

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

IASI monitoring team

20/04/2026 00:00:00 - 21/04/2026 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 20/04/2026 00:00:00 - 21/04/2026 00:00:00 .

The monitoring data are extracted on PDU basis.

## 2 Data quantity 20/04/2026 00:00:00 - 21/04/2026 00:00:00

Product Type	Number	Action
L0 HKTM PDUs	467	-
L0 IASI PDUs	468	-
L1 ENG PDUs	459	e
L1 ENG distinct GEPSGranule	460	a
L1 DPX PDUs (RM: IASI-HIRS)	0	e
L1 DPS Files (RM: OBS-CAL NWP based)	459	-

Table 1: Data quantity

APID	Seq from	Seq to	Time from	Time to
PX1 (130)	8617	9290	20260420054159.946	20260420054500.266
PX1 (130)	10271	1988	20260420081458.523	20260420085100.231
PX2 (135)	8617	9290	20260420054159.946	20260420054500.266
PX2 (135)	10271	1988	20260420081458.523	20260420085100.231
PX3 (140)	8617	9290	20260420054159.946	20260420054500.266
PX3 (140)	10271	1988	20260420081458.523	20260420085100.231
PX4 (145)	8617	9290	20260420054159.946	20260420054500.266
PX4 (145)	10271	1988	20260420081458.523	20260420085100.231
IMG (150)	9782	10547	20260420054159.946	20260420054500.266
IMG (150)	16028	8825	20260420081459.820	20260420085100.231
VER (160)	16380	0	20260420012402.539	20260420012410.539
VER (160)	1	16381	20260420012410.539	20260420012410.539
VER (160)	-1	2	20260420012410.539	20260420012418.539
VER (160)	9666	9782	20260420054154.540	20260420054506.536
VER (160)	15406	373	20260420081458.523	20260420085106.504
VER (160)	16382	0	20260420155754.463	20260420155802.463
VER (160)	3	16383	20260420155802.463	20260420155802.463
VER (160)	-1	4	20260420155802.463	20260420155810.463

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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>
AUX (180)	8482	8506	20260420054154.974	20260420054506.970
AUX (180)	9630	9901	20260420081458.956	20260420085106.934

Table 2: L0 data gaps

### 3 Instrument modes

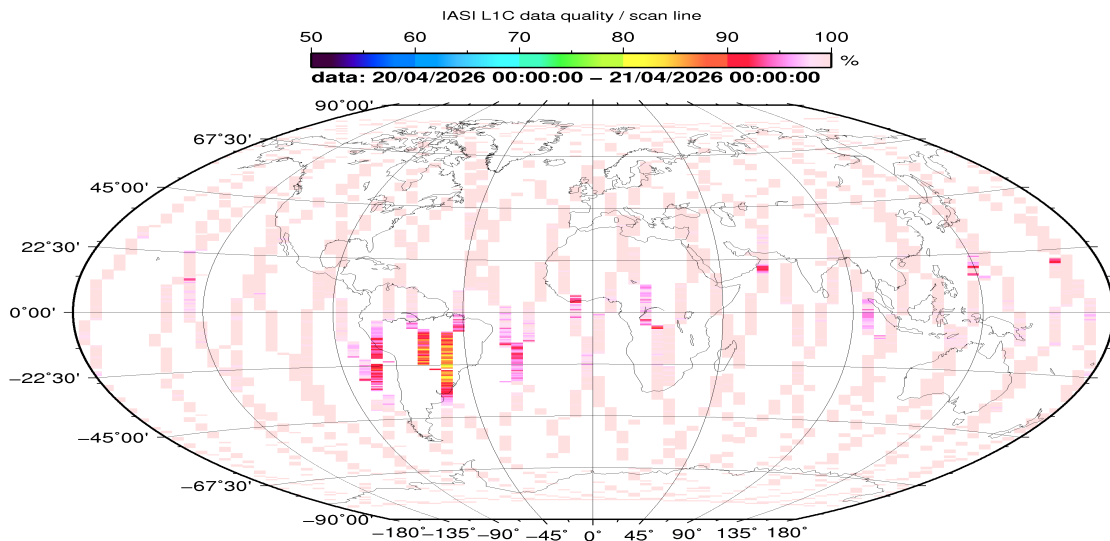
Time	Transition from	Transition to
20/04/2026 00:00:12	-	Normal operation

