

NuSTAR and VERITAS observations of unidentified Galactic HAWC sources

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We present follow-up X-ray and gamma-ray observations of two unidentified Galactic HAWC sources, 2HWC J1928+177 and 2HWC J1953+294, with the NuSTAR and VERITAS observatories. VERITAS gamma-ray observations of 2HWC J1928+177 resulted in upper limits, while a follow-up NuSTAR X-ray observation detected a variable X-ray point source with a bright IR counterpart. The HAWC source could be powered by this variable X-ray source (which might indicate a new gamma-ray binary system) or by a nearby radio pulsar, PSR J1928+1746. The second unidentified HAWC source, 2HWC J1953+294, has been associated with an ageing pulsar wind nebula (PWN), DA495. NuSTAR and VERITAS observations of DA495 allow us to study its multi-wavelength SED and determine whether the HAWC source is powered by the PWN. We will also overview our HAWC-VERITAS-NuSTAR observation campaign and present some preliminary results from a few other TeV gamma-ray sources as well as our future plans.

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