

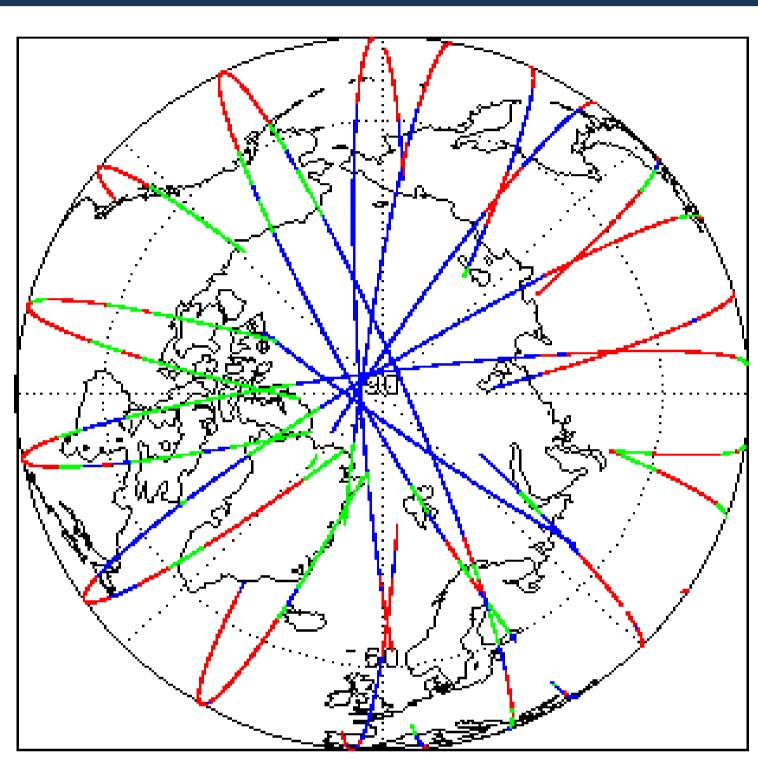
# 1. Overview

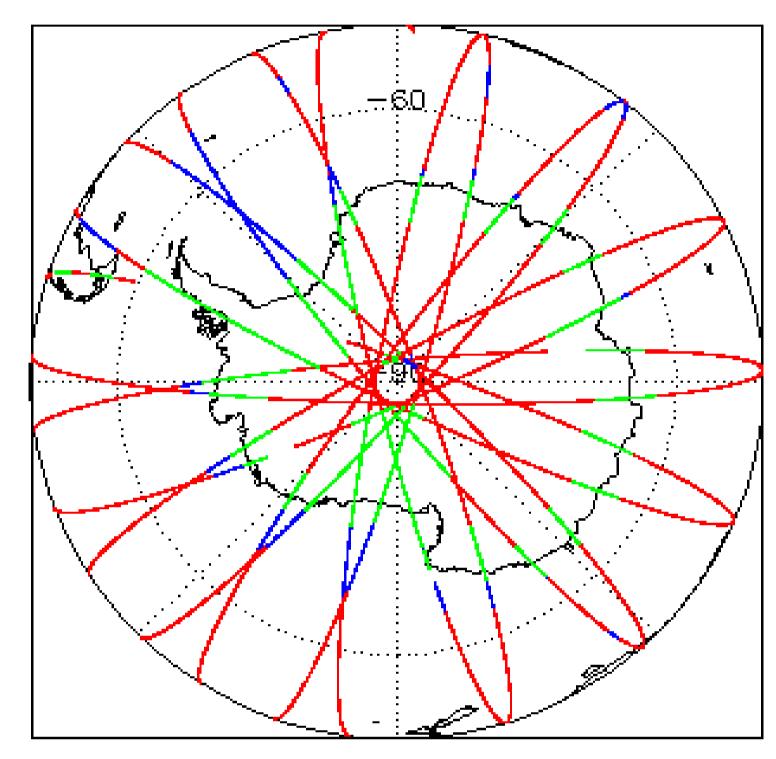
Report Production:	15-Mar-2021		
Processor Used:	CryoSat Ocean Processor		
Data Used:	Near Real Time Ocean Products (NOP) L1B & L2 Science Data		

