

MEASUREMENT OF THE UHECR ENERGY SPECTRUM USING MONOCULAR HIRES DATA

HiRes Collaboration

The High-Resolution Fly's Eye Experiment (HiRes) has been making monocular fluorescence observations of cosmic rays above 3×10^{18} eV since June, 1997. Events collected through October, 2000, included about 1850 hours of good weather data. HiRes has made careful analysis and cross-checks of its photonic calibration, as well as the calibration of the atmospheric transmission. These have been incorporated into the spectrum analysis. Monte Carlo prediction for resolutions have also been verified with the smaller stereo data set. The resulting ultra-high energy cosmic ray spectrum will be presented.