





1. Overview

| Report Production: | 15-Mar-2023 | |
|---------------------------|--|--|
| Processor Used: | CryoSat Ocean Processor | |
| Data Used: | Near Real Time Ocean Products (NOP) L1B & L2 Science Data | |

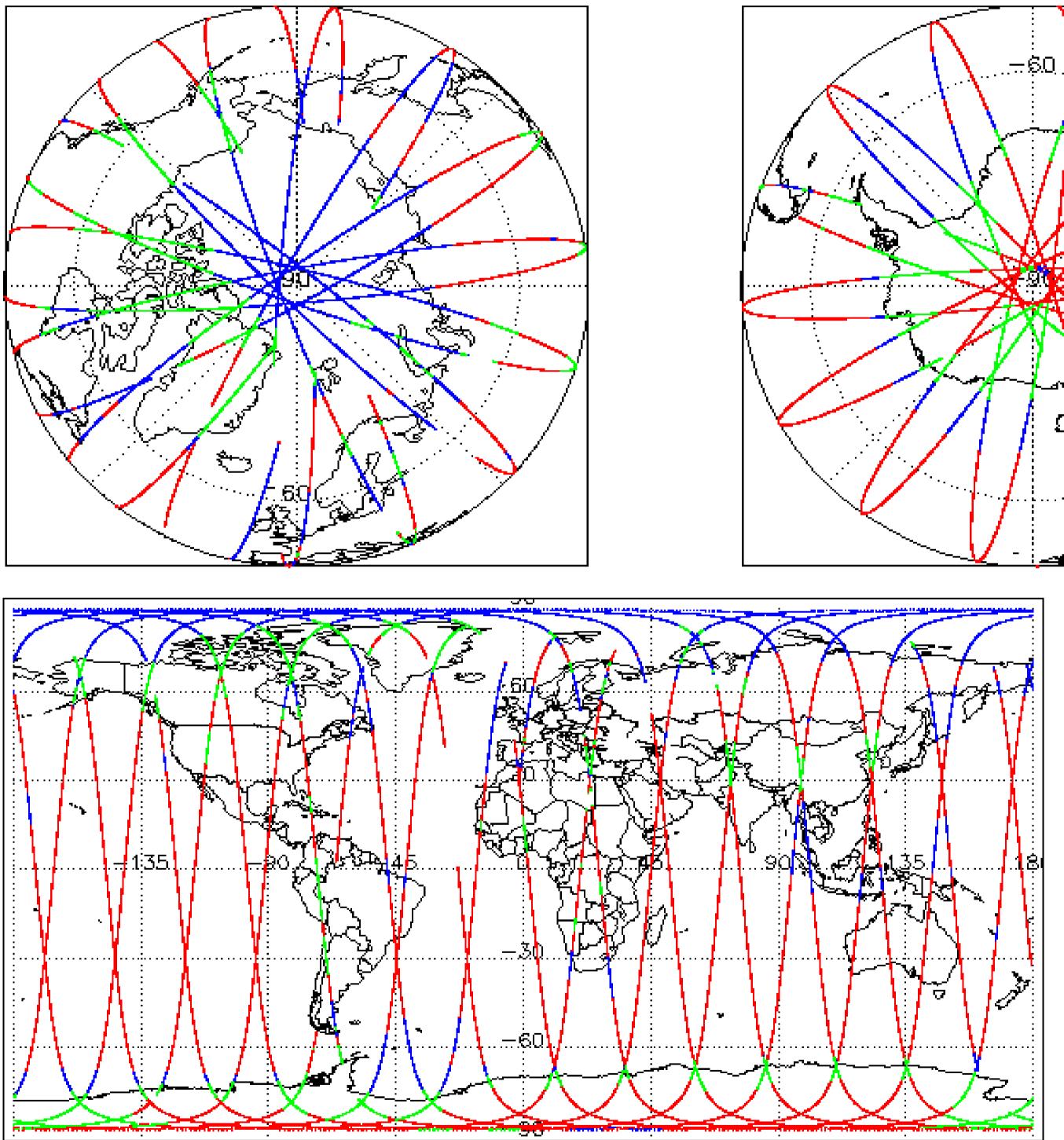
We would love to hear from you!

