

## 1. Overview

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

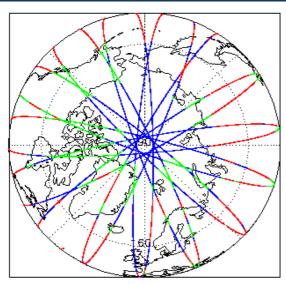
#### We would love to hear from you!

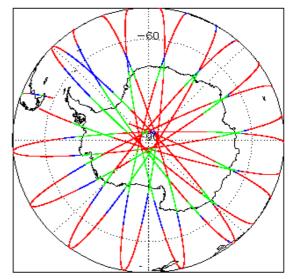
Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to cs2\_qc\_team@telespazio.com

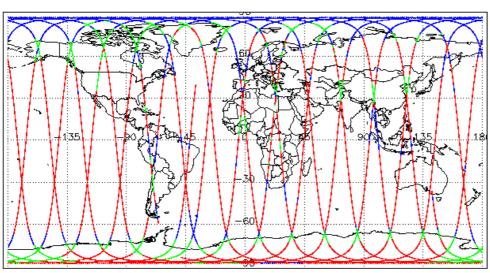
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary 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, 7.2

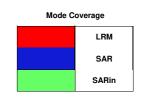
I	Mission / Instru	ment News
	02-May-2023	None
	03-May-2023	None
	04-May-2023	Nothing planned

# 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 NetCDF product file (.nc).

#### 4.2 L1B Product Header Analysis

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

Number of products with errors:

#### 4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

#### 4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

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. The attitude correction is actually not missing. This will be resolved in the next SW update.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20230503T043108_20230503T043603_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. The table provides the full list of products flagged.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20230503T010045_20230503T011009_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230503T045845_20230503T052702_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230503T074510_20230503T074635_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230503T221256_20230503T221839_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230503T012933_20230503T013114_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230503T034916_20230503T035105_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230503T044005_20230503T044022_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230503T062838_20230503T063303_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230503T140640_20230503T140750_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230503T143252_20230503T143722_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230503T195201_20230503T195252_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230503T012148_20230503T012340_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230503T031219_20230503T031430_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230503T062119_20230503T062434_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230503T092851_20230503T093157_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230503T094013_20230503T094730_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230503T121440_20230503T122119_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230503T143818_20230503T144311_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230503T230014_20230503T230207_C001	Loss of Echo	The tracking echo is missing for one or more records

#### 5. IOP Level 2 Data Quality Check

#### 5.1 L2 Product Format Check

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

Number of products with errors:

## 5.2 L2 Product Header Analysis

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

Number of products with errors:

#### 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

### 5.4 L2 Auxiliary Correction Error Check

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

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

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

Number of products with errors.	J <u>e</u>		
Product		Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230503T0	045845_20230503T052701_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPM_2_20230503T1	131544_20230503T132611_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T0	003030_20230503T003424_C001	Mean Sea Surface (1), Mean 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_20230503T0	012011_20230503T012147_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T0	012710_20230503T012820_C001	Mean Sea Surface (1), Mean 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_20230503T0	030629_20230503T031218_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T0	034916_20230503T035105_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T0	035918_20230503T040140_C001	Mean Sea Surface (1), Mean 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_20230503T0	044040_20230503T044221_C001	Mean Sea Surface (1), Mean 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_20230503T0	044638_20230503T045052_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20230503T0	062435_20230503T062519_C001	Mean Sea Surface (1), Mean 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_20230503T0	062838_20230503T063303_C001	Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T0	070852_20230503T071225_C001	Mean Sea Surface (1), Mean 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_20230503T0	071800_20230503T071915_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T0	084810_20230503T085130_C001	Mean Sea Surface (1), Mean 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_20230503T0	085642_20230503T085807_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T0	093802_20230503T094012_C001	Mean Sea Surface (1), Mean 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_20230503T1	103546_20230503T103654_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T1	111814_20230503T111925_C001	Mean Sea Surface (1), Mean 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_20230503T1	120331_20230503T120512_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T1	125616_20230503T125840_C001	Mean Sea Surface (1), Mean 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_20230503T1	143252_20230503T143722_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_20230503T1	152155_20230503T152443_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T1	l61159_20230503T161545_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20230503T1	161623_20230503T161653_C001	Mean Sea Surface (1), Mean 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_20230503T1	180155_20230503T180326_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230503T2	202743_20230503T203049_C001	Mean Sea Surface (1), Mean 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_20230503T2	220044_20230503T220335_C001	Mean Sea Surface (1), Mean 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_20230503T2	220644_20230503T221020_C001	Mean Sea Surface (1), Mean 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_20230503T2	234123_20230503T234357_C001	Mean Sea Surface (1), Mean 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_20230503T0	012148_20230503T012340_C001	Mean Sea Surface (1), Mean 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_20230503T0	012340_20230503T012710_C001	Mean Sea Surface (1), Mean 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_20230503T030006_20230503T030629_C001	Mean Sea Surface (1), Mean 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_20230503T044221_20230503T044637_C001	Mean Sea Surface (1), Mean 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_20230503T062119_20230503T062434_C001	Mean Sea Surface (1), Mean 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_20230503T062519_20230503T062838_C001	Mean Sea Surface (1), Mean 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_20230503T075939_20230503T080735_C001	Mean Sea Surface (1), Mean 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_20230503T094013_20230503T094730_C001	Mean Sea Surface (1), Mean 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_20230503T111925_20230503T112641_C001	Mean Sea Surface (1), Mean 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_20230503T125840_20230503T130403_C001	Mean Sea Surface (1), Mean 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_20230503T143722_20230503T143806_C001	Mean Sea Surface (1), Mean 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_20230503T143818_20230503T144311_C001	Mean Sea Surface (1), Mean 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_20230503T144313_20230503T144437_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPR_2_20230503T161545_20230503T161623_C001	Mean Sea Surface (1), Mean 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_20230503T161653_20230503T162431_C001	Mean Sea Surface (1), Mean 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_20230503T175238_20230503T175952_C001	Mean Sea Surface (1), Mean 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_20230503T193211_20230503T193835_C001	Mean Sea Surface (1), Mean 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_20230503T193835_20230503T193902_C001	Mean Sea Surface (1), Mean 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_20230503T211038_20230503T211735_C001	Mean Sea Surface (1), Mean 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_20230503T211735_20230503T211916_C001	Mean Sea Surface (1), Mean 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_20230503T225148_20230503T225633_C001	Mean Sea Surface (1), Mean 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_20230503T225633_20230503T225754_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

