

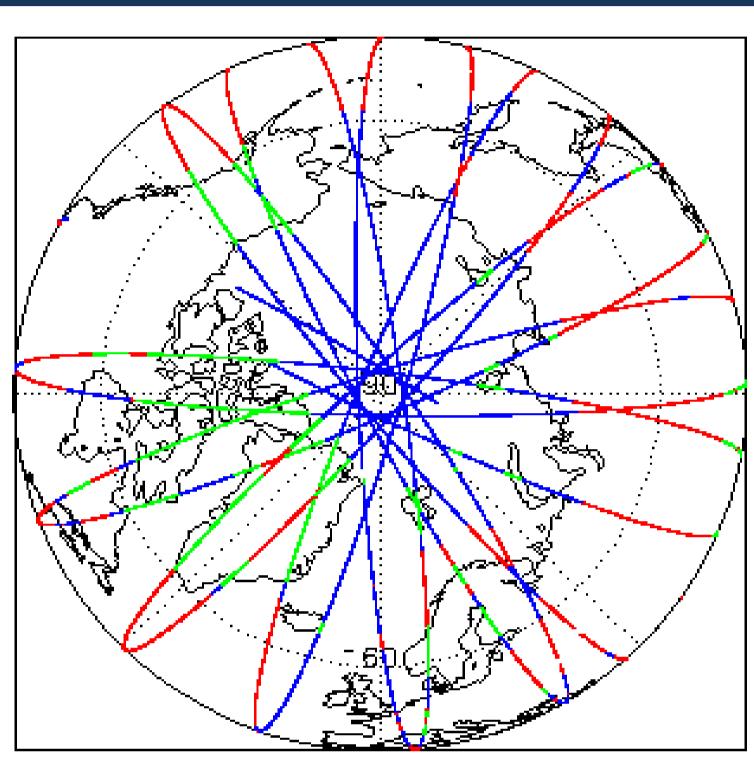
## 1. Overview

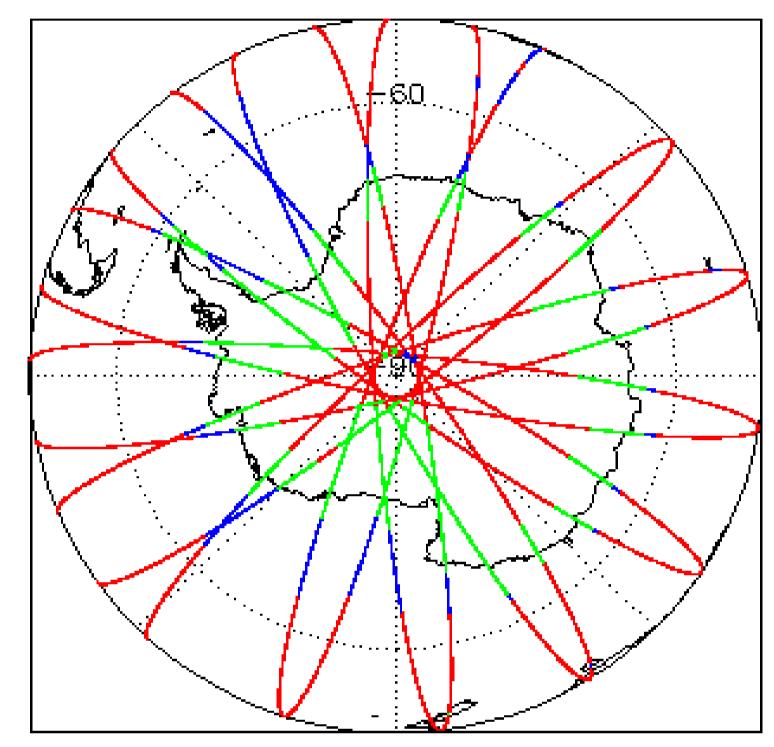
Report Production:	01-Feb-2021	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	

