

Subject: [allemploy] FYI: 20 Nov 2006 BIWEEKLY CALENDAR OF THE ALMA PROJECT at NRAO
From: "Alwyn Wootten" <awootten@nrao.edu>
Date: 11/29/2006, 10:55 AM
To: anasac@nrao.edu, allemploy@nrao.edu, alma-info@nrao.edu, almasci@nrao.edu

BIWEEKLY CALENDAR OF THE ALMA PROJECT at NRAO
20 November 2006 - 4 December 2006

***** THIS FORTNIGHT*****
Happy Thanksgiving!

Talks (invited and contributed) from the recent and very successful Science with ALMA: a new era for Astrophysics, held 13-17 Nov in Madrid, will be available on the conference webpage. It is expected that the links will be active around December 15th.

At the conference, new stills and animations of ALMA artist concepts were provided by ESO. Copies of the stills are available at <http://www.eso.org/projects/alma/> and will soon appear in the NRAO image gallery. Also, the tenth edition of the European ALMA Newsletter, featuring the recent workshop on water vapor radiometry, is available from that website.

The Sept/Oct 2006 ASAC report may be found at:
http://www.alma.nrao.edu/committees/ASAC/asacreport_2006sept.pdf

Past issues of this Calendar may be viewed at
<http://www.cv.nrao.edu/~awootten/mmailcal/ALMCalendars.html>
See also the JAO ALMA Calendar overview at:
http://www.alma.cl/alma_project

General Happenings

Sky: Mercury is at greatest elongation, 20° west of the Sun. It's low in the dawn. Fomalhaut shines highest due south right after dark, far left of the waxing Moon. Fomalhaut hosts a debris disk which will be imaged with ALMA. Saturn (magnitude +0.4, in Leo), rises around 10 or 10:30 p.m. The recently discovered 400 km ice fountains of its 500 km moon Enceladus will make a good target for ALMA imaging (finest beam 50 km).

Santiago: Local hiring of AIV staff continues. Some staff are now arriving at North American sites. The ALMA Board recently approved the 2007 Construction and Operations budgets.

AOS (Array Ops Site, 16570ft altitude): Finish work at the Technical Building is well progressed. Much of the final equipment to be installed is now on the site.

OSF (Ops Support Facility, 9600ft altitude): The AIV temporary building was completed on 7 Nov 2006, on schedule. Holography tower is under construction. Finished utilities installations in Vertex and MELCO SEF Sites (except Fiber Optics) November 15, 2006, The ALMA contractors camp capacity of 145 beds is exhausted. Contractor's camp extension work was approved by NSF and is proceeding toward a mid-December delivery date. Currently there are approximately 256 persons working at the site of which approximately 124 use the ALMA and Contractor's lodging facilities.

NTC: The first beam map (B6, 1.3mm) in a production cryostat was produced. The first set of Band 3 warm optics shipped to the NA FEIC, where the first

B3 (3mm) cartridge, serial number 2, arrived, was unpacked and inspected in preparation for PAS. PAS of the Band 9 Cartridge #1 at the NA FEIC is scheduled for mid Dec. 2006. At this point a complete complement of bilateral cartridges will be available at the NA FEIC.

NAASC: Operations plan meetings occurring daily week of 27 Nov.
F. DeLucia visiting from Ohio State to discuss ALMA line frequency needs.

AOC: Rodrigo Olguin (EE) started with AIV team. Work concentrates on support of ATF activities, including the move of the prototype system to the prototype antennas located there.

ATF: Achieved basic completion of Holography functionality at ATF. The BEND AEC antenna racks were removed from the AOC on Nov 13 and moved onto the AEC antenna on Nov 14. Checkout will be done the week of Nov 20. The move of the proto-correlator and central LO will start the week of Nov 27. The BEND antenna rack installation in the Vertex antenna is planned for the week of Dec 04.
A proposed date for a meeting to review the results of the laboratory phase of Prototype System Integration (PSI) is 24 and 25 January 2007 in Socorro.

