

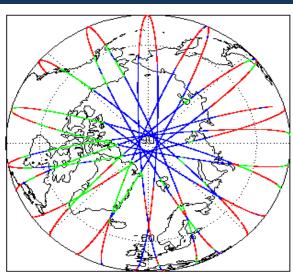
## 1. Overview

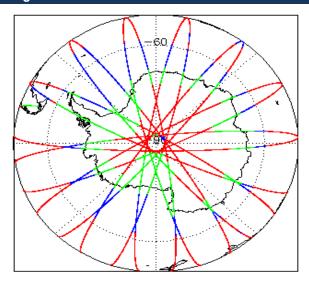
Report Production:	25-Jun-2021		
Processor Used:	CryoSat Ocean Processor		
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data		

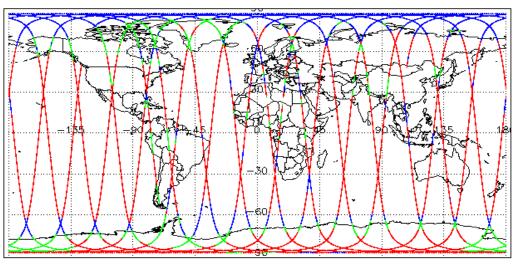
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary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

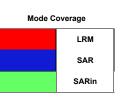
Ī	Mission / Instru	ment News
	21-Jun-2021	None
	22-Jun-2021	None
	23-Jun-2021	Nothing planned

## 2. Global Coverage









## 3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

## 4. IOP Level 1B Data Quality Check

### 4.1 L1B Product Format Check

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

#### 4.2 L1B Product Header Analysis

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

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

Number of products with errors:

#### 4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

#### 4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

0

#### 4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

#### 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.

umber of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20210622T100936_20210622T102052_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20210622T223611_20210622T225050_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210621T235900_20210622T000345_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T003138_20210622T003531_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T031124_20210622T031246_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T035949_20210622T040025_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T080621_20210622T081132_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T085724_20210622T090016_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T121539_20210622T121634_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T121640_20210622T121753_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T144640_20210622T144918_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T162720_20210622T162841_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T170820_20210622T170859_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T171841_20210622T172007_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T202412_20210622T202651_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T202707_20210622T202832_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T220108_20210622T220519_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210622T234109_20210622T234425_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210622T053811_20210622T054101_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210622T071711_20210622T071917_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210622T152746_20210622T153539_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210622T202832_20210622T203616_C001	Loss of Echo	The tracking echo is missing for one or more records

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

#### 5.1 L2 Product Format Check

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

Number of products with errors:

### 5.2 L2 Product Header Analysis

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

Number of products with errors:

## 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

0

#### 5.4 L2 Auxiliary Correction Error Check

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

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

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

> Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.

> Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.

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- > Mean Dynamic Topography: The error value is currently set for products over land and sea ice, but this is to be expected.
- > Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

Number of products with errors:

**Test Failed** Product There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR IOPM 2 20210622T134615 20210622T134701 C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or CS\_OFFL\_SIR\_IOPN\_2\_20210622T003138\_20210622T003531\_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or CS\_OFFL\_SIR\_IOPN\_2\_20210622T003537\_20210622T003649\_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR IOPN 2 20210622T013135 20210622T013354 C001 Mean Dynamic Topography (1) more records There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR IOPN 2 20210622T020933 20210622T021512 C001 Mean Dynamic Topography (1) Mean Sea Surface (1), Total Geocentric There is an error with the MSS height (solution 1) and the Total CS\_OFFL\_SIR\_IOPN\_2\_20210622T034742\_20210622T035206\_C001 Ocean Tide (GOT) Geocentric Ocean Tide (solution 1: GOT) for one or more records There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR IOPN 2 20210622T044107 20210622T044231 C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR IOPN 2 20210622T052943 20210622T053133 C001 Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T062719\_20210622T063022\_C001 Topography height (solution 1) Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T080038\_20210622T080344\_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T080621\_20210622T081132\_C001 Topography height (solution 1) Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T094100\_20210622T094334\_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T103609\_20210622T103725\_C001 Topography (1) Topography height (solution 1) Mean Dynamic Topography (1), Total There is an error with the Mean Dynamic Topography (solution 1) and the CS\_OFFL\_SIR\_IOPN\_2\_20210622T103949\_20210622T104226\_C001 Geocentric Ocean Tide (GOT) Total Geocentric Ocean Tide (solution 1: GOT) for one or more records ean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS OFFL SIR IOPN 2 20210622T111558 20210622T112209 C001 Topography height (solution 1) Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS OFFL SIR IOPN 2 20210622T121539 20210622T121634 C001 Topography (1) Topography height (solution 1) There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR IOPN 2 20210622T121640 20210622T121753 C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR IOPN 2 20210622T125821 20210622T130001 C001 Mean Dynamic Topography (1) more records There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T135501\_20210622T135946\_C001 Topography height (solution 1) Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T144640\_20210622T144918\_C001 Topography (1) Topography height (solution 1) There is an error with the Mean Dynamic Topography height for one or Mean Dynamic Topography (1) CS OFFL SIR IOPN 2 20210622T165905 20210622T165927 C001 more records There is an error with the Total Geocentric Ocean Tide height (solution 1: CS\_OFFL\_SIR\_IOPN\_2\_20210622T171841\_20210622T172007\_C001 Total Geocentric Ocean Tide (GOT) GOT) for one or more records There is an error with the Mean Dynamic Topography height for one or CS OFFL SIR IOPN 2 20210622T180552 20210622T180708 C001 Mean Dynamic Topography (1) more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS OFFL SIR IOPN 2 20210622T194458 20210622T194613 C001 Topography (1) Topography height (solution 1) There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1), Total Geocentric Ocean CS OFFL SIR IOPN 2 20210622T202412 20210622T202651 C001 Topography (solution 1), and tidal corrections for one or more records Tide (GOT), Total Geocentric Ocean There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T202707\_20210622T202832\_C001 Topography (1) Topography height (solution 1) Mean Dynamic Topography (1), Total There is an error with the Mean Dynamic Topography (solution 1) and the CS\_OFFL\_SIR\_IOPN\_2\_20210622T220108\_20210622T220519\_C001 Geocentric Ocean Tide (GOT) Total Geocentric Ocean Tide (solution 1: GOT) for one or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T220636\_20210622T220740\_C001 Topography height (solution 1) Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T230036\_20210622T230307\_C001 Topography (1) Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS\_OFFL\_SIR\_IOPN\_2\_20210622T234552\_20210622T234640\_C001 Topography (1) Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS OFFL SIR IOPR 2 20210622T003649 20210622T004212 C001 Topography height (solution 1) Topography (1) There is an error with the Mean Dynamic Topography height for one or CS\_OFFL\_SIR\_IOPR\_2\_20210622T004221\_20210622T004313\_C001 Mean Dynamic Topography (1) more records

