

Summary: GSICS VIS/NIR meeting 09 December 2021

**Pang Zhang** (CMA) presented “CMA Libra CSRB project”. The \$50M project is in phase B, the instrument prototypes are being built and tested. SI-traceable instrument is still under development. The project is waiting a satellite platform and launch opportunity. The proposed swath width of EMIS is 50Km and the pixel resolution is 100m. Currently it contains both a visible and IR component.

Dave Doelling (NASA) presented “Summary of the CLARREO Pathfinder workshop meeting (Nov 2-3, 2021)”. The CLARREO project has strict requirements to inter-calibrate the CERES and N20-VIIRS sensor and to characterize the moon and demonstrate intercalibration of the geostationary sensor GOES-EAST during the first year of operations. After the first year of operation will begin to intercalibrate more sensors and characterize earth invariant targets. GSICS is trying to coordinate with the CLARREO mission to host the GSICS 2025 annual meeting to facilitate GSICS recommendations for the CLARREO project. The CLARREO will produce L1A and L1B datasets. The L1A dataset will have all of the calibration information and will be presented in nominal spatial and spectral resolution, whereas the L1B will contain QA flags and have consistent spatial and spectral resolutions, as well as assigned meta-data to indicate intercal, lunar, PICS, and nadir scan modes. The SI traceable reflectance measurement uncertainty has over 90 terms and will be provided. The lunar measurements will be on order of day depending on the priority.

We then had lightning presentations of the impact CLARREO will have amongst the GSICS agencies.

These presentations are at the end of the Dave Doelling Summary presentation

**Raj Bhatt** (NASA) (presented by Dave Doelling). CERES will intercalibrate directly N20-VIIRS and GOES-EAST with CLARREO and then compare the multiple inter-calibration method uncertainties (ray-matching, deserts, DCC) between the two sensors. Also, to update the SBAF tool with CLARREO spectral data.

**Aisheng Wu** (NASA) (presented by Dave Doelling). NASA will try to resolve the ~5% solar diffuser difference between NPP and N20 VIIRS as well as the SBAF impact

Changyong Cao (NOAA) (presented by Jason Choi). Will also try to resolve the NPP and N20 VIIRS absolute calibration difference (~2%). Also use CLARREO to resolve the N20 on orbit solar diffuser and lunar stability trends.

These were presented by the authors

**Fred Wu** (NOAA) “Verification of ABI Calibration Using CLARREO”. NOAA will directly inter-calibrate ABI with CLARREO and verify the inter-calibration with PICS and DCC.

**Arata Okuyama** (JMA) “Expectations for CPF from Himawari” Intercalibrate AHI with ray-matching directory, as well as characterize deserts, DCC, liquid water clouds, clear-sky ocean and sun-glint.

**Sebastien Wagner** (EUMETSAT) Potential benefits of using CLARREO Pathfinder data for intercalibration from a EUMETSAT perspective” EUMETSAT prioritized the MTG FCI, EPS 3MI and METimage sensors, the characterization of the moon and Saharan and Arabian PICS especially Libya-4.