



Step by Step Guidance for Monitoring Convection through Satellite Observations

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The aim of this presentation is to stimulate efficient utilization of satellite data in operational meteorology for detection, analysis and prediction of deep moist convection and associated phenomena, which is the main purpose of the EUMETSAT Convection Working Group (<https://www.essl.org/cwg/>).

This presentation is the first “graphical” release (Beta Version) of condensed version based on Recent Concepts and Practices documents (https://www.essl.org/cwg/res/pdf/BP-EUMETSAT_20140612.pdf) with some updates which is joint effort of Convection Working Group and will be in such form updated also in future on yearly basis. In this presentation the geostationary satellite products, especially from Meteosat Second Generation, are grouped in three convective stages: (1) Pre-Convective Environment, (2) Convective Initiation and (3) Mature Storm Characteristics. For each product in each group mentioned above, most important condensed information is illustrated including an illustrative case, accessibility, dissemination, limitations and a link to training module or other more detailed information. Also a short comparison between similar products is given. For example, comparison between iSHAI and GII will explain that iSHAI is accessible after installing NWCSAF software in local environment, it requires a real-time MSG/SEVIRI input and selected NWP model fields. Meanwhile GII product is accessible via EumetCast and always uses ECMWF data in addition to MSG/SEVIRI data.

The aim of this presentation is to bring satellite products, which are important for monitoring convection, closer to forecasters. It is a small, but important step to bridge the gap between research and operations.