

NRAO Events at the AAS-Austin Meeting



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Jan 10, 2012 | Austin, TX



[ALMA Special Session at the 219th AAS \(https://science.nrao.edu/science/aas/219/alma-special-session-at-the-219th-aas\)](https://science.nrao.edu/science/aas/219/alma-special-session-at-the-219th-aas)

Jan 11, 2012 | Austin, TX



[Proposing to Use NRAO Telescopes \(https://science.nrao.edu/science/event/aas-2012/proposing-to-use-the-nrao-telescopes\)](https://science.nrao.edu/science/event/aas-2012/proposing-to-use-the-nrao-telescopes)

Jan 11 - 12, 2012 | Austin, TX

NRAO Call for Proposals: Semester 2012B

The NRAO is pleased to announce the Call for Proposals for the Semester 2012B. The call solicits proposals for the Expanded Very Large Array (EVLA), the Green Bank Telescope (GBT), and/or the Very Long Baseline Array (VLBA). The call is open now and will close on 1 February 2012 at 17:00 EST (22:00 UTC).

Proposal preparation and submission are via the NRAO Proposal Submission Tool (PST) available through the **[NRAO Interactive Services \(http://my.nrao.edu/\)](http://my.nrao.edu/)**. Several modifications to the PST have been made and will be in place starting 12:00 EST (17:00 UTC) Friday, 6 January 2012. All proposal authors must be registered users. On the registration form you will be asked for contact information that will be used for notification about proposal status, telescope scheduling, student funding, etc. We encourage all new proposers to register early.

General News for Proposers

Full Implementation of the Semester-Based Proposal Cycle

NRAO has fully migrated from the old trimester-based proposal cycle to the new semester-based proposal cycle, with each semester lasting six months. Proposal submission deadlines are on 1 February and 1 August each year. At each deadline, proposers may request time on the GBT, the VLBA, and/or the EVLA. The 1 February deadline typically applies to requests for time from 1 August through 31 January, and the 1 August deadline applies to requests for time from 1 February through 31 July. However, proposers are encouraged to request the time and resources needed to complete the observations necessary to address their scientific objectives, even if the request spans multiple semesters and/or EVLA configurations. Further details about proposal submission, proposal evaluation, and time allocation are available **[here \(https://science.nrao.edu/observing/proposal-types\)](https://science.nrao.edu/observing/proposal-types)**.

Tips for Proposers

The new NRAO proposal evaluation and time allocation process, now occurring on a semester basis, is panel based. That is, members of the scientific community are responsible for reviewing proposals based on their scientific merit through eight **Science Review Panels** (<https://science.nrao.edu/observing/proposal-types/sciencereviewpanels>). As a means of broadening the scientific perspective of its reviewers, and of increasing the participation of the wider astronomy and astrophysics community in the science program of NRAO facilities, SRP membership is deliberately selected to include some colleagues that are not necessarily experts in radio observational techniques. This being the case, we encourage proposers to consider the following when preparing their proposals:

1. Avoid the use of radio astronomy jargon.
2. Do not assume the reader is familiar with a particular observing technique - explain it briefly.
3. Do not assume the reader is familiar with an earlier rationale for a developing line of research - provide adequate historical context.
4. Describe previous observations and publications relevant to the proposed observations.
5. If a particular point source or brightness temperature sensitivity is required, specify the required sensitivity and justify the requirement.

Filler Time

The Observatory would like to point out that there are opportunities for so-called "filler" programs on all of its telescopes. Observing programs that exploit frequencies <10 GHz (X band and below), do not have strong scheduling constraints, and could benefit from short scheduling blocks are encouraged to propose for such opportunities. The proposal should make clear in the abstract and early in the science justification that "filler" time (scheduling priority C) is being requested, not time at scheduling priority A or B.

High Risk Proposals

As a means of maximizing its scientific impact through cutting edge observations, the Observatory also encourages the submission of high-risk/high-reward proposals. Such proposals may involve unusual targets, nonstandard observing techniques, new post-observing data reduction and analysis, or supplementary hardware or new back ends. Please contact **Observatory Science Operations** (<mailto:tbastian@nrao.edu>) prior to submitting such proposals to discuss anticipated resource requirements. Observers contemplating such proposals may also wish to consider submitting an **Exploratory Proposal** (<https://science.nrao.edu/observing/proposal-types/exploratoryproposals>) to request **Director's Discretionary Time** (<https://science.nrao.edu/observing/proposal-types/directorsdiscretionarytime>) as a means of demonstrating a proof of concept.

