



# 1. Overview

**QA4EO Daily Report for NOP data:** 

Report Production:	06-Jan-2023
Processor Used:	CryoSat Ocean Processor
Data Used:	Near Real Time Ocean Products (NOP) L1B & L2 Science Data

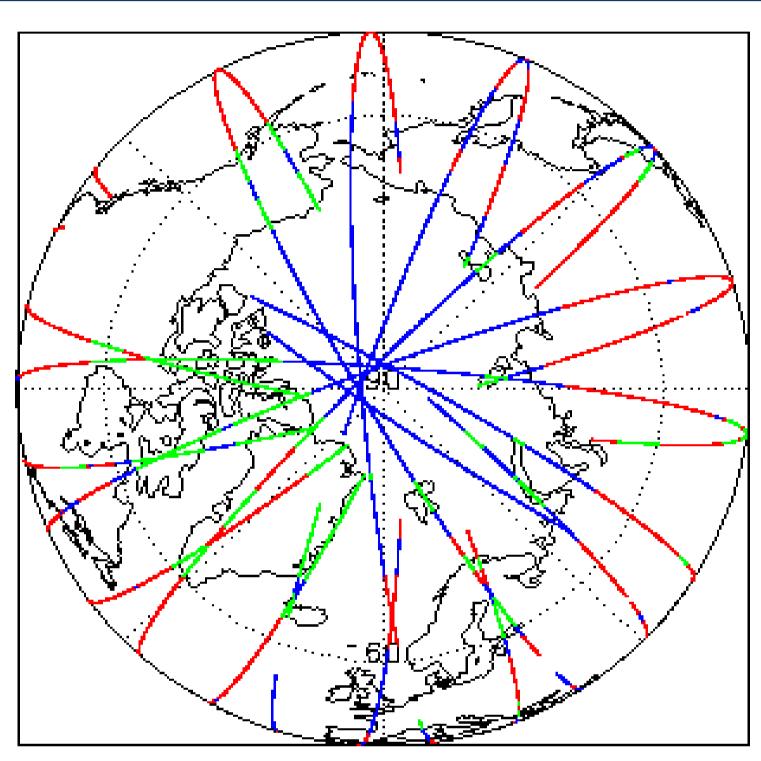
We would love to hear from you!
se let us know your feedback about these daily
reports: What do you like/ dislike? What quality
monation do vou pand? Cand vour fandbank to

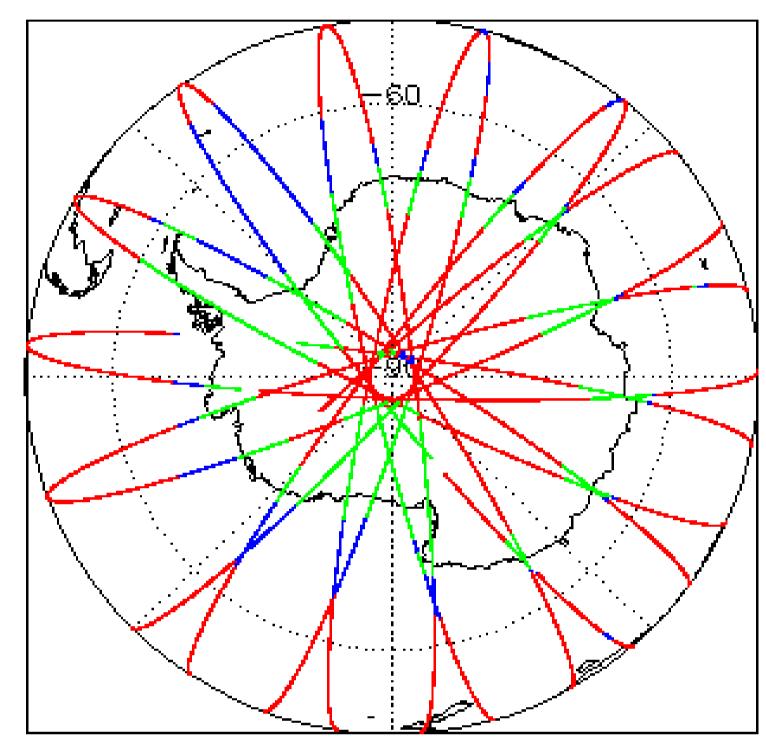
Pleas quality information do you need? Send your feedback to cs2\_qc\_team@telespazio.com

