

# IASI L0 and L1 Daily Monitoring Report **Metop-C**

IASI monitoring team

15/04/2026 00:00:00 - 16/04/2026 00:00:00

## 1 Introduction

This report provides summary monitoring plots and figures from IASI instrument on the Metop-C satellite retrieved from the IASI L0 and L1 ENG product (3 minutes data packet) for 15/04/2026 00:00:00 - 16/04/2026 00:00:00 .

The monitoring data are extracted on PDU basis.

## 2 Data quantity 15/04/2026 00:00:00 - 16/04/2026 00:00:00

Product Type	Number	Action
L0 HKTm PDUs	481	-
L0 IASI PDUs	481	-
L1 ENG PDUs	480	-
L1 ENG distinct GEPSSGranule	481	-
<b>L1 DPX PDUs (RM: IASI-HIRS)</b>	<b>0</b>	<b>e</b>
L1 DPS Files (RM: OBS-CAL NWP based)	480	-

Table 1: Data quantity

APID	Seq from	Seq to	Time from	Time to
PX1 (130)	10991	10993	20260415163857.388	20260415163857.822
PX1 (130)	10994	11088	20260415163858.037	20260415163922.900
PX1 (130)	11088	11090	20260415163922.900	20260415163924.845
PX2 (135)	10986	10988	20260415163856.306	20260415163856.740
PX2 (135)	10990	10992	20260415163857.173	20260415163857.603
PX2 (135)	10995	11087	20260415163858.252	20260415163922.685
PX3 (140)	10989	10992	20260415163856.955	20260415163857.603
PX3 (140)	10992	10994	20260415163857.603	20260415163858.037
PX3 (140)	10995	11087	20260415163858.252	20260415163922.685
PX3 (140)	11088	11090	20260415163922.900	20260415163924.845
PX4 (145)	10995	11088	20260415163858.252	20260415163922.900
IMG (150)	12466	12468	20260415163856.091	20260415163856.521
IMG (150)	12471	12473	20260415163857.173	20260415163857.603
IMG (150)	12476	12577	20260415163858.252	20260415163922.037
IMG (150)	12577	12580	20260415163922.037	20260415163922.685
VER (160)	16379	0	20260415045331.154	20260415045339.150
VER (160)	0	16380	20260415045339.150	20260415045339.150
VER (160)	-1	1	20260415045339.150	20260415045347.150
VER (160)	16380	0	20260415121027.131	20260415121035.131

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**Table 2 – continued from previous page**

<b>APID</b>	<b>Seq from</b>	<b>Seq to</b>	<b>Time from</b>	<b>Time to</b>
VER (160)	1	16381	20260415121035.131	20260415121035.131
VER (160)	-1	2	20260415121035.131	20260415121043.131
VER (160)	10061	10078	20260415163851.119	20260415163923.119
VER (160)	16381	0	20260415192723.077	20260415192731.077
VER (160)	2	16382	20260415192731.077	20260415192731.077
VER (160)	-1	3	20260415192731.077	20260415192739.076
AUX (180)	8561	8565	20260415163851.548	20260415163923.548

Table 2: L0 data gaps

### 3 Instrument modes

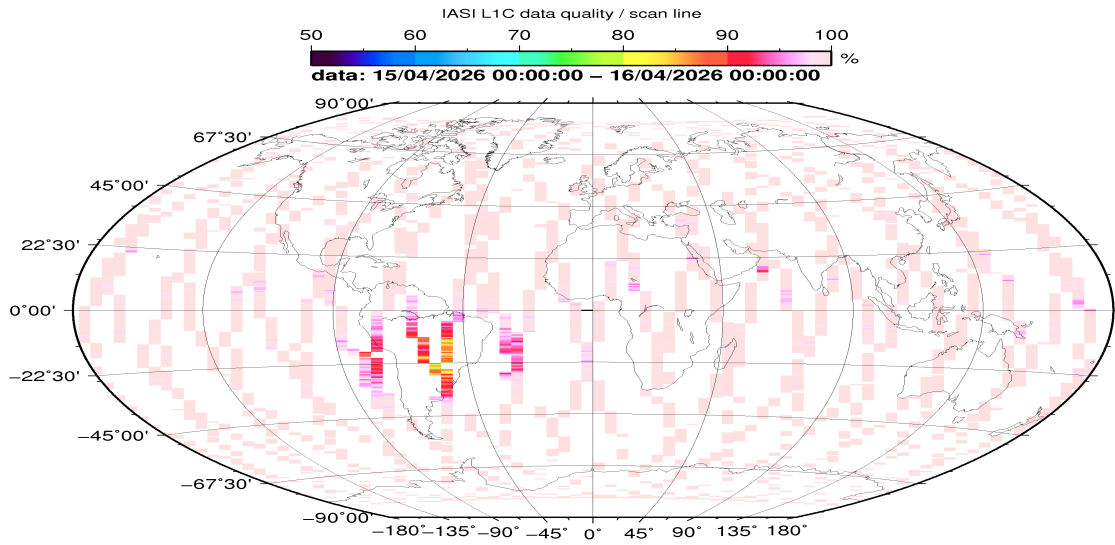
Time	Transition from	Transition to
15/04/2026 00:00:08	-	Normal operation