ALMA Preparatory Science Programs on NRAO Telescopes

With ALMA early science operations underway, we continue to encourage the community to propose for ALMA Preparatory Science observing programs on the EVLA, the GBT, and the VLBA of any proposal type (**Large** (<https://science.nrao.edu/observing/proposal-types/largeproppolicy>), Regular and Triggered). There will be no limits on the fraction of time that NRAO will allocate for these proposals. Such proposals should be identified as ALMA preparatory science in the proposal title or in the abstract. These proposals will be subject to the normal evaluation process.

Opportunities for Joint Observations with Fermi or Chandra

We remind the community that it is possible to propose for observing time on NRAO facilities through the Fermi Gamma-ray Space Telescope *Joint Proposal Opportunity* or the *Cooperative Proposal Opportunity*. For Fermi, which is primarily in sky-survey mode, potential observers may propose for NRAO observations that make use of the Fermi survey data even without re-pointing of the Fermi satellite. The actual amount of NRAO observing time allocated via the Joint Fermi Process depends on the amount of proposal pressure and the scientific quality of the proposals. A maximum of 10% of the NRAO scientific observing time is made available on the GBT, the VLBA and the EVLA, or up to 400-650 hours per year on each telescope. Details about joint observations with Fermi and the EVLA, the GBT, or the VLBA may be found [here \(http://fermi.gsfc.nasa.gov/ssc/proposals/nrao.html\)](http://fermi.gsfc.nasa.gov/ssc/proposals/nrao.html). The next Fermi proposal deadline is in January 20, 2012.

Similarly, the community may propose for observing time on NRAO facilities through a joint program with the Chandra X-ray Observatory. For Chandra, proposals must be for observations that require both Chandra pointing and NRAO observations to carry out a scientific investigation. NRAO plans to make up to 3% of EVLA, VLBA and GBT observing time available for this Chandra Cycle 14 with a maximum of 5% in any configuration/time period, including an 18-month period close to Cycle 14 such that all EVLA configurations are available. Section 4.5.4 of the Chandra call for proposals gives specifics of the joint NRAO/Chandra program. The next Chandra proposal deadline is in March 15, 2012.

PhD Dissertations using NRAO Facilities

Students planning to use one or more NRAO telescopes for their PhD dissertation must submit a "Plan of Dissertation Research" of no more than 1000 words with their first proposal. This plan can be referred to in later proposals. At a minimum the plan should contain a thesis time line and an estimate of the level of NRAO telescope resources needed. The plan provides some assurance against a dissertation being impaired by an adverse review of a proposal when the full scope of the thesis is not seen. The plan can be submitted via [NRAO Interactive Services \(http://my.nrao.edu/\)](http://my.nrao.edu/). Students are reminded to submit their plan comfortably in advance of the proposal deadline. New thesis plans must be in pdf format so science reviewers can easily access the plans. Students who have not yet graduated but have active plans on file should convert those plans to a pdf format if they are not already in that form.

Student Observing Support Program

NRAO maintains a program to support research by students, both graduate and undergraduate, at U.S. universities and colleges. This program is intended to strengthen the proactive role of the Observatory in training new generations of telescope users. Regular or Triggered proposals submitted for the EVLA, the VLBA and the GBT are eligible. Large proposals for the EVLA, the VLBA, the GBT, and any combination of these telescopes are also eligible. New applications to the program may be submitted along with new observing proposals at any proposal deadline. A general overview of the program can be found [here \(https://science.nrao.edu/opportunities/student-programs/student-supportintro\)](https://science.nrao.edu/opportunities/student-programs/student-supportintro); additional details can be found [here \(https://science.nrao.edu/opportunities/student-programs/sos\)](https://science.nrao.edu/opportunities/student-programs/sos).

Key Science Projects

The NRAO Time Allocation Committee (TAC) automatically considers proposals for time on the EVLA, the GBT, and the VLBA for designation as **Key Science Projects** (<https://science.nrao.edu/science/key-science-projects>). Key Science Projects are those that are timely, are likely to have a high science impact, and address forefront issues in astronomy and astrophysics. Nominations for Key Science Projects will be based on the above factors as well as the proposal's scientific rank, a recommendation by the TAC, and approval by the NRAO Director. Observers may request consideration for nomination as a Key Science Project by the TAC.

