

QA4EO Daily Report for IOP data:

<u>06/02/2022</u>

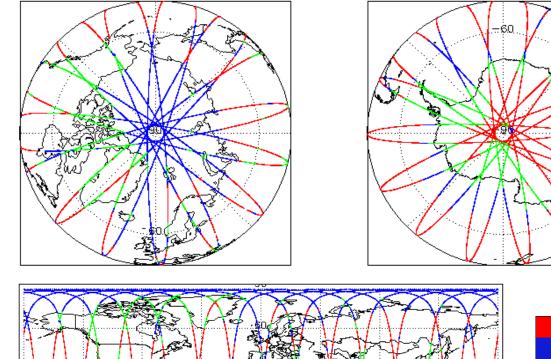
IDEAS-QAHEO

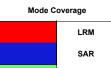
| Demant Dreductions | 08-Feb-2022 | Check | L1 & L2 | P2P |
|------------------------------|-----------------------------------|--|------------------------------|-------------------------|
| Report Production: | 06-Feb-2022 | Server check: science-pds.cryosat.esa.int | Nominal | Nominal |
| Breeze Hands Oran Oran Drawn | Cruce Set Ocean Brassager | Server check: calval-pds.cryosat.esa.int | Nominal | Nominal |
| Processor Used: | CryoSat Ocean Processor | Product Software Check | Nominal | Nominal |
| Data Used: | Intermediate Ocean Products (IOP) | Product Format Check | Nominal | Nominal |
| L1B | L1B, L2 & P2P Science Data | 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 |
| | | QCC Error/ Warning Check | See Section 7.1 and 7.2 | See Section 7.1 and 7.2 |

1. Overview

| Mission / Instrument News | | |
|---------------------------|-----------------|--|
| 05-Feb-2022 | None | |
| 06-Feb-2022 | None | |
| 07-Feb-2022 | Nothing planned | |







8

SARin

3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

0

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

4. IOP Level 1B Data Quality Check

4.1 L1B Product Format Check

35

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).

30

60.

Number of products with errors:

| 4.2 L1B Product Header Analysis | | | | |
|--|---|--|--|--|
| For all products, a series of pre-defined checks are performed on the MPH and | I SPH in order to identify any incon | sistencies and/or errors raised by the ground-segment processing chain. | | |
| > L1B Processing Quality HR: The l1b_proc_flag_hr flag is currently set all L OSARIn chains. A modification is required in the next release. Number of products with errors: 0 | 1B IOPR and IOPN products becau | use the I1b_processing_quality_hr field is not correctly configured in the OSAR and | | |
| | | | | |
| 4.3 L1B Auxilary Data File Usage Check | | | | |
| Each product is checked for missing Data Set Descriptors with respect to a pre | e-determined baseline and also to c | heck the validity of Auxiliary Data Files is correct. | | |
| Number of products with errors: 0 | | | | |
| 4.4 L1B Auxiliary Correction Error Check | | | | |
| CryoSat L1B data includes a correction error flag for each measurement recorr | d. The bit value of this flag indicates | s any problems when set | | |
| Number of products with errors: 0 | | | | |
| | | | | |
| 4.5 L1B Measurement Confidence Data Check | | | | |
| CryoSat L1B data includes a measurement confidence flag for each measuren | nent record. The bit value of this fla | g indicates any problems when set. | | |
| > Attitude Correction Missing: This flag is currently set in error for IOPR prod | ducts due to a configuration issue. | The attitude correction is actually not missing. This will be resolved in the next SW update | | |
| Number of products with errors: 1 | | | | |
| Product | Test Failed | Description | | |
| CS_OFFL_SIR_IOPM1B_20220206T005005_20220206T005115_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 | I. The bit value of this flag indicates | any problems when set. | | |
| Loss of Echo Flag: This flag is currently set for products over land, but this is | to be expected. | | | |
| Number of products with errors: 17 | | | | |
| Product | Test Failed | Description | | |
| CS_OFFL_SIR_IOPM1B_20220206T030435_20220206T033043_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPM1B_20220206T061528_20220206T064947_C001 CS_OFFL_SIR_IOPM1B_20220206T120139_20220206T120516_C001 | Loss of Echo Loss of Echo | The tracking echo is missing for one or more records The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPM1B_20220206T161715_20220206T164458_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPN1B_20220206T011027_20220206T011248_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPN1B_20220206T092206_20220206T092323_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPN1B_20220206T105659_20220206T110051_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPN1B_20220206T110105_20220206T110236_C001 CS_OFFL_SIR_IOPN1B_20220206T123723_20220206T124127_C001 | Loss of Echo Loss of Echo | The tracking echo is missing for one or more records The tracking echo is missing for one or more records | | |
| CS OFFL SIR IOPN1B 202202001123025 202202001124127_0001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPN1B_20220206T224030_20220206T224151_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPR1B_20220206T060204_20220206T060314_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPR1B_20220206T100021_20220206T100109_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPR1B_20220206T123354_20220206T123614_C001 CS_OFFL_SIR_IOPR1B_20220206T192354_20220206T192421_C001 | Loss of Echo Loss of Echo | The tracking echo is missing for one or more records The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPR1B_202202001192937_202202001192421_0001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| CS_OFFL_SIR_IOPR1B_20220206T220253_20220206T220331_C001 | Loss of Echo | The tracking echo is missing for one or more records | | |
| | | | | |
| 5. IU | P Level 2 Data Qual | ну спеск | | |
| 5.1 L2 Product Format Check | | | | |
| Each product, retrieved and unpacked from the science server, is checked to e | ensure it consists of both an XML he | eader file (.HDR) and a NetCDF product file (.nc). | | |
| Number of products with errors: 0 | | | | |
| | | | | |
| 5.2 L2 Product Header Analysis | | | | |
| For all products, a series of pre-defined checks are performed on the MPH and | SPH in order to identify any incom | sistencies 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 a | back the validity of Auviliany Date Files is correct | | |
| | | | | |
| | Number of products with errors: 0 | | | |
| 5.4 L2 Auxiliary Correction Error Check | | | | |
| For all products, the auxiliary corrections within the Geophysical Group are che | ecked for the default error value (32 | | | |
| Currently, there are some common auxiliary correction errors raised in th followed by a table highlighting any additional issues which may arise fro | | pected due to surface type. All common flags are summarised in the list below, | | |
| > ECMWF Meteo Corrections: Currently the following corrections are not con Correction and the U-Wind and V-Wind components of the ECMWF model win not reported in the table below. | | Dry Tropospheric Corection, Wet Tropospheric Correction, Inverse Barometric (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are | | |

> Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.

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

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

> Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

| Product | Test Failed | Description |
|---|--|--|
| CS_OFFL_SIR_IOPM_2_20220206T024124_20220206T024146_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T175502_20220206T175510_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T220331_20220206T221300_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T000850_20220206T000951_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T001053_20220206T001649_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T011027_20220206T011248_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T015308_20220206T015500_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T025008_20220206T025445_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T033248_20220206T033426_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T043052_20220206T043110_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T051239_20220206T051625_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T060020_20220206T060109_C001 | Total Geocentric Ocean Tide (GOT) | There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T065214_20220206T065531_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T074306_20220206T074355_C001 | Mean Sea Surface (1) | There is an error with the MSS height (solution 1) for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T083952_20220206T084059_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T092206_20220206T092323_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T110105_20220206T110236_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T115524_20220206T120139_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T123723_20220206T124127_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T133444_20220206T133805_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T155018_20220206T155643_C001 | Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non Equilibrium Long Period Ocean Tide | There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT and 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T165451_20220206T165611_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T182454_20220206T182621_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T183144_20220206T183455_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T192746_20220206T192917_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T200436_20220206T200551_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T201044_20220206T201410_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T214522_20220206T214757_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPN_2_20220206T224030_20220206T224151_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_IOPN_2_20220206T232147_20220206T232648_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T010416_20220206T011027_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T024551_20220206T025008_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T042304_20220206T043052_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| | | |

| CS_OFFL_SIR_IOPR_2_20220206T060321_20220206T061135_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
|---|--|--|
| CS_OFFL_SIR_IOPR_2_20220206T074355_20220206T075407_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T092324_20220206T093048_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T110236_20220206T110757_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T124127_20220206T124309_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T124309_20220206T124835_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T141950_20220206T142511_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T155643_20220206T160541_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T173612_20220206T174205_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T174205_20220206T174535_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T174725_20220206T174934_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPR_2_20220206T175349_20220206T175502_C001 | Mean Dynamic Topography (1) | There is an error with the Mean Dynamic Topography height for one or more records |
| CS_OFFL_SIR_IOPR_2_20220206T191147_20220206T192134_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T192134_20220206T192305_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T205403_20220206T210033_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T210033_20220206T210608_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T223317_20220206T223919_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T223919_20220206T224030_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOPR_2_20220206T230254_20220206T230508_C001 | Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) 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: 1 | | |
|---|---------------------|---|
| Product | Test Failed | Description |
| CS_OFFL_SIR_IOPM_2_20220206T005005_20220206T005115_C001 | Power scaling error | There is an error in the scaling of the L1B waveform for one or more records |

