

1. Overview

Report Production:	21-Feb-2023
Processor Used:	CryoSat Ocean Processor
Data Used:	Near Real Time Ocean Products (NOP) L1B & L2 Science Data

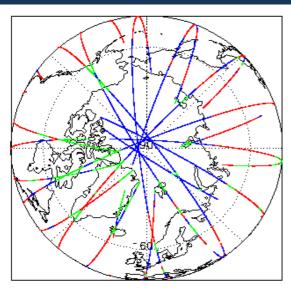
We would love to hear from you!

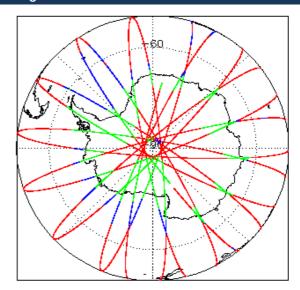
Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to cs2_qc_team@telespazio.com

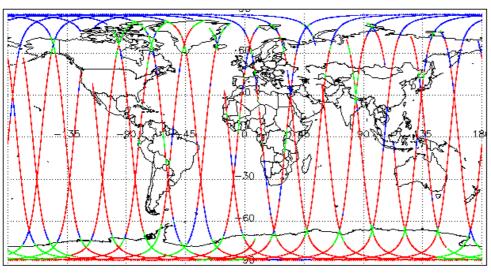
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement 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 / Instrument News		
19-Feb-2023	None	
20-Feb-2023	None	
21-Feb-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 I1b_proc_flag_hr flag is currently set all L1B NOPR and NOPN products because the I1b_processing_quality_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

4.3 L1B Auxilary Data File Usage Check

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

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

Number of products with errors:

0

4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

^

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

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20230220T034855_20230220T035804_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20230220T182239_20230220T185646_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230220T045506_20230220T050046_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230220T063653_20230220T063831_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230220T073324_20230220T073810_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230220T104636_20230220T104733_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230220T140256_20230220T140508_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230220T231525_20230220T231843_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230220T122427_20230220T123833_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230220T154559_20230220T155140_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230220T155652_20230220T155747_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230220T171519_20230220T171616_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230220T172514_20230220T173206_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:

0

5.2 L2 Product Header Analysis

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

Number of products with errors:

0

5.3 L2 Auxiliary Data File Usage Check

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

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

Number of products with errors:

0

5.4 L2 Auxiliary Correction Error Check

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

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

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

Number of products with errors:

128

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230220T000030_20230220T000548_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records

CS_OFFL_SIR_NOPM_2_20230220T001116_20230220T003401_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T003647_20230220T004610_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T004806_20230220T004811_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T004813_20230220T004820_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T004823_20230220T004823_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T005815_20230220T005840_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T005846_20230220T010221_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T010557_20230220T010701_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T010714_20230220T010733_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T010741_20230220T010903_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T010947_20230220T011438_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T011810_20230220T012253_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T012441_20230220T013801_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T014148_20230220T014449_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T015049_20230220T021807_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T021947_20230220T022251_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T022619_20230220T022622_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T022626_20230220T022640_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T022643_20230220T022646_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T022648_20230220T022820_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T024006_20230220T024024_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T024109_20230220T024804_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T024818_20230220T031228_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T032203_20230220T032357_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T032630_20230220T032842_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T033029_20230220T033554_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T033647_20230220T034709_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T034711_20230220T034711_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T034713_20230220T034821_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T034855_20230220T035804_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040140_20230220T040229_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040233_20230220T040254_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records

