

GOES-18 ABI L2+ Enterprise Cloud Mask (ECM) Release

Provisional Data Quality

October 14, 2022

Read-Me for Data Users

The GOES-R Peer/Stakeholder Product Validation Review (PS-PVR) for the GOES-18 Advanced Baseline Imager (ABI) L2+ Enterprise Cloud Mask (ECM) was held on September 28, 2022. As a result of this review, the panel chair declared that this product meets the criteria for Provisional Maturity.

A full description and format of the ECM 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 ECM from GOES-R ABI observations is described in detail in the "GOES-R Advanced Baseline Imager (ABI) Algorithm Theoretical Basis Document for A Naïve Bayesian Cloud Mask Delivered to NOAA Enterprise". ATBDs are available at https://www.star.nesdis.noaa.gov/goesr/documentation_ATBDs.php.

By definition, Provisional maturity means that:

- Validation activities are ongoing and the general research community is now encouraged to participate.
- Severe algorithm anomalies are identified and under analysis. Solutions to anomalies are in development and testing.
- Incremental product improvements may still be occurring.
- Product performance has been demonstrated through analysis of a small number of independent measurements.
- Product analysis is sufficient to communicate to users.
- Documentation of product performance exists.
- Testing has been fully documented.
- Product is ready for operational use and for use in comprehensive calibration/validation activities and product optimization.

Persons desiring to use the GOES-18 ABI Provisional maturity ECM 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.

Status of the current ECM product and any remaining known issues are as follows:

1. Some ECM terminator performance issues that will be improved by an updated look up table in the near future.
2. No other ECM performance issues noted during this review cycle.

Contact for further information: OSPO User Services at SPSD.UserServices@noaa.gov

Contacts for specific information on the ABI L2 ECM product:

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