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### Cloud Optical Thickness Estimation from GMS-5/SVISSR

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#### Abstract

To assess environmental change at global scale, accurate estimates of fluxes at high temporal resolution are needed. An algorithm for the shortwave radiation budget from the GMS-5/SVISSR data has been studied. In this study, a component of this algorithm used for deriving COT is evaluated. The COT retrieved from the GMS-5/SVISSR is compared with similar parameters

Terra/MODIS during APEX-E2. It was found that the assumption of clouds as well as the sensor quantization noise can introduce a large error from GMS-5/SVISSR. In the present analysis we show that the errors of clouds in the aggregate due to unknown effective radius can be reduced compared to errors of pixel-level ones.

Keywords: [estimation of cloud optical properties](#), [cloud optical thickness](#), [effective radius](#), [quantization noise of satellite sensor](#)

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