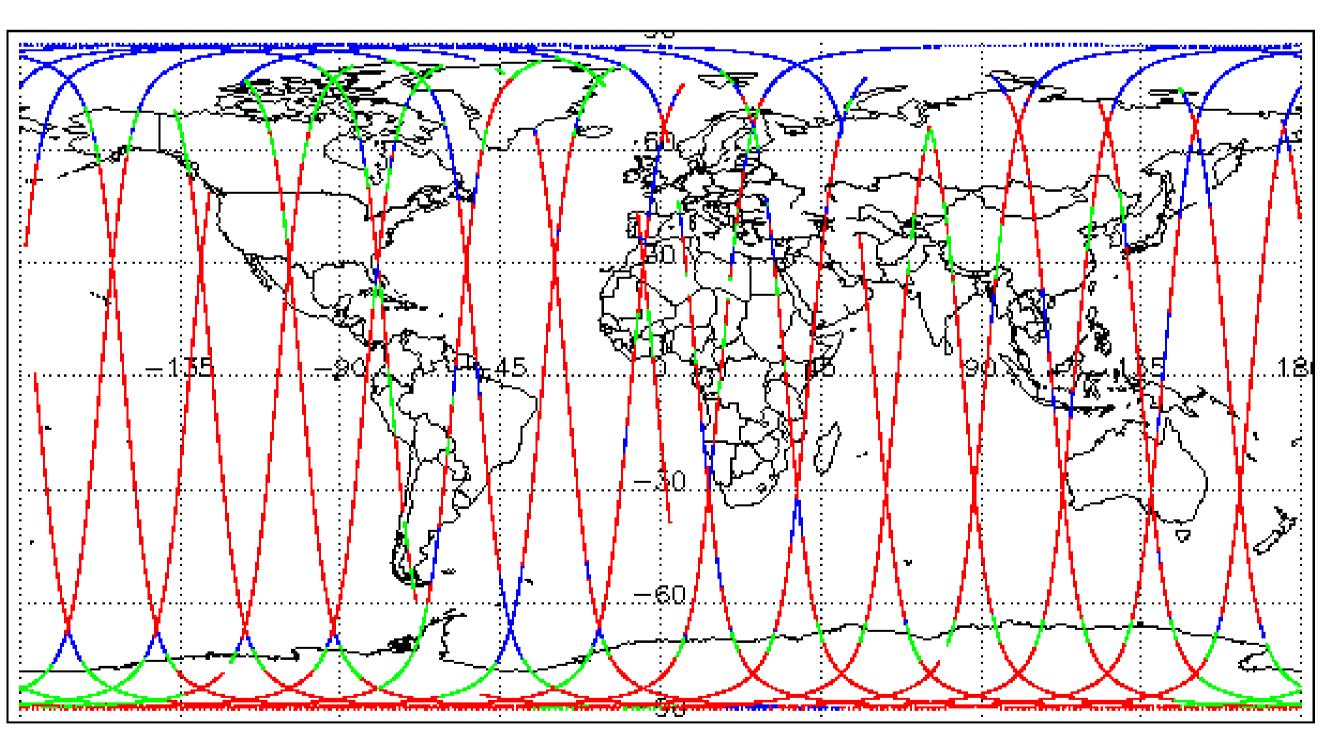
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement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

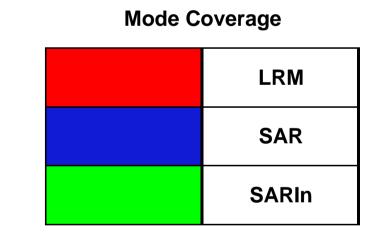
Mission / Instru	ument News
13-Mar-2021	None
14-Mar-2021	None
15-Mar-2021	Nothing planned

# 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
Star Tracker(s) in use:	Star Tracker 1

# 4. NOP Level 1B Data Quality Check

# 4.1 L1B Product Format Check

#### **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.

Dynamic Atmospheric Correction: The DAC is missing in all products because the auxiliary files required are not available in time for processing. This known and expected behaviour.

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:** 

0

#### 4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

4

Product	Test Failed	Description
CS_OFFL_SIR_NOPN1B_20210314T182909_20210314T182915_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:

12

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20210314T185607_20210314T193108_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T045300_20210314T045414_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T084138_20210314T084615_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T130422_20210314T130500_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T135132_20210314T135512_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T153519_20210314T153646_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T161006_20210314T161619_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T170948_20210314T171159_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T180256_20210314T180454_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T184906_20210314T185351_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210314T220215_20210314T220307_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210314T022303_20210314T022742_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210314T034742_20210314T035005_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210314T080652_20210314T080745_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210314T120151_20210314T120245_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210314T164719_20210314T164917_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210314T171522_20210314T171559_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210314T220307_20210314T221055_C001	Loss of Echo	The tracking echo is missing for one or more records

## 5. NOP Level 2 Data Quality Check

### **5.1 L2 Product Format Check**

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

Number of products with errors:

0

### **5.2 L2 Product Header Analysis**

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

Number of products with errors:

0

### **5.3 L2 Auxiliary Data File Usage Check**

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

Wind Model File Usage: This file is currently not included in all L2 products.

Number of products with errors:

0

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

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

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

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

43

CS_OFFL_SIR_NOPM_2_20210314T145104_20210314T151319_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or
		more records
CS_OFFL_SIR_NOPM_2_20210314T215105_20210314T215206_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T003152_20210314T003402_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T012927_20210314T013037_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T030628_20210314T030826_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T035005_20210314T035221_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T045300_20210314T045414_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T052545_20210314T053058_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T061543_20210314T061739_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T062530_20210314T062800_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T070529_20210314T070902_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T070902_20210314T070921_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T084138_20210314T084615_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T093513_20210314T093637_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_NOPN_2_20210314T104434_20210314T104603_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T112127_20210314T112431_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T125440_20210314T125747_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T130029_20210314T130414_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T143508_20210314T143741_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T153015_20210314T153132_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T161006_20210314T161619_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T170948_20210314T171159_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20210314T171253_20210314T171521_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T175229_20210314T175407_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20210314T184906_20210314T185351_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 height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records

Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period  CS_OFFL_SIR_NOPN_2_20210314T221247_20210314T221410_C001  Total Geocentric Ocean Tide (GOT)  There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more record GOT) for one or more records  There is an error with the Total Geocentric Ocean Tide height (solution 2) and the Height (solution 3) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20210314T2214T0_C001  Mean Sea Surface (1), Mean Dynamic Topography (1)  CS_OFFL_SIR_NOPN_2_20210314T225132_20210314T225446_C001  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynam Topography height (solution 1) for one or more records  CS_OFFL_SIR_NOPN_2_20210314T230000_20210314T230115_C001  Mean Dynamic Topography (1)  There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_202103141225132_202103141225446_C001  Topography (1)  Topography (1)  Topography height (solution 1) for one or more records  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_202103141230000_202103141230115_C001   Mean Dynamic Topography (1)   more records
CO OFFI CID NORM O 2024024 (T224222 2024 (T224224 T22424 T22424 T22424 T2242 T224 T2242 T224 T2242 T224 T2242 T224 T2242 T224 T2242
CS_OFFL_SIR_NOPN_2_20210314T234233_20210314T234247_C001
CS_OFFL_SIR_NOPR_2_20210314T003403_20210314T004109_C001  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynam Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20210314T021306_20210314T022019_C001  Mean Sea Surface (1), Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynam Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20210314T032754_20210314T033007_C001  Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT)  There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPR_2_20210314T035221_20210314T035914_C001  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20210314T053058_20210314T053716_C001  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynam Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20210314T102543_20210314T103510_C001  Mean Sea Surface (1), Mean Dynamic Topography (1)  Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynam Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20210314T120245_20210314T120317_C001  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period  Tide (FES), Non-Equilibrium Long Period
CS_OFFL_SIR_NOPR_2_20210314T170343_20210314T170501_C001  Mean Dynamic Topography (1)  There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20210314T201924_20210314T202942_C001  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20210314T215207_20210314T215321_C001  Mean Dynamic Topography (1)  There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20210314T220307_20210314T221055_C001  Mean Sea Surface (1), Mean Dynamic Topography (1)  Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynam Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20210314T234248_20210314T235352_C001  Mean Sea Surface (1), Mean Dynamic Topography (1)  Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

## 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

## 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.

0

Number of products with errors: 91

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20210313T235207_20210314T001206_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_NOPM_2_20210314T004416_20210314T011754_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_NOPM_2_20210314T012045_20210314T012515_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_NOPM_2_20210314T013128_20210314T013511_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_NOPM_2_20210314T013617_20210314T020740_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.

