

Phase 2 Processes and Life at the OSF

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ALMA Regional Centre



Phase 2 Process

- If your proposal has been ranked **High Priority**, you will be assigned a Contact Scientist from the EU ARC
- The Contact Scientist will initiate contact by opening a Phase 2 **Helpdesk** ticket on your behalf
- Depending on the scheduling requirements for your project (RA, array configuration etc) and its exact ranking **this may not happen until several months after the PRP outcome**
- Some **Filler** projects may also proceed to Phase 2



Phase 2 Process

- ALMA observations are executed using **Scheduling Blocks (SBs)** prepared with the **ALMA Observing Tool (OT)** on the basis of the Phase 1 proposals accepted
- This process will become increasingly automated as the ALMA OT develops in coming observing cycles
- In Cycle 1, we expect the creation of SBs to need significant human interaction -> a P2G (Phase 2 Group) person will be assigned to your project to prepare the SBs



Phase 2 Process

- All project-specific interaction between the PI and ALMA during the Phase 2 process will be via the **Contact Scientist** and must be captured by the **ALMA Helpdesk**
- You will be sent a first draft of the SBs by your Contact Scientist through the Helpdesk
- Ideally, they fulfil the requirements of your science goals and you can approve them
- If not, you iterate with the Contact Scientist until you converge on a solution
- All SBs **must be approved** by the PI (again via Helpdesk) before they can be executed



Checking your SBs

See ALMA OT Phase 2 demo !



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Changes to SBs

- Any changes necessitated by the PRP or on technical grounds should have been incorporated in the first draft
- Most frequent changes requested by PI to first draft SBs in Cycle 0 were regarding choice of calibrators -> normally no problem
- Other minor PI-initiated changes (e.g. very small frequency shift, larger offset for atmospheric calibrations, changing velocity reference frame etc) can also be easily incorporated
- Major changes (e.g. changing target, changing spectral setup, changes in array, addition of extra calibrators etc) require a formal change request and will normally not be approved.

Change request form in Helpdesk

The screenshot shows a web browser window with the URL `https://help.almascience.org/index.php`. The page title is "ALMA European Regional Centre - Welcome to the Helpdesk". The browser's address bar and navigation tools are visible at the top. The page content includes the ALMA logo and "EUROPEAN ARC ALMA Regional Centre" branding. A navigation breadcrumb trail reads "Science Portal » Helpdesk Home » Submit a Ticket » General Queries (EU)".

The main content area is titled "Submit a Ticket" and contains the following sections:

- General Information:** A "Priority:" dropdown menu set to "Default".
- General Sub-categories:** A list of checkboxes for "Please specify areas of concern":
 - Science Portal/Registration
 - Documentation
 - Webpages
 - Proposal reviews and assessment (science and technical)
 - Project tracking
 - Proposal Change Request (accepted proposals only)
 - Other
- Proposal Change Request (all fields required):**
 - Proposal/Project ID:** An empty text input field.
 - Basis of Request:** A dropdown menu set to "(T) Technical grounds".
 - Proposed Changes:** A large text area with the label "300 words or less".
 - Justification for proposed changes:** A large text area with the label "300 words or less".
 - ARC Contact Scientist (if known):** An empty text input field.
- Message Details:** A "Subject: *" text input field.

On the right side of the page, there is a sidebar with the following elements:

- How do I use the helpdesk?**
- My Account [Logout]:** Shows "Logged In: Suzanna Randall".
- Search:** A search input field with a "Search" button and a dropdown menu set to "-- Entire Support Site --".

Tracking your project

- In Cycle 1, you will be able to track the progress of your project using the Project Tracker software (will become available from the Science Portal)
- You will be able to see detailed information about the setup of your project, when observations are started, when they are completed, and when they have passed QA2



ALMA Project Tracker v.9.0.7

Project search Sched Block search Alma user portal

- Logged as **srandall**
- User roles: **user**
- Project Tracker Version **9.0**
- [User Manual \(PDF\)](#)



Theme



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Project search

- Logged as **srandall**
- User roles: user
- Project Tracker Version
- User Manual (PDF)

