GOES-18 ABI L2+ Cloud Top Parameters (CTP) Release Beta Data Quality May 24, 2022 Read-Me for Data Users

The GOES-18 Advanced Baseline Imager (ABI) L2+ Cloud Top Parameters (CTP), including Height, Temperature, and Pressure, products were declared Beta maturity on May 11, 2022. No formal review was conducted because the algorithms are identical to the ones running with GOES-16 and GOES-17, so the Beta declaration of the ABI L1b and CMI flows down to the ABI L2+ products.

The GOES-18 ABI CTP product generates the cloud-top height, cloud-top temperature and cloud-top pressure products from the 11 um, 12 um and 13.3 um infrared observations. In normal Mode 6 operations, the Cloud Top Height is produced every 10 minutes for Full Disk, every 5 minutes for CONUS, and every 1 minute for Mesoscale. The Cloud Top Pressure is produced every 10 minutes for Full Disk and every 5 minutes for CONUS. The Cloud Top Temperature is produced every 10 minutes for Full Disk, and every 1 minute for Mesoscale.

A full description and format of the CTP products can be found in the Product Definition and User's Guide (PUG) document (http://www.goes-r.gov/products/docs/PUG-L2+-vol5.pdf). The algorithm used to derive the CTP products from GOES-18 ABI observations is described in detail in the "GOES-R Advanced Baseline Imager (ABI) Algorithm Theoretical Basis Document for ABI Cloud Height" (https://www.star.nesdis.noaa.gov/goesr/documents/ATBDs/Baseline/ATBD_GOES-R Cloud%20Height v3.0 July%202012.pdf).

Beta maturity, by definition, means that:

- Rapid changes in product input tables/algorithms are expected;
- Product initial looks and validation may not be fully adequate to determine product quality;
- Anomalies may be found in the product and the resolution strategy may not exist;
- Product is made available to users to gain familiarity with data formats and parameters;
- Product may have been minimally validated and may still contain significant errors; and
- Product is not optimized for operational use.

Persons desiring to use the GOES-18 ABI Beta maturity CTP products for any reason, including but not limited to scientific and technical investigations, are encouraged to consult the NOAA/NESDIS/STAR Algorithm Working Group (AWG) scientists for feasibility of the planned applications. The CTP product is sensitive to upstream processing that includes the quality of the calibration, navigation, cloud mask, and cloud type/phase.

There are no specific known issues under investigation at this time.

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