

Dark Energy Spectroscopic Instrument: Data Overview

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The Dark Energy Spectroscopic Instrument (DESI) started its main survey. Over 5 years, it will measure the spectra and redshifts of about 35 millions galaxies and quasars over 14,000 square degrees. This 3D map will be used to reconstruct the expansion history of the universe up to $z=3.5$, and measure the growth rate of structure in the redshift range 0.7-1.6 with unequaled precision. The start of the survey marks the end of a successful survey validation period during which more than one million cosmological redshifts were measured, already about as many as in any previous survey. This data set, along with many commissioning studies, has demonstrated the project meets its science requirements written many years ago. I will present how we have validated the target selection, the observation strategy and the data processing, demonstrating that we can achieve our goals in terms of density of galaxies and quasars with measured redshifts, with the required precision, for exposure times that allow us to cover one third of the sky in five years.

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