## 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230503T043108_20230503T043603_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

## 5.6 L2 Measurement Quality Flag Check

## L2 Quality Flags (20 Hz)

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

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230502T235321_20230503T001114_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T001232_20230503T002621_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_20230503T003424_20230503T003624_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_20230503T003734_20230503T004126_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_20230503T004318_20230503T005843_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T010045_20230503T011009_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_20230503T012820_20230503T012933_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_20230503T013750_20230503T014932_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_20230503T020520_20230503T020914_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T021232_20230503T022028_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_20230503T022242_20230503T023751_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T031447_20230503T032421_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_20230503T032434_20230503T034833_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_20230503T035105_20230503T035315_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_20230503T035338_20230503T035917_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_20230503T040206_20230503T042711_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_20230503T043649_20230503T043729_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_20230503T045052_20230503T045135_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_20230503T045845_20230503T052701_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_20230503T053315_20230503T053747_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_20230503T054049_20230503T060125_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_20230503T060915_20230503T060948_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_20230503T063303_20230503T070613_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_IOPM_2_20230503T071226_20230503T071759_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_IOPM_2_20230503T071934_20230503T072545_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fla and the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T075656_20230503T075838_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fland the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T081145_20230503T084534_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fl and the OCOG Altimeter Range and Backscatter Quality Flags have t set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T085130_20230503T085642_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_IOPM_2_20230503T085853_20230503T091825_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fl and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T093623_20230503T093638_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fl and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T095013_20230503T101122_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T101232_20230503T102354_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T102821_20230503T103130_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have bee for one or more records
CS_OFFL_SIR_IOPM_2_20230503T103147_20230503T103545_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have bee for one or more records
CS_OFFL_SIR_IOPM_2_20230503T103822_20230503T110648_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T110704_20230503T111406_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fl and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T111543_20230503T111814_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have bee for one or more records
CS_OFFL_SIR_IOPM_2_20230503T113215_20230503T113259_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T113330_20230503T114701_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T114732_20230503T120320_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T120512_20230503T121030_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have bee for one or more records
CS_OFFL_SIR_IOPM_2_20230503T121049_20230503T121249_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have bee for one or more records
CS_OFFL_SIR_IOPM_2_20230503T122119_20230503T123406_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fland the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T123621_20230503T124824_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T125056_20230503T125217_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T131544_20230503T132611_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fland the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T132750_20230503T134230_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fland the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_IOPM_2_20230503T134438_20230503T134942_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have bee for one or more records
CS_OFFL_SIR_IOPM_2_20230503T135813_20230503T135910_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fland the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records