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20 Hz)

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

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

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

> OCOG Altimeter Range and Backscatter Quality Flags: These flags are currently set for some records over continental ice.

| Product | Test Failed | Description |
|---|--|---|
| CS_OFFL_SIR_IOPM_2_20220206T000951_20220206T001053_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_IOPM_2_20220206T001649_20220206T001948_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T001955_20220206T002428_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T002639_20220206T004116_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_IOPM_2_20220206T010323_20220206T010416_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |

| CS_OFFL_SIR_IOPM_2_20220206T011945_20220206T012358_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
|---|--|---|
| CS_OFFL_SIR_IOPM_2_20220206T012400_20220206T012535_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_IOPM_2_20220206T012820_20220206T015228_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_IOPM_2_20220206T015500_20220206T020327_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T020557_20220206T023137_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_IOPM_2_20220206T024108_20220206T024124_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T030435_20220206T033043_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_IOPM_2_20220206T033713_20220206T034129_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T034446_20220206T041150_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_IOPM_2_20220206T041240_20220206T041436_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T041523_20220206T041647_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T042232_20220206T042304_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_IOPM_2_20220206T043740_20220206T050957_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_IOPM_2_20220206T051625_20220206T052210_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T052334_20220206T052950_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_IOPM_2_20220206T060109_20220206T060204_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_IOPM_2_20220206T061528_20220206T064947_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_IOPM_2_20220206T065531_20220206T070043_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T070239_20220206T072208_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_IOPM_2_20220206T075407_20220206T082244_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_IOPM_2_20220206T082255_20220206T082803_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_IOPM_2_20220206T083538_20220206T083952_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T084146_20220206T084256_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_IOPM_2_20220206T084313_20220206T090918_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_IOPM_2_20220206T091048_20220206T091751_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_IOPM_2_20220206T091751_20220206T091813_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_IOPM_2_20220206T093455_20220206T093624_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_IOPM_2_20220206T093716_20220206T094526_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_IOPM_2_20220206T094947_20220206T095915_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_IOPM_2_20220206T100109_20220206T100735_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_IOPM_2_20220206T100910_20220206T101431_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T101450_20220206T101700_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T102542_20220206T103805_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_IOPM_2_20220206T103948_20220206T104834_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_IOPM_2_20220206T105000_20220206T105659_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_IOPM_2_20220206T111927_20220206T112907_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_IOPM_2_20220206T113109_20220206T113822_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_IOPM_2_20220206T113942_20220206T114627_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_IOPM_2_20220206T114837_20220206T115332_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T115407_20220206T115524_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T120139_20220206T120516_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_IOPM_2_20220206T121933_20220206T122800_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_IOPM_2_20220206T122916_20220206T123230_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_IOPM_2_20220206T125835_20220206T125840_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T130945_20220206T132535_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_IOPM_2_20220206T132817_20220206T133300_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T133322_20220206T133444_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T133912_20220206T140236_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_IOPM_2_20220206T140238_20220206T140616_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_IOPM_2_20220206T143909_20220206T150519_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_IOPM_2_20220206T150803_20220206T151201_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T151205_20220206T151215_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| | | |

| CS_OFFL_SIR_IOPM_2_20220206T151221_20220206T151546_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
|---|--|---|
| CS_OFFL_SIR_IOPM_2_20220206T151810_20220206T154543_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_IOPM_2_20220206T161715_20220206T164458_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_IOPM_2_20220206T164632_20220206T165116_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T165120_20220206T165451_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T165849_20220206T173241_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_IOPM_2_20220206T174535_20220206T174725_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_IOPM_2_20220206T181716_20220206T181930_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_IOPM_2_20220206T182129_20220206T182422_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_IOPM_2_20220206T182621_20220206T183144_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T183734_20220206T185950_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_IOPM_2_20220206T190235_20220206T191147_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_IOPM_2_20220206T192421_20220206T192746_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_IOPM_2_20220206T193510_20220206T194035_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_IOPM_2_20220206T194353_20220206T194903_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_IOPM_2_20220206T195032_20220206T200346_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_IOPM_2_20220206T200551_20220206T201044_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T201653_20220206T202305_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_IOPM_2_20220206T202312_20220206T204910_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_IOPM_2_20220206T205245_20220206T205249_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T211100_20220206T211354_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_IOPM_2_20220206T211524_20220206T213823_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_IOPM_2_20220206T215627_20220206T220253_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_IOPM_2_20220206T221852_20220206T222625_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_IOPM_2_20220206T224151_20220206T224500_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T224726_20220206T230254_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_IOPM_2_20220206T230508_20220206T232006_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_IOPM_2_20220206T232648_20220206T232904_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T232943_20220206T233403_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPM_2_20220206T233545_20220206T235041_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_IOPR_2_20220206T055707_20220206T055814_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_IOPR_2_20220206T074021_20220206T074306_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_IOPR_2_20220206T103805_20220206T103948_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_IOPR_2_20220206T174205_20220206T174535_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_IOPR_2_20220206T204910_20220206T205220_C001 | OCOG Altimeter Range Quality, OCOG Backscatter Quality | The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPR_2_20220206T211354_20220206T211524_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_IOPR_2_20220206T220253_20220206T220331_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_IOPR_2_20220206T221411_20220206T221852_C001 | Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality | The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |

L2 Quality Flags (20 Hz PLRM)

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

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

> OCOG Altimeter Range and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over continental ice.

91

Number of products with errors:

| Product | Test Failed | Description |
|---|---|---|
| CS_OFFL_SIR_IOPN_2_20220206T000850_20220206T000951_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_IOPN_2_20220206T001053_20220206T001649_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_IOPN_2_20220206T002428_20220206T002612_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_IOPN_2_20220206T005403_20220206T005416_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_IOPN_2_20220206T011027_20220206T011248_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_IOPN_2_20220206T011316_20220206T011503_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_IOPN_2_20220206T015308_20220206T015500_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_IOPN_2_20220206T023137_20220206T023512_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_IOPN_2_20220206T023945_20220206T024108_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_IOPN_2_20220206T025008_20220206T025445_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_IOPN_2_20220206T025530_20220206T025652_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_IOPN_2_20220206T030045_20220206T030252_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_IOPN_2_20220206T033248_20220206T033426_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_IOPN_2_20220206T034129_20220206T034421_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_IOPN_2_20220206T043119_20220206T043740_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_IOPN_2_20220206T052210_20220206T052324_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_IOPN_2_20220206T053900_20220206T054234_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_IOPN_2_20220206T054250_20220206T054429_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_IOPN_2_20220206T055100_20220206T055306_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_IOPN_2_20220206T061135_20220206T061300_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_IOPN_2_20220206T082930_20220206T083330_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_IOPN_2_20220206T091847_20220206T092056_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_IOPN_2_20220206T101700_20220206T101843_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_IOPN_2_20220206T105659_20220206T110051_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_IOPN_2_20220206T111531_20220206T111927_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_IOPN_2_20220206T115524_20220206T120139_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_IOPN_2_20220206T121331_20220206T121933_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_IOPN_2_20220206T132610_20220206T132817_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_IOPN_2_20220206T141351_20220206T141514_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_IOPN_2_20220206T141600_20220206T141950_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_IOPN_2_20220206T143706_20220206T143909_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_IOPN_2_20220206T155018_20220206T155643_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_IOPN_2_20220206T173241_20220206T173405_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_IOPN_2_20220206T173443_20220206T173612_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_IOPN_2_20220206T175324_20220206T175349_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_IOPN_2_20220206T181024_20220206T181146_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_IOPN_2_20220206T210608_20220206T210657_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_IOPN_2_20220206T214522_20220206T214757_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_IOPN_2_20220206T224030_20220206T224151_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_IOPN_2_20220206T224500_20220206T224726_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_IOPN_2_20220206T232044_20220206T232143_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_IOPN_2_20220206T232147_20220206T232648_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_IOPN_2_20220206T233403_20220206T233540_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_IOPR_2_20220206T000650_20220206T000721_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_IOPR_2_20220206T004116_20220206T004801_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_IOPR_2_20220206T010416_20220206T011027_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_IOPR_2_20220206T011552_20220206T011822_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_IOPR_2_20220206T012535_20220206T012616_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_IOPR_2_20220206T024146_20220206T024408_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_IOPR_2_20220206T024427_20220206T024525_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_IOPR_2_20220206T024551_20220206T025008_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_IOPR_2_20220206T042304_20220206T043052_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_IOPR_2_20220206T055707_20220206T055814_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_IOPR_2_20220206T060204_20220206T060314_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_IOPR_2_20220206T060321_20220206T061135_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_IOPR_2_20220206T061300_20220206T061339_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_IOPR_2_20220206T073425_20220206T073533_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_IOPR_2_20220206T074021_20220206T074306_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_IOPR_2_20220206T074355_20220206T075407_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_IOPR_2_20220206T092324_20220206T093048_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_IOPR_2_20220206T093227_20220206T093255_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_IOPR_2_20220206T110236_20220206T110757_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_IOPR_2_20220206T113822_20220206T113942_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_IOPR_2_20220206T115332_20220206T115336_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_IOPR_2_20220206T123354_20220206T123614_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 |
| CS_OFFL_SIR_IOPR_2_20220206T124309_20220206T124835_C001 | PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality | set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records |
| CS_OFFL_SIR_IOPR_2_20220206T125342_20220206T125416_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_IOPR_2_20220206T130211_20220206T130945_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_IOPR_2_20220206T133805_20220206T133912_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_IOPR_2_20220206T140616_20220206T140710_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_IOPR_2_20220206T141950_20220206T142511_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_IOPR_2_20220206T142528_20220206T142810_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_IOPR_2_20220206T151701_20220206T151810_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_IOPR_2_20220206T155643_20220206T160541_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_IOPR_2_20220206T160604_20220206T160833_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_IOPR_2_20220206T165611_20220206T165849_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_IOPR_2_20220206T173405_20220206T173443_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_IOPR_2_20220206T173612_20220206T174205_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_IOPR_2_20220206T174205_20220206T174535_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_IOPR_2_20220206T174725_20220206T174934_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_IOPR_2_20220206T181531_20220206T181716_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_IOPR_2_20220206T191147_20220206T192134_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_IOPR_2_20220206T192134_20220206T192305_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_IOPR_2_20220206T193314_20220206T193510_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_IOPR_2_20220206T205403_20220206T210033_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_IOPR_2_20220206T210033_20220206T210608_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_IOPR_2_20220206T213823_20220206T214522_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_IOPR_2_20220206T222916_20220206T222938_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_IOPR_2_20220206T223317_20220206T223919_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 |

