Maturity	Sensor Use	Algorithm stability	Metadata & QA	Documentation	Validation	Public Release	Science & Applications
1	Research Mission with limited period of record	Significant changes likely	Incomplete	Draft Operational Algorithm Description (OAD)	Minimal	Limited data availability to develop familiarity	Little or none
2	Research Mission with limited period of record	Some changes expected	Research grade (extensive)	OAD Version 1+	Uncertainty estimated for select locations/times	Data available but of unknown accuracy; caveats required for use.	Limited or ongoing
3	Research Mission with sufficient period of record	Minimal changes expected	Research grade (extensive); Meets international standards	Peer-reviewed OAD and product descriptions	Uncertainty estimated over widely distribute times/location by multiple investigators; Differences understood.	Data available but of unknown accuracy; caveats required for use.	Provisionally used in applications and assessments demonstrating positive value.
4	Operational Mission with sufficient period of record	Minimal changes expected	Stable, Allows provenance tracking and reproducibility; Meets international standards	Public Operational Algorithm Description (OAD); Peer- reviewed product descriptions	Uncertainty estimated over widely distribute times/location by multiple investigators; Differences understood.	Data archived and available but of unknown accuracy; caveats required for use.	Operationally used in applications and assessments demonstrating positive value.
5	All relevant research and operational missions; unified and coherent record demonstrated across different sensors	Stable and reproducible	Stable, Allows provenance tracking and reproducibility; Meets international standards	Public OAD and Validation Plan; Peer-reviewed product and validation articles	Consistent uncertainties estimated over most environmental conditions by multiple investigators	Multi-mission record is archived and publicly available with associated uncertainty estimate	Used in published applications and assessments by different investigators
6	All relevant research and operational missions; unified and coherent record over complete series; record is considered scientifically irrefutable following extensive scrutiny	Stable and reproducible; homogeneous and published error budget	Stable, Allows provenance tracking and reproducibility; Meets international standards	Product, algorithm, validation, processing and metadata described in peer-reviewed literature	Observation strategy designed to reveal systematic errors through independent cross- checks, open inspection, and continuous interrogation	Multi-mission record is publicly available from Long- Term archive	Used in multiple published applications and assessments by different investigators
Comments for Maturity rating	AVHRR/1 and AVHRR/2 and AVHRR/3 included PATMOS- x. Reflectance calibration demonstrated to be consistent.	Product suite is stable.	CF compliant HDF4	No OAD but we do have OSDPD documentation	Through GEWEX and EUMETSAT workshops, we have done much multi-group intercomparisons	archived at NCDC	published and referenced research
Avg rating = 3.4	AVHRR/1 data has larger uncertainity	Patmos-x will adopt lessons learned from NPOESS and GOES-R	website to help users obtain and work with data.	All PATMOS-x algorithms are published			Several papers have written by users outside of the PATMOS-x team
							PATMOS-x data has found application and been published in the areas of cloud, aerosol, ndvi and ocean turbidity remote senssing.