

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

IASI monitoring team

05/04/2026 00:00:00 - 06/04/2026 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 05/04/2026 00:00:00 - 06/04/2026 00:00:00 .

The monitoring data are extracted on PDU basis.

## 2 Data quantity 05/04/2026 00:00:00 - 06/04/2026 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)	352	488	20260405164635.297	20260405164712.270
PX2 (135)	350	352	20260405164634.864	20260405164635.297
PX2 (135)	354	357	20260405164635.727	20260405164636.375
PX2 (135)	357	488	20260405164636.375	20260405164712.270
PX3 (140)	352	488	20260405164635.297	20260405164712.270
PX4 (145)	352	488	20260405164635.297	20260405164712.270
IMG (150)	12428	12431	20260405164635.078	20260405164635.727
IMG (150)	12431	12584	20260405164635.727	20260405164712.051
VER (160)	16381	0	20260405043540.452	20260405043548.452
VER (160)	2	16382	20260405043548.452	20260405043548.452
VER (160)	-1	3	20260405043548.452	20260405043556.452
VER (160)	16382	0	20260405115236.394	20260405115244.394
VER (160)	3	16383	20260405115244.394	20260405115244.394
VER (160)	-1	4	20260405115244.394	20260405115252.394
VER (160)	11018	11044	20260405164628.379	20260405164716.375
AUX (180)	15306	15312	20260405164628.809	20260405164716.809

Table 2: L0 data gaps

### 3 Instrument modes

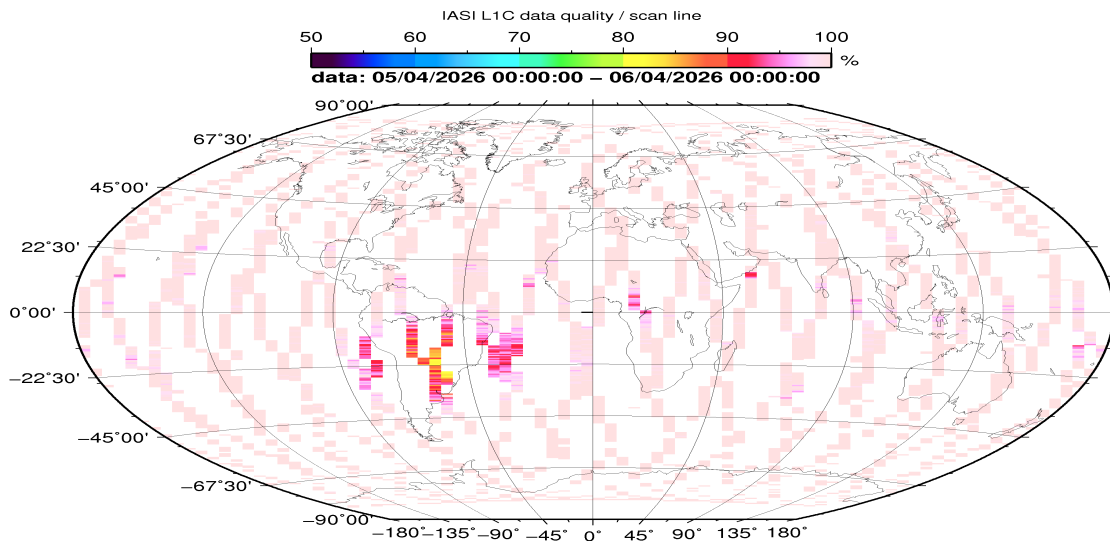
Time	Transition from	Transition to
05/04/2026 00:00:07	-	Normal operation

