

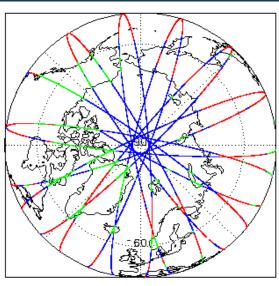
# 1. Overview

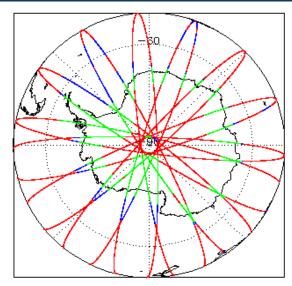
| Report Production: | 02-Apr-2020                      |  |
|--------------------|----------------------------------|--|
| Processor Used:    | CryoSat Ocean Processor          |  |
| Data Used:         | Geophysical Ocean Products (GOP) |  |

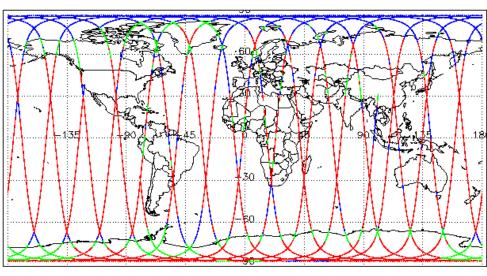
| Check                                      | L1 & L2                      | P2P             |
|--|------------------------------|-----------------|
| Server check: science-pds.cryosat.esa.int  | Nominal                      | Nominal         |
| Server check: calval-pds.cryosat.esa.int   | Nominal                      | 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 and 5.5 | See Section 6.5 |
| 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 |

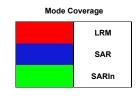
| Mission / Inst | Mission / Instrument News |  |  |
|----------------|---------------------------|--|--|
| 03-Mar-2020    | None                      |  |  |
| 04-Mar-2020    | None                      |  |  |
| 05-Mar-2020    | Nothing planned           |  |  |

# 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:

## 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:

0

0

#### 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:

| Product   | Test Failed         | Description  |
|---|---------------------|--|
| CS_OFFL_SIR_GOPM1B_20200304T131557_20200304T134138_C001 | Power scaling error | There is an error in the scaling of the L1B waveform for one or more records |

### 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:

| Product   | Test Failed  | Description  |
|---|--------------|--|
| CS_OFFL_SIR_GOPM1B_20200304T161000_20200304T161043_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20200304T094048_20200304T094209_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20200304T125925_20200304T130416_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20200304T174641_20200304T174808_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20200304T192951_20200304T193305_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20200304T211106_20200304T211203_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPN1B_20200304T224903_20200304T225117_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20200304T021720_20200304T021825_C001 | Loss of Echo | The tracking echo is missing for one or more records |
| CS_OFFL_SIR_GOPR1B_20200304T061204_20200304T062154_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: 0

