



*Read-me for Data Users*

**MEMORANDUM FOR:** The JPSS Program Record  
**SUBMITTED BY:** JPSS MiRS Team Lead, Quanhua (Mark) Liu  
**CONCURRED BY:** JPSS Algorithm Management Project Lead Lihang Zhou  
JPSS STAR Program Manager Ingrid Guch  
**APPROVED BY:** JPSS Program Scientist Satya Kalluri

**SUBJECT:** NOAA-21 MiRS Provisional maturity status  
**DATE:** 06/22/2023

**Provisional maturity status declaration for MiRS EDR Products**

**Maturity Review Date:** 06/22/2023  
**Effective Date:** 05/12/2023  
**Operational System:** MiRS, Version 11.9

1. Maturity stage definition (reference to the AMM webpage for maturity 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 (DPS): See artifact at TBD  
Quality flags (Table): See artifact at TBD  
Product evaluation/validation: See artifact at TBD  
Product availability/reliability:  
N21 EDR data have been produced with V11.9 since 11/2022, qualitative comparisons of all EDR products with N20 products show extremely good agreement. Limited quantitative comparisons of all EDR products with independent references also show very good agreement.  
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: Additional quantitative validation of RR, LSE, CLW; all products now have some quantitative validation
4. Review board recommendations: TBD
5. Path Forward/Future Plan: Continue qualitative and quantitative validation using independent references for all EDR products either locally, or in some cases, globally.
6. Additional Items to note

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>

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