ALMA

Project search

ALMA ID

PI Full Name

Project Name

Project Code

Project UID

Project Cycle

Project Type

Percent completed 0 %

Project state history

<input type="checkbox"/> Approved	In the last <input type="text"/>
<input type="checkbox"/> Broken	From time <input type="text"/>
<input type="checkbox"/> CSVReady	To time <input type="text"/>
<input type="checkbox"/> Canceled	Predefined queries <input type="text"/>
<input type="checkbox"/> FullyObserved	
<input type="checkbox"/> ObservingTimedOut	
<input type="checkbox"/> PartiallyObserved	
<input type="checkbox"/> Phase1Submitted	
<input type="checkbox"/> Phase2Submitted	
<input type="checkbox"/> Processed	
<input type="checkbox"/> Ready	
<input type="checkbox"/> Rejected	
<input type="checkbox"/> Repaired	
<input type="checkbox"/> Verified	

ALMA Project Tracker v.9.0.7

Project search Sched Block search Alma user portal

Project UID	Project Code	PI Name	Name	Progress	State	Scientific Rank	Version	Time of Creation	Timed Out
uid://A002/X36d874/Xc3	2011.0.00026.CSV	srandall	test_bandcycling	Not available	CSVReady	3	2	2012-01-30	
uid://A002/X399a4e/X1	2011.0.99001.CSV	srandall	test_bandcycling	Not available	CSVReady	3	2.1	2012-03-04	
uid://A002/X399aae/X1	2011.0.99001.CSV	srandall	test_bandcycling	Not available	CSVReady	3	2.2	2012-03-04	
uid://A002/X327408/X2b8	9999.4.00017.CSV	srandall	Dirk's Test new hexagon v2	Not available	CSVReady	0	2	2011-12-21	
uid://A002/X327408/X317	9999.4.00019.CSV	srandall	HD 100546	Not available	CSVReady	0	0.1	2011-12-24	
uid://A002/X327408/X29d	2011.0.00976.S	srandall	LO4R8.1_TESTS_396_B3	Not available	Canceled	0	0.0	2011-12-19	
uid://A002/X327408/X2a8	2011.0.00016.CSV	srandall	LO4R8.1_TESTS_396_B3	Not available	CSVReady	0	0.0	2011-12-20	
uid://A002/X395327/X1	2011.0.99001.CSV	srandall	LO4R8.1_TESTS_396_B3	Not available	CSVReady	0	0.1	2012-02-28	
uid://A002/X395327/Xc	2011.0.99002.CSV	srandall	LO4R8.1_TESTS_396_B3	Not available	CSVReady	0	0.1	2012-02-28	
uid://A002/X303d22/Xb1	2011.0.00007.CSV	srandall	Redshift test	Not available	CSVReady	0	0	2011-11-07	

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Results per page 10 16 projects found.

Project: Dirk's Test new hexagon v2 - uid://A002/X327408/X2b8

Refresh

- 9999.4.00017.CSV
 - Proposal
 - Observing Program
 - Mosaic test
 - J0522-364_B3
 - 3C279_B6
 - 3C279_B7
 - 3C279_B9

Project

Name	Dirk's Test new hexagon v2	Id	uid://A002/X327408/X2b8
Code	9999.4.00017.CSV	Scientific Rank	
PI Full Name	Suzanna Randall	Letter Grade	D
Email	srandall@eso.org	Scientific Score	
Creation date	2011-12-21 05:20:25	Version	2
Project completion percentage			

[Project Report](#) PDF HTML



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uid://A002/X395327/Xc	2011.0.99002.CSV	srandall	LO4R8.1_TESTS_396_B3	Not available	CSVReady	0	0.1	2012-02-28	
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Science Goals

Name: J0522-364 - new mosaic CASA test

Notes: Each of the 4 SBs (one for each Cycle 0 band) should be observed twice: once two hours before the target crosses the meridian, once two hours after.

Desired noise level	7.0 mJy	Will be observed with ACA?	false
Name of the lines		Center Frequency	100.0 GHz
Peak Flux	2.0 Jy	Linewidth	0.0 GHz

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uid://A002/X36d874/Xc3	2011.0.00026.CSV	srandall	test_bandcycling	Not available	CSVReady	3	2	2012-01-30	
uid://A002/X399a4e/X1	2011.0.99001.CSV	srandall	test_bandcycling	Not available	CSVReady	3	2.1	2012-03-04	
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uid://A002/X327408/X29d	2011.0.00976.S	srandall	LO4R8.1_TESTS_396_B3	Not available	Canceled	0	0.0	2011-12-19	
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 - 3C279_B7
 - 3C279_B9

Sched Block: J0522-364_B3

Source Name: J0522-364_B3 State: CSVReady

Sched Block id: uid://A002/X327408/X2ba Status entity id: uid://A002/X327408/X2c1

Time observed (used vs. estimated)

Maximum exec time

Expected Exec count

Current executions

Progress

Delay (sec.)

Mode

Standard mode

Sched Block details

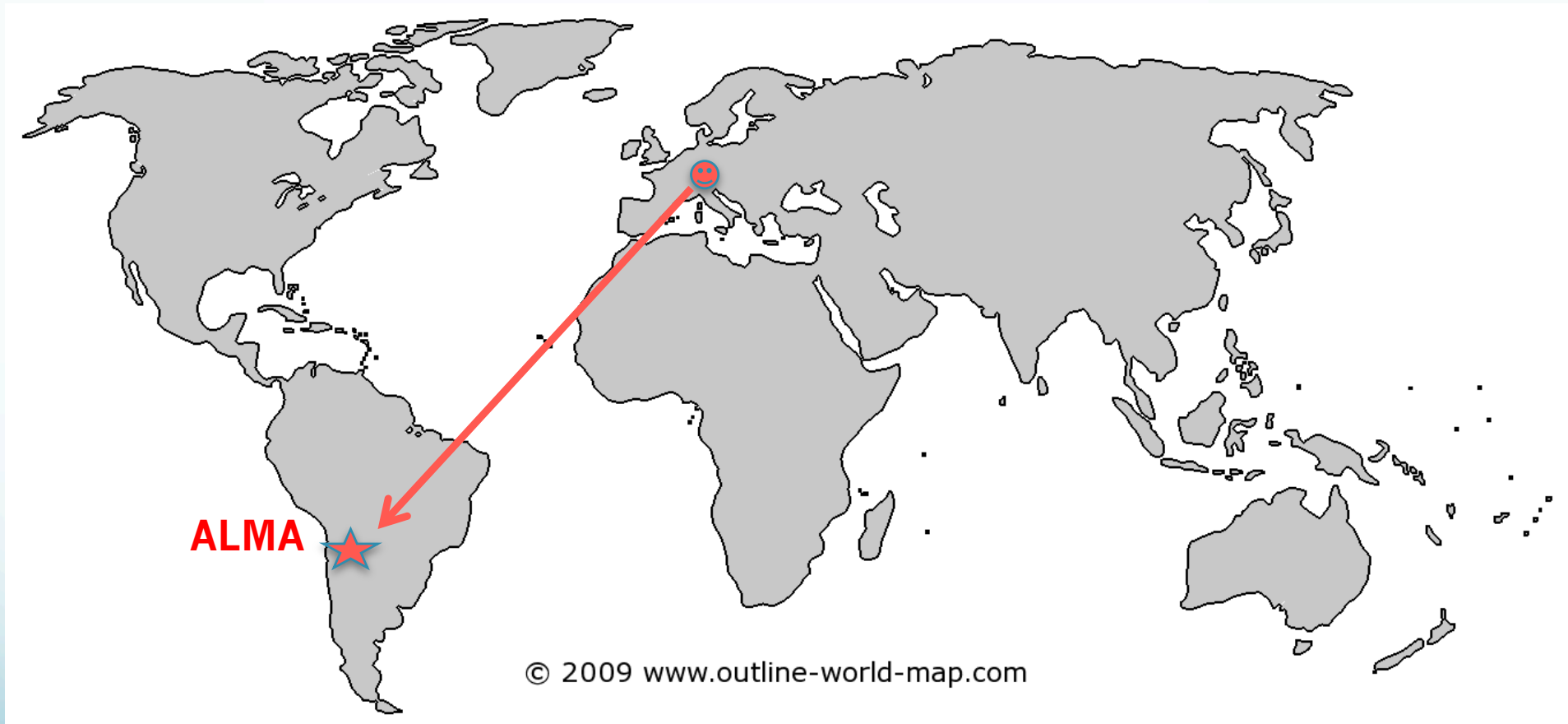
Field Source List

Type	Name	RA (h:m:s)	Dec (d:m:s)
Primary:	J0522-364	05:22:57.9	-36:27:30
Phase	J0538-440	05:38:50.3	-44:05:08

Theme



Over to Chile...



