

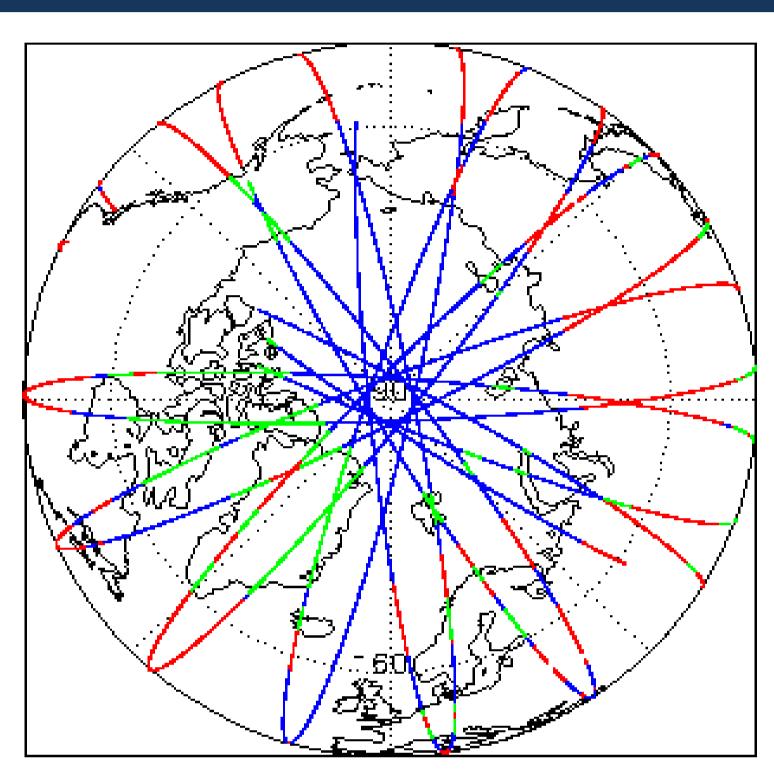
1. Overview

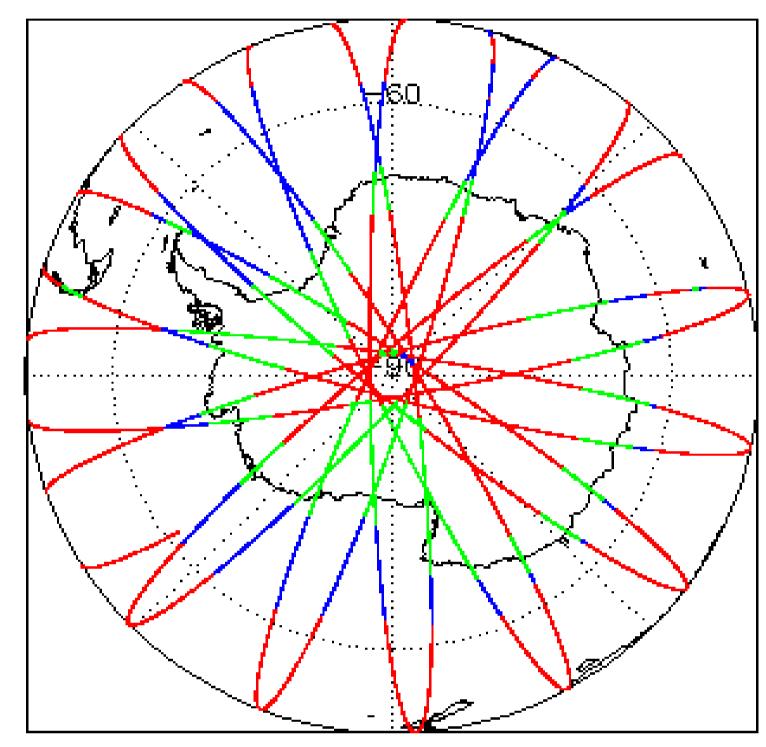
| Report Production: | 27-Jan-2021 | |
|--------------------|---|--|
| Processor Used: | CryoSat Ocean Processor | |
| Data Used: | Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data | |