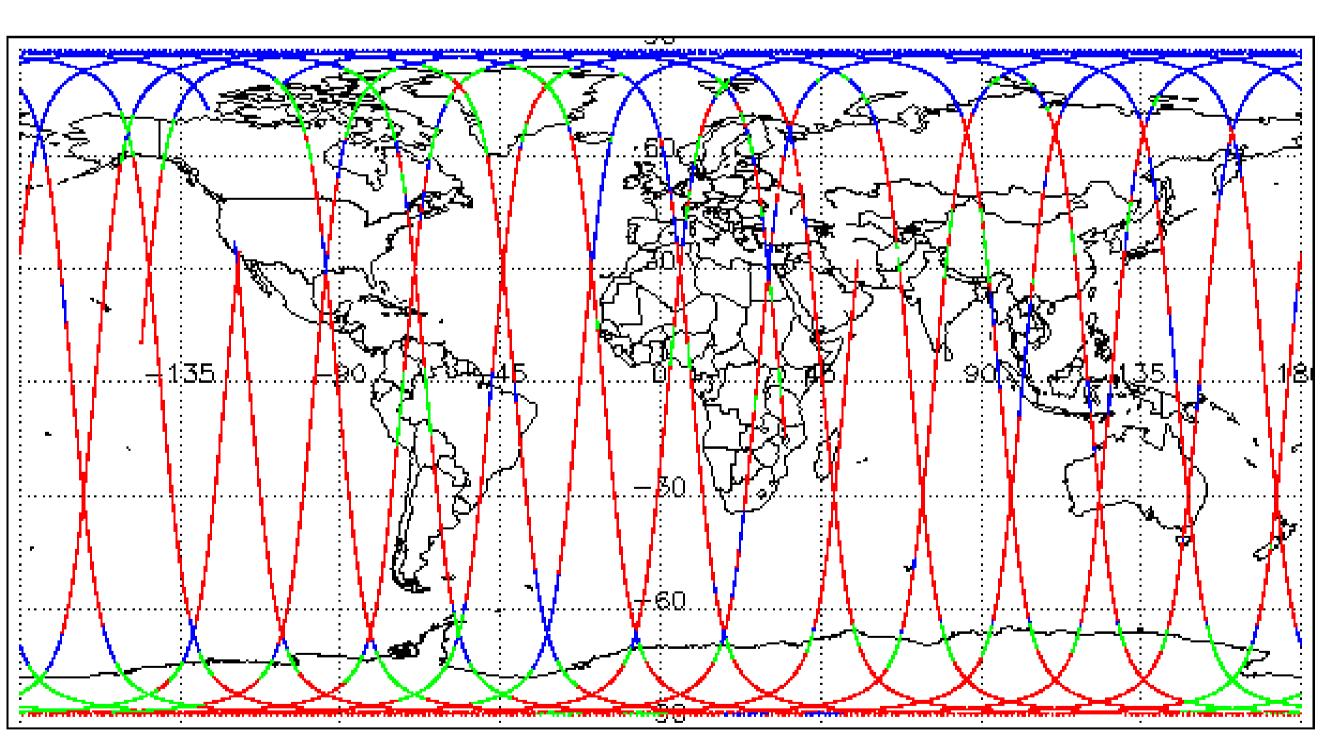
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary 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 7.1 and 7.2	See Section 7.1, 7.2

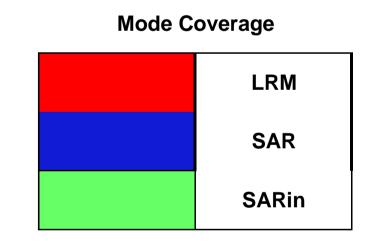
Mission / Instru	Mission / Instrument News		
27-Jan-2021	None		
28-Jan-2021	SIRAL unavailability due to On-board Maintenance on the 28/01/2021 from 10:25:30 to 10:40:00 UTC		
29-Jan-2021	Nothing planned		

# 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:

0

#### **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:

#### 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:** 

2

Product	Test Failed	Description
CS_OFFL_SIR_IOPN1B_20210128T024435_20210128T024445_C001	Echo error, Cal1. Correction Missing, TRK echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo. The attitude has not been corrected
CS_OFFL_SIR_IOPN1B_20210128T061620_20210128T061627_C001	Cal1 Correction Missing	The Cal1 correction has not been applied

#### 4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

17

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20210128T233206_20210128T233403_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T002258_20210128T002339_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T003558_20210128T003726_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T034124_20210128T034358_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T051825_20210128T052244_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T052349_20210128T052456_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T062237_20210128T062405_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T065828_20210128T070355_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T134930_20210128T135131_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T184400_20210128T184450_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20210128T202126_20210128T202632_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210128T065742_20210128T065828_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210128T120933_20210128T121142_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210128T135131_20210128T135318_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210128T165104_20210128T165218_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210128T183638_20210128T183720_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20210128T215641_20210128T220147_C001	Loss of Echo	The tracking echo is missing for one or more records

## 5. OP 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:

0

0

## 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

#### **5.4 L2 Auxiliary Correction Error Check**

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

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

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

Number of products with errors: 55

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20210128T001413_20210128T001506_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20210128T055326_20210128T060849_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20210128T185317_20210128T190252_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210128T002258_20210128T002339_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_IOPN_2_20210128T011435_20210128T011749_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T012302_20210128T012420_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210128T030209_20210128T030323_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T034124_20210128T034358_C001	Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Fauilibrium Long Period Ocean Tide	There is an error with the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_IOPN_2_20210128T034424_20210128T034547_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T051825_20210128T052244_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20210128T052349_20210128T052456_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T061746_20210128T062019_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T065828_20210128T070355_C001		There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20210128T075656_20210128T080028_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T083826_20210128T084217_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T093806_20210128T093949_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210128T124715_20210128T124838_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210128T125404_20210128T125718_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210128T142648_20210128T142802_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210128T143303_20210128T143622_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T170256_20210128T170417_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20210128T184212_20210128T184317_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210128T192511_20210128T192706_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210128T193526_20210128T193714_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210128T202126_20210128T202632_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20210128T210444_20210128T210603_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

