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Measurements of the helicity asymmetry E for eta meson photoproduction on the proton BRIAN MORRISON¹, Arizona State University, FOR THE CLAS COLLABORATION — The nucleon resonance spectrum consists of many overlapping excitations. Polarization observables are an important tool for understanding and clarifying these spectra. While there is a large data base of differential cross sections for the process, there are no published data for eta double polarization asymmetries. A program of double polarization experiments has been conducted at Jefferson Lab using a tagged polarized photon beam and a frozen spin polarized target (FROST). The results to be presented were taken during the first running period of FROST using the CLAS detector at Jefferson Lab with photon energies ranging from 329 to 2,350 MeV. We present data for the E polarization observable for eta meson photoproduction at threshold and above, along with comparisons to several theoretical predictions.

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