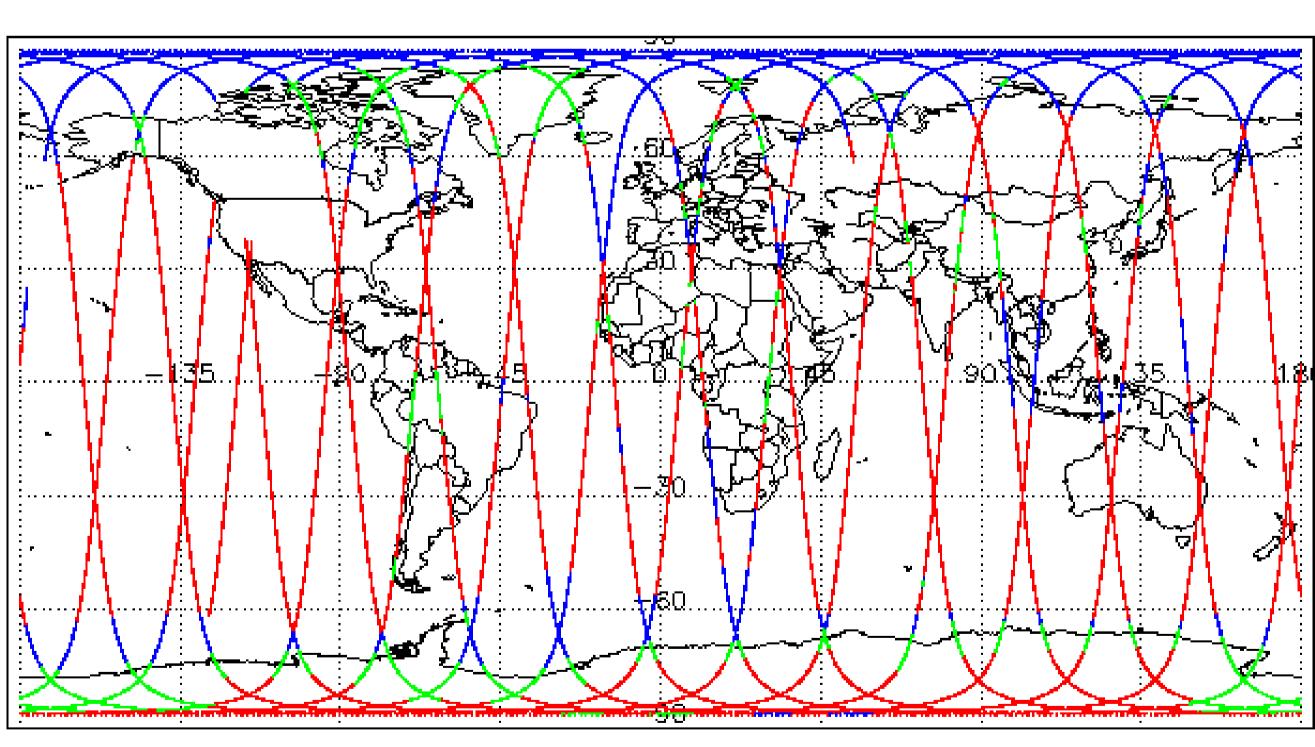
| Check | L1 & L2 | P2P |
|--|-------------------------|-------------------------|
| Server check: science-pds.cryosat.esa.int | Nominal | Nominal |
| Server check: calval-pds.cryosat.esa.int | Nominal | Nominal |
| Product Software Check | Nominal | Nominal |
| Product Format Check | Nominal | Nominal |
| Product Header Analysis | Nominal | Nominal |
| Auxiliary Data File Usage Check | Nominal | Nominal |
| Auxiliary Correction Error Check | See Section 5.4 | See Section 6.4 |
| Measurement Confidence Data Check | See Section 4.5, 4.6 | Nominal |
| Range, SWH & Backscatter Measurement Check | See Section 5.6 | See Section 6.6 |
| Ocean Retracking Quality Check | See Section 5.7 | See Section 6.7 |
| QCC Error/ Warning Check | See Section 7.1 and 7.2 | See Section 7.1 and 7.2 |

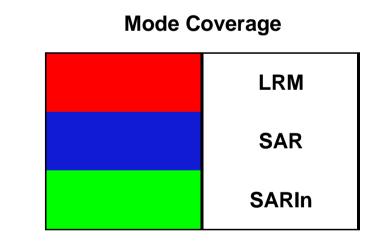
| Mission / Instru | Mission / Instrument News | | |
|------------------|---------------------------|--|--|
| 27-Dec-2020 | None | | |
| 28-Dec-2020 | None | | |
| 29-Dec-2020 | Nothing planned | | |

2. Global Coverage









3. Instrument Configuration

The SIRAL instrument configuration for the day of acquisition is provided below.

SIRAL instrument(s) in use: SIRAL - A

4. GOP Level 1B Data Quality Check

4.1 L1B Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL).

4.2 L1B Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L1B GOPR and GOPN products because the I1b_processing_quality_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

4.3 L1B Auxilary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.

Number of products with errors:

0

4.4 L1B Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

4.5 L1B Measurement Confidence Data Check

CryoSat L1B data includes a measurement confidence flag for each measurement record. The bit value of this flag indicates any problems when set.

Attitude Correction Missing: This flag is currently set in error for GOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.

Number of products with errors:

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0

4.6 L1B Waveform Group Data Check

CryoSat L1B data includes a waveform data flag for each measurement record. The bit value of this flag indicates any problems when set.

Loss of Echo Flag: This flag is currently set for some products over land, but this is to be expected.

Number of products with errors:

18

| Product | Test Failed | Description |
|---|--------------|--|
| CS_OFFL_SIR_GOPM1B_20201228T080102_20201228T081301_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPM1B_20201228T133903_20201228T133956_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20201228T014429_20201228T014527_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20201228T050047_20201228T050458_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20201228T150432_20201228T150521_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20201228T173121_20201228T173658_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20201228T191534_20201228T191711_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20201228T203713_20201228T203844_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20201228T214035_20201228T214628_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20201228T231527_20201228T231554_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20201228T005028_20201228T005404_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20201228T032213_20201228T033546_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20201228T060043_20201228T060706_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20201228T081552_20201228T081721_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20201228T141636_20201228T141959_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20201228T164207_20201228T165656_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20201228T201036_20201228T201119_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20201228T204251_20201228T204419_C001 | Loss of Echo | The tracking echo is missing for one or more records |

5. GOP Level 2 Data Quality Check

5.1 L2 Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL).

Number of products with errors:

0

5.2 L2 Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

Number of products with errors:

5.3 L2 Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.

Number of products with errors:

0

5.4 L2 Auxiliary Correction Error Check

For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767).

