

ALMA Cycle 0 & 1 Status

Ken Tatematsu

Manager, ALMA Regional Center

NAOJ

Status of Early Science Cycle 0

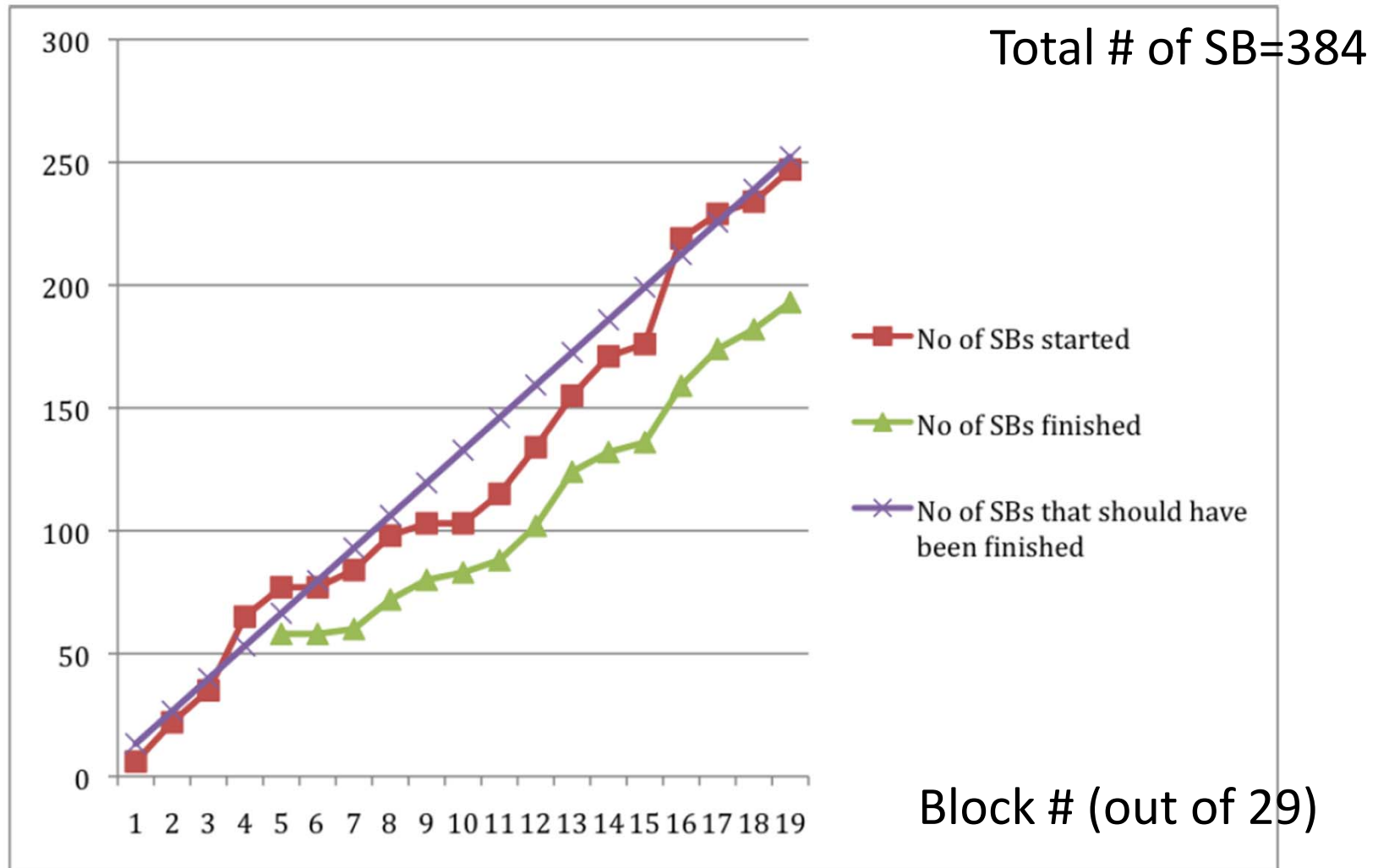


Figure 5. SBs started, and finished, by observing block

Cycle 0 band statistics as of July 31, Aug 30

Band	Execution time (h)	Execution time (%)	Band distribution in the 112 high priority projects (%)
B3	147	22.4	19.0
B6	152	23.1	24.4
B7	298	45.4	39.3
B9	60	9.1	17.3