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CS_OFFL_SIR_IOPR_2_20210622T021513_20210622T022113_C001	Mean Sea Surface (1), Mean 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_20210622T022113_20210622T022426_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210622T035206_20210622T035949_C001	Mean Sea Surface (1), Mean 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_20210622T053133_20210622T053811_C001	Mean Sea Surface (1), Mean 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_20210622T053811_20210622T054101_C001	Mean Sea Surface (1), Mean 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_20210622T070957_20210622T071711_C001	Mean Sea Surface (1), Mean 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_20210622T071711_20210622T071917_C001	Mean Sea Surface (1), Mean 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_20210622T072254_20210622T072905_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPR_2_20210622T085132_20210622T085608_C001	Mean Sea Surface (1), Mean 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_20210622T085608_20210622T085723_C001	Mean Sea Surface (1), Mean 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_20210622T102929_20210622T103446_C001	Mean Sea Surface (1), Mean 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_20210622T103446_20210622T103609_C001	Mean Sea Surface (1), Mean 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_20210622T121120_20210622T121539_C001	Mean Sea Surface (1), Mean 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_20210622T134701_20210622T134711_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210622T134711_20210622T135039_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210622T135045_20210622T135501_C001	Mean Sea Surface (1), Mean 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_20210622T152746_20210622T153539_C001	Mean Sea Surface (1), Mean 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_20210622T165756_20210622T165905_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210622T170859_20210622T171647_C001	Mean Sea Surface (1), Mean 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_20210622T184845_20210622T185757_C001	Mean Sea Surface (1), Mean 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_20210622T202832_20210622T203616_C001	Mean Sea Surface (1), Mean 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_20210622T220740_20210622T221303_C001	Mean Sea Surface (1), Mean 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_20210622T230307_20210622T230531_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20210622T233622_20210622T233715_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPR_2_20210622T234640_20210622T235344_C001	Mean Sea 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:

0

### 5.6 L2 Measurement Quality Flag Check

## L2 Quality Flags (20Hz)

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

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20210622T000345_20210622T001022_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_20210622T001507_20210622T001939_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_20210622T002222_20210622T002810_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_20210622T005901_20210622T012008_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_20210622T012446_20210622T012836_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_20210622T012857_20210622T013135_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_20210622T013532_20210622T020240_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_20210622T023530_20210622T025953_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_20210622T030230_20210622T030751_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_20210622T031504_20210622T034742_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_20210622T040837_20210622T041041_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_20210622T041135_20210622T043051_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_20210622T043421_20210622T043914_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_20210622T044232_20210622T045029_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_20210622T045457_20210622T052741_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_20210622T054101_20210622T054202_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_20210622T060850_20210622T061801_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_20210622T062205_20210622T062719_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_20210622T063402_20210622T065532_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_20210622T065817_20210622T070844_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_20210622T071917_20210622T072254_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_20210622T073819_20210622T074425_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_20210622T074612_20210622T075643_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_20210622T081341_20210622T084311_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_20210622T090209_20210622T093357_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_20210622T094334_20210622T094530_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_20210622T094733_20210622T095034_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_20210622T095251_20210622T095607_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_20210622T095633_20210622T100932_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_20210622T100936_20210622T102052_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.

