v255t

Description	Proper motion and Parallax of Methanol Masers: A search for infalling ga
Antennas	At-Cd-Ho-Mp-Pa-Hh
Start	226 17:00:00
Stop	227 18:00:00
PI	S.P. Ellingsen

Setup v255t.5cm-icrf:

Station Modes	At Cd Ho Mp Pa
Channel 1	IFP#1-LO 6300 - 6316 MHz USB RCP
Channel 2	IFP#1-HI 6316 - 6332 MHz USB RCP
Channel 3	IFP#2-LO 6642 - 6658 MHz USB LCP
Channel 4	IFP#2-HI 6658 - 6674 MHz USB LCP
DAS 1 Skyfreq	6316 & 6658 MHz
Bandwidth	16 MHz
DAS Mode	vsop.pro (telescope)

Station Modes	Hh
Channel 1	6642 - 6658 MHz USB RCP
Channel 2	6642 - 6658 MHz USB LCP
Channel 3	6658 - 6674 MHz USB RCP
Channel 4	6658 - 6674 MHz USB LCP
Bandwidth	16 MHz
DAS Mode	Mark5

Setup v255t.5cm:

Station Modes	At Cd Ho Mp Pa
Channel 1	IFP#1-LO 6642 - 6658 MHz USB RCP
Channel 2	IFP#1-HI 6658 - 6674 MHz USB RCP
Channel 3	IFP#2-LO 6642 - 6658 MHz USB LCP
Channel 4	IFP#2-HI 6658 - 6674 MHz USB LCP
DAS 1 Skyfreq	6658 MHz
Bandwidth	16 MHz
DAS Mode	vsop.pro (telescope)

Station Modes	Hh
Channel 1	6642 - 6658 MHz USB RCP
Channel 2	6642 - 6658 MHz USB LCP
Channel 3	6658 - 6674 MHz USB RCP
Channel 4	6658 - 6674 MHz USB LCP
Bandwidth	16 MHz
DAS Mode	Mark5

Mode changes:
226 17:00:00 v255t.5cm-icrf
226 18:48:00 v255t.5cm

227 01:15:00 v255t.5cm-icrf
227 02:07:00 v255t.5cm
227 05:30:00 v255t.5cm-icrf
227 06:15:00 v255t.5cm
227 09:15:00 v255t.5cm-icrf
227 10:00:00 v255t.5cm
227 13:30:00 v255t.5cm-icrf
227 14:15:00 v255t.5cm
227 17:15:00 v255t.5cm-icrf

Ftp: ftp://ftp.atnf.csiro.au/pub/people/vlbi/v255/v255t

Comments:

At Cd Ho Mp Pa: Dual frequency setup required. Will need special DAS setup

The purpose of these observations is to obtain the subsequent epoch for proper motion/parallax for G263.250+0.514, G305.202+0.208, G305.208+0.206 and G305.200+0.019, G339.884-1.259, G339.681-1.208 and G339.682-1.207.

The G263.250 observations should show a modest peak at a sky frequency of 6667.8 MHz. The G305.21 observations should show a modest peak at a sky frequency around 6668.9 and the 339.88-1.26 should show a strong peak at a sky frequency of around 6668.9 MHz during these observations.

During the ICRF runs we have sometimes had to exclude certain antennas (particularly Parkes and Hart) from observations of some sources in order to get a good spread of azimuths and elevations. Observing comments for each antenna:

Hobart, Ceduna :

The 4 x 16 MHz bandpass setup requires feeding two separate LOs into IFP#1 and #2 on the DAS/frequency translator. For Hobart the LOs should be set to 468 MHz (IFP#1) and 810 MHz (IFP#2) for the 4 x 16 MHz setup and 810 MHz for the 2 x 16 MHz setup. For Ceduna, if you set the agilent to 11.1 GHz rather than 11.4 GHz, then you can use the same LOs as at Hobart.

The level into IF#1 will change significantly between the two setups. Set the level into the DAS so that it is within range for both setups. Setup the system temperature measurement so that it works for both IFs for the v255s.5cm setup. Please don't change the attenuation into the DAS when the setup changes as that may change the delay.

Mopra :

Note the use of the dual sideband vsop profile. Only the lower sideband should be selected for transfer.

Note the use of the dual sideband vsop profile. Only the lower sideband should be selected for

transfer. The basic method and frequencies for this experiment are the same as for the earlier v255 experiments (Jun 13, Mar 13, Mar 12, Nov 11 and earlier). The frequency setup for this session is identical to v255s in June 2013. As for the earlier experiments for the ICRF observations it is 2 IFs with different polarizations. The times for the setup (mode) changes are given above.

Not observing from 227/16:25 - 17:05.

ATCA :

For the ATCA please phase-up antennas CA01 through CA05 for this experiment.

Setup as for a 2p-4IF experiment (dual DAS with huygens cable for entire experiment) with DAS1 tuned to the lower frequency and DAS2 to the upper frequency. Use the feature in cdisko version 4 to automate the changes of channel selection as per the following table. v255t.5cm Channels 5-8 v255t.5cm-icrf Channels 1,2,7,8

Not observing from 227/15:45 - 17:05.

Parkes :

Not observing during these times:

226 / 18:52 - 20:34
226 / 21:38 - 22:31
226 / 23:32 - 227 / 00:13
227 / 02:54 - 03:23
227 / 06:28 - 06:51
227 / 11:54 - 12:33
227 / 14:36 - 17:05

Hart:

Observations at Hart begin at 227/01:15-01:30 UT for ICRF observations, and then delay calibration from 02:00-02:12 UT.

Target observations begin at 227/04:04.

Not observing during these times:

226 / 18:00 - 227 / 01:15
227 / 05:00 - 06:15 (includes ICRF bloc)
227 / 06:51 - 07:56
227 / 09:42 - 10:05 (includes ICRF bloc)
227 / 11:26 - 11:44
227 / 13:30 - 14:21 (includes ICRF bloc)
227 / 17:15 - 18:00 (includes ICRF bloc)

Observing comments for each antenna:

At	Cd	Ho	Mp	Pa	Hh

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Observing Logs

Parkes onsource flagging
ATCA onsource flagging
Mopra onsource flagging
Mopra Tsys (plot)
Parkes Tsys

Weather

ATCA Weather
Mopra Weather
Parkes Weather

Monica log information - EXPERIMENTAL:

Mopra Tsys
Parkes Tsys
ATCA Tsys