Currently, there are some common auxiliary correction errors raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

| Number of products with errors: 54 | | |
|---|---|---|
| Product | Test Failed | Description |
| CS_OFFL_SIR_GOPM_2_20201228T201120_20201228T202341_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T001154_20201228T001215_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T005405_20201228T005756_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T014429_20201228T014527_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T023350_20201228T023703_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T024217_20201228T024329_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T041115_20201228T041537_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T042120_20201228T042241_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T045913_20201228T050005_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T050047_20201228T050458_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T055855_20201228T060043_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T064301_20201228T064403_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T073703_20201228T073927_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T082057_20201228T082308_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T090709_20201228T090927_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T091606_20201228T092029_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T095739_20201228T100131_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T104728_20201228T105000_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T105721_20201228T105904_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T140630_20201228T140748_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T141319_20201228T141636_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T154553_20201228T154708_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T155216_20201228T155530_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T172650_20201228T172925_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T173121_20201228T173658_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| | | |

| CS_OFFL_SIR_GOPN_2_20201228T182210_20201228T182716_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
|---|--|---|
| CS_OFFL_SIR_GOPN_2_20201228T190538_20201228T190829_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T200119_20201228T200227_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T204420_20201228T204631_C001 | Tiviean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T214035_20201228T214628_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T223319_20201228T223547_C001 | Tiviean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPN_2_20201228T232051_20201228T232138_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T000202_20201228T001154_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T013431_20201228T013609_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T014527_20201228T015317_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T032213_20201228T033546_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T050458_20201228T051215_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T064403_20201228T064934_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the GPD Wet Tropospheric correction, the MSS height (solution 1) and tidal corrections for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T065023_20201228T065113_C001 | Tiviean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T081302_20201228T081435_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T082308_20201228T083000_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T100132_20201228T100644_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T100719_20201228T100845_C001 | Tiviean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T113915_20201228T114704_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T131734_20201228T132505_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T133418_20201228T133614_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T145313_20201228T150308_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T150308_20201228T150432_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T163514_20201228T164207_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T181630_20201228T182058_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T182058_20201228T182210_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T190051_20201228T190538_C001 | Mean Sea Surface (1) | There is an error with the MSS height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T195443_20201228T195710_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T195710_20201228T200119_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| | | |

| CS_OFFL_SIR_GOPR_2_20201228T200435_20201228T201005_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography (solution 1) for one or more records |
|---|---|--|
| CS_OFFL_SIR_GOPR_2_20201228T213348_20201228T214035_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOPR_2_20201228T231554_20201228T232050_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |

5.5 L2 Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

0

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20Hz)

CryoSat L2 data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common flags raised in the Level 2 products, which are summarised below. The table provides the full list of products flagged.

- > Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags: These flags are currently set for some records over ocean.
- > OCOG Altimeter Range and Backscatter Quality Flags: These flags are currently set for some records over continental ice.

Number of products with errors: 78

| Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
|--|---|
| and Backscatter Quality, OCOG | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| and Backscatter Quality, OCOG | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| and Backscatter Quality, OCOG | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| and Backscatter Quality, OCOG | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| and Backscatter Quality, OCOG | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| and Backscatter Quality, OCOG | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| and Backscatter Quality, OCOG | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records. |
| | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range and Backscatter Quality |

| CS_OFFL_SIR_GOPM_2_20201228T051609_20201228T052038_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
|---|--|--|
| CS_OFFL_SIR_GOPM_2_20201228T052218_20201228T054846_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T055037_20201228T055604_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T060706_20201228T061935_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T062003_20201228T063723_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T065938_20201228T071031_C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T071235_20201228T072745_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T073005_20201228T073502_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T073541_20201228T073702_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T074408_20201228T075500_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T080102_20201228T081301_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T085200_20201228T090654_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T090927_20201228T091415_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T092106_20201228T095457_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T102222_20201228T104307_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T104355_20201228T104605_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T105000_20201228T105332_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T105355_20201228T105721_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T110019_20201228T112655_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T115805_20201228T120009_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T120020_20201228T122511_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T122749_20201228T123247_C001 | | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T124058_20201228T131422_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T132653_20201228T132854_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T140259_20201228T140317_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T140748_20201228T141319_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |

| | and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
|---|--|--|
| CS_OFFL_SIR_GOPM_2_20201228T150615_20201228T150739_C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T152543_20201228T154218_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T155835_20201228T163220_C001 | G i i | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T165657_20201228T170136_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T170213_20201228T171952_C001 | _ | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T173834_20201228T175156_C001 | • | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T175317_20201228T175540_C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T180022_20201228T180856_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T182728_20201228T184457_C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T184640_20201228T190051_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| US OFFE SIR GOPM / /0/01/28119113/ /0/01/281191534 COOT | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T191728_20201228T193157_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T193450_20201228T194413_C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| US OFFE SIR GOPINEZ ZUZUTZZREZUUZZE ZUZUTZZREZUUSZE CUUT | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T201120_20201228T202341_C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T202923_20201228T203713_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T203844_20201228T204251_C001 | _ | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| US OFFE SIR GOPINEZ ZUZUTZZREZU4631 ZUZUTZZREZU5437 CUUT | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T205716_20201228T211217_C001 | —————————————————————————————————————— | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T214909_20201228T215924_C001 | • • | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T215929_20201228T222208_C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| US OFFE SIR GOPINEZ ZUZULZZREZZEZ ZUZULZZREZZRE E | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T223628_20201228T230107_C001 | | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| U.S. OFFI, SIR (3OPM / 202012281233329 202012281233415 C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPM_2_20201228T233439_20201229T000004_C001 | _ | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |

| CS_OFFL_SIR_GOPN_2_20201228T095546_20201228T095640_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
|---|--|--|
| CS_OFFL_SIR_GOPN_2_20201228T114704_20201228T114718_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T200326_20201228T200434_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T231527_20201228T231554_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T072745_20201228T072822_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T073517_20201228T073522_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T181630_20201228T182058_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T201036_20201228T201119_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |

L2 Quality Flags (20Hz PLRM)

Currently, there are several common flags raised in the Level 2 products, which are summarised below. The table provides the full list of products flagged.

- > Ocean Altimeter Range, SSHA, SWH and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over sea ice.
- > OCOG Altimeter Range and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over continental ice.

Number of products with errors:

| Product | Test Failed | Description |
|---|--|--|
| CS_OFFL_SIR_GOPN_2_20201228T005405_20201228T005756_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T010345_20201228T010510_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T013945_20201228T014108_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T014222_20201228T014252_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T023350_20201228T023703_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T024217_20201228T024329_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T031630_20201228T031638_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T041115_20201228T041537_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T042120_20201228T042241_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T050047_20201228T050458_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T064301_20201228T064403_C001 | | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T073703_20201228T073927_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T075622_20201228T075640_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T075739_20201228T075945_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T075945_20201228T080102_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |

| CS_OFFL_SIR_GOPN_2_20201228T081721_20201228T082017_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
|---|---|--|
| CS_OFFL_SIR_GOPN_2_20201228T082057_20201228T082308_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T095739_20201228T100131_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T101847_20201228T102149_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T115522_20201228T115628_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T123622_20201228T123800_C001 | Tand Backscatter Challty PLRIVE OCCU | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T131423_20201228T131542_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T134040_20201228T134146_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T134643_20201228T135016_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T150432_20201228T150521_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T151210_20201228T151232_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T152340_20201228T152543_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T155216_20201228T155530_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T170136_20201228T170213_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T172650_20201228T172925_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T173121_20201228T173658_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T190538_20201228T190829_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T191534_20201228T191711_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T202341_20201228T202922_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T203713_20201228T203844_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T212307_20201228T212518_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T214035_20201228T214628_C001 | TAITIMETER RANGE AND BACKSCATTER CHAILTY | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T222720_20201228T222752_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T223319_20201228T223547_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T230107_20201228T230204_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPN_2_20201228T231402_20201228T231427_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |

| CS_OFFL_SIR_GOPR_2_20201228T000202_20201228T001154_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
|---|--|--|
| CS_OFFL_SIR_GOPR_2_20201228T005028_20201228T005404_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T013918_20201228T013945_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T014108_20201228T014139_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T014527_20201228T015317_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T015443_20201228T015504_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T023017_20201228T023350_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T024330_20201228T024644_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T025237_20201228T025822_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T031650_20201228T031932_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T032213_20201228T033546_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T050458_20201228T051215_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T051335_20201228T051542_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T060043_20201228T060706_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T061935_20201228T062002_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T064403_20201228T064934_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T065455_20201228T065534_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T073927_20201228T074221_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T081302_20201228T081435_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T081552_20201228T081721_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T082308_20201228T083000_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T100132_20201228T100644_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T100719_20201228T100845_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T113915_20201228T114704_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T114925_20201228T114956_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records. |
| CS_OFFL_SIR_GOPR_2_20201228T123800_20201228T124058_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. |

