

# **QA4EO Daily Report for NOP data:**

22/09/2021

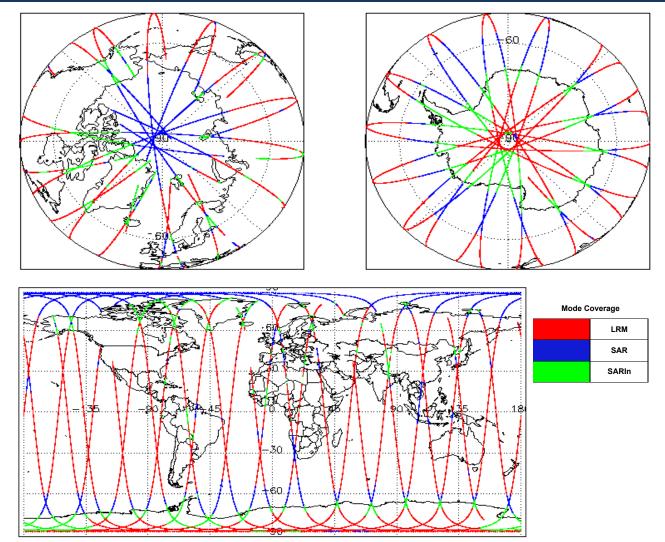
	22 Son 2021	Check	L1 & L2
Report Production:	23-Sep-2021	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	Cruce Cat Occar Brancoson	Server check: calval-pds.cryosat.esa.int	Nominal
FIDCESSOF USEd.	CryoSat Ocean Processor	Product Software Check	Nominal
Data Used:	Near Real Time Ocean Products (NOP)	Product Format Check	Nominal
	L1B & L2 Science Data	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 and 5.5
		Measurement Quality Flag Check	See Section 5.6
		Ocean Retracking Quality Check	See Section 5.7
		QCC Error/ Warning Check	See Section 7.2

1. Overview

# Mission / Instrument News 21-Sep-2021 None 22-Sep-2021 None

23-Sep-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

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

Header Analysis
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.
y 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 ication is required in the next release.
th errors: 0
Data File Usage Check
for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.
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.
th errors: 0
/ Correction Error Check
<pre>y 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 its equired in the next release.</pre> <pre>th errors: 0</pre> Data File Usage Check for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct. 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. th errors: 0

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 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:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20210922T222740_20210922T223221_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

#### 4.6 L1B Waveform Group Data Check

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

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

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#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20210922T041604_20210922T042258_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210922T123320_20210922T130637_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210922T141039_20210922T142208_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210922T063004_20210922T063542_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210922T123203_20210922T123320_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210922T153751_20210922T154001_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210922T185758_20210922T190010_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210922T072228_20210922T072409_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210922T090309_20210922T090820_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210922T122229_20210922T123018_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210922T134937_20210922T135134_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210922T172054_20210922T172635_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210922T203833_20210922T204347_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). 0

Number of products with errors:

#### 5.2 L2 Product Header Analysis

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

Number of products with errors:

## 5.3 L2 Auxiliary Data File Usage Check

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

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

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.

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

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

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

Number of products with errors:

Product

**Test Failed** 

Description

CS_OFFL_SIR_NOPM_2_20210922T182132_20210922T182927_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
CS_OFFL_SIR_NOPN_2_20210922T013401_20210922T013527_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_20210922T014045_20210922T014352_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_20210922T031346_20210922T031645_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_20210922T031946_20210922T032325_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_20210922T045425_20210922T045659_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_20210922T054933_20210922T055053_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
CS_OFFL_SIR_NOPN_2_20210922T063004_20210922T063542_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_20210922T072409_20210922T072456_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_20210922T072907_20210922T072943_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_20210922T072945_20210922T073045_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_20210922T081149_20210922T081327_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_20210922T082216_20210922T082422_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_20210922T090820_20210922T091306_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_20210922T100008_20210922T100233_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_20210922T113103_20210922T113456_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Perioc Ocean Tide	Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20210922T121646_20210922T121810_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_20210922T122131_20210922T122229_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_20210922T131050_20210922T131404_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_20210922T131919_20210922T132030_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_20210922T144821_20210922T145241_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_20210922T145821_20210922T145943_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_20210922T163600_20210922T163747_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_20210922T172002_20210922T172054_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_20210922T181404_20210922T181627_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_20210922T185448_20210922T185712_C001	Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_NOPN_2_20210922T185758_20210922T190010_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
CS_OFFL_SIR_NOPN_2_20210922T194412_20210922T194623_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_20210922T195305_20210922T195734_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_20210922T203441_20210922T203833_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_20210922T212428_20210922T212703_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_20210922T213423_20210922T213606_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_20210922T231323_20210922T231500_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_20210922T090309_20210922T090820_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_NOPR_2_20210922T104316_20210922T104851_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
	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or
CS_OFFL_SIR_NOPR_2_20210922T121137_20210922T121314_C001	wear Dynamic Topography (1)	more records There is an error with the Mean Dynamic Topography height for one or

