

Global-scale Observations of the Limb and Disk (GOLD)

Data Issues Table

Revision 2.3 - November 4, 2026

The table below contains a summary of issues that can be screened for in GOLD data. The table is organized by data product and includes a short description of each issue, the parameter that can be used to screen the data, the value (or range) of the parameter, and a link to the section of the GOLD release notes where additional details about the issue can be found.

The table does not include all the known issues with GOLD data. It includes only issues that can be routinely screened for. The GOLD data release notes include details on all known issues with Level 1 and Level 2 data, and all GOLD data users should read the release notes, as well as the GOLD Public Science Data Products Guide. The latest version of both documents are available via the GOLD website (https://gold.cs.ucf.edu/data/documentation/) or from the NASA's Space Physics Data Facility (https://spdf.gsfc.nasa.gov/pub/data/gold/documentation/).

The Level 2 data products include both file-level and pixel-level Data Quality Index (DQI) flags. The complete lists of DQI values for each Level 2 product are available in the GOLD Public Science Data Products Guide. The DQI flag may include one or more DQI values and are set bitwise. If screening for a particular DQI value, bitwise operators must be used. See Appendix A in the GOLD Public Science Data Products Guide for sample code.

Data Product	**Issue**	**Parameter**	**Parameter Value**	**Release Note section (Rev 5.12)**
L1C (All)	Loss of detector sensitivity	Date	6/5/26 - Ongoing	3.1.23
L1C DAY	Noisy data (high particle background)	Global attribute HIGH_BACKGROUND	1	3.1.15
L1C DAY	Artifacts due to unmitigated gain loss	Date/Time	10/1/25-3/1/26 UT < 13:00 9/15/26 - Ongoing UT < 13:00	3.1.21
L1C LIM	Artifacts due to unmitigated gain loss	Date/Time	10/1/25-3/1/26 <13:00 UT 9/15/26 - TBD <13:00 UT	3.1.21
L1C LIM	Anomalously low radiance values	Date/Time	3/13/26 – 3/24/26 14:34 & 14:37 UT	3.1.22
L1C NI1	Noisy data (high particle background)	Global attribute HIGH_BACKGROUND	1	3.1.15
L2 TLIMB	Degraded performance at high solar zenith angle	File-level or Pixel-level DQI	2	3.2.2.5

Data Product	Issue	Parameter	Parameter Value	Release Note section (Rev 5.12)
L2 TLIMB	Tangent altitude constraints	File-level or Pixel-level DQI	32	3.2.2.4
L2 TLIMB	Algorithm failure	Pixel-level DQI	64	3.2.2.6
L2 TLIMB	Latitude constraints	Pixel-level DQI	128	3.2.2.3
L2 TLIMB	Stars in the field of view	Pixel-level DQI	256	3.2.2.2
L2 TLIMB	Loss of detector sensitivity	Date	6/5/26 - Ongoing	3.2.2.8
L2 TDISK	Invalid solar zenith angle	File-level or Pixel-level DQI	1	3.2.3.2
L2 TDISK	Invalid emission angle	File-level or Pixel-level DQI	8	3.2.3.2
L2 TDISK	Algorithm failure	Pixel-level DQI	16	3.2.3.3
L2 TDISK	Potential contamination by energetic particle flux in the polar regions	Geomagnetic latitude	>60 degrees	3.2.3.5
L2 TDISK	Discontinuities around GYM actuations	Date (+/- 10 days)	4/26/2019 8/11/2020 10/10/2019 3/20/2020 8/11/2020 2/8/2021 6/12/2021 8/27/2021 8/9/2022 5/30/2023 11/7/2023 12/11/2023 4/22/2024 10/7/2024 12/21/2024 10/22/2025 11/6/2025 11/18/2025 6/5/2026	3.2.3.6

Data Product	Issue	Parameter	Parameter Value	Release Note section (Rev 5.12)
L2 TDISK	TDISK artifacts due to unmitigated gain loss	Date/Time	10/22/25-11/6/25 UT < 13:00 11/18/25-1/31/26 08:22 UT scans 12/21/25-1/31/26 08:10 UT scans 9/15/26 - Ongoing UT < 13:00	3.2.3.7
L2 TDISK	Loss of detector sensitivity	Date	6/5/26 - Ongoing	3.2.3.8
L2 ON2	Invalid solar zenith angle	Pixel-level DQI	1	3.2.4.1
L2 ON2	Contamination of ON2	Geomagnetic latitude	>60 degrees	3.2.4.2
L2 ON2	Discontinuities around GYM actuations	Date (+/- 10 days)	4/26/2019 8/11/2020 10/10/2019 3/20/2020 8/11/2020 2/8/2021 6/12/2021 8/27/2021 8/9/2022 5/30/2023 11/7/2023 12/11/2023 4/22/2024 10/7/2024 12/21/2024 10/22/2025 11/6/2025 11/18/2025 6/5/2026	3.2.4.4
L2 ON2	ON2 artifacts (source unknown)	Date	5/20/23-5/25/23	3.2.4.6
L2 ON2	ON2 artifacts due to unmitigated gain loss	Date/Time	10/15/25-12/6/25 08:00 UT +/ 1 hr 12/7/25-2/26/26 UT < 13:00 9/15/26 - Ongoing UT < 13:00	3.2.4.7

Data Product	Issue	Parameter	Parameter Value	Release Note section (Rev 5.12)
L2 ON2	Loss of detector sensitivity	Date	6/5/26 - Ongoing	3.2.4.8
L2 QEUV	Invalid solar zenith angle	Pixel-level DQI	1	3.2.5.1
L2 QEUV	Discontinuities around GYM actuations	Date (+/- 10 days)	4/26/2019 8/11/2020 10/10/2019 3/20/2020 8/11/2020 2/8/2021 6/12/2021 8/27/2021 8/9/2022 5/30/2023 11/7/2023 12/11/2023 4/22/2024 10/7/2024 12/21/2024 10/22/2025 11/6/2025 11/18/2025 6/5/2026	3.2.5.4
L2 QUEV	QEUV artifacts due to unmitigated gain loss	Date	10/22/25-10/29/25 12/7/25-2/26/26	3.2.5.6
L2 QEUV	Loss of detector sensitivity	Date	6/5/26 - Ongoing	3.2.5.7
L2 O2DEN	Loss of detector sensitivity	Date	6/5/26 - Ongoing	3.2.1.6
L2 NMAX	Loss of detector sensitivity	Date	6/5/26 - Ongoing	3.2.6.4