

The VERITAS Stellar Intensity Interferometer (VSII) Survey of Northern Sky Stellar diameters.
 Dave Kieda, University of Utah for the VERITAS collaboration



What is this contribution about?

This poster describes the structure and status of the Veritas Stellar Intensity Interferometer (VSII) Survey of Northern Sky Stellar diameters.

Why is it relevant / interesting?

VSII measures stellar diameters at shorter wavelengths (416 nm) and longer baselines than traditional amplitude interferometers. This is a significant extension of the science portfolio of the VERITAS gamma-ray observatory.

What have we done?

Since December 2019, we have used VSII to observe over 255 hours on 39 different stars. This includes 21 single stars and 18 binary stars over a range of stellar classes and magnitudes.

What is the result?

Preliminary analysis of the data demonstrates the ability of VSII to measure stellar diameters over a range of stellar classes and diameters with <5% resolution. A final analysis of the observations is forthcoming.

