Subject: [allemploy] FYI: July MONTHLY CALENDAR OF THE ALMA PROJECT at NRAO
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Date: 7/28/2010, 12:35 PM
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MONTHLY CALENDAR OF THE ALMA PROJECT at NRAO July 2010

On 8 July, ALMA antenna PM02 was moved from the 2900m altitude Operations Support Facility (OSF) to the 5000m altitude Array Operations Site (AOS), the second NAOJ antenna to make this long trip. It joined four antennas already at the high elevation site. Its sibling, PM03, had returned to the OSF for planned upgrades a few weeks earlier; it will return to the AOS in August.

Antenna DV04 joined these five on 26 July, bringing the array to six and maintaining the pace needed to meet the project target of eight antennas at the AOS by the end of August. The twenty-eight baselines available between these eight antennas will offer a marked improvement in ALMA's imaging ability. With five antennas, the array provided ten baselines; imaging excellence increases approximately as the square of antenna number.

While essentially all of the ALMA hardware is in place, the software that enables its use is deployed in incremental stages at six month intervals. Functionality of the hardware can only be fully tested according to the ability of the software releases to accommodate the tests. A new software release containing many new capabilities, was released in June and installed on the array. A particular focus now is, of course, the testing of capabilities which are scheduled for availability during ALMA Early Science, expected next year.

Antennas are moved to the AOS after being provisionally accepted at the contractor's site and moved to the OSF. Each antenna is outfitted with electronics and put through exhaustive tests at the OSF by the Assembly, Integration and Verification (AIV) team.

Antenna DV08 recently became the tenth ALMA antenna to begin the process, after its 13 July move from the contractor's on-site facility to its new ALMA home. After outfitting and initial tests, the antennas at the OSF are normally combined into a two-element interferometer for final tests. This interferometer also provides a staging platform for new software, as was done for the recent release. With the move of DV04, three antennas are currently undergoing testing at the OSF and interferometry there will undergo a short hiatus as tested antennas move to the AOS.

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

Observing with ALMA As the array moves toward Early Science, it is time to think of taking advantage of that first observing opportunity. An "Observing with ALMA" session will be held during the 9-13 Jan 2011 AAS meeting in Seattle, at 2pm on 12 January.

Immediately following on 15-17 January 2011, the Fifth NAASC

Workshop 'ALMA: Extending the Limits of Astrophysical Spectroscopy', to be held in nearby Victoria, B. C. will highlight transformational science enabled by modern high resolution wideband spectroscopy. Pre-registration is open! See http://www.almatelescope.ca/Spectroscopy2011/ Personnel Shifts Rick Murowinski's appointment as Project Engineer came to an end on June 30th; Rick has returned to his home organization, the Herzberg Institute for Astrophysics. East Asian Project Scientist Koh-ichiro Morita will move to the Joint ALMA Observatory as System Verification Scientist from 1st August after about three years in his present position. He will be succeeded as East Asia Project Scintist by Masao Saito, who has served as ALMA-J Antenna Lead, who brings significant experience in interferometric science, having been a commissioning scientist in the SMA project. Hajime Ezawa succeeds Saito as an antenna engineering scientist. _____ Government In Congress, the Senate Appropriations Committee approved the FY 2011 Commerce, Justice, Science Appropriations Bill. This bill, S. 3636, provides funding for the National Science Foundation. Accompanying this bill is Senate Report 111-229, which states that the Committee's recommendation includes funding at the requested level for the Atacama Large Millimeter Array [ALMA]. The equivalent House Subcommittee has approved its version of this bill. Past issues of this Calendar may be viewed at http://www.cv.nrao.edu/~awootten/mmaimcal/ALMACalendars.html General Happenings Photos of activity may be found at NRAO eNews: http://www.nrao.edu/news/newsletters/ Sky: New moon occurs on 9 August. The Perseid meteor shower will bejewel

the dark night sky on 11 and 12 August. If you wish to focus your views on the best time, watch at 1:00UT on Aug 13--meteors are already appearing though and plenty will appear for North American observers on Thursday night, Aug 12th through Friday morning. Venus, Mars, Saturn and even Mercury light the evening sky; the triple conjunction of the first three should be especially arresting. C/2009 R1 (McNaught) reached 5th magnitude rounding the Sun in July and will reappear at 9th magnitude in southern hemisphere skies by late August; it will never brighten northern skies again.

AOS: Six antennas are at the AOS with the early July arrival of PM02 and the late month arrival of DV04.

OSF: The tenth antenna, DV08, was received by ALMA (see above). Three accepted antennas remain as of the end of July. A backup structure was hoisted onto a mount to assemble a third AEM antenna in the contractor's facility. Additional 7m antennas are due for shipment from Japan late in the month; during the month the 15th Vertex antenna arrived at that contractor's facility.

NAASC: An "Observing with ALMA" session will be held during the Seattle AAS meeting. Immediately following, the Fifth NAASC Workshop will highlight transformational science enabled by modern high resolution wideband spectroscopy. Pre-registration is open! See <u>http://www.almatelescope.ca/Spectroscopy2011/</u> '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. A review of the ALMA Operations proposal for 2012-2015 was held by NSF in Chile in 2010 July. ****** DAILY CALENDAR (Times EDT/EST) Oct 7-8CSV Status UpdateOct 11-12SciOps Readiness Review Chile Chile Oct 25-28 Annual ALMA External Review Chile Nov 10Observatory Readiness ReviewNov 16-18ALMA Board Meeting Chile Chile _____ 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. 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 _____ CARMA CARMA, the Combined Array for Research in Millimeter-wave Astronomy, is accepting observing proposals for its 2011a semester, which will extend from 1 November to 30 June 2011. The CARMA deadline is August 31. See http://www.mmarray.org/ -----IRAM A new CALL FOR PROPOSALS for IRAM telescopes is available at the web page: http://www.iram.fr/GENERAL/calls/w10/w10.pdf The deadline for proposal submission is 14 September at 17:00 CEST (UT+2 hours); the proposal submission facility will be opened on 24 August, 2010. Please note that the deadline for submission of proposals will *exceptionally be on Tuesday*, i.e. not the usual Thursday. 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

Allemploy mailing list Allemploy@listmgr.cv.nrao.edu http://listmgr.cv.nrao.edu/mailman/listinfo/allemploy