Table 2. Cumulative band statistics July31

Aug30

Cycle 0 Status as of July 31

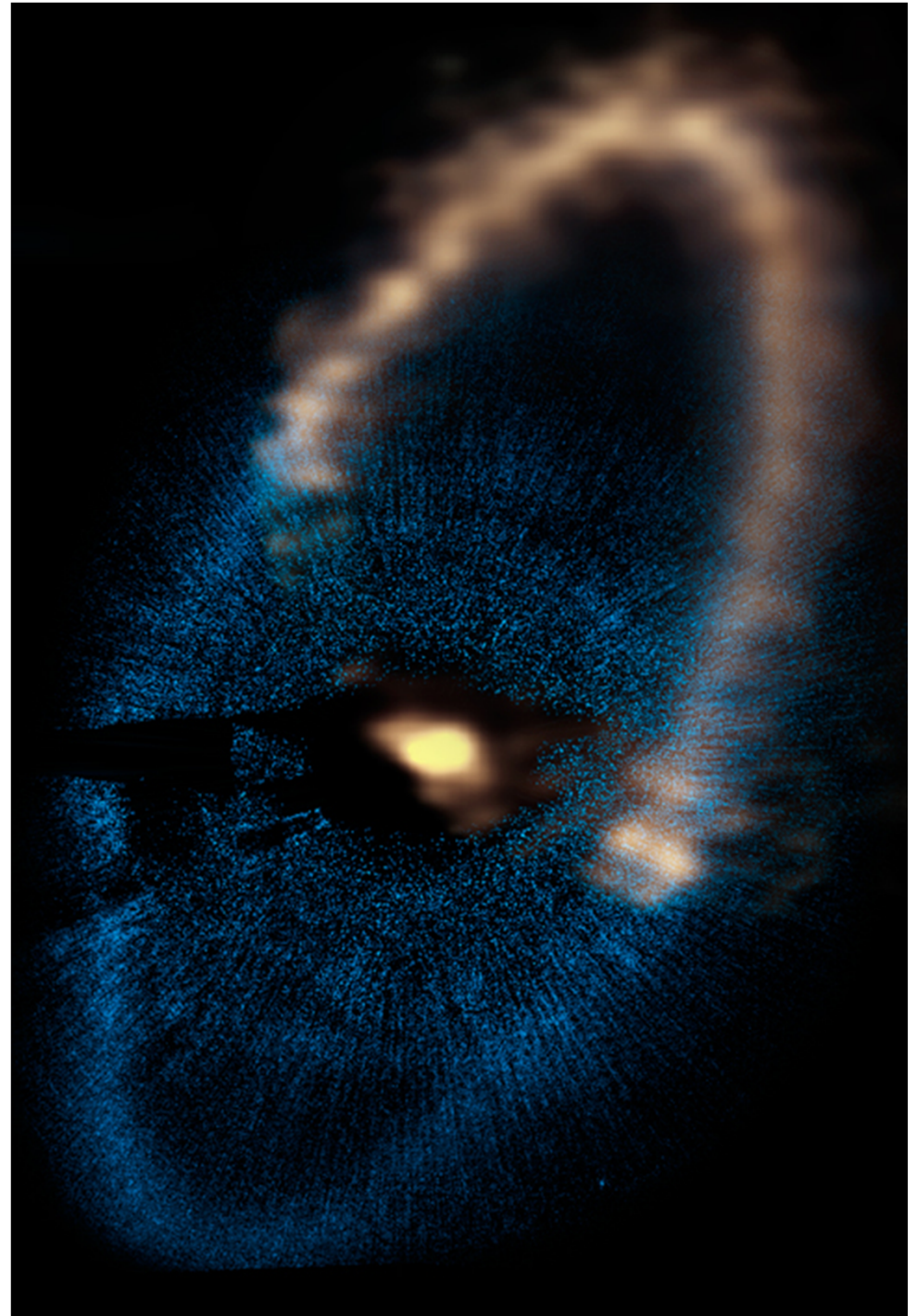
Dataset (SB) View	Totals	
Datasets needed	384	
Datasets started	247	64%
Datasets finished	193	50%
Datasets passed QA2	127	33%
Datasets delivered	116	30%