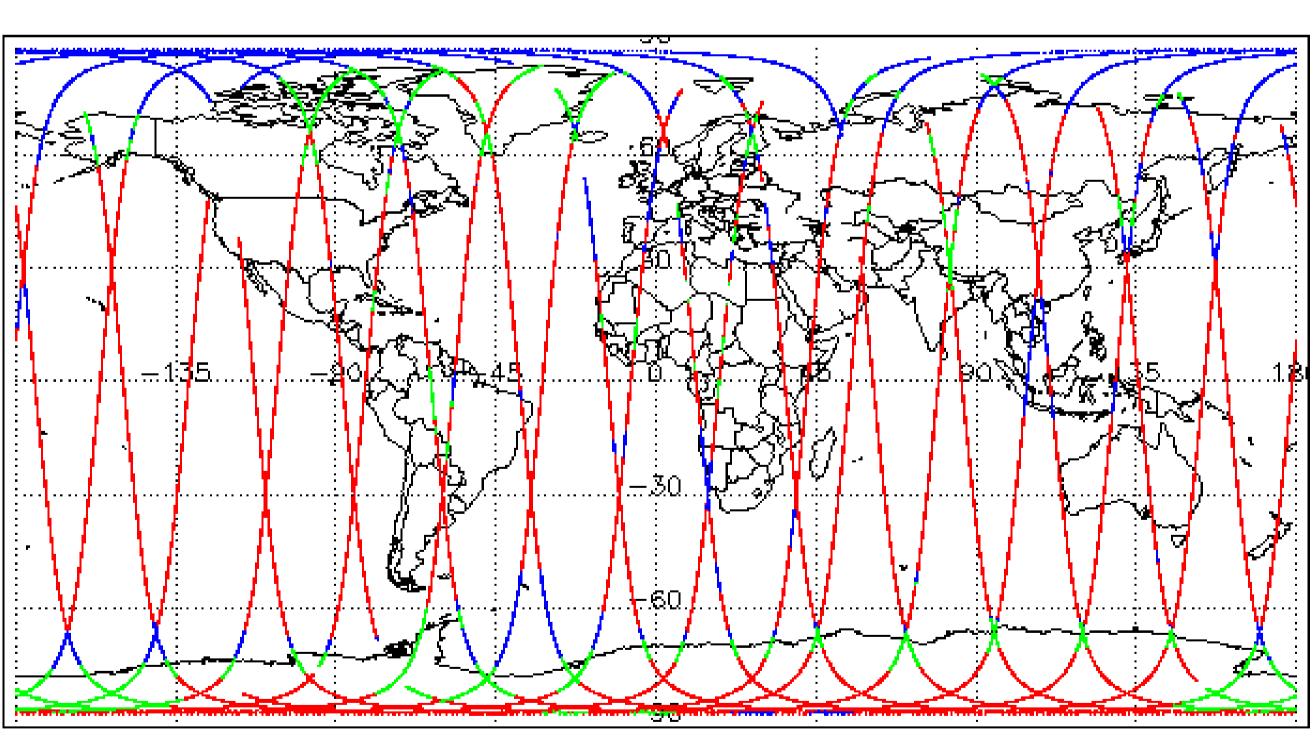
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement Confidence Data Check	See Section 4.5, 4.6 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

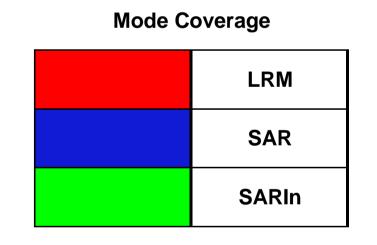
Mission / Instrument News			
04-Jan-2023	None		
05-Jan-2023	None		
06-Jan-2023	Nothing planned		

# 2. Global Coverage









# 3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A
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 NetCDF product file (.nc).

