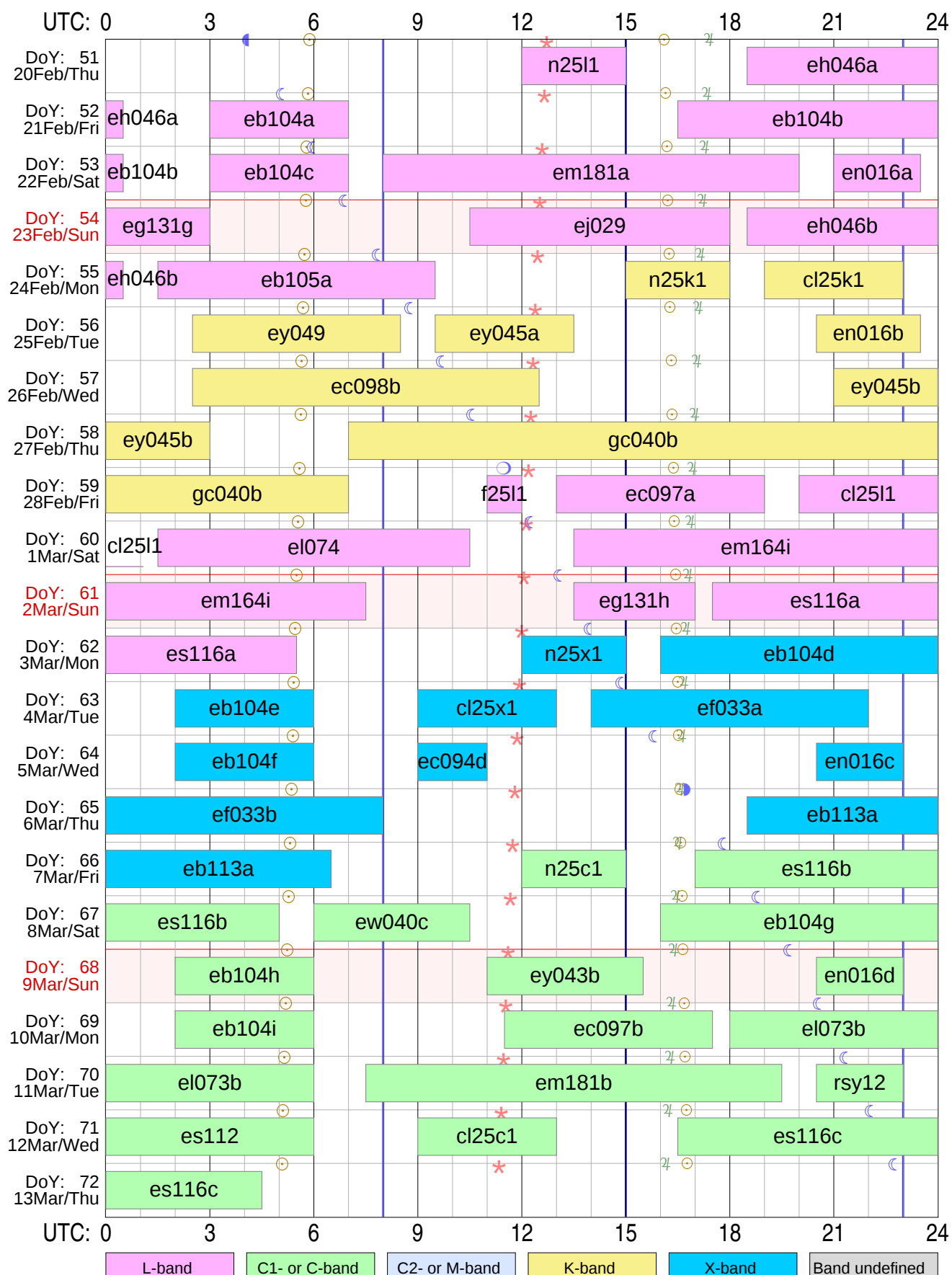


Tr VLBI plan for Feb/Mar 2025



Version: 2025.02.13

Sky events at Tr: ☉ Sunrise & sunset ☾ Moon transit ♃ Transit of Jupiter ★ Transit of Aries (0h ST)
Vertical lines in blue mark operator shift times at Tr Total observing time: 330.0 hours in 51 experiments scheduled

Strona zostawiona celowo pusta

EVN Experiments

Feb 2025

Uytownik ftp dla logw i schedulw RA: grt

ftp://webinet.asc.rssi.ru

Przykad dla log files: cd GRT_log_files/2014_09/2014_09_01_raks08ak

Przykad dla sched files: cd schedule/grtsched/RAKS/rk08ak

Year = 2025, 2nd line is: Year Date UTstart UTstop Exper. xxComment						
Nr	D	M	<=Dur	Exper. name		Comment
1	20.02	3.0	n25l1			L
2	20.02	5.5	eh046a			L
3	21.02	4.0	eb104a			L
4	21.02	7.5	eb104b			L
5	22.02	4.0	eb104c			L
6	22.02	12.0	em181a			L
7	22.02	2.5	en016a			L
8	23.02	3.0	eg131g			L
9	23.02	7.5	ej029			L
10	23.02	5.5	eh046b			L
11	24.02	8.0	eb105a			L
12	24.02	3.0	n25k1			K
13	24.02	4.0	cl25k1			K
14	25.02	6.0	ey049			K
15	25.02	4.0	ey045a			K
16	25.02	3.0	en016b			K
17	26.02	10.0	ec098b			K
18	26.02	3.0	ey045b			K
19	27.02	17.0	gc040b			K
20	28.02	1.0	f25l1			L
21	28.02	6.0	ec097a			L
22	28.02	4.0	cl25l1			L
23	1.03	9.0	el074			L
24	1.03	10.5	em164i			L
25	2.03	3.5	eg131h			L
26	2.03	6.5	es116a			L
27	3.03	3.0	n25x1			X
28	3.03	8.0	eb104d			X
29	4.03	4.0	eb104e			X
30	4.03	4.0	cl25x1			X
31	4.03	8.0	ef033a			X
32	5.03	4.0	eb104f			X
33	5.03	2.0	ec094d			X
34	5.03	2.5	en016c			X
35	6.03	8.0	ef033b			X
36	6.03	5.5	eb113a			X
37	7.03	3.0	n25c1			C
38	7.03	7.0	es116b			C
39	8.03	4.5	ew040c			C
40	8.03	8.0	eb104g			C

41	9.03	4.0	eb104h	C
42	9.03	4.5	ey043b	C
43	9.03	2.5	en016d	C
44	10.03	4.0	eb104i	C
45	10.03	6.0	ec097b	C
46	10.03	6.0	el073b	C
47	11.03	12.0	em181b	C
48	11.03	2.5	rsy12	C
49	12.03	6.0	es112	C
50	12.03	4.0	cl25c1	C
51	12.03	7.5	es116c	C

Summer time (DST): Mar 30 to Oct 26, 2025

Total observing time: 330.0 hours in 51 experiments

Plik pdf tego dokumentu jest dost/epny w sieci pod adresem:

<http://paulo.astro.uni.torun.pl/~pw/VLBI/schedules/feb25.pdf>

NETWORK MONITORING EXPERIMENT

PI: Benito Marcote

Address: JIVE

Observing mode: vlbi

Schedule for TORUN (Code Tr)

Page 2

Network Monitoring Experiment

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 20 Feb 2025	Day 51	---							
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

12 00 00	J0237+2848	23 16 57	46.1	102.8	-3.4		-42.0	0	0	12 00 00
12 05 00	=0234+285	23 21 58	46.8	104.0	-3.3		-41.7	300	39	12 00 01
12 07 00	J0237+2848	23 23 58	47.1	104.5	-3.3		-41.6	114	39	12 07 00
12 12 00	=0234+285	23 28 59	47.8	105.7	-3.2		-41.3	300	77	12 07 01
12 17 00	J0237+2848	23 34 00	48.5	106.9	-3.1		-41.0	293	77	12 17 00
12 27 00	=0234+285	23 44 02	50.0	109.5	-2.9		-40.3	600	155	12 17 01
12 32 00	J0237+2848	23 49 03	50.7	110.8	-2.8		-39.9	293	155	12 32 00
12 42 00	=0234+285	23 59 04	52.1	113.5	-2.7		-39.0	600	232	12 32 01
12 47 00	J0237+2848	00 04 05	52.8	114.9	-2.6		-38.5	293	232	12 47 00
12 57 00	=0234+285	00 14 07	54.1	117.8	-2.4		-37.3	600	309	12 47 01
13 02 00	J0237+2848	00 19 08	54.8	119.3	-2.3		-36.7	293	309	13 02 00
13 12 00	=0234+285	00 29 09	56.1	122.5	-2.2		-35.4	600	386	13 02 01
13 17 00	J0237+2848	00 34 10	56.7	124.1	-2.1		-34.6	293	386	13 17 00
13 27 00	=0234+285	00 44 12	57.9	127.5	-1.9		-33.0	600	464	13 17 01
13 32 00	J0237+2848	00 49 12	58.5	129.2	-1.8		-32.1	293	464	13 32 00
13 42 00	=0234+285	00 59 14	59.6	132.9	-1.7		-30.2	600	541	13 32 01
13 47 00	J0237+2848	01 04 15	60.2	134.8	-1.6		-29.1	293	541	13 47 00
13 57 00	=0234+285	01 14 17	61.2	138.7	-1.4		-26.9	600	618	13 47 01
14 02 00	J0237+2848	01 19 17	61.7	140.8	-1.3		-25.7	292	618	14 02 00
14 12 00	=0234+285	01 29 19	62.6	145.1	-1.2		-23.1	600	696	14 02 01
14 17 00	J0237+2848	01 34 20	63.0	147.3	-1.1		-21.8	292	696	14 17 00
14 27 00	=0234+285	01 44 21	63.8	151.9	-0.9		-18.9	600	773	14 17 01
14 32 00	J0237+2848	01 49 22	64.1	154.3	-0.8		-17.3	292	773	14 32 00
14 42 00	=0234+285	01 59 24	64.7	159.2	-0.7		-14.1	600	850	14 32 01
14 47 00	J0237+2848	02 04 25	65.0	161.7	-0.6		-12.4	292	850	14 47 00
15 00 00	=0234+285	02 17 27	65.5	168.4	-0.4		-7.9	780	951	14 47 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error
	(B1950)	(J2000)		(mas)
0234+285	02 34 55.589593	* 02 37 52.405680	02 39 20.850129	0.11
* J0237+2848	28 35 11.40778	* 28 48 08.99003	28 54 45.77913	0.10

eh046atr

RED NUGGESTS

PI: Dan Hu

Address: Masaryk University

Observing mode: vlbi

Schedule for TORUN (Code Tr)

Page 2

Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 20 Feb 2025	Day 51	---							
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

18 30 00	J0830-0636	05 48 01	20.9	135.8	-2.7		-25.0	0	0	18 30 00
18 31 00	=0828-064	05 49 02	21.0	136.0	-2.7		-24.8	60	8	18 30 01
18 31 00	J0827-0708	05 49 02	20.9	137.1	-2.7		-24.3	-15	8	No stop
18 34 30	---	05 52 32	21.3	138.0	-2.6		-23.9	195	35	18 31 01
18 34 30	J0830-0636	05 52 32	21.4	136.8	-2.7		-24.4	-14	35	No stop
18 36 30	=0828-064	05 54 32	21.6	137.3	-2.6		-24.2	106	50	18 34 31
18 40 00	4C39.25	05 58 03	51.8	90.0	-3.5		-50.5	84	50	18 40 00
18 45 00	---	06 03 04	52.6	91.0	-3.4		-50.5	300	89	18 40 01
18 48 00	J0830-0636	06 06 04	22.7	140.2	-2.4		-22.8	54	89	18 48 00
18 50 00	=0828-064	06 08 05	22.9	140.7	-2.4		-22.5	120	104	18 48 01
18 50 00	MRK1216	06 08 05	22.8	141.3	-2.4		-22.2	-12	104	No stop
18 54 00	---	06 12 05	23.2	142.3	-2.3		-21.7	228	135	18 50 01
18 54 00	J0830-0636	06 12 05	23.3	141.7	-2.3		-22.0	-12	135	No stop
18 55 30	=0828-064	06 13 36	23.4	142.0	-2.3		-21.8	78	147	18 54 01
18 55 30	MRK1216	06 13 36	23.3	142.7	-2.3		-21.5	-12	147	No stop
18 59 30	---	06 17 36	23.7	143.7	-2.2		-21.0	228	178	18 55 31
19 00 00	J0830-0636	06 18 06	23.8	143.2	-2.2		-21.2	18	178	19 00 00
19 01 00	=0828-064	06 19 06	23.9	143.4	-2.2		-21.1	60	185	19 00 01
19 01 00	MRK1216	06 19 06	23.8	144.1	-2.2		-20.8	-12	185	No stop
19 05 00	---	06 23 07	24.1	145.1	-2.1		-20.2	228	216	19 01 01
19 05 00	J0830-0636	06 23 07	24.3	144.5	-2.1		-20.6	-12	216	No stop
19 06 30	=0828-064	06 24 37	24.4	144.8	-2.1		-20.4	78	228	19 05 01
19 06 30	MRK1216	06 24 37	24.3	145.5	-2.1		-20.0	-12	228	No stop
19 10 30	---	06 28 38	24.6	146.5	-2.0		-19.5	228	259	19 06 31
19 11 00	J0830-0636	06 29 08	24.8	146.0	-2.0		-19.8	18	259	19 11 00
19 12 00	=0828-064	06 30 08	24.9	146.3	-2.0		-19.6	60	267	19 11 01

Schedule for TORUN (Code Tr)

Page 3

Red Nuggets

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Thu	20 Feb 2025	Day 51	---							
19 12 00	MRK1216	06 30 08	24.7	146.9	-2.0		-19.3	-12	267	No stop
19 16 00	---	06 34 09	25.1	147.9	-1.9		-18.7	228	298	19 12 01
19 16 00	J0830-0636	06 34 09	25.2	147.3	-2.0		-19.1	-12	298	No stop
19 17 30	=0828-064	06 35 39	25.3	147.7	-1.9		-18.9	78	309	19 16 01
19 17 30	MRK1216	06 35 39	25.2	148.3	-1.9		-18.5	-12	309	No stop
19 21 30	---	06 39 40	25.5	149.4	-1.8		-17.9	228	340	19 17 31
19 22 00	J0830-0636	06 40 10	25.7	148.9	-1.9		-18.2	18	340	19 22 00
19 23 00	=0828-064	06 41 10	25.8	149.1	-1.8		-18.1	60	348	19 22 01
19 23 00	MRK1216	06 41 10	25.6	149.8	-1.8		-17.7	-12	348	No stop
19 27 00	---	06 45 11	25.9	150.8	-1.7		-17.2	228	379	19 23 01
19 27 00	J0830-0636	06 45 11	26.1	150.2	-1.8		-17.5	-12	379	No stop
19 28 30	=0828-064	06 46 41	26.2	150.6	-1.8		-17.3	78	390	19 27 01
19 28 30	MRK1216	06 46 41	26.0	151.2	-1.7		-16.9	-12	390	No stop
19 32 30	---	06 50 42	26.3	152.3	-1.7		-16.3	228	421	19 28 31
19 33 00	J0830-0636	06 51 12	26.5	151.8	-1.7		-16.6	18	421	19 33 00
19 34 00	=0828-064	06 52 12	26.6	152.0	-1.7		-16.5	60	429	19 33 01
19 34 00	MRK1216	06 52 12	26.4	152.7	-1.6		-16.1	-12	429	No stop
19 38 00	---	06 56 13	26.7	153.8	-1.6		-15.5	228	460	19 34 01
19 38 00	J0830-0636	06 56 13	26.9	153.1	-1.6		-15.9	-12	460	No stop
19 39 30	=0828-064	06 57 43	27.0	153.5	-1.6		-15.6	78	471	19 38 01
19 39 30	MRK1216	06 57 43	26.8	154.2	-1.5		-15.3	-12	471	No stop
19 43 30	---	07 01 43	27.0	155.2	-1.5		-14.7	228	502	19 39 31
19 44 00	J0830-0636	07 02 14	27.3	154.7	-1.5		-15.0	18	502	19 44 00
19 45 00	=0828-064	07 03 14	27.3	155.0	-1.5		-14.8	60	510	19 44 01
19 45 00	MRK1216	07 03 14	27.1	155.6	-1.4		-14.4	-12	510	No stop
19 49 00	---	07 07 14	27.4	156.7	-1.4		-13.8	228	541	19 45 01
19 49 00	J0830-0636	07 07 14	27.6	156.1	-1.4		-14.2	-12	541	No stop
19 50 30	=0828-064	07 08 45	27.7	156.5	-1.4		-14.0	78	553	19 49 01
19 50 30	MRK1216	07 08 45	27.5	157.1	-1.4		-13.6	-12	553	No stop
19 54 30	---	07 12 45	27.7	158.2	-1.3		-13.0	228	584	19 50 31
19 55 00	J0830-0636	07 13 15	27.9	157.7	-1.3		-13.2	18	584	19 55 00
19 56 00	=0828-064	07 14 16	28.0	158.0	-1.3		-13.1	60	591	19 55 01

Schedule for TORUN (Code Tr)

Page 4

Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Thu	20 Feb 2025	Day 51	---							
19 56 00	MRK1216	07 14 16	27.8	158.6	-1.3		-12.7	-12	591	No stop
20 00 00	---	07 18 16	28.0	159.7	-1.2		-12.1	228	622	19 56 01
20 00 00	J0830-0636	07 18 16	28.2	159.1	-1.2		-12.5	-12	622	No stop
20 01 30	=0828-064	07 19 46	28.3	159.5	-1.2		-12.2	78	634	20 00 01
20 01 30	MRK1216	07 19 46	28.1	160.2	-1.2		-11.9	-12	634	No stop
20 05 30	---	07 23 47	28.3	161.3	-1.1		-11.2	228	665	20 01 31
20 06 00	J0830-0636	07 24 17	28.5	160.8	-1.1		-11.5	18	665	20 06 00
20 07 00	=0828-064	07 25 17	28.6	161.0	-1.1		-11.3	60	672	20 06 01
20 07 00	MRK1216	07 25 17	28.3	161.7	-1.1		-11.0	-12	672	No stop
20 11 00	---	07 29 18	28.5	162.8	-1.0		-10.3	228	703	20 07 01
20 11 00	J0830-0636	07 29 18	28.7	162.2	-1.0		-10.7	-12	703	No stop
20 12 30	=0828-064	07 30 48	28.8	162.6	-1.0		-10.4	78	715	20 11 01
20 12 30	MRK1216	07 30 48	28.6	163.2	-1.0		-10.1	-12	715	No stop
20 16 30	---	07 34 49	28.7	164.3	-0.9		-9.4	228	746	20 12 31
20 17 00	J0830-0636	07 35 19	29.0	163.8	-0.9		-9.7	18	746	20 17 00
20 18 00	=0828-064	07 36 19	29.1	164.1	-0.9		-9.5	60	754	20 17 01
20 18 00	J0830-0636	07 36 19	29.1	164.1	-0.9		-9.5	-5	754	No stop
20 19 30	=0828-064	07 37 49	29.1	164.5	-0.9		-9.3	85	765	20 18 01
20 19 30	J0827-0708	07 37 49	28.7	165.7	-0.8		-8.6	-15	765	No stop
20 23 00	---	07 41 20	28.9	166.7	-0.8		-8.0	195	792	20 19 31
20 23 00	J0830-0636	07 41 20	29.3	165.5	-0.8		-8.7	-14	792	No stop
20 24 30	=0828-064	07 42 50	29.3	165.9	-0.8		-8.4	76	804	20 23 01
20 28 00	4C39.25	07 46 21	67.5	118.7	-1.7		-42.6	53	804	20 28 00
20 33 00	---	07 51 22	68.1	120.6	-1.6		-41.6	300	842	20 28 01
20 43 00	J0830-0636	08 01 23	29.9	171.2	-0.5		-5.3	442	842	20 43 00
20 44 30	=0828-064	08 02 53	29.9	171.6	-0.5		-5.0	90	854	20 43 01
20 44 30	MRK1216	08 02 53	29.6	172.2	-0.5		-4.7	-12	854	No stop
20 48 30	---	08 06 54	29.7	173.4	-0.4		-4.0	228	885	20 44 31
20 48 30	J0830-0636	08 06 54	30.0	172.8	-0.4		-4.4	-12	885	No stop
20 50 00	=0828-064	08 08 24	30.0	173.2	-0.4		-4.1	78	897	20 48 31

Schedule for TORUN (Code Tr)

Page 5

Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Thu	20 Feb 2025	Day	51	---						
20 50 00	MRK1216	08 08 24	29.7	173.8	-0.4		-3.7	-12	897	No stop
20 54 00	---	08 12 25	29.8	175.0	-0.3		-3.0	228	927	20 50 01
20 54 30	J0830-0636	08 12 55	30.1	174.5	-0.3		-3.3	18	927	20 54 30
20 55 30	=0828-064	08 13 55	30.1	174.8	-0.3		-3.1	60	935	20 54 31
20 55 30	MRK1216	08 13 55	29.8	175.4	-0.3		-2.8	-12	935	No stop
20 59 30	---	08 17 56	29.8	176.5	-0.2		-2.1	228	966	20 55 31
20 59 30	J0830-0636	08 17 56	30.1	175.9	-0.2		-2.5	-12	966	No stop
21 01 00	=0828-064	08 19 26	30.2	176.4	-0.2		-2.2	78	978	20 59 31
21 01 00	MRK1216	08 19 26	29.8	177.0	-0.2		-1.8	-12	978	No stop
21 05 00	---	08 23 27	29.9	178.1	-0.1		-1.1	228	1009	21 01 01
21 05 30	J0830-0636	08 23 57	30.2	177.7	-0.1		-1.4	18	1009	21 05 30
21 06 30	=0828-064	08 24 57	30.2	178.0	-0.1		-1.2	60	1016	21 05 31
21 06 30	MRK1216	08 24 57	29.9	178.5	-0.1		-0.9	-12	1016	No stop
21 10 30	---	08 28 58	29.9	179.7	-0.0		-0.2	228	1047	21 06 31
21 10 30	J0830-0636	08 28 58	30.2	179.1	-0.1		-0.5	-12	1047	No stop
21 12 00	=0828-064	08 30 28	30.2	179.5	-0.0		-0.3	78	1059	21 10 31
21 12 00	MRK1216	08 30 28	29.9	180.1	0.0		0.1	-12	1059	No stop
21 16 00	---	08 34 29	29.9	181.3	0.1		0.8	228	1090	21 12 01
21 16 30	J0830-0636	08 34 59	30.2	180.8	0.0		0.5	18	1090	21 16 30
21 17 30	=0828-064	08 35 59	30.2	181.1	0.1		0.7	60	1098	21 16 31
21 17 30	MRK1216	08 35 59	29.9	181.7	0.1		1.0	-12	1098	No stop
21 21 30	---	08 40 00	29.8	182.8	0.2		1.7	228	1128	21 17 31
21 21 30	J0830-0636	08 40 00	30.2	182.3	0.1		1.4	-12	1128	No stop
21 23 00	=0828-064	08 41 30	30.2	182.7	0.2		1.6	78	1140	21 21 31
21 23 00	MRK1216	08 41 30	29.8	183.3	0.2		2.0	-12	1140	No stop
21 27 00	---	08 45 30	29.8	184.4	0.3		2.7	228	1171	21 23 01
21 27 30	J0830-0636	08 46 01	30.1	184.0	0.2		2.4	18	1171	21 27 30
21 28 30	=0828-064	08 47 01	30.1	184.3	0.2		2.6	60	1179	21 27 31
21 28 30	MRK1216	08 47 01	29.8	184.9	0.3		2.9	-12	1179	No stop
21 32 30	---	08 51 01	29.7	186.0	0.3		3.6	228	1210	21 28 31

Schedule for TORUN (Code Tr)
Red Nuggests

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Thu	20 Feb 2025	Day	51	---						
21 32 30	J0830-0636	08 51 01	30.1	185.4	0.3		3.3	-12	1210	No stop
21 34 00	=0828-064	08 52 32	30.1	185.9	0.3		3.5	78	1221	21 32 31
21 34 00	MRK1216	08 52 32	29.7	186.4	0.4		3.9	-12	1221	No stop
21 38 00	---	08 56 32	29.6	187.6	0.4		4.6	228	1252	21 34 01
21 38 30	J0830-0636	08 57 02	30.0	187.2	0.4		4.3	18	1252	21 38 30
21 39 30	=0828-064	08 58 03	30.0	187.4	0.4		4.5	60	1260	21 38 31
21 39 30	MRK1216	08 58 03	29.6	188.0	0.5		4.8	-12	1260	No stop
21 43 30	---	09 02 03	29.5	189.1	0.5		5.5	228	1291	21 39 31
21 43 30	J0830-0636	09 02 03	29.9	188.6	0.5		5.2	-12	1291	No stop
21 45 00	=0828-064	09 03 33	29.8	189.0	0.5		5.4	78	1302	21 43 31
21 45 00	MRK1216	09 03 33	29.5	189.6	0.6		5.8	-12	1302	No stop
21 49 00	---	09 07 34	29.4	190.7	0.6		6.4	228	1333	21 45 01
21 49 30	J0830-0636	09 08 04	29.7	190.3	0.6		6.2	18	1333	21 49 30
21 50 30	=0828-064	09 09 04	29.7	190.6	0.6		6.4	60	1341	21 49 31
21 50 30	MRK1216	09 09 04	29.3	191.1	0.7		6.7	-12	1341	No stop
21 54 30	---	09 13 05	29.2	192.3	0.7		7.4	228	1372	21 50 31
21 54 30	J0830-0636	09 13 05	29.6	191.7	0.7		7.1	-12	1372	No stop
21 56 00	=0828-064	09 14 35	29.5	192.2	0.7		7.3	78	1384	21 54 31
21 56 00	MRK1216	09 14 35	29.1	192.7	0.7		7.6	-12	1384	No stop
22 00 00	---	09 18 36	29.0	193.8	0.8		8.3	228	1414	21 56 01
22 00 30	J0830-0636	09 19 06	29.4	193.4	0.8		8.1	18	1414	22 00 30
22 01 30	=0828-064	09 20 06	29.4	193.7	0.8		8.2	60	1422	22 00 31
22 01 30	MRK1216	09 20 06	28.9	194.2	0.8		8.6	-12	1422	No stop
22 05 30	---	09 24 07	28.8	195.4	0.9		9.2	228	1453	22 01 31
22 05 30	J0830-0636	09 24 07	29.2	194.8	0.9		8.9	-12	1453	No stop
22 07 00	=0828-064	09 25 37	29.1	195.3	0.9		9.2	78	1465	22 05 31
22 07 00	MRK1216	09 25 37	28.7	195.8	0.9		9.5	-12	1465	No stop
22 11 00	---	09 29 38	28.6	196.9	1.0		10.1	228	1496	22 07 01
22 11 30	J0830-0636	09 30 08	29.0	196.5	1.0		9.9	18	1496	22 11 30
22 12 30	=0828-064	09 31 08	28.9	196.8	1.0		10.1	60	1503	22 11 31

Schedule for TORUN (Code Tr)

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Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Thu	20 Feb 2025	Day	51	---						
22 12 30	J0830-0636	09 31 08	28.9	196.8	1.0		10.1	-5	1503	No stop
22 14 00	=0828-064	09 32 38	28.9	197.2	1.0		10.3	85	1515	22 12 31
22 14 00	J0827-0708	09 32 38	28.2	198.1	1.1		10.9	-15	1515	No stop
22 17 30	---	09 36 09	28.0	199.1	1.1		11.4	195	1542	22 14 01
22 17 30	J0830-0636	09 36 09	28.7	198.2	1.1		10.9	-15	1542	No stop
22 19 00	=0828-064	09 37 39	28.6	198.6	1.1		11.1	75	1554	22 17 31
22 22 30	4C39.25	09 41 10	75.7	189.9	0.2		7.6	20	1554	22 22 30
22 27 30	---	09 46 10	75.5	193.7	0.3		10.6	300	1592	22 22 31
22 37 30	J0830-0636	09 56 12	27.6	203.7	1.4		14.1	408	1592	22 37 30
22 39 00	=0828-064	09 57 42	27.5	204.1	1.4		14.3	90	1604	22 37 31
22 39 00	MRK1216	09 57 42	27.1	204.6	1.5		14.6	-13	1604	No stop
22 43 30	---	10 02 13	26.8	205.8	1.5		15.3	257	1639	22 39 01
22 43 30	J0830-0636	10 02 13	27.2	205.3	1.5		15.0	-13	1639	No stop
22 45 00	=0828-064	10 03 43	27.1	205.8	1.5		15.2	77	1650	22 43 31
22 45 00	MRK1216	10 03 43	26.7	206.2	1.6		15.5	-13	1650	No stop
22 49 00	---	10 07 44	26.4	207.3	1.6		16.1	227	1681	22 45 01
22 49 30	J0830-0636	10 08 14	26.8	207.0	1.6		15.9	17	1681	22 49 30
22 50 30	=0828-064	10 09 14	26.8	207.2	1.6		16.1	60	1689	22 49 31
22 50 30	MRK1216	10 09 14	26.3	207.7	1.7		16.3	-13	1689	No stop
22 55 00	---	10 13 45	26.0	208.9	1.7		17.0	257	1724	22 50 31
22 55 00	J0830-0636	10 13 45	26.5	208.4	1.7		16.7	-13	1724	No stop
22 56 30	=0828-064	10 15 15	26.3	208.8	1.7		17.0	77	1735	22 55 01
22 56 30	MRK1216	10 15 15	25.9	209.3	1.8		17.2	-13	1735	No stop
23 00 30	---	10 19 16	25.6	210.3	1.8		17.8	227	1766	22 56 31
23 01 00	J0830-0636	10 19 46	26.0	210.0	1.8		17.6	17	1766	23 01 00
23 02 00	=0828-064	10 20 46	25.9	210.3	1.8		17.8	60	1774	23 01 01
23 02 00	MRK1216	10 20 46	25.5	210.7	1.8		18.0	-13	1774	No stop
23 06 30	---	10 25 17	25.1	211.9	1.9		18.6	257	1809	23 02 01
23 06 30	J0830-0636	10 25 17	25.6	211.5	1.9		18.4	-13	1809	No stop
23 08 00	=0828-064	10 26 47	25.5	211.9	1.9		18.6	77	1820	23 06 31

Schedule for TORUN (Code Tr)

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Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 20 Feb 2025	Day 51	---							
23 08 00	MRK1216	10 26 47	25.0	212.3	1.9		18.8	-13	1820	No stop
23 12 00	---	10 30 48	24.7	213.3	2.0		19.4	227	1851	23 08 01
23 12 30	J0830-0636	10 31 18	25.1	213.0	2.0		19.2	17	1851	23 12 30
23 13 30	=0828-064	10 32 18	25.0	213.3	2.0		19.4	60	1859	23 12 31
23 13 30	MRK1216	10 32 18	24.5	213.7	2.0		19.6	-13	1859	No stop
23 18 00	---	10 36 49	24.2	214.9	2.1		20.2	257	1894	23 13 31
23 18 00	J0830-0636	10 36 49	24.6	214.5	2.1		20.0	-13	1894	No stop
23 19 30	=0828-064	10 38 19	24.5	214.8	2.1		20.2	77	1905	23 18 01
23 19 30	MRK1216	10 38 19	24.0	215.2	2.1		20.4	-13	1905	No stop
23 23 30	---	10 42 20	23.7	216.3	2.2		21.0	227	1936	23 19 31
23 24 00	J0830-0636	10 42 50	24.1	216.0	2.2		20.8	17	1936	23 24 00
23 25 00	=0828-064	10 43 50	24.0	216.2	2.2		20.9	60	1944	23 24 01
23 25 00	MRK1216	10 43 50	23.5	216.6	2.2		21.2	-13	1944	No stop
23 29 30	---	10 48 21	23.1	217.8	2.3		21.8	257	1979	23 25 01
23 29 30	J0830-0636	10 48 21	23.6	217.4	2.3		21.5	-13	1979	No stop
23 31 00	=0828-064	10 49 51	23.5	217.8	2.3		21.7	77	1990	23 29 31
23 31 00	MRK1216	10 49 51	23.0	218.1	2.3		21.9	-13	1990	No stop
23 35 00	---	10 53 51	22.6	219.1	2.4		22.5	227	2021	23 31 01
23 35 30	J0830-0636	10 54 22	23.1	218.9	2.4		22.3	17	2021	23 35 30
23 36 30	=0828-064	10 55 22	23.0	219.1	2.4		22.4	60	2029	23 35 31
23 36 30	MRK1216	10 55 22	22.5	219.5	2.4		22.6	-13	2029	No stop
23 41 00	---	10 59 52	22.0	220.6	2.5		23.2	257	2064	23 36 31
23 41 00	J0830-0636	10 59 52	22.5	220.3	2.5		23.0	-13	2064	No stop
23 42 30	=0828-064	11 01 23	22.4	220.6	2.5		23.2	77	2075	23 41 01
23 42 30	MRK1216	11 01 23	21.9	221.0	2.5		23.4	-13	2075	No stop
23 46 30	---	11 05 23	21.5	222.0	2.6		23.9	227	2106	23 42 31
23 47 00	J0830-0636	11 05 53	22.0	221.8	2.6		23.7	17	2106	23 47 00
23 48 00	=0828-064	11 06 54	21.9	222.0	2.6		23.9	60	2114	23 47 01
23 48 00	MRK1216	11 06 54	21.3	222.4	2.6		24.1	-13	2114	No stop
23 52 30	---	11 11 24	20.9	223.4	2.7		24.6	257	2149	23 48 01

Schedule for TORUN (Code Tr)

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Red Nuggets

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 20 Feb 2025	Day 51	---							
23 52 30	J0830-0636	11 11 24	21.4	223.1	2.7		24.4	-13	2149	No stop
23 54 00	=0828-064	11 12 55	21.2	223.5	2.7		24.6	77	2160	23 52 31
23 54 00	MRK1216	11 12 55	20.7	223.8	2.7		24.8	-13	2160	No stop
23 58 00	---	11 16 55	20.3	224.8	2.8		25.2	227	2191	23 54 01
23 58 30	J0830-0636	11 17 25	20.8	224.6	2.8		25.1	17	2191	23 58 30
23 59 30	=0828-064	11 18 26	20.7	224.8	2.8		25.2	60	2199	23 58 31
---	Start: Thu 20 Feb 2025	Day 51	--	Stop: Fri 21 Feb 2025			Day 52	---		
23 59 30	MRK1216	11 18 26	20.1	225.1	2.8		25.4	-13	2199	No stop
00 04 00	---	11 22 56	19.7	226.2	2.9		25.9	257	2234	23 59 31
00 04 00	J0830-0636	11 22 56	20.2	225.9	2.8		25.7	-13	2234	No stop
00 05 30	=0828-064	11 24 26	20.0	226.2	2.9		25.9	77	2245	00 04 01
00 05 30	MRK1216	11 24 26	19.5	226.6	2.9		26.1	-13	2245	No stop
00 09 30	---	11 28 27	19.1	227.5	3.0		26.5	227	2276	00 05 31
00 10 00	J0830-0636	11 28 57	19.5	227.3	2.9		26.4	17	2276	00 10 00
00 11 00	=0828-064	11 29 57	19.4	227.5	3.0		26.5	60	2284	00 10 01
00 11 00	MRK1216	11 29 57	18.9	227.9	3.0		26.7	-13	2284	No stop
00 15 30	---	11 34 28	18.4	228.9	3.1		27.1	257	2319	00 11 01
00 15 30	J0830-0636	11 34 28	18.9	228.6	3.0		27.0	-13	2319	No stop
00 17 00	=0828-064	11 35 58	18.7	228.9	3.1		27.1	77	2330	00 15 31
00 17 00	MRK1216	11 35 58	18.2	229.3	3.1		27.3	-14	2330	No stop
00 21 00	---	11 39 59	17.8	230.2	3.2		27.7	226	2361	00 17 01
00 21 30	J0830-0636	11 40 29	18.2	230.0	3.1		27.6	17	2361	00 21 30
00 22 30	=0828-064	11 41 29	18.1	230.2	3.2		27.7	60	2369	00 21 31
00 25 30	4C39.25	11 44 30	62.9	252.3	2.3		47.3	-2	2369	00 25 30
00 30 00	---	11 49 01	62.2	253.6	2.3		47.8	268	2404	00 25 31

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7

Station: TORUN

Total bit rate: 1024

Format: VDIF

Bits per sample: 2

Sample rate: 64.000

Number of channels: 8 DBE type: DBBC_DDC Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* MRK1216	08 26 19.790511	* 08 28 47.110000	08 30 02.379772	0.00
	-06 46 22.96081	*-06 56 24.50000	-07 01 31.12857	0.00
* J0827-0708	08 24 39.080163	* 08 27 06.167617	08 28 21.317220	0.00
	-06 58 50.25170	*-07 08 45.89819	-07 13 49.57150	0.00
0828-064	08 28 22.066150	* 08 30 49.744063	08 32 05.198449	0.16
* J0830-0636	-06 26 11.33893	*-06 36 19.99111	-06 41 30.18078	0.36
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 82 observations.			
* 4C39.25	09 23 55.319216	* 09 27 03.013937	09 28 39.211077	0.31
J0927+3902	39 15 23.56644	* 39 02 20.85185	38 55 45.33705	0.16
0923+392	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J0927+39	GSFC 2016a X/S astro solution, 250526 observations.			
* 3C286	13 28 49.657769	* 13 31 08.288061	13 32 19.199008	0.17
J1331+3030	30 45 58.64066	* 30 30 32.95930	30 22 30.66870	0.16
1328+307	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J1331+30	GSFC 2016a X/S astro solution, 269 observations.			

MULTI-FREQ STUDY ON FRB PRSS - FRB190520

PI: *Bhandari*

Address: JIVE

Observing mode: evn

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSS - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day	52	---						
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

03 00 00	J1550+0527	14 19 25	38.7	150.0	-1.5		-17.6	0	0	03 00 00
03 02 00	=1548+056	14 21 25	38.8	150.6	-1.5		-17.2	120	15	03 00 01
03 02 20	J1550+0527	14 21 46	38.8	150.7	-1.5		-17.2	14	15	03 02 20
03 06 00	=1548+056	14 25 26	39.1	151.8	-1.4		-16.6	220	44	03 02 21
03 06 20	J1550+0527	14 25 46	39.1	151.9	-1.4		-16.5	14	44	03 06 20
03 10 00	=1548+056	14 29 27	39.4	153.1	-1.4		-15.9	220	72	03 06 21
03 12 00	J1605-1139	14 31 27	22.0	154.8	-1.6		-15.2	41	72	03 12 00
03 13 30	=1602-115	14 32 57	22.1	155.1	-1.6		-14.9	90	84	03 12 01
03 13 30	FRB190520	14 32 57	22.7	155.9	-1.5		-14.5	-14	84	No stop
03 18 00	---	14 37 28	23.0	157.0	-1.4		-13.8	256	119	03 13 31
03 18 30	J1605-1139	14 37 58	22.5	156.4	-1.5		-14.2	17	119	03 18 30
03 19 40	=1602-115	14 39 08	22.5	156.7	-1.5		-14.0	70	128	03 18 31
03 19 40	FRB190520	14 39 08	23.1	157.5	-1.4		-13.6	-14	128	No stop
03 24 10	---	14 43 39	23.3	158.6	-1.3		-12.9	256	162	03 19 41
03 24 10	J1605-1139	14 43 39	22.8	157.9	-1.4		-13.3	-13	162	No stop
03 26 00	=1602-115	14 45 29	22.9	158.4	-1.4		-13.1	97	176	03 24 11
03 26 00	FRB190520	14 45 29	23.4	159.1	-1.3		-12.6	-13	176	No stop
03 30 30	---	14 50 00	23.7	160.3	-1.2		-11.9	257	211	03 26 01
03 31 00	J1605-1139	14 50 30	23.2	159.7	-1.3		-12.3	17	211	03 31 00
03 32 10	=1602-115	14 51 40	23.2	160.0	-1.3		-12.1	70	220	03 31 01
03 32 10	J1603-1007	14 51 40	24.8	160.1	-1.2		-12.0	-20	220	No stop
03 36 40	=1600-099	14 56 11	25.0	161.3	-1.1		-11.3	250	255	03 32 11
03 36 40	J1605-1139	14 56 11	23.4	161.1	-1.2		-11.4	-20	255	No stop
03 38 30	=1602-115	14 58 01	23.5	161.6	-1.1		-11.1	90	269	03 36 41
03 38 30	FRB190520	14 58 01	24.0	162.4	-1.1		-10.7	-13	269	No stop
03 43 00	---	15 02 32	24.2	163.6	-1.0		-10.0	257	304	03 38 31

Schedule for TORUN (Code Tr)

Page 3

Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day 52	---							
03 43 30	J1605-1139	15 03 02	23.8	162.9	-1.1		-10.4	17	304	03 43 30
03 44 40	=1602-115	15 04 13	23.8	163.3	-1.0		-10.2	70	313	03 43 31
03 44 40	FRB190520	15 04 13	24.3	164.0	-1.0		-9.7	-13	313	No stop
03 49 10	---	15 08 43	24.5	165.2	-0.9		-9.0	257	348	03 44 41
03 49 10	J1605-1139	15 08 43	24.0	164.4	-1.0		-9.5	-13	348	No stop
03 51 00	=1602-115	15 10 34	24.1	164.9	-0.9		-9.2	97	362	03 49 11
03 51 00	FRB190520	15 10 34	24.6	165.7	-0.9		-8.7	-13	362	No stop
03 55 30	---	15 15 04	24.7	166.9	-0.8		-8.0	257	397	03 51 01
03 56 00	J1605-1139	15 15 34	24.3	166.3	-0.9		-8.4	17	397	03 56 00
03 57 10	=1602-115	15 16 45	24.3	166.6	-0.8		-8.2	70	406	03 56 01
03 57 10	FRB190520	15 16 45	24.8	167.4	-0.8		-7.7	-13	406	No stop
04 01 40	---	15 21 15	24.9	168.6	-0.7		-7.0	257	441	03 57 11
04 01 40	J1605-1139	15 21 15	24.5	167.8	-0.8		-7.5	-13	441	No stop
04 03 30	=1602-115	15 23 06	24.5	168.3	-0.7		-7.2	97	455	04 01 41
04 03 30	FRB190520	15 23 06	25.0	169.1	-0.7		-6.7	-13	455	No stop
04 08 00	---	15 27 36	25.1	170.3	-0.6		-5.9	257	490	04 03 31
04 08 30	J1605-1139	15 28 06	24.7	169.6	-0.6		-6.4	17	490	04 08 30
04 09 40	=1602-115	15 29 17	24.7	169.9	-0.6		-6.2	70	499	04 08 31
04 09 40	J1603-1007	15 29 17	26.3	170.3	-0.6		-5.9	-20	499	No stop
04 14 10	=1600-099	15 33 47	26.4	171.5	-0.5		-5.2	250	533	04 09 41
04 14 10	J1605-1139	15 33 47	24.8	171.1	-0.5		-5.4	-19	533	No stop
04 16 00	=1602-115	15 35 38	24.8	171.6	-0.5		-5.1	91	547	04 14 11
04 16 00	FRB190520	15 35 38	25.3	172.5	-0.5		-4.6	-13	547	No stop
04 20 30	---	15 40 08	25.4	173.7	-0.4		-3.9	257	582	04 16 01
04 21 00	J1605-1139	15 40 38	24.9	173.0	-0.4		-4.3	17	582	04 21 00
04 22 10	=1602-115	15 41 49	25.0	173.3	-0.4		-4.1	70	591	04 21 01
04 22 10	FRB190520	15 41 49	25.4	174.1	-0.4		-3.6	-13	591	No stop
04 26 40	---	15 46 19	25.4	175.3	-0.3		-2.8	257	626	04 22 11
04 26 40	J1605-1139	15 46 19	25.0	174.5	-0.3		-3.4	-13	626	No stop
04 28 30	=1602-115	15 48 10	25.1	175.0	-0.3		-3.1	97	640	04 26 41
04 28 30	FRB190520	15 48 10	25.5	175.8	-0.3		-2.5	-13	640	No stop
04 33 00	---	15 52 40	25.5	177.1	-0.2		-1.8	257	675	04 28 31

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day 52	---							
04 33 30	J1605-1139	15 53 11	25.1	176.3	-0.2		-2.2	17	675	04 33 30
04 34 40	=1602-115	15 54 21	25.1	176.7	-0.2		-2.0	70	684	04 33 31
04 34 40	FRB190520	15 54 21	25.5	177.5	-0.2		-1.5	-13	684	No stop
04 39 10	---	15 58 51	25.5	178.8	-0.1		-0.8	257	719	04 34 41
04 39 10	J1605-1139	15 58 51	25.2	177.9	-0.1		-1.3	-13	719	No stop
04 41 00	=1602-115	16 00 42	25.2	178.4	-0.1		-1.0	97	733	04 39 11
04 41 00	FRB190520	16 00 42	25.5	179.2	-0.0		-0.5	-14	733	No stop
04 45 30	---	16 05 12	25.5	180.5	0.0		0.3	256	768	04 41 01
04 46 00	J1605-1139	16 05 43	25.2	179.7	-0.0		-0.2	17	768	04 46 00
04 47 10	=1602-115	16 06 53	25.2	180.1	0.0		0.0	70	777	04 46 01
04 47 10	J1603-1007	16 06 53	26.7	180.6	0.0		0.4	-19	777	No stop
04 51 40	=1600-099	16 11 24	26.7	181.8	0.1		1.1	251	812	04 47 11
04 51 40	J1605-1139	16 11 24	25.2	181.3	0.1		0.8	-19	812	No stop
04 53 30	=1602-115	16 13 14	25.2	181.8	0.1		1.1	91	826	04 51 41
04 53 30	FRB190520	16 13 14	25.5	182.7	0.2		1.6	-14	826	No stop
04 58 00	---	16 17 45	25.5	183.9	0.2		2.4	256	861	04 53 31
04 58 30	J1605-1139	16 18 15	25.1	183.1	0.2		1.9	17	861	04 58 30
04 59 40	=1602-115	16 19 25	25.1	183.4	0.2		2.1	70	870	04 58 31
04 59 40	FRB190520	16 19 25	25.5	184.3	0.3		2.7	-14	870	No stop
05 04 10	---	16 23 56	25.4	185.6	0.3		3.4	256	904	04 59 41
05 04 10	J1605-1139	16 23 56	25.1	184.7	0.3		2.9	-13	904	No stop
05 06 00	=1602-115	16 25 46	25.0	185.2	0.3		3.2	97	918	05 04 11
05 06 00	FRB190520	16 25 46	25.4	186.1	0.4		3.7	-14	918	No stop
05 10 30	---	16 30 17	25.3	187.3	0.4		4.4	256	953	05 06 01
05 11 00	J1605-1139	16 30 47	25.0	186.5	0.4		4.0	17	953	05 11 00
05 12 10	=1602-115	16 31 57	25.0	186.8	0.4		4.2	70	962	05 11 01
05 12 10	FRB190520	16 31 57	25.3	187.7	0.5		4.7	-14	962	No stop
05 16 40	---	16 36 28	25.2	188.9	0.6		5.5	256	997	05 12 11
05 16 40	J1605-1139	16 36 28	24.9	188.0	0.5		4.9	-13	997	No stop
05 18 30	=1602-115	16 38 18	24.8	188.5	0.5		5.2	97	1011	05 16 41

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day 52	---							
05 18 30	FRB190520	16 38 18	25.1	189.4	0.6		5.8	-14	1011	No stop
05 23 00	---	16 42 49	25.0	190.7	0.7		6.5	256	1046	05 18 31
05 23 30	J1605-1139	16 43 19	24.7	189.9	0.6		6.0	17	1046	05 23 30
05 24 40	=1602-115	16 44 29	24.7	190.2	0.6		6.2	70	1055	05 23 31
05 24 40	J1603-1007	16 44 29	26.1	190.9	0.7		6.6	-19	1055	No stop
05 29 10	=1600-099	16 49 00	26.0	192.1	0.7		7.4	251	1090	05 24 41
05 29 10	J1605-1139	16 49 00	24.5	191.4	0.7		7.0	-19	1090	No stop
05 31 00	=1602-115	16 50 50	24.5	191.9	0.7		7.3	91	1104	05 29 11
05 31 00	FRB190520	16 50 50	24.8	192.8	0.8		7.8	-14	1104	No stop
05 35 30	---	16 55 21	24.6	194.0	0.9		8.5	256	1139	05 31 01
05 36 00	J1605-1139	16 55 51	24.3	193.2	0.8		8.1	17	1139	05 36 00
05 37 10	=1602-115	16 57 01	24.3	193.5	0.8		8.3	70	1148	05 36 01
05 37 10	FRB190520	16 57 01	24.5	194.5	0.9		8.8	-14	1148	No stop
05 41 40	---	17 01 32	24.4	195.7	1.0		9.5	256	1183	05 37 11
05 41 40	J1605-1139	17 01 32	24.1	194.7	0.9		9.0	-13	1183	No stop
05 43 30	=1602-115	17 03 22	24.0	195.2	0.9		9.3	97	1197	05 41 41
05 43 30	FRB190520	17 03 22	24.3	196.1	1.0		9.8	-14	1197	No stop
05 48 00	---	17 07 53	24.1	197.3	1.1		10.5	256	1232	05 43 31
05 48 30	J1605-1139	17 08 23	23.8	196.5	1.0		10.1	17	1232	05 48 30
05 49 40	=1602-115	17 09 33	23.8	196.9	1.0		10.2	70	1241	05 48 31
05 49 40	FRB190520	17 09 33	24.0	197.8	1.1		10.8	-14	1241	No stop
05 54 10	---	17 14 04	23.8	199.0	1.2		11.5	256	1275	05 49 41
05 54 10	J1605-1139	17 14 04	23.6	198.0	1.1		10.9	-13	1275	No stop
05 56 00	=1602-115	17 15 54	23.5	198.5	1.2		11.2	97	1289	05 54 11
05 56 00	FRB190520	17 15 54	23.7	199.4	1.2		11.8	-14	1289	No stop
06 00 30	---	17 20 25	23.5	200.6	1.3		12.5	256	1324	05 56 01
06 01 00	J1605-1139	17 20 55	23.3	199.8	1.2		12.0	17	1324	06 01 00
06 02 10	=1602-115	17 22 05	23.2	200.1	1.3		12.2	70	1333	06 01 01
06 02 10	J1603-1007	17 22 05	24.6	201.0	1.3		12.6	-19	1333	No stop
06 06 40	=1600-099	17 26 36	24.3	202.2	1.4		13.3	251	1368	06 02 11

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day 52	---							
06 06 40	J1605-1139	17 26 36	23.0	201.3	1.3		12.9	-19	1368	No stop
06 08 30	=1602-115	17 28 26	22.9	201.8	1.4		13.2	91	1382	06 06 41
06 08 30	FRB190520	17 28 26	23.0	202.7	1.4		13.7	-14	1382	No stop
06 13 00	---	17 32 57	22.8	203.9	1.5		14.4	256	1417	06 08 31
06 13 30	J1605-1139	17 33 27	22.6	203.1	1.4		13.9	17	1417	06 13 30
06 14 40	=1602-115	17 34 37	22.5	203.4	1.5		14.1	70	1426	06 13 31
06 14 40	FRB190520	17 34 37	22.7	204.3	1.5		14.6	-14	1426	No stop
06 19 10	---	17 39 08	22.4	205.5	1.6		15.3	256	1461	06 14 41
06 19 10	J1605-1139	17 39 08	22.2	204.5	1.5		14.8	-13	1461	No stop
06 21 00	=1602-115	17 40 58	22.1	205.0	1.6		15.0	97	1475	06 19 11
06 21 00	FRB190520	17 40 58	22.3	205.9	1.6		15.5	-14	1475	No stop
06 25 30	---	17 45 29	22.0	207.1	1.7		16.2	256	1510	06 21 01
06 26 00	J1605-1139	17 45 59	21.8	206.3	1.7		15.8	17	1510	06 26 00
06 27 10	=1602-115	17 47 09	21.7	206.6	1.7		15.9	70	1519	06 26 01
06 27 10	FRB190520	17 47 09	21.8	207.5	1.7		16.4	-14	1519	No stop
06 31 40	---	17 51 40	21.5	208.6	1.8		17.1	256	1554	06 27 11
06 31 40	J1605-1139	17 51 40	21.4	207.7	1.7		16.6	-13	1554	No stop
06 33 30	=1602-115	17 53 30	21.3	208.2	1.8		16.8	97	1568	06 31 41
06 33 30	FRB190520	17 53 30	21.4	209.1	1.8		17.3	-14	1568	No stop
06 38 00	---	17 58 01	21.1	210.2	1.9		18.0	256	1603	06 33 31
06 38 30	J1605-1139	17 58 31	20.9	209.4	1.9		17.5	17	1603	06 38 30
06 39 40	=1602-115	17 59 41	20.8	209.7	1.9		17.7	70	1612	06 38 31
06 39 40	J1603-1007	17 59 41	22.1	210.7	1.9		18.2	-18	1612	No stop
06 44 10	=1600-099	18 04 12	21.8	211.9	2.0		18.8	252	1646	06 39 41
06 44 10	J1605-1139	18 04 12	20.5	210.8	2.0		18.3	-18	1646	No stop
06 46 00	=1602-115	18 06 02	20.3	211.3	2.0		18.6	92	1660	06 44 11
06 47 40	J1550+0527	18 07 43	34.8	222.6	2.3		24.1	32	1660	06 47 40
06 52 00	=1548+056	18 12 03	34.4	223.8	2.3		24.7	260	1694	06 47 41

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri 21 Feb 2025 Day 52 ---

----- pulsar-check -----

06 56 00	B1933+16	18 16 04	50.0	149.0	-1.3	-18.8	74	1694	06 56 00
07 00 00	---	18 20 05	50.3	150.4	-1.3	-18.0	240	1725	06 56 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 7 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 7

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* FRB190520	15 59 18.982305	* 16 02 04.261100	16 03 27.434273	0.00
	-11 08 58.91332	*-11 17 17.36600	-11 21 35.73777	0.00
* B1933+16	19 33 31.814330	* 19 35 47.800000	19 36 55.036180	0.00
	16 09 57.63427	* 16 16 39.90000	16 19 47.07888	0.00
1548+056	15 48 06.931007	* 15 50 35.269240	15 51 50.032969	0.01
* J1550+0527	05 36 11.23091	* 05 27 10.44845	05 22 24.72155	0.01
J1550+05	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 9440 observations.			
1600-099	16 00 34.687412	* 16 03 18.778244	16 04 41.349112	0.13
* J1603-1007	-09 59 07.60341	*-10 07 21.29503	-10 11 37.72987	0.27
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 134 observations.			
1602-115	16 02 31.767572	* 16 05 17.531656	16 06 40.929425	0.02
* J1605-1139	-11 31 20.63028	*-11 39 26.83112	-11 43 38.92690	0.04
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 2275 observations.			

MULTI-FREQ STUDY ON FRB PRSSs - R4

PI: *Bhandari*

Address: JIVE

Observing mode: evn

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Fri 21 Feb 2025	Day 52	---							
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

16 30 00	J1048+7143	03 51 38	45.3	25.7	-7.0		-55.7	0	0	16 30 00
16 32 00	=1044+719	03 53 39	45.4	25.9	-6.9		-56.0	120	15	16 30 01
16 32 20	J1048+7143	03 53 59	45.4	25.9	-6.9		-56.1	15	15	16 32 20
16 36 00	=1044+719	03 57 39	45.7	26.1	-6.9		-56.8	220	44	16 32 21
16 37 00	J1031+7441	03 58 39	48.3	23.3	-6.6		-63.1	36	44	16 37 00
16 41 00	=1027+749	04 02 40	48.5	23.5	-6.5		-64.0	240	75	16 37 01
16 41 00	R4_D	04 02 40	47.9	24.6	-6.6		-62.5	-15	75	No stop
16 45 00	---	04 06 41	48.2	24.8	-6.5		-63.3	225	106	16 41 01
16 45 00	J1031+7441	04 06 41	48.8	23.6	-6.4		-64.8	-15	106	No stop
16 47 30	=1027+749	04 09 11	48.9	23.7	-6.4		-65.3	135	125	16 45 01
16 47 30	R4_D	04 09 11	48.3	24.9	-6.5		-63.8	-15	125	No stop
16 51 30	---	04 13 12	48.6	25.1	-6.4		-64.6	225	156	16 47 31
16 52 15	J1031+7441	04 13 57	49.2	23.9	-6.3		-66.3	30	156	16 52 15
16 54 15	=1027+749	04 15 57	49.3	24.0	-6.3		-66.8	120	171	16 52 16
16 54 15	R4_D	04 15 57	48.8	25.2	-6.3		-65.2	-15	171	No stop
16 58 15	---	04 19 58	49.0	25.4	-6.3		-66.0	225	202	16 54 16
16 59 00	J1031+7441	04 20 43	49.6	24.2	-6.2		-67.8	30	202	16 59 00
17 01 00	=1027+749	04 22 43	49.8	24.3	-6.2		-68.2	120	218	16 59 01
17 01 00	R4_D	04 22 43	49.2	25.5	-6.2		-66.6	-15	218	No stop
17 05 00	---	04 26 44	49.5	25.7	-6.2		-67.4	225	249	17 01 01
17 05 00	J1031+7441	04 26 44	50.0	24.4	-6.1		-69.0	-15	249	No stop
17 07 30	=1027+749	04 29 14	50.2	24.5	-6.1		-69.6	135	268	17 05 01
17 07 30	J1027+7428	04 29 14	50.3	25.0	-6.0		-70.2	-11	268	No stop
17 11 30	=1023+747	04 33 15	50.6	25.1	-5.9		-71.0	229	299	17 07 31
17 12 05	J1031+7441	04 33 50	50.4	24.7	-6.0		-70.6	24	299	17 12 05
17 14 05	=1027+749	04 35 50	50.6	24.8	-6.0		-71.0	120	314	17 12 06

Schedule for TORUN (Code Tr)

Page 3

Multi-freq study on FRB PRSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Fri	21 Feb 2025	Day 52	---							
17 14 05	R4_D	04 35 50	50.1	26.1	-6.0		-69.3	-15	314	No stop
17 18 05	---	04 39 51	50.3	26.2	-5.9		-70.2	225	345	17 14 06
17 18 05	J1031+7441	04 39 51	50.8	24.9	-5.9		-71.8	-15	345	No stop
17 20 35	=1027+749	04 42 22	51.0	25.0	-5.9		-72.4	135	365	17 18 06
17 20 35	R4_D	04 42 22	50.5	26.3	-5.9		-70.7	-15	365	No stop
17 24 35	---	04 46 22	50.8	26.5	-5.8		-71.5	225	395	17 20 36
17 25 20	J1031+7441	04 47 07	51.3	25.1	-5.8		-73.4	30	395	17 25 20
17 27 20	=1027+749	04 49 08	51.4	25.2	-5.7		-73.9	120	411	17 25 21
17 27 20	R4_D	04 49 08	51.0	26.5	-5.8		-72.1	-15	411	No stop
17 31 20	---	04 53 08	51.2	26.7	-5.7		-73.0	225	442	17 27 21
17 32 05	J1031+7441	04 53 53	51.7	25.3	-5.7		-74.9	30	442	17 32 05
17 34 05	=1027+749	04 55 54	51.8	25.4	-5.6		-75.3	120	457	17 32 06
17 34 05	R4_D	04 55 54	51.4	26.8	-5.7		-73.6	-16	457	No stop
17 38 05	---	04 59 54	51.7	26.9	-5.6		-74.4	224	488	17 34 06
17 38 05	J1031+7441	04 59 54	52.1	25.5	-5.6		-76.2	-16	488	No stop
17 40 35	=1027+749	05 02 25	52.3	25.6	-5.5		-76.8	134	508	17 38 06
17 40 35	J1027+7428	05 02 25	52.5	26.0	-5.5		-77.4	-11	508	No stop
17 44 35	=1023+747	05 06 25	52.7	26.1	-5.4		-78.3	229	538	17 40 36
17 45 10	J1031+7441	05 07 01	52.6	25.7	-5.4		-77.8	24	538	17 45 10
17 47 10	=1027+749	05 09 01	52.7	25.7	-5.4		-78.2	120	554	17 45 11
17 47 10	R4_D	05 09 01	52.3	27.2	-5.5		-76.4	-16	554	No stop
17 51 10	---	05 13 02	52.6	27.3	-5.4		-77.3	224	585	17 47 11
17 51 10	J1031+7441	05 13 02	53.0	25.8	-5.3		-79.1	-16	585	No stop
17 53 40	=1027+749	05 15 32	53.1	25.8	-5.3		-79.7	134	604	17 51 11
17 53 40	R4_D	05 15 32	52.8	27.3	-5.3		-77.8	-16	604	No stop
17 57 40	---	05 19 33	53.0	27.4	-5.3		-78.7	224	635	17 53 41
17 58 25	J1031+7441	05 20 18	53.4	25.9	-5.2		-80.8	29	635	17 58 25
18 00 25	=1027+749	05 22 18	53.6	26.0	-5.2		-81.2	120	651	17 58 26
18 00 25	R4_D	05 22 18	53.2	27.5	-5.2		-79.3	-16	651	No stop
18 04 25	---	05 26 19	53.5	27.6	-5.2		-80.2	224	681	18 00 26
18 05 10	J1031+7441	05 27 04	53.9	26.0	-5.1		-82.3	29	681	18 05 10
18 07 10	=1027+749	05 29 04	54.0	26.1	-5.1		-82.8	120	697	18 05 11

Schedule for TORUN (Code Tr)

Page 4

Multi-freq study on FRB PRSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day	52	---						
18 07 10	R4_D	05 29 04	53.7	27.6	-5.1		-80.9	-16	697	No stop
18 11 10	---	05 33 05	54.0	27.7	-5.1		-81.8	224	728	18 07 11
18 11 10	J1031+7441	05 33 05	54.3	26.1	-5.0		-83.7	-16	728	No stop
18 13 40	=1027+749	05 35 35	54.4	26.2	-5.0		-84.3	134	747	18 11 11
18 13 40	J1027+7428	05 35 35	54.7	26.6	-4.9		-84.9	-11	747	No stop
18 17 40	=1023+747	05 39 36	55.0	26.6	-4.8		-85.8	229	778	18 13 41
18 18 15	J1031+7441	05 40 11	54.7	26.2	-4.9		-85.4	24	778	18 18 15
18 20 15	=1027+749	05 42 11	54.9	26.2	-4.9		-85.8	120	794	18 18 16
18 20 15	R4_D	05 42 11	54.6	27.8	-4.9		-83.8	-16	794	No stop
18 24 15	---	05 46 12	54.9	27.9	-4.8		-84.8	224	824	18 20 16
18 24 15	J1031+7441	05 46 12	55.1	26.3	-4.8		-86.8	-16	824	No stop
18 26 45	=1027+749	05 48 42	55.3	26.3	-4.7		-87.4	134	844	18 24 16
18 26 45	R4_D	05 48 42	55.1	27.9	-4.8		-85.3	-16	844	No stop
18 30 45	---	05 52 43	55.3	27.9	-4.7		-86.3	224	875	18 26 46
18 31 30	J1031+7441	05 53 28	55.6	26.3	-4.7		-88.5	28	875	18 31 30
18 33 30	=1027+749	05 55 29	55.8	26.3	-4.6		-89.0	120	890	18 31 31
18 33 30	R4_D	05 55 29	55.5	28.0	-4.7		-86.9	-17	890	No stop
18 37 30	---	05 59 29	55.8	28.0	-4.6		-87.9	223	921	18 33 31
18 38 15	J1031+7441	06 00 14	56.1	26.3	-4.6		-90.1	28	921	18 38 15
18 40 15	=1027+749	06 02 15	56.2	26.3	-4.5		-90.6	120	937	18 38 16
18 40 15	R4_D	06 02 15	56.0	28.0	-4.6		-88.5	-17	937	No stop
18 44 15	---	06 06 15	56.3	28.0	-4.5		-89.5	223	967	18 40 16
18 44 15	J1031+7441	06 06 15	56.5	26.3	-4.5		-91.6	-17	967	No stop
18 46 45	=1027+749	06 08 46	56.6	26.3	-4.4		-92.2	133	987	18 44 16
18 46 45	J1027+7428	06 08 46	56.9	26.7	-4.3		-92.8	-11	987	No stop
18 50 45	=1023+747	06 12 46	57.2	26.6	-4.3		-93.8	229	1018	18 46 46
18 51 20	J1031+7441	06 13 21	57.0	26.3	-4.3		-93.3	24	1018	18 51 20
18 53 20	=1027+749	06 15 22	57.1	26.2	-4.3		-93.8	120	1033	18 51 21
18 53 20	R4_D	06 15 22	56.9	28.0	-4.3		-91.7	-17	1033	No stop
18 57 20	---	06 19 22	57.2	28.0	-4.3		-92.6	223	1064	18 53 21

Schedule for TORUN (Code Tr)

Page 5

Multi-freq study on FRB PRSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Fri	21 Feb 2025	Day	52	---						
18 57 20	J1031+7441	06 19 22	57.4	26.2	-4.2		-94.8	-17	1064	No stop
18 59 50	=1027+749	06 21 53	57.5	26.2	-4.2		-95.4	133	1083	18 57 21
18 59 50	R4_D	06 21 53	57.4	28.0	-4.2		-93.3	-17	1083	No stop
19 03 50	---	06 25 53	57.7	27.9	-4.2		-94.2	223	1114	18 59 51
19 04 35	J1031+7441	06 26 39	57.8	26.1	-4.1		-96.6	28	1114	19 04 35
19 06 35	=1027+749	06 28 39	58.0	26.1	-4.1		-97.1	120	1130	19 04 36
19 06 35	R4_D	06 28 39	57.9	27.9	-4.1		-94.9	-17	1130	No stop
19 10 35	---	06 32 40	58.2	27.8	-4.1		-95.9	223	1161	19 06 36
19 11 20	J1031+7441	06 33 25	58.3	26.0	-4.0		-98.4	28	1161	19 11 20
19 13 20	=1027+749	06 35 25	58.4	26.0	-4.0		-98.9	120	1176	19 11 21
19 13 20	R4_D	06 35 25	58.3	27.8	-4.0		-96.6	-17	1176	No stop
19 17 20	---	06 39 26	58.6	27.7	-3.9		-97.6	223	1207	19 13 21
19 17 20	J1031+7441	06 39 26	58.7	25.9	-3.9		-99.9	-17	1207	No stop
19 19 50	=1027+749	06 41 56	58.8	25.8	-3.9		-100.6	133	1226	19 17 21
19 19 50	J1027+7428	06 41 56	59.1	26.2	-3.8		-101.2	-11	1226	No stop
19 23 50	=1023+747	06 45 57	59.4	26.0	-3.7		-102.3	229	1257	19 19 51
19 24 25	J1031+7441	06 46 32	59.1	25.7	-3.8		-101.8	24	1257	19 24 25
19 26 25	=1027+749	06 48 32	59.3	25.7	-3.7		-102.3	120	1273	19 24 26
19 26 55	J1048+7143	06 49 02	58.5	31.7	-4.0		-93.2	3	1273	19 26 55
19 30 25	=1044+719	06 52 33	58.8	31.6	-4.0		-94.1	210	1300	19 26 56
19 31 25	J1031+7441	06 53 33	59.6	25.5	-3.7		-103.6	33	1300	19 31 25
19 33 25	=1027+749	06 55 33	59.7	25.4	-3.6		-104.2	120	1315	19 31 26
19 33 25	R4_D	06 55 33	59.8	27.4	-3.7		-101.8	-17	1315	No stop
19 37 25	---	06 59 34	60.0	27.2	-3.6		-102.9	223	1346	19 33 26
19 37 25	J1031+7441	06 59 34	60.0	25.3	-3.6		-105.3	-17	1346	No stop
19 39 55	=1027+749	07 02 04	60.1	25.2	-3.5		-105.9	133	1365	19 37 26
19 39 55	R4_D	07 02 04	60.2	27.2	-3.6		-103.6	-17	1365	No stop
19 43 55	---	07 06 05	60.5	27.0	-3.5		-104.7	223	1396	19 39 56
19 44 40	J1031+7441	07 06 50	60.4	25.0	-3.4		-107.2	27	1396	19 44 40
19 46 40	=1027+749	07 08 51	60.6	25.0	-3.4		-107.8	120	1412	19 44 41

Schedule for TORUN (Code Tr)

Page 6

Multi-freq study on FRB PRSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day 52	---							
19 46 40	R4_D	07 08 51	60.7	26.9	-3.5		-105.4	-18	1412	No stop
19 50 40	---	07 12 51	60.9	26.8	-3.4		-106.5	222	1443	19 46 41
19 51 25	J1031+7441	07 13 36	60.9	24.7	-3.3		-109.1	27	1443	19 51 25
19 53 25	=1027+749	07 15 37	61.0	24.7	-3.3		-109.7	120	1458	19 51 26
19 53 25	R4_D	07 15 37	61.1	26.6	-3.3		-107.3	-18	1458	No stop
19 57 25	---	07 19 37	61.4	26.5	-3.3		-108.4	222	1489	19 53 26
19 57 25	J1031+7441	07 19 37	61.3	24.5	-3.2		-110.8	-18	1489	No stop
19 59 55	=1027+749	07 22 08	61.4	24.3	-3.2		-111.5	132	1508	19 57 26
19 59 55	J1027+7428	07 22 08	61.7	24.6	-3.1		-112.3	-12	1508	No stop
20 03 55	=1023+747	07 26 08	62.0	24.3	-3.1		-113.4	228	1539	19 59 56
20 04 30	J1031+7441	07 26 43	61.7	24.1	-3.1		-112.9	23	1539	20 04 30
20 06 30	=1027+749	07 28 44	61.8	24.0	-3.1		-113.4	120	1555	20 04 31
20 06 30	R4_D	07 28 44	62.0	26.0	-3.1		-111.0	-18	1555	No stop
20 10 30	---	07 32 44	62.3	25.8	-3.1		-112.1	222	1586	20 06 31
20 10 30	J1031+7441	07 32 44	62.1	23.8	-3.0		-114.6	-18	1586	No stop
20 13 00	=1027+749	07 35 15	62.2	23.6	-3.0		-115.3	132	1605	20 10 31
20 13 00	R4_D	07 35 15	62.4	25.6	-3.0		-112.9	-18	1605	No stop
20 17 00	---	07 39 16	62.7	25.4	-3.0		-114.0	222	1636	20 13 01
20 17 45	J1031+7441	07 40 01	62.5	23.3	-2.9		-116.8	27	1636	20 17 45
20 19 45	=1027+749	07 42 01	62.6	23.2	-2.9		-117.4	120	1651	20 17 46
20 19 45	R4_D	07 42 01	62.9	25.2	-2.9		-114.9	-18	1651	No stop
20 23 45	---	07 46 02	63.1	25.0	-2.8		-116.1	222	1682	20 19 46
20 24 30	J1031+7441	07 46 47	62.9	22.8	-2.8		-118.8	27	1682	20 24 30
20 26 30	=1027+749	07 48 47	63.0	22.7	-2.7		-119.4	120	1698	20 24 31
20 26 30	R4_D	07 48 47	63.3	24.8	-2.8		-116.9	-18	1698	No stop
20 30 30	---	07 52 48	63.5	24.5	-2.7		-118.1	222	1729	20 26 31
20 30 30	J1031+7441	07 52 48	63.2	22.4	-2.7		-120.6	-18	1729	No stop
20 33 00	=1027+749	07 55 18	63.4	22.2	-2.6		-121.4	132	1748	20 30 31
20 33 00	J1027+7428	07 55 18	63.7	22.3	-2.6		-122.3	-12	1748	No stop
20 37 00	=1023+747	07 59 19	63.9	22.0	-2.5		-123.5	228	1779	20 33 01

Schedule for TORUN (Code Tr)

Page 7

Multi-freq study on FRB PRSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day	52	---						
20 37 35	J1031+7441	07 59 54	63.6	21.9	-2.6		-122.8	23	1779	20 37 35
20 39 35	=1027+749	08 01 54	63.8	21.7	-2.5		-123.5	120	1794	20 37 36
20 39 35	R4_D	08 01 54	64.1	23.8	-2.6		-121.0	-18	1794	No stop
20 43 35	---	08 05 55	64.3	23.4	-2.5		-122.2	222	1825	20 39 36
20 43 35	J1031+7441	08 05 55	64.0	21.4	-2.5		-124.7	-18	1825	No stop
20 46 05	=1027+749	08 08 25	64.1	21.1	-2.4		-125.5	132	1845	20 43 36
20 46 05	R4_D	08 08 25	64.5	23.2	-2.5		-123.0	-18	1845	No stop
20 50 05	---	08 12 26	64.7	22.8	-2.4		-124.3	222	1876	20 46 06
20 50 50	J1031+7441	08 13 11	64.4	20.7	-2.3		-127.1	27	1876	20 50 50
20 52 50	=1027+749	08 15 11	64.5	20.5	-2.3		-127.7	120	1891	20 50 51
20 52 50	R4_D	08 15 11	64.9	22.6	-2.4		-125.2	-18	1891	No stop
20 56 50	---	08 19 12	65.1	22.2	-2.3		-126.5	222	1922	20 52 51
20 57 35	J1031+7441	08 19 57	64.7	20.1	-2.2		-129.3	27	1922	20 57 35
20 59 35	=1027+749	08 21 58	64.8	19.9	-2.2		-130.0	120	1937	20 57 36
20 59 35	R4_D	08 21 58	65.3	21.9	-2.2		-127.4	-18	1937	No stop
21 03 35	---	08 25 58	65.5	21.5	-2.2		-128.8	222	1968	20 59 36
21 03 35	J1031+7441	08 25 58	65.0	19.4	-2.1		-131.3	-18	1968	No stop
21 06 05	=1027+749	08 28 29	65.1	19.2	-2.1		-132.1	132	1988	21 03 36
21 06 05	J1027+7428	08 28 29	65.5	19.1	-2.0		-133.1	-12	1988	No stop
21 10 05	=1023+747	08 32 29	65.7	18.7	-2.0		-134.5	228	2019	21 06 06
21 10 40	J1031+7441	08 33 04	65.4	18.7	-2.0		-133.7	23	2019	21 10 40
21 12 40	=1027+749	08 35 05	65.5	18.5	-2.0		-134.4	120	2034	21 10 41
21 12 40	R4_D	08 35 05	66.0	20.5	-2.0		-131.9	-18	2034	No stop
21 16 40	---	08 39 05	66.2	20.0	-2.0		-133.3	222	2065	21 12 41
21 16 40	J1031+7441	08 39 05	65.7	18.0	-1.9		-135.8	-18	2065	No stop
21 19 10	=1027+749	08 41 36	65.8	17.7	-1.9		-136.6	132	2084	21 16 41
21 19 10	R4_D	08 41 36	66.3	19.7	-1.9		-134.2	-17	2084	No stop
21 23 10	---	08 45 36	66.5	19.2	-1.8		-135.6	223	2115	21 19 11
21 23 55	J1031+7441	08 46 22	66.0	17.1	-1.8		-138.3	27	2115	21 23 55
21 25 55	=1027+749	08 48 22	66.1	16.9	-1.8		-139.0	120	2131	21 23 56

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day	52	---						
21 25 55	R4_D	08 48 22	66.6	18.8	-1.8		-136.6	-17	2131	No stop
21 29 55	---	08 52 22	66.8	18.3	-1.7		-138.0	223	2162	21 25 56
21 30 40	J1031+7441	08 53 08	66.3	16.3	-1.7		-140.7	28	2162	21 30 40
21 32 40	=1027+749	08 55 08	66.4	16.0	-1.6		-141.4	120	2177	21 30 41
21 32 40	R4_D	08 55 08	67.0	17.9	-1.7		-139.0	-17	2177	No stop
21 36 40	---	08 59 09	67.1	17.4	-1.6		-140.5	223	2208	21 32 41
21 36 40	J1031+7441	08 59 09	66.5	15.5	-1.6		-142.9	-17	2208	No stop
21 39 10	=1027+749	09 01 39	66.6	15.2	-1.5		-143.8	133	2227	21 36 41
21 39 10	J1027+7428	09 01 39	67.0	15.0	-1.5		-144.9	-12	2227	No stop
21 43 10	=1023+747	09 05 40	67.1	14.4	-1.4		-146.4	228	2258	21 39 11
21 43 45	J1031+7441	09 06 15	66.8	14.5	-1.5		-145.5	23	2258	21 43 45
21 45 45	=1027+749	09 08 15	66.9	14.3	-1.4		-146.2	120	2274	21 43 46
21 46 15	J1048+7143	09 08 45	68.4	21.6	-1.7		-135.5	0	2274	21 46 15
21 49 45	=1044+719	09 12 16	68.6	21.1	-1.6		-136.8	210	2301	21 46 16
21 50 45	J1031+7441	09 13 16	67.1	13.5	-1.3		-148.1	30	2301	21 50 45
21 52 45	=1027+749	09 15 16	67.1	13.3	-1.3		-148.8	120	2316	21 50 46
21 52 45	R4_D	09 15 16	67.8	15.0	-1.4		-146.6	-17	2316	No stop
21 56 45	---	09 19 17	68.0	14.4	-1.3		-148.1	223	2347	21 52 46
21 56 45	J1031+7441	09 19 17	67.3	12.7	-1.2		-150.4	-17	2347	No stop
21 59 15	=1027+749	09 21 47	67.3	12.3	-1.2		-151.3	133	2366	21 56 46
21 59 15	R4_D	09 21 47	68.1	14.0	-1.2		-149.1	-16	2366	No stop
22 03 15	---	09 25 48	68.2	13.3	-1.2		-150.7	224	2397	21 59 16
22 04 00	J1031+7441	09 26 33	67.5	11.6	-1.1		-153.1	28	2397	22 04 00
22 06 00	=1027+749	09 28 33	67.5	11.2	-1.1		-153.9	120	2413	22 04 01
22 06 00	R4_D	09 28 33	68.3	12.8	-1.1		-151.7	-16	2413	No stop
22 10 00	---	09 32 34	68.4	12.2	-1.1		-153.3	224	2444	22 06 01
22 10 45	J1031+7441	09 33 19	67.7	10.5	-1.0		-155.8	29	2444	22 10 45
22 12 45	=1027+749	09 35 20	67.7	10.2	-1.0		-156.5	120	2459	22 10 46
22 12 45	R4_D	09 35 20	68.5	11.7	-1.0		-154.4	-16	2459	No stop
22 16 45	---	09 39 20	68.6	11.0	-0.9		-156.1	224	2490	22 12 46

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day	52	---						
22 16 45	J1031+7441	09 39 20	67.8	9.5	-0.9		-158.1	-16	2490	No stop
22 19 15	=1027+749	09 41 51	67.9	9.1	-0.9		-159.1	134	2509	22 16 46
22 19 15	J1027+7428	09 41 51	68.2	8.6	-0.8		-160.5	-11	2509	No stop
22 23 15	=1023+747	09 45 51	68.3	8.0	-0.7		-162.1	229	2540	22 19 16
22 23 50	J1031+7441	09 46 26	68.0	8.3	-0.8		-160.9	24	2540	22 23 50
22 25 50	=1027+749	09 48 27	68.0	8.0	-0.8		-161.7	120	2556	22 23 51
22 25 50	R4_D	09 48 27	68.9	9.3	-0.8		-159.8	-16	2556	No stop
22 29 50	---	09 52 27	69.0	8.6	-0.7		-161.4	224	2587	22 25 51
22 29 50	J1031+7441	09 52 27	68.1	7.3	-0.7		-163.3	-16	2587	No stop
22 32 20	=1027+749	09 54 58	68.2	6.9	-0.6		-164.3	134	2606	22 29 51
22 32 20	R4_D	09 54 58	69.0	8.1	-0.7		-162.5	-16	2606	No stop
22 36 20	---	09 58 58	69.1	7.4	-0.6		-164.1	224	2637	22 32 21
22 37 05	J1031+7441	09 59 44	68.3	6.1	-0.6		-166.2	29	2637	22 37 05
22 39 05	=1027+749	10 01 44	68.3	5.7	-0.5		-167.0	120	2652	22 37 06
22 39 05	R4_D	10 01 44	69.2	6.8	-0.6		-165.3	-16	2652	No stop
22 43 05	---	10 05 45	69.2	6.1	-0.5		-167.0	224	2683	22 39 06
22 43 50	J1031+7441	10 06 30	68.4	4.9	-0.5		-169.0	29	2683	22 43 50
22 45 50	=1027+749	10 08 30	68.4	4.5	-0.4		-169.8	120	2699	22 43 51
22 45 50	R4_D	10 08 30	69.3	5.5	-0.5		-168.1	-16	2699	No stop
22 49 50	---	10 12 31	69.3	4.8	-0.4		-169.8	224	2730	22 45 51
22 49 50	J1031+7441	10 12 31	68.4	3.8	-0.4		-171.4	-16	2730	No stop
22 52 20	=1027+749	10 15 01	68.4	3.4	-0.3		-172.4	134	2749	22 49 51
22 52 20	J1027+7428	10 15 01	68.7	2.7	-0.2		-174.0	-12	2749	No stop
22 56 20	=1023+747	10 19 02	68.7	2.0	-0.2		-175.6	228	2780	22 52 21
22 56 55	J1031+7441	10 19 37	68.5	2.5	-0.2		-174.3	23	2780	22 56 55
22 58 55	=1027+749	10 21 37	68.5	2.2	-0.2		-175.1	120	2795	22 56 56
22 58 55	R4_D	10 21 37	69.4	2.9	-0.2		-173.7	-16	2795	No stop
23 02 55	---	10 25 38	69.4	2.1	-0.2		-175.4	224	2826	22 58 56
23 02 55	J1031+7441	10 25 38	68.5	1.4	-0.1		-176.8	-16	2826	No stop
23 05 25	=1027+749	10 28 08	68.5	1.0	-0.1		-177.8	134	2846	23 02 56

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day	52	---						
23 05 25	R4_D	10 28 08	69.5	1.6	-0.1		-176.5	-16	2846	No stop
23 09 25	---	10 32 09	69.5	0.8	-0.1		-178.2	224	2877	23 05 26
23 10 10	J1031+7441	10 32 54	68.5	0.1	-0.0		-179.7	29	2877	23 10 10
23 12 10	=1027+749	10 34 54	68.5	-0.2	0.0		179.4	120	2892	23 10 11
23 12 10	R4_D	10 34 54	69.5	0.3	-0.0		-179.4	-16	2892	No stop
23 16 10	---	10 38 55	69.5	-0.5	0.0		178.9	224	2923	23 12 11
23 16 55	J1031+7441	10 39 40	68.5	-1.1	0.1		177.5	29	2923	23 16 55
23 18 55	=1027+749	10 41 40	68.5	-1.5	0.1		176.7	120	2938	23 16 56
23 18 55	R4_D	10 41 40	69.5	-1.1	0.1		177.7	-16	2938	No stop
23 22 55	---	10 45 41	69.5	-1.9	0.2		176.0	224	2969	23 18 56
23 22 55	J1031+7441	10 45 41	68.5	-2.2	0.2		175.0	-16	2969	No stop
23 25 25	=1027+749	10 48 11	68.5	-2.7	0.2		174.0	134	2989	23 22 56
23 25 25	J1027+7428	10 48 11	68.7	-3.4	0.3		172.3	-13	2989	No stop
23 29 25	=1023+747	10 52 12	68.6	-4.2	0.4		170.7	227	3020	23 25 26
23 30 00	J1031+7441	10 52 47	68.4	-3.5	0.3		172.1	22	3020	23 30 00
23 32 00	=1027+749	10 54 48	68.4	-3.8	0.4		171.3	120	3035	23 30 01
23 32 00	R4_D	10 54 48	69.4	-3.7	0.3		172.1	-16	3035	No stop
23 36 00	---	10 58 48	69.3	-4.5	0.4		170.4	224	3066	23 32 01
23 36 00	J1031+7441	10 58 48	68.4	-4.6	0.4		169.7	-16	3066	No stop
23 38 30	=1027+749	11 01 19	68.3	-5.0	0.5		168.7	134	3085	23 36 01
23 38 30	R4_D	11 01 19	69.3	-5.0	0.4		169.3	-16	3085	No stop
23 42 30	---	11 05 19	69.3	-5.8	0.5		167.6	224	3116	23 38 31
23 43 15	J1031+7441	11 06 04	68.3	-5.8	0.5		166.7	29	3116	23 43 15
23 45 15	=1027+749	11 08 05	68.2	-6.2	0.6		165.9	120	3132	23 43 16
23 45 15	R4_D	11 08 05	69.2	-6.3	0.5		166.5	-16	3132	No stop
23 49 15	---	11 12 05	69.1	-7.1	0.6		164.8	224	3163	23 45 16
23 50 00	J1031+7441	11 12 51	68.2	-7.0	0.7		164.0	29	3163	23 50 00
23 52 00	=1027+749	11 14 51	68.1	-7.4	0.7		163.2	120	3178	23 50 01
23 52 00	R4_D	11 14 51	69.1	-7.6	0.6		163.7	-16	3178	No stop
23 56 00	---	11 18 51	69.0	-8.4	0.7		162.0	224	3209	23 52 01

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - R4

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	21 Feb 2025	Day	52	---						
23 56 00	J1031+7441	11 18 51	68.0	-8.0	0.8		161.6	-16	3209	No stop
23 58 30	=1027+749	11 21 22	68.0	-8.5	0.8		160.6	134	3228	23 56 01
--- Start: Fri	21 Feb 2025	Day	52	--	Stop: Sat	22 Feb 2025	Day	53	---	
23 58 30	J1027+7428	11 21 22	68.1	-9.3	0.9		158.9	-13	3228	No stop
00 02 30	=1023+747	11 25 23	68.0	-10.0	0.9		157.3	227	3259	23 58 31
00 03 05	J1031+7441	11 25 58	67.9	-9.2	0.9		158.8	22	3259	00 03 05
00 05 05	=1027+749	11 27 58	67.8	-9.6	0.9		158.0	120	3275	00 03 06
00 05 05	R4_D	11 27 58	68.8	-10.0	0.9		158.2	-16	3275	No stop
00 09 05	---	11 31 59	68.7	-10.7	0.9		156.6	224	3305	00 05 06
00 09 05	J1031+7441	11 31 59	67.7	-10.2	1.0		156.4	-16	3305	No stop
00 11 35	=1027+749	11 34 29	67.7	-10.6	1.0		155.5	134	3325	00 09 06
00 11 35	R4_D	11 34 29	68.6	-11.2	1.0		155.6	-16	3325	No stop
00 15 35	---	11 38 30	68.5	-11.9	1.0		154.0	224	3356	00 11 36
00 15 35	J1031+7441	11 38 30	67.5	-11.2	1.1		153.9	-16	3356	No stop
00 18 05	=1027+749	11 41 00	67.5	-11.6	1.1		152.9	134	3375	00 15 36
00 18 35	J1048+7143	11 41 30	70.7	-12.2	0.9		156.3	4	3375	00 18 35
00 22 30	=1044+719	11 45 26	70.5	-13.0	0.9		154.6	235	3405	00 18 36
00 26 00	B0355+54_D	11 48 56	29.3	-36.6	7.8		37.9	42	3405	00 26 00
00 30 00	---	11 52 57	29.0	-36.1	7.9		37.3	240	3436	00 26 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 6	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 7 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 7

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* R4_D	10 30 14.165246	* 10 34 14.260000	10 36 19.696563	0.00
	74 00 33.36476	* 73 45 04.09500	73 37 12.32427	0.00
* B0355+54_D	03 55 00.512430	* 03 58 53.700000	04 00 51.097939	0.00
	54 04 41.30138	* 54 13 13.70000	54 17 45.71403	0.00
1023+747	10 23 13.036378	* 10 27 24.146818	10 29 35.221799	0.83
* J1027+7428	74 43 43.63326	* 74 28 26.09766	74 20 40.81364	0.13
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 114 observations.			
1027+749	10 27 13.324578	* 10 31 22.024040	10 33 31.971549	0.97
* J1031+7441	74 57 22.73392	* 74 41 58.34534	74 34 09.30268	0.12
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 99 observations.			
1044+719	10 44 49.735100	* 10 48 27.619916	10 50 21.573184	0.34
* J1048+7143	71 59 26.88543	* 71 43 35.93846	71 35 31.95938	0.18
J1048+71	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 131737 observations.			

