

VSOP AO4 PROPOSAL COVER SHEETS

DEADLINE : 2 October, 2000

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

(1) Date prepared : 29 September, 2000

(2) Proposal title : Following the evolution of the Vir A jet.

(3)	INVESTIGATORS	INSTITUTION
P.I.	Bill Junor	UNM, USA
co-I.	John Biretta	STScI, USA
co-I.		
co-I.		
co-I.		
co-I.		
co-I.		
co-I.		
co-I.		
co-I.		

(4) Principal Investigator (or contact person) details...

Name : Bill Junor

E-mail : bjunor@astro.phys.unm.edu

Fax : +1-505-277-1520

Phone : +1-505-846-4948

Address : Dept. of Physics & Astronomy

: University of New Mexico

: 800 Yale Blvd., N.E.

: Albuquerque, NM 87131

: United States of America

(5) Proposal Abstract :

One epoch of $\lambda 6$ cm observations of the Key Source, Vir A, is requested in early 2001 to extend the time baseline of the monitoring program. This will allow us to follow the evolution of the jet — particularly the flaring feature(s) in the limbs — and to set stronger upper limits on proper motions in the jet. Since the source is evolving slowly, the additional data can also be combined with those from earlier epochs to produce an improved image.

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

Object type:

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

Observation type:

☒ Continuum, ☐ Spectral Line, ☐ Polarization, ☐ Time critical,

☐ Phase-reference, ☐ 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: 1

(8) Details of proposed experiments

	Experiment 1	Experiment 2	Experiment 3	Experiment 4
Source name (<i>Jhhmm±ddmm</i>)	J1230+1233			
Alternative name	3C274, Vir A			
RA(J2000) (hh mm ss.ssss)	12 30 49.42340			
Dec(J2000) (dd mm ss.sss)	+12 23 28.0442			
Observing frequency band (GHz)	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)	1			
No. of correlating passes (if >1)				
Total flux density (Jy)	70			
Correlated flux (mJy)	400			
<i>Ground Radio Telescopes:</i>				
Suggested array given at Item (11)?	☐	☐	☐	☐
<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 VSOP proposal code(s)	V081B, W040A1-3, W040A5-6			

(9) VSOP spacecraft observing mode (see Section 3 and Table 2 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 :

(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 L^AT_EX 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 L^AT_EX 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 2 October 2000