

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"Start Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Atmospheric temperature profile - Lower troposphere (LT)	50 km	63 km	100 km	0.15 km	0.238 km	0.6 km	1 h	1.4 h	3 h	1 h	1.3 h	2 h	2 K	2.7 K	5 K	Firm
Cloud drop size (at cloud top)	50 km	63 km	100 km				1 h	1.4 h	3 h	1 h	1.3 h	2 h	15 µm	18.9 µm	30 µm	Firm
Cloud ice profile - Higher troposphere (HT)	50 km	63 km	100 km	0.15 km	0.238 km	0.6 km	1 h	1.4 h	3 h	1 h	1.3 h	2 h	10 %	13.6 %	25 %	Firm
Cloud ice profile - Lower troposphere (LT)	50 km	63 km	100 km	0.15 km	0.238 km	0.6 km	1 h	1.4 h	3 h	1 h	1.3 h	2 h	10 %	13.6 %	25 %	Firm
Cloud water profile (< 100 µm) - Lower troposphere (LT)	50 km	63 km	100 km	0.15 km	0.238 km	0.6 km	1 h	1.4 h	3 h	1 h	1.3 h	2 h	10 %	13.6 %	25 %	Firm
Cloud water profile (> 100 µm) - Lower troposphere (LT)	50 km	63 km	100 km	0.15 km	0.238 km	0.6 km	1 h	1.4 h	3 h	1 h	1.3 h	2 h	10 %	13.6 %	25 %	Firm
Specific humidity profile - Lower troposphere (LT)	50 km	63 km	100 km	0.15 km	0.238 km	0.6 km	1 h	1.4 h	3 h	1 h	1.3 h	2 h	5 %	6.3 %	10 %	Firm
Wind profile (horizontal component) - Higher troposphere (HT)	50 km	63 km	100 km	0.15 km	0.238 km	0.6 km	0.0833 h	0.105 h	0.167 h	1 h	1.4 h	3 h	2 m/s	2.7 m/s	5 m/s	Firm
Wind profile (horizontal component) - Lower stratosphere (LS)	50 km	63 km	100 km	0.15 km	0.238 km	0.6 km	0.0833 h	0.105 h	0.167 h	1 h	1.4 h	3 h	2 m/s	2.7 m/s	5 m/s	Firm
Wind profile (horizontal component) - Lower troposphere (LT)	50 km	63 km	100 km	0.15 km	0.238 km	0.6 km	0.0833 h	0.105 h	0.167 h	1 h	1.4 h	3 h	2 m/s	2.7 m/s	5 m/s	Firm

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"Fert Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Aerosol profile - Higher stratosphere & mesosphere (HS & M)	15 km	50 km	250 km	0.2 km	2.99 km	3 km	1 h	6 h	24 h	0.1 h	0.5 h	6 h	10 %	20 %	50 %	Tentative
Aerosol profile - Higher troposphere (HT)	15 km	50 km	250 km	0.2 km	2.99 km	3 km	1 h	6 h	24 h	0.1 h	0.5 h	6 h	10 %	20 %	50 %	Tentative
Aerosol profile - Lower stratosphere (LS)	15 km	50 km	250 km	0.2 km	2.99 km	3 km	1 h	6 h	24 h	0.1 h	0.5 h	6 h	10 %	20 %	50 %	Tentative
Aerosol profile - Lower troposphere (LT)	15 km	50 km	250 km	0.2 km	2.99 km	3 km	1 h	6 h	24 h	0.1 h	0.5 h	6 h	10 %	20 %	50 %	Tentative
Aerosol profile - Total column	15 km	50 km	250 km				1 h	6 h	24 h	0.1 h	0.5 h	6 h	10 %	20 %	50 %	Tentative
Air pressure over land surface	15 km	100 km	500 km				1 h	6 h	12 h	0.1 h	0.5 h	6 h	0.5 hPa	.99 hPa	1 hPa	Firm
Air pressure over sea surface	15 km	100 km	500 km				1 h	6 h	12 h	0.1 h	0.5 h	6 h	0.5 hPa	.99 hPa	1 hPa	Firm
Air specific humidity (at surface)	15 km	50 km	250 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	2 %	5 %	10 %	Reasonable
Air temperature (at surface)	15 km	50 km	250 km				1 h	6 h	12 h	0.1 h	0.5 h	6 h	0.5 K	1 K	2 K	Reasonable
Atmospheric temperature profile - Higher stratosphere & mesosphere	50 km	100 km	500 km	0.3 km	1 km	3 km	1 h	6 h	24 h	0.1 h	0.5 h	6 h	0.5 K	3 K	5 K	Reasonable
Atmospheric temperature profile - Higher troposphere (HT)	15 km	100 km	500 km	0.3 km	1 km	3 km	1 h	6 h	24 h	0.1 h	0.5 h	6 h	0.5 K	1 K	3 K	Firm
Atmospheric temperature profile - Lower stratosphere (LS)	15 km	100 km	500 km	0.3 km	1 km	3 km	1 h	6 h	24 h	0.1 h	0.5 h	6 h	0.5 K	1 K	3 K	Firm
Atmospheric temperature profile - Lower troposphere (LT)	15 km	100 km	500 km	0.3 km	1 km	3 km	1 h	6 h	24 h	0.1 h	0.5 h	6 h	0.5 K	1 K	3 K	Firm
Cloud base height	5 km	15 km	50 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	0.2 km	.5 km	1 km	Reasonable
Cloud cover	5 km	15 km	50 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	5 % (Max)	10 % (Max)	20 % (Max)	Reasonable
Cloud drop size (at cloud top)	5 km	15 km	50 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	1 µm	2 µm	5 µm	Tentative
Cloud ice profile - Higher troposphere (HT)	5 km	15 km	50 km	0.2 km	1 km	2 km	1 h	3 h	12 h	0.1 h	0.5 h	6 h	20 %	50 %	100 %	Reasonable
Cloud ice profile - Lower troposphere (LT)	5 km	15 km	50 km	0.2 km	1 km	2 km	1 h	3 h	12 h	0.1 h	0.5 h	6 h	20 %	50 %	100 %	Reasonable
Cloud ice profile - Total column	5 km	15 km	50 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	5 g/m2	10 g/m2	20 g/m2	Reasonable
Cloud imagery	0.99 km	1 km	5 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h				Firm
Cloud top height	5 km	15 km	50 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	0.2 km	.5 km	1 km	Firm

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"For Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Cloud water profile (< 100 µm) - Higher troposphere (HT)	5 km	15 km	50 km	0.2 km	1 km	2 km	1 h	3 h	12 h	0.1 h	0.5 h	6 h	20 %	50 %	100 %	Reasonable
Cloud water profile (< 100 µm) - Lower troposphere (LT)	5 km	15 km	50 km	0.2 km	1 km	2 km	1 h	3 h	12 h	0.1 h	0.5 h	6 h	20 %	50 %	100 %	Reasonable
Cloud water profile (< 100 µm) - Total column	5 km	15 km	50 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	10 kg/m ²	20 kg/m ²	50 kg/m ²	Reasonable
Cloud water profile (> 100 µm) - Higher troposphere (HT)	5 km	15 km	50 km	0.2 km	1 km	2 km	1 h	3 h	12 h	0.1 h	0.5 h	6 h	20 %	50 %	100 %	Reasonable
Cloud water profile (> 100 µm) - Lower troposphere (LT)	5 km	15 km	50 km	0.2 km	1 km	2 km	1 h	3 h	12 h	0.1 h	0.5 h	6 h	20 %	50 %	100 %	Reasonable
Cloud water profile (> 100 µm) - Total column	5 km	15 km	50 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	10 kg/m ²	kg/m ²	50 kg/m ²	Reasonable
Dominant wave direction							1 h	3 h	12 h	0.1 h	0.5 h	6 h	10 degrees	15 degrees	30 degrees	Firm
Dominant wave period	15 km	50 km	250 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	0.25 s	.5 s	1 s	Firm
Downwelling long-wave radiation at the Earth surface	10 km	30 km	100 km				1 h	3 h	12 h	24 h	120 h	720 h	1 W/m ²	10 W/m ²	20 W/m ²	Reasonable
Downwelling short-wave radiation at the Earth surface	10 km	30 km	100 km				1 h	3 h	12 h	24 h	120 h	720 h	1 W/m ²	10 W/m ²	20 W/m ²	Reasonable
Land surface temperature	5 km	15 km	250 km				0.5 h	3 h	6 h	0.1 h	0.5 h	6 h	0.5 K	1 K	4 K	Firm
Leaf Area Index (LAI)	2 km	10 km	50 km				1 d	5 d	10 d	0.125 d	1 d	10 d	5 % (Max)	10 % (Max)	20 % (Max)	Reasonable
Long-wave Earth surface emissivity	5 km	15 km	50 km				24 h	120 h	720 h	24 h	120 h	720 h	0.5 % (Max)	1 % (Max)	3 % (Max)	Reasonable
Normalized Differential Vegetation Index (NDVI)	2 km	10 km	50 km				1 d	5 d	10 d	0.125 d	1 d	10 d	5 % (Max)	10 % (Max)	20 % (Max)	Reasonable
Outgoing long-wave Earth surface	10 km	30 km	100 km				1 h	3 h	12 h	24 h	120 h	720 h	1 W/m ²	10 W/m ²	20 W/m ²	Reasonable
Outgoing long-wave radiation at TOA	10 km	30 km	100 km				1 h	3 h	12 h	24 h	120 h	720 h	5 W/m ²	10 W/m ²	20 W/m ²	Firm
Outgoing short-wave radiation at TOA	10 km	30 km	100 km				1 h	3 h	12 h	24 h	120 h	720 h	5 W/m ²	10 W/m ²	20 W/m ²	Firm
Outgoing spectral radiance at TOA	10 km	30 km	100 km				0.004 d	0.0125 d	5 d	24 h	120 h	720 h	5 % (Max)	10 % (Max)	20 % (Max)	Reasonable
Ozone profile - Higher stratosphere & mesosphere (HS & M)	15 km	100 km	250 km	1 km	2.2 km	10 km	1 h	6 h	12 h	0.1 h	0.5 h	6 h	5 %	10 %	20 %	Reasonable
Ozone profile - Higher troposphere (HT)	15 km	100 km	250 km	1 km	2.2 km	10 km	1 h	6 h	12 h	0.1 h	0.5 h	6 h	5 %	10 %	20 %	Firm
Ozone profile - Lower stratosphere (LS)	15 km	100 km	250 km	1 km	2.2 km	10 km	1 h	6 h	12 h	0.1 h	0.5 h	6 h	5 %	10 %	20 %	Firm