CS_OFFL_SIR_NOPM_2_20230220T040256_20230220T040332_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040334_20230220T040345_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040347_20230220T040407_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040412_20230220T040418_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040422_20230220T040426_C001	GIM lonospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040432_20230220T040611_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040616_20230220T040620_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040625_20230220T040626_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040633_20230220T040643_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040648_20230220T040659_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T040702_20230220T040800_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T041558_20230220T042004_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T042121_20230220T042350_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T042517_20230220T043545_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T043916_20230220T044216_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T044322_20230220T045506_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T050046_20230220T050313_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T050341_20230220T050805_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T050945_20230220T052450_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T054141_20230220T054146_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T054218_20230220T054223_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T054227_20230220T054233_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T054240_20230220T054245_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T054247_20230220T054248_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T054252_20230220T054253_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T054255_20230220T054256_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T054258_20230220T054308_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T054311_20230220T054812_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T060039_20230220T060158_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T060321_20230220T060625_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T060642_20230220T061030_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T061153_20230220T061728_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records

CS_OFFL_SIR_NOPM_2_20230220T061835_20230220T063603_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T063831_20230220T064719_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T064931_20230220T071153_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T071227_20230220T071321_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T071704_20230220T071759_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T071932_20230220T072302_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T072444_20230220T072546_C001	GIM Ionospheric Correction, Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the GIM Ionospheric correction, Mean Sea surface and Mean Dynamic Topography for one or more records
CS_OFFL_SIR_NOPM_2_20230220T073810_20230220T073909_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T074031_20230220T074844_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T074846_20230220T081520_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T081757_20230220T081939_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T082044_20230220T082511_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T082756_20230220T085558_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T085601_20230220T085614_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T092230_20230220T092506_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T092632_20230220T095445_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T100000_20230220T100550_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T100716_20230220T102637_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T102639_20230220T102641_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T102644_20230220T102653_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T102655_20230220T103111_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T103115_20230220T103350_C001	GIM Ionospheric Correction, Mean Dynamic Topography (1)	There is an error with the GIM Ionospheric correction and Mean Dynamic Topography for one or more records
CS_OFFL_SIR_NOPM_2_20230220T103528_20230220T103642_C001	GIM Ionospheric Correction, Mean Dynamic Topography (1)	There is an error with the GIM lonospheric correction and Mean Dynamic Topography for one or more records
CS_OFFL_SIR_NOPM_2_20230220T104013_20230220T104139_C001	GIM Ionospheric Correction, Mean Dynamic Topography (1)	There is an error with the GIM lonospheric correction and Mean Dynamic Topography for one or more records
CS_OFFL_SIR_NOPM_2_20230220T104351_20230220T104431_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T104458_20230220T104542_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T105824_20230220T113329_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T113907_20230220T114423_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records

CS_OFFL_SIR_NOPM_2_20230220T114601_20230220T114906_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T115106_20230220T115413_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T115950_20230220T120110_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T120113_20230220T120258_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T120319_20230220T121015_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T121158_20230220T121442_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T121733_20230220T121819_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T122144_20230220T122427_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T123833_20230220T124712_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T124958_20230220T131223_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T131744_20230220T131909_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T131916_20230220T132325_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T132523_20230220T133832_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T134020_20230220T134738_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T134828_20230220T135254_C001	GIM lonospheric Correction	There is an error with the GIM lonospheric correction for one or more records

CS_OFFL_SIR_NOPM_2_20230220T140050_20230220T140117_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T140204_20230220T140219_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T141455_20230220T141506_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T141508_20230220T141546_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T141850_20230220T145112_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T145244_20230220T145809_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T145815_20230220T145821_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T145828_20230220T150105_C001	GIM lonospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T150535_20230220T150604_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T150911_20230220T152142_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T152157_20230220T153922_C001	GIM lonospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T154044_20230220T154244_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T154256_20230220T154506_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T155323_20230220T155337_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T155340_20230220T155346_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T155348_20230220T155402_C001	GIM Ionospheric Correction	There is an error with the GIM Ionospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T155407_20230220T155413_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T155415_20230220T155421_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records

CS_OFFL_SIR_NOPM_2_20230220T155425_20230220T155458_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction for one or more records
CS_OFFL_SIR_NOPM_2_20230220T155500_20230220T155501_C001	GIM Ionospheric Correction	There is an error with the GIM lonospheric correction 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.