MULTI-FREQ STUDY ON FRB PRSS - FRB190520

PI: *Bhandari*

Address: JIVE
Observing mode: evn

Schedule for TORUN (Code Tr) Page 2

Multi-freq study on FRB PRSS - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT		Source		Start / Stop					Early		Disk		TPStart	
Stop UT				LST	EL	AZ	HA	UP	ParA	Dwell	GBytes		SYNC	

--- Sat 22 Feb 2025 Day 53 ---														
Next scan frequencies:				1626.49	1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:				673.51	673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:				32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

03 00 00	J1550+0527	14 23 22	39.0 151.2 -1.5						-16.9	0	0	03 00 00		
03 02 00	=1548+056	14 25 22	39.1 151.8 -1.4						-16.6	120	15	03 00 01		
03 02 20	J1550+0527	14 25 42	39.1 151.9 -1.4						-16.5	14	15	03 02 20		
03 06 00	=1548+056	14 29 23	39.4 153.0 -1.4						-15.9	220	44	03 02 21		
03 06 20	J1550+0527	14 29 43	39.4 153.1 -1.4						-15.8	14	44	03 06 20		
03 10 00	=1548+056	14 33 23	39.6 154.3 -1.3						-15.2	220	72	03 06 21		
03 12 00	J1605-1139	14 35 24	22.3 155.8 -1.5						-14.6	41	72	03 12 00		
03 13 30	=1602-115	14 36 54	22.4 156.2 -1.5						-14.4	90	84	03 12 01		
03 13 30	FRB190520	14 36 54	22.9 156.9 -1.4						-13.9	-14	84	No stop		
03 18 00	---	14 41 25	23.2 158.1 -1.4						-13.2	256	119	03 13 31		
03 18 30	J1605-1139	14 41 55	22.7 157.4 -1.4						-13.6	17	119	03 18 30		
03 19 40	=1602-115	14 43 05	22.8 157.7 -1.4						-13.4	70	128	03 18 31		
03 19 40	FRB190520	14 43 05	23.3 158.5 -1.3						-13.0	-14	128	No stop		
03 24 10	---	14 47 36	23.5 159.7 -1.3						-12.3	256	162	03 19 41		
03 24 10	J1605-1139	14 47 36	23.0 158.9 -1.3						-12.7	-13	162	No stop		
03 26 00	=1602-115	14 49 26	23.1 159.4 -1.3						-12.5	97	176	03 24 11		
03 26 00	FRB190520	14 49 26	23.6 160.1 -1.2						-12.0	-13	176	No stop		
03 30 30	---	14 53 57	23.8 161.3 -1.2						-11.3	257	211	03 26 01		
03 31 00	J1605-1139	14 54 27	23.4 160.7 -1.2						-11.7	17	211	03 31 00		
03 32 10	=1602-115	14 55 37	23.4 161.0 -1.2						-11.5	70	220	03 31 01		
03 32 10	J1603-1007	14 55 37	25.0 161.2 -1.2						-11.3	-20	220	No stop		
03 36 40	=1600-099	15 00 08	25.2 162.4 -1.1						-10.6	250	255	03 32 11		
03 36 40	J1605-1139	15 00 08	23.6 162.2 -1.1						-10.8	-20	255	No stop		
03 38 30	=1602-115	15 01 58	23.7 162.7 -1.1						-10.5	90	269	03 36 41		
03 38 30	FRB190520	15 01 58	24.2 163.4 -1.0						-10.1	-13	269	No stop		
03 43 00	---	15 06 29	24.4 164.6 -0.9						-9.3	257	304	03 38 31		

Schedule for TORUN (Code Tr)

Page 3

Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
03 43 30	J1605-1139	15 06 59	23.9	164.0	-1.0		-9.7	17	304	03 43 30
03 44 40	=1602-115	15 08 09	24.0	164.3	-1.0		-9.6	70	313	03 43 31
03 44 40	FRB190520	15 08 09	24.5	165.1	-0.9		-9.1	-13	313	No stop
03 49 10	---	15 12 40	24.6	166.3	-0.8		-8.3	257	348	03 44 41
03 49 10	J1605-1139	15 12 40	24.2	165.5	-0.9		-8.8	-13	348	No stop
03 51 00	=1602-115	15 14 30	24.2	166.0	-0.9		-8.5	97	362	03 49 11
03 51 00	FRB190520	15 14 30	24.7	166.8	-0.8		-8.1	-13	362	No stop
03 55 30	---	15 19 01	24.8	168.0	-0.7		-7.3	257	397	03 51 01
03 56 00	J1605-1139	15 19 31	24.4	167.3	-0.8		-7.7	17	397	03 56 00
03 57 10	=1602-115	15 20 41	24.4	167.6	-0.8		-7.6	70	406	03 56 01
03 57 10	FRB190520	15 20 41	24.9	168.4	-0.7		-7.1	-13	406	No stop
04 01 40	---	15 25 12	25.0	169.6	-0.6		-6.3	257	441	03 57 11
04 01 40	J1605-1139	15 25 12	24.6	168.8	-0.7		-6.8	-13	441	No stop
04 03 30	=1602-115	15 27 02	24.6	169.3	-0.7		-6.5	97	455	04 01 41
04 03 30	FRB190520	15 27 02	25.1	170.1	-0.6		-6.0	-13	455	No stop
04 08 00	---	15 31 33	25.2	171.4	-0.5		-5.3	257	490	04 03 31
04 08 30	J1605-1139	15 32 03	24.8	170.7	-0.6		-5.7	17	490	04 08 30
04 09 40	=1602-115	15 33 13	24.8	171.0	-0.6		-5.5	70	499	04 08 31
04 09 40	J1603-1007	15 33 13	26.4	171.4	-0.5		-5.3	-20	499	No stop
04 14 10	=1600-099	15 37 44	26.4	172.6	-0.4		-4.5	250	533	04 09 41
04 14 10	J1605-1139	15 37 44	24.9	172.2	-0.5		-4.8	-19	533	No stop
04 16 00	=1602-115	15 39 34	24.9	172.7	-0.5		-4.5	91	547	04 14 11
04 16 00	FRB190520	15 39 34	25.3	173.5	-0.4		-4.0	-13	547	No stop
04 20 30	---	15 44 05	25.4	174.7	-0.3		-3.2	257	582	04 16 01
04 21 00	J1605-1139	15 44 35	25.0	174.0	-0.4		-3.7	17	582	04 21 00
04 22 10	=1602-115	15 45 45	25.0	174.3	-0.3		-3.5	70	591	04 21 01
04 22 10	FRB190520	15 45 45	25.4	175.2	-0.3		-2.9	-13	591	No stop
04 26 40	---	15 50 16	25.5	176.4	-0.2		-2.2	257	626	04 22 11
04 26 40	J1605-1139	15 50 16	25.1	175.6	-0.3		-2.7	-13	626	No stop
04 28 30	=1602-115	15 52 06	25.1	176.1	-0.2		-2.4	97	640	04 26 41
04 28 30	FRB190520	15 52 06	25.5	176.9	-0.2		-1.9	-13	640	No stop
04 33 00	---	15 56 37	25.5	178.1	-0.1		-1.1	257	675	04 28 31

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
04 33 30	J1605-1139	15 57 07	25.1	177.4	-0.2		-1.6	17	675	04 33 30
04 34 40	=1602-115	15 58 17	25.2	177.7	-0.1		-1.4	70	684	04 33 31
04 34 40	FRB190520	15 58 17	25.5	178.6	-0.1		-0.9	-14	684	No stop
04 39 10	---	16 02 48	25.5	179.8	-0.0		-0.1	256	719	04 34 41
04 39 10	J1605-1139	16 02 48	25.2	178.9	-0.1		-0.6	-13	719	No stop
04 41 00	=1602-115	16 04 38	25.2	179.4	-0.0		-0.3	97	733	04 39 11
04 41 00	FRB190520	16 04 38	25.5	180.3	0.0		0.2	-14	733	No stop
04 45 30	---	16 09 09	25.5	181.5	0.1		0.9	256	768	04 41 01
04 46 00	J1605-1139	16 09 39	25.2	180.8	0.0		0.5	17	768	04 46 00
04 47 10	=1602-115	16 10 49	25.2	181.1	0.1		0.7	70	777	04 46 01
04 47 10	J1603-1007	16 10 49	26.7	181.7	0.1		1.0	-19	777	No stop
04 51 40	=1600-099	16 15 20	26.7	182.9	0.2		1.8	251	812	04 47 11
04 51 40	J1605-1139	16 15 20	25.2	182.3	0.1		1.4	-19	812	No stop
04 53 30	=1602-115	16 17 10	25.1	182.8	0.2		1.7	91	826	04 51 41
04 53 30	FRB190520	16 17 10	25.5	183.7	0.2		2.3	-14	826	No stop
04 58 00	---	16 21 41	25.4	184.9	0.3		3.0	256	861	04 53 31
04 58 30	J1605-1139	16 22 11	25.1	184.2	0.3		2.6	17	861	04 58 30
04 59 40	=1602-115	16 23 21	25.1	184.5	0.3		2.8	70	870	04 58 31
04 59 40	FRB190520	16 23 21	25.4	185.4	0.3		3.3	-14	870	No stop
05 04 10	---	16 27 52	25.3	186.6	0.4		4.1	256	904	04 59 41
05 04 10	J1605-1139	16 27 52	25.0	185.7	0.4		3.5	-13	904	No stop
05 06 00	=1602-115	16 29 42	25.0	186.2	0.4		3.8	97	918	05 04 11
05 06 00	FRB190520	16 29 42	25.3	187.1	0.4		4.4	-14	918	No stop
05 10 30	---	16 34 13	25.2	188.3	0.5		5.1	256	953	05 06 01
05 11 00	J1605-1139	16 34 43	24.9	187.6	0.5		4.6	17	953	05 11 00
05 12 10	=1602-115	16 35 53	24.9	187.9	0.5		4.8	70	962	05 11 01
05 12 10	FRB190520	16 35 53	25.2	188.8	0.5		5.4	-14	962	No stop
05 16 40	---	16 40 24	25.1	190.0	0.6		6.1	256	997	05 12 11
05 16 40	J1605-1139	16 40 24	24.8	189.1	0.6		5.6	-13	997	No stop
05 18 30	=1602-115	16 42 14	24.7	189.6	0.6		5.9	97	1011	05 16 41

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
05 18 30	FRB190520	16 42 14	25.0	190.5	0.6		6.4	-14	1011	No stop
05 23 00	---	16 46 45	24.9	191.7	0.7		7.1	256	1046	05 18 31
05 23 30	J1605-1139	16 47 15	24.6	190.9	0.7		6.7	17	1046	05 23 30
05 24 40	=1602-115	16 48 25	24.6	191.2	0.7		6.9	70	1055	05 23 31
05 24 40	J1603-1007	16 48 25	26.0	192.0	0.7		7.3	-19	1055	No stop
05 29 10	=1600-099	16 52 56	25.9	193.2	0.8		8.0	251	1090	05 24 41
05 29 10	J1605-1139	16 52 56	24.4	192.4	0.8		7.6	-19	1090	No stop
05 31 00	=1602-115	16 54 47	24.4	192.9	0.8		7.9	91	1104	05 29 11
05 31 00	FRB190520	16 54 47	24.6	193.9	0.9		8.4	-14	1104	No stop
05 35 30	---	16 59 17	24.4	195.1	0.9		9.2	256	1139	05 31 01
05 36 00	J1605-1139	16 59 47	24.2	194.3	0.9		8.7	17	1139	05 36 00
05 37 10	=1602-115	17 00 58	24.1	194.6	0.9		8.9	70	1148	05 36 01
05 37 10	FRB190520	17 00 58	24.4	195.5	1.0		9.4	-14	1148	No stop
05 41 40	---	17 05 28	24.2	196.7	1.0		10.1	256	1183	05 37 11
05 41 40	J1605-1139	17 05 28	24.0	195.8	1.0		9.6	-13	1183	No stop
05 43 30	=1602-115	17 07 19	23.9	196.3	1.0		9.9	97	1197	05 41 41
05 43 30	FRB190520	17 07 19	24.1	197.2	1.1		10.4	-14	1197	No stop
05 48 00	---	17 11 49	23.9	198.4	1.1		11.1	256	1232	05 43 31
05 48 30	J1605-1139	17 12 19	23.7	197.6	1.1		10.7	17	1232	05 48 30
05 49 40	=1602-115	17 13 30	23.6	197.9	1.1		10.9	70	1241	05 48 31
05 49 40	FRB190520	17 13 30	23.8	198.8	1.2		11.4	-14	1241	No stop
05 54 10	---	17 18 00	23.6	200.0	1.2		12.1	256	1275	05 49 41
05 54 10	J1605-1139	17 18 00	23.4	199.1	1.2		11.6	-13	1275	No stop
05 56 00	=1602-115	17 19 51	23.3	199.5	1.2		11.8	97	1289	05 54 11
05 56 00	FRB190520	17 19 51	23.5	200.5	1.3		12.4	-14	1289	No stop
06 00 30	---	17 24 21	23.3	201.6	1.3		13.1	256	1324	05 56 01
06 01 00	J1605-1139	17 24 51	23.1	200.9	1.3		12.6	17	1324	06 01 00
06 02 10	=1602-115	17 26 02	23.0	201.2	1.3		12.8	70	1333	06 01 01
06 02 10	J1603-1007	17 26 02	24.4	202.1	1.4		13.2	-19	1333	No stop
06 06 40	=1600-099	17 30 32	24.1	203.2	1.4		13.9	251	1368	06 02 11

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
06 06 40	J1605-1139	17 30 32	22.7	202.3	1.4		13.5	-19	1368	No stop
06 08 30	=1602-115	17 32 23	22.6	202.8	1.4		13.7	91	1382	06 06 41
06 08 30	FRB190520	17 32 23	22.8	203.7	1.5		14.3	-14	1382	No stop
06 13 00	---	17 36 53	22.5	204.9	1.6		14.9	256	1417	06 08 31
06 13 30	J1605-1139	17 37 24	22.3	204.1	1.5		14.5	17	1417	06 13 30
06 14 40	=1602-115	17 38 34	22.3	204.4	1.5		14.7	70	1426	06 13 31
06 14 40	FRB190520	17 38 34	22.4	205.3	1.6		15.2	-14	1426	No stop
06 19 10	---	17 43 04	22.1	206.5	1.7		15.8	256	1461	06 14 41
06 19 10	J1605-1139	17 43 04	22.0	205.5	1.6		15.3	-13	1461	No stop
06 21 00	=1602-115	17 44 55	21.9	206.0	1.6		15.6	97	1475	06 19 11
06 21 00	FRB190520	17 44 55	22.0	206.9	1.7		16.1	-14	1475	No stop
06 25 30	---	17 49 25	21.7	208.1	1.8		16.8	256	1510	06 21 01
06 26 00	J1605-1139	17 49 56	21.5	207.3	1.7		16.3	17	1510	06 26 00
06 27 10	=1602-115	17 51 06	21.4	207.6	1.7		16.5	70	1519	06 26 01
06 27 10	FRB190520	17 51 06	21.6	208.5	1.8		17.0	-14	1519	No stop
06 31 40	---	17 55 36	21.2	209.6	1.9		17.6	256	1554	06 27 11
06 31 40	J1605-1139	17 55 36	21.1	208.7	1.8		17.1	-13	1554	No stop
06 33 30	=1602-115	17 57 27	21.0	209.2	1.8		17.4	97	1568	06 31 41
06 33 30	FRB190520	17 57 27	21.1	210.1	1.9		17.9	-14	1568	No stop
06 38 00	---	18 01 58	20.7	211.2	2.0		18.5	256	1603	06 33 31
06 38 30	J1605-1139	18 02 28	20.6	210.4	1.9		18.1	17	1603	06 38 30
06 39 40	=1602-115	18 03 38	20.5	210.7	1.9		18.2	70	1612	06 38 31
06 39 40	J1603-1007	18 03 38	21.8	211.7	2.0		18.7	-18	1612	No stop
06 44 10	=1600-099	18 08 09	21.5	212.9	2.1		19.3	252	1646	06 39 41
06 44 10	J1605-1139	18 08 09	20.2	211.8	2.0		18.9	-18	1646	No stop
06 46 00	=1602-115	18 09 59	20.0	212.3	2.1		19.1	92	1660	06 44 11
06 47 40	J1550+0527	18 11 39	34.4	223.7	2.3		24.6	32	1660	06 47 40
06 52 00	=1548+056	18 16 00	33.9	224.9	2.4		25.2	260	1694	06 47 41

Schedule for TORUN (Code Tr)

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Multi-freq study on FRB PRSs - FRB190520

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat 22 Feb 2025 Day 53 ---

----- pulsar-check -----

06 56 00	B1933+16	18 20 00	50.3	150.4	-1.3		-18.0	75	1694	06 56 00
07 00 00	---	18 24 01	50.6	151.8	-1.2		-17.2	240	1725	06 56 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 7 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 7

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* FRB190520	15 59 18.982305	* 16 02 04.261100	16 03 27.472082	0.00
	-11 08 58.91332	*-11 17 17.36600	-11 21 35.83740	0.00
* B1933+16	19 33 31.814330	* 19 35 47.800000	19 36 55.063563	0.00
	16 09 57.63427	* 16 16 39.90000	16 19 46.98440	0.00
1548+056	15 48 06.931007	* 15 50 35.269240	15 51 50.068777	0.01
* J1550+0527	05 36 11.23091	* 05 27 10.44845	05 22 24.62596	0.01
J1550+05	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 9440 observations.			
1600-099	16 00 34.687412	* 16 03 18.778244	16 04 41.386729	0.13
* J1603-1007	-09 59 07.60341	*-10 07 21.29503	-10 11 37.82850	0.27
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 134 observations.			
1602-115	16 02 31.767572	* 16 05 17.531656	16 06 40.967328	0.02
* J1605-1139	-11 31 20.63028	*-11 39 26.83112	-11 43 39.02450	0.04
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 2275 observations.			

em181atr

EM181A
PI: *Suma Murthy*

Address: JIVE

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat 22 Feb 2025 Day 53 ---										
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

08 00 00	3C84	19 24 11	18.1	43.3	-8.0		-33.4	0	0	08 00 00
08 03 00	---	19 27 11	18.4	43.8	-7.9		-33.8	180	23	08 00 01
08 05 00	3C48	19 29 12	24.7	66.8	-6.2		-41.3	59	23	08 05 00
08 08 00	---	19 32 12	25.1	67.3	-6.1		-41.5	180	46	08 05 01
08 10 30	J0123+3044	19 34 43	25.7	72.1	-5.8		-41.7	126	46	08 10 30
08 13 30	=0120+304	19 37 43	26.1	72.6	-5.8		-41.9	180	70	08 10 31
08 13 30	4C31.04	19 37 43	27.7	72.1	-5.7		-42.6	-20	70	No stop
08 17 00	---	19 41 14	28.2	72.8	-5.7		-42.7	190	97	08 13 31
08 17 30	J0123+3044	19 41 44	26.7	73.3	-5.7		-42.1	11	97	08 17 30
08 18 30	=0120+304	19 42 44	26.8	73.5	-5.7		-42.1	60	104	08 17 31
08 18 30	4C31.04	19 42 44	28.4	73.0	-5.6		-42.8	-20	104	No stop
08 22 00	---	19 46 15	28.9	73.6	-5.6		-43.0	190	131	08 18 31
08 22 00	J0123+3044	19 46 15	27.3	74.1	-5.6		-42.3	-19	131	No stop
08 23 30	=0120+304	19 47 45	27.6	74.4	-5.6		-42.4	71	143	08 22 01
08 23 30	4C31.04	19 47 45	29.1	73.9	-5.6		-43.1	-20	143	No stop
08 27 00	---	19 51 15	29.6	74.5	-5.5		-43.2	190	170	08 23 31
08 27 30	J0123+3044	19 51 46	28.1	75.1	-5.5		-42.5	11	170	08 27 30
08 28 30	=0120+304	19 52 46	28.3	75.3	-5.5		-42.6	60	178	08 27 31
08 28 30	4C31.04	19 52 46	29.8	74.8	-5.5		-43.3	-20	178	No stop
08 32 00	---	19 56 16	30.4	75.4	-5.4		-43.4	190	205	08 28 31
08 32 00	J0123+3044	19 56 16	28.8	75.9	-5.5		-42.7	-19	205	No stop
08 33 30	=0120+304	19 57 47	29.0	76.2	-5.4		-42.8	71	216	08 32 01
08 33 30	4C31.04	19 57 47	30.6	75.7	-5.4		-43.5	-20	216	No stop
08 37 00	---	20 01 17	31.1	76.3	-5.3		-43.7	190	243	08 33 31
08 37 30	J0123+3044	20 01 47	29.6	76.9	-5.4		-43.0	11	243	08 37 30
08 38 30	=0120+304	20 02 47	29.7	77.1	-5.4		-43.0	60	251	08 37 31

Schedule for TORUN (Code Tr)

Page 3

EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
08 38 30	4C31.04	20 02 47	31.3	76.6	-5.3		-43.7	-20	251	No stop
08 42 00	---	20 06 18	31.8	77.2	-5.2		-43.9	190	278	08 38 31
08 42 00	J0123+3044	20 06 18	30.3	77.7	-5.3		-43.1	-19	278	No stop
08 43 30	=0120+304	20 07 48	30.5	78.0	-5.3		-43.2	71	290	08 42 01
08 43 30	4C31.04	20 07 48	32.0	77.5	-5.2		-43.9	-20	290	No stop
08 47 00	---	20 11 19	32.5	78.1	-5.2		-44.0	190	317	08 43 31
08 47 30	J0123+3044	20 11 49	31.1	78.7	-5.2		-43.3	11	317	08 47 30
08 48 30	=0120+304	20 12 49	31.2	78.9	-5.2		-43.4	60	325	08 47 31
08 48 30	4C31.04	20 12 49	32.8	78.4	-5.1		-44.1	-20	325	No stop
08 52 00	---	20 16 20	33.3	79.0	-5.1		-44.2	190	352	08 48 31
08 52 00	J0123+3044	20 16 20	31.7	79.6	-5.1		-43.5	-19	352	No stop
08 53 30	=0120+304	20 17 50	32.0	79.8	-5.1		-43.5	71	363	08 52 01
08 53 30	4C31.04	20 17 50	33.5	79.3	-5.1		-44.3	-20	363	No stop
08 57 00	---	20 21 20	34.0	79.9	-5.0		-44.4	190	390	08 53 31
08 57 30	J0123+3044	20 21 50	32.6	80.6	-5.0		-43.6	11	390	08 57 30
08 58 30	=0120+304	20 22 51	32.7	80.8	-5.0		-43.7	60	398	08 57 31
08 58 30	4C31.04	20 22 51	34.2	80.2	-5.0		-44.4	-20	398	No stop
09 02 00	---	20 26 21	34.8	80.8	-4.9		-44.5	190	425	08 58 31
09 02 00	J0123+3044	20 26 21	33.2	81.4	-5.0		-43.8	-19	425	No stop
09 03 30	=0120+304	20 27 51	33.4	81.7	-4.9		-43.8	71	437	09 02 01
09 03 30	4C31.04	20 27 51	35.0	81.1	-4.9		-44.6	-20	437	No stop
09 07 00	---	20 31 22	35.5	81.8	-4.8		-44.7	190	464	09 03 31
09 07 30	J0123+3044	20 31 52	34.0	82.4	-4.9		-43.9	11	464	09 07 30
09 08 30	=0120+304	20 32 52	34.2	82.6	-4.9		-43.9	60	471	09 07 31
09 08 30	4C31.04	20 32 52	35.7	82.0	-4.8		-44.7	-20	471	No stop
09 12 00	---	20 36 23	36.3	82.7	-4.7		-44.8	190	499	09 08 31
09 12 00	J0123+3044	20 36 23	34.7	83.3	-4.8		-44.0	-19	499	No stop
09 13 30	=0120+304	20 37 53	34.9	83.6	-4.8		-44.0	71	510	09 12 01
09 14 30	3C84	20 38 53	26.6	55.3	-6.7		-41.3	-12	510	09 14 30
09 17 30	---	20 41 54	27.0	55.8	-6.7		-41.6	168	533	09 14 31
09 19 30	3C48	20 43 54	35.4	79.9	-4.9		-45.0	57	533	09 19 30
09 22 30	---	20 46 55	35.8	80.4	-4.9		-45.1	180	556	09 19 31

Schedule for TORUN (Code Tr)

Page 4

EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
09 25 00	J0123+3044	20 49 25	36.7	85.8	-4.6		-44.2	125	556	09 25 00
09 28 00	=0120+304	20 52 25	37.1	86.3	-4.5		-44.3	180	580	09 25 01
09 28 00	4C31.04	20 52 25	38.7	85.7	-4.5		-45.1	-20	580	No stop
09 31 30	---	20 55 56	39.2	86.4	-4.4		-45.2	190	607	09 28 01
09 32 00	J0123+3044	20 56 26	37.7	87.1	-4.5		-44.3	11	607	09 32 00
09 33 00	=0120+304	20 57 26	37.9	87.3	-4.4		-44.3	60	614	09 32 01
09 33 00	4C31.04	20 57 26	39.4	86.7	-4.4		-45.2	-20	614	No stop
09 36 30	---	21 00 57	39.9	87.4	-4.3		-45.2	190	642	09 33 01
09 36 30	J0123+3044	21 00 57	38.4	88.0	-4.4		-44.4	-19	642	No stop
09 38 00	=0120+304	21 02 27	38.6	88.3	-4.4		-44.4	71	653	09 36 31
09 38 00	4C31.04	21 02 27	40.2	87.6	-4.3		-45.2	-20	653	No stop
09 41 30	---	21 05 58	40.7	88.3	-4.3		-45.3	190	680	09 38 01
09 42 00	J0123+3044	21 06 28	39.2	89.1	-4.3		-44.4	11	680	09 42 00
09 43 00	=0120+304	21 07 28	39.4	89.3	-4.3		-44.4	60	688	09 42 01
09 43 00	4C31.04	21 07 28	40.9	88.6	-4.2		-45.3	-20	688	No stop
09 46 30	---	21 10 58	41.4	89.3	-4.2		-45.3	190	715	09 43 01
09 46 30	J0123+3044	21 10 58	39.9	90.0	-4.2		-44.4	-19	715	No stop
09 48 00	=0120+304	21 12 29	40.1	90.3	-4.2		-44.4	71	727	09 46 31
09 48 00	4C31.04	21 12 29	41.7	89.6	-4.1		-45.3	-20	727	No stop
09 51 30	---	21 15 59	42.2	90.3	-4.1		-45.3	190	754	09 48 01
09 52 00	J0123+3044	21 16 29	40.7	91.1	-4.1		-44.4	11	754	09 52 00
09 53 00	=0120+304	21 17 30	40.9	91.3	-4.1		-44.4	60	761	09 52 01
09 53 00	4C31.04	21 17 30	42.4	90.6	-4.1		-45.3	-20	761	No stop
09 56 30	---	21 21 00	42.9	91.3	-4.0		-45.3	190	788	09 53 01
09 56 30	J0123+3044	21 21 00	41.4	92.0	-4.1		-44.4	-19	788	No stop
09 58 00	=0120+304	21 22 30	41.6	92.3	-4.0		-44.3	71	800	09 56 31
09 58 00	4C31.04	21 22 30	43.2	91.6	-4.0		-45.3	-20	800	No stop
10 01 30	---	21 26 01	43.7	92.4	-3.9		-45.2	190	827	09 58 01
10 02 00	J0123+3044	21 26 31	42.2	93.1	-4.0		-44.3	11	827	10 02 00
10 03 00	=0120+304	21 27 31	42.4	93.3	-3.9		-44.3	60	835	10 02 01

Schedule for TORUN (Code Tr)

Page 5

EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
10 03 00	4C31.04	21 27 31	43.9	92.7	-3.9		-45.2	-20	835	No stop
10 06 30	---	21 31 02	44.4	93.4	-3.8		-45.2	190	862	10 03 01
10 06 30	J0123+3044	21 31 02	42.9	94.1	-3.9		-44.3	-19	862	No stop
10 08 00	=0120+304	21 32 32	43.1	94.4	-3.9		-44.2	71	873	10 06 31
10 08 00	4C31.04	21 32 32	44.7	93.7	-3.8		-45.2	-20	873	No stop
10 11 30	---	21 36 03	45.2	94.4	-3.7		-45.1	190	900	10 08 01
10 12 00	J0123+3044	21 36 33	43.7	95.2	-3.8		-44.2	11	900	10 12 00
10 13 00	=0120+304	21 37 33	43.9	95.5	-3.8		-44.1	60	908	10 12 01
10 13 00	4C31.04	21 37 33	45.4	94.8	-3.7		-45.1	-20	908	No stop
10 16 30	---	21 41 03	45.9	95.5	-3.7		-45.0	190	935	10 13 01
10 16 30	J0123+3044	21 41 03	44.4	96.2	-3.7		-44.1	-19	935	No stop
10 18 00	=0120+304	21 42 34	44.6	96.5	-3.7		-44.0	71	947	10 16 31
10 18 00	4C31.04	21 42 34	46.2	95.8	-3.6		-45.0	-20	947	No stop
10 21 30	---	21 46 04	46.7	96.6	-3.6		-44.9	190	974	10 18 01
10 22 00	J0123+3044	21 46 34	45.2	97.4	-3.6		-43.9	11	974	10 22 00
10 23 00	=0120+304	21 47 34	45.4	97.6	-3.6		-43.9	60	982	10 22 01
10 23 00	4C31.04	21 47 34	46.9	96.9	-3.6		-44.9	-20	982	No stop
10 26 30	---	21 51 05	47.4	97.7	-3.5		-44.8	190	1009	10 23 01
10 26 30	J0123+3044	21 51 05	45.9	98.4	-3.6		-43.8	-19	1009	No stop
10 28 00	=0120+304	21 52 35	46.1	98.7	-3.5		-43.7	71	1020	10 26 31
10 29 00	3C84	21 53 35	36.4	66.9	-5.5		-47.6	-19	1020	10 29 00
10 32 00	---	21 56 36	36.8	67.4	-5.4		-47.9	161	1043	10 29 01
10 34 00	3C48	21 58 36	46.5	94.4	-3.7		-45.7	51	1043	10 34 00
10 37 00	---	22 01 37	47.0	95.0	-3.6		-45.7	180	1067	10 34 01
10 39 30	J0123+3044	22 04 07	47.8	101.4	-3.3		-43.3	123	1067	10 39 30
10 42 30	=0120+304	22 07 08	48.3	102.1	-3.3		-43.2	180	1090	10 39 31
10 42 30	4C31.04	22 07 08	49.8	101.4	-3.2		-44.2	-20	1090	No stop
10 46 00	---	22 10 38	50.3	102.2	-3.2		-44.0	190	1117	10 42 31
10 46 30	J0123+3044	22 11 08	48.9	103.0	-3.2		-43.0	11	1117	10 46 30
10 47 30	=0120+304	22 12 09	49.0	103.3	-3.2		-42.9	60	1125	10 46 31

Schedule for TORUN (Code Tr)

Page 6

EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
10 47 30	4C31.04	22 12 09	50.6	102.6	-3.1		-43.9	-20	1125	No stop
10 51 00	---	22 15 39	51.1	103.4	-3.1		-43.7	190	1152	10 47 31
10 51 00	J0123+3044	22 15 39	49.5	104.1	-3.1		-42.7	-19	1152	No stop
10 52 30	=0120+304	22 17 09	49.7	104.5	-3.1		-42.6	71	1163	10 51 01
10 52 30	4C31.04	22 17 09	51.3	103.8	-3.1		-43.6	-20	1163	No stop
10 56 00	---	22 20 40	51.8	104.6	-3.0		-43.4	190	1190	10 52 31
10 56 30	J0123+3044	22 21 10	50.3	105.5	-3.1		-42.4	11	1190	10 56 30
10 57 30	=0120+304	22 22 10	50.5	105.7	-3.0		-42.3	60	1198	10 56 31
10 57 30	4C31.04	22 22 10	52.0	105.0	-3.0		-43.3	-20	1198	No stop
11 01 00	---	22 25 41	52.5	105.9	-2.9		-43.1	190	1225	10 57 31
11 01 00	J0123+3044	22 25 41	51.0	106.6	-3.0		-42.1	-19	1225	No stop
11 02 30	=0120+304	22 27 11	51.2	107.0	-3.0		-42.0	71	1237	11 01 01
11 02 30	4C31.04	22 27 11	52.7	106.3	-2.9		-43.0	-20	1237	No stop
11 06 00	---	22 30 42	53.2	107.2	-2.8		-42.8	190	1264	11 02 31
11 06 30	J0123+3044	22 31 12	51.8	108.0	-2.9		-41.7	11	1264	11 06 30
11 07 30	=0120+304	22 32 12	51.9	108.3	-2.9		-41.6	60	1271	11 06 31
11 07 30	4C31.04	22 32 12	53.5	107.6	-2.8		-42.6	-20	1271	No stop
11 11 00	---	22 35 42	54.0	108.5	-2.8		-42.4	190	1298	11 07 31
11 11 00	J0123+3044	22 35 42	52.4	109.2	-2.8		-41.4	-19	1298	No stop
11 12 30	=0120+304	22 37 13	52.6	109.6	-2.8		-41.2	71	1310	11 11 01
11 12 30	4C31.04	22 37 13	54.2	108.9	-2.7		-42.2	-20	1310	No stop
11 16 00	---	22 40 43	54.7	109.8	-2.7		-41.9	190	1337	11 12 31
11 16 30	J0123+3044	22 41 13	53.2	110.7	-2.7		-40.9	11	1337	11 16 30
11 17 30	=0120+304	22 42 13	53.3	110.9	-2.7		-40.8	60	1345	11 16 31
11 17 30	4C31.04	22 42 13	54.9	110.2	-2.6		-41.8	-20	1345	No stop
11 21 00	---	22 45 44	55.4	111.2	-2.6		-41.5	190	1372	11 17 31
11 21 00	J0123+3044	22 45 44	53.8	111.9	-2.6		-40.5	-19	1372	No stop
11 22 30	=0120+304	22 47 14	54.0	112.3	-2.6		-40.3	71	1384	11 21 01
11 22 30	4C31.04	22 47 14	55.6	111.6	-2.6		-41.3	-20	1384	No stop
11 26 00	---	22 50 45	56.1	112.6	-2.5		-41.0	190	1411	11 22 31

Schedule for TORUN (Code Tr)

Page 7

EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day	53	---						
11 26 30	J0123+3044	22 51 15	54.6	113.4	-2.6		-39.9	11	1411	11 26 30
11 27 30	=0120+304	22 52 15	54.7	113.7	-2.5		-39.8	60	1418	11 26 31
11 27 30	4C31.04	22 52 15	56.3	113.1	-2.5		-40.8	-20	1418	No stop
11 31 00	---	22 55 46	56.8	114.1	-2.4		-40.4	190	1445	11 27 31
11 31 00	J0123+3044	22 55 46	55.2	114.7	-2.5		-39.4	-19	1445	No stop
11 32 30	=0120+304	22 57 16	55.4	115.2	-2.5		-39.3	71	1457	11 31 01
11 32 30	4C31.04	22 57 16	57.0	114.5	-2.4		-40.3	-20	1457	No stop
11 36 00	---	23 00 46	57.4	115.6	-2.3		-39.9	190	1484	11 32 31
11 36 30	J0123+3044	23 01 17	55.9	116.4	-2.4		-38.8	11	1484	11 36 30
11 37 30	=0120+304	23 02 17	56.1	116.7	-2.4		-38.7	60	1492	11 36 31
11 37 30	4C31.04	23 02 17	57.7	116.0	-2.3		-39.7	-20	1492	No stop
11 41 00	---	23 05 47	58.1	117.1	-2.3		-39.2	190	1519	11 37 31
11 41 00	J0123+3044	23 05 47	56.5	117.7	-2.3		-38.3	-19	1519	No stop
11 42 30	=0120+304	23 07 18	56.7	118.2	-2.3		-38.1	71	1530	11 41 01
11 43 30	3C84	23 08 18	47.1	79.0	-4.2		-52.0	-33	1530	11 43 30
11 46 30	---	23 11 18	47.6	79.5	-4.2		-52.1	147	1554	11 43 31
11 48 30	3C48	23 13 19	57.4	112.7	-2.4		-41.5	39	1554	11 48 30
11 51 30	---	23 16 19	57.8	113.6	-2.4		-41.2	180	1577	11 48 31
11 54 00	J0123+3044	23 18 49	58.2	121.8	-2.1		-36.5	120	1577	11 54 00
11 57 00	=0120+304	23 21 50	58.6	122.8	-2.0		-36.0	180	1600	11 54 01
11 57 00	4C31.04	23 21 50	60.2	122.3	-2.0		-36.9	-20	1600	No stop
12 00 30	---	23 25 21	60.7	123.5	-1.9		-36.3	190	1627	11 57 01
12 01 00	J0123+3044	23 25 51	59.1	124.2	-2.0		-35.4	11	1627	12 01 00
12 02 00	=0120+304	23 26 51	59.2	124.5	-2.0		-35.2	60	1635	12 01 01
12 02 00	4C31.04	23 26 51	60.8	124.0	-1.9		-36.1	-20	1635	No stop
12 05 30	---	23 30 21	61.3	125.3	-1.8		-35.4	190	1662	12 02 01
12 05 30	J0123+3044	23 30 21	59.7	125.8	-1.9		-34.6	-19	1662	No stop
12 07 00	=0120+304	23 31 52	59.9	126.3	-1.9		-34.3	71	1673	12 05 31
12 07 00	4C31.04	23 31 52	61.5	125.8	-1.8		-35.2	-20	1673	No stop
12 10 30	---	23 35 22	61.9	127.1	-1.8		-34.5	190	1700	12 07 01

Schedule for TORUN (Code Tr)

Page 8

EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
12 11 00	J0123+3044	23 35 52	60.3	127.7	-1.8		-33.6	10	1700	12 11 00
12 12 00	=0120+304	23 36 52	60.5	128.1	-1.8		-33.4	60	1708	12 11 01
12 12 00	4C31.04	23 36 52	62.1	127.7	-1.7		-34.2	-20	1708	No stop
12 15 30	---	23 40 23	62.5	129.0	-1.7		-33.5	190	1735	12 12 01
12 15 30	J0123+3044	23 40 23	60.9	129.4	-1.7		-32.7	-20	1735	No stop
12 17 00	=0120+304	23 41 53	61.0	129.9	-1.7		-32.4	70	1747	12 15 31
12 17 00	4C31.04	23 41 53	62.7	129.6	-1.7		-33.2	-20	1747	No stop
12 20 30	---	23 45 24	63.1	130.9	-1.6		-32.5	190	1774	12 17 01
12 21 00	J0123+3044	23 45 54	61.5	131.4	-1.6		-31.6	10	1774	12 21 00
12 22 00	=0120+304	23 46 54	61.6	131.8	-1.6		-31.4	60	1782	12 21 01
12 22 00	4C31.04	23 46 54	63.2	131.5	-1.6		-32.1	-20	1782	No stop
12 25 30	---	23 50 25	63.6	132.9	-1.5		-31.3	190	1809	12 22 01
12 25 30	J0123+3044	23 50 25	62.0	133.2	-1.6		-30.7	-20	1809	No stop
12 27 00	=0120+304	23 51 55	62.2	133.8	-1.5		-30.3	70	1820	12 25 31
12 27 00	4C31.04	23 51 55	63.8	133.6	-1.5		-31.0	-20	1820	No stop
12 30 30	---	23 55 25	64.2	135.0	-1.4		-30.2	190	1847	12 27 01
12 31 00	J0123+3044	23 55 56	62.6	135.4	-1.5		-29.4	10	1847	12 31 00
12 32 00	=0120+304	23 56 56	62.7	135.8	-1.5		-29.2	60	1855	12 31 01
12 32 00	4C31.04	23 56 56	64.3	135.6	-1.4		-29.8	-20	1855	No stop
12 35 30	---	00 00 26	64.7	137.1	-1.3		-28.9	190	1882	12 32 01
12 35 30	J0123+3044	00 00 26	63.1	137.2	-1.4		-28.4	-20	1882	No stop
12 37 00	=0120+304	00 01 57	63.2	137.9	-1.4		-28.0	70	1894	12 35 31
12 37 00	4C31.04	00 01 57	64.8	137.8	-1.3		-28.5	-20	1894	No stop
12 40 30	---	00 05 27	65.2	139.3	-1.3		-27.6	190	1921	12 37 01
12 41 00	J0123+3044	00 05 57	63.6	139.6	-1.3		-27.0	10	1921	12 41 00
12 42 00	=0120+304	00 06 57	63.7	140.0	-1.3		-26.7	60	1928	12 41 01
12 42 00	4C31.04	00 06 57	65.3	140.0	-1.2		-27.2	-20	1928	No stop
12 45 30	---	00 10 28	65.7	141.6	-1.2		-26.2	190	1955	12 42 01
12 45 30	J0123+3044	00 10 28	64.0	141.6	-1.2		-25.8	-20	1955	No stop
12 47 00	=0120+304	00 11 58	64.2	142.2	-1.2		-25.4	70	1967	12 45 31

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day	53	---						
12 47 00	4C31.04	00 11 58	65.8	142.3	-1.2		-25.7	-20	1967	No stop
12 50 30	---	00 15 29	66.1	144.0	-1.1		-24.7	190	1994	12 47 01
12 51 00	J0123+3044	00 15 59	64.5	144.0	-1.1		-24.3	10	1994	12 51 00
12 52 00	=0120+304	00 16 59	64.6	144.5	-1.1		-24.0	60	2002	12 51 01
12 52 00	4C31.04	00 16 59	66.2	144.7	-1.1		-24.3	-20	2002	No stop
12 55 30	---	00 20 30	66.5	146.4	-1.0		-23.2	190	2029	12 52 01
12 55 30	J0123+3044	00 20 30	64.9	146.1	-1.1		-23.0	-20	2029	No stop
12 57 00	=0120+304	00 22 00	65.1	146.8	-1.0		-22.5	70	2040	12 55 31
12 58 00	3C84	00 23 00	58.3	92.9	-3.0		-53.3	-62	2040	12 58 00
13 01 00	---	00 26 00	58.7	93.6	-2.9		-53.3	118	2064	12 58 01
13 03 00	3C48	00 28 01	66.5	140.3	-1.2		-27.3	12	2064	13 03 00
13 06 00	---	00 31 01	66.8	141.7	-1.1		-26.5	180	2087	13 03 01
13 08 30	J0123+3044	00 33 32	65.9	152.4	-0.8		-18.9	116	2087	13 08 30
13 11 30	=0120+304	00 36 32	66.1	153.9	-0.8		-17.9	180	2110	13 08 31
13 11 30	4C31.04	00 36 32	67.7	154.5	-0.7		-17.8	-20	2110	No stop
13 15 00	---	00 40 03	68.0	156.4	-0.7		-16.5	190	2137	13 11 31
13 15 30	J0123+3044	00 40 33	66.4	155.9	-0.7		-16.6	10	2137	13 15 30
13 16 30	=0120+304	00 41 33	66.4	156.5	-0.7		-16.2	60	2145	13 15 31
13 16 30	4C31.04	00 41 33	68.0	157.2	-0.7		-16.0	-20	2145	No stop
13 20 00	---	00 45 04	68.2	159.2	-0.6		-14.6	190	2172	13 16 31
13 20 00	J0123+3044	00 45 04	66.6	158.3	-0.7		-15.0	-19	2172	No stop
13 21 30	=0120+304	00 46 34	66.7	159.1	-0.6		-14.5	71	2183	13 20 01
13 21 30	4C31.04	00 46 34	68.3	160.0	-0.6		-14.1	-20	2183	No stop
13 25 00	---	00 50 04	68.5	162.0	-0.5		-12.7	190	2211	13 21 31
13 25 30	J0123+3044	00 50 34	66.9	161.2	-0.6		-13.0	11	2211	13 25 30
13 26 30	=0120+304	00 51 35	67.0	161.7	-0.5		-12.7	60	2218	13 25 31
13 26 30	4C31.04	00 51 35	68.6	162.8	-0.5		-12.1	-20	2218	No stop
13 30 00	---	00 55 05	68.7	164.8	-0.4		-10.7	190	2245	13 26 31
13 30 00	J0123+3044	00 55 05	67.1	163.6	-0.5		-11.4	-19	2245	No stop
13 31 30	=0120+304	00 56 35	67.2	164.4	-0.5		-10.8	71	2257	13 30 01

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day	53	---						
13 31 30	4C31.04	00 56 35	68.8	165.7	-0.4		-10.1	-19	2257	No stop
13 35 00	---	01 00 06	68.9	167.7	-0.3		-8.7	191	2284	13 31 31
13 35 30	J0123+3044	01 00 36	67.4	166.6	-0.4		-9.3	11	2284	13 35 30
13 36 30	=0120+304	01 01 36	67.4	167.2	-0.4		-8.9	60	2292	13 35 31
13 36 30	4C31.04	01 01 36	68.9	168.6	-0.3		-8.1	-19	2292	No stop
13 40 00	---	01 05 07	69.0	170.6	-0.3		-6.7	191	2319	13 36 31
13 40 00	J0123+3044	01 05 07	67.5	169.1	-0.3		-7.6	-19	2319	No stop
13 41 30	=0120+304	01 06 37	67.5	170.0	-0.3		-7.0	71	2330	13 40 01
13 41 30	4C31.04	01 06 37	69.1	171.5	-0.2		-6.0	-19	2330	No stop
13 45 00	---	01 10 08	69.1	173.6	-0.2		-4.6	191	2357	13 41 31
13 45 30	J0123+3044	01 10 38	67.6	172.2	-0.2		-5.4	11	2357	13 45 30
13 46 30	=0120+304	01 11 38	67.7	172.8	-0.2		-5.1	60	2365	13 45 31
13 46 30	4C31.04	01 11 38	69.2	174.4	-0.2		-3.9	-19	2365	No stop
13 50 00	---	01 15 08	69.2	176.5	-0.1		-2.5	191	2392	13 46 31
13 50 00	J0123+3044	01 15 08	67.7	174.7	-0.2		-3.7	-19	2392	No stop
13 51 30	=0120+304	01 16 39	67.7	175.6	-0.1		-3.1	71	2404	13 50 01
13 51 30	4C31.04	01 16 39	69.2	177.4	-0.1		-1.8	-19	2404	No stop
13 55 00	---	01 20 09	69.2	179.5	-0.0		-0.3	191	2431	13 51 31
13 55 30	J0123+3044	01 20 39	67.8	177.9	-0.1		-1.5	11	2431	13 55 30
13 56 30	=0120+304	01 21 40	67.8	178.4	-0.0		-1.1	60	2439	13 55 31
13 56 30	4C31.04	01 21 40	69.2	180.4	0.0		0.3	-19	2439	No stop
14 00 00	---	01 25 10	69.2	182.5	0.1		1.8	191	2466	13 56 31
14 00 00	J0123+3044	01 25 10	67.8	180.4	0.0		0.3	-19	2466	No stop
14 01 30	=0120+304	01 26 40	67.8	181.3	0.0		0.9	71	2477	14 00 01
14 01 30	4C31.04	01 26 40	69.2	183.4	0.1		2.4	-19	2477	No stop
14 05 00	---	01 30 11	69.2	185.5	0.2		3.9	191	2504	14 01 31
14 05 30	J0123+3044	01 30 41	67.7	183.5	0.1		2.5	11	2504	14 05 30
14 06 30	=0120+304	01 31 41	67.7	184.1	0.1		2.9	60	2512	14 05 31
14 06 30	4C31.04	01 31 41	69.1	186.4	0.2		4.5	-19	2512	No stop
14 10 00	---	01 35 12	69.1	188.4	0.2		6.0	191	2539	14 06 31

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart
Stop UT		LST	EL	AZ	HA UP	ParA Dwell	GBytes	SYNC
--- Sat 22 Feb 2025 Day 53 ---								
14 10 00	J0123+3044	01 35 12	67.7	186.1	0.2	4.3 -19	2539	No stop
14 11 30	=0120+304	01 36 42	67.7	186.9	0.2	4.9 71	2551	14 10 01
14 12 30	3C84	01 37 42	69.2	113.0	-1.7	-47.7 -102	2551	14 12 30
14 15 30	---	01 40 43	69.6	114.1	-1.7	-47.1 78	2574	14 12 31
14 17 30	3C48	01 42 43	70.2	182.2	0.1	1.6 -32	2574	14 17 30
14 22 30	---	01 47 44	70.1	185.3	0.1	3.8 268	2612	14 17 31
14 25 00	J0123+3044	01 50 14	67.3	194.5	0.4	10.1 119	2612	14 25 00
14 28 00	=0120+304	01 53 15	67.2	196.1	0.5	11.2 180	2636	14 25 01
14 28 00	4C31.04	01 53 15	68.4	198.8	0.5	13.2 -20	2636	No stop
14 31 30	---	01 56 45	68.2	200.8	0.6	14.6 190	2663	14 28 01
14 32 00	J0123+3044	01 57 15	67.0	198.3	0.5	12.7 10	2663	14 32 00
14 33 00	=0120+304	01 58 16	66.9	198.8	0.6	13.0 60	2670	14 32 01
14 33 00	4C31.04	01 58 16	68.2	201.6	0.6	15.2 -20	2670	No stop
14 36 30	---	02 01 46	68.0	203.5	0.7	16.5 190	2697	14 33 01
14 36 30	J0123+3044	02 01 46	66.8	200.7	0.6	14.3 -20	2697	No stop
14 38 00	=0120+304	02 03 16	66.7	201.5	0.6	14.8 70	2709	14 36 31
14 38 00	4C31.04	02 03 16	67.9	204.3	0.7	17.0 -20	2709	No stop
14 41 30	---	02 06 47	67.6	206.2	0.8	18.3 190	2736	14 38 01
14 42 00	J0123+3044	02 07 17	66.4	203.5	0.7	16.2 10	2736	14 42 00
14 43 00	=0120+304	02 08 17	66.4	204.1	0.7	16.6 60	2744	14 42 01
14 43 00	4C31.04	02 08 17	67.5	207.0	0.8	18.8 -21	2744	No stop
14 46 30	---	02 11 48	67.3	208.8	0.8	20.0 189	2771	14 43 01
14 46 30	J0123+3044	02 11 48	66.2	205.8	0.8	17.8 -20	2771	No stop
14 48 00	=0120+304	02 13 18	66.1	206.6	0.8	18.3 70	2782	14 46 31
14 48 00	4C31.04	02 13 18	67.2	209.6	0.9	20.5 -21	2782	No stop
14 51 30	---	02 16 49	66.9	211.3	0.9	21.7 189	2810	14 48 01
14 52 00	J0123+3044	02 17 19	65.8	208.6	0.9	19.6 10	2810	14 52 00
14 53 00	=0120+304	02 18 19	65.7	209.1	0.9	19.9 60	2817	14 52 01
14 53 00	4C31.04	02 18 19	66.8	212.1	1.0	22.2 -21	2817	No stop
14 56 30	---	02 21 49	66.5	213.8	1.0	23.3 189	2844	14 53 01

Schedule for TORUN (Code Tr)

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EM181A

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Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Sat	22 Feb 2025	Day	53	---						
14 56 30	J0123+3044	02 21 49	65.5	210.8	1.0		21.0	-20	2844	No stop
14 58 00	=0120+304	02 23 20	65.3	211.5	1.0		21.5	70	2856	14 56 31
14 58 00	4C31.04	02 23 20	66.4	214.5	1.0		23.8	-21	2856	No stop
15 01 30	---	02 26 50	66.1	216.2	1.1		24.8	189	2883	14 58 01
15 02 00	J0123+3044	02 27 20	65.0	213.4	1.0		22.7	10	2883	15 02 00
15 03 00	=0120+304	02 28 20	64.9	213.9	1.1		23.0	60	2891	15 02 01
15 03 00	4C31.04	02 28 20	65.9	216.9	1.1		25.3	-21	2891	No stop
15 06 30	---	02 31 51	65.6	218.6	1.2		26.3	189	2918	15 03 01
15 06 30	J0123+3044	02 31 51	64.6	215.5	1.1		24.0	-20	2918	No stop
15 08 00	=0120+304	02 33 21	64.5	216.2	1.1		24.4	70	2929	15 06 31
15 08 00	4C31.04	02 33 21	65.5	219.2	1.2		26.7	-21	2929	No stop
15 11 30	---	02 36 52	65.1	220.8	1.3		27.7	189	2956	15 08 01
15 12 00	J0123+3044	02 37 22	64.1	218.0	1.2		25.5	10	2956	15 12 00
15 13 00	=0120+304	02 38 22	64.0	218.4	1.2		25.8	60	2964	15 12 01
15 13 00	4C31.04	02 38 22	65.0	221.5	1.3		28.1	-21	2964	No stop
15 16 30	---	02 41 53	64.6	223.0	1.3		29.0	189	2991	15 13 01
15 16 30	J0123+3044	02 41 53	63.7	220.0	1.3		26.7	-20	2991	No stop
15 18 00	=0120+304	02 43 23	63.6	220.6	1.3		27.1	70	3003	15 16 31
15 18 00	4C31.04	02 43 23	64.5	223.7	1.4		29.4	-21	3003	No stop
15 21 30	---	02 46 54	64.1	225.1	1.4		30.2	189	3030	15 18 01
15 22 00	J0123+3044	02 47 24	63.2	222.3	1.4		28.1	10	3030	15 22 00
15 23 00	=0120+304	02 48 24	63.1	222.7	1.4		28.3	60	3038	15 22 01
15 23 00	4C31.04	02 48 24	64.0	225.8	1.5		30.6	-21	3038	No stop
15 26 30	---	02 51 54	63.6	227.2	1.5		31.4	189	3065	15 23 01
15 26 30	J0123+3044	02 51 54	62.7	224.2	1.5		29.2	-20	3065	No stop
15 28 00	=0120+304	02 53 25	62.5	224.8	1.5		29.5	70	3076	15 26 31
15 30 00	3C84	02 55 25	77.7	156.5	-0.4		-18.7	-31	3076	15 30 00
15 33 00	---	02 58 25	77.9	159.1	-0.4		-16.7	149	3099	15 30 01
15 35 00	3C48	03 00 26	65.4	224.3	1.4		30.1	-26	3099	15 35 00
15 39 00	---	03 04 26	65.0	226.1	1.4		31.1	214	3130	15 35 01

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day	53	---						
15 41 30	J0123+3044	03 06 57	61.0	230.1	1.7		32.4	122	3130	15 41 30
15 44 30	=0120+304	03 09 57	60.7	231.2	1.8		33.0	180	3153	15 41 31
15 44 30	4C31.04	03 09 57	61.5	234.1	1.8		35.2	-21	3153	No stop
15 48 00	---	03 13 28	61.0	235.4	1.9		35.8	189	3181	15 44 31
15 48 30	J0123+3044	03 13 58	60.2	232.6	1.8		33.8	10	3181	15 48 30
15 49 30	=0120+304	03 14 58	60.1	233.0	1.8		34.0	60	3188	15 48 31
15 49 30	4C31.04	03 14 58	60.9	235.9	1.9		36.0	-20	3188	No stop
15 53 00	---	03 18 29	60.4	237.1	2.0		36.6	190	3215	15 49 31
15 53 00	J0123+3044	03 18 29	59.7	234.2	1.9		34.6	-20	3215	No stop
15 54 30	=0120+304	03 19 59	59.5	234.8	1.9		34.8	70	3227	15 53 01
15 54 30	4C31.04	03 19 59	60.2	237.6	2.0		36.9	-20	3227	No stop
15 58 00	---	03 23 30	59.8	238.8	2.0		37.4	190	3254	15 54 31
15 58 30	J0123+3044	03 24 00	59.0	236.1	2.0		35.5	10	3254	15 58 30
15 59 30	=0120+304	03 25 00	58.9	236.5	2.0		35.7	60	3262	15 58 31
15 59 30	4C31.04	03 25 00	59.6	239.3	2.1		37.7	-20	3262	No stop
16 03 00	---	03 28 30	59.1	240.5	2.1		38.2	190	3289	15 59 31
16 03 00	J0123+3044	03 28 30	58.4	237.7	2.1		36.2	-20	3289	No stop
16 04 30	=0120+304	03 30 01	58.2	238.1	2.1		36.5	70	3300	16 03 01
16 04 30	4C31.04	03 30 01	58.9	241.0	2.2		38.4	-20	3300	No stop
16 08 00	---	03 33 31	58.5	242.1	2.2		38.9	190	3327	16 04 31
16 08 30	J0123+3044	03 34 01	57.7	239.4	2.2		37.0	10	3327	16 08 30
16 09 30	=0120+304	03 35 01	57.6	239.8	2.2		37.2	60	3335	16 08 31
16 09 30	4C31.04	03 35 01	58.3	242.5	2.2		39.1	-20	3335	No stop
16 13 00	---	03 38 32	57.8	243.6	2.3		39.5	190	3362	16 09 31
16 13 00	J0123+3044	03 38 32	57.1	240.9	2.2		37.7	-20	3362	No stop
16 14 30	=0120+304	03 40 02	56.9	241.3	2.3		37.9	70	3374	16 13 01
16 14 30	4C31.04	03 40 02	57.6	244.1	2.3		39.7	-20	3374	No stop
16 18 00	---	03 43 33	57.1	245.1	2.4		40.1	190	3401	16 14 31
16 18 30	J0123+3044	03 44 03	56.4	242.6	2.3		38.4	10	3401	16 18 30
16 19 30	=0120+304	03 45 03	56.3	242.9	2.3		38.5	60	3409	16 18 31

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day	53	---						
16 19 30	4C31.04	03 45 03	56.9	245.6	2.4		40.3	-20	3409	No stop
16 23 00	---	03 48 34	56.4	246.6	2.5		40.7	190	3436	16 19 31
16 23 00	J0123+3044	03 48 34	55.8	243.9	2.4		38.9	-19	3436	No stop
16 24 30	=0120+304	03 50 04	55.6	244.4	2.4		39.1	71	3447	16 23 01
16 24 30	4C31.04	03 50 04	56.2	247.0	2.5		40.9	-20	3447	No stop
16 28 00	---	03 53 34	55.7	248.0	2.5		41.2	190	3474	16 24 31
16 28 30	J0123+3044	03 54 05	55.1	245.6	2.5		39.6	11	3474	16 28 30
16 29 30	=0120+304	03 55 05	54.9	245.8	2.5		39.7	60	3482	16 28 31
16 29 30	4C31.04	03 55 05	55.5	248.5	2.6		41.4	-20	3482	No stop
16 33 00	---	03 58 35	55.0	249.4	2.6		41.7	190	3509	16 29 31
16 33 00	J0123+3044	03 58 35	54.4	246.8	2.6		40.0	-19	3509	No stop
16 34 30	=0120+304	04 00 06	54.2	247.3	2.6		40.2	71	3521	16 33 01
16 34 30	4C31.04	04 00 06	54.8	249.9	2.7		41.8	-20	3521	No stop
16 38 00	---	04 03 36	54.3	250.8	2.7		42.1	190	3548	16 34 31
16 38 30	J0123+3044	04 04 06	53.7	248.4	2.7		40.6	11	3548	16 38 30
16 39 30	=0120+304	04 05 06	53.5	248.7	2.7		40.7	60	3555	16 38 31
16 39 30	4C31.04	04 05 06	54.1	251.2	2.7		42.3	-19	3555	No stop
16 43 00	---	04 08 37	53.6	252.1	2.8		42.6	191	3582	16 39 31
16 43 00	J0123+3044	04 08 37	53.0	249.6	2.7		41.0	-19	3582	No stop
16 44 30	=0120+304	04 10 07	52.8	250.0	2.8		41.1	71	3594	16 43 01
16 45 30	3C84	04 11 07	75.8	221.0	0.8		31.8	-40	3594	16 45 30
16 48 30	---	04 14 08	75.5	222.9	0.9		33.1	140	3617	16 45 31
16 50 30	3C48	04 16 08	55.8	250.4	2.6		42.6	33	3617	16 50 30
16 55 30	---	04 21 09	55.1	251.8	2.7		43.0	300	3656	16 50 31
16 58 00	J0123+3044	04 23 39	50.9	253.5	3.0		42.1	121	3656	16 58 00
17 01 00	=0120+304	04 26 40	50.5	254.3	3.0		42.3	180	3679	16 58 01
17 01 00	4C31.04	04 26 40	51.0	256.7	3.1		43.7	-19	3679	No stop
17 04 30	---	04 30 10	50.5	257.5	3.2		43.9	191	3706	17 01 01
17 05 00	J0123+3044	04 30 41	49.9	255.3	3.1		42.6	11	3706	17 05 00
17 06 00	=0120+304	04 31 41	49.7	255.5	3.1		42.6	60	3714	17 05 01

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day	53	---						
17 06 00	4C31.04	04 31 41	50.3	257.9	3.2		44.0	-19	3714	No stop
17 09 30	---	04 35 11	49.8	258.7	3.2		44.2	191	3741	17 06 01
17 09 30	J0123+3044	04 35 11	49.2	256.4	3.2		42.8	-19	3741	No stop
17 11 00	=0120+304	04 36 42	49.0	256.7	3.2		42.9	71	3753	17 09 31
17 11 00	4C31.04	04 36 42	49.5	259.1	3.3		44.2	-19	3753	No stop
17 14 30	---	04 40 12	49.0	259.9	3.3		44.4	191	3780	17 11 01
17 15 00	J0123+3044	04 40 42	48.4	257.7	3.3		43.1	12	3780	17 15 00
17 16 00	=0120+304	04 41 42	48.3	257.9	3.3		43.2	60	3787	17 15 01
17 16 00	4C31.04	04 41 42	48.8	260.2	3.3		44.4	-19	3787	No stop
17 19 30	---	04 45 13	48.3	261.0	3.4		44.6	191	3814	17 16 01
17 19 30	J0123+3044	04 45 13	47.7	258.7	3.3		43.3	-18	3814	No stop
17 21 00	=0120+304	04 46 43	47.5	259.1	3.4		43.4	72	3826	17 19 31
17 21 00	4C31.04	04 46 43	48.1	261.4	3.4		44.6	-19	3826	No stop
17 24 30	---	04 50 14	47.5	262.2	3.5		44.7	191	3853	17 21 01
17 25 00	J0123+3044	04 50 44	46.9	260.0	3.4		43.5	12	3853	17 25 00
17 26 00	=0120+304	04 51 44	46.8	260.2	3.5		43.6	60	3861	17 25 01
17 26 00	4C31.04	04 51 44	47.3	262.5	3.5		44.8	-19	3861	No stop
17 29 30	---	04 55 15	46.8	263.3	3.6		44.9	191	3888	17 26 01
17 29 30	J0123+3044	04 55 15	46.3	261.0	3.5		43.7	-18	3888	No stop
17 31 00	=0120+304	04 56 45	46.0	261.4	3.5		43.8	72	3899	17 29 31
17 31 00	4C31.04	04 56 45	46.6	263.6	3.6		44.9	-18	3899	No stop
17 34 30	---	05 00 15	46.0	264.3	3.7		45.0	192	3926	17 31 01
17 35 00	J0123+3044	05 00 45	45.4	262.3	3.6		43.9	12	3926	17 35 00
17 36 00	=0120+304	05 01 46	45.3	262.5	3.6		43.9	60	3934	17 35 01
17 36 00	4C31.04	05 01 46	45.8	264.7	3.7		45.0	-18	3934	No stop
17 39 30	---	05 05 16	45.3	265.4	3.7		45.1	192	3961	17 36 01
17 39 30	J0123+3044	05 05 16	44.8	263.2	3.7		44.0	-18	3961	No stop
17 41 00	=0120+304	05 06 46	44.6	263.6	3.7		44.0	72	3973	17 39 31
17 41 00	4C31.04	05 06 46	45.1	265.7	3.8		45.1	-18	3973	No stop
17 44 30	---	05 10 17	44.5	266.5	3.8		45.2	192	4000	17 41 01

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day	53	---						
17 45 00	J0123+3044	05 10 47	44.0	264.4	3.8		44.1	12	4000	17 45 00
17 46 00	=0120+304	05 11 47	43.8	264.6	3.8		44.1	60	4008	17 45 01
17 46 00	4C31.04	05 11 47	44.3	266.8	3.8		45.2	-18	4008	No stop
17 49 30	---	05 15 18	43.8	267.5	3.9		45.2	192	4035	17 46 01
17 49 30	J0123+3044	05 15 18	43.3	265.4	3.8		44.2	-18	4035	No stop
17 51 00	=0120+304	05 16 48	43.1	265.7	3.9		44.2	72	4046	17 49 31
17 51 00	4C31.04	05 16 48	43.6	267.8	3.9		45.2	-18	4046	No stop
17 54 30	---	05 20 19	43.0	268.5	4.0		45.3	192	4073	17 51 01
17 55 00	J0123+3044	05 20 49	42.5	266.5	3.9		44.3	12	4073	17 55 00
17 56 00	=0120+304	05 21 49	42.3	266.8	4.0		44.3	60	4081	17 55 01
17 56 00	4C31.04	05 21 49	42.8	268.8	4.0		45.3	-18	4081	No stop
17 59 30	---	05 25 19	42.3	269.6	4.1		45.3	192	4108	17 56 01
17 59 30	J0123+3044	05 25 19	41.8	267.5	4.0		44.3	-18	4108	No stop
18 01 00	=0120+304	05 26 50	41.6	267.8	4.0		44.4	72	4120	17 59 31
18 02 00	3C84	05 27 50	66.0	254.2	2.1		50.6	-45	4120	18 02 00
18 05 00	---	05 30 50	65.5	255.1	2.2		50.9	135	4143	18 02 01
18 07 00	3C48	05 32 51	44.6	268.4	3.9		45.9	28	4143	18 07 00
18 12 00	---	05 37 52	43.8	269.4	4.0		45.9	300	4181	18 07 01
18 14 30	J0123+3044	05 40 22	39.5	270.5	4.3		44.4	121	4181	18 14 30
18 17 30	=0120+304	05 43 22	39.1	271.1	4.3		44.4	180	4205	18 14 31
18 17 30	4C31.04	05 43 22	39.6	273.1	4.4		45.2	-18	4205	No stop
18 21 00	---	05 46 53	39.0	273.8	4.4		45.2	192	4232	18 17 31
18 21 30	J0123+3044	05 47 23	38.5	271.9	4.4		44.4	13	4232	18 21 30
18 22 30	=0120+304	05 48 23	38.3	272.1	4.4		44.4	60	4239	18 21 31
18 22 30	4C31.04	05 48 23	38.8	274.1	4.5		45.1	-18	4239	No stop
18 26 00	---	05 51 54	38.3	274.7	4.5		45.1	192	4266	18 22 31
18 26 00	J0123+3044	05 51 54	37.8	272.8	4.5		44.3	-17	4266	No stop
18 27 30	=0120+304	05 53 24	37.6	273.1	4.5		44.3	73	4278	18 26 01
18 27 30	4C31.04	05 53 24	38.1	275.0	4.5		45.1	-18	4278	No stop
18 31 00	---	05 56 55	37.5	275.7	4.6		45.0	192	4305	18 27 31

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
18 31 30	J0123+3044	05 57 25	37.0	273.9	4.5		44.3	13	4305	18 31 30
18 32 30	=0120+304	05 58 25	36.8	274.0	4.6		44.3	60	4313	18 31 31
18 32 30	4C31.04	05 58 25	37.3	276.0	4.6		45.0	-18	4313	No stop
18 36 00	---	06 01 55	36.8	276.6	4.7		44.9	192	4340	18 32 31
18 36 00	J0123+3044	06 01 55	36.3	274.7	4.6		44.2	-17	4340	No stop
18 37 30	=0120+304	06 03 26	36.1	275.0	4.7		44.2	73	4352	18 36 01
18 37 30	4C31.04	06 03 26	36.6	276.9	4.7		44.9	-17	4352	No stop
18 41 00	---	06 06 56	36.1	277.6	4.8		44.8	193	4379	18 37 31
18 41 30	J0123+3044	06 07 26	35.5	275.8	4.7		44.1	13	4379	18 41 30
18 42 30	=0120+304	06 08 27	35.3	276.0	4.7		44.1	60	4386	18 41 31
18 42 30	4C31.04	06 08 27	35.8	277.8	4.8		44.7	-17	4386	No stop
18 46 00	---	06 11 57	35.3	278.5	4.8		44.6	193	4413	18 42 31
18 46 00	J0123+3044	06 11 57	34.8	276.6	4.8		44.0	-17	4413	No stop
18 47 30	=0120+304	06 13 27	34.6	276.9	4.8		44.0	73	4425	18 46 01
18 47 30	4C31.04	06 13 27	35.1	278.8	4.9		44.6	-17	4425	No stop
18 51 00	---	06 16 58	34.6	279.4	4.9		44.5	193	4452	18 47 31
18 51 30	J0123+3044	06 17 28	34.0	277.6	4.9		43.9	13	4452	18 51 30
18 52 30	=0120+304	06 18 28	33.8	277.8	4.9		43.9	60	4460	18 51 31
18 52 30	4C31.04	06 18 28	34.3	279.7	5.0		44.5	-17	4460	No stop
18 56 00	---	06 21 59	33.8	280.3	5.0		44.3	193	4487	18 52 31
18 56 00	J0123+3044	06 21 59	33.3	278.5	5.0		43.8	-17	4487	No stop
18 57 30	=0120+304	06 23 29	33.1	278.8	5.0		43.7	73	4498	18 56 01
18 57 30	4C31.04	06 23 29	33.6	280.6	5.0		44.3	-17	4498	No stop
19 01 00	---	06 27 00	33.1	281.2	5.1		44.2	193	4525	18 57 31
19 01 30	J0123+3044	06 27 30	32.5	279.5	5.1		43.6	13	4525	19 01 30
19 02 30	=0120+304	06 28 30	32.3	279.7	5.1		43.6	60	4533	19 01 31
19 02 30	4C31.04	06 28 30	32.9	281.5	5.1		44.1	-17	4533	No stop
19 06 00	---	06 32 00	32.3	282.1	5.2		44.0	193	4560	19 02 31
19 06 00	J0123+3044	06 32 00	31.8	280.3	5.1		43.5	-17	4560	No stop
19 07 30	=0120+304	06 33 31	31.6	280.6	5.2		43.4	73	4572	19 06 01

Schedule for TORUN (Code Tr)

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EM181A

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day	53	---						
19 07 30	4C31.04	06 33 31	32.1	282.4	5.2		43.9	-17	4572	No stop
19 11 00	---	06 37 01	31.6	283.0	5.3		43.8	193	4599	19 07 31
19 11 30	J0123+3044	06 37 31	31.0	281.3	5.2		43.3	13	4599	19 11 30
19 12 30	=0120+304	06 38 31	30.9	281.5	5.2		43.3	60	4607	19 11 31
19 12 30	4C31.04	06 38 31	31.4	283.3	5.3		43.7	-17	4607	No stop
19 16 00	---	06 42 02	30.9	283.9	5.4		43.6	193	4634	19 12 31
19 16 00	J0123+3044	06 42 02	30.3	282.2	5.3		43.1	-17	4634	No stop
19 17 30	=0120+304	06 43 32	30.1	282.4	5.3		43.1	73	4645	19 16 01
19 17 30	4C31.04	06 43 32	30.7	284.2	5.4		43.5	-17	4645	No stop
19 21 00	---	06 47 03	30.2	284.8	5.4		43.4	193	4672	19 17 31
19 21 30	J0123+3044	06 47 33	29.5	283.2	5.4		42.9	13	4672	19 21 30
19 22 30	=0120+304	06 48 33	29.4	283.3	5.4		42.9	60	4680	19 21 31
19 22 30	4C31.04	06 48 33	29.9	285.1	5.5		43.3	-17	4680	No stop
19 26 00	---	06 52 04	29.4	285.7	5.5		43.2	193	4707	19 22 31
19 26 00	J0123+3044	06 52 04	28.9	284.0	5.5		42.8	-17	4707	No stop
19 27 30	=0120+304	06 53 34	28.6	284.2	5.5		42.7	73	4719	19 26 01
19 27 30	4C31.04	06 53 34	29.2	286.0	5.5		43.1	-17	4719	No stop
19 31 00	---	06 57 05	28.7	286.6	5.6		42.9	193	4746	19 27 31
19 31 30	J0123+3044	06 57 35	28.1	285.0	5.6		42.5	13	4746	19 31 30
19 32 30	=0120+304	06 58 35	27.9	285.1	5.6		42.5	60	4753	19 31 31
19 32 30	4C31.04	06 58 35	28.5	286.9	5.6		42.8	-17	4753	No stop
19 36 00	---	07 02 05	28.0	287.5	5.7		42.7	193	4780	19 32 31
19 36 00	J0123+3044	07 02 05	27.4	285.8	5.6		42.3	-17	4780	No stop
19 37 30	=0120+304	07 03 36	27.2	286.0	5.7		42.2	73	4792	19 36 01
19 37 30	4C31.04	07 03 36	27.8	287.8	5.7		42.6	-17	4792	No stop
19 41 00	---	07 07 06	27.3	288.4	5.8		42.4	193	4819	19 37 31
19 41 30	J0123+3044	07 07 36	26.6	286.8	5.7		42.1	13	4819	19 41 30
19 42 30	=0120+304	07 08 36	26.5	286.9	5.7		42.0	60	4827	19 41 31
19 42 30	4C31.04	07 08 36	27.1	288.6	5.8		42.3	-17	4827	No stop
19 46 00	---	07 12 07	26.6	289.2	5.9		42.1	193	4854	19 42 31

Schedule for TORUN (Code Tr)

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EM181A

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Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

```
-----
Start UT  Source          Start / Stop      Early   Disk   TPStart
Stop UT          LST      EL    AZ    HA  UP    ParA  Dwell  GBytes  SYNC
-----
```

--- Sat 22 Feb 2025 Day 53 ---

```
19 46 00  J0123+3044  07 12 07  26.0 287.6  5.8      41.8  -17    4854  No stop
19 47 30  =0120+304    07 13 37  25.8 287.8  5.8      41.8   73    4866  19 46 01

19 48 30  3C84        07 14 37  50.1 277.6  3.9      52.8  -45    4866  19 48 30
19 53 00  ---         07 19 08  49.4 278.4  4.0      52.6  225    4900  19 48 31

19 55 00  3C48        07 21 08  28.6 288.4  5.7      43.0   28    4900  19 55 00
20 00 00  ---         07 26 09  27.9 289.3  5.8      42.7  300    4939  19 55 01
```

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

```
Setup group:    7          Station: TORUN          Total bit rate: 1024
Format: VDIF          Bits per sample: 2          Sample rate: 64.000
Number of channels: 8    DBE type: DBBC_DDC        Speedup factor: 1.00
```

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 5 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 5

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* 4C31.04	01 16 47.245342	* 01 19 35.000876	01 20 58.313061	0.00
	31 55 05.83643	* 32 10 50.06197	32 18 48.70908	0.00
0120+304	01 20 14.738570	* 01 23 02.281461	01 24 25.530749	0.13
* J0123+3044	30 28 27.84809	* 30 44 06.91790	30 52 02.71946	0.18
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 131 observations.			
* 3C48	01 34 49.826446	* 01 37 41.299512	01 39 06.582985	0.55
J0137+3309	32 54 20.25968	* 33 09 35.13386	33 17 20.11137	0.56
0134+329	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J0137+33	GSFC 2016a X/S astro solution, 90 observations.			
* 3C84	03 16 29.567265	* 03 19 48.160096	03 21 27.775461	1.50
J0319+4130	41 19 51.91692	* 41 30 42.10404	41 36 19.60586	2.86
0316+413	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J0319+41	GSFC 2016a X/S astro solution, 10291 observations			

en016atr

COLLIMATION AND ACCELERATION OF THE M84 JET: SYNERGY WITH EVN+E-MER PI: *Dhanya G. Nair*

Address: Department of Astronomy, University of Concepcion

Schedule for TORUN (Code Tr)

Page 2

Collimation and acceleration of the M84 jet: synergy with EVN+e-MERLIN a

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat 22 Feb 2025 Day 53 ---										
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

21 00 00	1156+295	08 26 19	44.4	99.9	-3.6		-42.6	0	0	21 00 00
21 04 30	---	08 30 50	45.1	100.9	-3.5		-42.4	270	35	21 00 01
21 06 59	M84	08 33 19	29.0	108.5	-3.9		-35.7	74	35	21 06 59
21 16 59	---	08 43 21	30.4	110.8	-3.7		-35.1	600	112	21 07 00
21 17 31	M84	08 43 53	30.5	110.9	-3.7		-35.1	26	112	21 17 31
21 27 31	---	08 53 55	31.9	113.3	-3.5		-34.4	600	189	21 17 32
21 28 03	M84	08 54 27	31.9	113.4	-3.5		-34.4	26	189	21 28 03
21 38 03	---	09 04 28	33.3	115.8	-3.4		-33.7	600	267	21 28 04
21 38 47	M87	09 05 13	32.2	114.9	-3.4		-33.9	27	267	21 38 47
21 41 47	---	09 08 13	32.6	115.7	-3.4		-33.6	180	290	21 38 48
21 42 31	M84	09 08 57	33.9	116.9	-3.3		-33.3	26	290	21 42 31
21 52 31	---	09 18 59	35.2	119.4	-3.1		-32.4	600	367	21 42 32
21 53 03	M84	09 19 31	35.3	119.5	-3.1		-32.4	26	367	21 53 03
22 03 03	---	09 29 32	36.6	122.1	-2.9		-31.4	600	444	21 53 04
22 03 35	M84	09 30 05	36.7	122.2	-2.9		-31.4	26	444	22 03 35
22 13 35	---	09 40 06	37.9	124.9	-2.8		-30.3	600	522	22 03 36
22 14 18	M87	09 40 49	36.9	123.9	-2.9		-30.7	26	522	22 14 18
22 17 18	---	09 43 50	37.2	124.7	-2.8		-30.4	180	545	22 14 19
22 18 02	M84	09 44 34	38.5	126.1	-2.7		-29.8	27	545	22 18 02
22 28 02	---	09 54 36	39.7	128.8	-2.5		-28.7	600	622	22 18 03
22 28 34	M84	09 55 08	39.7	129.0	-2.5		-28.6	26	622	22 28 34
22 38 34	---	10 05 09	40.9	131.8	-2.4		-27.3	600	699	22 28 35
22 39 06	M84	10 05 41	40.9	132.0	-2.3		-27.2	26	699	22 39 06
22 49 06	---	10 15 43	42.0	134.9	-2.2		-25.9	600	777	22 39 07
22 49 49	M87	10 16 26	41.0	133.7	-2.3		-26.4	26	777	22 49 49
22 52 49	---	10 19 27	41.4	134.6	-2.2		-26.0	180	800	22 49 50

Schedule for TORUN (Code Tr)

Page 3

Collimation and acceleration of the M84 jet: synergy with EVN+e-MERLIN a

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	22 Feb 2025	Day 53	---							
22 53 33	M84	10 20 11	42.5	136.2	-2.1		-25.2	27	800	22 53 33
23 03 33	---	10 30 12	43.5	139.2	-1.9		-23.7	600	877	22 53 34
23 04 05	M84	10 30 45	43.6	139.4	-1.9		-23.6	26	877	23 04 05
23 14 05	---	10 40 46	44.5	142.5	-1.8		-22.0	600	955	23 04 06
23 14 37	M84	10 41 18	44.6	142.7	-1.8		-21.9	26	955	23 14 37
23 19 07	---	10 45 49	45.0	144.2	-1.7		-21.1	270	989	23 14 38
23 19 50	M87	10 46 32	44.1	142.8	-1.8		-21.8	27	989	23 19 50
23 22 50	---	10 49 33	44.3	143.8	-1.7		-21.3	180	1013	23 19 51
23 25 30	1156+295	10 52 13	62.9	145.5	-1.1		-22.9	77	1013	23 25 30
23 30 00	---	10 56 44	63.3	147.6	-1.1		-21.6	270	1047	23 25 31

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* M84	12 22 31.582023	* 12 25 03.743339	12 26 21.521627	0.00
	13 09 49.76860	* 12 53 13.13921	12 44 41.09172	0.00
* M87	12 28 17.569282	* 12 30 49.423384	12 32 07.025228	0.00
	12 40 01.74886	* 12 23 28.04369	12 14 57.33582	0.00
* 1156+295	11 56 57.786213	* 11 59 31.833914	12 00 50.873467	0.00
	29 31 25.73872	* 29 14 43.82682	29 06 08.35408	0.00

TRACING THE RADIO OUTFLOWS IN RQ AGN FROM PC- TO KPC-SCALES

PI: *Salmoli Ghosh*

Address: National Centre for Radio Astrophysics - TIFR

Observing mode: Phase-referencing continuum

Schedule for TORUN (Code Tr)

Page 2

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun 23 Feb 2025	Day 54	---							
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

00 00 00	4C39.25	11 26 49	65.3	246.9	2.0		45.2	0	0	00 00 00
00 07 00	---	11 33 50	64.4	249.1	2.1		46.2	420	54	00 00 01

00 12 00	J1214+0829	11 38 51	44.6	166.9	-0.6		-7.9	119	54	00 12 00
00 17 00	=1212+087	11 43 51	44.8	168.7	-0.5		-6.9	300	93	00 12 01

00 17 00	NGC4235	11 43 51	43.4	168.1	-0.6		-7.1	-18	93	No stop
00 20 30	---	11 47 22	43.5	169.3	-0.5		-6.4	192	120	00 17 01

00 21 00	J1214+0829	11 47 52	44.9	170.0	-0.5		-6.0	12	120	00 21 00
00 22 00	=1212+087	11 48 52	44.9	170.4	-0.5		-5.8	60	128	00 21 01

00 22 00	NGC4235	11 48 52	43.6	169.8	-0.5		-6.1	-18	128	No stop
00 25 30	---	11 52 23	43.6	171.0	-0.4		-5.4	192	155	00 22 01

00 25 30	J1214+0829	11 52 23	45.0	171.6	-0.4		-5.1	-18	155	No stop
00 27 00	=1212+087	11 53 53	45.0	172.1	-0.4		-4.8	72	166	00 25 31

00 27 00	NGC4235	11 53 53	43.7	171.6	-0.4		-5.1	-18	166	No stop
00 30 30	---	11 57 24	43.8	172.8	-0.4		-4.4	192	193	00 27 01

00 31 00	J1214+0829	11 57 54	45.1	173.5	-0.3		-3.9	12	193	00 31 00
00 32 00	=1212+087	11 58 54	45.1	173.9	-0.3		-3.7	60	201	00 31 01

00 32 00	NGC4235	11 58 54	43.8	173.3	-0.3		-4.1	-18	201	No stop
00 35 30	---	12 02 25	43.8	174.5	-0.3		-3.3	192	228	00 32 01

00 35 30	J1214+0829	12 02 25	45.2	175.1	-0.2		-3.0	-18	228	No stop
00 37 00	=1212+087	12 03 55	45.2	175.7	-0.2		-2.6	72	240	00 35 31

00 37 00	NGC4235	12 03 55	43.9	175.0	-0.2		-3.0	-18	240	No stop
00 40 30	---	12 07 25	43.9	176.2	-0.2		-2.3	192	267	00 37 01

00 41 00	J1214+0829	12 07 55	45.2	177.1	-0.1		-1.8	12	267	00 41 00
00 42 00	=1212+087	12 08 56	45.2	177.4	-0.1		-1.6	60	274	00 41 01

00 42 00	NGC4235	12 08 56	43.9	176.7	-0.2		-2.0	-18	274	No stop
00 45 30	---	12 12 26	43.9	177.9	-0.1		-1.3	192	301	00 42 01

Schedule for TORUN (Code Tr)

Page 3

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day 54	---							
00 45 30	J1214+0829	12 12 26	45.2	178.6	-0.1		-0.8	-18	301	No stop
00 47 00	=1212+087	12 13 56	45.2	179.2	-0.0		-0.5	72	313	00 45 31
00 47 00	NGC4235	12 13 56	43.9	178.4	-0.1		-0.9	-18	313	No stop
00 50 30	---	12 17 27	44.0	179.6	-0.0		-0.2	192	340	00 47 01
00 51 00	J1214+0829	12 17 57	45.3	180.6	0.0		0.4	12	340	00 51 00
00 52 00	=1212+087	12 18 57	45.2	180.9	0.0		0.6	60	348	00 51 01
00 52 00	NGC4235	12 18 57	44.0	180.2	0.0		0.1	-18	348	No stop
00 55 30	---	12 22 28	43.9	181.4	0.1		0.8	192	375	00 52 01
00 55 30	J1214+0829	12 22 28	45.2	182.2	0.1		1.3	-18	375	No stop
00 57 00	=1212+087	12 23 58	45.2	182.7	0.1		1.6	72	386	00 55 31
00 57 00	NGC4235	12 23 58	43.9	181.9	0.1		1.1	-18	386	No stop
01 00 30	---	12 27 29	43.9	183.1	0.2		1.9	192	414	00 57 01
01 01 00	J1214+0829	12 27 59	45.2	184.1	0.2		2.5	12	414	01 01 00
01 02 00	=1212+087	12 28 59	45.2	184.5	0.2		2.7	60	421	01 01 01
01 02 00	NGC4235	12 28 59	43.9	183.6	0.2		2.2	-18	421	No stop
01 05 30	---	12 32 29	43.9	184.8	0.2		2.9	192	448	01 02 01
01 05 30	J1214+0829	12 32 29	45.1	185.7	0.3		3.4	-18	448	No stop
01 07 00	=1212+087	12 34 00	45.1	186.2	0.3		3.8	72	460	01 05 31
01 07 00	NGC4235	12 34 00	43.8	185.3	0.3		3.2	-18	460	No stop
01 10 30	---	12 37 30	43.8	186.5	0.3		4.0	192	487	01 07 01
01 11 00	J1214+0829	12 38 00	45.0	187.6	0.4		4.6	12	487	01 11 00
01 12 00	=1212+087	12 39 01	45.0	188.0	0.4		4.8	60	495	01 11 01
01 12 00	NGC4235	12 39 01	43.8	187.1	0.3		4.3	-18	495	No stop
01 15 30	---	12 42 31	43.7	188.3	0.4		5.0	192	522	01 12 01
01 15 30	J1214+0829	12 42 31	44.9	189.2	0.4		5.6	-18	522	No stop
01 17 00	=1212+087	12 44 01	44.9	189.7	0.5		5.9	72	533	01 15 31
01 17 00	NGC4235	12 44 01	43.7	188.8	0.4		5.3	-18	533	No stop
01 20 30	---	12 47 32	43.6	190.0	0.5		6.0	192	560	01 17 01
01 21 00	J1214+0829	12 48 02	44.8	191.1	0.5		6.7	12	560	01 21 00
01 22 00	=1212+087	12 49 02	44.8	191.4	0.5		6.9	60	568	01 21 01
01 22 00	NGC4235	12 49 02	43.5	190.5	0.5		6.3	-18	568	No stop
01 25 30	---	12 52 33	43.4	191.7	0.6		7.0	192	595	01 22 01

Schedule for TORUN (Code Tr)

Page 4

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun 23 Feb 2025	Day 54	---							
01 25 30	J1214+0829	12 52 33	44.7	192.7	0.6		7.6	-18	595	No stop
01 27 00	=1212+087	12 54 03	44.6	193.2	0.6		7.9	72	607	01 25 31
01 27 00	NGC4235	12 54 03	43.4	192.2	0.6		7.3	-18	607	No stop
01 30 30	---	12 57 34	43.3	193.4	0.7		8.0	192	634	01 27 01
01 31 00	J1214+0829	12 58 04	44.5	194.5	0.7		8.8	12	634	01 31 00
01 32 00	=1212+087	12 59 04	44.4	194.9	0.7		9.0	60	642	01 31 01
01 32 00	NGC4235	12 59 04	43.2	193.9	0.7		8.3	-18	642	No stop
01 35 30	---	13 02 34	43.1	195.1	0.7		9.0	192	669	01 32 01
01 35 30	J1214+0829	13 02 34	44.3	196.1	0.8		9.7	-18	669	No stop
01 37 00	=1212+087	13 04 05	44.2	196.6	0.8		10.0	72	680	01 35 31
01 37 00	NGC4235	13 04 05	43.0	195.6	0.8		9.3	-18	680	No stop
01 40 30	---	13 07 35	42.9	196.7	0.8		10.0	192	707	01 37 01
01 41 00	J1214+0829	13 08 05	44.0	198.0	0.9		10.8	13	707	01 41 00
01 42 00	=1212+087	13 09 05	44.0	198.3	0.9		11.0	60	715	01 41 01
01 42 00	NGC4235	13 09 05	42.8	197.2	0.8		10.3	-18	715	No stop
01 45 30	---	13 12 36	42.7	198.4	0.9		11.0	192	742	01 42 01
01 45 30	J1214+0829	13 12 36	43.8	199.5	0.9		11.7	-17	742	No stop
01 47 00	=1212+087	13 14 06	43.7	200.0	1.0		12.0	73	754	01 45 31
01 47 00	NGC4235	13 14 06	42.6	198.9	0.9		11.3	-18	754	No stop
01 50 30	---	13 17 37	42.4	200.1	1.0		12.0	192	781	01 47 01
01 51 00	J1214+0829	13 18 07	43.5	201.3	1.0		12.7	13	781	01 51 00
01 52 00	=1212+087	13 19 07	43.5	201.7	1.0		12.9	60	788	01 51 01
01 52 00	NGC4235	13 19 07	42.3	200.6	1.0		12.3	-17	788	No stop
01 55 30	---	13 22 38	42.1	201.7	1.1		12.9	193	815	01 52 01
01 55 30	J1214+0829	13 22 38	43.3	202.8	1.1		13.6	-17	815	No stop
01 57 00	=1212+087	13 24 08	43.2	203.3	1.1		13.9	73	827	01 55 31
01 57 00	NGC4235	13 24 08	42.1	202.2	1.1		13.2	-17	827	No stop
02 00 30	---	13 27 38	41.8	203.3	1.2		13.9	193	854	01 57 01
02 01 00	J1214+0829	13 28 09	42.9	204.6	1.2		14.7	13	854	02 01 00
02 02 00	=1212+087	13 29 09	42.9	205.0	1.2		14.8	60	862	02 01 01

Schedule for TORUN (Code Tr)

Page 5

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun 23 Feb 2025	Day 54	---							
02 02 00	NGC4235	13 29 09	41.8	203.8	1.2		14.1	-17	862	No stop
02 05 30	---	13 32 39	41.5	204.9	1.2		14.8	193	889	02 02 01
02 05 30	J1214+0829	13 32 39	42.7	206.1	1.3		15.5	-17	889	No stop
02 07 00	=1212+087	13 34 10	42.6	206.6	1.3		15.8	73	900	02 05 31
02 07 00	NGC4235	13 34 10	41.4	205.4	1.3		15.1	-17	900	No stop
02 10 30	---	13 37 40	41.2	206.5	1.3		15.7	193	927	02 07 01
02 11 00	J1214+0829	13 38 10	42.3	207.9	1.4		16.5	13	927	02 11 00
02 12 00	=1212+087	13 39 10	42.2	208.2	1.4		16.7	60	935	02 11 01
02 12 00	NGC4235	13 39 10	41.1	207.0	1.3		16.0	-17	935	No stop
02 15 30	---	13 42 41	40.9	208.1	1.4		16.6	193	962	02 12 01
02 15 30	J1214+0829	13 42 41	42.0	209.3	1.4		17.3	-17	962	No stop
02 17 00	=1212+087	13 44 11	41.8	209.8	1.5		17.6	73	974	02 15 31
02 17 00	NGC4235	13 44 11	40.8	208.6	1.4		16.8	-17	974	No stop
02 20 30	---	13 47 42	40.5	209.7	1.5		17.4	193	1001	02 17 01
02 21 00	J1214+0829	13 48 12	41.5	211.1	1.5		18.2	13	1001	02 21 00
02 22 00	=1212+087	13 49 12	41.5	211.4	1.5		18.4	60	1009	02 21 01
02 22 00	NGC4235	13 49 12	40.4	210.2	1.5		17.7	-17	1009	No stop
02 25 30	---	13 52 43	40.1	211.2	1.6		18.3	193	1036	02 22 01
02 25 30	J1214+0829	13 52 43	41.2	212.5	1.6		19.0	-17	1036	No stop
02 27 00	=1212+087	13 54 13	41.1	212.9	1.6		19.3	73	1047	02 25 31
02 27 00	NGC4235	13 54 13	40.0	211.7	1.6		18.5	-17	1047	No stop
02 30 30	---	13 57 43	39.7	212.8	1.7		19.1	193	1074	02 27 01
02 31 00	J1214+0829	13 58 14	40.7	214.2	1.7		19.9	13	1074	02 31 00
02 32 00	=1212+087	13 59 14	40.6	214.5	1.7		20.1	60	1082	02 31 01
02 32 00	NGC4235	13 59 14	39.6	213.2	1.7		19.4	-17	1082	No stop
02 35 30	---	14 02 44	39.3	214.3	1.7		19.9	193	1109	02 32 01
02 35 30	J1214+0829	14 02 44	40.3	215.5	1.8		20.7	-17	1109	No stop
02 37 00	=1212+087	14 04 14	40.2	216.0	1.8		20.9	73	1121	02 35 31
02 37 00	NGC4235	14 04 14	39.2	214.8	1.8		20.2	-17	1121	No stop
02 40 30	---	14 07 45	38.9	215.8	1.8		20.7	193	1148	02 37 01

Schedule for TORUN (Code Tr)

Page 6

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun 23 Feb 2025	Day 54	---							
02 41 00	J1214+0829	14 08 15	39.8	217.2	1.9		21.5	13	1148	02 41 00
02 42 00	=1212+087	14 09 15	39.8	217.5	1.9		21.7	60	1156	02 41 01
02 42 00	NGC4235	14 09 15	38.7	216.3	1.8		21.0	-17	1156	No stop
02 45 30	---	14 12 46	38.4	217.3	1.9		21.5	193	1183	02 42 01
02 45 30	J1214+0829	14 12 46	39.4	218.6	1.9		22.2	-16	1183	No stop
02 47 00	=1212+087	14 14 16	39.3	219.0	2.0		22.5	74	1194	02 45 31
02 49 00	4C39.25	14 16 16	40.4	284.0	4.8		48.5	-25	1194	02 49 00
02 52 00	---	14 19 17	39.9	284.5	4.8		48.4	155	1217	02 49 01
02 54 00	3C286	14 21 17	65.6	206.3	0.8		17.9	-51	1217	02 54 00
03 00 00	---	14 27 18	65.2	209.2	0.9		19.9	309	1264	02 54 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 7 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 7

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* NGC4235	12 14 36.713052	* 12 17 09.880000	12 18 28.134699	0.00
	07 28 09.25124	* 07 11 29.60000	07 02 57.23478	0.00
* 4C39.25	09 23 55.319216	* 09 27 03.013937	09 28 39.230622	0.31
J0927+3902	39 15 23.56644	* 39 02 20.85185	38 55 45.55204	0.16
0923+392	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J0927+39	GSFC 2016a X/S astro solution, 250526 observations.			
1212+087	12 12 26.757767	* 12 14 59.913189	12 16 18.178938	0.96
* J1214+0829	08 46 02.77335	* 08 29 22.51814	08 20 49.70342	1.14
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 46 observations.			
* 3C286	13 28 49.657769	* 13 31 08.288061	13 32 19.270192	0.17
J1331+3030	30 45 58.64066	* 30 30 32.95930	30 22 30.64299	0.16
1328+307	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J1331+30	GSFC 2016a X/S astro solution, 269 observations.			

MAGNETIC PROPELLER J0240+1952

PI: Pengfei Jiang

Address: Xinjiang Astronomical Observatory

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun 23 Feb 2025	Day 54	---							
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	

10 30 00	3C48	21 58 32	46.5	94.4	-3.7		-45.7	0	0	10 30 00
10 31 50	---	22 00 22	46.8	94.8	-3.6		-45.7	110	14	10 30 01
10 34 20	3C84	22 02 53	37.7	68.4	-5.3		-48.3	82	14	10 34 20
10 36 10	---	22 04 43	38.0	68.7	-5.3		-48.4	110	28	10 34 21
10 38 10	J0240+1848	22 06 44	27.7	95.1	-4.6		-39.2	53	28	10 38 10
10 39 10	---	22 07 44	27.8	95.3	-4.6		-39.2	60	36	10 38 11
10 39 10	J0240+2222	22 07 44	30.5	92.6	-4.6		-40.5	-24	36	No stop
10 40 30	---	22 09 04	30.7	92.9	-4.6		-40.5	56	46	10 39 11
10 40 30	J0240	22 09 04	28.8	94.8	-4.6		-39.5	-21	46	No stop
10 43 00	---	22 11 34	29.2	95.3	-4.5		-39.5	129	66	10 40 31
10 43 00	J0240+1848	22 11 34	28.4	96.1	-4.5		-39.1	-15	66	No stop
10 44 00	---	22 12 34	28.5	96.3	-4.5		-39.1	45	73	10 43 01
10 44 00	J0240+2222	22 12 34	31.3	93.6	-4.5		-40.4	-24	73	No stop
10 45 20	---	22 13 55	31.5	93.9	-4.5		-40.4	56	84	10 44 01
10 45 20	J0240	22 13 55	29.5	95.8	-4.5		-39.5	-21	84	No stop
10 47 50	---	22 16 25	29.9	96.3	-4.4		-39.4	129	103	10 45 21
10 48 20	J0240+1848	22 16 55	29.2	97.2	-4.4		-39.0	15	103	10 48 20
10 49 10	---	22 17 45	29.3	97.4	-4.4		-39.0	50	109	10 48 21
10 49 10	J0240+2222	22 17 45	32.0	94.7	-4.4		-40.4	-24	109	No stop
10 50 30	---	22 19 06	32.2	95.0	-4.4		-40.4	56	120	10 49 11
10 50 30	J0240	22 19 06	30.3	96.9	-4.4		-39.4	-21	120	No stop
10 53 00	---	22 21 36	30.7	97.4	-4.3		-39.3	129	139	10 50 31
10 53 00	J0240+1848	22 21 36	29.9	98.2	-4.3		-38.9	-15	139	No stop
10 54 00	---	22 22 36	30.0	98.4	-4.3		-38.9	45	147	10 53 01
10 54 00	J0240+2222	22 22 36	32.8	95.7	-4.3		-40.3	-24	147	No stop
10 55 20	---	22 23 56	33.0	96.0	-4.3		-40.3	56	157	10 54 01

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day 54	---							
10 55 20	J0240	22 23 56	31.0	97.9	-4.3		-39.3	-21	157	No stop
10 57 50	---	22 26 27	31.4	98.4	-4.3		-39.2	129	176	10 55 21
10 58 20	J0240+1848	22 26 57	30.7	99.3	-4.3		-38.8	15	176	10 58 20
10 59 10	---	22 27 47	30.8	99.5	-4.2		-38.8	50	183	10 58 21
10 59 10	J0240+2222	22 27 47	33.5	96.8	-4.2		-40.2	-24	183	No stop
11 00 30	---	22 29 07	33.7	97.1	-4.2		-40.2	56	193	10 59 11
11 00 30	J0240	22 29 07	31.8	99.0	-4.2		-39.1	-21	193	No stop
11 03 00	---	22 31 38	32.2	99.5	-4.2		-39.1	129	213	11 00 31
11 03 00	J0240+1848	22 31 38	31.4	100.3	-4.2		-38.6	-15	213	No stop
11 04 00	---	22 32 38	31.5	100.6	-4.2		-38.6	45	220	11 03 01
11 04 00	J0240+2222	22 32 38	34.3	97.8	-4.2		-40.1	-24	220	No stop
11 05 20	---	22 33 58	34.5	98.1	-4.1		-40.0	56	231	11 04 01
11 05 20	J0240	22 33 58	32.5	100.0	-4.1		-39.0	-21	231	No stop
11 07 50	---	22 36 28	32.9	100.6	-4.1		-38.9	129	250	11 05 21
11 08 20	J0240+1848	22 36 58	32.1	101.5	-4.1		-38.5	15	250	11 08 20
11 09 10	---	22 37 49	32.3	101.7	-4.1		-38.4	50	256	11 08 21
11 09 10	J0240+2222	22 37 49	35.0	98.9	-4.1		-39.9	-24	256	No stop
11 10 30	---	22 39 09	35.2	99.2	-4.1		-39.9	56	267	11 09 11
11 10 30	J0240	22 39 09	33.3	101.2	-4.1		-38.8	-21	267	No stop
11 13 00	---	22 41 39	33.7	101.7	-4.0		-38.7	129	286	11 10 31
11 13 00	J0240+1848	22 41 39	32.8	102.5	-4.0		-38.3	-15	286	No stop
11 14 00	---	22 42 39	33.0	102.8	-4.0		-38.2	45	294	11 13 01
11 14 00	J0240+2222	22 42 39	35.7	100.0	-4.0		-39.8	-24	294	No stop
11 15 20	---	22 44 00	35.9	100.3	-4.0		-39.8	56	304	11 14 01
11 15 20	J0240	22 44 00	34.0	102.2	-4.0		-38.6	-21	304	No stop
11 17 50	---	22 46 30	34.4	102.8	-3.9		-38.5	129	323	11 15 21
11 18 20	J0240+1848	22 47 00	33.6	103.7	-3.9		-38.1	15	323	11 18 20
11 19 10	---	22 47 50	33.7	103.9	-3.9		-38.0	50	330	11 18 21
11 19 10	J0240+2222	22 47 50	36.5	101.1	-3.9		-39.6	-24	330	No stop
11 20 30	---	22 49 10	36.7	101.4	-3.9		-39.6	56	340	11 19 11
11 20 30	J0240	22 49 10	34.8	103.4	-3.9		-38.4	-21	340	No stop
11 23 00	---	22 51 41	35.1	103.9	-3.8		-38.3	129	359	11 20 31

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
11 23 00	J0240+1848	22 51 41	34.3	104.8	-3.8		-37.9	-15	359	No stop
11 24 00	---	22 52 41	34.4	105.0	-3.8		-37.8	45	367	11 23 01
11 24 00	J0240+2222	22 52 41	37.2	102.2	-3.8		-39.4	-25	367	No stop
11 25 20	---	22 54 01	37.4	102.5	-3.8		-39.4	55	377	11 24 01
11 25 20	J0240	22 54 01	35.5	104.5	-3.8		-38.2	-21	377	No stop
11 27 50	---	22 56 32	35.8	105.0	-3.8		-38.1	129	397	11 25 21
11 28 20	J0240+1848	22 57 02	35.1	106.0	-3.8		-37.6	15	397	11 28 20
11 29 10	---	22 57 52	35.2	106.2	-3.7		-37.6	50	403	11 28 21
11 29 10	J0240+2222	22 57 52	38.0	103.4	-3.7		-39.2	-25	403	No stop
11 30 30	---	22 59 12	38.2	103.7	-3.7		-39.2	55	414	11 29 11
11 30 30	J0240	22 59 12	36.2	105.7	-3.7		-38.0	-21	414	No stop
11 33 00	---	23 01 43	36.6	106.2	-3.7		-37.8	129	433	11 30 31
11 33 00	J0240+1848	23 01 43	35.7	107.1	-3.7		-37.4	-15	433	No stop
11 34 00	---	23 02 43	35.9	107.3	-3.7		-37.3	45	441	11 33 01
11 34 00	J0240+2222	23 02 43	38.7	104.5	-3.7		-39.0	-25	441	No stop
11 35 20	---	23 04 03	38.9	104.8	-3.6		-38.9	55	451	11 34 01
11 35 20	J0240	23 04 03	36.9	106.8	-3.6		-37.7	-21	451	No stop
11 37 50	---	23 06 33	37.3	107.4	-3.6		-37.6	129	470	11 35 21
11 38 20	J0240+1848	23 07 03	36.5	108.3	-3.6		-37.1	15	470	11 38 20
11 39 10	---	23 07 54	36.6	108.5	-3.6		-37.0	50	477	11 38 21
11 39 10	J0240+2222	23 07 54	39.4	105.7	-3.6		-38.7	-25	477	No stop
11 40 30	---	23 09 14	39.6	106.0	-3.5		-38.7	55	487	11 39 11
11 40 30	J0240	23 09 14	37.7	108.0	-3.5		-37.4	-21	487	No stop
11 43 00	---	23 11 44	38.0	108.6	-3.5		-37.3	129	506	11 40 31
11 43 00	J0240+1848	23 11 44	37.2	109.4	-3.5		-36.8	-15	506	No stop
11 44 00	---	23 12 44	37.3	109.7	-3.5		-36.7	45	514	11 43 01
11 44 00	J0240+2222	23 12 44	40.1	106.8	-3.5		-38.5	-25	514	No stop
11 45 20	---	23 14 05	40.3	107.1	-3.5		-38.4	55	524	11 44 01
11 45 20	J0240	23 14 05	38.3	109.1	-3.5		-37.1	-21	524	No stop
11 47 50	---	23 16 35	38.7	109.7	-3.4		-37.0	129	544	11 45 21

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day 54	---							
11 48 20	J0240+1848	23 17 05	37.9	110.7	-3.4		-36.4	15	544	11 48 20
11 49 10	---	23 17 55	38.0	110.9	-3.4		-36.4	50	550	11 48 21
11 49 10	J0240+2222	23 17 55	40.9	108.1	-3.4		-38.2	-25	550	No stop
11 50 30	---	23 19 15	41.1	108.4	-3.4		-38.1	55	560	11 49 11
11 50 30	J0240	23 19 15	39.1	110.4	-3.4		-36.8	-21	560	No stop
11 53 00	---	23 21 46	39.4	111.0	-3.3		-36.6	129	580	11 50 31
11 53 00	J0240+1848	23 21 46	38.6	111.8	-3.3		-36.1	-15	580	No stop
11 54 00	---	23 22 46	38.7	112.1	-3.3		-36.0	45	587	11 53 01
11 54 00	J0240+2222	23 22 46	41.6	109.2	-3.3		-37.9	-25	587	No stop
11 55 20	---	23 24 06	41.8	109.6	-3.3		-37.8	55	598	11 54 01
11 55 20	J0240	23 24 06	39.8	111.6	-3.3		-36.5	-21	598	No stop
11 57 50	---	23 26 37	40.1	112.2	-3.3		-36.3	129	617	11 55 21
11 58 20	J0240+1848	23 27 07	39.3	113.2	-3.3		-35.7	14	617	11 58 20
11 59 10	---	23 27 57	39.4	113.4	-3.2		-35.6	50	623	11 58 21
11 59 10	J0240+2222	23 27 57	42.3	110.5	-3.2		-37.5	-25	623	No stop
12 00 30	---	23 29 17	42.5	110.8	-3.2		-37.4	55	634	11 59 11
12 00 30	J0240	23 29 17	40.5	112.8	-3.2		-36.1	-21	634	No stop
12 03 00	---	23 31 47	40.8	113.5	-3.2		-35.9	129	653	12 00 31
12 03 00	J0240+1848	23 31 47	40.0	114.3	-3.2		-35.3	-16	653	No stop
12 04 00	---	23 32 48	40.1	114.6	-3.2		-35.3	44	661	12 03 01
12 04 00	J0240+2222	23 32 48	43.0	111.7	-3.2		-37.1	-25	661	No stop
12 05 20	---	23 34 08	43.2	112.1	-3.1		-37.0	55	671	12 04 01
12 05 20	J0240	23 34 08	41.1	114.1	-3.1		-35.7	-21	671	No stop
12 07 50	---	23 36 38	41.5	114.7	-3.1		-35.5	129	690	12 05 21
12 08 20	J0240+1848	23 37 08	40.7	115.7	-3.1		-34.9	14	690	12 08 20
12 09 10	---	23 37 58	40.8	115.9	-3.1		-34.8	50	697	12 08 21
12 09 10	J0240+2222	23 37 58	43.7	113.0	-3.1		-36.7	-25	697	No stop
12 10 30	---	23 39 19	43.9	113.4	-3.0		-36.6	55	707	12 09 11
12 10 30	J0240	23 39 19	41.9	115.4	-3.0		-35.3	-21	707	No stop
12 13 00	---	23 41 49	42.2	116.0	-3.0		-35.0	129	727	12 10 31

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day 54	---							
12 13 00	J0240+1848	23 41 49	41.3	116.9	-3.0		-34.5	-16	727	No stop
12 14 00	---	23 42 49	41.5	117.1	-3.0		-34.4	44	734	12 13 01
12 14 00	J0240+2222	23 42 49	44.4	114.3	-3.0		-36.3	-25	734	No stop
12 15 20	---	23 44 10	44.5	114.6	-3.0		-36.2	55	745	12 14 01
12 15 20	J0240	23 44 10	42.5	116.6	-3.0		-34.8	-21	745	No stop
12 17 50	---	23 46 40	42.8	117.3	-2.9		-34.6	129	764	12 15 21
12 18 20	J0240+1848	23 47 10	42.0	118.3	-2.9		-34.0	14	764	12 18 20
12 19 10	---	23 48 00	42.1	118.5	-2.9		-33.9	50	770	12 18 21
12 19 10	J0240+2222	23 48 00	45.1	115.7	-2.9		-35.9	-25	770	No stop
12 20 30	---	23 49 20	45.2	116.0	-2.9		-35.7	55	781	12 19 11
12 22 50	3C48	23 51 41	62.5	125.2	-1.8		-35.9	62	781	12 22 50
12 24 40	---	23 53 31	62.7	125.9	-1.8		-35.6	110	795	12 22 51
12 26 40	J0240+1848	23 55 31	43.1	120.5	-2.8		-33.1	32	795	12 26 40
12 27 40	---	23 56 32	43.3	120.8	-2.8		-33.0	60	803	12 26 41
12 27 40	J0240+2222	23 56 32	46.2	117.9	-2.8		-35.0	-25	803	No stop
12 29 00	---	23 57 52	46.4	118.3	-2.7		-34.9	55	813	12 27 41
12 29 00	J0240	23 57 52	44.3	120.3	-2.7		-33.5	-21	813	No stop
12 31 30	---	00 00 22	44.6	121.0	-2.7		-33.2	129	832	12 29 01
12 31 30	J0240+1848	00 00 22	43.7	121.8	-2.7		-32.6	-16	832	No stop
12 32 30	---	00 01 22	43.9	122.1	-2.7		-32.5	44	840	12 31 31
12 32 30	J0240+2222	00 01 22	46.8	119.3	-2.7		-34.5	-25	840	No stop
12 33 50	---	00 02 43	47.0	119.7	-2.7		-34.4	55	850	12 32 31
12 33 50	J0240	00 02 43	44.9	121.7	-2.7		-32.9	-22	850	No stop
12 36 20	---	00 05 13	45.3	122.4	-2.6		-32.7	128	870	12 33 51
12 36 50	J0240+1848	00 05 43	44.4	123.3	-2.6		-32.0	14	870	12 36 50
12 37 40	---	00 06 33	44.5	123.6	-2.6		-31.9	50	876	12 36 51
12 37 40	J0240+2222	00 06 33	47.5	120.7	-2.6		-34.0	-25	876	No stop
12 39 00	---	00 07 53	47.7	121.1	-2.6		-33.8	55	886	12 37 41
12 39 00	J0240	00 07 53	45.6	123.1	-2.6		-32.4	-22	886	No stop
12 41 30	---	00 10 24	45.9	123.8	-2.5		-32.1	128	906	12 39 01

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
12 41 30	J0240+1848	00 10 24	45.0	124.7	-2.5		-31.5	-16	906	No stop
12 42 30	---	00 11 24	45.1	124.9	-2.5		-31.4	44	913	12 41 31
12 42 30	J0240+2222	00 11 24	48.1	122.1	-2.5		-33.4	-25	913	No stop
12 43 50	---	00 12 44	48.3	122.5	-2.5		-33.2	55	924	12 42 31
12 43 50	J0240	00 12 44	46.2	124.5	-2.5		-31.8	-22	924	No stop
12 46 20	---	00 15 15	46.5	125.2	-2.4		-31.5	128	943	12 43 51
12 46 50	J0240+1848	00 15 45	45.7	126.2	-2.4		-30.8	14	943	12 46 50
12 47 40	---	00 16 35	45.8	126.4	-2.4		-30.7	50	949	12 46 51
12 47 40	J0240+2222	00 16 35	48.8	123.6	-2.4		-32.8	-25	949	No stop
12 49 00	---	00 17 55	49.0	124.0	-2.4		-32.6	55	960	12 47 41
12 49 00	J0240	00 17 55	46.8	126.0	-2.4		-31.1	-22	960	No stop
12 51 30	---	00 20 25	47.1	126.7	-2.4		-30.8	128	979	12 49 01
12 51 30	J0240+1848	00 20 25	46.2	127.6	-2.4		-30.2	-16	979	No stop
12 52 30	---	00 21 26	46.3	127.9	-2.3		-30.1	44	987	12 51 31
12 52 30	J0240+2222	00 21 26	49.4	125.1	-2.3		-32.1	-26	987	No stop
12 53 50	---	00 22 46	49.6	125.5	-2.3		-32.0	54	997	12 52 31
12 53 50	J0240	00 22 46	47.4	127.4	-2.3		-30.5	-22	997	No stop
12 56 20	---	00 25 16	47.7	128.2	-2.3		-30.1	128	1016	12 53 51
12 56 50	J0240+1848	00 25 46	46.9	129.2	-2.3		-29.5	14	1016	12 56 50
12 57 40	---	00 26 36	47.0	129.4	-2.3		-29.4	50	1023	12 56 51
12 57 40	J0240+2222	00 26 36	50.0	126.7	-2.3		-31.4	-26	1023	No stop
12 59 00	---	00 27 57	50.2	127.1	-2.2		-31.2	54	1033	12 57 41
12 59 00	J0240	00 27 57	48.0	129.0	-2.2		-29.8	-22	1033	No stop
13 01 30	---	00 30 27	48.3	129.8	-2.2		-29.4	128	1052	12 59 01
13 01 30	J0240+1848	00 30 27	47.4	130.6	-2.2		-28.8	-16	1052	No stop
13 02 30	---	00 31 27	47.5	130.9	-2.2		-28.7	44	1060	13 01 31
13 02 30	J0240+2222	00 31 27	50.6	128.2	-2.2		-30.7	-26	1060	No stop
13 03 50	---	00 32 47	50.8	128.6	-2.2		-30.5	54	1070	13 02 31
13 03 50	J0240	00 32 47	48.6	130.5	-2.2		-29.1	-22	1070	No stop
13 06 20	---	00 35 18	48.9	131.3	-2.1		-28.7	128	1090	13 03 51