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"For Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Ozone profile - Lower troposphere (LT)	15 km	100 km	250 km	1 km	2.2 km	10 km	1 h	6 h	12 h	0.1 h	0.5 h	6 h	5 %	10 %	20 %	Firm
Ozone profile - Total column	15 km	100 km	250 km				1 h	6 h	12 h	0.1 h	0.5 h	6 h	5 DU	10 DU	20 DU	Firm
Precipitation index (daily cumulative)	10 km	30 km	100 km				1 h	3 h	12 h	24 h	120 h	720 h	0.5 mm/d	2 mm/d	5 mm/d	Firm
Precipitation rate (liquid) at the surface	5 km	15 km	50 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	0.1 mm/h	.5 mm/h	1 mm/h	Reasonable
Precipitation rate (solid) at the surface	5 km	15 km	50 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	0.1 mm/h	.5 mm/h	1 mm/h	Reasonable
Sea surface temperature	5 km	15 km	250 km				3 h	24 h	120 h	3 h	24 h	120 h	0.3 K	.5 K	1 K	Firm
Sea-ice cover	5 km	15 km	100 km				0.125 d	1 d	5 d	0.125 d	1 d	5 d	5 % (Max)	10 % (Max)	20 % (Max)	Firm
Sea-ice surface temperature	5 km	15 km	250 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	0.5 K	1 K	4 K	Reasonable
Sea-ice thickness	15 km	50 km	250 km				1 d	5 d	30 d	1 d	5 d	30 d	20 cm	50 cm	100 cm	Tentative
Sea-ice type	10 km	25 km	100 km				0.125 d	1 d	5 d	0.125 d	1 d	5 d	4 classes	3 classes	2 classes	Tentative
Short-wave cloud reflectance	10 km	30 km	100 km				1 h	3 h	12 h	24 h	120 h	720 h	1 % (Max)	3 % (Max)	10 % (Max)	Reasonable
Short-wave Earth surface bi-directional reflectance	10 km	30 km	100 km				1 h	3 h	12 h	24 h	120 h	720 h	1 % (Max)	2 % (Max)	5 % (Max)	Reasonable
Significant wave height	15 km	50 km	250 km				1 h	3 h	12 h	0.1 h	0.5 h	6 h	0.1 m	.3 m	0.5 m	Firm
Snow cover	5 km	15 km	100 km				3 h	24 h	120 h	3 h	24 h	120 h	10 % (Max)	20 % (Max)	50 % (Max)	Firm
Snow water equivalent	5 km	15 km	100 km				3 h	24 h	120 h	3 h	24 h	120 h	2 mm	10 mm	20 mm	Reasonable
Soil moisture	5 km	15 km	100 km				0.125 d	1 d	5 d	0.125 d	1 d	5 d	10 g/kg	20 g/kg	50 g/kg	Reasonable
Specific humidity profile - Higher troposphere (HT)	15 km	50 km	250 km	0.5 km	1 km	3 km	1 h	6 h	12 h	0.1 h	0.5 h	6 h	2 %	5 %	10 %	Firm
Specific humidity profile - Lower troposphere (LT)	15 km	50 km	250 km	0.3 km	1 km	3 km	1 h	6 h	12 h	0.1 h	0.5 h	6 h	2 %	5 %	10 %	Firm
Specific humidity profile - Total column	15 km	50 km	250 km				1 h	6 h	12 h	0.1 h	0.5 h	6 h	1 kg/m2	2 kg/m2	5 kg/m2	Firm
Wind profile (horizontal component) - Higher stratosphere & mesosphere	50 km	100 km	500 km	1 km	2 km	3 km	1 h	6 h	12 h	0.1 h	0.5 h	6 h	1 m/s	5 m/s	10 m/s	Firm
Wind profile (horizontal component) - Higher troposphere (HT)	15 km	100 km	500 km	0.5 km	1 km	3 km	1 h	6 h	12 h	0.1 h	0.5 h	6 h	1 m/s	3 m/s	8 m/s	Firm

"Requirement"	Hor Res Goa	"HR B/T"	"HR T/H"	Vert Res Go	"VR B/T"	"VR T/H"	Obs Cycle	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	Acc - RMS	"AC B/T"	"AC T/H"	CF_NAME
Air pressure over land surface	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.79 h	2 h	0.5 hPa	0.63 hPa	1 hPa	Firm
Air pressure over sea surface	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 hPa	0.63 hPa	1 hPa	Firm
Air specific humidity (at surface)	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	5 %	7.2 %	15 %	Reasonable
Air temperature (at surface)	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 K	0.794 K	2 K	Reasonable
Atmospheric temperature profile - Higher troposphere (HT)	10 km	36.8 km	500 km	1 km	1.4 km	3 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	0.5 K	0.909 K	3 K	Firm
Atmospheric temperature profile - Lower stratosphere (LS)	10 km	36.8 km	500 km	1 km	1.4 km	3 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	0.5 K	0.909 K	3 K	Firm
Atmospheric temperature profile - Lower troposphere (LT)	10 km	36.8 km	500 km	0.3 km	0.646 km	3 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	0.5 K	0.909 K	3 K	Firm
Cloud base height	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.909 h	3 h	0.5 km	0.63 km	1 km	Tentative
Cloud cover	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	5 % (Max)	7.9 % (Max)	20 % (Max)	Reasonable
Cloud drop size (at cloud top)	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 µm	0.794 µm	2 µm	Firm
Cloud ice profile - Higher troposphere (HT)	10 km	29.2 km	250 km	1 km	2.2 km	10 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %	Tentative
Cloud ice profile - Lower troposphere (LT)	10 km	29.2 km	250 km	0.3 km	0.766 km	5 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %	Tentative
Cloud ice profile - Total column	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	10 g/m2	12.6 g/m2	20 g/m2	Tentative
Cloud imagery	1 km	3.7 km	50 km				0.25 h	0.721 h	6 h	0.5 h	0.794 h	2 h				Firm
Cloud top height	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 km	0.63 km	1 km	Firm
Cloud water profile (< 100 µm) - Higher troposphere (HT)	10 km	29.2 km	250 km	1 km	2.2 km	10 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %	Tentative
Cloud water profile (< 100 µm) - Lower troposphere (LT)	10 km	29.2 km	250 km	0.3 km	0.766 km	5 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %	Tentative
Cloud water profile (< 100 µm) - Total column	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	10 kg/m2	17.1 kg/m2	50 kg/m2	Tentative
Cloud water profile (> 100 µm) - Higher troposphere (HT)	10 km	29.2 km	250 km	1 km	2.2 km	10 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %	Tentative
Cloud water profile (> 100 µm) - Lower troposphere (LT)	10 km	29.2 km	250 km	0.3 km	0.766 km	5 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %	Tentative
Cloud water profile (> 100 µm) - Total column	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.25 h	0.5 h	4 h	10 kg/m2	17.1 kg/m2	50 kg/m2	Tentative

"Requirement"	Hor Res	Res Goa	"HR B/T"	"HR T/H"	Vert Res	Res Goa	"VR B/T"	"VR T/H"	Obs Cycle	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	Acc - RMS	"AC B/T"	"AC T/H"	CF_NAME
Dominant wave direction	10 km	17.1 km	50 km						1 h	2.3 h	12 h	0.5 h	0.794 h	2 h	10 degrees	12.6 degrees	20 degrees	Firm
Dominant wave period	10 km	17.1 km	50 km						1 h	2.3 h	12 h	0.5 h	0.794 h	2 h	0.5 s	0.63 s	1 s	Firm
Land surface temperature	10 km	29.2 km	250 km						0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 K	1 K	4 K	Firm
Leaf Area Index (LAI)	10 km	17.1 km	50 km						7 d	11.4 d	30 d	1 d	1.9 d	7 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Tentative
Long-wave Earth surface emissivity	5 km	18.4 km	250 km						24 h	74.6 h	720 h	24 h	74.6 h	720 h	1 % (Max)	1.7 % (Max)	5 % (Max)	Tentative
Normalized Differential Vegetation Index (NDVI)	10 km	17.1 km	50 km						7 d	11.4 d	30 d	1 d	1.9 d	7 d	1 % (Max)	1.7 % (Max)	5 % (Max)	Tentative
Outgoing long-wave radiation at TOA	10 km	29.2 km	250 km						0.5 h	0.63 h	1 h	240 h	346.1 h	720 h	5 W/m2	6.3 W/m2	10 W/m2	Firm
Outgoing short-wave radiation at TOA	10 km	29.2 km	250 km						0.5 h	0.63 h	1 h	240 h	274.7 h	360 h	5 W/m2	6.3 W/m2	10 W/m2	Firm
Ozone profile - Higher troposphere (HT)	10 km	27.1 km	200 km	1 km	2.2 km	10 km	0.5 h	0.909 h	3 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %		Tentative	
Ozone profile - Lower stratosphere (LS)	10 km	27.1 km	200 km	1 km	2.2 km	10 km	0.5 h	0.909 h	3 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %		Tentative	
Ozone profile - Lower troposphere (LT)	10 km	27.1 km	200 km	1 km	1.7 km	5 km	0.5 h	0.909 h	3 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %		Tentative	
Ozone profile - Total column	10 km	21.5 km	100 km						0.5 h	1.145 h	6 h	0.25 h	0.5 h	2 h	5 DU	7.9 DU	20 DU	Reasonable
Precipitation index (daily cumulative)	10 km	29.2 km	250 km						0.5 h	1.442 h	12 h	24 h	74.6 h	720 h	0.5 mm/d	1.077 mm/d	5 mm/d	Reasonable
Precipitation rate (liquid) at the surface	10 km	17.1 km	50 km						0.5 h	1.145 h	6 h	0.5 h	0.794 h	2 h	0.1 mm/h	0.215 mm/h	1 mm/h	Tentative
Precipitation rate (solid) at the surface	10 km	21.5 km	100 km						0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.1 mm/h	0.215 mm/h	1 mm/h	Tentative
Sea surface temperature	25 km	31.5 km	50 km						1 h	2.3 h	12 h	1 h	2.9 h	24 h	0.5 K	0.63 K	1 K	Firm
Sea-ice cover	25 km	31.5 km	50 km						0.5 d	1.205 d	7 d	0.3 d	0.646 d	3 d	5 % (Max)	10.8 % (Max)	50 % (Max)	Firm
Sea-ice surface temperature	5 km	13.6 km	100 km						0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 K	1 K	4 K	Firm
Sea-ice thickness	5 km	18.4 km	250 km						1 d	1.9 d	7 d	1 d	1.9 d	7 d	50 cm	63 cm	100 cm	Speculative
Significant wave height	10 km	17.1 km	50 km						1 h	2.3 h	12 h	1 h	1.3 h	2 h	0.1 m	0.126 m	0.2 m	Firm
Snow cover	5 km	18.4 km	250 km						12 h	28.9 h	168 h	6 h	9.5 h	24 h	10 % (Max)	17.1 % (Max)	50 % (Max)	Reasonable

"Requirement"	Hor Res Goa	"HR B/T"	"HR T/H"	Vert Res Goa	"VR B/T"	"VR T/H"	Obs Cycle	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	Acc - RMS	"AC B/T"	"AC T/H"	CF_NAME
Snow water equivalent	5 km	18.4 km	250 km				6 h	21.8 h	288 h	6 h	9.5 h	24 h	5 mm	7.9 mm	20 mm	Tentative
Soil moisture	5 km	18.4 km	250 km				1 d	1.9 d	7 d	7 d	10 d	30 d	10 g/kg	17.1 g/kg	50 g/kg	Reasonable
Specific humidity profile - Higher troposphere (HT)	10 km	21.5 km	100 km	1 km	1.4 km	3 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %	Firm
Specific humidity profile - Lower troposphere (LT)	10 km	21.5 km	100 km	0.4 km	0.684 km	2 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	5 %	7.9 %	20 %	Firm
Specific humidity profile - Total column	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	1 kg/m2	1.7 kg/m2	5 kg/m2	Firm
Wind profile (horizontal component) - Higher troposphere (HT)	10 km	36.8 km	500 km	1 km	2.2 km	10 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	1 m/s	2 m/s	8 m/s	Firm
Wind profile (horizontal component) - Lower stratosphere (LS)	10 km	36.8 km	500 km	1 km	2.2 km	10 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	1 m/s	1.7 m/s	5 m/s	Firm
Wind profile (horizontal component) - Lower troposphere (LT)	10 km	36.8 km	500 km	0.4 km	0.928 km	5 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	1 m/s	1.7 m/s	5 m/s	Firm
Wind profile (vertical component) - Higher troposphere (HT)	10 km	36.8 km	500 km	0.5 km	1.357 km	10 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	1 cm/s	1.7 cm/s	5 cm/s	Speculative
Wind profile (vertical component) - Lower stratosphere (LS)	10 km	36.8 km	500 km	0.5 km	1.357 km	10 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	1 cm/s	1.7 cm/s	5 cm/s	Speculative
Wind profile (vertical component) - Lower troposphere (LT)	10 km	36.8 km	500 km	0.5 km	1.077 km	5 km	0.5 h	1.442 h	12 h	0.25 h	0.5 h	2 h	1 cm/s	1.7 cm/s	5 cm/s	Speculative
Wind speed over land surface (horizontal)	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 m/s	0.909 m/s	3 m/s	Reasonable
Wind speed over sea surface (horizontal)	10 km	21.5 km	100 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 m/s	0.909 m/s	3 m/s	Firm
Wind vector over land surface (horizontal)	10 km	29.2 km	250 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 m/s	1.077 m/s	5 m/s	Reasonable
Wind vector over sea surface (horizontal)	10 km	21.5 km	100 km				0.5 h	1.442 h	12 h	0.5 h	0.794 h	2 h	0.5 m/s	1.077 m/s	5 m/s	Firm