CS_OFFL_SIR_NOPR_2_20210922T122229_20210922T123018_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_NOPR_2_20210922T140050_20210922T140927_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_NOPR_2_20210922T154158_20210922T155001_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_NOPR_2_20210922T172054_20210922T172635_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_NOPR_2_20210922T190010_20210922T190707_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_NOPR_2_20210922T203833_20210922T204347_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_NOPR_2_20210922T221625_20210922T222353_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_NOPR_2_20210922T235434_20210923T000205_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

#### 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20210922T222740_20210922T223221_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

## 5.6 L2 Measurement Quality Flag Check

#### L2 Quality Flags (20Hz)

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

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

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

> OCOG Altimeter Range and Backscatter Quality Flags: These flags are currently set for some records over continental ice.

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#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20210922T000919_20210922T004121_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_20210922T005317_20210922T005534_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_20210922T005550_20210922T005641_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_20210922T012444_20210922T012938_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_20210922T013527_20210922T014045_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_20210922T014802_20210922T020857_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_20210922T021143_20210922T022307_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_20210922T023234_20210922T023716_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_20210922T025306_20210922T025749_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_20210922T025936_20210922T030930_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_20210922T032710_20210922T035303_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_20210922T035443_20210922T040307_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_20210922T041427_20210922T041519_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_20210922T041604_20210922T042258_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_20210922T042312_20210922T044724_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_20210922T050124_20210922T050339_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_20210922T050629_20210922T051044_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_20210922T051136_20210922T052208_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_20210922T052212_20210922T052216_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_20210922T052218_20210922T052318_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_20210922T052321_20210922T053259_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_20210922T055053_20210922T055457_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_20210922T055616_20210922T061058_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_20210922T061818_20210922T062909_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_20210922T063837_20210922T064302_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_20210922T064557_20210922T065947_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_20210922T070126_20210922T070806_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_20210922T073132_20210922T073220_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_20210922T073449_20210922T073654_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_20210922T074137_20210922T074526_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_20210922T074648_20210922T075235_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_20210922T075305_20210922T080928_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_20210922T081327_20210922T082216_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_20210922T082546_20210922T084647_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_20210922T092328_20210922T094905_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_20210922T095540_20210922T100008_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_20210922T100517_20210922T103113_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_20210922T104053_20210922T104244_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_20210922T105723_20210922T110002_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_20210922T110127_20210922T112705_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_20210922T113456_20210922T114047_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_20210922T114414_20210922T115935_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_20210922T120659_20210922T120846_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_20210922T121953_20210922T122131_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_20210922T123320_20210922T130637_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_20210922T131404_20210922T131919_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_20210922T132602_20210922T132916_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_20210922T133616_20210922T133752_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_20210922T135639_20210922T140050_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_20210922T141039_20210922T142208_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_20210922T142453_20210922T144601_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_20210922T145241_20210922T145405_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_20210922T145412_20210922T145821_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_20210922T150338_20210922T151329_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_20210922T151517_20210922T152234_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_20210922T152327_20210922T152750_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_20210922T155001_20210922T162443_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_20210922T162739_20210922T163305_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_20210922T163324_20210922T163600_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_20210922T164407_20210922T165638_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_20210922T165656_20210922T171422_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_20210922T173545_20210922T174728_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_20210922T174932_20210922T180408_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_20210922T180704_20210922T181203_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_20210922T182132_20210922T182927_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_20210922T183805_20210922T185418_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_20210922T185712_20210922T185758_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_20210922T192857_20210922T194245_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_20210922T194623_20210922T195116_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
Backscatter Quality	for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
Backscatter Quality	for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
Backscatter Quality	for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
Backscatter Quality	for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
Backscatter Quality	for one or more records.
OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
Backscatter Quality	for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality	set for one or more records.
	Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Backscatter Quality Ocean Altimeter Range, Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality OCCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Backscatter Quality,

