THE WHIPPLE OBSERVATORY GRANITE III UPGRADE PROGRAM

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The VERITAS Collaboration has been carrying out an upgrade program, GRANITE III, on the 10 m telescope atop Mt. Hopkins. The four year program, 1996 through 2000, has involved a large field-of-view camera, a hardware pattern selection recognition trigger, a small pixel camera, and a resurfacing of the mirror facets which comprise the 10 m reflector. Results of the program indicate the following; a large field-of-view yields an increased collection area for cosmic-ray triggers, the hardware pattern trigger reduces the energy threshold of the telescope by greatly suppressing night sky accidental triggers over a simple multiplicity coincidence trigger, and small pixelation reduces the energy threshold of the telescope through improved image reconstruction and hence better cosmic-ray background discrimination. Data acquired with the 10 m telescope during this multi-year program will be presented demonstrating the gains at each stage.