"Requirement"	"for Res Go"	"HR B/T"	"HR T/H"	"forert Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Air temperature (at surface)	10 km	21.5 km	100 km				1 h	2.3 h	12 h	1 h	1.6 h	4 h	0.5 K	0.794 K	2 K	Firm
Atmospheric stability index	20 km	43.1 km	200 km				1 h	1.8 h	6 h	1 h	1.4 h	3 h	Missing	K	Missing	Firm
Atmospheric temperature profile - Higher troposphere (HT)	20 km	43.1 km	200 km	0.1 km	0.271 km	2 km	3 h	4.8 h	12 h	1 h	1.4 h	3 h	0.5 K	0.909 K	3 K	Firm
Atmospheric temperature profile - Lower stratosphere (LS)	20 km	43.1 km	200 km	0.1 km	0.271 km	2 km	3 h	4.8 h	12 h	1 h	1.4 h	3 h	0.5 K	0.909 K	3 K	Firm
Atmospheric temperature profile - Lower troposphere (LT)	20 km	43.1 km	200 km	0.1 km	0.271 km	2 km	3 h	4.8 h	12 h	1 h	1.4 h	3 h	0.5 K	0.909 K	3 K	Firm
Cloud imagery	1 km	2.2 km	10 km				0.25 h	0.721 h	6 h	0.25 h	0.721 h	6 h				Firm
Cloud top height	1 km	2.2 km	10 km				0.25 h	0.721 h	6 h	0.25 h	0.721 h	6 h	0.5 km	0.794 km	2 km	Firm
Cloud type	20 km	43.1 km	200 km				0.25 h	0.721 h	6 h	0.25 h	0.721 h	6 h	10 classes	7.9 classes	5 classes	Firm
Dominant wave direction	50 km	79.4 km	200 km				3 h	4.8 h	12 h	1 h	1.4 h	3 h	20 degrees	22.9 degrees	30 degrees	Firm
Dominant wave period	50 km	79.4 km	200 km				3 h	4.8 h	12 h	1 h	1.4 h	3 h	0.5 s	0.63 s	1 s	Firm
Ozone profile - Total column	20 km	27.1 km	50 km				0.25 h	0.909 h	12 h	0.25 h	0.721 h	6 h	5 DU	7.9 DU	20 DU	Firm
Precipitation rate (liquid) at the surface	20 km	34.2 km	100 km				1 h	1.8 h	6 h	0.25 h	0.721 h	6 h	0.1 mm/h	0.215 mm/h	1 mm/h	Firm
Precipitation rate (solid) at the surface	20 km	34.2 km	100 km				3 h	3.8 h	6 h	0.25 h	0.721 h	6 h	0.1 mm/h	0.215 mm/h	1 mm/h	Firm
Sea surface temperature	5 km	10.8 km	50 km				3 h	6 h	24 h	1 h	2.9 h	24 h	0.5 K	0.794 K	2 K	Firm
Specific humidity profile - Higher troposphere (HT)	20 km	43.1 km	200 km	0.1 km	0.271 km	2 km	3 h	4.8 h	12 h	1 h	1.4 h	3 h	5 %	7.9 %	20 %	Firm
Specific humidity profile - Lower troposphere (LT)	20 km	43.1 km	200 km	0.1 km	0.271 km	2 km	3 h	4.8 h	12 h	1 h	1.4 h	3 h	5 %	7.9 %	20 %	Firm
Wind profile (horizontal component) - Higher troposphere (HT)	20 km	43.1 km	200 km	0.1 km	0.271 km	2 km	3 h	4.8 h	12 h	1 h	1.4 h	3 h	2 m/s	3.2 m/s	8 m/s	Firm
Wind profile (horizontal component) - Lower stratosphere (LS)	20 km	43.1 km	200 km	0.1 km	0.271 km	2 km	3 h	4.8 h	12 h	1 h	1.4 h	3 h	2 m/s	2.7 m/s	5 m/s	Firm
Wind profile (horizontal component) - Lower troposphere (LT)	20 km	43.1 km	200 km	0.1 km	0.271 km	2 km	3 h	4.8 h	12 h	1 h	1.4 h	3 h	2 m/s	2.7 m/s	5 m/s	Firm
Wind speed over land surface (horizontal)	20 km	43.1 km	200 km				1 h	2.3 h	12 h	1 h	1.4 h	3 h	2 m/s	2.7 m/s	5 m/s	Firm
Wind speed over sea surface (horizontal)	20 km	43.1 km	200 km				1 h	2.3 h	12 h	1 h	1.4 h	3 h	2 m/s	2.7 m/s	5 m/s	Firm
Wind vector over land surface (horizontal)	20 km	43.1 km	200 km				1 h	2.3 h	12 h	1 h	1.4 h	3 h	2 m/s	2.7 m/s	5 m/s	Firm
Wind vector over sea surface (horizontal)	20 km	43.1 km	200 km				1 h	2.3 h	12 h	1 h	1.4 h	3 h	2 m/s	2.7 m/s	5 m/s	Firm

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"For Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Fractional Photosynthetically Active Radiation (fAPAR)	50 km	107.7 km	500 km				7 d	11.4 d	30 d	1 d	3.1 d	30 d	5 % (Max)	6.3 % (Max)	10 % (Max)	Firm
Geoid	100 km	171 km	500 km				240 mo	274.7 mo	360 mo	12 y	15.1 y	24 y	1 cm	1.7 cm	5 cm	Firm
Ocean chlorophyll	25 km	39.7 km	100 km				1 d	1.4 d	3 d	1 d	1.4 d	3 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Firm
Ocean dynamic topography	25 km	39.7 km	100 km				7 d	11.4 d	30 d	2 d	3.9 d	15 d	1 cm	1.6 cm	4 cm	Firm
Ocean surface salinity	100 km	135.7 km	250 km				30 d	37.8 d	60 d	9 d	21.3 d	120 d	0.1 psu	0.144 psu	0.3 psu	Reasonable
Ocean suspended sediment concentration	100 km	171 km	500 km				1 d	1.8 d	6 d	30 d	43.3 d	90 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Speculative
Ocean yellow substance absorbance	100 km	171 km	500 km				1 d	1.8 d	6 d	30 d	43.3 d	90 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Speculative
Sea surface temperature	50 km	85.5 km	250 km				3 h	4.8 h	12 h	3 h	6 h	24 h	0.1 K	0.171 K	0.5 K	Firm
Snow water equivalent	50 km	107.7 km	500 km				24 h	45.9 h	168 h	24 h	45.9 h	168 h	5 mm	7.9 mm	20 mm	Tentative
Soil moisture	50 km	107.7 km	500 km				1 d	1.9 d	7 d	1 d	1.9 d	7 d	10 g/kg	17.1 g/kg	50 g/kg	Reasonable
Vegetation type	50000 m	107721.7 m	500000 m				7 d	11.4 d	30 d	1 d	1.9 d	7 d	18 classes	14.3 classes	9 classes	Firm

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"For Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Aerosol profile - Total column	5 km	10.8 km	50 km				0.25 h	0.909 h	12 h	0.25 h	0.5 h	2 h	10 %	12.6 %	20 %	Firm
Air temperature (at surface)	5 km	7.9 km	20 km				0.25 h	0.397 h	1 h	0.25 h	0.315 h	0.5 h	0.5 K	0.63 K	1 K	Reasonable
Atmospheric stability index	5 km	10.8 km	50 km				0.08 h	0.147 h	0.5 h	0.25 h	0.397 h	1 h	Missing	K	Missing	Firm
Atmospheric temperature profile - Higher troposphere (HT)	5 km	17.1 km	200 km	1 km	1.4 km	3 km	0.25 h	0.397 h	1 h	0.08 h	0.147 h	0.5 h	1 K	1.3 K	2 K	Firm
Atmospheric temperature profile - Lower troposphere (LT)	5 km	17.1 km	200 km	0.5 km	0.63 km	1 km	0.25 h	0.397 h	1 h	0.08 h	0.147 h	0.5 h	0.5 K	0.794 K	2 K	Firm
Cloud cover	1 km	2.7 km	20 km				0.0083 h	0.041 h	1 h	0.016 h	0.05 h	0.5 h	5 % (Max)	7.9 % (Max)	20 % (Max)	Firm
Cloud imagery	1 km	1.7 km	5 km				0.05 h	0.108 h	0.5 h	0.25 h	0.397 h	1 h				Firm
Cloud top height	1 km	2.2 km	10 km				0.01 h	0.037 h	0.5 h	0.02 h	0.058 h	0.5 h	0.1 km	0.215 km	1 km	Firm
Cloud top temperature	1 km	2.2 km	10 km				0.01 h	0.037 h	0.5 h	0.02 h	0.058 h	0.5 h	0.5 K	0.794 K	2 K	Firm
Cloud type	1 km	2.2 km	10 km				0.01 h	0.037 h	0.5 h	0.02 h	0.058 h	0.5 h	10 classes	7.9 classes	5 classes	Firm
Fire area	5 km	18.4 km	250 km				0.25 d	0.909 d	12 d	1 d	1.6 d	4 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Firm
Fire temperature	5 km	18.4 km	250 km				0.25 d	0.909 d	12 d	1 d	1.6 d	4 d	500 K	630 K	1000 K	Firm
Height of the top of the Planetary Boundary Layer	5 km	10.8 km	50 km				0.25 h	0.397 h	1 h	0.08 h	0.147 h	0.5 h	50 m	107.7 m	500 m	Firm
Height of tropopause	10 km	27.1 km	200 km				0.5 h	1.145 h	6 h	0.5 h	0.794 h	2 h	0.1 km	0.215 km	1 km	Firm
Land surface temperature	1 km	3.7 km	50 km				0.25 h	0.397 h	1 h	0.08 h	0.147 h	0.5 h	0.5 K	0.909 K	3 K	Firm
Normalized Differential Vegetation Index (NDVI)	5 km	6.3 km	10 km				1 d	2.3 d	12 d	1 d	1.7 d	5 d	5 % (Max)	6.3 % (Max)	10 % (Max)	Firm
Ocean surface currents (vector)	10 km	17.1 km	50 km				0.25 d	0.721 d	6 d	0.25 d	0.63 d	4 d	0.5 cm/s	0.63 cm/s	1 cm/s	Firm
Precipitation rate (liquid) at the surface	5 km	10.8 km	50 km				0.08 h	0.186 h	1 h	0.08 h	0.147 h	0.5 h	0.1 mm/h	0.215 mm/h	1 mm/h	Firm
Precipitation rate (solid) at the surface	5 km	10.8 km	50 km				0.25 h	0.397 h	1 h	0.5 h	0.79 h	2 h	0.1 mm/h	0.215 mm/h	1 mm/h	Firm
Sea surface temperature	5 km	10.8 km	50 km				1 h	1.8 h	6 h	1 h	1.3 h	2 h	0.5 K	0.794 K	2 K	Firm
Sea-ice cover	5 km	10.8 km	50 km				1 d	2.9 d	24 d	1 d	1.8 d	6 d	10 % (Max)	12.6 % (Max)	20 % (Max)	Firm
Snow cover	5 km	10.8 km	50 km				1 h	5.2 h	144 h	1 h	1.8 h	6 h	10 % (Max)	12.6 % (Max)	20 % (Max)	Firm