Table 3: Instrument modes

### 4 L0 and L1 Data Quality

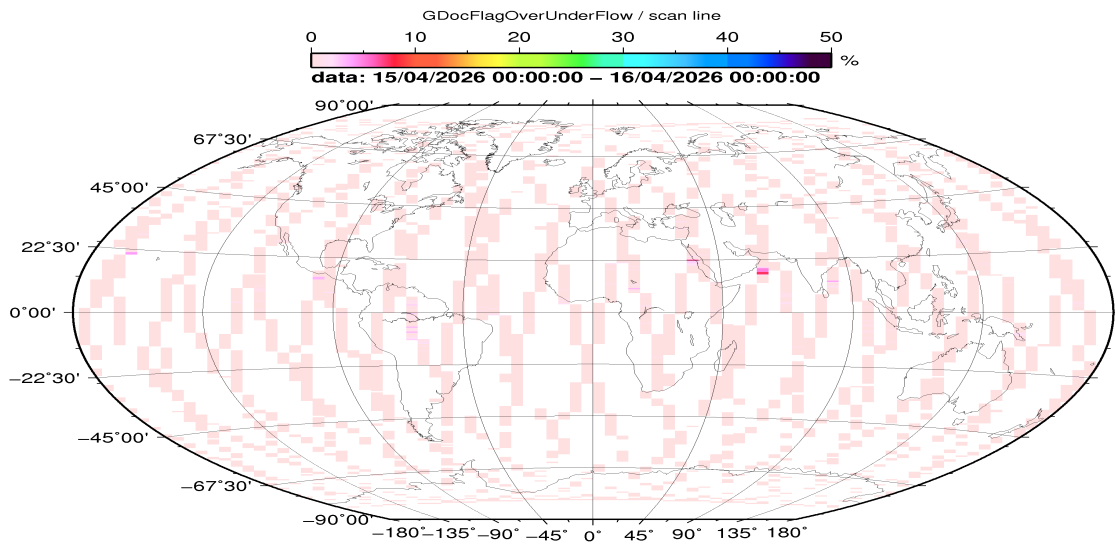
Flag	Value	Action
L0 IASI PDUs	481	-
L1 ENG PDUs	480	-
L1 ENG distinct GEPSGranule	481	-
GQisFlagQual set (PX1)	99.65 %	-
GQisFlagQual set (PX2)	99.67 %	-
GQisFlagQual set (PX3)	99.69 %	-
GQisFlagQual set (PX4)	99.63 %	-
GQisFlagQual set (all)	99.66 %	-

