

## **NAASC Visitor Support Programs**

Visitors to the NAASC are expected to fall into two categories, based on the purpose of their trip and length of time spent at the NAASC. The first category is short-term visitors to the NAASC, defined here as those visiting for a week or less. Short-term visitors are ALMA users coming to the NAASC looking for expert assistance to obtain the optimum results from their data. The second category of visitors to the NAASC is composed of those visiting on long-term basis, defined here as a few weeks to a few months. Long-term visitors are scientists and engineers that want to interact with Observatory staff to carry out research programs. Because these programs have different audiences and goals, they will be discussed separately in this document.

### **NAASC Short-Term Visitor Program Introduction**

Access to expert assistance is central to the successful analysis and interpretation of complex interferometric data sets by ALMA users. To meet this need, the NAASC runs a visitor program, modeled on the successful VLA program. Visitors will be provided with face-to-face support from NAASC staff, as well as financial support (if eligible), computing power and office space. The details of the short-term visitor program are given below.

### **Who is the short-term visitor program for?**

We expect that the majority of short-term visitors to the NAASC will be those who have had their ALMA projects run and want assistance with data reduction or access to NAASC computer facilities. In some cases short-term visits may be scheduled for assistance with the technical aspects of ALMA proposals or designing scheduling blocks (SBs). Scientists carrying out archival projects may also take advantage of the visitor program.

The NAASC will provide assistance to one visitor from each scheduled or observed project, though a second investigator from a project may also visit, provided the second investigator is a student, graduate or undergraduate. An experienced investigator must accompany any student who is new to radio interferometry.

### **Reimbursement policy**

Although the visitor program is available to all ALMA users, investigators from U.S. institutions who have been awarded time on ALMA may request funds to travel to the NAASC to plan the observations or reduce data. Reimbursement may be requested for a second investigator from a U.S. institution, provided the second investigator is a student, graduate or undergraduate. In addition, travel support to the NAASC for research on archival data may be available. The reimbursement will be for the actual cost of economy airfare, up to a limit of \$1000, originating from within the U.S. including its territories and Puerto Rico and on a U.S. carrier. Costs of lodging may also be reimbursed, up to \$XX/night. No reimbursement will be

made for ground transportation or meals. Alternatively, NRAO can make the flight and hotel reservations and directly pay these costs.

To qualify, an investigator from a U.S. institution must not be employed at a Federally Funded Research and Development Center (FFRDC) or its sponsoring agency. Exceptions are possible (e.g., investigators early in their careers); contact [tbastian@nrao.edu](mailto:tbastian@nrao.edu) to request an exception. The NSF maintains a master government list of FFRDCs at <http://www.zyn.com/SBIR/articles/ffrdc.htm>.

To have the NAASC directly pay for travel and hotel costs, or to be reimbursed for these costs, then before visiting the NAASC the U.S. investigator should:

- Complete an [NRAO Outside Observer Travel Authorization](#) and Expense Voucher, available here, and have the voucher approved.

After the NAASC visit, the U.S. investigator should:

- Submit the voucher and original ticket receipts to the U.S. institution's travel office.
- Make its request within 30 days of the completion of the authorized travel.

### **What the NAASC provides to a short-term visitor**

For a qualifying U.S. investigator, the NAASC can provide logistical and financial support by making travel and hotel reservations or reimbursing these costs. For all visitors, once a visit to the NAASC has been arranged, a NAASC staff member will be assigned to be the “friend” of the project. The friend of the project will be the primary contact person between the NAASC and the visitor, and as such will answer any logistical questions prior to the visit. During the visit, the friend will spend up to 2 hours per day with the visiting team.

While at the NAASC, visitors will have an office and the computing facilities needed to work with their ALMA data. If visitors have any special needs or plan to work on their private laptop computer, this should be discussed with the friend before arrival. Prior to their arrival at the NAASC, visitors should also discuss the available methods for bringing their reduced data back home with them (external hard drive, ftp, DVD, etc.). A copy of the data the visitor has been working on will be kept on the NAASC computers for at least a few weeks after a visit. That way, if there are post-visit questions, the friend of the project can look directly at the data, making it much easier to understand any problems.

After a visit, visitors will be invited to submit feedback on the service received and whether the goals of the visit were met.

### **How many visitors can we support?**

The NAASC visitor program is limited by the availability of office space, funds to cover visitors’ travel expenses (see the reimbursement policy above), and the time of NAASC staff to help visitors. The NAASC anticipates being able to accommodate two teams of two visitors per week, with each team receiving up to 2 hours of one-on-one time with a NAASC staff member per day.

### **Method to arrange a visit**

Astronomers wishing to arrange a visit to the NAASC may do so via Helpdesk tickets to the “visits” category. A NAASC staff member will contact the ticket submitter to schedule and discuss the proposed visit. The visitor program is run on a space and resource-available basis, and Helpdesk tickets to request a visit may be submitted at any time.

### **Accommodations in Charlottesville**

Visitors to the NAASC will have assistance making their flight and hotel arrangements for their trip to Charlottesville. Those visitors being reimbursed for some of their travel expenses should be aware of the reimbursement policy stated above. Visitors are responsible for arranging their own ground transportation and meals.

For many visitors to the NAASC, air travel will be the best way to get to Charlottesville. Charlottesville has a regional airport (code CHO), and is within driving distance of the airports in Richmond (RIC, ~1.5 hour drive) and Washington DC (IAD and DCA; 2.5 and 3 hours, respectively and not including time spent in traffic). Charlottesville is also accessible by train via Amtrak (<http://www.amtrak.com/>).

Driving directions to the NAASC is given here: <http://www.nrao.edu/directions/cville/edgemont.shtml>

### **What to do prior to an approved trip**

- Familiarize yourself with CASA
- Familiarize yourself with the basics of interferometry (e.g., see <http://science.nrao.edu/alma/pubs.shtml#pubs1>)
- You will be contacted by a NAASC staff member to help arrange and discuss your accommodations in Charlottesville
  - Flights
  - Hotel
  - Ground transportation
- Let your project’s “friend” know of any special requirements you have for reduction and analysis of your data
- Arrange with your project’s “friend” for a method to bring your reduced data home with you
- Fill out the required form(s) for reimbursement of travel expenses and send these to the NAASC

### **NAASC Long-Term Visitor Program**

The NRAO encourages, and can provide financial support for, Ph.D. scientists and engineers in radio astronomy and related fields to visit any of its sites to interact with Observatory staff and carry out research programs, e.g. during sabbatical or summer leave from their home institutes. We are particularly interested to support visits by young scientists who are junior faculty members at colleges and universities.

The terms of such visits are negotiable, and their length may range from a few weeks to several months. Support can range from paying for accommodation

and travel costs, to providing summer or sabbatical salary supplements, according to need. For more information about the Visitors Program, please contact Dr. Tim Bastian.

**Items for discussion**

- 1) Which expenses do we want to reimburse? Certainly airfare, and probably hotel, but what about ground transportation and food?