

# Atmospheric monitoring using the Cherenkov Transparency Coefficient for the Cherenkov Telescope Array

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The Cherenkov Telescope Array (CTA), the future ground-based gamma-ray observatory, will require reliable monitoring of the atmosphere which is an inherent part of the detector. We discuss here the implementation of the extended method of the Cherenkov Transparency Coefficient for the atmospheric calibration for the CTA. The method estimates the atmospheric transmission of Cherenkov light, relying on the measurement of the rates of cosmic ray-induced air showers that trigger different pairs of telescopes. We examine the performance of our approach utilizing Monte Carlo simulations assuming various atmospheric conditions and CTA observation configurations.

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