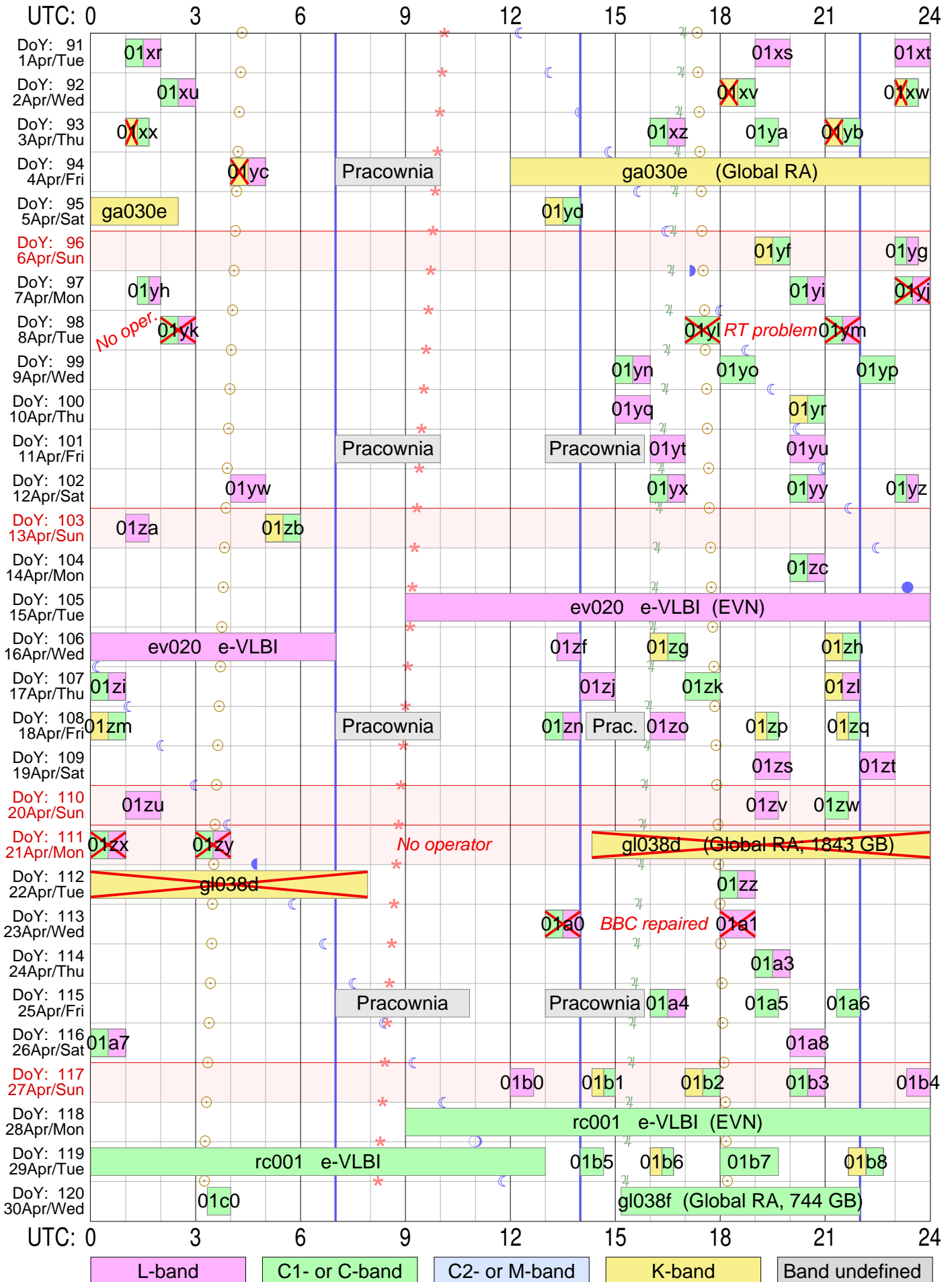


Tr VLBI plan for Apr 2014



Version: 2014.04.28

Sky events at Tr: ☉ Sunrise & sunset ☾☽ Transit of Moon ♃ Transit of Jupiter ★ Transit of Aries (0h ST)
 Vertical lines in blue mark operator shift times at Tr Total observing time: 155.6 hours in 77 experiments scheduled
 Two initial characters (rk) are omitted from RA experiment names!

Strona zostawiona celowo pusta

RadioAstron and EVN Experiments

April 2014

Użytkownik i hasło ftp dla logów i schedulów RA: grt K0&th%

ftp://webinet.asc.rssi.ru

Przykład dla log files: cd GRT_log_files/2013_08/2013_08_01_raks02aa

Przykład dla sched files: cd schedule/grtsched/RAKS/rk02aa

DoY	DoM	WD	UT_Start	UT_Stop	Experim.	Band	Uwagi
			h m	h m	name		
91	1	Wto	1 00	2 00	rk01xr	C->L	
91	1	Wto	19 00	20 00	rk01xs	L	
91	1	Wto	23 00	24 00	rk01xt	L	
92	2	Sro	2 00	3 00	rk01xu	C->L	
92	2	Sro	18 00	19 00	rk01xv	K->C	
92	2	Sro	23 00	23 40	rk01xw	K->C	
93	3	Czw	1 00	1 40	rk01xx	K->C	
93	3	Czw	16 00	17 00	rk01xz	C->L	
93	3	Czw	19 00	19 40	rk01ya	C	
93	3	Czw	21 00	22 00	rk01yb	K->C	
94	4	Pia	4 00	5 00	rk01yc	K->L	
94	4	Pia	12 00	24+02 30	ga030e	K	Global RA
95	5	Sob	13 00	14 00	rk01yd	K->C	
96	6	Nie	19 00	20 00	rk01yf	K->C	
96	6	Nie	23 00	23 40	rk01yg	C->L	
97	7	Pon	1 20	2 00	rk01yh	C->L	
97	7	Pon	20 00	21 00	rk01yi	C->L	
97	7	Pon	23 00	24 00	rk01yj	C->L	
98	8	Wto	2 00	3 00	rk01yk	C->L	
98	8	Wto	17 00	18 00	rk01yl	C	
98	8	Wto	21 00	22 00	rk01ym	C->L	
99	9	Sro	15 00	16 00	rk01yn	C->L	
99	9	Sro	18 00	19 00	rk01yo	C	
99	9	Sro	22 00	23 00	rk01yp	C	
100	10	Czw	15 00	16 00	rk01yq	L	
100	10	Czw	20 00	21 00	rk01yr	K->C	
101	11	Pia	16 00	17 00	rk01yt	L	
101	11	Pia	20 00	21 00	rk01yu	L	
102	12	Sob	4 00	5 00	rk01yw	L	
102	12	Sob	16 00	17 00	rk01yx	C->L	
102	12	Sob	20 00	21 00	rk01yy	C->L	
102	12	Sob	23 00	23 40	rk01yz	C->L	
103	13	Nie	1 00	1 40	rk01za	L	
103	13	Nie	5 00	6 00	rk01zb	K->C	
104	14	Pon	20 00	21 00	rk01zc	C->L	
105	15	Wto	9 00	24+13 00	ev020	L	e-VLBI
106	16	Sro	13 20	14 00	rk01zf	L	
106	16	Sro	16 00	17 00	rk01zg	K->C	
106	16	Sro	21 00	22 00	rk01zh	K->C	
107	17	Czw	0 00	1 00	rk01zi	C->L	

107 17	Czw	14 00	15 00	rk01zj	L	
107 17	Czw	17 00	18 00	rk01zk	C	
107 17	Czw	21 00	22 00	rk01zl	K->L	
108 18	Pia	0 00	1 00	rk01zm	K->C	
108 18	Pia	13 00	14 00	rk01zn	C->L	
108 18	Pia	16 00	17 00	rk01zo	L	
108 18	Pia	19 00	19 40	rk01zp	K->C	
108 18	Pia	21 20	22 00	rk01zq	K->C	
109 19	Sob	19 00	20 00	rk01zs	L	
109 19	Sob	22 00	23 00	rk01zt	L	
110 20	Nie	1 00	2 00	rk01zu	L	
110 20	Nie	19 00	19 40	rk01zv	L	
110 20	Nie	21 00	21 40	rk01zw	C	
111 21	Pon	0 00	1 00	rk01zx	C->L	
111 21	Pon	3 00	4 00	rk01zy	C->L	
111 21	Pon	14 00	24+08 00	gl038d	K	Global RA
112 22	Wto	18 00	19 00	rk01zz	C->L	
113 23	Sro	13 00	14 00	rk01a0	C->L	
113 23	Sro	18 00	19 00	rk01a1	L	
114 24	Czw	19 00	20 00	rk01a3	C->L	
115 25	Pia	16 00	17 00	rk01a4	C->L	
115 25	Pia	19 00	19 40	rk01a5	C	
115 25	Pia	21 20	22 00	rk01a6	C	
116 26	Sob	0 00	1 00	rk01a7	C->L	
116 26	Sob	20 00	21 00	rk01a8	L	
117 27	Nie	12 00	12 40	rk01b0	L	
117 27	Nie	14 20	15 00	rk01b1	K->C	
117 27	Nie	17 00	18 00	rk01b2	K->C	
117 27	Nie	20 00	21 00	rk01b3	C->L	
117 27	Nie	23 20	24 00	rk01b4	L	
118 28	Pon	9 00	24+13 00	rc001	e-VLBI	
119 29	Wto	14 00	14 40	rk01b5	C - zmiana 28 IV z K->C	
119 29	Wto	16 00	16 40	rk01b6	K->C	
119 29	Wto	18 00	19 40	rk01b7	C	
119 29	Wto	21 40	22 40	rk01b8	K->C	
120 30	Sro	3 20	4 00	rk01c0	C	
120 30	Sro	15 10	22 00	gl038f	C	Global RA

Razem 77 eksperymentow (EVN i RA)

Do zapisu obserwacji RadioAstronu dedykowany na stałe jest dyskpak

TR-00002/1600

montowany w banku A. Gdyby ten się zapełnił, trzeba użyć innego paka, w pierwszym rzędzie

HART-041/3200 i SHAO-032/4000

(w rezerwie są też paki na sesję majową: JOD-0050/6000[4500], UAO-0016/2000, TR-00008/2000, USN-0203/2000 i JIVE-055/2000). Kolejny pak można zamontować w banku B obok TR-00002/1600 (lub sam w A). Jeśli zaczęto nagrywać w banku B, do kolejnych eksperymentów trzeba używać także banku B.

UWAGA: 1-godzinne eksperymenty RA zwykle wymagają ok. 110 GB wolnego miejsca na dyskpacku (dłuższe odpowiednio więcej).

rk01xrtr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 1 Apr 2014 Day 91 ---

----- 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

01 00 00 1023+131 14 51 32 24.4 258.5 4.4 37.1 0 0 01 00 00
01 14 30 --- 15 06 04 22.3 261.6 4.7 37.5 870 28 01 00 01
01 15 00 1023+131 15 06 34 22.2 261.7 4.7 37.5 24 28 01 15 00
01 25 00 --- 15 16 36 20.7 263.8 4.8 37.7 600 47 01 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00

01 30 00 1023+131 15 21 37 20.0 264.8 4.9 37.8 293 47 01 30 00
01 44 30 --- 15 36 09 17.8 267.7 5.2 38.0 870 75 01 30 01
01 45 00 1023+131 15 36 39 17.7 267.8 5.2 38.0 24 75 01 45 00
02 00 00 --- 15 51 41 15.5 270.9 5.4 38.0 900 104 01 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	6	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1023+131	10 23 16.285230	* 10 25 56.285371	10 26 43.296429	0.00
J1025+1253	13 09 05.49476	* 12 53 49.02188	12 49 15.63176	0.00

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)
1023+131	142.4

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

rk01xstr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 1 Apr 2014 Day 91 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, TPStart, SYNC. Contains observation schedule data for 19:00:00 to 20:00:00.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 9 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=  2400.00  2400.00  2400.00  2400.00
Net SB=      L      L      U      U
IF SB =      L      L      L      L
Pol.  =      RCP     LCP     RCP     LCP
BBC   =      1      2      1      2
BBC SB=      U      U      L      L
IF    =      C      A      C      A

```

The following frequency sets based on these setups were used.

```

Frequency Set:  6  Setup file default.  Used with PCAL = 1MHz
LO sum=  1668.00  1668.00  1668.00  1668.00
BBC fr=   732.00  732.00  732.00  732.00
Bandwd=   16.00  16.00  16.00  16.00
Matching frequency sets:  6

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1036+054	10 36 10.827228	* 10 38 46.779881	10 39 32.717493	0.00
J1038+0512	05 28 06.89952	* 05 12 29.08645	05 07 48.42671	0.00

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)
1036+054    147.4

```

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

```

rk01xttr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 1 Apr 2014 Day 91 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with 11 columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, TPStart. Contains scan schedule data for 2014-04-01.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 11 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = 1MHz
 LO sum= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 Bandwd= 16.00 16.00 16.00 16.00
 Matching frequency sets: 8

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)
* 1510-089	15 10 08.900178	* 15 12 50.532926	15 13 38.233599	0.00
J1512-0905	-08 54 47.61965	*-09 05 59.82980	-09 09 12.39462	0.00

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)
1510-089	142.8

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

SETUP FILE INFORMATION:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	5	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: 11 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: 11

Track assignments are:

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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	13	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 13 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 13

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1123+264	11 23 14.869304	* 11 25 53.711924	11 26 40.473951	0.00
J1125+2610	26 26 49.99096	* 26 10 19.97856	26 05 28.96784	0.00

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)
3C286	143.0
1123+264	143.7

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

rk01xvtr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: K&C-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Wed 2 Apr 2014 Day 92 ---

----- K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies: 736.00 736.00 736.00 736.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

18 00 00 0834-201 07 58 16 16.1 170.5 -0.7 -6.1 0 0 18 00 00
18 14 30 --- 08 12 48 16.4 174.0 -0.4 -3.8 870 28 18 00 01
18 15 00 0834-201 08 13 18 16.4 174.1 -0.4 -3.8 24 28 18 15 00
18 25 00 --- 08 23 20 16.5 176.6 -0.2 -2.2 600 47 18 15 01

----- 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

18 30 00 0834-201 08 28 21 16.5 177.8 -0.1 -1.4 293 47 18 30 00
18 44 30 --- 08 42 53 16.6 181.4 0.1 0.9 870 75 18 30 01
18 45 00 0834-201 08 43 23 16.6 181.5 0.1 1.0 24 75 18 45 00
19 00 00 --- 08 58 26 16.4 185.2 0.4 3.3 900 104 18 45 01

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01xv_freq.dat:

tr1cm

Setup group:	5	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=	21500.00	21500.00	21500.00	21500.00
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=	22236.00	22236.00	22236.00	22236.00
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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 6 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: 6

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0834-201	08 34 24.601681	* 08 36 39.215241	08 37 18.723179	0.00
J0836-2016	-20 06 30.40845	*-20 16 59.50414	-20 20 21.44038	0.00

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)
0834-201	117.5

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

rk01xwtr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: K&C-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

--- Wed 2 Apr 2014 Day 92 ---

----- K-band VLBI scans -----

```
Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies:   736.00   736.00   736.00   736.00
Next scan bandwidths:  16.00   16.00   16.00   16.00

23 00 00 0748+126    12 59 05 17.8 267.1 5.1    37.9   0       0   23 00 00
23 15 00 ---          13 14 07 15.6 270.1 5.4    38.0  900     29   23 00 01
```

----- 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

23 20 00 0748+126    13 19 08 14.8 271.1 5.5    37.9  293     29   23 20 00
23 40 00 ---          13 39 12 11.8 275.1 5.8    37.8 1200     67   23 20 01
```

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01xw_freq.dat:
tr1cm

Setup group:	4	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=	21500.00	21500.00	21500.00	21500.00
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:	2	Setup file default.	Used with PCAL = 1MHz
LO sum=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	2		

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0748+126	07 48 05.060493	* 07 50 52.045731	07 51 40.409250	0.00
J0750+1231	12 38 45.47747	* 12 31 04.82815	12 28 39.51395	0.00

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)
0748+126	104.2

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

rk01xxtr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: K&C-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

--- Thu 3 Apr 2014 Day 93 ---

----- K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies: 736.00 736.00 736.00 736.00
Next scan bandwidths: 16.00 16.00 16.00 16.00
01 00 00 0851+202 14 59 25 15.4 -76.9 6.1 38.5 0 0 01 00 00
01 15 00 --- 15 14 27 13.2 -74.1 6.3 37.9 900 29 01 00 01

----- 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
01 20 00 0851+202 15 19 28 12.5 -73.1 6.4 37.7 293 29 01 20 00
01 40 00 --- 15 39 31 9.6 -69.3 6.7 36.7 1200 67 01 20 01

SETUP FILE INFORMATION:

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

=====
Setup file: ralcm2.set

Matching groups in ./rk01xx_freq.dat:
tr1cm

Setup group:	4	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=	21500.00	21500.00	21500.00	21500.00
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:	2	Setup file default.	Used with PCAL = 1MHz
LO sum=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	2		

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0851+202	08 51 57.250618	* 08 54 48.874930	08 55 38.823362	0.00
J0854+2006	20 17 58.41733	* 20 06 30.64078	20 03 03.33426	0.00

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)
0851+202    117.5

```

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

```

rk01xztr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

--- Thu 3 Apr 2014 Day 93 ---

----- 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

16 00 00 1642+690 06 01 53 32.9 8.4-10.7 -14.1 0 0 16 00 00
16 14 30 --- 06 16 25 33.2 9.9-10.4 -16.7 870 28 16 00 01
16 15 00 1642+690 06 16 55 33.2 10.0-10.4 -16.8 24 28 16 15 00
16 25 00 --- 06 26 57 33.5 11.0-10.3 -18.5 600 47 16 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00

16 30 00 1642+690 06 31 58 33.7 11.5-10.2 -19.4 294 47 16 30 00
16 44 30 --- 06 46 30 34.1 13.0 -9.9 -22.0 870 75 16 30 01
16 45 00 1642+690 06 47 00 34.1 13.0 -9.9 -22.1 24 75 16 45 00
17 00 00 --- 07 02 02 34.7 14.5 -9.7 -24.8 900 104 16 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 6 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: 6

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	7	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 7 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 7

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1642+690	16 42 18.064877	* 16 42 07.848507	16 42 06.534645	0.00
J1642+6856	69 02 13.21708	* 68 56 39.75636	68 54 53.08210	0.00

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)
1642+690	95.9

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


```

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:  3  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:  3

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error
	(B1950)	(J2000)		(mas)
* 0743-006	07 43 21.047495	* 07 45 54.082322	07 46 38.451801	0.00
J0745-0044	-00 36 55.80448	*-00 44 17.54000	-00 46 41.73624	0.00

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)
0743-006    103.8

```

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

```

rk01ybtr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: K&C-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

--- Thu 3 Apr 2014 Day 93 ---

----- K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
 Next BBC frequencies: 736.00 736.00 736.00 736.00
 Next scan bandwidths: 16.00 16.00 16.00 16.00

21 00 00	0834-201	11 02 42	10.1	214.4	2.4		21.2	0	0	21 00 00
21 14 30	---	11 17 14	8.8	217.6	2.7		23.0	870	28	21 00 01
21 15 00	0834-201	11 17 44	8.8	217.7	2.7		23.0	24	28	21 15 00
21 25 00	---	11 27 46	7.8	219.9	2.8		24.2	600	47	21 15 01

----- 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

21 30 00	0834-201	11 32 47	7.4	220.9	2.9		24.8	293	47	21 30 00
21 44 30	---	11 47 19	5.9	224.0	3.2		26.4	870	75	21 30 01
21 45 00	0834-201	11 47 49	5.8	224.1	3.2		26.5	24	75	21 45 00
22 00 00	---	12 02 52	4.2	227.3	3.4		28.1	900	104	21 45 01

SETUP FILE INFORMATION:

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

=====
Setup file: ralcm2.set

Matching groups in ./rk01yb_freq.dat:
tr1cm

Setup group:	7	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=	21500.00	21500.00	21500.00	21500.00
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=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	4		

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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:  8  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:  8

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0834-201	08 34 24.601681	* 08 36 39.215241	08 37 18.706328	0.00
J0836-2016	-20 06 30.40845	*-20 16 59.50414	-20 20 21.54040	0.00

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)
0834-201	116.6

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

rk01yctr

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: K&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

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

--- Fri 4 Apr 2014 Day 94 ---

----- K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
 Next BBC frequencies: 736.00 736.00 736.00 736.00
 Next scan bandwidths: 16.00 16.00 16.00 16.00

04 00 00	1611+343	18 03 51	62.9	236.7	1.8	37.4	0	0	04 00 00
04 14 30	---	18 18 23	61.0	241.7	2.1	39.7	870	28	04 00 01
04 15 00	1611+343	18 18 53	61.0	241.9	2.1	39.8	24	28	04 15 00
04 25 00	---	18 28 55	59.6	245.1	2.2	41.2	600	47	04 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
 Next BBC frequencies: 732.00 732.00 732.00 732.00

04 30 00	1611+343	18 33 56	58.9	246.6	2.3	41.8	293	47	04 30 00
04 44 30	---	18 48 28	56.9	250.8	2.6	43.3	870	75	04 30 01
04 45 00	1611+343	18 48 58	56.8	250.9	2.6	43.3	24	75	04 45 00
05 00 00	---	19 04 01	54.7	254.9	2.8	44.5	900	104	04 45 01

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01yc_freq.dat:
tr1cm

Setup group:	8	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=	21500.00	21500.00	21500.00	21500.00
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:	7	Setup file default.	Used with PCAL = 1MHz
LO sum=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	7		

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	4	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 10 Setup file default. Used with PCAL = 1MHz
LO sum=      1668.00  1668.00  1668.00  1668.00
BBC fr=       732.00   732.00   732.00   732.00
Bandwd=       16.00   16.00   16.00   16.00
Matching frequency sets: 10

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	Source position (RA/Dec) (J2000)	(Date)	Error (mas)
* 1611+343	16 11 47.914251	* 16 13 41.064242	16 14 14.523237	0.00
J1613+3412	34 20 19.83376	* 34 12 47.90878	34 10 31.22283	0.00

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)
1611+343	118.0

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

PROBING THE INNERMOST REGIONS OF AGN JETS AND THEIR MAGNETIC FIELDS

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Observing mode: K-band, dual-pol

Notes: Please, send Mk5 disk packs to MPIfR-Bonn

Schedule for TORUN (Code Tr) Page 2

Probing the innermost regions of AGN jets and their magnetic fields

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

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

Disk: GBytes recorded to this point.

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

SYNC: Time correlator is expected to sync up.

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

--- Fri 4 Apr 2014 Day 94 ---

----- Ground segment 01 -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00

Next BBC frequencies: 736.00 736.00 736.00 736.00

Next scan bandwidths: 16.00 16.00 16.00 16.00

```
12 00 00 0923+392    02 05 10 19.8 50.6 -7.4    -36.6    0        0    12 00 00
12 03 00 ---        02 08 10 20.1 51.1 -7.3    -36.9    180      6    12 00 01

12 03 30 0748+126    02 08 40 12.5 85.8 -5.7    -37.8    -55      6    12 03 30
12 12 00 ---        02 17 12 13.8 87.5 -5.6    -37.9    455     22    12 03 31

12 12 30 0742+103    02 17 42 12.8 90.1 -5.5    -37.6    11      22    12 12 30
12 20 30 ---        02 25 43 14.0 91.7 -5.3    -37.6    480     37    12 12 31

12 21 00 0851+202    02 26 13 11.6 72.0 -6.5    -37.4    -24     37    12 21 00
12 24 30 ---        02 29 44 12.2 72.7 -6.4    -37.6    186     44    12 21 01
```

----- Space segment 01 -----

```
12 25 00 0851+202    02 30 14 12.2 72.8 -6.4    -37.6    24      44    12 25 00
12 34 30 ---        02 39 45 13.6 74.6 -6.3    -38.0    570     62    12 25 01

12 35 00 0851+202    02 40 15 13.7 74.7 -6.3    -38.1    24      62    12 35 00
12 44 30 ---        02 49 47 15.1 76.5 -6.1    -38.4    570     81    12 35 01

12 45 00 0851+202    02 50 17 15.1 76.6 -6.1    -38.5    24      81    12 45 00
12 54 30 ---        02 59 49 16.5 78.4 -5.9    -38.8    570     99    12 45 01

12 55 00 0851+202    03 00 19 16.6 78.5 -5.9    -38.8    24      99    12 55 00
13 04 30 ---        03 09 50 18.0 80.4 -5.8    -39.1    570    117    12 55 01
```

----- Ground segment 02 -----

```
13 05 00 0851+202    03 10 20 18.1 80.4 -5.8    -39.1    24     117    13 05 00
13 14 30 ---        03 19 52 19.5 82.3 -5.6    -39.3    570    135    13 05 01
```

Schedule for TORUN (Code Tr)

Page 3

Probing the innermost regions of AGN jets and their magnetic fields

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

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

Disk: GBytes recorded to this point.

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

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC
--- Fri 4 Apr 2014 Day 94 ---										
13 15 00	0851+202	03 20 22	19.6	82.4	-5.6		-39.3	24	135	13 15 00
13 24 00	---	03 29 24	20.9	84.1	-5.4		-39.5	540	153	13 15 01
13 24 30	0851+202	03 29 54	21.0	84.2	-5.4		-39.5	24	153	13 24 30
13 34 00	---	03 39 25	22.4	86.1	-5.3		-39.6	570	171	13 24 31
13 34 30	0851+202	03 39 55	22.5	86.2	-5.3		-39.6	24	171	13 34 30
13 44 00	---	03 49 27	23.9	88.0	-5.1		-39.7	570	189	13 34 31
13 45 25	0742+103	03 50 52	26.5	109.7	-3.9		-35.1	27	189	13 45 25
13 54 30	---	03 59 59	27.8	111.7	-3.8		-34.5	545	207	13 45 26
13 55 05	0748+126	04 00 34	29.0	109.1	-3.9		-35.5	15	207	13 55 05
14 04 30	---	04 10 00	30.4	111.3	-3.7		-35.0	565	225	13 55 06
14 05 00	0851+202	04 10 30	27.1	92.3	-4.8		-39.7	-23	225	14 05 00
14 09 30	---	04 15 01	27.8	93.2	-4.7		-39.7	247	233	14 05 01
----- Space segment 02 -----										
14 10 00	0851+202	04 15 31	27.8	93.3	-4.7		-39.7	24	233	14 10 00
14 19 30	---	04 25 03	29.3	95.2	-4.5		-39.5	570	252	14 10 01
14 20 00	0851+202	04 25 33	29.3	95.3	-4.5		-39.5	24	252	14 20 00
14 29 30	---	04 35 04	30.7	97.3	-4.3		-39.3	570	270	14 20 01
14 30 00	0851+202	04 35 34	30.8	97.5	-4.3		-39.3	24	270	14 30 00
14 39 30	---	04 45 06	32.2	99.5	-4.2		-39.1	570	288	14 30 01
14 40 00	0851+202	04 45 36	32.3	99.6	-4.2		-39.1	24	288	14 40 00
14 49 30	---	04 55 08	33.7	101.7	-4.0		-38.8	570	306	14 40 01
14 50 00	0851+202	04 55 38	33.8	101.8	-4.0		-38.7	24	306	14 50 00
14 59 30	---	05 05 09	35.2	103.9	-3.8		-38.4	570	324	14 50 01
15 00 00	0851+202	05 05 39	35.3	104.0	-3.8		-38.3	24	324	15 00 00
15 09 30	---	05 15 11	36.6	106.2	-3.7		-37.9	570	343	15 00 01
15 10 00	0851+202	05 15 41	36.7	106.3	-3.7		-37.8	24	343	15 10 00
15 19 30	---	05 25 12	38.1	108.5	-3.5		-37.3	570	361	15 10 01
15 20 00	0851+202	05 25 43	38.1	108.7	-3.5		-37.3	24	361	15 20 00
15 29 30	---	05 35 14	39.5	111.0	-3.3		-36.7	570	379	15 20 01
15 30 00	0851+202	05 35 44	39.6	111.1	-3.3		-36.6	24	379	15 30 00
15 39 30	---	05 45 16	40.9	113.4	-3.2		-35.9	570	397	15 30 01

Schedule for TORUN (Code Tr)

Page 4

Probing the innermost regions of AGN jets and their magnetic fields

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

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

Disk: GBytes recorded to this point.

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

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC
--- Fri 4 Apr 2014 Day 94 ---										
15 40 00	0851+202	05 45 46	41.0	113.6	-3.2		-35.9	24	397	15 40 00
15 49 30	---	05 55 17	42.3	116.0	-3.0		-35.1	570	416	15 40 01
15 50 00	0851+202	05 55 48	42.3	116.1	-3.0		-35.0	24	416	15 50 00
15 54 30	---	06 00 18	42.9	117.3	-2.9		-34.6	270	424	15 50 01
----- Space segment 03 -----										
15 55 00	0851+202	06 00 48	43.0	117.4	-2.9		-34.6	24	424	15 55 00
16 04 30	---	06 10 20	44.2	120.0	-2.8		-33.6	570	443	15 55 01
16 05 00	0851+202	06 10 50	44.3	120.1	-2.7		-33.6	24	443	16 05 00
16 14 30	---	06 20 22	45.5	122.8	-2.6		-32.5	570	461	16 05 01
16 15 00	0851+202	06 20 52	45.6	122.9	-2.6		-32.4	24	461	16 15 00
16 24 30	---	06 30 23	46.8	125.7	-2.4		-31.3	570	479	16 15 01
16 25 00	0851+202	06 30 53	46.8	125.8	-2.4		-31.2	24	479	16 25 00
16 34 30	---	06 40 25	48.0	128.7	-2.3		-29.9	570	497	16 25 01
----- Ground segment 04 -----										
16 35 00	0851+202	06 40 55	48.0	128.8	-2.2		-29.9	24	497	16 35 00
16 44 00	---	06 49 56	49.1	131.6	-2.1		-28.5	540	515	16 35 01
16 44 30	0851+202	06 50 26	49.1	131.8	-2.1		-28.5	24	515	16 44 30
16 54 00	---	06 59 58	50.2	134.8	-1.9		-27.0	570	533	16 44 31
16 54 30	0851+202	07 00 28	50.2	135.0	-1.9		-26.9	24	533	16 54 30
17 04 00	---	07 10 00	51.2	138.2	-1.8		-25.2	570	551	16 54 31
17 04 30	0851+202	07 10 30	51.3	138.3	-1.8		-25.1	24	551	17 04 30
17 14 00	---	07 20 01	52.2	141.6	-1.6		-23.4	570	569	17 04 31
17 15 45	0742+103	07 21 47	46.8	171.2	-0.4		-5.4	31	569	17 15 45
17 24 30	---	07 30 33	46.9	174.3	-0.3		-3.5	525	586	17 15 46
17 25 05	0748+126	07 31 08	49.2	172.3	-0.3		-4.7	13	586	17 25 05
17 34 30	---	07 40 35	49.3	175.8	-0.2		-2.6	565	604	17 25 06
17 35 00	0851+202	07 41 05	54.0	149.3	-1.2		-19.0	-38	604	17 35 00
17 39 30	---	07 45 35	54.3	151.0	-1.2		-18.0	232	613	17 35 01
----- Space segment 04 -----										
17 40 00	0851+202	07 46 06	54.3	151.2	-1.2		-17.9	24	613	17 40 00
17 49 30	---	07 55 37	55.0	154.9	-1.0		-15.7	570	631	17 40 01

Schedule for TORUN (Code Tr)

Page 5

Probing the innermost regions of AGN jets and their magnetic fields

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

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

Disk: GBytes recorded to this point.

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

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC
--- Fri 4 Apr 2014 Day 94 ---										
17 50 00	0851+202	07 56 07	55.0	155.1	-1.0		-15.6	24	631	17 50 00
17 59 30	---	08 05 39	55.6	158.9	-0.8		-13.3	570	649	17 50 01
18 00 00	0851+202	08 06 09	55.6	159.1	-0.8		-13.2	24	649	18 00 00
18 09 30	---	08 15 40	56.1	163.0	-0.7		-10.8	570	668	18 00 01
18 10 00	0851+202	08 16 11	56.1	163.2	-0.7		-10.6	23	668	18 10 00
18 19 30	---	08 25 42	56.5	167.2	-0.5		-8.1	570	686	18 10 01
----- Ground segment 05 -----										
18 21 25	0923+392	08 27 37	72.5	137.7	-1.0		-31.3	40	686	18 21 25
18 24 25	---	08 30 38	72.8	139.4	-1.0		-30.2	180	692	18 21 26
18 25 25	0742+103	08 31 38	46.1	196.2	0.8		9.8	-69	692	18 25 25
18 34 55	---	08 41 10	45.7	199.5	0.9		11.7	501	710	18 25 26
18 35 30	0748+126	08 41 45	48.2	198.5	0.8		11.3	12	710	18 35 30
18 45 00	---	08 51 16	47.7	201.9	1.0		13.3	570	728	18 35 31
18 46 30	0851+202	08 52 47	57.0	178.8	-0.0		-0.8	28	728	18 46 30
18 51 30	---	08 57 47	57.0	180.9	0.0		0.6	300	738	18 46 31
18 52 00	0851+202	08 58 17	57.0	181.1	0.0		0.7	23	738	18 52 00
19 00 50	---	09 07 09	56.9	184.9	0.2		3.2	530	755	18 52 01
19 01 20	0851+202	09 07 39	56.9	185.2	0.2		3.3	23	755	19 01 20
19 10 10	---	09 16 30	56.7	188.9	0.3		5.7	530	772	19 01 21
19 10 40	0851+202	09 17 00	56.7	189.2	0.4		5.8	23	772	19 10 40
19 19 30	---	09 25 52	56.4	192.9	0.5		8.2	530	788	19 10 41
19 20 00	0851+202	09 26 22	56.4	193.1	0.5		8.3	23	788	19 20 00
19 24 30	---	09 30 53	56.3	195.0	0.6		9.5	270	797	19 20 01
----- Space segment 05 -----										
19 25 00	0851+202	09 31 23	56.2	195.2	0.6		9.7	23	797	19 25 00
19 34 30	---	09 40 54	55.8	199.2	0.8		12.1	570	815	19 25 01
19 35 00	0851+202	09 41 24	55.8	199.4	0.8		12.2	24	815	19 35 00
19 44 30	---	09 50 56	55.3	203.2	0.9		14.6	570	834	19 35 01
19 45 00	0851+202	09 51 26	55.2	203.4	0.9		14.7	24	834	19 45 00
19 54 30	---	10 00 58	54.6	207.2	1.1		17.0	570	852	19 45 01
19 55 00	0851+202	10 01 28	54.6	207.3	1.1		17.1	24	852	19 55 00
20 04 30	---	10 10 59	53.9	211.0	1.3		19.2	570	870	19 55 01

Schedule for TORUN (Code Tr)

Page 6

Probing the innermost regions of AGN jets and their magnetic fields

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

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

Disk: GBytes recorded to this point.

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

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC
--- Fri 4 Apr 2014 Day 94 ---										
----- Ground segment 06 -----										
20 05 55	0748+126	10 12 25	40.7	227.9	2.3		27.1	22	870	20 05 55
20 14 30	---	10 21 01	39.7	230.3	2.5		28.3	515	887	20 05 56
20 16 00	0851+202	10 22 31	53.0	215.2	1.4		21.6	26	887	20 16 00
20 24 30	---	10 31 03	52.2	218.3	1.6		23.3	510	903	20 16 01
20 25 00	0851+202	10 31 33	52.1	218.5	1.6		23.4	24	903	20 25 00
20 34 30	---	10 41 04	51.2	221.8	1.8		25.2	570	921	20 25 01
20 35 00	0851+202	10 41 34	51.2	221.9	1.8		25.3	24	921	20 35 00
20 44 30	---	10 51 06	50.2	225.1	1.9		26.9	570	939	20 35 01
20 45 00	0851+202	10 51 36	50.1	225.3	1.9		27.0	24	939	20 45 00
20 54 30	---	11 01 08	49.1	228.3	2.1		28.5	570	958	20 45 01
20 56 00	0742+103	11 02 38	31.9	241.1	3.3		32.3	12	958	20 56 00
21 04 30	---	11 11 09	30.7	243.2	3.4		33.0	510	974	20 56 01
21 05 30	0851+202	11 12 09	47.8	231.7	2.3		30.1	-18	974	21 05 30
21 09 30	---	11 16 10	47.3	232.9	2.3		30.7	222	982	21 05 31
----- Space segment 06 -----										
21 10 00	0851+202	11 16 40	47.3	233.1	2.4		30.7	24	982	21 10 00
21 19 30	---	11 26 12	46.1	235.9	2.5		31.9	570	1000	21 10 01
21 20 00	0851+202	11 26 42	46.1	236.0	2.5		32.0	24	1000	21 20 00
21 29 30	---	11 36 13	44.9	238.7	2.7		33.1	570	1018	21 20 01
21 30 00	0851+202	11 36 43	44.8	238.8	2.7		33.2	24	1018	21 30 00
21 39 30	---	11 46 15	43.6	241.4	2.8		34.2	570	1036	21 30 01
21 40 00	0851+202	11 46 45	43.5	241.6	2.9		34.2	24	1036	21 40 00
21 49 30	---	11 56 17	42.2	244.1	3.0		35.1	570	1055	21 40 01
21 50 00	0851+202	11 56 47	42.1	244.2	3.0		35.1	24	1055	21 50 00
21 59 30	---	12 06 18	40.8	246.6	3.2		35.9	570	1073	21 50 01
22 00 00	0851+202	12 06 48	40.8	246.8	3.2		36.0	24	1073	22 00 00
22 09 30	---	12 16 20	39.5	249.1	3.3		36.7	570	1091	22 00 01
22 10 00	0851+202	12 16 50	39.4	249.2	3.4		36.7	24	1091	22 10 00
22 19 30	---	12 26 21	38.0	251.5	3.5		37.3	570	1109	22 10 01

Schedule for TORUN (Code Tr)

Page 7

Probing the innermost regions of AGN jets and their magnetic fields

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

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

Disk: GBytes recorded to this point.

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

SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop				Early	Disk	TPStart		
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC
--- Fri 4 Apr 2014 Day 94 ---										
22 21 00	0748+126	12 27 52	22.5	260.7	4.6		37.4	18	1109	22 21 00
22 30 00	---	12 36 53	21.1	262.6	4.8		37.6	540	1127	22 21 01
22 30 30	0742+103	12 37 23	18.4	262.3	4.9		37.2	6	1127	22 30 30
22 39 30	---	12 46 25	17.1	264.1	5.0		37.4	540	1144	22 30 31
22 41 00	0851+202	12 47 55	34.9	256.5	3.9		38.4	9	1144	22 41 00
22 49 30	---	12 56 26	33.7	258.4	4.0		38.8	510	1160	22 41 01
22 50 00	0851+202	12 56 57	33.6	258.5	4.0		38.8	24	1160	22 50 00
22 54 30	---	13 01 27	32.9	259.5	4.1		38.9	270	1169	22 50 01
----- Space segment 07 -----										
22 55 00	0851+202	13 01 57	32.9	259.6	4.1		39.0	24	1169	22 55 00
23 04 30	---	13 11 29	31.5	261.6	4.3		39.2	570	1187	22 55 01
23 05 00	0851+202	13 11 59	31.4	261.8	4.3		39.2	24	1187	23 05 00
23 14 30	---	13 21 31	30.0	263.8	4.4		39.5	570	1205	23 05 01
23 15 00	0851+202	13 22 01	29.9	263.9	4.4		39.5	24	1205	23 15 00
23 24 30	---	13 31 32	28.5	265.8	4.6		39.6	570	1224	23 15 01
23 25 00	0851+202	13 32 02	28.4	266.0	4.6		39.6	24	1224	23 25 00
23 34 30	---	13 41 34	27.0	267.9	4.8		39.7	570	1242	23 25 01
----- Ground segment 08 -----										
23 36 00	0923+392	13 43 04	45.2	278.4	4.3		49.8	8	1242	23 36 00
23 39 00	---	13 46 05	44.7	278.9	4.3		49.7	180	1248	23 36 01
23 40 00	0851+202	13 47 05	26.1	269.0	4.9		39.7	-24	1248	23 40 00
23 44 30	---	13 51 35	25.5	269.9	4.9		39.7	246	1256	23 40 01
23 45 00	0851+202	13 52 06	25.4	270.0	4.9		39.7	24	1256	23 45 00
23 54 30	---	14 01 37	23.9	271.9	5.1		39.7	570	1274	23 45 01
--- Start: Fri 4 Apr 2014 Day 94 -- Stop: Sat 5 Apr 2014 Day 95 ---										
23 55 00	0851+202	14 02 07	23.9	272.0	5.1		39.7	24	1274	23 55 00
00 04 30	---	14 11 39	22.4	273.9	5.3		39.6	570	1293	23 55 01
00 05 00	0851+202	14 12 09	22.4	274.0	5.3		39.6	24	1293	00 05 00
00 14 30	---	14 21 40	20.9	275.8	5.4		39.5	570	1311	00 05 01

Schedule for TORUN (Code Tr)

Page 8

Probing the innermost regions of AGN jets and their magnetic fields

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

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
--- Sat 5 Apr 2014 Day 95 ---										
00 15 00	0851+202	14 22 10	20.9	275.9	5.4		39.5	24	1311	00 15 00
00 24 30	---	14 31 42	19.5	277.8	5.6		39.3	570	1329	00 15 01
00 25 00	0851+202	14 32 12	19.4	277.9	5.6		39.3	24	1329	00 25 00
00 34 30	---	14 41 44	18.0	279.7	5.8		39.1	570	1347	00 25 01
00 35 00	0851+202	14 42 14	17.9	279.8	5.8		39.0	24	1347	00 35 00
00 39 30	---	14 46 44	17.2	280.7	5.9		38.9	270	1356	00 35 01
----- Space segment 08 -----										
00 40 00	0851+202	14 47 15	17.1	280.8	5.9		38.9	24	1356	00 40 00
00 49 30	---	14 56 46	15.7	282.6	6.0		38.6	570	1374	00 40 01
00 50 00	0851+202	14 57 16	15.7	282.7	6.0		38.6	24	1374	00 50 00
00 59 30	---	15 06 48	14.3	284.5	6.2		38.2	570	1392	00 50 01
01 00 00	0851+202	15 07 18	14.2	284.6	6.2		38.2	24	1392	01 00 00
01 09 30	---	15 16 49	12.8	286.4	6.4		37.8	570	1411	01 00 01
01 10 00	0851+202	15 17 20	12.8	286.5	6.4		37.8	24	1411	01 10 00
01 19 30	---	15 26 51	11.4	288.3	6.5		37.4	570	1429	01 10 01
01 20 00	0851+202	15 27 21	11.3	288.4	6.5		37.3	24	1429	01 20 00
01 29 30	---	15 36 53	10.0	290.2	6.7		36.9	570	1447	01 20 01
01 30 00	0851+202	15 37 23	9.9	290.3	6.7		36.8	24	1447	01 30 00
01 39 30	---	15 46 54	8.6	292.1	6.9		36.3	570	1465	01 30 01
01 40 00	0851+202	15 47 24	8.5	292.2	6.9		36.3	24	1465	01 40 00
01 49 30	---	15 56 56	7.2	294.1	7.0		35.7	570	1484	01 40 01
01 50 00	0851+202	15 57 26	7.1	294.1	7.0		35.7	24	1484	01 50 00
01 59 30	---	16 06 58	5.8	296.0	7.2		35.1	570	1502	01 50 01
02 00 00	0851+202	16 07 28	5.8	296.1	7.2		35.0	24	1502	02 00 00
02 09 30	---	16 16 59	4.5	297.9	7.4		34.4	570	1520	02 00 01
02 10 00	0851+202	16 17 29	4.4	298.0	7.4		34.4	24	1520	02 10 00
02 19 30	---	16 27 01	3.2	299.9	7.5		33.7	570	1538	02 10 01
02 20 00	0851+202	16 27 31	3.1	300.0	7.5		33.6	24	1538	02 20 00
02 29 30	---	16 37 03	1.9	301.9	7.7	D	32.9	0	1557	02 20 01

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./ga030e_freq_sess313rdbe.dat:
tr1cm

Setup group:	5	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=	21500.00	21500.00	21500.00	21500.00
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:	7	Setup file default.	Used with PCAL = 1MHz	
LO sum=	22236.00	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00	16.00
Matching frequency sets:	7			

Track assignments are:

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

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0742+103	07 42 48.464623	* 07 45 33.059522	07 46 20.697204	0.00
	10 18 32.65786	* 10 11 12.69221	10 08 52.47569	0.00
* 0748+126	07 48 05.060493	* 07 50 52.045731	07 51 40.387017	0.00
J0750+1231	12 38 45.47747	* 12 31 04.82815	12 28 39.50424	0.00
* 0851+202	08 51 57.250618	* 08 54 48.874930	08 55 38.804836	0.00
J0854+2006	20 17 58.41733	* 20 06 30.64078	20 03 03.37628	0.00
* 0923+392	09 23 55.319218	* 09 27 03.013939	09 27 57.625221	0.00
J0927+3902	39 15 23.56637	* 39 02 20.85177	38 58 32.20173	0.00

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01yd_freq.dat:

tr1cm

Setup group:	8	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=	21500.00	21500.00	21500.00	21500.00
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:	7	Setup file default.	Used with PCAL = 1MHz	
LO sum=	22236.00	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00	16.00
Matching frequency sets:	7			

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	5	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: 10 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: 10

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0722+145	07 22 26.966166	* 07 25 16.807764	07 26 05.828126	0.00
J0725+1425	14 31 12.28332	* 14 25 13.74657	14 23 18.11792	0.00

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)
0722+145	95.3

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

rk01yft

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: K&C-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
 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 6 Apr 2014 Day 96 ---

----- K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
 Next BBC frequencies: 736.00 736.00 736.00 736.00
 Next scan bandwidths: 16.00 16.00 16.00 16.00