### 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:

### 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: 6

| Product   | Test Failed                       | Description   |
|---|-----------------------------------|---|
| CS OFFI SIR GOPM 2 20200304T130416 20200304T130459 C001 | Tido (GOT) Total Geocentric Ocean | 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_20200304T003508_20200304T003826_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_20200304T011623_20200304T012012_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_20200304T025051_20200304T025704_C001 | Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide  | There is an error with 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_GOPN_2_20200304T035510_20200304T035628_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_20200304T045502_20200304T045705_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_20200304T053201_20200304T053510_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T062813_20200304T062934_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_20200304T070454_20200304T070616_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_20200304T071100_20200304T071427_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T084537_20200304T084812_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T094048_20200304T094209_C001 | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>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_20200304T094525_20200304T094741_C001 | Total Geocentric Ocean Tide (GOT),<br>Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide  | There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records  |
| CS_OFFL_SIR_GOPN_2_20200304T102101_20200304T102701_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T103415_20200304T103553_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_20200304T112012_20200304T112225_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T112403_20200304T112620_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_20200304T120303_20200304T120450_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_20200304T121322_20200304T121516_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_20200304T125925_20200304T130416_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T152207_20200304T152327_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_20200304T152344_20200304T152603_C001 | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>Tide (GOT), Total Geocentric Ocean<br>Tide (FES), Non-Equilibrium Long Period<br>Ocean Tide | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Tota Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records |
| CS_OFFL_SIR_GOPN_2_20200304T170158_20200304T170510_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T171029_20200304T171146_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_20200304T184039_20200304T184358_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T184926_20200304T185051_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_20200304T192951_20200304T193305_C001 | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>Tide (GOT), Total Geocentric Ocean<br>Tide (FES), Non-Equilibrium Long Period<br>Ocean Tide | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Tota Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records |
| CS_OFFL_SIR_GOPN_2_20200304T202728_20200304T202908_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T211106_20200304T211203_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T215621_20200304T215803_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_20200304T220513_20200304T220726_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T224903_20200304T225117_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T233533_20200304T233719_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_20200304T234404_20200304T234856_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T012012_20200304T012849_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T025704_20200304T030604_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T043634_20200304T044255_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T044255_20200304T044558_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T044744_20200304T044938_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_20200304T045422_20200304T045502_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_20200304T061204_20200304T062154_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T062154_20200304T062328_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T075426_20200304T080051_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T080051_20200304T080221_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T093354_20200304T093936_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T093936_20200304T094048_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T111600_20200304T111707_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T111707_20200304T112012_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T112941_20200304T113040_C001 | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>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_GOPR_2_20200304T125251_20200304T125925_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T143433_20200304T143949_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T160231_20200304T160436_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_20200304T160759_20200304T161000_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_20200304T161336_20200304T162135_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T175209_20200304T180102_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T193306_20200304T194043_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T211203_20200304T211746_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T211801_20200304T211922_C001 | Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide               | There is an error with 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_GOPR_2_20200304T225118_20200304T225500_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_20200304T225500_20200304T225804_C001 | Mean Sea Surface (1), Mean Dynamic<br>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:

| Product   | Test Failed         | Description   |
|---|---------------------|---|
| CS_OFFL_SIR_GOPM_2_20200304T131557_20200304T134138_C001 | Power scaling error | There is an error in the scaling of the L2 waveform for one or more records |

## 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.

| Product   | Test Failed  | Description  |
|---|--|--|
| CS_OFFL_SIR_GOPM_2_20200304T000953_20200304T002617_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_20200304T002840_20200304T003320_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T003342_20200304T003507_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T003859_20200304T010309_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T010312_20200304T011415_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T011538_20200304T011622_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T013924_20200304T020552_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T020809_20200304T021220_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T021240_20200304T021605_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T021825_20200304T024604_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T024800_20200304T025051_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_20200304T031758_20200304T034526_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_20200304T034654_20200304T035134_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T035138_20200304T035509_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T035741_20200304T043259_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T044558_20200304T044743_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T051720_20200304T051947_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T052639_20200304T053200_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T053709_20200304T060009_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T060255_20200304T061203_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T062437_20200304T062813_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T063534_20200304T064053_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T064414_20200304T064903_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T065050_20200304T070353_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T071618_20200304T072314_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T072324_20200304T074932_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T080956_20200304T081413_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_20200304T081544_20200304T083838_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T085644_20200304T090308_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_20200304T091908_20200304T092627_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T093230_20200304T093238_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T094748_20200304T095329_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_20200304T095456_20200304T100311_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_20200304T100525_20200304T102026_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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_20200304T102701_20200304T102918_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T102955_20200304T103415_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T103553_20200304T104259_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_20200304T104421_20200304T105055_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_20200304T105235_20200304T105417_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_20200304T105420_20200304T110730_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_20200304T110753_20200304T110823_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T111403_20200304T111426_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T113040_20200304T113639_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_20200304T114632_20200304T120223_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_20200304T120450_20200304T121321_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T121525_20200304T123824_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_20200304T131557_20200304T134138_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_20200304T134358_20200304T134551_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T134645_20200304T135126_C001 | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T135418_20200304T135742_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_20200304T135923_20200304T142047_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_20200304T145312_20200304T152044_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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. |
|   |  |  |

