

Subject: [allemploy] FYI: 6/20/05 Biweekly Calendar of the ALMA Project at NRAO
From: Al Wootten <awootten@nrao.edu>
Date: 6/22/2005, 5:51 PM
To: allemploy@nrao.edu, anasac@nrao.edu, alma-info@nrao.edu

BIWEEKLY CALENDAR OF THE ALMA PROJECT at NRAO
June 20, 2005 -- July 3, 2005

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

As some of you may be aware, we have received news from ESO of a delay in their ALMA antenna procurement process.

In a meeting earlier this week, the ESO Council strongly reaffirmed their strategic commitment to ALMA. However Council requested a fuller understanding of the overall financial situation as a result of the rebaselining exercise, which is not yet completed. Therefore ESO is not yet in a position to place an antenna contract.

We here in North America, like ESO, remain 100% committed to the success of ALMA and, along with NSF and NRC, are working very closely with our colleagues in Europe and on the ALMA Board to help bring a rapid and successful solution to this situation.

K. Y. Lo
Adrian Russell

The ALMA Board met 21-22 June in the Lissabon Zaal of the Dutch Ministry of Education, Culture and Science. The Minister opened the meeting with remarks.

Band 4 and Band 8 cartridges will have Preliminary Design Review at NAOJ in Japan this week.

A Report was released Friday 10 June by the National Academies. The report assesses the impact of a possible descope of the ALMA to 40 or 50 antennas on its technical performance and scientific program.

You may see a version of the report at:
<http://books.nap.edu/catalog/11326.html>
though the table there lists an ALMA of 50 50m antennas as a descope option.

Excerpt:
"Two of the three Level One requirements, involving sensitivity and high-contrast imaging of protostellar disks, will not be met with either a 40- or a 50-antenna array..."Severest degradation is in image fidelity, which will be reduced by factors of two and three with descopes to 50 and 40 antennas, respectively."

For a more thorough discussion, please see the Feb 2005 ASAC Report.

As you know, the committee structure in the House was changed this year so NSF and NASA are in with a different lot of agencies.

H.R.2862: Science, State, Justice, Commerce, and Related Agencies Appropriations Act, 2006
House Report 109-118 was just released.
National Science Foundation is increased \$171 million over last year and \$38 million above the budget request. Total funding is \$5.64 billion. Includes \$4.38 billion for research, \$157 million over last year; and \$807 million for education and human resources, \$70 million above the request.

From

http://thomas.loc.gov/cgi-bin/cpquery/?&db_id=cp109&sid=cp109s7FJj&r_n=hr118.109&item=&sel=TOC_354405&

we learn:

The Committee recommendation includes funding for the following major projects: \$49,240,000 for Atacama Large Millimeter Array construction; \$50,620,000 for EarthScope; \$50,450,000 for the IceCube Neutrino Observatory; and \$57,920,000 for the Scientific Ocean Drilling Vessel. The recommendation does not provide for any new project starts, as none were requested."

Mark Gurwell noted that if 3C454.3 continues to brighten exponentially that we will need to institute a zone of avoidance in the pointing software to protect the Smithsonian Submm Array (see Test Log Entry 9513).

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

See also the ALMA Calendar overview at:
<https://wikio.nrao.edu/bin/view/ALMA/AlmaCalendar>

ALMACalendar6Jun05.txt

General Happenings

Santiago: Rebaselining: Third Version frozen and distributed; insertion into COBRA begins; SOW review underway; Risk register information being evaluated.

OSF: Start of Camp Manager services is scheduled for 01-Jul-2005. Contracting for First Aid Services is under way (by JAO). Service start is scheduled for 01-Jul-2005. Ambulance procurement is under way. Delivery expected on 01-Aug- 2005. Construction start for the continuation of the road construction above km 28 is scheduled for 01-Jul-2005. The extension of the ALMA camp to 30 bed capacity has been substantially completed. Currently there are approximately 27 persons working at the site

AOS: A large earthquake which struck much further north in Chile did not cause damage at any ALMA site. Analysis of ALMA seismometer data is in process.

Tucson: Tucson, the central LO, antenna LO and RF simulator racks are being disassembled and packed for shipping to NRAO-Socorro for the beginning of combined system testing. Tucson lab, equipment, furniture packed and moved June 27.

John Fitzner, Frank Gacon leave NRAO - July 30. Thanks guys, and best wishes!

ATF: A draft Water Vapor Radiometer (WVR) Preliminary Design Review report is now available for internal review. Preparation of WVR field testing at the SMA, instead of the ATF, is underway. Shepherd and Hale reviewed new interim control GUIs at the ATF.

AOC: Central LO rack delivered to Socorro from Tucson: June 22
Computing IPT Review3 telecons held. Output will be ~200 actions on CIPT personnel.
System Requirement Review Meeting will be done in Charlottesville 26 and 27 of July.
Correlator throughput tests with the ALMA archive computer system continue; Interface tests between 2nd LO and control computer continue; Digital Transmission System (DTS) Fiber Optic links 1 and 2 and digitizer tests are restarted.

NTC: FE delta PDR plans are nearly complete. The review meeting will be

held at ESO in Garching on 6 - 7 July 05. PAI of cryostat #2 took place on 2-3 June 05 at RAL, UK and was successfully passed. This cryostat will be shipped first to IRAM to be used in the sub-system design verification of the Band 6 receiver.

After completion of this verification the cryostat will be shipped to the NA Front End Integration Center (FEIC) at the NTC. Tests continued successfully on the first prototype Tunable Filter Bank (TFB) card for the correlator in the test fixture. Preparations including software are being made for installation into the first quadrant of the correlator. The ACA Correlator PDR was held in Mitaka; the review was very successful, only minor reservations were noted to be addressed.

Many personnel changes--welcome, folks!

Jason Castro started with BE-LO Photonic group: June 8

Bill Shillue transferred to CV-NTC: June 13

Chris Jacques transfers to CV-NTC: July 1

Glenn Diaz starts with BE-LO Photonics group: July 11

Juanita Banda transfers to CV-NTC: July 18

Rodrigo Brito transfers to CV-NTC: Aug 1

HIA: Band 3 cartridge: Noise measurements with 1 GHz resolution have been performed. Gain stability has been measured to meet specification at 0.1-1 seconds.

NAASC: FITS files of the protoplanet plus disk simulations performed by Sebastian

Wolf were obtained for further ALMA simulation. Guiseppe Lodato provided FITS files

for a protostellar disk simulation which he has made. Face-to-face meeting of the

ANASAC was held 12 June in Boston followed by a meeting on submillimeter astronomy

featuring the SMA.

DAILY CALENDAR (Times EDT) see

<https://wikio.nrao.edu/bin/view/ALMA/AlmaCalendar>

Mon 20 June

All Day: JAO-Executive meetings, Scheveningen, Holland.

Tue 21

All Day: ALMA Board meeting, The Hague.

Bands 4 & 8 PDRs, Tokyo

Wed 22

All Day: ALMA Board meeting, The Hague.

Bands 4 & 8 PDRs, Tokyo

Thu 23

Bands 4 & 8 PDRs, Tokyo

Fri 24

Bands 4 & 8 PDRs, Tokyo

Sat 25

Sun 26

Mon 27

9:30 AM-10:30 AM: North American Project Office Meeting

10:30 AM-11:30 AM: JAO IPT Telecon

Tue June 28

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

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

Wed 29

Thu 30

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

Fri 1 July

Sat 2 July

Sun 3 July Deep Impact probe impact of comet Temple 1.

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

ALMA Calendar--<https://wikio.nrao.edu/bin/view/ALMA/AlmaCalendar>

- * June 21-22 -- ALMA Board Meeting, The Hague, Netherlands
- * June 21-24 -- Bands 4 & 8 PDRs, Tokyo
- * Jul 3-4 -- Deep Impact probe impact of comet Temple 1.
- * Jul 6-7 -- Front End IPT delta PDR, Garching
- * Sep 4-5 -- Tentative ASAC Meeting, Los Angeles
- * Oct 6 -- Rolling Stones come to Scott Stadium, Charlottesville

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

ALMA Memo #529 Velocity and structure function of phase screen aloft
Chajnantor

Author: Hideharu Ishizaki and Seiichi Sakamoto

Abstract: We analyzed the phase data from simultaneous measurements with the two sets of radio seeing monitors aligned in series at the ALMA site. During the one month period in summer from 1999 November 11 to December 12, the median value of the spatial phase structure function exponent deduced from the 300 m and 600 m baseline data was 0.59.

The exponent independently extracted from the temporal phase structure function at the 300 m baseline was 0.62, supporting the above value obtained from the spatial phase structure function. These median values lie midway of the values for thin screen (1/3) and thick screen (5/6). No evidence for diurnal variation of the temporal phase structure function exponent was found in our data on the contrary to the previous report.

The phase screen velocity calculated from the lag time of the maximum correlation of the two sets of phase data had good correlation with the surface wind velocity at 8 m except for higher values by about 1.2. This indicates that the screen height deduced using the surface wind velocity as the screen velocity needs to be corrected upward. Provided the logarithmic wind profile and plausible roughness length ($z_0 \sim 0.05$), the measured small ratio is understood as a reflection of small height difference of the flows, namely very low height to the phase screen (~ 100 m).

This memo will shortly be available at www.alma.nrao.edu

A copy may be obtained at edm.alma.cl: <http://tinyurl.com/ar5xa>

*****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@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/mmailcal/ALMACalendars.html>

Allemploy mailing list

Allemploy@listmgr.cv.nrao.edu

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