

V131a Update on ALMA Operations and Development Program - Spring 2023

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In this presentation, we will offer an update on ALMA Operations and Development Program.

Operations: The transition from Cycle 8 2021 to Cycle 9 of ALMA scientific observations was very smooth at the end of September 2022. Cycle 8 was the 2nd most productive cycle in ALMA's history in terms of observed hours in the 12m array. Cycle 9 started very well but unfortunately scientific observations were interrupted due to a cyber attack. This presentation will provide an update on the latest situation with respect to the status of Cycle 9, the preparation towards Cycle 10, and some statistics from Cycle 8 2021.

Development: NAOJ is collaborating in the development of receivers for Band 1 (35-50 GHz, led by ASIAA) and Band 2 (67-116 GHz, led by ESO), the ACA Spectrometer (led by KASI), and the ALMA2030 Data Transmission System (DTS, in collaboration with NRAO and KASI) in addition to initial studies in hardware and software. In this presentation, we will provide an update on the status of the different projects and studies. In particular, we will report on the status of work for the implementation of Band 1 and the ACA Spectrometer in ALMA towards Cycle 10, the outcome of the ALMA band 2 Critical Design Review, the first steps in the DTS upgrade, and the demonstration of different technologies towards ALMA2. We will also provide an update on the latest milestones towards the implementation of the ALMA2030 Wideband Sensitivity Upgrade (WSU), including the outcome of the System Requirement Review (SRR) held in October 2022.