Table 3: Instrument modes

### 4 L0 and L1 Data Quality

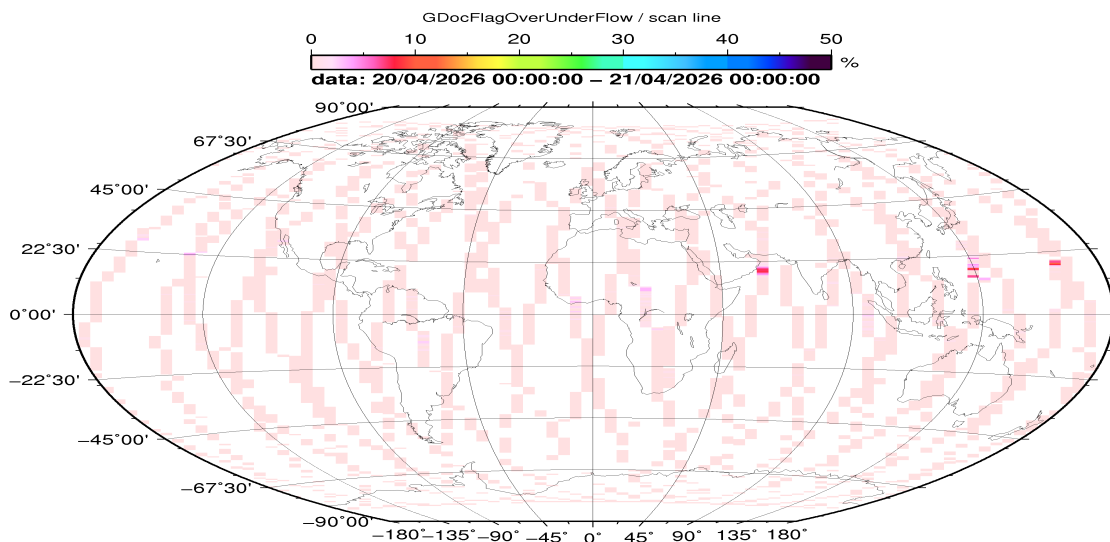
Flag	Value	Action
L0 IASI PDUs	468	-
<b>L1 ENG PDUs</b>	<b>459</b>	<b>e</b>
<b>L1 ENG distinct GEPSGranule</b>	<b>460</b>	<b>a</b>
GQisFlagQual set (PX1)	99.66 %	-
GQisFlagQual set (PX2)	99.69 %	-
GQisFlagQual set (PX3)	99.68 %	-
GQisFlagQual set (PX4)	99.61 %	-
GQisFlagQual set (all)	99.66 %	-