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"Start Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	CF_NAME
Soil moisture	5 km	10.8 km	50 km				0.5 d	0.794 d	2 d	0.25 d	0.397 d	1 d	10 g/kg	17.1 g/kg	50 g/kg	Reasonable
Specific humidity profile - Higher troposphere (HT)	5 km	17.1 km	200 km	1 km	1.4 km	3 km	0.25 h	0.397 h	1 h	0.08 h	0.147 h	0.5 h	5 %	7.9 %	20 %	Firm
Specific humidity profile - Lower troposphere (LT)	5 km	17.1 km	200 km	0.5 km	0.63 km	1 km	0.25 h	0.397 h	1 h	0.08 h	0.147 h	0.5 h	5 %	7.9 %	20 %	Firm
Specific humidity profile - Total column	5 km	10.8 km	50 km				0.25 h	0.397 h	1 h	0.08 h	0.147 h	0.5 h	1 kg/m2	1.7 kg/m2	5 kg/m2	Firm
Temperature of tropopause	10 km	27.1 km	200 km				0.5 h	1.145 h	6 h	0.5 h	0.794 h	2 h	0.5 K	0.794 K	2 K	Firm
Wind profile (horizontal component) - Higher troposphere (HT)	5 km	17.1 km	200 km	0.5 km	0.63 km	1 km	0.25 h	0.63 h	4 h	0.08 h	0.147 h	0.5 h	1 m/s	2 m/s	8 m/s	Firm
Wind profile (horizontal component) - Lower stratosphere (LS)	5 km	17.1 km	200 km	0.5 km	0.63 km	1 km	0.25 h	0.721 h	6 h	0.25 h	0.5 h	2 h	1 m/s	1.7 m/s	5 m/s	Firm
Wind profile (horizontal component) - Lower troposphere (LT)	5 km	17.1 km	200 km	0.5 km	0.63 km	1 km	0.25 h	0.721 h	6 h	0.25 h	0.5 h	2 h	1 m/s	1.7 m/s	5 m/s	Firm
Wind profile (vertical component) - Lower troposphere (LT)	5 km	17.1 km	200 km	0.5 km	0.794 km	2 km	0.25 h	0.397 h	1 h	0.08 h	0.147 h	0.5 h	1 cm/s	1.7 cm/s	5 cm/s	Firm
Wind speed over land surface (horizontal)	5 km	10.8 km	50 km				0.25 h	0.572 h	3 h	0.25 h	0.397 h	1 h	1 m/s	1.7 m/s	5 m/s	Firm
Wind speed over sea surface (horizontal)	5 km	10.8 km	50 km				0.25 h	0.572 h	3 h	0.25 h	0.397 h	1 h	1 m/s	1.7 m/s	5 m/s	Firm
Wind vector over land surface (horizontal)	5 km	10.8 km	50 km				0.25 h	0.572 h	3 h	0.25 h	0.397 h	1 h	1 m/s	1.7 m/s	5 m/s	Firm
Wind vector over sea surface (horizontal)	5 km	10.8 km	50 km				0.25 h	0.572 h	3 h	0.25 h	0.397 h	1 h	1 m/s	1.7 m/s	5 m/s	Firm

"Requirement"	Hor Res Goa	"HR B/T"	"HR T/H"	Vert Res Go	"VR B/T"	"VR T/H"	Obs Cycle	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	Acc - RMS	"AC B/T"	"AC T/H"	CF_NAME
Aerosol profile - Higher stratosphere & mesosphere (HS & M)	50 km	107.7 km	500 km	1 km	2.2 km	10 km	6 h	9.5 h	24 h	12 h	28.9 h	168 h	10 %	12.6 %	20 %	Firm
Aerosol profile - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	6 h	9.5 h	24 h	12 h	28.9 h	168 h	10 %	12.6 %	20 %	Firm
Aerosol profile - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	6 h	9.5 h	24 h	12 h	28.9 h	168 h	10 %	12.6 %	20 %	Firm
Aerosol profile - Lower troposphere (LT)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	6 h	9.5 h	24 h	12 h	28.9 h	168 h	5 %	7.9 %	20 %	Firm
Cloud imagery	100 km	126 km	200 km				3 h	4.8 h	12 h	72 h	95.5 h	168 h				Firm
Ozone profile - Higher stratosphere & mesosphere (HS & M)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	3 h	7.6 h	48 h	72 h	95.5 h	168 h	5 %	8.5 %	25 %	Firm
Ozone profile - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	3 h	11.5 h	168 h	72 h	95.5 h	168 h	3 %	5.6 %	20 %	Firm
Ozone profile - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	3 h	11.5 h	168 h	72 h	95.5 h	168 h	3 %	5.6 %	20 %	Firm
Ozone profile - Lower troposphere (LT)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	3 h	11.5 h	168 h	72 h	95.5 h	168 h	3 %	5.6 %	20 %	Firm
Ozone profile - Total column	25 km	39.7 km	100 km				6 h	12 h	48 h	3 h	11.5 h	168 h	6 DU	9 DU	20 DU	Firm
Specific humidity profile - Higher stratosphere & mesosphere (HS & M)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	12 h	21.8 h	72 h	72 h	95.5 h	168 h	5 %	7.9 %	20 %	Firm
Specific humidity profile - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	12 h	21.8 h	72 h	72 h	95.5 h	168 h	5 %	7.9 %	20 %	Firm
Specific humidity profile - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	12 h	21.8 h	72 h	72 h	95.5 h	168 h	5 %	7.9 %	20 %	Firm
Specific humidity profile - Lower troposphere (LT)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	6 h	13.7 h	72 h	72 h	95.5 h	168 h	5 %	7.9 %	20 %	Firm
Trace gas profile BrO - Higher stratosphere & mesosphere (HS & M)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile BrO - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile BrO - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile BrO - Lower troposphere (LT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CFC 11 - Higher stratosphere & mesosphere (HS & M)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CFC 11 - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CFC 11 - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CFC 11 - Lower troposphere (LT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm

"Requirement"	Hor Res Goa	"HR B/T"	"HR T/H"	Vert Res Go	"VR B/T"	"VR T/H"	Obs Cycle	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	Acc - RMS	"AC B/T"	"AC T/H"	CF_NAME
Trace gas profile CFC 12 - Higher stratosphere & mesosphere (HS & M)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CFC 12 - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CFC 12 - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CFC 12 - Lower troposphere (LT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CH4 - Higher stratosphere & mesosphere (HS & M)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	3.4 %	10 %	Firm
Trace gas profile CH4 - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	3.4 %	10 %	Firm
Trace gas profile CH4 - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	3.4 %	10 %	Firm
Trace gas profile CH4 - Lower troposphere (LT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	3.4 %	10 %	Firm
Trace gas profile ClO - Higher stratosphere & mesosphere (HS & M)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile ClO - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile ClO - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile ClO - Lower troposphere (LT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile ClONO2 - Higher stratosphere & mesosphere (HS & M)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile ClONO2 - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile ClONO2 - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CO - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CO - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CO - Lower troposphere (LT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile CO2 - Lower troposphere (LT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	2.7 %	5 %	Firm
Trace gas profile COS - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.4 km	3 km	12 h	21.8 h	72 h	24 h	45.9 h	168 h	15 %	17.8 %	25 %	Firm
Trace gas profile COS - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	12 h	21.8 h	72 h	24 h	45.9 h	168 h	15 %	17.8 %	25 %	Firm
Trace gas profile COS - Lower troposphere (LT)	100 km	171 km	500 km	1 km	1.4 km	3 km	12 h	21.8 h	72 h	24 h	45.9 h	168 h	15 %	17.8 %	25 %	Firm

"Requirement"	Hor Res Goa	"HR B/T"	"HR T/H"	Vert Res Go	"VR B/T"	"VR T/H"	Obs Cycle	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	Acc - RMS	"AC B/T"	"AC T/H"	CF_NAME
Trace gas profile HCHO - Total column	50 km	107.7 km	500 km				24 h	30.2 h	48 h	72 h	95.5 h	168 h	5 %	7.2 %	15 %	Firm
Trace gas profile HCl - Higher stratosphere & mesosphere (HS & M)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	2.7 %	5 %	Firm
Trace gas profile HCl - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.1 km	1.5 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	2.7 %	5 %	Firm
Trace gas profile HCl - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	2.7 %	5 %	Firm
Trace gas profile HNO3 - Higher stratosphere & mesosphere (HS & M)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile HNO3 - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile HNO3 - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile HNO3 - Lower troposphere (LT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile N2O - Higher stratosphere & mesosphere (HS & M)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	4.3 %	20 %	Firm
Trace gas profile N2O - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	4.3 %	20 %	Firm
Trace gas profile N2O - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	4.3 %	20 %	Firm
Trace gas profile N2O - Lower troposphere (LT)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	2 %	4.3 %	20 %	Firm
Trace gas profile NO - Higher stratosphere & mesosphere (HS & M)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile NO - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile NO - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile NO - Lower troposphere (LT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile NO2 - Higher stratosphere & mesosphere (HS & M)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile NO2 - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile NO2 - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile NO2 - Lower troposphere (LT)	50 km	107.7 km	500 km	1 km	1.6 km	4 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	6.3 %	10 %	Firm
Trace gas profile NO2 - Total column	50 km	107.7 km	500 km				24 h	30.2 h	48 h	72 h	95.5 h	168 h	5 %	7.2 %	15 %	Firm
Trace gas profile OH - Higher stratosphere & mesosphere (HS & M)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	9.1 %	30 %	Firm

"Requirement"	Hor Res Goa	"HR B/T"	"HR T/H"	Vert Res Go	"VR B/T"	"VR T/H"	Obs Cycle	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	Acc - RMS	"AC B/T"	"AC T/H"	CF_NAME
Trace gas profile OH - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.1 km	1.5 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	9.1 %	30 %	Firm
Trace gas profile OH - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	9.1 %	30 %	Firm
Trace gas profile OH - Lower troposphere (LT)	100 km	171 km	500 km	1 km	1.1 km	1.5 km	6 h	9.5 h	24 h	72 h	95.5 h	168 h	5 %	9.1 %	30 %	Firm
Trace gas profile SO2 - Higher troposphere (HT)	100 km	171 km	500 km	1 km	1.4 km	3 km	12 h	21.8 h	72 h	24 h	45.9 h	168 h	10 %	12.6 %	20 %	Firm
Trace gas profile SO2 - Lower stratosphere (LS)	100 km	171 km	500 km	1 km	1.4 km	3 km	12 h	21.8 h	72 h	24 h	45.9 h	168 h	10 %	12.6 %	20 %	Firm
Trace gas profile SO2 - Lower troposphere (LT)	100 km	171 km	500 km	1 km	1.4 km	3 km	12 h	21.8 h	72 h	24 h	45.9 h	168 h	10 %	12.6 %	20 %	Firm