CS_OFFL_SIR_IOPN_2_20210128T224611_20210128T224811_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOPR_2_20210128T001506_20210128T001609_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_20210128T002614_20210128T003402_C001	Mean Sea 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_20210128T020605_20210128T021643_C001	Mean Sea 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_20210128T034547_20210128T035243_C001	Mean Sea 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_20210128T052456_20210128T053019_C001	Mean Sea 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_20210128T062019_20210128T062237_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_20210128T070355_20210128T071054_C001	Mean Sea 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_20210128T072924_20210128T073247_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_20210128T084217_20210128T084723_C001	Mean Sea 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_20210128T101924_20210128T102530_C001	Mean Sea 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_20210128T115830_20210128T120605_C001	Mean Sea 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_20210128T121521_20210128T121707_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_20210128T133350_20210128T134523_C001	Mean Sea 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_20210128T151605_20210128T152257_C001	Mean Sea 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_20210128T152257_20210128T152844_C001	Mean Sea 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_20210128T165542_20210128T170110_C001	Mean Sea 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_20210128T170110_20210128T170256_C001	Mean Sea 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_20210128T174429_20210128T174514_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_20210128T183545_20210128T183635_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_20210128T183638_20210128T183720_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_20210128T183743_20210128T183914_C001	Mean Sea 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_20210128T183914_20210128T184212_C001	Mean Sea 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_20210128T201536_20210128T202126_C001	Mean Sea 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_20210128T215641_20210128T220147_C001	Mean Sea 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_20210128T232439_20210128T232534_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_20210128T233036_20210128T233206_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_20210128T233403_20210128T234350_C001	Mean Sea 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.

#### **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_20210128T002339_20210128T002425_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_20210128T003726_20210128T011156_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_20210128T011749_20210128T012302_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_20210128T012459_20210128T012751_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_20210128T012826_20210128T014412_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_20210128T014559_20210128T014932_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_20210128T015520_20210128T015632_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_20210128T015649_20210128T015710_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_20210128T021643_20210128T022600_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_20210128T022819_20210128T024435_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_20210128T024445_20210128T025032_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_20210128T025609_20210128T025751_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_20210128T025757_20210128T030209_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_20210128T030411_20210128T032622_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_20210128T032658_20210128T033136_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_20210128T033158_20210128T033939_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_20210128T033939_20210128T034043_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_20210128T035837_20210128T041212_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_20210128T041347_20210128T042320_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_20210128T042324_20210128T043002_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_20210128T043126_20210128T043650_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_20210128T043709_20210128T043928_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_20210128T044757_20210128T050025_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_20210128T050131_20210128T051825_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_20210128T054128_20210128T055123_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_20210128T055326_20210128T060849_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_20210128T061054_20210128T061549_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_20210128T061609_20210128T061620_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_20210128T061627_20210128T061746_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_20210128T062439_20210128T063712_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_20210128T064153_20210128T065333_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_20210128T072310_20210128T072431_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_20210128T073247_20210128T074752_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_20210128T075507_20210128T075520_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_20210128T080115_20210128T082422_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_20210128T082424_20210128T082826_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_20210128T090202_20210128T092227_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_IOPM_2_20210128T092318_20210128T092745_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_20210128T093035_20210128T093418_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_20210128T094031_20210128T100807_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_20210128T104001_20210128T110656_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_20210128T110840_20210128T111333_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_20210128T111340_20210128T111709_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_20210128T112111_20210128T115514_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_20210128T120802_20210128T120933_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_20210128T124347_20210128T124637_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_20210128T124838_20210128T125404_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_20210128T125958_20210128T132220_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_20210128T132455_20210128T133350_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.