| CS_OFFL_SIR_GOPR_2_20201228T133418_20201228T133514_C001 CS_OFFL_SIR_GOPR_2_20201228T134185_20201228T134185_C001 CS_OFFL_SIR_GOPR_2_20201228T134185_20201228T150388_C001 CS_OFFL_SIR_GOPR_2_20201228T135038_20201228T150388_C001 CS_OFFL_SIR_GOPR_2_20201228T135038_20201228T150388_C001 CS_OFFL_SIR_GOPR_2_20201228T150308_20201228T150388_C001 CS_OFFL_SIR_GOPR_2_20201228T150308_20201228T150388_C001 CS_OFFL_SIR_GOPR_2_20201228T150308_20201228T150388_C001 CS_OFFL_SIR_GOPR_2_20201228T150308_20201228T150388_C001 CS_OFFL_SIR_GOPR_2_20201228T150321_20201228T150388_C001 CS_OFFL_SIR_GOPR_2_20201228T150321_20201228T150398_C001 CS_OFFL_SIR_GOPR_2_20201228T150323_20201228T150398_C001 CS_OFFL_SIR_GOPR_2_20201228T150323_20201228T150398_C001 CS_OFFL_SIR_GOPR_2_20201228T150323_20201228T150398_C001 CS_OFFL_SIR_GOPR_2_20201228T150313_20201228T150398_C001 CS_OFFL_SIR_GOPR_2_20201228T160319_20201228T150398_C001 CS_OFFL_SIR_GOPR_2_20201228T160319_20201228T150398_C001 CS_OFFL_SIR_GOPR_2_20201228T160319_20201228T150398_C001 CS_OFFL_SIR_GOPR_2_20201228T160319_20201228T160308_C001 CS_OFFL_SIR_GOPR_2_20201228T160319_20201228T160308_C001 CS_OFFL_SIR_GOPR_2_20201228T160319_20201228T160308_C001 CS_OFFL_SIR_GOPR_2_20201228T160319_20201228T160308_C001 CS_OFFL_SIR_GOPR_2_20201228T160319_20201228T160308_C001 CS_OFFL_SIR_GOPR_2_20201228T160319_20201228T160308_ | y Flags ye been y Flags ye been y Flags ye been or one or |
|--|--|
| and Bankscatter Quality PLRM, COCO Alimeter Range and Bankscatter Quality Flags have been set more records. CS_OFFL_SIR_GOPR_2_20201228T163313_20201228T163032_C001 CS_OFFL_SIR_GOPR_2_20201228T160308_20201228T160308_C001 CS_OFFL_SIR_GOPR_2_20201228T150308_20201228T150432_C001 CS_OFFL_SIR_GOPR_2_20201228T150308_20201228T150432_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150432_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_C001 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T160615_C001 CS_OFFL_SIR_GOPR_2_20201228T160615_C001 CS_OFFL_SIR_GOPR | y Flags ye been y Flags ye been y Flags ye been or one or |
| and Backscatter Quality PLEM OCO Millmeter Range and Backscatter Quality Plags have for one or more records. CS_OFFL_SIR_GOPR_2_20201228T150308_20201228T150432_CO01 All meter Range and Backscatter Quality Plags have been set for one or more records. CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_CO01 All meter Range and Backscatter Quality PLEM OCO All meter Range Quality PLEM OCO All meter Range Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All meter Range SSHA, SWH and Backscatter Quality PLEM OCO All mete | y Flags ye been y Flags ye been or one or |
| CS_OFFL_SIR_GOPR_2_20201228T150308_20201228T150432_CO01 and Backscatter Quality PLRM, CCOG Attimeter Range and Backscatter Quality Plays and the COCO Attimeter Range and Backscatter Quality Flags has store one or more records. CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_CO01 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T150615_CO01 CS_OFFL_SIR_GOPR_2_20201228T150523_20201228T150615_CO01 CS_OFFL_SIR_GOPR_2_20201228T150523_20201228T150615_CO01 CS_OFFL_SIR_GOPR_2_20201228T150523_20201228T15052_CO01 CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T15052_CO01 CS_OFFL_SIR_GOPR_2_20201228T163313_20201228T163409_CO01 CS_OFFL_SIR_GOPR_2_20201228T163514_20201228T165656_CO01 CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_CO01 CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T172650_CO01 CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T172650_CO01 CS_OFFL_SIR_GOPR_2_20201228T180519_20201228T181216_CO01 CS_OFFL_SIR_GOPR_2_20201228T181555_20201228T181216_CO01 COCG Altimeter Range Cuality PLRM, COCG Altimeter Range and Backscatter Quality Flags have been set more records. CS_OFFL_SIR_GOPR_2_20201228T181216_CO01 CS_OFFL_SIR_GOPR_2_20201228T181216_CO01 CS_OFFL_SIR_GOPR_2_20201228T181216_CO01 CS_OFFL_SIR_GOPR_2_20201228T181519_CO01 CS_OFFL_SIR_GOPR_2_20201228T181519_CO01 CS_OFFL_SIR_GOPR_2_20201228T181519_CO01 CS_OFFL_SIR_GOPR_2_20201228T181519_CO01 CS_OFFL_SIR_GOPR_2_20201228T181519_CO01 CS_OFFL_SIR_GOPR_2_20201228T181519_CO01 CS_OFFL_SIR_GOPR_2_20201 | y Flags ve been or one or |
| CS_OFFL_SIR_GOPR_2_20201228T150521_20201228T161207_C001 CS_OFFL_SIR_GOPR_2_20201228T160923_20201228T161207_C001 CS_OFFL_SIR_GOPR_2_20201228T160923_20201228T161207_C001 CS_OFFL_SIR_GOPR_2_20201228T163923_20201228T164207_C001 CS_OFFL_SIR_GOPR_2_20201228T163313_20201228T163409_C001 CS_OFFL_SIR_GOPR_2_20201228T163313_20201228T163409_C001 CS_OFFL_SIR_GOPR_2_20201228T163514_20201228T163656_C001 CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_C001 CS_OFFL_SIR_GOPR_2_20201228T17952_20201228T172650_C001 CS_OFFL_SIR_GOPR_2_20201228T17952_20201228T181216_C001 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181216_C001 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181619_C001 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181619_C001 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181619_C001 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CCC_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CCC_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CCC_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CCC_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CCC_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CCC_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CCC_OFFL_SIR_GOPR_2_20201228T181455_20201228T18 | or one or |
