WORLD METEOROLOGICAL ORGANIZATION

COMMISSION FOR BASIC SYSTEMS
OPAG ON INTEGRATED OBSERVING SYSTEMS

EXPERT TEAM ON
OBSERVATIONAL DATA REQUIREMENTS AND
REDESIGN OF THE GLOBAL OBSERVING SYSTEM
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REVIEW OF OBSERVING SYSTEM CAPABILITIES AND USER REQUIREMENTS

(Submitted by the Secretariat)

Summary and Purpose of Document

The purpose of this document is to inform the Expert Team members of the latest list of expected observational performances and data requirements.

ACTION PROPOSED

The Expert Team members are invited to review expected observational performances and propose updates as appropriate.

Appendices: A. User Estimates of Observing System Performances

B. WMO requirements without match in user estimates but with a match in space agency estimates

C. WMO Observational Data Requirements

DISCUSSION

1. The ET-ODRRGOS has followed the Rolling Review of Requirements Process whereby observational requirements have been compared to user estimates of expected observational performances. The last full review of the user estimates of expected observational performances found in the CEOS/WMO database was performed in 2001. Since 2001, many new user estimates of expected performances have been added to the database especially for *in situ* systems including the GCOS Surface and Upper Air Networks.

2. Appendix A is the present list of user estimates of expected observing system performances sorted by user requirements (alphabetically). It is anticipated that the meeting will review, update and/or validate all the expected performances found in Appendix A. For in situ systems, expected performances are shown for each of the 34 homogeneous areas developed by the Expert Team.

3. For satellite instruments only, it should be noted that the database contains two sets of expected performances: space agencies; and user (provided by the Expert Team on Observational Data Requirements and Redesign of the Global Observing System [ET-ODRRGOS]). While in the Rolling Review of Requirements process only WMO (user) provided estimates are utilized, there are several requirements for which no expected performances exist in the WMO (user) estimates, whereas estimates do exist from the space agency. A list of WMO requirements that have no corresponding user estimates but for which there are space agency estimates of satellite system performances is contained in Appendix B. Appendix B may serve the Expert Team as a guide in developing new user estimates.

4. Appendix C contains the latest set of WMO Observational Data Requirements to GCOS.

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APPENDIX A

USER ESTIMATES OF OBSERVING SYSTEM PERFORMANCES

User estimates of instrument performances

30-Jun-04

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
AATSR	Cloud cover		15	km			10	% (Max)	36	h	3	h		Potential expected
AATSR	Cloud imagery		1	km					36	h	3	h		Potential expected
AATSR	Cloud type		15	km			8	classes	36	h	3	h		Experimental
AATSR	Fire area		1	m2			20	% (Max)	1.5	d	0.125	d		Potential expected
AATSR	Fire temperature		1	K			50	K	1.5	d	0.125	d		Potential expected
AATSR	Land cover		1000	m			10	classes	0.01	y	1	d		Potential expected
AATSR	Leaf Area Index (LAI)		1	km			20	% (Max)	30	d	1	d		Potential
AATSR	Long-wave Earth surface emissivity		1	km			2	% (Max)	36	h	3	h		Potential expected
AATSR	Sea surface bulk temperature		1	km			0.4		36	h	3	h		Potential realized
AATSR	Vegetation type		1000	m			10	classes	30	d	0.125	d		Potential expected
AIRS	Atmospheric temperature profile	Higher troposphere (HT)	25	km	1	km	1	K	12	h	3	h		Potential realized
AIRS	Atmospheric temperature profile	Lower stratosphere (LS)	25	km	2	km	1	K	12	h	3	h		Potential realized
AIRS	Atmospheric temperature profile	Lower troposphere (LT)	25	km	1	km	1	K	12	h	3	h		Potential realized
AIRS	Cloud cover		25	km			10	% (Max)	12	h	3	h		Potential expected
AIRS	Cloud optical thickness		25	km			20	%	12	h	3	h		Experimental
AIRS	Cloud top height		25	km			0.5	km	12	h	3	h		Experimental
AIRS	Cloud top temperature		25	km			2	K	12	h	3	h		Experimental
AIRS	Land surface temperature		25	km			0.5	K	12	h	3	h		Experimental
AIRS	Outgoing long-wave radiation at		25	km			5	m/s	12	h	3	h		Potential realized
AIRS	Outgoing short-wave radiation at		25	km			5	W/m2	12	h	3	h		Potential realized
AIRS	Ozone profile	Higher troposphere (HT)	25	km	5	km	15	%	12	h	3	h		Potential
AIRS	Ozone profile	Total column	25	km			20	DU	12	h	3	h		Experimental
AIRS	Sea surface bulk temperature		25	km			0.3		12	h	3	h		Potential realized
AIRS	Specific humidity profile	Higher troposphere (HT)	25	km	1	km	10	%	12	h	3	h		Potential realized
AIRS	Specific humidity profile	Lower troposphere (LT)	25	km	1	km	10	%	12	h	3	h		Potential realized
AIRS	Specific humidity profile	Total column	25	km			2	kg/m2	12	h	3	h		Potential expected
ALADIN	Aerosol profile	Lower troposphere (LT)	200	km	0.5	km		%	2	h	3	h		Potential
ALADIN	Aerosol profile	Lower stratosphere (LS)	200	km	2	km		%	2	h	3	h		Potential
ALADIN	Aerosol profile	Higher troposphere (HT)	200	km	1	km		%	2	h	3	h		Potential
Amdar FL ARC	Atmospheric temperature profile	Higher troposphere (HT)	270	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL ARC	Wind profile (horizontal component)	Higher troposphere (HT)	270	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL MED	Atmospheric temperature profile	Higher troposphere (HT)	156	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL MED	Wind profile (horizontal component)	Higher troposphere (HT)	156	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL NAO CST	Atmospheric temperature profile	Higher troposphere (HT)	50	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL NAO CST	Wind profile (horizontal component)	Higher troposphere (HT)	50	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL NAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	223	km	5	km	1	K	24	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Amdar FL NAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	223	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL NIO CST	Atmospheric temperature profile	Higher troposphere (HT)	334	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL NIO CST	Wind profile (horizontal component)	Higher troposphere (HT)	334	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL NIO OPN	Atmospheric temperature profile	Higher troposphere (HT)	498	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL NIO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	498	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL NPO CST	Atmospheric temperature profile	Higher troposphere (HT)	851	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL NPO CST	Wind profile (horizontal component)	Higher troposphere (HT)	851	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL NPO OPN	Atmospheric temperature profile	Higher troposphere (HT)	2150	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL NPO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	2150	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL RA-I N	Atmospheric temperature profile	Higher troposphere (HT)	375	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL RA-I N	Wind profile (horizontal component)	Higher troposphere (HT)	375	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL RA-I S	Atmospheric temperature profile	Higher troposphere (HT)	330	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL RA-I S	Wind profile (horizontal component)	Higher troposphere (HT)	330	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL RA-I T	Atmospheric temperature profile	Higher troposphere (HT)	402	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL RA-I T	Wind profile (horizontal component)	Higher troposphere (HT)	402	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL RA-II E	Atmospheric temperature profile	Higher troposphere (HT)	998	km	5	km	1	K	12	h	1	h		Potential realized
Amdar FL RA-II E	Wind profile (horizontal component)	Higher troposphere (HT)	998	km	5	km	2	m/s	12	d	1	h		Potential realized
Amdar FL RA-II N	Atmospheric temperature profile	Higher troposphere (HT)	614	km	5	km	1	K	12	h	1	h		Potential realized
Amdar FL RA-II N	Wind profile (horizontal component)	Higher troposphere (HT)	614	km	5	km	2	m/s	12	d	1	h		Potential realized
Amdar FL RA-II S	Atmospheric temperature profile	Higher troposphere (HT)	310	km	5	km	1	K	12	h	1	h		Potential realized
Amdar FL RA-II S	Wind profile (horizontal component)	Higher troposphere (HT)	310	km	5	km	2	m/s	12	d	1	h		Potential realized
Amdar FL RA-II W	Atmospheric temperature profile	Higher troposphere (HT)	429	km	5	km	1	K	12	h	1	h		Potential realized
Amdar FL RA-II W	Wind profile (horizontal component)	Higher troposphere (HT)	429	km	5	km	2	m/s	12	d	1	h		Potential realized
Amdar FL RA-III N	Atmospheric temperature profile	Higher troposphere (HT)	455	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL RA-III N	Wind profile (horizontal component)	Higher troposphere (HT)	455	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL RA-III S	Atmospheric temperature profile	Higher troposphere (HT)	557	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL RA-III S	Wind profile (horizontal component)	Higher troposphere (HT)	557	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL RA-IV C	Atmospheric temperature profile	Higher troposphere (HT)	90	km	5	km	1	K	1	h	1	h		Potential realized
Amdar FL RA-IV C	Wind profile (horizontal component)	Higher troposphere (HT)	90	km	5	km	2	m/s	1	d	1	h		Potential realized
Amdar FL RA-IV N	Atmospheric temperature profile	Higher troposphere (HT)	318	km	5	km	1	K	12	h	1	h		Potential realized
Amdar FL RA-IV N	Wind profile (horizontal component)	Higher troposphere (HT)	318	km	5	km	2	m/s	12	d	1	h		Potential realized
Amdar FL RA-IV S	Atmospheric temperature profile	Higher troposphere (HT)	690	km	5	km	1	K	12	h	1	h		Potential realized
Amdar FL RA-IV S	Wind profile (horizontal component)	Higher troposphere (HT)	690	km	5	km	2	m/s	12	d	1	h		Potential realized
Amdar FL RA-V NW	Atmospheric temperature profile	Higher troposphere (HT)	550	km	5	km	1	K	12	h	1	h		Potential realized
Amdar FL RA-V NW	Wind profile (horizontal component)	Higher troposphere (HT)	550	km	5	km	2	m/s	12	d	1	h		Potential realized
Amdar FL RA-V SW	Atmospheric temperature profile	Higher troposphere (HT)	167	km	5	km	1	K	12	h	1	h		Potential realized
Amdar FL RA-V SW	Wind profile (horizontal component)	Higher troposphere (HT)	167	km	5	km	2	m/s	12	d	1	h		Potential realized
Amdar FL RA-VI EE	Atmospheric temperature profile	Higher troposphere (HT)	159	km	5	km	1	K	8	h	1	h		Potential realized
Amdar FL RA-VI EE	Wind profile (horizontal component)	Higher troposphere (HT)	159	km	5	km	2	m/s	8	d	1	h		Potential realized
Amdar FL RA-VI WE	Atmospheric temperature profile	Higher troposphere (HT)	38	km	5	km	1	K	8	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Amdar FL RA-VI WE	Wind profile (horizontal component)	Higher troposphere (HT)	38	km	5	km	2	m/s	8	d	1	h		Potential realized
Amdar FL RA-VII	Atmospheric temperature profile	Higher troposphere (HT)	2361	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL RA-VII	Wind profile (horizontal component)	Higher troposphere (HT)	2361	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL SAO CST	Atmospheric temperature profile	Higher troposphere (HT)	414	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL SAO CST	Wind profile (horizontal component)	Higher troposphere (HT)	414	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL SAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	1857	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL SAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	1857	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL SIO	Atmospheric temperature profile	Higher troposphere (HT)	904	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL SIO	Wind profile (horizontal component)	Higher troposphere (HT)	904	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL SPO CST	Atmospheric temperature profile	Higher troposphere (HT)	923	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL SPO CST	Wind profile (horizontal component)	Higher troposphere (HT)	923	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL SPO OPN	Atmospheric temperature profile	Higher troposphere (HT)	991	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL SPO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	991	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL TAO CST	Atmospheric temperature profile	Higher troposphere (HT)	576	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL TAO CST	Wind profile (horizontal component)	Higher troposphere (HT)	576	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL TAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	689	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL TAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	689	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL TPO CST	Atmospheric temperature profile	Higher troposphere (HT)	1051	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL TPO CST	Wind profile (horizontal component)	Higher troposphere (HT)	1051	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar FL TPO OPN	Atmospheric temperature profile	Higher troposphere (HT)	806	km	5	km	1	K	24	h	1	h		Potential realized
Amdar FL TPO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	806	km	5	km	2	m/s	24	d	1	h		Potential realized
Amdar P ARC	Atmospheric temperature profile	Lower troposphere (LT)	2978	km	0.4	km	2	K	120	h	1	h		Potential realized
Amdar P ARC	Wind profile (horizontal component)	Lower troposphere (LT)	2978	km	0.4	km	2	m/s	120	h	1	h		Potential realized
Amdar P MED	Atmospheric temperature profile	Lower troposphere (LT)	2149	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P MED	Wind profile (horizontal component)	Lower troposphere (LT)	2149	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P NAO CST	Atmospheric temperature profile	Lower troposphere (LT)	3067	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P NAO CST	Wind profile (horizontal component)	Lower troposphere (LT)	3067	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P NIO OPN	Atmospheric temperature profile	Lower troposphere (LT)	5000	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P NIO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	5000	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P RA-I S	Atmospheric temperature profile	Lower troposphere (LT)	615	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P RA-I S	Wind profile (horizontal component)	Lower troposphere (LT)	615	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P RA-I T	Atmospheric temperature profile	Lower troposphere (LT)	3287	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P RA-I T	Wind profile (horizontal component)	Lower troposphere (LT)	3287	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P RA-II E	Atmospheric temperature profile	Lower troposphere (LT)	3054	km	0.4	km	2	K	12	h	1	h		Potential realized
Amdar P RA-II E	Wind profile (horizontal component)	Lower troposphere (LT)	3054	km	0.4	km	2	m/s	12	h	1	h		Potential realized
Amdar P RA-II S	Atmospheric temperature profile	Lower troposphere (LT)	1708	km	0.4	km	2	K	12	h	1	h		Potential realized
Amdar P RA-II S	Wind profile (horizontal component)	Lower troposphere (LT)	1708	km	0.4	km	2	m/s	12	h	1	h		Potential realized
Amdar P RA-III N	Atmospheric temperature profile	Lower troposphere (LT)	1447	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P RA-III N	Wind profile (horizontal component)	Lower troposphere (LT)	1447	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P RA-III S	Atmospheric temperature profile	Lower troposphere (LT)	1026	km	0.4	km	2	K	24	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Amdar P RA-III S	Wind profile (horizontal component)	Lower troposphere (LT)	1026	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P RA-IV C	Atmospheric temperature profile	Lower troposphere (LT)	300	km	0.4	km	2	K	5	h	1	h		Potential realized
Amdar P RA-IV C	Wind profile (horizontal component)	Lower troposphere (LT)	300	km	0.4	km	2	m/s	5	h	1	h		Potential realized
Amdar P RA-IV S	Atmospheric temperature profile	Lower troposphere (LT)	9999	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P RA-IV S	Wind profile (horizontal component)	Lower troposphere (LT)	9999	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P RA-V NW	Atmospheric temperature profile	Lower troposphere (LT)	3821	km	0.4	km	2	K	6	h	1	h		Potential realized
Amdar P RA-V NW	Wind profile (horizontal component)	Lower troposphere (LT)	3821	km	0.4	km	2	m/s	6	h	1	h		Potential realized
Amdar P RA-V SW	Atmospheric temperature profile	Lower troposphere (LT)	644	km	0.4	km	2	K	6	h	1	h		Potential realized
Amdar P RA-V SW	Wind profile (horizontal component)	Lower troposphere (LT)	644	km	0.4	km	2	m/s	6	h	1	h		Potential realized
Amdar P RA-VI EE	Atmospheric temperature profile	Lower troposphere (LT)	692	km	0.4	km	2	K	2	h	1	h		Potential realized
Amdar P RA-VI EE	Wind profile (horizontal component)	Lower troposphere (LT)	692	km	0.4	km	2	m/s	2	h	1	h		Potential realized
Amdar P RA-VI WE	Atmospheric temperature profile	Lower troposphere (LT)	175	km	0.4	km	2	K	2	h	1	h		Potential realized
Amdar P RA-VI WE	Wind profile (horizontal component)	Lower troposphere (LT)	175	km	0.4	km	2	m/s	2	h	1	h		Potential realized
Amdar P SIO	Atmospheric temperature profile	Lower troposphere (LT)	3142	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P SIO	Wind profile (horizontal component)	Lower troposphere (LT)	3142	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P TAO CST	Atmospheric temperature profile	Lower troposphere (LT)	2925	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P TAO CST	Wind profile (horizontal component)	Lower troposphere (LT)	2925	km	0.4	km	2	m/s	24	h	1	h		Potential realized
Amdar P TPO OPN	Atmospheric temperature profile	Lower troposphere (LT)	40696	km	0.4	km	2	K	24	h	1	h		Potential realized
Amdar P TPO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	40696	km	0.4	km	2	m/s	24	h	1	h		Potential realized
AMI/SAR/Image	Iceberg fractional cover		30	km				% (Max)	0.5	d	0.1	d		Experimental
AMI/SAR/Image	Iceberg height		30	km				m	0.5	d	0.1	d		Experimental
AMI/SAR/Image	Land cover		30	m			10	classes	0.01	y	1	d		Experimental
AMI/SAR/Image	Land surface imagery		30	m					3	d	0.1	d		Experimental
AMI/SAR/Image	Land surface topography		30	m			3	m (vert.)	0.5	y	1	d		Experimental
AMI/SAR/Image	Sea-ice cover		0.1	km			30	% (Max)	0.5	d	2.4	d		Experimental
AMI/SAR/Image	Soil moisture		0.1	km				g/kg	30	d	2.4	d		Experimental
AMI/SAR/Image	Vegetation type		30	m			15	classes	30	d	1	d		Experimental
AMI/SAR/wave	Dominant wave direction		5	km				degrees	48	h	2	h		Experimental
AMI/SAR/wave	Dominant wave period		5	km				s	48	h	2	h		Experimental
AMI/SAR/wave	Ocean surface currents (vector)		0.1	km				cm/s	2	d	2.4	d		Experimental
AMI/scatterometer	Sea-ice cover		50	km			50	% (Max)	3	d	2.4	d		Experimental
AMI/scatterometer	Soil moisture		50	km				g/kg	3	d	2.4	d		Experimental
AMI/scatterometer	Wind vector over sea surface (horizontal)		25	km			2	m/s	72	h	3	h		Experimental
AMSR	Sea surface bulk temperature		25	km			1		12	h	24	h		Potential expected
AMSR	Sea-ice cover		10	km			30	% (Max)	0.5	d	0.25	d		Potential expected
AMSR	Snow cover		10	km			10	% (Max)	12	h	24	h		Potential
AMSR	Snow water equivalent		10	km			5	mm	12	h	6	h		Experimental
AMSR	Soil moisture		60	km				g/kg	0.5	d	1	d		Experimental
AMSR	Specific humidity profile	Total column	10	km			1.5	kg/m2	12	h	3	h		Potential expected

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
AMSU-A	Atmospheric temperature profile	Lower stratosphere (LS)	50	km	2	km	2	K	12	h	2	h	Delay is quicker for local reception	Potential realized
AMSU-A	Atmospheric temperature profile	Higher stratosphere & mesosphere (HS & M)	50	km	2	km	2	K	12	h	2	h	Delay is quicker for local reception	Potential realized
AMSU-A	Atmospheric temperature profile	Higher troposphere (HT)	50	km	1	km	2	K	12	h	2	h	Delay is quicker for local reception	Potential realized
AMSU-A	Atmospheric temperature profile	Lower troposphere (LT)	50	km	1	km	2	K	12	h	2	h	Delay is quicker for local reception	Potential realized
AMSU-A	Cloud water profile (< 100 µm)	Total column	50	km			300	kg/m2	12	h	2	h	Delay is quicker for local reception	Potential
AMSU-A	Land surface temperature		50	km			3	K	12	h	2	h	Delay is quicker for local reception	Experimental
AMSU-A	Precipitation rate (liquid) at the		50	km			5	m/s	12	h	2	h	Delay is quicker for local reception	Potential realized
AMSU-A	Precipitation rate (solid) at the		50	km			5	mm/h	12	h	2	h	Delay is quicker for local reception	Potential realized
AMSU-A	Sea-ice cover		50	km			30	% (Max)	0.5	d	0.08	d	Delay is quicker for local reception	Potential expected
AMSU-A	Snow cover		50	km			50	% (Max)	12	h	6	h	Delay is quicker for local reception	Potential expected
AMSU-B	Cloud water profile (< 100 µm)	Total column	15	km			200	kg/m2	12	h	2	h	Delay is quicker for local	Potential reception
AMSU-B	Precipitation rate (liquid) at the		15	km			5	m/s	12	h	2	h	Delay is quicker for local reception	Potential realized
AMSU-B	Precipitation rate (solid) at the		15	km			5	mm/h	12	h	2	h	Delay is quicker for local reception	Potential realized
AMSU-B	Sea-ice cover		15	km			30	% (Max)	0.5	d	0.08	d	Delay is quicker for local reception	Potential expected
AMSU-B	Snow cover		15	km			50	% (Max)	12	h	6	h	Delay is quicker for local reception	Potential expected
AMSU-B	Specific humidity profile	Lower troposphere (LT)	15	km	1	km	15	%	12	h	2	h	Delay is quicker for local reception	Potential realized
AMSU-B	Specific humidity profile	Total column	15	km			1	kg/m2	12	h	2	h	Delay is quicker for local reception	Potential expected
AMSU-B	Specific humidity profile	Higher troposphere (HT)	15	km	1	km	15	%	12	h	2	h	Delay is quicker for local reception	Potential realized
Argo NAO OPN	Ocean salinity		350	km			0.01	psu	10	d	12	d	1/2 implementation in 2003, full in 2005	Potential expected
Argo NAO OPN	Sea surface bulk temperature		350	km			0.01		240	h	12	h	1/2 implementation in 2003, full in 2005	Potential expected
Argo NIO OPN	Ocean salinity		350	km			0.01	psu	10	d	12	d	1/2 implementation in 2003, full in 2005	Potential expected
Argo NIO OPN	Sea surface bulk temperature		350	km			0.01		240	h	12	h	1/2 implementation in 2003, full in 2005	Potential expected
Argo NPO OPN	Ocean salinity		350	km			0.01	psu	10	d	12	d	1/2 implementation in 2003, full in 2005	Potential expected

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv	Cycle	Delay		Comment	Con
Argo NPO OPN	Sea surface bulk temperature	350	km		0.01		240	h	12	h	1/2 implementation in 2003, full in 2005	Potential expected
Argo SAO OPN	Ocean salinity	350	km		0.01	psu	10	d	12	d	1/2 implementation in 2003, full in 2005	Potential expected
Argo SAO OPN	Sea surface bulk temperature	350	km		0.01		240	h	12	h	1/2 implementation in 2003, full in 2005	Potential expected
Argo SIO	Ocean salinity	350	km		0.01	psu	10	d	12	d	1/2 implementation in 2003, full in 2005	Potential expected
Argo SIO	Sea surface bulk temperature	350	km		0.01		240	h	12	h	1/2 implementation in 2003, full in 2005	Potential expected
Argo SPO OPN	Ocean salinity	350	km		0.01	psu	10	d	12	d	1/2 implementation in 2003, full in 2005	Potential expected
Argo SPO OPN	Sea surface bulk temperature	350	km		0.01		240	h	12	h	1/2 implementation in 2003, full in 2005	Potential expected
Argo TAO OPN	Ocean salinity	350	km		0.01	psu	10	d	12	d	1/2 implementation in 2003, full in 2005	Potential expected
Argo TAO OPN	Sea surface bulk temperature	350	km		0.01		240	h	12	h	1/2 implementation in 2003, full in 2005	Potential expected
Argo TPO OPN	Ocean salinity	350	km		0.01	psu	10	d	12	d	1/2 implementation in 2003, full in 2005	Potential expected
Argo TPO OPN	Sea surface bulk temperature	350	km		0.01		240	h	12	h	1/2 implementation in 2003, full in 2005	Potential expected
ASAR	Land cover	1000	m		5	classes	0.01	y	2	d		Experimental
ASAR	Land surface imagery	1000	m				2	d	1	d		Experimental
ASAR	Soil moisture	1	km			g/kg	2	d	2	d		Experimental
ASAR (image mode)	Iceberg fractional cover	30	km			% (Max)	2	d	0.1	d		Experimental
ASAR (image mode)	Iceberg height	30	km			m	2	d	0.1	d		Experimental
ASAR (image mode)	Land cover	30	m		10	classes	0.01	y	1	d		Experimental
ASAR (image mode)	Land surface imagery	30	m				2	d	0.1	d		Experimental
ASAR (image mode)	Land surface topography	30	m		3	m (vert.)	0.5	y	1	d		Experimental
ASAR (image mode)	Sea-ice cover	0.1	km		30	% (Max)	0.5	d	2.4	d		Experimental
ASAR (image mode)	Soil moisture	0.1	km			g/kg	2	d	2.4	d		Experimental
ASAR (image mode)	Vegetation type	30	m		15	classes	30	d	1	d		Experimental
ASAR (wave mode)	Dominant wave direction	5	km			degrees	48	h	2	h		Potential realized
ASAR (wave mode)	Dominant wave period	5	km			s	48	h	2	h		Potential realized
ASAR (wave mode)	Ocean surface currents (vector)	0.1	km			cm/s	2	d	2.4	d		Experimental
ASCAT	Sea-ice cover	50	km		50	% (Max)	1.5	d	0.75	d		Potential
ASCAT	Soil moisture	50	km		0.1	g/kg	1.5	d	0.75	d		Experimental
ASCAT	Wind vector over sea surface (horizontal)	50	km		2	m/s	18	h	0.75	h		Potential expected
ASTER	Fractional Photosynthetically Active Radiation (FPAR)	0.015	km		25	% (Max)	16	d	1	d		Experimental
ASTER	Land cover	15	m		20	classes	0.04	y	1	d		Potential expected

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
ASTER	Land surface imagery		15	m					16	d		d		Experimental
ASTER	Land surface temperature		0.09	km			1	K	400	h	24	h		Potential
ASTER	Land surface topography		15	m			7	m (vert.)	0.5	y	24	d		Experimental
ASTER	Leaf Area Index (LAI)		0.015	km			20	% (Max)	16	d	1	d		Potential
ASTER	Normalized Differential Vegetation Index (NDVI)		0.015	km			5	% (Max)	16	d	1	d		Potential
ATLID	Cloud optical thickness			km			10	%	24	h	144	h		Potential
ATMS	Atmospheric temperature profile	Higher stratosphere & mesosphere (HS & M)	50	km	2	km	2	K	12	h	2	h		Potential
ATMS	Atmospheric temperature profile	Lower troposphere (LT)	50	km	1	km	2	K	12	h	2	h		Potential
ATMS	Atmospheric temperature profile	Higher troposphere (HT)	50	km	1	km	2	K	12	h	2	h		Potential
ATMS	Atmospheric temperature profile	Lower stratosphere (LS)	50	km	2	km	2	K	12	h	2	h		Potential
ATMS	Cloud water profile (< 100 µm)	Total column	15	km			200	kg/m2	12	h	2	h		Potential
ATMS	Land surface temperature		50	km			3	K	12	h	2	h		Experimental
ATMS	Precipitation rate (liquid) at the		15	km			5	m/s	12	h	2	h		Potential
ATMS	Precipitation rate (solid) at the		15	km			5	mm/h	12	h	2	h		Potential
ATMS	Sea-ice cover		15	km			30	% (Max)	0.5	d	0.08	d		Potential
ATMS	Snow cover		15	km			50	% (Max)	12	h	2	h		Potential
ATMS	Specific humidity profile	Lower troposphere (LT)	15	km	1	km	15	%	12	h	2	h		Potential
ATMS	Specific humidity profile	Total column	15	km			1	kg/m2	12	h	2	h		Potential
ATMS	Specific humidity profile	Higher troposphere (HT)	15	km	1	km	15	%	12	h	2	h		Potential
ATOVS (HIRS/3 + AMSU + AVHRR/3)	Atmospheric temperature profile	Lower troposphere (LT)	40	km	1	km	2	K	12	h	2	h		Potential realized
ATOVS (HIRS/3 + AMSU + AVHRR/3)	Atmospheric temperature profile	Lower stratosphere (LS)	40	km	2	km	1.5	K	12	h	2	h		Potential realized
ATOVS (HIRS/3 + AMSU + AVHRR/3)	Atmospheric temperature profile	Higher troposphere (HT)	40	km	1	km	2	K	12	h	2	h		Potential realized
ATOVS (HIRS/3 + AMSU + AVHRR/3)	Specific humidity profile	Total column	15	km			1	kg/m2	12	h	2	h		Potential expected
ATSR	Cloud cover		15	km			10	% (Max)	36	h	3	h		Experimental
ATSR	Cloud imagery		1	km					36	h	3	h		Experimental
ATSR	Cloud type		15	km			5	classes	36	h	3	h		Experimental
ATSR	Long-wave Earth surface emissivity		1	km			2	% (Max)	36	h	3	h		Experimental
ATSR	Sea surface bulk temperature		1	km			0.4		36	h	3	h		Potential realized
ATSR-2	Cloud imagery		1	km					36	h	3	h		Potential expected
ATSR-2	Cloud type		15	km			5	classes	36	h	3	h		Experimental
ATSR-2	Fire area		0.1	m2			20	% (Max)	1.5	d	0.125	d		Experimental
ATSR-2	Fire temperature		0.1	K			200	K	1.5	d	0.125	d		Experimental
ATSR-2	Land cover		1000	m			10	classes	0.01	y	1	d		Experimental
ATSR-2	Leaf Area Index (LAI)		1	km			30	% (Max)	30	d	1	d		Potential
ATSR-2	Sea surface bulk temperature		1	km			0.4		36	h	3	h		Potential realized
AVHRR/2	Aerosol profile	Total column	1	km			10	%	12	h	2	h		Potential

Instrument	Parameter		Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
AVHRR/2	Cloud cover		5	km		10	% (Max)	12	h	2	h		Potential expected
AVHRR/2	Cloud imagery		4	km				12	h	2	h		Potential realized
AVHRR/2	Cloud top height		4	km		1.5	km	12	h	2	h		Potential expected
AVHRR/2	Cloud top temperature		4	km		2	K	12	h	2	h		Potential expected
AVHRR/2	Cloud type		15	km		5	classes	12	h	2	h		Potential expected
AVHRR/2	Fire area		1	m2		20	% (Max)	0.5	d	0.125	d		Potential realized
AVHRR/2	Fire temperature		1	K		200	K	0.5	d	0.125	d		Potential realized
AVHRR/2	Fractional Photosynthetically Active Radiation (FPAR)		1	km		25	% (Max)	7	d	1	d		Experimental
AVHRR/2	Land surface temperature		1	km		1	K	12	h	2	h		Potential expected
AVHRR/2	Normalized Differential Vegetation Index (NDVI)		1	km		10	% (Max)	0.5	d	1	d		Potential
AVHRR/2	Sea surface bulk temperature		4	km		0.5		12	h	2	h		Potential realized
AVHRR/3	Aerosol profile	Total column	1	km		10	%	12	h	2	h		Potential
AVHRR/3	Cloud cover		5	km		10	% (Max)	12	h	2	h		Potential expected
AVHRR/3	Cloud imagery		4	km				12	h	2	h		Potential expected
AVHRR/3	Cloud optical thickness		4	km		20	%	12	h	2	h		Potential expected
AVHRR/3	Cloud top height		10	km		1.5	km	12	h	2	h		Potential
AVHRR/3	Cloud type		15	km		5	classes	12	h	2	h		Potential expected
AVHRR/3	Fire area		1	m2		20	% (Max)	0.5	d	0.125	d		Potential realized
AVHRR/3	Fire temperature		1	K		200	K	0.5	d	0.125	d		Potential realized
AVHRR/3	Fractional Photosynthetically Active Radiation (FPAR)		1	km		25	% (Max)	1	d	1	d		Experimental
AVHRR/3	Land cover		1000	m		10	classes	0.01	y	1	d		Potential
AVHRR/3	Leaf Area Index (LAI)		1	km		25	% (Max)	1	d	1	d		Potential
AVHRR/3	Normalized Differential Vegetation Index (NDVI)		1	km		10	% (Max)	0.5	d	1	d		Potential
AVHRR/3	Sea surface bulk temperature		4	km		0.5		12	h	2	h		Potential realized
AVHRR/4	Aerosol profile	Total column	1	km		10	%	12	h	2	h		Potential
AVHRR/4	Cloud cover		5	km		8	% (Max)	12	h	2	h		Potential expected
AVHRR/4	Cloud imagery		4	km				12	h	2	h		Potential expected
AVHRR/4	Cloud optical thickness		4	km		20	%	12	h	2	h		Potential expected
AVHRR/4	Cloud top height		10	km		1.5	km	12	h	2	h		Potential
AVHRR/4	Cloud type		15	km		5	classes	12	h	2	h		Potential expected
AVHRR/4	Fire area		1	m2		20	% (Max)	0.5	d	0.125	d		Potential realized
AVHRR/4	Fire temperature		1	K		200	K	0.5	d	0.125	d		Potential realized
AVHRR/4	Fractional Photosynthetically Active Radiation (FPAR)		1	km		25	% (Max)	1	d	1	d		Experimental
AVHRR/4	Land cover		1000	m		10	classes	0.01	y	1	d		Potential
AVHRR/4	Leaf Area Index (LAI)		1	km		25	% (Max)	1	d	1	d		Potential
AVHRR/4	Normalized Differential Vegetation Index (NDVI)		1	km		10	% (Max)	0.5	d	1	d		Potential

