

# Data Product Maturity Definitions

NPP SDR Product Maturity Levels
<p><b>1. Beta</b></p> <ul style="list-style-type: none"><li>• Early release product.</li><li>• Initial calibration applied.</li><li>• Minimally validated and may still contain significant errors (rapid changes can be expected. Version changes will not be identified as errors are corrected as on-orbit baseline is not established)</li><li>• Available to allow users to gain familiarity with data formats and parameters</li><li>• Product is not appropriate as the basis for quantitative scientific publications studies and applications</li></ul>
<p><b>2. Provisional</b></p> <ul style="list-style-type: none"><li>• Product quality may not be optimal</li><li>• Incremental product improvements are still occurring as calibration parameters are adjusted with sensor on-orbit characterization (versions will be tracked)</li><li>• General research community is encouraged to participate in the QA and validation of the product, but need to be aware that product validation and QA are ongoing</li><li>• Users are urged to consult the SDR product status document prior to use of the data in publications</li><li>• Ready for operational evaluation</li></ul>
<p><b>3. Validated/ Calibrated</b></p> <ul style="list-style-type: none"><li>• On-orbit sensor performance characterized and calibration parameters adjusted accordingly</li><li>• Ready for use in applications and scientific publications</li><li>• There may be later improved versions</li><li>• There will be strong versioning with documentation</li></ul>

# Data Product Maturity Definitions (cont.)

NPP EDR Product Maturity Levels	
<p><b>1. Beta</b></p> <ul style="list-style-type: none"> <li>• Early release product</li> <li>• Minimally validated</li> <li>• May still contain significant errors.</li> <li>• Versioning not established until a baseline is determined.</li> <li>• Available to allow users to gain familiarity with data formats and parameters</li> <li>• Product is not appropriate as the basis for quantitative scientific publications studies and applications</li> </ul>	
<p><b>2. Provisional</b></p> <ul style="list-style-type: none"> <li>• Product quality may not be optimal</li> <li>• Incremental product improvements are still occurring.</li> <li>• Version control is in affect</li> <li>• General research community is encouraged to participate in the QA and validation of the product, but need to be aware that product validation and QA are ongoing</li> <li>• Users are urged to consult the EDR product status document prior to use of the data in publications</li> <li>• May be replaced in the archive when the validated product becomes available</li> <li>• Ready for operational evaluation</li> </ul>	
<p><b>3. Validated</b></p> <ul style="list-style-type: none"> <li>• Product performance is well defined over a range of representative conditions</li> <li>• Ready for use by the Centrals and in scientific publications</li> <li>• There may be later improved versions</li> <li>• There are three validation stages (see next column)</li> </ul>	<p><b>Stage 1 Validation:</b> Product performance has been demonstrated to comply with the specification using a small number of independent measurements obtained from selected locations, periods, and associated ground-truth/field program efforts.</p> <p><b>Stage 2 Validation:</b> Product performance has been demonstrated to comply with the specification over a widely distributed set of locations and periods via several ground-truth and validation efforts.</p> <p><b>Stage 3 Validation:</b> Product performance has been demonstrated to comply with the specification and the uncertainties in the product well established via independent measurements in a systematic and statistically robust way representing global conditions.</p>