Table 3: Instrument modes

### 4 L0 and L1 Data Quality

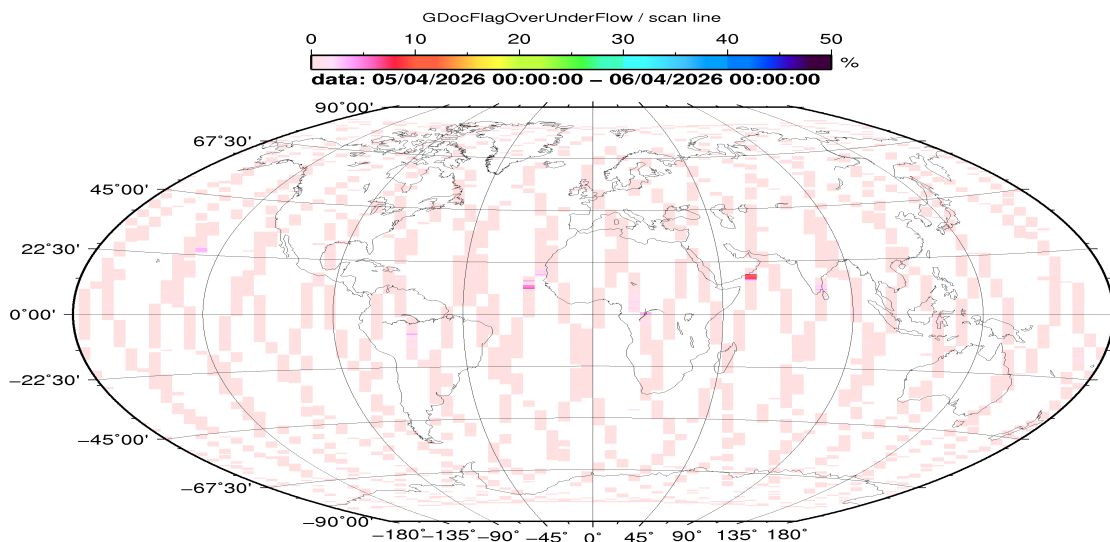
Flag	Value	Action
L0 IASI PDUs	481	-
L1 ENG PDUs	480	-
L1 ENG distinct GEPSGranule	481	-
GQisFlagQual set (PX1)	99.63 %	-
GQisFlagQual set (PX2)	99.67 %	-
GQisFlagQual set (PX3)	99.67 %	-
GQisFlagQual set (PX4)	99.61 %	-
GQisFlagQual set (all)	99.64 %	-