Table 4: Quality flags



CMV 2026 Apr 21 07:49:32

Figure 1: L1C data quality



CMV 2026 Apr 21 07:49:36

Figure 2: Flag of Over and Under Flows

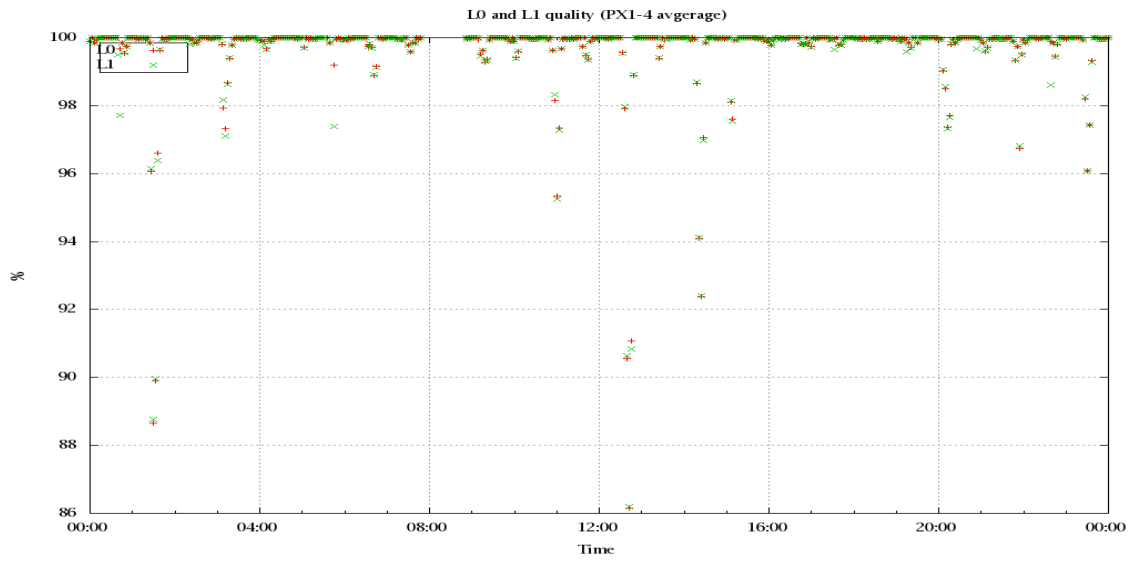


Figure 3: Level 0 and 1C overall quality

