## Abstract Submitted for the MAS14 Meeting of The American Physical Society

The High Altitude Water Cherenkov Observatory KELLY MALONE, Pennsylvania State University, HAWC COLLABORATION — The High Altitude Water Cherenkov (HAWC) Gamma-Ray Observatory, located at an altitude of 4100m on the Sierra Negra plateau in Mexico, is a second-generation experiment designed to observe TeV gamma rays and cosmic rays from air showers. It consists of a large array of water Cherenkov detectors, each of which is equipped with 4 PMTs. Data collection began in 2012 with a partially built detector. The full 300-detector array will be deployed by December 2014. HAWC's large field of view ( $\sim 2$  sr) and high duty cycle (>90%) makes it well suited to observe gamma ray bursts, diffuse emission from the galactic plane, AGN, the cosmic ray anisotropy, and other transient and extended sources. I will present the observatory, scientific motivation and current status of the deployment.

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Date submitted: 29 Aug 2014 Electronic form version 1.4