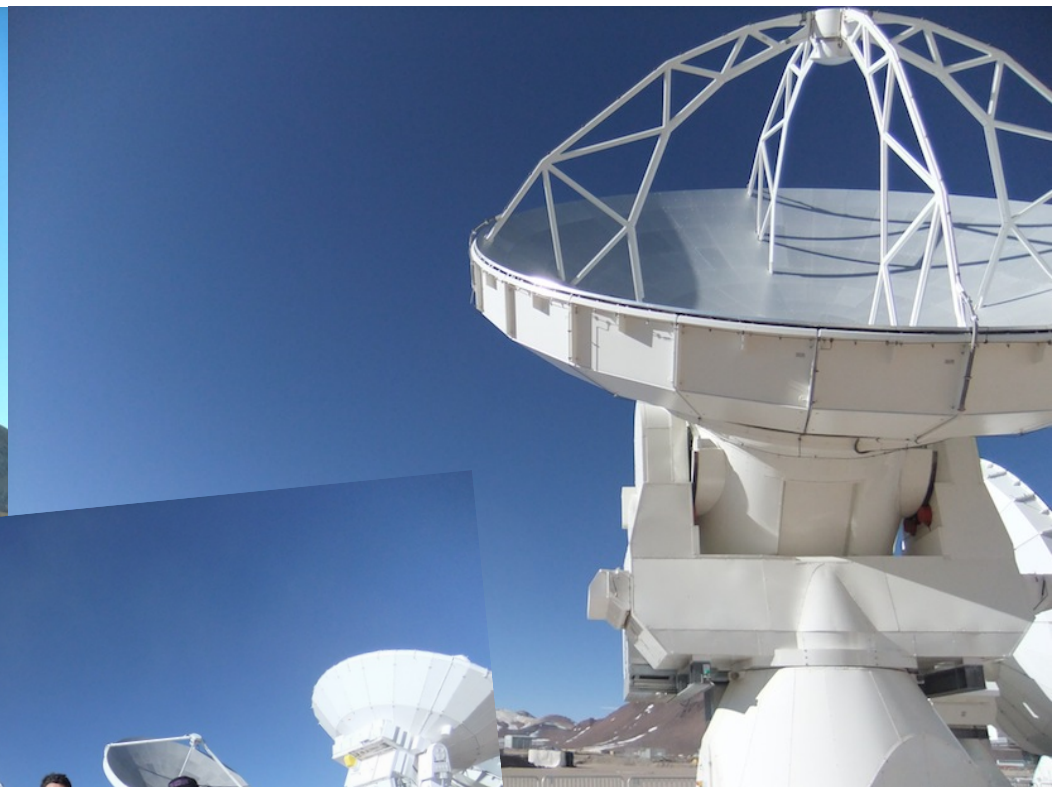
AOS: Array Operations Site at ~5000 m
OSF: Operations Support Facility at ~3000 m



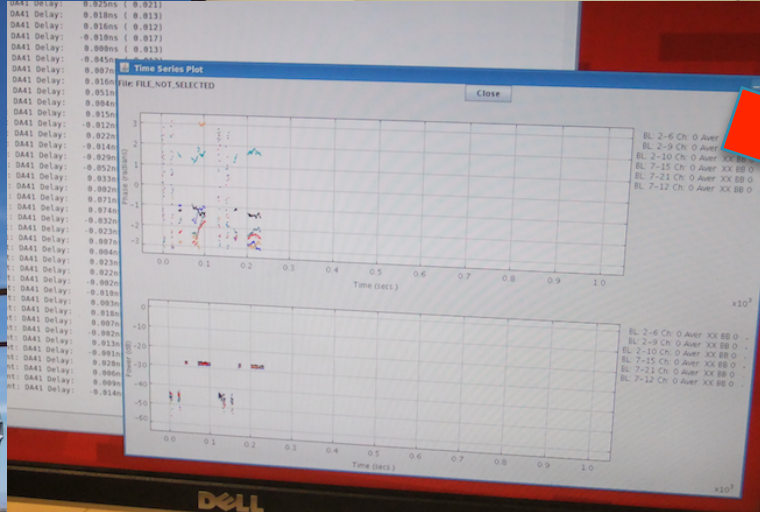
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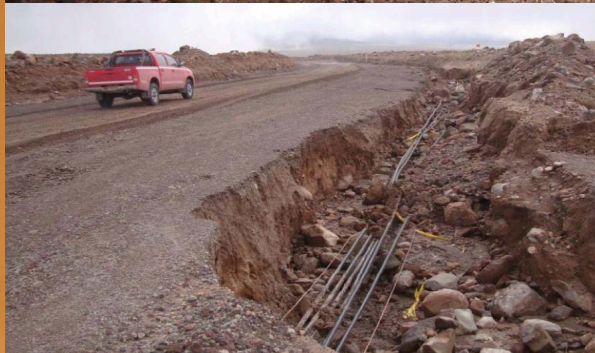
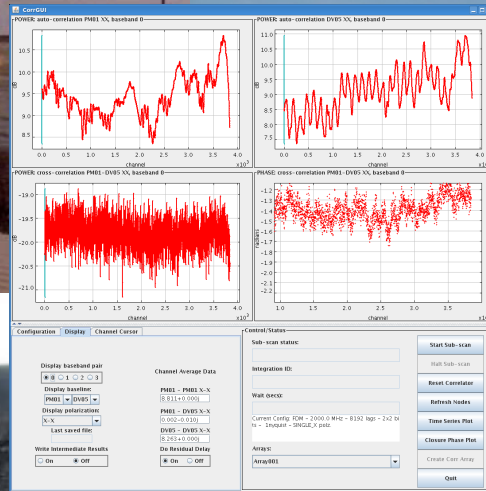
AOS impressions



OSF impressions: The Good



OSF impressions: The Bad

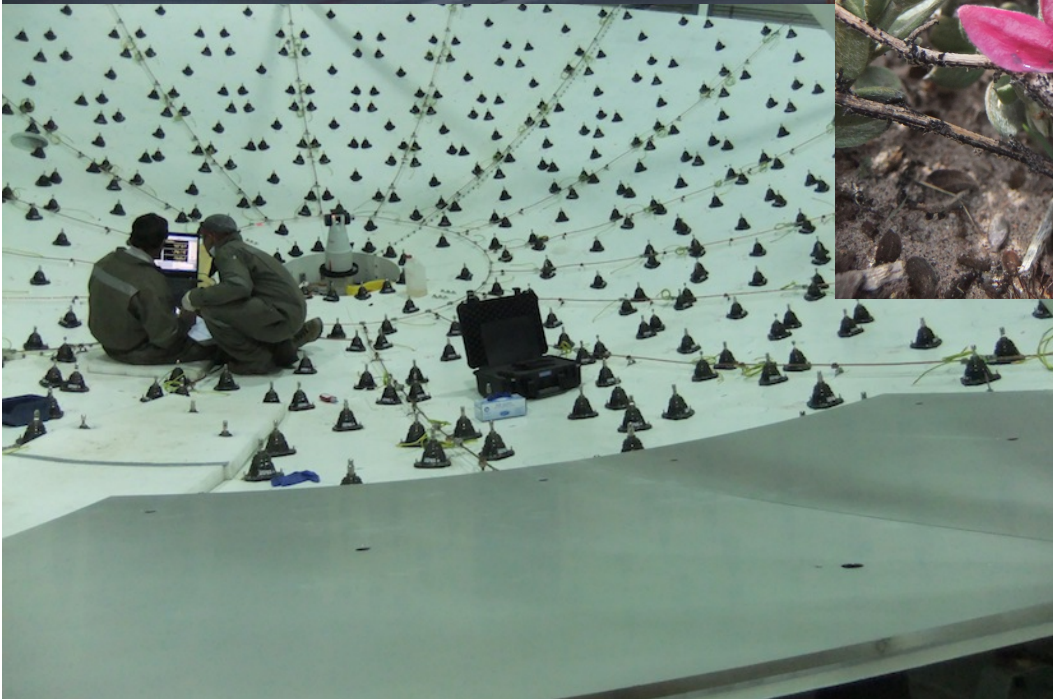


OSF impressions: The Bizarre

UFOs!!!



... and the beautiful!



OSF worklife

- Control room is shared by staff working with antennas located at the OSF (System Integration) and the AOS (array at the high site)
- Science operations work closely with the Array Operators, Computing and Engineering groups
- Science operations typically use the AOS array from ~ 4 pm to 8 am – the morning and early afternoon are reserved for Computing and Engineering



- When not using the array, science operation activities include data reduction, planning observations, creating SBs etc.

AOS schedule (as of March 2012)

- Alternating weeks of CSV and Early Science time (change-over on Wednesdays)

CSV time:

- first-time antenna integration
- calibration database filling
- testing of new capabilities
- testing & debugging new software/features
- science demonstration
- ...

Early Science time:

- Early Science observations
- antenna re-integration (e.g. after a move)
- regular flux measurements of calibrators already in the database
- ...



Early Science observations

- Science staff: DSO Lead, AoD-Day (1-11:30 pm), AoD-Night (10:30 pm – 6:30 am), AoD-morning (6 am – 4 pm). Observations 4 pm – 8 am.
- DSO lead makes a preliminary list of SBs to be observed; AoDs make final decision. Discussion at 3 pm meeting.
- AoD (Astronomer on Duty): select SBs to execute, check & edit them in the OT, run QA script, export & check data, comment problems, fill the night report, update project JIRA tickets (status & worklog)



Get started preparing proposals
NOW

(or maybe tomorrow)

We're here to help!



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