

Summary:

Ling Sun presented the multi-satellite FY-1 and FY-3 VIRR visible recalibration effort at CMA performed with multiple independent calibration methods. The FY-1 and FY-3 satellite orbits are not maintained and drifted over their lifetimes causing challenges to the calibration effort. The VIRR record is consistently calibrated within 5%. Questions: Future improvements include looking at stray light and response versus scan angle differences.

Jae-Hyun AHN: Introduced the two GOCI sensors and retrieved ocean color products. The calibration effort uses the MODIS 0.86 μ m as the calibration reference to inter-calibrate the GOCI 0.86 μ m channel. The remaining shorter visible wavelengths are calibrated using inter-band predicted Radiative transfer model results. Questions: The greatest challenge for inter-band calibration is the characterization and observations of aerosols for use in the radiative transfer model

Kodera Kazuki: Presented JMA comprehensive DCC calibration work with MTSAT-1R, MTSAT-2, and Himawari-8. The DCC method produced the most consistent results with the solar diffuser observations of the Himawari-8 visible channel degradation.

Raj Bhatt: Presented results from the newly revised GSICS DCC calibration ATBD to be release in July 2021. During one of the Fall 2021 monthly web meetings, we will discuss the implementation variations across agencies and the sharing of best practices. This will be tied to writing the GSICS interagency journal paper. Please email Raj for any questions or data requests on the implementation of the DCC method in your agency.

NOAA-20 VIIRS is the calibration reference for the new ATBD. It was stressed that the NOAA and NASA VIIRS visible calibration was within 0.2% and either dataset is accepted for GSICS DCC products. It was noted that the VIIRS channels are independently calibrated against the solar diffuser and is very important to document which VIIRS channel was used for DCC calibration.

Questions: Shukla asked if the VIIRS dataset will be made available to agencies. All information required for DCC calibration will be made available on the GSICS web site. Tim urged more discussion on the systematic uncertainties with the DCC method. Sebastien Wagner has a strawman GSICS product netCDF file for agencies to use as a model. Fred Wu is trying out PDF curve fitting to reduce the mode noise.