"Requirement"	"for Res Go"	"HR B/T"	"HR T/H"	"ert Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Fire area	0.01 km	0.1 km	10 km				0.25 d	0.397 d	1 d	0.0416 d	0.076 d	0.25 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Reasonable
Fire temperature	0.01 km	0.1 km	10 km				0.25 d	0.397 d	1 d	0.0416 d	0.076 d	0.25 d	50 K	79.4 K	200 K	Reasonable
Fractional Photosynthetically Active Radiation (fAPAR)	5 km	13.6 km	100 km				0.0416 d	0.23 d	7 d	1 d	1.7 d	5 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Reasonable
Land cover	100 m	215.4 m	1000 m				1 y	1.3 y	2 y	10 d	14.4 d	30 d	10 classes	7.4 classes	4 classes	Reasonable
Land surface temperature	0.1 km	0.464 km	10 km				1 h	4.2 h	72 h	3 h	6 h	24 h	0.3 K	0.565 K	2 K	Reasonable
Leaf Area Index (LAI)	0.01 km	0.1 km	10 km				5 d	5.6 d	7 d	1 d	1.7 d	5 d	5 % (Max)	6.3 % (Max)	10 % (Max)	Reasonable
Normalized Differential Vegetation Index (NDVI)	1 km	2.2 km	10 km				1 d	1.9 d	7 d	1 d	1.7 d	5 d	5 % (Max)	6.3 % (Max)	10 % (Max)	Reasonable
Precipitation index (daily cumulative)	10 km	17.1 km	50 km				24 h	34.6 h	72 h	24 h	30.2 h	48 h	2 mm/d	3.4 mm/d	10 mm/d	Reasonable
Snow cover	1 km	2.2 km	10 km				120 h	134.2 h	168 h	24 h	43.6 h	144 h	2 % (Max)	3.4 % (Max)	10 % (Max)	Reasonable
Snow water equivalent	1 km	2.2 km	10 km				168 h	272.9 h	720 h	24 h	45.9 h	168 h	5 mm	23.2 mm	500 mm	Reasonable
Soil moisture	0.1 km	0.215 km	1 km				1 d	1.9 d	7 d	1 d	1.7 d	5 d	10 g/kg	17.1 g/kg	50 g/kg	Reasonable
Soil type	0.1 km	0.464 km	10 km				1 y	1.3 y	2 y	10 d	14.4 d	30 d	15 classes	10.4 classes	5 classes	Reasonable
Vegetation type	50 m	107.7 m	500 m				30 d	37.8 d	60 d	1 d	1.9 d	7 d	30 classes	16.5 classes	5 classes	Reasonable

"Requirement"	for Res Go	"HR B/T"	"HR T/H"	for Res Go	"VR B/T"	"VR T/H"	Obs Cycle	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	Acc - RMS	"AC B/T"	"AC T/H"	CF_NAME
Iceberg fractional cover	1 km	3.7 km	50 km				1 d	2.3 d	12 d	1 d	1.6 d	4 d	10 % (Max)	12.6 % (Max)	20 % (Max)	Firm
Iceberg height	1 km	3.7 km	50 km				1 d	2.3 d	12 d	1 d	1.6 d	4 d	1 m	1.3 m	2 m	Firm
Land cover	10 m	292.4 m	250000 m				0.02 y	0.074 y	1 y	1 d	1.9 d	7 d	50 classes	23.2 classes	5 classes	Reasonable
Land surface imagery	10 m	292.4 m	250000 m				1 d	7.1 d	365 d	1 d	1.9 d	7 d				Reasonable
Land surface temperature	0.01 km	0.292 km	250 km				1 h	5.5 h	168 h	24 h	45.9 h	168 h	0.3 K	0.646 K	3 K	Reasonable
Land surface topography	100 m	215.4 m	1000 m				10 y	17.1 y	50 y	30 d	81.4 d	600 d	1 m (vert.)	1.7 m (vert.)	5 m (vert.)	Reasonable
Leaf Area Index (LAI)	0.01 km	0.1 km	10 km				7 d	10.6 d	24 d	1 d	1.7 d	5 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Reasonable
Long-wave Earth surface emissivity	0.01 km	0.292 km	250 km				24 h	54.9 h	288 h	24 h	54.9 h	288 h	5 % (Max)	7.9 % (Max)	20 % (Max)	Reasonable
Normalized Differential Vegetation Index (NDVI)	0.01 km	0.292 km	250 km				1 d	3.1 d	30 d	1 d	1.9 d	7 d	1 % (Max)	2.7 % (Max)	20 % (Max)	Reasonable
Outgoing long-wave radiation at TOA	10 km	21.5 km	100 km				1 h	2.3 h	12 h	24 h	45.9 h	168 h	5 W/m2	7.9 W/m2	20 W/m2	Reasonable
Outgoing short-wave radiation at TOA	0.1 km	1.26 km	200 km				1 h	1.8 h	6 h	24 h	45.9 h	168 h	5 W/m2	7.9 W/m2	20 W/m2	Reasonable
Permafrost	0.1 km	1 km	100 km				0.25 d	0.572 d	3 d	0.25 d	0.721 d	6 d	5 % (Max)	8.5 % (Max)	25 % (Max)	Reasonable
Sea level	0.1 km	0.464 km	10 km				1 d	1.9 d	7 d	1 d	1.9 d	7 d	2 cm	3.4 cm	10 cm	Reasonable
Snow cover	0.1 km	1 km	100 km				24 h	45.9 h	168 h	24 h	43.6 h	144 h	5 % (Max)	7.9 % (Max)	20 % (Max)	Reasonable
Snow melting conditions	0.1 km	0.464 km	10 km				0.5 h	4.16 h	288 h	1 h	5.2 h	144 h	5 classes	3.7 classes	2 classes	Reasonable
Snow water equivalent	0.1 km	0.464 km	10 km				24 h	45.9 h	168 h	24 h	43.6 h	144 h	5 mm	7.9 mm	20 mm	Reasonable
Soil moisture	0.01 km	0.292 km	250 km				1 d	1.4 d	3 d	1 d	5.2 d	144 d	10 g/kg	17.1 g/kg	50 g/kg	Reasonable
Vegetation type	10 m	46.4 m	1000 m				7 d	26.2 d	365 d	1 d	3.1 d	30 d	50 classes	23.2 classes	5 classes	Reasonable

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"Start Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Aerosol absorption optical depth (VIS) - Higher Stratosphere & Mesosphere	1 km	2 km	10 km				1 d	2 d	7 d	7 d	14 d	60 d	0.004 1/km	0.01 1/km	0.02 1/km	Reasonable
Aerosol absorption optical depth (VIS) - Higher Troposphere column	1 km	2 km	10 km				1 d	2 d	7 d	7 d	14 d	60 d	0.004 1/km	0.01 1/km	0.02 1/km	Reasonable
Aerosol absorption optical depth (VIS) - Lower Stratosphere column	1 km	2 km	10 km				1 d	2 d	7 d	7 d	14 d	60 d	0.004 1/km	0.01 1/km	0.02 1/km	Reasonable
Aerosol absorption optical depth (VIS) - Lower Troposphere column	1 km	2 km	10 km				1 d	2 d	7 d	7 d	14 d	60 d	0.004 1/km	0.01 1/km	0.02 1/km	Reasonable
Aerosol extinction coefficient (VIS) - Higher stratosphere & mesosphere	10 km	20 km	100 km	0.5 km	0.65 km	1 km	1 d	2 d	7 d	7 d	14 d	60 d	0.01 1/km 1/km	0.02 1/km	Reasonable	
Aerosol extinction coefficient (VIS) - Higher troposphere (HT)	10 km	20 km	100 km	0.5 km	0.65 km	1 km	1 d	2 d	7 d	7 d	14 d	60 d	0.01 1/km 1/km	0.02 1/km	Reasonable	
Aerosol extinction coefficient (VIS) - Lower stratosphere (LS)	10 km	20 km	100 km	0.5 km	0.65 km	1 km	1 d	2 d	7 d	7 d	14 d	60 d	0.01 1/km 1/km	0.02 1/km	Reasonable	
Aerosol extinction coefficient (VIS) - Lower troposphere (LT)	10 km	20 km	100 km	0.5 km	0.65 km	1 km	1 d	2 d	7 d	7 d	14 d	60 d	0.01 1/km 1/km	0.02 1/km	Reasonable	
Aerosol optical depth (VIS+IR) - Higher Stratosphere & Mesosphere	1 km	2 km	10 km				1 d	2 d	7 d	7 d	14 d	60 d	0.01 1/km 1/km	0.02 1/km	Reasonable	
Aerosol optical depth (VIS+IR) - Higher Troposphere column	1 km	2 km	10 km				1 d	2 d	7 d	7 d	14 d	60 d	0.01 1/km 1/km	0.02 1/km	Reasonable	
Aerosol optical depth (VIS+IR) - Lower Stratosphere column	1 km	2 km	10 km				1 d	2 d	7 d	7 d	14 d	60 d	0.01 1/km 1/km	0.02 1/km	Reasonable	
Aerosol optical depth (VIS+IR) - Lower Troposphere column	1 km	2 km	10 km				1 d	2 d	7 d	7 d	14 d	60 d	0.01 1/km 1/km	0.02 1/km	Reasonable	
Aerosol profile - Higher stratosphere & mesosphere (HS & M)	100 km	171 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	10 %	12.6 %	20 %	Tentative
Aerosol profile - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	6 h	18.2 h	168 h	720 h	907.1 h	1440 h	10 %	12.6 %	20 %	Tentative
Aerosol profile - Higher troposphere (HT)	100 km	171 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	10 %	12.6 %	20 %	Tentative
Aerosol profile - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	2.2 km	10 km	6 h	18.2 h	168 h	720 h	907.1 h	1440 h	10 %	12.6 %	20 %	Tentative
Aerosol profile - Lower stratosphere (LS)	100 km	171 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	10 %	12.6 %	20 %	Tentative
Aerosol profile - Lower troposphere (LT)	50 km	107.7 km	500 km	0.1 km	0.215 km	1 km	6 h	18.2 h	168 h	720 h	907.1 h	1440 h	10 %	12.6 %	20 %	Tentative
Aerosol profile - Lower troposphere (LT)	100 km	171 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	10 %	12.6 %	20 %	Tentative
Air pressure over land surface	200 km	300 km	500 km				3 h	6 h	24 h	3 h	6 h	12 h	0.5 hPa	0.65 hPa	1 hPa	Reasonable
Air pressure over sea surface	200 km	300 km	500 km				3 h	6 h	24 h	3 h	6 h	12 h	0.5 hPa	0.65 hPa	1 hPa	Reasonable
Air specific humidity (at surface)	25 km	50 km	100 km				3 h	4 h	6 h	24 h	48 h	72 h	1 %	1.3 %	2 %	Speculative
Air specific humidity (at surface)	100 km	171 km	500 km				12 h	15.1 h	24 h	24 h	30.2 h	48 h	10 %	12.6 %	20 %	Tentative
Air temperature (at surface)	25 km	50 km	100 km				3 h	6 h	12 h	24 h	36 h	48 h	0.1 K	0.15 K	0.3 K	Firm