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
AVHRR/4	Sea surface bulk temperature		4	km			0.5		12	h	2	h		Potential realized
AVNIR	Land surface imagery		8	m					41	d		d		Potential realized
AVNIR-2	Land cover		10	m			25	classes	0.04	y		d		Experimental
AVNIR-2	Land surface topography		2.5	m				m (vert.)	0.04	y		d		Experimental
AVNIR-2	Vegetation type		2.5	m			35	classes	41	d	1	d		Experimental
BATHY ARC	Ocean salinity		9999	km				psu	6	d	1	d		Potential realized
BATHY MED	Ocean salinity		9527	km				psu	6	d	1	d		Potential realized
BATHY NAO CST	Ocean salinity		4688	km				psu	6	d	1	d		Potential realized
BATHY NAO OPN	Ocean salinity		3756	km				psu	6	d	1	d		Potential realized
BATHY NIO CST	Ocean salinity		5577	km				psu	6	d	1	d		Potential realized
BATHY NIO OPN	Ocean salinity		7563	km				psu	6	d	1	d		Potential realized
BATHY NPO CST	Ocean salinity		1114	km				psu	6	d	1	d		Potential realized
BATHY NPO OPN	Ocean salinity		2281	km				psu	6	d	1	d		Potential realized
BATHY RA-V NW	Ocean salinity		3433	km				psu	6	d	1	d		Potential realized
BATHY RA-V SW	Ocean salinity		5066	km				psu	6	d	1	d		Potential realized
BATHY SAO CST	Ocean salinity		7999	km				psu	6	d	1	d		Potential realized
BATHY SIO	Ocean salinity		9999	km				psu	6	d	1	d		Potential realized
BATHY SPO OPN	Ocean salinity		8283	km				psu	6	d	1	d		Potential realized
BATHY TAO CST	Ocean salinity		9999	km				psu	6	d	1	d		Potential realized
BATHY TAO OPN	Ocean salinity		6000	km				psu	6	d	1	d		Potential realized
BATHY TPO CST	Ocean salinity		3623	km				psu	6	d	1	d		Potential realized
BATHY TPO OPN	Ocean salinity		3628	km				psu	6	d	1	d		Potential realized
BTVK	Cloud imagery		1.5	km					1	h	0.5	h		Potential expected
BUFS-2	Ozone profile	Lower stratosphere (LS)	270	km	5	km	10	%	12	h	24	h		Experimental
BUFS-2	Ozone profile	Lower troposphere (LT)	50	km	5	km	10	%	12	h	24	h		Experimental
Buoys MED	Air pressure over sea surface		1785	km			0.5	hPa	4	h	1	h		Potential realized
Buoys MED	Air temperature (at surface)		1907	km			0.2	K	2	h	6	h		Potential realized
Buoys MED	Sea surface bulk temperature		1478	km			1		2	h	6	h		Potential realized
Buoys NAO CST	Air pressure over sea surface		830	km			0.5	hPa	4	h	1	h		Potential realized
Buoys NAO CST	Air temperature (at surface)		1277	km			0.5	K	2	h	6	h		Potential realized
Buoys NAO CST	Sea surface bulk temperature		603	km			0.3		2	h	6	h		Potential realized
Buoys NAO CST	Wind vector over sea surface (horizontal)		2611	km			2	m/s	8	h	1	h		Potential realized
Buoys NIO CST	Air pressure over sea surface		9999	km			0.5	hPa	4	h	1	h		Potential realized
Buoys NPO CST	Air pressure over sea surface		652	km			0.5	hPa	4	h	1	h		Potential realized
Buoys NPO CST	Air temperature (at surface)		2438	km			0.5	K	2	h	6	h		Potential realized
Buoys NPO CST	Sea surface bulk temperature		422	km			0.3		2	h	6	h		Potential realized
Buoys NPO CST	Wind vector over sea surface (horizontal)		622	km			2	m/s	8	h	1	h		Potential realized
Buoys RA-IV S	Air pressure over sea surface		4770	km			0.5	hPa	4	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Buoys RA-IV S	Air temperature (at surface)		9999	km			0.5	K	2	h	6	h		Potential realized
Buoys RA-IV S	Sea surface bulk temperature		533	km			0.3		2	h	6	h		Potential realized
Buoys RA-IV S	Wind vector over sea surface (horizontal)		4577	km			2	m/s	8	h	1	h		Potential realized
Buoys RA-V NW	Air pressure over sea surface		1438	km			0.5	hPa	4	h	1	h		Potential realized
Buoys RA-V NW	Air temperature (at surface)		1391	km			0.5	K	2	h	6	h		Potential realized
Buoys RA-V NW	Sea surface bulk temperature		1122	km			0.3		2	h	6	h		Potential realized
Buoys RA-V NW	Wind vector over sea surface (horizontal)		1462	km			2	m/s	8	h	1	h		Potential realized
Buoys RA-V SW	Air pressure over sea surface		1420	km			0.5	hPa	4	h	1	h		Potential realized
Buoys RA-V SW	Air temperature (at surface)		1395	km			0.5	K	2	h	6	h		Potential realized
Buoys RA-V SW	Sea surface bulk temperature		942	km			0.3		2	h	6	h		Potential realized
Buoys RA-V SW	Wind vector over sea surface (horizontal)		2322	km			2	m/s	8	h	1	h		Potential realized
Buoys RA-VII	Air pressure over sea surface		1830	km			0.5	hPa	4	h	1	h		Potential realized
Buoys RA-VII	Air temperature (at surface)		1739	km			0.5	K	2	h	6	h		Potential realized
Buoys RA-VII	Sea surface bulk temperature		1478	km			0.3		2	h	6	h		Potential realized
Buoys SAO CST	Air pressure over sea surface		1660	km			0.5	hPa	4	h	1	h		Potential realized
Buoys SAO CST	Air temperature (at surface)		9999	km			0.5	K	2	h	6	h		Potential realized
Buoys SAO CST	Sea surface bulk temperature		1128	km			0.3		2	h	6	h		Potential realized
Buoys TAO CST	Air pressure over sea surface		1524	km			0.5	hPa	4	h	1	h		Potential realized
Buoys TAO CST	Air temperature (at surface)		3169	km			0.5	K	2	h	6	h		Potential realized
Buoys TAO CST	Sea surface bulk temperature		544	km			0.3		2	h	6	h		Potential realized
Buoys TAO CST	Wind vector over sea surface (horizontal)		2619	km			2	m/s	8	h	1	h		Potential realized
Buoys TPO CST	Air temperature (at surface)		4486	km			0.5	K	2	h	6	h		Potential realized
Buoys TPO CST	Sea surface bulk temperature		1599	km			0.3		2	h	6	h		Potential realized
Buoys TPO CST	Wind vector over sea surface (horizontal)		3663	km			2	m/s	8	h	1	h		Potential realized
CCD	Land surface imagery		19.5	m					26	d		d		Experimental
CrIS	Atmospheric temperature profile	Lower troposphere (LT)	25	km	1	km	1	K	12	h	2	h		Potential realized
CrIS	Atmospheric temperature profile	Lower stratosphere (LS)	25	km	2	km	1	K	12	h	2	h		Potential realized
CrIS	Atmospheric temperature profile	Higher troposphere (HT)	25	km	1	km	1	K	12	h	2	h		Potential realized
CrIS	Cloud cover		25	km			10	% (Max)	12	h	3	h		Potential expected
CrIS	Cloud optical thickness		25	km			20	%	12	h	3	h		Experimental
CrIS	Cloud top height		25	km			0.5	km	12	h	2	h		Potential
CrIS	Cloud top temperature		25	km			2	K	12	h	3	h		Experimental
CrIS	Land surface temperature		25	km			0.5	K	12	h	3	h		Experimental
CrIS	Outgoing long-wave radiation at		25	km			5	m/s	12	h	3	h		Potential realized
CrIS	Outgoing short-wave radiation at		25	km			5	W/m2	12	h	3	h		Potential realized
CrIS	Ozone profile	Total column	25	km			20	DU	12	h	3	h		Experimental

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
CrIS	Ozone profile	Higher troposphere (HT)	25	km	5	km	15	%	12	h	3	h		Potential
CrIS	Sea surface bulk temperature		25	km			0.3		12	h	3	h		Potential realized
CrIS	Specific humidity profile	Total column	25	km			2	kg/m2	12	h	2	h		Potential expected
CrIS	Specific humidity profile	Lower troposphere (LT)	25	km	1	km	10	%	12	h	2	h		Potential realized
CrIS	Specific humidity profile	Higher troposphere (HT)	25	km	1	km	10	%	12	h	2	h		Potential realized
DriftBuoys ARC	Air pressure over sea surface		517	km			0.5	hPa	1.3	h	1.3	h	Asynoptic data	Potential realized
DriftBuoys ARC	Air specific humidity (at surface)		99999	km			10	%	1.3	h	1.3	h	Asynoptic data	Potential realized
DriftBuoys ARC	Air temperature (at surface)		551	km			0.5	K	1.3	h	1.5	h	Asynoptic data	Potential realized
DriftBuoys ARC	Sea surface bulk temperature		1056	km			0.3		1.3	h	1	h	Asynoptic data	Potential realized
DriftBuoys ARC	Wind vector over sea surface (horizontal)		99999	km			2	m/s	1.3	h	1.3	h	Asynoptic data	Potential realized
DriftBuoys NAO OPN	Air pressure over sea surface		616	km			0.5	hPa	0.9	h	2.1	h	Asynoptic data	Potential realized
DriftBuoys NAO OPN	Air specific humidity (at surface)		99999	km			10	%	0.9	h	2.1	h	Asynoptic data	Potential realized
DriftBuoys NAO OPN	Air temperature (at surface)		1067	km			0.5	K	1	h	1	h	Asynoptic data	Potential realized
DriftBuoys NAO OPN	Sea surface bulk temperature		412	km			0.3		1.6	h	1.5	h	Asynoptic data	Potential realized
DriftBuoys NAO OPN	Wind vector over sea surface (horizontal)		1471	km			2	m/s	1.5	h	1.6	h	Asynoptic data	Potential realized
DriftBuoys NIO OPN	Air pressure over sea surface		1888	km			0.5	hPa	1.6	h	2.9	h	Asynoptic data	Potential realized
DriftBuoys NIO OPN	Air specific humidity (at surface)		99999	km			10	%	1.6	h	2.9	h	Asynoptic data	Potential realized
DriftBuoys NIO OPN	Air temperature (at surface)		99999	km			0.5	K	1.6	h	2.9	h	Asynoptic data	Potential realized
DriftBuoys NIO OPN	Sea surface bulk temperature		1121	km			0.3		3.2	h	2.2	h	Asynoptic data	Potential realized
DriftBuoys NIO OPN	Wind vector over sea surface (horizontal)		4624	km			2	m/s	1.1	h	2.7	h	Asynoptic data	Potential realized
DriftBuoys NPO OPN	Air pressure over sea surface		884	km			0.5	hPa	2.2	h	2.3	h	Asynoptic data	Potential realized
DriftBuoys NPO OPN	Air specific humidity (at surface)		99999	km			10	%	2.2	h	2.3	h	Asynoptic data	Potential realized
DriftBuoys NPO OPN	Air temperature (at surface)		1603	km			0.5	K	2.6	h	1.5	h	Asynoptic data	Potential realized
DriftBuoys NPO OPN	Sea surface bulk temperature		449	km			0.3		3.5	h	1.5	h	Asynoptic data	Potential realized
DriftBuoys NPO OPN	Wind vector over sea surface (horizontal)		1279	km			2	m/s	1.8	h	1.9	h	Asynoptic data	Potential realized
DriftBuoys SAO OPN	Air pressure over sea surface		991	km			0.5	hPa	1.3	h	3.9	h	Asynoptic data	Potential realized
DriftBuoys SAO OPN	Air specific humidity (at surface)		99999	km			10	%	1.3	h	3.9	h	Asynoptic data	Potential realized
DriftBuoys SAO OPN	Air temperature (at surface)		99999	km			0.5	K	1.3	h	3.9	h	Asynoptic data	Potential realized
DriftBuoys SAO OPN	Sea surface bulk temperature		708	km			0.3		2.9	h	2.8	h	Asynoptic data	Potential realized
DriftBuoys SAO OPN	Wind vector over sea surface (horizontal)		99999	km			2	m/s	1.3	h	3.9	h	Asynoptic data	Potential realized
DriftBuoys SIO	Air pressure over sea surface		1292	km			0.5	hPa	1.4	h	2.8	h	Asynoptic data	Potential realized
DriftBuoys SIO	Air specific humidity (at surface)		99999	km			10	%	1.4	h	2.8	h	Asynoptic data	Potential realized
DriftBuoys SIO	Air temperature (at surface)		3711	km			0.5	K	2.1	h	1.2	h	Asynoptic data	Potential realized
DriftBuoys SIO	Sea surface bulk temperature		845	km			0.3		2.3	h	2.1	h	Asynoptic data	Potential realized
DriftBuoys SIO	Wind vector over sea surface (horizontal)		5249	km			2	m/s	1.7	h	1.25	h	Asynoptic data	Potential realized
DriftBuoys SPO OPN	Air pressure over sea surface		1466	km			0.5	hPa	1.8	h	2	h	Asynoptic data	Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
DriftBuoys SPO OPN	Air specific humidity (at surface)	99999	km		10	%	1.8	h	2	h	Asynoptic data	Potential realized
DriftBuoys SPO OPN	Air temperature (at surface)	2478	km		0.5	K	1.1	h	1.9	h	Asynoptic data	Potential realized
DriftBuoys SPO OPN	Sea surface bulk temperature	909	km		0.3		2.8	h	1.9	h	Asynoptic data	Potential realized
DriftBuoys SPO OPN	Wind vector over sea surface (horizontal)	99999	km		2	m/s	1.8	h	2	h	Asynoptic data	Potential realized
DriftBuoys TAO OPN	Air pressure over sea surface	1467	km		0.5	hPa	1.4	h	3.6	h	Asynoptic data	Potential realized
DriftBuoys TAO OPN	Air specific humidity (at surface)	5683	km		10	%	1.1	h	5.1	h	Asynoptic data	Potential realized
DriftBuoys TAO OPN	Air temperature (at surface)	4018	km		0.5	K	2.1	h	5	h	Asynoptic data	Potential realized
DriftBuoys TAO OPN	Sea surface bulk temperature	828	km		0.3		2.7	h	2.7	h	Asynoptic data	Potential realized
DriftBuoys TAO OPN	Wind vector over sea surface (horizontal)	1713	km		2	m/s	1.5	h	3.1	h	Asynoptic data	Potential realized
DriftBuoys TPO OPN	Air pressure over sea surface	3490	km		0.5	hPa	3.9	h	2.7	h	Asynoptic data	Potential realized
DriftBuoys TPO OPN	Air specific humidity (at surface)	99999	km		10	%	3.9	h	2.7	h	Asynoptic data	Potential realized
DriftBuoys TPO OPN	Air temperature (at surface)	4725	km		0.5	K	3.8	h	1.6	h	Asynoptic data	Potential realized
DriftBuoys TPO OPN	Sea surface bulk temperature	826	km		0.3		3.5	h	1.9	h	Asynoptic data	Potential realized
DriftBuoys TPO OPN	Wind vector over sea surface (horizontal)	8185	km		2	m/s	6.5	h	1.6	h	Asynoptic data	Potential realized
ETM+	Fractional Photosynthetically Active Radiation (FPAR)	0.03	km		15	% (Max)	1	d	1	d		Experimental
ETM+	Land cover	30	m		20	classes	0.04	y	2	d		Potential expected
ETM+	Land surface imagery	30	m				16	d	1	d		Potential
ETM+	Leaf Area Index (LAI)	0.03	km		20	% (Max)	16	d	1	d		Potential expected
ETM+	Normalized Differential Vegetation Index (NDVI)	0.03	km		5	% (Max)	1	d	1	d		Potential
ETM+	Vegetation type	30	m		20	classes	16	d	2	d		Potential expected
FRX-XBT NAO OPN	Sea surface bulk temperature	901	km		0.1		490	h	12	h	FRX mode to be enhanced along with implementation of Argo	Potential realized
FRX-XBT NIO OPN	Sea surface bulk temperature	1008	km		0.1		490	h	12	h	FRX mode to be enhanced along with implementation of Argo	Potential realized
FRX-XBT NPO OPN	Sea surface bulk temperature	830	km		0.1		490	h	12	h	FRX mode to be enhanced along with implementation of Argo	Potential realized
FRX-XBT SAO OPN	Sea surface bulk temperature	1618	km		0.1		490	h	12	h	FRX mode to be enhanced along with implementation of Argo	Potential realized
FRX-XBT SIO	Sea surface bulk temperature	882	km		0.1		490	h	12	h	FRX mode to be enhanced along with implementation of Argo	Potential realized
FRX-XBT SPO OPN	Sea surface bulk temperature	2491	km		0.1		490	h	12	h	FRX mode to be enhanced along with implementation of Argo	Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
FRX-XBT TAO OPN realized	Sea surface bulk temperature		732	km			0.1		490	h	12	h	FRX mode to be enhanced along with implementation of Argo	Potential
FRX-XBT TPO OPN realized	Sea surface bulk temperature		1134	km			0.1		490	h	12	h	FRX mode to be enhanced along with implementation of Argo	Potential
FRX-XBT* NAO OPN	Sea surface bulk temperature		440	km			0.1		490	h	12	h	Once Argo implemented	Potential expected
FRX-XBT* NIO OPN	Sea surface bulk temperature		770	km			0.1		490	h	12	h	Once Argo implemented	Potential expected
FRX-XBT* NPO OPN	Sea surface bulk temperature		410	km			0.1		490	h	12	h	Once Argo implemented	Potential expected
FRX-XBT* SAO OPN	Sea surface bulk temperature		590	km			0.1		490	h	12	h	Once Argo implemented	Potential expected
FRX-XBT* SIO	Sea surface bulk temperature		780	km			0.1		490	h	12	h	Once Argo implemented	Potential expected
FRX-XBT* SPO OPN	Sea surface bulk temperature		540	km			0.1		490	h	12	h	Once Argo implemented	Potential expected
FRX-XBT* TAO OPN	Sea surface bulk temperature		760	km			0.1		490	h	12	h	Once Argo implemented	Potential expected
FRX-XBT* TPO OPN	Sea surface bulk temperature		720	km			0.1		490	h	12	h	Once Argo implemented	Potential expected
GIFTS	Atmospheric temperature profile	Lower stratosphere (LS)	25	km	2	km	1	K	12	h	2	h		Potential realized
GIFTS	Atmospheric temperature profile	Lower troposphere (LT)	25	km	1	km	1	K	12	h	2	h		Potential realized
GIFTS	Atmospheric temperature profile	Higher troposphere (HT)	25	km	1	km	1	K	12	h	2	h		Potential realized
GIFTS	Cloud cover		25	km			10	% (Max)	12	h	3	h		Potential expected
GIFTS	Cloud optical thickness		25	km			20	%	12	h	3	h		Experimental
GIFTS	Cloud top height		25	km			0.5	km	12	h	2	h		Potential
GIFTS	Cloud top temperature		25	km			2	K	12	h	3	h		Experimental
GIFTS	Land surface temperature		25	km			0.5	K	12	h	3	h		Experimental
GIFTS	Outgoing long-wave radiation at		25	km			5	m/s	12	h	3	h		Potential realized
GIFTS	Outgoing short-wave radiation at		25	km			5	W/m2	12	h	3	h		Potential realized
GIFTS	Ozone profile	Higher troposphere (HT)	25	km	5	km	15	%	12	h	3	h		Potential
GIFTS	Ozone profile	Total column	25	km			20	DU	12	h	3	h		Experimental
GIFTS	Sea surface bulk temperature		25	km			0.3		12	h	3	h		Potential realized
GIFTS	Specific humidity profile	Lower troposphere (LT)	25	km	1	km	10	%	12	h	2	h		Potential realized
GIFTS	Specific humidity profile	Higher troposphere (HT)	25	km	1	km	10	%	12	h	2	h		Potential realized
GIFTS	Specific humidity profile	Total column	25	km			2	kg/m2	12	h	2	h		Potential expected
GIFTS	Wind profile (horizontal component)	Higher troposphere (HT)	40	km	2	km	3	m/s	1	d	1	h		Experimental
GIFTS	Wind profile (horizontal component)	Lower troposphere (LT)	40	km	2	km	1	m/s	1	h	1	h		Potential expected
GLI	Cloud imagery		0.25	km					12	h	720	h		Potential expected
GLI	Cloud optical thickness		0.25	km			1	%	12	h	720	h		Potential realized
GLI	Iceberg fractional cover		0.25	km				% (Max)	0.5	d	30	d		Potential
GLI	Iceberg height		0.25	km				m	0.5	d	30	d		Potential
GLI	Land cover		250	m			15	classes	0.01	y	3	d		Potential expected
GLI	Sea-ice cover		0.25	km			50	% (Max)	0.5	d	30	d		Potential expected
GLI	Snow cover		1	km			10	% (Max)	12	h	24	h		Potential
GLI	Specific humidity profile	Total column	0.25	km			5	kg/m2	12	h	720	h		Potential expected
GLI	Vegetation type		250	m			10	classes	3	d	1	d		Potential