| CS_OFFL_SIR_GOPR_2_20201228T154219_20201228T164553_CO01 CS_OFFL_SIR_GOPR_2_20201228T163313_20201228T163409_CO01 CS_OFFL_SIR_GOPR_2_20201228T163313_20201228T163409_CO01 CS_OFFL_SIR_GOPR_2_20201228T163514_20201228T164207_CO01 CS_OFFL_SIR_GOPR_2_20201228T163514_20201228T164207_CO01 CS_OFFL_SIR_GOPR_2_20201228T163514_20201228T165656_CO01 CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_CO01 CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_CO01 CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_CO01 CS_OFFL_SIR_GOPR_2_20201228T171952_20201228T172650_CO01 CS_OFFL_SIR_GOPR_2_20201228T171952_20201228T181216_CO01 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181216_CO01 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181619_CO01 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181619_CO01 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_CO01 CS_OFFL_SIR_GOPR_2_20201228T181619_CO01 CS_OFFL_SIR_GOPR_2_20201228T181619_CO01 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181619_CO01 CS_OFFL_SIR_GOPR_2_2020122 | y Flags |
| and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Ba | |
| CS_OFFL_SIR_GOPR_2_20201228T163514_20201228T164207_C001 CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_C001 CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_C001 CS_OFFL_SIR_GOPR_2_20201228T171952_20201228T172650_C001 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181216_C001 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_ | |
| CS_OFFL_SIR_GOPR_2_20201228T163514_20201228T164207_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_C001 CS_OFFL_SIR_GOPR_2_20201228T171952_20201228T172650_C001 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181216_C001 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CS_OFFL_SIR_GOPR_2_20201228 | or one or |
| CS_OFFL_SIR_GOPR_2_20201228T164207_20201228T165656_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPR_2_20201228T171952_20201228T172650_C001 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181216_C001 CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181216_C001 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range Range and Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. | |
| CS_OFFL_SIR_GOPR_2_20201228T171952_20201228T172650_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPR_2_20201228T180919_20201228T181216_C001 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altime | • |
| OCOG Backscatter Quality OCOG Backscatter Quality OCOG Backscatter Quality More records. OCOG Backscatter Quality More records. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range Altime | |
| CS_OFFL_SIR_GOPR_2_20201228T181455_20201228T181619_C001 and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Set for one or more records. | or one or |
| | |
| CS_OFFL_SIR_GOPR_2_20201228T181630_20201228T182058_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and the OCOG Altimeter Range and the OCOG Altimeter Range and the OCOG Set for one or more records. | |
| CS_OFFL_SIR_GOPR_2_20201228T193157_20201228T193449_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and the OCOG Alt | |
| CS_OFFL_SIR_GOPR_2_20201228T195443_20201228T195710_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set in more records. | or one or |
| CS_OFFL_SIR_GOPR_2_20201228T195710_20201228T200119_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality PLRM Set for one or more records. | • |
| CS_OFFL_SIR_GOPR_2_20201228T200435_20201228T201005_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set in more records. | or one or |
| CS_OFFL_SIR_GOPR_2_20201228T211217_20201228T212012_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and the OCOG Alt | • |
| CS_OFFL_SIR_GOPR_2_20201228T213348_20201228T214035_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and the OCOG Alt | • |
| CS_OFFL_SIR_GOPR_2_20201228T214628_20201228T214909_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and the OCOG Altimeter Range and the OCOG Altimeter Range and the OCOG Set for one or more records. | ve been |
| CS_OFFL_SIR_GOPR_2_20201228T22208_20201228T222327_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Set for one or more records | • |
| CS_OFFL_SIR_GOPR_2_20201228T223548_20201228T223628_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality PLRM PLRM | y Flage |
| CS_OFFL_SIR_GOPR_2_20201228T231146_20201228T231402_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set to more records. | • |
| CS_OFFL_SIR_GOPR_2_20201228T231554_20201228T232050_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality PLRM PLRM | ve been |