19 00 00	0834-201	09 14 12	16.1	189.0	0.6		5.7	0	0	19 00 00
19 14 30	---	09 28 44	15.7	192.5	0.9		8.0	870	28	19 00 01
19 15 00	0834-201	09 29 14	15.7	192.6	0.9		8.1	24	28	19 15 00
19 25 00	---	09 39 16	15.3	195.0	1.0		9.6	600	47	19 15 01

----- 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

19 30 00	0834-201	09 44 17	15.1	196.2	1.1		10.3	293	47	19 30 00
19 44 30	---	09 58 49	14.5	199.7	1.4		12.5	870	75	19 30 01
19 45 00	0834-201	09 59 19	14.4	199.8	1.4		12.5	24	75	19 45 00
20 00 00	---	10 14 22	13.6	203.4	1.6		14.7	900	104	19 45 01

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01yf_freq.dat:
tr1cm

Setup group:	5	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=	21500.00	21500.00	21500.00	21500.00
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:	3	Setup file default.	Used with PCAL = 1MHz	
LO sum=	22236.00	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00	16.00
Matching frequency sets:	3			

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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:  6  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:  6

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0834-201	08 34 24.601681	* 08 36 39.215241	08 37 18.664627	0.00
J0836-2016	-20 06 30.40845	*-20 16 59.50414	-20 20 21.73693	0.00

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)
0834-201	114.5

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

SETUP FILE INFORMATION:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	6	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 6 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 6

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0738+313	07 38 00.178561	* 07 41 10.703310	07 42 05.659541	0.00
J0741+3112	31 19 02.05896	* 31 12 00.22895	31 09 52.27965	0.00

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)
0738+313	94.8

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

SETUP FILE INFORMATION:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 7 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: 7

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	8	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  8  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  8

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0814+425	08 14 51.669840	* 08 18 15.999600	08 19 15.035332	0.00
J0818+4222	42 32 07.73231	* 42 22 45.41481	42 20 00.99649	0.00

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)
0814+425        99.2

```

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

```

rk01yitr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: C&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
 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 7 Apr 2014 Day 97 ---

----- 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

20 00 00	0743-006	10 18 18	27.6	223.9	2.5	24.6	0	0	20 00 00
20 14 30	---	10 32 51	26.0	227.6	2.8	26.3	870	28	20 00 01
20 15 00	0743-006	10 33 21	26.0	227.7	2.8	26.4	24	28	20 15 00
20 25 00	---	10 43 22	24.8	230.2	2.9	27.5	600	47	20 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
 Next BBC frequencies: 732.00 732.00 732.00 732.00

20 30 00	0743-006	10 48 23	24.2	231.4	3.0	28.0	293	47	20 30 00
20 44 30	---	11 02 56	22.5	234.8	3.3	29.4	870	75	20 30 01
20 45 00	0743-006	11 03 26	22.4	235.0	3.3	29.5	24	75	20 45 00
21 00 00	---	11 18 28	20.5	238.5	3.5	30.8	900	104	20 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	1	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: 3 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: 3

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	5	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0743-006	07 43 21.047495	* 07 45 54.082322	07 46 38.395215	0.00
J0745-0044	-00 36 55.80448	*-00 44 17.54000	-00 46 41.73119	0.00

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)
0743-006	100.1

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

rk01yjtr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: C&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
 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 7 Apr 2014 Day 97 ---

----- 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

23 00 00	1504-166	13 18 48	16.1	152.8	-1.8	-16.6	0	0	23 00 00
23 14 30	---	13 33 20	17.1	156.3	-1.6	-14.6	870	28	23 00 01
23 15 00	1504-166	13 33 50	17.1	156.5	-1.6	-14.5	24	28	23 15 00
23 25 00	---	13 43 52	17.7	158.9	-1.4	-13.1	600	47	23 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
 Next BBC frequencies: 732.00 732.00 732.00 732.00

23 30 00	1504-166	13 48 53	17.9	160.1	-1.3	-12.3	293	47	23 30 00
23 44 30	---	14 03 25	18.6	163.7	-1.1	-10.1	870	75	23 30 01
23 45 00	1504-166	14 03 55	18.6	163.8	-1.1	-10.1	24	75	23 45 00
23 59 59	---	14 18 58	19.2	167.6	-0.8	-7.7	899	104	23 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 7 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: 7

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	8	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  8  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  8

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1504-166	15 04 16.415562	* 15 07 04.786961	15 07 54.685836	0.00
J1507-1652	-16 40 59.36701	*-16 52 30.26713	-16 55 47.12298	0.00

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)
1504-166	148.8

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

rk01yctr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: C&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
 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 8 Apr 2014 Day 98 ---

----- 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

02 00 00	1327+321	16 19 17	53.1	251.9	2.8		42.2	0	0	02 00 00
02 14 30	---	16 33 50	51.0	255.6	3.1		43.2	870	28	02 00 01
02 15 00	1327+321	16 34 20	50.9	255.7	3.1		43.2	24	28	02 15 00
02 25 00	---	16 44 21	49.5	258.1	3.2		43.8	600	47	02 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
 Next BBC frequencies: 732.00 732.00 732.00 732.00

02 30 00	1327+321	16 49 22	48.7	259.3	3.3		44.0	293	47	02 30 00
02 44 30	---	17 03 55	46.6	262.6	3.6		44.5	870	75	02 30 01
02 45 00	1327+321	17 04 25	46.5	262.7	3.6		44.5	24	75	02 45 00
03 00 00	---	17 19 27	44.3	265.9	3.8		44.8	900	104	02 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 7 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: 7

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	8	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  8  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  8

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1327+321	13 27 34.876201	* 13 29 52.864906	13 30 33.817565	0.00
J1329+3154	32 09 38.80938	* 31 54 11.05448	31 49 39.71846	0.00

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)
1327+321	140.6

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

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: 2 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: 2

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1403+411	14 03 04.025300	* 14 05 07.795440	14 05 44.720800	0.00
J1405+4056	41 11 16.37060	* 40 56 57.83098	40 52 46.47358	0.00

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)
1403+411	130.0

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

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: C&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
 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 8 Apr 2014 Day 98 ---

----- 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

21 00 00	0814+425	11 22 25	58.0	269.2	3.1	54.3	0	0	21 00 00
21 14 30	---	11 36 57	55.8	272.0	3.3	54.3	870	28	21 00 01
21 15 00	0814+425	11 37 27	55.7	272.1	3.3	54.3	24	28	21 15 00
21 25 00	---	11 47 29	54.2	274.0	3.5	54.1	600	47	21 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
 Next BBC frequencies: 732.00 732.00 732.00 732.00

21 30 00	0814+425	11 52 30	53.5	274.9	3.6	54.0	293	47	21 30 00
21 44 30	---	12 07 02	51.3	277.5	3.8	53.6	870	75	21 30 01
21 45 00	0814+425	12 07 32	51.2	277.6	3.8	53.6	24	75	21 45 00
22 00 00	---	12 22 35	49.0	280.2	4.1	53.1	900	104	21 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	1	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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	6	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  6  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  6

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0814+425	08 14 51.669840	* 08 18 15.999600	08 19 14.998711	0.00
J0818+4222	42 32 07.73231	* 42 22 45.41481	42 20 01.15424	0.00

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)
0814+425        97.5

```

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

```


SETUP FILE INFORMATION:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 6 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: 6

Track assignments are:

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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	7	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 7 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 7

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0917+624	09 17 40.306860	* 09 21 36.231074	09 22 44.489490	0.00
J0921+6215	62 28 38.64009	* 62 15 52.18031	62 12 14.94346	0.00

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)
3C147	69.8
0917+624	97.4

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


```

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:  2  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:  2

```

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)
* 0804+499	08 04 58.395748	* 08 08 39.666289	08 09 43.414699	0.00
J0808+4950	49 59 23.07807	* 49 50 36.53037	49 48 04.76097	0.00

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)
0804+499    93.0

```

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

```



```

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:  2  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:  2

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	Source position (RA/Dec) (J2000)	(Date)	Error (mas)
* 0925+504	09 25 51.973728	* 09 29 15.440209	09 30 14.470506	0.00
J0929+5013	50 26 44.31059	* 50 13 35.98961	50 09 49.55030	0.00

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)
0925+504    104.6

```

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

```

rk01yqtr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Thu 10 Apr 2014 Day 100 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with 11 columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, SYNC. It lists observation times and parameters for source 0954+658.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set
--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 5 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0954+658	09 54 57.847936	* 09 58 47.245116	09 59 53.839062	0.00
J0958+6533	65 48 15.53882	* 65 33 54.81801	65 29 51.28591	0.00

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)
0954+658	98.1

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

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01yr_freq.dat:
tr1cm

Setup group:	4	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=	21500.00	21500.00	21500.00	21500.00
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:	1	Setup file default.	Used with PCAL = 1MHz	
LO sum=	22236.00	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00	16.00
Matching frequency sets:	1			

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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:  3  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:  3

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0743-006	07 43 21.047495	* 07 45 54.082322	07 46 38.340640	0.00
J0745-0044	-00 36 55.80448	*-00 44 17.54000	-00 46 41.59777	0.00

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)
0743-006	97.4

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

rk01yttr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

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

--- Fri 11 Apr 2014 Day 101 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with 11 columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, TPStart, SYNC. It contains multiple rows of observation data for source 1044+719.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 6 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=  2400.00  2400.00  2400.00  2400.00
Net SB=      L      L      U      U
IF SB =      L      L      L      L
Pol.  =      RCP     LCP     RCP     LCP
BBC   =      1      2      1      2
BBC SB=      U      U      L      L
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=  1668.00  1668.00  1668.00  1668.00
BBC fr=   732.00  732.00  732.00  732.00
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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1044+719	10 44 49.735111	* 10 48 27.619927	10 49 31.371793	0.00
J1048+7143	71 59 26.88535	* 71 43 35.93838	71 39 07.41084	0.00

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)
1044+719    96.1

```

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

```


1st LO=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

Frequency Set: 7 Setup file default. Used with PCAL = 1MHz
 LO sum= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 Bandwd= 16.00 16.00 16.00 16.00
 Matching frequency sets: 7

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)
* 1508+572	15 08 45.204538	* 15 10 02.922371	15 10 26.947781	0.00
J1510+5702	57 14 02.08966	* 57 02 43.37583	56 59 22.98860	0.00

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)
3C286	141.0
1508+572	110.7

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

rk01ywtr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Sat 12 Apr 2014 Day 102 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with 11 columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, SYNC. It lists observation times and parameters for source 1611+343.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 6 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1611+343	16 11 47.914251	* 16 13 41.064242	16 14 14.722158	0.00
J1613+3412	34 20 19.83376	* 34 12 47.90878	34 10 32.44283	0.00

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)
1611+343	120.9

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

rk01yxr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: C&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

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

--- Sat 12 Apr 2014 Day 102 ---

----- 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

16 00 00	1044+719	06 37 22	57.6	31.6	-4.2	-90.7	0	0	16 00 00
16 14 30	---	06 51 54	58.8	31.5	-4.0	-94.2	870	28	16 00 01
16 15 00	1044+719	06 52 24	58.8	31.5	-4.0	-94.4	24	28	16 15 00
16 25 00	---	07 02 26	59.6	31.4	-3.8	-96.9	600	47	16 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
 Next BBC frequencies: 732.00 732.00 732.00 732.00

16 30 00	1044+719	07 07 27	60.0	31.3	-3.7	-98.2	294	47	16 30 00
16 44 30	---	07 21 59	61.1	30.9	-3.5	-102.0	870	75	16 30 01
16 45 00	1044+719	07 22 29	61.2	30.8	-3.5	-102.1	24	75	16 45 00
17 00 00	---	07 37 31	62.3	30.2	-3.2	-106.2	900	104	16 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 8 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: 8

Track assignments are:

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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	8	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  9  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  9

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1044+719	10 44 49.735111	* 10 48 27.619927	10 49 31.326305	0.00
J1048+7143	71 59 26.88535	* 71 43 35.93838	71 39 07.67965	0.00

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)
1044+719	95.6

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

SETUP FILE INFORMATION:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 8 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: 8

Track assignments are:

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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	8	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  9  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  9

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1508+572	15 08 45.204538	* 15 10 02.922371	15 10 26.966804	0.00
J1510+5702	57 14 02.08966	* 57 02 43.37583	56 59 23.28313	0.00

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)
1508+572	110.6

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

rk01yztr

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: C&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

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

--- Sat 12 Apr 2014 Day 102 ---

----- 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

```
23 00 00 0954+658            13 38 31 60.7 -43.7 3.6            88.2    0            0    23 00 00
23 15 00 ---                    13 53 33 59.1 -43.5 3.9            84.9    900            29    23 00 01
```

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
 Next BBC frequencies: 732.00 732.00 732.00 732.00

```
23 20 00 0954+658            13 58 34 58.6 -43.4 4.0            83.9    294            29    23 20 00
23 40 00 ---                    14 18 37 56.5 -42.8 4.3            79.8    1200            67    23 20 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 7 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: 7

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	7	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  8  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  8

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0954+658	09 54 57.847936	* 09 58 47.245116	09 59 53.742339	0.00
J0958+6533	65 48 15.53882	* 65 33 54.81801	65 29 51.79032	0.00

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)
0954+658	96.6

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

1st LO=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1044+719	10 44 49.735111	* 10 48 27.619927	10 49 31.307977	0.00
J1048+7143	71 59 26.88535	* 71 43 35.93838	71 39 07.78033	0.00

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)
1044+719	95.4

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

rk01zbtr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: K&C-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
 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 13 Apr 2014 Day 103 ---

----- K-band VLBI scans -----

```
Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
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 1641+399    19 39 30 57.5 263.8 2.9    51.0    0    0    05 00 00
05 14 30 ---          19 54 02 55.3 267.0 3.2    51.3   870   28    05 00 01

05 15 00 1641+399    19 54 32 55.3 267.1 3.2    51.3   24   28    05 15 00
05 25 00 ---          20 04 34 53.8 269.2 3.4    51.4   600   47    05 15 01
```

----- 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

05 30 00 1641+399    20 09 35 53.0 270.2 3.4    51.4   293   47    05 30 00
05 44 30 ---          20 24 07 50.8 273.0 3.7    51.3   870   75    05 30 01

05 45 00 1641+399    20 24 37 50.8 273.1 3.7    51.3   24   75    05 45 00
06 00 00 ---          20 39 40 48.5 275.9 3.9    51.0   900  104    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: ra1cm2.set

Matching groups in ./rk01zb_freq.dat:
tr1cm

Setup group:	9	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=	21500.00	21500.00	21500.00	21500.00
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:	9	Setup file default.	Used with PCAL = 1MHz
LO sum=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	9		

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	4	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: 11 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: 11

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1641+399	16 41 17.606226	* 16 42 58.809963	16 43 29.002920	0.00
J1642+3948	39 54 10.81479	* 39 48 36.99385	39 46 54.48774	0.00

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)
3C286	140.5
1641+399	113.2

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

rk01zctr

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

--- Mon 14 Apr 2014 Day 104 ---

----- 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
20 00 00 0743-006 10 45 54 24.5 230.8 3.0 27.7 0 0 20 00 00
20 14 30 --- 11 00 27 22.8 234.3 3.2 29.2 870 28 20 00 01
20 15 00 0743-006 11 00 57 22.7 234.4 3.2 29.2 24 28 20 15 00
20 25 00 --- 11 10 58 21.5 236.7 3.4 30.1 600 47 20 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
20 30 00 0743-006 11 15 59 20.9 237.9 3.5 30.6 293 47 20 30 00
20 44 30 --- 11 30 31 19.0 241.2 3.7 31.8 870 75 20 30 01
20 45 00 0743-006 11 31 02 18.9 241.3 3.7 31.8 24 75 20 45 00
21 00 00 --- 11 46 04 16.9 244.7 4.0 32.9 900 104 20 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 3 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: 3

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	7	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0743-006	07 43 21.047495	* 07 45 54.082322	07 46 38.252222	0.00
J0745-0044	-00 36 55.80448	*-00 44 17.54000	-00 46 41.44791	0.00

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)
0743-006	93.7

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

ev020tr

E-EVN: YOUNG QUASARS

PI: *Sjoert van Velzen*

Address: JIVE Oude Hoogeveensedijk 4 Dwingeloo Netherlands
Phone: +31 521 596 536 EMAIL: zparagi@jive.nl
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Observing mode: realtime e-vlbi

Schedule for TORUN (Code Tr) Page 2
 e-EVN: Young Quasars

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 15 Apr 2014 Day 105 ---										
Next scan frequencies: 1610.49 1610.49 1610.49 1610.49 1642.49 1642.49 1642.49 1642.49										
1674.49 1674.49 1674.49 1674.49 1706.49 1706.49 1706.49 1706.49										
Next BBC frequencies: 689.51 689.51 689.51 689.51 657.51 657.51 657.51 657.51										
625.51 625.51 625.51 625.51 593.51 593.51 593.51 593.51										
Next scan bandwidths: 16.00 16.00 16.00 16.00 16.00 16.00 16.00 16.00										
16.00 16.00 16.00 16.00 16.00 16.00 16.00 16.00										

09 00 00	0234+285	23 48 02	50.6	110.8	-2.8		-39.9	0	0	09 00 00
09 15 00	---	00 03 05	52.7	114.9	-2.6		-38.5	900	115	09 00 01
09 15 40	0234+285	00 03 45	52.8	115.1	-2.6		-38.4	34	115	09 15 40
09 30 00	---	00 18 07	54.7	119.3	-2.3		-36.7	860	225	09 15 41
09 30 40	0234+285	00 18 47	54.8	119.5	-2.3		-36.6	34	225	09 30 40
09 45 00	---	00 33 10	56.6	124.0	-2.1		-34.6	860	335	09 30 41
09 45 40	0234+285	00 33 50	56.7	124.2	-2.1		-34.5	34	335	09 45 40
10 00 00	---	00 48 12	58.4	129.2	-1.8		-32.1	860	445	09 45 41
10 00 40	0234+285	00 48 52	58.5	129.4	-1.8		-32.0	34	445	10 00 40
10 15 00	---	01 03 15	60.1	134.7	-1.6		-29.2	860	556	10 00 41
10 15 40	0234+285	01 03 55	60.2	135.0	-1.6		-29.0	33	556	10 15 40
10 30 00	---	01 18 17	61.6	140.7	-1.3		-25.7	860	666	10 15 41
10 30 40	0234+285	01 18 57	61.7	141.0	-1.3		-25.6	33	666	10 30 40
10 45 00	---	01 33 20	63.0	147.2	-1.1		-21.8	860	776	10 30 41
10 45 40	0234+285	01 34 00	63.0	147.5	-1.1		-21.6	33	776	10 45 40
11 00 00	---	01 48 22	64.1	154.1	-0.8		-17.4	860	886	10 45 41
11 03 00	0528+134	01 51 22	31.4	110.9	-3.7		-35.2	43	886	11 03 00
11 15 00	---	02 03 24	33.1	113.7	-3.5		-34.4	720	978	11 03 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

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 15 Apr 2014 Day 105 ---										
11 15 40	0528+134	02 04 05	33.2	113.9	-3.5		-34.4	34	978	11 15 40
11 30 00	---	02 18 27	35.1	117.4	-3.2		-33.3	860	1088	11 15 41
11 30 40	0528+134	02 19 07	35.2	117.6	-3.2		-33.2	34	1088	11 30 40
11 45 00	---	02 33 29	37.1	121.2	-3.0		-31.9	860	1198	11 30 41
11 45 40	0528+134	02 34 09	37.2	121.4	-3.0		-31.8	34	1198	11 45 40
12 00 00	---	02 48 32	39.0	125.2	-2.7		-30.3	860	1308	11 45 41
12 00 40	0528+134	02 49 12	39.1	125.4	-2.7		-30.2	34	1308	12 00 40
12 15 00	---	03 03 34	40.8	129.3	-2.5		-28.5	860	1418	12 00 41
12 15 40	0528+134	03 04 14	40.9	129.5	-2.5		-28.5	34	1418	12 15 40
12 30 00	---	03 18 37	42.5	133.7	-2.2		-26.5	860	1528	12 15 41
12 30 40	0528+134	03 19 17	42.5	133.9	-2.2		-26.4	34	1528	12 30 40
12 45 00	---	03 33 39	44.0	138.2	-2.0		-24.3	860	1638	12 30 41
12 45 40	0528+134	03 34 19	44.1	138.4	-2.0		-24.2	34	1638	12 45 40
13 00 00	---	03 48 42	45.5	142.9	-1.7		-21.9	860	1748	12 45 41
13 03 00	0528+134	03 51 42	45.7	143.9	-1.7		-21.3	173	1748	13 03 00
13 15 00	---	04 03 44	46.8	147.9	-1.5		-19.2	720	1841	13 03 01
13 15 40	0528+134	04 04 24	46.8	148.1	-1.5		-19.0	34	1841	13 15 40
13 30 00	---	04 18 47	47.9	153.0	-1.2		-16.3	860	1951	13 15 41
13 33 00	OJ287	04 21 47	28.8	94.6	-4.6		-39.6	48	1951	13 33 00
13 45 00	---	04 33 49	30.6	97.1	-4.4		-39.4	720	2043	13 33 01
13 45 40	OJ287	04 34 29	30.7	97.2	-4.4		-39.4	34	2043	13 45 40
14 00 00	---	04 48 52	32.8	100.3	-4.1		-39.0	860	2153	13 45 41
14 00 40	OJ287	04 49 32	32.9	100.4	-4.1		-38.9	34	2153	14 00 40
14 15 00	---	05 03 54	35.0	103.6	-3.9		-38.4	860	2263	14 00 41
14 15 40	OJ287	05 04 34	35.1	103.8	-3.9		-38.4	34	2263	14 15 40
14 30 00	---	05 18 56	37.2	107.1	-3.6		-37.7	860	2373	14 15 41
14 30 40	OJ287	05 19 37	37.3	107.2	-3.6		-37.6	34	2373	14 30 40
14 45 00	---	05 33 59	39.3	110.6	-3.4		-36.7	860	2483	14 30 41
14 45 40	OJ287	05 34 39	39.4	110.8	-3.3		-36.7	34	2483	14 45 40
15 00 00	---	05 49 01	41.4	114.4	-3.1		-35.6	860	2593	14 45 41
15 00 40	OJ287	05 49 42	41.5	114.6	-3.1		-35.5	34	2593	15 00 40
15 15 00	---	06 04 04	43.4	118.3	-2.9		-34.2	860	2703	15 00 41

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

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 15 Apr 2014 Day 105 ---										
15 15 40	OJ287	06 04 44	43.5	118.5	-2.8		-34.2	34	2703	15 15 40
15 30 00	---	06 19 06	45.4	122.4	-2.6		-32.7	860	2813	15 15 41
15 30 40	OJ287	06 19 46	45.5	122.6	-2.6		-32.6	34	2813	15 30 40
15 45 00	---	06 34 09	47.2	126.8	-2.4		-30.8	860	2924	15 30 41
15 45 40	OJ287	06 34 49	47.3	127.0	-2.3		-30.7	34	2924	15 45 40
16 00 00	---	06 49 11	49.0	131.4	-2.1		-28.7	860	3034	15 45 41
16 00 40	OJ287	06 49 51	49.1	131.6	-2.1		-28.6	34	3034	16 00 40
16 15 00	---	07 04 14	50.6	136.2	-1.9		-26.2	860	3144	16 00 41
16 15 40	OJ287	07 04 54	50.7	136.5	-1.8		-26.1	34	3144	16 15 40
16 30 00	---	07 19 16	52.1	141.4	-1.6		-23.5	860	3254	16 15 41
16 30 40	OJ287	07 19 56	52.2	141.6	-1.6		-23.4	34	3254	16 30 40
16 45 00	---	07 34 19	53.4	146.8	-1.4		-20.5	860	3364	16 30 41
16 45 40	OJ287	07 34 59	53.5	147.0	-1.3		-20.4	34	3364	16 45 40
17 00 00	---	07 49 21	54.6	152.5	-1.1		-17.2	860	3474	16 45 41
17 00 40	OJ287	07 50 01	54.6	152.7	-1.1		-17.0	33	3474	17 00 40
17 15 00	---	08 04 24	55.5	158.4	-0.9		-13.6	860	3584	17 00 41
17 15 40	OJ287	08 05 04	55.5	158.7	-0.8		-13.4	33	3584	17 15 40
17 30 00	---	08 19 26	56.2	164.6	-0.6		-9.8	860	3694	17 15 41
17 34 00	3C286	08 23 27	31.4	79.9	-5.1		-43.3	55	3694	17 34 00
17 49 00	---	08 38 29	33.6	82.7	-4.9		-43.7	900	3809	17 34 01
17 51 00	OQ208	08 40 29	27.1	78.0	-5.5		-41.9	81	3809	17 51 00
17 55 00	---	08 44 30	27.7	78.7	-5.4		-42.0	240	3840	17 51 01
17 56 00	J1430+3649	08 45 30	30.6	68.2	-5.8		-44.1	24	3840	17 56 00
18 00 00	=1428+370	08 49 31	31.1	68.9	-5.7		-44.4	240	3871	17 56 01
18 00 00	J143213	08 49 31	29.7	70.0	-5.7		-43.6	-19	3871	No stop
18 04 00	---	08 53 32	30.3	70.6	-5.7		-43.8	221	3901	18 00 01
18 04 00	J1430+3649	08 53 32	31.7	69.6	-5.6		-44.6	-19	3901	No stop
18 05 00	=1428+370	08 54 32	31.8	69.7	-5.6		-44.7	41	3909	18 04 01
18 05 00	J143050	08 54 32	30.1	71.6	-5.6		-43.7	-20	3909	No stop
18 09 00	---	08 58 32	30.7	72.3	-5.5		-43.9	220	3940	18 05 01
18 09 30	J1430+3649	08 59 03	32.5	70.5	-5.5		-44.9	10	3940	18 09 30
18 10 00	=1428+370	08 59 33	32.5	70.6	-5.5		-45.0	30	3944	18 09 31

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are 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 15 Apr 2014 Day 105 ---										
18 10 00	J143718	08 59 33	31.6	69.5	-5.6		-44.5	-16	3944	No stop
18 14 00	---	09 03 33	32.1	70.2	-5.6		-44.8	224	3974	18 10 01
18 14 00	J1430+3649	09 03 33	33.1	71.2	-5.5		-45.2	-17	3974	No stop
18 15 00	=1428+370	09 04 33	33.2	71.4	-5.4		-45.3	43	3982	18 14 01
18 15 00	J142850	09 04 33	32.1	73.3	-5.4		-44.5	-17	3982	No stop
18 19 00	---	09 08 34	32.7	74.0	-5.3		-44.7	223	4013	18 15 01
18 19 00	J1430+3649	09 08 34	33.8	72.1	-5.4		-45.5	-17	4013	No stop
18 20 00	=1428+370	09 09 34	33.9	72.3	-5.4		-45.5	43	4020	18 19 01
18 20 00	J144230	09 09 34	31.7	71.0	-5.6		-44.5	-22	4020	No stop
18 24 00	---	09 13 35	32.2	71.7	-5.5		-44.7	218	4051	18 20 01
18 24 00	J1430+3649	09 13 35	34.5	72.9	-5.3		-45.8	-23	4051	No stop
18 25 00	=1428+370	09 14 35	34.7	73.1	-5.3		-45.8	37	4059	18 24 01
18 25 00	J144230	09 14 35	32.4	71.8	-5.5		-44.8	-22	4059	No stop
18 29 00	---	09 18 36	32.9	72.5	-5.4		-45.0	218	4090	18 25 01
18 29 30	J1430+3649	09 19 06	35.3	73.9	-5.2		-46.1	7	4090	18 29 30
18 30 00	=1428+370	09 19 36	35.4	74.0	-5.2		-46.1	30	4093	18 29 31
18 30 00	J144230	09 19 36	33.1	72.7	-5.4		-45.0	-22	4093	No stop
18 34 00	---	09 23 37	33.7	73.4	-5.3		-45.3	218	4124	18 30 01
18 34 00	J1430+3649	09 23 37	36.0	74.6	-5.1		-46.3	-23	4124	No stop
18 35 00	=1428+370	09 24 37	36.1	74.8	-5.1		-46.3	37	4132	18 34 01
18 35 00	J144230	09 24 37	33.8	73.5	-5.3		-45.3	-22	4132	No stop
18 39 00	---	09 28 37	34.4	74.2	-5.2		-45.5	218	4163	18 35 01
18 39 00	J1430+3649	09 28 37	36.7	75.5	-5.0		-46.5	-23	4163	No stop
18 40 00	=1428+370	09 29 38	36.8	75.7	-5.0		-46.6	37	4170	18 39 01
18 40 00	J143024	09 29 38	35.9	77.0	-5.0		-45.8	-16	4170	No stop
18 44 00	---	09 33 38	36.5	77.7	-5.0		-46.0	224	4201	18 40 01
18 44 00	J1430+3649	09 33 38	37.4	76.4	-5.0		-46.7	-16	4201	No stop
18 45 00	=1428+370	09 34 38	37.6	76.5	-4.9		-46.8	44	4209	18 44 01
18 45 00	J143024	09 34 38	36.6	77.9	-4.9		-46.0	-16	4209	No stop
18 49 00	---	09 38 39	37.2	78.6	-4.9		-46.2	224	4239	18 45 01
18 49 30	J1430+3649	09 39 09	38.2	77.3	-4.9		-47.0	14	4239	18 49 30
18 50 00	=1428+370	09 39 39	38.3	77.4	-4.9		-47.0	30	4243	18 49 31

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are 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 15 Apr 2014 Day 105 ---										
18 50 00	J143024	09 39 39	37.4	78.8	-4.9		-46.2	-16	4243	No stop
18 54 00	---	09 43 40	38.0	79.5	-4.8		-46.4	224	4274	18 50 01
18 54 00	J1430+3649	09 43 40	38.9	78.1	-4.8		-47.2	-16	4274	No stop
18 55 00	=1428+370	09 44 40	39.0	78.3	-4.8		-47.2	44	4282	18 54 01
18 55 00	J143024	09 44 40	38.1	79.6	-4.8		-46.4	-16	4282	No stop
18 59 00	---	09 48 41	38.7	80.4	-4.7		-46.5	224	4312	18 55 01
18 59 00	J1430+3649	09 48 41	39.6	79.0	-4.7		-47.4	-16	4312	No stop
19 00 00	=1428+370	09 49 41	39.8	79.2	-4.7		-47.4	44	4320	18 59 01
19 00 00	J143213	09 49 41	38.4	80.4	-4.7		-46.4	-18	4320	No stop
19 04 00	---	09 53 41	39.0	81.2	-4.7		-46.5	222	4351	19 00 01
19 04 00	J1430+3649	09 53 41	40.4	79.9	-4.6		-47.5	-19	4351	No stop
19 05 00	=1428+370	09 54 42	40.5	80.1	-4.6		-47.6	41	4358	19 04 01
19 05 00	J143050	09 54 42	38.9	82.3	-4.6		-46.1	-20	4358	No stop
19 09 00	---	09 58 42	39.5	83.0	-4.5		-46.2	220	4389	19 05 01
19 09 30	J1430+3649	09 59 12	41.2	80.9	-4.5		-47.7	10	4389	19 09 30
19 10 00	=1428+370	09 59 42	41.3	81.0	-4.5		-47.7	30	4393	19 09 31
19 10 00	J143718	09 59 42	40.2	79.8	-4.6		-47.5	-16	4393	No stop
19 14 00	---	10 03 43	40.8	80.5	-4.6		-47.6	224	4424	19 10 01
19 14 00	J1430+3649	10 03 43	41.9	81.7	-4.5		-47.9	-17	4424	No stop
19 15 00	=1428+370	10 04 43	42.0	81.9	-4.4		-47.9	43	4431	19 14 01
19 15 00	J142850	10 04 43	41.0	84.1	-4.4		-46.7	-18	4431	No stop
19 19 00	---	10 08 44	41.6	84.8	-4.3		-46.8	222	4462	19 15 01
19 19 00	J1430+3649	10 08 44	42.6	82.6	-4.4		-48.0	-18	4462	No stop
19 20 00	=1428+370	10 09 44	42.8	82.8	-4.4		-48.0	42	4470	19 19 01
19 20 00	J144230	10 09 44	40.4	81.5	-4.6		-47.1	-22	4470	No stop
19 24 00	---	10 13 45	41.0	82.2	-4.5		-47.3	218	4500	19 20 01
19 24 00	J1430+3649	10 13 45	43.4	83.5	-4.3		-48.1	-23	4500	No stop
19 25 00	=1428+370	10 14 45	43.5	83.7	-4.3		-48.2	37	4508	19 24 01
19 25 00	J144230	10 14 45	41.2	82.4	-4.5		-47.3	-22	4508	No stop
19 29 00	---	10 18 46	41.8	83.1	-4.4		-47.4	218	4539	19 25 01
19 29 30	J1430+3649	10 19 16	44.2	84.5	-4.2		-48.2	7	4539	19 29 30
19 30 00	=1428+370	10 19 46	44.2	84.6	-4.2		-48.3	30	4543	19 29 31

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

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

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TPStart: Recording start time. Frequencies are 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 15 Apr 2014 Day 105 ---										
19 30 00	J144230	10 19 46	41.9	83.3	-4.4		-47.4	-22	4543	No stop
19 34 00	---	10 23 46	42.5	84.0	-4.3		-47.5	218	4573	19 30 01
19 34 00	J1430+3649	10 23 46	44.8	85.4	-4.1		-48.3	-23	4573	No stop
19 35 00	=1428+370	10 24 47	45.0	85.5	-4.1		-48.3	37	4581	19 34 01
19 35 00	J144230	10 24 47	42.7	84.2	-4.3		-47.5	-23	4581	No stop
19 39 00	---	10 28 47	43.3	85.0	-4.2		-47.6	217	4612	19 35 01
19 39 00	J1430+3649	10 28 47	45.6	86.3	-4.0		-48.4	-23	4612	No stop
19 40 00	=1428+370	10 29 47	45.8	86.5	-4.0		-48.4	37	4620	19 39 01
19 40 00	J143024	10 29 47	44.8	88.0	-4.0		-47.4	-16	4620	No stop
19 44 00	---	10 33 48	45.4	88.8	-4.0		-47.4	224	4650	19 40 01
19 44 00	J1430+3649	10 33 48	46.4	87.3	-4.0		-48.5	-16	4650	No stop
19 45 00	=1428+370	10 34 48	46.5	87.5	-3.9		-48.5	44	4658	19 44 01
19 45 00	J143024	10 34 48	45.6	89.0	-3.9		-47.4	-16	4658	No stop
19 49 00	---	10 38 49	46.2	89.8	-3.9		-47.4	224	4689	19 45 01
19 49 30	J1430+3649	10 39 19	47.2	88.3	-3.9		-48.5	14	4689	19 49 30
19 50 00	=1428+370	10 39 49	47.3	88.4	-3.9		-48.5	30	4692	19 49 31
19 50 00	J143024	10 39 49	46.4	90.0	-3.9		-47.4	-16	4692	No stop
19 54 00	---	10 43 50	47.0	90.8	-3.8		-47.4	224	4723	19 50 01
19 54 00	J1430+3649	10 43 50	47.9	89.2	-3.8		-48.5	-16	4723	No stop
19 55 00	=1428+370	10 44 50	48.0	89.4	-3.8		-48.5	44	4731	19 54 01
19 55 00	J143024	10 44 50	47.1	91.0	-3.8		-47.4	-16	4731	No stop
19 59 00	---	10 48 51	47.7	91.8	-3.7		-47.4	224	4762	19 55 01
19 59 00	J1430+3649	10 48 51	48.6	90.2	-3.7		-48.5	-16	4762	No stop
20 00 00	=1428+370	10 49 51	48.8	90.4	-3.7		-48.5	44	4769	19 59 01
20 00 00	J143213	10 49 51	47.4	91.9	-3.7		-47.2	-18	4769	No stop
20 04 00	---	10 53 51	48.0	92.8	-3.6		-47.1	222	4800	20 00 01
20 04 00	J1430+3649	10 53 51	49.4	91.2	-3.6		-48.5	-19	4800	No stop
20 05 00	=1428+370	10 54 52	49.5	91.4	-3.6		-48.5	41	4808	20 04 01
20 05 00	J143050	10 54 52	47.9	94.1	-3.6		-46.5	-20	4808	No stop
20 09 00	---	10 58 52	48.5	94.9	-3.5		-46.5	220	4838	20 05 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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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 15 Apr 2014 Day 105 ---										
20 09 30	J1430+3649	10 59 22	50.2	92.4	-3.5		-48.5	10	4838	20 09 30
20 10 00	=1428+370	10 59 52	50.3	92.5	-3.5		-48.5	30	4842	20 09 31
20 10 00	J143718	10 59 52	49.2	91.2	-3.6		-48.5	-17	4842	No stop
20 14 00	---	11 03 53	49.8	92.0	-3.6		-48.5	223	4873	20 10 01
20 14 00	J1430+3649	11 03 53	50.9	93.3	-3.5		-48.4	-17	4873	No stop
20 15 00	=1428+370	11 04 53	51.0	93.5	-3.4		-48.4	43	4881	20 14 01
20 15 00	J142850	11 04 53	50.0	96.1	-3.4		-46.7	-20	4881	No stop
20 19 00	---	11 08 54	50.6	97.0	-3.3		-46.6	220	4911	20 15 01
20 19 00	J1430+3649	11 08 54	51.6	94.4	-3.4		-48.4	-19	4911	No stop
20 20 00	=1428+370	11 09 54	51.8	94.6	-3.4		-48.3	41	4919	20 19 01
20 20 00	J144230	11 09 54	49.4	93.1	-3.6		-47.7	-23	4919	No stop
20 24 00	---	11 13 55	50.0	93.9	-3.5		-47.7	217	4950	20 20 01
20 24 00	J1430+3649	11 13 55	52.4	95.5	-3.3		-48.3	-23	4950	No stop
20 25 00	=1428+370	11 14 55	52.5	95.7	-3.3		-48.2	37	4957	20 24 01
20 25 00	J144230	11 14 55	50.2	94.1	-3.5		-47.7	-23	4957	No stop
20 29 00	---	11 18 55	50.8	95.0	-3.4		-47.6	217	4988	20 25 01
20 29 30	J1430+3649	11 19 26	53.2	96.7	-3.2		-48.1	7	4988	20 29 30
20 30 00	=1428+370	11 19 56	53.3	96.8	-3.2		-48.1	30	4992	20 29 31
20 30 00	J144230	11 19 56	50.9	95.2	-3.4		-47.6	-22	4992	No stop
20 34 00	---	11 23 56	51.5	96.1	-3.3		-47.5	218	5023	20 30 01
20 34 00	J1430+3649	11 23 56	53.9	97.7	-3.1		-48.0	-23	5023	No stop
20 35 00	=1428+370	11 24 56	54.0	97.9	-3.1		-47.9	37	5030	20 34 01
20 35 00	J144230	11 24 56	51.7	96.3	-3.3		-47.5	-22	5030	No stop
20 39 00	---	11 28 57	52.3	97.2	-3.2		-47.3	218	5061	20 35 01
20 39 00	J1430+3649	11 28 57	54.6	98.8	-3.0		-47.8	-23	5061	No stop
20 40 00	=1428+370	11 29 57	54.8	99.1	-3.0		-47.7	37	5069	20 39 01
20 40 00	J143024	11 29 57	53.8	100.9	-3.0		-46.3	-17	5069	No stop
20 44 00	---	11 33 58	54.4	101.9	-3.0		-46.1	223	5100	20 40 01
20 44 00	J1430+3649	11 33 58	55.3	100.0	-3.0		-47.6	-17	5100	No stop
20 45 00	=1428+370	11 34 58	55.5	100.3	-2.9		-47.5	43	5107	20 44 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are 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 15 Apr 2014 Day 105 ---										
20 45 00	J143024	11 34 58	54.6	102.1	-2.9		-46.0	-17	5107	No stop
20 49 00	---	11 38 59	55.2	103.1	-2.9		-45.8	223	5138	20 45 01
20 49 30	J1430+3649	11 39 29	56.2	101.4	-2.9		-47.3	13	5138	20 49 30
20 50 00	=1428+370	11 39 59	56.2	101.5	-2.9		-47.3	30	5142	20 49 31
20 50 00	J143024	11 39 59	55.3	103.4	-2.9		-45.7	-17	5142	No stop
20 54 00	---	11 44 00	55.9	104.4	-2.8		-45.5	223	5172	20 50 01
20 54 00	J1430+3649	11 44 00	56.8	102.5	-2.8		-47.0	-17	5172	No stop
20 55 00	=1428+370	11 45 00	57.0	102.7	-2.8		-47.0	43	5180	20 54 01
20 55 00	J143024	11 45 00	56.0	104.6	-2.8		-45.4	-18	5180	No stop
20 59 00	---	11 49 00	56.6	105.7	-2.7		-45.1	222	5211	20 55 01
20 59 00	J1430+3649	11 49 00	57.6	103.7	-2.7		-46.7	-17	5211	No stop
21 00 00	=1428+370	11 50 01	57.7	104.0	-2.7		-46.7	43	5219	20 59 01
21 00 00	J143213	11 50 01	56.3	105.8	-2.7		-44.9	-18	5219	No stop
21 04 00	---	11 54 01	56.9	106.8	-2.6		-44.6	222	5249	21 00 01
21 04 00	J1430+3649	11 54 01	58.3	105.0	-2.6		-46.4	-19	5249	No stop
21 05 00	=1428+370	11 55 01	58.4	105.3	-2.6		-46.3	41	5257	21 04 01
21 05 00	J143050	11 55 01	56.7	108.4	-2.6		-43.7	-21	5257	No stop
21 09 00	---	11 59 02	57.3	109.5	-2.5		-43.3	219	5288	21 05 01
21 09 30	J1430+3649	11 59 32	59.1	106.5	-2.5		-45.9	9	5288	21 09 30
21 10 00	=1428+370	12 00 02	59.2	106.6	-2.5		-45.9	30	5292	21 09 31
21 10 00	J143718	12 00 02	58.2	104.9	-2.6		-46.4	-16	5292	No stop
21 14 00	---	12 04 03	58.7	106.0	-2.6		-46.0	224	5322	21 10 01
21 14 00	J1430+3649	12 04 03	59.7	107.7	-2.5		-45.5	-17	5322	No stop
21 15 00	=1428+370	12 05 03	59.9	108.0	-2.4		-45.5	43	5330	21 14 01
21 15 00	J142850	12 05 03	58.8	111.2	-2.4		-43.0	-21	5330	No stop
21 19 00	---	12 09 04	59.3	112.3	-2.3		-42.6	219	5361	21 15 01
21 19 00	J1430+3649	12 09 04	60.4	109.2	-2.4		-45.1	-21	5361	No stop
21 20 00	=1428+370	12 10 04	60.6	109.5	-2.4		-45.0	39	5368	21 19 01
21 20 00	J144230	12 10 04	58.3	107.3	-2.6		-45.0	-22	5368	No stop
21 24 00	---	12 14 04	58.9	108.4	-2.5		-44.7	218	5399	21 20 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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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 15 Apr 2014 Day 105 ---										
21 24 00	J1430+3649	12 14 04	61.2	110.6	-2.3		-44.5	-23	5399	No stop
21 25 00	=1428+370	12 15 05	61.3	110.9	-2.3		-44.4	37	5407	21 24 01
21 25 00	J144230	12 15 05	59.0	108.7	-2.5		-44.6	-22	5407	No stop
21 29 00	---	12 19 05	59.6	109.8	-2.4		-44.2	218	5437	21 25 01
21 29 30	J1430+3649	12 19 35	61.9	112.3	-2.2		-43.9	7	5437	21 29 30
21 30 00	=1428+370	12 20 05	62.0	112.4	-2.2		-43.8	30	5441	21 29 31
21 30 00	J144230	12 20 05	59.7	110.1	-2.4		-44.1	-22	5441	No stop
21 34 00	---	12 24 06	60.3	111.3	-2.3		-43.7	218	5472	21 30 01
21 34 00	J1430+3649	12 24 06	62.5	113.7	-2.1		-43.3	-23	5472	No stop
21 35 00	=1428+370	12 25 06	62.7	114.0	-2.1		-43.2	37	5480	21 34 01
21 35 00	J144230	12 25 06	60.4	111.6	-2.3		-43.6	-22	5480	No stop
21 39 00	---	12 29 07	61.0	112.8	-2.2		-43.1	218	5510	21 35 01
21 39 00	J1430+3649	12 29 07	63.2	115.3	-2.0		-42.7	-22	5510	No stop
21 40 00	=1428+370	12 30 07	63.4	115.6	-2.0		-42.5	38	5518	21 39 01
21 40 00	J143024	12 30 07	62.4	117.8	-2.0		-40.6	-18	5518	No stop
21 44 00	---	12 34 08	62.9	119.1	-1.9		-40.0	222	5549	21 40 01
21 44 00	J1430+3649	12 34 08	63.9	117.0	-2.0		-41.9	-18	5549	No stop
21 45 00	=1428+370	12 35 08	64.0	117.3	-1.9		-41.8	42	5556	21 44 01
21 45 00	J143024	12 35 08	63.0	119.5	-1.9		-39.9	-18	5556	No stop
21 49 00	---	12 39 09	63.5	120.9	-1.9		-39.2	222	5587	21 45 01
21 49 30	J1430+3649	12 39 39	64.6	118.9	-1.9		-41.0	12	5587	21 49 30
21 50 00	=1428+370	12 40 09	64.7	119.1	-1.9		-40.9	30	5591	21 49 31
21 50 00	J143024	12 40 09	63.7	121.2	-1.8		-39.0	-18	5591	No stop
21 54 00	---	12 44 09	64.2	122.7	-1.8		-38.3	222	5622	21 50 01
21 54 00	J1430+3649	12 44 09	65.2	120.5	-1.8		-40.2	-18	5622	No stop
21 55 00	=1428+370	12 45 10	65.4	120.9	-1.8		-40.0	42	5629	21 54 01
21 55 00	J143024	12 45 10	64.3	123.0	-1.8		-38.1	-18	5629	No stop
21 59 00	---	12 49 10	64.8	124.6	-1.7		-37.3	222	5660	21 55 01
21 59 00	J1430+3649	12 49 10	65.9	122.4	-1.7		-39.3	-18	5660	No stop
22 00 00	=1428+370	12 50 10	66.0	122.7	-1.7		-39.1	42	5668	21 59 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC
--- Tue 15 Apr 2014 Day 105 ---										
22 00 00	J143213	12 50 10	64.5	124.6	-1.7		-37.2	-19	5668	No stop
22 04 00	---	12 54 11	65.0	126.1	-1.6		-36.4	221	5699	22 00 01
22 04 00	J1430+3649	12 54 11	66.5	124.3	-1.6		-38.3	-19	5699	No stop
22 05 00	=1428+370	12 55 11	66.6	124.7	-1.6		-38.0	41	5706	22 04 01
22 05 00	J143050	12 55 11	64.7	128.1	-1.6		-34.9	-22	5706	No stop
22 09 00	---	12 59 12	65.2	129.7	-1.5		-34.1	218	5737	22 05 01
22 09 30	J1430+3649	12 59 42	67.2	126.5	-1.5		-37.0	9	5737	22 09 30
22 10 00	=1428+370	13 00 12	67.2	126.7	-1.5		-36.9	30	5741	22 09 31
22 10 00	J143718	13 00 12	66.4	124.1	-1.6		-38.3	-19	5741	No stop
22 14 00	---	13 04 13	66.9	125.7	-1.6		-37.4	221	5772	22 10 01
22 14 00	J1430+3649	13 04 13	67.7	128.4	-1.5		-36.0	-20	5772	No stop
22 15 00	=1428+370	13 05 13	67.8	128.8	-1.4		-35.7	40	5779	22 14 01
22 15 00	J142850	13 05 13	66.5	132.4	-1.4		-32.7	-22	5779	No stop
22 19 00	---	13 09 14	66.9	134.2	-1.3		-31.7	218	5810	22 15 01
22 19 00	J1430+3649	13 09 14	68.3	130.6	-1.4		-34.7	-22	5810	No stop
22 20 00	=1428+370	13 10 14	68.4	131.1	-1.4		-34.4	38	5818	22 19 01
22 20 00	J144230	13 10 14	66.3	127.3	-1.5		-36.1	-22	5818	No stop
22 24 00	---	13 14 14	66.8	128.9	-1.5		-35.2	218	5848	22 20 01
22 24 00	J1430+3649	13 14 14	68.9	132.9	-1.3		-33.3	-23	5848	No stop
22 25 00	=1428+370	13 15 15	69.0	133.4	-1.3		-33.0	37	5856	22 24 01
22 25 00	J144230	13 15 15	66.9	129.4	-1.5		-35.0	-23	5856	No stop
22 29 00	---	13 19 15	67.4	131.1	-1.4		-34.0	217	5887	22 25 01
22 29 30	J1430+3649	13 19 45	69.4	135.5	-1.2		-31.7	6	5887	22 29 30
22 30 00	=1428+370	13 20 15	69.5	135.7	-1.2		-31.5	30	5891	22 29 31
22 30 00	J144230	13 20 15	67.5	131.5	-1.4		-33.7	-23	5891	No stop
22 34 00	---	13 24 16	67.9	133.3	-1.3		-32.6	217	5921	22 30 01
22 34 00	J1430+3649	13 24 16	69.9	137.7	-1.1		-30.3	-24	5921	No stop
22 35 00	=1428+370	13 25 16	70.0	138.2	-1.1		-29.9	36	5929	22 34 01
22 35 00	J144230	13 25 16	68.0	133.8	-1.3		-32.4	-24	5929	No stop
22 39 00	---	13 29 17	68.5	135.6	-1.2		-31.2	216	5960	22 35 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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SYNC: Time correlator is expected to sync up.

Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC
--- Tue 15 Apr 2014 Day 105 ---										
22 39 00	J1430+3649	13 29 17	70.4	140.3	-1.0		-28.6	-25	5960	No stop
22 40 00	=1428+370	13 30 17	70.5	140.8	-1.0		-28.2	35	5967	22 39 01
22 40 00	J143024	13 30 17	69.3	142.9	-1.0		-26.4	-18	5967	No stop
22 44 00	---	13 34 18	69.6	145.0	-0.9		-25.0	222	5998	22 40 01
22 44 00	J1430+3649	13 34 18	70.9	143.0	-0.9		-26.8	-18	5998	No stop
22 45 00	=1428+370	13 35 18	71.0	143.5	-0.9		-26.4	42	6006	22 44 01
22 45 00	J143024	13 35 18	69.7	145.5	-0.9		-24.6	-18	6006	No stop
22 49 00	---	13 39 18	70.0	147.7	-0.9		-23.2	222	6036	22 45 01
22 49 30	J1430+3649	13 39 49	71.4	146.1	-0.9		-24.7	12	6036	22 49 30
22 50 00	=1428+370	13 40 19	71.4	146.4	-0.8		-24.5	30	6040	22 49 31
22 50 00	J143024	13 40 19	70.1	148.2	-0.8		-22.8	-18	6040	No stop
22 54 00	---	13 44 19	70.4	150.5	-0.8		-21.3	222	6071	22 50 01
22 54 00	J1430+3649	13 44 19	71.7	148.7	-0.8		-22.9	-18	6071	No stop
22 55 00	=1428+370	13 45 19	71.8	149.3	-0.8		-22.5	42	6079	22 54 01
22 55 00	J143024	13 45 19	70.5	151.0	-0.8		-20.9	-18	6079	No stop
22 59 00	---	13 49 20	70.8	153.4	-0.7		-19.3	222	6109	22 55 01
22 59 00	J1430+3649	13 49 20	72.1	151.7	-0.7		-20.8	-18	6109	No stop
23 00 00	=1428+370	13 50 20	72.2	152.3	-0.7		-20.4	42	6117	22 59 01
23 03 00	NRA0512	13 53 21	58.7	98.1	-2.8		-50.6	56	6117	23 03 00
23 06 00	---	13 56 21	59.2	98.9	-2.7		-50.5	180	6140	23 03 01
23 09 00	J1430+3649	13 59 22	72.7	158.0	-0.5		-16.3	48	6140	23 09 00
23 10 00	=1428+370	14 00 22	72.8	158.6	-0.5		-15.8	60	6148	23 09 01
23 10 00	J143213	14 00 22	71.1	159.1	-0.5		-15.2	-20	6148	No stop
23 14 00	---	14 04 23	71.3	161.6	-0.5		-13.4	220	6179	23 10 01
23 14 00	J1430+3649	14 04 23	73.0	161.3	-0.4		-13.9	-20	6179	No stop
23 15 00	=1428+370	14 05 23	73.0	161.9	-0.4		-13.4	40	6186	23 14 01
23 15 00	J143050	14 05 23	70.7	163.5	-0.4		-11.9	-23	6186	No stop
23 19 00	---	14 09 23	70.9	166.0	-0.4		-10.2	217	6217	23 15 01
23 19 30	J1430+3649	14 09 53	73.2	165.0	-0.4		-11.2	7	6217	23 19 30
23 20 00	=1428+370	14 10 24	73.3	165.3	-0.3		-10.9	30	6221	23 19 31

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

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 15 Apr 2014 Day 105 ---										
23 20 00	J143718	14 10 24	72.9	160.9	-0.5		-14.2	-23	6221	No stop
23 24 00	---	14 14 24	73.1	163.6	-0.4		-12.2	217	6252	23 20 01
23 24 00	J1430+3649	14 14 24	73.4	168.1	-0.3		-8.9	-24	6252	No stop
23 25 00	=1428+370	14 15 24	73.4	168.8	-0.3		-8.4	36	6259	23 24 01
23 25 00	J142850	14 15 24	71.6	170.8	-0.2		-6.7	-21	6259	No stop
23 29 00	---	14 19 25	71.7	173.4	-0.2		-4.8	219	6290	23 25 01
23 29 00	J1430+3649	14 19 25	73.5	171.6	-0.2		-6.3	-21	6290	No stop
23 30 00	=1428+370	14 20 25	73.5	172.3	-0.2		-5.8	39	6298	23 29 01
23 30 00	J144230	14 20 25	72.3	164.7	-0.4		-11.3	-30	6298	No stop
23 34 00	---	14 24 26	72.5	167.3	-0.3		-9.4	210	6328	23 30 01
23 34 00	J1430+3649	14 24 26	73.6	175.1	-0.1		-3.7	-31	6328	No stop
23 35 00	=1428+370	14 25 26	73.6	175.8	-0.1		-3.1	29	6336	23 34 01
23 35 00	J144230	14 25 26	72.5	168.0	-0.3		-8.9	-30	6336	No stop
23 39 00	---	14 29 27	72.6	170.7	-0.2		-6.9	210	6367	23 35 01
23 39 30	J1430+3649	14 29 57	73.7	179.0	-0.0		-0.7	-2	6367	23 39 30
23 40 00	=1428+370	14 30 27	73.7	179.4	-0.0		-0.4	28	6371	23 39 31
23 40 00	J144230	14 30 27	72.7	171.4	-0.2		-6.4	-30	6371	No stop
23 44 00	---	14 34 27	72.7	174.1	-0.1		-4.4	210	6401	23 40 01
23 44 00	J1430+3649	14 34 27	73.6	182.3	0.1		1.7	-32	6401	No stop
23 45 00	=1428+370	14 35 28	73.6	183.0	0.1		2.2	28	6409	23 44 01
23 45 00	J144230	14 35 28	72.7	174.8	-0.1		-3.9	-31	6409	No stop
23 49 00	---	14 39 28	72.8	177.5	-0.1		-1.9	209	6440	23 45 01
23 49 00	J1430+3649	14 39 28	73.6	185.8	0.1		4.4	-32	6440	No stop
23 50 00	=1428+370	14 40 28	73.6	186.5	0.2		4.9	28	6447	23 49 01
23 50 00	J143213	14 40 28	72.0	185.0	0.1		3.7	-20	6447	No stop
23 54 00	---	14 44 29	71.9	187.7	0.2		5.6	220	6478	23 50 01
23 54 00	J1430+3649	14 44 29	73.5	189.3	0.2		7.0	-20	6478	No stop
23 55 00	=1428+370	14 45 29	73.5	190.0	0.2		7.5	40	6486	23 54 01
23 55 00	J143050	14 45 29	71.1	189.0	0.2		6.5	-23	6486	No stop
23 59 00	---	14 49 30	71.0	191.5	0.3		8.3	217	6517	23 55 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

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 15 Apr 2014 Day 105 ---										
23 59 30	J1430+3649	14 50 00	73.3	193.2	0.3		9.8	7	6517	23 59 30
23 59 59	=1428+370	14 50 30	73.3	193.5	0.3		10.1	29	6520	23 59 31
--- Wed 16 Apr 2014 Day 106 ---										
00 00 00	J143718	14 50 30	73.5	188.9	0.2		6.7	-24	6520	No stop
00 04 00	---	14 54 31	73.4	191.7	0.3		8.7	216	6551	00 00 00
00 04 00	J1430+3649	14 54 31	73.2	196.2	0.4		12.1	-25	6551	No stop
00 05 00	=1428+370	14 55 31	73.1	196.9	0.4		12.6	35	6559	00 04 01
00 05 00	J142850	14 55 31	71.2	196.8	0.4		12.2	-21	6559	No stop
00 09 00	---	14 59 32	71.0	199.2	0.5		13.9	219	6589	00 05 01
00 09 00	J1430+3649	14 59 32	72.9	199.6	0.5		14.6	-21	6589	No stop
00 10 00	=1428+370	15 00 32	72.9	200.3	0.5		15.0	39	6597	00 09 01
00 10 00	J143024	15 00 32	71.5	199.3	0.5		14.1	-19	6597	No stop
00 14 00	---	15 04 32	71.3	201.8	0.6		15.8	221	6628	00 10 01
00 14 00	J1430+3649	15 04 32	72.7	202.9	0.6		16.9	-18	6628	No stop
00 15 00	=1428+370	15 05 33	72.6	203.5	0.6		17.4	42	6636	00 14 01
00 15 00	J143024	15 05 33	71.2	202.4	0.6		16.3	-19	6636	No stop
00 19 00	---	15 09 33	71.0	204.8	0.6		18.0	221	6666	00 15 01
00 19 30	J1430+3649	15 10 03	72.3	206.4	0.6		19.4	12	6666	00 19 30
00 20 00	=1428+370	15 10 33	72.3	206.7	0.7		19.7	30	6670	00 19 31
00 20 00	J143024	15 10 33	70.9	205.4	0.7		18.4	-18	6670	No stop
00 24 00	---	15 14 34	70.7	207.7	0.7		20.0	222	6701	00 20 01
00 24 00	J1430+3649	15 14 34	72.0	209.1	0.7		21.4	-18	6701	No stop
00 25 00	=1428+370	15 15 34	71.9	209.7	0.7		21.8	42	6709	00 24 01
00 25 00	J143024	15 15 34	70.6	208.3	0.7		20.4	-18	6709	No stop
00 29 00	---	15 19 35	70.3	210.6	0.8		22.0	222	6739	00 25 01
00 29 00	J1430+3649	15 19 35	71.6	212.1	0.8		23.5	-18	6739	No stop
00 30 00	=1428+370	15 20 35	71.5	212.7	0.8		23.9	42	6747	00 29 01
00 30 00	J143213	15 20 35	70.1	209.8	0.8		21.4	-20	6747	No stop
00 34 00	---	15 24 36	69.8	212.1	0.9		22.9	220	6778	00 30 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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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
--- Wed 16 Apr 2014 Day 106 ---										
00 34 00	J1430+3649	15 24 36	71.2	215.0	0.9		25.4	-21	6778	No stop
00 35 00	=1428+370	15 25 36	71.1	215.5	0.9		25.8	39	6785	00 34 01
00 35 00	J143050	15 25 36	69.0	212.5	0.9		23.0	-22	6785	No stop
00 39 00	---	15 29 37	68.6	214.6	1.0		24.4	218	6816	00 35 01
00 39 30	J1430+3649	15 30 07	70.7	218.0	1.0		27.5	8	6816	00 39 30
00 40 00	=1428+370	15 30 37	70.7	218.3	1.0		27.7	30	6820	00 39 31
00 40 00	J143718	15 30 37	71.2	214.6	0.9		25.1	-22	6820	No stop
00 44 00	---	15 34 37	70.9	216.8	0.9		26.6	218	6851	00 40 01
00 44 00	J1430+3649	15 34 37	70.3	220.4	1.1		29.0	-22	6851	No stop
00 45 00	=1428+370	15 35 38	70.2	220.9	1.1		29.4	38	6858	00 44 01
00 45 00	J142850	15 35 38	68.3	219.2	1.1		27.6	-21	6858	No stop
00 49 00	---	15 39 38	67.9	221.2	1.2		28.8	219	6889	00 45 01
00 49 00	J1430+3649	15 39 38	69.8	222.9	1.1		30.7	-21	6889	No stop
00 50 00	=1428+370	15 40 38	69.7	223.4	1.2		31.0	39	6897	00 49 01
00 50 00	J143024	15 40 38	68.4	221.6	1.2		29.2	-18	6897	No stop
00 54 00	---	15 44 39	68.0	223.5	1.2		30.4	222	6927	00 50 01
00 54 00	J1430+3649	15 44 39	69.3	225.4	1.2		32.2	-18	6927	No stop
00 55 00	=1428+370	15 45 39	69.1	225.9	1.2		32.5	42	6935	00 54 01
00 55 00	J143024	15 45 39	67.9	224.0	1.2		30.7	-18	6935	No stop
00 59 00	---	15 49 40	67.5	225.8	1.3		31.9	222	6966	00 55 01
00 59 30	J1430+3649	15 50 10	68.7	228.0	1.3		33.8	12	6966	00 59 30
01 00 00	=1428+370	15 50 40	68.6	228.2	1.3		34.0	30	6970	00 59 31
01 00 00	J143024	15 50 40	67.4	226.3	1.3		32.1	-18	6970	No stop
01 04 00	---	15 54 41	66.9	228.0	1.4		33.2	222	7000	01 00 01
01 04 00	J1430+3649	15 54 41	68.1	230.0	1.4		35.0	-18	7000	No stop
01 05 00	=1428+370	15 55 41	68.0	230.4	1.4		35.3	42	7008	01 04 01
01 05 00	J143024	15 55 41	66.8	228.5	1.4		33.4	-18	7008	No stop
01 09 00	---	15 59 41	66.4	230.2	1.5		34.4	222	7039	01 05 01
01 09 00	J1430+3649	15 59 41	67.6	232.1	1.5		36.3	-18	7039	No stop
01 10 00	=1428+370	16 00 42	67.4	232.6	1.5		36.5	42	7046	01 09 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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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
--- Wed 16 Apr 2014 Day 106 ---										
01 10 00	J143213	16 00 42	66.3	229.5	1.5		33.9	-20	7046	No stop
01 14 00	---	16 04 42	65.8	231.1	1.5		34.9	220	7077	01 10 01
01 14 00	J1430+3649	16 04 42	67.0	234.2	1.6		37.4	-21	7077	No stop
01 15 00	=1428+370	16 05 42	66.8	234.6	1.6		37.7	39	7085	01 14 01
01 15 00	J143050	16 05 42	64.9	231.1	1.6		34.5	-21	7085	No stop
01 19 00	---	16 09 43	64.5	232.7	1.6		35.4	219	7116	01 15 01
01 19 30	J1430+3649	16 10 13	66.3	236.4	1.6		38.6	8	7116	01 19 30
01 20 00	=1428+370	16 10 43	66.2	236.6	1.7		38.7	30	7119	01 19 31
01 20 00	J143718	16 10 43	67.0	233.9	1.5		37.2	-19	7119	No stop
01 24 00	---	16 14 44	66.5	235.5	1.6		38.1	221	7150	01 20 01
01 24 00	J1430+3649	16 14 44	65.7	238.1	1.7		39.5	-20	7150	No stop
01 25 00	=1428+370	16 15 44	65.6	238.5	1.7		39.7	40	7158	01 24 01
01 25 00	J142850	16 15 44	63.8	236.4	1.8		37.5	-20	7158	No stop
01 29 00	---	16 19 45	63.3	237.9	1.8		38.3	220	7189	01 25 01
01 29 00	J1430+3649	16 19 45	65.1	240.0	1.8		40.5	-20	7189	No stop
01 30 00	=1428+370	16 20 45	64.9	240.3	1.8		40.6	40	7196	01 29 01
01 30 00	J144230	16 20 45	65.8	234.6	1.6		37.2	-26	7196	No stop
01 34 00	---	16 24 46	65.3	236.2	1.7		38.0	214	7227	01 30 01
01 34 00	J1430+3649	16 24 46	64.4	241.8	1.9		41.3	-26	7227	No stop
01 35 00	=1428+370	16 25 46	64.3	242.1	1.9		41.5	34	7235	01 34 01
01 35 00	J144230	16 25 46	65.1	236.5	1.7		38.2	-26	7235	No stop
01 39 00	---	16 29 46	64.6	238.0	1.8		39.0	214	7265	01 35 01
01 39 30	J1430+3649	16 30 16	63.7	243.6	2.0		42.2	4	7265	01 39 30
01 40 00	=1428+370	16 30 47	63.6	243.8	2.0		42.3	30	7269	01 39 31
01 40 00	J144230	16 30 47	64.5	238.4	1.8		39.2	-26	7269	No stop
01 44 00	---	16 34 47	64.0	239.9	1.9		39.9	214	7300	01 40 01
01 44 00	J1430+3649	16 34 47	63.1	245.1	2.1		42.8	-26	7300	No stop
01 45 00	=1428+370	16 35 47	62.9	245.5	2.1		43.0	34	7308	01 44 01
01 45 00	J144230	16 35 47	63.9	240.2	1.9		40.0	-25	7308	No stop
01 49 00	---	16 39 48	63.3	241.6	1.9		40.7	215	7338	01 45 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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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
--- Wed 16 Apr 2014 Day 106 ---										
01 49 00	J1430+3649	16 39 48	62.4	246.7	2.1		43.5	-25	7338	No stop
01 50 00	=1428+370	16 40 48	62.2	247.0	2.2		43.6	35	7346	01 49 01
01 50 00	J143213	16 40 48	61.2	244.2	2.1		41.4	-20	7346	No stop
01 54 00	---	16 44 49	60.7	245.5	2.2		41.9	220	7377	01 50 01
01 54 00	J1430+3649	16 44 49	61.7	248.3	2.2		44.1	-20	7377	No stop
01 55 00	=1428+370	16 45 49	61.5	248.6	2.2		44.2	40	7384	01 54 01
01 55 00	J143050	16 45 49	59.8	245.2	2.2		41.3	-21	7384	No stop
01 59 00	---	16 49 50	59.3	246.4	2.3		41.8	219	7415	01 55 01
01 59 30	J1430+3649	16 50 20	60.9	249.9	2.3		44.7	8	7415	01 59 30
02 00 00	=1428+370	16 50 50	60.8	250.1	2.3		44.8	30	7419	01 59 31
02 00 00	J143718	16 50 50	61.7	248.0	2.2		44.0	-18	7419	No stop
02 04 00	---	16 54 50	61.2	249.2	2.3		44.4	222	7450	02 00 01
02 04 00	J1430+3649	16 54 50	60.3	251.2	2.4		45.2	-18	7450	No stop
02 05 00	=1428+370	16 55 51	60.1	251.5	2.4		45.3	42	7457	02 04 01
02 05 00	J142850	16 55 51	58.5	249.4	2.4		43.2	-20	7457	No stop
02 09 00	---	16 59 51	57.9	250.5	2.5		43.6	220	7488	02 05 01
02 09 00	J1430+3649	16 59 51	59.5	252.6	2.5		45.7	-20	7488	No stop
02 10 00	=1428+370	17 00 51	59.4	252.9	2.5		45.8	40	7496	02 09 01
02 10 00	J143024	17 00 51	58.4	251.0	2.5		44.1	-17	7496	No stop
02 14 00	---	17 04 52	57.8	252.2	2.6		44.5	223	7526	02 10 01
02 14 00	J1430+3649	17 04 52	58.8	254.0	2.6		46.1	-17	7526	No stop
02 15 00	=1428+370	17 05 52	58.7	254.3	2.6		46.2	43	7534	02 14 01
02 15 00	J143024	17 05 52	57.6	252.4	2.6		44.6	-17	7534	No stop
02 19 00	---	17 09 53	57.1	253.5	2.6		44.9	223	7565	02 15 01
02 19 30	J1430+3649	17 10 23	58.0	255.4	2.7		46.5	13	7565	02 19 30
02 20 00	=1428+370	17 10 53	57.9	255.6	2.7		46.5	30	7569	02 19 31
02 20 00	J143024	17 10 53	56.9	253.8	2.7		45.0	-17	7569	No stop
02 24 00	---	17 14 54	56.3	254.8	2.7		45.3	223	7599	02 20 01
02 24 00	J1430+3649	17 14 54	57.4	256.6	2.7		46.8	-17	7599	No stop
02 25 00	=1428+370	17 15 54	57.2	256.9	2.7		46.9	43	7607	02 24 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are 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
--- Wed 16 Apr 2014 Day 106 ---										
02 25 00	J143024	17 15 54	56.2	255.1	2.7		45.3	-17	7607	No stop
02 29 00	---	17 19 55	55.6	256.1	2.8		45.6	223	7638	02 25 01
02 29 00	J1430+3649	17 19 55	56.6	257.9	2.8		47.1	-17	7638	No stop
02 30 00	=1428+370	17 20 55	56.5	258.1	2.8		47.2	43	7645	02 29 01
02 30 00	J143213	17 20 55	55.6	255.6	2.8		45.3	-19	7645	No stop
02 34 00	---	17 24 55	55.0	256.6	2.9		45.6	221	7676	02 30 01
02 34 00	J1430+3649	17 24 55	55.9	259.1	2.9		47.4	-19	7676	No stop
02 35 00	=1428+370	17 25 56	55.7	259.3	2.9		47.4	41	7684	02 34 01
02 35 00	J143050	17 25 56	54.1	256.3	2.9		45.0	-20	7684	No stop
02 39 00	---	17 29 56	53.5	257.3	3.0		45.2	220	7715	02 35 01
02 39 30	J1430+3649	17 30 26	55.1	260.4	3.0		47.6	9	7715	02 39 30
02 40 00	=1428+370	17 30 56	55.0	260.5	3.0		47.7	30	7718	02 39 31
02 40 00	J143718	17 30 56	55.9	258.9	2.9		47.3	-16	7718	No stop
02 44 00	---	17 34 57	55.4	259.8	3.0		47.5	224	7749	02 40 01
02 44 00	J1430+3649	17 34 57	54.4	261.5	3.1		47.8	-17	7749	No stop
02 45 00	=1428+370	17 35 57	54.3	261.7	3.1		47.9	43	7757	02 44 01
02 45 00	J142850	17 35 57	52.7	259.8	3.1		46.1	-20	7757	No stop
02 49 00	---	17 39 58	52.1	260.7	3.2		46.2	220	7788	02 45 01
02 49 00	J1430+3649	17 39 58	53.7	262.6	3.1		48.0	-19	7788	No stop
02 50 00	=1428+370	17 40 58	53.5	262.8	3.2		48.0	41	7795	02 49 01
02 50 00	J143024	17 40 58	52.5	261.2	3.2		46.7	-17	7795	No stop
02 54 00	---	17 44 59	51.9	262.1	3.2		46.8	223	7826	02 50 01
02 54 00	J1430+3649	17 44 59	52.9	263.7	3.2		48.2	-17	7826	No stop
02 55 00	=1428+370	17 45 59	52.8	263.9	3.2		48.2	43	7834	02 54 01
02 55 00	J143024	17 45 59	51.8	262.3	3.2		46.8	-17	7834	No stop
02 59 00	---	17 50 00	51.2	263.2	3.3		47.0	223	7864	02 55 01
02 59 30	J1430+3649	17 50 30	52.1	264.9	3.3		48.3	13	7864	02 59 30
03 00 00	=1428+370	17 51 00	52.0	265.0	3.3		48.3	30	7868	02 59 31
03 00 00	J143024	17 51 00	51.0	263.4	3.3		47.0	-17	7868	No stop
03 04 00	---	17 55 00	50.4	264.3	3.4		47.1	223	7899	03 00 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

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
--- Wed 16 Apr 2014 Day 106 ---										
03 04 00	J1430+3649	17 55 00	51.4	265.9	3.4		48.4	-16	7899	No stop
03 05 00	=1428+370	17 56 01	51.3	266.1	3.4		48.4	44	7907	03 04 01
03 05 00	J143024	17 56 01	50.3	264.5	3.4		47.1	-17	7907	No stop
03 09 00	---	18 00 01	49.7	265.4	3.5		47.2	223	7937	03 05 01
03 09 00	J1430+3649	18 00 01	50.7	267.0	3.5		48.5	-16	7937	No stop
03 10 00	=1428+370	18 01 01	50.5	267.2	3.5		48.5	44	7945	03 09 01
03 10 00	J143213	18 01 01	49.6	264.9	3.5		47.0	-18	7945	No stop
03 14 00	---	18 05 02	49.0	265.8	3.5		47.1	222	7976	03 10 01
03 14 00	J1430+3649	18 05 02	49.9	268.0	3.6		48.5	-18	7976	No stop
03 15 00	=1428+370	18 06 02	49.8	268.2	3.6		48.5	42	7983	03 14 01
03 15 00	J143050	18 06 02	48.2	265.5	3.6		46.5	-20	7983	No stop
03 19 00	---	18 10 03	47.6	266.4	3.6		46.6	220	8014	03 15 01
03 19 30	J1430+3649	18 10 33	49.1	269.1	3.7		48.5	10	8014	03 19 30
03 20 00	=1428+370	18 11 03	49.0	269.2	3.7		48.5	30	8018	03 19 31
03 20 00	J143718	18 11 03	50.0	267.8	3.6		48.5	-16	8018	No stop
03 24 00	---	18 15 04	49.4	268.6	3.6		48.5	224	8049	03 20 01
03 24 00	J1430+3649	18 15 04	48.4	270.0	3.7		48.5	-16	8049	No stop
03 25 00	=1428+370	18 16 04	48.3	270.2	3.7		48.5	44	8056	03 24 01
03 25 00	J142850	18 16 04	46.7	268.5	3.8		47.0	-20	8056	No stop
03 29 00	---	18 20 04	46.1	269.3	3.8		47.0	220	8087	03 25 01
03 29 00	J1430+3649	18 20 04	47.7	271.0	3.8		48.5	-19	8087	No stop
03 30 00	=1428+370	18 21 05	47.5	271.2	3.8		48.5	41	8095	03 29 01
03 30 00	J144230	18 21 05	48.7	267.9	3.6		47.8	-21	8095	No stop
03 34 00	---	18 25 05	48.1	268.7	3.7		47.8	219	8125	03 30 01
03 34 00	J1430+3649	18 25 05	46.9	272.0	3.9		48.5	-21	8125	No stop
03 35 00	=1428+370	18 26 05	46.8	272.2	3.9		48.5	39	8133	03 34 01
03 35 00	J144230	18 26 05	48.0	268.9	3.7		47.8	-21	8133	No stop
03 39 00	---	18 30 06	47.4	269.7	3.8		47.8	219	8164	03 35 01
03 39 30	J1430+3649	18 30 36	46.1	273.1	4.0		48.4	9	8164	03 39 30
03 40 00	=1428+370	18 31 06	46.0	273.2	4.0		48.4	30	8168	03 39 31

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

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
--- Wed 16 Apr 2014 Day 106 ---										
03 40 00	J144230	18 31 06	47.2	269.9	3.8		47.8	-21	8168	No stop
03 44 00	---	18 35 07	46.6	270.7	3.9		47.8	219	8198	03 40 01
03 44 00	J1430+3649	18 35 07	45.4	273.9	4.1		48.4	-21	8198	No stop
03 45 00	=1428+370	18 36 07	45.3	274.1	4.1		48.4	39	8206	03 44 01
03 45 00	J144230	18 36 07	46.5	270.9	3.9		47.8	-21	8206	No stop
03 49 00	---	18 40 08	45.9	271.7	4.0		47.8	219	8237	03 45 01
03 49 00	J1430+3649	18 40 08	44.7	274.9	4.1		48.3	-21	8237	No stop
03 50 00	=1428+370	18 41 08	44.5	275.1	4.2		48.3	39	8245	03 49 01
03 50 00	J143024	18 41 08	43.5	273.7	4.2		47.3	-17	8245	No stop
03 54 00	---	18 45 09	42.9	274.4	4.2		47.2	223	8275	03 50 01
03 54 00	J1430+3649	18 45 09	43.9	275.8	4.2		48.2	-16	8275	No stop
03 55 00	=1428+370	18 46 09	43.8	276.0	4.2		48.2	44	8283	03 54 01
03 55 00	J143024	18 46 09	42.8	274.6	4.3		47.2	-17	8283	No stop
03 59 00	---	18 50 09	42.2	275.4	4.3		47.1	223	8314	03 55 01
03 59 30	J1430+3649	18 50 39	43.1	276.8	4.3		48.1	14	8314	03 59 30
04 00 00	=1428+370	18 51 10	43.0	276.9	4.3		48.1	30	8317	03 59 31
04 00 00	J143024	18 51 10	42.0	275.6	4.3		47.1	-17	8317	No stop
04 04 00	---	18 55 10	41.4	276.3	4.4		47.0	223	8348	04 00 01
04 04 00	J1430+3649	18 55 10	42.4	277.7	4.4		48.0	-16	8348	No stop
04 05 00	=1428+370	18 56 10	42.3	277.8	4.4		47.9	44	8356	04 04 01
04 05 00	J143024	18 56 10	41.3	276.5	4.4		47.0	-17	8356	No stop
04 09 00	---	19 00 11	40.7	277.2	4.5		46.9	223	8387	04 05 01
04 09 00	J1430+3649	19 00 11	41.7	278.6	4.5		47.8	-16	8387	No stop
04 10 00	=1428+370	19 01 11	41.5	278.7	4.5		47.8	44	8394	04 09 01
04 10 00	J143213	19 01 11	40.6	276.8	4.5		46.8	-17	8394	No stop
04 14 00	---	19 05 12	40.0	277.6	4.5		46.7	223	8425	04 10 01
04 14 00	J1430+3649	19 05 12	40.9	279.5	4.6		47.7	-17	8425	No stop
04 15 00	=1428+370	19 06 12	40.8	279.6	4.6		47.6	43	8433	04 14 01
04 15 00	J143050	19 06 12	39.2	277.3	4.6		46.2	-20	8433	No stop
04 19 00	---	19 10 13	38.6	278.1	4.6		46.1	220	8463	04 15 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

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
--- Wed 16 Apr 2014 Day 106 ---										
04 19 30	J1430+3649	19 10 43	40.1	280.4	4.7		47.5	11	8463	04 19 30
04 20 00	=1428+370	19 11 13	40.0	280.5	4.7		47.5	30	8467	04 19 31
04 20 00	J143718	19 11 13	41.0	279.3	4.6		47.7	-16	8467	No stop
04 24 00	---	19 15 13	40.4	280.0	4.6		47.5	224	8498	04 20 01
04 24 00	J1430+3649	19 15 13	39.4	281.2	4.7		47.3	-16	8498	No stop
04 25 00	=1428+370	19 16 14	39.3	281.4	4.7		47.3	44	8506	04 24 01
04 25 00	J142850	19 16 14	37.7	280.0	4.8		46.1	-20	8506	No stop
04 29 00	---	19 20 14	37.1	280.7	4.8		46.0	220	8536	04 25 01
04 29 00	J1430+3649	19 20 14	38.7	282.1	4.8		47.1	-19	8536	No stop
04 30 00	=1428+370	19 21 14	38.6	282.3	4.8		47.1	41	8544	04 29 01
04 30 00	J144230	19 21 14	39.7	279.4	4.6		47.0	-20	8544	No stop
04 34 00	---	19 25 15	39.1	280.1	4.7		46.9	220	8575	04 30 01
04 34 00	J1430+3649	19 25 15	38.0	283.0	4.9		46.9	-20	8575	No stop
04 35 00	=1428+370	19 26 15	37.8	283.2	4.9		46.9	40	8582	04 34 01
04 35 00	J144230	19 26 15	39.0	280.3	4.7		46.8	-20	8582	No stop
04 39 00	---	19 30 16	38.4	281.0	4.8		46.7	220	8613	04 35 01
04 39 30	J1430+3649	19 30 46	37.2	283.9	5.0		46.7	10	8613	04 39 30
04 40 00	=1428+370	19 31 16	37.1	284.0	5.0		46.6	30	8617	04 39 31
04 40 00	J144230	19 31 16	38.2	281.2	4.8		46.7	-20	8617	No stop
04 44 00	---	19 35 17	37.6	281.9	4.9		46.5	220	8648	04 40 01
04 44 00	J1430+3649	19 35 17	36.5	284.7	5.1		46.5	-20	8648	No stop
04 45 00	=1428+370	19 36 17	36.4	284.9	5.1		46.4	40	8655	04 44 01
04 45 00	J144230	19 36 17	37.5	282.1	4.9		46.5	-20	8655	No stop
04 49 00	---	19 40 18	36.9	282.8	5.0		46.3	220	8686	04 45 01
04 49 00	J1430+3649	19 40 18	35.8	285.6	5.2		46.2	-20	8686	No stop
04 50 00	=1428+370	19 41 18	35.6	285.8	5.2		46.2	40	8694	04 49 01
04 50 00	J143024	19 41 18	34.6	284.6	5.2		45.4	-17	8694	No stop
04 54 00	---	19 45 18	34.0	285.3	5.2		45.3	223	8725	04 50 01
04 54 00	J1430+3649	19 45 18	35.1	286.4	5.2		46.0	-17	8725	No stop
04 55 00	=1428+370	19 46 19	34.9	286.6	5.3		45.9	43	8732	04 54 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are 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
--- Wed 16 Apr 2014 Day 106 ---										
04 55 00	J143024	19 46 19	33.9	285.4	5.3		45.2	-17	8732	No stop
04 59 00	---	19 50 19	33.3	286.1	5.3		45.0	223	8763	04 55 01
04 59 30	J1430+3649	19 50 49	34.3	287.4	5.3		45.7	13	8763	04 59 30
05 00 00	=1428+370	19 51 19	34.2	287.5	5.3		45.6	30	8767	04 59 31
05 00 00	J143024	19 51 19	33.2	286.3	5.3		45.0	-17	8767	No stop
05 04 00	---	19 55 20	32.6	287.0	5.4		44.8	223	8797	05 00 01
05 04 00	J1430+3649	19 55 20	33.6	288.1	5.4		45.4	-17	8797	No stop
05 05 00	=1428+370	19 56 20	33.5	288.3	5.4		45.4	43	8805	05 04 01
05 05 00	J143024	19 56 20	32.4	287.2	5.4		44.7	-17	8805	No stop
05 09 00	---	20 00 21	31.9	287.9	5.5		44.5	223	8836	05 05 01
05 09 00	J1430+3649	20 00 21	32.9	289.0	5.5		45.1	-17	8836	No stop
05 10 00	=1428+370	20 01 21	32.8	289.1	5.5		45.1	43	8844	05 09 01
05 10 00	J143213	20 01 21	31.8	287.5	5.5		44.4	-16	8844	No stop
05 14 00	---	20 05 22	31.2	288.2	5.5		44.2	224	8874	05 10 01
05 14 00	J1430+3649	20 05 22	32.2	289.8	5.6		44.8	-17	8874	No stop
05 15 00	=1428+370	20 06 22	32.1	290.0	5.6		44.8	43	8882	05 14 01
05 15 00	J143050	20 06 22	30.4	288.0	5.6		43.8	-20	8882	No stop
05 19 00	---	20 10 23	29.8	288.7	5.6		43.6	220	8913	05 15 01
05 19 30	J1430+3649	20 10 53	31.4	290.7	5.7		44.5	10	8913	05 19 30
05 20 00	=1428+370	20 11 23	31.3	290.8	5.7		44.5	30	8917	05 19 31
05 20 00	J143718	20 11 23	32.2	289.7	5.6		44.8	-16	8917	No stop
05 24 00	---	20 15 23	31.7	290.4	5.6		44.6	224	8947	05 20 01
05 24 00	J1430+3649	20 15 23	30.8	291.5	5.7		44.2	-16	8947	No stop
05 25 00	=1428+370	20 16 24	30.6	291.7	5.8		44.1	44	8955	05 24 01
05 25 00	J142850	20 16 24	29.0	290.5	5.8		43.3	-20	8955	No stop
05 29 00	---	20 20 24	28.4	291.1	5.8		43.0	220	8986	05 25 01
05 29 00	J1430+3649	20 20 24	30.1	292.3	5.8		43.9	-20	8986	No stop
05 30 00	=1428+370	20 21 24	29.9	292.5	5.8		43.8	40	8993	05 29 01
05 30 00	J144230	20 21 24	31.0	289.8	5.6		44.2	-20	8993	No stop
05 34 00	---	20 25 25	30.4	290.5	5.7		44.0	220	9024	05 30 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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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
--- Wed 16 Apr 2014 Day 106 ---										
05 34 00	J1430+3649	20 25 25	29.4	293.2	5.9		43.5	-20	9024	No stop
05 35 00	=1428+370	20 26 25	29.3	293.3	5.9		43.5	40	9032	05 34 01
05 35 00	J144230	20 26 25	30.3	290.7	5.7		43.9	-19	9032	No stop
05 39 00	---	20 30 26	29.7	291.4	5.8		43.7	221	9062	05 35 01
05 39 30	J1430+3649	20 30 56	28.6	294.1	6.0		43.2	10	9062	05 39 30
05 40 00	=1428+370	20 31 26	28.6	294.2	6.0		43.1	30	9066	05 39 31
05 40 00	J144230	20 31 26	29.6	291.5	5.8		43.6	-19	9066	No stop
05 44 00	---	20 35 27	29.0	292.2	5.9		43.3	221	9097	05 40 01
05 44 00	J1430+3649	20 35 27	28.0	294.8	6.1		42.9	-20	9097	No stop
05 45 00	=1428+370	20 36 27	27.9	295.0	6.1		42.8	40	9105	05 44 01
05 45 00	J144230	20 36 27	28.9	292.4	5.9		43.3	-19	9105	No stop
05 49 00	---	20 40 27	28.3	293.0	6.0		43.0	221	9135	05 45 01
05 49 00	J1430+3649	20 40 27	27.3	295.7	6.2		42.5	-20	9135	No stop
05 50 00	=1428+370	20 41 28	27.2	295.8	6.2		42.4	40	9143	05 49 01
05 50 00	J143024	20 41 28	26.1	294.8	6.2		41.9	-17	9143	No stop
05 54 00	---	20 45 28	25.6	295.5	6.2		41.6	223	9174	05 50 01
05 54 00	J1430+3649	20 45 28	26.7	296.5	6.2		42.1	-17	9174	No stop
05 55 00	=1428+370	20 46 28	26.5	296.7	6.3		42.0	43	9181	05 54 01
05 55 00	J143024	20 46 28	25.4	295.7	6.3		41.6	-17	9181	No stop
05 59 00	---	20 50 29	24.9	296.4	6.3		41.3	223	9212	05 55 01
05 59 30	J1430+3649	20 50 59	25.9	297.4	6.3		41.7	13	9212	05 59 30
06 00 00	=1428+370	20 51 29	25.9	297.5	6.3		41.7	30	9216	05 59 31
06 00 00	J143024	20 51 29	24.8	296.5	6.3		41.2	-17	9216	No stop
06 04 00	---	20 55 30	24.2	297.2	6.4		40.9	223	9247	06 00 01
06 04 00	J1430+3649	20 55 30	25.3	298.2	6.4		41.3	-17	9247	No stop
06 05 00	=1428+370	20 56 30	25.2	298.3	6.4		41.3	43	9254	06 04 01
06 05 00	J143024	20 56 30	24.1	297.4	6.4		40.8	-17	9254	No stop
06 09 00	---	21 00 31	23.6	298.1	6.5		40.5	223	9285	06 05 01
06 09 00	J1430+3649	21 00 31	24.7	299.0	6.5		41.0	-17	9285	No stop
06 10 00	=1428+370	21 01 31	24.5	299.2	6.5		40.9	43	9293	06 09 01
06 10 00	J143213	21 01 31	23.5	297.7	6.5		40.5	-17	9293	No stop
06 14 00	---	21 05 32	23.0	298.4	6.5		40.2	223	9324	06 10 01

Schedule for TORUN (Code Tr)

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e-EVN: Young Quasars

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

Disk: GBytes recorded to this point.

TPStart: Recording start time. Frequencies are 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
--- Wed 16 Apr 2014 Day 106 ---										
06 14 00	J1430+3649	21 05 32	24.0	299.8	6.6		40.5	-17	9324	No stop
06 15 00	=1428+370	21 06 32	23.9	300.0	6.6		40.5	43	9331	06 14 01
06 15 00	J143050	21 06 32	22.1	298.3	6.6		39.8	-21	9331	No stop
06 19 00	---	21 10 32	21.6	299.0	6.7		39.5	219	9362	06 15 01
06 19 30	J1430+3649	21 11 02	23.3	300.8	6.7		40.1	10	9362	06 19 30
06 20 00	=1428+370	21 11 33	23.2	300.9	6.7		40.0	30	9366	06 19 31
06 20 00	J143718	21 11 33	24.0	299.7	6.6		40.6	-15	9366	No stop
06 24 00	---	21 15 33	23.5	300.4	6.6		40.2	225	9396	06 20 01
06 24 00	J1430+3649	21 15 33	22.7	301.5	6.7		39.7	-16	9396	No stop
06 25 00	=1428+370	21 16 33	22.6	301.7	6.8		39.6	44	9404	06 24 01
06 25 00	J142850	21 16 33	20.9	300.7	6.8		39.0	-20	9404	No stop
06 29 00	---	21 20 34	20.4	301.4	6.9		38.7	220	9435	06 25 01
06 29 00	J1430+3649	21 20 34	22.1	302.4	6.8		39.3	-20	9435	No stop
06 30 00	=1428+370	21 21 34	21.9	302.5	6.8		39.2	40	9443	06 29 01
06 30 00	J143024	21 21 34	20.8	301.6	6.8		38.8	-17	9443	No stop
06 34 00	---	21 25 35	20.3	302.3	6.9		38.5	223	9473	06 30 01
06 34 00	J1430+3649	21 25 35	21.4	303.2	6.9		38.8	-17	9473	No stop
06 35 00	=1428+370	21 26 35	21.3	303.4	6.9		38.7	43	9481	06 34 01
06 35 00	J143024	21 26 35	20.2	302.5	6.9		38.4	-17	9481	No stop
06 39 00	---	21 30 36	19.7	303.2	7.0		38.0	223	9512	06 35 01
06 39 30	J1430+3649	21 31 06	20.8	304.1	7.0		38.3	13	9512	06 39 30
06 40 00	=1428+370	21 31 36	20.7	304.2	7.0		38.3	30	9516	06 39 31
06 40 00	J143024	21 31 36	19.6	303.3	7.0		38.0	-17	9516	No stop
06 44 00	---	21 35 36	19.1	304.0	7.1		37.6	223	9546	06 40 01
06 44 00	J1430+3649	21 35 36	20.2	304.9	7.1		37.9	-17	9546	No stop
06 45 00	=1428+370	21 36 37	20.1	305.1	7.1		37.8	43	9554	06 44 01
06 45 00	J143024	21 36 37	18.9	304.2	7.1		37.5	-18	9554	No stop
06 49 00	---	21 40 37	18.4	304.9	7.2		37.2	222	9585	06 45 01
06 49 00	J1430+3649	21 40 37	19.6	305.7	7.2		37.5	-17	9585	No stop
06 50 00	=1428+370	21 41 37	19.5	305.9	7.2		37.4	43	9592	06 49 01
06 53 00	NRA0512	21 44 38	38.6	287.4	5.1		48.2	93	9592	06 53 00
07 00 00	---	21 51 39	37.6	288.6	5.2		47.8	420	9646	06 53 01

SETUP FILE INFORMATION:

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

=====
 Setup file: sess313.L1024

Matching groups in /aps3/opt/share/sched_11.0/catalogs/freq.dat:
 tr18cm E-mail Borkowski 12Mar98, preferred alternative

Setup group: 3 Station: TORUN Total bit rate: 1024
 Format: MKIV1:2 Bits per sample: 2 Sample rate: 32.000
 Number of channels: 16 DBE type: Speedup factor: 0.50

Disk used to record data.

