L1 & L2

P2P



Pleas

## 1. Overview

Check

Server check: science-pds.cryosat.esa.int

Server check: calval-pds.cryosat.esa.int

**Product Software Check** 

**Product Format Check** 

Report Production:	09-Mar-2023
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

We would love to hear from you!	
se let us know your feedback about these da	ily
reports: What do you like/ dislike? What qua	alit

quality reports: What do you like/ dislike? What quali information do you need? Send your feedback to cs2\_qc\_team@telespazio.com

Product Header Analysis
Auxiliary Data File Usage Check
Auxiliary Correction Error Check
Measurement Confidence Data Check
Range, SWH & Backscatter Measurement Check
Ocean Retracking Quality Check
QCC Error/ Warning Check

Nominal	Nominal
Nominal	Nominal
See Section 5.4	See Section 6.4
See Section 4.5, 4.6 and 5.5	See Section 6.5
See Section 5.6	See Section 6.6
See Section 5.7	See Section 6.7
See Section 7.1 and 7.2	See Section 7.1 and 7.2

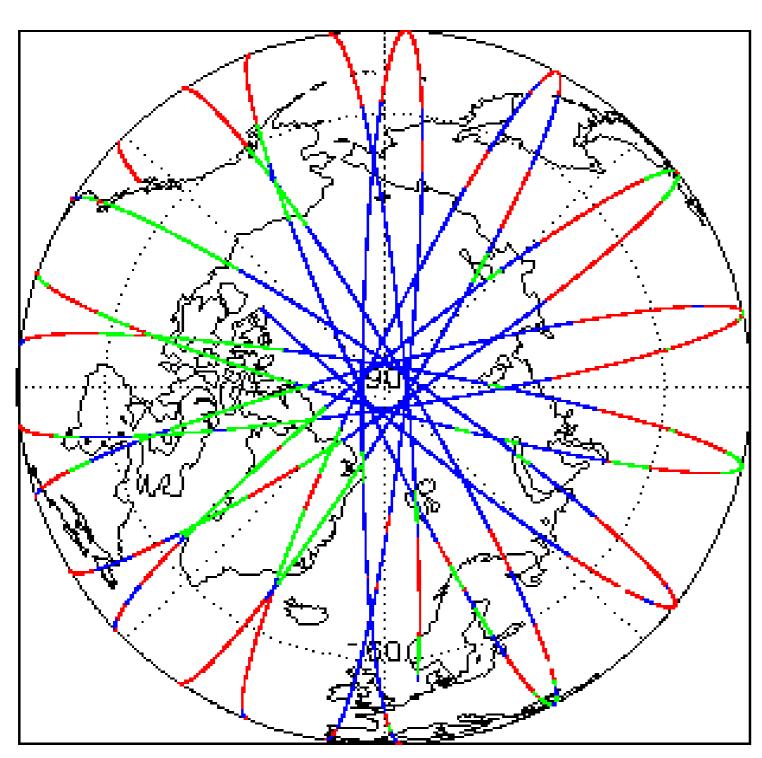
Mission / instrument news	
05-Mar-2023	None
06-Mar-2023	None