## 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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20210922T004121_20210922T004252_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_20210922T005711_20210922T005834_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_20210922T010251_20210922T010309_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_20210922T011423_20210922T011446_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_20210922T024934_20210922T025306_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_20210922T031346_20210922T031645_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_20210922T041519_20210922T041604_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 PLRM, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPN_2_20210922T045425_20210922T045659_C001	Altimeter Range and Backscatter Quality PLRM	set for one or more records.
CS_OFFL_SIR_NOPN_2_20210922T053442_20210922T053637_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_20210922T063004_20210922T063542_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_20210922T064302_20210922T064442_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_20210922T072409_20210922T072456_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_20210922T072907_20210922T072943_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_20210922T073220_20210922T073449_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_20210922T073654_20210922T073816_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_20210922T074526_20210922T074648_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_20210922T081149_20210922T081327_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_20210922T084853_20210922T085200_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_20210922T085759_20210922T085940_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_20210922T090820_20210922T091306_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_20210922T091405_20210922T091526_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_20210922T095126_20210922T095253_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_20210922T095436_20210922T095540_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_20210922T100008_20210922T100233_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_20210922T113103_20210922T113456_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_20210922T121646_20210922T121810_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_20210922T123018_20210922T123118_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_20210922T123203_20210922T123320_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_20210922T131050_20210922T131404_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_20210922T131919_20210922T132030_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_20210922T152234_20210922T152327_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_20210922T153751_20210922T154001_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_20210922T163600_20210922T163747_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_20210922T171422_20210922T171542_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