Description (1994) 250-000 and the Comment Program (2004) Comment Program (2004) Comment Program (2004) Comment Program of Businestine Coulty Figure 1994 Comment Program (2004) Comment Program of Businestine Coulty Figure 1994 Comment Program (2004) Co	CS_OFFL_SIR_IOPM_2_20230503T141535_20230503T141959_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
Section Country   Section Co	CS_OFFL_SIR_IOPM_2_20230503T142122_20230503T142823_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
See   Part   200006801116807 20000680116807 200006801	CS_OFFL_SIR_IOPM_2_20230503T145030_20230503T145322_C001		
Description of the control of the co	CS_OFFL_SIR_IOPM_2_20230503T150007_20230503T150224_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Secretary County	CS_OFFL_SIR_IOPM_2_20230503T150427_20230503T152127_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscaler Caulity   Coro or more records	CS_OFFL_SIR_IOPM_2_20230503T152444_20230503T152859_C001		
Dear Allmeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Code  CS_OFFL_SRIL_IOPM_2_202000001195502_2020000119540_C001  Dear Allmeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Code Allmeter Range SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Code Allmeter Range and Backscatter Quality Flags and Backscatter Quality Code Allmeter Range and Backscatter Quality Flags have been set for some one records  CS_OFFL_SRIL_IOPM_2_202000001177061_2020000001171401_C001  DOGA Allmeter Range Quality, OCOG Backscatter Quality CS_OFFL_SRIL_IOPM_2_202000001171401_2020000001171401_C001  DOGA Allmeter Range Quality, OCOG Backscatter Quality CS_OFFL_SRIL_IOPM_2_202000001171401_202000001171401_C001  DOGA Allmeter Range, SSHA, SWH and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set for some one records  The COGA Allmeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_IOPM_2_20230503T152906_20230503T152914_C001		
CS_OFFL_SIR_IOPML2_20205003T150306_20205003T19019 CD01  Alternative Range and Basidecenter Cuality Range Range and Basidecenter Cuality Range R	CS_OFFL_SIR_IOPM_2_20230503T152921_20230503T153105_C001		
and Backscatter Quality Plags have been Allineter Range and Backscatter Quality Flags have been Allineter Range and Backscatter Quality Flags have been set to one or more records  CS_OFFL_SIR_OPM_2_202305031170261_202305031170814_C001  CS_OFFL_SIR_OPM_2_202305031170261_202305031170814_C001  CS_OFFL_SIR_OPM_2_202305031170261_202305031170261_C001  CS_OFFL_SIR_OPM_2_202305031170261_202305031170261_C001  CS_OFFL_SIR_OPM_2_202305031170261_202305031170261_C001  CS_OFFL_SIR_OPM_2_202305031170261_202305031170261_C001  CS_OFFL_SIR_OPM_2_202305031170261_202305031170261_C001  CS_OFFL_SIR_OPM_2_202305031170261_202305031170261_C001  CS_OFFL_SIR_OPM_2_202305031180405_20230503118040_C001  CS_OFFL_SIR_OPM_2_202305031180405_202305031180402_C001  CS_OFFL_SIR_OPM_2_202305031180405_202305031180402_C001  CS_OFFL_SIR_OPM_2_202305031180405_202305031180402_C001  CS_OFFL_SIR_OPM_2_202305031180405_202305031180402_C001  CS_OFFL_SIR_OPM_2_202305031180405_202305031180503_C001  CS_OFFL_SIR_OPM_2_202305031180405_202305031180503_C001  CS_OFFL_SIR_OPM_2_202305031180405_202305031180503_C001  CS_OFFL_SIR_OPM_2_202305031180405_202305031180503_C001  CS_OFFL_SIR_OPM_2_202305031180405_202305031180503_C001  CS_OFFL_SIR_OPM_2_202305031180505_202305031180503_C001  CS_OFFL_SIR_OPM_2_202305031180505_202305031180503_C001  CS_OFFL_SIR_OPM_2_202305031180505_202305031190503_C001  CS_OFFL_SIR_OPM_2_202305031180505_202305031120222_C001  CS_OFFL_SIR_OPM_2_202305031180505_202305031120222_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120222_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120605_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120605_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120605_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120605_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120605_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120605_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120605_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120605_C001  CS_OFFL_SIR_OPM_2_202305031120505_202305031120605_C001  CS_OFFL_SIR_OPM_2_2	CS_OFFL_SIR_IOPM_2_20230503T153520_20230503T155849_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_202305031170821_202305031171145_CO01  CS_OFFL_SIR_IOPM_2_202305031170821_20230503117415_CO01  CS_OFFL_SIR_IOPM_2_20230503117445_20230503117421_CO01  CS_OFFL_SIR_IOPM_2_20230503117445_20230503117421_CO01  CS_OFFL_SIR_IOPM_2_202305031174251_20230503117421_CO01  CS_OFFL_SIR_IOPM_2_20230503118402_CO01  CS_OFFL_SIR_IOPM_2_20230503118503_CO01  CS_OFFL_SIR_IOPM_2_2023050312003118_00003718202_CO01  CS_OFFL_SIR_IOPM_2_2023050312003118_00003718202_CO01  CS_OFFL_SIR_IOPM_2_2023050312003118_00003718202_CO01  CS_OFFL_SIR_IOPM_2_20230503120031_2000037120000000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20230503T163546_20230503T170109_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_JOPM_2_2223503717445_22235037174221_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Flags and the COOG Altimeter Range and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_IOPM_2_20230503T170251_20230503T170814_C001		
CS_OFFL_SIR_IOPM_2_20220503T174251_20230503T17473_C001  CS_OFFL_SIR_IOPM_2_20220503T174251_20230503T174713_C001  CS_OFFL_SIR_IOPM_2_20220503T174251_20230503T174713_C001  CS_OFFL_SIR_IOPM_2_20220503T174251_20230503T174713_C001  CS_OFFL_SIR_IOPM_2_20220503T174251_20230503T183400_C001  CS_OFFL_SIR_IOPM_2_20220503T181231_20230503T183400_C001  CS_OFFL_SIR_IOPM_2_20220503T181231_20230503T183400_C001  CS_OFFL_SIR_IOPM_2_20220503T184245_20230503T184102_C001  CS_OFFL_SIR_IOPM_2_20220503T184245_20230503T18400_C001  CS_OFFL_SIR_IOPM_2_20220503T184425_20230503T18400_C001  CS_OFFL_SIR_IOPM_2_20220503T184445_20230503T185053_C001  CS_OFFL_SIR_IOPM_2_20220503T184445_20230503T185053_C001  CS_OFFL_SIR_IOPM_2_20220503T184405_20230503T192822_C001  CS_OFFL_SIR_IOPM_2_20220503T184405_20230503T192822_C001  CS_OFFL_SIR_IOPM_2_20220503T201156_20230503T202011_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T202011_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T202014_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T202742_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T210755_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20220503T203331_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20220503T21002_20250503T214468_C001  CS_OFFL_SIR_IOPM_2_20220503T214055_20230503T214448_C001  CC_OFFL_SIR_IOPM_2_20220503T214055_20230503T214448_C001  CC_OFFL_SIR_IOPM_2_20220503T214656_20230503T214468_C001  CC_OFFL_SIR_IOPM_2_20220503T214656_20230503T214468_C001  CC_OFFL_SIR_IOPM_2_20220503T214656_20230503T214468_C001  CC_OFFL_SIR_IOPM_2_20220503T214656_20230503T214468_C001  CC_OFFL_SIR_IOPM_2_20220503T214656_20230503T214468_C001  CC_OFFL_SIR_IOPM_2_20220503T214656_20230503T214468_C001  CC_OFFL_SIR_IOPM_2_20220503T214656_20230503T214468_C001	CS_OFFL_SIR_IOPM_2_20230503T170821_20230503T171145_C001		
