ALMA Technical Support

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UK ALMA Regional Centre Node
University of Manchester

Overview

- ALMA organisation and services
- Websites
  - Web portal
  - Helpdesk
- Documentation
- Software
  - CASA
  - Observing Tool
  - 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.

North American ALMA Science Center

almascience.nrao.edu

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 astro-nomers in the USA, Canada, and Taiwan.

European ALMA Regional Centre

almascience.eso.org

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.

NAOJ
National Astronomical Observatory of Japan

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

ALMA Portal

www.almascience.org

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 at .

About ALMA
ALMA Science
Call for Proposals
ALMA Data
Documents & Tools
Knowledgebase/FAQ

User Services at ARCs

- Helpdesk
- EU ARC
- NA ARC
- EA ARC

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 login 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.

ALMA Newsletter

Newsletter No. 9
May 23, 2012

More…

General News

ALMA Early Science Cycle 1: Outcome of the Proposal Review Process
Nov 27, 2012

New release of ALMA Science Verification data
Oct 23, 2012

Announcement of intent to release a new installment of Science Verification data
Oct 16, 2012

Update on ALMA Cycle 0 observations
Oct 08, 2012

More…

Local News

Cycle 1 preparation workshops throughout Europe
May 16, 2012

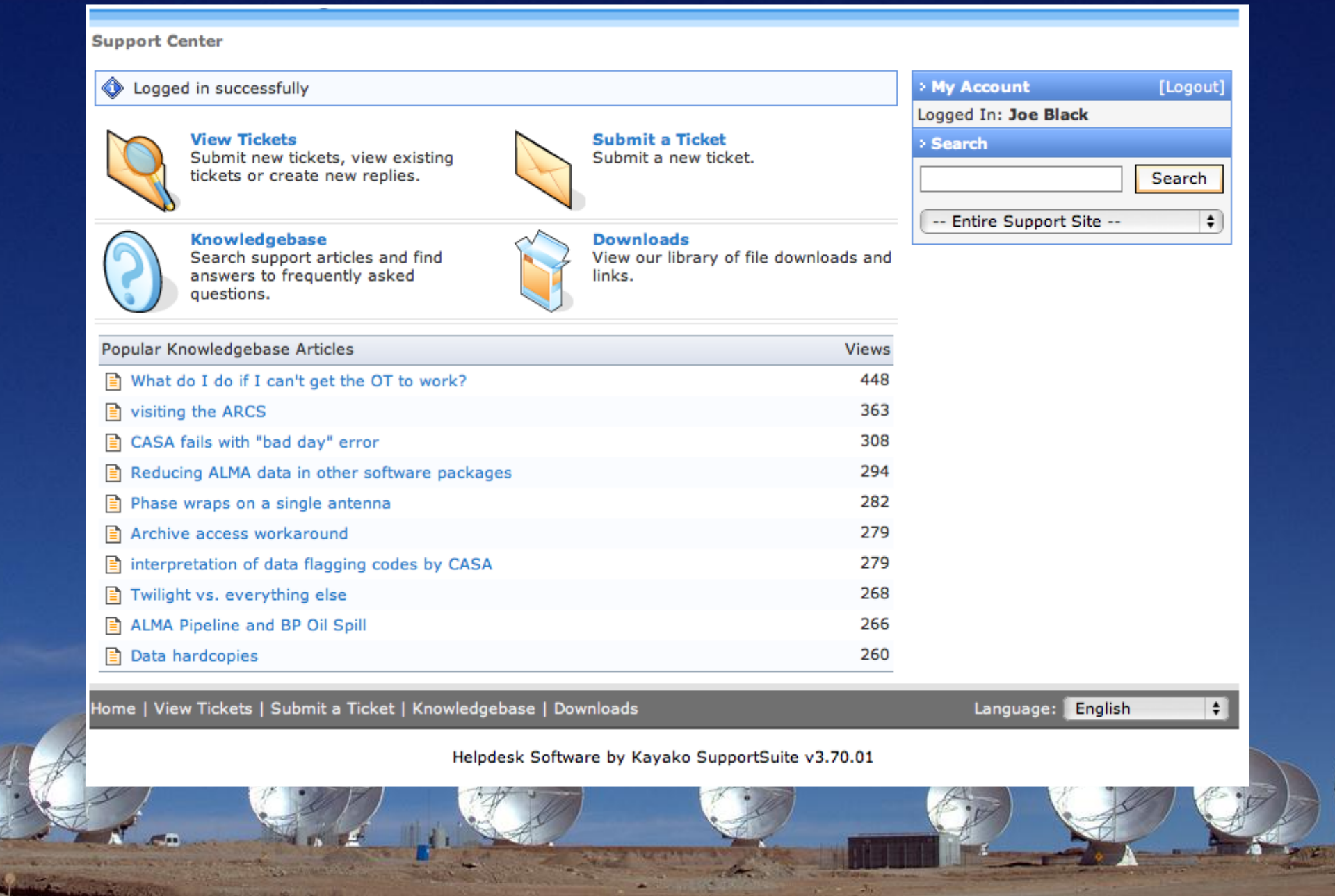
ALMA Community Days: Early Sciece in Cycle 1, 25-27 June 2012, ESO Garching
Mar 22, 2012