| | 1 | | | | | | |
|---|--|---|--|--|--|--|--|
| CS_OFFL_SIR_IOPR_2_20220206T230254_20220206T230508_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_IOPR_2_20220206T235041_20220206T235220_C001 | OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality | The OCOG Range and Backscatter Quality Flags have been set for one or more records | | | | | |
| L2 Quality Flags (1 Hz & 1 Hz PLRM) | | | | | | | |
| Currently, there are several common flags raised in the Level 2 products, wh | ich are summarised below. | | | | | | |
| > 1 Hz and 1 Hz Ocean SSHA Quality Flags: These flags are currently set for pro- | oducts over sea ice, which is to be expecte | ed. | | | | | |
| Number of products with errors: 193 | | | | | | | |
| 5.8 L2 Ocean Retracking Quality Check | | | | | | | |
| L2 Retracking Flags (20 Hz) | | | | | | | |
| CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz measured | ment record. The bit value of this flag indic | ates 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. Th | ne number of products with this error flag set is given below. | | | | | |
| Number of products with errors: 64 | | | | | | | |
| L2 Retracking Flags (20 Hz PLRM) | | | | | | | |
| CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz PLRM me | easurement record. The bit value of this fla | ag indicates any problems when set. | | | | | |
| > Ocean Retracking Quality Flag (PLRM): This flag is currently set for products I | OPR and IOPN products over sea ice, but | this is to be expected. | | | | | |
| Number of products with errors: 147 | | | | | | | |
| 6. IOP L2 P | ole-to-Pole Data Quality | Check | | | | | |
| 6.1 P2P Product Format Check | · · · | | | | | | |
| 6.1 P2P Product Format Check | | | | | | | |
| Each product, retrieved and unpacked from the science server, is checked to ensu | re it consists of both an XML header file (.I | 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 SP | 'H in order to identify any inconsistencies a | and/or errors raised by the ground-segment processing chain. | | | | | |
| Number of products with errors: 0 | | | | | | | |
| 6.3 P2P Auxiliary Data File Usage Check | | | | | | | |
| Each product is checked for missing Data Set Descriptors with respect to a pre-del | termined baseline and also to check the va | alidity of Auviliary Data Files is correct | | | | | |
| Number of products with errors: 0 | | | | | | | |
| | | | | | | | |
| 6.4 P2P Auxiliary Correction Error Check | | | | | | | |
| For all products, the auxiliary corrections within the Geophysical Group are checked | d for the default error value (32767). | | | | | | |
| Currently, there are some common auxiliary correction errors raised in the L followed by a table highlighting any additional issues which may arise from t | | to surface type. All common flags are summarised in the list below, | | | | | |
| > ECMWF Meteo Corrections: Currently the following corrections are not comput Correction and the U-Wind and V-Wind components of the ECMWF model wind ve not reported in the table below. | | | | | | | |
| > Sea State Bias & Sea State Bias PLRM: The error value is currently set for pro | ducts over sea ice, but this is to be expect | ed. | | | | | |
| > Mean Sea Surface: The error value is currently set for products over land and su | ea ice, but this is to be expected. | | | | | | |
| > Mean Dynamic Topography: The error value is currently set for products over I | and and sea ice, but this is to be expected | | | | | | |
| > Altimetric Wind Speed Error: The error value is currently set for products over | land and sea ice, but this is to be expected | d. | | | | | |
| Number of products with errors: 29 | | | | | | | |
| Product | Test Failed | Description | | | | | |
| CS_OFFL_SIR_IOP_220220205T232943_20220206T001922_C002 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) | | | | | |
| CS_OFFL_SIR_IOP_2_20220206T001922_20220206T010857_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) | | | | | |
| CS_OFFL_SIR_IOP_2_20220206T010857_20220206T015837_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records | | | | | |
| CS_OFFL_SIR_IOP_220220206T015837_20220206T024812_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) | | | | | |
| CS_OFFL_SIR_IOP_2_20220206T024812_20220206T033751_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) | | | | | |
| CS OFFL SIR IOP 2 20220206T033751 20220206T042727 C001 | Mean Sea Surface (1), Mean Dynamic | There is an error with the MSS height (solution 1) and the Mean Dynamic | | | | | |