| Section For Continue Continu   | CS_OFFL_SIR_GOPM_2_20200304T152604_20200304T153158_C001 | OCOG Altimeter Range Quality, OCOG | The OCOG Altimeter Range and Backscatter Quality Flags have been set |
|--|---|------------------------------------|--|
| Comparing the    |   | Backscatter Quality                | for one or more records.   |
| Col.      | CS_OFFL_SIR_GOPM_2_20200304T153326_20200304T155500_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| Seg. GPFL_SR_GPFM12_2000004T19011_2001004T19012_00101  CS_GPFL_SR_GPFM12_2000004T19101_2001004T191012_00101  CS_GPFL_SR_GPFM12_2000004T19101_2001004T191012_00101  CS_GPFL_SR_GPFM12_2000004T19101_2001004T191012_00101  CS_GPFL_SR_GPFM12_2000004T19101_2001004T191012_00101  CS_GPFL_SR_GPFM12_2000004T191012_001004T191012_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004T191012_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004T191012_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004T191012_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004T191012_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004T1910101_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004T1910101_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_200100404T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_200100404T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_200100404T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_200100404T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_200100404T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_200100404T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_200100404T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_200100404T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_200100404T191010_00101  CS_GPFL_SR_GPFM12_2000004T191004_2001004040404040404040404040404040404040                                  | CS_OFFL_SIR_GOPM_2_20200304T161000_20200304T161043_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| Bossetter Quality  CS CRFL SRF QOPM 2 20000041171091 20000041171090 C001  CR CRFL SRF QOPM 2 2000004117107 20000041171094 C001  CR CRFL SRF QOPM 2 2000004177107 20000041171093 C001  CR CRFL SRF QOPM 2 2000004177107 2000004177203 C001  CR CRFL SRF QOPM 2 200000417709 2000004177003 C001  CR CRFL SRF QOPM 2 200000417700 200000417700 C001  CR CRFL SRF QOPM 2 20000041700 C001  CR CRFL SRF QOPM 2 2000004170 C002  CR CRFL SRF QOPM 2 2000004170 C002  CR CRFL SR | CS_OFFL_SIR_GOPM_2_20200304T162440_20200304T165943_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| Section   Column      | CS_OFFL_SIR_GOPM_2_20200304T170511_20200304T171029_C001 |                                    |  |
| and Seakerseiter Quality, COOS Affinisher Range of Seakerseiter Quality (Page 1 have been affinisher Range and Seakerseiter Quality) (Page 2 (1994)). Bit (Page 2) (1994) (Page 2) (Page  | CS_OFFL_SIR_GOPM_2_20200304T171201_20200304T171508_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| Sackscatter Quality (1997)  CS_OFFL_SIR_OOPM_2_200000041176012_70000041176040_2001  CS_OFFL_SIR_OOPM_2_200000041176041_70000041181315_C001  CS_OFFL_SIR_OOPM_2_20000004118041_70000041181315_C001  CS_OFFL_SIR_OOPM_2_20000004118041_70000041181315_C001  CS_OFFL_SIR_OOPM_2_20000004118041_70000041181315_C001  CS_OFFL_SIR_OOPM_2_20000004118041_70000041181315_C001  CS_OFFL_SIR_OOPM_2_20000004118040_7000004118050_2001  CS_OFFL_SIR_OOPM_2_20000004118050_7000004118050_C001  CS_OFFL_SIR_OOPM_2_20000004118050_7000004118050_C001  CS_OFFL_SIR_OOPM_2_20000004118050_7000004118050_C001  CS_OFFL_SIR_OOPM_2_20000004118050_7000004118050_C001  CS_OFFL_SIR_OOPM_2_20000004118050_7000004118050_C001  CS_OFFL_SIR_OOPM_2_20000004118050_7000004118050_C001  CS_OFFL_SIR_OOPM_2_20000004118050_7000004118050_C001  CS_OFFL_SIR_OOPM_2_20000004118050_7000004118050_C001  CS_OFFL_SIR_OOPM_2_20000004118050_7000004118050_C000004118050_C000004118050_7000004118050_700004118050_700004118050_700004118050_7000004118050_700004118050_700004118050_70000418050_70000418050_70000418050_70000418050_70000418050_70000418050_700000418050_70000418050_70000418050_70000418050_70000418050_70000418050_70000418050_70000418050_70000418050_700000418050_70000418050_70000418050_70000418050_70000418050_70000418050_7000041805 | CS_OFFL_SIR_GOPM_2_20200304T171707_20200304T171834_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| SC_OFFL_SIR_GOPM_2_20000304119041_20000341191390_C001  SC_OFFL_SIR_GOPM_2_20000304119041_20000341191390_C001  