Project View	Totals	
Highest Priority projects	112	
Projects started	89	79%
Projects partially delivered	39	35%
Projects completed	15	13%

Cycle 0 and SV refereed papers

- High-z, extragalaxies
 - Cycle 0 Nagao et al. A&A 542, L34 $z=4.76$ SMG LESS J033229.4 [NII]
 - SV Wagg et al. ApJ 752, L30 $z=4.7$ SMG BR1202 [CII]
 - SV Herrera et al. A&A 538, L9 Antennae CO3-2
- Galactic
 - SV Zapata et al. ApJ 754, L17 Ori KL SiO outflow
 - SV Pineda et al. A&A 544, L7 IRAS16293 P-Cygni profile
 - Cycle 0 Boley et al. ApJ 750, L21 Fomalhaut B7 continuum
 - SV Oberg et al. ApJ 749 162 TW Hya HCN
 - SV Rosenfeld et al. ApJ in press TW Hya CO2-1,3-2
 - SV Hirota, Kim, Honma ApJL in press Ori KL 232G H₂O maser discovery
 - Cycle 0 Late-type star, European PI, Nature in press
- Astrochemistry
 - SV Jorgensen et al. ApJL in press IRAS16293 Glycolaldehyde

- Boley et al.
- ApJ 750, L21
- Fomalhaut
- B7 continuum

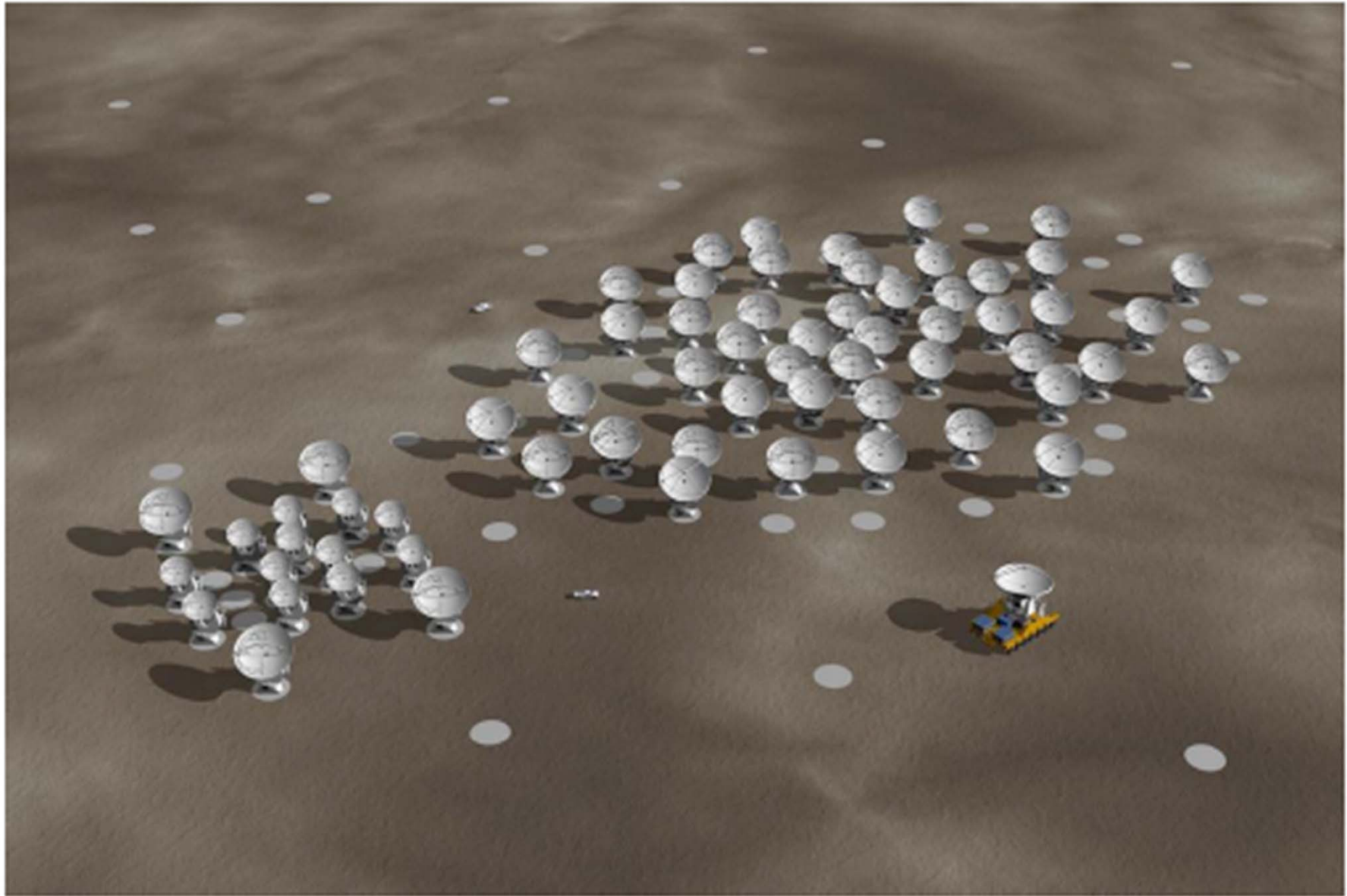


Current Status

- 44 antennas at AOS (12 of them are Japanese)
 - 27 of them are being used for Cycle 0 (cf. nominal 16)
- All 16 ACA antennas have been delivered to JAO
- 18 Band-4, 25 Band-8, 6 Band-10 cartridges have been shipped.

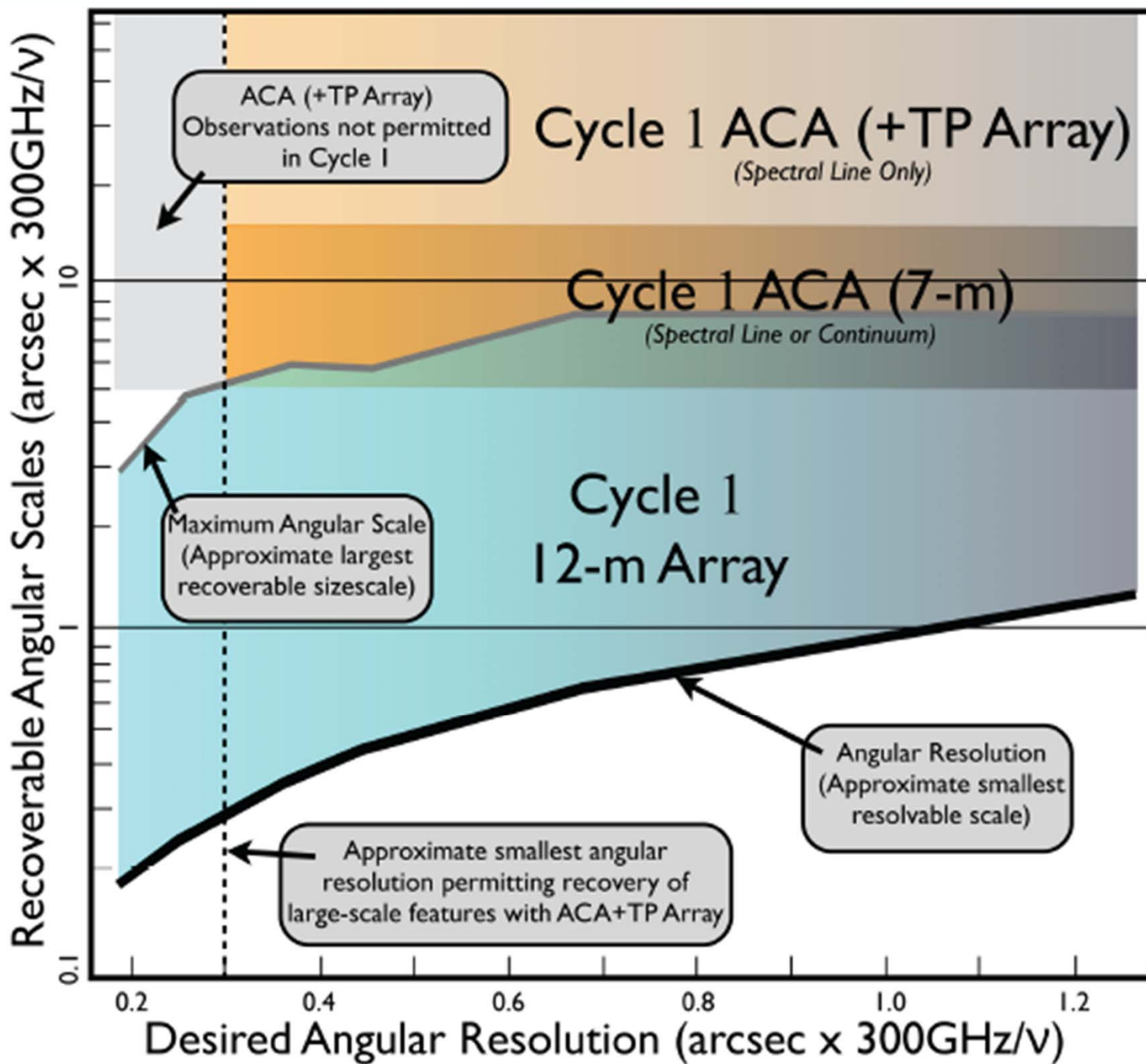
Photo: 2012 May 12 when 33rd antenna arrived





