

## V110b Update on ALMA Operations and Development Program - Fall 2025

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This presentation provides an update on ALMA operations and development overview since the previous ASJ meeting in March 2025. The Cycle 11 observing season, which began in October 2024, has been progressing smoothly, with both observations and data delivery to PIs proceeding well, including through the automated system. The Call for Proposals for Cycle 12 closed as planned on April 24, again with a large number of proposals received. New capabilities to be introduced in Cycle 12 include full polarization in Band 1 on the 7-m Array and Band-to-Band calibration for Large Programs.

Preparations for the Wideband Sensitivity Upgrade (WSU) are also progressing. This major upgrade includes replacing hardware components such as receivers, digitizers, data transmission systems, a correlator, and a spectrometer. In addition, the observational and data analysis software are being updated for operations of the integrated WSU system. The overall system design and its staged implementation plan are being actively developed by teams from software/computing, science operations as well as development and engineering. This effort has brought the project to the point where it is ready for external reviews scheduled for the summer and fall of 2025. Regarding the development led by East Asia, design studies for the Total Power GPU spectrometer and the new Band 8v2 receivers are underway. The Data Transmission System, which passed its Preliminary Design Review in 2024, is currently undergoing prototyping.