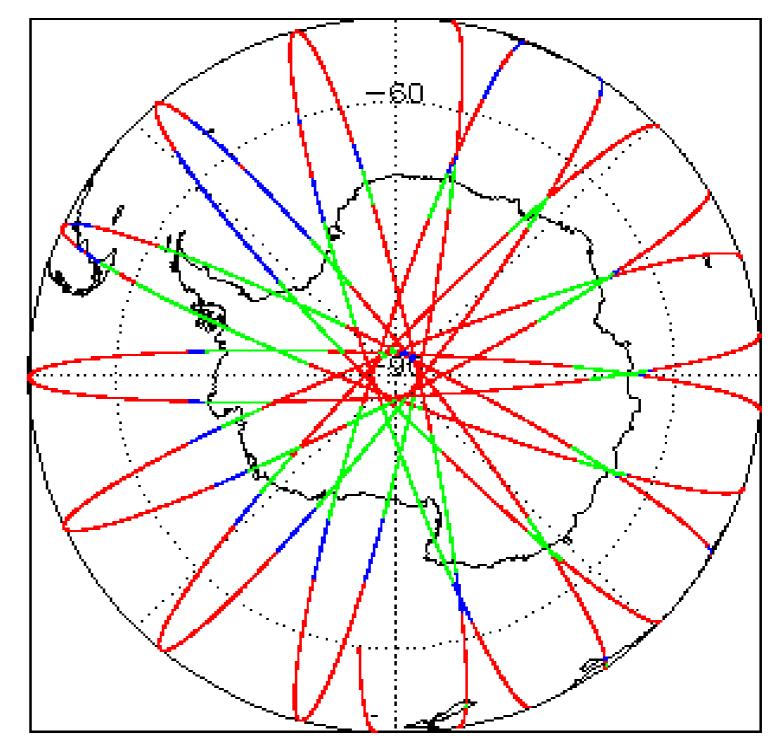
Nothing planned

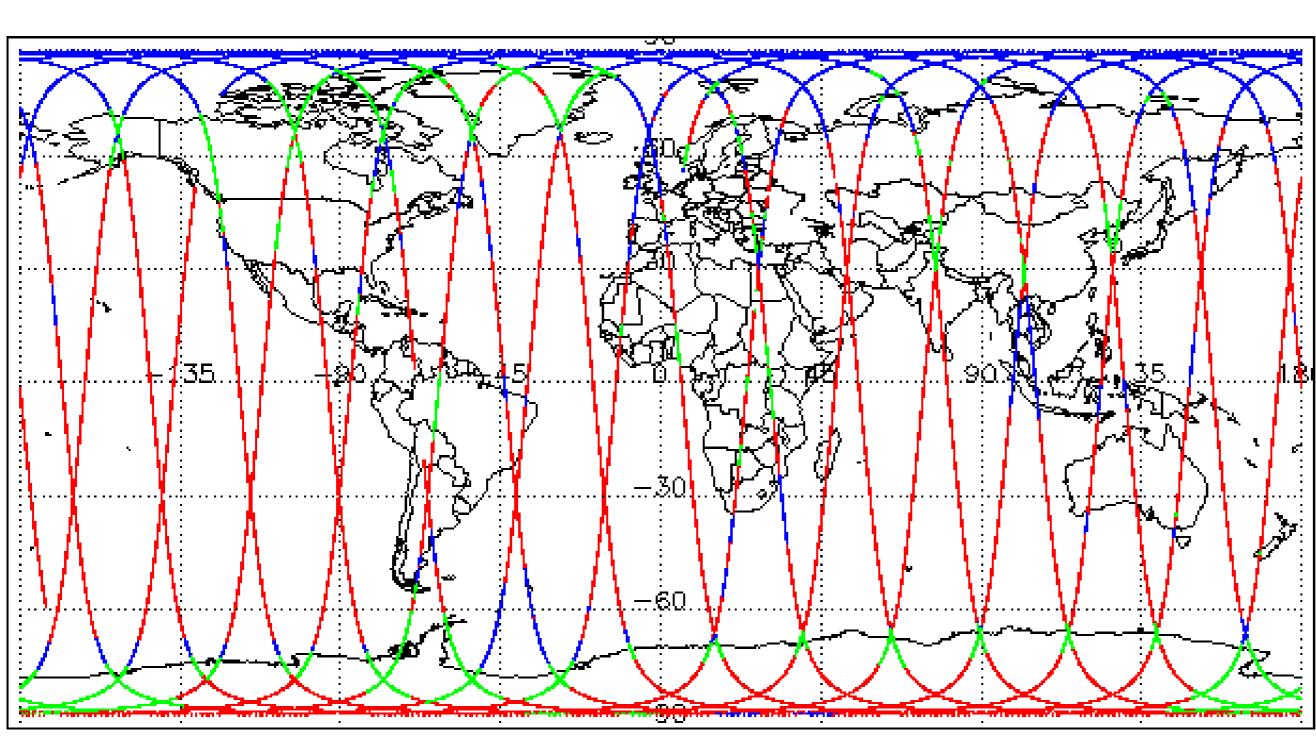
Mission / Instrument News

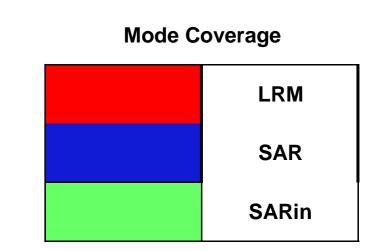
07-Mar-2023

# 2. Global Coverage









# 3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

# 4. IOP Level 1B Data Quality Check

## **4.1 L1B Product Format Check**

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

## **4.2 L1B Product Header Analysis**

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

Number of products with errors:

### 4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

### **4.4 L1B Auxiliary Correction Error Check**

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

Number of products with errors:

 $\cap$ 

0

#### 4.5 L1B Measurement Confidence Data Check

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

> Attitude Correction Missing: This flag is currently set in error for IOPR products 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:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20230306T155703_20230306T155924_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more
CS_OTTE_STY_TOT WTB_202303001133703_202303001133924_C001	l ower scaling error	records

#### 4.6 L1B Waveform Group Data Check

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

Loss of Echo Flag: This flag is currently set for products over land, but this is to be expected. The table provides the full list of products flagged.

Number of products with errors:

20

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20230306T104540_20230306T112028_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230306T202000_20230306T202035_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230306T204853_20230306T211525_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230306T212749_20230306T220302_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T013131_20230306T013650_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T022229_20230306T022642_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T040419_20230306T040650_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T071428_20230306T071447_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T081147_20230306T081438_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T102123_20230306T102326_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T103040_20230306T103129_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T104358_20230306T104540_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T152715_20230306T153109_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T153126_20230306T153256_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T162543_20230306T163157_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T170740_20230306T171139_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230306T230202_20230306T230513_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230306T040909_20230306T041144_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230306T120552_20230306T121037_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230306T121415_20230306T122439_C001	Loss of Echo	The tracking echo is missing for one or more records

## 5. IOP Level 2 Data Quality Check

### **5.1 L2 Product Format Check**

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

Number of products with errors:

### **5.2 L2 Product Header Analysis**

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

Number of products with errors: 0

### **5.3 L2 Auxiliary Data File Usage Check**

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

Number of products with errors:

### **5.4 L2 Auxiliary Correction Error Check**

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

0

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

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

Number of products with errors:

52

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230306T071127_20230306T071144_C001	Tiviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T012614_20230306T012914_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T013131_20230306T013650_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_20230306T022229_20230306T022642_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20230306T030608_20230306T030843_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_20230306T040122_20230306T040236_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_20230306T040419_20230306T040650_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T044110_20230306T044707_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T054046_20230306T054307_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_20230306T062326_20230306T062517_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_20230306T072026_20230306T072503_C001	Tiviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T080306_20230306T080443_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T094256_20230306T094643_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_20230306T112232_20230306T112548_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_20230306T113101_20230306T113223_C001	Tiviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T121326_20230306T121414_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_20230306T131011_20230306T131117_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_20230306T135225_20230306T135343_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_20230306T152715_20230306T153109_C001	Tiviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T153126_20230306T153256_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_20230306T170740_20230306T171139_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_20230306T171139_20230306T171147_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_20230306T184620_20230306T185009_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_20230306T202036_20230306T202703_C001		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_20230306T212509_20230306T212629_C001	Tiviean Dynamic Toboqraphy (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T222344_20230306T222404_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T225512_20230306T225638_C001	Tiviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230306T230202_20230306T230513_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_20230306T235804_20230306T235937_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_IOPR_2_20230306T003507_20230306T004222_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_20230306T004222_20230306T004428_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_20230306T021652_20230306T022117_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_20230306T022117_20230306T022229_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_20230306T035450_20230306T035922_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_20230306T035922_20230306T040122_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_20230306T053436_20230306T054046_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_20230306T071611_20230306T072025_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_20230306T085017_20230306T090110_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_20230306T103319_20230306T104154_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_20230306T120552_20230306T121037_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230306T121415_20230306T122439_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_20230306T135343_20230306T140108_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_20230306T153256_20230306T153816_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_20230306T171147_20230306T171854_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_20230306T185010_20230306T185528_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_20230306T202703_20230306T203600_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_20230306T220631_20230306T221223_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_20230306T221223_20230306T221604_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_20230306T221739_20230306T221951_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230306T222404_20230306T222519_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230306T234157_20230306T235155_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_20230306T235155_20230306T235324_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)

## 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230306T155703_20230306T155924_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.

Number of products with errors: 101

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230305T235747_20230306T002043_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230306T002127_20230306T003233_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230306T010229_20230306T012223_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230306T012240_20230306T012451_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_IOPM_2_20230306T012914_20230306T013131_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_20230306T013825_20230306T020815_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_20230306T022724_20230306T024614_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_20230306T024644_20230306T025949_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_20230306T031215_20230306T031543_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_20230306T031716_20230306T033305_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_20230306T033507_20230306T034429_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_20230306T034802_20230306T034930_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_20230306T034945_20230306T035013_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_20230306T040236_20230306T040419_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_20230306T040731_20230306T040909_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230306T041145_20230306T042346_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_20230306T044010_20230306T044110_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_20230306T045013_20230306T045445_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_20230306T045633_20230306T051135_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_20230306T052411_20230306T052415_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_20230306T055004_20230306T055553_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_20230306T055838_20230306T062256_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_20230306T062517_20230306T063346_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_20230306T063554_20230306T070155_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_20230306T070532_20230306T071005_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_20230306T073524_20230306T080201_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_20230306T081449_20230306T084232_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_20230306T084234_20230306T084238_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_20230306T084240_20230306T084456_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_20230306T090801_20230306T094108_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