	Occar Altimates Dange COLIA CVALL	The Ocean Altimater Dange, COLIA, CWILL and Deckrosofter Ovelity, Flags
CS_OFFL_SIR_NOPM_2_20210314T022742_20210314T023452_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_NOPM_2_20210314T023934_20210314T024041_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_NOPM_2_20210314T024050_20210314T024207_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_NOPM_2_20210314T024322_20210314T025719_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_NOPM_2_20210314T025857_20210314T030414_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_NOPM_2_20210314T030448_20210314T030628_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_NOPM_2_20210314T031437_20210314T032753_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_NOPM_2_20210314T033007_20210314T034207_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_NOPM_2_20210314T040930_20210314T041954_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_NOPM_2_20210314T042134_20210314T043632_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_NOPM_2_20210314T043824_20210314T044326_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_NOPM_2_20210314T045159_20210314T045300_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_NOPM_2_20210314T045834_20210314T050419_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_NOPM_2_20210314T050930_20210314T051346_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_NOPM_2_20210314T051509_20210314T051606_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_NOPM_2_20210314T051629_20210314T052217_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_NOPM_2_20210314T055353_20210314T061542_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_NOPM_2_20210314T061848_20210314T062244_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_NOPM_2_20210314T062305_20210314T062529_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_NOPM_2_20210314T062841_20210314T065738_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_NOPM_2_20210314T065939_20210314T070339_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_NOPM_2_20210314T072937_20210314T075514_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_NOPM_2_20210314T075635_20210314T080158_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_NOPM_2_20210314T080745_20210314T084138_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_NOPM_2_20210314T090246_20210314T090409_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_NOPM_2_20210314T091152_20210314T091305_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_NOPM_2_20210314T091308_20210314T092523_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_NOPM_2_20210314T092826_20210314T093502_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_NOPM_2_20210314T093637_20210314T094437_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_NOPM_2_20210314T094719_20210314T102146_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_NOPM_2_20210314T104731_20210314T104825_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_NOPM_2_20210314T105335_20210314T105439_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_NOPM_2_20210314T110341_20210314T111432_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_NOPM_2_20210314T111612_20210314T112127_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_NOPM_2_20210314T112647_20210314T114530_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_NOPM_2_20210314T115650_20210314T120151_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_NOPM_2_20210314T121334_20210314T121417_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_NOPM_2_20210314T121503_20210314T121757_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_NOPM_2_20210314T122146_20210314T122152_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_NOPM_2_20210314T123229_20210314T123831_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_NOPM_2_20210314T124019_20210314T125339_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_NOPM_2_20210314T125747_20210314T130028_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_NOPM_2_20210314T130628_20210314T133706_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_NOPM_2_20210314T135631_20210314T140330_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_NOPM_2_20210314T140349_20210314T142804_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_NOPM_2_20210314T143742_20210314T143936_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_NOPM_2_20210314T144147_20210314T144438_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_NOPM_2_20210314T144608_20210314T145014_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_NOPM_2_20210314T145104_20210314T151319_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_NOPM_2_20210314T153646_20210314T153841_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_NOPM_2_20210314T154038_20210314T155241_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_NOPM_2_20210314T160818_20210314T161005_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_NOPM_2_20210314T161916_20210314T162343_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_NOPM_2_20210314T162524_20210314T164029_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_NOPM_2_20210314T164208_20210314T164451_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_NOPM_2_20210314T165624_20210314T165642_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_NOPM_2_20210314T171857_20210314T172447_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_NOPM_2_20210314T172731_20210314T175153_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_NOPM_2_20210314T175408_20210314T180255_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_NOPM_2_20210314T180456_20210314T182908_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_NOPM_2_20210314T183233_20210314T183329_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_NOPM_2_20210314T185606_20210314T193108_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_NOPM_2_20210314T193625_20210314T194048_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_NOPM_2_20210314T194347_20210314T200925_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_NOPM_2_20210314T203741_20210314T211012_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_NOPM_2_20210314T211540_20210314T212128_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_NOPM_2_20210314T212251_20210314T212913_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_NOPM_2_20210314T213145_20210314T213840_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_NOPM_2_20210314T220033_20210314T220122_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_NOPM_2_20210314T221410_20210314T224915_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_NOPM_2_20210314T225446_20210314T230000_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_NOPM_2_20210314T230137_20210314T230446_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_NOPM_2_20210314T230647_20210314T231331_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_NOPM_2_20210314T231640_20210314T232104_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_NOPM_2_20210314T233715_20210314T233925_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_NOPM_2_20210314T233928_20210314T233954_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_NOPM_2_20210314T235352_20210315T000252_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_NOPN_2_20210314T070340_20210314T070501_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_NOPN_2_20210314T143937_20210314T144146_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_NOPN_2_20210314T182953_20210314T183233_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_NOPN_2_20210314T233206_20210314T233250_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_NOPN_2_20210314T234233_20210314T234247_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_NOPR_2_20210314T004245_20210314T004416_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_NOPR_2_20210314T022303_20210314T022742_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_NOPR_2_20210314T130529_20210314T130628_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_NOPR_2_20210314T233925_20210314T233928_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.

## 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: 90

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20210314T001207_20210314T001533_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_NOPN_2_20210314T003152_20210314T003402_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_NOPN_2_20210314T021200_20210314T021224_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_NOPN_2_20210314T040625_20210314T040930_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_NOPN_2_20210314T043635_20210314T043823_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_NOPN_2_20210314T044401_20210314T044403_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_NOPN_2_20210314T045300_20210314T045414_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_NOPN_2_20210314T045558_20210314T045742_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_NOPN_2_20210314T050419_20210314T050856_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_NOPN_2_20210314T051346_20210314T051508_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_NOPN_2_20210314T052217_20210314T052339_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_NOPN_2_20210314T054649_20210314T055045_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_NOPN_2_20210314T061543_20210314T061739_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_NOPN_2_20210314T065739_20210314T065939_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_NOPN_2_20210314T070340_20210314T070501_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_NOPN_2_20210314T070529_20210314T070902_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_NOPN_2_20210314T072527_20210314T072713_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_NOPN_2_20210314T072840_20210314T072936_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_NOPN_2_20210314T075514_20210314T075635_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_NOPN_2_20210314T080531_20210314T080652_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_NOPN_2_20210314T084138_20210314T084615_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_NOPN_2_20210314T094437_20210314T094549_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_NOPN_2_20210314T102146_20210314T102305_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_NOPN_2_20210314T102402_20210314T102542_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_NOPN_2_20210314T103610_20210314T103638_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_NOPN_2_20210314T103753_20210314T103916_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_NOPN_2_20210314T105151_20210314T105335_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_NOPN_2_20210314T112127_20210314T112431_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_NOPN_2_20210314T123023_20210314T123229_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_NOPN_2_20210314T125440_20210314T125747_C001	TAITIMETER Range and Backscatter Chality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20210314T130029_20210314T130414_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_NOPN_2_20210314T135132_20210314T135512_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_NOPN_2_20210314T143508_20210314T143741_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_NOPN_2_20210314T143937_20210314T144146_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_NOPN_2_20210314T151506_20210314T151729_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_NOPN_2_20210314T153519_20210314T153646_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_NOPN_2_20210314T155454_20210314T155523_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_NOPN_2_20210314T155755_20210314T155900_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_NOPN_2_20210314T161006_20210314T161619_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_NOPN_2_20210314T170948_20210314T171159_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_NOPN_2_20210314T171735_20210314T171857_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

COST DELICATION L'ADICHITICATION DE CHI DELICATION DE CHI DELICATI	CS_OFFL_SIR_NOPN_2_20210314T172608_20210314T172731_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 OFF. 61 NOTH 2 SERVENTISSES 2016 ATTIMES OFF.  CS OFF. 61 NOTH 2 SERVENTISSES 2016 ATTIMES OF	CS_OFFL_SIR_NOPN_2_20210314T180256_20210314T180454_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Comparison   Com	CS_OFFL_SIR_NOPN_2_20210314T182953_20210314T183233_C001		, ,
Co. CHIL. SIRL NORM, 2, 202 903 4 212210, 202 903 4 212201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 212201, 202 903 4 212201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 212201, 202 903 4 212201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 212201, 202 903 4 212201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 212201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 212201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 212201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 212201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 212201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 222201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 222201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 222201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 222201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 222201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 222201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 222201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 222201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 22201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 22201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 22201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 22201, CO01  Col. CHIL. SIRL NORM, 2, 202 903 4 202 9	CS_OFFL_SIR_NOPN_2_20210314T183329_20210314T183457_C001		
DIS DEF. SIR NOPN 2 7691051472-928 7091051472-9301 COST Absent Charge Plants  COST DEF. SIR NOPN 2 7691051472-9304 COST  COST DEF. SIR NOPN 2 7691051472-9	CS_OFFL_SIR_NOPN_2_20210314T185444_20210314T185606_C001		, ,
CS_OFF_SIR_NORPL_2 022129* 4172132* 4172415. CDIT  CS_OFF_SIR_NORPL_2 022129* 4172412* 02212* 0	CS_OFFL_SIR_NOPN_2_20210314T212128_20210314T212251_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS. OPFL_SIR_VOPFL_2/C212341726147_2012410_C001	CS_OFFL_SIR_NOPN_2_20210314T214644_20210314T214750_C001		, ,
OCC September Plange Dusity FLRM. OCS September Range Dusity FLRM. OCC September Range Dusity FLRM.	CS_OFFL_SIR_NOPN_2_20210314T215728_20210314T215851_C001		, ,
CS_OFFL_SIR_NOFR_2_202103-4T03403_202103-4T03405_CO01  CS_OFFL_SIR_NOFR_2_202103-4T03403_202103-4T03405_CO01  CS_OFFL_SIR_NOFR_2_202103-4T03403_202103-4T03405_CO01  CS_OFFL_SIR_NOFR_2_202103-4T03403_202103-4T03405_CO01  CS_OFFL_SIR_NOFR_2_202103-4T03403_202103-4T03405_CO01  CS_OFFL_SIR_NOFR_2_202103-4T03403_202103-4T03405_CO01  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03203-CO01  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03203-CO01  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03203-CO01  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03203-CO01  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03203-CO01  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03203-CO01  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03405-CO01  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03405_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03505_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03505_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03505_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03505_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03505_202103-4T03505_CO07  CS_OFFL_SIR_NOFR_2_202103-4T03505_202103-4T03505_CO07  CS_OFFL_SIR	CS_OFFL_SIR_NOPN_2_20210314T221247_20210314T221410_C001		
DOCO Established Coulty  DOCO Fig. Sir. NOPR 2 20210314703403 202103147091195 CO01  SOFFL Sir. NOPR 2 20210314709112 20210314709109 CO01  SOFFL Sir. NOPR 2 202103147091274 20210314709107 CO01  CS. OFFL Sir. NOPR 2 202103147091274 20210314709109 CO01  CS. OFFL Sir. NOPR 2 202103147091274 20210314709109 CO01  CS. OFFL Sir. NOPR 2 20210314709000 CO01  CS. OFFL Sir. N	CS_OFFL_SIR_NOPN_2_20210314T225132_20210314T225446_C001		
CS_OFFL_SIR_NOPR_2_20210314T004102_20210314T004108_C001	CS_OFFL_SIR_NOPN_2_20210314T232104_20210314T232159_C001		, ,
CS OFFL SIR NOPR 2 20210314T03292 20210314T03297 C001  All Reference Range SHA SWH and Buckscatter Quality Plags and bedocatter Qual	CS_OFFL_SIR_NOPR_2_20210314T003403_20210314T004109_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS OFFL SIR NOPR 2 20210314T02206 20210314T032742 C011  Almeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_NOPR_2_20210314T004112_20210314T004146_C001		, ,
and Backscater Ouslity PLRM, COCG Altimeter Range and Backscater Ouslity PLRM CS_OFFL_SIR_NOPR_2_202103147030827_202103147031437_C001  CS_OFFL_SIR_NOPR_2_202103147030827_202103147031437_C001  CS_OFFL_SIR_NOPR_2_202103147030827_202103147034837_C001  CS_OFFL_SIR_NOPR_2_20210314703428_202103147034637_C001  CS_OFFL_SIR_NOPR_2_20210314703428_202103147034637_C001  CS_OFFL_SIR_NOPR_2_20210314703428_202103147034637_C001  CS_OFFL_SIR_NOPR_2_202103147034837_202103147034637_C001  CS_OFFL_SIR_NOPR_2_202103147034837_202103147034637_C001  CS_OFFL_SIR_NOPR_2_202103147034837_202103147034731_C001  CS_OFFL_SIR_NOPR_2_202103147034837_202103147034731_C001  CS_OFFL_SIR_NOPR_2_202103147034837_202103147034731_C001  CS_OFFL_SIR_NOPR_2_202103147034837_202103147034731_C001  CS_OFFL_SIR_NOPR_2_202103147034837_20210314703505_C001  CS_OFFL_SIR_NOPR_2_202103147034837_20210314703505_C001  CS_OFFL_SIR_NOPR_2_20210314703505_20210314703505_C001  CS_OFFL_SIR_NOPR_2_20210314703505_20210314703505_C001  CS_OFFL_SIR_NOPR_2_20210314703505_20210314703505_C001  CS_OFFL_SIR_NOPR_2_20210314703505_20210314703505_C001  CS_OFFL_SIR_NOPR_2_20210314703505_20210314703505_C001  CS_OFFL_SIR_NOPR_2_20210314703505_20210314703505_C001  CS_OFFL_SIR_NOPR_2_20210314703505_20210314703505_C001  CS_OFFL_SIR_NOPR_2_20210314703505_20210314703505_C001  CS_OFFL_SIR_NOPR_2_20210314705305_20210314705305_C001  CS_OFFL_SIR_NOPR_2_20210314705305_20210314705305_C001  CS_OFFL_SIR_NOPR_2_20210314705305_20210314705305_C001  CS_OFFL_SIR_NOPR_2_20210314705305_20210314705305_C001  CS_OFFL_SIR_NOPR_2_20210314705305_20210314705305_C001  CS_OFFL_SIR_NOPR_2_20210314705305_C001  CS_OFFL_SIR_NOPR_2_20210314705305_202103147055350_C001  CS_OFFL_SIR_NOPR_2_20210314705305_202103147055350_C001  CS_OFFL_SIR_NOPR_2_20210314705305_202103147055350_C001  CS_OFFL_SIR_NOPR_2_20210314705305_202103147055350_C001  CS_OFFL_SIR_NOPR_2_20210314705305_202103147055350_C001  CS_OFFL_SIR_NOPR_2_20210314705305_202103147055350_C001  CS_OFFL_SIR_NOPR_2_20210314705305_202103147055350_C001  CS_OFFL_SIR_NOPR_2_202103147	CS_OFFL_SIR_NOPR_2_20210314T021306_20210314T022019_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OOG Altimeter Range and Backscatter Quality PLRM, OOG Altimeter Range and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20210314T032754_20210314T034037_C001  CS_OFFL_SIR_NOPR_2_20210314T034038_20210314T034637_C001  CS_OFFL_SIR_NOPR_2_20210314T034038_20210314T034637_C001  CS_OFFL_SIR_NOPR_2_20210314T034038_20210314T034637_C001  CS_OFFL_SIR_NOPR_2_20210314T034037_20210314T034731_C001  CS_OFFL_SIR_NOPR_2_20210314T034732_20210314T034731_C001  CS_OFFL_SIR_NOPR_2_20210314T034742_20210314T035005_C001  CS_OFFL_SIR_NOPR_2_20210314T034742_20210314T035014_C001  CS_OFFL_SIR_NOPR_2_20210314T035035_20210314T035014_C001  CS_OFFL_SIR_NOPR_2_20210314T035035_20210314T035014_C001  CS_OFFL_SIR_NOPR_2_20210314T035035_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T05305_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053834_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053833_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053834_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053835_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053835_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053835_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053835_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053835_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053835_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053835_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053804_C001  CC_OCA_Altimeter Range_CS_HA_SWH and Backscatter Quality PLRM_OCOM_Altimeter Range_ASHA_SWH and Backscatter Qu	CS_OFFL_SIR_NOPR_2_20210314T022303_20210314T022742_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCOG Backscatter Quality  CS OFFL SIR NOPR 2 20210314T034208 20210314T034637 C001  CS OFFL SIR NOPR 2 20210314T034208 20210314T034637 C001  CS OFFL SIR NOPR 2 20210314T034637 20210314T034731 C001  CS OFFL SIR NOPR 2 20210314T034637 20210314T034731 C001  CS OFFL SIR NOPR 2 20210314T034637 20210314T034731 C001  CS OFFL SIR NOPR 2 20210314T034742_20210314T035005_C001  CS OFFL SIR NOPR 2 20210314T034742_20210314T035005_C001  CS OFFL SIR NOPR 2 20210314T034742_20210314T035005_C001  CS OFFL SIR NOPR 2 20210314T035221_20210314T035015_C001  CS OFFL SIR NOPR 2 20210314T053505_20210314T035716_C001  CS OFFL SIR NOPR 2 20210314T053505_20210314T053706_C001  CS OFFL SIR NOPR 2 20210314T053752_20210314T053804_C001  CS OFFL SIR NOPR 2 20210314T053752_20210314T053535_C001  CS OFFL SIR NOPR 2 20210314T055157_20210314T053535_C001  CS OFFL SIR NOPR 2 20210314T058200_20210314T053535_C001  CS OFFL SIR NOPR 2 20210314T058200_20210314T053535_C001  CS OFFL SIR NOPR 2 20210314T058200_20210314T0583804_C001  CS OFFL SIR NOPR 2 20210314T0582800_20210314T062840 C001  Altimeter Range and Backscatter Quality PLRM, COCO Altimeter Range and Backscatter Quality Plags have been set for one or more records.  CS OFFL SIR NOPR 2 20210314T0582800_20210314T062840 C001  Altimeter Range and Backscatter Quality Plags have been set for one or more records.  CS OFFL SIR NOPR 2 20210314T082800_20210314T062840 C001  Altimeter Range and Backscatter Quality Plags have been set for one or more records.  CS OFFL SIR NOPR 2 20210314T082800_20210314T06	CS_OFFL_SIR_NOPR_2_20210314T030827_20210314T031437_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20210314T034208_20210314T034637_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20210314T034637_20210314T034731_C001  CS_OFFL_SIR_NOPR_2_20210314T034637_20210314T035005_C001  CS_OFFL_SIR_NOPR_2_20210314T034742_20210314T035005_C001  CS_OFFL_SIR_NOPR_2_20210314T035221_20210314T035005_C001  CS_OFFL_SIR_NOPR_2_20210314T035221_20210314T035016_C001  CS_OFFL_SIR_NOPR_2_20210314T035058_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053058_20210314T053706_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053804_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053804_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053804_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053804_C001  CS_OFFL_SIR_NOPR_2_20210314T055157_20210314T055353_C001  CS_OFFL_SIR_NOPR_2_20210314T056800_20210314T062840_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T062840_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T068052_20210314T068052_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T068054_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T068054_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T068054_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T068054_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T068054_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T068054_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T068054_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T068054_C001  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T080745_C001  Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20210314T068052_20210314T080745_C001  Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20210314T080652_20210314T080745_C001  Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20210314T080652_20210314T080745_C001  Altimeter Range and Ba	CS_OFFL_SIR_NOPR_2_20210314T032754_20210314T033007_C001	OCOG Backscatter Quality	
and Backscatter Quality PLRM. COG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and Backscatter Quality PLRM. OCG Altimeter Range and Backscatter Quality PLRM. OCG Altimeter Range and Backscatter Quality PLRM. OCG Altimeter Range and Backscatter Quality Flags and the OCG Altimeter Range and Backscatter Quality Flags and Backscatter Quality Fl	CS_OFFL_SIR_NOPR_2_20210314T034208_20210314T034637_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPR_2_20210314T035221_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053058_20210314T053716_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053756_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053756_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053804_C001  CS_OFFL_SIR_NOPR_2_20210314T055157_20210314T053804_C001  CS_OFFL_SIR_NOPR_2_20210314T055157_20210314T053656_C001  CS_OFFL_SIR_NOPR_2_20210314T056806_20210314T056840_C001  CS_OFFL_SIR_NOPR_2_20210314T062800_20210314T062840_C001  CS_OFFL_SIR_NOPR_2_20210314T066652_20210314T0680745_C001  CS_OFFL_SIR_NOPR_2_20210314T066652_20210314T0680745_C001  CS_OFFL_SIR_NOPR_2_20210314T066652_20210314T0680745_C001  Altimeter Range and Backscatter Quality PLRM. OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM. OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM. OCOG Altimeter Range and Backscatter Quality PLRM. OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM. OCOG Altimeter Range and B	CS_OFFL_SIR_NOPR_2_20210314T034637_20210314T034731_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, O	CS_OFFL_SIR_NOPR_2_20210314T034742_20210314T035005_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053804_C001  CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053853_C001  CS_OFFL_SIR_NOPR_2_20210314T062800_20210314T062840_C001  CS_OFFL_SIR_NOPR_2_20210314T062800_20210314T062840_C001  CS_OFFL_SIR_NOPR_2_20210314T062800_20210314T062840_C001  CS_OFFL_SIR_NOPR_2_20210314T080652_20210314T080745_C001	CS_OFFL_SIR_NOPR_2_20210314T035221_20210314T035914_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053804_C001  OCOG Backscatter Quality  OCOG Backscatter Quality  DCS_OFFL_SIR_NOPR_2_20210314T055157_20210314T055353_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range	CS_OFFL_SIR_NOPR_2_20210314T053058_20210314T053716_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20210314T055157_20210314T055353_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Ba	CS_OFFL_SIR_NOPR_2_20210314T053752_20210314T053804_C001		, ,
CS_OFFL_SIR_NOPR_2_20210314T062800_20210314T062840_C001  and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Fl	CS_OFFL_SIR_NOPR_2_20210314T055157_20210314T055353_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20210314T080652_20210314T080745_C001  and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Plags Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20210314T062800_20210314T062840_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_NOPR_2_20210314T080652_20210314T080745_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_NOPR_2_20210314T085433_20210314T085609_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_NOPR_2_20210314T085659_20210314T085853_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_NOPR_2_20210314T102543_20210314T103510_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_NOPR_2_20210314T104604_20210314T104731_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_NOPR_2_20210314T121758_20210314T122146_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_NOPR_2_20210314T122152_20210314T122312_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_NOPR_2_20210314T133825_20210314T134124_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_NOPR_2_20210314T134141_20210314T134147_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_NOPR_2_20210314T134358_20210314T134520_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_NOPR_2_20210314T142805_20210314T143507_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_NOPR_2_20210314T155242_20210314T155454_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_NOPR_2_20210314T164451_20210314T164719_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_NOPR_2_20210314T164719_20210314T164917_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_NOPR_2_20210314T165725_20210314T165734_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_NOPR_2_20210314T170343_20210314T170501_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_NOPR_2_20210314T171522_20210314T171559_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_NOPR_2_20210314T172448_20210314T172608_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_NOPR_2_20210314T193109_20210314T193207_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_NOPR_2_20210314T201924_20210314T202942_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_NOPR_2_20210314T220307_20210314T221055_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_NOPR_2_20210314T224916_20210314T225132_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_NOPR_2_20210314T233954_20210314T234232_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_NOPR_2_20210314T234248_20210314T235352_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.

## 5.7 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 falling at ocean/ land boundaries, but this is expected.

63

118

Number of products with errors:

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

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

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

Number of products with errors:

## 7. NOP 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_NOPM1B	160	160	4	156	0
SIR_NOPR1B	107	107	0	107	0
SIR_NOPN1B	101	101	2	99	0
SIR_NOPM_2	160	160	106	54	0
SIR_NOPR_2	107	107	37	66	4
SIR_NOPN_2	101	101	43	58	0

### 7.1 QCC Errors

**Number of QCC reports with errors:** 

9

Total number of occurrences of each error

Total number of occurrences of each error											
Product Type RLOBO	OPNCDF	RL	RL	RLOBOPNCDF	RL	RL	-	-	-	-	-
SIR NOPR 2	4	1	4	4	1	4					

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

### 7.2 QCC Warnings

**Number of QCC reports with warnings** 

1585

Total number of occurrences of each warning

Total Hamber of Coolin Hamming							
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_NOPM1B	156	0	0	0	0	0	0
SIR_NOPM_2	0	0	41	41	0	42	0
SIR_NOPN1B	97	0	0	0	0	0	0
SIR_NOPN_2	0	0	9	32	4	24	21
SIR_NOPR1B	103	0	0	0	0	0	0
SIR_NOPR_2	0	4	20	39	2	27	20

Product Type	RBSZOPOEPNCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCI	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	35	34	0	0	0	0	29
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	16	0	0	23	0	33	0
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	13	0	31	0	39	0	0

Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	0	0	4	28	0	5	35
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	27	15	46	49	33	26
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	28	0	3	47	26	5	26

Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDE	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
	TOTALISE I DI EKIMITODI	KOMIOZI NODI		-		-	
SIR_NOPM1B	0	0	1	0	0	0	
SIR_NOPM_2	0	1	1	0	0	0	
SIR_NOPN1B	0	0	0	0	48	0	
SIR_NOPN_2	26	13	0	0	0	0	
SIR_NOPR1B	0	0	0	0	107	6	
SIR NOPR 2	37	2	0	5	0	0	

Test Description Key:		
Abbreviation	Test name	Details
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees

RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch (DBL ASC, rounded up to 0.1)
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

0