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day 54	---							
13 06 50	J0240+1848	00 35 48	48.0	132.2	-2.1		-28.0	14	1090	13 06 50
13 07 40	---	00 36 38	48.1	132.5	-2.1		-27.9	50	1096	13 06 51
13 07 40	J0240+2222	00 36 38	51.2	129.8	-2.1		-30.0	-26	1096	No stop
13 09 00	---	00 37 58	51.4	130.2	-2.1		-29.8	54	1107	13 07 41
13 09 00	J0240	00 37 58	49.2	132.1	-2.1		-28.3	-22	1107	No stop
13 11 30	---	00 40 29	49.4	132.9	-2.0		-27.9	128	1126	13 09 01
13 11 30	J0240+1848	00 40 29	48.5	133.7	-2.0		-27.3	-16	1126	No stop
13 12 30	---	00 41 29	48.6	134.0	-2.0		-27.2	44	1134	13 11 31
13 12 30	J0240+2222	00 41 29	51.8	131.4	-2.0		-29.2	-26	1134	No stop
13 13 50	---	00 42 49	51.9	131.8	-2.0		-29.0	54	1144	13 12 31
13 13 50	J0240	00 42 49	49.7	133.7	-2.0		-27.5	-22	1144	No stop
13 16 20	---	00 45 20	50.0	134.5	-1.9		-27.1	128	1163	13 13 51
13 16 50	J0240+1848	00 45 50	49.1	135.4	-1.9		-26.5	14	1163	13 16 50
13 17 40	---	00 46 40	49.2	135.7	-1.9		-26.3	50	1170	13 16 51
13 17 40	J0240+2222	00 46 40	52.3	133.1	-1.9		-28.3	-26	1170	No stop
13 19 00	---	00 48 00	52.5	133.5	-1.9		-28.1	54	1180	13 17 41
13 19 00	J0240	00 48 00	50.3	135.4	-1.9		-26.7	-22	1180	No stop
13 21 30	---	00 50 30	50.5	136.2	-1.9		-26.3	128	1199	13 19 01
13 21 30	J0240+1848	00 50 30	49.6	137.0	-1.9		-25.7	-16	1199	No stop
13 22 30	---	00 51 31	49.7	137.3	-1.8		-25.5	44	1207	13 21 31
13 22 30	J0240+2222	00 51 31	52.9	134.7	-1.8		-27.5	-26	1207	No stop
13 23 50	---	00 52 51	53.0	135.1	-1.8		-27.3	54	1217	13 22 31
13 23 50	J0240	00 52 51	50.8	137.0	-1.8		-25.9	-22	1217	No stop
13 26 20	---	00 55 21	51.0	137.8	-1.8		-25.4	128	1237	13 23 51
13 26 50	J0240+1848	00 55 51	50.1	138.7	-1.8		-24.8	14	1237	13 26 50
13 27 40	---	00 56 41	50.2	139.0	-1.8		-24.6	50	1243	13 26 51
13 27 40	J0240+2222	00 56 41	53.4	136.5	-1.8		-26.6	-26	1243	No stop
13 29 00	---	00 58 02	53.5	136.9	-1.7		-26.3	54	1253	13 27 41
13 29 00	J0240	00 58 02	51.3	138.7	-1.7		-24.9	-22	1253	No stop
13 31 30	---	01 00 32	51.5	139.6	-1.7		-24.5	128	1273	13 29 01

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
13 31 30	J0240+1848	01 00 32	50.6	140.3	-1.7		-23.9	-16	1273	No stop
13 32 30	---	01 01 32	50.7	140.6	-1.7		-23.7	44	1280	13 31 31
13 32 30	J0240+2222	01 01 32	53.9	138.2	-1.7		-25.7	-26	1280	No stop
13 33 50	---	01 02 52	54.0	138.6	-1.7		-25.4	54	1291	13 32 31
13 33 50	J0240	01 02 52	51.8	140.4	-1.7		-24.0	-22	1291	No stop
13 36 20	---	01 05 23	52.0	141.3	-1.6		-23.6	128	1310	13 33 51
13 36 50	J0240+1848	01 05 53	51.1	142.1	-1.6		-22.9	14	1310	13 36 50
13 37 40	---	01 06 43	51.1	142.4	-1.6		-22.8	50	1317	13 36 51
13 37 40	J0240+2222	01 06 43	54.4	140.0	-1.6		-24.7	-26	1317	No stop
13 39 00	---	01 08 03	54.5	140.5	-1.6		-24.4	54	1327	13 37 41
13 39 00	J0240	01 08 03	52.2	142.2	-1.6		-23.1	-22	1327	No stop
13 41 30	---	01 10 34	52.5	143.1	-1.5		-22.6	128	1346	13 39 01
13 41 30	J0240+1848	01 10 34	51.5	143.8	-1.5		-22.0	-16	1346	No stop
13 42 30	---	01 11 34	51.6	144.1	-1.5		-21.8	44	1354	13 41 31
13 42 30	J0240+2222	01 11 34	54.9	141.8	-1.5		-23.7	-26	1354	No stop
13 43 50	---	01 12 54	55.0	142.3	-1.5		-23.4	54	1364	13 42 31
13 43 50	J0240	01 12 54	52.7	143.9	-1.5		-22.1	-22	1364	No stop
13 46 20	---	01 15 24	52.9	144.8	-1.4		-21.6	128	1384	13 43 51
13 46 50	J0240+1848	01 15 55	52.0	145.7	-1.4		-21.0	14	1384	13 46 50
13 47 40	---	01 16 45	52.0	146.0	-1.4		-20.8	50	1390	13 46 51
13 47 40	J0240+2222	01 16 45	55.3	143.7	-1.4		-22.6	-26	1390	No stop
13 49 00	---	01 18 05	55.5	144.2	-1.4		-22.3	54	1400	13 47 41
13 49 00	J0240	01 18 05	53.1	145.8	-1.4		-21.1	-23	1400	No stop
13 51 30	---	01 20 35	53.3	146.7	-1.4		-20.5	127	1420	13 49 01
13 51 30	J0240+1848	01 20 35	52.3	147.4	-1.4		-20.0	-16	1420	No stop
13 52 30	---	01 21 35	52.4	147.7	-1.3		-19.8	44	1427	13 51 31
13 52 30	J0240+2222	01 21 35	55.8	145.5	-1.3		-21.6	-27	1427	No stop
13 53 50	---	01 22 56	55.9	146.0	-1.3		-21.3	53	1438	13 52 31
13 53 50	J0240	01 22 56	53.5	147.6	-1.3		-20.0	-23	1438	No stop
13 56 20	---	01 25 26	53.7	148.5	-1.3		-19.5	127	1457	13 53 51

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
13 56 50	J0240+1848	01 25 56	52.8	149.3	-1.3		-18.9	14	1457	13 56 50
13 57 40	---	01 26 46	52.8	149.6	-1.3		-18.7	50	1463	13 56 51
13 57 40	J0240+2222	01 26 46	56.2	147.5	-1.3		-20.4	-27	1463	No stop
13 59 00	---	01 28 07	56.3	148.1	-1.2		-20.1	53	1474	13 57 41
13 59 00	J0240	01 28 07	53.9	149.5	-1.2		-18.9	-23	1474	No stop
14 01 30	---	01 30 37	54.1	150.5	-1.2		-18.4	127	1493	13 59 01
14 01 30	J0240+1848	01 30 37	53.1	151.1	-1.2		-17.9	-17	1493	No stop
14 02 30	---	01 31 37	53.2	151.4	-1.2		-17.7	43	1501	14 01 31
14 02 30	J0240+2222	01 31 37	56.6	149.4	-1.2		-19.3	-27	1501	No stop
14 03 50	---	01 32 57	56.7	150.0	-1.2		-19.0	53	1511	14 02 31
14 03 50	J0240	01 32 57	54.3	151.4	-1.2		-17.8	-23	1511	No stop
14 06 20	---	01 35 28	54.5	152.3	-1.1		-17.3	127	1530	14 03 51
14 06 50	J0240+1848	01 35 58	53.5	153.1	-1.1		-16.7	13	1530	14 06 50
14 07 40	---	01 36 48	53.5	153.4	-1.1		-16.5	50	1537	14 06 51
14 07 40	J0240+2222	01 36 48	57.0	151.5	-1.1		-18.1	-27	1537	No stop
14 09 00	---	01 38 08	57.0	152.0	-1.1		-17.7	53	1547	14 07 41
14 11 30	3C84	01 40 39	69.6	114.1	-1.7		-47.2	58	1547	14 11 30
14 13 20	---	01 42 29	69.8	114.8	-1.6		-46.8	110	1561	14 11 31
14 16 40	3C48	01 45 49	70.2	184.1	0.1		3.0	47	1561	14 16 40
14 18 30	---	01 47 40	70.1	185.3	0.1		3.8	110	1575	14 16 41
14 20 30	J0240+1848	01 49 40	54.3	158.4	-0.9		-13.5	47	1575	14 20 30
14 21 30	---	01 50 40	54.4	158.8	-0.9		-13.3	60	1583	14 20 31
14 21 30	J0240+2222	01 50 40	57.9	157.2	-0.9		-14.6	-27	1583	No stop
14 22 50	---	01 52 00	57.9	157.8	-0.8		-14.2	53	1593	14 21 31
14 22 50	J0240	01 52 00	55.5	158.9	-0.8		-13.3	-23	1593	No stop
14 25 20	---	01 54 31	55.6	159.9	-0.8		-12.7	127	1613	14 22 51
14 25 20	J0240+1848	01 54 31	54.6	160.3	-0.8		-12.3	-17	1613	No stop
14 26 20	---	01 55 31	54.6	160.7	-0.8		-12.1	43	1621	14 25 21
14 26 20	J0240+2222	01 55 31	58.1	159.3	-0.8		-13.3	-27	1621	No stop
14 27 40	---	01 56 51	58.2	159.8	-0.8		-13.0	53	1631	14 26 21

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
14 27 40	J0240	01 56 51	55.7	160.8	-0.8		-12.1	-23	1631	No stop
14 30 10	---	01 59 22	55.9	161.9	-0.7		-11.5	127	1650	14 27 41
14 30 40	J0240+1848	01 59 52	54.8	162.5	-0.7		-11.0	13	1650	14 30 40
14 31 30	---	02 00 42	54.9	162.8	-0.7		-10.8	50	1657	14 30 41
14 31 30	J0240+2222	02 00 42	58.4	161.5	-0.7		-11.9	-27	1657	No stop
14 32 50	---	02 02 02	58.5	162.1	-0.7		-11.6	53	1667	14 31 31
14 32 50	J0240	02 02 02	56.0	163.0	-0.7		-10.8	-23	1667	No stop
14 35 20	---	02 04 32	56.1	164.0	-0.6		-10.1	127	1686	14 32 51
14 35 20	J0240+1848	02 04 32	55.0	164.4	-0.6		-9.8	-17	1686	No stop
14 36 20	---	02 05 33	55.1	164.8	-0.6		-9.6	43	1694	14 35 21
14 36 20	J0240+2222	02 05 33	58.6	163.6	-0.6		-10.6	-27	1694	No stop
14 37 40	---	02 06 53	58.7	164.2	-0.6		-10.2	53	1704	14 36 21
14 37 40	J0240	02 06 53	56.2	165.0	-0.6		-9.5	-23	1704	No stop
14 40 10	---	02 09 23	56.3	166.0	-0.5		-8.9	127	1724	14 37 41
14 40 40	J0240+1848	02 09 53	55.2	166.6	-0.5		-8.5	13	1724	14 40 40
14 41 30	---	02 10 44	55.3	166.9	-0.5		-8.3	50	1730	14 40 41
14 41 30	J0240+2222	02 10 44	58.8	165.8	-0.5		-9.1	-27	1730	No stop
14 42 50	---	02 12 04	58.9	166.4	-0.5		-8.8	53	1740	14 41 31
14 42 50	J0240	02 12 04	56.4	167.1	-0.5		-8.2	-23	1740	No stop
14 45 20	---	02 14 34	56.5	168.2	-0.5		-7.5	127	1760	14 42 51
14 45 20	J0240+1848	02 14 34	55.4	168.5	-0.5		-7.3	-17	1760	No stop
14 46 20	---	02 15 34	55.4	168.9	-0.4		-7.0	43	1767	14 45 21
14 46 20	J0240+2222	02 15 34	59.0	168.0	-0.4		-7.8	-27	1767	No stop
14 47 40	---	02 16 55	59.0	168.6	-0.4		-7.4	53	1778	14 46 21
14 47 40	J0240	02 16 55	56.5	169.2	-0.4		-6.9	-23	1778	No stop
14 50 10	---	02 19 25	56.6	170.2	-0.4		-6.2	127	1797	14 47 41
14 50 40	J0240+1848	02 19 55	55.5	170.7	-0.4		-5.9	13	1797	14 50 40
14 51 30	---	02 20 45	55.6	171.0	-0.4		-5.7	50	1803	14 50 41
14 51 30	J0240+2222	02 20 45	59.1	170.3	-0.4		-6.3	-27	1803	No stop
14 52 50	---	02 22 05	59.2	170.9	-0.3		-5.9	53	1814	14 51 31

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
14 52 50	J0240	02 22 05	56.7	171.4	-0.3		-5.5	-23	1814	No stop
14 55 20	---	02 24 36	56.7	172.4	-0.3		-4.8	127	1833	14 52 51
14 55 20	J0240+1848	02 24 36	55.6	172.6	-0.3		-4.7	-17	1833	No stop
14 56 20	---	02 25 36	55.7	173.1	-0.3		-4.4	43	1841	14 55 21
14 56 20	J0240+2222	02 25 36	59.2	172.5	-0.3		-4.9	-27	1841	No stop
14 57 40	---	02 26 56	59.3	173.1	-0.3		-4.5	53	1851	14 56 21
14 57 40	J0240	02 26 56	56.8	173.4	-0.3		-4.2	-23	1851	No stop
15 00 10	---	02 29 27	56.8	174.5	-0.2		-3.5	127	1870	14 57 41
15 00 40	J0240+1848	02 29 57	55.7	174.9	-0.2		-3.2	13	1870	15 00 40
15 01 30	---	02 30 47	55.7	175.2	-0.2		-3.0	50	1877	15 00 41
15 01 30	J0240+2222	02 30 47	59.3	174.8	-0.2		-3.4	-27	1877	No stop
15 02 50	---	02 32 07	59.3	175.4	-0.2		-3.0	53	1887	15 01 31
15 02 50	J0240	02 32 07	56.8	175.7	-0.2		-2.8	-23	1887	No stop
15 05 20	---	02 34 37	56.9	176.7	-0.1		-2.1	127	1907	15 02 51
15 05 20	J0240+1848	02 34 37	55.8	176.8	-0.1		-2.0	-17	1907	No stop
15 06 20	---	02 35 38	55.8	177.3	-0.1		-1.7	43	1914	15 05 21
15 06 20	J0240+2222	02 35 38	59.4	177.0	-0.1		-1.9	-27	1914	No stop
15 07 40	---	02 36 58	59.4	177.6	-0.1		-1.6	53	1925	15 06 21
15 07 40	J0240	02 36 58	56.9	177.7	-0.1		-1.4	-23	1925	No stop
15 10 10	---	02 39 28	56.9	178.8	-0.0		-0.8	127	1944	15 07 41
15 10 40	J0240+1848	02 39 58	55.8	179.1	-0.0		-0.6	13	1944	15 10 40
15 11 30	---	02 40 48	55.8	179.4	-0.0		-0.3	50	1950	15 10 41
15 11 30	J0240+2222	02 40 48	59.4	179.4	-0.0		-0.4	-27	1950	No stop
15 12 50	---	02 42 09	59.4	180.0	-0.0		-0.0	53	1961	15 11 31
15 12 50	J0240	02 42 09	56.9	180.0	-0.0		-0.0	-23	1961	No stop
15 15 20	---	02 44 39	56.9	181.0	0.0		0.7	127	1980	15 12 51
15 15 20	J0240+1848	02 44 39	55.8	181.1	0.0		0.7	-17	1980	No stop
15 16 20	---	02 45 39	55.8	181.5	0.1		0.9	43	1988	15 15 21
15 16 20	J0240+2222	02 45 39	59.4	181.6	0.1		1.0	-27	1988	No stop
15 17 40	---	02 46 59	59.4	182.2	0.1		1.4	53	1998	15 16 21

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
15 17 40	J0240	02 46 59	56.9	182.1	0.1		1.3	-23	1998	No stop
15 20 10	---	02 49 30	56.9	183.1	0.1		2.0	127	2017	15 17 41
15 20 40	J0240+1848	02 50 00	55.8	183.3	0.1		2.1	13	2017	15 20 40
15 21 30	---	02 50 50	55.8	183.7	0.1		2.3	50	2024	15 20 41
15 21 30	J0240+2222	02 50 50	59.4	183.9	0.1		2.5	-27	2024	No stop
15 22 50	---	02 52 10	59.3	184.5	0.2		2.9	53	2034	15 21 31
15 22 50	J0240	02 52 10	56.8	184.3	0.2		2.7	-23	2034	No stop
15 25 20	---	02 54 41	56.8	185.4	0.2		3.4	127	2053	15 22 51
15 25 20	J0240+1848	02 54 41	55.7	185.3	0.2		3.3	-17	2053	No stop
15 26 20	---	02 55 41	55.7	185.7	0.2		3.6	43	2061	15 25 21
15 26 20	J0240+2222	02 55 41	59.3	186.1	0.2		4.0	-27	2061	No stop
15 27 40	---	02 57 01	59.3	186.7	0.2		4.3	53	2071	15 26 21
15 27 40	J0240	02 57 01	56.8	186.4	0.2		4.1	-23	2071	No stop
15 30 10	---	02 59 32	56.7	187.4	0.3		4.7	127	2091	15 27 41
15 30 40	J0240+1848	03 00 02	55.6	187.5	0.3		4.8	13	2091	15 30 40
15 31 30	---	03 00 52	55.6	187.9	0.3		5.0	50	2097	15 30 41
15 31 30	J0240+2222	03 00 52	59.2	188.4	0.3		5.5	-27	2097	No stop
15 32 50	---	03 02 12	59.2	189.0	0.3		5.9	53	2107	15 31 31
15 32 50	J0240	03 02 12	56.7	188.6	0.3		5.5	-23	2107	No stop
15 35 20	---	03 04 42	56.6	189.6	0.4		6.1	127	2127	15 32 51
15 35 20	J0240+1848	03 04 42	55.5	189.5	0.4		6.0	-17	2127	No stop
15 36 20	---	03 05 43	55.5	189.9	0.4		6.3	43	2135	15 35 21
15 36 20	J0240+2222	03 05 43	59.1	190.6	0.4		6.9	-27	2135	No stop
15 37 40	---	03 07 03	59.0	191.2	0.4		7.2	53	2145	15 36 21
15 37 40	J0240	03 07 03	56.5	190.6	0.4		6.8	-23	2145	No stop
15 40 10	---	03 09 33	56.5	191.7	0.5		7.4	127	2164	15 37 41
15 40 40	J0240+1848	03 10 03	55.4	191.7	0.5		7.4	13	2164	15 40 40
15 41 30	---	03 10 53	55.4	192.0	0.5		7.6	50	2171	15 40 41
15 41 30	J0240+2222	03 10 53	58.9	192.9	0.5		8.3	-27	2171	No stop
15 42 50	---	03 12 14	58.9	193.5	0.5		8.7	53	2181	15 41 31

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Sun	23 Feb 2025	Day	54	---						
15 42 50	J0240	03 12 14	56.4	192.8	0.5		8.1	-23	2181	No stop
15 45 20	---	03 14 44	56.3	193.9	0.5		8.8	127	2200	15 42 51
15 45 20	J0240+1848	03 14 44	55.2	193.6	0.5		8.6	-17	2200	No stop
15 46 20	---	03 15 44	55.2	194.0	0.6		8.8	43	2208	15 45 21
15 46 20	J0240+2222	03 15 44	58.7	195.0	0.6		9.7	-27	2208	No stop
15 47 40	---	03 17 04	58.7	195.6	0.6		10.1	53	2218	15 46 21
15 47 40	J0240	03 17 04	56.2	194.8	0.6		9.4	-23	2218	No stop
15 50 10	---	03 19 35	56.1	195.9	0.6		10.1	127	2238	15 47 41
15 50 40	J0240+1848	03 20 05	55.0	195.8	0.6		9.9	13	2238	15 50 40
15 51 30	---	03 20 55	55.0	196.1	0.6		10.2	50	2244	15 50 41
15 51 30	J0240+2222	03 20 55	58.5	197.3	0.6		11.1	-27	2244	No stop
15 52 50	---	03 22 15	58.5	197.9	0.7		11.5	53	2254	15 51 31
15 52 50	J0240	03 22 15	56.0	197.0	0.7		10.8	-23	2254	No stop
15 55 20	---	03 24 46	55.9	198.0	0.7		11.4	127	2274	15 52 51
15 55 20	J0240+1848	03 24 46	54.8	197.7	0.7		11.1	-17	2274	No stop
15 56 20	---	03 25 46	54.8	198.1	0.7		11.4	43	2281	15 55 21
15 56 20	J0240+2222	03 25 46	58.3	199.4	0.7		12.5	-27	2281	No stop
15 57 40	---	03 27 06	58.2	200.0	0.7		12.8	53	2292	15 56 21
15 57 40	J0240	03 27 06	55.8	199.0	0.7		12.0	-23	2292	No stop
16 00 10	---	03 29 36	55.6	200.0	0.8		12.6	127	2311	15 57 41
16 00 40	J0240+1848	03 30 07	54.6	199.8	0.8		12.4	13	2311	16 00 40
16 01 30	---	03 30 57	54.5	200.2	0.8		12.6	50	2317	16 00 41
16 01 30	J0240+2222	03 30 57	58.0	201.6	0.8		13.8	-27	2317	No stop
16 02 50	---	03 32 17	57.9	202.2	0.8		14.2	53	2328	16 01 31
16 05 20	3C48	03 34 47	61.4	237.7	1.9		37.4	65	2328	16 05 20
16 07 10	---	03 36 38	61.2	238.3	2.0		37.7	110	2342	16 05 21
16 09 30	J0240+1848	03 38 58	54.1	203.3	0.9		14.6	54	2342	16 09 30
16 10 30	---	03 39 58	54.0	203.7	1.0		14.8	60	2350	16 09 31
16 10 30	J0240+2222	03 39 58	57.5	205.4	1.0		16.2	-27	2350	No stop
16 11 50	---	03 41 18	57.4	205.9	1.0		16.5	53	2360	16 10 31

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
16 11 50	J0240	03 41 18	55.0	204.7	1.0		15.5	-23	2360	No stop
16 14 20	---	03 43 49	54.8	205.7	1.0		16.1	127	2379	16 11 51
16 14 20	J0240+1848	03 43 49	53.8	205.2	1.0		15.7	-17	2379	No stop
16 15 20	---	03 44 49	53.7	205.6	1.0		15.9	43	2387	16 14 21
16 15 20	J0240+2222	03 44 49	57.2	207.4	1.0		17.4	-27	2387	No stop
16 16 40	---	03 46 09	57.1	207.9	1.1		17.7	53	2397	16 15 21
16 16 40	J0240	03 46 09	54.7	206.6	1.1		16.6	-23	2397	No stop
16 19 10	---	03 48 40	54.5	207.6	1.1		17.2	127	2417	16 16 41
16 19 40	J0240+1848	03 49 10	53.4	207.2	1.1		16.9	13	2417	16 19 40
16 20 30	---	03 50 00	53.4	207.6	1.1		17.1	50	2423	16 19 41
16 20 30	J0240+2222	03 50 00	56.8	209.4	1.1		18.6	-27	2423	No stop
16 21 50	---	03 51 20	56.7	210.0	1.2		18.9	53	2433	16 20 31
16 21 50	J0240	03 51 20	54.3	208.6	1.2		17.8	-23	2433	No stop
16 24 20	---	03 53 50	54.1	209.5	1.2		18.4	127	2453	16 21 51
16 24 20	J0240+1848	03 53 50	53.1	209.0	1.2		17.9	-17	2453	No stop
16 25 20	---	03 54 51	53.0	209.4	1.2		18.1	43	2460	16 24 21
16 25 20	J0240+2222	03 54 51	56.4	211.4	1.2		19.8	-27	2460	No stop
16 26 40	---	03 56 11	56.3	211.9	1.2		20.1	53	2471	16 25 21
16 26 40	J0240	03 56 11	53.9	210.4	1.2		18.9	-23	2471	No stop
16 29 10	---	03 58 41	53.8	211.4	1.3		19.4	127	2490	16 26 41
16 29 40	J0240+1848	03 59 11	52.7	211.0	1.3		19.1	13	2490	16 29 40
16 30 30	---	04 00 01	52.6	211.3	1.3		19.3	50	2497	16 29 41
16 30 30	J0240+2222	04 00 01	56.0	213.4	1.3		21.0	-26	2497	No stop
16 31 50	---	04 01 22	55.9	213.9	1.3		21.2	54	2507	16 30 31
16 31 50	J0240	04 01 22	53.5	212.4	1.3		20.0	-23	2507	No stop
16 34 20	---	04 03 52	53.3	213.3	1.4		20.5	127	2526	16 31 51
16 34 20	J0240+1848	04 03 52	52.3	212.7	1.4		20.1	-17	2526	No stop
16 35 20	---	04 04 52	52.2	213.1	1.4		20.3	43	2534	16 34 21
16 35 20	J0240+2222	04 04 52	55.6	215.2	1.4		22.0	-26	2534	No stop
16 36 40	---	04 06 12	55.5	215.7	1.4		22.3	54	2544	16 35 21

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
16 36 40	J0240	04 06 12	53.1	214.2	1.4		21.0	-23	2544	No stop
16 39 10	---	04 08 43	52.9	215.1	1.4		21.5	127	2564	16 36 41
16 39 40	J0240+1848	04 09 13	51.9	214.6	1.5		21.1	13	2564	16 39 40
16 40 30	---	04 10 03	51.8	214.9	1.5		21.3	50	2570	16 39 41
16 40 30	J0240+2222	04 10 03	55.1	217.2	1.5		23.1	-26	2570	No stop
16 41 50	---	04 11 23	55.0	217.7	1.5		23.4	54	2580	16 40 31
16 41 50	J0240	04 11 23	52.7	216.0	1.5		22.1	-23	2580	No stop
16 44 20	---	04 13 54	52.5	216.9	1.5		22.6	127	2600	16 41 51
16 44 20	J0240+1848	04 13 54	51.5	216.3	1.5		22.1	-17	2600	No stop
16 45 20	---	04 14 54	51.4	216.7	1.5		22.3	43	2607	16 44 21
16 45 20	J0240+2222	04 14 54	54.7	219.0	1.5		24.1	-26	2607	No stop
16 46 40	---	04 16 14	54.6	219.4	1.6		24.4	54	2618	16 45 21
16 46 40	J0240	04 16 14	52.3	217.8	1.6		23.0	-23	2618	No stop
16 49 10	---	04 18 44	52.0	218.6	1.6		23.5	127	2637	16 46 41
16 49 40	J0240+1848	04 19 15	51.0	218.2	1.6		23.1	13	2637	16 49 40
16 50 30	---	04 20 05	50.9	218.5	1.6		23.2	50	2643	16 49 41
16 50 30	J0240+2222	04 20 05	54.2	220.8	1.6		25.1	-26	2643	No stop
16 51 50	---	04 21 25	54.1	221.3	1.7		25.4	54	2654	16 50 31
16 51 50	J0240	04 21 25	51.8	219.6	1.7		24.0	-23	2654	No stop
16 54 20	---	04 23 55	51.5	220.4	1.7		24.5	127	2673	16 51 51
16 54 20	J0240+1848	04 23 55	50.5	219.8	1.7		24.0	-17	2673	No stop
16 55 20	---	04 24 55	50.4	220.1	1.7		24.1	43	2681	16 54 21
16 55 20	J0240+2222	04 24 55	53.7	222.5	1.7		26.1	-26	2681	No stop
16 56 40	---	04 26 16	53.6	223.0	1.7		26.3	54	2691	16 55 21
16 56 40	J0240	04 26 16	51.3	221.2	1.7		24.9	-22	2691	No stop
16 59 10	---	04 28 46	51.1	222.1	1.8		25.4	128	2710	16 56 41
16 59 40	J0240+1848	04 29 16	50.0	221.6	1.8		24.9	13	2710	16 59 40
17 00 30	---	04 30 06	49.9	221.9	1.8		25.1	50	2717	16 59 41
17 00 30	J0240+2222	04 30 06	53.2	224.3	1.8		27.0	-26	2717	No stop
17 01 50	---	04 31 27	53.0	224.8	1.8		27.3	54	2727	17 00 31

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
17 01 50	J0240	04 31 27	50.8	223.0	1.8		25.8	-22	2727	No stop
17 04 20	---	04 33 57	50.5	223.8	1.9		26.3	128	2746	17 01 51
17 04 20	J0240+1848	04 33 57	49.5	223.1	1.9		25.7	-17	2746	No stop
17 05 20	---	04 34 57	49.4	223.5	1.9		25.9	43	2754	17 04 21
17 05 20	J0240+2222	04 34 57	52.6	226.0	1.9		27.9	-26	2754	No stop
17 06 40	---	04 36 17	52.5	226.4	1.9		28.1	54	2764	17 05 21
17 06 40	J0240	04 36 17	50.3	224.6	1.9		26.7	-22	2764	No stop
17 09 10	---	04 38 48	50.0	225.4	1.9		27.1	128	2784	17 06 41
17 09 40	J0240+1848	04 39 18	49.0	224.9	2.0		26.6	14	2784	17 09 40
17 10 30	---	04 40 08	48.9	225.1	2.0		26.7	50	2790	17 09 41
17 10 30	J0240+2222	04 40 08	52.1	227.7	2.0		28.7	-26	2790	No stop
17 11 50	---	04 41 28	51.9	228.2	2.0		29.0	54	2801	17 10 31
17 11 50	J0240	04 41 28	49.7	226.3	2.0		27.5	-22	2801	No stop
17 14 20	---	04 43 59	49.4	227.1	2.0		27.9	128	2820	17 11 51
17 14 20	J0240+1848	04 43 59	48.5	226.4	2.0		27.3	-16	2820	No stop
17 15 20	---	04 44 59	48.4	226.7	2.0		27.5	44	2828	17 14 21
17 15 20	J0240+2222	04 44 59	51.5	229.3	2.0		29.5	-26	2828	No stop
17 16 40	---	04 46 19	51.4	229.7	2.1		29.7	54	2838	17 15 21
17 16 40	J0240	04 46 19	49.2	227.8	2.1		28.3	-22	2838	No stop
17 19 10	---	04 48 49	48.9	228.6	2.1		28.6	128	2857	17 16 41
17 19 40	J0240+1848	04 49 19	47.9	228.0	2.1		28.2	14	2857	17 19 40
17 20 30	---	04 50 10	47.8	228.3	2.1		28.3	50	2864	17 19 41
17 20 30	J0240+2222	04 50 10	50.9	231.0	2.1		30.3	-26	2864	No stop
17 21 50	---	04 51 30	50.8	231.4	2.2		30.5	54	2874	17 20 31
17 21 50	J0240	04 51 30	48.6	229.5	2.2		29.0	-22	2874	No stop
17 24 20	---	04 54 00	48.3	230.2	2.2		29.4	128	2893	17 21 51
17 24 20	J0240+1848	04 54 00	47.4	229.5	2.2		28.8	-16	2893	No stop
17 25 20	---	04 55 00	47.3	229.8	2.2		29.0	44	2901	17 24 21
17 25 20	J0240+2222	04 55 00	50.4	232.5	2.2		31.0	-25	2901	No stop
17 26 40	---	04 56 21	50.2	232.9	2.2		31.2	55	2911	17 25 21

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
17 26 40	J0240	04 56 21	48.0	230.9	2.2		29.7	-22	2911	No stop
17 29 10	---	04 58 51	47.8	231.7	2.3		30.1	128	2931	17 26 41
17 29 40	J0240+1848	04 59 21	46.7	231.1	2.3		29.6	14	2931	17 29 40
17 30 30	---	05 00 11	46.7	231.3	2.3		29.7	50	2937	17 29 41
17 30 30	J0240+2222	05 00 11	49.7	234.1	2.3		31.7	-25	2937	No stop
17 31 50	---	05 01 31	49.6	234.5	2.3		31.9	55	2947	17 30 31
17 31 50	J0240	05 01 31	47.4	232.5	2.3		30.5	-22	2947	No stop
17 34 20	---	05 04 02	47.1	233.3	2.4		30.8	128	2967	17 31 51
17 34 20	J0240+1848	05 04 02	46.2	232.5	2.4		30.2	-16	2967	No stop
17 35 20	---	05 05 02	46.1	232.8	2.4		30.4	44	2974	17 34 21
17 35 20	J0240+2222	05 05 02	49.2	235.5	2.4		32.4	-25	2974	No stop
17 36 40	---	05 06 22	49.0	235.9	2.4		32.6	55	2985	17 35 21
17 36 40	J0240	05 06 22	46.9	233.9	2.4		31.1	-22	2985	No stop
17 39 10	---	05 08 53	46.5	234.7	2.4		31.4	128	3004	17 36 41
17 39 40	J0240+1848	05 09 23	45.6	234.1	2.5		30.9	14	3004	17 39 40
17 40 30	---	05 10 13	45.5	234.3	2.5		31.0	50	3011	17 39 41
17 40 30	J0240+2222	05 10 13	48.5	237.1	2.5		33.1	-25	3011	No stop
17 41 50	---	05 11 33	48.3	237.4	2.5		33.2	55	3021	17 40 31
17 41 50	J0240	05 11 33	46.2	235.5	2.5		31.8	-22	3021	No stop
17 44 20	---	05 14 04	45.9	236.2	2.5		32.1	128	3040	17 41 51
17 44 20	J0240+1848	05 14 04	45.0	235.4	2.5		31.5	-16	3040	No stop
17 45 20	---	05 15 04	44.9	235.7	2.5		31.6	44	3048	17 44 21
17 45 20	J0240+2222	05 15 04	47.9	238.5	2.5		33.6	-25	3048	No stop
17 46 40	---	05 16 24	47.7	238.8	2.6		33.8	55	3058	17 45 21
17 46 40	J0240	05 16 24	45.6	236.8	2.6		32.3	-22	3058	No stop
17 49 10	---	05 18 54	45.3	237.6	2.6		32.6	128	3077	17 46 41
17 49 40	J0240+1848	05 19 24	44.3	236.9	2.6		32.1	14	3077	17 49 40
17 50 30	---	05 20 15	44.2	237.1	2.6		32.2	50	3084	17 49 41
17 50 30	J0240+2222	05 20 15	47.2	239.9	2.6		34.2	-25	3084	No stop
17 51 50	---	05 21 35	47.0	240.3	2.7		34.4	55	3094	17 50 31

Schedule for TORUN (Code Tr)

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magnetic propeller J0240+1952

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

```
-----
Start UT  Source          Start / Stop      Early   Disk   TPStart
Stop UT          LST      EL    AZ    HA  UP    ParA  Dwell  GBytes  SYNC
-----
```

--- Sun 23 Feb 2025 Day 54 ---

```
17 54 10 3C48          05 23 55 45.9 266.5 3.7      45.8   73   3094  17 54 10
17 56 00 ---          05 25 45 45.6 266.9 3.8      45.8  110   3108  17 54 11

17 58 10 3C84          05 27 56 66.0 254.3 2.1      50.6   39   3108  17 58 10
18 00 00 ---          05 29 46 65.7 254.8 2.1      50.8  110   3123  17 58 11
```

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

```
Setup group:      7          Station: TORUN          Total bit rate: 1024
Format: VDIF      Bits per sample: 2          Sample rate: 64.000
Number of channels: 8    DBE type: DBBC_DDC      Speedup factor: 1.00
```

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* J0240	02 37 59.389730	* 02 40 48.528344	02 42 13.164408	0.00
	19 39 37.61370	* 19 52 26.90366	19 58 56.49659	0.00
* J0240+1848	02 37 54.584532	* 02 40 42.816319	02 42 07.002180	0.00
	18 35 10.51372	* 18 48 00.05466	18 54 29.42084	0.00
* J0240+2222	02 37 56.611285	* 02 40 47.897988	02 42 13.598659	0.00
	22 10 05.37627	* 22 22 54.73310	22 29 25.17853	0.00
* 3C84	03 16 29.567282	* 03 19 48.160112	03 21 27.761771	0.00
	41 19 51.91651	* 41 30 42.10364	41 36 19.56035	0.00
* 3C48	01 34 49.826479	* 01 37 41.299545	01 39 06.576647	0.00
	32 54 20.25999	* 33 09 35.13417	33 17 20.01162	0.00

eh046btr

RED NUGGESTS

PI: *Dan Hu*

Address: Masaryk University

Observing mode: vlbi

Schedule for TORUN (Code Tr)

Page 2

Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun 23 Feb 2025	Day 54	---							
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

18 30 00	J1058+4304	05 59 51	41.2	70.0	-5.0		-50.4	0	0	18 30 00
18 31 00	=1055+433	06 00 51	41.4	70.2	-5.0		-50.5	60	8	18 30 01
18 31 00	J1058+4248	06 00 51	41.2	70.5	-5.0		-50.3	-10	8	No stop
18 34 30	---	06 04 22	41.7	71.0	-4.9		-50.6	200	35	18 31 01
18 34 30	J1058+4304	06 04 22	41.9	70.7	-4.9		-50.7	-10	35	No stop
18 36 30	=1055+433	06 06 22	42.2	71.0	-4.9		-50.9	110	50	18 34 31
18 39 30	4C39.25	06 09 23	53.5	92.3	-3.3		-50.5	123	50	18 39 30
18 44 30	---	06 14 23	54.3	93.4	-3.2		-50.4	300	89	18 39 31
18 46 00	J1058+4304	06 15 54	43.5	72.5	-4.7		-51.5	33	89	18 46 00
18 48 00	=1055+433	06 17 54	43.8	72.9	-4.7		-51.6	120	104	18 46 01
18 48 00	PGC032873	06 17 54	43.6	73.9	-4.7		-51.2	-14	104	No stop
18 52 30	---	06 22 25	44.2	74.7	-4.6		-51.4	256	139	18 48 01
18 52 30	J1058+4304	06 22 25	44.5	73.6	-4.6		-51.9	-14	139	No stop
18 54 00	=1055+433	06 23 55	44.7	73.8	-4.6		-52.0	76	151	18 52 31
18 54 00	PGC032873	06 23 55	44.5	74.9	-4.6		-51.5	-15	151	No stop
18 58 30	---	06 28 26	45.1	75.6	-4.5		-51.7	255	185	18 54 01
18 59 00	J1058+4304	06 28 56	45.4	74.6	-4.5		-52.3	16	185	18 59 00
19 00 00	=1055+433	06 29 56	45.5	74.8	-4.5		-52.3	60	193	18 59 01
19 00 00	PGC032873	06 29 56	45.3	75.9	-4.5		-51.8	-15	193	No stop
19 04 30	---	06 34 27	46.0	76.6	-4.4		-52.1	255	228	19 00 01
19 04 30	J1058+4304	06 34 27	46.2	75.5	-4.4		-52.6	-14	228	No stop
19 06 00	=1055+433	06 35 57	46.4	75.7	-4.4		-52.7	76	240	19 04 31
19 06 00	PGC032873	06 35 57	46.2	76.9	-4.4		-52.1	-15	240	No stop
19 10 30	---	06 40 28	46.9	77.6	-4.3		-52.3	255	274	19 06 01
19 11 00	J1058+4304	06 40 58	47.1	76.5	-4.3		-52.9	15	274	19 11 00
19 12 00	=1055+433	06 41 58	47.3	76.7	-4.3		-53.0	60	282	19 11 01

Schedule for TORUN (Code Tr)

Page 3

Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day 54	---							
19 12 00	PGC032873	06 41 58	47.1	77.9	-4.3		-52.4	-15	282	No stop
19 16 30	---	06 46 29	47.8	78.6	-4.2		-52.6	255	317	19 12 01
19 16 30	J1058+4304	06 46 29	47.9	77.4	-4.2		-53.2	-15	317	No stop
19 18 00	=1055+433	06 47 59	48.2	77.7	-4.2		-53.3	75	328	19 16 31
19 18 00	PGC032873	06 47 59	48.0	78.9	-4.2		-52.7	-15	328	No stop
19 22 30	---	06 52 30	48.6	79.6	-4.1		-52.9	255	363	19 18 01
19 23 00	J1058+4304	06 53 00	48.9	78.5	-4.1		-53.5	15	363	19 23 00
19 24 00	=1055+433	06 54 00	49.1	78.7	-4.1		-53.5	60	371	19 23 01
19 24 00	PGC032873	06 54 00	48.9	79.9	-4.1		-52.9	-15	371	No stop
19 28 30	---	06 58 31	49.5	80.7	-4.0		-53.1	255	406	19 24 01
19 28 30	J1058+4304	06 58 31	49.7	79.4	-4.0		-53.7	-15	406	No stop
19 30 00	=1055+433	07 00 01	49.9	79.7	-4.0		-53.8	75	417	19 28 31
19 30 00	PGC032873	07 00 01	49.8	80.9	-4.0		-53.2	-15	417	No stop
19 34 30	---	07 04 32	50.4	81.7	-3.9		-53.3	255	452	19 30 01
19 35 00	J1058+4304	07 05 02	50.7	80.5	-3.9		-54.0	15	452	19 35 00
19 36 00	=1055+433	07 06 02	50.8	80.7	-3.9		-54.0	60	460	19 35 01
19 36 00	PGC032873	07 06 02	50.7	82.0	-3.9		-53.4	-15	460	No stop
19 40 30	---	07 10 33	51.3	82.7	-3.8		-53.5	255	495	19 36 01
19 40 30	J1058+4304	07 10 33	51.5	81.5	-3.8		-54.2	-15	495	No stop
19 42 00	=1055+433	07 12 03	51.7	81.7	-3.8		-54.3	75	506	19 40 31
19 42 00	PGC032873	07 12 03	51.5	83.0	-3.8		-53.6	-15	506	No stop
19 46 30	---	07 16 34	52.2	83.8	-3.7		-53.7	255	541	19 42 01
19 47 00	J1058+4304	07 17 04	52.5	82.6	-3.7		-54.4	15	541	19 47 00
19 48 00	=1055+433	07 18 04	52.6	82.8	-3.7		-54.5	60	549	19 47 01
19 48 00	PGC032873	07 18 04	52.4	84.1	-3.7		-53.7	-15	549	No stop
19 52 30	---	07 22 35	53.1	84.9	-3.6		-53.8	255	584	19 48 01
19 52 30	J1058+4304	07 22 35	53.3	83.6	-3.6		-54.6	-15	584	No stop
19 54 00	=1055+433	07 24 05	53.5	83.8	-3.6		-54.6	75	595	19 52 31
19 54 00	PGC032873	07 24 05	53.3	85.2	-3.6		-53.9	-15	595	No stop
19 58 30	---	07 28 36	54.0	86.0	-3.5		-54.0	255	630	19 54 01
19 59 00	J1058+4304	07 29 06	54.3	84.7	-3.5		-54.8	15	630	19 59 00
20 00 00	=1055+433	07 30 06	54.4	84.9	-3.5		-54.8	60	638	19 59 01

Schedule for TORUN (Code Tr)

Page 4

Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
20 00 00	PGC032873	07 30 06	54.2	86.3	-3.5		-54.0	-16	638	No stop
20 04 30	---	07 34 37	54.9	87.1	-3.4		-54.0	254	672	20 00 01
20 04 30	J1058+4304	07 34 37	55.1	85.7	-3.4		-54.9	-15	672	No stop
20 06 00	=1055+433	07 36 07	55.3	86.0	-3.4		-54.9	75	684	20 04 31
20 06 00	PGC032873	07 36 07	55.1	87.4	-3.4		-54.1	-16	684	No stop
20 10 30	---	07 40 38	55.8	88.3	-3.3		-54.1	254	719	20 06 01
20 11 00	J1058+4304	07 41 08	56.1	87.0	-3.3		-55.0	14	719	20 11 00
20 12 00	=1055+433	07 42 08	56.2	87.1	-3.3		-55.0	60	727	20 11 01
20 12 00	PGC032873	07 42 08	56.1	88.6	-3.3		-54.1	-16	727	No stop
20 16 30	---	07 46 39	56.7	89.5	-3.2		-54.1	254	761	20 12 01
20 16 30	J1058+4304	07 46 39	56.9	88.0	-3.2		-55.1	-16	761	No stop
20 18 00	=1055+433	07 48 09	57.1	88.3	-3.2		-55.1	74	773	20 16 31
20 18 00	PGC032873	07 48 09	57.0	89.8	-3.2		-54.1	-16	773	No stop
20 22 30	---	07 52 40	57.6	90.7	-3.1		-54.1	254	808	20 18 01
20 23 00	J1058+4304	07 53 10	57.9	89.3	-3.1		-55.1	14	808	20 23 00
20 24 00	=1055+433	07 54 10	58.0	89.5	-3.1		-55.1	60	815	20 23 01
20 24 30	J1058+4304	07 54 40	58.1	89.6	-3.1		-55.1	24	815	20 24 30
20 25 30	=1055+433	07 55 40	58.2	89.8	-3.1		-55.1	60	823	20 24 31
20 25 30	J1058+4248	07 55 40	58.1	90.2	-3.1		-54.8	-11	823	No stop
20 29 00	---	07 59 11	58.6	90.9	-3.0		-54.8	199	850	20 25 31
20 29 00	J1058+4304	07 59 11	58.8	90.5	-3.0		-55.1	-11	850	No stop
20 30 30	=1055+433	08 00 41	59.0	90.8	-3.0		-55.1	79	862	20 29 01
20 32 30	4C39.25	08 02 41	69.6	125.3	-1.4		-39.1	37	862	20 32 30
20 37 30	---	08 07 42	70.2	127.5	-1.3		-37.8	300	900	20 32 31
20 45 30	J1058+4304	08 15 43	61.3	93.9	-2.7		-54.9	395	900	20 45 30
20 47 30	=1055+433	08 17 44	61.6	94.4	-2.7		-54.9	120	916	20 45 31
20 47 30	PGC032873	08 17 44	61.4	96.0	-2.7		-53.7	-17	916	No stop
20 52 00	---	08 22 14	62.1	97.1	-2.6		-53.5	253	951	20 47 31
20 52 00	J1058+4304	08 22 14	62.2	95.4	-2.6		-54.8	-17	951	No stop
20 53 30	=1055+433	08 23 45	62.5	95.7	-2.6		-54.7	73	962	20 52 01

Schedule for TORUN (Code Tr)

Page 5

Red Nuggests

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun 23 Feb 2025	Day 54	---							
20 53 30	PGC032873	08 23 45	62.3	97.5	-2.6		-53.5	-17	962	No stop
20 58 00	---	08 28 15	63.0	98.5	-2.5		-53.3	253	997	20 53 31
20 58 30	J1058+4304	08 28 45	63.2	96.9	-2.5		-54.5	13	997	20 58 30
20 59 30	=1055+433	08 29 46	63.4	97.1	-2.5		-54.5	60	1005	20 58 31
20 59 30	PGC032873	08 29 46	63.2	98.9	-2.5		-53.2	-17	1005	No stop
21 04 00	---	08 34 16	63.8	100.0	-2.4		-53.0	253	1040	20 59 31
21 04 00	J1058+4304	08 34 16	64.0	98.2	-2.4		-54.3	-17	1040	No stop
21 05 30	=1055+433	08 35 47	64.2	98.6	-2.4		-54.2	73	1051	21 04 01
21 05 30	PGC032873	08 35 47	64.1	100.4	-2.4		-52.9	-17	1051	No stop
21 10 00	---	08 40 17	64.7	101.6	-2.3		-52.6	253	1086	21 05 31
21 10 30	J1058+4304	08 40 47	65.0	99.8	-2.3		-53.9	13	1086	21 10 30
21 11 30	=1055+433	08 41 48	65.1	100.1	-2.3		-53.9	60	1094	21 10 31
21 11 30	PGC032873	08 41 48	65.0	102.0	-2.3		-52.5	-17	1094	No stop
21 16 00	---	08 46 18	65.6	103.2	-2.2		-52.1	253	1128	21 11 31
21 16 00	J1058+4304	08 46 18	65.8	101.3	-2.2		-53.6	-17	1128	No stop
21 17 30	=1055+433	08 47 49	66.0	101.7	-2.2		-53.4	73	1140	21 16 01
21 17 30	PGC032873	08 47 49	65.8	103.6	-2.2		-52.0	-18	1140	No stop
21 22 00	---	08 52 19	66.5	104.9	-2.1		-51.6	252	1175	21 17 31
21 22 30	J1058+4304	08 52 49	66.8	103.1	-2.1		-53.0	13	1175	21 22 30
21 23 30	=1055+433	08 53 50	66.9	103.3	-2.1		-53.0	60	1183	21 22 31
21 23 30	PGC032873	08 53 50	66.7	105.3	-2.1		-51.4	-18	1183	No stop
21 28 00	---	08 58 20	67.4	106.7	-2.0		-50.9	252	1217	21 23 31
21 28 00	J1058+4304	08 58 20	67.6	104.6	-2.0		-52.5	-18	1217	No stop
21 29 30	=1055+433	08 59 51	67.8	105.1	-2.0		-52.4	72	1229	21 28 01
21 29 30	PGC032873	08 59 51	67.6	107.1	-2.0		-50.8	-18	1229	No stop
21 34 00	---	09 04 21	68.2	108.6	-1.9		-50.2	252	1264	21 29 31
21 34 30	J1058+4304	09 04 51	68.5	106.6	-1.9		-51.8	12	1264	21 34 30
21 35 30	=1055+433	09 05 52	68.7	106.9	-1.9		-51.7	60	1271	21 34 31
21 35 30	PGC032873	09 05 52	68.4	109.0	-1.9		-50.0	-18	1271	No stop
21 40 00	---	09 10 22	69.1	110.5	-1.8		-49.4	252	1306	21 35 31

Schedule for TORUN (Code Tr)

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Red Nuggests

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun 23 Feb 2025	Day 54	---							
21 40 00	J1058+4304	09 10 22	69.3	108.3	-1.8		-51.1	-18	1306	No stop
21 41 30	=1055+433	09 11 53	69.5	108.8	-1.8		-50.9	72	1318	21 40 01
21 41 30	PGC032873	09 11 53	69.3	111.0	-1.8		-49.2	-19	1318	No stop
21 46 00	---	09 16 23	69.9	112.6	-1.7		-48.4	251	1353	21 41 31
21 46 30	J1058+4304	09 16 53	70.2	110.5	-1.7		-50.2	12	1353	21 46 30
21 47 30	=1055+433	09 17 53	70.4	110.9	-1.7		-50.0	60	1360	21 46 31
21 47 30	PGC032873	09 17 53	70.1	113.2	-1.7		-48.2	-19	1360	No stop
21 52 00	---	09 22 24	70.7	114.8	-1.6		-47.4	251	1395	21 47 31
21 52 00	J1058+4304	09 22 24	71.0	112.5	-1.6		-49.3	-18	1395	No stop
21 53 30	=1055+433	09 23 54	71.2	113.0	-1.6		-49.0	72	1407	21 52 01
21 53 30	PGC032873	09 23 54	70.9	115.4	-1.6		-47.1	-19	1407	No stop
21 58 00	---	09 28 25	71.6	117.2	-1.5		-46.1	251	1441	21 53 31
21 58 30	J1058+4304	09 28 55	71.9	115.0	-1.5		-48.0	11	1441	21 58 30
21 59 30	=1055+433	09 29 55	72.0	115.3	-1.5		-47.8	60	1449	21 58 31
21 59 30	PGC032873	09 29 55	71.8	117.8	-1.5		-45.8	-19	1449	No stop
22 04 00	---	09 34 26	72.3	119.7	-1.4		-44.7	251	1484	21 59 31
22 04 00	J1058+4304	09 34 26	72.6	117.2	-1.4		-46.9	-19	1484	No stop
22 05 30	=1055+433	09 35 56	72.8	117.8	-1.4		-46.5	71	1496	22 04 01
22 05 30	PGC032873	09 35 56	72.5	120.4	-1.4		-44.4	-20	1496	No stop
22 10 00	---	09 40 27	73.1	122.4	-1.3		-43.2	250	1530	22 05 31
22 10 30	J1058+4304	09 40 57	73.5	120.0	-1.3		-45.2	11	1530	22 10 30
22 11 30	=1055+433	09 41 57	73.6	120.5	-1.3		-45.0	60	1538	22 10 31
22 11 30	PGC032873	09 41 57	73.3	123.1	-1.3		-42.7	-20	1538	No stop
22 16 00	---	09 46 28	73.9	125.3	-1.2		-41.4	250	1573	22 11 31
22 16 00	J1058+4304	09 46 28	74.2	122.6	-1.2		-43.7	-19	1573	No stop
22 17 30	=1055+433	09 47 58	74.4	123.4	-1.2		-43.2	71	1584	22 16 01
22 17 30	PGC032873	09 47 58	74.1	126.1	-1.2		-40.9	-20	1584	No stop
22 22 00	---	09 52 29	74.6	128.5	-1.1		-39.4	250	1619	22 17 31
22 22 30	J1058+4304	09 52 59	75.0	125.9	-1.1		-41.6	10	1619	22 22 30
22 23 30	=1055+433	09 53 59	75.1	126.5	-1.1		-41.3	60	1627	22 22 31

Schedule for TORUN (Code Tr)

Page 7

Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day 54	---							
22 24 00	J1058+4304	09 54 29	75.2	126.7	-1.1		-41.1	23	1627	22 24 00
22 25 00	=1055+433	09 55 30	75.3	127.3	-1.1		-40.7	60	1635	22 24 01
22 25 00	J1058+4248	09 55 30	75.1	128.0	-1.1		-40.1	-13	1635	No stop
22 28 30	---	09 59 00	75.5	129.9	-1.0		-38.8	197	1662	22 25 01
22 28 30	J1058+4304	09 59 00	75.7	129.2	-1.0		-39.4	-12	1662	No stop
22 30 00	=1055+433	10 00 30	75.9	130.1	-1.0		-38.9	78	1673	22 28 31
22 33 30	4C39.25	10 04 01	74.6	206.7	0.6		20.3	43	1673	22 33 30
22 38 30	---	10 09 02	74.2	210.1	0.7		22.8	300	1712	22 33 31
22 46 30	J1058+4304	10 17 03	77.6	141.0	-0.7		-31.1	319	1712	22 46 30
22 48 30	=1055+433	10 19 04	77.8	142.4	-0.7		-30.0	120	1727	22 46 31
22 48 30	PGC032873	10 19 04	77.3	145.4	-0.6		-27.4	-21	1727	No stop
22 53 00	---	10 23 34	77.7	148.9	-0.6		-24.7	249	1762	22 48 31
22 53 00	J1058+4304	10 23 34	78.2	145.9	-0.6		-27.4	-20	1762	No stop
22 54 30	=1055+433	10 25 05	78.3	147.1	-0.6		-26.4	70	1774	22 53 01
22 54 30	PGC032873	10 25 05	77.8	150.1	-0.5		-23.8	-21	1774	No stop
22 58 40	---	10 29 15	78.1	153.5	-0.5		-21.2	229	1806	22 54 31
22 59 10	J1058+4304	10 29 45	78.7	151.1	-0.5		-23.4	10	1806	22 59 10
23 00 10	=1055+433	10 30 45	78.8	151.9	-0.5		-22.7	60	1814	22 59 11
23 00 10	PGC032873	10 30 45	78.2	154.8	-0.4		-20.2	-21	1814	No stop
23 04 40	---	10 35 16	78.5	158.7	-0.4		-17.1	249	1849	23 00 11
23 04 40	J1058+4304	10 35 16	79.1	155.9	-0.4		-19.5	-19	1849	No stop
23 06 10	=1055+433	10 36 46	79.2	157.3	-0.4		-18.4	71	1860	23 04 41
23 06 10	PGC032873	10 36 46	78.6	160.1	-0.3		-16.0	-20	1860	No stop
23 10 20	---	10 40 57	78.7	163.9	-0.3		-13.0	230	1892	23 06 11
23 10 50	J1058+4304	10 41 27	79.4	161.7	-0.3		-14.9	11	1892	23 10 50
23 11 50	=1055+433	10 42 27	79.5	162.7	-0.3		-14.1	60	1900	23 10 51
23 11 50	PGC032873	10 42 27	78.8	165.3	-0.3		-11.9	-20	1900	No stop
23 16 20	---	10 46 58	79.0	169.5	-0.2		-8.5	250	1935	23 11 51
23 16 20	J1058+4304	10 46 58	79.6	167.1	-0.2		-10.5	-18	1935	No stop
23 17 50	=1055+433	10 48 28	79.7	168.6	-0.2		-9.3	72	1946	23 16 21

Schedule for TORUN (Code Tr)

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Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	23 Feb 2025	Day	54	---						
23 17 50	PGC032873	10 48 28	79.0	171.0	-0.2		-7.3	-19	1946	No stop
23 22 00	---	10 52 39	79.1	175.0	-0.1		-4.0	231	1979	23 17 51
23 22 30	J1058+4304	10 53 09	79.8	173.4	-0.1		-5.4	13	1979	23 22 30
23 23 30	=1055+433	10 54 09	79.8	174.4	-0.1		-4.6	60	1986	23 22 31
23 23 30	PGC032873	10 54 09	79.1	176.5	-0.1		-2.8	-18	1986	No stop
23 28 00	---	10 58 40	79.1	180.9	0.0		0.7	252	2021	23 23 31
23 28 00	J1058+4304	10 58 40	79.8	179.1	-0.0		-0.7	-16	2021	No stop
23 29 30	=1055+433	11 00 10	79.8	180.7	0.0		0.6	74	2033	23 28 01
23 29 30	PGC032873	11 00 10	79.1	182.4	0.0		1.9	-17	2033	No stop
23 33 40	---	11 04 21	79.0	186.5	0.1		5.2	233	2065	23 29 31
23 34 10	J1058+4304	11 04 51	79.8	185.5	0.1		4.5	15	2065	23 34 10
23 35 10	=1055+433	11 05 51	79.8	186.6	0.1		5.4	60	2073	23 34 11
23 35 10	PGC032873	11 05 51	79.0	187.9	0.1		6.4	-16	2073	No stop
23 39 40	---	11 10 22	78.9	192.2	0.2		9.9	254	2107	23 35 11
23 39 40	J1058+4304	11 10 22	79.7	191.2	0.2		9.1	-15	2107	No stop
23 41 10	=1055+433	11 11 52	79.6	192.7	0.2		10.4	75	2119	23 39 41
23 41 10	PGC032873	11 11 52	78.8	193.7	0.2		11.0	-15	2119	No stop
23 45 20	---	11 16 03	78.7	197.5	0.3		14.1	235	2151	23 41 11
23 45 50	J1058+4304	11 16 33	79.5	197.3	0.3		14.1	15	2151	23 45 50
23 46 50	=1055+433	11 17 33	79.4	198.3	0.3		14.9	60	2159	23 45 51
23 46 50	PGC032873	11 17 33	78.6	198.9	0.3		15.2	-15	2159	No stop
23 51 20	---	11 22 04	78.4	202.9	0.4		18.4	255	2194	23 46 51
23 51 20	J1058+4304	11 22 04	79.2	202.5	0.4		18.3	-15	2194	No stop
23 52 50	=1055+433	11 23 34	79.1	203.9	0.4		19.4	75	2205	23 51 21
23 52 50	PGC032873	11 23 34	78.3	204.2	0.4		19.4	-15	2205	No stop
23 57 00	---	11 27 45	78.0	207.7	0.5		22.2	235	2238	23 52 51
23 57 30	J1058+4304	11 28 15	78.8	208.1	0.5		22.7	15	2238	23 57 30
23 58 30	=1055+433	11 29 15	78.7	208.9	0.5		23.4	60	2245	23 57 31

Schedule for TORUN (Code Tr)

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Red Nuggests

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Start: Sun 23 Feb 2025		Day 54	-- Stop: Mon 24 Feb 2025			Day 55	---			
23 58 30	PGC032873	11 29 15	77.9	209.0	0.5		23.1	-15	2245	No stop
00 03 00	---	11 33 46	77.5	212.5	0.6		25.8	255	2280	23 58 31
00 03 00	J1058+4304	11 33 46	78.4	212.7	0.6		26.3	-15	2280	No stop
00 04 30	=1055+433	11 35 16	78.2	213.9	0.6		27.2	75	2292	00 03 01
00 04 30	PGC032873	11 35 16	77.4	213.7	0.6		26.7	-16	2292	No stop
00 08 40	---	11 39 27	77.1	216.8	0.7		29.0	234	2324	00 04 31
00 09 10	J1058+4304	11 39 57	77.8	217.5	0.7		30.0	15	2324	00 09 10
00 10 10	=1055+433	11 40 57	77.7	218.3	0.7		30.5	60	2332	00 09 11
00 10 10	PGC032873	11 40 57	76.9	217.9	0.7		29.8	-15	2332	No stop
00 14 40	---	11 45 28	76.5	221.0	0.8		32.1	255	2366	00 10 11
00 14 40	J1058+4304	11 45 28	77.3	221.5	0.8		32.9	-15	2366	No stop
00 16 10	=1055+433	11 46 58	77.1	222.6	0.8		33.7	75	2378	00 14 41
00 16 10	PGC032873	11 46 58	76.3	222.0	0.8		32.8	-15	2378	No stop
00 20 20	---	11 51 09	75.9	224.7	0.9		34.7	235	2410	00 16 11
00 20 50	J1058+4304	11 51 39	76.7	225.7	0.9		35.9	15	2410	00 20 50
00 21 50	=1055+433	11 52 39	76.6	226.3	0.9		36.4	60	2418	00 20 51
00 24 50	4C39.25	11 55 39	61.3	255.4	2.5		48.3	108	2418	00 24 50
00 30 00	---	12 00 50	60.5	256.8	2.5		48.7	310	2458	00 24 51

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		Error
	(B1950)	(J2000)	(Date)
* PGC032873	10 53 25.158071	* 10 56 16.060000	10 57 44.031062
	42 36 00.97826	* 42 19 59.30000	42 11 48.03256
			0.00
* J1058+4248	10 55 10.015976	* 10 58 00.753096	10 59 28.657387
	43 04 47.94589	* 42 48 44.15638	42 40 31.71186
			0.00
* 4C39.25	09 23 55.319216	* 09 27 03.013937	09 28 39.239114
J0927+3902	39 15 23.56644	* 39 02 20.85185	38 55 45.63590
0923+392	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc		0.31
J0927+39	GSFC 2016a X/S astro solution, 250526 observations.		0.16
1055+433	10 55 12.034150	* 10 58 02.920796	10 59 30.909591
* J1058+4304	43 20 45.33545	* 43 04 41.50524	42 56 29.04539
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc		0.11
	GSFC 2016a X/S astro solution, 155 observations.		0.10
* 3C286	13 28 49.657769	* 13 31 08.288061	13 32 19.296169
J1331+3030	30 45 58.64066	* 30 30 32.95930	30 22 30.62325
1328+307	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc		0.17
J1331+30	GSFC 2016a X/S astro solution, 269 observations.		0.16

DOUBLING THE KNOWN FRB PRSS - R25

PI: *Bhandari*

Address: JIVE

Observing mode: evn

Schedule for TORUN (Code Tr)

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Doubling the known FRB PRSS - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	24 Feb 2025	Day	55	---						
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

01 30 00	J1642+3948	13 01 00	50.5	86.6	-3.7		-51.2	0	0	01 30 00
01 32 00	=3C345	13 03 00	50.8	87.0	-3.7		-51.3	120	15	01 30 01
01 32 20	J1642+3948	13 03 20	50.8	87.0	-3.7		-51.3	14	15	01 32 20
01 36 00	=3C345	13 07 01	51.4	87.8	-3.6		-51.3	220	44	01 32 21
01 36 20	J1642+3948	13 07 21	51.4	87.8	-3.6		-51.3	14	44	01 36 20
01 40 00	=3C345	13 11 02	52.0	88.5	-3.5		-51.3	220	72	01 36 21
01 40 40	J1640+3946	13 11 42	52.4	89.2	-3.5		-51.3	28	72	01 40 40
01 42 10	=NRA0512	13 13 12	52.7	89.5	-3.5		-51.3	90	84	01 40 41
01 42 10	R25_D	13 13 12	54.2	87.9	-3.4		-53.1	-19	84	No stop
01 46 40	---	13 17 43	54.8	88.8	-3.3		-53.2	251	119	01 42 11
01 46 40	J1640+3946	13 17 43	53.3	90.4	-3.4		-51.3	-19	119	No stop
01 48 10	=NRA0512	13 19 13	53.6	90.7	-3.4		-51.3	71	130	01 46 41
01 48 10	R25_D	13 19 13	55.1	89.1	-3.3		-53.2	-19	130	No stop
01 52 40	---	13 23 44	55.7	90.0	-3.2		-53.2	251	165	01 48 11
01 53 20	J1640+3946	13 24 24	54.4	91.8	-3.3		-51.3	21	165	01 53 20
01 54 20	=NRA0512	13 25 24	54.5	92.0	-3.3		-51.3	60	173	01 53 21
01 54 20	R25_D	13 25 24	56.0	90.3	-3.2		-53.2	-19	173	No stop
01 58 50	---	13 29 55	56.7	91.2	-3.1		-53.2	251	207	01 54 21
01 58 50	J1640+3946	13 29 55	55.2	92.9	-3.2		-51.2	-19	207	No stop
02 00 20	=NRA0512	13 31 25	55.4	93.2	-3.2		-51.2	71	219	01 58 51
02 00 20	R25_D	13 31 25	56.9	91.5	-3.1		-53.1	-19	219	No stop
02 04 50	---	13 35 56	57.6	92.5	-3.0		-53.1	251	254	02 00 21
02 05 30	J1640+3946	13 36 36	56.2	94.3	-3.1		-51.1	21	254	02 05 30
02 06 30	=NRA0512	13 37 36	56.3	94.5	-3.1		-51.1	60	262	02 05 31
02 06 30	J1646+4059	13 37 36	56.1	91.5	-3.2		-52.6	-21	262	No stop
02 11 00	=1645+410	13 42 07	56.8	92.4	-3.1		-52.6	249	296	02 06 31

Schedule for TORUN (Code Tr)

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Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Mon	24 Feb 2025	Day 55	---							
02 11 40	J1640+3946	13 42 47	57.1	95.7	-3.0		-51.0	19	296	02 11 40
02 12 40	=NRA0512	13 43 47	57.3	95.9	-3.0		-50.9	60	304	02 11 41
02 12 40	R25_D	13 43 47	58.8	94.1	-2.9		-53.0	-19	304	No stop
02 17 10	---	13 48 18	59.4	95.1	-2.8		-52.9	251	339	02 12 41
02 17 10	J1640+3946	13 48 18	57.9	96.9	-2.9		-50.8	-19	339	No stop
02 18 40	=NRA0512	13 49 48	58.2	97.3	-2.9		-50.8	71	350	02 17 11
02 18 40	R25_D	13 49 48	59.7	95.5	-2.8		-52.8	-19	350	No stop
02 23 10	---	13 54 19	60.3	96.5	-2.7		-52.7	251	385	02 18 41
02 23 50	J1640+3946	13 54 59	58.9	98.5	-2.8		-50.6	21	385	02 23 50
02 24 50	=NRA0512	13 55 59	59.1	98.7	-2.8		-50.5	60	393	02 23 51
02 24 50	R25_D	13 55 59	60.6	96.9	-2.7		-52.6	-19	393	No stop
02 29 20	---	14 00 30	61.3	97.9	-2.6		-52.4	251	428	02 24 51
02 29 20	J1640+3946	14 00 30	59.7	99.8	-2.7		-50.3	-19	428	No stop
02 30 50	=NRA0512	14 02 00	60.0	100.2	-2.7		-50.2	71	439	02 29 21
02 30 50	R25_D	14 02 00	61.5	98.3	-2.6		-52.4	-19	439	No stop
02 35 20	---	14 06 31	62.1	99.4	-2.5		-52.2	251	474	02 30 51
02 36 00	J1640+3946	14 07 11	60.7	101.5	-2.6		-49.9	21	474	02 36 00
02 37 00	=NRA0512	14 08 11	60.9	101.7	-2.6		-49.9	60	482	02 36 01
02 37 00	J1646+4059	14 08 11	60.7	98.2	-2.7		-51.9	-22	482	No stop
02 41 30	=1645+410	14 12 42	61.4	99.3	-2.6		-51.7	248	517	02 37 01
02 42 10	J1640+3946	14 13 22	61.6	103.1	-2.5		-49.5	18	517	02 42 10
02 43 10	=NRA0512	14 14 22	61.8	103.3	-2.4		-49.4	60	524	02 42 11
02 43 10	R25_D	14 14 22	63.3	101.4	-2.4		-51.7	-19	524	No stop
02 47 40	---	14 18 53	64.0	102.6	-2.3		-51.4	251	559	02 43 11
02 47 40	J1640+3946	14 18 53	62.4	104.5	-2.4		-49.1	-19	559	No stop
02 49 10	=NRA0512	14 20 23	62.7	105.0	-2.3		-49.0	71	571	02 47 41
02 49 10	R25_D	14 20 23	64.2	103.0	-2.3		-51.3	-19	571	No stop
02 53 40	---	14 24 54	64.8	104.2	-2.2		-50.9	251	605	02 49 11
02 54 20	J1640+3946	14 25 34	63.4	106.4	-2.3		-48.5	21	605	02 54 20
02 55 20	=NRA0512	14 26 34	63.5	106.7	-2.2		-48.4	60	613	02 54 21
02 55 20	R25_D	14 26 34	65.1	104.7	-2.2		-50.7	-19	613	No stop
02 59 50	---	14 31 05	65.7	106.0	-2.1		-50.3	251	648	02 55 21

Schedule for TORUN (Code Tr)

Page 4

Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
 Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	24 Feb 2025	Day	55	---						
02 59 50	J1640+3946	14 31 05	64.2	108.0	-2.2		-47.9	-19	648	No stop
03 01 20	=NRA0512	14 32 35	64.4	108.5	-2.1		-47.8	71	660	02 59 51
03 01 20	R25_D	14 32 35	66.0	106.4	-2.1		-50.2	-20	660	No stop
03 05 50	---	14 37 06	66.6	107.8	-2.0		-49.7	250	694	03 01 21
03 06 30	J1640+3946	14 37 46	65.1	110.0	-2.1		-47.2	21	694	03 06 30
03 07 30	=NRA0512	14 38 46	65.3	110.3	-2.0		-47.1	60	702	03 06 31
03 07 30	J1646+4059	14 38 46	65.2	106.2	-2.2		-49.7	-23	702	No stop
03 12 00	=1645+410	14 43 17	65.8	107.6	-2.1		-49.3	247	737	03 07 31
03 12 40	J1640+3946	14 43 57	66.0	112.0	-2.0		-46.4	16	737	03 12 40
03 13 40	=NRA0512	14 44 57	66.1	112.3	-1.9		-46.2	60	745	03 12 41
03 14 20	J1642+3948	14 45 37	65.9	111.7	-2.0		-46.5	27	745	03 14 20
03 18 20	=3C345	14 49 38	66.5	113.0	-1.9		-46.0	240	775	03 14 21
03 19 00	J1640+3946	14 50 18	66.9	114.1	-1.9		-45.4	26	775	03 19 00
03 20 30	=NRA0512	14 51 48	67.1	114.6	-1.8		-45.2	90	787	03 19 01
03 20 30	R25_D	14 51 48	68.7	112.5	-1.8		-47.7	-20	787	No stop
03 25 00	---	14 56 19	69.3	114.1	-1.7		-46.9	250	822	03 20 31
03 25 00	J1640+3946	14 56 19	67.7	116.2	-1.8		-44.4	-19	822	No stop
03 26 30	=NRA0512	14 57 49	67.9	116.8	-1.7		-44.2	71	833	03 25 01
03 26 30	R25_D	14 57 49	69.5	114.7	-1.7		-46.7	-20	833	No stop
03 31 00	---	15 02 20	70.1	116.4	-1.6		-45.8	250	868	03 26 31
03 31 40	J1640+3946	15 03 00	68.6	118.7	-1.6		-43.2	20	868	03 31 40
03 32 40	=NRA0512	15 04 00	68.7	119.1	-1.6		-43.0	60	876	03 31 41
03 32 40	R25_D	15 04 00	70.3	117.0	-1.6		-45.5	-20	876	No stop
03 37 10	---	15 08 31	70.9	118.8	-1.5		-44.5	250	911	03 32 41
03 37 10	J1640+3946	15 08 31	69.3	120.9	-1.5		-42.1	-20	911	No stop
03 38 40	=NRA0512	15 10 01	69.5	121.5	-1.5		-41.7	70	922	03 37 11
03 38 40	R25_D	15 10 01	71.1	119.5	-1.5		-44.2	-20	922	No stop
03 43 10	---	15 14 32	71.7	121.4	-1.4		-43.1	250	957	03 38 41
03 43 50	J1640+3946	15 15 12	70.2	123.7	-1.4		-40.5	20	957	03 43 50
03 44 50	=NRA0512	15 16 12	70.3	124.1	-1.4		-40.3	60	965	03 43 51

Schedule for TORUN (Code Tr)

Page 5

Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	24 Feb 2025	Day	55	---						
03 44 50	J1646+4059	15 16 12	70.4	119.0	-1.5		-44.0	-25	965	No stop
03 49 20	=1645+410	15 20 43	70.9	120.9	-1.5		-43.0	245	1000	03 44 51
03 50 00	J1640+3946	15 21 23	70.9	126.4	-1.3		-38.9	14	1000	03 50 00
03 51 00	=NRA0512	15 22 23	71.0	126.9	-1.3		-38.6	60	1007	03 50 01
03 51 00	R25_D	15 22 23	72.7	125.0	-1.3		-41.0	-20	1007	No stop
03 55 30	---	15 26 54	73.3	127.2	-1.2		-39.6	250	1042	03 51 01
03 55 30	J1640+3946	15 26 54	71.6	129.0	-1.2		-37.3	-20	1042	No stop
03 57 00	=NRA0512	15 28 24	71.8	129.8	-1.2		-36.9	70	1054	03 55 31
03 57 00	R25_D	15 28 24	73.4	127.9	-1.2		-39.1	-20	1054	No stop
04 01 30	---	15 32 55	74.0	130.3	-1.1		-37.6	250	1089	03 57 01
04 02 10	J1640+3946	15 33 35	72.3	132.4	-1.1		-35.2	20	1089	04 02 10
04 03 10	=NRA0512	15 34 35	72.4	132.9	-1.1		-34.9	60	1096	04 02 11
04 03 10	R25_D	15 34 35	74.2	131.2	-1.1		-37.0	-20	1096	No stop
04 07 40	---	15 39 06	74.7	133.7	-1.0		-35.3	250	1131	04 03 11
04 07 40	J1640+3946	15 39 06	72.9	135.3	-1.0		-33.3	-20	1131	No stop
04 09 10	=NRA0512	15 40 36	73.1	136.2	-1.0		-32.7	70	1143	04 07 41
04 09 10	R25_D	15 40 36	74.8	134.6	-1.0		-34.7	-20	1143	No stop
04 13 40	---	15 45 07	75.3	137.3	-0.9		-32.8	250	1177	04 09 11
04 14 20	J1640+3946	15 45 47	73.6	139.1	-0.9		-30.7	20	1177	04 14 20
04 15 20	=NRA0512	15 46 47	73.7	139.7	-0.9		-30.3	60	1185	04 14 21
04 15 20	J1646+4059	15 46 47	74.1	133.6	-1.0		-35.1	-27	1185	No stop
04 19 50	=1645+410	15 51 18	74.6	136.2	-0.9		-33.4	243	1220	04 15 21
04 20 30	J1640+3946	15 51 58	74.2	142.9	-0.8		-28.1	12	1220	04 20 30
04 21 30	=NRA0512	15 52 58	74.3	143.5	-0.8		-27.7	60	1228	04 20 31
04 21 30	R25_D	15 52 58	76.0	142.4	-0.8		-29.2	-20	1228	No stop
04 26 00	---	15 57 29	76.4	145.6	-0.7		-26.9	250	1262	04 21 31
04 26 00	J1640+3946	15 57 29	74.7	146.4	-0.7		-25.6	-20	1262	No stop
04 27 30	=NRA0512	15 58 59	74.8	147.4	-0.7		-24.9	70	1274	04 26 01
04 27 30	R25_D	15 58 59	76.6	146.7	-0.7		-26.1	-20	1274	No stop
04 32 00	---	16 03 30	76.9	150.0	-0.6		-23.6	250	1309	04 27 31

Schedule for TORUN (Code Tr)

Page 6

Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	24 Feb 2025	Day 55	---							
04 32 40	J1640+3946	16 04 10	75.2	150.9	-0.6		-22.3	20	1309	04 32 40
04 33 40	=NRA0512	16 05 10	75.3	151.6	-0.6		-21.8	60	1317	04 32 41
04 33 40	R25_D	16 05 10	77.0	151.3	-0.5		-22.6	-20	1317	No stop
04 38 10	---	16 09 41	77.4	154.9	-0.5		-19.9	250	1351	04 33 41
04 38 10	J1640+3946	16 09 41	75.6	154.8	-0.5		-19.4	-20	1351	No stop
04 39 40	=NRA0512	16 11 11	75.7	155.9	-0.5		-18.6	70	1363	04 38 11
04 39 40	R25_D	16 11 11	77.4	156.1	-0.4		-18.9	-20	1363	No stop
04 44 10	---	16 15 42	77.7	159.8	-0.4		-16.0	250	1398	04 39 41
04 44 50	J1640+3946	16 16 22	76.0	159.8	-0.4		-15.6	20	1398	04 44 50
04 45 50	=NRA0512	16 17 22	76.0	160.6	-0.4		-15.0	60	1405	04 44 51
04 45 50	J1646+4059	16 17 22	76.8	154.0	-0.5		-20.4	-27	1405	No stop
04 50 20	=1645+410	16 21 53	77.1	157.6	-0.4		-17.6	243	1440	04 45 51
04 51 00	J1640+3946	16 22 33	76.2	164.6	-0.3		-11.9	11	1440	04 51 00
04 52 00	=NRA0512	16 23 33	76.3	165.4	-0.3		-11.3	60	1448	04 51 01
04 52 00	R25_D	16 23 33	78.0	166.7	-0.2		-10.6	-20	1448	No stop
04 56 30	---	16 28 04	78.2	170.7	-0.2		-7.4	250	1483	04 52 01
04 56 30	J1640+3946	16 28 04	76.4	169.1	-0.2		-8.5	-20	1483	No stop
04 58 00	=NRA0512	16 29 34	76.5	170.3	-0.2		-7.6	70	1494	04 56 31
04 58 00	R25_D	16 29 34	78.2	172.1	-0.1		-6.3	-20	1494	No stop
05 02 30	---	16 34 05	78.3	176.2	-0.1		-3.0	250	1529	04 58 01
05 03 10	J1640+3946	16 34 45	76.6	174.5	-0.1		-4.3	20	1529	05 03 10
05 04 10	=NRA0512	16 35 45	76.6	175.4	-0.1		-3.6	60	1537	05 03 11
05 04 10	R25_D	16 35 45	78.3	177.8	-0.0		-1.8	-20	1537	No stop
05 08 40	---	16 40 16	78.3	181.9	0.0		1.6	250	1572	05 04 11
05 08 40	J1640+3946	16 40 16	76.6	179.1	-0.0		-0.7	-20	1572	No stop
05 10 10	=NRA0512	16 41 46	76.6	180.4	0.0		0.3	70	1583	05 08 41
05 10 10	R25_D	16 41 46	78.3	183.3	0.1		2.7	-21	1583	No stop
05 14 40	---	16 46 17	78.2	187.5	0.1		6.0	249	1618	05 10 11
05 15 20	J1640+3946	16 46 57	76.6	184.7	0.1		3.6	19	1618	05 15 20
05 16 20	=NRA0512	16 47 57	76.6	185.5	0.1		4.3	60	1626	05 15 21

Schedule for TORUN (Code Tr)

Page 7

Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Mon 24 Feb 2025	Day 55	---							
05 16 20	J1646+4059	16 47 57	77.8	180.2	0.0		0.1	-25	1626	No stop
05 20 50	=1645+410	16 52 28	77.8	184.2	0.1		3.3	245	1660	05 16 21
05 21 30	J1640+3946	16 53 08	76.5	189.7	0.2		7.6	14	1660	05 21 30
05 22 30	=NRA0512	16 54 08	76.5	190.6	0.2		8.2	60	1668	05 21 31
05 23 10	J1642+3948	16 54 48	76.5	189.1	0.2		7.1	23	1668	05 23 10
05 27 10	=3C345	16 58 49	76.4	192.4	0.2		9.6	240	1699	05 23 11
05 27 50	J1640+3946	16 59 29	76.3	194.9	0.3		11.5	22	1699	05 27 50
05 29 20	=NRA0512	17 00 59	76.2	196.0	0.3		12.5	90	1711	05 27 51
05 29 20	R25_D	17 00 59	77.7	200.5	0.4		16.3	-24	1711	No stop
05 33 50	---	17 05 30	77.4	204.2	0.5		19.2	246	1745	05 29 21
05 33 50	J1640+3946	17 05 30	76.0	199.6	0.4		15.1	-24	1745	No stop
05 35 20	=NRA0512	17 07 00	75.9	200.7	0.4		16.0	66	1757	05 33 51
05 35 20	R25_D	17 07 00	77.3	205.4	0.5		20.1	-25	1757	No stop
05 39 50	---	17 11 31	77.0	209.0	0.6		22.8	245	1792	05 35 21
05 40 30	J1640+3946	17 12 11	75.6	204.6	0.5		18.9	16	1792	05 40 30
05 41 30	=NRA0512	17 13 11	75.6	205.3	0.5		19.5	60	1800	05 40 31
05 41 30	R25_D	17 13 11	76.9	210.2	0.6		23.8	-25	1800	No stop
05 46 00	---	17 17 42	76.5	213.6	0.7		26.3	245	1834	05 41 31
05 46 00	J1640+3946	17 17 42	75.3	208.5	0.6		21.9	-25	1834	No stop
05 47 30	=NRA0512	17 19 12	75.2	209.6	0.6		22.7	65	1846	05 46 01
05 47 30	R25_D	17 19 12	76.4	214.7	0.7		27.1	-26	1846	No stop
05 52 00	---	17 23 43	76.0	217.8	0.8		29.4	244	1881	05 47 31
05 52 40	J1640+3946	17 24 23	74.7	213.1	0.7		25.2	15	1881	05 52 40
05 53 40	=NRA0512	17 25 23	74.7	213.7	0.7		25.7	60	1888	05 52 41
05 53 40	J1646+4059	17 25 23	76.3	211.4	0.6		24.4	-20	1888	No stop
05 58 10	=1645+410	17 29 54	75.9	214.6	0.7		26.8	250	1923	05 53 41
05 58 50	J1640+3946	17 30 34	74.2	217.1	0.8		28.1	20	1923	05 58 50
05 59 50	=NRA0512	17 31 34	74.1	217.7	0.8		28.5	60	1931	05 58 51
05 59 50	R25_D	17 31 34	75.2	222.9	0.9		33.0	-26	1931	No stop
06 04 20	---	17 36 05	74.8	225.6	1.0		34.9	244	1966	05 59 51

Schedule for TORUN (Code Tr)

Page 8

Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	24 Feb 2025	Day	55	---						
06 04 20	J1640+3946	17 36 05	73.7	220.4	0.9		30.4	-25	1966	No stop
06 05 50	=NRA0512	17 37 35	73.5	221.3	0.9		31.0	65	1977	06 04 21
06 05 50	R25_D	17 37 35	74.6	226.5	1.0		35.5	-26	1977	No stop
06 10 20	---	17 42 06	74.1	229.0	1.1		37.2	244	2012	06 05 51
06 11 00	J1640+3946	17 42 46	73.0	224.2	1.0		33.0	15	2012	06 11 00
06 12 00	=NRA0512	17 43 46	72.9	224.8	1.0		33.4	60	2020	06 11 01
06 12 00	R25_D	17 43 46	73.9	229.9	1.1		37.7	-26	2020	No stop
06 16 30	---	17 48 17	73.4	232.2	1.2		39.3	244	2055	06 12 01
06 16 30	J1640+3946	17 48 17	72.4	227.2	1.1		34.9	-25	2055	No stop
06 18 00	=NRA0512	17 49 47	72.3	228.0	1.1		35.4	65	2066	06 16 31
06 18 00	R25_D	17 49 47	73.2	233.0	1.2		39.7	-25	2066	No stop
06 22 30	---	17 54 18	72.7	235.2	1.3		41.1	245	2101	06 18 01
06 23 10	J1640+3946	17 54 58	71.7	230.6	1.2		37.1	15	2101	06 23 10
06 24 10	=NRA0512	17 55 58	71.6	231.0	1.2		37.4	60	2109	06 23 11
06 24 10	J1646+4059	17 55 58	73.3	230.3	1.1		37.7	-20	2109	No stop
06 28 40	=1645+410	18 00 29	72.7	232.6	1.2		39.1	250	2144	06 24 11
06 29 20	J1640+3946	18 01 09	70.9	233.5	1.3		38.9	20	2144	06 29 20
06 30 20	=NRA0512	18 02 09	70.8	233.9	1.3		39.1	60	2151	06 29 21
06 30 20	R25_D	18 02 09	71.7	238.8	1.4		43.2	-25	2151	No stop
06 34 50	---	18 06 40	71.1	240.7	1.5		44.3	245	2186	06 30 21
06 34 50	J1640+3946	18 06 40	70.3	235.9	1.4		40.3	-24	2186	No stop
06 36 20	=NRA0512	18 08 10	70.1	236.6	1.4		40.7	66	2198	06 34 51
06 36 20	R25_D	18 08 10	70.9	241.3	1.5		44.6	-25	2198	No stop
06 40 50	---	18 12 41	70.3	243.1	1.6		45.5	245	2232	06 36 21
06 41 30	J1640+3946	18 13 21	69.4	238.8	1.5		41.9	16	2232	06 41 30
06 42 30	=NRA0512	18 14 21	69.3	239.2	1.6		42.1	60	2240	06 41 31
06 42 30	R25_D	18 14 21	70.1	243.7	1.6		45.9	-24	2240	No stop
06 47 00	---	18 18 52	69.5	245.4	1.7		46.7	246	2275	06 42 31
06 47 00	J1640+3946	18 18 52	68.7	240.9	1.6		43.0	-24	2275	No stop
06 48 30	=NRA0512	18 20 22	68.5	241.5	1.7		43.3	66	2287	06 47 01

Schedule for TORUN (Code Tr)

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Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart
Stop UT		LST	EL	AZ	HA UP	ParA Dwell	GBytes	SYNC

--- Mon 24 Feb 2025 Day 55 ---								
06 48 30	R25_D	18 20 22	69.3	246.0	1.7	47.0 -24	2287	No stop
06 53 00	---	18 24 53	68.6	247.6	1.8	47.7 246	2321	06 48 31
06 53 40	J1640+3946	18 25 33	67.8	243.5	1.7	44.3 17	2321	06 53 40
06 54 40	=NRA0512	18 26 33	67.7	243.8	1.8	44.5 60	2329	06 53 41
06 54 40	J1646+4059	18 26 33	69.4	243.8	1.6	45.5 -20	2329	No stop
06 59 10	=1645+410	18 31 04	68.8	245.5	1.7	46.3 250	2364	06 54 41
06 59 50	J1640+3946	18 31 44	67.0	245.6	1.8	45.3 20	2364	06 59 50
07 00 50	=NRA0512	18 32 44	66.8	246.0	1.9	45.5 60	2372	06 59 51
07 00 50	R25_D	18 32 44	67.5	250.2	1.9	48.9 -24	2372	No stop
07 05 20	---	18 37 15	66.9	251.6	2.0	49.4 246	2406	07 00 51
07 05 20	J1640+3946	18 37 15	66.2	247.5	1.9	46.2 -23	2406	No stop
07 06 50	=NRA0512	18 38 45	66.0	248.0	2.0	46.4 67	2418	07 05 21
07 06 50	R25_D	18 38 45	66.7	252.1	2.0	49.6 -23	2418	No stop
07 11 20	---	18 43 16	66.0	253.5	2.1	50.1 247	2453	07 06 51
07 12 00	J1640+3946	18 43 56	65.3	249.7	2.0	47.1 17	2453	07 12 00
07 13 00	=NRA0512	18 44 56	65.1	250.0	2.1	47.2 60	2460	07 12 01
07 13 00	R25_D	18 44 56	65.8	254.0	2.1	50.3 -23	2460	No stop
07 17 30	---	18 49 27	65.1	255.2	2.2	50.7 247	2495	07 13 01
07 17 30	J1640+3946	18 49 27	64.5	251.4	2.1	47.7 -22	2495	No stop
07 19 00	=NRA0512	18 50 57	64.3	251.8	2.2	47.9 68	2507	07 17 31
07 19 00	R25_D	18 50 57	64.9	255.7	2.2	50.9 -23	2507	No stop
07 23 30	---	18 55 28	64.3	256.9	2.3	51.2 247	2542	07 19 01
07 24 10	J1640+3946	18 56 08	63.5	253.3	2.2	48.4 18	2542	07 24 10
07 25 10	=NRA0512	18 57 08	63.4	253.6	2.3	48.5 60	2549	07 24 11
07 25 10	J1646+4059	18 57 08	65.1	253.9	2.2	49.8 -20	2549	No stop
07 29 40	=1645+410	19 01 39	64.5	255.2	2.2	50.2 250	2584	07 25 11
07 30 20	J1640+3946	19 02 19	62.7	255.0	2.3	49.0 20	2584	07 30 20
07 31 20	=NRA0512	19 03 19	62.5	255.3	2.4	49.0 60	2592	07 30 21
07 31 20	R25_D	19 03 19	63.1	259.0	2.4	51.8 -22	2592	No stop
07 35 50	---	19 07 50	62.4	260.1	2.5	52.1 248	2627	07 31 21

Schedule for TORUN (Code Tr)

Page 10

Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	24 Feb 2025	Day	55	---						
07 35 50	J1640+3946	19 07 50	61.9	256.5	2.4		49.4	-22	2627	No stop
07 37 20	=NRA0512	19 09 20	61.6	256.9	2.5		49.5	68	2638	07 35 51
07 37 20	R25_D	19 09 20	62.2	260.5	2.5		52.1	-22	2638	No stop
07 41 50	---	19 13 51	61.5	261.6	2.6		52.4	248	2673	07 37 21
07 42 30	J1640+3946	19 14 31	60.9	258.3	2.6		49.9	18	2673	07 42 30
07 43 30	=NRA0512	19 15 31	60.7	258.5	2.6		49.9	60	2681	07 42 31
07 43 30	R25_D	19 15 31	61.3	262.0	2.6		52.4	-22	2681	No stop
07 48 00	---	19 20 02	60.6	263.1	2.7		52.6	248	2716	07 43 31
07 48 00	J1640+3946	19 20 02	60.1	259.7	2.6		50.2	-21	2716	No stop
07 49 30	=NRA0512	19 21 32	59.8	260.0	2.7		50.3	69	2727	07 48 01
07 49 30	R25_D	19 21 32	60.4	263.4	2.7		52.7	-22	2727	No stop
07 54 00	---	19 26 03	59.7	264.4	2.8		52.8	248	2762	07 49 31
07 54 40	J1640+3946	19 26 43	59.1	261.3	2.8		50.5	19	2762	07 54 40
07 55 40	=NRA0512	19 27 43	58.9	261.5	2.8		50.6	60	2770	07 54 41
07 55 40	J1646+4059	19 27 43	60.6	261.9	2.7		51.9	-20	2770	No stop
08 00 10	=1645+410	19 32 14	60.0	262.9	2.7		52.1	250	2804	07 55 41
08 00 50	J1640+3946	19 32 54	58.1	262.7	2.9		50.8	20	2804	08 00 50
08 01 50	=NRA0512	19 33 54	58.0	263.0	2.9		50.8	60	2812	08 00 51
08 01 50	R25_D	19 33 54	58.6	266.2	2.9		53.0	-21	2812	No stop
08 06 20	---	19 38 25	57.9	267.1	3.0		53.1	249	2847	08 01 51
08 06 20	J1640+3946	19 38 25	57.3	264.0	3.0		50.9	-21	2847	No stop
08 07 50	=NRA0512	19 39 55	57.1	264.3	3.0		51.0	69	2858	08 06 21
08 07 50	R25_D	19 39 55	57.7	267.4	3.0		53.1	-21	2858	No stop
08 12 20	---	19 44 26	57.0	268.4	3.1		53.1	249	2893	08 07 51
08 13 00	J1640+3946	19 45 06	56.3	265.5	3.1		51.1	19	2893	08 13 00
08 14 00	=NRA0512	19 46 06	56.2	265.7	3.1		51.1	60	2901	08 13 01
08 14 00	R25_D	19 46 06	56.7	268.7	3.1		53.2	-21	2901	No stop
08 18 30	---	19 50 37	56.0	269.6	3.2		53.2	249	2936	08 14 01
08 18 30	J1640+3946	19 50 37	55.5	266.6	3.2		51.2	-20	2936	No stop
08 20 00	=NRA0512	19 52 07	55.3	267.0	3.2		51.2	70	2947	08 18 31

Schedule for TORUN (Code Tr)

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Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	24 Feb 2025	Day	55	---						
08 20 00	R25_D	19 52 07	55.8	269.9	3.2		53.2	-21	2947	No stop
08 24 30	---	19 56 38	55.1	270.8	3.3		53.2	249	2982	08 20 01
08 25 10	J1640+3946	19 57 18	54.5	268.0	3.3		51.3	20	2982	08 25 10
08 26 10	=NRA0512	19 58 18	54.3	268.3	3.3		51.3	60	2990	08 25 11
08 26 10	J1646+4059	19 58 18	56.1	268.6	3.2		52.6	-20	2990	No stop
08 30 40	=1645+410	20 02 49	55.4	269.5	3.3		52.6	250	3025	08 26 11
08 31 20	J1640+3946	20 03 29	53.6	269.3	3.4		51.3	20	3025	08 31 20
08 32 20	=NRA0512	20 04 29	53.4	269.5	3.4		51.3	60	3032	08 31 21
08 32 20	R25_D	20 04 29	54.0	272.4	3.4		53.1	-20	3032	No stop
08 36 50	---	20 09 00	53.3	273.2	3.5		53.1	250	3067	08 32 21
08 36 50	J1640+3946	20 09 00	52.7	270.4	3.5		51.3	-20	3067	No stop
08 38 20	=NRA0512	20 10 30	52.5	270.7	3.5		51.3	70	3079	08 36 51
08 38 20	R25_D	20 10 30	53.1	273.5	3.5		53.0	-20	3079	No stop
08 42 50	---	20 15 01	52.4	274.3	3.6		53.0	250	3114	08 38 21
08 43 30	J1640+3946	20 15 41	51.7	271.7	3.6		51.3	20	3114	08 43 30
08 44 30	=NRA0512	20 16 41	51.6	271.9	3.6		51.3	60	3121	08 43 31
08 44 30	R25_D	20 16 41	52.1	274.7	3.6		52.9	-20	3121	No stop
08 49 00	---	20 21 12	51.5	275.5	3.7		52.8	250	3156	08 44 31
08 49 00	J1640+3946	20 21 12	50.9	272.8	3.7		51.2	-20	3156	No stop
08 50 30	=NRA0512	20 22 42	50.7	273.1	3.7		51.2	70	3168	08 49 01
08 50 30	R25_D	20 22 42	51.2	275.8	3.7		52.8	-20	3168	No stop
08 55 00	---	20 27 13	50.6	276.6	3.8		52.7	250	3202	08 50 31
08 55 40	J1640+3946	20 27 53	49.9	274.1	3.8		51.1	21	3202	08 55 40
08 56 40	=NRA0512	20 28 53	49.8	274.2	3.8		51.1	60	3210	08 55 41
08 56 40	J1646+4059	20 28 53	51.5	274.5	3.7		52.4	-20	3210	No stop
09 01 10	=1645+410	20 33 24	50.8	275.4	3.8		52.3	250	3245	08 56 41
09 01 50	J1640+3946	20 34 04	49.0	275.2	3.9		51.0	20	3245	09 01 50
09 02 50	=NRA0512	20 35 04	48.8	275.4	3.9		51.0	60	3253	09 01 51
09 02 50	R25_D	20 35 04	49.4	278.0	3.9		52.4	-19	3253	No stop
09 07 50	---	20 40 05	48.7	278.8	4.0		52.3	281	3291	09 02 51

Schedule for TORUN (Code Tr)

Page 12

Doubling the known FRB PRSs - R25

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon 24 Feb 2025 Day 55 ---

09 07 50	J1640+3946	20 40 05	48.1	276.3	4.0		50.9	-19	3291	No stop
09 09 20	=NRA0512	20 41 36	47.9	276.6	4.0		50.9	71	3303	09 07 51
09 09 20	R25_D	20 41 36	48.4	279.1	4.1		52.2	-19	3303	No stop
09 14 20	---	20 46 36	47.7	280.0	4.1		52.0	281	3342	09 09 21
09 15 00	J1640+3946	20 47 16	47.0	277.6	4.1		50.7	21	3342	09 15 00
09 17 00	=NRA0512	20 49 17	46.7	278.0	4.1		50.6	120	3357	09 15 01
09 17 40	J1642+3948	20 49 57	47.0	277.7	4.1		50.7	28	3357	09 17 40
09 21 40	=3C345	20 53 58	46.4	278.4	4.2		50.6	240	3388	09 17 41

----- pulsar-check -----

09 26 00	B1933+16	20 58 18	49.9	211.2	1.4		18.9	109	3388	09 26 00
09 30 00	---	21 02 19	49.6	212.6	1.4		19.7	240	3419	09 26 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* B1933+16	19 33 31.814330	* 19 35 47.800000	19 36 55.119831	0.00
	16 09 57.63427	* 16 16 39.90000	16 19 46.76626	0.00
* R25_D	16 35 41.913015	* 16 37 20.475400	16 38 10.104663	0.00
	41 32 56.66957	* 41 26 59.80240	41 23 35.49964	0.00
NRA0512	16 38 48.169688	* 16 40 29.632773	16 41 20.684799	0.00
* J1640+3946	39 52 30.08664	* 39 46 46.02845	39 43 28.52606	0.00
1638+398	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J1640+39	GSFC 2016a X/S astro solution, 124178 observations.			
3C345	16 41 17.606229	* 16 42 58.809967	16 43 49.708067	0.79
* J1642+3948	39 54 10.81492	* 39 48 36.99399	39 45 24.62937	0.59
1641+399	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J1642+39	GSFC 2016a X/S astro solution, 53724 observations.			
1645+410	16 45 18.214793	* 16 46 56.858700	16 47 46.433840	0.09
* J1646+4059	41 04 34.49967	* 40 59 17.17206	40 56 12.84138	0.13
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 111 observations.			

n25k1tr

NETWORK MONITORING EXPERIMENT

PI: *Junghwan Oh*

Address: JIVE

Schedule for TORUN (Code Tr)

Page 2

Network Monitoring Experiment

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	24 Feb 2025	Day	55	---						
Next scan frequencies:		21901.00	21901.00	21901.00	21901.00	21901.00	21901.00	21965.00	21965.00	21965.00
		22029.00	22029.00	22029.00	22029.00	22029.00	22029.00	22093.00	22093.00	22093.00
		22157.00	22157.00	22157.00	22157.00	22157.00	22157.00	22221.00	22221.00	22221.00
		22285.00	22285.00	22285.00	22285.00	22285.00	22285.00	22349.00	22349.00	22349.00
Next BBC frequencies:		544.00	544.00	544.00	544.00	544.00	544.00	608.00	608.00	608.00
		672.00	672.00	672.00	672.00	672.00	672.00	736.00	736.00	736.00
		800.00	800.00	800.00	800.00	800.00	800.00	864.00	864.00	864.00
		928.00	928.00	928.00	928.00	928.00	928.00	992.00	992.00	992.00
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
15 00 00	J0530+1331	02 33 13	37.0	121.0	-3.0		-32.0	0	0	15 00 00
15 05 00	=0528+134	02 38 14	37.6	122.3	-2.9		-31.5	300	155	15 00 01
15 10 00	J0530+1331	02 43 15	38.3	123.6	-2.8		-31.0	293	155	15 10 00
15 15 00	=0528+134	02 48 16	38.9	124.9	-2.7		-30.4	300	309	15 10 01
15 20 00	J0530+1331	02 53 16	39.5	126.3	-2.7		-29.9	293	309	15 20 00
15 30 00	=0528+134	03 03 18	40.7	129.1	-2.5		-28.7	600	618	15 20 01
15 35 00	J0530+1331	03 08 19	41.3	130.5	-2.4		-28.0	293	618	15 35 00
15 45 00	=0528+134	03 18 20	42.4	133.4	-2.2		-26.7	600	927	15 35 01
15 50 00	J0530+1331	03 23 21	42.9	134.9	-2.2		-26.0	293	927	15 50 00
16 00 00	=0528+134	03 33 23	44.0	137.9	-2.0		-24.5	600	1237	15 50 01
16 05 00	J0530+1331	03 38 24	44.5	139.5	-1.9		-23.7	293	1237	16 05 00
16 15 00	=0528+134	03 48 25	45.4	142.6	-1.7		-22.0	600	1546	16 05 01
16 25 00	J0741+3112	03 58 27	44.5	95.7	-3.7		-44.3	488	1546	16 25 00
16 35 00	=0738+313	04 08 29	45.9	97.9	-3.6		-44.0	600	1855	16 25 01
16 40 00	J0741+3112	04 13 30	46.7	99.0	-3.5		-43.9	293	1855	16 40 00
16 50 00	=0738+313	04 23 31	48.2	101.3	-3.3		-43.5	600	2164	16 40 01
16 55 00	J0741+3112	04 28 32	48.9	102.5	-3.2		-43.2	293	2164	16 55 00
17 05 00	=0738+313	04 38 34	50.4	104.9	-3.1		-42.7	600	2473	16 55 01
17 10 00	J0741+3112	04 43 34	51.1	106.2	-3.0		-42.4	293	2473	17 10 00
17 20 00	=0738+313	04 53 36	52.5	108.8	-2.8		-41.6	600	2782	17 10 01

Schedule for TORUN (Code Tr)

Page 3

Network Monitoring Experiment

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

```
-----
Start UT  Source          Start / Stop      Early   Disk   TPStart
Stop UT          LST      EL    AZ    HA  UP    ParA  Dwell  GBytes  SYNC
-----
```

--- Mon 24 Feb 2025 Day 55 ---

```
17 40 00  OJ287          05 13 39  36.3 105.7 -3.7      -38.0   293    3092   17 40 00
17 50 00  ---           05 23 41  37.7 108.1 -3.5      -37.4   600    3401   17 40 01

17 55 00  OJ287          05 28 42  38.5 109.2 -3.5      -37.1   293    3401   17 55 00
18 00 00  ---           05 33 43  39.2 110.5 -3.4      -36.8   300    3555   17 55 01

17 25 00  OJ287          04 58 37  34.1 102.3 -4.0      -38.6   215    2782   17 25 00
17 35 00  ---           05 08 39  35.6 104.6 -3.8      -38.2   600    3092   17 25 01
```

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.K4096

```
Setup group:      7          Station: TORUN          Total bit rate: 4096
Format: VDIF      Bits per sample: 2              Sample rate: 64.000
Number of channels: 32    DBE type: DBBC_DDC        Speedup factor: 1.00
```

Disk used to record data.

1st LO=	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00
	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00
	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00
	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00
Net SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF SB =	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
	3	11	3	11	4	12	4	12
	5	13	5	13	6	14	6	14
	7	15	7	15	8	16	8	16
BBC SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF =	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set:	7	Setup file default. Used with PCAL = off						
LO sum=	21901.00	21901.00	21901.00	21901.00	21965.00	21965.00	21965.00	21965.00
	22029.00	22029.00	22029.00	22029.00	22093.00	22093.00	22093.00	22093.00
	22157.00	22157.00	22157.00	22157.00	22221.00	22221.00	22221.00	22221.00
	22285.00	22285.00	22285.00	22285.00	22349.00	22349.00	22349.00	22349.00
BBC fr=	544.00	544.00	544.00	544.00	608.00	608.00	608.00	608.00
	672.00	672.00	672.00	672.00	736.00	736.00	736.00	736.00
	800.00	800.00	800.00	800.00	864.00	864.00	864.00	864.00
	928.00	928.00	928.00	928.00	992.00	992.00	992.00	992.00
Bandwd=	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

Matching frequency sets: 7

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23
barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)			Error
	(B1950)	(J2000)	(Date)	(mas)
0528+134	05 28 06.759216	* 05 30 56.416746	05 32 22.314764	0.21
* J0530+1331	13 29 42.28882	* 13 31 55.14948	13 33 03.72606	0.24
J0530+13	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 138236 observations.			

0738+313	07 38 00.178554	* 07 41 10.703303	07 42 47.857639	0.15
* J0741+3112	31 19 02.05911	* 31 12 00.22910	31 08 31.20687	0.44
J0741+31	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 9707 observations.			
* 0J287	08 51 57.250615	* 08 54 48.874927	08 56 16.613054	0.00
J0854+2006	20 17 58.41740	* 20 06 30.64085	20 00 42.73850	0.00
0851+202	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J0854+20	GSFC 2016a X/S astro solution, 270807 observations.			

IMAGING THE INNERMOST JET IN THE OFF-AXIS ULX CYG X-3

PI: Jun Yang

Address: Onsala Space Observatory

Schedule for TORUN (Code Tr)

Page 2

Imaging the innermost jet in the off-axis ULX Cyg X-3

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Tue 25 Feb 2025	Day 56	---							
Next scan frequencies:		21901.00	21901.00	21901.00	21901.00	21901.00	21901.00	21965.00	21965.00	21965.00
		22029.00	22029.00	22029.00	22029.00	22029.00	22029.00	22093.00	22093.00	22093.00
		22157.00	22157.00	22157.00	22157.00	22157.00	22157.00	22221.00	22221.00	22221.00
		22285.00	22285.00	22285.00	22285.00	22285.00	22285.00	22349.00	22349.00	22349.00
Next BBC frequencies:		544.00	544.00	544.00	544.00	544.00	544.00	608.00	608.00	608.00
		672.00	672.00	672.00	672.00	672.00	672.00	736.00	736.00	736.00
		800.00	800.00	800.00	800.00	800.00	800.00	864.00	864.00	864.00
		928.00	928.00	928.00	928.00	928.00	928.00	992.00	992.00	992.00
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
02 30 00	J2015+3710	14 05 06	27.4	63.6	-6.2		-42.5	0	0	02 30 00
02 34 00	=2013+370	14 09 07	28.0	64.3	-6.1		-42.8	240	124	02 30 01
02 35 00	J2018+3851	14 10 07	28.9	62.6	-6.2		-43.3	43	124	02 35 00
02 37 00	---	14 12 08	29.2	62.9	-6.1		-43.4	120	185	02 35 01
02 38 00	J2023+4125	14 13 08	30.5	60.3	-6.2		-44.1	40	185	02 38 00
02 41 00	---	14 16 08	30.9	60.7	-6.1		-44.4	180	278	02 38 01
02 42 00	J2035+4049	14 17 08	29.1	59.5	-6.3		-43.2	39	278	02 42 00
02 45 00	---	14 20 09	29.5	60.0	-6.3		-43.5	180	371	02 42 01
02 45 45	CYG-X3	14 20 54	30.0	60.5	-6.2		-43.8	32	371	02 45 45
02 53 45	---	14 28 55	31.1	61.7	-6.1		-44.5	480	618	02 45 46
02 54 10	G79.977+0.81	14 29 20	31.3	61.7	-6.1		-44.6	16	618	02 54 10
02 54 50	---	14 30 01	31.4	61.8	-6.1		-44.7	40	639	02 54 11
02 55 15	CYG-X3	14 30 26	31.3	62.0	-6.0		-44.6	16	639	02 55 15
03 03 15	---	14 38 27	32.4	63.2	-5.9		-45.3	480	886	02 55 16
03 03 40	G79.977+0.81	14 38 52	32.5	63.1	-5.9		-45.4	16	886	03 03 40
03 04 20	---	14 39 32	32.6	63.2	-5.9		-45.5	40	907	03 03 41
03 04 45	CYG-X3	14 39 57	32.6	63.4	-5.9		-45.4	16	907	03 04 45
03 12 45	---	14 47 58	33.6	64.7	-5.8		-46.0	480	1154	03 04 46
03 13 30	J2018+3851	14 48 44	34.2	68.9	-5.5		-46.1	22	1154	03 13 30
03 14 10	---	14 49 24	34.3	69.0	-5.5		-46.1	40	1175	03 13 31

Schedule for TORUN (Code Tr)

Page 3

Imaging the innermost jet in the off-axis ULX Cyg X-3

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Tue	25 Feb 2025	Day 56	---							
03 14 55	CYG-X3	14 50 09	33.9	65.0	-5.7		-46.2	22	1175	03 14 55
03 22 55	---	14 58 10	35.0	66.3	-5.6		-46.8	480	1422	03 14 56
03 23 20	G79.977+0.81	14 58 35	35.2	66.2	-5.6		-46.9	16	1422	03 23 20
03 24 00	---	14 59 15	35.3	66.3	-5.6		-47.0	40	1443	03 23 21
03 24 25	CYG-X3	14 59 40	35.2	66.5	-5.6		-46.9	16	1443	03 24 25
03 32 25	---	15 07 42	36.4	67.8	-5.4		-47.5	480	1690	03 24 26
03 32 50	G79.977+0.81	15 08 07	36.5	67.7	-5.4		-47.6	16	1690	03 32 50
03 33 30	---	15 08 47	36.6	67.8	-5.4		-47.7	40	1711	03 32 51
03 33 55	CYG-X3	15 09 12	36.6	68.1	-5.4		-47.6	16	1711	03 33 55
03 41 55	---	15 17 13	37.7	69.3	-5.3		-48.1	480	1958	03 33 56
03 42 40	J2018+3851	15 17 58	38.4	73.7	-5.0		-47.8	21	1958	03 42 40
03 43 20	---	15 18 39	38.5	73.8	-5.0		-47.8	40	1979	03 42 41
03 44 05	CYG-X3	15 19 24	38.0	69.7	-5.2		-48.3	22	1979	03 44 05
03 52 05	---	15 27 25	39.1	71.0	-5.1		-48.8	480	2226	03 44 06
03 52 30	G79.977+0.81	15 27 50	39.3	70.9	-5.1		-48.9	16	2226	03 52 30
03 53 10	---	15 28 30	39.4	71.0	-5.1		-49.0	40	2247	03 52 31
03 53 35	CYG-X3	15 28 55	39.3	71.2	-5.1		-48.9	16	2247	03 53 35
04 01 35	---	15 36 57	40.5	72.5	-4.9		-49.4	480	2494	03 53 36
04 02 00	G79.977+0.81	15 37 22	40.7	72.4	-4.9		-49.5	16	2494	04 02 00
04 02 40	---	15 38 02	40.8	72.5	-4.9		-49.6	40	2515	04 02 01
04 03 05	CYG-X3	15 38 27	40.7	72.7	-4.9		-49.5	16	2515	04 03 05
04 11 05	---	15 46 28	41.8	74.0	-4.8		-49.9	480	2762	04 03 06
04 11 50	J2018+3851	15 47 13	42.6	78.7	-4.5		-49.2	21	2762	04 11 50
04 12 30	---	15 47 53	42.7	78.8	-4.5		-49.2	40	2782	04 11 51
04 13 15	CYG-X3	15 48 38	42.2	74.4	-4.7		-50.1	21	2782	04 13 15
04 21 15	---	15 56 40	43.3	75.7	-4.6		-50.5	480	3030	04 13 16
04 21 40	G79.977+0.81	15 57 05	43.5	75.6	-4.6		-50.6	16	3030	04 21 40
04 22 20	---	15 57 45	43.6	75.7	-4.6		-50.7	40	3050	04 21 41
04 22 45	CYG-X3	15 58 10	43.5	75.9	-4.6		-50.6	16	3050	04 22 45
04 30 45	---	16 06 11	44.7	77.3	-4.5		-50.9	480	3298	04 22 46
04 31 10	G79.977+0.81	16 06 36	44.9	77.2	-4.4		-51.1	16	3298	04 31 10
04 31 50	---	16 07 16	45.0	77.3	-4.4		-51.1	40	3318	04 31 11

Schedule for TORUN (Code Tr)

Page 4

Imaging the innermost jet in the off-axis ULX Cyg X-3

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Tue	25 Feb 2025	Day	56	---					
04 32 15	CYG-X3	16 07 42	44.9	77.5	-4.4		-51.0	16	3318	04 32 15
04 40 15	---	16 15 43	46.1	78.9	-4.3		-51.4	480	3566	04 32 16
04 41 00	J2018+3851	16 16 28	47.0	83.8	-4.0		-50.1	20	3566	04 41 00
04 41 40	---	16 17 08	47.1	84.0	-4.0		-50.1	40	3586	04 41 01
----- Long gap for EF to do pointing observations -----										
04 42 40	J2015+3710	16 18 08	46.6	86.6	-4.0		-48.9	41	3586	04 42 40
04 49 40	=2013+370	16 25 09	47.6	87.9	-3.9		-48.9	420	3803	04 42 41
04 50 25	CYG-X3	16 25 55	47.6	80.6	-4.1		-51.8	15	3803	04 50 25
04 58 25	---	16 33 56	48.8	82.0	-4.0		-52.0	480	4050	04 50 26
04 58 50	G79.977+0.81	16 34 21	49.0	81.9	-4.0		-52.2	16	4050	04 58 50
04 59 30	---	16 35 01	49.1	82.0	-4.0		-52.2	40	4071	04 58 51
04 59 55	CYG-X3	16 35 26	49.0	82.3	-4.0		-52.1	16	4071	04 59 55
05 07 55	---	16 43 27	50.2	83.7	-3.8		-52.3	480	4318	04 59 56
05 08 20	G79.977+0.81	16 43 52	50.4	83.6	-3.8		-52.5	16	4318	05 08 20
05 09 00	---	16 44 33	50.5	83.7	-3.8		-52.5	40	4339	05 08 21
05 09 25	CYG-X3	16 44 58	50.5	84.0	-3.8		-52.4	16	4339	05 09 25
05 17 25	---	16 52 59	51.7	85.5	-3.7		-52.5	480	4586	05 09 26
05 18 15	J2018+3851	16 53 49	52.6	91.0	-3.4		-50.5	24	4586	05 18 15
05 18 55	---	16 54 29	52.7	91.2	-3.4		-50.5	40	4607	05 18 16
05 19 40	CYG-X3	16 55 14	52.0	85.9	-3.6		-52.6	19	4607	05 19 40
05 27 40	---	17 03 16	53.2	87.4	-3.5		-52.7	480	4854	05 19 41
05 28 05	G79.977+0.81	17 03 41	53.4	87.3	-3.5		-52.9	16	4854	05 28 05
05 28 45	---	17 04 21	53.5	87.4	-3.5		-52.9	40	4875	05 28 06
05 29 10	CYG-X3	17 04 46	53.4	87.7	-3.5		-52.7	16	4875	05 29 10
05 37 10	---	17 12 47	54.6	89.2	-3.3		-52.8	480	5122	05 29 11
05 37 35	G79.977+0.81	17 13 12	54.8	89.1	-3.3		-53.0	16	5122	05 37 35
05 38 15	---	17 13 52	54.9	89.2	-3.3		-53.0	40	5142	05 37 36
05 38 40	CYG-X3	17 14 17	54.8	89.5	-3.3		-52.8	16	5142	05 38 40
05 46 40	---	17 22 19	56.1	91.2	-3.2		-52.7	480	5390	05 38 41

Schedule for TORUN (Code Tr)

Page 5

Imaging the innermost jet in the off-axis ULX Cyg X-3

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

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Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Tue	25 Feb 2025	Day 56	---							
05 47 30	J2018+3851	17 23 09	56.9	97.3	-2.9		-50.0	23	5390	05 47 30
05 48 10	---	17 23 49	57.0	97.5	-2.9		-49.9	40	5410	05 47 31
05 48 55	CYG-X3	17 24 34	56.4	91.6	-3.1		-52.7	18	5410	05 48 55
05 56 55	---	17 32 35	57.6	93.3	-3.0		-52.6	480	5658	05 48 56
05 57 20	G79.977+0.81	17 33 01	57.8	93.2	-3.0		-52.8	16	5658	05 57 20
05 58 00	---	17 33 41	57.9	93.3	-3.0		-52.8	40	5678	05 57 21
05 58 25	CYG-X3	17 34 06	57.8	93.6	-3.0		-52.6	15	5678	05 58 25
06 06 25	---	17 42 07	59.0	95.4	-2.9		-52.4	480	5926	05 58 26
06 06 50	G79.977+0.81	17 42 32	59.2	95.2	-2.8		-52.6	16	5926	06 06 50
06 07 30	---	17 43 12	59.3	95.4	-2.8		-52.6	40	5946	06 06 51
06 07 55	CYG-X3	17 43 37	59.2	95.7	-2.8		-52.4	15	5946	06 07 55
06 15 55	---	17 51 39	60.4	97.6	-2.7		-52.1	480	6194	06 07 56
06 16 45	J2018+3851	17 52 29	61.3	104.6	-2.4		-48.3	21	6194	06 16 45
06 17 25	---	17 53 09	61.4	104.8	-2.4		-48.3	40	6214	06 16 46
----- Long gap for EF to do pointing observations -----										
06 18 25	J2015+3710	17 54 09	60.8	108.4	-2.4		-45.7	38	6214	06 18 25
06 25 25	=2013+370	18 01 10	61.8	110.5	-2.3		-45.0	420	6431	06 18 26
06 26 30	CYG-X3	18 02 15	62.0	100.1	-2.5		-51.6	29	6431	06 26 30
06 34 30	---	18 10 17	63.2	102.2	-2.4		-51.1	480	6678	06 26 31
06 34 55	G79.977+0.81	18 10 42	63.4	102.0	-2.4		-51.3	15	6678	06 34 55
06 35 35	---	18 11 22	63.5	102.2	-2.4		-51.3	40	6699	06 34 56
06 36 00	CYG-X3	18 11 47	63.4	102.6	-2.4		-51.0	15	6699	06 36 00
06 44 00	---	18 19 48	64.6	104.8	-2.2		-50.3	480	6946	06 36 01
06 44 25	G79.977+0.81	18 20 13	64.8	104.6	-2.2		-50.6	15	6946	06 44 25
06 45 05	---	18 20 53	64.9	104.8	-2.2		-50.5	40	6967	06 44 26
06 45 30	CYG-X3	18 21 18	64.8	105.2	-2.2		-50.2	15	6967	06 45 30
06 53 30	---	18 29 20	66.0	107.5	-2.1		-49.4	480	7214	06 45 31
06 54 35	J2018+3851	18 30 25	66.6	116.3	-1.8		-43.8	33	7214	06 54 35
06 55 15	---	18 31 05	66.7	116.5	-1.8		-43.7	40	7234	06 54 36

Schedule for TORUN (Code Tr)

Page 6

Imaging the innermost jet in the off-axis ULX Cyg X-3

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT			Source	Start / Stop							Early	Disk	TPStart
Stop UT				LST	EL		AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Tue			25 Feb 2025	Day	56	---							
06	56	20	CYG-X3	18 32 10	66.4	108.4	-2.0		-49.1	33	7234	06 56 20	
07	04	20	---	18 40 12	67.5	111.0	-1.9		-48.0	480	7482	06 56 21	
07	04	45	G79.977+0.81	18 40 37	67.7	110.8	-1.9		-48.3	15	7482	07 04 45	
07	05	25	---	18 41 17	67.8	111.0	-1.9		-48.2	40	7502	07 04 46	
07	05	50	CYG-X3	18 41 42	67.7	111.5	-1.9		-47.8	15	7502	07 05 50	
07	13	50	---	18 49 43	68.8	114.2	-1.7		-46.5	480	7750	07 05 51	
07	14	15	G79.977+0.81	18 50 08	69.0	114.1	-1.7		-46.8	15	7750	07 14 15	
07	14	55	---	18 50 48	69.1	114.3	-1.7		-46.7	40	7770	07 14 16	
07	15	20	CYG-X3	18 51 13	69.0	114.8	-1.7		-46.3	15	7770	07 15 20	
07	23	20	---	18 59 15	70.1	117.8	-1.6		-44.8	480	8018	07 15 21	
07	24	25	J2018+3851	19 00 20	70.4	128.3	-1.3		-37.3	29	8018	07 24 25	
07	25	05	---	19 01 00	70.5	128.6	-1.3		-37.1	40	8038	07 24 26	
07	26	10	CYG-X3	19 02 05	70.5	119.0	-1.5		-44.2	30	8038	07 26 10	
07	34	10	---	19 10 06	71.5	122.3	-1.4		-42.3	480	8286	07 26 11	
07	34	35	G79.977+0.81	19 10 31	71.7	122.2	-1.4		-42.5	15	8286	07 34 35	
07	35	15	---	19 11 12	71.8	122.5	-1.4		-42.3	40	8306	07 34 36	
07	35	40	CYG-X3	19 11 37	71.7	123.0	-1.4		-41.9	14	8306	07 35 40	
07	43	40	---	19 19 38	72.7	126.8	-1.2		-39.6	480	8554	07 35 41	
07	44	05	G79.977+0.81	19 20 03	72.9	126.6	-1.2		-39.8	15	8554	07 44 05	
07	44	45	---	19 20 43	73.0	127.0	-1.2		-39.6	40	8574	07 44 06	
07	45	10	CYG-X3	19 21 08	72.9	127.5	-1.2		-39.2	14	8574	07 45 10	
07	53	10	---	19 29 10	73.8	131.7	-1.1		-36.5	480	8822	07 45 11	
07	54	15	J2018+3851	19 30 15	73.5	144.3	-0.8		-26.8	25	8822	07 54 15	
07	54	55	---	19 30 55	73.6	144.7	-0.8		-26.5	40	8842	07 54 16	
07	56	00	CYG-X3	19 32 00	74.1	133.2	-1.0		-35.5	26	8842	07 56 00	
08	04	00	---	19 40 01	75.0	137.9	-0.9		-32.2	480	9089	07 56 01	
08	04	25	G79.977+0.81	19 40 26	75.2	137.9	-0.9		-32.4	15	9089	08 04 25	
08	05	05	---	19 41 07	75.2	138.3	-0.9		-32.1	40	9110	08 04 26	
08	05	30	CYG-X3	19 41 32	75.1	138.9	-0.9		-31.6	15	9110	08 05 30	
08	13	30	---	19 49 33	75.9	144.1	-0.7		-27.8	480	9357	08 05 31	

Schedule for TORUN (Code Tr)

Page 7

Imaging the innermost jet in the off-axis ULX Cyg X-3

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

```

-----
Start UT  Source          Start / Stop      Early   Disk   TPStart
Stop UT          LST      EL    AZ    HA  UP    ParA  Dwell  GBytes  SYNC
-----
--- Tue 25 Feb 2025   Day 56 ---

08 13 55 G79.977+0.81  19 49 58  76.1 144.1 -0.7    -27.9   15    9357  08 13 55
08 14 35 ---          19 50 38  76.1 144.6 -0.7    -27.5   40    9378  08 13 56

08 15 00 CYG-X3       19 51 03  76.0 145.2 -0.7    -27.1   15    9378  08 15 00
08 23 00 ---          19 59 04  76.6 151.0 -0.6    -22.7  480    9625  08 15 01

08 24 05 J2018+3851   20 00 10  75.5 164.9 -0.3    -11.6   23    9625  08 24 05
08 24 45 ---          20 00 50  75.5 165.4 -0.3    -11.2   40    9646  08 24 06

08 25 45 J2015+3710   20 01 50  74.0 169.5 -0.2     -7.9   38    9646  08 25 45
08 29 45 =2013+370    20 05 51  74.1 172.3 -0.2     -5.8  240    9770  08 25 46

```

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.K4096nt

```

Setup group:      7          Station: TORUN          Total bit rate: 4096
Format: VDIF      Bits per sample: 2              Sample rate: 64.000
Number of channels: 32    DBE type: DBBC_DDC        Speedup factor: 1.00

```

Disk used to record data.

1st LO=	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00
	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00
	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00
	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00	21357.00
Net SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF SB =	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
	3	11	3	11	4	12	4	12
	5	13	5	13	6	14	6	14
	7	15	7	15	8	16	8	16
BBC SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF =	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set:	8	Setup file default.	Used with PCAL = off
LO sum=	21901.00	21901.00	21901.00
	22029.00	22029.00	22029.00
	22157.00	22157.00	22157.00
	22285.00	22285.00	22285.00
BBC fr=	544.00	544.00	544.00
	672.00	672.00	672.00
	800.00	800.00	800.00
	928.00	928.00	928.00
Bandwd=	32.00	32.00	32.00
	32.00	32.00	32.00
	32.00	32.00	32.00
	32.00	32.00	32.00

Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23
barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)	Error
	(B1950) (J2000) (Date)	(mas)
* CYG-X3	20 30 37.609355 * 20 32 25.769443 20 33 18.354231	0.00
	40 47 12.60948 * 40 57 27.87978 41 02 21.55553	0.00
* G79.977+0.81	20 30 33.033016 * 20 32 20.900000 20 33 13.331182	0.00

	40 57 39.40173	* 41 07 54.40000	41 12 47.92270	0.00
	No accurate position available			
* J2023+4125	20 21 50.118817	* 20 23 36.163900	20 24 27.708946	0.00
	41 15 42.31611	* 41 25 26.74400	41 30 04.23357	0.00
* J2035+4049	20 33 27.825067	* 20 35 16.636000	20 36 09.540417	0.00
	40 39 18.62990	* 40 49 43.66000	40 54 42.46184	0.00
* J2018+3851	20 16 41.516202	* 20 18 31.024200	20 19 24.425607	0.00
	38 41 53.25421	* 38 51 19.38200	38 55 47.50296	0.00
2013+370	20 13 37.014517	* 20 15 28.729803	20 16 23.308245	0.09
* J2015+3710	37 01 44.45878	* 37 10 59.51466	37 15 22.00660	0.12
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 131 observations.			

EVN OBSERVATIONS OF CSOs AT 1.3CM (SESSION 1)

PI: *Xi Yan*

Address: Galaxy and Cosmology Group

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 1)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Tue 25 Feb 2025	Day 56	---							
Next scan frequencies:		22139.49	22139.49	22139.49	22139.49	22139.49	22203.49	22203.49	22203.49	22203.49
		22267.49	22267.49	22267.49	22267.49	22267.49	22331.49	22331.49	22331.49	22331.49
Next BBC frequencies:		659.49	659.49	659.49	659.49	659.49	723.49	723.49	723.49	723.49
		787.49	787.49	787.49	787.49	787.49	851.49	851.49	851.49	851.49
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

09 30 00	3C454.3	21 06 15	47.5	139.5	-1.8		-24.0	0	0	09 30 00
09 34 00	---	21 10 16	47.8	140.8	-1.7		-23.3	240	62	09 30 01
09 37 00	J0111+3906	21 13 17	47.6	84.1	-4.0		-50.5	51	62	09 37 00
09 40 00	=0108+388	21 16 17	48.1	84.6	-3.9		-50.5	180	108	09 37 01
09 40 30	J0111+3906	21 16 47	48.2	84.7	-3.9		-50.5	24	108	09 40 30
09 54 00	=0108+388	21 30 19	50.2	87.3	-3.7		-50.8	810	317	09 40 31
09 54 30	J0111+3906	21 30 49	50.3	87.4	-3.7		-50.8	24	317	09 54 30
10 08 00	=0108+388	21 44 22	52.3	90.0	-3.5		-50.8	810	526	09 54 31
10 08 30	J0111+3906	21 44 52	52.4	90.1	-3.5		-50.8	24	526	10 08 30
10 22 00	=0108+388	21 58 24	54.4	92.9	-3.2		-50.7	810	734	10 08 31
10 22 30	J0111+3906	21 58 54	54.5	93.0	-3.2		-50.7	24	734	10 22 30
10 36 00	=0108+388	22 12 26	56.5	95.9	-3.0		-50.5	810	943	10 22 31
10 36 30	J0111+3906	22 12 56	56.6	96.0	-3.0		-50.4	24	943	10 36 30
10 50 00	=0108+388	22 26 29	58.6	99.2	-2.8		-49.9	810	1152	10 36 31
10 50 30	J0111+3906	22 26 59	58.7	99.3	-2.8		-49.9	24	1152	10 50 30
11 04 00	=0108+388	22 40 31	60.7	102.6	-2.5		-49.2	810	1360	10 50 31
11 04 30	J0111+3906	22 41 01	60.7	102.8	-2.5		-49.1	24	1360	11 04 30
11 18 00	=0108+388	22 54 33	62.7	106.4	-2.3		-48.0	810	1569	11 04 31
11 18 30	J0111+3906	22 55 03	62.8	106.6	-2.3		-48.0	24	1569	11 18 30
11 32 00	=0108+388	23 08 35	64.7	110.6	-2.1		-46.5	810	1778	11 18 31
11 32 30	J0111+3906	23 09 06	64.8	110.8	-2.1		-46.5	24	1778	11 32 30
11 40 00	=0108+388	23 16 37	65.8	113.2	-1.9		-45.5	450	1894	11 32 31
11 40 30	J0111+3906	23 17 07	65.9	113.3	-1.9		-45.4	24	1894	11 40 30
11 50 30	=0108+388	23 27 09	67.2	116.8	-1.8		-43.8	600	2048	11 40 31

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 1)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Tue	25 Feb 2025	Day 56	---							
11 52 30	J0355+3909	23 29 09	43.5	79.1	-4.5		-49.6	17	2048	11 52 30
11 53 30	---	23 30 09	43.6	79.3	-4.4		-49.6	60	2064	11 52 31
11 53 30	0402+379	23 30 09	41.3	78.6	-4.6		-48.4	-22	2064	No stop
11 54 50	---	23 31 29	41.5	78.8	-4.6		-48.5	58	2084	11 53 31
11 54 50	J0355+3909	23 31 29	43.8	79.5	-4.4		-49.7	-23	2084	No stop
11 56 10	---	23 32 49	44.0	79.7	-4.4		-49.7	57	2105	11 54 51
11 56 10	0402+379	23 32 49	41.7	79.0	-4.6		-48.5	-22	2105	No stop
11 57 30	---	23 34 10	41.9	79.3	-4.6		-48.6	58	2126	11 56 11
11 57 30	J0355+3909	23 34 10	44.2	80.0	-4.4		-49.8	-23	2126	No stop
11 58 50	---	23 35 30	44.4	80.2	-4.4		-49.8	57	2146	11 57 31
11 58 50	0402+379	23 35 30	42.1	79.5	-4.5		-48.6	-22	2146	No stop
12 00 10	---	23 36 50	42.3	79.7	-4.5		-48.7	58	2167	11 58 51
12 00 10	J0355+3909	23 36 50	44.6	80.4	-4.3		-49.9	-23	2167	No stop
12 01 30	---	23 38 10	44.8	80.7	-4.3		-49.9	57	2187	12 00 11
12 01 30	0402+379	23 38 10	42.5	80.0	-4.5		-48.7	-22	2187	No stop
12 02 50	---	23 39 31	42.7	80.2	-4.5		-48.8	58	2208	12 01 31
12 02 50	J0355+3909	23 39 31	45.0	80.9	-4.3		-49.9	-23	2208	No stop
12 04 10	---	23 40 51	45.2	81.1	-4.3		-50.0	57	2229	12 02 51
12 04 10	0402+379	23 40 51	42.9	80.4	-4.4		-48.8	-22	2229	No stop
12 05 30	---	23 42 11	43.1	80.7	-4.4		-48.9	58	2249	12 04 11
12 06 30	J0355+3909	23 43 11	45.5	81.6	-4.2		-50.1	37	2249	12 06 30
12 07 50	---	23 44 31	45.7	81.8	-4.2		-50.1	80	2270	12 06 31
12 07 50	0402+379	23 44 31	43.5	81.1	-4.4		-49.0	-22	2270	No stop
12 09 10	---	23 45 52	43.7	81.3	-4.4		-49.0	58	2290	12 07 51
12 09 10	J0355+3909	23 45 52	45.9	82.0	-4.2		-50.1	-23	2290	No stop
12 10 30	---	23 47 12	46.1	82.3	-4.2		-50.2	57	2311	12 09 11
12 10 30	0402+379	23 47 12	43.9	81.6	-4.3		-49.0	-22	2311	No stop
12 11 50	---	23 48 32	44.1	81.8	-4.3		-49.1	58	2332	12 10 31
12 11 50	J0355+3909	23 48 32	46.3	82.5	-4.1		-50.2	-23	2332	No stop
12 13 10	---	23 49 52	46.5	82.8	-4.1		-50.3	57	2352	12 11 51
12 13 10	0402+379	23 49 52	44.2	82.1	-4.3		-49.1	-22	2352	No stop
12 14 30	---	23 51 12	44.4	82.3	-4.3		-49.2	58	2373	12 13 11

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 1)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Tue	25 Feb 2025	Day	56	---						
12 14 30	J0355+3909	23 51 12	46.7	83.0	-4.1		-50.3	-23	2373	No stop
12 15 50	---	23 52 33	46.9	83.2	-4.1		-50.3	57	2393	12 14 31
12 15 50	0402+379	23 52 33	44.6	82.5	-4.2		-49.2	-22	2393	No stop
12 17 10	---	23 53 53	44.8	82.8	-4.2		-49.2	58	2414	12 15 51
12 17 10	J0355+3909	23 53 53	47.1	83.5	-4.1		-50.4	-23	2414	No stop
12 18 30	---	23 55 13	47.3	83.7	-4.0		-50.4	57	2435	12 17 11
12 18 30	0402+379	23 55 13	45.0	83.0	-4.2		-49.3	-22	2435	No stop
12 19 50	---	23 56 33	45.2	83.3	-4.2		-49.3	58	2455	12 18 31
12 20 50	J0355+3909	23 57 34	47.7	84.1	-4.0		-50.5	37	2455	12 20 50
12 22 10	---	23 58 54	47.9	84.4	-4.0		-50.5	80	2476	12 20 51
12 22 10	0402+379	23 58 54	45.6	83.7	-4.1		-49.4	-22	2476	No stop
12 23 30	---	00 00 14	45.8	83.9	-4.1		-49.4	58	2497	12 22 11
12 23 30	J0355+3909	00 00 14	48.1	84.6	-3.9		-50.5	-23	2497	No stop
12 24 50	---	00 01 34	48.3	84.9	-3.9		-50.5	57	2517	12 23 31
12 24 50	0402+379	00 01 34	46.0	84.2	-4.1		-49.4	-22	2517	No stop
12 26 10	---	00 02 54	46.2	84.4	-4.1		-49.4	58	2538	12 24 51
12 26 10	J0355+3909	00 02 54	48.5	85.1	-3.9		-50.6	-23	2538	No stop
12 27 30	---	00 04 15	48.7	85.4	-3.9		-50.6	57	2558	12 26 11
12 27 30	0402+379	00 04 15	46.4	84.7	-4.1		-49.5	-22	2558	No stop
12 28 50	---	00 05 35	46.6	84.9	-4.0		-49.5	58	2579	12 27 31
12 28 50	J0355+3909	00 05 35	48.9	85.6	-3.9		-50.6	-23	2579	No stop
12 30 10	---	00 06 55	49.1	85.9	-3.8		-50.6	57	2600	12 28 51
12 30 10	0402+379	00 06 55	46.8	85.2	-4.0		-49.5	-22	2600	No stop
12 31 30	---	00 08 15	47.0	85.4	-4.0		-49.5	58	2620	12 30 11
12 31 30	J0355+3909	00 08 15	49.3	86.1	-3.8		-50.7	-23	2620	No stop
12 32 50	---	00 09 35	49.5	86.4	-3.8		-50.7	57	2641	12 31 31
12 32 50	0402+379	00 09 35	47.2	85.7	-4.0		-49.6	-22	2641	No stop
12 34 10	---	00 10 56	47.4	85.9	-3.9		-49.6	58	2661	12 32 51
12 35 10	J0355+3909	00 11 56	49.8	86.8	-3.8		-50.7	37	2661	12 35 10
12 36 30	---	00 13 16	50.0	87.1	-3.7		-50.7	80	2682	12 35 11

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 1)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Tue	25 Feb 2025	Day	56	---						
12 36 30	0402+379	00 13 16	47.7	86.4	-3.9		-49.6	-22	2682	No stop
12 37 50	---	00 14 36	47.9	86.6	-3.9		-49.6	58	2703	12 36 31
12 37 50	J0355+3909	00 14 36	50.2	87.3	-3.7		-50.7	-23	2703	No stop
12 39 10	---	00 15 57	50.4	87.6	-3.7		-50.8	57	2723	12 37 51
12 39 10	0402+379	00 15 57	48.1	86.9	-3.9		-49.7	-22	2723	No stop
12 40 30	---	00 17 17	48.3	87.1	-3.8		-49.7	58	2744	12 39 11
12 40 30	J0355+3909	00 17 17	50.6	87.9	-3.7		-50.8	-23	2744	No stop
12 41 50	---	00 18 37	50.8	88.1	-3.6		-50.8	57	2764	12 40 31
12 41 50	0402+379	00 18 37	48.5	87.4	-3.8		-49.7	-22	2764	No stop
12 43 10	---	00 19 57	48.7	87.6	-3.8		-49.7	58	2785	12 41 51
12 43 10	J0355+3909	00 19 57	51.0	88.4	-3.6		-50.8	-23	2785	No stop
12 44 30	---	00 21 17	51.2	88.6	-3.6		-50.8	57	2806	12 43 11
12 44 30	0402+379	00 21 17	48.9	87.9	-3.8		-49.7	-22	2806	No stop
12 45 50	---	00 22 38	49.1	88.2	-3.7		-49.7	58	2826	12 44 31
12 45 50	J0355+3909	00 22 38	51.4	88.9	-3.6		-50.8	-23	2826	No stop
12 47 10	---	00 23 58	51.6	89.2	-3.5		-50.8	57	2847	12 45 51
12 47 10	0402+379	00 23 58	49.3	88.4	-3.7		-49.7	-22	2847	No stop
12 48 30	---	00 25 18	49.5	88.7	-3.7		-49.7	58	2868	12 47 11
12 49 30	J0355+3909	00 26 18	52.0	89.6	-3.5		-50.8	37	2868	12 49 30
12 50 50	---	00 27 38	52.2	89.9	-3.5		-50.8	80	2888	12 49 31
12 50 50	0402+379	00 27 38	49.9	89.1	-3.7		-49.8	-22	2888	No stop
12 52 10	---	00 28 59	50.1	89.4	-3.6		-49.8	58	2909	12 50 51
12 52 10	J0355+3909	00 28 59	52.4	90.2	-3.5		-50.8	-23	2909	No stop
12 53 30	---	00 30 19	52.6	90.4	-3.4		-50.8	57	2929	12 52 11
12 53 30	0402+379	00 30 19	50.3	89.7	-3.6		-49.8	-22	2929	No stop
12 54 50	---	00 31 39	50.5	89.9	-3.6		-49.8	58	2950	12 53 31
12 54 50	J0355+3909	00 31 39	52.8	90.7	-3.4		-50.8	-23	2950	No stop
12 56 10	---	00 32 59	53.0	91.0	-3.4		-50.8	57	2971	12 54 51
12 56 10	0402+379	00 32 59	50.7	90.2	-3.6		-49.8	-22	2971	No stop
12 57 30	---	00 34 20	50.9	90.5	-3.6		-49.8	58	2991	12 56 11

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 1)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Tue	25 Feb 2025	Day	56	---						
12 57 30	J0355+3909	00 34 20	53.2	91.2	-3.4		-50.8	-23	2991	No stop
12 58 50	---	00 35 40	53.4	91.5	-3.4		-50.8	57	3012	12 57 31
12 58 50	0402+379	00 35 40	51.1	90.7	-3.5		-49.8	-22	3012	No stop
13 00 10	---	00 37 00	51.3	91.0	-3.5		-49.8	58	3032	12 58 51
13 00 10	J0355+3909	00 37 00	53.6	91.8	-3.3		-50.8	-23	3032	No stop
13 01 30	---	00 38 20	53.8	92.1	-3.3		-50.8	57	3053	13 00 11
13 01 30	0402+379	00 38 20	51.5	91.3	-3.5		-49.7	-22	3053	No stop
13 02 50	---	00 39 40	51.7	91.6	-3.5		-49.7	58	3074	13 01 31
13 03 50	J0355+3909	00 40 41	54.1	92.5	-3.3		-50.8	37	3074	13 03 50
13 05 10	---	00 42 01	54.3	92.8	-3.2		-50.7	80	3094	13 03 51
13 05 10	0402+379	00 42 01	52.1	92.0	-3.4		-49.7	-22	3094	No stop
13 06 30	---	00 43 21	52.3	92.3	-3.4		-49.7	58	3115	13 05 11
13 06 30	J0355+3909	00 43 21	54.5	93.1	-3.2		-50.7	-23	3115	No stop
13 07 50	---	00 44 41	54.7	93.4	-3.2		-50.7	57	3135	13 06 31
13 07 50	0402+379	00 44 41	52.5	92.6	-3.4		-49.7	-22	3135	No stop
13 09 10	---	00 46 01	52.7	92.9	-3.4		-49.7	58	3156	13 07 51
13 09 10	J0355+3909	00 46 01	54.9	93.7	-3.2		-50.7	-23	3156	No stop
13 10 30	---	00 47 22	55.1	94.0	-3.2		-50.7	57	3177	13 09 11
13 10 30	0402+379	00 47 22	52.9	93.2	-3.3		-49.7	-22	3177	No stop
13 11 50	---	00 48 42	53.1	93.4	-3.3		-49.6	58	3197	13 10 31
13 11 50	J0355+3909	00 48 42	55.3	94.3	-3.1		-50.6	-23	3197	No stop
13 13 10	---	00 50 02	55.5	94.5	-3.1		-50.6	57	3218	13 11 51
13 13 10	0402+379	00 50 02	53.3	93.7	-3.3		-49.6	-22	3218	No stop
13 14 30	---	00 51 22	53.5	94.0	-3.3		-49.6	58	3239	13 13 11
13 14 30	J0355+3909	00 51 22	55.7	94.8	-3.1		-50.6	-23	3239	No stop
13 15 50	---	00 52 43	55.9	95.1	-3.1		-50.5	57	3259	13 14 31
13 15 50	0402+379	00 52 43	53.7	94.3	-3.2		-49.6	-22	3259	No stop
13 17 10	---	00 54 03	53.9	94.6	-3.2		-49.5	58	3280	13 15 51
13 18 10	J0355+3909	00 55 03	56.3	95.6	-3.0		-50.5	37	3280	13 18 10
13 19 30	---	00 56 23	56.5	95.9	-3.0		-50.4	80	3300	13 18 11

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 1)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

```
-----
Start UT  Source          Start / Stop      Early   Disk   TPStart
Stop UT          LST      EL    AZ    HA  UP    ParA  Dwell  GBytes  SYNC
-----
```

--- Tue 25 Feb 2025 Day 56 ---

```
13 19 30  0402+379      00 56 23  54.2  95.1 -3.2      -49.5  -22    3300  No stop
13 20 50  ---          00 57 43  54.4  95.4 -3.2      -49.5   58    3321  13 19 31

13 20 50  J0355+3909    00 57 43  56.7  96.2 -3.0      -50.4  -23    3321  No stop
13 22 10  ---          00 59 04  56.9  96.5 -3.0      -50.4   57    3342  13 20 51

13 24 10  J0422+5324    01 01 04  60.2  68.5 -3.4      -69.8   49    3342  13 24 10
13 29 10  =0418+532     01 06 05  60.9  69.0 -3.3      -70.3  300    3419  13 24 11
```

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.K2048

```
Setup group:      7          Station: TORUN          Total bit rate: 2048
Format: VDIF      Bits per sample: 2          Sample rate: 64.000
Number of channels: 16    DBE type: DBBC_DDC    Speedup factor: 1.00
```

Disk used to record data.

1st LO=	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00
	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00
Net SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF SB =	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
	3	11	3	11	4	12	4	12
BBC SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF =	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 11 Setup file default. Used with PCAL = off

LO sum=	22139.49	22139.49	22139.49	22139.49	22203.49	22203.49	22203.49	22203.49
	22267.49	22267.49	22267.49	22267.49	22331.49	22331.49	22331.49	22331.49
BBC fr=	659.49	659.49	659.49	659.49	723.49	723.49	723.49	723.49
	787.49	787.49	787.49	787.49	851.49	851.49	851.49	851.49
Bandwd=	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

Matching frequency sets: 11

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* J0355+3909	03 51 56.635287	* 03 55 16.590900	03 56 57.142590	0.00
	39 00 24.86250	* 39 09 09.80500	39 13 43.96170	0.00
0108+388	01 08 47.254574	* 01 11 37.316770	01 13 01.585478	0.05
* J0111+3906	38 50 32.81430	* 39 06 28.10393	39 14 33.46890	0.05
J0111+39	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 644 observations.			
* 0402+379	04 02 29.863331	* 04 05 49.262754	04 07 29.616698	0.18
J0405+3803	37 55 27.11233	* 38 03 32.23441	38 07 46.08933	0.18
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 92 observations.			
0418+532	04 18 49.157437	* 04 22 44.398872	04 24 42.988240	0.22
* J0422+5324	53 17 25.97780	* 53 24 26.26326	53 28 11.74196	0.22
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 62 observations.			
* 3C454.3	22 51 29.519739	* 22 53 57.747939	22 55 10.938013	0.65
J2253+1608	15 52 54.34808	* 16 08 53.56091	16 16 48.88479	0.73
2251+158	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J2253+16	GSFC 2016a X/S astro solution, 41272 observations			

COLLIMATION AND ACCELERATION OF THE M84 JET: SYNERGY WITH EVN+E-MER
 PI: *Dhanya G. Nair*

Address: Department of Astronomy, University of Concepcion

Schedule for TORUN (Code Tr)

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Collimation and acceleration of the M84 jet: synergy with EVN+e-MERLIN a

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Tue 25 Feb 2025 Day 56 ---										
Next scan frequencies:		22139.49	22139.49	22139.49	22139.49	22139.49	22203.49	22203.49	22203.49	22203.49
		22267.49	22267.49	22267.49	22267.49	22267.49	22331.49	22331.49	22331.49	22331.49
Next BBC frequencies:		659.49	659.49	659.49	659.49	659.49	723.49	723.49	723.49	723.49
		787.49	787.49	787.49	787.49	787.49	851.49	851.49	851.49	851.49
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

20 30 00	1156+295	08 08 04	41.7	95.9	-3.9		-43.1	0	0	20 30 00
20 34 00	---	08 12 05	42.3	96.7	-3.8		-43.0	240	62	20 30 01

20 37 02	M84	08 15 07	26.4	104.5	-4.2		-36.6	107	62	20 37 02
20 47 02	---	08 25 09	27.8	106.7	-4.0		-36.1	600	216	20 37 03

20 47 34	M84	08 25 41	27.9	106.8	-4.0		-36.1	26	216	20 47 34
20 57 34	---	08 35 42	29.3	109.1	-3.8		-35.6	600	371	20 47 35

20 58 06	M84	08 36 14	29.4	109.2	-3.8		-35.6	26	371	20 58 06
21 08 06	---	08 46 16	30.8	111.5	-3.7		-34.9	600	526	20 58 07

21 08 50	M87	08 47 00	29.7	110.7	-3.8		-35.1	26	526	21 08 50
21 11 50	---	08 50 01	30.1	111.4	-3.7		-34.9	180	572	21 08 51

21 12 34	M84	08 50 45	31.4	112.5	-3.6		-34.7	26	572	21 12 34
21 22 34	---	09 00 47	32.8	114.9	-3.4		-33.9	600	727	21 12 35

21 23 06	M84	09 01 19	32.9	115.0	-3.4		-33.9	26	727	21 23 06
21 33 06	---	09 11 20	34.2	117.5	-3.3		-33.1	600	881	21 23 07

21 33 38	M84	09 11 52	34.3	117.6	-3.2		-33.1	26	881	21 33 38
21 43 38	---	09 21 54	35.6	120.1	-3.1		-32.2	600	1036	21 33 39

21 44 21	M87	09 22 37	34.5	119.2	-3.2		-32.4	26	1036	21 44 21
21 47 21	---	09 25 38	34.9	120.0	-3.1		-32.2	180	1082	21 44 22

21 48 05	M84	09 26 22	36.2	121.3	-3.0		-31.7	26	1082	21 48 05
21 58 05	---	09 36 23	37.5	123.9	-2.8		-30.7	600	1237	21 48 06

21 58 37	M84	09 36 55	37.5	124.0	-2.8		-30.7	26	1237	21 58 37
22 08 37	---	09 46 57	38.8	126.7	-2.7		-29.6	600	1391	21 58 38

Schedule for TORUN (Code Tr)

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Collimation and acceleration of the M84 jet: synergy with EVN+e-MERLIN a

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Tue 25 Feb 2025	Day 56	---							
----- Effelsberg pointing gap -----										
22 09 09	M84	09 47 29	38.8	126.9	-2.6		-29.5	26	1391	22 09 09
22 19 09	---	09 57 31	40.0	129.6	-2.5		-28.3	600	1546	22 09 10
22 19 53	M87	09 58 15	39.0	128.6	-2.6		-28.7	27	1546	22 19 53
22 22 53	---	10 01 15	39.3	129.4	-2.5		-28.4	180	1592	22 19 54
22 23 37	M84	10 02 00	40.5	130.9	-2.4		-27.7	27	1592	22 23 37
22 27 37	---	10 06 00	41.0	132.0	-2.3		-27.2	240	1654	22 23 38
22 28 09	M84	10 06 32	41.0	132.2	-2.3		-27.1	26	1654	22 28 09
22 38 09	---	10 16 34	42.1	135.1	-2.2		-25.7	600	1809	22 28 10
22 38 41	M84	10 17 06	42.2	135.3	-2.2		-25.7	26	1809	22 38 41
22 48 41	---	10 27 08	43.2	138.3	-2.0		-24.2	600	1963	22 38 42
22 49 13	M84	10 27 40	43.3	138.5	-2.0		-24.1	26	1963	22 49 13
22 59 13	---	10 37 41	44.2	141.6	-1.8		-22.5	600	2118	22 49 14
22 59 56	M87	10 38 25	43.3	140.3	-1.9		-23.1	27	2118	22 59 56
23 02 56	---	10 41 25	43.6	141.2	-1.8		-22.6	180	2164	22 59 57
23 03 40	M84	10 42 09	44.6	143.0	-1.7		-21.8	27	2164	23 03 40
23 13 40	---	10 52 11	45.5	146.2	-1.6		-20.0	600	2319	23 03 41
23 14 12	M84	10 52 43	45.6	146.4	-1.6		-19.9	26	2319	23 14 12
23 21 22	---	10 59 54	46.1	148.8	-1.4		-18.6	430	2430	23 14 13
23 22 06	M87	11 00 38	45.3	147.3	-1.5		-19.4	28	2430	23 22 06
23 25 06	---	11 03 39	45.5	148.3	-1.5		-18.8	180	2476	23 22 07
23 27 00	1156+295	11 05 33	63.9	151.6	-0.9		-19.1	31	2476	23 27 00
23 30 00	---	11 08 33	64.2	153.0	-0.9		-18.2	180	2522	23 27 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.K2048

Setup group: 7	Station: TORUN	Total bit rate: 2048
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 16	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00
	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00
Net SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF SB =	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
	3	11	3	11	4	12	4	12
BBC SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF =	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set:	7	Setup file default. Used with PCAL = off						
LO sum=	22139.49	22139.49	22139.49	22139.49	22203.49	22203.49	22203.49	22203.49
	22267.49	22267.49	22267.49	22267.49	22331.49	22331.49	22331.49	22331.49
BBC fr=	659.49	659.49	659.49	659.49	723.49	723.49	723.49	723.49
	787.49	787.49	787.49	787.49	851.49	851.49	851.49	851.49
Bandwd=	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Matching frequency sets:	7							

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error
	(B1950)	(J2000)		(mas)
* M84	12 22 31.582023	* 12 25 03.743339	12 26 21.597796	0.00
	13 09 49.76860	* 12 53 13.13921	12 44 40.85435	0.00
* M87	12 28 17.569282	* 12 30 49.423384	12 32 07.102746	0.00
	12 40 01.74886	* 12 23 28.04369	12 14 57.08491	0.00
* 1156+295	11 56 57.786213	* 11 59 31.833914	12 00 50.949045	0.00
	29 31 25.73872	* 29 14 43.82682	29 06 08.41973	0.00

PROPER MOTION AND B-FIELD OF H2O-WFPN I18443-0231

PI: *Roldan Cala*

Address: Instituto de Astrofisica de Andalucia, IAA-CSIC

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed 26 Feb 2025 Day 57 ---										
Next scan frequencies:		22125.26	22125.26	22125.26	22125.26	22125.26	22125.26	22189.26	22189.26	22189.26
		22253.26	22253.26	22253.26	22253.26	22253.26	22253.26	22317.26	22317.26	22317.26
Next BBC frequencies:		645.26	645.26	645.26	645.26	645.26	645.26	709.26	709.26	709.26
		773.26	773.26	773.26	773.26	773.26	773.26	837.26	837.26	837.26
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

02 30 00	J1751+0939	14 09 03	27.8	112.7	-3.7		-34.2	0	0	02 30 00
02 35 00	=1749+096	14 14 04	28.4	113.8	-3.6		-33.9	300	77	02 30 01

02 35 00	J1743-0350	14 14 04	18.0	123.3	-3.5		-30.2	-53	77	No stop
02 39 00	=1741-038	14 18 04	18.5	124.2	-3.5		-29.8	187	139	02 35 01

02 40 00	I18443	14 19 05	11.4	109.9	-4.5		-34.4	16	139	02 40 00
02 41 30	---	14 20 35	11.6	110.2	-4.5		-34.3	90	162	02 40 01

02 41 30	J1841-0348	14 20 35	11.3	112.2	-4.4		-33.9	-18	162	No stop
02 42 30	=1838-038	14 21 35	11.4	112.4	-4.4		-33.8	42	178	02 41 31

02 42 30	I18443	14 21 35	11.7	110.4	-4.4		-34.3	-17	178	No stop
02 44 00	---	14 23 05	11.9	110.8	-4.4		-34.2	73	201	02 42 31

02 44 00	J1841-0348	14 23 05	11.6	112.7	-4.3		-33.7	-18	201	No stop
02 45 00	=1838-038	14 24 05	11.7	112.9	-4.3		-33.7	42	216	02 44 01

02 45 00	I18443	14 24 05	12.1	111.0	-4.4		-34.1	-17	216	No stop
02 46 30	---	14 25 36	12.3	111.3	-4.4		-34.1	73	240	02 45 01

02 46 30	J1841-0348	14 25 36	11.9	113.2	-4.3		-33.6	-18	240	No stop
02 47 30	=1838-038	14 26 36	12.1	113.4	-4.3		-33.5	42	255	02 46 31

02 47 30	I18443	14 26 36	12.4	111.5	-4.4		-34.0	-17	255	No stop
02 49 00	---	14 28 06	12.7	111.8	-4.3		-33.9	73	278	02 47 31

02 49 30	J1841-0348	14 28 36	12.4	113.9	-4.2		-33.4	12	278	02 49 30
02 50 00	=1838-038	14 29 06	12.4	114.0	-4.2		-33.4	30	286	02 49 31

02 50 00	I18443	14 29 06	12.8	112.0	-4.3		-33.9	-17	286	No stop
02 51 30	---	14 30 37	13.0	112.3	-4.3		-33.8	73	309	02 50 01

02 51 30	J1841-0348	14 30 37	12.6	114.3	-4.2		-33.3	-18	309	No stop
02 52 30	=1838-038	14 31 37	12.8	114.5	-4.2		-33.2	42	325	02 51 31

Schedule for TORUN (Code Tr)

Page 3

Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day 57	---							
02 52 30	I18443	14 31 37	13.1	112.6	-4.3		-33.7	-17	325	No stop
02 54 00	---	14 33 07	13.3	112.9	-4.3		-33.6	73	348	02 52 31
02 54 00	J1841-0348	14 33 07	13.0	114.8	-4.2		-33.1	-18	348	No stop
02 55 00	=1838-038	14 34 07	13.1	115.0	-4.1		-33.0	42	363	02 54 01
02 55 00	I18443	14 34 07	13.5	113.1	-4.2		-33.6	-17	363	No stop
02 56 30	---	14 35 37	13.7	113.4	-4.2		-33.5	73	386	02 55 01
02 56 30	J1841-0348	14 35 37	13.3	115.4	-4.1		-32.9	-18	386	No stop
02 57 30	=1838-038	14 36 38	13.5	115.6	-4.1		-32.9	42	402	02 56 31
02 57 30	I18443	14 36 38	13.8	113.6	-4.2		-33.4	-17	402	No stop
02 59 00	---	14 38 08	14.0	114.0	-4.2		-33.3	73	425	02 57 31
02 59 30	J1841-0348	14 38 38	13.7	116.0	-4.1		-32.7	12	425	02 59 30
03 00 00	=1838-038	14 39 08	13.8	116.1	-4.1		-32.7	30	433	02 59 31
03 00 00	I18443	14 39 08	14.2	114.2	-4.2		-33.3	-17	433	No stop
03 01 30	---	14 40 38	14.4	114.5	-4.1		-33.2	73	456	03 00 01
03 01 30	J1841-0348	14 40 38	14.0	116.5	-4.0		-32.6	-18	456	No stop
03 02 30	=1838-038	14 41 38	14.1	116.7	-4.0		-32.5	42	471	03 01 31
03 02 30	I18443	14 41 38	14.5	114.7	-4.1		-33.1	-17	471	No stop
03 04 00	---	14 43 09	14.7	115.0	-4.1		-33.0	73	495	03 02 31
03 04 00	J1841-0348	14 43 09	14.3	117.0	-4.0		-32.4	-18	495	No stop
03 05 00	=1838-038	14 44 09	14.5	117.2	-4.0		-32.4	42	510	03 04 01
03 05 00	I18443	14 44 09	14.9	115.3	-4.1		-32.9	-17	510	No stop
03 06 30	---	14 45 39	15.1	115.6	-4.0		-32.8	73	533	03 05 01
03 06 30	J1841-0348	14 45 39	14.7	117.5	-4.0		-32.2	-18	533	No stop
03 07 30	=1838-038	14 46 39	14.8	117.8	-3.9		-32.2	42	549	03 06 31
03 07 30	I18443	14 46 39	15.2	115.8	-4.0		-32.8	-17	549	No stop
03 09 00	---	14 48 09	15.4	116.1	-4.0		-32.7	73	572	03 07 31
03 09 30	J1841-0348	14 48 40	15.1	118.2	-3.9		-32.0	12	572	03 09 30
03 10 00	=1838-038	14 49 10	15.1	118.3	-3.9		-32.0	30	580	03 09 31
03 10 00	I18443	14 49 10	15.5	116.3	-4.0		-32.6	-17	580	No stop
03 11 30	---	14 50 40	15.7	116.7	-4.0		-32.5	73	603	03 10 01
03 11 30	J1841-0348	14 50 40	15.3	118.6	-3.9		-31.9	-18	603	No stop
03 12 30	=1838-038	14 51 40	15.5	118.9	-3.9		-31.8	42	618	03 11 31

Schedule for TORUN (Code Tr)

Page 4

Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day 57	---							
03 12 30	I18443	14 51 40	15.9	116.9	-3.9		-32.4	-17	618	No stop
03 14 00	---	14 53 10	16.1	117.2	-3.9		-32.3	73	642	03 12 31
03 14 00	J1841-0348	14 53 10	15.7	119.2	-3.8		-31.7	-18	642	No stop
03 15 00	=1838-038	14 54 10	15.8	119.4	-3.8		-31.6	42	657	03 14 01
03 15 00	I18443	14 54 10	16.2	117.4	-3.9		-32.2	-17	657	No stop
03 16 30	---	14 55 41	16.4	117.8	-3.9		-32.1	73	680	03 15 01
03 16 30	J1841-0348	14 55 41	16.0	119.7	-3.8		-31.5	-18	680	No stop
03 17 30	=1838-038	14 56 41	16.1	120.0	-3.8		-31.4	42	696	03 16 31
03 17 30	I18443	14 56 41	16.5	118.0	-3.9		-32.1	-17	696	No stop
03 19 00	---	14 58 11	16.7	118.3	-3.8		-31.9	73	719	03 17 31
03 19 30	J1841-0348	14 58 41	16.4	120.4	-3.7		-31.3	12	719	03 19 30
03 20 00	=1838-038	14 59 11	16.4	120.5	-3.7		-31.2	30	727	03 19 31
03 20 00	I18443	14 59 11	16.9	118.6	-3.8		-31.9	-17	727	No stop
03 21 30	---	15 00 41	17.1	118.9	-3.8		-31.8	73	750	03 20 01
03 21 30	J1841-0348	15 00 41	16.6	120.9	-3.7		-31.1	-18	750	No stop
03 22 30	=1838-038	15 01 42	16.8	121.1	-3.7		-31.0	42	765	03 21 31
03 22 30	I18443	15 01 42	17.2	119.1	-3.8		-31.7	-17	765	No stop
03 24 00	---	15 03 12	17.4	119.4	-3.8		-31.6	73	788	03 22 31
03 24 00	J1841-0348	15 03 12	17.0	121.4	-3.7		-30.9	-18	788	No stop
03 25 00	=1838-038	15 04 12	17.1	121.6	-3.6		-30.8	42	804	03 24 01
03 25 00	I18443	15 04 12	17.5	119.7	-3.7		-31.5	-17	804	No stop
03 26 30	---	15 05 42	17.7	120.0	-3.7		-31.4	73	827	03 25 01
03 26 30	J1841-0348	15 05 42	17.3	122.0	-3.6		-30.7	-18	827	No stop
03 27 30	=1838-038	15 06 42	17.4	122.2	-3.6		-30.6	42	842	03 26 31
03 27 30	I18443	15 06 42	17.9	120.2	-3.7		-31.3	-17	842	No stop
03 29 00	---	15 08 13	18.1	120.6	-3.7		-31.2	73	866	03 27 31
03 29 30	J1841-0348	15 08 43	17.7	122.7	-3.6		-30.4	12	866	03 29 30
03 30 00	=1838-038	15 09 13	17.7	122.8	-3.6		-30.4	30	873	03 29 31
03 30 00	I18443	15 09 13	18.2	120.8	-3.7		-31.1	-17	873	No stop
03 31 30	---	15 10 43	18.4	121.1	-3.6		-31.0	73	897	03 30 01

Schedule for TORUN (Code Tr)

Page 5

Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
03 32 30	J1743-0350	15 11 43	24.6	137.0	-2.6		-24.2	13	897	03 32 30
03 36 30	=1741-038	15 15 44	25.0	138.1	-2.5		-23.7	240	958	03 32 31
03 37 00	I18443	15 16 14	19.1	122.4	-3.5		-30.5	-16	958	03 37 00
03 38 30	---	15 17 44	19.3	122.7	-3.5		-30.4	74	982	03 37 01
03 38 30	J1841-0348	15 17 44	18.8	124.7	-3.4		-29.7	-18	982	No stop
03 39 30	=1838-038	15 18 44	18.9	124.9	-3.4		-29.6	42	997	03 38 31
03 39 30	I18443	15 18 44	19.4	123.0	-3.5		-30.3	-17	997	No stop
03 41 00	---	15 20 15	19.6	123.3	-3.5		-30.2	73	1020	03 39 31
03 41 00	J1841-0348	15 20 15	19.1	125.3	-3.4		-29.4	-18	1020	No stop
03 42 00	=1838-038	15 21 15	19.2	125.5	-3.4		-29.3	42	1036	03 41 01
03 42 00	I18443	15 21 15	19.7	123.5	-3.5		-30.1	-17	1036	No stop
03 43 30	---	15 22 45	19.9	123.9	-3.4		-29.9	73	1059	03 42 01
03 43 30	J1841-0348	15 22 45	19.4	125.9	-3.3		-29.2	-18	1059	No stop
03 44 30	=1838-038	15 23 45	19.5	126.1	-3.3		-29.1	42	1074	03 43 31
03 44 30	I18443	15 23 45	20.0	124.1	-3.4		-29.8	-17	1074	No stop
03 46 00	---	15 25 15	20.2	124.5	-3.4		-29.7	73	1098	03 44 31
03 46 30	J1841-0348	15 25 46	19.8	126.6	-3.3		-28.9	12	1098	03 46 30
03 47 00	=1838-038	15 26 16	19.8	126.7	-3.3		-28.9	30	1105	03 46 31
03 47 00	I18443	15 26 16	20.3	124.7	-3.4		-29.6	-17	1105	No stop
03 48 30	---	15 27 46	20.5	125.0	-3.3		-29.5	73	1128	03 47 01
03 48 30	J1841-0348	15 27 46	20.0	127.0	-3.3		-28.7	-18	1128	No stop
03 49 30	=1838-038	15 28 46	20.1	127.3	-3.2		-28.6	42	1144	03 48 31
03 49 30	I18443	15 28 46	20.6	125.3	-3.3		-29.4	-17	1144	No stop
03 51 00	---	15 30 16	20.8	125.6	-3.3		-29.2	73	1167	03 49 31
03 51 00	J1841-0348	15 30 16	20.3	127.6	-3.2		-28.5	-18	1167	No stop
03 52 00	=1838-038	15 31 16	20.4	127.8	-3.2		-28.4	42	1183	03 51 01
03 52 00	I18443	15 31 16	20.9	125.9	-3.3		-29.2	-17	1183	No stop
03 53 30	---	15 32 47	21.1	126.2	-3.3		-29.0	73	1206	03 52 01
03 53 30	J1841-0348	15 32 47	20.6	128.2	-3.2		-28.2	-18	1206	No stop
03 54 30	=1838-038	15 33 47	20.7	128.4	-3.1		-28.1	42	1221	03 53 31

Schedule for TORUN (Code Tr)

Page 6

Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
03 54 30	I18443	15 33 47	21.3	126.4	-3.2		-28.9	-17	1221	No stop
03 56 00	---	15 35 17	21.4	126.8	-3.2		-28.8	73	1244	03 54 31
03 56 30	J1841-0348	15 35 47	21.0	128.9	-3.1		-27.9	12	1244	03 56 30
03 57 00	=1838-038	15 36 17	21.0	129.0	-3.1		-27.9	30	1252	03 56 31
03 57 00	I18443	15 36 17	21.6	127.0	-3.2		-28.7	-17	1252	No stop
03 58 30	---	15 37 48	21.7	127.4	-3.2		-28.5	73	1275	03 57 01
03 58 30	J1841-0348	15 37 48	21.2	129.4	-3.1		-27.7	-18	1275	No stop
03 59 30	=1838-038	15 38 48	21.3	129.6	-3.1		-27.6	42	1291	03 58 31
03 59 30	I18443	15 38 48	21.9	127.6	-3.2		-28.4	-17	1291	No stop
04 01 00	---	15 40 18	22.0	128.0	-3.1		-28.3	73	1314	03 59 31
04 01 00	J1841-0348	15 40 18	21.5	130.0	-3.0		-27.5	-18	1314	No stop
04 02 00	=1838-038	15 41 18	21.6	130.2	-3.0		-27.4	42	1329	04 01 01
04 02 00	I18443	15 41 18	22.1	128.2	-3.1		-28.2	-17	1329	No stop
04 03 30	---	15 42 48	22.3	128.6	-3.1		-28.0	73	1353	04 02 01
04 03 30	J1841-0348	15 42 48	21.8	130.6	-3.0		-27.2	-18	1353	No stop
04 04 30	=1838-038	15 43 49	21.9	130.8	-3.0		-27.1	42	1368	04 03 31
04 04 30	I18443	15 43 49	22.4	128.8	-3.1		-27.9	-17	1368	No stop
04 06 00	---	15 45 19	22.6	129.2	-3.0		-27.8	73	1391	04 04 31
04 06 30	J1841-0348	15 45 49	22.1	131.3	-2.9		-26.9	12	1391	04 06 30
04 07 00	=1838-038	15 46 19	22.2	131.4	-2.9		-26.8	30	1399	04 06 31
04 07 00	I18443	15 46 19	22.7	129.4	-3.0		-27.7	-17	1399	No stop
04 08 30	---	15 47 49	22.9	129.8	-3.0		-27.5	73	1422	04 07 01
04 08 30	J1841-0348	15 47 49	22.3	131.8	-2.9		-26.7	-18	1422	No stop
04 09 30	=1838-038	15 48 49	22.4	132.0	-2.9		-26.6	42	1438	04 08 31
04 09 30	I18443	15 48 49	23.0	130.0	-3.0		-27.4	-17	1438	No stop
04 11 00	---	15 50 20	23.2	130.4	-3.0		-27.2	73	1461	04 09 31
04 11 00	J1841-0348	15 50 20	22.6	132.4	-2.9		-26.4	-18	1461	No stop
04 12 00	=1838-038	15 51 20	22.7	132.6	-2.9		-26.3	42	1476	04 11 01
04 12 00	I18443	15 51 20	23.3	130.6	-2.9		-27.1	-17	1476	No stop
04 13 30	---	15 52 50	23.5	131.0	-2.9		-27.0	73	1499	04 12 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
04 13 30	J1841-0348	15 52 50	22.9	133.0	-2.8		-26.1	-18	1499	No stop
04 14 30	=1838-038	15 53 50	23.0	133.2	-2.8		-26.0	42	1515	04 13 31
04 14 30	I18443	15 53 50	23.6	131.2	-2.9		-26.9	-17	1515	No stop
04 16 00	---	15 55 20	23.8	131.6	-2.9		-26.7	73	1538	04 14 31
04 16 30	J1841-0348	15 55 51	23.2	133.7	-2.8		-25.8	12	1538	04 16 30
04 17 00	=1838-038	15 56 21	23.3	133.8	-2.8		-25.7	30	1546	04 16 31
04 17 00	I18443	15 56 21	23.9	131.8	-2.9		-26.6	-17	1546	No stop
04 18 30	---	15 57 51	24.0	132.2	-2.8		-26.4	73	1569	04 17 01
04 18 30	J1841-0348	15 57 51	23.4	134.2	-2.7		-25.6	-18	1569	No stop
04 19 30	=1838-038	15 58 51	23.5	134.5	-2.7		-25.4	42	1584	04 18 31
04 19 30	I18443	15 58 51	24.2	132.5	-2.8		-26.3	-17	1584	No stop
04 21 00	---	16 00 21	24.3	132.8	-2.8		-26.2	73	1608	04 19 31
04 21 00	J1841-0348	16 00 21	23.7	134.8	-2.7		-25.3	-18	1608	No stop
04 22 00	=1838-038	16 01 21	23.8	135.1	-2.7		-25.2	42	1623	04 21 01
04 22 00	I18443	16 01 21	24.4	133.1	-2.8		-26.0	-18	1623	No stop
04 23 30	---	16 02 52	24.6	133.4	-2.8		-25.9	72	1646	04 22 01
04 23 30	J1841-0348	16 02 52	24.0	135.4	-2.7		-25.0	-18	1646	No stop
04 24 30	=1838-038	16 03 52	24.1	135.7	-2.6		-24.9	42	1662	04 23 31
04 24 30	I18443	16 03 52	24.7	133.7	-2.7		-25.8	-18	1662	No stop
04 26 00	---	16 05 22	24.9	134.1	-2.7		-25.6	72	1685	04 24 31
04 26 30	J1841-0348	16 05 52	24.3	136.2	-2.6		-24.6	12	1685	04 26 30
04 27 00	=1838-038	16 06 22	24.3	136.3	-2.6		-24.6	30	1693	04 26 31
04 27 00	I18443	16 06 22	25.0	134.3	-2.7		-25.5	-18	1693	No stop
04 28 30	---	16 07 52	25.1	134.7	-2.7		-25.3	72	1716	04 27 01
04 29 00	J1751+0939	16 08 23	41.7	144.5	-1.7		-20.7	-46	1716	04 29 00
04 34 00	=1749+096	16 13 23	42.2	146.0	-1.7		-19.9	254	1793	04 29 01
04 35 00	J1743-0350	16 14 24	29.9	153.6	-1.5		-15.5	0	1793	04 35 00
04 39 00	=1741-038	16 18 24	30.2	154.7	-1.4		-14.9	240	1855	04 35 01
04 40 00	I18443	16 19 24	26.3	137.6	-2.5		-23.9	11	1855	04 40 00
04 41 30	---	16 20 55	26.5	138.0	-2.5		-23.7	90	1878	04 40 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Wed	26 Feb 2025	Day	57	---					
04 41 30	J1841-0348	16 20 55	25.8	140.0	-2.4		-22.8	-18	1878	No stop
04 42 30	=1838-038	16 21 55	25.9	140.2	-2.3		-22.6	42	1894	04 41 31
04 42 30	I18443	16 21 55	26.6	138.2	-2.4		-23.6	-18	1894	No stop
04 44 00	---	16 23 25	26.7	138.6	-2.4		-23.4	72	1917	04 42 31
04 44 00	J1841-0348	16 23 25	26.0	140.6	-2.3		-22.4	-18	1917	No stop
04 45 00	=1838-038	16 24 25	26.1	140.9	-2.3		-22.3	42	1932	04 44 01
04 45 00	I18443	16 24 25	26.8	138.9	-2.4		-23.3	-18	1932	No stop
04 46 30	---	16 25 55	27.0	139.3	-2.4		-23.1	72	1955	04 45 01
04 46 30	J1841-0348	16 25 55	26.3	141.3	-2.3		-22.1	-18	1955	No stop
04 47 30	=1838-038	16 26 56	26.4	141.5	-2.3		-22.0	42	1971	04 46 31
04 47 30	I18443	16 26 56	27.1	139.5	-2.4		-23.0	-18	1971	No stop
04 49 00	---	16 28 26	27.2	139.9	-2.3		-22.8	72	1994	04 47 31
04 49 30	J1841-0348	16 28 56	26.6	142.0	-2.2		-21.7	12	1994	04 49 30
04 50 00	=1838-038	16 29 26	26.6	142.2	-2.2		-21.7	30	2002	04 49 31
04 50 00	I18443	16 29 26	27.3	140.2	-2.3		-22.6	-17	2002	No stop
04 51 30	---	16 30 56	27.5	140.6	-2.3		-22.4	73	2025	04 50 01
04 51 30	J1841-0348	16 30 56	26.7	142.6	-2.2		-21.5	-18	2025	No stop
04 52 30	=1838-038	16 31 56	26.8	142.8	-2.2		-21.3	42	2040	04 51 31
04 52 30	I18443	16 31 56	27.6	140.8	-2.3		-22.3	-17	2040	No stop
04 54 00	---	16 33 27	27.7	141.2	-2.2		-22.1	73	2064	04 52 31
04 54 00	J1841-0348	16 33 27	27.0	143.2	-2.2		-21.1	-18	2064	No stop
04 55 00	=1838-038	16 34 27	27.1	143.5	-2.1		-21.0	42	2079	04 54 01
04 55 00	I18443	16 34 27	27.8	141.5	-2.2		-22.0	-17	2079	No stop
04 56 30	---	16 35 57	27.9	141.9	-2.2		-21.8	73	2102	04 55 01
04 56 30	J1841-0348	16 35 57	27.2	143.9	-2.1		-20.8	-18	2102	No stop
04 57 30	=1838-038	16 36 57	27.3	144.1	-2.1		-20.6	42	2118	04 56 31
04 57 30	I18443	16 36 57	28.0	142.1	-2.2		-21.6	-17	2118	No stop
04 59 00	---	16 38 27	28.2	142.5	-2.2		-21.4	73	2141	04 57 31
04 59 30	J1841-0348	16 38 58	27.4	144.7	-2.1		-20.4	12	2141	04 59 30
05 00 00	=1838-038	16 39 28	27.5	144.8	-2.1		-20.3	30	2149	04 59 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
05 00 00	I18443	16 39 28	28.3	142.8	-2.1		-21.3	-17	2149	No stop
05 01 30	---	16 40 58	28.4	143.2	-2.1		-21.1	73	2172	05 00 01
05 01 30	J1841-0348	16 40 58	27.6	145.2	-2.0		-20.1	-18	2172	No stop
05 02 30	=1838-038	16 41 58	27.7	145.5	-2.0		-19.9	42	2187	05 01 31
05 02 30	I18443	16 41 58	28.5	143.5	-2.1		-21.0	-17	2187	No stop
05 04 00	---	16 43 28	28.6	143.9	-2.1		-20.8	73	2211	05 02 31
05 04 00	J1841-0348	16 43 28	27.8	145.9	-2.0		-19.7	-18	2211	No stop
05 05 00	=1838-038	16 44 28	27.9	146.1	-2.0		-19.6	42	2226	05 04 01
05 05 00	I18443	16 44 28	28.7	144.1	-2.1		-20.6	-17	2226	No stop
05 06 30	---	16 45 59	28.8	144.5	-2.0		-20.4	73	2249	05 05 01
05 06 30	J1841-0348	16 45 59	28.0	146.5	-1.9		-19.4	-18	2249	No stop
05 07 30	=1838-038	16 46 59	28.1	146.8	-1.9		-19.2	42	2265	05 06 31
05 07 30	I18443	16 46 59	28.9	144.8	-2.0		-20.3	-17	2265	No stop
05 09 00	---	16 48 29	29.1	145.2	-2.0		-20.1	73	2288	05 07 31
05 09 30	J1841-0348	16 48 59	28.3	147.3	-1.9		-19.0	12	2288	05 09 30
05 10 00	=1838-038	16 49 29	28.3	147.5	-1.9		-18.9	30	2296	05 09 31
05 10 00	I18443	16 49 29	29.1	145.5	-2.0		-19.9	-17	2296	No stop
05 11 30	---	16 51 00	29.3	145.9	-2.0		-19.7	73	2319	05 10 01
05 11 30	J1841-0348	16 51 00	28.5	147.9	-1.9		-18.7	-18	2319	No stop
05 12 30	=1838-038	16 52 00	28.5	148.1	-1.8		-18.5	42	2334	05 11 31
05 12 30	I18443	16 52 00	29.4	146.1	-1.9		-19.6	-17	2334	No stop
05 14 00	---	16 53 30	29.5	146.6	-1.9		-19.3	73	2357	05 12 31
05 14 00	J1841-0348	16 53 30	28.7	148.5	-1.8		-18.3	-18	2357	No stop
05 15 00	=1838-038	16 54 30	28.7	148.8	-1.8		-18.2	42	2373	05 14 01
05 15 00	I18443	16 54 30	29.6	146.8	-1.9		-19.2	-17	2373	No stop
05 16 30	---	16 56 00	29.7	147.2	-1.9		-19.0	73	2396	05 15 01
05 16 30	J1841-0348	16 56 00	28.8	149.2	-1.8		-17.9	-18	2396	No stop
05 17 30	=1838-038	16 57 01	28.9	149.5	-1.8		-17.8	42	2411	05 16 31
05 17 30	I18443	16 57 01	29.8	147.5	-1.9		-18.8	-17	2411	No stop
05 19 00	---	16 58 31	29.9	147.9	-1.8		-18.6	73	2435	05 17 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
05 19 30	J1841-0348	16 59 01	29.1	150.0	-1.7		-17.5	12	2435	05 19 30
05 20 00	=1838-038	16 59 31	29.1	150.2	-1.7		-17.4	30	2442	05 19 31
05 20 00	I18443	16 59 31	30.0	148.2	-1.8		-18.5	-17	2442	No stop
05 21 30	---	17 01 01	30.1	148.6	-1.8		-18.2	73	2466	05 20 01
05 21 30	J1841-0348	17 01 01	29.2	150.6	-1.7		-17.2	-18	2466	No stop
05 22 30	=1838-038	17 02 01	29.3	150.9	-1.7		-17.0	42	2481	05 21 31
05 22 30	I18443	17 02 01	30.2	148.9	-1.8		-18.1	-17	2481	No stop
05 24 00	---	17 03 32	30.3	149.3	-1.7		-17.9	73	2504	05 22 31
05 24 00	J1841-0348	17 03 32	29.4	151.3	-1.7		-16.8	-18	2504	No stop
05 25 00	=1838-038	17 04 32	29.5	151.5	-1.6		-16.7	42	2520	05 24 01
05 25 00	I18443	17 04 32	30.4	149.6	-1.7		-17.7	-17	2520	No stop
05 26 30	---	17 06 02	30.5	150.0	-1.7		-17.5	73	2543	05 25 01
05 26 30	J1841-0348	17 06 02	29.6	152.0	-1.6		-16.4	-18	2543	No stop
05 27 30	=1838-038	17 07 02	29.7	152.2	-1.6		-16.3	42	2558	05 26 31
05 27 30	I18443	17 07 02	30.5	150.3	-1.7		-17.3	-17	2558	No stop
05 29 00	---	17 08 32	30.7	150.7	-1.7		-17.1	73	2582	05 27 31
05 29 30	J1841-0348	17 09 02	29.8	152.8	-1.6		-16.0	12	2582	05 29 30
05 30 00	=1838-038	17 09 33	29.8	152.9	-1.6		-15.9	30	2589	05 29 31
05 30 00	I18443	17 09 33	30.7	151.0	-1.6		-17.0	-17	2589	No stop
05 31 30	---	17 11 03	30.8	151.4	-1.6		-16.7	73	2612	05 30 01
05 32 30	J1743-0350	17 12 03	32.6	170.1	-0.6		-5.9	8	2612	05 32 30
05 36 30	=1741-038	17 16 04	32.7	171.3	-0.5		-5.2	240	2674	05 32 31
05 37 30	I18443	17 17 04	31.3	153.1	-1.5		-15.8	8	2674	05 37 30
05 39 00	---	17 18 34	31.4	153.5	-1.5		-15.6	90	2697	05 37 31
05 39 00	J1841-0348	17 18 34	30.4	155.4	-1.4		-14.5	-18	2697	No stop
05 40 00	=1838-038	17 19 34	30.5	155.7	-1.4		-14.3	42	2713	05 39 01
05 40 00	I18443	17 19 34	31.4	153.8	-1.5		-15.4	-17	2713	No stop
05 41 30	---	17 21 04	31.5	154.2	-1.5		-15.2	73	2736	05 40 01
05 41 30	J1841-0348	17 21 04	30.6	156.1	-1.4		-14.1	-18	2736	No stop
05 42 30	=1838-038	17 22 05	30.6	156.4	-1.3		-13.9	42	2752	05 41 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day 57	---							
05 42 30	I18443	17 22 05	31.6	154.5	-1.4		-15.0	-17	2752	No stop
05 44 00	---	17 23 35	31.7	154.9	-1.4		-14.8	73	2775	05 42 31
05 44 00	J1841-0348	17 23 35	30.7	156.9	-1.3		-13.7	-18	2775	No stop
05 45 00	=1838-038	17 24 35	30.8	157.1	-1.3		-13.5	42	2790	05 44 01
05 45 00	I18443	17 24 35	31.8	155.2	-1.4		-14.6	-17	2790	No stop
05 46 30	---	17 26 05	31.9	155.6	-1.4		-14.4	73	2813	05 45 01
05 47 00	J1841-0348	17 26 35	30.9	157.7	-1.3		-13.2	12	2813	05 47 00
05 47 30	=1838-038	17 27 05	30.9	157.8	-1.3		-13.1	30	2821	05 47 01
05 47 30	I18443	17 27 05	31.9	155.9	-1.4		-14.2	-17	2821	No stop
05 49 00	---	17 28 36	32.0	156.3	-1.3		-14.0	73	2844	05 47 31
05 49 00	J1841-0348	17 28 36	31.0	158.3	-1.2		-12.9	-18	2844	No stop
05 50 00	=1838-038	17 29 36	31.1	158.6	-1.2		-12.7	42	2860	05 49 01
05 50 00	I18443	17 29 36	32.1	156.6	-1.3		-13.8	-17	2860	No stop
05 51 30	---	17 31 06	32.2	157.0	-1.3		-13.6	73	2883	05 50 01
05 51 30	J1841-0348	17 31 06	31.1	159.0	-1.2		-12.5	-18	2883	No stop
05 52 30	=1838-038	17 32 06	31.2	159.3	-1.2		-12.3	42	2898	05 51 31
05 52 30	I18443	17 32 06	32.2	157.3	-1.3		-13.4	-17	2898	No stop
05 54 00	---	17 33 37	32.3	157.8	-1.2		-13.1	73	2922	05 52 31
05 54 00	J1841-0348	17 33 37	31.3	159.7	-1.2		-12.1	-18	2922	No stop
05 55 00	=1838-038	17 34 37	31.3	160.0	-1.1		-11.9	42	2937	05 54 01
05 55 00	I18443	17 34 37	32.4	158.1	-1.2		-13.0	-17	2937	No stop
05 56 30	---	17 36 07	32.4	158.5	-1.2		-12.7	73	2960	05 55 01
05 57 00	J1841-0348	17 36 37	31.4	160.6	-1.1		-11.6	12	2960	05 57 00
05 57 30	=1838-038	17 37 07	31.5	160.7	-1.1		-11.5	30	2968	05 57 01
05 57 30	I18443	17 37 07	32.5	158.8	-1.2		-12.6	-17	2968	No stop
05 59 00	---	17 38 37	32.6	159.2	-1.2		-12.3	73	2991	05 57 31
05 59 00	J1841-0348	17 38 37	31.5	161.1	-1.1		-11.2	-18	2991	No stop
06 00 00	=1838-038	17 39 38	31.6	161.4	-1.1		-11.1	42	3007	05 59 01
06 00 00	I18443	17 39 38	32.6	159.5	-1.1		-12.2	-17	3007	No stop
06 01 30	---	17 41 08	32.7	159.9	-1.1		-11.9	73	3030	06 00 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
06 01 30	J1841-0348	17 41 08	31.7	161.9	-1.0		-10.8	-18	3030	No stop
06 02 30	=1838-038	17 42 08	31.7	162.1	-1.0		-10.6	42	3045	06 01 31
06 02 30	I18443	17 42 08	32.8	160.2	-1.1		-11.7	-17	3045	No stop
06 04 00	---	17 43 38	32.8	160.7	-1.1		-11.5	73	3068	06 02 31
06 04 00	J1841-0348	17 43 38	31.8	162.6	-1.0		-10.4	-18	3068	No stop
06 05 00	=1838-038	17 44 38	31.8	162.9	-1.0		-10.2	42	3084	06 04 01
06 05 00	I18443	17 44 38	32.9	161.0	-1.1		-11.3	-17	3084	No stop
06 06 30	---	17 46 09	33.0	161.4	-1.0		-11.1	73	3107	06 05 01
06 07 00	J1841-0348	17 46 39	31.9	163.4	-0.9		-9.9	12	3107	06 07 00
06 07 30	=1838-038	17 47 09	31.9	163.6	-0.9		-9.8	30	3115	06 07 01
06 07 30	I18443	17 47 09	33.0	161.7	-1.0		-10.9	-17	3115	No stop
06 09 00	---	17 48 39	33.1	162.1	-1.0		-10.6	73	3138	06 07 31
06 09 00	J1841-0348	17 48 39	32.0	164.0	-0.9		-9.5	-18	3138	No stop
06 10 00	=1838-038	17 49 39	32.0	164.3	-0.9		-9.4	42	3153	06 09 01
06 10 00	I18443	17 49 39	33.1	162.4	-1.0		-10.5	-17	3153	No stop
06 11 30	---	17 51 09	33.2	162.9	-1.0		-10.2	73	3177	06 10 01
06 11 30	J1841-0348	17 51 09	32.1	164.8	-0.9		-9.1	-17	3177	No stop
06 12 30	=1838-038	17 52 10	32.1	165.0	-0.8		-8.9	43	3192	06 11 31
06 12 30	I18443	17 52 10	33.2	163.2	-0.9		-10.0	-17	3192	No stop
06 14 00	---	17 53 40	33.3	163.6	-0.9		-9.8	73	3215	06 12 31
06 14 00	J1841-0348	17 53 40	32.2	165.5	-0.8		-8.7	-17	3215	No stop
06 15 00	=1838-038	17 54 40	32.2	165.8	-0.8		-8.5	43	3231	06 14 01
06 15 00	I18443	17 54 40	33.3	163.9	-0.9		-9.6	-17	3231	No stop
06 16 30	---	17 56 10	33.4	164.3	-0.9		-9.3	73	3254	06 15 01
06 17 00	J1841-0348	17 56 40	32.3	166.4	-0.8		-8.2	13	3254	06 17 00
06 17 30	=1838-038	17 57 10	32.3	166.5	-0.8		-8.1	30	3262	06 17 01
06 17 30	I18443	17 57 10	33.4	164.6	-0.9		-9.2	-17	3262	No stop
06 19 00	---	17 58 41	33.5	165.1	-0.8		-8.9	73	3285	06 17 31
06 19 00	J1841-0348	17 58 41	32.4	166.9	-0.7		-7.8	-17	3285	No stop
06 20 00	=1838-038	17 59 41	32.4	167.2	-0.7		-7.6	43	3300	06 19 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
06 20 00	I18443	17 59 41	33.5	165.4	-0.8		-8.7	-17	3300	No stop
06 21 30	---	18 01 11	33.6	165.8	-0.8		-8.5	73	3324	06 20 01
06 21 30	J1841-0348	18 01 11	32.4	167.7	-0.7		-7.4	-17	3324	No stop
06 22 30	=1838-038	18 02 11	32.5	168.0	-0.7		-7.2	43	3339	06 21 31
06 22 30	I18443	18 02 11	33.6	166.1	-0.8		-8.3	-17	3339	No stop
06 24 00	---	18 03 41	33.7	166.6	-0.7		-8.0	73	3362	06 22 31
06 24 00	J1841-0348	18 03 41	32.5	168.4	-0.7		-6.9	-17	3362	No stop
06 25 00	=1838-038	18 04 42	32.6	168.7	-0.6		-6.8	43	3378	06 24 01
06 25 00	I18443	18 04 42	33.7	166.9	-0.7		-7.8	-17	3378	No stop
06 26 30	---	18 06 12	33.8	167.3	-0.7		-7.6	73	3401	06 25 01
06 27 00	J1841-0348	18 06 42	32.6	169.3	-0.6		-6.4	13	3401	06 27 00
06 27 30	=1838-038	18 07 12	32.6	169.4	-0.6		-6.3	30	3409	06 27 01
06 27 30	I18443	18 07 12	33.8	167.6	-0.7		-7.4	-18	3409	No stop
06 29 00	---	18 08 42	33.8	168.1	-0.7		-7.1	72	3432	06 27 31
06 29 30	J1743-0350	18 09 12	32.8	187.1	0.4		4.3	-23	3432	06 29 30
06 33 30	=1741-038	18 13 13	32.8	188.3	0.5		5.0	217	3494	06 29 31
06 34 30	I18443	18 14 13	34.0	169.7	-0.6		-6.2	8	3494	06 34 30
06 36 00	---	18 15 43	34.0	170.2	-0.5		-5.9	90	3517	06 34 31
06 36 00	J1841-0348	18 15 43	32.8	172.0	-0.5		-4.8	-18	3517	No stop
06 37 00	=1838-038	18 16 44	32.8	172.3	-0.4		-4.6	42	3532	06 36 01
06 37 00	I18443	18 16 44	34.1	170.5	-0.5		-5.7	-18	3532	No stop
06 38 30	---	18 18 14	34.1	170.9	-0.5		-5.4	72	3555	06 37 01
06 38 30	J1841-0348	18 18 14	32.9	172.7	-0.4		-4.4	-18	3555	No stop
06 39 30	=1838-038	18 19 14	32.9	173.0	-0.4		-4.2	42	3571	06 38 31
06 39 30	I18443	18 19 14	34.1	171.2	-0.5		-5.3	-18	3571	No stop
06 41 00	---	18 20 44	34.2	171.7	-0.5		-5.0	72	3594	06 39 31
06 41 00	J1841-0348	18 20 44	32.9	173.4	-0.4		-3.9	-18	3594	No stop
06 42 00	=1838-038	18 21 44	32.9	173.7	-0.4		-3.8	42	3610	06 41 01
06 42 00	I18443	18 21 44	34.2	172.0	-0.4		-4.8	-18	3610	No stop
06 43 30	---	18 23 15	34.2	172.4	-0.4		-4.5	72	3633	06 42 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