Topography height (solution 1) e (1), Me n Dyn Topography (1)

Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records CS_OFFL_SIR_IOP_2_20220206T042727_20220206T051706_C001 Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: CS_OFFL_SIR_IOP_2_20220206T051706_20220206T060641_C001 Tide (GOT) GOT) for one or more records There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS_OFFL_SIR_IOP_2_20220206T060641_20220206T065621_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic

Topography (1)

CS_OFFL_SIR_IOP_2__20220206T065621_20220206T074556_C001

| CS_OFFL_SIR_IOP_220220206T074556_20220206T083535_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
|---|--|---|
| CS_OFFL_SIR_IOP_220220206T083535_20220206T092511_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T092511_20220206T101450_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T101450_20220206T110425_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T110425_20220206T115405_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T115405_20220206T124340_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T124340_20220206T133319_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T133319_20220206T142255_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T142255_20220206T151234_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) wean Sea Surrace (1), wean Dynamic | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T151234_20220206T160209_C001 | Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) Non-Fauilibrium Long Period | There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records |
| CS_OFFL_SIR_IOP_220220206T160209_20220206T165149_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T165149_20220206T174124_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T174124_20220206T183104_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T183104_20220206T192039_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T192039_20220206T201018_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records |
| CS_OFFL_SIR_IOP_220220206T201018_20220206T205953_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T205953_20220206T214933_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T214933_20220206T223908_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1) | There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) |
| CS_OFFL_SIR_IOP_220220206T223908_20220206T232847_C001 | Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) | There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) 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: | 1 | | | | | |
|--|-------------------------------|--|--|--|--|--|
| Product | | Test Failed | Description | | | |
| CS_OFFL_SIR_IOP_220220206T001922_2022020 | 6T010857_C001 | Power scaling error | There is an error in the scaling of the L1B waveform for one or more records | | | |
| 6.6 P2P Measurement Quality Flag C | heck | | | | | |
| P2P Quality Flags (20 Hz) | | | | | | |
| CryoSat P2P data includes Quality Flags for each 20 H | lz, 20 Hz PLRM and 1 Hz m | easurement record, copied from the corres | sponding L2 products. | | | |
| Since the P2P Quality Flags are copied directly from | n the L2 Quality Flags, ple | ase see Section 5.6 for the full list of pr | roducts affected. | | | |
| Number of products with errors: | 29 | | | | | |
| P2P Quality Flags (20 Hz PLRM) | | | | | | |
| Since the P2P Quality Flags are copied directly from | n the L2 Quality Flags, ple | ase see Section 5.6 for the full list of pr | roducts affected. | | | |
| Number of products with errors: | 29 | | | | | |
| P2P Quality Flags (1 Hz & 1 Hz PLRM) | | | | | | |
| Since the P2P Quality Flags are copied directly from | n the L2 Quality Flags, ple | ase see Section 5.6 for the full list of pr | roducts affected. | | | |
| Number of products with errors: | 29 | | | | | |
| 6.8 P2P Ocean Retracking Quality Ch | neck | | | | | |
| P2P Retracking Flags (20 Hz) | | | | | | |
| Cryosat P2P data includes an ocean retracking quality | flag (field 19) for each 20 H | z measurement record. The bit value of thi | is flag indicates any problems when set. | | | |
| > Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected. | | | | | | |
| Number of products with errors: | 24 | | | | | |
| P2P Retracking Flags PLRM | | | | | | |
| CryoSat L2 data includes an ocean retracking quality fl | ag for each 20 Hz PLRM me | easurement record. The bit value of this fla | g indicates any problems when set. | | | |
| > Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected. | | | | | | |

