

VSOP AO2 PROPOSAL COVER SHEETS

DEADLINE : 8 May, 1998

SEND TO : VSOG, ISAS, 3-1-1 Yoshinodai, Sagamihara, Kanagawa 229-8510, JAPAN

Please read Appendix C of Announcement of Opportunity for details on how to fill in this Cover Sheet.

(1) Date prepared : 28 April 1998

(2) Proposal title : Deep Interferometric VSOP-Arecibo Survey

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(5) Proposal Abstract :

We propose sensitive 5-GHz HALCA-Arecibo observations of at least 30 objects from a sample of 60 flat-spectrum sources selected from the FIRST survey. Such observations would enter a previously unreachable area in the phase space of angular resolution vs. sensitivity, that can be exploited only by the most sensitive VSOP baseline, between HALCA and Arecibo. The program objects are a compact-flux-density-limited subset of a larger sample of 161 FIRST sources imaged in VLBA snapshot observations. Statistical studies of the HALCA-Arecibo data will be compared to results of the VSOP Survey Program to look for differences in the properties of the compact components between high- and moderate-luminosity sources. In addition, the properties of the weaker sources in this program will be used for planning purposes for future, more sensitive space VLBI missions such as VSOP-2 and ARISE.

(6) Proposal Category (indicate all that apply):

Object type:

☒ AGN, ☐ Maser, ☐ Stellar, ☐ Pulsar, ☐ Other :

Observation type:

☒ Continuum, ☐ Spectral Line, ☐ Polarization, ☒ Time-critical, ☒ Other : Deep survey

(7) Number of proposed experiments

An ‘experiment’ is one or more observations of one source at a fixed HALCA set-up. A request to observe the same source at 1.6 GHz and separately at 5 GHz requires two columns to be filled in in item (8) below. A request to observe the same source with HALCA simultaneously observing at 1.6 GHz and 5 GHz requires one column to be filled in. Multi-epoch observations of the same source at the same frequency – a ‘monitoring experiment’ – requires only one column to be filled in. Suggested observing dates, especially for for time-critical and monitoring experiments, should be specified in item (10).

