ALMA Technical Support

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Overview

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- Documentation
- Software
  - CASA
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  - Observing Support Tool (web-based simulator)
- Observing process
Organisation and Services
Global Organisation

ALMA is an international collaboration. The Joint ALMA Office is in Chile, and regional centres are located in North America, Europe, and East Asia.
The North American ALMA Science Center is located within the NRAO headquarters in Charlottesville, Virginia.

The NAASC is operated in collaboration with the NRC of Canada and ASIAA in Taiwan.

Support is provided to astronomers in the USA, Canada, and Taiwan.
In the European ARC, it was decided to locate the main ARC in Garching, Germany, and to place several nodes across Europe.

Users in ESO countries (including Brazil) will generally be supported by their local ARC nodes.
East Asian ALMA Regional Center
almascience.nao.ac.jp

The main East Asian ARC is located at the NAOJ in Mitaka, Japan.

Taiwan falls within the East Asian ARC area but has its own centre at ASIAA.

These organisations support astronomers in Japan and Taiwan.
Support for Astronomers outside the ARC Areas

People outside the executive areas (e.g. China, Mexico, Norway, Russia) may submit proposals as “Open Skies” program.

The rules for how Open Skies programs are allocating time are rather complicated. For reference, 2 of 196 highest-priority proposals for Cycle 1 were Open Skies proposals.

During the proposal submission process, PIs may select which ARC they want to support their program.
Services Provided to Users by the ARCs

• Training workshops, tutorials, and conferences
• Outreach
• Assistance with proposal submission
• Observations preparation
• Assistance with data reduction
• General software support
Websites
The ALMA Portal can be accessed from www.almascience.org. From the portal, it is possible to access the following information:

- News
- Call for proposals
- Documentation
- Web-based tools
- CASA home page
- Data archive
- Helpdesk

People need to register with the portal to do the following:

- Submit proposals (or be a Co-I on proposals)
- Submit Helpdesk tickets
- Download proprietary data
Atacama Large Millimeter/submillimeter Array
In search of our Cosmic Origins

Please select your preferred ALMA Regional Centre (ARC). Alternatively you will be redirected in 8 seconds to the closest ARC which in your case is...
Welcome to the Science Portal at ESO

Overview
The Atacama Large Millimeter/submillimeter Array (ALMA) is a major new facility for world astronomy. When completed in 2013, ALMA will consist of a giant array of 12-m antennas, with baselines up to 16 km, and an additional compact array of 7-m and 12-m antennas to greatly enhance ALMA’s ability to image extended targets. ALMA will be outfitted with state-of-the-art receivers that cover atmospheric windows from 84–950 GHz (3mm – 300 micron). Construction of ALMA started in 2003 and will be completed in 2013. The ALMA project is an international collaboration between Europe, East Asia and North America in cooperation with the Republic of Chile. More details can be found via the About ALMA link in the left menu.

This is the website for the ALMA Science Portal, served from one of the ALMA Regional Centers (ARCs) of the ALMA partner organizations: ESO, NRAO or NAOJ. You may switch between the different instances of the portal through the links to the appropriate ALMA partner at the top banner. Through this portal you can find details about the technical capabilities of ALMA, how to propose for observing time, and how to access ALMA data. It includes links to all official ALMA documents and tools, including those for preparing and submitting proposals and processing ALMA data. In order to access some of the tools, users must register with the project and log in to the portal via the links at the top banner.

Each of the three ARCs provides additional User Services, including a Helpdesk for all user queries. Each ARC maintains additional web pages with information on region-specific user services, such as visitor and student programs, schools, workshops, financial programs and public outreach activities. These are accessed via the links under the User Services at the ARCs area in the left menu.
The ALMA Helpdesk can be used to either search for user questions or ask questions.

General queries will be answered by one of the ARC staff. Simple or common questions will probably be answered rapidly. Queries about visiting or interacting with the ARC nodes will be answered by staff at the nodes.

Responses to helpdesk tickets should be received within 2 working days.
Support Center » Submit a Ticket

Submit a Ticket

If you can't find a solution to your problem in our knowledgebase, you can submit a ticket by selecting the appropriate category below.

Select Category

- General Queries (NA) - Science Portal/Registration, Documentation, Webpages, Proposal reviews and assessment, Project tracking, other
- Project Planning (NA) - Available Capabilities, Call for Proposals, Sensitivity Calculator, Simulators, Splatalogue, other
- Observing Tool (NA) - Proposal Preparation, Proposal Submission (general), Phase2 process
- Data Reduction (NA) - CASA, pipeline processing, etc...
- Archive and Data Retrieval (NA) - archive access and queries, obtaining your ALMA data
- Face to Face Support (NA) - Data reduction, sabbatical, science, short term, other

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Early Science Primer

This is a broad introduction to ALMA that is meant for novice ALMA users. This includes:

• General background information on ALMA and radio astronomy
• Technical details on ALMA performance
• Organisational information
• Examples of ALMA Early Science Proposals (probably no longer as important as real-life proposals)
• Overview of observations and data reduction
Proposers Guide

This is a general introduction to ALMA for people writing proposals. It includes:

• Outline of the ALMA organisation structure
• Recursive list of the available documentation and tools
• Guidelines on proposal preparation
• Description of the time allocation process, observation preparation, and data delivery
• Summary of telescope capabilities
This is technical information that is really of importance to expert users. It includes:

- Technical information on receivers, correlators
- Information on setups for telescope
- Description of scheduling blocks (SB)
- Details on calibration strategies
Software
CASA is the main data reduction software used for ALMA. The software can also be used for processing data from other radio telescopes.

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Observing Process
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1. A user creates a proposal and submits it using the Observing Tool.

2. The proposal is reviewed and ranked by the Proposal Review Committee.

3. If the proposal is going to be scheduled for observation, the ARC works with the PI to create Scheduling Blocks for the program.
Observing Process

4. The observations are performed.

5. The data are pipeline-processed and undergo quality assurance.

6. The data are delivered to the PI.

7. The PI can then work with people in the ARCs to reprocess his/her data.
After the meeting, if you have any questions on anything regarding ALMA, please use the Helpdesk.