

Minutes for AMiBA Telecon 20111110, UTC 2:00

Regular Meeting Time: UTC 2:00 Every Thursday

USA Toll-Free 888-204-5987

Taiwan Toll-Free 00801-10-4304

Access code: 2151097

Host password: 6697

- **General issue:**
 - The emergency generator failed to start until several attempts in the recent power transfer test.
 - Pierre was concerned with the function of on-site UPS which should sustain computers from power outage (or generator tests on the main breaker.)
- **Operation on site:**
 - Lab
 -
 - IF/LO & Rx status
 - Ant 10 seems back online (from drift scan fringe plots of recent obs).
 - Readout & Correlator
 - CCC's / partition is still full, but seems not to interfere the obs/ctrl software.
 - A script is needed to compare time diff between CCC, TCS and GPS.
 - Observations:
 - A2390 & Blank patch needs a few nights to reach the depth; A383 is a bit over but we will keep going in case of any flaw to data quality.
 - The blank patch and A2390 could reach desired depth (50 & 25 hrs respectively) in 1 or 2 weeks. Then do r-pointing for $El > 70$ modeling, and obs 2 radio sources (northern and southern) for 5 days for deformation model testing.
 - Repeating Jupiter radio-alignment measurements is on hold until all Rx are back online.
 - The current IT has not included the systematic misalignment to the East and the absolute pointing error.
- **Dish , Mount, Pointing:**
 - Besides the pointing issue at high El , it is suspected that the western part has worse pointing than the eastern part of the sky. Victor shows at a region of $Az \sim 300$ deg, $El < 40$ deg the error is up to 0.8 arcmin. Need to be confirmed.
 - radio pointing: the increasing-with-hexpol error pattern should be real. (now IT corrections for all hexpols are the same.) The IT corrections follow the r-pointing error trends, but with a different amplitude making the r-pointing rms increase.
 - "stretch" the hexapod before obs might help on pointing deviation near the zenith.
 - Vertex todo: to install another logger to record HPC log file on next site trip.
- **Platform, Deformation:**
 - Strain-gauge data needs to be combined with pointing logs to see if there is difference between hexpol=0 and < 5 deg strategies.
 - The feasibility to use the laser-ranging technique? The technique can provide z-axis information.
 - Ask Vertex for codes to calculate the reacting force.
- **Data Analysis & Science:**
 - Some users of Proty's pipeline didn't update to the latest mbtp address table, which also affects Victor's r-pointing results since June.
 - Need to check if the noise can be integrated down at the scale of all data. And cross-check with the optical images to examine the issue of better pointing at the eastern sky than the western.
 - Radio sources calibrated by Jupiter are OK. So the Jupiter problem could be subtler. Spikes?
 - DACOTA: 3 near-term questions: 1) sensitivity estimates, 2) low-z CO, 3) AMiBA noise scale with time.
 - The companion radio sources (snapshots between 0.5 hr of cluster obs) have better pointing, implying problems existed in longer integration of clusters?
 - Hiroaki reported that for some clusters (ex. A2142) he has to constrain data in $El = 60-65$ deg in order to produce images. Victor added, however, the companion radio source of A2142 has good data quality.
 - Hiroaki reported that extrapolated calibration for dates without calibration info is not good; the flagging scheme obtained from calibrators is critical.
 - Long baselines have higher fluxes. Related to non-flat vis in calibration? (not pure point source) Not critical so far until ultra-deep integration.

- Ant9 RR is often flagged out. Some baselines' noise weights are poor and we need to exam on this. The current weighting scheme is pursuing high S/N so with loss of efficiency.

Cluster (till 11/11/15)	on-src time (min) in the past week	Total on-src time (min)	% of data analyzed
A1689		456	More than 80% data has been roughly looked by Kyle. Further detailed analysis tasks has not been distributed, of which the progress will be logged here.
MACS J2129.4		1326	
RXJ1347		393	
A2261		1344	
MS2137		2454	
RCS1447		975	
MACS J1931		1485	
A209		1485	
A2142		795	
A383	27	2313	
A2390	15	1332	
MACS J0329	48	420	
MACS J0429	48	348	

- Beyond 13 element:
 - Platform modification
 - Calibration system

Traveling Schedule to Hilo: (current)

•

Traveling Schedule to Hilo: (proposed)

- Johnson (mainly for SMA upgrade)

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, ctili@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, hyhuang@asiaa.sinica.edu.tw, nishioka@asiaa.sinica.edu.tw, jhpw@phys.ntu.edu.tw, keiichi@asiaa.sinica.edu.tw, blog.locutus@gmail.com, mkesteve@atnf.csiro.au, raffin@asiaa.sinica.edu.tw, hueiwang@ew.ee.ntu.edu.tw, pshaw@asiaa.sinica.edu.tw, yjhwang@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, r91222045@ntu.edu.tw, skyjadel@gmail.com, sandor@asiaa.sinica.edu.tw, wyhwang@phys.ntu.edu.tw, sstele@sma.hawaii.edu, syli@asiaa.sinica.edu.tw, koconnel@sma.hawaii.edu, pho@asiaa.sinica.edu.tw

Please contact MTC for managing this mailing list