OCC EDR Release, Beta Data Quality
Last Updated: 1/9/2013
Read-me for Data Users

The JPSS Algorithm Engineering Review Board approved the release of the OCC EDR to the public with a Beta level quality as of 6 February 2012. Beta quality is defined as:

- Early release product
- Initial calibration applied
- Minimally validated and may still contain significant errors (additional changes are expected)
- Available to allow users to gain familiarity with data formats and parameters
- Product is not appropriate as the basis for quantitative scientific publications, studies and applications

The Board recommends that users be informed of the following product information and characteristics when evaluating the OCC EDR:

- OCC EDR data were produced since November 21, 2011, but data before February 6, 2012 were not reliable because the SDR were not correctly calibrated.

- The chlorophyll-a algorithm was changed from Carder algorithm to OC3V since implementation in operations on December 9, 2011.

- Significant sensor near-infrared/shortwave infrared (NIR/SWIR) degradation has been an issue after VIIRS launch, but after the new scan-by-scan RSB calibration algorithm /F-LUT was implemented in operations on August 10, 2012; it has no negative impact on OCC EDR.

- The significant NIR/SWIR degradation may still be an important issue, although currently no negative impact on OCC EDR has been found.

- OCC EDR anomaly occurred for some scenes due to VIIRS onboard calibration dual gain switch issue. This issue was resolved in Mx6.3 which was implemented in operations on Oct 15, 2012.

- Before Mx6.3, there are no Chl-a retrievals in case of negative remote-sensing reflectance in M1–M5. Since Mx6.3, Chl-a data have been retrieved in case of negative remote-sensing reflectance at the band M5. There are still no Chl-a retrievals in case of negative remote-sensing reflectance at any bands M1–M4. This issue will be fixed soon with a projected build release date of June 13, 2013.

- No retrievals in coastal and inland waters (to be fixed soon with a projected build release date of June 13, 2013).

- No vicarious calibration has been applied in the operational IDPS OCC EDR processing.

- IDPS OCC EDR quality flags need significant modifications/improvements.

- Sun glint masking/correction algorithm needs to be modified/improved, e.g., it appears over-masking in sun glint area.

- Inherent Optical Property for absorption (IOP-a) and backscattering (IOP-s) products have not been evaluated yet, and these products are considered experimental products. It may require a different IOP algorithm for improved products.

- There are atmospheric correction problems in coastal turbid and inland waters due to the algorithm issue. The required algorithm for correction of the NIR water-leaving radiance contributions has not been implemented in the IDPS OCC EDR data processing.

- Some $nL_w(\lambda)$ biases in the blue bands since mid-May 2012 are due to VIIRS SDR issue. We expect that this SDR-related issue will be addressed/resolved soon. See the VIIRS SDR readme for more detail.

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