7. IOP QCC Report Analysis

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

| Product type | No. Products | No. QCC Reports | No. Valid | No. Warnings | No. Errors |
|--------------|--------------|-----------------|-----------|--------------|------------|
| SIR_IOPM1B | 218 | 218 | 4 | 214 | 0 |
| SIR_IOPR1B | 127 | 111 | 0 | 109 | 2 |
| SIR_IOPN1B | 111 | 127 | 0 | 127 | 0 |
| SIR_IOPM_2 | 218 | 218 | 155 | 63 | 0 |
| SIR_IOPR_2 | 127 | 109 | 42 | 67 | 0 |
| SIR_IOPN_2 | 109 | 127 | 45 | 79 | 3 |
| SIR_IOP_P2P | 28 | 28 | 0 | 26 | 2 |

7.1 QCC Errors

| Νι | Imber of QCC | reports with er | rors: | 15 | | | | | | | | |
|----|--------------|-----------------|-------|------------|----|--------------|----------------|---------------|---|---|---|---|
| | | | | | | Total number | of occurrences | of each error | | | | |
| Ρ | roduct Type | LOBOPNCDF | RL | RLOBOPNCDF | RL | ISSOPOBHRNO | - | - | - | - | - | - |
| S | IR_IOPN1B | 0 | 0 | 0 | 0 | 2 | | | | | | |
| S | SIR_IOPR_2 | 3 | 3 | 3 | 3 | 0 | | | | | | |
| | | | | | | | | | | | | |
| Ρ | roduct Type | LOBOPNCDF | RL | RLOBOPNCDF | RL | - | - | - | - | - | - | - |
| S | SIR_IOP_2_ | 2 | 2 | 2 | 2 | | | | | | | |

| Test Description Key: | | | | | |
|---|---------------------------------|--|--|--|--|
| Abbreviation | Test name | Details | | | |
| RLOBOPNCDF | RangeLatitudeOrBlankOP_7NetCDF | Latitude should be between -90E7 and 90E7 | | | |
| RL | RangeLatitude_7 | Latitude should be between -90E7 and 90E7 | | | |
| RLOBOPNCDF | RangeLongitudeOrBlankOP_7NetCDF | Longitude should be between -180E7 and 180E7 | | | |
| RL | RangeLongitude_7 | Longitude should be between -180E7 and 180E7 | | | |
| RRTAISSOPOBHRNCD RangeRecordTAIStartStopOPOrBlankHRNetC The time value should be between the record TAI start/stop times of the SPH | | | | | |