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CQUIT-SIR OPPL_2000000190001100000110000001100000011000000	CS_OFFL_SIR_IOPM_2_20230306T094643_20230306T095228_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
DOLD-H_BIR_CHIL_200000001**CHIS_00000001**CHIS_00000001**CHIS_000000000000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20230306T095342_20230306T100009_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
Col. OFF.   Six   DMD   2   20000000111010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   200000011010   2000000011010   2000000011010   2000000011010   2000000011010   2000000011010   2000000011010   2000000011010   20000000011010   20000000011010   20000000011010   20000000000	CS_OFFL_SIR_IOPM_2_20230306T103129_20230306T103222_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
Description Course	CS_OFFL_SIR_IOPM_2_20230306T104540_20230306T112028_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
CS_OFFL_SIR_OPM_2_2020006T19036_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020006T19036_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020006T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020006T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020008T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020008T19031_2020008T19030_00000  CS_OFFL_SIR_OPM_2_2020008T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020008T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020008T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020008T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020008T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020008T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020008T19031_2020008T19030_0000  CS_OFFL_SIR_OPM_2_2020008T19030_00000  CS_OFFL_SIR_OPM_2_2020008T19030_00000T19000000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20230306T112548_20230306T113100_C001	_	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
Control   Cont	CS_OFFL_SIR_IOPM_2_20230306T113243_20230306T115226_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
and the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all the OCOC Alliment Range and Backscaller Quality Flags have been all th	CS_OFFL_SIR_IOPM_2_20230306T122439_20230306T125259_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
Rediscated Custing.  CS OFFL SIR (IPPM 2 2020006T13122 2020006T13800 COI)  Does Allineer Range SIM SVM and Baskscated Custing COOG Allineer Range and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T13810 2020006T13800 COI)  Does Allineer Range SIM SVM and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T13810 2020006T13800 COI)  Does Allineer Range SIM SVM and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T13810 2020006T13800 COI)  Does Allineer Range Glasty. COOG Allineer Range and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T14511 2020006T141017_COI)  Does Allineer Range Glasty. COOG Allineer Range and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T14200_202006T141017_COI)  Does Allineer Range SIM SVM and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T14300 ZU20006T14202_COI)  Does Allineer Range SIM SVM and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T14400 ZU20000F114200_COI)  Does Allineer Range SIM SVM and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T14400 ZU20000F114470 COI)  Does Allineer Range and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T14400 ZU20000F114470 COI)  Does Allineer Range and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T14400 ZU20000F114470 COI)  Does Allineer Range and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T14400 ZU2000F115002 COI)  Does Allineer Range and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (IPPM 2 2020006T14400 ZU2000F115002 COI)  Does Allineer Range and Baskscated Custing Flags have been set for one or more records.  CS OFFL SIR (I	CS_OFFL_SIR_IOPM_2_20230306T125310_20230306T125822_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
CS_OFFL_SIR_JOPM_2_20230306T13212_2023030T134200_C001  All reduce Range and Backscatter Coulty CS_OFFL_SIR_JOPM_2_2023030T134108_2023030T134400_C001  CS_OFFL_SIR_JOPM_2_2023030T134108_2023030T134400_C001  CS_OFFL_SIR_JOPM_2_2023030T134108_2023030T134400_C001  CS_OFFL_SIR_JOPM_2_2023030T134108_2023030T134400_C001  CS_OFFL_SIR_JOPM_2_2023030T134108_2023030T134107_C001  CS_OFFL_SIR_JOPM_2_2023030T134108_2023030T1342412_2003030T1342412_2003030T1342412_2003030T1342	CS_OFFL_SIR_IOPM_2_20230306T130556_20230306T131011_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
and Backscater Quality, OCDG CS_OFFL_SIR_IOPM_2_20230300T130118_20230300T130226_CO01  CS_OFFL_SIR_IOPM_2_20230300T130118_20230300T130226_CO01  CS_OFFL_SIR_IOPM_2_20230300T140118_20230300T130126_CO01  CS_OFFL_SIR_IOPM_2_20230300T140118_20230300T14107_CO01  CS_OFFL_SIR_IOPM_2_20230300T140118_20230300T14107_CO01  CS_OFFL_SIR_IOPM_2_20230300T140014_20230300T14107_CO01  CS_OFFL_SIR_IOPM_2_20230300T14004_20230300T14107_CO01  CS_OFFL_SIR_IOPM_2_20230300T14004_20230300T14107_CO01  CS_OFFL_SIR_IOPM_2_20230300T14008_20230300T144449_CO01  CS_OFFL_SIR_IOPM_2_20230300T14008_20230300T144449_CO01  CS_OFFL_SIR_IOPM_2_20230300T14000_20230300T144449_CO01  CS_OFFL_SIR_IOPM_2_20230300T140000_20230300T144449_CO01  CS_OFFL_SIR_IOPM_2_20230300T140000_20230300T144449_CO01  CS_OFFL_SIR_IOPM_2_20230300T140000_20230300T144449_CO01  CS_OFFL_SIR_IOPM_2_20230300T140000_20230300T140000_20230300T140000_20230300T140000_20230300T140000_20230300T140000_20230300T140000_20230300T140000_20230300T140000_20230300T140000_20230300T1400000_20230300T1400000_20230300T140000_20230300T1400000_20230300T1400000_20230300T1400000_20230300T1400000_20230300T1400000_20230300T1400000000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20230306T131212_20230306T133938_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230306T140741_20230306T141617_C001  CS_OFFL_SIR_IOPM_2_20230306T142042_20230306T142012_20230306T142021_20230306T144068_202306T144068_20230306T144068_202306T144068_202306_20230306T144068_202306_20230306T144068_202	CS_OFFL_SIR_IOPM_2_20230306T134108_20230306T134809_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
and the OCOS Allmeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T1420ID 20230306T142222 C001  CS_OFFL_SIR_IOPM_2_20230306T1420ID 20230306T142222 C001  CS_OFFL_SIR_IOPM_2_20230306T1420ID 20230306T142222 C001  CS_OFFL_SIR_IOPM_2_20230306T1430ID_20230306T1423756_C001  CS_OFFL_SIR_IOPM_2_20230306T1430ID_20230306T143756_C001  CS_OFFL_SIR_IOPM_2_20230306T1430ID_20230306T14449_C001  CS_OFFL_SIR_IOPM_2_20230306T1430ID_20230306T144718 C001  CS_OFFL_SIR_IOPM_2_20230306T1450ID_20230306T144718 C001  CS_OFFL_SIR_IOPM_2_20230306T1450ID_20230306T150ID_202	CS_OFFL_SIR_IOPM_2_20230306T135118_20230306T135225_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
and Backscatter Quality Plags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T14308_20230306T143756_C001  CS_OFFL_SIR_IOPM_2_20230306T14308_20230306T143756_C001  CS_OFFL_SIR_IOPM_2_20230306T14308_20230306T144786_C001  CS_OFFL_SIR_IOPM_2_20230306T14308_20230306T14449_C001  CS_OFFL_SIR_IOPM_2_20230306T144508_20230306T144786_C001  CS_OFFL_SIR_IOPM_2_20230306T144508_20230306T144786_C001  CS_OFFL_SIR_IOPM_2_20230306T144508_20230306T150617 C001  CS_OFFL_SIR_IOPM_2_20230306T140500 20230306T150617 C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T15005 20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T15005 20230306T15085 C001  CS_OFFL_SIR_IOPM_2_20230306T15005 20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T15005 20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T15005 20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T154428_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T154428_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154428_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154428_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154428_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154428_20230306T154305_C001  CCGGA Altimeter Range and Backscatter Quality Flags have been set for one or more records  The OCGGA Altimeter Range and Backscatter Quality Flags have been set for one or more records  The OCGGA Altimeter Range and Backscatter Quality Flags have been set for one or more records  The OCGGA Altimeter Range and Backscatter Quality Flags have been set for one or more records  The OCGGA Altimeter Range and Backscatter Quality Flags have been set for one or more records  The OCGGA Altimeter Range and Backscatter Quality Flags have been set for one or more records  The OCGGA Altimeter Range and Backscatter Quality Flags have been set for one or more records  The OCGGA Altimeter Range and Backscatter Quality Flags have been set for one or more records  The OCGGA Altimeter Range and Backscatter Quality Flags have been set for one or more record	CS_OFFL_SIR_IOPM_2_20230306T140741_20230306T141617_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
and Backscatter Quality and Backscatter Quality and Backscatter Quality and the COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_JOPM_2_20230306T143927_20230306T144449_C001  CS_OFFL_SIR_JOPM_2_20230306T144508_20230306T144449_C001  CS_OFFL_SIR_JOPM_2_20230306T144508_20230306T144718_C001  CS_OFFL_SIR_JOPM_2_20230306T144508_20230306T144718_C001  CS_OFFL_SIR_JOPM_2_20230306T145002 20230306T160617 C001  CS_OFFL_SIR_JOPM_2_20230306T145002 20230306T160617 C001  CS_OFFL_SIR_JOPM_2_20230306T150620 20230306T160624 C001  CS_OFFL_SIR_JOPM_2_20230306T15002 20230306T160824 C001  CS_OFFL_SIR_JOPM_2_20230306T15002 20230306T160838_C001  CS_OFFL_SIR_JOPM_2_20230306T164831_20230306T162854 C001  CS_OFFL_SIR_JOPM_2_20230306T164831_20230306T165701_C001  CS_OFFL_SIR_JOPM_2_20230306T164831_20230306T165701_C001  CS_OFFL_SIR_JOPM_2_20230306T164831_20230306T165701_C001  CS_OFFL_SIR_JOPM_2_20230306T164831_20230306T165031_C001  CS_OFFL_SIR_JOPM_2_20230306T164831_20230306T165701_C001  CS_OFFL_SIR_JOPM_2_20230306T164831_20230306T1650838_C001  CS_OFFL_SIR_JOPM_2_20230306T164831_20230306T1650838_C001  CS_OFFL_SIR	CS_OFFL_SIR_IOPM_2_20230306T142004_20230306T142222_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230306T144508_20230306T144718_C001  CS_OFFL_SIR_IOPM_2_20230306T144500_20230306T150617_C001  CS_OFFL_SIR_IOPM_2_20230306T145600_20230306T150617_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150624_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T151853_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620	CS_OFFL_SIR_IOPM_2_20230306T143108_20230306T143756_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230306T145600_20230306T150617_C001  CS_OFFL_SIR_IOPM_2_20230306T145600_20230306T150617_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150624_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T15005_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T15005_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T15005_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T15242_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T15242_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_20230306T154055_C001  CS_OFFL_SIR_IOPM_2_20230306T154031_	CS_OFFL_SIR_IOPM_2_20230306T143927_20230306T144449_C001	_	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001  CS_OFFL_SIR_IOPM_2_20230306T151005_20230306T151853_C001  CS_OFFL_SIR_IOPM_2_20230306T151005_20230306T151853_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SI	CS_OFFL_SIR_IOPM_2_20230306T144508_20230306T144718_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230306T151005_20230306T151853_C001  CS_OFFL_SIR_IOPM_2_20230306T151005_20230306T151853_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T1560838_C001  CCean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T154305_C001  CCean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCOMPA_2_20230306T154128_20230306T154305_C001  CCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCOMPA_2_20230306T154128_20230306T154305_C001  CCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_IOPM_2_20230306T145600_20230306T150617_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
CS_OFFL_SIR_IOPM_2_20230306T151005_20230306T151853_C001  and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T160127_20230306T160838_C001  Altimeter Range and Backscatter Quality, CCOG Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean	CS_OFFL_SIR_IOPM_2_20230306T150620_20230306T150824_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
and Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001  and Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T1524128_20230306T152654_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T160838_C001  and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T160838_C001  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T160127_20230306T160838_C001  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T160127_20230306T160838_C001  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPM_2_20230306T151005_20230306T151853_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154305_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  CS_OFFL_SIR_IOPM_2_20230306T160127_20230306T160838_C001  and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T160127_20230306T160838_C001  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPM_2_20230306T152020_20230306T152242_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, 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  Ocean Altimeter Range, SSHA, SWH Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Flags and Backscatter Quality, OCOG  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPM_2_20230306T152412_20230306T152654_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230306T160127_20230306T160838_C001  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Flags have been set for one or more records.			The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPM_2_20230306T160127_20230306T160838_C001 and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20230306T154128_20230306T154305_C001		The Ocean Altimates Decree COLIA CIVIL and Declaration Overlity Flags	
		and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
CS_OFFL_SIR_IOPM_2_20230306T161000_20230306T161706_C001  Ocean Altimeter Range, SSHA, SWH  and Backscatter Quality, OCOG  Altimeter Range and Backscatter Quality  Set for one or more records	CS_OFFL_SIR_IOPM_2_20230306T154931_20230306T155701_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been	