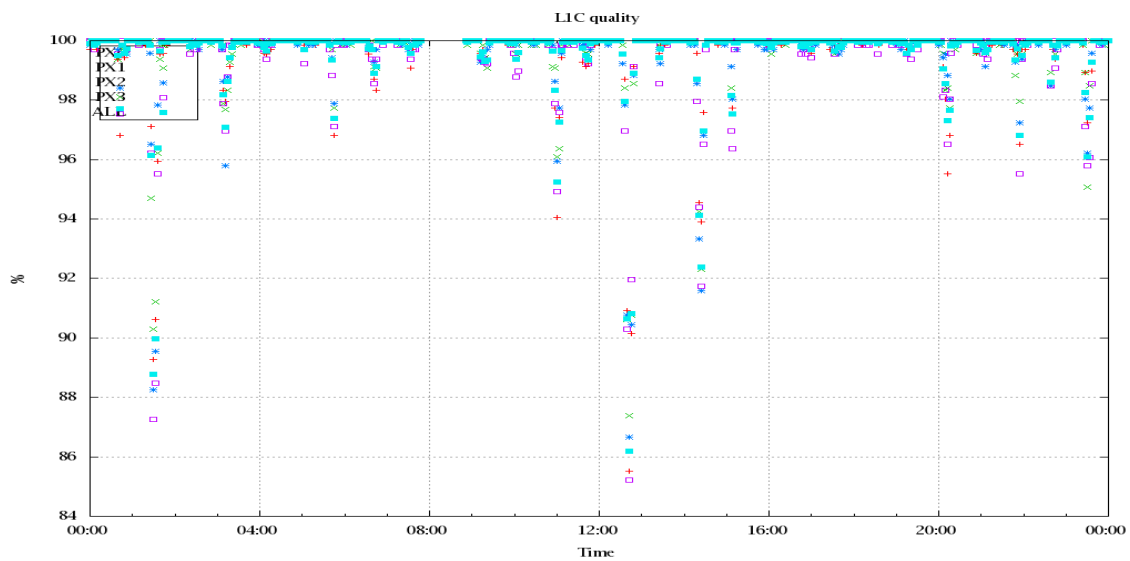


Figure 4: Level 1C quality

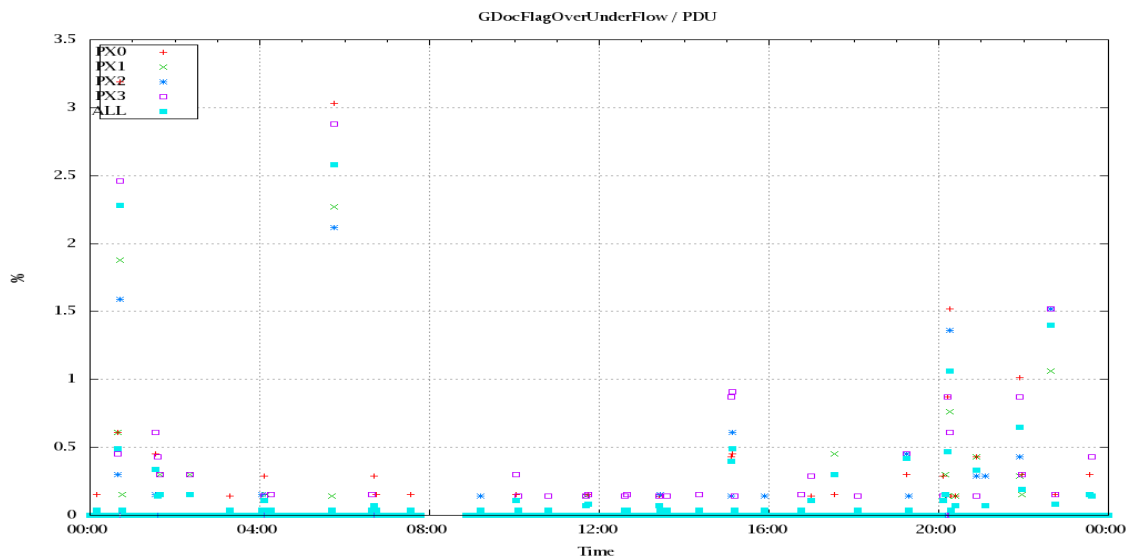


Figure 5: Timeseries of flag of Over and Under Flows

## 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.

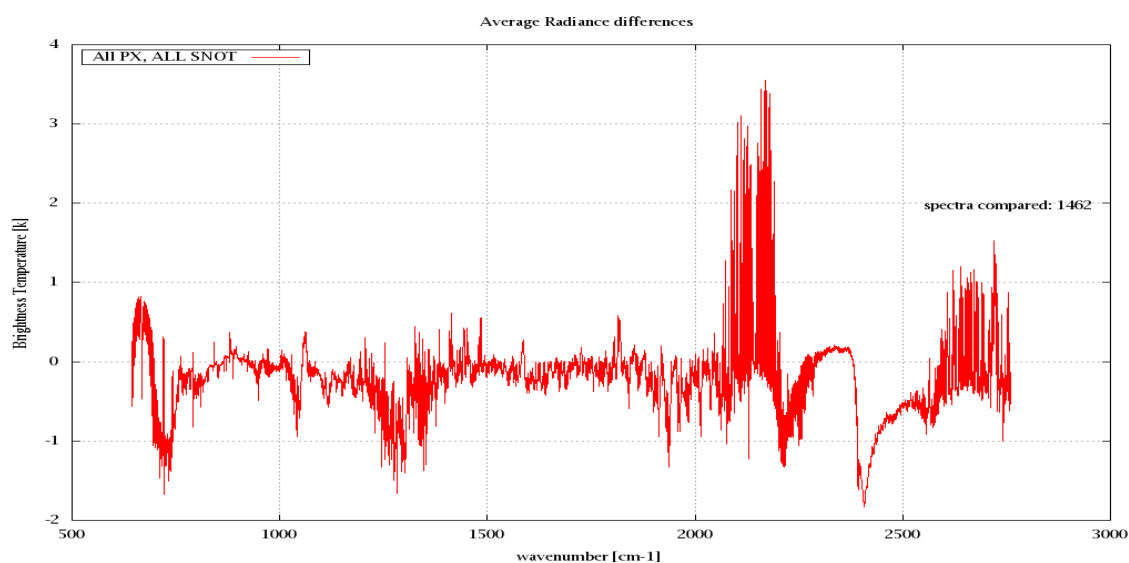