SC_OFFL_SIR_GOPM_2_20000304119041_2000034119390_C001  SC_OFFL_SIR_GOPM_2_2000304119041_2000034119390_C001  SC_OFFL_SIR_GOPM_2_2000304119040_2000034119400_C001  SC_OFFL_SIR_GOPM_2_2000304119040_2000034119400_C001  SC_OFFL_SIR_GOPM_2_2000304119040_2000034119400_C001  SC_OFFL_SIR_GOPM_2_2000304119040_2000034119041_C001  SC_OFFL_SIR_GOPM_2_2000304119040_2000034119040_C001  SC_OFFL_SIR_GOPM_2_20003041119040_C001  SC_OFFL_SIR_GOPM_2_20003041119040_C001  SC_OFFL_SIR_GOPM_2_20003041119040_C001  SC_OFFL_SIR_GOPM_2_20003041119040_C001  SC_OFFL_SIR_GOPM_2_20003041119040_C001  SC_OFFL_SIR_GOPM_2_20003041119040_C001  SC_OFFL_SIR_GOPM_2_20003041119040_C001  SC_OFFL_SIR_ | CS_OFFL_SIR_GOPM_2_20200304T172612_20200304T172933_C001 |                                    |  |
| and the COGA Allimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200304T184586_20200304T184592_C001  CS_OFFL_SIR_GOPM_2_20200304T184592_20200304T184592_C001  CS_OFFL_SIR_GOPM_2_20200304T184592_20200304T184592_C001  CS_OFFL_SIR_GOPM_2_20200304T18650_20200304T196592_C001  CS_OFFL_SIR_GOPM_2_20200304T18650_20200304T196592_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T196592_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T196592_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T196592_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T19654_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T19654_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T19654_C001  CS_OFFL_SIR_GOPM_2_20200304T19654_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T19654_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T19654_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T19654_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T201702_C001  CS_OFFL_SIR_GOPM_2_20200304T19650_20200304T201702_C001  CS_OFFL_SIR_GOPM_2_20200304T20502_20200304T201702_C001  CS_OFFL_SIR_GOPM_2_20200304T20502_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T20502_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T20502_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T20502_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T207072_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T207072_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T207072_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T207072_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T20707_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T207072_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T207077_20200304T207070_C001  CS_OFFL_SIR_GOPM_2_20200304T207077_20200304T207070_C001  | CS_OFFL_SIR_GOPM_2_20200304T174809_20200304T175045_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set of the COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200304T20447_2020304T20442_2001  CS_OFFL_SIR_GOPM_2_20200304T20304_2020304T20304_2020304_2020304_2020304_2020304_2020304_2020304_2020304_2020304_2020304_2020304_2020304_2020304_2020 | CS_OFFL_SIR_GOPM_2_20200304T180441_20200304T181315_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| Beckscatter Quality  CS_OFFL_SIR_GOPM_2_20200304T184520_20200304T184925_C001  CS_OFFL_SIR_GOPM_2_20200304T1845100_20200304T190431_C001  CS_OFFL_SIR_GOPM_2_20200304T190419_20200304T190431_C001  CS_OFFL_SIR_GOPM_2_20200304T190419_20200304T191230_C001  CS_OFFL_SIR_GOPM_2_20200304T190419_20200304T191230_C001  CS_OFFL_SIR_GOPM_2_20200304T190419_20200304T19130_C001  CS_OFFL_SIR_GOPM_2_20200304T190419_20200304T19130_C001  CS_OFFL_SIR_GOPM_2_20200304T190419_20200304T19130_C001  CS_OFFL_SIR_GOPM_2_20200304T190419_20200304T19130_C001  CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T19150_C001  CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T19150_C001  CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T19150_C001  CS_OFFL_SIR_GOPM_2_20200304T191439_20200304T202410_C001  CS_OFFL_SIR_GOPM_2_20200304T191439_20200304T202410_C001  CS_OFFL_SIR_GOPM_2_20200304T20302_20200304T202410_C001  CS_OFFL_SIR_GOPM_2_20200304T20302_20200304T202423_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_20200304T202423_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T202423_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T202423_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T202430_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T202430_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T202430_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T20541_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T20541_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T20541_C001  