

ISO/TS 19130-2:2014-01 (E)

Geographic information - Imagery sensor models for geopositioning - Part 2: SAR, InSAR, lidar and sonar

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Conformance	1
3	Normative references	1
4	Terms and definitions	2
5	Symbols and abbreviations	12
5.1	Symbols	12
5.2	Abbreviated terms	17
5.3	Notation	18
6	Sensor Model Extensions	19
6.1	Introduction	19
6.2	SE_SensorModel	19
6.3	SE_Dynamics	19
6.4	SE_PlatformDynamics	20
7	Refinement of SAR physical sensor model	20
7.1	Introduction	20
7.2	SE_SAROperation	21
8	Interferometric SAR	22
8.1	Introduction	22
8.2	InSAR geometry	22
8.3	Interferometric SAR operation	24
9	Lidar physical sensor model	26
9.1	Description of sensor	26
9.2	Information required for geolocating	27
10	Sonar physical sensor model	28
10.1	Description of sensor	28
10.2	Information required for geolocating	32
11	Aerial triangulation	36
11.1	Introduction	36
11.2	SE_AerialTriangulation	37
11.3	SE_ATObservations	37
11.4	SE_ATOtherResults	38
11.5	SE_ATUnknowns	39
Annex A (normative) Conformance and testing		40
Annex B (normative) Data dictionary		42

Annex C (informative) Synthetic aperture radar sensor model metadata profiles supporting precise geopositioning	74
Annex D (informative) Lidar sensor model metadata profiles supporting precise geopositioning	98
Annex E (informative) Sonar sensor model metadata profiles supporting precise geopositioning	129
Bibliography	151