"Requirement"	"for Res Go"	"HR B/T"	"HR T/H"	"ert Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	CF_NAME
Air temperature (at surface)	100 km	171 km	500 km				12 h	15.1 h	24 h	24 h	30.2 h	48 h	0.2 K	0.271 K	0.5 K	Tentative
Air-sea delta pCO2	5 km	10 km	50 km				1 d	3 d	30 d	30 d	70 d	360 d	1 microatm	1.5 microatm	3 microatm	Reasonable
Albedo	1 km	2 km	10 km				1 d	3 d	30 d	30 d	45 d	90 d	5 % (Max)	7 % (Max)	10 % (Max)	Reasonable
Atmospheric temperature profile - Higher stratosphere & mesosphere	100 km	200 km	500 km	2 km	2.5 km	3 km	3 h	4 h	6 h	3 h	6 h	12 h	0.5 K	1 K	3 K	Firm
Atmospheric temperature profile - Higher stratosphere & mesosphere	50 km	107.7 km	500 km	5 km	6.3 km	10 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	1 K	1.4 K	3 K	Reasonable
Atmospheric temperature profile - Higher stratosphere & mesosphere	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	0.5 K	0.63 K	1 K	Reasonable
Atmospheric temperature profile - Higher troposphere (HT)	100 km	200 km	500 km	0.1 km	0.2 km	0.5 km	3 h	4 h	6 h	3 h	6 h	12 h	0.5 K	1 K	2 K	Firm
Atmospheric temperature profile - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.4 km	3 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	0.5 K	0.909 K	3 K	Reasonable
Atmospheric temperature profile - Higher troposphere (HT)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	0.5 K	0.63 K	1 K	Reasonable
Atmospheric temperature profile - Lower stratosphere (LS)	100 km	200 km	500 km	2 km	2.5 km	3 km	3 h	4 h	6 h	3 h	6 h	12 h	0.5 K	1 K	2 K	Firm
Atmospheric temperature profile - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.4 km	3 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	0.5 K	0.909 K	3 K	Reasonable
Atmospheric temperature profile - Lower stratosphere (LS)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	0.5 K	0.63 K	1 K	Reasonable
Atmospheric temperature profile - Lower troposphere (LT)	100 km	200 km	500 km	0.1 km	0.2 km	0.5 km	3 h	4 h	6 h	3 h	6 h	12 h	0.5 K	1 K	2 K	Firm
Atmospheric temperature profile - Lower troposphere (LT)	50 km	107.7 km	500 km	0.3 km	0.646 km	3 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	0.5 K	0.909 K	3 K	Reasonable
Atmospheric temperature profile - Lower troposphere (LT)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	0.5 K	0.63 K	1 K	Reasonable
Biomass	0.01 km	0.1 km	10 km				360 d	450 d	720 d	30 d	45 d	90 d	5 t/ha	7 t/ha	10 t/ha	Reasonable
Cloud base height	50 km	85.5 km	250 km				3 h	4.8 h	12 h	720 h	907.1 h	1440 h	0.5 km	0.794 km	2 km	Tentative
Cloud cover	99 km	100 km	500 km				3 h	4 h	6 h	3 h	6 h	12 h	10 % (Max)	15 % (Max)	20 % (Max)	Firm
Cloud cover	50 km	85.5 km	250 km				3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 % (Max)	7.9 % (Max)	20 % (Max)	Reasonable
Cloud ice profile - Higher stratosphere & mesosphere (HS & M)	50 km	85.5 km	250 km	1 km	1.7 km	5 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Tentative
Cloud ice profile - Higher troposphere (HT)	50 km	85.5 km	250 km	1 km	1.7 km	5 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Tentative
Cloud ice profile - Lower stratosphere (LS)	50 km	85.5 km	250 km	1 km	1.7 km	5 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Tentative
Cloud ice profile - Lower troposphere (LT)	50 km	85.5 km	250 km	1 km	1.3 km	2 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Tentative
Cloud ice profile - Total column	100 km	200 km	500 km				3 h	4 h	6 h	3 h	6 h	12 h	10 g/m2	15 g/m2	20 g/m2	Firm

"Requirement"	"for Res Go"	"HR B/T"	"HR T/H"	"Start Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Cloud ice profile - Total column	50 km	85.5 km	250 km				3 h	4.8 h	12 h	720 h	907.1 h	1440 h	10 g/m2	12.6 g/m2	20 g/m2	Tentative
Cloud optical thickness	100 km	171 km	500 km				12 h	15.1 h	24 h	24 h	30.2 h	48 h	15 %	18.9 %	30 %	Reasonable
Cloud top height	100 km	200 km	500 km				3 h	4 h	6 h	3 h	6 h	12 h	0.5 km	1 km	2 km	Firm
Cloud top height	100 km	171 km	500 km				12 h	15.1 h	24 h	24 h	30.2 h	48 h	0.5 km	0.63 km	1 km	Reasonable
Cloud top temperature	100 km	200 km	500 km				3 h	4 h	6 h	3 h	6 h	12 h	0.3 K	0.4 K	0.6 K	Firm
Cloud top temperature	50 km	85.5 km	250 km				3 h	4.8 h	12 h	720 h	907.1 h	1440 h	0.5 K	0.794 K	2 K	Reasonable
Cloud water profile (< 100 µm) - Higher troposphere (HT)	50 km	85.5 km	250 km	1 km	2.2 km	10 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Tentative
Cloud water profile (< 100 µm) - Lower troposphere (LT)	50 km	85.5 km	250 km	1 km	1.7 km	5 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Tentative
Cloud water profile (< 100 µm) - Total column	100 km	200 km	500 km				3 h	4 h	6 h	3 h	6 h	12 h	10 kg/m2	20 kg/m2	50 kg/m2	Firm
Cloud water profile (< 100 µm) - Total column	50 km	85.5 km	250 km				3 h	4.8 h	12 h	720 h	907.1 h	1440 h	10 kg/m2	17.1 kg/m2	50 kg/m2	Tentative
Cloud water profile (> 100 µm) - Higher troposphere (HT)	50 km	85.5 km	250 km	1 km	2.2 km	10 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Tentative
Cloud water profile (> 100 µm) - Lower troposphere (LT)	50 km	85.5 km	250 km	1 km	1.7 km	5 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Tentative
Cloud water profile (> 100 µm) - Total column	100 km	200 km	500 km				3 h	4 h	6 h	3 h	6 h	12 h	5 kg/m2	10 kg/m2	20 kg/m2	Firm
Cloud water profile (> 100 µm) - Total column	50 km	85.5 km	250 km				3 h	4.8 h	12 h	720 h	907.1 h	1440 h	10 kg/m2	17.1 kg/m2	50 kg/m2	Tentative
Coastal sea level change	25 km	100 km	1000 km				24 h	50 h	240 h	1 h	3 h	24 h	1 cm	2 cm	10 cm	Reasonable
Downwelling long-wave radiation at the Earth surface	25 km	50 km	100 km				3 h	4 h	6 h	24 h	48 h	120 h	5 W/m2	6.5 W/m2	10 W/m2	Firm
Downwelling short-wave radiation at the Earth surface	25 km	50 km	100 km				24 h	48 h	120 h	24 h	72 h	720 h	5 W/m2	6.5 W/m2	10 W/m2	Firm
Downwelling solar radiation at TOA	100 km	200 km	500 km				3 d	4 d	6 d	3 d	7 d	24 d	1 W/m2	1.3 W/m2	2 W/m2	Reasonable
Downwelling solar radiation at TOA	25 km	39.7 km	100 km				1 d	1.8 d	6 d	30 d	43.3 d	90 d	0.1 W/m2	0.215 W/m2	1 W/m2	Reasonable
Fire area	0.25 km	0.85 km	10 km				1 d	1.5 d	3 d	360 d	450 d	720 d	5 % (Max)	7 % (Max)	10 % (Max)	Reasonable
Fractional Photosynthetically Active Radiation (fAPAR)	0.25 km	0.5 km	2 km				1 d	3 d	30 d	10 d	15 d	30 d	5 % (Max)	7 % (Max)	10 % (Max)	Firm
Glacier cover	30 m	45 m	100 m				1 y	1.5 y	5 y	360 d	450 d	720 d	5 % (Max)	7 % (Max)	10 % (Max)	Firm
Glacier topography	30 m	45 m	100 m				1 y	1.5 y	5 y	360 d	450 d	720 d	10 cm	22 cm	100 cm	Firm
Ground water	1 km	2 km	10 km				30 d	70 d	360 d	30 d	45 d	90 d	5 % (Max)	7 % (Max)	10 % (Max)	Firm

"Requirement"	"for Res Go"	"HR B/T"	"HR T/H"	"ert Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Iceberg fractional cover	1 km	2.2 km	10 km				365 d	584.6 d	1500 d	30 d	43.3 d	90 d	10 % (Max)	12.6 % (Max)	20 % (Max)	Tentative
Iceberg height	1 km	2.2 km	10 km				365 d	584.6 d	1500 d	30 d	43.3 d	90 d	1 m	1.4 m	3 m	Tentative
Ice-sheet topography	0.01 km	0.015 km	0.05 km				1 y	2 y	10 y	360 d	450 d	720 d	10 cm (vert.)	15 cm (vert.)	20 cm (vert.)	Speculative
Ice-sheet topography	0.1 km	0.171 km	0.5 km				10 y	11.4 y	15 y	30 d	43.3 d	90 d	5 cm (vert.)	6.3 cm (vert.)	10 cm (vert.)	Tentative
Lake level	4 km	8 km	40 km				30 d	45 d	90 d	30 d	45 d	90 d	10 cm	15 cm	20 cm	Reasonable
Lake surface temperature	1 km	2 km	10 km				1 d	2 d	10 d	30 d	45 d	90 d	0.2 K	0.3 K	0.4 K	Firm
Land cover	250 m	400 m	1000 m				1 y	1.5 y	5 y	1 d	7 d	360 d	50 classes	25 classes	5 classes	Firm
Land surface imagery	250 m	550 m	2500 m				30 d	45 d	90 d	30 d	45 d	90 d				Firm
Land surface temperature	1 km	10 km	500 km				24 h	48 h	72 h	3 h	4 h	6 h	1 K	1.3 K	2 K	Firm
Land surface temperature	50 km	85.5 km	250 km				3 h	4.8 h	12 h	720 h	907.1 h	1440 h	1 K	1.6 K	4 K	Reasonable
Land surface topography	250 m	850 m	10000 m				5 y	6 y	10 y	360 d	450 d	720 d	1 m (vert.)	2 m (vert.)	10 m (vert.)	Firm
Leaf Area Index (LAI)	0.25 km	0.85 km	10 km				1 d	3 d	30 d	30 d	45 d	90 d	5 % (Max)	7 % (Max)	10 % (Max)	Tentative
Ocean carbon content change	50 km	60 km	100 km	10	13	20	5 y	6 y	10 y	1 y	1.3 y	2 y	DIC/µmol/kg	DIC/µmol/kg	DIC/µmol/kg	Reasonable
Ocean chlorophyll	1 km	5 km	100 km				1 d	1.5 d	3 d	1 d	1.5 d	3 d	5 % (Max)	8.5 % (Max)	25 % (Max)	Firm
Ocean chlorophyll	100 km	171 km	500 km				1 d	1.8 d	6 d	30 d	43.3 d	90 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Speculative
Ocean dynamic topography	25 km	50 km	250 km				1 d	3 d	30 d	0.125 d	0.25 d	1 d	1 cm	1.5 cm	5 cm	Firm
Ocean dynamic topography	100 km	126 km	200 km				5 d	6.3 d	10 d	10 d	14.4 d	30 d	2 cm	2.7 cm	5 cm	Speculative
Ocean salinity - Deep-ocean	50 km	60 km	100 km	2	2.5	4	30 d	70 d	360 d	60 d	110 d	360 d	0.002 psu	0.003 psu	0.005 psu	Reasonable
Ocean salinity - Upper-ocean	15 km	40 km	300 km	1 m	2 m	10 m	1 d	2 d	10 d	0.5 h	0.6 h	1 h	0.001 psu	0.002 psu	0.01 psu	Reasonable
Ocean surface salinity	100 km	170 km	500 km				7 d	11 d	30 d	10 d	15 d	30 d	0.05 psu	0.09 psu	0.3 psu	Firm
Ocean surface salinity	100 km	135.7 km	250 km				30 d	37.8 d	60 d	9 d	21.3 d	120 d	0.1 psu	0.144 psu	0.3 psu	Reasonable
Ocean suspended sediment concentration	100 km	171 km	500 km				1 d	1.8 d	6 d	30 d	43.3 d	90 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Speculative
Ocean temperature - Deep-ocean	50 km	60 km	100 km	2	2.5	4	30 d	150 d	3600 d	60 d	110 d	360 d	0.002 K	0.003 K	0.005 K	Reasonable
Ocean temperature - Upper-ocean	1 km	6 km	300 km	1 m	2 m	10 m	1 d	2 d	10 d	0.5 h	0.6 h	1 h	0.001 K	0.002 K	0.01 K	Reasonable

