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## First Limits on the Dark Matter Cross-Section with the HAWC Observatory

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The High Altitude Water Cherenkov (HAWC) gamma-ray observatory is a wide field-of-view observatory sensitive to 100 GeV – 100 TeV gamma-rays and cosmic-rays. The HAWC observatory is also sensitive to diverse indirect searches for dark matter annihilation, including annihilation from extended dark matter sources, the diffuse gamma-ray emission from dark matter annihilation, and gamma-ray emission from non-luminous dark matter subhalos. Among the most promising classes of objects for the indirect detection of dark matter are dwarf spheroidal galaxies. These objects are expected to have few astrophysical sources of gamma-rays, but high dark matter content, making them ideal candidates for indirect dark matter detection with gamma-rays. Here we present independent limits on the annihilation cross section for 14 dwarf spheroidal galaxies within the HAWC field-of-view, as well as a combined limit using all 14 candidates. These are the first limits on the annihilation cross section using data collected with HAWC. Other dark matter results and studies with the HAWC observatory will also be discussed.

### Collaboration

HAWC

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