Figure 6: Average Radiance differences: OBS-CAL

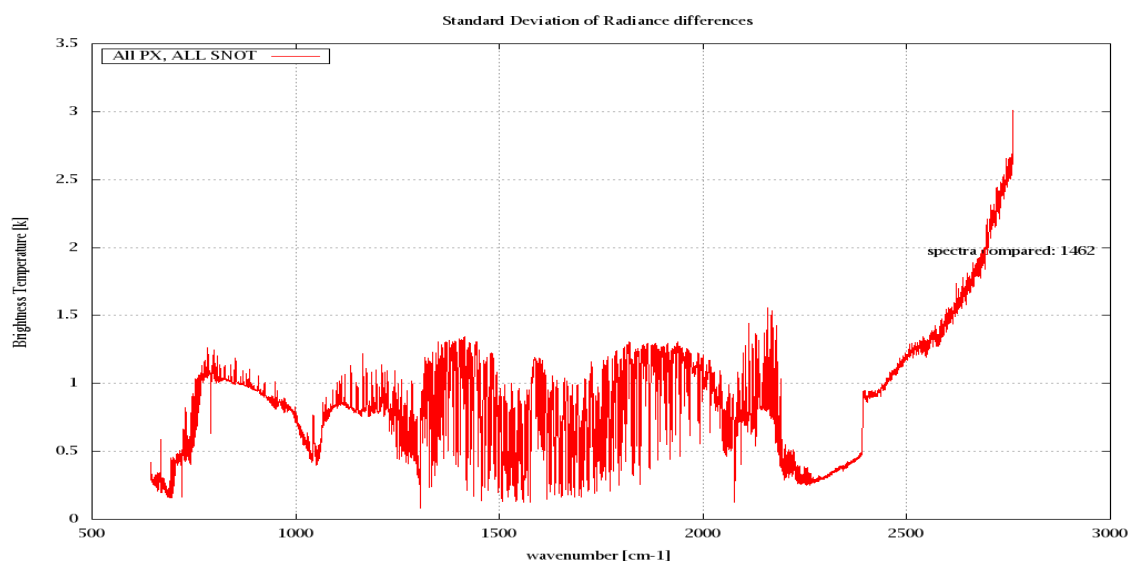


Figure 7: Standard Deviation of Radiance differences

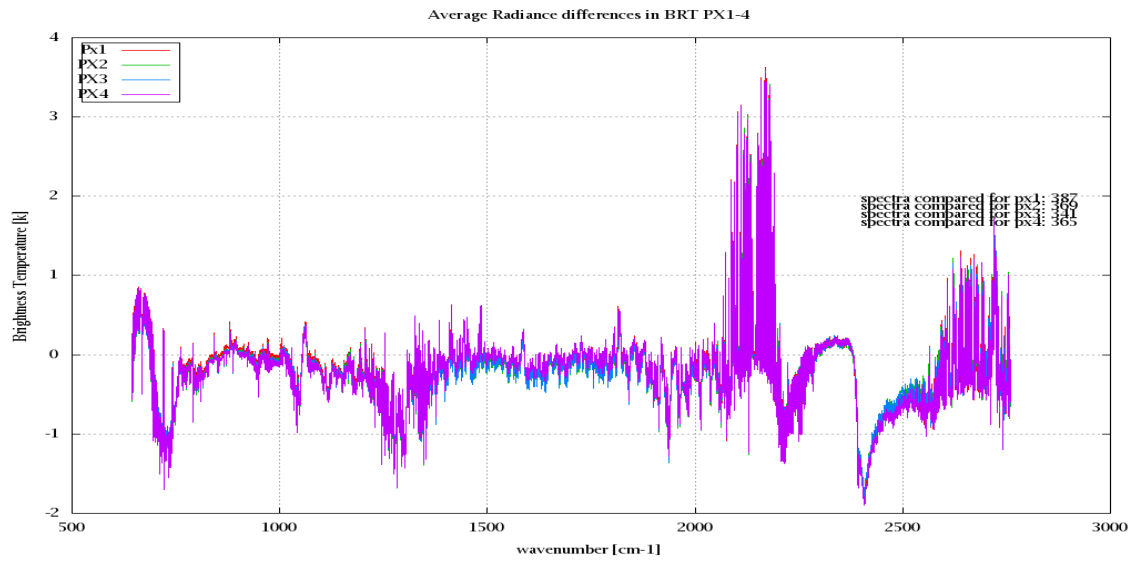


Figure 8: Average Radiance differences: OBS-CAL