Please Use the NRAO Helpdesk

Assistance with proposal submission, observation preparation, data processing, and instrument-related topics is available through the **NRAO Helpdesk** (<http://help.nrao.edu>). We encourage all NRAO proposers and users to make use of the Helpdesk. Log in using the same user ID and password used to access **NRAO Interactive Services** (<http://my.nrao.edu/>).

EVLA Proposals

Observing Capabilities for EVLA Early Science

The 1 February 2012 deadline involves the observing period 31 August 2012 through 07 January 2013 (Semester 2012B), corresponding to the BnA and A configurations. This will be the last semester of Early Science prior to full EVLA operations, and only the BnA and/or A configurations, or multi-configuration proposals requiring BnA and/or A configurations, can be requested. Note, however, that because substantially increased capabilities are expected to be offered in Semester 2013A and following, users intending to submit multi-configuration proposals requiring BnA and/or A configuration might prefer to wait until these capabilities are available. See the **EVLA Configuration Plans** (<https://science.nrao.edu/facilities/evla/proposing/configpropdeadlines>) for further information.

All antennas now employ EVLA-style electronics, and almost all of the new receiver systems will be installed by the beginning of the EVLA BnA configuration. EVLA Early Science is enabled by two programs for the user community: the **Open Shared Risk Observing (OSRO)** (<http://science.nrao.edu/facilities/evla/earlyscience/osro>) program and the **Resident Shared Risk Observing (RSRO)** (<http://science.nrao.edu/facilities/evla/earlyscience/rsro>) program. These programs have been announced previously in **NRAO eNews** (http://www.nrao.edu/news/newsletters/enews/enews_2_8/enews_2_8.shtml#evla). For this semester, the capabilities offered for the OSRO program are identical to the previous proposal cycle with additional receiver availability; the RSRO program offers enhanced correlator capabilities and access to up to 8 GHz of bandwidth using the new 3-bit samplers. Both programs' capabilities are described in detail on the OSRO and RSRO web pages. In addition, the **EVLA Observational Status Summary** (http://evlaguides.nrao.edu/index.php?title=Observational_Status_Summary) has been updated and provides a reference to the capabilities for those interested in proposing. We remind users that access to the EVLA is on a shared-risk basis, and that the EVLA is undergoing commissioning through end of 2012. Nevertheless, NRAO will make every effort to ensure high-quality EVLA data during this period.

For this semester, we will be offering continuous frequency coverage from 1 to 50 GHz for the majority of the antenna systems (i.e., the extended EVLA tuning ranges at L, S, C, X, Ku, K, Ka, and Q-bands). Some L-band systems are "interim," which means they use old VLA polarizers. The ranges outside the nominal VLA frequencies for L-band have poor sensitivity and polarization performance for the interim receivers, as compared with the nominal VLA frequencies. New EVLA-style X-band receivers are included in astronomical observations along with the existing narrow-band VLA (8-8.8 GHz; see the following table) receivers as soon as they have been tested. For Semester 2012B the majority of antennas will have the new wide-band receivers. For those bands whose receivers support the wide bandwidths, the two IF pairs may independently be placed anywhere in the tuning range shown in the table below, except for special limitations on the tuning of the IFs for the Ka-band receiver. Please consult the [EVLA Observational Status Summary \(http://evlaguides.nrao.edu/index.php?title=Observational_Status_Summary\)](http://evlaguides.nrao.edu/index.php?title=Observational_Status_Summary) for frequency setting restrictions and details on the sensitivity as a function of frequency.

The numbers of receiver systems available for the EVLA BnA configuration are expected to be as follows:

Band	Tuning range	Receiver availability: September 2012
L	1-2 GHz	25 (EVLA) + 2 (interim)
S	2-4 GHz	27
C	4-8 GHz	27
X	8.0-12.0 (8.0-8.8) GHz	24 (EVLA) + 3 (VLA)
Ku	12.0-18.0 GHz	24
K	18-26.5 GHz	27
Ka	26.5-40 GHz	27
Q	40-50 GHz	27

OSRO observers will be able to use two independently-tuned basebands, each up to 1 GHz wide. Each baseband comprises up to 8 contiguous sub-bands, with sub-band bandwidths selectable in powers of two between 31.25 kHz and 128 MHz. RSRO observers have considerably more flexibility in the correlator setups (number of sub-bands, varying bandwidths, independent tuning and channelization); correlator recirculation, enabling options for millions of spectral channels, is also being commissioned through the RSRO program. In addition, the majority of antennas will be equipped with 3-bit samplers, enabling up to 8 GHz of instantaneous bandwidth. These features will be made available to the general community at the beginning of the next configuration cycle in January 2013.