and files pools of the coord Allimeter Range and Backscatter Quality Flags have been all the coord Allimeter Range and Backscatter Quality Flags have been all the coord Allimeter Range and Backscatter Quality Flags have been all the coord Allimeter Range and Backscatter Quality Flags have been all the coord Allimeter Range and Backscatter Quality Flags have been all the coord Allimeter Range and Backscatter Quality Flags have been all the coord Allimeter Range and Backscatter Quality Flags have been all the coord Allimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230503T183435_20230503T184102_C001  CS_OFFL_SIR_IOPM_2_20230503T184245_20230503T185053_C001  CS_OFFL_SIR_IOPM_2_20230503T184245_20230503T185053_C001  CS_OFFL_SIR_IOPM_2_20230503T186405_20230503T192822_C001  CS_OFFL_SIR_IOPM_2_20230503T201156_20230503T202011_C001  CS_OFFL_SIR_IOPM_2_20230503T201156_20230503T202011_C001  CS_OFFL_SIR_IOPM_2_20230503T202011_C001  CS_OFFL_SIR_IOPM_2_20230503T20011_C001  CS_OFFL_	CS_OFFL_SIR_IOPM_2_20230503T171445_20230503T174221_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COGO Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230503T183435_20230503T184102_C001  CS_OFFL_SIR_IOPM_2_20230503T184245_20230503T184102_C001  CS_OFFL_SIR_IOPM_2_20230503T184245_20230503T185053_C001  CS_OFFL_SIR_IOPM_2_20230503T184245_20230503T185053_C001  CS_OFFL_SIR_IOPM_2_20230503T184245_20230503T185053_C001  CS_OFFL_SIR_IOPM_2_20230503T185405_20230503T182822_C001  CS_OFFL_SIR_IOPM_2_20230503T185405_20230503T192822_C001  CS_OFFL_SIR_IOPM_2_20230503T201156_20230503T202011_C001  CS_OFFL_SIR_IOPM_2_20230503T201156_20230503T202011_C001  CS_OFFL_SIR_IOPM_2_20230503T202255_20230503T202742_C001  CS_OFFL_SIR_IOPM_2_20230503T202255_20230503T202742_C001  CS_OFFL_SIR_IOPM_2_20230503T202255_20230503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T202255_20230503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T202255_20230503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T20230503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T2030503T2072742_C001  CS_OFFL_SIR_IOPM_2_20230503T21200_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T21200_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T21200_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T21200_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212405_20230503T212448_C001  CS_OFFL_SIR_IOPM_2_20230503T212405_20230503T212448_C001  CS_OFFL_SIR_IOPM_2_20230503T214405_20230503T212448_C001  CS_OFFL_SIR_IOPM_2_20230503T214405_20230503T212448_C001  CS_OFFL_SIR_IOPM_2_20230503T214405_20230503T214448_C001	CS_OFFL_SIR_IOPM_2_20230503T174251_20230503T174713_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been at the OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230503T202255_20230503T202742_C001  CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T210755_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T212459_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SI	CS_OFFL_SIR_IOPM_2_20230503T181231_20230503T183400_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230503T185405_20230503T192822_C001  CS_OFFL_SIR_IOPM_2_20230503T185405_20230503T192822_C001  CS_OFFL_SIR_IOPM_2_20230503T201156_20230503T202011_C001  CS_OFFL_SIR_IOPM_2_20230503T201156_20230503T202011_C001  CS_OFFL_SIR_IOPM_2_20230503T20225_20230503T202012_C001  CS_OFFL_SIR_IOPM_2_20230503T20225_20230503T202742_C001  CS_OFFL_SIR_IOPM_2_20230503T20235_20230503T202742_C001  CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T20755_C001  CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212000_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T214488_C001  CS_OFFL_SIR_IOPM_2_20230503T214636	CS_OFFL_SIR_IOPM_2_20230503T183435_20230503T184102_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20230503T185405_20230503T192822_C001  Altimeter Range and Backscatter Quality COG Altimeter Range, SSHA, SWH and Backscatter Quality COG Altimeter Range, SSHA, SWH and Backscatter Quality COG Altimeter Range, SSHA, SWH and Backscatter Quality COG Altimeter Range and Backscatter Quality Flags have been  CS_OFFL_SIR_IOPM_2_20230503T20225_20230503T202742_C001  CS_OFFL_SIR_IOPM_2_20230503T20225_20230503T207742_C001  CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T210755_C001  CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T210755_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T212859_C001  CS_OFFL_SIR_IOPM_2_20230503T2144005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IO	CS_OFFL_SIR_IOPM_2_20230503T184245_20230503T185053_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230503T202225_20230503T202742_C001  CS_OFFL_SIR_IOPM_2_20230503T202225_20230503T202742_C001  CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T210755_C001  CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T210755_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T21205_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T212859_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T2124448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CCG_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCG_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCG_Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPM_2_20230503T185405_20230503T192822_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T210755_C001  Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T210755_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T212859_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T212859_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214036_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CCCCA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCCCA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCCCA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCCCA Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCCCA Altimeter Range and Backscatter Quality Flags have been set fo	CS_OFFL_SIR_IOPM_2_20230503T201156_20230503T202011_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 set for one or more records  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T212859_C001  OCGA Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  OCGA Altimeter Range Quality, OCOG Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  OCGA Altimeter Range, SSHA, SWH 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 and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  OCOG Altimeter Range Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPM_2_20230503T202225_20230503T202742_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T212859_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914	CS_OFFL_SIR_IOPM_2_20230503T203331_20230503T210755_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  Cean Altimeter Range, SSHA, SWH 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 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 20230503T220643 C001  COCOG Altimeter Range Quality, OCOG  OCOG Altimeter Range Quality, OCOG  The OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_IOPM_2_20230503T212010_20230503T212415_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T216336_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T216336_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T216336_20230503T215914_C001  CS_OFFL_SIR_IOPM_2_20230503T216336_20230503T216433_C001  CS_OFFL_SIR_IOPM_2_20230503T216336_20230503T220643_C001	CS_OFFL_SIR_IOPM_2_20230503T212750_20230503T212859_C001		
CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  OCOG Altimeter Range Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_IOPM_2_20230503T214005_20230503T214448_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20230503T214636_20230503T215914_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20230503T220336_20230503T220643_C001		

