CrIS SDR Release, Validated Data Quality

Recommended Cautions for Data Users

The JPSS Algorithm Engineering Review Board has released the CrIS Sensor Data Record product to the public with the data quality attribute of Validated as of 02/21/2014. Validated Quality is defined as:

- On-orbit sensor performance characterized and calibration parameters adjusted accordingly
- There may be later improved version
- There will be strong versioning with documentation
- Ready for use in applications and scientific publication

The Board recommends that users be aware of certain specific data product characteristics. The following caveat is presented in the CrIS SDR product generated with Mx build versions 7.1 to 8.2:

> The Lunar Intrusion flag associated with a spectrum may be incorrectly set to the ON status for a period of about two orbits following a lunar intrusion event. The lunar intrusion flag error is due to a software bug, causing that the software does not set the flag back to the normal status at the end of a lunar intrusion event and results in the flag remaining at the ON status for about two orbits. The lunar intrusion flag error has no impact to the data quality. This lunar intrusion flag error was introduced in Mx7.1 (released on 10 July 2013) and will be fixed in Mx8.3, scheduled to be in operation on 10 March 2014.

CrIS Validated Maturity has been reached as of Mx8.2 including the upload of Engineering Packet version 36.

The Products with Short names of the effected products

CrIS SDR Ellipsoid Geolocation	GCRSO_NPP
CrIS Science SDR	CRIS_SDR
CrIS Science RDR	RCRIS-RNSCA_NPP
CrIS Housekeeping Telemetry RDR	RCRIT_NPP
CrIS Memory Dump	RCRIU_NPP
CrIS Scene Selection Module (SSM) Dwell RDR	RCRIH_NPP
CrIS Diagnostic RDR	RCRID_NPP
CrIS Housekeeping Dwell	RCRIH_NPP
CrIS Inteferogram Module	RCRII_NPP

The CrIS SDR data quality indicators and data quality flags form a hierarchical tree. At the top of the tree is the CrIS Overall Data Quality flag. The user is recommended to examine this overall data quality flag. It has 4 states: 1) 0= good, 2) 1=degraded, 3) 2 = invalid, 4) 3= fill

values of a short granule. Detailed descriptions of the overall quality flag as well as all other quality flags can be found in the CrIS User's guide available online at:

http://www.star.nesdis.noaa.gov/jpss/documents/UserGuides/CrIS_SDR_Users_Guide_1p0_TBD.pdf.