7.2 QCC Warnings

SIR_IOP_2

28

19

11

Number of QCC reports with warnings 2192 Total number of occurrences of each warning CDF MVIOEPNCDF MVIONCDF IOHHMOOR MVIOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDPLRMNCI BCSHNCDF Product Type 214 SIR IOPM1B SIR_IOPM_2 0 40 37 45 0 0 109 0 SIR_IOPN1B 0 0 0 0 0 SIR IOPN 2 10 38 29 35 SIR_IOPR1B 122 0 0 0 0 0 0 SIR_IOPR_2 36 30 28 3 25 RBSZOPOEPNCDF RPEPOPFDLRMNCDF RPEPOPFDPLRMSARNCDRPEPOPFDPLRMSINNCDRPEPOPFDSARNCDF RPEPOPFDSINNCDF RPEPOPLRMNCDF Product Type SIR_IOPM1B 0 0 0 0 SIR IOPM 2 33 38 0 23 0 SIR IOPN1B 0 0 0 0 0 0 15 25 38 SIR IOPN 2 0 0 SIR_IOPR1B 0 0 0 0 0 0 SIR IOPR 2 12 40 47 RPEPOPSARNCDF RPEPOPSINNCDF RSSBCONCDF RSSHAOFDNCDF RSSHAOFDPLRMNCDF RSSHAONCDF RSWHOEPFDNCDF Product Type SIR_IOPM1B SIR IOPM 2 0 3 20 0 29 0 13 SIR_IOPN1B 0 0 0 0 0 0 SIR IOPN 2 30 43 54 27 35 SIR IOPR1B 0 0 0 0 0 0 0 SIR IOPR 2 57 35 40 14 27 RSWHOEPFDPLRMNCDF RSWHOEPNCDF SPHRTASCNSNCDF SPHRTASCNSNCDF SOOHHIFHD SCSTODHRNCDF SCSTODNCDF Product Type SIR_IOPM1B 0 SIR_IOPM_2 0 С SIR_IOPN1B 0 0 0 0 54 4 SIR_IOPN_2 34 14 0 0 n SIR_IOPR1B 0 0 1 0 127 7 SIR IOPR 2 41 0 0 0 IOHHMOOR MVIOEPFDNCDF MVIOEPNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDPLRMNCCRBSZOPOEPNCDF MVIONCDF Product Type SIR IOP 2 16 26 28 28 20 28 RPEPOPFDPLRMSINNCDIRPEPOPFDSINNCDF RPEPOPSINNCDF RSSBCONCDF RSSHAOFDNCDF RSSHAOFDPLRMNCDF RSSHAONCDF Product Type 28 SIR_IOP_2 17 26 21 15 17 22 RSWHOEPFDPLRMNCDF RSWHOEPNCDF Product Type RSWHOEPEDNCDE SPHI POWNCDE

Test Description Key: Abbreviation Test name Details BCSHNCDE BurstCounterStep20HzNetCDF The burst counter should be one higher with regard to the previous burst counter IOHHMOOR ndexOf1Hzin20HzMappingOutOfRange The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1) MVIOEPFDNCDF MissingValueIntOceanExcludingPolarFD2NetCDF The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees MVIOEPNCDF lissingValueIntOceanExcludingPolarNetCDF The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees MVIONCDF MissingValueIntOceanNetCDF The value should not be a 'missing value' for surface type 0 only The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes RBSZOPOEPFDNCDF RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF etween -70 and 70 degrees RBSZOPOEPFDPLRM The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF NCDF etween -70 and 70 degrees The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes RBSZOPOEPNCDF RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF etween -70 and 70 degrees The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 RPEPOPFDLRMNCDF RangePeakinessExcludingPolarOPFD2LRMNetCDF and 70 degrees RPEPOPFDPLRMSAR The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF NCDF

| RPEPOPFDPLRMSINN CDF | RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF | The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
|-------------------------|--|---|
| RPEPOPFDSARNCDF | RangePeakinessExcludingPolarOPFD2SARNetCDF | The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPFDSINNCDF | RangePeakinessExcludingPolarOPFD2SINNetCDF | The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPLRMNCDF | RangePeakinessExcludingPolarOPLRMNetCDF | The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPSARNCDF | RangePeakinessExcludingPolarOPSARNetCDF | The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RPEPOPSINNCDF | RangePeakinessExcludingPolarOPSINNetCDF | The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RSSBCONCDF | RangeSeaStateBiasCorrectionOceanNetCDF | The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean |
| RSSHAOFDNCDF | RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF | The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean |
| RSSHAOFDPLRMNCD F | RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF | The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean |
| RSSHAONCDF | RangeSeaSurfaceHeightAnomalyOceanNetCDF | The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean |
| RSWHOEPFDNCDF | RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF | The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RSWHOEPFDPLRMNC DF | RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF | The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| RSWHOEPNCDF | RangeSignificantWaveHeightOceanExcludingPolarNetCDF | The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees |
| SPHRTASCNSNCDF | SPH_Rel_Time_ASC_Node_Start_v2_NetCDF | Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1) |
| SPHRTASCNSNCDF | SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF | Rel_Time_ASC_Node_Stop mismatch |
| SOOHHIFHD | SameOrOneHigher1HzIndexFor20HzData | The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample |
| SCSTODHRNCDF | SequenceCounterStepTODHRNetCDF | The sequence counter should be modulo 4 higher with regard to the previous sequence counter |
| SCSTODNCDF | SequenceCounterStepTODNetCDF | The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter |

7.3 Missing QCC Reports

Number of products with missing QCC reports: