Pre-Operational NDVI Product Derived from MSG SEVIRI

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Normalized Difference Vegetation Index (NDVI) is a crucial land surface characteristic derived from satellite data. NDVI derived from AVHRR/NOAA is now the most widely used in medium to large scale studies to determine vegetation-climate interactions. Experiments with MSG (METEOSAT 8/9) SEVIRI data have demonstrated a good potential for new generation imaging instruments onboard geostationary satellites to provide routine monitoring of the vegetation state through NDVI.

In this study, we present pre-operational daily and weekly NDVI products derived from MSG SEVIRI data. Full disc MSG coverage red and near infrared bands are processed and the products are masked using the derived Cloud Mask products. Validation is performed against Land SAF fractional vegetation cover (FVC) products. Additionally, MSG NDVI products are compared with METOP AVHRR based NDVI products. Temporal stability analysis is also performed.