

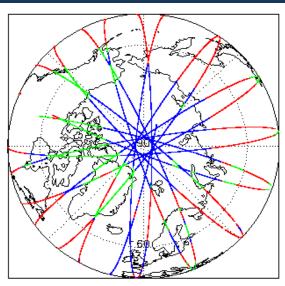
# 1. Overview

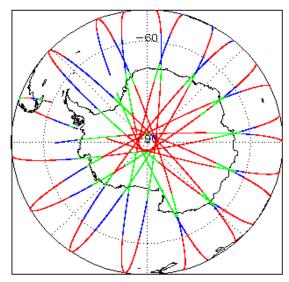
Report Production:	04-Aug-2020	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	

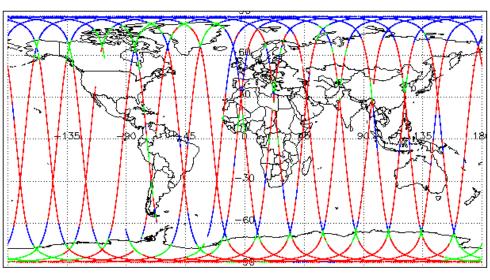
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary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

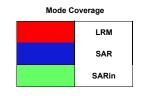
Mission / Insti	rument News
31-Jul-2020	None
01-Aug-2020	None
02-Aug-2020	Nothing planned

# 2. Global Coverage









# 3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

# 4. IOP Level 1B Data Quality Check

## 4.1 L1B Product Format Check

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

#### 4.2 L1B Product Header Analysis

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

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

Number of products with errors:

## 4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

# 4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

0

0

#### 4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20200801T020702_20200801T022103_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_IOPM1B_20200801T032723_20200801T034342_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_IOPM1B_20200801T161557_20200801T162247_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_IOPM1B_20200801T163902_20200801T164754_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.

Number of products with errors: 13

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20200801T023816_20200801T025317_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200801T025518_20200801T030441_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200801T132103_20200801T133539_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200801T143055_20200801T144744_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200801T032142_20200801T032214_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200801T050100_20200801T050653_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200801T082311_20200801T082724_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200801T162639_20200801T163151_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200801T190618_20200801T190738_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200801T112113_20200801T112145_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200801T112326_20200801T112638_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200801T112638_20200801T113056_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200801T121752_20200801T121952_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.

Number of products with errors:

54

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200801T025518_20200801T030441_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_20200801T065416_20200801T072044_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_20200801T114232_20200801T120508_C001	Total Geocentric Ocean Tide (FES), Non Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOPM_2_20200801T181906_20200801T182011_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPM_2_20200801T225313_20200801T230454_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_20200801T004710_20200801T004948_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_20200801T005146_20200801T005719_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_20200801T014237_20200801T014725_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_20200801T022619_20200801T022855_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_20200801T032142_20200801T032214_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_20200801T050100_20200801T050653_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_20200801T054350_20200801T054538_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_20200801T055348_20200801T055613_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_20200801T064113_20200801T064520_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_20200801T072318_20200801T072500_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_20200801T082311_20200801T082724_C001	Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Total Geocentr Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20200801T090326_20200801T090658_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_20200801T104241_20200801T104602_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_20200801T105115_20200801T105240_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_20200801T113319_20200801T113447_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_20200801T131247_20200801T131356_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_20200801T140719_20200801T140913_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_20200801T162639_20200801T163151_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_20200801T171628_20200801T171923_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_20200801T172548_20200801T172844_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_20200801T180635_20200801T180957_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_20200801T180957_20200801T181014_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_20200801T213703_20200801T213720_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_20200801T214517_20200801T214709_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_20200801T221532_20200801T221657_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_20200801T222215_20200801T222521_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_20200801T235517_20200801T235821_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_20200731T235516_20200801T000235_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_20200801T000235_20200801T000524_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_20200801T013710_20200801T014128_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_20200801T014128_20200801T014236_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_20200801T031457_20200801T031734_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_20200801T031734_20200801T032142_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_20200801T045440_20200801T050100_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_20200801T063621_20200801T064112_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_20200801T081400_20200801T082311_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_20200801T095407_20200801T100205_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_20200801T113447_20200801T114231_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_20200801T131356_20200801T132102_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_20200801T142841_20200801T143055_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPR_2_20200801T145311_20200801T150036_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_20200801T163151_20200801T163902_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_20200801T181015_20200801T181906_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_20200801T194708_20200801T195446_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_20200801T212639_20200801T213308_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_20200801T213308_20200801T213536_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_20200801T230454_20200801T231208_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_20200801T231208_20200801T231349_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_20200801T231846_20200801T232224_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

