

第 3 回 ALMA 科学諮問委員会 議事概要

Date and time: July 5, 2023, 13:00 - 15:30 (online)

Attendees:

JSAC: Yuri Aikawa, Fumi Egusa, Kotaro Kohno, Munetake Momose, Toshikazu Onishi, Hideo Sagawa, Nami Sakai, Yoshito Shimajiri, John Silverman, Kengo Tachihara, Yoichi Tamura

Ex officio: Alvaro Gonzalez, Misato Fukagawa, Bunyo Hatsukade, Ken Tatematsu, Atsushi Nishimura, Tetsuhiro Minamidani

Agenda:

1. ngVLA report
2. ALMA report
3. NRO report
4. ASTE report

1. ngVLA report

Alvaro Gonzalez provided the ngVLA status.

- NAOJ ngVLA Study Group continues science/technical studies in 2022-2023. The group lead changed from A. Gonzalez as interim to T. Izumi on July 1st. An internal management team is being established at NAOJ.
- Joint SWG meetings were held on March 29 and June 5. Two SWG leads were replaced to engage new members within the younger generations. The next meeting of SWG leads will be held in late July.
- Two seminars with ELSI/Tokyo Institute of Technology were held on March 22 and June 14.
- Poster presentations at international conferences in Vancouver in May and Sapporo in August.
- The TAC meeting is scheduled on July 25. Time and reference distribution system designs by NAOJ continue to be tested. 3D printing experiments of different components, 18m antenna studies with industry, and the design of 6-m antenna optics continue.

2. ALMA report

Alvaro Gonzalez provided the ALMA status.

- ALMA has held events in Chile in March and in Tokyo in May to celebrate its 10th anniversary of full-fledge operations.
- The ALMA2 Project formally started in Japan on April 1. The Scientific Goals and Missions for the ALMA Project have been updated.

- Cycle 10 CfP was released on April 12 and closed on May 10.
- Publication statistics (as of July 4): 3350 papers, 493 from Japan (2nd behind USA).
- A project framework document for the WSU planning is almost complete. ALMA Management Team has been working on defining new processes and organization structure to assign resources for development out of operations resources.
- Development
 - Band 1: Production was completed in Taiwan, and all receivers were received at the site. Integration proceeds as planned.
 - Analysis of Band 1 Science Verification data is ongoing by teams in ASIAA and NAOJ.
 - Band 8: Initial planning for the upgrade was completed.
 - Band 2: planning towards production.
- DTS: Technical work continues, in collaboration with NICT.
- Norikazu Mizuno was appointed as the ALMA Deputy Director for Operations on July 1. Hiroshi Nagai was appointed as the NAOJ ALMA Commissioning Scientist at the EA-ARC.

Bunyo Hatsukade provided the report on science-related activities.

- Integrated Science Team sent a response letter to the letter from the Solar Community.
- ALMA Conference (4-8 December 2023, at Puerto Varas, Chile) is being prepared.
- NAOJ ALMA is organizing a tour of the ALMA site for a group of young Japanese researchers as part of the 10th-anniversary activities just after the ALMA conference.

Misato Fukagawa reported on the EA ARC user support:

- Cycle 10 proposal preparation meeting was held on April 18, online and onsite.
- An announcement of publication support in FY2023 will be made.
- Data reduction tutorials in FY2023 are planned.

There were discussions on the effect of the cyberattack, a fraction of Large Programs compared to that in Cycle 9, the total requested observing time for Cycle 10, and possible issues related to the CfP outcomes of small communities. Some other questions and requests were raised by the JSAC members, which will be discussed in the next meeting.

3. Atsushi Nishimura and Ken Tatematsu provided the NRO report.

- NRO offers the opportunities of the charged 45-m telescope time observations with three submission deadlines: June 1st for hands-on tutorials or development programs, August 1st for science observations, and December 1 for allocations later than February. NRO accepted 185 hours of requests for the deadline of June 1.

- The CfP of NRO45m 2023B semester was issued on June 30. The HINOTORI filter enabling simultaneous observations of H22 and Z45 receivers was opened for the community.
- Development program using the Nobeyama campus:
 - A workshop regarding development programs using Nobeyama was held on June 1.
 - The 1-year expiration period is added for the proposals that are accepted but do not receive funding.
 - The call for proposals was issued on June 15, and the deadline is July 18.
- The 7BEE receiver will not be released for the charged telescope time due to performance problems.

4. Tetsuhiro Minamidani provided the ASTE status report.

- The status of the ASTE telescope and infrastructure
 - Malfunction of sub-reflector driving system recovered.
 - ASTE site was reopened on May 9. Minimum antenna maintenance was done. The heterodyne receivers and the spectrometer were started up.
 - Commissioning and Science Verification with DASH345 / CAT8W and XFFTS are ongoing.
 - Observing environment, software, tools, etc., are under preparation.
 - ASTE operation room in San Pedro de Atacama was relocated.
- Planned activities in FY2023 and FY2024
 - Commissioning heterodyne receivers and spectrometer
 - KAKENHI projects
 - DESHIMA project
 - Open-use programs carried over from FY2020 are planned in FY2024.