Table 4: Quality flags



CMV 2026 Apr 06 07:40:39

Figure 1: L1C data quality



CMV 2026 Apr 06 07:40:43

Figure 2: Flag of Over and Under Flows

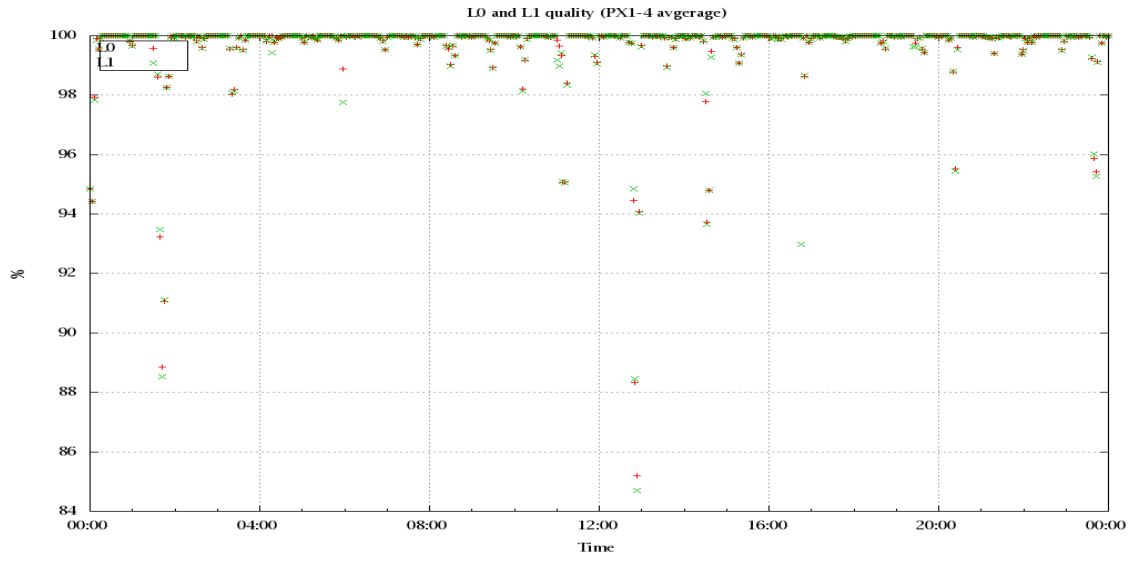


Figure 3: Level 0 and 1C overall quality

