



Cy4 Statistics and User Support (+some Cy5 info.)

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Science Operation in past ~1 yr

- Cycle 4 operation: Oct. 1, 2016 – Sep. 30, 2017
 - Several New Capabilities
 - Large program
 - Spectral line polarimetry
 - Solar observations
 - VLBI observations
 - ACA standalone
 - 109 Grade A+B projects, 49 Grade C projects in EA
 - New challenge: improving delivery efficiency was the biggest concern as the delivery backlog was becoming significant
- Cycle 5 operation: Oct. 1, 2017

Cycle 4 Performance

- Antenna numbers were in line with expectations
- Available hours fell ~8% short due to weather downtime
- Project completion fell short of expectations due to June-September queue mismatch caused by the change in the configuration schedule
 - Poor queue match to the sky led to some deviations in executive balance that need to be recovered in Cycle 5

Cycle 4 Completion Rate (preliminary)

S. Corder's presentation at Board meeting

12m

		Completion Rate			
Grade	N	Completed	Partial	No Data	Resubmissions
A + DDT	530	77%	5%	17%	1%
B	972	69%	5%	23%	3%
C	801	43%	3%	51%	3%

7m

		Completion Rate			
Grade	N	Completed	Partial	No Data	Resubmissions
A + DDT	24	92%	0%	0%	8%
B	134	94%	0	2%	4%
C	150	93%	1%	3%	2%

Cycle 4 Completion Rate (preliminary)

S. Corder's presentation at Board meeting

TP

		Completion Rate			
Grade	N	Completed	Partial	No Data	Resubmissions
A + DDT	16	88%	13%	0%	0%
B	58	50%	17%	33%	0%
C	71	85%	7%	4%	4%

ACA
supplemental call

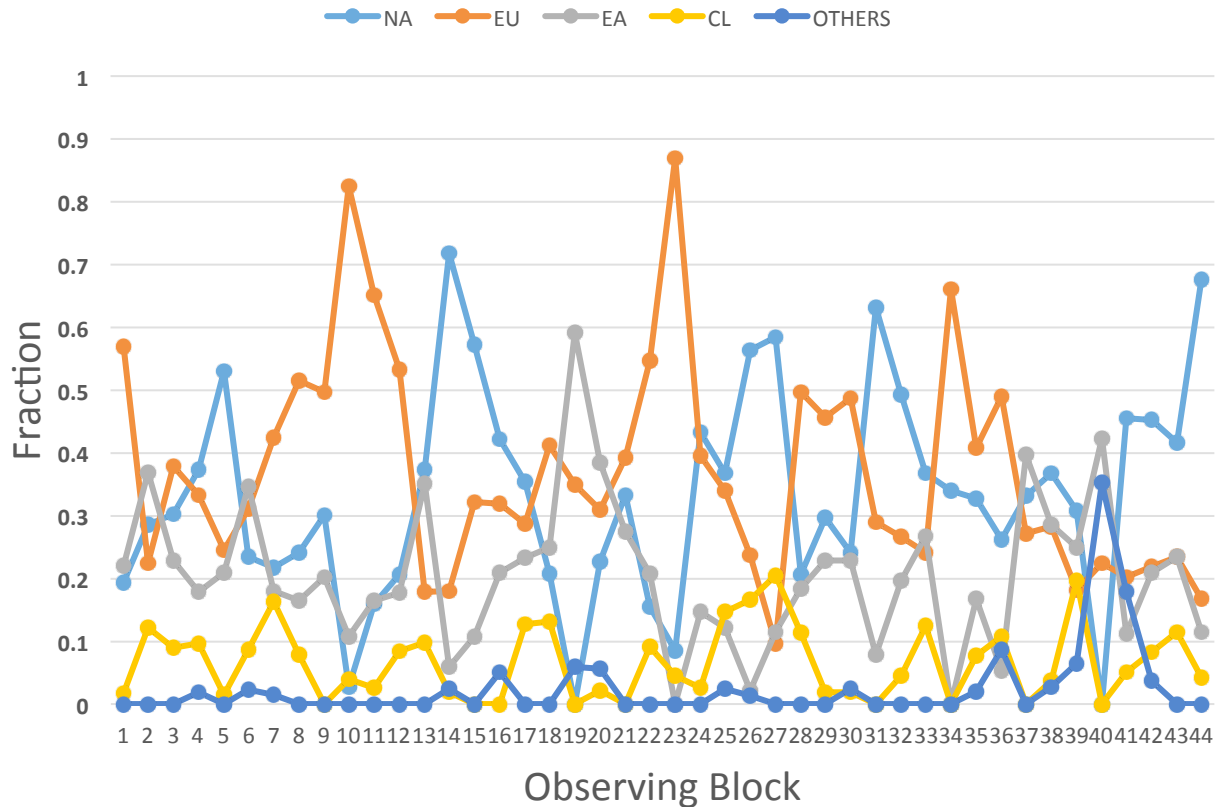
		Completion Rate		
Grade	N	Completed	Partial	No Data
C	295	93%	2%	4%

