

**SCIENCE OPERATIONS** (Lars-Ake Nyman, Paola Andreani, John Hibbard, Ken Tatematsu)

**Status of the Cycle 1 proposal review process**

Preparations for the proposal review meetings that will take place in Santiago on October 1-5 at Hotel Sheraton in Santiago went well. A summary of the meetings and the outcome will be presented in the October monthly report.

**Cycle 0 observations**

No observations took place in September because of the work on the upgrade of the correlator and the power system.

**Cycle 0 data processing**

Data processing is proceeding at the ARCs as well as at the JAO. Figure 1 shows the number of SBs that have been processed and delivered to PIs as function of time (=completed executions of SBs that have passed QA2), and Table 1 shows the cumulative status of observations and data processing until October 6. The calibration problems that had been delaying processing of Band 9 data have been rectified, and all the band 9 data collected so far have now been distributed to ARC and JAO staff for processing. Pipeline testing is currently ongoing at the JAO and the ARCs, and the second version of the pipeline software is now in use at the JAO.

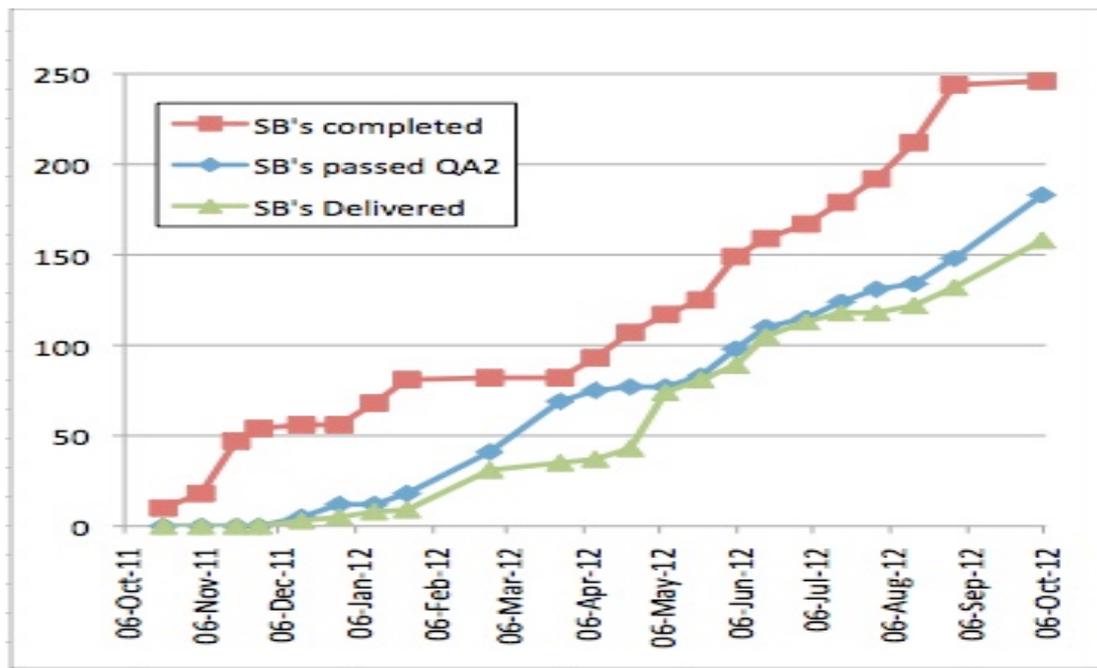


Figure 1: Data Processing and data delivery

Priority=Highest	Projects	SBs	Executions
<b>Total Number Needed</b>	113	370	749
<b>Started</b>	96	278	619
<b>Passed QA0+</b>	-	244	574
<b>Passed QA2 or delivered (partly or completely)</b>	59	182	363
<b>Completed</b>	25	182	363

Table 1: Status of Cycle 0 observations and data processing on October 6

Table 2 shows the Executive balance derived from the number of hours of successful observations (datasets that have passed QA0). Active management of the observing schedule ensures that the balance achieved to date is very close to the nominal regional shares.

<b>Summary: Time of Executions that passed QA0; by Executive (hours)</b>				
<b>Executive:</b>	<b>CL</b>	<b>EA</b>	<b>EU</b>	<b>NA</b>
<b>Sum (hours)</b>	93.5	179.0	285.2	279.2
<b>Fraction (%)</b>	11.2%	21.4%	34.1%	33.4%
<b>Difference</b>	1.2%	-1.1%	0.3%	-0.4%

**Table 2: Executive balance of observing time and the differences with respect to the regional share**

The forecast is that the majority of the Cycle 0 high priority projects will be finished (currently 70% of the observing time has been used and 70% of the executions are done) before the end of Cycle 0. However, it will most likely not be possible to finish all Band 9 executions because of limitations in suitable observing conditions and pressure in some LST ranges.

**DSO Hiring:**

Interviews took place for the JAO Operations Astronomer position. Several good candidates were identified and a job offer will be made.

The deadline for applications for the first 3 JAO postdoctoral fellowship positions was September 27. Applications from 26 candidates were received.

**Additional ARC activities:**

**Users survey completed.** EU is producing the pie charts to hand over to the NA ARC to write the final report.

**EA ARC:**

East Asia accepted a total of 11 SBs to be reduced for QA2 in September. During this month, the data reduction for 6 SBs passed QA2.

EA ARC was involved in reducing SV data HD163296 B6 data and Arp 220 B9 data.

Semiannual meeting of the Astronomical Society of Japan was held on Sep 19-21 in Oita, Japan, and ARC staff members have reported their ARC activities and their researches.

**EU ARC:**

Maria Diaz-Trigo and Steve Longmore (ESO-ALMA Fellow) served as Technical Secretaries at the science panel meeting in Santiago.

**QA2 process** has been going on during the month of September with the help of the ARC nodes. The first EU Band 9 dataset was calibrated, imaged and delivered to PI. Many other data delivered to EU PIs.

**Pipeline testing:** Humphreys and Stoehr completed the pipeline testing using the EU delivered Early Science Projects. Felix Stoehr created a script to compare QA2 of Pipeline and script-based reductions.

**CASA beta testing** started in EU with the help of Fellows and ARC nodes

**SV data reduction:** EU ARC involved in reducing SV data SgrA\*, HD163296 and RXCJ1347-1145.

Annual meeting of the German Astronomy Society, Hamburg, Sep. 24-28: 2 posters were presented : "The Atacama Large Millimeter/submillimeter Array", "The European ALMA Regional Centre", displayed Mon-Fri splinter meeting "First Science with ALMA"

**NA ARC:**

September efforts include extensive testing by NAASC staff of CASA 3.4 and the local pipeline installation.

With the backlog of band9 observations released, NA started a concerted data reduction effort. A total of 13 staff (including colleagues from NRC and the NAASC postdocs) started (or restarted) processing for 25 SBs, encompassing 15 projects. By the end of September, 11 of these had been posted for approval, 11 were in process, and 3 resubmitted for more observations. NA delivered datasets for five projects. We anticipated that this elevated effort will continue into October, after which we should be caught up.

The NAASC hosted our yearly face-to-face meeting with our community advisory committee, the ANASAC. The meeting was held in Charlottesville, VA, USA on September 20-21. Topics included updates on Science Operations and Construction, ASAC charges, the Cycle 1 proposal process, data processing requirements, future NAASC workshops, and the ALMA Development program. Presentations are available at <https://safe.nrao.edu/wiki/bin/view/ALMA/Sep12Agenda>.

The NAASC co-hosted the science workshop "High Redshift Comes of Age: A Celebration of the Career of Paul Vanden Bout" in Charlottesville September 13-15 (<https://science.nrao.edu/facilities/alma/naasc-workshops/HizISM/>). About 60 scientists attended, and some spectacular ALMA results were presented.

Interviews were conducted at NRAO for the Assistant Director for NA ALMA Operations.