Baseline Capabilities: Antennas and Array Configurations

- Number of antennas:
 - Target: Thirty-two 12m antennas, **nine** 7m antennas, **two 12m total power antennas**
- 12m Array Configurations:
 - Reconfiguration will be “pseudo-continuous”—the array expands and contracts by moving a few antennas at a time. Some of this provided by adding more antennas. **6 different configurations.**
 - Maximum baseline lengths will be from 160m to 1km
 - PIs will apply for a required angular resolution and largest angular scale rather than specific configurations.
 - (The above scheme is intended to match the scheme assumed for Full Operations. Details still to be worked out.)
- Solar observation and polarization were not included in Cycle 1
 - Being carried out in commissioning for Cycle 2

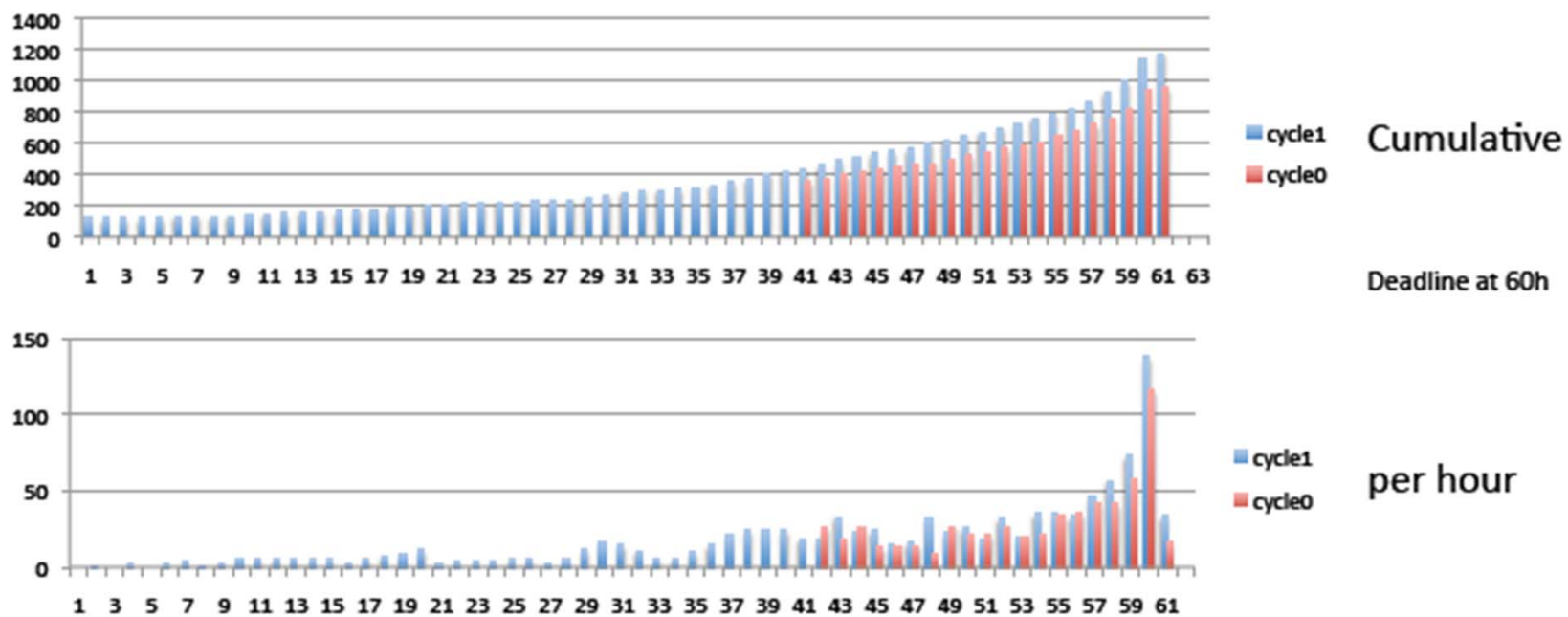


Cycle 1 deadline (July 12)

- We have received 1161 proposals in Cycle 1 (cf. 929 in Cycle 0)
- Excluding duplication, the final number is 1131 (but statistics are based on 1133)

Cycle 1 Proposal Submission

- Deadline July 12 at UT 15:00: **1161 proposals** (close to “expected” 1200)
- Server down for about 15 mins during the last hour => deadline extended by 1h



Cycle 1分野別プロポージャー数と審査 パネル数(各パネル7名)

Category 1, Cosmology:	233 (2 panels)
Category 2, Galaxies:	301 (3 panels)
Category 3, Star formation, ISM:	271 (3 panels)
