Update on EUMETSAT VIS-NIR GSICS products

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Current EUMETSAT VIS-NIR GSICS products

Product Type	Algorithm Type	Data Producer	Maturity Level	Monitored Instrument	Reference Instrument	Version	Data Start Date	Data End Date	Docs / Data Links
Near Real Time Correction (DCC)	GEO-LEO VIS	EUMETSAT	Demonstration	MSG-1 SEVIRI	Aqua MODIS	1	2016-09-09	2018-06-17	Docs Data
Near Real Time Correction (DCC)	GEO-LEO VIS	EUMETSAT	Demonstration	MSG-4 SEVIRI	Aqua MODIS	1	2018-05-07	Present	Docs Data
Near-Real Time Correction (DCC)	GEO-LEO VIS	EUMETSAT	Demonstration	MSG-3 SEVIRI	Aqua MODIS	1	2016-03-19	Present	Docs Data
Re-Analysis Correction (DCC)	GEO-LEO VIS	EUMETSAT	Demonstration	MSG-1 SEVIRI	Aqua MODIS	1	2016-09-09	2022-01-27	Docs Data
Re-Analysis Correction (DCC)	GEO-LEO VIS	EUMETSAT	Demonstration	MSG-3 SEVIRI	Aqua MODIS	1	2016-03-19	Present	Docs Data
Re-Analysis Correction (DCC)	GEO-LEO VIS	EUMETSAT	Demonstration	MSG-4 SEVIRI	Aqua MODIS	1	2018-05-07	Present	Docs Data

Rationale

- EUMETSAT investigated the connections to our servers and could not identify any regular user.
- MODIS DCC covering only one channel.
- SEVIRI operational L1 VIS/NIR will be corrected (bias+drift) using MICMICS desert vicarious, lunar and DCC by end of 2025. **Strong GSICS impact on the EUMETSAT L1 operational calibration is acknowledged.**
- Inter-calibration accuracy should be better than the calibration accuracy
- **For quality monitoring purposes**, EUMETSAT deployed **MATRICS** (targeting functions of NOAA STAR ICVS and CMA L1 monitoring system) for Met-12 FCI and LI. It features all radiometric (and geometric) user-relevant live monitoring information. Additional missions will be deployed in the next months.

See https://matrics.eumetsat.int/

- GEO-ring: EUMETSAT and NOAA are producing a FCDR from all historical measurements from imagers in geostationary orbit that form the Geostationary Ring. With cross-calibrated mapped radiances and spectral band adjustment factors. **The GSICS methods will be employed**.
- **EUMETSAT is announced at the 2025 GSICS annual meeting we are considering discontinuing our GSICS VIS-NIR products.**

Follow-up

- The GSICS Executive Panel and the CGMS WG II supported the following statement:

Acknowledgement of the shift of the GSICS end-product from inter-calibration coefficient products to the operational monitoring of the radiometric performances. The inter-calibration between sensors (or with reference sensors) is essential to detect and address radiometric anomalies, but the GSICS algorithms and methodologies also includes vicarious, on-board calibration monitoring, feedback from L2 etc.

- EUMETSAT thus decided to
  - discontinue its GSICS VIS-NIR and IR products generation and storage.
  - Assess the decommissioning of the EUMETSAT GSICS server (in discussion with partner agencies).
  - Decommission the GSICS plotting tool in favour of MATRICS

- EUMETSAT remain fully committed to the GSICS activities/cooperations, but under a more focussed form.

MATRICS

MATRICS is online: https://matrics.eumetsat.int

www.eumetsat.int

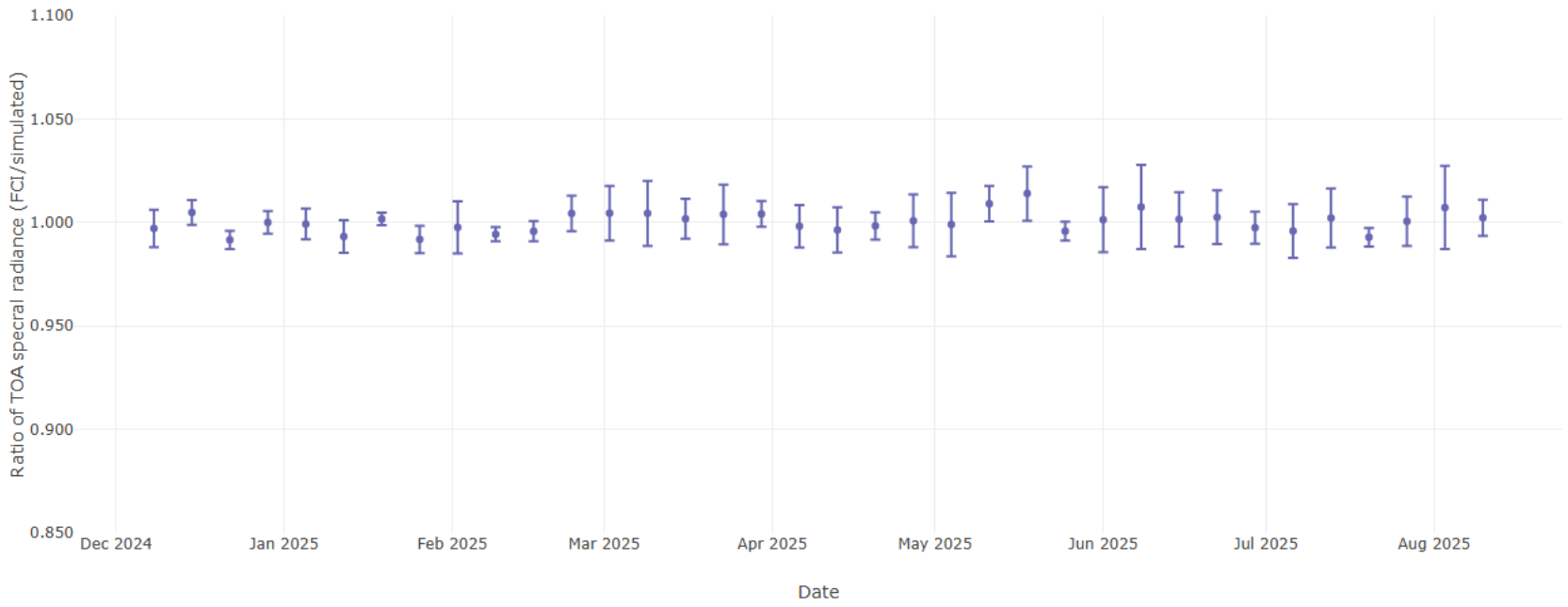
EUMETSAT USER PORTAL

- Home
- Meteosat-12
  - FCI
    - Instrument Status
    - Radiance Validation
      - VNIR Channels
      - Inter-Calibration with IASI/CrIS
      - Inter-Calibration with IASI: scatter plots
    - Geometric Validation
  - LI
- Support

MATRICS Monitoring Analysis Testing, Reporting Integrated Cal/Val System

Meteosat-12, FCI Radiance Validation: VNIR channels

Select a parameter:	Select band:	Start date / time:	End date / time:
Absolute Desert Vicarious calibration	VIS04	05/06/2023 14:41 UTC	13/08/2025 14:41 UTC



Thank you!

Questions are welcome.