

Multi-wavelength Observations of a Long-duration Flare from BL Lacertae

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The Very Energetic Radiation Imaging Telescope Array System (VERITAS) is one of the world's most sensitive very-high-energy (VHE; $E > 100$ GeV) gamma-ray observatories. VERITAS is used to regularly monitor the VHE flux of selected intermediate-frequency-peaked BL Lac objects (IBLs). IBLs are typically only detected at VHE during flaring episodes, and their VHE emission mechanisms may differ from those of high-frequency-peaked BL Lac objects more commonly detected at VHE. In October-November 2022, VERITAS observed a long duration (≈ 45 days) VHE flare from BL Lacertae for the first time. The initial detection of this flare triggered a multi-wavelength observation campaign on the source. Scientific results from these multi-wavelength observations of this BL Lacertae flaring event will be presented.

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