CO - DR OPH 1 ASSISTANTIAN APPRIATED COID  CO - DR OPH 1 ASSISTANTIAN APPRIATED COID  CO - DR OPH 2 APPRIATED APPRIATED COID  CO - DR OPH 3 APPRIATED APPRIATED COID  CO - DR OPH 3 APPRIA	CS_OFFL_SIR_IOPM_2_20210128T134656_20210128T134930_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.
Reduces a Charley  Committed to Committed Comm	CS_OFFL_SIR_IOPM_2_20210128T140609_20210128T142555_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CRISTON CONTROL OF THE CONTROL OF	CS_OFFL_SIR_IOPM_2_20210128T142802_20210128T143303_C001	_	
Set Delta, Silk, CPM 2, 2011/12/17 (EM 2011/27) (COC)  COLONIA, Silk, CPM 2, 2011/12/17	CS_OFFL_SIR_IOPM_2_20210128T143907_20210128T151204_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Dec. COFTL, S. (10PM_2_30210120TR0012_COPT15046_CO21)  CS. COFTL, S. (10PM_2_30210120TR0012_CO21)  CS. COFTL, S. (10PM_2_30210120TR0012_	CS_OFFL_SIR_IOPM_2_20210128T153748_20210128T160041_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Compare   Comp	CS_OFFL_SIR_IOPM_2_20210128T161851_20210128T163425_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SRI_LON_2_202*01287196192_020108719644_0001  CS_OFFL_SRI_LON_2_002*01287196192_020108719644_0001  CS_OFFL_SRI_LON_2_002*01287196192_020108719644_0001  CS_OFFL_SRI_LON_2_002*0128717617_002*01087176702_0001  CS_OFFL_SRI_LON_2_002*0128717617_002*01087176702_0001  CS_OFFL_SRI_LON_2_002*0128717617_002*01087176702_0001  CS_OFFL_SRI_LON_2_002*0128717617_002*01087176702_0001  CS_OFFL_SRI_LON_2_002*0128717617_002*01087176702_0001  CS_OFFL_SRI_LON_2_002*0128717617_002*01087176702_0001  CS_OFFL_SRI_LON_2_002*01287176172 002*01087176002 0001  CS_OFFL_SRI_LON_2_002*01287176702_00010787176002 0001  CS_OFFL_SRI_LON_2_002*01287176702_00010787176002 0001  CS_OFFL_SRI_LON_2_002*01287176702 00010787176002 0001078	CS_OFFL_SIR_IOPM_2_20210128T163427_20210128T163443_C001		
Suddestate Dually  CS_OFF_SIR_OFM_2_20210128T178147_20240128T172914_CD01  CS_OFF_SIR_OFM_2_20210128T178165_20240128T172914_CD01  CS_OFF_SIR_OFM_2_20210128T178265_20240128T172914_CD01  CS_OFF_SIR_OFM_2_20210128T178265_20240128T172914_CD01  CS_OFF_SIR_OFM_2_20210128T178265_20240128T172914_CD01  CS_OFF_SIR_OFM_2_20210128T178266_20240128T172914_CD01  CS_OFF_SIR_OFM_2_20210128T178266_20240128T172914_CD01  CS_OFF_SIR_OFM_2_20210128T178266_20240128T172914_CD01  CS_OFF_SIR_OFM_2_20210128T178266_20240128T172914_CD01  CS_OFF_SIR_OFM_2_20210128T18266_20240128T18296_	CS_OFFL_SIR_IOPM_2_20210128T164113_20210128T164939_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backsotter Outley  Oscan Affirede Range SSHA, SWH are Backsotter Outley  Oscan Affirede Range SSHA, SWH are Backsotter Outley  Oscan Affirede Range Affirede Range SSHA, SWH are Backsotter Outley  Oscan Affirede Range and Backsotter Outley  Oscan Affirede Range and Backsotter Outley  Oscan Affirede Range Outley  Affirede Range Outley  Oscan Affirede Range and Backsotter Outley  Oscan Affirede Range and Backsotter Outley  Oscan Affirede Range Outley  Oscan Affirede Range SSHA, SWH are Backsotter Outley  Oscan Affirede Range Outley  Os	CS_OFFL_SIR_IOPM_2_20210128T165436_20210128T165443_C001		
and bisocoater Quality, COCO Altimeter Range and Basissaster Quality Plags have been and become to compare the COCO Altimeter Range and Basissaster Quality Plags have been and become to compare Range, SSHA, SSHA and Basissaster Quality Plags have been and become to compare Range, SSHA, SSHA and Basissaster Quality Plags have been and become to compare Range, SSHA, SSHA and Basissaster Quality Plags have been and become to compare Range, SSHA, SSHA and Basissaster Quality Plags have been and become to compare Range, SSHA, SSHA and Basissaster Quality Plags have been and become to compare Range, SSHA, SSHA and Basissaster Quality Plags have been and become to compare Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared to compare Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-compared Range, SSHA, SSHA and Basissaster Quality Plags have been self-co	CS_OFFL_SIR_IOPM_2_20210128T170417_20210128T170703_C001		
und the DOGG Alternator Range and Backscartor Quality Flags have been set for one or more records.  CS. OFFL SIR JOPM_2 202101281174911 202101281175822 C010  CS. OFFL SIR JOPM_2 202101281175807_20210128115034_C001  CS. OFFL SIR JOPM_2 202101281175807_20210128115034_C001  CS. OFFL SIR JOPM_2 202101281181045 20210128115034_C001  CS. OFFL SIR JOPM_2 202101281181045 20210128115036_C001  CS. OFFL SIR JOPM_2 202101281180357 20210128115036_C001  CS. OFFL SIR JOPM_2 20210128118035 20210128115038_C001  CS. OFFL SIR JOPM_2 20210128118037 20210128115038_C001  CS. OFFL SIR JOPM_2 20210128118037 20210128115028_C001  CS. OFFL SIR JOPM_2 20210128118037 20210128115028_C001  CS. OFFL SIR JOPM_2 20210128118037 20210128115038_C001  CS. OFFL SIR JOPM_2 20210128118037 20210128115038_C001  CS. OFFL SIR JOPM_2 20210128118038_C0010128115038_C001  CS. OFFL SIR JOPM_2 20210128119038_C0010128115038_C001  CS. OFFL SIR JOPM_2 20210128119038_C00210128115038_C001  CS. OFFL SIR JOPM_2 2021	CS_OFFL_SIR_IOPM_2_20210128T170849_20210128T172514_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_202101281175092_202101281175093_202101281175093_202101281175093_202101281175093_202101281175093_202101281175093_202101281175093_202101281181094_202101281181094_202101281181094_202101281181094_202101281181094_202101281181094_202101281181094_202101281181094_202101281181094_202101281180958_202101281180958_202	CS_OFFL_SIR_IOPM_2_20210128T172728_20210128T174203_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscater Quality  CS_OFFL_SIR_IOPM_2_20210128T175807_20210128T181034_C001  CS_OFFL_SIR_IOPM_2_20210128T181048_20210128T181034_C001  CS_OFFL_SIR_IOPM_2_20210128T181048_20210128T181034_C001  CS_OFFL_SIR_IOPM_2_20210128T181048_20210128T181036_C001  CS_OFFL_SIR_IOPM_2_20210128T181048_20210128T181036_C001  CS_OFFL_SIR_IOPM_2_20210128T18107_20210128T182459_C001  CS_OFFL_SIR_IOPM_2_20210128T180107_20210128T180108_C001  CS_OFFL_SIR_IOPM_2_20210128T180107_20210128T180108_C001  CS_OFFL_SIR_IOPM_2_20210128T180107_20210128T180108_C001  CS_OFFL_SIR_IOPM_2_20210128T19008_20210128T19008_C001  CS_OFFL_SIR_IOPM_2_20210128T1	CS_OFFL_SIR_IOPM_2_20210128T174911_20210128T175121_C001		