CS_OFFL_SIR_IOPM_2_20230306T161854_20230306T162349_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_20230306T162425_20230306T162542_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_20230306T163157_20230306T163546_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_20230306T164952_20230306T165842_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_20230306T165936_20230306T170250_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_20230306T170413_20230306T170416_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPM_2_20230306T173122_20230306T173229_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_20230306T174007_20230306T175612_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_20230306T180852_20230306T183633_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_20230306T183745_20230306T184410_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_20230306T190654_20230306T190726_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_20230306T190929_20230306T193549_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_20230306T193821_20230306T194219_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_20230306T194223_20230306T194233_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_20230306T194239_20230306T194604_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_20230306T194826_20230306T201602_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_20230306T204853_20230306T211525_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_20230306T211649_20230306T212134_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_20230306T212138_20230306T212509_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_20230306T212749_20230306T220302_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_20230306T221604_20230306T221739_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_20230306T223638_20230306T224041_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_20230306T224204_20230306T224548_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_20230306T224737_20230306T224947_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_20230306T225147_20230306T225454_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_20230306T225639_20230306T230202_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_OFF	L_SIR_IOPM_2_20230306T230708_20230306T233009_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_OFF	L_SIR_IOPM_2_20230306T233255_20230306T234157_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_OFF	L_SIR_IOPM_2_20230306T235439_20230306T235803_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_OFF	L_SIR_IOPN_2_20230306T034429_20230306T034802_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_OFF	L_SIR_IOPN_2_20230306T040122_20230306T040236_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_OFF	L_SIR_IOPN_2_20230306T043909_20230306T044009_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_OFF	L_SIR_IOPN_2_20230306T102123_20230306T102326_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_OFF	L_SIR_IOPN_2_20230306T172947_20230306T173122_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_OFF	L_SIR_IOPN_2_20230306T190726_20230306T190929_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_OFF	L_SIR_IOPN_2_20230306T194233_20230306T194239_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_OFF	L_SIR_IOPN_2_20230306T194604_20230306T194719_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_OFF	L_SIR_IOPR_2_20230306T004505_20230306T004629_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_OFF	L_SIR_IOPR_2_20230306T040909_20230306T041144_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_OFF	L_SIR_IOPR_2_20230306T054614_20230306T054841_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_OFF	L_SIR_IOPR_2_20230306T080201_20230306T080306_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_OFF	L_SIR_IOPR_2_20230306T100009_20230306T100512_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_OFF	L_SIR_IOPR_2_20230306T152242_20230306T152412_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_OFF	L_SIR_IOPR_2_20230306T193549_20230306T193600_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_OFF	L_SIR_IOPR_2_20230306T230513_20230306T230708_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.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20230306T013131_20230306T013650_C001	IANG BACKSCATTOL CHAINTY PLRIVE CICCUS	The Ocean Altimeter Range, SSHA, SWH 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_20230306T022229_20230306T022642_C001	TAITIMETEL RANGE AND BACKSCATTEL CHAITIV	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS OFFE SIR TOPN 2 202303061031040 202303061031215 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_20230306T034429_20230306T034802_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_20230306T040122_20230306T040236_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_20230306T042346_20230306T042827_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPN_2_20230306T043909_20230306T044009_C001	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_20230306T044110_20230306T044707_C001	TAITIMETER Range and Backscatter Quality I	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPN_2_20230306T052135_20230306T052324_C001	OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPN_2_20230306T054046_20230306T054307_C001	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_20230306T054337_20230306T054525_C001	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_20230306T054543_20230306T054614_C001	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_IOPN_2_20230306T054841_20230306T055004_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_20230306T070155_20230306T070532_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_20230306T080607_20230306T080730_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_20230306T081147_20230306T081438_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_20230306T100919_20230306T101253_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_20230306T102358_20230306T102416_C001	OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one omore records	
CS_OFFL_SIR_IOPN_2_20230306T102834_20230306T102947_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	
	OCOG Altimeter Range Quality PLRM,		
CS_OFFL_SIR_IOPN_2_20230306T104358_20230306T104540_C001	_	The OCOG Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPN_2_20230306T104358_20230306T104540_C001  CS_OFFL_SIR_IOPN_2_20230306T115226_20230306T115527_C001	OCOG Backscatter Quality  OCOG Altimeter Range Quality PLRM,		
	OCOG Backscatter Quality  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  OCOG Altimeter Range Quality PLRM,	more records  The OCOG Range and Backscatter Quality Flags have been set for one or	
CS_OFFL_SIR_IOPN_2_20230306T115226_20230306T115527_C001	OCOG Backscatter Quality  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  OCOG Altimeter Range Quality PLRM,	The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or	
CS_OFFL_SIR_IOPN_2_20230306T115226_20230306T115527_C001  CS_OFFL_SIR_IOPN_2_20230306T125948_20230306T130348_C001	OCOG Backscatter Quality  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPN_2_20230306T115226_20230306T115527_C001  CS_OFFL_SIR_IOPN_2_20230306T125948_20230306T130348_C001  CS_OFFL_SIR_IOPN_2_20230306T134908_20230306T135118_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPN_2_20230306T115226_20230306T115527_C001  CS_OFFL_SIR_IOPN_2_20230306T125948_20230306T130348_C001  CS_OFFL_SIR_IOPN_2_20230306T134908_20230306T135118_C001  CS_OFFL_SIR_IOPN_2_20230306T144719_20230306T144902_C001	OCOG Backscatter Quality  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPN_2_20230306T115226_20230306T115527_C001  CS_OFFL_SIR_IOPN_2_20230306T125948_20230306T130348_C001  CS_OFFL_SIR_IOPN_2_20230306T134908_20230306T135118_C001  CS_OFFL_SIR_IOPN_2_20230306T144719_20230306T144902_C001  CS_OFFL_SIR_IOPN_2_20230306T152715_20230306T153109_C001	OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPN_2_20230306T115226_20230306T115527_C001  CS_OFFL_SIR_IOPN_2_20230306T125948_20230306T130348_C001  CS_OFFL_SIR_IOPN_2_20230306T134908_20230306T135118_C001  CS_OFFL_SIR_IOPN_2_20230306T144719_20230306T144902_C001  CS_OFFL_SIR_IOPN_2_20230306T152715_20230306T153109_C001  CS_OFFL_SIR_IOPN_2_20230306T154551_20230306T154931_C001	OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or more records	