Table 4: Quality flags



CSMP 2026 Apr 16 07:40:34

Figure 1: L1C data quality



CSMP 2026 Apr 16 07:40:38

Figure 2: Flag of Over and Under Flows

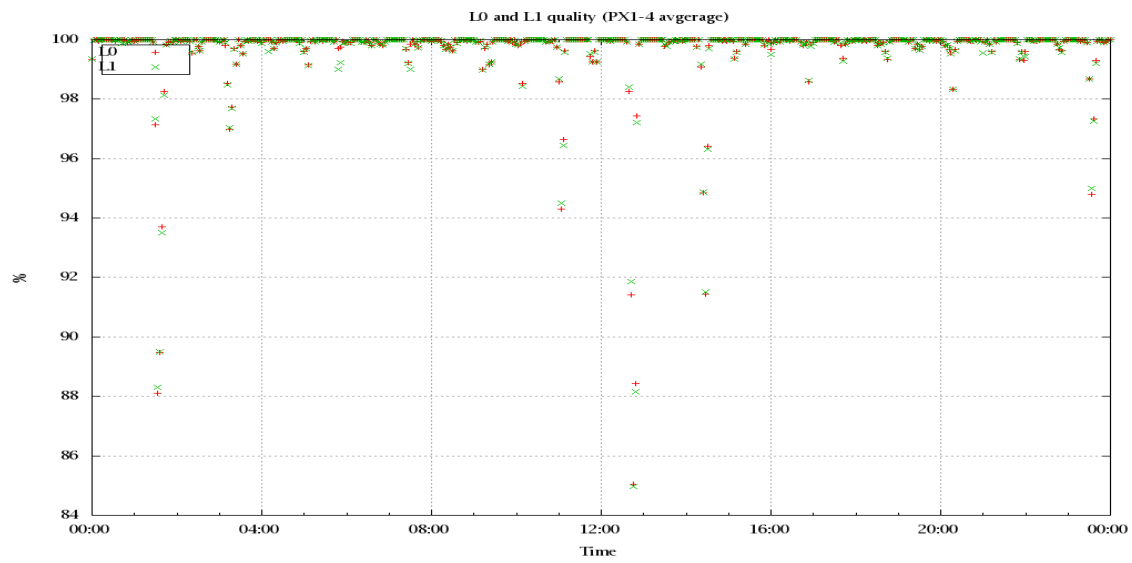


Figure 3: Level 0 and 1C overall quality

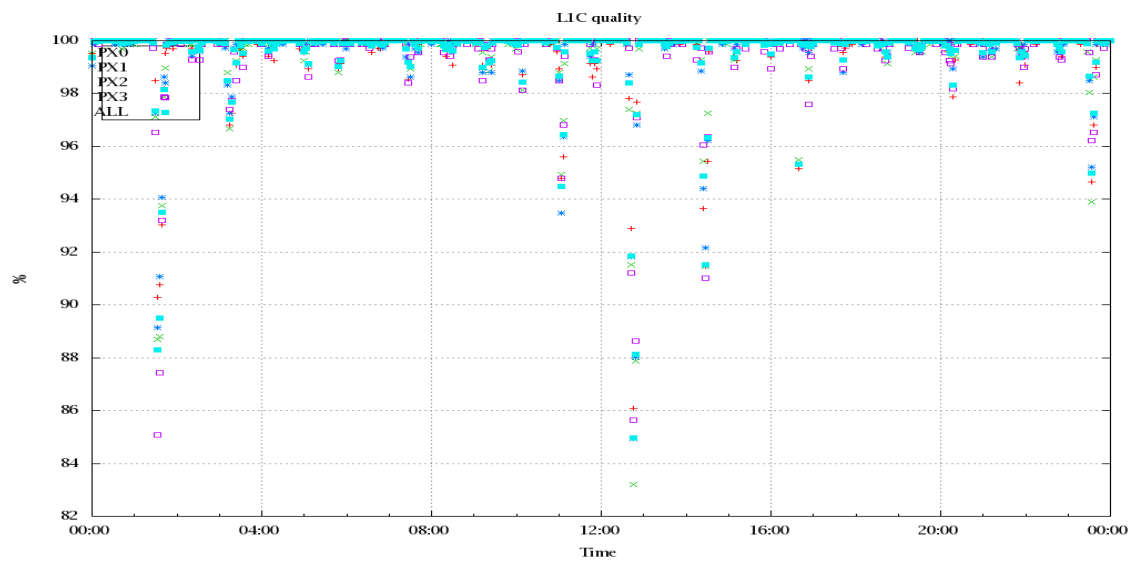


Figure 4: Level 1C quality

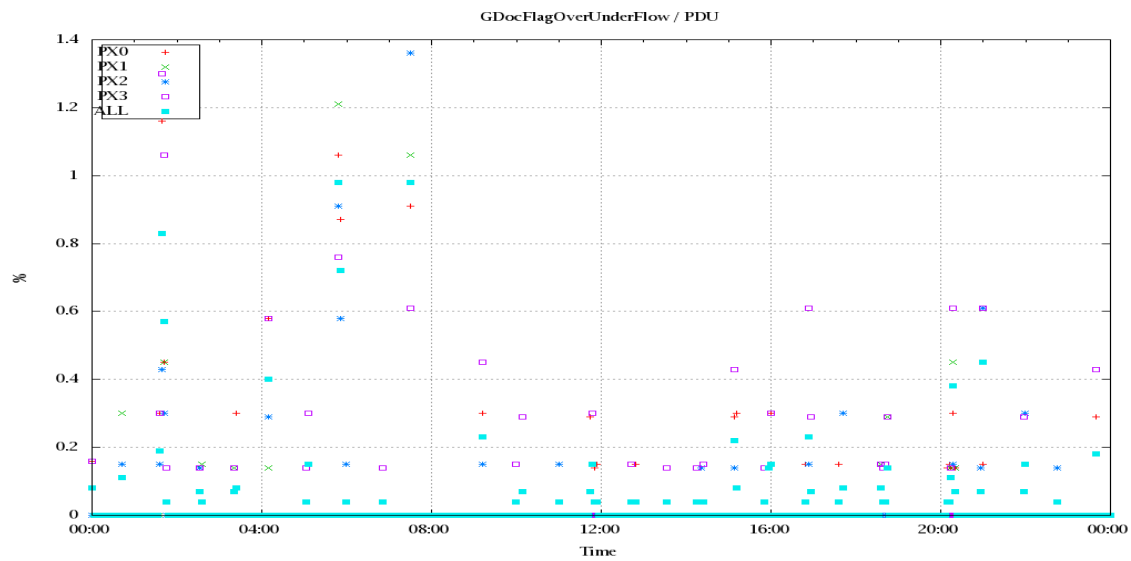


Figure 5: Timeseries of flag of Over and Under Flows

## 5 Radiance monitoring based on NWP

The radiance monitoring compares the IASI measurements (L1C-eps-products) obtained under clear sky situation over sea with modeled radiances. Cloud identification is based on cloud flag of co-located AVHRR L1B data in addition to information from the IASI L1C clustering analysis here only homogenous situations are taken into account (99.0 percent in first class).

A radiative transfer model (RTM) is feed with co-located ECMWF profiles of T, water vapor and Ozone. Between March 2007 and the 18th of May 2010 RTIASI in Version 4.0 is used. After that date the RTTOV model in V9.3 is used.

Information about the SST is obtained from the AVHRR L1B or taken from AVHRR scenes analysis (CGS only). In the following figures 28 to 34, the so-called radiance anomaly is shown. The radiance anomaly is defined as the difference between the quarter daily radiance average OBS-CAL (over all pixels and scan positions 10 to 20) and the average bias OBS-CAL (over all pixels and scan positions 10 to 20) of the last 30 days.

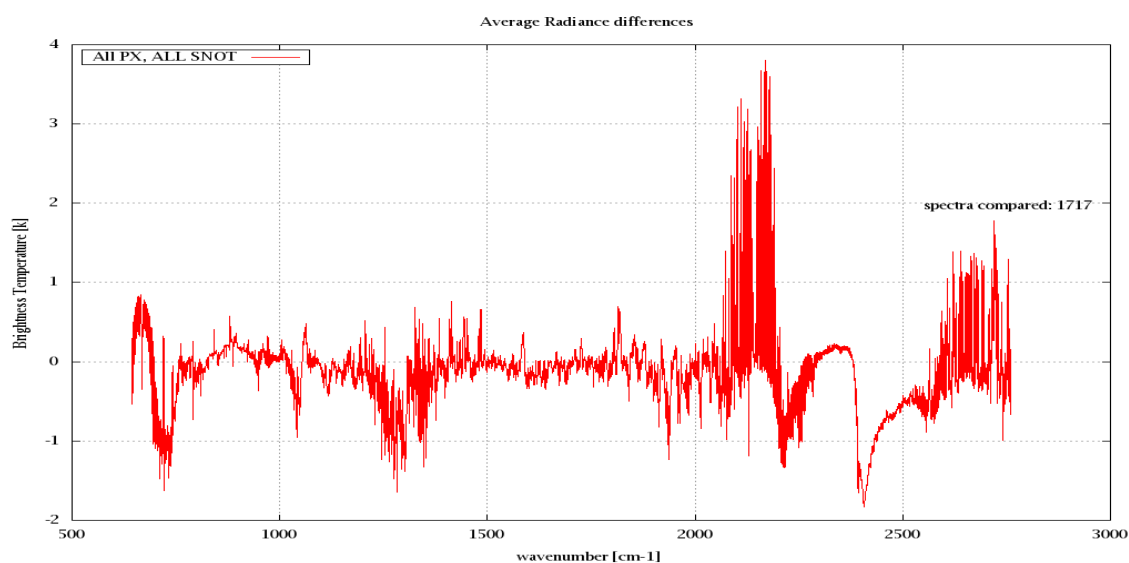


Figure 6: Average Radiance differences: OBS-CAL

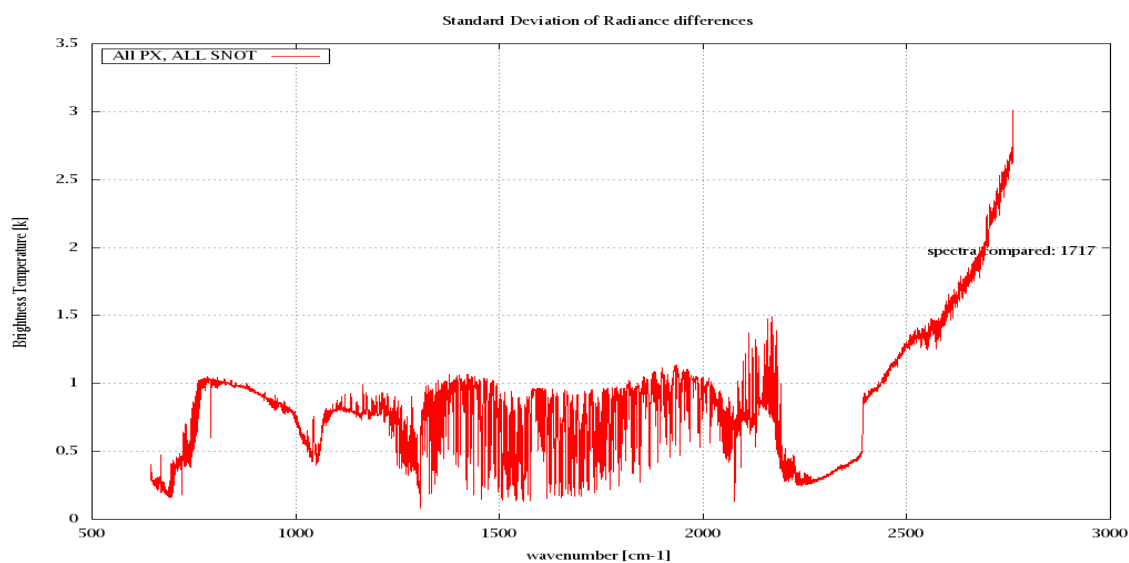


Figure 7: Standard Deviation of Radiance differences

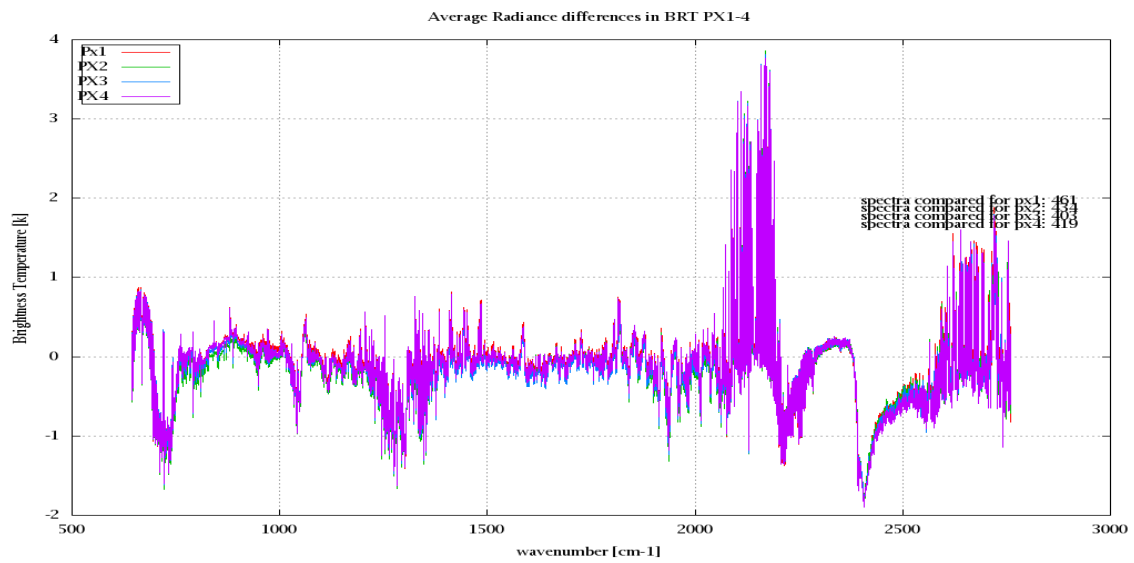


Figure 8: Average Radiance differences: OBS-CAL

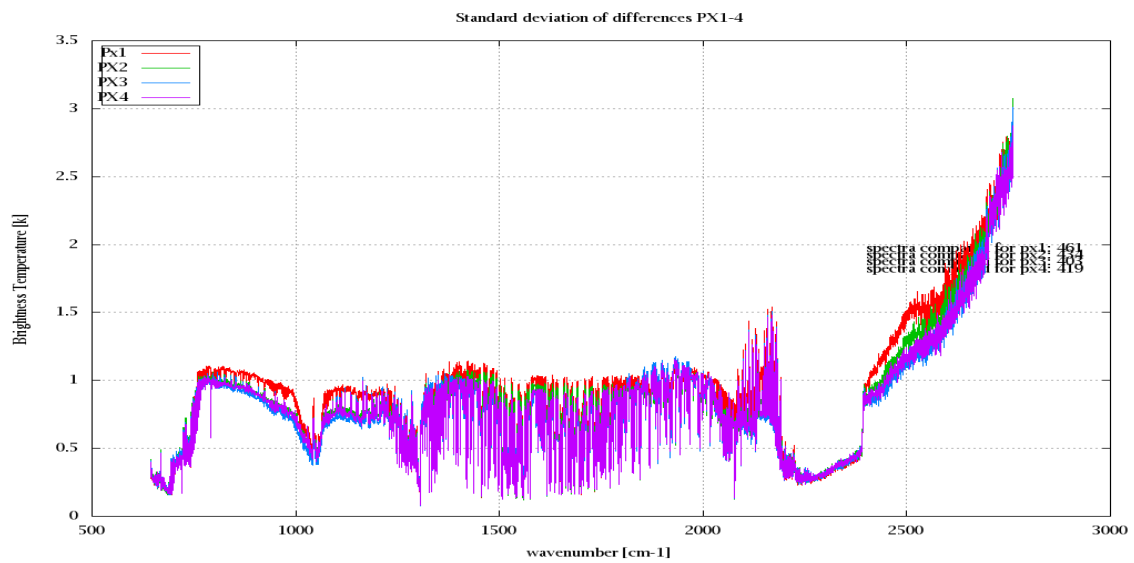