CS_OFFL_SIR_GOPM_2_20200304T203012_2020304T20541_C001  CCCG_Allimeter Range_CSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCCG_Allimeter Range_CSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCCG_Allimeter Range_CSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCCG_Allimeter Range_CSHA, SWH and Ba | CS_OFFL_SIR_GOPM_2_20200304T181601_20200304T183902_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200304T185100_20200304T190431_C001  CS_OFFL_SIR_GOPM_2_20200304T190619_20200304T190431_C001  CS_OFFL_SIR_GOPM_2_20200304T190619_20200304T191230_C001  CS_OFFL_SIR_GOPM_2_20200304T190619_20200304T191230_C001  CS_OFFL_SIR_GOPM_2_20200304T190619_20200304T191230_C001  CS_OFFL_SIR_GOPM_2_20200304T190619_20200304T191230_C001  CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T191854_C001  CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T191854_C001  CS_OFFL_SIR_GOPM_2_20200304T194339_20200304T207102_C001  CS_OFFL_SIR_GOPM_2_20200304T201902_20200304T20720_C001  CS_OFFL_SIR_GOPM_2_20200304T201902_20200304T202010  CS_OFFL_SIR_GOPM_2_20200304T20400_20200304T202420_C001  CS_OFFL_SIR_GOPM_2_20200304T20400_20200304T202420_C001  CS_OFFL_SIR_GOPM_2_20200304T20400_20200304T202420_C001  CS_OFFL_SIR_GOPM_2_20200304T20400_20200304T202420_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T2103018_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T2103018_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T2103018_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T2103018_2 | CS_OFFL_SIR_GOPM_2_20200304T184358_20200304T184512_C001 |                                    |  |
| and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been etc. OFFL_SIR_GOPM_2_20200304T190419_20200304T191230_CO01  CS_OFFL_SIR_GOPM_2_20200304T190414_20200304T191230_CO01  CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T191854_CO01  CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T191854_CO01  CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T191854_CO01  CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T191854_CO01  CS_OFFL_SIR_GOPM_2_20200304T191439_20200304T201702_CO01  CS_OFFL_SIR_GOPM_2_20200304T191439_20200304T201702_CO01  CS_OFFL_SIR_GOPM_2_20200304T201902_20200304T202410_CO01  CS_OFFL_SIR_GOPM_2_20200304T201902_20200304T202423_CO01  CS_OFFL_SIR_GOPM_2_20200304T202417_20200304T202423_CO01  CS_OFFL_SIR_GOPM_2_20200304T202417_20200304T202423_CO01  CS_OFFL_SIR_GOPM_2_20200304T202410_CO01  CS_OFFL_SIR_GOPM_2_20200304T203110_Z0200304T203213_CO01  CS_OFFL_SIR_GOPM_2_20200304T203110_Z0200304T210541_CO01  CS_OFFL_SIR_GOPM_2_20200304T203110_Z0200304T210541_CO01  CS_OFFL_SIR_GOPM_2_20200304T210777_20200304T210541_CO01  CS_OFFL_SIR_GOPM_2_20200304T210777_20200304T210580_CO01  CS_OFFL_SIR_GOPM_2_20200304T210777_20200304T210580_CO01  CS_OFFL_SIR_GOPM_2_20200304T210777_20200304T210580_CO01  CS_OFFL_SIR_GOPM_2_20200304T210777_20200304T210580_CO01  CS_OFFL_SIR_GOPM_2_20200304T210777_20200304T210580_CO01  CS_OFFL_SIR_GOPM_2_20200304T210777_20200304T210580_CO01  CS_OFFL_SIR_GOPM_2_20200304T210777_20200304T210580_CO01  CS_OFFL_SIR_GOPM_2_20200304T210777_20200304T210580_CO01  CS_OFFL_SIR_GOPM | CS_OFFL_SIR_GOPM_2_20200304T184520_20200304T184925_C001 |                                    |  |
| CS_OFFL_SIR_GOPM_2_20200304T190819_20200304T19130C001  and Backscatter Quality. CDG Altimeter Range and Backscatter Quality. CDG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T20541_C001  CS_OFFL_SIR_GOPM_2_20200304T203710_2020304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T2105737_20200304T210590_C001  CS_OFFL_SIR_GOPM_2_20200304T210541_2000104T215541_2000004T215561_C001  CS_OFFL_SIR_GOPM_2_20200304T210541_2000004T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T210541_2000004T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T210541_2000004T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T210541_2000004T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T210541_2000004T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T210541_2000004T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T210541_2000004T215621 | CS_OFFL_SIR_GOPM_2_20200304T185100_20200304T190431_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range Abackscatter Quality, CCOG Altimeter Range, SSHA, SWH and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags and the CCOG Altimeter Range and