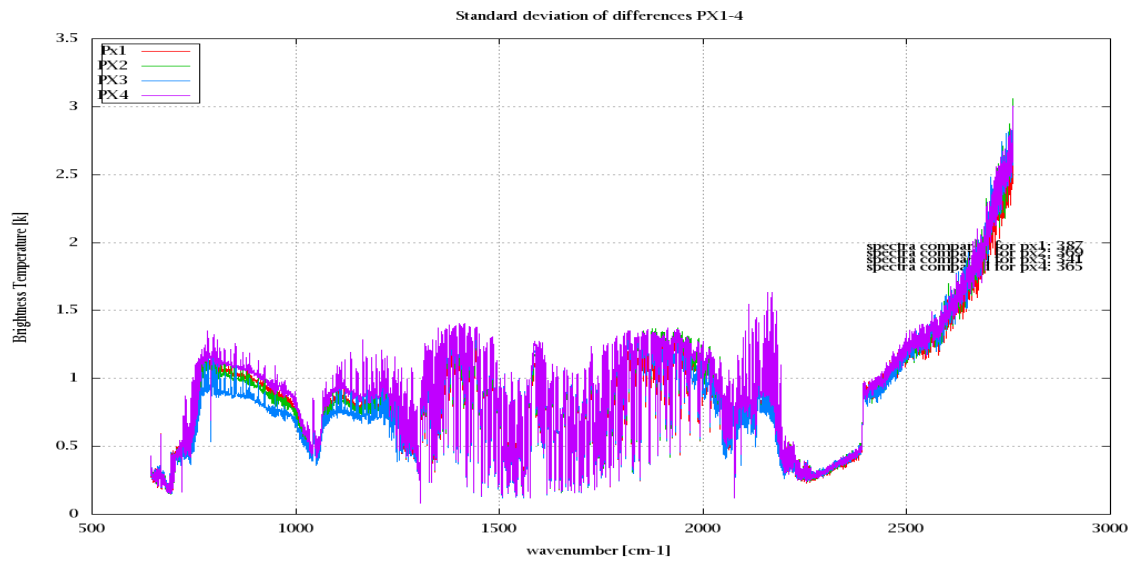


Figure 9: Standard Deviation of Radiance differences

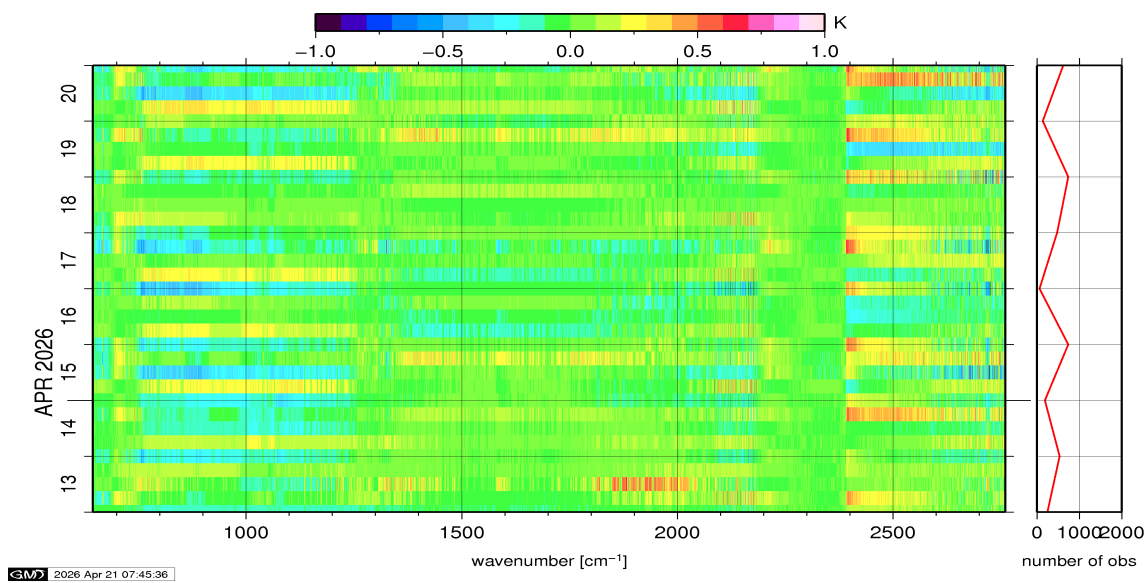


Figure 10: Radiance Anomaly in BT: All Channels

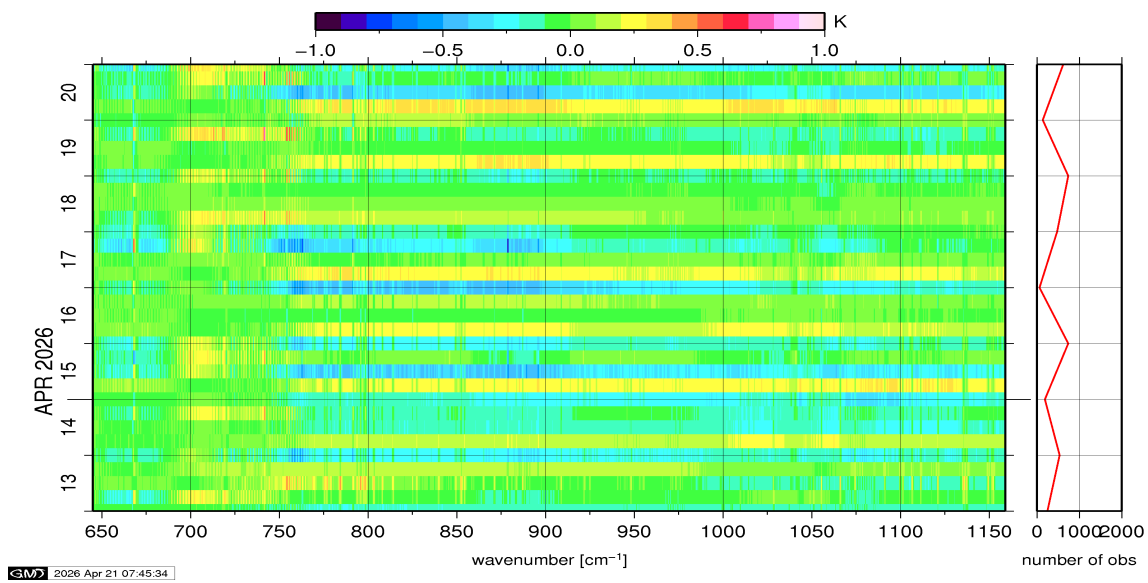


