

## 1. Overview

Report Production:	10-Sep-2021
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1 and 7.2

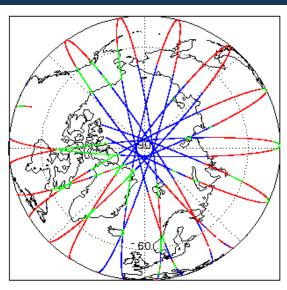
Mission / In	strument	News
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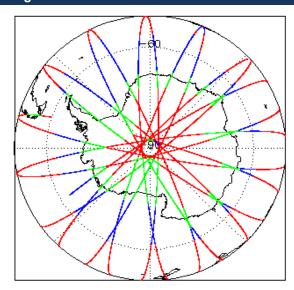
07-Sep-2021 SIRAL unavailability on 07-Sept-2021 from 12:26 to 12:30 due to an unplanned ground segment anomaly.

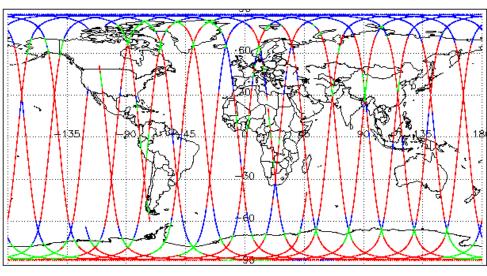
08-Sep-2021 None

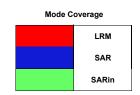
09-Sep-2021 Nothing planned

# 2. Global Coverage









## 3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

## 4. 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 binary product file (.DBL).

#### 4.2 L1B Product Header Analysis

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

L1B Processing Quality HR: The I1b\_proc\_flag\_hr flag is currently set all L1B IOPR and IOPN products because the I1b\_processing\_quality\_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

#### 4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

## 4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

0

0

### 4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20210908T174153_20210908T174711_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

## 4.6 L1B Waveform Group Data Check

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

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

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20210908T034014_20210908T041616_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210908T065909_20210908T071346_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210908T071547_20210908T072508_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210908T074850_20210908T080324_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210908T201711_20210908T202712_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210908T203943_20210908T204758_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210908T024534_20210908T024636_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210908T074406_20210908T074452_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210908T074644_20210908T074850_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210908T092137_20210908T092637_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210908T115422_20210908T115551_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210908T155446_20210908T155526_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210908T191127_20210908T191342_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210908T201453_20210908T201711_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210908T013748_20210908T014024_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210908T155526_20210908T160323_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210908T173427_20210908T174011_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210908T194117_20210908T194256_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 binary product file (.DBL).

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:

## 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

#### 5.4 L2 Auxiliary Correction Error Check

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

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

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Corection, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. 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.

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20210908T010644_20210908T011053_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20210908T092638_20210908T093505_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_IOPM_2_20210908T123058_20210908T123536_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20210908T140512_20210908T140541_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20210908T223812_20210908T224047_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T005521_20210908T005640_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_20210908T014725_20210908T014848_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T015415_20210908T015727_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T032700_20210908T032814_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T033313_20210908T033635_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_20210908T050750_20210908T051026_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_20210908T060305_20210908T060425_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_20210908T064502_20210908T064921_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_20210908T074223_20210908T074327_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_20210908T074644_20210908T074850_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T082521_20210908T082714_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T083537_20210908T083725_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T092137_20210908T092637_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_20210908T114618_20210908T114821_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_20210908T132410_20210908T132730_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_20210908T142303_20210908T142620_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T150305_20210908T150626_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_20210908T155446_20210908T155526_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_20210908T163937_20210908T164135_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T165013_20210908T165145_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_20210908T173326_20210908T173427_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_20210908T182741_20210908T182947_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_20210908T191127_20210908T191342_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_20210908T195756_20210908T195943_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T201453_20210908T201711_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_20210908T204759_20210908T205212_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210908T214722_20210908T214925_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210908T005842_20210908T010643_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_20210908T011535_20210908T011720_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210908T023628_20210908T024407_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_20210908T024408_20210908T024533_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_20210908T041617_20210908T042306_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_20210908T042307_20210908T042640_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_20210908T055536_20210908T060143_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_20210908T060143_20210908T060305_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_20210908T062524_20210908T062737_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_IOPR_2_20210908T073555_20210908T073728_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210908T073756_20210908T073954_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_20210908T073954_20210908T074223_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_20210908T091539_20210908T092137_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_20210908T105651_20210908T110158_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_20210908T122450_20210908T122553_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210908T122626_20210908T122645_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210908T123550_20210908T124400_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_20210908T141443_20210908T142303_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_20210908T174153_20210908T174711_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