Backscatter Quality Flags and the CCOG Altimeter Range and Backscatter Quality Flags and the CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200304T201902_20200304T202410_C001  CS_OFFL_SIR_GOPM_2_20200304T202417_20200304T202423_C001  CS_OFFL_SIR_GOPM_2_20200304T202430_20200304T202423_C001  CS_OFFL_SIR_GOPM_2_20200304T202430_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T202430_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203010_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203010_20200304T203011_C0010  CS_OFFL_SIR_GOPM_2_20200304T203010_20200304T203010_C0010  CS_OFFL_SIR_GOPM_2_20200304T203010_20200304T203010_C0010  CS_OFFL_SIR_GOPM_2_20200304T203010_20200304T203010_C0010  CS_OFFL_SIR_GOPM_2_20200304T203010_20200304T203010_C0010  CS_OFFL_SIR_GOPM_2_20200304T203010_20200304T203010_C0010  CS_OFFL_SIR_GOPM_2_20200304T203010_20200304T203010_C0010  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T210500_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T210500_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215521_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215521_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215521_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215521_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215521_C0 | CS_OFFL_SIR_GOPM_2_20200304T190619_20200304T191230_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags  | CS_OFFL_SIR_GOPM_2_20200304T191414_20200304T191854_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200304T202417_20200304T202423_C001  CS_OFFL_SIR_GOPM_2_20200304T202430_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T202430_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T203510_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T210950_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CC_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CC_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CC_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CC_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CC_OFFL_SIR_GOPM_2_20200304T21 | CS_OFFL_SIR_GOPM_2_20200304T194339_20200304T201702_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200304T202430_20200304T202728_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T210950_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T210950_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T21 | CS_OFFL_SIR_GOPM_2_20200304T201902_20200304T202410_C001 |                                    |  |
| Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T210541_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T21050_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T210950_C001  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T210950_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CCCOR_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CCCCOR_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCCCOR_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC  | CS_OFFL_SIR_GOPM_2_20200304T202417_20200304T202423_C001 |                                    |  |
| and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  | CS_OFFL_SIR_GOPM_2_20200304T202430_20200304T202728_C001 |                                    |  |
| CS_OFFL_SIR_GOPM_2_20200304T2105310_20200304T210541_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T210950_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T2156 | CS_OFFL_SIR_GOPM_2_20200304T203018_20200304T203213_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001  Backscatter Quality  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality, OCOG Altimeter Range, 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_20200304T214034_20200304T215621_C001  CS_OFFL_SIR_GOPM_2_2 | CS_OFFL_SIR_GOPM_2_20200304T203510_20200304T210541_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
| and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.   | CS_OFFL_SIR_GOPM_2_20200304T210737_20200304T210950_C001 |                                    |  |
| CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set  | CS_OFFL_SIR_GOPM_2_20200304T212543_20200304T213958_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
|  | CS_OFFL_SIR_GOPM_2_20200304T214034_20200304T215621_C001 | and Backscatter Quality, OCOG      | and the OCOG Altimeter Range and Backscatter Quality Flags have been |
|  | CS_OFFL_SIR_GOPM_2_20200304T215803_20200304T220308_C001 |                                    |  |

