

GrOptics User's Guide

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Abstract

GrOptics is a detailed simulation program for ray-tracing Cherenkov photons through large arrays of atmospheric Cherenkov telescopes. The code input is from shower packages such as Corsika after conversion to GrISU format. The output to a ROOT file records individual photons striking the camera surface. The package models both VERITAS Davies-Cotton and Schwarzschild-Coudee telescopes with all telescope parameters taken from input files. There is no limit to the number or type of array telescopes. Adding new telescope types, input and output formats, etc. is straightforward using standard C++ coding techniques with existing base classes.

1 Introduction