Category 4, Disks and Solar System:	211 (2 Panels)
Category 5, Evolved Stars and the Sun:	117 (1 Panel)

Cycle 1プロポージャー地域別

EA:	211 (18.6%)
EA/NA:	1
EU:	486 (42.9%)
NA:	340 (30.0%)
CH:	65 (5.8%)
Open sky:	30 (2.7%)

Cycle 1 Timeline - 2013

- October 1-5: Proposal Review Panels/Committee (49 members->78)
- October 12-29: Technical Assessment (f2f: Oct 23-25)
- November 14: PI notification and start of Phase 2
- 1 January: Start of Cycle 1 observations
- February: Engineering period
- 31 October: End of Cycle 1 observations

international conference “The First Year of ALMA Science 2012”

- Puerto Varas, Chile
- 12-15 December

- Milestones
 - Registration deadline: Sept 15, 2012
 - Hotel reservation deadline: Sept 20, 2012
 - Abstracts deadline: Oct 27, 2012

- SOC
 - Leonardo Testi (ESO, Chair), Paola Andreani (ESO), Lewis Ball (JAO), Alberto Bolatto (University of Maryland), Crystal Brogan (NRAO), Françoise Combes (Observatoire de Paris), Rob Ivison (Royal Observatory of Edinburgh), Kelsey Johnson (University of Virginia), Carol Lonsdale (NRAO), Gautier Mathys (JAO), Munetake Momose (Ibaraki University), Neil Nagar (Universidad de Concepción), Lars-Ake Nyman (JAO), Toshikazu Onishi (Osaka Prefecture University), Alison Peck (JAO), Masao Saito (JAO), Ken Tatematsu (NAOJ), Ewine van Dishoeck (Leiden Observatory), Al Wootten (NRAO), Martin Zwaan (ESO)