ALMA Helpdesk

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
Logged in successfully
View Tickets
Submit new tickets, view existing tickets or create new replies.
Submit a Ticket
Submit a new ticket.
Knowledgebase
Search support articles and find answers to frequently asked questions.
Downloads
View our library of file downloads and links.
Popular Knowledgebase Articles
Views
What do I do if I can't get the OT to work?
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visiting the ARCS
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CASA fails with "bad day" error
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Reducing ALMA data in other software packages
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Phase wraps on a single antenna
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Archive access workaround
279
interpretation of data flagging codes by CASA
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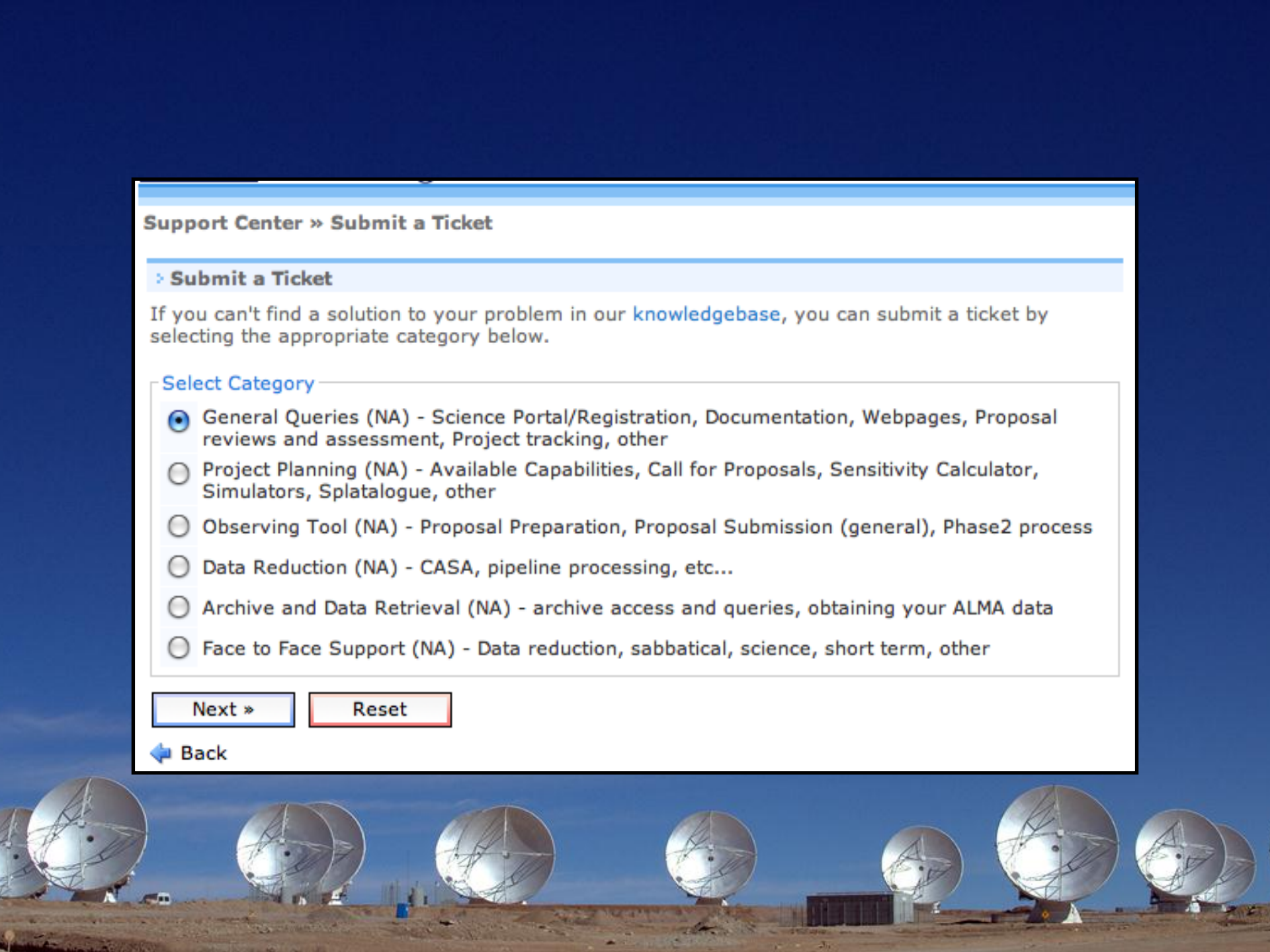
Twilight vs. everything else
268
ALMA Pipeline and BP Oil Spill
266
Data hardcopies
260
My Account
[Logout]
Logged In: Joe Black
Search
Search
-- Entire Support Site --
Home | View Tickets | Submit a Ticket | Knowledgebase | Downloads
Language: English
Helpdesk Software by Kayako SupportSuite v3.70.01

