

Measurements of the neutrons and gamma rays emitted in fission can help us better understand the physics of the fission process. Past experimental analyses have focused mainly on the neutrons emitted during fission, but relatively little is known about fission gamma rays. We analyzed data collected at the Los Alamos Neutron Science Center (LANSCE) using the Chi-Nu organic-scintillator detector array measuring neutron-induced fission reactions of ^{235}U . With this data we study the gamma-ray emission as a function of incident neutron energy. In the analysis we plan to present, changes in the gamma-ray multiplicity and spectrum. We will use the multiplicity and spectral information to draw conclusions about the relationship between incident energy and the angular momenta of the fission fragments.