Number of products with errors:

90

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230220T000030_20230220T000548_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_20230220T001116_20230220T003401_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_20230220T003647_20230220T004610_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_20230220T005815_20230220T005840_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_20230220T005846_20230220T010221_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_20230220T011810_20230220T012253_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_20230220T012441_20230220T013801_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_20230220T014148_20230220T014449_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_20230220T015049_20230220T021807_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_20230220T021947_20230220T022251_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_20230220T024109_20230220T024804_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_20230220T024818_20230220T031228_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_20230220T033029_20230220T033554_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_20230220T033647_20230220T034709_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_20230220T034713_20230220T034821_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_20230220T034855_20230220T035804_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_20230220T040616_20230220T040620_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_20230220T041558_20230220T042004_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_20230220T042121_20230220T042350_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_20230220T042517_20230220T043545_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_20230220T044322_20230220T045506_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_20230220T050046_20230220T050313_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_20230220T050341_20230220T050805_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_20230220T050945_20230220T052450_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_20230220T060642_20230220T061030_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_20230220T061153_20230220T061728_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_20230220T061835_20230220T063603_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_20230220T063831_20230220T064719_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_20230220T064931_20230220T071153_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_20230220T074846_20230220T081520_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_20230220T082044_20230220T082511_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_20230220T082756_20230220T085558_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_20230220T092230_20230220T092506_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_20230220T092632_20230220T095445_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_20230220T100000_20230220T100550_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_20230220T100716_20230220T102637_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_20230220T104458_20230220T104542_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_20230220T105824_20230220T113329_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_20230220T113907_20230220T114423_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_20230220T114601_20230220T114906_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_20230220T115106_20230220T115413_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_20230220T122144_20230220T122427_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_20230220T123833_20230220T124712_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_20230220T124958_20230220T131223_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_20230220T131916_20230220T132325_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_20230220T132523_20230220T133832_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_20230220T134020_20230220T134738_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_20230220T134828_20230220T135254_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_20230220T141850_20230220T145112_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_20230220T150535_20230220T150604_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_20230220T150911_20230220T152142_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_20230220T152157_20230220T153922_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_20230220T154256_20230220T154506_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_20230220T160049_20230220T161232_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_20230220T161436_20230220T163025_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_20230220T163208_20230220T163707_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_20230220T164619_20230220T165437_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_20230220T170308_20230220T171425_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_20230220T171616_20230220T171757_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_20230220T173734_20230220T173819_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_20230220T175413_20230220T180902_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_20230220T181126_20230220T181620_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_20230220T181626_20230220T181638_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_20230220T181701_20230220T181809_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_20230220T182239_20230220T185646_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_20230220T192425_20230220T194533_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_20230220T194610_20230220T194914_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_20230220T195207_20230220T195536_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_20230220T200145_20230220T203005_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_20230220T210110_20230220T212822_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_NOPW_2_92003220119452_2003220119	CS_OFFL_SIR_NOPM_2_20230220T212952_20230220T213451_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CG_OFFL_SIR_NOPM_2_0202021721410_2020221725086_C001 CG_OFFL_SIR_NOPM_2_0202021720140_2020221725086_C001 CG_OFFL_SIR_NOPM_2_0202021720140_2020221720808_C001 CG_OFFL_SIR_NOPM_2_0202021720140_2020221720808_C001 CG_OFFL_SIR_NOPM_2_0202021720140_2020221720440_C001 CG_OFFL_SIR_NOPM_2_0202021720203_202021720446_C001 CG_OFFL_SIR_NOPM_2_0202021720203_202021720446_C001 CG_OFFL_SIR_NOPM_2_02020201720203_2020201720446_C001 CG_OFFL_SIR_NOPM_2_02020201720203_2020201720446_C001 CG_OFFL_SIR_NOPM_2_02020201720203_2020201720446_C001 CG_OFFL_SIR_NOPM_2_02020201704400_0020201701902_C001 CG_OFFL_SIR_NOPM_2_02020201704400_0020201701902_C001 CG_OFFL_SIR_NOPM_2_02020201704400_0020201701902_C001 CG_OFFL_SIR_NOPM_2_020202017017092_C001 CG_OFFL_SIR_NOPM_2_020202017017093_C00202017017092_C001 CG_OFFL_SIR_NOPM_2_020202017017093_C00202017017093_C001 CG_OFFL_SIR_NOPM_2_020202017017093_C00202017017093_C001 CG_OFFL_SIR_NOPM_2_02020202017017093_C00202017017093_C001 CG_OFFL_SIR_NOPM_2_02020202017017093_C00202017017093_C001 CG_OFFL_SIR_NOPM_2_02020202017017093_C00202017017093_C001 CG_OFFL_SIR_NOPM_2_02020202017017093_C0010100000000000000000000000000000000	CS_OFFL_SIR_NOPM_2_20230220T213459_20230220T213827_C001		
and the COCA Allimeter Range and Backscatter Quality Flags have been Affirefer Range of Backscatter Quality Flags have been Affirefer Range of Backscatter Quality Flags have been set for one of more records. CS_OFFL_SIR_NOPM_2_202302207123995_20230220723944_C001 CS_OFFL_SIR_NOPM_2_202302207104450_20230220714487_C001 CS_OFFL_SIR_NOPM_2_202302207104450_20230220714487_C001 CS_OFFL_SIR_NOPM_2_202302207104450_20230220714487_C001 CS_OFFL_SIR_NOPM_2_202302207104450_202302207114872_C001 CS_OFFL_SIR_NOPM_2_202302207104450_202302207114872_C001 CS_OFFL_SIR_NOPM_2_202302207104450_202302207114872_C001 CS_OFFL_SIR_NOPM_2_202302207104450_202302207114872_C001 CS_OFFL_SIR_NOPM_2_202302207104450_202302207114872_C001 CS_OFFL_SIR_NOPM_2_202302207104450_202302207114872_C001 CS_OFFL_SIR_NOPM_2_202302207104450_202302207114872_C001 CS_OFFL_SIR_NOPM_2_202302207104450_202302207114872_C001 CS_OFFL_SIR_NOPM_2_2023022071154294_2023022071154250_C001 CS_OFFL_SIR_NOPM_2_2023022071154297_2023022071154250_C001 CS_OFFL_SIR_NOPM_2_2023022071154250_2001 CS_OFFL_SIR_NOPM_2_202302207115	CS_OFFL_SIR_NOPM_2_20230220T214137_20230220T221622_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS. OFFL_SIR_NOPN_2_20230220710450_202302207014827_0001 CS. OFFL_SIR_NOPN_2_202302207014450_202302207014827_0001 CS. OFFL_SIR_NOPN_2_20230220701450_202302207014827_0001 CS. OFFL_SIR_NOPN_2_20230220701450_202302207014827_0001 CS. OFFL_SIR_NOPN_2_20230220701450_202302207014827_0001 CS. OFFL_SIR_NOPN_2_20230220701759_20230220701932_0001 CS. OFFL_SIR_NOPN_2_20230220701759_20230220701959_0001 CS. OFFL_SIR_NOPN_2_20230220701759_0003020701759_0003020701759_0003000000000000000000000000000000000	CS_OFFL_SIR_NOPM_2_20230220T230140_20230220T230808_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been after the records CS_OFFL_SIR_NOPN_2_20230220T014450_20230220T04827_CO01 CS_OFFL_SIR_NOPN_2_20230220T014450_20230220T04827_CO01 CS_OFFL_SIR_NOPN_2_20230220T07789_20230220T04826_CO01 CS_OFFL_SIR_NOPN_2_20230220T07789_20230220T04256_CO01 CS_OFFL_SIR_NOPN_2_20230220T154244_20230220T154559_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154590_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154590_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154590_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154590_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T15559_CO01 CS_OFFL_SIR_NOPN_2_20230220T15509_CO01 CS_OFFL_SIR_NOPR_2_20230220T15509_CO01 CS_OFFL_SIR_NOPR_2_20230220T15509_CO01 CS_OFFL_SIR_NOPR_2_20230220T15509_CO01 CS_OFFL	CS_OFFL_SIR_NOPM_2_20230220T230951_20230220T231524_C001		
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPN_2_20230220T1759_20230220T17392_CO01 CS_OFFL_SIR_NOPN_2_20230220T154244_20230220T154256_CO01 CS_OFFL_SIR_NOPN_2_20230220T154264_20230220T154256_CO01 CS_OFFL_SIR_NOPN_2_20230220T154264_20230220T154559_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T18239_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T18239_CO01 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T18239_CO01 CS_OFFL_SIR_NOPN_2_20230220T15553_20230220T18239_CO01 CS_OFFL_SIR_NOPN_2_20230220T15553_20230220T18239_CO01 CS_OFFL_SIR_NOPN_2_20230220T15553_20230220T18559_CO01 CS_OFFL_SIR_NOPN_2_20230220T15553_20230220T19553_20230220T105507_CO01 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T19553_CO01 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T19553_CO01 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T19553_CO01 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T19553_CO01 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T19553_CO01 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T19553_CO01 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T12838_CO01 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T12838_CO01 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T12838_CO01 CS_OFFL_SIR_NOPR_2_20230220T12853_20230220T12833_CO01 CS_OFFL_SIR_NOPR_2_20230220T12853_20230220T12833_CO01 CS_OFFL_SIR_NOPR_2_20230220T128452_20230220T12833_CO01 CS_OFFL_SIR_NOPR_2_20230220T128452_20230220T12833_CO01 CS_OFFL_SIR_NOPR_2_20230220T128452_20230220T12833_CO01 CS_OFFL_SIR_NOPR_2_20230220T128452_20230220T128333_CO01 CS_OFFL_SIR_NOPR_2_20230220T128452_20230220T128333_CO01 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_CO01 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_CO01 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_CO01 CS_OFFL_SIR_NOPR	CS_OFFL_SIR_NOPM_2_20230220T232053_20230220T235445_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality GS_OFFL_SIR_NOPN_2_20230220T154244_20230220T154256_C001 CS_OFFL_SIR_NOPN_2_20230220T154244_20230220T154559_C001 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154599_C001 CS_OFFL_SIR_NOPN_2_20230220T172303_20230220T154599_C001 CS_OFFL_SIR_NOPN_2_20230220T172303_20230220T172514_C001 CS_OFFL_SIR_NOPN_2_20230220T172303_20230220T172514_C001 CS_OFFL_SIR_NOPN_2_20230220T172303_20230220T172514_C001 CS_OFFL_SIR_NOPN_2_20230220T181809_20230220T182239_C001 CS_OFFL_SIR_NOPN_2_20230220T181809_20230220T182239_C001 CS_OFFL_SIR_NOPN_2_20230220T181809_20230220T182239_C001 CS_OFFL_SIR_NOPN_2_20230220T195553_20230220T182559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T2938_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T2938_C001 CS_OFFL_SIR_NOPN_2_20230220T19553_20230220T2938_C001 CS_OFFL_SIR_NOPN_2_20230220T02563_20230220T2938_C001 CS_OFFL_SIR_NOPR_2_20230220T02563_20230220T025610_C001 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T04353_C001 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T12383_C001 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T12383_C001 CS_OFFL_SIR_NOPR_2_20230220T124427_20230220T145828_C001 CCS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CCS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145838_C001 CCS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145838_C001 CCS_OFFL_SIR_NOPR_2_20230220T043545_20230220T145838_C001 CCS_OFFL_SIR_NOPR_2_20230220T043545_20230220T145838_C001 CCS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145838_C001 CCS_OFFL_SIR_NOPR_2_20230220T145821_20230220T1458	CS_OFFL_SIR_NOPN_2_20230220T014450_20230220T014827_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_C001 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_C001 CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_C001 CS_OFFL_SIR_NOPN_2_20230220T172303_20230220T172514_C001 CS_OFFL_SIR_NOPN_2_20230220T172303_20230220T172514_C001 CS_OFFL_SIR_NOPN_2_20230220T172303_20230220T172514_C001 CS_OFFL_SIR_NOPN_2_20230220T181809_20230220T182239_C001 CS_OFFL_SIR_NOPN_2_20230220T181809_20230220T182239_C001 CS_OFFL_SIR_NOPN_2_20230220T181809_20230220T182239_C001 CS_OFFL_SIR_NOPN_2_20230220T181809_20230220T181809_20230220T181809_20230220T181809_20230220T181809_20230220T181809_20230220T181809_20230220T1805559_C001 CS_OFFL_SIR_NOPN_2_20230220T18553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T18553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T1833_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T1833_20230220T1900110_C001 CS_OFFL_SIR_NOPN_2_20230220T1833_20230220T21938_C001 CS_OFFL_SIR_NOPN_2_20230220T1833_20230220T21938_C001 CS_OFFL_SIR_NOPN_2_20230220T21833_20230220T21938_C001 CS_OFFL_SIR_NOPR_2_20230220T221833_20230220T022510_C001 CS_OFFL_SIR_NOPR_2_20230220T02563_20230220T022510_C001 CS_OFFL_SIR_NOPR_2_20230220T02563_20230220T022510_C001 CS_OFFL_SIR_NOPR_2_20230220T12487_20230220T148809_C001 CS_OFFL_SIR_NOPR_2_20230220T12487_20230220T148809_C001 CS_OFFL_SIR_NOPR_2_20230220T148809_C001 CS_OFFL_SIR_NOPR_2_20230220T148809_	CS_OFFL_SIR_NOPN_2_20230220T071759_20230220T071932_C001		
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been Range Altimeter Range and Backscatter Quality Flags have been Range Altimeter Range and Backscatter Quality Flags have been Range Altimeter Range and Backscatter Quality Flags have been Range SPHA, SWH and Backscatter Quality Flags have been Range	CS_OFFL_SIR_NOPN_2_20230220T154244_20230220T154256_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been attempted to the COG Altimeter Range and Backscatter Quality Flags have been attempted and Backscatter Quality Altimeter Range and Backscatter Quality Flags have been attempted and Backscatter Quality Altimeter Range and Backscatter Quality Flags have been attempted and Backscatter Quality Altimeter Range and Backscatter Quality Flags have been attempted and the COG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPN_2_20230220T195553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T195927_20230220T200110_C001 CS_OFFL_SIR_NOPN_2_20230220T195927_20230220T200110_C001 CS_OFFL_SIR_NOPN_2_20230220T195927_20230220T221938_C001 CS_OFFL_SIR_NOPN_2_20230220T022603_20230220T221938_C001 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_C001 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_C001 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T023833_C001 CS_OFFL_SIR_NOPR_2_20230220T102427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T102427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T102427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T102427_20230220T1043830_C001 CS_OFFL_SIR_NOPR_2_20230220T1045845_20230220T1045828_C001 CCGA Altimeter Range Quality, OCOG Backscatter Quality COGG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range Altimeter Range Altimeter Range and Backscatter Quality Flags have	CS_OFFL_SIR_NOPN_2_20230220T154507_20230220T154559_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
S_OFFL_SIR_NOPN_2_20230220T181809_20230220T182339_0001 and Backscatter Quality, CCG Altimeter Range and Backscatter Quality Flags have been alter one or more records CS_OFFL_SIR_NOPN_2_20230220T195553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T195553_20230220T195559_C001 CS_OFFL_SIR_NOPN_2_20230220T195927_20230220T200110_C001 CS_OFFL_SIR_NOPN_2_20230220T195927_20230220T200110_C001 CS_OFFL_SIR_NOPN_2_20230220T21833_20230220T221938_C001 CS_OFFL_SIR_NOPN_2_20230220T221833_20230220T221938_C001 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_C001 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_C001 CS_OFFL_SIR_NOPR_2_20230220T12427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T12427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T12427_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 COCQA Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOGA Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOGA Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOGA Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOGA Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOGA Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOGA Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOGA Altimeter Range Altimeter Range and Backscatter Quality Flags have be	CS_OFFL_SIR_NOPN_2_20230220T172303_20230220T172514_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_NOPN_2_20230220T195927_20230220T200110_C001 