Data Processing Pipeline for KPLO/PolCam

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The Korea Pathfinder Lunar Orbiter (KPLO) named 'Danuri', the first Korean lunar orbiter, was launched on August 5, 2022 at Cape Canaveral Space Force Station, USA. The orbiter is expected to enter the lunar orbit this December. The Wide-Angle Polarimetric Camera, PolCam, is a payload of the KPLO that will measure the polarimetric properties of the lunar surface from its orbit (100 ± 30 km). In this work, we developed the data processing pipeline using the Integrated System for Imagers and Spectrometers (ISIS) program from the United States Geological Survey (USGS). We used the SPICE (Spacecraft, Planet, Instrument, Camera-matrix, Events) kernels including simulated orbit information provided by Korea Aerospace Research Institute (KARI). Also, we verified this pipeline using our mock data generated from SELENE Multiband Imager data. In this poster, we will introduce our data processing pipeline and the test results.