

# **QA4EO Daily Report for IOP data:**

27/09/2021

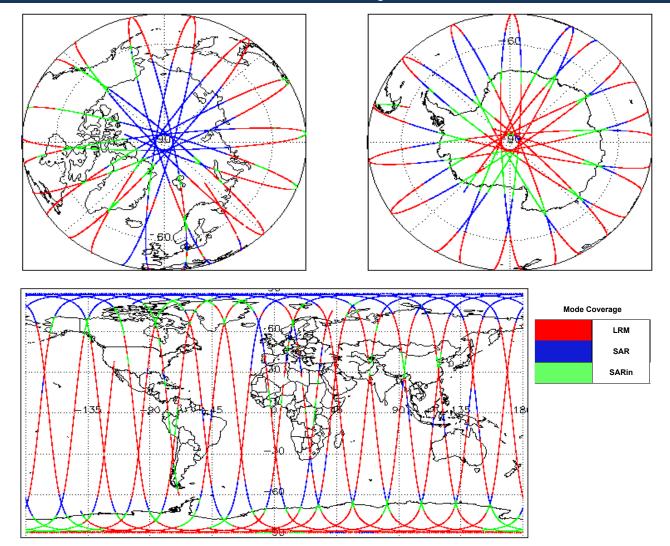
		Check	L1 & L2	P2P
Report Production:	30-Sep-2021	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Des ses se la sela		Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Intermediate Ocean Products (IOP)	Product Format Check	Nominal	Nominal
Data Used:	L1B, L2 & P2P Science Data	Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
		Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
		Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
		Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
		QCC Error/ Warning Check	See Section 7.2	See Section 7.2

1. Overview

# Mission / Instrument News 26-Sep-2021 None 27-Sep-2021 None

28-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). 0

4.2 L1B Product Header Ana	ysis
For all products, a series of pre-defined ch	cks 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_pro OSARIn chains. A modification is required	c_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 n the next release.
Number of products with errors:	0
4.3 L1B Auxilary Data File Us	age 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:	0
4.4 L1B Auxiliary Correction	Error Check
CryoSat L1B data includes a correction err	or flag for each measurement record. The bit value of this flag indicates any problems when set.
Number of products with errors:	0
4.5 L1B Measurement Confic	ence Data Check
CryoSat L1B data includes a measuremen	confidence flag for each measurement record. The bit value of this flag indicates any problems when set.
Attitude Correction Missing: This flag is	surrently 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_20210927T105000_20210927T111624_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_20210926T235854_20210927T000346_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210927T023225_20210927T030809_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210927T094735_20210927T094756_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210927T130354_20210927T130659_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210927T163402_20210927T164826_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210927T165307_20210927T165519_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210927T045519_20210927T045639_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210927T144509_20210927T144737_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210927T180339_20210927T180555_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210927T193918_20210927T194430_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210927T225601_20210927T225947_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210927T230730_20210927T230806_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210927T014257_20210927T014518_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210927T143613_20210927T143939_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210927T144737_20210927T145532_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210927T162640_20210927T163402_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210927T222026_20210927T222253_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: 0

#### 5.2 L2 Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. Number of products with errors: 0

### 5.3 L2 Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct. Number of products with errors: 0

#### 5.4 L2 Auxiliary Correction Error Check

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

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

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric 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.

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Number of products with errors: 51		
Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20210926T235854_20210927T000346_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_20210927T213031_20210927T213257_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_20210927T003940_20210927T004100_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_20210927T004629_20210927T004946_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_20210927T013742_20210927T013834_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_20210927T014121_20210927T014233_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_20210927T021906_20210927T022020_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_20210927T022527_20210927T022843_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Perior 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_20210927T040001_20210927T040239_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_20210927T040432_20210927T041017_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_20210927T045519_20210927T045639_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_20210927T053825_20210927T054138_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_20210927T063430_20210927T063537_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_20210927T071734_20210927T071937_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_20210927T081345_20210927T081932_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_20210927T085708_20210927T085825_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_20210927T103628_20210927T103748_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_20210927T121617_20210927T121944_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_20210927T130249_20210927T130336_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_20210927T131459_20210927T131729_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_20210927T140401_20210927T140525_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_20210927T144509_20210927T144737_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Perioc Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_IOPN_2_20210927T162535_20210927T162640_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_20210927T171959_20210927T172200_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_20210927T180339_20210927T180555_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_20210927T193918_20210927T194430_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_20210927T203913_20210927T204134_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_20210927T211713_20210927T212254_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_20210927T220845_20210927T221009_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_20210927T234846_20210927T235011_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_20210927T000728_20210927T000918_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_20210927T012930_20210927T013620_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_20210927T013620_20210927T013742_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_20210927T030809_20210927T031520_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_20210927T031520_20210927T031834_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_20210927T044750_20210927T045411_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_20210927T045411_20210927T045519_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_20210927T053634_20210927T053825_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20210927T062746_20210927T063010_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_20210927T063010_20210927T063430_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_20210927T080818_20210927T081345_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_20210927T094902_20210927T095403_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_20210927T112744_20210927T113604_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_20210927T130659_20210927T131459_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_20210927T144737_20210927T145532_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_20210927T162640_20210927T163402_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_20210927T180555_20210927T181226_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_20210927T194430_20210927T194954_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_20210927T194959_20210927T195145_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_20210927T212254_20210927T213031_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_20210927T225947_20210927T230730_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:
 1

 Product
 Test Failed
 Description

 CS\_OFFL\_SIR\_IOPM\_2\_20210927T105000\_20210927T111624\_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.

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Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20210926T235854_20210927T000346_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_20210927T003247_20210927T003410_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_20210927T004100_20210927T004629_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_20210927T005356_20210927T012835_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_20210927T013834_20210927T014056_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_20210927T015843_20210927T021449_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_20210927T022020_20210927T022527_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_20210927T023225_20210927T030809_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_20210927T031834_20210927T031949_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_20210927T033020_20210927T035302_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_20210927T041219_20210927T042355_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_20210927T042516_20210927T042623_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_20210927T042636_20210927T042854_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_20210927T043335_20210927T044750_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_20210927T050029_20210927T051754_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_20210927T051949_20210927T053405_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_20210927T054439_20210927T054846_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_20210927T055129_20210927T060356_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_20210927T060515_20210927T060601_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_20210927T060801_20210927T061724_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_20210927T063727_20210927T063911_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_20210927T063947_20210927T065649_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_20210927T070219_20210927T071107_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_20210927T071111_20210927T071456_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_20210927T071937_20210927T072749_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_20210927T073109_20210927T074601_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_20210927T075036_20210927T075441_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_20210927T081932_20210927T082812_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_20210927T082848_20210927T085441_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_20210927T090106_20210927T090624_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_20210927T091127_20210927T093418_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_20210927T093745_20210927T094341_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_20210927T094341_20210927T094706_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_20210927T100707_20210927T103326_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_20210927T104034_20210927T104639_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_20210927T105000_20210927T111624_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_20210927T112049_20210927T112744_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_20210927T113949_20210927T121139_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_20210927T121944_20210927T122511_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_20210927T122917_20210927T123303_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_20210927T130354_20210927T130659_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_20210927T131843_20210927T132746_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_20210927T133030_20210927T135150_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_20210927T140929_20210927T142539_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_20210927T144341_20210927T144427_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_20210927T145532_20210927T153036_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_20210927T153412_20210927T153847_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_20210927T153907_20210927T154253_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_20210927T154949_20210927T162132_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_20210927T163402_20210927T164826_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_20210927T165307_20210927T165519_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_20210927T165616_20210927T171000_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_20210927T171229_20210927T171747_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_20210927T171822_20210927T171959_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_20210927T172805_20210927T174127_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_20210927T174535_20210927T180056_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_20210927T182304_20210927T183153_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_20210927T183507_20210927T184843_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_20210927T185156_20210927T185659_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_20210927T185736_20210927T185837_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_20210927T190532_20210927T190639_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_20210927T191136_20210927T191800_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_20210927T192251_20210927T192720_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_20210927T193003_20210927T193551_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_20210927T193713_20210927T193918_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_20210927T200653_20210927T202711_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_20210927T203225_20210927T203616_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_20210927T204348_20210927T211112_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_20210927T214311_20210927T220637_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_20210927T221009_20210927T221531_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_20210927T221538_20210927T221904_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_20210927T222253_20210927T225520_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_20210927T230847_20210927T230958_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_20210927T231030_20210927T231544_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_20210927T232009_20210927T233837_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_20210927T234201_20210927T234600_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_20210927T235011_20210927T235810_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_20210927T003940_20210927T004100_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_20210927T013742_20210927T013834_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_20210927T045911_20210927T050029_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_20210927T063629_20210927T063727_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_20210927T162132_20210927T162239_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_20210927T203632_20210927T203638_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_20210927T213902_20210927T214038_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_20210927T123303_20210927T123554_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_20210927T143613_20210927T143939_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_20210927T162640_20210927T163402_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality 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.

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Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20210927T001349_20210927T001455_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_20210927T001756_20210927T001934_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_20210927T001951_20210927T002325_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_20210927T003940_20210927T004100_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_20210927T004629_20210927T004946_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_20210927T013742_20210927T013834_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_20210927T014121_20210927T014233_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_20210927T021906_20210927T022020_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_20210927T022527_20210927T022843_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_20210927T040001_20210927T040239_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_20210927T040432_20210927T041017_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_20210927T045519_20210927T045639_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_20210927T053552_20210927T053634_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_20210927T053825_20210927T054138_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_20210927T061724_20210927T061942_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_20210927T063629_20210927T063727_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_20210927T065649_20210927T070219_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_20210927T072749_20210927T072937_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_20210927T075909_20210927T075942_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_20210927T081345_20210927T081932_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_20210927T085708_20210927T085825_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_20210927T094706_20210927T094735_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_20210927T094839_20210927T094902_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

GS_OFFL_SR_UOPN_2_202100271103043_202100271104034_0001         COGG Allineser Range Quality PLINI, DOGG Baskscatter Quality PLINI, DOGG Baskscatter Quality PLINI, DOGG Baskscatter Quality PLINI, DOGG Allineser Range Quality PLINI, DOGG Allineser Range Quality PLINI, DOGG Allineser Range Quality PLINI, DOGG Baskscatter Quality Flags have been act for inner records.         The OCOG Range end Baskscatter Quality Flags have been act for inner records.           GS_OFFL_SR_UOPN_2_202100271113049_020109271113049_0201         COGG Allineser Range Quality PLINI, DOGG Baskscatter Quality Flags have been act for inner records.         The OCOG Range end Baskscatter Quality Flags have been act for inner records.           GS_OFFL_SR_UOPN_2_202100271113049_02010927114209_0001         COGG Allineser Range Quality PLINI, DOGG Baskscatter Quality Flags have been act for inner records.         The OCOG Range end Baskscatter Quality Flags have been act for inner records.           GS_OFFL_SR_UOPN_2_202100271142509_00010771142509_0001         COGG Allineser Range Quality PLINI, DOGG Allineser Range Quality PLINI, DOGG Allineser Range Quality PLINI, The OCOG Range end Baskscatter Quality Flags have been act for inner records.         The OCOG Range end Baskscatter Quality Flags have been act for inner records.           GS_OFFL_SR_UOPN_2_202100271142509_00010271142509_0001         COGG Allineser Range Quality PLINI, Marker Range SMS ANNI PLINI         The OCOG Range end Baskscatter Quality Flags have been act for inner records.           GS_OFFL_SR_UOPN_2_202100271142509_0001271142509_0001         COGG Allineser Range Quality PLINI, Marker Range Quality PLINI, COGG Allineser Range Quality PLINI, Marker Range Quality PLINI, COGG Allineser Range Quality PLINI, Marker Range Quality PL
Corpert_SiR_UOPU_2_0210027110969_022100271119260_0001         COCG Backscatter Quality         or more records.           CS_OFFL_SIR_UOPU_2_0210027111364_020100271119260_0001         COCG Backscatter Quality         The COCG Barge and Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_UOPU_2_02100271113264_020100271113728_0001         COCG Backscatter Quality         The COCG Barge and Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_UOPU_2_02100271132542_0001         COCG Allmeter Range Quality PLRM, The COCG Barge and Backscatter Quality Flags have been set for one records.         The COCG Barge and Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_UOPU_2_02100271142309_02100271142309_02100271142307_COCI         COCGG Backscatter Cuality Flags have been set for one records.           CS_OFFL_SIR_UOPU_2_02100271142309_02100271142307_02100271144377_COCI         COCGG Backscatter Cuality Flags have been set for one records.           CS_OFFL_SIR_UOPU_2_02100271142309_02100271154112_COCI         COCGG Backscatter Cuality Flags have been set for one records.           CS_OFFL_SIR_UOPU_2_02100271154230_02100271154112_COCI         COCGG Backscatter Cuality Flags have been set for one records.           CS_OFFL_SIR_UOPU_2_02100271154210_COCI         COCGG Backscatter Cuality Flags have been set for one records.           CS_OFFL_SIR_UOPU_2_02100271154210_COCI         COCGG Backscatter Cuality Flags have been set for one records.           CS_OFFL_SIR_UOPU_2_02100271154053_02100271154410_COCI         COCGG Backscatter Cu
