

This document is intended as a basic cheatsheet for new people at the OSF. The OSF can be a bewildering place the first time around (or even the second time around). It is our hope that this working document will allow for a simpler transition to the OSF for new people.

For more information on this document, please contact Kartik Sheth (ksheth@nrao.edu) or Itziar de Gregorio (idegrego@alma.cl)

## LOGISTICS



### BEFORE YOU ARRIVE THE OSF

1. **HAME:** Be sure you have ready your high altitude medical examination (HAME) before you arrive the OSF. Claudia Reyes should be the contact person to help you with this (creyes@alma.cl). If the Paramedics at OSF has not been informed yet that you passed the examination, you may not be allowed to visit or work at the high site (AOS), unless a waiver is signed and a medical check is performed at OSF.
  - Visitors and CSV liaisons can have the test performed at their home institutions. The certification is good for a year.
1. **OSF TURNOS:** Alison Peck is responsible for organizing the date of your shifts at the OSF (apeck@alma.cl). In the "OSF Science Support google calendar" you will see the shift (day --from 12:00 p.m. o 8:00 p.m.-- or night -- from 8:00 p.m. to 4:00 a.m.--) assigned to you. This calendar is also embedded on the AIVC Office web page at <http://www.alma.cl/aiv/> and in the OSF Science roster at:
  - 2. <http://wikis.alma.cl/bin/view/AIV/CurrentActivitiesAndOSFInformation>
3. OSF shifts usually last 8 days and you can arrive the morning of your shift or the evening before. If you arrive in the morning you should not work later than midnight that first day.
1. **TRAVEL ORGANIZATION:** Once you know the date of your next shift you have to inform Claudia Reyes about those dates and if you would like to fly up the morning of your shift, or the evening before. You can check the status of your flight, taxi and room reservation in the Actual Trip system (<http://at.alma.cl/login.php>). Ask Claudia for creating a username and a password for you to be able to access the system.
1. **TRANSPORTATION TO THE OSF:** In Calama airport there will be a bus to take you to the OSF. *At the terminal* usually there is a person carrying an ALMA cartel that will inform you about the location of the bus. If nobody from ALMA is in the arrival gate, search for a big blue and red bus at the Eastern end of the airport parking.

### WHEN YOU ARRIVE THE OSF

- **ALMA ID CARD:** The first time you go to the OSF a temporary ID card will be provided at the ALMA main gate. Once you arrive the OSF, you have to request a permanent ID card in the reception and ask for the activation of the meals. The reception is in the administration building, in front of the bus stop.
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- **ROOM:** You can get your room key in the administration building.
- **MEALS:** They are provided at the Comedor/Casino/Cantina (dining room). You have to pass you ID card through the electronic reader and give the ticket to the kitchen personnel at the entry or drop it in a bowl next to the reader every time you have some meal. The timetable for meals is:
  - Breakfast: 6:30 - 9:30 a.m.
  - Lunch: 12:30 - 14:30 p.m.
  - Dinner: 18:30 - 21:30 p.m.
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- **Breakfasts for astronomers:** If you are working by night and you get up late, you can have a fast and light "Desayuno para astrónomos" (breakfast for astronomers). You will find it in the fridge of the dining room. If there is any in that fridge, ask to the kitchen personnel.
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- **Night meals:** If you want a snack by night, you can fill the form with your preferences and send it to [colacion@alma.cl](mailto:colacion@alma.cl) before 15:00. You can pick your meal up in the dining room between 21:30-22:30. You will find the Meal Request Form at:
  - <http://wikis.alma.cl/bin/view/AIV/CurrentActivitiesAndOSFInformation>
  -
- **SAFETY WAREHOUSE:** It is located in front of the technical building and there you can ask for a helmet, sun glasses, a hat for the sun, and a light. You can find sunscreen at the main entry of the technical building.
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- **OFFICE:** You can ask Suitay Chang ([schang@alma.cl](mailto:schang@alma.cl)) or Ximena Acuna ([xacuna@alma.cl](mailto:xacuna@alma.cl)) for your office keys. Alicia Fredes ([afredes@alma.cl](mailto:afredes@alma.cl)) can also help you with logistics issues.
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- **EMERGENCY:** In case of emergency, you can call 555. If you need to contact directly a paramedics, dial 6400
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- **MORE SERVICES:** There is a laundry, a gym, a music room and a recreation room inside the site. Ask your colleagues for the location of them.
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- **TELEPHONE CALLS:** [helpdesk@alma.cl](mailto:helpdesk@alma.cl) will provide you a pincode. See next link to used telephone at alma: <https://>

[dtswiki.alma.cl/bin/view/IT/ALMA\\_DIAL\\_OUT](http://dtswiki.alma.cl/bin/view/IT/ALMA_DIAL_OUT)

You can find extra information about logistics at:  
<http://wikis.alma.cl/bin/view/AIV/CurrentActivitiesAndOSFInformation>

### SCIENCE MEETINGS AND DAILY REPORTS

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#### DAILY SCIENCE COORDINATION MEETINGS

Everyday, all scientists at the OSF are requested to attend the coordination meeting at 3:00 p.m. in TF 2 room (or Science meeting room) at the TF building. There, scientists inform to Alsacia colleagues about the progresses of the previous night's observations and discuss about the observing plan for the day.

On Tuesdays, we have a longer Science coordination meeting with a video link connection with Alsacia, ESO, and NRAO. It starts at 2:30 p.m. and we discuss more general topics of logistics and testing. This is followed at 15:15 by either a System Verification and Science Coordination meeting, or by a Science Only meeting.

On Thursdays occasionally there is a science talk, or a few short ones, at 2:00 pm, followed by some discussion. At 3:00 pm the usual astronomers meeting takes place.

At 3:30 p.m., after the science group meeting, there is an AIV group meeting in the TF main meeting room. You can also attend if you wish, but it is not mandatory. The AIV and CSV Leads must attend.

For a more detailed information, you can check the next URL:  
<http://wikis.alma.cl/bin/view/AIV/ScheduleAndCoordinationMeetings>

#### DAILY SCIENCE REPORTS: SCIENCE ACTIVITY JOURNAL AND SHIFT LOG TOOL

You will be requested to fill every day the science activity journal and the shift log to report all the tests you do during your observing shift, as well the problems you find. Also you may have to fill some information in the relevant JIRA tickets and, even, you may have to create new ones (cf. ALMA Issue tracking).

The **Science Activity Journal** is inside the wikis:  
<http://wikis.alma.cl/bin/view/AIV/ScienceActivityJournal>

To access the **ALMA Shift Log Tool** you have to log into some STE and type: *shiftlog archive*. Then go to *File --> New --> Simple* and write there your notes. When you finish press *Save Entry* in the upper right panel.  
You can find much more detailed information about the Shift Log Tool in the next link:  
<http://almasw.hq.eso.org/almasw/bin/view/OBOPS/ShiftLogTool>

### COMPUTERS AND SYSTEM ISSUES

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#### STANDARD TEST ENVIRONMENT (STE)

It is a protected network that provides a standardized operating system, network infrastructure, and user environment to test and run ALMA software. The STEs are designed to be consistent and reliable, regardless of which ALMA development partner builds and operates a particular STE.

There is one hard disk shared by all the STEs. You can access to all directories of all tests performed using different antennas from every STE. All the data are stored automatically in the new archive.

Right now (March 2010), there are four STEs working, accessible to the scientists :

1. - TFINT (to perform interferometry at the OSF).  
- AOS (to carry out interferometry at the AOS).  
- TFSD (For single dish tests *at the OSF* ).  
- TFOHG (For holography tests *at the OSF*)

**User personal accounts** are individual and centrally authenticated for all STEs. They are stored in /users/username/TFSD directory. To access remotely to an STE you must use the following hostname: STE-gns.aiv.alma.cl.

Example: if you want to connect with the STE that is doing interferometry at the OSF, you should type:  
`ssh -X username@tfint-gns.aiv.alma.cl`

and use the password of your personal account

You can find users manual and tutorials at:

[http://aivwiki.alma.cl/index.php/STE\\_Users\\_Manual](http://aivwiki.alma.cl/index.php/STE_Users_Manual)  
<http://almasw.hq.eso.org/almasw/bin/view/ITS/StandardTestEnvironmentManual>  
<http://aivwiki.alma.cl/index.php/SW014>

### SCIENCE TESTS DIRECTORIES

For science tests, the main directory is `/groups/science`. There you can find several subdirectories that contains important information about antenna testing for scientists and engineers.

**DATA** --> Are under directory `/groups/science/data`, ordered by antenna name for single dish tests carried out at OSF, and under **RADIO** for those carried out with the AOS interferometer.

**SCRIPTS** --> Are under directory `/groups/science/scripts/R7.0.0_WORKING`, (note this directory may change with time. Ask your colleagues about the last one). Further auxiliary scripts may be found in thematic subdirectories under `/scripts/`.

### CVS (Concurrent version control)

Science tests are usually done with scripts under `/groups/science/scripts/R7.0.0_WORKING/`. If you want to edit a script, you can do it in your own account, under `/AIV/science/scripts/R7.0.0_WORKING/` directory, using `cvs`, and then you can commit it later into the repository.

- To checkout a version of the archive in your own directory:

#### 1- CVS login:

```
* export CVSROOT=":pserver:USER@cvssrv.hq.eso.org:/project21/CVS"
* cvs login
```

#### 2- Local copy checkout (checkout sources for editing):

```
* cvs co AIV/science/
```

- To update (Bring work tree in sync with repository) and commit changes:

```
* cvs update [file or dir]
* cvs commit [file or dir]
```

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- And the final step to update the scripts in the common working scripts directory:

```
* ssh gns
• /sbin/update-sciencedir -d scripts
```

If you want a cvs account, send your request to [mpasquat@eso.org](mailto:mpasquat@eso.org)

See more information at:

<http://aivwiki.alma.cl/index.php/SW006>  
<http://aivwiki.alma.cl/index.php/SW014>  
[http://aivwiki.alma.cl/index.php/STE\\_Users\\_Manual](http://aivwiki.alma.cl/index.php/STE_Users_Manual)

For a quick reference guide:

<http://tinyurl.com/2X3j6>

### ALMA Issue Tracking

This is the system we have in ALMA to report and follow the evolution of tests and problems observed in the different areas and activities of the project.

Ask [msimmond@alma.cl](mailto:msimmond@alma.cl) for a JIRA account to get into the ALMA Issue Tacking system.

<http://jira.alma.cl/secure/Dashhhttp://jira.alma.cl/secure/Dashboard.jspa>

### ALMA EDM (Electronic Document Management)

It is a the computer system or suite of programs designed to store and track ALMA electronic documents and other media. You can access via: <http://edm.alma.cl/>

Ask [acaceres@alma.cl](mailto:acaceres@alma.cl) for a username and a password.

### REMOTE ACCESS TO STEs, REDUCTION MACHINES (sco-red and osf-red) AND DATA:

You can proceed in two ways. If you just want to check or retrieve some files, you can simply login in [tatio.aiv.alma.cl](http://tatio.aiv.alma.cl) and from here login to any STE. This is fast but tatio has no X windows support, so its functionality for editing or data reduction is poor.

For greater functionality, you can access them either using a VPN connection or through an SSH tunnel via tatio. See the detailed procedures in:

[http://aivwiki.alma.cl/index.php/Remote\\_access\\_to\\_OSF\\_STEs](http://aivwiki.alma.cl/index.php/Remote_access_to_OSF_STEs)

## TOOLS USED FOR OBSERVING

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- \* OMC - The Operation Monitor and Control GUI. This controls the array (and sub-arrays). Usually controlled by the operators.
- \* JLog - System logs - These are updated continuously and so when something goes wrong, this is where you look for the errors. Make sure you cut and paste the entire error message into the ShiftLog or in the JIRA ticket if the problem needs to be tracked down and diagnosed.
- \* Quicklook - Quicklook windows open at the end of a source and plot the results of the observing intent (flux, delay, amp) - i.e. for a pointing observation, the QuickLook window will show the results in a graphical format.
- \* CorrGUI - This GUI is expected to allow you to see the real time data from the correlator. The big drawback is that you can only see one baseline at a time but if you are tracking a source or going back and forth between objects, its a nice way to ensure you have fringes.
- \* TelCal and TelCalSpy - TelCal is the calibration software that runs "under the hood" and measures such things as delays, pointing offsets, coherence, etc. The output of TelCal is what gets fed into QuickLook. A TelCalSpy window is usually run in a separate window by the operators - make sure and check this esp. when starting any time of observation.
- \* ShiftLogTool - This is a GUI that is to be used by the scientists continuously to enter in commands and keep a log of their observations. The ShiftLogTool puts the comments into the science archive and therefore has a long term storage capability. On the negative side, if the archive is down, the tool may not work.
- \* Science Activity Journal - Before the ShiftLogTool was available, the scientists started keeping the log in a Science activity journal which still persists and is used as the standard log entry place by the scientists. Its not very readable but its functional.
- \* ALMA Observing Tool - This is the tool that will be used by all astronomers who want to observe (and propose) with ALMA. We use it currently to create "scheduling blocks" and run and test the array but we are limited by the underlying scripts it calls. So the OT is what we will use long term but in the short term we rely more on the manual mode python scripts ;)
- \* Manual Mode and Scripts - Manual mode is essentially what is used to control the array currently using python scripts which in turn call various pre-defined control objects. A list of all the scripts currently available and used are placed here: <http://...>

## ONLINE INFORMATION

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Places / People to know at the site:

Safety Office  
Dormitory D8  
The Casino  
Office and locker space in the facility  
Coffee / Tea / Fridge / Water etc.  
Music room  
Gym room  
Hiking

Max Aguilar  
Safety folks: La Salle, Saavedra  
Paramedics:  
Emilio Barrios  
Bernahard Lopez / Octavio Hernandez  
Gene Duvall, Nick Emerson  
Tzu Chen, Ruben Soto  
Alicia / Patricia / Ximena

## ONLINE INFORMATION

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### WHERE TO FIND INFORMATION AT THE WEB

There are four main places where you can find information about ALMA project on the web:

<http://wikis.alma.cl> (ask for access to [webmaster@alma.cl](mailto:webmaster@alma.cl))  
<http://aivwiki.alma.cl> (ask for access to Juan Pablo Caram ([jcaram@alma.cl](mailto:jcaram@alma.cl)))  
<http://almasw.hq.eso.org>  
<http://www.almaobservatory.org>

#### SOME USEFUL LINKS

**OSF contact list:**

<http://wikis.alma.cl/bin/view/AIV/OSFContactList>

**ALMA Acronyms:**

<http://aivwiki.alma.cl/index.php/Acronyms>

**ALMA ESSENTIALS:**

<http://wikis.alma.cl/bin/view/AIV/CSV>

**AIV Operations manual and Science Test Procedures:**

<http://wikis.alma.cl/bin/view/AIV/AIVOperationsManual>

**Science scripts documentation:**

<http://wikis.alma.cl/bin/view/AIV/ScienceScriptsDocumentation>

**Current activities and OSF Information:**

<http://wikis.alma.cl/bin/view/AIV/CurrentActivitiesAndOSFInformation>

**Data reduction hints for ALMA data**

<http://wikis.alma.cl/bin/view/AIV/ToolsForMakingPrettyPicturesWithALMAData>

**ALMA Official visitors:**

<http://wikis.alma.cl/bin/view/ALMASafety/OfficialVisitors>

**Commonly used software resources:**

<http://wikis.alma.cl/bin/view/AIV/SoftwareResources>