COLORF, SRI, CPM 2, 2000000712493 (20000007124900, CD01)  COLORF, SRI, CPM 2, 2000000712493 (2000007124900, CD01)  COLORF, SRI, CPM 2, 2000000771493 (2000007714900, CD01)  COLORF, SRI, CPM 2, 2000000771493 (20000077	CS_OFFL_SIR_IOPM_2_20230503T221256_20230503T221839_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 SRI IOPM 2 2020000172392 20200001723939 C011  Open Allerede Rays (SRI), CSMI Allered Ray	CS_OFFL_SIR_IOPM_2_20230503T221843_20230503T224005_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Selection County	CS_OFFL_SIR_IOPM_2_20230503T224139_20230503T224605_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SRI_IOPM_2_PXX28560T24357_2022600T128551 COID  CS_OFFL_SRI_IOPM_2_PXX28560T24357_2022600T128551 COID  CS_OFFL_SRI_IOPM_2_PXX28560T24357_2022600T128552 COID  CS_OFFL_SRI_IOPM_2_PXX28560T128352 QX28500T128551 COID  CS_OFFL_SRI_IOPM_2_PXX28560T128352 QX28500T128551 COID  CS_OFFL_SRI_IOPM_2_PXX28560T128352 QX28500T128551 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T128352 QX28500T128551 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T128353 QX28500T128552 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T128353 QX28500T128552 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T128353 QX28500T128552 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T128353 QX28500T12852 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T128353 QX28500T102832 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T128353 QX28500T102832 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX28500T102835 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX28500T102835 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX28500T102835 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX28500T102835 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX1000T118468 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX1000T118468 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX1000T118468 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX1000T118468 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX1000T118565 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX1000T118565 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T102835 QX1000T118565 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T12835 QX1000T118565 QX101  CS_OFFL_SRI_IOPM_2_PXX28560T12835 QX1000T118565 QX1000T11	CS_OFFL_SIR_IOPM_2_20230503T230304_20230503T231002_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Custry  CG_OFFL_SIR_IOPM_2_202030507120504_202030507120503_20203  CG_OFFL_SIR_IOPM_2_202030507120504_202030507120504_00001  CG_OFFL_SIR_IOPM_2_202030507120504_202030507120504_00001  CG_OFFL_SIR_IOPM_2_202030507120504_202030507110114_C001  CG_OFFL_SIR_IOPM_2_202030507120504_202030507110114_C001  CG_OFFL_SIR_IOPM_2_202030507120504_202030507110114_C001  CG_OFFL_SIR_IOPM_2_202030507120504_202030507110114_C001  CG_OFFL_SIR_IOPM_2_202030507102031_202030507110114_C001  CG_OFFL_SIR_IOPM_2_202030507102031_20203050710114_C001  CG_OFFL_SIR_IOPM_2_202030507110114_202030507110114_C001  CG_OFFL_SIR_IOPM_2_202030507110114_20203050	CS_OFFL_SIR_IOPM_2_20230503T231020_20230503T233423_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_LOPM_2_000000071260542_0000000071260540_0000000000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20230503T234357_20230503T234551_C001		
and Backscatter Caulity Plags have been set for one or more records.  CS_OFFL_SIR_IOPN_2_20230503T012933_20230503T010939_C001  CS_OFFL_SIR_IOPN_2_20230503T012933_20230503T0129314_C001  CS_OFFL_SIR_IOPN_2_20230503T012933_20230503T012932_C001  CS_OFFL_SIR_IOPN_2_20230503T012933_20230503T012932_C001  CS_OFFL_SIR_IOPN_2_20230503T012933_20230503T012932_C001  CS_OFFL_SIR_IOPN_2_20230503T012932_2001  CS_OFFL_SIR_IOPN_2_20230503T012933_20230503T012932_C001  CS_OFFL_SIR_IOPN_2_20230503T012932_2001  CS_OFFL_SIR_IOPN_2_20230503T012932_C001  CS_OFFL_SIR_IOPN_2_20230503T012932_2001  CS_OFFL_SIR_IOPN_2_20230503T012932_2001  CS_OFFL_SIR_IOPN_2_20230503T012932_C001  CS_OFFL_SIR_IOPN_2_20230503T012932_C001  CS_OFFL_SIR_IOPN_2_20230503T134291_20230503T154438_C001  CS_OFFL_SIR_IOPN_2_20230503T134291_20230503T154438_C001  CS_OFFL_SIR_IOPN_2_20230503T134291_20230503T154438_C001  CS_OFFL_SIR_IOPN_2_20230503T134291_20230503T154438_C001  CS_OFFL_SIR_IOPN_2_20230503T13444_20230503T16107_C001  CS_OFFL_SIR_IOPN_2_20230503T134291_20230503T16107_C001  CS_OFFL_SIR_IOPN_2_20230503T134291_20230503T164438_C001  CS_OFFL_SIR_IOPN_2_20230503T120331_C001  CS_OFFL_SIR_IOPN_2_20230503T120331_C001  CS_OFFL_SIR_IOPN_2_20230503T120331_2001  CS_OFFL_SIR_IOPN_2_20230503T120331_2001  CS_OFFL_SIR_IOPN_2_20230503T120331_2001  CS_OFFL_SIR_IOPN_2_20230503T120331_2001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T120331_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T12031_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T12031_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T12031_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T12031_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T12031_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T12031_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T12031_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T12031_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T12031_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T120303_C001  CS_OFFL_SIR_IOPN_2_20230503T125501_20230503T120303_C001  CS_OFFL_SIR_IOPN_2_20230503T1	CS_OFFL_SIR_IOPM_2_20230503T234827_20230503T235033_C001		
and flash-osciter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_JOPN_2_20230503T012333_20230503T013114_C001  CS_OFFL_SIR_JOPN_2_20230503T012333_20230503T012132_C001  CS_OFFL_SIR_JOPN_2_20230503T012332_20230503T012134_C001  CS_OFFL_SIR_JOPN_2_20230503T012332_20230503T012134_C001  CS_OFFL_SIR_JOPN_2_20230503T043742_20230503T01234_C001  CS_OFFL_SIR_JOPN_2_20230503T043742_20230503T01234_C001  CS_OFFL_SIR_JOPN_2_20230503T144231_20230503T15434_S_C001  CS_OFFL_SIR_JOPN_2_20230503T144231_20230503T15434_S_C001  CS_OFFL_SIR_JOPN_2_20230503T144231_20230503T161017_C001  CS_OFFL_SIR_JOPN_2_20230503T16056_20230503T161017_C001  CS_OFFL_SIR_JOPN_2_20230503T12004_20230503T160107_C001  CS_OFFL_SIR_JOPN_2_20230503T12004_20230503T160107_C001  CS_OFFL_SIR_JOPN_2_20230503T12004_20230503T120035_C001  CS_OFFL_SIR_JOPN_2_20230503T12004_20230503T120035_C001  CS_OFFL_SIR_JOPN_2_20230503T12004_20230503T120035_C001  CS_OFFL_SIR_JOPN_2_20230503T12004_20230503T120035_C001  CS_OFFL_SIR_JOPN_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPN_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPN_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPN_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPN_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120030_20230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120035_C00230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120035_C00230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T120035_C00230503T120035_C001  CS_OFFL_SIR_JOPR_2_20230503T14433_20230503T14433_20230503T14433_20230503T14433_20230503T14433_20230503T14433_20230503T14433_20230503T14433_20230503T14433_20230503T144	CS_OFFL_SIR_IOPM_2_20230503T235243_20230503T235759_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, DOOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_JOPN_2_202305037102915_202305037047322_C001  CS_OFFL_SIR_JOPN_2_202305037043729_202305037047342_C001  CS_OFFL_SIR_JOPN_2_202305037104251_20230503704742_C001  CS_OFFL_SIR_JOPN_2_202305037104251_2023050371047438_C001  CS_OFFL_SIR_JOPN_2_202305037104251_2023050371047438_C001  CS_OFFL_SIR_JOPN_2_202305037104251_2023050371047438_C001  CS_OFFL_SIR_JOPN_2_202305037100444_202305037120335_C001  CS_OFFL_SIR_JOPN_2_202305037120304_202305037120331_C001  CS_OFFL_SIR_JOPN_2_202305037120304_202305037120301_C001  CS_OFFL_SIR_JOPN_2_202305037120304_202305037120301_C001  CS_OFFL_SIR_JOPN_2_202305037120304_202305037120301_C001  CS_OFFL_SIR_JOPN_2_2023050371120304_202305037120301_C001  CS_OFFL_SIR_JOPN_2_2023050371120304_202305037120301_C001  CS_OFFL_SIR_JOPN_2_2023050371120304_202305037120301_C001  CS_OFFL_SIR_JOPN_2_2023050371120304_202305037120301_C001  CS_OFFL_SIR_JOPN_2_202305037112030_202305037120301_C001  CS_OFFL_SIR_JOPN_2_20230503711735_202305037121001_C001  CS_OFFL_SIR_JOPN_2_202305037121930_2023050371	CS_OFFL_SIR_IOPM_2_20230503T235853_20230504T000902_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPN_2_20230503T14251_20230503T9443742_C001  CS_OFFL_SIR_IOPN_2_20230503T14251_20230503T19443R_C001  CS_OFFL_SIR_IOPN_2_20230503T16056_20230503T19443R_C001  CS_OFFL_SIR_IOPN_2_20230503T16056_20230503T181017_C001  CS_OFFL_SIR_IOPN_2_20230503T16056_20230503T181017_C001  CS_OFFL_SIR_IOPN_2_20230503T120044_20230503T20335_C001  CS_OFFL_SIR_IOPN_2_20230503T120044_20230503T120335_C001  CS_OFFL_SIR_IOPN_2_20230503T120044_20230503T120335_C001  CS_OFFL_SIR_IOPN_2_20230503T120022_20230503T120335_C001  CS_OFFL_SIR_IOPN_2_20230503T120022_20230503T120335_C001  CS_OFFL_SIR_IOPR_2_20230503T120022_20230503T120335_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T144437_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_20230503T120316_C001  CS_OFFL_SIR_IOPR_2_20230503T145350_	CS_OFFL_SIR_IOPN_2_20230503T012933_20230503T013114_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPN_2_20230503T134251_20230503T134438_C001  CS_OFFL_SIR_IOPN_2_20230503T160968_20230503T161017_C001  CS_OFFL_SIR_IOPN_2_20230503T160968_20230503T161017_C001  CS_OFFL_SIR_IOPN_2_20230503T220044_20230503T161017_C001  CS_OFFL_SIR_IOPN_2_20230503T220044_20230503T220335_C001  CS_OFFL_SIR_IOPN_2_20230503T220044_20230503T220335_C001  CS_OFFL_SIR_IOPN_2_20230503T103144_20230503T220335_C001  CS_OFFL_SIR_IOPN_2_20230503T103144_20230503T103147_C001  CS_OFFL_SIR_IOPR_2_20230503T103144_20230503T103147_C001  CS_OFFL_SIR_IOPR_2_20230503T103144_20230503T103147_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T1203112031_C001  CS_OFFL_SIR_IOPR_2_20230503T125501_20230503T120311_C001  CS_OFFL_SIR_IOPR_2_20230503T125501_20230503T125615_C001  CS_OFFL_SIR_IOPR_2_20230503T125501_20230503T125615_C001  CS_OFFL_SIR_IOPR_2_20230503T144373_20230503T198318_C001  CS_OFFL_SIR_IOPR_2_20230503T144375_20230503T198318_C001  CS_OFFL_SIR_IOPR_2_20230503T121735_20230503T198318_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T2121016_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T2121016_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212004_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212004_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212004_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212004_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212004_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20230503T212004_C001  CS_OFFL_SIR_IOPR_2_20230503T21735_20	CS_OFFL_SIR_IOPN_2_20230503T020915_20230503T021232_C001		
Backscatter Quality  CS_OFFL_SIR_IOPN_2_20230503T160966_20230503T161017_C001  CS_OFFL_SIR_IOPN_2_20230503T160966_20230503T161017_C001  CS_OFFL_SIR_IOPN_2_20230503T220044_20230503T220335_C001  CS_OFFL_SIR_IOPN_2_20230503T220044_20230503T220335_C001  CS_OFFL_SIR_IOPN_2_20230503T103144_20230503T20335_C001  CS_OFFL_SIR_IOPR_2_20230503T103144_20230503T103147_C001  CS_OFFL_SIR_IOPR_2_20230503T103142_20230503T103147_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T125501_20230503T125615_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T144437_C001  CS_OFFL_SIR_IOPR_2_20230503T1444313_20230503T144437_C001  CS_OFFL_SIR_IOPR_2_20230503T1444313_20230503T125318_C001  CS_OFFL_SIR_IOPR_2_20230503T125252_20230503T125318_C001  CS_OFFL_SIR_IOPR_2_20230503T12733_20230503T211736_C001  CS_OFFL_SIR_IOPR_2_20230503T211733_20230503T211736_C001  CS_OFFL_SIR_IOPR_2_20230503T211733_20230503T211736_C001  CS_OFFL_SIR_IOPR_2_20230503T211733_20230503T211736_C001  CS_OFFL_SIR_IOPR_2_20230503T211733_20230503T212010_C001  CO0R_Altimeter Range Cuality. OCOG Altimeter Range and Backscatter Cuality Flags have been set for one or more records  CS_OFFL_SIR_IOPR_2_20230503T211733_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T21733_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_202305	CS_OFFL_SIR_IOPN_2_20230503T043729_20230503T043742_C001		
Backscatter Quality  CS_OFFL_SIR_IOPN_2_202305037120044_202305037220335_C001  CS_OFFL_SIR_IOPN_2_202305037120044_202305037220335_C001  CS_OFFL_SIR_IOPN_2_202305037103144_202305037103147_C001  CS_OFFL_SIR_IOPN_2_202305037103144_202305037103147_C001  CS_OFFL_SIR_IOPN_2_202305037120320_202305037120331_C001  CS_OFFL_SIR_IOPN_2_202305037120320_202305037120331_C001  CS_OFFL_SIR_IOPN_2_202305037120320_202305037120331_C001  CS_OFFL_SIR_IOPN_2_202305037125501_202305037125615_C001  CS_OFFL_SIR_IOPN_2_202305037125501_202305037125615_C001  CS_OFFL_SIR_IOPN_2_202305037144313_202305037144437_C001  CS_OFFL_SIR_IOPN_2_202305037144313_202305037144437_C001  CS_OFFL_SIR_IOPN_2_2023050371195252_202305037195318_C001  CS_OFFL_SIR_IOPN_2_2023050371195252_202305037195318_C001  CS_OFFL_SIR_IOPN_2_2023050371195252_202305037195318_C001  CS_OFFL_SIR_IOPN_2_202305037121735_2023050371210000000000000000000000000000000000	CS_OFFL_SIR_IOPN_2_20230503T134251_20230503T134438_C001		
Backscatter Quality  CS_OFFL_SIR_IOPR_2_20230503T103144_20230503T103147_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T125501_20230503T125615_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T1244437_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T144437_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T12911916_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CCCAR Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCCAR Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCCAR Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCCAR Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCCAR Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCCAR Altimeter Range and Ba	CS_OFFL_SIR_IOPN_2_20230503T160956_20230503T161017_C001		
CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001  CS_OFFL_SIR_IOPR_2_20230503T125501_20230503T125615_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T125615_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T144437_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T144437_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T21100_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C	CS_OFFL_SIR_IOPN_2_20230503T220044_20230503T220335_C001		
Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T125615_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T144437_C001  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T144437_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CCCG_Altimeter Range and Backscatter Quality Fla	CS_OFFL_SIR_IOPR_2_20230503T103144_20230503T103147_C001	0 2	
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T144437_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044	CS_OFFL_SIR_IOPR_2_20230503T120320_20230503T120331_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001  DCGG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  Backscatter Quality occor for one or more records  The OCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags and the OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPR_2_20230503T224727_20230503T224730_C001  DCGG Altimeter Range Quality, OCGG  Altimeter Range Quality, OCGG  Altimeter Range Quality, OCGG  Altimeter Range Quality, OCGG  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPR_2_20230503T125501_20230503T125615_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T2230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T2230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T2230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T2230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T2230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T2230503T220730_C001  CS_OFFL_SIR_IOPR_2_20230503T2230503T220730_C001  CS_OFFL_SIR_IOPR_2_20230503T2230503T220730_C001  CS_OFFL_SIR_IOPR_2_20230503T2230503T220730_C001  CCG_Altimeter Range Quality, OCOG_Altimeter Range and Backscatter Quality Flags have been set one or more records  CS_OFFL_SIR_IOPR_2_20230503T2230503T220730_C001  CCG_Altimeter Range Quality, OCOG_Altimeter Range and Backscatter Quality Flags have been set one or more records  CS_OFFL_SIR_IOPR_2_20230503T2230503T220730_C001  CCG_Altimeter Range Quality, OCOG_Altimeter Range and Backscatter Quality Flags have been set one or more records	CS_OFFL_SIR_IOPR_2_20230503T144313_20230503T144437_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T225915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T225915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T225915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T225915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T225915_20230503T220044_C001  CS_OFFL_SIR_IOPR_2_20230503T225727_20230503T220730_C001  CS_OFFL_SIR_IOPR_2_20230503T224730_C001  CS_OFFL_SIR_IOPR_2_2	CS_OFFL_SIR_IOPR_2_20230503T195252_20230503T195318_C001		
CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  Cs_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T224727_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T224727_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T224727_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T220044_C001  Cs_OFFL_SIR_IOPR_2_20230503T220044_C0	CS_OFFL_SIR_IOPR_2_20230503T211735_20230503T211916_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality set for one or more records  OCOG Altimeter Range Quality, OCOG  The OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_IOPR_2_20230503T211939_20230503T212010_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPR_2_20230503T215915_20230503T220044_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPR_2_20230503T224727_20230503T224730_C001		

