Atacama Large Millimeter/
 Submillimeter Array
Alonso de Córdova 3107
Vitacura - Santiago Chile

MEMORANDUM

To: APP/ADE/ADC EOC Teams

From: Anthony Remijan, ALMA Program Scientist (EOC)

Date: 7/26/2014

Subject: Hourly Plan for H Maser integration – Tuesday, 29 July, 2014

On Tuesday, 29 July 2014, the APP team with support from EOC, ADE and ADC will be integrating the new H maser which will provide the new 5 MHz standard for ALMA and provide another large step toward VLBI capabilities with ALMA. In order to properly coordinate the testing of the new H maser, the following actions will be taken during the day on Tuesday. The table below illustrates the time, team and activities and tests to take place as we move toward the use of the H maser standard.

As part of the maser integration test procedure, three distinct tests will be done before and after the integration to test the initial performance. They are listed below:
1. DelayCal.py will be run in TDM mode on 3c279 over the course of ~30-45 mins to look at the overall phase stability vs. time.
2. DelayCal.py will be run in a high resolution FDM mode on the v=1, J=2-1 transition of SiO towards VyCanis Majoris to determine if there is any evidence of line broadening.
3. A similar, high spectral resolution observation of an ES program will be run to test the e2e performance of the maser. A thorough QA0/2 will be performed on the dataset to ensure the data quality.

Full instructions to run both the DelayCals and the ES observation will be available on the EOC weekly top priority page available at: https://wikis.alma.cl/bin/view/AIV/29July-05Aug%2c2014.

Time	EOC Activities	APP Activities	ADC Activities
09:00-10:00	EOC team en route to the site	Alejandro, Jay Blanchard et al. en route to the AOS	Prepare AOS-STE with 2014.2 for testing of subarrays.
10:00-11:00	EOC team en route to the site – Sawada-san available for science support from Santiago	Installation of the new maser and initial testing	2014.2 testing of sub arrays
11:00-12:00	Sawada-san available for science support from Santiago – look at DelayCal results	"GO/NO GO" decision given by the APP team at the AOS for the first DelayCal with the new maser	Run FDM DelayCal under 2014.2 on 3c279 with support from the operators. Continue 2014.2 testing with subarrays
12:00-13:00	Contingency/Lunch –	Contingency/Lunch	Contingency/Lunch

	EOC team arrives on site. Sawada-san available for science support from Santiago		
13:00-14:00	EOC team available for science support – new DelayCal after install of new BL firmware	Install new firmware on quadrants 1 and 2	Run FDM DelayCal under 2014.2 on 3c279 with support from the operators. Continue 2014.2 testing with subarrays
14:00-15:00	EOC team available for science support – new DelayCal after install of new BL firmware	Install new firmware on quadrants 3 and 4	Run FDM DelayCal under 2014.2 on 3c279 with support from the operators. Continue 2014.2 testing with subarrays
15:00-16:00	EOC team available for science support – Daily tagup with Santiago	Contingency – start down from the AOS	Continue 2014.2 testing with subarrays
16:00-17:00	EOC team available for science support	Team returns from AOS	Continue 2014.2 testing with subarrays
17:00-18:00	Engineering tagup – EOC available for support		Continue 2014.2 testing with subarrays
18:00-21:00	EOC available for support		Continue 2014.2 testing with subarrays
22:00-23:00	Handover to Science		Handover to Science – 10.6
23:00-09:00	EOC Observations and Testing		Run in 10.6