

ALMA Science

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For interferometric observations, the highest time resolution is set by the shortest correlator dump time. In so-called time division mode (TDM), the correlator can output every 16ms (though at reduced spectral resolution), so you can Nyquist sample a 32ms variation. One of these modes is number 70 which is described in detail in ALMA memo [556](#) available at

https://science.nrao.edu/facilities/alma/aboutALMA/Technology/ALMA_Memo_Series or at Escoffier et al. 2007, A&A 462, 801. For single dish observations with the total power array, dumps as short as 1ms will be possible.

Note that observed data will be time-integrated for 6~10 seconds and stored (for 1 second in Solar Observation).