Subject: [allemploy] FYI: May 2010 MONTHLY CALENDAR OF THE ALMA PROJECT at NRAO
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MONTHLY CALENDAR OF THE ALMA PROJECT at NRAO
May 2010

********** THIS MONTH **********
ALMA Grows to a Handful

On 29 April Vertex antenna DV03 was moved to the Array Operations Site (AOS) at 16500 ft elevation, bringing the array there briefly to four antennas--one antenna was taken back down to the Operations Support Facility for upgrades, and the array fell back to three. In the third week of May it returned to the AOS to be placed on pad J504 and on the 20th of May amplitude closure was achieved on the four antenna array.

On 31 May Vertex antenna DV05 arrived on pad T701, a location eventually slated to support one of the Atacama Compact Array (ACA) 12m antennas.

Astronomers and engineers soon succeeded in linking all five antennas for commissioning activities. The ten baselines available between these antennas offer a marked improvement in ALMA's imaging ability; by Early Science about a year from now sixteen antennas will provide 120 baselines and enable scientists to explore the southern sky with unprecedented sensitivity and precision. The integration of the third quadrant of the 64-station correlator continues at the Array Operations Site Technical Building nearby the array. Tests of the ACA correlator from NAOJ are also proceeding at the AOS TB.

See a photo at http://science.nrao.edu/alma/index.shtml

Meanwhile at the 2900m Operations Support Facility (OSF) another three antennas await their journey to high altitude. DV07 finished its holographic surface accuracy verification. Meanwhile, the NRAO Front End Integration Center in Charlottesville delivered a new Front End component, the first to contain six receiver cartridges. This unit provides capability at wavelengths of 2mm and .6mm by incorporating these cartridges, delivered to NRAO from NAOJ where they are manufactured. This Front End also passed through all of its test at the cadence required for the ALMA construction schedule.

During June, commissioning continues. One antenna is scheduled to be moved to longer baselines for tests best performed in that configuration. Another antenna will move back to the OSF for installation of some updated components. It is expected that more antennas will be accepted by ALMA from their contractor during the month, moving from the contractor facility to the OSF for system assembly, integration and verification there.

Past issues of this Calendar may be viewed at
http://www.cv.nrao.edu/~awootten/mmaimcal/ALMACalendars.html

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General Happenings
Photos of activity may be found at NRAO eNews:
http://www.nrao.edu/news/newsletters/

Sky: Mars joins Regulus in Leo as Venus lights the Sunset. Saturn

glows just to the west. Comet C/2009 R1 (McNaught) will pass closest to Earth on 15 June, on its way to solar rendezvous 2 July. Look in the northeast sky in Perseus before sunrise to see its 5th magnitude glow. By perihelion it should be 2nd magnitude, though a difficult object in the solar glare for optical observers--it passes within 0.4 AU of the Sun on its first passage to the inner solar system before it is flung back to deep space. Radio observers should have few problems observing the comet, the 54th discovered by McNaught; it returns to the southern hemisphere where it was discovered in August.

AOS: Five antennas are at the AOS. The second Mitsubishi antenna is expected to arrive before long. Installation of the third quadrant of the 64-antenna correlator is proceeding.

OSF: A seventh Vertex antenna is expected to arrive from the vendor very soon. The first erected European antenna has moved under power in both axes.

NAASC: A "Preparing for ALMA" session was held as part of the 12th Synthesis Imaging Workshop in Socorro in June (see below). Over 150 students participated in the Workshop which included tutorials on data reduction and on ancillary programs. Also, end-to-end user tests have been executed under the guidance of the JAO. These have included proposal submission, technical assessment, judgement before a mock review committee, generation of observing instructions ('schedule blocks') for successful proposals and proposal tracking. d

The Fifth NAASC Workshop will highlight transformational science enabled by modern high resolution wideband spectroscopy. 'ALMA: Extending the Limits of Astrophysical Spectroscopy' will be held Jan 15-17, 2011 in Victoria, B. C. after the 217th AAS meeting 9-13 Jan 2011 in Seattle. Watch for an announcement!

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DAILY CALENDAR (Times EDT/EST) see
https://wikio.nrao.edu/bin/view/ALMA/AlmaCalendar

Jun 8 - 15	12th Synthesis Imaging Workshop	Socorro, NM	
Jul 13-18	NAASC Operations Review	Chile	
Aug	ALMA System Review III	TBD	
Oct 7-8	CSV Status Update	Chile	
Oct 11-12	SciOps Readiness Review	Chile	
Oct 25-28	Annual ALMA External Review	Chile	
Nov 10	Observatory Readiness Review	Chile	
Nov 16-18	ALMA Board Meeting	Chile	

********** TECHNICAL NEWS **********

**********ALSO OF INTEREST**********

ATCA Deadline 15 June

Astronomers from Australia and overseas are invited to apply for observing time on Australia Telescope National Facility telescopes. Observing time is awarded by a Time Assignment Committee on the basis of the merits of the proposed research. Please note that the ATNF does not employ telescope operators and observers are required to be present for their observations.

Observing Semester	Closing Date	Semester	TAC meeting
OCT (OCTS)	Jun 15	Oct 01 - Mar 31	July

See: http://www.atnf.csiro.au/observers/

The Call for Proposals for Basic Science observations with the Stratospheric Observatory For Infrared Astronomy (SOFIA) is now open. SOFIA recently completed its first science light flight 26 May. The deadline for

responding to the call is Friday, July 30, 2010.
The Basic Science program will consist of about 75 hours of on-sky exposure with either the FORCAST mid-infrared camera or the GREAT sub-millimeter heterodyne spectrometer. The observing time is expected to take place during a 2-3 month interval within the time frame of March 1 through August 31, 2011.
Documents needed to consider observational possibilities and constraints, and to prepare and submit observing proposals, can be found at:
http://www.sofia.usra.edu/Science/proposals/basic_science

Congratulations to the Hyabusha team! The plucky spacecraft, once thought lost, plunged through the atmosphere 13 June. The beacon signal from its capsule, perhaps returning a sample of asteroid Itokawa, has reportedly been picked up in the Woomera region in Australia.
Watch reentry at http://bit.ly/8XCGjY
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Please send information for upcoming calendars by Friday evening of the preceding biweekly period to Jennifer Neighbours or Al Wootten via e-mail (jneighbo at nrao.edu or awootten at nrao.edu).

The calendar will be issued between late Friday and sometime on Monday by e-mail to all NRAO scientific staff members and anyone else interested. A specific mailing list, alma-info, has been created for anyone wishing to receive it.
Past issues are available at
http://www.cv.nrao.edu/~awootten/mmaimcal/ALMACalendars.html