Selection and surply and selection country.  3 (PRI, 3RR OPM 2 20010027110200 2010027110004 COD  4 (PRI, 3RR OPM 2 20010027110200 2010027110004 COD  5 (PRI, 3RR OPM 2 20010027110004 COD  5 (PRI, 3			
20 GPT_SR_ICPN_2_2010027110202_2010022710200_0000000000	CS_OFFL_SIR_IOPM_2_20210622T103725_20210622T103949_C001		
Backbacker Caulty   Sept 200180271 19269   200	CS_OFFL_SIR_IOPM_2_20210622T104226_20210622T105834_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Section (Public Page 1988)   Public Page 1989   P	CS_OFFL_SIR_IOPM_2_20210622T112210_20210622T112450_C001		
Sept.   Sept.   CPM   2   2021   2022   1   2022   2022   1   2024   1   2022   2022   1   2024   1   2024   1   2022   2022   1   2024   1   2024   2022   2022   1   2024   2022   2022   1   2024   2022   2022   2022   2022   2022   2022   2024   2022   2024   2022	CS_OFFL_SIR_IOPM_2_20210622T112507_20210622T112936_C001		
Sec.   CHILL, SIR_, DOM 1_2, TILL TOWNST   THORSE   COURT	CS_OFFL_SIR_IOPM_2_20210622T113223_20210622T114622_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Section   Comparison   Compar	CS_OFFL_SIR_IOPM_2_20210622T114801_20210622T115044_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
SQ. GPFL_SR_OPM_2_202108271120912_2021082710901_2001002710904_0000000000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20210622T122450_20210622T123041_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
SO OFFL, SIR, JOPM, 2, 20210622713014, 20210622714078, CO01  SO OFFL, SIR, JOPM, 2, 20210622713014, 2021062714078, CO01  SO OFFL, SIR, JOPM, 2, 202106227140159, 2021062714078, CO01  SO OFFL, SIR, JOPM, 2, 20210627140159, 2021062714078, CO01  SO OFFL, SIR, JOPM, 2, 20210627140159, 2021062714078, CO01  SO OFFL, SIR, JOPM, 2, 20210627140159, 20210627140947, CO01  SO OFFL, SIR, JOPM, 2, 20210627140506, 20210627115094, CO01  SO OFFL, SIR, JOPM, 2, 20210627140506, 2021062715094, CO01  SO OFFL, SIR, JOPM, 2, 20210627140506, 2021062715094, CO01  SO OFFL, SIR, JOPM, 2, 20210627150906, 2021062715090, CO01  SO OFFL, SIR, JOPM, 2, 20210627150906, 2021062715090, CO01  SO OFFL, SIR, JOPM, 2, 20210627150906, 20210627115090, CO01  SO OFFL, SIR, JOPM, 2, 202106271150906, 20210627115090, CO01  SO OFFL, SIR, JOPM, 2, 20210627115090	CS_OFFL_SIR_IOPM_2_20210622T123324_20210622T123610_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Clustly  Corean Allimeter Range, SSHA, SWH and Backscatter Quality	CS_OFFL_SIR_IOPM_2_20210622T123612_20210622T125647_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the COGA Altimeter Range and Backscatter Quality Flags have been set to one or more records.  SOFFL_SIR_IOPM_2_20210622T140158_20210622T140547a_CO01  SOCIA Altimeter Range Quality, COCO Altimeter Range and Backscatter Quality Flags have been set to one or more records.  CS_OFFL_SIR_IOPM_2_20210622T1440158_20210622T144054C_CO01  SOCIA Altimeter Range Quality, COCO Altimeter Range and Backscatter Quality Flags have been set to one or more records.  CS_OFFL_SIR_IOPM_2_20210622T144218_20210622T144040_CO01  CS_OFFL_SIR_IOPM_2_20210622T144218_2021062ZT140640_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT140506_2021062ZT140640_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT140506_2021062ZT150504_CO01  Altimeter Range Quality, COCO Altimeter Range and Backscatter Quality Flags have been set to one or more records.  CS_OFFL_SIR_IOPM_2_2021062ZT140506_2021062ZT150504_CO01  Altimeter Range Quality, COCO Altimeter Range and Backscatter Quality Flags have been set to one or more records.  CS_OFFL_SIR_IOPM_2_2021062ZT150506_2021062ZT150504_CO01  Altimeter Range Quality, COCO Altimeter Range and Backscatter Quality Flags have been set to one or more records.  CS_OFFL_SIR_IOPM_2_2021062ZT150506_2021062ZT150504_CO01  Altimeter Range and Backscatter Quality Flags have been set to one or more records.  CS_OFFL_SIR_IOPM_2_2021062ZT150506_2021062ZT150704_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT150506_2021062ZT150504_CO01  Altimeter Range and Backscatter Quality.  CS_OFFL_SIR_IOPM_2_2021062ZT162506_2021062ZT150504_CO01  Altimeter Range and Backscatter Quality.  CS_OFFL_SIR_IOPM_2_2021062ZT162506_2021062ZT150504_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT162506_2021062ZT150504_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT162506_2021062ZT150504_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT162506_2021062ZT150504_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT162506_2021062ZT150504_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT162506_2021062ZT150504_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT162506_2021062ZT150504_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT162506_2021062ZT150504_CO01  CS_OFFL_SIR_IOPM_2_2021062ZT160506_2021062ZT1505	CS_OFFL_SIR_IOPM_2_20210622T130001_20210622T130845_C001		
Backscatter Ouality  CS_OFFL_SIR_JOPM_2_20210822T141055_20210822T144040_C001  CS_OFFL_SIR_JOPM_2_20210822T144105_20210822T144040_C001  CS_OFFL_SIR_JOPM_2_20210822T14418_20210822T144040_C001  CS_OFFL_SIR_JOPM_2_20210822T145056_20210822T15634_C001  CS_OFFL_SIR_JOPM_2_20210822T145056_20210822T15634_C001  CS_OFFL_SIR_JOPM_2_20210822T15056_20210822T15634_C001  CS_OFFL_SIR_JOPM_2_20210822T15206_20210822T152746_C001  CS_OFFL_SIR_JOPM_2_20210822T152306_20210822T152746_C001  CS_OFFL_SIR_JOPM_2_20210822T15238_20210822T161423_C001  CS_OFFL_SIR_JOPM_2_20210822T15238_20210822T161646_C001  CS_OFFL_SIR_JOPM_2_20210822T15238_20210822T1616466_C001  CS_OFFL_SIR_JOPM_2_20210822T162566_20210822T162740_C001  CS_OFFL_SIR_JOPM_2_20210822T162566_20210822T162740_C001  CS_OFFL_SIR_JOPM_2_20210822T162782_C001082T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162782_C001082T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162782_C001082T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162782_C001082T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162782_C001082T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162782_C001082T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162782_C001082T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162782_C001082T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162566_20210822T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162566_20210822T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162782_C001082T163646_C001  CS_OFFL_SIR_JOPM_2_20210822T162566_20210822T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162566_20210822T163504_C001  CS_OFFL_SIR_JOPM_2_20210822T162566_20210822T163646_C001  CS_OFFL_SIR_JOPM_2_20210822T162566_20210822T163682_C0010  CS_OFFL_SIR_JOPM_2_20210822T162656_20210822T163682_C001  CS_OFFL_SIR_JOPM_2_20210822T162656_20210822T163682_C001  CS_OFFL_SIR_JOPM_2_20210822T162656_20210822T163682_C001  CS_OFFL_SIR_JOPM_2_20210822T162656_20210822T163664_C001  CS_OFFL_SIR_JOPM_2_20210822T162656_20210822T163664_C001  CS_OFFL_SIR_JOPM_2_20210822T160656_20210822T165664_C001  CS_OFFL_SIR_JOPM_2_20210822T160656_20210822T165664_C001  CS_OFFL_SIR_JOPM_2_20210822T160656_20210822T16	CS_OFFL_SIR_IOPM_2_20210622T131154_20210622T133557_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 nor excords.  