## 5.6 L2 Measurement Quality Flag Check

## L2 Quality Flags (20Hz)

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

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

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

CS_OFFL_SIR_IOPM_2_20210908T000854_20210908T000520_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Plags In a Company of the OCOG Altimeter Range and Backscatter Quality Flags In a CS_OFFL_SIR_IOPM_2_20210908T000854_20210908T001343_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T001350_20210908T001720_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T001350_20210908T001720_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T002207_20210908T005521_C001  OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T002207_20210908T005521_C001  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T010644_20210908T011053_C001  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T010644_20210908T011053_C001  OCOG Altimeter Range and Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T012945_20210908T013747_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T012945_20210908T013747_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  OCOG Altimeter Range Range Altimeter Range and Backscatter Quality Plags In a CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  OCOG Altimeter Range Range Altimeter Range Range Altimeter Range Range Altimeter Range Ran	been set been set ty Flags ave been ty Flags ave been been set been set ty Flags ave been been set
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210908T001350_20210908T001720_C001  CS_OFFL_SIR_IOPM_2_20210908T001350_20210908T001720_C001  CS_OFFL_SIR_IOPM_2_20210908T002207_20210908T005521_C001  CS_OFFL_SIR_IOPM_2_20210908T002207_20210908T005521_C001  CS_OFFL_SIR_IOPM_2_20210908T002207_20210908T005521_C001  CS_OFFL_SIR_IOPM_2_20210908T010644_20210908T011053_C001  CS_OFFL_SIR_IOPM_2_20210908T010644_20210908T011053_C001  CS_OFFL_SIR_IOPM_2_20210908T012945_20210908T013747_C001  CS_OFFL_SIR_IOPM_2_20210908T012945_20210908T015414_C001  CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T022220_C001  Backscatter Quality  CCS_OFFL_SIR_IOPM_2_20210908T020134_20210908T022220_C001  CCOCG Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality  CCS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  CCS_OFFL_SIR_IOPM_2_20210908T014849_20210908T022220_C001  CCS_OFFL_SIR_IOPM_2_20210908T020134_20210908T022220_C001	been set  ty Flags ave been  ty Flags ave been  been set  been set  ty Flags ave been  ty Flags ave been
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CS_OFFL_SIR_IOPM_2_20210908T002207_20210908T005521_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.  CS_OFFL_SIR_IOPM_2_20210908T010644_20210908T011053_C001  CS_OFFL_SIR_IOPM_2_20210908T012945_20210908T013747_C001  CS_OFFL_SIR_IOPM_2_20210908T012945_20210908T015414_C001  CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  CS_OFFL_SIR_IOPM_2_20210908T012945_20210908T022220_C001  Altimeter Range Range Quality, OCOG Backscatter Quality, OCOG	ty Flags ave been been set been set ty Flags ty Flags ty Flags ty Flags
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Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210908T014849_20210908T015414_C001  CS_OFFL_SIR_IOPM_2_20210908T020134_20210908T022220_C001  Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210908T020134_20210908T022220_C001  Backscatter Quality  COCG Altimeter Range Quality, OCOG Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210908T020134_20210908T022220_C001  The OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have for one or more records.	ty Flags
Backscatter Quality for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags had backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags had backscatter Qu	ty Flags ave been ty Flags
CS_OFFL_SIR_IOPM_2_20210908T020134_20210908T022220_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags h	ave been
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags Hand Backscatter Quality Flags	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags has been for one or more records.	
CS_OFFL_SIR_IOPM_2_20210908T030619_20210908T032249_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags Hardward Range and Backscatter Quality Set for one or more records.	
CS_OFFL_SIR_IOPM_2_20210908T032815_20210908T033313_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have for one or more records.	been set
CS_OFFL_SIR_IOPM_2_20210908T034014_20210908T041616_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags Hard Backscatter Qua	
CS_OFFL_SIR_IOPM_2_20210908T042641_20210908T042739_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags has been for one or more records.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags had been compared and the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had been compared to the OCOG Altimeter Range and Backscatter Quality Flags had be	
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Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags has been depicted by the control of the control	
CS_OFFL_SIR_IOPM_2_20210908T060426_20210908T060717_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality  The OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.	been set
CS_OFFL_SIR_IOPM_2_20210908T060849_20210908T062523_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags has been decreased as the open control of the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Quality Flags has been decreased as the ocean Altimeter Range and Backscatter Qu	
CS_OFFL_SIR_IOPM_2_20210908T062738_20210908T064159_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags had been been been been been been been bee	
CS_OFFL_SIR_IOPM_2_20210908T064921_20210908T065132_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality  The OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.	been set
CS_OFFL_SIR_IOPM_2_20210908T065217_20210908T065634_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality  The OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.	been set
CS_OFFL_SIR_IOPM_2_20210908T065909_20210908T071346_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been been been been been been been be	
CS_OFFL_SIR_IOPM_2_20210908T071547_20210908T072508_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been dependent on the OCOG Altimeter Range and Backscatter Quality Set for one or more records.	
CS_OFFL_SIR_IOPM_2_20210908T074512_20210908T074643_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been been been been been been been be	
CS_OFFL_SIR_IOPM_2_20210908T074850_20210908T080324_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags in the OCOG Altimeter Range and Backscatter Quality Set for one or more records.	

CS_OFFL_SIR_IOPM_2_20210908T080326_20210908T080438_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_20210908T080939_20210908T082246_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_20210908T082715_20210908T083536_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_20210908T083903_20210908T085502_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_20210908T085609_20210908T085956_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_20210908T092638_20210908T093505_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_20210908T093642_20210908T100230_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_20210908T100858_20210908T101357_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_20210908T101906_20210908T104232_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_20210908T105514_20210908T105546_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_20210908T111528_20210908T114058_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_20210908T114821_20210908T115421_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_20210908T115745_20210908T122449_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_20210908T123058_20210908T123536_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_20210908T124718_20210908T131938_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_20210908T132730_20210908T133253_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_20210908T133708_20210908T133753_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_20210908T133758_20210908T134049_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_20210908T134338_20210908T134709_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_20210908T141057_20210908T141442_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_20210908T142621_20210908T143533_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_20210908T143819_20210908T145940_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_20210908T150626_20210908T150734_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_20210908T150740_20210908T151147_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_20210908T151718_20210908T152653_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_20210908T152841_20210908T153426_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_20210908T160323_20210908T163817_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_20210908T164135_20210908T164633_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_20210908T165734_20210908T172913_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_20210908T173123_20210908T173325_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_20210908T174153_20210908T174711_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_20210908T174714_20210908T175615_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_20210908T180209_20210908T181735_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_20210908T182021_20210908T182532_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_20210908T182609_20210908T182740_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_20210908T183529_20210908T184734_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_20210908T185155_20210908T190753_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_20210908T190937_20210908T191109_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_20210908T193059_20210908T194021_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_20210908T194256_20210908T195626_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_20210908T195943_20210908T200444_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_20210908T201711_20210908T202712_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_20210908T202955_20210908T203508_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_20210908T203943_20210908T204758_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_20210908T211356_20210908T213443_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_20210908T214020_20210908T214402_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_20210908T215131_20210908T221905_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_20210908T223812_20210908T224047_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_20210908T225034_20210908T231429_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_20210908T231802_20210908T232316_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_20210908T232323_20210908T232650_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_IOPN_2_20210908T025336_20210908T025402_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_IOPN_2_20210908T151147_20210908T151312_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_IOPN_2_20210908T190753_20210908T190937_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_IOPN_2_20210908T214417_20210908T214423_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210908T011535_20210908T011720_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210908T011823_20210908T012006_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210908T014158_20210908T014725_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210908T060143_20210908T060305_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210908T073555_20210908T073728_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210908T165640_20210908T165734_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210908T191110_20210908T191127_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

## L2 Quality Flags (20Hz PLRM)

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

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

Number of products with errors:

95

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20210908T000730_20210908T000853_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_20210908T005521_20210908T005640_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_20210908T005720_20210908T005841_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_20210908T012843_20210908T012945_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_20210908T014725_20210908T014848_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_20210908T024534_20210908T024636_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_20210908T030311_20210908T030618_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210908T032700_20210908T032814_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_20210908T051219_20210908T051845_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_20210908T060305_20210908T060425_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_20210908T064305_20210908T064446_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_20210908T064502_20210908T064921_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_20210908T072508_20210908T072545_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_20210908T073728_20210908T073756_C001	OCOG Altimeter Range Quality PLRM,	The OCOG Range and Backscatter Quality Flags have been set for one or
	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH	more records.
CS_OFFL_SIR_IOPN_2_20210908T074223_20210908T074327_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_IOPN_2_20210908T074644_20210908T074850_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_20210908T080439_20210908T080939_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_20210908T082521_20210908T082714_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_20210908T090218_20210908T090605_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_20210908T092137_20210908T092637_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_20210908T100813_20210908T100858_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_20210908T101357_20210908T101626_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_20210908T104232_20210908T104421_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_20210908T105439_20210908T105514_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_20210908T114420_20210908T114540_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_20210908T124400_20210908T124717_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_20210908T132410_20210908T132730_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_20210908T133253_20210908T133412_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_20210908T134710_20210908T134832_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_20210908T135508_20210908T135652_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_20210908T141003_20210908T141057_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_20210908T142303_20210908T142620_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_20210908T150305_20210908T150626_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_20210908T153426_20210908T153647_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_20210908T155236_20210908T155443_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_20210908T155446_20210908T155526_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_20210908T163937_20210908T164135_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_20210908T191127_20210908T191342_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_20210908T201453_20210908T201711_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_20210908T202713_20210908T202955_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_20210908T210823_20210908T211223_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_20210908T213702_20210908T214019_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_20210908T224048_20210908T224211_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_20210908T224942_20210908T225034_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_20210908T231625_20210908T231802_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_20210908T000521_20210908T000729_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_20210908T005640_20210908T005719_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_20210908T005842_20210908T010643_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_20210908T011053_20210908T011154_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_20210908T011535_20210908T011720_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_20210908T014158_20210908T014725_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_20210908T015727_20210908T020134_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_20210908T023628_20210908T024407_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_20210908T024408_20210908T024533_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_20210908T025146_20210908T025327_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_20210908T032250_20210908T032659_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_20210908T033635_20210908T034013_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_20210908T041617_20210908T042306_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_20210908T042307_20210908T042640_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_20210908T042740_20210908T042848_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_20210908T050051_20210908T050749_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_20210908T055536_20210908T060143_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_20210908T062524_20210908T062737_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_20210908T071347_20210908T071512_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_20210908T073555_20210908T073728_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

Comparison	CS_OFFL_SIR_IOPR_2_20210908T073954_20210908T074223_C001  Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  CS_OFFL_SIR_IOPR_2_20210908T093506_20210908T093642_C001  CS_OFFL_SIR_IOPR_2_20210908T100230_20210908T100454_C001  CS_OFFL_SIR_IOPR_2_20210908T100230_20210908T100454_C001  CS_OFFL_SIR_IOPR_2_20210908T100230_20210908T100454_C001  CS_OFFL_SIR_IOPR_2_20210908T100230_20210908T100454_C001  Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLR	have been ality Flags have been et for one or
Comparison   Com	CS_OFFL_SIR_IOPR_2_20210908T082247_20210908T082520_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  CS_OFFL_SIR_IOPR_2_20210908T093506_20210908T093642_C001  CS_OFFL_SIR_IOPR_2_20210908T100230_20210908T100454_C001  CS_OFFL_SIR_IOPR_2_20210908T100230_20210908T100454_C001  And the OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter	have been
Co. CPFL SR (CPPL 2 ACCIDIONI 100000 DOSE AC	OCOG Backscatter Quality  OCOG Backscatter Quality  OCOG Backscatter Quality  OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Flags set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags set for one or more records.	
and Beckesche County PRES COUNTY  COUNTY DESCRIPTION OF THE COUNTY OF TH	CS_OFFL_SIR_IOPR_2_20210908T100230_20210908T100454_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags set for one or more records.	
CS	Ocean Altimeter Range, SSHA, SWH	
Ed. COFFL_SIR_  DOR_2_20010081110508_20010081110500_0001   Coll. COFFL_SIR_  DOR_2_20010081110508_20010081110500_0001   Coll. COFFL_SIR_  DOR_2_20010081110508_20010081110500_0001   Coll. COFFL_SIR_  DOR_2_20010081110508_20010081110500_0001   Coll. COFFL_SIR_  DOR_2_20010081110500_20010081110500_0001   Coll. COFFL_SIR_  DOR_2_20010081110500_20010081110500_0001   Coll. COFFL_SIR_  DOR_2_20010081110500_20010081110500_0001   Coll. COFFL_SIR_  DOR_2_20010081110500_0001   Coll. COFFL_SIR_  DOR_2_20010081110500_00010081100000000000000000	CS_OFFL_SIR_IOPR_2_20210908T101626_20210908T101905_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags set for one or more records.	
CS_OFFL_SR_IOPR_2_20210081110091_20210081110109_001110109_0011   Dear Allmein Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Cook American Rays, SSH-, SWH and Basscader Quality Flags from the Rays and Basscader Quality Flags from the Ra	CS_OFFL_SIR_IOPR_2_20210908T105546_20210908T105630_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags set for one or more records.	
DB_OPPL_SIR_LOPPL_2.0010081114409_201008111978_COID  DB_OPPL_SIR_LOPPL_2.0010081119082_2011008111978_COID  DB_OPPL_SIR_LOPPL_2.0010081119082_201100811978_COID  DB_OPPL_SIR_LOPPL_2.001008112009_201100811978_COID  DB_OPPL_SIR_LOPPL_2.001008112009_201100811978_COID  DB_OPPL_SIR_LOPPL_2.001008112009_201100811978_COID  DB_OPPL_SIR_LOPPL_2.001008112009_201100811978_COID  DB_OPPL_SIR_LOPPL_2.001008112009_201100811978_COID  DB_OPPL_SIR_LOPPL_2.001008112009_201100811940_COID  DB_OPPL_SIR_LOPPL_2.001008112009_201100811940_COID  DB_OPPL_SIR_LOPPL_2.001008113039_201100811940_COID  DB_OPPL_SIR_LOPPL_2.00100811931312_201100811940_COID  DB_OPPL_SIR_LOPPL_2.00100811931312_2011008119410_COID  DB_OPPL_SIR_LOPPL_2.00100	CS_OFFL_SIR_IOPR_2_20210908T105651_20210908T110158_C001 and Backscatter Quality PLRM, 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.	, ,
Description (1997) 1997 (2000) 1997 (1998) 1997 (2000) 1997 (1998) 1997 (2000) 1997 (1998) 1997 (2000) 1997 (1998) 1997 (2000)	CS_OFFL_SIR_IOPR_2_20210908T114059_20210908T114419_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags set for one or more records.	
DOCG Basksorator Coality   Part   Document	CS_OFFL_SIR_IOPR_2_20210908T115552_20210908T115745_C001 and Backscatter Quality PLRM, 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.	
CS_OFFL_SIR_JOPR_2_20210908T13039_20210908T132410_C001  CS_OFFL_SIR_JOPR_2_20210908T131392_20210908T132410_C001  CS_OFFL_SIR_JOPR_2_20210908T131392_20210908T132410_C001  CS_OFFL_SIR_JOPR_2_20210908T14444_20210908T142040_C001  CS_OFFL_SIR_JOPR_2_20210908T14444_20210908T142040_C001  CS_OFFL_SIR_JOPR_2_20210908T15122_20210908T163132_C001  CS_OFFL_SIR_JOPR_2_20210908T15122_20210908T163132_C001  CS_OFFL_SIR_JOPR_2_20210908T15122_20210908T163132_C001  CS_OFFL_SIR_JOPR_2_20210908T163142_20210908T163332_C001  CS_OFFL_SIR_JOPR_2_20210908T174024_20210908T174152_C001  CS_OFFL_SIR_JOPR_2_20210908T174024_20210908T183540_C001  CS_OFFL_SIR_JOPR_2_20210908T174024_20210908T183540_C001  CS_OFFL_SIR_JOPR_2_20210908T174024_20210908T183540_C001  CS_OFFL_SIR_JOPR_2_20210908T174024_20210908T183540_C001  CS_OFFL_SIR_JOPR_2_20210908T183540_C001  CS_OFFL_SIR_JOPR_2_20210908T19343_20210908T19333_C001  CS_OFFL_SIR_JOPR_2_20210908T19343_20210908T193532_C001  CS_OFFL_SIR_JOPR_2_20210908T19343_20210908T193532_C001  CS_OFFL_SIR_JOPR_2_20210908T19343_20210908T193532_C001  CS_OFFL_SIR_JOPR_2_20210908T19343_20210908T193532_C001  CS_OFFL_SIR_JOPR_2_20210908T19343_20210908T193532_C001  CS_OFFL_SIR_JOPR_2_20210908T19343_20210908T193532_C001  CS_OFFL_SIR_JOPR_2_20210908T19343_20210908T193532_C001  CS_OFFL_SIR_JOPR_2_202109		t for one or
and Backscatter Quality PLRM.  CS_OFFL_SIR_JOPR_2_20210008T140738_20210008T140946_C001  CS_OFFL_SIR_JOPR_2_20210008T140738_20210008T140946_C001  CS_OFFL_SIR_JOPR_2_20210008T141443_20210008T142303_C001  CS_OFFL_SIR_JOPR_2_20210008T141443_20210008T142303_C001  CS_OFFL_SIR_JOPR_2_20210008T151312_20210008T162303_C001  CS_OFFL_SIR_JOPR_2_20210008T151312_20210008T163308_C001  CS_OFFL_SIR_JOPR_2_20210008T16332_C001  CS_OFFL_SIR_JOPR_2_20210008T16332_C001  CS_OFFL_SIR_JOPR_2_20210008T163338_C001  CS_OFFL_SIR_JOPR_2_20210008T163338_C001  CS_OFFL_SIR_JOPR_2_20210008T16348_20210008T16540_C001  CS_OFFL_SIR_JOPR_2_20210008T16348_20210008T16540_C001  CS_OFFL_SIR_JOPR_2_20210008T174024_20210008T16540_C001  CS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174152_C001  CS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174152_C001  CS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174152_C001  CS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174152_C001  CS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174012_C001  CCS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174012_C001  CCS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174012_C001  CCS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174012_C001  CCS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174012_C001  CCS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174012_C001  CCS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174012_C001  CCS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174012_C001  CCS_OFFL_SIR_JOPR_2_20210008T174024_20210008T174008_C001  Allimater Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPR_2_20210908T123550_20210908T124400_C001 and Backscatter Quality PLRM, 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 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 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 and Backscatter Quality Fla	
CS_OFFL_SIR_IOPR_2_2021008T141443_2021008T142303_C001  CS_OFFL_SIR_IOPR_2_2021008T141443_2021008T142303_C001  CS_OFFL_SIR_IOPR_2_2021008T151312_2021008T16718_C001  CS_OFFL_SIR_IOPR_2_2021008T1631312_2021008T160323_C001  CS_OFFL_SIR_IOPR_2_2021008T163818_2021008T160323_C001  CS_OFFL_SIR_IOPR_2_2021008T163818_2021008T160323_C001  CS_OFFL_SIR_IOPR_2_2021008T163818_2021008T160323_C001  CS_OFFL_SIR_IOPR_2_2021008T163818_2021008T160323_C001  CS_OFFL_SIR_IOPR_2_2021008T163818_2021008T160323_C001  CS_OFFL_SIR_IOPR_2_2021008T163818_2021008T160323_C001  CS_OFFL_SIR_IOPR_2_2021009ST163818_2021008T160323_C001  CS_OFFL_SIR_IOPR_2_2021009ST163818_2021008T160323_C001  CS_OFFL_SIR_IOPR_2_2021009ST163818_20210008T16540_C001  CS_OFFL_SIR_IOPR_2_2021009ST163818_2021008T16540_C001  CS_OFFL_SIR_IOPR_2_2021009ST165440_2021008T16540_C001  CS_OFFL_SIR_IOPR_2_2021009ST174024_2021008T174152_C001  CS_OFFL_SIR_IOPR_2_2021009ST174024_2021008T174152_C001  CS_OFFL_SIR_IOPR_2_2021009ST18248_2021008T185528_C001  CS_OFFL_SIR_IOPR_2_2021009ST18248_2021008T185528_C001  CS_OFFL_SIR_IOPR_2_2021009ST18248_2021008ST165528_C001  CS_OFFL_SIR_IOPR_2_2021009ST18248_2021009ST174152_C001  CS_OFFL_SIR_IOPR_2_2021009ST18248_2021009ST185528_C001  CS_OFFL_SIR_IOPR_2_2021009ST18248_2021009ST1	CS_OFFL_SIR_IOPR_2_20210908T131939_20210908T132410_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and Backscatter Qua	