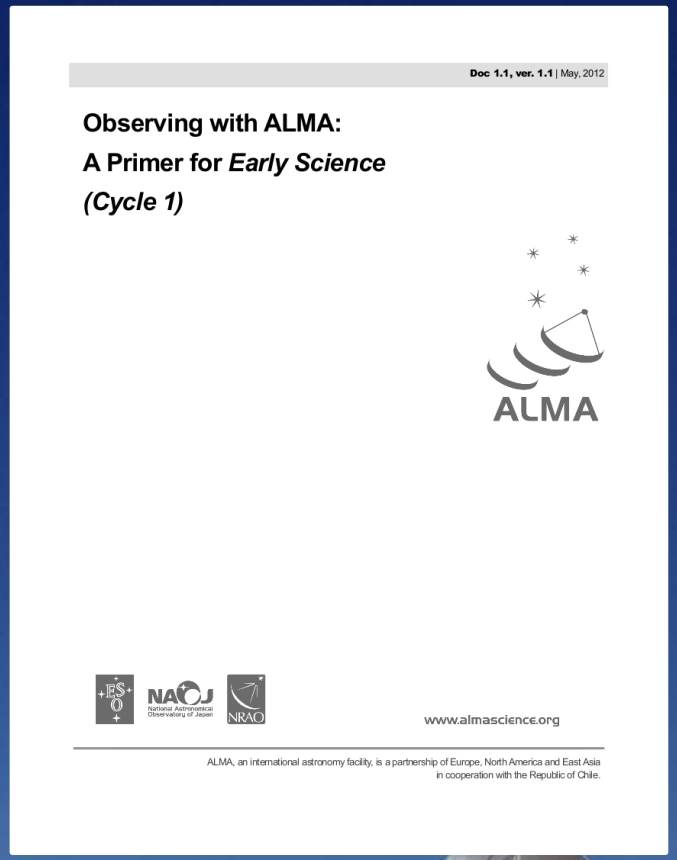

Support Center » Submit a Ticket
Submit a Ticket
If you can't find a solution to your problem in our knowledgebase, you can submit a ticket by selecting the appropriate category below.
Select Category
General Queries (NA) - Science Portal/Registration, Documentation, Webpages, Proposal reviews and assessment, 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
Next »
Reset
Back

Documentation

Early Science Primer

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

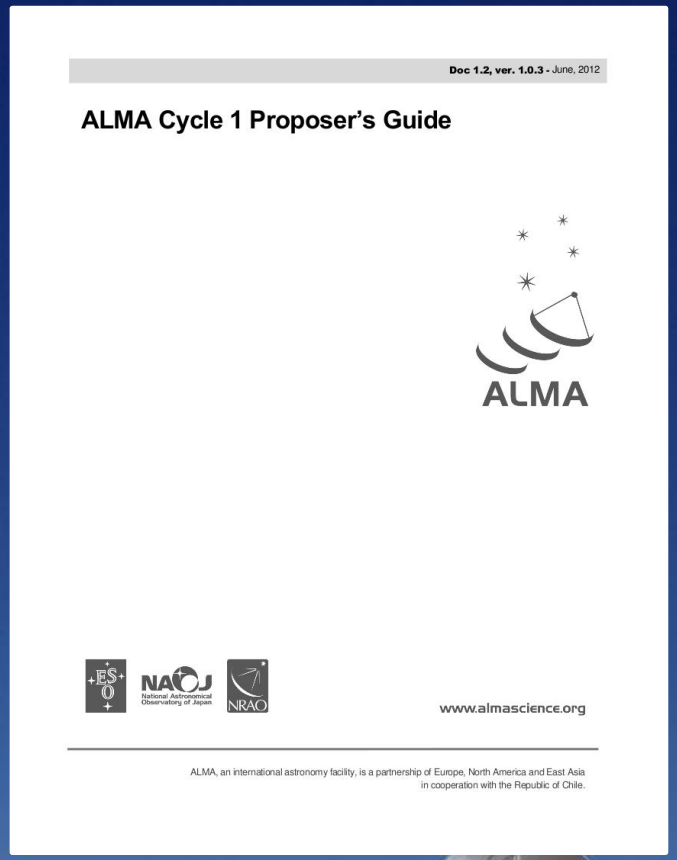
- General background information on ALMA and radio astronomy
- Technical details on ALMA performance
- Organisational information
- Examples of ALMA Early Science Proposals (probably no longer as important as real-life proposals)
- Overview of observations and data reduction



Proposers Guide

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

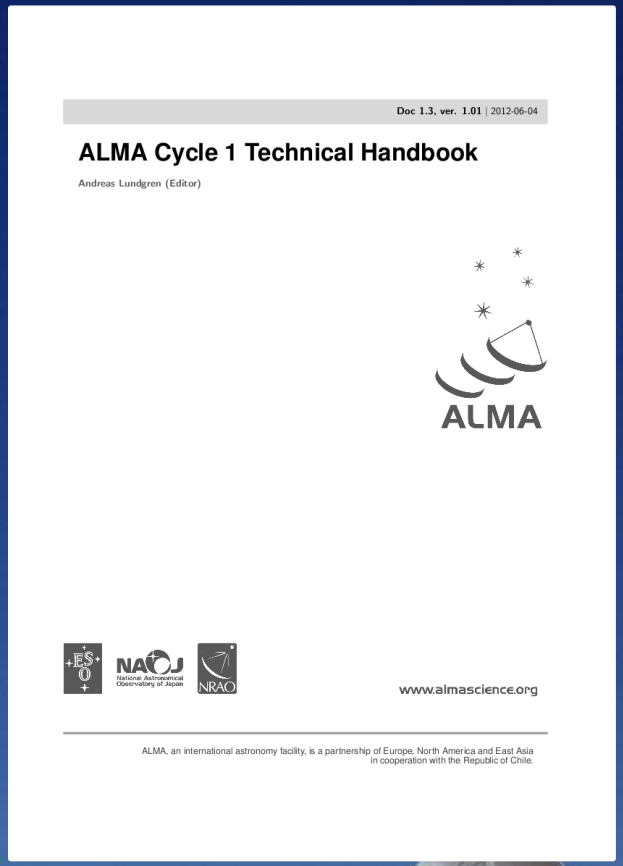
- Outline of the ALMA organisation structure
- Recursive list of the available documentation and tools
- Guidelines on proposal preparation
- Description of the time allocation process, observation preparation, and data delivery
- Summary of telescope capabilities



Technical Handbook

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

casa.nrao.edu

CASA is the main data reduction software used for ALMA. The software can also be used for processing data from other radio telescopes.

CASA is based on python. Most commands are called from a command line interface, but GUIs are used for many interactive steps (e.g. data display and cleaning).

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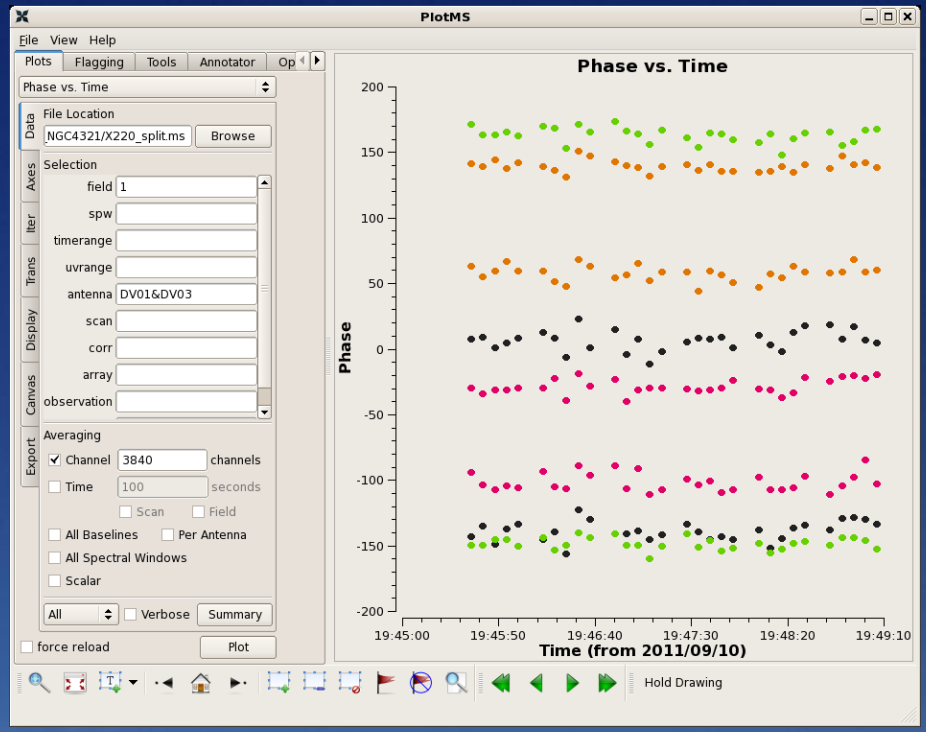