The number of experiments in this proposal is: 30

(8) Details of proposed experiments

	Experiment 1	Experiment 2	Experiment 3	Experiment 4
Source name (<i>Jhhmm±ddmm</i>)	J0724+2957	J0736+2954	J0741+3112	J0748+3006
Alternative name				
RA(J2000) (hh mm ss.ssss)	07 24 28.0412	07 36 13.6601	07 41 10.7033	07 48 09.4668
Dec(J2000) (dd mm ss.ssss)	+29 57 48.003	+29 55 22.198	+31 12 00.229	+30 06 30.394
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.1	0.5	2.4	0.2
Correlated flux (mJy)	94	262	1914	150
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 5	Experiment 6	Experiment 7	Experiment 8
Source name (<i>Jhhmm±ddmm</i>)	J0754+3033	J0759+3010	J0817+3227	J0819+3226
Alternative name				
RA(J2000) (hh mm ss.ssss)	07 54 48.8500	07 59 28.2867	08 17 28.5416	08 19 02.3287
Dec(J2000) (dd mm ss.ssss)	+30 33 55.019	+30 10 28.320	+32 27 02.922	+32 26 37.229
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.1	0.1	0.6	0.2
Correlated flux (mJy)	131	78	141	199
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 9	Experiment 10	Experiment 11	Experiment 12
Source name (<i>Jhhmm±ddmm</i>)	J0821+3107	J0823+2928	J0900+3330	J0911+3349
Alternative name				
RA(J2000) (hh mm ss.ssss)	08 21 07.6145	08 23 41.1328	09 00 30.4096	09 11 47.7598
Dec(J2000) (dd mm ss.ssss)	+31 07 51.139	+29 28 28.204	+33 30 08.964	+33 49 16.791
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.2	0.5	0.1	0.3
Correlated flux (mJy)	105	265	76	110
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 13	Experiment 14	Experiment 15	Experiment 16
Source name (<i>Jhhmm±ddmm</i>)	J0915+2933	J0919+3324	J0923+3107	J0925+3127
Alternative name				
RA(J2000) (hh mm ss.ssss)	09 15 52.4020	09 19 08.7900	09 23 47.9502	09 25 43.6497
Dec(J2000) (dd mm ss.ssss)	+29 33 24.049	+33 24 41.958	+31 07 54.167	+31 27 10.828
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.2	0.2	0.3	0.3
Correlated flux (mJy)	107	174	101	100
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 17	Experiment 18	Experiment 19	Experiment 20
Source name (<i>Jhhmm±ddmm</i>)	J0949+2920	J0953+3225	J0955+3335	J1001+2911
Alternative name				
RA(J2000) (hh mm ss.ssss)	09 49 48.1490	09 53 27.9571	09 55 37.9395	10 01 10.2067
Dec(J2000) (dd mm ss.ssss)	+29 20 52.957	+32 25 51.525	+33 35 03.952	+29 11 37.549
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.1	0.2	0.1	0.2
Correlated flux (mJy)	103	119	88	143
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 21	Experiment 22	Experiment 23	Experiment 24
Source name (<i>Jhhmm±ddmm</i>)	J1003+3244	J1010+3330	J1044+2959	J1103+3104
Alternative name				
RA(J2000) (hh mm ss.ssss)	10 03 57.5655	10 10 51.8291	10 44 06.3435	11 03 13.3033
Dec(J2000) (dd mm ss.ssss)	+32 44 03.549	+33 30 17.792	+29 59 01.025	+30 14 42.742
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.3	0.3	0.1	0.2
Correlated flux (mJy)	99	284	136	260
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 25	Experiment 26	Experiment 27	Experiment 28
Source name (<i>Jhhmm±ddmm</i>)	J1111+3252	J1118+2922	J1124+3214	J1134+2901
Alternative name				
RA(J2000) (hh mm ss.ssss)	11 11 31.7738	11 18 57.9225	11 24 03.0174	11 34 14.3263
Dec(J2000) (dd mm ss.ssss)	+32 52 55.810	+29 22 13.771	+32 14 14.096	+29 01 21.217
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.2	0.1	0.1	0.1
Correlated flux (mJy)	106	86	81	137
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 29	Experiment 30	Experiment 31	Experiment 32
Source name (<i>Jhhmm±ddmm</i>)	J1135+3010	J1152+2930	J1159+2914	J1205+3041
Alternative name				
RA(J2000) (hh mm ss.ssss)	11 35 14.0919	11 52 58.7616	11 59 31.8345	12 05 04.8041
Dec(J2000) (dd mm ss.ssss)	+30 10 05.612	+29 30 15.081	+29 14 43.841	+30 41 05.433
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.1	0.1	1.5	0.1
Correlated flux (mJy)	124	107	1339	122
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 33	Experiment 34	Experiment 35	Experiment 36
Source name (<i>Jhhmm±ddmm</i>)	J1215+3151	J1217+3007	J1228+3128	J1310+3233
Alternative name				
RA(J2000) (hh mm ss.ssss)	12 15 48.9675	12 17 52.0826	12 28 24.9686	13 10 59.4039
Dec(J2000) (dd mm ss.ssss)	+31 51 34.590	+30 07 00.651	+31 28 37.636	+32 33 34.457
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.2	0.4	0.3	0.7
Correlated flux (mJy)	202	227	232	382
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 37	Experiment 38	Experiment 39	Experiment 40
Source name (<i>Jhhmm±ddmm</i>)	J1312+3113	J1324+3251	J1329+3154	J1350+3034
Alternative name				
RA(J2000) (hh mm ss.ssss)	13 12 48.7985	13 24 57.5172	13 29 52.8662	13 50 52.7369
Dec(J2000) (dd mm ss.ssss)	+31 13 00.599	+32 51 45.923	+31 54 11.062	+30 34 53.610
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.1	0.1	1.3	0.3
Correlated flux (mJy)	89	92	1295	221
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 41	Experiment 42	Experiment 43	Experiment 44
Source name (<i>Jhhmm±ddmm</i>)	J1435+3012	J1437+3002	J1442+3234	J1454+2955
Alternative name				
RA(J2000) (hh mm ss.ssss)	14 35 35.4031	14 37 58.6758	14 42 00.1425	14 54 32.3002
Dec(J2000) (dd mm ss.ssss)	+30 12 24.535	+30 02 07.072	+32 34 20.316	+29 55 58.050
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.2	0.1	0.3	0.5
Correlated flux (mJy)	124	84	145	83
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 45	Experiment 46	Experiment 47	Experiment 48
Source name (<i>Jhhmm±ddmm</i>)	J1504+3249	J1514+2931	J1521+3115	J1522+3144
Alternative name				
RA(J2000) (hh mm ss.ssss)	15 04 07.5310	15 14 20.8891	15 21 01.2875	15 22 09.9910
Dec(J2000) (dd mm ss.ssss)	+32 49 21.200	+29 31 03.577	+31 15 37.834	+31 44 14.406
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.2	0.2	0.2	0.3
Correlated flux (mJy)	136	81	94	250
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 49	Experiment 50	Experiment 51	Experiment 52
Source name (<i>Jhhmm±ddmm</i>)	J1527+3115	J1528+3157	J1539+3104	J1544+3240
Alternative name				
RA(J2000) (hh mm ss.ssss)	15 27 18.7388	15 28 52.7753	15 39 16.1764	15 44 05.6591
Dec(J2000) (dd mm ss.ssss)	+31 15 24.410	+31 57 25.380	+31 04 07.680	+32 40 48.317
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.5	0.2	0.1	0.2
Correlated flux (mJy)	84	114	140	152
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 53	Experiment 54	Experiment 55	Experiment 56
Source name (<i>Jhhmm±ddmm</i>)	J1558+3323	J1602+3326	J1605+3001	J1634+3203
Alternative name				
RA(J2000) (hh mm ss.ssss)	15 58 55.1844	16 02 07.2650	16 05 33.0498	16 34 12.7904
Dec(J2000) (dd mm ss.ssss)	+33 23 18.608	+33 26 53.085	+30 01 29.711	+32 03 35.434
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.1	2.1	0.3	0.3
Correlated flux (mJy)	83	1136	107	149
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

