GSICS VIS/NIR May 11, 2023 Monthly Web Meeting

Haifeng Qian (NOAA) Characterization and correction of ABI solar diffuser residual BRDF

He discussed the GOES-16 solar diffuser elevation and beta angle corrections to determine the sensor degradation with greater certainty. These results can be applied to GOES-18 solar diffuser. Dave asked if the solar diffuser is along the same optical path, it is but uses a different part of the mirror not used for Earth viewing. It was also interesting how band 1 had more degradation in 2022 than in 2018. Jason asked if they accounted for the solar diffuser degradation itself. It seems that the solar diffuser does not degrade and is used to account for the degradation of all of the channels including SWIR bands.

Hugh Kieffer and Tom Stone, Discussion of the Lunar SLIM code conversion

Began discussion of implementation of a "GSICS community lunar calibration system" to accommodate the SLIM model in a generalised architecture. This "thing in quotes" above needs a name. For now, I will call it "LUCAS" for LUnar CAlibration System. Suggestions for a permanent name welcomed.

Noted: Send material for discussion earlier (when possible)

Python is the destination language. There was no discussion of alternates.

NOAA (Fred Wu) will provide support for coding LUCAS, which is now assigned to Bikash Basnet. There was little discussion on how the task might be divided between persons or institutions.

Action items: All are May11-2023

-1 All: reply to Hugh by May 18 noon UTC if you wish to participate in development of file contents. Are you willing to chair the subgroup?

-2 Thijs: Contact the LIME group, invite them to participate.

-3 Steve: Outline proposal for software sharing during system development (Manik is an expert?) Discussion favored Gitlab. Need to address access by Chinese colleagues.

-4 Seb: Provide an example template for definition of files that follow GSICS content conventions. Provide the GSICS formal file naming requirements. Provide the GSICS file formats for RSRs

-5 Fred? (anybody) Identify possible sources of information for what the Chinese may be doing in lunar model development.

-6 Steve: Describe (or share) what has been done in geometry processing in Python

-7 All: More discussion on RSR formats.

- -8 Hugh: Send SLIMv2.1 distribution to Bikash, Thijs, Seb
- -9 Hugh: Distribute revised Alog.pdf Table 1 & 2, with explanation and notes.