L2 Quality Flags (1 Hz & 1Hz PLRM)

Currently, there are several common flags raised in the Level 2 products, which are summarised below.

190

146

0

0

> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for products over sea ice, which is to be expected.

Number of products with errors:

5.8 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20Hz)

CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below.

Number of products with errors: 65

L2 Retracking Flags (20Hz, PLRM)

CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz PLRM measurement record. The bit value of this flag indicates any problems when set.

Ocean Retracking Quality Flag (PLRM): This flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected.

Number of products with errors:

6. GOP L2 Pole-to-Pole Data Quality Check

6.1 P2P Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a NetCDF product file (.nc).

Number of products with errors:

6.2 P2P Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

Number of products with errors:

6.3 P2P Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.

Number of products with errors:

6.4 P2P Auxiliary Correction Error Check

For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767).

Currently, there are some common auxiliary correction errors raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

Number of products with errors: 30

| Product | Test Failed | Description |
|---|---|--|
| CS_OFFL_SIR_GOP_220201227T231905_20201228T000842_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T000842_20201228T005820_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records |
| CS_OFFL_SIR_GOP_220201228T005820_20201228T014757_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T014757_20201228T023734_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T023734_20201228T032712_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T032712_20201228T041649_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T041649_20201228T050626_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_GOP_220201228T050626_20201228T055604_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T055604_20201228T064541_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T064541_20201228T073518_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T073518_20201228T082455_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_GOP_220201228T082455_20201228T091433_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |

| CS_OFFL_SIR_GOP_220201228T091433_20201228T100410_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
|---|---|--|
| CS_OFFL_SIR_GOP_220201228T100410_20201228T105348_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T105348_20201228T114325_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T114325_20201228T123302_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T123302_20201228T132240_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T132240_20201228T141217_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T141217_20201228T150154_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T150154_20201228T155132_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T155132_20201228T164109_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records |
| CS_OFFL_SIR_GOP_220201228T164109_20201228T173046_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T173046_20201228T182024_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T182024_20201228T191001_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T191001_20201228T195938_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T195938_20201228T204915_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T204915_20201228T213853_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T213853_20201228T222830_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_GOP_220201228T222830_20201228T231808_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |
| CS_OFFL_SIR_GOP_220201228T231808_20201229T000745_C002 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records |

6.5 P2P Measurement Confidence Data Check

CryoSat P2P data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

6.6 P2P Measurement Quality Flag Check

P2P Quality Flags (20Hz)

CryoSat P2P data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record, copied from the corresponding L2 products.

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

0

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Number of products with errors: 29

P2P Quality Flags (20Hz PLRM)

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

Number of products with errors: 30

P2P Quality Flags (1 Hz & 1Hz PLRM)

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

Number of products with errors: 30

6.8 P2P Ocean Retracking Quality Check

P2P Retracking Flags (20Hz)

Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Ocean Retracking Quality Flag (PLRM): This flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected.

Number of products with errors:

P2P Retracking Flags PLRM

CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz PLRM measurement record. The bit value of this flag indicates any problems when set.

Ocean Retracking Quality Flag (PLRM): This flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected.

Number of products with errors:

30

7. GOP QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or warnings is provided below.

| Product type | No. Products | No. QCC Reports | No. Valid | No. Warnings | No. Errors |
|--------------|--------------|-----------------|-----------|--------------|------------|
| SIR_GOPM1B | 210 | 210 | 4 | 206 | 0 |
| SIR_GOPR1B | 126 | 126 | 0 | 126 | 0 |
| SIR_GOPN1B | 106 | 106 | 2 | 104 | 0 |
| SIR_GOPM_2 | 210 | 210 | 161 | 49 | 0 |
| SIR_GOPR_2 | 126 | 126 | 39 | 83 | 4 |
| SIR_GOPN_2 | 106 | 106 | 47 | 59 | 0 |
| SIR_GOP_P2P | 29 | 29 | 0 | 26 | 3 |

7.1 QCC Errors

Number of QCC reports with errors:

7

Total number of occurrences of each error

| | | | | | rotai number | or occurrences | or each error | | | | |
|---------------------|------------|----|------------|----|--------------|----------------|---------------|---|---|---|---|
| Product Type | RLOBOPNCDF | RL | RLOBOPNCDF | RL | - | - | - | - | • | - | - |
| SIR_GOPR_2 | 4 | 4 | 4 | 4 | | | | | | | |
| | | | | | | | | | | | |
| Product Type | RLOBOPNCDF | RL | RLOBOPNCDF | RL | - | - | - | - | • | - | - |
| SIR GOP 2 | 3 | 3 | 3 | 3 | | | | | | | |

| est Description Key: | | | | | | |
|----------------------|---------------------------------|--|--|--|--|--|
| Abbreviation | Test name | Details | | | | |
| RLOBOPNCDF | RangeLatitudeOrBlankOP_7NetCDF | Latitude should be between -90E7 and 90E7 | | | | |
| RL | RangeLatitude_7 | Latitude should be between -90E7 and 90E7 | | | | |
| RLOBOPNCDF | RangeLongitudeOrBlankOP_7NetCDF | Longitude should be between -180E7 and 180E7 | | | | |
| RL | RangeLongitude_7 | Longitude should be between -180E7 and 180E7 | | | | |

7.2 QCC Warnings

SIR_GOP_2_

Number of QCC reports with warnings

2240

Total number of occurrences of each warning

| Product Type | BCSHNCDF | IOHHMOOR | MVIOEPFDNCDF | MVIOEPNCDF | MVIONCDF | RBSZOPOEPFDNCDF | RBSZOPOEPFDPLRMNCD |
|--------------|----------|----------|--------------|------------|----------|-----------------|--------------------|
| SIR_GOPM1B | 206 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_GOPM_2 | 0 | 0 | 38 | 33 | 0 | 39 | 0 |
| SIR_GOPN1B | 102 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_GOPN_2 | 0 | 0 | 8 | 31 | 5 | 20 | 20 |
| SIR_GOPR1B | 125 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_GOPR_2 | 0 | 4 | 45 | 53 | 0 | 31 | 29 |

| Product Type | RBSZOPOEPNCDF | RNELPOTONCDF | RPEPOPFDLRMNCDF | RPEPOPFDPLRMSARNCI | RPEPOPFDPLRMSINNCD | RPEPOPFDSARNCDF | RPEPOPFDSINNCDF |
|--------------|---------------|--------------|-----------------|--------------------|--------------------|-----------------|-----------------|
| SIR_GOPM1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_GOPM_2 | 33 | 0 | 30 | 0 | 0 | 0 | 0 |
| SIR_GOPN1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_GOPN_2 | 12 | 0 | 0 | 0 | 21 | 0 | 30 |
| SIR_GOPR1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_GOPR_2 | 13 | 2 | 0 | 53 | 0 | 59 | 0 |

| Product Type | RPEPOPLRMNCDF | RPEPOPSARNCDF | RPEPOPSINNCDF | RSSBCONCDF | RSSHAOFDNCDF | RSSHAOFDPLRMNCDF | RSSHAONCDF |
|--------------|---------------|---------------|---------------|------------|--------------|------------------|------------|
| SIR_GOPM1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_GOPM_2 | 26 | 0 | 0 | 7 | 26 | 0 | 5 |
| SIR_GOPN1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_GOPN_2 | 0 | 0 | 26 | 14 | 43 | 49 | 31 |
| SIR_GOPR1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_GOPR_2 | 0 | 51 | 0 | 6 | 63 | 38 | 19 |

| Product Type | RSWHOEPFDNCDF | RSWHOEPFDPLRMNCDF | RSWHOEPNCDF | SOOHHIFHD | SCSTODHRNCDF | SCSTODNCDF | - |
|--------------|---------------|-------------------|-------------|-----------|--------------|------------|---|
| SIR_GOPM1B | 0 | 0 | 0 | 0 | 0 | 1 | |
| SIR_GOPM_2 | 35 | 0 | 3 | 0 | 0 | 0 | |
| SIR_GOPN1B | 0 | 0 | 0 | 0 | 43 | 4 | |
| SIR_GOPN_2 | 24 | 24 | 10 | 1 | 0 | 0 | |
| SIR_GOPR1B | 0 | 0 | 0 | 0 | 126 | 12 | |
| SIR GOPR 2 | 37 | 56 | 1 | 15 | 0 | 0 | |

| Product Type | IOHHMOOR | MVIOEPFDNCDF | MVIOEPNCDF | MVIONCDF | RBSZOPOEPFDNCDF | RBSZOPOEPFDPLRMNCD | RBSZOPOEPNCDF |
|--------------|--------------|---------------------|-----------------|---------------|-----------------|--------------------|------------------|
| | 15 | 29 | 29 | 5 | 28 | 18 | 26 |
| | | | | | | | |
| Product Type | RNELPOTONCDF | RPEPOPFDPLRMSINNCDI | RPEPOPFDSINNCDF | RPEPOPSINNCDF | RSSBCONCDF | RSSHAOFDNCDF | RSSHAOFDPLRMNCDF |

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| Product Type | RSSHAONCDF | RSWHOEPFDNCDF | RSWHOEPFDPLRMNCDF | RSWHOEPNCDF | SPHLPQWNCDF | - | - |
|--------------|------------|---------------|-------------------|-------------|-------------|---|---|
| SIR_GOP_2_ | 26 | 29 | 20 | 14 | 29 | | |

24

16

29

| Test Description Key: | | | | |
|-------------------------|---|--|--|--|
| Abbreviation | Test name | Details | | |
| BCSHNCDF | BurstCounterStep20HzNetCDF | The burst counter should be one higher with regard to the previous burst counter | | |
| IOHHMOOR | IndexOf1Hzin20HzMappingOutOfRange | The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1) | | |
| MVIOEPFDNCDF | MissingValueIntOceanExcludingPolarFD2NetCDF | The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees | | |
| MVIOEPNCDF | MissingValueIntOceanExcludingPolarNetCDF | The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees | | |
| MVIONCDF | MissingValueIntOceanNetCDF | The value should not be a 'missing value' for surface type 0 only | | |
| RBSZOPOEPFDNCDF | RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF | The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees | | |
| RBSZOPOEPFDPLRM NCDF | RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF | The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees | | |
| RBSZOPOEPNCDF | RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF | The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees | | |

| RNELPOTONCDF | RangeNELPOceanTideOceanNetCDF | The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean |
|-------------------------|--|--|
| RPEPOPFDLRMNCDF | RangePeakinessExcludingPolarOPFD2LRMNetCDF | The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPFDPLRMSAR NCDF | RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF | The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| | RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF | The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| | RangePeakinessExcludingPolarOPFD2SARNetCDF | The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPFDSINNCDF | RangePeakinessExcludingPolarOPFD2SINNetCDF | The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPLRMNCDF | RangePeakinessExcludingPolarOPLRMNetCDF | The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPSARNCDF | RangePeakinessExcludingPolarOPSARNetCDF | The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPSINNCDF | RangePeakinessExcludingPolarOPSINNetCDF | The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RSSBCONCDF | RangeSeaStateBiasCorrectionOceanNetCDF | The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean |
| RSSHAOFDNCDF | RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF | The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean |
| RSSHAOFDPLRMNCD | RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF | The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean |
| RSSHAONCDF | RangeSeaSurfaceHeightAnomalyOceanNetCDF | The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean |
| RSWHOEPFDNCDF | RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF | The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RSWHOEPFDPLRMNC DF | RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF | The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RSWHOEPNCDF | RangeSignificantWaveHeightOceanExcludingPolarNetCDF | The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| SOOHHIFHD | SameOrOneHigher1HzIndexFor20HzData | The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample |
| SCSTODHRNCDF | SequenceCounterStepTODHRNetCDF | The sequence counter should be modulo 4 higher with regard to the previous sequence counter |
| SCSTODNCDF | SequenceCounterStepTODNetCDF | The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter |

7.3 Missing QCC Reports

Number of products with missing QCC reports: