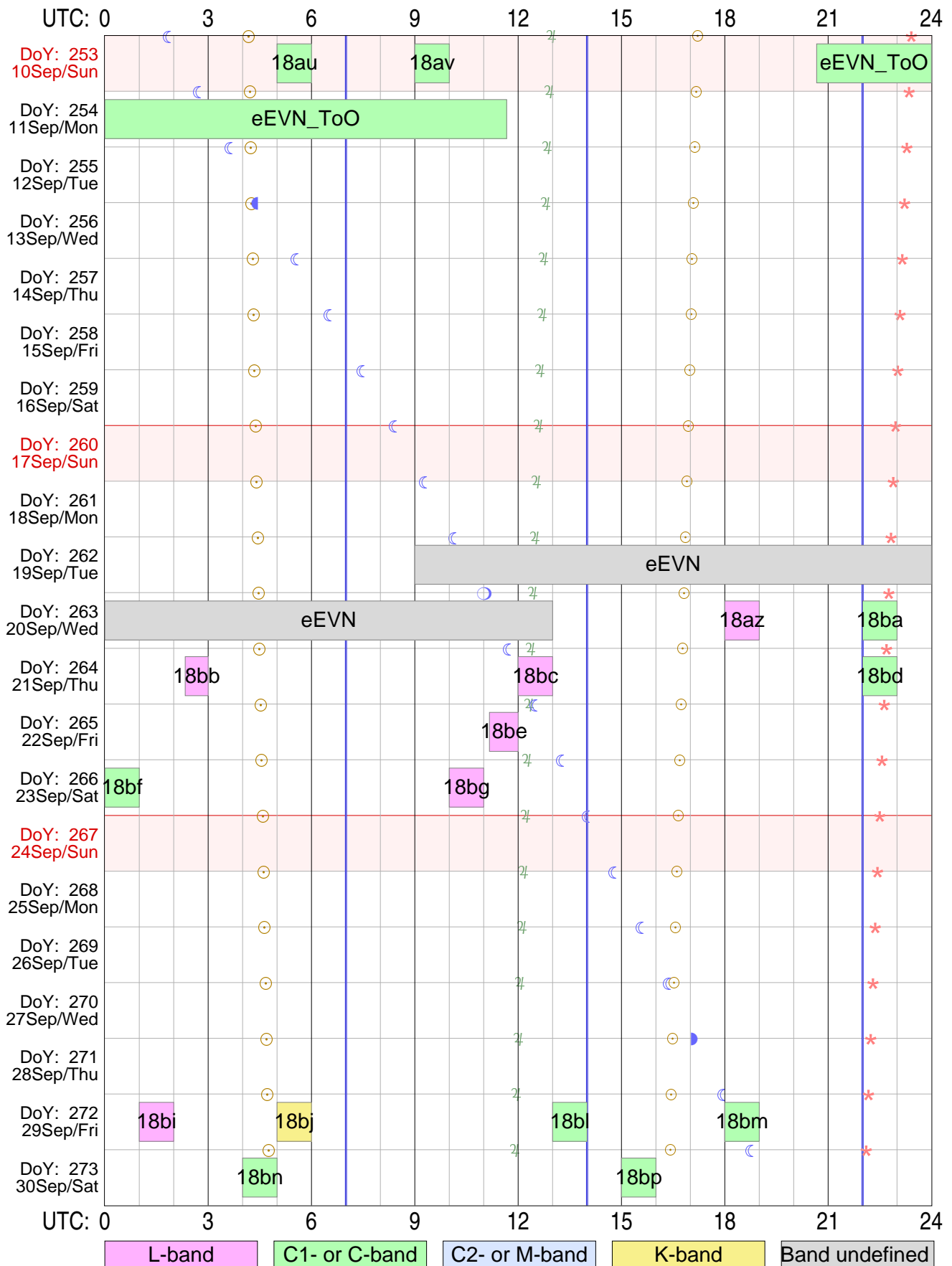


Tr VLBI plan for Sep 2017



Version: 2017.09.08

Sky events at Tr: ☉ Sunrise & sunset ☾☽ Moon Transits ♃ Jupiter Transits * Aries Transits (0h ST)
 Vertical lines in blue mark operator shift times at Tr Total observing time: 58.5 hours in 18 experiments scheduled
 Initial characters 'rk' are omitted from RA experiment names!

Strona zostawiona celowo pusta

RadioAstron & EVN Experiments

Sep 2017

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 = 2017, 2nd line is: Year | Date | UTstart | UTstop | Exper. | xxComment |
|--------------------------------|-------|---------|--------|-------------|-----------|
| Nr | D | M | <=Dur | Exper. name | Comment |
| 1 | 10.09 | 1.0 | 18au | | C |
| 2 | 10.09 | 1.0 | 18av | | C |
| 3 | 20.09 | 1.0 | 18az | | L |
| 4 | 20.09 | 1.0 | 18ba | | C |
| 5 | 21.09 | 0.7 | 18bb | | L |
| 6 | 21.09 | 1.0 | 18bc | | L |
| 7 | 21.09 | 1.0 | 18bd | | C |
| 8 | 22.09 | 0.8 | 18be | | L |
| 9 | 23.09 | 1.0 | 18bf | | C |
| 10 | 23.09 | 1.0 | 18bg | | L |
| 11 | 29.09 | 1.0 | 18bi | | L |
| 12 | 29.09 | 1.0 | 18bj | | K |
| 13 | 29.09 | 1.0 | 18bl | | C |
| 14 | 29.09 | 1.0 | 18bm | | C |
| 15 | 30.09 | 1.0 | 18bn | | C |
| 16 | 30.09 | 1.0 | 18bp | | C |
| 17 | 19.09 | 28.0 | eEVN | | |

Summer time (DST): Mar 26 to Oct 29, 2017

Total observing time: 43.5 hours in 17 experiments

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

<http://paulo.astro.uni.torun.pl/~pw/VLBI/schedules/sep17.pdf>

rk18autr

RADIOASTRON AGN MONITORING
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Phone: +7-495-3332512 EMAIL: kirx@scan.sai.msu.ru
Fax: +7-495-3332378 Phone during observation: +7-903-6614865

Observing mode: C/K-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Monitoring

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 10 Sep 2017 Day 253 ---

----- C-band VLBI scans -----

| | | | | | | | | | | |
|------------------------|----------|----------|---------|---------|-----|------|-----|-----|----------|--|
| Next scan frequencies: | 4836.00 | 4836.00 | 4836.00 | 4836.00 | | | | | | |
| Next BBC frequencies: | 736.00 | 736.00 | 736.00 | 736.00 | | | | | | |
| Next scan bandwidths: | 16.00 | 16.00 | 16.00 | 16.00 | | | | | | |
| 05 00 00 | 2200+420 | 05 31 58 | 21.8 | -47.5 | 7.5 | 36.8 | 0 | 0 | 05 00 00 | |
| 05 14 30 | --- | 05 46 30 | 20.2 | -45.2 | 7.7 | 35.2 | 870 | 28 | 05 00 01 | |
| 05 15 00 | 2200+420 | 05 47 00 | 20.2 | -45.1 | 7.7 | 35.1 | 24 | 28 | 05 15 00 | |
| 05 29 30 | --- | 06 01 33 | 18.7 | -42.7 | 8.0 | 33.5 | 870 | 56 | 05 15 01 | |
| 05 30 00 | 2200+420 | 06 02 03 | 18.6 | -42.7 | 8.0 | 33.4 | 24 | 56 | 05 30 00 | |
| 05 44 30 | --- | 06 16 35 | 17.2 | -40.3 | 8.2 | 31.7 | 870 | 84 | 05 30 01 | |
| 05 45 00 | 2200+420 | 06 17 05 | 17.1 | -40.2 | 8.2 | 31.6 | 24 | 84 | 05 45 00 | |
| 06 00 00 | --- | 06 32 08 | 15.7 | -37.7 | 8.5 | 29.8 | 900 | 112 | 05 45 01 | |

SETUP FILE INFORMATION:

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

===== Setup file: ra6cm2.set

| | | | | | |
|---------------------|---------|------------------|-------|-----------------|--------|
| Setup group: | 3 | Station: | TORUN | Total bit rate: | 256 |
| Format: | MKIV1:4 | Bits per sample: | 2 | Sample rate: | 32.000 |
| Number of channels: | 4 | DBE type: | | Speedup factor: | 1.00 |

Disk used to record data.

```

1st LO=  4100.00  4100.00  4100.00  4100.00
Net SB=           L           L           U           U
IF SB =           U           U           U           U
Pol.  =      RCP      LCP      RCP      LCP
BBC   =           1           2           1           2
BBC SB=           L           L           U           U
IF    =           C           A           C           A

```

The following frequency sets based on these setups were used.

```

Frequency Set:  5  Setup file default.  Used with PCAL = 1MHz
LO sum=  4836.00  4836.00  4836.00  4836.00
BBC fr=   736.00   736.00   736.00   736.00
Bandwd=   16.00   16.00   16.00   16.00
Matching frequency sets:  5

```

Track assignments are:

```

track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

| Source | Source position (RA/Dec) (B1950) | (J2000) | (Date) | Error (mas) |
|------------|--|-------------------|-----------------|----------------|
| * FAKERA | 11 57 21.769299 | * 12 00 00.000000 | 12 00 34.427002 | 0.00 |
| | 85 16 41.77889 | * 85 00 00.000000 | 84 54 14.41812 | 0.00 |
| | fake circumpolar target for a TS to look at | | | |
| * 2200+420 | 22 00 39.362504 | * 22 02 43.291371 | 22 03 28.646232 | 0.00 |
| J2202+4216 | 42 02 08.59073 | * 42 16 39.97987 | 42 21 58.56596 | 0.00 |
| BLLAC | ./rk18au_sources.radioastron | | | |
| | AGN, rfc_2013d Petrov, 2013, unpublished 59417 observations, RA-A04-07, RA-A03-0 | | | |

EFFECT OF SOLAR CORONA

The solar corona can cause unstable phases for sources too close to the Sun. SCHED provides warnings at individual scans for distances less than 10 degrees. The distance from the Sun to each source in this schedule is:

```

Source      Sun distance (deg)
2200+420    130.1

```

Barry Clark estimates from predictions by Ketan Desai of IPM scattering sizes that the Sun will cause amplitude reductions on the longest VLBA baselines at a solar distance of $60 \text{ deg } F^{-0.6}$ where F is in GHz.

For common VLBI bands, this is:

```

1.6 GHz      45. deg
2.3 GHz      36. deg
5.0 GHz      23. deg
8.4 GHz      17. deg
15.0 GHz     12. deg
22.0 GHz     9. deg

```

rk18avtr

RADIOASTRON AGN MONITORING
PI: Yuri Kovalev

Address: ASC Lebedev Profsoyuznaya 84/32 117997 Moscow, Russia
Phone: +7-495-3332512 EMAIL: kirx@scan.sai.msu.ru
Fax: +7-495-3332378 Phone during observation: +7-903-6614865

Observing mode: C/L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Monitoring

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 10 Sep 2017 Day 253 ---

----- C-band VLBI scans -----

Next scan frequencies: 4836.00 4836.00 4836.00 4836.00
Next BBC frequencies: 736.00 736.00 736.00 736.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

| Start UT | Source | LST | EL | AZ | HA | UP | ParA | Dwell | GBytes | TPStart SYNC |
|----------|----------|----------|-----|----------|------|----|------|-------|--------|--------------|
| 09 00 00 | 2200+420 | 09 32 37 | 5.7 | -5.7 | 11.5 | | 4.6 | 0 | 0 | 09 00 00 |
| 09 14 30 | --- | 09 47 10 | 5.5 | -3.0 | 11.7 | | 2.5 | 870 | 28 | 09 00 01 |
| 09 15 00 | 2200+420 | 09 47 40 | 5.5 | -2.9 | 11.7 | | 2.4 | 24 | 28 | 09 15 00 |
| 09 29 30 | --- | 10 02 12 | 5.5 | -0.2 | 12.0 | | 0.2 | 870 | 56 | 09 15 01 |
| 09 30 00 | 2200+420 | 10 02 42 | 5.5 | -0.1 | 12.0 | | 0.1 | 24 | 56 | 09 30 00 |
| 09 44 30 | --- | 10 17 14 | 5.5 | 2.6-11.8 | | | -2.1 | 870 | 84 | 09 30 01 |
| 09 45 00 | 2200+420 | 10 17 45 | 5.5 | 2.6-11.8 | | | -2.2 | 24 | 84 | 09 45 00 |
| 10 00 00 | --- | 10 32 47 | 5.7 | 5.4-11.5 | | | -4.4 | 900 | 112 | 09 45 01 |

SETUP FILE INFORMATION:

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

===== Setup file: ra6cm2.set

Setup group: 2 Station: TORUN Total bit rate: 256
Format: MKIV1:4 Bits per sample: 2 Sample rate: 32.000
Number of channels: 4 DBE type: Speedup factor: 1.00

Disk used to record data.

```

1st LO=  4100.00  4100.00  4100.00  4100.00
Net SB=           L           L           U           U
IF SB =           U           U           U           U
Pol.  =          RCP          LCP          RCP          LCP
BBC   =           1           2           1           2
BBC SB=           L           L           U           U
IF    =           C           A           C           A

```

The following frequency sets based on these setups were used.

```

Frequency Set:  4  Setup file default.  Used with PCAL = 1MHz
LO sum=  4836.00  4836.00  4836.00  4836.00
BBC fr=   736.00   736.00   736.00   736.00
Bandwd=   16.00   16.00   16.00   16.00
Matching frequency sets:  4

```

Track assignments are:

```

track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

| Source | Source position (RA/Dec) (B1950) | (J2000) | (Date) | Error (mas) |
|------------|--|-------------------|-----------------|----------------|
| * FAKERA | 11 57 21.769299 | * 12 00 00.000000 | 12 00 34.415694 | 0.00 |
| | 85 16 41.77889 | * 85 00 00.000000 | 84 54 14.35876 | 0.00 |
| | fake circumpolar target for a TS to look at | | | |
| * 2200+420 | 22 00 39.362504 | * 22 02 43.291371 | 22 03 28.645340 | 0.00 |
| J2202+4216 | 42 02 08.59073 | * 42 16 39.97987 | 42 21 58.61183 | 0.00 |
| BLLAC | ./rk18av_sources.radioastron | | | |
| | AGN, rfc_2013d Petrov, 2013, unpublished 59417 observations, RA-A04-07, RA-A03-0 | | | |

EFFECT OF SOLAR CORONA

The solar corona can cause unstable phases for sources too close to the Sun. SCHED provides warnings at individual scans for distances less than 10 degrees. The distance from the Sun to each source in this schedule is:

| Source | Sun distance (deg) |
|----------|--------------------|
| 2200+420 | 130.1 |

Barry Clark estimates from predictions by Ketan Desai of IPM scattering sizes that the Sun will cause amplitude reductions on the longest VLBA baselines at a solar distance of $60 \text{ deg } F^{-0.6}$ where F is in GHz.

For common VLBI bands, this is:

| | |
|----------|---------|
| 1.6 GHz | 45. deg |
| 2.3 GHz | 36. deg |
| 5.0 GHz | 23. deg |
| 8.4 GHz | 17. deg |
| 15.0 GHz | 12. deg |
| 22.0 GHz | 9. deg |

rm013tr

RM013
PI: Marcote

Address: JIVE

Observing mode: evn

Schedule for TORUN (Code Tr)

Page 2

RM013

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.

Table with columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Early Dwell, Disk GBytes, TPStart SYNC. Includes scan frequencies and bandwidths for Sun 10 Sep 2017 Day 253.

Schedule for TORUN (Code Tr)

Page 3

RM013

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 10 Sep 2017 | Day 253 | | | | | --- | | | | |
| 22 51 00 | 0234+285 | 23 25 54 | 47.4 | 105.1 | -3.2 | | -41.5 | 54 | 908 | 22 51 00 | |
| 23 00 00 | --- | 23 34 55 | 48.7 | 107.3 | -3.1 | | -40.9 | 540 | 977 | 22 51 01 | |
| 23 01 00 | 0234+285 | 23 35 55 | 48.9 | 107.6 | -3.1 | | -40.8 | 54 | 977 | 23 01 00 | |
| 23 10 00 | --- | 23 44 57 | 50.1 | 109.9 | -2.9 | | -40.2 | 540 | 1046 | 23 01 01 | |
| 23 11 00 | 0234+285 | 23 45 57 | 50.3 | 110.1 | -2.9 | | -40.1 | 54 | 1046 | 23 11 00 | |
| 23 20 00 | --- | 23 54 58 | 51.5 | 112.6 | -2.7 | | -39.3 | 540 | 1115 | 23 11 01 | |
| 23 21 00 | 0234+285 | 23 55 59 | 51.7 | 112.8 | -2.7 | | -39.2 | 54 | 1115 | 23 21 00 | |
| 23 30 00 | --- | 00 05 00 | 52.9 | 115.4 | -2.6 | | -38.3 | 540 | 1185 | 23 21 01 | |
| 23 31 00 | 0234+285 | 00 06 00 | 53.1 | 115.6 | -2.5 | | -38.2 | 54 | 1185 | 23 31 00 | |
| 23 40 00 | --- | 00 15 02 | 54.3 | 118.3 | -2.4 | | -37.2 | 540 | 1254 | 23 31 01 | |
| 23 41 00 | 0234+285 | 00 16 02 | 54.4 | 118.6 | -2.4 | | -37.0 | 54 | 1254 | 23 41 00 | |
| 23 50 00 | --- | 00 25 03 | 55.6 | 121.3 | -2.2 | | -35.8 | 540 | 1323 | 23 41 01 | |
| 23 51 00 | 0234+285 | 00 26 04 | 55.7 | 121.7 | -2.2 | | -35.7 | 54 | 1323 | 23 51 00 | |
| 23 59 59 | --- | 00 35 05 | 56.8 | 124.6 | -2.1 | | -34.4 | 539 | 1392 | 23 51 01 | |
| ----- | | | | | | | | | | | |
| --- | Mon 11 Sep 2017 | Day 254 | | | | | --- | | | | |
| 00 01 00 | 0234+285 | 00 36 05 | 57.0 | 124.9 | -2.0 | | -34.2 | 53 | 1392 | 00 01 00 | |
| 00 10 00 | --- | 00 45 07 | 58.0 | 128.0 | -1.9 | | -32.7 | 540 | 1462 | 00 01 01 | |
| 00 11 00 | 0234+285 | 00 46 07 | 58.2 | 128.3 | -1.9 | | -32.5 | 53 | 1462 | 00 11 00 | |
| 00 20 00 | --- | 00 55 08 | 59.2 | 131.6 | -1.7 | | -30.9 | 540 | 1531 | 00 11 01 | |
| 00 21 00 | 0234+285 | 00 56 08 | 59.3 | 131.9 | -1.7 | | -30.7 | 53 | 1531 | 00 21 00 | |
| 00 30 00 | --- | 01 05 10 | 60.3 | 135.3 | -1.6 | | -28.8 | 540 | 1600 | 00 21 01 | |
| ----- | | | | | | | | | | | |
| ----- RM013 ----- | | | | | | | | | | | |
| 00 31 00 | 0234+285 | 01 06 10 | 60.4 | 135.7 | -1.5 | | -28.6 | 53 | 1600 | 00 31 00 | |
| 00 40 00 | --- | 01 15 12 | 61.3 | 139.3 | -1.4 | | -26.5 | 540 | 1669 | 00 31 01 | |
| 00 41 00 | 0234+285 | 01 16 12 | 61.4 | 139.7 | -1.4 | | -26.3 | 53 | 1669 | 00 41 00 | |
| 00 45 00 | --- | 01 20 12 | 61.8 | 141.4 | -1.3 | | -25.3 | 240 | 1700 | 00 41 01 | |
| 00 47 50 | J0529+3209 | 01 23 03 | 41.7 | 89.9 | -4.1 | | -45.2 | 52 | 1700 | 00 47 50 | |
| 00 49 50 | --- | 01 25 03 | 42.0 | 90.3 | -4.1 | | -45.2 | 120 | 1715 | 00 47 51 | |
| 00 49 50 | FRB | 01 25 03 | 42.3 | 88.9 | -4.1 | | -45.8 | -16 | 1715 | No stop | |
| 00 53 20 | --- | 01 28 34 | 42.8 | 89.6 | -4.1 | | -45.8 | 194 | 1742 | 00 49 51 | |
| 00 53 50 | J0529+3209 | 01 29 04 | 42.6 | 91.1 | -4.0 | | -45.2 | 14 | 1742 | 00 53 50 | |
| 00 54 50 | --- | 01 30 04 | 42.8 | 91.3 | -4.0 | | -45.2 | 60 | 1750 | 00 53 51 | |

Schedule for TORUN (Code Tr)

Page 4

RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 00 56 50 | J0346+5400 | 01 32 04 | 70.0 | 73.5 | -2.3 | | -78.9 | 4 | 1750 | 00 56 50 |
| 00 58 20 | =0342+538 | 01 33 35 | 70.2 | 73.6 | -2.2 | | -79.1 | 90 | 1762 | 00 56 51 |
| 00 58 20 | J0332+5434 | 01 33 35 | 72.3 | 72.9 | -2.0 | | -82.5 | -22 | 1762 | No stop |
| 01 01 50 | --- | 01 37 05 | 72.8 | 73.1 | -2.0 | | -83.0 | 188 | 1788 | 00 58 21 |
| 01 02 20 | J0346+5400 | 01 37 35 | 70.8 | 74.0 | -2.2 | | -79.6 | 9 | 1788 | 01 02 20 |
| 01 03 20 | =0342+538 | 01 38 35 | 70.9 | 74.1 | -2.2 | | -79.7 | 60 | 1796 | 01 02 21 |
| 01 05 20 | J0529+3209 | 01 40 36 | 44.3 | 93.5 | -3.8 | | -45.1 | 6 | 1796 | 01 05 20 |
| 01 06 20 | --- | 01 41 36 | 44.5 | 93.7 | -3.8 | | -45.1 | 60 | 1804 | 01 05 21 |
| 01 06 20 | FRB | 01 41 36 | 44.8 | 92.2 | -3.9 | | -45.8 | -16 | 1804 | No stop |
| 01 09 50 | --- | 01 45 06 | 45.3 | 92.9 | -3.8 | | -45.8 | 194 | 1831 | 01 06 21 |
| 01 09 50 | J0529+3209 | 01 45 06 | 45.0 | 94.5 | -3.8 | | -45.0 | -16 | 1831 | No stop |
| 01 11 20 | --- | 01 46 37 | 45.2 | 94.8 | -3.7 | | -45.0 | 74 | 1842 | 01 09 51 |
| 01 11 20 | FRB | 01 46 37 | 45.6 | 93.3 | -3.8 | | -45.7 | -16 | 1842 | No stop |
| 01 14 50 | --- | 01 50 07 | 46.1 | 94.0 | -3.7 | | -45.7 | 194 | 1869 | 01 11 21 |
| 01 15 30 | J0529+3209 | 01 50 47 | 45.9 | 95.7 | -3.7 | | -44.9 | 24 | 1869 | 01 15 30 |
| 01 16 30 | --- | 01 51 48 | 46.0 | 95.9 | -3.6 | | -44.9 | 60 | 1877 | 01 15 31 |
| 01 16 30 | FRB | 01 51 48 | 46.3 | 94.3 | -3.7 | | -45.7 | -16 | 1877 | No stop |
| 01 20 00 | --- | 01 55 18 | 46.9 | 95.1 | -3.6 | | -45.6 | 194 | 1904 | 01 16 31 |
| 01 20 00 | J0529+3209 | 01 55 18 | 46.5 | 96.7 | -3.6 | | -44.8 | -16 | 1904 | No stop |
| 01 21 30 | --- | 01 56 48 | 46.8 | 97.0 | -3.6 | | -44.8 | 74 | 1915 | 01 20 01 |
| 01 21 30 | INBEAM | 01 56 48 | 47.1 | 95.4 | -3.6 | | -45.6 | -16 | 1915 | No stop |
| 01 25 00 | --- | 02 00 19 | 47.6 | 96.2 | -3.5 | | -45.5 | 194 | 1942 | 01 21 31 |
| 01 25 40 | J0529+3209 | 02 00 59 | 47.4 | 97.9 | -3.5 | | -44.6 | 24 | 1942 | 01 25 40 |
| 01 26 40 | --- | 02 01 59 | 47.5 | 98.1 | -3.5 | | -44.6 | 60 | 1950 | 01 25 41 |
| 01 26 40 | FRB | 02 01 59 | 47.9 | 96.5 | -3.5 | | -45.4 | -16 | 1950 | No stop |
| 01 30 10 | --- | 02 05 30 | 48.4 | 97.3 | -3.5 | | -45.4 | 194 | 1977 | 01 26 41 |
| 01 30 10 | J0529+3209 | 02 05 30 | 48.1 | 98.9 | -3.4 | | -44.5 | -16 | 1977 | No stop |
| 01 31 40 | --- | 02 07 00 | 48.3 | 99.3 | -3.4 | | -44.4 | 74 | 1988 | 01 30 11 |
| 01 31 40 | FRB | 02 07 00 | 48.6 | 97.6 | -3.4 | | -45.3 | -16 | 1988 | No stop |
| 01 35 10 | --- | 02 10 31 | 49.1 | 98.4 | -3.4 | | -45.2 | 194 | 2015 | 01 31 41 |

Schedule for TORUN (Code Tr)
 RM013

Page 5

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 01 35 50 | J0529+3209 | 02 11 11 | 48.9 | 100.2 | -3.3 | | -44.3 | 23 | 2015 | 01 35 50 |
| 01 36 50 | --- | 02 12 11 | 49.0 | 100.4 | -3.3 | | -44.2 | 60 | 2023 | 01 35 51 |
| 01 36 50 | FRB | 02 12 11 | 49.4 | 98.8 | -3.3 | | -45.1 | -16 | 2023 | No stop |
| 01 40 20 | --- | 02 15 41 | 49.9 | 99.6 | -3.3 | | -45.0 | 194 | 2050 | 01 36 51 |
| 01 40 20 | J0529+3209 | 02 15 41 | 49.6 | 101.3 | -3.2 | | -44.1 | -17 | 2050 | No stop |
| 01 41 50 | --- | 02 17 12 | 49.8 | 101.6 | -3.2 | | -44.0 | 73 | 2062 | 01 40 21 |
| 01 41 50 | INBEAM | 02 17 12 | 50.1 | 100.0 | -3.3 | | -45.0 | -16 | 2062 | No stop |
| 01 45 20 | --- | 02 20 42 | 50.7 | 100.8 | -3.2 | | -44.8 | 194 | 2088 | 01 41 51 |
| 01 46 00 | J0529+3209 | 02 21 22 | 50.4 | 102.6 | -3.2 | | -43.8 | 23 | 2088 | 01 46 00 |
| 01 47 00 | --- | 02 22 23 | 50.5 | 102.9 | -3.1 | | -43.8 | 60 | 2096 | 01 46 01 |
| 01 47 00 | FRB | 02 22 23 | 50.9 | 101.2 | -3.2 | | -44.7 | -16 | 2096 | No stop |
| 01 50 30 | --- | 02 25 53 | 51.4 | 102.0 | -3.1 | | -44.6 | 194 | 2123 | 01 47 01 |
| 01 50 30 | J0529+3209 | 02 25 53 | 51.1 | 103.7 | -3.1 | | -43.6 | -17 | 2123 | No stop |
| 01 52 00 | --- | 02 27 23 | 51.3 | 104.1 | -3.1 | | -43.5 | 73 | 2135 | 01 50 31 |
| 01 52 00 | FRB | 02 27 23 | 51.6 | 102.4 | -3.1 | | -44.5 | -17 | 2135 | No stop |
| 01 55 30 | --- | 02 30 54 | 52.1 | 103.2 | -3.0 | | -44.3 | 193 | 2162 | 01 52 01 |
| 01 56 10 | J0529+3209 | 02 31 34 | 51.9 | 105.1 | -3.0 | | -43.2 | 23 | 2162 | 01 56 10 |
| 01 57 10 | --- | 02 32 34 | 52.0 | 105.4 | -3.0 | | -43.2 | 60 | 2169 | 01 56 11 |
| 01 57 10 | FRB | 02 32 34 | 52.4 | 103.6 | -3.0 | | -44.2 | -17 | 2169 | No stop |
| 02 00 40 | --- | 02 36 05 | 52.9 | 104.5 | -3.0 | | -44.0 | 193 | 2196 | 01 57 11 |
| 02 00 40 | J0529+3209 | 02 36 05 | 52.5 | 106.2 | -2.9 | | -42.9 | -17 | 2196 | No stop |
| 02 02 10 | --- | 02 37 35 | 52.7 | 106.6 | -2.9 | | -42.8 | 73 | 2208 | 02 00 41 |
| 02 02 10 | INBEAM | 02 37 35 | 53.1 | 104.9 | -2.9 | | -43.9 | -17 | 2208 | No stop |
| 02 05 40 | --- | 02 41 06 | 53.6 | 105.7 | -2.9 | | -43.7 | 193 | 2235 | 02 02 11 |
| 02 06 20 | J0529+3209 | 02 41 46 | 53.3 | 107.7 | -2.8 | | -42.5 | 23 | 2235 | 02 06 20 |
| 02 07 20 | --- | 02 42 46 | 53.5 | 108.0 | -2.8 | | -42.4 | 60 | 2242 | 02 06 21 |
| 02 07 20 | FRB | 02 42 46 | 53.8 | 106.2 | -2.8 | | -43.5 | -17 | 2242 | No stop |
| 02 10 50 | --- | 02 46 16 | 54.4 | 107.1 | -2.8 | | -43.3 | 193 | 2269 | 02 07 21 |
| 02 10 50 | J0529+3209 | 02 46 16 | 54.0 | 108.9 | -2.7 | | -42.2 | -17 | 2269 | No stop |
| 02 12 20 | --- | 02 47 47 | 54.2 | 109.3 | -2.7 | | -42.0 | 73 | 2281 | 02 10 51 |

Schedule for TORUN (Code Tr)

Page 6

RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 02 12 20 | FRB | 02 47 47 | 54.6 | 107.5 | -2.8 | | -43.2 | -17 | 2281 | No stop |
| 02 15 50 | --- | 02 51 17 | 55.1 | 108.4 | -2.7 | | -42.9 | 193 | 2308 | 02 12 21 |
| 02 16 30 | J0529+3209 | 02 51 57 | 54.8 | 110.4 | -2.6 | | -41.7 | 23 | 2308 | 02 16 30 |
| 02 17 30 | --- | 02 52 58 | 54.9 | 110.7 | -2.6 | | -41.6 | 60 | 2315 | 02 16 31 |
| 02 17 30 | FRB | 02 52 58 | 55.3 | 108.9 | -2.7 | | -42.7 | -17 | 2315 | No stop |
| 02 21 00 | --- | 02 56 28 | 55.8 | 109.8 | -2.6 | | -42.4 | 193 | 2342 | 02 17 31 |
| 02 21 00 | J0529+3209 | 02 56 28 | 55.4 | 111.7 | -2.6 | | -41.2 | -17 | 2342 | No stop |
| 02 22 30 | --- | 02 57 58 | 55.6 | 112.1 | -2.5 | | -41.1 | 73 | 2354 | 02 21 01 |
| 02 22 30 | INBEAM | 02 57 58 | 56.0 | 110.2 | -2.6 | | -42.3 | -17 | 2354 | No stop |
| 02 26 00 | --- | 03 01 29 | 56.5 | 111.2 | -2.5 | | -42.0 | 193 | 2381 | 02 22 31 |
| 02 26 40 | J0529+3209 | 03 02 09 | 56.2 | 113.3 | -2.5 | | -40.7 | 22 | 2381 | 02 26 40 |
| 02 27 40 | --- | 03 03 09 | 56.4 | 113.6 | -2.5 | | -40.6 | 60 | 2388 | 02 26 41 |
| 02 27 40 | FRB | 03 03 09 | 56.7 | 111.7 | -2.5 | | -41.8 | -17 | 2388 | No stop |
| 02 31 10 | --- | 03 06 40 | 57.2 | 112.7 | -2.4 | | -41.4 | 193 | 2415 | 02 27 41 |
| 02 31 10 | J0529+3209 | 03 06 40 | 56.8 | 114.6 | -2.4 | | -40.2 | -18 | 2415 | No stop |
| 02 32 40 | --- | 03 08 10 | 57.0 | 115.1 | -2.4 | | -40.0 | 72 | 2427 | 02 31 11 |
| 02 32 40 | FRB | 03 08 10 | 57.4 | 113.1 | -2.4 | | -41.3 | -17 | 2427 | No stop |
| 02 36 10 | --- | 03 11 41 | 57.9 | 114.2 | -2.4 | | -40.9 | 193 | 2454 | 02 32 41 |
| 02 36 50 | J0529+3209 | 03 12 21 | 57.6 | 116.3 | -2.3 | | -39.5 | 22 | 2454 | 02 36 50 |
| 02 37 50 | --- | 03 13 21 | 57.7 | 116.6 | -2.3 | | -39.4 | 60 | 2462 | 02 36 51 |
| 02 37 50 | FRB | 03 13 21 | 58.1 | 114.7 | -2.3 | | -40.7 | -17 | 2462 | No stop |
| 02 41 20 | --- | 03 16 51 | 58.6 | 115.7 | -2.3 | | -40.2 | 193 | 2488 | 02 37 51 |
| 02 41 20 | J0529+3209 | 03 16 51 | 58.2 | 117.7 | -2.2 | | -38.9 | -18 | 2488 | No stop |
| 02 42 50 | --- | 03 18 22 | 58.4 | 118.2 | -2.2 | | -38.7 | 72 | 2500 | 02 41 21 |
| 02 42 50 | INBEAM | 03 18 22 | 58.9 | 116.2 | -2.2 | | -40.1 | -17 | 2500 | No stop |
| 02 46 20 | --- | 03 21 52 | 59.3 | 117.3 | -2.2 | | -39.6 | 193 | 2527 | 02 42 51 |
| 02 47 00 | J0529+3209 | 03 22 32 | 59.0 | 119.5 | -2.1 | | -38.1 | 22 | 2527 | 02 47 00 |
| 02 48 00 | --- | 03 23 33 | 59.1 | 119.8 | -2.1 | | -38.0 | 60 | 2535 | 02 47 01 |
| 02 48 00 | FRB | 03 23 33 | 59.5 | 117.8 | -2.2 | | -39.4 | -17 | 2535 | No stop |
| 02 51 30 | --- | 03 27 03 | 60.0 | 119.0 | -2.1 | | -38.9 | 193 | 2562 | 02 48 01 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 02 51 30 | J0529+3209 | 03 27 03 | 59.5 | 121.0 | -2.1 | | -37.5 | -18 | 2562 | No stop |
| 02 53 00 | --- | 03 28 33 | 59.7 | 121.5 | -2.0 | | -37.2 | 72 | 2573 | 02 51 31 |
| 02 53 00 | FRB | 03 28 33 | 60.2 | 119.5 | -2.1 | | -38.6 | -18 | 2573 | No stop |
| 02 56 30 | --- | 03 32 04 | 60.6 | 120.6 | -2.0 | | -38.1 | 192 | 2600 | 02 53 01 |
| 02 57 10 | J0529+3209 | 03 32 44 | 60.3 | 122.9 | -2.0 | | -36.6 | 22 | 2600 | 02 57 10 |
| 02 58 10 | --- | 03 33 44 | 60.4 | 123.3 | -1.9 | | -36.4 | 60 | 2608 | 02 57 11 |
| 02 58 10 | FRB | 03 33 44 | 60.9 | 121.2 | -2.0 | | -37.9 | -18 | 2608 | No stop |
| 03 01 40 | --- | 03 37 15 | 61.3 | 122.4 | -1.9 | | -37.3 | 192 | 2635 | 02 58 11 |
| 03 01 40 | J0529+3209 | 03 37 15 | 60.8 | 124.5 | -1.9 | | -35.8 | -18 | 2635 | No stop |
| 03 03 10 | --- | 03 38 45 | 61.0 | 125.0 | -1.9 | | -35.5 | 72 | 2646 | 03 01 41 |
| 03 03 10 | INBEAM | 03 38 45 | 61.5 | 122.9 | -1.9 | | -37.0 | -18 | 2646 | No stop |
| 03 06 40 | --- | 03 42 16 | 62.0 | 124.2 | -1.8 | | -36.4 | 192 | 2673 | 03 03 11 |
| 03 07 20 | J0529+3209 | 03 42 56 | 61.5 | 126.5 | -1.8 | | -34.8 | 22 | 2673 | 03 07 20 |
| 03 08 20 | --- | 03 43 56 | 61.6 | 126.9 | -1.8 | | -34.6 | 60 | 2681 | 03 07 21 |
| 03 08 20 | FRB | 03 43 56 | 62.1 | 124.8 | -1.8 | | -36.1 | -18 | 2681 | No stop |
| 03 11 50 | --- | 03 47 27 | 62.6 | 126.0 | -1.8 | | -35.4 | 192 | 2708 | 03 08 21 |
| 03 11 50 | J0529+3209 | 03 47 27 | 62.1 | 128.2 | -1.7 | | -33.9 | -18 | 2708 | No stop |
| 03 13 20 | --- | 03 48 57 | 62.2 | 128.8 | -1.7 | | -33.6 | 72 | 2719 | 03 11 51 |
| 03 13 20 | FRB | 03 48 57 | 62.7 | 126.6 | -1.7 | | -35.2 | -18 | 2719 | No stop |
| 03 16 50 | --- | 03 52 27 | 63.2 | 127.9 | -1.7 | | -34.5 | 192 | 2746 | 03 13 21 |
| 03 17 30 | J0529+3209 | 03 53 07 | 62.7 | 130.4 | -1.6 | | -32.7 | 22 | 2746 | 03 17 30 |
| 03 18 30 | --- | 03 54 08 | 62.8 | 130.7 | -1.6 | | -32.5 | 60 | 2754 | 03 17 31 |
| 03 18 30 | FRB | 03 54 08 | 63.4 | 128.6 | -1.6 | | -34.1 | -18 | 2754 | No stop |
| 03 22 00 | --- | 03 57 38 | 63.8 | 129.9 | -1.6 | | -33.4 | 192 | 2781 | 03 18 31 |
| 03 22 00 | J0529+3209 | 03 57 38 | 63.2 | 132.1 | -1.5 | | -31.7 | -18 | 2781 | No stop |
| 03 23 30 | --- | 03 59 08 | 63.4 | 132.7 | -1.5 | | -31.4 | 72 | 2792 | 03 22 01 |
| 03 23 30 | INBEAM | 03 59 08 | 64.0 | 130.5 | -1.6 | | -33.0 | -18 | 2792 | No stop |
| 03 27 00 | --- | 04 02 39 | 64.4 | 132.0 | -1.5 | | -32.2 | 192 | 2819 | 03 23 31 |
| 03 27 40 | J0529+3209 | 04 03 19 | 63.8 | 134.4 | -1.5 | | -30.4 | 21 | 2819 | 03 27 40 |
| 03 28 40 | --- | 04 04 19 | 64.0 | 134.9 | -1.4 | | -30.2 | 60 | 2827 | 03 27 41 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 03 28 40 | FRB | 04 04 19 | 64.5 | 132.6 | -1.5 | | -31.8 | -18 | 2827 | No stop |
| 03 32 10 | --- | 04 07 50 | 64.9 | 134.1 | -1.4 | | -31.0 | 192 | 2854 | 03 28 41 |
| 03 32 10 | J0529+3209 | 04 07 50 | 64.3 | 136.3 | -1.4 | | -29.3 | -19 | 2854 | No stop |
| 03 33 40 | --- | 04 09 20 | 64.5 | 137.0 | -1.4 | | -28.9 | 71 | 2865 | 03 32 11 |
| 03 33 40 | FRB | 04 09 20 | 65.1 | 134.8 | -1.4 | | -30.6 | -18 | 2865 | No stop |
| 03 37 10 | --- | 04 12 51 | 65.4 | 136.3 | -1.3 | | -29.7 | 192 | 2892 | 03 33 41 |
| 03 37 50 | J0529+3209 | 04 13 31 | 64.9 | 138.8 | -1.3 | | -27.9 | 21 | 2892 | 03 37 50 |
| 03 38 50 | --- | 04 14 31 | 65.0 | 139.2 | -1.3 | | -27.6 | 60 | 2900 | 03 37 51 |
| 03 38 50 | FRB | 04 14 31 | 65.6 | 137.0 | -1.3 | | -29.3 | -18 | 2900 | No stop |
| 03 42 20 | --- | 04 18 02 | 66.0 | 138.6 | -1.3 | | -28.3 | 192 | 2927 | 03 38 51 |
| 03 42 20 | J0529+3209 | 04 18 02 | 65.3 | 140.8 | -1.2 | | -26.6 | -19 | 2927 | No stop |
| 03 43 50 | --- | 04 19 32 | 65.5 | 141.5 | -1.2 | | -26.2 | 71 | 2938 | 03 42 21 |
| 03 43 50 | INBEAM | 04 19 32 | 66.1 | 139.3 | -1.2 | | -27.9 | -18 | 2938 | No stop |
| 03 47 20 | --- | 04 23 02 | 66.5 | 140.9 | -1.2 | | -26.9 | 192 | 2965 | 03 43 51 |
| 03 48 00 | J0529+3209 | 04 23 42 | 65.9 | 143.4 | -1.1 | | -25.0 | 21 | 2965 | 03 48 00 |
| 03 49 00 | --- | 04 24 43 | 66.0 | 143.9 | -1.1 | | -24.7 | 60 | 2973 | 03 48 01 |
| 03 49 00 | FRB | 04 24 43 | 66.6 | 141.7 | -1.1 | | -26.4 | -18 | 2973 | No stop |
| 03 52 30 | --- | 04 28 13 | 66.9 | 143.3 | -1.1 | | -25.4 | 192 | 3000 | 03 49 01 |
| 03 52 30 | J0529+3209 | 04 28 13 | 66.3 | 145.6 | -1.0 | | -23.6 | -19 | 3000 | No stop |
| 03 54 00 | --- | 04 29 43 | 66.4 | 146.3 | -1.0 | | -23.2 | 71 | 3012 | 03 52 31 |
| 03 54 00 | FRB | 04 29 43 | 67.1 | 144.1 | -1.1 | | -24.9 | -18 | 3012 | No stop |
| 03 57 30 | --- | 04 33 14 | 67.4 | 145.8 | -1.0 | | -23.8 | 192 | 3038 | 03 54 01 |
| 03 58 10 | J0529+3209 | 04 33 54 | 66.7 | 148.4 | -0.9 | | -21.8 | 21 | 3038 | 03 58 10 |
| 03 59 10 | --- | 04 34 54 | 66.8 | 148.9 | -0.9 | | -21.5 | 60 | 3046 | 03 58 11 |
| 03 59 10 | FRB | 04 34 54 | 67.5 | 146.6 | -1.0 | | -23.2 | -18 | 3046 | No stop |
| 04 02 40 | --- | 04 38 25 | 67.8 | 148.4 | -0.9 | | -22.1 | 192 | 3073 | 03 59 11 |
| 04 02 40 | J0529+3209 | 04 38 25 | 67.1 | 150.6 | -0.9 | | -20.4 | -19 | 3073 | No stop |
| 04 04 10 | --- | 04 39 55 | 67.2 | 151.4 | -0.8 | | -19.9 | 71 | 3085 | 04 02 41 |
| 04 04 10 | INBEAM | 04 39 55 | 67.9 | 149.2 | -0.9 | | -21.5 | -18 | 3085 | No stop |
| 04 07 40 | --- | 04 43 26 | 68.2 | 151.0 | -0.8 | | -20.3 | 192 | 3112 | 04 04 11 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 04 08 20 | J0529+3209 | 04 44 06 | 67.5 | 153.6 | -0.8 | | -18.4 | 21 | 3112 | 04 08 20 |
| 04 09 20 | --- | 04 45 06 | 67.5 | 154.1 | -0.8 | | -18.1 | 60 | 3119 | 04 08 21 |
| 04 09 20 | FRB | 04 45 06 | 68.3 | 151.9 | -0.8 | | -19.7 | -18 | 3119 | No stop |
| 04 12 50 | --- | 04 48 37 | 68.5 | 153.8 | -0.7 | | -18.5 | 192 | 3146 | 04 09 21 |
| 04 12 50 | J0529+3209 | 04 48 37 | 67.8 | 156.0 | -0.7 | | -16.8 | -18 | 3146 | No stop |
| 04 14 20 | --- | 04 50 07 | 67.8 | 156.8 | -0.7 | | -16.3 | 72 | 3158 | 04 12 51 |
| 04 14 20 | FRB | 04 50 07 | 68.6 | 154.6 | -0.7 | | -17.9 | -18 | 3158 | No stop |
| 04 17 50 | --- | 04 53 37 | 68.8 | 156.6 | -0.7 | | -16.6 | 192 | 3185 | 04 14 21 |
| 04 18 30 | J0529+3209 | 04 54 17 | 68.1 | 159.0 | -0.6 | | -14.7 | 22 | 3185 | 04 18 30 |
| 04 19 30 | --- | 04 55 18 | 68.1 | 159.6 | -0.6 | | -14.3 | 60 | 3192 | 04 18 31 |
| 04 19 30 | FRB | 04 55 18 | 68.9 | 157.5 | -0.6 | | -15.9 | -18 | 3192 | No stop |
| 04 23 00 | --- | 04 58 48 | 69.1 | 159.5 | -0.6 | | -14.6 | 192 | 3219 | 04 19 31 |
| 04 23 00 | J0529+3209 | 04 58 48 | 68.3 | 161.5 | -0.5 | | -13.0 | -18 | 3219 | No stop |
| 04 24 30 | --- | 05 00 18 | 68.4 | 162.4 | -0.5 | | -12.4 | 72 | 3231 | 04 23 01 |
| 04 24 30 | INBEAM | 05 00 18 | 69.2 | 160.4 | -0.5 | | -14.0 | -17 | 3231 | No stop |
| 04 28 00 | --- | 05 03 49 | 69.4 | 162.4 | -0.5 | | -12.5 | 193 | 3258 | 04 24 31 |
| 04 28 40 | J0529+3209 | 05 04 29 | 68.6 | 164.7 | -0.4 | | -10.8 | 22 | 3258 | 04 28 40 |
| 04 29 40 | --- | 05 05 29 | 68.6 | 165.3 | -0.4 | | -10.4 | 60 | 3265 | 04 28 41 |
| 04 31 40 | 0234+285 | 05 07 30 | 53.6 | 243.1 | 2.5 | | 37.7 | -51 | 3265 | 04 31 40 |
| 04 34 40 | --- | 05 10 30 | 53.2 | 244.0 | 2.5 | | 38.0 | 129 | 3288 | 04 31 41 |
| 04 37 30 | J0529+3209 | 05 13 21 | 68.8 | 169.8 | -0.3 | | -7.2 | 6 | 3288 | 04 37 30 |
| 04 39 30 | --- | 05 15 21 | 68.9 | 171.0 | -0.3 | | -6.4 | 120 | 3304 | 04 37 31 |
| 04 39 30 | FRB | 05 15 21 | 69.8 | 169.2 | -0.3 | | -7.7 | -17 | 3304 | No stop |
| 04 43 00 | --- | 05 18 51 | 69.9 | 171.3 | -0.2 | | -6.2 | 193 | 3331 | 04 39 31 |
| 04 43 00 | J0529+3209 | 05 18 51 | 69.0 | 173.1 | -0.2 | | -4.9 | -17 | 3331 | No stop |
| 04 44 30 | --- | 05 20 22 | 69.0 | 173.9 | -0.2 | | -4.3 | 73 | 3342 | 04 43 01 |
| 04 44 30 | FRB | 05 20 22 | 69.9 | 172.2 | -0.2 | | -5.6 | -16 | 3342 | No stop |
| 04 48 00 | --- | 05 23 52 | 70.0 | 174.3 | -0.2 | | -4.1 | 194 | 3369 | 04 44 31 |
| 04 48 40 | J0529+3209 | 05 24 32 | 69.0 | 176.4 | -0.1 | | -2.5 | 23 | 3369 | 04 48 40 |
| 04 49 40 | --- | 05 25 33 | 69.1 | 177.0 | -0.1 | | -2.1 | 60 | 3377 | 04 48 41 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 04 49 40 | FRB | 05 25 33 | 70.0 | 175.4 | -0.1 | | -3.3 | -16 | 3377 | No stop |
| 04 53 10 | --- | 05 29 03 | 70.0 | 177.5 | -0.1 | | -1.8 | 194 | 3404 | 04 49 41 |
| 04 53 10 | J0529+3209 | 05 29 03 | 69.1 | 179.1 | -0.0 | | -0.7 | -17 | 3404 | No stop |
| 04 54 40 | --- | 05 30 33 | 69.1 | 180.0 | -0.0 | | -0.0 | 73 | 3415 | 04 53 11 |
| 04 54 40 | INBEAM | 05 30 33 | 70.1 | 178.5 | -0.0 | | -1.1 | -17 | 3415 | No stop |
| 04 58 10 | --- | 05 34 04 | 70.1 | 180.6 | 0.0 | | 0.4 | 193 | 3442 | 04 54 41 |
| 04 58 50 | J0529+3209 | 05 34 44 | 69.1 | 182.4 | 0.1 | | 1.7 | 23 | 3442 | 04 58 50 |
| 04 59 50 | --- | 05 35 44 | 69.1 | 183.0 | 0.1 | | 2.2 | 60 | 3450 | 04 58 51 |
| 04 59 50 | FRB | 05 35 44 | 70.1 | 181.6 | 0.0 | | 1.1 | -17 | 3450 | No stop |
| 05 03 20 | --- | 05 39 15 | 70.0 | 183.8 | 0.1 | | 2.7 | 193 | 3477 | 04 59 51 |
| 05 03 20 | J0529+3209 | 05 39 15 | 69.0 | 185.1 | 0.1 | | 3.6 | -17 | 3477 | No stop |
| 05 04 50 | --- | 05 40 45 | 69.0 | 186.0 | 0.2 | | 4.3 | 73 | 3488 | 05 03 21 |
| 05 04 50 | FRB | 05 40 45 | 70.0 | 184.7 | 0.1 | | 3.4 | -17 | 3488 | No stop |
| 05 08 20 | --- | 05 44 16 | 70.0 | 186.8 | 0.2 | | 4.9 | 193 | 3515 | 05 04 51 |
| 05 09 00 | J0529+3209 | 05 44 56 | 68.9 | 188.5 | 0.2 | | 6.0 | 23 | 3515 | 05 09 00 |
| 05 10 00 | --- | 05 45 56 | 68.9 | 189.0 | 0.3 | | 6.4 | 60 | 3523 | 05 09 01 |
| 05 10 00 | FRB | 05 45 56 | 69.9 | 187.8 | 0.2 | | 5.6 | -17 | 3523 | No stop |
| 05 13 30 | --- | 05 49 26 | 69.8 | 190.0 | 0.3 | | 7.1 | 193 | 3550 | 05 10 01 |
| 05 13 30 | J0529+3209 | 05 49 26 | 68.8 | 191.1 | 0.3 | | 7.8 | -17 | 3550 | No stop |
| 05 15 00 | --- | 05 50 57 | 68.8 | 191.9 | 0.3 | | 8.4 | 73 | 3562 | 05 13 31 |
| 05 15 00 | INBEAM | 05 50 57 | 69.8 | 190.9 | 0.3 | | 7.8 | -17 | 3562 | No stop |
| 05 18 30 | --- | 05 54 27 | 69.7 | 193.0 | 0.4 | | 9.3 | 193 | 3588 | 05 15 01 |
| 05 19 10 | J0529+3209 | 05 55 07 | 68.6 | 194.4 | 0.4 | | 10.1 | 23 | 3588 | 05 19 10 |
| 05 20 10 | --- | 05 56 08 | 68.6 | 194.9 | 0.4 | | 10.5 | 60 | 3596 | 05 19 11 |
| 05 20 10 | FRB | 05 56 08 | 69.6 | 194.0 | 0.4 | | 10.0 | -17 | 3596 | No stop |
| 05 23 40 | --- | 05 59 38 | 69.5 | 196.0 | 0.4 | | 11.4 | 193 | 3623 | 05 20 11 |
| 05 23 40 | J0529+3209 | 05 59 38 | 68.4 | 196.9 | 0.5 | | 11.9 | -17 | 3623 | No stop |
| 05 25 10 | --- | 06 01 08 | 68.4 | 197.8 | 0.5 | | 12.5 | 73 | 3635 | 05 23 41 |
| 05 25 10 | FRB | 06 01 08 | 69.4 | 196.9 | 0.5 | | 12.0 | -17 | 3635 | No stop |
| 05 28 40 | --- | 06 04 39 | 69.3 | 198.9 | 0.5 | | 13.5 | 193 | 3662 | 05 25 11 |

Schedule for TORUN (Code Tr)

Page 11

RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 05 29 20 | J0529+3209 | 06 05 19 | 68.2 | 200.1 | 0.6 | | 14.1 | 23 | 3662 | 05 29 20 |
| 05 30 20 | --- | 06 06 19 | 68.1 | 200.6 | 0.6 | | 14.5 | 60 | 3669 | 05 29 21 |
| 05 30 20 | FRB | 06 06 19 | 69.2 | 199.9 | 0.6 | | 14.1 | -17 | 3669 | No stop |
| 05 33 50 | --- | 06 09 50 | 69.0 | 201.9 | 0.6 | | 15.5 | 193 | 3696 | 05 30 21 |
| 05 33 50 | J0529+3209 | 06 09 50 | 67.9 | 202.5 | 0.7 | | 15.8 | -17 | 3696 | No stop |
| 05 35 20 | --- | 06 11 20 | 67.8 | 203.4 | 0.7 | | 16.3 | 73 | 3708 | 05 33 51 |
| 05 35 20 | INBEAM | 06 11 20 | 68.9 | 202.8 | 0.6 | | 16.1 | -17 | 3708 | No stop |
| 05 38 50 | --- | 06 14 51 | 68.7 | 204.7 | 0.7 | | 17.5 | 193 | 3735 | 05 35 21 |
| 05 39 30 | J0529+3209 | 06 15 31 | 67.6 | 205.6 | 0.7 | | 17.8 | 23 | 3735 | 05 39 30 |
| 05 40 30 | --- | 06 16 31 | 67.5 | 206.1 | 0.8 | | 18.2 | 60 | 3742 | 05 39 31 |
| 05 40 30 | FRB | 06 16 31 | 68.6 | 205.6 | 0.7 | | 18.0 | -17 | 3742 | No stop |
| 05 44 00 | --- | 06 20 02 | 68.4 | 207.5 | 0.8 | | 19.3 | 193 | 3769 | 05 40 31 |
| 05 44 00 | J0529+3209 | 06 20 02 | 67.3 | 207.9 | 0.8 | | 19.4 | -17 | 3769 | No stop |
| 05 45 30 | --- | 06 21 32 | 67.2 | 208.7 | 0.8 | | 19.9 | 73 | 3781 | 05 44 01 |
| 05 45 30 | FRB | 06 21 32 | 68.3 | 208.3 | 0.8 | | 19.9 | -17 | 3781 | No stop |
| 05 49 00 | --- | 06 25 02 | 68.0 | 210.1 | 0.9 | | 21.1 | 193 | 3808 | 05 45 31 |
| 05 49 40 | J0529+3209 | 06 25 42 | 66.8 | 210.8 | 0.9 | | 21.3 | 23 | 3808 | 05 49 40 |
| 05 50 40 | --- | 06 26 43 | 66.8 | 211.3 | 0.9 | | 21.6 | 60 | 3815 | 05 49 41 |
| 05 50 40 | FRB | 06 26 43 | 67.9 | 211.0 | 0.9 | | 21.7 | -17 | 3815 | No stop |
| 05 54 10 | --- | 06 30 13 | 67.6 | 212.8 | 1.0 | | 22.9 | 193 | 3842 | 05 50 41 |
| 05 54 10 | J0529+3209 | 06 30 13 | 66.5 | 213.1 | 1.0 | | 22.8 | -17 | 3842 | No stop |
| 05 55 40 | --- | 06 31 43 | 66.4 | 213.8 | 1.0 | | 23.2 | 73 | 3854 | 05 54 11 |
| 05 55 40 | INBEAM | 06 31 43 | 67.5 | 213.6 | 1.0 | | 23.4 | -17 | 3854 | No stop |
| 05 59 10 | --- | 06 35 14 | 67.2 | 215.4 | 1.0 | | 24.5 | 193 | 3881 | 05 55 41 |
| 05 59 50 | J0529+3209 | 06 35 54 | 66.0 | 215.8 | 1.1 | | 24.5 | 23 | 3881 | 05 59 50 |
| 06 00 50 | --- | 06 36 54 | 65.9 | 216.3 | 1.1 | | 24.8 | 60 | 3888 | 05 59 51 |
| 06 00 50 | FRB | 06 36 54 | 67.0 | 216.1 | 1.1 | | 25.0 | -17 | 3888 | No stop |
| 06 04 20 | --- | 06 40 25 | 66.7 | 217.8 | 1.1 | | 26.1 | 193 | 3915 | 06 00 51 |
| 06 04 20 | J0529+3209 | 06 40 25 | 65.6 | 217.9 | 1.2 | | 25.8 | -17 | 3915 | No stop |
| 06 05 50 | --- | 06 41 55 | 65.5 | 218.6 | 1.2 | | 26.3 | 73 | 3927 | 06 04 21 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 06 05 50 | FRB | 06 41 55 | 66.6 | 218.5 | 1.1 | | 26.5 | -17 | 3927 | No stop |
| 06 09 20 | --- | 06 45 26 | 66.2 | 220.1 | 1.2 | | 27.5 | 193 | 3954 | 06 05 51 |
| 06 10 00 | J0529+3209 | 06 46 06 | 65.1 | 220.5 | 1.3 | | 27.4 | 23 | 3954 | 06 10 00 |
| 06 11 00 | --- | 06 47 06 | 65.0 | 220.9 | 1.3 | | 27.7 | 60 | 3962 | 06 10 01 |
| 06 11 00 | FRB | 06 47 06 | 66.1 | 220.9 | 1.2 | | 28.0 | -17 | 3962 | No stop |
| 06 14 30 | --- | 06 50 37 | 65.7 | 222.5 | 1.3 | | 29.0 | 193 | 3988 | 06 11 01 |
| 06 14 30 | J0529+3209 | 06 50 37 | 64.6 | 222.5 | 1.3 | | 28.6 | -17 | 3988 | No stop |
| 06 16 00 | --- | 06 52 07 | 64.5 | 223.1 | 1.4 | | 29.0 | 73 | 4000 | 06 14 31 |
| 06 16 00 | INBEAM | 06 52 07 | 65.6 | 223.2 | 1.3 | | 29.4 | -17 | 4000 | No stop |
| 06 19 30 | --- | 06 55 37 | 65.2 | 224.8 | 1.4 | | 30.3 | 193 | 4027 | 06 16 01 |
| 06 20 10 | J0529+3209 | 06 56 17 | 64.0 | 224.9 | 1.4 | | 30.0 | 23 | 4027 | 06 20 10 |
| 06 21 10 | --- | 06 57 18 | 63.9 | 225.3 | 1.4 | | 30.3 | 60 | 4035 | 06 20 11 |
| 06 21 10 | FRB | 06 57 18 | 65.0 | 225.4 | 1.4 | | 30.7 | -17 | 4035 | No stop |
| 06 24 40 | --- | 07 00 48 | 64.7 | 226.9 | 1.5 | | 31.6 | 193 | 4062 | 06 21 11 |
| 06 24 40 | J0529+3209 | 07 00 48 | 63.5 | 226.7 | 1.5 | | 31.1 | -17 | 4062 | No stop |
| 06 26 10 | --- | 07 02 18 | 63.4 | 227.4 | 1.5 | | 31.5 | 73 | 4073 | 06 24 41 |
| 06 26 10 | FRB | 07 02 18 | 64.5 | 227.5 | 1.5 | | 31.9 | -17 | 4073 | No stop |
| 06 29 40 | --- | 07 05 49 | 64.1 | 228.9 | 1.5 | | 32.7 | 193 | 4100 | 06 26 11 |
| 06 30 20 | J0529+3209 | 07 06 29 | 62.9 | 229.0 | 1.6 | | 32.4 | 23 | 4100 | 06 30 20 |
| 06 31 20 | --- | 07 07 29 | 62.8 | 229.4 | 1.6 | | 32.6 | 60 | 4108 | 06 30 21 |
| 06 31 20 | FRB | 07 07 29 | 63.9 | 229.6 | 1.6 | | 33.1 | -17 | 4108 | No stop |
| 06 34 50 | --- | 07 11 00 | 63.5 | 231.0 | 1.6 | | 33.9 | 193 | 4135 | 06 31 21 |
| 06 34 50 | J0529+3209 | 07 11 00 | 62.4 | 230.8 | 1.7 | | 33.3 | -17 | 4135 | No stop |
| 06 36 20 | --- | 07 12 30 | 62.2 | 231.3 | 1.7 | | 33.6 | 73 | 4146 | 06 34 51 |
| 06 36 20 | INBEAM | 07 12 30 | 63.3 | 231.6 | 1.7 | | 34.2 | -17 | 4146 | No stop |
| 06 39 50 | --- | 07 16 01 | 62.9 | 233.0 | 1.7 | | 34.9 | 193 | 4173 | 06 36 21 |
| 06 40 30 | J0529+3209 | 07 16 41 | 61.7 | 232.9 | 1.8 | | 34.5 | 23 | 4173 | 06 40 30 |
| 06 41 30 | --- | 07 17 41 | 61.6 | 233.3 | 1.8 | | 34.6 | 60 | 4181 | 06 40 31 |
| 06 41 30 | FRB | 07 17 41 | 62.7 | 233.5 | 1.7 | | 35.2 | -17 | 4181 | No stop |
| 06 45 00 | --- | 07 21 12 | 62.3 | 234.8 | 1.8 | | 35.9 | 193 | 4208 | 06 41 31 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 06 45 00 | J0529+3209 | 07 21 12 | 61.2 | 234.5 | 1.8 | | 35.3 | -17 | 4208 | No stop |
| 06 46 30 | --- | 07 22 42 | 61.0 | 235.1 | 1.9 | | 35.6 | 73 | 4219 | 06 45 01 |
| 06 46 30 | FRB | 07 22 42 | 62.1 | 235.4 | 1.8 | | 36.2 | -17 | 4219 | No stop |
| 06 50 00 | --- | 07 26 12 | 61.7 | 236.6 | 1.9 | | 36.8 | 193 | 4246 | 06 46 31 |
| 06 50 40 | J0529+3209 | 07 26 52 | 60.5 | 236.5 | 1.9 | | 36.3 | 23 | 4246 | 06 50 40 |
| 06 51 40 | --- | 07 27 53 | 60.3 | 236.9 | 2.0 | | 36.5 | 60 | 4254 | 06 50 41 |
| 06 51 40 | FRB | 07 27 53 | 61.4 | 237.2 | 1.9 | | 37.1 | -17 | 4254 | No stop |
| 06 55 10 | --- | 07 31 23 | 61.0 | 238.4 | 2.0 | | 37.7 | 193 | 4281 | 06 51 41 |
| 06 55 10 | J0529+3209 | 07 31 23 | 59.9 | 238.1 | 2.0 | | 37.0 | -17 | 4281 | No stop |
| 06 56 40 | --- | 07 32 53 | 59.7 | 238.6 | 2.0 | | 37.3 | 73 | 4292 | 06 55 11 |
| 06 56 40 | INBEAM | 07 32 53 | 60.8 | 239.0 | 2.0 | | 37.9 | -17 | 4292 | No stop |
| 07 00 10 | --- | 07 36 24 | 60.4 | 240.2 | 2.1 | | 38.5 | 193 | 4319 | 06 56 41 |
| 07 00 50 | J0529+3209 | 07 37 04 | 59.2 | 240.0 | 2.1 | | 37.9 | 23 | 4319 | 07 00 50 |
| 07 01 50 | --- | 07 38 04 | 59.0 | 240.3 | 2.1 | | 38.0 | 60 | 4327 | 07 00 51 |
| 07 01 50 | FRB | 07 38 04 | 60.1 | 240.7 | 2.1 | | 38.7 | -17 | 4327 | No stop |
| 07 05 20 | --- | 07 41 35 | 59.7 | 241.8 | 2.1 | | 39.2 | 193 | 4354 | 07 01 51 |
| 07 05 20 | J0529+3209 | 07 41 35 | 58.6 | 241.4 | 2.2 | | 38.5 | -17 | 4354 | No stop |
| 07 06 50 | --- | 07 43 05 | 58.4 | 241.9 | 2.2 | | 38.7 | 73 | 4365 | 07 05 21 |
| 07 06 50 | FRB | 07 43 05 | 59.5 | 242.3 | 2.2 | | 39.4 | -17 | 4365 | No stop |
| 07 10 20 | --- | 07 46 36 | 59.0 | 243.4 | 2.2 | | 39.9 | 193 | 4392 | 07 06 51 |
| 07 11 00 | J0529+3209 | 07 47 16 | 57.8 | 243.2 | 2.3 | | 39.3 | 23 | 4392 | 07 11 00 |
| 07 12 00 | --- | 07 48 16 | 57.7 | 243.5 | 2.3 | | 39.4 | 60 | 4400 | 07 11 01 |
| 07 12 00 | FRB | 07 48 16 | 58.8 | 243.9 | 2.3 | | 40.1 | -17 | 4400 | No stop |
| 07 15 30 | --- | 07 51 47 | 58.3 | 245.0 | 2.3 | | 40.5 | 193 | 4427 | 07 12 01 |
| 07 15 30 | J0529+3209 | 07 51 47 | 57.2 | 244.6 | 2.4 | | 39.8 | -17 | 4427 | No stop |
| 07 17 00 | --- | 07 53 17 | 57.0 | 245.0 | 2.4 | | 40.0 | 73 | 4438 | 07 15 31 |
| 07 17 00 | INBEAM | 07 53 17 | 58.1 | 245.5 | 2.3 | | 40.8 | -17 | 4438 | No stop |
| 07 20 30 | --- | 07 56 47 | 57.6 | 246.5 | 2.4 | | 41.2 | 193 | 4465 | 07 17 01 |
| 07 21 10 | J0529+3209 | 07 57 27 | 56.4 | 246.2 | 2.4 | | 40.5 | 23 | 4465 | 07 21 10 |
| 07 22 10 | --- | 07 58 28 | 56.3 | 246.5 | 2.5 | | 40.6 | 60 | 4473 | 07 21 11 |

Schedule for TORUN (Code Tr)

Page 14

RM013

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 |
| ----- | | | | | | | | | | |
| --- Mon 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 07 22 10 | FRB | 07 58 28 | 57.4 | 247.0 | 2.4 | | 41.3 | -17 | 4473 | No stop |
| 07 25 40 | --- | 08 01 58 | 56.9 | 248.0 | 2.5 | | 41.7 | 193 | 4500 | 07 22 11 |
| 07 25 40 | J0529+3209 | 08 01 58 | 55.8 | 247.5 | 2.5 | | 41.0 | -17 | 4500 | No stop |
| 07 27 10 | --- | 08 03 28 | 55.6 | 248.0 | 2.5 | | 41.1 | 73 | 4512 | 07 25 41 |
| 07 27 10 | FRB | 08 03 28 | 56.7 | 248.4 | 2.5 | | 41.8 | -17 | 4512 | No stop |
| 07 30 40 | --- | 08 06 59 | 56.2 | 249.4 | 2.6 | | 42.2 | 193 | 4538 | 07 27 11 |
| 07 31 20 | J0529+3209 | 08 07 39 | 55.0 | 249.1 | 2.6 | | 41.5 | 23 | 4538 | 07 31 20 |
| 07 32 20 | --- | 08 08 39 | 54.9 | 249.4 | 2.6 | | 41.6 | 60 | 4546 | 07 31 21 |
| 07 32 20 | FRB | 08 08 39 | 56.0 | 249.9 | 2.6 | | 42.3 | -17 | 4546 | No stop |
| 07 35 50 | --- | 08 12 10 | 55.5 | 250.8 | 2.7 | | 42.6 | 193 | 4573 | 07 32 21 |
| 07 35 50 | J0529+3209 | 08 12 10 | 54.4 | 250.4 | 2.7 | | 41.9 | -17 | 4573 | No stop |
| 07 37 20 | --- | 08 13 40 | 54.2 | 250.8 | 2.7 | | 42.1 | 73 | 4585 | 07 35 51 |
| 07 37 20 | INBEAM | 08 13 40 | 55.3 | 251.3 | 2.7 | | 42.8 | -17 | 4585 | No stop |
| 07 40 50 | --- | 08 17 11 | 54.8 | 252.2 | 2.7 | | 43.1 | 193 | 4612 | 07 37 21 |
| 07 41 30 | J0529+3209 | 08 17 51 | 53.6 | 251.9 | 2.8 | | 42.4 | 23 | 4612 | 07 41 30 |
| 07 42 30 | --- | 08 18 51 | 53.4 | 252.1 | 2.8 | | 42.5 | 60 | 4619 | 07 41 31 |
| 07 42 30 | FRB | 08 18 51 | 54.5 | 252.6 | 2.8 | | 43.2 | -17 | 4619 | No stop |
| 07 46 00 | --- | 08 22 22 | 54.0 | 253.5 | 2.8 | | 43.5 | 193 | 4646 | 07 42 31 |
| 07 46 00 | J0529+3209 | 08 22 22 | 52.9 | 253.0 | 2.9 | | 42.7 | -17 | 4646 | No stop |
| 07 47 30 | --- | 08 23 52 | 52.7 | 253.4 | 2.9 | | 42.8 | 73 | 4658 | 07 46 01 |
| 07 47 30 | FRB | 08 23 52 | 53.8 | 253.9 | 2.8 | | 43.6 | -17 | 4658 | No stop |
| 07 51 00 | --- | 08 27 22 | 53.3 | 254.8 | 2.9 | | 43.8 | 193 | 4685 | 07 47 31 |
| 07 51 40 | J0529+3209 | 08 28 02 | 52.1 | 254.5 | 3.0 | | 43.1 | 23 | 4685 | 07 51 40 |
| 07 52 40 | --- | 08 29 03 | 52.0 | 254.7 | 3.0 | | 43.2 | 60 | 4692 | 07 51 41 |
| 07 52 40 | FRB | 08 29 03 | 53.0 | 255.2 | 2.9 | | 43.9 | -17 | 4692 | No stop |
| 07 56 10 | --- | 08 32 33 | 52.5 | 256.1 | 3.0 | | 44.1 | 193 | 4719 | 07 52 41 |
| 07 56 10 | J0529+3209 | 08 32 33 | 51.5 | 255.6 | 3.0 | | 43.4 | -17 | 4719 | No stop |
| 07 57 40 | --- | 08 34 03 | 51.2 | 256.0 | 3.1 | | 43.5 | 73 | 4731 | 07 56 11 |
| 07 57 40 | INBEAM | 08 34 03 | 52.3 | 256.5 | 3.0 | | 44.2 | -17 | 4731 | No stop |
| 08 01 10 | --- | 08 37 34 | 51.8 | 257.4 | 3.1 | | 44.4 | 193 | 4758 | 07 57 41 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 08 01 50 | J0529+3209 | 08 38 14 | 50.6 | 257.0 | 3.1 | | 43.7 | 23 | 4758 | 08 01 50 |
| 08 02 50 | --- | 08 39 14 | 50.5 | 257.2 | 3.1 | | 43.8 | 60 | 4765 | 08 01 51 |
| 08 02 50 | FRB | 08 39 14 | 51.6 | 257.7 | 3.1 | | 44.5 | -17 | 4765 | No stop |
| 08 06 20 | --- | 08 42 45 | 51.0 | 258.6 | 3.2 | | 44.7 | 193 | 4792 | 08 02 51 |
| 08 06 20 | J0529+3209 | 08 42 45 | 50.0 | 258.1 | 3.2 | | 44.0 | -17 | 4792 | No stop |
| 08 07 50 | --- | 08 44 15 | 49.7 | 258.4 | 3.2 | | 44.0 | 73 | 4804 | 08 06 21 |
| 08 07 50 | FRB | 08 44 15 | 50.8 | 258.9 | 3.2 | | 44.7 | -17 | 4804 | No stop |
| 08 11 20 | --- | 08 47 46 | 50.3 | 259.7 | 3.2 | | 44.9 | 193 | 4831 | 08 07 51 |
| 08 12 00 | J0529+3209 | 08 48 26 | 49.1 | 259.4 | 3.3 | | 44.2 | 23 | 4831 | 08 12 00 |
| 08 13 00 | --- | 08 49 26 | 49.0 | 259.6 | 3.3 | | 44.3 | 60 | 4838 | 08 12 01 |
| 08 13 00 | FRB | 08 49 26 | 50.1 | 260.1 | 3.3 | | 45.0 | -17 | 4838 | No stop |
| 08 16 30 | --- | 08 52 57 | 49.5 | 260.9 | 3.3 | | 45.1 | 193 | 4865 | 08 13 01 |
| 08 16 30 | J0529+3209 | 08 52 57 | 48.5 | 260.4 | 3.4 | | 44.4 | -17 | 4865 | No stop |
| 08 18 00 | --- | 08 54 27 | 48.2 | 260.8 | 3.4 | | 44.4 | 73 | 4877 | 08 16 31 |
| 08 18 00 | INBEAM | 08 54 27 | 49.3 | 261.3 | 3.4 | | 45.2 | -17 | 4877 | No stop |
| 08 21 30 | --- | 08 57 57 | 48.8 | 262.1 | 3.4 | | 45.3 | 193 | 4904 | 08 18 01 |
| 08 22 10 | J0529+3209 | 08 58 37 | 47.6 | 261.7 | 3.5 | | 44.6 | 23 | 4904 | 08 22 10 |
| 08 23 10 | --- | 08 59 38 | 47.5 | 262.0 | 3.5 | | 44.6 | 60 | 4912 | 08 22 11 |
| 08 23 10 | FRB | 08 59 38 | 48.5 | 262.4 | 3.4 | | 45.3 | -17 | 4912 | No stop |
| 08 26 40 | --- | 09 03 08 | 48.0 | 263.2 | 3.5 | | 45.4 | 193 | 4938 | 08 23 11 |
| 08 26 40 | J0529+3209 | 09 03 08 | 46.9 | 262.7 | 3.5 | | 44.7 | -17 | 4938 | No stop |
| 08 28 10 | --- | 09 04 38 | 46.7 | 263.1 | 3.6 | | 44.8 | 73 | 4950 | 08 26 41 |
| 08 28 10 | FRB | 09 04 38 | 47.8 | 263.5 | 3.5 | | 45.5 | -17 | 4950 | No stop |
| 08 31 40 | --- | 09 08 09 | 47.3 | 264.3 | 3.6 | | 45.5 | 193 | 4977 | 08 28 11 |
| 08 32 20 | J0529+3209 | 09 08 49 | 46.1 | 264.0 | 3.6 | | 44.9 | 23 | 4977 | 08 32 20 |
| 08 33 20 | --- | 09 09 49 | 46.0 | 264.2 | 3.7 | | 44.9 | 60 | 4985 | 08 32 21 |
| 08 33 20 | FRB | 09 09 49 | 47.0 | 264.7 | 3.6 | | 45.6 | -17 | 4985 | No stop |
| 08 36 50 | --- | 09 13 20 | 46.5 | 265.4 | 3.7 | | 45.6 | 193 | 5012 | 08 33 21 |
| 08 36 50 | J0529+3209 | 09 13 20 | 45.4 | 264.9 | 3.7 | | 45.0 | -17 | 5012 | No stop |
| 08 38 20 | --- | 09 14 50 | 45.2 | 265.3 | 3.7 | | 45.0 | 73 | 5023 | 08 36 51 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 08 38 20 | INBEAM | 09 14 50 | 46.3 | 265.8 | 3.7 | | 45.7 | -17 | 5023 | No stop |
| 08 41 50 | --- | 09 18 21 | 45.7 | 266.5 | 3.8 | | 45.7 | 193 | 5050 | 08 38 21 |
| 08 42 30 | J0529+3209 | 09 19 01 | 44.6 | 266.1 | 3.8 | | 45.1 | 23 | 5050 | 08 42 30 |
| 08 43 30 | --- | 09 20 01 | 44.4 | 266.4 | 3.8 | | 45.1 | 60 | 5058 | 08 42 31 |
| 08 43 30 | FRB | 09 20 01 | 45.5 | 266.8 | 3.8 | | 45.7 | -17 | 5058 | No stop |
| 08 47 00 | --- | 09 23 32 | 45.0 | 267.5 | 3.8 | | 45.8 | 193 | 5085 | 08 43 31 |
| 08 47 00 | J0529+3209 | 09 23 32 | 43.9 | 267.1 | 3.9 | | 45.1 | -17 | 5085 | No stop |
| 08 48 30 | --- | 09 25 02 | 43.7 | 267.4 | 3.9 | | 45.1 | 73 | 5096 | 08 47 01 |
| 08 48 30 | FRB | 09 25 02 | 44.7 | 267.9 | 3.9 | | 45.8 | -17 | 5096 | No stop |
| 08 52 00 | --- | 09 28 32 | 44.2 | 268.6 | 3.9 | | 45.8 | 193 | 5123 | 08 48 31 |
| 08 52 40 | J0529+3209 | 09 29 12 | 43.0 | 268.3 | 4.0 | | 45.2 | 23 | 5123 | 08 52 40 |
| 08 53 40 | --- | 09 30 13 | 42.9 | 268.5 | 4.0 | | 45.2 | 60 | 5131 | 08 52 41 |
| 08 53 40 | FRB | 09 30 13 | 44.0 | 268.9 | 4.0 | | 45.8 | -17 | 5131 | No stop |
| 08 57 10 | --- | 09 33 43 | 43.4 | 269.6 | 4.0 | | 45.8 | 193 | 5158 | 08 53 41 |
| 08 57 10 | J0529+3209 | 09 33 43 | 42.4 | 269.2 | 4.1 | | 45.2 | -17 | 5158 | No stop |
| 08 58 40 | --- | 09 35 13 | 42.1 | 269.5 | 4.1 | | 45.2 | 73 | 5169 | 08 57 11 |
| 08 58 40 | INBEAM | 09 35 13 | 43.2 | 270.0 | 4.0 | | 45.8 | -17 | 5169 | No stop |
| 09 02 10 | --- | 09 38 44 | 42.7 | 270.7 | 4.1 | | 45.8 | 193 | 5196 | 08 58 41 |
| 09 02 50 | J0529+3209 | 09 39 24 | 41.5 | 270.3 | 4.1 | | 45.2 | 23 | 5196 | 09 02 50 |
| 09 03 50 | --- | 09 40 24 | 41.4 | 270.5 | 4.2 | | 45.2 | 60 | 5204 | 09 02 51 |
| ----- CLOCK-SEARCH ----- | | | | | | | | | | |
| 09 05 40 | J0449+1121 | 09 42 15 | 19.2 | 263.3 | 4.9 | | 37.5 | 13 | 5204 | 09 05 40 |
| 09 09 40 | =0446+112 | 09 46 15 | 18.6 | 264.1 | 4.9 | | 37.5 | 240 | 5235 | 09 05 41 |
| 09 10 40 | J0449+1121 | 09 47 15 | 18.5 | 264.3 | 5.0 | | 37.6 | 54 | 5235 | 09 10 40 |
| 09 14 40 | =0446+112 | 09 51 16 | 17.9 | 265.1 | 5.0 | | 37.6 | 240 | 5265 | 09 10 41 |
| 09 15 40 | J0449+1121 | 09 52 16 | 17.7 | 265.4 | 5.0 | | 37.6 | 54 | 5265 | 09 15 40 |
| 09 19 40 | =0446+112 | 09 56 17 | 17.1 | 266.2 | 5.1 | | 37.7 | 240 | 5296 | 09 15 41 |
| 09 20 40 | J0530+1331 | 09 57 17 | 24.9 | 259.1 | 4.4 | | 37.3 | 17 | 5296 | 09 20 40 |
| 09 24 40 | =0528+134 | 10 01 18 | 24.3 | 260.0 | 4.5 | | 37.5 | 240 | 5327 | 09 20 41 |

Schedule for TORUN (Code Tr)
 RM013

Page 17

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 09 25 40 | J0530+1331 | 10 02 18 | 24.2 | 260.2 | 4.5 | | 37.5 | 54 | 5327 | 09 25 40 |
| 09 29 40 | =0528+134 | 10 06 19 | 23.6 | 261.0 | 4.6 | | 37.6 | 240 | 5358 | 09 25 41 |
| 09 30 40 | J0530+1331 | 10 07 19 | 23.4 | 261.2 | 4.6 | | 37.6 | 54 | 5358 | 09 30 40 |
| 09 34 40 | =0528+134 | 10 11 19 | 22.9 | 262.1 | 4.7 | | 37.7 | 240 | 5388 | 09 30 41 |
| ----- RM013 ----- | | | | | | | | | | |
| 09 34 40 | J0530+1331 | 10 11 19 | 22.9 | 262.1 | 4.7 | | 37.7 | -5 | 5388 | No stop |
| 09 36 10 | =0528+134 | 10 12 50 | 22.6 | 262.4 | 4.7 | | 37.7 | 85 | 5400 | 09 34 41 |
| 09 36 10 | J0529+3209 | 10 12 50 | 36.5 | 276.7 | 4.7 | | 44.8 | -65 | 5400 | No stop |
| 09 40 10 | --- | 10 16 50 | 35.9 | 277.5 | 4.8 | | 44.7 | 175 | 5431 | 09 36 11 |
| 09 40 10 | FRB | 10 16 50 | 37.0 | 277.9 | 4.7 | | 45.3 | -17 | 5431 | No stop |
| 09 43 40 | --- | 10 20 21 | 36.5 | 278.5 | 4.8 | | 45.2 | 193 | 5458 | 09 40 11 |
| 09 44 10 | J0529+3209 | 10 20 51 | 35.3 | 278.2 | 4.8 | | 44.6 | 13 | 5458 | 09 44 10 |
| 09 45 10 | --- | 10 21 51 | 35.2 | 278.4 | 4.9 | | 44.6 | 60 | 5465 | 09 44 11 |
| 09 45 10 | FRB | 10 21 51 | 36.2 | 278.8 | 4.8 | | 45.1 | -17 | 5465 | No stop |
| 09 48 40 | --- | 10 25 22 | 35.7 | 279.5 | 4.9 | | 45.0 | 193 | 5492 | 09 45 11 |
| 09 48 40 | J0529+3209 | 10 25 22 | 34.6 | 279.1 | 4.9 | | 44.5 | -17 | 5492 | No stop |
| 09 50 10 | --- | 10 26 52 | 34.4 | 279.3 | 4.9 | | 44.4 | 73 | 5504 | 09 48 41 |
| 09 50 10 | FRB | 10 26 52 | 35.5 | 279.7 | 4.9 | | 45.0 | -17 | 5504 | No stop |
| 09 53 40 | --- | 10 30 23 | 35.0 | 280.4 | 5.0 | | 44.9 | 193 | 5531 | 09 50 11 |
| 09 54 10 | J0529+3209 | 10 30 53 | 33.8 | 280.1 | 5.0 | | 44.3 | 13 | 5531 | 09 54 10 |
| 09 55 10 | --- | 10 31 53 | 33.7 | 280.3 | 5.0 | | 44.3 | 60 | 5538 | 09 54 11 |
| 09 55 10 | FRB | 10 31 53 | 34.8 | 280.6 | 5.0 | | 44.8 | -17 | 5538 | No stop |
| 09 58 40 | --- | 10 35 23 | 34.2 | 281.3 | 5.0 | | 44.7 | 193 | 5565 | 09 55 11 |
| 09 58 40 | J0529+3209 | 10 35 23 | 33.2 | 280.9 | 5.1 | | 44.2 | -17 | 5565 | No stop |
| 10 00 10 | --- | 10 36 54 | 32.9 | 281.2 | 5.1 | | 44.1 | 73 | 5577 | 09 58 41 |
| 10 00 10 | INBEAM | 10 36 54 | 34.0 | 281.6 | 5.1 | | 44.7 | -17 | 5577 | No stop |
| 10 03 40 | --- | 10 40 24 | 33.5 | 282.2 | 5.1 | | 44.5 | 193 | 5604 | 10 00 11 |
| 10 04 10 | J0529+3209 | 10 40 54 | 32.4 | 281.9 | 5.2 | | 44.0 | 13 | 5604 | 10 04 10 |
| 10 05 10 | --- | 10 41 54 | 32.2 | 282.1 | 5.2 | | 43.9 | 60 | 5612 | 10 04 11 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 10 05 10 | FRB | 10 41 54 | 33.3 | 282.4 | 5.1 | | 44.5 | -17 | 5612 | No stop |
| 10 08 40 | --- | 10 45 25 | 32.8 | 283.1 | 5.2 | | 44.3 | 193 | 5638 | 10 05 11 |
| 10 08 40 | J0529+3209 | 10 45 25 | 31.7 | 282.7 | 5.2 | | 43.8 | -17 | 5638 | No stop |
| 10 10 10 | --- | 10 46 55 | 31.5 | 283.0 | 5.3 | | 43.7 | 73 | 5650 | 10 08 41 |
| 10 10 10 | FRB | 10 46 55 | 32.5 | 283.3 | 5.2 | | 44.3 | -17 | 5650 | No stop |
| 10 13 40 | --- | 10 50 26 | 32.0 | 284.0 | 5.3 | | 44.1 | 193 | 5677 | 10 10 11 |
| 10 14 10 | J0529+3209 | 10 50 56 | 30.9 | 283.7 | 5.3 | | 43.6 | 13 | 5677 | 10 14 10 |
| 10 15 10 | --- | 10 51 56 | 30.7 | 283.9 | 5.4 | | 43.5 | 60 | 5685 | 10 14 11 |
| 10 15 10 | FRB | 10 51 56 | 31.8 | 284.2 | 5.3 | | 44.1 | -17 | 5685 | No stop |
| 10 18 40 | --- | 10 55 27 | 31.3 | 284.8 | 5.4 | | 43.9 | 193 | 5712 | 10 15 11 |
| 10 18 40 | J0529+3209 | 10 55 27 | 30.2 | 284.5 | 5.4 | | 43.4 | -17 | 5712 | No stop |
| 10 20 10 | --- | 10 56 57 | 30.0 | 284.8 | 5.4 | | 43.3 | 73 | 5723 | 10 18 41 |
| 10 20 10 | INBEAM | 10 56 57 | 31.1 | 285.1 | 5.4 | | 43.8 | -17 | 5723 | No stop |
| 10 23 40 | --- | 11 00 27 | 30.6 | 285.8 | 5.5 | | 43.7 | 193 | 5750 | 10 20 11 |
| 10 24 10 | J0529+3209 | 11 00 58 | 29.4 | 285.5 | 5.5 | | 43.1 | 13 | 5750 | 10 24 10 |
| 10 25 10 | --- | 11 01 58 | 29.3 | 285.7 | 5.5 | | 43.1 | 60 | 5758 | 10 24 11 |
| 10 25 10 | FRB | 11 01 58 | 30.4 | 286.0 | 5.5 | | 43.6 | -17 | 5758 | No stop |
| 10 28 40 | --- | 11 05 28 | 29.9 | 286.6 | 5.5 | | 43.4 | 193 | 5785 | 10 25 11 |
| 10 28 40 | J0529+3209 | 11 05 28 | 28.8 | 286.3 | 5.6 | | 42.9 | -17 | 5785 | No stop |
| 10 30 10 | --- | 11 06 59 | 28.6 | 286.5 | 5.6 | | 42.8 | 73 | 5796 | 10 28 41 |
| 10 30 10 | FRB | 11 06 59 | 29.6 | 286.9 | 5.6 | | 43.3 | -17 | 5796 | No stop |
| 10 33 40 | --- | 11 10 29 | 29.1 | 287.5 | 5.6 | | 43.2 | 193 | 5823 | 10 30 11 |
| 10 34 10 | J0529+3209 | 11 10 59 | 28.0 | 287.3 | 5.7 | | 42.6 | 13 | 5823 | 10 34 10 |
| 10 35 10 | --- | 11 11 59 | 27.8 | 287.4 | 5.7 | | 42.6 | 60 | 5831 | 10 34 11 |
| 10 35 10 | FRB | 11 11 59 | 28.9 | 287.7 | 5.6 | | 43.1 | -17 | 5831 | No stop |
| 10 38 40 | --- | 11 15 30 | 28.4 | 288.4 | 5.7 | | 42.9 | 193 | 5858 | 10 35 11 |
| 10 38 40 | J0529+3209 | 11 15 30 | 27.3 | 288.0 | 5.7 | | 42.4 | -17 | 5858 | No stop |
| 10 40 10 | --- | 11 17 00 | 27.1 | 288.3 | 5.8 | | 42.3 | 73 | 5869 | 10 38 41 |
| 10 40 10 | INBEAM | 11 17 00 | 28.2 | 288.7 | 5.7 | | 42.8 | -17 | 5869 | No stop |
| 10 43 40 | --- | 11 20 31 | 27.7 | 289.3 | 5.8 | | 42.6 | 193 | 5896 | 10 40 11 |

Schedule for TORUN (Code Tr)
RM013

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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 |
| ----- | | | | | | | | | | |
| --- Mon 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 10 44 10 | J0529+3209 | 11 21 01 | 26.6 | 289.0 | 5.8 | | 42.1 | 13 | 5896 | 10 44 10 |
| 10 45 10 | --- | 11 22 01 | 26.4 | 289.2 | 5.9 | | 42.1 | 60 | 5904 | 10 44 11 |
| 10 45 10 | FRB | 11 22 01 | 27.5 | 289.5 | 5.8 | | 42.5 | -17 | 5904 | No stop |
| 10 48 40 | --- | 11 25 32 | 27.0 | 290.1 | 5.9 | | 42.3 | 193 | 5931 | 10 45 11 |
| 10 48 40 | J0529+3209 | 11 25 32 | 25.9 | 289.8 | 5.9 | | 41.9 | -17 | 5931 | No stop |
| 10 50 10 | --- | 11 27 02 | 25.7 | 290.1 | 5.9 | | 41.8 | 73 | 5942 | 10 48 41 |
| 10 50 10 | FRB | 11 27 02 | 26.8 | 290.4 | 5.9 | | 42.3 | -17 | 5942 | No stop |
| 10 53 40 | --- | 11 30 32 | 26.3 | 291.0 | 6.0 | | 42.0 | 193 | 5969 | 10 50 11 |
| 10 54 10 | J0529+3209 | 11 31 02 | 25.1 | 290.8 | 6.0 | | 41.6 | 13 | 5969 | 10 54 10 |
| 10 55 10 | --- | 11 32 03 | 25.0 | 290.9 | 6.0 | | 41.5 | 60 | 5977 | 10 54 11 |
| 10 55 10 | FRB | 11 32 03 | 26.1 | 291.2 | 6.0 | | 42.0 | -17 | 5977 | No stop |
| 10 58 40 | --- | 11 35 33 | 25.6 | 291.8 | 6.0 | | 41.7 | 193 | 6004 | 10 55 11 |
| 10 58 40 | J0529+3209 | 11 35 33 | 24.5 | 291.6 | 6.1 | | 41.3 | -17 | 6004 | No stop |
| 11 00 10 | --- | 11 37 03 | 24.3 | 291.8 | 6.1 | | 41.2 | 73 | 6015 | 10 58 41 |
| 11 00 10 | INBEAM | 11 37 03 | 25.4 | 292.1 | 6.1 | | 41.7 | -17 | 6015 | No stop |
| 11 03 40 | --- | 11 40 34 | 24.9 | 292.7 | 6.1 | | 41.4 | 193 | 6042 | 11 00 11 |
| 11 04 10 | J0529+3209 | 11 41 04 | 23.7 | 292.5 | 6.2 | | 40.9 | 13 | 6042 | 11 04 10 |
| 11 05 10 | --- | 11 42 04 | 23.6 | 292.7 | 6.2 | | 40.9 | 60 | 6050 | 11 04 11 |
| 11 05 10 | FRB | 11 42 04 | 24.7 | 293.0 | 6.1 | | 41.3 | -17 | 6050 | No stop |
| 11 08 40 | --- | 11 45 35 | 24.2 | 293.6 | 6.2 | | 41.1 | 193 | 6077 | 11 05 11 |
| 11 08 40 | J0529+3209 | 11 45 35 | 23.1 | 293.3 | 6.2 | | 40.7 | -17 | 6077 | No stop |
| 11 10 10 | --- | 11 47 05 | 22.9 | 293.6 | 6.3 | | 40.6 | 73 | 6088 | 11 08 41 |
| 11 10 10 | FRB | 11 47 05 | 24.0 | 293.8 | 6.2 | | 41.0 | -17 | 6088 | No stop |
| 11 13 40 | --- | 11 50 36 | 23.5 | 294.4 | 6.3 | | 40.8 | 193 | 6115 | 11 10 11 |
| 11 14 10 | J0529+3209 | 11 51 06 | 22.4 | 294.3 | 6.3 | | 40.3 | 13 | 6115 | 11 14 10 |
| 11 15 10 | --- | 11 52 06 | 22.2 | 294.4 | 6.4 | | 40.2 | 60 | 6123 | 11 14 11 |
| 11 15 10 | FRB | 11 52 06 | 23.3 | 294.7 | 6.3 | | 40.7 | -17 | 6123 | No stop |
| 11 18 40 | --- | 11 55 36 | 22.8 | 295.3 | 6.4 | | 40.4 | 193 | 6150 | 11 15 11 |
| 11 18 40 | J0529+3209 | 11 55 36 | 21.7 | 295.1 | 6.4 | | 40.0 | -17 | 6150 | No stop |
| 11 20 10 | --- | 11 57 07 | 21.5 | 295.3 | 6.4 | | 39.9 | 73 | 6162 | 11 18 41 |

Schedule for TORUN (Code Tr)

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RM013

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 11 Sep 2017 Day 254 --- | | | | | | | | | | |
| 11 20 10 | INBEAM | 11 57 07 | 22.6 | 295.6 | 6.4 | | 40.3 | -17 | 6162 | No stop |
| 11 23 40 | --- | 12 00 37 | 22.2 | 296.2 | 6.5 | | 40.1 | 193 | 6188 | 11 20 11 |
| 11 24 10 | J0529+3209 | 12 01 07 | 21.0 | 296.0 | 6.5 | | 39.6 | 13 | 6188 | 11 24 10 |
| 11 25 10 | --- | 12 02 08 | 20.9 | 296.2 | 6.5 | | 39.5 | 60 | 6196 | 11 24 11 |
| 11 27 10 | J0550+2326 | 12 04 08 | 16.8 | 286.9 | 6.2 | | 38.8 | 86 | 6196 | 11 27 10 |
| 11 30 00 | =0547+234 | 12 06 58 | 16.4 | 287.4 | 6.3 | | 38.6 | 170 | 6218 | 11 27 11 |
| 11 30 00 | J0543+2329 | 12 06 58 | 15.3 | 288.9 | 6.4 | | 38.3 | -17 | 6218 | No stop |
| 11 33 30 | --- | 12 10 29 | 14.8 | 289.5 | 6.4 | | 38.1 | 193 | 6245 | 11 30 01 |
| 11 33 30 | J0550+2326 | 12 10 29 | 15.9 | 288.1 | 6.3 | | 38.5 | -17 | 6245 | No stop |
| 11 35 00 | =0547+234 | 12 11 59 | 15.7 | 288.4 | 6.3 | | 38.4 | 73 | 6256 | 11 33 31 |
| 11 35 00 | J0543+2329 | 12 11 59 | 14.6 | 289.8 | 6.5 | | 38.0 | -17 | 6256 | No stop |
| 11 38 30 | --- | 12 15 30 | 14.1 | 290.5 | 6.5 | | 37.8 | 193 | 6283 | 11 35 01 |
| 11 39 00 | J0550+2326 | 12 16 00 | 15.1 | 289.1 | 6.4 | | 38.2 | 13 | 6283 | 11 39 00 |
| 11 40 00 | =0547+234 | 12 17 00 | 14.9 | 289.3 | 6.4 | | 38.2 | 60 | 6291 | 11 39 01 |

SETUP FILE INFORMATION:

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

==== Setup file: sess217.C2048e

| | | |
|-----------------------|--------------------|----------------------|
| Setup group: 10 | Station: TORUN | Total bit rate: 1024 |
| Format: MARK5B | 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= | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 |
| Net SB= | L | L | U | U | L | L | U | U | U |
| IF SB = | U | U | U | U | U | U | U | U | U |
| Pol. = | RCP | LCP | RCP | LCP | RCP | LCP | RCP | LCP | LCP |
| BBC = | 1 | 5 | 1 | 5 | 3 | 7 | 3 | 7 | 7 |
| BBC SB= | L | L | U | U | L | L | U | U | U |
| IF = | A1 | B1 | A1 | B1 | A1 | B1 | A1 | B1 | B1 |

The following frequency sets based on these setups were used.

Frequency Set: 6 Setup file default. Used with PCAL = off
 LO sum= 4958.49 4958.49 4958.49 4958.49 5022.49 5022.49 5022.49 5022.49
 BBC fr= 758.49 758.49 758.49 758.49 822.49 822.49 822.49 822.49
 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= 10, 14, 2, 6, 12, 16, 4, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

| Source | Source position (RA/Dec) (B1950) | (J2000) | (Date) | Error (mas) |
|--------------|---|-------------------|-----------------|----------------|
| * FRB | 05 28 41.724731 | * 05 31 58.701590 | 05 33 07.518302 | 0.00 |
| | 33 06 43.24088 | * 33 08 52.55010 | 33 09 24.07368 | 0.00 |
| * INBEAM | 05 28 36.907210 | * 05 31 53.922113 | 05 33 02.752859 | 0.00 |
| | 33 08 10.41555 | * 33 10 20.07143 | 33 10 51.70723 | 0.00 |
| * J0529+3209 | 05 26 12.903667 | * 05 29 28.211037 | 05 30 36.464808 | 0.00 |
| | 32 07 26.83083 | * 32 09 46.94745 | 32 10 22.62687 | 0.00 |
| * J0332+5434 | 03 29 11.066308 | * 03 32 59.368000 | 03 34 20.814619 | 0.00 |
| | 54 24 37.47697 | * 54 34 43.57000 | 54 37 57.63720 | 0.00 |
| * J0543+2329 | 05 40 06.988481 | * 05 43 09.650000 | 05 44 13.367045 | 0.00 |
| | 23 27 45.90818 | * 23 29 06.10000 | 23 29 24.08380 | 0.00 |
| * 0234+285 | 02 34 55.589590 | * 02 37 52.405677 | 02 38 55.449073 | 0.00 |
| J0237+2848 | 28 35 11.40776 | * 28 48 08.99001 | 28 52 34.50925 | 0.00 |
| J0237+28 | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.gsfc | | | |
| | GSFC 2015a astro solution, unpublished 54650 observations. | | | |
| 0342+538 | 03 42 44.555632 | * 03 46 34.504133 | 03 47 56.332065 | 0.08 |
| * J0346+5400 | 53 51 41.29066 | * 54 00 59.10921 | 54 03 55.71466 | 0.05 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.gsfc | | | |
| | GSFC 2015a astro solution, unpublished 345 observations. | | | |
| 0446+112 | 04 46 21.217283 | * 04 49 07.671102 | 04 50 06.066909 | 0.01 |
| * J0449+1121 | 11 16 17.84561 | * 11 21 28.59640 | 11 23 12.12356 | 0.01 |
| J0449+11 | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.gsfc | | | |
| | GSFC 2015a astro solution, unpublished 10743 observations. | | | |
| 0528+134 | 05 28 06.759216 | * 05 30 56.416747 | 05 31 55.667536 | 0.21 |
| * J0530+1331 | 13 29 42.28885 | * 13 31 55.14952 | 13 32 35.28333 | 0.24 |
| J0530+13 | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.gsfc | | | |
| | GSFC 2015a astro solution, unpublished 135789 observations. | | | |

| | | | | |
|--------------|---|-------------------|-----------------|-------------------|
| 0547+234 | 05 47 44.714955 | * 05 50 47.390894 | 05 51 51.055670 | 0.09 |
| * J0550+2326 | 23 26 01.27029 | * 23 26 48.17689 | 23 26 54.55476 | 0.11 |
| J0550+23 | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.gsfc | | | |
| | GSFC 2015a astro solution, unpublished | | | 153 observations. |

el058dtr

E-EVN: EL058D, RP028, EG096C, RP029B

PI: , Lobanov, Perez-Torres, Gawronski, Paragi

Address: JIVE

Observing mode: realtime e-vlbi

Schedule for TORUN (Code Tr)

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e-EVN: EL058D, RP028, EG096C, RP029B

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 |
| ----- | | | | | | | | | | |
| --- Tue 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| ----- clock-search ----- | | | | | | | | | | |
| Next scan frequencies: | | 4958.49 | 4958.49 | 4958.49 | 4958.49 | 5022.49 | 5022.49 | 5022.49 | 5022.49 | |
| Next BBC frequencies: | | 758.49 | 758.49 | 758.49 | 758.49 | 822.49 | 822.49 | 822.49 | 822.49 | |
| Next scan bandwidths: | | 32.00 | 32.00 | 32.00 | 32.00 | 32.00 | 32.00 | 32.00 | 32.00 | |
| ----- | | | | | | | | | | |
| 09 00 00 | J1407+2827 | 10 08 06 | 40.2 | 95.1 | -4.0 | | -42.8 | 0 | 0 | 09 00 00 |
| 09 10 00 | =1404+286 | 10 18 08 | 41.7 | 97.2 | -3.8 | | -42.6 | 600 | 77 | 09 00 01 |
| ----- | | | | | | | | | | |
| 09 11 00 | J1407+2827 | 10 19 08 | 41.8 | 97.4 | -3.8 | | -42.6 | 54 | 77 | 09 11 00 |
| 09 25 00 | =1404+286 | 10 33 10 | 43.9 | 100.5 | -3.6 | | -42.1 | 840 | 185 | 09 11 01 |
| ----- | | | | | | | | | | |
| 09 26 00 | J1407+2827 | 10 34 10 | 44.0 | 100.8 | -3.6 | | -42.1 | 54 | 185 | 09 26 00 |
| 09 40 00 | =1404+286 | 10 48 13 | 46.1 | 104.0 | -3.3 | | -41.5 | 840 | 292 | 09 26 01 |
| ----- | | | | | | | | | | |
| 09 41 00 | J1407+2827 | 10 49 13 | 46.2 | 104.2 | -3.3 | | -41.4 | 54 | 292 | 09 41 00 |
| 09 55 00 | =1404+286 | 11 03 15 | 48.3 | 107.7 | -3.1 | | -40.6 | 840 | 400 | 09 41 01 |
| ----- | | | | | | | | | | |
| 09 56 00 | J1407+2827 | 11 04 15 | 48.4 | 107.9 | -3.1 | | -40.5 | 54 | 400 | 09 56 00 |
| 10 10 00 | =1404+286 | 11 18 18 | 50.4 | 111.6 | -2.8 | | -39.4 | 840 | 508 | 09 56 01 |
| ----- | | | | | | | | | | |
| 10 11 00 | J1407+2827 | 11 19 18 | 50.5 | 111.8 | -2.8 | | -39.3 | 54 | 508 | 10 11 00 |
| 10 25 00 | =1404+286 | 11 33 20 | 52.5 | 115.7 | -2.6 | | -37.9 | 840 | 615 | 10 11 01 |
| ----- | | | | | | | | | | |
| 10 26 00 | J1407+2827 | 11 34 20 | 52.6 | 116.0 | -2.6 | | -37.8 | 54 | 615 | 10 26 00 |
| 10 40 00 | =1404+286 | 11 48 23 | 54.5 | 120.1 | -2.3 | | -36.2 | 840 | 723 | 10 26 01 |
| ----- | | | | | | | | | | |
| 10 41 00 | J1407+2827 | 11 49 23 | 54.6 | 120.5 | -2.3 | | -36.0 | 54 | 723 | 10 41 00 |
| 10 55 00 | =1404+286 | 12 03 25 | 56.4 | 124.9 | -2.1 | | -34.0 | 840 | 831 | 10 41 01 |
| ----- | | | | | | | | | | |
| 10 56 00 | J1407+2827 | 12 04 25 | 56.5 | 125.2 | -2.1 | | -33.9 | 53 | 831 | 10 56 00 |
| 11 10 00 | =1404+286 | 12 18 27 | 58.1 | 130.1 | -1.8 | | -31.5 | 840 | 938 | 10 56 01 |
| ----- | | | | | | | | | | |
| 11 11 00 | J1407+2827 | 12 19 28 | 58.3 | 130.4 | -1.8 | | -31.3 | 53 | 938 | 11 11 00 |
| 11 25 00 | =1404+286 | 12 33 30 | 59.8 | 135.6 | -1.6 | | -28.5 | 840 | 1046 | 11 11 01 |
| ----- | | | | | | | | | | |
| 11 26 00 | J1407+2827 | 12 34 30 | 59.9 | 136.0 | -1.6 | | -28.3 | 53 | 1046 | 11 26 00 |
| 11 40 00 | =1404+286 | 12 48 32 | 61.3 | 141.6 | -1.3 | | -25.1 | 840 | 1154 | 11 26 01 |
| ----- | | | | | | | | | | |
| 11 41 00 | J1407+2827 | 12 49 33 | 61.4 | 142.0 | -1.3 | | -24.8 | 53 | 1154 | 11 41 00 |
| 11 55 00 | =1404+286 | 13 03 35 | 62.6 | 148.1 | -1.1 | | -21.1 | 840 | 1262 | 11 41 01 |

Schedule for TORUN (Code Tr)

Page 3

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 | Day 262 | | | | | --- | | | | |
| 11 56 00 | J1407+2827 | 13 04 35 | 62.7 | 148.5 | -1.1 | | -20.9 | 53 | 1262 | 11 56 00 | |
| 12 10 00 | =1404+286 | 13 18 37 | 63.7 | 155.0 | -0.8 | | -16.7 | 840 | 1369 | 11 56 01 | |
| 12 11 00 | J1407+2827 | 13 19 38 | 63.7 | 155.5 | -0.8 | | -16.4 | 53 | 1369 | 12 11 00 | |
| 12 25 00 | =1404+286 | 13 33 40 | 64.5 | 162.4 | -0.6 | | -11.9 | 840 | 1477 | 12 11 01 | |
| 12 26 00 | J1407+2827 | 13 34 40 | 64.5 | 162.9 | -0.6 | | -11.6 | 53 | 1477 | 12 26 00 | |
| 12 40 00 | =1404+286 | 13 48 42 | 65.0 | 170.0 | -0.3 | | -6.8 | 840 | 1585 | 12 26 01 | |
| 12 42 20 | J1602+3326 | 13 51 03 | 59.4 | 116.8 | -2.2 | | -39.9 | 18 | 1585 | 12 42 20 | |
| 12 55 00 | =1600+335 | 14 03 45 | 61.1 | 121.0 | -2.0 | | -38.1 | 760 | 1682 | 12 42 21 | |
| 12 56 00 | J1602+3326 | 14 04 45 | 61.2 | 121.3 | -2.0 | | -37.9 | 53 | 1682 | 12 56 00 | |
| 13 10 00 | =1600+335 | 14 18 47 | 63.0 | 126.4 | -1.7 | | -35.4 | 840 | 1790 | 12 56 01 | |
| 13 11 00 | J1602+3326 | 14 19 47 | 63.1 | 126.7 | -1.7 | | -35.2 | 53 | 1790 | 13 11 00 | |
| 13 25 00 | =1600+335 | 14 33 50 | 64.7 | 132.3 | -1.5 | | -32.2 | 840 | 1897 | 13 11 01 | |
| 13 26 00 | J1602+3326 | 14 34 50 | 64.8 | 132.7 | -1.5 | | -31.9 | 53 | 1897 | 13 26 00 | |
| 13 40 00 | =1600+335 | 14 48 52 | 66.3 | 138.8 | -1.2 | | -28.3 | 840 | 2005 | 13 26 01 | |
| 13 41 00 | J1602+3326 | 14 49 52 | 66.4 | 139.3 | -1.2 | | -28.0 | 53 | 2005 | 13 41 00 | |
| 13 55 00 | =1600+335 | 15 03 55 | 67.7 | 146.0 | -1.0 | | -23.7 | 840 | 2113 | 13 41 01 | |
| ----- EL058C ----- | | | | | | | | | | | |
| 13 57 40 | J1557-0001 | 15 06 35 | 35.7 | 163.9 | -0.9 | | -9.6 | 26 | 2113 | 13 57 40 | |
| 14 00 10 | =1555+001 | 15 09 05 | 35.8 | 164.6 | -0.8 | | -9.2 | 150 | 2132 | 13 57 41 | |
| 14 02 10 | J1625-2527 | 15 11 06 | 9.7 | 162.7 | -1.3 | | -11.4 | 8 | 2132 | 14 02 10 | |
| 14 05 10 | =1622-253 | 15 14 06 | 9.8 | 163.4 | -1.2 | | -11.0 | 180 | 2155 | 14 02 11 | |
| 14 05 10 | ARSCO | 15 14 06 | 12.5 | 163.8 | -1.1 | | -10.5 | -24 | 2155 | No stop | |
| 14 09 25 | --- | 15 18 22 | 12.7 | 164.8 | -1.1 | | -9.8 | 231 | 2188 | 14 05 11 | |
| 14 09 25 | J1625-2527 | 15 18 22 | 10.0 | 164.3 | -1.1 | | -10.3 | -24 | 2188 | No stop | |
| 14 11 10 | =1622-253 | 15 20 07 | 10.1 | 164.7 | -1.1 | | -10.1 | 81 | 2201 | 14 09 26 | |
| 14 11 10 | ARSCO | 15 20 07 | 12.8 | 165.2 | -1.0 | | -9.6 | -24 | 2201 | No stop | |
| 14 15 25 | --- | 15 24 23 | 12.9 | 166.2 | -1.0 | | -8.9 | 231 | 2234 | 14 11 11 | |
| 14 16 00 | J1625-2527 | 15 24 58 | 10.3 | 165.8 | -1.0 | | -9.4 | 11 | 2234 | 14 16 00 | |
| 14 17 10 | =1622-253 | 15 26 08 | 10.3 | 166.1 | -1.0 | | -9.2 | 70 | 2243 | 14 16 01 | |
| 14 17 10 | ARSCO | 15 26 08 | 13.0 | 166.6 | -0.9 | | -8.7 | -24 | 2243 | No stop | |
| 14 21 25 | --- | 15 30 24 | 13.1 | 167.6 | -0.9 | | -8.0 | 231 | 2276 | 14 17 11 | |

Schedule for TORUN (Code Tr)

Page 4

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 14 21 25 | J1621-2241 | 15 30 24 | 13.3 | 167.6 | -0.9 | | -8.0 | -10 | 2276 | No stop |
| 14 23 25 | --- | 15 32 24 | 13.4 | 168.1 | -0.8 | | -7.7 | 110 | 2291 | 14 21 26 |
| 14 24 00 | J1625-2527 | 15 32 59 | 10.5 | 167.7 | -0.9 | | -8.2 | 10 | 2291 | 14 24 00 |
| 14 25 10 | =1622-253 | 15 34 10 | 10.6 | 167.9 | -0.9 | | -8.0 | 70 | 2300 | 14 24 01 |
| 14 25 10 | ARSCO | 15 34 10 | 13.2 | 168.5 | -0.8 | | -7.5 | -24 | 2300 | No stop |
| 14 29 25 | --- | 15 38 25 | 13.4 | 169.5 | -0.7 | | -6.8 | 231 | 2333 | 14 25 11 |
| 14 29 25 | J1625-2527 | 15 38 25 | 10.7 | 168.9 | -0.8 | | -7.4 | -24 | 2333 | No stop |
| 14 31 10 | =1622-253 | 15 40 11 | 10.8 | 169.3 | -0.8 | | -7.1 | 81 | 2346 | 14 29 26 |
| 14 31 10 | ARSCO | 15 40 11 | 13.4 | 169.9 | -0.7 | | -6.6 | -24 | 2346 | No stop |
| 14 35 25 | --- | 15 44 26 | 13.5 | 170.9 | -0.6 | | -5.9 | 231 | 2379 | 14 31 11 |
| 14 36 00 | J1625-2527 | 15 45 01 | 10.9 | 170.4 | -0.7 | | -6.4 | 11 | 2379 | 14 36 00 |
| 14 37 10 | =1622-253 | 15 46 12 | 10.9 | 170.7 | -0.7 | | -6.2 | 70 | 2388 | 14 36 01 |
| 14 37 10 | ARSCO | 15 46 12 | 13.6 | 171.3 | -0.6 | | -5.6 | -24 | 2388 | No stop |
| 14 41 25 | --- | 15 50 27 | 13.7 | 172.3 | -0.5 | | -5.0 | 231 | 2421 | 14 37 11 |
| 14 41 25 | J1621-2241 | 15 50 27 | 13.9 | 172.4 | -0.5 | | -5.0 | -10 | 2421 | No stop |
| 14 43 25 | --- | 15 52 28 | 13.9 | 172.8 | -0.5 | | -4.6 | 110 | 2436 | 14 41 26 |
| 14 44 00 | J1625-2527 | 15 53 03 | 11.1 | 172.2 | -0.6 | | -5.2 | 10 | 2436 | 14 44 00 |
| 14 45 10 | =1622-253 | 15 54 13 | 11.1 | 172.5 | -0.5 | | -5.0 | 70 | 2445 | 14 44 01 |
| 14 45 10 | ARSCO | 15 54 13 | 13.7 | 173.2 | -0.5 | | -4.4 | -24 | 2445 | No stop |
| 14 49 25 | --- | 15 58 29 | 13.8 | 174.2 | -0.4 | | -3.8 | 231 | 2478 | 14 45 11 |
| 14 49 25 | J1625-2527 | 15 58 29 | 11.2 | 173.5 | -0.5 | | -4.3 | -24 | 2478 | No stop |
| 14 51 10 | =1622-253 | 16 00 14 | 11.2 | 173.9 | -0.4 | | -4.1 | 81 | 2491 | 14 49 26 |
| 14 51 10 | ARSCO | 16 00 14 | 13.8 | 174.6 | -0.4 | | -3.5 | -24 | 2491 | No stop |
| 14 55 25 | --- | 16 04 30 | 13.9 | 175.7 | -0.3 | | -2.8 | 231 | 2524 | 14 51 11 |
| 14 56 00 | J1625-2527 | 16 05 05 | 11.3 | 175.0 | -0.4 | | -3.3 | 11 | 2524 | 14 56 00 |
| 14 57 10 | =1622-253 | 16 06 15 | 11.3 | 175.3 | -0.3 | | -3.2 | 70 | 2533 | 14 56 01 |
| 14 57 10 | ARSCO | 16 06 15 | 13.9 | 176.1 | -0.3 | | -2.6 | -24 | 2533 | No stop |
| 15 01 25 | --- | 16 10 31 | 13.9 | 177.1 | -0.2 | | -1.9 | 231 | 2565 | 14 57 11 |
| 15 01 25 | J1621-2241 | 16 10 31 | 14.1 | 177.1 | -0.2 | | -1.9 | -10 | 2565 | No stop |
| 15 03 25 | --- | 16 12 31 | 14.2 | 177.6 | -0.2 | | -1.6 | 110 | 2581 | 15 01 26 |

Schedule for TORUN (Code Tr) Page 5
 e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 15 04 00 | J1625-2527 | 16 13 06 | 11.3 | 176.8 | -0.2 | | -2.1 | 11 | 2581 | 15 04 00 |
| 15 05 10 | =1622-253 | 16 14 16 | 11.4 | 177.1 | -0.2 | | -1.9 | 70 | 2590 | 15 04 01 |
| 15 05 10 | ARSCO | 16 14 16 | 14.0 | 178.0 | -0.1 | | -1.3 | -24 | 2590 | No stop |
| 15 09 25 | --- | 16 18 32 | 14.0 | 179.0 | -0.1 | | -0.7 | 231 | 2622 | 15 05 11 |
| 15 09 25 | J1625-2527 | 16 18 32 | 11.4 | 178.1 | -0.1 | | -1.3 | -24 | 2622 | No stop |
| 15 11 10 | =1622-253 | 16 20 17 | 11.4 | 178.5 | -0.1 | | -1.0 | 81 | 2636 | 15 09 26 |
| 15 11 10 | ARSCO | 16 20 17 | 14.0 | 179.4 | -0.0 | | -0.4 | -24 | 2636 | No stop |
| 15 15 25 | --- | 16 24 33 | 14.0 | 180.4 | 0.0 | | 0.3 | 231 | 2669 | 15 11 11 |
| 15 16 00 | J1625-2527 | 16 25 08 | 11.4 | 179.6 | -0.0 | | -0.3 | 11 | 2669 | 15 16 00 |
| 15 17 10 | =1622-253 | 16 26 18 | 11.4 | 179.9 | -0.0 | | -0.1 | 70 | 2678 | 15 16 01 |
| 15 17 10 | ARSCO | 16 26 18 | 14.0 | 180.8 | 0.1 | | 0.5 | -24 | 2678 | No stop |
| 15 21 25 | --- | 16 30 34 | 14.0 | 181.8 | 0.1 | | 1.2 | 231 | 2710 | 15 17 11 |
| 15 21 25 | J1621-2241 | 16 30 34 | 14.2 | 181.9 | 0.1 | | 1.2 | -10 | 2710 | No stop |
| 15 23 25 | --- | 16 32 34 | 14.2 | 182.4 | 0.2 | | 1.5 | 110 | 2726 | 15 21 26 |
| 15 24 00 | J1625-2527 | 16 33 09 | 11.4 | 181.5 | 0.1 | | 1.0 | 11 | 2726 | 15 24 00 |
| 15 25 10 | =1622-253 | 16 34 19 | 11.4 | 181.7 | 0.1 | | 1.1 | 70 | 2735 | 15 24 01 |
| 15 25 10 | ARSCO | 16 34 19 | 13.9 | 182.7 | 0.2 | | 1.8 | -23 | 2735 | No stop |
| 15 29 25 | --- | 16 38 35 | 13.9 | 183.7 | 0.3 | | 2.4 | 232 | 2767 | 15 25 11 |
| 15 29 25 | J1625-2527 | 16 38 35 | 11.4 | 182.7 | 0.2 | | 1.8 | -23 | 2767 | No stop |
| 15 31 10 | =1622-253 | 16 40 20 | 11.4 | 183.1 | 0.2 | | 2.1 | 82 | 2781 | 15 29 26 |
| 15 31 10 | ARSCO | 16 40 20 | 13.9 | 184.2 | 0.3 | | 2.7 | -23 | 2781 | No stop |
| 15 35 25 | --- | 16 44 36 | 13.8 | 185.2 | 0.4 | | 3.4 | 232 | 2813 | 15 31 11 |
| 15 36 00 | J1625-2527 | 16 45 11 | 11.3 | 184.2 | 0.3 | | 2.8 | 12 | 2813 | 15 36 00 |
| 15 37 10 | =1622-253 | 16 46 21 | 11.3 | 184.5 | 0.3 | | 3.0 | 70 | 2822 | 15 36 01 |
| 15 37 10 | ARSCO | 16 46 21 | 13.8 | 185.6 | 0.4 | | 3.6 | -23 | 2822 | No stop |
| 15 41 25 | --- | 16 50 37 | 13.7 | 186.6 | 0.5 | | 4.3 | 232 | 2855 | 15 37 11 |
| 15 41 25 | J1621-2241 | 16 50 37 | 13.9 | 186.7 | 0.5 | | 4.3 | -10 | 2855 | No stop |
| 15 43 25 | --- | 16 52 37 | 13.9 | 187.1 | 0.5 | | 4.6 | 110 | 2871 | 15 41 26 |
| 15 44 00 | J1625-2527 | 16 53 13 | 11.2 | 186.1 | 0.4 | | 4.0 | 11 | 2871 | 15 44 00 |
| 15 45 10 | =1622-253 | 16 54 23 | 11.2 | 186.3 | 0.5 | | 4.2 | 70 | 2879 | 15 44 01 |

Schedule for TORUN (Code Tr)

Page 6

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 15 45 10 | ARSCO | 16 54 23 | 13.7 | 187.5 | 0.5 | | 4.9 | -23 | 2879 | No stop |
| 15 49 25 | --- | 16 58 38 | 13.6 | 188.5 | 0.6 | | 5.5 | 232 | 2912 | 15 45 11 |
| 15 49 25 | J1625-2527 | 16 58 38 | 11.1 | 187.3 | 0.5 | | 4.9 | -23 | 2912 | No stop |
| 15 51 10 | =1622-253 | 17 00 24 | 11.1 | 187.7 | 0.6 | | 5.1 | 82 | 2926 | 15 49 26 |
| 15 51 10 | ARSCO | 17 00 24 | 13.5 | 188.9 | 0.6 | | 5.8 | -23 | 2926 | No stop |
| 15 55 25 | --- | 17 04 39 | 13.4 | 189.9 | 0.7 | | 6.4 | 232 | 2958 | 15 51 11 |
| 15 56 00 | J1625-2527 | 17 05 14 | 11.0 | 188.8 | 0.6 | | 5.9 | 12 | 2958 | 15 56 00 |
| 15 57 10 | =1622-253 | 17 06 25 | 10.9 | 189.1 | 0.7 | | 6.0 | 70 | 2967 | 15 56 01 |
| 15 57 10 | ARSCO | 17 06 25 | 13.4 | 190.3 | 0.7 | | 6.7 | -23 | 2967 | No stop |
| 16 01 25 | --- | 17 10 40 | 13.3 | 191.3 | 0.8 | | 7.3 | 232 | 3000 | 15 57 11 |
| 16 01 25 | J1621-2241 | 17 10 40 | 13.5 | 191.4 | 0.8 | | 7.4 | -10 | 3000 | No stop |
| 16 03 25 | --- | 17 12 41 | 13.4 | 191.9 | 0.8 | | 7.7 | 110 | 3015 | 16 01 26 |
| 16 04 00 | J1625-2527 | 17 13 16 | 10.8 | 190.7 | 0.8 | | 7.1 | 11 | 3015 | 16 04 00 |
| 16 05 10 | =1622-253 | 17 14 26 | 10.7 | 190.9 | 0.8 | | 7.2 | 70 | 3024 | 16 04 01 |
| 16 05 10 | ARSCO | 17 14 26 | 13.2 | 192.2 | 0.9 | | 7.9 | -23 | 3024 | No stop |
| 16 09 25 | --- | 17 18 42 | 13.0 | 193.2 | 0.9 | | 8.6 | 232 | 3057 | 16 05 11 |
| 16 09 25 | J1625-2527 | 17 18 42 | 10.6 | 191.9 | 0.9 | | 7.9 | -23 | 3057 | No stop |
| 16 11 10 | =1622-253 | 17 20 27 | 10.5 | 192.3 | 0.9 | | 8.1 | 82 | 3071 | 16 09 26 |
| 16 11 10 | ARSCO | 17 20 27 | 13.0 | 193.6 | 1.0 | | 8.8 | -23 | 3071 | No stop |
| 16 15 25 | --- | 17 24 43 | 12.8 | 194.6 | 1.0 | | 9.5 | 232 | 3103 | 16 11 11 |
| 16 16 00 | J1625-2527 | 17 25 18 | 10.4 | 193.4 | 1.0 | | 8.9 | 12 | 3103 | 16 16 00 |
| 16 17 10 | =1622-253 | 17 26 28 | 10.3 | 193.7 | 1.0 | | 9.0 | 70 | 3112 | 16 16 01 |
| 16 17 10 | ARSCO | 17 26 28 | 12.7 | 195.0 | 1.1 | | 9.7 | -23 | 3112 | No stop |
| 16 21 25 | --- | 17 30 44 | 12.6 | 196.0 | 1.1 | | 10.3 | 232 | 3145 | 16 17 11 |
| 16 21 25 | J1621-2241 | 17 30 44 | 12.8 | 196.1 | 1.1 | | 10.4 | -10 | 3145 | No stop |
| 16 23 25 | --- | 17 32 44 | 12.7 | 196.6 | 1.2 | | 10.7 | 110 | 3160 | 16 21 26 |
| 16 24 00 | J1625-2527 | 17 33 19 | 10.1 | 195.2 | 1.1 | | 10.0 | 11 | 3160 | 16 24 00 |
| 16 25 10 | =1622-253 | 17 34 29 | 10.0 | 195.5 | 1.1 | | 10.2 | 70 | 3169 | 16 24 01 |
| 16 25 10 | ARSCO | 17 34 29 | 12.4 | 196.9 | 1.2 | | 10.9 | -23 | 3169 | No stop |
| 16 29 25 | --- | 17 38 45 | 12.2 | 197.8 | 1.3 | | 11.5 | 232 | 3202 | 16 25 11 |

Schedule for TORUN (Code Tr) Page 7
 e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 16 29 25 | J1625-2527 | 17 38 45 | 9.9 | 196.4 | 1.2 | | 10.8 | -23 | 3202 | No stop |
| 16 31 10 | =1622-253 | 17 40 30 | 9.8 | 196.8 | 1.2 | | 11.1 | 82 | 3215 | 16 29 26 |
| 16 31 10 | ARSCO | 17 40 30 | 12.1 | 198.3 | 1.3 | | 11.8 | -23 | 3215 | No stop |
| 16 35 25 | --- | 17 44 46 | 11.9 | 199.2 | 1.4 | | 12.4 | 232 | 3248 | 16 31 11 |
| 16 36 00 | J1625-2527 | 17 45 21 | 9.6 | 197.9 | 1.3 | | 11.8 | 12 | 3248 | 16 36 00 |
| 16 37 10 | =1622-253 | 17 46 31 | 9.5 | 198.2 | 1.3 | | 12.0 | 70 | 3257 | 16 36 01 |
| 16 37 10 | ARSCO | 17 46 31 | 11.8 | 199.6 | 1.4 | | 12.7 | -23 | 3257 | No stop |
| 16 41 25 | --- | 17 50 47 | 11.6 | 200.6 | 1.5 | | 13.3 | 232 | 3290 | 16 37 11 |
| 16 41 25 | J1621-2241 | 17 50 47 | 11.8 | 200.7 | 1.5 | | 13.3 | -10 | 3290 | No stop |
| 16 43 25 | --- | 17 52 47 | 11.7 | 201.2 | 1.5 | | 13.6 | 110 | 3305 | 16 41 26 |
| 16 44 00 | J1625-2527 | 17 53 22 | 9.2 | 199.7 | 1.4 | | 13.0 | 12 | 3305 | 16 44 00 |
| 16 45 10 | =1622-253 | 17 54 33 | 9.1 | 200.0 | 1.5 | | 13.1 | 70 | 3314 | 16 44 01 |
| 16 45 10 | ARSCO | 17 54 33 | 11.4 | 201.5 | 1.5 | | 13.8 | -22 | 3314 | No stop |
| 16 49 25 | --- | 17 58 48 | 11.2 | 202.4 | 1.6 | | 14.4 | 233 | 3347 | 16 45 11 |
| 16 49 25 | J1625-2527 | 17 58 48 | 8.9 | 200.9 | 1.5 | | 13.7 | -22 | 3347 | No stop |
| 16 51 10 | =1622-253 | 18 00 34 | 8.8 | 201.3 | 1.6 | | 14.0 | 83 | 3360 | 16 49 26 |
| 16 51 10 | ARSCO | 18 00 34 | 11.1 | 202.8 | 1.6 | | 14.7 | -22 | 3360 | No stop |
| 16 55 25 | --- | 18 04 49 | 10.8 | 203.8 | 1.7 | | 15.3 | 233 | 3393 | 16 51 11 |
| 16 56 00 | J1625-2527 | 18 05 24 | 8.5 | 202.4 | 1.6 | | 14.7 | 13 | 3393 | 16 56 00 |
| 16 57 10 | =1622-253 | 18 06 35 | 8.5 | 202.6 | 1.7 | | 14.8 | 70 | 3402 | 16 56 01 |
| 16 57 10 | ARSCO | 18 06 35 | 10.7 | 204.2 | 1.7 | | 15.5 | -22 | 3402 | No stop |
| 17 01 25 | --- | 18 10 50 | 10.4 | 205.2 | 1.8 | | 16.1 | 233 | 3435 | 16 57 11 |
| 17 01 25 | J1621-2241 | 18 10 50 | 10.6 | 205.3 | 1.8 | | 16.1 | -10 | 3435 | No stop |
| 17 03 25 | --- | 18 12 51 | 10.5 | 205.7 | 1.8 | | 16.4 | 110 | 3450 | 17 01 26 |
| 17 04 00 | J1625-2527 | 18 13 26 | 8.1 | 204.1 | 1.8 | | 15.8 | 12 | 3450 | 17 04 00 |
| 17 05 10 | =1622-253 | 18 14 36 | 8.0 | 204.4 | 1.8 | | 15.9 | 70 | 3459 | 17 04 01 |
| 17 05 10 | ARSCO | 18 14 36 | 10.2 | 206.0 | 1.9 | | 16.6 | -22 | 3459 | No stop |
| 17 09 25 | --- | 18 18 52 | 9.9 | 207.0 | 1.9 | | 17.2 | 233 | 3492 | 17 05 11 |
| 17 09 25 | J1625-2527 | 18 18 52 | 7.7 | 205.3 | 1.9 | | 16.5 | -22 | 3492 | No stop |
| 17 11 10 | =1622-253 | 18 20 37 | 7.6 | 205.7 | 1.9 | | 16.8 | 83 | 3505 | 17 09 26 |

Schedule for TORUN (Code Tr)

Page 8

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 17 11 10 | ARSCO | 18 20 37 | 9.8 | 207.4 | 2.0 | | 17.4 | -22 | 3505 | No stop |
| 17 15 25 | --- | 18 24 53 | 9.5 | 208.3 | 2.0 | | 18.0 | 233 | 3538 | 17 11 11 |
| 17 16 00 | J1625-2527 | 18 25 28 | 7.3 | 206.8 | 2.0 | | 17.4 | 13 | 3538 | 17 16 00 |
| 17 17 10 | =1622-253 | 18 26 38 | 7.2 | 207.0 | 2.0 | | 17.6 | 70 | 3547 | 17 16 01 |
| 17 17 10 | ARSCO | 18 26 38 | 9.4 | 208.7 | 2.1 | | 18.2 | -22 | 3547 | No stop |
| 17 21 25 | --- | 18 30 54 | 9.1 | 209.6 | 2.1 | | 18.8 | 233 | 3579 | 17 17 11 |
| 17 21 25 | J1621-2241 | 18 30 54 | 9.2 | 209.8 | 2.1 | | 18.9 | -10 | 3579 | No stop |
| 17 23 25 | --- | 18 32 54 | 9.1 | 210.2 | 2.2 | | 19.1 | 110 | 3595 | 17 21 26 |
| 17 24 00 | J1625-2527 | 18 33 29 | 6.7 | 208.5 | 2.1 | | 18.5 | 12 | 3595 | 17 24 00 |
| 17 25 10 | =1622-253 | 18 34 39 | 6.6 | 208.7 | 2.1 | | 18.7 | 70 | 3604 | 17 24 01 |
| 17 25 10 | ARSCO | 18 34 39 | 8.8 | 210.5 | 2.2 | | 19.3 | -22 | 3604 | No stop |
| 17 29 25 | --- | 18 38 55 | 8.4 | 211.4 | 2.3 | | 19.9 | 233 | 3637 | 17 25 11 |
| 17 29 25 | J1625-2527 | 18 38 55 | 6.3 | 209.7 | 2.2 | | 19.2 | -22 | 3637 | No stop |
| 17 31 10 | =1622-253 | 18 40 40 | 6.2 | 210.0 | 2.2 | | 19.5 | 83 | 3650 | 17 29 26 |
| 17 31 10 | ARSCO | 18 40 40 | 8.3 | 211.8 | 2.3 | | 20.1 | -22 | 3650 | No stop |
| 17 35 25 | --- | 18 44 56 | 8.0 | 212.7 | 2.4 | | 20.6 | 233 | 3683 | 17 31 11 |
| 17 36 00 | J1625-2527 | 18 45 31 | 5.8 | 211.1 | 2.3 | | 20.1 | 13 | 3683 | 17 36 00 |
| 17 37 10 | =1622-253 | 18 46 41 | 5.7 | 211.3 | 2.3 | | 20.2 | 70 | 3692 | 17 36 01 |
| 17 37 10 | ARSCO | 18 46 41 | 7.8 | 213.1 | 2.4 | | 20.9 | -22 | 3692 | No stop |
| 17 41 25 | --- | 18 50 57 | 7.5 | 214.0 | 2.5 | | 21.4 | 233 | 3724 | 17 37 11 |
| 17 41 25 | J1621-2241 | 18 50 57 | 7.6 | 214.1 | 2.5 | | 21.4 | -10 | 3724 | No stop |
| 17 43 25 | --- | 18 52 57 | 7.5 | 214.6 | 2.5 | | 21.7 | 110 | 3740 | 17 41 26 |
| 17 44 00 | J1625-2527 | 18 53 32 | 5.2 | 212.8 | 2.4 | | 21.1 | 13 | 3740 | 17 44 00 |
| 17 45 10 | =1622-253 | 18 54 42 | 5.1 | 213.0 | 2.5 | | 21.3 | 70 | 3749 | 17 44 01 |
| 17 45 10 | ARSCO | 18 54 42 | 7.2 | 214.8 | 2.5 | | 21.9 | -21 | 3749 | No stop |
| 17 49 25 | --- | 18 58 58 | 6.8 | 215.7 | 2.6 | | 22.4 | 234 | 3781 | 17 45 11 |
| 17 49 25 | J1625-2527 | 18 58 58 | 4.7 | 213.9 | 2.5 | | 21.8 | -22 | 3781 | No stop |
| 17 51 10 | =1622-253 | 19 00 43 | 4.6 | 214.3 | 2.6 | | 22.0 | 83 | 3795 | 17 49 26 |
| 17 58 10 | J0013+4051 | 19 07 45 | 38.9 | 70.9 | -5.1 | | -48.7 | 118 | 3795 | 17 58 10 |
| 17 59 40 | =0010+405 | 19 09 15 | 39.2 | 71.1 | -5.1 | | -48.8 | 90 | 3806 | 17 58 11 |

Schedule for TORUN (Code Tr) Page 9
 e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| ----- RP028 ----- | | | | | | | | | | |
| 18 00 00 | J0013+4051 | 19 09 35 | 39.2 | 71.2 | -5.1 | | -48.8 | 14 | 3806 | 18 00 00 |
| 18 01 00 | =0010+405 | 19 10 35 | 39.4 | 71.4 | -5.1 | | -48.9 | 60 | 3814 | 18 00 01 |
| 18 02 00 | J2353+5518 | 19 11 35 | 50.4 | 57.3 | -4.7 | | -62.8 | 5 | 3814 | 18 02 00 |
| 18 03 00 | =2351+550 | 19 12 35 | 50.5 | 57.4 | -4.7 | | -63.0 | 60 | 3822 | 18 02 01 |
| 18 03 00 | IRAS23436 | 19 12 35 | 50.6 | 61.1 | -4.6 | | -61.6 | -22 | 3822 | No stop |
| 18 06 44 | --- | 19 16 20 | 51.0 | 61.5 | -4.5 | | -62.1 | 202 | 3850 | 18 03 01 |
| 18 07 24 | J2353+5518 | 19 17 00 | 51.1 | 57.8 | -4.6 | | -63.5 | 18 | 3850 | 18 07 24 |
| 18 08 24 | =2351+550 | 19 18 00 | 51.2 | 57.9 | -4.6 | | -63.6 | 60 | 3858 | 18 07 25 |
| 18 08 24 | IRAS23436 | 19 18 00 | 51.3 | 61.7 | -4.5 | | -62.3 | -22 | 3858 | No stop |
| 18 12 04 | --- | 19 21 41 | 51.8 | 62.1 | -4.4 | | -62.7 | 198 | 3886 | 18 08 25 |
| 18 12 04 | J2353+5518 | 19 21 41 | 51.7 | 58.3 | -4.5 | | -64.1 | -22 | 3886 | No stop |
| 18 13 34 | =2351+550 | 19 23 11 | 51.9 | 58.4 | -4.5 | | -64.3 | 68 | 3898 | 18 12 05 |
| 18 13 34 | IRAS23436 | 19 23 11 | 52.0 | 62.2 | -4.4 | | -62.8 | -23 | 3898 | No stop |
| 18 17 18 | --- | 19 26 56 | 52.5 | 62.6 | -4.3 | | -63.3 | 201 | 3927 | 18 13 35 |
| 18 17 58 | J2353+5518 | 19 27 36 | 52.4 | 58.9 | -4.5 | | -64.9 | 17 | 3927 | 18 17 58 |
| 18 18 48 | =2351+550 | 19 28 26 | 52.6 | 58.9 | -4.4 | | -65.0 | 50 | 3933 | 18 17 59 |
| 18 18 48 | IRAS23436 | 19 28 26 | 52.7 | 62.8 | -4.3 | | -63.4 | -23 | 3933 | No stop |
| 18 22 32 | --- | 19 32 11 | 53.2 | 63.2 | -4.2 | | -63.9 | 201 | 3962 | 18 18 49 |
| 18 22 32 | J2353+5518 | 19 32 11 | 53.0 | 59.3 | -4.4 | | -65.4 | -23 | 3962 | No stop |
| 18 24 02 | =2351+550 | 19 33 41 | 53.2 | 59.5 | -4.3 | | -65.6 | 67 | 3973 | 18 22 33 |
| 18 24 02 | IRAS23436 | 19 33 41 | 53.4 | 63.4 | -4.2 | | -64.0 | -23 | 3973 | No stop |
| 18 27 46 | --- | 19 37 25 | 53.9 | 63.8 | -4.2 | | -64.5 | 201 | 4002 | 18 24 03 |
| 18 28 26 | J2353+5518 | 19 38 06 | 53.8 | 59.9 | -4.3 | | -66.2 | 17 | 4002 | 18 28 26 |
| 18 29 26 | =2351+550 | 19 39 06 | 53.9 | 60.0 | -4.3 | | -66.3 | 60 | 4010 | 18 28 27 |
| 18 29 26 | IRAS23436 | 19 39 06 | 54.1 | 64.0 | -4.1 | | -64.6 | -23 | 4010 | No stop |
| 18 33 06 | --- | 19 42 46 | 54.6 | 64.4 | -4.1 | | -65.1 | 197 | 4038 | 18 29 27 |
| 18 33 06 | J2353+5518 | 19 42 46 | 54.4 | 60.3 | -4.2 | | -66.8 | -23 | 4038 | No stop |
| 18 34 36 | =2351+550 | 19 44 17 | 54.6 | 60.5 | -4.2 | | -67.0 | 67 | 4049 | 18 33 07 |

Schedule for TORUN (Code Tr)

Page 10

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 18 34 36 | IRAS23436 | 19 44 17 | 54.8 | 64.5 | -4.0 | | -65.2 | -23 | 4049 | No stop |
| 18 38 20 | --- | 19 48 01 | 55.3 | 65.0 | -4.0 | | -65.6 | 201 | 4078 | 18 34 37 |
| 18 39 00 | J2353+5518 | 19 48 41 | 55.2 | 60.9 | -4.1 | | -67.6 | 17 | 4078 | 18 39 00 |
| 18 39 50 | =2351+550 | 19 49 31 | 55.3 | 61.0 | -4.1 | | -67.7 | 50 | 4085 | 18 39 01 |
| 18 39 50 | IRAS23436 | 19 49 31 | 55.5 | 65.1 | -4.0 | | -65.8 | -23 | 4085 | No stop |
| 18 43 34 | --- | 19 53 16 | 56.0 | 65.5 | -3.9 | | -66.2 | 201 | 4113 | 18 39 51 |
| 18 43 34 | J2353+5518 | 19 53 16 | 55.8 | 61.3 | -4.0 | | -68.1 | -23 | 4113 | No stop |
| 18 45 04 | =2351+550 | 19 54 46 | 56.0 | 61.5 | -4.0 | | -68.3 | 67 | 4125 | 18 43 35 |
| 18 45 04 | IRAS23436 | 19 54 46 | 56.2 | 65.7 | -3.9 | | -66.4 | -23 | 4125 | No stop |
| 18 48 48 | --- | 19 58 31 | 56.7 | 66.1 | -3.8 | | -66.8 | 201 | 4154 | 18 45 05 |
| 18 49 28 | J2353+5518 | 19 59 11 | 56.6 | 61.9 | -3.9 | | -68.9 | 17 | 4154 | 18 49 28 |
| 18 50 28 | =2351+550 | 20 00 11 | 56.7 | 62.0 | -3.9 | | -69.0 | 60 | 4161 | 18 49 29 |
| 18 50 28 | IRAS23436 | 20 00 11 | 57.0 | 66.3 | -3.8 | | -67.0 | -24 | 4161 | No stop |
| 18 54 08 | --- | 20 03 52 | 57.5 | 66.7 | -3.7 | | -67.4 | 196 | 4189 | 18 50 29 |
| 18 54 08 | J2353+5518 | 20 03 52 | 57.2 | 62.3 | -3.8 | | -69.5 | -24 | 4189 | No stop |
| 18 55 38 | =2351+550 | 20 05 22 | 57.4 | 62.5 | -3.8 | | -69.7 | 66 | 4201 | 18 54 09 |
| 18 55 38 | IRAS23436 | 20 05 22 | 57.7 | 66.8 | -3.7 | | -67.6 | -24 | 4201 | No stop |
| 18 59 22 | --- | 20 09 07 | 58.2 | 67.2 | -3.6 | | -68.0 | 200 | 4230 | 18 55 39 |
| 19 00 02 | J2353+5518 | 20 09 47 | 58.0 | 62.9 | -3.7 | | -70.3 | 16 | 4230 | 19 00 02 |
| 19 00 52 | =2351+550 | 20 10 37 | 58.1 | 62.9 | -3.7 | | -70.4 | 50 | 4236 | 19 00 03 |
| 19 00 52 | IRAS23436 | 20 10 37 | 58.4 | 67.4 | -3.6 | | -68.1 | -24 | 4236 | No stop |
| 19 04 36 | --- | 20 14 21 | 58.9 | 67.8 | -3.5 | | -68.6 | 200 | 4265 | 19 00 53 |
| 19 04 36 | J2353+5518 | 20 14 21 | 58.6 | 63.3 | -3.7 | | -70.9 | -24 | 4265 | No stop |
| 19 06 06 | =2351+550 | 20 15 52 | 58.8 | 63.4 | -3.6 | | -71.1 | 66 | 4276 | 19 04 37 |
| 19 06 06 | IRAS23436 | 20 15 52 | 59.1 | 67.9 | -3.5 | | -68.7 | -24 | 4276 | No stop |
| 19 09 50 | --- | 20 19 36 | 59.6 | 68.3 | -3.5 | | -69.1 | 200 | 4305 | 19 06 07 |
| 19 10 30 | J2353+5518 | 20 20 16 | 59.4 | 63.8 | -3.6 | | -71.6 | 16 | 4305 | 19 10 30 |
| 19 11 30 | =2351+550 | 20 21 17 | 59.5 | 63.9 | -3.6 | | -71.8 | 60 | 4313 | 19 10 31 |
| 19 11 30 | IRAS23436 | 20 21 17 | 59.9 | 68.5 | -3.4 | | -69.3 | -24 | 4313 | No stop |
| 19 15 10 | --- | 20 24 57 | 60.4 | 68.9 | -3.4 | | -69.7 | 196 | 4341 | 19 11 31 |

Schedule for TORUN (Code Tr)

Page 11

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 19 15 10 | J2353+5518 | 20 24 57 | 60.0 | 64.2 | -3.5 | | -72.2 | -24 | 4341 | No stop |
| 19 16 40 | =2351+550 | 20 26 27 | 60.2 | 64.3 | -3.5 | | -72.4 | 66 | 4353 | 19 15 11 |
| 19 16 40 | IRAS23436 | 20 26 27 | 60.6 | 69.0 | -3.3 | | -69.9 | -24 | 4353 | No stop |
| 19 20 24 | --- | 20 30 12 | 61.1 | 69.4 | -3.3 | | -70.3 | 200 | 4381 | 19 16 41 |
| 19 21 04 | J2353+5518 | 20 30 52 | 60.8 | 64.7 | -3.4 | | -73.0 | 16 | 4381 | 19 21 04 |
| 19 21 54 | =2351+550 | 20 31 42 | 60.9 | 64.8 | -3.4 | | -73.1 | 50 | 4388 | 19 21 05 |
| 19 21 54 | IRAS23436 | 20 31 42 | 61.3 | 69.6 | -3.3 | | -70.5 | -25 | 4388 | No stop |
| 19 25 38 | --- | 20 35 27 | 61.9 | 70.0 | -3.2 | | -70.9 | 199 | 4416 | 19 21 55 |
| 19 25 38 | J2353+5518 | 20 35 27 | 61.4 | 65.1 | -3.3 | | -73.6 | -25 | 4416 | No stop |
| 19 27 08 | =2351+550 | 20 36 57 | 61.6 | 65.2 | -3.3 | | -73.8 | 65 | 4428 | 19 25 39 |
| 19 27 08 | IRAS23436 | 20 36 57 | 62.1 | 70.1 | -3.2 | | -71.0 | -25 | 4428 | No stop |
| 19 30 52 | --- | 20 40 42 | 62.6 | 70.5 | -3.1 | | -71.4 | 199 | 4457 | 19 27 09 |
| 19 31 32 | J2353+5518 | 20 41 22 | 62.2 | 65.6 | -3.2 | | -74.4 | 15 | 4457 | 19 31 32 |
| 19 32 32 | =2351+550 | 20 42 22 | 62.4 | 65.7 | -3.2 | | -74.5 | 60 | 4464 | 19 31 33 |
| 19 32 32 | IRAS23436 | 20 42 22 | 62.8 | 70.7 | -3.1 | | -71.6 | -25 | 4464 | No stop |
| 19 36 12 | --- | 20 46 03 | 63.4 | 71.1 | -3.0 | | -72.0 | 195 | 4493 | 19 32 33 |
| 19 36 12 | J2353+5518 | 20 46 03 | 62.9 | 66.0 | -3.1 | | -75.0 | -25 | 4493 | No stop |
| 19 37 42 | =2351+550 | 20 47 33 | 63.1 | 66.1 | -3.1 | | -75.2 | 65 | 4504 | 19 36 13 |
| 19 37 42 | IRAS23436 | 20 47 33 | 63.6 | 71.2 | -3.0 | | -72.2 | -25 | 4504 | No stop |
| 19 41 26 | --- | 20 51 18 | 64.1 | 71.6 | -2.9 | | -72.6 | 199 | 4533 | 19 37 43 |
| 19 42 06 | J2353+5518 | 20 51 58 | 63.7 | 66.4 | -3.0 | | -75.8 | 15 | 4533 | 19 42 06 |
| 19 42 56 | =2351+550 | 20 52 48 | 63.8 | 66.5 | -3.0 | | -75.9 | 50 | 4539 | 19 42 07 |
| 19 42 56 | IRAS23436 | 20 52 48 | 64.3 | 71.8 | -2.9 | | -72.8 | -26 | 4539 | No stop |
| 19 46 40 | --- | 20 56 32 | 64.9 | 72.1 | -2.8 | | -73.2 | 198 | 4568 | 19 42 57 |
| 19 46 40 | J2353+5518 | 20 56 32 | 64.3 | 66.8 | -3.0 | | -76.4 | -26 | 4568 | No stop |
| 19 48 10 | =2351+550 | 20 58 03 | 64.5 | 66.9 | -2.9 | | -76.7 | 64 | 4579 | 19 46 41 |
| 19 48 10 | IRAS23436 | 20 58 03 | 65.1 | 72.3 | -2.8 | | -73.3 | -26 | 4579 | No stop |
| 19 51 54 | --- | 21 01 47 | 65.6 | 72.7 | -2.8 | | -73.7 | 198 | 4608 | 19 48 11 |
| 19 52 34 | J2353+5518 | 21 02 27 | 65.2 | 67.2 | -2.9 | | -77.3 | 14 | 4608 | 19 52 34 |
| 19 53 34 | =2351+550 | 21 03 28 | 65.3 | 67.3 | -2.9 | | -77.4 | 60 | 4616 | 19 52 35 |

Schedule for TORUN (Code Tr)

Page 12

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 19 53 34 | IRAS23436 | 21 03 28 | 65.9 | 72.8 | -2.7 | | -73.9 | -26 | 4616 | No stop |
| 19 57 14 | --- | 21 07 08 | 66.4 | 73.2 | -2.7 | | -74.3 | 194 | 4644 | 19 53 35 |
| 19 57 14 | J2353+5518 | 21 07 08 | 65.8 | 67.6 | -2.8 | | -77.9 | -26 | 4644 | No stop |
| 19 58 44 | =2351+550 | 21 08 38 | 66.0 | 67.7 | -2.8 | | -78.1 | 64 | 4656 | 19 57 15 |
| 19 58 44 | IRAS23436 | 21 08 38 | 66.6 | 73.4 | -2.6 | | -74.5 | -26 | 4656 | No stop |
| 20 02 28 | --- | 21 12 23 | 67.1 | 73.7 | -2.6 | | -74.9 | 198 | 4684 | 19 58 45 |
| 20 03 08 | J2353+5518 | 21 13 03 | 66.6 | 68.0 | -2.7 | | -78.7 | 13 | 4684 | 20 03 08 |
| 20 03 58 | =2351+550 | 21 13 53 | 66.7 | 68.1 | -2.7 | | -78.9 | 50 | 4691 | 20 03 09 |
| 20 03 58 | IRAS23436 | 21 13 53 | 67.4 | 73.9 | -2.6 | | -75.0 | -27 | 4691 | No stop |
| 20 07 42 | --- | 21 17 38 | 67.9 | 74.3 | -2.5 | | -75.4 | 197 | 4719 | 20 03 59 |
| 20 07 42 | J2353+5518 | 21 17 38 | 67.3 | 68.3 | -2.6 | | -79.4 | -27 | 4719 | No stop |
| 20 09 12 | =2351+550 | 21 19 08 | 67.5 | 68.4 | -2.6 | | -79.6 | 63 | 4731 | 20 07 43 |
| 20 09 12 | IRAS23436 | 21 19 08 | 68.1 | 74.4 | -2.5 | | -75.6 | -27 | 4731 | No stop |
| 20 12 56 | --- | 21 22 53 | 68.7 | 74.8 | -2.4 | | -76.0 | 197 | 4760 | 20 09 13 |
| 20 13 36 | J2353+5518 | 21 23 33 | 68.1 | 68.7 | -2.5 | | -80.2 | 13 | 4760 | 20 13 36 |
| 20 14 36 | =2351+550 | 21 24 33 | 68.2 | 68.8 | -2.5 | | -80.4 | 60 | 4767 | 20 13 37 |
| 20 14 36 | IRAS23436 | 21 24 33 | 68.9 | 75.0 | -2.4 | | -76.2 | -27 | 4767 | No stop |
| 20 18 16 | --- | 21 28 14 | 69.4 | 75.3 | -2.3 | | -76.6 | 193 | 4796 | 20 14 37 |
| 20 18 16 | J2353+5518 | 21 28 14 | 68.7 | 69.0 | -2.4 | | -80.9 | -28 | 4796 | No stop |
| 20 19 46 | =2351+550 | 21 29 44 | 69.0 | 69.1 | -2.4 | | -81.2 | 62 | 4807 | 20 18 17 |
| 20 19 46 | IRAS23436 | 21 29 44 | 69.6 | 75.5 | -2.3 | | -76.8 | -28 | 4807 | No stop |
| 20 23 30 | --- | 21 33 28 | 70.2 | 75.8 | -2.2 | | -77.2 | 196 | 4836 | 20 19 47 |
| 20 24 10 | J2353+5518 | 21 34 09 | 69.6 | 69.4 | -2.3 | | -81.8 | 12 | 4836 | 20 24 10 |
| 20 25 00 | =2351+550 | 21 34 59 | 69.7 | 69.4 | -2.3 | | -82.0 | 50 | 4842 | 20 24 11 |
| 20 25 00 | IRAS23436 | 21 34 59 | 70.4 | 76.0 | -2.2 | | -77.3 | -28 | 4842 | No stop |
| 20 28 44 | --- | 21 38 43 | 71.0 | 76.3 | -2.1 | | -77.7 | 196 | 4871 | 20 25 01 |
| 20 28 44 | J2353+5518 | 21 38 43 | 70.2 | 69.6 | -2.3 | | -82.5 | -28 | 4871 | No stop |
| 20 30 14 | =2351+550 | 21 40 14 | 70.4 | 69.7 | -2.2 | | -82.8 | 62 | 4883 | 20 28 45 |
| 20 30 14 | IRAS23436 | 21 40 14 | 71.2 | 76.5 | -2.1 | | -77.9 | -29 | 4883 | No stop |
| 20 33 58 | --- | 21 43 58 | 71.7 | 76.9 | -2.1 | | -78.3 | 195 | 4911 | 20 30 15 |

Schedule for TORUN (Code Tr)

Page 13

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 20 34 38 | J2353+5518 | 21 44 38 | 71.0 | 69.9 | -2.2 | | -83.5 | 11 | 4911 | 20 34 38 |
| 20 35 38 | =2351+550 | 21 45 38 | 71.2 | 70.0 | -2.1 | | -83.6 | 60 | 4919 | 20 34 39 |
| 20 35 38 | IRAS23436 | 21 45 38 | 72.0 | 77.0 | -2.0 | | -78.5 | -29 | 4919 | No stop |
| 20 39 18 | --- | 21 49 19 | 72.5 | 77.4 | -2.0 | | -78.9 | 191 | 4947 | 20 35 39 |
| 20 39 18 | J2353+5518 | 21 49 19 | 71.7 | 70.1 | -2.1 | | -84.2 | -29 | 4947 | No stop |
| 20 40 48 | =2351+550 | 21 50 49 | 71.9 | 70.2 | -2.1 | | -84.4 | 61 | 4959 | 20 39 19 |
| 20 40 48 | IRAS23436 | 21 50 49 | 72.7 | 77.5 | -1.9 | | -79.0 | -30 | 4959 | No stop |
| 20 44 32 | --- | 21 54 34 | 73.3 | 77.9 | -1.9 | | -79.5 | 194 | 4987 | 20 40 49 |
| 20 45 12 | J2353+5518 | 21 55 14 | 72.5 | 70.4 | -2.0 | | -85.2 | 10 | 4987 | 20 45 12 |
| 20 46 02 | =2351+550 | 21 56 04 | 72.7 | 70.4 | -2.0 | | -85.3 | 50 | 4994 | 20 45 13 |
| 20 46 02 | IRAS23436 | 21 56 04 | 73.5 | 78.0 | -1.8 | | -79.6 | -30 | 4994 | No stop |
| 20 49 46 | --- | 21 59 49 | 74.0 | 78.4 | -1.8 | | -80.0 | 194 | 5023 | 20 46 03 |
| 20 49 46 | J2353+5518 | 21 59 49 | 73.2 | 70.6 | -1.9 | | -86.0 | -31 | 5023 | No stop |
| 20 51 16 | =2351+550 | 22 01 19 | 73.4 | 70.6 | -1.9 | | -86.2 | 59 | 5034 | 20 49 47 |
| 20 51 16 | IRAS23436 | 22 01 19 | 74.3 | 78.5 | -1.8 | | -80.2 | -31 | 5034 | No stop |
| 20 55 00 | --- | 22 05 04 | 74.8 | 78.9 | -1.7 | | -80.6 | 193 | 5063 | 20 51 17 |
| 20 55 40 | J2353+5518 | 22 05 44 | 74.0 | 70.8 | -1.8 | | -87.0 | 9 | 5063 | 20 55 40 |
| 20 56 40 | =2351+550 | 22 06 44 | 74.2 | 70.8 | -1.8 | | -87.2 | 60 | 5070 | 20 55 41 |
| 20 56 40 | IRAS23436 | 22 06 44 | 75.1 | 79.0 | -1.7 | | -80.8 | -32 | 5070 | No stop |
| 21 00 20 | --- | 22 10 24 | 75.6 | 79.4 | -1.6 | | -81.2 | 188 | 5099 | 20 56 41 |
| 21 00 20 | J2353+5518 | 22 10 24 | 74.7 | 70.9 | -1.7 | | -87.9 | -32 | 5099 | No stop |
| 21 01 50 | =2351+550 | 22 11 55 | 74.9 | 70.9 | -1.7 | | -88.1 | 58 | 5110 | 21 00 21 |
| 21 01 50 | IRAS23436 | 22 11 55 | 75.8 | 79.5 | -1.6 | | -81.4 | -32 | 5110 | No stop |
| 21 05 34 | --- | 22 15 39 | 76.4 | 79.8 | -1.5 | | -81.8 | 192 | 5139 | 21 01 51 |
| 21 06 14 | J2353+5518 | 22 16 19 | 75.5 | 71.0 | -1.6 | | -89.0 | 7 | 5139 | 21 06 14 |
| 21 07 04 | =2351+550 | 22 17 10 | 75.7 | 71.0 | -1.6 | | -89.2 | 50 | 5145 | 21 06 15 |
| 21 07 04 | IRAS23436 | 22 17 10 | 76.6 | 80.0 | -1.5 | | -82.0 | -33 | 5145 | No stop |
| 21 10 48 | --- | 22 20 54 | 77.2 | 80.3 | -1.4 | | -82.4 | 191 | 5174 | 21 07 05 |
| 21 10 48 | J2353+5518 | 22 20 54 | 76.2 | 71.0 | -1.6 | | -89.9 | -34 | 5174 | No stop |
| 21 12 18 | =2351+550 | 22 22 24 | 76.4 | 71.0 | -1.5 | | -90.2 | 56 | 5186 | 21 10 49 |

Schedule for TORUN (Code Tr)

Page 14

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 21 12 18 | IRAS23436 | 22 22 24 | 77.4 | 80.4 | -1.4 | | -82.6 | -34 | 5186 | No stop |
| 21 16 02 | --- | 22 26 09 | 77.9 | 80.8 | -1.3 | | -83.0 | 190 | 5214 | 21 12 19 |
| 21 16 02 | J2353+5518 | 22 26 09 | 76.9 | 71.0 | -1.5 | | -91.0 | -35 | 5214 | No stop |
| 21 17 32 | =2351+550 | 22 27 39 | 77.1 | 70.9 | -1.4 | | -91.3 | 55 | 5226 | 21 16 03 |
| 21 17 32 | IRAS23436 | 22 27 39 | 78.2 | 80.9 | -1.3 | | -83.2 | -35 | 5226 | No stop |
| 21 21 16 | --- | 22 31 24 | 78.7 | 81.2 | -1.3 | | -83.6 | 189 | 5255 | 21 17 33 |
| 21 22 06 | J2353+5518 | 22 32 14 | 77.8 | 70.8 | -1.4 | | -92.4 | 14 | 5255 | 21 22 06 |
| 21 23 06 | =2351+550 | 22 33 14 | 77.9 | 70.8 | -1.4 | | -92.6 | 60 | 5262 | 21 22 07 |
| 21 23 06 | IRAS23436 | 22 33 14 | 79.0 | 81.4 | -1.2 | | -83.8 | -36 | 5262 | No stop |
| 21 26 46 | --- | 22 36 55 | 79.5 | 81.7 | -1.2 | | -84.2 | 184 | 5290 | 21 23 07 |
| 21 26 46 | J2353+5518 | 22 36 55 | 78.5 | 70.7 | -1.3 | | -93.5 | -37 | 5290 | No stop |
| 21 28 16 | =2351+550 | 22 38 25 | 78.7 | 70.6 | -1.3 | | -93.9 | 53 | 5302 | 21 26 47 |
| 21 28 16 | IRAS23436 | 22 38 25 | 79.8 | 81.8 | -1.1 | | -84.4 | -37 | 5302 | No stop |
| 21 32 00 | --- | 22 42 10 | 80.3 | 82.1 | -1.1 | | -84.9 | 187 | 5331 | 21 28 17 |
| 21 32 50 | J2353+5518 | 22 43 00 | 79.3 | 70.3 | -1.2 | | -95.1 | 12 | 5331 | 21 32 50 |
| 21 33 40 | =2351+550 | 22 43 50 | 79.4 | 70.3 | -1.2 | | -95.3 | 50 | 5337 | 21 32 51 |
| 21 33 40 | IRAS23436 | 22 43 50 | 80.6 | 82.2 | -1.1 | | -85.1 | -39 | 5337 | No stop |
| 21 37 24 | --- | 22 47 35 | 81.1 | 82.5 | -1.0 | | -85.6 | 185 | 5366 | 21 33 41 |
| 21 37 24 | J2353+5518 | 22 47 35 | 80.0 | 70.0 | -1.1 | | -96.4 | -40 | 5366 | No stop |
| 21 38 54 | =2351+550 | 22 49 05 | 80.2 | 69.8 | -1.1 | | -96.8 | 50 | 5377 | 21 37 25 |
| 21 38 54 | IRAS23436 | 22 49 05 | 81.3 | 82.6 | -1.0 | | -85.7 | -41 | 5377 | No stop |
| 21 42 38 | --- | 22 52 49 | 81.9 | 82.9 | -0.9 | | -86.2 | 183 | 5406 | 21 38 55 |
| 21 42 38 | J2353+5518 | 22 52 49 | 80.7 | 69.4 | -1.0 | | -98.0 | -42 | 5406 | No stop |
| 21 44 08 | =2351+550 | 22 54 20 | 80.9 | 69.2 | -1.0 | | -98.5 | 48 | 5418 | 21 42 39 |
| 21 44 08 | IRAS23436 | 22 54 20 | 82.1 | 83.0 | -0.9 | | -86.4 | -43 | 5418 | No stop |
| 21 47 52 | --- | 22 58 04 | 82.7 | 83.2 | -0.8 | | -86.9 | 181 | 5446 | 21 44 09 |
| 21 48 42 | J2353+5518 | 22 58 54 | 81.6 | 68.5 | -0.9 | | -100.1 | 6 | 5446 | 21 48 42 |
| 21 49 42 | =2351+550 | 22 59 55 | 81.7 | 68.4 | -0.9 | | -100.5 | 60 | 5454 | 21 48 43 |
| 21 49 42 | IRAS23436 | 22 59 55 | 83.0 | 83.4 | -0.8 | | -87.2 | -45 | 5454 | No stop |
| 21 53 22 | --- | 23 03 35 | 83.5 | 83.6 | -0.7 | | -87.7 | 175 | 5482 | 21 49 43 |

Schedule for TORUN (Code Tr)

Page 15

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 21 53 22 | J2353+5518 | 23 03 35 | 82.2 | 67.6 | -0.9 | | -102.0 | -47 | 5482 | No stop |
| 21 54 52 | =2351+550 | 23 05 05 | 82.4 | 67.3 | -0.8 | | -102.6 | 43 | 5494 | 21 53 23 |
| 21 54 52 | IRAS23436 | 23 05 05 | 83.7 | 83.6 | -0.7 | | -88.0 | -48 | 5494 | No stop |
| 21 58 36 | --- | 23 08 50 | 84.3 | 83.8 | -0.6 | | -88.5 | 176 | 5523 | 21 54 53 |
| 21 59 36 | J2353+5518 | 23 09 50 | 83.1 | 66.0 | -0.7 | | -104.9 | 10 | 5523 | 21 59 36 |
| 22 00 36 | =2351+550 | 23 10 50 | 83.2 | 65.7 | -0.7 | | -105.4 | 60 | 5530 | 21 59 37 |
| 22 00 36 | IRAS23436 | 23 10 50 | 84.6 | 83.9 | -0.6 | | -88.9 | -51 | 5530 | No stop |
| 22 04 16 | --- | 23 14 31 | 85.1 | 84.0 | -0.5 | | -89.5 | 169 | 5558 | 22 00 37 |
| 22 04 16 | J2353+5518 | 23 14 31 | 83.7 | 64.4 | -0.7 | | -107.4 | -55 | 5558 | No stop |
| 22 05 46 | =2351+550 | 23 16 01 | 83.9 | 63.8 | -0.6 | | -108.3 | 35 | 5570 | 22 04 17 |
| 22 05 46 | IRAS23436 | 23 16 01 | 85.4 | 84.0 | -0.5 | | -89.8 | -55 | 5570 | No stop |
| 22 09 30 | --- | 23 19 46 | 85.9 | 83.9 | -0.5 | | -90.6 | 169 | 5599 | 22 05 47 |
| 22 10 30 | J2353+5518 | 23 20 46 | 84.5 | 61.5 | -0.6 | | -111.6 | 0 | 5599 | 22 10 30 |
| 22 11 20 | =2351+550 | 23 21 36 | 84.7 | 61.1 | -0.6 | | -112.2 | 50 | 5605 | 22 10 31 |
| 22 11 20 | IRAS23436 | 23 21 36 | 86.2 | 83.9 | -0.4 | | -91.0 | -61 | 5605 | No stop |
| 22 15 04 | --- | 23 25 21 | 86.7 | 83.7 | -0.4 | | -92.0 | 163 | 5634 | 22 11 21 |
| 22 15 04 | J2353+5518 | 23 25 21 | 85.1 | 58.6 | -0.5 | | -115.4 | -67 | 5634 | No stop |
| 22 16 34 | =2351+550 | 23 26 51 | 85.3 | 57.5 | -0.5 | | -116.8 | 23 | 5645 | 22 15 05 |
| 22 16 34 | IRAS23436 | 23 26 51 | 87.0 | 83.5 | -0.3 | | -92.5 | -67 | 5645 | No stop |
| 22 20 18 | --- | 23 30 36 | 87.5 | 82.8 | -0.3 | | -93.9 | 157 | 5674 | 22 16 35 |
| 22 21 18 | J2353+5518 | 23 31 36 | 85.9 | 53.2 | -0.4 | | -122.2 | -15 | 5674 | 22 21 18 |
| 22 22 18 | =2351+550 | 23 32 36 | 86.0 | 52.1 | -0.4 | | -123.5 | 45 | 5682 | 22 21 19 |
| 22 22 18 | IRAS23436 | 23 32 36 | 87.8 | 82.3 | -0.2 | | -94.8 | -75 | 5682 | No stop |
| 22 25 58 | --- | 23 36 17 | 88.4 | 80.5 | -0.2 | | -97.3 | 145 | 5710 | 22 22 19 |
| 22 25 58 | J2353+5518 | 23 36 17 | 86.5 | 47.4 | -0.3 | | -128.9 | -85 | 5710 | No stop |
| 22 27 28 | =2351+550 | 23 37 47 | 86.6 | 45.1 | -0.3 | | -131.5 | 5 | 5722 | 22 25 59 |
| 22 27 28 | IRAS23436 | 23 37 47 | 88.6 | 79.3 | -0.2 | | -98.8 | -81 | 5722 | No stop |
| 22 31 12 | --- | 23 41 31 | 89.1 | 73.3 | -0.1 | | -105.6 | 143 | 5750 | 22 27 29 |
| 22 32 12 | J2353+5518 | 23 42 32 | 87.1 | 36.2 | -0.2 | | -141.4 | -31 | 5750 | 22 32 12 |
| 22 33 02 | =2351+550 | 23 43 22 | 87.2 | 34.3 | -0.2 | | -143.4 | 19 | 5757 | 22 32 13 |

Schedule for TORUN (Code Tr)

Page 16

e-EVN: EL058D, RP028, EG096C, RP029B

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 19 Sep 2017 Day 262 --- | | | | | | | | | | |
| 22 33 02 | IRAS23436 | 23 43 22 | 89.4 | 66.1 | -0.1 | | -113.1 | -59 | 5757 | No stop |
| 22 36 46 | --- | 23 47 06 | 89.8 | -3.7 | 0.0 | | 176.3 | 165 | 5785 | 22 33 03 |
| 22 36 46 | J2353+5518 | 23 47 06 | 87.4 | 24.7 | -0.1 | | -153.8 | -65 | 5785 | No stop |
| 22 38 16 | =2351+550 | 23 48 37 | 87.5 | 20.2 | -0.1 | | -158.6 | 25 | 5797 | 22 36 47 |
| 22 43 00 | J2353+5518 | 23 53 21 | 87.7 | 4.5 | -0.0 | | -175.3 | 266 | 5797 | 22 43 00 |
| 22 43 45 | =2351+550 | 23 54 06 | 87.7 | 1.9 | -0.0 | | -178.0 | 45 | 5803 | 22 43 01 |
| 22 47 25 | J2353+5518 | 23 57 47 | 87.6 | -10.9 | 0.1 | | 168.4 | 202 | 5803 | 22 47 25 |
| 22 48 55 | =2351+550 | 23 59 17 | 87.6 | -15.9 | 0.1 | | 163.2 | 90 | 5814 | 22 47 26 |
| 22 57 39 | J0013+4051 | 00 08 03 | 77.8 | 174.2 | -0.1 | | -4.6 | 133 | 5814 | 22 57 39 |
| 23 00 39 | =0010+405 | 00 11 03 | 77.8 | 176.9 | -0.1 | | -2.4 | 180 | 5837 | 22 57 40 |

----- CLOCK-SEARCH -----

| | | | | | | | | | | |
|----------|------------|----------|------|-------|------|--|-------|-----|------|----------|
| 23 01 39 | J0013+4051 | 00 12 03 | 77.9 | 177.8 | -0.0 | | -1.7 | 52 | 5837 | 23 01 39 |
| 23 05 39 | =0010+405 | 00 16 04 | 77.9 | 181.4 | 0.0 | | 1.1 | 240 | 5868 | 23 01 40 |
| 23 08 39 | J0237+2848 | 00 19 05 | 54.8 | 119.5 | -2.3 | | -36.6 | 41 | 5868 | 23 08 39 |
| 23 15 39 | =0234+285 | 00 26 06 | 55.7 | 121.7 | -2.2 | | -35.7 | 420 | 5922 | 23 08 40 |
| 23 16 39 | J0237+2848 | 00 27 06 | 55.8 | 122.0 | -2.2 | | -35.6 | 54 | 5922 | 23 16 39 |
| 23 30 39 | =0234+285 | 00 41 08 | 57.6 | 126.6 | -2.0 | | -33.4 | 840 | 6030 | 23 16 40 |
| 23 31 39 | J0237+2848 | 00 42 08 | 57.7 | 126.9 | -1.9 | | -33.2 | 53 | 6030 | 23 31 39 |
| 23 45 39 | =0234+285 | 00 56 11 | 59.3 | 131.9 | -1.7 | | -30.7 | 840 | 6137 | 23 31 40 |

--- Start: Tue 19 Sep 2017 Day 262 -- Stop: Wed 20 Sep 2017 Day 263 ---

| | | | | | | | | | | |
|----------|------------|----------|------|-------|------|--|-------|-----|------|----------|
| 23 46 39 | J0237+2848 | 00 57 11 | 59.4 | 132.3 | -1.7 | | -30.5 | 53 | 6137 | 23 46 39 |
| 00 00 39 | =0234+285 | 01 11 13 | 60.9 | 137.7 | -1.5 | | -27.5 | 840 | 6245 | 23 46 40 |
| 00 01 39 | J0237+2848 | 01 12 13 | 61.0 | 138.1 | -1.4 | | -27.2 | 53 | 6245 | 00 01 39 |
| 00 15 39 | =0234+285 | 01 26 16 | 62.3 | 144.0 | -1.2 | | -23.8 | 840 | 6353 | 00 01 40 |
| 00 16 39 | J0237+2848 | 01 27 16 | 62.4 | 144.4 | -1.2 | | -23.5 | 53 | 6353 | 00 16 39 |
| 00 30 39 | =0234+285 | 01 41 18 | 63.6 | 150.7 | -1.0 | | -19.6 | 840 | 6460 | 00 16 40 |
| 00 31 39 | J0237+2848 | 01 42 18 | 63.6 | 151.2 | -0.9 | | -19.3 | 53 | 6460 | 00 31 39 |
| 00 45 39 | =0234+285 | 01 56 20 | 64.5 | 157.9 | -0.7 | | -15.0 | 840 | 6568 | 00 31 40 |
| 00 46 39 | J0237+2848 | 01 57 21 | 64.6 | 158.4 | -0.7 | | -14.6 | 53 | 6568 | 00 46 39 |
| 01 00 39 | =0234+285 | 02 11 23 | 65.3 | 165.5 | -0.5 | | -9.9 | 840 | 6676 | 00 46 40 |

Schedule for TORUN (Code Tr)

Page 17

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 01 01 39 | J0237+2848 | 02 12 23 | 65.3 | 166.0 | -0.4 | | -9.6 | 53 | 6676 | 01 01 39 |
| 01 15 39 | =0234+285 | 02 26 25 | 65.7 | 173.3 | -0.2 | | -4.6 | 840 | 6783 | 01 01 40 |
| 01 19 39 | J0555+3948 | 02 30 26 | 53.0 | 89.7 | -3.4 | | -51.4 | 57 | 6783 | 01 19 39 |
| 01 30 39 | =0552+398 | 02 41 28 | 54.7 | 92.0 | -3.3 | | -51.4 | 660 | 6868 | 01 19 40 |
| 01 31 39 | J0555+3948 | 02 42 28 | 54.8 | 92.2 | -3.2 | | -51.4 | 54 | 6868 | 01 31 39 |
| 01 45 39 | =0552+398 | 02 56 30 | 56.9 | 95.2 | -3.0 | | -51.1 | 840 | 6976 | 01 31 40 |
| 01 46 39 | J0555+3948 | 02 57 31 | 57.1 | 95.4 | -3.0 | | -51.1 | 54 | 6976 | 01 46 39 |
| 02 00 39 | =0552+398 | 03 11 33 | 59.2 | 98.6 | -2.8 | | -50.6 | 840 | 7083 | 01 46 40 |
| 02 01 39 | J0555+3948 | 03 12 33 | 59.3 | 98.9 | -2.7 | | -50.6 | 54 | 7083 | 02 01 39 |
| 02 15 39 | =0552+398 | 03 26 35 | 61.4 | 102.4 | -2.5 | | -49.8 | 840 | 7191 | 02 01 40 |
| 02 16 39 | J0555+3948 | 03 27 35 | 61.5 | 102.6 | -2.5 | | -49.7 | 54 | 7191 | 02 16 39 |
| 02 30 39 | =0552+398 | 03 41 38 | 63.6 | 106.5 | -2.3 | | -48.6 | 840 | 7299 | 02 16 40 |
| 02 31 39 | J0555+3948 | 03 42 38 | 63.7 | 106.7 | -2.2 | | -48.5 | 54 | 7299 | 02 31 39 |
| 02 45 39 | =0552+398 | 03 56 40 | 65.7 | 111.0 | -2.0 | | -46.9 | 840 | 7407 | 02 31 40 |
| 02 46 39 | J0555+3948 | 03 57 40 | 65.8 | 111.3 | -2.0 | | -46.7 | 54 | 7407 | 02 46 39 |
| 03 00 39 | =0552+398 | 04 11 43 | 67.8 | 116.1 | -1.8 | | -44.6 | 840 | 7514 | 02 46 40 |
| 03 01 39 | J0555+3948 | 04 12 43 | 67.9 | 116.5 | -1.7 | | -44.4 | 53 | 7514 | 03 01 39 |
| 03 15 39 | =0552+398 | 04 26 45 | 69.7 | 121.9 | -1.5 | | -41.6 | 840 | 7622 | 03 01 40 |
| 03 16 39 | J0555+3948 | 04 27 45 | 69.9 | 122.3 | -1.5 | | -41.3 | 53 | 7622 | 03 16 39 |
| 03 30 39 | =0552+398 | 04 41 48 | 71.6 | 128.6 | -1.2 | | -37.6 | 840 | 7730 | 03 16 40 |
| 03 31 39 | J0555+3948 | 04 42 48 | 71.7 | 129.1 | -1.2 | | -37.3 | 53 | 7730 | 03 31 39 |
| 03 45 39 | =0552+398 | 04 56 50 | 73.3 | 136.5 | -1.0 | | -32.6 | 840 | 7837 | 03 31 40 |
| 03 46 39 | J0555+3948 | 04 57 50 | 73.4 | 137.0 | -1.0 | | -32.2 | 53 | 7837 | 03 46 39 |
| 04 00 39 | =0552+398 | 05 11 53 | 74.7 | 145.6 | -0.7 | | -26.2 | 840 | 7945 | 03 46 40 |
| 04 01 39 | J0555+3948 | 05 12 53 | 74.8 | 146.2 | -0.7 | | -25.7 | 52 | 7945 | 04 01 39 |
| 04 15 39 | =0552+398 | 05 26 55 | 75.8 | 156.1 | -0.5 | | -18.5 | 840 | 8053 | 04 01 40 |
| 04 16 39 | J0555+3948 | 05 27 55 | 75.8 | 156.8 | -0.5 | | -17.9 | 52 | 8053 | 04 16 39 |
| 04 30 39 | =0552+398 | 05 41 57 | 76.5 | 167.8 | -0.2 | | -9.5 | 840 | 8160 | 04 16 40 |
| 04 34 39 | J0927+3902 | 05 45 58 | 50.1 | 87.7 | -3.7 | | -50.5 | 64 | 8160 | 04 34 39 |
| 04 45 39 | =0923+392 | 05 57 00 | 51.7 | 89.9 | -3.5 | | -50.6 | 660 | 8245 | 04 34 40 |

Schedule for TORUN (Code Tr)

Page 18

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017  Day 263 ---

04 46 39  J0927+3902  05 58 00  51.9  90.1 -3.5    -50.6   54   8245  04 46 39
05 00 39  =0923+392   06 12 02  54.0  92.9 -3.3    -50.5   840   8353  04 46 40

05 01 39  J0927+3902  06 13 03  54.2  93.2 -3.3    -50.5   54   8353  05 01 39
05 15 39  =0923+392   06 27 05  56.3  96.2 -3.0    -50.1   840   8460  05 01 40

05 16 39  J0927+3902  06 28 05  56.4  96.4 -3.0    -50.1   54   8460  05 16 39
05 30 39  =0923+392   06 42 07  58.5  99.7 -2.8    -49.6   840   8568  05 16 40

05 31 39  J0927+3902  06 43 07  58.6  99.9 -2.7    -49.5   54   8568  05 31 39
05 45 39  =0923+392   06 57 10  60.7 103.5 -2.5    -48.7   840   8676  05 31 40

05 46 39  J0927+3902  06 58 10  60.8 103.7 -2.5    -48.6   54   8676  05 46 39
05 59 39  =0923+392   07 11 12  62.7 107.3 -2.3    -47.5   780   8776  05 46 40

----- EG096C -----

05 59 59  J0927+3902  07 11 32  62.8 107.4 -2.3    -47.5   14   8776  05 59 59
06 05 49  =0923+392   07 17 23  63.6 109.1 -2.2    -46.8   350   8821  06 00 00

06 07 49  J1108+4330  07 19 23  51.6  80.7 -3.8    -54.7   48   8821  06 07 49
06 08 49  ---          07 20 24  51.8  80.8 -3.8    -54.7   60   8828  06 07 50

06 09 29  J1108+4330  07 21 04  51.9  81.0 -3.8    -54.7   34   8828  06 09 29
06 10 29  ---          07 22 04  52.0  81.1 -3.8    -54.8   60   8836  06 09 30

06 10 29  J1112+4301  07 22 04  51.1  81.1 -3.9    -54.1  -16   8836  No stop
06 13 59  ---          07 25 34  51.6  81.7 -3.8    -54.2  194   8863  06 10 30

06 13 59  J1108+4330  07 25 34  52.6  81.7 -3.7    -54.9  -16   8863  No stop
06 15 29  ---          07 27 05  52.8  82.0 -3.7    -55.0   74   8874  06 14 00

06 15 29  ARUMA       07 27 05  51.4  81.4 -3.8    -54.1  -19   8874  No stop
06 18 59  ---          07 30 35  51.9  82.1 -3.8    -54.2  191   8901  06 15 30

06 19 39  J1108+4330  07 31 15  53.4  82.7 -3.6    -55.1   21   8901  06 19 39
06 20 39  ---          07 32 16  53.5  82.9 -3.6    -55.1   60   8909  06 19 40

06 20 39  ARUMA       07 32 16  52.1  82.3 -3.7    -54.3  -19   8909  No stop
06 24 09  ---          07 35 46  52.7  83.0 -3.7    -54.4  191   8936  06 20 40

06 24 09  J1108+4330  07 35 46  54.1  83.5 -3.6    -55.2  -19   8936  No stop
06 25 39  ---          07 37 16  54.3  83.8 -3.5    -55.3   71   8948  06 24 10

```

Schedule for TORUN (Code Tr)

Page 19

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 06 25 39 | ARUMA | 07 37 16 | 52.9 | 83.2 | -3.7 | | -54.5 | -19 | 8948 | No stop |
| 06 29 09 | --- | 07 40 47 | 53.4 | 83.8 | -3.6 | | -54.6 | 191 | 8974 | 06 25 40 |
| 06 29 49 | J1108+4330 | 07 41 27 | 54.9 | 84.5 | -3.5 | | -55.4 | 21 | 8974 | 06 29 49 |
| 06 30 49 | --- | 07 42 27 | 55.1 | 84.7 | -3.4 | | -55.4 | 60 | 8982 | 06 29 50 |
| 06 30 49 | ARUMA | 07 42 27 | 53.7 | 84.1 | -3.6 | | -54.6 | -19 | 8982 | No stop |
| 06 34 19 | --- | 07 45 58 | 54.2 | 84.8 | -3.5 | | -54.7 | 191 | 9009 | 06 30 50 |
| 06 34 19 | J1108+4330 | 07 45 58 | 55.6 | 85.3 | -3.4 | | -55.5 | -19 | 9009 | No stop |
| 06 35 49 | --- | 07 47 28 | 55.8 | 85.6 | -3.4 | | -55.5 | 71 | 9021 | 06 34 20 |
| 06 35 49 | ARUMA | 07 47 28 | 54.4 | 85.0 | -3.5 | | -54.7 | -19 | 9021 | No stop |
| 06 39 19 | --- | 07 50 59 | 54.9 | 85.7 | -3.4 | | -54.8 | 191 | 9048 | 06 35 50 |
| 06 39 59 | J1108+4330 | 07 51 39 | 56.4 | 86.4 | -3.3 | | -55.6 | 21 | 9048 | 06 39 59 |
| 06 40 59 | --- | 07 52 39 | 56.6 | 86.6 | -3.3 | | -55.6 | 60 | 9055 | 06 40 00 |
| 06 40 59 | J1112+4301 | 07 52 39 | 55.7 | 86.5 | -3.3 | | -54.9 | -16 | 9055 | No stop |
| 06 44 29 | --- | 07 56 09 | 56.2 | 87.2 | -3.3 | | -55.0 | 194 | 9082 | 06 41 00 |
| 06 44 29 | J1108+4330 | 07 56 09 | 57.1 | 87.2 | -3.2 | | -55.7 | -16 | 9082 | No stop |
| 06 45 59 | --- | 07 57 40 | 57.3 | 87.5 | -3.2 | | -55.7 | 74 | 9094 | 06 44 30 |
| 06 45 59 | ARUMA | 07 57 40 | 55.9 | 86.9 | -3.3 | | -54.9 | -19 | 9094 | No stop |
| 06 49 29 | --- | 08 01 10 | 56.5 | 87.6 | -3.3 | | -55.0 | 191 | 9121 | 06 46 00 |
| 06 50 09 | J1108+4330 | 08 01 50 | 58.0 | 88.3 | -3.1 | | -55.7 | 21 | 9121 | 06 50 09 |
| 06 51 09 | --- | 08 02 51 | 58.1 | 88.5 | -3.1 | | -55.7 | 60 | 9128 | 06 50 10 |
| 06 51 09 | ARUMA | 08 02 51 | 56.7 | 87.9 | -3.2 | | -55.0 | -19 | 9128 | No stop |
| 06 54 39 | --- | 08 06 21 | 57.2 | 88.6 | -3.2 | | -55.0 | 191 | 9155 | 06 51 10 |
| 06 54 39 | J1108+4330 | 08 06 21 | 58.6 | 89.2 | -3.0 | | -55.8 | -19 | 9155 | No stop |
| 06 56 09 | --- | 08 07 51 | 58.9 | 89.5 | -3.0 | | -55.8 | 71 | 9167 | 06 54 40 |
| 06 56 09 | ARUMA | 08 07 51 | 57.5 | 88.9 | -3.1 | | -55.0 | -19 | 9167 | No stop |
| 06 59 39 | --- | 08 11 22 | 58.0 | 89.6 | -3.1 | | -55.0 | 191 | 9194 | 06 56 10 |
| 07 00 19 | J1108+4330 | 08 12 02 | 59.5 | 90.3 | -3.0 | | -55.8 | 21 | 9194 | 07 00 19 |
| 07 01 19 | --- | 08 13 02 | 59.7 | 90.5 | -2.9 | | -55.8 | 60 | 9201 | 07 00 20 |
| 07 01 19 | ARUMA | 08 13 02 | 58.2 | 89.9 | -3.1 | | -55.0 | -19 | 9201 | No stop |
| 07 04 49 | --- | 08 16 33 | 58.8 | 90.6 | -3.0 | | -55.0 | 191 | 9228 | 07 01 20 |

Schedule for TORUN (Code Tr)

Page 20

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 07 04 49 | J1108+4330 | 08 16 33 | 60.2 | 91.2 | -2.9 | | -55.7 | -19 | 9228 | No stop |
| 07 06 19 | --- | 08 18 03 | 60.4 | 91.5 | -2.9 | | -55.7 | 71 | 9240 | 07 04 50 |
| 07 06 19 | ARUMA | 08 18 03 | 59.0 | 90.9 | -3.0 | | -55.0 | -19 | 9240 | No stop |
| 07 09 49 | --- | 08 21 34 | 59.5 | 91.6 | -2.9 | | -55.0 | 191 | 9267 | 07 06 20 |
| 07 10 29 | J1108+4330 | 08 22 14 | 61.0 | 92.4 | -2.8 | | -55.7 | 21 | 9267 | 07 10 29 |
| 07 11 29 | --- | 08 23 14 | 61.2 | 92.6 | -2.8 | | -55.7 | 60 | 9274 | 07 10 30 |
| 07 11 29 | J1112+4301 | 08 23 14 | 60.3 | 92.6 | -2.8 | | -55.0 | -16 | 9274 | No stop |
| 07 14 59 | --- | 08 26 44 | 60.8 | 93.3 | -2.8 | | -55.0 | 194 | 9301 | 07 11 30 |
| 07 14 59 | J1108+4330 | 08 26 44 | 61.7 | 93.4 | -2.7 | | -55.6 | -16 | 9301 | No stop |
| 07 16 29 | --- | 08 28 15 | 61.9 | 93.7 | -2.7 | | -55.6 | 74 | 9313 | 07 15 00 |
| 07 16 29 | ARUMA | 08 28 15 | 60.5 | 93.0 | -2.8 | | -54.9 | -19 | 9313 | No stop |
| 07 19 59 | --- | 08 31 45 | 61.1 | 93.8 | -2.7 | | -54.8 | 191 | 9340 | 07 16 30 |
| 07 20 39 | J1108+4330 | 08 32 25 | 62.6 | 94.6 | -2.6 | | -55.5 | 21 | 9340 | 07 20 39 |
| 07 21 39 | --- | 08 33 26 | 62.7 | 94.9 | -2.6 | | -55.5 | 60 | 9348 | 07 20 40 |
| 07 21 39 | ARUMA | 08 33 26 | 61.3 | 94.2 | -2.7 | | -54.8 | -19 | 9348 | No stop |
| 07 25 09 | --- | 08 36 56 | 61.8 | 94.9 | -2.7 | | -54.7 | 191 | 9374 | 07 21 40 |
| 07 25 09 | J1108+4330 | 08 36 56 | 63.2 | 95.6 | -2.5 | | -55.4 | -19 | 9374 | No stop |
| 07 26 39 | --- | 08 38 26 | 63.5 | 96.0 | -2.5 | | -55.3 | 71 | 9386 | 07 25 10 |
| 07 26 39 | ARUMA | 08 38 26 | 62.1 | 95.3 | -2.6 | | -54.7 | -19 | 9386 | No stop |
| 07 30 09 | --- | 08 41 57 | 62.6 | 96.1 | -2.6 | | -54.6 | 191 | 9413 | 07 26 40 |
| 07 30 49 | J1108+4330 | 08 42 37 | 64.1 | 97.0 | -2.4 | | -55.1 | 21 | 9413 | 07 30 49 |
| 07 31 49 | --- | 08 43 37 | 64.2 | 97.2 | -2.4 | | -55.1 | 60 | 9421 | 07 30 50 |
| 07 31 49 | ARUMA | 08 43 37 | 62.8 | 96.5 | -2.6 | | -54.5 | -19 | 9421 | No stop |
| 07 35 19 | --- | 08 47 08 | 63.3 | 97.3 | -2.5 | | -54.4 | 191 | 9448 | 07 31 50 |
| 07 35 19 | J1108+4330 | 08 47 08 | 64.8 | 98.1 | -2.4 | | -54.9 | -19 | 9448 | No stop |
| 07 36 49 | --- | 08 48 38 | 65.0 | 98.4 | -2.3 | | -54.9 | 71 | 9459 | 07 35 20 |
| 07 36 49 | ARUMA | 08 48 38 | 63.6 | 97.7 | -2.5 | | -54.3 | -19 | 9459 | No stop |
| 07 40 19 | --- | 08 52 09 | 64.1 | 98.5 | -2.4 | | -54.1 | 191 | 9486 | 07 36 50 |
| 07 40 59 | J1108+4330 | 08 52 49 | 65.6 | 99.5 | -2.3 | | -54.6 | 21 | 9486 | 07 40 59 |
| 07 41 59 | --- | 08 53 49 | 65.7 | 99.7 | -2.3 | | -54.6 | 60 | 9494 | 07 41 00 |

Schedule for TORUN (Code Tr)

Page 21

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 07 41 59 | J1112+4301 | 08 53 49 | 64.8 | 99.6 | -2.3 | | -54.0 | -16 | 9494 | No stop |
| 07 45 29 | --- | 08 57 19 | 65.4 | 100.5 | -2.3 | | -53.7 | 194 | 9521 | 07 42 00 |
| 07 45 29 | J1108+4330 | 08 57 19 | 66.3 | 100.6 | -2.2 | | -54.3 | -16 | 9521 | No stop |
| 07 46 59 | --- | 08 58 50 | 66.5 | 101.0 | -2.2 | | -54.2 | 74 | 9532 | 07 45 30 |
| 07 46 59 | ARUMA | 08 58 50 | 65.1 | 100.2 | -2.3 | | -53.8 | -19 | 9532 | No stop |
| 07 50 29 | --- | 09 02 20 | 65.6 | 101.1 | -2.2 | | -53.5 | 191 | 9559 | 07 47 00 |
| 07 51 09 | J1108+4330 | 09 03 00 | 67.1 | 102.2 | -2.1 | | -53.9 | 21 | 9559 | 07 51 09 |
| 07 52 09 | --- | 09 04 01 | 67.2 | 102.4 | -2.1 | | -53.8 | 60 | 9567 | 07 51 10 |
| 07 52 09 | ARUMA | 09 04 01 | 65.8 | 101.5 | -2.2 | | -53.4 | -18 | 9567 | No stop |
| 07 55 39 | --- | 09 07 31 | 66.4 | 102.5 | -2.2 | | -53.1 | 192 | 9594 | 07 52 10 |
| 07 55 39 | J1108+4330 | 09 07 31 | 67.8 | 103.4 | -2.0 | | -53.5 | -19 | 9594 | No stop |
| 07 57 09 | --- | 09 09 01 | 68.0 | 103.9 | -2.0 | | -53.4 | 71 | 9605 | 07 55 40 |
| 07 57 09 | ARUMA | 09 09 01 | 66.6 | 102.9 | -2.1 | | -53.0 | -18 | 9605 | No stop |
| 08 00 39 | --- | 09 12 32 | 67.1 | 103.9 | -2.1 | | -52.7 | 192 | 9632 | 07 57 10 |
| 08 01 19 | J1108+4330 | 09 13 12 | 68.6 | 105.1 | -1.9 | | -53.0 | 21 | 9632 | 08 01 19 |
| 08 02 19 | --- | 09 14 12 | 68.7 | 105.4 | -1.9 | | -52.9 | 60 | 9640 | 08 01 20 |
| 08 02 19 | ARUMA | 09 14 12 | 67.3 | 104.4 | -2.0 | | -52.5 | -18 | 9640 | No stop |
| 08 05 49 | --- | 09 17 43 | 67.8 | 105.4 | -2.0 | | -52.2 | 192 | 9667 | 08 02 20 |
| 08 05 49 | J1108+4330 | 09 17 43 | 69.2 | 106.5 | -1.9 | | -52.4 | -19 | 9667 | No stop |
| 08 07 19 | --- | 09 19 13 | 69.5 | 106.9 | -1.8 | | -52.3 | 71 | 9678 | 08 05 50 |
| 08 07 19 | ARUMA | 09 19 13 | 68.1 | 105.9 | -2.0 | | -52.0 | -18 | 9678 | No stop |
| 08 10 49 | --- | 09 22 44 | 68.6 | 106.9 | -1.9 | | -51.6 | 192 | 9705 | 08 07 20 |
| 08 11 29 | J1108+4330 | 09 23 24 | 70.1 | 108.3 | -1.8 | | -51.7 | 21 | 9705 | 08 11 29 |
| 08 12 29 | --- | 09 24 24 | 70.2 | 108.6 | -1.7 | | -51.6 | 60 | 9713 | 08 11 30 |
| 08 12 29 | J1112+4301 | 09 24 24 | 69.3 | 108.4 | -1.8 | | -51.1 | -16 | 9713 | No stop |
| 08 15 59 | --- | 09 27 54 | 69.8 | 109.5 | -1.8 | | -50.6 | 194 | 9740 | 08 12 30 |
| 08 15 59 | J1108+4330 | 09 27 54 | 70.7 | 109.8 | -1.7 | | -51.1 | -16 | 9740 | No stop |
| 08 17 29 | --- | 09 29 25 | 70.9 | 110.3 | -1.7 | | -50.8 | 74 | 9751 | 08 16 00 |
| 08 17 29 | ARUMA | 09 29 25 | 69.5 | 109.1 | -1.8 | | -50.8 | -18 | 9751 | No stop |
| 08 20 59 | --- | 09 32 55 | 70.0 | 110.3 | -1.7 | | -50.2 | 192 | 9778 | 08 17 30 |

Schedule for TORUN (Code Tr)

Page 22

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 08 21 39 | J1108+4330 | 09 33 35 | 71.5 | 111.8 | -1.6 | | -50.1 | 21 | 9778 | 08 21 39 |
| 08 22 39 | --- | 09 34 36 | 71.6 | 112.2 | -1.6 | | -49.9 | 60 | 9786 | 08 21 40 |
| 08 22 39 | ARUMA | 09 34 36 | 70.3 | 110.8 | -1.7 | | -50.0 | -18 | 9786 | No stop |
| 08 26 09 | --- | 09 38 06 | 70.7 | 112.1 | -1.6 | | -49.4 | 192 | 9813 | 08 22 40 |
| 08 26 09 | J1108+4330 | 09 38 06 | 72.1 | 113.5 | -1.5 | | -49.3 | -19 | 9813 | No stop |
| 08 27 39 | --- | 09 39 36 | 72.3 | 114.1 | -1.5 | | -49.0 | 71 | 9824 | 08 26 10 |
| 08 27 39 | ARUMA | 09 39 36 | 71.0 | 112.6 | -1.6 | | -49.1 | -18 | 9824 | No stop |
| 08 31 09 | --- | 09 43 07 | 71.4 | 114.0 | -1.6 | | -48.5 | 192 | 9851 | 08 27 40 |
| 08 31 49 | J1108+4330 | 09 43 47 | 72.9 | 115.8 | -1.4 | | -48.1 | 21 | 9851 | 08 31 49 |
| 08 32 49 | --- | 09 44 47 | 73.0 | 116.2 | -1.4 | | -47.9 | 60 | 9859 | 08 31 50 |
| 08 32 49 | ARUMA | 09 44 47 | 71.7 | 114.6 | -1.5 | | -48.2 | -18 | 9859 | No stop |
| 08 36 19 | --- | 09 48 18 | 72.1 | 116.0 | -1.5 | | -47.4 | 192 | 9886 | 08 32 50 |
| 08 36 19 | J1108+4330 | 09 48 18 | 73.5 | 117.7 | -1.4 | | -47.0 | -19 | 9886 | No stop |
| 08 37 49 | --- | 09 49 48 | 73.7 | 118.4 | -1.3 | | -46.7 | 71 | 9898 | 08 36 20 |
| 08 37 49 | ARUMA | 09 49 48 | 72.3 | 116.6 | -1.4 | | -47.1 | -18 | 9898 | No stop |
| 08 41 19 | --- | 09 53 19 | 72.8 | 118.1 | -1.4 | | -46.3 | 192 | 9924 | 08 37 50 |
| 08 41 59 | J1108+4330 | 09 53 59 | 74.2 | 120.3 | -1.3 | | -45.6 | 21 | 9924 | 08 41 59 |
| 08 42 59 | --- | 09 54 59 | 74.4 | 120.8 | -1.2 | | -45.3 | 60 | 9932 | 08 42 00 |
| 08 42 59 | J1112+4301 | 09 54 59 | 73.5 | 120.1 | -1.3 | | -45.2 | -16 | 9932 | No stop |
| 08 46 29 | --- | 09 58 29 | 73.9 | 121.7 | -1.2 | | -44.2 | 194 | 9959 | 08 43 00 |
| 08 46 29 | J1108+4330 | 09 58 29 | 74.8 | 122.5 | -1.2 | | -44.2 | -16 | 9959 | No stop |
| 08 47 59 | --- | 10 00 00 | 75.0 | 123.2 | -1.2 | | -43.8 | 74 | 9971 | 08 46 30 |
| 08 47 59 | ARUMA | 10 00 00 | 73.7 | 121.1 | -1.3 | | -44.6 | -18 | 9971 | No stop |
| 08 51 29 | --- | 10 03 30 | 74.1 | 122.7 | -1.2 | | -43.6 | 192 | 9998 | 08 48 00 |
| 08 52 09 | J1108+4330 | 10 04 10 | 75.5 | 125.4 | -1.1 | | -42.4 | 21 | 9998 | 08 52 09 |
| 08 53 09 | --- | 10 05 11 | 75.6 | 125.9 | -1.1 | | -42.0 | 60 | 10005 | 08 52 10 |
| 08 53 09 | ARUMA | 10 05 11 | 74.3 | 123.5 | -1.2 | | -43.1 | -18 | 10005 | No stop |
| 08 56 39 | --- | 10 08 41 | 74.8 | 125.3 | -1.1 | | -42.0 | 192 | 10032 | 08 53 10 |
| 08 56 39 | J1108+4330 | 10 08 41 | 76.1 | 127.9 | -1.0 | | -40.7 | -20 | 10032 | No stop |
| 08 58 09 | --- | 10 10 11 | 76.2 | 128.8 | -1.0 | | -40.1 | 70 | 10044 | 08 56 40 |

Schedule for TORUN (Code Tr)

Page 23

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 08 58 09 | ARUMA | 10 10 11 | 75.0 | 126.1 | -1.1 | | -41.5 | -19 | 10044 | No stop |
| 09 01 39 | --- | 10 13 42 | 75.4 | 128.0 | -1.0 | | -40.2 | 191 | 10071 | 08 58 10 |
| 09 02 19 | J1108+4330 | 10 14 22 | 76.7 | 131.3 | -0.9 | | -38.4 | 19 | 10071 | 09 02 19 |
| 09 03 19 | --- | 10 15 22 | 76.8 | 131.9 | -0.9 | | -38.0 | 60 | 10078 | 09 02 20 |
| 09 03 19 | ARUMA | 10 15 22 | 75.6 | 128.9 | -1.0 | | -39.6 | -20 | 10078 | No stop |
| 09 06 49 | --- | 10 18 53 | 76.0 | 131.0 | -1.0 | | -38.2 | 190 | 10105 | 09 03 20 |
| 09 06 49 | J1108+4330 | 10 18 53 | 77.2 | 134.2 | -0.8 | | -36.4 | -21 | 10105 | No stop |
| 09 08 19 | --- | 10 20 23 | 77.4 | 135.2 | -0.8 | | -35.7 | 69 | 10117 | 09 06 50 |
| 09 08 19 | ARUMA | 10 20 23 | 76.2 | 131.9 | -0.9 | | -37.6 | -21 | 10117 | No stop |
| 09 11 49 | --- | 10 23 54 | 76.5 | 134.1 | -0.9 | | -36.1 | 189 | 10144 | 09 08 20 |
| 09 12 29 | J1108+4330 | 10 24 34 | 77.8 | 138.1 | -0.7 | | -33.5 | 18 | 10144 | 09 12 29 |
| 09 13 29 | --- | 10 25 34 | 77.9 | 138.8 | -0.7 | | -33.0 | 60 | 10151 | 09 12 30 |
| 09 13 29 | J1112+4301 | 10 25 34 | 77.1 | 137.1 | -0.8 | | -33.9 | -16 | 10151 | No stop |
| 09 16 59 | --- | 10 29 04 | 77.4 | 139.6 | -0.7 | | -32.1 | 194 | 10178 | 09 13 30 |
| 09 16 59 | J1108+4330 | 10 29 04 | 78.3 | 141.4 | -0.7 | | -31.0 | -18 | 10178 | No stop |
| 09 18 29 | --- | 10 30 35 | 78.4 | 142.6 | -0.6 | | -30.2 | 72 | 10190 | 09 17 00 |
| 09 18 29 | ARUMA | 10 30 35 | 77.2 | 138.5 | -0.8 | | -32.9 | -23 | 10190 | No stop |
| 09 21 59 | --- | 10 34 05 | 77.6 | 141.0 | -0.7 | | -31.0 | 187 | 10217 | 09 18 30 |
| 09 22 39 | J1108+4330 | 10 34 45 | 78.8 | 145.9 | -0.6 | | -27.6 | 16 | 10217 | 09 22 39 |
| 09 23 39 | --- | 10 35 46 | 78.8 | 146.8 | -0.6 | | -26.9 | 60 | 10224 | 09 22 40 |
| 09 23 39 | ARUMA | 10 35 46 | 77.7 | 142.3 | -0.7 | | -30.1 | -24 | 10224 | No stop |
| 09 27 09 | --- | 10 39 16 | 78.0 | 144.9 | -0.6 | | -28.1 | 186 | 10251 | 09 23 40 |
| 09 27 09 | J1108+4330 | 10 39 16 | 79.1 | 149.8 | -0.5 | | -24.6 | -25 | 10251 | No stop |
| 09 28 39 | --- | 10 40 46 | 79.2 | 151.1 | -0.5 | | -23.5 | 65 | 10263 | 09 27 10 |
| 09 28 39 | ARUMA | 10 40 46 | 78.2 | 146.1 | -0.6 | | -27.2 | -24 | 10263 | No stop |
| 09 32 09 | --- | 10 44 17 | 78.5 | 149.0 | -0.5 | | -25.0 | 186 | 10290 | 09 28 40 |
| 09 32 49 | J1108+4330 | 10 44 57 | 79.5 | 154.9 | -0.4 | | -20.5 | 14 | 10290 | 09 32 49 |
| 09 33 49 | --- | 10 45 57 | 79.6 | 155.9 | -0.4 | | -19.8 | 60 | 10298 | 09 32 50 |
| 09 33 49 | ARUMA | 10 45 57 | 78.6 | 150.4 | -0.5 | | -23.9 | -25 | 10298 | No stop |
| 09 37 19 | --- | 10 49 28 | 78.8 | 153.4 | -0.5 | | -21.5 | 185 | 10324 | 09 33 50 |

Schedule for TORUN (Code Tr) Page 24
 e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 09 37 19 | J1108+4330 | 10 49 28 | 79.8 | 159.2 | -0.3 | | -17.0 | -27 | 10324 | No stop |
| 09 38 49 | --- | 10 50 58 | 79.9 | 160.7 | -0.3 | | -15.8 | 63 | 10336 | 09 37 20 |
| 09 38 49 | ARUMA | 10 50 58 | 78.9 | 154.7 | -0.4 | | -20.5 | -26 | 10336 | No stop |
| 09 42 19 | --- | 10 54 29 | 79.1 | 157.9 | -0.4 | | -17.9 | 184 | 10363 | 09 38 50 |
| 09 42 59 | J1108+4330 | 10 55 09 | 80.0 | 164.9 | -0.2 | | -12.4 | 12 | 10363 | 09 42 59 |
| 09 43 59 | --- | 10 56 09 | 80.1 | 166.0 | -0.2 | | -11.6 | 60 | 10371 | 09 43 00 |
| 09 43 59 | ARUMA | 10 56 09 | 79.2 | 159.5 | -0.3 | | -16.7 | -27 | 10371 | No stop |
| 09 47 29 | --- | 10 59 39 | 79.4 | 162.8 | -0.3 | | -14.0 | 183 | 10398 | 09 44 00 |
| 09 48 09 | J1108+4330 | 11 00 20 | 80.2 | 170.3 | -0.2 | | -8.0 | 10 | 10398 | 09 48 09 |
| 09 50 09 | --- | 11 02 20 | 80.3 | 172.5 | -0.1 | | -6.2 | 120 | 10413 | 09 48 10 |
| 09 52 39 | J1310+3220 | 11 04 50 | 59.2 | 120.0 | -2.1 | | -38.0 | 30 | 10413 | 09 52 39 |
| 09 58 39 | =1308+326 | 11 10 51 | 60.0 | 122.0 | -2.0 | | -37.0 | 360 | 10459 | 09 52 40 |
| ----- RP029B ----- | | | | | | | | | | |
| 09 58 59 | J1310+3220 | 11 11 11 | 60.0 | 122.1 | -2.0 | | -37.0 | 14 | 10459 | 09 58 59 |
| 10 04 19 | =1308+326 | 11 16 32 | 60.7 | 123.9 | -1.9 | | -36.1 | 320 | 10500 | 09 59 00 |
| 10 07 59 | J1303-2405 | 11 20 13 | 9.5 | 156.1 | -1.7 | | -15.5 | 14 | 10500 | 10 07 59 |
| 10 09 29 | --- | 11 21 43 | 9.6 | 156.4 | -1.7 | | -15.3 | 90 | 10512 | 10 08 00 |
| 10 09 29 | SSS17A | 11 21 43 | 9.9 | 154.8 | -1.8 | | -16.2 | -16 | 10512 | No stop |
| 10 11 59 | --- | 11 24 14 | 10.0 | 155.3 | -1.8 | | -15.9 | 134 | 10531 | 10 09 30 |
| 10 11 59 | J1303-2405 | 11 24 14 | 9.7 | 157.0 | -1.7 | | -14.9 | -17 | 10531 | No stop |
| 10 13 29 | --- | 11 25 44 | 9.8 | 157.3 | -1.6 | | -14.7 | 73 | 10542 | 10 12 00 |
| 10 13 29 | SSS17A | 11 25 44 | 10.1 | 155.7 | -1.8 | | -15.7 | -16 | 10542 | No stop |
| 10 15 59 | --- | 11 28 14 | 10.3 | 156.2 | -1.7 | | -15.3 | 134 | 10562 | 10 13 30 |
| 10 16 29 | J1303-2405 | 11 28 44 | 10.0 | 158.0 | -1.6 | | -14.3 | 13 | 10562 | 10 16 29 |
| 10 17 29 | --- | 11 29 44 | 10.0 | 158.2 | -1.6 | | -14.1 | 60 | 10569 | 10 16 30 |
| 10 17 29 | SSS17A | 11 29 44 | 10.4 | 156.6 | -1.7 | | -15.1 | -16 | 10569 | No stop |
| 10 19 59 | --- | 11 32 15 | 10.5 | 157.1 | -1.6 | | -14.7 | 134 | 10589 | 10 17 30 |
| 10 19 59 | J1303-2405 | 11 32 15 | 10.2 | 158.8 | -1.5 | | -13.8 | -17 | 10589 | No stop |
| 10 21 29 | --- | 11 33 45 | 10.3 | 159.1 | -1.5 | | -13.6 | 73 | 10600 | 10 20 00 |

Schedule for TORUN (Code Tr)

Page 25

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 10 21 29 | J1312-2350 | 11 33 45 | 10.0 | 156.9 | -1.7 | | -14.9 | -18 | 10600 | No stop |
| 10 23 59 | --- | 11 36 15 | 10.1 | 157.5 | -1.6 | | -14.6 | 132 | 10619 | 10 21 30 |
| 10 24 39 | J1303-2405 | 11 36 56 | 10.4 | 159.8 | -1.5 | | -13.1 | 22 | 10619 | 10 24 39 |
| 10 25 39 | --- | 11 37 56 | 10.5 | 160.0 | -1.4 | | -13.0 | 60 | 10627 | 10 24 40 |
| 10 25 39 | SSS17A | 11 37 56 | 10.8 | 158.4 | -1.5 | | -13.9 | -16 | 10627 | No stop |
| 10 28 09 | --- | 11 40 26 | 11.0 | 159.0 | -1.5 | | -13.6 | 134 | 10646 | 10 25 40 |
| 10 28 09 | J1303-2405 | 11 40 26 | 10.6 | 160.6 | -1.4 | | -12.6 | -17 | 10646 | No stop |
| 10 29 39 | --- | 11 41 56 | 10.7 | 161.0 | -1.4 | | -12.4 | 73 | 10658 | 10 28 10 |
| 10 29 39 | SSS17A | 11 41 56 | 11.0 | 159.3 | -1.5 | | -13.4 | -16 | 10658 | No stop |
| 10 32 09 | --- | 11 44 27 | 11.2 | 159.9 | -1.4 | | -13.0 | 134 | 10677 | 10 29 40 |
| 10 32 39 | J1303-2405 | 11 44 57 | 10.8 | 161.6 | -1.3 | | -12.0 | 13 | 10677 | 10 32 39 |
| 10 33 39 | --- | 11 45 57 | 10.9 | 161.9 | -1.3 | | -11.8 | 60 | 10685 | 10 32 40 |
| 10 33 39 | SSS17A | 11 45 57 | 11.2 | 160.2 | -1.4 | | -12.8 | -16 | 10685 | No stop |
| 10 36 09 | --- | 11 48 27 | 11.4 | 160.8 | -1.4 | | -12.4 | 134 | 10704 | 10 33 40 |
| 10 36 09 | J1303-2405 | 11 48 27 | 11.0 | 162.4 | -1.3 | | -11.5 | -17 | 10704 | No stop |
| 10 37 39 | --- | 11 49 58 | 11.1 | 162.8 | -1.2 | | -11.2 | 73 | 10715 | 10 36 10 |
| 10 37 39 | J1312-2350 | 11 49 58 | 10.8 | 160.6 | -1.4 | | -12.6 | -18 | 10715 | No stop |
| 10 40 09 | --- | 11 52 28 | 11.0 | 161.1 | -1.4 | | -12.3 | 132 | 10735 | 10 37 40 |
| 10 40 49 | J1303-2405 | 11 53 08 | 11.2 | 163.5 | -1.2 | | -10.8 | 22 | 10735 | 10 40 49 |
| 10 41 49 | --- | 11 54 08 | 11.2 | 163.7 | -1.2 | | -10.6 | 60 | 10742 | 10 40 50 |
| 10 41 49 | SSS17A | 11 54 08 | 11.6 | 162.1 | -1.3 | | -11.6 | -16 | 10742 | No stop |
| 10 44 19 | --- | 11 56 39 | 11.8 | 162.7 | -1.2 | | -11.2 | 134 | 10762 | 10 41 50 |
| 10 44 19 | J1303-2405 | 11 56 39 | 11.3 | 164.3 | -1.1 | | -10.3 | -17 | 10762 | No stop |
| 10 45 49 | --- | 11 58 09 | 11.4 | 164.6 | -1.1 | | -10.0 | 73 | 10773 | 10 44 20 |
| 10 45 49 | SSS17A | 11 58 09 | 11.8 | 163.0 | -1.2 | | -11.0 | -16 | 10773 | No stop |
| 10 48 19 | --- | 12 00 39 | 11.9 | 163.6 | -1.2 | | -10.6 | 134 | 10792 | 10 45 50 |
| 10 48 49 | J1303-2405 | 12 01 10 | 11.5 | 165.3 | -1.1 | | -9.6 | 13 | 10792 | 10 48 49 |
| 10 49 49 | --- | 12 02 10 | 11.6 | 165.6 | -1.0 | | -9.4 | 60 | 10800 | 10 48 50 |
| 10 49 49 | SSS17A | 12 02 10 | 12.0 | 164.0 | -1.1 | | -10.4 | -16 | 10800 | No stop |
| 10 52 19 | --- | 12 04 40 | 12.1 | 164.5 | -1.1 | | -10.1 | 134 | 10819 | 10 49 50 |

Schedule for TORUN (Code Tr)

Page 26

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 10 52 19 | J1303-2405 | 12 04 40 | 11.6 | 166.1 | -1.0 | | -9.1 | -17 | 10819 | No stop |
| 10 53 49 | --- | 12 06 10 | 11.7 | 166.5 | -1.0 | | -8.8 | 73 | 10831 | 10 52 20 |
| 10 53 49 | J1312-2350 | 12 06 10 | 11.6 | 164.3 | -1.1 | | -10.3 | -18 | 10831 | No stop |
| 10 56 19 | --- | 12 08 41 | 11.7 | 164.8 | -1.1 | | -9.9 | 132 | 10850 | 10 53 50 |
| 10 56 59 | J1303-2405 | 12 09 21 | 11.8 | 167.2 | -0.9 | | -8.4 | 22 | 10850 | 10 56 59 |
| 10 57 59 | --- | 12 10 21 | 11.8 | 167.5 | -0.9 | | -8.2 | 60 | 10858 | 10 57 00 |
| 10 57 59 | SSS17A | 12 10 21 | 12.3 | 165.8 | -1.0 | | -9.2 | -16 | 10858 | No stop |
| 11 00 29 | --- | 12 12 51 | 12.4 | 166.4 | -1.0 | | -8.8 | 134 | 10877 | 10 58 00 |
| 11 00 29 | J1303-2405 | 12 12 51 | 11.9 | 168.0 | -0.9 | | -7.8 | -16 | 10877 | No stop |
| 11 01 59 | --- | 12 14 22 | 12.0 | 168.4 | -0.8 | | -7.6 | 74 | 10889 | 11 00 30 |
| 11 01 59 | SSS17A | 12 14 22 | 12.5 | 166.8 | -0.9 | | -8.6 | -16 | 10889 | No stop |
| 11 04 29 | --- | 12 16 52 | 12.5 | 167.4 | -0.9 | | -8.2 | 134 | 10908 | 11 02 00 |
| 11 04 59 | J1303-2405 | 12 17 22 | 12.1 | 169.1 | -0.8 | | -7.2 | 14 | 10908 | 11 04 59 |
| 11 05 59 | --- | 12 18 22 | 12.1 | 169.3 | -0.8 | | -7.0 | 60 | 10915 | 11 05 00 |
| 11 05 59 | SSS17A | 12 18 22 | 12.6 | 167.7 | -0.9 | | -8.0 | -16 | 10915 | No stop |
| 11 08 29 | --- | 12 20 53 | 12.7 | 168.3 | -0.8 | | -7.6 | 134 | 10935 | 11 06 00 |
| 11 08 29 | J1303-2405 | 12 20 53 | 12.2 | 169.9 | -0.7 | | -6.6 | -16 | 10935 | No stop |
| 11 09 59 | --- | 12 22 23 | 12.2 | 170.2 | -0.7 | | -6.4 | 74 | 10946 | 11 08 30 |
| 11 09 59 | J1312-2350 | 12 22 23 | 12.2 | 168.0 | -0.9 | | -7.8 | -18 | 10946 | No stop |
| 11 12 29 | --- | 12 24 53 | 12.2 | 168.6 | -0.8 | | -7.5 | 132 | 10965 | 11 10 00 |
| 11 13 09 | J1303-2405 | 12 25 34 | 12.3 | 171.0 | -0.6 | | -5.9 | 21 | 10965 | 11 13 09 |
| 11 14 09 | --- | 12 26 34 | 12.3 | 171.2 | -0.6 | | -5.8 | 60 | 10973 | 11 13 10 |
| 11 14 09 | SSS17A | 12 26 34 | 12.8 | 169.6 | -0.7 | | -6.8 | -16 | 10973 | No stop |
| 11 16 39 | --- | 12 29 04 | 12.9 | 170.2 | -0.7 | | -6.4 | 134 | 10992 | 11 14 10 |
| 11 16 39 | J1303-2405 | 12 29 04 | 12.4 | 171.8 | -0.6 | | -5.4 | -16 | 10992 | No stop |
| 11 18 09 | --- | 12 30 34 | 12.4 | 172.1 | -0.6 | | -5.2 | 74 | 11004 | 11 16 40 |
| 11 18 09 | SSS17A | 12 30 34 | 12.9 | 170.6 | -0.7 | | -6.2 | -16 | 11004 | No stop |
| 11 20 39 | --- | 12 33 05 | 13.0 | 171.1 | -0.6 | | -5.8 | 134 | 11023 | 11 18 10 |
| 11 21 09 | J1303-2405 | 12 33 35 | 12.4 | 172.8 | -0.5 | | -4.7 | 14 | 11023 | 11 21 09 |
| 11 22 09 | --- | 12 34 35 | 12.5 | 173.1 | -0.5 | | -4.6 | 60 | 11031 | 11 21 10 |

Schedule for TORUN (Code Tr)

Page 27

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 11 22 09 | SSS17A | 12 34 35 | 13.0 | 171.5 | -0.6 | | -5.6 | -16 | 11031 | No stop |
| 11 24 39 | --- | 12 37 05 | 13.1 | 172.1 | -0.6 | | -5.2 | 134 | 11050 | 11 22 10 |
| 11 24 39 | J1303-2405 | 12 37 05 | 12.5 | 173.7 | -0.5 | | -4.2 | -16 | 11050 | No stop |
| 11 26 09 | --- | 12 38 36 | 12.5 | 174.0 | -0.4 | | -3.9 | 74 | 11062 | 11 24 40 |
| 11 26 09 | J1312-2350 | 12 38 36 | 12.6 | 171.8 | -0.6 | | -5.4 | -18 | 11062 | No stop |
| 11 28 39 | --- | 12 41 06 | 12.6 | 172.4 | -0.5 | | -5.0 | 132 | 11081 | 11 26 10 |
| 11 29 19 | J1303-2405 | 12 41 46 | 12.6 | 174.7 | -0.4 | | -3.5 | 21 | 11081 | 11 29 19 |
| 11 30 19 | --- | 12 42 46 | 12.6 | 175.0 | -0.4 | | -3.3 | 60 | 11089 | 11 29 20 |
| 11 30 19 | SSS17A | 12 42 46 | 13.2 | 173.4 | -0.5 | | -4.3 | -16 | 11089 | No stop |
| 11 32 49 | --- | 12 45 17 | 13.2 | 174.0 | -0.4 | | -3.9 | 134 | 11108 | 11 30 20 |
| 11 32 49 | J1303-2405 | 12 45 17 | 12.6 | 175.6 | -0.3 | | -2.9 | -16 | 11108 | No stop |
| 11 34 19 | --- | 12 46 47 | 12.6 | 175.9 | -0.3 | | -2.7 | 74 | 11119 | 11 32 50 |
| 11 34 19 | SSS17A | 12 46 47 | 13.3 | 174.4 | -0.4 | | -3.7 | -16 | 11119 | No stop |
| 11 36 49 | --- | 12 49 17 | 13.3 | 174.9 | -0.4 | | -3.3 | 134 | 11139 | 11 34 20 |
| 11 37 19 | J1303-2405 | 12 49 48 | 12.7 | 176.6 | -0.2 | | -2.2 | 14 | 11139 | 11 37 19 |
| 11 38 19 | --- | 12 50 48 | 12.7 | 176.9 | -0.2 | | -2.1 | 60 | 11146 | 11 37 20 |
| 11 38 19 | SSS17A | 12 50 48 | 13.3 | 175.3 | -0.3 | | -3.1 | -16 | 11146 | No stop |
| 11 40 49 | --- | 12 53 18 | 13.3 | 175.9 | -0.3 | | -2.7 | 134 | 11165 | 11 38 20 |
| 11 40 49 | J1303-2405 | 12 53 18 | 12.7 | 177.4 | -0.2 | | -1.7 | -16 | 11165 | No stop |
| 11 42 19 | --- | 12 54 48 | 12.7 | 177.8 | -0.2 | | -1.5 | 74 | 11177 | 11 40 50 |
| 11 42 19 | J1312-2350 | 12 54 48 | 12.9 | 175.6 | -0.3 | | -2.9 | -18 | 11177 | No stop |
| 11 44 49 | --- | 12 57 19 | 12.9 | 176.1 | -0.3 | | -2.5 | 132 | 11196 | 11 42 20 |
| 11 45 29 | J1303-2405 | 12 57 59 | 12.7 | 178.5 | -0.1 | | -1.0 | 21 | 11196 | 11 45 29 |
| 11 46 29 | --- | 12 58 59 | 12.7 | 178.8 | -0.1 | | -0.8 | 60 | 11204 | 11 45 30 |
| 11 46 29 | SSS17A | 12 58 59 | 13.4 | 177.2 | -0.2 | | -1.8 | -16 | 11204 | No stop |
| 11 48 59 | --- | 13 01 29 | 13.4 | 177.8 | -0.2 | | -1.4 | 134 | 11223 | 11 46 30 |
| 11 48 59 | J1303-2405 | 13 01 29 | 12.7 | 179.4 | -0.0 | | -0.4 | -16 | 11223 | No stop |
| 11 50 29 | --- | 13 03 00 | 12.7 | 179.7 | -0.0 | | -0.2 | 74 | 11235 | 11 49 00 |
| 11 50 29 | SSS17A | 13 03 00 | 13.4 | 178.2 | -0.1 | | -1.2 | -16 | 11235 | No stop |
| 11 52 59 | --- | 13 05 30 | 13.4 | 178.8 | -0.1 | | -0.8 | 134 | 11254 | 11 50 30 |

Schedule for TORUN (Code Tr)

Page 28

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 11 53 29 | J1303-2405 | 13 06 00 | 12.7 | 180.4 | 0.0 | | 0.3 | 14 | 11254 | 11 53 29 |
| 11 54 29 | --- | 13 07 00 | 12.7 | 180.6 | 0.0 | | 0.4 | 60 | 11262 | 11 53 30 |
| 11 54 29 | SSS17A | 13 07 00 | 13.4 | 179.1 | -0.1 | | -0.6 | -16 | 11262 | No stop |
| 11 56 59 | --- | 13 09 31 | 13.4 | 179.7 | -0.0 | | -0.2 | 134 | 11281 | 11 54 30 |
| 11 56 59 | J1303-2405 | 13 09 31 | 12.7 | 181.2 | 0.1 | | 0.8 | -16 | 11281 | No stop |
| 11 58 29 | --- | 13 11 01 | 12.7 | 181.6 | 0.1 | | 1.0 | 74 | 11292 | 11 57 00 |
| 11 58 29 | J1312-2350 | 13 11 01 | 13.0 | 179.4 | -0.0 | | -0.4 | -18 | 11292 | No stop |
| 12 00 59 | --- | 13 13 31 | 13.0 | 179.9 | -0.0 | | -0.0 | 132 | 11312 | 11 58 30 |
| 12 01 39 | J1303-2405 | 13 14 12 | 12.7 | 182.3 | 0.2 | | 1.5 | 22 | 11312 | 12 01 39 |
| 12 02 39 | --- | 13 15 12 | 12.7 | 182.6 | 0.2 | | 1.7 | 60 | 11319 | 12 01 40 |
| 12 02 39 | SSS17A | 13 15 12 | 13.4 | 181.1 | 0.1 | | 0.7 | -16 | 11319 | No stop |
| 12 05 09 | --- | 13 17 42 | 13.4 | 181.6 | 0.1 | | 1.1 | 134 | 11339 | 12 02 40 |
| 12 05 09 | J1303-2405 | 13 17 42 | 12.7 | 183.1 | 0.2 | | 2.1 | -16 | 11339 | No stop |
| 12 06 39 | --- | 13 19 12 | 12.7 | 183.5 | 0.2 | | 2.3 | 74 | 11350 | 12 05 10 |
| 12 06 39 | SSS17A | 13 19 12 | 13.4 | 182.0 | 0.1 | | 1.3 | -16 | 11350 | No stop |
| 12 09 09 | --- | 13 21 43 | 13.4 | 182.6 | 0.2 | | 1.7 | 134 | 11369 | 12 06 40 |
| 12 09 39 | J1303-2405 | 13 22 13 | 12.6 | 184.2 | 0.3 | | 2.8 | 14 | 11369 | 12 09 39 |
| 12 10 39 | --- | 13 23 13 | 12.6 | 184.4 | 0.3 | | 2.9 | 60 | 11377 | 12 09 40 |
| 12 10 39 | SSS17A | 13 23 13 | 13.4 | 182.9 | 0.2 | | 1.9 | -16 | 11377 | No stop |
| 12 13 09 | --- | 13 25 43 | 13.4 | 183.5 | 0.2 | | 2.3 | 134 | 11396 | 12 10 40 |
| 12 13 09 | J1303-2405 | 13 25 43 | 12.6 | 185.0 | 0.4 | | 3.3 | -16 | 11396 | No stop |
| 12 14 39 | --- | 13 27 14 | 12.6 | 185.4 | 0.4 | | 3.5 | 74 | 11408 | 12 13 10 |
| 12 14 39 | J1312-2350 | 13 27 14 | 12.9 | 183.2 | 0.2 | | 2.1 | -18 | 11408 | No stop |
| 12 17 09 | --- | 13 29 44 | 12.9 | 183.7 | 0.3 | | 2.5 | 132 | 11427 | 12 14 40 |
| 12 17 49 | J1303-2405 | 13 30 24 | 12.5 | 186.1 | 0.4 | | 4.0 | 22 | 11427 | 12 17 49 |
| 12 18 49 | --- | 13 31 24 | 12.5 | 186.3 | 0.5 | | 4.2 | 60 | 11435 | 12 17 50 |
| 12 19 49 | J1337-1257 | 13 32 25 | 23.8 | 178.4 | -0.1 | | -1.0 | 4 | 11435 | 12 19 49 |
| 12 22 49 | =1334-127 | 13 35 25 | 23.9 | 179.2 | -0.1 | | -0.5 | 180 | 11458 | 12 19 50 |
| 12 23 59 | J1303-2405 | 13 36 35 | 12.4 | 187.5 | 0.5 | | 5.0 | 13 | 11458 | 12 23 59 |
| 12 25 59 | --- | 13 38 36 | 12.4 | 188.0 | 0.6 | | 5.3 | 120 | 11473 | 12 24 00 |

Schedule for TORUN (Code Tr) Page 29
 e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 12 25 59 | SSS17A | 13 38 36 | 13.2 | 186.6 | 0.5 | | 4.3 | -16 | 11473 | No stop |
| 12 28 29 | --- | 13 41 06 | 13.1 | 187.1 | 0.5 | | 4.7 | 134 | 11492 | 12 26 00 |
| 12 28 29 | J1303-2405 | 13 41 06 | 12.3 | 188.6 | 0.6 | | 5.6 | -16 | 11492 | No stop |
| 12 29 59 | --- | 13 42 36 | 12.3 | 188.9 | 0.6 | | 5.9 | 74 | 11504 | 12 28 30 |
| 12 29 59 | SSS17A | 13 42 36 | 13.1 | 187.5 | 0.5 | | 4.9 | -16 | 11504 | No stop |
| 12 32 29 | --- | 13 45 07 | 13.1 | 188.1 | 0.6 | | 5.3 | 134 | 11523 | 12 30 00 |
| 12 32 59 | J1303-2405 | 13 45 37 | 12.2 | 189.6 | 0.7 | | 6.3 | 14 | 11523 | 12 32 59 |
| 12 33 59 | --- | 13 46 37 | 12.2 | 189.9 | 0.7 | | 6.5 | 60 | 11531 | 12 33 00 |
| 12 33 59 | SSS17A | 13 46 37 | 13.0 | 188.4 | 0.6 | | 5.5 | -16 | 11531 | No stop |
| 12 36 29 | --- | 13 49 07 | 13.0 | 189.0 | 0.6 | | 5.9 | 134 | 11550 | 12 34 00 |
| 12 36 29 | J1303-2405 | 13 49 07 | 12.1 | 190.5 | 0.7 | | 6.9 | -16 | 11550 | No stop |
| 12 37 59 | --- | 13 50 38 | 12.1 | 190.8 | 0.8 | | 7.1 | 74 | 11562 | 12 36 30 |
| 12 37 59 | J1312-2350 | 13 50 38 | 12.6 | 188.6 | 0.6 | | 5.7 | -18 | 11562 | No stop |
| 12 40 29 | --- | 13 53 08 | 12.5 | 189.2 | 0.7 | | 6.0 | 132 | 11581 | 12 38 00 |
| 12 41 09 | J1303-2405 | 13 53 48 | 12.0 | 191.5 | 0.8 | | 7.6 | 22 | 11581 | 12 41 09 |
| 12 42 09 | --- | 13 54 48 | 12.0 | 191.8 | 0.8 | | 7.7 | 60 | 11589 | 12 41 10 |
| 12 42 09 | SSS17A | 13 54 48 | 12.8 | 190.4 | 0.7 | | 6.8 | -16 | 11589 | No stop |
| 12 44 39 | --- | 13 57 19 | 12.8 | 190.9 | 0.8 | | 7.1 | 134 | 11608 | 12 42 10 |
| 12 44 39 | J1303-2405 | 13 57 19 | 11.9 | 192.4 | 0.9 | | 8.1 | -16 | 11608 | No stop |
| 12 46 09 | --- | 13 58 49 | 11.8 | 192.7 | 0.9 | | 8.3 | 74 | 11619 | 12 44 40 |
| 12 46 09 | SSS17A | 13 58 49 | 12.7 | 191.3 | 0.8 | | 7.4 | -16 | 11619 | No stop |
| 12 48 39 | --- | 14 01 19 | 12.6 | 191.9 | 0.8 | | 7.7 | 134 | 11639 | 12 46 10 |
| 12 49 09 | J1303-2405 | 14 01 49 | 11.7 | 193.4 | 1.0 | | 8.8 | 14 | 11639 | 12 49 09 |
| 12 50 09 | --- | 14 02 50 | 11.7 | 193.6 | 1.0 | | 8.9 | 60 | 11646 | 12 49 10 |
| 12 50 09 | SSS17A | 14 02 50 | 12.6 | 192.2 | 0.9 | | 8.0 | -16 | 11646 | No stop |
| 12 52 39 | --- | 14 05 20 | 12.5 | 192.8 | 0.9 | | 8.3 | 134 | 11665 | 12 50 10 |
| 12 52 39 | J1303-2405 | 14 05 20 | 11.6 | 194.2 | 1.0 | | 9.3 | -16 | 11665 | No stop |
| 12 54 09 | --- | 14 06 50 | 11.5 | 194.5 | 1.0 | | 9.5 | 74 | 11677 | 12 52 40 |
| 12 54 09 | J1312-2350 | 14 06 50 | 12.1 | 192.4 | 0.9 | | 8.1 | -18 | 11677 | No stop |
| 12 56 39 | --- | 14 09 21 | 12.0 | 193.0 | 0.9 | | 8.5 | 132 | 11696 | 12 54 10 |

Schedule for TORUN (Code Tr)

Page 30

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 12 57 19 | J1303-2405 | 14 10 01 | 11.4 | 195.3 | 1.1 | | 10.0 | 22 | 11696 | 12 57 19 |
| 12 58 19 | --- | 14 11 01 | 11.4 | 195.5 | 1.1 | | 10.1 | 60 | 11704 | 12 57 20 |
| 12 58 19 | SSS17A | 14 11 01 | 12.3 | 194.1 | 1.0 | | 9.2 | -16 | 11704 | No stop |
| 13 00 49 | --- | 14 13 31 | 12.2 | 194.7 | 1.0 | | 9.6 | 134 | 11723 | 12 58 20 |
| 13 00 49 | J1303-2405 | 14 13 31 | 11.3 | 196.1 | 1.2 | | 10.5 | -16 | 11723 | No stop |
| 13 02 19 | --- | 14 15 02 | 11.2 | 196.4 | 1.2 | | 10.7 | 74 | 11735 | 13 00 50 |
| 13 02 19 | SSS17A | 14 15 02 | 12.2 | 195.1 | 1.1 | | 9.8 | -16 | 11735 | No stop |
| 13 04 49 | --- | 14 17 32 | 12.1 | 195.6 | 1.1 | | 10.2 | 134 | 11754 | 13 02 20 |
| 13 05 19 | J1303-2405 | 14 18 02 | 11.1 | 197.1 | 1.2 | | 11.2 | 14 | 11754 | 13 05 19 |
| 13 06 19 | --- | 14 19 02 | 11.0 | 197.3 | 1.2 | | 11.3 | 60 | 11762 | 13 05 20 |
| 13 06 19 | SSS17A | 14 19 02 | 12.0 | 196.0 | 1.1 | | 10.4 | -16 | 11762 | No stop |
| 13 08 49 | --- | 14 21 33 | 11.9 | 196.6 | 1.2 | | 10.8 | 134 | 11781 | 13 06 20 |
| 13 08 49 | J1303-2405 | 14 21 33 | 10.9 | 197.9 | 1.3 | | 11.7 | -16 | 11781 | No stop |
| 13 10 19 | --- | 14 23 03 | 10.9 | 198.2 | 1.3 | | 11.9 | 74 | 11792 | 13 08 50 |
| 13 10 19 | J1312-2350 | 14 23 03 | 11.5 | 196.1 | 1.2 | | 10.5 | -18 | 11792 | No stop |
| 13 12 49 | --- | 14 25 33 | 11.4 | 196.7 | 1.2 | | 10.9 | 132 | 11812 | 13 10 20 |
| 13 13 29 | J1303-2405 | 14 26 13 | 10.7 | 199.0 | 1.4 | | 12.4 | 22 | 11812 | 13 13 29 |
| 13 14 29 | --- | 14 27 14 | 10.7 | 199.2 | 1.4 | | 12.5 | 60 | 11819 | 13 13 30 |
| 13 14 29 | SSS17A | 14 27 14 | 11.6 | 197.9 | 1.3 | | 11.6 | -16 | 11819 | No stop |
| 13 16 59 | --- | 14 29 44 | 11.5 | 198.4 | 1.3 | | 12.0 | 134 | 11839 | 13 14 30 |
| 13 16 59 | J1303-2405 | 14 29 44 | 10.5 | 199.8 | 1.4 | | 12.9 | -17 | 11839 | No stop |
| 13 18 29 | --- | 14 31 14 | 10.4 | 200.1 | 1.4 | | 13.1 | 73 | 11850 | 13 17 00 |
| 13 18 29 | SSS17A | 14 31 14 | 11.5 | 198.8 | 1.3 | | 12.2 | -17 | 11850 | No stop |
| 13 20 59 | --- | 14 33 45 | 11.3 | 199.4 | 1.4 | | 12.5 | 133 | 11869 | 13 18 30 |
| 13 21 29 | J1303-2405 | 14 34 15 | 10.3 | 200.8 | 1.5 | | 13.5 | 13 | 11869 | 13 21 29 |
| 13 22 29 | --- | 14 35 15 | 10.2 | 201.0 | 1.5 | | 13.6 | 60 | 11877 | 13 21 30 |
| 13 22 29 | SSS17A | 14 35 15 | 11.3 | 199.7 | 1.4 | | 12.8 | -17 | 11877 | No stop |
| 13 24 59 | --- | 14 37 45 | 11.1 | 200.3 | 1.5 | | 13.1 | 133 | 11896 | 13 22 30 |
| 13 24 59 | J1303-2405 | 14 37 45 | 10.1 | 201.6 | 1.6 | | 14.0 | -17 | 11896 | No stop |
| 13 26 29 | --- | 14 39 15 | 10.0 | 201.9 | 1.6 | | 14.2 | 73 | 11908 | 13 25 00 |

Schedule for TORUN (Code Tr)

Page 31

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 13 26 29 | J1312-2350 | 14 39 15 | 10.8 | 199.8 | 1.4 | | 12.9 | -18 | 11908 | No stop |
| 13 28 59 | --- | 14 41 46 | 10.6 | 200.4 | 1.5 | | 13.2 | 132 | 11927 | 13 26 30 |
| 13 29 39 | J1303-2405 | 14 42 26 | 9.8 | 202.6 | 1.6 | | 14.7 | 22 | 11927 | 13 29 39 |
| 13 30 39 | --- | 14 43 26 | 9.8 | 202.8 | 1.7 | | 14.8 | 60 | 11935 | 13 29 40 |
| 13 30 39 | SSS17A | 14 43 26 | 10.8 | 201.6 | 1.5 | | 13.9 | -17 | 11935 | No stop |
| 13 33 09 | --- | 14 45 57 | 10.7 | 202.1 | 1.6 | | 14.3 | 133 | 11954 | 13 30 40 |
| 13 33 09 | J1303-2405 | 14 45 57 | 9.6 | 203.4 | 1.7 | | 15.2 | -17 | 11954 | No stop |
| 13 34 39 | --- | 14 47 27 | 9.5 | 203.7 | 1.7 | | 15.4 | 73 | 11965 | 13 33 10 |
| 13 34 39 | SSS17A | 14 47 27 | 10.6 | 202.5 | 1.6 | | 14.5 | -17 | 11965 | No stop |
| 13 37 09 | --- | 14 49 57 | 10.5 | 203.0 | 1.7 | | 14.8 | 133 | 11985 | 13 34 40 |
| 13 37 39 | J1303-2405 | 14 50 27 | 9.4 | 204.4 | 1.8 | | 15.8 | 13 | 11985 | 13 37 39 |
| 13 38 39 | --- | 14 51 27 | 9.3 | 204.6 | 1.8 | | 15.9 | 60 | 11992 | 13 37 40 |
| 13 38 39 | SSS17A | 14 51 27 | 10.4 | 203.4 | 1.7 | | 15.1 | -17 | 11992 | No stop |
| 13 41 09 | --- | 14 53 58 | 10.2 | 203.9 | 1.7 | | 15.4 | 133 | 12012 | 13 38 40 |
| 13 41 09 | J1303-2405 | 14 53 58 | 9.1 | 205.2 | 1.8 | | 16.3 | -17 | 12012 | No stop |
| 13 42 39 | --- | 14 55 28 | 9.0 | 205.5 | 1.9 | | 16.5 | 73 | 12023 | 13 41 10 |
| 13 42 39 | J1312-2350 | 14 55 28 | 9.9 | 203.5 | 1.7 | | 15.2 | -18 | 12023 | No stop |
| 13 45 09 | --- | 14 57 59 | 9.7 | 204.0 | 1.7 | | 15.5 | 132 | 12042 | 13 42 40 |
| 13 45 49 | J1303-2405 | 14 58 39 | 8.8 | 206.2 | 1.9 | | 16.9 | 22 | 12042 | 13 45 49 |
| 13 46 49 | --- | 14 59 39 | 8.8 | 206.4 | 1.9 | | 17.0 | 60 | 12050 | 13 45 50 |
| 13 46 49 | SSS17A | 14 59 39 | 9.9 | 205.2 | 1.8 | | 16.2 | -17 | 12050 | No stop |
| 13 49 19 | --- | 15 02 09 | 9.7 | 205.8 | 1.9 | | 16.5 | 133 | 12069 | 13 46 50 |
| 13 49 19 | J1303-2405 | 15 02 09 | 8.6 | 207.0 | 2.0 | | 17.4 | -17 | 12069 | No stop |
| 13 50 49 | --- | 15 03 39 | 8.5 | 207.3 | 2.0 | | 17.6 | 73 | 12081 | 13 49 20 |
| 13 50 49 | SSS17A | 15 03 39 | 9.6 | 206.1 | 1.9 | | 16.7 | -17 | 12081 | No stop |
| 13 53 19 | --- | 15 06 10 | 9.4 | 206.7 | 1.9 | | 17.1 | 133 | 12100 | 13 50 50 |
| 13 53 49 | J1303-2405 | 15 06 40 | 8.3 | 208.0 | 2.0 | | 18.0 | 13 | 12100 | 13 53 49 |
| 13 54 49 | --- | 15 07 40 | 8.2 | 208.2 | 2.1 | | 18.1 | 60 | 12108 | 13 53 50 |
| 13 54 49 | SSS17A | 15 07 40 | 9.3 | 207.0 | 1.9 | | 17.3 | -17 | 12108 | No stop |
| 13 57 19 | --- | 15 10 11 | 9.2 | 207.6 | 2.0 | | 17.6 | 133 | 12127 | 13 54 50 |

Schedule for TORUN (Code Tr)

Page 32

e-EVN: EL058D, RP028, EG096C, RP029B

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 20 Sep 2017 Day 263 --- | | | | | | | | | | |
| 13 57 19 | J1303-2405 | 15 10 11 | 8.0 | 208.8 | 2.1 | | 18.5 | -17 | 12127 | No stop |
| 13 58 49 | --- | 15 11 41 | 7.9 | 209.1 | 2.1 | | 18.7 | 73 | 12139 | 13 57 20 |
| 13 58 49 | J1312-2350 | 15 11 41 | 8.8 | 207.1 | 2.0 | | 17.4 | -18 | 12139 | No stop |
| 14 01 19 | --- | 15 14 11 | 8.6 | 207.6 | 2.0 | | 17.7 | 132 | 12158 | 13 58 50 |
| 14 01 59 | J1303-2405 | 15 14 51 | 7.7 | 209.8 | 2.2 | | 19.1 | 22 | 12158 | 14 01 59 |
| 14 02 59 | --- | 15 15 51 | 7.6 | 210.0 | 2.2 | | 19.2 | 60 | 12165 | 14 02 00 |
| 14 02 59 | SSS17A | 15 15 51 | 8.8 | 208.8 | 2.1 | | 18.4 | -17 | 12165 | No stop |
| 14 05 29 | --- | 15 18 22 | 8.6 | 209.4 | 2.1 | | 18.7 | 133 | 12185 | 14 03 00 |
| 14 05 29 | J1303-2405 | 15 18 22 | 7.4 | 210.5 | 2.2 | | 19.5 | -17 | 12185 | No stop |
| 14 06 59 | --- | 15 19 52 | 7.3 | 210.9 | 2.3 | | 19.7 | 73 | 12196 | 14 05 30 |
| 14 06 59 | SSS17A | 15 19 52 | 8.5 | 209.7 | 2.2 | | 18.9 | -17 | 12196 | No stop |
| 14 09 29 | --- | 15 22 23 | 8.3 | 210.2 | 2.2 | | 19.3 | 133 | 12215 | 14 07 00 |
| 14 09 59 | J1303-2405 | 15 22 53 | 7.1 | 211.5 | 2.3 | | 20.1 | 12 | 12215 | 14 09 59 |
| 14 10 59 | --- | 15 23 53 | 7.0 | 211.7 | 2.3 | | 20.3 | 60 | 12223 | 14 10 00 |
| 14 10 59 | SSS17A | 15 23 53 | 8.2 | 210.6 | 2.2 | | 19.4 | -17 | 12223 | No stop |
| 14 13 29 | --- | 15 26 23 | 8.0 | 211.1 | 2.3 | | 19.8 | 133 | 12242 | 14 11 00 |
| 14 13 29 | J1303-2405 | 15 26 23 | 6.8 | 212.3 | 2.4 | | 20.6 | -18 | 12242 | No stop |
| 14 14 59 | --- | 15 27 53 | 6.7 | 212.6 | 2.4 | | 20.8 | 72 | 12254 | 14 13 30 |
| 14 14 59 | J1312-2350 | 15 27 53 | 7.6 | 210.6 | 2.2 | | 19.6 | -17 | 12254 | No stop |
| 14 17 29 | --- | 15 30 24 | 7.5 | 211.2 | 2.3 | | 19.9 | 133 | 12273 | 14 15 00 |
| 14 18 09 | J1303-2405 | 15 31 04 | 6.4 | 213.3 | 2.4 | | 21.2 | 22 | 12273 | 14 18 09 |
| 14 19 09 | --- | 15 32 04 | 6.3 | 213.5 | 2.5 | | 21.3 | 60 | 12281 | 14 18 10 |
| 14 19 09 | SSS17A | 15 32 04 | 7.5 | 212.3 | 2.4 | | 20.5 | -17 | 12281 | No stop |
| 14 21 39 | --- | 15 34 35 | 7.3 | 212.9 | 2.4 | | 20.8 | 133 | 12300 | 14 19 10 |
| 14 21 39 | J1303-2405 | 15 34 35 | 6.1 | 214.0 | 2.5 | | 21.6 | -18 | 12300 | No stop |
| 14 23 39 | --- | 15 36 35 | 6.0 | 214.5 | 2.5 | | 21.9 | 102 | 12315 | 14 21 40 |
| 14 27 09 | J1310+3220 | 15 40 05 | 56.2 | 246.9 | 2.5 | | 40.8 | 7 | 12315 | 14 27 09 |
| 14 30 09 | =1308+326 | 15 43 06 | 55.8 | 247.8 | 2.5 | | 41.1 | 180 | 12339 | 14 27 10 |

SETUP FILE INFORMATION:

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

=====
===== Setup file: sess217.C2048e

Setup group: 9

Station: TORUN

Total bit rate: 1024

Format: MARK5B

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= | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 | 4200.00 |
| Net SB= | L | L | U | U | L | L | U | U | U |
| IF SB = | U | U | U | U | U | U | U | U | U |
| Pol. = | RCP | LCP | RCP | LCP | RCP | LCP | RCP | LCP | LCP |
| BBC = | 1 | 5 | 1 | 5 | 3 | 7 | 3 | 7 | 7 |
| BBC SB= | L | L | U | U | L | L | U | U | U |
| IF = | A1 | B1 | A1 | B1 | A1 | B1 | A1 | B1 | B1 |

The following frequency sets based on these setups were used.

Frequency Set: 7 Setup file default. Used with PCAL = off
 LO sum= 4958.49 4958.49 4958.49 4958.49 5022.49 5022.49 5022.49 5022.49
 BBC fr= 758.49 758.49 758.49 758.49 822.49 822.49 822.49 822.49
 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= 10, 14, 2, 6, 12, 16, 4, 8
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

| Source | Source position (RA/Dec) (B1950) | (J2000) | (Date) | Error (mas) |
|--------------|---|-------------------|-----------------|----------------|
| * ARSCO | 16 18 48.001119 | * 16 21 47.288392 | 16 22 49.693836 | 0.00 |
| | -22 46 08.01594 | *-22 53 10.42207 | -22 55 28.70045 | 0.00 |
| | Proper motion used. Reference epoch: 2017.27927 | | | |
| | At epoch: RA = 16 21 47.288000 Dec = -22 53 10.40000 | | | |
| | Rates: RA = 12.40 mas/yr Dec = -50.50 mas/yr | | | |
| | Parallax: 0.0000 mas. | | | |
| | Planetary motion (includes proper motion). Ref. MJD: 58015.3819 | | | |
| | Rates: RA = 0.24567E-05 s/day Dec = -0.13826E-03 arcsec/day | | | |
| * J1621-2241 | 16 18 33.253628 | * 16 21 32.276276 | 16 22 34.587512 | 0.00 |
| | -22 33 58.02036 | *-22 41 01.40904 | -22 43 19.96943 | 0.00 |
| * IRAS23436 | 23 43 37.615051 | * 23 46 05.517275 | 23 47 00.192154 | 0.00 |
| | 52 57 21.56123 | * 53 14 01.26050 | 53 19 56.87462 | 0.00 |
| * ARUMA | 11 12 58.336511 | * 11 15 44.462590 | 11 16 40.327490 | 0.00 |
| | 43 14 44.50698 | * 42 58 22.42090 | 42 52 40.84712 | 0.00 |
| * J1112+4301 | 11 09 46.149123 | * 11 12 33.150600 | 11 13 29.322133 | 0.00 |
| | 43 17 35.70611 | * 43 01 16.47900 | 42 55 35.59167 | 0.00 |
| * J1108+4330 | 11 05 35.113895 | * 11 08 23.476931 | 11 09 20.104665 | 0.00 |
| | 43 47 08.86359 | * 43 30 53.65728 | 43 25 13.70631 | 0.00 |
| * SSS17A | 13 07 05.876058 | * 13 09 48.089000 | 13 10 43.885230 | 0.00 |
| | -23 06 55.47686 | *-23 22 53.35000 | -23 28 20.96010 | 0.00 |
| * J1303-2405 | 13 00 37.951987 | * 13 03 19.646900 | 13 04 15.251088 | 0.00 |
| | -23 48 57.23719 | *-24 05 03.05600 | -24 10 33.61492 | 0.00 |
| * J1312-2350 | 13 10 05.987814 | * 13 12 48.758100 | 13 13 44.757260 | 0.00 |
| | -23 34 53.02797 | *-23 50 46.95300 | -23 56 13.22641 | 0.00 |
| 0010+405 | 00 10 54.297705 | * 00 13 31.130202 | 00 14 28.224140 | 0.13 |

| | | | | |
|--------------|--|-------------------|-----------------|------|
| * J0013+4051 | 40 34 56.63340 | * 40 51 37.14414 | 40 57 31.69556 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 1713 observations | | | |
| 0234+285 | 02 34 55.589591 | * 02 37 52.405678 | 02 38 55.686171 | 0.11 |
| * J0237+2848 | 28 35 11.40781 | * 28 48 08.99006 | 28 52 36.05835 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 57801 observations | | | |
| 0552+398 | 05 52 01.407174 | * 05 55 30.805616 | 05 56 44.081537 | 0.13 |
| * J0555+3948 | 39 48 21.94584 | * 39 48 49.16499 | 39 48 42.65527 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 404081 observations | | | |
| 0923+392 | 09 23 55.319219 | * 09 27 03.013940 | 09 28 06.934611 | 0.13 |
| * J0927+3902 | 39 15 23.56641 | * 39 02 20.85181 | 38 57 40.15734 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 252917 observations | | | |
| 1308+326 | 13 08 07.560134 | * 13 10 28.663853 | 13 11 16.340983 | 0.12 |
| * J1310+3220 | 32 36 40.23877 | * 32 20 43.78284 | 32 15 22.00447 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 119714 observations | | | |
| 1334-127 | 13 34 59.803873 | * 13 37 39.782778 | 13 38 34.809217 | 0.10 |
| * J1337-1257 | -12 42 09.74311 | *-12 57 24.69338 | -13 02 35.11884 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 98521 observations | | | |
| 1404+286 | 14 04 45.615158 | * 14 07 00.394416 | 14 07 46.173938 | 0.11 |
| * J1407+2827 | 28 41 29.23513 | * 28 27 14.69016 | 28 22 32.40895 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 71115 observations | | | |
| 1555+001 | 15 55 17.692620 | * 15 57 51.433972 | 15 58 44.703108 | 0.10 |
| * J1557-0001 | 00 06 43.53284 | *-00 01 50.41377 | -00 04 34.21604 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 2923 observations | | | |
| 1600+335 | 16 00 11.909330 | * 16 02 07.263460 | 16 02 46.827207 | 0.12 |
| * J1602+3326 | 33 35 09.59260 | * 33 26 53.07228 | 33 24 22.74062 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 1894 observations | | | |
| 1622-253 | 16 22 44.105298 | * 16 25 46.891639 | 16 26 50.544948 | 0.11 |
| * J1625-2527 | -25 20 51.69568 | *-25 27 38.32688 | -25 29 51.86920 | 0.10 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 47503 observations | | | |
| 2351+550 | 23 51 11.688098 | * 23 53 42.299681 | 23 54 38.109214 | 0.34 |
| * J2353+5518 | 55 01 59.33560 | * 55 18 40.66699 | 55 24 35.80203 | 0.30 |
| | /home/guest/rmc/SCHED/sched11.4/catalogs/sources.rfc | | | |
| | rfc_2015a Petrov, 2015, unpublished. 161 observations | | | |

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