Figure 11: Radiance Anomaly in BT: IASI Band 1

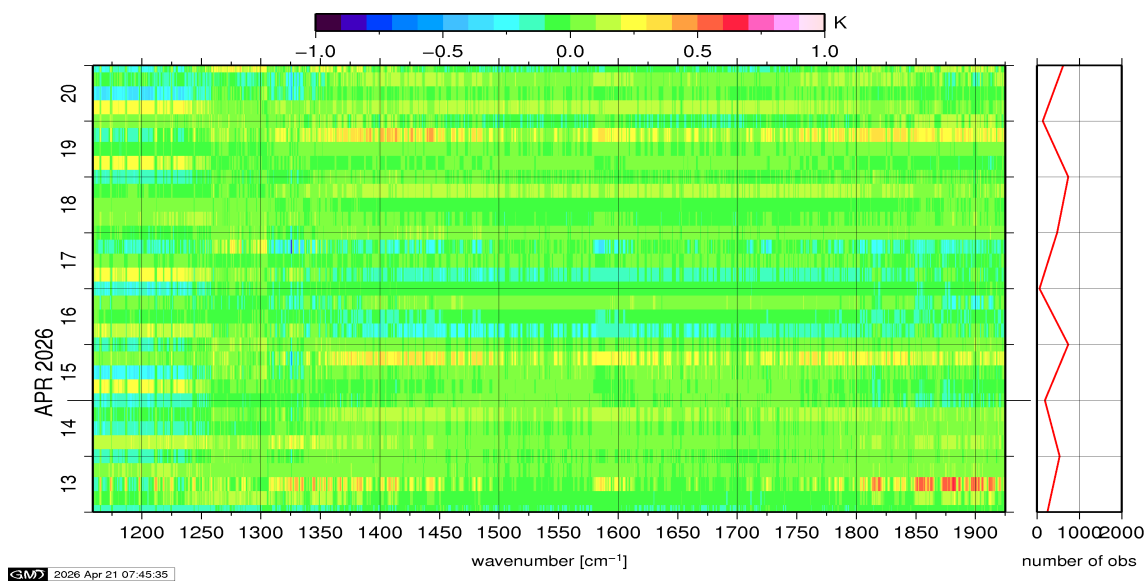


Figure 12: Radiance Anomaly in BT: IASI Band 2

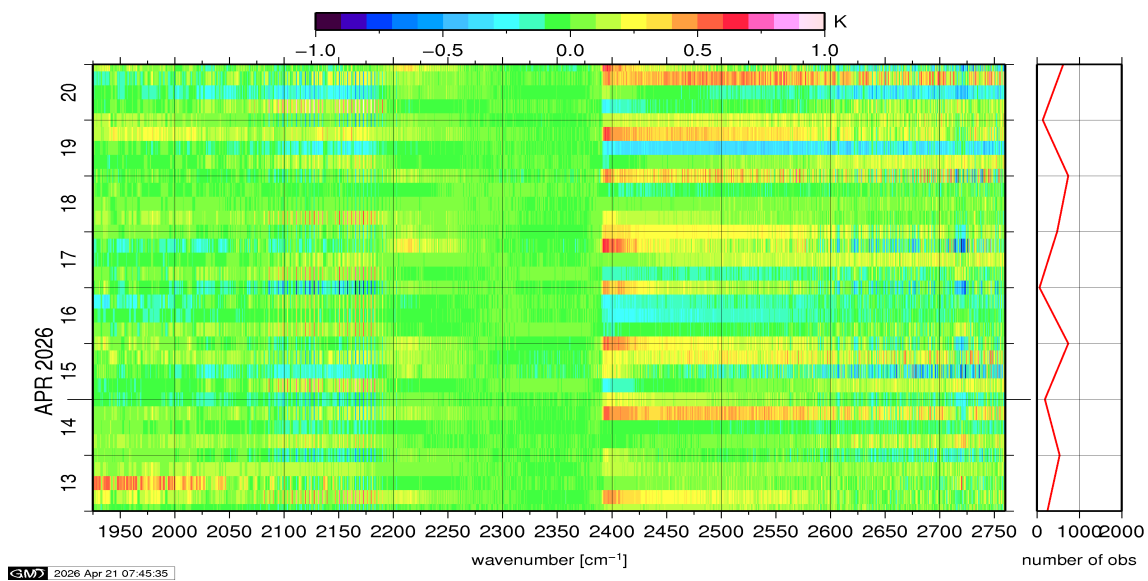


Figure 13: Radiance Anomaly in BT: IASI Band 3