Figure 9: Standard Deviation of Radiance differences

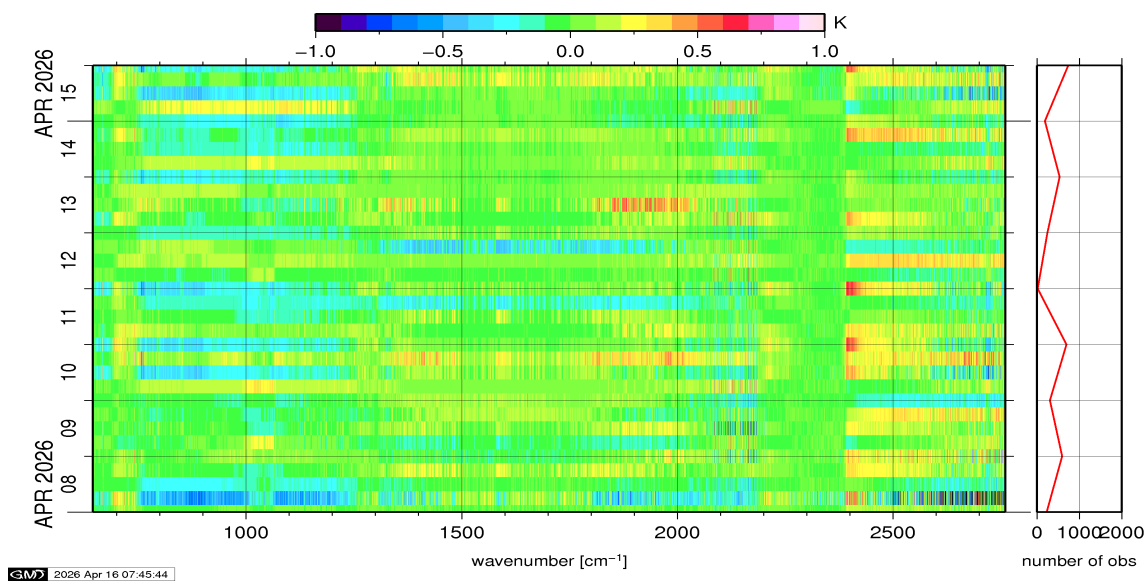


Figure 10: Radiance Anomaly in BT: All Channels

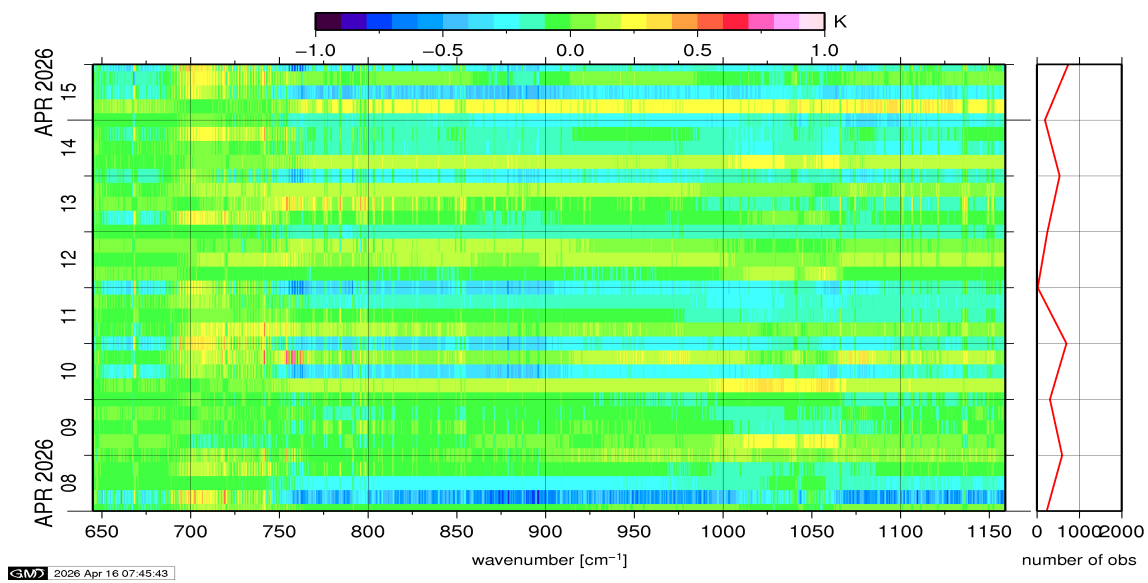


Figure 11: Radiance Anomaly in BT: IASI Band 1

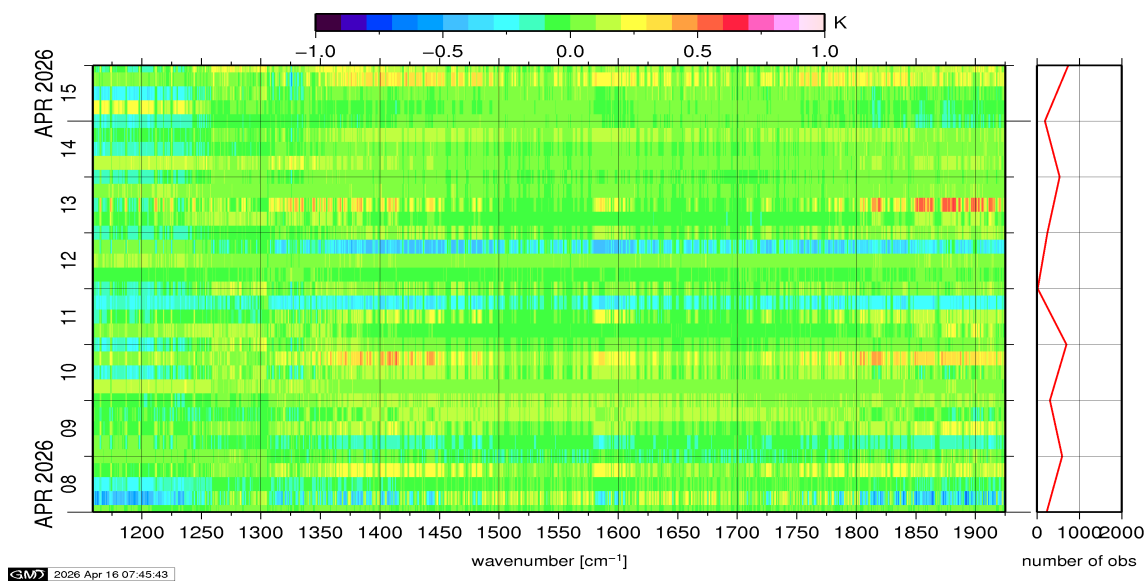


Figure 12: Radiance Anomaly in BT: IASI Band 2