CQUPTU_BIT_UPDPL_20P10207107800_20P10207107800_20P102         CODD #Hame Regins 2001 FMR         In-CODD Regins the Extension Links of Page Mark           CQUPTU_BIT_UPDPL_20P10207110800_20P1020710800_20P1020710800_20P1         CODD #Hame Regins 2001 FMR         In-CODD Regins the Extension Links of Page Mark           CQUPTU_BIT_UPDPL_20P1020710800_20P1020710800_20P101000_20P10000_20			
C (PL, SPL NUM Y 2001/02/11/02/	CS_OFFL_SIR_NOPN_2_20210922T172635_20210922T172723_C001		
Bit Diff. Bit John J. 2001/00011 Bits J. 2001/0	CS_OFFL_SIR_NOPN_2_20210922T180521_20210922T180704_C001		5 5 5
B. GHE, JBE, NORH, J. 201002710443, 200       and Katabara Daday Rep. Cond.       instruction Data Structure Data Structur	CS_OFFL_SIR_NOPN_2_20210922T183457_20210922T183805_C001		
CR_DPTL_BR_NOPPL_2.3201002716455_261002716073_0001       and better Complexibility FLB_NOPPL_2.3201002710045_0001         CR_DPTL_BR_NOPPL_2.3201002710045_0001       and better Complexibility FLB_NOPPL_2.3201002710045_0001       and better Complexibility FLB_NOPPL_2.3201002710045_0001         CR_DPTL_BR_NOPPL_2.32010027120045_0001       and better Complexibility FLB_NOPPL_2.3201002710045_0001       and better Complexibility FLB_NOPPL_2.3201002710045_0001         CR_DPTL_BR_NOPPL_2.32010027120045_0001       and better Complexibility FLB_NOPPL_2.32010027120045_0001       and better Complexibility FLB_NOPPL_2.3201002710045_0001         CR_DPTL_BR_NOPPL_2.32010027120045_00010001       and better Complexibility FLB_NOPPL_2.3201002710045_0001       and better Complexibility FLB_NOPPL_2.3201002710045_0001         CR_DPTL_BR_NOPPL_2.3201002710400_0011       and better Complexibility FLB_NOPPL_2.3201002710400_0011       and better Complexibility FLB_NOPPL_2.3201002710400_0011         CR_DPTL_BR_NOPPL_2.3201002710400_0011	CS_OFFL_SIR_NOPN_2_20210922T194412_20210922T194623_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
C3. OFTL. SRI, NOPL 2, 3821062278341, 2021922720333, 2001 PERSON CONTL. SRI, NOPL 2, 3821062278341, 2021922720333, 2001 PERSON CONTL. SRI, NOPL 2, 3821062278347, 2021922720342, 2001 C4. OFTL. SRI, NOPL 2, 3821062278347, 2021922720342, 2001 C5. OFTL. SRI, NOPL 2, 3821062278347, 2021922720342, 2001 C5. OFTL. SRI, NOPL 2, 3821062278347, 2021922703420, 2001 C5. OFTL. SRI, NOPL 2, 3821062278347, 2021922703420, 2001 C5. OFTL. SRI, NOPL 2, 3821062278347, 2021922703420, 2001 C5. OFTL. SRI, NOPL 2, 382106227123454, 2021922703420, 2001 C5. OFTL. SRI, NOPL 2, 382106227123454, 2021922712320, 2001 C5. OFTL. SRI, NOPL 2, 382106227123272, 2021922712320, 2001 C5. OFTL. SRI, NOPL 2, 382106227123272, 2021922712320, 2001 C5. OFTL. SRI, NOPL 2, 382106227123720, 2011 C5. OFTL. SRI, NOPL 2, 38210627123272, 2021922712320, 2001 C5. OFTL. SRI, NOPL 2, 38210627123237, 20019227123237, 2001 C5. OFTL. SRI, NOPL 2, 38210627123237, 20019227123237, 2001 C5. OFTL. SRI, NOPL 2, 38210627123237, 20019227123237, 2001 C5. OFTL. SRI, NOPL 2, 38210627123323, 20019227123237, 2001 C5. OFTL. SRI, NOPL 2, 38210627123332, 201992712333, 20192712333, 20192712333, 201992710333, 2019 C5. OFTL. SRI, NOPL 2, 38210627101452, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 201992710343, 2019927103	CS_OFFL_SIR_NOPN_2_20210922T195305_20210922T195734_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CE_DEFL_SR_NOPY_2_30210227100340_20210227120440_2001  CE_DEFL_SR_NOPY_2_30210227100340_201002710040_2001  CE_DEFL_SR_NOPY_2_30210227100340_201002710340_001  CE_DEFL_SR_NOPY_2_30210227100340_201002710340_001  CE_DEFL_SR_NOPY_2_30210227100340_201002710340_001  CE_DEFL_SR_NOPY_2_30210227100340_201002710340_001  CE_DEFL_SR_NOPY_2_30210227100340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_201002710340_001  CE_DEFL_SR_NOPY_2_3021022710340_2010027  CE_DEFL_SR_NOPY_2_3021022710340_20100271  CE_DEFL_SR_NOPY_2_3021022710340_001  CE_DEFL_SR_NOPY_2_3021022710340_2010027  CE_DEFL_SR_NOPY_2_3021022710340_2010027  CE_DEFL_SR_NOPY_2_3021022710340_20100  CE_DEFL_SR_NOPY_2_3021022710340_2010027  CE_DEFL_SR_NOPY_2_3021022710340_20100  CE_DEFL_SR_NOPY_2_3021022710340_2010  CE_DEFL_SR_NOPY_2_3021022710340_20100  CE_DEFL_SR_NOPY_2_3021022710340_2010  CE_DEFL_SR_NOPY_2_3021022710340_2010  CE_DEFL_SR_NOPY_2_3021022710340_2010  CE_DEFL_SR_NOPY_2_3021022710340_20104  CE_DEFL_SR_NOPY_2_3021022710340_20104  CE_DEFL_SR_NOPY_2_3021022710340_20104  CE_DEFL_SR_NOPY_2_3021022710340_20104  CE_DEFL_SR_NOPY_2_3021022710340_20104  CE_DEFL_SR_NOPY_2_3021022710340_20104  CE_DEFL_SR_NOPY_2_30	CS_OFFL_SIR_NOPN_2_20210922T203441_20210922T203833_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_CPT_SIN_NOPL_2.0210927123591_202102271240_001         COCG Basesater Guily         or more records.           CS_CPT_SIN_NOPL_2.0210927123691_202102271240_001         COCG Basesater Guily CHAN         The OccoR Regis and Backsater Guily Flags have been set for ore or none records.           CS_CPT_SIN_NOPL_2.0210927123692_2021092712369_0_001         COCG Basesater Guily CHAN         The OccoR Regis and Backsater Guily Flags have been set for ore or or none records.           CS_CPT_SIN_NOPL_2.021092712369_2021092712369_0_001         COCG Basesater Guily FLAN         The OccoR Regis and Backsater Guily Flags have been set for ore or or none records.           CS_CPT_SIN_NOPL_2.021092712369_2021092712369_0_001         COCG Altheur Regis Guily FLAN         The OCCOR Regis and Backsater Guily Flags have been set for ore or or none records.           CS_CPT_SIN_NOPL_2.021092712369_2021092712369_0_001         COCG Altheur Regis Guily FLAN         The OCCOR Regis and Backsater Guily Flags have been set for ore or or none records.           CS_CPT_SIN_NOPL_2.021092710369_22021092710429_0_001         COCG Altheur Regis GUIN FLAN         The OCCOR Regis and Backsater Guily Flags have been set for ore or or none records.           CS_CPT_SIN_NOPL_2.021092710369_22021092710429_2021092710429_001         COCG Altheur Regis GUIN FLAN         The OCCOR Regis and Backsater Guily Flags have been set for ore or or no records.           CS_CPT_SIN_NOPR_2.021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_2021092710429_	CS_OFFL_SIR_NOPN_2_20210922T204347_20210922T204421_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_DFFL_SR_NOPR_2_0010827102010_001         OCOG Backstatter Cality         en mere moorts           CS_OFFL_SR_NOPR_2_0010827122270_20210827122270         OCOG Backstatter Cality PLBA.         The OCosA Attractor Range, SBHA, SWH and Backstatter Cality PLBA.           CS_OFFL_SR_NOPR_2_0010827122270_20210827122270_0011         OCOG Backstatter Cality PLBA.         The OCosA Attractor Range, SBHA, SWH and Backstatter Cality PLBA.           