

BIWEEKY CALENDAR OF THE ALMA PROJECT at NRAO  
7 December - 21 December 2009

\*\*\*\*\* THIS FORTNIGHT\*\*\*\*\*  
ALMA Moves a Third Antenna to 5000m

Please see:

[http://www.nrao.edu/news/newsletters/enews/enews\\_2\\_12/enews\\_2\\_12.shtml#alma](http://www.nrao.edu/news/newsletters/enews/enews_2_12/enews_2_12.shtml#alma)

On 20 November, a third antenna joined the two ALMA antennas undergoing verification phases of interferometry at the 5000m Array Operation Site (AOS). The two-station interferometer at the AOS recorded fringes at a wavelength of 456 microns on the night of 21 November. Observations of the water vapor maser spectral line in the evolved star VY CMa at 658 GHz were made in good conditions (0.8 mm precipitable water vapor (PWV)) on a 160 meter baseline (fringe spacing 0.6 arcseconds). Integration and testing of an upgraded software system is under way as verification proceeds towards the first three-antenna interferometry, adding baselines of 200 and 116m to the fledgling array. One hundred fifty-two of the 192 antenna pads at the AOS have passed preliminary acceptance. In January, pads in the Atacama Compact Array (ACA) area will be available, allowing interferometry on shorter baselines.

At the 3000m elevation Operations Support Facility (OSF), holography on the two most recent antennas to join the flock has resulted in surface adjustments to the precision levels attained on the other antennas as optical pointing tests bring those antennas to a point where radiometric tests can begin. A new front end package arrived from the Front End Integration Center (FEIC) at the NRAO Technology Center to undergo testing and deployment in one of the antennas. A fifth frontend should be shipped from the FEIC in Taiwan by the end of the year. Interferometry at the OSF will resume with the newly accepted antenna and front ends in January. The control of the antennas at the AOS and the OSF has moved from temporary quarters to a fully outfitted control room in the OSF Technical Facility.

Further antenna acceptances will occur during the next month. In the contractors' camps, an AEM antenna has been outfitted with a dummy front end and back end racks in an early test of antenna cabin accommodations. Panels are also being attached to the AEM backup structure. The first of the 7m antennas from Melco destined for the ACA is being erected. New antenna shipments arrive often at all of the contractor camps; the arrival of materiel has become so frequent that it is difficult to assess how many antennas' worth of parts are on site.

Figure at the link given above:

Figure 1: Three antennas in the fledgling ALMA array track a source early on Thanksgiving morning at the ALMA site.

-----  
Best wishes for the Holidays to all!  
-----

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

\*\*\*\*\*  
General Happenings

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

A calendar of NAASC events may be found at:  
[http://www.cv.nrao.edu/naasc/alma\\_calendar.shtml](http://www.cv.nrao.edu/naasc/alma_calendar.shtml)

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

Jan 1 2010 Happy New Year!  
Jan 4-7 2010 215th AAS Meeting, Washington.  
Jan 5 NRAO Town Hall  
Jan 7 NAASC Poster Session

\*\*\*\*\* TECHNICAL NEWS \*\*\*\*\*  
\*\*\*\*\*ALSO OF INTEREST\*\*\*\*\*

-----  
\*\*\*\*\*  
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/mmailcal/ALMACalendars.html>