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
GOME	Ozone profile	Lower stratosphere (LS)	960	km	5	km	10	%	3	h	14	h		Potential expected
GOME-2	Ozone profile	Lower stratosphere (LS)	960	km	5	km	10	%	3	h	2	h		Potential expected
GOMOS	Ozone profile	Lower stratosphere (LS)	300	km	1	km		%	36	h	3	h		Experimental
GRAS	Atmospheric temperature profile	Higher stratosphere & mesosphere (HS & M)	1000	km	1	km	1	K	12	h	2	h		Potential expected
GRAS	Atmospheric temperature profile	Lower stratosphere (LS)	1000	km	1	km	1	K	12	h	2	h		Potential expected
GRAS	Atmospheric temperature profile	Higher troposphere (HT)	1000	km	1	km	1	K	12	h	2	h		Potential expected
GRAS	Specific humidity profile	Lower troposphere (LT)	1000	km	1	km	10	%	12	h	2	h		Potential expected
GSN	Air pressure over land surface		691	km			0.3	hPa	6	h	0.8	h		Potential realized
GSN	Air specific humidity (at surface)		691	km			5	%	6	h	0.8	h		Potential realized
GSN	Air temperature (at surface)		691	km			0.2	K	6	h	0.8	h		Potential realized
GSN	Cloud base height		691	km			0.5	km	6	h	0.8	h		Potential realized
GSN	Cloud cover		691	km			12.5	% (Max)	6	h	0.8	h		Potential realized
GSN	Precipitation index (daily		691	km			0.1	mm/d	24	h	0.8	h		Potential realized
GSN	Wind vector over land surface (horizontal)		691	km			0.5	m/s	6	h	0.8	h		Potential realized
GSN ARC	Air pressure over land surface		526	km			0.3	hPa	6	h	0.8	h		Potential realized
GSN ARC	Air specific humidity (at surface)		526	km			5	%	6	h	0.8	h		Potential realized
GSN ARC	Air temperature (at surface)		526	km			0.2	K	6	h	0.8	h		Potential realized
GSN ARC	Cloud base height		526	km			0.5	km	6	h	0.8	h		Potential realized
GSN ARC	Cloud cover		526	km			12.5	% (Max)	6	h	0.8	h		Potential realized
GSN ARC	Precipitation index (daily		526	km			0.1	mm/d	24	h	0.8	h		Potential realized
GSN ARC	Wind vector over land surface (horizontal)		526	km			0.5	m/s	6	h	0.8	h		Potential realized
GSN MED	Air pressure over land surface		567	km			0.3	hPa	6	h	0.8	h		Potential realized
GSN MED	Air specific humidity (at surface)		567	km			5	%	6	h	0.8	h		Potential realized
GSN MED	Air temperature (at surface)		567	km			0.2	K	6	h	0.8	h		Potential realized
GSN MED	Cloud base height		567	km			0.5	km	6	h	0.8	h		Potential realized
GSN MED	Cloud cover		567	km			12.5	% (Max)	6	h	0.8	h		Potential realized
GSN MED	Precipitation index (daily		567	km			0.1	mm/d	24	h	0.8	h		Potential realized
GSN MED	Wind vector over land surface (horizontal)		567	km			0.5	m/s	6	h	0.8	h		Potential realized
GSN NAO OPN	Air pressure over land surface		2236	km			0.3	hPa	6	h	0.8	h		Potential realized
GSN NAO OPN	Air specific humidity (at surface)		2236	km			5	%	6	h	0.8	h		Potential realized
GSN NAO OPN	Air temperature (at surface)		2236	km			0.2	K	6	h	0.8	h		Potential realized
GSN NAO OPN	Cloud base height		2236	km			0.5	km	6	h	0.8	h		Potential realized
GSN NAO OPN	Cloud cover		2236	km			12.5	% (Max)	6	h	0.8	h		Potential realized
GSN NAO OPN	Precipitation index (daily		2236	km			0.1	mm/d	24	h	0.8	h		Potential realized
GSN NAO OPN	Wind vector over land surface (horizontal)		2236	km			0.5	m/s	6	h	0.8	h		Potential realized
GSN NIO CST	Air pressure over land surface		1817	km			0.3	hPa	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
GSN NIO CST	Air specific humidity (at surface)	1817	km		5	%	6	h	0.8	h		Potential realized
GSN NIO CST	Air temperature (at surface)	1817	km		0.2	K	6	h	0.8	h		Potential realized
GSN NIO CST	Cloud base height	1817	km		0.5	km	6	h	0.8	h		Potential realized
GSN NIO CST	Cloud cover	1817	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN NIO CST	Precipitation index (daily	1817	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN NIO CST	Wind vector over land surface (horizontal)	1817	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN NIO OPN	Air pressure over land surface	3391	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN NIO OPN	Air specific humidity (at surface)	3391	km		5	%	6	h	0.8	h		Potential realized
GSN NIO OPN	Air temperature (at surface)	3391	km		0.2	K	6	h	0.8	h		Potential realized
GSN NIO OPN	Cloud base height	3391	km		0.5	km	6	h	0.8	h		Potential realized
GSN NIO OPN	Cloud cover	3391	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN NIO OPN	Precipitation index (daily	3391	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN NIO OPN	Wind vector over land surface (horizontal)	3391	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN NPO CST	Air pressure over land surface	1285	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN NPO CST	Air specific humidity (at surface)	1285	km		5	%	6	h	0.8	h		Potential realized
GSN NPO CST	Air temperature (at surface)	1285	km		0.2	K	6	h	0.8	h		Potential realized
GSN NPO CST	Cloud base height	1285	km		0.5	km	6	h	0.8	h		Potential realized
GSN NPO CST	Cloud cover	1285	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN NPO CST	Precipitation index (daily	1285	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN NPO CST	Wind vector over land surface (horizontal)	1285	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-I N	Air pressure over land surface	548	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-I N	Air specific humidity (at surface)	548	km		5	%	6	h	0.8	h		Potential realized
GSN RA-I N	Air temperature (at surface)	548	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-I N	Cloud base height	548	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-I N	Cloud cover	548	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-I N	Precipitation index (daily	548	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-I N	Wind vector over land surface (horizontal)	548	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-I S	Air pressure over land surface	379	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-I S	Air specific humidity (at surface)	379	km		5	%	6	h	0.8	h		Potential realized
GSN RA-I S	Air temperature (at surface)	379	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-I S	Cloud base height	379	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-I S	Cloud cover	379	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-I S	Precipitation index (daily	379	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-I S	Wind vector over land surface (horizontal)	379	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-I T	Air pressure over land surface	445	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-I T	Air specific humidity (at surface)	445	km		5	%	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
GSN RA-I T	Air temperature (at surface)	445	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-I T	Cloud base height	445	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-I T	Cloud cover	445	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-I T	Precipitation index (daily	445	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-I T	Wind vector over land surface (horizontal)	445	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-II E	Air pressure over land surface	360	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-II E	Air specific humidity (at surface)	360	km		5	%	6	h	0.8	h		Potential realized
GSN RA-II E	Air temperature (at surface)	360	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-II E	Cloud base height	360	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-II E	Cloud cover	360	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-II E	Precipitation index (daily	360	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-II E	Wind vector over land surface (horizontal)	360	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-II N	Air pressure over land surface	329	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-II N	Air specific humidity (at surface)	329	km		5	%	6	h	0.8	h		Potential realized
GSN RA-II N	Air temperature (at surface)	329	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-II N	Cloud base height	329	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-II N	Cloud cover	329	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-II N	Precipitation index (daily	329	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-II N	Wind vector over land surface (horizontal)	329	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-II S	Air pressure over land surface	351	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-II S	Air specific humidity (at surface)	351	km		5	%	6	h	0.8	h		Potential realized
GSN RA-II S	Air temperature (at surface)	351	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-II S	Cloud base height	351	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-II S	Cloud cover	351	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-II S	Precipitation index (daily	351	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-II S	Wind vector over land surface (horizontal)	351	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-II W	Air pressure over land surface	503	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-II W	Air specific humidity (at surface)	503	km		5	%	6	h	0.8	h		Potential realized
GSN RA-II W	Air temperature (at surface)	503	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-II W	Cloud base height	503	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-II W	Cloud cover	503	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-II W	Precipitation index (daily	503	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-II W	Wind vector over land surface (horizontal)	503	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-III N	Air pressure over land surface	383	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-III N	Air specific humidity (at surface)	383	km		5	%	6	h	0.8	h		Potential realized
GSN RA-III N	Air temperature (at surface)	383	km		0.2	K	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
GSN RA-III N	Cloud base height	383	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-III N	Cloud cover	383	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-III N	Precipitation index (daily	383	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-III N	Wind vector over land surface (horizontal)	383	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-III S	Air pressure over land surface	316	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-III S	Air specific humidity (at surface)	316	km		5	%	6	h	0.8	h		Potential realized
GSN RA-III S	Air temperature (at surface)	316	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-III S	Cloud base height	316	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-III S	Cloud cover	316	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-III S	Precipitation index (daily	316	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-III S	Wind vector over land surface (horizontal)	316	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-IV C	Air pressure over land surface	360	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-IV C	Air specific humidity (at surface)	360	km		5	%	6	h	0.8	h		Potential realized
GSN RA-IV C	Air temperature (at surface)	360	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-IV C	Cloud base height	360	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-IV C	Cloud cover	360	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-IV C	Precipitation index (daily	360	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-IV C	Wind vector over land surface (horizontal)	360	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-IV N	Air pressure over land surface	400	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-IV N	Air specific humidity (at surface)	400	km		5	%	6	h	0.8	h		Potential realized
GSN RA-IV N	Air temperature (at surface)	400	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-IV N	Cloud base height	400	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-IV N	Cloud cover	400	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-IV N	Precipitation index (daily	400	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-IV N	Wind vector over land surface (horizontal)	400	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-IV S	Air pressure over land surface	536	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-IV S	Air specific humidity (at surface)	536	km		5	%	6	h	0.8	h		Potential realized
GSN RA-IV S	Air temperature (at surface)	536	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-IV S	Cloud base height	536	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-IV S	Cloud cover	536	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-IV S	Precipitation index (daily	536	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-IV S	Wind vector over land surface (horizontal)	536	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-V NW	Air pressure over land surface	704	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-V NW	Air specific humidity (at surface)	704	km		5	%	6	h	0.8	h		Potential realized
GSN RA-V NW	Air temperature (at surface)	704	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-V NW	Cloud base height	704	km		0.5	km	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
GSN RA-V NW	Cloud cover	704	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-V NW	Precipitation index (daily	704	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-V NW	Wind vector over land surface (horizontal)	704	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-V SW	Air pressure over land surface	590	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-V SW	Air specific humidity (at surface)	590	km		5	%	6	h	0.8	h		Potential realized
GSN RA-V SW	Air temperature (at surface)	590	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-V SW	Cloud base height	590	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-V SW	Cloud cover	590	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-V SW	Precipitation index (daily	590	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-V SW	Wind vector over land surface (horizontal)	590	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-VI EE	Air pressure over land surface	269	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-VI EE	Air specific humidity (at surface)	269	km		5	%	6	h	0.8	h		Potential realized
GSN RA-VI EE	Air temperature (at surface)	269	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-VI EE	Cloud base height	269	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-VI EE	Cloud cover	269	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-VI EE	Precipitation index (daily	269	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-VI EE	Wind vector over land surface (horizontal)	269	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-VI WE	Air pressure over land surface	316	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-VI WE	Air specific humidity (at surface)	316	km		5	%	6	h	0.8	h		Potential realized
GSN RA-VI WE	Air temperature (at surface)	316	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-VI WE	Cloud base height	316	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-VI WE	Cloud cover	316	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-VI WE	Precipitation index (daily	316	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-VI WE	Wind vector over land surface (horizontal)	316	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN RA-VII	Air pressure over land surface	1334	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN RA-VII	Air specific humidity (at surface)	1334	km		5	%	6	h	0.8	h		Potential realized
GSN RA-VII	Air temperature (at surface)	1334	km		0.2	K	6	h	0.8	h		Potential realized
GSN RA-VII	Cloud base height	1334	km		0.5	km	6	h	0.8	h		Potential realized
GSN RA-VII	Cloud cover	1334	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN RA-VII	Precipitation index (daily	1334	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN RA-VII	Wind vector over land surface (horizontal)	1334	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN SAO OPN	Air pressure over land surface	4940	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN SAO OPN	Air specific humidity (at surface)	4940	km		5	%	6	h	0.8	h		Potential realized
GSN SAO OPN	Air temperature (at surface)	4940	km		0.2	K	6	h	0.8	h		Potential realized
GSN SAO OPN	Cloud base height	4940	km		0.5	km	6	h	0.8	h		Potential realized
GSN SAO OPN	Cloud cover	4940	km		12.5	% (Max)	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
GSN SAO OPN	Precipitation index (daily	4940	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN SAO OPN	Wind vector over land surface (horizontal)	4940	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN SIO	Air pressure over land surface	1781	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN SIO	Air specific humidity (at surface)	1781	km		5	%	6	h	0.8	h		Potential realized
GSN SIO	Air temperature (at surface)	1781	km		0.2	K	6	h	0.8	h		Potential realized
GSN SIO	Cloud base height	1781	km		0.5	km	6	h	0.8	h		Potential realized
GSN SIO	Cloud cover	1781	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN SIO	Precipitation index (daily	1781	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN SIO	Wind vector over land surface (horizontal)	1781	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN SPO CST	Air pressure over land surface	949	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN SPO CST	Air specific humidity (at surface)	949	km		5	%	6	h	0.8	h		Potential realized
GSN SPO CST	Air temperature (at surface)	949	km		0.2	K	6	h	0.8	h		Potential realized
GSN SPO CST	Cloud base height	949	km		0.5	km	6	h	0.8	h		Potential realized
GSN SPO CST	Cloud cover	949	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN SPO CST	Precipitation index (daily	949	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN SPO CST	Wind vector over land surface (horizontal)	949	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN SPO OPN	Air pressure over land surface	2327	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN SPO OPN	Air specific humidity (at surface)	2327	km		5	%	6	h	0.8	h		Potential realized
GSN SPO OPN	Air temperature (at surface)	2327	km		0.2	K	6	h	0.8	h		Potential realized
GSN SPO OPN	Cloud base height	2327	km		0.5	km	6	h	0.8	h		Potential realized
GSN SPO OPN	Cloud cover	2327	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN SPO OPN	Precipitation index (daily	2327	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN SPO OPN	Wind vector over land surface (horizontal)	2327	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN TAO OPN	Air pressure over land surface	2371	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN TAO OPN	Air specific humidity (at surface)	2371	km		5	%	6	h	0.8	h		Potential realized
GSN TAO OPN	Air temperature (at surface)	2371	km		0.2	K	6	h	0.8	h		Potential realized
GSN TAO OPN	Cloud base height	2371	km		0.5	km	6	h	0.8	h		Potential realized
GSN TAO OPN	Cloud cover	2371	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN TAO OPN	Precipitation index (daily	2371	km		0.1	mm/d	24	h	0.8	h		Potential realized
GSN TAO OPN	Wind vector over land surface (horizontal)	2371	km		0.5	m/s	6	h	0.8	h		Potential realized
GSN TPO OPN	Air pressure over land surface	1351	km		0.3	hPa	6	h	0.8	h		Potential realized
GSN TPO OPN	Air specific humidity (at surface)	1351	km		5	%	6	h	0.8	h		Potential realized
GSN TPO OPN	Air temperature (at surface)	1351	km		0.2	K	6	h	0.8	h		Potential realized
GSN TPO OPN	Cloud base height	1351	km		0.5	km	6	h	0.8	h		Potential realized
GSN TPO OPN	Cloud cover	1351	km		12.5	% (Max)	6	h	0.8	h		Potential realized
GSN TPO OPN	Precipitation index (daily	1351	km		0.1	mm/d	24	h	0.8	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
GSN TPO OPN	Wind vector over land surface (horizontal)		1351	km			0.5	m/s	6	h	0.8	h		Potential realized
GUAN	Atmospheric temperature profile	Higher troposphere (HT)	1726	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN	Atmospheric temperature profile	Lower troposphere (LT)	1726	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN	Atmospheric temperature profile	Lower stratosphere (LS)	1726	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN	Specific humidity profile	Higher troposphere (HT)	1726	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN	Specific humidity profile	Lower troposphere (LT)	1726	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN	Wind profile (horizontal component)	Lower troposphere (LT)	1726	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN	Wind profile (horizontal component)	Lower stratosphere (LS)	1726	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN	Wind profile (horizontal component)	Higher troposphere (HT)	1726	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN ARC	Atmospheric temperature profile	Higher troposphere (HT)	1577	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN ARC	Atmospheric temperature profile	Lower stratosphere (LS)	1577	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN ARC	Atmospheric temperature profile	Lower troposphere (LT)	1577	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN ARC	Specific humidity profile	Higher troposphere (HT)	1577	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN ARC	Specific humidity profile	Lower troposphere (LT)	1577	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN ARC	Wind profile (horizontal component)	Higher troposphere (HT)	1577	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN ARC	Wind profile (horizontal component)	Lower troposphere (LT)	1577	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN ARC	Wind profile (horizontal component)	Lower stratosphere (LS)	1577	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN NAO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	3536	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN NAO OPN	Atmospheric temperature profile	Lower troposphere (LT)	3536	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN NAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	3536	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN NAO OPN	Specific humidity profile	Higher troposphere (HT)	3536	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN NAO OPN	Specific humidity profile	Lower troposphere (LT)	3536	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN NAO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	3536	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN NAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	3536	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN NAO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	3536	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN NIO OPN	Atmospheric temperature profile	Lower troposphere (LT)	3391	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN NIO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	3391	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN NIO OPN	Atmospheric temperature profile	Higher troposphere (HT)	3391	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN NIO OPN	Specific humidity profile	Lower troposphere (LT)	3391	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN NIO OPN	Specific humidity profile	Higher troposphere (HT)	3391	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN NIO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	3391	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN NIO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	3391	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN NIO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	3391	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN NPO CST	Atmospheric temperature profile	Higher troposphere (HT)	1285	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN NPO CST	Atmospheric temperature profile	Lower stratosphere (LS)	1285	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN NPO CST	Atmospheric temperature profile	Lower troposphere (LT)	1285	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN NPO CST	Specific humidity profile	Lower troposphere (LT)	1285	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN NPO CST	Specific humidity profile	Higher troposphere (HT)	1285	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN NPO CST	Wind profile (horizontal component)	Lower stratosphere (LS)	1285	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
GUAN NPO CST	Wind profile (horizontal component)	Lower troposphere (LT)	1285	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN NPO CST	Wind profile (horizontal component)	Higher troposphere (HT)	1285	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-I N	Atmospheric temperature profile	Lower stratosphere (LS)	2156	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-I N	Atmospheric temperature profile	Lower troposphere (LT)	2156	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-I N	Atmospheric temperature profile	Higher troposphere (HT)	2156	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-I N	Specific humidity profile	Higher troposphere (HT)	2156	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-I N	Specific humidity profile	Lower troposphere (LT)	2156	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-I N	Wind profile (horizontal component)	Lower stratosphere (LS)	2156	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-I N	Wind profile (horizontal component)	Lower troposphere (LT)	2156	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-I N	Wind profile (horizontal component)	Higher troposphere (HT)	2156	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-I S	Atmospheric temperature profile	Lower troposphere (LT)	1072	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-I S	Atmospheric temperature profile	Higher troposphere (HT)	1072	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-I S	Atmospheric temperature profile	Lower stratosphere (LS)	1072	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-I S	Specific humidity profile	Lower troposphere (LT)	1072	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-I S	Specific humidity profile	Higher troposphere (HT)	1072	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-I S	Wind profile (horizontal component)	Lower troposphere (LT)	1072	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-I S	Wind profile (horizontal component)	Higher troposphere (HT)	1072	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-I S	Wind profile (horizontal component)	Lower stratosphere (LS)	1072	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-I T	Atmospheric temperature profile	Lower stratosphere (LS)	1293	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-I T	Atmospheric temperature profile	Lower troposphere (LT)	1293	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-I T	Atmospheric temperature profile	Higher troposphere (HT)	1293	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-I T	Specific humidity profile	Higher troposphere (HT)	1293	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-I T	Specific humidity profile	Lower troposphere (LT)	1293	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-I T	Wind profile (horizontal component)	Lower stratosphere (LS)	1293	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-I T	Wind profile (horizontal component)	Lower troposphere (LT)	1293	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-I T	Wind profile (horizontal component)	Higher troposphere (HT)	1293	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-II E	Atmospheric temperature profile	Lower stratosphere (LS)	766	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-II E	Atmospheric temperature profile	Lower troposphere (LT)	766	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-II E	Atmospheric temperature profile	Higher troposphere (HT)	766	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-II E	Specific humidity profile	Lower troposphere (LT)	766	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-II E	Specific humidity profile	Higher troposphere (HT)	766	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-II E	Wind profile (horizontal component)	Higher troposphere (HT)	766	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-II E	Wind profile (horizontal component)	Lower troposphere (LT)	766	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-II E	Wind profile (horizontal component)	Lower stratosphere (LS)	766	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-II N	Atmospheric temperature profile	Lower stratosphere (LS)	1057	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-II N	Atmospheric temperature profile	Higher troposphere (HT)	1057	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-II N	Atmospheric temperature profile	Lower troposphere (LT)	1057	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-II N	Specific humidity profile	Higher troposphere (HT)	1057	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-II N	Specific humidity profile	Lower troposphere (LT)	1057	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-II N	Wind profile (horizontal component)	Higher troposphere (HT)	1057	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
GUAN RA-II N	Wind profile (horizontal component)	Lower troposphere (LT)	1057	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-II N	Wind profile (horizontal component)	Lower stratosphere (LS)	1057	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-II S	Atmospheric temperature profile	Lower troposphere (LT)	1197	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-II S	Atmospheric temperature profile	Higher troposphere (HT)	1197	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-II S	Atmospheric temperature profile	Lower stratosphere (LS)	1197	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-II S	Specific humidity profile	Higher troposphere (HT)	1197	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-II S	Specific humidity profile	Lower troposphere (LT)	1197	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-II S	Wind profile (horizontal component)	Lower troposphere (LT)	1197	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-II S	Wind profile (horizontal component)	Lower stratosphere (LS)	1197	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-II S	Wind profile (horizontal component)	Higher troposphere (HT)	1197	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-II W	Atmospheric temperature profile	Lower troposphere (LT)	1510	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-II W	Atmospheric temperature profile	Higher troposphere (HT)	1510	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-II W	Atmospheric temperature profile	Lower stratosphere (LS)	1510	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-II W	Specific humidity profile	Higher troposphere (HT)	1510	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-II W	Specific humidity profile	Lower troposphere (LT)	1510	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-II W	Wind profile (horizontal component)	Lower stratosphere (LS)	1510	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-II W	Wind profile (horizontal component)	Lower troposphere (LT)	1510	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-II W	Wind profile (horizontal component)	Higher troposphere (HT)	1510	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-III N	Atmospheric temperature profile	Higher troposphere (HT)	1118	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-III N	Atmospheric temperature profile	Lower stratosphere (LS)	1118	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-III N	Atmospheric temperature profile	Lower troposphere (LT)	1118	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-III N	Specific humidity profile	Higher troposphere (HT)	1118	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-III N	Specific humidity profile	Lower troposphere (LT)	1118	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-III N	Wind profile (horizontal component)	Higher troposphere (HT)	1118	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-III N	Wind profile (horizontal component)	Lower troposphere (LT)	1118	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-III N	Wind profile (horizontal component)	Lower stratosphere (LS)	1118	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-III S	Atmospheric temperature profile	Higher troposphere (HT)	725	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-III S	Atmospheric temperature profile	Lower stratosphere (LS)	725	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-III S	Atmospheric temperature profile	Lower troposphere (LT)	725	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-III S	Specific humidity profile	Lower troposphere (LT)	725	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-III S	Specific humidity profile	Higher troposphere (HT)	725	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-III S	Wind profile (horizontal component)	Higher troposphere (HT)	725	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-III S	Wind profile (horizontal component)	Lower troposphere (LT)	725	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-III S	Wind profile (horizontal component)	Lower stratosphere (LS)	725	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-IV C	Atmospheric temperature profile	Lower troposphere (LT)	1195	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-IV C	Atmospheric temperature profile	Higher troposphere (HT)	1195	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-IV C	Atmospheric temperature profile	Lower stratosphere (LS)	1195	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-IV C	Specific humidity profile	Lower troposphere (LT)	1195	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-IV C	Specific humidity profile	Higher troposphere (HT)	1195	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-IV C	Wind profile (horizontal component)	Lower stratosphere (LS)	1195	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
GUAN RA-IV C	Wind profile (horizontal component)	Higher troposphere (HT)	1195	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-IV C	Wind profile (horizontal component)	Lower troposphere (LT)	1195	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-IV N	Atmospheric temperature profile	Lower stratosphere (LS)	1414	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-IV N	Atmospheric temperature profile	Higher troposphere (HT)	1414	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-IV N	Atmospheric temperature profile	Lower troposphere (LT)	1414	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-IV N	Specific humidity profile	Lower troposphere (LT)	1414	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-IV N	Specific humidity profile	Higher troposphere (HT)	1414	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-IV N	Wind profile (horizontal component)	Lower stratosphere (LS)	1414	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-IV N	Wind profile (horizontal component)	Lower troposphere (LT)	1414	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-IV N	Wind profile (horizontal component)	Higher troposphere (HT)	1414	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-IV S	Atmospheric temperature profile	Higher troposphere (HT)	993	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-IV S	Atmospheric temperature profile	Lower stratosphere (LS)	993	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-IV S	Atmospheric temperature profile	Lower troposphere (LT)	993	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-IV S	Specific humidity profile	Lower troposphere (LT)	993	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-IV S	Specific humidity profile	Higher troposphere (HT)	993	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-IV S	Wind profile (horizontal component)	Lower stratosphere (LS)	993	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-IV S	Wind profile (horizontal component)	Lower troposphere (LT)	993	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-IV S	Wind profile (horizontal component)	Higher troposphere (HT)	993	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-V NW	Atmospheric temperature profile	Lower stratosphere (LS)	1459	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-V NW	Atmospheric temperature profile	Higher troposphere (HT)	1459	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-V NW	Atmospheric temperature profile	Lower troposphere (LT)	1459	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-V NW	Specific humidity profile	Higher troposphere (HT)	1459	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-V NW	Specific humidity profile	Lower troposphere (LT)	1459	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-V NW	Wind profile (horizontal component)	Lower troposphere (LT)	1459	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-V NW	Wind profile (horizontal component)	Lower stratosphere (LS)	1459	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-V NW	Wind profile (horizontal component)	Higher troposphere (HT)	1459	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-V SW	Atmospheric temperature profile	Lower troposphere (LT)	1351	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-V SW	Atmospheric temperature profile	Higher troposphere (HT)	1351	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-V SW	Atmospheric temperature profile	Lower stratosphere (LS)	1351	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-V SW	Specific humidity profile	Higher troposphere (HT)	1351	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-V SW	Specific humidity profile	Lower troposphere (LT)	1351	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-V SW	Wind profile (horizontal component)	Lower stratosphere (LS)	1351	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-V SW	Wind profile (horizontal component)	Lower troposphere (LT)	1351	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-V SW	Wind profile (horizontal component)	Higher troposphere (HT)	1351	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-VI EE	Atmospheric temperature profile	Lower troposphere (LT)	1140	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-VI EE	Atmospheric temperature profile	Higher troposphere (HT)	1140	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-VI EE	Atmospheric temperature profile	Lower stratosphere (LS)	1140	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-VI EE	Specific humidity profile	Lower troposphere (LT)	1140	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-VI EE	Specific humidity profile	Higher troposphere (HT)	1140	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-VI EE	Wind profile (horizontal component)	Lower stratosphere (LS)	1140	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
GUAN RA-VI EE	Wind profile (horizontal component)	Higher troposphere (HT)	1140	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-VI EE	Wind profile (horizontal component)	Lower troposphere (LT)	1140	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-VI WE	Atmospheric temperature profile	Lower troposphere (LT)	730	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-VI WE	Atmospheric temperature profile	Higher troposphere (HT)	730	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-VI WE	Atmospheric temperature profile	Lower stratosphere (LS)	730	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-VI WE	Specific humidity profile	Lower troposphere (LT)	730	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-VI WE	Specific humidity profile	Higher troposphere (HT)	730	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-VI WE	Wind profile (horizontal component)	Lower stratosphere (LS)	730	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-VI WE	Wind profile (horizontal component)	Higher troposphere (HT)	730	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-VI WE	Wind profile (horizontal component)	Lower troposphere (LT)	730	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-VII	Atmospheric temperature profile	Higher troposphere (HT)	1722	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-VII	Atmospheric temperature profile	Lower troposphere (LT)	1722	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN RA-VII	Atmospheric temperature profile	Lower stratosphere (LS)	1722	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN RA-VII	Specific humidity profile	Higher troposphere (HT)	1722	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-VII	Specific humidity profile	Lower troposphere (LT)	1722	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN RA-VII	Wind profile (horizontal component)	Higher troposphere (HT)	1722	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN RA-VII	Wind profile (horizontal component)	Lower troposphere (LT)	1722	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN RA-VII	Wind profile (horizontal component)	Lower stratosphere (LS)	1722	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN SAO OPN	Atmospheric temperature profile	Lower troposphere (LT)	3493	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN SAO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	3493	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN SAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	3493	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN SAO OPN	Specific humidity profile	Higher troposphere (HT)	3493	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN SAO OPN	Specific humidity profile	Lower troposphere (LT)	3493	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN SAO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	3493	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN SAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	3493	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN SAO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	3493	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN SIO	Atmospheric temperature profile	Lower stratosphere (LS)	2519	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN SIO	Atmospheric temperature profile	Higher troposphere (HT)	2519	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN SIO	Atmospheric temperature profile	Lower troposphere (LT)	2519	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN SIO	Specific humidity profile	Lower troposphere (LT)	2519	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN SIO	Specific humidity profile	Higher troposphere (HT)	2519	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN SIO	Wind profile (horizontal component)	Lower stratosphere (LS)	2519	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN SIO	Wind profile (horizontal component)	Lower troposphere (LT)	2519	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN SIO	Wind profile (horizontal component)	Higher troposphere (HT)	2519	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN SPO OPN	Atmospheric temperature profile	Lower troposphere (LT)	2850	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN SPO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	2850	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN SPO OPN	Atmospheric temperature profile	Higher troposphere (HT)	2850	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN SPO OPN	Specific humidity profile	Lower troposphere (LT)	2850	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN SPO OPN	Specific humidity profile	Higher troposphere (HT)	2850	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN SPO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	2850	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
GUAN SPO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	2850	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN SPO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	2850	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN TAO OPN	Atmospheric temperature profile	Lower troposphere (LT)	3061	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN TAO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	3061	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN TAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	3061	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN TAO OPN	Specific humidity profile	Higher troposphere (HT)	3061	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN TAO OPN	Specific humidity profile	Lower troposphere (LT)	3061	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN TAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	3061	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
GUAN TAO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	3061	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN TAO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	3061	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN TPO OPN	Atmospheric temperature profile	Higher troposphere (HT)	2598	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN TPO OPN	Atmospheric temperature profile	Lower troposphere (LT)	2598	km	0.15	km	1	K	12	h	1.5	h		Potential realized
GUAN TPO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	2598	km	0.15	km	2	K	12	h	1.5	h		Potential realized
GUAN TPO OPN	Specific humidity profile	Higher troposphere (HT)	2598	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN TPO OPN	Specific humidity profile	Lower troposphere (LT)	2598	km	0.15	km	5	%	12	h	1.5	h		Potential realized
GUAN TPO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	2598	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN TPO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	2598	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
GUAN TPO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	2598	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
HALOE	Ozone profile	Lower stratosphere (LS)		km	3	km	10	%	576	h	24	h		Experimental
HDX-XBT MED	Sea surface bulk temperature		174	km			0.1		727	h	12	h	MFS Pilot Project	Potential realized
HDX-XBT NAO OPN	Sea surface bulk temperature		203	km			0.1		2190	h	12	h	HDX mode to be enhanced along with implementation of Argo	Potential realized
HDX-XBT NIO OPN	Sea surface bulk temperature		356	km			0.1		2190	h	12	h	HDX mode to be enhanced along with implementation of Argo	Potential realized
HDX-XBT NPO OPN	Sea surface bulk temperature		196	km			0.1		2190	h	12	h	HDX mode to be enhanced along with implementation of Argo	Potential realized
HDX-XBT SAO OPN	Sea surface bulk temperature		1029	km			0.1		2190	h	12	h	HDX mode to be enhanced along with implementation of Argo	Potential realized
HDX-XBT SIO	Sea surface bulk temperature		333	km			0.1		2190	h	12	h	HDX mode to be enhanced along with implementation of Argo	Potential realized
HDX-XBT SPO OPN	Sea surface bulk temperature		284	km			0.1		2190	h	12	h	HDX mode to be enhanced along with implementation of Argo	Potential realized
HDX-XBT TAO OPN	Sea surface bulk temperature		912	km			0.1		2190	h	12	h	HDX mode to be enhanced along with implementation of Argo	Potential realized
HDX-XBT TPO OPN	Sea surface bulk temperature		359	km			0.1		2190	h	12	h	HDX mode to be enhanced along with implementation of Argo	Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
HDX-XBT* NAO OPN	Sea surface bulk temperature		220	km			0.1		2190	h	12	h	Once Argo implemented	Potential expected
HDX-XBT* NIO OPN	Sea surface bulk temperature		170	km			0.1		2190	h	12	h	Once Argo implemented	Potential expected
HDX-XBT* NPO OPN	Sea surface bulk temperature		220	km			0.1		2190	h	12	h	Once Argo implemented	Potential expected
HDX-XBT* SAO OPN	Sea surface bulk temperature		520	km			0.1		2190	h	12	h	Once Argo implemented	Potential expected
HDX-XBT* SIO	Sea surface bulk temperature		300	km			0.1		2190	h	12	h	Once Argo implemented	Potential expected
HDX-XBT* SPO OPN	Sea surface bulk temperature		390	km			0.1		2190	h	12	h	Once Argo implemented	Potential expected
HDX-XBT* TAO OPN	Sea surface bulk temperature		170	km			0.1		2190	h	12	h	Once Argo implemented	Potential expected
HDX-XBT* TPO OPN	Sea surface bulk temperature		280	km			0.1		2190	h	12	h	Once Argo implemented	Potential expected
HIRS/2	Atmospheric temperature profile	Lower troposphere (LT)	80	km	1	km	2.5	K	12	h	2	h		Potential realized
HIRS/2	Atmospheric temperature profile	Lower stratosphere (LS)	80	km	2	km	2	K	12	h	2	h		Potential realized
HIRS/2	Atmospheric temperature profile	Higher troposphere (HT)	80	km	1	km	2.5	K	12	h	2	h		Potential realized
HIRS/2	Cloud cover		80	km			20	% (Max)	12	h	2	h		Potential expected
HIRS/2	Cloud optical thickness		80	km			20	%	12	h	2	h		Experimental
HIRS/2	Cloud top height		80	km			0.7	km	12	h	2	h		Potential
HIRS/2	Ozone profile	Total column	80	km			30	DU	12	h	2	h		Experimental
HIRS/2	Specific humidity profile	Higher troposphere (HT)	80	km	1	km	20	%	12	h	2	h		Potential realized
HIRS/2	Specific humidity profile	Lower troposphere (LT)	80	km	1	km	20	%	12	h	2	h		Potential realized
HIRS/2	Specific humidity profile	Total column	80	km			2	kg/m2	12	h	2	h		Potential expected
HIRS/3	Atmospheric temperature profile	Lower stratosphere (LS)	40	km	2	km	2	K	12	h	2	h		Potential realized
HIRS/3	Atmospheric temperature profile	Lower troposphere (LT)	40	km	1	km	2.5	K	12	h	2	h		Potential realized
HIRS/3	Atmospheric temperature profile	Higher troposphere (HT)	40	km	1	km	2.5	K	12	h	2	h		Potential realized
HIRS/3	Cloud cover		40	km			20	% (Max)	12	h	2	h		Potential expected
HIRS/3	Cloud optical thickness		40	km			20	%	12	h	2	h		Experimental
HIRS/3	Cloud top height		40	km			0.7	km	12	h	2	h		Potential expected
HIRS/3	Cloud top temperature		40	km			2	K	12	h	2	h		Potential expected
HIRS/3	Land surface temperature		40	km			2	K	12	h	2	h		Potential expected
HIRS/3	Outgoing long-wave radiation at		40	km			10	m/s	12	h	2	h		Potential realized
HIRS/3	Outgoing short-wave radiation at		40	km			10	W/m2	12	h	2	h		Potential realized
HIRS/3	Ozone profile	Total column	40	km			30	DU	12	h	2	h		Experimental
HIRS/3	Sea surface bulk temperature		40	km			0.5		12	h	2	h		Potential realized
HIRS/3	Specific humidity profile	Total column	40	km			2	kg/m2	12	h	2	h		Potential expected
HIRS/3	Specific humidity profile	Lower troposphere (LT)	40	km	1	km	20	%	12	h	2	h		Potential realized
HIRS/3	Specific humidity profile	Higher troposphere (HT)	40	km	1	km	20	%	12	h	2	h		Potential realized
HIRS/4	Atmospheric temperature profile	Higher troposphere (HT)	40	km	1	km	2.5	K	12	h	2	h		Potential realized
HIRS/4	Atmospheric temperature profile	Lower troposphere (LT)	40	km	1	km	2.5	K	12	h	2	h		Potential realized
HIRS/4	Atmospheric temperature profile	Lower stratosphere (LS)	40	km	2	km	2	K	12	h	2	h		Potential realized
HIRS/4	Cloud cover		40	km			20	% (Max)	12	h	2	h		Potential expected
HIRS/4	Cloud optical thickness		40	km			20	%	12	h	2	h		Experimental
HIRS/4	Cloud top height		40	km			0.7	km	12	h	2	h		Potential expected
HIRS/4	Cloud top temperature		40	km			2	K	12	h	2	h		Potential expected

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
HIRS/4	Land surface temperature		40	km			2	K	12	h	2	h		Potential expected
HIRS/4	Outgoing long-wave radiation at		40	km			10	m/s	12	h	2	h		Potential realized
HIRS/4	Outgoing short-wave radiation at		40	km			10	W/m2	12	h	2	h		Potential realized
HIRS/4	Ozone profile	Total column	40	km			30	DU	12	h	2	h		Experimental
HIRS/4	Sea surface bulk temperature		40	km			0.5		12	h	2	h		Potential realized
HIRS/4	Specific humidity profile	Lower troposphere (LT)	40	km	1	km	20	%	12	h	2	h		Potential realized
HIRS/4	Specific humidity profile	Higher troposphere (HT)	40	km	1	km	20	%	12	h	2	h		Potential realized
HIRS/4	Specific humidity profile	Total column	40	km			2	kg/m2	12	h	2	h		Potential expected
HRG	Land cover		10	m			20	classes	0.04	y	3	d		Potential
HRG	Land surface imagery		5	m					26	d	30	d		Experimental
HRG	Land surface topography		5	m			8	m (vert.)	0.5	y	12	d		Experimental
HRG	Vegetation type		10	m			25	classes	26	d	10	d		Potential
HRV	Fire area		10	m2			20	% (Max)	5	d	3	d		Experimental
HRV	Fire temperature		10	K			200	K	5	d	3	d		Experimental
HRV	Land cover		20	m			20	classes	0.07	y	3	d		Potential
HRV	Land surface imagery		10	m					26	d	30	d		Potential
HRV	Land surface topography		10	m			15	m (vert.)	0.5	y	12	d		Experimental
HRV	Normalized Differential Vegetation Index (NDVI)		0.01	km			5	% (Max)	26	d	1	d		Potential
HRV	Vegetation type		20	m			20	classes	26	d	10	d		Potential
HRVIR	Land cover		20	m			20	classes	0.04	y	3	d		Potential
HRVIR	Land surface imagery		10	m					26	d	30	d		Potential
HRVIR	Land surface topography		10	m			15	m (vert.)	0.5	y	12	d		Experimental
HRVIR	Vegetation type		20	m			20	classes	26	d	10	d		Potential
IASI	Atmospheric temperature profile	Lower troposphere (LT)	25	km	1	km	1	K	12	h	2	h		Potential realized
IASI	Atmospheric temperature profile	Lower stratosphere (LS)	25	km	2	km	1	K	12	h	2	h		Potential realized
IASI	Atmospheric temperature profile	Higher troposphere (HT)	25	km	1	km	1	K	12	h	2	h		Potential realized
IASI	Cloud cover		25	km			10	% (Max)	12	h	2	h		Potential expected
IASI	Cloud optical thickness		25	km			20	%	12	h	2	h		Experimental
IASI	Cloud top height		25	km			0.5	km	12	h	2	h		Experimental
IASI	Cloud top temperature		25	km			2	K	12	h	2	h		Experimental
IASI	Land surface temperature		25	km			0.5	K	12	h	2	h		Experimental
IASI	Long-wave Earth surface emissivity		25	km			1	% (Max)	12	h	2	h		Potential
IASI	Outgoing long-wave radiation at		25	km			5	m/s	12	h	2	h		Potential realized
IASI	Outgoing short-wave radiation at		25	km			5	W/m2	12	h	2	h		Potential realized
IASI	Ozone profile	Total column	25	km			20	DU	12	h	2	h		Experimental
IASI	Ozone profile	Higher troposphere (HT)	25	km	5	km	15	%	12	h	2	h		Potential
IASI	Ozone profile	Lower stratosphere (LS)	25	km	5	km	10	%	12	h	2	h		Potential
IASI	Sea surface bulk temperature		25	km			0.3		12	h	2	h		Potential realized
IASI	Specific humidity profile	Lower troposphere (LT)	25	km	1	km	10	%	12	h	2	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
IASI	Specific humidity profile	Total column	25	km			2	kg/m2	12	h	2	h		Potential expected
IASI	Specific humidity profile	Higher troposphere (HT)	25	km	1	km	10	%	12	h	2	h		Potential realized
ILAS	Aerosol profile	Higher troposphere (HT)		km	2	km		%		h	720	h		Potential expected
ILAS-II	Aerosol profile	Higher troposphere (HT)		km	1	km		%		h	720	h		Potential
Imager	Cloud cover		4	km			10	% (Max)	0.5	h	0.5	h		Potential realized
Imager	Cloud imagery		4	km					0.5	h	0.1	h		Potential realized
Imager	Cloud top height		50	km			1	km	1	h	1	h		Potential realized
Imager	Cloud top temperature		50	km			2	K	1	h	0.5	h		Potential realized
Imager	Fire area		4	m2			10	% (Max)	0.08	d	1	d		Experimental
Imager	Fire temperature		4	K			50	K	0.08	d	1	d		Experimental
Imager	Land surface temperature		4	km			2	K	1	h	0.5	h		Potential expected
Imager	Precipitation rate (liquid) at the		10	km			30	m/s	1	h	0.5	h		Potential realized
Imager	Precipitation rate (solid) at the		4	km			30	mm/h	0.5	h	0.5	h		Potential realized
Imager	Sea surface bulk temperature		4	km			0.5		1	h	0.5	h		Potential realized
Imager	Specific humidity profile	Lower troposphere (LT)	50	km	2	km	20	%	1	h	0.5	h		Potential realized
Imager	Specific humidity profile	Higher troposphere (HT)	50	km	3	km	20	%	1	h	1	h		Potential realized
Imager	Wind profile (horizontal component)	Higher troposphere (HT)	150	km	5	km	5	m/s	1	d	1	h		Potential realized
Imager	Wind profile (horizontal component)	Lower troposphere (LT)	150	km	5	km	3	m/s	1	h	1	h		Potential realized
IMAGER/MTSAT-2	Wind profile (horizontal component)	Lower troposphere (LT)	150	km	5	km	3	m/s	1	h	1	h		Potential expected
IMAGER/MTSAT-2	Wind profile (horizontal component)	Higher troposphere (HT)	150	km	5	km	5	m/s	1	d	1	h		Potential expected
IMG	Atmospheric temperature profile	Lower troposphere (LT)	100	km	1	km	1	K	984	h	336	h		Potential
IMG	Atmospheric temperature profile	Higher troposphere (HT)	100	km	1	km	1	K	984	h	336	h		Potential realized
IMG	Atmospheric temperature profile	Lower stratosphere (LS)	100	km	2	km	1	K	984	h	336	h		Potential realized
IMG	Ozone profile	Lower stratosphere (LS)	80	km		km	16	%	984	h	288	h		Potential
IMG	Specific humidity profile	Lower stratosphere (LS)	100	km	1	km		%	984	h	336	h		Experimental
IMG	Trace gas profile CH4	Lower stratosphere (LS)	80	km	12	km	20	%	984	h	288	h		Potential
IMG	Trace gas profile CH4	Lower troposphere (LT)	80	km	5	km	20	%	984	h	288	h		Potential
IMG	Trace gas profile CH4	Higher troposphere (HT)	80	km	8	km	20	%	984	h	288	h		Potential
IMG	Trace gas profile CO	Higher troposphere (HT)	80	km	8	km	20	%	984	h	288	h		Potential
IMG	Trace gas profile CO	Lower stratosphere (LS)	80	km	12	km	20	%	984	h	288	h		Potential
IMG	Trace gas profile CO	Lower troposphere (LT)	80	km	5	km	20	%	984	h	288	h		Potential
IMG	Trace gas profile CO2	Total column	80	km			2	%	984	h	288	h		Potential
Klimat	Cloud cover		2.5	km			20	% (Max)	12	h	6	h		Potential expected
LDX-XBT NAO OPN realized	Sea surface bulk temperature		445	km			0.1		727	h	12	h	Broadcast mode to decline along with implementation of Argo	Potential
LDX-XBT NIO OPN realized	Sea surface bulk temperature		708	km			0.1		727	h	12	h	Broadcast mode to decline along with implementation of Argo	Potential