Executive Balance (tentative)

As of Dec. 15

Summary: Time of Executions that passed QA0; by Executive (hours). Array: 12M

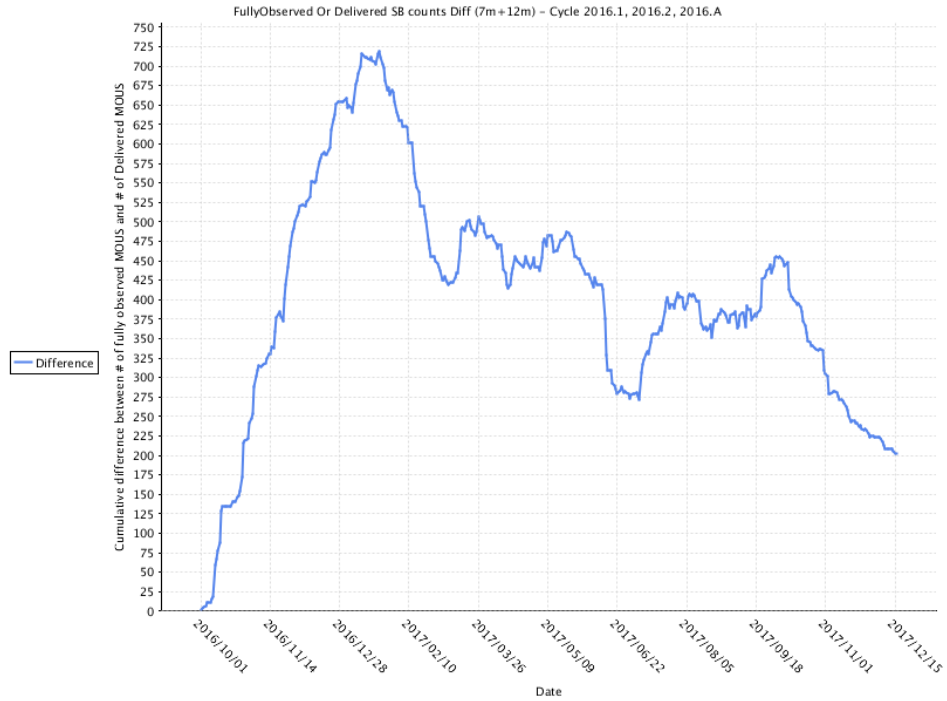
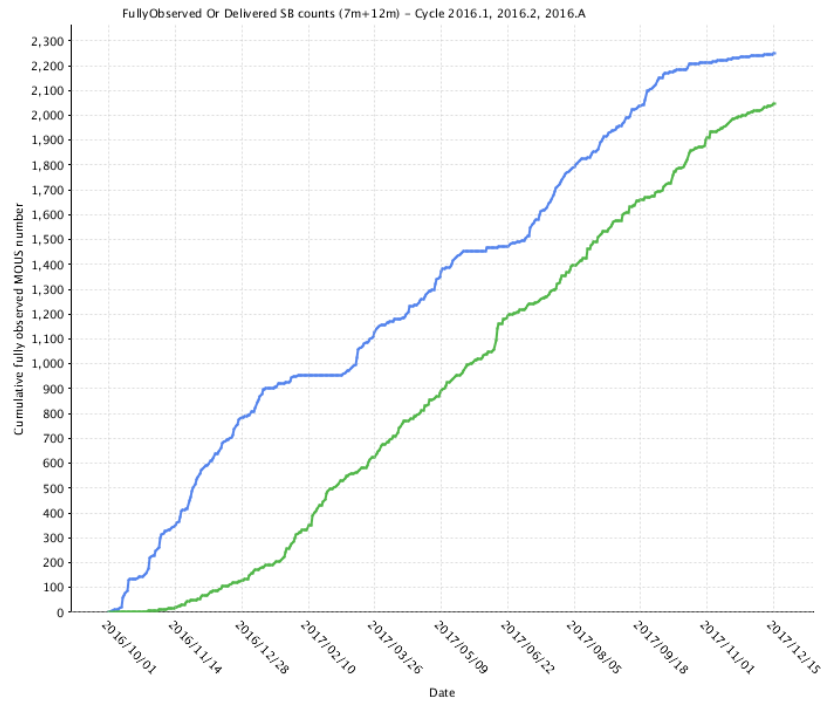
Executive	NA	EU	EA	CL	XX	Sum (h)	Dataset s
	Grade A+B	Grade A+B	Grade A+B	Grade A+B	Grade A+B		
Sum (hours)	698.2	793.2	405.7	146.7	35.0	2078.9	1859.5
Fraction (%)	33.6%	38.2%	19.5%	7.1%	1.7%		
Expected share	33.8%	33.8%	22.5%	10.0%	0.0%		
Difference	-0.2%	4.4%	-3.0%	-2.9%	1.7%		



Data Delivery Progress

Number of FullyObserved and Delivered MOUSs

FullyObserved - Delivered MOUSs



Data Delivery Progress

- Situation is getting much improved
 - Both pipeline calibration and imaging are in operation at EA-ARC.
 - Pipeline flagging and low SNR heuristics are mostly successful
 - Data reducer do not quite often need to do manual intervention.
 - Automatic queueing of pipeline calibration and imaging will be operational soon.

