ALMA/45m/ASTE Users Meeting 2016
December 19 – 20, 2016
NAOJ, Mitaka, Japan

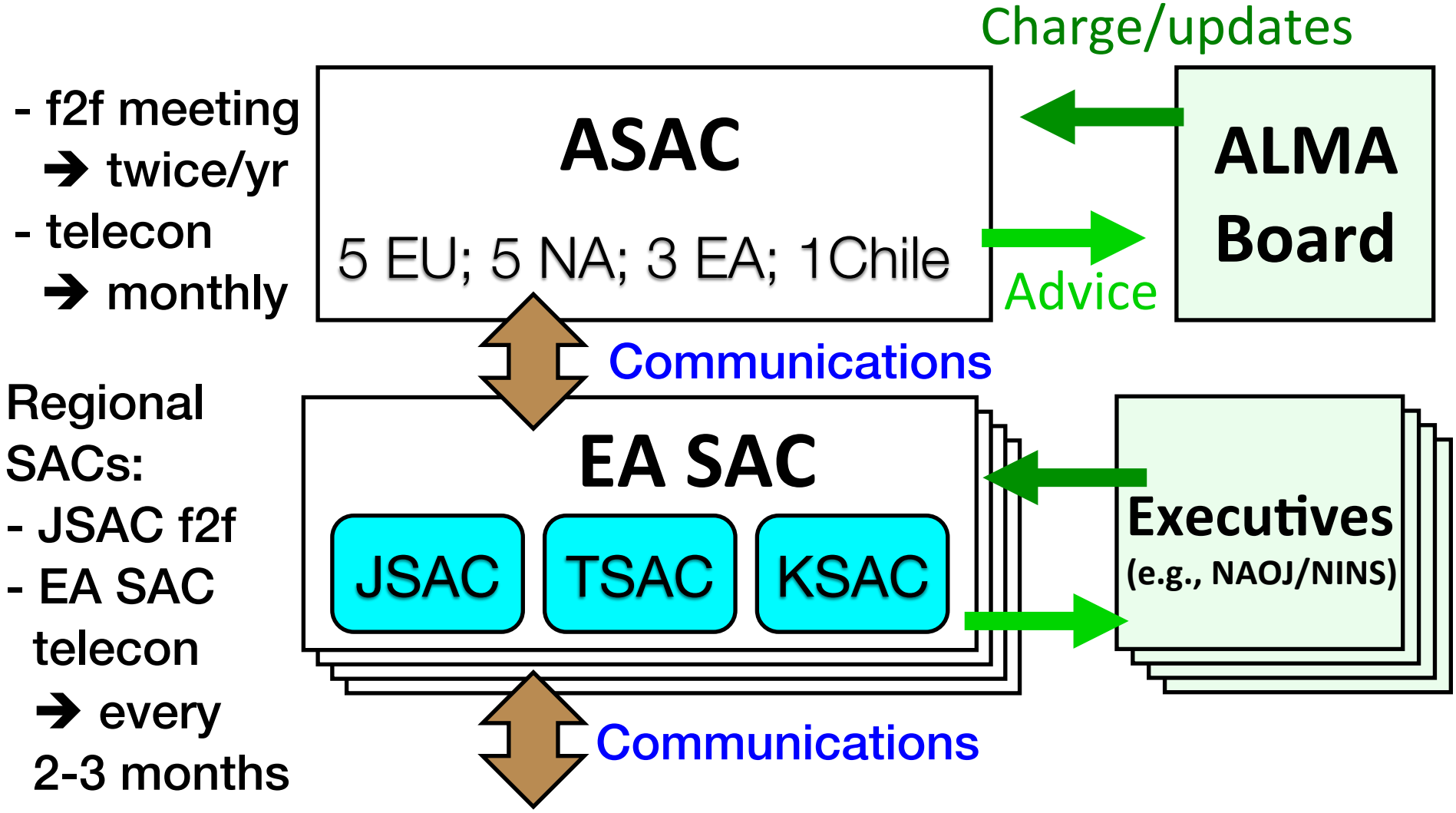
Science Advisory Committee (SAC) Report

On be half of JSAC/EASAC

Kotaro Kohno

Univ. of Tokyo

SAC structure



Momose-san's slide

As of October 2016

ASAC

ESAC

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R. Neri (IRAM/NOEMA)
H. van Langevelde (JIVE/Leiden)
※ K. Knudsen