| CS_OFFL_SIR_GOPM_2_20200304T220328_20200304T220339_C001  | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
|--|--|--|
| CS_OFFL_SIR_GOPM_2_20200304T221243_20200304T2222246_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_20200304T222906_20200304T224036_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_20200304T230319_20200304T231855_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_20200304T232035_20200304T233520_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_20200304T233719_20200304T234219_C001  | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T234300_20200304T234403_C001  | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPM_2_20200304T234943_20200305T001243_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_20200304T013545_20200304T013924_C001  | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T080221_20200304T080227_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_20200304T142047_20200304T142152_C001  | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T191345_20200304T191414_C001  | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T220513_20200304T220726_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_20200304T043426_20200304T043503_C001  | OCOG Altimeter Range Quality, OCOG<br>Backscatter Quality  | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T152044_20200304T152206_C001  | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality, OCOG<br>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:

83

| Product   | Test Failed   | Description  |
|---|---|--|
| CS_OFFL_SIR_GOPN_2_20200304T003508_20200304T003826_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T011415_20200304T011538_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T011623_20200304T012012_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T013545_20200304T013924_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T025051_20200304T025704_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T035510_20200304T035628_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T045502_20200304T045705_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T050540_20200304T050612_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T052512_20200304T052639_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T053201_20200304T053510_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, 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_20200304T064053_20200304T064414_C001 | PLRM 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_20200304T070454_20200304T070616_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T084537_20200304T084812_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T085005_20200304T085323_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T085425_20200304T085631_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T094525_20200304T094741_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T102101_20200304T102701_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T112403_20200304T112620_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T114249_20200304T114631_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T124005_20200304T124332_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T125925_20200304T130416_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T134237_20200304T134358_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T152207_20200304T152327_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T162310_20200304T162440_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T170158_20200304T170510_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T172933_20200304T173023_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T180102_20200304T180136_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T180153_20200304T180231_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T184039_20200304T184358_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T191345_20200304T191414_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T192724_20200304T192809_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T192951_20200304T193305_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T210605_20200304T210736_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPN_2_20200304T220513_20200304T220726_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T224457_20200304T224758_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T233533_20200304T233719_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
|---|---|--|
| CS_OFFL_SIR_GOPN_2_20200304T234404_20200304T234856_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T000236_20200304T000456_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T000458_20200304T000953_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T012012_20200304T012849_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T025704_20200304T030604_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T030634_20200304T030913_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T031415_20200304T031445_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T043634_20200304T044255_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T044744_20200304T044938_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T061204_20200304T062154_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T062154_20200304T062328_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T075016_20200304T075220_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T075426_20200304T080051_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T080051_20200304T080221_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T080227_20200304T080629_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T092825_20200304T092901_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T092906_20200304T092908_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T093936_20200304T094048_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T100312_20200304T100525_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T105056_20200304T105235_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T112225_20200304T112403_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T112620_20200304T112738_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T114030_20200304T114118_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T125149_20200304T125251_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_20200304T125251_20200304T125925_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T131152_20200304T131334_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
|---|---|--|
| CS_OFFL_SIR_GOPR_2_20200304T143236_20200304T143409_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T160759_20200304T161000_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T161200_20200304T161313_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_20200304T161336_20200304T162135_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T171835_20200304T172106_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_20200304T174514_20200304T174641_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T175209_20200304T180102_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_20200304T180231_20200304T180346_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_20200304T180350_20200304T180441_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_20200304T192809_20200304T192950_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_20200304T193306_20200304T194043_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T203213_20200304T203510_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T211203_20200304T211746_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_20200304T212420_20200304T212543_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T220726_20200304T221243_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_20200304T222653_20200304T222906_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T224036_20200304T224221_C001 | OCOG Altimeter Range Quality PLRM,<br>OCOG Backscatter Quality  | The OCOG Range and Backscatter Quality Flags have been set for one or more records.  |
| CS_OFFL_SIR_GOPR_2_20200304T224408_20200304T224457_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T224759_20200304T224903_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_20200304T225118_20200304T225500_C001 | Ocean Altimeter Range, SSHA, SWH<br>and Backscatter Quality PLRM, OCOG<br>Altimeter Range and Backscatter Quality<br>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_20200304T225500_20200304T225804_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. |

### L2 Quality Flags (1 Hz & 1Hz PLRM)

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

> 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:

200

## 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.

### 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:

0

#### 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:

Ω

#### 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:

Λ

#### 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:

29

| Product  | Test Failed   | Description  |
|--|---|--|
| CS_OFFL_SIR_GOP_220200304T003327_20200304T012306_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T012306_20200304T021241_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T021241_20200304T030220_C001  | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>Tide (FES), Non-Equilibrium Long Period<br>Ocean Tide                                       |  |
| CS_OFFL_SIR_GOP_220200304T030220_20200304T035154_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T035154_20200304T044133_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T044133_20200304T053108_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T053108_20200304T062047_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T062047_20200304T071021_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T071021_20200304T080001_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T080001_20200304T084935_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T084935_20200304T093914_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_2_20200304T093914_20200304T102848_C001 | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>Tide (GOT), Total Geocentric Ocean<br>Tide (FES), Non-Equilibrium Long Period<br>Ocean Tide | 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_220200304T102848_20200304T111828_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T111828_20200304T120802_C001  | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>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_220200304T120802_20200304T125741_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T125741_20200304T134716_C001  | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>Tide (GOT), Total Geocentric Ocean<br>Tide (FES), Non-Equilibrium Long Period<br>Ocean Tide | 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_220200304T134716_20200304T143655_C001  | Mean Sea Surface (1), Mean Dynamic<br>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_220200304T143655_20200304T152629_C001  | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>Tide (GOT), Total Geocentric Ocean<br>Tide (FES), Non-Equilibrium Long Period<br>Ocean Tide | 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_2_20200304T152629_20200304T161609_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_2_20200304T161609_20200304T170543_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_2_20200304T170543_20200304T175522_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_2_20200304T175522_20200304T184456_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_2_20200304T184456_20200304T193436_C001 | Mean Sea Surface (1), Mean Dynamic<br>Topography (1), Total Geocentric Ocean<br>Tide (GOT), Total Geocentric Ocean<br>Tide (FES), Non-Equilibrium Long Period<br>Ocean Tide | 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_2_20200304T193436_20200304T202410_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_2_20200304T202410_20200304T211349_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_2_20200304T211349_20200304T220323_C001 | Topography (1), Total Geocentric Ocean  | 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_2_20200304T220323_20200304T225303_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_2_20200304T225303_20200304T234237_C001 | Mean Sea Surface (1), Mean Dynamic<br>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_2_20200304T234237_20200305T003216_C002 | Mean Sea Surface (1), Mean Dynamic<br>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.

Number of products with errors: 3

## 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: 2

### 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: 3

## 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