CS_OFFL_SIR_IOPM_2_20210822T144218_20210822T144840_C001  CS_OFFL_SIR_IOPM_2_20210822T145056_20210822T151834_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152529_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152529_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152529_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152529_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152529_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152780_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152780_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152780_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152780_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152780_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152780_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152300_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T152300_C001  CS_OFFL_SIR_IOPM_2_20210822T152308_20210822T162500_C001  CS_OFFL_SIR_IOPM_2_20210822T162308_20210822T162500_C001  CS_OFFL_SIR_IOPM_2_20210822T162308_20210822T162500_C001  CS_OFFL_SIR_IOPM_2_20210822T162308_20210822T162500_C001  CS_OFFL_SIR_IOPM_2_20210822T162308_20210822T162500_C001  CS_OFFL_SIR_IOPM_2_20210822T162506_00210822T162500_C001  CS_OFFL_SIR_IOPM_2_20210822T162308_20210822T162500_C001  CS_OFFL_SIR_IOPM_2_20210822T162506_00210822T162500_C001  CS_OFFL_SIR_IOPM_2_20210822T162508_20210822T162500_C001  CS_OFFL_SIR_IOPM_2_20210822T160308_20210822T160502_C001  CS_OFFL_SIR_IOPM_2_20210822T160309_20210822T160502_C001  CS_OFFL_SIR_IOPM_2_20210822T160309_20210822T160502_C001  CS_OFFL_SIR_IOPM_2_20210822T160309_20210822T160502_C001  CS_OFFL_SIR_IOPM_2_20210822T160309_20210822T160502_C001  CS_OFFL_SIR_IOPM_2_20210822T160309_20210822T160502_C001  CS_OFFL_SIR_IOPM_2_20210822T160309_20210822T160502_C001  CS_OFFL_SIR_IOPM_2_20210822T160309_20210822T160502_C001  CS_OFFL_SIR_IOPM_2_20210822T160309_20210822T160502_C001  CS_OFFL_SIR_IOPM_2_20210822T160309_20210822T160502	CS_OFFL_SIR_IOPM_2_20210622T140159_20210622T140739_C001		
Backscatter Quality  CS_OFFL_SIR_JOPM_2_20210622T145056_2021062ZT151634_C001  CS_OFFL_SIR_JOPM_2_2021062ZT145056_2021062ZT152520_C001  CS_OFFL_SIR_JOPM_2_2021062ZT152306_2021062ZT152520_C001  CS_OFFL_SIR_JOPM_2_2021062ZT152306_2021062ZT152520_C001  CS_OFFL_SIR_JOPM_2_2021062ZT152306_2021062ZT152520_C001  CS_OFFL_SIR_JOPM_2_2021062ZT152306_2021062ZT152520_C001  CS_OFFL_SIR_JOPM_2_2021062ZT152306_2021062ZT152520_C001  CS_OFFL_SIR_JOPM_2_2021062ZT152306_2021062ZT152520_C001  CS_OFFL_SIR_JOPM_2_2021062ZT152306_2021062ZT162306_C001  CS_OFFL_SIR_JOPM_2_2021062ZT16236_2021062ZT162306_C001  CS_OFFL_SIR_JOPM_2_2021062ZT16236_2021062ZT1623000  CS_OFFL_SIR_JOPM_2_2021062ZT16236_2021062ZT162306_C001  CS_OFFL_SIR_JOPM_2_2021062ZT16236_2021062ZT162306_C001  CS_OFFL_SIR_JOPM_2_2021062ZT16236_2021062ZT162306_C001  CS_OFFL_SIR_JOPM_2_2021062ZT16236_2021062ZT162506_C001  CS_OFFL_SIR_JOPM_2_2021062ZT163822_2021062ZT164546_C001  CS_OFFL_SIR_JOPM_2_2021062ZT170025_2021062ZT170724_C001  CS_OFFL_SIR_JOPM_2_2021062ZT170025_2021062ZT170724_C001  CS_OFFL_SIR_JOPM_2_2021062ZT170025_2021062ZT170724_C001  CS_OFFL_SIR_JOPM_2_2021062ZT170025_2021062ZT170724_C001  CS_OFFL_SIR_JOPM_2_2021062ZT170025_2021062ZT170724_C001  CS_OFFL_SIR_JOPM_2_2021062ZT170025_2021062ZT170025_C00106Z	CS_OFFL_SIR_IOPM_2_20210622T141055_20210622T143547_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.  CS_OFFL_SIR_JOPM_2_20210622T152306_20210622T152529_CO01  CS_OFFL_SIR_JOPM_2_20210622T152728_20210622T152746_CO01  CS_OFFL_SIR_JOPM_2_20210622T152728_20210622T152746_CO01  CS_OFFL_SIR_JOPM_2_20210622T152728_20210622T152746_CO01  CS_OFFL_SIR_JOPM_2_20210622T152728_20210622T162746_CO01  CS_OFFL_SIR_JOPM_2_20210622T162732_20210622T162746_CO01  CS_OFFL_SIR_JOPM_2_20210622T162732_20210622T162720_CO01  CS_OFFL_SIR_JOPM_2_20210622T162732_20210622T162720_CO01  CS_OFFL_SIR_JOPM_2_20210622T162732_20210622T163504_CO01  CS_OFFL_SIR_JOPM_2_20210622T162732_20210622T163504_CO01  CS_OFFL_SIR_JOPM_2_20210622T162732_20210622T163504_CO01  CS_OFFL_SIR_JOPM_2_20210622T162732_20210622T163504_CO01  CS_OFFL_SIR_JOPM_2_20210622T162732_20210622T163504_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT16256_2021062ZT163504_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT16256_2021062ZT163504_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT16265_2021062ZT163504_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT16265_2021062ZT163504_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT16265_2021062ZT165504_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT170625_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT170625_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT170625_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT170625_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT170625_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT170625_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT170625_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT180039_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT180039_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT180039_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT180039_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT180039_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT180039_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT180039_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT180039_2021062ZT170724_CO01  CS_OFFL_SIR_JOPM_2_2021062ZT180039_2021062ZT170724_CO0	CS_OFFL_SIR_IOPM_2_20210622T144218_20210622T144640_C001		
Backscater Quality  CS_OFFL_SIR_IOPM_2_20210622T152786_20210622T152746_C001  Backscater Quality  CS_OFFL_SIR_IOPM_2_20210622T152786_20210622T152746_C001  CS_OFFL_SIR_IOPM_2_20210622T152786_20210622T161423_C001  CS_OFFL_SIR_IOPM_2_20210622T16232_20210622T161423_C001  CS_OFFL_SIR_IOPM_2_20210622T16232_20210622T162720_C001  CS_OFFL_SIR_IOPM_2_20210622T16232_20210622T16270_C001  CS_OFFL_SIR_IOPM_2_20210622T16232_20210622T163504_C001  CS_OFFL_SIR_IOPM_2_20210622T16256_20210622T163504_C001  CS_OFFL_SIR_IOPM_2_20210622T16256_20210622T165504_C001  CS_OFFL_SIR_IOPM_2_20210622T16256_20210622T165504_C001  CS_OFFL_SIR_IOPM_2_20210622T170625_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T170625_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T17007_20210622T175341_C001  CS_OFFL_SIR_IOPM_2_20210622T17007_20210622T175341_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_20210622T1780552_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_20210622T180059_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_30210622T180059_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_30210622T180059_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_30210622T180059_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_30210622T180059_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_30210622T180059_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_30210622T180059_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_30210622T180059_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_30210622T180059_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_30210622T180059_C001  CS_OFFL_SIR_IOPM_2_2	CS_OFFL_SIR_IOPM_2_20210622T145056_20210622T151634_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been 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.  