

ALMA Calibration Group

Teleconference 2004-08-12

Connection Details

• Call date: 2004–08–12 (Thursday)

• Call time: <u>15:00 UT</u>
• Duration: 1.0 hr

• USA Toll Free Number: 1–877–919–7148

• International: +1-203-566-1039

Passcode: 5 1 0 4 6 8Leader: Jeff Mangum

Action Items

Assigned	Task	Opened	Due/Completed
Calibration Subgroup Leads	Coordinate review and revision of their assigned sections by 2004–08–12 telecon. Note that target date for completion of the <u>Calibration Plan</u> is 2004–10–01.	2004-07-30	2004-09-08
Mangum	Will seek guidance from ALMA Management on the question of ACA operation. In the meantime, group discussions should consider ACA–related issues within the context of specific calibration categories.	2004-07-15	2004-09-08
Mangum	ALMA calibration document "roadmap".	2004-08-12	2004-09-08
Completed Action	Items		
All	Consider whether "Primary Beam" calibration should be added to the list of calibration categories and <u>Calibration</u> <u>Plan</u> sections.	2004-07-15	2004-08-12
All	Consider whether "Total Power" calibration can be incorporated within other calibration categories (use the current content of the <u>Calibration Plan</u> as a guide).	2004-07-15	2004-08-12
Holdaway/Wilson	Produce a first-cut at a "Primary Beam" calibration section.	2004-07-30	2004-08-12
Mangum	Works with NRAO Computing to implement an externally—accessible Wiki. If this option will not develop within the next month or so, explore use of the existing ESO Wiki. Richer suggests building Calibration Wiki within an ALMA Science IPT Wiki. DONE: See https://wikio.nrao.edu/bin/view/ALMA/AlmaCal.	2004-07-15	2004-08-12

Gibson/Welch Send preprint of Icarus paper on 28.5 GHz absolute calibration to the group.	2004-07-15	2004-07-30
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Attendance

Di Francesco Hills Holdaway Laing Mangum Morita Mundy Myers Saito Stirling Sramek Wilson Woody Wootten Wright

Agenda and Minutes

NOTE:

- Items in blue are notes/comments from the most recent telecon,
- Items in red are action items, and
- Items in green are completed action items.

1. Calibration Plan

The <u>Calibration Plan</u> needs to be finished. In order to accomplish this, it will be necessary to have small groups concentrate on specific sections of the plan. The group agreed to the following breakdown. "Volunteers" for review and update of each section, with a suggested "lead volunteer" denoted in bold, are indicated:

- ◆ Amplitude and Flux Calibration (**Welch**, Butler, Carter, Gibson, Holdaway, Mangum, Martin-Pintado, Kawabe, Wilson)
- ♦ Phase Calibration (**Hills**, Holdaway, Mundy, Richer, Stirling, Wootten)
- ♦ Bandpass Calibration (Guilloteau, Bacmann)
- ♦ Polarization Calibration (**Myers**, Holdaway, Laing)
- ♦ Pointing Calibration (Mangum, Lucas, Holdaway)
- ♦ Antenna Location Calibration (**Conway**, Wright, Morita)
- ♦ Antenna and Electronic Delay Calibration (Lucas)
- ♦ Optics Calibration (**Butler**, Saito)
- ◆ Total Power Calibration (**Holdaway**, Mangum, Mundy, Kawabe)
- ♦ Primary Beam Calibration (**Holdaway**, Wilson)
- ♦ Archiving and Accessing Calibration Quantities (**Lucas**, Mangum)

Discussion...

- ♦ Wright: Primary Beam calibration section first—cut submitted by Holdaway/Wilson is a good start.
- ♦ Mangum: This first cut has been posted to the primary beam calibration wiki page (CalPrimaryBeam) at https://wikio.nrao.edu/bin/view/Main/CalPrimaryBeam.
- ◆ ACTION: *Calibration Subgroup Leads*, indicated in **bold** above, will coordinate review and revision of their assigned sections by 2004–09–08 telecon. Note that target date for completion of the <u>Calibration Plan</u> is 2004–10–01.

The need for a Total Power calibration section?

♦ *Mangum:* During our 2004–07–30 telecon pointed out that the current content of the "Total Power" section in the <u>Calibration Plan</u> is composed of calibration categories which exist on their own elsewhere (like pointing, amplitude, focus, etc.). Therefore, perhaps the issues pertinent to "Total Power" calibration should be incorporated into other

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calibration categories.

- ♦ Holdaway: Almost. Things like Pointing can go into the Pointing chapter, Focus can go into the Optics chapter, etc. I will write a MEMO with all the calculations which are currently in the Total Power chapter, and the remaining stuff in the Total Power chapter would be pretty light weight, leaving only things like gain stability and TP/interferometer cross calibration.
- ◆ ACTION COMPLETE: *All* agreed with Holdaway's suggestion that the majority of the existing TP calibration section should be incorporated into a memo, leaving only a few TP–specific calibration issues to be addressed in a TP calibration section.
- 2. ACTION COMPLETE: *Holdaway and Wilson* produced a first–cut at a "Primary Beam" calibration section. See the <u>Calibration wiki</u> for details.

3. Calibration Group Use of the Wiki

Now that NRAO Computing has completed the installation of the external wiki, Mangum suggested that we adopt the wiki platform as a general interaction tool. In particular, the wiki can serve as an efficient medium through which modifications to the <u>Calibration Plan</u> can be made. All agreed which this approach.

Several points regarding use of the wiki:

- ♦ In order for Calibration Group members to use the wiki, each person must first register at https://wikio.nrao.edu/bin/view/TWiki/TWikiRegistration. Please let Mangum know if you have questions about this process.
- ♦ Following John Richer's suggestion, I have moved all of the AlmaCal wiki topics from my wiki to the newly-created ALMA wiki at https://wikio.nrao.edu/bin/view/ALMA/AlmaSci. Note that if you mistakenly go to the old location under JeffMangum, you can still get to the new location (the wiki keeps track of where things get moved).
- ♦ A nice introduction to use the wiki can be found at <u>PatrickMurphyIntroToWiki</u>. From this intro you can dig further into wiki capabilities.
- ♦ When you edit a page you lock it.
- A file lock will time out and release after one hour of inactivity.
- ♦ A file lock can be overridden (please do not do this).
- ◆ Please consider signing up to receive email updates of ALMA Calibration Group wiki page changes via the wiki WebNotify function at https://wikio.nrao.edu/bin/view/ALMA/WebNotify. NRAO Computing will enable this feature in the coming weeks (given sufficient demand).
- ♦ The wiki has lots of plugins (like one which allows for an interactive group action item list) which will be installed over the coming few weeks.

4. Amplitude Calibration Subsystem Development Reports

- ♦ Berkeley Absolute Flux Calibration System (Wright)
 - ♦ Wright: Measurements completed (by default...BIMA antennas being disassembled for move to CARMA).
- ◆ Semi-Transparent Vane (STV) Calibration System (Wilson)
 - ♦ Wilson: Tan has authorized Madrid Polytech to proceed with lab measurements of STV material.
- ♦ Multi–Load (ML) Calibration System (Wilson)
 - ♦ Wilson: No new news. Recall that this is a development designed to implement the system described in ALMA Memo 461 (Guilloteau and Bacmann). See Multi-Load

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<u>Calibration System Kickoff Meeting Minutes</u> for background and schedule for this development.

5. Date of next phone meeting

The next ALMA Calibration Group telecon will be <u>2004</u>, <u>September 8th 15:00 UT</u>. (*NOTE: Shifted -1 day to avoid ASAC telecon on 2004–09–09*)

\$Id: calgroup-meeting.html,v 1.14 2004/08/13 13:05:50 jmangum Exp \$

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