	Experiment 57	Experiment 58	Experiment 59	Experiment 60
Source name (<i>Jhhmm±ddmm</i>)	J1653+3107	J1708+3346	J1725+3026	J1726+3213
Alternative name				
RA(J2000) (hh mm ss.ssss)	16 53 29.9125	17 08 01.2528	17 25 17.4979	17 26 35.1268
Dec(J2000) (dd mm ss.ssss)	+31 07 56.890	+33 46 46.380	+30 26 40.835	+32 13 23.036
Observing frequency band (GHz)	5	5	5	5
<i>Continuum observations:</i>				
Standard VSOP freq. channels?	☒	☒	☒	☒
Channel A range (MHz)				
Channel B range (MHz)				
<i>Spectral line observations:</i>				
Ch.A spectral line rest freq. (MHz)				
Ch.A LSR velocity (km/s)				
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)				
Min. spectral channels per IF channel				
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	0.3	0.1	0.1	0.2
Correlated flux (mJy)	346	98	130	141
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (10)?	☒	☒	☒	☒
<i>GRT observing mode:</i>				
128Mbps LCP (standard)	☒	☒	☒	☒
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
<i>Preferred correlator:</i>				
No preference	☒	☒	☒	☒
Mitaka	☐	☐	☐	☐
Penticton	☐	☐	☐	☐
Socorro	☐	☐	☐	☐
<i>Monitoring programs:</i>				
Number of observations				
Mean interval (days)				
Related AO1 proposal code(s)	V127	V127	V127	V127

(9) VSOP spacecraft observing mode (see Section 3 and Table 5 of the VSOP Proposer's Guide):

- ☒ 2 channel x 16 MHz, 2-bit (Standard mode),
☐ Other:

Phase calibration tones:

- ☒ On (Standard continuum mode),
☐ Off (Standard spectral line mode)

(Include justification of any non-standard choice at (10) below)

(10) Additional notes to the scheduler :

AR is required, since it is the only telescope giving sufficient sensitivity for some of the proposed sources.

The choice of an additional ground telescope depends on recorder and correlator availability and compatibility. Possible candidates include GB,NT,MC,WB,EB, for example.

There is no special prioritization among the 60 candidate sources; we leave the choice of sources to the scheduler, to be selected according to the optimization of observing efficiency and (u,v) coverage.

Long (u,v) tracks from near perigee to near apogee are preferred.

Adequate notification of scheduling is desired to permit a proposal for contemporaneous 8- and 15-GHz VLBA snapshots.

(11) Attach a scientific and technical justification, not in excess of 2 pages of text and 2 pages of figures. Up to one page of (u,v) plots per source may optionally be included.

(Refer to the VSOP Announcement of Opportunity for detailed instructions.)

Preprints and reprints will not be forwarded to the Scientific Review Committee.

Send two paper copies of the complete proposal to:

VSOP Observing Proposals
VSOP Science Operations Group
Institute of Space and Astronautical Science
3-1-1 Yoshinodai, Sagami-hara
Kanagawa 229-8510 JAPAN

In addition, e-mail the completed L^AT_EX file to submit@vsop.isas.ac.jp

Information from the Cover Sheets of scheduled proposals will be made available from the VSOP WWW site.

Proposals must be received at ISAS by 8 May 1998