

HRIT and LRIT Dissemination Scheme

The dissemination scheme in force at the start of the routine operational phase have been established during the commissioning period, taking into account the characteristics of the SEVIRI image data, in particular with regard to its compressibility.

Table 1 below summarises the contents of both HRIT and LRIT services. To optimise dissemination bandwidth the use of data compression in order to maximise the amount of information to be transmitted is required. A primary objective of the service is to deliver image data for nowcasting within a few minutes of the end of acquisition of each image part, therefore the timeliness of data delivery is an issue of utmost importance.

Access to the content of LRIT and HRIT is controlled in accordance with EUMETSAT Data Policy. The control of non-essential data is accomplished through the use of encryption schemes.

Table 1 - LRIT and HRIT Dissemination Baseline

	LRIT			HRIT		
	Repeat Cycle (mins)	Timeliness (mins)	Compression	Repeat Cycle (mins)	Timeliness (mins)	Compression
SEVIRI 1.5 (rectified data with header and trailer)						
HRV	-	-	-	15	5	lossy (JPEG)
VIS 0.6	30	15	lossy (JPEG)	15	5	lossless (WaveLet Transform)
VIS 0.8	-	-	-	15	5	lossless (WaveLet Transform)
IR 1.6	30	15	lossy (JPEG)	15	5	lossless (WaveLet Transform)
IR 3.9	30	15	lossy (JPEG)	15	5	lossless (WaveLet Transform)
WV 6.2	30	15	lossy (JPEG)	15	5	lossless (WaveLet Transform)
WV 7.3	-	-	-	15	5	lossless (WaveLet Transform)
IR 8.7	-	-	-	15	5	lossless (WaveLet Transform)
IR 9.7 (O ₃)	-	-	-	15	5	lossless (WaveLet Transform)
IR 10.8	30	15	lossy (JPEG)	15	5	lossless (WaveLet Transform)
IR 12.0	-	-	-	15	5	lossless (WaveLet Transform)
IR 13.4 (CO ₂)	-	-	-	15	5	lossless (WaveLet Transform)
Foreign Satellite Data						

GOES-E: VIS 0.55	180	180	lossless (JPEG)	-	-	-
GOES-E: WV 6.8	180	180	lossless (JPEG)	-	-	-
GOES-E: IR 10.7	180	180	lossless (JPEG)	-	-	-
GOES-W: VIS 0.55	180	180	lossless (JPEG)	-	-	-
GOES-W: WV 6.8	180	180	lossless (JPEG)	-	-	-
GOES-W: IR 10.7	180	180	lossless (JPEG)	-	-	-
GMS/MT-SAT: VIS 0.5	180	180	lossless (JPEG)	-	-	-
GMS/MT-SAT: WV 6.7	180	180	lossless (JPEG)	-	-	-
GMS/MT-SAT: IR 10.8	180	180	lossless (JPEG)	-	-	-
Meteosat-5 Data						
MET-5: VIS 0.5	180	180	lossless (JPEG)	-	-	-
MET-5: WV 5.7	180	180	lossless (JPEG)	-	-	-
MET-5: IR 10.5	180	180	lossless (JPEG)	-	-	-
Meteorological Products						
AMV	180	15	BUFR	-	-	-
TOZ	180	15	BUFR	-	-	-
CLM	15	15	GRIB2	-	-	-
GII	15	15	BUFR	-	-	-
TH	60	15	BUFR	-	-	-
CTH	180	15	lossless (JPEG)	-	-	-
CLAI	180	15	lossless (JPEG)	-	-	-
CLA	180	15	BUFR	-	-	-
SST	720	15	None	-	-	-
SEA ICE	24 hours	15	None	-	-	-
DCP/MDD Services						
DCP	N/A	10	None	-	-	-
DCP Bulletins	N/A	180	None	-	-	-
MDD	Continuous	30	None	-	-	-
Service Messages						
ADMIN	30	120	None	15	120	None
NEWS	As required	120	None	As required	120	None
REG-RPT	Daily (21.00 UTC)	120	None	Daily (21.00 UTC)	120	None
TIMTABNOM	1440	120	None	1440	120	None
OVL-CL, OVL-	1440	120	None	1440	120	None

Abbreviations Key

Image Data

HRV - High Resolution Visible
IR - Infra red
VIS - Visible
WV - Water Vapour

Meteorological Products List

AMV - Atmosphere Motion Vectors
CLA - Cloud Analysis
CLAI - Cloud Analysis Image
CLM - Cloud Mask
CTH - Cloud Top Height
GII - Global Instability Index
SST - Sea Surface Temperature
TH - Tropospheric Humidity
TOZ - Total Ozone

Service Messages

ADMIN - System admin messages report on last 24 hours of operations.
NEWS - Informs users of real-time problems, with follow up messages when the problem is resolve - it may be sent at anytime of day.
OVL-CL - Coastline overlays for full disk.
OVL-GRID - Grid overlays for full disk, generated at 10 degree grid point distance.
REG-RPT - Announces the planned schedule for the following week.
TIMTABNOM - Contains the dissemination scheme baseline.

The data content of the HRIT and LRIT are formatted in accordance with an internationally coordinated scheme which is specified in the CGMS LRIT/HRIT Global Specifications, The mission specific details of this dissemination scheme are described in the document "MSG Ground Segment – LRIT/HRIT Mission Specific Implementation". Both documents are provided on the EUMETSAT Web Page in PDF format for [download](#).