CS_OFFL_SIR_IOPN_2_20230306T184620_20230306T185009_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_20230306T185528_20230306T185550_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_20230306T190527_20230306T190654_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_20230306T190726_20230306T190929_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_20230306T194219_20230306T194223_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_20230306T211525_20230306T211649_C001	OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records	
CS_OFFL_SIR_IOPN_2_20230306T212509_20230306T212629_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_20230306T223546_20230306T223638_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_20230306T225512_20230306T225638_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_20230306T003507_20230306T004222_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_20230306T020816_20230306T021230_C001	LIANG BACKSCATTER CHAINTY PLRIVE OLOG	The Ocean Altimeter Range, SSHA, SWH 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_20230306T021232_20230306T021236_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_20230306T021652_20230306T022117_C001	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_20230306T022117_20230306T022229_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_20230306T024614_20230306T024644_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_20230306T025949_20230306T030608_C001	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_20230306T035450_20230306T035922_C001	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_20230306T035922_20230306T040122_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_20230306T040909_20230306T041144_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_20230306T043703_20230306T043739_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_20230306T043801_20230306T043908_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_20230306T051135_20230306T051621_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_20230306T051621_20230306T052024_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_20230306T053436_20230306T054046_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_20230306T063544_20230306T063554_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_20230306T071144_20230306T071150_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records	

