

Recent Highlights from the High Altitude Water Cherenkov Observatory

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The High Altitude Water Cherenkov (HAWC) Observatory has been surveying the TeV sky for over 3 years. HAWC surveys 2/3rd of the sky each day with a wide field-of-view, high duty-cycle, and wide energy range. HAWC is a powerful instrument to study key aspects of particle astrophysics, including the production, propagation, and interaction of cosmic rays, searches for dark matter, and locating the highest energy (>100 TeV) gamma-ray sources. It can also monitor for variable sources and transients. We will discuss the discovery of TeV halos around middle-aged nearby pulsars that shed new light on the positron excess puzzle. We will also discuss new TeV sources that have been discovered, including possible PeV cosmic ray sources (PeVatrons). Additionally, we will discuss searches for GRBs, gravitational wave events, and dark matter.

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