





1. Overview

QA4EO Daily Report for NOP data:

Report Production:	02-Mar-2023
Processor Used:	CryoSat Ocean Processor
Data Used:	Near Real Time Ocean Products (NOP) L1B & L2 Science Data

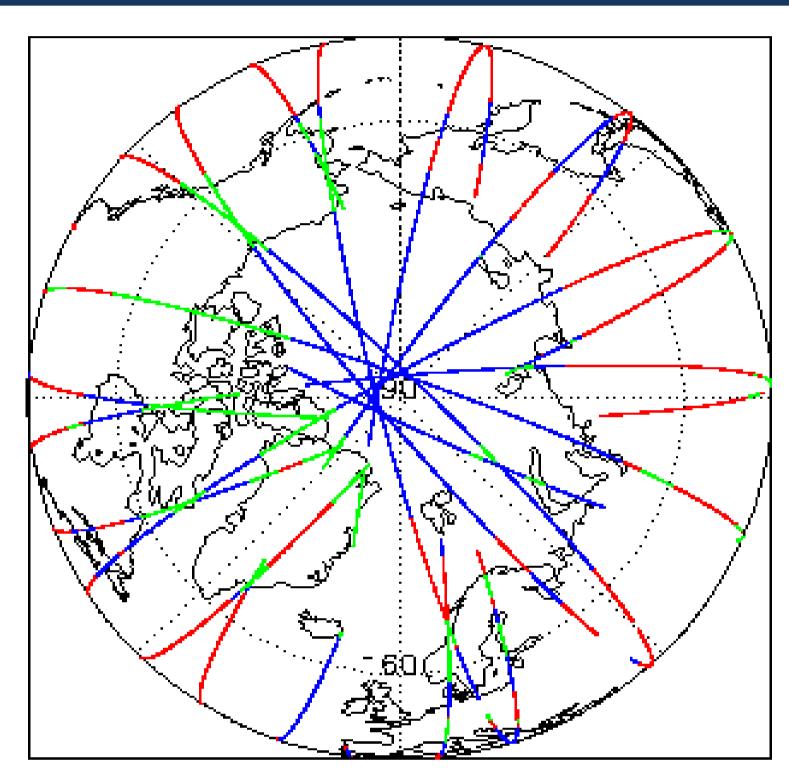
We would love to hear from you! Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to

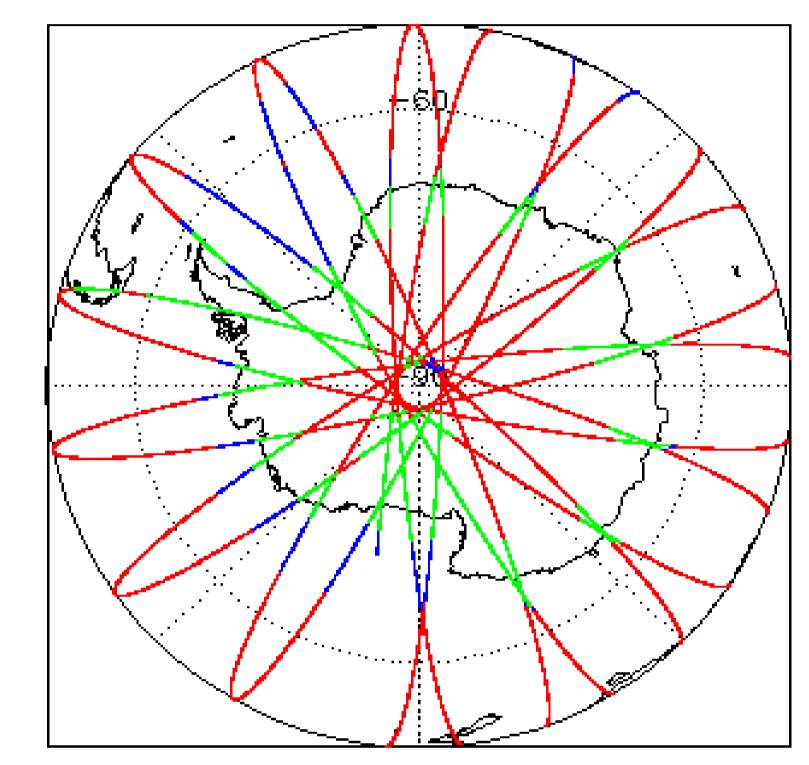
cs2_qc_team@telespazio.com

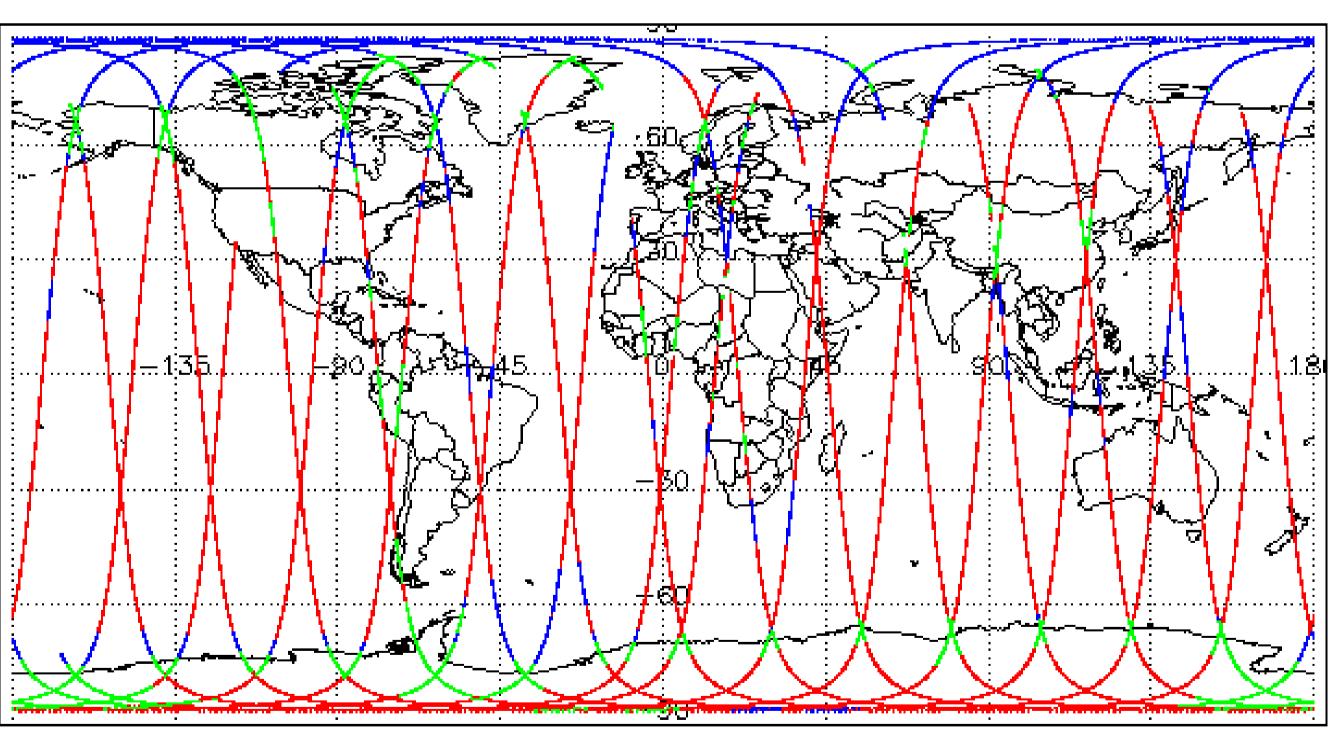
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement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

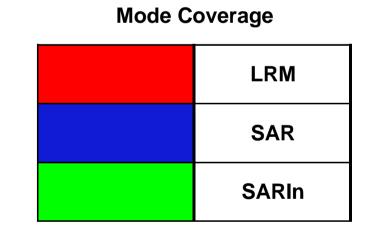
Mission / Instru	ment News
28-Feb-2023	None
01-Mar-2023	None
02-Mar-2023	Nothing planned

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

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.

Number of products with errors:

0

4.5 L1B Measurement Confidence Data Check

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

> Attitude Correction Missing: This flag is currently set in error for NOPR products due to a configuration issue. 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:

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:

13

0

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20230301T173123_20230301T174005_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20230301T233215_20230301T233408_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230301T031636_20230301T031756_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230301T035632_20230301T035808_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230301T045551_20230301T045656_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230301T063505_20230301T064011_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230301T112346_20230301T112437_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230301T162142_20230301T162255_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230301T162457_20230301T162650_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230301T193759_20230301T194408_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230301T211701_20230301T212110_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230301T080847_20230301T081000_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230301T154318_20230301T154907_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.
- > 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:

Draduat	Toot Foiled	Description
Product CS_OFFL_SIR_NOPM_2_20230301T161823_20230301T161857_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean	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_NOPM_2_20230301T195332_20230301T195417_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_20230301T004028_20230301T004142_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_20230301T004644_20230301T005003_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_20230301T022120_20230301T022356_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_20230301T022550_20230301T023216_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_20230301T031636_20230301T031756_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_20230301T035859_20230301T040252_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_20230301T045551_20230301T045656_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_20230301T053852_20230301T054048_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_20230301T054907_20230301T055055_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_20230301T063505_20230301T064011_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_20230301T071825_20230301T071944_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_20230301T085953_20230301T090152_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_20230301T103739_20230301T104101_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_20230301T104626_20230301T104744_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_20230301T113627_20230301T113954_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_20230301T121638_20230301T121958_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_20230301T130612_20230301T130821_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_20230301T140353_20230301T140522_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_20230301T144655_20230301T144758_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_20230301T154114_20230301T154318_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_20230301T162650_20230301T162713_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_20230301T171956_20230301T172406_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_20230301T172813_20230301T173123_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_20230301T190047_20230301T190254_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_20230301T193759_20230301T194408_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_20230301T221008_20230301T221133_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_20230301T234938_20230301T235104_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_20230301T235617_20230301T235918_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_20230301T035809_20230301T035859_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230301T042718_20230301T042837_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_20230301T044924_20230301T045014_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_20230301T045018_20230301T045059_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_20230301T050458_20230301T050553_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_20230301T071718_20230301T071825_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_20230301T081020_20230301T081525_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_20230301T093820_20230301T093854_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_20230301T094414_20230301T094546_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_20230301T094725_20230301T095728_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_20230301T112759_20230301T113627_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_20230301T130856_20230301T131640_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_20230301T144758_20230301T145346_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_20230301T162713_20230301T163355_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_20230301T180544_20230301T181105_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_20230301T194408_20230301T195139_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_20230301T195139_20230301T195332_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_20230301T212111_20230301T212848_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:

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.

0

Number of products with errors: 87

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230301T000035_20230301T000304_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_20230301T001949_20230301T003930_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_20230301T004143_20230301T004644_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_20230301T005210_20230301T012547_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_20230301T015126_20230301T021421_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_20230301T023226_20230301T024800_C00	001		The Ocean Altimeter Range, SSHA, SWH 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_20230301T024823_20230301T025012_C00	001		The Ocean Altimeter Range, SSHA, SWH 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_20230301T025454_20230301T030311_C00	001		The Ocean Altimeter Range, SSHA, SWH 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_20230301T030827_20230301T030847_C00)() 1	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_20230301T032224_20230301T033853_C00	001		The Ocean Altimeter Range, SSHA, SWH 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_20230301T034107_20230301T035543_C0	001		The Ocean Altimeter Range, SSHA, SWH 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_20230301T040551_20230301T041004_C00)() 1	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_20230301T041140_20230301T042415_C00	001		The Ocean Altimeter Range, SSHA, SWH 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_20230301T042440_20230301T042717_C00	001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230301T042929_20230301T043839_C00	001	•	The Ocean Altimeter Range, SSHA, SWH 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_20230301T044022_20230301T044313_C00)() 1	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_20230301T044316_20230301T044337_C00)() 1	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_20230301T050650_20230301T051629_C00	001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230301T052319_20230301T053815_C00	001	• 1	The Ocean Altimeter Range, SSHA, SWH 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_20230301T054048_20230301T054907_C00)() 1	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_20230301T055109_20230301T060806_C00	001	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_20230301T062208_20230301T062249_C00)() 1	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_20230301T065005_20230301T065327_C00	001		The Ocean Altimeter Range, SSHA, SWH 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_20230301T065329_20230301T071717_C00	001		The Ocean Altimeter Range, SSHA, SWH 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_20230301T072228_20230301T072733_C00)() 1	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_20230301T073013_20230301T075550_C00	001	G .	The Ocean Altimeter Range, SSHA, SWH 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_20230301T082747_20230301T085607_C00	001	•	The Ocean Altimeter Range, SSHA, SWH 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_20230301T090152_20230301T090754_C00)() 1	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_20230301T090925_20230301T093755_C00	001	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_20230301T094546_20230301T094725_C00	001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230301T100054_20230301T103508_C00	001	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_20230301T104101_20230301T104626_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_20230301T104800_20230301T105419_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_20230301T111829_20230301T111923_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_20230301T112437_20230301T112758_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_20230301T114036_20230301T114904_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_20230301T115149_20230301T121441_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_20230301T121958_20230301T122105_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_20230301T122110_20230301T122518_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_20230301T122645_20230301T124059_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_20230301T124211_20230301T124654_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_20230301T125615_20230301T125639_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_20230301T131901_20230301T135259_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_20230301T135509_20230301T140004_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_20230301T140609_20230301T140818_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_20230301T141105_20230301T144232_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_20230301T150229_20230301T150945_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_20230301T151426_20230301T151512_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_20230301T151518_20230301T153212_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_20230301T153350_20230301T153903_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_20230301T154907_20230301T160245_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_20230301T160608_20230301T161621_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_20230301T164427_20230301T165447_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_20230301T165627_20230301T171118_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_20230301T171314_20230301T171815_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_20230301T171854_20230301T171956_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_20230301T173123_20230301T174005_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_20230301T174351_20230301T174839_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_20230301T175122_20230301T175708_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_20230301T182726_20230301T185033_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_20230301T185349_20230301T185733_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_20230301T190339_20230301T192949_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_20230301T200414_20230301T202957_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_20230301T203131_20230301T203648_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_20230301T203655_20230301T204021_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_20230301T204310_20230301T211701_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_20230301T213347_20230301T213703_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_20230301T213737_20230301T213928_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_20230301T214103_20230301T215858_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_20230301T220323_20230301T220951_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_20230301T221133_20230301T221723_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_20230301T222233_20230301T225624_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_20230301T233215_20230301T233408_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_20230301T233616_20230301T234937_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_20230301T235104_20230301T235616_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_20230301T014227_20230301T014239_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_20230301T051808_20230301T052319_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_20230301T103739_20230301T104101_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_20230301T144246_20230301T144349_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_20230301T144655_20230301T144758_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_20230301T185749_20230301T185754_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_20230301T025012_20230301T025453_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_20230301T080847_20230301T081000_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_20230301T085608_20230301T085749_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_NOPR_2_20230301T144758_20230301T145346_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_20230301T150945_20230301T151426_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_NOPR_2_20230301T171816_20230301T171822_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.

75

Number of products with errors:

CS_OFFL_SIR_NOPN_2_20233301T003304_2223331T005504_C001 CS_OFFL_SIR_NOPN_2_20233301T003304_2223331T005504_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007792_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007792_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007792_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007792_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007792_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007792_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007792_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_2233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233001T007702_C001 CS_OFFL_SIR_NOPN_2_20233301T007702_C001 CS_OFFL_SIR_NOPN_2_20233001T007702_C001 CS_OFFL_SIR_NOPN_2_20233001T007702_C001 CS_OFF	Product	Test Failed	Description
OCOS Backscatter Quality CS_OFFL_SIR_NOPN_2_2023001T004078_2023001T004142_C001 OCOS Attimeter Range Quality PLRM. The OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. The OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. The OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. The OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. The OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. The OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. OCOS Backscatter Quality OCOS Attimeter Range Quality PLRM. The OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. OCOS Backscatter Quality OCOS Attimeter Range Quality PLRM. The OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. OCOS Backscatter Quality OCOS Attimeter Range Quality PLRM. OCOS Backscatter Quality OCOS Attimeter Range Quality PLRM. OCOS Backscatter Quality OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. OCOS Backscatter Quality OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. OCOS Backscatter Quality OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Range and Backscatter Quality Flags have been set for one or more records OCOS Attimeter Range Quality PLRM. OCOS Backscatter Quality OCOS Range and Backscatter Quality Flags have been set for one or more records The OCOS Range and Backscatter Quality Flags	CS_OFFL_SIR_NOPN_2_20230301T000304_20230301T000508_C001		
CS_OFFL_SIR_NOPN_2_2023031T004028_2023031T004122_CO01 CS_OFFL_SIR_NOPN_2_20230301T004028_2023031T004122_CO01 CS_OFFL_SIR_NOPN_2_20230301T004028_2023031T004022_CO01 CS_OFFL_SIR_NOPN_2_20230301T045840_2023031T044022_CO01 CS_OFFL_SIR_NOPN_2_20230301T045840_2023031T044022_CO01 CS_OFFL_SIR_NOPN_2_20230301T045740_20230301T045530_CO01 CS_OFFL_SIR_NOPN_2_20230301T045740_20230301T045330_CO01 CS_OFFL_SIR_NOPN_2_20230301T057808_20230301T055319_CO01 CS_OFFL_SIR_NOPN_2_20230301T057808_20230301T055404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T0540402_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T0540404_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T0540404_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T054041R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538852_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538385_20230301T05404R_CO01 CS_OFFL_SIR_NOPN_2_20230301T0538385_20230301T005404R_CO01 CCS_OFFL_SIR_NOPN_2_20230301T0538385_20230301T005404R_CO01 CCS_OFFL_SIR_NOPN_2_20230301T0583852_20230301T100544_CO01 CCS_OFFL_SIR_NOPN_2_20230301T0583852_20230301T100544_CO01 CCS_OFFL_SIR_NOPN_2_20230301T0583852_20230301T100544_CO01 CCS_OFFL_SIR_NOPN_2_20230301T0583852_20230301T100544_CO01 CCS_OFFL_SIR_NOPN_2_20230301T1035852_20230301T100544_CO01 CCS_OFFL_SIR_NOPN_2_20230301T1035852_20230301T100544_CO01 CCCG_OFFL_SIR_NOPN_2_20230301T1035852_20230301T100544_CO01 CCCG_OFFL_SIR_NOPN_2_20230301T103588_20230301T100544_CO01 CCCG_OFFL_SIR_NOPN_2_20230301T103588_20230301T112437_CO01 CCCG_OFFL_SIR_NOPN_2_20230301T103588_20230301T112437_CO01 CCCG_OFFL_SI	CS_OFFL_SIR_NOPN_2_20230301T000717_20230301T000759_C001		
CS_OFFL_SIR_NOPN_2_20230301T003025_20230301T04304_C001 CS_OFFL_SIR_NOPN_2_20230301T04384_0_20230301T044022_C001 CS_OFFL_SIR_NOPN_2_20230301T04384_0_20230301T044022_C001 CS_OFFL_SIR_NOPN_2_20230301T04384_0_20230301T04585_0_C001 CS_OFFL_SIR_NOPN_2_20230301T04574_0_20230301T04585_0_C001 CS_OFFL_SIR_NOPN_2_20230301T04584_0_20230301T04585_0_C001 CS_OFFL_SIR_NOPN_2_20230301T051809_20230301T052319_C001 CS_OFFL_SIR_NOPN_2_20230301T051809_20230301T052319_C001 CS_OFFL_SIR_NOPN_2_20230301T05355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T05355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T05355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T05355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T05355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T05355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T05355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T05355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T06355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T06355_2_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T06355_2_20230301T064011_C001 CS_OFFL_SIR_NOPN_2_20230301T06355_2_20230301T064041_C001 CS_OFFL_SIR_NOPN_2_20230301T06355_2_20230301T06405_2_20230301T06405_2_20230301T06405_2_20230301T06405_2_20230301T06405_2_20230301T06405_2_20230301T06405_2_20230301T06405_2_20230301T06405_2_20230301T06405_2_20230301T06405_2_20230301T112437_C001 CCC_OFFL_SIR_NOPN_2_20230301T0645_2_20230301T112437_C001 CCC_OFFL_SIR_NOPN_2_20230301T11246_20230301T11245_2_2001 CCC_OFFL_SIR_NOPN_2_20230301T11246_20230301T11245_2_2001 CCC_OFFL_SIR_NOPN_2_20230301T11246_20230301T11245_2_2001 CCC_OFFL_SIR_NOPN_2_20230301T11246_20230301T11245_2_2001 CCC_OFFL_SIR_NOPN_2_20230301T11246_20230301T11245_2_2001 CCC_OFFL_SIR_NOPN_2_20230301T04646_2001 CCC_OFFL_SIR_NOPN_2_20230301T04646_2001 CCC_OFFL_SIR_NOPN_2_20230301T11246_2003001T11245_2_001 CCC_OFFL_SIR_NOPN_2_20230301T11246_2003001T11245_2_001 CCC_OFFL_SIR_NOPN_2_202303001T04646_2001 CCC_OFFL_SIR_NOPN_2_202303001T04646_2001 CCC_OFFL_SIR_NOP	CS_OFFL_SIR_NOPN_2_20230301T001700_20230301T001918_C001		
CS OFFL SIR NOPN 2 20230301T043840 20230301T044022 C001 CS OFFL SIR NOPN 2 20230301T043840 20230301T04530 C001 CS OFFL SIR NOPN 2 20230301T045740 20230301T04530 C001 CS OFFL SIR NOPN 2 20230301T045740 20230301T04530 C001 CS OFFL SIR NOPN 2 20230301T051808 20230301T052319 C001 CS OFFL SIR NOPN 2 20230301T051808 20230301T052319 C001 CS OFFL SIR NOPN 2 20230301T053862 20230301T054048 C001 CS OFFL SIR NOPN 2 20230301T053862 20230301T054048 C001 CS OFFL SIR NOPN 2 20230301T053862 20230301T054048 C001 CS OFFL SIR NOPN 2 20230301T05305 20230301T054048 C001 CS OFFL SIR NOPN 2 20230301T05305 20230301T054048 C001 CS OFFL SIR NOPN 2 20230301T05305 20230301T054048 C001 CS OFFL SIR NOPN 2 20230301T050505 20230301T064011 C001 CS OFFL SIR NOPN 2 20230301T0505728 20230301T060025 C001 CS OFFL SIR NOPN 2 20230301T0605754 20230301T060025 C001 CS OFFL SIR NOPN 2 20230301T0605754 20230301T060025 C001 CS OFFL SIR NOPN 2 20230301T0605754 20230301T100054 C001 CS OFFL SIR NOPN 2 20230301T0605754 20230301T100054 C001 CS OFFL SIR NOPN 2 20230301T0605728 20230301T100054 C001 CS OFFL SIR NOPN 2 20230301T0605728 20230301T100054 C001 CS OFFL SIR NOPN 2 20230301T0605728 20230301T1120054 C001 CS OFFL SIR NOPN 2 20230301T112346 20230301T112347 C001 CS OFFL SIR NOPN 2 20230301T112346 20230301T112358 C001 CS OFFL SIR NOPN 2 20230301T113627 20230301T112358 C001 CS OFFL SIR NOPN 2 20230301T113627 20230301T113854 C001 CS OFFL SIR NOPN 2 20230301T113627 20230301T113854 C001 CS OFFL SIR NOPN 2 20230301T113627 20230301T112358 C001 CS OFFL SIR NOPN 2 20230301T113627 20230301T113854 C001 CS OFFL SIR NOPN 2 20230301T113627 20230301T113854 C001 CS OFFL SIR NOPN 2 20230301T113627 20230301T112858 C001 CS OFFL SIR NOPN 2 20230301T112858 C001	CS_OFFL_SIR_NOPN_2_20230301T004028_20230301T004142_C001		
OCG Backscatter Quality CS OFFL SIR NOPN 2 20230301T045740 20230301T045830 C001 CS OFFL SIR NOPN 2 20230301T045740 20230301T045830 C001 CS OFFL SIR NOPN 2 20230301T051808 20230301T052319 C001 CS OFFL SIR NOPN 2 20230301T051808 20230301T052319 C001 CS OFFL SIR NOPN 2 20230301T053852 20230301T054048 C001 CS OFFL SIR NOPN 2 20230301T053852 20230301T054048 C001 CS OFFL SIR NOPN 2 20230301T053655 20230301T054048 C001 CS OFFL SIR NOPN 2 20230301T063605 20230301T064011 C001 CS OFFL SIR NOPN 2 20230301T063605 20230301T064011 C001 CS OFFL SIR NOPN 2 20230301T063605 20230301T096925 C001 CS OFFL SIR NOPN 2 20230301T069754 20230301T090925 C001 CS OFFL SIR NOPN 2 20230301T069754 20230301T090925 C001 CS OFFL SIR NOPN 2 20230301T090754 20230301T100054 C001 CS OFFL SIR NOPN 2 20230301T100057 C001 CS OFFL SIR NOPN 2 20230301T11246 20230301T1100054 C001 CS OFFL SIR NOPN 2 20230301T11246 20230301T112497 C001 CS OFFL SIR NOPN 2 20230301T11246 20230301T112497 C001 CS OFFL SIR NOPN 2 20230301T11246 20230301T112497 C001 CS OFFL SIR NOPN 2 20230301T112496 20230301	CS_OFFL_SIR_NOPN_2_20230301T022550_20230301T023216_C001	_	
and Backscatter Quality PLRM, COCG Altimeter Range and Backscatter Quality PLRM, COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPN_2_20230301T085505_20230301T080925_C001 CS_OFFL_SIR_NOPN_2_20230301T085728_20230301T100054_C001 CS_OFFL_SIR_NOPN_2_20230301T1085728_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T11246_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112458_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112458_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112458_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112458_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112458_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112458_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112458_C001 CS_OFFL_SIR_NOPN_2_20230301T113628_20230301T121558_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T113628_20230301T121558_C001 CCG_G Altimeter Range Quality PLRM, COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCG_G Altimeter Range Quality PLRM, CCG_G Range and Backscatter Quality Flags have been set for one or more records CCG_G Altimeter Range Quality PLRM, CCG_G Range and Backscatter Quality Flags have been set for one or more records CCG_G Altimeter Range Quality PLRM, CCG_G R	CS_OFFL_SIR_NOPN_2_20230301T043840_20230301T044022_C001		
CS_OFFL_SIR_NOPN_2_20230301T053852_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T053852_20230301T054048_C001 CS_OFFL_SIR_NOPN_2_20230301T063505_20230301T064011_C001 CS_OFFL_SIR_NOPN_2_20230301T063505_20230301T064011_C001 CS_OFFL_SIR_NOPN_2_20230301T063505_20230301T064011_C001 CS_OFFL_SIR_NOPN_2_20230301T090754_20230301T090925_C001 CS_OFFL_SIR_NOPN_2_20230301T090754_20230301T090925_C001 CS_OFFL_SIR_NOPN_2_20230301T095728_20230301T00054_C001 CS_OFFL_SIR_NOPN_2_20230301T095728_20230301T100054_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112368_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T112368_20230301T112958_C001 CS_OFFL_SIR_NOPN_2_20230301T112638_20230301T112958_C001 CS_OFFL_SIR_NOPN_2_20230301T112638_20230301T112958_C001 CS_OFFL_SIR_NOPN_2_20230301T112638_20230301T112958_C001 CCG_GAltimeter Range_Quality_PLRM, OCOG_Backscatter Quality_PLRM,	CS_OFFL_SIR_NOPN_2_20230301T045740_20230301T045830_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_NOPN_2_20230301T05355_20230301T054041_C001 CS_OFFL_SIR_NOPN_2_20230301T063505_20230301T064011_C001 CS_OFFL_SIR_NOPN_2_20230301T090754_20230301T090925_C001 CS_OFFL_SIR_NOPN_2_20230301T090754_20230301T090925_C001 CS_OFFL_SIR_NOPN_2_20230301T090754_20230301T100054_C001 CS_OFFL_SIR_NOPN_2_20230301T095728_20230301T100054_C001 CS_OFFL_SIR_NOPN_2_20230301T095728_20230301T1100054_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112362_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T1123627_20230301T112458_C001 CS_OFFL_SIR_NOPN_2_20230301T112468_20230301T112958_C001 CS_OFFL_SIR_NOPN_2_20230301T112638_20230301T112958_C001 CS_OFFL_SIR_NOPN_2_20230301T112638_20230301T112958	CS_OFFL_SIR_NOPN_2_20230301T051808_20230301T052319_C001		
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM. CS_OFFL_SIR_NOPN_2_20230301T090754_20230301T090925_C001 CS_OFFL_SIR_NOPN_2_20230301T090754_20230301T100054_C001 CS_OFFL_SIR_NOPN_2_20230301T095728_20230301T100054_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112958_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T112958_C001 CS_OFFL_SIR_NOPN_2_20230301T112638_20230301T12958_C001 CCG_G Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPN_2_20230301T053852_20230301T054048_C001		, ,
CS_OFFL_SIR_NOPN_2_20230301T090754_20230301T100054_C001 CS_OFFL_SIR_NOPN_2_20230301T1095728_20230301T1100054_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T121638_20230301T121958_C001 CS_OFFL_SIR_NOPN_2_20230301T121638_20230301T121958_C001 CCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscat	CS_OFFL_SIR_NOPN_2_20230301T063505_20230301T064011_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_NOPN_2_20230301T10346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T121638_20230301T121958_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records The Ocog Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPN_2_20230301T090754_20230301T090925_C001	_	
CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 CS_OFFL_SIR_NOPN_2_20230301T121638_20230301T121958_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPN_2_20230301T095728_20230301T100054_C001	OCOG Backscatter Quality	
CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001 OCOG Backscatter Quality OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM OCOG Altimeter Range Quality PLRM The OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPN_2_20230301T112346_20230301T112437_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCOG Backscatter Quality OCOG Backscatter Quality PLRM The OCOG Range and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_NOPN_2_20230301T113627_20230301T113954_C001		
OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_NOPN_2_20230301T121638_20230301T121958_C001		
OCOG Backscatter Quality more records	CS_OFFL_SIR_NOPN_2_20230301T124654_20230301T125020_C001	OCOG Backscatter Quality	
CS_OFFL_SIR_NOPN_2_20230301T135307_20230301T135509_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPN_2_20230301T135307_20230301T135509_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_NOPN_2_20230301T144655_20230301T144758_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPN_2_20230301T144655_20230301T144758_C001		
CS_OFFL_SIR_NOPN_2_20230301T153935_20230301T153939_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPN_2_20230301T153935_20230301T153939_C001		

CS_OFFL_SIR_NOPN_2_20230301T154114_20230301T154318_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_20230301T162457_20230301T162650_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_20230301T164147_20230301T164426_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_20230301T171850_20230301T171854_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_20230301T171956_20230301T172406_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_20230301T172813_20230301T173123_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_20230301T174005_20230301T174351_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_20230301T180123_20230301T180356_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_20230301T190047_20230301T190254_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_20230301T193234_20230301T193450_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_20230301T193759_20230301T194408_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_20230301T195417_20230301T195540_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_20230301T202958_20230301T203131_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_20230301T211701_20230301T212111_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_20230301T221008_20230301T221133_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_20230301T225820_20230301T230026_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_20230301T231103_20230301T231144_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_20230301T233147_20230301T233215_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_20230301T000508_20230301T000657_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_20230301T000913_20230301T001107_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_20230301T003931_20230301T004028_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_20230301T012547_20230301T012710_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_20230301T030426_20230301T030428_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_20230301T030447_20230301T030541_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_20230301T030543_20230301T030559_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_20230301T030601_20230301T030608_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_20230301T033854_20230301T034107_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_20230301T042842_20230301T042918_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_20230301T045018_20230301T045059_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_20230301T064019_20230301T064308_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_20230301T081020_20230301T081525_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_20230301T093820_20230301T093854_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230301T094414_20230301T094546_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_20230301T094725_20230301T095728_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_20230301T111447_20230301T111829_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_20230301T112104_20230301T112331_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_20230301T112759_20230301T113627_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_20230301T114904_20230301T115149_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_20230301T125448_20230301T125558_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_20230301T130856_20230301T131640_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_20230301T131807_20230301T131901_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_20230301T144758_20230301T145346_C001	PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230301T145349_20230301T145509_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_20230301T145745_20230301T150229_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_20230301T161622_20230301T161822_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_20230301T161858_20230301T162142_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_20230301T162256_20230301T162457_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_20230301T162713_20230301T163355_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_20230301T171816_20230301T171822_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_20230301T175811_20230301T180046_C001	PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230301T180544_20230301T181105_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_20230301T194408_20230301T195139_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_20230301T212111_20230301T212848_C001	LAITIMATAL RANGA ANG RACKSCATTAL LILIALITY	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
LS OFFI SIR NOPR / /0/303011/31409/0/303011/31548 COOT	•	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS OFFE SIR NOPR 7 7073030117333408 7073030117333517 C001	•	The OCOG Range and Backscatter Quality Flags have been set for one or more records
LS OFFE SIR NOPR / 202303011233514 202303011233616 C001		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: 188

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.

Number of products with errors: 62

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: 132

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	194	194	4	190	0
SIR_NOPR1B	125	125	0	125	0
SIR_NOPN1B	105	105	3	102	0
SIR_NOPM_2	194	194	140	54	0
SIR_NOPR_2	125	125	58	64	3
SIR_NOPN_2	105	105	41	64	0

7.1 QCC Errors

Number of QCC reports with errors:

RL

Product Type RLOBOPNCDF

6

RL

RLOBOPNCDF

Total number of occurrences of each error

5 -										
SIR_NOPR_2	3	3	3	3						
Test Description Key:										
Abbreviation	Test r	ame		Details						
RLOBOPNCDF	Rangel	_atitudeOrBlankOP_	7NetCDF	Latitude should be between -90E7 and 90E7 - NetCDF						

Abbreviation	Test name	Details
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7 - NetCDF
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7 - NetCDF

7.2 QCC Warnings

Number of QCC reports with warnings

1708

Total number of occurrences of each warning

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_NOPM1B	190	0	0	0	0	0	0
SIR_NOPM_2	0	0	39	41	1	45	0
SIR_NOPN1B	100	0	0	0	0	0	0
SIR_NOPN_2	0	0	12	36	4	28	30
SIR_NOPR1B	123	0	0	0	0	0	0
SIR_NOPR_2	0	3	20	34	0	25	19

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARN	CURPEPOPFDPLE	RMSINNCD RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	34	0	29	0	0	0	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	19	0	0	0	20	0	32
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	9	2	0	38	0	46	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	25	0	0	7	31	0	5
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	0	27	13	47	55	28
SIR_NOPR1B	0	0	0	0	0	0	0
SIR NOPR 2	0	35	0	1	48	23	11

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	40	0	2	0	0	0	0
SIR_NOPN1B	0	0	0	0	0	49	0
SIR_NOPN_2	33	32	9	0	0	0	0
SIR_NOPR1B	0	0	0	0	0	125	13
SIR_NOPR_2	27	38	1	1	3	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
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

7.3 Missing QCC Reports

Number of products with missing QCC reports: