



## **Implementation of an Inter-Calibration Method between Meteosat SEVIRI and MODIS Solar Bands using Deep Convective Cloud Targets**

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So far, the calibration of the solar bands available on the operational weather satellite imagers aboard geostationary satellites has been exclusively relying on vicarious methods that consist mainly of comparing observed radiances with a modelled signal over a variety of targets (deserts, oceans, clouds, Moon, etc.). As the set of geostationary satellites currently in operation do not sense the same part of the Earth, the type and the properties of the targets available in their field of regard vary significantly from one instrument to another, making the harmonization and the comparability of the data sets challenging.

Within the framework of the Global Space-based Inter-Calibration System (GSICS) Research Working Group, a set of vicarious inter-calibration methods for the solar bands are recommended for implementation by the various weather satellite operators in order to improve the quality and the comparability of the Earth Observation data provided by the current geostationary meteorological satellites. One of these methods is based on the inter-calibration of the solar bands available on the geostationary imagers with the Moderate Resolution Imaging Spectroradiometer (MODIS) on-board the Aqua satellite, using deep convective clouds (DCCs) as calibration targets (Doelling et al. 2011). This method is applied to the Spinning Enhanced Visible and Infrared Imager (SEVIRI) aboard the Meteosat 8 and 9 satellites. After a description of the main steps of the algorithm, the first results are presented and discussed.