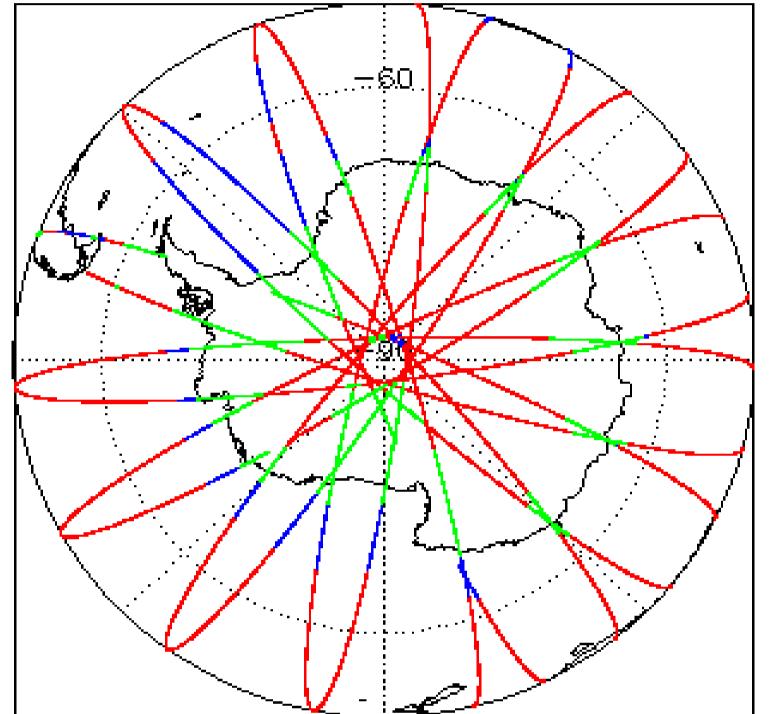
Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to cs2_qc_team@telespazio.com

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

| Mission / Instru | iment News |
|------------------|-----------------|
| 13-Mar-2023 | None |
| 14-Mar-2023 | None |
| 15-Mar-2023 | 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 |
|-----------------------------|----------------|
| Star Tracker(s) in use: | Star Tracker 1 |

4. NOP 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 NetCDF product file (.nc).

Number of products with errors:

0

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 current | ly set all L1B NOPR and NOPN products because the | e I1b_processing_quality_hr field is not correctly | y configured in the OSAR and |
|---|---|--|------------------------------|
| OSARIn chains. A modification is required in the next release. | | | |

Number of products with errors:

0

0

0

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.

> Dynamic Atmospheric Correction: The DAC is missing in all products because the auxiliary files required are not available in time for processing. This known and expected behaviour.

Number of products with errors:

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 NOPR products due to a configuration issue. The attitude correction is not actually missing, This is being investigated and will be updated in the next SW update.

Number of products with errors:

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 occasional products over land, but this is to be expected.

Number of products with errors:

18

| Product | Test Failed | Description |
|---|--------------|--|
| CS_OFFL_SIR_NOPM1B_20230314T030948_20230314T032526_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPM1B_20230314T121653_20230314T123826_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPM1B_20230314T164420_20230314T164640_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPM1B_20230314T220811_20230314T220915_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20230314T035349_20230314T035459_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20230314T053309_20230314T053809_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20230314T070645_20230314T070702_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20230314T085516_20230314T085945_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20230314T101348_20230314T101542_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20230314T120537_20230314T120651_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20230314T162314_20230314T162455_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20230314T165936_20230314T170402_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPN1B_20230314T221723_20230314T221844_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20230314T040249_20230314T040439_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20230314T053856_20230314T054108_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20230314T084513_20230314T085516_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20230314T120652_20230314T121410_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_NOPR1B_20230314T223625_20230314T223844_C001 | Loss of Echo | The tracking echo is missing for one or more records |

5. NOP 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 NetCDF product file (.nc).

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.

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.

Wind Model File Usage: This file is currently not included in all L2 products.

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 Corection, 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.

> Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.

> Mean Dynamic Topography: The error value is currently set for products over land and 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:

| Product CS_OFFL_SIR_NOPM_2_20230314T005444_20230314T011221_C001 | Test Failed Mean Dynamic Topography (1) | Description There is an error with the Mean Dynamic Topography height for one or more records |
|--|---|---|
| CS_OFFL_SIR_NOPM_2_20230314T072526_20230314T072738_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPM_2_20230314T141351_20230314T143011_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPM_2_20230314T164804_20230314T165511_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPN_2_20230314T011908_20230314T012152_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_NOPN_2_20230314T012355_20230314T012520_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_NOPN_2_20230314T021447_20230314T021916_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_NOPN_2_20230314T025830_20230314T030105_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_NOPN_2_20230314T035349_20230314T035459_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_NOPN_2_20230314T035615_20230314T035652_C001 | Total Geocentric Ocean Tide (GOT) | There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_NOPN_2_20230314T053309_20230314T053809_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_NOPN_2_20230314T061556_20230314T061745_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPN_2_20230314T062601_20230314T062822_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_NOPN_2_20230314T071314_20230314T071732_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPN_2_20230314T093532_20230314T093907_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_NOPN_2_20230314T111452_20230314T111811_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_NOPN_2_20230314T120537_20230314T120651_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_NOPN_2_20230314T130228_20230314T130336_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPN_2_20230314T134454_20230314T134605_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1), 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_NOPN_2_20230314T143932_20230314T144122_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_NOPN_2_20230314T152249_20230314T152520_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_NOPN_2_20230314T161803_20230314T161947_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_NOPN_2_20230314T165936_20230314T170402_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1), 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_NOPN_2_20230314T174836_20230314T175121_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_NOPN_2_20230314T183838_20230314T184226_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPN_2_20230314T201350_20230314T201600_C001 | Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide | There is an error with the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and 2: FES) and the Non- Equilibrium Long Period Ocean Tide for one or more records |
| CS_OFFL_SIR_NOPN_2_20230314T225425_20230314T225732_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_NOPR_2_20230314T020728_20230314T020846_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPR_2_20230314T034713_20230314T035032_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_NOPR_2_20230314T035032_20230314T035349_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_NOPR_2_20230314T035804_20230314T040219_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide | There is an error with the WSS height (solution T), the Mean Dynamic |
|---|---|--|
| CS_OFFL_SIR_NOPR_2_20230314T052647_20230314T053308_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_NOPR_2_20230314T070833_20230314T071313_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_NOPR_2_20230314T084513_20230314T085516_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_NOPR_2_20230314T102627_20230314T103415_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_NOPR_2_20230314T120652_20230314T121410_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_NOPR_2_20230314T134605_20230314T135318_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_NOPR_2_20230314T152520_20230314T153207_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_NOPR_2_20230314T170403_20230314T170954_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_NOPR_2_20230314T170958_20230314T171124_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_NOPR_2_20230314T184226_20230314T185136_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_NOPR_2_20230314T201920_20230314T202658_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 (20 Hz)

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:

| Product | Test Failed | Description |
|---|--|---|
| CS_OFFL_SIR_NOPM_2_20230313T235010_20230314T002458_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_NOPM_2_20230314T002650_20230314T002712_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_NOPM_2_20230314T005444_20230314T011221_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_NOPM_2_20230314T011520_20230314T011642_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_NOPM_2_20230314T013049_20230314T014727_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_NOPM_2_20230314T014811_20230314T015045_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_NOPM_2_20230314T015255_20230314T020007_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_NOPM_2_20230314T022000_20230314T023757_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_NOPM_2_20230314T024049_20230314T025257_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 |
| | 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_NOPM_2_20230314T030948_20230314T032526_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_NOPM_2_20230314T032728_20230314T033650_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_NOPM_2_20230314T034234_20230314T034334_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_NOPM_2_20230314T035500_20230314T035615_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_NOPM_2_20230314T040219_20230314T040249_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_NOPM_2_20230314T040440_20230314T041611_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_NOPM_2_20230314T043204_20230314T043334_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_NOPM_2_20230314T043337_20230314T043552_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_NOPM_2_20230314T043916_20230314T044710_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_NOPM_2_20230314T044858_20230314T050433_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_NOPM_2_20230314T054158_20230314T055619_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_NOPM_2_20230314T055621_20230314T061518_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_NOPM_2_20230314T061746_20230314T061956_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_NOPM_2_20230314T062019_20230314T062600_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_NOPM_2_20230314T062832_20230314T065359_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_NOPM_2_20230314T071937_20230314T072226_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_NOPM_2_20230314T072526_20230314T072738_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_NOPM_2_20230314T072740_20230314T072743_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_NOPM_2_20230314T072745_20230314T075419_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_NOPM_2_20230314T075956_20230314T080426_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_NOPM_2_20230314T080711_20230314T082911_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_NOPM_2_20230314T082914_20230314T083542_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_NOPM_2_20230314T083545_20230314T083629_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_NOPM_2_20230314T085946_20230314T093325_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_NOPM_2_20230314T093907_20230314T094442_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_NOPM_2_20230314T094605_20230314T095227_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_NOPM_2_20230314T102338_20230314T102517_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_NOPM_2_20230314T103837_20230314T111250_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_NOPM_2_20230314T111812_20230314T112324_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_NOPM_2_20230314T112507_20230314T114508_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_NOPM_2_20230314T121653_20230314T123826_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_NOPM_2_20230314T123936_20230314T125036_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_NOPM_2_20230314T125518_20230314T125812_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_NOPM_2_20230314T125818_20230314T125826_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_NOPM_2_20230314T125829_20230314T130228_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_NOPM_2_20230314T130430_20230314T132257_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_NOPM_2_20230314T133417_20230314T134046_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_NOPM_2_20230314T140007_20230314T140748_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_NOPM_2_20230314T141230_20230314T141343_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_NOPM_2_20230314T141351_20230314T143011_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_NOPM_2_20230314T143153_20230314T143711_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_NOPM_2_20230314T144805_20230314T150048_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_NOPM_2_20230314T150303_20230314T151502_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_NOPM_2_20230314T154222_20230314T155154_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_NOPM_2_20230314T155429_20230314T160054_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_NOPM_2_20230314T160057_20230314T160930_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_NOPM_2_20230314T161119_20230314T161623_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_NOPM_2_20230314T161648_20230314T161803_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_NOPM_2_20230314T162455_20230314T162552_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_NOPM_2_20230314T163502_20230314T163635_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_NOPM_2_20230314T164420_20230314T164640_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_NOPM_2_20230314T164804_20230314T165511_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_NOPM_2_20230314T172029_20230314T172030_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_NOPM_2_20230314T172752_20230314T172903_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_NOPM_2_20230314T173114_20230314T174832_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_NOPM_2_20230314T175122_20230314T175541_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_NOPM_2_20230314T180135_20230314T182622_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_NOPM_2_20230314T182732_20230314T183636_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_NOPM_2_20230314T185345_20230314T185816_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_NOPM_2_20230314T190217_20230314T192818_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_NOPM_2_20230314T192933_20230314T193456_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_NOPM_2_20230314T194044_20230314T200902_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_NOPM_2_20230314T201028_20230314T201349_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_NOPM_2_20230314T203141_20230314T203630_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_NOPM_2_20230314T203723_20230314T203909_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_NOPM_2_20230314T204528_20230314T204624_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_NOPM_2_20230314T204626_20230314T210754_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_NOPM_2_20230314T210925_20230314T211735_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_NOPM_2_20230314T212010_20230314T215505_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_NOPM_2_20230314T220811_20230314T220915_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_NOPM_2_20230314T223413_20230314T223612_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_NOPM_2_20230314T223844_20230314T224721_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_NOPM_2_20230314T224905_20230314T225424_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_NOPM_2_20230314T225941_20230314T232235_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_NOPM_2_20230314T232521_20230314T233438_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_NOPM_2_20230314T234649_20230314T235054_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_NOPN_2_20230314T033651_20230314T033948_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_NOPN_2_20230314T075528_20230314T075623_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_NOPN_2_20230314T161803_20230314T161947_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_NOPN_2_20230314T193456_20230314T193502_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_NOPR_2_20230314T011222_20230314T011520_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_NOPR_2_20230314T053809_20230314T053816_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_NOPR_2_20230314T101314_20230314T101348_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_NOPR_2_20230314T103554_20230314T103654_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_NOPR_2_20230314T202925_20230314T202940_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_NOPR_2_20230314T235701_20230314T235810_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |

L2 Quality Flags (20 Hz 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_NOPN_2_20230314T011908_20230314T012152_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_NOPN_2_20230314T012355_20230314T012520_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_NOPN_2_20230314T021447_20230314T021916_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_NOPN_2_20230314T035349_20230314T035459_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_NOPN_2_20230314T035615_20230314T035652_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_NOPN_2_20230314T051402_20230314T051758_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_NOPN_2_20230314T053309_20230314T053809_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_NOPN_2_20230314T053817_20230314T053856_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_NOPN_2_20230314T065359_20230314T065522_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_NOPN_2_20230314T070411_20230314T070424_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_NOPN_2_20230314T070758_20230314T070832_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_NOPN_2_20230314T071314_20230314T071732_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_NOPN_2_20230314T071814_20230314T071936_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_NOPN_2_20230314T072235_20230314T072526_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_NOPN_2_20230314T075528_20230314T075623_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 |