CS_OFFL_SIR_IOPM_2_20210622T162132_20210622T162720_C001  CS_OFFL_SIR_IOPM_2_20210622T162956_20210622T163504_C001  CS_OFFL_SIR_IOPM_2_20210622T162956_20210622T163504_C001  CS_OFFL_SIR_IOPM_2_20210622T163822_20210622T164546_C001  CS_OFFL_SIR_IOPM_2_20210622T163822_20210622T164546_C001  CS_OFFL_SIR_IOPM_2_20210622T17025_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T17025_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T17025_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T17007_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T17007_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T17007_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T17007_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T17007_20210622T17007_20210622T17007_20210622T17007_20210622T17007_20210622T17007_20210622T17007_20210622T180552_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_2021062ZT180552_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_2021062ZT180552_C001  CS_OFFL_SIR_IOPM_2_2021062ZT180039_2021062ZT180552_C001  CS_OFFL_SIR_IOPM_2_2021062ZT180039_2021062ZT180552_C001  CS_OFFL_SIR_IOPM_2_2021062ZT180039_2021062ZT180552_C001  CS_OFFL_SIR_IOPM_2_2021062ZT180552_C001  CS_OFFL_SIR	CS_OFFL_SIR_IOPM_2_20210622T152306_20210622T152529_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality Set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range SINA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range SINA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range SINA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range SINA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range SINA, SWH and Backscatter Quality Flags have been set for on	CS_OFFL_SIR_IOPM_2_20210622T152728_20210622T152746_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210622T162956_20210622T163504_C001  CS_OFFL_SIR_IOPM_2_20210622T163822_20210622T164546_C001  CS_OFFL_SIR_IOPM_2_20210622T163822_20210622T164546_C001  CS_OFFL_SIR_IOPM_2_20210622T163822_20210622T164546_C001  CS_OFFL_SIR_IOPM_2_20210622T170625_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T170625_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T170625_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T170027_20210622T170724_C001  CS_OFFL_SIR_IOPM_2_20210622T17007_20210622T175341_C001  CS_OFFL_SIR_IOPM_2_20210622T17007_20210622T175341_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_20210622T180552_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_20210622T18039_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_20210622T181039_C001  CS_OFFL_SIR_IOPM_2_20210622T180039_20210622T181039_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T180588_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T180588_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T180588_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T180588_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T180588_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T180588_C001  CS_OFFL_SIR_IOPM_2_20210622T1805857_20210622T180588_C001  CS_OFFL_SIR_IOPM_2_20210622T1805858_C001  CS_OFFL_SIR_IOPM_2_20210622T1805858_C001  CS_OFFL_SIR_IOPM_2_20210622T1805858_C001  CS_OFFL_SIR_IOPM_2_20210622T1805858_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T1805858_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T1805858_C001  CS_OFFL_SIR_IOPM_2_20210622T18154_20210622T1805858_C001  CS_OFFL_SIR_IOPM_2_20210622T1805858_C001  CS_OFFL_SIR_IOPM_2_20210622	CS_OFFL_SIR_IOPM_2_20210622T154326_20210622T161423_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range Ra	CS_OFFL_SIR_IOPM_2_20210622T162132_20210622T162720_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been 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.  CS_OFFL_SIR_IOPM_2_20210622T180039_20210622T180552_C001  CS_OFFL_SIR_IOPM_2_20210622T180929_20210622T181039_C001  CS_OFFL_SIR_IOPM_2_20210622T180929_20210622T181039_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T1815757_20210622T180455_C001  CS_OFFL_SIR_IOPM_2_20210622T1815757_20210622T180455_C001  CS_OFFL_SIR_IOPM_2_20210622T1815757_20210622T180455_C001  CS_OFFL_SIR_IOPM_2_20210622T1815757_20210622T18045_C001  CS_OFFL_SIR_IOPM_2_20210622T181045_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_202	CS_OFFL_SIR_IOPM_2_20210622T162956_20210622T163504_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210622T170625_20210622T170724_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, 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 Altimeter Range Quality, OCOG Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range, Quality, OCOG Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SS	CS_OFFL_SIR_IOPM_2_20210622T163822_20210622T164546_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, OCOG Altimeter Range and Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210622T180039_20210622T180552_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags 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 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 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 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 and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Qua	CS_OFFL_SIR_IOPM_2_20210622T170625_20210622T170724_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210622T180929_20210622T181039_C001  Doean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001  Doean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been 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, SSHA, SWH 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, 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 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 a	CS_OFFL_SIR_IOPM_2_20210622T172007_20210622T175341_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210622T180929_20210622T181039_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags 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.  Ocean Altimeter Range, SSHA, SWH Altimeter Range and Backscatter Quality Flags have been 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 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 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 Qua	CS_OFFL_SIR_IOPM_2_20210622T180039_20210622T180552_C001		
CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH 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 and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quali	CS_OFFL_SIR_IOPM_2_20210622T180929_20210622T181039_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210622T185757_20210622T190845_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20210622T181154_20210622T182658_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20210622T185757_20210622T190845_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