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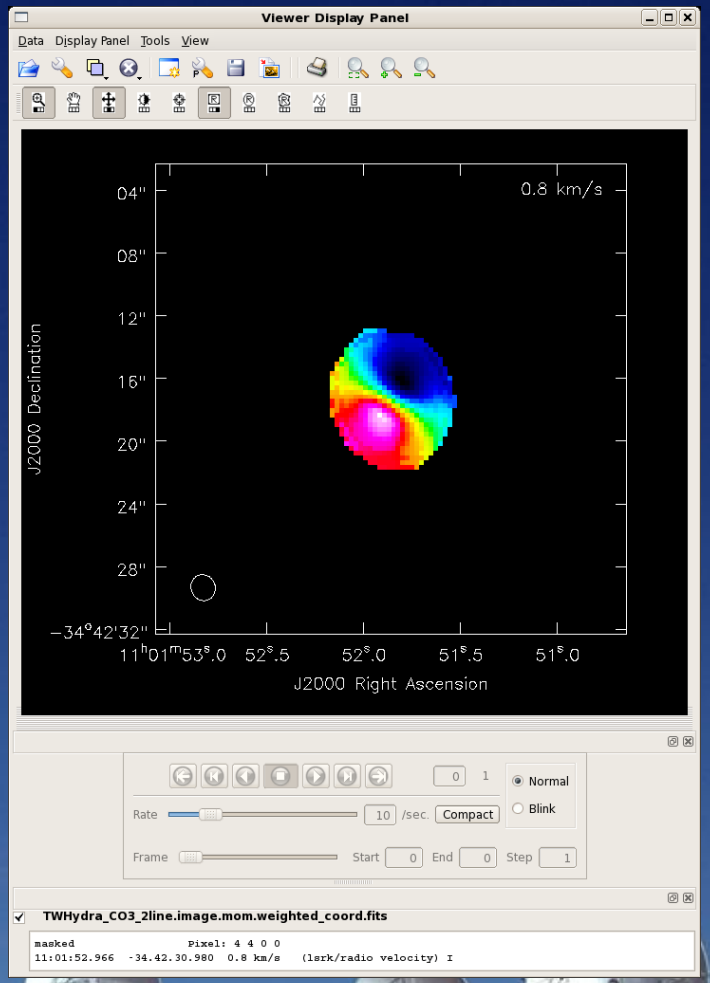
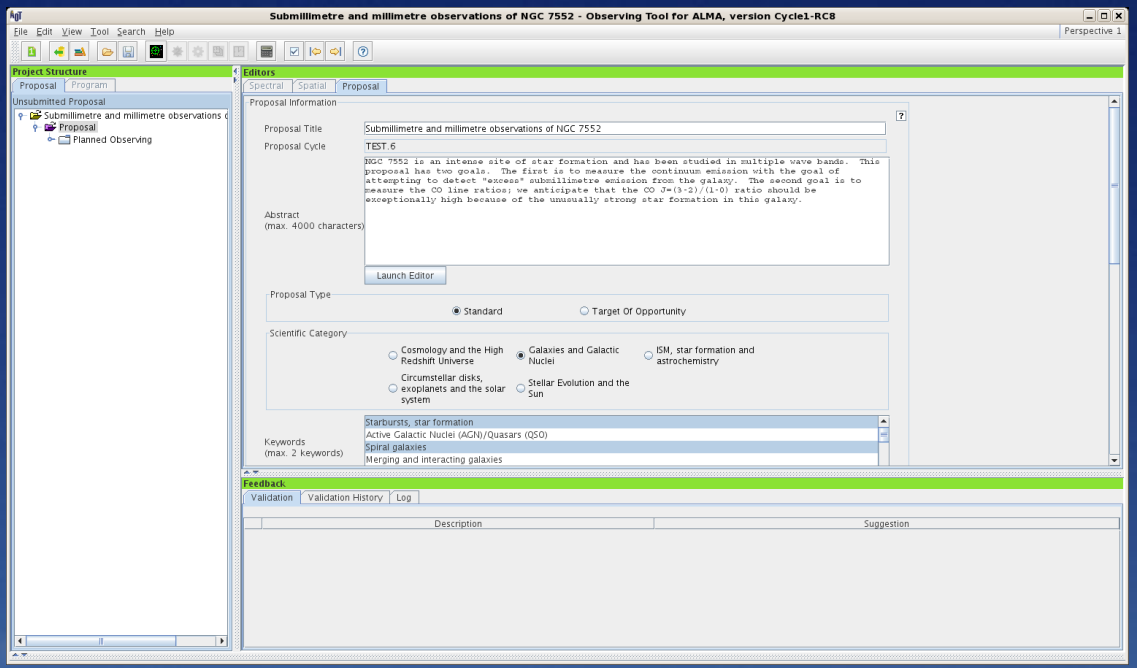


Observing Tool

The Observing Tool (OT) is used to prepare and submit telescope proposals.

The GUI also includes a sensitivity calculator and a spectral line catalogue.