1st LO=	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00	2300.00
Net SB=	L	L	U	U	L	L	U	U	U
	L	L	U	U	L	L	U	U	U
IF SB =	L	L	L	L	L	L	L	L	L
	L	L	L	L	L	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP	LCP
BBC =	1	2	1	2	3	4	3	4	4
	5	6	5	6	7	8	7	8	8
BBC SB=	U	U	L	L	U	U	L	L	L
	U	U	L	L	U	U	L	L	L
IF =	C	A	C	A	C	A	C	A	A
	C	A	C	A	C	A	C	A	A

The following frequency sets based on these setups were used.

Frequency Set: 6 Setup file default. Used pcal sets: 1

LO sum=	1610.49	1610.49	1610.49	1610.49	1642.49	1642.49	1642.49	1642.49
	1674.49	1674.49	1674.49	1674.49	1706.49	1706.49	1706.49	1706.49
BBC fr=	689.51	689.51	689.51	689.51	657.51	657.51	657.51	657.51
	625.51	625.51	625.51	625.51	593.51	593.51	593.51	593.51
Bandwd=	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00

Matching frequency sets: 6

The following pulse cal sets were used with this setup:

Pulse cal detection set: 1 PCAL = OFF

PCALXB1=	S1	S2	S3	S4	S5	S6	S7	S8
PCALXB2=	M1	M2	M3	M4	M5	M6	M7	M8
PCALFR1=	0	0	0	0	0	0	0	0
PCALFR2=	0	0	0	0	0	0	0	0

Track assignments are:

track1= 2, 10, 18, 26, 3, 11, 19, 27, 66, 74, 82, 90, 67, 75, 83, 91
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		Date	Error (mas)
	(B1950)	(J2000)		
* J143213	14 30 08.721775 35 22 52.67822	* 14 32 13.540000 * 35 09 41.00000	14 32 50.776681 35 05 49.93596	0.00 0.00
* J143050	14 28 45.102826 34 39 29.47874	* 14 30 50.910000 * 34 26 14.10000	14 31 28.427084 34 22 21.98282	0.00 0.00
* J143718	14 35 15.885042 36 58 47.81892	* 14 37 18.080000 * 36 45 50.00000	14 37 54.571867 36 42 02.86160	0.00 0.00
* J142850	14 26 44.829871 35 07 41.47903	* 14 28 50.470000 * 34 54 20.80000	14 29 27.942131 34 50 27.18759	0.00 0.00
* J144230	14 40 28.409140 36 10 18.56789	* 14 42 30.670000 * 35 57 35.30000	14 43 07.172908 35 53 52.26774	0.00 0.00
* J143024	14 28 19.440280 35 37 54.63161	* 14 30 24.290000 * 35 24 38.10000	14 31 01.537670 35 20 45.66625	0.00 0.00
J0237+2848	02 34 55.589591	* 02 37 52.405678	02 38 42.358723	0.11
* 0234+285	28 35 11.40773	* 28 48 08.98998	28 51 42.68306	0.10
J0530+1331	05 28 06.759218	* 05 30 56.416749	05 31 44.701294	0.10
* 0528+134	13 29 42.28877	* 13 31 55.14944	13 32 20.10091	0.10
J0854+2006	08 51 57.250618	* 08 54 48.874930	08 55 38.621019	0.11
* 0J287	20 17 58.41733	* 20 06 30.64078	20 03 04.13500	0.10
J1331+3030	13 28 49.657778	* 13 31 08.288070	13 31 49.450401	0.20
* 3C286	30 45 58.64061	* 30 30 32.95925	30 26 03.63590	0.19
J1407+2827	14 04 45.615156	* 14 07 00.394414	14 07 40.470575	0.24
* 0Q208	28 41 29.23519	* 28 27 14.69022	28 23 05.62882	0.34
* J1430+3649	14 28 37.312694	* 14 30 40.583688	14 31 17.386931	0.13
1428+370	37 02 19.65909	* 36 49 03.88873	36 45 11.68779	0.11
J1640+3946	16 38 48.169686	* 16 40 29.632770	16 40 59.960577	0.13
* NRA0512	39 52 30.08655	* 39 46 46.02836	39 45 01.09667	0.10

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)	Source	Sun distance (deg)
J143213	133.0	0528+134	57.8
J143050	133.7	0J287	104.9
J143718	131.1	3C286	139.6
J142850	133.4	0Q208	140.9
J144230	131.5	J1430+3649	131.5
J143024	132.8	NRA0512	114.3
0234+285	24.0		

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	5.0 GHz	23. deg
---------	---------	---------	---------

rk01zfr

RADIOASTRON AGN SURVEY

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Wed 16 Apr 2014 Day 106 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with 12 columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, SYNC. It lists observation times for source 0821+394 and blank observations.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 10 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

Frequency Set: 8 Setup file default. Used with PCAL = 1MHz
 LO sum= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 Bandwd= 16.00 16.00 16.00 16.00
 Matching frequency sets: 8

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0821+394	08 21 37.310231	* 08 24 55.483856	08 25 52.558943	0.00
J0824+3916	39 26 28.25687	* 39 16 41.90401	39 13 50.42819	0.00

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)
0821+394	92.6

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

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01zg_freq.dat:
tr1cm

Setup group:	8	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=	21500.00	21500.00	21500.00	21500.00
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:	7	Setup file default.	Used with PCAL = 1MHz	
LO sum=	22236.00	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00	16.00
Matching frequency sets:	7			

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	5	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: 10 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: 10

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0808+019	08 08 51.138133	* 08 11 26.707316	08 12 11.696784	0.00
J0811+0146	01 55 51.17945	* 01 46 52.22014	01 44 01.60136	0.00

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)
0808+019	97.9

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

rk01zhtr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: K&C-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Wed 16 Apr 2014 Day 106 ---

----- K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies: 736.00 736.00 736.00 736.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

21 00 00 0754+100 11 53 57 26.2 250.3 3.9 35.0 0 0 21 00 00
21 14 30 --- 12 08 29 24.2 253.5 4.2 35.8 870 28 21 00 01
21 15 00 0754+100 12 09 00 24.1 253.6 4.2 35.8 24 28 21 15 00
21 25 00 --- 12 19 01 22.6 255.8 4.4 36.2 600 47 21 15 01

----- 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

21 30 00 0754+100 12 24 02 21.9 256.9 4.4 36.4 293 47 21 30 00
21 44 30 --- 12 38 34 19.8 260.0 4.7 36.9 870 75 21 30 01
21 45 00 0754+100 12 39 04 19.7 260.1 4.7 36.9 24 75 21 45 00
22 00 00 --- 12 54 07 17.5 263.2 4.9 37.2 900 104 21 45 01

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01zh_freq.dat:
tr1cm

Setup group:	5	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=	21500.00	21500.00	21500.00	21500.00
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=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	4		

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 6 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: 6

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0754+100	07 54 22.579229	* 07 57 06.642950	07 57 53.957338	0.00
J0757+0956	10 04 39.66684	* 09 56 34.85224	09 54 02.24218	0.00

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)
0754+100	92.7

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

rk01zitr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Thu 17 Apr 2014 Day 107 ---

----- 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

00 00 00 0827+243 14 54 27 15.8 -70.7 6.4 38.4 0 0 00 00 00
00 14 30 --- 15 08 59 13.8 -68.0 6.6 37.6 870 28 00 00 01
00 15 00 0827+243 15 09 29 13.7 -67.9 6.6 37.6 24 28 00 15 00
00 25 00 --- 15 19 31 12.3 -66.1 6.8 37.0 600 47 00 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00

00 30 00 0827+243 15 24 32 11.6 -65.1 6.9 36.6 293 47 00 30 00
00 44 30 --- 15 39 04 9.7 -62.4 7.1 35.7 870 75 00 30 01
00 45 00 0827+243 15 39 34 9.6 -62.3 7.1 35.6 24 75 00 45 00
01 00 00 --- 15 54 37 7.6 -59.5 7.4 34.5 900 104 00 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	7	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 6 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 6

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0827+243	08 27 54.398594	* 08 30 52.086193	08 31 43.399823	0.00
J0830+2410	24 21 07.66367	* 24 10 59.82026	24 07 57.28516	0.00

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)
0827+243	97.3

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

rk01zjtr

RADIOASTRON AGN SURVEY

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

--- Thu 17 Apr 2014 Day 107 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

14 00 00	0906+430	04 56 45	47.8	77.4	-4.2	-53.1	0	0	14 00 00
14 14 30	---	05 11 17	49.9	79.9	-4.0	-53.7	870	28	14 00 01
14 15 00	0906+430	05 11 47	50.0	79.9	-4.0	-53.7	24	28	14 15 00
14 29 30	---	05 26 20	52.2	82.4	-3.7	-54.3	870	56	14 15 01
14 30 00	0906+430	05 26 50	52.2	82.5	-3.7	-54.3	24	56	14 30 00
14 44 30	---	05 41 22	54.4	85.1	-3.5	-54.7	870	84	14 30 01
14 45 00	0906+430	05 41 52	54.5	85.2	-3.5	-54.7	24	84	14 45 00
15 00 00	---	05 56 55	56.7	88.0	-3.2	-54.9	900	112	14 45 01

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 11 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= 2400.00 2400.00 2400.00 2400.00
Net SB=      L      L      U      U
IF SB =      L      L      L      L
Pol.  =      RCP     LCP     RCP     LCP
BBC   =      1      2      1      2
BBC SB=      U      U      L      L
IF    =      C      A      C      A

```

The following frequency sets based on these setups were used.

```

Frequency Set: 10 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 10

```

```

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)
* 0906+430	09 06 17.256145	* 09 09 33.497149	09 10 30.185290	0.00
J0909+4253	43 05 59.00858	* 42 53 46.48205	42 50 14.80840	0.00

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)
0906+430    98.4

```

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

```

rk01zktr

RADIOASTRON AGN SURVEY

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Observing mode: C-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Thu 17 Apr 2014 Day 107 ---

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

Table with 11 columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, SYNC. It lists observation times and parameters for source 0805-077.

SETUP FILE INFORMATION:

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

==== Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 3 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: 3

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)
* 0805-077	08 05 49.552833	* 08 08 15.536034	08 08 57.784774	0.00
J0808-0751	-07 42 22.40698	*-07 51 09.88656	-07 54 00.28863	0.00

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)
0805-077	97.9

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

rk01zltr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: K&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

--- Thu 17 Apr 2014 Day 107 ---

----- K-band VLBI scans -----

```
Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies:   736.00   736.00   736.00   736.00
Next scan bandwidths:  16.00   16.00   16.00   16.00

21 00 00 0808+019    11 57 54 20.9 243.0 3.8    32.4   0    0    21 00 00
21 14 30 ---          12 12 26 18.9 246.3 4.0    33.4  870   28    21 00 01

21 15 00 0808+019    12 12 56 18.8 246.4 4.0    33.4  24    28    21 15 00
21 25 00 ---          12 22 58 17.4 248.6 4.2    34.0  600   47    21 15 01
```

----- L-band VLBI scans -----

```
Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies:   732.00   732.00   732.00   732.00

21 30 00 0808+019    12 27 59 16.7 249.7 4.3    34.3  293   47    21 30 00
21 44 30 ---          12 42 31 14.7 252.8 4.5    35.0  870   75    21 30 01

21 45 00 0808+019    12 43 01 14.6 252.9 4.5    35.0  24    75    21 45 00
22 00 00 ---          12 58 04 12.4 256.0 4.8    35.7  900  104    21 45 01
```


SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01zl_freq.dat:
tr1cm

Setup group:	7	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=	21500.00	21500.00	21500.00	21500.00
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=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	5		

Track assignments are:

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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 7 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 7

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0808+019	08 08 51.138133	* 08 11 26.707316	08 12 11.679274	0.00
J0811+0146	01 55 51.17945	* 01 46 52.22014	01 44 01.58748	0.00

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)
0808+019	96.8

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

SETUP FILE INFORMATION:

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

=====
Setup file: ralcm2.set

Matching groups in ./rk01zm_freq.dat:
tr1cm

Setup group:	5	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=	21500.00	21500.00	21500.00	21500.00
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=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	4		

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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:  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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0851+202	08 51 57.250618	* 08 54 48.874930	08 55 38.571345	0.00
J0854+2006	20 17 58.41733	* 20 06 30.64078	20 03 04.22001	0.00

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)
0851+202	102.8

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

rk01znt

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

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

--- Fri 18 Apr 2014 Day 108 ---

----- 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

13 00 00 0808+019 04 00 31 17.3 111.2 -4.2 -34.1 0 0 13 00 00
13 14 30 --- 04 15 04 19.3 114.4 -4.0 -33.2 870 28 13 00 01
13 15 00 0808+019 04 15 34 19.4 114.5 -3.9 -33.1 24 28 13 15 00
13 25 00 --- 04 25 35 20.7 116.8 -3.8 -32.4 600 47 13 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00

13 30 00 0808+019 04 30 36 21.4 117.9 -3.7 -32.1 293 47 13 30 00
13 44 30 --- 04 45 09 23.3 121.3 -3.5 -30.9 870 75 13 30 01
13 45 00 0808+019 04 45 39 23.4 121.4 -3.4 -30.9 24 75 13 45 00
14 00 00 --- 05 00 41 25.3 124.9 -3.2 -29.5 900 104 13 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	5	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: 12 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: 12

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	15	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

Frequency Set: 14 Setup file default. Used with PCAL = 1MHz
 LO sum= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 Bandwd= 16.00 16.00 16.00 16.00
 Matching frequency sets: 14

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0808+019	08 08 51.138133	* 08 11 26.707316	08 12 11.671244	0.00
J0811+0146	01 55 51.17945	* 01 46 52.22014	01 44 01.57964	0.00

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)
3C147	62.2
0808+019	96.2

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

rk01zotr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

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

--- Fri 18 Apr 2014 Day 108 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
 Next BBC frequencies: 732.00 732.00 732.00 732.00
 Next scan bandwidths: 16.00 16.00 16.00 16.00

16 00 00	0823+033	07 01 01	37.0	152.9	-1.4		-15.9	0	0	16 00 00
16 14 30	---	07 15 33	37.9	157.3	-1.2		-13.4	870	28	16 00 01
16 15 00	0823+033	07 16 03	37.9	157.4	-1.2		-13.3	24	28	16 15 00
16 29 30	---	07 30 36	38.7	162.0	-0.9		-10.7	870	56	16 15 01
16 30 00	0823+033	07 31 06	38.7	162.1	-0.9		-10.6	24	56	16 30 00
16 44 30	---	07 45 38	39.3	166.7	-0.7		-7.9	870	84	16 30 01
16 45 00	0823+033	07 46 08	39.3	166.9	-0.7		-7.8	24	84	16 45 00
17 00 00	---	08 01 11	39.7	171.7	-0.4		-5.0	900	112	16 45 01

SETUP FILE INFORMATION:

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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
 This might be ok because the catalog is not complete.
 But be very careful to be sure that the setup is correct.

Setup group: 12 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

Frequency Set: 9 Setup file default. Used with PCAL = 1MHz
 LO sum= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 Bandwd= 16.00 16.00 16.00 16.00
 Matching frequency sets: 9

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(Date)	Error (mas)	
* 0823+033	08 23 13.540326	* 08 25 50.338355	08 26 35.723315	0.00
J0825+0309	03 19 15.40169	* 03 09 24.51995	03 06 19.68648	0.00

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)
3C147	62.1
0823+033	99.3

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

rk01zptr

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: K&C-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

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

--- Fri 18 Apr 2014 Day 108 ---

----- K-band VLBI scans -----

```
Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies:   736.00   736.00   736.00   736.00
Next scan bandwidths:  16.00   16.00   16.00   16.00
```

```
19 00 00 0805-077      10 01 30 24.5 210.9 1.9      18.1   0      0 19 00 00
19 15 00 ---          10 16 33 23.3 214.7 2.1      20.2  900   29 19 00 01
```

----- 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
```

```
19 20 00 0805-077      10 21 34 22.8 216.0 2.2      20.9  293   29 19 20 00
19 40 00 ---          10 41 37 21.0 221.0 2.5      23.4 1200  67 19 20 01
```

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01zp_freq.dat:
tr1cm

Setup group:	6	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=	21500.00	21500.00	21500.00	21500.00
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:	3	Setup file default.	Used with PCAL = 1MHz
LO sum=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	3		

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 6 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: 6

```

```

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)
* 0805-077	08 05 49.552833	* 08 08 15.536034	08 08 57.770999	0.00
J0808-0751	-07 42 22.40698	*-07 51 09.88656	-07 54 00.30810	0.00

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)
0805-077	96.9

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

rk01zqtr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: K&C-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

```
-----
```

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

```
-----
```

--- Fri 18 Apr 2014 Day 108 ---

----- K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies: 736.00 736.00 736.00 736.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

21 20 00	0808+019	12 21 53	17.6	248.3	4.2	33.9	0	0	21 20 00
21 35 00	---	12 36 56	15.5	251.6	4.4	34.7	900	29	21 20 01

----- 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

21 40 00	0808+019	12 41 57	14.7	252.6	4.5	35.0	293	29	21 40 00
22 00 00	---	13 02 00	11.8	256.8	4.8	35.8	1200	67	21 40 01

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01zq_freq.dat:
tr1cm

Setup group:	4	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=	21500.00	21500.00	21500.00	21500.00
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:	2	Setup file default.	Used with PCAL = 1MHz
LO sum=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	2		

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	1	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)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0808+019	08 08 51.138133	* 08 11 26.707316	08 12 11.667194	0.00
J0811+0146	01 55 51.17945	* 01 46 52.22014	01 44 01.57652	0.00

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)
0808+019	95.9

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

rk01zstr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

--- Sat 19 Apr 2014 Day 109 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00
19 00 00 1514+197 10 05 27 22.6 87.3 -5.2 -39.5 0 0 19 00 00
19 14 30 --- 10 19 59 24.8 90.1 -5.0 -39.6 870 28 19 00 01
19 15 00 1514+197 10 20 30 24.8 90.2 -5.0 -39.6 24 28 19 15 00
19 29 30 --- 10 35 02 27.0 93.2 -4.7 -39.5 870 56 19 15 01
19 30 00 1514+197 10 35 32 27.1 93.3 -4.7 -39.5 24 56 19 30 00
19 44 30 --- 10 50 04 29.3 96.3 -4.5 -39.3 870 84 19 30 01
19 45 00 1514+197 10 50 34 29.3 96.4 -4.5 -39.3 24 84 19 45 00
20 00 00 --- 11 05 37 31.6 99.6 -4.2 -38.9 900 112 19 45 01

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 8 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 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)
* 1514+197	15 14 40.985841	* 15 16 56.796164	15 17 37.183656	0.00
J1516+1932	19 43 10.94234	* 19 32 12.99191	19 29 01.59195	0.00

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)
1514+197	142.4

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

rk01zttr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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, Source, Start / Stop (LST, EL, AZ, HA, UP), ParA, Early Dwell, Disk GBytes, TPStart SYNC. Includes scan data for Sat 19 Apr 2014, Day 109.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 6 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

Frequency Set: 3 Setup file default. Used with PCAL = 1MHz
 LO sum= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 Bandwd= 16.00 16.00 16.00 16.00
 Matching frequency sets: 3

Track assignments are:

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

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0827+243	08 27 54.398594	* 08 30 52.086193	08 31 43.361779	0.00
J0830+2410	24 21 07.66367	* 24 10 59.82026	24 07 57.31921	0.00

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)
0827+243	94.5

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

rk01zutr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 20 Apr 2014 Day 110 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with 11 columns: Start UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, SYNC. It lists observation times and parameters for sources 1023+131 and ---.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 5 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= 2400.00 2400.00 2400.00 2400.00
Net SB=      L      L      U      U
IF SB =      L      L      L      L
Pol.  =      RCP     LCP     RCP     LCP
BBC   =      1      2      1      2
BBC SB=      U      U      L      L
IF    =      C      A      C      A

```

The following frequency sets based on these setups were used.

```

Frequency Set: 2 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 2

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1023+131	10 23 16.285230	* 10 25 56.285371	10 26 43.102590	0.00
J1025+1253	13 09 05.49476	* 12 53 49.02188	12 49 16.77366	0.00

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)
1023+131    123.7

```

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

```

rk01zvtr

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 20 Apr 2014 Day 110 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

19 00 00 1514+197 10 09 24 23.2 88.0 -5.1 -39.5 0 0 19 00 00
19 19 30 --- 10 28 57 26.1 92.0 -4.8 -39.5 1170 37 19 00 01
19 20 00 1514+197 10 29 27 26.2 92.1 -4.8 -39.5 24 37 19 20 00
19 40 00 --- 10 49 30 29.2 96.2 -4.5 -39.3 1200 76 19 20 01

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 8 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 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)
* 1514+197	15 14 40.985841	* 15 16 56.796164	15 17 37.203488	0.00
J1516+1932	19 43 10.94234	* 19 32 12.99191	19 29 01.71950	0.00

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)
1514+197	142.6

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

rk01zwtr

RADIOASTRON AGN SURVEY

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Observing mode: C-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 20 Apr 2014 Day 110 ---

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

21 00 00	1611+343	12 09 43	43.6	88.6	-4.1		-46.5	0	0	21 00 00
21 19 30	---	12 29 17	46.5	92.5	-3.7		-46.5	1170	37	21 00 01
21 20 00	1611+343	12 29 47	46.6	92.6	-3.7		-46.5	24	37	21 20 00
21 40 00	---	12 49 50	49.6	96.9	-3.4		-46.1	1200	76	21 20 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

--- WARNING --- This group does not match an entry in the frequency catalog.
 This might be ok because the catalog is not complete.
 But be very careful to be sure that the setup is correct.

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: 2 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: 2

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1611+343	16 11 47.914251	* 16 13 41.064242	16 14 14.907133	0.00
J1613+3412	34 20 19.83376	* 34 12 47.90878	34 10 34.31999	0.00

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)
1611+343	123.3

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

rk01zxtr

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Mon 21 Apr 2014 Day 111 ---

----- 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
00 00 00 1040+244 15 10 13 33.0 266.9 4.4 41.0 0 0 00 00 00
00 14 30 --- 15 24 45 30.8 269.8 4.7 41.1 870 28 00 00 01
00 15 00 1040+244 15 25 15 30.7 269.9 4.7 41.1 24 28 00 15 00
00 25 00 --- 15 35 17 29.2 271.9 4.9 41.1 600 47 00 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
00 30 00 1040+244 15 40 18 28.5 272.9 4.9 41.1 293 47 00 30 00
00 44 30 --- 15 54 50 26.3 275.7 5.2 40.9 870 75 00 30 01
00 45 00 1040+244 15 55 20 26.2 275.8 5.2 40.9 24 75 00 45 00
01 00 00 --- 16 10 23 24.0 278.7 5.4 40.5 900 104 00 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	1	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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	6	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 6 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 6

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1040+244	10 40 25.199377	* 10 43 09.035778	10 43 56.946033	0.00
J1043+2408	24 24 19.59847	* 24 08 35.40933	24 03 58.87833	0.00

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)
1040+244	121.2

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

rk01zytr

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: C&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
 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 21 Apr 2014 Day 111 ---

----- 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

```
03 00 00 0906+430    18 10 42  13.4 -32.2  9.0      25.9    0      0    03 00 00
03 14 30 ---         18 25 15  12.3 -29.7  9.2      23.9   870    28    03 00 01

03 15 00 0906+430    18 25 45  12.3 -29.6  9.3      23.9    24    28    03 15 00
03 25 00 ---         18 35 47  11.5 -27.9  9.4      22.5   600    47    03 15 01
```

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
 Next BBC frequencies: 732.00 732.00 732.00 732.00

```
03 30 00 0906+430    18 40 47  11.2 -27.0  9.5      21.8   294    47    03 30 00
03 44 30 ---         18 55 20  10.2 -24.5  9.7      19.8   870    75    03 30 01

03 45 00 0906+430    18 55 50  10.2 -24.4  9.8      19.8    24    75    03 45 00
04 00 00 ---         19 10 52   9.3 -21.7 10.0      17.7   900   104    03 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	1	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: 6 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: 6

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	7	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  7  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  7

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0906+430	09 06 17.256145	* 09 09 33.497149	09 10 30.130238	0.00
J0909+4253	43 05 59.00858	* 42 53 46.48205	42 50 15.00626	0.00

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)
0906+430	95.3

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

RA KSP: STRUCTURE AND PHYSICS OF COMPACT JETS

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Observing mode: K-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RA KSP: Structure and physics of compact jets

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

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
-----
```

--- Mon 21 Apr 2014 Day 111 ---

----- Space segment 03: K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
 Next BBC frequencies: 736.00 736.00 736.00 736.00
 Next scan bandwidths: 16.00 16.00 16.00 16.00

14 20 00	1641+399	05 32 34	3.5	9.4-11.2	-7.3	0	0	14 20 00
14 34 30	---	05 47 07	3.9	12.2-10.9	-9.5	870	28	14 20 01
14 35 00	1641+399	05 47 37	3.9	12.3-10.9	-9.6	24	28	14 35 00
14 49 30	---	06 02 09	4.4	15.0-10.7	-11.7	870	56	14 35 01
14 50 30	1641+399	06 03 09	4.5	15.2-10.7	-11.8	54	56	14 50 30
14 55 00	---	06 07 40	4.6	16.1-10.6	-12.5	270	64	14 50 31
14 55 30	1641+399	06 08 10	4.7	16.2-10.6	-12.6	24	64	14 55 30
15 00 00	---	06 12 41	4.9	17.0-10.5	-13.2	270	73	14 55 31
15 00 30	1641+399	06 13 11	4.9	17.1-10.5	-13.3	24	73	15 00 30
15 05 00	---	06 17 42	5.1	18.0-10.4	-13.9	270	82	15 00 31
15 05 30	1641+399	06 18 12	5.1	18.0-10.4	-14.0	24	82	15 05 30
15 10 00	---	06 22 42	5.3	18.9-10.3	-14.7	270	90	15 05 31
15 10 30	1641+399	06 23 12	5.3	19.0-10.3	-14.7	24	90	15 10 30
15 15 00	---	06 27 43	5.6	19.8-10.3	-15.4	270	99	15 10 31
15 15 30	1641+399	06 28 13	5.6	19.9-10.3	-15.4	24	99	15 15 30
15 20 00	---	06 32 44	5.8	20.8-10.2	-16.1	270	108	15 15 31
15 20 30	1641+399	06 33 14	5.9	20.9-10.2	-16.1	24	108	15 20 30
15 25 00	---	06 37 45	6.1	21.7-10.1	-16.8	270	116	15 20 31

Schedule for TORUN (Code Tr)

Page 3

RA KSP: Structure and physics of compact jets

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

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
--- Mon 21 Apr 2014 Day 111 ---										
15 25 30	1641+399	06 38 15	6.1	21.8-10.1			-16.9	24	116	15 25 30
15 30 00	---	06 42 46	6.4	22.6-10.0			-17.5	270	125	15 25 31
15 30 30	1641+399	06 43 16	6.4	22.7-10.0			-17.6	24	125	15 30 30
15 35 00	---	06 47 46	6.7	23.5 -9.9			-18.2	270	133	15 30 31
15 35 30	1641+399	06 48 17	6.7	23.6 -9.9			-18.3	24	133	15 35 30
15 40 00	---	06 52 47	7.0	24.5 -9.8			-18.9	270	142	15 35 31
15 40 30	1641+399	06 53 17	7.0	24.5 -9.8			-18.9	24	142	15 40 30
15 45 00	---	06 57 48	7.3	25.4 -9.8			-19.6	270	151	15 40 31
15 45 30	1641+399	06 58 18	7.3	25.5 -9.8			-19.6	24	151	15 45 30
15 50 00	---	07 02 49	7.6	26.3 -9.7			-20.2	270	159	15 45 31
15 50 30	1641+399	07 03 19	7.7	26.4 -9.7			-20.3	24	159	15 50 30
15 55 00	---	07 07 50	8.0	27.2 -9.6			-20.9	270	168	15 50 31
15 55 30	1641+399	07 08 20	8.0	27.3 -9.6			-21.0	24	168	15 55 30
15 59 30	---	07 12 21	8.3	28.0 -9.5			-21.5	240	176	15 55 31
16 00 00	1641+399	07 12 51	8.3	28.1 -9.5			-21.6	24	176	16 00 00
16 04 30	---	07 17 21	8.6	28.9 -9.4			-22.2	270	184	16 00 01
----- Space segment 04: K-band VLBI scans -----										
16 05 00	1641+399	07 17 51	8.7	29.0 -9.4			-22.3	24	184	16 05 00
16 19 30	---	07 32 24	9.8	31.6 -9.2			-24.2	870	212	16 05 01
16 20 00	1641+399	07 32 54	9.8	31.7 -9.2			-24.2	24	212	16 20 00
16 34 30	---	07 47 26	11.0	34.3 -8.9			-26.1	870	240	16 20 01
16 35 30	1641+399	07 48 26	11.1	34.4 -8.9			-26.2	54	240	16 35 30
16 40 00	---	07 52 57	11.5	35.2 -8.8			-26.8	270	249	16 35 31
16 40 30	1641+399	07 53 27	11.5	35.3 -8.8			-26.9	24	249	16 40 30
16 45 00	---	07 57 58	11.9	36.1 -8.8			-27.4	270	257	16 40 31
16 45 30	1641+399	07 58 28	12.0	36.2 -8.8			-27.5	24	257	16 45 30
16 50 00	---	08 02 59	12.4	37.0 -8.7			-28.0	270	266	16 45 31
16 50 30	1641+399	08 03 29	12.4	37.1 -8.7			-28.1	24	266	16 50 30
16 55 00	---	08 08 00	12.8	37.9 -8.6			-28.7	270	275	16 50 31
16 55 30	1641+399	08 08 30	12.9	37.9 -8.6			-28.7	24	275	16 55 30
17 00 00	---	08 13 00	13.3	38.7 -8.5			-29.3	270	283	16 55 31

Schedule for TORUN (Code Tr)

Page 4

RA KSP: Structure and physics of compact jets

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

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
--- Mon 21 Apr 2014 Day 111 ---										
17 00 30	1641+399	08 13 31	13.3	38.8	-8.5		-29.3	24	283	17 00 30
17 05 00	---	08 18 01	13.8	39.6	-8.4		-29.9	270	292	17 00 31
17 05 30	1641+399	08 18 31	13.8	39.7	-8.4		-29.9	24	292	17 05 30
17 10 00	---	08 23 02	14.3	40.4	-8.3		-30.5	270	300	17 05 31
17 10 30	1641+399	08 23 32	14.3	40.5	-8.3		-30.5	24	300	17 10 30
17 15 00	---	08 28 03	14.7	41.3	-8.3		-31.0	270	309	17 10 31
17 15 30	1641+399	08 28 33	14.8	41.4	-8.2		-31.1	24	309	17 15 30
17 20 00	---	08 33 04	15.2	42.1	-8.2		-31.6	270	318	17 15 31
17 20 30	1641+399	08 33 34	15.3	42.2	-8.2		-31.7	24	318	17 20 30
17 25 00	---	08 38 05	15.8	43.0	-8.1		-32.2	270	326	17 20 31
17 25 30	1641+399	08 38 35	15.8	43.1	-8.1		-32.3	24	326	17 25 30
17 30 00	---	08 43 05	16.3	43.8	-8.0		-32.8	270	335	17 25 31
17 30 30	1641+399	08 43 35	16.3	43.9	-8.0		-32.8	24	335	17 30 30
17 35 00	---	08 48 06	16.8	44.7	-7.9		-33.3	270	344	17 30 31
17 35 30	1641+399	08 48 36	16.9	44.8	-7.9		-33.4	24	344	17 35 30
17 40 00	---	08 53 07	17.3	45.5	-7.8		-33.9	270	352	17 35 31
17 40 30	1641+399	08 53 37	17.4	45.6	-7.8		-33.9	24	352	17 40 30
17 44 30	---	08 57 38	17.8	46.3	-7.8		-34.4	240	360	17 40 31
17 45 00	1641+399	08 58 08	17.9	46.4	-7.8		-34.4	24	360	17 45 00
17 49 30	---	09 02 39	18.4	47.1	-7.7		-34.9	270	369	17 45 01
----- Space segment 05: K-band VLBI scans -----										
17 50 00	1641+399	09 03 09	18.4	47.2	-7.7		-35.0	24	369	17 50 00
18 04 30	---	09 17 41	20.1	49.6	-7.4		-36.5	870	396	17 50 01
18 05 00	1641+399	09 18 11	20.1	49.7	-7.4		-36.6	24	396	18 05 00
18 19 30	---	09 32 44	21.8	52.1	-7.2		-38.0	870	424	18 05 01
18 20 30	1641+399	09 33 44	21.9	52.2	-7.2		-38.1	54	424	18 20 30
18 25 00	---	09 38 14	22.5	52.9	-7.1		-38.6	270	433	18 20 31
18 25 30	1641+399	09 38 44	22.5	53.0	-7.1		-38.6	24	433	18 25 30
18 30 00	---	09 43 15	23.1	53.8	-7.0		-39.1	270	442	18 25 31
18 30 30	1641+399	09 43 45	23.1	53.8	-7.0		-39.1	24	442	18 30 30
18 35 00	---	09 48 16	23.7	54.6	-6.9		-39.5	270	450	18 30 31

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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
--- Mon 21 Apr 2014 Day 111 ---										
18 35 30	1641+399	09 48 46	23.7	54.7	-6.9		-39.6	24	450	18 35 30
18 40 00	---	09 53 17	24.3	55.4	-6.8		-40.0	270	459	18 35 31
18 40 30	1641+399	09 53 47	24.4	55.5	-6.8		-40.1	24	459	18 40 30
18 45 00	---	09 58 18	24.9	56.2	-6.8		-40.5	270	468	18 40 31
18 45 30	1641+399	09 58 48	25.0	56.3	-6.7		-40.5	24	468	18 45 30
18 50 00	---	10 03 19	25.5	57.0	-6.7		-40.9	270	476	18 45 31
18 50 30	1641+399	10 03 49	25.6	57.1	-6.7		-41.0	24	476	18 50 30
18 55 00	---	10 08 19	26.2	57.8	-6.6		-41.4	270	485	18 50 31
18 55 30	1641+399	10 08 49	26.2	57.9	-6.6		-41.4	24	485	18 55 30
19 00 00	---	10 13 20	26.8	58.6	-6.5		-41.8	270	493	18 55 31
19 00 30	1641+399	10 13 50	26.9	58.7	-6.5		-41.9	24	493	19 00 30
19 05 00	---	10 18 21	27.5	59.4	-6.4		-42.3	270	502	19 00 31
19 05 30	1641+399	10 18 51	27.5	59.5	-6.4		-42.3	24	502	19 05 30
19 10 00	---	10 23 22	28.1	60.2	-6.3		-42.7	270	511	19 05 31
19 10 30	1641+399	10 23 52	28.2	60.3	-6.3		-42.7	24	511	19 10 30
19 15 00	---	10 28 23	28.8	61.0	-6.3		-43.1	270	519	19 10 31
19 15 30	1641+399	10 28 53	28.8	61.1	-6.2		-43.2	24	519	19 15 30
19 20 00	---	10 33 23	29.4	61.8	-6.2		-43.5	270	528	19 15 31
19 20 30	1641+399	10 33 54	29.5	61.9	-6.2		-43.6	24	528	19 20 30
19 25 00	---	10 38 24	30.1	62.6	-6.1		-43.9	270	537	19 20 31
19 25 30	1641+399	10 38 54	30.2	62.7	-6.1		-44.0	24	537	19 25 30
19 29 30	---	10 42 55	30.7	63.3	-6.0		-44.3	240	544	19 25 31
19 30 00	1641+399	10 43 25	30.8	63.4	-6.0		-44.3	24	544	19 30 00
19 34 30	---	10 47 56	31.4	64.1	-5.9		-44.7	270	553	19 30 01
----- Space segment 06: K-band VLBI scans -----										
19 35 00	1641+399	10 48 26	31.4	64.2	-5.9		-44.7	24	553	19 35 00
19 49 30	---	11 02 58	33.4	66.6	-5.7		-45.8	870	581	19 35 01
19 50 00	1641+399	11 03 28	33.5	66.6	-5.7		-45.8	24	581	19 50 00
20 04 30	---	11 18 01	35.5	69.0	-5.4		-46.8	870	609	19 50 01
----- Ground segment 06: K-band VLBI scans -----										
20 05 30	1641+399	11 19 01	35.7	69.1	-5.4		-46.9	54	609	20 05 30
20 10 00	---	11 23 32	36.3	69.9	-5.3		-47.2	270	617	20 05 31

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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
--- Mon 21 Apr 2014 Day 111 ---										
20 10 30	1641+399	11 24 02	36.4	69.9	-5.3		-47.2	24	617	20 10 30
20 15 00	---	11 28 32	37.0	70.7	-5.2		-47.5	270	626	20 10 31
20 15 30	1641+399	11 29 03	37.1	70.8	-5.2		-47.5	24	626	20 15 30
20 20 00	---	11 33 33	37.7	71.5	-5.2		-47.8	270	635	20 15 31
20 20 30	1641+399	11 34 03	37.8	71.6	-5.2		-47.8	24	635	20 20 30
20 25 00	---	11 38 34	38.4	72.3	-5.1		-48.1	270	643	20 20 31
20 25 30	1641+399	11 39 04	38.5	72.4	-5.1		-48.1	24	643	20 25 30
20 30 00	---	11 43 35	39.1	73.1	-5.0		-48.4	270	652	20 25 31
20 30 30	1641+399	11 44 05	39.2	73.2	-5.0		-48.4	24	652	20 30 30
20 35 00	---	11 48 36	39.9	74.0	-4.9		-48.7	270	660	20 30 31
20 35 30	1641+399	11 49 06	39.9	74.0	-4.9		-48.7	24	660	20 35 30
20 40 00	---	11 53 37	40.6	74.8	-4.8		-48.9	270	669	20 35 31
20 40 30	1641+399	11 54 07	40.7	74.9	-4.8		-49.0	24	669	20 40 30
20 45 00	---	11 58 37	41.3	75.6	-4.7		-49.2	270	678	20 40 31
20 45 30	1641+399	11 59 07	41.4	75.7	-4.7		-49.2	24	678	20 45 30
20 50 00	---	12 03 38	42.0	76.5	-4.7		-49.4	270	686	20 45 31
20 50 30	1641+399	12 04 08	42.1	76.6	-4.7		-49.5	24	686	20 50 30
20 55 00	---	12 08 39	42.8	77.3	-4.6		-49.7	270	695	20 50 31
20 55 30	1641+399	12 09 09	42.9	77.4	-4.6		-49.7	24	695	20 55 30
21 00 00	---	12 13 40	43.5	78.2	-4.5		-49.9	270	704	20 55 31
21 00 30	1641+399	12 14 10	43.6	78.3	-4.5		-49.9	24	704	21 00 30
21 05 00	---	12 18 41	44.3	79.0	-4.4		-50.1	270	712	21 00 31
21 05 30	1641+399	12 19 11	44.3	79.1	-4.4		-50.1	24	712	21 05 30
21 10 00	---	12 23 42	45.0	79.9	-4.3		-50.3	270	721	21 05 31
21 10 30	1641+399	12 24 12	45.1	80.0	-4.3		-50.3	24	721	21 10 30
21 15 00	---	12 28 42	45.7	80.8	-4.2		-50.5	270	730	21 10 31
21 15 30	1641+399	12 29 12	45.8	80.9	-4.2		-50.5	24	730	21 15 30
21 19 30	---	12 33 13	46.4	81.6	-4.2		-50.6	240	737	21 15 31
----- Space segment 07: K-band VLBI scans -----										
21 20 00	1641+399	12 33 43	46.5	81.7	-4.2		-50.6	24	737	21 20 00
21 34 30	---	12 48 16	48.6	84.3	-3.9		-51.0	870	765	21 20 01

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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

--- Mon 21 Apr 2014 Day 111 ---

21 35 00	1641+399	12 48 46	48.7	84.4	-3.9		-51.0	24	765	21 35 00
21 49 30	---	13 03 18	50.9	87.1	-3.7		-51.3	870	793	21 35 01

----- Ground segment 07: K-band VLBI scans -----

21 50 30	1641+399	13 04 18	51.0	87.3	-3.7		-51.3	54	793	21 50 30
21 55 00	---	13 08 49	51.7	88.1	-3.6		-51.4	270	802	21 50 31
21 55 30	1641+399	13 09 19	51.8	88.2	-3.6		-51.4	24	802	21 55 30
22 00 00	---	13 13 50	52.5	89.1	-3.5		-51.4	270	810	21 55 31
22 00 30	1641+399	13 14 20	52.6	89.2	-3.5		-51.4	24	810	22 00 30
22 05 00	---	13 18 51	53.2	90.1	-3.4		-51.4	270	819	22 00 31
22 05 30	1641+399	13 19 21	53.3	90.2	-3.4		-51.4	24	819	22 05 30
22 10 00	---	13 23 51	54.0	91.1	-3.3		-51.4	270	828	22 05 31
22 10 30	1641+399	13 24 21	54.1	91.2	-3.3		-51.4	24	828	22 10 30
22 15 00	---	13 28 52	54.7	92.2	-3.2		-51.3	270	836	22 10 31
22 15 30	1641+399	13 29 22	54.8	92.3	-3.2		-51.3	24	836	22 15 30
22 20 00	---	13 33 53	55.5	93.2	-3.2		-51.3	270	845	22 15 31
22 20 30	1641+399	13 34 23	55.6	93.3	-3.2		-51.3	24	845	22 20 30
22 25 00	---	13 38 54	56.2	94.3	-3.1		-51.2	270	853	22 20 31
22 25 30	1641+399	13 39 24	56.3	94.4	-3.1		-51.2	24	853	22 25 30
22 30 00	---	13 43 55	57.0	95.4	-3.0		-51.1	270	862	22 25 31
22 30 30	1641+399	13 44 25	57.1	95.5	-3.0		-51.1	24	862	22 30 30
22 35 00	---	13 48 55	57.7	96.5	-2.9		-50.9	270	871	22 30 31
22 35 30	1641+399	13 49 26	57.8	96.6	-2.9		-50.9	24	871	22 35 30
22 40 00	---	13 53 56	58.5	97.7	-2.8		-50.8	270	879	22 35 31
22 40 30	1641+399	13 54 26	58.6	97.8	-2.8		-50.7	24	879	22 40 30
22 45 00	---	13 58 57	59.2	98.8	-2.7		-50.5	270	888	22 40 31
22 45 30	1641+399	13 59 27	59.3	99.0	-2.7		-50.5	24	888	22 45 30
22 50 00	---	14 03 58	60.0	100.1	-2.7		-50.3	270	897	22 45 31
22 50 30	1641+399	14 04 28	60.0	100.2	-2.7		-50.3	24	897	22 50 30
22 55 00	---	14 08 59	60.7	101.3	-2.6		-50.0	270	905	22 50 31

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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
--- Mon 21 Apr 2014 Day 111 ---										
22 55 30	1641+399	14 09 29	60.8	101.4	-2.6		-50.0	24	905	22 55 30
23 00 00	---	14 14 00	61.4	102.6	-2.5		-49.7	270	914	22 55 31
23 00 30	1641+399	14 14 30	61.5	102.7	-2.5		-49.7	24	914	23 00 30
23 05 00	---	14 19 00	62.2	103.9	-2.4		-49.3	270	923	23 00 31
23 05 30	1641+399	14 19 30	62.3	104.0	-2.4		-49.3	24	923	23 05 30
23 09 30	---	14 23 31	62.8	105.1	-2.3		-49.0	240	930	23 05 31
----- Space segment 08: K-band VLBI scans -----										
23 10 00	1641+399	14 24 01	62.9	105.3	-2.3		-48.9	24	930	23 10 00
23 24 30	---	14 38 34	65.0	109.5	-2.1		-47.4	870	958	23 10 01
23 25 00	1641+399	14 39 04	65.1	109.7	-2.1		-47.4	24	958	23 25 00
23 39 30	---	14 53 36	67.1	114.4	-1.8		-45.4	870	986	23 25 01
----- Ground segment 08: K-band VLBI scans -----										
23 40 30	1641+399	14 54 36	67.2	114.8	-1.8		-45.2	53	986	23 40 30
23 45 00	---	14 59 07	67.8	116.4	-1.7		-44.4	270	995	23 40 31
23 45 30	1641+399	14 59 37	67.9	116.6	-1.7		-44.3	24	995	23 45 30
23 50 00	---	15 04 08	68.5	118.2	-1.7		-43.5	270	1003	23 45 31
23 50 30	1641+399	15 04 38	68.6	118.4	-1.6		-43.4	24	1003	23 50 30
23 55 00	---	15 09 09	69.2	120.2	-1.6		-42.5	270	1012	23 50 31
23 55 30	1641+399	15 09 39	69.2	120.4	-1.6		-42.4	24	1012	23 55 30
23 59 59	---	15 14 09	69.8	122.2	-1.5		-41.4	269	1020	23 55 31
--- Tue 22 Apr 2014 Day 112 ---										
00 00 30	1641+399	15 14 40	69.9	122.5	-1.5		-41.3	23	1020	00 00 30
00 05 00	---	15 19 10	70.4	124.4	-1.4		-40.2	270	1029	00 00 31
00 05 30	1641+399	15 19 40	70.5	124.6	-1.4		-40.0	23	1029	00 05 30
00 10 00	---	15 24 11	71.0	126.6	-1.3		-38.8	270	1038	00 05 31
00 10 30	1641+399	15 24 41	71.1	126.9	-1.3		-38.7	23	1038	00 10 30
00 15 00	---	15 29 12	71.6	129.0	-1.2		-37.4	270	1046	00 10 31
00 15 30	1641+399	15 29 42	71.7	129.3	-1.2		-37.2	23	1046	00 15 30
00 20 00	---	15 34 13	72.2	131.5	-1.2		-35.8	270	1055	00 15 31

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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 22 Apr 2014 Day 112 ---										
00 20 30	1641+399	15 34 43	72.3	131.8	-1.1		-35.7	23	1055	00 20 30
00 25 00	---	15 39 14	72.8	134.1	-1.1		-34.1	270	1064	00 20 31
00 25 30	1641+399	15 39 44	72.8	134.4	-1.1		-33.9	23	1064	00 25 30
00 30 00	---	15 44 14	73.3	136.9	-1.0		-32.3	270	1072	00 25 31
00 30 30	1641+399	15 44 44	73.3	137.2	-1.0		-32.1	23	1072	00 30 30
00 35 00	---	15 49 15	73.8	139.8	-0.9		-30.3	270	1081	00 30 31
00 35 30	1641+399	15 49 45	73.8	140.1	-0.9		-30.1	23	1081	00 35 30
00 40 00	---	15 54 16	74.3	142.8	-0.8		-28.2	270	1090	00 35 31
00 40 30	1641+399	15 54 46	74.3	143.2	-0.8		-27.9	23	1090	00 40 30
00 45 00	---	15 59 17	74.7	146.1	-0.7		-25.9	270	1098	00 40 31
00 45 30	1641+399	15 59 47	74.7	146.4	-0.7		-25.6	23	1098	00 45 30
00 50 00	---	16 04 18	75.1	149.4	-0.7		-23.4	270	1107	00 45 31
00 50 30	1641+399	16 04 48	75.1	149.8	-0.6		-23.2	23	1107	00 50 30
00 54 30	---	16 08 48	75.4	152.6	-0.6		-21.1	240	1115	00 50 31
----- Space segment 09: K-band VLBI scans -----										
00 55 00	1641+399	16 09 18	75.5	152.9	-0.6		-20.8	23	1115	00 55 00
01 09 30	---	16 23 51	76.3	163.9	-0.3		-12.5	870	1142	00 55 01
01 10 00	1641+399	16 24 21	76.3	164.3	-0.3		-12.2	23	1142	01 10 00
01 24 30	---	16 38 53	76.7	176.2	-0.1		-3.0	870	1170	01 10 01
----- Ground segment 09: K-band VLBI scans -----										
01 25 30	1641+399	16 39 53	76.7	177.0	-0.1		-2.3	52	1170	01 25 30
01 30 00	---	16 44 24	76.7	180.8	0.0		0.6	270	1179	01 25 31
01 30 30	1641+399	16 44 54	76.7	181.2	0.0		0.9	22	1179	01 30 30
01 35 00	---	16 49 25	76.6	184.9	0.1		3.9	270	1188	01 30 31
01 35 30	1641+399	16 49 55	76.6	185.4	0.1		4.2	22	1188	01 35 30
01 40 00	---	16 54 26	76.6	189.1	0.2		7.1	270	1196	01 35 31
01 40 30	1641+399	16 54 56	76.5	189.5	0.2		7.4	22	1196	01 40 30
01 45 00	---	16 59 27	76.4	193.2	0.3		10.2	270	1205	01 40 31
01 45 30	1641+399	16 59 57	76.4	193.6	0.3		10.6	23	1205	01 45 30
01 50 00	---	17 04 28	76.2	197.1	0.3		13.3	270	1213	01 45 31

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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 22 Apr 2014 Day 112 ---										
01 50 30	1641+399	17 04 58	76.2	197.5	0.4		13.6	23	1213	01 50 30
01 55 00	---	17 09 28	76.0	201.0	0.4		16.3	270	1222	01 50 31
01 55 30	1641+399	17 09 58	75.9	201.4	0.4		16.6	23	1222	01 55 30
02 00 00	---	17 14 29	75.7	204.8	0.5		19.1	270	1231	01 55 31
02 00 30	1641+399	17 14 59	75.6	205.1	0.5		19.4	23	1231	02 00 30
02 05 00	---	17 19 30	75.3	208.4	0.6		21.8	270	1239	02 00 31
02 05 30	1641+399	17 20 00	75.3	208.7	0.6		22.1	23	1239	02 05 30
02 10 00	---	17 24 31	75.0	211.8	0.7		24.3	270	1248	02 05 31
02 10 30	1641+399	17 25 01	74.9	212.2	0.7		24.6	23	1248	02 10 30
02 15 00	---	17 29 32	74.5	215.1	0.8		26.7	270	1257	02 10 31
02 15 30	1641+399	17 30 02	74.5	215.5	0.8		27.0	23	1257	02 15 30
02 20 00	---	17 34 32	74.1	218.3	0.9		29.0	270	1265	02 15 31
02 20 30	1641+399	17 35 03	74.0	218.6	0.9		29.2	23	1265	02 20 30
02 25 00	---	17 39 33	73.6	221.3	0.9		31.0	270	1274	02 20 31
02 25 30	1641+399	17 40 03	73.6	221.6	0.9		31.2	23	1274	02 25 30
02 30 00	---	17 44 34	73.1	224.1	1.0		33.0	270	1283	02 25 31
02 30 30	1641+399	17 45 04	73.1	224.4	1.0		33.2	23	1283	02 30 30
02 35 00	---	17 49 35	72.6	226.8	1.1		34.8	270	1291	02 30 31
02 35 30	1641+399	17 50 05	72.5	227.1	1.1		34.9	23	1291	02 35 30
02 39 30	---	17 54 06	72.1	229.2	1.2		36.2	240	1299	02 35 31
----- Space segment 10: K-band VLBI scans -----										
02 40 00	1641+399	17 54 36	72.0	229.4	1.2		36.4	23	1299	02 40 00
02 54 00	---	18 08 38	70.3	236.0	1.4		40.4	840	1326	02 40 01
02 55 00	1641+399	18 09 38	70.2	236.4	1.4		40.6	53	1326	02 55 00
03 09 30	---	18 24 11	68.3	242.3	1.7		43.8	870	1354	02 55 01
03 10 30	1641+399	18 25 11	68.2	242.6	1.7		43.9	53	1354	03 10 30
03 15 00	---	18 29 41	67.6	244.3	1.8		44.7	270	1362	03 10 31
03 15 30	1641+399	18 30 12	67.5	244.5	1.8		44.8	24	1362	03 15 30
03 20 00	---	18 34 42	66.9	246.0	1.9		45.6	270	1371	03 15 31

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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 22 Apr 2014 Day 112 ---										
03 20 30	1641+399	18 35 12	66.8	246.2	1.9		45.6	24	1371	03 20 30
03 25 00	---	18 39 43	66.2	247.7	1.9		46.3	270	1380	03 20 31
03 25 30	1641+399	18 40 13	66.1	247.9	1.9		46.4	24	1380	03 25 30
03 30 00	---	18 44 44	65.5	249.3	2.0		47.0	270	1388	03 25 31
03 30 30	1641+399	18 45 14	65.4	249.5	2.0		47.0	24	1388	03 30 30
03 35 00	---	18 49 45	64.8	250.9	2.1		47.6	270	1397	03 30 31
03 35 30	1641+399	18 50 15	64.7	251.0	2.1		47.6	24	1397	03 35 30
03 40 00	---	18 54 46	64.1	252.4	2.2		48.1	270	1405	03 35 31
03 40 30	1641+399	18 55 16	64.0	252.5	2.2		48.2	24	1405	03 40 30
03 45 00	---	18 59 46	63.4	253.8	2.3		48.6	270	1414	03 40 31
03 45 30	1641+399	19 00 16	63.3	254.0	2.3		48.7	24	1414	03 45 30
03 50 00	---	19 04 47	62.6	255.2	2.4		49.1	270	1423	03 45 31
03 50 30	1641+399	19 05 17	62.6	255.4	2.4		49.1	24	1423	03 50 30
03 55 00	---	19 09 48	61.9	256.6	2.4		49.5	270	1431	03 50 31
03 55 30	1641+399	19 10 18	61.8	256.7	2.4		49.5	24	1431	03 55 30
04 00 00	---	19 14 49	61.2	257.9	2.5		49.8	270	1440	03 55 31
04 00 30	1641+399	19 15 19	61.1	258.0	2.5		49.9	24	1440	04 00 30
04 05 00	---	19 19 50	60.4	259.2	2.6		50.1	270	1449	04 00 31
04 05 30	1641+399	19 20 20	60.4	259.3	2.6		50.2	24	1449	04 05 30
04 10 00	---	19 24 51	59.7	260.4	2.7		50.4	270	1457	04 05 31
04 10 30	1641+399	19 25 21	59.6	260.5	2.7		50.4	24	1457	04 10 30
04 15 00	---	19 29 51	59.0	261.6	2.8		50.6	270	1466	04 10 31
04 15 30	1641+399	19 30 21	58.9	261.7	2.8		50.6	24	1466	04 15 30
04 20 00	---	19 34 52	58.2	262.8	2.9		50.8	270	1475	04 15 31
04 20 30	1641+399	19 35 22	58.1	262.9	2.9		50.8	24	1475	04 20 30
04 24 30	---	19 39 23	57.5	263.8	2.9		51.0	240	1482	04 20 31
----- Space segment 11: K-band VLBI scans -----										
04 25 00	1641+399	19 39 53	57.5	263.9	2.9		51.0	24	1482	04 25 00
04 34 00	---	19 48 54	56.1	265.9	3.1		51.2	540	1500	04 25 01

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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 22 Apr 2014 Day 112 ---										
04 35 00	1641+399	19 49 55	56.0	266.1	3.1		51.2	54	1500	04 35 00
04 44 30	---	19 59 26	54.5	268.1	3.3		51.3	570	1518	04 35 01
04 55 30	1641+399	20 10 28	52.9	270.4	3.4		51.4	653	1518	04 55 30
05 00 00	---	20 14 59	52.2	271.2	3.5		51.4	270	1526	04 55 31
05 00 30	1641+399	20 15 29	52.1	271.3	3.5		51.4	24	1526	05 00 30
05 05 00	---	20 20 00	51.5	272.2	3.6		51.3	270	1535	05 00 31
05 05 30	1641+399	20 20 30	51.4	272.3	3.6		51.3	24	1535	05 05 30
05 10 00	---	20 25 00	50.7	273.2	3.7		51.3	270	1544	05 05 31
05 10 30	1641+399	20 25 30	50.6	273.3	3.7		51.3	24	1544	05 10 30
05 15 00	---	20 30 01	49.9	274.1	3.8		51.2	270	1552	05 10 31
05 15 30	1641+399	20 30 31	49.9	274.2	3.8		51.2	24	1552	05 15 30
05 20 00	---	20 35 02	49.2	275.1	3.9		51.1	270	1561	05 15 31
05 20 30	1641+399	20 35 32	49.1	275.1	3.9		51.1	24	1561	05 20 30
05 25 00	---	20 40 03	48.4	276.0	3.9		51.0	270	1570	05 20 31
05 25 30	1641+399	20 40 33	48.4	276.1	4.0		51.0	24	1570	05 25 30
05 30 00	---	20 45 04	47.7	276.9	4.0		50.9	270	1578	05 25 31
05 30 30	1641+399	20 45 34	47.6	277.0	4.0		50.9	24	1578	05 30 30
05 35 00	---	20 50 04	47.0	277.8	4.1		50.7	270	1587	05 30 31
05 35 30	1641+399	20 50 35	46.9	277.9	4.1		50.7	24	1587	05 35 30
05 40 00	---	20 55 05	46.2	278.7	4.2		50.6	270	1596	05 35 31
05 40 30	1641+399	20 55 35	46.1	278.8	4.2		50.6	24	1596	05 40 30
05 45 00	---	21 00 06	45.5	279.5	4.3		50.4	270	1604	05 40 31
05 45 30	1641+399	21 00 36	45.4	279.6	4.3		50.4	24	1604	05 45 30
05 50 00	---	21 05 07	44.7	280.4	4.4		50.2	270	1613	05 45 31
05 50 30	1641+399	21 05 37	44.7	280.5	4.4		50.2	24	1613	05 50 30
05 55 00	---	21 10 08	44.0	281.3	4.4		50.0	270	1621	05 50 31
05 55 30	1641+399	21 10 38	43.9	281.4	4.5		50.0	24	1621	05 55 30
06 00 00	---	21 15 09	43.2	282.1	4.5		49.8	270	1630	05 55 31
06 00 30	1641+399	21 15 39	43.2	282.2	4.5		49.8	24	1630	06 00 30
06 05 00	---	21 20 09	42.5	283.0	4.6		49.6	270	1639	06 00 31

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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 22 Apr 2014 Day 112 ---										
06 05 30	1641+399	21 20 39	42.4	283.1	4.6		49.6	24	1639	06 05 30
06 10 00	---	21 25 10	41.8	283.8	4.7		49.4	270	1647	06 05 31
06 10 30	1641+399	21 25 40	41.7	283.9	4.7		49.3	24	1647	06 10 30
06 15 00	---	21 30 11	41.1	284.7	4.8		49.1	270	1656	06 10 31
06 15 30	1641+399	21 30 41	41.0	284.8	4.8		49.1	24	1656	06 15 30
06 19 30	---	21 34 42	40.4	285.4	4.9		48.9	240	1664	06 15 31
----- Space segment 12: K-band VLBI scans -----										
06 20 00	1641+399	21 35 12	40.3	285.5	4.9		48.8	24	1664	06 20 00
06 34 30	---	21 49 44	38.2	287.9	5.1		48.0	870	1692	06 20 01
06 35 00	1641+399	21 50 14	38.2	288.0	5.1		48.0	24	1692	06 35 00
06 49 00	---	22 04 17	36.2	290.3	5.3		47.1	840	1718	06 35 01
06 50 00	1641+399	22 05 17	36.0	290.4	5.4		47.1	54	1718	06 50 00
07 04 30	---	22 19 49	34.0	292.8	5.6		46.1	870	1746	06 50 01
07 05 00	1641+399	22 20 19	33.9	292.9	5.6		46.1	24	1746	07 05 00
07 19 30	---	22 34 52	31.9	295.2	5.9		45.0	870	1774	07 05 01
07 20 30	1641+399	22 35 52	31.8	295.3	5.9		44.9	54	1774	07 20 30
07 25 00	---	22 40 23	31.2	296.1	5.9		44.6	270	1783	07 20 31
07 25 30	1641+399	22 40 53	31.1	296.1	6.0		44.5	24	1783	07 25 30
07 30 00	---	22 45 23	30.5	296.9	6.0		44.2	270	1791	07 25 31
07 30 30	1641+399	22 45 53	30.5	296.9	6.0		44.1	24	1791	07 30 30
07 35 00	---	22 50 24	29.9	297.7	6.1		43.8	270	1800	07 30 31
07 35 30	1641+399	22 50 54	29.8	297.8	6.1		43.8	24	1800	07 35 30
07 40 00	---	22 55 25	29.2	298.5	6.2		43.4	270	1809	07 35 31
07 40 30	1641+399	22 55 55	29.1	298.6	6.2		43.3	24	1809	07 40 30
07 45 00	---	23 00 26	28.5	299.3	6.3		43.0	270	1817	07 40 31
07 45 30	1641+399	23 00 56	28.5	299.4	6.3		42.9	24	1817	07 45 30
07 50 00	---	23 05 27	27.9	300.1	6.4		42.5	270	1826	07 45 31
07 50 30	1641+399	23 05 57	27.8	300.2	6.4		42.5	24	1826	07 50 30
07 55 00	---	23 10 27	27.2	300.9	6.4		42.1	270	1835	07 50 31
07 55 30	1641+399	23 10 58	27.2	301.0	6.5		42.1	24	1835	07 55 30
08 00 00	---	23 15 28	26.6	301.7	6.5		41.7	270	1843	07 55 31

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./gl038d_freq_sess313rdbe.dat:
tr1cm

Setup group: 33	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=	21500.00	21500.00	21500.00	21500.00
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: 53	Setup file default.	Used with PCAL = 1MHz		
LO sum=	22236.00	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00	16.00
Matching frequency sets:	53			

Track assignments are:

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

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1641+399	16 41 17.606226	* 16 42 58.809963	16 43 29.211293	0.00
J1642+3948	39 54 10.81479	* 39 48 36.99385	39 46 56.30338	0.00

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)
1641+399	115.5

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	22.0 GHz	9. deg
5.0 GHz	23. deg	43.0 GHz	6. deg

rk01zztr

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 22 Apr 2014 Day 112 ---

----- 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

18 00 00 0805-077 09 17 07 27.3 199.1 1.1 11.4 0 0 18 00 00
18 14 30 --- 09 31 39 26.5 203.0 1.4 13.7 870 28 18 00 01
18 15 00 0805-077 09 32 09 26.5 203.1 1.4 13.8 24 28 18 15 00
18 25 00 --- 09 42 11 25.9 205.8 1.6 15.3 600 47 18 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00

18 30 00 0805-077 09 47 12 25.5 207.1 1.6 16.1 293 47 18 30 00
18 44 30 --- 10 01 44 24.5 210.9 1.9 18.2 870 75 18 30 01
18 45 00 0805-077 10 02 14 24.4 211.1 1.9 18.2 24 75 18 45 00
19 00 00 --- 10 17 17 23.2 214.9 2.1 20.3 900 104 18 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	8	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  7  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  7

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0805-077	08 05 49.552833	* 08 08 15.536034	08 08 57.722876	0.00
J0808-0751	-07 42 22.40698	*-07 51 09.88656	-07 54 00.22045	0.00

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)
0805-077	93.5

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

rk01a0tr

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Wed 23 Apr 2014 Day 113 ---

----- 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

13 00 00 0906+015 04 20 14 11.5 103.4 -4.8 -35.7 0 0 13 00 00
13 14 30 --- 04 34 47 13.6 106.5 -4.6 -35.2 870 28 13 00 01
13 15 00 0906+015 04 35 17 13.7 106.6 -4.6 -35.1 24 28 13 15 00
13 25 00 --- 04 45 18 15.1 108.7 -4.4 -34.7 600 47 13 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00

13 30 00 0906+015 04 50 19 15.8 109.8 -4.3 -34.4 293 47 13 30 00
13 44 30 --- 05 04 51 17.9 112.9 -4.1 -33.6 870 75 13 30 01
13 45 00 0906+015 05 05 22 17.9 113.0 -4.1 -33.6 24 75 13 45 00
14 00 00 --- 05 20 24 20.0 116.4 -3.8 -32.6 900 104 13 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	5	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: 8 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: 8

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	11	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 10 Setup file default. Used with PCAL = 1MHz
LO sum=      1668.00  1668.00  1668.00  1668.00
BBC fr=       732.00   732.00   732.00   732.00
Bandwd=       16.00   16.00   16.00   16.00
Matching frequency sets: 10

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0906+015	09 06 35.181592	* 09 09 10.091598	09 09 55.121028	0.00
J0909+0121	01 33 48.12919	* 01 21 35.61771	01 17 50.64997	0.00

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)
0906+015	105.7

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

rk01a1tr

RADIOASTRON AGN SURVEY

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Wed 23 Apr 2014 Day 113 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with 11 columns: Start UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, SYNC. It lists observation times and parameters for source 0805-077.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 8 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 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)
* 0805-077	08 05 49.552833	* 08 08 15.536034	08 08 57.705770	0.00
J0808-0751	-07 42 22.40698	*-07 51 09.88656	-07 54 00.15355	0.00

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)
0805-077	92.6

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

rk01a3tr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: C&L-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

--- Thu 24 Apr 2014 Day 114 ---

----- 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

19 00 00 0823+033    10 25 10 34.4 216.7 2.0    21.1    0    0    19 00 00
19 14 30 ---          10 39 42 33.0 220.8 2.2    23.1   870   28   19 00 01

19 15 00 0823+033    10 40 12 32.9 220.9 2.2    23.2   24   28   19 15 00
19 25 00 ---          10 50 14 31.9 223.6 2.4    24.5   600   47   19 15 01
```

----- L-band VLBI scans -----

```
Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies:  732.00  732.00  732.00  732.00

19 30 00 0823+033    10 55 15 31.4 225.0 2.5    25.2   293   47   19 30 00
19 44 30 ---          11 09 47 29.8 228.8 2.7    26.9   870   75   19 30 01

19 45 00 0823+033    11 10 17 29.8 228.9 2.7    26.9   24   75   19 45 00
20 00 00 ---          11 25 20 28.0 232.7 3.0    28.6   900  104   19 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	7	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 6 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 6

```

```

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)
* 0823+033	08 23 13.540326	* 08 25 50.338355	08 26 35.641957	0.00
J0825+0309	03 19 15.40169	* 03 09 24.51995	03 06 19.92558	0.00

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)
0823+033	93.6

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

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

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

--- Fri 25 Apr 2014 Day 115 ---

----- 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

16 00 00 0923+392 07 28 37 65.2 112.7 -2.0 -45.5 0 0 16 00 00
16 14 30 --- 07 43 09 67.2 117.7 -1.7 -43.2 870 28 16 00 01
16 15 00 0923+392 07 43 39 67.3 117.9 -1.7 -43.1 24 28 16 15 00
16 25 00 --- 07 53 41 68.6 121.7 -1.6 -41.1 600 47 16 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00

16 30 00 0923+392 07 58 42 69.2 123.8 -1.5 -39.9 292 47 16 30 00
16 44 30 --- 08 13 14 70.9 130.3 -1.2 -36.1 870 75 16 30 01
16 45 00 0923+392 08 13 44 71.0 130.5 -1.2 -35.9 23 75 16 45 00
17 00 00 --- 08 28 47 72.6 138.4 -1.0 -30.9 900 104 16 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	8	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 7 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 7

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0923+392	09 23 55.319218	* 09 27 03.013939	09 27 57.226801	0.00
J0927+3902	39 15 23.56637	* 39 02 20.85177	38 58 34.54382	0.00

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)
0923+392	95.7

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

rk01a5tr

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Observing mode: C-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

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

--- Fri 25 Apr 2014 Day 115 ---

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

19 00 00 0906+015 10 29 06 35.7 204.6 1.3 14.5 0 0 19 00 00
19 19 30 --- 10 48 40 34.3 210.4 1.6 17.7 1170 37 19 00 01
19 20 00 0906+015 10 49 10 34.3 210.5 1.7 17.8 24 37 19 20 00
19 40 00 --- 11 09 13 32.6 216.2 2.0 20.8 1200 76 19 20 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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:  1  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:  1

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	Source position (RA/Dec) (J2000)	(Date)	Error (mas)
* 0906+015	09 06 35.181592	* 09 09 10.091598	09 09 55.078115	0.00
J0909+0121	01 33 48.12919	* 01 21 35.61771	01 17 50.80554	0.00

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)
0906+015    103.6

```

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

```

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Observing mode: C-band, dual-pol

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

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

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

--- Fri 25 Apr 2014 Day 115 ---

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

21 20 00	0823+033	12 49 29	16.8	252.0	4.4		34.9	0	0	21 20 00
21 39 30	---	13 09 03	14.0	256.1	4.7		35.7	1170	37	21 20 01
21 40 00	0823+033	13 09 33	14.0	256.2	4.7		35.7	24	37	21 40 00
22 00 00	---	13 29 36	11.0	260.4	5.1		36.4	1200	76	21 40 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

--- WARNING --- This group does not match an entry in the frequency catalog.
 This might be ok because the catalog is not complete.
 But be very careful to be sure that the setup is correct.

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: 3 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: 3

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(Date)	Error (mas)	
* 0823+033	08 23 13.540326	* 08 25 50.338355	08 26 35.619061	0.00
J0825+0309	03 19 15.40169	* 03 09 24.51995	03 06 20.00048	0.00

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)
0823+033	92.5

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

rk01a7tr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Sat 26 Apr 2014 Day 116 ---

----- 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

00 00 00 0917+449 15 29 56 33.2 -58.1 6.1 45.8 0 0 00 00 00
00 14 30 --- 15 44 28 31.3 -56.0 6.4 44.4 870 28 00 00 01
00 15 00 0917+449 15 44 58 31.3 -55.9 6.4 44.3 24 28 00 15 00
00 25 00 --- 15 55 00 30.0 -54.4 6.6 43.3 600 47 00 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00

00 30 00 0917+449 16 00 01 29.4 -53.7 6.6 42.8 293 47 00 30 00
00 44 30 --- 16 14 33 27.7 -51.5 6.9 41.3 870 75 00 30 01
00 45 00 0917+449 16 15 03 27.6 -51.4 6.9 41.3 24 75 00 45 00
01 00 00 --- 16 30 06 25.9 -49.1 7.1 39.7 900 104 00 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 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

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	6	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set: 6 Setup file default. Used with PCAL = 1MHz
LO sum= 1668.00 1668.00 1668.00 1668.00
BBC fr= 732.00 732.00 732.00 732.00
Bandwd= 16.00 16.00 16.00 16.00
Matching frequency sets: 6

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0917+449	09 17 41.919222	* 09 20 58.458485	09 21 55.111167	0.00
J0920+4441	44 54 39.62449	* 44 41 53.98501	44 38 14.25234	0.00

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)
0917+449	92.3

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

rk01a8tr

RADIOASTRON AGN SURVEY

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Sat 26 Apr 2014 Day 116 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with 11 columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, SYNC. It lists observation times and parameters for source 1015+359.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 6 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

Frequency Set: 3 Setup file default. Used with PCAL = 1MHz
 LO sum= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 Bandwd= 16.00 16.00 16.00 16.00
 Matching frequency sets: 3

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1015+359	10 15 16.226760	* 10 18 10.988103	10 19 01.752852	0.00
J1018+3542	35 57 41.35603	* 35 42 39.44084	35 38 18.87886	0.00

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)
1015+359	105.3

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

rk01b0tr

RADIOASTRON AGN SURVEY

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 27 Apr 2014 Day 117 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

12 00 00 0955+476 03 35 50 33.1 53.6 -6.4 -45.5 0 0 12 00 00
12 19 30 --- 03 55 24 35.5 56.4 -6.1 -47.6 1170 37 12 00 01
12 20 00 0955+476 03 55 54 35.6 56.4 -6.1 -47.6 24 37 12 20 00
12 40 00 --- 04 15 57 38.2 59.2 -5.7 -49.6 1200 76 12 20 01

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 9 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

Frequency Set: 7 Setup file default. Used with PCAL = 1MHz
 LO sum= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 Bandwd= 16.00 16.00 16.00 16.00
 Matching frequency sets: 7

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)
* 0955+476	09 55 08.528430	* 09 58 19.671645	09 59 14.912297	0.00
J0958+4725	47 39 28.28168	* 47 25 07.84237	47 21 02.47871	0.00

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)
0955+476	95.8

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

rk01b1tr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: K&C-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 27 Apr 2014 Day 117 ---

----- K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies: 736.00 736.00 736.00 736.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

14 20 00 0906+015 05 56 13 24.6 124.7 -3.2 -29.6 0 0 14 20 00
14 35 00 --- 06 11 16 26.4 128.3 -3.0 -28.1 900 29 14 20 01

----- 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

14 40 00 0906+015 06 16 17 27.0 129.5 -2.9 -27.6 293 29 14 40 00
15 00 00 --- 06 36 20 29.2 134.6 -2.6 -25.3 1200 67 14 40 01

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01b1_freq.dat:
tr1cm

Setup group: 11	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=	21500.00	21500.00	21500.00	21500.00
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: 10	Setup file default.	Used with PCAL = 1MHz		
LO sum=	22236.00	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00	16.00
Matching frequency sets:	10			

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 6	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: 13 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: 13

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0906+015	09 06 35.181592	* 09 09 10.091598	09 09 55.040982	0.00
J0909+0121	01 33 48.12919	* 01 21 35.61771	01 17 50.90360	0.00

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)
0906+015	101.9

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

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01b2_freq.dat:
tr1cm

Setup group:	7	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=	21500.00	21500.00	21500.00	21500.00
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=	22236.00	22236.00	22236.00	22236.00
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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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:  8  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:  8

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0834-201	08 34 24.601681	* 08 36 39.215241	08 37 18.273910	0.00
J0836-2016	-20 06 30.40845	*-20 16 59.50414	-20 20 21.79592	0.00

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)
0834-201	98.7

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

rk01b3tr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: C&L-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 27 Apr 2014 Day 117 ---

----- 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

20 00 00 0945+408 11 37 09 68.0 246.2 1.8 46.4 0 0 20 00 00
20 14 30 --- 11 51 42 66.0 251.0 2.0 48.4 870 28 20 00 01
20 15 00 0945+408 11 52 12 65.9 251.2 2.0 48.5 24 28 20 15 00
20 25 00 --- 12 02 13 64.5 254.1 2.2 49.5 600 47 20 15 01

----- L-band VLBI scans -----

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00

20 30 00 0945+408 12 07 14 63.7 255.5 2.3 50.0 293 47 20 30 00
20 44 30 --- 12 21 47 61.6 259.4 2.5 51.0 870 75 20 30 01
20 45 00 0945+408 12 22 17 61.5 259.5 2.5 51.0 24 75 20 45 00
21 00 00 --- 12 37 19 59.3 263.1 2.8 51.7 900 104 20 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 6 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: 6

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

=====
Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	9	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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
IF =	C	A	C	A

The following frequency sets based on these setups were used.

```

Frequency Set:  8  Setup file default.  Used with PCAL = 1MHz
LO sum=    1668.00  1668.00  1668.00  1668.00
BBC fr=     732.00   732.00   732.00   732.00
Bandwd=     16.00   16.00   16.00   16.00
Matching frequency sets:  8

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0945+408	09 45 50.078219	* 09 48 55.338151	09 49 48.894792	0.00
J0948+4039	40 53 43.38094	* 40 39 44.58693	40 35 43.31417	0.00

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)
0945+408	97.0

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

rk01b4tr

RADIOASTRON AGN SURVEY

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Observing mode: L-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 27 Apr 2014 Day 117 ---

Next scan frequencies: 1668.00 1668.00 1668.00 1668.00
Next BBC frequencies: 732.00 732.00 732.00 732.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

Table with 12 columns: Start UT, Stop UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, SYNC. Contains 4 rows of scan data.

SETUP FILE INFORMATION:

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

==== Setup file: ra18cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group: 6 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=	2400.00	2400.00	2400.00	2400.00
Net SB=	L	L	U	U
IF SB =	L	L	L	L
Pol. =	RCP	LCP	RCP	LCP
BBC =	1	2	1	2
BBC SB=	U	U	L	L
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= 1668.00 1668.00 1668.00 1668.00
 BBC fr= 732.00 732.00 732.00 732.00
 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)	(Date)	Error (mas)	
* 0923+392	09 23 55.319218	* 09 27 03.013939	09 27 57.164150	0.00
J0927+3902	39 15 23.56637	* 39 02 20.85177	38 58 34.77397	0.00

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)
0923+392	93.7

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

E-EVN RUNS: RC001, RSP09, AND EG082C
 PI: *David Cseh, Miguel Perez-Torres, and Marcin Gawronski*

Address: JIVE Oude Hoogeveensedijk 4 Dwingeloo Netherlands

Phone: +31 521 596 536 EMAIL: zparagi@jive.nl
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Observing mode: realtime e-vlbi

Schedule for TORUN (Code Tr) Page 2

 e-EVN runs: RC001, RSP09, and EG082C

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

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

--- Mon 28 Apr 2014 Day 118 ---										
Next scan frequencies:		4942.49	4942.49	4942.49	4942.49	4974.49	4974.49	4974.49	4974.49	
		5006.49	5006.49	5006.49	5006.49	5038.49	5038.49	5038.49	5038.49	
Next BBC frequencies:		742.49	742.49	742.49	742.49	774.49	774.49	774.49	774.49	
		806.49	806.49	806.49	806.49	838.49	838.49	838.49	838.49	
Next scan bandwidths:		16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	
		16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	
09 00 00	0133+476	00 39 17	79.4	113.2	-1.0		-55.4	0	0	09 00 00
09 15 00	---	00 54 20	81.4	122.5	-0.7		-49.1	900	115	09 00 01
09 15 40	0133+476	00 55 00	81.5	123.0	-0.7		-48.8	33	115	09 15 40
09 30 00	---	01 09 22	83.1	136.0	-0.5		-38.5	860	225	09 15 41
09 30 40	0133+476	01 10 03	83.2	136.7	-0.5		-37.9	32	225	09 30 40
09 45 00	---	01 24 25	84.4	156.2	-0.2		-21.2	860	335	09 30 41
09 45 40	0133+476	01 25 05	84.5	157.3	-0.2		-20.2	31	335	09 45 40
10 00 00	---	01 39 27	84.8	183.0	0.0		2.7	860	445	09 45 41
10 04 00	DA193	01 43 28	46.0	81.0	-4.2		-50.6	21	445	10 04 00
10 15 00	---	01 54 30	47.7	83.0	-4.0		-50.9	660	530	10 04 01
10 15 40	DA193	01 55 10	47.8	83.1	-4.0		-50.9	34	530	10 15 40
10 30 00	---	02 09 32	49.9	85.8	-3.8		-51.2	860	640	10 15 41
10 30 40	DA193	02 10 12	50.0	85.9	-3.8		-51.2	34	640	10 30 40
10 45 00	---	02 24 35	52.2	88.6	-3.5		-51.4	860	750	10 30 41
10 45 40	DA193	02 25 15	52.3	88.8	-3.5		-51.4	34	750	10 45 40
11 00 00	---	02 39 37	54.4	91.6	-3.3		-51.4	860	860	10 45 41
11 00 40	DA193	02 40 17	54.5	91.8	-3.3		-51.4	34	860	11 00 40
11 15 00	---	02 54 40	56.7	94.8	-3.0		-51.2	860	970	11 00 41

Schedule for TORUN (Code Tr)

Page 3

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
11 15 40	DA193	02 55 20	56.8	95.0	-3.0		-51.2	34	970	11 15 40
11 30 00	---	03 09 42	58.9	98.3	-2.8		-50.7	860	1080	11 15 41
11 30 40	DA193	03 10 22	59.0	98.4	-2.8		-50.7	34	1080	11 30 40
11 45 00	---	03 24 45	61.1	101.9	-2.5		-49.9	860	1190	11 30 41
11 45 40	DA193	03 25 25	61.2	102.1	-2.5		-49.8	34	1190	11 45 40
12 00 00	---	03 39 47	63.3	106.0	-2.3		-48.7	860	1300	11 45 41
12 00 40	DA193	03 40 27	63.4	106.2	-2.3		-48.7	34	1300	12 00 40
12 15 00	---	03 54 50	65.5	110.5	-2.0		-47.1	860	1411	12 00 41
12 15 40	DA193	03 55 30	65.6	110.7	-2.0		-47.0	34	1411	12 15 40
12 30 00	---	04 09 52	67.6	115.5	-1.8		-44.9	860	1521	12 15 41
12 34 00	J0749+7420	04 13 53	59.8	25.9	-3.6		-103.9	46	1521	12 34 00
12 45 00	=0743+744	04 24 54	60.6	25.5	-3.4		-106.9	660	1605	12 34 01
12 47 00	J0841+7053	04 26 55	57.3	33.1	-4.3		-88.6	90	1605	12 47 00
13 00 00	=0836+710	04 39 57	58.4	33.1	-4.0		-91.6	780	1705	12 47 01
13 01 10	J0749+7420	04 41 07	61.6	24.8	-3.2		-111.5	38	1705	13 01 10
13 04 00	=0743+744	04 43 58	61.8	24.6	-3.1		-112.3	170	1727	13 01 11
13 05 10	J0841+7053	04 45 08	58.8	33.1	-4.0		-92.9	38	1727	13 05 10
13 06 10	=0836+710	04 46 08	58.9	33.1	-3.9		-93.1	60	1734	13 05 11
13 06 10	H0IIX-1	04 46 08	60.7	33.1	-3.6		-98.3	-21	1734	No stop
13 09 40	---	04 49 38	61.0	33.0	-3.5		-99.2	189	1761	13 06 11
13 09 40	J0841+7053	04 49 38	59.2	33.0	-3.9		-94.0	-20	1761	No stop
13 11 10	=0836+710	04 51 09	59.3	33.0	-3.9		-94.4	70	1773	13 09 41
13 11 10	H0IIX-1	04 51 09	61.1	32.9	-3.5		-99.6	-21	1773	No stop
13 14 40	---	04 54 39	61.4	32.8	-3.4		-100.5	189	1800	13 11 11
13 15 20	J0841+7053	04 55 19	59.7	33.0	-3.8		-95.4	20	1800	13 15 20
13 16 20	=0836+710	04 56 20	59.7	32.9	-3.8		-95.7	60	1807	13 15 21
13 16 20	H0IIX-1	04 56 20	61.6	32.8	-3.4		-101.0	-21	1807	No stop
13 19 50	---	04 59 50	61.8	32.7	-3.4		-101.9	189	1834	13 16 21
13 19 50	J0841+7053	04 59 50	60.0	32.9	-3.7		-96.5	-20	1834	No stop
13 21 20	=0836+710	05 01 20	60.1	32.9	-3.7		-96.9	70	1846	13 19 51
13 21 20	H0IIX-1	05 01 20	62.0	32.6	-3.3		-102.3	-21	1846	No stop
13 24 50	---	05 04 51	62.2	32.5	-3.3		-103.2	189	1873	13 21 21

Schedule for TORUN (Code Tr)

Page 4

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
13 25 30	J0841+7053	05 05 31	60.5	32.8	-3.6		-98.0	20	1873	13 25 30
13 26 30	=0836+710	05 06 31	60.6	32.7	-3.6		-98.2	60	1880	13 25 31
13 26 30	H0IIX-1	05 06 31	62.4	32.4	-3.2		-103.7	-21	1880	No stop
13 30 00	---	05 10 02	62.7	32.2	-3.2		-104.7	189	1907	13 26 31
13 30 00	J0841+7053	05 10 02	60.9	32.6	-3.5		-99.1	-20	1907	No stop
13 31 30	=0836+710	05 11 32	61.0	32.6	-3.5		-99.5	70	1919	13 30 01
13 31 30	H0IIX-1	05 11 32	62.8	32.2	-3.2		-105.1	-21	1919	No stop
13 35 00	---	05 15 03	63.1	32.0	-3.1		-106.1	189	1946	13 31 31
13 35 40	J0841+7053	05 15 43	61.3	32.5	-3.5		-100.6	20	1946	13 35 40
13 36 40	=0836+710	05 16 43	61.4	32.5	-3.4		-100.9	60	1953	13 35 41
13 36 40	H0IIX-1	05 16 43	63.2	31.9	-3.1		-106.5	-21	1953	No stop
13 40 10	---	05 20 14	63.5	31.7	-3.0		-107.5	189	1980	13 36 41
13 40 10	J0841+7053	05 20 14	61.7	32.3	-3.4		-101.8	-20	1980	No stop
13 41 40	=0836+710	05 21 44	61.8	32.3	-3.4		-102.2	70	1992	13 40 11
13 41 40	H0IIX-1	05 21 44	63.6	31.6	-3.0		-108.0	-21	1992	No stop
13 45 10	---	05 25 14	63.9	31.4	-2.9		-109.0	189	2019	13 41 41
13 45 50	J0841+7053	05 25 54	62.1	32.1	-3.3		-103.4	20	2019	13 45 50
13 46 50	=0836+710	05 26 55	62.2	32.1	-3.3		-103.6	60	2026	13 45 51
13 46 50	H0IIX-1	05 26 55	64.0	31.3	-2.9		-109.5	-20	2026	No stop
13 50 20	---	05 30 25	64.3	31.1	-2.8		-110.5	190	2053	13 46 51
13 50 20	J0841+7053	05 30 25	62.5	31.9	-3.2		-104.6	-20	2053	No stop
13 51 50	=0836+710	05 31 55	62.6	31.9	-3.2		-105.0	70	2065	13 50 21
13 51 50	H0IIX-1	05 31 55	64.4	31.0	-2.8		-110.9	-20	2065	No stop
13 55 20	---	05 35 26	64.7	30.8	-2.8		-112.0	190	2092	13 51 51
13 56 00	J0841+7053	05 36 06	62.9	31.7	-3.1		-106.2	20	2092	13 56 00
13 57 00	=0836+710	05 37 06	63.0	31.6	-3.1		-106.5	60	2099	13 56 01
13 57 00	H0IIX-1	05 37 06	64.8	30.6	-2.7		-112.5	-20	2099	No stop
14 00 30	---	05 40 37	65.0	30.4	-2.7		-113.6	190	2126	13 57 01
14 00 30	J0841+7053	05 40 37	63.3	31.4	-3.0		-107.5	-20	2126	No stop
14 02 00	=0836+710	05 42 07	63.4	31.3	-3.0		-107.9	70	2138	14 00 31
14 02 00	H0IIX-1	05 42 07	65.2	30.2	-2.6		-114.0	-20	2138	No stop
14 05 30	---	05 45 38	65.4	30.0	-2.6		-115.1	190	2164	14 02 01

Schedule for TORUN (Code Tr)

Page 5

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
14 06 10	J0841+7053	05 46 18	63.7	31.1	-2.9		-109.1	20	2164	14 06 10
14 07 10	=0836+710	05 47 18	63.8	31.0	-2.9		-109.4	60	2172	14 06 11
14 07 10	H0IIX-1	05 47 18	65.6	29.8	-2.6		-115.6	-20	2172	No stop
14 10 40	---	05 50 49	65.8	29.5	-2.5		-116.8	190	2199	14 07 11
14 10 40	J0841+7053	05 50 49	64.1	30.8	-2.9		-110.4	-20	2199	No stop
14 12 10	=0836+710	05 52 19	64.2	30.7	-2.8		-110.9	70	2211	14 10 41
14 12 10	H0IIX-1	05 52 19	65.9	29.4	-2.5		-117.2	-20	2211	No stop
14 15 40	---	05 55 49	66.2	29.0	-2.4		-118.4	190	2237	14 12 11
14 16 20	J0841+7053	05 56 29	64.5	30.4	-2.8		-112.1	20	2237	14 16 20
14 17 20	=0836+710	05 57 30	64.6	30.3	-2.8		-112.4	60	2245	14 16 21
14 17 20	H0IIX-1	05 57 30	66.3	28.9	-2.4		-118.9	-20	2245	No stop
14 20 50	---	06 01 00	66.6	28.5	-2.3		-120.1	190	2272	14 17 21
14 20 50	J0841+7053	06 01 00	64.9	30.1	-2.7		-113.5	-20	2272	No stop
14 22 20	=0836+710	06 02 30	65.0	30.0	-2.7		-113.9	70	2284	14 20 51
14 22 20	H0IIX-1	06 02 30	66.7	28.3	-2.3		-120.6	-20	2284	No stop
14 25 50	---	06 06 01	66.9	28.0	-2.2		-121.8	190	2310	14 22 21
14 26 30	J0841+7053	06 06 41	65.3	29.6	-2.6		-115.2	20	2310	14 26 30
14 27 30	=0836+710	06 07 41	65.4	29.5	-2.6		-115.5	60	2318	14 26 31
14 27 30	H0IIX-1	06 07 41	67.0	27.8	-2.2		-122.3	-20	2318	No stop
14 31 00	---	06 11 12	67.3	27.4	-2.2		-123.5	190	2345	14 27 31
14 31 00	J0841+7053	06 11 12	65.6	29.2	-2.5		-116.7	-20	2345	No stop
14 32 30	=0836+710	06 12 42	65.7	29.1	-2.5		-117.1	70	2356	14 31 01
14 32 30	H0IIX-1	06 12 42	67.4	27.2	-2.1		-124.0	-20	2356	No stop
14 36 00	---	06 16 13	67.6	26.8	-2.1		-125.3	190	2383	14 32 31
14 36 40	J0841+7053	06 16 53	66.0	28.7	-2.4		-118.5	20	2383	14 36 40
14 37 40	=0836+710	06 17 53	66.1	28.6	-2.4		-118.8	60	2391	14 36 41
14 37 40	H0IIX-1	06 17 53	67.7	26.5	-2.1		-125.9	-20	2391	No stop
14 41 10	---	06 21 24	68.0	26.1	-2.0		-127.1	190	2418	14 37 41
14 41 10	J0841+7053	06 21 24	66.4	28.3	-2.4		-119.9	-20	2418	No stop
14 42 40	=0836+710	06 22 54	66.5	28.1	-2.3		-120.4	70	2429	14 41 11
14 42 40	H0IIX-1	06 22 54	68.1	25.9	-2.0		-127.7	-20	2429	No stop
14 46 10	---	06 26 24	68.3	25.4	-1.9		-128.9	190	2456	14 42 41

Schedule for TORUN (Code Tr)

Page 6

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
14 46 50	J0841+7053	06 27 04	66.8	27.7	-2.3		-121.8	21	2456	14 46 50
14 47 50	=0836+710	06 28 05	66.8	27.5	-2.2		-122.2	60	2464	14 46 51
14 49 00	J0749+7420	06 29 15	67.2	14.1	-1.4		-147.2	28	2464	14 49 00
14 51 50	=0743+744	06 32 05	67.3	13.7	-1.3		-148.2	170	2486	14 49 01
14 53 00	J0841+7053	06 33 15	67.2	27.0	-2.2		-124.0	28	2486	14 53 00
14 54 00	=0836+710	06 34 16	67.2	26.8	-2.1		-124.3	60	2493	14 53 01
14 54 00	H0IIX-1	06 34 16	68.8	24.3	-1.8		-131.9	-19	2493	No stop
14 57 30	---	06 37 46	69.0	23.7	-1.7		-133.2	191	2520	14 54 01
14 57 30	J0841+7053	06 37 46	67.5	26.4	-2.1		-125.5	-20	2520	No stop
14 59 00	=0836+710	06 39 16	67.6	26.2	-2.1		-126.1	70	2532	14 57 31
14 59 00	H0IIX-1	06 39 16	69.1	23.5	-1.7		-133.8	-20	2532	No stop
15 02 30	---	06 42 47	69.3	22.9	-1.6		-135.1	190	2559	14 59 01
15 03 10	J0841+7053	06 43 27	67.9	25.7	-2.0		-127.5	20	2559	15 03 10
15 04 10	=0836+710	06 44 27	67.9	25.5	-2.0		-127.9	60	2566	15 03 11
15 04 10	H0IIX-1	06 44 27	69.4	22.6	-1.6		-135.8	-20	2566	No stop
15 07 40	---	06 47 58	69.6	22.0	-1.5		-137.2	190	2593	15 04 11
15 07 40	J0841+7053	06 47 58	68.1	25.1	-1.9		-129.2	-21	2593	No stop
15 09 10	=0836+710	06 49 28	68.2	24.9	-1.9		-129.7	69	2605	15 07 41
15 09 10	H0IIX-1	06 49 28	69.7	21.7	-1.5		-137.8	-21	2605	No stop
15 12 40	---	06 52 59	69.9	21.1	-1.5		-139.2	189	2632	15 09 11
15 13 20	J0841+7053	06 53 39	68.5	24.2	-1.8		-131.3	19	2632	15 13 20
15 14 20	=0836+710	06 54 39	68.6	24.1	-1.8		-131.6	60	2639	15 13 21
15 14 20	H0IIX-1	06 54 39	70.0	20.8	-1.4		-139.9	-21	2639	No stop
15 17 50	---	06 58 10	70.1	20.2	-1.4		-141.3	189	2666	15 14 21
15 17 50	J0841+7053	06 58 10	68.8	23.6	-1.7		-133.0	-21	2666	No stop
15 19 20	=0836+710	06 59 40	68.9	23.3	-1.7		-133.5	69	2678	15 17 51
15 19 20	H0IIX-1	06 59 40	70.2	19.9	-1.4		-142.0	-22	2678	No stop
15 22 50	---	07 03 10	70.4	19.2	-1.3		-143.4	188	2705	15 19 21
15 23 30	J0841+7053	07 03 50	69.1	22.7	-1.6		-135.2	18	2705	15 23 30
15 24 30	=0836+710	07 04 51	69.2	22.5	-1.6		-135.5	60	2712	15 23 31
15 24 30	H0IIX-1	07 04 51	70.5	18.8	-1.3		-144.1	-22	2712	No stop
15 28 00	---	07 08 21	70.6	18.1	-1.2		-145.6	188	2739	15 24 31

Schedule for TORUN (Code Tr)

Page 7

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
15 28 00	J0841+7053	07 08 21	69.4	21.9	-1.6		-136.9	-22	2739	No stop
15 29 30	=0836+710	07 09 51	69.5	21.7	-1.5		-137.5	68	2751	15 28 01
15 29 30	H0IIX-1	07 09 51	70.7	17.8	-1.2		-146.3	-23	2751	No stop
15 33 00	---	07 13 22	70.9	17.1	-1.1		-147.8	187	2778	15 29 31
15 33 40	J0841+7053	07 14 02	69.7	20.9	-1.5		-139.2	17	2778	15 33 40
15 34 40	=0836+710	07 15 02	69.7	20.7	-1.5		-139.6	60	2785	15 33 41
15 34 40	H0IIX-1	07 15 02	70.9	16.7	-1.1		-148.6	-23	2785	No stop
15 38 10	---	07 18 33	71.1	16.0	-1.0		-150.1	187	2812	15 34 41
15 38 10	J0841+7053	07 18 33	69.9	20.1	-1.4		-141.0	-23	2812	No stop
15 39 40	=0836+710	07 20 03	70.0	19.8	-1.4		-141.7	67	2824	15 38 11
15 39 40	H0IIX-1	07 20 03	71.2	15.6	-1.0		-150.8	-23	2824	No stop
15 43 10	---	07 23 34	71.3	14.8	-1.0		-152.4	187	2851	15 39 41
15 43 50	J0841+7053	07 24 14	70.2	19.0	-1.3		-143.4	17	2851	15 43 50
15 44 50	=0836+710	07 25 14	70.3	18.8	-1.3		-143.8	60	2858	15 43 51
15 44 50	H0IIX-1	07 25 14	71.4	14.4	-0.9		-153.1	-24	2858	No stop
15 48 20	---	07 28 45	71.5	13.6	-0.9		-154.7	186	2885	15 44 51
15 48 20	J0841+7053	07 28 45	70.4	18.1	-1.2		-145.3	-24	2885	No stop
15 49 50	=0836+710	07 30 15	70.5	17.8	-1.2		-145.9	66	2897	15 48 21
15 49 50	H0IIX-1	07 30 15	71.5	13.3	-0.8		-155.4	-24	2897	No stop
15 53 20	---	07 33 45	71.7	12.4	-0.8		-157.0	186	2924	15 49 51
15 54 00	J0841+7053	07 34 25	70.7	17.0	-1.1		-147.7	16	2924	15 54 00
15 55 00	=0836+710	07 35 26	70.7	16.7	-1.1		-148.2	60	2931	15 54 01
15 55 00	H0IIX-1	07 35 26	71.7	12.0	-0.8		-157.8	-25	2931	No stop
15 58 30	---	07 38 56	71.8	11.2	-0.7		-159.5	185	2958	15 55 01
15 58 30	J0841+7053	07 38 56	70.9	16.0	-1.1		-149.7	-25	2958	No stop
16 00 00	=0836+710	07 40 26	70.9	15.7	-1.0		-150.4	65	2970	15 58 31
16 00 00	H0IIX-1	07 40 26	71.9	10.8	-0.7		-160.2	-25	2970	No stop
16 03 30	---	07 43 57	71.9	9.9	-0.6		-161.8	185	2996	16 00 01
16 04 10	J0841+7053	07 44 37	71.1	14.7	-1.0		-152.2	15	2996	16 04 10
16 05 10	=0836+710	07 45 37	71.1	14.5	-1.0		-152.7	60	3004	16 04 11

Schedule for TORUN (Code Tr)

Page 8

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
16 05 10	HOIIX-1	07 45 37	72.0	9.5	-0.6		-162.6	-25	3004	No stop
16 08 40	---	07 49 08	72.1	8.6	-0.5		-164.3	185	3031	16 05 11
16 08 40	J0841+7053	07 49 08	71.3	13.7	-0.9		-154.3	-25	3031	No stop
16 10 10	=0836+710	07 50 38	71.3	13.4	-0.9		-155.0	65	3043	16 08 41
16 10 10	HOIIX-1	07 50 38	72.1	8.2	-0.5		-165.1	-26	3043	No stop
16 13 40	---	07 54 09	72.2	7.3	-0.4		-166.8	184	3069	16 10 11
16 14 20	J0841+7053	07 54 49	71.5	12.4	-0.8		-156.9	15	3069	16 14 20
16 15 20	=0836+710	07 55 49	71.5	12.2	-0.8		-157.3	60	3077	16 14 21
16 15 20	HOIIX-1	07 55 49	72.2	6.8	-0.4		-167.6	-26	3077	No stop
16 18 50	---	07 59 20	72.3	5.9	-0.4		-169.3	184	3104	16 15 21
16 18 50	J0841+7053	07 59 20	71.6	11.3	-0.7		-159.0	-26	3104	No stop
16 20 20	=0836+710	08 00 50	71.6	10.9	-0.7		-159.7	64	3116	16 18 51
16 20 20	HOIIX-1	08 00 50	72.3	5.5	-0.3		-170.0	-26	3116	No stop
16 23 50	---	08 04 20	72.3	4.5	-0.3		-171.8	184	3142	16 20 21
16 24 30	J0841+7053	08 05 01	71.8	9.9	-0.6		-161.6	14	3142	16 24 30
16 25 30	=0836+710	08 06 01	71.8	9.7	-0.6		-162.1	60	3150	16 24 31
16 25 30	HOIIX-1	08 06 01	72.4	4.1	-0.2		-172.6	-26	3150	No stop
16 29 00	---	08 09 31	72.4	3.1	-0.2		-174.3	184	3177	16 25 31
16 29 00	J0841+7053	08 09 31	71.9	8.8	-0.6		-163.8	-26	3177	No stop
16 30 30	=0836+710	08 11 01	71.9	8.4	-0.5		-164.5	64	3188	16 29 01
16 30 30	HOIIX-1	08 11 01	72.4	2.7	-0.2		-175.1	-27	3188	No stop
16 34 00	---	08 14 32	72.4	1.8	-0.1		-176.8	183	3215	16 30 31
16 34 40	J0841+7053	08 15 12	72.0	7.3	-0.5		-166.5	14	3215	16 34 40
16 35 40	=0836+710	08 16 12	72.0	7.1	-0.4		-167.0	60	3223	16 34 41
16 36 50	J0749+7420	08 17 23	68.6	-4.9	0.4		169.1	31	3223	16 36 50
16 39 40	=0743+744	08 20 13	68.6	-5.4	0.5		168.0	170	3245	16 36 51
16 40 50	J0841+7053	08 21 23	72.1	5.7	-0.4		-169.5	32	3245	16 40 50
16 41 50	=0836+710	08 22 23	72.1	5.5	-0.3		-170.0	60	3252	16 40 51
16 41 50	HOIIX-1	08 22 23	72.4	-0.4	0.0		179.3	-27	3252	No stop
16 45 20	---	08 25 54	72.4	-1.4	0.1		177.5	183	3279	16 41 51

Schedule for TORUN (Code Tr)

Page 9

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
16 45 20	J0841+7053	08 25 54	72.1	4.5	-0.3		-171.7	-27	3279	No stop
16 46 50	=0836+710	08 27 24	72.2	4.1	-0.3		-172.4	63	3291	16 45 21
16 46 50	H0IIX-1	08 27 24	72.4	-1.8	0.1		176.8	-27	3291	No stop
16 50 20	---	08 30 55	72.4	-2.7	0.2		175.1	183	3318	16 46 51
16 51 00	J0841+7053	08 31 35	72.2	3.0	-0.2		-174.5	13	3318	16 51 00
16 52 00	=0836+710	08 32 35	72.2	2.8	-0.2		-175.0	60	3325	16 51 01
16 52 00	H0IIX-1	08 32 35	72.4	-3.2	0.2		174.2	-27	3325	No stop
16 55 30	---	08 36 06	72.4	-4.1	0.3		172.5	183	3352	16 52 01
16 55 30	J0841+7053	08 36 06	72.2	1.8	-0.1		-176.7	-27	3352	No stop
16 57 00	=0836+710	08 37 36	72.2	1.4	-0.1		-177.4	63	3364	16 55 31
16 57 00	H0IIX-1	08 37 36	72.3	-4.5	0.3		171.7	-27	3364	No stop
17 00 30	---	08 41 06	72.3	-5.5	0.3		170.0	183	3391	16 57 01
17 01 10	J0841+7053	08 41 47	72.2	0.3	-0.0		-179.5	13	3391	17 01 10
17 02 10	=0836+710	08 42 47	72.2	0.0	-0.0		-180.0	60	3398	17 01 11
17 02 10	H0IIX-1	08 42 47	72.3	-5.9	0.4		169.2	-27	3398	No stop
17 05 40	---	08 46 17	72.2	-6.9	0.4		167.5	183	3425	17 02 11
17 05 40	J0841+7053	08 46 17	72.2	-0.9	0.1		178.3	-27	3425	No stop
17 07 10	=0836+710	08 47 48	72.2	-1.3	0.1		177.6	63	3437	17 05 41
17 07 10	H0IIX-1	08 47 48	72.2	-7.3	0.4		166.8	-27	3437	No stop
17 10 40	---	08 51 18	72.1	-8.2	0.5		165.0	183	3464	17 07 11
17 11 20	J0841+7053	08 51 58	72.2	-2.5	0.2		175.5	13	3464	17 11 20
17 12 20	=0836+710	08 52 58	72.2	-2.7	0.2		175.0	60	3471	17 11 21
17 12 20	H0IIX-1	08 52 58	72.1	-8.6	0.5		164.2	-27	3471	No stop
17 15 50	---	08 56 29	72.0	-9.5	0.6		162.6	183	3498	17 12 21
17 15 50	J0841+7053	08 56 29	72.2	-3.7	0.2		173.3	-27	3498	No stop
17 17 20	=0836+710	08 57 59	72.2	-4.1	0.3		172.6	63	3510	17 15 51
17 17 20	H0IIX-1	08 57 59	71.9	-9.9	0.6		161.8	-27	3510	No stop
17 20 50	---	09 01 30	71.9	-10.8	0.7		160.2	183	3537	17 17 21
17 21 30	J0841+7053	09 02 10	72.1	-5.2	0.3		170.5	14	3537	17 21 30
17 22 30	=0836+710	09 03 10	72.1	-5.4	0.3		170.0	60	3544	17 21 31

Schedule for TORUN (Code Tr)

Page 10

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
17 22 30	H0IIX-1	09 03 10	71.8	-11.2	0.7		159.4	-27	3544	No stop
17 26 00	---	09 06 41	71.7	-12.1	0.8		157.7	183	3571	17 22 31
17 26 00	J0841+7053	09 06 41	72.1	-6.3	0.4		168.3	-26	3571	No stop
17 27 30	=0836+710	09 08 11	72.0	-6.7	0.4		167.6	64	3583	17 26 01
17 27 30	H0IIX-1	09 08 11	71.7	-12.4	0.8		157.0	-27	3583	No stop
17 31 00	---	09 11 41	71.5	-13.3	0.8		155.4	183	3610	17 27 31
17 31 40	J0841+7053	09 12 22	71.9	-7.8	0.5		165.6	14	3610	17 31 40
17 32 40	=0836+710	09 13 22	71.9	-8.1	0.5		165.1	60	3617	17 31 41
17 32 40	H0IIX-1	09 13 22	71.5	-13.7	0.9		154.6	-26	3617	No stop
17 36 10	---	09 16 52	71.3	-14.5	0.9		153.0	184	3644	17 32 41
17 36 10	J0841+7053	09 16 52	71.8	-9.0	0.6		163.4	-26	3644	No stop
17 37 40	=0836+710	09 18 23	71.8	-9.3	0.6		162.7	64	3656	17 36 11
17 37 40	H0IIX-1	09 18 23	71.3	-14.8	1.0		152.3	-26	3656	No stop
17 41 10	---	09 21 53	71.2	-15.6	1.0		150.8	184	3683	17 37 41
17 41 50	J0841+7053	09 22 33	71.7	-10.4	0.7		160.7	14	3683	17 41 50
17 42 50	=0836+710	09 23 33	71.7	-10.6	0.7		160.3	60	3690	17 41 51
17 42 50	H0IIX-1	09 23 33	71.1	-16.0	1.0		150.0	-26	3690	No stop
17 46 20	---	09 27 04	70.9	-16.8	1.1		148.5	184	3717	17 42 51
17 46 20	J0841+7053	09 27 04	71.6	-11.5	0.7		158.6	-25	3717	No stop
17 47 50	=0836+710	09 28 34	71.5	-11.8	0.8		157.9	65	3729	17 46 21
17 47 50	H0IIX-1	09 28 34	70.9	-17.1	1.1		147.8	-26	3729	No stop
17 51 20	---	09 32 05	70.7	-17.8	1.2		146.3	184	3756	17 47 51
17 52 00	J0841+7053	09 32 45	71.4	-12.8	0.8		156.0	15	3756	17 52 00
17 53 00	=0836+710	09 33 45	71.4	-13.1	0.8		155.5	60	3763	17 52 01
17 53 00	H0IIX-1	09 33 45	70.6	-18.2	1.2		145.6	-25	3763	No stop
17 56 30	---	09 37 16	70.5	-18.9	1.3		144.1	185	3790	17 53 01
17 56 30	J0841+7053	09 37 16	71.2	-13.9	0.9		153.9	-25	3790	No stop
17 58 00	=0836+710	09 38 46	71.2	-14.2	0.9		153.3	65	3802	17 56 31
17 58 00	H0IIX-1	09 38 46	70.4	-19.2	1.3		143.4	-25	3802	No stop
18 01 30	---	09 42 16	70.2	-19.9	1.4		141.9	185	3828	17 58 01

Schedule for TORUN (Code Tr)

Page 11

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
18 02 10	J0841+7053	09 42 57	71.0	-15.2	1.0		151.4	15	3828	18 02 10
18 03 10	=0836+710	09 43 57	71.0	-15.4	1.0		150.9	60	3836	18 02 11
18 03 10	H0IIX-1	09 43 57	70.1	-20.2	1.4		141.3	-25	3836	No stop
18 06 40	---	09 47 27	69.9	-20.8	1.4		139.8	185	3863	18 03 11
18 06 40	J0841+7053	09 47 27	70.8	-16.2	1.1		149.4	-24	3863	No stop
18 08 10	=0836+710	09 48 58	70.8	-16.5	1.1		148.7	66	3875	18 06 41
18 08 10	H0IIX-1	09 48 58	69.9	-21.1	1.5		139.2	-24	3875	No stop
18 11 40	---	09 52 28	69.7	-21.8	1.5		137.8	186	3901	18 08 11
18 12 20	J0841+7053	09 53 08	70.6	-17.4	1.2		146.9	16	3901	18 12 20
18 13 20	=0836+710	09 54 08	70.6	-17.6	1.2		146.5	60	3909	18 12 21
18 13 20	H0IIX-1	09 54 08	69.6	-22.0	1.6		137.1	-24	3909	No stop
18 16 50	---	09 57 39	69.4	-22.6	1.6		135.7	186	3936	18 13 21
18 16 50	J0841+7053	09 57 39	70.4	-18.3	1.2		145.0	-24	3936	No stop
18 18 20	=0836+710	09 59 09	70.3	-18.6	1.3		144.4	66	3948	18 16 51
18 18 20	H0IIX-1	09 59 09	69.3	-22.9	1.6		135.1	-24	3948	No stop
18 21 50	---	10 02 40	69.1	-23.5	1.7		133.8	186	3974	18 18 21
18 22 30	J0841+7053	10 03 20	70.1	-19.4	1.3		142.6	17	3974	18 22 30
18 23 30	=0836+710	10 04 20	70.1	-19.6	1.4		142.2	60	3982	18 22 31
18 24 40	J0749+7420	10 05 30	64.8	-20.6	2.2		128.6	37	3982	18 24 40
18 27 30	=0743+744	10 08 21	64.7	-20.9	2.3		127.7	170	4004	18 24 41
18 28 40	J0841+7053	10 09 31	69.8	-20.5	1.4		140.1	37	4004	18 28 40
18 29 40	=0836+710	10 10 31	69.7	-20.7	1.5		139.6	60	4012	18 28 41
18 29 40	H0IIX-1	10 10 31	68.6	-24.7	1.8		130.8	-23	4012	No stop
18 33 10	---	10 14 02	68.4	-25.2	1.9		129.5	187	4038	18 29 41
18 33 10	J0841+7053	10 14 02	69.6	-21.3	1.5		138.2	-22	4038	No stop
18 34 40	=0836+710	10 15 32	69.5	-21.6	1.5		137.6	68	4050	18 33 11
18 34 40	H0IIX-1	10 15 32	68.3	-25.4	1.9		128.9	-23	4050	No stop
18 38 10	---	10 19 02	68.1	-25.9	2.0		127.6	187	4077	18 34 41
18 38 50	J0841+7053	10 19 43	69.2	-22.3	1.6		136.0	18	4077	18 38 50
18 39 50	=0836+710	10 20 43	69.2	-22.5	1.6		135.6	60	4084	18 38 51

Schedule for TORUN (Code Tr)

Page 12

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
18 39 50	H0IIX-1	10 20 43	67.9	-26.1	2.0		127.0	-22	4084	No stop
18 43 20	---	10 24 13	67.7	-26.6	2.1		125.8	188	4111	18 39 51
18 43 20	J0841+7053	10 24 13	69.0	-23.0	1.7		134.2	-22	4111	No stop
18 44 50	=0836+710	10 25 44	68.9	-23.3	1.7		133.7	68	4123	18 43 21
18 44 50	H0IIX-1	10 25 44	67.6	-26.8	2.1		125.3	-22	4123	No stop
18 48 20	---	10 29 14	67.4	-27.2	2.1		124.0	188	4150	18 44 51
18 49 00	J0841+7053	10 29 54	68.6	-23.9	1.8		132.1	19	4150	18 49 00
18 50 00	=0836+710	10 30 54	68.6	-24.1	1.8		131.7	60	4157	18 49 01
18 50 00	H0IIX-1	10 30 54	67.3	-27.4	2.2		123.5	-21	4157	No stop
18 53 30	---	10 34 25	67.0	-27.8	2.2		122.3	189	4184	18 50 01
18 53 30	J0841+7053	10 34 25	68.4	-24.6	1.9		130.4	-21	4184	No stop
18 55 00	=0836+710	10 35 55	68.3	-24.8	1.9		129.8	69	4196	18 53 31
18 55 00	H0IIX-1	10 35 55	66.9	-28.0	2.2		121.7	-21	4196	No stop
18 58 30	---	10 39 26	66.7	-28.3	2.3		120.6	189	4223	18 55 01
18 59 10	J0841+7053	10 40 06	68.0	-25.4	2.0		128.3	19	4223	18 59 10
19 00 10	=0836+710	10 41 06	67.9	-25.5	2.0		127.9	60	4230	18 59 11
19 00 10	H0IIX-1	10 41 06	66.5	-28.5	2.3		120.0	-21	4230	No stop
19 03 40	---	10 44 37	66.3	-28.9	2.4		118.9	189	4257	19 00 11
19 03 40	J0841+7053	10 44 37	67.7	-26.0	2.0		126.7	-20	4257	No stop
19 05 10	=0836+710	10 46 07	67.6	-26.2	2.1		126.2	70	4269	19 03 41
19 05 10	H0IIX-1	10 46 07	66.2	-29.0	2.4		118.4	-20	4269	No stop
19 08 40	---	10 49 37	65.9	-29.4	2.5		117.2	190	4296	19 05 11
19 09 20	J0841+7053	10 50 18	67.3	-26.7	2.1		124.7	20	4296	19 09 20
19 10 20	=0836+710	10 51 18	67.3	-26.8	2.1		124.3	60	4303	19 09 21
19 10 20	H0IIX-1	10 51 18	65.8	-29.5	2.5		116.7	-20	4303	No stop
19 13 50	---	10 54 48	65.5	-29.8	2.6		115.6	190	4330	19 10 21
19 13 50	J0841+7053	10 54 48	67.0	-27.2	2.2		123.1	-19	4330	No stop
19 15 20	=0836+710	10 56 19	66.9	-27.4	2.2		122.6	71	4342	19 13 51
19 15 20	H0IIX-1	10 56 19	65.4	-30.0	2.6		115.1	-19	4342	No stop
19 18 50	---	10 59 49	65.2	-30.2	2.6		114.0	191	4369	19 15 21

Schedule for TORUN (Code Tr)

Page 13

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
19 19 30	J0841+7053	11 00 29	66.6	-27.9	2.3		121.2	21	4369	19 19 30
19 20 30	=0836+710	11 01 29	66.6	-28.0	2.3		120.9	60	4376	19 19 31
19 20 30	H0IIX-1	11 01 29	65.0	-30.4	2.7		113.5	-19	4376	No stop
19 24 00	---	11 05 00	64.8	-30.6	2.7		112.4	191	4403	19 20 31
19 24 00	J0841+7053	11 05 00	66.3	-28.3	2.4		119.7	-19	4403	No stop
19 25 30	=0836+710	11 06 30	66.2	-28.5	2.4		119.2	71	4415	19 24 01
19 25 30	H0IIX-1	11 06 30	64.6	-30.8	2.8		112.0	-19	4415	No stop
19 29 00	---	11 10 01	64.4	-31.0	2.8		110.9	191	4442	19 25 31
19 29 40	J0841+7053	11 10 41	65.9	-28.9	2.5		117.9	21	4442	19 29 40
19 30 40	=0836+710	11 11 41	65.8	-29.0	2.5		117.5	60	4449	19 29 41
19 30 40	H0IIX-1	11 11 41	64.3	-31.1	2.8		110.4	-20	4449	No stop
19 34 10	---	11 15 12	64.0	-31.3	2.9		109.4	190	4476	19 30 41
19 34 10	J0841+7053	11 15 12	65.6	-29.3	2.5		116.4	-19	4476	No stop
19 35 40	=0836+710	11 16 42	65.5	-29.4	2.6		115.9	71	4488	19 34 11
19 35 40	H0IIX-1	11 16 42	63.9	-31.4	2.9		109.0	-20	4488	No stop
19 39 10	---	11 20 12	63.6	-31.6	3.0		108.0	190	4515	19 35 41
19 39 50	J0841+7053	11 20 53	65.1	-29.8	2.6		114.6	20	4515	19 39 50
19 40 50	=0836+710	11 21 53	65.1	-29.9	2.7		114.3	60	4522	19 39 51
19 40 50	H0IIX-1	11 21 53	63.5	-31.7	3.0		107.5	-20	4522	No stop
19 44 20	---	11 25 23	63.2	-31.9	3.1		106.5	190	4549	19 40 51
19 44 20	J0841+7053	11 25 23	64.8	-30.1	2.7		113.3	-20	4549	No stop
19 45 50	=0836+710	11 26 54	64.7	-30.2	2.7		112.8	70	4561	19 44 21
19 45 50	H0IIX-1	11 26 54	63.1	-32.0	3.1		106.1	-20	4561	No stop
19 49 20	---	11 30 24	62.8	-32.2	3.2		105.1	190	4588	19 45 51
19 50 00	J0841+7053	11 31 04	64.4	-30.5	2.8		111.5	20	4588	19 50 00
19 51 00	=0836+710	11 32 04	64.3	-30.6	2.8		111.2	60	4595	19 50 01
19 51 00	H0IIX-1	11 32 04	62.6	-32.3	3.2		104.6	-20	4595	No stop
19 54 30	---	11 35 35	62.4	-32.4	3.2		103.7	190	4622	19 51 01
19 54 30	J0841+7053	11 35 35	64.0	-30.9	2.9		110.2	-20	4622	No stop
19 56 00	=0836+710	11 37 05	63.9	-30.9	2.9		109.8	70	4634	19 54 31

Schedule for TORUN (Code Tr)

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e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
19 56 00	H0IIX-1	11 37 05	62.2	-32.5	3.3		103.2	-20	4634	No stop
19 59 30	---	11 40 36	62.0	-32.6	3.3		102.3	190	4660	19 56 01
20 00 10	J0841+7053	11 41 16	63.6	-31.2	3.0		108.5	20	4660	20 00 10
20 01 10	=0836+710	11 42 16	63.5	-31.3	3.0		108.3	60	4668	20 00 11
20 01 10	H0IIX-1	11 42 16	61.8	-32.7	3.4		101.8	-20	4668	No stop
20 04 40	---	11 45 47	61.5	-32.8	3.4		100.9	190	4695	20 01 11
20 04 40	J0841+7053	11 45 47	63.2	-31.5	3.0		107.3	-20	4695	No stop
20 06 10	=0836+710	11 47 17	63.1	-31.5	3.1		106.8	70	4707	20 04 41
20 06 10	H0IIX-1	11 47 17	61.4	-32.8	3.4		100.5	-20	4707	No stop
20 09 40	---	11 50 47	61.1	-32.9	3.5		99.6	190	4733	20 06 11
20 10 20	J0841+7053	11 51 28	62.8	-31.7	3.1		105.7	20	4733	20 10 20
20 11 20	=0836+710	11 52 28	62.7	-31.8	3.2		105.4	60	4741	20 10 21
20 12 30	J0749+7420	11 53 38	58.2	-26.5	4.0		97.3	39	4741	20 12 30
20 15 20	=0743+744	11 56 28	58.0	-26.6	4.1		96.6	170	4763	20 12 31
20 16 30	J0841+7053	11 57 39	62.3	-32.0	3.2		103.9	40	4763	20 16 30
20 17 30	=0836+710	11 58 39	62.2	-32.1	3.3		103.7	60	4771	20 16 31
20 17 30	H0IIX-1	11 58 39	60.5	-33.1	3.6		97.6	-20	4771	No stop
20 21 00	---	12 02 09	60.2	-33.2	3.7		96.7	190	4797	20 17 31
20 21 00	J0841+7053	12 02 09	61.9	-32.2	3.3		102.7	-20	4797	No stop
20 22 30	=0836+710	12 03 40	61.8	-32.3	3.3		102.3	70	4809	20 21 01
20 22 30	H0IIX-1	12 03 40	60.1	-33.2	3.7		96.3	-20	4809	No stop
20 26 00	---	12 07 10	59.8	-33.3	3.8		95.4	190	4836	20 22 31
20 26 40	J0841+7053	12 07 50	61.5	-32.4	3.4		101.2	20	4836	20 26 40
20 27 40	=0836+710	12 08 50	61.4	-32.4	3.4		100.9	60	4844	20 26 41
20 27 40	H0IIX-1	12 08 50	59.6	-33.3	3.8		95.0	-20	4844	No stop
20 31 10	---	12 12 21	59.4	-33.4	3.9		94.1	190	4870	20 27 41
20 31 10	J0841+7053	12 12 21	61.1	-32.6	3.5		100.0	-20	4870	No stop
20 32 40	=0836+710	12 13 51	61.0	-32.6	3.5		99.6	70	4882	20 31 11
20 32 40	H0IIX-1	12 13 51	59.2	-33.4	3.9		93.8	-20	4882	No stop
20 36 10	---	12 17 22	58.9	-33.4	3.9		92.9	190	4909	20 32 41

Schedule for TORUN (Code Tr)

Page 15

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
20 36 50	J0841+7053	12 18 02	60.7	-32.7	3.6		98.5	20	4909	20 36 50
20 37 50	=0836+710	12 19 02	60.6	-32.7	3.6		98.3	60	4916	20 36 51
20 37 50	H0IIX-1	12 19 02	58.8	-33.4	4.0		92.5	-20	4916	No stop
20 41 20	---	12 22 33	58.5	-33.5	4.0		91.7	190	4943	20 37 51
20 41 20	J0841+7053	12 22 33	60.3	-32.8	3.7		97.4	-20	4943	No stop
20 42 50	=0836+710	12 24 03	60.2	-32.8	3.7		97.0	70	4955	20 41 21
20 42 50	H0IIX-1	12 24 03	58.4	-33.5	4.1		91.3	-21	4955	No stop
20 46 20	---	12 27 34	58.1	-33.5	4.1		90.5	189	4982	20 42 51
20 47 00	J0841+7053	12 28 14	59.8	-32.9	3.8		95.9	20	4982	20 47 00
20 48 00	=0836+710	12 29 14	59.7	-32.9	3.8		95.7	60	4989	20 47 01
20 48 00	H0IIX-1	12 29 14	58.0	-33.5	4.1		90.1	-21	4989	No stop
20 51 30	---	12 32 44	57.7	-33.5	4.2		89.2	189	5016	20 48 01
20 51 30	J0841+7053	12 32 44	59.5	-33.0	3.8		94.8	-20	5016	No stop
20 53 00	=0836+710	12 34 15	59.3	-33.0	3.9		94.4	70	5028	20 51 31
20 53 00	H0IIX-1	12 34 15	57.5	-33.5	4.2		88.9	-21	5028	No stop
20 56 30	---	12 37 45	57.3	-33.4	4.3		88.1	189	5055	20 53 01
20 57 10	J0841+7053	12 38 25	59.0	-33.1	3.9		93.4	20	5055	20 57 10
20 58 10	=0836+710	12 39 25	58.9	-33.1	3.9		93.2	60	5062	20 57 11
20 58 10	H0IIX-1	12 39 25	57.1	-33.4	4.3		87.7	-21	5062	No stop
21 01 40	---	12 42 56	56.8	-33.4	4.4		86.9	189	5089	20 58 11
21 01 40	J0841+7053	12 42 56	58.6	-33.1	4.0		92.3	-20	5089	No stop
21 03 10	=0836+710	12 44 26	58.5	-33.1	4.0		92.0	70	5101	21 01 41
21 03 10	H0IIX-1	12 44 26	56.7	-33.4	4.4		86.5	-21	5101	No stop
21 06 40	---	12 47 57	56.4	-33.4	4.4		85.7	189	5128	21 03 11
21 07 20	J0841+7053	12 48 37	58.2	-33.1	4.1		91.0	20	5128	21 07 20
21 08 20	=0836+710	12 49 37	58.1	-33.1	4.1		90.7	60	5135	21 07 21
21 08 20	H0IIX-1	12 49 37	56.3	-33.3	4.5		85.4	-21	5135	No stop
21 11 50	---	12 53 08	56.0	-33.3	4.5		84.6	189	5162	21 08 21
21 11 50	J0841+7053	12 53 08	57.8	-33.1	4.2		89.9	-20	5162	No stop
21 13 20	=0836+710	12 54 38	57.7	-33.1	4.2		89.5	70	5174	21 11 51

Schedule for TORUN (Code Tr)

Page 16

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
21 13 20	H0IIX-1	12 54 38	55.9	-33.3	4.6		84.2	-21	5174	No stop
21 16 50	---	12 58 09	55.6	-33.2	4.6		83.5	189	5201	21 13 21
21 17 30	J0841+7053	12 58 49	57.3	-33.1	4.3		88.6	20	5201	21 17 30
21 18 30	=0836+710	12 59 49	57.2	-33.1	4.3		88.3	60	5208	21 17 31
21 18 30	H0IIX-1	12 59 49	55.4	-33.2	4.6		83.1	-21	5208	No stop
21 22 00	---	13 03 19	55.1	-33.1	4.7		82.3	189	5235	21 18 31
21 22 00	J0841+7053	13 03 19	57.0	-33.1	4.3		87.5	-20	5235	No stop
21 23 30	=0836+710	13 04 50	56.8	-33.1	4.4		87.2	70	5247	21 22 01
21 23 30	H0IIX-1	13 04 50	55.0	-33.1	4.7		82.0	-21	5247	No stop
21 27 00	---	13 08 20	54.7	-33.0	4.8		81.2	189	5274	21 23 31
21 27 40	J0841+7053	13 09 00	56.5	-33.0	4.4		86.2	20	5274	21 27 40
21 28 40	=0836+710	13 10 00	56.4	-33.0	4.5		86.0	60	5281	21 27 41
21 28 40	H0IIX-1	13 10 00	54.6	-33.0	4.8		80.8	-21	5281	No stop
21 32 10	---	13 13 31	54.3	-32.9	4.9		80.1	189	5308	21 28 41
21 32 10	J0841+7053	13 13 31	56.1	-33.0	4.5		85.2	-20	5308	No stop
21 33 40	=0836+710	13 15 01	56.0	-33.0	4.5		84.8	70	5320	21 32 11
21 33 40	H0IIX-1	13 15 01	54.2	-32.9	4.9		79.8	-21	5320	No stop
21 37 10	---	13 18 32	53.9	-32.8	5.0		79.0	189	5347	21 33 41
21 37 50	J0841+7053	13 19 12	55.7	-32.9	4.6		83.9	20	5347	21 37 50
21 38 50	=0836+710	13 20 12	55.6	-32.9	4.6		83.7	60	5354	21 37 51
21 38 50	H0IIX-1	13 20 12	53.8	-32.7	5.0		78.6	-21	5354	No stop
21 42 20	---	13 23 43	53.5	-32.6	5.0		77.9	189	5381	21 38 51
21 42 20	J0841+7053	13 23 43	55.3	-32.8	4.7		82.9	-20	5381	No stop
21 43 50	=0836+710	13 25 13	55.2	-32.8	4.7		82.6	70	5393	21 42 21
21 43 50	H0IIX-1	13 25 13	53.4	-32.6	5.1		77.6	-21	5393	No stop
21 47 20	---	13 28 44	53.1	-32.5	5.1		76.8	189	5420	21 43 51
21 48 00	J0841+7053	13 29 24	54.8	-32.7	4.8		81.6	20	5420	21 48 00
21 49 00	=0836+710	13 30 24	54.7	-32.7	4.8		81.4	60	5427	21 48 01
21 49 00	H0IIX-1	13 30 24	52.9	-32.4	5.2		76.5	-21	5427	No stop
21 52 30	---	13 33 54	52.7	-32.3	5.2		75.8	189	5454	21 49 01

Schedule for TORUN (Code Tr)

Page 17

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
21 52 30	J0841+7053	13 33 54	54.5	-32.6	4.9		80.7	-20	5454	No stop
21 54 00	=0836+710	13 35 25	54.3	-32.6	4.9		80.3	70	5466	21 52 31
21 54 00	H0IIX-1	13 35 25	52.5	-32.3	5.2		75.4	-21	5466	No stop
21 57 30	---	13 38 55	52.3	-32.1	5.3		74.7	189	5492	21 54 01
21 58 10	J0841+7053	13 39 35	54.0	-32.5	4.9		79.4	20	5492	21 58 10
21 59 10	=0836+710	13 40 35	53.9	-32.5	5.0		79.2	60	5500	21 58 11
22 00 20	J0749+7420	13 41 46	50.9	-25.4	5.8		72.2	41	5500	22 00 20
22 03 10	=0743+744	13 44 36	50.8	-25.3	5.9		71.6	170	5522	22 00 21
22 04 20	J0841+7053	13 45 46	53.5	-32.3	5.0		78.1	41	5522	22 04 20
22 05 20	=0836+710	13 46 46	53.4	-32.3	5.1		77.9	60	5530	22 04 21
22 05 20	H0IIX-1	13 46 46	51.6	-31.8	5.4		73.1	-21	5530	No stop
22 08 50	---	13 50 17	51.4	-31.7	5.5		72.4	189	5556	22 05 21
22 08 50	J0841+7053	13 50 17	53.1	-32.2	5.1		77.1	-20	5556	No stop
22 10 20	=0836+710	13 51 47	53.0	-32.1	5.1		76.8	70	5568	22 08 51
22 10 20	H0IIX-1	13 51 47	51.2	-31.6	5.5		72.1	-21	5568	No stop
22 13 50	---	13 55 18	51.0	-31.5	5.6		71.3	189	5595	22 10 21
22 14 30	J0841+7053	13 55 58	52.7	-32.0	5.2		75.9	20	5595	22 14 30
22 15 30	=0836+710	13 56 58	52.6	-32.0	5.2		75.7	60	5603	22 14 31
22 15 30	H0IIX-1	13 56 58	50.8	-31.4	5.6		71.0	-20	5603	No stop
22 19 00	---	14 00 29	50.6	-31.3	5.7		70.3	190	5629	22 15 31
22 19 00	J0841+7053	14 00 29	52.3	-31.9	5.3		75.0	-20	5629	No stop
22 20 30	=0836+710	14 01 59	52.2	-31.8	5.3		74.7	70	5641	22 19 01
22 20 30	H0IIX-1	14 01 59	50.4	-31.2	5.7		70.0	-20	5641	No stop
22 24 00	---	14 05 30	50.2	-31.1	5.7		69.3	190	5668	22 20 31
22 24 40	J0841+7053	14 06 10	51.9	-31.7	5.4		73.8	20	5668	22 24 40
22 25 40	=0836+710	14 07 10	51.8	-31.6	5.4		73.6	60	5676	22 24 41
22 25 40	H0IIX-1	14 07 10	50.0	-31.0	5.8		68.9	-20	5676	No stop
22 29 10	---	14 10 40	49.8	-30.8	5.8		68.2	190	5702	22 25 41
22 29 10	J0841+7053	14 10 40	51.5	-31.5	5.5		72.9	-20	5702	No stop
22 30 40	=0836+710	14 12 11	51.4	-31.4	5.5		72.6	70	5714	22 29 11

Schedule for TORUN (Code Tr)

Page 18

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
22 30 40	H0IIX-1	14 12 11	49.7	-30.7	5.9		67.9	-20	5714	No stop
22 34 10	---	14 15 41	49.4	-30.6	5.9		67.2	190	5741	22 30 41
22 34 50	J0841+7053	14 16 21	51.1	-31.3	5.6		71.7	20	5741	22 34 50
22 35 50	=0836+710	14 17 22	51.0	-31.2	5.6		71.5	60	5748	22 34 51
22 35 50	H0IIX-1	14 17 22	49.3	-30.5	5.9		66.9	-20	5748	No stop
22 39 20	---	14 20 52	49.0	-30.3	6.0		66.2	190	5775	22 35 51
22 39 20	J0841+7053	14 20 52	50.7	-31.1	5.6		70.8	-20	5775	No stop
22 40 50	=0836+710	14 22 22	50.6	-31.0	5.7		70.5	70	5787	22 39 21
22 40 50	H0IIX-1	14 22 22	48.9	-30.2	6.0		65.9	-20	5787	No stop
22 44 20	---	14 25 53	48.6	-30.0	6.1		65.2	190	5814	22 40 51
22 45 00	J0841+7053	14 26 33	50.3	-30.8	5.7		69.7	20	5814	22 45 00
22 46 00	=0836+710	14 27 33	50.2	-30.8	5.7		69.5	60	5821	22 45 01
22 46 00	H0IIX-1	14 27 33	48.5	-30.0	6.1		64.9	-20	5821	No stop
22 49 30	---	14 31 04	48.2	-29.8	6.2		64.2	190	5848	22 46 01
22 49 30	J0841+7053	14 31 04	50.0	-30.6	5.8		68.7	-20	5848	No stop
22 51 00	=0836+710	14 32 34	49.8	-30.5	5.8		68.4	70	5860	22 49 31
22 51 00	H0IIX-1	14 32 34	48.1	-29.7	6.2		63.9	-20	5860	No stop
22 54 30	---	14 36 05	47.9	-29.5	6.3		63.2	190	5887	22 51 01
22 55 10	J0841+7053	14 36 45	49.5	-30.3	5.9		67.6	20	5887	22 55 10
22 56 10	=0836+710	14 37 45	49.4	-30.3	5.9		67.4	60	5894	22 55 11
22 56 10	H0IIX-1	14 37 45	47.7	-29.4	6.3		62.9	-20	5894	No stop
22 59 40	---	14 41 15	47.5	-29.2	6.3		62.2	190	5921	22 56 11
22 59 40	J0841+7053	14 41 15	49.2	-30.1	6.0		66.7	-20	5921	No stop
23 01 10	=0836+710	14 42 46	49.1	-30.1	6.0		66.4	70	5933	22 59 41
23 01 10	H0IIX-1	14 42 46	47.4	-29.1	6.4		61.9	-20	5933	No stop
23 04 40	---	14 46 16	47.1	-28.9	6.4		61.3	190	5960	23 01 11
23 05 20	J0841+7053	14 46 56	48.8	-29.8	6.1		65.6	20	5960	23 05 20
23 06 20	=0836+710	14 47 57	48.7	-29.8	6.1		65.4	60	5967	23 05 21
23 06 20	H0IIX-1	14 47 57	47.0	-28.8	6.4		60.9	-20	5967	No stop
23 09 50	---	14 51 27	46.7	-28.6	6.5		60.3	190	5994	23 06 21

Schedule for TORUN (Code Tr)

Page 19

e-EVN runs: RC001, RSP09, and EG082C

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

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
--- Mon 28 Apr 2014 Day 118 ---										
23 09 50	J0841+7053	14 51 27	48.4	-29.6	6.1		64.7	-20	5994	No stop
23 11 20	=0836+710	14 52 57	48.3	-29.5	6.2		64.4	70	6006	23 09 51
23 11 20	H0IIX-1	14 52 57	46.6	-28.5	6.5		60.0	-20	6006	No stop
23 14 50	---	14 56 28	46.4	-28.3	6.6		59.3	190	6033	23 11 21
23 15 30	J0841+7053	14 57 08	48.0	-29.3	6.2		63.6	20	6033	23 15 30
23 16 30	=0836+710	14 58 08	47.9	-29.2	6.3		63.4	60	6040	23 15 31
23 16 30	H0IIX-1	14 58 08	46.3	-28.2	6.6		59.0	-20	6040	No stop
23 20 00	---	15 01 39	46.0	-28.0	6.7		58.3	190	6067	23 16 31
23 20 00	J0841+7053	15 01 39	47.7	-29.0	6.3		62.7	-20	6067	No stop
23 21 30	=0836+710	15 03 09	47.6	-29.0	6.3		62.4	70	6079	23 20 01
23 21 30	H0IIX-1	15 03 09	45.9	-27.9	6.7		58.0	-20	6079	No stop
23 25 00	---	15 06 40	45.7	-27.7	6.8		57.4	190	6106	23 21 31
23 25 40	J0841+7053	15 07 20	47.3	-28.7	6.4		61.6	20	6106	23 25 40
23 26 40	=0836+710	15 08 20	47.2	-28.7	6.4		61.4	60	6113	23 25 41
23 26 40	H0IIX-1	15 08 20	45.5	-27.6	6.8		57.0	-20	6113	No stop
23 30 10	---	15 11 50	45.3	-27.3	6.8		56.4	190	6140	23 26 41
23 30 10	J0841+7053	15 11 50	46.9	-28.5	6.5		60.7	-20	6140	No stop
23 31 40	=0836+710	15 13 21	46.8	-28.4	6.5		60.4	70	6152	23 30 11
23 31 40	H0IIX-1	15 13 21	45.2	-27.2	6.9		56.1	-20	6152	No stop
23 35 10	---	15 16 51	45.0	-27.0	6.9		55.4	190	6179	23 31 41
23 35 50	J0841+7053	15 17 31	46.5	-28.1	6.6		59.6	20	6179	23 35 50
23 36 50	=0836+710	15 18 32	46.5	-28.1	6.6		59.4	60	6186	23 35 51
23 36 50	H0IIX-1	15 18 32	44.8	-26.9	7.0		55.1	-20	6186	No stop
23 40 20	---	15 22 02	44.6	-26.7	7.0		54.4	190	6213	23 36 51
23 40 20	J0841+7053	15 22 02	46.2	-27.9	6.7		58.8	-20	6213	No stop
23 41 50	=0836+710	15 23 32	46.1	-27.8	6.7		58.5	70	6225	23 40 21
23 41 50	H0IIX-1	15 23 32	44.5	-26.6	7.0		54.2	-20	6225	No stop
23 45 20	---	15 27 03	44.3	-26.3	7.1		53.5	190	6252	23 41 51
23 46 00	J0841+7053	15 27 43	45.8	-27.5	6.7		57.7	21	6252	23 46 00
23 47 00	=0836+710	15 28 43	45.7	-27.4	6.8		57.5	60	6259	23 46 01

Schedule for TORUN (Code Tr)

Page 20

e-EVN runs: RC001, RSP09, and EG082C

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

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
-----
--- Mon 28 Apr 2014  Day 118 ---

23 48 10  J0749+7420  15 29 53  44.6 -20.2  7.6      50.0   41   6259  23 48 10
23 51 00  =0743+744    15 32 44  44.4 -20.0  7.7      49.4  170   6281  23 48 11

23 52 10  J0841+7053  15 33 54  45.4 -27.1  6.9      56.5   41   6281  23 52 10
23 53 10  =0836+710   15 34 54  45.3 -27.0  6.9      56.3   60   6289  23 52 11

23 53 10  HOIIX-1     15 34 54  43.7 -25.8  7.2      52.0  -20   6289  No stop
23 56 40  ---         15 38 25  43.5 -25.5  7.3      51.4  190   6316  23 53 11

23 56 40  J0841+7053  15 38 25  45.1 -26.8  6.9      55.6  -19   6316  No stop
23 58 10  =0836+710   15 39 55  45.0 -26.7  7.0      55.4   71   6327  23 56 41

--- Start: Mon 28 Apr 2014  Day 118 -- Stop: Tue 29 Apr 2014  Day 119 ---

23 58 10  HOIIX-1     15 39 55  43.4 -25.4  7.3      51.1  -19   6327  No stop
00 01 40  ---         15 43 26  43.2 -25.2  7.4      50.4  191   6354  23 58 11

00 02 20  J0841+7053  15 44 06  44.7 -26.4  7.0      54.6   21   6354  00 02 20
00 03 20  =0836+710   15 45 06  44.6 -26.4  7.0      54.4   60   6362  00 02 21

00 03 20  HOIIX-1     15 45 06  43.1 -25.0  7.4      50.1  -19   6362  No stop
00 06 50  ---         15 48 36  42.9 -24.8  7.5      49.5  191   6388  00 03 21

00 06 50  J0841+7053  15 48 36  44.4 -26.1  7.1      53.7  -19   6388  No stop
00 08 20  =0836+710   15 50 07  44.3 -26.0  7.1      53.4   71   6400  00 06 51

00 08 20  HOIIX-1     15 50 07  42.8 -24.7  7.5      49.2  -19   6400  No stop
00 11 50  ---         15 53 37  42.6 -24.4  7.5      48.5  191   6427  00 08 21

00 12 30  J0841+7053  15 54 17  44.0 -25.7  7.2      52.6   21   6427  00 12 30
00 13 30  =0836+710   15 55 18  44.0 -25.7  7.2      52.4   60   6435  00 12 31

00 13 30  HOIIX-1     15 55 18  42.5 -24.3  7.6      48.2  -19   6435  No stop
00 17 00  ---         15 58 48  42.2 -24.0  7.6      47.6  191   6461  00 13 31

00 17 00  J0841+7053  15 58 48  43.7 -25.4  7.3      51.8  -19   6461  No stop
00 18 30  =0836+710   16 00 18  43.6 -25.3  7.3      51.5   71   6473  00 17 01

00 18 30  HOIIX-1     16 00 18  42.1 -23.9  7.7      47.3  -19   6473  No stop
00 22 00  ---         16 03 49  41.9 -23.6  7.7      46.7  191   6500  00 18 31

00 22 40  J0841+7053  16 04 29  43.4 -25.0  7.4      50.7   21   6500  00 22 40
00 23 40  =0836+710   16 05 29  43.3 -25.0  7.4      50.5   60   6508  00 22 41

```

Schedule for TORUN (Code Tr)

Page 21

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
00 23 40	H0IIX-1	16 05 29	41.8	-23.5	7.7		46.3	-19	6508	No stop
00 27 10	---	16 09 00	41.6	-23.2	7.8		45.7	191	6534	00 23 41
00 27 10	J0841+7053	16 09 00	43.1	-24.7	7.4		49.9	-19	6534	No stop
00 28 40	=0836+710	16 10 30	43.0	-24.6	7.5		49.6	71	6546	00 27 11
00 28 40	H0IIX-1	16 10 30	41.5	-23.1	7.8		45.4	-19	6546	No stop
00 32 10	---	16 14 01	41.3	-22.9	7.9		44.8	191	6573	00 28 41
00 32 50	J0841+7053	16 14 41	42.7	-24.3	7.5		48.8	21	6573	00 32 50
00 33 50	=0836+710	16 15 41	42.7	-24.2	7.5		48.6	60	6580	00 32 51
00 33 50	H0IIX-1	16 15 41	41.2	-22.7	7.9		44.5	-19	6580	No stop
00 37 20	---	16 19 11	41.0	-22.4	8.0		43.8	191	6607	00 33 51
00 37 20	J0841+7053	16 19 11	42.5	-24.0	7.6		48.0	-19	6607	No stop
00 38 50	=0836+710	16 20 42	42.4	-23.8	7.6		47.7	71	6619	00 37 21
00 38 50	H0IIX-1	16 20 42	40.9	-22.3	8.0		43.5	-19	6619	No stop
00 42 20	---	16 24 12	40.7	-22.0	8.1		42.9	191	6646	00 38 51
00 43 00	J0841+7053	16 24 52	42.1	-23.5	7.7		46.9	21	6646	00 43 00
00 44 00	=0836+710	16 25 53	42.0	-23.4	7.7		46.7	60	6653	00 43 01
00 44 00	H0IIX-1	16 25 53	40.6	-21.9	8.1		42.6	-19	6653	No stop
00 47 30	---	16 29 23	40.5	-21.6	8.1		41.9	191	6680	00 44 01
00 47 30	J0841+7053	16 29 23	41.8	-23.2	7.8		46.1	-19	6680	No stop
00 49 00	=0836+710	16 30 53	41.7	-23.1	7.8		45.8	71	6692	00 47 31
00 49 00	H0IIX-1	16 30 53	40.4	-21.5	8.2		41.7	-19	6692	No stop
00 52 30	---	16 34 24	40.2	-21.2	8.2		41.0	191	6719	00 49 01
00 53 10	J0841+7053	16 35 04	41.5	-22.7	7.9		45.0	22	6719	00 53 10
00 54 10	=0836+710	16 36 04	41.4	-22.7	7.9		44.9	60	6726	00 53 11
00 54 10	H0IIX-1	16 36 04	40.1	-21.1	8.3		40.7	-19	6726	No stop
00 57 40	---	16 39 35	39.9	-20.8	8.3		40.1	191	6753	00 54 11
00 57 40	J0841+7053	16 39 35	41.2	-22.4	7.9		44.2	-18	6753	No stop
00 59 10	=0836+710	16 41 05	41.2	-22.3	8.0		43.9	72	6765	00 57 41
00 59 10	H0IIX-1	16 41 05	39.8	-20.7	8.3		39.8	-18	6765	No stop
01 02 40	---	16 44 36	39.6	-20.4	8.4		39.2	192	6792	00 59 11

Schedule for TORUN (Code Tr)

Page 22

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
01 03 20	J0841+7053	16 45 16	40.9	-21.9	8.0		43.2	22	6792	01 03 20
01 04 20	=0836+710	16 46 16	40.9	-21.9	8.1		43.0	60	6799	01 03 21
01 04 20	H0IIX-1	16 46 16	39.5	-20.2	8.4		38.9	-18	6799	No stop
01 07 50	---	16 49 46	39.4	-19.9	8.5		38.2	192	6826	01 04 21
01 07 50	J0841+7053	16 49 46	40.7	-21.6	8.1		42.3	-18	6826	No stop
01 09 20	=0836+710	16 51 17	40.6	-21.5	8.1		42.1	72	6838	01 07 51
01 09 20	H0IIX-1	16 51 17	39.3	-19.8	8.5		37.9	-18	6838	No stop
01 12 50	---	16 54 47	39.1	-19.5	8.6		37.3	192	6865	01 09 21
01 13 30	J0841+7053	16 55 27	40.4	-21.1	8.2		41.3	22	6865	01 13 30
01 14 30	=0836+710	16 56 28	40.3	-21.1	8.2		41.1	60	6872	01 13 31
01 14 30	H0IIX-1	16 56 28	39.0	-19.4	8.6		37.0	-18	6872	No stop
01 18 00	---	16 59 58	38.9	-19.1	8.7		36.4	192	6899	01 14 31
01 18 00	J0841+7053	16 59 58	40.1	-20.8	8.3		40.5	-18	6899	No stop
01 19 30	=0836+710	17 01 28	40.0	-20.6	8.3		40.2	72	6911	01 18 01
01 19 30	H0IIX-1	17 01 28	38.8	-19.0	8.7		36.1	-18	6911	No stop
01 23 00	---	17 04 59	38.6	-18.7	8.7		35.4	192	6938	01 19 31
01 23 40	J0841+7053	17 05 39	39.8	-20.3	8.4		39.4	22	6938	01 23 40
01 24 40	=0836+710	17 06 39	39.8	-20.2	8.4		39.2	60	6945	01 23 41
01 24 40	H0IIX-1	17 06 39	38.5	-18.5	8.8		35.1	-18	6945	No stop
01 28 10	---	17 10 10	38.4	-18.2	8.8		34.5	192	6972	01 24 41
01 28 10	J0841+7053	17 10 10	39.6	-19.9	8.5		38.6	-18	6972	No stop
01 29 40	=0836+710	17 11 40	39.5	-19.8	8.5		38.3	72	6984	01 28 11
01 29 40	H0IIX-1	17 11 40	38.3	-18.1	8.8		34.2	-18	6984	No stop
01 33 10	---	17 15 11	38.1	-17.8	8.9		33.6	192	7011	01 29 41
01 33 50	J0841+7053	17 15 51	39.3	-19.4	8.6		37.5	22	7011	01 33 50
01 34 50	=0836+710	17 16 51	39.3	-19.4	8.6		37.4	60	7018	01 33 51
01 36 00	J0749+7420	17 18 01	40.0	-12.6	9.4		29.0	42	7018	01 36 00
01 38 50	=0743+744	17 20 52	39.9	-12.4	9.5		28.5	170	7040	01 36 01
01 40 00	J0841+7053	17 22 02	39.0	-18.9	8.7		36.4	42	7040	01 40 00
01 41 00	=0836+710	17 23 02	38.9	-18.8	8.7		36.2	60	7048	01 40 01

Schedule for TORUN (Code Tr)

Page 23

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
01 41 00	H0IIX-1	17 23 02	37.8	-17.1	9.0		32.2	-18	7048	No stop
01 44 30	---	17 26 32	37.6	-16.8	9.1		31.5	192	7075	01 41 01
01 44 30	J0841+7053	17 26 32	38.8	-18.5	8.7		35.6	-17	7075	No stop
01 46 00	=0836+710	17 28 03	38.7	-18.4	8.8		35.3	73	7086	01 44 31
01 46 00	H0IIX-1	17 28 03	37.6	-16.6	9.1		31.3	-17	7086	No stop
01 49 30	---	17 31 33	37.4	-16.3	9.2		30.6	193	7113	01 46 01
01 50 10	J0841+7053	17 32 13	38.5	-18.1	8.8		34.6	23	7113	01 50 10
01 51 10	=0836+710	17 33 14	38.5	-18.0	8.8		34.4	60	7121	01 50 11
01 51 10	H0IIX-1	17 33 14	37.3	-16.2	9.2		30.3	-17	7121	No stop
01 54 40	---	17 36 44	37.2	-15.8	9.3		29.7	193	7148	01 51 11
01 54 40	J0841+7053	17 36 44	38.3	-17.7	8.9		33.7	-17	7148	No stop
01 56 10	=0836+710	17 38 14	38.2	-17.5	8.9		33.5	73	7159	01 54 41
01 56 10	H0IIX-1	17 38 14	37.1	-15.7	9.3		29.4	-17	7159	No stop
01 59 40	---	17 41 45	37.0	-15.4	9.3		28.8	193	7186	01 56 11
02 00 20	J0841+7053	17 42 25	38.0	-17.2	9.0		32.7	23	7186	02 00 20
02 01 20	=0836+710	17 43 25	38.0	-17.1	9.0		32.5	60	7194	02 00 21
02 01 20	H0IIX-1	17 43 25	36.9	-15.2	9.4		28.5	-17	7194	No stop
02 04 50	---	17 46 56	36.8	-14.9	9.4		27.8	193	7220	02 01 21
02 04 50	J0841+7053	17 46 56	37.8	-16.8	9.1		31.9	-17	7220	No stop
02 06 20	=0836+710	17 48 26	37.8	-16.6	9.1		31.6	73	7232	02 04 51
02 06 20	H0IIX-1	17 48 26	36.7	-14.8	9.5		27.6	-17	7232	No stop
02 09 50	---	17 51 57	36.6	-14.5	9.5		26.9	193	7259	02 06 21
02 10 30	J0841+7053	17 52 37	37.6	-16.3	9.2		30.8	23	7259	02 10 30
02 11 30	=0836+710	17 53 37	37.6	-16.2	9.2		30.7	60	7267	02 10 31
----- WSRTcal - Ef pointing check -----										
02 11 30	3C286	17 53 37	38.3	271.3	4.4		44.1	-594	7267	No stop
02 21 30	---	18 03 39	36.8	273.3	4.5		44.1	6	7343	02 11 31
02 25 30	J1658+3443	18 07 39	67.9	220.5	1.2		28.3	109	7343	02 25 30
02 30 30	=1656+348	18 12 40	67.4	222.9	1.2		29.8	300	7382	02 25 31

Schedule for TORUN (Code Tr)

Page 24

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
02 30 30	J1658+3443	18 12 40	67.4	222.9	1.2		29.8	-5	7382	No stop
02 31 40	=1656+348	18 13 50	67.3	223.4	1.3		30.1	65	7391	02 30 31
02 31 40	IRAS16474	18 13 50	66.1	226.9	1.4		32.1	-22	7391	No stop
02 35 40	---	18 17 51	65.7	228.6	1.5		33.1	218	7421	02 31 41
02 36 20	J1658+3443	18 18 31	66.8	225.5	1.3		31.4	19	7421	02 36 20
02 36 50	=1656+348	18 19 01	66.8	225.7	1.3		31.5	30	7425	02 36 21
02 36 50	IRAS16474	18 19 01	65.5	229.1	1.5		33.4	-22	7425	No stop
02 40 50	---	18 23 02	65.1	230.8	1.6		34.3	218	7456	02 36 51
02 40 50	J1658+3443	18 23 02	66.3	227.5	1.4		32.6	-21	7456	No stop
02 42 00	=1656+348	18 24 12	66.2	228.0	1.4		32.9	49	7465	02 40 51
02 42 00	IRAS16474	18 24 12	64.9	231.2	1.6		34.6	-21	7465	No stop
02 46 00	---	18 28 13	64.4	232.8	1.6		35.4	219	7496	02 42 01
02 46 40	J1658+3443	18 28 53	65.7	230.0	1.5		34.0	19	7496	02 46 40
02 47 10	=1656+348	18 29 23	65.6	230.2	1.5		34.1	30	7500	02 46 41
02 47 10	IRAS16474	18 29 23	64.3	233.3	1.7		35.7	-21	7500	No stop
02 51 10	---	18 33 23	63.8	234.8	1.7		36.5	219	7530	02 47 11
02 51 10	J1658+3443	18 33 23	65.1	231.8	1.6		35.0	-20	7530	No stop
02 52 20	=1656+348	18 34 34	65.0	232.3	1.6		35.3	50	7539	02 51 11
02 52 20	IRAS16474	18 34 34	63.7	235.2	1.7		36.7	-21	7539	No stop
02 56 20	---	18 38 34	63.2	236.7	1.8		37.5	219	7570	02 52 21
02 57 00	J1658+3443	18 39 14	64.4	234.1	1.7		36.3	20	7570	02 57 00
02 57 30	=1656+348	18 39 44	64.4	234.3	1.7		36.4	30	7574	02 57 01
02 57 30	IRAS16474	18 39 44	63.0	237.1	1.8		37.7	-20	7574	No stop
03 01 30	---	18 43 45	62.5	238.6	1.9		38.4	220	7604	02 57 31
03 01 30	J1658+3443	18 43 45	63.9	235.8	1.8		37.2	-20	7604	No stop
03 02 40	=1656+348	18 44 55	63.7	236.2	1.8		37.4	50	7613	03 01 31
03 02 40	IRAS16474	18 44 55	62.4	239.0	1.9		38.6	-20	7613	No stop
03 06 40	---	18 48 56	61.9	240.3	2.0		39.2	220	7644	03 02 41
03 07 20	J1658+3443	18 49 36	63.1	237.9	1.9		38.2	21	7644	03 07 20
03 07 50	=1656+348	18 50 06	63.1	238.1	1.9		38.3	30	7648	03 07 21

Schedule for TORUN (Code Tr)

Page 25

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
03 07 50	IRAS16474	18 50 06	61.7	240.7	2.0		39.4	-20	7648	No stop
03 11 50	---	18 54 07	61.2	242.1	2.1		40.0	220	7679	03 07 51
03 11 50	J1658+3443	18 54 07	62.6	239.5	1.9		39.0	-19	7679	No stop
03 13 00	=1656+348	18 55 17	62.4	239.9	1.9		39.2	51	7688	03 11 51
03 13 00	IRAS16474	18 55 17	61.0	242.4	2.1		40.2	-19	7688	No stop
03 17 00	---	18 59 18	60.5	243.7	2.2		40.7	221	7718	03 13 01
03 17 40	J1658+3443	18 59 58	61.8	241.5	2.0		39.9	21	7718	03 17 40
03 18 10	=1656+348	19 00 28	61.7	241.7	2.0		40.0	30	7722	03 17 41
03 18 10	IRAS16474	19 00 28	60.3	244.1	2.2		40.9	-19	7722	No stop
03 22 10	---	19 04 29	59.8	245.4	2.2		41.4	221	7753	03 18 11
03 22 10	J1658+3443	19 04 29	61.2	243.0	2.1		40.6	-19	7753	No stop
03 23 20	=1656+348	19 05 39	61.0	243.4	2.1		40.8	51	7762	03 22 11
03 23 20	IRAS16474	19 05 39	59.6	245.7	2.3		41.6	-19	7762	No stop
03 27 20	---	19 09 39	59.1	246.9	2.3		42.0	221	7793	03 23 21
03 28 00	J1658+3443	19 10 20	60.4	244.9	2.2		41.4	21	7793	03 28 00
03 28 30	=1656+348	19 10 50	60.3	245.0	2.2		41.5	30	7796	03 28 01
03 28 30	IRAS16474	19 10 50	58.9	247.3	2.4		42.2	-19	7796	No stop
03 32 30	---	19 14 50	58.3	248.4	2.4		42.6	221	7827	03 28 31
03 32 30	J1658+3443	19 14 50	59.8	246.2	2.3		42.0	-19	7827	No stop
03 33 40	=1656+348	19 16 00	59.6	246.6	2.3		42.1	51	7836	03 32 31
03 33 40	IRAS16474	19 16 00	58.2	248.8	2.4		42.7	-19	7836	No stop
03 37 40	---	19 20 01	57.6	249.9	2.5		43.1	221	7867	03 33 41
03 38 20	J1658+3443	19 20 41	59.0	248.0	2.4		42.6	21	7867	03 38 20
03 38 50	=1656+348	19 21 11	58.9	248.1	2.4		42.7	30	7871	03 38 21
03 38 50	IRAS16474	19 21 11	57.5	250.2	2.5		43.2	-19	7871	No stop
03 42 50	---	19 25 12	56.9	251.4	2.6		43.6	221	7901	03 38 51
03 42 50	J1658+3443	19 25 12	58.4	249.3	2.4		43.1	-19	7901	No stop
03 44 00	=1656+348	19 26 22	58.2	249.6	2.5		43.2	51	7910	03 42 51
03 44 00	IRAS16474	19 26 22	56.7	251.7	2.6		43.7	-19	7910	No stop
03 48 00	---	19 30 23	56.1	252.8	2.7		44.0	221	7941	03 44 01

Schedule for TORUN (Code Tr)

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e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
03 48 40	J1658+3443	19 31 03	57.5	250.9	2.5		43.7	21	7941	03 48 40
03 49 10	=1656+348	19 31 33	57.5	251.1	2.5		43.7	30	7945	03 48 41
03 49 10	IRAS16474	19 31 33	56.0	253.1	2.7		44.1	-19	7945	No stop
03 53 10	---	19 35 34	55.4	254.1	2.8		44.4	221	7976	03 49 11
03 53 10	J1658+3443	19 35 34	56.9	252.2	2.6		44.1	-19	7976	No stop
03 54 20	=1656+348	19 36 44	56.7	252.5	2.6		44.2	51	7985	03 53 11
03 54 20	IRAS16474	19 36 44	55.2	254.4	2.8		44.5	-19	7985	No stop
03 58 20	---	19 40 44	54.6	255.4	2.8		44.8	221	8015	03 54 21
03 59 00	J1658+3443	19 41 25	56.0	253.7	2.7		44.5	21	8015	03 59 00
03 59 30	=1656+348	19 41 55	56.0	253.9	2.7		44.6	30	8019	03 59 01
03 59 30	IRAS16474	19 41 55	54.5	255.7	2.9		44.9	-19	8019	No stop
04 03 30	---	19 45 55	53.9	256.7	2.9		45.1	221	8050	03 59 31
04 03 30	J1658+3443	19 45 55	55.4	254.9	2.8		44.8	-19	8050	No stop
04 04 40	=1656+348	19 47 06	55.2	255.2	2.8		44.9	51	8059	04 03 31
04 04 40	IRAS16474	19 47 06	53.7	257.0	3.0		45.2	-19	8059	No stop
04 08 40	---	19 51 06	53.1	258.0	3.0		45.4	221	8090	04 04 41
04 09 20	J1658+3443	19 51 46	54.5	256.4	2.9		45.2	21	8090	04 09 20
04 09 50	=1656+348	19 52 16	54.5	256.5	2.9		45.3	30	8093	04 09 21
04 09 50	IRAS16474	19 52 16	53.0	258.3	3.0		45.4	-19	8093	No stop
04 13 50	---	19 56 17	52.4	259.2	3.1		45.6	221	8124	04 09 51
04 13 50	J1658+3443	19 56 17	53.9	257.5	3.0		45.5	-19	8124	No stop
04 15 00	=1656+348	19 57 27	53.7	257.8	3.0		45.6	51	8133	04 13 51
04 15 00	IRAS16474	19 57 27	52.2	259.5	3.1		45.7	-19	8133	No stop
04 19 00	---	20 01 28	51.6	260.5	3.2		45.9	221	8164	04 15 01
04 19 40	J1658+3443	20 02 08	53.0	258.9	3.1		45.8	21	8164	04 19 40
04 20 10	=1656+348	20 02 38	52.9	259.0	3.1		45.8	30	8168	04 19 41
04 20 10	IRAS16474	20 02 38	51.4	260.7	3.2		45.9	-19	8168	No stop
04 24 10	---	20 06 39	50.8	261.6	3.3		46.1	221	8198	04 20 11
04 24 10	J1658+3443	20 06 39	52.4	260.0	3.1		46.0	-19	8198	No stop
04 25 20	=1656+348	20 07 49	52.2	260.2	3.2		46.0	51	8207	04 24 11

Schedule for TORUN (Code Tr)

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e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
04 25 20	IRAS16474	20 07 49	50.7	261.9	3.3		46.1	-19	8207	No stop
04 29 20	---	20 11 50	50.1	262.8	3.4		46.2	221	8238	04 25 21
04 30 00	J1658+3443	20 12 30	51.5	261.3	3.2		46.2	21	8238	04 30 00
04 30 30	=1656+348	20 13 00	51.4	261.4	3.2		46.2	30	8242	04 30 01
04 30 30	IRAS16474	20 13 00	49.9	263.1	3.4		46.3	-19	8242	No stop
04 34 30	---	20 17 00	49.3	263.9	3.5		46.4	221	8273	04 30 31
04 34 30	J1658+3443	20 17 00	50.8	262.3	3.3		46.4	-19	8273	No stop
04 35 40	=1656+348	20 18 11	50.6	262.6	3.3		46.4	51	8282	04 34 31
04 35 40	IRAS16474	20 18 11	49.1	264.2	3.5		46.4	-19	8282	No stop
04 39 40	---	20 22 11	48.5	265.1	3.5		46.5	221	8312	04 35 41
04 40 20	J1658+3443	20 22 51	49.9	263.6	3.4		46.5	21	8312	04 40 20
04 40 50	=1656+348	20 23 21	49.9	263.8	3.4		46.6	30	8316	04 40 21
04 40 50	IRAS16474	20 23 21	48.3	265.3	3.6		46.5	-19	8316	No stop
04 44 50	---	20 27 22	47.7	266.2	3.6		46.6	221	8347	04 40 51
04 44 50	J1658+3443	20 27 22	49.3	264.6	3.5		46.7	-19	8347	No stop
04 46 00	=1656+348	20 28 32	49.1	264.9	3.5		46.7	51	8356	04 44 51
04 46 00	IRAS16474	20 28 32	47.6	266.4	3.6		46.6	-19	8356	No stop
04 50 00	---	20 32 33	47.0	267.3	3.7		46.6	221	8387	04 46 01
04 50 40	J1658+3443	20 33 13	48.4	265.9	3.6		46.8	21	8387	04 50 40
04 51 10	=1656+348	20 33 43	48.3	266.0	3.6		46.8	30	8390	04 50 41
04 51 10	IRAS16474	20 33 43	46.8	267.5	3.7		46.6	-19	8390	No stop
04 55 10	---	20 37 44	46.2	268.3	3.8		46.7	221	8421	04 51 11
04 57 30	J1751+0939	20 40 04	35.0	233.6	2.8		29.4	55	8421	04 57 30
05 00 00	=1749+096	20 42 35	34.7	234.3	2.8		29.6	150	8440	04 57 31
05 00 30	J1751+0939	20 43 05	34.7	234.4	2.8		29.7	24	8440	05 00 30
05 06 00	=1749+096	20 48 36	34.0	235.8	2.9		30.3	330	8483	05 00 31
05 07 40	J1847+0810	20 50 16	38.7	220.2	2.0		23.1	53	8483	05 07 40
05 09 10	=1844+081	20 51 46	38.6	220.6	2.1		23.3	90	8494	05 07 41
05 09 10	J1844+1140	20 51 46	41.5	223.4	2.1		24.9	-25	8494	No stop
05 12 40	---	20 55 17	41.1	224.4	2.2		25.4	185	8521	05 09 11
05 13 10	J1847+0810	20 55 47	38.2	221.8	2.1		23.9	5	8521	05 13 10
05 14 10	=1844+081	20 56 47	38.1	222.1	2.1		24.0	60	8529	05 13 11

Schedule for TORUN (Code Tr)

Page 28

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
05 14 10	V1285AQL	20 56 47	39.1	219.8	2.0		22.9	-18	8529	No stop
05 17 40	---	21 00 18	38.8	220.8	2.1		23.4	192	8556	05 14 11
05 17 40	J1847+0810	21 00 18	37.7	223.1	2.2		24.5	-19	8556	No stop
05 19 10	=1844+081	21 01 48	37.6	223.5	2.2		24.7	71	8567	05 17 41
05 19 10	V1285AQL	21 01 48	38.6	221.3	2.1		23.6	-18	8567	No stop
05 22 40	---	21 05 18	38.3	222.3	2.2		24.1	192	8594	05 19 11
05 23 10	J1847+0810	21 05 48	37.2	224.7	2.3		25.2	11	8594	05 23 10
05 24 10	=1844+081	21 06 49	37.0	224.9	2.3		25.4	60	8602	05 23 11
05 24 10	V1285AQL	21 06 49	38.1	222.7	2.2		24.3	-18	8602	No stop
05 27 40	---	21 10 19	37.8	223.7	2.2		24.8	192	8628	05 24 11
05 27 40	J1847+0810	21 10 19	36.7	225.9	2.4		25.8	-18	8628	No stop
05 29 10	=1844+081	21 11 49	36.5	226.3	2.4		26.0	72	8640	05 27 41
05 29 10	V1285AQL	21 11 49	37.6	224.2	2.3		25.0	-18	8640	No stop
05 32 40	---	21 15 20	37.2	225.1	2.3		25.5	192	8667	05 29 11
05 33 10	J1847+0810	21 15 50	36.1	227.4	2.5		26.5	12	8667	05 33 10
05 34 10	=1844+081	21 16 50	36.0	227.7	2.5		26.7	60	8675	05 33 11
05 34 10	V1285AQL	21 16 50	37.1	225.6	2.3		25.7	-18	8675	No stop
05 37 40	---	21 20 21	36.7	226.5	2.4		26.1	192	8701	05 34 11
05 37 40	J1847+0810	21 20 21	35.6	228.7	2.5		27.1	-18	8701	No stop
05 39 10	=1844+081	21 21 51	35.4	229.1	2.6		27.3	72	8713	05 37 41
05 39 10	J1844+1140	21 21 51	38.1	231.9	2.6		28.9	-24	8713	No stop
05 42 40	---	21 25 22	37.7	232.9	2.7		29.3	186	8740	05 39 11
05 43 10	J1847+0810	21 25 52	34.9	230.2	2.6		27.8	6	8740	05 43 10
05 44 10	=1844+081	21 26 52	34.8	230.4	2.6		27.9	60	8748	05 43 11
05 44 10	V1285AQL	21 26 52	36.0	228.3	2.5		27.0	-18	8748	No stop
05 47 40	---	21 30 22	35.6	229.3	2.6		27.4	192	8774	05 44 11
05 47 40	J1847+0810	21 30 22	34.4	231.4	2.7		28.3	-18	8774	No stop
05 49 10	=1844+081	21 31 53	34.2	231.7	2.7		28.5	72	8786	05 47 41
05 49 10	V1285AQL	21 31 53	35.4	229.7	2.6		27.6	-18	8786	No stop
05 52 40	---	21 35 23	35.0	230.6	2.7		28.0	192	8813	05 49 11
05 53 10	J1847+0810	21 35 53	33.8	232.8	2.8		28.9	12	8813	05 53 10
05 54 10	=1844+081	21 36 54	33.6	233.1	2.8		29.0	60	8820	05 53 11

Schedule for TORUN (Code Tr)

Page 29

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
05 54 10	V1285AQL	21 36 54	34.8	231.0	2.7		28.2	-18	8820	No stop
05 57 40	---	21 40 24	34.4	232.0	2.7		28.6	192	8847	05 54 11
05 57 40	J1847+0810	21 40 24	33.2	234.0	2.9		29.4	-18	8847	No stop
05 59 10	=1844+081	21 41 54	33.0	234.4	2.9		29.5	72	8859	05 57 41
05 59 10	V1285AQL	21 41 54	34.2	232.3	2.8		28.7	-17	8859	No stop
06 02 40	---	21 45 25	33.8	233.3	2.8		29.1	193	8886	05 59 11
06 03 10	J1847+0810	21 45 55	32.5	235.4	3.0		30.0	12	8886	06 03 10
06 04 10	=1844+081	21 46 55	32.4	235.6	3.0		30.1	60	8893	06 03 11
06 04 10	V1285AQL	21 46 55	33.6	233.7	2.8		29.3	-18	8893	No stop
06 07 40	---	21 50 26	33.2	234.6	2.9		29.6	192	8920	06 04 11
06 07 40	J1847+0810	21 50 26	32.0	236.5	3.0		30.4	-18	8920	No stop
06 09 10	=1844+081	21 51 56	31.8	236.9	3.1		30.5	72	8932	06 07 41
06 09 10	J1844+1140	21 51 56	34.4	239.8	3.1		32.0	-24	8932	No stop
06 12 40	---	21 55 27	33.9	240.7	3.2		32.3	186	8959	06 09 11
06 13 10	J1847+0810	21 55 57	31.3	237.9	3.1		30.9	6	8959	06 13 10
06 14 10	=1844+081	21 56 57	31.2	238.1	3.2		31.0	60	8966	06 13 11
06 14 10	V1285AQL	21 56 57	32.4	236.2	3.0		30.3	-18	8966	No stop
06 17 40	---	22 00 27	32.0	237.1	3.1		30.6	192	8993	06 14 11
06 17 40	J1847+0810	22 00 27	30.7	239.0	3.2		31.3	-18	8993	No stop
06 19 10	=1844+081	22 01 58	30.5	239.4	3.2		31.5	72	9005	06 17 41
06 19 10	V1285AQL	22 01 58	31.8	237.5	3.1		30.8	-18	9005	No stop
06 22 40	---	22 05 28	31.3	238.4	3.2		31.1	192	9032	06 19 11
06 23 10	J1847+0810	22 05 58	30.0	240.4	3.3		31.8	12	9032	06 23 10
06 24 10	=1844+081	22 06 58	29.9	240.6	3.3		31.9	60	9039	06 23 11
06 24 10	V1285AQL	22 06 58	31.1	238.7	3.2		31.3	-18	9039	No stop
06 27 40	---	22 10 29	30.7	239.6	3.2		31.6	192	9066	06 24 11
06 27 40	J1847+0810	22 10 29	29.4	241.5	3.4		32.2	-18	9066	No stop
06 29 10	=1844+081	22 11 59	29.2	241.8	3.4		32.3	72	9078	06 27 41
06 29 10	V1285AQL	22 11 59	30.5	240.0	3.3		31.7	-18	9078	No stop
06 32 40	---	22 15 30	30.0	240.8	3.3		32.0	192	9105	06 29 11
06 33 10	J1847+0810	22 16 00	28.7	242.8	3.5		32.6	12	9105	06 33 10
06 34 10	=1844+081	22 17 00	28.5	243.0	3.5		32.7	60	9112	06 33 11

Schedule for TORUN (Code Tr)

Page 30

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
06 34 10	V1285AQL	22 17 00	29.8	241.2	3.3		32.1	-18	9112	No stop
06 37 40	---	22 20 31	29.4	242.0	3.4		32.4	192	9139	06 34 11
06 37 40	J1847+0810	22 20 31	28.1	243.8	3.5		33.0	-18	9139	No stop
06 39 10	=1844+081	22 22 01	27.9	244.2	3.6		33.1	72	9151	06 37 41
06 39 10	J1844+1140	22 22 01	30.4	247.1	3.6		34.4	-23	9151	No stop
06 42 40	---	22 25 31	29.9	247.9	3.7		34.6	187	9178	06 39 11
06 43 10	J1847+0810	22 26 02	27.3	245.1	3.6		33.4	7	9178	06 43 10
06 44 10	=1844+081	22 27 02	27.2	245.4	3.7		33.5	60	9185	06 43 11
06 44 10	V1285AQL	22 27 02	28.5	243.6	3.5		32.9	-18	9185	No stop
06 47 40	---	22 30 32	28.0	244.4	3.6		33.2	192	9212	06 44 11
06 47 40	J1847+0810	22 30 32	26.7	246.2	3.7		33.7	-18	9212	No stop
06 49 10	=1844+081	22 32 03	26.5	246.5	3.7		33.8	72	9224	06 47 41
06 49 10	V1285AQL	22 32 03	27.8	244.7	3.6		33.3	-18	9224	No stop
06 52 40	---	22 35 33	27.3	245.6	3.7		33.5	192	9251	06 49 11
06 53 10	J1847+0810	22 36 03	25.9	247.4	3.8		34.1	12	9251	06 53 10
06 54 10	=1844+081	22 37 03	25.8	247.7	3.8		34.1	60	9258	06 53 11
06 54 10	V1285AQL	22 37 03	27.1	245.9	3.7		33.7	-18	9258	No stop
06 57 40	---	22 40 34	26.6	246.7	3.7		33.9	192	9285	06 54 11
06 57 40	J1847+0810	22 40 34	25.3	248.5	3.9		34.4	-18	9285	No stop
06 59 10	=1844+081	22 42 04	25.1	248.8	3.9		34.4	72	9297	06 57 41
06 59 10	V1285AQL	22 42 04	26.4	247.1	3.8		34.0	-18	9297	No stop
07 02 40	---	22 45 35	25.9	247.9	3.8		34.2	192	9323	06 59 11
07 03 10	J1847+0810	22 46 05	24.5	249.7	4.0		34.7	11	9323	07 03 10
07 04 10	=1844+081	22 47 05	24.4	249.9	4.0		34.7	60	9331	07 03 11
07 04 10	V1285AQL	22 47 05	25.7	248.2	3.8		34.3	-18	9331	No stop
07 07 40	---	22 50 36	25.2	249.0	3.9		34.5	192	9358	07 04 11
07 07 40	J1847+0810	22 50 36	23.9	250.7	4.0		34.9	-19	9358	No stop
07 09 10	=1844+081	22 52 06	23.7	251.0	4.1		35.0	71	9370	07 07 41
07 09 10	J1844+1140	22 52 06	26.1	253.9	4.1		36.1	-23	9370	No stop
07 12 40	---	22 55 36	25.6	254.7	4.2		36.3	187	9396	07 09 11
07 13 10	J1847+0810	22 56 06	23.1	251.9	4.1		35.2	7	9396	07 13 10
07 14 10	=1844+081	22 57 07	23.0	252.1	4.2		35.3	60	9404	07 13 11

Schedule for TORUN (Code Tr)

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e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
07 14 10	V1285AQL	22 57 07	24.3	250.5	4.0		34.9	-18	9404	No stop
07 17 40	---	23 00 37	23.8	251.2	4.1		35.1	192	9431	07 14 11
07 17 40	J1847+0810	23 00 37	22.5	252.9	4.2		35.4	-19	9431	No stop
07 19 10	=1844+081	23 02 07	22.3	253.2	4.2		35.5	71	9443	07 17 41
07 19 10	V1285AQL	23 02 07	23.6	251.6	4.1		35.2	-18	9443	No stop
07 22 40	---	23 05 38	23.1	252.3	4.2		35.3	192	9469	07 19 11
07 23 10	J1847+0810	23 06 08	21.7	254.1	4.3		35.7	11	9469	07 23 10
07 24 10	=1844+081	23 07 08	21.5	254.3	4.3		35.7	60	9477	07 23 11
07 24 10	V1285AQL	23 07 08	22.9	252.7	4.2		35.4	-18	9477	No stop
07 27 40	---	23 10 39	22.4	253.4	4.2		35.6	192	9504	07 24 11
07 27 40	J1847+0810	23 10 39	21.0	255.1	4.4		35.9	-19	9504	No stop
07 29 10	=1844+081	23 12 09	20.8	255.4	4.4		36.0	71	9515	07 27 41
07 29 10	V1285AQL	23 12 09	22.2	253.8	4.3		35.6	-18	9515	No stop
07 32 40	---	23 15 40	21.7	254.5	4.3		35.8	192	9542	07 29 11
07 33 10	J1847+0810	23 16 10	20.2	256.3	4.5		36.1	11	9542	07 33 10
07 34 10	=1844+081	23 17 10	20.1	256.5	4.5		36.1	60	9550	07 33 11
07 34 10	V1285AQL	23 17 10	21.5	254.9	4.4		35.9	-18	9550	No stop
07 37 40	---	23 20 41	20.9	255.6	4.4		36.0	192	9577	07 34 11
07 37 40	J1847+0810	23 20 41	19.6	257.2	4.5		36.3	-19	9577	No stop
07 39 10	=1844+081	23 22 11	19.3	257.5	4.6		36.3	71	9588	07 37 41
07 39 10	J1844+1140	23 22 11	21.7	260.4	4.6		37.2	-23	9588	No stop
07 42 40	---	23 25 41	21.2	261.1	4.7		37.3	187	9615	07 39 11
07 43 10	J1847+0810	23 26 11	18.7	258.4	4.6		36.5	7	9615	07 43 10
07 44 10	=1844+081	23 27 12	18.6	258.6	4.7		36.5	60	9623	07 43 11
07 44 10	V1285AQL	23 27 12	20.0	257.0	4.5		36.3	-18	9623	No stop
07 47 40	---	23 30 42	19.5	257.7	4.6		36.4	192	9650	07 44 11
07 47 40	J1847+0810	23 30 42	18.1	259.3	4.7		36.6	-19	9650	No stop
07 49 10	=1844+081	23 32 12	17.9	259.6	4.7		36.6	71	9661	07 47 41
07 49 10	V1285AQL	23 32 12	19.3	258.1	4.6		36.4	-18	9661	No stop
07 52 40	---	23 35 43	18.7	258.8	4.7		36.5	192	9688	07 49 11
07 53 10	J1847+0810	23 36 13	17.3	260.5	4.8		36.7	11	9688	07 53 10
07 54 10	=1844+081	23 37 13	17.1	260.7	4.8		36.8	60	9696	07 53 11

Schedule for TORUN (Code Tr)

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e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
07 54 10	V1285AQL	23 37 13	18.5	259.1	4.7		36.6	-19	9696	No stop
07 57 40	---	23 40 44	18.0	259.8	4.7		36.7	191	9723	07 54 11
07 57 40	J1847+0810	23 40 44	16.6	261.4	4.9		36.9	-19	9723	No stop
07 59 10	=1844+081	23 42 14	16.4	261.7	4.9		36.9	71	9734	07 57 41
07 59 10	V1285AQL	23 42 14	17.8	260.2	4.8		36.7	-19	9734	No stop
08 02 40	---	23 45 45	17.3	260.9	4.8		36.8	191	9761	07 59 11
08 03 10	J1847+0810	23 46 15	15.8	262.5	5.0		37.0	11	9761	08 03 10
08 04 10	=1844+081	23 47 15	15.6	262.8	5.0		37.0	60	9769	08 03 11
08 04 10	V1285AQL	23 47 15	17.0	261.2	4.9		36.9	-19	9769	No stop
08 07 40	---	23 50 45	16.5	261.9	4.9		36.9	191	9796	08 04 11
08 07 40	J1847+0810	23 50 45	15.1	263.5	5.0		37.1	-19	9796	No stop
08 09 10	=1844+081	23 52 16	14.9	263.8	5.1		37.1	71	9807	08 07 41
08 09 10	J1844+1140	23 52 16	17.2	266.6	5.1		37.7	-22	9807	No stop
08 12 40	---	23 55 46	16.7	267.3	5.2		37.8	188	9834	08 09 11
08 12 40	J1847+0810	23 55 46	14.4	264.5	5.1		37.1	-23	9834	No stop
08 14 10	=1844+081	23 57 17	14.1	264.8	5.2		37.2	67	9846	08 12 41
08 14 10	V1285AQL	23 57 17	15.5	263.3	5.0		37.1	-19	9846	No stop
08 17 40	---	00 00 47	15.0	264.0	5.1		37.1	191	9873	08 14 11
08 18 10	J1847+0810	00 01 17	13.5	265.6	5.2		37.2	11	9873	08 18 10
08 19 10	=1844+081	00 02 17	13.4	265.8	5.2		37.2	60	9880	08 18 11
08 22 20	J2148+0657	00 05 28	36.2	223.7	2.3		24.7	90	9880	08 22 20
08 27 20	=2145+067	00 10 29	35.7	225.1	2.4		25.4	300	9919	08 22 21
08 29 20	J0841+7053	00 12 29	39.4	379.7	-8.5		-38.0	-205	9919	08 29 20
08 42 20	=0836+710	00 25 31	40.1	380.7	-8.3		-40.4	575	10019	08 29 21
08 43 30	J0749+7420	00 26 41	45.3	381.0	-7.4		-52.9	37	10019	08 43 30
08 46 20	=0743+744	00 29 32	45.5	381.2	-7.4		-53.4	170	10040	08 43 31
08 47 30	J0841+7053	00 30 42	40.4	381.2	-8.2		-41.4	37	10040	08 47 30
08 48 30	=0836+710	00 31 42	40.4	381.3	-8.2		-41.6	60	10048	08 47 31
08 48 30	HOIIX-1	00 31 42	41.6	383.2	-7.8		-45.5	-17	10048	No stop
08 52 00	---	00 35 13	41.8	383.4	-7.8		-46.1	193	10075	08 48 31
08 52 00	J0841+7053	00 35 13	40.6	381.5	-8.1		-42.2	-17	10075	No stop
08 53 30	=0836+710	00 36 43	40.7	381.7	-8.1		-42.5	73	10086	08 52 01

Schedule for TORUN (Code Tr)

Page 33

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
08 53 30	H0IIX-1	00 36 43	41.8	383.5	-7.7		-46.4	-17	10086	No stop
08 57 00	---	00 40 14	42.1	383.8	-7.7		-47.0	193	10113	08 53 31
08 57 40	J0841+7053	00 40 54	41.0	382.0	-8.0		-43.2	23	10113	08 57 40
08 58 40	=0836+710	00 41 54	41.0	382.1	-8.0		-43.4	60	10121	08 57 41
08 58 40	H0IIX-1	00 41 54	42.2	383.9	-7.7		-47.4	-17	10121	No stop
09 02 10	---	00 45 24	42.4	384.2	-7.6		-48.0	193	10148	08 58 41
09 02 10	J0841+7053	00 45 24	41.2	382.3	-8.0		-44.1	-17	10148	No stop
09 03 40	=0836+710	00 46 55	41.3	382.5	-7.9		-44.4	73	10159	09 02 11
09 03 40	H0IIX-1	00 46 55	42.5	384.3	-7.6		-48.3	-18	10159	No stop
09 07 10	---	00 50 25	42.7	384.6	-7.5		-48.9	192	10186	09 03 41
09 07 50	J0841+7053	00 51 05	41.5	382.8	-7.9		-45.1	22	10186	09 07 50
09 08 50	=0836+710	00 52 05	41.6	382.9	-7.8		-45.3	60	10194	09 07 51
09 08 50	H0IIX-1	00 52 05	42.8	384.7	-7.5		-49.2	-18	10194	No stop
09 12 20	---	00 55 36	43.0	385.0	-7.4		-49.9	192	10221	09 08 51
09 12 20	J0841+7053	00 55 36	41.8	383.1	-7.8		-46.0	-18	10221	No stop
09 13 50	=0836+710	00 57 06	41.9	383.2	-7.8		-46.2	72	10232	09 12 21
09 13 50	H0IIX-1	00 57 06	43.1	385.1	-7.4		-50.2	-18	10232	No stop
09 17 20	---	01 00 37	43.3	385.3	-7.3		-50.8	192	10259	09 13 51
09 18 00	J0841+7053	01 01 17	42.1	383.6	-7.7		-47.0	22	10259	09 18 00
09 19 00	=0836+710	01 02 17	42.2	383.6	-7.7		-47.2	60	10267	09 18 01
09 19 00	H0IIX-1	01 02 17	43.4	385.4	-7.3		-51.1	-18	10267	No stop
09 22 30	---	01 05 48	43.7	385.7	-7.3		-51.8	192	10294	09 19 01
09 22 30	J0841+7053	01 05 48	42.4	383.9	-7.6		-47.9	-18	10294	No stop
09 24 00	=0836+710	01 07 18	42.5	384.0	-7.6		-48.1	72	10305	09 22 31
09 24 00	H0IIX-1	01 07 18	43.8	385.8	-7.2		-52.1	-18	10305	No stop
09 27 30	---	01 10 49	44.0	386.0	-7.2		-52.7	192	10332	09 24 01
09 28 10	J0841+7053	01 11 29	42.8	384.3	-7.5		-48.9	22	10332	09 28 10
09 29 10	=0836+710	01 12 29	42.8	384.4	-7.5		-49.1	60	10340	09 28 11
09 29 10	H0IIX-1	01 12 29	44.1	386.2	-7.1		-53.1	-18	10340	No stop
09 32 40	---	01 15 59	44.3	386.4	-7.1		-53.7	192	10367	09 29 11
09 32 40	J0841+7053	01 15 59	43.0	384.6	-7.4		-49.8	-18	10367	No stop
09 34 10	=0836+710	01 17 30	43.1	384.8	-7.4		-50.0	72	10378	09 32 41

Schedule for TORUN (Code Tr)

Page 34

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
09 34 10	H0IIX-1	01 17 30	44.4	386.5	-7.1		-54.0	-18	10378	No stop
09 37 40	---	01 21 00	44.7	386.7	-7.0		-54.7	192	10405	09 34 11
09 38 20	J0841+7053	01 21 40	43.4	385.1	-7.4		-50.8	22	10405	09 38 20
09 39 20	=0836+710	01 22 41	43.5	385.1	-7.3		-51.0	60	10413	09 38 21
09 39 20	H0IIX-1	01 22 41	44.8	386.8	-7.0		-55.0	-18	10413	No stop
09 42 50	---	01 26 11	45.0	387.1	-6.9		-55.6	192	10440	09 39 21
09 42 50	J0841+7053	01 26 11	43.7	385.4	-7.3		-51.7	-18	10440	No stop
09 44 20	=0836+710	01 27 41	43.8	385.5	-7.3		-51.9	72	10451	09 42 51
09 44 20	H0IIX-1	01 27 41	45.1	387.2	-6.9		-55.9	-18	10451	No stop
09 47 50	---	01 31 12	45.4	387.4	-6.8		-56.6	192	10478	09 44 21
09 48 30	J0841+7053	01 31 52	44.1	385.8	-7.2		-52.7	22	10478	09 48 30
09 49 30	=0836+710	01 32 52	44.1	385.8	-7.2		-52.9	60	10486	09 48 31
09 49 30	H0IIX-1	01 32 52	45.5	387.5	-6.8		-56.9	-19	10486	No stop
09 53 00	---	01 36 23	45.7	387.7	-6.7		-57.6	191	10513	09 49 31
09 53 00	J0841+7053	01 36 23	44.3	386.1	-7.1		-53.6	-19	10513	No stop
09 54 30	=0836+710	01 37 53	44.4	386.2	-7.1		-53.9	71	10524	09 53 01
09 54 30	H0IIX-1	01 37 53	45.8	387.8	-6.7		-57.9	-19	10524	No stop
09 58 00	---	01 41 24	46.1	388.1	-6.7		-58.5	191	10551	09 54 31
09 58 40	J0841+7053	01 42 04	44.7	386.5	-7.0		-54.7	21	10551	09 58 40
09 59 40	=0836+710	01 43 04	44.8	386.5	-7.0		-54.8	60	10559	09 58 41
09 59 40	H0IIX-1	01 43 04	46.2	388.2	-6.6		-58.8	-19	10559	No stop
10 03 10	---	01 46 34	46.5	388.4	-6.6		-59.5	191	10586	09 59 41
10 03 10	J0841+7053	01 46 34	45.0	386.8	-6.9		-55.5	-19	10586	No stop
10 04 40	=0836+710	01 48 05	45.1	386.9	-6.9		-55.8	71	10597	10 03 11
10 04 40	H0IIX-1	01 48 05	46.6	388.5	-6.5		-59.8	-19	10597	No stop
10 08 10	---	01 51 35	46.8	388.7	-6.5		-60.5	191	10624	10 04 41
10 08 50	J0841+7053	01 52 15	45.4	387.1	-6.8		-56.6	21	10624	10 08 50
10 09 50	=0836+710	01 53 16	45.5	387.2	-6.8		-56.8	60	10632	10 08 51
10 09 50	H0IIX-1	01 53 16	46.9	388.8	-6.5		-60.8	-19	10632	No stop
10 13 20	---	01 56 46	47.2	389.0	-6.4		-61.5	191	10659	10 09 51
10 13 20	J0841+7053	01 56 46	45.7	387.4	-6.8		-57.4	-19	10659	No stop
10 14 50	=0836+710	01 58 16	45.8	387.5	-6.7		-57.7	71	10670	10 13 21

Schedule for TORUN (Code Tr)

Page 35

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
10 14 50	H0IIX-1	01 58 16	47.3	389.1	-6.4		-61.8	-19	10670	No stop
10 18 20	---	02 01 47	47.6	389.3	-6.3		-62.5	191	10697	10 14 51
10 19 00	J0841+7053	02 02 27	46.1	387.8	-6.7		-58.5	21	10697	10 19 00
10 20 00	=0836+710	02 03 27	46.2	387.8	-6.7		-58.7	60	10705	10 19 01
10 20 00	H0IIX-1	02 03 27	47.7	389.4	-6.3		-62.8	-19	10705	No stop
10 23 30	---	02 06 58	47.9	389.6	-6.2		-63.5	191	10731	10 20 01
10 23 30	J0841+7053	02 06 58	46.4	388.1	-6.6		-59.4	-19	10731	No stop
10 25 00	=0836+710	02 08 28	46.5	388.1	-6.6		-59.7	71	10743	10 23 31
10 25 00	H0IIX-1	02 08 28	48.0	389.6	-6.2		-63.8	-19	10743	No stop
10 28 30	---	02 11 59	48.3	389.8	-6.1		-64.4	191	10770	10 25 01
10 29 10	J0841+7053	02 12 39	46.8	388.4	-6.5		-60.5	21	10770	10 29 10
10 30 10	=0836+710	02 13 39	46.9	388.5	-6.5		-60.7	60	10778	10 29 11
10 31 20	J0749+7420	02 14 49	51.9	385.8	-5.6		-75.3	38	10778	10 31 20
10 34 10	=0743+744	02 17 40	52.1	385.9	-5.6		-75.9	170	10799	10 31 21
10 35 20	J0841+7053	02 18 50	47.3	388.8	-6.4		-61.7	38	10799	10 35 20
10 36 20	=0836+710	02 19 50	47.4	388.8	-6.4		-61.9	60	10807	10 35 21
10 36 20	H0IIX-1	02 19 50	48.9	390.2	-6.0		-66.0	-19	10807	No stop
10 39 50	---	02 23 20	49.2	390.4	-6.0		-66.7	191	10834	10 36 21
10 39 50	J0841+7053	02 23 20	47.6	389.0	-6.3		-62.6	-19	10834	No stop
10 41 20	=0836+710	02 24 51	47.7	389.1	-6.3		-62.9	71	10845	10 39 51
10 41 20	H0IIX-1	02 24 51	49.3	390.5	-5.9		-67.0	-19	10845	No stop
10 44 50	---	02 28 21	49.5	390.7	-5.9		-67.7	191	10872	10 41 21
10 45 30	J0841+7053	02 29 01	48.0	389.3	-6.2		-63.7	21	10872	10 45 30
10 46 30	=0836+710	02 30 02	48.1	389.4	-6.2		-63.9	60	10880	10 45 31
10 46 30	H0IIX-1	02 30 02	49.7	390.8	-5.8		-68.0	-20	10880	No stop
10 50 00	---	02 33 32	49.9	390.9	-5.8		-68.7	190	10907	10 46 31
10 50 00	J0841+7053	02 33 32	48.4	389.6	-6.2		-64.6	-19	10907	No stop
10 51 30	=0836+710	02 35 02	48.5	389.6	-6.1		-64.9	71	10918	10 50 01
10 51 30	H0IIX-1	02 35 02	50.1	391.0	-5.8		-69.0	-20	10918	No stop
10 55 00	---	02 38 33	50.3	391.1	-5.7		-69.7	190	10945	10 51 31
10 55 40	J0841+7053	02 39 13	48.8	389.9	-6.1		-65.7	20	10945	10 55 40
10 56 40	=0836+710	02 40 13	48.9	389.9	-6.0		-65.9	60	10953	10 55 41

Schedule for TORUN (Code Tr)

Page 36

e-EVN runs: RC001, RSP09, and EG082C

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

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 29 Apr 2014 Day 119 ---										
10 56 40	H0IIX-1	02 40 13	50.5	391.2	-5.7		-70.0	-20	10953	No stop
11 00 10	---	02 43 44	50.7	391.4	-5.6		-70.8	190	10980	10 56 41
11 00 10	J0841+7053	02 43 44	49.1	390.1	-6.0		-66.6	-20	10980	No stop
11 01 40	=0836+710	02 45 14	49.2	390.2	-6.0		-66.9	70	10991	11 00 11
11 01 40	H0IIX-1	02 45 14	50.9	391.4	-5.6		-71.1	-20	10991	No stop
11 05 10	---	02 48 45	51.1	391.6	-5.5		-71.8	190	11018	11 01 41
11 05 50	J0841+7053	02 49 25	49.6	390.4	-5.9		-67.7	20	11018	11 05 50
11 06 50	=0836+710	02 50 25	49.6	390.4	-5.9		-67.9	60	11026	11 05 51
11 06 50	H0IIX-1	02 50 25	51.3	391.7	-5.5		-72.1	-20	11026	No stop
11 10 20	---	02 53 55	51.5	391.8	-5.5		-72.8	190	11053	11 06 51
11 10 20	J0841+7053	02 53 55	49.9	390.6	-5.8		-68.6	-20	11053	No stop
11 11 50	=0836+710	02 55 26	50.0	390.7	-5.8		-68.9	70	11064	11 10 21
11 11 50	H0IIX-1	02 55 26	51.7	391.9	-5.4		-73.1	-20	11064	No stop
11 15 20	---	02 58 56	51.9	392.0	-5.4		-73.9	190	11091	11 11 51
11 16 00	J0841+7053	02 59 36	50.3	390.8	-5.7		-69.8	20	11091	11 16 00
11 17 00	=0836+710	03 00 37	50.4	390.9	-5.7		-70.0	60	11099	11 16 01
11 17 00	H0IIX-1	03 00 37	52.1	392.1	-5.3		-74.2	-20	11099	No stop
11 20 30	---	03 04 07	52.3	392.2	-5.3		-74.9	190	11126	11 17 01
11 20 30	J0841+7053	03 04 07	50.7	391.0	-5.6		-70.7	-20	11126	No stop
11 22 00	=0836+710	03 05 37	50.8	391.1	-5.6		-71.0	70	11137	11 20 31
11 22 00	H0IIX-1	03 05 37	52.5	392.2	-5.3		-75.3	-20	11137	No stop
11 25 30	---	03 09 08	52.8	392.3	-5.2		-76.0	190	11164	11 22 01
11 26 10	J0841+7053	03 09 48	51.1	391.3	-5.6		-71.8	20	11164	11 26 10
11 27 10	=0836+710	03 10 48	51.2	391.3	-5.5		-72.0	60	11172	11 26 11
11 27 10	H0IIX-1	03 10 48	52.9	392.4	-5.2		-76.3	-20	11172	No stop
11 30 40	---	03 14 19	53.2	392.5	-5.1		-77.1	190	11199	11 27 11
11 30 40	J0841+7053	03 14 19	51.5	391.5	-5.5		-72.7	-20	11199	No stop
11 32 10	=0836+710	03 15 49	51.6	391.5	-5.5		-73.1	70	11210	11 30 41
11 32 10	H0IIX-1	03 15 49	53.3	392.6	-5.1		-77.4	-20	11210	No stop
11 35 40	---	03 19 20	53.6	392.7	-5.0		-78.1	190	11237	11 32 11
11 36 20	J0841+7053	03 20 00	51.9	391.7	-5.4		-73.9	20	11237	11 36 20
11 37 20	=0836+710	03 21 00	52.0	391.7	-5.4		-74.1	60	11245	11 36 21

Schedule for TORUN (Code Tr)

Page 37

e-EVN runs: RC001, RSP09, and EG082C

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

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

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SYNC: Time correlator 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 29 Apr 2014 Day 119 ---										
11 37 20	H0IIX-1	03 21 00	53.7	392.7	-5.0		-78.5	-20	11245	No stop
11 40 50	---	03 24 30	54.0	392.8	-4.9		-79.2	190	11272	11 37 21
11 40 50	J0841+7053	03 24 30	52.3	391.8	-5.3		-74.9	-20	11272	No stop
11 42 20	=0836+710	03 26 01	52.4	391.9	-5.3		-75.2	70	11283	11 40 51
11 42 20	H0IIX-1	03 26 01	54.1	392.8	-4.9		-79.6	-20	11283	No stop
11 45 50	---	03 29 31	54.4	392.9	-4.9		-80.3	190	11310	11 42 21
11 46 30	J0841+7053	03 30 11	52.7	392.0	-5.2		-76.0	20	11310	11 46 30
11 47 30	=0836+710	03 31 12	52.8	392.1	-5.2		-76.3	60	11318	11 46 31
11 47 30	H0IIX-1	03 31 12	54.5	393.0	-4.8		-80.7	-20	11318	No stop
11 51 00	---	03 34 42	54.8	393.0	-4.8		-81.5	190	11345	11 47 31
11 51 00	J0841+7053	03 34 42	53.1	392.2	-5.1		-77.0	-20	11345	No stop
11 52 30	=0836+710	03 36 12	53.2	392.2	-5.1		-77.3	70	11356	11 51 01
11 52 30	H0IIX-1	03 36 12	54.9	393.1	-4.7		-81.8	-20	11356	No stop
11 56 00	---	03 39 43	55.2	393.1	-4.7		-82.6	190	11383	11 52 31
11 56 40	J0841+7053	03 40 23	53.5	392.3	-5.0		-78.2	20	11383	11 56 40
11 57 40	=0836+710	03 41 23	53.6	392.4	-5.0		-78.4	60	11391	11 56 41
11 57 40	H0IIX-1	03 41 23	55.4	393.2	-4.7		-82.9	-20	11391	No stop
12 01 10	---	03 44 54	55.7	393.2	-4.6		-83.7	190	11418	11 57 41
12 01 10	J0841+7053	03 44 54	53.9	392.5	-5.0		-79.2	-20	11418	No stop
12 02 40	=0836+710	03 46 24	54.0	392.5	-4.9		-79.5	70	11429	12 01 11
12 02 40	H0IIX-1	03 46 24	55.8	393.3	-4.6		-84.0	-20	11429	No stop
12 06 10	---	03 49 55	56.1	393.3	-4.5		-84.8	190	11456	12 02 41
12 06 50	J0841+7053	03 50 35	54.4	392.6	-4.9		-80.4	20	11456	12 06 50
12 07 50	=0836+710	03 51 35	54.4	392.6	-4.9		-80.6	60	11464	12 06 51
12 07 50	H0IIX-1	03 51 35	56.2	393.3	-4.5		-85.2	-20	11464	No stop
12 11 20	---	03 55 05	56.5	393.4	-4.4		-86.0	190	11491	12 07 51
12 11 20	J0841+7053	03 55 05	54.7	392.7	-4.8		-81.4	-20	11491	No stop
12 12 50	=0836+710	03 56 36	54.9	392.7	-4.8		-81.7	70	11502	12 11 21
12 12 50	H0IIX-1	03 56 36	56.6	393.4	-4.4		-86.3	-20	11502	No stop
12 16 20	---	04 00 06	56.9	393.4	-4.3		-87.1	190	11529	12 12 51
12 17 00	J0841+7053	04 00 46	55.2	392.8	-4.7		-82.6	20	11529	12 17 00
12 18 00	=0836+710	04 01 47	55.3	392.8	-4.7		-82.9	60	11537	12 17 01

Schedule for TORUN (Code Tr)

Page 38

e-EVN runs: RC001, RSP09, and EG082C

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

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Start UT	Source	Start / Stop					Early	Disk	TPStart	
Stop UT		LST	EL	AZ	HA	UP	ParA	Dwell	GBytes	SYNC
--- Tue 29 Apr 2014 Day 119 ---										
12 19 10	J0749+7420	04 02 57	59.1	386.2	-3.8		-101.0	42	11537	12 19 10
12 22 00	=0743+744	04 05 47	59.3	386.2	-3.8		-101.8	170	11558	12 19 11
12 23 10	J0841+7053	04 06 57	55.7	392.9	-4.6		-84.0	42	11558	12 23 10
12 24 10	=0836+710	04 07 58	55.8	392.9	-4.6		-84.2	60	11566	12 23 11
12 24 10	H0IIX-1	04 07 58	57.6	393.5	-4.2		-89.0	-21	11566	No stop
12 27 40	---	04 11 28	57.9	393.5	-4.2		-89.8	189	11593	12 24 11
12 27 40	J0841+7053	04 11 28	56.1	393.0	-4.5		-85.0	-20	11593	No stop
12 29 10	=0836+710	04 12 58	56.2	393.0	-4.5		-85.4	70	11604	12 27 41
12 29 10	H0IIX-1	04 12 58	58.0	393.5	-4.1		-90.1	-21	11604	No stop
12 32 40	---	04 16 29	58.3	393.5	-4.1		-91.0	189	11631	12 29 11
12 33 20	J0841+7053	04 17 09	56.5	393.0	-4.4		-86.3	20	11631	12 33 20
12 34 20	=0836+710	04 18 09	56.6	393.1	-4.4		-86.5	60	11639	12 33 21
12 34 20	H0IIX-1	04 18 09	58.4	393.5	-4.0		-91.4	-21	11639	No stop
12 37 50	---	04 21 40	58.7	393.4	-4.0		-92.2	189	11666	12 34 21
12 37 50	J0841+7053	04 21 40	56.9	393.1	-4.4		-87.3	-20	11666	No stop
12 39 20	=0836+710	04 23 10	57.0	393.1	-4.3		-87.7	70	11677	12 37 51
12 39 20	H0IIX-1	04 23 10	58.8	393.4	-4.0		-92.6	-21	11677	No stop
12 42 50	---	04 26 41	59.1	393.4	-3.9		-93.4	189	11704	12 39 21
12 43 30	J0841+7053	04 27 21	57.4	393.1	-4.3		-88.7	20	11704	12 43 30
12 44 30	=0836+710	04 28 21	57.4	393.1	-4.2		-88.9	60	11712	12 43 31
12 44 30	H0IIX-1	04 28 21	59.3	393.4	-3.9		-93.8	-21	11712	No stop
12 48 00	---	04 31 51	59.5	393.3	-3.8		-94.7	189	11739	12 44 31
12 48 00	J0841+7053	04 31 51	57.7	393.1	-4.2		-89.7	-20	11739	No stop
12 49 30	=0836+710	04 33 22	57.9	393.1	-4.2		-90.1	70	11750	12 48 01
12 49 30	H0IIX-1	04 33 22	59.7	393.3	-3.8		-95.1	-21	11750	No stop
12 53 00	---	04 36 52	60.0	393.3	-3.7		-95.9	189	11777	12 49 31
12 53 40	J0841+7053	04 37 32	58.2	393.1	-4.1		-91.1	20	11777	12 53 40
12 54 40	=0836+710	04 38 33	58.3	393.1	-4.1		-91.3	60	11785	12 53 41
12 54 40	H0IIX-1	04 38 33	60.1	393.2	-3.7		-96.4	-21	11785	No stop
12 58 10	---	04 42 03	60.4	393.2	-3.6		-97.3	189	11812	12 54 41
12 58 10	J0841+7053	04 42 03	58.6	393.1	-4.0		-92.2	-20	11812	No stop
12 59 40	=0836+710	04 43 33	58.7	393.1	-4.0		-92.5	70	11823	12 58 11

SETUP FILE INFORMATION:

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

=====
Setup file: sess313.C1024

Matching groups in /aps3/opt/share/sched_11.0/catalogs/freq.dat:
tr6cm E-mail Borkowski 23Apr03 (CR 1May03)

Setup group: 2 Station: TORUN Total bit rate: 1024
Format: MKIV1:2 Bits per sample: 2 Sample rate: 32.000
Number of channels: 16 DBE type: Speedup factor: 0.50

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
	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
	L	L	U	U	L	L	U	U	U
IF SB =	U	U	U	U	U	U	U	U	U
	U	U	U	U	U	U	U	U	U
Pol. =	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP	LCP
	RCP	LCP	RCP	LCP	RCP	LCP	RCP	LCP	LCP
BBC =	1	2	1	2	3	4	3	4	4
	5	6	5	6	7	8	7	8	8
BBC SB=	L	L	U	U	L	L	U	U	U
	L	L	U	U	L	L	U	U	U
IF =	C	A	C	A	C	A	C	A	A
	C	A	C	A	C	A	C	A	A

The following frequency sets based on these setups were used.

Frequency Set: 5 Setup file default. Used pcal sets: 1

LO sum=	4942.49	4942.49	4942.49	4942.49	4974.49	4974.49	4974.49	4974.49
	5006.49	5006.49	5006.49	5006.49	5038.49	5038.49	5038.49	5038.49
BBC fr=	742.49	742.49	742.49	742.49	774.49	774.49	774.49	774.49
	806.49	806.49	806.49	806.49	838.49	838.49	838.49	838.49
Bandwd=	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00

Matching frequency sets: 5

The following pulse cal sets were used with this setup:

Pulse cal detection set: 1 PCAL = OFF

PCALXB1=	S1	S2	S3	S4	S5	S6	S7	S8
PCALXB2=	M1	M2	M3	M4	M5	M6	M7	M8
PCALFR1=	0	0	0	0	0	0	0	0
PCALFR2=	0	0	0	0	0	0	0	0

Track assignments are:

track1= 2, 10, 18, 26, 3, 11, 19, 27, 66, 74, 82, 90, 67, 75, 83, 91
barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* HOIIX-1	08 14 16.789832 70 51 42.44279	* 08 19 28.981800 * 70 42 18.99200	08 20 57.399616 70 39 42.03169	0.00 0.00
* IRAS16474	16 47 24.040751 34 30 17.95229	* 16 49 14.203000 * 34 25 09.72000	16 49 47.258610 34 23 38.33563	0.00 0.00
* V1285AQL	18 53 03.266101 08 20 12.96152	* 18 55 27.499300 * 08 24 08.02130	18 56 09.773330 08 25 16.70799	0.00 0.00
* J1844+1140	18 41 57.758320 11 37 16.89940	* 18 44 18.018500 * 11 40 24.41500	18 44 59.211598 11 41 18.57597	0.00 0.00
J0136+4751	01 33 55.103060	* 01 36 58.594805	01 37 50.559945	0.15
* 0133+476	47 36 12.85363	* 47 51 29.10002	47 55 41.77082	0.10
J0555+3948	05 52 01.407174	* 05 55 30.805616	05 56 30.296686	0.13
* DA193	39 48 21.94578	* 39 48 49.16493	39 48 50.66999	0.10
* J0749+7420	07 43 14.670010	* 07 49 22.456659	07 51 06.112481	0.91
0743+744	74 28 09.87092	* 74 20 41.59192	74 18 36.87390	0.40
* J0841+7053	08 36 21.556645	* 08 41 24.365283	08 42 50.245245	0.31
0836+710	71 04 22.42740	* 70 53 42.17302	70 50 43.89381	0.10
J1331+3030	13 28 49.657778	* 13 31 08.288070	13 31 49.480441	0.20
* 3C286	30 45 58.64061	* 30 30 32.95925	30 26 06.26614	0.19
* J1658+3443	16 56 12.262784	* 16 58 01.419200	16 58 34.167138	0.14
1656+348	34 47 59.82929	* 34 43 28.40197	34 42 07.37723	0.12
* J1751+0939	17 49 10.387929	* 17 51 32.818572	17 52 14.865221	0.10
1749+096	09 39 42.82574	* 09 39 00.72829	09 38 49.67117	0.10
* J1847+0810	18 44 48.246328	* 18 47 12.660418	18 47 55.026341	0.24
1844+081	08 07 15.53478	* 08 10 35.38871	08 11 34.08532	0.43
* J2148+0657	21 45 36.078475	* 21 48 05.458673	21 48 48.300389	0.26
2145+067	06 43 40.90461	* 06 57 38.60421	07 01 37.64379	0.26

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)	Source	Sun distance (deg)
HOIIX-1	76.1	J0841+7053	77.9
IRAS16474	120.3	3C286	133.4
V1285AQL	109.0	J1658+3443	118.9
J1844+1140	110.5	J1751+0939	123.2
0133+476	34.9	J1847+0810	111.0
DA193	52.6	J2148+0657	68.0
J0749+7420	73.9		

rk01b5tr

RADIOASTRON AGN SURVEY

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

```
#####
##### Observing mode: K&C-band, dual-pol #####
#####
```

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
 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 29 Apr 2014 Day 119 ---

----- K-band VLBI scans -----

```
Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies:   736.00   736.00   736.00   736.00
Next scan bandwidths:  16.00   16.00   16.00   16.00

14 00 00 0923+392    05 44 03 49.8 87.3 -3.7   -50.5   0       0   14 00 00
14 15 00 ---          05 59 06 52.1 90.3 -3.5   -50.6  900     29   14 00 01
```

----- 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

14 20 00 0923+392    06 04 07 52.8 91.3 -3.4   -50.6  293     29   14 20 00
14 40 00 ---          06 24 10 55.8 95.6 -3.1   -50.2 1200     67   14 20 01
```

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01b5_freq.dat:
tr1cm

Setup group:	10	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=	21500.00	21500.00	21500.00	21500.00
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:	10	Setup file default.	Used with PCAL = 1MHz
LO sum=	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00
Matching frequency sets:	10		

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	6	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: 13 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: 13

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 0923+392	09 23 55.319218	* 09 27 03.013939	09 27 57.125364	0.00
J0927+3902	39 15 23.56637	* 39 02 20.85177	38 58 34.87483	0.00

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)
0923+392	92.2

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

rk01b6tr

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UWAGA: zmiana pasma w czasie tego eksperymentu!!!

#####
Observing mode: K&C-band, dual-pol
#####

Schedule for TORUN (Code Tr) Page 2

RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 29 Apr 2014 Day 119 ---

----- K-band VLBI scans -----

Next scan frequencies: 22236.00 22236.00 22236.00 22236.00
Next BBC frequencies: 736.00 736.00 736.00 736.00
Next scan bandwidths: 16.00 16.00 16.00 16.00

16 00 00 1005+066 07 44 23 34.7 134.6 -2.4 -25.5 0 0 16 00 00
16 15 00 --- 07 59 25 36.3 138.7 -2.2 -23.5 900 29 16 00 01

----- 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

16 20 00 1005+066 08 04 26 36.8 140.2 -2.1 -22.8 293 29 16 20 00
16 40 00 --- 08 24 30 38.6 146.0 -1.7 -19.7 1200 67 16 20 01

SETUP FILE INFORMATION:

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

=====
Setup file: ralcm2.set

Matching groups in ./rk01b6_freq.dat:
tr1cm

Setup group:	8	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=	21500.00	21500.00	21500.00	21500.00
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:	7	Setup file default.	Used with PCAL = 1MHz	
LO sum=	22236.00	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00	16.00
Matching frequency sets:	7			

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	4	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: 10 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: 10

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1005+066	10 05 23.466064	* 10 08 00.816157	10 08 46.707292	0.00
J1008+0621	06 36 03.30797	* 06 21 21.21593	06 16 56.97306	0.00

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)
1005+066	112.6

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

rk01b7tr

RADIOASTRON AGN SURVEY

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Observing mode: C-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

UP: D => Below limits; H => Below horizon mask; W => still slewing at end; blank => Up.
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 29 Apr 2014 Day 119 ---

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

Table with 11 columns: Start UT, Source, LST, EL, AZ, HA, UP, ParA, Dwell, GBytes, SYNC. It lists observation times and parameters for source 0945+408.

SETUP FILE INFORMATION:

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

==== Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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: 2 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: 2

Track assignments are:
 track1= 2, 18, 3, 19
 barrel=roll_off

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	(Date)	Error (mas)	
* 0945+408	09 45 50.078219	* 09 48 55.338151	09 49 48.848350	0.00
J0948+4039	40 53 43.38094	* 40 39 44.58693	40 35 43.47859	0.00

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)
0945+408	95.3

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

SETUP FILE INFORMATION:

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

=====
Setup file: ra1cm2.set

Matching groups in ./rk01b8_freq.dat:
tr1cm

Setup group:	9	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=	21500.00	21500.00	21500.00	21500.00
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:	7	Setup file default.	Used with PCAL = 1MHz	
LO sum=	22236.00	22236.00	22236.00	22236.00
BBC fr=	736.00	736.00	736.00	736.00
Bandwd=	16.00	16.00	16.00	16.00
Matching frequency sets:	7			

Track assignments are:

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

=====
Setup file: ra6cm2.set

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

Setup group:	4	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: 11 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: 11

```

```

Track assignments are:
track1= 2, 18, 3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	Source position (RA/Dec) (J2000)	(Date)	Error (mas)
* 1641+399	16 41 17.606226	* 16 42 58.809963	16 43 29.388354	0.00
J1642+3948	39 54 10.81479	* 39 48 36.99385	39 46 58.33973	0.00

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)
1641+399	117.1

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

rk01c0tr

RADIOASTRON AGN SURVEY

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Observing mode: C-band, dual-pol

Schedule for TORUN (Code Tr) Page 2
RadioAstron AGN Survey

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

--- Wed 30 Apr 2014 Day 120 ---

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

03 20 00 1641+399 19 06 15 62.4 255.6 2.4 49.2 0 0 03 20 00
03 39 30 --- 19 25 48 59.6 260.6 2.7 50.4 1170 37 03 20 01
03 40 00 1641+399 19 26 18 59.5 260.7 2.7 50.5 24 37 03 40 00
04 00 00 --- 19 46 21 56.5 265.3 3.0 51.2 1200 76 03 40 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

--- WARNING --- This group does not match an entry in the frequency catalog.
This might be ok because the catalog is not complete.
But be very careful to be sure that the setup is correct.

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:  2  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:  2

```

```

Track assignments are:
track1=  2, 18,  3, 19
barrel=roll_off

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec)		(Date)	Error (mas)
	(B1950)	(J2000)		
* 1641+399	16 41 17.606226	* 16 42 58.809963	16 43 29.393292	0.00
J1642+3948	39 54 10.81479	* 39 48 36.99385	39 46 58.40829	0.00

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)
1641+399    117.2

```

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

```

gl038ftr

RA KSP: STRUCTURE AND PHYSICS OF COMPACT JETS

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Observing mode: C-band, dual-pol

=====

UWAGA: LO = 4100 MHz

=====

Schedule for TORUN (Code Tr) Page 2

RA KSP: Structure and physics of compact jets

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

--- Wed 30 Apr 2014 Day 120 ---

----- Ground segment 03: 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						
15 10 30	1226+023	06 58 41	5.9	94.6	-5.5		-36.8	0	0	15 10 30
15 19 30	---	07 07 43	7.2	96.4	-5.4		-36.7	540	17	15 10 31
15 20 00	1226+023	07 08 13	7.3	96.5	-5.4		-36.7	24	17	15 20 00
15 29 30	---	07 17 45	8.7	98.4	-5.2		-36.5	570	36	15 20 01
15 30 00	1226+023	07 18 15	8.8	98.5	-5.2		-36.5	24	36	15 30 00
15 39 30	---	07 27 46	10.2	100.5	-5.0		-36.2	570	54	15 30 01
15 40 00	1226+023	07 28 16	10.3	100.6	-5.0		-36.2	24	54	15 40 00
15 49 30	---	07 37 48	11.7	102.5	-4.9		-35.9	570	72	15 40 01
15 50 00	1226+023	07 38 18	11.8	102.7	-4.9		-35.9	24	72	15 50 00
15 59 30	---	07 47 50	13.2	104.6	-4.7		-35.5	570	90	15 50 01
16 00 00	1226+023	07 48 20	13.2	104.7	-4.7		-35.5	24	90	16 00 00
16 09 30	---	07 57 51	14.6	106.7	-4.5		-35.1	570	108	16 00 01
16 10 00	1226+023	07 58 21	14.7	106.8	-4.5		-35.1	24	108	16 10 00
16 19 30	---	08 07 53	16.0	108.9	-4.4		-34.6	570	127	16 10 01

----- Space segment 04: C-band VLBI scans -----

16 20 00	1226+023	08 08 23	16.1	109.0	-4.4		-34.6	24	127	16 20 00
16 29 30	---	08 17 54	17.5	111.0	-4.2		-34.1	570	145	16 20 01
16 30 00	1226+023	08 18 25	17.5	111.1	-4.2		-34.1	24	145	16 30 00
16 39 30	---	08 27 56	18.9	113.2	-4.0		-33.5	570	163	16 30 01

Schedule for TORUN (Code Tr)

Page 3

RA KSP: Structure and physics of compact jets

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

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
--- Wed 30 Apr 2014 Day 120 ---										
16 40 00	1226+023	08 28 26	18.9	113.3	-4.0		-33.5	24	163	16 40 00
16 49 30	---	08 37 58	20.2	115.4	-3.9		-32.9	570	181	16 40 01
16 50 00	1226+023	08 38 28	20.3	115.6	-3.9		-32.8	24	181	16 50 00
16 59 30	---	08 47 59	21.6	117.7	-3.7		-32.1	570	200	16 50 01
----- Ground segment 04: C-band VLBI scans -----										
17 00 30	1226+023	08 49 00	21.7	117.9	-3.7		-32.1	54	200	17 00 30
17 09 30	---	08 58 01	22.9	120.0	-3.5		-31.4	540	217	17 00 31
17 10 00	1226+023	08 58 31	23.0	120.1	-3.5		-31.3	24	217	17 10 00
17 19 30	---	09 08 03	24.2	122.4	-3.4		-30.5	570	235	17 10 01
17 20 00	1226+023	09 08 33	24.2	122.5	-3.4		-30.5	24	235	17 20 00
17 29 30	---	09 18 04	25.4	124.7	-3.2		-29.6	570	253	17 20 01
17 30 00	1226+023	09 18 34	25.5	124.9	-3.2		-29.5	24	253	17 30 00
17 39 30	---	09 28 06	26.7	127.2	-3.0		-28.6	570	272	17 30 01
17 40 00	1226+023	09 28 36	26.7	127.3	-3.0		-28.6	24	272	17 40 00
17 49 30	---	09 38 08	27.8	129.7	-2.9		-27.6	570	290	17 40 01
17 50 00	1226+023	09 38 38	27.9	129.8	-2.9		-27.5	24	290	17 50 00
17 59 30	---	09 48 09	29.0	132.2	-2.7		-26.4	570	308	17 50 01
18 00 00	1226+023	09 48 39	29.0	132.3	-2.7		-26.4	24	308	18 00 00
18 09 30	---	09 58 11	30.1	134.8	-2.5		-25.2	570	326	18 00 01
----- Space segment 05: C-band VLBI scans -----										
18 10 00	1226+023	09 58 41	30.1	134.9	-2.5		-25.2	24	326	18 10 00
18 19 30	---	10 08 13	31.1	137.4	-2.4		-24.0	570	345	18 10 01
18 20 00	1226+023	10 08 43	31.2	137.6	-2.4		-23.9	24	345	18 20 00
18 29 30	---	10 18 14	32.1	140.1	-2.2		-22.6	570	363	18 20 01
18 30 00	1226+023	10 18 44	32.1	140.3	-2.2		-22.6	24	363	18 30 00
18 39 30	---	10 28 16	33.0	142.9	-2.0		-21.3	570	381	18 30 01
18 40 00	1226+023	10 28 46	33.1	143.0	-2.0		-21.2	24	381	18 40 00
18 49 30	---	10 38 17	33.9	145.7	-1.9		-19.8	570	399	18 40 01
----- Ground segment 05: C-band VLBI scans -----										
18 50 30	1226+023	10 39 18	34.0	146.0	-1.8		-19.6	54	399	18 50 30
18 59 30	---	10 48 19	34.7	148.6	-1.7		-18.3	540	417	18 50 31

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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
--- Wed 30 Apr 2014 Day 120 ---										
19 00 00	1226+023	10 48 49	34.8	148.7	-1.7		-18.2	24	417	19 00 00
19 09 30	---	10 58 21	35.5	151.5	-1.5		-16.7	570	435	19 00 01
19 10 00	1226+023	10 58 51	35.5	151.6	-1.5		-16.6	24	435	19 10 00
19 19 30	---	11 08 22	36.2	154.5	-1.4		-15.0	570	453	19 10 01
19 20 00	1226+023	11 08 52	36.2	154.6	-1.3		-14.9	24	453	19 20 00
19 29 30	---	11 18 24	36.8	157.5	-1.2		-13.3	570	471	19 20 01
19 30 00	1226+023	11 18 54	36.8	157.6	-1.2		-13.2	24	471	19 30 00
19 39 30	---	11 28 26	37.3	160.6	-1.0		-11.5	570	490	19 30 01
19 40 00	1226+023	11 28 56	37.3	160.7	-1.0		-11.4	24	490	19 40 00
19 49 30	---	11 38 27	37.8	163.7	-0.9		-9.7	570	508	19 40 01
19 50 00	1226+023	11 38 57	37.8	163.8	-0.8		-9.6	24	508	19 50 00
19 59 30	---	11 48 29	38.2	166.8	-0.7		-7.9	570	526	19 50 01
20 00 00	1226+023	11 48 59	38.2	167.0	-0.7		-7.8	24	526	20 00 00
20 09 30	---	11 58 31	38.5	170.0	-0.5		-6.0	570	544	20 00 01
----- Space segment 06: C-band VLBI scans -----										
20 10 00	1226+023	11 59 01	38.5	170.1	-0.5		-5.9	24	544	20 10 00
20 19 30	---	12 08 32	38.7	173.2	-0.4		-4.1	570	563	20 10 01
20 20 00	1226+023	12 09 02	38.7	173.3	-0.3		-4.0	24	563	20 20 00
20 29 30	---	12 18 34	38.8	176.4	-0.2		-2.2	570	581	20 20 01
20 30 00	1226+023	12 19 04	38.8	176.5	-0.2		-2.1	24	581	20 30 00
20 39 30	---	12 28 36	38.9	179.6	-0.0		-0.2	570	599	20 30 01
20 40 00	1226+023	12 29 06	38.9	179.8	-0.0		-0.1	24	599	20 40 00
20 49 30	---	12 38 37	38.8	182.8	0.1		1.7	570	617	20 40 01
20 50 00	1226+023	12 39 07	38.8	183.0	0.2		1.8	24	617	20 50 00
20 59 30	---	12 48 39	38.7	186.0	0.3		3.6	570	636	20 50 01
21 00 00	1226+023	12 49 09	38.7	186.2	0.3		3.7	24	636	21 00 00
21 09 30	---	12 58 40	38.5	189.2	0.5		5.5	570	654	21 00 01
21 10 00	1226+023	12 59 11	38.5	189.4	0.5		5.6	24	654	21 10 00
21 19 30	---	13 08 42	38.2	192.4	0.6		7.4	570	672	21 10 01
----- Ground segment 06: C-band VLBI scans -----										
21 20 30	1226+023	13 09 42	38.2	192.7	0.7		7.6	54	672	21 20 30
21 29 30	---	13 18 44	37.9	195.5	0.8		9.3	540	689	21 20 31

Schedule for TORUN (Code Tr)

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RA KSP: Structure and physics of compact jets

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

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
-----
--- Wed 30 Apr 2014  Day 120 ---

21 30 00  1226+023      13 19 14  37.9 195.7  0.8      9.4   24    689   21 30 00
21 39 30  ---                13 28 45  37.4 198.7  1.0     11.1  570    708   21 30 01

21 40 00  1226+023      13 29 15  37.4 198.8  1.0     11.2   24    708   21 40 00
21 49 30  ---                13 38 47  36.9 201.7  1.1     12.9  570    726   21 40 01

21 50 00  1226+023      13 39 17  36.9 201.9  1.2     12.9   24    726   21 50 00
21 59 30  ---                13 48 49  36.3 204.8  1.3     14.6  570    744   21 50 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

```

--- WARNING --- This group does not match an entry in the frequency catalog.
                  This might be ok because the catalog is not complete.
                  But be very careful to be sure that the setup is correct.

```

```

Setup group:   9          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: 17 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: 17

```

Track assignments are:

```

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

```

POSITIONS OF SOURCES USED IN RECORDING SCANS

Source	Source position (RA/Dec) (B1950)	Source position (RA/Dec) (J2000)	(Date)	Error (mas)
* 1226+023	12 26 33.245835	* 12 29 06.699731	12 29 52.139239	0.00
J1229+0203	02 19 43.30547	* 02 03 08.59797	01 58 16.27576	0.00

SOURCE SCAN SUMMARY FOR SOURCES LISTED ABOVE

Scan hours are for recording scans only.

Baseline hours are only counted for scans above horizon at both ends.

Source	Setup file	Frequency sets (duplicates not shown)	Observing hours	
			Scan	Baseline
FAKERA	ra6cm2.set	11	4.275	0.000
1226+023	ra6cm2.set	1 2 3 11 17 18 19 20 21 24 +	12.142	197.083
	ra1cm2.set	4 7 8 9 10 14 16 23 25	11.950	331.158

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:

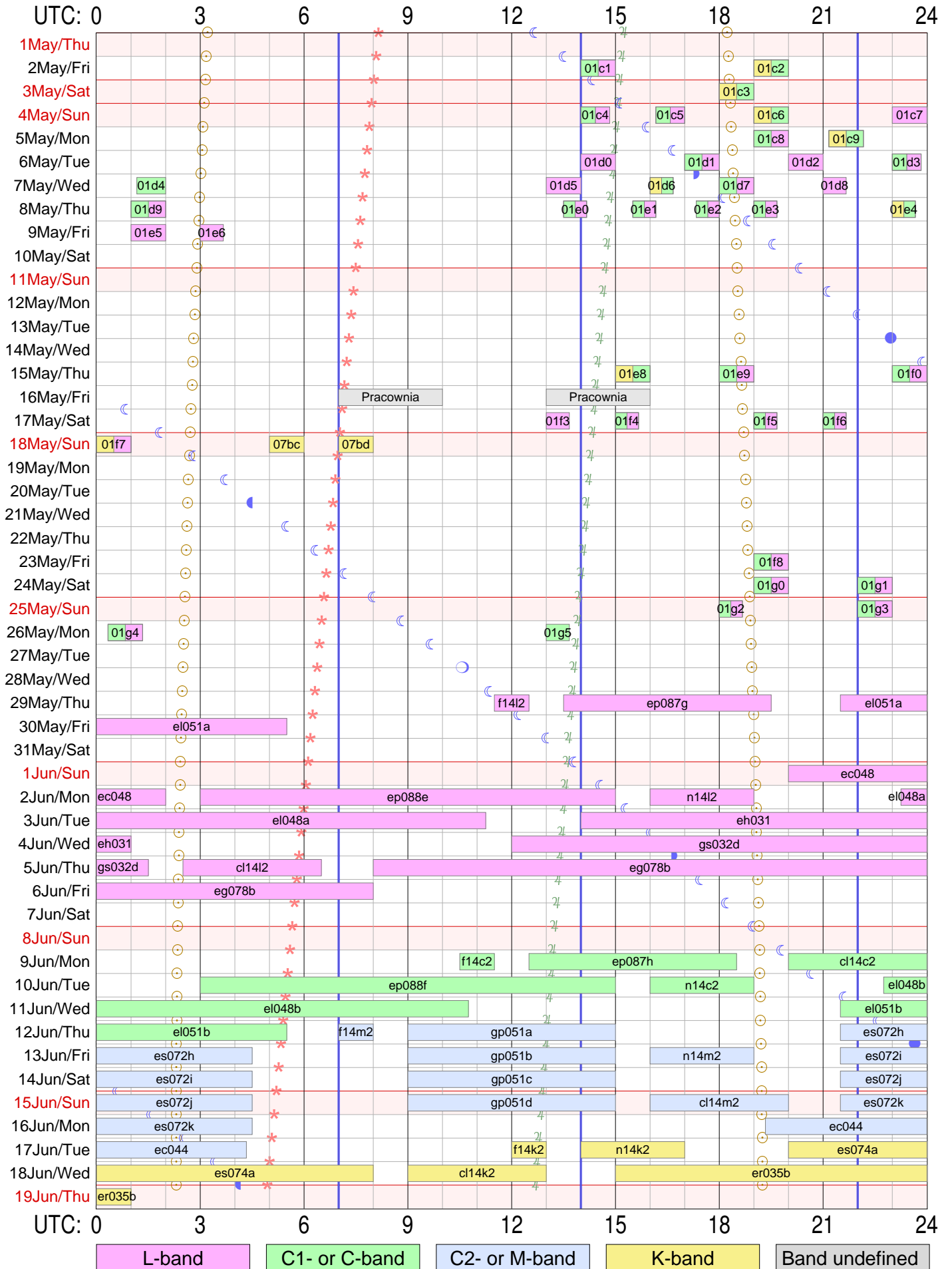
Source	Sun distance (deg)
FAKERA	79.2
1226+023	145.5

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:

327 MHz	117. deg
610 MHz	81. deg
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
43.0 GHz	6. deg

Tr VLBI plan for May/June 2014



Sky events at Tr: ☉ Sunrise & sunset ☾☽ Transit of Moon ♃ Transit of Jupiter * Transit of Aries (0h ST)

Vertical lines in blue mark operator shift times at Tr Total observing time: 283.2 hours in 78 experiments scheduled

Two initial characters (rk) are omitted from RA experiment names!

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