SNPP CrIS (side-2) SDR Algorithm Maturity Review
July 25 2019

Review Team Members: Mitch Goldberg (chair), Lihang Zhou, Satya Kalluri, Bonnie Reed, Jim Yoe, Kevin Schrab, Rick Stumpf, Michael Ford, Gary Wick, Tom Renkevens, Jim Gleason

The review team acknowledges that the CrIS SDR science team has done an excellent job in preparing for this review and calibrating/validating the SNPP/CrIS SDR Side-2 products after the SNPP CrIS switched to side-2 electronics.

The validation results demonstrated that the performance of the CrIS SDR side-2 products meets the spectral, radiometric, and geolocation specs globally, and showing good consistency with those from SNPP CrIS SDR from side-1. Mitch requested the team to confirm the users listed on the slide 41. Good users' feedback presented by NCEP and NRL, confirmed that the CrIS SDR from side-2 is consistent with those from side-1. The NUCAPS, NPROVS, and OSPO sounding teams also provided comprehensive feedback and confirmed that the NUCAPS retrievals from side-2 and side-1 are very consistent; the statistics are almost on top of each other for the temperature and moisture retrievals.

The lessons learned captured by the team are very useful. We should look into why the switch could not be done in a shorter time, especially, how long it takes for technical assessment and solution, and how long it takes to communicate with management for making the final decision.

The review panel further recommends:
- The **SNPP CrIS side-2 SDR** has **met the Provisional maturity** requirements effective EP v40 implementation (completed on Aug 1st 2019, at 16:49:40 UTC/12:49:40EST)
- The NUCAPS team to confirm the performance with the CrIS side-2 met the spec, without further updating codes/coefficient files. The NUCAPS Provisional will be declared virtually after the review team received the results/confirmation from the NUCAPS team.
  - Based on the documentation provided from the NUCAPS team on August 6th, the **SNPP NUCAPS EDRs** produced from side-2 SDR are also at the **Provisional maturity level.**
- Mitch requested the CrIS team working with OSPO to confirm the list of users and provide updated users information back to the panel