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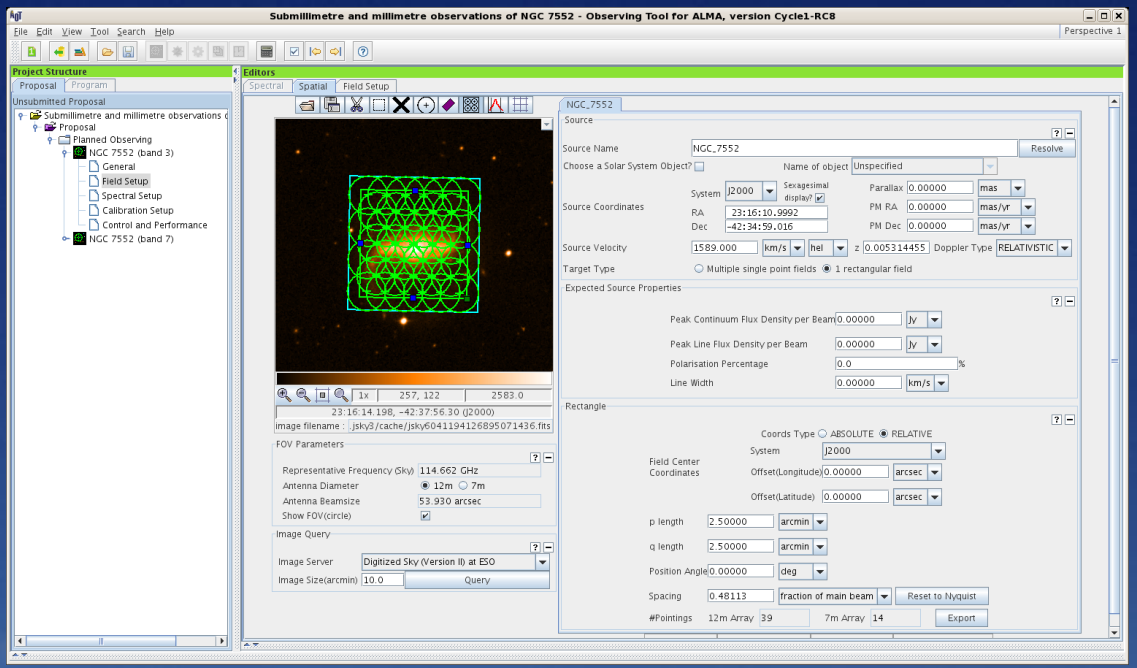

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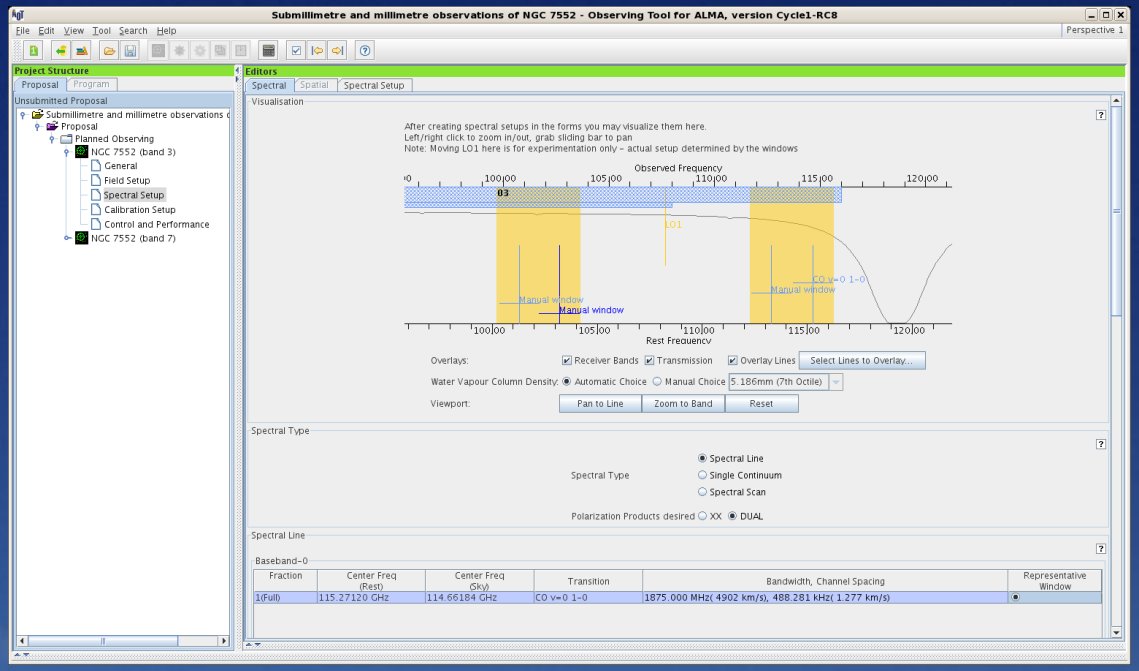