CS_OFFL_SIR_NOPN_2_20230220T195927_20230220T200110_C001 CS_OFFL_SIR_NOPN_2_20230220T221833_20230220T221938_C001 CS_OFFL_SIR_NOPN_2_20230220T221833_20230220T221938_C001 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_C001 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_C001 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_C001 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T124427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T124427_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T199853_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T199853_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T199853_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T199853_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T199853_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T199853_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T199853_C001 CS_OFFL_SIR_NOPR_2_20230220T199338_20230220T199853_C001 CS_OFFL_SIR_NOPR_2_20230220T199388_20230220T199853_C001 CS_OFFL_SIR_NOPR_2_20230220T19	CS_OFFL_SIR_NOPN_2_20230220T181809_20230220T182239_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPN_2_20230220T221833_20230220T221938_CO01 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_CO01 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_CO01 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_CO01 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_CO01 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_CO01 CS_OFFL_SIR_NOPR_2_20230220T122427_20230220T123833_CO01 CS_OFFL_SIR_NOPR_2_20230220T122427_20230220T145828_CO01 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_CO01 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_CO01 And Backscatter Quality and Backscatter Quality and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPN_2_20230220T195553_20230220T195559_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_C001 CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_C001 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_C001 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_C001 CS_OFFL_SIR_NOPR_2_20230220T122427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T122427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T190338_20230220T190853_C001 And Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T190853_C001 CS_OFFL_SIR_NOPR_2_20230220T190338_20230220T190853_C001 And the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T190338_20230220T190853_C001	CS_OFFL_SIR_NOPN_2_20230220T195927_20230220T200110_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_C001 CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_C001 CS_OFFL_SIR_NOPR_2_20230220T122427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T122427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T122427_20230220T123833_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T190338_20230220T190853_C001 CS_OFFL_SIR_NOPR_2_20230220T190338_20230220T190853_C001 CCGA Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T190853_C001 CCGA Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPN_2_20230220T221833_20230220T221938_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality Ocean Altimeter Range, SSHA, SWH 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_20230220T145821_20230220T145828_C001 OCEAN Altimeter Range and Backscatter Quality, OCOG Backscatter Quality, OCOG Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality, OCOG Backscatter Quality The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records OCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records OCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPR_2_20230220T022603_20230220T022610_C001		
CS_OFFL_SIR_NOPR_2_20230220T122427_20230220T123833_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001 CS_OFFL_SIR_NOPR_2_20230220T190338_20230220T190853_C001 And Backscatter Quality, OCOG Backscatter Quality, OCOG Backscatter Quality Coean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_NOPR_2_20230220T190338_20230220T190853_C001 Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_C001		
Backscatter Quality for one or more records Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_NOPR_2_20230220T122427_20230220T123833_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPR_2_20230220T190338_20230220T190853_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_NOPR_2_20230220T145821_20230220T145828_C001		
	CS_OFFL_SIR_NOPR_2_20230220T190338_20230220T190853_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

