Summer 2015 internship at Johns Hopkins— Rachel Maxwell

Rachel Maxwell is currently working at the Johns Hopkins University Applied Physics Lab (JHU/APL) as a summer intern, where she researches the surface of Mercury using spectroscopy data from the MESSENGER (MErcury Surface, Space ENvironment, GEochemistry, and Ranging) spacecraft, which recently ended orbital operations. Her project consists of analyzing the spectroscopy data of hollows (relatively fresh, bright depressions in the surface, believed to be formed by the sublimation of volatiles) in an attempt to find a trend in the geochemistry of these areas. Here she can be seen celebrating the New Horizons Flyby of Pluto on 14 July 2015, a mission in which JHU/APL plays a major role. During the school year, Rachel works with Professor Briony Horgan of the Earth, Atmospheric, and Planetary Sciences Department where she analyzes Martian spectroscopy data from the CRISM (Compact Reconnaissance Imaging Spectrometer for Mars) spacecraft to look for minerals that might help determine the history of water on the planet. She will continue her Mars research throughout her senior year, and hopes to attend graduate school in planetary sciences to add to her knowledge about planetary bodies.