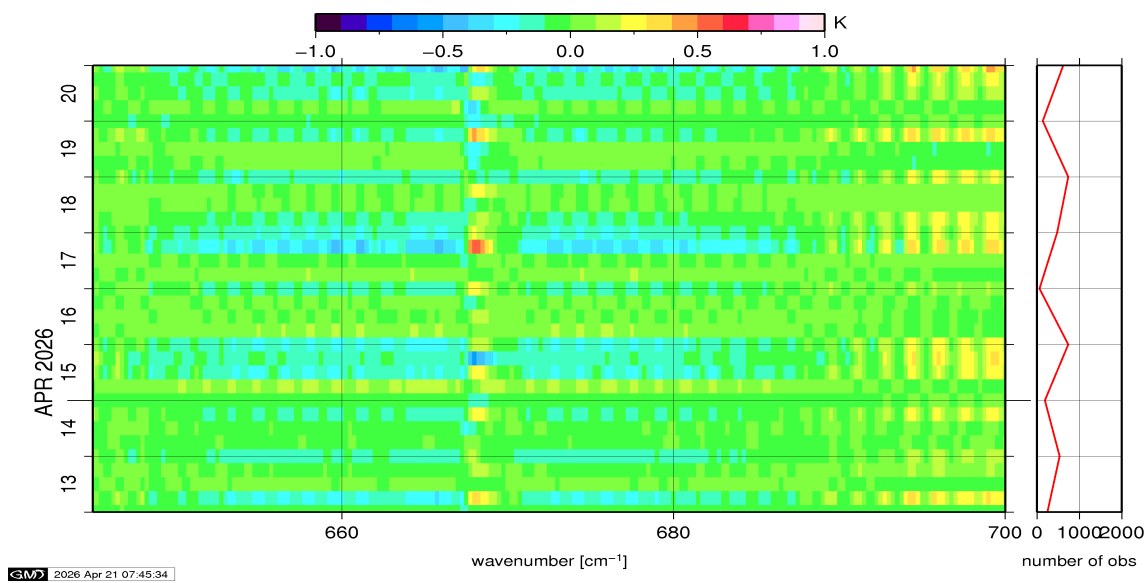


Figure 14: Radiance Anomaly in BT: CO2 14

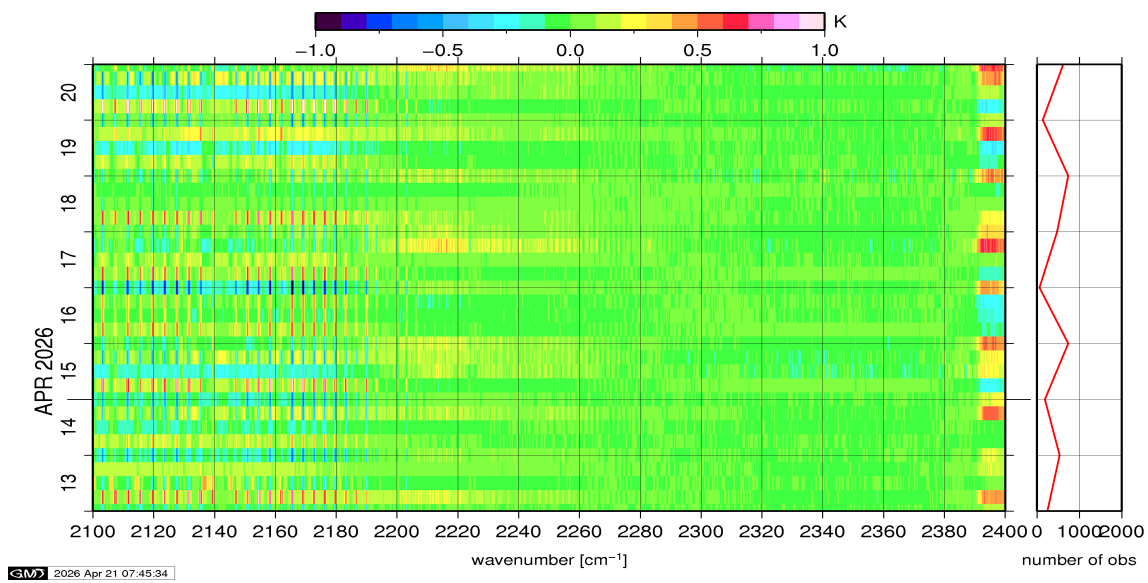


Figure 15: Radiance Anomaly in BT: CO2 4.3

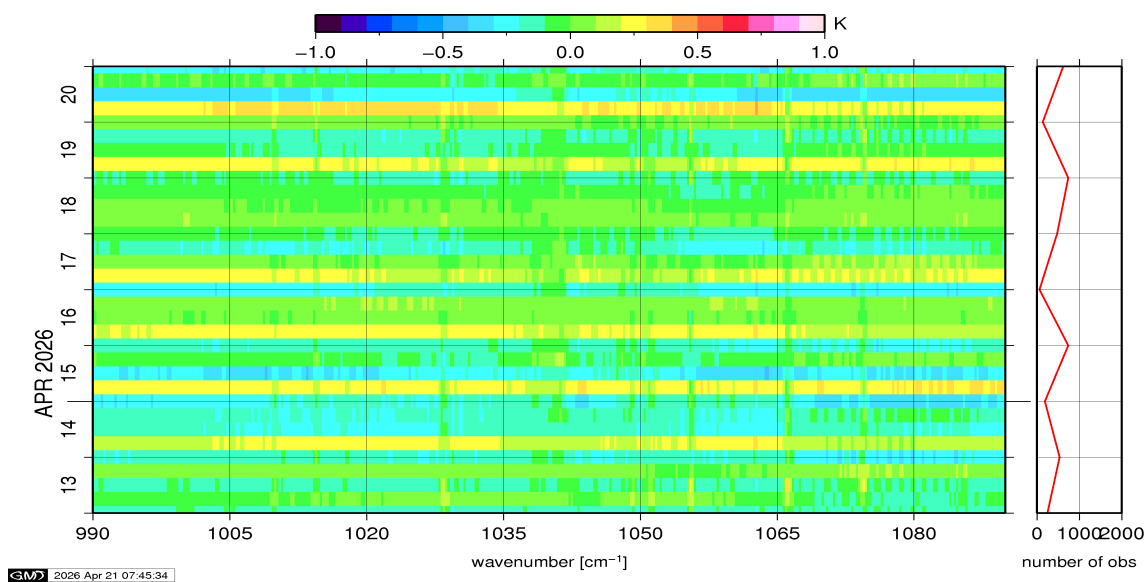


Figure 16: Radiance Anomaly in BT: O3