KSAC

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B.-C. Koo (SNU)
A. Chung (Yonsei U.)
A. Lyo (KASI)

TSAC

H.-R. V. Chen (NTHU)
P. Koch (ASIAA)
Y.-W. Tang (ASIAA)
S.Y. Liu (ASIAA)

ANASAC

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A. Bolatto (U. Maryland)
R. Osten (STScI/JWST)
※ G. Novak, Stephen White, C. Wilson
D. Scott (U. British Colombia)

Chile

M. Aravena (Univ. Diego Prtales)

JSAC

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N. Ohashi (NAOJ/Subaru)
K. Kohno (U. Tokyo)

N. Sakai (RIKEN)
K. Tachihara (Nagoya U.)

Y. Aikawa (U. Tsukuba)
H. Imai (Kagoshima U.)
N. Kuno (U. Tsukuba)
K. Motohara (U. Tokyo)
T. Oka (Keio U.)
T. Onishi (Osaka Pref. U.)

Recent issues discussed in ASAC (1)

- Data delivery backlog
  - Extremely concerned about the growth of backlog in delivery of data to users.
  - Release of raw data to PIs? (the archive still requires full processing of the data, though)
- Archive/Imaging pipeline
  - Needs definition of science-ready imaging products for archive and PI use.
- CASA
  - Lack of backward compatibility is being a (serious) concern

Recent issues discussed in ASAC (2)

- Large programs
  - Ensure success of two accepted large proposals
- Proposal review
  - encouragement of community/review panel towards medium-sized proposals
  - access to ACA in standalone mode for Band 8 through 10 to allow community to gain expertise
  - inclusion of ARC personnel as APR reviewers if community pool is too small ← important for EA!
  - inclusion of demographic information seems mandatory for different analyses (e.g. gender bias, success of non-traditional users etc.)

Recent issues discussed in ASAC (3)

- Development studies
  - significant progress on Band 2+ and 2+3 suggests need for a strategic decision in the near future.
- "ALMA2030" and new science goals of ALMA
  - While ALMA2030 set the basic science goals, the Board would like to see these encapsulated into new science goals, with (at least) one per major development initiative.
  - The three major initiatives are, broadly speaking, enhanced throughput (e.g., improvement of RX/IF/correlators, etc.), longer baselines, and wider field of view (e.g., focal plane arrays).

Memo:

Current ALMA science goals

1. The ability to detect spectral line emission from CO or C^+ in a normal galaxy like the Milky Way at a redshift of z = 3, in less than 24 hours of observation.
2. The ability to image the gas kinematics in a solar-mass protostellar/protoplanetary disk at a distance of 150 pc, enabling one to study the physical, chemical, and magnetic field structure of the disk and to detect the tidal gaps created by planets undergoing formation.
3. The ability to provide precise images at an angular resolution of 0.1”.

JSAC

- Regional SAC for ALMA project
- also plays a role as SAC for NRO 45m and ASTE 10m telescopes
- Members from projects (NAOJ Chile Observatory and Nobeyama Radio Observatory):
  - T. Hasegawa → S. Sakamoto,
  - S. Iguchi, K. Tatematsu, D. Iono
  - M. Saito (→ ?)
  - T. Okuda → S. Asayama

Recent issues discussed in JSAC

- ALMA operations & ASAC issues
  - Region specific issues (e.g., ALMA PI support)
- Operation of NRO 45m telescope
  - Improvement of mapping performance at 3mm
  - New proposal due dates, new frameworks (e.g., Joint proposal)
- Operation of ASTE 10m telescope
  - Implementation of Band-8 on ASTE
  - ASTECAM CSV review
- Optimization of annual meetings/proposal due dates
  - Development workshop (July), user's meeting (December), ALMA (April), 45m/ASTE general/large/joint (July) + 45m short/ASTE general (December) + DDT

We need your feedback!