CD-PFL_SR_UOPL_2_002108271131458_00210827113178_C001         DCOG Backscatter Quality         or more records.           CS_OFFL_SR_UOPL_2_002108271131458_00210827113178_C001         CCOG Altrester Rauge Quality PLRM. CCOG Backscatter Quality         The CCOG Range and Backscatter Quality Flags have been set for more records.           CS_OFFL_SR_UOPL_2_00210827114258_002108271142680_C001         CCCOG Altrester Rauge Quality PLRM. CCCOG Altrester Rauge Quality PLRM. CCCCOG Altrester Rauge Quality PLRM. CCCOG Altrester Rauge Quality PLRM. CCCCOG Altrester Rauge Quality PLRM. CCCCOG Altrester Rauge Quality PLRM. CCCCOG Altrester Rauge ASSA. Statuterer Rauge and Backscatter Quality PLRM. CCCCOG Altrester Rauge Quality PLRM. CCCCOG Altrester Rauge Quality PLRM. CCCCG Al
CS_OFFL_SIR_JOPN_2_20210927T135623_20210927T135844_C001       OCOG Bindscatter Quality       Immore records.         CS_OFFL_SIR_JOPN_2_20210927T135623_20210927T135844_C001       OCOG Altimeter Range Quality PLRM, COGG Backscatter Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for irrore records.         CS_OFFL_SIR_JOPN_2_20210927T142539_20210927T142906_C001       OCOG Altimeter Range AGMAS SMH, ord Backscatter Quality PLRM, CoCGG Backscatter Quality PLRM, The OCOG Altimeter Range, SSHA, SMH and Backscatter Quality Flags have been set for irrore records.         CS_OFFL_SIR_JOPN_2_20210927T144509_20210927T144737_C001       Minter Range, SSHA, SMH and Backscatter Quality Flags have been set for irrore records.         CS_OFFL_SIR_JOPN_2_20210927T145022_20210927T155312_C001       Ocean Altimeter Range, SSHA, SMH and Backscatter Quality Flags have tell for into irrore records.         CS_OFFL_SIR_JOPN_2_20210927T154253_20210927T155412_C001       Minter Range, SSHA, SMH and Backscatter Quality Flags have tell for into irrore records.         CS_OFFL_SIR_JOPN_2_20210927T17154253_20210927T1752410_C001       Minter Range Quality FLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for irrore records.         CS_OFFL_SIR_JOPN_2_20210927T1719459_20210927T172200_C001       OCOG Altimeter Range Quality FLRM, COGG Backscatter Quality FLRM, The OCOGR Range and Backscatter Quality Flags have been set for irrore records.         CS_OFFL_
CS_OFF_SIR_IOPN_2_202109271142038_202109271142096_C001         OCOG Backscatter Quality         or more records.           CS_OFFL_SIR_IOPN_2_202109271142038_202109271142096_C001         OCOG Attimeter Range Quality PLRM         The OCOG Range and Backscatter Quality           CS_OFFL_SIR_IOPN_2_202109271142038_202109271144737_C001         Attimeter Range SIAA.SWH         The OCOG Attimeter Range, SIAA.SWH           CS_OFFL_SIR_IOPN_2_202109271142037_20109271144737_C001         Attimeter Range, SIAA.SWH         The OCOG Attimeter Range, SIAA.SWH           CS_OFFL_SIR_IOPN_2_202109271153212_202109271153412_C001         Attimeter Range, SIAA.SWH         The OCOG Attimeter Range, SIAA.SWH           CS_OFFL_SIR_IOPN_2_202109271154253_202109271154410_C001         Attimeter Range Quality PLRM.         The OCOG Attimeter Range, SIAA.SWH           CS_OFFL_SIR_IOPN_2_202109271174203_202109271172200_C001         OCOG Attimeter Range Quality PLRM.         The OCOG Range and Backscatter Quality           CS_OFFL_SIR_IOPN_2_202109271171980_202109271172200_C001         OCOG Attimeter Range Quality PLRM.         The OCOG Range and Backscatter Quality Flags have been set for more records.           CS_OFFL_SIR_IOPN_2_202109271190539_20210927119230_C001         OCOG Attimeter Range Quality PLRM.         The OCOG Range and Backscatter Quality Flags have been set for more records.           CS_OFFL_SIR_IOPN_2_202109271192032_20210927119230_C001         OCOG Attimeter Range Quality PLRM.         The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20210327114239_20210327114239_202103271144539_202103271144539_202103271144539_202103271144539_202103271144539_202103271144539_202103271144539_202103271144539_202103271144539_202103271144539_202103271144539_202103271153412_C001         Occean Altimeter Range_SSHA, SWH and Backscatter Quality PLRM         Occean Altimeter Range_SSHA, SWH and Backscatter Quality FLRM, COCG G Backscatter Quality PLRM         The OCCGR Range and Backscatter Quality FLRM, COCG Range and Backscatter Quality FLRM, COCG Backscatter Quality PLRM         The OCCGR Range and Backscatter Quality FLRM, COCG G Backscatter Quality PLRM, COCG G Backscatter
GS_OFFL_SIR_IOPN_2_20210927114509_20210927115419_C001       and Backscatter Quality FLRM, COCG       Im Double Additional Datascatter Quality Flags and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range Quality PLRM, OCG Backscatter Quality Flags and the OCG Altimeter Range Quality PLRM, OCG Backscatter Quality Flags and the OCG Range and Backscatter Quality Flags and the OCG Range and Backscatter Quality Flags and the OCG Range and Backscatter Quality Flags and the other Range Altimeter Range Quality PLRM, OCG Backscatter Quality Flags and the OCG Range and Backscatter Quality Flags and the other Range Altimeter Range Altither Range Altimeter Range Altimeter Range Altimeter Range Altimete
GS_OFFL_SIR_JOPN_2_20210927T153227_20210927T153227_20210927T15412_C001       and Backscatter Quality PLRM the QOG Altimeter Range and Backscatter Quality PLRM the QOG Backscatter Quality PLRM to more records.       The QOG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_JOPN_2_20210927T180309_20210927T180304_C001       OCCG Altimeter Range Quality PLRM, OCG Backscatter Quality       The OCGO Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_JOPN_2_20210927T180309_20210927T191306_C001       OCCG Altimeter Range Quality PLRM, OCG Backscatter Quality       The OCGO Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_JOPN_2_20210927T191308_20210927T192300_C001       OCCG Altimeter Range Quality PLRM, OCCG Backscatter Quality       The OCGO Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_JOPN_2_20210927T193018_20210927T194300_C001       OCCG Altimeter Rang
CS_OFFL_SIR_IOPN_2_20210927T154253_20210927T154410_C001       And Backscatter Quality Plays have control and the OCGG Alimeter Range and Backscatter Quality Plays have been set for one or more records.         CS_OFFL_SIR_IOPN_2_20210927T171959_20210927T172200_C001       CCCG Alimeter Range Quality PLRM, OCGG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPN_2_20210927T180339_20210927T180555_C001       CCCG Alimeter Range Quality PLRM, OCGG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T180339_20210927T180555_C001       CCCG Alimeter Range Quality PLRM, OCGG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T182007_20210927T182304_C001       CCCG Alimeter Range Quality PLRM, OCGG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T1910639_20210927T19136_C001       CCCG Alimeter Range Quality PLRM, OCCG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T1910639_20210927T19136_C001       CCCG Alimeter Range Quality PLRM, OCCG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T194430_C001       CCCG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for or or more records.         CS_OFFL_SIR_IOPN_2_20210927T1920315_20210927T194430_C001       CCCG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for or or more records.         CS_OFFL_SIR_IOPN_2_20210927T1920315_20210927T194430_C001       CCCG Alimet
CS_OFFL_SIR_IOPN_2_20210927T180339_20210927T180555_C001       OCOG Backscatter Quality       or more records.         CS_OFFL_SIR_IOPN_2_20210927T180339_20210927T180555_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T180339_20210927T182304_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T190639_20210927T191136_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T191800_20210927T19230_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T191800_20210927T192230_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T193918_20210927T194430_C001       OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM
CS_OFFL_SIR_IOPN_2_20210927T180339_20210927T180359_C001       OCOG Backscatter Quality       or more records.         CS_OFFL_SIR_IOPN_2_20210927T182007_20210927T182304_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for more records.         CS_OFFL_SIR_IOPN_2_20210927T190639_20210927T19136_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for more records.         CS_OFFL_SIR_IOPN_2_20210927T191800_20210927T19230_C001       OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T193918_20210927T194430_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T202915_20210927T203225_C001       OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Ocean Altimeter Range Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Ocean Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Ocean Altimeter Range Quality PL
CS_OFFL_SIR_IOPN_2_20210927T182007_20210927T191136_C001       OCOG Backscatter Quality       or more records.         CS_OFFL_SIR_IOPN_2_20210927T190639_20210927T191136_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set fo or more records.         CS_OFFL_SIR_IOPN_2_20210927T191800_20210927T192230_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set fo or more records.         CS_OFFL_SIR_IOPN_2_20210927T193918_20210927T194430_C001       Ocog Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set fo or more records.       The OCOG Range and Backscatter Quality Flags have been set fo or more records.         CS_OFFL_SIR_IOPN_2_20210927T193918_20210927T194430_C001       Ocog Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set fo or more records.       The OCOG Range and Backscatter Quality Flags have been set fo or more records.         CS_OFFL_SIR_IOPN_2_20210927T202915_20210927T203225_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set fo or more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Ocog Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Altimeter Range and Backscatter Quality Flags have been set fo or more records.         CS_OFFL_SIR_