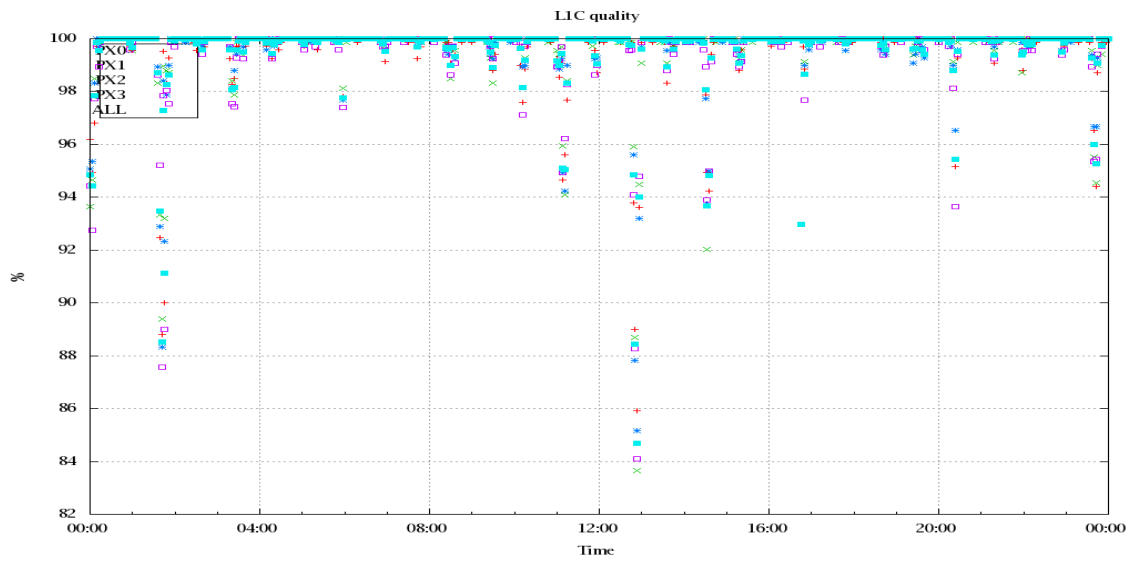


Figure 4: Level 1C quality

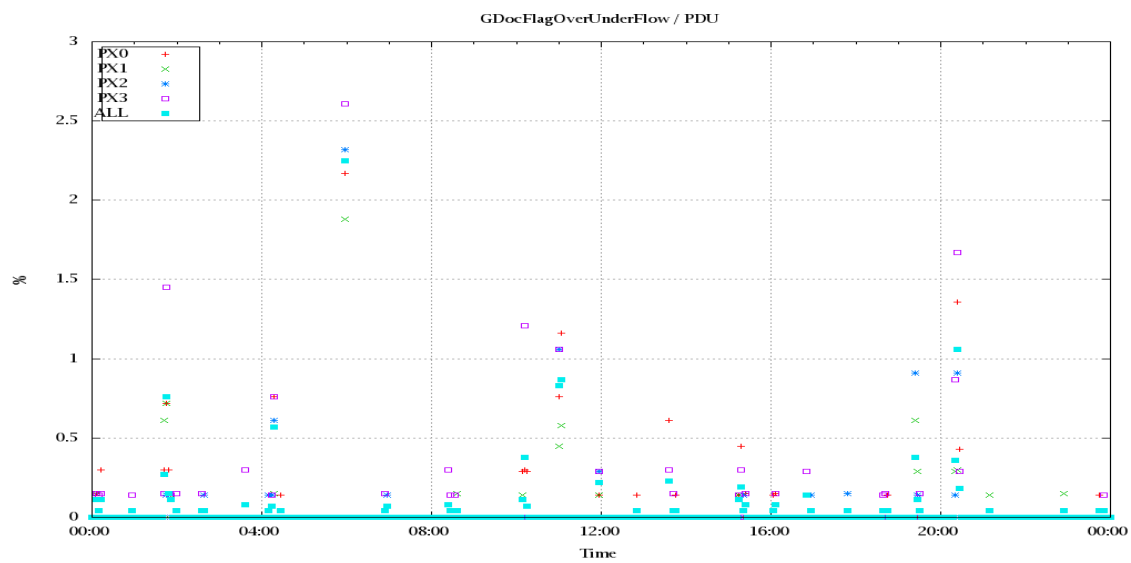


Figure 5: Timeseries of flag of Over and Under Flows

## 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.

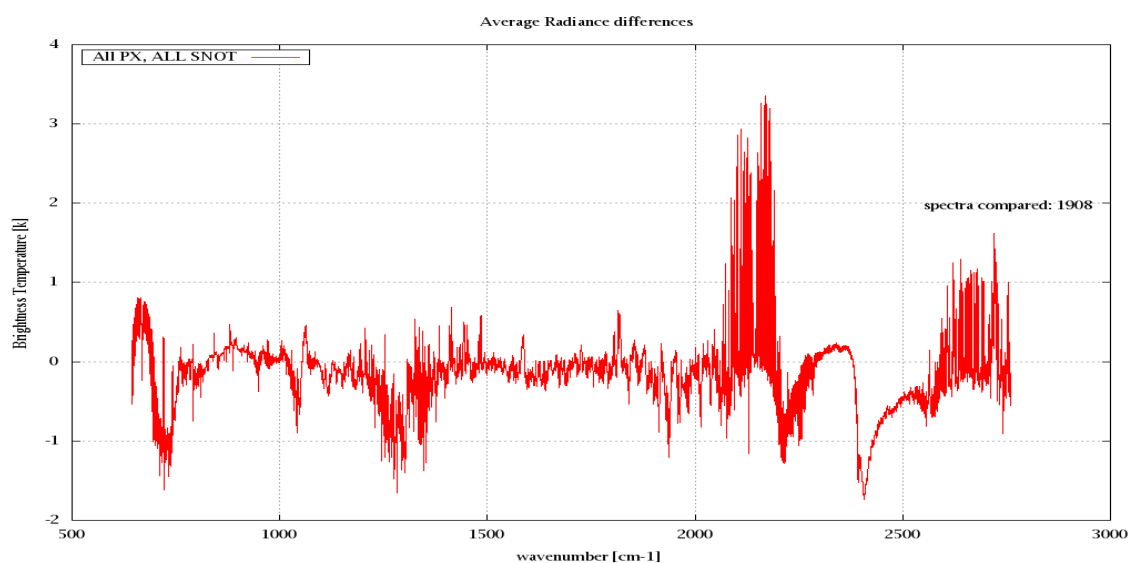