CS_OFFL_SR_NOPR_2_0010827122270_0011         OCOG Backstatter Cality PLBA.         The OCOG Bange and Backstatter Cality PLBA.           CS_OFFL_SR_NOPR_2_0010827122270_0011         OCOG Attractor Range Cality PLBA.         The OCOG Bange and Backstatter Cality PLBA.           CS_OFFL_SR_NOPR_2_0010827102270_0011         OCOG Attractor Range Cality PLBA.         The OCOG Bange and Backstatter Cality PLBA.           CS_OFFL_SR_NOPR_2_00108271028071_0001         OCOG Attractor Range Cality PLBA.         The OCOG Bange and Backstatter Cality PLBA.           CS_OFFL_SR_NOPR_2_0010827103801_0011         OCOG Attractor Range Cality PLBA.         The OCOG Bange and Backstatter Cality PLBA.           CS_OFFL_SR_NOPR_2_0010827103801_001100071020001         OCOG Attractor Range Cality PLBA.         The OCOG Bange and Backstatter Cality PLBA.           CS_OFFL_SR_NOPR_2_0010827103801_0011         OCOG Attractor Range Cality PLBA.         The OCOG Bange and Backstatter Cality PLBA.           CS_OFFL_SR_NOPR_2_0010827103801_0011         OCOG Attractor Range Cality PLBA.         The OCOG Attractor Range Cality PLBA. </td <td>CS_OFFL_SIR_NOPN_2_20210922T205540_20210922T205856_C001</td> <td></td> <td></td>	CS_OFFL_SIR_NOPN_2_20210922T205540_20210922T205856_C001		
CS_OFFL_SIR_NOPK_2_20210922712428_20210922712702_0001 DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Fuer Kenner Records. DCGO Altreder Range Auß Bucketter Coulty Fuer Kenner Records. DCGO Altreder Range Auß Fuer Kenner Records. DCGO Altreder Range Records. DCGO Altre	CS_OFFL_SIR_NOPN_2_20210922T205914_20210922T205920_C001		
0.00-UPL_SH_NOPL_2_0210022122322_10000211222302_00001         DOOG Radicater Quality         immune records.           DS_OPPL_SH_NOPH_2_0210022122322_10000221223322_0001         DOOG Allmeter Range Outliny FIRM, DOGG Allmeter Range Outliny FIRM, Manuele Range and Backscatter Quality FIRM, DOGG Allmeter Range and Backscatter Quality FIRM, DOGG Allmeter Range and Backscatter Quality FIRM, Manuele Range and Backscatter Quality FIRM, DOGG Allmeter Range Author PARM, DOGG Allmeter Range Author PARM, DOGG Allmeter Range Author PARM, DOGG Allmeter Range Author PARM, DOGG Allmeter Range Quality FIRM, Manuele Range Quality FIRM, DOGG Allmeter Range Quality FIRM, DOGG Allmeter Range Author PARM, DOGG Allmeter Range Quality FIRM, DOGG Allmeter Range SIM, SWH and Backscatter Quality FIRM have been set for one promor records.           CS_OFFL_SIR_NOPR_2_20210822T016581_2021082T016912_0001         DOGG Allmeter Range SIM, SWH and Backscatter Quality FIRM have been set for one or more records.           CS_OFFL_SIR_NOPR_2_20210822T014362_2021092T01448_2021092T01448_2021092T01448_20	CS_OFFL_SIR_NOPN_2_20210922T212428_20210922T212703_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_2021022123132_02109221231300_C011         OCC0E Backscatter Quality         or more records.           CS_OFFL_SIR_NOPR_2_20210922123132_02109221231500_C011         Desimilarities Range, SIAS, SIM, SIM, Minister Range and Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_NOPR_2_2021092212014522_0210922104522_0210922104522_02109221004532_001         OCC0 Altimeter Range Quality PLRN, CDC Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_NOPR_2_202109221004522_0210922100512_C011         OCC0 Altimeter Range Quality PLRN, CDC Backscatter Quality Flags, have been set for one records.           CS_OFFL_SIR_NOPR_2_202109221005514_202100512_C011         OCC0 Altimeter Range, SIM, SIM, and Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_NOPR_2_202109221005814_2021005012_C011         OCC0 Altimeter Range, SIM, SIM, and Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_NOPR_2_202109221016514_2021005012_C011         Decam Altimeter Range, SIM, SIM, and Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_NOPR_2_202109221014592_02100221014692_C011         Decam Altimeter Range, SIM, SIM, and Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_NOPR_2_202109221014592_02100220014692_C011         Decam Altimeter Range, SIM, SIM, and Backscatter Quality Flags have been set for one records.           CS_OFFL_SIR_NOPR_2_202109221014592_02109270340_C011         DOCC0 Altimeter Range, SIM, SIM and Backscatter Quality Flags have been set for one records.           CS_OFFL	CS_OFFL_SIR_NOPN_2_20210922T222702_20210922T222740_C001		
CS_OFFL_SIR_NOPR_2_20210922T03132_20210922T03150_0001       and Baskscatter Qualty Flags have been act for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T04252_20210922T04338_0001       OCOG Altimeter Range and Backscatter Qualty Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T004538_0001       OCOG Altimeter Range Qualty FLRM.       The OCOG Range and Backscatter Qualty Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T005641_20210922T005711_C001       OCOG Altimeter Range Qualty FLRM.       The OCOG Range and Backscatter Qualty Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T012838_20210922T013401_C001       OCOG Altimeter Range Qualty FLRM.       The OCOG Range and Backscatter Qualty Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T012838_20210922T013401_C001       OCOG Altimeter Range Altimeter Range Altimeter Range and Backscatter Qualty Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T014302_20210922T014402_C001       OCOG Altimeter Range Altimeter Range Altimeter Range and Backscatter Qualty Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T014302_20210922T014402_C001       OCOG Altimeter Range Qualty FLRM. COCO Altimeter Range and Backscatter Qualty Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T014302_20210922T014402_C001       OCOG Altimeter Range Cualty FLRM. COCO Altimeter Range and Backscatter Qualty Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T014302_0210922T014402	CS_OFFL_SIR_NOPN_2_20210922T223221_20210922T223327_C001		
CS_OFFL_SIR_NOPR_2_20210927100435_20210927100435_0001         OCOG Backscatter Quality PLRM, COGG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_NOPR_2_202109227005841_2021002910_0001         OCOG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_NOPR_2_202109227012938_20210922701401_C001         OCOG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been pLRM         The OCOG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been at for one or more records.           CS_OFFL_SIR_NOPR_2_202109227012938_202109227014052_0001         OCOG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been at for one or neor records.           CS_OFFL_SIR_NOPR_2_202109227014352_202109227014802_0001         OCOG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been at for one or neor records.           CS_OFFL_SIR_NOPR_2_202109227023716_202109227024055_0001         OCOG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been records.           CS_OFFL_SIR_NOPR_2_202109227032716_202109227031346_0001         OCOG Alimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Flags have been set for one or neor records.           CS_OFFL_SIR_NOPR_2_20210922703235_202109227031346_0001         OCOG Alimeter Range Quality PLRM, OCOG Alimeter Range and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_NOPR_2_2021092270414	CS_OFFL_SIR_NOPN_2_20210922T231323_20210922T231500_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB_OFFL_SIR_NOPR_2_20210822T005834_20210922T005912_C001       OCOG Backscatter Quality       or more records.         CS_OFFL_SIR_NOPR_2_20210822T005834_20210922T013401_C001       Ocoan Altimeter Range, SSHA, SWH and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T012938_20210922T013401_C001       Minimeter Range, and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T012938_20210922T013401_C001       Altimeter Range, SSHA, SWH and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T012938_20210922T014052_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T014352_20210922T014802_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T0123716_20210922T024053_C001       OCEGA Altimeter Range, SSHA, SWH and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T023716_20210922T031346_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T032325_20210922T032710_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T044724_20210922T044436_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T044724_20210922T044436_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       File         CS_OFFL_SIR_NOPR_2_20210922T044724_20210922T044425_C00	CS_OFFL_SIR_NOPR_2_20210922T004252_20210922T004338_C001		
CS_OFFL_SIR_NOPR_2_20210922T005914_20210922T013401_C001       And Backscatter Quality PLRM_OCCO_ Allimeter Range and Backscatter Quality PLRM_OCCO_ PLRM       The OCCO Allimeter Range, SSHA, SWH and the OCCO Allimeter Range, SSHA, SWH and the OCCO Allimeter Range, SSHA, SWH and Backscatter Quality PLRM_OCCO_ Allimeter Range, SSHA, SWH, and the OCCO Allimeter Range, SSHA, SWH and Backscatter Quality PLRM_OCCO_ Allimeter Range, SSHA, SWH, and the OCCO Allimeter Range, SSHA, SWH and Backscatter Quality PLRM_OCCO_ Allimeter Range, SSHA, SWH, and the OCCO Allimeter Range, SSHA, SWH and Backscatter Quality PLRM_OCCO_ Allimeter Range, SSHA, SWH, and Backscatter Quality PLRM_OCCO Allimeter Range, SSHA, SWH and Backscatter Quality PLRM_OCCO Allimeter Range, SSHA, SWH and Backscatter Quality PLRM_OCCO Allimeter Range and Backscatter Quality PLRM_OCCO	CS_OFFL_SIR_NOPR_2_20210922T005641_20210922T005711_C001	<b>0</b>	
CS_OFFL_SIR_NOPR_2_20210922T012938_20210922T01401_C001       and Backscatter Quality PLRM.       Interformation Range, SSHA, SWH and Backscatter Quality PLRM.         CS_OFFL_SIR_NOPR_2_20210922T014352_20210922T014802_C001       Attimeter Range, SSHA, SWH and Backscatter Quality PLRM.       The OCGR Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T014352_20210922T014802_C001       OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T03336_C001       OCGG Backscatter Quality PLRM, OCGG Backscatter Quality PLRM,         CS_OFFL_SIR_NOPR_2_20210922T03308_020210922T031346_C001       Attimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCGG Backscatter Quality PLRM, OCGG Backscatter Quality PLRM, OCGG Backscatter Quality PLRM, OCGG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCGG Backscatte	CS_OFFL_SIR_NOPR_2_20210922T005834_20210922T005912_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_20210922T014352_0210922T014002_C001       and Backscatter Quality PLRM, Interest Range and Backscatter Quality PLRM, DCGG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T023716_02010922T024053_C001       OCGG Altimeter Range Quality PLRM, OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T030930_02010922T031346_C001       McGG Backscatter Quality PLRM, OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T032325_0210922T032710_C001       McBackscatter Quality PLRM, OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T040307_02019922T040436_C001       OCGG Altimeter Range Quality PLRM, OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T040307_02019922T040436_C001       OCGG Altimeter Range Quality PLRM, OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041137_02019922T041201_C001       OCGG Altimeter Range Quality PLRM, OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041420_20210922T041427_C001       OCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041427_20210922T0445425_C001       Ocean Altimeter Range, SSHA, SWH and Backsca	CS_OFFL_SIR_NOPR_2_20210922T012938_20210922T013401_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_20210922104/15_20210922104053_C001       OCOG Backscatter Quality       or more records.         CS_OFFL_SIR_NOPR_2_202109221030930_202109221031346_C001       Decean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, and Backscatter Quality FLRM, OCOG Altimeter Range, and Backscatter Quality FLRM, OCOG Altimeter Range, and Backscatter Quality Flags have been at the OCOG Altimeter Range, and Backscatter Quality Flags have been at the OCOG Altimeter Range, and Backscatter Quality Flags have been at the OCOG Altimeter Range, and Backscatter Quality Flags have been at the OCOG Altimeter Range, and Backscatter Quality Flags have been at the OCOG Altimeter Range, and Backscatter Quality Flags have been at the OCOG Altimeter Range, and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA,	CS_OFFL_SIR_NOPR_2_20210922T014352_20210922T014802_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_20210922T030930_20210922T031346_C001       Ine Ocean Altimeter Range 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_20210922T032325_20210922T032710_C001       Coean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, 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_20210922T040307_20210922T040436_C001       COCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041137_20210922T041201_C001       COCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041137_20210922T041201_C001       Cocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041120_C001       Cocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041420_20210922T041427_C001       Cocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T044724_20210922T0445425_C001       Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T044724_20210922T045425_C001       Cocean Altimeter Range ASH, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_N	CS_OFFL_SIR_NOPR_2_20210922T023716_20210922T024053_C001		
CS_OFFL_SIR_NOPR_2_20210922T032325_20210922T032710_C001       and Backscatter Quality PLRM, OCOG       Inte OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T040307_20210922T04036_C001       OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041137_20210922T040436_C001       OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041137_20210922T041201_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041420_20210922T041427_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041420_20210922T041427_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041420_20210922T045425_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T061058_20210922T061412_C001       OCCG Altimeter Range Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T061058_20210922T061412_C001       OCCG Altimeter Range Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CCS_OFFL_	CS_OFFL_SIR_NOPR_2_20210922T030930_20210922T031346_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_202109221040307_202109221040436_C001       OCOG Backscatter Quality       or more records.         CS_OFFL_SIR_NOPR_2_20210922T041137_20210922T041201_C001       Ocean Altimeter Range, SSHA, SWH 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 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 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_20210922T061058_20210922T061412_C001       OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range, SSHA, SWH 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_20210922T061058_20210922T061412_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set f	CS_OFFL_SIR_NOPR_2_20210922T032325_20210922T032710_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_20210922T041137_20210922T041201_C001       and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality PLRM       Inter Code Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T041420_20210922T041427_C001       Decan Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality PLRM, OCOG Attimeter Range Quality PLRM, OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T061058_20210922T061412_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Attimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T072228_20210922T072409_C001       OCOG Attimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality PLRM, OCOG Attimet	CS_OFFL_SIR_NOPR_2_20210922T040307_20210922T040436_C001		
CS_OFFL_SIR_NOPR_2_20210922T041420_20210922T041427_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM       Inte Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality PLRM         CS_OFFL_SIR_NOPR_2_20210922T044724_20210922T045425_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, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, and Backscatter Quality PLRM         CS_OFFL_SIR_NOPR_2_20210922T061058_20210922T061412_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_20210922T072228_20210922T072409_C001       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 Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20210922T041137_20210922T041201_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_20210922T044724_20210922T045425_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM       Ind Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality set for one or more records.         CS_OFFL_SIR_NOPR_2_20210922T061058_20210922T061412_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_20210922T072228_20210922T072409_C001       OCGA Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Ba	CS_OFFL_SIR_NOPR_2_20210922T041420_20210922T041427_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_20210922T072228_20210922T072409_C001       OCOG Backscatter Quality       or more records.         Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPR_2_20210922T044724_20210922T045425_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_20210922T072228_20210922T072409_C001 and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_NOPR_2_20210922T061058_20210922T061412_C001		
	CS_OFFL_SIR_NOPR_2_20210922T072228_20210922T072409_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_20210922T090309_20210922T090820_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_20210922T094905_20210922T095126_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_20210922T100233_20210922T100517_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_20210922T104316_20210922T104851_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_20210922T112705_20210922T113103_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_20210922T114212_20210922T114414_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_20210922T120846_20210922T121023_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_20210922T122229_20210922T123018_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_20210922T123118_20210922T123203_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_20210922T130637_20210922T131050_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_20210922T132030_20210922T132602_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_20210922T132916_20210922T133514_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_20210922T140050_20210922T140927_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_20210922T144601_20210922T144821_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_20210922T145943_20210922T150338_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_20210922T154158_20210922T155001_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_20210922T163747_20210922T164407_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_20210922T172054_20210922T172635_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_20210922T174728_20210922T174932_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_20210922T181627_20210922T182007_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_20210922T182927_20210922T182947_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_20210922T190010_20210922T190707_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_20210922T192042_20210922T192857_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_20210922T203833_20210922T204347_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_20210922T204421_20210922T204555_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_20210922T212128_20210922T212428_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_20210922T221625_20210922T222353_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_20210922T230113_20210922T230318_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_20210922T231500_20210922T231741_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_20210922T235434_20210923T000205_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.

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

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

172

58

132

> 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:

## 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.

0

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	149	149	2	147	0
SIR_NOPR1B	95	95	0	95	0
SIR_NOPN1B	109	109	5	104	0
SIR_NOPM_2	149	149	94	55	0
SIR_NOPR_2	95	95	29	66	0
SIR_NOPN_2	109	109	44	65	0

### 7.1 QCC Errors

Number of QCC reports with errors:

### 7.2 QCC Warnings

Number of QCC reports with warnings 1637 Total number of occurrences of each warning							
Product Type	BCSHNCDF	MVIOEPFDNCDF		MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	RBSZOPOEPNCDF
SIR_NOPM1B	147	0	0	0	0	0	0
SIR_NOPM_2	0	39	36	1	44	0	39
SIR_NOPN1B	102	0	0	0	0	0	0
SIR_NOPN_2	0	9	29	4	25	30	18
SIR_NOPR1B	91	0	0	0	0	0	0
SIR_NOPR_2	0	38	40	0	36	30	18
Product Type	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNC	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF		RPEPOPLRMNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	1	35	0	0	0	0	25
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	0	0	19	0	35	0
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	0	0	41	0	43	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	3	25	0	0	32
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	24	17	53	54	30	27
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	40	0	5	50	32	8	31
	Product Type RSWHOEPFDPLRMNCDF RSWHOEPNCDF SPHRTASCNSNCDF SPHRTASCNSNCDF SOOHHIFHD SCSTODHRNCDF SCSTODNCDF						
Product Type		RSWHOEPNCDF	SPHRTASCNSNCDF	SPHRTASCNSNCDF	SOOHHIFHD		SCSTODNCDF
SIR_NOPM1B	0	0	0	1	0	0	0
SIR_NOPM_2	0	1	0	1	0	0	0
SIR_NOPN1B	0	0	0	0	0	41	0
SIR_NOPN_2	27	14	0	0	1	0	0
SIR_NOPR1B	0	0	1	0	0	95	4
SIR_NOPR_2	40	3	0	0	2	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	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
	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
NCDF RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMN	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

0