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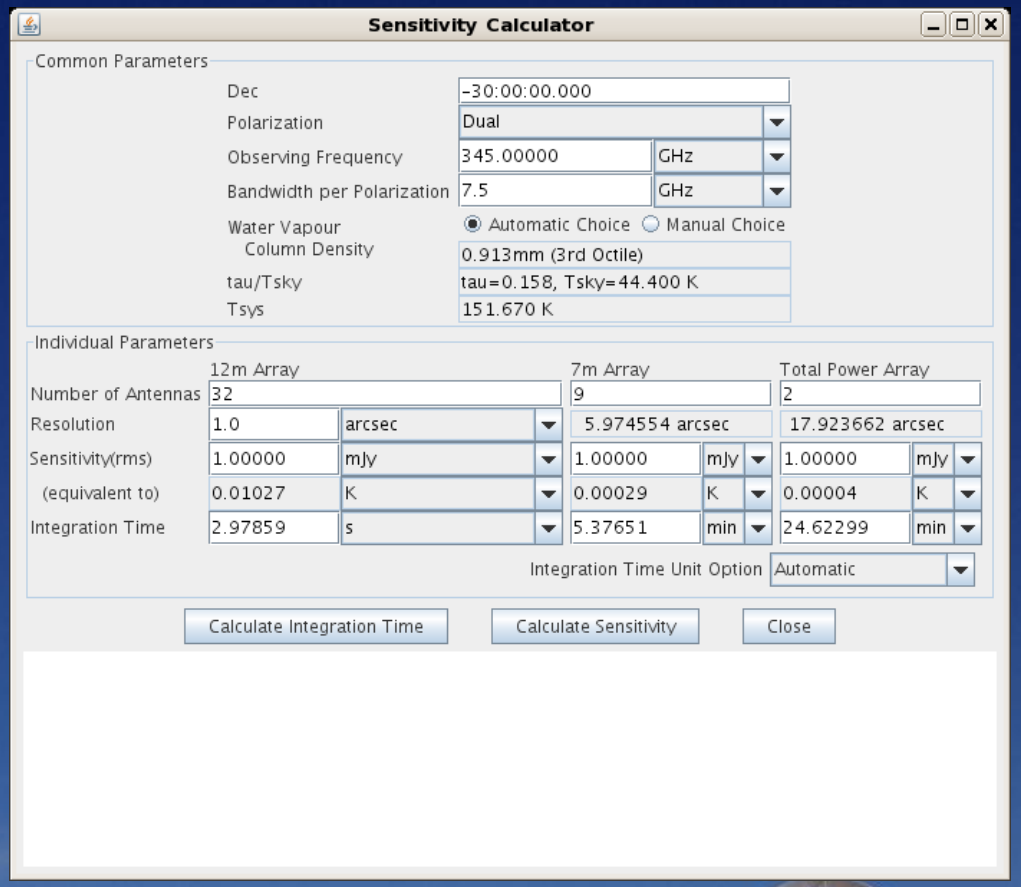

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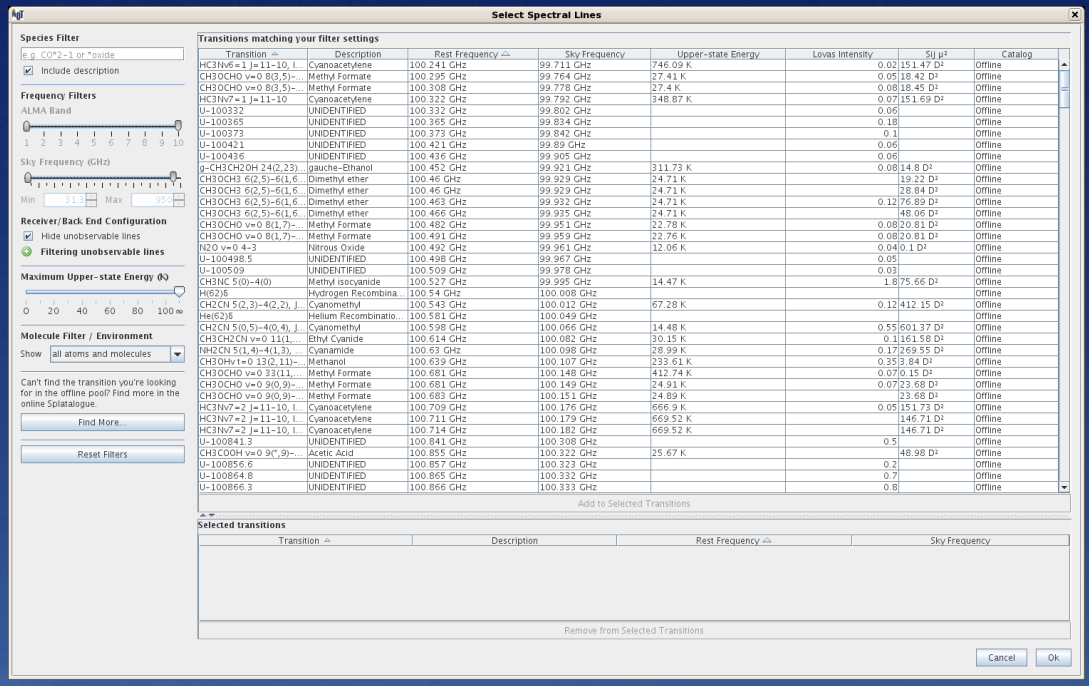
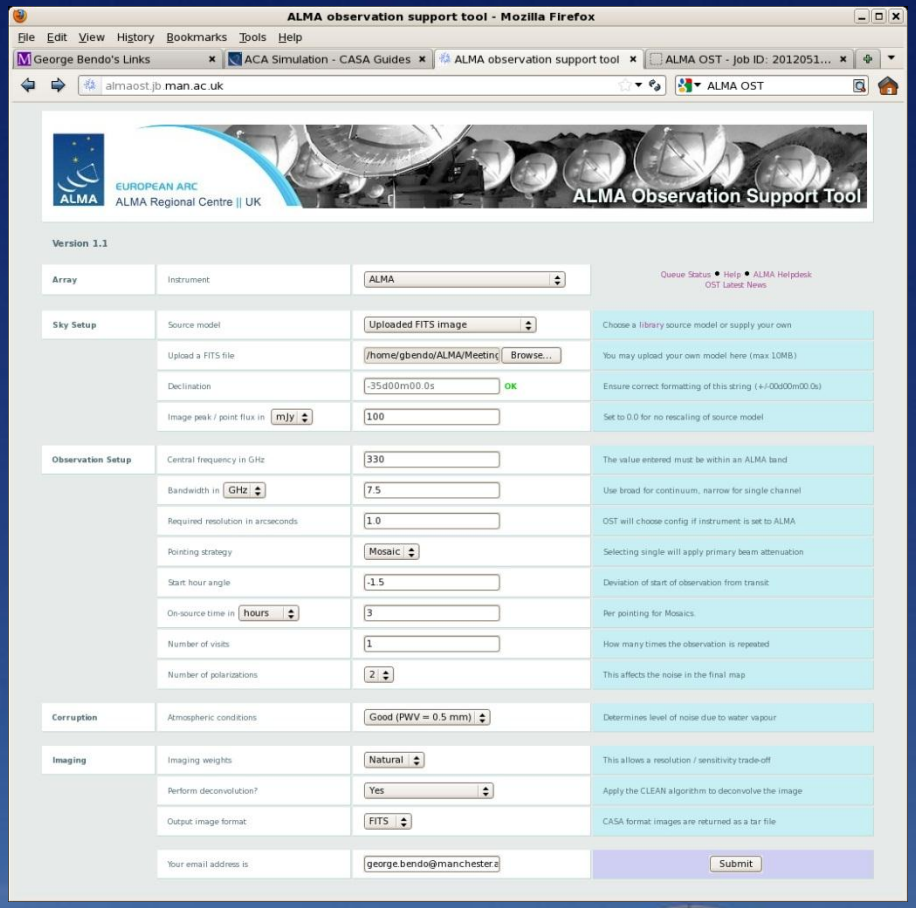