CS_OFFL_SIR_IOPN_2_20210927T190639_20210927T19230_C001       OCOG Backscatter Quality       or more records.         CS_OFFL_SIR_IOPN_2_20210927T191800_20210927T192230_C001       OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T193918_20210927T194430_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T202915_20210927T203225_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T201114_20210927T211318_C001       Ocean Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T211114_20210927T211318_C001       OCEG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T211114_20210927T211318_C001       OCEG Altimeter Range Quality PLRM, OCEG Range and Backscatter Quality Flags have been set for or or more records.
CS_OFFL_SIR_IOPN_2_20210927T193918_20210927T194430_C001       Occos Backscatter Quality       or more records.         CS_OFFL_SIR_IOPN_2_20210927T202915_20210927T203225_C001       Occos Altimeter Range Quality PLRM, OCCOS Altimeter Range and Backscatter Quality       The Occan Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality         CS_OFFL_SIR_IOPN_2_20210927T202915_20210927T203225_C001       OCCOG Altimeter Range Quality PLRM, OCCOS Backscatter Quality       The OCCG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Occan Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality       The Occan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Occog Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM       The Occog Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T211114_20210927T211318_C001       OCCG Altimeter Range Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Backscatter Quality       The OCCG Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T211114_20210927T211318_C001       OCCG Altimeter Range Quality PLRM, OCCG Backscatter Quality       The OCCG Range and B
CS_OFFL_SIR_IOPN_2_20210927T193918_20210927T194430_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM       The OCGA Altimeter Range and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality set for one or more records.         CS_OFFL_SIR_IOPN_2_20210927T202915_20210927T203225_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCGA Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       The OCGA Range and Backscatter Quality       The OCGA Range and Backscatter Quality         CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       The OCGA Range and Backscatter Quality       The OCGA Range and Backscatter Quality         CS_OFFL_SIR_IOPN_2_20210927T211114_20210927T211318_C001       OccGA Altimeter Range Quality PLRM, OCGB Backscatter Quality       The OCGA Range and Backscatter Quality Flags have been set for or more records.         CS_OFFL_SIR_IOPN_2_20210927T211114_20210927T211318_C001       OCCGA Altimeter Range Quality PLRM, OCGB Backscatter Quality       The OCGB Range and Backscatter Quality Flags have been set for or more records.
CS_OFFL_SIR_IOPN_2_202109277203913_202109277204134_C001       OCOG Backscatter Quality       or more records.         CS_OFFL_SIR_IOPN_2_202109277203913_202109277204134_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 set for one or more records.         CS_OFFL_SIR_IOPN_2_202109277211114_202109277211318_C001       OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Backscatter Quality PLRM       The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210927T203913_20210927T204134_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM       Interformeter Range and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality set for one or more records.         CS_OFFL_SIR_IOPN_2_20210927T211114_20210927T211318_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for or more records.
OCOG Backscatter Quality or more records.
Ocean Altimeter Range SSHA SWH
CS_OFFL_SIR_IOPN_2_20210927T211713_20210927T212254_C001 CCean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range,
CS_OFFL_SIR_IOPN_2_20210927T214214_20210927T214311_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20210927T220845_20210927T221009_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20210927T225520_20210927T225558_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for or more records.
CS_OFFL_SIR_IOPN_2_20210927T225601_20210927T225947_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range and Backscatter Quality set for one or more records.
CS_OFFL_SIR_IOPN_2_20210927T230958_20210927T231030_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality Flags have been set for orm ore records.
CS_OFFL_SIR_IOPN_2_20210927T234846_20210927T235011_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG PLRM The Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPR_2_20210927T000728_20210927T000918_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, or more records.

CS_OFFL_SIR_IOPR_2_20210927T002956_20210927T003247_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_20210927T003410_20210927T003940_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_20210927T012930_20210927T013620_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_20210927T013620_20210927T013742_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_20210927T014257_20210927T014518_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_20210927T014742_20210927T014949_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_20210927T021449_20210927T021906_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_20210927T022843_20210927T023225_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_20210927T030809_20210927T031520_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_20210927T031520_20210927T031834_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_20210927T035302_20210927T040001_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_20210927T041017_20210927T041219_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_20210927T044750_20210927T045411_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_20210927T045411_20210927T045519_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_20210927T053634_20210927T053825_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_20210927T060601_20210927T060801_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_20210927T062746_20210927T063010_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_20210927T063010_20210927T063430_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_20210927T071456_20210927T071734_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_20210927T072937_20210927T073109_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_20210927T080818_20210927T081345_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_20210927T085441_20210927T085708_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_20210927T090900_20210927T091127_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_20210927T094902_20210927T095403_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_20210927T104803_20210927T105000_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_20210927T112744_20210927T113604_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_20210927T121139_20210927T121617_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_20210927T123303_20210927T123554_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_20210927T125322_20210927T125656_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_20210927T125955_20210927T130235_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_20210927T130659_20210927T131459_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_20210927T135150_20210927T135523_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_20210927T140525_20210927T140929_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_20210927T143358_20210927T143435_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_20210927T143613_20210927T143939_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_20210927T144737_20210927T145532_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_20210927T154410_20210927T154949_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_20210927T162640_20210927T163402_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_20210927T171000_20210927T171053_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_20210927T172200_20210927T172805_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_20210927T180555_20210927T181226_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_20210927T194430_20210927T194954_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_20210927T194959_20210927T195145_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_20210927T200520_20210927T200653_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_20210927T202711_20210927T202915_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_20210927T204134_20210927T204348_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_20210927T222026_20210927T222253_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_20210927T225947_20210927T230730_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

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

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

191

> 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:

## 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. 71

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.

## 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 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.

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> 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_220210926T235558_20210927T004537_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOP_220210927T004537_20210927T013513_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_220210927T013513_20210927T022451_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_220210927T022451_20210927T031428_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_220210927T031428_20210927T040406_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_220210927T040406_20210927T045342_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_220210927T045342_20210927T054320_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_220210927T054320_20210927T063257_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_220210927T063257_20210927T072235_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_220210927T072235_20210927T081212_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_220210927T081212_20210927T090150_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_220210927T090150_20210927T095126_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_220210927T095126_20210927T104105_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_20210927T104105_20210927T113041_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_220210927T113041_20210927T122019_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_220210927T122019_20210927T130956_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_220210927T130956_20210927T135934_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_220210927T135934_20210927T144910_C001	Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_IOP_220210927T144910_20210927T153849_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_220210927T153849_20210927T162825_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_220210927T162825_20210927T171803_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_220210927T171803_20210927T180740_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_220210927T180740_20210927T185718_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_220210927T185718_20210927T194654_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_220210927T194654_20210927T203633_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_220210927T203633_20210927T212609_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_220210927T212609_20210927T221548_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_220210927T221548_20210927T230524_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_220210927T230524_20210927T235502_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

6.6 P2P Measurement Quality Flag Check

CryoSat P2P data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors: 1		
Product	Test Failed	Description
CS_OFFL_SIR_IOP_2_20210927T104105_20210927T113041_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

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 be a set of the se	rectly 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 be an expected by the second seco	rectly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.
Number of products with errors:	30
P2P Quality Flags (1 Hz & 1Hz PL	RM)
Since the P2P Quality Flags are copied directly be an expected with the second se	rectly 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
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## 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.

30

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30

Number of products with errors:

## P2P Retracking Flags PLRM

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

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

Number of products with errors:

# 7. IOP QCC Report Analysis

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

No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
160	160	2	158	0
93	100	5	95	0
100	93	0	93	0
160	160	101	59	0
93	100	40	60	0
100	93	22	71	0
29	29	0	29	0
	160 93 100 160 93 100	160         160           93         100           100         93           160         160           93         100           100         93           100         93	160         160         2           93         100         5           100         93         0           160         160         101           93         100         40           100         93         22	160         160         2         158           93         100         5         95           100         93         0         93           160         160         101         59           93         100         40         60           100         93         22         71

## 7.1 QCC Errors

Number of QCC reports with errors:

### 7.2 QCC Warnings

Number of QCC report	ts with warnings	2160					
			Total numb	per of occurrences of ea	ach warning		
Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	RBSZOPOEPNCDF
SIR_IOPM1B	158	0	0	0	0	0	0
SIR IOPM 2	0	43	47	0	46	0	33

0

Product Type	BCSHNCDF	WVIDEPFDNCDF	WIVIOEPNCDF	MVIONCOF	RESZOPOEPFDNCDF	RESZOPOEPFDPLRWINCL	RESZUPUEPNEDF
SIR_IOPM1B	158	0	0	0	0	0	0
SIR_IOPM_2	0	43	47	0	46	0	33
SIR_IOPN1B	95	0	0	0	0	0	0
SIR_IOPN_2	0	8	32	3	25	34	18

SIR_IOPR1B	88	0	0	0	0	0	0
SIR_IOPR_2	0	37	42	0	37	30	21
Due du et Turre	RNELPOTONCDF	RPEPOPFDLRMNCDF				RPEPOPFDSINNCDF	RPEPOPLRMNCDF
Product Type		RFEFOFFDERMINGDF	RFEFOFFDFERMISARNO		CD RFEFOFFDSARNODF		
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	37	0	0	0	0	30
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	0	0	25	0	34	0
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	1	0	47	0	50	0	0
Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
SIR IOPM1B	0	0	0	0	0	0	0
SIR IOPM 2	0	0	5	35	0	6	41
SIR IOPN1B	0	0	0	0	0	0	0
SIR IOPN 2	0	25	20	45	50	28	30
	0	25	20	0	0	0	0
SIR_IOPR1B	43	0	0	-	48		37
SIR_IOPR_2	43	U	3	61	48	14	37
Product Type	RSWHOEPFDPLRMNC		SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
SIR IOPM1B	0		0	0	0	0	-
	0	0	0	0	0	0	
SIR_IOPM_2 SIR IOPN1B	0	2	0	0	44	1	
		17	1	0	44	1	
SIR_IOPN_2	29 0		1	3	93	0	
SIR_IOPR1B	45	0	0	0	93	4	
SIR_IOPR_2	45	4	0	0	0	0	
Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMN	CERBSZOPOEPNCDF
SIR IOP 2	16	28	29	3	29	17	29
Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNC	DIRPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNC
SIR_IOP_2_	1	16	29	22	19	29	18
			•				
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-
SIR_IOP_2_	26	29	17	19	29		
Product Type	-	•	-	-	•	•	-
SIR IOP 2							

Test Description Key:		
Abbreviation	Test name	Details
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
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	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
NCDF RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter signa zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
	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	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
RSWHOEPFDPLRMN	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

0