

**WGCV evaluation of Sentinel 1 IWS (10m) self-assessment submitted by
CATALYST EARTH (SAR (NRB) PFS v1.1) for CEOS-ARD compliance**

			Threshold	Goal
1	CEOS-ARD product	General Metadata		
1.1	[ALL]	Traceability	Not Required	Not Assessed
1.2	[ALL]	Metadata Machine Readability	Verified	Not Assessed
1.3	[ALL]	Product Type	Verified	Not Assessed
1.4	[ALL]	Document Identifier	Verified	Not Assessed
1.5	[ALL]	Data Collection Time	Verified	Not Assessed
1.6		Source Data Attributes		
1.6.1	[ALL]	Source Data Access	Verified	Not Assessed
1.6.2	[ALL]	Instrument	Verified	Not Assessed
1.6.3	[ALL]	Source Data Acquisition Time	Verified	Not Assessed
1.6.4	[ALL]	Source Data Acquisition Parameters	Verified	Not Assessed
1.6.5	[ALL]	Source Data Orbit Information	Verified	Not Assessed
1.6.6	[ALL]	Source Data Processing Parameters	Verified	Not Assessed
1.6.7	[ALL]	Source Data Image Attributes	Verified	Not Assessed
1.6.8	[ALL]	Sensor Calibration	Not Required	Not Assessed
1.6.9	[ALL]	Performance Indicators	Verified	Not Assessed
1.6.10	[ALL]	Source Data Polarimetric Calibration Matrices	Not Required	Not Assessed
1.6.11	[ALL]	Mean Faraday Rotation Angle	Not Required	Not Assessed
1.6.12	[ALL]	Ionosphere indicator	Not Required	Not Assessed
1.7		CEOS-ARD Product Attributes		
1.7.1	[ALL]	Product Data Access	Verified	Not Assessed
1.7.2	[ALL]	Auxiliary Data	Not Required	Not Assessed
1.7.3	[ALL]	Product Sample Spacing	Verified	Not Assessed
1.7.4	[NRB] [POL] [ORB]	Product Equivalent Number of Looks	Not Required	Not Assessed
1.7.5	[ALL]	Product Resolution	Not Required	Not Assessed
1.7.6	[NRB] [POL] [ORB]	Product Filtering	Verified	Not Assessed
1.7.7	[ALL]	Product Bounding Box	Verified	Not Assessed
1.7.8	[ALL]	Product Geographical Extent	Verified	Not Assessed
1.7.9	[ALL]	Product Image Size	Verified	Not Assessed
1.7.10	[ALL]	Product Pixel Coordinate Convention	Verified	Not Assessed
1.7.11	[ALL]	Product Coordinate Reference System	Verified	Not Assessed
1.7.12	[ORB]	Look Direction Polynomials	Not Product Relevant	Not Relevant
1.7.13	[GSLC]	Radar Unit Look Vector	Not Product Relevant	Not Relevant
1.7.14	[GSLC]	Slant Range Sensor to Surface	Not Product Relevant	Not Relevant
1.7.15	[NRB] [POL] [GSLC]	Reference Orbit	Not Required	Not Assessed

			Threshold	Goal
2	CEOS-ARD product	Per-Pixel Metadata		
2.1	[ALL]	Metadata Machine Readability	Verified	Not Assessed
2.2	[ALL]	Data Mask Image	Verified	Not Assessed
2.3	[ALL]	Scattering Area Image	Not Required	Not Assessed
2.4	[ALL]	Local Incident Angle Image	Verified	Not Assessed
2.5	[ALL]	Ellipsoidal Incident Angle Image	Not Required	Not Assessed
2.6	[ALL]	Noise Power Image	Not Required	Not Assessed
2.7	[NRB] [POL] [GSLC]	Gamma-to-Sigma Ratio Image	Not Required	Not Assessed
2.8	[ALL]	Acquisition ID Image	Verified	Not Assessed
2.9	[NRB] [POL] [GSLC]	Per-pixel DEM	Not Required	Not Assessed
2.10	[ORB]	Per-pixel Geoid	Not Product Relevant	Not Relevant
2.11	[ORB]	Look Direction Image	Not Product Relevant	Not Relevant
2.12	[GSLC]	Radar Unit Look Vector Grid Image	Not Product Relevant	Not Relevant
2.13	[GSLC]	Slant Range Sensor to Surface Image	Not Product Relevant	Not Relevant
2.14	[GSLC]	InSAR Phase Uncertainty Image	Not Product Relevant	Not Relevant
2.15	[GSLC]	Atmospheric Phase Correction Image	Not Product Relevant	Not Relevant
2.16	[GSLC]	Ionospheric Phase Correction Image	Not Product Relevant	Not Relevant
			Threshold	Goal
3	CEOS-ARD product	Radiometrically Corrected Measurements		
3.1	[ALL]	Backscatter Measurements	Verified	Not Assessed
3.2	[ALL]	Scaling Conversion	Verified	Not Assessed
3.3	[ALL]	Noise Removal	Verified	Not Assessed
3.4	[NRB] [POL] [GSLC]	Radiometric Terrain Correction Algorithms	Verified	Not Assessed
3.5	[ALL]	Radiometric Accuracy	Not Required	Not Assessed
3.6	[ORB]	Mean Wind-Normalised Backscatter Measurements	Not Product Relevant	Not Relevant
3.7	[NRB] [POL]	Flattened Phase	Not Required	Not Assessed
			Threshold	Goal
4	CEOS-ARD product	Geometric Corrections		
4.1	[ALL]	Geometric Correction Algorithms	Not Required	Not Assessed
4.2	[ALL]	Digital Elevation Model	Verified	Not Assessed
4.3	[ALL]	Geometric Accuracy	Verified	Not Assessed
4.4	[ALL]	Geometric Refined Accuracy	Not Required	Not Assessed
4.5	[ALL]	Gridding Convention	Verified	Not Assessed

CEOS-ARD Evaluation Outcome: (SAR PFS v1.1)

Product Type:	Normalised Radar Backscatter (NRB) ScanSAR
Threshold level:	Compliance verified for 31 PFS metadata items at Threshold level by WGCV PoC through 1-on-1 discussions and clarifications with Catalyst Earth representatives (Kevin Jones & Griffin Williams). <i>The VV VH IWS (10m) Sentinel 1 Normalised Radar Backscatter Product is CEOS-ARD compliant at Threshold level.</i>
Goal level:	No Assessment