

第 1 回 ALMA 科学諮問委員会 議事概要

Date and time : October 21 , 2024 14:00 - 16:30 (JSAC startet at 15:30)

Attendees:

JSAC: Yuri Aikawa, Fumi Egusa, Takuya Hashimoto, Hanae Inami, Shinya Komugi,
Kazuhito Motogi, Hideo Sagawa, Hidetoshi Sano, Yoshito Shimajiri, Shigehisa Takakuwa,
Yoichi Tamura,

EASAC: Aeree Chung, Jongsoo Kim, Cheng-Yu Kuo, Li-Hwai Lin, Sasha Trippe

Ex officio: Satoru Iguchi, Takuma Izumi, Misato Fukagawa, Bunyo Hatsukade, Atsushi
Nishimura

Agenda:

EASAC 14:00-15:30

1. Introduction of members of this term
2. ALMA report (Fukagawa)
3. Discussion
4. Input on community survey with the legacy system

JSAC 15:30-16:30

1. Domestic ALMA report (Fukagawa)
2. NRO report (Nishimura)
3. ASTE report (Minamidani)
4. ngVLA report (Izumi)
5. Discussion
6. Charges of this term

EASAC meeting:

1. Input on community survey with the legacy system
 - The idea of the community survey with the legacy system before WSU implementation was proposed. The EASAC's inputs are requested for discussion at the ASAC meeting. The EASAC raised some concerns and discussed the issues. Since there are many uncertainties in terms of the definition and implementation of such a survey, EASAC considered that it could neither support nor oppose it at this point. Continued discussion is needed in the future. The community survey after WSU implementation will be another point of discussion in the near future.

- It would be quite complex to handle the community survey although the definition of the survey is not defined by now.
- It is a bit challenging to start a new community survey because currently ALMA has a very high oversubscription rate for regular PI proposal.
- We would be able to start the community survey without increasing the oversubscription rate if we trade for large programs.
- As it is difficult to make the survey less biased, the community survey usually doesn't benefit the whole community.
- If the observatory leads and conducts the community survey based on the community input, there is a way to sort of get rid of some bias.
- We should not start the community survey before the WSU. We would probably like to do that after WSU when the sensitivity is better.

2. Discussion

- The EASAC discussed the proposed change to the DDT proprietary period. The motivation for waiving the DDT proprietary period is to provide wider and more immediate access to the data and to maximize the benefit for the entire community. Tradeoffs are the creation of pressure for quick publication and the

disparity for less experienced researchers or smaller teams. The Integrated Science Team (IST) endorsed proposal to waive the DDT proprietary period although the IST acknowledged the tradeoffs. The EASAC raised concerns about potential disadvantages for the EA community. The concerns will be discussed at a later ASAC meeting. The EASAC also considers it important to ensure the fairness and transparency for accepting exceptional cases.

3. ALMA report (Fukagawa)

- Cycle10 finished, Cycle 11 started
 - Record-breaking hours of science-quality data on all the 3 Arrays (12m, 7m, Total Power)
 - More high-frequency SBs were observed compared to previous cycles.
 - Automatic data delivery has been implemented during Cycle 10 gradually.
 - ACA spectrometer developed in East Asia has been used for TP data from the beginning of Cycle 10.
 - Observations with Band 1 receivers, whose development was led by EA, started on the 12-m Array in March 2024.
- EA Science & Data Analysis Workshops (in Korea)

- Wide Sensitivity Upgrade (WSU)
 - Website on WSU has been set up in JAO, and each region is also planning to have a similar site.
 - No announcement to the community yet since November 2023. The need is recognized.
 - WSU planning is ongoing for the whole observing system.
 - WSU EA components: Preliminary Design Review for the Data Transmission System concluded with “Pass” this month.
- Update on the management in NAOJ ALMA
 - ARC Manager (Takuma Izumi) from September 2024

JSAC meeting:

1. Domestic ALMA report (Izumi & Hatsukade)

- ALMA continues user support (publication support and data analysis workshop), ALMA grant fellow, and support for ALMA workshop.
- EA ALMA Development workshop was held in Mitaka (~100 participants).
The next ALMA Science Workshop will be held in Kagoshima.

2. NRO report (Nishimura)

- NRO terminated open-use of the 45m telescope in 2021 and started charged telescope time (10k JPY/hour for domestic, 30k JPY/hour for international without sales tax).
- Several types of programs were offered (General, EAVN, Student, CSV Contribution, Development, and Hands-on tutorials).

3. ngVLA report (Izumi)

- The ngVLA project (NRAO) has passed the NSF's Conceptual Design Review in September
- NAOJ Study group submitted a Letter of Intent for the NAOJ Science Roadmap.
- On-site experiment of the time/frequency reference distribution system is planned.
- A new contract with MELCO was made for ultra low-cost antenna.
- ATC will continue the in-house production of lower-frequency receivers.
- International Science Workshop held in Mexico (2024 Nov).