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Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
06 44 00	J1841-0348	18 23 45	33.0	174.3	-0.3		-3.4	12	3633	06 44 00
06 44 30	=1838-038	18 24 15	33.0	174.5	-0.3		-3.3	30	3640	06 44 01
06 44 30	I18443	18 24 15	34.2	172.7	-0.4		-4.4	-18	3640	No stop
06 46 00	---	18 25 45	34.3	173.2	-0.4		-4.1	72	3664	06 44 31
06 46 00	J1841-0348	18 25 45	33.0	174.9	-0.3		-3.0	-18	3664	No stop
06 47 00	=1838-038	18 26 45	33.0	175.2	-0.3		-2.9	42	3679	06 46 01
06 47 00	I18443	18 26 45	34.3	173.5	-0.4		-3.9	-18	3679	No stop
06 48 30	---	18 28 15	34.3	173.9	-0.3		-3.6	72	3702	06 47 01
06 48 30	J1841-0348	18 28 15	33.0	175.7	-0.2		-2.6	-18	3702	No stop
06 49 30	=1838-038	18 29 16	33.0	176.0	-0.2		-2.4	42	3718	06 48 31
06 49 30	I18443	18 29 16	34.3	174.2	-0.3		-3.5	-18	3718	No stop
06 51 00	---	18 30 46	34.3	174.7	-0.3		-3.2	72	3741	06 49 31
06 51 00	J1841-0348	18 30 46	33.1	176.4	-0.2		-2.1	-18	3741	No stop
06 52 00	=1838-038	18 31 46	33.1	176.7	-0.2		-2.0	42	3756	06 51 01
06 52 00	I18443	18 31 46	34.4	175.0	-0.3		-3.0	-18	3756	No stop
06 53 30	---	18 33 16	34.4	175.4	-0.3		-2.7	72	3780	06 52 01
06 54 00	J1841-0348	18 33 46	33.1	177.3	-0.1		-1.6	12	3780	06 54 00
06 54 30	=1838-038	18 34 16	33.1	177.5	-0.1		-1.5	30	3787	06 54 01
06 54 30	I18443	18 34 16	34.4	175.8	-0.2		-2.6	-18	3787	No stop
06 56 00	---	18 35 47	34.4	176.2	-0.2		-2.3	72	3810	06 54 31
06 56 00	J1841-0348	18 35 47	33.1	177.9	-0.1		-1.3	-18	3810	No stop
06 57 00	=1838-038	18 36 47	33.1	178.2	-0.1		-1.1	42	3826	06 56 01
06 57 00	I18443	18 36 47	34.4	176.5	-0.2		-2.1	-18	3826	No stop
06 58 30	---	18 38 17	34.4	177.0	-0.2		-1.8	72	3849	06 57 01
06 58 30	J1841-0348	18 38 17	33.1	178.7	-0.1		-0.8	-18	3849	No stop
06 59 30	=1838-038	18 39 17	33.1	179.0	-0.1		-0.6	42	3865	06 58 31
06 59 30	I18443	18 39 17	34.4	177.3	-0.2		-1.6	-18	3865	No stop
07 01 00	---	18 40 48	34.4	177.7	-0.1		-1.4	72	3888	06 59 31
07 01 00	J1841-0348	18 40 48	33.1	179.4	-0.0		-0.4	-18	3888	No stop
07 02 00	=1838-038	18 41 48	33.1	179.7	-0.0		-0.2	42	3903	07 01 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
07 02 00	I18443	18 41 48	34.4	178.0	-0.1		-1.2	-18	3903	No stop
07 03 30	---	18 43 18	34.5	178.5	-0.1		-0.9	72	3926	07 02 01
07 04 00	J1841-0348	18 43 48	33.1	180.3	0.0		0.2	12	3926	07 04 00
07 04 30	=1838-038	18 44 18	33.1	180.5	0.0		0.3	30	3934	07 04 01
07 04 30	I18443	18 44 18	34.5	178.8	-0.1		-0.7	-18	3934	No stop
07 06 00	---	18 45 48	34.5	179.2	-0.0		-0.5	72	3957	07 04 31
07 06 00	J1841-0348	18 45 48	33.1	180.9	0.1		0.5	-18	3957	No stop
07 07 00	=1838-038	18 46 49	33.1	181.2	0.1		0.7	42	3973	07 06 01
07 07 00	I18443	18 46 49	34.5	179.5	-0.0		-0.3	-18	3973	No stop
07 08 30	---	18 48 19	34.5	180.0	0.0		0.0	72	3996	07 07 01
07 08 30	J1841-0348	18 48 19	33.1	181.7	0.1		1.0	-18	3996	No stop
07 09 30	=1838-038	18 49 19	33.1	181.9	0.1		1.2	42	4011	07 08 31
07 09 30	I18443	18 49 19	34.5	180.3	0.0		0.2	-19	4011	No stop
07 11 00	---	18 50 49	34.5	180.8	0.0		0.5	71	4035	07 09 31
07 11 00	J1841-0348	18 50 49	33.1	182.4	0.1		1.4	-19	4035	No stop
07 12 00	=1838-038	18 51 49	33.1	182.7	0.2		1.6	41	4050	07 11 01
07 12 00	I18443	18 51 49	34.5	181.1	0.1		0.6	-19	4050	No stop
07 13 30	---	18 53 20	34.5	181.5	0.1		0.9	71	4073	07 12 01
07 14 00	J1841-0348	18 53 50	33.1	183.3	0.2		2.0	11	4073	07 14 00
07 14 30	=1838-038	18 54 20	33.1	183.4	0.2		2.1	30	4081	07 14 01
07 14 30	I18443	18 54 20	34.5	181.8	0.1		1.1	-19	4081	No stop
07 16 00	---	18 55 50	34.4	182.3	0.1		1.4	71	4104	07 14 31
07 16 00	J1841-0348	18 55 50	33.0	183.9	0.2		2.3	-19	4104	No stop
07 17 00	=1838-038	18 56 50	33.0	184.2	0.2		2.5	41	4120	07 16 01
07 17 00	I18443	18 56 50	34.4	182.6	0.1		1.6	-19	4120	No stop
07 18 30	---	18 58 20	34.4	183.0	0.2		1.8	71	4143	07 17 01
07 18 30	J1841-0348	18 58 20	33.0	184.6	0.3		2.8	-19	4143	No stop
07 19 30	=1838-038	18 59 21	33.0	184.9	0.3		3.0	41	4158	07 18 31
07 19 30	I18443	18 59 21	34.4	183.3	0.2		2.0	-19	4158	No stop
07 21 00	---	19 00 51	34.4	183.8	0.2		2.3	71	4181	07 19 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
07 21 00	J1841-0348	19 00 51	33.0	185.4	0.3		3.2	-19	4181	No stop
07 22 00	=1838-038	19 01 51	33.0	185.7	0.3		3.4	41	4197	07 21 01
07 22 00	I18443	19 01 51	34.4	184.1	0.2		2.5	-19	4197	No stop
07 23 30	---	19 03 21	34.4	184.6	0.3		2.7	71	4220	07 22 01
07 24 00	J1841-0348	19 03 51	32.9	186.3	0.4		3.8	11	4220	07 24 00
07 24 30	=1838-038	19 04 21	32.9	186.4	0.4		3.9	30	4228	07 24 01
07 24 30	I18443	19 04 21	34.4	184.9	0.3		2.9	-19	4228	No stop
07 26 00	---	19 05 52	34.3	185.3	0.3		3.2	71	4251	07 24 31
07 27 00	J1751+0939	19 06 52	44.0	205.8	1.2		15.4	4	4251	07 27 00
07 31 00	=1749+096	19 10 52	43.8	207.2	1.3		16.1	240	4313	07 27 01
07 32 00	J1743-0350	19 11 53	30.2	205.2	1.4		14.9	-5	4313	07 32 00
07 36 00	=1741-038	19 15 53	30.0	206.3	1.5		15.5	235	4375	07 32 01
07 37 00	I18443	19 16 53	34.1	188.6	0.5		5.2	9	4375	07 37 00
07 38 30	---	19 18 24	34.1	189.1	0.5		5.4	90	4398	07 37 01
07 38 30	J1841-0348	19 18 24	32.6	190.6	0.6		6.3	-19	4398	No stop
07 39 30	=1838-038	19 19 24	32.6	190.9	0.6		6.5	41	4413	07 38 31
07 39 30	I18443	19 19 24	34.1	189.4	0.5		5.6	-19	4413	No stop
07 41 00	---	19 20 54	34.0	189.8	0.5		5.9	71	4437	07 39 31
07 41 00	J1841-0348	19 20 54	32.5	191.3	0.6		6.8	-19	4437	No stop
07 42 00	=1838-038	19 21 54	32.5	191.6	0.7		7.0	41	4452	07 41 01
07 42 00	I18443	19 21 54	34.0	190.1	0.6		6.1	-19	4452	No stop
07 43 30	---	19 23 25	34.0	190.6	0.6		6.3	71	4475	07 42 01
07 43 30	J1841-0348	19 23 25	32.5	192.0	0.7		7.2	-19	4475	No stop
07 44 30	=1838-038	19 24 25	32.4	192.3	0.7		7.4	41	4491	07 43 31
07 44 30	I18443	19 24 25	33.9	190.9	0.6		6.5	-19	4491	No stop
07 46 00	---	19 25 55	33.9	191.3	0.6		6.8	71	4514	07 44 31
07 46 30	J1841-0348	19 26 25	32.4	192.9	0.7		7.7	11	4514	07 46 30
07 47 00	=1838-038	19 26 55	32.4	193.1	0.7		7.8	30	4522	07 46 31
07 47 00	I18443	19 26 55	33.9	191.6	0.6		7.0	-19	4522	No stop
07 48 30	---	19 28 25	33.8	192.1	0.7		7.2	71	4545	07 47 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
07 48 30	J1841-0348	19 28 25	32.3	193.5	0.8		8.1	-19	4545	No stop
07 49 30	=1838-038	19 29 25	32.3	193.8	0.8		8.3	41	4560	07 48 31
07 49 30	I18443	19 29 25	33.8	192.4	0.7		7.4	-19	4560	No stop
07 51 00	---	19 30 56	33.7	192.8	0.7		7.7	71	4583	07 49 31
07 51 00	J1841-0348	19 30 56	32.2	194.2	0.8		8.5	-19	4583	No stop
07 52 00	=1838-038	19 31 56	32.2	194.5	0.8		8.7	41	4599	07 51 01
07 52 00	I18443	19 31 56	33.7	193.1	0.7		7.9	-19	4599	No stop
07 53 30	---	19 33 26	33.7	193.6	0.8		8.1	71	4622	07 52 01
07 53 30	J1841-0348	19 33 26	32.1	195.0	0.8		8.9	-19	4622	No stop
07 54 30	=1838-038	19 34 26	32.1	195.3	0.9		9.1	41	4637	07 53 31
07 54 30	I18443	19 34 26	33.6	193.9	0.8		8.3	-19	4637	No stop
07 56 00	---	19 35 57	33.6	194.3	0.8		8.6	71	4661	07 54 31
07 56 30	J1841-0348	19 36 27	32.0	195.8	0.9		9.5	11	4661	07 56 30
07 57 00	=1838-038	19 36 57	32.0	196.0	0.9		9.5	30	4668	07 56 31
07 57 00	I18443	19 36 57	33.5	194.6	0.8		8.7	-19	4668	No stop
07 58 30	---	19 38 27	33.5	195.1	0.8		9.0	71	4692	07 57 01
07 58 30	J1841-0348	19 38 27	31.9	196.4	0.9		9.8	-19	4692	No stop
07 59 30	=1838-038	19 39 27	31.9	196.7	0.9		10.0	41	4707	07 58 31
07 59 30	I18443	19 39 27	33.4	195.4	0.9		9.2	-19	4707	No stop
08 01 00	---	19 40 57	33.4	195.8	0.9		9.4	71	4730	07 59 31
08 01 00	J1841-0348	19 40 57	31.8	197.2	1.0		10.2	-20	4730	No stop
08 02 00	=1838-038	19 41 58	31.8	197.4	1.0		10.4	40	4746	08 01 01
08 02 00	I18443	19 41 58	33.3	196.1	0.9		9.6	-19	4746	No stop
08 03 30	---	19 43 28	33.3	196.5	0.9		9.9	71	4769	08 02 01
08 03 30	J1841-0348	19 43 28	31.7	197.9	1.0		10.6	-20	4769	No stop
08 04 30	=1838-038	19 44 28	31.6	198.2	1.0		10.8	40	4784	08 03 31
08 04 30	I18443	19 44 28	33.2	196.8	0.9		10.0	-19	4784	No stop
08 06 00	---	19 45 58	33.2	197.3	1.0		10.3	71	4808	08 04 31
08 06 30	J1841-0348	19 46 28	31.6	198.7	1.1		11.1	10	4808	08 06 30
08 07 00	=1838-038	19 46 58	31.5	198.9	1.1		11.2	30	4815	08 06 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
08 07 00	I18443	19 46 58	33.1	197.6	1.0		10.5	-19	4815	No stop
08 08 30	---	19 48 29	33.0	198.0	1.0		10.7	71	4838	08 07 01
08 08 30	J1841-0348	19 48 29	31.5	199.3	1.1		11.5	-20	4838	No stop
08 09 30	=1838-038	19 49 29	31.4	199.6	1.1		11.6	40	4854	08 08 31
08 09 30	I18443	19 49 29	33.0	198.3	1.0		10.9	-20	4854	No stop
08 11 00	---	19 50 59	32.9	198.8	1.0		11.1	70	4877	08 09 31
08 11 00	J1841-0348	19 50 59	31.3	200.0	1.1		11.9	-20	4877	No stop
08 12 00	=1838-038	19 51 59	31.3	200.3	1.2		12.1	40	4893	08 11 01
08 12 00	I18443	19 51 59	32.9	199.0	1.1		11.3	-20	4893	No stop
08 13 30	---	19 53 29	32.8	199.5	1.1		11.6	70	4916	08 12 01
08 13 30	J1841-0348	19 53 29	31.2	200.7	1.2		12.3	-20	4916	No stop
08 14 30	=1838-038	19 54 30	31.1	201.0	1.2		12.5	40	4931	08 13 31
08 14 30	I18443	19 54 30	32.8	199.8	1.1		11.7	-20	4931	No stop
08 16 00	---	19 56 00	32.7	200.2	1.1		12.0	70	4954	08 14 31
08 16 30	J1841-0348	19 56 30	31.0	201.6	1.2		12.8	10	4954	08 16 30
08 17 00	=1838-038	19 57 00	31.0	201.7	1.2		12.9	30	4962	08 16 31
08 17 00	I18443	19 57 00	32.6	200.5	1.1		12.2	-20	4962	No stop
08 18 30	---	19 58 30	32.5	200.9	1.2		12.4	70	4985	08 17 01
08 18 30	J1841-0348	19 58 30	30.9	202.2	1.3		13.1	-20	4985	No stop
08 19 30	=1838-038	19 59 30	30.9	202.5	1.3		13.3	40	5001	08 18 31
08 19 30	I18443	19 59 30	32.5	201.2	1.2		12.6	-20	5001	No stop
08 21 00	---	20 01 01	32.4	201.7	1.2		12.8	70	5024	08 19 31
08 21 00	J1841-0348	20 01 01	30.8	202.9	1.3		13.5	-20	5024	No stop
08 22 00	=1838-038	20 02 01	30.7	203.2	1.3		13.7	40	5039	08 21 01
08 22 00	I18443	20 02 01	32.4	202.0	1.2		13.0	-20	5039	No stop
08 23 30	---	20 03 31	32.3	202.4	1.3		13.2	70	5063	08 22 01
08 23 30	J1841-0348	20 03 31	30.6	203.6	1.3		13.9	-20	5063	No stop
08 24 30	=1838-038	20 04 31	30.6	203.9	1.4		14.1	40	5078	08 23 31
08 24 30	I18443	20 04 31	32.2	202.7	1.3		13.4	-20	5078	No stop
08 26 00	---	20 06 01	32.1	203.1	1.3		13.6	70	5101	08 24 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
08 26 30	J1841-0348	20 06 32	30.4	204.4	1.4		14.4	10	5101	08 26 30
08 27 00	=1838-038	20 07 02	30.4	204.6	1.4		14.5	30	5109	08 26 31
08 27 00	I18443	20 07 02	32.1	203.4	1.3		13.8	-20	5109	No stop
08 28 30	---	20 08 32	32.0	203.8	1.3		14.0	70	5132	08 27 01
08 29 00	J1743-0350	20 09 02	25.6	220.5	2.4		23.0	-18	5132	08 29 00
08 33 00	=1741-038	20 13 03	25.2	221.5	2.5		23.5	222	5194	08 29 01
08 34 00	I18443	20 14 03	31.6	205.4	1.4		14.9	13	5194	08 34 00
08 35 30	---	20 15 33	31.5	205.8	1.5		15.2	90	5217	08 34 01
08 35 30	J1841-0348	20 15 33	29.9	206.9	1.5		15.8	-20	5217	No stop
08 36 30	=1838-038	20 16 33	29.8	207.2	1.6		16.0	40	5233	08 35 31
08 36 30	I18443	20 16 33	31.5	206.1	1.5		15.3	-20	5233	No stop
08 38 00	---	20 18 03	31.4	206.5	1.5		15.6	70	5256	08 36 31
08 38 00	J1841-0348	20 18 03	29.7	207.6	1.6		16.2	-20	5256	No stop
08 39 00	=1838-038	20 19 04	29.6	207.9	1.6		16.4	40	5271	08 38 01
08 39 00	I18443	20 19 04	31.3	206.8	1.5		15.7	-20	5271	No stop
08 40 30	---	20 20 34	31.2	207.2	1.5		16.0	70	5294	08 39 01
08 40 30	J1841-0348	20 20 34	29.5	208.3	1.6		16.6	-20	5294	No stop
08 41 30	=1838-038	20 21 34	29.4	208.6	1.6		16.7	40	5310	08 40 31
08 41 30	I18443	20 21 34	31.1	207.5	1.6		16.1	-20	5310	No stop
08 43 00	---	20 23 04	31.0	207.9	1.6		16.4	70	5333	08 41 31
08 43 30	J1841-0348	20 23 34	29.3	209.2	1.7		17.0	10	5333	08 43 30
08 44 00	=1838-038	20 24 04	29.3	209.3	1.7		17.1	30	5341	08 43 31
08 44 00	I18443	20 24 04	30.9	208.2	1.6		16.5	-20	5341	No stop
08 45 30	---	20 25 35	30.8	208.6	1.6		16.7	70	5364	08 44 01
08 45 30	J1841-0348	20 25 35	29.1	209.7	1.7		17.3	-20	5364	No stop
08 46 30	=1838-038	20 26 35	29.1	210.0	1.7		17.5	40	5379	08 45 31
08 46 30	I18443	20 26 35	30.8	208.9	1.6		16.9	-20	5379	No stop
08 48 00	---	20 28 05	30.7	209.3	1.7		17.1	70	5403	08 46 31
08 48 00	J1841-0348	20 28 05	29.0	210.4	1.8		17.7	-20	5403	No stop
08 49 00	=1838-038	20 29 05	28.9	210.7	1.8		17.9	40	5418	08 48 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
08 49 00	I18443	20 29 05	30.6	209.6	1.7		17.3	-20	5418	No stop
08 50 30	---	20 30 36	30.5	210.0	1.7		17.5	70	5441	08 49 01
08 50 30	J1841-0348	20 30 36	28.8	211.1	1.8		18.1	-20	5441	No stop
08 51 30	=1838-038	20 31 36	28.7	211.3	1.8		18.2	40	5457	08 50 31
08 51 30	I18443	20 31 36	30.4	210.3	1.7		17.7	-20	5457	No stop
08 53 00	---	20 33 06	30.3	210.7	1.7		17.9	70	5480	08 51 31
08 53 30	J1841-0348	20 33 36	28.5	211.9	1.8		18.5	10	5480	08 53 30
08 54 00	=1838-038	20 34 06	28.5	212.0	1.9		18.6	30	5488	08 53 31
08 54 00	I18443	20 34 06	30.2	211.0	1.8		18.0	-20	5488	No stop
08 55 30	---	20 35 36	30.1	211.4	1.8		18.3	70	5511	08 54 01
08 55 30	J1841-0348	20 35 36	28.4	212.4	1.9		18.8	-20	5511	No stop
08 56 30	=1838-038	20 36 37	28.3	212.7	1.9		19.0	40	5526	08 55 31
08 56 30	I18443	20 36 37	30.0	211.7	1.8		18.4	-20	5526	No stop
08 58 00	---	20 38 07	29.9	212.1	1.8		18.6	70	5550	08 56 31
08 58 00	J1841-0348	20 38 07	28.2	213.1	1.9		19.2	-20	5550	No stop
08 59 00	=1838-038	20 39 07	28.1	213.4	1.9		19.3	40	5565	08 58 01
08 59 00	I18443	20 39 07	29.8	212.4	1.8		18.8	-20	5565	No stop
09 00 30	---	20 40 37	29.7	212.8	1.9		19.0	70	5588	08 59 01
09 00 30	J1841-0348	20 40 37	28.0	213.8	2.0		19.5	-20	5588	No stop
09 01 30	=1838-038	20 41 37	27.9	214.0	2.0		19.7	40	5604	09 00 31
09 01 30	I18443	20 41 37	29.6	213.0	1.9		19.1	-20	5604	No stop
09 03 00	---	20 43 08	29.5	213.5	1.9		19.3	70	5627	09 01 31
09 03 30	J1841-0348	20 43 38	27.7	214.6	2.0		20.0	10	5627	09 03 30
09 04 00	=1838-038	20 44 08	27.7	214.7	2.0		20.0	30	5635	09 03 31
09 04 00	I18443	20 44 08	29.4	213.7	1.9		19.5	-20	5635	No stop
09 05 30	---	20 45 38	29.3	214.1	2.0		19.7	70	5658	09 04 01
09 05 30	J1841-0348	20 45 38	27.5	215.1	2.0		20.2	-20	5658	No stop
09 06 30	=1838-038	20 46 38	27.4	215.3	2.1		20.4	40	5673	09 05 31
09 06 30	I18443	20 46 38	29.2	214.4	2.0		19.8	-20	5673	No stop
09 08 00	---	20 48 08	29.1	214.8	2.0		20.1	70	5696	09 06 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart
Stop UT		LST	EL	AZ	HA UP	ParA Dwell	GBytes	SYNC
--- Wed 26 Feb 2025 Day 57 ---								
09 08 00	J1841-0348	20 48 08	27.3	215.7	2.1	20.6 -20	5696	No stop
09 09 00	=1838-038	20 49 09	27.2	216.0	2.1	20.7 40	5712	09 08 01
09 09 00	I18443	20 49 09	29.0	215.1	2.0	20.2 -20	5712	No stop
09 10 30	---	20 50 39	28.8	215.5	2.0	20.4 70	5735	09 09 01
09 10 30	J1841-0348	20 50 39	27.1	216.4	2.1	20.9 -20	5735	No stop
09 11 30	=1838-038	20 51 39	27.0	216.7	2.1	21.1 40	5750	09 10 31
09 11 30	I18443	20 51 39	28.8	215.7	2.1	20.6 -20	5750	No stop
09 13 00	---	20 53 09	28.6	216.1	2.1	20.8 70	5774	09 11 31
09 13 30	J1841-0348	20 53 39	26.8	217.2	2.2	21.3 10	5774	09 13 30
09 14 00	=1838-038	20 54 09	26.8	217.3	2.2	21.4 30	5781	09 13 31
09 14 00	I18443	20 54 09	28.5	216.4	2.1	20.9 -20	5781	No stop
09 15 30	---	20 55 40	28.4	216.8	2.1	21.1 70	5805	09 14 01
09 15 30	J1841-0348	20 55 40	26.6	217.7	2.2	21.6 -20	5805	No stop
09 16 30	=1838-038	20 56 40	26.5	218.0	2.2	21.7 40	5820	09 15 31
09 16 30	I18443	20 56 40	28.3	217.1	2.1	21.2 -20	5820	No stop
09 18 00	---	20 58 10	28.2	217.5	2.2	21.4 70	5843	09 16 31
09 18 00	J1841-0348	20 58 10	26.4	218.4	2.3	21.9 -20	5843	No stop
09 19 00	=1838-038	20 59 10	26.3	218.6	2.3	22.1 40	5859	09 18 01
09 19 00	I18443	20 59 10	28.1	217.7	2.2	21.6 -20	5859	No stop
09 20 30	---	21 00 40	27.9	218.1	2.2	21.8 70	5882	09 19 01
09 20 30	J1841-0348	21 00 40	26.2	219.0	2.3	22.3 -20	5882	No stop
09 21 30	=1838-038	21 01 41	26.1	219.3	2.3	22.4 40	5897	09 20 31
09 21 30	I18443	21 01 41	27.8	218.4	2.2	21.9 -20	5897	No stop
09 23 00	---	21 03 11	27.7	218.8	2.2	22.1 70	5921	09 21 31
09 23 30	J1841-0348	21 03 41	25.9	219.8	2.3	22.6 10	5921	09 23 30
09 24 00	=1838-038	21 04 11	25.8	219.9	2.4	22.7 30	5928	09 23 31
09 24 00	I18443	21 04 11	27.6	219.0	2.3	22.2 -20	5928	No stop
09 25 30	---	21 05 41	27.5	219.4	2.3	22.4 70	5951	09 24 01
09 26 30	J1743-0350	21 06 41	19.2	234.4	3.4	29.3 15	5951	09 26 30
09 30 30	=1741-038	21 10 42	18.7	235.3	3.4	29.7 240	6013	09 26 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
09 31 30	I18443	21 11 42	26.9	221.0	2.4		23.2	15	6013	09 31 30
09 33 00	---	21 13 13	26.7	221.4	2.4		23.4	90	6036	09 31 31
09 33 00	J1841-0348	21 13 13	24.9	222.2	2.5		23.8	-21	6036	No stop
09 34 00	=1838-038	21 14 13	24.8	222.4	2.5		24.0	39	6052	09 33 01
09 34 00	I18443	21 14 13	26.6	221.6	2.4		23.5	-20	6052	No stop
09 35 30	---	21 15 43	26.5	222.0	2.5		23.7	70	6075	09 34 01
09 35 30	J1841-0348	21 15 43	24.7	222.8	2.5		24.1	-21	6075	No stop
09 36 30	=1838-038	21 16 43	24.6	223.1	2.6		24.3	39	6091	09 35 31
09 36 30	I18443	21 16 43	26.4	222.3	2.5		23.9	-20	6091	No stop
09 38 00	---	21 18 13	26.2	222.7	2.5		24.0	70	6114	09 36 31
09 38 00	J1841-0348	21 18 13	24.4	223.4	2.6		24.4	-21	6114	No stop
09 39 00	=1838-038	21 19 13	24.3	223.7	2.6		24.6	39	6129	09 38 01
09 39 00	I18443	21 19 13	26.1	222.9	2.5		24.2	-20	6129	No stop
09 40 30	---	21 20 44	26.0	223.3	2.5		24.3	70	6152	09 39 01
09 41 00	J1841-0348	21 21 14	24.1	224.2	2.6		24.8	9	6152	09 41 00
09 41 30	=1838-038	21 21 44	24.1	224.3	2.6		24.9	30	6160	09 41 01
09 41 30	I18443	21 21 44	25.9	223.6	2.6		24.5	-20	6160	No stop
09 43 00	---	21 23 14	25.7	223.9	2.6		24.6	70	6183	09 41 31
09 43 00	J1841-0348	21 23 14	23.9	224.7	2.7		25.0	-21	6183	No stop
09 44 00	=1838-038	21 24 14	23.8	224.9	2.7		25.2	39	6199	09 43 01
09 44 00	I18443	21 24 14	25.6	224.2	2.6		24.8	-20	6199	No stop
09 45 30	---	21 25 45	25.5	224.6	2.6		24.9	70	6222	09 44 01
09 45 30	J1841-0348	21 25 45	23.6	225.3	2.7		25.3	-21	6222	No stop
09 46 30	=1838-038	21 26 45	23.5	225.6	2.7		25.4	39	6237	09 45 31
09 46 30	I18443	21 26 45	25.4	224.8	2.6		25.1	-20	6237	No stop
09 48 00	---	21 28 15	25.2	225.2	2.7		25.2	70	6261	09 46 31
09 48 00	J1841-0348	21 28 15	23.4	225.9	2.8		25.6	-21	6261	No stop
09 49 00	=1838-038	21 29 15	23.3	226.2	2.8		25.7	39	6276	09 48 01
09 49 00	I18443	21 29 15	25.1	225.4	2.7		25.4	-20	6276	No stop
09 50 30	---	21 30 45	24.9	225.8	2.7		25.5	70	6299	09 49 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
09 51 00	J1841-0348	21 31 15	23.1	226.7	2.8		26.0	9	6299	09 51 00
09 51 30	=1838-038	21 31 46	23.0	226.8	2.8		26.0	30	6307	09 51 01
09 51 30	I18443	21 31 46	24.8	226.1	2.7		25.6	-20	6307	No stop
09 53 00	---	21 33 16	24.7	226.4	2.7		25.8	70	6330	09 51 31
09 53 00	J1841-0348	21 33 16	22.8	227.1	2.8		26.2	-21	6330	No stop
09 54 00	=1838-038	21 34 16	22.7	227.4	2.9		26.3	39	6346	09 53 01
09 54 00	I18443	21 34 16	24.5	226.7	2.8		25.9	-20	6346	No stop
09 55 30	---	21 35 46	24.4	227.1	2.8		26.1	70	6369	09 54 01
09 55 30	J1841-0348	21 35 46	22.6	227.8	2.9		26.5	-21	6369	No stop
09 56 30	=1838-038	21 36 46	22.4	228.0	2.9		26.6	39	6384	09 55 31
09 56 30	I18443	21 36 46	24.3	227.3	2.8		26.2	-20	6384	No stop
09 58 00	---	21 38 17	24.1	227.7	2.8		26.4	70	6407	09 56 31
09 58 00	J1841-0348	21 38 17	22.3	228.4	2.9		26.7	-21	6407	No stop
09 59 00	=1838-038	21 39 17	22.2	228.6	2.9		26.8	39	6423	09 58 01
09 59 00	I18443	21 39 17	24.0	227.9	2.8		26.5	-20	6423	No stop
10 00 30	---	21 40 47	23.8	228.3	2.9		26.7	70	6446	09 59 01
10 01 00	J1841-0348	21 41 17	21.9	229.1	3.0		27.0	9	6446	10 01 00
10 01 30	=1838-038	21 41 47	21.9	229.2	3.0		27.1	30	6454	10 01 01
10 01 30	I18443	21 41 47	23.7	228.5	2.9		26.8	-20	6454	No stop
10 03 00	---	21 43 17	23.5	228.9	2.9		26.9	70	6477	10 01 31
10 03 00	J1841-0348	21 43 17	21.7	229.6	3.0		27.3	-21	6477	No stop
10 04 00	=1838-038	21 44 18	21.6	229.8	3.0		27.4	39	6492	10 03 01
10 04 00	I18443	21 44 18	23.4	229.1	2.9		27.0	-21	6492	No stop
10 05 30	---	21 45 48	23.3	229.5	3.0		27.2	69	6516	10 04 01
10 05 30	J1841-0348	21 45 48	21.4	230.2	3.1		27.5	-21	6516	No stop
10 06 30	=1838-038	21 46 48	21.3	230.4	3.1		27.6	39	6531	10 05 31
10 06 30	I18443	21 46 48	23.1	229.7	3.0		27.3	-21	6531	No stop
10 08 00	---	21 48 18	23.0	230.1	3.0		27.5	69	6554	10 06 31
10 08 00	J1841-0348	21 48 18	21.1	230.8	3.1		27.8	-21	6554	No stop
10 09 00	=1838-038	21 49 18	21.0	231.0	3.1		27.9	39	6570	10 08 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
10 09 00	I18443	21 49 18	22.9	230.4	3.0		27.6	-21	6570	No stop
10 10 30	---	21 50 49	22.7	230.7	3.0		27.7	69	6593	10 09 01
10 11 00	J1841-0348	21 51 19	20.8	231.5	3.1		28.1	9	6593	10 11 00
10 11 30	=1838-038	21 51 49	20.7	231.6	3.2		28.1	30	6601	10 11 01
10 11 30	I18443	21 51 49	22.6	231.0	3.1		27.8	-21	6601	No stop
10 13 00	---	21 53 19	22.4	231.3	3.1		28.0	69	6624	10 11 31
10 13 00	J1841-0348	21 53 19	20.5	231.9	3.2		28.3	-21	6624	No stop
10 14 00	=1838-038	21 54 19	20.4	232.2	3.2		28.4	39	6639	10 13 01
10 14 00	I18443	21 54 19	22.3	231.5	3.1		28.1	-21	6639	No stop
10 15 30	---	21 55 49	22.1	231.9	3.1		28.2	69	6663	10 14 01
10 15 30	J1841-0348	21 55 49	20.2	232.5	3.2		28.5	-21	6663	No stop
10 16 30	=1838-038	21 56 50	20.1	232.8	3.2		28.6	39	6678	10 15 31
10 16 30	I18443	21 56 50	22.0	232.1	3.1		28.3	-21	6678	No stop
10 18 00	---	21 58 20	21.8	232.5	3.2		28.5	69	6701	10 16 31
10 18 00	J1841-0348	21 58 20	19.9	233.1	3.3		28.8	-21	6701	No stop
10 19 00	=1838-038	21 59 20	19.8	233.3	3.3		28.9	39	6717	10 18 01
10 19 00	I18443	21 59 20	21.7	232.7	3.2		28.6	-21	6717	No stop
10 20 30	---	22 00 50	21.5	233.1	3.2		28.7	69	6740	10 19 01
10 21 00	J1841-0348	22 01 20	19.6	233.8	3.3		29.1	9	6740	10 21 00
10 21 30	=1838-038	22 01 50	19.5	233.9	3.3		29.1	30	6748	10 21 01
10 21 30	I18443	22 01 50	21.4	233.3	3.2		28.8	-21	6748	No stop
10 23 00	---	22 03 21	21.2	233.7	3.3		29.0	69	6771	10 21 31
10 24 00	J1751+0939	22 04 21	23.8	253.6	4.2		35.8	5	6771	10 24 00
10 28 00	=1749+096	22 08 22	23.2	254.5	4.3		35.9	240	6833	10 24 01
10 29 00	J1743-0350	22 09 22	10.9	248.2	4.4		34.0	0	6833	10 29 00
10 33 00	=1741-038	22 13 22	10.4	249.0	4.5		34.2	240	6894	10 29 01
10 34 00	I18443	22 14 23	19.8	236.2	3.4		30.0	11	6894	10 34 00
10 35 30	---	22 15 53	19.6	236.6	3.5		30.1	90	6918	10 34 01
10 35 30	J1841-0348	22 15 53	17.8	237.1	3.6		30.4	-21	6918	No stop
10 36 30	=1838-038	22 16 53	17.7	237.4	3.6		30.4	39	6933	10 35 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Wed	26 Feb 2025	Day	57	---						
10 36 30	I18443	22 16 53	19.5	236.8	3.5		30.2	-21	6933	No stop
10 38 00	---	22 18 23	19.3	237.2	3.5		30.3	69	6956	10 36 31
10 38 00	J1841-0348	22 18 23	17.5	237.7	3.6		30.6	-21	6956	No stop
10 39 00	=1838-038	22 19 23	17.3	237.9	3.6		30.7	39	6972	10 38 01
10 39 00	I18443	22 19 23	19.2	237.4	3.5		30.4	-21	6972	No stop
10 40 30	---	22 20 54	19.0	237.7	3.5		30.5	69	6995	10 39 01
10 40 30	J1841-0348	22 20 54	17.1	238.3	3.6		30.8	-21	6995	No stop
10 41 30	=1838-038	22 21 54	17.0	238.5	3.7		30.9	39	7010	10 40 31
10 41 30	I18443	22 21 54	18.9	238.0	3.6		30.6	-21	7010	No stop
10 43 00	---	22 23 24	18.7	238.3	3.6		30.8	69	7034	10 41 31
10 43 30	J1841-0348	22 23 54	16.8	238.9	3.7		31.0	9	7034	10 43 30
10 44 00	=1838-038	22 24 24	16.7	239.0	3.7		31.1	30	7041	10 43 31
10 44 00	I18443	22 24 24	18.6	238.5	3.6		30.8	-21	7041	No stop
10 45 30	---	22 25 54	18.4	238.9	3.6		31.0	69	7064	10 44 01
10 45 30	J1841-0348	22 25 54	16.5	239.4	3.7		31.2	-21	7064	No stop
10 46 30	=1838-038	22 26 55	16.4	239.6	3.7		31.3	39	7080	10 45 31
10 46 30	I18443	22 26 55	18.2	239.1	3.6		31.0	-21	7080	No stop
10 48 00	---	22 28 25	18.0	239.4	3.7		31.2	69	7103	10 46 31
10 48 00	J1841-0348	22 28 25	16.2	239.9	3.8		31.4	-21	7103	No stop
10 49 00	=1838-038	22 29 25	16.0	240.2	3.8		31.5	39	7119	10 48 01
10 49 00	I18443	22 29 25	17.9	239.7	3.7		31.2	-21	7119	No stop
10 50 30	---	22 30 55	17.7	240.0	3.7		31.4	69	7142	10 49 01
10 50 30	J1841-0348	22 30 55	15.9	240.5	3.8		31.6	-21	7142	No stop
10 51 30	=1838-038	22 31 55	15.7	240.7	3.8		31.7	39	7157	10 50 31
10 51 30	I18443	22 31 55	17.6	240.2	3.7		31.4	-21	7157	No stop
10 53 00	---	22 33 26	17.4	240.6	3.8		31.6	69	7180	10 51 31
10 53 30	J1841-0348	22 33 56	15.5	241.2	3.9		31.8	9	7180	10 53 30
10 54 00	=1838-038	22 34 26	15.4	241.3	3.9		31.8	30	7188	10 53 31
10 54 00	I18443	22 34 26	17.3	240.8	3.8		31.6	-21	7188	No stop
10 55 30	---	22 35 56	17.1	241.1	3.8		31.8	69	7211	10 54 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
10 55 30	J1841-0348	22 35 56	15.2	241.6	3.9		32.0	-21	7211	No stop
10 56 30	=1838-038	22 36 56	15.1	241.8	3.9		32.0	39	7227	10 55 31
10 56 30	I18443	22 36 56	16.9	241.3	3.8		31.8	-21	7227	No stop
10 58 00	---	22 38 26	16.7	241.7	3.8		31.9	69	7250	10 56 31
10 58 00	J1841-0348	22 38 26	14.9	242.1	3.9		32.1	-21	7250	No stop
10 59 00	=1838-038	22 39 27	14.7	242.4	3.9		32.2	39	7265	10 58 01
10 59 00	I18443	22 39 27	16.6	241.9	3.9		32.0	-21	7265	No stop
11 00 30	---	22 40 57	16.4	242.2	3.9		32.1	69	7289	10 59 01
11 00 30	J1841-0348	22 40 57	14.5	242.7	4.0		32.3	-21	7289	No stop
11 01 30	=1838-038	22 41 57	14.4	242.9	4.0		32.4	39	7304	11 00 31
11 01 30	I18443	22 41 57	16.3	242.4	3.9		32.2	-21	7304	No stop
11 03 00	---	22 43 27	16.1	242.8	3.9		32.3	69	7327	11 01 31
11 03 30	J1841-0348	22 43 57	14.1	243.3	4.0		32.5	9	7327	11 03 30
11 04 00	=1838-038	22 44 27	14.1	243.5	4.0		32.6	30	7335	11 03 31
11 04 00	I18443	22 44 27	15.9	243.0	3.9		32.4	-21	7335	No stop
11 05 30	---	22 45 58	15.7	243.3	4.0		32.5	69	7358	11 04 01
11 05 30	J1841-0348	22 45 58	13.9	243.8	4.1		32.7	-21	7358	No stop
11 06 30	=1838-038	22 46 58	13.7	244.0	4.1		32.7	39	7374	11 05 31
11 06 30	I18443	22 46 58	15.6	243.5	4.0		32.6	-21	7374	No stop
11 08 00	---	22 48 28	15.4	243.9	4.0		32.7	69	7397	11 06 31
11 08 00	J1841-0348	22 48 28	13.5	244.3	4.1		32.8	-21	7397	No stop
11 09 00	=1838-038	22 49 28	13.4	244.5	4.1		32.9	39	7412	11 08 01
11 09 00	I18443	22 49 28	15.3	244.1	4.0		32.7	-21	7412	No stop
11 10 30	---	22 50 59	15.1	244.4	4.0		32.8	69	7435	11 09 01
11 10 30	J1841-0348	22 50 59	13.2	244.9	4.1		33.0	-21	7435	No stop
11 11 30	=1838-038	22 51 59	13.0	245.1	4.2		33.1	39	7451	11 10 31
11 11 30	I18443	22 51 59	14.9	244.6	4.1		32.9	-21	7451	No stop
11 13 00	---	22 53 29	14.7	245.0	4.1		33.0	69	7474	11 11 31
11 13 30	J1841-0348	22 53 59	12.8	245.5	4.2		33.2	9	7474	11 13 30
11 14 00	=1838-038	22 54 29	12.7	245.6	4.2		33.2	30	7482	11 13 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Wed	26 Feb 2025	Day	57	---					
11 14 00	I18443	22 54 29	14.6	245.2	4.1		33.1	-21	7482	No stop
11 15 30	---	22 55 59	14.4	245.5	4.1		33.2	69	7505	11 14 01
11 15 30	J1841-0348	22 55 59	12.5	245.9	4.2		33.3	-21	7505	No stop
11 16 30	=1838-038	22 57 00	12.4	246.1	4.2		33.4	39	7520	11 15 31
11 16 30	I18443	22 57 00	14.2	245.7	4.1		33.2	-21	7520	No stop
11 18 00	---	22 58 30	14.0	246.0	4.2		33.3	69	7544	11 16 31
11 18 00	J1841-0348	22 58 30	12.1	246.5	4.3		33.5	-21	7544	No stop
11 19 00	=1838-038	22 59 30	12.0	246.7	4.3		33.5	39	7559	11 18 01
11 19 00	I18443	22 59 30	13.9	246.3	4.2		33.4	-21	7559	No stop
11 20 30	---	23 01 00	13.7	246.6	4.2		33.5	69	7582	11 19 01
11 20 30	J1841-0348	23 01 00	11.8	247.0	4.3		33.6	-21	7582	No stop
11 21 30	=1838-038	23 02 00	11.7	247.2	4.3		33.7	39	7598	11 20 31
11 21 30	I18443	23 02 00	13.6	246.8	4.2		33.5	-21	7598	No stop
11 23 00	---	23 03 31	13.3	247.1	4.3		33.6	69	7621	11 21 31
11 23 30	J1841-0348	23 04 01	11.4	247.6	4.4		33.8	9	7621	11 23 30
11 24 00	=1838-038	23 04 31	11.3	247.7	4.4		33.8	30	7629	11 23 31
11 24 00	I18443	23 04 31	13.2	247.3	4.3		33.7	-21	7629	No stop
11 25 30	---	23 06 01	13.0	247.7	4.3		33.8	69	7652	11 24 01
11 31 30	I18443	23 12 02	12.2	248.9	4.4		34.1	353	7652	11 31 30
11 33 00	---	23 13 32	11.9	249.3	4.4		34.2	90	7675	11 31 31
11 33 00	J1841-0348	23 13 32	10.1	249.6	4.5		34.3	-21	7675	No stop
11 34 00	=1838-038	23 14 32	9.9	249.8	4.5		34.4	39	7691	11 33 01
11 34 00	I18443	23 14 32	11.8	249.5	4.4		34.3	-21	7691	No stop
11 35 30	---	23 16 03	11.6	249.8	4.5		34.3	69	7714	11 34 01
11 35 30	J1841-0348	23 16 03	9.7	250.2	4.6		34.5	-21	7714	No stop
11 36 30	=1838-038	23 17 03	9.6	250.4	4.6		34.5	39	7729	11 35 31
11 36 30	I18443	23 17 03	11.5	250.0	4.5		34.4	-21	7729	No stop
11 38 00	---	23 18 33	11.2	250.3	4.5		34.5	69	7752	11 36 31
11 38 00	J1841-0348	23 18 33	9.3	250.7	4.6		34.6	-21	7752	No stop
11 39 00	=1838-038	23 19 33	9.2	250.9	4.6		34.7	39	7768	11 38 01

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop						Early	Disk	TPStart
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day 57	---							
11 39 00	I18443	23 19 33	11.1	250.5	4.5		34.5	-21	7768	No stop
11 40 30	---	23 21 03	10.9	250.8	4.5		34.6	69	7791	11 39 01
11 41 00	J1841-0348	23 21 34	8.9	251.3	4.6		34.8	9	7791	11 41 00
11 41 30	=1838-038	23 22 04	8.8	251.4	4.7		34.8	30	7799	11 41 01
11 41 30	I18443	23 22 04	10.7	251.0	4.6		34.6	-21	7799	No stop
11 43 00	---	23 23 34	10.5	251.4	4.6		34.7	69	7822	11 41 31
11 43 00	J1841-0348	23 23 34	8.6	251.7	4.7		34.9	-21	7822	No stop
11 44 00	=1838-038	23 24 34	8.5	251.9	4.7		34.9	39	7837	11 43 01
11 44 00	I18443	23 24 34	10.4	251.6	4.6		34.8	-21	7837	No stop
11 45 30	---	23 26 04	10.2	251.9	4.6		34.8	69	7861	11 44 01
11 45 30	J1841-0348	23 26 04	8.3	252.2	4.7		35.0	-21	7861	No stop
11 46 30	=1838-038	23 27 04	8.1	252.5	4.7		35.0	39	7876	11 45 31
11 46 30	I18443	23 27 04	10.0	252.1	4.6		34.9	-21	7876	No stop
11 48 00	---	23 28 35	9.8	252.4	4.7		35.0	69	7899	11 46 31
11 48 00	J1841-0348	23 28 35	7.9	252.8	4.8		35.1	-21	7899	No stop
11 49 00	=1838-038	23 29 35	7.8	253.0	4.8		35.1	39	7915	11 48 01
11 49 00	I18443	23 29 35	9.7	252.6	4.7		35.0	-21	7915	No stop
11 50 30	---	23 31 05	9.5	252.9	4.7		35.1	69	7938	11 49 01
11 51 00	J1841-0348	23 31 35	7.5	253.4	4.8		35.2	9	7938	11 51 00
11 51 30	=1838-038	23 32 05	7.4	253.5	4.8		35.2	30	7946	11 51 01
11 51 30	I18443	23 32 05	9.3	253.1	4.7		35.1	-21	7946	No stop
11 53 00	---	23 33 35	9.1	253.4	4.8		35.2	69	7969	11 51 31
11 53 00	J1841-0348	23 33 35	7.2	253.8	4.8		35.3	-21	7969	No stop
11 54 00	=1838-038	23 34 36	7.1	254.0	4.9		35.3	39	7984	11 53 01
11 54 00	I18443	23 34 36	9.0	253.6	4.8		35.2	-21	7984	No stop
11 55 30	---	23 36 06	8.7	254.0	4.8		35.3	69	8007	11 54 01
11 55 30	J1841-0348	23 36 06	6.8	254.3	4.9		35.4	-21	8007	No stop
11 56 30	=1838-038	23 37 06	6.7	254.5	4.9		35.4	39	8023	11 55 31
11 56 30	I18443	23 37 06	8.6	254.2	4.8		35.3	-21	8023	No stop
11 58 00	---	23 38 36	8.4	254.5	4.8		35.4	69	8046	11 56 31

Schedule for TORUN (Code Tr)

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Proper motion and B-field of H2O-WFPN I18443-0231

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day 57	---							
11 58 00	J1841-0348	23 38 36	6.5	254.8	4.9		35.5	-21	8046	No stop
11 59 00	=1838-038	23 39 36	6.3	255.0	4.9		35.5	39	8062	11 58 01
11 59 00	I18443	23 39 36	8.2	254.7	4.9		35.4	-21	8062	No stop
12 00 30	---	23 41 07	8.0	255.0	4.9		35.5	69	8085	11 59 01
12 01 00	J1841-0348	23 41 37	6.0	255.4	5.0		35.6	9	8085	12 01 00
12 01 30	=1838-038	23 42 07	6.0	255.5	5.0		35.6	30	8092	12 01 01
12 01 30	I18443	23 42 07	7.9	255.2	4.9		35.5	-21	8092	No stop
12 03 00	---	23 43 37	7.6	255.5	4.9		35.6	69	8116	12 01 31
12 03 00	J1841-0348	23 43 37	5.7	255.8	5.0		35.7	-21	8116	No stop
12 04 00	=1838-038	23 44 37	5.6	256.0	5.0		35.7	39	8131	12 03 01
12 04 00	I18443	23 44 37	7.5	255.7	4.9		35.6	-21	8131	No stop
12 05 30	---	23 46 08	7.3	256.0	5.0		35.7	69	8154	12 04 01
12 05 30	J1841-0348	23 46 08	5.4	256.4	5.1		35.8	-21	8154	No stop
12 06 30	=1838-038	23 47 08	5.2	256.6	5.1		35.8	39	8170	12 05 31
12 06 30	I18443	23 47 08	7.1	256.2	5.0		35.7	-21	8170	No stop
12 08 00	---	23 48 38	6.9	256.5	5.0		35.8	69	8193	12 06 31
12 09 00	I18443	23 49 38	6.8	256.7	5.0		35.8	54	8193	12 09 00
12 10 30	---	23 51 08	6.5	257.0	5.0		35.9	90	8216	12 09 01
12 11 30	I18443	23 52 09	6.4	257.2	5.1		35.9	54	8216	12 11 30
12 13 00	---	23 53 39	6.2	257.6	5.1		35.9	90	8239	12 11 31
12 14 00	I18443	23 54 39	6.0	257.8	5.1		36.0	54	8239	12 14 00
12 15 30	---	23 56 09	5.8	258.1	5.1		36.0	90	8262	12 14 01
12 16 30	I18443	23 57 09	5.7	258.3	5.1		36.0	54	8262	12 16 30
12 18 00	---	23 58 40	5.4	258.6	5.2		36.1	90	8286	12 16 31
12 19 00	I18443	23 59 40	5.3	258.8	5.2		36.1	54	8286	12 19 00
12 20 30	---	00 01 10	5.1	259.1	5.2		36.2	90	8309	12 19 01
12 26 00	J2253+1608	00 06 41	50.6	207.7	1.2		16.9	145	8309	12 26 00
12 30 00	=2251+158	00 10 42	50.3	209.1	1.3		17.7	240	8371	12 26 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.K2048

Setup group:	7	Station: TORUN	Total bit rate: 2048
Format: VDIF		Bits per sample: 2	Sample rate: 64.000
Number of channels: 16		DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00
	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00
Net SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF SB =	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
	3	11	3	11	4	12	4	12
BBC SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF =	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set:	7	Setup file default. Used with PCAL = off						
LO sum=	22125.26	22125.26	22125.26	22125.26	22189.26	22189.26	22189.26	22189.26
	22253.26	22253.26	22253.26	22253.26	22317.26	22317.26	22317.26	22317.26
BBC fr=	645.26	645.26	645.26	645.26	709.26	709.26	709.26	709.26
	773.26	773.26	773.26	773.26	837.26	837.26	837.26	837.26
Bandwd=	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Matching frequency sets: 7								

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error
	(B1950)	(J2000)		(mas)
* I18443	18 44 23.762957	* 18 47 00.401200	18 48 18.493662	0.00
	-02 31 11.09401	*-02 27 52.55200	-02 26 24.53928	0.00
1838-038	18 38 49.113418	* 18 41 27.313257	18 42 46.220294	1.92
* J1841-0348	-03 51 38.98791	*-03 48 44.35192	-03 47 27.97275	2.58
	rfc_2024b Petrov and Kovalev, in preparation 44 observations			
1741-038	17 41 20.616012	* 17 43 58.856136	17 45 18.092143	0.08
* J1743-0350	-03 48 48.89990	*-03 50 04.61670	-03 50 54.25140	0.18
	rfc_2024b Petrov and Kovalev, in preparation 346318 observations			
1749+096	17 49 10.387932	* 17 51 32.818575	17 52 44.045534	0.10
* J1751+0939	09 39 42.82589	* 09 39 00.72844	09 38 23.48975	0.16
	rfc_2024b Petrov and Kovalev, in preparation 307945 observations			
2251+158	22 51 29.519752	* 22 53 57.747951	22 55 10.942580	0.11
* J2253+1608	15 52 54.34815	* 16 08 53.56098	16 16 48.80801	0.15
	rfc_2024b Petrov and Kovalev, in preparation 52698 observations			

EVN OBSERVATIONS OF CSOs AT 1.3CM (SESSION 2)

PI: *Xi Yan*

Address: Galaxy and Cosmology Group

Schedule for TORUN (Code Tr)

Page 2

EVN observations of CSOs at 1.3cm (Session 2)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
Next scan frequencies:		22139.49	22139.49	22139.49	22139.49	22203.49	22203.49	22203.49	22203.49	22203.49
		22267.49	22267.49	22267.49	22267.49	22331.49	22331.49	22331.49	22331.49	22331.49
Next BBC frequencies:		659.49	659.49	659.49	659.49	723.49	723.49	723.49	723.49	723.49
		787.49	787.49	787.49	787.49	851.49	851.49	851.49	851.49	851.49
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

21 00 00	1156+295	08 42 05	46.7	103.5	-3.3	-41.9	0	0	21 00 00	
21 03 30	---	08 45 36	47.3	104.3	-3.3	-41.7	210	54	21 00 01	

21 04 30	J1128+5925	08 46 36	66.9	58.2	-2.7	-87.4	-47	54	21 04 30	
21 06 30	=1125+596	08 48 36	67.1	58.2	-2.7	-87.8	73	85	21 04 31	

21 06 30	NGC3894	08 48 36	64.5	57.8	-3.0	-83.8	-24	85	No stop	
21 10 30	---	08 52 37	65.0	57.9	-3.0	-84.6	216	147	21 06 31	

21 10 30	NGC3894	08 52 37	65.0	57.9	-3.0	-84.6	-5	147	No stop	
21 14 30	---	08 56 38	65.5	58.0	-2.9	-85.4	235	209	21 10 31	

21 14 30	NGC3894	08 56 38	65.5	58.0	-2.9	-85.4	-5	209	No stop	
21 18 30	---	09 00 38	66.1	58.1	-2.8	-86.1	235	271	21 14 31	

21 19 30	J1128+5925	09 01 39	68.8	58.3	-2.5	-90.6	36	271	21 19 30	
21 20 30	=1125+596	09 02 39	68.9	58.3	-2.5	-90.8	60	286	21 19 31	

21 20 30	NGC3894	09 02 39	66.3	58.1	-2.8	-86.5	-24	286	No stop	
21 24 30	---	09 06 39	66.8	58.2	-2.7	-87.3	216	348	21 20 31	

21 24 30	NGC3894	09 06 39	66.8	58.2	-2.7	-87.3	-5	348	No stop	
21 28 30	---	09 10 40	67.3	58.3	-2.7	-88.1	235	410	21 24 31	

21 28 30	NGC3894	09 10 40	67.3	58.3	-2.7	-88.1	-5	410	No stop	
21 32 30	---	09 14 41	67.8	58.3	-2.6	-89.0	235	471	21 28 31	

21 33 30	J1128+5925	09 15 41	70.6	58.1	-2.2	-93.8	36	471	21 33 30	
21 34 30	=1125+596	09 16 41	70.7	58.1	-2.2	-94.0	60	487	21 33 31	

21 34 30	NGC3894	09 16 41	68.1	58.3	-2.6	-89.4	-24	487	No stop	
21 38 30	---	09 20 42	68.6	58.3	-2.5	-90.2	216	549	21 34 31	

21 38 30	NGC3894	09 20 42	68.6	58.3	-2.5	-90.2	-5	549	No stop	
21 42 30	---	09 24 42	69.1	58.3	-2.4	-91.1	235	611	21 38 31	

Schedule for TORUN (Code Tr)

Page 3

EVN observations of CSOs at 1.3cm (Session 2)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day 57	---							
21 42 30	NGC3894	09 24 42	69.1	58.3	-2.4		-91.1	-5	611	No stop
21 46 30	---	09 28 43	69.6	58.3	-2.4		-92.0	235	672	21 42 31
21 47 30	J1128+5925	09 29 43	72.4	57.5	-2.0		-97.3	36	672	21 47 30
21 48 30	=1125+596	09 30 43	72.5	57.5	-2.0		-97.6	60	688	21 47 31
21 48 30	NGC3894	09 30 43	69.9	58.2	-2.3		-92.5	-24	688	No stop
21 52 30	---	09 34 44	70.4	58.1	-2.3		-93.4	216	750	21 48 31
21 52 30	NGC3894	09 34 44	70.4	58.1	-2.3		-93.4	-5	750	No stop
21 56 30	---	09 38 45	70.9	58.0	-2.2		-94.4	235	812	21 52 31
21 56 30	NGC3894	09 38 45	70.9	58.0	-2.2		-94.4	-5	812	No stop
22 00 30	---	09 42 45	71.4	57.9	-2.1		-95.4	235	873	21 56 31
22 01 30	J1128+5925	09 43 45	74.2	56.5	-1.8		-101.3	36	873	22 01 30
22 02 30	=1125+596	09 44 46	74.3	56.4	-1.7		-101.6	60	889	22 01 31
22 02 30	NGC3894	09 44 46	71.7	57.8	-2.1		-95.9	-23	889	No stop
22 06 30	---	09 48 46	72.2	57.6	-2.0		-96.9	217	951	22 02 31
22 06 30	NGC3894	09 48 46	72.2	57.6	-2.0		-96.9	-5	951	No stop
22 10 30	---	09 52 47	72.7	57.4	-2.0		-98.0	235	1013	22 06 31
22 10 30	NGC3894	09 52 47	72.7	57.4	-2.0		-98.0	-5	1013	No stop
22 14 30	---	09 56 48	73.2	57.2	-1.9		-99.1	235	1074	22 10 31
22 15 30	J1128+5925	09 57 48	75.9	54.9	-1.5		-105.9	36	1074	22 15 30
22 16 30	=1125+596	09 58 48	76.0	54.8	-1.5		-106.3	60	1090	22 15 31
22 16 30	NGC3894	09 58 48	73.5	57.0	-1.9		-99.7	-23	1090	No stop
22 20 30	---	10 02 49	74.0	56.7	-1.8		-100.8	217	1152	22 16 31
22 20 30	NGC3894	10 02 49	74.0	56.7	-1.8		-100.8	-5	1152	No stop
22 24 30	---	10 06 49	74.5	56.3	-1.7		-102.1	235	1213	22 20 31
22 24 30	NGC3894	10 06 49	74.5	56.3	-1.7		-102.1	-5	1213	No stop
22 28 30	---	10 10 50	75.0	55.9	-1.7		-103.3	235	1275	22 24 31
22 29 30	J1128+5925	10 11 50	77.6	52.4	-1.3		-111.3	37	1275	22 29 30
22 30 30	=1125+596	10 12 50	77.7	52.2	-1.3		-111.8	60	1291	22 29 31
22 30 30	NGC3894	10 12 50	75.2	55.7	-1.6		-104.0	-23	1291	No stop
22 34 30	---	10 16 51	75.7	55.1	-1.6		-105.4	217	1353	22 30 31
22 34 30	NGC3894	10 16 51	75.7	55.1	-1.6		-105.4	-5	1353	No stop
22 38 30	---	10 20 52	76.2	54.6	-1.5		-106.8	235	1414	22 34 31

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 2)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
22 38 30	NGC3894	10 20 52	76.2	54.6	-1.5		-106.8	-5	1414	No stop
22 42 30	---	10 24 52	76.7	53.9	-1.4		-108.3	235	1476	22 38 31
22 43 30	J1128+5925	10 25 52	79.2	48.7	-1.1		-118.0	35	1476	22 43 30
22 44 30	=1125+596	10 26 53	79.3	48.4	-1.0		-118.6	60	1492	22 43 31
22 46 30	J1347+1217	10 28 53	33.1	116.7	-3.3		-33.3	-67	1492	22 46 30
22 48 30	=1345+125	10 30 53	33.4	117.2	-3.3		-33.1	53	1523	22 46 31
22 48 30	J1347+1217	10 30 53	33.4	117.2	-3.3		-33.1	-5	1523	No stop
22 52 30	=1345+125	10 34 54	33.9	118.2	-3.2		-32.8	235	1584	22 48 31
22 52 30	J1347+1217	10 34 54	33.9	118.2	-3.2		-32.8	-5	1584	No stop
22 56 30	=1345+125	10 38 54	34.4	119.2	-3.2		-32.4	235	1646	22 52 31
22 56 30	J1347+1217	10 38 54	34.4	119.2	-3.2		-32.4	-5	1646	No stop
23 00 30	=1345+125	10 42 55	34.9	120.2	-3.1		-32.1	235	1708	22 56 31
23 01 00	J1347+1217	10 43 25	35.0	120.3	-3.1		-32.0	24	1708	23 01 00
23 05 00	=1345+125	10 47 26	35.5	121.3	-3.0		-31.7	240	1770	23 01 01
23 05 00	J1347+1217	10 47 26	35.5	121.3	-3.0		-31.7	-5	1770	No stop
23 09 00	=1345+125	10 51 27	36.0	122.3	-3.0		-31.3	235	1832	23 05 01
23 09 30	J1347+1217	10 51 57	36.1	122.5	-2.9		-31.2	24	1832	23 09 30
23 13 30	=1345+125	10 55 57	36.6	123.5	-2.9		-30.8	240	1894	23 09 31
23 13 30	J1347+1217	10 55 57	36.6	123.5	-2.9		-30.8	-5	1894	No stop
23 18 00	=1345+125	11 00 28	37.2	124.7	-2.8		-30.3	265	1963	23 13 31
23 18 00	J1347+1217	11 00 28	37.2	124.7	-2.8		-30.3	-5	1963	No stop
23 22 30	=1345+125	11 04 59	37.7	125.9	-2.7		-29.8	265	2033	23 18 01
23 23 00	J1347+1217	11 05 29	37.8	126.0	-2.7		-29.8	24	2033	23 23 00
23 27 00	=1345+125	11 09 30	38.3	127.1	-2.7		-29.3	240	2095	23 23 01
23 27 00	J1347+1217	11 09 30	38.3	127.1	-2.7		-29.3	-5	2095	No stop
23 31 30	=1345+125	11 14 00	38.8	128.3	-2.6		-28.8	265	2164	23 27 01
23 31 30	J1347+1217	11 14 00	38.8	128.3	-2.6		-28.8	-5	2164	No stop
23 36 00	=1345+125	11 18 31	39.3	129.6	-2.5		-28.3	265	2234	23 31 31
23 36 30	J1347+1217	11 19 01	39.4	129.7	-2.5		-28.2	24	2234	23 36 30
23 40 30	=1345+125	11 23 02	39.8	130.9	-2.4		-27.7	240	2296	23 36 31

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 2)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Wed	26 Feb 2025	Day	57	---						
23 40 30	J1347+1217	11 23 02	39.8	130.9	-2.4		-27.7	-5	2296	No stop
23 45 00	=1345+125	11 27 32	40.3	132.1	-2.4		-27.1	265	2365	23 40 31
23 45 00	J1347+1217	11 27 32	40.3	132.1	-2.4		-27.1	-5	2365	No stop
23 49 30	=1345+125	11 32 03	40.8	133.4	-2.3		-26.5	265	2435	23 45 01
23 50 00	J1347+1217	11 32 33	40.9	133.6	-2.3		-26.4	24	2435	23 50 00
23 54 00	=1345+125	11 36 34	41.3	134.7	-2.2		-25.9	240	2497	23 50 01
23 54 00	J1347+1217	11 36 34	41.3	134.7	-2.2		-25.9	-5	2497	No stop
23 58 30	=1345+125	11 41 05	41.8	136.1	-2.1		-25.2	265	2566	23 54 01
--- Start: Wed	26 Feb 2025	Day	57	-- Stop: Thu	27 Feb 2025	Day	58	---		
23 58 30	J1347+1217	11 41 05	41.8	136.1	-2.1		-25.2	-5	2566	No stop
00 03 00	=1345+125	11 45 35	42.3	137.4	-2.1		-24.6	265	2636	23 58 31
00 03 30	J1347+1217	11 46 06	42.3	137.6	-2.0		-24.5	24	2636	00 03 30
00 07 30	=1345+125	11 50 06	42.7	138.8	-2.0		-23.9	240	2697	00 03 31
00 07 30	J1347+1217	11 50 06	42.7	138.8	-2.0		-23.9	-5	2697	No stop
00 12 00	=1345+125	11 54 37	43.2	140.2	-1.9		-23.2	265	2767	00 07 31
00 12 00	J1347+1217	11 54 37	43.2	140.2	-1.9		-23.2	-5	2767	No stop
00 16 30	=1345+125	11 59 08	43.6	141.6	-1.8		-22.4	265	2837	00 12 01
00 17 00	J1347+1217	11 59 38	43.6	141.7	-1.8		-22.4	24	2837	00 17 00
00 21 00	=1345+125	12 03 38	44.0	143.0	-1.8		-21.7	240	2898	00 17 01
00 21 00	J1347+1217	12 03 38	44.0	143.0	-1.8		-21.7	-5	2898	No stop
00 25 30	=1345+125	12 08 09	44.4	144.4	-1.7		-20.9	265	2968	00 21 01
00 25 30	J1347+1217	12 08 09	44.4	144.4	-1.7		-20.9	-5	2968	No stop
00 30 00	=1345+125	12 12 40	44.8	145.9	-1.6		-20.2	265	3038	00 25 31
00 30 30	J1347+1217	12 13 10	44.8	146.0	-1.6		-20.1	24	3038	00 30 30
00 34 30	=1345+125	12 17 11	45.2	147.3	-1.5		-19.4	240	3099	00 30 31
00 34 30	J1347+1217	12 17 11	45.2	147.3	-1.5		-19.4	-5	3099	No stop
00 39 00	=1345+125	12 21 41	45.5	148.8	-1.5		-18.5	265	3169	00 34 31
00 39 00	J1347+1217	12 21 41	45.5	148.8	-1.5		-18.5	-5	3169	No stop
00 43 30	=1345+125	12 26 12	45.9	150.3	-1.4		-17.7	265	3239	00 39 01

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 2)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Thu	27 Feb 2025	Day 58	---							
00 44 30	J1347+1217	12 27 12	45.9	150.7	-1.4		-17.5	53	3239	00 44 30
00 49 00	=1345+125	12 31 43	46.3	152.2	-1.3		-16.7	270	3308	00 44 31
00 49 00	J1347+1217	12 31 43	46.3	152.2	-1.3		-16.7	-5	3308	No stop
00 53 00	=1345+125	12 35 44	46.5	153.5	-1.2		-15.9	235	3370	00 49 01
01 03 00	NGC3998	12 45 45	82.9	292.7	0.8		103.3	303	3370	01 03 00
01 07 00	---	12 49 46	82.3	291.8	0.8		101.5	240	3432	01 03 01
01 08 00	NGC3894	12 50 46	79.6	312.4	1.0		119.8	4	3432	01 08 00
01 12 00	---	12 54 47	79.1	311.1	1.1		117.6	240	3494	01 08 01
01 12 00	NGC3998	12 54 47	81.6	290.8	0.9		99.6	-56	3494	No stop
01 16 00	---	12 58 47	81.0	290.2	1.0		98.2	184	3555	01 12 01
01 16 00	NGC3894	12 58 47	78.7	309.9	1.1		115.6	-54	3555	No stop
01 20 00	---	13 02 48	78.2	308.8	1.2		113.7	186	3617	01 16 01
01 21 00	NGC3998	13 03 48	80.3	289.7	1.1		96.6	7	3617	01 21 00
01 25 00	---	13 07 49	79.8	289.3	1.1		95.4	240	3679	01 21 01
01 26 00	NGC3894	13 08 49	77.5	307.4	1.3		111.0	9	3679	01 26 00
01 30 00	---	13 12 50	77.0	306.6	1.4		109.4	240	3741	01 26 01
01 30 00	NGC3998	13 12 50	79.1	289.0	1.2		94.1	-50	3741	No stop
01 34 00	---	13 16 50	78.5	288.8	1.3		93.1	190	3803	01 30 01
01 34 00	NGC3894	13 16 50	76.5	305.9	1.4		107.8	-49	3803	No stop
01 38 00	---	13 20 51	76.1	305.3	1.5		106.3	191	3865	01 34 01
01 39 00	NGC3998	13 21 51	77.8	288.7	1.4		91.9	12	3865	01 39 00
01 43 00	---	13 25 52	77.2	288.6	1.4		91.0	240	3926	01 39 01
01 44 00	NGC3894	13 26 52	75.3	304.4	1.6		104.2	13	3926	01 44 00
01 48 00	---	13 30 53	74.8	304.0	1.7		102.9	240	3988	01 44 01
01 48 00	NGC3998	13 30 53	76.5	288.6	1.5		89.9	-46	3988	No stop
01 52 00	---	13 34 53	75.9	288.6	1.6		89.1	194	4050	01 48 01
01 52 00	NGC3894	13 34 53	74.3	303.6	1.7		101.7	-45	4050	No stop
01 56 00	---	13 38 54	73.8	303.2	1.8		100.5	195	4112	01 52 01
01 57 00	NGC3998	13 39 54	75.2	288.7	1.7		88.2	16	4112	01 57 00
02 01 00	---	13 43 55	74.6	288.8	1.7		87.4	240	4174	01 57 01

Schedule for TORUN (Code Tr)

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EVN observations of CSOs at 1.3cm (Session 2)

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Thu	27 Feb 2025	Day	58	---						
02 02 00	NGC3894	13 44 55	73.1	302.8	1.9		98.7	17	4174	02 02 00
02 06 00	---	13 48 56	72.5	302.5	2.0		97.6	240	4236	02 02 01
02 06 00	NGC3998	13 48 56	73.9	288.9	1.8		86.5	-42	4236	No stop
02 10 00	---	13 52 56	73.4	289.0	1.9		85.8	198	4297	02 06 01
02 10 00	NGC3894	13 52 56	72.0	302.3	2.0		96.6	-41	4297	No stop
02 14 00	---	13 56 57	71.5	302.1	2.1		95.6	199	4359	02 10 01
02 15 00	NGC3998	13 57 57	72.6	289.2	2.0		85.0	19	4359	02 15 00
02 19 00	---	14 01 58	72.1	289.4	2.0		84.3	240	4421	02 15 01
02 20 00	NGC3894	14 02 58	70.8	301.9	2.2		94.1	20	4421	02 20 00
02 24 00	---	14 06 59	70.3	301.8	2.3		93.1	240	4483	02 20 01
02 24 00	NGC3998	14 06 59	71.4	289.7	2.1		83.5	-39	4483	No stop
02 28 00	---	14 10 59	70.8	289.9	2.2		82.9	201	4545	02 24 01
02 28 00	NGC3894	14 10 59	69.7	301.8	2.3		92.2	-39	4545	No stop
02 32 00	---	14 15 00	69.2	301.7	2.4		91.3	201	4607	02 28 01
02 33 00	NGC3998	14 16 00	70.1	290.1	2.3		82.1	22	4607	02 33 00
02 37 00	---	14 20 01	69.5	290.4	2.3		81.5	240	4668	02 33 01
02 38 00	NGC3894	14 21 01	68.5	301.7	2.5		90.0	22	4668	02 38 00
02 42 00	---	14 25 02	67.9	301.7	2.6		89.1	240	4730	02 38 01
02 42 00	NGC3998	14 25 02	68.8	290.7	2.4		80.8	-37	4730	No stop
02 46 00	---	14 29 02	68.3	290.9	2.5		80.2	203	4792	02 42 01
02 46 00	NGC3894	14 29 02	67.4	301.7	2.6		88.3	-37	4792	No stop
02 50 00	---	14 33 03	66.9	301.8	2.7		87.5	203	4854	02 46 01
02 51 00	NGC3998	14 34 03	67.6	291.3	2.6		79.5	24	4854	02 51 00
02 55 00	---	14 38 04	67.0	291.6	2.6		78.9	240	4916	02 51 01
02 57 00	J1058+8114	14 40 04	57.5	346.4	3.7		113.9	-5	4916	02 57 00
03 00 00	=1053+815	14 43 04	57.4	346.3	3.7		113.1	175	4962	02 57 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.K2048

Setup group: 7

Station: TORUN

Total bit rate: 2048

Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 16	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00
	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00	21480.00
Net SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF SB =	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
	3	11	3	11	4	12	4	12
BBC SB=	L	L	U	U	L	L	U	U
	L	L	U	U	L	L	U	U
IF =	A1	B1	A1	B1	A1	B1	A1	B1
	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set:	11	Setup file default. Used with PCAL = off						
LO sum=	22139.49	22139.49	22139.49	22139.49	22203.49	22203.49	22203.49	22203.49
	22267.49	22267.49	22267.49	22267.49	22331.49	22331.49	22331.49	22331.49
BBC fr=	659.49	659.49	659.49	659.49	723.49	723.49	723.49	723.49
	787.49	787.49	787.49	787.49	851.49	851.49	851.49	851.49
Bandwd=	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Matching frequency sets:	11							

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* NGC3998	11 55 20.947530	* 11 57 56.133331	11 59 16.874136	0.00
	55 43 54.65353	* 55 27 12.92205	55 18 37.42249	0.00
1053+815	10 53 36.229432	* 10 58 11.535369	11 00 37.853651	0.03
* J1058+8114	81 30 35.56783	* 81 14 32.67518	81 06 23.71190	0.00
J1058+81	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 35777 observations.			
1125+596	11 25 23.181651	* 11 28 13.340676	11 29 41.945018	0.11
* J1128+5925	59 41 46.14385	* 59 25 14.79854	59 16 47.30813	0.06
J1128+59	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 477 observations.			
* NGC3894	11 46 10.410918	* 11 48 50.358256	11 50 13.820333	0.36
J1148+5924	59 41 36.72438	* 59 24 56.38192	59 16 22.53506	0.19
1146+596	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 120 observations.			
* 1156+295	11 56 57.786211	* 11 59 31.833912	12 00 50.969786	0.00
J1159+2914	29 31 25.73880	* 29 14 43.82690	29 06 08.48410	0.00
J1159+29	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc GSFC 2016a X/S astro solution, 78215 observations.			
* 3C286	13 28 49.657769	* 13 31 08.288061	13 32 19.394240	0.17

J1331+3030	30 45 58.64066	*	30 30 32.95930	30 22 30.58841	0.16
1328+307	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc				
J1331+30	GSFC 2016a X/S astro solution, 269 observations.				
1345+125	13 45 06.171234	*	13 47 33.361612	13 48 48.446212	0.10
* J1347+1217	12 32 20.33883	*	12 17 24.24015	12 09 39.64632	0.21
J1347+12	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc				
	GSFC 2016a X/S astro solution, 201 observations.				

IMPROVING K-BAND CELESTIAL REF.FRAME FOR THE NEXT MULTI-WAVEBAND IC

PI: P. Charlot

Address: Laboratoire d'Astrophysique de Bordeaux

Schedule for TORUN (Code Tr)

Page 2

Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
Next scan frequencies:		22044.00	22044.00	22108.00	22108.00	22172.00	22172.00	22236.00	22236.00	22236.00
		22300.00	22300.00	22364.00	22364.00	22428.00	22428.00	22492.00	22492.00	22492.00
Next BBC frequencies:		544.00	544.00	608.00	608.00	672.00	672.00	736.00	736.00	736.00
		800.00	800.00	864.00	864.00	928.00	928.00	992.00	992.00	992.00
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

07 00 00	2059+034	18 43 44	33.0	137.2	-2.3		-24.1	0	0	07 00 00
07 01 31	---	18 45 15	33.2	137.6	-2.3		-23.9	91	23	07 00 01
07 02 37	2204-007	18 46 21	22.2	123.7	-3.4		-30.0	11	23	07 02 37
07 04 08	---	18 47 53	22.3	124.0	-3.3		-29.8	91	47	07 02 38
07 05 18	2215+150	18 49 03	34.4	111.9	-3.5		-35.3	11	47	07 05 18
07 06 42	---	18 50 27	34.6	112.3	-3.5		-35.2	84	69	07 05 19
07 07 25	CTA102	18 51 10	29.7	111.5	-3.7		-34.8	11	69	07 07 25
07 08 50	---	18 52 35	29.9	111.8	-3.7		-34.7	85	90	07 07 26
07 09 39	2254+074	18 53 25	23.3	109.0	-4.1		-35.0	10	90	07 09 39
07 13 05	---	18 56 51	23.8	109.7	-4.0		-34.8	206	144	07 09 40
07 27 53	2319+317	19 11 42	41.1	89.1	-4.2		-45.2	817	144	07 27 53
07 29 27	---	19 13 16	41.4	89.4	-4.2		-45.2	94	168	07 27 54
07 30 20	2234+282	19 14 09	45.7	102.9	-3.4		-41.8	11	168	07 30 20
07 31 35	---	19 15 24	45.9	103.2	-3.4		-41.8	75	187	07 30 21
07 36 34	1606+106	19 20 24	32.9	239.9	3.2		31.9	11	187	07 36 34
07 37 57	---	19 21 47	32.7	240.2	3.2		32.0	83	208	07 36 35
07 40 02	NRA0512	19 23 52	59.5	260.6	2.7		50.4	10	208	07 40 02
07 42 21	---	19 26 12	59.1	261.2	2.7		50.5	139	244	07 40 03
07 44 00	1751+288	19 27 51	60.3	224.4	1.6		28.6	10	244	07 44 00
07 45 22	---	19 29 13	60.1	224.9	1.6		28.9	82	265	07 44 01
07 48 34	1514+004	19 32 26	15.6	248.5	4.2		34.0	11	265	07 48 34
07 49 34	---	19 33 26	15.5	248.7	4.3		34.0	60	281	07 48 35
07 52 17	1928+154	19 36 10	52.5	181.6	0.1		1.0	10	281	07 52 17
07 53 49	---	19 37 42	52.5	182.2	0.1		1.4	92	305	07 52 18

Schedule for TORUN (Code Tr)

Page 3

Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Thu	27 Feb 2025	Day	58	---						
07 55 19	1959+332	19 39 12	69.9	165.6	-0.4		-10.3	11	305	07 55 19
07 56 31	---	19 40 24	70.0	166.3	-0.4		-9.8	72	323	07 55 20
07 57 12	2018+295	19 41 05	65.6	158.6	-0.7		-14.6	10	323	07 57 12
07 58 33	---	19 42 27	65.6	159.3	-0.6		-14.1	81	344	07 57 13
08 01 51	1546+027	19 45 45	20.3	245.6	3.9		33.2	11	344	08 01 51
08 03 24	---	19 47 18	20.1	245.9	3.9		33.3	93	368	08 01 52
08 05 06	1749+096	19 49 01	40.6	219.1	1.9		22.6	11	368	08 05 06
08 06 58	---	19 50 53	40.5	219.7	2.0		22.9	112	397	08 05 07
08 08 46	1555+001	19 52 41	18.3	243.7	3.9		32.6	11	397	08 08 46
08 10 13	---	19 54 08	18.1	244.1	3.9		32.7	87	419	08 08 47
08 14 09	1342+663	19 58 05	45.8	324.4	6.2		59.2	61	419	08 14 09
08 15 43	---	19 59 39	45.6	324.5	6.2		58.9	94	443	08 14 10
08 16 36	1357+769	20 00 33	50.9	338.4	6.0		72.3	10	443	08 16 36
08 18 02	---	20 01 59	50.9	338.5	6.1		72.0	86	466	08 16 37
08 18 44	1231+811	20 02 41	48.8	346.9	7.5		57.7	10	466	08 18 44
08 20 26	---	20 04 23	48.8	347.0	7.5		57.3	102	492	08 18 45
08 21 44	0716+714	20 05 41	34.6	364.0	-11.3		-7.4	11	492	08 21 44
08 22 44	---	20 06 42	34.6	364.1	-11.3		-7.6	60	507	08 21 45
08 31 47	0056-001	20 15 46	11.4	105.1	-4.7		-35.4	10	507	08 31 47
08 34 20	---	20 18 19	11.8	105.7	-4.7		-35.3	153	547	08 31 48
08 35 24	2355-106	20 19 24	11.4	124.7	-3.7		-30.1	11	547	08 35 24
08 36 35	---	20 20 35	11.5	124.9	-3.6		-30.0	71	565	08 35 25
08 40 15	0016+731	20 24 15	58.6	27.8	-3.9		-97.6	11	565	08 40 15
08 41 25	---	20 25 26	58.7	27.8	-3.9		-97.9	70	583	08 40 16
08 43 48	1849+670	20 27 49	71.6	-30.9	1.6		127.5	11	583	08 43 48
08 44 48	---	20 28 49	71.5	-31.1	1.7		127.1	60	598	08 43 49
08 47 59	0012+610	20 32 01	59.6	51.6	-3.7		-80.0	10	598	08 47 59
08 49 52	---	20 33 54	59.8	51.7	-3.7		-80.4	113	628	08 48 00
08 56 32	1656-075	20 40 35	13.5	236.7	3.7		30.4	15	628	08 56 32
08 57 55	---	20 41 58	13.3	237.0	3.7		30.6	83	649	08 56 33
09 02 33	2000+472	20 46 37	81.1	235.5	0.7		47.1	10	649	09 02 33
09 04 43	---	20 48 47	80.8	237.1	0.8		48.3	130	682	09 02 34

Schedule for TORUN (Code Tr)

Page 4

Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

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SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Thu	27 Feb 2025	Day	58	---						
09 05 52	1935+360	20 49 57	69.0	223.6	1.2		30.9	11	682	09 05 52
09 08 34	---	20 52 39	68.7	224.9	1.2		31.7	162	724	09 05 53
09 12 51	0013-184	20 56 57	6.9	132.8	-3.3		-27.6	11	724	09 12 51
09 14 59	---	20 59 05	7.2	133.3	-3.3		-27.4	128	757	09 12 52
09 15 56	0113-118	21 00 02	5.5	117.4	-4.3		-32.9	10	757	09 15 56
09 17 00	---	21 01 06	5.6	117.7	-4.3		-32.9	64	774	09 15 57
09 17 18	0113-118	21 01 24	5.7	117.7	-4.3		-32.8	12	774	09 17 18
09 18 18	---	21 02 25	5.8	117.9	-4.3		-32.8	60	789	09 17 19
09 24 37	1504+377	21 08 45	28.8	294.9	6.0		43.3	10	789	09 24 37
09 26 41	---	21 10 49	28.6	295.3	6.1		43.1	124	821	09 24 38
09 29 20	0603+882	21 13 28	51.6	361.6	-9.8		-31.8	11	821	09 29 20
09 31 00	---	21 15 09	51.6	361.6	-9.8		-32.2	100	847	09 29 21
09 32 37	4067.05	21 16 46	51.7	397.3	-5.2		-71.6	11	847	09 32 37
09 36 27	---	21 20 37	52.0	397.4	-5.2		-72.3	230	906	09 32 38
09 39 01	0529+483	21 23 11	22.4	397.0	-8.2		-33.0	29	906	09 39 01
09 40 34	---	21 24 44	22.5	397.3	-8.2		-33.2	93	930	09 39 02
09 41 40	0738+491	21 25 50	14.3	376.9	-10.3		-15.5	10	930	09 41 40
09 42 40	---	21 26 51	14.3	377.1	-10.3		-15.6	60	946	09 41 41
09 43 34	0814+425	21 27 45	6.5	372.5	-10.9		-10.1	11	946	09 43 34
09 45 11	---	21 29 22	6.6	372.8	-10.8		-10.4	97	971	09 43 35
09 50 12	1739-152	21 34 24	5.7	235.0	3.8		30.7	10	971	09 50 12
09 51 12	---	21 35 24	5.5	235.2	3.9		30.8	60	986	09 50 13
09 56 21	0805+410	21 40 34	5.9	376.9	-10.5		-13.3	11	986	09 56 21
09 57 21	---	21 41 34	5.9	377.1	-10.5		-13.5	60	1001	09 56 22
10 02 34	1929+226	21 46 48	50.4	233.2	2.2		31.4	10	1001	10 02 34
10 05 05	---	21 49 19	50.1	234.0	2.3		31.8	151	1040	10 02 35
10 07 47	1829-106	21 52 02	13.7	230.4	3.3		28.1	11	1040	10 07 47
10 11 42	---	21 55 57	13.2	231.2	3.4		28.4	235	1101	10 07 48
10 14 21	1636+473	21 58 37	41.1	297.4	5.3		51.7	12	1101	10 14 21
10 15 50	---	22 00 06	40.9	297.6	5.4		51.6	89	1124	10 14 22

Schedule for TORUN (Code Tr)

Page 5

Improving K-band celestial ref.frame for the next multi-waveband ICRF

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Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
10 16 32	NRA0512	22 00 48	36.3	290.0	5.3		47.2	11	1124	10 16 32
10 18 43	---	22 03 00	36.0	290.4	5.4		47.1	131	1158	10 16 33
10 23 25	2315-172	22 07 42	18.4	161.9	-1.2		-11.2	10	1158	10 23 25
10 24 25	---	22 08 43	18.4	162.1	-1.2		-11.1	60	1173	10 23 26
10 26 03	0139-097	22 10 21	13.0	125.9	-3.5		-29.5	10	1173	10 26 03
10 27 03	---	22 11 21	13.1	126.1	-3.5		-29.5	60	1188	10 26 04
10 27 56	0215+015	22 12 14	18.1	112.2	-4.1		-33.8	10	1188	10 27 56
10 29 13	---	22 13 31	18.3	112.5	-4.1		-33.7	77	1208	10 27 57
10 30 14	0240-060	22 14 32	8.6	111.7	-4.5		-34.1	11	1208	10 30 14
10 32 14	---	22 16 33	8.8	112.1	-4.5		-34.0	120	1239	10 30 15
10 35 13	0017+200	22 19 32	49.9	132.7	-2.0		-28.1	11	1239	10 35 13
10 36 37	---	22 20 57	50.1	133.1	-2.0		-27.9	84	1261	10 35 14
10 37 42	NGC0262	22 22 02	56.2	113.5	-2.5		-40.5	11	1261	10 37 42
10 40 22	---	22 24 42	56.6	114.3	-2.4		-40.2	160	1302	10 37 43
10 43 02	0048-097	22 27 23	20.4	141.6	-2.4		-22.2	10	1302	10 43 02
10 44 49	---	22 29 10	20.6	142.1	-2.4		-22.0	107	1330	10 43 03
10 48 49	0057+678	22 33 11	66.9	34.8	-2.5		-112.1	11	1330	10 48 49
10 50 31	---	22 34 53	67.0	34.7	-2.5		-112.6	102	1356	10 48 50
10 52 19	1231+811	22 36 41	44.9	-6.4	10.0		24.5	11	1356	10 52 19
10 53 19	---	22 37 41	44.8	-6.3	10.1		24.3	60	1371	10 52 20
10 53 48	1150+812	22 38 10	44.4	-4.2	10.7		16.0	11	1371	10 53 48
10 56 03	---	22 40 26	44.3	-4.1	10.8		15.5	135	1406	10 53 49
11 00 00	0312+100	22 44 23	21.3	101.5	-4.5		-36.7	11	1406	11 00 00
11 04 31	---	22 48 55	22.0	102.5	-4.5		-36.6	271	1476	11 00 01
11 08 00	2204-007	22 52 25	35.7	193.7	0.7		8.2	12	1476	11 08 00
11 09 18	---	22 53 43	35.7	194.1	0.8		8.4	78	1496	11 08 01
11 10 41	2143-156	22 55 06	20.1	197.3	1.1		10.7	11	1496	11 10 41
11 13 00	---	22 57 25	20.0	197.9	1.2		11.0	139	1532	11 10 42
11 16 22	1749+096	23 00 48	15.5	265.4	5.1		37.4	52	1532	11 16 22
11 17 22	---	23 01 48	15.3	265.6	5.2		37.4	60	1547	11 16 23

Schedule for TORUN (Code Tr)

Page 6

Improving K-band celestial ref.frame for the next multi-waveband ICRF

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Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
11 22 24	0245-167	23 06 51	5.7	127.3	-3.7		-29.9	10	1547	11 22 24
11 27 24	---	23 11 52	6.3	128.4	-3.6		-29.4	300	1625	11 22 25
11 37 59	1746+470	23 22 29	39.1	299.1	5.6		50.2	280	1625	11 37 59
11 42 59	---	23 27 29	38.4	299.8	5.7		49.8	300	1702	11 38 00
11 45 14	1936+046	23 29 45	22.9	245.8	3.8		33.4	12	1702	11 45 14
11 48 03	---	23 32 34	22.5	246.5	3.9		33.5	169	1746	11 45 15
11 49 10	2059+034	23 33 41	31.8	225.9	2.5		25.6	11	1746	11 49 10
11 51 39	---	23 36 11	31.5	226.5	2.6		25.9	149	1784	11 49 11
11 54 01	1717+178	23 38 33	11.4	284.4	6.3		37.6	11	1784	11 54 01
11 55 01	---	23 39 33	11.3	284.6	6.3		37.6	60	1799	11 54 02
12 01 21	0420-014	23 45 54	11.0	107.3	-4.6		-35.0	10	1799	12 01 21
12 02 21	---	23 46 55	11.1	107.5	-4.6		-35.0	60	1815	12 01 22
12 07 38	1849+670	23 52 12	52.6	-38.3	5.0		73.3	10	1815	12 07 38
12 12 38	---	23 57 13	52.1	-38.1	5.1		72.3	300	1892	12 07 39
12 17 07	1441+522	00 01 43	20.4	-25.3	9.3		24.6	137	1892	12 17 07
12 22 07	---	00 06 44	20.0	-24.6	9.4		23.9	300	1969	12 17 08
12 24 14	0716+714	00 08 51	44.0	24.9	-7.3		-52.1	13	1969	12 24 14
12 25 31	---	00 10 08	44.1	25.0	-7.2		-52.4	77	1989	12 24 15
12 26 49	0917+624	00 11 27	29.9	21.1	-9.2		-27.6	11	1989	12 26 49
12 28 46	---	00 13 24	30.0	21.3	-9.2		-27.9	117	2019	12 26 50
12 32 03	0133+476	00 16 41	76.1	103.3	-1.4		-60.8	10	2019	12 32 03
12 33 59	---	00 18 38	76.4	104.0	-1.3		-60.5	116	2049	12 32 04
12 38 29	1357+769	00 23 09	40.6	-7.1	10.4		18.6	33	2049	12 38 29
12 40 46	---	00 25 26	40.5	-6.9	10.5		18.1	137	2085	12 38 30
12 42 55	1851+488	00 27 35	40.3	-58.8	5.6		51.5	10	2085	12 42 55
12 44 19	---	00 28 59	40.1	-58.7	5.6		51.4	84	2106	12 42 56
12 49 50	0430+289	00 34 31	40.6	94.1	-4.0		-43.3	11	2106	12 49 50
12 52 18	---	00 37 00	40.9	94.7	-4.0		-43.3	148	2144	12 49 51
12 58 07	2215+150	00 42 50	43.0	230.6	2.4		28.8	63	2144	12 58 07
12 59 07	---	00 43 50	42.9	230.8	2.4		28.9	60	2160	12 58 08

Schedule for TORUN (Code Tr)

Page 7

Improving K-band celestial ref.frame for the next multi-waveband ICRF

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Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
12 59 50	2150+173	00 44 33	41.5	239.8	2.8		33.0	10	2160	12 59 50
13 02 55	---	00 47 39	41.1	240.6	2.9		33.3	185	2207	12 59 51
13 08 39	0920+390	00 53 23	12.3	399.1	-8.5		-29.0	12	2207	13 08 39
13 10 07	---	00 54 52	12.4	399.3	-8.5		-29.2	88	2230	13 08 40
13 17 37	0008-264	01 02 23	10.1	191.4	0.8		7.6	19	2230	13 17 37
13 19 14	---	01 04 00	10.0	191.8	0.9		7.8	97	2255	13 17 38
13 20 09	2315-172	01 04 55	16.4	206.3	1.8		16.1	11	2255	13 20 09
13 22 56	---	01 07 43	16.3	207.0	1.8		16.5	167	2298	13 20 10
13 24 39	0056-001	01 09 26	37.1	182.8	0.2		1.7	11	2298	13 24 39
13 27 00	---	01 11 47	37.1	183.6	0.2		2.1	141	2334	13 24 40
13 28 08	0113-118	01 12 56	25.4	178.8	-0.1		-0.8	10	2334	13 28 08
13 30 10	---	01 14 58	25.4	179.3	-0.0		-0.4	122	2366	13 28 09
13 34 45	0805+410	01 19 34	25.0	54.5	-6.9		-40.2	10	2366	13 34 45
13 37 06	---	01 21 55	25.3	54.9	-6.8		-40.5	141	2402	13 34 46
13 43 45	2319+317	01 28 35	59.3	239.7	2.1		37.8	15	2402	13 43 45
13 45 22	---	01 30 13	59.1	240.2	2.1		38.0	97	2427	13 43 46
13 48 44	1903+196	01 33 35	11.8	287.3	6.4		37.5	11	2427	13 48 44
13 50 16	---	01 35 07	11.6	287.6	6.5		37.5	92	2451	13 48 45
13 51 20	1751+288	01 36 11	9.2	306.7	7.7		33.3	11	2451	13 51 20
13 52 45	---	01 37 37	9.0	306.9	7.7		33.2	85	2473	13 51 21
13 54 21	1935+360	01 39 13	28.1	293.8	6.0		42.9	11	2473	13 54 21
13 55 21	---	01 40 13	27.9	294.0	6.0		42.8	60	2488	13 54 22
13 57 12	2142+110	01 42 04	27.5	251.1	3.9		35.4	10	2488	13 57 12
13 58 12	---	01 43 05	27.4	251.4	3.9		35.5	60	2504	13 57 13
13 59 02	CTA102	01 43 55	34.1	240.7	3.2		32.3	11	2504	13 59 02
14 00 20	---	01 45 13	34.0	241.0	3.2		32.5	78	2524	13 59 03
14 01 03	2254+074	01 45 56	33.5	232.5	2.8		28.7	11	2524	14 01 03
14 02 50	---	01 47 43	33.3	232.9	2.8		28.9	107	2551	14 01 04
14 03 55	2142+110	01 48 49	26.5	252.6	4.0		35.8	11	2551	14 03 55
14 06 06	---	01 51 00	26.2	253.1	4.1		35.9	131	2585	14 03 56

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
14 08 41	0115-214	01 53 35	15.5	188.4	0.6		5.4	10	2585	14 08 41
14 10 26	---	01 55 21	15.4	188.8	0.6		5.6	105	2612	14 08 42
14 11 36	0245-167	01 56 31	19.5	166.6	-0.9		-8.4	10	2612	14 11 36
14 13 11	---	01 58 06	19.6	167.0	-0.9		-8.1	95	2637	14 11 37
14 15 21	0507+179	02 00 16	39.1	114.7	-3.2		-35.0	10	2637	14 15 21
14 17 01	---	02 01 57	39.4	115.2	-3.2		-34.9	100	2662	14 15 22
14 19 02	0234+285	02 03 58	65.0	161.5	-0.6		-12.6	11	2662	14 19 02
14 20 24	---	02 05 20	65.0	162.2	-0.6		-12.1	82	2684	14 19 03
14 21 33	0235+164	02 06 29	53.0	166.6	-0.6		-8.4	10	2684	14 21 33
14 23 47	---	02 08 44	53.1	167.5	-0.5		-7.8	134	2718	14 21 34
14 26 55	0003+380	02 11 52	64.1	248.2	2.1		45.4	12	2718	14 26 55
14 28 39	---	02 13 37	63.9	248.7	2.1		45.6	104	2745	14 26 56
14 31 22	0139-097	02 16 20	27.1	189.3	0.6		5.6	11	2745	14 31 22
14 32 22	---	02 17 20	27.1	189.6	0.6		5.8	60	2760	14 31 23
14 35 15	0548+084	02 20 14	28.3	116.0	-3.5		-33.1	11	2760	14 35 15
14 36 18	---	02 21 17	28.5	116.3	-3.5		-33.0	63	2777	14 35 16
14 37 08	0640+090	02 22 07	21.6	104.5	-4.4		-36.1	10	2777	14 37 08
14 41 35	---	02 26 35	22.3	105.4	-4.3		-35.9	267	2845	14 37 09
14 47 17	2000+472	02 32 18	32.5	-52.6	6.5		44.9	11	2845	14 47 17
14 48 18	---	02 33 19	32.4	-52.5	6.5		44.8	61	2861	14 47 18
14 54 03	0558+234	02 39 05	41.6	107.3	-3.4		-38.7	11	2861	14 54 03
14 55 33	---	02 40 35	41.8	107.7	-3.4		-38.6	90	2884	14 54 04
14 56 08	0610+260	02 41 10	42.2	102.7	-3.6		-40.7	10	2884	14 56 08
14 58 22	---	02 43 25	42.5	103.2	-3.5		-40.6	134	2919	14 56 09
15 03 49	2204-007	02 48 52	11.4	253.7	4.7		35.2	11	2919	15 03 49
15 06 00	---	02 51 04	11.1	254.2	4.7		35.3	131	2953	15 03 50
15 09 48	0002+541	02 54 52	65.5	290.6	2.8		76.1	10	2953	15 09 48
15 11 47	---	02 56 52	65.2	290.8	2.8		75.8	119	2983	15 09 49
15 13 29	0057+678	02 58 34	69.6	329.0	1.9		123.4	10	2983	15 13 29
15 14 29	---	02 59 34	69.5	328.9	2.0		123.0	60	2999	15 13 30

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

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Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
15 15 26	0203+625	03 00 31	78.1	330.4	0.9		139.4	11	2999	15 15 26
15 16 35	---	03 01 40	78.0	329.9	0.9		138.7	69	3016	15 15 27
15 17 53	0016+731	03 02 59	63.6	335.6	2.7		118.6	10	3016	15 17 53
15 18 53	---	03 03 59	63.6	335.5	2.7		118.3	60	3032	15 17 54
15 19 58	2116+818	03 05 04	52.6	347.1	5.9		81.5	10	3032	15 19 58
15 22 57	---	03 08 04	52.5	347.1	5.9		80.8	179	3078	15 19 59
15 30 00	0458-020	03 15 08	30.5	148.4	-1.8		-18.3	11	3078	15 30 00
15 35 00	---	03 20 09	30.9	149.8	-1.7		-17.6	300	3155	15 30 01
15 37 49	0459+415	03 22 58	69.6	113.7	-1.7		-47.4	10	3155	15 37 49
15 39 48	---	03 24 57	69.8	114.4	-1.7		-47.1	119	3186	15 37 50
15 44 45	1849+670	03 29 55	35.9	-21.5	8.7		34.5	10	3186	15 44 45
15 45 49	---	03 30 59	35.8	-21.4	8.7		34.3	64	3202	15 44 46
15 51 53	0527-053	03 37 04	26.8	147.8	-1.9		-18.7	11	3202	15 51 53
15 53 40	---	03 38 52	27.0	148.3	-1.9		-18.5	107	3230	15 51 54
15 54 25	0458-020	03 39 37	32.3	155.3	-1.4		-14.6	11	3230	15 54 25
15 55 43	---	03 40 55	32.4	155.7	-1.4		-14.3	78	3250	15 54 26
15 57 23	0511-220	03 42 35	12.3	158.2	-1.5		-13.9	11	3250	15 57 23
16 00 39	---	03 45 52	12.5	158.9	-1.5		-13.5	196	3301	15 57 24
16 02 23	0723-008	03 47 36	19.4	119.9	-3.7		-31.4	11	3301	16 02 23
16 04 23	---	03 49 36	19.6	120.3	-3.6		-31.2	120	3332	16 02 24
16 07 20	0256-005	03 52 34	35.6	196.0	0.9		9.5	11	3332	16 07 20
16 08 42	---	03 53 56	35.5	196.4	0.9		9.8	82	3353	16 07 21
16 10 45	0248-266	03 55 59	9.3	194.6	1.1		9.7	11	3353	16 10 45
16 12 29	---	03 57 44	9.3	195.0	1.1		10.0	104	3379	16 10 46
16 16 30	0133+476	04 01 45	66.9	271.8	2.4		63.7	11	3379	16 16 30
16 18 44	---	04 04 00	66.6	272.2	2.4		63.7	134	3414	16 16 31
16 21 31	0240-060	04 06 47	28.6	203.5	1.4		13.9	11	3414	16 21 31
16 23 50	---	04 09 07	28.5	204.1	1.4		14.3	139	3450	16 21 32
16 25 19	0306+102	04 10 36	45.8	201.5	1.0		12.9	10	3450	16 25 19
16 26 48	---	04 12 05	45.7	202.0	1.0		13.2	89	3473	16 25 20

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

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SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
16 29 17	0327-241	04 14 34	12.5	190.2	0.7		6.7	10	3473	16 29 17
16 31 05	---	04 16 23	12.4	190.6	0.8		6.9	108	3501	16 29 18
16 32 56	0420-014	04 18 14	35.6	178.1	-0.1		-1.2	10	3501	16 32 56
16 35 39	---	04 20 57	35.6	178.9	-0.1		-0.7	163	3543	16 32 57
16 40 22	1144+402	04 25 41	20.5	50.1	-7.4		-36.8	10	3543	16 40 22
16 43 09	---	04 28 29	20.8	50.5	-7.3		-37.1	167	3586	16 40 23
16 50 59	0048-097	04 36 20	11.6	236.7	3.7		30.6	83	3586	16 50 59
16 53 04	---	04 38 25	11.3	237.2	3.8		30.8	125	3618	16 51 00
16 55 08	0406-127	04 40 30	24.0	188.1	0.5		5.0	11	3618	16 55 08
16 57 47	---	04 43 09	23.9	188.8	0.5		5.4	159	3659	16 55 09
17 00 29	0847-120	04 45 52	6.3	120.4	-4.1		-32.0	10	3659	17 00 29
17 01 29	---	04 46 52	6.5	120.6	-4.1		-32.0	60	3674	17 00 30
17 07 22	2135+508	04 52 46	30.1	-43.4	7.2		41.1	10	3674	17 07 22
17 08 22	---	04 53 46	30.0	-43.3	7.3		41.0	60	3690	17 07 23
17 18 21	0119+041	05 03 47	23.9	243.5	3.7		32.6	11	3690	17 18 21
17 20 07	---	05 05 33	23.7	243.9	3.7		32.7	106	3717	17 18 22
17 22 06	0346-279	05 07 32	7.4	197.3	1.3		11.6	11	3717	17 22 06
17 24 20	---	05 09 46	7.3	197.8	1.3		12.0	134	3751	17 22 07
17 25 49	0606-223	05 11 16	13.5	166.0	-1.0		-9.0	10	3751	17 25 49
17 27 30	---	05 12 57	13.5	166.4	-1.0		-8.8	101	3777	17 25 50
17 32 21	0529+483	05 17 49	84.6	147.9	-0.3		-28.7	11	3777	17 32 21
17 33 23	---	05 18 51	84.6	149.6	-0.3		-27.3	62	3793	17 32 22
17 38 39	0113-118	05 24 08	6.9	240.3	4.1		32.2	11	3793	17 38 39
17 39 47	---	05 25 16	6.8	240.6	4.1		32.3	68	3811	17 38 40
17 40 39	0056-001	05 26 08	14.1	250.9	4.4		34.6	10	3811	17 40 39
17 43 53	---	05 29 23	13.6	251.6	4.5		34.7	194	3861	17 40 40
17 47 15	2229+591	05 32 45	37.5	321.8	7.0		47.0	47	3861	17 47 15
17 49 37	---	05 35 08	37.3	322.1	7.0		46.6	142	3898	17 47 16
17 51 38	0017+200	05 37 09	22.8	274.2	5.3		39.7	10	3898	17 51 38
17 53 07	---	05 38 38	22.5	274.5	5.3		39.7	89	3920	17 51 39

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

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Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
17 54 13	0003+380	05 39 44	33.6	291.0	5.5		45.7	10	3920	17 54 13
17 55 15	---	05 40 47	33.5	291.2	5.6		45.7	62	3936	17 54 14
18 02 29	1040+244	05 48 02	28.4	87.1	-4.9		-41.0	11	3936	18 02 29
18 04 21	---	05 49 54	28.7	87.5	-4.9		-41.0	112	3965	18 02 30
18 06 06	0938-133	05 51 39	7.0	124.2	-3.8		-30.7	10	3965	18 06 06
18 09 35	---	05 55 09	7.5	124.9	-3.8		-30.4	209	4019	18 06 07
18 18 55	0904-201	06 04 30	6.5	137.4	-3.1		-25.7	524	4019	18 18 55
18 21 50	---	06 07 26	6.8	138.0	-3.0		-25.4	175	4064	18 18 56
18 23 19	0805-077	06 08 55	23.8	147.1	-2.0		-19.2	11	4064	18 23 19
18 24 47	---	06 10 23	23.9	147.4	-2.0		-19.0	88	4087	18 23 20
18 25 59	0728-235	06 11 36	11.2	161.3	-1.3		-12.2	10	4087	18 25 59
18 28 44	---	06 14 21	11.3	161.9	-1.3		-11.8	165	4129	18 26 00
18 33 58	1357+769	06 19 36	46.0	17.7	-7.6		-51.8	11	4129	18 33 58
18 35 05	---	06 20 43	46.1	17.7	-7.6		-52.1	67	4147	18 33 59
18 37 01	0716+714	06 22 39	70.5	14.9	-1.0		-151.1	10	4147	18 37 01
18 38 30	---	06 24 09	70.6	14.6	-1.0		-151.8	89	4170	18 37 02
18 42 30	1636+473	06 28 09	13.0	18.7-10.2			-16.5	10	4170	18 42 30
18 43 30	---	06 29 09	13.1	18.9-10.2			-16.6	60	4185	18 42 31
18 47 25	0814+425	06 33 05	69.2	110.5	-1.8		-49.5	11	4185	18 47 25
18 48 25	---	06 34 05	69.3	110.8	-1.8		-49.4	60	4201	18 47 26
18 49 33	0920+390	06 35 13	57.8	99.2	-2.8		-49.4	11	4201	18 49 33
18 50 33	---	06 36 14	57.9	99.4	-2.8		-49.4	60	4216	18 49 34
18 51 33	0955+326	06 37 14	48.5	99.4	-3.4		-44.5	11	4216	18 51 33
18 52 33	---	06 38 14	48.6	99.6	-3.4		-44.5	60	4231	18 51 34
18 53 16	OK290	06 38 57	43.7	107.0	-3.3		-39.4	10	4231	18 53 16
18 54 16	---	06 39 57	43.8	107.3	-3.3		-39.3	60	4247	18 53 17
18 55 20	1004+141	06 41 01	33.4	113.6	-3.5		-34.5	11	4247	18 55 20
18 56 24	---	06 42 06	33.5	113.9	-3.4		-34.4	64	4263	18 55 21
19 01 17	2039+452	06 46 59	11.6	-20.1	10.1		17.1	10	4263	19 01 17
19 03 24	---	06 49 07	11.5	-19.7	10.1		16.8	127	4296	19 01 18

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

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Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
19 06 00	2116+818	06 51 43	46.5	-6.5	9.7		30.2	11	4296	19 06 00
19 07 22	---	06 53 05	46.5	-6.5	9.7		29.9	82	4317	19 06 01
19 08 24	0016+731	06 54 08	48.0	-24.7	6.6		62.6	11	4317	19 08 24
19 09 59	---	06 55 43	47.9	-24.6	6.6		62.2	95	4342	19 08 25
19 10 52	0012+610	06 56 36	40.7	-38.4	6.7		51.2	10	4342	19 10 52
19 11 52	---	06 57 36	40.6	-38.3	6.7		51.1	60	4357	19 10 53
19 12 45	0057+678	06 58 29	48.3	-33.8	5.9		64.5	10	4357	19 12 45
19 13 53	---	06 59 37	48.2	-33.7	6.0		64.3	68	4375	19 12 46
19 15 50	NGC0262	07 01 35	23.5	-67.4	6.2		40.9	11	4375	19 15 50
19 16 51	---	07 02 36	23.4	-67.2	6.2		40.8	61	4390	19 15 51
19 22 22	1101+384	07 08 08	47.2	85.8	-4.0		-49.5	10	4390	19 22 22
19 23 23	---	07 09 09	47.3	86.0	-3.9		-49.5	61	4406	19 22 23
19 28 34	0422+004	07 14 21	27.1	228.8	2.8		26.9	10	4406	19 28 34
19 30 30	---	07 16 17	26.8	229.3	2.8		27.1	116	4436	19 28 35
19 31 16	0458-020	07 17 03	28.2	218.9	2.2		22.2	10	4436	19 31 16
19 33 20	---	07 19 08	28.0	219.5	2.3		22.4	124	4468	19 31 17
19 35 06	0215+015	07 20 54	10.2	259.4	5.0		36.2	11	4468	19 35 06
19 36 06	---	07 21 54	10.0	259.6	5.0		36.2	60	4483	19 35 07
19 38 00	0234+285	07 23 48	33.8	274.4	4.7		43.2	11	4483	19 38 00
19 39 05	---	07 24 54	33.7	274.6	4.8		43.1	65	4500	19 38 01
19 42 15	0632-235	07 28 04	12.5	192.2	0.9		8.0	10	4500	19 42 15
19 44 45	---	07 30 35	12.4	192.8	0.9		8.3	150	4539	19 42 16
19 45 22	0627-199	07 31 12	15.7	194.8	1.0		9.4	11	4539	19 45 22
19 47 08	---	07 32 58	15.7	195.2	1.0		9.7	106	4566	19 45 23
19 48 08	0511-220	07 33 58	9.1	212.4	2.3		20.3	11	4566	19 48 08
19 50 45	---	07 36 36	8.9	213.0	2.4		20.6	157	4607	19 48 09
19 55 39	0309+411	07 41 30	45.0	283.1	4.4		51.3	140	4607	19 55 39
19 58 31	---	07 44 23	44.6	283.6	4.5		51.1	172	4651	19 55 40
20 00 54	2135+508	07 46 46	16.8	342.2	10.1		17.0	11	4651	20 00 54
20 01 55	---	07 47 47	16.8	342.4	10.2		16.8	61	4667	20 00 55