	Ocean Altimeter Range, SSHA, SWH	
CS_OFFL_SIR_IOPR_2_20230306T071447_20230306T071544_C001	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_20230306T071611_20230306T072025_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_20230306T085017_20230306T090110_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_20230306T100009_20230306T100512_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_20230306T102729_20230306T102834_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_20230306T102948_20230306T103024_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_20230306T103319_20230306T104154_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_20230306T104328_20230306T104350_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_20230306T121048_20230306T121326_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_20230306T121415_20230306T122439_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_20230306T135343_20230306T140108_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_20230306T140255_20230306T140622_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_20230306T153256_20230306T153816_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_20230306T153957_20230306T154002_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_20230306T165842_20230306T165936_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_20230306T170417_20230306T170633_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_20230306T171147_20230306T171854_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_20230306T173229_20230306T173248_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_20230306T173249_20230306T173327_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_20230306T173330_20230306T174007_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_20230306T183633_20230306T183745_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_20230306T185010_20230306T185528_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_20230306T185550_20230306T185834_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_20230306T193549_20230306T193600_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_20230306T202703_20230306T203600_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_20230306T203622_20230306T203907_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_20230306T220443_20230306T220503_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_20230306T220631_20230306T221223_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_20230306T221223_20230306T221604_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_20230306T234157_20230306T235155_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_20230306T235155_20230306T235324_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

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

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

63

> 1 Hz and 1 Hz Ocean SSHA Quality Flags: These flags are currently set for products over sea ice, which is to be expected. The number of products with this error flag set is given below.

