

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.

38th International Cosmic Ray Conference (ICRC2023)
26 July - 3 August, 2023
Nagoya, Japan



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Acknowledgements

This research is supported by grants from the U.S. Department of Energy Office of Science, the U.S. National Science Foundation and the Smithsonian Institution, by NSERC in Canada, and by the Helmholtz Association in Germany. This research used resources provided by the Open Science Grid, which is supported by the National Science Foundation and the U.S. Department of Energy's Office of Science, and resources of the National Energy Research Scientific Computing Center (NERSC), a U.S. Department of Energy Office of Science User Facility operated under Contract No. DE-AC02-05CH11231. We acknowledge the excellent work of the technical support staff at the Fred Lawrence Whipple Observatory and at the collaborating institutions in the construction and operation of the instrument.

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