ESO: The ESO Finance Committee (FC) approved a number of key items on 6 and 7 November 2006:
* Approval to negotiate a final contract for several important EU FE IPT work packages, including those for production of ALMA Cryostats and 4 - 8 GHz cryogenic amplifiers.
* A contract extension for the set up of the EU FEIC at RAL is being prepared.
* The proposed extension of the Computing agreements with European Institutes that are already part of the CIPT, up to max 2011.

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

- Mon 20 Nov -
- Tue 21 Nov -
- 10:30 AM-11:30 AM: JAO IPT Telecon
- Wed 22 Nov
- Thu 23 Nov - Thanksgiving Day, US and Japan
- Fri 24 Nov - NRAO Holiday
- Sat 25 Nov
- Sun 26 Nov
- Mon 27 Nov

- B7 Cartidge No 2 PAI scheduled.
- Tue 28 Nov
- 1:29 AM: First-quarter Moon.
- 10:30 AM-11:30 AM: JAO IPT Telecon
- Noon: NAASC Tuesday Lunch: Weeds, Flowers, Clutter and a New Approach to Removing the Spectroscopic Bottleneck in Millimeter and Submillimeter Astrophysical Spectra - A Discussion Frank De Lucia from The Ohio State University
- Wed 29 Nov
- 9:30 AM: ALMA Science IPT Telecon
- Thu 30 Nov
- Fri 1 Dec
- 16:30 Chile: "Millimeter Detection of Spitzer selected hyperluminous infrared Starburst Galaxies" Dr. Alain Omont, Institut d'Astrophysique de Paris, France. ESO Conference Room, Vitacura.
- Sat 2 Dec
- Sun 3 Dec
- Mon 4 Dec

Fourth Chilean School of Astrophysics--Interferometry in the Epoch of ALMA and VLTI <http://www.astro.puc.cl/school/>

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

Dec 6		ASAC Telecon
Dec 6-7	all day	ACA correlator CDR Japan
Dec 6-8	all day	Molecular database meeting Leiden
Dec 7		ALMA Board telecon
Dec 14	all day	LLC and LO Photonic Rx DR Cville
Dec 29	1800UT	ANASAC telecon
Jan 16-17 '07	all day	Transporter FDR
Jan 18 '07		ALMA Board telecon
Jan 29-30 '07	all day	B9 Cartridge CDR
Jan 30	all day	AEM antenna PPDR
Feb 6-7		B9 cartridge CDR Groningen
Feb 15		ALMA Board Telecon Telecon

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

ALMA Memo # 560: Methods for the Characterization and Measurement of the Gain Fluctuations of Cryogenic Amplifiers

Authors: J. D. Gallego, I. Lopez, C. Diez, A. Barcia

Abstract: Since ALMA instrument will have low noise receivers with very large instantaneous bandwidth, gain stability should be carefully specified to avoid limiting the sensitivity of the total system. This memorandum reviews the methods for the characterization of gain stability in the time and frequency domain and presents examples of experimental setups used for its measurement in the case of cryogenic amplifiers of the type used in the IF of ALMA as well as its practical limitations. Special attention is paid to some important but not widely known effects, as the dependence of gain fluctuation with bias and its variation across the band of the amplifier. Finally, the compliance of one prototype 4-12 GHz InP cryogenic IF amplifier with the requirements of ALMA project is discussed.

View a pdf version of ALMA Memo #560 which will be at:
<http://www.alma.nrao.edu/memos/html-memos/alma560/memo560.pdf>

ALMA Memo # 563: Suggestions for SMA Connector Use on ALMA
Author: A. R. Kerr

Abstract: With over 600 receiver cartridges, ALMA will have several thousand SMA connectors, many of which will be subjected to periodic cryogenic cooling. At present, ALMA has no specifications on the proper torquing of SMA connectors nor on whether any type of staking should be used. This note summarizes the experience of a number of engineers involved with receiver construction for radio astronomy and satellite instruments, and suggests SMA connector tightening procedures for ALMA.

View a pdf version of ALMA Memo #563 which will be at:
<http://www.alma.nrao.edu/memos/html-memos/alma563/memo563.pdf>

*****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>

Allemploy mailing list

Allemploy@listmgr.cv.nrao.edu

<http://listmgr.cv.nrao.edu/mailman/listinfo/allemploy>