Minutes for AMiBA Engineering Telecom 20070906, UTC 2:00

Regular Meeting Time: UTC 2:00 Every Thursday
USA Dial-in = 1-877-505-6247; passcode 8339148 #; mod_code 2917771 #
Outside USA Dial-in = 1 630 693 3224

- Mount operation:
  - General:
    - There has been no update from Vertex about the skypol-lock solution.
    - We will ask Vertex to modify the TCP parameter in ACU regarding the latency issue.
    - Jack encoder cables are still on the surface. Will try to route thru conduits next week.
  - Problem lists :Vertex issue (PK summary)
    - (1) ACU latency problem seems to be resolved. Guillaume is trying to simulate and reproduce the delay using ACU simulator in Taipei.
    - (2) Sky-pol lock problem was identified and Stephan will send the corresponding modification in another week
  - Problem lists: Our side (PK summary)
    - - correlate 1st OT -2nd OT data, especially polarization pointing: being worked on.
    - - improvements on control software: change in polarization pointing to save time
    - - user-friendly input for tracking with defined hexpol Not very pressing items, but we need to keep working on it.
- Testing on site:
  - Rx status
    - RR box “hair” problem?
  - Broken 2nd mirror of Ant2:
    - With the damaged mirror, we will lose efficiency and increase noise and also change the beam pattern. However, for on-axis observation, the problem is not very obvious.
  - IF power:
    - Ant3IF2 TP shows zero counts and is not changing with input power under etd 2.
    - Jupiter fringe first taken after RR input power was raised from -12dBm to -8dBm. SN ratio will be analyzed.
  - DC offset:
    - 1L LO power adjusted and IF power has increased with no more AM-ing. Next will verify the y-factor.
    - Derek measured the power modulation of 1L using a Krytar detector and peak-to-peak is 7mV. However, the square wave pattern from IF power sometimes disappear while the triggering phsw pattern is normal. At the same time, 1R looks normal and 7L/7R also look normal. Plan to measure all IF AM-ing tomorrow.
  - Pointing:
    - Comparing two OT's shows there is 0.3' to 0.5' discrepancy, probably due to local effect. Note the two data sets do not share exactly the same pointings, which may be a source of discrepancy.
  - Observations:
    - Six pointings of the A2390 mosaic were observed. Next team to go to Hilo is Keiichi and Patrick (in mid-Sep).
    - 1L- and 2R-related baselines show abnormal pattern. Being investigated.
  - RPFITS
    - Remaining: ACU-TCS delay prevents smooth operation of correlator thru a_boss.
- General site issue:
  - Compressor #3 (refurbished one, connected to Ant 1267) was found to have leaked some oil into He lines. Supply lines are hotter than usual. Pablo has replaced it with another compressor. The temperature of the Ant's are good so far.
- 13 element:
  - Rx
    - Mixers (3) are being wire-bonded.
    - Johnson will consult Pablo about cold head power on setting up compressor in Hilo lab.
  - IF/LO
    - Prof. Chu's lab is going to acquire test fixtures for individual chips. (test fixtures for the entire chain was already made.)
    - SW has order two sets of the current IF/LO module. Longest lead time for components is 3 months.
  - RO and correlator
    - RO boards are under testing. It shows some noise pickup. CT will delay the trip to test them in Hilo by one week. (to week of Sep/20)
    - (corerlator frame) ARL is revising the drawings.

    - Peter is making progress on the 1st and 2nd section assembling.
- 3rd section
    - 3rd section packaging is finished and being sent back to us.
- 1.2m dish
    - 3rd dish is finished. Cotech claims it is within our weight spec. Ted is going to inspect it and also examine the feed leg shape.
    - Received frame for near-field measurement. Minor modification required for assembling in lab. The setup will be taken to EE dept for 30cm dish verification first.
    - The far-field mount can hold the new dish. Operation seems ok within the small scanning range of the setup. Waiting for good weather and need manpower.
    - Next four dishes will arrive in Oct. Cotech will try their best to meet weight spec.
- Platform modification
    - The new interface ring concepts are being studied.
    - Philippe reported an idea of new carbon fiber interface ring. Its main advantage is light-weight and possibility to change design to better support outer rim of platform. We should consider what rx position will never be used.
    - Total weight of 1.2m 13-element is about 4.5tons. It is 800kg over the spec of hexapod but still within safety margin.
- Calibration system
    - No update

Traveling Schedule to Hilo:

ASIAA Hawaii: http://pmo.asiaa.sinica.edu.tw/Hilo%20office/
AMiBA Website: http://amiba.asiaa.sinica.edu.tw/
Distribution List:
kylin@asiaa.sinica.edu.tw, ctli@asiaa.sinica.edu.tw, dkubo@sma.hawaii.edu, homin@asiaa.sinica.edu.tw, cchan@asiaa.sinica.edu.tw, shchang@asiaa.sinica.edu.tw, pmkoch@asiaa.sinica.edu.tw, pierre@asiaa.sinica.edu.tw, ydhuang@asiaa.sinica.edu.tw, chiuehth@phys.ntu.edu.tw, ky1@asiaa.sinica.edu.tw, nishioka@asiaa.sinica.edu.tw, jhpw@phys.ntu.edu.tw, keiichi@asiaa.sinica.edu.tw, r91222042@ntu.edu.tw, mkesteve@atnf.csiro.au, raffin@asiaa.sinica.edu.tw, hueiwang@ew.ee.ntu.edu.tw, pshaw@asiaa.sinica.edu.tw, y.jhwang@asiaa.sinica.edu.tw, f87026@ew.ee.ntu.edu.tw, ho@cfa.harvard.edu, jbp@cmu.edu, swchang@asiaa.sinica.edu.tw, thc@ew.ee.ntu.edu.tw, chchang@asiaa.sinica.edu.tw, ken@asiaa.sinica.edu.tw, fabi@asiaa.sinica.edu.tw, poshiro@asiaa.sinica.edu.tw, jlim@asiaa.sinica.edu.tw, wwilson@atnf.CSIRO.AU, pablo@asiaa.sinica.edu.tw, sandor@asiaa.sinica.edu.tw, sllin@asiaa.sinica.edu.tw
Please contact MTC for managing this mailing list