

# The ALMA Wideband Sensitivity Upgrade

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The Wideband Sensitivity Upgrade is an ALMA initiative to implement the highest near-term priority of the ALMA Development Roadmap: to at least double ALMA's system bandwidth with improved sensitivity and scientific capabilities. This goal requires upgrading the receivers and most of the digital electronics, including the correlator, as well as the ALMA software that drives the system. The Wideband Sensitivity Upgrade will afford significant improvements for every future ALMA observation. The impact will span the vast array of astronomical topics for continuum or spectral line science. The impact will be particularly profound for high spectral resolution surveys ( $< 0.2$  km/s) of molecular clouds and protoplanetary disks, where the instantaneous correlated bandwidth will increase by 1-2 orders of magnitude over current capabilities. This poster will summarize the future upgrades for the Wideband Sensitivity Upgrade and the expected scientific impact.