

LARGE ZENITH ANGLE OBSERVATIONS WITH THE HIGH RESOLUTION GRANITE III CAMERA

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The GRANITE III camera of the Whipple Cherenkov Telescope at the Fred Lawrence Whipple Observatory on Mount Hopkins, Arizona (2300 m a.s.l.) achieves the highest angular resolution of all cameras used on this telescope so far. The central region of the camera has 379 pixels with an individual angular diameter of 0.12° . This makes the instrument especially suitable for observations of gamma-induced air-showers at large zenith angles since the increase in average distance to the shower maximum leads to smaller shower images in the focal plane of the telescope. We examine the characteristics of gamma-induced air-showers at zenith angles up to 70° based on observations of the Crab Nebula and Mrk 421.