| | OCOG Altimeter Range Quality PLRM, | The OCOG Range and Backscatter Quality Flags have been set for one or | |
|---|---|---|--|
| CS_OFFL_SIR_NOPN_2_20230314T075820_20230314T075956_C001 | OCOG Backscatter Quality | more records | |
| CS_OFFL_SIR_NOPN_2_20230314T093532_20230314T093907_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_NOPN_2_20230314T100202_20230314T100313_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_NOPN_2_20230314T103415_20230314T103553_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_NOPN_2_20230314T103655_20230314T103826_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_NOPN_2_20230314T111452_20230314T111811_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_NOPN_2_20230314T112324_20230314T112449_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_NOPN_2_20230314T114508_20230314T114825_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_NOPN_2_20230314T120537_20230314T120651_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_NOPN_2_20230314T143012_20230314T143153_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_NOPN_2_20230314T143932_20230314T144122_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_NOPN_2_20230314T152249_20230314T152520_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_NOPN_2_20230314T153843_20230314T154222_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_NOPN_2_20230314T160933_20230314T161118_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_NOPN_2_20230314T163135_20230314T163502_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_NOPN_2_20230314T163635_20230314T164217_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_NOPN_2_20230314T165936_20230314T170402_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_NOPN_2_20230314T172031_20230314T172333_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_NOPN_2_20230314T174836_20230314T175121_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_NOPN_2_20230314T175744_20230314T180051_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_NOPN_2_20230314T183838_20230314T184226_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_NOPN_2_20230314T185817_20230314T190216_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_NOPN_2_20230314T215506_20230314T215640_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_NOPN_2_20230314T221050_20230314T221212_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_NOPN_2_20230314T221632_20230314T221648_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_NOPN_2_20230314T221851_20230314T221940_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 |