### **4.2 L1B Product Header Analysis**

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

> L1B Processing Quality HR: The l1b\_proc\_flag\_hr flag is currently set all L1B NOPR and NOPN products because the l1b\_processing\_quality\_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

#### 4.3 L1B Auxilary Data File Usage Check

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

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

Number of products with errors:

#### 4.4 L1B Auxiliary Correction Error Check

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

0

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. The attitude correction is not actually missing, 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_20230105T015106_20230105T015152_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 occasional products over land, but this is to be expected.

Number of products with errors:

16

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20230105T151257_20230105T153453_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20230105T161130_20230105T161535_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20230105T182554_20230105T183533_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20230105T232459_20230105T235110_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230105T045855_20230105T050228_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230105T081711_20230105T081918_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230105T082017_20230105T082245_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230105T130931_20230105T131027_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230105T162546_20230105T162800_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230105T194226_20230105T194528_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230105T194558_20230105T194809_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230105T103729_20230105T103926_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230105T141759_20230105T142400_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230105T183534_20230105T183616_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230105T193757_20230105T193901_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230105T230410_20230105T231201_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 NetCDF product file (.nc).

Number of products with errors:

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

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

Number of products with errors: 0

## 5.3 L2 Auxiliary Data File Usage Check

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

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

Number of products with errors:

#### **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).

0

0

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

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

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230105T125540_20230105T125643_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_20230105T000117_20230105T000152_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_20230105T012911_20230105T013036_C001	Tiviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230105T022846_20230105T023150_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_20230105T040150_20230105T040459_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_20230105T040747_20230105T041129_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_20230105T054227_20230105T054500_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_20230105T063735_20230105T063853_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_20230105T071724_20230105T072340_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_20230105T081711_20230105T081918_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_20230105T085950_20230105T090052_C001	Tiviean Dynamic Lobodraphy (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230105T095624_20230105T100110_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_20230105T104807_20230105T105037_C001		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_20230105T121907_20230105T122258_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20230105T130931_20230105T131027_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_20230105T135852_20230105T140205_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_20230105T153612_20230105T154036_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_20230105T154623_20230105T154741_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_20230105T162546_20230105T162800_C001		There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20230105T172355_20230105T172541_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_20230105T180803_20230105T180905_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_20230105T190204_20230105T190430_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_20230105T194226_20230105T194528_C001		There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230105T194558_20230105T194809_C001		There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), 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_20230105T204108_20230105T204202_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_20230105T212240_20230105T212632_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_20230105T213144_20230105T213218_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_20230105T221228_20230105T221459_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_20230105T222223_20230105T222405_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_20230104T235337_20230105T000117_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_20230105T000424_20230105T000600_C001	liviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20230105T030927_20230105T031046_C001	, ,	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_NOPR_2_20230105T032519_20230105T032904_C001	liviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20230105T112656_20230105T113657_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_20230105T125930_20230105T130108_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_20230105T131028_20230105T131817_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_20230105T145001_20230105T150109_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_20230105T162959_20230105T163738_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_20230105T180905_20230105T181434_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_20230105T193757_20230105T193901_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_20230105T194809_20230105T195503_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_20230105T212633_20230105T213143_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_20230105T230410_20230105T231201_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_20230105T015106_20230105T015152_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 (20 Hz)

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

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

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

Number of products with errors:

90

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230105T001309_20230105T001355_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_20230105T001950_20230105T003311_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_20230105T003544_20230105T004151_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_20230105T004354_20230105T005156_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_20230105T005542_20230105T012911_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_20230105T014236_20230105T014332_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_20230105T021216_20230105T022122_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_20230105T022330_20230105T022845_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_20230105T023423_20230105T025656_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_20230105T025942_20230105T030927_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_20230105T032055_20230105T032131_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_20230105T032231_20230105T032518_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_20230105T033245_20230105T033741_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_20230105T033954_20230105T034552_C001	•	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230105T034739_20230105T035905_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_20230105T041418_20230105T044103_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_20230105T044242_20230105T044706_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_20230105T050358_20230105T051049_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_20230105T051105_20230105T053525_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_20230105T054501_20230105T054655_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_20230105T054913_20230105T055149_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_20230105T055323_20230105T055800_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230105T055851_20230105T062046_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_20230105T062931_20230105T063103_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_20230105T063854_20230105T064248_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_20230105T064625_20230105T070001_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_20230105T070621_20230105T071723_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_20230105T072340_20230105T072613_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_20230105T072636_20230105T073102_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_20230105T073259_20230105T074746_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_20230105T074926_20230105T075222_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_20230105T082618_20230105T083328_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_20230105T083451_20230105T085853_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_20230105T090125_20230105T091016_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_20230105T091230_20230105T093626_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_20230105T101331_20230105T103729_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_20230105T104056_20230105T104234_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_20230105T104343_20230105T104807_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_20230105T105101_20230105T111646_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_20230105T114511_20230105T121627_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_20230105T122258_20230105T122846_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_20230105T123025_20230105T124829_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_20230105T125540_20230105T125643_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_20230105T132127_20230105T135616_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_20230105T140205_20230105T140718_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_20230105T140916_20230105T141203_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_20230105T141404_20230105T141759_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_20230105T142401_20230105T142820_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_20230105T143452_20230105T143736_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_20230105T144434_20230105T144706_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_20230105T150109_20230105T151011_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_20230105T151257_20230105T153453_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_20230105T154036_20230105T154206_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_20230105T154214_20230105T154622_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_20230105T154830_20230105T160129_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_20230105T160221_20230105T161033_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_20230105T161130_20230105T161535_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_20230105T164211_20230105T164539_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_20230105T164719_20230105T171414_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_20230105T171539_20230105T172106_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_20230105T172125_20230105T172354_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_20230105T173208_20230105T174437_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_20230105T174512_20230105T180227_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_20230105T180621_20230105T180803_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_20230105T182554_20230105T183533_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_20230105T183737_20230105T185313_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_20230105T185507_20230105T190004_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_20230105T190043_20230105T190203_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_20230105T190907_20230105T192124_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_20230105T192605_20230105T193726_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230105T200047_20230105T200050_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_20230105T201701_20230105T203206_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230105T203431_20230105T203918_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_20230105T203958_20230105T204108_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_20230105T204537_20230105T211245_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_20230105T214723_20230105T220752_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_20230105T220844_20230105T221207_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_20230105T221500_20230105T221833_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_20230105T222448_20230105T225258_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_20230105T232459_20230105T235110_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_20230105T235252_20230105T235748_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPN_2_20230105T041158_20230105T041235_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPN_2_20230105T190204_20230105T190430_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPN_2_20230105T194558_20230105T194809_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPN_2_20230105T221228_20230105T221459_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230105T003312_20230105T003544_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_NOPR_2_20230105T032519_20230105T032904_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_NOPR_2_20230105T050228_20230105T050312_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230105T163741_20230105T163742_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_NOPR_2_20230105T195927_20230105T195936_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

### L2 Quality Flags (20 Hz PLRM)

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

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

Number of products with errors:

77

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20230105T000315_20230105T000423_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_20230105T005157_20230105T005308_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_20230105T020255_20230105T020407_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_20230105T033742_20230105T033954_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_20230105T041158_20230105T041235_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_20230105T045855_20230105T050228_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_20230105T054227_20230105T054500_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_20230105T062232_20230105T062443_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_20230105T064249_20230105T064414_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_20230105T070515_20230105T070621_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_20230105T071724_20230105T072340_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_20230105T081218_20230105T081252_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_20230105T081711_20230105T081918_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_20230105T082017_20230105T082245_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_20230105T085950_20230105T090052_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_20230105T093627_20230105T093633_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_20230105T095624_20230105T100110_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_20230105T100206_20230105T100327_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_20230105T130447_20230105T130610_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_20230105T130931_20230105T131027_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_20230105T135852_20230105T140205_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_20230105T140719_20230105T140832_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_20230105T143926_20230105T144017_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_20230105T144955_20230105T145001_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_20230105T153612_20230105T154036_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_20230105T154623_20230105T154741_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_20230105T162416_20230105T162505_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_20230105T162546_20230105T162800_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_20230105T172355_20230105T172541_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_20230105T180453_20230105T180620_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_20230105T190204_20230105T190430_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_20230105T190709_20230105T190826_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_20230105T192228_20230105T192604_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_20230105T194226_20230105T194528_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_20230105T194558_20230105T194809_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_20230105T204108_20230105T204202_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_20230105T213144_20230105T213218_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_20230105T222223_20230105T222405_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_20230104T235337_20230105T000117_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_20230105T000153_20230105T000307_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_20230105T001113_20230105T001157_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230105T005309_20230105T005541_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_20230105T013036_20230105T013117_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_20230105T014436_20230105T014513_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_20230105T020852_20230105T021152_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_20230105T032519_20230105T032904_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_20230105T035906_20230105T040150_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_20230105T053526_20230105T054226_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_20230105T070002_20230105T070214_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_20230105T074747_20230105T074925_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_20230105T075223_20230105T075634_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_20230105T081919_20230105T082016_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_20230105T112656_20230105T113657_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_20230105T125643_20230105T125816_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_20230105T125817_20230105T125823_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_20230105T130416_20230105T130447_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_20230105T130611_20230105T130647_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_20230105T131028_20230105T131817_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_20230105T144707_20230105T144954_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_20230105T145001_20230105T150109_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_20230105T160130_20230105T160220_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_20230105T163850_20230105T163911_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_20230105T164007_20230105T164046_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_20230105T172542_20230105T173208_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_20230105T180905_20230105T181434_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_20230105T181524_20230105T181610_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_20230105T181957_20230105T182000_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_20230105T182139_20230105T182143_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_20230105T185313_20230105T185324_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_20230105T190430_20230105T190708_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_20230105T193757_20230105T193901_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_20230105T194118_20230105T194226_C001	TAITIMETER RANGE AND BACKSCATTER CHAITIVE	The Ocean Altimeter Range, SSHA, SWH 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_20230105T194529_20230105T194558_C001	TAITIMETER Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230105T194809_20230105T195503_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_20230105T200957_20230105T201700_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_20230105T212633_20230105T213143_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_20230105T213218_20230105T213353_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records

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

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

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

Number of products with errors: 172

### 5.7 L2 Ocean Retracking Quality Check

#### L2 Retracking Flags (20 Hz)

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

> Ocean Retracking Quality Flag: This flag is currently set for products falling at ocean/ land boundaries, but this is expected.

131

Number of products with errors: 57

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

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

> Ocean Retracking Quality Flag (PLRM): This flag is currently set for products 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	199	199	8	191	0
SIR_NOPR1B	152	152	0	152	0
SIR_NOPN1B	105	105	5	100	0
SIR_NOPM_2	199	199	141	58	0
SIR_NOPR_2	152	152	75	77	0
SIR_NOPN_2	105	105	39	66	0

### 7.1 QCC Errors

Number of QCC reports with errors:

0

## 7.2 QCC Warnings

Number of QCC reports with warnings

1780

#### Total number of occurrences of each warning

Total number of occurrences of each warning							
Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_NOPM1B	191	0	0	0	0	0	0
SIR_NOPM_2	0	33	36	0	47	0	41
SIR_NOPN1B	97	0	0	0	0	0	0
SIR_NOPN_2	0	7	32	3	18	21	10
SIR_NOPR1B	149	0	0	0	0	0	0
SIR NOPR 2	0	20	36	1	24	20	8

Product Type	RLPTONCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCI	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	9	0	33	0	0	0	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	50	0	0	0	20	0	33
SIR_NOPR1B	0	0	0	0	0	0	0
SIR NOPR 2	40	3	0	35	0	46	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	22	0	0	4	17	0	3
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	0	26	17	45	52	36
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	0	33	0	2	52	29	8

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
SIR_NOPM1B	0	0	0	0	0	0	
SIR_NOPM_2	30	0	1	0	0	0	
SIR_NOPN1B	0	0	0	0	46	0	
SIR_NOPN_2	25	28	11	0	0	0	
SIR_NOPR1B	0	0	0	0	152	8	
SIR_NOPR_2	26	42	0	2	0	0	

### Author Counter should be one higher with regard to the previous bunst counter  ### MINISPENDED**  **MINISPENDED**  **MINI	Test Description Key:		
MINICEPRINCE  MissingValueIndicenseExcludingPolarEDANACE  MissingV	Abbreviation	Test name	Details
MOIOEPRODE Missing/valueth/CoentExtudingPotarMeCDF The value should not be a missing value for surface type 6 only for failulates between 70 and 70 degrees MOIONCDF Missing/valueth/CoentExtudingPotarMeCDF The value should not be a missing value for surface type 0 only The backscatter spins are thought be between 700 and 7500 for missing) for surface type = ocean for inthudes section 70 and 70 degrees MOIONCDF RRESCODEFENCH RRESCODEF	BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
MONOCOF Mising/site/interactions.  Mising/site/interaction.  Mising/si	MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
RBSZOPOEPFDLRM RRSZOPOEPFDLRM RRSZOP	MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
hetween 71 and 70 orgress  RESZOPOEPFDLEN RANGESCOPOEPFDLEN RANGESCOPOEPFDLEN RANGESCOPOEPFDLEN RANGESCOPOEPFDLEN RANGESCOPOEPFDLEN RANGESCOPOEPFDLEN RANGESCOPOEPFDLEN RANGESCOPOEPFDLEN RANGELOPGENICIPE RANGENICIPE RANGENI	MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
Selection of the configuration	RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	,
REPTONCDF RRELOTONCDF RRELOTON	RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	· · · · · · · · · · · · · · · · · · ·
RREPOPEDLATION OF Range-Peakiness Excluding-folar OPF02LRMvetCDF RREPOPEDSININCDF RREPOPEDININCDF RREPOPED	RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	, , , , , , , , , , , , , , , , , , ,
REPOPEDLEMNCDF RREPOPEDLEMSAR RREPOPEDLEMSAR RREPOPEDLEMSAR RREPOPEDLEMSAR RREPOPEDLEMSAR RRODF RREPOPEDLEMSAR RRODF RREPOPEDLEMSAR RRODF RRODF PORAMINON RangePeakinessExuludingPolarOPED2LRMSARNetCDF RREPOPEDSARNCDF RRODF PoakinessExuludingPolarOPED2LRMSARNetCDF RREPOPEDSARNCDF RRODF PoakinessExuludingPolarOPED2LRMSINNetCDF RRODF Poakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  RREPOPEDSINNCDF RRODF SARNCDF RRODF SARNET	RLPTONCDF	RangeLongPeriodTideOceanNetCDF	
REPOPPDLRMSAR NCDF RREPOPPDLRMSINN CDF RREPOPPDLRMSINN CDF RREPOPPDSARNCDF RRE	RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
NAME REPOPFDLAMSINN RANGEPEARMORDF REPOPFDRAMSINN RANGEPEARMORDF REPOPFDSARNCDF REPOPFDSARNCDF REPOPFDSINNCDF REPOPFDSINNCDF REPOPFDSINNCDF REPOPFDSINNCDF REPOPFDSINNCDF REPOPFDSINNCDF REPOPFDSINNCDF REPOPFDSINNCDF REPOPFSINNCDF RESSHAOFDNCDF RESSHAOFDNCDF RESSHAOFDF RESSHAOFDF RESSHAOFDF RESSHAOFDF RESSHAOFDF RESSHAORDF RESSHAO	RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	,
RPEPOPFDSINNCDF RangePeakinessExcludingPolarOPFD2SARNetCDF RangePeakinessExcludingPolarOPFD2SINNetCDF RangeSeaSurfaceHeightAnomalyOceanPEDSNetCDF RangeSeaSurfaceHeightAnomalyOceanPEDSNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFNetCDF RangeSignificantWaveHeightOceanExcludingPolarFNetCDF	RPEPOPFDPLRMSAR NCDF		· · · · · · · · · · · · · · · · · · ·
RREPOPEDSINNCDF RangePeakinessExcludingPolarOPFD2SINNetCDF RREPOPLRMNCDF RangePeakinessExcludingPolarOPFD2SINNetCDF RREPOPLRMNCDF RangePeakinessExcludingPolarOPFD2SINNetCDF RREPOPSINNCDF RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanPSINNetCDF RangeSeaSurfaceHeightAnomalyOceanPSINNetCDF RangeSeaSurfaceHeightAnomalyOceanPSINNetCDF RangeSeaSurfaceHeightAnomalyOceanPSINNetCDF RangeSeaSurfaceHeightAnomalyOceanPSINNetCDF RangeSeaSurfaceHeightAnomalyOceanPSINNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSigni	RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	, · · · · · · · · · · · · · · · · · · ·
RREPOPLISMNODF RangePeakinessExcludingPolarOPLRMNetCDF RangePeakinessExcludingPolarOPLRMNetCDF Reperopsinnode RangePeakinessExcludingPolarOPSARNetCDF Reperopsinnode RangePeakinessExcludingPolarOPSARNetCDF Reperopsinnode RangePeakinessExcludingPolarOPSARNetCDF Reperopsinnode RangePeakinessExcludingPolarOPSARNetCDF Reperopsinnode RangePeakinessExcludingPolarOPSINNetCDF Reperopsinnode RangePeakinessExcludingPolarOPSINNetCDF Reperopsinnode RangePeakinessExcludingPolarOPSINNetCDF Reperopsinnode RangeSeaStateBiasCorrectionOceanNetCDF Resperopsinnode RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF Resperopsinnode Resperopsinno	RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	
RPEPOPSARNCDF RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangeSeaStateBiasCorrectionOceanNetCDF RangeSeaStateBiasCorrectionOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeigh	RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	,
RREPOPSARRODF RangePeakinessExcludingPolarOPSARNetCDF RangeSeaStateBiasCorrectionOceanNetCDF RRSBCONCDF RangeSeaStateBiasCorrectionOceanNetCDF RRSSHAOFDNCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RRSSHAOFDPLRMNCD RRSSHAOFDPLRMNCD RRSSHAOFDPLRMNCD RRSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RRSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RRSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RRSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RRSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RRSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RRSSHAONCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RRSWHOEPFDNCDF RRSWHOEPFDPLRMNCD RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RRSWHOEPFDPLRMNCD RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RRSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RRSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RRSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RRSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RRSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RRSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RRSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RRSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RRSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSigni	RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	
RRSBCONCDF RangeSeaStateBiasCorrectionOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeOconeHigher1HzIndexFor20HzData 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	RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	, , , , , , , , , , , , , , , , , , , ,
RSSHAOFDNCDF RANGESeaSurfaceHeightAnomalyOceanFD3NetCDF RANGESeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RANGESeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RANGESeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceH	RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	, · · · · · · · · · · · · · · · · · · ·
RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDPLRMNCD RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RSWHOEPFDPLRMNCD RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDPLRMNCD RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWave	RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  SOOHHIFHD  SequenceCounterStepTODHRNetCDF  The sequence counter should be modulo 4 higher with regard to the previous sequence counter	RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	
RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample  The sequence counter should be modulo 4 higher with regard to the previous sequence counter	RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	
RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  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	RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	
RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  SOOHHIFHD SameOrOneHigher1HzIndexFor20HzData The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample  SCSTODHRNCDF SequenceCounterStepTODHRNetCDF The sequence counter should be modulo 4 higher with regard to the previous sequence counter	RSWHOEPFDNCDF		
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	RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	
SCSTODHRNCDF SequenceCounterStepTODHRNetCDF The sequence counter should be modulo 4 higher with regard to the previous sequence counter	RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	, , ,
	SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODNCDF SequenceCounterStepTODNetCDF The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter	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: