SUMMARY FILE FOR PROJECT: EA037B

COVER INFORMATION:

Experiment: Phase-reference observations of NGC7469
Exp. Code: EA037B
Start Day 71 is Mon 12 Mar 2007 MJD 54171

Schedule Version: 4.00
Processed by SCHED version: 6.05 June 2006

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Observing mode: Phase-referencing of NGC 7469 at 18cm (256 Mb/s)

Notes: Reference source: J2310+1055, at a radial distance of 2.7 deg

No cover letter provided.

CORRELATION REQUESTS (Defaults in parentheses):

Correlator (Required if recording):	JIVE
Correlator average time (2 sec):	2.000 sec.
Alternate average time (for spacecraft).	0.000 sec.
Spectral channels per baseband (16):	16
Number of antennas to be correlated:	8
Polarization (ON):	OFF
Correlator weighting function (UNIFORM):	UNIFORM
Distribution tape (DAT):	FTP
Source positions from:	

FROM SCHEDULE
Shipping address for correlator output:
IAA-CSIC
P.O. Box 3004
18080-Granada, Spain

Correlator Notes:

DERIVED INFORMATION FOR CORRELATION:

Elapsed time for project: 5.97 hours.
Total time in scheduled scans: 5.47 hours.
Total time in recording scans: 5.47 hours.
Total number of baseline hours: 309.23 (Recording scans only)
Projected maximum data output rate from the correlator: 33.8 kbytes/sec
if processed in one pass.
Projected correlator output data set size: 570.0 Mbytes
NOTE: Above numbers assume the same correlator parameters are used for all data.

STATIONS USED IN SCHEDULE:

Station	Code	Latitude	Longitude	Elevation	X	Y	Z
JODRELL2	Jb	53.23396	2.30390	144.	3822846.760	-153802.280	5086285.900
CAMBG32M	Cm	52.16695	-0.03715	83.	3920356.150	2542.020	5014284.420
WSTRBORK	Wb	52.91529	-6.63333	71.	3828445.659	445223.600	5064921.568

Station	Code	Latitude	Longitude	Elevation	X	Y	Z
EFLSBERG	Ef	50.52483	-6.88361	417.	4033947.477	486990.518	4900430.818
ONSALA85	On	57.39307	-11.91777	58.	3370966.123	711465.961	5349664.022
MEDICINA	Mc	44.52049	-11.64693	67.	4461369.983	919596.825	4449559.202
NOTO	Nt	36.87605	-14.98905	143.	4934563.118	1321201.263	3806484.490
TORUN	Tr	53.09546	-18.56406	134.	3638558.510	1221969.720	5077036.760
SHANGHAI	Sh	31.09916	-121.19966	29.	-2831686.914	4675733.670	3275327.682
URUMQI	Ur	43.47151	-87.17813	2033.	228310.719	4631922.785	4367063.969
HART	Hh	-25.88975	-27.68539	1416.	5085442.785	2668263.486	-2768697.016

Plate tectonic motion adjustments for MJD 54171

Station	Code	Station motions (m/yr)				Adjusted positions		
		X	Y	Z	MJD0	X	Y	Z
JODRELL2	Jb	-0.0117	0.0170	0.0093	50449	3822846.641	-153802.106	5086285.995
CAMBG32M	Cm	-0.0120	0.0173	0.0094	50449	3920356.028	2542.196	5014284.516
WSTRBORK	Wb	-0.0135	0.0170	0.0087	50449	3828445.521	445223.774	5064921.657
EFLSBERG	Ef	-0.0137	0.0174	0.0080	50449	4033947.338	486990.696	4900430.900
ONSALA85	On	-0.0133	0.0150	0.0085	50449	3370965.987	711466.113	5349664.108
MEDICINA	Mc	-0.0178	0.0194	0.0087	50449	4461369.801	919597.023	4449559.291
NOTO	Nt	-0.0176	0.0180	0.0126	50449	4934562.939	1321201.446	3806484.618
TORUN	Tr	-0.0160	0.0165	0.0075	50449	3638558.347	1221969.888	5077036.837
SHANGHAI	Sh	-0.0301	-0.0115	-0.0135	50449	-2831687.221	4675733.553	3275327.544
URUMQI	Ur	-0.0309	-0.0031	0.0027	50449	228310.404	4631922.754	4367063.997
HART	Hh	-0.0012	0.0195	0.0145	50449	5085442.772	2668263.685	-2768696.868

BASELINE LENGTHS (km)

	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
Jb	0	197	599	699	1011	1401	2247	1388	8419	6028	8441
Cm	197	0	454	510	957	1205	2055	1253	8393	5956	8308
Wb	599	454	0	266	601	1002	1890	799	8090	5565	8239
Ef	699	510	266	0	831	757	1644	853	8205	5652	8042
On	1011	957	601	831	0	1429	2279	637	7647	5119	8525
Mc	1401	1205	1002	757	1429	0	893	1078	8287	5630	7453
Nt	2247	2055	1890	1644	2279	893	0	1817	8476	5781	6713
Tr	1388	1253	799	853	637	1078	1817	0	7552	4874	8108
Sh	8419	8393	8090	8205	7647	8287	8476	7552	0	3249	10160
Ur	6028	5956	5565	5652	5119	5630	5781	4874	3249	0	8852
Hh	8441	8308	8239	8042	8525	7453	6713	8108	10160	8852	0

RECORDING SYSTEM INFORMATION:

DISKS - Stations potentially recording on disks.

Station	Drive type	DAR
JODRELL2	MARK5A	MKIV
CAMBG32M	MARK5A	VLBA4
WSTRBORK	MARK5A	MKIV
EFLSBERG	MARK5A	MKIV
ONSALA85	MARK5A	MKIV
MEDICINA	MARK5A	MKIV
NOTO	MARK5A	VLBA4
TORUN	MARK5A	VLBA4
SHANGHAI	MARK5A	VLBA4
URUMQI	MARK5A	MKIV
HART	MARK5A	MKIV

EXPERIMENT SUMMARY:

Number of input scans:	108
Number of scans scheduled:	108
Number of stations:	11
Number of sources input:	4
Number of setup files used:	1

Station summaries (tape stations):

Station	Control	Scans	Scan Hours	Tape Hours	Tapes	Passes	Readbacks	Formatter Reconfigures	Sync Hours

Station summaries (disk stations):

Station	Control	Scans	Scan Hours	Record hrs	Gbytes	Formatter Reconfigures	Sync Hours
JODRELL2	VEX	108	5.47	5.47	635.	0	0.03
CAMBG32M	VEX	108	5.47	5.47	635.	0/ 0	0.01
WSTRBORK	VEX	108	5.47	5.47	635.	0	0.03

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  EFLSBERG   VEX      108       5.47           5.47          635.             0          0.03
  ONSALA85   VEX      108       5.47           5.47          635.             0          0.03
  MEDICINA   VEX      108       5.47           5.47          635.             0          0.03
  NOTO       VEX      108       5.47           5.47          635.          0/ 0          0.01
  TORUN      VEX      108       5.47           5.47          635.          0/ 0          0.01
  SHANGHAI   VEX       37       1.90           1.90          221.          0/ 0          0.00
  URUMQI     VEX       84       4.23           4.23          492.             0          0.03
  HART       VEX      108       5.47           5.47          635.             0          0.03

Notes on the station summaries:

    "Sync Hours" is on-source, in-scan time lost during correlation to resyncing
    recordings.  Resyncs follow tape stoppages and formatter reconfigures.

    For VLBA DAR stations, total reconfigures and reconfigures during recording are shown.
    Reconfigures during recording can cause slow correlator sync.
    Any reconfigure can slow sync at JIVE.




The following setup groups are the same as group   1 below.
   4:EFLSBERG


 Setup file: ea037b.18cm
   Matches group j2b18cm in /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
    LO from Parry 23Jan97, assuming ident to JB1

   Setup group:    1          Station: JODRELL2           Total bit rate:  256
   Format: MKIV1:2            Bits per sample: 2          Sample rate: 16.000
   Number of channels:  8                                 Speedup factor:   1.00

   Disk used to record data.

   1st LO=   1510.00   1510.00   1510.00   1510.00   1510.00   1510.00   1510.00   1510.00
   Net SB=         U         U         U         U         U         U         U         U
   Pol.  =       RCP       LCP       RCP       LCP       RCP       LCP       RCP       LCP
   BBC   =         2         1         4         3         6         5         8         7
   BBC SB=         U         U         U         U         U         U         U         U
   IF    =        2N        1N        2N        1N        2N        1N        2N        1N

  The following frequency sets based on this setup were used.

   Frequency Set:   1  Setup file default.  No pcal detection.
   LO sum=    1637.99   1637.99   1645.99   1645.99   1653.99   1653.99   1661.99   1661.99
   BBC fr=     127.99    127.99    135.99    135.99    143.99    143.99    151.99    151.99
   Bandwd=      8.000     8.000     8.000     8.000     8.000     8.000     8.000     8.000

   Track assignments are:
    track1=   2, 10, 18, 26,  3, 11, 19, 27
    barrel=roll_off


 Setup file: ea037b.18cm
   Matches group cm18cm in /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
    Confirmed by Alastair Gunn 31 Jan 2005

   Setup group:    2          Station: CAMBG32M           Total bit rate:  256
   Format: MKIV1:2            Bits per sample: 2          Sample rate: 16.000
   Number of channels:  8                                 Speedup factor:   1.00

   Disk used to record data.

   1st LO=   1110.00   1110.00   1110.00   1110.00   1110.00   1110.00   1110.00   1110.00
   Net SB=         U         U         U         U         U         U         U         U
   Pol.  =       RCP       LCP       RCP       LCP       RCP       LCP       RCP       LCP
   BBC   =         1         2         3         4         5         6         7         8
   BBC SB=         U         U         U         U         U         U         U         U
   IF    =         C         A         C         A         C         A         C         A

  The following frequency sets based on this setup were used.

   Frequency Set:   2  Setup file default.  Used pcal sets:   1
   LO sum=    1637.99   1637.99   1645.99   1645.99   1653.99   1653.99   1661.99   1661.99
   BBC fr=     527.99    527.99    535.99    535.99    543.99    543.99    551.99    551.99
   Bandwd=      8.000     8.000     8.000     8.000     8.000     8.000     8.000     8.000

  The following pulse cal sets were used with this setup:
```



```
   Pulse cal detection set:   1  PCAL = 1MHZ
    PCALXB1=   S1    S3    S5    S7    S1    S3    S5    S7
    PCALXB2=   S2    S4    S6    S8    S2    S4    S6    S8
    PCALFR1=    10    10    10    10  6010  6010  6010  6010
    PCALFR2=    10    10    10    10  6010  6010  6010  6010

   Track assignments are:
    track1=   2, 10, 18, 26,  3, 11, 19, 27
    barrel=roll_off


The following setup groups are the same as group   3 below.
  11:HART


 Setup file: ea037b.18cm
   Matches group wb18cm in /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
    E-mail Foley 22Jan97 MFFE, must be using Low patch

   Setup group:    3          Station: WSTRBORK           Total bit rate:  256
   Format: MKIV1:2            Bits per sample: 2          Sample rate: 16.000
   Number of channels:  8                                 Speedup factor:   1.00

   Disk used to record data.

   1st LO=   1510.00   1510.00   1510.00   1510.00   1510.00   1510.00   1510.00   1510.00
   Net SB=         U         U         U         U         U         U         U         U
   Pol.  =       RCP       LCP       RCP       LCP       RCP       LCP       RCP       LCP
   BBC   =         2         1         4         3         6         5         8         7
   BBC SB=         U         U         U         U         U         U         U         U
   IF    =        2N        1N        2N        1N        2N        1N        2N        1N

  The following frequency sets based on this setup were used.

   Frequency Set:   3  Setup file default.  No pcal detection.
   LO sum=    1637.99   1637.99   1645.99   1645.99   1653.99   1653.99   1661.99   1661.99
   BBC fr=     127.99    127.99    135.99    135.99    143.99    143.99    151.99    151.99
   Bandwd=      8.000     8.000     8.000     8.000     8.000     8.000     8.000     8.000

   Track assignments are:
    track1=   2, 10, 18, 26,  3, 11, 19, 27
    barrel=roll_off


 Setup file: ea037b.18cm
   Matches group on21cm1 in /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
    Values from E-mail J.Conway (CR 21Oct02)

   Setup group:    5          Station: ONSALA85           Total bit rate:  256
   Format: MKIV1:2            Bits per sample: 2          Sample rate: 16.000
   Number of channels:  8                                 Speedup factor:   1.00

   Disk used to record data.

   1st LO=   1500.00   1500.00   1500.00   1500.00   1500.00   1500.00   1500.00   1500.00
   Net SB=         U         U         U         U         U         U         U         U
   Pol.  =       RCP       LCP       RCP       LCP       RCP       LCP       RCP       LCP
   BBC   =         2         1         4         3         6         5         8         7
   BBC SB=         U         U         U         U         U         U         U         U
   IF    =        2N        1N        2N        1N        2N        1N        2N        1N

  The following frequency sets based on this setup were used.

   Frequency Set:   5  Setup file default.  No pcal detection.
   LO sum=    1637.99   1637.99   1645.99   1645.99   1653.99   1653.99   1661.99   1661.99
   BBC fr=     137.99    137.99    145.99    145.99    153.99    153.99    161.99    161.99
   Bandwd=      8.000     8.000     8.000     8.000     8.000     8.000     8.000     8.000

   Track assignments are:
    track1=   2, 10, 18, 26,  3, 11, 19, 27
    barrel=roll_off


 Setup file: ea037b.18cm
   Matches group mc18cm in /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
    updated from Maccaferri (CR 2Dec00)

   Setup group:    6          Station: MEDICINA           Total bit rate:  256
   Format: MKIV1:2            Bits per sample: 2          Sample rate: 16.000
```

```
  Number of channels:  8                           Speedup factor:   1.00

  Disk used to record data.

  1st LO=   1295.00   1295.00   1295.00   1295.00   1295.00   1295.00   1295.00   1295.00
  Net SB=         U         U         U         U         U         U         U         U
  Pol.  =       RCP       LCP       RCP       LCP       RCP       LCP       RCP       LCP
  BBC   =         2         1         4         3         6         5         8         7
  BBC SB=         U         U         U         U         U         U         U         U
  IF    =        2N        1N        2N        1N        2N        1N        2N        1N

 The following frequency sets based on this setup were used.

  Frequency Set:   6  Setup file default.  No pcal detection.
  LO sum=    1637.99   1637.99   1645.99   1645.99   1653.99   1653.99   1661.99   1661.99
  BBC fr=     342.99    342.99    350.99    350.99    358.99    358.99    366.99    366.99
  Bandwd=      8.000     8.000     8.000     8.000     8.000     8.000     8.000     8.000

  Track assignments are:
   track1=   2, 10, 18, 26,  3, 11, 19, 27
   barrel=roll_off


Setup file: ea037b.18cm
  Matches group nt18cm in /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
   LO from Trigilio 26Sep96

  Setup group:    7          Station: NOTO             Total bit rate:  256
  Format: MKIV1:2            Bits per sample: 2        Sample rate: 16.000
  Number of channels:  8                               Speedup factor:   1.00

  Disk used to record data.

  1st LO=    799.10    799.10    799.10    799.10    799.10    799.10    799.10    799.10
  Net SB=         U         U         U         U         U         U         U         U
  Pol.  =       RCP       LCP       RCP       LCP       RCP       LCP       RCP       LCP
  BBC   =         1         2         3         4         5         6         7         8
  BBC SB=         U         U         U         U         U         U         U         U
  IF    =        C         A         C         A         C         A         C         A

 The following frequency sets based on this setup were used.

  Frequency Set:   7  Setup file default.  Used pcal sets:   1
  LO sum=    1637.99   1637.99   1645.99   1645.99   1653.99   1653.99   1661.99   1661.99
  BBC fr=     838.89    838.89    846.89    846.89    854.89    854.89    862.89    862.89
  Bandwd=      8.000     8.000     8.000     8.000     8.000     8.000     8.000     8.000

 The following pulse cal sets were used with this setup:

  Pulse cal detection set:   1  PCAL = 1MHZ
   PCALXB1=   S1    S3    S5    S7    S1    S3    S5    S7
   PCALXB2=   S2    S4    S6    S8    S2    S4    S6    S8
   PCALFR1=    10    10    10    10  6010  6010  6010  6010
   PCALFR2=    10    10    10    10  6010  6010  6010  6010

  Track assignments are:
   track1=   2, 10, 18, 26,  3, 11, 19, 27
   barrel=roll_off


Setup file: ea037b.18cm
  Matches group tr18cm in /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
   E-mail Borkowski 12Mar98, preferred alternative

  Setup group:    8          Station: TORUN            Total bit rate:  256
  Format: MKIV1:2            Bits per sample: 2        Sample rate: 16.000
  Number of channels:  8                               Speedup factor:   1.00

  Disk used to record data.

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

 The following frequency sets based on this setup were used.

  Frequency Set:   8  Setup file default.  Used pcal sets:   1
```



```
  LO sum=    1637.99   1637.99   1645.99   1645.99   1653.99   1653.99   1661.99   1661.99
  BBC fr=     662.01    662.01    654.01    654.01    646.01    646.01    638.01    638.01
  Bandwd=      8.000     8.000     8.000     8.000     8.000     8.000     8.000     8.000

 The following pulse cal sets were used with this setup:

  Pulse cal detection set:   1  PCAL = 1MHZ
   PCALXB1=   S1    S3    S5    S7    S1    S3    S5    S7
   PCALXB2=   S2    S4    S6    S8    S2    S4    S6    S8
   PCALFR1=    10    10    10    10  6010  6010  6010  6010
   PCALFR2=    10    10    10    10  6010  6010  6010  6010

  Track assignments are:
   track1=   2, 10, 18, 26,  3, 11, 19, 27
   barrel=roll_off


Setup file: ea037b.18cm
  Matches group sh18cm in /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
   Huang Xinyong 27Sept05

  Setup group:    9          Station: SHANGHAI         Total bit rate:  256
  Format: MKIV1:2            Bits per sample: 2        Sample rate: 16.000
  Number of channels:  8                               Speedup factor:   1.00

  Disk used to record data.

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

 The following frequency sets based on this setup were used.

  Frequency Set:   9  Setup file default.  Used pcal sets:   1
  LO sum=    1637.99   1637.99   1645.99   1645.99   1653.99   1653.99   1661.99   1661.99
  BBC fr=     662.01    662.01    654.01    654.01    646.01    646.01    638.01    638.01
  Bandwd=      8.000     8.000     8.000     8.000     8.000     8.000     8.000     8.000

 The following pulse cal sets were used with this setup:

  Pulse cal detection set:   1  PCAL = 1MHZ
   PCALXB1=   S1    S3    S5    S7    S1    S3    S5    S7
   PCALXB2=   S2    S4    S6    S8    S2    S4    S6    S8
   PCALFR1=    10    10    10    10  6010  6010  6010  6010
   PCALFR2=    10    10    10    10  6010  6010  6010  6010

  Track assignments are:
   track1=   2, 10, 18, 26,  3, 11, 19, 27
   barrel=roll_off


Setup file: ea037b.18cm
  Matches group ur18cm in /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
   update L.Xiang 9Feb05

  Setup group:   10          Station: URUMQI           Total bit rate:  256
  Format: MKIV1:2            Bits per sample: 2        Sample rate: 16.000
  Number of channels:  8                               Speedup factor:   1.00

  Disk used to record data.

  1st LO=   1300.00   1300.00   1300.00   1300.00   1300.00   1300.00   1300.00   1300.00
  Net SB=         U         U         U         U         U         U         U         U
  Pol.  =       RCP       LCP       RCP       LCP       RCP       LCP       RCP       LCP
  BBC   =         2         1         4         3         6         5         8         7
  BBC SB=         U         U         U         U         U         U         U         U
  IF    =        2N        1N        2N        1N        2N        1N        2N        1N

 The following frequency sets based on this setup were used.

  Frequency Set:  10  Setup file default.  No pcal detection.
  LO sum=    1637.99   1637.99   1645.99   1645.99   1653.99   1653.99   1661.99   1661.99
  BBC fr=     337.99    337.99    345.99    345.99    353.99    353.99    361.99    361.99
  Bandwd=      8.000     8.000     8.000     8.000     8.000     8.000     8.000     8.000

  Track assignments are:
   track1=   2, 10, 18, 26,  3, 11, 19, 27
```

```
barrel=roll_off
```


SUMMARY for experiment EA037B Phase-reference observations of NGC7469

```
    Top item is:    Start elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
    Bottom item is: End elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
    TYPE top: -=> normal scan, P=>Pointing or Ta;  bottom: -=>recording, N=>not recording.
    Day  71 is Mon  12 Mar 2007   MJD  54171
```

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
1	71	07:30:00	J2310+1055	-	22	24	27	28	28	33	38	34	35	53	38
	71	07:32:00	ea037b.18cm	-	22	24	27	28	28	33	38	34	35	52	38
2	71	07:32:00	NGC7469	-	22	23	27	28	28	33	38	33	32	50	41
	71	07:36:00	-	-	22	24	27	28	28	34	39	34	31	49	42
3	71	07:36:00	J2310+1055	-	23	24	28	29	29	34	39	34	34	52	39
	71	07:37:30	-	-	23	25	28	29	29	34	39	35	33	52	39
4	71	07:38:00	J2310+1055	-	23	25	28	29	29	34	39	35	33	52	39
	71	07:39:00	-	-	23	25	28	29	29	35	39	35	33	52	39
5	71	07:39:00	NGC7469	-	23	24	28	29	28	34	40	34	31	49	42
	71	07:43:00	-	-	23	25	28	29	29	35	40	34	30	48	43
6	71	07:43:00	J2310+1055	-	24	25	29	30	30	35	40	35	32	51	40
	71	07:44:30	-	-	24	26	29	30	30	35	41	35	32	51	40
7	71	07:45:00	J2310+1055	-	24	26	29	30	30	36	41	36	32	51	40
	71	07:46:00	-	-	24	26	29	30	30	36	41	36	32	51	41
8	71	07:46:00	NGC7469	-	24	25	29	30	29	35	41	35	29	48	43
	71	07:50:00	-	-	24	26	29	30	30	36	42	35	28	48	44
9	71	07:50:00	J2310+1055	-	25	26	30	31	31	36	42	36	31	50	41
	71	07:51:30	-	-	25	27	30	31	31	37	42	36	30	50	41
10	71	07:52:00	J2310+1055	-	25	27	30	31	31	37	42	36	30	50	41
	71	07:53:00	-	-	25	27	30	32	31	37	42	37	30	50	42
11	71	07:53:00	NGC7469	-	25	26	30	31	30	36	42	36	28	47	44
	71	07:57:00	-	-	25	27	30	31	30	37	43	36	27	47	45
12	71	07:57:00	J2310+1055	-	26	28	31	32	31	38	43	37	29	49	42
	71	07:58:30	-	-	26	28	31	32	32	38	43	37	29	49	43
13	71	07:59:00	J2310+1055	-	26	28	31	32	32	38	43	37	29	49	43
	71	08:00:00	-	-	26	28	31	33	32	38	43	37	29	49	43
14	71	08:05:00	3C454.3	-	34	35	39	40	39	45	51	44	26	50	41
	71	08:16:00	-	-	35	37	40	41	40	47	53	46	24	48	43
15	71	08:21:00	3C48	-	25	26	30	29	34	31	30	37	63	80	7D
	71	08:32:00	-	-	26	27	31	31	35	32	32	39	61	80	8
16	71	08:35:00	J2310+1055	-	31	33	36	37	35	43	50	41	21	44	48
	71	08:37:00	-	-	31	33	36	38	36	44	50	41	21	44	48

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Start elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
Bottom item is: End elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
17	71	08:37:00	NGC7469	-	31	32	35	37	34	43	50	40	18	41	50
	71	08:41:00	ea037b.18cm	-	31	33	36	37	35	44	50	41	17	40	51
18	71	08:41:00	J2310+1055	-	32	34	37	38	36	44	51	42	20	43	48
	71	08:43:00	-	-	32	34	37	38	36	45	51	42	19	43	48
19	71	08:43:00	NGC7469	-	31	33	36	38	35	44	51	41	17	40	51
	71	08:47:00	-	-	32	34	36	38	35	44	51	41	16	39	52
20	71	08:47:40	J2310+1055	-	33	35	37	39	37	45	52	42	18	42	49
	71	08:49:40	-	-	33	35	38	39	37	46	52	43	18	42	49
21	71	08:49:40	NGC7469	-	32	34	37	38	36	45	52	41	15	39	52
	71	08:53:40	-	-	33	35	37	39	36	45	52	42	15	38	52
22	71	08:53:40	J2310+1055	-	34	35	38	40	37	46	53	43	17	41	50
	71	08:55:40	-	-	34	36	38	40	37	46	53	43	17	41	50
23	71	08:55:40	NGC7469	-	33	35	37	39	36	46	53	42	14	38	52
	71	08:59:40	-	-	33	35	38	40	36	46	53	42	13	37	53
24	71	09:00:20	J2310+1055	-	34	36	39	41	38	47	54	44	16	40	50
	71	09:02:20	-	-	35	36	39	41	38	47	54	44	15	40	50
25	71	09:02:20	NGC7469	-	34	36	38	40	37	46	54	42	13	37	53
	71	09:06:20	-	-	34	36	39	40	37	47	54	43	12	36	53
26	71	09:06:20	J2310+1055	-	35	37	40	41	38	48	55	44	14	39	51
	71	09:08:20	-	-	35	37	40	42	39	48	55	44	14	39	51
27	71	09:08:20	NGC7469	-	35	36	39	41	37	47	54	43	11	36	53
	71	09:12:20	-	-	35	37	39	41	37	48	55	43	11	35	54
28	71	09:13:00	J2310+1055	-	36	38	40	42	39	49	56	45	13	38	51
	71	09:15:00	-	-	36	38	41	42	39	49	56	45	13	38	51
29	71	09:15:00	NGC7469	-	35	37	39	41	38	48	55	43	10	35	54
	71	09:19:00	-	-	36	38	40	42	38	48	56	43	9	34	54
30	71	09:19:00	J2310+1055	-	37	39	41	43	39	49	57	45	12	37	52
	71	09:21:00	-	-	37	39	41	43	40	50	57	45	11	36	52
31	71	09:21:00	NGC7469	-	36	38	40	42	38	49	56	44	9	34	54
	71	09:25:00	-	-	36	38	40	42	38	49	57	44	8	33	54
32	71	09:25:40	J2310+1055	-	38	39	42	44	40	50	58	45	10	36	52
	71	09:27:40	-	-	38	40	42	44	40	50	58	46	10	35	52

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Start elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
Bottom item is: End elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
33	71	09:27:40	NGC7469	-	37	39	41	43	39	49	57	44	7	33	55
	71	09:31:40	ea037b.18cm	-	37	39	41	43	39	50	57	44	6	32	55
34	71	09:31:40	J2310+1055	-	38	40	42	44	40	51	58	46	9	35	52
	71	09:33:40	-	-	38	40	42	44	40	51	59	46	9	34	53
35	71	09:33:40	NGC7469	-	37	39	41	43	39	50	58	44	6	32	55
	71	09:37:40	-	-	38	40	41	44	39	50	58	45	5	31	55
36	71	09:38:20	J2310+1055	-	39	41	43	45	41	52	59	46	8	34	53
	71	09:40:20	-	-	39	41	43	45	41	52	59	46	7	33	53
37	71	09:40:20	NGC7469	-	38	40	42	44	39	51	58	45	---D	30	55
	71	09:44:20	-	-	39	40	42	44	40	51	59	45	---D	30	55
38	71	09:44:20	J2310+1055	-	40	41	43	45	41	52	60	47	6	32	53
	71	09:46:20	-	-	40	42	44	46	41	52	60	47	6	32	53
39	71	09:46:20	NGC7469	-	39	40	42	44	40	51	59	45	---D	29	55
	71	09:50:20	-	-	39	41	43	45	40	51	59	45	---D	29	55
40	71	09:51:00	J2310+1055	-	40	42	44	46	41	53	61	47	---D	31	53
	71	09:53:00	-	-	41	42	44	46	42	53	61	47	---D	31	53
41	71	09:53:00	NGC7469	-	39	41	43	45	40	52	60	45	---D	28	55
	71	09:57:00	-	-	40	41	43	45	40	52	60	45	---D	28	55
42	71	09:57:00	J2310+1055	-	41	43	44	47	42	53	61	47	---D	30	53
	71	09:59:00	-	-	41	43	45	47	42	54	61	47	---D	30	53
43	71	09:59:00	NGC7469	-	40	42	43	45	40	52	60	45	---D	27	55
	71	10:03:00	-	-	40	42	43	46	40	52	60	45	---D	27	55
44	71	10:03:40	J2310+1055	-	42	43	45	47	42	54	62	47	---D	29	53
	71	10:05:40	-	-	42	44	45	47	42	54	62	47	---D	29	53
45	71	10:05:40	NGC7469	-	41	42	44	46	40	53	61	46	---D	26	55
	71	10:09:40	-	-	41	43	44	46	41	53	61	46	---D	25	55
46	71	10:09:40	J2310+1055	-	42	44	45	48	42	54	62	47	---D	28	53
	71	10:11:40	-	-	42	44	45	48	42	54	63	48	---D	28	53
47	71	10:11:40	NGC7469	-	41	43	44	46	41	53	61	46	---D	25	55
	71	10:15:40	-	-	41	43	44	46	41	53	61	46	---D	24	55
48	71	10:16:20	J2310+1055	-	43	44	46	48	43	55	63	48	---D	27	53
	71	10:18:20	-	-	43	45	46	48	43	55	63	48	---D	26	53

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Start elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
Bottom item is: End elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
49	71	10:18:20	NGC7469	-	42	43	44	47	41	53	61	46	---D	24	55
	71	10:22:20	ea037b.18cm	-	42	44	45	47	41	54	62	46	---D	23	55
50	71	10:22:20	J2310+1055	-	43	45	46	48	43	55	63	48	---D	26	53
	71	10:24:20	-	-	43	45	46	49	43	55	63	48	---D	25	53
51	71	10:24:20	NGC7469	-	42	44	45	47	41	54	62	46	---D	23	54
	71	10:28:20	-	-	42	44	45	47	41	54	62	46	---D	22	54
52	71	10:29:00	J2310+1055	-	44	46	47	49	43	56	64	48	---D	25	53
	71	10:31:00	-	-	44	46	47	49	43	56	64	48	---D	24	52
53	71	10:31:00	NGC7469	-	43	44	45	47	41	54	62	46	---D	22	54
	71	10:35:00	-	-	43	44	45	47	41	54	62	46	---D	21	54
54	71	10:35:00	J2310+1055	-	44	46	47	49	43	56	64	48	---D	23	52
	71	10:37:00	-	-	44	46	47	49	43	56	64	48	---D	23	52
55	71	10:37:00	NGC7469	-	43	45	45	48	41	54	62	46	---D	20	54
	71	10:41:00	-	-	43	45	45	48	41	54	62	46	---D	20	53
56	71	10:41:40	J2310+1055	-	45	46	47	49	43	56	64	48	---D	22	52
	71	10:43:40	-	-	45	47	47	50	43	56	64	48	---D	22	52
57	71	10:43:40	NGC7469	-	43	45	45	48	41	54	62	46	---D	19	53
	71	10:47:40	-	-	44	45	46	48	41	54	62	46	---D	19	53
58	71	10:47:40	J2310+1055	-	45	47	47	50	43	56	64	48	---D	21	51
	71	10:49:40	-	-	45	47	47	50	43	56	64	48	---D	21	51
59	71	10:49:40	NGC7469	-	44	45	46	48	41	54	62	46	---D	18	53
	71	10:53:40	-	-	44	46	46	48	42	54	62	46	---D	17	52
60	71	10:54:20	J2310+1055	-	46	47	48	50	44	56	64	48	---D	20	51
	71	10:56:20	-	-	46	47	48	50	44	56	64	48	---D	20	51
61	71	10:56:20	NGC7469	-	44	46	46	48	42	54	62	46	---D	17	52
	71	11:00:20	-	-	44	46	46	48	42	54	62	45	---D	16	52
62	71	11:00:20	J2310+1055	-	46	47	48	50	44	56	64	48	---D	19	50
	71	11:02:20	-	-	46	48	48	50	44	56	64	48	---D	19	50
63	71	11:02:20	NGC7469	-	44	46	46	48	42	54	62	45	---D	16	51
	71	11:06:20	-	-	45	46	46	48	41	54	62	45	---D	15	51
64	71	11:07:00	J2310+1055	-	46	48	48	50	44	56	64	47	---D	18	50
	71	11:09:00	-	-	46	48	48	50	44	56	64	47	---D	17	50

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Start elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
Bottom item is: End elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
65	71	11:09:00	NGC7469	-	45	46	46	48	41	54	61	45	---D	15	51
	71	11:13:00	ea037b.18cm	-	45	46	46	48	41	54	61	45	---D	14	50
66	71	11:13:00	J2310+1055	-	47	48	48	50	44	56	64	47	---D	17	49
	71	11:15:00	-	-	47	48	48	50	44	56	64	47	---D	16	49
67	71	11:15:00	NGC7469	-	45	46	46	48	41	54	61	45	---D	14	50
	71	11:19:00	-	-	45	46	46	48	41	54	61	45	---D	13	50
68	71	11:19:40	J2310+1055	-	47	48	48	50	43	56	63	47	---D	15	48
	71	11:21:40	-	-	47	48	48	50	43	56	63	47	---D	15	48
69	71	11:21:40	NGC7469	-	45	46	46	48	41	54	61	45	---D	12	49
	71	11:25:40	-	-	45	47	46	48	41	54	61	44	---D	12	49
70	71	11:25:40	J2310+1055	-	47	48	48	50	43	56	63	47	---D	14	48
	71	11:27:40	-	-	47	49	48	50	43	56	63	47	---D	14	48
71	71	11:27:40	NGC7469	-	45	47	46	48	41	54	60	44	---D	11	48
	71	11:31:40	-	-	45	47	46	48	41	54	60	44	---D	11	48
72	71	11:32:20	J2310+1055	-	47	49	48	50	43	56	63	46	---D	13	47
	71	11:34:20	-	-	47	49	48	50	43	56	62	46	---D	13	47
73	71	11:34:20	NGC7469	-	46	47	46	48	41	54	60	44	---D	10	47
	71	11:38:20	-	-	46	47	46	48	41	53	60	44	---D	9	47
74	71	11:38:20	J2310+1055	-	47	49	48	50	43	56	62	46	---D	12	46
	71	11:40:20	-	-	48	49	48	50	43	56	62	46	---D	12	46
75	71	11:40:20	NGC7469	-	46	47	46	48	41	53	59	44	---D	9	47
	71	11:44:20	-	-	46	47	46	48	41	53	59	43	---D	8	46
76	71	11:45:00	J2310+1055	-	48	49	48	50	43	55	61	46	---D	11	45
	71	11:47:00	-	-	48	49	48	50	43	55	61	46	---D	10	45
77	71	11:47:00	NGC7469	-	46	47	46	48	41	53	59	43	---D	8	46
	71	11:51:00	-	-	46	47	45	48	40	53	58	43	---D	7	45
78	71	11:51:00	J2310+1055	-	48	49	48	50	43	55	61	45	---D	10	44
	71	11:53:00	-	-	48	49	48	50	43	55	61	45	---D	9	44
79	71	11:53:00	NGC7469	-	46	47	45	48	40	52	58	43	---D	7	45
	71	11:57:00	-	-	46	47	45	48	40	52	58	42	---D	6	44
80	71	11:57:40	J2310+1055	-	48	49	48	50	42	55	60	45	---D	8	43
	71	11:59:40	-	-	48	49	47	50	42	54	60	45	---D	8	43

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Start elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
Bottom item is: End elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
					STATIONS		t => tape change								
81	71	11:59:40	NGC7469	-	46	47	45	47	40	52	57	42	---D	5	44
	71	12:03:40	ea037b.18cm	-	46	47	45	47	40	52	57	42	---D	5D	43
82	71	12:03:40	J2310+1055	-	48	49	47	50	42	54	59	44	---D	7	43
	71	12:05:40	-	-	48	49	47	50	42	54	59	44	---D	7	42
83	71	12:05:40	NGC7469	-	46	47	45	47	40	51	57	42	---D	---D	43
	71	12:09:40	-	-	46	46	45	47	40	51	56	41	---D	---D	42
84	71	12:10:20	J2310+1055	-	48	49	47	49	42	54	59	44	---D	6	42
	71	12:12:20	-	-	48	49	47	49	42	53	58	44	---D	6	41
85	71	12:12:20	NGC7469	-	46	46	45	47	39	51	56	41	---D	---D	42
	71	12:16:20	-	-	45	46	44	47	39	51	55	41	---D	---D	41
86	71	12:16:20	J2310+1055	-	48	48	47	49	42	53	58	43	---D	5	41
	71	12:18:20	-	-	48	48	47	49	41	53	58	43	---D	5D	40
87	71	12:18:20	NGC7469	-	45	46	44	46	39	50	55	41	---D	---D	41
	71	12:22:20	-	-	45	46	44	46	39	50	54	40	---D	---D	40
88	71	12:23:00	J2310+1055	-	47	48	46	49	41	52	57	43	---D	---D	39
	71	12:25:00	-	-	47	48	46	49	41	52	57	43	---D	---D	39
89	71	12:25:00	NGC7469	-	45	46	44	46	39	50	54	40	---D	---D	39
	71	12:29:00	-	-	45	46	44	46	38	49	53	40	---D	---D	39
90	71	12:29:00	J2310+1055	-	47	48	46	48	41	52	56	42	---D	---D	38
	71	12:31:00	-	-	47	48	46	48	41	52	56	42	---D	---D	38
91	71	12:31:00	NGC7469	-	45	46	44	46	38	49	53	40	---D	---D	38
	71	12:35:00	-	-	45	46	43	45	38	49	52	39	---D	---D	38
92	71	12:35:40	J2310+1055	-	47	48	46	48	40	51	55	42	---D	---D	37
	71	12:37:40	-	-	47	48	46	48	40	51	55	41	---D	---D	37
93	71	12:37:40	NGC7469	-	45	45	43	45	38	48	52	39	---D	---D	37
	71	12:41:40	-	-	45	45	43	45	37	48	51	38	---D	---D	36
94	71	12:41:40	J2310+1055	-	47	48	45	47	40	51	54	41	---D	---D	36
	71	12:43:40	-	-	47	47	45	47	40	50	54	41	---D	---D	36
95	71	12:43:40	NGC7469	-	45	45	43	45	37	48	51	38	---D	---D	36
	71	12:47:40	-	-	44	45	42	44	37	47	51	38	---D	---D	35
96	71	12:48:20	J2310+1055	-	47	47	45	47	39	50	53	40	---D	---D	35
	71	12:50:20	-	-	47	47	45	47	39	50	53	40	---D	---D	35

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Start elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
Bottom item is: End elevation, flag (D=>Down, H=>Below Horizon, t=>Tape Change.)
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
					STATIONS		t => tape change								
97	71	12:50:20	NGC7469	-	44	45	42	44	37	47	50	38	---D	---D	35
	71	12:54:20	ea037b.18cm	-	44	44	42	44	36	46	49	37	---D	---D	34
98	71	12:54:20	J2310+1055	-	46	47	44	46	39	49	52	40	---D	---D	34
	71	12:56:20	-	-	46	47	44	46	39	49	52	40	---D	---D	34
99	71	12:56:20	NGC7469	-	44	44	42	44	36	46	49	37	---D	---D	34
	71	13:00:20	-	-	44	44	41	43	36	46	48	36	---D	---D	33
100	71	13:01:00	J2310+1055	-	46	46	44	46	38	48	51	39	---D	---D	33
	71	13:03:00	-	-	46	46	44	46	38	48	51	39	---D	---D	32
101	71	13:03:00	NGC7469	-	44	44	41	43	36	45	48	36	---D	---D	32
	71	13:07:00	-	-	43	44	41	43	35	45	47	36	---D	---D	32
102	71	13:07:00	J2310+1055	-	46	46	43	45	38	47	50	38	---D	---D	32
	71	13:09:00	-	-	46	46	43	45	38	47	50	38	---D	---D	31
103	71	13:09:00	NGC7469	-	43	43	41	42	35	44	47	35	---D	---D	31
	71	13:13:00	-	-	43	43	40	42	35	44	46	35	---D	---D	30
104	71	13:13:40	J2310+1055	-	45	46	43	44	37	47	49	38	---D	---D	30
	71	13:15:40	-	-	45	45	43	44	37	46	49	37	---D	---D	30
105	71	13:15:40	NGC7469	-	43	43	40	42	35	44	46	35	---D	---D	30
	71	13:19:40	-	-	42	43	40	41	34	43	45	34	---D	---D	29
106	71	13:19:40	J2310+1055	-	45	45	42	44	37	46	48	37	---D	---D	29
	71	13:21:40	-	-	45	45	42	44	37	45	47	37	---D	---D	29
107	71	13:21:40	NGC7469	-	42	42	39	41	34	43	45	34	---D	---D	29
	71	13:25:40	-	-	42	42	39	41	34	42	44	33	---D	---D	28
108	71	13:26:20	J2310+1055	-	44	45	42	43	36	45	47	36	---D	---D	28
	71	13:28:20	-	-	44	44	41	43	36	44	46	36	---D	---D	28

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Seconds antenna is on source during scan.
Bottom item is: Slew time in seconds from previous source.
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT	SOURCE	TYPE	STATIONS	t => tape change									
		STOP UT			Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
1	71	07:30:00	J2310+1055	-	120	120	120	120	120	120	120	120	120	120	120
	71	07:32:00	ea037b.18cm	-	0	0	0	0	0	0	0	0	0	0	0
2	71	07:32:00	NGC7469	-	220	209	220	206	232	232	233	219	234	229	209
	71	07:36:00	-	-	20	31	20	34	8	8	7	21	6	11	31
3	71	07:36:00	J2310+1055	-	70	59	70	56	82	82	83	69	84	79	59
	71	07:37:30	-	-	20	31	20	34	8	8	7	21	6	11	31
4	71	07:38:00	J2310+1055	-	60	60	60	60	60	60	60	60	60	60	60
	71	07:39:00	-	-	6	14	12	14	2	4	2	8	2	2	23
5	71	07:39:00	NGC7469	-	220	209	220	206	232	232	233	219	234	229	209
	71	07:43:00	-	-	20	31	20	34	8	8	7	21	6	11	31
6	71	07:43:00	J2310+1055	-	70	59	70	56	82	82	83	69	84	79	59
	71	07:44:30	-	-	20	31	20	34	8	8	7	21	6	11	31
7	71	07:45:00	J2310+1055	-	60	60	60	60	60	60	60	60	60	60	60
	71	07:46:00	-	-	6	14	12	14	2	4	2	8	2	2	23
8	71	07:46:00	NGC7469	-	220	209	220	206	232	232	233	219	234	229	209
	71	07:50:00	-	-	20	31	20	34	8	8	7	21	6	11	31
9	71	07:50:00	J2310+1055	-	70	59	70	56	82	82	83	69	84	79	59
	71	07:51:30	-	-	20	31	20	34	8	8	7	21	6	11	31
10	71	07:52:00	J2310+1055	-	60	60	60	60	60	60	60	60	60	60	60
	71	07:53:00	-	-	6	14	12	14	2	4	2	8	2	2	23
11	71	07:53:00	NGC7469	-	220	209	220	206	232	232	233	219	234	229	209
	71	07:57:00	-	-	20	31	20	34	8	8	7	21	6	11	31
12	71	07:57:00	J2310+1055	-	69	59	70	56	82	82	83	69	84	79	59
	71	07:58:30	-	-	21	31	20	34	8	8	7	21	6	11	31
13	71	07:59:00	J2310+1055	-	60	60	60	60	60	60	60	60	60	60	60
	71	08:00:00	-	-	6	14	12	14	2	4	2	8	2	2	23
14	71	08:05:00	3C454.3	-	660	660	660	660	660	660	660	660	660	660	660
	71	08:16:00	-	-	39	47	31	51	20	19	17	40	10	25	38
15	71	08:21:00	3C48	-	660	660	660	660	660	660	660	660	660	660	0
	71	08:32:00	-	-	145	103	145	142	134	67	65	120	67	147	106
16	71	08:35:00	J2310+1055	-	120	120	120	120	120	120	120	120	120	120	120
	71	08:37:00	-	-	152	107	138	149	127	72	73	123	69	121	102

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Seconds antenna is on source during scan.
Bottom item is: Slew time in seconds from previous source.
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT	SOURCE	TYPE	STATIONS	t => tape change									
		STOP UT			Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
17	71	08:37:00	NGC7469	-	219	208	220	205	232	231	232	219	234	229	209
	71	08:41:00	ea037b.18cm	-	21	32	20	35	8	9	8	21	6	11	31
18	71	08:41:00	J2310+1055	-	99	88	100	85	112	111	112	99	114	109	89
	71	08:43:00	-	-	21	32	20	35	8	9	8	21	6	11	31
19	71	08:43:00	NGC7469	-	219	208	220	205	232	231	232	219	234	229	209
	71	08:47:00	-	-	21	32	20	35	8	9	8	21	6	11	31
20	71	08:47:40	J2310+1055	-	120	120	120	120	120	120	120	120	120	120	120
	71	08:49:40	-	-	20	31	20	34	8	9	8	21	6	11	31
21	71	08:49:40	NGC7469	-	219	208	220	205	232	231	232	219	234	229	209
	71	08:53:40	-	-	21	32	20	35	8	9	8	21	6	11	31
22	71	08:53:40	J2310+1055	-	99	88	100	85	112	111	112	99	114	109	89
	71	08:55:40	-	-	21	32	20	35	8	9	8	21	6	11	31
23	71	08:55:40	NGC7469	-	219	208	220	205	232	231	232	219	234	229	209
	71	08:59:40	-	-	21	32	20	35	8	9	8	21	6	11	31
24	71	09:00:20	J2310+1055	-	120	120	120	120	120	120	120	120	120	120	120
	71	09:02:20	-	-	21	31	20	34	8	9	8	20	6	11	31
25	71	09:02:20	NGC7469	-	219	208	220	205	232	231	232	219	234	229	209
	71	09:06:20	-	-	21	32	20	35	8	9	8	21	6	11	31
26	71	09:06:20	J2310+1055	-	99	88	100	85	112	111	112	99	114	109	89
	71	09:08:20	-	-	21	32	20	35	8	9	8	21	6	11	31
27	71	09:08:20	NGC7469	-	219	208	220	205	232	231	232	219	234	229	209
	71	09:12:20	-	-	21	32	20	35	8	9	8	21	6	11	31
28	71	09:13:00	J2310+1055	-	120	120	120	120	120	120	120	120	120	120	120
	71	09:15:00	-	-	21	32	20	34	8	9	8	20	6	11	31
29	71	09:15:00	NGC7469	-	219	208	220	205	232	231	231	219	234	229	209
	71	09:19:00	-	-	21	32	20	35	8	9	9	21	6	11	31
30	71	09:19:00	J2310+1055	-	99	88	100	85	112	111	111	99	114	109	89
	71	09:21:00	-	-	21	32	20	35	8	9	9	21	6	11	31
31	71	09:21:00	NGC7469	-	219	208	220	205	232	231	231	219	234	229	209
	71	09:25:00	-	-	21	32	20	35	8	9	9	21	6	11	31
32	71	09:25:40	J2310+1055	-	120	120	120	120	120	120	120	120	120	120	120
	71	09:27:40	-	-	21	32	20	34	8	9	8	20	6	11	31

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Seconds antenna is on source during scan.
Bottom item is: Slew time in seconds from previous source.
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
33	71	09:27:40	NGC7469	-	219	208	220	205	232	231	231	219	234	229	209
	71	09:31:40	ea037b.18cm	-	21	32	20	35	8	9	9	21	6	11	31
34	71	09:31:40	J2310+1055	-	99	88	100	85	112	111	111	99	114	109	89
	71	09:33:40	-	-	21	32	20	35	8	9	9	21	6	11	31
35	71	09:33:40	NGC7469	-	219	208	220	205	232	231	231	219	234	229	209
	71	09:37:40	-	-	21	32	20	35	8	9	9	21	6	11	31
36	71	09:38:20	J2310+1055	-	120	120	120	120	120	120	120	120	120	120	120
	71	09:40:20	-	-	21	32	20	34	8	9	8	20	6	11	31
37	71	09:40:20	NGC7469	-	219	208	220	205	232	231	231	219	---	229	209
	71	09:44:20	-	-	21	32	20	35	8	9	9	21	---	11	31
38	71	09:44:20	J2310+1055	-	99	88	100	85	112	111	111	99	120	109	89
	71	09:46:20	-	-	21	32	20	35	8	9	9	21	3	11	31
39	71	09:46:20	NGC7469	-	219	208	220	205	232	231	231	219	---	229	209
	71	09:50:20	-	-	21	32	20	35	8	9	9	21	---	11	31
40	71	09:51:00	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	09:53:00	-	-	21	32	20	34	8	9	8	20	---	11	31
41	71	09:53:00	NGC7469	-	219	208	220	205	232	231	231	220	---	229	209
	71	09:57:00	-	-	21	32	20	35	8	9	9	20	---	11	31
42	71	09:57:00	J2310+1055	-	99	88	100	85	112	111	111	100	---	109	89
	71	09:59:00	-	-	21	32	20	35	8	9	9	20	---	11	31
43	71	09:59:00	NGC7469	-	219	208	220	205	232	231	231	220	---	229	209
	71	10:03:00	-	-	21	32	20	35	8	9	9	20	---	11	31
44	71	10:03:40	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	10:05:40	-	-	21	32	20	34	8	9	8	21	---	11	31
45	71	10:05:40	NGC7469	-	219	208	220	205	232	231	231	219	---	229	209
	71	10:09:40	-	-	21	32	20	35	8	9	9	21	---	11	31
46	71	10:09:40	J2310+1055	-	99	88	100	85	112	111	111	99	---	109	89
	71	10:11:40	-	-	21	32	20	35	8	9	9	21	---	11	31
47	71	10:11:40	NGC7469	-	219	208	220	205	232	231	231	219	---	229	209
	71	10:15:40	-	-	21	32	20	35	8	9	9	21	---	11	31
48	71	10:16:20	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	10:18:20	-	-	21	32	20	34	8	9	8	21	---	11	31

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Seconds antenna is on source during scan.
Bottom item is: Slew time in seconds from previous source.
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
49	71	10:18:20	NGC7469	-	219	208	220	205	232	231	231	219	---	229	209
	71	10:22:20	ea037b.18cm	-	21	32	20	35	8	9	9	21	---	11	31
50	71	10:22:20	J2310+1055	-	99	88	100	85	112	111	112	99	---	109	89
	71	10:24:20	-	-	21	32	20	35	8	9	8	21	---	11	31
51	71	10:24:20	NGC7469	-	219	208	220	205	232	231	232	219	---	229	209
	71	10:28:20	-	-	21	32	20	35	8	9	8	21	---	11	31
52	71	10:29:00	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	10:31:00	-	-	21	32	20	34	8	8	8	21	---	11	31
53	71	10:31:00	NGC7469	-	219	208	220	206	232	231	232	219	---	229	209
	71	10:35:00	-	-	21	32	20	34	8	9	8	21	---	11	31
54	71	10:35:00	J2310+1055	-	99	88	100	86	112	111	112	98	---	109	89
	71	10:37:00	-	-	21	32	20	34	8	9	8	22	---	11	31
55	71	10:37:00	NGC7469	-	219	208	220	206	232	231	232	218	---	229	209
	71	10:41:00	-	-	21	32	20	34	8	9	8	22	---	11	31
56	71	10:41:40	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	10:43:40	-	-	21	31	20	33	8	8	7	22	---	11	31
57	71	10:43:40	NGC7469	-	219	208	220	206	232	231	232	218	---	229	209
	71	10:47:40	-	-	21	32	20	34	8	9	8	22	---	11	31
58	71	10:47:40	J2310+1055	-	99	88	100	86	112	112	112	98	---	109	89
	71	10:49:40	-	-	21	32	20	34	8	8	8	22	---	11	31
59	71	10:49:40	NGC7469	-	219	208	220	206	232	232	233	218	---	229	209
	71	10:53:40	-	-	21	32	20	34	8	8	7	22	---	11	31