## 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200801T020702_20200801T022103_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOPM_2_20200801T032723_20200801T034342_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOPM_2_20200801T161557_20200801T162247_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOPM_2_20200801T163902_20200801T164754_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

# 5.6 L2 Measurement Quality Flag Check

## L2 Quality Flags (20Hz)

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200801T000524_20200801T000559_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_20200801T001719_20200801T002142_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_20200801T002235_20200801T004014_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_20200801T005921_20200801T011341_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_20200801T011502_20200801T011607_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_20200801T012049_20200801T013515_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_20200801T014743_20200801T020533_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_20200801T020702_20200801T022103_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_20200801T022855_20200801T023057_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_20200801T023202_20200801T023559_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_20200801T023816_20200801T025317_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_20200801T025518_20200801T030441_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_20200801T032723_20200801T034342_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_20200801T035106_20200801T035219_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_20200801T035943_20200801T040204_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_20200801T040700_20200801T041502_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_20200801T041800_20200801T043225_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_20200801T050926_20200801T054206_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_20200801T054538_20200801T054746_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_20200801T054815_20200801T055348_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_20200801T055807_20200801T062135_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_20200801T065311_20200801T065315_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_20200801T065416_20200801T072044_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_20200801T073306_20200801T073344_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_20200801T073651_20200801T075606_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_20200801T080803_20200801T081400_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.

CQ-OPT_SR_OPM_2_20000011101012_2000001110100_00000000	CS_OFFL_SIR_IOPM_2_20200801T082724_20200801T085859_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.
CQ_CPT_SRI_CPM_2_2000001119018_20000011100801_0001  CQ_CPT_SRI_CPM_2_2000001119018_20000011100801_0001  CQ_CPT_SRI_CPM_2_2000001119018_20000011100801_0001  CQ_CPT_SRI_CPM_2_20000011110082_20000011100801_0001  CQ_CPT_SRI_CPM_2_20000011110082_2000000111100801_0001  CQ_CPT_SRI_CPM_2_20000011110082_2000000111100801_0001  CQ_CPT_SRI_CPM_2_20000011110082_2000000111100801_0001  CQ_CPT_SRI_CPM_2_20000011110082_2000000111100801_0001  CQ_CPT_SRI_CPM_2_20000011110082_200000011110080_0001  CQ_CPT_SRI_CPM_2_20000011110082_200000011110080_0001  CQ_CPT_SRI_CPM_2_20000011110082_200000011110080_0001  CQ_CPT_SRI_CPM_2_20000011110082_200000011110080_0001  CQ_CPT_SRI_CPM_2_20000011110082_200000011110080_0001  CQ_CPT_SRI_CPM_2_20000011110082_200000011110080_0001  CQ_CPT_SRI_CPM_2_20000011110082_200000011110080_0001  CQ_CPT_SRI_CPM_2_20000011110080_200000011110080_0001  CQ_CPT_SRI_CPM_2_200000011110080_0001  CQ_CPT_SRI_CPM_	CS_OFFL_SIR_IOPM_2_20200801T090658_20200801T091230_C001		
Col. OFFL. SRI.   OFFL. 2. 20200011100101_20001   Col. OFFL. SRI.   OFFL. 2. 20200011100102_2000011100101_20001   Col. OFFL. SRI.   OFFL. 2. 202000011100102_2000011100101_20001   Col. OFFL. SRI.   OFFL. 2. 202000011100102_2000011100102_2000011100101_20001   Col. OFFL. SRI.   OFFL. 2. 202000011100102_20000011100001_20001   Col. OFFL. SRI.   OFFL. 2. 202000011100002_200000111200001_20001   Col. OFFL. SRI.   OFFL. 2. 202000011100002_20000011120000_20001   Col. OFFL. SRI.   OFFL. 2. 202000011120002_20000011210000_20001   Col. OFFL. SRI.   OFFL. 2. 202000011120000_20000011210000_20001   Col. OFFL. SRI.   OFFL. 2. 202000011120000_2000001120000_2000001120000_2000001120000_2000001120000_2000001120000_2000001120000_20000001120000_2000001120000_200000001120000_200000001120000_200000001120000_20000001120000_200000000	CS_OFFL_SIR_IOPM_2_20200801T091555_20200801T092018_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB_OPT_SRI_OPM_2_2200801T10600_2000001T105185_0001	CS_OFFL_SIR_IOPM_2_20200801T095124_20200801T095407_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Language of the Control (Language of the Contr	CS_OFFL_SIR_IOPM_2_20200801T100610_20200801T103909_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB_OPFL_SR_IOPM_2_2020001111008_2020001111008_00000111009000011100900001110090000111009000011100900001110090000111009000011100900001110090000111009000011100900000111009000001110090000011100900000111009000000	CS_OFFL_SIR_IOPM_2_20200801T104602_20200801T105115_C001		
and Backscatter Quality (Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within the Coop Alternative Range and Backscatter Quality Flags have been within	CS_OFFL_SIR_IOPM_2_20200801T105622_20200801T111258_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscater Caulity, COCO Altimeter Range and Backscater Caulity Plags have been after Range and Backscater Caulity COCO Altimeter Range and Backscater Caulity Plags have been after Range and Backscater Caulity Plags have been after Range and Backscater Caulity Plags have been after Range and Backscater Caulity Plags and Backscater Caulity CoCO Altimeter Range and Backscater Caulity Plags and Backscater Caulity CoCO Altimeter Range and Backscater Caulity Plags and Backscater Caulity CoCO Altimeter Range and Backscater Caulity Plags have been after Range Range Range Caulity Plags have been after Range CS_OFFL_SIR_IOPM_2_202088011122564_20208011130117_COCI  CS_OFFL_SIR_IOPM_2_202088011130132_20208011130117_COCI  CS_OFFL_SIR_IOPM_2_202088011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011130132_20208011133014_COCI  CS_OFFL_SIR_IOPM_2_202088011132102_20208011133039_COCI  CS_OFFL_SIR_IOPM_2_202088011132102_20208011133039_COCI  CS_OFFL_SIR_IOPM_2_202088011132103_20208011133039_COCI  CS_OFFL_SIR_IOPM_2_202088011132103_20208011133039_COCI  CS_OFFL_SIR_IOPM_2_202088011134034_COCI  CS_OFFL_SIR_IOPM_2_202088011134034_COCI  CS_OFFL_SIR_IOPM_2_202088011134034_COCI  CS_OFFL_SIR_IOPM_2_202088011134034_COCI  CS_OFFL_SIR_IOPM_2_202088011134034_COCI  CS_OFFL_SIR_IOPM_2_202088011134034_COCI  CS_OFFL_SIR_IOPM_2_20208801113404_COCI  CS_OFFL_SIR_IOPM_2_20208801113404_COCI  CS_OFFL_SIR_IOPM_2_20208801113404_COCI  CS_OFFL_SIR_IOPM_2_20208801113404_COCI  CS_OFFL_SIR_IOPM_2_20208801113404_COCI  CS_OFFL_SIR_IOPM_2_20208801113404_COCI  CS_OFFL_SIR_IOPM_2_20208801113404_COCI  CS_OFFL_SIR_IOPM_2_20208801113404_COCI  CS_OFFL_SIR_IOPM_2_20208801114044_COCI  CS_OFFL_SIR_IOPM_2_20208801114044_COCI  CS_OFFL_SIR_IOPM_2_20208801114044_COCI  CS_OFFL_SIR_IOPM_2_20208801114044	CS_OFFL_SIR_IOPM_2_20200801T113056_20200801T113116_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20000001T129151_20000001T129002_0001  CS_OFFL_SIR_IOPM_2_20000001T129054_20000001T130117_0010  All more Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20000001T130153_20000001T130117_0010  CS_OFFL_SIR_IOPM_2_20000001T130153_20000001T130117_0010  CS_OFFL_SIR_IOPM_2_20000001T130153_20000001T130117_0010  CS_OFFL_SIR_IOPM_2_20000001T130153_20000001T130147_0010  CS_OFFL_SIR_IOPM_2_20000001T130153_20000001T130147_0010  CS_OFFL_SIR_IOPM_2_20000001T13104_20000001T130159_0010  CS_OFFL_SIR_IOPM_2_20000001T13104_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13104_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13059_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13015_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13015_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13015_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13009_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13009_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13009_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13009_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13009_20000001T13059_0010  CS_OFFL_SIR_IOPM_2_20000001T13009_20000001T13009_0010  CS_OFFL_SIR_IOPM_2_20000001T13009_20000001T13009_0010  CS_OFFL_SIR_IOPM_2_20000001T13009_20000001T14009_0010  CS_OFFL_SIR_IOPM_2_20000001T13009_0010000000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20200801T114232_20200801T120508_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  For one or more records.  CS_OFFL_SIR_JOPM_2_202008017129594_202008017130117_CO01  CS_OFFL_SIR_JOPM_2_202008017130132_202008017130117_CO01  CS_OFFL_SIR_JOPM_2_202008017130132_202008017130117_CO01  CS_OFFL_SIR_JOPM_2_202008017130104_202008017130143_CO01  CS_OFFL_SIR_JOPM_2_20200801713004_202008017130143_CO01  CS_OFFL_SIR_JOPM_2_20200801713004_202008017130143_CO01  CS_OFFL_SIR_JOPM_2_20200801713004_202008017130143_CO01  CS_OFFL_SIR_JOPM_2_20200801713004_202008017130143_CO01  CS_OFFL_SIR_JOPM_2_20200801713004_202008017130143_CO01  CS_OFFL_SIR_JOPM_2_20200801713004_202008017130143_CO01  CS_OFFL_SIR_JOPM_2_20200801713004_202008017130143_CO01  CS_OFFL_SIR_JOPM_2_20200801713004_2020080171	CS_OFFL_SIR_IOPM_2_20200801T120555_20200801T121752_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COGG Allimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_JOPM_2_20200801T130133_2020801T130948_0001  CS_OFFL_SIR_JOPM_2_20200801T130104_2020801T130948_0001  CS_OFFL_SIR_JOPM_2_20200801T131004_2020801T131247_0001  Backscatter Quality, COGG Allimeter Range and Backscatter Quality Flags have been set for one or or more records.  CS_OFFL_SIR_JOPM_2_20200801T132103_2020801T133539_0001  CS_OFFL_SIR_JOPM_2_20200801T132103_2020801T133539_0001  CS_OFFL_SIR_JOPM_2_20200801T132103_2020801T134143_0001  CS_OFFL_SIR_JOPM_2_20200801T134021_2020801T134143_0001  CS_OFFL_SIR_JOPM_2_20200801T134021_20208001T13539_0001  CS_OFFL_SIR_JOPM_2_20200801T134021_20208001T13509_0001  CS_OFFL_SIR_JOPM_2_20200801T134021_20208001T134143_0001  CS_OFFL_SIR_JOPM_2_20200801T134021_20208001T134143_0001  CS_OFFL_SIR_JOPM_2_20200801T134021_20208001T134143_0001  CS_OFFL_SIR_JOPM_2_20200801T134021_20208001T13509_0001  CS_OFFL_SIR_JOPM_2_20200801T134009_000001T135724_0001  CS_OFFL_SIR_JOPM_2_20200801T135044_20208001T140502_0001  CS_OFFL_SIR_JOPM_2_20200801T135044_20208001T140502_0001  CS_OFFL_SIR_JOPM_2_20200801T135044_20208001T140502_0001  CS_OFFL_SIR_JOPM_2_20200801T135044_20208001T140502_0001  CS_OFFL_SIR_JOPM_2_20200801T14051_20208001T140502_0001  CS_OFFL_SIR_JOPM_2_20200801T14051_20208001T142841_0001  CS_OFFL_SIR_JOPM_2_20200801T14051_20208001T142841_0001  CS_OFFL_SIR_JOPM_2_20200801T14051_20208001T142841_0001  CS_OFFL_SIR_JOPM_2_20200801T14051_20208001T142841_0001  CS_OFFL_SIR_JOPM_2_20200801T15015_20200801T145041_0001  CS_OFFL_SIR_JOPM_2_20200801T15015_20200801T145041_0001  CS_OFFL_SIR_JOPM_2_20200801T15015_20208001T15041_0001  CS_OFFL_SIR_JOPM_2_20200801T15015_20208001T15041_0001  CS_OFFL_SIR_JOPM_2_20200801T15015_20208001T15041_0001  CS_OFFL_SIR_JOPM_2_20200801T15015_20208001T15041_0001  CS_OFFL_SIR_JOPM_2_20200801T15015_20208001T15041_0001  CS_OFFL_SIR_JOPM_2_20200801T15015_20208001T15041_0001  CS_OFFL_SIR_JOPM_2_20200801T15015_20208001T15041_0001  CS_OFFL_SIR_JOPM_2_20200	CS_OFFL_SIR_IOPM_2_20200801T122151_20200801T122602_C001		
CS_OFFL_SIR_IOPM_2_20200801T13004_20200801T130848_C001  CS_OFFL_SIR_IOPM_2_20200801T131004_20200801T131247_C001  CS_OFFL_SIR_IOPM_2_20200801T131004_20200801T131247_C001  CS_OFFL_SIR_IOPM_2_20200801T131004_20200801T131247_C001  CS_OFFL_SIR_IOPM_2_20200801T131004_20200801T133539_C001  CS_OFFL_SIR_IOPM_2_20200801T132103_20200801T133539_C001  CS_OFFL_SIR_IOPM_2_20200801T132103_20200801T133539_C001  CS_OFFL_SIR_IOPM_2_20200801T134021_20200801T134143_C001  CS_OFFL_SIR_IOPM_2_20200801T134021_20200801T135724_C001  CS_OFFL_SIR_IOPM_2_20200801T135044_20200801T135724_C001  CS_OFFL_SIR_IOPM_2_20200801T135944_20200801T140502_C001  CS_OFFL_SIR_IOPM_2_20200801T140502_C001  CS_OFFL_SIR_IOPM_2_20200801T140502_20200801T140719_C001  CS_OFFL_SIR_IOPM_2_20200801T140502_20200801T140714_C001  CS_OFFL_SIR_IOPM_2_20200801T15016_20200801T140714_C001  CS_OFFL_SIR_IOPM_2_20200801T15016_20200801T140714_C001  CS_OFFL_SIR_IOPM_2_20200801T15016_20200801T150	CS_OFFL_SIR_IOPM_2_20200801T123504_20200801T130117_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_2020801T13103_2020801T133539_C001  CS_OFFL_SIR_IOPM_2_2020801T132103_2020801T133539_C001  CS_OFFL_SIR_IOPM_2_2020801T134021_2020801T134143_C001  CS_OFFL_SIR_IOPM_2_2020801T134021_2020801T134143_C001  CS_OFFL_SIR_IOPM_2_2020801T134021_2020801T134143_C001  CS_OFFL_SIR_IOPM_2_2020801T134021_2020801T134143_C001  CS_OFFL_SIR_IOPM_2_2020801T13403_2020801T134143_C001  CS_OFFL_SIR_IOPM_2_2020801T135044_2020801T140502_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140502_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140502_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140510_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140510_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140510_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T140521_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T14052_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T14052_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T14052_2020801T140541_C001  CS_OFFL_SIR_IOPM_2_2020801T150115_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_2020801T150115_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_2020801T150115_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_2020801T150115_20200801T150414_C001  CS_OFFL_SIR_IOPM_2_2020801T150115_20200801T150414_C001  CS_OFFL_SIR_IOPM_2_2020801T150115_20200801T150414_C001  CS_OFFL_SIR_IOPM_2_2020801T150115_20200801T150414_C001  CS_OFFL_SIR_IOPM_2_2020801T150115_20200801T150414_C001  CS_OFFL_SIR_IOPM_2_2020801T150115_20200801T150414_C001  CCS_OFFL_SIR_IOPM_2_2020801T150115_20200801T150414_C001  CCS_OFFL_SIR_IOPM_2_2020801T150115_20200801T150414_C001  CCS_OFFL_SIR_IOPM_2_2020801T150115_20200801T150414_C001  CCS_OFFL_SIR_IOPM_2_20200801T150115_20200801T150415_C001  CCS_OFFL_SIR_IOPM_2_20200801T150	CS_OFFL_SIR_IOPM_2_20200801T130133_20200801T130848_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COCG Allimeter Range and Backscatter Quality Flags have been Allimeter Range and Backscatter Quality Flags have been Allimeter Range and Backscatter Quality Flags and the OCCG Allimeter Range and Backscatter Quality Flags Backscatter Quality Flag	CS_OFFL_SIR_IOPM_2_20200801T131004_20200801T131247_C001		
and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Ra	CS_OFFL_SIR_IOPM_2_20200801T132103_20200801T133539_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range Altimeter Range Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200801T135944_20200801T140502_C001  DCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200801T140521_20200801T140719_C001  DCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200801T141542_20200801T142841_C001  DCOG Altimeter Range, SSHA, SWH and Backscatter Quality Set for one or more records.  DCOG Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001  DCOG Altimeter Range Quality, OCOG Altime	CS_OFFL_SIR_IOPM_2_20200801T134021_20200801T134143_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Sackscatter Quality  CS_OFFL_SIR_IOPM_2_20200801T140521_20200801T140719_C001  CS_OFFL_SIR_IOPM_2_20200801T140521_20200801T142841_C001  CS_OFFL_SIR_IOPM_2_20200801T143055_20200801T142841_C001  CS_OFFL_SIR_IOPM_2_20200801T143055_20200801T144744_C001  CS_OFFL_SIR_IOPM_2_20200801T15015_20200801	CS_OFFL_SIR_IOPM_2_20200801T134509_20200801T135724_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20200801T141542_20200801T142841_C001  CS_OFFL_SIR_IOPM_2_20200801T141542_20200801T142841_C001  CS_OFFL_SIR_IOPM_2_20200801T143055_20200801T144744_C001  CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T152041_C001  CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T152041_C001  CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T152041_C001  CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T15221_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001  CS_OFFL_SIR_IOPM_2_20200801T15015_20200801T154414_C001  CS_OFFL_SIR_IOPM_2_20200801T15015_20200801T150445_C001  CS_OFFL_SIR_IOPM_2_20200801T15015_20200801T150445_C001  CS_OFFL_SIR_IOPM_2_20200801T15015_20200801T150445_C001  CCCCAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCCCAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCCCAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCCCAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCCCAN Altimeter Range, SSH	CS_OFFL_SIR_IOPM_2_20200801T135944_20200801T140502_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200801T143055_20200801T144744_C001  CS_OFFL_SIR_IOPM_2_20200801T15015_20200801T152041_C001  CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T152041_C001  CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T152041_C001  CS_OFFL_SIR_IOPM_2_20200801T152021_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601150_20200	CS_OFFL_SIR_IOPM_2_20200801T140521_20200801T140719_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T152041_C001  CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T152041_C001  CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T153414_C001  and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2_20200801T161434_C001  CS_OFFL_SIR_IOPM_2_20200801T1601434_C001  CS_OFFL_SIR_IOPM_2	CS_OFFL_SIR_IOPM_2_20200801T141542_20200801T142841_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T152041_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_2020	CS_OFFL_SIR_IOPM_2_20200801T143055_20200801T144744_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been  CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T161150_20200801T161434_C001	CS_OFFL_SIR_IOPM_2_20200801T151015_20200801T152041_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  Go one or more records.  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001  CS_OFFL_SIR_IOPM_2_20200801T161150_20200801T161434_C001  Backscatter Quality  Go one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality Flags and Backscatter Quality Fla	CS_OFFL_SIR_IOPM_2_20200801T152221_20200801T153614_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Flags and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags	CS_OFFL_SIR_IOPM_2_20200801T153910_20200801T154414_C001		
CS_OFFL_SIR_IOPM_2_20200801T161150_20200801T161434_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20200801T160127_20200801T160445_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20200801T161150_20200801T161434_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_IOPM_2_20200801T161557_20200801T162247_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_20200801T165131_20200801T165431_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_20200801T165443_20200801T171458_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_20200801T171924_20200801T172331_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_20200801T172338_20200801T172347_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_20200801T183022_20200801T185416_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_20200801T185720_20200801T190246_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_20200801T190253_20200801T190618_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_20200801T191003_20200801T194203_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_20200801T200754_20200801T202704_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_20200801T202909_20200801T203351_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_20200801T203720_20200801T204527_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_20200801T205019_20200801T212247_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_20200801T214047_20200801T214420_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_20200801T215725_20200801T220252_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_20200801T220603_20200801T221201_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_20200801T221657_20200801T222215_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_20200801T222915_20200801T225028_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_20200801T225313_20200801T230454_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_20200801T231401_20200801T231846_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_20200801T233410_20200801T233919_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_20200801T234107_20200801T235128_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_20200801T182611_20200801T182742_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_20200801T213703_20200801T213720_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_20200801T221532_20200801T221657_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_20200801T014725_20200801T014743_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_20200801T023738_20200801T023816_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_20200801T025317_20200801T025518_C001	•	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200801T112113_20200801T112145_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_20200801T134447_20200801T134509_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_20200801T214710_20200801T214744_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

# L2 Quality Flags (20Hz PLRM)

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20200801T004710_20200801T004948_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_20200801T005146_20200801T005719_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_20200801T023559_20200801T023738_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_20200801T034343_20200801T034350_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_20200801T040353_20200801T040417_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_20200801T041502_20200801T041651_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_20200801T050100_20200801T050653_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_20200801T062428_20200801T062539_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_20200801T063046_20200801T063119_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_20200801T063551_20200801T063621_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_20200801T064113_20200801T064520_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_20200801T073345_20200801T073507_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_20200801T090326_20200801T090658_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_20200801T093115_20200801T093243_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_20200801T100205_20200801T100350_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_20200801T104241_20200801T104602_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_20200801T105115_20200801T105240_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_20200801T111258_20200801T111621_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_20200801T113319_20200801T113447_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_20200801T121952_20200801T122151_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_20200801T131247_20200801T131356_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_20200801T140719_20200801T140913_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_20200801T150651_20200801T151015_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_20200801T153722_20200801T153910_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_20200801T160445_20200801T161002_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_20200801T161434_20200801T161557_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_20200801T162639_20200801T163151_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_20200801T171628_20200801T171923_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_20200801T172548_20200801T172844_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_20200801T180429_20200801T180551_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_20200801T180635_20200801T180957_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_20200801T182611_20200801T182742_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_20200801T190618_20200801T190738_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_20200801T194203_20200801T194708_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_20200801T195633_20200801T195755_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_20200801T203556_20200801T203720_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_20200801T212247_20200801T212416_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_20200801T213841_20200801T214004_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_20200801T215555_20200801T215725_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_20200801T221532_20200801T221657_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_20200801T222215_20200801T222521_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_20200801T233106_20200801T233410_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_20200801T004014_20200801T004535_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_20200801T020533_20200801T020702_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

	Ocean Altimeter Range, SSHA, SWH	The Ocean Allimeter Dames COLIA CIAIL and Declearation Oscilla Ciam
CS_OFFL_SIR_IOPR_2_20200801T022103_20200801T022619_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200801T031457_20200801T031734_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_20200801T043225_20200801T043514_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_20200801T043514_20200801T043949_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_20200801T045440_20200801T050100_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_20200801T055613_20200801T055807_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_20200801T063218_20200801T063432_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_20200801T072044_20200801T072318_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_20200801T091347_20200801T091555_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_20200801T094713_20200801T095015_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_20200801T095407_20200801T100205_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_20200801T103910_20200801T104241_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_20200801T105240_20200801T105622_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_20200801T113447_20200801T114231_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_20200801T121752_20200801T121952_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_20200801T122616_20200801T122620_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_20200801T123126_20200801T123504_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_20200801T140913_20200801T141542_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_20200801T142841_20200801T143055_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_20200801T145311_20200801T150036_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_20200801T153614_20200801T153722_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_20200801T161120_20200801T161150_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_20200801T171458_20200801T171628_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_20200801T172844_20200801T173048_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_20200801T181015_20200801T181906_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_20200801T185416_20200801T185606_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_20200801T194708_20200801T195446_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_20200801T200434_20200801T200520_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_20200801T203352_20200801T203556_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_20200801T204638_20200801T205019_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_20200801T212416_20200801T212506_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_20200801T213811_20200801T213841_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_20200801T221202_20200801T221532_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_20200801T222521_20200801T222915_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_20200801T231208_20200801T231349_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_20200801T231846_20200801T232224_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_20200801T235128_20200801T235517_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

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

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

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

Number of products with errors: 189

## 5.8 L2 Ocean Retracking Quality Check

#### L2 Retracking Flags (20Hz)

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

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

Number of products with errors:

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

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

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

Number of products with errors: 145

## 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:

0

#### 6.4 P2P Auxiliary Correction Error Check

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220200731T231203_20200801T000139_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_220200801T000139_20200801T005117_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_220200801T005117_20200801T014054_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_220200801T014054_20200801T023032_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_220200801T023032_20200801T032008_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_220200801T032008_20200801T040947_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_220200801T040947_20200801T045923_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_220200801T045923_20200801T054902_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_220200801T054902_20200801T063838_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_220200801T063838_20200801T072816_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_220200801T072816_20200801T081752_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_220200801T081752_20200801T090731_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_220200801T090731_20200801T095707_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_220200801T095707_20200801T104646_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_220200801T104646_20200801T113622_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_220200801T113622_20200801T122600_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), 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), 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_220200801T122600_20200801T131536_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_220200801T131536_20200801T140515_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_220200801T140515_20200801T145451_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_220200801T145451_20200801T154430_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_220200801T154430_20200801T163406_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_220200801T163406_20200801T172344_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_220200801T172344_20200801T181321_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_220200801T181321_20200801T190259_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_220200801T190259_20200801T195235_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_220200801T195235_20200801T204214_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_220200801T204214_20200801T213150_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_220200801T213150_20200801T222129_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_220200801T222129_20200801T231105_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

# 6.5 P2P Measurement Confidence Data Check

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220200801T014054_20200801T023032_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOP_220200801T032008_20200801T040947_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOP_220200801T154430_20200801T163406_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOP_220200801T163406_20200801T172344_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

## 6.6 P2P Measurement Quality Flag Check

# P2P Quality Flags (20Hz)

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

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

Number of products with errors: 29

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

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

Number of products with errors:

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

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

Number of products with errors:

## 6.8 P2P Ocean Retracking Quality Check

## P2P Retracking Flags (20Hz)

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

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

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.

30

Number of products with errors:

# 7. IOP QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_IOPM1B	148	148	4	144	0
SIR_IOPR1B	105	97	1	96	0
SIR_IOPN1B	97	105	0	105	0
SIR_IOPM_2	148	148	100	48	0
SIR_IOPR_2	105	97	40	57	0
SIR_IOPN_2	97	105	26	78	1
SIR IOP P2P	29	29	0	28	1

#### 7.1 QCC Errors

Number of QCC reports with errors:

8

Total number of occurrences of each error

<b>Product Type</b>	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOPR_2	1	1	1	1							
			·					•		•	•
<b>Product Type</b>	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-

Test Description Key:				
Abbreviation	Test name	Details		
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7		
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7		
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7		
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7		

# 7.2 QCC Warnings

# Number of QCC reports with warnings

2141

## Total number of occurrences of each warning

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_IOPM1B	144	0	0	0	0	0	0
SIR_IOPM_2	0	0	40	36	1	39	0
SIR_IOPN1B	94	0	0	0	0	0	0
SIR_IOPN_2	0	0	8	33	2	22	25
SIR_IOPR1B	103	0	0	0	0	0	0
SIR_IOPR_2	0	1	41	47	1	36	30

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNC	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	35	0	33	0	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	13	0	0	0	24	0	31
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	20	2	0	47	0	53	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	30	0	0	5	28	0	1
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	0	29	17	38	52	35
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	45	0	2	68	48	10

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
SIR_IOPM1B	0	0	0	0	0	0	
SIR_IOPM_2	35	0	0	0	0	0	
SIR_IOPN1B	0	0	0	0	43	2	
SIR_IOPN_2	33	33	15	1	0	0	
SIR_IOPR1B	0	0	0	0	105	2	
SIR IOPR 2	36	50	4	2	0	0	

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_IOP_2_	16	29	29	4	29	20	28

Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNCDI	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_IOP_2_	2	18	29	23	17	29	19
,	,	•		,	,		·
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	•	

est Description Key:					
Abbreviation	Test name	Details			
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter			
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)			
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees			
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees			
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only			
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean			
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
	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			
RSWHOEPFDPLRMNC	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample			
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter			
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter			

# 7.3 Missing QCC Reports