What's New in Cycle 5 Operation?


- **P2G:** PIs not generating SBs in Cycle 5, just revising SGs and submitting their projects again for confirmation. Observatory generating automatically SBs, then reviewed by ARC staff.
- **Helpdesk:** PI can trigger ToO observations via helpdesk and directly contact the staff in Chile.
- **Archive:** All the archive contents have unique file names e.g., scriptForPI.py -> member.uid___A002_Xabc_X0123.scriptForPI.py

Cy5 Configuration Schedule

Start date	End date	Config	min - max baseline (m)	beam (") ¹	maximum recoverable scale (") ¹
2017-10-01	2017-10-22	C43-10	244-16200	0.042"	0.50"
2017-10-22	2017-11-07	C43-9	368-13900	0.057"	0.81"
2017-11-07	2017-11-27	C43-8	110-8500	0.096"	1.4"
2017-11-27	2017-12-07	C43-7	64-3600	0.21"	2.6"
2017-12-07	2018-01-10	C43-6	15-2500	0.31"	4.1"
2018-01-10	2018-02-01	C43-5	15-1400	0.54"	6.7"
2018-02-01	2018-02-28	February Maintenance Period			
2018-03-01	2018-03-30	C43-4	15-784	0.92"	11.2"
2018-03-30	2018-05-05	C43-3	15-500	1.4"	16.2"
2018-05-05	2018-06-05	C43-2	15-314	2.3"	22.6"
2018-06-05	2018-07-22	C43-1	15-161	3.4"	29.0"
2018-07-22	2018-08-15	C43-2	15-314	2.3"	22.6"
2018-08-15	2018-08-30	C43-3	15-500	1.4"	16.2"
2018-08-30	2018-09-15	C43-4	15-784	0.92"	11.2"
2018-09-15	2018-09-30	C43-5	15-1400	0.54"	6.7"

New Delivery Style in Cycle 5

- No single tar package is archived anymore.
- Download individual files
- README txt is replaced by AQUA QA2 Report



QA2 Report

Project information

Name ALMA Cycle 5: The Strong, Moderate and Weak Sources Survey
Code 12376529
PI Glenn Jones
Organization ALMA
Co-Is T. Araya, G. Carrillo, S. Chapman, T. Chama, T. Higgs, K. Hasegawa, T. Ishiguro, T. Kamae, J. Kamae, J. Kamae

ObsUnitSet information

Name Member OUS (1237652901832294517)
QA2 Status ✔ Pass
Member OUS Status ID uid://A001/X1284/X12e0
SchedBlock name 12376529_c_06_7M
SchedBlock UID uid://A001/X1284/X1223
Array 7M
Mode Standard
Band ALMA_RB_06
Repr.Freq. (sky) 221.54 [GHz]
Spectral setup ACA
Sources
Other SBs in this Group
OUS (Member OUS Status ID in brackets):
Execution count 1.00 of 1 expected

Final QA2 comment

Calibration and imaging was done with CASA 5.1.1-5 pipeline version of 40896 (Pipeline-CASA51-P2-B). No major issue is found in the calibration and imaging.

RMS and beam size at representative frequency

Sensitivity goal 15.80000 [mJy] over bandwidth 15.07236 [MHz]
Angular resolution goal 5.70994 [arcsec]
Achieved RMS for desired bandwidth 6.80000 [mJy] **for continuum** 0.47000 [mJy]
Achieved synthesized
Semi-major axis (arcsec) 7.100 **Semi-minor axis (arcsec)** 4.400 **Position angle (deg)** -83.300

Execution blocks summary

EB	N Ant.	Start Time	End Time	ToS (sec)	Avg. Elev. (deg)	Trans. Elev. (deg)	Mean PWV (mm)	Phase RMS (deg)	Min BL (m)	Max BL (m)	AR (")	MRS (")	EF
uid://A002/Xc55c89/X244f	11	2017-10-05 05:24:	2017-10-05 05:51:	1649	73.5	75.5	0.0	0.272	8.9	48.9	4.6	25.6	1.00

Spectral Windows

Transition	Central Frequency (sky, bar, GHz)	Bandwidth (GHz)	N of channels
cont3	238.324	2.000	128
cont2	236.402	2.000	128
cont1	223.909	2.000	128

Question to all of you

- According to the user survey, user satisfaction rate for information about proposal preparation (Proposing Guidance page in SP) was significantly low in EA.
- We kindly ask you to provide us your suggestion in discussion session.