60	71	10:54:20	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	10:56:20	-	-	20	31	20	33	8	9	7	22	---	11	31
61	71	10:56:20	NGC7469	-	219	208	220	206	232	231	233	218	---	229	209
	71	11:00:20	-	-	21	32	20	34	8	9	7	22	---	11	31
62	71	11:00:20	J2310+1055	-	99	88	100	87	112	111	113	98	---	109	89
	71	11:02:20	-	-	21	32	20	33	8	9	7	22	---	11	31
63	71	11:02:20	NGC7469	-	219	208	220	207	232	231	233	218	---	229	209
	71	11:06:20	-	-	21	32	20	33	8	9	7	22	---	11	31
64	71	11:07:00	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	11:09:00	-	-	20	31	20	32	8	9	7	22	---	11	31

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Seconds antenna is on source during scan.
Bottom item is: Slew time in seconds from previous source.
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

STATIONS   t => tape change

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
65	71	11:09:00	NGC7469	-	219	208	220	207	232	231	233	218	---	229	209
	71	11:13:00	ea037b.18cm	-	21	32	20	33	8	9	7	22	---	11	31
66	71	11:13:00	J2310+1055	-	99	89	100	87	112	111	113	98	---	109	89
	71	11:15:00	-	-	21	31	20	33	8	9	7	22	---	11	31
67	71	11:15:00	NGC7469	-	219	209	220	207	232	231	233	217	---	229	209
	71	11:19:00	-	-	21	31	20	33	8	9	7	23	---	11	31
68	71	11:19:40	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	11:21:40	-	-	20	30	20	31	8	9	7	22	---	11	31
69	71	11:21:40	NGC7469	-	219	209	220	208	232	231	233	217	---	229	209
	71	11:25:40	-	-	21	31	20	32	8	9	7	23	---	11	31
70	71	11:25:40	J2310+1055	-	100	89	100	88	112	111	113	97	---	109	89
	71	11:27:40	-	-	20	31	20	32	8	9	7	23	---	11	31
71	71	11:27:40	NGC7469	-	220	209	220	208	232	231	233	217	---	229	209
	71	11:31:40	-	-	20	31	20	32	8	9	7	23	---	11	31
72	71	11:32:20	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	11:34:20	-	-	21	30	20	31	8	9	7	23	---	11	31
73	71	11:34:20	NGC7469	-	219	209	220	208	232	231	233	217	---	229	209
	71	11:38:20	-	-	21	31	20	32	8	9	7	23	---	11	31
74	71	11:38:20	J2310+1055	-	99	89	100	89	112	111	113	97	---	109	89
	71	11:40:20	-	-	21	31	20	31	8	9	7	23	---	11	31
75	71	11:40:20	NGC7469	-	219	209	220	209	232	231	233	217	---	229	209
	71	11:44:20	-	-	21	31	20	31	8	9	7	23	---	11	31
76	71	11:45:00	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	11:47:00	-	-	21	29	20	30	8	9	7	23	---	11	31
77	71	11:47:00	NGC7469	-	219	210	220	209	232	231	233	217	---	229	209
	71	11:51:00	-	-	21	30	20	31	8	9	7	23	---	11	31
78	71	11:51:00	J2310+1055	-	99	90	100	90	112	111	113	97	---	109	89
	71	11:53:00	-	-	21	30	20	30	8	9	7	23	---	11	31
79	71	11:53:00	NGC7469	-	219	210	220	210	232	230	233	217	---	229	209
	71	11:57:00	-	-	21	30	20	30	8	10	7	23	---	11	31
80	71	11:57:40	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	11:59:40	-	-	21	29	20	30	8	9	7	23	---	11	31

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Seconds antenna is on source during scan.
Bottom item is: Slew time in seconds from previous source.
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

STATIONS   t => tape change

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
81	71	11:59:40	NGC7469	-	219	210	220	209	232	230	233	217	---	0	209
	71	12:03:40	ea037b.18cm	-	21	30	20	31	8	10	7	23	---	11	31
82	71	12:03:40	J2310+1055	-	98	90	100	89	112	110	113	97	---	110	89
	71	12:05:40	-	-	22	30	20	31	8	10	7	23	---	10	31
83	71	12:05:40	NGC7469	-	218	210	220	209	232	230	233	217	---	---	209
	71	12:09:40	-	-	22	30	20	31	8	10	7	23	---	---	31
84	71	12:10:20	J2310+1055	-	120	120	120	120	120	120	120	120	---	120	120
	71	12:12:20	-	-	22	30	20	31	8	10	7	23	---	5	31
85	71	12:12:20	NGC7469	-	218	210	220	209	232	230	233	217	---	---	209
	71	12:16:20	-	-	22	30	20	31	8	10	7	23	---	---	31
86	71	12:16:20	J2310+1055	-	98	90	100	89	112	110	113	97	---	0	89
	71	12:18:20	-	-	22	30	20	31	8	10	7	23	---	4	31
87	71	12:18:20	NGC7469	-	218	210	220	209	232	230	233	217	---	---	209
	71	12:22:20	-	-	22	30	20	31	8	10	7	23	---	---	31
88	71	12:23:00	J2310+1055	-	120	120	120	120	120	120	120	120	---	---	120
	71	12:25:00	-	-	22	30	20	31	8	10	7	23	---	---	31
89	71	12:25:00	NGC7469	-	218	210	220	209	232	230	233	216	---	---	209
	71	12:29:00	-	-	22	30	20	31	8	10	7	24	---	---	31
90	71	12:29:00	J2310+1055	-	98	90	100	89	112	110	113	96	---	---	89
	71	12:31:00	-	-	22	30	20	31	8	10	7	24	---	---	31
91	71	12:31:00	NGC7469	-	218	210	220	209	232	230	233	216	---	---	209
	71	12:35:00	-	-	22	30	20	31	8	10	7	24	---	---	31
92	71	12:35:40	J2310+1055	-	120	120	120	120	120	120	120	120	---	---	120
	71	12:37:40	-	-	22	30	20	31	8	10	7	23	---	---	31
93	71	12:37:40	NGC7469	-	218	210	220	209	232	230	233	216	---	---	209
	71	12:41:40	-	-	22	30	20	31	8	10	7	24	---	---	31
94	71	12:41:40	J2310+1055	-	97	89	100	89	112	110	113	96	---	---	89
	71	12:43:40	-	-	23	31	20	31	8	10	7	24	---	---	31
95	71	12:43:40	NGC7469	-	217	209	220	209	232	230	233	216	---	---	209
	71	12:47:40	-	-	23	31	20	31	8	10	7	24	---	---	31
96	71	12:48:20	J2310+1055	-	120	120	120	120	120	120	120	120	---	---	120
	71	12:50:20	-	-	23	31	20	31	8	10	7	23	---	---	31

SUMMARY for experiment EA037B Phase-reference observations of NGC7469

Top item is: Seconds antenna is on source during scan.
Bottom item is: Slew time in seconds from previous source.
TYPE top: -=> normal scan, P=>Pointing or Ta; bottom: -=>recording, N=>not recording.
Day 71 is Mon 12 Mar 2007   MJD 54171

SCAN	DAY	START UT / STOP UT	SOURCE	TYPE	Jb	Cm	Wb	Ef	On	Mc	Nt	Tr	Sh	Ur	Hh
97	71	12:50:20	NGC7469	-	217	209	220	208	232	230	233	216	---	---	209
	71	12:54:20	ea037b.18cm	-	23	31	20	32	8	10	7	24	---	---	31
98	71	12:54:20	J2310+1055	-	97	89	100	88	112	110	113	96	---	---	89
	71	12:56:20	-	-	23	31	20	32	8	10	7	24	---	---	31
99	71	12:56:20	NGC7469	-	217	209	220	208	232	230	233	216	---	---	209
	71	13:00:20	-	-	23	31	20	32	8	10	7	24	---	---	31
100	71	13:01:00	J2310+1055	-	120	120	120	120	120	120	120	120	---	---	120
	71	13:03:00	-	-	23	31	20	31	8	10	7	23	---	---	31
101	71	13:03:00	NGC7469	-	217	209	220	208	232	230	233	216	---	---	209
	71	13:07:00	-	-	23	31	20	32	8	10	7	24	---	---	31
102	71	13:07:00	J2310+1055	-	97	89	100	88	112	110	113	96	---	---	89
	71	13:09:00	-	-	23	31	20	32	8	10	7	24	---	---	31
103	71	13:09:00	NGC7469	-	217	209	220	208	232	230	233	216	---	---	209
	71	13:13:00	-	-	23	31	20	32	8	10	7	24	---	---	31
104	71	13:13:40	J2310+1055	-	120	120	120	120	120	120	120	120	---	---	120
	71	13:15:40	-	-	23	31	20	32	8	10	7	24	---	---	31
105	71	13:15:40	NGC7469	-	217	209	220	208	232	230	233	216	---	---	209
	71	13:19:40	-	-	23	31	20	32	8	10	7	24	---	---	31
106	71	13:19:40	J2310+1055	-	97	89	100	88	112	110	113	96	---	---	89
	71	13:21:40	-	-	23	31	20	32	8	10	7	24	---	---	31
107	71	13:21:40	NGC7469	-	217	209	220	208	232	230	233	216	---	---	209
	71	13:25:40	-	-	23	31	20	32	8	10	7	24	---	---	31
108	71	13:26:20	J2310+1055	-	120	120	120	120	120	120	120	120	---	---	120
	71	13:28:20	-	-	23	31	20	32	8	10	7	24	---	---	31

(STATIONS header note: t => tape change)

TAPE TIMES (Without autoallocation):

Station	Tape start time. Day	Time (UT)	Tape end time. Day	Time (UT)
JODRELL2	71	07:30:00	71	13:28:20
CAMBG32M	71	07:30:00	71	13:28:20
WSTRBORK	71	07:30:00	71	13:28:20
EFLSBERG	71	07:30:00	71	13:28:20
ONSALA85	71	07:30:00	71	13:28:20
MEDICINA	71	07:30:00	71	13:28:20
NOTO	71	07:30:00	71	13:28:20
TORUN	71	07:30:00	71	13:28:20
SHANGHAI	71	07:30:00	71	09:46:20
URUMQI	71	07:30:00	71	12:18:20
HART	71	07:30:00	71	13:28:20

```
 SOURCE LIST -- Phase-reference observations of NGC7469
     Catalog positions marked with *.
     Precession of date coordinates is based on stop time of first scan.
     Names used in schedule marked with *.
     Short names used in VLA and SNAP files marked with +.
     Observation date used in B1950/J2000 coordinate conversion (PRECDATE):  1979.900
     No adjustments are made for rates (DRA, DDEC).
     Scan hours are for recording scans only.
     Baseline hours are only counted for scans above horizon at both ends.

   Source                        Source position (RA/Dec)                       Error
                        (B1950)             (J2000)              (Date)            (mas)

 * NGC7469           23 00 44.413178   * 23 03 15.617200     23 03 36.261718       0.00
                     08 36 15.75160    * 08 52 25.94500      08 54 37.04011        0.00
                     From catalog imbedded in main SCHED input file.
                        3.333 scan hours,    135.035 baseline hours above horizon.

   J0137+3309        01 34 49.826430   * 01 37 41.299496     01 38 04.716995       0.90
   0134+329          32 54 20.25964    * 33 09 35.13382      33 11 50.98736        0.91
 * 3C48              /mnt/datos/antxon/sched-v6.05/catalogs/sources.vlba
   J0137+33          VLBA Calib Survey - GSFC sols. - created L.Petrov 2005f_astro
                        0.183 scan hours,      8.250 baseline hours above horizon.

   J2253+1608        22 51 29.519744   * 22 53 57.747943     22 54 17.855050       0.31
   2251+158          15 52 54.34806    * 16 08 53.56089      16 11 02.57766        0.20
 * 3C454.3           /mnt/datos/antxon/sched-v6.05/catalogs/sources.vlba
   J2253+16          VLBA Calib Survey - GSFC sols. - created L.Petrov 2005f_astro
                        0.183 scan hours,     10.083 baseline hours above horizon.

 * J2310+1055        23 07 57.541049   * 23 10 28.517751     23 10 49.099613       0.37
   2307+106          10 39 13.09644    * 10 55 30.69685      10 57 43.24822        0.47
                     /mnt/datos/antxon/sched-v6.05/catalogs/sources.vlba
                     VLBA Calib Survey - GSFC sols. - created L.Petrov 2005f_astro
                        1.767 scan hours,     73.108 baseline hours above horizon.



  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)
   NGC7469             13.8
   3C48                47.7
   3C454.3             21.3
   J2310+1055          15.0

  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 60deg 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


 Source separations in degrees for pairs closer than  30.00 degrees.

     NGC7469       3C454.3         7.6196
     NGC7469       J2310+1055      2.7138
     3C454.3       J2310+1055      6.5860




 J2000 coordinates formatted for possible transfer to the correlator data base:
name = 'NGC7469'  ra = 23h03m15.617200s  dec = 08d52'25.94500"
name = '3C48'   ra = 01h37m41.299496s  dec = 33d09'35.13382"
name = '3C454.3'  ra = 22h53m57.747943s  dec = 16d08'53.56089"
name = 'J2310+1055'  ra = 23h10m28.517751s  dec = 10d55'30.69685"


Catalogs:
```



```
  Station:   /mnt/datos/antxon/sched-v6.05/catalogs/stations.dat
                Version:  2006Dec04-17:14:51
  Location:  /mnt/datos/antxon/sched-v6.05/catalogs/locations.dat
                Version:  Not known
  Frequency: /mnt/datos/antxon/sched-v6.05/catalogs/freq.dat
                Version:  2006Jun08-14:55:16
  Source:   /mnt/datos/antxon/sched-v6.05/catalogs/sources.vlba
                Version:  Not given


Code versions:
  Release version:            6.05  June 2006
  Version of VEX standard:   1.50
  Version of VEX code:       0.86
  Version of plot code:      1.06
  Version of ephemeris code: 1.01
  Version of PGPLOT:        v5.2.2
```