VSOP AO3 PROPOSAL COVER SHEETS

DEADLINE : 1 October, 1999
SEND TO : VSOG, ISAS, 3-1-1 Yoshinodai, Sagamihara, Kanagawa 229-8510, JAPAN

(1) Date prepared : 27 September 1999

(2) Proposal title : Study of OH masers with high angular resolution

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(5) Proposal Abstract :

We propose high angular resolution observations in OH maser transition line. Our goal is to resolve elongated maser spots, for what we selected specific period of observations. Maser spot sizes will be used for calculation of brightness temperature and for studying interstellar scattering.

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

Object type:
☐ AGN, ☑ Maser, ☐ Stellar, ☐ Pulsar, ☐ Other :

Observation type:
☐ Continuum, ☑ Spectral Line, ☐ Polarization, ☐ Time-critical, ☐ Other :

(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 (11).

The number of experiments in this proposal is: 4

(8) Details of proposed experiments

	Experiment 1	Experiment 2	Experiment 3	Experiment 4
Source name (J*hhmm*±*ddmm*)	OH34.26+0.15	W 48	NGC6334B	W 75N
Alternative name	OH34.26+0.15	W48	NGC6334B	W75N
RA(J2000) (hh mm ss.ssss)	18 53 18.6853	19 01 45.5382	17 19 57.3778	20 38 36.414
Dec(J2000) (dd mm ss.ssss)	+01 14 59.900	+01 13 32.546	−35 57 52.433	+42 37 35.44
Observing frequency band (GHz)	1.6	1.6	1.6	1.6
Continuum observations:				
Standard VSOP freq. channels?	☐	☐	☐	☐
Channel A range (MHz)				
Channel B range (MHz)				
Spectral line observations:				
Ch.A spectral line rest freq. (MHz)	1665.4018	1665.4018	1665.4018	1665.4018
Ch.A LSR velocity (km/s)	55.9	41.8	−8.0	5.6
Ch.B spectral line rest freq. (MHz)				
Ch.B LSR velocity (km/s)				
FWHM of field of view required (mas)	2000	2000	2000	2000
Min. spectral channels per IF channel	1024	1024	1024	1024
Correlator averaging time (sec)				
No. of correlating passes (if >1)				
Total flux density (Jy)	50	31	70	70
Correlated flux (mJy)	10000	10000	7000	10000
Ground Radio Telescopes:				
Suggested array given at Item (11)?	☑	☑	☑	☑
GRT observing mode:				
128Mbps LCP (standard)	☑	☑	☑	☑
128Mbps LCP/RCP	☐	☐	☐	☐
256Mbps LCP/RCP	☐	☐	☐	☐
Preferred correlator:				
No preference	☐	☐	☐	☐
Mitaka	☐	☐	☐	☐
Penticton	☑	☑	☑	☑
Socorro	☐	☐	☐	☐
Monitoring programs:				
Number of observations				
Mean interval (days)				
Related VSOP proposal code(s)	v036	v103		

(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 (11) below)

(10) Assistance with preparation of ground telescope schedule files:

☐ VSOG assistance requested, ☑ Consultation desired, ☐ No assistance required

(11) Additional notes to the scheduler :

Experiment 1: from 01 July 2000 to 15 September 2000; TI, UD, AT, HO, BL, SH, NT, MP, TR, HH and EB
Experiment 2: from 15 July 2000 to 30 September 2000; TI, UD, AT, HO, BL, SH, NT, MP, TR, HH and EB
Experiment 3: from 1 August 2000 to 30 August 2000; TI, UD, AT, HO, SH, NT, MP, and HH
Experiment 4: from 15 October 2000 to 15 November 2000 or from 20 May 2000 to 10 June 2000; UD, BL, SH, NT, TR, HH and EB.

(12) Attach a scientific and technical justification, not in excess of 2 pages of text and 2 pages of figures. Refer to the VSOP Announcement of Opportunity for detailed instructions. Preprints and reprints will not be forwarded to the Scientific Review Committee.

EITHER e-mail the completed LaTeX file to submit@vsop.isas.ac.jp and 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, Sagamihara
Kanagawa 229-8510 JAPAN

OR e-mail the completed LaTeX Cover Sheets file and, in a separate e-mail, the postscript file of the scientific and technical justification, 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 1 October 1999