"Requirement"	"for Res Go"	"HR B/T"	"HR T/H"	"Alert Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Ocean yellow substance absorbance	100 km	171 km	500 km				1 d	1.8 d	6 d	30 d	43.3 d	90 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Speculative
Outgoing long-wave Earth surface	25 km	50 km	100 km				3 h	4 h	6 h	24 h	48 h	120 h	5 W/m ²	6.5 W/m ²	10 W/m ²	Speculative
Outgoing long-wave radiation at TOA	100 km	200 km	500 km				3 h	4 h	6 h	3 h	6 h	24 h	5 W/m ²	6.5 W/m ²	10 W/m ²	Firm
Outgoing long-wave radiation at TOA	50 km	85.5 km	250 km				3 h	3.8 h	6 h	720 h	1038.4 h	2160 h	5 W/m ²	6.3 W/m ²	10 W/m ²	Reasonable
Outgoing short-wave radiation at TOA	100 km	200 km	500 km				3 h	4 h	6 h	3 h	6 h	24 h	5 W/m ²	6.5 W/m ²	10 W/m ²	Firm
Outgoing short-wave radiation at TOA	50 km	85.5 km	250 km				3 h	3.8 h	6 h	720 h	1038.4 h	2160 h	5 W/m ²	6.3 W/m ²	10 W/m ²	Reasonable
Ozone profile - Higher stratosphere & mesosphere (HS & M)	50 km	100 km	500 km	0.5 km	1 km	3 km	3 h	9 h	48 h	720 h	1440 h	4520 h	5 %	8 %	20 %	Firm
Ozone profile - Higher stratosphere & mesosphere (HS & M)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	5 %	6.3 %	10 %	Reasonable
Ozone profile - Higher troposphere (HT)	5 km	20 km	100 km	0.5 km	1 km	2 km	3 h	9 h	72 h	720 h	1440 h	4520 h	10 %	15 %	30 %	Firm
Ozone profile - Higher troposphere (HT)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	5 %	6.3 %	10 %	Reasonable
Ozone profile - Lower stratosphere (LS)	50 km	75 km	100 km	0.5 km	1 km	3 km	3 h	9 h	72 h	720 h	1440 h	4520 h	5 %	8 %	20 %	Firm
Ozone profile - Lower stratosphere (LS)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	5 %	6.3 %	10 %	Reasonable
Ozone profile - Lower troposphere (LT)	5 km	10 km	50 km	0.5 km	1 km	2 km	3 h	9 h	72 h	720 h	1440 h	4520 h	10 %	13 %	20 %	Firm
Ozone profile - Lower troposphere (LT)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	5 %	6.3 %	10 %	Reasonable
Ozone profile - Total column	5 km	10 km	50 km				3 h	9 h	72 h	720 h	1440 h	4520 h	5 DU	8 DU	15 DU	Firm
Ozone profile - Troposphere column	5 km	10 km	50 km				3 h	9 h	72 h	720 h	1440 h	4520 h	5 DU	8 DU	15 DU	Firm
Permafrost	0.25 km	0.85 km	10 km				1 d	1.5 d	5 d	1 d	1.5 d	5 d	5 % (Max)	7 % (Max)	10 % (Max)	Firm
Precipitation index (daily cumulative)	100 km	200 km	500 km				12 h	16 h	24 h	24 h	72 h	288 h	1 mm/d	1.3 mm/d	2 mm/d	Firm
Precipitation index (daily cumulative)	50 km	85.5 km	250 km				1 h	2.3 h	12 h	720 h	907.1 h	1440 h	0.5 mm/d	1.077 mm/d	5 mm/d	Reasonable
Precipitation rate (liquid) at the surface	100 km	200 km	500 km				3 h	4 h	6 h	3 h	6 h	12 h	0.1 mm/h	0.3 mm/h	2 mm/h	Firm
Precipitation rate (solid) at the surface	100 km	200 km	500 km				3 h	4 h	6 h	3 h	6 h	12 h	0.1 mm/h	0.3 mm/h	2 mm/h	Firm
River discharge	10 km	20 km	100 km				1 d	2 d	7 d	30 d	45 d	90 d	5 % (Max)	7 % (Max)	10 % (Max)	Reasonable
Sea surface temperature	10 km	50 km	500 km				3 h	6 h	24 h	3 h	6 h	12 h	0.25 K	0.4 K	1 K	Firm
Sea surface temperature	1 km	8 km	500 km				1 h	3 h	24 h	3 h	5 h	12 h	0.1 K	0.126 K	0.2 K	Reasonable

"Requirement"	"for Res Go"	"HR B/T"	"HR T/H"	"for Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	CF_NAME
Sea surface temperature	50 km	85.5 km	250 km				1 h	2.3 h	12 h	720 h	907.1 h	1440 h	0.5 K	0.794 K	2 K	Reasonable
Sea surface temperature	25 km	39.7 km	100 km				24 h	30.2 h	48 h	720 h	907.1 h	1440 h	0.5 K	0.794 K	2 K	Reasonable
Sea surface temperature	10 km	17.1 km	50 km				3 h	3.8 h	6 h	24 h	34.6 h	72 h	0.1 K	0.144 K	0.3 K	Reasonable
Sea-ice cover	12 km	25 km	100 km				1 d	2 d	7 d	0.125 d	0.25 d	1 d	5 % (Max)	6 % (Max)	10 % (Max)	Firm
Sea-ice cover	15 km	38.3 km	250 km				1 d	2.5 d	15 d	30 d	43.3 d	90 d	5 % (Max)	10.8 % (Max)	50 % (Max)	Reasonable
Sea-ice cover	25 km	39.7 km	100 km				1 d	1.9 d	7 d	7 d	11.4 d	30 d	5 % (Max)	6.3 % (Max)	10 % (Max)	Reasonable
Sea-ice cover	15 km	22.4 km	50 km				1 d	1.4 d	3 d	3 d	4 d	7 d	2 % (Max)	2.7 % (Max)	5 % (Max)	Reasonable
Sea-ice surface temperature	100 km	171 km	500 km				12 h	15.1 h	24 h	24 h	30.2 h	48 h	1 K	1.3 K	2 K	Reasonable
Sea-ice thickness	100 km	170 km	500 km				1 d	2 d	7 d	1 d	3 d	24 d	0.1 cm	0.2 cm	1 cm	Reasonable
Sea-ice thickness	200 km	271.4 km	500 km				7 d	11.4 d	30 d	30 d	43.3 d	90 d	100 cm	126 cm	200 cm	Tentative
Short-wave Earth surface bi-directional reflectance	25 km	50 km	100 km				3 h	4 h	6 h	24 h	48 h	120 h	5 % (Max)	6.5 % (Max)	10 % (Max)	Speculative
Significant wave height	25 km	50 km	250 km				3 h	4 h	6 h	3 h	6 h	12 h	0.1 m	0.3 m	2 m	Firm
Significant wave height	100 km	135.7 km	250 km				12 h	15.1 h	24 h	720 h	907.1 h	1440 h	0.5 m	0.63 m	1 m	Reasonable
Snow cover	0.1 km	0.45 km	10 km				24 h	75 h	720 h	30 h	70 h	360 h	5 % (Max)	7 % (Max)	10 % (Max)	Firm
Snow cover	100 km	200 km	500 km				24 h	48 h	168 h	6 h	12 h	24 h	10 % (Max)	13 % (Max)	20 % (Max)	Firm
Snow cover	15 km	38.3 km	250 km				24 h	45.9 h	168 h	720 h	1038.4 h	2160 h	10 % (Max)	17.1 % (Max)	50 % (Max)	Reasonable
Snow cover	1 km	2.9 km	25 km				24 h	41 h	120 h	168 h	272.9 h	720 h	10 % (Max)	12.6 % (Max)	20 % (Max)	Reasonable
Snow water equivalent	100 km	200 km	500 km				24 h	48 h	168 h	6 h	12 h	24 h	5 mm	6.5 mm	10 mm	Firm
Snow water equivalent	15 km	38.3 km	250 km				12 h	28.9 h	168 h	720 h	1038.4 h	2160 h	5 mm	7.9 mm	20 mm	Tentative
Snow water equivalent	10 km	13.6 km	25 km				24 h	41 h	120 h	168 h	272.9 h	720 h	5 mm	7.9 mm	20 mm	Tentative
Soil moisture	50 km	60 km	100 km				7 d	11 d	30 d	360 d	450 d	720 d	5 g/kg	7 g/kg	10 g/kg	Speculative
Soil moisture	15 km	38.3 km	250 km				1 d	2.2 d	10 d	10 d	14.4 d	30 d	10 g/kg	17.1 g/kg	50 g/kg	Tentative
Specific humidity profile - Higher stratosphere & mesosphere (HS & M)	50 km	100 km	200 km	2 km	3 km	5 km	3 h	4 h	6 h	168 h	336 h	1440 h	2 %	5 %	20 %	Firm
Specific humidity profile - Higher stratosphere & mesosphere (HS & M)	50 km	85.5 km	250 km	1 km	1.4 km	3 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Reasonable

"Requirement"	"or Res Go"	"HR B/T"	"HR T/H"	"ert Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	CF_NAME
Specific humidity profile - Higher stratosphere & mesosphere (HS & M)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	2 %	2.7 %	5 %	Reasonable
Specific humidity profile - Higher troposphere (HT)	20 km	50 km	100 km	0.1 km	0.5 km	2 km	3 h	4 h	6 h	168 h	336 h	1440 h	2 %	5 %	20 %	Firm
Specific humidity profile - Higher troposphere (HT)	50 km	63 km	100 km	0.5 km	0.794 km	2 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Reasonable
Specific humidity profile - Higher troposphere (HT)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	2 %	2.7 %	5 %	Reasonable
Specific humidity profile - Lower stratosphere (LS)	50 km	100 km	200 km	2 km	2.5 km	3 km	3 h	4 h	6 h	168 h	336 h	1440 h	2 %	5 %	20 %	Firm
Specific humidity profile - Lower stratosphere (LS)	50 km	85.5 km	250 km	0.5 km	0.794 km	2 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Reasonable
Specific humidity profile - Lower stratosphere (LS)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	2 %	2.7 %	5 %	Reasonable
Specific humidity profile - Lower troposphere (LT)	10 km	15 km	25 km	0.1 km	0.2 km	1 km	3 h	4 h	6 h	168 h	336 h	1440 h	2 %	4 %	15 %	Firm
Specific humidity profile - Lower troposphere (LT)	50 km	63 km	100 km	0.5 km	0.794 km	2 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	5 %	7.9 %	20 %	Reasonable
Specific humidity profile - Lower troposphere (LT)	50 km	107.7 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	2 %	2.7 %	5 %	Reasonable
Specific humidity profile - Total column	50 km	100 km	200 km				3 h	4 h	6 h	168 h	336 h	1440 h	1 kg/m ²	1.4 kg/m ²	3 kg/m ²	Firm
Specific humidity profile - Troposphere column	10 km	25 km	200 km				3 h	4 h	6 h	168 h	336 h	1440 h	1 kg/m ²	1.4 kg/m ²	3 kg/m ²	Reasonable
Trace gas profile CH4 - Higher stratosphere & mesosphere (HS & M)	50 km	100 km	250 km	2 km	2.5 km	4 km	3 h	4 h	6 h	720 h	1440 h	4320 h	2 %	4 %	10 %	Firm
Trace gas profile CH4 - Higher troposphere (HT)	50 km	100 km	250 km	2 km	2.5 km	4 km	3 h	4 h	6 h	720 h	1440 h	4320 h	2 %	4 %	10 %	Firm
Trace gas profile CH4 - Lower stratosphere (LS)	50 km	100 km	250 km	2 km	2.5 km	4 km	3 h	4 h	6 h	720 h	1440 h	4320 h	2 %	4 %	10 %	Firm
Trace gas profile CH4 - Lower troposphere (LT)	10 km	20 km	50 km	2 km	2.5 km	3 km	3 h	4 h	6 h	720 h	1440 h	4320 h	2 %	4 %	10 %	Firm
Trace gas profile CH4 - Total column	10 km	50 km	250 km				3 h	4 h	6 h	720 h	1440 h	4320 h	2 %	4 %	10 %	Reasonable
Trace gas profile CH4 - Troposphere column	10 km	20 km	50 km				3 h	4 h	6 h	720 h	1440 h	4320 h	2 %	4 %	10 %	Reasonable
Trace gas profile CO2 - Higher troposphere (HT)	50 km	100 km	250 km	1 km	1.5 km	2 km	3 h	4 h	6 h	168 h	336 h	1440 h	1 %	1.3 %	2 %	Reasonable
Trace gas profile CO2 - Higher stratosphere & mesosphere (HS & M)	250 km	350 km	500 km	2 km	3 km	4 km	3 h	4 h	6 h	720 h	1440 h	4320 h	1 %	1.3 %	2 %	Reasonable
Trace gas profile CO2 - Lower stratosphere (LS)	250 km	350 km	500 km	1 km	2 km	4 km	3 h	4 h	6 h	720 h	1440 h	4320 h	1 %	1.3 %	2 %	Reasonable
Trace gas profile CO2 - Lower troposphere (LT)	10 km	50 km	500 km	0.5 km	1 km	2 km	3 h	6 h	12 h	168 h	336 h	1440 h	1 %	1.3 %	2 %	Firm
Trace gas profile CO2 - Total column	50 km	100 km	500 km				3 h	4 h	6 h	720 h	1440 h	4320 h	1 %	1.3 %	2 %	Reasonable
Trace gas profile CO2 - Troposphere column	10 km	50 km	500 km				3 h	4 h	6 h	168 h	336 h	1440 h	1 %	1.3 %	2 %	Reasonable

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"Start Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Wetland extent	0.25 km	0.85 km	10 km				7 d	11 d	30 d	30 d	45 d	90 d	5 % (Max)	7 % (Max)	10 % (Max)	Reasonable
Wind profile (horizontal component) - Higher stratosphere & mesosphere	100 km	200 km	500 km	0.5 km	1 km	3 km	3 h	3.8 h	6 h	3 h	6 h	12 h	2 m/s	3 m/s	7 m/s	Firm
Wind profile (horizontal component) - Higher stratosphere & mesosphere	50 km	107.7 km	500 km	2 km	2.7 km	5 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	3 m/s	3.6 m/s	5 m/s	Reasonable
Wind profile (horizontal component) - Higher stratosphere & mesosphere	200 km	271.4 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	3 m/s	3.6 m/s	5 m/s	Reasonable
Wind profile (horizontal component) - Higher troposphere (HT)	100 km	200 km	500 km	0.5 km	0.65 km	1 km	3 h	4 h	6 h	3 h	6 h	12 h	2 m/s	3 m/s	5 m/s	Firm
Wind profile (horizontal component) - Higher troposphere (HT)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	2 m/s	2.7 m/s	5 m/s	Reasonable
Wind profile (horizontal component) - Higher troposphere (HT)	200 km	271.4 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	3 m/s	3.6 m/s	5 m/s	Reasonable
Wind profile (horizontal component) - Lower stratosphere (LS)	100 km	200 km	500 km	0.5 km	0.65 km	1 km	3 h	4 h	6 h	3 h	6 h	12 h	2 m/s	3 m/s	5 m/s	Firm
Wind profile (horizontal component) - Lower stratosphere (LS)	50 km	107.7 km	500 km	1 km	1.7 km	5 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	2 m/s	2.7 m/s	5 m/s	Reasonable
Wind profile (horizontal component) - Lower stratosphere (LS)	200 km	271.4 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	3 m/s	3.6 m/s	5 m/s	Reasonable
Wind profile (horizontal component) - Lower troposphere (LT)	100 km	200 km	500 km	0.5 km	1 km	2 km	3 h	4 h	6 h	3 h	6 h	12 h	2 m/s	3 m/s	5 m/s	Firm
Wind profile (horizontal component) - Lower troposphere (LT)	50 km	107.7 km	500 km	0.3 km	0.766 km	5 km	3 h	4.8 h	12 h	720 h	907.1 h	1440 h	2 m/s	2.7 m/s	5 m/s	Reasonable
Wind profile (horizontal component) - Lower troposphere (LT)	200 km	271.4 km	500 km	0.5 km	0.794 km	2 km	6 h	13.7 h	72 h	24 h	45.9 h	168 h	3 m/s	3.6 m/s	5 m/s	Reasonable
Wind speed over sea surface (horizontal)	10 km	40 km	500 km				1 h	3 h	24 h	1 h	2 h	12 h	0.5 m/s	0.6 m/s	1 m/s	Reasonable
Wind vector over sea surface (horizontal)	10 km	20 km	100 km				1 h	3 h	24 h	3 h	5 h	12 h	0.5 m/s	1 m/s	5 m/s	Firm
Wind vector over sea surface (horizontal)	10 km	50 km	500 km				1 h	3 h	6 h	3 h	6 h	12 h	0.5 m/s	1 m/s	5 m/s	Firm
Wind vector over sea surface (horizontal)	50 km	85.5 km	250 km				12 h	15.1 h	24 h	720 h	907.1 h	1440 h	1 m/s	1.7 m/s	5 m/s	Reasonable
Wind vector over sea surface (horizontal)	25 km	39.7 km	100 km				12 h	15.1 h	24 h	720 h	907.1 h	1440 h	1 m/s	1.7 m/s	5 m/s	Reasonable
Wind vector over sea surface (horizontal)	50 km	85.5 km	250 km				12 h	15.1 h	24 h	72 h	95.5 h	168 h	1 m/s	1.7 m/s	5 m/s	Reasonable

"Requirement"	for Res Go	"HR B/T"	"HR T/H"	for Res Go	"VR B/T"	"VR T/H"	Obs Cycle	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	Acc - RMS	"AC B/T"	"AC T/H"	CF_NAME
Aerosol (total column) size	4 km	9.3 km	50 km				24 h	30.2 h	48 h	3 h	4 h	7 h	0.1 µm	0.215 µm	1 µm	Firm
Aerosol (total column) size	1 km	2.2 km	10 km				24 h	30.2 h	48 h	3 h	4 h	7 h	0.1 µm	0.215 µm	1 µm	Firm
Air pressure over sea surface	50 km	63 km	100 km				24 h	30.2 h	48 h	3 h	4 h	7 h	10 hPa	11.4 hPa	15 hPa	Firm
Dominant wave direction	10 km	14.4 km	30 km				1 h	1.8 h	6 h	2 h	2.5 h	4 h	10 degrees	12.6 degrees	20 degrees	Firm
Dominant wave period	10 km	14.4 km	30 km				1 h	1.8 h	6 h	2 h	2.5 h	4 h	0.5 s	0.63 s	1 s	Firm
Fractional Photosynthetically Active Radiation (fAPAR)	10 km	17.1 km	50 km				0.04 d	0.117 d	1 d	3 d	4 d	7 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Firm
Fractional Photosynthetically Active Radiation (fAPAR)	1 km	1.7 km	5 km				0.04 d	0.117 d	1 d	3 d	4 d	7 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Firm
Geoid	250 km	315 km	500 km				240 mo	274.7 mo	360 mo	12 y	15.1 y	24 y	2 cm	2.7 cm	5 cm	Firm
Ocean chlorophyll	10 km	17.1 km	50 km				1 d	1.4 d	3 d	3 d	4 d	7 d	0.1 % (Max)	0.171 % (Max)	0.5 % (Max)	Firm
Ocean chlorophyll	1 km	1.7 km	5 km				1 d	1.4 d	3 d	3 d	4 d	7 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Firm
Ocean chlorophyll	25 km	39.7 km	100 km				1 d	1.4 d	3 d	1 d	1.4 d	3 d	0.1 % (Max)	0.171 % (Max)	0.5 % (Max)	Firm
Ocean dynamic topography	100 km	144.2 km	300 km				10 d	14.4 d	30 d	10 d	14.4 d	30 d	2 cm	2.7 cm	5 cm	Firm
Ocean dynamic topography	25 km	39.7 km	100 km				7 d	11.4 d	30 d	2 d	3.9 d	15 d	2 cm	3.4 cm	10 cm	Firm
Ocean surface salinity	200 km	271.4 km	500 km				10 d	14.4 d	30 d	10 d	14.4 d	30 d	0.1 psu	0.215 psu	1 psu	Firm
Ocean yellow substance absorbance	1 km	1.7 km	5 km				1 d	1.3 d	2 d	3 d	4 d	7 d	5 % (Max)	7.9 % (Max)	20 % (Max)	Firm
Ozone profile - Total column	50 km	79.4 km	200 km				24 h	30.2 h	48 h	3 h	4 h	7 h	10 DU	12.6 DU	20 DU	Firm
Sea surface temperature	10 km	17.1 km	50 km				24 h	30.2 h	48 h	3 h	4 h	7 h	0.1 K	0.171 K	0.5 K	Firm
Sea surface temperature	1 km	1.7 km	5 km				24 h	30.2 h	48 h	3 h	4 h	7 h	0.1 K	0.171 K	0.5 K	Firm
Sea surface temperature	10 km	31.1 km	300 km				6 h	29.6 h	720 h	6 h	29.6 h	720 h	0.1 K	0.215 K	1 K	Firm
Sea surface temperature	1 km	2.2 km	10 km				6 h	7.6 h	12 h	2 h	2.5 h	4 h	0.1 K	0.271 K	2 K	Firm
Sea-ice cover	10 km	21.5 km	100 km				1 d	1.8 d	6 d	0.125 d	0.25 d	1 d	2 % (Max)	3.4 % (Max)	10 % (Max)	Firm

"Requirement"	"For Res Go"	"HR B/T"	"HR T/H"	"First Res Go"	"VR B/T"	"VR T/H"	"Obs Cycle"	"OC B/T"	"OC T/H"	"Delay of a"	"DA B/T"	"DA T/H"	"Acc - RMS"	"AC B/T"	"AC T/H"	"CF_NAME"
Sea-ice thickness	25 km	39.7 km	100 km				1 d	1.8 d	6 d	1 d	1.8 d	6 d	50 cm	63 cm	100 cm	Firm
Specific humidity profile - Total column	25 km	39.7 km	100 km				24 h	45.9 h	168 h	3 h	4 h	7 h	5 kg/m2	6.3 kg/m2	10 kg/m2	Firm
Wind speed over sea surface (horizontal)	25 km	39.7 km	100 km				24 h	45.9 h	168 h	24 h	45.9 h	168 h	1 m/s	1.3 m/s	2 m/s	Firm
Wind vector over sea surface (horizontal)	4 km	9.3 km	50 km				24 h	30.2 h	48 h	3 h	4 h	7 h	2 m/s	2.7 m/s	5 m/s	Firm
Wind vector over sea surface (horizontal)	25 km	39.7 km	100 km				24 h	45.9 h	168 h	24 h	45.9 h	168 h	1 m/s	1.3 m/s	2 m/s	Firm