Figure 6: Average Radiance differences: OBS-CAL

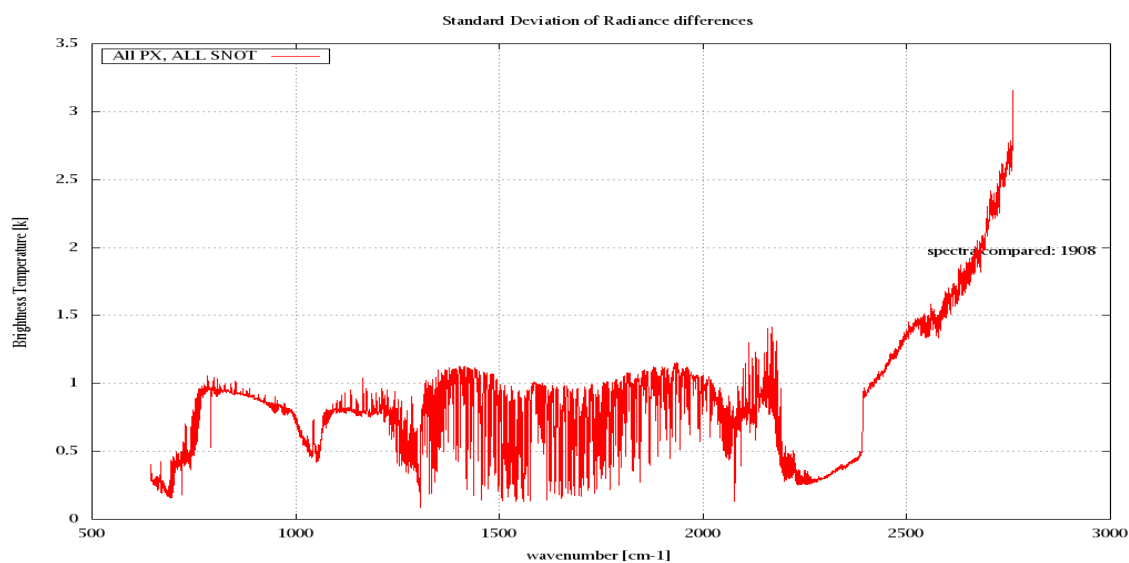


Figure 7: Standard Deviation of Radiance differences

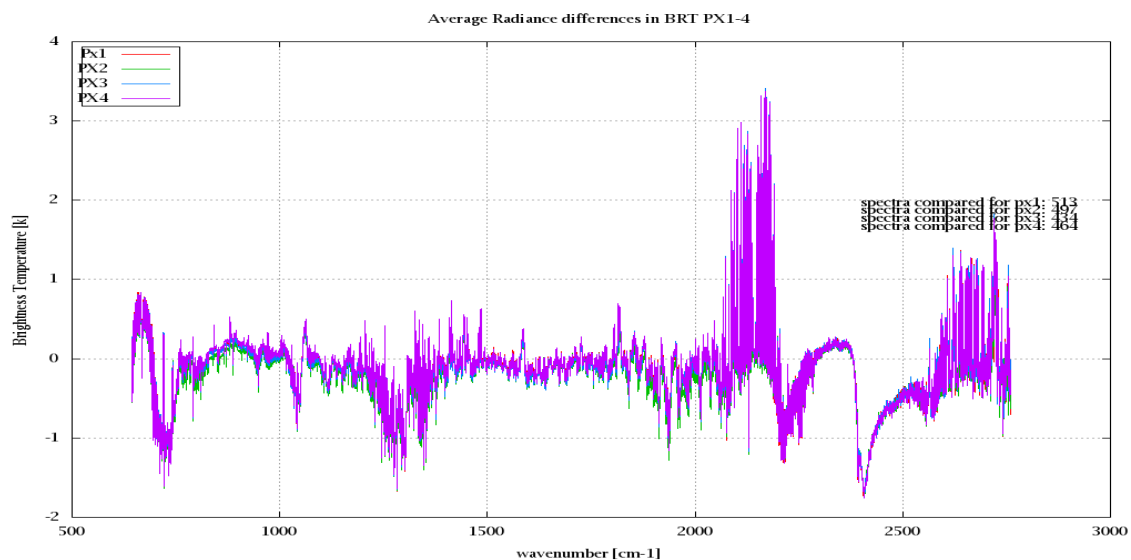


Figure 8: Average Radiance differences: OBS-CAL

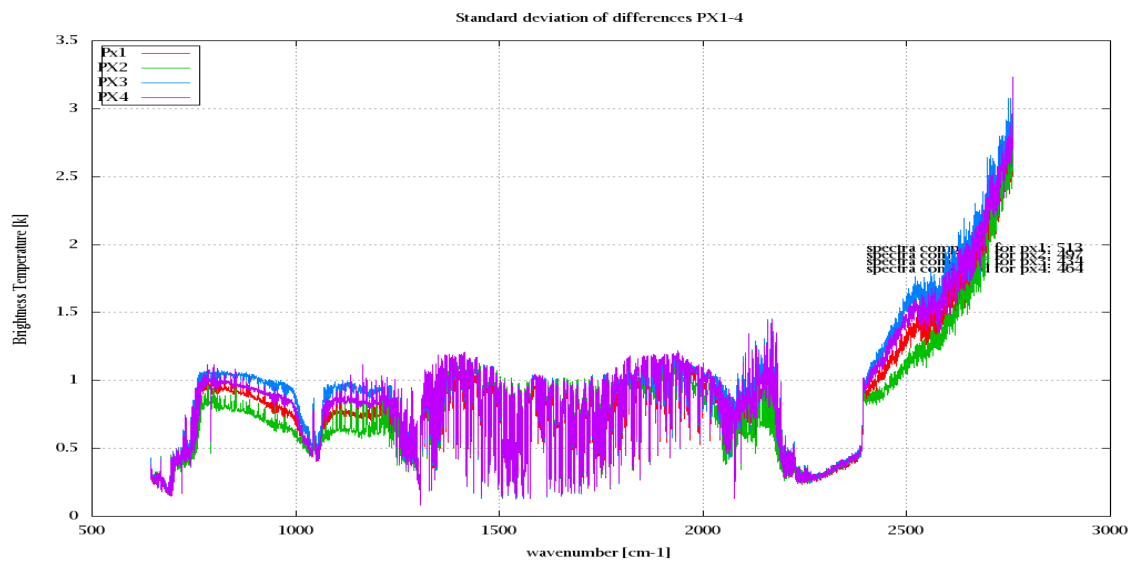


Figure 9: Standard Deviation of Radiance differences

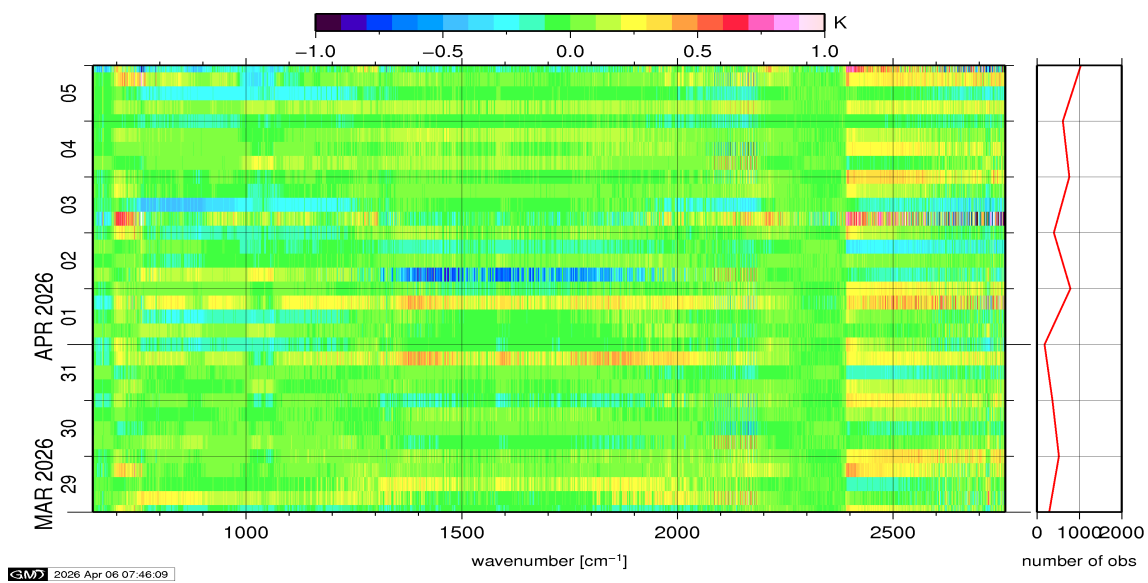


Figure 10: Radiance Anomaly in BT: All Channels

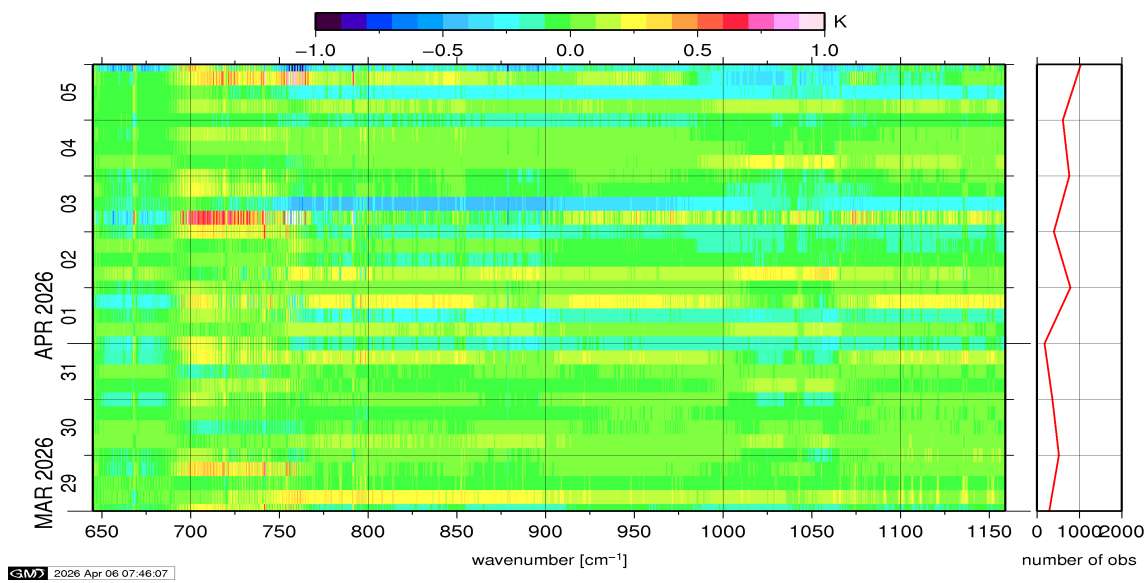