Number of products with errors: 191

## 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 measurement record. The bit value of this flag indicates any problems when set.

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

Number of products with errors:

#### L2 Retracking Flags (20 Hz PLRM)

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

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

Number of products with errors: 144

## 6. IOP L2 Pole-to-Pole Data Quality Check

#### **6.1 P2P Product Format Check**

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

Number of products with errors:

## **6.2 P2P Product Header Analysis**

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

Number of products with errors: 0

## 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

## 6.4 P2P Auxiliary Correction Error Check

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

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

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

Number of products with errors: 30

Product Test Failed		Description	
	CS_OFFL_SIR_IOP_220230305T235134_20230306T004111_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
	CS_OFFL_SIR_IOP_220230306T004111_20230306T013048_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_220230306T013048_20230306T022025_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
	CS_OFFL_SIR_IOP_220230306T022025_20230306T031003_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
	CS_OFFL_SIR_IOP_220230306T031003_20230306T035940_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

CS_OFFL_SIR_IOP_220230306T035940_20230306T044918_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_220230306T044918_20230306T053855_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_220230306T053855_20230306T062832_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_220230306T062832_20230306T071810_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_220230306T071810_20230306T080747_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_220230306T080747_20230306T085724_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_220230306T085724_20230306T094702_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_220230306T094702_20230306T103639_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_220230306T103639_20230306T112617_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_220230306T112617_20230306T121554_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_220230306T121554_20230306T130531_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_220230306T130531_20230306T135508_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_220230306T135508_20230306T144446_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_220230306T144446_20230306T153423_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_220230306T153423_20230306T162400_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_220230306T162400_20230306T171337_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_220230306T171337_20230306T180315_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_220230306T180315_20230306T185252_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_220230306T185252_20230306T194230_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_220230306T194230_20230306T203207_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220230306T203207_20230306T212145_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_220230306T212145_20230306T221121_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_220230306T221121_20230306T230059_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_220230306T230059_20230306T235036_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_220230306T235036_20230307T004014_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:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220230306T153423_20230306T162400_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 Check**

### P2P Quality Flags (20 Hz)

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

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

Number of products with errors:

30

## P2P Quality Flags (20 Hz PLRM)

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

### P2P Quality Flags (1 Hz & 1 Hz PLRM)

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the number of L2 products affected. The number of P2P products affected is given below.

Number of products with errors:

## 6.8 P2P Ocean Retracking Quality Check

#### P2P Retracking Flags (20 Hz)

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

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

30

30

Number of products with errors: 28

#### P2P Retracking Flags PLRM

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

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

Number of products with errors:

# 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	204	204	4	200	0
SIR_IOPR1B	131	104	1	103	0
SIR_IOPN1B	104	131	0	131	0
SIR_IOPM_2	204	204	147	57	0
SIR_IOPR_2	131	104	39	65	0
SIR_IOPN_2	104	131	50	80	1
SIR_IOP_P2P	29	29	0	28	1

## 7.1 QCC Errors

**Number of QCC reports with errors:** 

8

Total number of occurrences of each error

					rotai number	of occurrences	or each error				
<b>Product Type</b>	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOPR_2	1	1	1	1							
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR IOP 2	1	1	1	1							

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				

## 7.2 QCC Warnings

SIR\_IOP\_2\_

**Number of QCC reports with warnings** 

2195

18

Total number of occurrences of each warning

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_IOPM1B	200	0	0	0	0	0	0
SIR_IOPM_2	0	0	40	41	0	45	0
SIR_IOPN1B	100	0	0	0	0	0	0
SIR_IOPN_2	0	0	13	34	6	28	31
SIR_IOPR1B	127	0	0	0	0	0	0
SIR_IOPR_2	0	1	27	35	0	32	23

Product Type	RBSZOPOEPNCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCD	RPEPOPFDPLRMSINNCDI	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	37	34	0	0	0	0	29
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	20	0	0	18	0	39	0
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	11	0	35	0	43	0	0

Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	0	6	29	0	3	40
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	25	18	47	56	35	33
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	33	0	2	66	27	11	34

_								
	Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-	-
	SIR_IOPM1B	0	0	0	0	0		
	SIR_IOPM_2	0	3	0	0	0		
	SIR_IOPN1B	0	0	0	49	2		
	SIR_IOPN_2	31	14	1	0	0		
	SIR_IOPR1B	0	0	0	131	8		
	SIR IOPR 2	40	3	2	0	0		

	Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCI	RBSZOPOEPNCDF
	SIR_IOP_2_	12	29	29	5	29	18	28
_								
	Product Type	BDEDUDEDDI BWSINNCD	PPEDOPEDSINNCDE	RDEDODSINNCDE	RSSBCONCDE	RSSHAOEDNCDE	RSSHAOEDDI RMNCDE	RSSHAONCDE

Product Type	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_IOP_2_	18	27	18	20	29	19	24
Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-	-

Test Description Key:		
Abbreviation	Test name	Details
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
	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
	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

# 7.3 Missing QCC Reports

Number of products with missing QCC reports: