

ISO/TS 19124-2:2025-12 (E)

Geographic information - Calibration and validation of remote sensing data and derived products - Part 2: Synthetic aperture radar (SAR)

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Abbreviated terms and symbols	5
4.1	Abbreviated terms	5
4.2	Symbols	5
5	Conformance	5
6	General model	5
7	Characteristics of SAR imagery data	8
7.1	General	8
7.2	SAR imagery data of general working modes	8
7.3	SAR imagery data of multi-dimensional working modes	9
7.3.1	General	9
7.3.2	Multi-polarimetric SAR data	9
7.3.3	Multi-aspect SAR data	9
7.3.4	Multi-temporal SAR data	10
7.3.5	Multi-frequency SAR data	10
7.4	Format of SAR imagery data	10
8	Calibration of SAR imagery data	10
8.1	General	10
8.2	Geometric calibration and geometric correction	11
8.3	Radiometric calibration and radiometric correction	11
8.4	Characteristic parameters calibration	12
9	Validation of SAR imagery data	12
9.1	General	12
9.2	Resolution and swath width	13
9.3	Imaging quality	13
9.4	Geometric accuracy	13
9.5	Radiometric accuracy	13
10	SAR-derived products and validation	14
10.1	Geophysical products derived from SAR imagery data	14
10.1.1	General	14
10.1.2	Numerical products	14
10.1.3	Categorical products	14
10.1.4	Multi-dimensional products	14
10.2	Validation	14
Annex A (normative)	Abstract test suite	16

Annex B (normative) Data dictionary	17
Annex C (informative) Examples of imagery data level definitions of several advanced SAR satellites	32
Annex D (informative) SAR three-dimensional image product	34
Annex E (informative) SAR multi-polarimetric data and product	36
Bibliography	38