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and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been a Altimeter Range and Backscatter Quality Flags have been a Altimeter Range and Backscatter Quality Flags Altimeter Range and Backscatter Quality Flags Altimeter Range and Backscatter Quality Flags And the CCOG Altimeter Range and Backscatter Qualit	CS_OFFL_SIR_IOPM_2_20210128T175807_20210128T181034_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 and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20210128T183127_20210128T190252_C001  CS_OFFL_SIR_IOPM_2_20210128T185317_20210128T190252_C001  CS_OFFL_SIR_IOPM_2_20210128T190388_20210128T190252_C001  CS_OFFL_SIR_IOPM_2_20210128T190388_20210128T192411_C001  CS_OFFL_SIR_IOPM_2_20210128T190388_20210128T192411_C001  CS_OFFL_SIR_IOPM_2_20210128T192706_20210128T193526_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T195430_C001  CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T195909_C001  CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203605_20210128T203347_C001  CS_OFFL_SIR_IOPM_2_20210128T203605_2021	CS_OFFL_SIR_IOPM_2_20210128T181048_20210128T181336_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T192706_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T19598_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T20334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T20334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T20334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T20334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  COCOS Altimeter Range and Backscatter Quality Staps have been set for one or more records.  CCOOS Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20210128T181537_20210128T182459_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean 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 set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter	CS_OFFL_SIR_IOPM_2_20210128T183127_20210128T183128_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20210128T192706_20210128T193526_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T195430_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T195430_C001  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T195430_C001  CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T195908_C001  CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T195908_C001  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T20334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20210128T185317_20210128T190252_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T195430_C001  CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T195908_C001  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  Backscatter Quality  Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T210846_20210128T211350_C001  CS_OFFL_SIR_IOPM_2_20210128T210846_2021012	CS_OFFL_SIR_IOPM_2_20210128T190938_20210128T192411_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, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Cs_OFFL_SIR_IOPM_2_20210128T195656_20210128T195908_C001  Cs_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  Cs_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  Cs_OFFL_SIR_IOPM_2_20210128T203950_20210128T203947_C001  Cs_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  Cs_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  Cs_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  Cs_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  Cs_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  Cs_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  Cs_OFFL_SIR_IOPM_2_20210128T210846_20210128T210334_C001  Cs_	CS_OFFL_SIR_IOPM_2_20210128T192706_20210128T193526_C001		
CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T195908_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T20334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T210846_20210128T211350_C001  and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  CS_OFFL_SIR_IOPM_2_20210128T210846_20210128T211350_C001  CS_OFFL_SIR_IOPM_2_20210128T210846_20210128T211350_C001	CS_OFFL_SIR_IOPM_2_20210128T193742_20210128T195430_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG 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, SSHA, SWH and Backscatter Quality Flags and the 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.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20210128T195656_20210128T195908_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range	CS_OFFL_SIR_IOPM_2_20210128T203627_20210128T203947_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
US OFFI SIR IOPM / 20/101281/10846 20/101281/11350 C001	CS_OFFL_SIR_IOPM_2_20210128T203950_20210128T210334_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20210128T210846_20210128T211350_C001		

CS_OFFL_SIR_IOPM_2_20210128T211641_20210128T214212_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_20210128T221405_20210128T224124_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_20210128T224811_20210128T225412_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_20210128T225543_20210128T232430_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_20210128T233206_20210128T233403_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_20210128T234714_20210129T002103_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_20210128T002529_20210128T002614_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_20210128T003558_20210128T003726_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_20210128T024435_20210128T024445_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_20210128T061620_20210128T061627_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_20210128T085710_20210128T085848_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_20210128T115514_20210128T115631_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_20210128T170703_20210128T170817_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_20210128T214213_20210128T214312_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_20210128T225412_20210128T225543_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_20210128T234350_20210128T234714_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_20210128T001506_20210128T001609_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_20210128T002614_20210128T003402_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_20210128T003515_20210128T003528_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_20210128T022600_20210128T022819_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_20210128T053723_20210128T053732_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_20210128T161835_20210128T161851_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_20210128T233036_20210128T233206_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

### L2 Quality Flags (20Hz PLRM)

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20210128T000259_20210128T000454_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_20210128T002037_20210128T002200_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_20210128T002529_20210128T002614_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_20210128T003402_20210128T003515_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_20210128T020537_20210128T020546_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_20210128T025153_20210128T025609_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_20210128T030209_20210128T030323_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_20210128T034124_20210128T034358_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_20210128T043928_20210128T044114_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_20210128T051825_20210128T052244_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_20210128T053019_20210128T053051_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_20210128T053806_20210128T054007_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_20210128T061620_20210128T061627_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_20210128T062237_20210128T062405_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_20210128T063712_20210128T064153_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_20210128T065450_20210128T065613_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_20210128T065828_20210128T070355_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_20210128T083826_20210128T084217_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_20210128T085710_20210128T085848_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_20210128T085946_20210128T090202_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_20210128T110716_20210128T110840_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_20210128T111709_20210128T111852_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_20210128T115712_20210128T115830_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one more records.  CS_OFFL_SIR_IOPN_2_20210128T124785_20210128T142838_C001  CS_OFFL_SIR_IOPN_2_20210128T12604_20210128T1426718_C001  CS_OFFL_SIR_IOPN_2_20210128T13633_20210128T13631_C001  CS_OFFL_SIR_IOPN_2_20210128T13633_20210128T13633_C001  CS_OFFL_SIR_IOPN_2_20210128T13633_20210128T13633_C001  CS_OFFL_SIR_IOPN_2_20210128T13633_20210128T13633_C001  CS_OFFL_SIR_IOPN_2_20210128T13638_20210128T13633_C001  CS_OFFL_SIR_IOPN_2_20210128T13638_20210128T13638_C001  CS_OFFL_SIR_IOPN_2_20210128T13638_20210128T13638_C001  CS_OFFL_SIR_IOPN_2_20210128T13638_20210128T13638_C001  CS_OFFL_SIR_IOPN_2_20210128T13638_20210128T13638_C001  CS_OFFL_SIR_IOPN_2_20210128T13638_20210128T13638_C001  CS_OFFL_SIR_IOPN_2_20210128T13638_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T1628_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T16103_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16103_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16103_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16103_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16103_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16103_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16103_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16103_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16103_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CCS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CCS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CCS_OFFL_SIR_IOPN_2_20210128T16128_20210128T161035_C001  CCS_OFFL_SIR_IOPN_2_20210128T161285_20210128T161
CS_OFFL_SIR_IOPN_2_20210128T134523_20210128T134631_C001  CS_OFFL_SIR_IOPN_2_20210128T134523_20210128T135131_C001  CS_OFFL_SIR_IOPN_2_20210128T134930_20210128T135131_C001  CS_OFFL_SIR_IOPN_2_20210128T134930_20210128T135131_C001  CS_OFFL_SIR_IOPN_2_20210128T134930_20210128T135398_C001  CS_OFFL_SIR_IOPN_2_20210128T135437_20210128T135538_C001  CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T140609_C001  CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T140609_C001  CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T140609_C001  CS_OFFL_SIR_IOPN_2_20210128T142848_20210128T142802_C001  CS_OFFL_SIR_IOPN_2_20210128T142848_20210128T142802_C001  CS_OFFL_SIR_IOPN_2_20210128T142848_20210128T142802_C001  CS_OFFL_SIR_IOPN_2_20210128T1406039_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T161039_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T161035_20010128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T161035_20010128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T161035_20010128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T161035_20010128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T161035_20010128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T161035_20010128T161035_C001  CS_OFFL_SIR_IOPN_2_20210128T161035_20010128T16001000000000000000000000000000000000
CS_OFFL_SIR_IOPN_2_20210128T134930_20210128T135131_C001  CS_OFFL_SIR_IOPN_2_20210128T134930_20210128T1353131_C001  CS_OFFL_SIR_IOPN_2_20210128T135437_20210128T135336_C001  CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T140609_C001  CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T140609_C001  CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T140609_C001  CS_OFFL_SIR_IOPN_2_20210128T142648_20210128T142602_C001  CS_OFFL_SIR_IOPN_2_20210128T142648_20210128T142602_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T183532_20210128T170817_C001  CCS_OFFL_SIR_IOPN_2_20210128T183532_20210128T170817_C001  CCS_OFFL_SIR_IOPN_2_20210128T183532_20210128T170817_C001  CCS_OFFL_SIR_IOPN_2_20210128T183532_20210128T170817_C001  CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
OCOG Backscatter Quality PLRM. CS_OFFL_SIR_IOPN_2_20210128T135437_20210128T140609_C001  CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T140609_C001  CS_OFFL_SIR_IOPN_2_20210128T140648_20210128T142802_C001  CS_OFFL_SIR_IOPN_2_20210128T142648_20210128T142802_C001  CS_OFFL_SIR_IOPN_2_20210128T142648_20210128T142802_C001  CS_OFFL_SIR_IOPN_2_20210128T1610739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T1610739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T1610739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T1610739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T1610739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T1610739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T1610739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T1610739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CCGG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CCGG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CCGG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  CCGG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  CCGG Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T140609_C001  CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T142609_C001  CS_OFFL_SIR_IOPN_2_20210128T142648_20210128T142802_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161017_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161017_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161017_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161017_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  The OCOG Range and Backscatter Quality Flags have been set for one more records.  The OCOG Range and Backscatter Quality Flags have been set for one more records.  The OCOG Range and Backscatter Quality Flags have been set for one more records.  The OCOG Range and Backscatter Quality Flags have been set for one more records.  The OCOG Range and Backscatter Quality Flags have been set for one more records.  The OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPN_2_20210128T140317_20210128T142802_C001  CS_OFFL_SIR_IOPN_2_20210128T142648_20210128T142802_C001  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  OCOG Backscatter Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPN_2_20210128T142648_20210128T142802_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  CS_OFFL_SIR_IOPN_2_20210128T160739_20210128T161015_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T183532_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T183532_20210128T183545_C001
CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  CS_OFFL_SIR_IOPN_2_20210128T183532_20210128T183545_C001  CS_OFFL_SIR_IOPN_2_20210128T183532_20210128T183545_C001  CS_OFFL_SIR_IOPN_2_20210128T183532_20210128T183545_C001  CS_OFFL_SIR_IOPN_2_20210128T183532_20210128T183545_C001  CS_OFFL_SIR_IOPN_2_20210128T183532_20210128T183545_C001
CS_OFFL_SIR_IOPN_2_20210128T161208_20210128T161835_C001  OCOG Backscatter Quality  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  The OCOG Range and Backscatter Quality Flags have been set for one more records.  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPN_2_20210128T170703_20210128T170817_C001  OCOG Backscatter Quality  More records.  OCOG Backscatter Quality  The OCOG Range and Backscatter Quality Flags have been set for one
US OFFI SIR JOPN 2 202101281183532 202101281183545 C001
OCOG Backscatter Quality more records.
CS_OFFL_SIR_IOPN_2_20210128T190429_20210128T190938_C001  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPN_2_20210128T192511_20210128T192706_C001  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPN_2_20210128T200210_20210128T200558_C001  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.  The OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPN_2_20210128T200636_20210128T200727_C001  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPN_2_20210128T202126_20210128T202632_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 betor one or more records.
CS_OFFL_SIR_IOPN_2_20210128T225412_20210128T225543_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210128T001506_20210128T001609_C001  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPR_2_20210128T002614_20210128T003402_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags between the ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags set for one or more records.
CS_OFFL_SIR_IOPR_2_20210128T011156_20210128T011435_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 betor one or more records.
CS_OFFL_SIR_IOPR_2_20210128T020605_20210128T021643_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags 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 set for one or more records.
CS_OFFL_SIR_IOPR_2_20210128T030323_20210128T030411_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_20210128T034547_20210128T035243_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_20210128T035440_20210128T035640_C001  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_IOPR_2_20210128T035718_20210128T035837_C001  OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one more records.

CS_OFFL_SIR_IOPR_2_20210128T044114_20210128T044757_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_20210128T052456_20210128T053019_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_20210128T053558_20210128T053611_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_20210128T053723_20210128T053732_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_20210128T062019_20210128T062237_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_20210128T065333_20210128T065429_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_20210128T065742_20210128T065828_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_20210128T070355_20210128T071054_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_20210128T071521_20210128T071607_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_20210128T072432_20210128T072922_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_20210128T072924_20210128T073247_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_20210128T082826_20210128T083044_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_20210128T084217_20210128T084723_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_20210128T084802_20210128T085002_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_20210128T101924_20210128T102530_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_20210128T111852_20210128T112111_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_20210128T115830_20210128T120605_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_20210128T121521_20210128T121707_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_20210128T133350_20210128T134523_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_20210128T135536_20210128T135729_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_20210128T142555_20210128T142648_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_20210128T151204_20210128T151327_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_20210128T152257_20210128T152844_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_20210128T165243_20210128T165247_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_20210128T165542_20210128T170110_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_20210128T170110_20210128T170256_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_20210128T172514_20210128T172728_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_20210128T174429_20210128T174514_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_20210128T183545_20210128T183635_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_20210128T183914_20210128T184212_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_20210128T184450_20210128T184639_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_20210128T184845_20210128T184930_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_20210128T201536_20210128T202126_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_20210128T202649_20210128T202929_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_20210128T203512_20210128T203627_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_20210128T210334_20210128T210444_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_20210128T211628_20210128T211641_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_20210128T215234_20210128T215434_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_20210128T215641_20210128T220147_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_20210128T233036_20210128T233206_C001	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_20210128T233403_20210128T234350_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

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

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

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

Number of products with errors: 199

## 5.8 L2 Ocean Retracking Quality Check

### L2 Retracking Flags (20Hz)

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

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

Number of products with errors: 55

## 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: 149

## 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.

#### 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:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220210127T233903_20210128T002843_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_220210128T002843_20210128T011818_C001	Mean Sea 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_220210128T011818_20210128T020757_C001	Mean Sea 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_220210128T020757_20210128T025732_C001	Mean Sea 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_220210128T025732_20210128T034712_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220210128T034712_20210128T043647_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210128T043647_20210128T052627_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220210128T052627_20210128T061602_C001	Mean Sea 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_220210128T061602_20210128T070541_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_220210128T070541_20210128T075516_C001	Mean Sea 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_220210128T075516_20210128T084456_C001	Mean Sea 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_220210128T084456_20210128T093431_C001	Mean Sea 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_220210128T093431_20210128T102411_C001	Mean Sea 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_220210128T102411_20210128T111346_C001	Mean Sea 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_220210128T111346_20210128T120325_C001	Mean Sea 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_220210128T120325_20210128T125301_C001	Mean Sea 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_220210128T125301_20210128T134240_C001	Mean Sea 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_220210128T134240_20210128T143215_C001	Mean Sea 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_220210128T143215_20210128T152155_C001	Mean Sea 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_220210128T152155_20210128T161130_C001	Mean Sea 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_220210128T161130_20210128T170109_C001	Mean Sea 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_220210128T170109_20210128T175044_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_220210128T175044_20210128T184024_C001	Mean Sea 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_220210128T184024_20210128T192959_C001	Mean Sea 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_220210128T192959_20210128T201939_C001	Mean Sea 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_220210128T201939_20210128T210914_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_220210128T210914_20210128T215853_C001	Mean Sea 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_220210128T215853_20210128T224829_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220210128T233808_20210129T002743_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

#### **6.5 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:

0

### 6.6 P2P Measurement Quality Flag Check

#### P2P Quality Flags (20Hz)

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

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

Number of products with errors: 29

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

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

Number of products with errors: 28

#### 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: 29

## 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: 27

#### P2P Retracking Flags PLRM

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

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

Number of products with errors: 29

## 7. IOP QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_IOPM1B	185	185	2	183	0
SIR_IOPR1B	144	93	2	91	0
SIR_IOPN1B	93	144	0	144	0
SIR_IOPM_2	185	185	129	56	0
SIR_IOPR_2	144	93	31	62	0
SIR_IOPN_2	93	144	59	81	4
SIR_IOP_P2P	28	28	0	25	3

#### 7.1 QCC Errors

Number of QCC reports with errors:

Total number	of occurrences	of each error
i Otal Hallibel	or occurrences	or caon crion

Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOPR_2	4	4	4	4							
•											•
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-

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

SIR\_IOP\_2\_

25

Number of QCC reports with warnings

2158

28

#### Total number of occurrences of each warning

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_IOPM1B	183	0	0	0	0	0	0
SIR_IOPM_2	0	0	42	43	0	49	0
SIR_IOPN1B	91	0	0	0	0	0	0
SIR_IOPN_2	0	0	9	30	7	26	28
SIR_IOPR1B	139	0	0	0	0	0	0
SIR_IOPR_2	0	4	22	41	0	30	23

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCE	RPEPOPFDPLRMSINNCDI	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	42	0	37	0	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	19	2	0	0	24	0	29
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	12	0	0	42	0	50	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	31	0	0	3	26	0	6
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	0	26	13	39	50	28
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	41	0	1	57	35	6

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
SIR_IOPM1B	0	0	0	0	0	0	
SIR_IOPM_2	36	0	1	0	0	0	
SIR_IOPN1B	0	0	0	0	45	0	
SIR_IOPN_2	27	24	14	0	0	0	
SIR_IOPR1B	0	0	0	0	144	8	
SIR_IOPR_2	27	48	0	12	0	0	

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_IOP_2_	17	28	28	6	28	16	26

Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_IOP_2_	2	16	27	23	12	28	18
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-

13

28

17

est Description Key:						
Abbreviation	Test name	Details				
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter				
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)				
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only				
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean				
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean				
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample				
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter				
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter				

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

Product name
No IOPX reports missing

Product name

CS\_OFFL\_SIR\_IOP\_2\_\_20210128T233808\_20210129T002743\_C002