| GS_OFFL_SIR_NOPR_2_20230314T011222_20230314T011520_C001 Cose Altimeter Range_SSH4_SVH ind Backscatter Quality Flags have affor to an one secods The Ocean Altimeter Range_SSH4_SVH and Backscatter Quality Flags CS_OFFL_SIR_NOPR_2_20230314T02007_20230314T020467_C001 Cosen Altimeter Range_SSH4_SVH ind Backscatter Quality Flags The Ocean Altimeter Range SSH4_SVH ind Backscatter Quality Flags The Ocean Altimeter Range SSH4_SVH ind Backscatter Quality Flags The Ocean Altimeter Range SSH4_SVH ind the OCOG Altimeter Range SSH4_SVH ind the OCOG Altimeter Range SSH4_SVH ind the OCOG Altimeter Range SSH4_SVH and Backscatter Quality Flags have affor to an one records CS_OFFL_SIR_NOPR_2_20230314T02047_20230314T020467_C001 Ocean Altimeter Range_SSH4_SVH ind the OCOG Altimeter Range SSH4_SVH ind the OCOG Altimeter Range SSH4_SVH and Backscatter Quality Flags have affor on an more records CS_OFFL_SIR_NOPR_2_20230314T024713_20730314T034713_20730314T035032_C001 Ocean Altimeter Range_SSH4_SVH ind the OCOG Altimeter Range. SSH4_SVH and Backscatter Quality Flags have affor on an one records The OCean Altimeter Range SSH4_SVH ind the OCOG Altimeter Range. SSH4_SVH and Backscatter Quality Flags have affor on an one records CS_OFFL_SIR_NOPR_2_20230314T034713_20730314T034713_20730314T034713_20730314T034713_20730314T035032_C001 Ocean Altimeter Range_SSH4_SVH ind the OCOG Altimeter Range SSH4_SVH ind the OCOG Altimeter Range. SSH4_SVH ind the OCOG Altimeter Range SSH4_SVH ind the OCOG |
|--|
| GS_OFFL_SIR_NOPR_2_20230314T02007_20230314T020457_C001 mind Backscatter Quality FLMM_OCCG more bordscatter Quality FLMM_OCCG GS_OFFL_SIR_NOPR_2_20230314T020728_20230314T020457_C001 more bordscatter Quality FLMM_OCCG more bordscatter Quality FLMM_OCCG GS_OFFL_SIR_NOPR_2_20230314T020728_20230314T020456_C001 More and Minister Range and Backscatter Quality FLMM_OCCG GS_OFFL_SIR_NOPR_2_20230314T02528_20230314T02528_202001 More and Minister Range and Backscatter Quality FLMM_OCCG GS_OFFL_SIR_NOPR_2_20230314T02528_20230314T025282_0001 More and Minister Range, SSHA, SWH and Backscatter Quality FLMM_OCCG GS_OFFL_SIR_NOPR_2_20230314T02528_20230314T025282_0001 Minister Range, SSHA, SWH and Backscatter Quality FLMM_OCCG GS_OFFL_SIR_NOPR_2_20230314T035032_001 Minister Range, SSHA, SWH and Backscatter Quality FLMM_OCCG Minister Range, SSHA, SWH more mare stockd Minister Range, SSHA, SWH |
| CS OFFL SIR NOPR 2 20230314T020728 20230314T020728 20230314T02846 C001 All meter Range and Backscatter Quality PLRN, OCCO All meter Range, SSHA, SWH and Backscatter Quality PLRN, OCCO All meter Range ALB Backscatter Quality PLRN, OCCO All meter Range, S |
| CS OFL SIR NOPR 2 20230314T025289 20230314T035032 20230314T051248 C001 CCGG Alimeter Range, SHA, SWH and Backscatter Quality PLRM, CCGG The Ocean Alimeter Range, SHA, SWH and Backscatter Quality PLRM, CCGG The Ocean Alimeter Range, SHA, SWH and Backscatter Quality PLRM, CCGG The Ocean Alimeter Range, SHA, SWH and Backscatter Quality PLRM, CCGG </td |
| CS_OFFL_SIR_NOPR_2_20230314T034713_20230314T035032_C001 and Backscatter Quality PLRM, OCCG and mackscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG and Backscatter Quality PLRM, OCCG CS_OFFL_SIR_NOPR_2_20230314T035032_20230314T035349_C001 Cosan Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG CS_OFFL_SIR_NOPR_2_20230314T035804_20230314T040219_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG CS_OFFL_SIR_NOPR_2_20230314T054804_20230314T051248_C001 OCCGG Backscatter Quality PLRM, OCCG The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230314T051248_C001 OCCGG Backscatter Quality PLRM, OCCG The OCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230314T052647_20230314T053308_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230314T053809_20230314T053308_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230314T053809_20230314T053816_C001 Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230314T053806_20230314T054108_C001 Altimeter Range, SSHA, SWH and Backscatter Q |
| CS_OFFL_SIR_NOPR_2_20230314T035032_20230314T035349_C001 and Backscatter Quality PLRM, OCCG Attimeter Range and Backscatter Quality PLRM The Ocean Attimeter Range, SSHA, SWH and Backscatter Quality PLRM CS_OFFL_SIR_NOPR_2_20230314T035804_20230314T040219_C001 Ocean Attimeter Range, SSHA, SWH and Backscatter Quality FLRM, OCCG Attimeter Range and Backscatter Quality FLRM, OCCG The Ocean Attimeter Range, SSHA, SWH and Backscatter Quality FLRM, OCCG Attimeter Range and Backscatter Quality FLRM, OCCG CS_OFFL_SIR_NOPR_2_20230314T050433_20230314T051248_C001 OCCG Attimeter Range Quality PLRM, OCCG Attimeter Range, SSHA, SWH and Backscatter Quality FLRM, OCCG Attimeter Range, SSHA, SWH and Backscatter Quality FLRM, OCCG Attimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Attimeter Range, Range, SSHA, SWH and Backscatter Quality FLRM OCCG Attimeter Range, SSHA, SWH and Backscatter Quality FLRM Attimeter Range and Backscatter Quality FLRM, OCCG Attimeter Range and Backscatter Quality FLRM, OCCG Attimeter Range, SSHA, SWH and Backscatter Quality FLRM, OCCG Attimeter Range and Backscatter Quality FLRM, OCCG Attimeter Range, SSHA, SWH and Backscatter Quality FLRM, OCCG Attimeter Range and Backscatter Quality FLRM, OCCG Attimeter Range and Backscatter Quality FLRM, OCCG Attimeter Range and Backscatter Quality FLRM, OCCG Attimeter Ra |
| CS_OFFL_SIR_NOPR_2_20230314T035804_20230314T040219_C001 and Backscatter Quality PLRM, OCGG Altimeter Range and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T050433_20230314T051248_C001 OCGG Altimeter Range Quality PLRM, OCGG Backscatter Quality PLRM, OCGG Backscatter Quality PLRM, OCGG Backscatter Quality PLRM, OCGG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230314T050433_20230314T051248_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCGG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230314T053808_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCGG Altimeter Range and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T053809_20230314T053816_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T053856_20230314T054108_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCGG Altimeter Range and |
| CS_OFFL_SIR_NOPR_2_202303141051248_C001 OCOG Backscatter Quality more records CS_OFFL_SIR_NOPR_2_20230314T052647_20230314T053308_C001 Atimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Atimeter Range and Backscatter Quality FLRM, OCOG Atimeter Range and Backscatter Quality FL |
| CS_OFFL_SIR_NOPR_2_20230314T052647_20230314T053308_C001 and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality and Mackscatter Quality PLRM CS_OFFL_SIR_NOPR_2_20230314T053809_20230314T053816_C001 Cean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T053866_20230314T053816_C001 Cean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T053856_20230314T054108_C001 Cean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T061518_20230314T061556_C001 Cean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T061518_20230314T061556_C001 Cean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T070425_20230314T070645_C001 Attimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T070425_20230314T070645_C001 Attimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T070425_20230314T070645_C001 Attimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records |
| CS_OFFL_SIR_NOPR_2_20230314T053809_20230314T053816_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM ind the OCOG Altimeter Range and Backscatter Quality and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality FLRM CS_OFFL_SIR_NOPR_2_20230314T053856_20230314T054108_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM The 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 have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T061518_20230314T061556_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T061518_20230314T061556_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T070425_20230314T070645_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records |
| CS_OFFL_SIR_NOPR_2_20230314T053856_20230314T054108_C001and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRMThe Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more recordsCS_OFFL_SIR_NOPR_2_20230314T061518_20230314T061556_C001Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more recordsCS_OFFL_SIR_NOPR_2_20230314T070425_20230314T070645_C001Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records |
| CS_OFFL_SIR_NOPR_2_20230314T061518_20230314T061556_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ine Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have set for one or more records CS_OFFL_SIR_NOPR_2_20230314T070425_20230314T070645_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records |
| CS_OFFL_SIR_NOPR_2_20230314T070425_20230314T070645_C001 and Backscatter Quality FLRM, OCOG Altimeter Range and Backscatter Quality FLRM, OCOG Altimeter Range and Backscatter Quality Flags have |
| PLRM |
| CS_OFFL_SIR_NOPR_2_20230314T070833_20230314T071313_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have Altimeter Range and Backscatter Quality PLRM. |
| CS_OFFL_SIR_NOPR_2_20230314T084228_20230314T084449_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality COG Backscatter QUAL QUAL QUAL QUAL QUAL QUAL QUAL QUAL |
| CS_OFFL_SIR_NOPR_2_20230314T084513_20230314T085516_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have Set for one or more records |
| CS_OFFL_SIR_NOPR_2_20230314T094558_20230314T094604_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have Altimeter Range and Backscatter Quality PLRM. |
| CS_OFFL_SIR_NOPR_2_20230314T095228_20230314T095605_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality COG Backscatter QUA |
| CS_OFFL_SIR_NOPR_2_20230314T101911_20230314T102236_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality COG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for a more records |
| CS_OFFL_SIR_NOPR_2_20230314T102518_20230314T102600_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality F and the OCOG Altime |
| CS_OFFL_SIR_NOPR_2_20230314T102627_20230314T103415_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Dcean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records |
| CS_OFFL_SIR_NOPR_2_20230314T115319_20230314T115353_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality COCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for one records of the term of te |
| CS_OFFL_SIR_NOPR_2_20230314T120652_20230314T121410_C001 Ocean Altimeter Range, SSHA, SWH Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have |
| PLRM set for one or more records |
| i set tor one or more records |