Subarrays, phased array, pulsar and VLBI observing modes will not be available in Semester 2012B except through the provision of RSRO commissioning effort to enable these modes. We are working on a new low frequency system in collaboration with the Naval Research Laboratory, but we have not yet completed an evaluation of its performance, and no proposals to use frequencies lower than 1 GHz will be considered for this call. However, members of the community interested in helping to commission the new system in return for access to [DDT exploratory time \(https://science.nrao.edu\)](https://science.nrao.edu)

[/observing/proposal-types/exploratoryproposals](#)) should apply to the RSRO program through the alternative route described under "Participation in the RSRO program" at the [RSRO web page \(http://science.nrao.edu/facilities/evla/earlyscience/rsro#AlternativeRSRO\)](#).

All EVLA observations are set up using the [Observation Preparation Tool \(OPT\) \(http://science.nrao.edu/evla/observing/opt.shtml\)](#). Use of the OPT requires registration in the NRAO User Database. Most, if not all, projects will be observed dynamically so users should submit scheduling blocks early in the configuration to maximize the opportunity of them being observed.

Proposal preparation and submission are via the Proposal Submission Tool at [NRAO Interactive Services \(https://my.nrao.edu/\)](#). The different capabilities available for the OSRO and RSRO programs may be selected in the "resources" section of VLA proposals.

Information about EVLA capabilities, observing strategies, calibration overhead, and proposal submission can be found in the [EVLA Observational Status Summary \(http://evlaguides.nrao.edu/index.php?title=Observational_Status_Summary\)](#) and at the [EVLA Proposing FAQ web page \(https://science.nrao.edu/facilities/evla/proposing/frequently-asked-questions\)](#).

GBT Proposals

The **1 February 2012 deadline** is for the Semester 2012B observing period: **1 August 2012 through 31 January 2013**. Proposals will be considered for the following receivers: 290-920 MHz (PF1), 910-1230 MHz (PF2), 1.15-1.73 GHz (L), 1.73-2.60 GHz (S), 3.8-6.1 GHz (C), shared-risk 6-8 GHz (C), 8.0-12.0 GHz (X), shared-risk 12.0-18.0 GHz (Ku), 18.0-26.0 (KFPA), 26.0-39.5 GHz (Ka), 38.2-49.8 GHz (Q) receivers, MUSTANG (80-100 GHz Bolometer Array) and shared-risk 67-93.3 GHz (W).

Available observing modes include spectral line (including cross-polarization), continuum, pulsar, and VLBI/VLBA. The VLBA back end with Mark5A disk recorder may be used as a high-time resolution (> 2 ns) backend for single-dish observing.

Details of all GBT observing modes are in the [GBT Proposer's Guide \(https://science.nrao.edu/facilities/gbt/proposing/GBTpg.pdf\)](#). Proposers should also consult the more general document "[The Performance of the GBT: A Guide for Planning Observations \(http://www.gb.nrao.edu/%7Ermaddale/GBT/ReceiverPerformance/PlaningObservations.htm\)](#)".

Ku-band Receiver: The Ku-band receiver is currently undergoing an upgrade to extent its nominal frequency range to cover 12.0 - 18.0 GHz. We will consider shared-risk proposals for this receiver at the 1 February 2012 proposal deadline. When proposing, please use the nominal system temperature for the "old" Ku receiver.

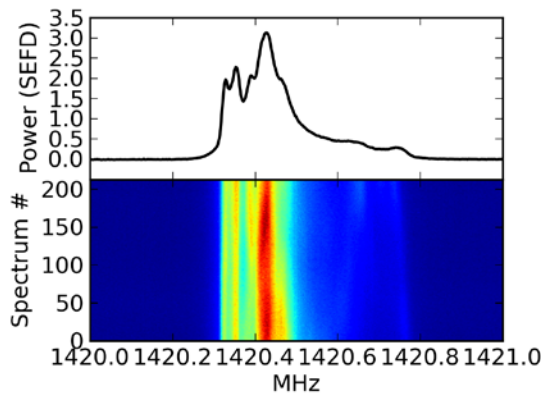
C-band Receiver: It is possible that the C-band receiver will be upgraded (if funds and resources become available) to include the 6-8 GHz frequency range. We will consider shared-risk proposals for the 1 February 2012 deadline for observations in the 6-8 GHz range.

4mm Receiver: The new 68-92 GHz 4mm (W-band) receiver is being commissioned. The receiver should be available for shared-risk observations in the 12B semester. Note that observations with this

receiver are expected to be limited to night-time only. Also, the pointing/tracking stability of the GBT is currently 2-3 arcseconds, which is a large fraction of the 4mm beam. For more information see the **GBT 4mm Receiver** (http://www.gb.nrao.edu/4mm/prop_12b.shtml) web page.

4mm VLBI: We will consider shared-risk proposals to use the new 4mm receiver for VLBI observations in the 12B semester.

Versatile GBT Astronomical Spectrometer (VEGAS): A new FPGA spectrometer is under development for the GBT. Shared-risk proposals to use VEGAS will be considered for the 12B semester. Please see the **GBT Proposer's Guide** (<https://science.nrao.edu/facilities/gbt/proposing/GBTpg.pdf>) for more information on VEGAS.



[\(images/VEGAS HI figure_1b.png\)](#)

Figure 1. First light HI drift scan observations using VEGAS on 16 Dec 2011.



[Zoom \(images/figure1_1.png\)](#)

New Sensitivity Calculator: All proposers should use the new and improved **GBT Sensitivity Calculator** (https://dss.gb.nrao.edu/calculator-ui/war/Calculator_ui.html). Please see the GBT Sensitivity Calculator **User's Guide** (https://dss.gb.nrao.edu/docs/Calculator_ug.pdf) for further instructions. The new Sensitivity Calculator results can be cut and pasted into the Technical Justification section of the proposal. This will streamline the creation of your Technical Justification and will increase your chances of getting a positive technical review.

Proposers requesting GBT participation in High Sensitivity Array (HSA), Very Long Baseline Array (VLBA), or global Very Long Baseline Interferometry (VLBI) observations should consult the "**VLBA, HSA, and VLBI** (</enews/4.7/index.shtml#3>)" section below.

The GBT will be scheduled by the **Dynamic Scheduling System (DSS)** (<http://www.gb.nrao.edu/DSS>) in Semester 2012B. Note that the DSS will result in no change to the proposal preparation and submission process: when the review process is complete, project investigators will be contacted on how to modify any information brought over from the PST which they desire to have changed before the semester begins. GBT staff will, as always, be available to help observers in working with the

observing information in the DSS database and also with understanding the new dynamic scheduling scheme. Note that the DSS alters only the scheduling process for the GBT and will not affect the observing interface (e.g. Astrid) in any way. The **GBT observing policies (<https://science.nrao.edu/facilities/gbt/observing/policies>)** describe the remote observing restrictions.

VLBA, HSA, & VLBI Proposals

The 1 February 2012 deadline applies to regular and triggered observing proposals requesting:

- Very Long Baseline Array (VLBA), alone or with affiliate(s)
 - **VLBA details (<http://science.nrao.edu/vlba/>)**
 - Proposal submission is via the NRAO **Proposal Submission Tool (<https://science.nrao.edu/facilities/vlba/proposing/pst>)**
- High Sensitivity Array (HSA), and subsets of the HSA (e.g., VLBA + Effelsberg and/or GBT)
 - **HSA details (<https://science.nrao.edu/facilities/vlba/proposing/HSA>)**
 - Proposal submission is via the NRAO **Proposal Submission Tool (<https://science.nrao.edu/facilities/vlba/proposing/pst>)**
- Global mm VLBI in the Autumn 2012 (currently scheduled for November 15-20), or later, sessions
 - **Proposal submission (<http://www.nrao.edu/admin/do/vlba-gvlbi.shtml>)** instructions

This deadline also applies to **large observing proposals (<https://science.nrao.edu/observing/proposal-types/largeproppolicy>)** requesting the VLBA, alone or with other NRAO resources.

The nominal observing period is August 1, 2012 through January 31, 2013, although multi-semester proposals may also be submitted.

Global cm VLBI (**VLBA (<http://science.nrao.edu/vlba/>) + European VLBI Network (<http://www.evlbi.org/>)**) proposals should be submitted at the EVN deadlines of February 1/June 1/October 1 through the EVN **NorthStar (<http://proposal.jive.nl/>)** tool. Proposals received by the February 1, 2012, deadline will be considered for scheduling in Session 2 (May 24 through June 12) 2012 or later.

Please see **here (<http://www.nrao.edu/admin/do/vlba-gvlbi.shtml>)** for further details and proposal submission instructions for VLBA, HSA, and global VLBI proposals.

