

## Fluorescence light emission in CORSIKA 8

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Air fluorescence has been usually neglected in current IACTs and wide-angle timing air Cherenkov detectors as the fluorescence light component is emitted isotropically and with a lower light yield than the Cherenkov component. However, next-generation km-scale arrays will register signals from air showers at impact distances where both light components start to be comparable. In order to take into account the fluorescence light in shower reconstruction, we need Monte Carlo simulations. Following the implementation we did in CORSIKA 7, we aim to also develop the emission of air fluorescence in the new CORSIKA 8 framework. As a starting point, we can share the FORTRAN routines we implemented in CORSIKA 7 as a stand-alone piece of code. We will discuss the aspects needed to make this implementation possible, such as the tracking of charged particles, corresponding deposited energy, and tabulated atmosphere.

**Authors:** MORCUENDE, Daniel (Universidad Complutense de Madrid); ROSADO, Jaime (Universidad Complutense de Madrid); CONTRERAS, Jose Luis (Universidad Complutense de Madrid)

**Presenter:** MORCUENDE, Daniel (Universidad Complutense de Madrid)

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