Figure 11: Radiance Anomaly in BT: IASI Band 1

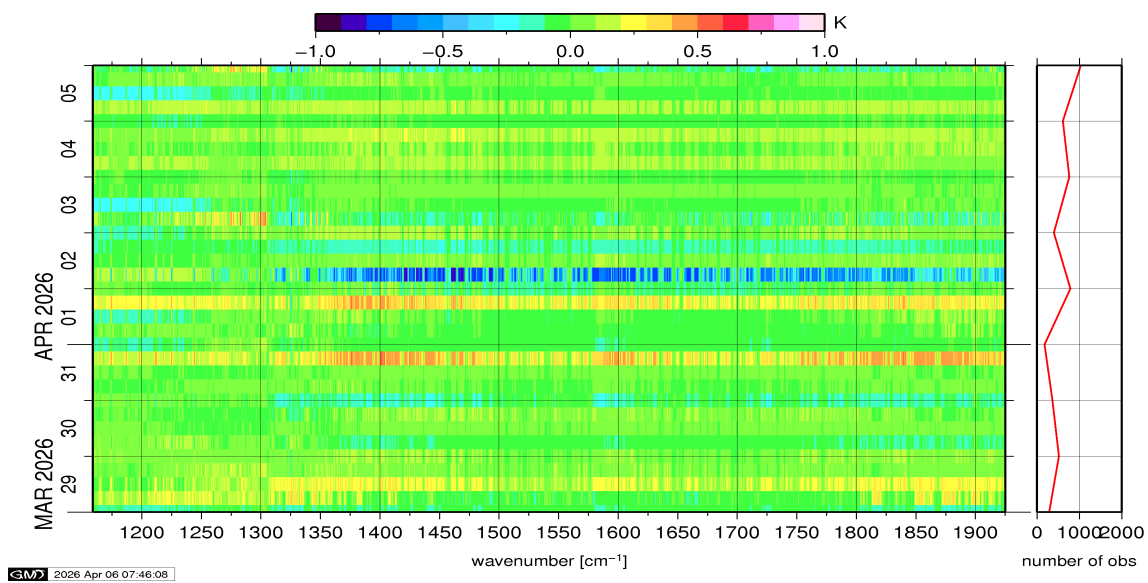


Figure 12: Radiance Anomaly in BT: IASI Band 2

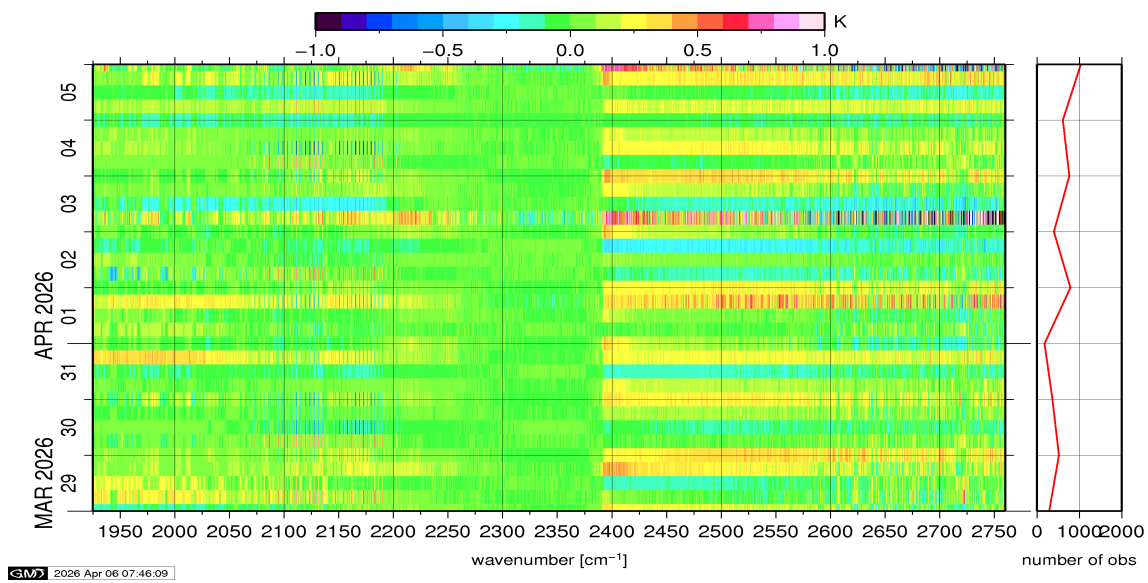


Figure 13: Radiance Anomaly in BT: IASI Band 3

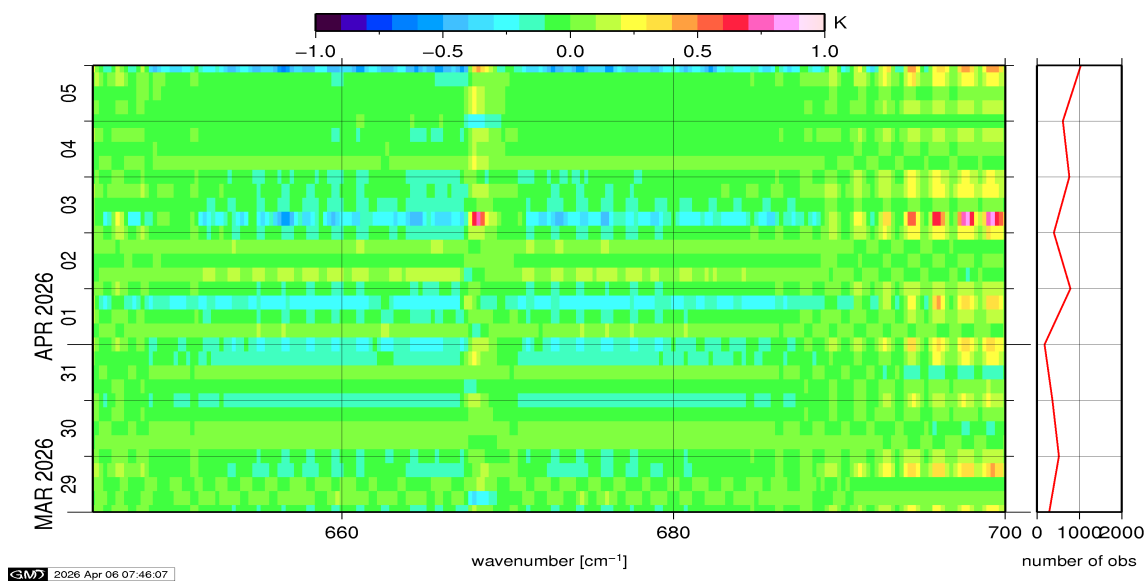


Figure 14: Radiance Anomaly in BT: CO2 14

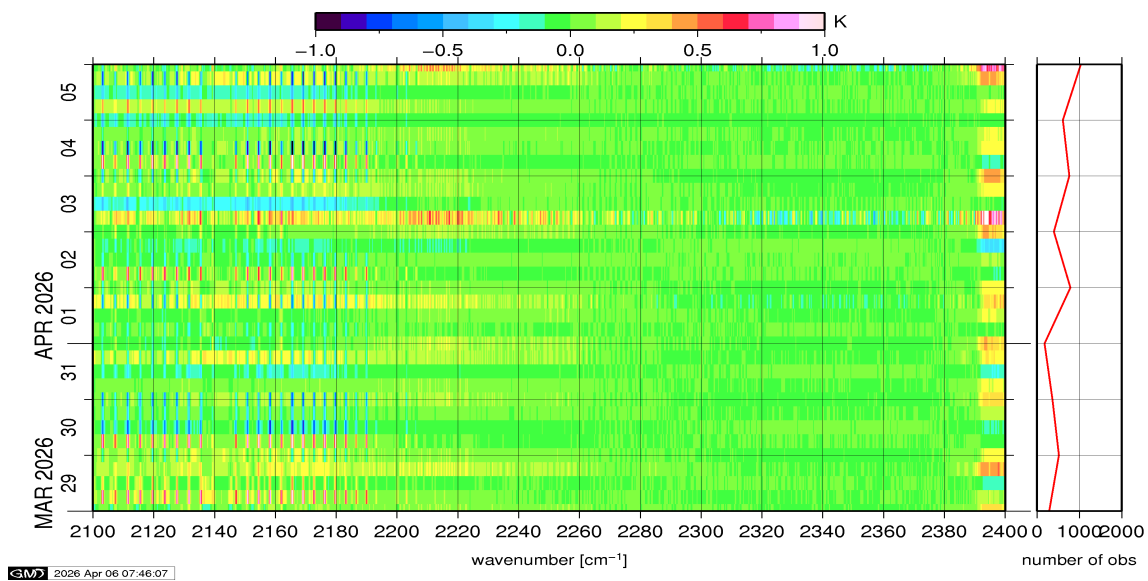


Figure 15: Radiance Anomaly in BT: CO2 4.3

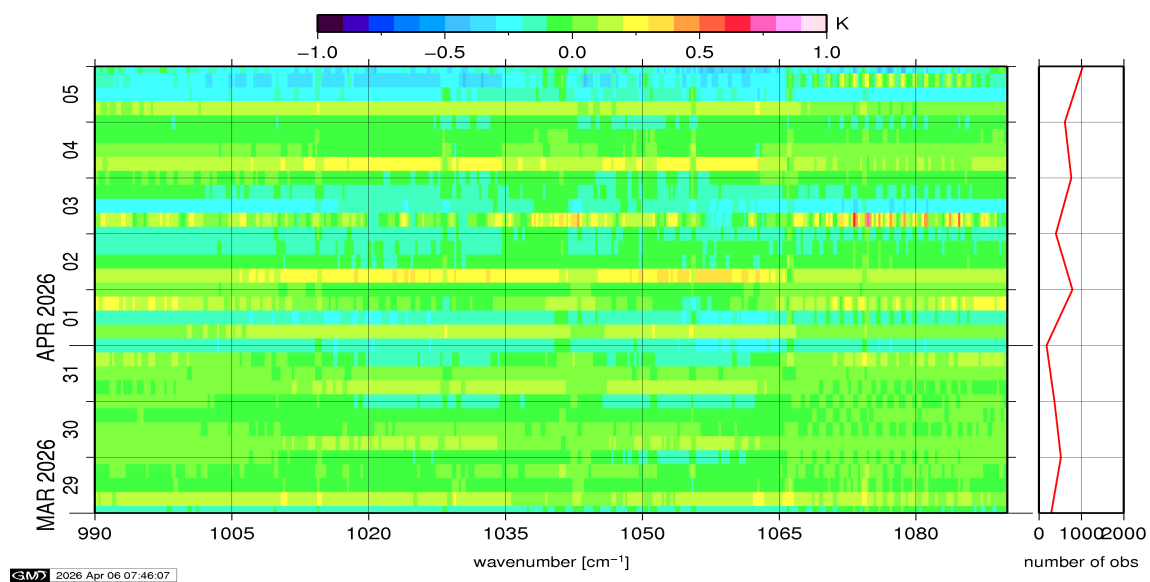


Figure 16: Radiance Anomaly in BT: O3