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The Dark Energy Survey: Progress Through First 5 Survey Seasons H THOMAS DIEHL, Fermilab, DARK ENERGY SURVEY COLLABORATION — The Dark Energy Survey (DES) is a currently running optical imaging survey aimed at understanding the accelerating expansion of the universe using four complementary methods: weak gravitational lensing, galaxy cluster counts, baryon acoustic oscillations, and Type Ia supernovae. To perform the 5000 sq-degree wide field and 30 sq-degree supernova surveys, the DES Collaboration built the Dark Energy Camera (DECam), a 3 square degree, 570 Megapixel CCD camera that is installed at the prime focus of the Blanco 4-meter telescope at the Cerro Tololo Inter-American Observatory. In Feb. 2018 DES completed its fifth 105-night season. We'll start our final (52 night) observing season in August. This presentation will describe DES, the survey strategy and goals, the efficiency of survey operations, and the quality and calibration of the data recorded through Year 5.

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