ATMOSPHERIC AND GEOMAGNETIC EFFECTS ON THE IMAGING ATMOSPHERIC CHERENKOV TECHNIQUE

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A number of atmospheric and geomagnetic effects have an impact on atmospheric Cherenkov detectors. In particular for the new telescope projects with their high-resolution cameras, the effects leading to distortions and displacements of shower images can be significant. Apart from that, the shower energy calibration is affected substantially at all energies. At low energies, geomagnetic effects may also deteriorate the gamma-hadron discrimination.