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
LDX-XBT NPO OPN realized	Sea surface bulk temperature		268	km			0.1		727	h	12	h	Broadcast mode to decline along with implementation of Argo	Potential
LDX-XBT SAO OPN realized	Sea surface bulk temperature		2852	km			0.1		727	h	12	h	Broadcast mode to decline along with implementation of Argo	Potential
LDX-XBT SIO realized	Sea surface bulk temperature		1771	km			0.1		727	h	12	h	Broadcast mode to decline along with implementation of Argo	Potential
LDX-XBT SPO OPN realized	Sea surface bulk temperature		754	km			0.1		727	h	12	h	Broadcast mode to decline along with implementation of Argo	Potential
LDX-XBT TAO OPN realized	Sea surface bulk temperature		1570	km			0.1		727	h	12	h	Broadcast mode to decline along with implementation of Argo	Potential
LDX-XBT TPO OPN realized	Sea surface bulk temperature		667	km			0.1		727	h	12	h	Broadcast mode to decline along with implementation of Argo	Potential
LISS-I	Land surface imagery		72.5	m					22	d		d		Experimental
LISS-II	Land surface imagery		37	m					27	d		d		Experimental
LISS-III	Land surface imagery		23.5	m					24	d		d		Experimental
MERIS	Cloud top height		0.3	km			0.2	km	12	h	3	h		Potential
MERIS	Cloud type		0.3	km			8	classes	12	h	3	h		Potential realized
MERIS	Land cover		300	m			15	classes	0.01	y	1	d		Potential expected
MERIS	Land surface imagery		250	m					30	d	0.125	d		Experimental
MERIS	Leaf Area Index (LAI)		0.3	km			20	% (Max)	7	d	1	d		Potential expected
MERIS	Snow cover		300	km			10	% (Max)	12	h	24	h		Potential
MERIS	Specific humidity profile	Total column	0.3	km			5	kg/m2	12	h	3	h		Experimental
MERIS	Vegetation type		300	m			10	classes	0.5	d	1	d		Potential
MESSR	Land surface imagery		50	m					17	d		d		Experimental
MHS	Cloud water profile (< 100 µm)	Total column	15	km			200	kg/m2	12	h	2	h		Potential
MHS	Precipitation rate (liquid) at the		15	km			5	m/s	12	h	0.5	h		Potential realized
MHS	Precipitation rate (solid) at the		15	km			5	mm/h	12	h	0.5	h		Potential realized
MHS	Sea-ice cover		15	km			30	% (Max)	0.5	d	0.08	d		Potential
MHS	Specific humidity profile	Higher troposphere (HT)	15	km	1	km	15	%	12	h	2	h		Potential realized
MHS	Specific humidity profile	Total column	15	km			1	kg/m2	12	h	2	h		Potential expected
MHS	Specific humidity profile	Lower troposphere (LT)	15	km	1	km	15	%	12	h	2	h		Potential realized
MIPAS	Ozone profile	Lower stratosphere (LS)	300	km	3	km		%	36	h	3	h		Experimental
MIPAS	Specific humidity profile	Lower stratosphere (LS)	300	km	3	km		%	36	h	3	h		Experimental
MISR	Leaf Area Index (LAI)		1	km			25	% (Max)	30	d	1	d		Potential
MIVZA	Precipitation rate (liquid) at the		80	km			5	m/s	12	h	24	h		Potential realized
MIVZA	Sea-ice cover		80	km			30	% (Max)	0.5	d	1	d		Experimental
MIVZA	Snow cover		60	km			20	% (Max)	12	h	24	h		Experimental

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
MIVZA	Specific humidity profile	Total column	60	km			2.5	kg/m2	12	h	24	h		Experimental
MODIS	Aerosol profile	Total column	5	km				%	12	h	24	h		Potential
MODIS	Atmospheric temperature profile	Lower troposphere (LT)	5	km	1	km	2.5	K	12	h	24	h		Potential realized
MODIS	Atmospheric temperature profile	Higher troposphere (HT)	5	km	1	km	2.5	K	12	h	24	h		Potential realized
MODIS	Cloud cover		5	km			5	% (Max)	12	h	24	h		Potential expected
MODIS	Cloud imagery		0.25	km					12	h	24	h		Experimental
MODIS	Cloud optical thickness		5	km			20	%	12	h	24	h		Potential realized
MODIS	Cloud top height		5	km			0.7	km	12	h	24	h		Experimental
MODIS	Cloud top temperature		5	km			2	K	12	h	24	h		Experimental
MODIS	Cloud type		1	km			8	classes	12	h	24	h		Experimental
MODIS	Fire area		1	m2			5	% (Max)	0.5	d	1	d		Potential
MODIS	Fire temperature		1	K			50	K	0.5	d	1	d		Potential
MODIS	Fractional Photosynthetically Active Radiation (FPAR)		0.25	km			15	% (Max)	0.5	d	24	d		Experimental
MODIS	Land cover		250	m			15	classes	0.01	y	1	d		Potential expected
MODIS	Land surface imagery		250	m					2	d	24	d		Potential
MODIS	Land surface temperature		1	km			1	K	12	h	24	h		Potential expected
MODIS	Leaf Area Index (LAI)		0.25	km			20	% (Max)	30	d	1	d		Potential expected
MODIS	Normalized Differential Vegetation Index (NDVI)		0.25	km			5	% (Max)	0.5	d	1	d		Potential expected
MODIS	Outgoing long-wave radiation at		5	km			10	m/s	12	h	24	h		Potential realized
MODIS	Outgoing short-wave radiation at		5	km			10	W/m2	12	h	24	h		Potential realized
MODIS	Ozone profile	Total column	5	km			50	DU	12	h	24	h		Potential realized
MODIS	Sea surface bulk temperature		1	km			0.3		12	h	24	h		Potential realized
MODIS	Snow cover		0.25	km			5	% (Max)	12	h	24	h		Experimental
MODIS	Specific humidity profile	Total column	5	km			2.5	kg/m2	12	h	24	h		Potential realized
MODIS	Specific humidity profile	Higher troposphere (HT)	5	km	3	km	20	%	12	h	24	h		Potential realized
MODIS	Specific humidity profile	Lower troposphere (LT)	5	km	2	km	20	%	12	h	24	h		Potential realized
MODIS	Vegetation type		250	m			10	classes	1	d	1	d		Potential realized
MR-2000M1	Cloud imagery		1.4	km					12	h	6	h		Potential realized
MR-900	Cloud imagery		2	km					12	h	6	h		Potential realized
MSR	Cloud cover		1	km			10	% (Max)	12	h	6	h		Potential
MSR	Cloud top height		1	km			1	km	24	h	6	h		Potential
MSR	Cloud top temperature		1	km			2	K	24	h	6	h		Potential
MSR	Cloud type		1	km			5	classes	24	h	6	h		Experimental
MSR	Fractional Photosynthetically Active Radiation (FPAR)		1	km			25	% (Max)	14	d	14	d		Experimental
MSR	Land surface temperature		1	km			2	K	12	h	12	h		Potential
MSR	Normalized Differential Vegetation Index (NDVI)		1	km			10	% (Max)	14	d	14	d		Potential
MSR	Sea surface bulk temperature		1	km			1		12	h	12	h		Potential

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
MSR	Sea-ice cover		1	km			30	% (Max)	0.5	d	0.5	d		Potential
MSR	Snow cover		1	km			20	% (Max)	12	h	6	h		Potential
MSU	Atmospheric temperature profile	Lower stratosphere (LS)	160	km	2	km	2	K	12	h	2	h		Potential realized
MSU	Atmospheric temperature profile	Higher troposphere (HT)	160	km	1	km	2.5	K	12	h	2	h		Potential realized
MSU	Atmospheric temperature profile	Lower troposphere (LT)	160	km	1	km	2.5	K	12	h	2	h		Potential realized
MSU	Precipitation rate (liquid) at the		160	km				m/s	12	h	0.5	h		Potential realized
MSU	Precipitation rate (solid) at the		160	km				mm/h	10	h	0.5	h		Potential realized
MSU-E	Land cover		25	m			10	classes	0.04	y	1	d		Experimental
MSU-E	Land surface imagery		25	m					16	d	0.063	d		Experimental
MSU-E	Leaf Area Index (LAI)		0.025	km			20	% (Max)	14	d	1	d		Potential expected
MSU-E	Vegetation type		25	m			10	classes	7	d	1	d		Experimental
MSU-SK	Iceberg fractional cover		0.2	km				% (Max)	7	d	1	d		Experimental
MSU-SK	Iceberg height		0.2	km				m	7	d	1	d		Experimental
MSU-SK	Land cover		200	m			10	classes	0.04	y	1	d		Potential expected
MSU-SK	Land surface imagery		200	m					14	d	1	d		Potential
MSU-V	Fire area		0.27	m2			20	% (Max)	7	d	1	d		Experimental
MSU-V	Fire temperature		0.27	K			200	K	7	d	1	d		Experimental
MSU-V	Land cover		50	m			10	classes	0.04	y	1	d		Experimental
MSU-V	Land surface imagery		50	m					30	d	1	d		Experimental
MVIRI	Cloud cover		20	km			15	% (Max)	0.5	h	2	h		Potential realized
MVIRI	Cloud imagery		5	km					0.5	h	0.1	h		Potential realized
MVIRI	Cloud top height		20	km			1.5	km	0.5	h	0.5	h		Potential realized
MVIRI	Cloud top temperature		5	km			2	K	0.5	h	0.5	h		Potential realized
MVIRI	Cloud type		150	km			4	classes	1	h	2	h		Potential expected
MVIRI	Outgoing long-wave radiation at		160	km			30	m/s	0.5	h	12	h		Potential realized
MVIRI	Outgoing short-wave radiation at		160	km			50	W/m2	0.5	h	12	h		Potential realized
MVIRI	Sea surface bulk temperature		15	km			2		0.5	h	2	h		Potential realized
MVIRI	Specific humidity profile	Higher troposphere (HT)	150	km	3	km	20	%	0.5	h	1	h		Potential realized
MVIRI	Wind profile (horizontal component)	Higher troposphere (HT)	150	km	5	km	5	m/s	1	d	2	h		Potential realized
MVIRI	Wind profile (horizontal component)	Lower troposphere (LT)	150	km	5	km	3	m/s	1	h	2	h		Potential realized
MVISR (10 channels)	Aerosol profile	Total column	1	km			10	%	12	h	12	h		Potential expected
MVISR (10 channels)	Cloud cover		4	km			10	% (Max)	12	h	12	h		Potential expected
MVISR (10 channels)	Cloud imagery		4	km					12	h	12	h		Potential expected
MVISR (10 channels)	Cloud optical thickness		4	km			20	%	12	h	12	h		Potential expected
MVISR (10 channels)	Cloud top height		10	km			1.5	km	12	h	12	h		Potential expected
MVISR (10 channels)	Cloud type		10	km			5	classes	12	h	12	h		Potential expected
MVISR (10 channels)	Fire area		1	m2			5	% (Max)	0.5	d	1	d		Potential expected
MVISR (10 channels)	Fire temperature		1	K			200	K	0.5	d	1	d		Potential expected
MVISR (10 channels)	Fractional Photosynthetically Active Radiation (FPAR)		1	km			25	% (Max)	0.5	d	1	d		Potential expected

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
MVISR (10 channels)	Land cover		1000	m			8	classes	0.005	y	1	d		Potential expected
MVISR (10 channels)	Leaf Area Index (LAI)		1	km			25	% (Max)	1	d	1	d		Potential expected
MVISR (10 channels)	Normalized Differential Vegetation Index (NDVI)		1	km			10	% (Max)	0.5	d	1	d		Potential expected
MVISR (10 channels)	Sea surface bulk temperature		4	km			1		12	h	12	h		Potential expected
MVZA	Specific humidity profile	Lower troposphere (LT)	20	km	1	km	15	%	12	h	24	h		Experimental
MZOAS	Permafrost		50	km			40	% (Max)	1	d	2	d		Experimental
MZOAS	Precipitation rate (liquid) at the		160	km			5	m/s	12	h	24	h		Potential realized
MZOAS	Sea surface bulk temperature		80	km			3		12	h	24	h		Experimental
MZOAS	Sea-ice cover		10	km			30	% (Max)	0.5	d	1	d		Experimental
MZOAS	Soil moisture		50	km				g/kg	15.5	d	1.5	d		Experimental
MZOAS	Wind vector over sea surface (horizontal)		80	km			2	m/s	12	h	24	h		Experimental
NSCAT	Sea-ice cover		25	km			50	% (Max)	0.5	d	0.25	d		Potential realized
NSCAT	Wind vector over sea surface (horizontal)		25	km			2	m/s	12	h	4	h		Experimental
OCTS	Sea-ice cover		0.25	km			30	% (Max)	0.5	d	0.25	d		Potential realized
PAN (IRS-1C/1D)	Land surface imagery		10	m					24	d	1	d		Experimental
Pilot MED	Wind profile (horizontal component)	Lower troposphere (LT)	1622	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
Pilot RA-I N	Wind profile (horizontal component)	Lower troposphere (LT)	2665	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
Pilot RA-I T	Wind profile (horizontal component)	Lower troposphere (LT)	3042	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
Pilot RA-II E	Wind profile (horizontal component)	Lower troposphere (LT)	1431	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
Pilot RA-II S	Wind profile (horizontal component)	Lower troposphere (LT)	1837	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
Pilot RA-V NW	Wind profile (horizontal component)	Lower troposphere (LT)	5156	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
Pilot RA-V SW	Wind profile (horizontal component)	Lower troposphere (LT)	1111	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
Pilot RA-VI WE	Wind profile (horizontal component)	Lower troposphere (LT)	1626	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
Pilot SIO	Wind profile (horizontal component)	Lower troposphere (LT)	4397	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
Pilot TPO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	4498	km	0.3	km	2	m/s	20	h	1.5	h		Potential realized
PR	Precipitation rate (liquid) at the		5	km			5	m/s	250	h	720	h		Potential expected
RA	Sea level		20	km			10	cm		d	20	d		Potential realized
RA-2	Sea level		20	km			10	cm		d	20	d		Potential realized
RADAR RA-IV C	Precipitation rate (liquid) at the		3	km			0.1	m/s	0.1	h	0.5	h		Potential realized
RADAR RA-IV C	Wind profile (horizontal component)	Higher troposphere (HT)	3	km	1	km	2	m/s	0.1	d	0.5	h		Potential realized
RADAR RA-IV C	Wind profile (horizontal component)	Lower troposphere (LT)	3	km	1	km	2	m/s	0.1	h	0.5	h		Potential realized
RADAR RA-VI WE	Precipitation rate (liquid) at the		3	km			0.1	m/s	0.1	h	0.5	h		Potential realized
RADAR RA-VI WE	Wind profile (horizontal component)	Lower troposphere (LT)	3	km	1	km	2	m/s	0.1	h	0.5	h		Potential realized
RADAR RA-VI WE	Wind profile (horizontal component)	Higher troposphere (HT)	3	km	1	km	2	m/s	0.1	d	0.5	h		Potential realized
Raobs ARC	Atmospheric temperature profile	Lower stratosphere (LS)	793	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs ARC	Atmospheric temperature profile	Lower troposphere (LT)	793	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs ARC	Atmospheric temperature profile	Higher troposphere (HT)	793	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs ARC	Specific humidity profile	Lower troposphere (LT)	793	km	0.15	km	5	%	12	h	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Raobs ARC	Specific humidity profile	Higher troposphere (HT)	793	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs ARC	Wind profile (horizontal component)	Lower troposphere (LT)	793	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs ARC	Wind profile (horizontal component)	Higher troposphere (HT)	793	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs ARC	Wind profile (horizontal component)	Lower stratosphere (LS)	793	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs MED	Atmospheric temperature profile	Lower stratosphere (LS)	703	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs MED	Atmospheric temperature profile	Lower troposphere (LT)	703	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs MED	Atmospheric temperature profile	Higher troposphere (HT)	703	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs MED	Specific humidity profile	Higher troposphere (HT)	703	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs MED	Specific humidity profile	Lower troposphere (LT)	703	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs MED	Wind profile (horizontal component)	Lower troposphere (LT)	703	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs MED	Wind profile (horizontal component)	Lower stratosphere (LS)	703	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs MED	Wind profile (horizontal component)	Higher troposphere (HT)	703	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs NAO CST	Atmospheric temperature profile	Higher troposphere (HT)	1455	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs NAO CST	Atmospheric temperature profile	Lower troposphere (LT)	1455	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs NAO CST	Atmospheric temperature profile	Lower stratosphere (LS)	1455	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs NAO CST	Specific humidity profile	Lower troposphere (LT)	1455	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs NAO CST	Specific humidity profile	Higher troposphere (HT)	1455	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs NAO CST	Wind profile (horizontal component)	Lower stratosphere (LS)	1455	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs NAO CST	Wind profile (horizontal component)	Lower troposphere (LT)	1455	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs NAO CST	Wind profile (horizontal component)	Higher troposphere (HT)	1455	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs NAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	1839	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs NAO OPN	Atmospheric temperature profile	Lower troposphere (LT)	1839	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs NAO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	1839	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs NAO OPN	Specific humidity profile	Lower troposphere (LT)	1839	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs NAO OPN	Specific humidity profile	Higher troposphere (HT)	1839	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs NAO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	1839	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs NAO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	1839	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs NAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	1839	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs NIO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	1533	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs NIO OPN	Atmospheric temperature profile	Lower troposphere (LT)	1533	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs NIO OPN	Atmospheric temperature profile	Higher troposphere (HT)	1533	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs NIO OPN	Specific humidity profile	Lower troposphere (LT)	1533	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs NIO OPN	Specific humidity profile	Higher troposphere (HT)	1533	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs NIO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	1533	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs NIO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	1533	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs NIO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	1533	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs NPO OPN	Atmospheric temperature profile	Higher troposphere (HT)	2008	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs NPO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	2008	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs NPO OPN	Atmospheric temperature profile	Lower troposphere (LT)	2008	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs NPO OPN	Specific humidity profile	Lower troposphere (LT)	2008	km	0.15	km	5	%	12	h	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Raobs NPO OPN	Specific humidity profile	Higher troposphere (HT)	2008	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs NPO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	2008	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs NPO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	2008	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs NPO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	2008	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-I N	Atmospheric temperature profile	Higher troposphere (HT)	1406	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-I N	Atmospheric temperature profile	Lower troposphere (LT)	1406	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-I N	Atmospheric temperature profile	Lower stratosphere (LS)	1406	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-I N	Specific humidity profile	Higher troposphere (HT)	1406	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-I N	Specific humidity profile	Lower troposphere (LT)	1406	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-I N	Wind profile (horizontal component)	Lower stratosphere (LS)	1406	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-I N	Wind profile (horizontal component)	Higher troposphere (HT)	1406	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-I N	Wind profile (horizontal component)	Lower troposphere (LT)	1406	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-I S	Atmospheric temperature profile	Lower stratosphere (LS)	652	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-I S	Atmospheric temperature profile	Lower troposphere (LT)	652	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-I S	Atmospheric temperature profile	Higher troposphere (HT)	652	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-I S	Specific humidity profile	Lower troposphere (LT)	652	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-I S	Specific humidity profile	Higher troposphere (HT)	652	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-I S	Wind profile (horizontal component)	Lower troposphere (LT)	652	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-I S	Wind profile (horizontal component)	Higher troposphere (HT)	652	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-I S	Wind profile (horizontal component)	Lower stratosphere (LS)	652	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-I T	Atmospheric temperature profile	Lower stratosphere (LS)	1226	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-I T	Atmospheric temperature profile	Lower troposphere (LT)	1226	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-I T	Atmospheric temperature profile	Higher troposphere (HT)	1226	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-I T	Specific humidity profile	Higher troposphere (HT)	1226	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-I T	Specific humidity profile	Lower troposphere (LT)	1226	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-I T	Wind profile (horizontal component)	Lower stratosphere (LS)	1226	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-I T	Wind profile (horizontal component)	Lower troposphere (LT)	1226	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-I T	Wind profile (horizontal component)	Higher troposphere (HT)	1226	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-II E	Atmospheric temperature profile	Lower stratosphere (LS)	294	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-II E	Atmospheric temperature profile	Lower troposphere (LT)	294	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-II E	Atmospheric temperature profile	Higher troposphere (HT)	294	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-II E	Specific humidity profile	Higher troposphere (HT)	294	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-II E	Specific humidity profile	Lower troposphere (LT)	294	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-II E	Wind profile (horizontal component)	Lower troposphere (LT)	294	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-II E	Wind profile (horizontal component)	Higher troposphere (HT)	294	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-II E	Wind profile (horizontal component)	Lower stratosphere (LS)	294	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-II N	Atmospheric temperature profile	Higher troposphere (HT)	444	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-II N	Atmospheric temperature profile	Lower troposphere (LT)	444	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-II N	Atmospheric temperature profile	Lower stratosphere (LS)	444	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-II N	Specific humidity profile	Lower troposphere (LT)	444	km	0.15	km	5	%	12	h	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Raobs RA-II N	Specific humidity profile	Higher troposphere (HT)	444	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-II N	Wind profile (horizontal component)	Lower troposphere (LT)	444	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-II N	Wind profile (horizontal component)	Lower stratosphere (LS)	444	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-II N	Wind profile (horizontal component)	Higher troposphere (HT)	444	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-II S	Atmospheric temperature profile	Lower stratosphere (LS)	442	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-II S	Atmospheric temperature profile	Lower troposphere (LT)	442	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-II S	Atmospheric temperature profile	Higher troposphere (HT)	442	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-II S	Specific humidity profile	Lower troposphere (LT)	442	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-II S	Specific humidity profile	Higher troposphere (HT)	442	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-II S	Wind profile (horizontal component)	Higher troposphere (HT)	442	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-II S	Wind profile (horizontal component)	Lower stratosphere (LS)	442	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-II S	Wind profile (horizontal component)	Lower troposphere (LT)	442	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-II W	Atmospheric temperature profile	Lower troposphere (LT)	766	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-II W	Atmospheric temperature profile	Lower stratosphere (LS)	766	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-II W	Atmospheric temperature profile	Higher troposphere (HT)	766	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-II W	Specific humidity profile	Lower troposphere (LT)	766	km	0.15	km	7	%	12	h	1.5	h		Potential realized
Raobs RA-II W	Specific humidity profile	Higher troposphere (HT)	766	km	0.15	km	7	%	12	h	1.5	h		Potential realized
Raobs RA-II W	Wind profile (horizontal component)	Lower troposphere (LT)	766	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-II W	Wind profile (horizontal component)	Lower stratosphere (LS)	766	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-II W	Wind profile (horizontal component)	Higher troposphere (HT)	766	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-III N	Atmospheric temperature profile	Higher troposphere (HT)	865	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-III N	Atmospheric temperature profile	Lower stratosphere (LS)	865	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-III N	Atmospheric temperature profile	Lower troposphere (LT)	865	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-III N	Specific humidity profile	Lower troposphere (LT)	865	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-III N	Specific humidity profile	Higher troposphere (HT)	865	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-III N	Wind profile (horizontal component)	Higher troposphere (HT)	865	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-III N	Wind profile (horizontal component)	Lower stratosphere (LS)	865	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-III N	Wind profile (horizontal component)	Lower troposphere (LT)	865	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-III S	Atmospheric temperature profile	Lower stratosphere (LS)	675	km	0.15	km	4	K	12	h	1.5	h		Potential realized
Raobs RA-III S	Atmospheric temperature profile	Lower troposphere (LT)	675	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-III S	Atmospheric temperature profile	Higher troposphere (HT)	675	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-III S	Specific humidity profile	Higher troposphere (HT)	675	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-III S	Specific humidity profile	Lower troposphere (LT)	675	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-III S	Wind profile (horizontal component)	Higher troposphere (HT)	675	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-III S	Wind profile (horizontal component)	Lower stratosphere (LS)	675	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-III S	Wind profile (horizontal component)	Lower troposphere (LT)	675	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-IV C	Atmospheric temperature profile	Lower stratosphere (LS)	331	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-IV C	Atmospheric temperature profile	Higher troposphere (HT)	331	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-IV C	Atmospheric temperature profile	Lower troposphere (LT)	331	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-IV C	Specific humidity profile	Higher troposphere (HT)	331	km	0.15	km	5	%	12	h	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Raobs RA-IV C	Specific humidity profile	Lower troposphere (LT)	331	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-IV C	Wind profile (horizontal component)	Higher troposphere (HT)	331	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-IV C	Wind profile (horizontal component)	Lower troposphere (LT)	331	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-IV C	Wind profile (horizontal component)	Lower stratosphere (LS)	331	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-IV N	Atmospheric temperature profile	Higher troposphere (HT)	447	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-IV N	Atmospheric temperature profile	Lower stratosphere (LS)	447	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-IV N	Atmospheric temperature profile	Lower troposphere (LT)	447	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-IV N	Specific humidity profile	Lower troposphere (LT)	447	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-IV N	Specific humidity profile	Higher troposphere (HT)	447	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-IV N	Wind profile (horizontal component)	Lower stratosphere (LS)	447	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-IV N	Wind profile (horizontal component)	Higher troposphere (HT)	447	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-IV N	Wind profile (horizontal component)	Lower troposphere (LT)	447	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-IV S	Atmospheric temperature profile	Higher troposphere (HT)	619	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-IV S	Atmospheric temperature profile	Lower troposphere (LT)	619	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-IV S	Atmospheric temperature profile	Lower stratosphere (LS)	619	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-IV S	Specific humidity profile	Higher troposphere (HT)	619	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-IV S	Specific humidity profile	Lower troposphere (LT)	619	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-IV S	Wind profile (horizontal component)	Lower troposphere (LT)	619	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-IV S	Wind profile (horizontal component)	Lower stratosphere (LS)	619	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-IV S	Wind profile (horizontal component)	Higher troposphere (HT)	619	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-V NW	Atmospheric temperature profile	Lower stratosphere (LS)	1021	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-V NW	Atmospheric temperature profile	Higher troposphere (HT)	1021	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-V NW	Atmospheric temperature profile	Lower troposphere (LT)	1021	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-V NW	Specific humidity profile	Higher troposphere (HT)	1021	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-V NW	Specific humidity profile	Lower troposphere (LT)	1021	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-V NW	Wind profile (horizontal component)	Higher troposphere (HT)	1021	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-V NW	Wind profile (horizontal component)	Lower stratosphere (LS)	1021	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-V NW	Wind profile (horizontal component)	Lower troposphere (LT)	1021	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-V SW	Atmospheric temperature profile	Lower troposphere (LT)	909	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-V SW	Atmospheric temperature profile	Lower stratosphere (LS)	909	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-V SW	Atmospheric temperature profile	Higher troposphere (HT)	909	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-V SW	Specific humidity profile	Higher troposphere (HT)	909	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-V SW	Specific humidity profile	Lower troposphere (LT)	909	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-V SW	Wind profile (horizontal component)	Lower troposphere (LT)	909	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-V SW	Wind profile (horizontal component)	Lower stratosphere (LS)	909	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-V SW	Wind profile (horizontal component)	Higher troposphere (HT)	909	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-VI EE	Atmospheric temperature profile	Lower troposphere (LT)	369	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-VI EE	Atmospheric temperature profile	Lower stratosphere (LS)	369	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-VI EE	Atmospheric temperature profile	Higher troposphere (HT)	369	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-VI EE	Specific humidity profile	Lower troposphere (LT)	369	km	0.15	km	5	%	12	h	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Raobs RA-VI EE	Specific humidity profile	Higher troposphere (HT)	369	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-VI EE	Wind profile (horizontal component)	Lower stratosphere (LS)	369	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-VI EE	Wind profile (horizontal component)	Higher troposphere (HT)	369	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-VI EE	Wind profile (horizontal component)	Lower troposphere (LT)	369	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-VI WE	Atmospheric temperature profile	Lower stratosphere (LS)	218	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-VI WE	Atmospheric temperature profile	Lower troposphere (LT)	218	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-VI WE	Atmospheric temperature profile	Higher troposphere (HT)	218	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-VI WE	Specific humidity profile	Higher troposphere (HT)	218	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-VI WE	Specific humidity profile	Lower troposphere (LT)	218	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-VI WE	Wind profile (horizontal component)	Higher troposphere (HT)	218	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs RA-VI WE	Wind profile (horizontal component)	Lower stratosphere (LS)	218	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-VI WE	Wind profile (horizontal component)	Lower troposphere (LT)	218	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-VII	Atmospheric temperature profile	Lower troposphere (LT)	1696	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-VII	Atmospheric temperature profile	Higher troposphere (HT)	1696	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs RA-VII	Atmospheric temperature profile	Lower stratosphere (LS)	1696	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs RA-VII	Specific humidity profile	Lower troposphere (LT)	1696	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-VII	Specific humidity profile	Higher troposphere (HT)	1696	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs RA-VII	Wind profile (horizontal component)	Lower stratosphere (LS)	1696	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-VII	Wind profile (horizontal component)	Lower troposphere (LT)	1696	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs RA-VII	Wind profile (horizontal component)	Higher troposphere (HT)	1696	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs SAO CST	Atmospheric temperature profile	Lower troposphere (LT)	1143	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs SAO CST	Atmospheric temperature profile	Lower stratosphere (LS)	1143	km	2	km	1	K	12	h	1.5	h		Potential realized
Raobs SAO CST	Atmospheric temperature profile	Higher troposphere (HT)	1143	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs SAO CST	Specific humidity profile	Lower troposphere (LT)	1143	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs SAO CST	Specific humidity profile	Higher troposphere (HT)	1143	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs SAO CST	Wind profile (horizontal component)	Lower troposphere (LT)	1143	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs SAO CST	Wind profile (horizontal component)	Higher troposphere (HT)	1143	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs SAO CST	Wind profile (horizontal component)	Lower stratosphere (LS)	1143	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs SAO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	2584	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs SAO OPN	Atmospheric temperature profile	Lower troposphere (LT)	2584	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs SAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	2584	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs SAO OPN	Specific humidity profile	Lower troposphere (LT)	2584	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs SAO OPN	Specific humidity profile	Higher troposphere (HT)	2584	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs SAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	2584	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs SAO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	2584	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs SAO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	2584	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs SIO	Atmospheric temperature profile	Higher troposphere (HT)	2971	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs SIO	Atmospheric temperature profile	Lower troposphere (LT)	2971	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs SIO	Atmospheric temperature profile	Lower stratosphere (LS)	2971	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs SIO	Specific humidity profile	Lower troposphere (LT)	2971	km	0.15	km	5	%	12	h	1.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Raobs SIO	Specific humidity profile	Higher troposphere (HT)	2971	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs SIO	Wind profile (horizontal component)	Lower stratosphere (LS)	2971	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs SIO	Wind profile (horizontal component)	Lower troposphere (LT)	2971	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs SIO	Wind profile (horizontal component)	Higher troposphere (HT)	2971	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs SPO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	3166	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs SPO OPN	Atmospheric temperature profile	Lower troposphere (LT)	3166	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs SPO OPN	Atmospheric temperature profile	Higher troposphere (HT)	3166	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs SPO OPN	Specific humidity profile	Lower troposphere (LT)	3166	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs SPO OPN	Specific humidity profile	Higher troposphere (HT)	3166	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs SPO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	3166	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs SPO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	3166	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs SPO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	3166	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs TAO OPN	Atmospheric temperature profile	Lower troposphere (LT)	2104	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs TAO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	2104	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs TAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	2104	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs TAO OPN	Specific humidity profile	Lower troposphere (LT)	2104	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs TAO OPN	Specific humidity profile	Higher troposphere (HT)	2104	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs TAO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	2104	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs TAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	2104	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
Raobs TAO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	2104	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs TPO OPN	Atmospheric temperature profile	Higher troposphere (HT)	2189	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs TPO OPN	Atmospheric temperature profile	Lower troposphere (LT)	2189	km	0.15	km	1	K	12	h	1.5	h		Potential realized
Raobs TPO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	2189	km	0.15	km	2	K	12	h	1.5	h		Potential realized
Raobs TPO OPN	Specific humidity profile	Lower troposphere (LT)	2189	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs TPO OPN	Specific humidity profile	Higher troposphere (HT)	2189	km	0.15	km	5	%	12	h	1.5	h		Potential realized
Raobs TPO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	2189	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs TPO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	2189	km	0.3	km	2	m/s	12	h	1.5	h		Potential realized
Raobs TPO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	2189	km	0.3	km	2	m/s	12	d	1.5	h		Potential realized
SAGE II	Aerosol profile	Lower stratosphere (LS)	100	km	1	km		%	24	h	720	h		Experimental
SAGE II	Aerosol profile	Higher troposphere (HT)	100	km	1	km		%	24	h	720	h		Experimental
SAGE II	Specific humidity profile	Lower stratosphere (LS)	100	km	1	km	10	%	48	h	720	h		Potential realized
SAGE III	Aerosol profile	Higher stratosphere & mesosphere (HS & M)	300	km	1	km	10	%	336	h	12	h		Experimental
SAGE III	Aerosol profile	Higher troposphere (HT)	300	km	1	km		%	336	h	12	h		Experimental
SAGE III	Aerosol profile	Lower stratosphere (LS)	300	km	1	km	10	%	336	h	12	h		Experimental
SAGE III	Ozone profile	Lower stratosphere (LS)	300	km	1	km	5	%	336	h	24	h		Experimental
SAGE III	Specific humidity profile	Lower stratosphere (LS)	100	km	0.5	km	10	%	336	h	12	h		Potential expected
SAR (JERS-1)	Land surface imagery		18	m					30	d	1	d		Experimental
SAR (RADARSAT)	Land surface imagery		25	m					30	d	1	d		Experimental
SBUV/2	Ozone profile	Lower stratosphere (LS)	183	km	5	km	10	%	24	h	3	h		Potential expected

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
SBUV/2	Ozone profile	Total column	183	km			30	DU	24	h	3	h		Experimental
SBUV/3	Ozone profile	Total column	183	km			30	DU	24	h	3	h		Experimental
SBUV/3	Ozone profile	Lower stratosphere (LS)	183	km	5	km	10	%	24	h	3	h		Experimental
SBUV/3	Ozone profile	Lower troposphere (LT)	183	km	5	km	10	%	24	h	3	h		Experimental
ScaRaB/MV2	Outgoing long-wave radiation at		60	km			10	m/s	12	h	24	h		Potential expected
ScaRaB/MV2	Outgoing short-wave radiation at		60	km			5	W/m2	12	h	24	h		Potential
SCIAMACHY	Ozone profile	Lower stratosphere (LS)	500	km	3	km		%	12	h	3	h		Experimental
SeaWinds	Sea-ice cover		25	km			50	% (Max)	0.5	d	0.25	d		Potential expected
SeaWinds	Wind vector over sea surface (horizontal)		25	km			2	m/s	12	h	4	h		Experimental
SEVIRI	Aerosol profile	Total column	3	km				%	0.25	h	0.25	h		Potential
SEVIRI	Atmospheric stability index		15	km				K	0.25	h	0.25	h		Potential realized
SEVIRI	Cloud cover		3	km			10	% (Max)	0.25	h	0.5	h		Potential expected
SEVIRI	Cloud imagery		3	km					0.25	h	0.1	h		Potential expected
SEVIRI	Cloud top height		10	km			0.7	km	0.25	h	0.5	h		Potential expected
SEVIRI	Cloud top temperature		3	km			2	K	0.25	h	0.5	h		Potential expected
SEVIRI	Cloud type		100	km			8	classes	0.25	h	1	h		Potential expected
SEVIRI	Fire area		3	m2			5	% (Max)	0.08	d	1	d		Experimental
SEVIRI	Fire temperature		3	K			50	K	0.08	d	1	d		Experimental
SEVIRI	Fractional Photosynthetically Active Radiation (FPAR)		3	km			25	% (Max)	1	d	1	d		Experimental
SEVIRI	Land surface temperature		10	km			2	K	0.25	h	0.25	h		Potential expected
SEVIRI	Long-wave Earth surface emissivity		3	km			3	% (Max)	0.25	h	24	h		Potential
SEVIRI	Normalized Differential Vegetation Index (NDVI)		3	km			10	% (Max)	0.08	d	1	d		Potential
SEVIRI	Outgoing long-wave radiation at		50	km			10	m/s	0.25	h	24	h		Potential realized
SEVIRI	Outgoing short-wave radiation at		50	km			10	W/m2	0.25	h	24	h		Potential realized
SEVIRI	Ozone profile	Total column	50	km			50	DU	0.25	h	2	h		Potential realized
SEVIRI	Precipitation rate (liquid) at the		10	km			30	m/s	0.25	h	0.5	h		Potential realized
SEVIRI	Precipitation rate (solid) at the		10	km			30	mm/h	0.25	h	0.5	h		Potential realized
SEVIRI	Sea surface bulk temperature		3	km			0.5		1	h	2	h		Potential realized
SEVIRI	Specific humidity profile	Lower troposphere (LT)	50	km	2	km	20	%	1	h	0.5	h		Potential realized
SEVIRI	Specific humidity profile	Total column	100	km			2	kg/m2	1	h	3	h		Potential expected
SEVIRI	Specific humidity profile	Higher troposphere (HT)	100	km	3	km	20	%	1	h	1	h		Potential realized
SEVIRI	Wind profile (horizontal component)	Higher troposphere (HT)	100	km	5	km	4	m/s	1	d	1	h		Potential realized
SEVIRI	Wind profile (horizontal component)	Lower troposphere (LT)	100	km	5	km	2	m/s	1	h	1	h		Potential realized
SEVIRI	Wind profile (horizontal component)	Lower stratosphere (LS)	100	km	10	km	10	m/s	1	h	1	h		Potential expected
Sfc obs ARC	Air pressure over land surface		351	km			0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs ARC	Air specific humidity (at surface)		351	km			5	%	6	h	0.8	h		Potential realized
Sfc obs ARC	Air temperature (at surface)		351	km			0.2	K	6	h	0.8	h		Potential realized
Sfc obs ARC	Cloud base height		351	km			0.5	km	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
Sfc obs ARC	Cloud cover	351	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs ARC	Precipitation index (daily	351	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs ARC	Wind vector over land surface (horizontal)	351	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs MED	Air pressure over land surface	245	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs MED	Air specific humidity (at surface)	245	km		5	%	6	h	0.8	h		Potential realized
Sfc obs MED	Air temperature (at surface)	245	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs MED	Cloud base height	245	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs MED	Cloud cover	245	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs MED	Precipitation index (daily	245	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs MED	Wind vector over land surface (horizontal)	245	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs NAO CST	Air pressure over land surface	900	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs NAO CST	Air specific humidity (at surface)	900	km		5	%	6	h	0.8	h		Potential realized
Sfc obs NAO CST	Air temperature (at surface)	900	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs NAO CST	Cloud base height	900	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs NAO CST	Cloud cover	900	km		8	% (Max)	6	h	0.8	h		Potential realized
Sfc obs NAO CST	Precipitation index (daily	900	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs NAO CST	Wind vector over land surface (horizontal)	900	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs NAO OPN	Air pressure over land surface	1315	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs NAO OPN	Air specific humidity (at surface)	1315	km		5	%	6	h	0.8	h		Potential realized
Sfc obs NAO OPN	Air temperature (at surface)	1315	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs NAO OPN	Cloud base height	1315	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs NAO OPN	Cloud cover	1315	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs NAO OPN	Precipitation index (daily	1315	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs NAO OPN	Wind vector over land surface (horizontal)	1315	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs NIO OPN	Air pressure over land surface	1351	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs NIO OPN	Air specific humidity (at surface)	1351	km		5	%	6	h	0.8	h		Potential realized
Sfc obs NIO OPN	Air temperature (at surface)	1351	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs NIO OPN	Cloud base height	1351	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs NIO OPN	Cloud cover	1351	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs NIO OPN	Precipitation index (daily	1351	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs NIO OPN	Wind vector over land surface (horizontal)	1351	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs NPO CST	Air pressure over land surface	1505	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs NPO CST	Air specific humidity (at surface)	1505	km		5	%	6	h	0.8	h		Potential realized
Sfc obs NPO CST	Air temperature (at surface)	1505	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs NPO CST	Cloud base height	1505	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs NPO CST	Cloud cover	1505	km		12.5	% (Max)	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
Sfc obs NPO CST	Precipitation index (daily	1505	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs NPO CST	Wind vector over land surface (horizontal)	1505	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs NPO OPN	Air pressure over land surface	2363	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs NPO OPN	Air specific humidity (at surface)	2363	km		5	%	6	h	0.8	h		Potential realized
Sfc obs NPO OPN	Air temperature (at surface)	2363	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs NPO OPN	Cloud base height	2363	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs NPO OPN	Cloud cover	2363	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs NPO OPN	Precipitation index (daily	2363	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs NPO OPN	Wind vector over land surface (horizontal)	2363	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-I N	Air pressure over land surface	386	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-I N	Air specific humidity (at surface)	386	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-I N	Air temperature (at surface)	386	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-I N	Cloud base height	386	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-I N	Cloud cover	386	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-I N	Precipitation index (daily	386	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-I N	Wind vector over land surface (horizontal)	386	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-I S	Air pressure over land surface	232	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-I S	Air specific humidity (at surface)	232	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-I S	Air temperature (at surface)	232	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-I S	Cloud base height	232	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-I S	Cloud cover	232	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-I S	Precipitation index (daily	232	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-I S	Wind vector over land surface (horizontal)	232	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-I T	Air pressure over land surface	304	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-I T	Air specific humidity (at surface)	304	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-I T	Air temperature (at surface)	304	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-I T	Cloud base height	304	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-I T	Cloud cover	304	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-I T	Precipitation index (daily	304	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-I T	Wind vector over land surface (horizontal)	304	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-II E	Air pressure over land surface	173	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-II E	Air specific humidity (at surface)	173	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-II E	Air temperature (at surface)	173	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-II E	Cloud base height	173	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-II E	Cloud cover	173	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-II E	Precipitation index (daily	173	km		0.1	mm/d	24	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
Sfc obs RA-II E	Wind vector over land surface (horizontal)	173	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-II N	Air pressure over land surface	163	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-II N	Air specific humidity (at surface)	163	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-II N	Air temperature (at surface)	163	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-II N	Cloud base height	163	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-II N	Cloud cover	163	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-II N	Precipitation index (daily	163	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-II N	Wind vector over land surface (horizontal)	163	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-II S	Air pressure over land surface	211	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-II S	Air specific humidity (at surface)	211	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-II S	Air temperature (at surface)	211	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-II S	Cloud base height	211	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-II S	Cloud cover	211	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-II S	Precipitation index (daily	211	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-II S	Wind vector over land surface (horizontal)	211	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-II W	Air pressure over land surface	211	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-II W	Air specific humidity (at surface)	211	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-II W	Air temperature (at surface)	211	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-II W	Cloud base height	211	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-II W	Cloud cover	211	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-II W	Precipitation index (daily	211	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-II W	Wind vector over land surface (horizontal)	211	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-III N	Air pressure over land surface	244	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-III N	Air specific humidity (at surface)	244	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-III N	Air temperature (at surface)	244	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-III N	Cloud base height	244	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-III N	Cloud cover	244	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-III N	Precipitation index (daily	244	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-III N	Wind vector over land surface (horizontal)	244	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-III S	Air pressure over land surface	178	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-III S	Air specific humidity (at surface)	178	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-III S	Air temperature (at surface)	178	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-III S	Cloud base height	178	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-III S	Cloud cover	178	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-III S	Precipitation index (daily	178	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-III S	Wind vector over land surface (horizontal)	178	km		0.5	m/s	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
Sfc obs RA-IV C	Air pressure over land surface	183	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-IV C	Air specific humidity (at surface)	183	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-IV C	Air temperature (at surface)	183	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-IV C	Cloud base height	183	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-IV C	Cloud cover	183	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-IV C	Precipitation index (daily	183	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-IV C	Wind vector over land surface (horizontal)	183	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-IV N	Air pressure over land surface	217	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-IV N	Air specific humidity (at surface)	217	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-IV N	Air temperature (at surface)	217	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-IV N	Cloud base height	217	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-IV N	Cloud cover	217	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-IV N	Precipitation index (daily	217	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-IV N	Wind vector over land surface (horizontal)	217	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-IV S	Air pressure over land surface	352	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-IV S	Air specific humidity (at surface)	352	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-IV S	Air temperature (at surface)	352	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-IV S	Cloud base height	352	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-IV S	Cloud cover	352	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-IV S	Precipitation index (daily	352	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-IV S	Wind vector over land surface (horizontal)	352	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-V NW	Air pressure over land surface	440	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-V NW	Air specific humidity (at surface)	440	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-V NW	Air temperature (at surface)	440	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-V NW	Cloud base height	440	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-V NW	Cloud cover	440	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-V NW	Precipitation index (daily	440	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-V NW	Wind vector over land surface (horizontal)	440	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-V SW	Air pressure over land surface	470	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-V SW	Air specific humidity (at surface)	470	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-V SW	Air temperature (at surface)	470	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-V SW	Cloud base height	470	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-V SW	Cloud cover	470	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-V SW	Precipitation index (daily	470	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-V SW	Wind vector over land surface (horizontal)	470	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-VI EE	Air pressure over land surface	121	km		0.3	hPa	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
Sfc obs RA-VI EE	Air specific humidity (at surface)	121	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-VI EE	Air temperature (at surface)	121	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-VI EE	Cloud base height	121	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-VI EE	Cloud cover	121	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-VI EE	Precipitation index (daily	121	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-VI EE	Wind vector over land surface (horizontal)	121	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-VI WE	Air pressure over land surface	108	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-VI WE	Air specific humidity (at surface)	108	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-VI WE	Air temperature (at surface)	108	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-VI WE	Cloud base height	108	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-VI WE	Cloud cover	108	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-VI WE	Precipitation index (daily	108	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-VI WE	Wind vector over land surface (horizontal)	108	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs RA-VII	Air pressure over land surface	768	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs RA-VII	Air specific humidity (at surface)	768	km		5	%	6	h	0.8	h		Potential realized
Sfc obs RA-VII	Air temperature (at surface)	768	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs RA-VII	Cloud base height	768	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs RA-VII	Cloud cover	768	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs RA-VII	Precipitation index (daily	768	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs RA-VII	Wind vector over land surface (horizontal)	768	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs SAO CST	Air pressure over land surface	433	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs SAO CST	Air specific humidity (at surface)	433	km		5	%	6	h	0.8	h		Potential realized
Sfc obs SAO CST	Air temperature (at surface)	433	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs SAO CST	Cloud base height	433	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs SAO CST	Cloud cover	433	km		8	% (Max)	6	h	0.8	h		Potential realized
Sfc obs SAO CST	Precipitation index (daily	433	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs SAO CST	Wind vector over land surface (horizontal)	433	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs SAO OPN	Air pressure over land surface	2782	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs SAO OPN	Air specific humidity (at surface)	2782	km		5	%	6	h	0.8	h		Potential realized
Sfc obs SAO OPN	Air temperature (at surface)	2782	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs SAO OPN	Cloud base height	2782	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs SAO OPN	Cloud cover	2782	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs SAO OPN	Precipitation index (daily	2782	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs SAO OPN	Wind vector over land surface (horizontal)	2782	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs SIO	Air pressure over land surface	1736	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs SIO	Air specific humidity (at surface)	1736	km		5	%	6	h	0.8	h		Potential realized

Instrument	Parameter	Hor Res		Vert Res	Accuracy		Obsv Cycle		Delay		Comment	Con
Sfc obs SIO	Air temperature (at surface)	1736	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs SIO	Cloud base height	1736	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs SIO	Cloud cover	1736	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs SIO	Precipitation index (daily	1736	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs SIO	Wind vector over land surface (horizontal)	1736	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs SPO OPN	Air pressure over land surface	2995	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs SPO OPN	Air specific humidity (at surface)	2995	km		5	%	6	h	0.8	h		Potential realized
Sfc obs SPO OPN	Air temperature (at surface)	2995	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs SPO OPN	Cloud base height	2995	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs SPO OPN	Cloud cover	2995	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs SPO OPN	Precipitation index (daily	2995	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs SPO OPN	Wind vector over land surface (horizontal)	2995	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs TAO CST	Air pressure over land surface	1676	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs TAO CST	Air specific humidity (at surface)	1676	km		5	%	6	h	0.8	h		Potential realized
Sfc obs TAO CST	Air temperature (at surface)	1676	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs TAO CST	Cloud base height	1676	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs TAO CST	Cloud cover	1676	km		8	% (Max)	6	h	0.8	h		Potential realized
Sfc obs TAO CST	Precipitation index (daily	1676	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs TAO CST	Wind vector over land surface (horizontal)	1676	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs TAO OPN	Air pressure over land surface	1459	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs TAO OPN	Air specific humidity (at surface)	1459	km		5	%	6	h	0.8	h		Potential realized
Sfc obs TAO OPN	Air temperature (at surface)	1459	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs TAO OPN	Cloud base height	1459	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs TAO OPN	Cloud cover	1459	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs TAO OPN	Precipitation index (daily	1459	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs TAO OPN	Wind vector over land surface (horizontal)	1459	km		0.5	m/s	6	h	0.8	h		Potential realized
Sfc obs TPO OPN	Air pressure over land surface	1068	km		0.3	hPa	6	h	0.8	h		Potential realized
Sfc obs TPO OPN	Air specific humidity (at surface)	1068	km		5	%	6	h	0.8	h		Potential realized
Sfc obs TPO OPN	Air temperature (at surface)	1068	km		0.2	K	6	h	0.8	h		Potential realized
Sfc obs TPO OPN	Cloud base height	1068	km		0.5	km	6	h	0.8	h		Potential realized
Sfc obs TPO OPN	Cloud cover	1068	km		12.5	% (Max)	6	h	0.8	h		Potential realized
Sfc obs TPO OPN	Precipitation index (daily	1068	km		0.1	mm/d	24	h	0.8	h		Potential realized
Sfc obs TPO OPN	Wind vector over land surface (horizontal)	1068	km		0.5	m/s	6	h	0.8	h		Potential realized
Ships ARC	Air pressure over sea surface	696	km		0.5	hPa	8	h	1	h		Potential realized
Ships ARC	Air specific humidity (at surface)	696	km		5	%	8	h	1	h		Potential realized
Ships ARC	Air temperature (at surface)	696	km		0.2	K	8	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Ships ARC	Atmospheric temperature profile	Higher troposphere (HT)	2746	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships ARC	Atmospheric temperature profile	Lower troposphere (LT)	2746	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships ARC	Atmospheric temperature profile	Lower stratosphere (LS)	2746	km	2	km	1	K	24	h	1	h		Potential realized
Ships ARC	Cloud base height		696	km			0.5	km	8	h	1	h		Potential realized
Ships ARC	Cloud cover		696	km			8	% (Max)	8	h	1	h		Potential realized
Ships ARC	Dominant wave direction		696	km				degrees	8	h	1	h		Potential realized
Ships ARC	Sea surface bulk temperature		696	km			1		8	h	1	h		Potential realized
Ships ARC	Significant wave height		696	km				m	8	h	1	h		Potential realized
Ships ARC	Specific humidity profile	Lower troposphere (LT)	2746	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships ARC	Specific humidity profile	Higher troposphere (HT)	2746	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships ARC	Wind profile (horizontal component)	Lower stratosphere (LS)	2746	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships ARC	Wind profile (horizontal component)	Higher troposphere (HT)	2746	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships ARC	Wind profile (horizontal component)	Lower troposphere (LT)	2746	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships ARC	Wind vector over sea surface (horizontal)		696	km			0.5	m/s	8	h	1	h		Potential realized
Ships MED	Air pressure over sea surface		414	km			0.5	hPa	8	h	1	h		Potential realized
Ships MED	Air specific humidity (at surface)		414	km			5	%	8	h	1	h		Potential realized
Ships MED	Air temperature (at surface)		414	km			0.2	K	8	h	1	h		Potential realized
Ships MED	Cloud base height		414	km			0.5	km	8	h	1	h		Potential realized
Ships MED	Cloud cover		414	km			8	% (Max)	8	h	1	h		Potential realized
Ships MED	Dominant wave direction		414	km				degrees	8	h	1	h		Potential realized
Ships MED	Sea surface bulk temperature		414	km			1		8	h	1	h		Potential realized
Ships MED	Significant wave height		414	km				m	8	h	1	h		Potential realized
Ships MED	Wind vector over sea surface (horizontal)		414	km			0.5	m/s	8	h	1	h		Potential realized
Ships NAO CST	Air pressure over sea surface		177	km			0.5	hPa	8	h	1	h		Potential realized
Ships NAO CST	Air specific humidity (at surface)		177	km			5	%	8	h	1	h		Potential realized
Ships NAO CST	Air temperature (at surface)		177	km			0.2	K	8	h	1	h		Potential realized
Ships NAO CST	Atmospheric temperature profile	Lower troposphere (LT)	1936	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships NAO CST	Atmospheric temperature profile	Higher troposphere (HT)	1936	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships NAO CST	Atmospheric temperature profile	Lower stratosphere (LS)	1936	km	2	km	1	K	24	h	1	h		Potential realized
Ships NAO CST	Cloud base height		177	km			0.5	km	8	h	1	h		Potential realized
Ships NAO CST	Cloud cover		177	km			8	% (Max)	8	h	1	h		Potential realized
Ships NAO CST	Dominant wave direction		177	km				degrees	8	h	1	h		Potential realized
Ships NAO CST	Sea surface bulk temperature		177	km			1		8	h	1	h		Potential realized
Ships NAO CST	Significant wave height		177	km				m	8	h	1	h		Potential realized
Ships NAO CST	Specific humidity profile	Lower troposphere (LT)	1936	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships NAO CST	Specific humidity profile	Higher troposphere (HT)	1936	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships NAO CST	Wind profile (horizontal component)	Higher troposphere (HT)	1936	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships NAO CST	Wind profile (horizontal component)	Lower stratosphere (LS)	1936	km	0.3	km	2	m/s	24	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Ships NAO CST	Wind profile (horizontal component)	Lower troposphere (LT)	1936	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships NAO CST	Wind vector over sea surface (horizontal)		177	km			0.5	m/s	8	h	1	h		Potential realized
Ships NAO OPN	Air pressure over sea surface		353	km			0.5	hPa	8	h	1	h		Potential realized
Ships NAO OPN	Air specific humidity (at surface)		353	km			5	%	8	h	1	h		Potential realized
Ships NAO OPN	Air temperature (at surface)		353	km			0.2	K	8	h	1	h		Potential realized
Ships NAO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	1779	km	2	km	1	K	24	h	1	h		Potential realized
Ships NAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	1779	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships NAO OPN	Atmospheric temperature profile	Lower troposphere (LT)	1779	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships NAO OPN	Cloud base height		353	km			0.5	km	8	h	1	h		Potential realized
Ships NAO OPN	Cloud cover		353	km			8	% (Max)	8	h	1	h		Potential realized
Ships NAO OPN	Dominant wave direction		353	km				degrees	8	h	1	h		Potential realized
Ships NAO OPN	Sea surface bulk temperature		353	km			1		8	h	1	h		Potential realized
Ships NAO OPN	Significant wave height		353	km				m	8	h	1	h		Potential realized
Ships NAO OPN	Specific humidity profile	Higher troposphere (HT)	1779	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships NAO OPN	Specific humidity profile	Lower troposphere (LT)	1779	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships NAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	1779	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships NAO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	1779	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships NAO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	1779	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships NAO OPN	Wind vector over sea surface (horizontal)		353	km			0.5	m/s	8	h	1	h		Potential realized
Ships NIO CST	Air pressure over sea surface		560	km			0.5	hPa	8	h	1	h		Potential realized
Ships NIO CST	Air specific humidity (at surface)		560	km			5	%	8	h	1	h		Potential realized
Ships NIO CST	Air temperature (at surface)		560	km			0.2	K	8	h	1	h		Potential realized
Ships NIO CST	Cloud base height		560	km			0.5	km	8	h	1	h		Potential realized
Ships NIO CST	Cloud cover		560	km			8	% (Max)	8	h	1	h		Potential realized
Ships NIO CST	Dominant wave direction		560	km				degrees	8	h	1	h		Potential realized
Ships NIO CST	Sea surface bulk temperature		560	km			1		8	h	1	h		Potential realized
Ships NIO CST	Significant wave height		560	km				m	8	h	1	h		Potential realized
Ships NIO CST	Wind vector over sea surface (horizontal)		560	km			0.5	m/s	8	h	1	h		Potential realized
Ships NIO OPN	Air pressure over sea surface		876	km			0.5	hPa	8	h	1	h		Potential realized
Ships NIO OPN	Air specific humidity (at surface)		876	km			5	%	8	h	1	h		Potential realized
Ships NIO OPN	Air temperature (at surface)		876	km			0.2	K	8	h	1	h		Potential realized
Ships NIO OPN	Cloud base height		876	km			0.5	km	8	h	1	h		Potential realized
Ships NIO OPN	Cloud cover		876	km			8	% (Max)	8	h	1	h		Potential realized
Ships NIO OPN	Dominant wave direction		876	km				degrees	8	h	1	h		Potential realized
Ships NIO OPN	Sea surface bulk temperature		876	km			1		8	h	1	h		Potential realized
Ships NIO OPN	Significant wave height		876	km				m	8	h	1	h		Potential realized
Ships NIO OPN	Wind vector over sea surface (horizontal)		876	km			0.5	m/s	8	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Ships NPO CST	Air pressure over sea surface		292	km			0.5	hPa	8	h	1	h		Potential realized
Ships NPO CST	Air specific humidity (at surface)		292	km			5	%	8	h	1	h		Potential realized
Ships NPO CST	Air temperature (at surface)		292	km			0.2	K	8	h	1	h		Potential realized
Ships NPO CST	Atmospheric temperature profile	Higher troposphere (HT)	4232	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships NPO CST	Atmospheric temperature profile	Lower troposphere (LT)	4232	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships NPO CST	Atmospheric temperature profile	Lower stratosphere (LS)	4232	km	2	km	1	K	24	h	1	h		Potential realized
Ships NPO CST	Cloud base height		292	km			0.5	km	8	h	1	h		Potential realized
Ships NPO CST	Cloud cover		292	km			8	% (Max)	8	h	1	h		Potential realized
Ships NPO CST	Dominant wave direction		292	km				degrees	8	h	1	h		Potential realized
Ships NPO CST	Sea surface bulk temperature		292	km			1		8	h	1	h		Potential realized
Ships NPO CST	Significant wave height		292	km				m	8	h	1	h		Potential realized
Ships NPO CST	Specific humidity profile	Higher troposphere (HT)	4232	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships NPO CST	Specific humidity profile	Lower troposphere (LT)	4232	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships NPO CST	Wind profile (horizontal component)	Lower troposphere (LT)	4232	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships NPO CST	Wind profile (horizontal component)	Lower stratosphere (LS)	4232	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships NPO CST	Wind profile (horizontal component)	Higher troposphere (HT)	4232	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships NPO CST	Wind vector over sea surface (horizontal)		292	km			0.5	m/s	8	h	1	h		Potential realized
Ships NPO OPN	Air pressure over sea surface		464	km			0.5	hPa	8	h	1	h		Potential realized
Ships NPO OPN	Air specific humidity (at surface)		464	km			5	%	8	h	1	h		Potential realized
Ships NPO OPN	Air temperature (at surface)		464	km			0.2	K	8	h	1	h		Potential realized
Ships NPO OPN	Cloud base height		464	km			0.5	km	8	h	1	h		Potential realized
Ships NPO OPN	Cloud cover		464	km			8	% (Max)	8	h	1	h		Potential realized
Ships NPO OPN	Dominant wave direction		464	km				degrees	8	h	1	h		Potential realized
Ships NPO OPN	Sea surface bulk temperature		464	km			1		8	h	1	h		Potential realized
Ships NPO OPN	Significant wave height		464	km				m	8	h	1	h		Potential realized
Ships NPO OPN	Wind vector over sea surface (horizontal)		464	km			0.5	m/s	8	h	1	h		Potential realized
Ships RA-IV S	Air pressure over sea surface		324	km			0.5	hPa	8	h	1	h		Potential realized
Ships RA-IV S	Air specific humidity (at surface)		324	km			5	%	4	h	0.5	h		Potential realized
Ships RA-IV S	Air temperature (at surface)		324	km			0.2	K	3	h	1.1	h		Potential realized
Ships RA-IV S	Atmospheric temperature profile	Higher troposphere (HT)	4419	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships RA-IV S	Atmospheric temperature profile	Lower troposphere (LT)	4419	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships RA-IV S	Atmospheric temperature profile	Lower stratosphere (LS)	4419	km	2	km	1	K	24	h	1	h		Potential realized
Ships RA-IV S	Cloud base height		324	km			0.5	km	4	h	0.8	h		Potential realized
Ships RA-IV S	Cloud cover		324	km			8	% (Max)	12	h	2	h		Potential realized
Ships RA-IV S	Dominant wave direction		324	km				degrees	48	h	2	h		Potential realized
Ships RA-IV S	Sea surface bulk temperature		324	km			1		2	h	6	h		Potential realized
Ships RA-IV S	Significant wave height		324	km				m	48	h	2	h		Potential realized
Ships RA-IV S	Specific humidity profile	Higher troposphere (HT)	4419	km	0.15	km	5	%	24	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Ships RA-IV S	Specific humidity profile	Lower troposphere (LT)	4419	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships RA-IV S	Wind profile (horizontal component)	Lower stratosphere (LS)	4419	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships RA-IV S	Wind profile (horizontal component)	Higher troposphere (HT)	4419	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships RA-IV S	Wind profile (horizontal component)	Lower troposphere (LT)	4419	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships RA-IV S	Wind vector over sea surface (horizontal)		324	km			0.5	m/s	3	h	0.8	h		Potential realized
Ships RA-V NW	Air pressure over sea surface		626	km			0.5	hPa	8	h	1	h		Potential realized
Ships RA-V NW	Air specific humidity (at surface)		626	km			5	%	4	h	0.5	h		Potential realized
Ships RA-V NW	Air temperature (at surface)		626	km			0.2	K	3	h	1.1	h		Potential realized
Ships RA-V NW	Atmospheric temperature profile	Higher troposphere (HT)	8610	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships RA-V NW	Atmospheric temperature profile	Lower troposphere (LT)	8610	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships RA-V NW	Atmospheric temperature profile	Lower stratosphere (LS)	8610	km	2	km	1	K	24	h	1	h		Potential realized
Ships RA-V NW	Cloud base height		626	km			0.5	km	4	h	0.8	h		Potential realized
Ships RA-V NW	Cloud cover		626	km			8	% (Max)	12	h	2	h		Potential realized
Ships RA-V NW	Dominant wave direction		626	km				degrees	48	h	2	h		Potential realized
Ships RA-V NW	Sea surface bulk temperature		626	km			1		2	h	6	h		Potential realized
Ships RA-V NW	Significant wave height		626	km				m	48	h	2	h		Potential realized
Ships RA-V NW	Specific humidity profile	Higher troposphere (HT)	8610	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships RA-V NW	Specific humidity profile	Lower troposphere (LT)	8610	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships RA-V NW	Wind profile (horizontal component)	Lower stratosphere (LS)	8610	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships RA-V NW	Wind profile (horizontal component)	Higher troposphere (HT)	8610	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships RA-V NW	Wind profile (horizontal component)	Lower troposphere (LT)	8610	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships RA-V NW	Wind vector over sea surface (horizontal)		626	km			0.5	m/s	3	h	0.8	h		Potential realized
Ships RA-V SW	Air pressure over sea surface		777	km			0.5	hPa	8	h	1	h		Potential realized
Ships RA-V SW	Air specific humidity (at surface)		777	km			5	%	8	h	1	h		Potential realized
Ships RA-V SW	Air temperature (at surface)		777	km			0.2	K	8	h	1	h		Potential realized
Ships RA-V SW	Atmospheric temperature profile	Higher troposphere (HT)	9999	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships RA-V SW	Atmospheric temperature profile	Lower stratosphere (LS)	9999	km	2	km	1	K	24	h	1	h		Potential realized
Ships RA-V SW	Atmospheric temperature profile	Lower troposphere (LT)	9999	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships RA-V SW	Cloud base height		777	km			0.5	km	8	h	1	h		Potential realized
Ships RA-V SW	Cloud cover		777	km			8	% (Max)	8	h	1	h		Potential realized
Ships RA-V SW	Dominant wave direction		777	km				degrees	8	h	1	h		Potential realized
Ships RA-V SW	Sea surface bulk temperature		777	km			1		8	h	1	h		Potential realized
Ships RA-V SW	Significant wave height		777	km				m	8	h	1	h		Potential realized
Ships RA-V SW	Specific humidity profile	Higher troposphere (HT)	9999	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships RA-V SW	Specific humidity profile	Lower troposphere (LT)	9999	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships RA-V SW	Wind profile (horizontal component)	Lower stratosphere (LS)	9999	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships RA-V SW	Wind profile (horizontal component)	Higher troposphere (HT)	9999	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships RA-V SW	Wind profile (horizontal component)	Lower troposphere (LT)	9999	km	0.3	km	2	m/s	24	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Ships RA-V SW	Wind vector over sea surface (horizontal)		777	km			3	m/s	8	h	1	h		Potential realized
Ships RA-VII	Air pressure over sea surface		27592	km			0.5	hPa	8	h	1	h		Potential realized
Ships RA-VII	Air specific humidity (at surface)		27592	km			5	%	4	h	0.5	h		Potential realized
Ships RA-VII	Air temperature (at surface)		27592	km			0.2	K	3	h	1.1	h		Potential realized
Ships RA-VII	Cloud base height		27592	km			0.5	km	4	h	0.8	h		Potential realized
Ships RA-VII	Cloud cover		27592	km			8	% (Max)	12	h	2	h		Potential realized
Ships RA-VII	Dominant wave direction		27592	km				degrees	48	h	2	h		Potential realized
Ships RA-VII	Sea surface bulk temperature		27592	km			1		2	h	6	h		Potential realized
Ships RA-VII	Significant wave height		27592	km				m	48	h	2	h		Potential realized
Ships RA-VII	Wind vector over sea surface (horizontal)		27592	km			0.5	m/s	3	h	0.8	h		Potential realized
Ships SAO CST	Air pressure over sea surface		809	km			0.5	hPa	8	h	1	h		Potential realized
Ships SAO CST	Air specific humidity (at surface)		809	km			5	%	8	h	1	h		Potential realized
Ships SAO CST	Air temperature (at surface)		809	km			0.2	K	8	h	1	h		Potential realized
Ships SAO CST	Cloud base height		809	km			0.5	km	8	h	1	h		Potential realized
Ships SAO CST	Cloud cover		809	km			8	% (Max)	8	h	1	h		Potential realized
Ships SAO CST	Dominant wave direction		809	km				degrees	8	h	1	h		Potential realized
Ships SAO CST	Sea surface bulk temperature		809	km			1		8	h	1	h		Potential realized
Ships SAO CST	Significant wave height		809	km				m	8	h	1	h		Potential realized
Ships SAO CST	Wind vector over sea surface (horizontal)		809	km			0.5	m/s	8	h	1	h		Potential realized
Ships SAO OPN	Air pressure over sea surface		1982	km			0.5	hPa	8	h	1	h		Potential realized
Ships SAO OPN	Air specific humidity (at surface)		1982	km			5	%	8	h	1	h		Potential realized
Ships SAO OPN	Air temperature (at surface)		1982	km			0.2	K	8	h	1	h		Potential realized
Ships SAO OPN	Cloud base height		1982	km			0.5	km	8	h	1	h		Potential realized
Ships SAO OPN	Cloud cover		1982	km			8	% (Max)	8	h	1	h		Potential realized
Ships SAO OPN	Dominant wave direction		1982	km				degrees	8	h	1	h		Potential realized
Ships SAO OPN	Sea surface bulk temperature		1982	km			1		8	h	1	h		Potential realized
Ships SAO OPN	Significant wave height		1982	km				m	8	h	1	h		Potential realized
Ships SAO OPN	Wind vector over sea surface (horizontal)		1982	km			0.5	m/s	8	h	1	h		Potential realized
Ships SIO	Air pressure over sea surface		1591	km			0.5	hPa	8	h	1	h		Potential realized
Ships SIO	Air specific humidity (at surface)		1591	km			5	%	8	h	1	h		Potential realized
Ships SIO	Air temperature (at surface)		1591	km			0.2	K	8	h	1	h		Potential realized
Ships SIO	Atmospheric temperature profile	Higher troposphere (HT)	9999	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships SIO	Atmospheric temperature profile	Lower troposphere (LT)	26016	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships SIO	Atmospheric temperature profile	Lower stratosphere (LS)	26016	km	2	km	1	K	24	h	1	h		Potential realized
Ships SIO	Cloud base height		1591	km			0.5	km	8	h	1	h		Potential realized
Ships SIO	Cloud cover		1591	km			8	% (Max)	8	h	1	h		Potential realized
Ships SIO	Dominant wave direction		1591	km				degrees	8	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Ships SIO	Sea surface bulk temperature		1591	km			1		8	h	1	h		Potential realized
Ships SIO	Significant wave height		1591	km				m	8	h	1	h		Potential realized
Ships SIO	Specific humidity profile	Higher troposphere (HT)	9999	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships SIO	Specific humidity profile	Lower troposphere (LT)	9999	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships SIO	Wind profile (horizontal component)	Lower troposphere (LT)	9999	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships SIO	Wind profile (horizontal component)	Higher troposphere (HT)	26016	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships SIO	Wind profile (horizontal component)	Lower stratosphere (LS)	26016	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships SIO	Wind vector over sea surface (horizontal)		1591	km			0.5	m/s	8	h	1	h		Potential realized
Ships SPO CST	Air pressure over sea surface		1849	km			0.5	hPa	8	h	1	h		Potential realized
Ships SPO CST	Air specific humidity (at surface)		1849	km			5	%	8	h	1	h		Potential realized
Ships SPO CST	Air temperature (at surface)		1849	km			0.2	K	8	h	1	h		Potential realized
Ships SPO CST	Cloud base height		1849	km			0.5	km	8	h	1	h		Potential realized
Ships SPO CST	Cloud cover		1849	km			8	% (Max)	8	h	1	h		Potential realized
Ships SPO CST	Dominant wave direction		1849	km				degrees	8	h	1	h		Potential realized
Ships SPO CST	Sea surface bulk temperature		1849	km			1		8	h	1	h		Potential realized
Ships SPO CST	Significant wave height		1849	km				m	8	h	1	h		Potential realized
Ships SPO CST	Wind vector over sea surface (horizontal)		1849	km			0.5	m/s	8	h	1	h		Potential realized
Ships SPO OPN	Air pressure over sea surface		2546	km			0.5	hPa	8	h	1	h		Potential realized
Ships SPO OPN	Air specific humidity (at surface)		2546	km			5	%	8	h	1	h		Potential realized
Ships SPO OPN	Air temperature (at surface)		2546	km			0.2	K	8	h	1	h		Potential realized
Ships SPO OPN	Cloud base height		2546	km			0.5	km	8	h	1	h		Potential realized
Ships SPO OPN	Cloud cover		2546	km			8	% (Max)	8	h	1	h		Potential realized
Ships SPO OPN	Dominant wave direction		2546	km				degrees	8	h	1	h		Potential realized
Ships SPO OPN	Sea surface bulk temperature		2546	km			1		8	h	1	h		Potential realized
Ships SPO OPN	Significant wave height		2546	km				m	8	h	1	h		Potential realized
Ships SPO OPN	Wind vector over sea surface (horizontal)		2546	km			0.5	m/s	8	h	1	h		Potential realized
Ships TAO CST	Air pressure over sea surface		540	km			0.5	hPa	8	h	1	h		Potential realized
Ships TAO CST	Air specific humidity (at surface)		540	km			5	%	8	h	1	h		Potential realized
Ships TAO CST	Air temperature (at surface)		540	km			0.2	K	8	h	1	h		Potential realized
Ships TAO CST	Cloud base height		540	km			0.5	km	8	h	1	h		Potential realized
Ships TAO CST	Cloud cover		540	km			8	% (Max)	8	h	1	h		Potential realized
Ships TAO CST	Dominant wave direction		540	km				degrees	8	h	1	h		Potential realized
Ships TAO CST	Sea surface bulk temperature		540	km			1		8	h	1	h		Potential realized
Ships TAO CST	Significant wave height		540	km				m	8	h	1	h		Potential realized
Ships TAO CST	Wind vector over sea surface (horizontal)		540	km			0.5	m/s	8	h	1	h		Potential realized
Ships TAO OPN	Air pressure over sea surface		837	km			0.5	hPa	8	h	1	h		Potential realized
Ships TAO OPN	Air specific humidity (at surface)		837	km			5	%	8	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Ships TAO OPN	Air temperature (at surface)		837	km			0.2	K	8	h	1	h		Potential realized
Ships TAO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	4005	km	2	km	1	K	24	h	1	h		Potential realized
Ships TAO OPN	Atmospheric temperature profile	Lower troposphere (LT)	4005	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships TAO OPN	Atmospheric temperature profile	Higher troposphere (HT)	4005	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships TAO OPN	Cloud base height		837	km			0.5	km	8	h	1	h		Potential realized
Ships TAO OPN	Cloud cover		837	km			8	% (Max)	8	h	1	h		Potential realized
Ships TAO OPN	Dominant wave direction		837	km				degrees	8	h	1	h		Potential realized
Ships TAO OPN	Sea surface bulk temperature		837	km			1		8	h	1	h		Potential realized
Ships TAO OPN	Significant wave height		837	km				m	8	h	1	h		Potential realized
Ships TAO OPN	Specific humidity profile	Lower troposphere (LT)	4005	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships TAO OPN	Specific humidity profile	Higher troposphere (HT)	4005	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships TAO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	4005	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships TAO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	4005	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships TAO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	4005	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships TAO OPN	Wind vector over sea surface (horizontal)		837	km			0.5	m/s	8	h	1	h		Potential realized
Ships TPO CST	Air pressure over sea surface		672	km			0.5	hPa	8	h	1	h		Potential realized
Ships TPO CST	Air specific humidity (at surface)		672	km			5	%	8	h	1	h		Potential realized
Ships TPO CST	Air temperature (at surface)		672	km			0.2	K	8	h	1	h		Potential realized
Ships TPO CST	Atmospheric temperature profile	Lower troposphere (LT)	3461	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships TPO CST	Atmospheric temperature profile	Higher troposphere (HT)	3461	km	0.15	km	1	K	24	h	1	h		Potential realized
Ships TPO CST	Atmospheric temperature profile	Lower stratosphere (LS)	3461	km	2	km	1	K	24	h	1	h		Potential realized
Ships TPO CST	Cloud base height		672	km			0.5	km	8	h	1	h		Potential realized
Ships TPO CST	Cloud cover		672	km			8	% (Max)	8	h	1	h		Potential realized
Ships TPO CST	Dominant wave direction		672	km				degrees	8	h	1	h		Potential realized
Ships TPO CST	Sea surface bulk temperature		672	km			1		8	h	1	h		Potential realized
Ships TPO CST	Significant wave height		672	km				m	8	h	1	h		Potential realized
Ships TPO CST	Specific humidity profile	Higher troposphere (HT)	3461	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships TPO CST	Specific humidity profile	Lower troposphere (LT)	3461	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships TPO CST	Wind profile (horizontal component)	Lower troposphere (LT)	3461	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships TPO CST	Wind profile (horizontal component)	Lower stratosphere (LS)	3461	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships TPO CST	Wind profile (horizontal component)	Higher troposphere (HT)	3461	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships TPO CST	Wind vector over sea surface (horizontal)		672	km			0.5	m/s	8	h	1	h		Potential realized
Ships TPO OPN	Air pressure over sea surface		1286	km			0.5	hPa	8	h	1	h		Potential realized
Ships TPO OPN	Air specific humidity (at surface)		1286	km			5	%	8	h	1	h		Potential realized
Ships TPO OPN	Air temperature (at surface)		1286	km			0.2	K	8	h	1	h		Potential realized
Ships TPO OPN	Atmospheric temperature profile	Lower stratosphere (LS)	9999	km	2	km	1	K	24	h	1	h		Potential realized
Ships TPO OPN	Atmospheric temperature profile	Lower troposphere (LT)	9999	km	0.15	km	2	K	24	h	1	h		Potential realized
Ships TPO OPN	Atmospheric temperature profile	Higher troposphere (HT)	9999	km	0.15	km	1	K	24	h	1	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
Ships TPO OPN	Cloud base height		1286	km			0.5	km	8	h	1	h		Potential realized
Ships TPO OPN	Cloud cover		1286	km			8	% (Max)	8	h	1	h		Potential realized
Ships TPO OPN	Dominant wave direction		1286	km				degrees	8	h	1	h		Potential realized
Ships TPO OPN	Sea surface bulk temperature		1286	km			1		8	h	1	h		Potential realized
Ships TPO OPN	Significant wave height		1286	km				m	8	h	1	h		Potential realized
Ships TPO OPN	Specific humidity profile	Lower troposphere (LT)	9999	km	0.15	km	7	%	24	h	1	h		Potential realized
Ships TPO OPN	Specific humidity profile	Higher troposphere (HT)	9999	km	0.15	km	5	%	24	h	1	h		Potential realized
Ships TPO OPN	Wind profile (horizontal component)	Lower stratosphere (LS)	9999	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships TPO OPN	Wind profile (horizontal component)	Higher troposphere (HT)	9999	km	0.3	km	2	m/s	24	d	1	h		Potential realized
Ships TPO OPN	Wind profile (horizontal component)	Lower troposphere (LT)	9999	km	0.3	km	2	m/s	24	h	1	h		Potential realized
Ships TPO OPN	Wind vector over sea surface (horizontal)		1286	km			0.5	m/s	8	h	1	h		Potential realized
Sounder	Atmospheric stability index		10	km				K	1	h	0.5	h		Potential realized
Sounder	Atmospheric temperature profile	Lower stratosphere (LS)	30	km	2	km	2	K	1	h	0.5	h		Potential realized
Sounder	Atmospheric temperature profile	Lower troposphere (LT)	30	km	1	km	2.5	K	1	h	0.5	h		Potential realized
Sounder	Atmospheric temperature profile	Higher troposphere (HT)	30	km	1	km	2.5	K	1	h	0.5	h		Potential realized
Sounder	Cloud cover		10	km			5	% (Max)	1	h	0.5	h		Potential expected
Sounder	Cloud optical thickness		30	km			20	%	1	h	0.5	h		Potential realized
Sounder	Cloud top height		10	km			0.7	km	1	h	0.5	h		Potential expected
Sounder	Cloud top temperature		30	km			2	K	1	h	0.5	h		Potential expected
Sounder	Land surface temperature		10	km			2	K	1	h	0.5	h		Potential expected
Sounder	Outgoing long-wave radiation at		30	km			10	m/s	1	h	12	h		Potential realized
Sounder	Outgoing short-wave radiation at		30	km			10	W/m2	1	h	12	h		Potential realized
Sounder	Ozone profile	Total column	30	km			30	DU	1	h	0.5	h		Potential realized
Sounder	Sea surface bulk temperature		10	km			0.5		1	h	0.5	h		Potential realized
Sounder	Specific humidity profile	Lower troposphere (LT)	30	km	1	km	20	%	1	h	0.5	h		Potential realized
Sounder	Specific humidity profile	Higher troposphere (HT)	30	km	1	km	20	%	1	h	0.5	h		Potential realized
Sounder	Specific humidity profile	Total column	30	km			2	kg/m2	1	h	0.5	h		Potential expected
Sounder	Wind profile (horizontal component)	Higher troposphere (HT)	150	km	5	km	5	m/s	1	d	1	h		Potential realized
SPECTRA	Leaf Area Index (LAI)		0.05	km			20	% (Max)		d	0.125	d		Experimental
SPECTRA	Long-wave Earth surface emissivity		0.2	km			0.5	% (Max)	72	h	3	h		Potential expected
SPECTRA	Snow melting conditions		0.05	km			5	classes		h		h		Experimental
SPECTRA	Snow water equivalent		0.05	km			5	mm	168	h	72	h		Experimental
SPECTRA	Vegetation type		50	m			10	classes		d	3	d		Potential
SSM/I	Cloud water profile (< 100 µm)	Total column	75	km			30	kg/m2	12	h	3	h		Potential realized
SSM/I	Permafrost		50	km			40	% (Max)	0.5	d	2	d		Experimental
SSM/I	Precipitation rate (liquid) at the		15	km				m/s	12	h	3	h		Potential realized
SSM/I	Sea-ice cover		15	km			20	% (Max)	0.5	d	24	d		Potential realized
SSM/I	Snow cover		20	km			10	% (Max)	12	h	24	h		Potential
SSM/I	Snow melting conditions		8	km			5	classes	12	h	24	h		Potential

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
SSM/I	Snow water equivalent		75	km				mm	12	h	3	h		Potential realized
SSM/I	Specific humidity profile	Total column	75	km			1.5	kg/m2	12	h	3	h		Potential realized
SSM/I	Wind speed over sea surface (horizontal)		75	km			1.5	m/s	12	h	3	h		Potential realized
SSM/T-1	Atmospheric temperature profile	Higher troposphere (HT)	200	km	1	km	2.5	K	12	h	3	h		Potential realized
SSM/T-1	Atmospheric temperature profile	Lower stratosphere (LS)	200	km	2	km	2	K	12	h	3	h		Potential realized
SSM/T-1	Atmospheric temperature profile	Lower troposphere (LT)	200	km	1	km	2.5	K	12	h	3	h		Potential realized
SSM/T-2	Specific humidity profile	Higher troposphere (HT)	50	km	1	km	20	%	12	h	3	h		Potential expected
SSM/T-2	Specific humidity profile	Lower troposphere (LT)	50	km	2	km	15	%	12	h	3	h		Potential realized
SSMIS	Atmospheric temperature profile	Lower troposphere (LT)	75	km	1	km	2	K	12	h	2	h	Delay is quicker for local reception	Potential realized
SSMIS	Atmospheric temperature profile	Higher troposphere (HT)	75	km	1	km	2	K	12	h	2	h	Delay is quicker for local reception	Potential realized
SSMIS	Atmospheric temperature profile	Lower stratosphere (LS)	75	km	2	km	2	K	12	h	2	h	Delay is quicker for local reception	Potential realized
SSMIS	Atmospheric temperature profile	Higher stratosphere & mesosphere (HS & M)	75	km	2	km	2	K	12	h	2	h	Delay is quicker for local reception	Potential realized
SSMIS	Cloud water profile (< 100 µm)	Total column	75	km			30	kg/m2	12	h	3	h		Potential realized
SSMIS	Land surface temperature		75	km			3	K	12	h	2	h	Delay is quicker for local reception	Experimental
SSMIS	Permafrost		50	km			40	% (Max)	0.5	d	2	d		Experimental
SSMIS	Precipitation rate (liquid) at the		15	km				m/s	12	h	3	h		Potential realized
SSMIS	Precipitation rate (solid) at the		75	km			5	mm/h	12	h	2	h	Delay is quicker for local reception	Potential realized
SSMIS	Sea-ice cover		15	km			20	% (Max)	0.5	d	24	d		Potential realized
SSMIS	Snow cover		75	km			50	% (Max)	12	h	2	h	Delay is quicker for local reception	Potential expected
SSMIS	Snow water equivalent		75	km				mm	12	h	3	h		Potential realized
SSMIS	Specific humidity profile	Higher troposphere (HT)	75	km	1	km	15	%	12	h	2	h	Delay is quicker for local reception	Potential realized
SSMIS	Specific humidity profile	Total column	75	km			1.5	kg/m2	12	h	3	h		Potential realized
SSMIS	Specific humidity profile	Lower troposphere (LT)	75	km	1	km	15	%	12	h	2	h	Delay is quicker for local reception	Potential realized
SSMIS	Wind speed over sea surface (horizontal)		75	km			1.5	m/s	12	h	3	h		Potential realized
SSU	Atmospheric temperature profile	Higher stratosphere & mesosphere (HS & M)	200	km	2	km	2	K	12	h	2	h		Potential realized
SSU	Atmospheric temperature profile	Lower stratosphere (LS)	200	km	2	km	2	K	12	h	2	h		Potential realized
TAO NIO OPN	Air pressure over sea surface		1580	km			0.1	hPa	9	h	3	h		Potential expected
TAO NIO OPN	Air specific humidity (at surface)		1580	km			4	%	9	h	3	h		Potential expected
TAO NIO OPN	Air temperature (at surface)		1580	km			0.2	K	9	h	3	h		Potential realized
TAO NIO OPN	Downwelling long-wave radiation at the Earth surface		1580	km			3	W/m2	24	h	12	h		Potential expected

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
TAO NIO OPN	Downwelling short-wave radiation at the Earth surface		1580	km			3	W/m2	24	h	12	h		Potential expected
TAO NIO OPN	Ocean salinity		1580	km			0.03	psu	24	d	3	d		Potential expected
TAO NIO OPN	Precipitation rate (liquid) at the		1580	km			1	m/s	24	h	12	h		Potential expected
TAO NIO OPN	Sea surface bulk temperature		1580	km			0.03		9	h	3	h		Potential expected
TAO NIO OPN	Wind vector over sea surface (horizontal)		1580	km			0.3	m/s	9	h	3	h		Potential expected
TAO TAO OPN	Air pressure over sea surface		1640	km			0.1	hPa	8	h	3.7	h	not on GTS	Potential realized
TAO TAO OPN	Air specific humidity (at surface)		1640	km			4	%	8	h	3.7	h	1400 Hor. Res. between 10S and 20N	Potential realized
TAO TAO OPN	Air temperature (at surface)		1640	km			0.2	K	8	h	3.7	h	1400 Hor. Res. between 10S and 20N	Potential realized
TAO TAO OPN	Downwelling short-wave radiation at the Earth surface		1640	km			3	W/m2	24	h	12.3	h	not on GTS	Potential realized
TAO TAO OPN	Ocean salinity		1640	km			0.03	psu	24	d	3.7	d	not on GTS	Potential realized
TAO TAO OPN	Precipitation rate (liquid) at the		1640	km			1	m/s	24	h	12.3	h	not on GTS	Potential realized
TAO TAO OPN	Sea surface bulk temperature		1640	km			0.03		8	h	3.7	h	1400 Hor. Res. between 10S and 20N	Potential realized
TAO TAO OPN	Wind vector over sea surface (horizontal)		1640	km			0.3	m/s	8	h	3.7	h	1400 Hor. Res. between 10S and 20N	Potential realized
TAO TPO OPN	Air pressure over sea surface		3660	km			0.1	hPa	9	h	2.45	h	not on GTS	Potential realized
TAO TPO OPN	Air specific humidity (at surface)		1380	km			4	%	9	h	2.45	h	1080 Hor. Res. between 10S and 10N	Potential realized
TAO TPO OPN	Air temperature (at surface)		1380	km			0.2	K	9	h	2.45	h	1080 Hor. Res. between 10S and 10N	Potential realized
TAO TPO OPN	Downwelling long-wave radiation at the Earth surface		3660	km			3	W/m2	24	h	11.1	h	not on GTS	Potential realized
TAO TPO OPN	Downwelling short-wave radiation at the Earth surface		2588	km			3	W/m2	24	h	11.1	h	not on GTS	Potential realized
TAO TPO OPN	Ocean salinity		2363	km			0.03	psu	24	d	2.45	d	not on GTS	Potential realized
TAO TPO OPN	Precipitation rate (liquid) at the		2363	km			1	m/s	24	h	11.1	h	not on GTS	Potential realized
TAO TPO OPN	Sea surface bulk temperature		1380	km			0.03		9	h	2.45	h	1080 Hor. Res. between 10S and 10N	Potential realized
TAO TPO OPN	Wind vector over sea surface (horizontal)		1380	km			0.3	m/s	9	h	2.45	h	1080 Hor. Res. between 10S and 10N	Potential realized
TM	Land cover		30	m			20	classes	0.04	y	2	d		Potential expected
TM	Vegetation type		30	m			20	classes	16	d	7	d		Potential realized
TMI	Specific humidity profile	Total column	10	km			1.5	kg/m2	80	h	720	h		Experimental
TOMS	Ozone profile	Total column	50	km			20	DU	12	h	2	h		Experimental
TOVS (HIRS/2 + MSU + SSU)	Atmospheric temperature profile	Higher troposphere (HT)	80	km	1	km	2	K	12	h	2	h		Potential realized
TOVS (HIRS/2 + MSU + SSU)	Atmospheric temperature profile	Lower troposphere (LT)	80	km	1	km	2	K	12	h	2	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
TOVS (HIRS/2 + MSU + SSU)	Atmospheric temperature profile	Lower stratosphere (LS)	80	km	2	km	1.5	K	12	h	2	h		Potential realized
TOVS (HIRS/2 + MSU + SSU)	Specific humidity profile	Total column	80	km			2	kg/m2	12	h	2	h		Potential expected
TOVS (HIRS/2 + MSU + SSU)	Specific humidity profile	Lower troposphere (LT)	80	km	1	km	15	%	12	h	2	h		Potential realized
TOVS (HIRS/2 + MSU + SSU)	Specific humidity profile	Higher troposphere (HT)	80	km	1	km	20	%	12	h	2	h		Potential realized
VAS	Atmospheric stability index		100	km				K	1	h	0.5	h		Potential realized
VAS	Atmospheric temperature profile	Lower stratosphere (LS)	100	km	2	km	2	K	1	h	0.5	h		Potential realized
VAS	Atmospheric temperature profile	Higher troposphere (HT)	100	km	1	km	2.5	K	1	h	0.5	h		Potential realized
VAS	Atmospheric temperature profile	Lower troposphere (LT)	100	km	1	km	2.5	K	1	h	0.5	h		Potential realized
VAS	Cloud cover		10	km			15	% (Max)	1	h	0.5	h		Potential expected
VAS	Cloud top height		100	km			0.7	km	1	h	0.5	h		Potential expected
VAS	Cloud top temperature		100	km			2	K	1	h	0.5	h		Potential expected
VAS	Land surface temperature		10	km			2	K	1	h	0.5	h		Potential expected
VAS	Outgoing long-wave radiation at		100	km			10	m/s	1	h	12	h		Potential realized
VAS	Outgoing short-wave radiation at		100	km			10	W/m2	1	h	12	h		Potential realized
VAS	Precipitation rate (liquid) at the		10	km				m/s	1	h	0.5	h		Potential realized
VAS	Precipitation rate (solid) at the		50	km				mm/h	1	h	0.5	h		Potential realized
VAS	Sea surface bulk temperature		10	km			0.5		1	h	0.5	h		Potential realized
VAS	Specific humidity profile	Higher troposphere (HT)	100	km	1	km	20	%	1	h	0.5	h		Potential realized
VAS	Specific humidity profile	Lower troposphere (LT)	100	km	1	km	15	%	1	h	0.5	h		Potential realized
VEGETATION	Land cover		1000	m			15	classes	0.01	y	3	d		Experimental
VEGETATION	Leaf Area Index (LAI)		1	km			20	% (Max)	30	d	3	d		Potential
VHRR	Wind profile (horizontal component)	Lower troposphere (LT)	150	km	5	km	4	m/s	1	h	2	h		Potential realized
VHRR	Wind profile (horizontal component)	Higher troposphere (HT)	150	km	5	km	6	m/s	1	d	2	h		Potential expected
VIIRS	Aerosol profile	Total column	5	km				%	12	h	2	h		Potential
VIIRS	Atmospheric temperature profile	Lower troposphere (LT)	5	km	1	km	2.5	K	12	h	2	h		Potential
VIIRS	Atmospheric temperature profile	Higher troposphere (HT)	5	km	1	km	2.5	K	12	h	2	h		Potential
VIIRS	Cloud cover		5	km			5	% (Max)	12	h	2	h		Potential
VIIRS	Cloud imagery		0.4	km					12	h	2	h		Experimental
VIIRS	Cloud optical thickness		5	km			20	%	12	h	2	h		Potential
VIIRS	Cloud top height		5	km			0.7	km	12	h	2	h		Experimental
VIIRS	Cloud top temperature		5	km			2	K	12	h	2	h		Experimental
VIIRS	Cloud type		1	km			8	classes	12	h	2	h		Experimental
VIIRS	Fire area		1	m2			5	% (Max)	0.5	d	0.08	d		Potential
VIIRS	Fire temperature		1	K			50	K	0.5	d	0.08	d		Potential
VIIRS	Fractional Photosynthetically Active Radiation (FPAR)		0.4	km			15	% (Max)	0.5	d	2	d		Experimental
VIIRS	Land cover		400	m			15	classes	0.01	y	0.08	d		Potential

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
VIIRS	Land surface imagery		400	m					2	d	2	d		Potential
VIIRS	Land surface temperature		1	km			1	K	12	h	2	h		Potential
VIIRS	Leaf Area Index (LAI)		0.4	km			20	% (Max)	30	d	0.08	d		Potential
VIIRS	Normalized Differential Vegetation Index (NDVI)		0.4	km			5	% (Max)	0.5	d	0.08	d		Potential
VIIRS	Outgoing long-wave radiation at		5	km			10	m/s	12	h	2	h		Potential
VIIRS	Outgoing short-wave radiation at		5	km			10	W/m2	12	h	2	h		Potential
VIIRS	Ozone profile	Total column	5	km			30	DU	12	h	2	h		Potential
VIIRS	Sea surface bulk temperature		1	km			0.3		12	h	2	h		Potential
VIIRS	Snow cover		0.4	km			5	% (Max)	12	h	2	h		Experimental
VIIRS	Specific humidity profile	Total column	5	km			2.5	kg/m2	12	h	2	h		Potential
VIIRS	Specific humidity profile	Higher troposphere (HT)	5	km	3	km	20	%	12	h	2	h		Potential
VIIRS	Specific humidity profile	Lower troposphere (LT)	5	km	2	km	20	%	12	h	2	h		Potential
VIIRS	Vegetation type		400	m			10	classes	1	d	0.08	d		Potential
VISSR (FY-2)	Cloud cover		20	km			15	% (Max)	1	h	1	h		Potential expected
VISSR (FY-2)	Cloud imagery		5	km					1	h	1	h		Potential expected
VISSR (FY-2)	Cloud top height		50	km			1	km	1	h	1	h		Potential expected
VISSR (FY-2)	Cloud top temperature		50	km			2	K	1	h	1	h		Potential expected
VISSR (FY-2)	Cloud type		50	km			3	classes	1	h	1	h		Potential expected
VISSR (FY-2)	Outgoing long-wave radiation at		50	km			20	m/s	1	h	12	h		Potential expected
VISSR (FY-2)	Outgoing short-wave radiation at		50	km			20	W/m2	1	h	12	h		Potential expected
VISSR (FY-2)	Precipitation rate (liquid) at the		5	km			10	m/s	1	h	3	h		Potential expected
VISSR (FY-2)	Sea surface bulk temperature		50	km			1		1	h	3	h		Potential expected
VISSR (FY-2)	Wind profile (horizontal component)	Lower troposphere (LT)	50	km	5	km	2	m/s	1	h	2	h		Potential expected
VISSR (FY-2)	Wind profile (horizontal component)	Higher troposphere (HT)	50	km	5	km	5	m/s	1	d	2	h		Potential expected
VISSR (GMS-5)	Cloud cover		20	km			15	% (Max)	1	h	1.5	h		Potential realized
VISSR (GMS-5)	Cloud imagery		5	km					1	h	0.1	h		Potential realized
VISSR (GMS-5)	Cloud top height		50	km			1	km	1	h	1.5	h		Potential realized
VISSR (GMS-5)	Cloud top temperature		50	km			2	K	3	h	1.5	h		Potential realized
VISSR (GMS-5)	Cloud type		50	km			2	classes	3	h	1.5	h		Potential realized
VISSR (GMS-5)	Outgoing long-wave radiation at		50	km			30	m/s	1	h	6	h		Potential realized
VISSR (GMS-5)	Outgoing short-wave radiation at		50	km				W/m2	1	h	6	h		Potential realized
VISSR (GMS-5)	Precipitation rate (liquid) at the		50	km				m/s	1	h	0.1	h		Potential realized
VISSR (GMS-5)	Precipitation rate (solid) at the		50	km				mm/h	1	h	0.1	h		Potential realized
VISSR (GMS-5)	Sea surface bulk temperature		50	km			1		1	h	1.5	h		Potential realized
VISSR (GMS-5)	Specific humidity profile	Higher troposphere (HT)	50	km	3	km	20	%	1	h	1	h		Potential realized
VISSR (GMS-5)	Specific humidity profile	Lower troposphere (LT)	50	km	2	km	20	%	1	h	0.5	h		Potential realized
VISSR (GMS-5)	Wind profile (horizontal component)	Lower troposphere (LT)	150	km	5	km	3	m/s	1	h	2	h		Potential realized
VISSR (GMS-5)	Wind profile (horizontal component)	Higher troposphere (HT)	150	km	5	km	5	m/s	1	d	2	h		Potential realized
WND P 449 RA-IV C	Wind profile (horizontal component)	Higher troposphere (HT)	700	km	0.32	km	1.5	m/s	1	d	0.5	h		Potential realized

Instrument	Parameter		Hor Res		Vert Res		Accuracy		Obsv Cycle		Delay		Comment	Con
WND P 449 RA-IV C	Wind profile (horizontal component)	Lower troposphere (LT)	700	km	0.32	km	1.5	m/s	1	h	0.5	h		Potential realized
WND P 915 RA-IV C	Wind profile (horizontal component)	Higher troposphere (HT)	1000	km	0.1	km	2	m/s	1	d	0.5	h		Potential realized
WND P 915 RA-IV C	Wind profile (horizontal component)	Lower troposphere (LT)	1000	km	0.1	km	2	m/s	1	h	0.5	h		Potential realized

APPENDIX B

WMO requirements without match in user estimates but with a match in space agency estimates

WMO requirements without match in user estimates but with a match in space agency estimates

30-Jun-04

Parameter / Instrument	Hor Res	Vert Res	Accuracy	Observing Cycle	Delay of availability
Cloud ice profile Higher troposphere (HT)					
CPR (Cloudsat)	3 km	0.5 km	50 %	h	h
Cloud ice profile Lower troposphere (LT)					
CPR (Cloudsat)	3 km	0.5 km	50 %	h	h
Cloud ice profile Total column					
CMIS	50 km		5 g/m2	12 h	2 h
Cloud water profile (< 100 µm) Higher troposphere (HT)					
CPR (Cloudsat)	3 km	0.5 km	25 %	h	h
Cloud water profile (< 100 µm) Lower troposphere (LT)					
ACE-FTS	km	km	%	h	h
AMSR-E	km	km	%	h	h
AMSU-B	km	km	%	h	h
APS	km	km	%	h	h
ATLID	km	km	%	h	h
CPR	km	km	%	h	h
CPR (Cloudsat)	3 km	0.5 km	25 %	h	h
GIFTS	km	km	%	h	h
HSB	km	km	%	h	h
IIR	km	km	%	h	h
IKFS-2	km	km	%	h	h
IVISSR (FY-2)	km	km	%	h	h
MAESTRO	km	km	%	h	h
MERIS	km	km	%	h	h
MHS	km	km	%	h	h
MR-2000M1	km	km	%	h	h
MTVZA	km	km	%	h	h
RM-08	km	km	%	h	h
Cloud water profile (> 100 µm) Higher troposphere (HT)					
CPR (Cloudsat)	3 km	0.5 km	25 %	h	h
Cloud water profile (> 100 µm) Lower troposphere (LT)					
CPR (Cloudsat)	3 km	0.5 km	25 %	h	h
TMI	21 km	2.5 km	%	24 h	24 h

Parameter	Hor Res	Vert Res	Accuracy	Observing Cycle	Delay of availability
Instrument					
Cloud water profile (> 100 µm) Total column					
ATMS	50 km		30 kg/m2	12 h	2 h
CPR (Cloudsat)	km		kg/m2	h	h
MHS	30 km		10 kg/m2	12 h	3 h
Ozone profile Higher stratosphere & mesosphere (HS & M)					
GOMOS	300 km	1 km	%	36 h	3 h
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS	km	km	%	h	h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	3 h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
OSIRIS	km	km	5 %	h	h
SAGE III	100 km	1 km	6 %	48 h	24 h
SBUV/2	200 km	8 km	5 %	24 h	3 h
SBUV/3	200 km	8 km	10 %	24 h	3 h
SCIAMACHY	500 km	3 km	%	36 h	3 h
SOFIS	300 km	1 km	%	h	h
SOPRANO	50000 km	2 km	%	3 h	h
Specific humidity profile Higher stratosphere & mesosphere (HS & M)					
AIRS	50 km	2 km	30 %	12 h	24 h
GOMOS	300 km	1 km	%	36 h	3 h
HiRDLS	400 km	1 km	%	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	3 h
MLS (EOS-Aura)	200 km	2 km	10 %	12 h	h
SAGE III	100 km	1 km	%	48 h	24 h
SMR	500 km	2 km	20 %	h	h
SOFIS	300 km	1 km	%	h	h
SOPRANO	50000 km	4 km	%	3 h	h
Trace gas profile BrO Higher stratosphere & mesosphere (HS & M)					
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
OSIRIS	km	km	20 %	h	h
Trace gas profile BrO Higher troposphere (HT)					
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
Trace gas profile BrO Lower stratosphere (LS)					
MASTER	1000000 km	4 km	%	3 h	h
MIPAS	300 km	3 km	%	36 h	h

Parameter	Hor Res	Vert Res	Accuracy	Observing Cycle	Delay of availability
Instrument					
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
OSIRIS	km	km	20 %	h	h
SAGE III	100 km	1 km	20 %	48 h	h
SCIAMACHY	500 km	3 km	%	36 h	3 h
SOPRANO	50000 km	4 km	%	3 h	h
Trace gas profile BrO Lower troposphere (LT)					
SAGE I	km	km	%	h	h
SAGE II	km	km	%	h	h
Trace gas profile CFC 11 Higher stratosphere & mesosphere (HS & M)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS	km	km	%	h	h
ILAS-II	300 km	1 km	%	h	h
SOFIS	300 km	1 km	%	h	h
Trace gas profile CFC 11 Higher troposphere (HT)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	h
SOFIS	300 km	1 km	%	h	h
Trace gas profile CFC 11 Lower stratosphere (LS)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	h
SOFIS	300 km	1 km	%	h	h
Trace gas profile CFC 12 Higher stratosphere & mesosphere (HS & M)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
Trace gas profile CFC 12 Higher troposphere (HT)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
SOFIS	300 km	1 km	%	h	h
Trace gas profile CFC 12 Lower stratosphere (LS)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	h
SOFIS	300 km	1 km	%	h	h
Trace gas profile CH4 Higher stratosphere & mesosphere (HS & M)					

Parameter	Hor Res	Vert Res	Accuracy	Observing Cycle	Delay of availability
Instrument					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS	km	km	%	h	h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	3 h
SOFIS	300 km	1 km	%	h	h
TES	169 km	6 km	%	96 h	24 h
Trace gas profile ClO Higher stratosphere & mesosphere (HS & M)					
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SMR	500 km	2 km	20 %	h	h
Trace gas profile ClO Higher troposphere (HT)					
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
Trace gas profile ClO Lower stratosphere (LS)					
MASTER	1000000 km	4 km	%	3 h	h
MIPAS	300 km	3 km	%	36 h	h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SAGE III	100 km	1 km	20 %	48 h	h
SCIAMACHY	500 km	3 km	%	36 h	3 h
SMR	500 km	2 km	20 %	h	h
SOPRANO	50000 km	4 km	%	3 h	h
Trace gas profile ClONO2 Higher stratosphere & mesosphere (HS & M)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SOFIS	300 km	1 km	%	h	h
Trace gas profile ClONO2 Higher troposphere (HT)					
ILAS-II	300 km	1 km	%	h	h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SOFIS	300 km	1 km	%	h	h
Trace gas profile ClONO2 Lower stratosphere (LS)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MASTER	1000000 km	4 km	%	3 h	h
MIPAS	300 km	3 km	%	36 h	h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SAGE III	100 km	1 km	20 %	48 h	h
SCIAMACHY	500 km	3 km	%	36 h	3 h
SOFIS	300 km	1 km	%	h	h

Parameter	Hor Res	Vert Res	Accuracy	Observing Cycle	Delay of availability
Instrument					
SOPRANO	50000 km	4 km	%	3 h	h
Trace gas profile HCl Higher stratosphere & mesosphere (HS & M)					
SOPRANO	50000 km	2 km	%	3 h	h
Trace gas profile HCl Higher troposphere (HT)					
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
Trace gas profile HCl Lower stratosphere (LS)					
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SOPRANO	50000 km	2 km	%	3 h	h
Trace gas profile HNO3 Higher stratosphere & mesosphere (HS & M)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS	km	km	%	h	h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	3 h
SOFIS	300 km	1 km	%	h	h
Trace gas profile HNO3 Higher troposphere (HT)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	3 h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SOFIS	300 km	1 km	%	h	h
TES	169 km	3 km	%	96 h	24 h
Trace gas profile HNO3 Lower stratosphere (LS)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MASTER	50000 km	2.5 km	%	3 h	h
MIPAS	300 km	3 km	%	36 h	3 h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SMR	500 km	2 km	20 %	h	h
SOFIS	300 km	1 km	%	h	h
TES	169 km	3 km	%	96 h	24 h
Trace gas profile HNO3 Lower troposphere (LT)					
TES	169 km	3 km	%	96 h	24 h
Trace gas profile N2O Higher stratosphere & mesosphere (HS & M)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS	km	km	%	h	h
ILAS-II	300 km	1 km	%	h	h

Parameter	Hor Res	Vert Res	Accuracy	Observing Cycle	Delay of availability
Instrument					
MIPAS	300 km	3 km	%	36 h	3 h
SOFIS	300 km	1 km	%	h	h
SOPRANO	50000 km	2 km	%	3 h	h
Trace gas profile N2O Higher troposphere (HT)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	3 h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SOFIS	300 km	1 km	%	h	h
TES	169 km	6 km	%	96 h	24 h
Trace gas profile N2O Lower stratosphere (LS)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MIPAS	300 km	3 km	%	36 h	3 h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	24 h
SMR	500 km	2 km	20 %	h	h
SOFIS	300 km	1 km	%	h	h
SOPRANO	50000 km	2 km	%	3 h	h
TES	169 km	6 km	%	96 h	24 h
Trace gas profile NO Higher stratosphere & mesosphere (HS & M)					
MIPAS	300 km	3 km	%	36 h	h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	h
SOPRANO	50000 km	2 km	%	3 h	h
Trace gas profile NO Higher troposphere (HT)					
TES	169 km	3 km	%	96 h	24 h
Trace gas profile NO Lower stratosphere (LS)					
MIPAS	300 km	3 km	%	36 h	h
MLS (EOS-Aura)	200 km	2 km	5 %	12 h	h
SOPRANO	50000 km	4 km	%	3 h	h
TES	169 km	3 km	%	96 h	24 h
Trace gas profile NO Lower troposphere (LT)					
TES	169 km	3 km	%	96 h	24 h
Trace gas profile NO2 Higher stratosphere & mesosphere (HS & M)					
GOMOS	300 km	1 km	%	36 h	3 h
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h

Parameter	Hor Res	Vert Res	Accuracy	Observing Cycle	Delay of availability
Instrument					
MIPAS	300 km	3 km	%	36 h	h
OSIRIS	km	km	15 %	h	h
SAGE III	100 km	1 km	10 %	48 h	720 h
SOFIS	300 km	1 km	%	h	h
TES	169 km	3 km	%	96 h	24 h
Trace gas profile NO2 Higher troposphere (HT)					
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MASTER	50000 km	2.5 km	%	3 h	h
SAGE III	100 km	1 km	10 %	48 h	720 h
SOFIS	300 km	1 km	%	h	h
TES	169 km	3 km	%	96 h	24 h
Trace gas profile NO2 Lower stratosphere (LS)					
GOMOS	300 km	1 km	%	36 h	3 h
HiRDLS	400 km	1 km	10 %	12 h	24 h
ILAS-II	300 km	1 km	%	h	h
MASTER	50000 km	2.5 km	%	3 h	h
MIPAS	300 km	3 km	%	36 h	h
OSIRIS	km	km	15 %	h	h
SAGE III	100 km	1 km	10 %	48 h	720 h
SOFIS	300 km	1 km	%	h	h
Trace gas profile NO2 Lower troposphere (LT)					
SAGE I	km	km	%	h	h
SAGE II	km	km	%	h	h
TES	169 km	3 km	%	96 h	24 h
Trace gas profile NO2 Total column					
GOME	320 km		20 %	72 h	336 h
SCIAMACHY	320 km		%	36 h	h

APPENDIX C

WMO OBSERVATIONAL DATA REQUIREMENTS

WMO 2004 rqmts Max/Min

30-Jun-04

Requirement	Application: Hor Res	Hor Min	Vert Res	Vert Min	Obs Cycle	Obs Min	Delay avail	Delay Min	Accuracy	Accuracy Min	Confidence	Remarks	Associate Ident	Source
Aero Met														
Atmospheric temperature profile - Lower troposphere (LT)	50 km	100 km	0.15 km	0.6 km	1 h	3 h	1 h	2 h	2 K	5 K	Firm		WMO_AeM_005	23/6/2000, ETODRRGO S-3
Cloud drop size (at cloud top)	50 km	100 km			1 h	3 h	1 h	2 h	15 µm	30 µm	Firm	gnd - Fl 260	WMO_AeM_010	23/6/2000, ETODRRGO S-3
Cloud ice profile - Higher troposphere (HT)	50 km	100 km	0.15 km	0.6 km	1 h	3 h	1 h	2 h	10 %	25 %	Firm		WMO_AeM_008	23/6/2000, ETODRRGO S-3
Cloud ice profile - Lower troposphere (LT)	50 km	100 km	0.15 km	0.6 km	1 h	3 h	1 h	2 h	10 %	25 %	Firm		WMO_AeM_009	23/6/2000, ETODRRGO S-3
Cloud water profile (< 100 µm) - Lower troposphere (LT)		50 km	100 km	0.15 km	0.6 km	1 h	3 h	1 h	2 h	10 %	25 %		Firm	WMO_AeM_006 23/6/2000, ETODRRGO S-3
Cloud water profile (> 100 µm) - Lower troposphere (LT)		50 km	100 km	0.15 km	0.6 km	1 h	3 h	1 h	2 h	10 %	25 %		Firm	WMO_AeM_007 23/6/2000, ETODRRGO S-3
Specific humidity profile - Lower troposphere (LT)	50 km	100 km	0.15 km	0.6 km	1 h	3 h	1 h	2 h	5 %	10 %	Firm		WMO_AeM_004	23/6/2000, ETODRRGO S-3
Wind profile (horizontal component) - Higher troposphere (HT)	50 km	100 km	0.15 km	0.6 km	0.0833	0.167 h	1 h	3 h	2 m/s	5 m/s	Firm	Near steep topography or jet streams min requirements for vertical gradient information 5m/s1000ft	WMO_AeM_001	23/6/2000, ETODRRGO S-3
Wind profile (horizontal component) - Lower stratosphere (LS)	50 km	100 km	0.15 km	0.6 km	0.0833	0.167 h	1 h	3 h	2 m/s	5 m/s	Firm	Near steep topography or jet streams min requirements for vertical gradient information 5m/s1000ft	WMO_AeM_002	23/6/2000, ETODRRGO S-3
Wind profile (horizontal component) - Lower troposphere (LT)	50 km	100 km	0.15 km	0.6 km	0.0833	0.167 h	1 h	3 h	2 m/s	5 m/s	Firm	Near steep topography or jet streams min requirements for vertical gradient information 5m/s1000ft	WMO_AeM_003	23/6/2000, ETODRRGO S-3
Agricultural Meteorology														

Application

Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Fire area	0.01 km	10 km			0.25 d	1 d	0.0416	0.25 d	5 % (Max)	20 % (Max)	Reasonable	Saturation lvl not reached before fire detected	WMO_S_059A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Fire temperature	0.01 km	10 km			0.25 d	1 d	0.0416	0.25 d	50 K	200 K	Reasonable	Saturation lvl not reached before fire detected	WMO_S_059C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Land cover	100 m	1000 m			1 y	2 y	10 d	30 d	10 classes	4 classes	Reasonable	Land utilization map composition	WMO_Sfc_N003A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Land surface temperature	0.1 km	10 km			1 h	72 h	3 h	24 h	0.3 K	2 K	Reasonable	Detection of areas affected by frost; drought eval	WMO_Sfc_008D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Leaf Area Index (LAI)	0.01 km	10 km			5 d	7 d	1 d	5 d	5 % (Max)	10 % (Max)	Reasonable	Evapotranspiration estimation; crop productivity	WMO_Sfc_N004A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Normalized Differential Vegetation Index (NDVI)	1 km	10 km			1 d	7 d	1 d	5 d	5 % (Max)	10 % (Max)	Reasonable	Event detection; crop state estimation	WMO_S_254D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Photosynthetically Active Radiation (PAR)	5 km	100 km			0.0416	7 d	1 d	5 d	5 % (Max)	20 % (Max)	Reasonable	Photosynthesis estimation; crop procductivity eval	WMO_Sfc_N061	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Precipitation index (daily cumulative)	10 km	50 km			24 h	72 h	24 h	48 h	2 mm/d	10 mm/d	Reasonable	Evaluation of soil moisture and avail to plants	WMO_Sfc_017B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Snow cover	1 km	10 km			120 h	168 h	24 h	144 h	2 % (Max)	10 % (Max)	Reasonable	Evaluation of crop wintering	WMO_Sfc_023C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application														
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Snow water equivalent	1 km	10 km			168 h	720 h	24 h	168 h	5 mm	500 mm	Reasonable	Evaluation of soil water storage in spring	WMO_Sfc_027C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Soil moisture	0.1 km	1 km			1 d	7 d	1 d	5 d	10 g/kg	50 g/kg	Reasonable	Crop state and productivity estimation	WMO_Sfc_012F	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Soil type	0.1 km	10 km			1 y	2 y	10 d	30 d	15 classes	5 classes	Reasonable	Crop state estimation, soil moisture evaluation	WMO_Sfc_N060	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Vegetation type	50 m	500 m			30 d	60 d	1 d	7 d	30 classes	5 classes	Reasonable	Land utilization map composition; crop eval	WMO_Sfc_N058 A	20/10/2003, ET ODRRGOS, Geneva,Nov 2003
Atmospheric chemistry														
Aerosol profile - Higher stratosphere & mesosphere (HS & M)	50 km	500 km	1 km	10 km	6 h	24 h	12 h	168 h	10 %	20 %	Firm	Ozone chem, Rad climatology	WMO_GAW_03 8A	24/5/2002, WMO TD No. 1052, SAT-26
Aerosol profile - Higher troposphere (HT)	50 km	500 km	1 km	5 km	6 h	24 h	12 h	168 h	10 %	20 %	Firm	Ozone chem, Rad climatology	WMO_GAW_03 2E	24/5/2002, WMO TD No. 1052, SAT-26
Aerosol profile - Lower stratosphere (LS)	50 km	500 km	1 km	5 km	6 h	24 h	12 h	168 h	10 %	20 %	Firm	Ozone chem, Rad climatology	WMO_GAW_03 2G	24/5/2002, WMO TD No. 1052, SAT-26
Aerosol profile - Lower troposphere (LT)	50 km	500 km	1 km	5 km	6 h	24 h	12 h	168 h	5 %	20 %	Firm	Ozone chem, Rad climatology	WMO_GAW_02 3B	24/5/2002, WMO TD No. 1052, SAT-26
Cloud imagery	100 km	200 km			3 h	12 h	72 h	72 h			Firm	Rad climatology	WMO_GAW_02	24/5/2002, WMO TD No. 1052, SAT-26
Ozone profile - Higher stratosphere & mesosphere (HS & M)	50 km	500 km	1 km	5 km	3 h	48 h	72 h	168 h	5 %	25 %	Firm	Strat chem/clim, Rad effects/clim, Ozone chem	WMO_GAW_04 2D	24/5/2002, WMO TD No. 1052, SAT-26

Application

Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Ozone profile - Higher troposphere (HT)	50 km	500 km	1 km	5 km	3 h	168 h	72 h	168 h	3 %	20 %	Firm	Trop chem/clim, Rad effects/clim, Ozone chem	WMO_GAW_04	24/5/2002, WMO TD No. 1052, SAT-26
Ozone profile - Lower stratosphere (LS)	50 km	500 km	1 km	5 km	3 h	168 h	72 h	168 h	3 %	20 %	Firm	Oxid cap, Rad effects/clim, Strat climat, O3 chem	WMO_GAW_04	24/5/2002, 5L WMO TD No. 1052, SAT-26
Ozone profile - Lower troposphere (LT)	50 km	500 km	1 km	5 km	3 h	168 h	72 h	168 h	3 %	20 %	Firm	Trop chem/clim, Rad effects/clim, Oxid cap	WMO_GAW_00	24/5/2002, WMO TD No. 1052, SAT-26
Ozone profile - Total column	25 km	100 km			6 h	48 h	3 h	168 h	6 DU	20 DU	Firm	UVB pred/anal, Dynamics	WMO_GAW_01	24/5/2002, WMO TD No. 1052, SAT-26
Specific humidity profile - Higher stratosphere & mesosphere (HS & M)	50 km	500 km	1 km	5 km	12 h	72 h	72 h	168 h	5 %	20 %	Firm	Atmos dynamics, Rad clim, Ozone chem, 5% RH	WMO_GAW_04 2E	24/5/2002, WMO TD No. 1052, SAT-26
Specific humidity profile - Higher troposphere (HT)	50 km	500 km	1 km	5 km	12 h	72 h	72 h	168 h	5 %	20 %	Firm	Oxid cap, Atm dyncs, Rad climat, Ozone chem, 5% RH	WMO_GAW_04	24/5/2002, 5K WMO TD No. 1052, SAT-26
Specific humidity profile - Lower stratosphere (LS)	50 km	500 km	1 km	5 km	12 h	72 h	72 h	168 h	5 %	20 %	Firm	Oxid cap, Atm dyncs, Rad climat, Ozone chem, 5% RH	WMO_GAW_04	24/5/2002, 5M WMO TD No. 1052, SAT-26
Specific humidity profile - Lower troposphere (LT)	50 km	500 km	1 km	5 km	6 h	72 h	72 h	168 h	5 %	20 %	Firm	Oxid cap, Atm dyncs, Rad clim, Ozone chem, 10% RH	WMO_GAW_01 4F	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile BrO - Higher stratosphere & mesosphere (HS & M)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_03 6C	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile BrO - Higher troposphere (HT)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_04 6C	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile BrO - Lower stratosphere (LS)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_04 6G	24/5/2002, WMO TD No. 1052, SAT-26

Requirement	Application										Confidence	Remarks	Associate	Source
	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min			Ident	
Trace gas profile BrO - Lower troposphere (LT)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_04	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CFC 11 - Higher stratosphere & mesosphere (HS & M)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Rad climatology, Atmos dynamics	WMO_GAW_03 9A	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CFC 11 - Higher troposphere (HT)		100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Rad climatology 2A	WMO_GAW_03 24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CFC 11 - Lower stratosphere (LS)		100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Atmos dynamics 2C	WMO_GAW_03 24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CFC 11 - Lower troposphere (LT)		100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Rad climatology 7A	WMO_GAW_04 24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CFC 12 - Higher stratosphere & mesosphere (HS & M)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Rad climatology, Atmos dynamics	WMO_GAW_03 9B	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CFC 12 - Higher troposphere (HT)		100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Rad climatology 2B	WMO_GAW_03 24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CFC 12 - Lower stratosphere (LS)		100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Atmos dynamics 2D	WMO_GAW_03 24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CFC 12 - Lower troposphere (LT)		100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Rad climatology 7B	WMO_GAW_04 24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CH4 - Higher stratosphere & mesosphere (HS & M)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	2 %	10 %	Firm	Ozone chem	WMO_GAW_03	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CH4 - Higher troposphere (HT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	2 %	10 %	Firm	Oxidizing cap, Atm dyncs, O3 chem, Rad clim	WMO_GAW_04	24/5/2002, WMO TD No. 1052, SAT-26

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Trace gas profile CH4 - Lower stratosphere (LS)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	2 %	10 %	Firm	Oxidizing cap, Atm dyncs, O3 chem, Rad clim	WMO_GAW_045E	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CH4 - Lower troposphere (LT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	2 %	10 %	Firm	C budget, bdry	WMO_GAW_01	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile ClO - Higher stratosphere & mesosphere (HS & M)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_036B	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile ClO - Higher troposphere (HT)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_046D	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile ClO - Lower stratosphere (LS)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_046F	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile ClO - Lower troposphere (LT)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_047C	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile ClONO2 - Higher stratosphere & mesosphere (HS & M)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_036D	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile ClONO2 - Higher troposphere (HT)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_046E	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile ClONO2 - Lower stratosphere (LS)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_046H	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CO - Higher troposphere (HT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap	WMO_GAW_045A	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CO - Lower stratosphere (LS)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap	WMO_GAW_045F	24/5/2002, WMO TD No. 1052, SAT-26

	Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Trace gas profile CO - Lower troposphere (LT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap	WMO_GAW_014A	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile CO2 - Lower troposphere (LT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	2 %	5 %	Firm	C budget, bdry	WMO_GAW_015A	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile COS - Higher troposphere (HT)	100 km	500 km	1 km	3 km	12 h	72 h	24 h	168 h	15 %	25 %	Firm	Strato aerosols	WMO_GAW_04	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile COS - Lower stratosphere (LS)	100 km	500 km	1 km	3 km	12 h	72 h	24 h	168 h	15 %	25 %	Firm	Strato aerosols	WMO_GAW_047K	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile COS - Lower troposphere (LT)	100 km	500 km	1 km	3 km	12 h	72 h	24 h	168 h	15 %	25 %	Firm	Strato aerosols	WMO_GAW_04	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile HCHO - Total column	50 km	500 km			24 h	48 h	72 h	168 h	5 %	15 %	Firm	Ozone precursor	WMO_GAW_047H	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile HCl - Higher stratosphere & mesosphere (HS & M)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	2 %	5 %	Firm	Ozone chem	WMO_GAW_037A	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile HCl - Higher troposphere (HT)	100 km	500 km	1 km	1.5 km	6 h	24 h	72 h	168 h	2 %	5 %	Firm	Ozone chem	WMO_GAW_030E	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile HCl - Lower stratosphere (LS)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	2 %	5 %	Firm	Ozone chem	WMO_GAW_030C	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile HNO3 - Higher stratosphere & mesosphere (HS & M)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Atmos dynamics, Ozone chem	WMO_GAW_042B	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile HNO3 - Higher troposphere (HT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap, Ozone chem, Atm dyncs	WMO_GAW_045D	24/5/2002, WMO TD No. 1052, SAT-26

	Application												
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Trace gas profile HNO3 - Lower stratosphere (LS)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap, Ozone chem, Atm dyncs	WMO_GAW_04	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile HNO3 - Lower troposphere (LT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap, Ozone chem, Atm dyncs	WMO_GAW_01 4D	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile N2O - Higher stratosphere & mesosphere (HS & M)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	2 %	20 %	Firm	Atmos dynamics, Rad clim, Ozone chem	WMO_GAW_04 2C	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile N2O - Higher troposphere (HT)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	2 %	20 %	Firm	Rad climatology, Atm dyncs, Ozone chem	WMO_GAW_03	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile N2O - Lower stratosphere (LS)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	2 %	20 %	Firm	Rad climatology, Atm dyncs, Ozone chem	WMO_GAW_03 4A	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile N2O - Lower troposphere (LT)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	2 %	20 %	Firm	Rad climatology, Atm dyncs, Ozone chem	WMO_GAW_04 7D	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile NO - Higher stratosphere & mesosphere (HS & M)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_03	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile NO - Higher troposphere (HT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap, Ozone chem	WMO_GAW_04 5B	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile NO - Lower stratosphere (LS)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap, Ozone chem	WMO_GAW_04 5G	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile NO - Lower troposphere (LT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap, Ozone chem	WMO_GAW_01 4B	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile NO2 - Higher stratosphere & mesosphere (HS & M)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Ozone chem	WMO_GAW_03 6A	24/5/2002, WMO TD No. 1052, SAT-26

Application

Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Trace gas profile NO2 - Higher troposphere (HT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap, Ozone chem	WMO_GAW_045C	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile NO2 - Lower stratosphere (LS)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap, Ozone chem	WMO_GAW_045H	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile NO2 - Lower troposphere (LT)	50 km	500 km	1 km	4 km	6 h	24 h	72 h	168 h	5 %	10 %	Firm	Oxidizing cap, Ozone chem	WMO_GAW_014C	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile NO2 - Total column	50 km	500 km			24 h	48 h	72 h	168 h	5 %	15 %	Firm	Atmospheric chemistry	WMO_GAW_014G	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile OH - Higher stratosphere & mesosphere (HS & M)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	30 %	Firm	Ozone chem	WMO_GAW_04	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile OH - Higher troposphere (HT)	100 km	500 km	1 km	1.5 km	6 h	24 h	72 h	168 h	5 %	30 %	Firm	Ozone chem	WMO_GAW_02	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile OH - Lower stratosphere (LS)	100 km	500 km	1 km	3 km	6 h	24 h	72 h	168 h	5 %	30 %	Firm	Ozone chem	WMO_GAW_029A	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile OH - Lower troposphere (LT)	100 km	500 km	1 km	1.5 km	6 h	24 h	72 h	168 h	5 %	30 %	Firm	Ozone chem	WMO_GAW_01	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile SO2 - Higher troposphere (HT)	100 km	500 km	1 km	3 km	12 h	72 h	24 h	168 h	10 %	20 %	Firm	Volcanic eruptions	WMO_GAW_047F	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile SO2 - Lower stratosphere (LS)	100 km	500 km	1 km	3 km	12 h	72 h	24 h	168 h	10 %	20 %	Firm	Volcanic eruptions	WMO_GAW_047G	24/5/2002, WMO TD No. 1052, SAT-26
Trace gas profile SO2 - Lower troposphere (LT)	100 km	500 km	1 km	3 km	12 h	72 h	24 h	168 h	10 %	20 %	Firm	Volcanic eruptions	WMO_GAW_047E	24/5/2002, WMO TD No. 1052, SAT-26

Global NWP

	Application												
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Aerosol profile - Higher troposphere (HT)	50 km	500 km	1 km	5 km	6 h	168 h	12 h	168 h	10 %	20 %	Tentative		WMO_UA_017A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Aerosol profile - Lower stratosphere (LS)	50 km	500 km	1 km	10 km	6 h	168 h	12 h	168 h	10 %	20 %	Tentative		WMO_UA_017J	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Aerosol profile - Lower troposphere (LT)	50 km	500 km	0.1 km	1 km	1 h	168 h	1 h	168 h	10 %	20 %	Tentative		WMO_UA_017	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Aerosol profile - Total column	50 km	500 km			1 h	168 h	1 h	168 h	10 %	20 %	Tentative		WMO_UA_017F	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Air pressure over land surface	50 km	250 km			1 h	12 h	1 h	4 h	0.5 hPa	2 hPa	Firm		WMO_Sfc_004	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Air pressure over sea surface	50 km	250 km			1 h	12 h	1 h	4 h	0.5 hPa	2 hPa	Firm		WMO_Sfc_004B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Air specific humidity (at surface)	50 km	250 km			1 h	12 h	1 h	4 h	5 %	15 %	Reasonable		WMO_Sfc_N011	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Air temperature (at surface)	50 km	250 km			1 h	12 h	1 h	4 h	0.5 K	2 K	Reasonable		WMO_Sfc_008E	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Higher stratosphere & mesosphere (HS & M)	50 km	500 km	1 km	3 km	1 h	12 h	1 h	4 h	0.5 K	5 K	Reasonable		WMO_UA_003B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Atmospheric temperature profile - Higher troposphere (HT)	50 km	500 km	1 km	3 km	1 h	12 h	1 h	4 h	0.5 K	3 K	Firm		WMO_UA_003A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Lower stratosphere (LS)	50 km	500 km	1 km	3 km	1 h	12 h	1 h	4 h	0.5 K	3 K	Firm		WMO_UA_003R	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Lower troposphere (LT)	50 km	500 km	0.3 km	3 km	1 h	12 h	1 h	4 h	0.5 K	3 K	Firm		WMO_UA_003	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud base height	50 km	250 km			1 h	12 h	1 h	4 h	0.5 km	1 km	Tentative		WMO_UA_N001	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud cover	50 km	250 km			1 h	12 h	1 h	4 h	5 % (Max)	20 % (Max)	Reasonable		WMO_UA_N023	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud drop size (at cloud top)	50 km	250 km			1 h	12 h	1 h	4 h	0.5 µm	2 µm	Speculative		WMO_Sfc_N022	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud ice profile - Higher troposphere (HT)	50 km	250 km	1 km	10 km	1 h	12 h	1 h	4 h	5 %	20 %	Tentative		WMO_UA_N016A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud ice profile - Lower troposphere (LT)	50 km	250 km	0.3 km	5 km	1 h	12 h	1 h	4 h	5 %	20 %	Tentative		WMO_UA_N015	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud ice profile - Total column	50 km	250 km			1 h	12 h	1 h	4 h	10 g/m2	20 g/m2	Tentative		WMO_UA_N018	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Cloud imagery	1 km	50 km			0.5 h	6 h	1 h	4 h			Firm		WMO_S_218	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud top height	50 km	250 km			1 h	12 h	1 h	4 h	0.5 km	1 km	Firm		WMO_UA_009	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (< 100 µm) - Higher troposphere (HT)		50 km	250 km	1 km	10 km	1 h	12 h	1 h	4 h	5 %	20 %		Tentative	WMO_UA_N013 20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (< 100 µm) - Lower troposphere (LT)		50 km	250 km	0.3 km	5 km	1 h	12 h	1 h	4 h	5 %	20 %		Tentative	WMO_UA_N012 20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (< 100 µm) - Total column	50 km	250 km			1 h	4 h	1 h	4 h	10 kg/m2	50 kg/m2	Tentative		WMO_UA_007B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (> 100 µm) - Higher troposphere (HT)		50 km	250 km	1 km	10 km	1 h	12 h	1 h	4 h	5 %	20 %		Tentative B	WMO_UA_N013 20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (> 100 µm) - Lower troposphere (LT)		50 km	250 km	0.3 km	5 km	1 h	12 h	1 h	4 h	5 %	20 %		Tentative A	WMO_UA_N012 20/10/2003, ET ODRRGOS, Geneva,Nov 2003
Cloud water profile (> 100 µm) - Total column	50 km	250 km			1 h	12 h	1 h	2 h	10 kg/m2	50 kg/m2	Tentative		WMO_UA_007	20/10/2003, ET ODRRGOS, Geneva,Nov 2003
Dominant wave direction	50 km	250 km			1 h	12 h	1 h	4 h	10 degrees	20 degrees	Firm		WMO_Sfc_018C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Dominant wave period	50 km	250 km			1 h	12 h	1 h	4 h	0.5 s	1 s	Firm		WMO_Sfc_018	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Land surface temperature	50 km	250 km			1 h	12 h	1 h	4 h	0.5 K	4 K	Firm		WMO_Sfc_008A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Leaf Area Index (LAI)	50 km	100 km			7 d	30 d	1 d	7 d	5 % (Max)	20 % (Max)	Tentative		WMO_Sfc_N001	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Long-wave Earth surface emissivity	15 km	250 km			24 h	720 h	24 h	720 h	1 % (Max)	5 % (Max)	Tentative		WMO_Sfc_N020	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Normalized Differential Vegetation Index (NDVI)	50 km	100 km			7 d	30 d	1 d	7 d	1 % (Max)	5 % (Max)	Tentative		WMO_S_254	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Outgoing long-wave radiation at TOA	50 km	250 km			1 h	1 h	240 h	720 h	5 W/m2	10 W/m2	Firm		WMO_UA_016F	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Outgoing short-wave radiation at TOA	50 km	250 km			1 h	6 h	240 h	360 h	5 W/m2	10 W/m2	Firm		WMO_UA_016	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Ozone profile - Higher troposphere (HT)	50 km	500 km	1 km	10 km	1 h	12 h	1 h	4 h	5 %	20 %	Tentative		WMO_UA_014A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Ozone profile - Lower stratosphere (LS)	50 km	500 km	1 km	10 km	1 h	12 h	1 h	4 h	5 %	20 %	Tentative		WMO_UA_014K	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Ozone profile - Lower troposphere (LT)	50 km	500 km	1 km	5 km	1 h	12 h	1 h	4 h	5 %	20 %	Tentative		WMO_UA_014	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Ozone profile - Total column	50 km	100 km			1 h	6 h	1 h	4 h	5 DU	20 DU	Reasonable		WMO_UA_014J	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Precipitation index (daily cumulative)	50 km	250 km			1 h	12 h	24 h	720 h	0.5 mm/d	5 mm/d	Reasonable		WMO_Sfc_017	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Precipitation rate (liquid) at the surface	50 km	100 km			1 h	12 h	1 h	4 h	0.1 mm/h	1 mm/h	Tentative		WMO_UA_N022A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Precipitation rate (solid) at the surface	50 km	100 km			1 h	12 h	1 h	4 h	0.1 mm/h	1 mm/h	Tentative		WMO_UA_N022	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea surface bulk temperature	50 km	250 km			3 h	360 h	3 h	180 h	0.5 K	2 K	Firm		WMO_Sfc_006C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea-ice cover	15 km	250 km			1 d	15 d	1 d	7 d	5 % (Max)	50 % (Max)	Firm		WMO_Sfc_019	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea-ice surface temperature	15 km	200 km			1 h	12 h	1 h	4 h	0.5 K	4 K	Reasonable		WMO_Sfc_N014	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea-ice thickness	15 km	250 km			1 d	7 d	1 d	7 d	50 cm	100 cm	Speculative		WMO_Sfc_021	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

	Application												
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Significant wave height	100 km	250 km			1 h	12 h	1 h	4 h	0.5 m	1 m	Firm		WMO_Sfc_N059	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Snow cover	15 km	250 km			12 h	168 h	12 h	24 h	10 % (Max)	50 % (Max)	Reasonable		WMO_Sfc_023	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Snow water equivalent	15 km	250 km			12 h	168 h	6 h	24 h	5 mm	20 mm	Tentative		WMO_Sfc_027	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Soil moisture	15 km	250 km			1 d	7 d	0.25 d	1 d	10 g/kg	50 g/kg	Reasonable		WMO_Sfc_012A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Higher troposphere (HT)	50 km	250 km	1 km	3 km	1 h	12 h	1 h	4 h	5 %	20 %	Firm	Accuracy 5% in RH	WMO_UA_006A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Lower troposphere (LT)	50 km	250 km	0.4 km	2 km	1 h	12 h	1 h	4 h	5 %	20 %	Firm	Accuracy 5% in RH	WMO_UA_006	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Total column	50 km	500 km			1 h	12 h	1 h	4 h	1 kg/m2	5 kg/m2	Firm		WMO_Sfc_N044A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Higher troposphere (HT)	50 km	500 km	1 km	10 km	1 h	12 h	1 h	4 h	1 m/s	8 m/s	Firm		WMO_UA_001A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Lower stratosphere (LS)	50 km	500 km	1 km	10 km	1 h	12 h	1 h	4 h	1 m/s	5 m/s	Firm		WMO_UA_001O	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application

Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Wind profile (horizontal component) - Lower troposphere (LT)	50 km	500 km	0.4 km	5 km	1 h	12 h	1 h	4 h	1 m/s	5 m/s	Firm		WMO_UA_001	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (vertical component) - Higher troposphere (HT)	50 km	500 km	0.5 km	10 km	1 h	12 h	1 h	4 h	1 cm/s	5 cm/s	Speculative		WMO_UA_N020	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (vertical component) - Lower stratosphere (LS)	50 km	500 km	0.5 km	10 km	1 h	12 h	1 h	4 h	1 cm/s	5 cm/s	Speculative		WMO_UA_N020A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (vertical component) - Lower troposphere (LT)	50 km	500 km	0.5 km	5 km	1 h	12 h	1 h	4 h	1 cm/s	5 cm/s	Speculative		WMO_UA_N019	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind speed over land surface (horizontal)	50 km	250 km			1 h	12 h	1 h	4 h	0.5 m/s	3 m/s	Reasonable		WMO_Sfc_010M	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind speed over sea surface (horizontal)	50 km	250 km			1 h	12 h	1 h	4 h	0.5 m/s	3 m/s	Firm		WMO_Sfc_010I	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind vector over land surface (horizontal)	50 km	250 km			1 h	12 h	1 h	4 h	0.5 m/s	5 m/s	Reasonable		WMO_Sfc_010E	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind vector over sea surface (horizontal)	50 km	250 km			1 h	12 h	1 h	4 h	0.5 m/s	5 m/s	Firm		WMO_Sfc_010A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Hydrology

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Iceberg fractional cover	1 km	50 km			1 d	12 d	1 d	4 d	10 % (Max)	20 % (Max)	Firm		WMO_S_154	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Iceberg height	1 km	50 km			1 d	12 d	1 d	4 d	1 m	2 m	Firm		WMO_S_154A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Land cover	10 m	250000			0.02 y	1 y	1 d	7 d	50 classes	5 classes	Reasonable		WMO_Sfc_N003	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Land surface imagery	10 m	250000			1 d	365 d	1 d	7 d			Reasonable		WMO_Sfc_N057	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Land surface temperature	0.01 km	250 km			1 h	168 h	24 h	168 h	0.3 K	3 K	Reasonable		WMO_Sfc_008C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Land surface topography	100 m	1000 m			10 y	50 y	30 d	600 d	1 m (vert.)	5 m (vert.)	Reasonable		WMO_Sfc_N005	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Leaf Area Index (LAI)	0.01 km	10 km			7 d	24 d	1 d	5 d	5 % (Max)	20 % (Max)	Reasonable		WMO_Sfc_N004	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Long-wave Earth surface emissivity	0.01 km	250 km			24 h	288 h	24 h	288 h	5 % (Max)	20 % (Max)	Reasonable		WMO_UA_N007	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Normalized Differential Vegetation Index (NDVI)	0.01 km	250 km			1 d	30 d	1 d	7 d	1 % (Max)	20 % (Max)	Reasonable		WMO_S_254C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Outgoing long-wave radiation at TOA	10 km	100 km			1 h	12 h	24 h	168 h	5 W/m2	20 W/m2	Reasonable		WMO_UA_016G	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Outgoing short-wave radiation at TOA	0.1 km	200 km			1 h	6 h	24 h	168 h	5 W/m2	20 W/m2	Reasonable		WMO_UA_016D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Permafrost	0.1 km	100 km			0.25 d	3 d	0.25 d	6 d	5 % (Max)	25 % (Max)	Reasonable		WMO_Sfc_N052	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea level	0.1 km	10 km			1 d	7 d	1 d	7 d	2 cm	10 cm	Reasonable		WMO_S_214	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Snow cover	0.1 km	100 km			24 h	168 h	24 h	144 h	5 % (Max)	20 % (Max)	Reasonable		WMO_Sfc_023D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Snow melting conditions	0.1 km	10 km			0.5 h	288 h	1 h	144 h	5 classes	2 classes	Reasonable		WMO_Sfc_N008	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Snow water equivalent	0.1 km	10 km			24 h	168 h	24 h	144 h	5 mm	20 mm	Reasonable		WMO_Sfc_027B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Soil moisture	0.01 km	250 km			1 d	3 d	1 d	144 d	10 g/kg	50 g/kg	Reasonable		WMO_Sfc_012E	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Vegetation type	10 m	1000 m			7 d	365 d	1 d	30 d	50 classes	5 classes	Reasonable		WMO_Sfc_N058	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Nowcasting														
Aerosol profile - Total column	5 km	50 km			0.25 h	12 h	0.25 h	2 h	10 %	20 %	Firm		WMO_UA_017H	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Air temperature (at surface)	5 km	20 km			0.25 h	1 h	0.25 h	0.5 h	0.5 K	1 K	Reasonable		WMO_Sfc_008G	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric stability index	5 km	50 km			0.08 h	0.5 h	0.25 h	1 h	Missing	Missing	Firm		WMO_UA_N004	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Higher troposphere (HT)	5 km	200 km	1 km	3 km	0.25 h	1 h	0.08 h	0.5 h	1 K	2 K	Firm		WMO_UA_003J	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Lower troposphere (LT)	5 km	200 km	0.5 km	1 km	0.25 h	1 h	0.08 h	0.5 h	0.5 K	2 K	Firm		WMO_UA_003I	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud cover	1 km	20 km			0.0083	1 h	0.016 h	0.5 h	5 % (Max)	20 % (Max)	Firm		WMO_UA_013	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud imagery	1 km	5 km			0.05 h	0.5 h	0.25 h	1 h			Firm		WMO_S_218C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud top height	1 km	10 km			0.01 h	0.5 h	0.02 h	0.5 h	0.1 km	1 km	Firm		WMO_UA_009C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application

Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Cloud top temperature	1 km	10 km			0.01 h	0.5 h	0.02 h	0.5 h	0.5 K	2 K	Firm		WMO_UA_011B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud type	1 km	10 km			0.01 h	0.5 h	0.02 h	0.5 h	10 classes	5 classes	Firm		WMO_UA_013B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Fire area	5 km	250 km			0.25 d	12 d	1 d	4 d	5 % (Max)	20 % (Max)	Firm		WMO_S_059	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Fire temperature	5 km	250 km			0.25 d	12 d	1 d	4 d	500 K	1000 K	Firm		WMO_S_059B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Height of the top of the Planetary Boundary Layer	5 km	50 km			0.25 h	1 h	0.08 h	0.5 h	50 m	500 m	Firm		WMO_UA_N005	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Height of tropopause	10 km	200 km			0.5 h	6 h	0.5 h	2 h	0.1 km	1 km	Firm		WMO_UA_N006	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Land surface temperature	1 km	50 km			0.25 h	1 h	0.08 h	0.5 h	0.5 K	3 K	Firm		WMO_Sfc_008	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Normalized Differential Vegetation Index (NDVI)	5 km	10 km			1 d	12 d	1 d	5 d	5 % (Max)	10 % (Max)	Firm		WMO_S_254B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Ocean currents (vector)	10 km	50 km			0.25 d	6 d	0.25 d	4 d	0.5 cm/s	1 cm/s	Firm		WMO_S_165	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Precipitation rate (liquid) at the surface	5 km	50 km			0.08 h	1 h	0.08 h	0.5 h	0.1 mm/h	1 mm/h	Firm		WMO_S_118B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Precipitation rate (solid) at the surface	5 km	50 km			0.25 h	1 h	0.5 h	0.5 h	0.1 mm/h	1 mm/h	Firm		WMO_Sfc_N045A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea surface bulk temperature	5 km	50 km			1 h	6 h	1 h	2 h	0.5 K	2 K	Firm		WMO_Sfc_006A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea-ice cover	5 km	50 km			1 d	24 d	1 d	6 d	10 % (Max)	20 % (Max)	Firm		WMO_Sfc_019B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Snow cover	5 km	50 km			1 h	144 h	1 h	6 h	10 % (Max)	20 % (Max)	Firm		WMO_Sfc_023B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Soil moisture	5 km	50 km			0.5 d	2 d	0.25 d	1 d	10 g/kg	50 g/kg	Reasonable		WMO_Sfc_012D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Higher troposphere (HT)	5 km	200 km	1 km	3 km	0.25 h	1 h	0.08 h	0.5 h	5 %	20 %	Firm	Accuracy 10% in RH	WMO_UA_006G	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Lower troposphere (LT)	5 km	200 km	0.5 km	1 km	0.25 h	1 h	0.08 h	0.5 h	5 %	20 %	Firm	Accuracy 5% in RH	WMO_UA_006F	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Total column	5 km	50 km			0.25 h	1 h	0.08 h	0.5 h	1 kg/m2	5 kg/m2	Firm		WMO_Sfc_N044	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Temperature of tropopause	10 km	200 km			0.5 h	6 h	0.5 h	2 h	0.5 K	2 K	Firm		WMO_UA_N006A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Higher troposphere (HT)	5 km	200 km	0.5 km	1 km	0.25 h	4 h	0.08 h	0.5 h	1 m/s	8 m/s	Firm		WMO_UA_001J	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Lower stratosphere (LS)	5 km	200 km	0.5 km	1 km	0.25 h	6 h	0.25 h	2 h	1 m/s	5 m/s	Firm		WMO_UA_001P	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Lower troposphere (LT)	5 km	200 km	0.5 km	1 km	0.25 h	6 h	0.25 h	2 h	1 m/s	5 m/s	Firm		WMO_UA_001I	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (vertical component) - Lower troposphere (LT)	5 km	200 km	0.5 km	2 km	0.25 h	1 h	0.08 h	0.5 h	1 cm/s	5 cm/s	Firm		WMO_UA_N020B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind speed over land surface (horizontal)	5 km	50 km			0.25 h	3 h	0.25 h	1 h	1 m/s	5 m/s	Firm		WMO_Sfc_N007	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind speed over sea surface (horizontal)	5 km	50 km			0.25 h	3 h	0.25 h	1 h	1 m/s	5 m/s	Firm		WMO_Sfc_N007	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind vector over land surface (horizontal)	5 km	50 km			0.25 h	3 h	0.25 h	1 h	1 m/s	5 m/s	Firm		WMO_Sfc_N007A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind vector over sea surface (horizontal)	5 km	50 km			0.25 h	3 h	0.25 h	1 h	1 m/s	5 m/s	Firm		WMO_Sfc_N007	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Application														
Regional NWP														
Air pressure over land surface	10 km	250 km			0.5 h	12 h	0.5 h	2 h	0.5 hPa	1 hPa	Firm		WMO_Sfc_004A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Air pressure over sea surface	10 km	250 km			0.5 h	12 h	0.5 h	2 h	0.5 hPa	1 hPa	Firm		WMO_Sfc_004C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Air specific humidity (at surface)	10 km	250 km			0.5 h	12 h	0.5 h	2 h	5 %	15 %	Reasonable		WMO_Sfc_N031	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Air temperature (at surface)	10 km	250 km			0.5 h	12 h	0.5 h	2 h	0.5 K	2 K	Reasonable		WMO_Sfc_008F	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Higher troposphere (HT)	10 km	500 km	1 km	3 km	0.5 h	12 h	0.5 h	2 h	0.5 K	3 K	Firm		WMO_UA_003D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Lower stratosphere (LS)	10 km	500 km	1 km	3 km	0.5 h	12 h	0.5 h	2 h	0.5 K	3 K	Firm		WMO_UA_003P	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Lower troposphere (LT)	10 km	500 km	0.3 km	3 km	0.5 h	12 h	0.5 h	2 h	0.5 K	3 K	Firm		WMO_UA_003C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud base height	10 km	250 km			0.5 h	12 h	0.5 h	3 h	0.5 km	1 km	Tentative		WMO_UA_N002	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Cloud cover	10 km	250 km			0.5 h	12 h	0.5 h	2 h	5 % (Max)	20 % (Max)	Reasonable		WMO_UA_N043	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud drop size (at cloud top)	10 km	250 km			0.5 h	12 h	0.5 h	2 h	0.5 µm	2 µm	Firm		WMO_Sfc_N043	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud ice profile - Higher troposphere (HT)	10 km	250 km	1 km	10 km	0.5 h	12 h	0.5 h	2 h	5 %	20 %	Tentative		WMO_UA_N025	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud ice profile - Lower troposphere (LT)	10 km	250 km	0.3 km	5 km	0.5 h	12 h	0.5 h	2 h	5 %	20 %	Tentative		WMO_UA_N024	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud ice profile - Total column	10 km	250 km			0.5 h	12 h	0.5 h	2 h	10 g/m2	20 g/m2	Tentative		WMO_UA_N027	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud imagery	1 km	50 km			0.25 h	6 h	0.5 h	2 h			Firm		WMO_S_218A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud top height	10 km	250 km			0.5 h	12 h	0.5 h	2 h	0.5 km	1 km	Firm		WMO_UA_009A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (< 100 µm) - Higher troposphere (HT)		10 km	250 km	1 km	10 km	0.5 h	12 h	0.5 h	2 h	5 %	20 %		Tentative	WMO_UA_N046 20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (< 100 µm) - Lower troposphere (LT)		10 km	250 km	0.3 km	5 km	0.5 h	12 h	0.5 h	2 h	5 %	20 %		Tentative	WMO_UA_N045 20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Cloud water profile (< 100 µm) - Total column	10 km	250 km			0.5 h	12 h	0.5 h	2 h	10 kg/m2	50 kg/m2	Tentative		WMO_UA_007C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (> 100 µm) - Higher troposphere (HT)		10 km	250 km	1 km	10 km	0.5 h	12 h	0.5 h	2 h	5 %	20 %		Tentative B	WMO_UA_N046 20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (> 100 µm) - Lower troposphere (LT)		10 km	250 km	0.3 km	5 km	0.5 h	12 h	0.5 h	2 h	5 %	20 %		Tentative A	WMO_UA_N045 20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud water profile (> 100 µm) - Total column	10 km	250 km			0.5 h	12 h	0.5 h	4 h	10 kg/m2	50 kg/m2	Tentative		WMO_UA_007A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Dominant wave direction	10 km	50 km			1 h	12 h	0.5 h	2 h	10 degrees	20 degrees	Firm		WMO_Sfc_018D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Dominant wave period	10 km	50 km			1 h	12 h	0.5 h	2 h	0.5 s	1 s	Firm		WMO_Sfc_018A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Land surface temperature	10 km	250 km			0.5 h	12 h	0.5 h	2 h	0.5 K	4 K	Firm		WMO_Sfc_008B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Leaf Area Index (LAI)	10 km	50 km			7 d	30 d	1 d	7 d	5 % (Max)	20 % (Max)	Tentative		WMO_Sfc_N006	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Long-wave Earth surface emissivity	5 km	250 km			24 h	720 h	24 h	720 h	1 % (Max)	5 % (Max)	Tentative		WMO_Sfc_N041	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

	Application												
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Normalized Differential Vegetation Index (NDVI)	10 km	50 km			7 d	30 d	1 d	7 d	1 % (Max)	5 % (Max)	Tentative		WMO_S_254A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Outgoing long-wave radiation at TOA	10 km	250 km			0.5 h	1 h	240 h	720 h	5 W/m2	10 W/m2	Firm		WMO_UA_016J	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Outgoing short-wave radiation at TOA	10 km	250 km			0.5 h	1 h	240 h	360 h	5 W/m2	10 W/m2	Firm		WMO_UA_016C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Ozone profile - Higher troposphere (HT)	10 km	200 km	1 km	10 km	0.5 h	3 h	0.5 h	2 h	5 %	20 %	Tentative		WMO_UA_014E	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Ozone profile - Lower stratosphere (LS)	10 km	200 km	1 km	10 km	0.5 h	3 h	0.5 h	2 h	5 %	20 %	Tentative		WMO_UA_014	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Ozone profile - Lower troposphere (LT)	10 km	200 km	1 km	5 km	0.5 h	3 h	0.5 h	2 h	5 %	20 %	Tentative		WMO_UA_014D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Ozone profile - Total column	10 km	100 km			0.5 h	6 h	0.5 h	2 h	5 DU	20 DU	Reasonable		WMO_UA_014N	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Precipitation index (daily cumulative)	10 km	250 km			0.5 h	12 h	24 h	720 h	0.5 mm/d	5 mm/d	Reasonable		WMO_Sfc_017A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Precipitation rate (liquid) at the surface	10 km	50 km			0.5 h	6 h	0.5 h	2 h	0.1 mm/h	1 mm/h	Tentative		WMO_UA_N044A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application												
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Precipitation rate (solid) at the surface	10 km	100 km			0.5 h	12 h	0.5 h	2 h	0.1 mm/h	1 mm/h	Tentative		WMO_UA_N044	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea surface bulk temperature	25 km	50 km			1 h	12 h	1 h	24 h	0.5 K	1 K	Firm		WMO_Sfc_006D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea-ice cover	25 km	50 km			0.5 d	7 d	0.3 d	3 d	5 % (Max)	50 % (Max)	Firm		WMO_Sfc_019A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea-ice surface temperature	5 km	100 km			0.5 h	12 h	0.5 h	2 h	0.5 K	4 K	Firm		WMO_Sfc_N034	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea-ice thickness	5 km	250 km			1 d	7 d	1 d	7 d	50 cm	100 cm	Speculative		WMO_Sfc_021A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Significant wave height	10 km	50 km			1 h	12 h	1 h	2 h	0.1 m	0.2 m	Firm		WMO_Sfc_N059A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Snow cover	5 km	250 km			12 h	168 h	6 h	24 h	10 % (Max)	50 % (Max)	Reasonable		WMO_Sfc_023A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Snow water equivalent	5 km	250 km			6 h	288 h	6 h	24 h	5 mm	20 mm	Tentative		WMO_Sfc_027A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Soil moisture	5 km	250 km			1 d	7 d	7 d	7 d	10 g/kg	50 g/kg	Reasonable		WMO_Sfc_012C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

	Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Specific humidity profile - Higher troposphere (HT)	10 km	100 km	1 km	3 km	0.5 h	12 h	0.5 h	2 h	5 %	20 %	Firm	Accuracy 5% in RH	WMO_UA_006	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Lower troposphere (LT)	10 km	100 km	0.4 km	2 km	0.5 h	12 h	0.5 h	2 h	5 %	20 %	Firm	Accuracy 5% in RH	WMO_UA_006L	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Total column	10 km	250 km			0.5 h	12 h	0.5 h	2 h	1 kg/m2	5 kg/m2	Firm		WMO_Sfc_N044	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Higher troposphere (HT)	10 km	500 km	1 km	10 km	0.5 h	12 h	0.5 h	2 h	1 m/s	8 m/s	Firm		WMO_UA_001D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Lower stratosphere (LS)	10 km	500 km	1 km	10 km	0.5 h	12 h	0.5 h	2 h	1 m/s	5 m/s	Firm		WMO_UA_001Q	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Lower troposphere (LT)	10 km	500 km	0.4 km	5 km	0.5 h	12 h	0.5 h	2 h	1 m/s	5 m/s	Firm		WMO_UA_001C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (vertical component) - Higher troposphere (HT)	10 km	500 km	0.5 km	10 km	0.5 h	12 h	0.5 h	2 h	1 cm/s	5 cm/s	Speculative		WMO_UA_N029	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (vertical component) - Lower stratosphere (LS)	10 km	500 km	0.5 km	10 km	0.5 h	12 h	0.5 h	2 h	1 cm/s	5 cm/s	Speculative		WMO_UA_N029A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (vertical component) - Lower troposphere (LT)	10 km	500 km	0.5 km	5 km	0.5 h	12 h	0.5 h	2 h	1 cm/s	5 cm/s	Speculative		WMO_UA_N028	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Wind speed over land surface (horizontal)	10 km	250 km			0.5 h	12 h	0.5 h	2 h	0.5 m/s	3 m/s	Reasonable		WMO_Sfc_010N	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind speed over sea surface (horizontal)	10 km	100 km			0.5 h	12 h	0.5 h	2 h	0.5 m/s	3 m/s	Firm		WMO_Sfc_010J	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind vector over land surface (horizontal)	10 km	250 km			0.5 h	12 h	0.5 h	2 h	0.5 m/s	5 m/s	Reasonable		WMO_Sfc_010F	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind vector over sea surface (horizontal)	10 km	100 km			0.5 h	12 h	0.5 h	2 h	0.5 m/s	5 m/s	Firm		WMO_Sfc_010B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
S & I A														
Fractional Photosynthetically Active Radiation (FPAR)	50 km	500 km			7 d	30 d	1 d	30 d	5 % (Max)	10 % (Max)	Firm		WMO_SIA075	23/6/2000, ETODRRGOS-3
Geoid	100 km	500 km			240 mo	360 mo	12 y	24 y	1 cm	5 cm	Firm		WMO_SIA030	23/6/2000, ETODRRGOS-3
Ocean chlorophyll	25 km	100 km			1 d	3 d	1 d	3 d	5 % (Max)	20 % (Max)	Firm		WMO_SIA036	23/6/2000, ETODRRGOS-3
Ocean dynamic topography	25 km	100 km			7 d	30 d	2 d	15 d	1 cm	4 cm	Firm		WMO_SIA039	23/6/2000, ETODRRGOS-3
Ocean salinity	100 km	250 km			30 d	60 d	9 d	120 d	0.1 psu	0.3 psu	Reasonable		WMO_SIA037	23/6/2000, ETODRRGOS-3
Ocean suspended sediment concentration	100 km	500 km			1 d	6 d	30 d	90 d	5 % (Max)	20 % (Max)	Speculative		WMO_SIA038	23/6/2000, ETODRRGOS-3
Ocean yellow substance absorbance	100 km	500 km			1 d	6 d	30 d	90 d	5 % (Max)	20 % (Max)	Speculative		WMO_SIA040	23/6/2000, ETODRRGOS-3
Sea surface bulk temperature	50 km	250 km			3 h	12 h	3 h	24 h	0.1 K	0.5 K	Firm	Tropical ocean most important	WMO_SIA068	23/6/2000, ETODRRGOS-3

Application													
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Snow water equivalent	50 km	500 km			24 h	168 h	24 h	168 h	5 mm	20 mm	Tentative		WMO_SIA056	23/6/2000, ETODRRGOS-3
Soil moisture	50 km	500 km			1 d	7 d	1 d	7 d	10 g/kg	50 g/kg	Reasonable		WMO_SIA057	23/6/2000, ETODRRGOS-3
Vegetation type	50000	500000			7 d	30 d	1 d	7 d	18 classes	9 classes	Firm		WMO_SIA074	23/6/2000, ETODRRGOS-3
Synoptic Meteorology														
Air temperature (at surface)	10 km	100 km			1 h	12 h	1 h	4 h	0.5 K	2 K	Firm		WMO_Sfc_008H	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric stability index	20 km	200 km			1 h	6 h	1 h	3 h	Missing	Missing	Firm		WMO_UA_N003	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Higher troposphere (HT)	20 km	200 km	0.1 km	2 km	3 h	12 h	1 h	3 h	0.5 K	3 K	Firm		WMO_UA_003G	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Lower stratosphere (LS)	20 km	200 km	0.1 km	2 km	3 h	12 h	1 h	3 h	0.5 K	3 K	Firm		WMO_UA_003Q	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Atmospheric temperature profile - Lower troposphere (LT)	20 km	200 km	0.1 km	2 km	3 h	12 h	1 h	3 h	0.5 K	3 K	Firm		WMO_UA_003F	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud imagery	1 km	10 km			0.25 h	6 h	0.25 h	6 h			Firm		WMO_S_218B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Cloud top height	1 km	10 km			0.25 h	6 h	0.25 h	6 h	0.5 km	2 km	Firm		WMO_UA_009B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application

Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Cloud type	20 km	200 km			0.25 h	6 h	0.25 h	6 h	10 classes	5 classes	Firm		WMO_UA_013A	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Dominant wave direction	50 km	200 km			3 h	12 h	1 h	3 h	20 degrees	30 degrees	Firm		WMO_Sfc_018E	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Dominant wave period	50 km	200 km			3 h	12 h	1 h	3 h	0.5 s	1 s	Firm		WMO_Sfc_018B	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Ozone profile - Total column	20 km	50 km			0.25 h	12 h	0.25 h	6 h	5 DU	20 DU	Firm		WMO_UA_014C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Precipitation rate (liquid) at the surface	20 km	100 km			1 h	6 h	0.25 h	6 h	0.1 mm/h	1 mm/h	Firm		WMO_S_118C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Precipitation rate (solid) at the surface	20 km	100 km			3 h	6 h	0.25 h	6 h	0.1 mm/h	1 mm/h	Firm		WMO_S_118	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Sea surface bulk temperature	5 km	50 km			3 h	24 h	1 h	24 h	0.5 K	2 K	Firm		WMO_Sfc_006	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Higher troposphere (HT)	20 km	200 km	0.1 km	2 km	3 h	12 h	1 h	3 h	5 %	20 %	Firm	Accuracy 10% in RH	WMO_UA_006D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Specific humidity profile - Lower troposphere (LT)	20 km	200 km	0.1 km	2 km	3 h	12 h	1 h	3 h	5 %	20 %	Firm	Accuracy 10% in RH	WMO_UA_006C	20/10/2003, ET ODRRGOS, Geneva, Nov 2003

Application														
Requirement	Hor Res	Min	Vert Res	Min	Obs Cycle	Min	Delay avail	Min	Accuracy	Min	Confidence	Remarks	Associate Ident	Source
Wind profile (horizontal component) - Higher troposphere (HT)	20 km	200 km	0.1 km	2 km	3 h	12 h	1 h	3 h	2 m/s	8 m/s	Firm		WMO_UA_001G	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Lower stratosphere (LS)	20 km	200 km	0.1 km	2 km	3 h	12 h	1 h	3 h	2 m/s	5 m/s	Firm		WMO_UA_001R	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind profile (horizontal component) - Lower troposphere (LT)	20 km	200 km	0.1 km	2 km	3 h	12 h	1 h	3 h	2 m/s	5 m/s	Firm		WMO_UA_001F	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind speed over land surface (horizontal)	20 km	200 km			1 h	12 h	1 h	3 h	2 m/s	5 m/s	Firm		WMO_Sfc_010L	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind speed over sea surface (horizontal)	20 km	200 km			1 h	12 h	1 h	3 h	2 m/s	5 m/s	Firm		WMO_Sfc_010H	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind vector over land surface (horizontal)	20 km	200 km			1 h	12 h	1 h	3 h	2 m/s	5 m/s	Firm		WMO_Sfc_010D	20/10/2003, ET ODRRGOS, Geneva, Nov 2003
Wind vector over sea surface (horizontal)	20 km	200 km			1 h	12 h	1 h	3 h	2 m/s	5 m/s	Firm		WMO_Sfc_010	20/10/2003, ET ODRRGOS, Geneva, Nov 2003