CS_OFFL_SIR_IOPR_2_20210908T161342_20210908T16303_C001  and Backscatter Quality PLRM, CCCC Altimeter Range and Backscatter Quality PLRM CCCC Altimeter Range and Backscatter Quality PLRM CCCC Altimeter Range and Backscatter Quality PLRM, CCCC Altimeter Range and Backscatter Quality PLRM, CCCC Altimeter Range and Backscatter Quality PLRM, CCCC Altimeter Range and Backscatter Quality Flags have been and backscatter Quality PLRM, CCCC Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, CCCC Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, CCCC Altimeter Range and Backscatter Quality PLRM, CCCC Altimeter Range, SSHA, SWH and Backscatter Quality Plags have been set for one or records.  CS_OFFL_SIR_IOPR_2_20210908T163818_20210908T163936_C001  CS_OFFL_SIR_IOPR_2_20210908T163818_20210908T163936_C001  CS_OFFL_SIR_IOPR_2_20210908T163162_20210908T165640_C001  CS_OFFL_SIR_IOPR_2_20210908T165146_20210908T165640_C001  CS_OFFL_SIR_IOPR_2_20210908T174074_20210908T174011_C001  CS_OFFL_SIR_IOPR_2_20210908T174074_20210908T174011_C001  CS_OFFL_SIR_IOPR_2_20210908T174074_20210908T174011_C001  CS_OFFL_SIR_IOPR_2_20210908T174024_20210908T174152_C001  CS_OFFL_SIR_IOPR_2_20210908T174024_20210908T174015_C001  CS_OFFL_SIR_IOPR_2_20210908T174024_20210908T174015_C001  CS_OFFL_SIR_IOPR_2_20210908T182948_20210908T185154_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T185154_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T185154_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T185154_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T205773_2001  CCCOG Altimeter Range and Backscatter Quality Fla		t for one or
and Backscater Quality FLRM, CCCG Altimeter Range, SPHA, SWH and Backscater Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPR_2_20210908T16536_20210908T160323_C001  CS_OFFL_SIR_IOPR_2_20210908T16536_20210908T160333_C001  CS_OFFL_SIR_IOPR_2_20210908T163318_20210908T163336_C001  CS_OFFL_SIR_IOPR_2_20210908T163318_20210908T163336_C001  CS_OFFL_SIR_IOPR_2_20210908T16346_20210908T16540_C001  CS_OFFL_SIR_IOPR_2_20210908T16546_20210908T165640_C001  CS_OFFL_SIR_IOPR_2_20210908T174072_20210908T174011_C001  CS_OFFL_SIR_IOPR_2_20210908T174072_20210908T174011_C001  CS_OFFL_SIR_IOPR_2_20210908T174072_20210908T174011_C001  CS_OFFL_SIR_IOPR_2_20210908T182946_20210908T18528_C001  CS_OFFL_SIR_IOPR_2_20210908T182946_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T182946_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T182946_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T182946_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T182946_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T182946_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T182946_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T182946_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T19343_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T18343_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T18343_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T18343_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T19343_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T19343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T19343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T19343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T19343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T19343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T19343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205732_C001  CS_OFFL_	CS_OFFL_SIR_IOPR_2_20210908T141443_20210908T142303_C001 and Backscatter Quality PLRM, 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.	, ,
and Backscatter Quality P.LRM, OCOG Altimeter Range and Backscatter Quality P.LRM, OCOG Altimeter Range and Backscatter Quality P.LRM on the Coop Altimeter Range and Backscatter Quality P.LRM on the Coop Altimeter Range and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range and Backscatter Quality P.LRM, OCOG Altimeter Range and Backscatter Quality P.LRM, OCOG Altimeter Range and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality P.LRM, OCOG Altimeter Range and Backscatter Quality P.LRM, OCOG Altimeter Range, S	CS_OFFL_SIR_IOPR_2_20210908T151312_20210908T151718_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and Backscatter Qua	
CS_OFFL_SIR_IOPR_2_20210908T163918_20210908T165936_C001  Allimeter Range and Backscatter Quality PLRM, OCOG Allimeter Range, SSHA, SWH and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_IOPR_2_20210908T173427_20210908T174011_C001  CS_OFFL_SIR_IOPR_2_20210908T173427_20210908T174011_C001  CS_OFFL_SIR_IOPR_2_20210908T174024_20210908T174011_C001  CS_OFFL_SIR_IOPR_2_20210908T174024_20210908T174152_C001  CS_OFFL_SIR_IOPR_2_20210908T185948_20210908T18554_C001  CS_OFFL_SIR_IOPR_2_20210908T184916_20210908T185154_C001  CS_OFFL_SIR_IOPR_2_20210908T19333_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T19333_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T205212_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205730_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205730_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205757_20210908T205757_20210908T205757_20210908T205757_20210908T205757_20210908T205757_202	CS_OFFL_SIR_IOPR_2_20210908T155526_20210908T160323_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags set for one or more records.	
CS_OFFL_SIR_IOPR_2_20210908T165146_20210908T165640_C001  Alimeter Range and Backscatter Quality PLRM, OCOG Alimeter Range and Backscatter Quality PLRM and Backscatter Quality PLRM, OCOG Alimeter Range and Backscatter Quality PLRM, OCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Alimeter Range and Backscatter Quality PLRM, OCOG Alimeter Range and Backscatter Quality PLRM, OCOG Alimeter Range and Backscatter Quality PLRM, OCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Alimeter Range and Backscatter Quality PLRM, OCOG Alimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Alimeter Range and Backscatter Quality PLRM, OCOG Alimeter Range and Bac	CS_OFFL_SIR_IOPR_2_20210908T163818_20210908T163936_C001 and Backscatter Quality PLRM, 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.	
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altim	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and Backscatter Quality Flags and Backscatter Quality Flags	
CS_OFFL_SIR_IOPR_2_20210908T182948_20210908T183528_C001  CS_OFFL_SIR_IOPR_2_20210908T182948_20210908T183528_C001  CS_OFFL_SIR_IOPR_2_20210908T184916_20210908T185154_C001  CS_OFFL_SIR_IOPR_2_20210908T184916_20210908T185154_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T205212_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  CS_OFFL_SIR_IOPR_2_20210908T213444_20210908T20572C_C001  CCGA Altimeter Range (Quality PLRM, OCOGA (Impeter Range) (SSHA, SWH) (And Backscatter Quality PLRM, OCOGA (Impeter Range) (SSHA, SWH) (CCGA (Impeter	CS_OFFL_SIR_IOPR_2_20210908T173427_20210908T174011_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and Backscatter Qua	
Adtimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM oCOG Altimeter Range and Backscatter Quality PLRM oCOG Altimeter Range and Backscatter Quality PLRM, oCOG Backscatter Quality PLRM, oCOG Backscatter Quality PLRM, oCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM oCOG Altimeter Range and Backscatter Quality PLRM, oCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, oCOG Altimeter Range and Backscatter Quality PLRM, oCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, oCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, oCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, oCOG Altimeter Range and Backscatter Quality PLRM,		t for one or
OCOG Backscatter Quality  CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  CS_OFFL_SIR_IOPR_2_20210908T205212_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205212_20210908T205732_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  OCOG Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG 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_IOPR_2_20210908T182948_20210908T183528_C001 and Backscatter Quality PLRM, 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.	
CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPR_2_20210908T205212_20210908T205733_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  CS_OFFL_SIR_IOPR_2_20210908T213444_20210908T213702_C001  Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPR_2_20210908T213444_20210908T213702_C001  CS_OFFL_SIR_IOPR_2_20210908T213444_20		t for one or
CS_OFFL_SIR_IOPR_2_20210908T205212_20210908T205733_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  CS_OFFL_SIR_IOPR_2_20210908T205757_20210908T205924_C001  CS_OFFL_SIR_IOPR_2_20210908T213444_20210908T213702_C001  Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPR_2_20210908T191343_20210908T192036_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags set for one or more records.	
OCOG Backscatter Quality  OCOG Backscatter Quality  OCOG Backscatter Quality  More records.  OCOG Backscatter Quality  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been an	CS_OFFL_SIR_IOPR_2_20210908T205212_20210908T205733_C001 and Backscatter Quality PLRM, 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.	
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality Flags have		t for one or
PLRM set for one or more records.	CS_OFFL_SIR_IOPR_2_20210908T213444_20210908T213702_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and Backscatter Qua	

CS_OFFL_SIR_IOPR_2_20210908T214926_20210908T215130_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_20210908T223035_20210908T223812_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_20210908T231430_20210908T231625_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_20210908T232949_20210908T233046_C001	Altimeter Range and Backscatter Cicality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

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

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

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

Number of products with errors: 184

#### 5.8 L2 Ocean Retracking Quality Check

#### L2 Retracking Flags (20Hz)

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

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

Number of products with errors:

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

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

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

Number of products with errors:

## 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:

## 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

#### 6.4 P2P Auxiliary Correction Error Check

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220210908T001407_20210908T010346_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_220210908T010346_20210908T015322_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_220210908T015322_20210908T024300_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_220210908T024300_20210908T033236_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_220210908T033236_20210908T042215_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_220210908T042215_20210908T051151_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T051151_20210908T060130_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

CS_OFFL_SIR_IOP_2_20210908T060130_20210908T065106_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_2_20210908T065106_20210908T074044_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T074044_20210908T083020_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T083020_20210908T091959_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T091959_20210908T100935_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_2_20210908T100935_20210908T105914_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_220210908T105914_20210908T114850_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_2_20210908T114850_20210908T123828_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T123828_20210908T132805_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T132805_20210908T141743_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T141743_20210908T150719_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T150719_20210908T155658_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_2_20210908T155658_20210908T164634_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T164634_20210908T173612_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T173612_20210908T182548_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T182548_20210908T191527_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T191527_20210908T200503_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T200503_20210908T205442_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T205442_20210908T214418_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T214418_20210908T223356_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210908T223356_20210908T232332_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)

## 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_220210908T173612_20210908T182548_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

#### 6.6 P2P Measurement Quality Flag Check

## P2P Quality Flags (20Hz)

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

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

Number of products with errors: 29

#### P2P Quality Flags (20Hz PLRM)

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

Number of products with errors: 2

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

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

Number of products with errors:

### 6.8 P2P Ocean Retracking Quality Check

## P2P Retracking Flags (20Hz)

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

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

#### 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:

29

## 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	145	145	8	137	0
SIR_IOPR1B	103	99	1	98	0
SIR_IOPN1B	99	103	0	103	0
SIR_IOPM_2	145	145	88	57	0
SIR_IOPR_2	103	99	36	63	0
SIR_IOPN_2	99	103	24	78	1
SIR_IOP_P2P	28	28	0	27	1

#### 7.1 QCC Errors

Number of QCC reports with errors:

8

Total number of occurrences of each error

Product Type RI	LOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOPR_2	1	1	1	1							
Product Type RI	LOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOP_2_	1	1	1	1							

<b>Test Description Key:</b>	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

Number of QCC reports with warnings

2210

Total number of occurrences of each warning

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_IOPM1B	137	0	0	0	0	0	0
SIR_IOPM_2	0	0	44	46	0	44	0
SIR_IOPN1B	97	0	0	0	0	0	0
SIR_IOPN_2	0	0	13	31	5	25	31
SIR_IOPR1B	94	0	0	0	0	0	0
SIR IOPR 2	0	1	38	42	1	37	35

Product Type	RBSZOPOEPNCDF	RLPTONCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCE	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	38	2	1	37	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	21	15	1	0	0	25	0
SIR_IOPR1B	0	0	0	0	0	0	0
SID IODD 2	21	18	6	n	43	0	52

Product Type	RPEPOPFDSINNCDF	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	35	0	0	11	33	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	30	0	0	25	19	39	49
SIR_IOPR1B	0	0	0	0	0	0	0
SIR IOPR 2	0	0	43	0	0	64	44

Г	Durada Atras	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	DEMILOEDNODE	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
L	Product Type	RSSHAUNCUF	RSWHOEPFDNCDF	KSWHOEPFDPLKWINCDF	KSWHOEPNCDF	SOURHIFHD	SCSTODHRNCDF	SCSTODNCDF
	SIR_IOPM1B	0	0	0	0	0	0	0
	SIR_IOPM_2	4	43	0	3	0	0	0
	SIR_IOPN1B	0	0	0	0	0	47	0
	SIR_IOPN_2	32	29	28	11	1	0	0
	SIR_IOPR1B	0	0	0	0	0	103	3
	SIR IOPR 2	7	34	48	0	1	0	0

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_IOP_2_	16	28	28	5	28	18	28
Product Type	RLPTONCDF	RNELPOTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF
SIR_IOP_2_	24	6	18	28	21	21	28

Product Type	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	•
SIR IOP 2	17	23	28	18	12	28	

Test Description Key:	est 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							

RLPTONCDF	RangeLongPeriodTideOceanNetCDF	The Long period tide height should be between -50mm and 50mm (or missing) for surface type = ocean
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
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: