Summary: GSICS VIS/NIR meeting 14 October 2021

Martin Burgdorf (U Hamburg) presented “Characterisation of the VIS/NIR Channels of SEVIRI With Venus” The transects of Venus and Mercury are useful to characterize GEO geometric performance, point spread function, co-registration and for calibration stability over time. The planet transects provide only sporadic observations over time.

Ben Scarino (NASA) presented “SBAF out of band tool features” He went over the tool features using NPP-VIIRS as an example and pointed out that the out of band contribution is a function of surface and cloud types and the channel location in the absorption band. This tool would be very helpful during ground characterization of the RSRs. Tim and Fred asked if negative RSR values could also be entered into the tool to make the results more accurate, and the OOB SBAF tool has the capability of adding in negative RSRs. Jason also asked of NPP-VIIRS in orbit RSRs (post 2014) could be utilized in the tool, the tool can incorporate new RSRs to keep the RSRs current.

Tim Hewison (EUMETSAT) presented SI Traceable Space-based Climate Observing System (STISCOS) Workshop Report Summary

Thorsten Fehr (ESA) presented “The ESA Earth Watch Mission TRUTHS: Traceable Radiometry Underpinning Terrestrial & Helio studies”

Yolanda Shea (NASA) presented “CLARREO Pathfinder Mission Overview”, Yolanda mentioned the CLARREO science team meeting coming up November 2-3, 2021. If anyone would like to bring discussion topics and present a 5-minute powerpoint contact Yoland. GSICS will hopefully have a list of PICS and sensor inter-calibration priorities.

The Discussion included

1. The TRUTHS and CLARREO schedule
   Observations to begin CLARREO 2024, TRUTHS 2028
2. The TRUTHS and CLARREO mission objectives, the intercalibration of certain sensors, and climate benchmarking
   For CLARREO the first year priorites are to intercalibrate CERES and VIIRS, the follow on years will have much more opportunity for sensor intercalibration and PICS characterization
3. What scan and amount of time where TRUTHS and CLARREO perform for Earth target characterization, sites that have already been selected?
   Dave Doelling will send an email for the GSICS community to prioritize a list of PICS, Libya-4 will be on the list and sensor intercalibration priorities.
4. Could TRUTHS and CLARREO intercalibrate individual concurrent GEOs while not intercalibrating selected sensors, most GSICS members are responsible for GEO calibration.
   After the first year CLARREO should be able to inter-calibrate various GEOs
5. TRUTHS and CLARREO Lunar scanning and objectives.

6. Will TRUTHS be in a precessionary orbit, what will TRUTHS scanning do while in twilight conditions, are they going to be useful. *CLARREO is on the ISS, which has a 51° inclination angle. TRUTHS will have a 90° inclination angle with a 61 day repeat cycle.*
7. If CLARREO is still in operation, will inter-calibration to TRUTHS be of highest priority. *YES*