## L2 Quality Flags (20 Hz PLRM)

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20230503T011009_20230503T011302_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_20230503T012011_20230503T012147_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_20230503T012710_20230503T012820_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_20230503T012933_20230503T013114_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_20230503T024726_20230503T025117_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_20230503T030629_20230503T031218_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_20230503T042908_20230503T043108_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_20230503T044040_20230503T044221_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_20230503T044638_20230503T045052_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_20230503T045135_20230503T045258_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_20230503T045510_20230503T045844_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_20230503T052847_20230503T053027_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_20230503T053138_20230503T053315_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_20230503T061954_20230503T062118_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_20230503T062435_20230503T062519_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_20230503T062838_20230503T063303_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_20230503T070852_20230503T071225_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_20230503T073543_20230503T073715_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_20230503T074959_20230503T075010_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_20230503T075557_20230503T075656_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_20230503T091826_20230503T092143_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_20230503T093802_20230503T094012_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_20230503T121249_20230503T121440_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_20230503T130403_20230503T130539_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_20230503T131209_20230503T131544_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_20230503T134251_20230503T134438_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
	PLRM  OCOG Altimeter Range Quality PLRM,	set for one or more records  The OCOG Range and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_IOPN_2_20230503T142000_20230503T142122_C001	OCOG Backscatter Quality	more records
CS_OFFL_SIR_IOPN_2_20230503T143210_20230503T143244_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_20230503T143252_20230503T143722_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_20230503T152155_20230503T152443_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_20230503T153105_20230503T153410_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_20230503T161017_20230503T161118_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_20230503T161159_20230503T161545_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_20230503T161623_20230503T161653_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_20230503T163138_20230503T163546_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_20230503T174714_20230503T175238_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_20230503T180155_20230503T180326_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_20230503T185054_20230503T185206_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_20230503T192822_20230503T192955_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_20230503T193902_20230503T194046_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_20230503T202059_20230503T202224_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_20230503T202743_20230503T203049_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_20230503T213633_20230503T214005_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_20230503T220044_20230503T220335_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_20230503T225754_20230503T230014_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_20230503T233952_20230503T234117_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_20230503T234123_20230503T234357_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_20230503T234551_20230503T234827_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_20230503T235033_20230503T235215_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_20230503T001114_20230503T001231_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_20230503T002622_20230503T003030_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_20230503T012340_20230503T012710_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
Co_OFFL_SIN_IOFN_2_202303031012340_202303031012710_C001	Altimeter Range and Backscatter Quality PLRM	set for one or more records
CS_OFFL_SIR_IOPR_2_20230503T013115_20230503T013533_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_20230503T013615_20230503T013750_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_20230503T014933_20230503T015422_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_20230503T023948_20230503T024306_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_20230503T024412_20230503T024512_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_20230503T030006_20230503T030629_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_20230503T031219_20230503T031430_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_20230503T043745_20230503T044004_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_20230503T044221_20230503T044637_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_20230503T052702_20230503T052847_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_20230503T061549_20230503T061805_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_20230503T062119_20230503T062434_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_20230503T062519_20230503T062838_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_20230503T070614_20230503T070852_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_20230503T075228_20230503T075553_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_20230503T075939_20230503T080735_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_20230503T080916_20230503T081023_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_20230503T093639_20230503T093802_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_20230503T094013_20230503T094730_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_20230503T101122_20230503T101231_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_20230503T111925_20230503T112641_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_20230503T112901_20230503T113100_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_20230503T123407_20230503T123620_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_20230503T124825_20230503T125056_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_20230503T125501_20230503T125615_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_20230503T125840_20230503T130403_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230503T140155_20230503T140209_C001	PLRM  OCOG Altimeter Range Quality PLRM,  OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230503T141114_20230503T141338_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_20230503T141353_20230503T141535_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_20230503T142957_20230503T143210_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_20230503T143722_20230503T143806_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_20230503T143818_20230503T144311_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_20230503T145839_20230503T150007_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_20230503T161545_20230503T161623_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_20230503T161653_20230503T162431_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_20230503T175238_20230503T175952_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_20230503T185207_20230503T185405_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_20230503T193211_20230503T193835_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_20230503T194046_20230503T194140_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_20230503T194533_20230503T194606_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_20230503T200920_20230503T201155_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_20230503T202012_20230503T202059_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_20230503T203050_20230503T203331_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_20230503T210755_20230503T211001_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_20230503T211038_20230503T211735_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_20230503T211735_20230503T211916_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_20230503T221020_20230503T221256_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_20230503T224006_20230503T224139_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_20230503T224733_20230503T224750_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_20230503T224807_20230503T224812_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_20230503T225010_20230503T225133_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_20230503T225148_20230503T225633_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_20230503T231003_20230503T231020_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_20230503T233423_20230503T233952_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

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

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

160

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

Number of products with errors: 211

#### 5.8 L2 Ocean Retracking Quality Check

#### L2 Retracking Flags (20 Hz)

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

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

Number of products with errors:

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

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

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

Number of products with errors:

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

#### 6.1 P2P Product Format Check

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

Number of products with errors:

6.2 P2P Product Header Analysis

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

Number of products with errors:

## 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

## 6.4 P2P Auxiliary Correction Error Check

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

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

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

Number of products with errors: 29

Product	Test Failed	Description
CS_OFFL_SIR_IOP_2_20230502T234608_20230503T003545_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T003545_20230503T012523_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T012523_20230503T021459_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T021459_20230503T030437_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T030437_20230503T035414_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T035414_20230503T044352_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T044352_20230503T053329_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_2_20230503T053329_20230503T062307_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

CS_OFFL_SIR_IOP_2_20230503T062307_20230503T071244_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_2_20230503T071244_20230503T080222_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T080222_20230503T085158_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T085158_20230503T094136_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T094136_20230503T103113_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T103113_20230503T112051_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T112051_20230503T121027_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T121027_20230503T130005_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T130005_20230503T134942_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T134942_20230503T143920_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_2_20230503T143920_20230503T152857_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_2_20230503T152857_20230503T161835_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_2_20230503T161835_20230503T170811_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T170811_20230503T175750_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T175750_20230503T184726_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T184726_20230503T193704_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T193704_20230503T202641_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T202641_20230503T211619_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T211619_20230503T220555_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T220555_20230503T225533_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20230503T225533_20230503T234510_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

#### 6.5 P2P Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220230503T035414_20230503T044352_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

## 6.6 P2P Measurement Quality Flag Check

## P2P Quality Flags (20 Hz)

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

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

Number of products with errors: 30

### P2P Quality Flags (20 Hz PLRM)

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

Number of products with errors: 30

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

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

Number of products with errors:

#### 6.8 P2P Ocean Retracking Quality Check

## P2P Retracking Flags (20 Hz)

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

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

Number of products with errors:

P2P Retracking Flags PLRM

29

30

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

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

Number of products with errors:

## 7. IOP QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_IOPM1B	SIR IOPM1B 176		5	171	0
SIR_IOPR1B	148	114	0	114	0
SIR_IOPN1B	114	148	0	148	0
SIR_IOPM_2	176	176	125	51	0
SIR_IOPR_2	148	114	45	69	0
SIR_IOPN_2	114	148	64	83	1
SIR IOP P2P	29	29	0	28	1

#### 7.1 QCC Errors

Number of QCC reports with errors:

10

Total number of occurrences of each error

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

Test Description Key:							
Abbreviation	Test name	Details					
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7					
RL	RangeLatitude_6	Latitude should be between -90E6 and 90E6					
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7					
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7					
RL	RangeLongitude_6	Longitude should be between -180E6 and 180E6					
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7					

## 7.2 QCC Warnings

Number of QCC reports with warnings

2285

Total number of occurrences of each warning

	· · · · · · · · · · · · · · · · · · ·								
	Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	
Ī	SIR_IOPM1B	171	0	0	0	0	0	0	
	SIR_IOPM_2	0	0	42	41	0	42	0	
	SIR_IOPN1B	112	0	0	0	0	0	0	
	SIR_IOPN_2	0	0	11	37	4	26	30	
	SIR_IOPR1B	147	0	0	0	0	0	0	
	SIR IOPR 2	0	1	35	46	1	33	28	

Product Type	RBSZOPOEPNCDF	RDACONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNC	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	34	0	33	0	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	23	0	0	0	21	0	33
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	16	1	0	44	0	53	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	25	0	0	6	30	0	4
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	0	26	20	47	57	38
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	44	0	1	69	32	9

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	37	0	0	0	0	0	0
SIR_IOPN1B	0	0	0	0	0	54	3
SIR_IOPN_2	30	26	11	0	1	0	0
SIR_IOPR1B	0	0	0	1	0	148	11
SIR IOPR 2	37	52	1	0	2	0	0

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_IOP_2_	14		29	5	29	18	27

Product Type	RDACONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_IOP_2_	1			21	20	29	18
		•				•	

Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-
SIR_IOP_2_	26	29	18	12	29		
Product Type	•	-	-	-	-		-
SIR IOP 2							

Test Description Key:						
Abbreviation	Test name	Details				
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter				
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	Missing Value Int Ocean Net CDF	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
RDACONCDF	RangeDynamicAtmosphericCorrectionOceanNetCDF	#N/A
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

L1B and L2 Product name

P2P Product name
CS\_OFFL\_SIR\_IOP\_2\_\_20230503T234510\_20230504T003448\_C002