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CS_OFFL_SIR_IOPM_2_20210622T191130_20210622T193238_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_20210622T193903_20210622T194040_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_20210622T194046_20210622T194458_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_20210622T194936_20210622T200909_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_20210622T200952_20210622T201423_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_20210622T201642_20210622T202219_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_20210622T203616_20210622T204412_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_20210622T204515_20210622T205614_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_20210622T205619_20210622T211151_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_20210622T211414_20210622T211939_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_20210622T211958_20210622T212220_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_20210622T213045_20210622T214312_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_20210622T214409_20210622T220108_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_20210622T220519_20210622T220636_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_20210622T222445_20210622T223408_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_20210622T223611_20210622T225050_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_20210622T225342_20210622T225837_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_20210622T225845_20210622T225852_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_20210622T225858_20210622T225909_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_20210622T230732_20210622T231816_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_20210622T232440_20210622T233621_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210622T012851_20210622T012857_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210622T044107_20210622T044231_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210622T090207_20210622T090209_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210622T220108_20210622T220519_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210622T004221_20210622T004313_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210622T070957_20210622T071711_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_IOPR_2_20210622T073048_20210622T073114_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210622T095157_20210622T095251_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_20210622T135045_20210622T135501_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_20210622T214312_20210622T214409_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_20210622T220740_20210622T221303_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_20210622T230307_20210622T230531_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210622T234640_20210622T235344_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

### L2 Quality Flags (20Hz PLRM)

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

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

Number of products with errors:

95

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20210621T235900_20210622T000345_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_20210622T001022_20210622T001450_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_20210622T003138_20210622T003531_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_20210622T005245_20210622T005644_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_20210622T012135_20210622T012446_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_20210622T020333_20210622T020538_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_20210622T020933_20210622T021512_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_20210622T022517_20210622T022639_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_20210622T023122_20210622T023257_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_20210622T034742_20210622T035206_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_20210622T045029_20210622T045142_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_20210622T062039_20210622T062205_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_20210622T073619_20210622T073819_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_20210622T080038_20210622T080344_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_20210622T080621_20210622T081132_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_20210622T085724_20210622T090016_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_20210622T094100_20210622T094334_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_20210622T095035_20210622T095157_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_20210622T102052_20210622T102320_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_20210622T103949_20210622T104226_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_20210622T111558_20210622T112209_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_20210622T112936_20210622T113117_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_20210622T121844_20210622T122112_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_20210622T122328_20210622T122450_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_20210622T130846_20210622T131039_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_20210622T133920_20210622T134042_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_20210622T134453_20210622T134615_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_20210622T135501_20210622T135946_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_20210622T140037_20210622T140159_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_20210622T140739_20210622T140801_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_20210622T143759_20210622T143931_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_20210622T164546_20210622T164741_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_20210622T170322_20210622T170444_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_20210622T171647_20210622T171758_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_20210622T171841_20210622T172007_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_20210622T175724_20210622T180038_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_20210622T180552_20210622T180708_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_20210622T183758_20210622T183824_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_20210622T193442_20210622T193903_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_20210622T194458_20210622T194613_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_20210622T202412_20210622T202651_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_20210622T202707_20210622T202832_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_20210622T221303_20210622T221341_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_20210622T225159_20210622T225342_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_20210622T232000_20210622T232314_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_20210622T232314_20210622T232440_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_20210622T233734_20210622T233858_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_20210622T234109_20210622T234425_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_20210622T234429_20210622T234545_C001	,	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210622T003649_20210622T004212_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_20210622T021513_20210622T022113_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_20210622T022113_20210622T022426_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_20210622T025953_20210622T030104_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_20210622T031246_20210622T031504_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_20210622T035206_20210622T035949_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_20210622T043914_20210622T044107_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_20210622T045142_20210622T045457_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_20210622T054510_20210622T054617_C001	. ,	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210622T061801_20210622T062039_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_20210622T063022_20210622T063401_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_20210622T070957_20210622T071711_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_20210622T071711_20210622T071917_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_20210622T072254_20210622T072905_C001	,	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210622T075643_20210622T080038_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_20210622T084954_20210622T085116_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_20210622T085132_20210622T085608_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_20210622T085608_20210622T085723_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_20210622T093357_20210622T094100_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_20210622T095157_20210622T095251_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_20210622T102929_20210622T103446_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_20210622T103446_20210622T103609_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_20210622T105835_20210622T110047_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_20210622T115045_20210622T115341_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_20210622T121120_20210622T121539_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_20210622T122112_20210622T122328_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_20210622T131040_20210622T131154_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_20210622T135045_20210622T135501_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_20210622T144918_20210622T145056_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_20210622T152529_20210622T152728_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_20210622T152746_20210622T153539_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_20210622T161423_20210622T161742_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_20210622T162842_20210622T162955_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_20210622T165433_20210622T165658_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_20210622T170445_20210622T170514_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_20210622T170859_20210622T171647_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_20210622T175341_20210622T175724_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_20210622T180709_20210622T180929_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_20210622T184845_20210622T185757_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_20210622T194613_20210622T194935_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_20210622T202832_20210622T203616_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_20210622T212407_20210622T213045_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_20210622T214312_20210622T214409_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_20210622T230307_20210622T230531_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_20210622T234640_20210622T235344_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_20210622T235753_20210622T235852_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

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

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

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

Number of products with errors:

201

## 5.8 L2 Ocean Retracking Quality Check

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

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

Number of products with errors:

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

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

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

Number of products with errors:

160

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

### 6.1 P2P Product Format Check

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

Number of products with errors:

-

#### 6.2 P2P Product Header Analysis

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

Number of products with errors:

0

#### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

0

#### 6.4 P2P Auxiliary Correction Error Check

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

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

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

Number of products with errors: 30

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220210621T234933_20210622T003908_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210622T003908_20210622T012847_C001	Mean Sea Surface (1), Mean 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_220210622T012847_20210622T021823_C001	Mean Sea Surface (1), Mean 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_20210622T021823_20210622T030802_C001	Mean Sea Surface (1), Mean 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_220210622T030802_20210622T035738_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_20210622T035738_20210622T044717_C001	Mean Sea Surface (1), Mean 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_220210622T044717_20210622T053652_C001	Mean Sea Surface (1), Mean 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_220210622T053652_20210622T062632_C001	Mean Sea Surface (1), Mean 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_220210622T062632_20210622T071607_C001	Mean Sea Surface (1), Mean 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_220210622T071607_20210622T080546_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_220210622T080546_20210622T085522_C001	Mean Sea Surface (1), Mean 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_220210622T085522_20210622T094501_C001	Mean Sea Surface (1), Mean 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_20210622T094501_20210622T103436_C001	Mean Sea Surface (1), Mean 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_220210622T103436_20210622T112415_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_220210622T112415_20210622T121351_C001	Mean Sea Surface (1), Mean 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_220210622T121351_20210622T130330_C001	Mean Sea Surface (1), Mean 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_220210622T130330_20210622T135306_C001	Mean Sea Surface (1), Mean 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_220210622T135306_20210622T144245_C001	Mean Sea Surface (1), Mean 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_220210622T144245_20210622T153220_C001	Mean Sea Surface (1), Mean 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_220210622T153220_20210622T162200_C001	Mean Sea Suriace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean	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_220210622T162200_20210622T171135_C001	Mean Sea Surface (1), Mean 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_220210622T171135_20210622T180114_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_220210622T180114_20210622T185050_C001	Mean Sea Surface (1), Mean 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_220210622T185050_20210622T194029_C001	Mean Sea Surface (1), Mean 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_220210622T194029_20210622T203004_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	Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220210622T203004_20210622T211943_C001	Mean Sea Surface (1), Mean 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_220210622T211943_20210622T220919_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_220210622T220919_20210622T225858_C001	Mean Sea Surface (1), Mean 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_220210622T225858_20210622T234834_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_220210622T234834_20210623T003813_C001	Mean Sea 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

## 6.6 P2P Measurement Quality Flag Check

### P2P Quality Flags (20Hz)

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

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

Number of products with errors:

### P2P Quality Flags (20Hz PLRM)

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

Number of products with errors:

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

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

Number of products with errors:

### 6.8 P2P Ocean Retracking Quality Check

#### P2P Retracking Flags (20Hz)

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

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

Number of products with errors:

#### P2P Retracking Flags PLRM

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

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

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	157	157	3	154	0
SIR_IOPR1B	114	113	1	112	0
SIR_IOPN1B	113	114	0	114	0
SIR_IOPM_2	157	157	107	50	0
SIR_IOPR_2	114	113	46	67	0
SIR_IOPN_2	113	114	33	81	0
SIR_IOP_P2P	29	29	0	29	0

# 7.2 QCC Warnings

### Number of QCC reports with warnings

2238

Total	number	of	occurrences	of	each	warning

Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	RBSZOPOEPNCDF	
SIR_IOPM1B	154	0	0	0	0	0	0	
SIR_IOPM_2	0	39	41	0	39	0	35	
SIR_IOPN1B	112	0	0	0	0	0	0	
SIR_IOPN_2	0	7	32	7	19	23	17	
SIR_IOPR1B	106	0	0	0	0	0	0	
SIR_IOPR_2	0	36	52	2	37	29	19	

Product Type	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNC	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	33	0	0	0	0	29
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	1	0	0	30	0	37	0
SIR_IOPR1B	0	0	0	0	0	0	0
SIR IOPR 2	0	0	54	0	59	0	0

Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	0	7	31	0	4	37
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	32	15	40	55	34	24
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	51	0	2	68	43	7	41

Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_IOPM1B	0	0	0	1	0	0	0
SIR_IOPM_2	0	5	0	1	0	0	0
SIR_IOPN1B	0	0	0	0	0	50	1
SIR_IOPN_2	32	13	1	0	4	0	0
SIR_IOPR1B	0	0	0	0	0	114	3
SIR_IOPR_2	52	3	0	0	1	0	0

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_IOP_2_	18	29	29	9	29	18	29

Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_IOP_2_	1	18		25	19	29	18
Product Type	RSSHAONCDE	RSWHOEPEDNCDE	RSWHOEPEDPI RMNCDE	RSWHOEPNCDE	SPHI POWNCDE		-

SIR_IOP_2_	25	29	19	15	29		
Product Type	-	-	-	•	•	-	•
SIR IOP 2							

0	1-0						
Product Type	•	•	-	•	-	•	•
SIR_IOP_2_							
	•	•		•	•		

Test Description Key:							
Abbreviation	Test name	Details					
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter					
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only					
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean					
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDPLRMSINN	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean					
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean					
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean					
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean					
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RSWHOEPFDPLRMN CDF	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)					
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch					
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