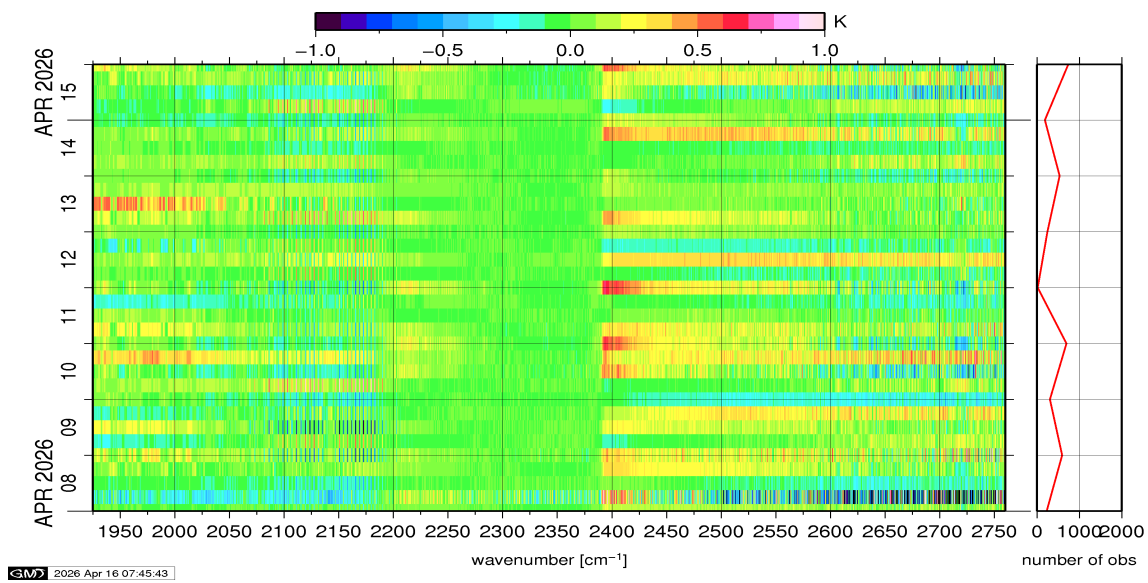


Figure 13: Radiance Anomaly in BT: IASI Band 3

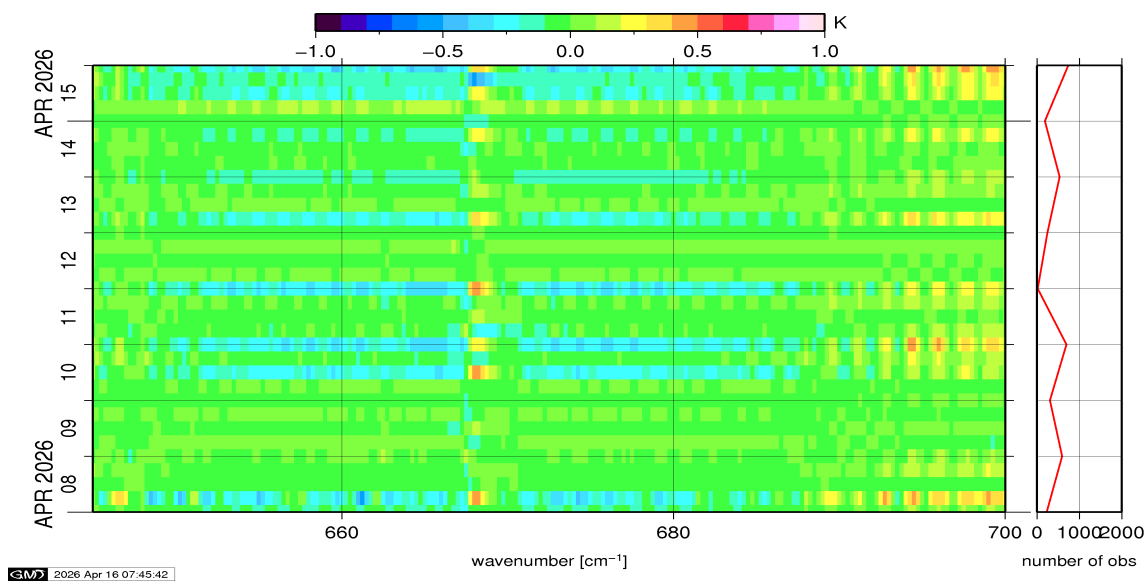


Figure 14: Radiance Anomaly in BT: CO2 14

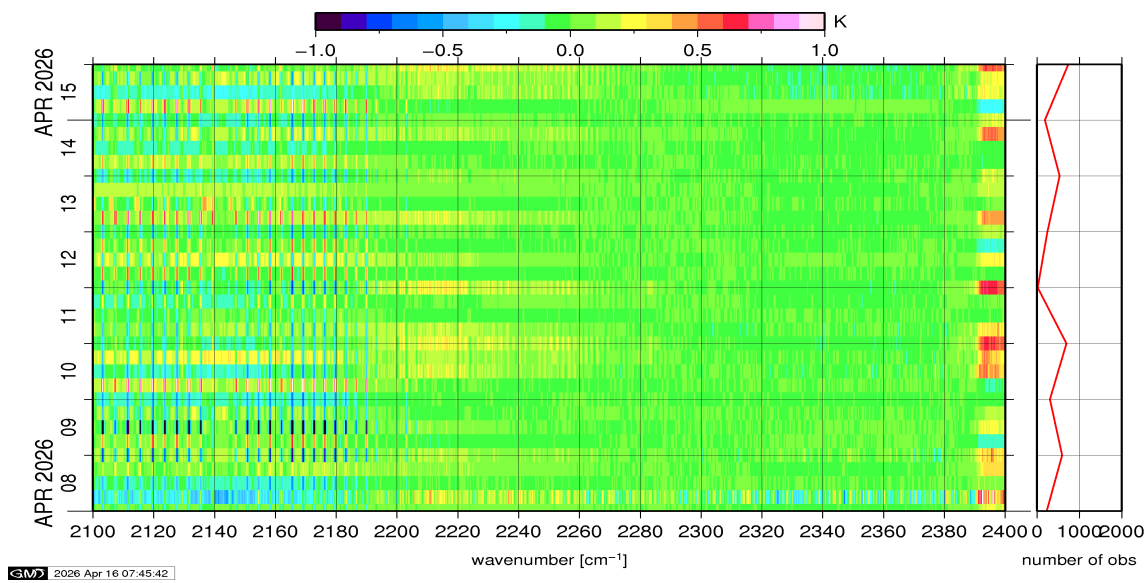


Figure 15: Radiance Anomaly in BT: CO2 4.3

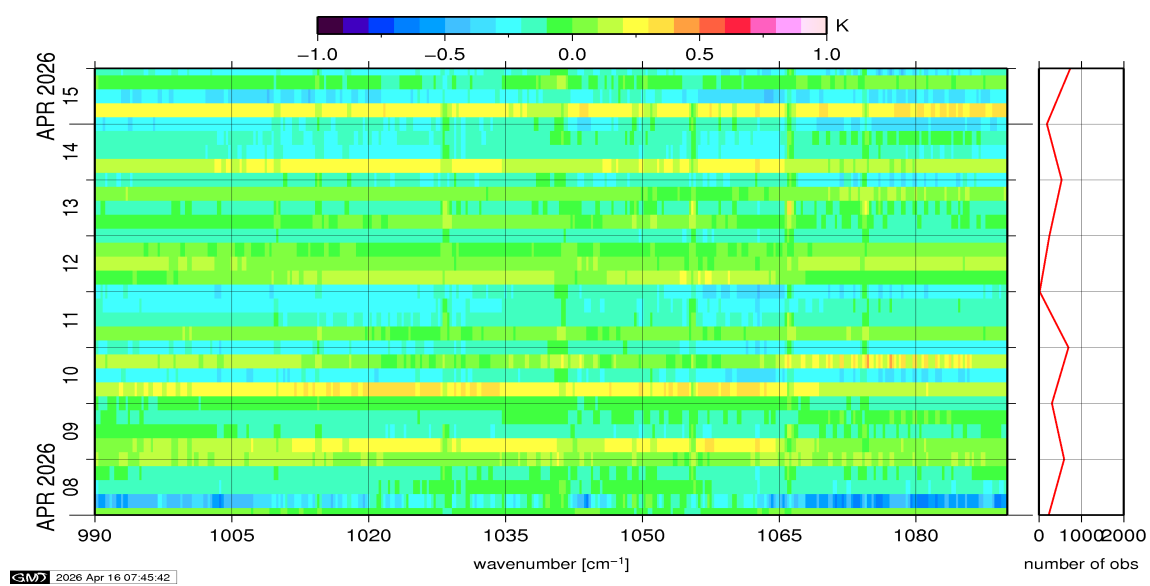


Figure 16: Radiance Anomaly in BT: O3