| CS_OFFL_SIR_NOPR_2_20230314T134605_20230314T135318_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_NOPR_2_20230314T143712_20230314T143718_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_NOPR_2_20230314T144122_20230314T144733_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_NOPR_2_20230314T151857_20230314T152248_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_NOPR_2_20230314T152520_20230314T153207_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_NOPR_2_20230314T165637_20230314T165851_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_NOPR_2_20230314T170403_20230314T170954_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_NOPR_2_20230314T170958_20230314T171124_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_NOPR_2_20230314T172456_20230314T172608_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_NOPR_2_20230314T172903_20230314T173114_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records |
| | Ocean Altimeter Range, SSHA, SWH | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags |

| CS_OFFL_SIR_NOPR_2_20230314T180051_20230314T180134_C001 | and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM | and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
|---|---|---|
| CS_OFFL_SIR_NOPR_2_20230314T184226_20230314T185136_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_NOPR_2_20230314T201920_20230314T202658_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_NOPR_2_20230314T202925_20230314T202940_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_NOPR_2_20230314T235054_20230314T235430_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records |

L2 Quality Flags (1 Hz & 1 Hz PLRM)

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

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

Number of products with errors:

191

5.7 L2 Ocean Retracking Quality Check

| L2 Retracking Flags (20 Hz) | | | |
|---|--|--|--|
| 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 falling at ocean/ land boundaries, but this is expected. | | | |
| Number of products with errors: | 58 | | |
| | | | |
| L2 Retracking Flags (20 Hz 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 NOPR and NOPN products over sea ice, but this is to be expected. | | |
| Number of products with errors: | 134 | | |

Number of products with errors:

7. NOP 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_NOPM1B | 189 | 189 | 3 | 186 | 0 |
| SIR_NOPR1B | 116 | 116 | 0 | 116 | 0 |
| SIR_NOPN1B | 102 | 102 | 1 | 101 | 0 |
| SIR_NOPM_2 | 189 | 189 | 132 | 57 | 0 |
| SIR_NOPR_2 | 116 | 116 | 45 | 70 | 1 |
| SIR_NOPN_2 | 102 | 102 | 39 | 63 | 0 |

7.1 QCC Errors

Number of QCC reports with errors:



Total number of occurrences of each error

| Product Type | RLOBOPNCDF | RL | RLOBOPNCDF | RL | - | - | - | - | - | - | - |
|--------------|------------|----|------------|----|---|---|---|---|---|---|---|
| SIR_NOPR_2 | 1 | 1 | 1 | 1 | | | | | | | |

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

7.2 QCC Warnings

Number of QCC reports with warnings

| | | | Total nu | umber of occurrences | of each warning | | |
|--------------|----------|----------|--------------|----------------------|-----------------|-----------------|--------------------|
| Product Type | BCSHNCDF | IOHHMOOR | MVIOEPFDNCDF | MVIOEPNCDF | MVIONCDF | RBSZOPOEPFDNCDF | RBSZOPOEPFDPLRMNCD |
| SIR_NOPM1B | 186 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPM_2 | 0 | 0 | 39 | 38 | 0 | 40 | 0 |
| SIR_NOPN1B | 100 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPN_2 | 0 | 0 | 11 | 30 | 4 | 28 | 32 |
| SIR_NOPR1B | 110 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPR_2 | 0 | 1 | 22 | 39 | 1 | 20 | 15 |

| Product Type | RBSZOPOEPNCDF | RNELPOTONCDF | RPEPOPFDLRMNCDF | RPEPOPFDPLRMSARNC | | RPEPOPFDSARNCDF | RPEPOPFDSINNCDF |
|--------------|---------------|--------------|-----------------|-------------------|----|-----------------|-----------------|
| SIR_NOPM1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPM_2 | 30 | 0 | 33 | 0 | 0 | 0 | 0 |
| SIR_NOPN1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPN_2 | 20 | 0 | 0 | 0 | 25 | 0 | 32 |
| SIR_NOPR1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPR_2 | 8 | 1 | 0 | 38 | 0 | 42 | 0 |

| Product Type | RPEPOPLRMNCDF | RPEPOPSARNCDF | RPEPOPSINNCDF | RSSBCONCDF | RSSHAOFDNCDF | RSSHAOFDPLRMNCDF | RSSHAONCDF |
|--------------|---------------|---------------|---------------|------------|--------------|------------------|------------|
| SIR_NOPM1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPM_2 | 22 | 0 | 0 | 4 | 26 | 0 | 1 |
| SIR_NOPN1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPN_2 | 0 | 0 | 23 | 17 | 46 | 48 | 25 |
| SIR_NOPR1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPR_2 | 0 | 36 | 0 | 2 | 57 | 27 | 15 |

| Product Type | RSWHOEPFDNCDF | RSWHOEPFDPLRMNCDF | RSWHOEPNCDF | SPHRTASCNSNCDF | SOOHHIFHD | SCSTODHRNCDF | SCSTODNCDF |
|--------------|---------------|-------------------|-------------|----------------|-----------|--------------|------------|
| SIR_NOPM1B | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SIR_NOPM_2 | 33 | 0 | 3 | 0 | 0 | 0 | 0 |
| SIR_NOPN1B | 0 | 0 | 0 | 1 | 0 | 50 | 1 |
| SIR_NOPN_2 | 31 | 29 | 14 | 0 | 1 | 0 | 0 |
| SIR_NOPR1B | 0 | 0 | 0 | 0 | 0 | 116 | 9 |
| SIR_NOPR_2 | 27 | 38 | 2 | 0 | 4 | 0 | 0 |

| Fest Description Key:Abbreviation | Test name | Details |
|-----------------------------------|---|--|
| BCSHNCDF | BurstCounterStep20HzNetCDF | The burst counter should be one higher with regard to the previous burst counter |
| OHHMOOR | 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 |
| RPEPOPFDPLRMSINN CDF | RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF | The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPFDSARNCDF | 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 F | 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 |
| SPHRTASCNSNCDF | SPH_Rel_Time_ASC_Node_Start_v2_NetCDF | Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1) |
| 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: | 0 |