



MEMORANDUM FOR: The Record
FROM: Quanhua (Mark) Liu, JPSS MiRS Products Team Lead
SUBJECT: MiRS Temperature, Water Vapor, Total Precipitable Water, Land Surface Emissivity, Land Surface Temperature, Cloud Liquid Water, Rain Rate, Sea Ice Concentration and Snow Water Equivalent Validated maturity status and public release
DATE: 09/19/2019

Validated maturity status declaration for MiRS Land Surface Emissivity, Land Surface Temperature, Cloud Liquid Water, Sea Ice Concentration and Snow Water Equivalent

Maturity Review Date: 09/19/2019
Effective Date: 09/19/2019
Operational System: Microwave Integrated Retrieval System (MiRS), Version 11.4

The JPSS Algorithm Maturity Readiness Review Board approved the release of the MiRS to the public with a Validated maturity level quality as of 09/19/2019 (effective date), based on JPSS Validation Maturity Review held on 09/19/2019 (link to review artifacts).

1. Maturity stage definition: <http://www.star.nesdis.noaa.gov/jpss/AlgorithmMaturity.php>
2. Algorithm Description:
 - List of Products (Collection Short Name (CSN)): NDE_L2_MIRS
 - Product requirements/Exclusions (L1RDS): See artifact at TBD
 - Quality flags (Table): See artifact at TBD
 - Product evaluation/validation: See artifact at TBD
 - Product availability/reliability:
 - N20 EDR data have been produced with V11.4 since 07/2019, data prior to 07/2019 were produced with V11.3. The primary change from V11.3 to V11.4 was an updated radiometric bias correction, which had only a small impact on the retrieved temperature profile bias.
 - Algorithm performance dependence: None.
 - Known errors/issues/limitations: SWE daytime estimates have higher uncertainty than nighttime estimates. Sea ice concentration estimates have higher uncertainty in each hemisphere's summer season.
3. Changes since last maturity stage: N/A
4. Review board recommendations: TBD
5. Path Forward/Future Plan: Future enhancements may include a dynamic air-mass based radiometric bias correction which accounts for local atmospheric and surface conditions, instead of the current static correction.

Additional information is available in the MiRS algorithm theoretical basis document (ATBD) and validation maturity review briefing, which can be accessed at:

<http://www.star.nesdis.noaa.gov/jpss/Docs.php>



Read-me for Data Users

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