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

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Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
20 10 55	1144+402	07 56 49	49.2	84.9	-3.9		-51.2	10	4667	20 10 55
20 13 15	---	07 59 09	49.6	85.3	-3.8		-51.2	140	4703	20 10 56
20 17 12	0723-008	08 03 07	35.4	191.1	0.6		6.6	11	4703	20 17 12
20 21 39	---	08 07 35	35.3	192.4	0.7		7.4	267	4771	20 17 13
20 24 43	0805+410	08 10 39	77.7	180.0	-0.0		-0.0	11	4771	20 24 43
20 29 43	---	08 15 40	77.7	184.4	0.1		3.5	300	4849	20 24 44
20 34 02	0218+357	08 20 00	28.4	293.2	6.0		43.1	27	4849	20 34 02
20 35 45	---	08 21 43	28.2	293.5	6.0		42.9	103	4875	20 34 03
20 37 35	0256-005	08 23 33	5.4	262.4	5.4		36.5	11	4875	20 37 35
20 39 09	---	08 25 07	5.1	262.7	5.4		36.6	94	4900	20 37 36
20 41 38	0507+179	08 27 37	38.5	246.5	3.3		35.4	10	4900	20 41 38
20 43 21	---	08 29 20	38.2	246.9	3.3		35.5	103	4926	20 41 39
20 45 36	0723-265	08 31 36	8.9	194.7	1.1		9.8	11	4926	20 45 36
20 47 06	---	08 33 06	8.9	195.0	1.1		10.0	90	4949	20 45 37
20 47 42	0728-235	08 33 42	12.0	194.4	1.0		9.4	10	4949	20 47 42
20 49 11	---	08 35 11	11.9	194.7	1.0		9.6	89	4972	20 47 43
20 52 07	0306+102	08 38 08	13.3	270.0	5.5		37.7	11	4972	20 52 07
20 54 15	---	08 40 16	13.0	270.4	5.5		37.7	128	5005	20 52 08
20 56 05	0133+476	08 42 06	28.9	312.6	7.1		41.3	11	5005	20 56 05
20 57 58	---	08 44 00	28.7	312.9	7.1		41.1	113	5034	20 56 06
20 59 27	0235+164	08 45 29	12.5	281.3	6.1		37.9	11	5034	20 59 27
21 00 27	---	08 46 29	12.4	281.5	6.1		37.9	60	5050	20 59 28
21 06 37	1329-049	08 52 40	7.4	109.2	-4.7		-34.7	10	5050	21 06 37
21 08 27	---	08 54 30	7.7	109.5	-4.6		-34.6	110	5078	21 06 38
21 12 18	0736+017	08 58 22	36.0	204.3	1.3		14.3	27	5078	21 12 18
21 13 18	---	08 59 22	35.9	204.6	1.3		14.5	60	5094	21 12 19
21 15 35	0606-223	09 01 39	5.9	219.3	2.9		24.3	11	5094	21 15 35
21 17 44	---	09 03 49	5.7	219.7	2.9		24.5	129	5127	21 15 36
21 19 16	0834-201	09 05 21	16.3	186.7	0.5		4.3	11	5127	21 19 16
21 23 16	---	09 09 22	16.2	187.7	0.5		4.9	240	5189	21 19 17

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
21 25 15	1156-215	09 11 21	6.5	141.1	-2.8		-24.0	11	5189	21 25 15
21 27 05	---	09 13 11	6.6	141.5	-2.8		-23.8	110	5217	21 25 16
21 28 35	1156-094	09 14 42	17.9	136.7	-2.8		-24.7	34	5217	21 28 35
21 30 17	---	09 16 24	18.1	137.1	-2.7		-24.5	102	5243	21 28 36
21 31 21	1315-058	09 17 28	11.9	117.7	-4.0		-32.3	10	5243	21 31 21
21 33 03	---	09 19 10	12.1	118.1	-4.0		-32.2	102	5269	21 31 22
21 35 18	1505+428	09 21 26	34.5	63.2	-5.8		-46.7	10	5269	21 35 18
21 37 58	---	09 24 06	34.9	63.6	-5.7		-46.9	160	5311	21 35 19
21 40 02	2000+472	09 26 10	12.1	14.2	-10.6		-12.6	10	5311	21 40 02
21 41 30	---	09 27 39	12.2	14.5	-10.6		-12.8	88	5333	21 40 03
21 42 42	2229+591	09 28 51	23.3	-8.7	10.9		10.3	11	5333	21 42 42
21 43 49	---	09 29 58	23.3	-8.5	11.0		10.1	67	5351	21 42 43
21 52 41	0611+131	09 38 52	33.4	244.8	3.4		33.9	10	5351	21 52 41
21 54 10	---	09 40 21	33.2	245.2	3.4		34.0	89	5374	21 52 42
21 54 59	0558+234	09 41 10	39.6	255.9	3.6		39.4	11	5374	21 54 59
21 56 16	---	09 42 27	39.5	256.2	3.7		39.4	77	5393	21 55 00
21 56 54	0610+260	09 43 05	43.2	255.8	3.5		40.4	10	5393	21 56 54
21 58 17	---	09 44 28	43.0	256.1	3.5		40.5	83	5415	21 56 55
22 01 57	2344+798	09 48 09	44.4	353.2	10.0		24.7	11	5415	22 01 57
22 03 31	---	09 49 43	44.4	353.3	10.0		24.4	94	5439	22 01 58
22 04 49	1849+670	09 51 02	35.0	379.8	-9.0		-31.5	10	5439	22 04 49
22 06 38	---	09 52 51	35.0	379.9	-8.9		-31.8	109	5467	22 04 50
22 08 40	4067.05	09 54 53	41.0	331.7	7.4		48.0	10	5467	22 08 40
22 09 40	---	09 55 53	40.9	331.8	7.4		47.8	60	5483	22 08 41
22 10 46	0354+559	09 57 00	42.0	311.5	5.9		53.9	10	5483	22 10 46
22 14 59	---	10 01 13	41.6	312.0	6.0		53.4	253	5548	22 10 47
22 22 21	1231+811	10 08 36	60.1	371.0	-2.4		-134.4	308	5548	22 22 21
22 27 21	---	10 13 37	60.2	370.7	-2.3		-135.9	300	5625	22 22 22
22 34 55	0527-053	10 21 13	6.1	252.8	4.8		35.2	202	5625	22 34 55
22 36 52	---	10 23 10	5.8	253.2	4.9		35.3	117	5655	22 34 56

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Thu 27 Feb 2025	Day 58	---							
22 38 30	0805-077	10 24 48	22.6	216.7	2.3		21.2	10	5655	22 38 30
22 41 40	---	10 27 59	22.3	217.5	2.3		21.6	190	5704	22 38 31
22 42 29	0847-120	10 28 48	21.3	205.6	1.6		15.4	10	5704	22 42 29
22 43 58	---	10 30 17	21.2	206.0	1.6		15.6	89	5727	22 42 30
22 44 49	0904-201	10 31 08	14.3	200.1	1.4		12.7	11	5727	22 44 49
22 47 48	---	10 34 08	14.1	200.8	1.4		13.1	179	5773	22 44 50
22 49 02	0802-010	10 35 22	27.4	222.9	2.5		24.1	10	5773	22 49 02
22 50 38	---	10 36 58	27.3	223.3	2.5		24.3	96	5798	22 49 03
22 52 01	0938-133	10 38 21	22.1	194.7	0.9		9.0	11	5798	22 52 01
22 54 25	---	10 40 46	22.0	195.3	1.0		9.4	144	5835	22 52 02
22 57 03	0548+084	10 43 24	17.1	261.2	4.8		36.9	11	5835	22 57 03
22 58 03	---	10 44 24	17.0	261.4	4.9		36.9	60	5850	22 57 04
23 01 21	0814+425	10 47 43	63.3	261.2	2.5		53.4	10	5850	23 01 21
23 03 00	---	10 49 22	63.0	261.6	2.5		53.4	99	5876	23 01 22
23 07 00	1244-255	10 53 23	7.1	154.2	-1.9		-16.9	10	5876	23 07 00
23 08 00	---	10 54 23	7.2	154.4	-1.9		-16.8	60	5891	23 07 01
23 12 14	0920+390	10 58 38	68.4	237.6	1.6		40.5	10	5891	23 12 14
23 17 14	---	11 03 38	67.8	239.6	1.6		41.6	300	5969	23 12 15
23 23 19	1144+402	11 09 44	75.2	149.8	-0.6		-23.2	166	5969	23 23 19
23 24 20	---	11 10 46	75.3	150.5	-0.6		-22.7	61	5984	23 23 20
23 25 54	1101+384	11 12 20	74.9	184.9	0.1		3.7	11	5984	23 25 54
23 27 52	---	11 14 18	74.9	186.4	0.1		4.9	118	6015	23 25 55
23 30 00	0J287	11 16 27	47.4	232.8	2.3		30.6	11	6015	23 30 00
23 35 00	---	11 21 27	46.8	234.3	2.4		31.3	300	6092	23 30 01
23 40 46	1546+027	11 27 14	16.3	108.2	-4.4		-34.8	78	6092	23 40 46
23 45 46	---	11 32 15	17.0	109.3	-4.3		-34.6	300	6169	23 40 47
23 50 14	1346-109	11 36 44	19.6	145.0	-2.2		-20.5	183	6169	23 50 14
23 52 22	---	11 38 52	19.7	145.5	-2.2		-20.3	128	6202	23 50 15
23 53 56	1546+027	11 40 26	18.2	111.0	-4.2		-34.1	10	6202	23 53 56
23 56 59	---	11 43 30	18.6	111.7	-4.1		-33.9	183	6250	23 53 57

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Fri	28 Feb 2025	Day	59	---						
00 02 13	0300+470	11 48 45	18.8	-32.8	8.7		28.7	10	6250	00 02 13
00 03 35	---	11 50 07	18.7	-32.5	8.7		28.5	82	6271	00 02 14
00 04 16	0345+460	11 50 48	21.7	-40.2	8.0		34.1	11	6271	00 04 16
00 05 55	---	11 52 27	21.6	-39.9	8.0		33.9	99	6296	00 04 17
00 07 07	0203+625	11 53 40	29.0	-16.8	9.7		22.5	11	6296	00 07 07
00 08 14	---	11 54 47	28.9	-16.7	9.8		22.3	67	6313	00 07 08
00 08 59	0057+678	11 55 32	32.0	-7.2	10.9		11.8	11	6313	00 08 59
00 11 03	---	11 57 36	32.0	-7.0	10.9		11.4	124	6345	00 09 00
00 14 57	1504+377	12 01 31	54.6	97.2	-3.1		-48.6	11	6345	00 14 57
00 15 57	---	12 02 31	54.7	97.5	-3.1		-48.6	60	6361	00 14 58
00 20 31	1004+141	12 07 06	44.3	221.9	2.0		24.4	10	6361	00 20 31
00 21 31	---	12 08 06	44.2	222.2	2.0		24.6	60	6376	00 20 32
00 22 28	0K290	12 09 03	52.9	234.1	2.2		32.5	11	6376	00 22 28
00 23 52	---	12 10 27	52.7	234.5	2.2		32.7	84	6398	00 22 29
00 25 04	0J287	12 11 40	40.2	247.8	3.3		36.3	11	6398	00 25 04
00 26 04	---	12 12 40	40.0	248.0	3.3		36.3	60	6413	00 25 05
00 27 18	0735+178	12 13 54	26.8	263.8	4.6		38.8	11	6413	00 27 18
00 28 18	---	12 14 54	26.7	264.0	4.6		38.8	60	6429	00 27 19
00 30 14	0459+415	12 16 50	23.1	309.5	7.2		38.4	10	6429	00 30 14
00 32 30	---	12 19 07	22.8	309.9	7.2		38.1	136	6464	00 30 15
00 34 43	0723-008	12 21 20	9.0	256.1	4.9		35.7	10	6464	00 34 43
00 36 07	---	12 22 44	8.8	256.4	4.9		35.7	84	6486	00 34 44
00 39 25	1040+244	12 26 03	55.2	223.3	1.7		26.8	10	6486	00 39 25
00 41 01	---	12 27 39	55.0	223.9	1.7		27.1	96	6510	00 39 26
00 42 50	1218-024	12 29 29	34.0	182.0	0.1		1.2	10	6510	00 42 50
00 46 52	---	12 33 31	34.0	183.3	0.2		2.0	242	6573	00 42 51
00 50 20	0640+090	12 37 00	8.3	273.8	5.9		37.3	12	6573	00 50 20
00 53 06	---	12 39 46	7.9	274.4	5.9		37.3	166	6615	00 50 21
00 56 13	1149-084	12 42 54	27.2	193.7	0.8		8.3	11	6615	00 56 13
00 59 16	---	12 45 57	27.1	194.6	0.9		8.8	183	6663	00 56 14

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

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SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
01 05 04	1150+812	12 51 46	61.9	355.2	0.9		161.7	12	6663	01 05 04
01 06 43	---	12 53 25	61.9	355.1	1.0		161.2	99	6688	01 05 05
01 08 00	0716+714	12 54 43	51.5	329.3	5.5		73.0	10	6688	01 08 00
01 09 00	---	12 55 43	51.4	329.3	5.5		72.8	60	6703	01 08 01
01 10 05	0917+624	12 56 48	61.0	309.4	3.6		83.4	10	6703	01 10 05
01 11 47	---	12 58 30	60.8	309.5	3.6		83.0	102	6730	01 10 06
01 17 41	1511-100	13 04 25	20.8	145.4	-2.2		-20.3	11	6730	01 17 41
01 20 45	---	13 07 30	21.0	146.1	-2.1		-19.9	184	6777	01 17 42
01 25 48	0012+610	13 12 34	25.1	7.4-11.1			-9.3	10	6777	01 25 48
01 27 26	---	13 14 12	25.1	7.6-11.0			-9.6	98	6802	01 25 49
01 28 35	0016+731	13 15 21	37.0	4.8-11.1			-10.2	10	6802	01 28 35
01 29 55	---	13 16 41	37.1	4.9-11.1			-10.4	80	6823	01 28 36
01 32 09	1357+769	13 18 56	66.2	5.6	-0.7		-165.3	11	6823	01 32 09
01 34 26	---	13 21 13	66.2	5.3	-0.6		-166.2	137	6858	01 32 10
01 38 18	0610+260	13 25 06	10.9	-60.8	7.2		35.7	11	6858	01 38 18
01 41 56	---	13 28 44	10.5	-60.1	7.2		35.4	218	6915	01 38 19
01 47 24	1751+288	13 34 13	37.3	90.4	-4.3		-43.2	12	6915	01 47 24
01 49 45	---	13 36 35	37.7	90.9	-4.3		-43.2	141	6951	01 47 25
01 53 24	0133+476	13 40 14	11.1	0.3-12.0			-0.3	23	6951	01 53 24
01 54 24	---	13 41 14	11.1	0.5-12.0			-0.4	60	6966	01 53 25
02 01 39	1156-215	13 48 30	11.4	205.4	1.8		16.1	10	6966	02 01 39
02 04 40	---	13 51 32	11.2	206.1	1.9		16.6	181	7013	02 01 40
02 04 58	1157-215	13 51 50	11.2	206.0	1.8		16.5	10	7013	02 04 58
02 06 34	---	13 53 26	11.1	206.4	1.9		16.7	96	7038	02 04 59
02 07 17	1124-186	13 54 09	11.2	214.9	2.4		21.3	11	7038	02 07 17
02 08 57	---	13 55 50	11.1	215.3	2.5		21.5	100	7063	02 07 18
02 09 44	1213-172	13 56 37	16.0	204.7	1.7		15.2	11	7063	02 09 44
02 11 03	---	13 57 56	16.0	205.0	1.7		15.4	79	7084	02 09 45
02 12 20	1315-058	13 59 13	30.1	191.3	0.7		6.8	10	7084	02 12 20
02 14 07	---	14 01 01	30.0	191.8	0.7		7.1	107	7111	02 12 21

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

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Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Fri 28 Feb 2025	Day 59	---							
02 14 40	1329-049	14 01 34	31.3	188.2	0.5		4.9	11	7111	02 14 40
02 16 22	---	14 03 16	31.3	188.7	0.5		5.2	102	7138	02 14 41
02 19 43	1749+096	14 06 37	27.4	112.1	-3.8		-34.4	33	7138	02 19 43
02 22 18	---	14 09 13	27.8	112.7	-3.7		-34.2	155	7178	02 19 44
02 26 33	4C67.05	14 13 29	30.6	-1.9	11.7		3.0	11	7178	02 26 33
02 28 54	---	14 15 50	30.6	-1.7	11.7		2.6	141	7214	02 26 34
02 30 21	0529+483	14 17 17	19.8	-32.4	8.7		29.0	10	7214	02 30 21
02 31 21	---	14 18 17	19.7	-32.3	8.7		28.9	60	7229	02 30 22
02 36 48	1829-106	14 23 45	7.2	118.5	-4.2		-32.5	11	7229	02 36 48
02 38 26	---	14 25 24	7.5	118.8	-4.1		-32.4	98	7255	02 36 49
02 39 18	1739-152	14 26 16	9.6	132.1	-3.3		-27.5	11	7255	02 39 18
02 41 07	---	14 28 05	9.8	132.5	-3.3		-27.3	109	7283	02 39 19
02 45 50	1144+402	14 32 49	59.3	261.2	2.7		50.6	11	7283	02 45 50
02 47 21	---	14 34 20	59.0	261.6	2.8		50.7	91	7306	02 45 51
02 50 17	1156-094	14 37 16	18.8	221.1	2.6		23.6	11	7306	02 50 17
02 51 57	---	14 38 57	18.6	221.5	2.6		23.8	100	7332	02 50 18
02 53 18	1339-206	14 40 18	14.9	193.7	0.9		8.8	10	7332	02 53 18
02 54 44	---	14 41 44	14.8	194.1	1.0		9.0	86	7354	02 53 19
02 55 30	1354-152	14 42 30	20.7	191.3	0.7		7.0	10	7354	02 55 30
02 58 56	---	14 45 57	20.6	192.2	0.8		7.6	206	7407	02 55 31
03 03 04	0805+410	14 50 06	26.4	303.6	6.7		41.3	10	7407	03 03 04
03 04 21	---	14 51 23	26.2	303.8	6.7		41.2	77	7427	03 03 05
03 04 54	0814+425	14 51 56	28.5	303.6	6.5		42.6	11	7427	03 04 54
03 06 16	---	14 53 18	28.3	303.8	6.6		42.4	82	7448	03 04 55
03 07 03	0738+491	14 54 05	29.0	314.3	7.2		40.9	11	7448	03 07 03
03 08 40	---	14 55 42	28.8	314.5	7.2		40.7	97	7473	03 07 04
03 12 52	1334-127	14 59 55	21.6	201.2	1.3		12.9	10	7473	03 12 52
03 14 10	---	15 01 13	21.5	201.6	1.4		13.1	78	7493	03 12 53
03 15 33	1339-287	15 02 37	6.0	197.2	1.3		11.8	11	7493	03 15 33
03 16 35	---	15 03 39	5.9	197.5	1.3		11.9	62	7509	03 15 34

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
03 19 24	1022+237	15 06 28	30.4	269.2	4.7		40.9	11	7509	03 19 24
03 20 35	---	15 07 39	30.2	269.4	4.7		40.9	71	7527	03 19 25
03 21 25	0955+326	15 08 30	32.7	281.7	5.1		44.1	11	7527	03 21 25
03 22 26	---	15 09 31	32.5	281.9	5.2		44.0	61	7543	03 21 26
03 23 14	0920+390	15 10 19	32.0	293.3	5.8		45.0	10	7543	03 23 14
03 25 06	---	15 12 11	31.7	293.6	5.8		44.8	112	7572	03 23 15
03 26 24	0917+624	15 13 29	46.0	317.8	5.8		59.7	10	7572	03 26 24
03 28 46	---	15 15 52	45.8	318.0	5.9		59.4	142	7609	03 26 25
03 31 15	0J287	15 18 21	12.7	286.5	6.4		37.8	11	7609	03 31 15
03 36 15	---	15 23 22	12.0	287.5	6.5		37.6	300	7686	03 31 16
03 40 46	1142+052	15 27 54	24.0	243.8	3.7		32.7	167	7686	03 40 46
03 44 13	---	15 31 21	23.6	244.6	3.7		33.0	207	7739	03 40 47
03 48 59	1636+473	15 36 08	78.5	114.2	-1.0		-53.7	10	7739	03 48 59
03 51 17	---	15 38 26	78.8	115.4	-1.0		-53.0	138	7775	03 49 00
03 55 23	1504-166	15 42 33	19.5	188.6	0.6		5.4	10	7775	03 55 23
03 57 56	---	15 45 07	19.5	189.3	0.6		5.8	153	7814	03 55 24
03 58 26	1456-179	15 45 37	18.0	191.2	0.7		7.0	11	7814	03 58 26
04 00 40	---	15 47 51	17.9	191.7	0.8		7.4	134	7849	03 58 27
04 03 07	1717+178	15 50 18	50.5	145.0	-1.5		-21.2	11	7849	04 03 07
04 04 46	---	15 51 58	50.7	145.6	-1.5		-20.9	99	7874	04 03 08
04 07 38	2000+472	15 54 50	51.2	72.4	-4.1		-57.9	11	7874	04 07 38
04 12 38	---	15 59 51	52.0	73.1	-4.1		-58.3	300	7951	04 07 39
04 18 05	1936+046	16 05 19	25.0	117.7	-3.6		-32.2	210	7951	04 18 05
04 19 43	---	16 06 57	25.2	118.1	-3.5		-32.1	98	7977	04 18 06
04 22 48	1849+670	16 10 03	66.4	38.4	-2.7		-106.5	11	7977	04 22 48
04 25 46	---	16 13 01	66.6	38.2	-2.6		-107.4	178	8023	04 22 49
04 32 13	1346-109	16 19 29	18.2	218.7	2.5		22.5	11	8023	04 32 13
04 33 40	---	16 20 56	18.0	219.0	2.5		22.7	87	8045	04 32 14
04 34 22	1406-076	16 21 39	22.9	215.6	2.2		20.7	10	8045	04 34 22
04 36 15	---	16 23 32	22.7	216.1	2.2		20.9	113	8074	04 34 23

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Fri 28 Feb 2025	Day	59	---						
04 37 51	1614+051	16 25 08	41.8	182.4	0.1		1.5	10	8074	04 37 51
04 40 37	---	16 27 55	41.8	183.4	0.2		2.0	166	8117	04 37 52
04 41 22	1606+106	16 28 40	47.2	186.8	0.3		4.1	11	8117	04 41 22
04 42 50	---	16 30 08	47.1	187.3	0.3		4.4	88	8140	04 41 23
04 44 53	1650-157	16 32 11	20.8	174.1	-0.4		-3.7	10	8140	04 44 53
04 47 46	---	16 35 05	20.9	174.9	-0.3		-3.2	173	8184	04 44 54
04 52 43	0002+541	16 40 03	31.6	39.2	-7.4		-41.0	11	8184	04 52 43
04 54 17	---	16 41 37	31.8	39.4	-7.4		-41.2	94	8208	04 52 44
04 55 32	0133+476	16 42 52	18.4	30.5	-8.9		-27.1	11	8208	04 55 32
04 56 32	---	16 43 52	18.5	30.7	-8.9		-27.3	60	8224	04 55 33
04 57 40	0345+460	16 45 00	10.0	9.4	-11.1		-8.2	10	8224	04 57 40
04 59 33	---	16 46 54	10.1	9.7	-11.1		-8.5	113	8253	04 57 41
05 08 00	1218-024	16 55 22	10.6	250.6	4.5		34.5	10	8253	05 08 00
05 11 37	---	16 59 00	10.1	251.3	4.6		34.7	217	8309	05 08 01
05 16 38	2005-044	17 04 01	20.7	129.4	-3.1		-27.7	42	8309	05 16 38
05 18 34	---	17 05 58	20.9	129.9	-3.1		-27.5	116	8339	05 16 39
05 20 19	2215+150	17 07 43	19.5	90.1	-5.2		-38.5	10	8339	05 20 19
05 21 48	---	17 09 12	19.8	90.4	-5.2		-38.5	89	8362	05 20 20
05 23 54	1959+241	17 11 19	46.9	114.8	-2.9		-36.8	10	8362	05 23 54
05 25 59	---	17 13 24	47.2	115.3	-2.8		-36.6	125	8394	05 23 55
05 28 44	1656-075	17 16 09	29.1	184.6	0.3		2.8	12	8394	05 28 44
05 31 06	---	17 18 32	29.1	185.2	0.3		3.2	142	8430	05 28 45
05 33 28	1330+022	17 20 54	20.9	243.3	3.8		32.5	11	8430	05 33 28
05 35 09	---	17 22 36	20.6	243.7	3.8		32.6	101	8456	05 33 29
05 36 34	1511-100	17 24 01	20.9	214.2	2.1		20.0	11	8456	05 36 34
05 38 16	---	17 25 43	20.8	214.6	2.2		20.3	102	8483	05 36 35
05 39 41	1704-141	17 27 08	22.5	184.8	0.3		3.0	10	8483	05 39 41
05 44 41	---	17 32 09	22.4	186.1	0.4		3.8	300	8560	05 39 42
05 48 40	1749+096	17 36 09	46.4	174.1	-0.3		-3.6	135	8560	05 48 40
05 50 23	---	17 37 52	46.4	174.7	-0.2		-3.2	103	8587	05 48 41

Schedule for TORUN (Code Tr)

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Improving K-band celestial ref.frame for the next multi-waveband ICRF

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
05 53 20	1424+240	17 40 50	43.5	250.1	3.2		38.1	11	8587	05 53 20
05 55 04	---	17 42 34	43.2	250.5	3.2		38.2	104	8613	05 53 21
05 57 01	1144+402	17 44 31	31.3	296.0	5.9		44.7	11	8613	05 57 01
05 58 25	---	17 45 55	31.1	296.2	6.0		44.5	84	8635	05 57 02
05 59 16	1101+384	17 46 46	24.2	301.9	6.7		40.4	11	8635	05 59 16
06 02 22	---	17 49 53	23.8	302.4	6.7		40.1	186	8683	05 59 17
06 05 37	1546+027	17 53 09	33.5	217.6	2.0		21.5	10	8683	06 05 37
06 07 10	---	17 54 42	33.3	218.0	2.1		21.7	93	8707	06 05 38
06 08 58	1708-250	17 56 30	11.2	190.0	0.7		6.6	11	8707	06 08 58
06 12 51	---	18 00 24	11.0	190.9	0.8		7.2	233	8767	06 08 59
06 15 50	2204-007	18 03 23	16.5	114.0	-4.1		-33.3	10	8767	06 15 50
06 18 00	---	18 05 34	16.8	114.5	-4.0		-33.1	130	8800	06 15 51
06 23 13	1329-049	18 10 47	7.9	250.2	4.6		34.6	27	8800	06 23 13
06 24 40	---	18 12 15	7.7	250.5	4.6		34.6	87	8823	06 23 14
06 27 59	1504+377	18 15 34	54.1	263.4	3.1		48.7	11	8823	06 27 59
06 30 30	---	18 18 06	53.8	263.9	3.2		48.7	151	8862	06 28 00
06 34 08	1908-201	18 21 44	16.0	167.6	-0.8		-7.9	10	8862	06 34 08
06 35 16	---	18 22 52	16.0	167.8	-0.8		-7.7	68	8879	06 34 09
06 39 56	1851+488	18 27 33	84.2	133.3	-0.4		-41.7	10	8879	06 39 56
06 40 56	---	18 28 33	84.3	134.6	-0.4		-40.7	60	8895	06 39 57
06 46 04	1726-269	18 33 42	8.8	194.2	1.0		9.5	11	8895	06 46 04
06 47 24	---	18 35 02	8.7	194.5	1.1		9.7	80	8915	06 46 05
06 48 33	1739-152	18 36 12	20.7	193.6	0.9		8.4	10	8915	06 48 33
06 49 33	---	18 37 12	20.6	193.8	0.9		8.5	60	8931	06 48 34
06 55 39	0354+559	18 43 19	24.3	23.5	-9.3		-25.4	10	8931	06 55 39
06 56 42	---	18 44 22	24.3	23.6	-9.3		-25.6	63	8947	06 55 40
06 58 49	0016+731	18 46 29	51.8	27.0	-5.6		-74.8	10	8947	06 58 49
07 00 00	---	18 47 40	51.9	27.0	-5.6		-75.1	71	8965	06 58 50

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.K2048globgeo

Setup group: 19	Station: TORUN	Total bit rate: 2048
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 16	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	21500.00	21500.00	21500.00	21500.00	21500.00	21500.00	21500.00	21500.00
	21500.00	21500.00	21500.00	21500.00	21500.00	21500.00	21500.00	21500.00
Net SB=	L	U	L	U	L	U	L	U
	L	U	L	U	L	U	L	U
IF SB =	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U
Pol. =	RCP	RCP	RCP	RCP	RCP	RCP	RCP	RCP
	RCP	RCP	RCP	RCP	RCP	RCP	RCP	RCP
BBC =	1	1	2	2	3	3	4	4
	5	5	6	6	7	7	8	8
BBC SB=	L	U	L	U	L	U	L	U
	L	U	L	U	L	U	L	U
IF =	A1	A1	A1	A1	A1	A1	A1	A1
	A1	A1	A1	A1	A1	A1	A1	A1

The following frequency sets based on these setups were used.

Frequency Set:	13	Setup file default. Used with PCAL = 1MHz						
LO sum=	22044.00	22044.00	22108.00	22108.00	22172.00	22172.00	22236.00	22236.00
	22300.00	22300.00	22364.00	22364.00	22428.00	22428.00	22492.00	22492.00
BBC fr=	544.00	544.00	608.00	608.00	672.00	672.00	736.00	736.00
	800.00	800.00	864.00	864.00	928.00	928.00	992.00	992.00
Bandwd=	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Matching frequency sets: 13								

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0002+541	00 02 29.056237	* 00 05 04.363337	00 06 20.100410	0.00
0002+541	54 11 43.18502	* 54 28 24.92431	54 36 52.12346	0.00
* 0003+380	00 03 22.335497	* 00 05 57.175386	00 07 13.416058	0.00
0003+380	38 03 33.40987	* 38 20 15.14894	38 28 39.23503	0.00
* 0008-264	00 08 28.884832	* 00 11 01.246737	00 12 16.902994	0.00
0008-264	-26 29 14.77706	*-26 12 33.37700	-26 04 19.37428	0.00
* 0012+610	00 12 07.893397	* 00 14 48.792099	00 16 06.868545	0.00
0012+610	61 01 03.42419	* 61 17 43.54242	61 26 12.08805	0.00
* 0013-184	00 13 01.930830	* 00 15 34.324529	00 16 50.023437	0.00
0013-184	-18 24 05.90004	*-18 07 25.58581	-17 59 11.37658	0.00
* 0016+731	00 16 54.195078	* 00 19 45.786356	00 21 07.273109	0.00
0016+731	73 10 51.40707	* 73 27 30.01751	73 36 00.48476	0.00
* 0017+200	00 17 02.119547	* 00 19 37.854490	00 20 54.984766	0.00
0017+200	20 05 06.80757	* 20 21 45.64453	20 30 05.46902	0.00
0046+316	00 46 04.857324	* 00 48 47.141481	00 50 07.495706	0.00
* NGC0262	31 41 04.49523	* 31 57 25.08475	32 05 39.83914	0.00

* 0048-097	00 48 09.975906	* 00 50 41.317374	00 51 56.596655	0.00
0048-097	-09 45 24.21192	*-09 29 05.21029	-09 21 00.24767	0.00
* 0056-001	00 56 31.756754	* 00 59 05.514933	01 00 21.998613	0.00
0056-001	-00 09 18.82697	* 00 06 51.62070	00 14 54.29821	0.00
* 0057+678	00 57 35.633560	* 01 00 51.663929	01 02 27.281204	0.00
0057+678	67 52 11.98183	* 68 08 20.53125	68 16 38.24292	0.00
* 0104-408	01 04 27.574524	* 01 06 45.107979	01 07 53.484174	0.00
0104-408	-40 50 21.55660	*-40 34 19.96069	-40 26 27.91939	0.00
* 0113-118	01 13 43.218974	* 01 16 12.522018	01 17 26.886146	0.00
0113-118	-11 52 04.53068	*-11 36 15.43459	-11 28 25.64272	0.00
* 0115-214	01 15 23.570466	* 01 17 48.780128	01 19 01.110562	0.00
0115-214	-21 26 53.45599	*-21 11 06.63317	-21 03 19.72511	0.00
* 0119+041	01 19 21.391387	* 01 21 56.861684	01 23 14.276827	0.00
0119+041	04 06 44.01331	* 04 22 24.73426	04 30 13.96877	0.00
* 0133+476	01 33 55.103062	* 01 36 58.594807	01 38 29.554310	0.00
0133+476	47 36 12.85362	* 47 51 29.10001	47 59 18.24779	0.00
* 0139-097	01 39 08.986366	* 01 41 37.939741	01 42 52.233394	0.00
0139-097	-09 45 09.38648	*-09 30 01.78610	-09 22 32.14645	0.00
* 0203+625	02 03 22.157625	* 02 07 03.016779	02 08 52.583093	0.00
0203+625	62 31 56.07856	* 62 46 12.06762	62 53 36.00566	0.00
* 0208-512	02 08 56.947207	* 02 10 46.200458	02 11 40.715178	0.00
0208-512	-51 15 07.67929	*-51 01 01.89206	-50 54 09.66677	0.00
* 0215+015	02 15 14.130222	* 02 17 48.954743	02 19 06.327150	0.00
0215+015	01 31 00.16086	* 01 44 49.69896	01 51 43.51525	0.00
* 0218+357	02 18 04.125914	* 02 21 05.468239	02 22 35.922737	0.00
0218+357	35 42 31.94481	* 35 56 13.73649	36 03 14.05197	0.00
* 0220-349	02 20 49.597016	* 02 22 56.401633	02 23 59.809233	0.00
0220-349	-34 55 05.08040	*-34 41 28.73016	-34 34 49.72329	0.00
* 0222-262	02 22 56.437334	* 02 25 10.889574	02 26 18.141429	0.00
0222-262	-26 16 49.54626	*-26 03 18.79753	-25 56 41.12939	0.00
0224+671	02 24 41.169027	* 02 28 50.051463	02 30 53.893189	0.00
* 4C67.05	67 07 39.70867	* 67 21 03.02930	67 28 02.21649	0.00
* 0234+285	02 34 55.589582	* 02 37 52.405669	02 39 20.774103	0.00
0234+285	28 35 11.40764	* 28 48 08.98989	28 54 45.43181	0.00
* 0235+164	02 35 52.630205	* 02 38 38.930097	02 40 02.103611	0.00
0235+164	16 24 04.01613	* 16 36 59.27455	16 43 30.71843	0.00
* 0240-060	02 40 43.239986	* 02 43 12.469466	02 44 27.187962	0.00
0240-060	-06 03 37.48476	*-05 50 55.29535	-05 44 37.10557	0.00
* 0244-470	02 44 13.566940	* 02 46 00.117986	02 46 53.502281	0.00
0244-470	-47 03 50.58470	*-46 51 17.23260	-46 45 11.39975	0.00
* 0245-167	02 45 47.266520	* 02 48 07.732228	02 49 18.101927	0.00
0245-167	-16 44 14.26824	*-16 31 46.38570	-16 25 38.13774	0.00
* 0248-266	02 48 24.330369	* 02 50 35.569192	02 51 41.337836	0.00

0248-266	-26 40 03.00057	*-26 27 42.51544	-26 21 40.18874	0.00
* 0249+171	02 49 19.937204	* 02 52 07.718696	02 53 31.711881	0.00
0249+171	17 06 26.05860	* 17 18 42.68853	17 24 55.23081	0.00
* 0256-005	02 56 55.117078	* 02 59 28.516158	03 00 45.395932	0.00
0256-005	-00 31 54.17503	*-00 19 59.97557	-00 14 04.11448	0.00
* 0300+470	03 00 10.111194	* 03 03 35.242212	03 05 17.876681	0.00
0300+470	47 04 33.67698	* 47 16 16.27532	47 22 21.29471	0.00
* 0306+102	03 06 20.921063	* 03 09 03.623488	03 10 25.192394	0.00
0306+102	10 17 51.96468	* 10 29 16.34087	10 35 00.72199	0.00
* 0309+411	03 09 44.793503	* 03 13 01.962118	03 14 40.723821	0.00
0309+411	41 08 48.80282	* 41 20 01.18341	41 25 49.51195	0.00
* 0312+100	03 12 38.457838	* 03 15 21.139816	03 16 42.735059	0.00
0312+100	10 01 39.05818	* 10 12 43.08377	10 18 17.23993	0.00
* 0327-241	03 27 43.872799	* 03 29 54.075541	03 30 59.520703	0.00
0327-241	-24 07 23.06437	*-23 57 08.77328	-23 52 09.16689	0.00
* 0345+460	03 45 46.869267	* 03 49 18.741575	03 51 05.187756	0.00
0345+460	46 00 52.34669	* 46 09 59.65777	46 14 47.08212	0.00
* 0346-279	03 46 34.026295	* 03 48 38.144559	03 49 40.640484	0.00
0346-279	-27 58 20.96631	*-27 49 13.56577	-27 44 48.29607	0.00
* 0354+559	03 54 31.306907	* 03 58 30.188157	04 00 30.319867	0.00
0354+559	55 58 10.41744	* 56 06 44.46057	56 11 17.75398	0.00
* 0406-127	04 06 45.326890	* 04 09 05.769715	04 10 16.531794	0.00
0406-127	-12 46 38.98053	*-12 38 48.14394	-12 34 57.56253	0.00
* 0420-014	04 20 43.539844	* 04 23 15.800721	04 24 32.555368	0.00
0420-014	-01 27 28.70038	*-01 20 33.06567	-01 17 06.84625	0.00
* 0422+004	04 22 12.515410	* 04 24 46.842055	04 26 04.640571	0.00
0422+004	00 29 16.67920	* 00 36 06.32939	00 39 30.15093	0.00
* 0426-380	04 26 54.700111	* 04 28 40.424270	04 29 33.927379	0.00
0426-380	-38 02 52.12294	*-37 56 19.58039	-37 53 13.59436	0.00
* 0430+289	04 30 29.680348	* 04 33 37.829854	04 35 12.681095	0.00
0430+289	28 59 40.38990	* 29 05 55.47708	29 09 11.25649	0.00
* 0451-282	04 51 15.126320	* 04 53 14.646801	04 54 15.155309	0.00
0451-282	-28 12 29.38859	*-28 07 37.32707	-28 05 19.94738	0.00
* 0454-810	04 54 17.961981	* 04 50 05.440230	04 48 02.657023	0.00
0454-810	-81 05 54.60914	*-81 01 02.23137	-80 58 39.42162	0.00
* 0458-020	04 58 41.344685	* 05 01 12.809881	05 02 29.360359	0.00
0458-020	-02 03 33.86898	*-01 59 14.25643	-01 57 06.53682	0.00
* 0459+415	04 59 06.857453	* 05 02 37.988219	05 04 24.652359	0.00
0459+415	41 35 03.74559	* 41 39 19.34756	41 41 38.70769	0.00
* 0507+179	05 07 07.486537	* 05 10 02.369123	05 11 30.754215	0.00
0507+179	17 56 58.64620	* 18 00 41.58165	18 02 37.12382	0.00
* 0511-220	05 11 41.814305	* 05 13 49.114323	05 14 53.608677	0.00
0511-220	-22 02 41.28436	*-21 59 16.09223	-21 57 40.92256	0.00

* 0524-485	05 24 57.685528	* 05 26 16.671327	05 26 57.110936	0.00
0524-485	-48 33 06.67003	*-48 30 36.79168	-48 29 32.97001	0.00
* 0527-053	05 27 25.984602	* 05 29 53.533504	05 31 08.256473	0.00
0527-053	-05 21 58.25817	*-05 19 41.61728	-05 18 36.64879	0.00
* 0529+483	05 29 27.565374	* 05 33 15.865783	05 35 11.478304	0.00
0529+483	48 20 47.97041	* 48 22 52.80774	48 24 07.64434	0.00
* 0537-286	05 37 56.930590	* 05 39 54.281469	05 40 53.914824	0.00
0537-286	-28 41 28.03796	*-28 39 55.94809	-28 39 18.70319	0.00
* 0548+084	05 48 27.535062	* 05 51 11.229346	05 52 34.186156	0.00
0548+084	08 28 26.71858	* 08 29 11.22194	08 29 33.77747	0.00
* 0558+234	05 58 44.684485	* 06 01 47.357025	06 03 19.971385	0.00
0558+234	23 24 54.65126	* 23 24 53.48480	23 24 57.38392	0.00
* 0603+882	06 04 00.850864	* 06 42 06.135531	07 01 08.672585	0.00
0603+882	88 13 36.00619	* 88 11 55.01559	88 10 26.70020	0.00
* 0606-223	06 06 53.376437	* 06 08 59.686844	06 10 03.925752	0.00
0606-223	-22 19 46.28506	*-22 20 20.95666	-22 20 45.98547	0.00
* 0610+260	06 10 43.739224	* 06 13 50.139159	06 15 24.711697	0.00
0610+260	26 05 30.39476	* 26 04 36.71979	26 04 14.74079	0.00
* 0611+131	06 11 08.402142	* 06 13 57.692746	06 15 23.589924	0.00
0611+131	13 07 40.23484	* 13 06 45.40069	13 06 19.09526	0.00
* 0627-199	06 27 14.114674	* 06 29 23.761865	06 30 29.754619	0.00
0627-199	-19 57 16.26236	*-19 59 19.72374	-20 00 28.78865	0.00
* 0632-235	06 32 54.082544	* 06 34 59.001001	06 36 02.645757	0.00
0632-235	-23 32 44.11701	*-23 35 11.95727	-23 36 33.87606	0.00
* 0640+090	06 40 42.315585	* 06 43 26.445027	06 44 49.865690	0.00
0640+090	09 00 40.92098	* 08 57 38.01205	08 56 05.71412	0.00
* 0716+714	07 16 13.029719	* 07 21 53.448454	07 24 47.439905	0.00
0716+714	71 26 15.17408	* 71 20 36.36343	71 17 56.27096	0.00
* 0723-008	07 23 17.838447	* 07 25 50.639950	07 27 08.494092	0.00
0723-008	-00 48 55.11275	*-00 54 56.54382	-00 58 01.52034	0.00
* 0723-265	07 23 21.920928	* 07 25 24.413149	07 26 27.021373	0.00
0723-265	-26 34 31.97292	*-26 40 32.67923	-26 43 41.53451	0.00
* 0728-235	07 28 59.946307	* 07 31 06.668015	07 32 11.412829	0.00
0728-235	-23 35 24.15020	*-23 41 47.87076	-23 45 07.88042	0.00
* 0735+178	07 35 14.126461	* 07 38 07.393749	07 39 35.689258	0.00
0735+178	17 49 09.26236	* 17 42 18.99815	17 38 53.22476	0.00
* 0736+017	07 36 42.512344	* 07 39 18.033902	07 40 37.310990	0.00
0736+017	01 44 00.18080	* 01 37 04.61772	01 33 32.74957	0.00
* 0738+491	07 38 19.233764	* 07 42 02.748938	07 43 56.856692	0.00
0738+491	49 07 19.77517	* 49 00 15.60899	48 56 49.31974	0.00
* 0802-010	08 02 40.259898	* 08 05 12.888480	08 06 30.780669	0.00
0802-010	-01 02 37.90133	*-01 11 13.79549	-01 15 37.00760	0.00

* 0805+410	08 05 33.646144	* 08 08 56.652046	08 10 40.368449	0.00
0805+410	41 01 33.06357	* 40 52 44.88897	40 48 23.28781	0.00
* 0805-077	08 05 49.552835	* 08 08 15.536036	08 09 30.074716	0.00
0805-077	-07 42 22.40693	*-07 51 09.88651	-07 55 39.97908	0.00
* 0814+425	08 14 51.669849	* 08 18 15.999609	08 20 00.459288	0.00
0814+425	42 32 07.73234	* 42 22 45.41484	42 18 06.38295	0.00
* 0826-373	08 26 12.001567	* 08 28 04.780230	08 29 02.723724	0.00
0826-373	-37 21 06.12613	*-37 31 06.28132	-37 36 15.18858	0.00
* 0834-201	08 34 24.601691	* 08 36 39.215251	08 37 48.095611	0.00
0834-201	-20 06 30.40842	*-20 16 59.50411	-20 22 22.06665	0.00
* 0835-339	08 35 01.682133	* 08 37 00.316675	08 38 01.203820	0.00
0835-339	-33 58 44.07719	*-34 09 14.85948	-34 14 38.92391	0.00
* 0843-547	08 43 40.337343	* 08 45 02.482705	08 45 45.263712	0.00
0843-547	-54 47 09.78339	*-54 58 08.54021	-55 03 45.85671	0.00
* 0847-120	08 47 46.523272	* 08 50 09.635638	08 51 22.821083	0.00
0847-120	-12 02 21.67236	*-12 13 35.37613	-12 19 19.73270	0.00
* 0847-354	08 47 47.306092	* 08 49 45.623487	08 50 46.385844	0.00
0847-354	-35 29 48.13146	*-35 41 01.27843	-35 46 46.40907	0.00
0851+202	08 51 57.250615	* 08 54 48.874927	08 56 16.615501	0.00
* 0J287	20 17 58.41744	* 20 06 30.64089	20 00 42.90708	0.00
* 0904-201	09 04 34.530811	* 09 06 51.305371	09 08 01.330026	0.00
0904-201	-20 07 48.70259	*-20 19 54.80516	-20 26 05.99266	0.00
* 0917+624	09 17 40.306879	* 09 21 36.231092	09 23 37.768319	0.00
0917+624	62 28 38.64007	* 62 15 52.18029	62 09 28.83156	0.00
* 0918-534	09 18 08.791728	* 09 19 44.039517	09 20 33.459659	0.00
0918-534	-53 27 21.60342	*-53 40 06.44752	-53 46 36.04934	0.00
* 0920+390	09 20 06.318434	* 09 23 14.452934	09 24 50.907135	0.00
0920+390	39 02 32.11181	* 38 49 39.91008	38 43 10.73733	0.00
* 0938-133	09 38 37.998633	* 09 41 02.549473	09 42 16.534594	0.00
0938-133	-13 22 10.46801	*-13 35 50.98483	-13 42 49.43432	0.00
0953+254	09 53 59.738494	* 09 56 49.875388	09 58 17.061494	0.00
* 0K290	25 29 33.58600	* 25 15 16.05010	25 08 00.49587	0.00
* 0955+326	09 55 25.405777	* 09 58 20.949634	09 59 50.992669	0.00
0955+326	32 38 23.03245	* 32 24 02.20949	32 16 45.51632	0.00
* 1004+141	10 04 59.783935	* 10 07 41.498089	10 09 04.305012	0.00
1004+141	14 11 10.91507	* 13 56 29.60084	13 49 00.85943	0.00
* 1016-311	10 16 12.577890	* 10 18 28.753504	10 19 38.580876	0.00
1016-311	-31 08 50.46285	*-31 23 53.84966	-31 31 33.18012	0.00
* 1022+237	10 22 07.918330	* 10 24 53.637284	10 26 18.600069	0.00
1022+237	23 47 48.44913	* 23 32 33.96374	23 24 48.14546	0.00
* 1034-293	10 34 55.824630	* 10 37 16.079742	10 38 27.954774	0.00
1034-293	-29 18 26.97249	*-29 34 02.81338	-29 41 58.30332	0.00
* 1040+244	10 40 25.199381	* 10 43 09.035781	10 44 33.068387	0.00

1040+244	24 24 19.59864	* 24 08 35.40950	24 00 33.67714	0.00
* 1048-313	10 48 43.355331	* 10 51 04.777525	10 52 17.248911	0.00
1048-313	-31 22 18.55751	*-31 38 14.30731	-31 46 19.37138	0.00
* 1101+384	11 01 40.567853	* 11 04 27.313943	11 05 53.126657	0.00
1101+384	38 28 42.95192	* 38 12 31.79899	38 04 15.50915	0.00
* 1123+264	11 23 14.869299	* 11 25 53.711919	11 27 15.251906	0.00
1123+264	26 26 49.99110	* 26 10 19.97870	26 01 52.77244	0.00
* 1124-186	11 24 34.018132	* 11 27 04.392457	11 28 21.307972	0.00
1124-186	-18 40 46.35956	*-18 57 17.44164	-19 05 41.44626	0.00
* 1142+052	11 42 47.144901	* 11 45 21.315161	11 46 40.207946	0.00
1142+052	05 12 06.34046	* 04 55 26.68782	04 46 55.19877	0.00
* 1143-332	11 43 57.526816	* 11 46 28.451793	11 47 45.672753	0.00
1143-332	-33 12 02.42944	*-33 28 42.63240	-33 37 08.75224	0.00
* 1143-696	11 43 31.954236	* 11 45 53.624206	11 47 07.408936	0.00
1143-696	-69 37 21.59645	*-69 54 01.79753	-70 02 21.48968	0.00
* 1144+402	11 44 21.020895	* 11 46 58.297907	11 48 19.368716	0.00
1144+402	40 15 14.23954	* 39 58 34.30446	39 50 00.47912	0.00
* 1149-084	11 49 43.843437	* 11 52 17.209517	11 53 35.611509	0.00
1149-084	-08 24 21.93409	*-08 41 03.31383	-08 49 34.06325	0.00
* 1150+812	11 50 23.482380	* 11 53 12.499219	11 54 46.956694	0.00
1150+812	81 15 10.31171	* 80 58 29.15454	80 49 56.30015	0.00
* 1156-094	11 56 39.052547	* 11 59 12.711653	12 00 31.246526	0.00
1156-094	-09 24 09.93238	*-09 40 52.04858	-09 49 23.09069	0.00
* 1156-215	11 56 37.268703	* 11 59 10.785361	12 00 29.240861	0.00
1156-215	-21 33 22.48860	*-21 50 04.67334	-21 58 33.69120	0.00
* 1157-215	11 57 18.309698	* 11 59 51.905998	12 01 10.400362	0.00
1157-215	-21 32 11.49814	*-21 48 53.70579	-21 57 22.73501	0.00
* 1213-172	12 13 11.668022	* 12 15 46.751776	12 17 05.960761	0.00
1213-172	-17 15 05.20066	*-17 31 45.40303	-17 40 14.18059	0.00
* 1218-024	12 18 49.916799	* 12 21 23.941193	12 22 42.643376	0.00
1218-024	-02 25 11.35058	*-02 41 49.60958	-02 50 20.20455	0.00
* 1231+811	12 31 38.947377	* 12 33 12.893056	12 34 10.509963	0.00
1231+811	81 11 05.74719	* 80 54 33.97236	80 46 01.80878	0.00
* 1244-255	12 44 06.713930	* 12 46 46.802044	12 48 08.468778	0.00
1244-255	-25 31 26.67465	*-25 47 49.28899	-25 56 07.28193	0.00
* 1252+119	12 52 07.716977	* 12 54 38.255619	12 55 55.224554	0.00
1252+119	11 57 20.86466	* 11 41 05.89510	11 32 43.53378	0.00
* 1306-395	13 06 58.426945	* 13 09 48.488329	13 11 15.206160	0.00
1306-395	-39 32 35.04982	*-39 48 33.08585	-39 56 34.79736	0.00
1315+346	13 15 17.789366	* 13 17 36.494176	13 18 47.793801	0.00
* OP326	34 41 02.60445	* 34 25 15.93257	34 17 03.22617	0.00
* 1315-058	13 15 57.621584	* 13 18 33.709431	13 19 53.271993	0.00
1315-058	-05 51 38.09009	*-06 07 23.82022	-06 15 28.20058	0.00

* 1324+224	13 24 37.118630	* 13 27 00.861314	13 28 14.423171	0.00
1324+224	22 26 22.70233	* 22 10 50.16277	22 02 45.93780	0.00
* 1329-049	13 29 28.424712	* 13 32 04.464684	13 33 23.958494	0.00
1329-049	-04 54 18.75778	*-05 09 43.30595	-05 17 37.46947	0.00
* 1330+022	13 30 20.472740	* 13 32 53.270536	13 34 11.165204	0.00
1330+022	02 16 08.78136	* 02 00 45.69919	01 52 50.41122	0.00
* 1334-127	13 34 59.803875	* 13 37 39.782780	13 39 01.217566	0.00
1334-127	-12 42 09.74298	*-12 57 24.69325	-13 05 11.94652	0.00
* 1339-206	13 39 20.210661	* 13 42 04.739557	13 43 28.446499	0.00
1339-206	-20 36 22.52425	*-20 51 29.54126	-20 59 10.52068	0.00
* 1339-287	13 39 25.874232	* 13 42 15.345637	13 43 41.562495	0.00
1339-287	-28 45 35.02197	*-29 00 41.83125	-29 08 20.27855	0.00
* 1342+663	13 42 41.043751	* 13 44 08.679590	13 44 56.101638	0.00
1342+663	66 21 13.16145	* 66 06 11.64383	65 58 17.62547	0.00
* 1346-109	13 46 23.516487	* 13 49 03.193047	13 50 24.434430	0.00
1346-109	-10 55 07.32904	*-11 10 00.81902	-11 17 37.87078	0.00
* 1349-439	13 49 52.526242	* 13 52 56.534970	13 54 30.162289	0.00
1349-439	-43 57 54.14032	*-44 12 40.38796	-44 20 03.74500	0.00
* 1354-152	13 54 28.601593	* 13 57 11.244984	13 58 33.941040	0.00
1354-152	-15 12 51.88896	*-15 27 28.78664	-15 34 56.25195	0.00
* 1357+769	13 57 42.116997	* 13 57 55.371528	13 58 08.589478	0.00
1357+769	76 57 53.35428	* 76 43 21.05108	76 35 40.18499	0.00
* 1406-076	14 06 17.898824	* 14 08 56.481202	14 10 17.096519	0.00
1406-076	-07 38 15.91679	*-07 52 26.66651	-07 59 43.38928	0.00
* 1424+240	14 24 44.222622	* 14 27 00.391774	14 28 09.871261	0.00
1424+240	24 01 25.78956	* 23 48 00.03768	23 40 56.80418	0.00
* 1424-418	14 24 46.670323	* 14 27 56.297572	14 29 32.551425	0.00
1424-418	-41 52 54.61345	*-42 06 19.43760	-42 13 01.78793	0.00
* 1441+522	14 41 24.844167	* 14 43 02.760702	14 43 53.568217	0.00
1441+522	52 14 18.42027	* 52 01 37.29861	51 54 50.84383	0.00
* 1451-400	14 51 20.583540	* 14 54 32.912361	14 56 10.359179	0.00
1451-400	-40 00 22.26293	*-40 12 32.51478	-40 18 37.60235	0.00
* 1456-179	14 56 39.692814	* 14 59 28.763197	15 00 54.402874	0.00
1456-179	-17 58 50.56977	*-18 10 45.18622	-18 16 50.27787	0.00
* 1504+377	15 04 12.956687	* 15 06 09.529975	15 07 09.103649	0.00
1504+377	37 42 23.33441	* 37 30 51.13251	37 24 40.60735	0.00
* 1504-166	15 04 16.415562	* 15 07 04.786961	15 08 30.035873	0.00
1504-166	-16 40 59.36698	*-16 52 30.26710	-16 58 23.92086	0.00
* 1505+428	15 05 04.054997	* 15 06 53.041840	15 07 48.899025	0.00
1505+428	42 50 52.72440	* 42 39 23.03562	42 33 12.78541	0.00
* 1511-100	15 11 02.250582	* 15 13 44.893422	15 15 07.232010	0.00
1511-100	-10 00 50.96545	*-10 12 00.26470	-10 17 45.50157	0.00

* 1514+004	15 14 06.740345	* 15 16 40.219059	15 17 57.958561	0.00
1514+004	00 26 01.34266	* 00 15 01.90911	00 09 17.93377	0.00
* 1514+197	15 14 40.985840	* 15 16 56.796163	15 18 05.752356	0.00
1514+197	19 43 10.94246	* 19 32 12.99203	19 26 23.70601	0.00
* 1538+477	15 38 00.886009	* 15 39 34.810369	15 40 22.899796	0.00
1538+477	47 45 10.16107	* 47 35 31.26416	47 30 14.73211	0.00
* 1546+027	15 46 58.292169	* 15 49 29.436843	15 50 45.823792	0.00
1546+027	02 46 06.07607	* 02 37 01.16342	02 32 13.58329	0.00
* 1555+001	15 55 17.692624	* 15 57 51.433976	15 59 09.071083	0.00
1555+001	00 06 43.53285	*-00 01 50.41375	-00 06 21.55984	0.00
* 1556+335	15 56 59.438416	* 15 58 55.186274	15 59 53.869198	0.00
1556+335	33 31 47.24644	* 33 23 18.60651	33 18 39.88116	0.00
* 1604-333	16 04 22.187024	* 16 07 34.762327	16 09 11.855897	0.00
1604-333	-33 23 10.54151	*-33 31 08.91306	-33 35 09.38697	0.00
* 1606+106	16 06 23.396625	* 16 08 46.203189	16 09 58.303287	0.00
1606+106	10 36 59.80115	* 10 29 07.77585	10 24 53.96133	0.00
* 1606-742	16 06 29.032744	* 16 12 33.884991	16 15 38.620710	0.00
1606-742	-74 15 55.35174	*-74 23 40.14294	-74 27 17.31098	0.00
* 1614+051	16 14 09.076773	* 16 16 37.556825	16 17 52.447275	0.00
1614+051	05 06 54.39661	* 04 59 32.73644	04 55 36.00442	0.00
* 1619-680	16 19 13.497235	* 16 24 18.437068	16 26 52.271882	0.00
1619-680	-68 02 15.80516	*-68 09 12.49572	-68 12 28.38681	0.00
* 1622-297	16 22 57.242927	* 16 26 06.020833	16 27 41.085914	0.00
1622-297	-29 44 41.40043	*-29 51 26.97116	-29 54 52.30461	0.00
* 1636+473	16 36 19.144414	* 16 37 45.130557	16 38 28.591069	0.00
1636+473	47 23 28.57998	* 47 17 33.83118	47 14 09.00144	0.00
1638+398	16 38 48.169691	* 16 40 29.632775	16 41 20.807186	0.00
* NRA0512	39 52 30.08662	* 39 46 46.02843	39 43 28.10911	0.00
* 1647-296	16 47 29.477786	* 16 50 39.544108	16 52 15.103907	0.00
1647-296	-29 38 41.69505	*-29 43 46.95445	-29 46 22.00320	0.00
* 1650-157	16 50 42.316783	* 16 53 34.206425	16 55 00.623285	0.00
1650-157	-15 46 37.45182	*-15 51 29.88808	-15 54 03.96915	0.00
* 1656-075	16 56 01.672877	* 16 58 44.061964	17 00 05.678758	0.00
1656-075	-07 34 47.28709	*-07 39 17.69435	-07 41 43.87530	0.00
* 1657-261	16 57 47.714239	* 17 00 53.154062	17 02 26.328857	0.00
1657-261	-26 06 29.52819	*-26 10 51.72538	-26 13 06.58501	0.00
* 1704-141	17 04 30.138394	* 17 07 20.390555	17 08 45.905096	0.00
1704-141	-14 11 28.84018	*-14 15 23.12673	-14 17 28.65338	0.00
* 1708-250	17 08 18.736723	* 17 11 23.102274	17 12 55.674884	0.00
1708-250	-25 05 23.98224	*-25 09 01.56281	-25 10 54.46340	0.00
* 1717+178	17 17 00.324740	* 17 19 13.048489	17 20 19.620805	0.00
1717+178	17 48 08.51611	* 17 45 06.43734	17 43 15.88152	0.00
* 1726-269	17 26 00.807051	* 17 29 08.216370	17 30 42.208509	0.00

1726-269	-26 55 29.40849	*-26 57 50.74421	-26 59 04.73968	0.00
* 1739-152	17 39 19.687711	* 17 42 11.662847	17 43 37.841842	0.00
1739-152	-15 16 05.13548	*-15 17 29.15830	-15 18 18.89726	0.00
* 1746+470	17 46 04.346063	* 17 47 26.647281	17 48 07.466220	0.00
1746+470	46 59 48.71224	* 46 58 50.92627	46 57 56.10443	0.00
* 1749+096	17 49 10.387933	* 17 51 32.818576	17 52 44.077880	0.00
1749+096	09 39 42.82591	* 09 39 00.72846	09 38 23.32830	0.00
* 1751+288	17 51 45.401876	* 17 53 42.473649	17 54 40.887882	0.00
1751+288	28 48 36.64969	* 28 48 04.93897	28 47 27.31655	0.00
* 1829-106	18 29 34.652811	* 18 32 20.836430	18 33 43.837015	0.00
1829-106	-10 37 26.19909	*-10 35 11.19938	-10 34 12.66566	0.00
* 1849+670	18 49 16.505884	* 18 49 16.072296	18 49 13.393770	0.00
1849+670	67 02 07.88053	* 67 05 41.68027	67 07 02.68479	0.00
* 1851+488	18 51 09.379856	* 18 52 28.547813	18 53 07.042733	0.00
1851+488	48 52 02.82129	* 48 55 47.48131	48 57 16.83572	0.00
* 1903+196	19 03 25.637178	* 19 05 36.472106	19 06 41.405621	0.00
1903+196	19 38 29.62721	* 19 43 08.04504	19 45 10.42725	0.00
* 1908-201	19 08 12.464439	* 19 11 09.652887	19 12 37.983234	0.00
1908-201	-20 11 55.17839	*-20 06 55.10898	-20 04 30.67539	0.00
* 1921-293	19 21 42.234129	* 19 24 51.055956	19 26 25.123567	0.00
1921-293	-29 20 26.35392	*-29 14 30.12101	-29 11 34.81637	0.00
* 1922-224	19 22 40.330225	* 19 25 39.790187	19 27 09.190549	0.00
1922-224	-22 25 34.97747	*-22 19 35.11276	-22 16 40.09946	0.00
* 1928+154	19 28 36.092062	* 19 30 52.766986	19 32 00.545468	0.00
1928+154	15 26 11.96593	* 15 32 34.42733	15 35 30.83943	0.00
* 1929+226	19 29 16.894891	* 19 31 24.916785	19 32 28.261806	0.00
1929+226	22 37 06.35050	* 22 43 31.25853	22 46 27.45549	0.00
* 1935+360	19 35 42.047358	* 19 37 31.436618	19 38 25.135797	0.00
1935+360	36 00 45.81335	* 36 07 35.84171	36 10 42.71661	0.00
* 1936+046	19 36 01.936452	* 19 38 30.669552	19 39 44.555346	0.00
1936+046	04 41 18.91434	* 04 48 11.61444	04 51 25.85359	0.00
* 1953-325	19 53 48.389539	* 19 56 59.455276	19 58 34.490268	0.00
1953-325	-32 33 49.62828	*-32 25 46.00691	-32 21 46.45668	0.00
* 1959+241	19 59 45.946262	* 20 01 53.777904	20 02 56.856456	0.00
1959+241	24 08 15.79837	* 24 16 39.98976	24 20 37.21566	0.00
* 1959+332	19 59 46.390075	* 20 01 42.209088	20 02 39.068421	0.00
1959+332	33 15 20.94229	* 33 23 44.76614	33 27 40.54209	0.00
* 2000+472	20 00 39.216077	* 20 02 10.418262	20 02 54.420114	0.00
2000+472	47 17 02.42447	* 47 25 28.77368	47 29 24.39020	0.00
* 2005-044	20 05 46.290693	* 20 08 24.429202	20 09 42.969597	0.00
2005-044	-04 27 17.00396	*-04 18 29.29813	-04 14 14.70294	0.00
* 2018+295	20 18 03.980870	* 20 20 06.563624	20 21 06.821330	0.00
2018+295	29 32 42.69989	* 29 42 14.18637	29 46 45.48461	0.00

* 2039+452	20 39 06.383173	* 20 40 48.333115	20 41 37.605713	0.00
2039+452	45 16 33.22992	* 45 27 17.14590	45 32 25.06723	0.00
* 2047-266	20 47 26.172413	* 20 50 24.693835	20 51 53.325608	0.00
2047-266	-26 39 31.71536	*-26 28 18.05750	-26 22 45.60352	0.00
* 2051-204	20 51 30.216827	* 20 54 22.072452	20 55 47.381376	0.00
2051-204	-20 27 43.34805	*-20 16 16.81934	-20 10 39.14103	0.00
* 2052-474	20 52 50.091130	* 20 56 16.359822	20 57 58.565453	0.00
2052-474	-47 26 19.35812	*-47 14 47.62756	-47 09 01.95033	0.00
* 2059+034	20 59 08.011532	* 21 01 38.834151	21 02 53.516963	0.00
2059+034	03 29 41.48364	* 03 41 31.32089	03 47 17.06036	0.00
* 2116+818	21 16 39.216630	* 21 14 01.171095	21 12 24.280019	0.00
2116+818	81 52 14.08119	* 82 04 48.34034	82 10 52.04392	0.00
* 2135+508	21 35 15.499526	* 21 37 00.986166	21 37 51.512190	0.00
2135+508	50 48 05.19433	* 51 01 36.12903	51 08 12.97992	0.00
* 2142+110	21 42 52.346936	* 21 45 18.775064	21 46 31.116695	0.00
2142+110	11 01 36.29880	* 11 15 27.31229	11 22 14.79970	0.00
* 2143-156	21 43 38.873701	* 21 46 22.979329	21 47 44.340209	0.00
2143-156	-15 39 37.25748	*-15 25 43.88569	-15 18 53.40953	0.00
* 2150+173	21 50 02.232822	* 21 52 24.819389	21 53 35.140245	0.00
2150+173	17 20 29.78521	* 17 34 37.79499	17 41 33.98895	0.00
* 2159+505	21 59 50.311748	* 22 01 43.537256	22 02 37.940125	0.00
2159+505	50 34 26.99217	* 50 48 56.38903	50 56 04.99907	0.00
* 2204-007	22 04 09.145192	* 22 06 43.282605	22 07 59.590005	0.00
2204-007	-00 45 42.03980	*-00 31 02.49515	-00 23 49.52376	0.00
* 2215+150	22 15 45.032352	* 22 18 10.913899	22 19 22.917746	0.00
2215+150	15 05 33.20689	* 15 20 35.71741	15 28 00.55797	0.00
* 2229+591	22 29 26.076350	* 22 31 17.075500	22 32 09.600165	0.00
2229+591	59 06 34.62563	* 59 22 00.84719	59 29 41.74116	0.00
2230+114	22 30 07.803937	* 22 32 36.408895	22 33 49.834604	0.00
* CTA102	11 28 22.81075	* 11 43 50.90403	11 51 29.14577	0.00
* 2234+282	22 34 01.728781	* 22 36 22.470825	22 37 31.654329	0.00
2234+282	28 13 23.21015	* 28 28 57.41288	28 36 39.88042	0.00
* 2245-328	22 45 51.504504	* 22 48 38.685746	22 50 01.533859	0.00
2245-328	-32 51 44.44017	*-32 35 52.18825	-32 28 01.62678	0.00
* 2251-419	22 51 45.752580	* 22 54 36.697480	22 56 01.320424	0.00
2251-419	-41 55 40.32383	*-41 39 40.25402	-41 31 45.47909	0.00
* 2254+074	22 54 45.978807	* 22 57 17.303116	22 58 32.164097	0.00
2254+074	07 27 08.97034	* 07 43 12.30253	07 51 09.01481	0.00
* 2315-172	23 15 33.735728	* 23 18 11.361393	23 19 29.537763	0.00
2315-172	-17 15 53.75241	*-16 59 29.18882	-16 51 22.81358	0.00
* 2319+317	23 19 28.286856	* 23 21 54.955984	23 23 07.108171	0.00
2319+317	31 47 40.33722	* 32 04 07.62251	32 12 20.27854	0.00

* 2344+798	23 44 16.001516	* 23 46 25.609020	23 47 21.171660	0.00
2344+798	79 51 15.47520	* 80 07 55.23948	80 16 24.07922	0.00
* 2351+456	23 51 49.972521	* 23 54 21.680232	23 55 36.011872	0.00
2351+456	45 36 22.77759	* 45 53 04.23653	46 01 28.76683	0.00
* 2353-686	23 53 22.983609	* 23 56 00.681443	23 57 17.785995	0.00
2353-686	-68 36 45.65546	*-68 20 03.47241	-68 11 48.64126	0.00
* 2355-106	23 55 36.945014	* 23 58 10.882397	23 59 27.293493	0.00
2355-106	-10 36 50.74022	*-10 20 08.61143	-10 11 52.70312	0.00
* 0537-441	05 37 21.071425	* 05 38 50.361559	05 39 35.987116	0.01
J0538-4405	-44 06 44.66633	*-44 05 08.93901	-44 04 31.84469	0.01
J0538-44	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 72326 observations.			

NETWORK MONITORING EXPERIMENT
PI: Benito Marcote

Address: JIVE

Observing mode: vlbi

Schedule for TORUN (Code Tr)

Page 2

Network Monitoring Experiment

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are LO sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Fri 28 Feb 2025	Day 59	---							
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

11 00 00	J0237+2848	22 48 20	41.8	96.4	-3.9		-43.0	0	0	11 00 00
11 05 00	=0234+285	22 53 21	42.6	97.5	-3.8		-42.9	300	39	11 00 01
11 07 00	J0237+2848	22 55 21	42.9	97.9	-3.7		-42.8	114	39	11 07 00
11 12 00	=0234+285	23 00 22	43.6	99.0	-3.6		-42.6	300	77	11 07 01
11 14 00	J0237+2848	23 02 22	43.9	99.5	-3.6		-42.6	114	77	11 14 00
11 17 00	=0234+285	23 05 23	44.4	100.2	-3.6		-42.5	180	100	11 14 01
11 19 00	J0237+2848	23 07 23	44.7	100.6	-3.5		-42.4	114	100	11 19 00
11 22 00	=0234+285	23 10 24	45.1	101.3	-3.5		-42.3	180	124	11 19 01
11 24 00	J0237+2848	23 12 24	45.4	101.8	-3.4		-42.2	114	124	11 24 00
11 27 00	=0234+285	23 15 24	45.8	102.5	-3.4		-42.1	180	147	11 24 01
11 29 00	J0237+2848	23 17 25	46.1	102.9	-3.4		-42.0	114	147	11 29 00
11 32 00	=0234+285	23 20 25	46.6	103.6	-3.3		-41.8	180	170	11 29 01
11 34 00	J0237+2848	23 22 25	46.9	104.1	-3.3		-41.7	114	170	11 34 00
11 37 00	=0234+285	23 25 26	47.3	104.8	-3.2		-41.5	180	193	11 34 01
11 39 00	J0237+2848	23 27 26	47.6	105.3	-3.2		-41.4	114	193	11 39 00
11 42 00	=0234+285	23 30 27	48.0	106.1	-3.1		-41.2	180	216	11 39 01
11 44 00	J0237+2848	23 32 27	48.3	106.6	-3.1		-41.1	114	216	11 44 00
11 47 00	=0234+285	23 35 28	48.8	107.3	-3.1		-40.9	180	240	11 44 01
11 49 00	J0237+2848	23 37 28	49.0	107.8	-3.0		-40.8	114	240	11 49 00
11 52 00	=0234+285	23 40 28	49.5	108.6	-3.0		-40.6	180	263	11 49 01
11 55 00	J0237+2848	23 43 29	49.9	109.4	-2.9		-40.3	173	263	11 55 00
12 00 00	=0234+285	23 48 30	50.6	110.7	-2.8		-39.9	300	301	11 55 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group:	7	Station: TORUN	Total bit rate: 1024
Format:	VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels:	8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error
	(B1950)	(J2000)		(mas)
0234+285	02 34 55.589593	* 02 37 52.405680	02 39 20.746482	0.11
* J0237+2848	28 35 11.40778	* 28 48 08.99003	28 54 45.32687	0.10

ec097atr

IRAS 04416+1215

PI: Chang

Address: Xinjiang Astronomical observatory, CAS

Observing mode: vlbi

Schedule for TORUN (Code Tr)

Page 2

IRAS 04416+1215

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

13 00 00	J0319+4130	00 48 40	62.1	98.7	-2.5		-52.5	0	0	13 00 00
13 03 00	---	00 51 40	62.6	99.5	-2.5		-52.4	180	23	13 00 01

13 06 00	J0449+1121	00 54 41	27.5	108.8	-3.9		-35.5	34	23	13 06 00
13 11 30	---	01 00 12	28.3	110.0	-3.8		-35.1	330	66	13 06 01

13 11 30	IRAS04416	01 00 12	29.7	110.4	-3.8		-35.2	-19	66	No stop
13 14 00	---	01 02 42	30.1	111.0	-3.7		-35.0	131	85	13 11 31

13 14 00	J0449+1121	01 02 42	28.6	110.6	-3.8		-35.0	-19	85	No stop
13 14 55	---	01 03 37	28.8	110.8	-3.8		-34.9	36	92	13 14 01

13 14 55	IRAS04416	01 03 37	30.2	111.2	-3.7		-35.0	-19	92	No stop
13 17 25	---	01 06 07	30.6	111.8	-3.7		-34.8	131	111	13 14 56

13 17 50	J0449+1121	01 06 33	29.2	111.5	-3.7		-34.8	6	111	13 17 50
13 18 20	---	01 07 03	29.2	111.6	-3.7		-34.7	30	115	13 17 51

13 18 20	IRAS04416	01 07 03	30.7	112.0	-3.6		-34.8	-19	115	No stop
13 20 50	---	01 09 33	31.0	112.6	-3.6		-34.6	131	135	13 18 21

13 20 50	J0449+1121	01 09 33	29.6	112.2	-3.7		-34.6	-19	135	No stop
13 21 45	---	01 10 28	29.7	112.4	-3.7		-34.5	36	142	13 20 51

13 21 45	IRAS04416	01 10 28	31.2	112.8	-3.6		-34.5	-19	142	No stop
13 24 15	---	01 12 59	31.5	113.4	-3.5		-34.4	131	161	13 21 46

13 24 40	J0449+1121	01 13 24	30.1	113.1	-3.6		-34.3	6	161	13 24 40
13 25 10	---	01 13 54	30.2	113.2	-3.6		-34.3	30	165	13 24 41

13 25 10	IRAS04416	01 13 54	31.6	113.6	-3.5		-34.3	-19	165	No stop
13 27 40	---	01 16 24	32.0	114.2	-3.5		-34.1	131	184	13 25 11

13 27 40	J0449+1121	01 16 24	30.5	113.8	-3.6		-34.1	-19	184	No stop
13 28 35	---	01 17 19	30.7	114.0	-3.6		-34.0	36	191	13 27 41

13 28 35	IRAS04416	01 17 19	32.1	114.4	-3.5		-34.0	-19	191	No stop
13 31 05	---	01 19 50	32.5	115.0	-3.4		-33.9	131	211	13 28 36

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day 59	---							
13 31 30	J0449+1121	01 20 15	31.1	114.7	-3.5		-33.8	6	211	13 31 30
13 32 00	---	01 20 45	31.1	114.8	-3.5		-33.8	30	214	13 31 31
13 32 00	IRAS04416	01 20 45	32.6	115.3	-3.4		-33.8	-19	214	No stop
13 34 30	---	01 23 15	32.9	115.9	-3.4		-33.6	131	234	13 32 01
13 34 30	J0449+1121	01 23 15	31.5	115.4	-3.5		-33.6	-19	234	No stop
13 35 25	---	01 24 10	31.6	115.6	-3.4		-33.5	36	241	13 34 31
13 35 25	IRAS04416	01 24 10	33.0	116.1	-3.4		-33.5	-19	241	No stop
13 37 55	---	01 26 41	33.4	116.7	-3.3		-33.3	131	260	13 35 26
13 38 20	J0449+1121	01 27 06	32.0	116.3	-3.4		-33.3	6	260	13 38 20
13 38 50	---	01 27 36	32.0	116.4	-3.4		-33.3	30	264	13 38 21
13 38 50	IRAS04416	01 27 36	33.5	116.9	-3.3		-33.2	-19	264	No stop
13 41 20	---	01 30 06	33.8	117.5	-3.3		-33.0	131	283	13 38 51
13 41 20	J0449+1121	01 30 06	32.4	117.1	-3.3		-33.1	-19	283	No stop
13 42 15	---	01 31 02	32.5	117.3	-3.3		-33.0	36	290	13 41 21
13 42 15	IRAS04416	01 31 02	34.0	117.8	-3.2		-33.0	-19	290	No stop
13 44 45	---	01 33 32	34.3	118.4	-3.2		-32.7	131	310	13 42 16
13 45 10	J0449+1121	01 33 57	32.9	118.0	-3.3		-32.7	6	310	13 45 10
13 45 40	---	01 34 27	33.0	118.1	-3.3		-32.7	30	314	13 45 11
13 45 40	IRAS04416	01 34 27	34.4	118.6	-3.2		-32.7	-19	314	No stop
13 48 10	---	01 36 58	34.7	119.2	-3.1		-32.4	131	333	13 45 41
13 48 10	J0449+1121	01 36 58	33.3	118.7	-3.2		-32.5	-19	333	No stop
13 49 05	---	01 37 53	33.4	119.0	-3.2		-32.4	36	340	13 48 11
13 49 05	IRAS04416	01 37 53	34.9	119.5	-3.1		-32.4	-19	340	No stop
13 51 35	---	01 40 23	35.2	120.1	-3.1		-32.1	131	359	13 49 06
13 52 00	J0449+1121	01 40 48	33.8	119.7	-3.2		-32.2	6	359	13 52 00
13 52 30	---	01 41 18	33.9	119.8	-3.2		-32.1	30	363	13 52 01
13 52 30	IRAS04416	01 41 18	35.3	120.3	-3.1		-32.0	-19	363	No stop
13 55 00	---	01 43 49	35.6	121.0	-3.0		-31.8	131	383	13 52 31
13 55 00	J0449+1121	01 43 49	34.2	120.4	-3.1		-31.9	-19	383	No stop
13 55 55	---	01 44 44	34.3	120.7	-3.1		-31.8	36	390	13 55 01
13 55 55	IRAS04416	01 44 44	35.8	121.2	-3.0		-31.7	-19	390	No stop
13 58 25	---	01 47 14	36.1	121.9	-3.0		-31.5	131	409	13 55 56

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
13 58 50	J0449+1121	01 47 39	34.7	121.4	-3.0		-31.5	6	409	13 58 50
13 59 20	---	01 48 09	34.7	121.5	-3.0		-31.5	30	413	13 58 51
13 59 20	IRAS04416	01 48 09	36.2	122.1	-3.0		-31.4	-19	413	No stop
14 01 50	---	01 50 40	36.5	122.7	-2.9		-31.1	131	432	13 59 21
14 01 50	J0449+1121	01 50 40	35.1	122.2	-3.0		-31.2	-19	432	No stop
14 02 45	---	01 51 35	35.2	122.4	-3.0		-31.1	36	439	14 01 51
14 02 45	IRAS04416	01 51 35	36.6	123.0	-2.9		-31.0	-19	439	No stop
14 05 15	---	01 54 05	36.9	123.6	-2.9		-30.8	131	459	14 02 46
14 05 40	J0449+1121	01 54 30	35.6	123.2	-2.9		-30.8	6	459	14 05 40
14 06 10	---	01 55 00	35.6	123.3	-2.9		-30.8	30	462	14 05 41
14 06 10	IRAS04416	01 55 00	37.1	123.9	-2.8		-30.7	-19	462	No stop
14 08 40	---	01 57 31	37.4	124.5	-2.8		-30.4	131	482	14 06 11
14 08 40	J0449+1121	01 57 31	35.9	123.9	-2.9		-30.5	-19	482	No stop
14 09 35	---	01 58 26	36.0	124.2	-2.9		-30.4	36	489	14 08 41
14 09 35	IRAS04416	01 58 26	37.5	124.8	-2.8		-30.3	-19	489	No stop
14 12 05	---	02 00 56	37.8	125.4	-2.7		-30.1	131	508	14 09 36
14 12 30	J0449+1121	02 01 22	36.4	125.0	-2.8		-30.1	6	508	14 12 30
14 13 00	---	02 01 52	36.5	125.1	-2.8		-30.1	30	512	14 12 31
14 13 00	IRAS04416	02 01 52	37.9	125.7	-2.7		-30.0	-19	512	No stop
14 15 30	---	02 04 22	38.2	126.4	-2.7		-29.7	131	531	14 13 01
14 15 30	J0449+1121	02 04 22	36.8	125.8	-2.8		-29.8	-19	531	No stop
14 16 25	---	02 05 17	36.9	126.0	-2.8		-29.7	36	538	14 15 31
14 16 25	IRAS04416	02 05 17	38.3	126.6	-2.7		-29.6	-19	538	No stop
14 18 55	---	02 07 48	38.6	127.3	-2.6		-29.3	131	558	14 16 26
14 19 20	J0449+1121	02 08 13	37.2	126.8	-2.7		-29.4	6	558	14 19 20
14 19 50	---	02 08 43	37.3	126.9	-2.7		-29.3	30	562	14 19 21
14 19 50	IRAS04416	02 08 43	38.7	127.5	-2.6		-29.2	-19	562	No stop
14 22 20	---	02 11 13	39.0	128.2	-2.6		-28.9	131	581	14 19 51
14 22 20	J0449+1121	02 11 13	37.6	127.6	-2.7		-29.0	-19	581	No stop
14 23 15	---	02 12 08	37.7	127.8	-2.6		-28.9	36	588	14 22 21

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
14 23 15	IRAS04416	02 12 08	39.1	128.5	-2.6		-28.8	-19	588	No stop
14 25 45	---	02 14 39	39.4	129.2	-2.5		-28.5	131	607	14 23 16
14 26 10	J0449+1121	02 15 04	38.1	128.6	-2.6		-28.6	6	607	14 26 10
14 26 40	---	02 15 34	38.1	128.8	-2.6		-28.5	30	611	14 26 11
14 26 40	IRAS04416	02 15 34	39.5	129.4	-2.5		-28.3	-19	611	No stop
14 29 10	---	02 18 04	39.8	130.1	-2.5		-28.0	131	631	14 26 41
14 29 10	J0449+1121	02 18 04	38.4	129.5	-2.5		-28.2	-19	631	No stop
14 30 05	---	02 18 59	38.5	129.7	-2.5		-28.1	36	638	14 29 11
14 30 05	IRAS04416	02 18 59	39.9	130.4	-2.4		-27.9	-19	638	No stop
14 32 35	---	02 21 30	40.2	131.1	-2.4		-27.6	131	657	14 30 06
14 33 00	J0449+1121	02 21 55	38.8	130.5	-2.5		-27.8	6	657	14 33 00
14 33 30	---	02 22 25	38.9	130.7	-2.5		-27.7	30	661	14 33 01
14 33 30	IRAS04416	02 22 25	40.3	131.4	-2.4		-27.5	-19	661	No stop
14 36 00	---	02 24 55	40.6	132.1	-2.3		-27.1	131	680	14 33 31
14 36 00	J0449+1121	02 24 55	39.2	131.4	-2.4		-27.4	-19	680	No stop
14 36 55	---	02 25 51	39.3	131.6	-2.4		-27.3	36	687	14 36 01
14 36 55	IRAS04416	02 25 51	40.7	132.3	-2.3		-27.0	-19	687	No stop
14 39 25	---	02 28 21	41.0	133.1	-2.3		-26.7	131	707	14 36 56
14 39 50	J0449+1121	02 28 46	39.6	132.4	-2.4		-26.9	6	707	14 39 50
14 40 20	---	02 29 16	39.7	132.6	-2.4		-26.8	30	710	14 39 51
14 40 20	IRAS04416	02 29 16	41.1	133.3	-2.3		-26.6	-19	710	No stop
14 42 50	---	02 31 47	41.3	134.1	-2.2		-26.2	131	730	14 40 21
14 42 50	J0449+1121	02 31 47	39.9	133.3	-2.3		-26.5	-19	730	No stop
14 43 45	---	02 32 42	40.0	133.6	-2.3		-26.3	36	737	14 42 51
14 43 45	IRAS04416	02 32 42	41.4	134.3	-2.2		-26.1	-19	737	No stop
14 46 15	---	02 35 12	41.7	135.1	-2.2		-25.7	131	756	14 43 46
14 46 40	J0449+1121	02 35 37	40.4	134.4	-2.2		-25.9	6	756	14 46 40
14 47 10	---	02 36 07	40.4	134.6	-2.2		-25.9	30	760	14 46 41
14 47 10	IRAS04416	02 36 07	41.8	135.3	-2.2		-25.6	-19	760	No stop
14 49 40	---	02 38 38	42.1	136.1	-2.1		-25.2	131	779	14 47 11

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
14 49 40	J0449+1121	02 38 38	40.7	135.3	-2.2		-25.5	-18	779	No stop
14 50 35	---	02 39 33	40.8	135.6	-2.2		-25.4	37	786	14 49 41
14 50 35	IRAS04416	02 39 33	42.2	136.4	-2.1		-25.1	-19	786	No stop
14 53 05	---	02 42 03	42.4	137.1	-2.1		-24.7	131	806	14 50 36
14 53 30	J0449+1121	02 42 28	41.1	136.4	-2.1		-25.0	7	806	14 53 30
14 54 00	---	02 42 58	41.1	136.6	-2.1		-24.9	30	810	14 53 31
14 54 00	IRAS04416	02 42 58	42.5	137.4	-2.0		-24.6	-19	810	No stop
14 56 30	---	02 45 29	42.8	138.1	-2.0		-24.2	131	829	14 54 01
14 56 30	J0449+1121	02 45 29	41.4	137.3	-2.1		-24.5	-18	829	No stop
14 57 25	---	02 46 24	41.5	137.6	-2.1		-24.4	37	836	14 56 31
14 57 25	IRAS04416	02 46 24	42.9	138.4	-2.0		-24.1	-19	836	No stop
14 59 55	---	02 48 54	43.1	139.2	-1.9		-23.7	131	855	14 57 26
15 00 20	J0449+1121	02 49 19	41.8	138.5	-2.0		-24.0	7	855	15 00 20
15 00 50	---	02 49 49	41.8	138.6	-2.0		-23.9	30	859	15 00 21
15 00 50	IRAS04416	02 49 49	43.2	139.5	-1.9		-23.6	-19	859	No stop
15 03 20	---	02 52 20	43.4	140.2	-1.9		-23.2	131	879	15 00 51
15 03 20	J0449+1121	02 52 20	42.1	139.4	-2.0		-23.5	-18	879	No stop
15 04 15	---	02 53 15	42.2	139.6	-2.0		-23.4	37	886	15 03 21
15 04 15	IRAS04416	02 53 15	43.5	140.5	-1.9		-23.0	-19	886	No stop
15 06 45	---	02 55 45	43.8	141.3	-1.8		-22.6	131	905	15 04 16
15 07 10	J0449+1121	02 56 11	42.4	140.5	-1.9		-22.9	7	905	15 07 10
15 07 40	---	02 56 41	42.5	140.7	-1.9		-22.8	30	909	15 07 11
15 07 40	IRAS04416	02 56 41	43.9	141.6	-1.8		-22.5	-19	909	No stop
15 10 10	---	02 59 11	44.1	142.4	-1.8		-22.0	131	928	15 07 41
15 10 10	J0449+1121	02 59 11	42.7	141.5	-1.9		-22.4	-18	928	No stop
15 11 05	---	03 00 06	42.8	141.7	-1.8		-22.3	37	935	15 10 11
15 11 05	IRAS04416	03 00 06	44.2	142.7	-1.8		-21.9	-19	935	No stop
15 13 35	---	03 02 37	44.4	143.5	-1.7		-21.5	131	955	15 11 06
15 14 00	J0449+1121	03 03 02	43.1	142.6	-1.8		-21.8	7	955	15 14 00
15 14 30	---	03 03 32	43.1	142.8	-1.8		-21.7	30	958	15 14 01

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
15 14 30	IRAS04416	03 03 32	44.5	143.8	-1.7		-21.3	-18	958	No stop
15 17 00	---	03 06 02	44.7	144.6	-1.7		-20.9	132	978	15 14 31
15 17 00	J0449+1121	03 06 02	43.4	143.6	-1.7		-21.3	-18	978	No stop
15 17 55	---	03 06 57	43.4	143.9	-1.7		-21.2	37	985	15 17 01
15 17 55	IRAS04416	03 06 57	44.8	144.9	-1.6		-20.7	-18	985	No stop
15 20 25	---	03 09 28	45.0	145.7	-1.6		-20.3	132	1004	15 17 56
15 20 50	J0449+1121	03 09 53	43.7	144.8	-1.7		-20.7	7	1004	15 20 50
15 21 20	---	03 10 23	43.7	145.0	-1.7		-20.6	30	1008	15 20 51
15 21 20	IRAS04416	03 10 23	45.1	146.0	-1.6		-20.1	-18	1008	No stop
15 23 50	---	03 12 53	45.3	146.8	-1.6		-19.7	132	1027	15 21 21
15 23 50	J0449+1121	03 12 53	44.0	145.8	-1.6		-20.2	-18	1027	No stop
15 24 45	---	03 13 48	44.0	146.0	-1.6		-20.0	37	1034	15 23 51
15 24 45	IRAS04416	03 13 48	45.4	147.1	-1.5		-19.5	-18	1034	No stop
15 27 15	---	03 16 19	45.6	147.9	-1.5		-19.1	132	1054	15 24 46
15 27 40	J0449+1121	03 16 44	44.3	147.0	-1.6		-19.5	7	1054	15 27 40
15 28 10	---	03 17 14	44.3	147.2	-1.6		-19.4	30	1058	15 27 41
15 28 10	IRAS04416	03 17 14	45.6	148.2	-1.5		-18.9	-18	1058	No stop
15 30 40	---	03 19 44	45.8	149.0	-1.4		-18.4	132	1077	15 28 11
15 30 40	J0449+1121	03 19 44	44.5	148.0	-1.5		-19.0	-18	1077	No stop
15 31 35	---	03 20 40	44.6	148.3	-1.5		-18.8	37	1084	15 30 41
15 31 35	IRAS04416	03 20 40	45.9	149.3	-1.4		-18.3	-18	1084	No stop
15 34 05	---	03 23 10	46.1	150.2	-1.4		-17.8	132	1103	15 31 36
15 34 30	J0449+1121	03 23 35	44.8	149.2	-1.4		-18.3	7	1103	15 34 30
15 35 00	---	03 24 05	44.9	149.4	-1.4		-18.2	30	1107	15 34 31
15 35 00	IRAS04416	03 24 05	46.2	150.5	-1.4		-17.6	-18	1107	No stop
15 37 30	---	03 26 35	46.3	151.3	-1.3		-17.2	132	1127	15 35 01
15 37 30	J0449+1121	03 26 35	45.0	150.2	-1.4		-17.7	-18	1127	No stop
15 38 25	---	03 27 31	45.1	150.5	-1.4		-17.5	37	1134	15 37 31
15 38 25	IRAS04416	03 27 31	46.4	151.6	-1.3		-17.0	-18	1134	No stop
15 40 55	---	03 30 01	46.6	152.5	-1.3		-16.5	132	1153	15 38 26

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
15 41 20	J0449+1121	03 30 26	45.3	151.5	-1.3		-17.0	7	1153	15 41 20
15 41 50	---	03 30 56	45.4	151.7	-1.3		-16.9	30	1157	15 41 21
15 41 50	IRAS04416	03 30 56	46.6	152.8	-1.2		-16.3	-18	1157	No stop
15 44 20	---	03 33 27	46.8	153.7	-1.2		-15.8	132	1176	15 41 51
15 44 20	J0449+1121	03 33 27	45.5	152.5	-1.3		-16.4	-18	1176	No stop
15 45 15	---	03 34 22	45.6	152.8	-1.3		-16.3	37	1183	15 44 21
15 45 15	IRAS04416	03 34 22	46.9	154.0	-1.2		-15.6	-18	1183	No stop
15 47 45	---	03 36 52	47.0	154.8	-1.2		-15.1	132	1203	15 45 16
15 48 10	J0449+1121	03 37 17	45.8	153.8	-1.2		-15.7	7	1203	15 48 10
15 48 40	---	03 37 47	45.8	154.0	-1.2		-15.6	30	1206	15 48 11
15 48 40	IRAS04416	03 37 47	47.1	155.2	-1.1		-15.0	-18	1206	No stop
15 51 10	---	03 40 18	47.3	156.0	-1.1		-14.5	132	1226	15 48 41
15 51 10	J0449+1121	03 40 18	46.0	154.8	-1.2		-15.1	-18	1226	No stop
15 52 05	---	03 41 13	46.1	155.1	-1.2		-14.9	37	1233	15 51 11
15 52 05	IRAS04416	03 41 13	47.3	156.4	-1.1		-14.3	-18	1233	No stop
15 54 35	---	03 43 43	47.5	157.2	-1.0		-13.8	132	1252	15 52 06
15 55 00	J0449+1121	03 44 08	46.2	156.1	-1.1		-14.4	7	1252	15 55 00
15 55 30	---	03 44 38	46.3	156.3	-1.1		-14.3	30	1256	15 55 01
15 55 30	IRAS04416	03 44 38	47.5	157.6	-1.0		-13.6	-18	1256	No stop
15 58 00	---	03 47 09	47.6	158.4	-1.0		-13.1	132	1275	15 55 31
15 58 00	J0449+1121	03 47 09	46.4	157.2	-1.1		-13.8	-18	1275	No stop
15 58 55	---	03 48 04	46.5	157.5	-1.0		-13.6	37	1282	15 58 01
15 58 55	IRAS04416	03 48 04	47.7	158.8	-1.0		-12.9	-18	1282	No stop
16 01 25	---	03 50 34	47.8	159.7	-0.9		-12.3	132	1302	15 58 56
16 01 50	J0449+1121	03 50 59	46.6	158.5	-1.0		-13.0	7	1302	16 01 50
16 02 20	---	03 51 30	46.7	158.7	-1.0		-12.9	30	1306	16 01 51
16 03 00	J0530+1331	03 52 10	45.7	143.9	-1.7		-21.4	-5	1306	16 03 00
16 08 00	---	03 57 10	46.2	145.5	-1.6		-20.5	295	1344	16 03 01
16 09 15	J0449+1121	03 58 26	47.0	161.1	-0.9		-11.4	29	1344	16 09 15
16 09 45	---	03 58 56	47.0	161.3	-0.9		-11.3	30	1348	16 09 16

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day 59	---							
16 09 45	IRAS04416	03 58 56	48.2	162.6	-0.8		-10.6	-18	1348	No stop
16 12 15	---	04 01 26	48.3	163.5	-0.7		-10.0	132	1367	16 09 46
16 12 15	J0449+1121	04 01 26	47.2	162.2	-0.8		-10.8	-18	1367	No stop
16 13 10	---	04 02 21	47.2	162.5	-0.8		-10.6	37	1375	16 12 16
16 13 10	IRAS04416	04 02 21	48.4	163.9	-0.7		-9.8	-18	1375	No stop
16 15 40	---	04 04 52	48.5	164.8	-0.7		-9.3	132	1394	16 13 11
16 16 05	J0449+1121	04 05 17	47.3	163.5	-0.8		-10.0	8	1394	16 16 05
16 16 35	---	04 05 47	47.4	163.7	-0.7		-9.9	30	1398	16 16 06
16 16 35	IRAS04416	04 05 47	48.5	165.1	-0.7		-9.1	-18	1398	No stop
16 19 05	---	04 08 17	48.6	166.0	-0.6		-8.5	132	1417	16 16 36
16 19 05	J0449+1121	04 08 17	47.5	164.6	-0.7		-9.4	-17	1417	No stop
16 20 00	---	04 09 12	47.5	164.9	-0.7		-9.2	38	1424	16 19 06
16 20 00	IRAS04416	04 09 12	48.7	166.4	-0.6		-8.3	-17	1424	No stop
16 22 30	---	04 11 43	48.7	167.3	-0.6		-7.8	133	1443	16 20 01
16 22 55	J0449+1121	04 12 08	47.6	166.0	-0.6		-8.5	8	1443	16 22 55
16 23 25	---	04 12 38	47.6	166.2	-0.6		-8.4	30	1447	16 22 56
16 23 25	IRAS04416	04 12 38	48.8	167.6	-0.6		-7.6	-17	1447	No stop
16 25 55	---	04 15 08	48.8	168.6	-0.5		-7.0	133	1467	16 23 26
16 25 55	J0449+1121	04 15 08	47.7	167.1	-0.6		-7.9	-17	1467	No stop
16 26 50	---	04 16 04	47.7	167.4	-0.6		-7.7	38	1474	16 25 56
16 26 50	IRAS04416	04 16 04	48.9	168.9	-0.5		-6.8	-17	1474	No stop
16 29 20	---	04 18 34	48.9	169.8	-0.5		-6.2	133	1493	16 26 51
16 29 45	J0449+1121	04 18 59	47.8	168.4	-0.5		-7.0	8	1493	16 29 45
16 30 15	---	04 19 29	47.8	168.6	-0.5		-6.9	30	1497	16 29 46
16 30 15	IRAS04416	04 19 29	49.0	170.2	-0.4		-6.0	-17	1497	No stop
16 32 45	---	04 22 00	49.0	171.1	-0.4		-5.5	133	1516	16 30 16
16 32 45	J0449+1121	04 22 00	47.9	169.5	-0.5		-6.4	-17	1516	No stop
16 33 40	---	04 22 55	47.9	169.9	-0.5		-6.2	38	1523	16 32 46
16 33 40	IRAS04416	04 22 55	49.0	171.4	-0.4		-5.3	-17	1523	No stop
16 36 10	---	04 25 25	49.1	172.4	-0.3		-4.7	133	1543	16 33 41

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
16 36 35	J0449+1121	04 25 50	48.0	170.9	-0.4		-5.5	8	1543	16 36 35
16 37 05	---	04 26 20	48.0	171.1	-0.4		-5.4	30	1546	16 36 36
16 37 05	IRAS04416	04 26 20	49.1	172.7	-0.3		-4.5	-17	1546	No stop
16 39 35	---	04 28 51	49.2	173.6	-0.3		-3.9	133	1566	16 37 06
16 39 35	J0449+1121	04 28 51	48.1	172.0	-0.4		-4.9	-17	1566	No stop
16 40 30	---	04 29 46	48.1	172.4	-0.3		-4.7	38	1573	16 39 36
16 40 30	IRAS04416	04 29 46	49.2	174.0	-0.3		-3.7	-17	1573	No stop
16 43 00	---	04 32 16	49.2	174.9	-0.2		-3.1	133	1592	16 40 31
16 43 25	J0449+1121	04 32 41	48.2	173.4	-0.3		-4.0	8	1592	16 43 25
16 43 55	---	04 33 11	48.2	173.6	-0.3		-3.9	30	1596	16 43 26
16 43 55	IRAS04416	04 33 11	49.2	175.2	-0.2		-2.9	-17	1596	No stop
16 46 25	---	04 35 42	49.3	176.2	-0.2		-2.3	133	1615	16 43 56
16 46 25	J0449+1121	04 35 42	48.2	174.5	-0.2		-3.3	-17	1615	No stop
16 47 20	---	04 36 37	48.2	174.9	-0.2		-3.1	38	1622	16 46 26
16 47 20	IRAS04416	04 36 37	49.3	176.5	-0.2		-2.1	-17	1622	No stop
16 49 50	---	04 39 07	49.3	177.5	-0.1		-1.6	133	1642	16 47 21
16 50 15	J0449+1121	04 39 32	48.2	176.0	-0.2		-2.5	8	1642	16 50 15
16 50 45	---	04 40 03	48.3	176.1	-0.2		-2.4	30	1646	16 50 16
16 50 45	IRAS04416	04 40 03	49.3	177.8	-0.1		-1.3	-17	1646	No stop
16 53 15	---	04 42 33	49.3	178.7	-0.1		-0.8	133	1665	16 50 46
16 53 15	J0449+1121	04 42 33	48.3	177.1	-0.1		-1.8	-17	1665	No stop
16 54 10	---	04 43 28	48.3	177.4	-0.1		-1.6	38	1672	16 53 16
16 54 10	IRAS04416	04 43 28	49.3	179.1	-0.0		-0.6	-17	1672	No stop
16 56 40	---	04 45 58	49.3	180.0	0.0		0.0	133	1691	16 54 11
16 57 05	J0449+1121	04 46 24	48.3	178.5	-0.1		-0.9	8	1691	16 57 05
16 57 35	---	04 46 54	48.3	178.7	-0.1		-0.8	30	1695	16 57 06
16 57 35	IRAS04416	04 46 54	49.3	180.4	0.0		0.2	-17	1695	No stop
17 00 05	---	04 49 24	49.3	181.3	0.1		0.8	133	1715	16 57 36
17 00 05	J0449+1121	04 49 24	48.3	179.6	-0.0		-0.3	-17	1715	No stop
17 01 00	---	04 50 19	48.3	179.9	-0.0		-0.0	38	1722	17 00 06

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
17 01 00	IRAS04416	04 50 19	49.3	181.7	0.1		1.0	-17	1722	No stop
17 03 30	---	04 52 50	49.3	182.6	0.1		1.6	133	1741	17 01 01
17 03 55	J0449+1121	04 53 15	48.3	181.0	0.0		0.6	8	1741	17 03 55
17 04 25	---	04 53 45	48.3	181.2	0.1		0.7	30	1745	17 03 56
17 04 25	IRAS04416	04 53 45	49.3	182.9	0.1		1.8	-17	1745	No stop
17 06 55	---	04 56 15	49.3	183.9	0.2		2.4	133	1764	17 04 26
17 06 55	J0449+1121	04 56 15	48.3	182.1	0.1		1.3	-17	1764	No stop
17 07 50	---	04 57 10	48.3	182.4	0.1		1.5	38	1771	17 06 56
17 07 50	IRAS04416	04 57 10	49.2	184.2	0.2		2.6	-17	1771	No stop
17 10 20	---	04 59 41	49.2	185.2	0.2		3.2	133	1791	17 07 51
17 10 45	J0449+1121	05 00 06	48.3	183.5	0.2		2.2	8	1791	17 10 45
17 11 15	---	05 00 36	48.3	183.7	0.2		2.3	30	1794	17 10 46
17 11 15	IRAS04416	05 00 36	49.2	185.5	0.2		3.4	-17	1794	No stop
17 13 45	---	05 03 06	49.2	186.4	0.3		4.0	133	1814	17 11 16
17 13 45	J0449+1121	05 03 06	48.2	184.6	0.2		2.8	-17	1814	No stop
17 14 40	---	05 04 01	48.2	185.0	0.2		3.0	38	1821	17 13 46
17 14 40	IRAS04416	05 04 01	49.1	186.8	0.3		4.2	-17	1821	No stop
17 17 10	---	05 06 32	49.1	187.7	0.3		4.7	133	1840	17 14 41
17 17 35	J0449+1121	05 06 57	48.2	186.0	0.3		3.7	8	1840	17 17 35
17 18 05	---	05 07 27	48.2	186.2	0.3		3.8	30	1844	17 17 36
17 18 05	IRAS04416	05 07 27	49.1	188.1	0.4		4.9	-17	1844	No stop
17 20 35	---	05 09 57	49.0	189.0	0.4		5.5	133	1863	17 18 06
17 20 35	J0449+1121	05 09 57	48.1	187.1	0.3		4.4	-17	1863	No stop
17 21 30	---	05 10 53	48.1	187.5	0.3		4.6	38	1870	17 20 36
17 21 30	IRAS04416	05 10 53	49.0	189.3	0.4		5.7	-17	1870	No stop
17 24 00	---	05 13 23	48.9	190.2	0.5		6.3	133	1890	17 21 31
17 24 25	J0449+1121	05 13 48	48.0	188.5	0.4		5.2	8	1890	17 24 25
17 24 55	---	05 14 18	48.0	188.7	0.4		5.3	30	1894	17 24 26
17 24 55	IRAS04416	05 14 18	48.9	190.6	0.5		6.5	-17	1894	No stop
17 27 25	---	05 16 49	48.8	191.5	0.5		7.0	133	1913	17 24 56

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart
Stop UT		LST	EL	AZ	HA UP	ParA Dwell	GBytes	SYNC
--- Fri 28 Feb 2025 Day 59 ---								
17 27 25	J0449+1121	05 16 49	48.0	189.6	0.4	5.9 -17	1913	No stop
17 28 20	---	05 17 44	48.0	190.0	0.5	6.1 38	1920	17 27 26
17 28 20	IRAS04416	05 17 44	48.8	191.9	0.5	7.3 -17	1920	No stop
17 30 50	---	05 20 14	48.7	192.8	0.6	7.8 133	1939	17 28 21
17 31 15	J0449+1121	05 20 39	47.9	191.0	0.5	6.7 8	1939	17 31 15
17 31 45	---	05 21 09	47.9	191.2	0.5	6.8 30	1943	17 31 16
17 31 45	IRAS04416	05 21 09	48.7	193.1	0.6	8.0 -18	1943	No stop
17 34 15	---	05 23 40	48.6	194.0	0.6	8.6 132	1963	17 31 46
17 34 15	J0449+1121	05 23 40	47.8	192.1	0.6	7.4 -17	1963	No stop
17 35 10	---	05 24 35	47.8	192.5	0.6	7.6 38	1970	17 34 16
17 35 10	IRAS04416	05 24 35	48.6	194.4	0.6	8.8 -18	1970	No stop
17 37 40	---	05 27 05	48.5	195.3	0.7	9.3 132	1989	17 35 11
17 38 05	J0449+1121	05 27 30	47.7	193.5	0.6	8.2 8	1989	17 38 05
17 38 35	---	05 28 00	47.6	193.7	0.6	8.3 30	1993	17 38 06
17 38 35	IRAS04416	05 28 00	48.4	195.6	0.7	9.5 -18	1993	No stop
17 41 05	---	05 30 31	48.3	196.5	0.7	10.1 132	2012	17 38 36
17 41 05	J0449+1121	05 30 31	47.5	194.6	0.7	8.9 -17	2012	No stop
17 42 00	---	05 31 26	47.5	194.9	0.7	9.1 38	2019	17 41 06
17 42 00	IRAS04416	05 31 26	48.3	196.8	0.8	10.3 -18	2019	No stop
17 44 30	---	05 33 56	48.2	197.8	0.8	10.8 132	2039	17 42 01
17 44 55	J0449+1121	05 34 21	47.4	196.0	0.7	9.7 8	2039	17 44 55
17 45 25	---	05 34 52	47.4	196.2	0.7	9.8 30	2042	17 44 56
17 45 25	IRAS04416	05 34 52	48.1	198.1	0.8	11.0 -18	2042	No stop
17 47 55	---	05 37 22	48.0	199.0	0.9	11.5 132	2062	17 45 26
17 47 55	J0449+1121	05 37 22	47.3	197.0	0.8	10.3 -17	2062	No stop
17 48 50	---	05 38 17	47.2	197.4	0.8	10.5 38	2069	17 47 56
17 48 50	IRAS04416	05 38 17	48.0	199.3	0.9	11.7 -18	2069	No stop
17 51 20	---	05 40 47	47.9	200.2	0.9	12.3 132	2088	17 48 51
17 51 45	J0449+1121	05 41 13	47.1	198.4	0.8	11.2 8	2088	17 51 45
17 52 15	---	05 41 43	47.1	198.6	0.9	11.3 30	2092	17 51 46

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Fri	28 Feb 2025	Day	59	---						
17 52 15	IRAS04416	05 41 43	47.8	200.5	0.9		12.5	-18	2092	No stop
17 54 45	---	05 44 13	47.7	201.4	1.0		13.0	132	2111	17 52 16
17 54 45	J0449+1121	05 44 13	46.9	199.5	0.9		11.8	-17	2111	No stop
17 55 40	---	05 45 08	46.9	199.8	0.9		12.0	38	2118	17 54 46
17 55 40	IRAS04416	05 45 08	47.6	201.7	1.0		13.2	-18	2118	No stop
17 58 10	---	05 47 39	47.5	202.6	1.0		13.7	132	2138	17 55 41
17 58 35	J0449+1121	05 48 04	46.7	200.8	1.0		12.6	8	2138	17 58 35
17 59 05	---	05 48 34	46.7	201.0	1.0		12.7	30	2142	17 58 36
17 59 05	IRAS04416	05 48 34	47.4	202.9	1.0		13.9	-18	2142	No stop
18 01 35	---	05 51 04	47.3	203.8	1.1		14.4	132	2161	17 59 06
18 01 35	J0449+1121	05 51 04	46.6	201.9	1.0		13.2	-17	2161	No stop
18 02 30	---	05 51 59	46.5	202.2	1.0		13.4	38	2168	18 01 36
18 02 30	IRAS04416	05 51 59	47.2	204.1	1.1		14.6	-18	2168	No stop
18 05 00	---	05 54 30	47.1	205.0	1.1		15.1	132	2187	18 02 31
18 05 25	J0449+1121	05 54 55	46.4	203.2	1.1		14.0	8	2187	18 05 25
18 05 55	---	05 55 25	46.3	203.4	1.1		14.1	30	2191	18 05 26
18 05 55	IRAS04416	05 55 25	47.0	205.3	1.2		15.3	-18	2191	No stop
18 08 25	---	05 57 55	46.8	206.2	1.2		15.7	132	2211	18 05 56
18 08 25	J0449+1121	05 57 55	46.2	204.2	1.1		14.6	-17	2211	No stop
18 09 20	---	05 58 50	46.1	204.5	1.1		14.7	38	2218	18 08 26
18 09 20	IRAS04416	05 58 50	46.8	206.5	1.2		15.9	-18	2218	No stop
18 11 50	---	06 01 21	46.6	207.4	1.3		16.4	132	2237	18 09 21
18 12 15	J0449+1121	06 01 46	45.9	205.5	1.2		15.3	8	2237	18 12 15
18 12 45	---	06 02 16	45.9	205.7	1.2		15.4	30	2241	18 12 16
18 12 45	IRAS04416	06 02 16	46.5	207.7	1.3		16.6	-18	2241	No stop
18 15 15	---	06 04 46	46.4	208.5	1.3		17.1	132	2260	18 12 46
18 15 15	J0449+1121	06 04 46	45.7	206.6	1.2		15.9	-17	2260	No stop
18 16 10	---	06 05 42	45.7	206.9	1.3		16.1	38	2267	18 15 16
18 16 10	IRAS04416	06 05 42	46.3	208.8	1.3		17.3	-18	2267	No stop
18 18 40	---	06 08 12	46.1	209.7	1.4		17.7	132	2287	18 16 11

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart
Stop UT		LST	EL	AZ	HA UP	ParA Dwell	GBytes	SYNC
--- Fri 28 Feb 2025 Day 59 ---								
18 19 05	J0449+1121	06 08 37	45.5	207.8	1.3	16.6 8	2287	18 19 05
18 19 35	---	06 09 07	45.4	208.0	1.3	16.7 30	2290	18 19 06
18 19 35	IRAS04416	06 09 07	46.0	210.0	1.4	17.9 -18	2290	No stop
18 22 05	---	06 11 38	45.9	210.8	1.4	18.4 132	2310	18 19 36
18 22 05	J0449+1121	06 11 38	45.3	208.9	1.4	17.2 -17	2310	No stop
18 23 00	---	06 12 33	45.2	209.2	1.4	17.4 38	2317	18 22 06
18 23 00	IRAS04416	06 12 33	45.8	211.1	1.4	18.5 -18	2317	No stop
18 25 30	---	06 15 03	45.6	212.0	1.5	19.0 132	2336	18 23 01
18 25 55	J0449+1121	06 15 28	45.0	210.1	1.4	17.9 8	2336	18 25 55
18 26 25	---	06 15 58	44.9	210.3	1.4	18.0 30	2340	18 25 56
18 26 25	IRAS04416	06 15 58	45.5	212.3	1.5	19.2 -18	2340	No stop
18 28 55	---	06 18 29	45.3	213.1	1.5	19.6 132	2359	18 26 26
18 28 55	J0449+1121	06 18 29	44.7	211.1	1.5	18.5 -17	2359	No stop
18 29 50	---	06 19 24	44.7	211.4	1.5	18.6 38	2366	18 28 56
18 29 50	IRAS04416	06 19 24	45.2	213.4	1.6	19.8 -18	2366	No stop
18 32 20	---	06 21 54	45.0	214.2	1.6	20.2 132	2386	18 29 51
18 32 45	J0449+1121	06 22 19	44.4	212.4	1.5	19.1 8	2386	18 32 45
18 33 15	---	06 22 49	44.4	212.5	1.5	19.2 30	2390	18 32 46
18 33 15	IRAS04416	06 22 49	45.0	214.5	1.6	20.4 -18	2390	No stop
18 35 45	---	06 25 20	44.7	215.3	1.7	20.8 132	2409	18 33 16
18 35 45	J0449+1121	06 25 20	44.2	213.3	1.6	19.7 -17	2409	No stop
18 36 40	---	06 26 15	44.1	213.6	1.6	19.8 38	2416	18 35 46
18 36 40	IRAS04416	06 26 15	44.7	215.6	1.7	21.0 -18	2416	No stop
18 39 10	---	06 28 45	44.4	216.4	1.7	21.4 132	2435	18 36 41
18 39 35	J0449+1121	06 29 10	43.9	214.6	1.6	20.3 8	2435	18 39 35
18 40 05	---	06 29 40	43.8	214.7	1.7	20.4 30	2439	18 39 36
18 40 05	IRAS04416	06 29 40	44.4	216.7	1.7	21.6 -18	2439	No stop
18 42 35	---	06 32 11	44.1	217.5	1.8	22.0 132	2459	18 40 06
18 42 35	J0449+1121	06 32 11	43.6	215.5	1.7	20.8 -17	2459	No stop
18 43 30	---	06 33 06	43.5	215.8	1.7	21.0 38	2466	18 42 36

Schedule for TORUN (Code Tr)
IRAS 04416+1215

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UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
Early: Seconds between end of slew and start. Dwell: On source seconds.
Disk: GBytes recorded to this point.
TPStart: Recording start time. Frequencies are L0 sum (band edge).
SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC
--- Fri 28 Feb 2025 Day 59 ---										
18 43 30	IRAS04416	06 33 06	44.0	217.8	1.8		22.1	-18	2466	No stop
18 46 00	---	06 35 36	43.8	218.6	1.8		22.5	132	2485	18 43 31
18 46 25	J0449+1121	06 36 02	43.3	216.7	1.8		21.5	8	2485	18 46 25
18 46 55	---	06 36 32	43.2	216.9	1.8		21.6	30	2489	18 46 26
18 46 55	IRAS04416	06 36 32	43.7	218.9	1.8		22.7	-18	2489	No stop
18 49 25	---	06 39 02	43.5	219.6	1.9		23.1	132	2508	18 46 56
18 49 25	J0449+1121	06 39 02	43.0	217.7	1.8		22.0	-17	2508	No stop
18 50 20	---	06 39 57	42.9	218.0	1.8		22.1	38	2515	18 49 26
18 50 20	IRAS04416	06 39 57	43.4	219.9	1.9		23.2	-18	2515	No stop
18 52 50	---	06 42 28	43.2	220.7	1.9		23.6	132	2535	18 50 21
18 53 15	J0449+1121	06 42 53	42.6	218.9	1.9		22.6	8	2535	18 53 15
18 53 45	---	06 43 23	42.6	219.0	1.9		22.7	30	2538	18 53 16
18 57 00	J0927+3902	06 46 38	59.1	100.7	-2.7		-49.3	-56	2538	18 57 00
19 00 00	---	06 49 39	59.5	101.5	-2.7		-49.2	124	2562	18 57 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

==== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error
	(B1950)	(J2000)		(mas)
* IRAS04416	04 41 41.266202	* 04 44 28.774000	04 45 53.270293	0.00
	12 15 41.59411	* 12 21 11.63500	12 23 59.27568	0.00
* J0449+1121	04 46 21.217282	* 04 49 07.671102	04 50 31.663302	0.00
	11 16 17.84565	* 11 21 28.59644	11 24 06.21567	0.00
* J0530+1331	05 28 06.759213	* 05 30 56.416744	05 32 22.251298	0.00
	13 29 42.28888	* 13 31 55.14955	13 33 03.87061	0.00
* J0319+4130	03 16 29.567332	* 03 19 48.160164	03 21 27.654161	0.00
	41 19 51.91970	* 41 30 42.10682	41 36 19.37871	0.00
* J0927+3902	09 23 55.319221	* 09 27 03.013942	09 28 39.256305	0.00
	39 15 23.56636	* 39 02 20.85176	38 55 46.43088	0.00

OH GAS IN MEGAMASER GALAXIES: IMAGING THE DIFFUSE AND COMPACT EMISSION

PI: Dalei Li

Address: Xinjiang Astronomical Observatory, Chinese Academy of Sciences

Observing mode: vlbi

Schedule for TORUN (Code Tr)

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OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early		Disk	TPStart
Stop UT		LST	EL	AZ	HA UP	ParA	Dwell	GBytes	SYNC

--- Sat 1 Mar 2025 Day 60 ---									
Next scan frequencies:		1554.72	1554.72	1607.22	1607.22	1659.72	1659.72	1691.72	1691.72
Next BBC frequencies:		745.28	745.28	692.78	692.78	640.28	640.28	608.28	608.28
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

01 30 00	3C345	13 20 43	53.4	90.4	-3.4	-51.4	0	0	01 30 00
01 35 00	---	13 25 44	54.2	91.5	-3.3	-51.3	300	39	01 30 01
01 38 00	J1642-0621	13 28 44	17.8	128.4	-3.2	-28.3	29	39	01 38 00
01 40 00	---	13 30 44	18.0	128.9	-3.2	-28.1	120	54	01 38 01
01 40 00	IRAS16399	13 30 44	14.9	130.4	-3.2	-27.7	-25	54	No stop
01 43 30	---	13 34 15	15.3	131.2	-3.2	-27.3	185	81	01 40 01
01 44 00	J1642-0621	13 34 45	18.5	129.8	-3.1	-27.7	4	81	01 44 00
01 45 30	---	13 36 15	18.6	130.2	-3.1	-27.5	90	93	01 44 01
01 45 30	IRAS16399	13 36 15	15.6	131.6	-3.1	-27.1	-25	93	No stop
01 49 00	---	13 39 46	16.0	132.4	-3.1	-26.7	185	120	01 45 31
01 49 30	J1642-0621	13 40 16	19.1	131.1	-3.1	-27.1	4	120	01 49 30
01 53 30	---	13 44 17	19.5	132.0	-3.0	-26.7	240	151	01 49 31
01 53 30	IRAS16399	13 44 17	16.4	133.5	-3.0	-26.2	-25	151	No stop
01 57 00	---	13 47 47	16.8	134.3	-2.9	-25.9	185	178	01 53 31
01 57 30	J1642-0621	13 48 17	20.0	133.0	-2.9	-26.2	4	178	01 57 30
01 59 00	---	13 49 48	20.1	133.3	-2.9	-26.1	90	189	01 57 31
01 59 00	IRAS16399	13 49 48	17.0	134.7	-2.9	-25.6	-25	189	No stop
02 02 30	---	13 53 18	17.4	135.6	-2.8	-25.3	185	216	01 59 01
02 03 00	J1642-0621	13 53 48	20.6	134.3	-2.8	-25.6	4	216	02 03 00
02 07 00	---	13 57 49	21.0	135.3	-2.8	-25.2	240	247	02 03 01
02 10 00	3C345	14 00 49	59.4	99.2	-2.7	-50.4	22	247	02 10 00
02 14 00	---	14 04 50	60.0	100.2	-2.6	-50.2	240	278	02 10 01
02 17 00	3C286	14 07 51	66.4	199.4	0.6	13.4	-34	278	02 17 00
02 22 00	---	14 12 51	66.1	202.0	0.7	15.1	266	317	02 17 01
02 28 00	J1642-0621	14 18 52	23.1	140.4	-2.4	-22.6	184	317	02 28 00
02 30 00	---	14 20 53	23.3	140.9	-2.4	-22.4	120	332	02 28 01

Schedule for TORUN (Code Tr)

Page 3

OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
02 30 00	IRAS16399	14 20 53	20.1	142.1	-2.4		-22.0	-26	332	No stop
02 33 30	---	14 24 23	20.5	143.0	-2.3		-21.5	184	359	02 30 01
02 34 00	J1642-0621	14 24 53	23.7	141.9	-2.3		-21.9	4	359	02 34 00
02 35 30	---	14 26 24	23.8	142.3	-2.3		-21.7	90	371	02 34 01
02 35 30	IRAS16399	14 26 24	20.6	143.5	-2.3		-21.3	-26	371	No stop
02 39 00	---	14 29 54	21.0	144.3	-2.2		-20.8	184	398	02 35 31
02 39 30	J1642-0621	14 30 24	24.2	143.3	-2.2		-21.2	4	398	02 39 30
02 41 00	---	14 31 54	24.3	143.7	-2.2		-21.0	90	410	02 39 31
02 41 00	IRAS16399	14 31 54	21.1	144.8	-2.2		-20.5	-26	410	No stop
02 44 30	---	14 35 25	21.4	145.7	-2.1		-20.1	184	437	02 41 01
02 45 00	J1642-0621	14 35 55	24.7	144.7	-2.1		-20.4	4	437	02 45 00
02 46 30	---	14 37 25	24.8	145.1	-2.1		-20.2	90	448	02 45 01
02 46 30	IRAS16399	14 37 25	21.6	146.2	-2.1		-19.8	-26	448	No stop
02 50 00	---	14 40 56	21.9	147.1	-2.1		-19.3	184	475	02 46 31
02 50 30	J1642-0621	14 41 26	25.2	146.2	-2.0		-19.7	4	475	02 50 30
02 52 00	---	14 42 56	25.3	146.5	-2.0		-19.5	90	487	02 50 31
02 52 00	IRAS16399	14 42 56	22.0	147.6	-2.0		-19.1	-26	487	No stop
02 55 30	---	14 46 27	22.3	148.5	-2.0		-18.6	184	514	02 52 01
02 56 00	J1642-0621	14 46 57	25.6	147.6	-1.9		-18.9	4	514	02 56 00
02 57 30	---	14 48 27	25.7	148.0	-1.9		-18.7	90	526	02 56 01
02 57 30	IRAS16399	14 48 27	22.5	149.0	-1.9		-18.3	-26	526	No stop
03 01 00	---	14 51 58	22.7	149.9	-1.9		-17.8	184	553	02 57 31
03 01 30	J1642-0621	14 52 28	26.0	149.0	-1.8		-18.1	4	553	03 01 30
03 03 00	---	14 53 58	26.2	149.4	-1.8		-17.9	90	564	03 01 31
03 03 00	IRAS16399	14 53 58	22.9	150.4	-1.8		-17.5	-26	564	No stop
03 06 30	---	14 57 29	23.2	151.3	-1.8		-17.0	184	591	03 03 01
03 07 00	J1642-0621	14 57 59	26.5	150.5	-1.8		-17.3	4	591	03 07 00
03 08 30	---	14 59 29	26.6	150.9	-1.7		-17.1	90	603	03 07 01
03 08 30	IRAS16399	14 59 29	23.3	151.8	-1.7		-16.7	-26	603	No stop
03 12 00	---	15 03 00	23.5	152.7	-1.7		-16.2	184	630	03 08 31
03 12 30	J1642-0621	15 03 30	26.9	151.9	-1.7		-16.5	4	630	03 12 30
03 14 00	---	15 05 00	27.0	152.4	-1.6		-16.3	90	642	03 12 31

Schedule for TORUN (Code Tr)

Page 4

OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
03 14 00	IRAS16399	15 05 00	23.7	153.2	-1.7		-15.9	-26	642	No stop
03 17 30	---	15 08 30	23.9	154.1	-1.6		-15.4	184	669	03 14 01
03 18 00	J1642-0621	15 09 01	27.2	153.4	-1.6		-15.7	4	669	03 18 00
03 19 30	---	15 10 31	27.3	153.8	-1.5		-15.5	90	680	03 18 01
03 19 30	IRAS16399	15 10 31	24.0	154.6	-1.6		-15.1	-26	680	No stop
03 23 00	---	15 14 01	24.3	155.6	-1.5		-14.6	184	707	03 19 31
03 23 30	J1642-0621	15 14 31	27.6	154.9	-1.5		-14.8	4	707	03 23 30
03 25 00	---	15 16 02	27.7	155.3	-1.5		-14.6	90	719	03 23 31
03 28 00	3C345	15 19 02	70.4	124.2	-1.4		-40.2	6	719	03 28 00
03 32 00	---	15 23 03	70.8	126.0	-1.3		-39.2	240	750	03 28 01
03 36 00	3C286	15 27 04	59.2	233.9	1.9		34.2	9	750	03 36 00
03 41 00	---	15 32 04	58.6	235.7	2.0		35.1	300	788	03 36 01
03 46 00	J1642-0621	15 37 05	28.9	161.1	-1.1		-11.3	135	788	03 46 00
03 48 00	---	15 39 05	29.0	161.7	-1.1		-11.0	120	804	03 46 01
03 48 00	IRAS16399	15 39 05	25.6	162.2	-1.1		-10.7	-26	804	No stop
03 51 30	---	15 42 36	25.8	163.1	-1.0		-10.2	184	831	03 48 01
03 52 00	J1642-0621	15 43 06	29.1	162.8	-1.0		-10.3	4	831	03 52 00
03 53 30	---	15 44 36	29.2	163.2	-1.0		-10.1	90	842	03 52 01
03 53 30	IRAS16399	15 44 36	25.9	163.7	-1.0		-9.9	-26	842	No stop
03 57 00	---	15 48 07	26.0	164.6	-0.9		-9.3	184	870	03 53 31
03 57 30	J1642-0621	15 48 37	29.4	164.3	-0.9		-9.4	4	870	03 57 30
03 59 00	---	15 50 07	29.4	164.8	-0.9		-9.1	90	881	03 57 31
03 59 00	IRAS16399	15 50 07	26.1	165.2	-0.9		-9.0	-26	881	No stop
04 02 30	---	15 53 38	26.2	166.1	-0.8		-8.4	184	908	03 59 01
04 03 00	J1642-0621	15 54 08	29.6	165.9	-0.8		-8.5	3	908	04 03 00
04 04 30	---	15 55 38	29.6	166.3	-0.8		-8.2	90	920	04 03 01
04 04 30	IRAS16399	15 55 38	26.3	166.7	-0.8		-8.1	-26	920	No stop
04 08 00	---	15 59 09	26.4	167.6	-0.7		-7.5	184	947	04 04 31
04 08 30	J1642-0621	15 59 39	29.8	167.5	-0.7		-7.5	3	947	04 08 30
04 10 00	---	16 01 09	29.8	167.9	-0.7		-7.3	90	958	04 08 31

Schedule for TORUN (Code Tr)

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OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
04 10 00	IRAS16399	16 01 09	26.5	168.2	-0.7		-7.2	-26	958	No stop
04 13 30	---	16 04 40	26.6	169.1	-0.7		-6.6	184	985	04 10 01
04 14 00	J1642-0621	16 05 10	29.9	169.0	-0.6		-6.6	3	985	04 14 00
04 15 30	---	16 06 40	30.0	169.5	-0.6		-6.4	90	997	04 14 01
04 15 30	IRAS16399	16 06 40	26.6	169.7	-0.6		-6.3	-26	997	No stop
04 19 00	---	16 10 11	26.7	170.6	-0.6		-5.7	184	1024	04 15 31
04 19 30	J1642-0621	16 10 41	30.1	170.6	-0.5		-5.7	3	1024	04 19 30
04 21 00	---	16 12 11	30.1	171.0	-0.5		-5.4	90	1036	04 19 31
04 21 00	IRAS16399	16 12 11	26.8	171.2	-0.5		-5.3	-26	1036	No stop
04 24 30	---	16 15 41	26.8	172.2	-0.5		-4.8	184	1063	04 21 01
04 25 00	J1642-0621	16 16 12	30.2	172.2	-0.5		-4.7	3	1063	04 25 00
04 26 30	---	16 17 42	30.2	172.6	-0.4		-4.5	90	1074	04 25 01
04 26 30	IRAS16399	16 17 42	26.9	172.7	-0.4		-4.4	-26	1074	No stop
04 30 00	---	16 21 12	26.9	173.7	-0.4		-3.8	184	1101	04 26 31
04 30 30	J1642-0621	16 21 42	30.3	173.8	-0.4		-3.8	3	1101	04 30 30
04 32 00	---	16 23 13	30.3	174.2	-0.3		-3.5	90	1113	04 30 31
04 32 00	IRAS16399	16 23 13	27.0	174.2	-0.3		-3.5	-26	1113	No stop
04 35 30	---	16 26 43	27.0	175.2	-0.3		-2.9	184	1140	04 32 01
04 36 00	J1642-0621	16 27 13	30.4	175.3	-0.3		-2.8	3	1140	04 36 00
04 37 30	---	16 28 44	30.4	175.8	-0.2		-2.6	90	1152	04 36 01
04 37 30	IRAS16399	16 28 44	27.0	175.8	-0.3		-2.6	-27	1152	No stop
04 41 00	---	16 32 14	27.1	176.7	-0.2		-2.0	183	1179	04 37 31
04 41 30	J1642-0621	16 32 44	30.5	176.9	-0.2		-1.9	3	1179	04 41 30
04 43 00	---	16 34 15	30.5	177.4	-0.2		-1.6	90	1190	04 41 31
04 43 00	IRAS16399	16 34 15	27.1	177.3	-0.2		-1.7	-27	1190	No stop
04 46 30	---	16 37 45	27.1	178.3	-0.1		-1.1	183	1217	04 43 01
04 47 00	J1642-0621	16 38 15	30.5	178.5	-0.1		-0.9	3	1217	04 47 00
04 48 30	---	16 39 45	30.5	179.0	-0.1		-0.6	90	1229	04 47 01
04 48 30	IRAS16399	16 39 45	27.1	178.8	-0.1		-0.7	-27	1229	No stop
04 52 00	---	16 43 16	27.1	179.8	-0.0		-0.1	183	1256	04 48 31

Schedule for TORUN (Code Tr)

Page 6

OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

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Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
04 52 30	J1642-0621	16 43 46	30.5	180.1	0.0		0.1	3	1256	04 52 30
04 54 00	---	16 45 16	30.5	180.5	0.0		0.3	90	1268	04 52 31
04 54 00	IRAS16399	16 45 16	27.1	180.3	0.0		0.2	-26	1268	No stop
04 57 30	---	16 48 47	27.1	181.3	0.1		0.8	184	1295	04 54 01
04 58 00	J1642-0621	16 49 17	30.5	181.7	0.1		1.0	4	1295	04 58 00
04 59 30	---	16 50 47	30.5	182.1	0.1		1.3	90	1306	04 58 01
04 59 30	IRAS16399	16 50 47	27.1	181.9	0.1		1.1	-26	1306	No stop
05 03 00	---	16 54 18	27.1	182.8	0.2		1.7	184	1333	04 59 31
05 03 30	J1642-0621	16 54 48	30.4	183.3	0.2		2.0	4	1333	05 03 30
05 05 00	---	16 56 18	30.4	183.7	0.2		2.2	90	1345	05 03 31
05 05 00	IRAS16399	16 56 18	27.1	183.4	0.2		2.1	-26	1345	No stop
05 08 30	---	16 59 49	27.0	184.4	0.3		2.7	184	1372	05 05 01
05 09 00	J1642-0621	17 00 19	30.4	184.9	0.3		2.9	4	1372	05 09 00
05 10 30	---	17 01 49	30.4	185.3	0.3		3.2	90	1384	05 09 01
05 10 30	IRAS16399	17 01 49	27.0	184.9	0.3		3.0	-26	1384	No stop
05 14 00	---	17 05 20	27.0	185.9	0.4		3.6	184	1411	05 10 31
05 14 30	J1642-0621	17 05 50	30.3	186.5	0.4		3.9	4	1411	05 14 30
05 16 00	---	17 07 20	30.3	186.9	0.4		4.2	90	1422	05 14 31
05 16 00	IRAS16399	17 07 20	26.9	186.4	0.4		3.9	-26	1422	No stop
05 19 30	---	17 10 51	26.9	187.4	0.4		4.5	184	1449	05 16 01
05 20 00	J1642-0621	17 11 21	30.2	188.0	0.5		4.9	4	1449	05 20 00
05 21 30	---	17 12 51	30.2	188.5	0.5		5.1	90	1461	05 20 01
05 21 30	IRAS16399	17 12 51	26.8	188.0	0.5		4.8	-26	1461	No stop
05 25 00	---	17 16 21	26.8	188.9	0.5		5.4	184	1488	05 21 31
05 25 30	J1642-0621	17 16 52	30.1	189.6	0.6		5.8	4	1488	05 25 30
05 27 00	---	17 18 22	30.0	190.1	0.6		6.1	90	1499	05 25 31
05 27 00	IRAS16399	17 18 22	26.7	189.5	0.6		5.8	-26	1499	No stop
05 30 30	---	17 21 52	26.6	190.4	0.6		6.3	184	1527	05 27 01
05 31 00	J1642-0621	17 22 22	29.9	191.2	0.6		6.7	4	1527	05 31 00
05 32 30	---	17 23 53	29.9	191.6	0.7		7.0	90	1538	05 31 01

Schedule for TORUN (Code Tr)

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OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

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Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop						Early	Disk	TPStart
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
05 32 30	IRAS16399	17 23 53	26.6	191.0	0.7		6.7	-26	1538	No stop
05 36 00	---	17 27 23	26.5	191.9	0.7		7.2	184	1565	05 32 31
05 36 30	J1642-0621	17 27 53	29.8	192.8	0.7		7.7	4	1565	05 36 30
05 38 00	---	17 29 24	29.7	193.2	0.8		7.9	90	1577	05 36 31
05 38 00	IRAS16399	17 29 24	26.4	192.5	0.8		7.6	-26	1577	No stop
05 41 30	---	17 32 54	26.3	193.4	0.8		8.1	184	1604	05 38 01
05 42 00	J1642-0621	17 33 24	29.6	194.3	0.8		8.6	4	1604	05 42 00
05 43 30	---	17 34 54	29.5	194.7	0.9		8.8	90	1615	05 42 01
05 43 30	IRAS16399	17 34 54	26.2	194.0	0.8		8.5	-26	1615	No stop
05 47 00	---	17 38 25	26.1	194.9	0.9		9.0	184	1642	05 43 31
05 47 30	J1642-0621	17 38 55	29.3	195.9	0.9		9.5	4	1642	05 47 30
05 49 00	---	17 40 25	29.3	196.3	1.0		9.8	90	1654	05 47 31
05 49 00	IRAS16399	17 40 25	26.0	195.5	0.9		9.4	-26	1654	No stop
05 52 30	---	17 43 56	25.8	196.4	1.0		9.9	184	1681	05 49 01
05 53 00	J1642-0621	17 44 26	29.1	197.4	1.0		10.4	4	1681	05 53 00
05 54 30	---	17 45 56	29.0	197.8	1.0		10.7	90	1693	05 53 01
05 54 30	IRAS16399	17 45 56	25.8	197.0	1.0		10.2	-26	1693	No stop
05 58 00	---	17 49 27	25.6	197.9	1.1		10.8	184	1720	05 54 31
05 58 30	J1642-0621	17 49 57	28.8	199.0	1.1		11.3	4	1720	05 58 30
06 00 00	---	17 51 27	28.8	199.4	1.1		11.6	90	1731	05 58 31
06 00 00	IRAS16399	17 51 27	25.5	198.5	1.1		11.1	-26	1731	No stop
06 03 30	---	17 54 58	25.3	199.4	1.2		11.7	184	1758	06 00 01
06 04 00	J1642-0621	17 55 28	28.6	200.5	1.2		12.2	4	1758	06 04 00
06 05 30	---	17 56 58	28.5	200.9	1.2		12.5	90	1770	06 04 01
06 05 30	IRAS16399	17 56 58	25.2	199.9	1.2		12.0	-26	1770	No stop
06 09 00	---	18 00 29	25.1	200.9	1.3		12.5	184	1797	06 05 31
06 09 30	J1642-0621	18 00 59	28.3	202.0	1.3		13.1	4	1797	06 09 30
06 11 00	---	18 02 29	28.2	202.4	1.3		13.3	90	1809	06 09 31
06 11 00	IRAS16399	18 02 29	24.9	201.4	1.3		12.8	-26	1809	No stop
06 14 30	---	18 06 00	24.7	202.3	1.4		13.4	184	1836	06 11 01

Schedule for TORUN (Code Tr)

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OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

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SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
06 15 00	J1642-0621	18 06 30	27.9	203.5	1.4		14.0	4	1836	06 15 00
06 16 30	---	18 08 00	27.9	203.9	1.4		14.2	90	1847	06 15 01
06 16 30	IRAS16399	18 08 00	24.6	202.8	1.4		13.7	-26	1847	No stop
06 20 00	---	18 11 30	24.4	203.8	1.5		14.2	184	1874	06 16 31
06 20 30	J1642-0621	18 12 01	27.6	205.0	1.5		14.8	4	1874	06 20 30
06 22 00	---	18 13 31	27.5	205.4	1.5		15.0	90	1886	06 20 31
06 22 00	IRAS16399	18 13 31	24.3	204.3	1.5		14.5	-26	1886	No stop
06 25 30	---	18 17 01	24.1	205.2	1.5		15.0	184	1913	06 22 01
06 26 00	J1642-0621	18 17 31	27.2	206.5	1.6		15.6	4	1913	06 26 00
06 27 30	---	18 19 02	27.1	206.9	1.6		15.9	90	1925	06 26 01
06 27 30	IRAS16399	18 19 02	24.0	205.7	1.6		15.3	-26	1925	No stop
06 31 00	---	18 22 32	23.7	206.6	1.6		15.9	184	1952	06 27 31
06 31 30	J1642-0621	18 23 02	26.9	208.0	1.7		16.5	4	1952	06 31 30
06 33 00	---	18 24 33	26.8	208.4	1.7		16.7	90	1963	06 31 31
06 33 00	IRAS16399	18 24 33	23.6	207.2	1.7		16.2	-26	1963	No stop
06 36 30	---	18 28 03	23.3	208.1	1.7		16.7	184	1990	06 33 01
06 37 00	J1642-0621	18 28 33	26.5	209.5	1.8		17.3	4	1990	06 37 00
06 38 30	---	18 30 04	26.4	209.9	1.8		17.5	90	2002	06 37 01
06 38 30	IRAS16399	18 30 04	23.2	208.6	1.8		16.9	-26	2002	No stop
06 42 00	---	18 33 34	22.9	209.5	1.8		17.4	184	2029	06 38 31
06 42 30	J1642-0621	18 34 04	26.1	210.9	1.8		18.1	4	2029	06 42 30
06 44 00	---	18 35 34	25.9	211.3	1.9		18.3	90	2040	06 42 31
06 44 00	IRAS16399	18 35 34	22.8	210.0	1.9		17.7	-26	2040	No stop
06 47 30	---	18 39 05	22.5	210.9	1.9		18.2	184	2068	06 44 01
06 48 00	J1642-0621	18 39 35	25.6	212.4	1.9		18.9	4	2068	06 48 00
06 49 30	---	18 41 05	25.5	212.7	2.0		19.1	90	2079	06 48 01
06 49 30	IRAS16399	18 41 05	22.4	211.4	2.0		18.5	-26	2079	No stop
06 53 00	---	18 44 36	22.1	212.3	2.0		19.0	184	2106	06 49 31
06 53 30	J1642-0621	18 45 06	25.2	213.8	2.0		19.6	5	2106	06 53 30
06 55 00	---	18 46 36	25.0	214.2	2.1		19.8	90	2118	06 53 31

Schedule for TORUN (Code Tr)

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OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
06 55 00	IRAS16399	18 46 36	21.9	212.8	2.0		19.3	-26	2118	No stop
06 58 30	---	18 50 07	21.6	213.7	2.1		19.7	184	2145	06 55 01
06 59 00	J1642-0621	18 50 37	24.7	215.2	2.1		20.4	5	2145	06 59 00
07 00 30	---	18 52 07	24.6	215.6	2.1		20.6	90	2156	06 59 01
07 00 30	IRAS16399	18 52 07	21.5	214.2	2.1		20.0	-26	2156	No stop
07 04 00	---	18 55 38	21.2	215.0	2.2		20.5	184	2183	07 00 31
07 04 30	J1642-0621	18 56 08	24.2	216.6	2.2		21.1	5	2183	07 04 30
07 06 00	---	18 57 38	24.1	217.0	2.2		21.3	90	2195	07 04 31
07 06 00	IRAS16399	18 57 38	21.0	215.5	2.2		20.7	-26	2195	No stop
07 09 30	---	19 01 09	20.7	216.4	2.3		21.2	184	2222	07 06 01
07 10 00	J1642-0621	19 01 39	23.7	218.0	2.3		21.8	5	2222	07 10 00
07 11 30	---	19 03 09	23.6	218.4	2.3		22.0	90	2234	07 10 01
07 11 30	IRAS16399	19 03 09	20.5	216.9	2.3		21.4	-25	2234	No stop
07 15 00	---	19 06 39	20.2	217.7	2.4		21.9	185	2261	07 11 31
07 15 30	J1642-0621	19 07 10	23.2	219.4	2.4		22.5	5	2261	07 15 30
07 17 00	---	19 08 40	23.1	219.8	2.4		22.7	90	2272	07 15 31
07 17 00	IRAS16399	19 08 40	20.0	218.2	2.4		22.1	-25	2272	No stop
07 20 30	---	19 12 10	19.7	219.1	2.5		22.6	185	2299	07 17 01
07 21 00	J1642-0621	19 12 40	22.7	220.8	2.5		23.2	5	2299	07 21 00
07 22 30	---	19 14 11	22.5	221.1	2.5		23.4	90	2311	07 21 01
07 22 30	IRAS16399	19 14 11	19.5	219.6	2.5		22.8	-25	2311	No stop
07 26 00	---	19 17 41	19.1	220.4	2.6		23.3	185	2338	07 22 31
07 26 30	J1642-0621	19 18 11	22.1	222.1	2.6		23.9	5	2338	07 26 30
07 28 00	---	19 19 42	22.0	222.5	2.6		24.1	90	2350	07 26 31
07 28 00	IRAS16399	19 19 42	19.0	220.9	2.6		23.5	-25	2350	No stop
07 31 30	---	19 23 12	18.6	221.7	2.7		23.9	185	2377	07 28 01
07 32 00	J1642-0621	19 23 42	21.6	223.5	2.7		24.6	5	2377	07 32 00
07 33 30	---	19 25 13	21.4	223.8	2.7		24.7	90	2388	07 32 01
07 33 30	IRAS16399	19 25 13	18.4	222.2	2.7		24.2	-25	2388	No stop
07 37 00	---	19 28 43	18.0	223.0	2.7		24.6	185	2415	07 33 31

Schedule for TORUN (Code Tr)

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OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
07 37 30	J1642-0621	19 29 13	21.0	224.8	2.8		25.2	5	2415	07 37 30
07 39 00	---	19 30 43	20.8	225.2	2.8		25.4	90	2427	07 37 31
07 39 00	IRAS16399	19 30 43	17.8	223.5	2.8		24.8	-25	2427	No stop
07 42 30	---	19 34 14	17.5	224.3	2.8		25.2	185	2454	07 39 01
07 43 00	J1642-0621	19 34 44	20.4	226.1	2.9		25.8	5	2454	07 43 00
07 44 30	---	19 36 14	20.2	226.5	2.9		26.0	90	2466	07 43 01
07 44 30	IRAS16399	19 36 14	17.3	224.8	2.9		25.4	-25	2466	No stop
07 48 00	---	19 39 45	16.9	225.6	2.9		25.8	185	2493	07 44 31
07 48 30	J1642-0621	19 40 15	19.8	227.4	2.9		26.4	5	2493	07 48 30
07 50 00	---	19 41 45	19.6	227.8	3.0		26.6	90	2504	07 48 31
07 50 00	IRAS16399	19 41 45	16.7	226.1	3.0		26.0	-25	2504	No stop
07 53 30	---	19 45 16	16.3	226.9	3.0		26.4	185	2531	07 50 01
07 54 00	J1642-0621	19 45 46	19.2	228.7	3.0		27.0	5	2531	07 54 00
07 55 30	---	19 47 16	19.0	229.1	3.1		27.2	90	2543	07 54 01
07 55 30	IRAS16399	19 47 16	16.1	227.3	3.1		26.6	-25	2543	No stop
07 59 00	---	19 50 47	15.7	228.1	3.1		27.0	185	2570	07 55 31
07 59 30	J1642-0621	19 51 17	18.5	230.0	3.1		27.6	5	2570	07 59 30
08 01 00	---	19 52 47	18.4	230.4	3.2		27.7	90	2582	07 59 31
08 01 00	IRAS16399	19 52 47	15.5	228.6	3.1		27.2	-25	2582	No stop
08 04 30	---	19 56 18	15.1	229.4	3.2		27.6	185	2609	08 01 01
08 05 00	J1642-0621	19 56 48	17.9	231.3	3.2		28.1	5	2609	08 05 00
08 06 30	---	19 58 18	17.7	231.6	3.2		28.3	90	2620	08 05 01
08 06 30	IRAS16399	19 58 18	14.8	229.8	3.2		27.8	-25	2620	No stop
08 10 00	---	20 01 49	14.4	230.6	3.3		28.1	185	2647	08 06 31
08 10 30	J1642-0621	20 02 19	17.2	232.6	3.3		28.7	5	2647	08 10 30
08 12 00	---	20 03 49	17.1	232.9	3.3		28.8	90	2659	08 10 31
08 12 00	IRAS16399	20 03 49	14.2	231.1	3.3		28.3	-25	2659	No stop
08 15 30	---	20 07 19	13.8	231.9	3.4		28.6	185	2686	08 12 01
08 16 00	J1642-0621	20 07 50	16.6	233.8	3.4		29.2	6	2686	08 16 00
08 17 30	---	20 09 20	16.4	234.1	3.4		29.3	90	2697	08 16 01

Schedule for TORUN (Code Tr)

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OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

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Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
08 17 30	IRAS16399	20 09 20	13.5	232.3	3.4		28.8	-25	2697	No stop
08 21 00	---	20 12 50	13.1	233.1	3.5		29.2	185	2725	08 17 31
08 21 30	J1642-0621	20 13 20	15.9	235.1	3.5		29.7	6	2725	08 21 30
08 23 00	---	20 14 51	15.7	235.4	3.5		29.8	90	2736	08 21 31
08 23 00	IRAS16399	20 14 51	12.9	233.5	3.5		29.3	-25	2736	No stop
08 26 30	---	20 18 21	12.5	234.3	3.6		29.7	185	2763	08 23 01
08 27 00	J1642-0621	20 18 51	15.2	236.3	3.6		30.2	6	2763	08 27 00
08 28 30	---	20 20 22	15.0	236.6	3.6		30.3	90	2775	08 27 01
08 28 30	IRAS16399	20 20 22	12.2	234.7	3.6		29.8	-25	2775	No stop
08 32 00	---	20 23 52	11.8	235.5	3.7		30.1	185	2802	08 28 31
08 32 30	J1642-0621	20 24 22	14.5	237.5	3.7		30.6	6	2802	08 32 30
08 34 00	---	20 25 52	14.3	237.8	3.7		30.8	90	2813	08 32 31
08 34 00	IRAS16399	20 25 52	11.5	235.9	3.7		30.3	-25	2813	No stop
08 37 30	---	20 29 23	11.1	236.7	3.8		30.6	185	2840	08 34 01
08 38 00	J1642-0621	20 29 53	13.8	238.7	3.8		31.1	6	2840	08 38 00
08 39 30	---	20 31 23	13.6	239.1	3.8		31.2	90	2852	08 38 01
08 39 30	IRAS16399	20 31 23	10.8	237.1	3.8		30.8	-25	2852	No stop
08 43 00	---	20 34 54	10.4	237.9	3.8		31.1	185	2879	08 39 31
08 43 30	J1642-0621	20 35 24	13.1	239.9	3.9		31.5	6	2879	08 43 30
08 45 00	---	20 36 54	12.9	240.3	3.9		31.6	90	2891	08 43 31
08 45 00	IRAS16399	20 36 54	10.1	238.3	3.9		31.2	-24	2891	No stop
08 48 30	---	20 40 25	9.7	239.1	3.9		31.5	186	2918	08 45 01
08 49 00	J1642-0621	20 40 55	12.4	241.1	4.0		31.9	6	2918	08 49 00
08 50 30	---	20 42 25	12.2	241.4	4.0		32.1	90	2929	08 49 01
08 54 30	J1642-0621	20 46 26	11.7	242.3	4.1		32.3	233	2929	08 54 30
08 56 00	---	20 47 56	11.5	242.6	4.1		32.5	90	2941	08 54 31
09 00 00	J1642-0621	20 51 57	10.9	243.5	4.1		32.7	233	2941	09 00 00
09 01 30	---	20 53 27	10.7	243.8	4.2		32.8	90	2953	09 00 01
09 05 30	J1642-0621	20 57 28	10.2	244.7	4.2		33.1	233	2953	09 05 30
09 07 00	---	20 58 58	10.0	245.0	4.3		33.2	90	2964	09 05 31

Schedule for TORUN (Code Tr)

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OH gas in Megamaser Galaxies: imaging the diffuse and compact emission

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

```
-----
Start UT  Source          Start / Stop      Early   Disk   TPStart
Stop UT          LST      EL    AZ    HA  UP    ParA  Dwell  GBytes  SYNC
-----
```

--- Sat 1 Mar 2025 Day 60 ---

```
10 24 00 3C345          22 16 11 34.5 292.1 5.5      46.4 4473      2964 10 24 00
10 29 00 ---          22 21 11 33.8 292.9 5.6      46.0 300      3003 10 24 01
```

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024usb

```
Setup group:      7          Station: TORUN          Total bit rate: 1024
Format: VDIF      Bits per sample: 2          Sample rate: 64.000
Number of channels: 8    DBE type: DBBC_DDC      Speedup factor: 1.00
```

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	U	U	U	U	U	U	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	2	10	3	11	4	12
BBC SB=	L	L	L	L	L	L	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 6 Setup file default. Used with PCAL = off
 LO sum= 1554.72 1554.72 1607.22 1607.22 1659.72 1659.72 1691.72 1691.72
 BBC fr= 745.28 745.28 692.78 692.78 640.28 640.28 608.28 608.28
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 6

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error
	(B1950)	(J2000)		(mas)
* IRAS16399	16 39 55.599269	* 16 42 40.107370	16 44 02.930024	0.00
	-09 37 35.64506	*-09 43 13.05900	-09 46 12.26913	0.00
* J1642-0621	16 39 21.443854	* 16 42 02.177700	16 43 23.109132	0.00
	-06 15 43.81936	*-06 21 23.69500	-06 24 25.42123	0.00
* 3C345	16 41 17.606234	* 16 42 58.809971	16 43 49.891629	0.00
	39 54 10.81496	* 39 48 36.99402	39 45 24.04354	0.00
* 3C286	13 28 49.657760	* 13 31 08.288052	13 32 19.443286	0.00
	30 45 58.64032	* 30 30 32.95896	30 22 30.71274	0.00

TESTING AGN EVOLUTION AND FEEDBACK BY COMBINING THE ILT AND E-MERLI
 PI: *John McKean*

Address: ASTRON

Observing mode: 18cm 1024-8-2

Schedule for TORUN (Code Tr)

Page 2

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

13 30 00	J1037+5711	01 22 41	25.1	23.1	-9.3		-25.7	0	0	13 30 00
13 31 30	---	01 24 11	25.2	23.3	-9.3		-25.9	90	12	13 30 01
13 31 30	P9	01 24 11	25.8	20.3	-9.5		-23.7	-20	12	No stop
13 35 30	---	01 28 12	26.0	20.9	-9.5		-24.4	220	43	13 31 31
13 36 00	J1037+5711	01 28 42	25.5	23.9	-9.2		-26.6	9	43	13 36 00
13 37 00	---	01 29 42	25.5	24.1	-9.2		-26.8	60	50	13 36 01
13 37 00	P9	01 29 42	26.1	21.1	-9.4		-24.6	-20	50	No stop
13 41 00	---	01 33 43	26.3	21.6	-9.4		-25.2	220	81	13 37 01
13 41 30	J1037+5711	01 34 13	25.8	24.7	-9.1		-27.4	9	81	13 41 30
13 42 30	---	01 35 13	25.9	24.8	-9.1		-27.6	60	89	13 41 31
13 42 30	P8	01 35 13	26.5	22.0	-9.3		-25.7	-20	89	No stop
13 46 30	---	01 39 14	26.7	22.5	-9.2		-26.3	220	120	13 42 31
13 47 00	J1037+5711	01 39 44	26.1	25.4	-9.0		-28.3	10	120	13 47 00
13 48 00	---	01 40 44	26.2	25.5	-9.0		-28.4	60	128	13 47 01
13 48 00	P8	01 40 44	26.8	22.7	-9.2		-26.6	-20	128	No stop
13 52 00	---	01 44 45	27.0	23.3	-9.2		-27.2	220	158	13 48 01
13 52 30	J1037+5711	01 45 15	26.5	26.1	-8.9		-29.1	10	158	13 52 30
13 53 30	---	01 46 15	26.6	26.3	-8.9		-29.3	60	166	13 52 31
13 53 30	P7	01 46 15	27.2	23.7	-9.1		-27.7	-19	166	No stop
13 57 30	---	01 50 16	27.5	24.2	-9.0		-28.3	221	197	13 53 31
13 58 00	J1037+5711	01 50 46	26.9	26.9	-8.8		-29.9	11	197	13 58 00
13 59 00	---	01 51 46	26.9	27.0	-8.8		-30.1	60	205	13 58 01
13 59 00	P7	01 51 46	27.6	24.4	-9.0		-28.6	-19	205	No stop
14 03 00	---	01 55 47	27.8	24.9	-8.9		-29.2	221	236	13 59 01
14 03 30	J1037+5711	01 56 17	27.3	27.6	-8.7		-30.8	10	236	14 03 30
14 04 30	---	01 57 17	27.3	27.7	-8.7		-30.9	60	243	14 03 31

Schedule for TORUN (Code Tr)

Page 3

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
14 04 30	P6	01 57 17	28.0	25.3	-8.9		-29.7	-19	243	No stop
14 08 30	---	02 01 17	28.3	25.8	-8.8		-30.3	221	274	14 04 31
14 09 00	J1037+5711	02 01 48	27.6	28.3	-8.6		-31.6	11	274	14 09 00
14 10 00	---	02 02 48	27.7	28.4	-8.6		-31.7	60	282	14 09 01
14 10 00	P6	02 02 48	28.4	26.0	-8.8		-30.5	-19	282	No stop
14 14 00	---	02 06 48	28.7	26.5	-8.7		-31.1	221	313	14 10 01
14 14 30	J1037+5711	02 07 18	28.0	29.0	-8.5		-32.4	11	313	14 14 30
14 15 30	---	02 08 19	28.1	29.2	-8.5		-32.6	60	321	14 14 31
14 15 30	P15	02 08 19	28.5	26.7	-8.7		-31.2	-19	321	No stop
14 19 30	---	02 12 19	28.8	27.2	-8.6		-31.8	221	352	14 15 31
14 20 00	J1037+5711	02 12 49	28.4	29.7	-8.4		-33.2	11	352	14 20 00
14 21 00	---	02 13 49	28.5	29.9	-8.4		-33.4	60	359	14 20 01
14 21 00	P15	02 13 49	28.9	27.4	-8.6		-32.0	-19	359	No stop
14 25 00	---	02 17 50	29.2	27.9	-8.6		-32.6	221	390	14 21 01
14 25 30	J1037+5711	02 18 20	28.9	30.5	-8.4		-34.0	11	390	14 25 30
14 26 30	---	02 19 20	28.9	30.6	-8.3		-34.2	60	398	14 25 31
14 26 30	P16	02 19 20	29.2	27.9	-8.6		-32.6	-20	398	No stop
14 30 30	---	02 23 21	29.5	28.4	-8.5		-33.2	220	429	14 26 31
14 31 00	J1037+5711	02 23 51	29.3	31.2	-8.3		-34.9	10	429	14 31 00
14 32 00	---	02 24 51	29.4	31.3	-8.2		-35.0	60	437	14 31 01
14 32 00	P16	02 24 51	29.6	28.6	-8.5		-33.4	-20	437	No stop
14 36 00	---	02 28 52	29.9	29.1	-8.4		-34.0	220	468	14 32 01
14 36 30	J1037+5711	02 29 22	29.7	31.9	-8.2		-35.7	10	468	14 36 30
14 37 30	---	02 30 22	29.8	32.0	-8.2		-35.8	60	475	14 36 31
14 37 30	P17	02 30 22	29.8	29.1	-8.4		-34.0	-20	475	No stop
14 41 30	---	02 34 23	30.1	29.6	-8.3		-34.6	220	506	14 37 31
14 42 00	J1037+5711	02 34 53	30.2	32.6	-8.1		-36.5	10	506	14 42 00
14 43 00	---	02 35 53	30.2	32.7	-8.1		-36.6	60	514	14 42 01
14 43 00	P17	02 35 53	30.2	29.8	-8.3		-34.8	-20	514	No stop
14 47 00	---	02 39 54	30.5	30.3	-8.2		-35.4	220	545	14 43 01
14 47 30	J1037+5711	02 40 24	30.6	33.3	-8.0		-37.3	10	545	14 47 30
14 48 30	---	02 41 24	30.7	33.4	-8.0		-37.4	60	553	14 47 31

Schedule for TORUN (Code Tr)

Page 4

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
14 48 30	P9	02 41 24	30.7	30.2	-8.2		-35.6	-21	553	No stop
14 52 30	---	02 45 25	31.1	30.7	-8.2		-36.2	219	584	14 48 31
14 53 00	J1037+5711	02 45 55	31.1	34.0	-7.9		-38.1	9	584	14 53 00
14 54 00	---	02 46 55	31.2	34.1	-7.9		-38.2	60	591	14 53 01
14 54 00	P9	02 46 55	31.2	30.9	-8.1		-36.4	-21	591	No stop
14 58 00	---	02 50 56	31.5	31.3	-8.1		-37.0	219	622	14 54 01
14 58 30	J1037+5711	02 51 26	31.5	34.6	-7.8		-38.9	9	622	14 58 30
14 59 30	---	02 52 26	31.6	34.8	-7.8		-39.0	60	630	14 58 31
14 59 30	P8	02 52 26	31.7	31.7	-8.0		-37.5	-20	630	No stop
15 03 30	---	02 56 26	32.1	32.2	-8.0		-38.1	220	661	14 59 31
15 04 00	J1037+5711	02 56 57	32.0	35.3	-7.7		-39.7	9	661	15 04 00
15 05 00	---	02 57 57	32.1	35.4	-7.7		-39.8	60	669	15 04 01
15 05 00	P8	02 57 57	32.2	32.4	-7.9		-38.3	-20	669	No stop
15 09 00	---	03 01 57	32.5	32.9	-7.9		-38.9	220	699	15 05 01
15 09 30	J1037+5711	03 02 27	32.5	36.0	-7.6		-40.5	9	699	15 09 30
15 10 30	---	03 03 28	32.6	36.1	-7.6		-40.6	60	707	15 09 31
15 10 30	P7	03 03 28	32.8	33.3	-7.8		-39.4	-20	707	No stop
15 14 30	---	03 07 28	33.1	33.8	-7.7		-40.0	220	738	15 10 31
15 15 00	J1037+5711	03 07 58	33.0	36.7	-7.5		-41.3	10	738	15 15 00
15 16 00	---	03 08 59	33.1	36.8	-7.5		-41.4	60	746	15 15 01
15 16 00	P7	03 08 59	33.2	33.9	-7.7		-40.3	-20	746	No stop
15 20 00	---	03 12 59	33.6	34.4	-7.7		-40.9	220	777	15 16 01
15 20 30	J1037+5711	03 13 29	33.5	37.3	-7.4		-42.1	10	777	15 20 30
15 21 30	---	03 14 29	33.6	37.5	-7.4		-42.2	60	785	15 20 31
15 21 30	P6	03 14 29	33.8	34.8	-7.6		-41.3	-20	785	No stop
15 25 30	---	03 18 30	34.2	35.3	-7.5		-41.9	220	815	15 21 31
15 26 00	J1037+5711	03 19 00	34.0	38.0	-7.3		-42.9	10	815	15 26 00
15 27 00	---	03 20 00	34.1	38.1	-7.3		-43.0	60	823	15 26 01
15 27 00	P6	03 20 00	34.3	35.4	-7.5		-42.2	-20	823	No stop
15 31 00	---	03 24 01	34.7	35.9	-7.4		-42.8	220	854	15 27 01

Schedule for TORUN (Code Tr)

Page 5

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
15 31 30	J1037+5711	03 24 31	34.5	38.7	-7.2		-43.6	10	854	15 31 30
15 32 30	---	03 25 31	34.6	38.8	-7.2		-43.8	60	862	15 31 31
15 32 30	P15	03 25 31	34.6	36.1	-7.4		-42.8	-19	862	No stop
15 36 30	---	03 29 32	34.9	36.6	-7.4		-43.3	221	893	15 32 31
15 37 00	J1037+5711	03 30 02	35.0	39.3	-7.2		-44.4	10	893	15 37 00
15 38 00	---	03 31 02	35.1	39.4	-7.1		-44.6	60	900	15 37 01
15 38 00	P15	03 31 02	35.1	36.8	-7.3		-43.6	-19	900	No stop
15 42 00	---	03 35 03	35.4	37.2	-7.3		-44.2	221	931	15 38 01
15 42 30	J1037+5711	03 35 33	35.5	40.0	-7.1		-45.2	10	931	15 42 30
15 43 30	---	03 36 33	35.6	40.1	-7.0		-45.3	60	939	15 42 31
15 43 30	P16	03 36 33	35.4	37.2	-7.3		-44.1	-20	939	No stop
15 47 30	---	03 40 34	35.8	37.7	-7.2		-44.7	220	970	15 43 31
15 48 00	J1037+5711	03 41 04	36.1	40.6	-7.0		-46.0	10	970	15 48 00
15 49 00	---	03 42 04	36.2	40.7	-7.0		-46.1	60	978	15 48 01
15 49 00	P16	03 42 04	35.9	37.8	-7.2		-44.9	-20	978	No stop
15 53 00	---	03 46 05	36.3	38.3	-7.1		-45.5	220	1009	15 49 01
15 53 30	J1037+5711	03 46 35	36.6	41.3	-6.9		-46.8	10	1009	15 53 30
15 54 30	---	03 47 35	36.7	41.4	-6.9		-46.9	60	1016	15 53 31
15 54 30	P17	03 47 35	36.3	38.3	-7.1		-45.5	-21	1016	No stop
15 58 30	---	03 51 35	36.6	38.7	-7.1		-46.1	219	1047	15 54 31
15 59 00	J1037+5711	03 52 06	37.2	41.9	-6.8		-47.5	9	1047	15 59 00
16 00 00	---	03 53 06	37.3	42.0	-6.8		-47.7	60	1055	15 59 01
16 00 00	P17	03 53 06	36.8	38.9	-7.0		-46.3	-21	1055	No stop
16 04 00	---	03 57 06	37.2	39.3	-7.0		-46.9	219	1086	16 00 01
16 04 30	J1037+5711	03 57 36	37.7	42.5	-6.7		-48.3	9	1086	16 04 30
16 05 30	---	03 58 37	37.8	42.6	-6.7		-48.4	60	1094	16 04 31
16 05 30	P9	03 58 37	37.4	39.2	-7.0		-47.1	-21	1094	No stop
16 09 30	---	04 02 37	37.7	39.7	-6.9		-47.6	219	1125	16 05 31
16 10 00	J1037+5711	04 03 07	38.3	43.2	-6.6		-49.1	8	1125	16 10 00
16 11 00	---	04 04 08	38.4	43.3	-6.6		-49.2	60	1132	16 10 01

Schedule for TORUN (Code Tr)

Page 6

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
16 11 00	P9	04 04 08	37.9	39.8	-6.9		-47.9	-22	1132	No stop
16 15 00	---	04 08 08	38.3	40.3	-6.8		-48.4	218	1163	16 11 01
16 15 30	J1037+5711	04 08 38	38.9	43.8	-6.5		-49.8	8	1163	16 15 30
16 16 30	---	04 09 38	39.0	43.9	-6.5		-50.0	60	1171	16 15 31
16 16 30	P8	04 09 38	38.6	40.6	-6.7		-48.9	-21	1171	No stop
16 20 30	---	04 13 39	39.0	41.1	-6.7		-49.5	219	1202	16 16 31
16 21 00	J1037+5711	04 14 09	39.4	44.4	-6.4		-50.6	9	1202	16 21 00
16 22 00	---	04 15 09	39.5	44.5	-6.4		-50.7	60	1210	16 21 01
16 22 00	P8	04 15 09	39.1	41.2	-6.6		-49.7	-21	1210	No stop
16 26 00	---	04 19 10	39.5	41.7	-6.6		-50.3	219	1241	16 22 01
16 26 30	J1037+5711	04 19 40	40.0	45.0	-6.3		-51.4	9	1241	16 26 30
16 27 30	---	04 20 40	40.1	45.1	-6.3		-51.5	60	1248	16 26 31
16 27 30	P7	04 20 40	39.9	42.0	-6.5		-50.8	-21	1248	No stop
16 31 30	---	04 24 41	40.3	42.4	-6.5		-51.4	219	1279	16 27 31
16 32 00	J1037+5711	04 25 11	40.6	45.6	-6.2		-52.1	9	1279	16 32 00
16 33 00	---	04 26 11	40.7	45.7	-6.2		-52.3	60	1287	16 32 01
16 33 00	P7	04 26 11	40.4	42.6	-6.4		-51.6	-21	1287	No stop
16 37 00	---	04 30 12	40.8	43.0	-6.4		-52.2	219	1318	16 33 01
16 37 30	J1037+5711	04 30 42	41.2	46.2	-6.1		-52.9	9	1318	16 37 30
16 38 30	---	04 31 42	41.3	46.3	-6.1		-53.0	60	1326	16 37 31
16 38 30	P6	04 31 42	41.2	43.4	-6.3		-52.7	-20	1326	No stop
16 42 30	---	04 35 43	41.6	43.8	-6.2		-53.2	220	1356	16 38 31
16 43 00	J1037+5711	04 36 13	41.8	46.8	-6.1		-53.7	9	1356	16 43 00
16 44 00	---	04 37 13	41.9	46.9	-6.0		-53.8	60	1364	16 43 01
16 44 00	P6	04 37 13	41.7	43.9	-6.2		-53.5	-20	1364	No stop
16 48 00	---	04 41 14	42.2	44.4	-6.2		-54.0	220	1395	16 44 01
16 48 30	J1037+5711	04 41 44	42.4	47.4	-6.0		-54.4	9	1395	16 48 30
16 49 30	---	04 42 44	42.5	47.5	-5.9		-54.6	60	1403	16 48 31
16 49 30	P15	04 42 44	42.1	44.6	-6.1		-54.0	-20	1403	No stop
16 53 30	---	04 46 45	42.5	45.1	-6.1		-54.6	220	1434	16 49 31

Schedule for TORUN (Code Tr)

Page 7

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day	60	---						
16 54 00	J1037+5711	04 47 15	43.0	48.0	-5.9		-55.2	10	1434	16 54 00
16 55 00	---	04 48 15	43.1	48.1	-5.9		-55.3	60	1441	16 54 01
16 55 00	P15	04 48 15	42.7	45.2	-6.1		-54.8	-20	1441	No stop
16 59 00	---	04 52 15	43.1	45.6	-6.0		-55.3	220	1472	16 55 01
16 59 30	J1037+5711	04 52 46	43.6	48.6	-5.8		-55.9	10	1472	16 59 30
17 00 30	---	04 53 46	43.8	48.7	-5.8		-56.1	60	1480	16 59 31
17 00 30	P16	04 53 46	43.1	45.6	-6.0		-55.3	-21	1480	No stop
17 04 30	---	04 57 46	43.5	46.0	-5.9		-55.9	219	1511	17 00 31
17 05 00	J1037+5711	04 58 16	44.3	49.2	-5.7		-56.7	9	1511	17 05 00
17 06 00	---	04 59 17	44.4	49.3	-5.7		-56.8	60	1519	17 05 01
17 06 00	P16	04 59 17	43.7	46.2	-5.9		-56.1	-21	1519	No stop
17 10 00	---	05 03 17	44.1	46.6	-5.8		-56.7	219	1550	17 06 01
17 10 30	J1037+5711	05 03 47	44.9	49.7	-5.6		-57.4	9	1550	17 10 30
17 11 30	---	05 04 47	45.0	49.8	-5.6		-57.6	60	1557	17 10 31
17 11 30	P17	05 04 47	44.1	46.5	-5.8		-56.6	-21	1557	No stop
17 15 30	---	05 08 48	44.5	46.9	-5.8		-57.2	219	1588	17 11 31
17 16 00	J1037+5711	05 09 18	45.5	50.3	-5.5		-58.2	9	1588	17 16 00
17 17 00	---	05 10 18	45.6	50.4	-5.5		-58.3	60	1596	17 16 01
17 17 00	P17	05 10 18	44.7	47.1	-5.7		-57.4	-21	1596	No stop
17 21 00	---	05 14 19	45.1	47.5	-5.7		-58.0	219	1627	17 17 01
17 21 30	J1037+5711	05 14 49	46.2	50.9	-5.4		-59.0	9	1627	17 21 30
17 22 30	---	05 15 49	46.3	51.0	-5.4		-59.1	60	1635	17 21 31
----- Fringe Finder 1 -----										
17 26 00	4C39.25	05 19 20	46.0	82.7	-4.2		-50.0	132	1635	17 26 00
17 31 00	---	05 24 21	46.8	83.6	-4.1		-50.1	300	1673	17 26 01
17 33 00	J1037+5711	05 26 21	47.5	52.0	-5.2		-60.5	42	1673	17 33 00
17 34 30	---	05 27 51	47.7	52.2	-5.2		-60.7	90	1685	17 33 01
17 34 30	P9	05 27 51	46.6	48.4	-5.5		-60.0	-22	1685	No stop
17 38 30	---	05 31 52	47.1	48.8	-5.4		-60.6	218	1716	17 34 31

Schedule for TORUN (Code Tr)

Page 8

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
17 39 00	J1037+5711	05 32 22	48.2	52.6	-5.1		-61.4	8	1716	17 39 00
17 40 00	---	05 33 22	48.4	52.7	-5.1		-61.5	60	1724	17 39 01
17 40 00	P9	05 33 22	47.3	49.0	-5.4		-60.8	-22	1724	No stop
17 44 00	---	05 37 23	47.7	49.3	-5.3		-61.4	218	1755	17 40 01
17 44 30	J1037+5711	05 37 53	48.9	53.2	-5.0		-62.1	8	1755	17 44 30
17 45 30	---	05 38 53	49.0	53.2	-5.0		-62.2	60	1762	17 44 31
17 45 30	P8	05 38 53	48.1	49.6	-5.3		-61.9	-22	1762	No stop
17 49 30	---	05 42 54	48.6	50.0	-5.2		-62.5	218	1793	17 45 31
17 50 00	J1037+5711	05 43 24	49.6	53.7	-4.9		-62.9	8	1793	17 50 00
17 51 00	---	05 44 24	49.7	53.8	-4.9		-63.0	60	1801	17 50 01
17 51 00	P8	05 44 24	48.7	50.1	-5.2		-62.7	-22	1801	No stop
17 55 00	---	05 48 25	49.2	50.5	-5.1		-63.3	218	1832	17 51 01
17 55 30	J1037+5711	05 48 55	50.2	54.2	-4.8		-63.6	8	1832	17 55 30
17 56 30	---	05 49 55	50.4	54.3	-4.8		-63.8	60	1840	17 55 31
17 56 30	P7	05 49 55	49.6	50.8	-5.0		-63.7	-22	1840	No stop
18 00 30	---	05 53 56	50.0	51.1	-5.0		-64.3	218	1870	17 56 31
18 01 00	J1037+5711	05 54 26	50.9	54.7	-4.7		-64.4	8	1870	18 01 00
18 02 00	---	05 55 26	51.0	54.8	-4.7		-64.5	60	1878	18 01 01
18 02 00	P7	05 55 26	50.2	51.3	-4.9		-64.5	-22	1878	No stop
18 06 00	---	05 59 26	50.7	51.6	-4.9		-65.1	218	1909	18 02 01
18 06 30	J1037+5711	05 59 57	51.6	55.2	-4.7		-65.1	8	1909	18 06 30
18 07 30	---	06 00 57	51.7	55.3	-4.6		-65.3	60	1917	18 06 31
18 07 30	P6	06 00 57	51.1	51.9	-4.8		-65.6	-22	1917	No stop
18 11 30	---	06 04 57	51.6	52.2	-4.8		-66.2	218	1948	18 07 31
18 12 00	J1037+5711	06 05 27	52.3	55.7	-4.6		-65.9	8	1948	18 12 00
18 13 00	---	06 06 28	52.4	55.8	-4.5		-66.0	60	1955	18 12 01
18 13 00	P6	06 06 28	51.7	52.4	-4.7		-66.4	-22	1955	No stop
18 17 00	---	06 10 28	52.2	52.7	-4.7		-67.0	218	1986	18 13 01
18 17 30	J1037+5711	06 10 58	53.0	56.2	-4.5		-66.7	8	1986	18 17 30
18 18 30	---	06 11 58	53.1	56.3	-4.5		-66.8	60	1994	18 17 31

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
18 18 30	P15	06 11 58	52.2	53.0	-4.7		-66.9	-21	1994	No stop
18 22 30	---	06 15 59	52.7	53.4	-4.6		-67.5	219	2025	18 18 31
18 23 00	J1037+5711	06 16 29	53.6	56.7	-4.4		-67.4	9	2025	18 23 00
18 24 00	---	06 17 29	53.8	56.8	-4.4		-67.6	60	2033	18 23 01
18 24 00	P15	06 17 29	52.9	53.5	-4.6		-67.7	-21	2033	No stop
18 28 00	---	06 21 30	53.4	53.8	-4.5		-68.3	219	2064	18 24 01
18 28 30	J1037+5711	06 22 00	54.3	57.2	-4.3		-68.2	9	2064	18 28 30
18 29 30	---	06 23 00	54.5	57.3	-4.3		-68.3	60	2071	18 28 31
18 29 30	P16	06 23 00	53.3	53.8	-4.5		-68.3	-22	2071	No stop
18 33 30	---	06 27 01	53.8	54.1	-4.4		-68.9	218	2102	18 29 31
18 34 00	J1037+5711	06 27 31	55.0	57.7	-4.2		-69.0	8	2102	18 34 00
18 35 00	---	06 28 31	55.2	57.8	-4.2		-69.1	60	2110	18 34 01
18 35 00	P16	06 28 31	54.0	54.3	-4.4		-69.1	-22	2110	No stop
18 39 00	---	06 32 32	54.5	54.6	-4.3		-69.7	218	2141	18 35 01
18 39 30	J1037+5711	06 33 02	55.7	58.1	-4.1		-69.7	8	2141	18 39 30
18 40 30	---	06 34 02	55.9	58.2	-4.1		-69.9	60	2149	18 39 31
18 40 30	P17	06 34 02	54.4	54.5	-4.3		-69.6	-22	2149	No stop
18 44 30	---	06 38 03	54.9	54.9	-4.3		-70.2	218	2180	18 40 31
18 45 00	J1037+5711	06 38 33	56.4	58.6	-4.0		-70.5	8	2180	18 45 00
18 46 00	---	06 39 33	56.6	58.7	-4.0		-70.7	60	2187	18 45 01
18 46 00	P17	06 39 33	55.1	55.0	-4.3		-70.5	-22	2187	No stop
18 50 00	---	06 43 34	55.6	55.3	-4.2		-71.1	218	2218	18 46 01
18 50 30	J1037+5711	06 44 04	57.2	59.0	-3.9		-71.3	8	2218	18 50 30
18 51 30	---	06 45 04	57.3	59.1	-3.9		-71.4	60	2226	18 50 31
18 51 30	P9	06 45 04	55.8	55.0	-4.2		-71.4	-23	2226	No stop
18 55 30	---	06 49 05	56.2	55.3	-4.1		-72.0	217	2257	18 51 31
18 56 00	J1037+5711	06 49 35	57.9	59.5	-3.8		-72.1	7	2257	18 56 00
18 57 00	---	06 50 35	58.0	59.6	-3.8		-72.2	60	2265	18 56 01
18 57 00	P9	06 50 35	56.4	55.4	-4.1		-72.3	-23	2265	No stop
19 01 00	---	06 54 35	56.9	55.7	-4.0		-72.9	217	2296	18 57 01

Schedule for TORUN (Code Tr)

Page 10

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
19 01 30	J1037+5711	06 55 06	58.6	59.9	-3.7		-72.9	7	2296	19 01 30
19 02 30	---	06 56 06	58.7	60.0	-3.7		-73.0	60	2303	19 01 31
19 02 30	P8	06 56 06	57.3	55.9	-4.0		-73.4	-23	2303	No stop
19 06 30	---	07 00 06	57.8	56.2	-3.9		-74.0	217	2334	19 02 31
19 07 00	J1037+5711	07 00 36	59.3	60.3	-3.6		-73.7	7	2334	19 07 00
19 08 00	---	07 01 37	59.4	60.4	-3.6		-73.8	60	2342	19 07 01
19 08 00	P8	07 01 37	58.0	56.3	-3.9		-74.3	-23	2342	No stop
19 12 00	---	07 05 37	58.5	56.5	-3.8		-74.9	217	2373	19 08 01
19 12 30	J1037+5711	07 06 07	60.0	60.7	-3.6		-74.5	7	2373	19 12 30
19 13 30	---	07 07 08	60.1	60.8	-3.5		-74.6	60	2381	19 12 31
19 13 30	P7	07 07 08	58.9	56.7	-3.8		-75.4	-23	2381	No stop
19 17 30	---	07 11 08	59.4	57.0	-3.7		-76.1	217	2411	19 13 31
19 18 00	J1037+5711	07 11 38	60.7	61.1	-3.5		-75.3	7	2411	19 18 00
19 19 00	---	07 12 38	60.9	61.2	-3.4		-75.5	60	2419	19 18 01
19 19 00	P7	07 12 38	59.6	57.1	-3.7		-76.3	-23	2419	No stop
19 23 00	---	07 16 39	60.1	57.3	-3.6		-77.0	217	2450	19 19 01
19 23 30	J1037+5711	07 17 09	61.5	61.5	-3.4		-76.1	7	2450	19 23 30
19 24 30	---	07 18 09	61.6	61.6	-3.4		-76.3	60	2458	19 23 31
19 24 30	P6	07 18 09	60.6	57.5	-3.5		-77.5	-23	2458	No stop
19 28 30	---	07 22 10	61.1	57.7	-3.5		-78.2	217	2489	19 24 31
19 29 00	J1037+5711	07 22 40	62.2	61.9	-3.3		-77.0	7	2489	19 29 00
19 30 00	---	07 23 40	62.3	62.0	-3.3		-77.1	60	2497	19 29 01
19 30 00	P6	07 23 40	61.3	57.8	-3.4		-78.4	-23	2497	No stop
19 34 00	---	07 27 41	61.8	58.0	-3.4		-79.1	217	2527	19 30 01
19 34 30	J1037+5711	07 28 11	62.9	62.2	-3.2		-77.8	7	2527	19 34 30
19 35 30	---	07 29 11	63.1	62.3	-3.2		-78.0	60	2535	19 34 31
19 35 30	P15	07 29 11	61.8	58.5	-3.4		-78.8	-22	2535	No stop
19 39 30	---	07 33 12	62.3	58.7	-3.3		-79.5	218	2566	19 35 31
19 40 00	J1037+5711	07 33 42	63.7	62.6	-3.1		-78.7	7	2566	19 40 00
19 41 00	---	07 34 42	63.8	62.6	-3.1		-78.8	60	2574	19 40 01

Schedule for TORUN (Code Tr)

Page 11

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
19 41 00	P15	07 34 42	62.5	58.8	-3.3		-79.8	-23	2574	No stop
19 45 00	---	07 38 43	63.0	59.0	-3.2		-80.4	217	2605	19 41 01
19 45 30	J1037+5711	07 39 13	64.4	62.9	-3.0		-79.5	7	2605	19 45 30
19 46 30	---	07 40 13	64.5	63.0	-3.0		-79.7	60	2612	19 45 31
19 46 30	P16	07 40 13	63.0	58.9	-3.2		-80.4	-23	2612	No stop
19 50 30	---	07 44 14	63.5	59.1	-3.1		-81.1	217	2643	19 46 31
19 51 00	J1037+5711	07 44 44	65.1	63.2	-2.9		-80.4	7	2643	19 51 00
19 52 00	---	07 45 44	65.3	63.3	-2.9		-80.6	60	2651	19 51 01
19 52 00	P16	07 45 44	63.7	59.2	-3.1		-81.3	-23	2651	No stop
19 56 00	---	07 49 45	64.2	59.4	-3.1		-82.0	217	2682	19 52 01
19 56 30	J1037+5711	07 50 15	65.9	63.5	-2.8		-81.3	7	2682	19 56 30
19 57 30	---	07 51 15	66.0	63.5	-2.8		-81.5	60	2690	19 56 31
19 57 30	P17	07 51 15	64.2	59.4	-3.1		-82.0	-23	2690	No stop
20 01 30	---	07 55 15	64.7	59.5	-3.0		-82.7	217	2721	19 57 31
20 02 00	J1037+5711	07 55 45	66.6	63.8	-2.7		-82.2	7	2721	20 02 00
20 03 00	---	07 56 46	66.8	63.8	-2.7		-82.4	60	2728	20 02 01
20 03 00	P17	07 56 46	64.9	59.6	-3.0		-83.0	-23	2728	No stop
20 07 00	---	08 00 46	65.4	59.7	-2.9		-83.7	217	2759	20 03 01
20 07 30	J1037+5711	08 01 16	67.4	64.0	-2.6		-83.1	7	2759	20 07 30
20 08 30	---	08 02 17	67.5	64.1	-2.6		-83.3	60	2767	20 07 31
20 08 30	P9	08 02 17	65.5	59.3	-2.9		-84.2	-25	2767	No stop
20 12 30	---	08 06 17	66.0	59.4	-2.8		-85.0	215	2798	20 08 31
20 13 00	J1037+5711	08 06 47	68.1	64.2	-2.5		-84.1	5	2798	20 13 00
20 14 00	---	08 07 47	68.2	64.3	-2.5		-84.3	60	2806	20 13 01
20 14 00	P9	08 07 47	66.2	59.4	-2.8		-85.3	-25	2806	No stop
20 18 00	---	08 11 48	66.7	59.5	-2.7		-86.0	215	2837	20 14 01
20 18 30	J1037+5711	08 12 18	68.9	64.4	-2.5		-85.1	5	2837	20 18 30
20 19 30	---	08 13 18	69.0	64.5	-2.4		-85.2	60	2844	20 18 31
20 19 30	P8	08 13 18	67.2	59.6	-2.7		-86.7	-25	2844	No stop
20 23 30	---	08 17 19	67.7	59.7	-2.6		-87.5	215	2875	20 19 31

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
20 24 00	J1037+5711	08 17 49	69.6	64.6	-2.4		-86.1	5	2875	20 24 00
20 25 00	---	08 18 49	69.7	64.6	-2.3		-86.3	60	2883	20 24 01
20 25 00	P8	08 18 49	67.9	59.7	-2.6		-87.8	-25	2883	No stop
20 29 00	---	08 22 50	68.4	59.7	-2.5		-88.6	215	2914	20 25 01
20 29 30	J1037+5711	08 23 20	70.3	64.7	-2.3		-87.1	5	2914	20 29 30
20 30 30	---	08 24 20	70.5	64.7	-2.3		-87.3	60	2922	20 29 31
20 30 30	P7	08 24 20	68.8	59.7	-2.5		-89.3	-25	2922	No stop
20 34 30	---	08 28 21	69.3	59.8	-2.4		-90.1	215	2953	20 30 31
20 35 00	J1037+5711	08 28 51	71.1	64.8	-2.2		-88.2	5	2953	20 35 00
20 36 00	---	08 29 51	71.2	64.8	-2.2		-88.4	60	2960	20 35 01
20 36 00	P7	08 29 51	69.5	59.8	-2.4		-90.4	-25	2960	No stop
20 40 00	---	08 33 52	70.1	59.7	-2.3		-91.3	215	2991	20 36 01
20 40 30	J1037+5711	08 34 22	71.8	64.9	-2.1		-89.3	5	2991	20 40 30
20 41 30	---	08 35 22	72.0	64.9	-2.1		-89.5	60	2999	20 40 31
20 41 30	P6	08 35 22	70.5	59.7	-2.3		-92.1	-25	2999	No stop
20 45 30	---	08 39 23	71.0	59.6	-2.2		-93.0	215	3030	20 41 31
20 46 00	J1037+5711	08 39 53	72.6	64.9	-2.0		-90.4	5	3030	20 46 00
20 47 00	---	08 40 53	72.7	64.9	-2.0		-90.7	60	3038	20 46 01
20 47 00	P6	08 40 53	71.2	59.6	-2.2		-93.3	-26	3038	No stop
20 51 00	---	08 44 54	71.7	59.5	-2.1		-94.3	214	3068	20 47 01
20 51 30	J1037+5711	08 45 24	73.3	64.8	-1.9		-91.6	4	3068	20 51 30
20 52 30	---	08 46 24	73.5	64.8	-1.9		-91.9	60	3076	20 51 31
20 52 30	P15	08 46 24	71.8	60.1	-2.1		-93.8	-24	3076	No stop
20 56 30	---	08 50 24	72.3	60.0	-2.0		-94.8	216	3107	20 52 31
20 57 00	J1037+5711	08 50 55	74.1	64.7	-1.8		-92.9	6	3107	20 57 00
20 58 00	---	08 51 55	74.2	64.7	-1.8		-93.1	60	3115	20 57 01
20 58 00	P15	08 51 55	72.5	59.9	-2.0		-95.2	-25	3115	No stop
21 02 00	---	08 55 55	73.1	59.7	-1.9		-96.2	215	3146	20 58 01
21 02 30	J1037+5711	08 56 25	74.8	64.5	-1.7		-94.2	5	3146	21 02 30
21 03 30	---	08 57 26	75.0	64.5	-1.7		-94.5	60	3153	21 02 31

Schedule for TORUN (Code Tr)

Page 13

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

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TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
21 03 30	P16	08 57 26	73.0	59.8	-1.9		-96.1	-25	3153	No stop
21 07 30	---	09 01 26	73.5	59.5	-1.9		-97.2	215	3184	21 03 31
21 08 00	J1037+5711	09 01 56	75.6	64.3	-1.6		-95.6	5	3184	21 08 00
21 09 00	---	09 02 57	75.7	64.2	-1.6		-95.9	60	3192	21 08 01
21 09 00	P16	09 02 57	73.7	59.5	-1.8		-97.6	-25	3192	No stop
21 13 00	---	09 06 57	74.3	59.2	-1.8		-98.7	215	3223	21 09 01
21 13 30	J1037+5711	09 07 27	76.3	63.9	-1.5		-97.1	5	3223	21 13 30
21 14 30	---	09 08 27	76.5	63.9	-1.5		-97.4	60	3231	21 13 31
21 14 30	P17	09 08 27	74.2	59.2	-1.8		-98.6	-24	3231	No stop
21 18 30	---	09 12 28	74.7	58.9	-1.7		-99.8	216	3262	21 14 31
21 19 00	J1037+5711	09 12 58	77.1	63.5	-1.4		-98.7	6	3262	21 19 00
21 20 00	---	09 13 58	77.2	63.4	-1.4		-99.0	60	3269	21 19 01
21 20 00	P17	09 13 58	74.9	58.8	-1.7		-100.2	-24	3269	No stop
21 24 00	---	09 17 59	75.4	58.4	-1.6		-101.5	216	3300	21 20 01
21 24 30	J1037+5711	09 18 29	77.8	62.9	-1.3		-100.4	6	3300	21 24 30
21 25 30	---	09 19 29	77.9	62.8	-1.3		-100.7	60	3308	21 24 31
21 25 30	P9	09 19 29	75.5	57.5	-1.6		-102.4	-26	3308	No stop
21 29 30	---	09 23 30	76.0	57.1	-1.5		-103.7	214	3339	21 25 31
21 30 00	J1037+5711	09 24 00	78.5	62.2	-1.3		-102.3	5	3339	21 30 00
21 31 00	---	09 25 00	78.7	62.1	-1.2		-102.6	60	3347	21 30 01
21 31 00	P9	09 25 00	76.2	56.9	-1.5		-104.2	-25	3347	No stop
21 35 00	---	09 29 01	76.7	56.3	-1.4		-105.7	215	3378	21 31 01
21 35 30	J1037+5711	09 29 31	79.3	61.3	-1.2		-104.3	5	3378	21 35 30
21 36 30	---	09 30 31	79.4	61.1	-1.1		-104.7	60	3385	21 35 31
21 36 30	P8	09 30 31	77.1	55.8	-1.4		-106.9	-26	3385	No stop
21 40 30	---	09 34 32	77.6	55.0	-1.3		-108.4	214	3416	21 36 31
21 41 00	J1037+5711	09 35 02	80.0	60.2	-1.1		-106.6	5	3416	21 41 00
21 42 00	---	09 36 02	80.1	60.0	-1.1		-107.0	60	3424	21 41 01
21 42 00	P8	09 36 02	77.8	54.8	-1.3		-109.0	-26	3424	No stop
21 46 00	---	09 40 03	78.3	53.9	-1.2		-110.7	214	3455	21 42 01

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
21 46 30	J1037+5711	09 40 33	80.7	58.8	-1.0		-109.1	5	3455	21 46 30
21 47 30	---	09 41 33	80.8	58.5	-1.0		-109.6	60	3463	21 46 31
21 47 30	P7	09 41 33	78.7	53.1	-1.2		-112.2	-26	3463	No stop
21 51 30	---	09 45 33	79.1	52.1	-1.1		-114.1	214	3494	21 47 31
21 52 00	J1037+5711	09 46 04	81.4	57.1	-0.9		-111.9	5	3494	21 52 00
21 53 00	---	09 47 04	81.5	56.8	-0.9		-112.5	60	3501	21 52 01
21 53 00	P7	09 47 04	79.3	51.6	-1.1		-114.8	-26	3501	No stop
21 57 00	---	09 51 04	79.8	50.4	-1.0		-116.9	214	3532	21 53 01
21 57 30	J1037+5711	09 51 34	82.1	55.1	-0.8		-115.1	6	3532	21 57 30
21 58 30	---	09 52 35	82.2	54.6	-0.8		-115.8	60	3540	21 57 31
21 58 30	P6	09 52 35	80.2	49.2	-1.0		-118.8	-26	3540	No stop
22 02 30	---	09 56 35	80.6	47.7	-0.9		-121.1	214	3571	21 58 31
22 03 00	J1037+5711	09 57 05	82.8	52.5	-0.7		-118.8	5	3571	22 03 00
22 04 00	---	09 58 06	82.9	51.9	-0.7		-119.6	60	3579	22 03 01
22 04 00	P6	09 58 06	80.8	47.0	-0.9		-122.1	-25	3579	No stop
22 08 00	---	10 02 06	81.2	45.2	-0.8		-124.8	215	3610	22 04 01
22 08 30	J1037+5711	10 02 36	83.4	49.3	-0.6		-123.2	7	3610	22 08 30
22 09 30	---	10 03 36	83.5	48.6	-0.6		-124.1	60	3617	22 08 31
22 09 30	P15	10 03 36	81.4	46.0	-0.8		-124.1	-22	3617	No stop
22 13 30	---	10 07 37	81.8	43.9	-0.7		-127.0	218	3648	22 09 31
22 14 00	J1037+5711	10 08 07	84.0	45.2	-0.5		-128.3	8	3648	22 14 00
22 15 00	---	10 09 07	84.1	44.4	-0.5		-129.4	60	3656	22 14 01
22 15 00	P15	10 09 07	82.0	43.1	-0.7		-128.2	-22	3656	No stop
22 19 00	---	10 13 08	82.4	40.6	-0.6		-131.5	218	3687	22 15 01
22 19 30	J1037+5711	10 13 38	84.6	40.3	-0.4		-134.5	8	3687	22 19 30
22 20 30	---	10 14 38	84.7	39.2	-0.4		-135.7	60	3695	22 19 31
22 20 30	P16	10 14 38	82.3	40.8	-0.6		-131.2	-23	3695	No stop
22 24 30	---	10 18 39	82.7	38.0	-0.6		-134.8	217	3725	22 20 31
22 25 00	J1037+5711	10 19 09	85.1	34.0	-0.3		-141.8	7	3725	22 25 00
22 26 00	---	10 20 09	85.2	32.8	-0.3		-143.3	60	3733	22 25 01

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
22 26 00	P16	10 20 09	82.9	36.9	-0.5		-136.2	-23	3733	No stop
22 30 00	---	10 24 10	83.2	33.7	-0.5		-140.3	217	3764	22 26 01
22 30 30	J1037+5711	10 24 40	85.5	26.4	-0.2		-150.5	1	3764	22 30 30
22 31 30	---	10 25 40	85.6	24.9	-0.2		-152.3	60	3772	22 30 31
22 31 30	P17	10 25 40	83.2	33.9	-0.5		-140.0	-32	3772	No stop
22 35 30	---	10 29 41	83.5	30.4	-0.4		-144.4	208	3803	22 31 31
22 36 00	J1037+5711	10 30 11	85.8	17.4	-0.2		-160.7	-11	3803	22 36 00
22 37 00	---	10 31 11	85.9	15.6	-0.1		-162.7	49	3810	22 36 01
22 37 00	P17	10 31 11	83.6	28.9	-0.4		-146.2	-40	3810	No stop
22 41 00	---	10 35 12	83.9	24.8	-0.3		-151.1	200	3841	22 37 01
22 41 30	J1037+5711	10 35 42	86.0	7.2	-0.1		-172.0	-21	3841	22 41 30
22 42 30	---	10 36 42	86.0	5.3	-0.0		-174.2	39	3849	22 41 31
22 42 30	P9	10 36 42	83.7	23.3	-0.3		-152.7	-50	3849	No stop
22 46 30	---	10 40 43	84.0	18.9	-0.3		-158.0	190	3880	22 42 31
22 47 00	J1037+5711	10 41 13	86.0	-3.6	0.0		176.1	-32	3880	22 47 00
22 48 00	---	10 42 13	86.0	-5.5	0.0		173.9	28	3888	22 47 01
22 48 00	P9	10 42 13	84.0	17.2	-0.2		-160.0	-58	3888	No stop
22 52 00	---	10 46 13	84.2	12.3	-0.2		-165.7	182	3919	22 48 01
22 52 30	J1037+5711	10 46 44	85.9	-14.1	0.1		164.4	-40	3919	22 52 30
22 53 30	---	10 47 44	85.9	-15.9	0.1		162.4	20	3926	22 52 31
22 53 30	P8	10 47 44	84.3	8.2	-0.1		-170.5	-61	3926	No stop
22 57 30	---	10 51 44	84.3	3.0	-0.0		-176.6	179	3957	22 53 31
22 58 00	J1037+5711	10 52 14	85.6	-23.5	0.2		153.8	-40	3957	22 58 00
22 59 00	---	10 53 15	85.6	-25.1	0.2		152.0	20	3965	22 58 01
22 59 00	P8	10 53 15	84.3	1.0	-0.0		-178.9	-64	3965	No stop
23 03 00	---	10 57 15	84.3	-4.3	0.1		175.0	176	3996	22 59 01
23 03 30	J1037+5711	10 57 45	85.2	-31.6	0.3		144.6	-41	3996	23 03 30
23 04 30	---	10 58 45	85.2	-32.9	0.3		143.1	19	4004	23 03 31
23 04 30	P7	10 58 45	84.3	-8.5	0.1		170.1	-61	4004	No stop
23 08 30	---	11 02 46	84.2	-13.6	0.2		164.2	179	4035	23 04 31

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
23 09 00	J1037+5711	11 03 16	84.8	-38.3	0.4		136.8	-36	4035	23 09 00
23 10 00	---	11 04 16	84.7	-39.4	0.4		135.5	24	4042	23 09 01
23 10 00	P7	11 04 16	84.1	-15.4	0.2		162.1	-61	4042	No stop
23 14 00	---	11 08 17	83.9	-20.1	0.3		156.6	179	4073	23 10 01
23 14 30	J1037+5711	11 08 47	84.2	-43.7	0.5		130.3	-33	4073	23 14 30
23 15 30	---	11 09 47	84.1	-44.5	0.5		129.2	27	4081	23 14 31
23 15 30	P6	11 09 47	83.7	-23.6	0.3		152.3	-55	4081	No stop
23 19 30	---	11 13 48	83.5	-27.7	0.4		147.5	185	4112	23 15 31
23 20 00	J1037+5711	11 14 18	83.6	-48.0	0.6		124.8	-26	4112	23 20 00
23 21 00	---	11 15 18	83.5	-48.7	0.6		123.9	34	4120	23 20 01
23 21 00	P6	11 15 18	83.4	-29.1	0.4		145.7	-53	4120	No stop
23 25 00	---	11 19 19	83.1	-32.6	0.5		141.4	187	4151	23 21 01
23 25 30	J1037+5711	11 19 49	83.0	-51.5	0.7		120.2	-23	4151	23 25 30
23 26 30	---	11 20 49	82.9	-52.0	0.7		119.5	37	4158	23 25 31
23 26 30	P15	11 20 49	83.2	-34.2	0.5		139.7	-49	4158	No stop
23 30 30	---	11 24 50	82.8	-37.4	0.6		135.7	191	4189	23 26 31
23 31 00	J1037+5711	11 25 20	82.3	-54.2	0.8		116.3	-19	4189	23 31 00
23 32 00	---	11 26 20	82.2	-54.7	0.8		115.7	41	4197	23 31 01
23 32 00	P15	11 26 20	82.7	-38.5	0.6		134.3	-46	4197	No stop
23 36 00	---	11 30 21	82.3	-41.2	0.7		130.7	194	4228	23 32 01
23 36 30	J1037+5711	11 30 51	81.7	-56.5	0.9		112.9	-16	4228	23 36 30
23 37 30	---	11 31 51	81.5	-56.8	0.9		112.4	44	4236	23 36 31
23 37 30	P16	11 31 51	82.3	-41.0	0.6		131.0	-46	4236	No stop
23 41 30	---	11 35 52	81.9	-43.4	0.7		127.7	194	4266	23 37 31
23 42 00	J1037+5711	11 36 22	81.0	-58.3	0.9		110.0	-15	4266	23 42 00
23 43 00	---	11 37 22	80.8	-58.6	1.0		109.5	45	4274	23 42 01
23 43 00	P16	11 37 22	81.7	-44.3	0.7		126.6	-43	4274	No stop
23 47 00	---	11 41 22	81.3	-46.3	0.8		123.7	197	4305	23 43 01
23 47 30	J1037+5711	11 41 53	80.2	-59.8	1.0		107.4	-12	4305	23 47 30
23 48 30	---	11 42 53	80.1	-60.0	1.1		106.9	48	4313	23 47 31

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sat	1 Mar 2025	Day 60	---							
23 48 30	P17	11 42 53	81.3	-46.2	0.8		123.9	-42	4313	No stop
23 52 30	---	11 46 53	80.9	-48.0	0.9		121.2	198	4344	23 48 31
23 53 00	J1037+5711	11 47 23	79.5	-61.0	1.1		105.1	-11	4344	23 53 00
23 54 00	---	11 48 24	79.4	-61.2	1.2		104.7	49	4352	23 53 01
23 54 00	P17	11 48 24	80.7	-48.6	0.9		120.3	-40	4352	No stop
23 58 00	---	11 52 24	80.3	-50.2	1.0		117.9	200	4382	23 54 01
23 58 30	J1037+5711	11 52 54	78.8	-61.9	1.2		103.0	-9	4382	23 58 30
23 59 30	---	11 53 55	78.7	-62.1	1.2		102.6	51	4390	23 58 31
--- Sun	2 Mar 2025	Day 61	---							
----- Fringe Finder 2 -----										
00 05 00	3C345	11 59 25	41.4	75.7	-4.7		-49.2	40	4390	00 05 00
00 10 00	---	12 04 26	42.1	76.6	-4.7		-49.4	300	4429	00 05 01
00 15 30	J1037+5711	12 09 57	76.5	-63.8	1.5		97.5	34	4429	00 15 30
00 17 00	---	12 11 27	76.3	-64.0	1.5		97.1	90	4440	00 15 31
00 17 00	P9	12 11 27	78.0	-54.3	1.3		110.0	-34	4440	No stop
00 21 00	---	12 15 28	77.6	-55.1	1.3		108.3	206	4471	00 17 01
00 21 30	J1037+5711	12 15 58	75.7	-64.2	1.6		95.8	-3	4471	00 21 30
00 22 30	---	12 16 58	75.6	-64.3	1.6		95.6	57	4479	00 21 31
00 22 30	P9	12 16 58	77.4	-55.4	1.4		107.7	-33	4479	No stop
00 26 30	---	12 20 59	76.9	-56.1	1.4		106.2	207	4510	00 22 31
00 27 00	J1037+5711	12 21 29	75.0	-64.5	1.7		94.4	-2	4510	00 27 00
00 28 00	---	12 22 29	74.8	-64.5	1.7		94.2	58	4518	00 27 01
00 28 00	P8	12 22 29	76.5	-56.5	1.5		105.0	-31	4518	No stop
00 32 00	---	12 26 30	76.0	-57.1	1.5		103.7	209	4549	00 28 01
00 32 30	J1037+5711	12 27 00	74.2	-64.7	1.8		93.1	0	4549	00 32 30
00 33 30	---	12 28 00	74.1	-64.7	1.8		92.9	60	4556	00 32 31
00 33 30	P8	12 28 00	75.8	-57.3	1.6		103.2	-30	4556	No stop
00 37 30	---	12 32 01	75.3	-57.7	1.6		101.9	210	4587	00 33 31
00 38 00	J1037+5711	12 32 31	73.5	-64.8	1.9		91.8	1	4587	00 38 00
00 39 00	---	12 33 31	73.3	-64.8	1.9		91.6	60	4595	00 38 01

