

Subject: [allemploy] 03/28/05 BIWEEKLY CALENDAR OF THE ALMA PROJECT at NRAO
From: Al Wootten <awootten@nrao.edu>
Date: 3/29/2005, 2:00 PM
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BIWEEKLY CALENDAR OF THE ALMA PROJECT at NRAO
March 28, 2005 -- April 11, 2005

***** THIS FORTNIGHT*****

A review of the ALMA Central Variable Reference will be held 29 March in Charlottesville.

A meeting of ALMA Executives will be held Monday, 4 April in Pasadena. On Tuesday and Wednesday, the ALMA Management Advisory Committee will meet, also in Pasadena. This will be followed on Thursday and Friday by a meeting of the ALMA Board. Saturday morning there will be a meeting of the bilateral partners.

APEX should soon be into commissioning again. The VERTEX engineers are on Chajnantor for the final installations.

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

General Happenings

Santiago: Most JAO and Chilean PMCS members were in Munich.

OSF: If this facility is tendered in April, as planned, provisional acceptance would occur August 2007, followed by outfitting/instrumentation. It was decided that interferometry will occur at the OSF.

Tucson: Prototype tests continue.

ATF: Post-fast switching antenna measurements underway. First fringes now not expected until early 2006. First ALMA Frontend may be delivered to System Integration May 2006 (hopefully earlier).

ESO: Members of the JAO met with IPT leaders in Garching to assess the ALMA rebaselining efforts. 35 Action Items were allocated and 5 Decisions were recorded. Among these were an ALMA spares policy and a decision to equip a Front End Integration Center at the OSF. The next meeting will be at the OSF during the last ten days of September.

DAILY CALENDAR (Times EST)

Mon 28 March

9:30 AM-10:30 AM: NA Project Office Staff Meeting

Tue 29 March

4:00 PM-5:00PM: NAScienceIPT teleconference (open to all interested parties) (434)296-7082

Agenda: <http://www.cv.nrao.edu/~awootten/mmaimcal/>

Wed 30

Thu 31

9:30 AM-11:00 AM: Management IPT Teleconference

Fri 01 April

Sat 02

Sun 03

Mon 04

10:00 AM-11:00 AM: Normal ASAC Teleconference postponed one week to 12 Apr.

9:30 AM-10:30 AM: NA Project Office Staff Meeting
10:30 AM-11:30 AM: JAO IPT Telecon
11:30 AM-12:30 PM: NA DH telecon

Tue 05

All day event: AMAC Meeting

4:00 PM-5:00PM: NAScienceIPT teleconference (Imaging Group telecon).

Wed 06

8:00 AM-4:00 PM: AMAC Meeting

2:00 PM-6:00 PM: ALMA Board Meeting

4:00 PM-6:00 PM: Joint Board/AMAC Meeting

Thu 07

All day event: ALMA Board Meeting

9:30 AM-11:00 AM: Management IPT Teleconference

Fri 08

8:00 AM-2:15 PM: ALMA Board Meeting

5:52 PM-6:46 PM: East Coast Partial Solar Eclipse; mid eclipse is 6:20 p.m.
(Virginia times) Wear Eye Protection!

Sat 09

Sun 10

***** UPCOMING EVENTS *****

ALMA Calendar--see also <https://wiki.nrao.edu/bin/view/ALMA/NAASC>

- * 29 March 2005 -- Central Variable Reference review, Charlottesville
- * 4 April -- Executive meeting, Pasadena
- * 5-6 April 2005 -- AMAC Face-to-face meeting, Pasadena, CA.
- * 7-8 April 2005 -- ALMA Board Face-to-face meeting, Pasadena, CA.
- * 9 April 2005 -- Bilateral project meeting
- * 4-5 May 2005 -- WVR PDR, OSO, Gothenburg, Sweden
- * 30 May - 10 June -- PDRs for ACA Correlator, B4, B8 may occur in Tokyo.

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

ALMA Memo # 519 An alternative scheme of round-trip phase correction
by Hitoshi KIUCHI (NAOJ), Masoto ISHIGURO (NAOJ)
2005-02-18

In photonic LO (Local) system, a two-wavelength optical beatnote is transmitted by optical fiber from the AOS technical building to antennas. At an antenna, a photo mixer converts the optical beatnote into a microwave-signal which works as a reference signal for the Worm Multiplier Assembly (WMA). The compensation of instability of transmission line is essential for interferometer to obtain fringes, and is an indispensable process for keeping signal coherence. However, it is delicate to measure an optical cable length delay, because the measured delay includes polarization mode dispersion (PMD). In order to accomplish the phase compensation on the optical fiber, we consider a double-difference method with a polarization alignment servo system.

In a few days, you will be able to view a pdf version of ALMA Memo #519:
<http://www.alma.nrao.edu/memos/html-memos/alma519/memo519.pdf>

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

ALMA: Imaging at the Outer Limits of Radio Astronomy
Contribution to IEEE ICASSP meeting, Philadelphia (Conf CD in library ER)
by Al Wootten and Darrel Emerson

The Atacama Large Millimeter/Submillimeter Array (ALMA)
is an international telescope project currently under construction in Northern Chile. Antennas arrayed over baselines up to 18 km in extent will constitute over 7000 m² of collecting area, enabling ALMA to provide images of unprecedented clarity and detail. Unlike existing radioastronomical arrays, ALMA will combine interferometric and single telescope data, providing a complete range of spatial scales with complete flux recovery. Six of a planned ten planned receiver bands will be built during the construction phase; eventually ALMA will

cover all atmospheric windows in the spectral wavelength range from 7mm to 0.3 mm. The combination of sensitivity, directivity, full UV coverage from the large number of individual antenna elements, precision calibration and the breadth of coverage, along with the extremely dry Chajnantor site at 16500 feet, will enable the creation of superb images of the celestial structures which emit millimeter and submillimeter photons, the most abundant photons in the Universe. Special equipment will continuously monitor atmospheric parameters, in particular the water vapor content along the telescopes' line of site, to permit real time correction of atmospheric perturbations to the observed wavefront. The observer will have a range of sophisticated data analysis techniques to be able to compensate for atmospheric and instrumental perturbations to the raw data.

View a pdf version of ALMA at the ICASSP:

<http://www.cv.nrao.edu/~awootten/mmaimcal/ALMAOuterLimits.pdf>

Please send information for upcoming calendars by Friday evening of the preceding biweekly period to Jennifer Neighbours or Al Wootten via e-mail (jneighbo@nrao.edu or awootten@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/allemplay>