Observing Support Tool

almaost.jb.man.ac.uk

The Observation Support Tool can be used to simulate ALMA obser-vations given any input image.

The OST is currently maintained by the UK ARC Node.



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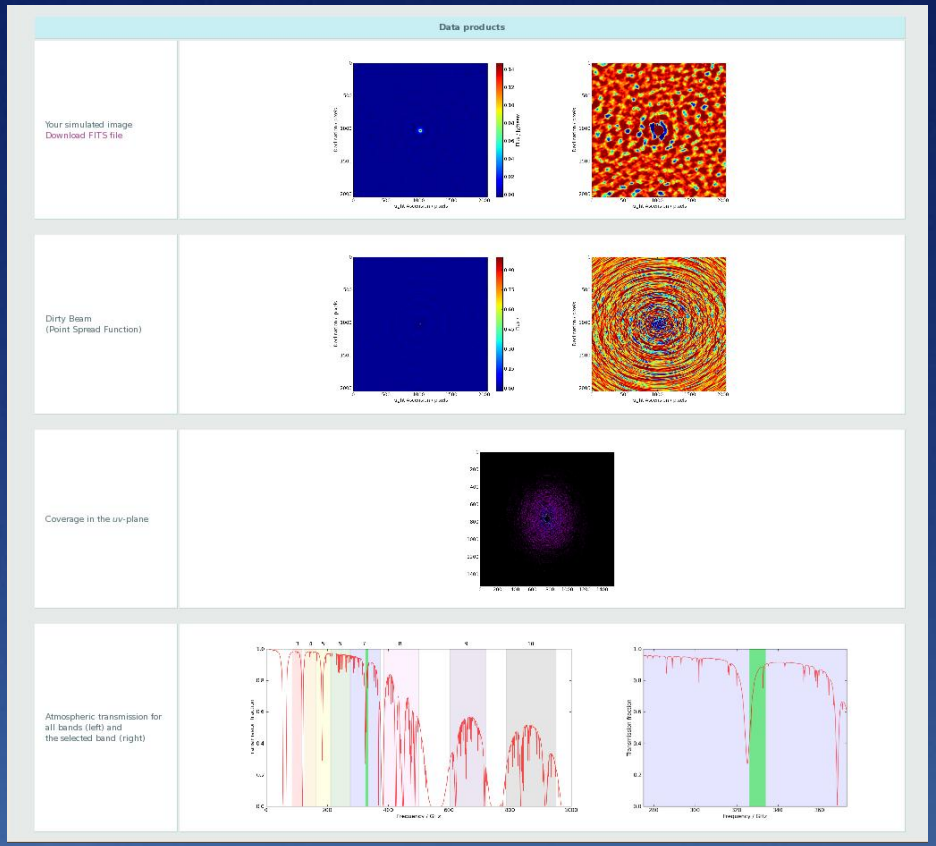

Observing Process

Observing Process

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.