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
00 39 00	P7	12 33 31	74.8	-58.0	1.7		100.8	-28	4595	No stop
00 43 00	---	12 37 32	74.3	-58.4	1.8		99.6	212	4626	00 39 01
00 43 30	J1037+5711	12 38 02	72.7	-64.9	2.0		90.6	2	4626	00 43 30
00 44 30	---	12 39 02	72.6	-64.9	2.0		90.4	60	4634	00 43 31
00 44 30	P7	12 39 02	74.1	-58.5	1.8		99.2	-28	4634	No stop
00 48 30	---	12 43 03	73.6	-58.8	1.8		98.1	212	4665	00 44 31
00 49 00	J1037+5711	12 43 33	72.0	-64.9	2.1		89.5	3	4665	00 49 00
00 50 00	---	12 44 33	71.8	-64.9	2.1		89.3	60	4672	00 49 01
00 50 00	P6	12 44 33	73.2	-59.0	1.9		97.2	-27	4672	No stop
00 54 00	---	12 48 33	72.7	-59.2	2.0		96.1	213	4703	00 50 01
00 54 30	J1037+5711	12 49 04	71.2	-64.8	2.2		88.3	4	4703	00 54 30
00 55 30	---	12 50 04	71.1	-64.8	2.2		88.2	60	4711	00 54 31
00 55 30	P6	12 50 04	72.5	-59.3	2.0		95.8	-26	4711	No stop
00 59 30	---	12 54 04	72.0	-59.4	2.1		94.7	214	4742	00 55 31
01 00 00	J1037+5711	12 54 34	70.5	-64.7	2.3		87.3	4	4742	01 00 00
01 01 00	---	12 55 35	70.3	-64.7	2.3		87.1	60	4750	01 00 01
01 01 00	P15	12 55 35	71.9	-60.1	2.1		94.0	-24	4750	No stop
01 05 00	---	12 59 35	71.4	-60.2	2.1		93.0	216	4780	01 01 01
01 05 30	J1037+5711	13 00 05	69.7	-64.6	2.3		86.2	6	4780	01 05 30
01 06 30	---	13 01 06	69.6	-64.6	2.4		86.0	60	4788	01 05 31
01 06 30	P15	13 01 06	71.2	-60.2	2.2		92.7	-24	4788	No stop
01 10 30	---	13 05 06	70.7	-60.3	2.2		91.8	216	4819	01 06 31
01 11 00	J1037+5711	13 05 36	69.0	-64.5	2.4		85.2	7	4819	01 11 00
01 12 00	---	13 06 36	68.8	-64.4	2.5		85.0	60	4827	01 11 01
01 12 00	P16	13 06 36	70.7	-60.3	2.2		91.8	-23	4827	No stop
01 16 00	---	13 10 37	70.2	-60.3	2.3		90.9	217	4858	01 12 01
01 16 30	J1037+5711	13 11 07	68.2	-64.3	2.5		84.2	7	4858	01 16 30
01 17 30	---	13 12 07	68.1	-64.2	2.5		84.1	60	4865	01 16 31
01 17 30	P16	13 12 07	70.0	-60.3	2.3		90.6	-23	4865	No stop
01 21 30	---	13 16 08	69.5	-60.3	2.4		89.7	217	4896	01 17 31

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Sun	2 Mar 2025	Day 61	---							
01 22 00	J1037+5711	13 16 38	67.5	-64.0	2.6		83.3	8	4896	01 22 00
01 23 00	---	13 17 38	67.3	-64.0	2.6		83.1	60	4904	01 22 01
01 23 00	P17	13 17 38	69.5	-60.3	2.4		89.8	-22	4904	No stop
01 27 00	---	13 21 39	69.0	-60.3	2.4		89.0	218	4935	01 23 01
01 27 30	J1037+5711	13 22 09	66.7	-63.8	2.7		82.4	8	4935	01 27 30
01 28 30	---	13 23 09	66.6	-63.8	2.7		82.2	60	4943	01 27 31
01 28 30	P17	13 23 09	68.8	-60.3	2.5		88.7	-22	4943	No stop
01 32 30	---	13 27 10	68.2	-60.3	2.5		87.8	218	4974	01 28 31
01 33 00	J1037+5711	13 27 40	66.0	-63.5	2.8		81.4	8	4974	01 33 00
01 34 00	---	13 28 40	65.9	-63.5	2.8		81.3	60	4981	01 33 01
01 34 00	P9	13 28 40	68.2	-59.7	2.5		88.2	-22	4981	No stop
01 38 00	---	13 32 41	67.7	-59.7	2.6		87.4	218	5012	01 34 01
01 38 30	J1037+5711	13 33 11	65.3	-63.3	2.9		80.5	7	5012	01 38 30
01 39 30	---	13 34 11	65.1	-63.2	2.9		80.4	60	5020	01 38 31
01 39 30	P9	13 34 11	67.5	-59.6	2.6		87.1	-23	5020	No stop
01 43 30	---	13 38 12	66.9	-59.6	2.7		86.3	217	5051	01 39 31
01 44 00	J1037+5711	13 38 42	64.5	-63.0	3.0		79.7	7	5051	01 44 00
01 45 00	---	13 39 42	64.4	-62.9	3.0		79.5	60	5059	01 44 01
01 45 00	P8	13 39 42	66.5	-59.5	2.8		85.7	-22	5059	No stop
01 49 00	---	13 43 42	66.0	-59.4	2.8		84.9	218	5090	01 45 01
01 49 30	J1037+5711	13 44 13	63.8	-62.6	3.1		78.8	8	5090	01 49 30
01 50 30	---	13 45 13	63.6	-62.6	3.1		78.6	60	5097	01 49 31
01 50 30	P8	13 45 13	65.8	-59.3	2.9		84.7	-22	5097	No stop
01 54 30	---	13 49 13	65.3	-59.2	2.9		83.9	218	5128	01 50 31
01 55 00	J1037+5711	13 49 43	63.0	-62.3	3.2		77.9	8	5128	01 55 00
01 56 00	---	13 50 44	62.9	-62.2	3.2		77.8	60	5136	01 55 01
01 56 00	P7	13 50 44	64.9	-59.1	3.0		83.3	-21	5136	No stop
02 00 00	---	13 54 44	64.3	-58.9	3.0		82.6	219	5167	01 56 01
02 00 30	J1037+5711	13 55 14	62.3	-61.9	3.3		77.1	9	5167	02 00 30
02 01 30	---	13 56 15	62.2	-61.9	3.3		76.9	60	5175	02 00 31

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
02 01 30	P7	13 56 15	64.2	-58.9	3.1		82.3	-21	5175	No stop
02 05 30	---	14 00 15	63.6	-58.7	3.1		81.6	219	5206	02 01 31
02 06 00	J1037+5711	14 00 45	61.6	-61.6	3.4		76.3	9	5206	02 06 00
02 07 00	---	14 01 45	61.4	-61.5	3.4		76.1	60	5213	02 06 01
02 07 00	P6	14 01 45	63.2	-58.6	3.2		81.0	-20	5213	No stop
02 11 00	---	14 05 46	62.7	-58.4	3.3		80.3	220	5244	02 07 01
02 11 30	J1037+5711	14 06 16	60.9	-61.2	3.4		75.4	9	5244	02 11 30
02 12 30	---	14 07 16	60.7	-61.1	3.5		75.3	60	5252	02 11 31
02 12 30	P6	14 07 16	62.5	-58.3	3.3		80.1	-20	5252	No stop
02 16 30	---	14 11 17	62.0	-58.1	3.3		79.4	220	5283	02 12 31
02 17 00	J1037+5711	14 11 47	60.1	-60.8	3.5		74.6	9	5283	02 17 00
02 18 00	---	14 12 47	60.0	-60.7	3.6		74.5	60	5291	02 17 01
02 18 00	P15	14 12 47	61.9	-58.5	3.4		78.9	-21	5291	No stop
02 22 00	---	14 16 48	61.4	-58.3	3.4		78.3	219	5322	02 18 01
02 22 30	J1037+5711	14 17 18	59.4	-60.4	3.6		73.8	9	5322	02 22 30
02 23 30	---	14 18 18	59.3	-60.3	3.6		73.7	60	5329	02 22 31
02 23 30	P15	14 18 18	61.2	-58.2	3.5		78.0	-21	5329	No stop
02 27 30	---	14 22 19	60.7	-58.0	3.5		77.4	219	5360	02 23 31
02 28 00	J1037+5711	14 22 49	58.7	-60.0	3.7		73.0	9	5360	02 28 00
02 29 00	---	14 23 49	58.6	-59.9	3.7		72.9	60	5368	02 28 01
02 29 00	P16	14 23 49	60.7	-58.0	3.5		77.4	-22	5368	No stop
02 33 00	---	14 27 50	60.2	-57.8	3.6		76.8	218	5399	02 29 01
02 33 30	J1037+5711	14 28 20	58.0	-59.6	3.8		72.2	8	5399	02 33 30
02 34 30	---	14 29 20	57.8	-59.5	3.8		72.1	60	5407	02 33 31
02 34 30	P16	14 29 20	60.0	-57.7	3.6		76.5	-22	5407	No stop
02 38 30	---	14 33 21	59.5	-57.4	3.7		75.9	218	5437	02 34 31
02 39 00	J1037+5711	14 33 51	57.3	-59.1	3.9		71.4	8	5437	02 39 00
02 40 00	---	14 34 51	57.1	-59.0	3.9		71.3	60	5445	02 39 01
02 40 00	P17	14 34 51	59.5	-57.4	3.7		75.9	-23	5445	No stop
02 44 00	---	14 38 52	59.0	-57.2	3.7		75.3	217	5476	02 40 01

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Sun	2 Mar 2025	Day 61	---							
02 44 30	J1037+5711	14 39 22	56.6	-58.7	4.0		70.6	7	5476	02 44 30
02 45 30	---	14 40 22	56.4	-58.6	4.0		70.5	60	5484	02 44 31
02 45 30	P17	14 40 22	58.8	-57.1	3.8		75.0	-23	5484	No stop
02 49 30	---	14 44 22	58.3	-56.8	3.8		74.4	217	5515	02 45 31
02 50 00	J1037+5711	14 44 53	55.8	-58.2	4.1		69.9	7	5515	02 50 00
02 51 00	---	14 45 53	55.7	-58.1	4.1		69.7	60	5522	02 50 01
02 51 00	P9	14 45 53	58.3	-56.4	3.8		74.6	-23	5522	No stop
02 55 00	---	14 49 53	57.8	-56.1	3.9		74.0	217	5553	02 51 01
02 55 30	J1037+5711	14 50 23	55.1	-57.8	4.2		69.1	6	5553	02 55 30
02 56 30	---	14 51 24	55.0	-57.7	4.2		68.9	60	5561	02 55 31
02 56 30	P9	14 51 24	57.6	-56.0	3.9		73.8	-23	5561	No stop
03 00 30	---	14 55 24	57.1	-55.8	4.0		73.1	217	5592	02 56 31
03 01 00	J1037+5711	14 55 54	54.4	-57.3	4.3		68.3	6	5592	03 01 00
03 02 00	---	14 56 54	54.3	-57.2	4.3		68.2	60	5600	03 01 01
03 02 00	P8	14 56 54	56.7	-55.5	4.0		72.6	-23	5600	No stop
03 06 00	---	15 00 55	56.2	-55.3	4.1		72.0	217	5631	03 02 01
03 06 30	J1037+5711	15 01 25	53.8	-56.8	4.4		67.5	7	5631	03 06 30
03 07 30	---	15 02 25	53.6	-56.7	4.4		67.4	60	5638	03 06 31
03 07 30	P8	15 02 25	56.0	-55.1	4.1		71.8	-23	5638	No stop
03 11 30	---	15 06 26	55.5	-54.9	4.2		71.2	217	5669	03 07 31
03 12 00	J1037+5711	15 06 56	53.1	-56.3	4.5		66.8	7	5669	03 12 00
03 13 00	---	15 07 56	52.9	-56.2	4.5		66.6	60	5677	03 12 01
03 13 00	P7	15 07 56	55.1	-54.6	4.3		70.7	-22	5677	No stop
03 17 00	---	15 11 57	54.6	-54.3	4.3		70.1	218	5708	03 13 01
03 17 30	J1037+5711	15 12 27	52.4	-55.8	4.6		66.0	8	5708	03 17 30
03 18 30	---	15 13 27	52.3	-55.7	4.6		65.9	60	5716	03 17 31
03 18 30	P7	15 13 27	54.5	-54.2	4.4		69.8	-22	5716	No stop
03 22 30	---	15 17 28	54.0	-53.9	4.4		69.2	218	5747	03 18 31
03 23 00	J1037+5711	15 17 58	51.7	-55.3	4.6		65.3	8	5747	03 23 00
03 24 00	---	15 18 58	51.6	-55.2	4.7		65.1	60	5754	03 23 01

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Sun	2 Mar 2025	Day 61	---							
03 24 00	P6	15 18 58	53.6	-53.6	4.5		68.7	-21	5754	No stop
03 28 00	---	15 22 59	53.1	-53.3	4.5		68.1	219	5785	03 24 01
03 28 30	J1037+5711	15 23 29	51.0	-54.8	4.7		64.5	8	5785	03 28 30
03 29 30	---	15 24 29	50.9	-54.7	4.8		64.4	60	5793	03 28 31
03 29 30	P6	15 24 29	52.9	-53.2	4.6		67.9	-21	5793	No stop
03 33 30	---	15 28 30	52.4	-52.8	4.6		67.3	219	5824	03 29 31
03 34 00	J1037+5711	15 29 00	50.3	-54.3	4.8		63.7	8	5824	03 34 00
03 35 00	---	15 30 00	50.2	-54.2	4.8		63.6	60	5832	03 34 01
03 35 00	P15	15 30 00	52.3	-53.1	4.6		67.0	-21	5832	No stop
03 39 00	---	15 34 01	51.8	-52.8	4.7		66.4	219	5863	03 35 01
03 39 30	J1037+5711	15 34 31	49.7	-53.8	4.9		63.0	8	5863	03 39 30
03 40 30	---	15 35 31	49.5	-53.7	4.9		62.8	60	5870	03 39 31
03 40 30	P15	15 35 31	51.6	-52.6	4.7		66.2	-21	5870	No stop
03 44 30	---	15 39 31	51.1	-52.3	4.8		65.6	219	5901	03 40 31
03 45 00	J1037+5711	15 40 02	49.0	-53.2	5.0		62.2	8	5901	03 45 00
03 46 00	---	15 41 02	48.9	-53.1	5.0		62.1	60	5909	03 45 01
03 46 00	P16	15 41 02	51.2	-52.3	4.8		65.6	-22	5909	No stop
03 50 00	---	15 45 02	50.7	-52.0	4.9		65.0	218	5940	03 46 01
03 50 30	J1037+5711	15 45 32	48.3	-52.7	5.1		61.5	7	5940	03 50 30
03 51 30	---	15 46 33	48.2	-52.6	5.1		61.3	60	5948	03 50 31
03 51 30	P16	15 46 33	50.5	-51.8	4.9		64.8	-22	5948	No stop
03 55 30	---	15 50 33	50.0	-51.5	5.0		64.2	218	5978	03 51 31
03 56 00	J1037+5711	15 51 03	47.7	-52.2	5.2		60.7	7	5978	03 56 00
03 57 00	---	15 52 04	47.6	-52.1	5.2		60.6	60	5986	03 56 01
03 57 00	P17	15 52 04	50.1	-51.5	5.0		64.3	-23	5986	No stop
04 01 00	---	15 56 04	49.6	-51.2	5.0		63.7	217	6017	03 57 01
04 01 30	J1037+5711	15 56 34	47.0	-51.6	5.3		60.0	7	6017	04 01 30
04 02 30	---	15 57 34	46.9	-51.5	5.3		59.8	60	6025	04 01 31
04 02 30	P17	15 57 34	49.4	-51.0	5.0		63.5	-23	6025	No stop
04 06 30	---	16 01 35	49.0	-50.7	5.1		62.9	217	6056	04 02 31

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
04 07 00	J1037+5711	16 02 05	46.4	-51.1	5.4		59.2	7	6056	04 07 00
04 08 00	---	16 03 05	46.3	-51.0	5.4		59.1	60	6064	04 07 01
----- Fringe Finder 3 -----										
04 10 00	4C39.25	16 05 06	25.4	-58.2	6.6		41.0	28	6064	04 10 00
04 15 00	---	16 10 06	24.7	-57.4	6.7		40.6	300	6102	04 10 01
04 17 00	J1037+5711	16 12 07	45.2	-50.0	5.5		57.8	29	6102	04 17 00
04 18 30	---	16 13 37	45.1	-49.9	5.6		57.6	90	6114	04 17 01
04 18 30	P9	16 13 37	47.8	-49.4	5.3		61.5	-24	6114	No stop
04 22 30	---	16 17 38	47.3	-49.0	5.4		60.9	216	6145	04 18 31
04 23 00	J1037+5711	16 18 08	44.5	-49.4	5.6		57.0	6	6145	04 23 00
04 24 00	---	16 19 08	44.4	-49.3	5.7		56.9	60	6152	04 23 01
04 24 00	P9	16 19 08	47.2	-48.9	5.4		60.7	-24	6152	No stop
04 28 00	---	16 23 09	46.7	-48.5	5.5		60.1	216	6183	04 24 01
04 28 30	J1037+5711	16 23 39	43.9	-48.8	5.7		56.3	6	6183	04 28 30
04 29 30	---	16 24 39	43.8	-48.7	5.8		56.1	60	6191	04 28 31
04 29 30	P8	16 24 39	46.3	-48.2	5.5		59.6	-23	6191	No stop
04 33 30	---	16 28 40	45.9	-47.8	5.6		59.0	217	6222	04 29 31
04 34 00	J1037+5711	16 29 10	43.3	-48.3	5.8		55.5	6	6222	04 34 00
04 35 00	---	16 30 10	43.2	-48.2	5.8		55.4	60	6230	04 34 01
04 35 00	P8	16 30 10	45.7	-47.7	5.6		58.8	-23	6230	No stop
04 39 00	---	16 34 10	45.3	-47.3	5.7		58.2	217	6261	04 35 01
04 39 30	J1037+5711	16 34 41	42.7	-47.7	5.9		54.7	6	6261	04 39 30
04 40 30	---	16 35 41	42.6	-47.6	5.9		54.6	60	6268	04 39 31
04 40 30	P7	16 35 41	44.9	-46.9	5.7		57.8	-23	6268	No stop
04 44 30	---	16 39 41	44.5	-46.5	5.8		57.2	217	6299	04 40 31
04 45 00	J1037+5711	16 40 11	42.1	-47.1	6.0		54.0	7	6299	04 45 00
04 46 00	---	16 41 12	42.0	-47.0	6.0		53.8	60	6307	04 45 01
04 46 00	P7	16 41 12	44.3	-46.4	5.8		57.0	-23	6307	No stop
04 50 00	---	16 45 12	43.9	-46.0	5.9		56.4	217	6338	04 46 01

Schedule for TORUN (Code Tr)

Page 24

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Sun	2 Mar 2025	Day 61	---							
04 50 30	J1037+5711	16 45 42	41.5	-46.5	6.1		53.2	7	6338	04 50 30
04 51 30	---	16 46 42	41.4	-46.4	6.1		53.1	60	6346	04 50 31
04 51 30	P6	16 46 42	43.5	-45.7	5.9		55.9	-22	6346	No stop
04 55 30	---	16 50 43	43.1	-45.3	6.0		55.3	218	6377	04 51 31
04 56 00	J1037+5711	16 51 13	40.9	-45.9	6.2		52.5	8	6377	04 56 00
04 57 00	---	16 52 13	40.8	-45.8	6.2		52.3	60	6384	04 56 01
04 57 00	P6	16 52 13	42.9	-45.1	6.0		55.1	-22	6384	No stop
05 01 00	---	16 56 14	42.5	-44.7	6.1		54.5	218	6415	04 57 01
05 01 30	J1037+5711	16 56 44	40.3	-45.3	6.3		51.7	8	6415	05 01 30
05 02 30	---	16 57 44	40.2	-45.2	6.3		51.6	60	6423	05 01 31
05 02 30	P15	16 57 44	42.3	-44.9	6.1		54.3	-22	6423	No stop
05 06 30	---	17 01 45	41.9	-44.5	6.2		53.7	218	6454	05 02 31
05 07 00	J1037+5711	17 02 15	39.7	-44.7	6.4		50.9	8	6454	05 07 00
05 08 00	---	17 03 15	39.6	-44.6	6.4		50.8	60	6462	05 07 01
05 08 00	P15	17 03 15	41.7	-44.3	6.2		53.5	-22	6462	No stop
05 12 00	---	17 07 16	41.3	-43.9	6.3		52.9	218	6492	05 08 01
05 12 30	J1037+5711	17 07 46	39.1	-44.1	6.5		50.2	8	6492	05 12 30
05 13 30	---	17 08 46	39.0	-43.9	6.5		50.0	60	6500	05 12 31
05 13 30	P16	17 08 46	41.4	-43.9	6.3		52.9	-23	6500	No stop
05 17 30	---	17 12 47	40.9	-43.5	6.3		52.4	217	6531	05 13 31
05 18 00	J1037+5711	17 13 17	38.5	-43.4	6.6		49.4	7	6531	05 18 00
05 19 00	---	17 14 17	38.4	-43.3	6.6		49.3	60	6539	05 18 01
05 19 00	P16	17 14 17	40.8	-43.3	6.4		52.2	-23	6539	No stop
05 23 00	---	17 18 18	40.4	-42.9	6.4		51.6	217	6570	05 19 01
05 23 30	J1037+5711	17 18 48	38.0	-42.8	6.7		48.6	7	6570	05 23 30
05 24 30	---	17 19 48	37.9	-42.7	6.7		48.5	60	6577	05 23 31
05 24 30	P17	17 19 48	40.4	-42.9	6.4		51.6	-23	6577	No stop
05 28 30	---	17 23 49	40.0	-42.5	6.5		51.0	217	6608	05 24 31
05 29 00	J1037+5711	17 24 19	37.4	-42.2	6.7		47.9	7	6608	05 29 00
05 30 00	---	17 25 19	37.3	-42.1	6.8		47.7	60	6616	05 29 01

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Sun	2 Mar 2025	Day 61	---							
05 30 00	P17	17 25 19	39.8	-42.3	6.5		50.8	-23	6616	No stop
05 34 00	---	17 29 19	39.4	-41.9	6.6		50.2	217	6647	05 30 01
05 34 30	J1037+5711	17 29 50	36.9	-41.5	6.8		47.1	7	6647	05 34 30
05 35 30	---	17 30 50	36.8	-41.4	6.9		46.9	60	6655	05 34 31
05 35 30	P9	17 30 50	39.5	-41.6	6.6		50.3	-24	6655	No stop
05 39 30	---	17 34 50	39.1	-41.2	6.7		49.7	216	6686	05 35 31
05 40 00	J1037+5711	17 35 20	36.3	-40.9	6.9		46.3	6	6686	05 40 00
05 41 00	---	17 36 21	36.2	-40.8	6.9		46.2	60	6693	05 40 01
05 41 00	P9	17 36 21	39.0	-41.1	6.7		49.5	-24	6693	No stop
05 45 00	---	17 40 21	38.6	-40.6	6.7		48.9	216	6724	05 41 01
05 45 30	J1037+5711	17 40 51	35.8	-40.3	7.0		45.5	6	6724	05 45 30
05 46 30	---	17 41 52	35.7	-40.1	7.0		45.4	60	6732	05 45 31
05 46 30	P8	17 41 52	38.2	-40.3	6.8		48.4	-23	6732	No stop
05 50 30	---	17 45 52	37.9	-39.8	6.9		47.8	217	6763	05 46 31
05 51 00	J1037+5711	17 46 22	35.2	-39.6	7.1		44.8	6	6763	05 51 00
05 52 00	---	17 47 22	35.1	-39.5	7.1		44.6	60	6771	05 51 01
05 52 00	P8	17 47 22	37.7	-39.6	6.9		47.6	-23	6771	No stop
05 56 00	---	17 51 23	37.3	-39.2	7.0		47.0	217	6802	05 52 01
05 56 30	J1037+5711	17 51 53	34.7	-38.9	7.2		44.0	6	6802	05 56 30
05 57 30	---	17 52 53	34.6	-38.8	7.2		43.8	60	6809	05 56 31
05 57 30	P7	17 52 53	37.0	-38.8	7.0		46.5	-23	6809	No stop
06 01 30	---	17 56 54	36.6	-38.4	7.1		46.0	217	6840	05 57 31
06 02 00	J1037+5711	17 57 24	34.2	-38.3	7.3		43.2	7	6840	06 02 00
06 03 00	---	17 58 24	34.1	-38.2	7.3		43.0	60	6848	06 02 01
06 03 00	P7	17 58 24	36.5	-38.2	7.1		45.7	-23	6848	No stop
06 07 00	---	18 02 25	36.1	-37.8	7.2		45.1	217	6879	06 03 01
06 07 30	J1037+5711	18 02 55	33.7	-37.6	7.4		42.4	7	6879	06 07 30
06 08 30	---	18 03 55	33.6	-37.5	7.4		42.3	60	6887	06 07 31
06 08 30	P6	18 03 55	35.8	-37.4	7.2		44.7	-22	6887	No stop
06 12 30	---	18 07 56	35.5	-36.9	7.3		44.1	218	6918	06 08 31

Schedule for TORUN (Code Tr)

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Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
06 13 00	J1037+5711	18 08 26	33.2	-37.0	7.5		41.6	8	6918	06 13 00
06 14 00	---	18 09 26	33.1	-36.8	7.5		41.5	60	6925	06 13 01
06 14 00	P6	18 09 26	35.3	-36.8	7.3		43.8	-22	6925	No stop
06 18 00	---	18 13 27	35.0	-36.3	7.4		43.3	218	6956	06 14 01
06 18 30	J1037+5711	18 13 57	32.7	-36.3	7.6		40.8	8	6956	06 18 30
06 19 30	---	18 14 57	32.6	-36.2	7.6		40.7	60	6964	06 18 31
06 19 30	P15	18 14 57	34.8	-36.4	7.4		43.1	-22	6964	No stop
06 23 30	---	18 18 58	34.4	-35.9	7.5		42.5	218	6995	06 19 31
06 24 00	J1037+5711	18 19 28	32.2	-35.6	7.7		40.0	8	6995	06 24 00
06 25 00	---	18 20 28	32.1	-35.5	7.7		39.9	60	7003	06 24 01
06 25 00	P15	18 20 28	34.3	-35.8	7.5		42.3	-22	7003	No stop
06 29 00	---	18 24 28	33.9	-35.3	7.6		41.7	218	7034	06 25 01
06 29 30	J1037+5711	18 24 59	31.7	-34.9	7.8		39.2	8	7034	06 29 30
06 30 30	---	18 25 59	31.6	-34.8	7.8		39.1	60	7041	06 29 31
06 30 30	P16	18 25 59	34.0	-35.3	7.5		41.7	-22	7041	No stop
06 34 30	---	18 29 59	33.6	-34.8	7.6		41.1	218	7072	06 30 31
06 35 00	J1037+5711	18 30 29	31.3	-34.2	7.9		38.4	7	7072	06 35 00
06 36 00	---	18 31 30	31.2	-34.1	7.9		38.3	60	7080	06 35 01
06 36 00	P16	18 31 30	33.5	-34.7	7.6		40.9	-22	7080	No stop
06 40 00	---	18 35 30	33.1	-34.2	7.7		40.3	218	7111	06 36 01
06 40 30	J1037+5711	18 36 00	30.8	-33.6	7.9		37.6	7	7111	06 40 30
06 41 30	---	18 37 01	30.7	-33.4	8.0		37.5	60	7119	06 40 31
06 41 30	P17	18 37 01	33.2	-34.2	7.7		40.3	-23	7119	No stop
06 45 30	---	18 41 01	32.8	-33.7	7.8		39.7	217	7149	06 41 31
06 46 00	J1037+5711	18 41 31	30.4	-32.9	8.0		36.8	7	7149	06 46 00
06 47 00	---	18 42 31	30.3	-32.7	8.1		36.7	60	7157	06 46 01
06 47 00	P17	18 42 31	32.7	-33.6	7.8		39.5	-23	7157	No stop
06 51 00	---	18 46 32	32.4	-33.1	7.9		38.9	217	7188	06 47 01
06 51 30	J1037+5711	18 47 02	29.9	-32.2	8.1		36.0	7	7188	06 51 30
06 52 30	---	18 48 02	29.8	-32.0	8.1		35.9	60	7196	06 51 31

Schedule for TORUN (Code Tr)

Page 27

Testing AGN evolution and feedback by combining the ILT and e-MERLIN/EVN

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
06 52 30	P9	18 48 02	32.5	-32.9	7.9		38.9	-24	7196	No stop
06 56 30	---	18 52 03	32.2	-32.4	7.9		38.3	216	7227	06 52 31
06 57 00	J1037+5711	18 52 33	29.5	-31.5	8.2		35.2	6	7227	06 57 00
06 58 00	---	18 53 33	29.4	-31.3	8.2		35.1	60	7234	06 57 01
06 58 00	P8	18 53 33	31.9	-32.0	8.0		37.8	-23	7234	No stop
07 02 00	---	18 57 34	31.6	-31.5	8.1		37.2	217	7265	06 58 01
07 02 30	J1037+5711	18 58 04	29.0	-30.8	8.3		34.4	7	7265	07 02 30
07 03 30	---	18 59 04	29.0	-30.6	8.3		34.2	60	7273	07 02 31
07 03 30	P7	18 59 04	31.3	-31.1	8.1		36.7	-23	7273	No stop
07 07 30	---	19 03 05	31.0	-30.6	8.2		36.1	217	7304	07 03 31
07 08 00	J1037+5711	19 03 35	28.6	-30.0	8.4		33.6	7	7304	07 08 00
07 09 00	---	19 04 35	28.5	-29.9	8.4		33.4	60	7312	07 08 01
07 09 00	P6	19 04 35	30.8	-30.2	8.2		35.6	-22	7312	No stop
07 13 00	---	19 08 36	30.5	-29.7	8.3		35.0	218	7343	07 09 01
07 13 30	J1037+5711	19 09 06	28.2	-29.3	8.5		32.8	8	7343	07 13 30
07 14 30	---	19 10 06	28.1	-29.2	8.5		32.6	60	7350	07 13 31
07 14 30	P15	19 10 06	30.3	-29.8	8.3		34.9	-22	7350	No stop
07 18 30	---	19 14 07	30.0	-29.3	8.4		34.3	218	7381	07 14 31
07 19 00	J1037+5711	19 14 37	27.8	-28.6	8.6		31.9	8	7381	07 19 00
07 20 00	---	19 15 37	27.7	-28.5	8.6		31.8	60	7389	07 19 01
07 20 00	P16	19 15 37	30.0	-29.3	8.4		34.3	-22	7389	No stop
07 24 00	---	19 19 38	29.7	-28.8	8.4		33.7	218	7420	07 20 01
07 24 30	J1037+5711	19 20 08	27.4	-27.9	8.7		31.1	8	7420	07 24 30
07 25 30	---	19 21 08	27.3	-27.8	8.7		31.0	60	7428	07 24 31
07 25 30	P17	19 21 08	29.7	-28.8	8.4		33.7	-23	7428	No stop
07 28 30	---	19 24 08	29.5	-28.5	8.5		33.3	157	7451	07 25 31
07 29 00	J1037+5711	19 24 38	27.1	-27.3	8.8		30.4	7	7451	07 29 00
07 30 00	---	19 25 39	27.0	-27.2	8.8		30.3	60	7459	07 29 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group:	6	Station: TORUN	Total bit rate: 1024
Format:	VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels:	8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st L0=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 7 Setup file default. Used with PCAL = off
 L0 sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 7

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* P6	10 45 39.067859	* 10 48 47.553700	10 50 25.310449	0.00
	59 08 59.69140	* 58 53 07.93400	58 45 04.53985	0.00
* P7	10 47 27.451821	* 10 50 35.107400	10 52 12.450800	0.00
	59 09 02.11774	* 58 53 07.93400	58 45 03.16297	0.00
* P8	10 49 15.837914	* 10 52 22.661100	10 53 59.589952	0.00
	59 09 04.48528	* 58 53 07.93400	58 45 01.81539	0.00
* P9	10 51 04.226084	* 10 54 10.214800	10 55 46.727928	0.00
	59 09 06.79387	* 58 53 07.93400	58 45 00.49719	0.00
* P15	10 46 32.594797	* 10 49 40.401300	10 51 17.802722	0.00
	58 56 58.91043	* 58 41 05.95000	58 33 01.85588	0.00
* P16	10 48 20.349080	* 10 51 27.335600	10 53 04.328694	0.00
	58 57 01.29412	* 58 41 05.95000	58 33 00.50137	0.00
* P17	10 50 08.105326	* 10 53 14.269800	10 54 50.853400	0.00
	58 57 03.61961	* 58 41 05.95000	58 32 59.17587	0.00
* J1037+5711	10 34 33.292410	* 10 37 44.307800	10 39 23.184386	0.00
	57 27 31.17081	* 57 11 55.62900	57 04 01.19022	0.00
* 4C39.25	09 23 55.319216	* 09 27 03.013937	09 28 39.246316	0.31
J0927+3902	39 15 23.56644	* 39 02 20.85185	38 55 46.62470	0.16
0923+392	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J0927+39	GSFC 2016a X/S astro solution, 250526 observations.			
* 3C345	16 41 17.606229	* 16 42 58.809967	16 43 49.907058	0.79
J1642+3948	39 54 10.81492	* 39 48 36.99399	39 45 24.02229	0.59
1641+399	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J1642+39	GSFC 2016a X/S astro solution, 53724 observations.			

TRACING THE RADIO OUTFLOWS IN RQ AGN FROM PC- TO KPC-SCALES

PI: *Salmoli Ghosh*

Address: National Centre for Radio Astrophysics - TIFR

Observing mode: Phase-referencing continuum

Schedule for TORUN (Code Tr)

Page 2

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun 2 Mar 2025	Day 61	---							
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

13 30 00	3C84	01 26 38	67.6	109.3	-1.9		-49.3	0	0	13 30 00
13 37 00	---	01 33 39	68.6	111.6	-1.8		-48.3	420	54	13 30 01

13 42 00	J0310-0823	01 38 40	25.5	154.5	-1.5		-15.2	124	54	13 42 00
13 47 00	=0307-085	01 43 40	25.8	155.8	-1.5		-14.4	300	93	13 42 01

13 47 00	NGC1241	01 43 40	25.3	155.6	-1.5		-14.5	-14	93	No stop
13 50 30	---	01 47 11	25.5	156.6	-1.4		-14.0	196	120	13 47 01

13 51 00	J0310-0823	01 47 41	26.1	156.9	-1.4		-13.8	16	120	13 51 00
13 52 00	=0307-085	01 48 41	26.1	157.1	-1.4		-13.6	60	128	13 51 01

13 52 00	NGC1241	01 48 41	25.6	157.0	-1.4		-13.8	-14	128	No stop
13 55 30	---	01 52 12	25.8	157.9	-1.3		-13.2	196	155	13 52 01

13 55 30	J0310-0823	01 52 12	26.3	158.1	-1.3		-13.1	-14	155	No stop
13 57 00	=0307-085	01 53 42	26.4	158.5	-1.3		-12.9	76	166	13 55 31

13 57 00	NGC1241	01 53 42	25.8	158.3	-1.3		-13.0	-14	166	No stop
14 00 30	---	01 57 13	26.0	159.2	-1.3		-12.4	196	193	13 57 01

14 01 00	J0310-0823	01 57 43	26.6	159.6	-1.2		-12.2	16	193	14 01 00
14 02 00	=0307-085	01 58 43	26.7	159.8	-1.2		-12.1	60	201	14 01 01

14 02 00	NGC1241	01 58 43	26.1	159.6	-1.2		-12.2	-14	201	No stop
14 05 30	---	02 02 13	26.3	160.6	-1.2		-11.7	196	228	14 02 01

14 05 30	J0310-0823	02 02 13	26.9	160.8	-1.2		-11.5	-14	228	No stop
14 07 00	=0307-085	02 03 44	26.9	161.2	-1.1		-11.3	76	240	14 05 31

14 07 00	NGC1241	02 03 44	26.4	161.0	-1.1		-11.4	-14	240	No stop
14 10 30	---	02 07 14	26.5	161.9	-1.1		-10.9	196	267	14 07 01

14 11 00	J0310-0823	02 07 44	27.1	162.3	-1.1		-10.6	16	267	14 11 00
14 12 00	=0307-085	02 08 45	27.2	162.6	-1.0		-10.5	60	274	14 11 01

14 12 00	NGC1241	02 08 45	26.6	162.3	-1.1		-10.6	-14	274	No stop
14 15 30	---	02 12 15	26.8	163.3	-1.0		-10.1	196	301	14 12 01

Schedule for TORUN (Code Tr)

Page 3

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
14 15 30	J0310-0823	02 12 15	27.3	163.5	-1.0		-9.9	-14	301	No stop
14 17 00	=0307-085	02 13 45	27.4	163.9	-1.0		-9.7	76	313	14 15 31
14 17 00	NGC1241	02 13 45	26.8	163.7	-1.0		-9.8	-14	313	No stop
14 20 30	---	02 17 16	27.0	164.7	-0.9		-9.2	196	340	14 17 01
14 21 00	J0310-0823	02 17 46	27.6	165.0	-0.9		-9.0	16	340	14 21 00
14 22 00	=0307-085	02 18 46	27.6	165.3	-0.9		-8.8	60	348	14 21 01
14 22 00	NGC1241	02 18 46	27.0	165.1	-0.9		-9.0	-14	348	No stop
14 25 30	---	02 22 17	27.2	166.0	-0.8		-8.4	196	375	14 22 01
14 25 30	J0310-0823	02 22 17	27.7	166.3	-0.8		-8.3	-14	375	No stop
14 27 00	=0307-085	02 23 47	27.8	166.7	-0.8		-8.0	76	386	14 25 31
14 27 00	NGC1241	02 23 47	27.2	166.5	-0.8		-8.2	-14	386	No stop
14 30 30	---	02 27 18	27.3	167.4	-0.8		-7.6	196	414	14 27 01
14 31 00	J0310-0823	02 27 48	27.9	167.8	-0.7		-7.4	16	414	14 31 00
14 32 00	=0307-085	02 28 48	27.9	168.1	-0.7		-7.2	60	421	14 31 01
14 32 00	NGC1241	02 28 48	27.4	167.8	-0.7		-7.4	-14	421	No stop
14 35 30	---	02 32 18	27.5	168.8	-0.7		-6.8	196	448	14 32 01
14 35 30	J0310-0823	02 32 18	28.0	169.1	-0.6		-6.6	-14	448	No stop
14 37 00	=0307-085	02 33 49	28.1	169.5	-0.6		-6.4	76	460	14 35 31
14 37 00	NGC1241	02 33 49	27.5	169.2	-0.6		-6.5	-14	460	No stop
14 40 30	---	02 37 19	27.6	170.2	-0.6		-5.9	196	487	14 37 01
14 41 00	J0310-0823	02 37 49	28.2	170.6	-0.6		-5.7	16	487	14 41 00
14 42 00	=0307-085	02 38 49	28.2	170.9	-0.5		-5.5	60	495	14 41 01
14 42 00	NGC1241	02 38 49	27.7	170.6	-0.6		-5.7	-14	495	No stop
14 45 30	---	02 42 20	27.7	171.6	-0.5		-5.1	196	522	14 42 01
14 45 30	J0310-0823	02 42 20	28.3	171.9	-0.5		-4.9	-14	522	No stop
14 47 00	=0307-085	02 43 50	28.3	172.3	-0.5		-4.7	76	533	14 45 31
14 47 00	NGC1241	02 43 50	27.8	172.0	-0.5		-4.8	-14	533	No stop
14 50 30	---	02 47 21	27.8	173.0	-0.4		-4.3	196	560	14 47 01
14 51 00	J0310-0823	02 47 51	28.4	173.4	-0.4		-4.0	16	560	14 51 00
14 52 00	=0307-085	02 48 51	28.4	173.7	-0.4		-3.8	60	568	14 51 01
14 52 00	NGC1241	02 48 51	27.9	173.4	-0.4		-4.0	-14	568	No stop
14 55 30	---	02 52 22	27.9	174.4	-0.3		-3.4	196	595	14 52 01

Schedule for TORUN (Code Tr)

Page 4

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day	61	---						
14 55 30	J0310-0823	02 52 22	28.5	174.7	-0.3		-3.2	-14	595	No stop
14 57 00	=0307-085	02 53 52	28.5	175.1	-0.3		-3.0	76	607	14 55 31
14 57 00	NGC1241	02 53 52	27.9	174.8	-0.3		-3.2	-13	607	No stop
15 00 30	---	02 57 23	28.0	175.8	-0.3		-2.6	197	634	14 57 01
15 01 00	J0310-0823	02 57 53	28.5	176.2	-0.2		-2.3	16	634	15 01 00
15 02 00	=0307-085	02 58 53	28.5	176.5	-0.2		-2.1	60	642	15 01 01
15 02 00	NGC1241	02 58 53	28.0	176.2	-0.2		-2.3	-13	642	No stop
15 05 30	---	03 02 23	28.0	177.2	-0.2		-1.7	197	669	15 02 01
15 05 30	J0310-0823	03 02 23	28.6	177.5	-0.1		-1.5	-13	669	No stop
15 07 00	=0307-085	03 03 54	28.6	177.9	-0.1		-1.3	77	680	15 05 31
15 07 00	NGC1241	03 03 54	28.0	177.6	-0.1		-1.5	-13	680	No stop
15 10 30	---	03 07 24	28.1	178.6	-0.1		-0.9	197	707	15 07 01
15 11 00	J0310-0823	03 07 54	28.6	179.1	-0.1		-0.6	17	707	15 11 00
15 12 00	=0307-085	03 08 54	28.6	179.3	-0.0		-0.4	60	715	15 11 01
15 12 00	NGC1241	03 08 54	28.1	179.0	-0.1		-0.6	-13	715	No stop
15 15 30	---	03 12 25	28.1	180.0	-0.0		-0.0	197	742	15 12 01
15 15 30	J0310-0823	03 12 25	28.6	180.3	0.0		0.2	-13	742	No stop
15 17 00	=0307-085	03 13 55	28.6	180.8	0.0		0.5	77	754	15 15 31
15 17 00	NGC1241	03 13 55	28.1	180.4	0.0		0.2	-13	754	No stop
15 20 30	---	03 17 26	28.1	181.4	0.1		0.8	197	781	15 17 01
15 21 00	J0310-0823	03 17 56	28.6	181.9	0.1		1.1	17	781	15 21 00
15 22 00	=0307-085	03 18 56	28.6	182.2	0.1		1.3	60	788	15 21 01
15 22 00	NGC1241	03 18 56	28.1	181.8	0.1		1.1	-13	788	No stop
15 25 30	---	03 22 27	28.0	182.8	0.2		1.7	197	815	15 22 01
15 25 30	J0310-0823	03 22 27	28.6	183.2	0.2		1.9	-13	815	No stop
15 27 00	=0307-085	03 23 57	28.5	183.6	0.2		2.2	77	827	15 25 31
15 27 00	NGC1241	03 23 57	28.0	183.2	0.2		2.0	-13	827	No stop
15 30 30	---	03 27 27	28.0	184.2	0.2		2.5	197	854	15 27 01
15 31 00	J0310-0823	03 27 58	28.5	184.7	0.3		2.9	17	854	15 31 00
15 32 00	=0307-085	03 28 58	28.5	185.0	0.3		3.0	60	862	15 31 01

Schedule for TORUN (Code Tr)

Page 5

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
15 32 00	NGC1241	03 28 58	28.0	184.6	0.3		2.8	-13	862	No stop
15 35 30	---	03 32 28	27.9	185.6	0.3		3.4	197	889	15 32 01
15 35 30	J0310-0823	03 32 28	28.4	186.0	0.4		3.6	-13	889	No stop
15 37 00	=0307-085	03 33 59	28.4	186.4	0.4		3.9	77	900	15 35 31
15 37 00	NGC1241	03 33 59	27.9	186.0	0.4		3.7	-13	900	No stop
15 40 30	---	03 37 29	27.8	187.0	0.4		4.2	197	927	15 37 01
15 41 00	J0310-0823	03 37 59	28.3	187.5	0.4		4.6	17	927	15 41 00
15 42 00	=0307-085	03 38 59	28.3	187.8	0.5		4.7	60	935	15 41 01
15 42 00	NGC1241	03 38 59	27.8	187.4	0.4		4.5	-13	935	No stop
15 45 30	---	03 42 30	27.7	188.4	0.5		5.1	197	962	15 42 01
15 45 30	J0310-0823	03 42 30	28.2	188.8	0.5		5.3	-13	962	No stop
15 47 00	=0307-085	03 44 00	28.2	189.2	0.5		5.6	77	974	15 45 31
15 47 00	NGC1241	03 44 00	27.7	188.8	0.5		5.3	-13	974	No stop
15 50 30	---	03 47 31	27.6	189.8	0.6		5.9	197	1001	15 47 01
15 51 00	J0310-0823	03 48 01	28.1	190.3	0.6		6.2	17	1001	15 51 00
15 52 00	=0307-085	03 49 01	28.1	190.6	0.6		6.4	60	1009	15 51 01
15 52 00	NGC1241	03 49 01	27.6	190.2	0.6		6.2	-13	1009	No stop
15 55 30	---	03 52 32	27.5	191.2	0.7		6.8	197	1036	15 52 01
15 55 30	J0310-0823	03 52 32	28.0	191.6	0.7		7.0	-13	1036	No stop
15 57 00	=0307-085	03 54 02	27.9	192.0	0.7		7.2	77	1047	15 55 31
15 57 00	NGC1241	03 54 02	27.4	191.6	0.7		7.0	-13	1047	No stop
16 00 30	---	03 57 32	27.3	192.6	0.8		7.6	197	1074	15 57 01
16 01 00	J0310-0823	03 58 02	27.8	193.1	0.8		7.9	17	1074	16 01 00
16 02 00	=0307-085	03 59 03	27.8	193.4	0.8		8.1	60	1082	16 01 01
16 02 00	NGC1241	03 59 03	27.3	193.0	0.8		7.8	-13	1082	No stop
16 05 30	---	04 02 33	27.2	193.9	0.8		8.4	197	1109	16 02 01
16 05 30	J0310-0823	04 02 33	27.6	194.4	0.9		8.7	-13	1109	No stop
16 07 00	=0307-085	04 04 03	27.6	194.8	0.9		8.9	77	1121	16 05 31
16 07 00	NGC1241	04 04 03	27.1	194.3	0.9		8.7	-13	1121	No stop
16 10 30	---	04 07 34	27.0	195.3	0.9		9.2	197	1148	16 07 01

Schedule for TORUN (Code Tr)

Page 6

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
16 11 00	J0310-0823	04 08 04	27.4	195.9	0.9		9.6	17	1148	16 11 00
16 12 00	=0307-085	04 09 04	27.4	196.1	1.0		9.7	60	1156	16 11 01
16 12 00	NGC1241	04 09 04	26.9	195.7	0.9		9.5	-13	1156	No stop
16 15 30	---	04 12 35	26.8	196.7	1.0		10.0	197	1183	16 12 01
16 15 30	J0310-0823	04 12 35	27.2	197.1	1.0		10.3	-13	1183	No stop
16 17 00	=0307-085	04 14 05	27.2	197.5	1.0		10.5	77	1194	16 15 31
16 17 00	NGC1241	04 14 05	26.7	197.1	1.0		10.3	-13	1194	No stop
16 20 30	---	04 17 36	26.5	198.0	1.1		10.8	197	1221	16 17 01
16 21 00	J0310-0823	04 18 06	27.0	198.6	1.1		11.2	17	1221	16 21 00
16 22 00	=0307-085	04 19 06	26.9	198.9	1.1		11.3	60	1229	16 21 01
16 22 00	NGC1241	04 19 06	26.5	198.4	1.1		11.1	-13	1229	No stop
16 25 30	---	04 22 36	26.3	199.4	1.2		11.6	197	1256	16 22 01
16 25 30	J0310-0823	04 22 36	26.8	199.8	1.2		11.9	-13	1256	No stop
16 27 00	=0307-085	04 24 07	26.7	200.3	1.2		12.1	77	1268	16 25 31
16 27 00	NGC1241	04 24 07	26.2	199.8	1.2		11.9	-13	1268	No stop
16 30 30	---	04 27 37	26.0	200.7	1.3		12.4	197	1295	16 27 01
16 31 00	J0310-0823	04 28 07	26.5	201.3	1.3		12.8	17	1295	16 31 00
16 32 00	=0307-085	04 29 08	26.4	201.6	1.3		12.9	60	1302	16 31 01
16 32 00	NGC1241	04 29 08	26.0	201.2	1.3		12.7	-13	1302	No stop
16 35 30	---	04 32 38	25.8	202.1	1.3		13.2	197	1329	16 32 01
16 35 30	J0310-0823	04 32 38	26.2	202.5	1.4		13.5	-13	1329	No stop
16 37 00	=0307-085	04 34 08	26.1	203.0	1.4		13.7	77	1341	16 35 31
16 37 00	NGC1241	04 34 08	25.7	202.5	1.4		13.4	-13	1341	No stop
16 40 30	---	04 37 39	25.5	203.4	1.4		14.0	197	1368	16 37 01
16 41 00	J0310-0823	04 38 09	25.9	204.0	1.4		14.3	17	1368	16 41 00
16 42 00	=0307-085	04 39 09	25.8	204.3	1.5		14.5	60	1376	16 41 01
16 42 00	NGC1241	04 39 09	25.4	203.8	1.4		14.2	-13	1376	No stop
16 45 30	---	04 42 40	25.2	204.8	1.5		14.7	197	1403	16 42 01
16 45 30	J0310-0823	04 42 40	25.6	205.2	1.5		15.0	-13	1403	No stop
16 47 00	=0307-085	04 44 10	25.5	205.6	1.5		15.2	77	1414	16 45 31

Schedule for TORUN (Code Tr)

Page 7

Tracing the Radio Outflows in RQ AGN from Pc- to Kpc-scales

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

---	Sun	2 Mar 2025	Day	61	---					
16 47 00	NGC1241	04 44 10	25.1	205.1	1.5		15.0	-13	1414	No stop
16 51 00	---	04 48 11	24.8	206.2	1.6		15.6	227	1445	16 47 01
16 51 00	J0310-0823	04 48 11	25.2	206.7	1.6		15.8	-12	1445	No stop
16 53 00	=0307-085	04 50 11	25.1	207.2	1.6		16.1	108	1461	16 51 01
16 55 00	3C84	04 52 11	70.9	242.1	1.5		45.2	-65	1461	16 55 00
17 00 00	---	04 57 12	70.3	244.0	1.6		46.2	235	1499	16 55 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(J2000)	(Date)	Error (mas)
* NGC1241	03 08 48.674588	* 03 11 14.610000	03 12 27.755381	0.00
	-09 06 35.71543	*-08 55 18.70000	-08 49 43.89682	0.00
0307-085	03 07 35.614122	* 03 10 02.049331	03 11 15.438452	0.21
* J0310-0823	-08 35 00.21166	*-08 23 39.29548	-08 18 02.39908	0.41
	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
	GSFC 2016a X/S astro solution, 86 observations.			
* 3C84	03 16 29.567265	* 03 19 48.160096	03 21 27.593753	1.50
J0319+4130	41 19 51.91692	* 41 30 42.10404	41 36 19.13310	2.86
0316+413	/home/guest/rmc/SCHED/sched11.6/catalogs/sources.gsfc			
J0319+41	GSFC 2016a X/S astro solution, 10291 observations.			

VLBI OBSERVATIONS OF A UNIQUE STRONG LENSING CLUSTER TO TEST H0 TEN
PI: *Cristiana Spingola*

Address: INAF Istituto di Radioastronomia

Phone during observation:

Observing mode: 18cm 1024-8-2

Schedule for TORUN (Code Tr)

Page 2

VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are LO sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early		Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun 2 Mar 2025 Day 61 ---										
Next scan frequencies:		1626.49	1626.49	1626.49	1626.49	1690.49	1690.49	1690.49	1690.49	1690.49
Next BBC frequencies:		673.51	673.51	673.51	673.51	609.51	609.51	609.51	609.51	609.51
Next scan bandwidths:		32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00

17 30 00	1013+2449	05 27 17	30.2	88.2	-4.8		-41.3	0	0	17 30 00
17 33 00	---	05 30 18	30.6	88.8	-4.8		-41.4	180	23	17 30 01

17 35 30	4C39.25	05 32 48	48.0	85.1	-3.9		-50.3	72	23	17 35 30
17 41 30	---	05 38 49	48.9	86.3	-3.8		-50.4	360	70	17 35 31

17 44 00	1013+2449	05 41 19	32.3	91.0	-4.6		-41.4	73	70	17 44 00
17 45 30	---	05 42 50	32.5	91.3	-4.5		-41.4	90	81	17 44 01

17 45 30	J1029A	05 42 50	31.4	87.1	-4.8		-42.0	-23	81	No stop
17 49 00	---	05 46 20	31.9	87.8	-4.7		-42.0	187	108	17 45 31

17 49 30	1013+2449	05 46 50	33.1	92.2	-4.5		-41.3	6	108	17 49 30
17 51 00	---	05 48 21	33.3	92.5	-4.4		-41.3	90	120	17 49 31

17 51 00	J1029A	05 48 21	32.2	88.2	-4.7		-42.0	-23	120	No stop
17 54 30	---	05 51 51	32.7	88.8	-4.6		-42.0	187	147	17 51 01

17 57 00	1013+2449	05 54 22	34.2	93.7	-4.3		-41.3	126	147	17 57 00
17 58 30	---	05 55 52	34.5	94.0	-4.3		-41.2	90	158	17 57 01

17 58 30	J1029A	05 55 52	33.3	89.6	-4.6		-42.0	-24	158	No stop
18 02 00	---	05 59 22	33.9	90.3	-4.5		-42.0	186	185	17 58 31

18 02 30	1013+2449	05 59 52	35.1	94.8	-4.3		-41.2	6	185	18 02 30
18 04 00	---	06 01 23	35.3	95.2	-4.2		-41.2	90	197	18 02 31

18 04 00	J1029A	06 01 23	34.2	90.8	-4.5		-42.0	-24	197	No stop
18 07 30	---	06 04 53	34.7	91.5	-4.4		-42.0	186	224	18 04 01

18 10 00	1013+2449	06 07 24	36.2	96.4	-4.1		-41.1	126	224	18 10 00
18 11 30	---	06 08 54	36.4	96.8	-4.1		-41.0	90	236	18 10 01

18 11 30	J1029B	06 08 54	35.3	92.3	-4.4		-42.0	-24	236	No stop
18 15 00	---	06 12 24	35.8	93.0	-4.3		-42.0	186	263	18 11 31

18 15 30	1013+2449	06 12 55	37.0	97.6	-4.0		-40.9	6	263	18 15 30
18 17 00	---	06 14 25	37.2	97.9	-4.0		-40.9	90	274	18 15 31

Schedule for TORUN (Code Tr)

Page 3

VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
18 17 00	J1029B	06 14 25	36.1	93.4	-4.3		-41.9	-24	274	No stop
18 20 30	---	06 17 55	36.6	94.1	-4.2		-41.9	186	301	18 17 01
18 23 00	1013+2449	06 20 26	38.1	99.2	-3.9		-40.7	126	301	18 23 00
18 24 30	---	06 21 56	38.3	99.6	-3.9		-40.7	90	313	18 23 01
18 24 30	J1029B	06 21 56	37.2	95.0	-4.1		-41.8	-24	313	No stop
18 28 00	---	06 25 27	37.8	95.7	-4.1		-41.8	186	340	18 24 31
18 28 30	1013+2449	06 25 57	38.9	100.5	-3.8		-40.5	6	340	18 28 30
18 30 00	---	06 27 27	39.2	100.8	-3.8		-40.5	90	352	18 28 31
18 30 00	J1029B	06 27 27	38.1	96.1	-4.1		-41.7	-24	352	No stop
18 33 30	---	06 30 58	38.6	96.9	-4.0		-41.7	186	379	18 30 01
18 36 00	1013+2449	06 33 28	40.0	102.1	-3.7		-40.3	125	379	18 36 00
18 37 30	---	06 34 58	40.3	102.5	-3.7		-40.2	90	390	18 36 01
18 37 30	G2	06 34 58	39.2	97.8	-3.9		-41.6	-24	390	No stop
18 41 00	---	06 38 29	39.7	98.5	-3.9		-41.5	186	417	18 37 31
18 41 30	1013+2449	06 38 59	40.9	103.4	-3.6		-40.0	5	417	18 41 30
18 43 00	---	06 40 29	41.1	103.7	-3.6		-39.9	90	429	18 41 31
18 43 00	G2	06 40 29	40.0	99.0	-3.8		-41.4	-24	429	No stop
18 46 30	---	06 44 00	40.5	99.7	-3.8		-41.3	186	456	18 43 01
18 49 00	1013+2449	06 46 30	41.9	105.1	-3.5		-39.6	125	456	18 49 00
18 50 30	---	06 48 00	42.2	105.5	-3.5		-39.6	90	468	18 49 01
18 53 00	4C39.25	06 50 31	59.6	101.7	-2.6		-49.1	71	468	18 53 00
18 59 00	---	06 56 32	60.5	103.2	-2.5		-48.7	360	514	18 53 01
19 01 30	1013+2449	06 59 02	43.7	108.2	-3.3		-38.9	73	514	19 01 30
19 03 00	---	07 00 32	44.0	108.5	-3.2		-38.8	90	526	19 01 31
19 03 00	J1029A	07 00 32	43.0	103.5	-3.5		-40.6	-25	526	No stop
19 06 30	---	07 04 03	43.5	104.3	-3.4		-40.5	185	553	19 03 01
19 07 00	1013+2449	07 04 33	44.5	109.5	-3.2		-38.5	5	553	19 07 00
19 08 30	---	07 06 03	44.7	109.9	-3.2		-38.4	90	564	19 07 01
19 08 30	J1029A	07 06 03	43.8	104.8	-3.4		-40.3	-25	564	No stop
19 12 00	---	07 09 34	44.3	105.6	-3.4		-40.2	185	591	19 08 31
19 14 30	1013+2449	07 12 04	45.6	111.4	-3.1		-38.0	124	591	19 14 30
19 16 00	---	07 13 34	45.8	111.8	-3.0		-37.9	90	603	19 14 31

Schedule for TORUN (Code Tr)

Page 4

VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
19 16 00	J1029B	07 13 34	44.8	106.6	-3.3		-39.9	-25	603	No stop
19 19 30	---	07 17 05	45.3	107.4	-3.2		-39.7	185	630	19 16 01
19 20 00	1013+2449	07 17 35	46.4	112.8	-3.0		-37.5	4	630	19 20 00
19 21 30	---	07 19 05	46.6	113.2	-2.9		-37.4	90	642	19 20 01
19 21 30	J1029B	07 19 05	45.6	107.9	-3.2		-39.6	-25	642	No stop
19 25 00	---	07 22 36	46.1	108.8	-3.1		-39.3	185	669	19 21 31
19 27 30	1013+2449	07 25 06	47.4	114.8	-2.8		-36.9	124	669	19 27 30
19 29 00	---	07 26 37	47.6	115.2	-2.8		-36.7	90	680	19 27 31
19 29 00	G2	07 26 37	46.7	109.8	-3.1		-39.0	-26	680	No stop
19 32 30	---	07 30 07	47.2	110.7	-3.0		-38.8	184	707	19 29 01
19 33 00	1013+2449	07 30 37	48.1	116.3	-2.7		-36.3	4	707	19 33 00
19 34 30	---	07 32 08	48.3	116.7	-2.7		-36.2	90	719	19 33 01
19 34 30	G2	07 32 08	47.5	111.2	-3.0		-38.6	-26	719	No stop
19 38 00	---	07 35 38	48.0	112.1	-2.9		-38.3	184	746	19 34 31
19 40 30	1013+2449	07 38 09	49.1	118.4	-2.6		-35.5	124	746	19 40 30
19 42 00	---	07 39 39	49.3	118.8	-2.6		-35.4	90	757	19 40 31
19 42 00	J1029A	07 39 39	48.5	113.2	-2.9		-38.0	-26	757	No stop
19 45 30	---	07 43 09	49.0	114.1	-2.8		-37.7	184	785	19 42 01
19 46 00	1013+2449	07 43 39	49.9	120.0	-2.5		-34.9	3	785	19 46 00
19 47 30	---	07 45 10	50.1	120.4	-2.5		-34.7	90	796	19 46 01
19 47 30	J1029A	07 45 10	49.3	114.7	-2.8		-37.5	-26	796	No stop
19 51 00	---	07 48 40	49.8	115.7	-2.7		-37.1	184	823	19 47 31
19 53 30	1013+2449	07 51 11	50.8	122.2	-2.4		-34.0	123	823	19 53 30
19 55 00	---	07 52 41	51.0	122.7	-2.4		-33.8	90	835	19 53 31
19 55 00	J1029B	07 52 41	50.3	116.8	-2.6		-36.7	-27	835	No stop
19 58 30	---	07 56 11	50.8	117.8	-2.6		-36.3	183	862	19 55 01
19 59 00	1013+2449	07 56 42	51.5	123.9	-2.3		-33.3	3	862	19 59 00
20 00 30	---	07 58 12	51.7	124.3	-2.3		-33.1	90	873	19 59 01
20 00 30	J1029B	07 58 12	51.0	118.3	-2.5		-36.1	-27	873	No stop
20 04 00	---	08 01 42	51.5	119.4	-2.5		-35.7	183	900	20 00 31

Schedule for TORUN (Code Tr)

Page 5

VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
20 06 30	1013+2449	08 04 13	52.4	126.2	-2.2		-32.2	123	900	20 06 30
20 08 00	---	08 05 43	52.6	126.7	-2.2		-32.0	90	912	20 06 31
20 08 00	J1029A	08 05 43	52.0	120.5	-2.4		-35.2	-27	912	No stop
20 11 30	---	08 09 14	52.5	121.6	-2.4		-34.8	183	939	20 08 01
20 12 00	1013+2449	08 09 44	53.1	128.0	-2.1		-31.4	2	939	20 12 00
20 13 30	---	08 11 14	53.3	128.4	-2.1		-31.2	90	951	20 12 01
20 13 30	J1029A	08 11 14	52.7	122.2	-2.3		-34.5	-27	951	No stop
20 17 00	---	08 14 45	53.2	123.3	-2.3		-34.0	183	978	20 13 31
20 19 30	1013+2449	08 17 15	54.0	130.4	-2.0		-30.2	122	978	20 19 30
20 21 00	---	08 18 45	54.2	130.9	-1.9		-30.0	90	989	20 19 31
20 21 00	J1029A	08 18 45	53.7	124.5	-2.2		-33.5	-28	989	No stop
20 24 30	---	08 22 16	54.1	125.7	-2.1		-33.0	182	1016	20 21 01
20 25 00	1013+2449	08 22 46	54.6	132.3	-1.9		-29.3	2	1016	20 25 00
20 26 30	---	08 24 16	54.8	132.8	-1.9		-29.0	90	1028	20 25 01
20 26 30	J1029A	08 24 16	54.3	126.3	-2.1		-32.7	-28	1028	No stop
20 30 00	---	08 27 47	54.8	127.4	-2.0		-32.1	182	1055	20 26 31
20 32 30	1013+2449	08 30 17	55.4	134.9	-1.8		-27.9	122	1055	20 32 30
20 34 00	---	08 31 47	55.6	135.4	-1.7		-27.6	90	1067	20 32 31
20 34 00	J1029B	08 31 47	55.2	128.8	-2.0		-31.5	-28	1067	No stop
20 37 30	---	08 35 18	55.6	130.0	-1.9		-30.9	182	1094	20 34 01
20 38 00	1013+2449	08 35 48	56.0	136.9	-1.7		-26.9	1	1094	20 38 00
20 39 30	---	08 37 18	56.2	137.4	-1.6		-26.6	90	1105	20 38 01
20 39 30	J1029B	08 37 18	55.9	130.6	-1.9		-30.5	-28	1105	No stop
20 43 00	---	08 40 49	56.3	131.9	-1.8		-29.9	182	1132	20 39 31
20 45 30	1013+2449	08 43 19	56.7	139.6	-1.5		-25.3	121	1132	20 45 30
20 47 00	---	08 44 49	56.9	140.2	-1.5		-25.0	90	1144	20 45 31
20 47 00	J1029B	08 44 49	56.7	133.3	-1.8		-29.2	-29	1144	No stop
20 50 30	---	08 48 20	57.1	134.5	-1.7		-28.5	181	1171	20 47 01
20 51 00	1013+2449	08 48 50	57.3	141.7	-1.4		-24.2	1	1171	20 51 00
20 52 30	---	08 50 20	57.4	142.3	-1.4		-23.8	90	1183	20 51 01

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
20 52 30	J1029B	08 50 20	57.3	135.3	-1.7		-28.1	-29	1183	No stop
20 56 00	---	08 53 51	57.7	136.6	-1.6		-27.4	181	1210	20 52 31
20 58 30	1013+2449	08 56 21	57.9	144.7	-1.3		-22.5	120	1210	20 58 30
21 00 00	---	08 57 52	58.1	145.3	-1.3		-22.1	90	1221	20 58 31
21 00 00	G2	08 57 52	58.1	138.1	-1.5		-26.6	-29	1221	No stop
21 03 30	---	09 01 22	58.4	139.4	-1.5		-25.8	181	1248	21 00 01
21 04 00	1013+2449	09 01 52	58.4	146.9	-1.2		-21.2	0	1248	21 04 00
21 05 30	---	09 03 22	58.5	147.5	-1.2		-20.8	90	1260	21 04 01
21 05 30	G2	09 03 22	58.6	140.2	-1.5		-25.4	-29	1260	No stop
21 09 00	---	09 06 53	59.0	141.6	-1.4		-24.6	181	1287	21 05 31
21 11 30	1013+2449	09 09 23	59.0	150.0	-1.1		-19.3	120	1287	21 11 30
21 13 00	---	09 10 54	59.1	150.6	-1.1		-18.9	90	1298	21 11 31
21 15 30	4C39.25	09 13 24	75.6	168.0	-0.3		-9.2	74	1298	21 15 30
21 21 30	---	09 19 25	75.7	172.7	-0.2		-5.6	360	1345	21 15 31
21 24 00	1013+2449	09 21 56	59.9	155.3	-0.9		-16.0	76	1345	21 24 00
21 25 30	---	09 23 26	60.0	156.0	-0.9		-15.6	90	1356	21 24 01
21 25 30	J1029A	09 23 26	60.4	148.4	-1.1		-20.6	-30	1356	No stop
21 29 00	---	09 26 56	60.6	149.9	-1.1		-19.6	180	1384	21 25 31
21 29 30	1013+2449	09 27 26	60.2	157.7	-0.8		-14.5	-1	1384	21 29 30
21 31 00	---	09 28 57	60.3	158.4	-0.8		-14.1	89	1395	21 29 31
21 31 00	J1029A	09 28 57	60.8	150.7	-1.0		-19.1	-30	1395	No stop
21 34 30	---	09 32 27	61.0	152.3	-1.0		-18.2	180	1422	21 31 01
21 37 00	1013+2449	09 34 58	60.6	161.1	-0.7		-12.4	119	1422	21 37 00
21 38 30	---	09 36 28	60.7	161.8	-0.6		-11.9	90	1434	21 37 01
21 38 30	J1029B	09 36 28	61.3	154.0	-0.9		-17.0	-30	1434	No stop
21 42 00	---	09 39 58	61.5	155.6	-0.8		-16.1	180	1461	21 38 31
21 42 30	1013+2449	09 40 29	60.9	163.6	-0.6		-10.8	-1	1461	21 42 30
21 44 00	---	09 41 59	60.9	164.3	-0.6		-10.3	89	1472	21 42 31
21 44 00	J1029B	09 41 59	61.7	156.5	-0.8		-15.5	-30	1472	No stop
21 47 30	---	09 45 29	61.9	158.1	-0.8		-14.4	180	1499	21 44 01

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
21 50 00	1013+2449	09 48 00	61.1	167.1	-0.5		-8.5	119	1499	21 50 00
21 51 30	---	09 49 30	61.2	167.8	-0.4		-8.1	90	1511	21 50 01
21 51 30	J1029A	09 49 30	62.1	160.0	-0.7		-13.2	-30	1511	No stop
21 55 00	---	09 53 01	62.3	161.6	-0.6		-12.2	180	1538	21 51 31
21 55 30	1013+2449	09 53 31	61.3	169.6	-0.4		-6.8	-1	1538	21 55 30
21 57 00	---	09 55 01	61.3	170.3	-0.3		-6.4	89	1550	21 55 31
21 57 00	J1029A	09 55 01	62.3	162.6	-0.6		-11.6	-30	1550	No stop
22 00 30	---	09 58 32	62.5	164.3	-0.5		-10.5	180	1577	21 57 01
22 01 00	1013+2449	09 59 02	61.4	172.2	-0.3		-5.1	-1	1577	22 01 00
22 02 30	---	10 00 32	61.5	173.0	-0.2		-4.7	89	1588	22 01 01
22 02 30	J1029B	10 00 32	62.6	165.2	-0.5		-9.8	-30	1588	No stop
22 06 00	---	10 04 02	62.7	166.9	-0.4		-8.7	180	1615	22 02 31
22 06 30	1013+2449	10 04 33	61.5	174.9	-0.2		-3.4	-1	1615	22 06 30
22 08 00	---	10 06 03	61.5	175.6	-0.2		-2.9	89	1627	22 06 31
22 08 00	J1029B	10 06 03	62.8	167.9	-0.4		-8.1	-30	1627	No stop
22 11 30	---	10 09 33	62.9	169.6	-0.4		-7.0	180	1654	22 08 01
22 14 00	1013+2449	10 12 04	61.6	178.4	-0.1		-1.0	119	1654	22 14 00
22 15 30	---	10 13 34	61.6	179.2	-0.0		-0.6	90	1666	22 14 01
22 15 30	J1029A	10 13 34	63.0	171.5	-0.3		-5.7	-30	1666	No stop
22 19 00	---	10 17 05	63.0	173.3	-0.2		-4.5	180	1693	22 15 31
22 19 30	1013+2449	10 17 35	61.6	181.1	0.0		0.7	-1	1693	22 19 30
22 21 00	---	10 19 05	61.6	181.8	0.1		1.2	89	1704	22 19 31
22 21 00	J1029A	10 19 05	63.1	174.3	-0.2		-3.8	-30	1704	No stop
22 24 30	---	10 22 35	63.1	176.0	-0.1		-2.7	180	1731	22 21 01
22 27 00	1013+2449	10 25 06	61.5	184.7	0.2		3.1	120	1731	22 27 00
22 28 30	---	10 26 36	61.5	185.4	0.2		3.6	90	1743	22 27 01
22 28 30	J1029A	10 26 36	63.2	178.0	-0.1		-1.3	-29	1743	No stop
22 32 00	---	10 30 07	63.2	179.7	-0.0		-0.2	181	1770	22 28 31
22 32 30	1013+2449	10 30 37	61.5	187.3	0.3		4.8	0	1770	22 32 30
22 34 00	---	10 32 07	61.4	188.0	0.3		5.3	90	1782	22 32 31

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Sun	2 Mar 2025	Day 61	---							
22 34 00	J1029A	10 32 07	63.2	180.7	0.0		0.5	-29	1782	No stop
22 37 30	---	10 35 38	63.1	182.5	0.1		1.7	181	1809	22 34 01
22 40 00	1013+2449	10 38 08	61.3	190.8	0.4		7.1	120	1809	22 40 00
22 41 30	---	10 39 38	61.2	191.5	0.4		7.6	90	1820	22 40 01
22 41 30	J1029B	10 39 38	63.1	184.5	0.1		3.0	-29	1820	No stop
22 45 00	---	10 43 09	63.1	186.2	0.2		4.1	181	1847	22 41 31
22 45 30	1013+2449	10 43 39	61.1	193.4	0.5		8.8	1	1847	22 45 30
22 47 00	---	10 45 09	61.0	194.1	0.5		9.3	90	1859	22 45 31
22 47 00	J1029B	10 45 09	63.0	187.2	0.2		4.8	-28	1859	No stop
22 50 30	---	10 48 40	63.0	188.9	0.3		5.9	182	1886	22 47 01
22 53 00	1013+2449	10 51 10	60.8	196.9	0.6		11.1	121	1886	22 53 00
22 54 30	---	10 52 40	60.7	197.6	0.6		11.5	90	1898	22 53 01
22 54 30	J1029B	10 52 40	62.9	190.9	0.4		7.3	-28	1898	No stop
22 58 00	---	10 56 11	62.7	192.6	0.4		8.4	182	1925	22 54 31
22 58 30	1013+2449	10 56 41	60.5	199.4	0.7		12.7	1	1925	22 58 30
23 00 00	---	10 58 11	60.5	200.0	0.7		13.1	90	1936	22 58 31
23 00 00	J1029B	10 58 11	62.7	193.5	0.5		9.0	-28	1936	No stop
23 03 30	---	11 01 42	62.5	195.2	0.5		10.1	182	1963	23 00 01
23 06 00	1013+2449	11 04 12	60.1	202.7	0.8		14.8	122	1963	23 06 00
23 07 30	---	11 05 43	60.1	203.4	0.8		15.2	90	1975	23 06 01
23 07 30	G2	11 05 43	62.4	197.1	0.6		11.4	-27	1975	No stop
23 11 00	---	11 09 13	62.2	198.8	0.6		12.5	183	2002	23 07 31
23 11 30	1013+2449	11 09 43	59.8	205.1	0.9		16.3	2	2002	23 11 30
23 13 00	---	11 11 13	59.7	205.8	0.9		16.7	90	2013	23 11 31
23 13 00	G2	11 11 13	62.1	199.7	0.7		13.1	-27	2013	No stop
23 16 30	---	11 14 44	61.9	201.4	0.7		14.1	183	2040	23 13 01
23 19 00	1013+2449	11 17 14	59.3	208.4	1.0		18.3	123	2040	23 19 00
23 20 30	---	11 18 45	59.2	209.0	1.1		18.7	90	2052	23 19 01
23 20 30	J1029A	11 18 45	61.7	203.2	0.8		15.3	-26	2052	No stop
23 24 00	---	11 22 15	61.5	204.8	0.9		16.3	184	2079	23 20 31

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Sun	2 Mar 2025	Day 61	---							
23 24 30	1013+2449	11 22 45	58.9	210.7	1.1		19.7	3	2079	23 24 30
23 26 00	---	11 24 16	58.8	211.3	1.1		20.1	90	2091	23 24 31
23 26 00	J1029A	11 24 16	61.4	205.7	0.9		16.9	-26	2091	No stop
23 29 30	---	11 27 46	61.1	207.3	1.0		17.9	184	2118	23 26 01
23 32 00	1013+2449	11 30 17	58.3	213.7	1.2		21.5	124	2118	23 32 00
23 33 30	---	11 31 47	58.2	214.3	1.3		21.9	90	2129	23 32 01
23 33 30	J1029B	11 31 47	60.8	209.0	1.0		19.0	-25	2129	No stop
23 37 00	---	11 35 17	60.6	210.5	1.1		19.9	185	2156	23 33 31
23 37 30	1013+2449	11 35 47	57.8	215.9	1.3		22.8	4	2156	23 37 30
23 39 00	---	11 37 18	57.7	216.5	1.4		23.2	90	2168	23 37 31
23 39 00	J1029B	11 37 18	60.4	211.4	1.1		20.4	-25	2168	No stop
23 42 30	---	11 40 48	60.1	212.9	1.2		21.3	185	2195	23 39 01
23 45 00	1013+2449	11 43 19	57.1	218.8	1.5		24.5	125	2195	23 45 00
23 46 30	---	11 44 49	57.0	219.4	1.5		24.8	90	2207	23 45 01
23 46 30	J1029A	11 44 49	59.8	214.5	1.2		22.3	-24	2207	No stop
23 50 00	---	11 48 20	59.5	216.0	1.3		23.2	186	2234	23 46 31
23 50 30	1013+2449	11 48 50	56.6	220.9	1.6		25.6	5	2234	23 50 30
23 52 00	---	11 50 20	56.5	221.5	1.6		26.0	90	2245	23 50 31
23 52 00	J1029A	11 50 20	59.3	216.8	1.3		23.6	-25	2245	No stop
23 55 30	---	11 53 50	59.0	218.2	1.4		24.5	185	2272	23 52 01
23 56 00	1013+2449	11 54 20	56.0	222.9	1.7		26.8	5	2272	23 56 00
23 57 30	---	11 55 51	55.9	223.5	1.7		27.1	90	2284	23 56 01

--- Start: Sun	2 Mar 2025	Day 61	--	Stop: Mon			3 Mar 2025	Day 62	---	
23 57 30	J1029B	11 55 51	58.8	219.0	1.4		24.9	-25	2284	No stop
00 01 00	---	11 59 21	58.5	220.4	1.5		25.7	185	2311	23 57 31
00 01 30	1013+2449	11 59 51	55.5	224.9	1.7		27.8	5	2311	00 01 30
00 03 00	---	12 01 22	55.3	225.4	1.8		28.1	90	2323	00 01 31
00 03 00	J1029B	12 01 22	58.3	221.1	1.5		26.1	-25	2323	No stop
00 06 30	---	12 04 52	57.9	222.5	1.6		26.9	185	2350	00 03 01

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	3 Mar 2025	Day 62	---							
00 09 00	1013+2449	12 07 23	54.7	227.5	1.9		29.2	125	2350	00 09 00
00 10 30	---	12 08 53	54.5	228.1	1.9		29.4	90	2361	00 09 01
00 10 30	G2	12 08 53	57.5	224.0	1.6		27.7	-25	2361	No stop
00 14 00	---	12 12 23	57.2	225.2	1.7		28.4	185	2388	00 10 31
00 14 30	1013+2449	12 12 54	54.0	229.4	2.0		30.1	5	2388	00 14 30
00 16 00	---	12 14 24	53.9	229.9	2.0		30.4	90	2400	00 14 31
00 16 00	G2	12 14 24	56.9	226.0	1.7		28.8	-25	2400	No stop
00 19 30	---	12 17 54	56.6	227.2	1.8		29.4	185	2427	00 16 01
00 22 00	1013+2449	12 20 25	53.2	231.9	2.1		31.3	124	2427	00 22 00
00 23 30	---	12 21 55	53.0	232.4	2.1		31.6	90	2439	00 22 01
00 23 30	J1029A	12 21 55	56.1	228.6	1.9		30.2	-25	2439	No stop
00 27 00	---	12 25 26	55.7	229.8	1.9		30.8	185	2466	00 23 31
00 27 30	1013+2449	12 25 56	52.5	233.6	2.2		32.2	4	2466	00 27 30
00 29 00	---	12 27 26	52.3	234.1	2.2		32.4	90	2477	00 27 31
00 29 00	J1029A	12 27 26	55.5	230.5	1.9		31.1	-26	2477	No stop
00 32 30	---	12 30 56	55.1	231.7	2.0		31.7	184	2504	00 29 01
00 35 00	1013+2449	12 33 27	51.6	236.0	2.3		33.2	124	2504	00 35 00
00 36 30	---	12 34 57	51.4	236.4	2.3		33.4	90	2516	00 35 01
00 36 30	J1029B	12 34 57	54.6	233.0	2.1		32.3	-26	2516	No stop
00 40 00	---	12 38 28	54.2	234.2	2.1		32.9	184	2543	00 36 31
00 40 30	1013+2449	12 38 58	50.9	237.6	2.4		33.9	4	2543	00 40 30
00 42 00	---	12 40 28	50.7	238.1	2.4		34.1	90	2554	00 40 31
00 42 00	J1029B	12 40 28	53.9	234.8	2.2		33.2	-26	2554	No stop
00 45 30	---	12 43 59	53.5	235.9	2.2		33.7	184	2582	00 42 01
00 48 00	1013+2449	12 46 29	49.9	239.9	2.5		34.9	124	2582	00 48 00
00 49 30	---	12 47 59	49.7	240.3	2.5		35.0	90	2593	00 48 01
00 49 30	J1029A	12 47 59	53.0	237.2	2.3		34.2	-26	2593	No stop
00 53 00	---	12 51 30	52.5	238.2	2.3		34.7	184	2620	00 49 31
00 53 30	1013+2449	12 52 00	49.2	241.4	2.6		35.5	4	2620	00 53 30
00 55 00	---	12 53 30	49.0	241.9	2.6		35.6	90	2632	00 53 31

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Mon	3 Mar 2025	Day 62	---							
00 55 00	J1029A	12 53 30	52.3	238.8	2.4		35.0	-26	2632	No stop
00 58 30	---	12 57 01	51.8	239.9	2.4		35.4	184	2659	00 55 01
01 01 00	1013+2449	12 59 31	48.2	243.5	2.7		36.3	124	2659	01 01 00
01 02 30	---	13 01 01	48.0	243.9	2.8		36.4	90	2670	01 01 01
01 02 30	J1029A	13 01 01	51.3	241.1	2.5		35.9	-26	2670	No stop
01 06 00	---	13 04 32	50.8	242.1	2.6		36.3	184	2697	01 02 31
01 06 30	1013+2449	13 05 02	47.5	245.0	2.8		36.8	3	2697	01 06 30
01 08 00	---	13 06 32	47.3	245.4	2.9		37.0	90	2709	01 06 31
01 08 00	J1029A	13 06 32	50.6	242.6	2.6		36.5	-26	2709	No stop
01 11 30	---	13 10 03	50.1	243.6	2.7		36.9	184	2736	01 08 01
01 14 00	1013+2449	13 12 33	46.4	247.0	3.0		37.5	123	2736	01 14 00
01 15 30	---	13 14 04	46.2	247.4	3.0		37.6	90	2748	01 14 01
01 15 30	J1029B	13 14 04	49.6	244.7	2.7		37.3	-26	2748	No stop
01 19 00	---	13 17 34	49.1	245.7	2.8		37.6	184	2775	01 15 31
01 19 30	1013+2449	13 18 04	45.7	248.5	3.0		37.9	3	2775	01 19 30
01 21 00	---	13 19 34	45.4	248.8	3.1		38.1	90	2786	01 19 31
01 21 00	J1029B	13 19 34	48.8	246.2	2.8		37.8	-26	2786	No stop
01 24 30	---	13 23 05	48.3	247.2	2.9		38.1	184	2813	01 21 01
01 27 00	1013+2449	13 25 35	44.6	250.4	3.2		38.5	123	2813	01 27 00
01 28 30	---	13 27 06	44.4	250.7	3.2		38.6	90	2825	01 27 01
01 28 30	J1029B	13 27 06	47.8	248.2	2.9		38.5	-26	2825	No stop
01 32 00	---	13 30 36	47.3	249.1	3.0		38.7	184	2852	01 28 31
01 32 30	1013+2449	13 31 06	43.8	251.7	3.3		38.9	3	2852	01 32 30
01 34 00	---	13 32 37	43.6	252.1	3.3		39.0	90	2864	01 32 31
01 34 00	J1029B	13 32 37	47.0	249.7	3.0		38.9	-26	2864	No stop
01 37 30	---	13 36 07	46.5	250.6	3.1		39.2	184	2891	01 34 01
01 40 00	1013+2449	13 38 38	42.7	253.5	3.4		39.3	123	2891	01 40 00
01 41 30	---	13 40 08	42.5	253.9	3.4		39.4	90	2902	01 40 01
01 41 30	G2	13 40 08	45.9	251.6	3.2		39.4	-26	2902	No stop
01 45 00	---	13 43 38	45.4	252.4	3.2		39.7	184	2929	01 41 31

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	3 Mar 2025	Day 62	---							
01 45 30	1013+2449	13 44 08	41.9	254.9	3.5		39.6	3	2929	01 45 30
01 47 00	---	13 45 39	41.7	255.2	3.5		39.7	90	2941	01 45 31
01 47 00	G2	13 45 39	45.1	252.9	3.3		39.8	-26	2941	No stop
01 50 30	---	13 49 09	44.6	253.8	3.3		40.0	184	2968	01 47 01
01 53 00	1013+2449	13 51 40	40.9	256.6	3.6		40.0	123	2968	01 53 00
01 54 30	---	13 53 10	40.6	256.9	3.6		40.1	90	2980	01 53 01
01 54 30	J1029A	13 53 10	44.1	254.7	3.4		40.2	-27	2980	No stop
01 58 00	---	13 56 41	43.5	255.6	3.4		40.4	183	3007	01 54 31
01 58 30	1013+2449	13 57 11	40.0	257.9	3.7		40.3	3	3007	01 58 30
02 00 00	---	13 58 41	39.8	258.2	3.7		40.3	90	3018	01 58 31
02 00 00	J1029A	13 58 41	43.3	256.0	3.5		40.5	-27	3018	No stop
02 03 30	---	14 02 11	42.7	256.8	3.5		40.7	183	3045	02 00 01
02 06 00	1013+2449	14 04 42	38.9	259.5	3.8		40.5	123	3045	02 06 00
02 07 30	---	14 06 12	38.7	259.9	3.8		40.6	90	3057	02 06 01
02 07 30	J1029B	14 06 12	42.2	257.8	3.6		40.9	-27	3057	No stop
02 11 00	---	14 09 43	41.6	258.6	3.7		41.0	183	3084	02 07 31
02 11 30	1013+2449	14 10 13	38.1	260.8	3.9		40.7	3	3084	02 11 30
02 13 00	---	14 11 43	37.9	261.1	3.9		40.8	90	3096	02 11 31
02 13 00	J1029B	14 11 43	41.4	259.0	3.7		41.1	-27	3096	No stop
02 16 30	---	14 15 14	40.8	259.8	3.7		41.2	183	3123	02 13 01
02 19 00	1013+2449	14 17 44	37.0	262.4	4.0		40.9	123	3123	02 19 00
02 20 30	---	14 19 14	36.8	262.7	4.1		41.0	90	3134	02 19 01
02 20 30	J1029A	14 19 14	40.2	260.7	3.8		41.4	-27	3134	No stop
02 24 00	---	14 22 45	39.7	261.5	3.9		41.5	183	3161	02 20 31
02 24 30	1013+2449	14 23 15	36.2	263.6	4.1		41.1	3	3161	02 24 30
02 26 00	---	14 24 45	36.0	263.9	4.2		41.1	90	3173	02 24 31
02 26 00	J1029A	14 24 45	39.4	261.9	3.9		41.5	-27	3173	No stop
02 29 30	---	14 28 16	38.9	262.7	4.0		41.6	183	3200	02 26 01
02 32 00	1013+2449	14 30 46	35.1	265.2	4.3		41.2	123	3200	02 32 00
02 33 30	---	14 32 16	34.8	265.5	4.3		41.2	90	3211	02 32 01

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	3 Mar 2025	Day 62	---							
02 33 30	J1029B	14 32 16	38.3	263.5	4.0		41.7	-27	3211	No stop
02 37 00	---	14 35 47	37.8	264.3	4.1		41.8	183	3239	02 33 31
02 37 30	1013+2449	14 36 17	34.2	266.3	4.3		41.3	3	3239	02 37 30
02 39 00	---	14 37 47	34.0	266.6	4.4		41.3	90	3250	02 37 31
02 39 00	J1029B	14 37 47	37.5	264.7	4.1		41.8	-27	3250	No stop
02 42 30	---	14 41 18	37.0	265.4	4.2		41.9	183	3277	02 39 01
02 45 00	1013+2449	14 43 48	33.1	267.8	4.5		41.3	123	3277	02 45 00
02 46 30	---	14 45 18	32.9	268.1	4.5		41.3	90	3289	02 45 01
02 46 30	J1029A	14 45 18	36.3	266.3	4.2		41.9	-27	3289	No stop
02 50 00	---	14 48 49	35.8	267.0	4.3		42.0	183	3316	02 46 31
02 50 30	1013+2449	14 49 19	32.3	269.0	4.6		41.4	3	3316	02 50 30
02 52 00	---	14 50 49	32.1	269.3	4.6		41.4	90	3327	02 50 31
02 52 00	J1029A	14 50 49	35.5	267.4	4.3		42.0	-27	3327	No stop
02 55 30	---	14 54 20	35.0	268.1	4.4		42.0	183	3354	02 52 01
02 58 00	1013+2449	14 56 50	31.1	270.5	4.7		41.4	123	3354	02 58 00
02 59 30	---	14 58 21	30.9	270.8	4.7		41.4	90	3366	02 58 01
02 59 30	J1029B	14 58 21	34.4	268.9	4.5		42.0	-27	3366	No stop
03 03 00	---	15 01 51	33.9	269.6	4.5		42.0	183	3393	02 59 31
03 03 30	1013+2449	15 02 21	30.3	271.6	4.8		41.4	3	3393	03 03 30
03 05 00	---	15 03 52	30.1	271.9	4.8		41.3	90	3405	03 03 31
03 05 00	J1029B	15 03 52	33.6	270.0	4.6		42.0	-27	3405	No stop
03 08 30	---	15 07 22	33.0	270.7	4.6		42.0	183	3432	03 05 01
03 11 00	1013+2449	15 09 53	29.2	273.0	4.9		41.3	123	3432	03 11 00
03 12 30	---	15 11 23	29.0	273.3	4.9		41.3	90	3443	03 11 01
03 12 30	G2	15 11 23	32.4	271.5	4.7		42.0	-27	3443	No stop
03 16 00	---	15 14 53	31.9	272.2	4.7		42.0	183	3470	03 12 31
03 16 30	1013+2449	15 15 23	28.4	274.1	5.0		41.2	3	3470	03 16 30
03 18 00	---	15 16 54	28.1	274.4	5.0		41.2	90	3482	03 16 31
03 18 00	G2	15 16 54	31.6	272.6	4.8		42.0	-27	3482	No stop
03 21 30	---	15 20 24	31.1	273.3	4.8		42.0	183	3509	03 18 01

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	TPStart SYNC

--- Mon	3 Mar 2025	Day 62	---							
03 24 00	1013+2449	15 22 55	27.2	275.6	5.1		41.1	123	3509	03 24 00
03 25 30	---	15 24 25	27.0	275.9	5.2		41.1	90	3521	03 24 01
03 25 30	J1029A	15 24 25	30.5	274.1	4.9		41.9	-27	3521	No stop
03 29 00	---	15 27 55	30.0	274.8	5.0		41.9	183	3548	03 25 31
03 29 30	1013+2449	15 28 26	26.4	276.6	5.2		41.0	3	3548	03 29 30
03 31 00	---	15 29 56	26.2	276.9	5.2		41.0	90	3559	03 29 31
03 31 00	J1029A	15 29 56	29.7	275.1	5.0		41.8	-27	3559	No stop
03 34 30	---	15 33 26	29.1	275.8	5.0		41.8	183	3586	03 31 01
03 37 00	1013+2449	15 35 57	25.3	278.1	5.3		40.9	123	3586	03 37 00
03 38 30	---	15 37 27	25.1	278.3	5.4		40.8	90	3598	03 37 01
03 38 30	J1029A	15 37 27	28.5	276.6	5.1		41.7	-27	3598	No stop
03 42 00	---	15 40 58	28.0	277.2	5.2		41.6	183	3625	03 38 31
03 42 30	1013+2449	15 41 28	24.5	279.1	5.4		40.7	3	3625	03 42 30
03 44 00	---	15 42 58	24.3	279.4	5.5		40.7	90	3637	03 42 31
03 44 00	J1029A	15 42 58	27.7	277.6	5.2		41.6	-27	3637	No stop
03 47 30	---	15 46 29	27.2	278.3	5.3		41.5	183	3664	03 44 01
03 50 00	1013+2449	15 48 59	23.4	280.5	5.6		40.5	123	3664	03 50 00
03 51 30	---	15 50 29	23.1	280.8	5.6		40.5	90	3675	03 50 01
03 51 30	J1029B	15 50 29	26.6	279.1	5.3		41.4	-27	3675	No stop
03 55 00	---	15 54 00	26.1	279.7	5.4		41.3	183	3702	03 51 31
03 55 30	1013+2449	15 54 30	22.6	281.6	5.7		40.4	3	3702	03 55 30
03 57 00	---	15 56 00	22.3	281.8	5.7		40.3	90	3714	03 55 31
03 57 00	J1029B	15 56 00	25.8	280.1	5.4		41.2	-27	3714	No stop
04 00 30	---	15 59 31	25.3	280.7	5.5		41.1	183	3741	03 57 01
04 03 00	1013+2449	16 02 01	21.5	283.0	5.8		40.1	123	3741	04 03 00
04 04 30	---	16 03 31	21.2	283.2	5.8		40.0	90	3753	04 03 01
04 04 30	J1029B	16 03 31	24.7	281.5	5.5		41.0	-27	3753	No stop
04 08 00	---	16 07 02	24.2	282.1	5.6		40.9	183	3780	04 04 31
04 08 30	1013+2449	16 07 32	20.6	284.0	5.9		39.9	3	3780	04 08 30
04 10 00	---	16 09 02	20.4	284.3	5.9		39.8	90	3791	04 08 31

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	3 Mar 2025	Day 62	---							
04 10 00	J1029B	16 09 02	23.9	282.5	5.6		40.8	-27	3791	No stop
04 13 30	---	16 12 33	23.4	283.2	5.7		40.7	183	3818	04 10 01
04 16 00	1013+2449	16 15 03	19.6	285.4	6.0		39.6	123	3818	04 16 00
04 17 30	---	16 16 33	19.3	285.7	6.0		39.5	90	3830	04 16 01
04 17 30	G2	16 16 33	22.8	283.9	5.8		40.5	-27	3830	No stop
04 21 00	---	16 20 04	22.2	284.6	5.8		40.4	183	3857	04 17 31
04 21 30	1013+2449	16 20 34	18.8	286.4	6.1		39.3	3	3857	04 21 30
04 23 00	---	16 22 04	18.5	286.7	6.1		39.3	90	3868	04 21 31
04 23 00	G2	16 22 04	22.0	284.9	5.9		40.3	-27	3868	No stop
04 26 30	---	16 25 35	21.5	285.6	5.9		40.2	183	3895	04 23 01
04 29 00	1013+2449	16 28 05	17.7	287.8	6.2		39.0	123	3895	04 29 00
04 30 30	---	16 29 36	17.5	288.1	6.2		38.9	90	3907	04 29 01
04 30 30	J1029A	16 29 36	20.9	286.3	6.0		40.0	-26	3907	No stop
04 34 00	---	16 33 06	20.4	286.9	6.0		39.8	184	3934	04 30 31
04 34 30	1013+2449	16 33 36	16.9	288.8	6.3		38.7	3	3934	04 34 30
04 36 00	---	16 35 06	16.7	289.1	6.3		38.6	90	3946	04 34 31
04 36 00	J1029A	16 35 06	20.1	287.3	6.1		39.7	-26	3946	No stop
04 39 30	---	16 38 37	19.6	288.0	6.1		39.6	184	3973	04 36 01
04 42 00	1013+2449	16 41 07	15.8	290.2	6.4		38.3	123	3973	04 42 00
04 43 30	---	16 42 38	15.6	290.5	6.5		38.2	90	3984	04 42 01
04 43 30	J1029B	16 42 38	19.0	288.7	6.2		39.4	-26	3984	No stop
04 47 00	---	16 46 08	18.5	289.3	6.3		39.2	184	4011	04 43 31
04 47 30	1013+2449	16 46 38	15.1	291.2	6.5		38.0	3	4011	04 47 30
04 49 00	---	16 48 09	14.8	291.5	6.5		37.9	90	4023	04 47 31
04 49 00	J1029B	16 48 09	18.2	289.7	6.3		39.1	-26	4023	No stop
04 52 30	---	16 51 39	17.7	290.4	6.3		38.9	184	4050	04 49 01
04 55 00	1013+2449	16 54 10	14.0	292.6	6.6		37.6	123	4050	04 55 00
04 56 30	---	16 55 40	13.8	292.9	6.7		37.5	90	4062	04 55 01
04 56 30	J1029A	16 55 40	17.2	291.1	6.4		38.7	-26	4062	No stop
05 00 00	---	16 59 10	16.7	291.7	6.5		38.5	184	4089	04 56 31

Schedule for TORUN (Code Tr)

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VLBI observations of a unique strong lensing cluster to test H0 tension

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.

Early: Seconds between end of slew and start. Dwell: On source seconds.

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are L0 sum (band edge).

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC

--- Mon	3 Mar 2025	Day	62	---						
05 00 30	1013+2449	16 59 41	13.2	293.7	6.7		37.3	3	4089	05 00 30
05 02 00	---	17 01 11	13.0	293.9	6.8		37.2	90	4100	05 00 31
05 02 00	J1029A	17 01 11	16.4	292.1	6.5		38.3	-26	4100	No stop
05 05 30	---	17 04 41	15.9	292.7	6.6		38.1	184	4127	05 02 01
05 08 00	1013+2449	17 07 12	12.2	295.1	6.9		36.8	123	4127	05 08 00
05 09 30	---	17 08 42	12.0	295.3	6.9		36.7	90	4139	05 08 01
05 09 30	J1029B	17 08 42	15.4	293.5	6.6		37.9	-26	4139	No stop
05 13 00	---	17 12 13	14.9	294.1	6.7		37.7	184	4166	05 09 31
05 13 30	1013+2449	17 12 43	11.5	296.1	7.0		36.4	3	4166	05 13 30
05 15 00	---	17 14 13	11.3	296.4	7.0		36.3	90	4178	05 13 31
05 15 00	J1029B	17 14 13	14.6	294.5	6.7		37.5	-26	4178	No stop
05 18 30	---	17 17 43	14.1	295.1	6.8		37.3	184	4205	05 15 01
05 21 00	1013+2449	17 20 14	10.5	297.5	7.1		35.9	123	4205	05 21 00
05 22 30	---	17 21 44	10.3	297.8	7.1		35.8	90	4216	05 21 01
05 22 30	G2	17 21 44	13.6	295.9	6.9		37.0	-26	4216	No stop
05 25 00	---	17 24 15	13.2	296.3	6.9		36.9	124	4236	05 22 31
05 25 30	1013+2449	17 24 45	9.9	298.3	7.2		35.6	4	4236	05 25 30
05 26 30	---	17 25 45	9.7	298.5	7.2		35.5	60	4243	05 25 31
05 26 30	G2	17 25 45	13.0	296.6	6.9		36.8	-26	4243	No stop
05 29 00	---	17 28 15	12.7	297.1	7.0		36.6	124	4263	05 26 31
05 29 00	1013+2449	17 28 15	9.4	299.0	7.2		35.3	-26	4263	No stop
05 30 00	---	17 29 15	9.3	299.2	7.2		35.2	34	4270	05 29 01

SETUP FILE INFORMATION:

NOTE: If DOPPLER, FREQ, or BW were used, see the individual scans for the final BBC settings.

===== Setup file: sess125.L1024

Setup group: 7	Station: TORUN	Total bit rate: 1024
Format: VDIF	Bits per sample: 2	Sample rate: 64.000
Number of channels: 8	DBE type: DBBC_DDC	Speedup factor: 1.00

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U
IF SB =	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP
BBC =	1	9	1	9	2	10	2	10
BBC SB=	U	U	L	L	U	U	L	L
IF =	A1	B1	A1	B1	A1	B1	A1	B1

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = off
 LO sum= 1626.49 1626.49 1626.49 1626.49 1690.49 1690.49 1690.49 1690.49
 BBC fr= 673.51 673.51 673.51 673.51 609.51 609.51 609.51 609.51
 Bandwd= 32.00 32.00 32.00 32.00 32.00 32.00 32.00 32.00
 Matching frequency sets: 8

Track assignments are:

track1= 1, 2, 3, 4, 5, 6, 7, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error
	(B1950)	(J2000)		(mas)
* J1029A	10 26 27.153582	* 10 29 13.950000	10 30 39.504569	0.00
	26 38 40.00512	* 26 23 17.96000	26 15 28.63961	0.00
* J1029B	10 26 27.450733	* 10 29 14.250000	10 30 39.806118	0.00
	26 39 02.21361	* 26 23 40.16000	26 15 50.83545	0.00
* G2	10 26 25.768147	* 10 29 12.570000	10 30 38.127355	0.00
	26 38 54.84567	* 26 23 32.84000	26 15 43.54104	0.00
* 1013+2449	10 11 05.630348	* 10 13 53.428772	10 15 19.442770	0.00
	25 04 10.18129	* 24 49 16.44079	24 41 42.10513	0.00
* 4C39.25	09 23 55.319213	* 09 27 03.013934	09 28 39.233080	0.00
	39 15 23.56646	* 39 02 20.85186	38 55 46.81814	0.00

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