Scheduling Considerations for Semester 2012B

The VLBA has a number of large, multi-year proposals which now cause the schedule to be highly subscribed over most GST (or PT_LST) ranges, many of which are high frequency (15 GHz and above). In addition, many current VLBA projects use long scheduling blocks (10 - 24 hours), which can leave large gaps in the overall schedule and reduces scheduling efficiency. Therefore, we particularly encourage new proposals that can use low frequencies, short scheduling blocks (4 - 8 hours), and flexible start times. Such proposals will have the highest probability of being observed in Semester 2012B.

2-Gbps Wideband Observing Capability

Proposals are solicited for observations using the new 2-Gigabit per second recording rate, corresponding to 256 MHz bandwidth per IF input in a typical 2-IF case. The new instrumentation currently provides sixteen fixed-bandwidth sub-bands recorded with 2-bit sampling at 2 Gbps. The sub-bands can be selected flexibly between polarizations, and at 32-MHz steps along the frequency axis. Some typical cases include: (a) a compact dual-polarization configuration, with eight contiguous sub-bands in each polarization; (b) a spanned-band dual-polarization configuration, with a total of eight sub-bands at every other 32-MHz frequency position in each polarization; (c) a single-polarization configuration in sub-bands contiguous across the entire width of one IF. A mode providing much greater tuning flexibility along with different sub-band bandwidths is currently being developed that will be very powerful for spectroscopy and other applications, and is available to participants in the **VLBA RSRO** (<https://science.nrao.edu/facilities/vlba/observing/rsro>) program.

The GBT has been included successfully in many of the validation tests, and proposals to use the GBT in 2-Gbps HSA observations will be considered at this deadline. Effelsberg and Arecibo have also installed the same wideband equipment, but their implementation is not yet complete. These stations can be requested for Semester 2012B, although we do not guarantee their participation. At this time it is not clear whether the VLBA/HSA 2-Gbps system will be compatible with other non-VLBA/HSA VLBI stations, and global VLBI proposals for Semester 2012B should assume a recording rate of 512 Mbps for the VLBA.

We are currently investigating a high failure rate of the 2-TB disk drives used in the high-speed 16-TB modules by the Mark 5C recording system used for 2-Gbps recording. The disk failures are likely to limit the fraction of observing time that can be scheduled with 2-Gbps recording until the problem is solved. Semester 2012B proposals requesting the 2-Gbps capability should therefore include justification for its use.

Wideband observing is selected via a checkbox labelled "Wideband Observing System" in the NRAO Proposal Submission Tool's resources section. That checkbox causes the appropriate fixed values to be filled throughout the resource segment, with the only exception being that either single- or dual-polarization modes can be specified. Proposals not requesting the wideband capability can continue to specify any modes of the original VLBA data acquisition system in the same manner as previously, with the standard 512-Mbps default data rate.

New C-Band Receivers Available

The new C-band receiver systems are scheduled to be installed at all ten VLBA stations by August 2012. An article on this upgrade, published in the **December 2011 NRAO eNews** (<https://science.nrao.edu/enews/4.12/index.shtml#8>), described the installation of equipment supporting the full 4-8 GHz band at Pie Town, and the first single-dish observations of the methanol maser line at 6.7 GHz. This initial call for proposals to exploit the new receiver's capabilities covers dual-polarization observations at any frequency within the 4-8 GHz range, limited only by the 512-MHz width of the IF system.

VLBA Resident Shared Risk Observing Program

The VLBA Resident Shared Risk Observing (RSRO) program provides users with early access to new capabilities in exchange for a period of residency in Socorro to help commission those capabilities. A

number of suggested areas are outlined at the **VLBA RSRO** (<https://science.nrao.edu/facilities/vlba/observing/rsro>) webpage, although we encourage other innovative ideas for new VLBA observing modes from the community as well. For Semester 2012B we highlight (1) inclusion of phased EVLA in high-sensitivity VLBA observations, and (2) flexible sub-band specification for spectroscopy, both of which will only be available through the RSRO program. Please contact NRAO staff via the **NRAO Helpdesk** (<http://help.nrao.edu>) with questions about the VLBA RSRO program or VLBA capabilities.

VLBA Observational Status Summary

An updated version of the VLBA Observational Status Summary is available in **html** (<http://www.vlba.nrao.edu/astro/obstatus/current/>), **pdf** (<http://www.vlba.nrao.edu/astro/obstatus/current/obssum.pdf>), or **postscript** (<http://www.vlba.nrao.edu/astro/obstatus/current/obssum.ps>) formats. This version includes information on the changes to the wideband observing capability, and on the new C-band receiver systems.

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