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:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20230220T000549_20230220T000855_C001	Altimeter Range and Backscatter Chiality	The Ocean Altimeter Range, SSHA, SWH 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_20230220T011438_20230220T011810_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_20230220T013850_20230220T014148_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records

CC OFFI CID NODN A 20020000T000040 0002000T0000FC 0004	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_NOPN_2_20230220T022940_20230220T022956_C001	Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPN_2_20230220T031928_20230220T032203_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_20230220T032842_20230220T033022_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_20230220T041437_20230220T041558_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_20230220T045506_20230220T050046_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_20230220T050314_20230220T050341_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_20230220T054913_20230220T055000_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_20230220T055411_20230220T055620_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_20230220T060158_20230220T060320_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_20230220T061728_20230220T061835_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_20230220T071357_20230220T071704_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_20230220T073324_20230220T073810_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_20230220T095607_20230220T100000_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_20230220T100551_20230220T100716_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_20230220T104151_20230220T104314_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_20230220T122036_20230220T122144_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_20230220T131326_20230220T131744_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_20230220T140117_20230220T140204_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_20230220T140256_20230220T140508_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_20230220T145119_20230220T145243_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_20230220T150105_20230220T150252_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_20230220T153926_20230220T154044_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_20230220T155140_20230220T155228_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_20230220T163025_20230220T163207_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_20230220T163908_20230220T164130_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_20230220T165649_20230220T165754_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_20230220T170005_20230220T170134_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one more records
CS_OFFL_SIR_NOPN_2_20230220T170134_20230220T170308_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one more records
CS_OFFL_SIR_NOPN_2_20230220T191831_20230220T191948_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one more records
CS_OFFL_SIR_NOPN_2_20230220T192044_20230220T192401_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for on more records
CS_OFFL_SIR_NOPN_2_20230220T194933_20230220T195207_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 Fla and the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_NOPN_2_20230220T195927_20230220T200110_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPN_2_20230220T205726_20230220T205811_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPN_2_20230220T213827_20230220T214004_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 Fla and the OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records
CS_OFFL_SIR_NOPN_2_20230220T221622_20230220T221748_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPN_2_20230220T222710_20230220T222735_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 Fla and the OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records
CS_OFFL_SIR_NOPN_2_20230220T224845_20230220T225219_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPN_2_20230220T231525_20230220T231843_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 Fland the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_NOPR_2_20230220T004610_20230220T004806_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 Fla and the OCOG Altimeter Range and Backscatter Quality Flags have best for one or more records
CS_OFFL_SIR_NOPR_2_20230220T010221_20230220T010557_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPR_2_20230220T010903_20230220T010946_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPR_2_20230220T022251_20230220T022541_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 Fla and the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_NOPR_2_20230220T023640_20230220T023710_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 Fla and the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_NOPR_2_20230220T031228_20230220T031928_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 Fla and the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_NOPR_2_20230220T043545_20230220T043830_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPR_2_20230220T055620_20230220T055725_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 Fla and the OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records
CS_OFFL_SIR_NOPR_2_20230220T055955_20230220T060039_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPR_2_20230220T090405_20230220T090543_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPR_2_20230220T090558_20230220T090809_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 Fla and the OCOG Altimeter Range and Backscatter Quality Flags have beset for one or more records
CS_OFFL_SIR_NOPR_2_20230220T103642_20230220T103819_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPR_2_20230220T104139_20230220T104150_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records
CS_OFFL_SIR_NOPR_2_20230220T104314_20230220T104350_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for or more records

CS_OFFL_SIR_NOPR_2_20230220T104733_20230220T105523_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_20230220T115413_20230220T115949_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_20230220T121442_20230220T121640_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_20230220T122427_20230220T123833_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_20230220T140703_20230220T141410_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_20230220T141550_20230220T141850_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_20230220T145821_20230220T145828_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_20230220T154559_20230220T155140_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_20230220T155630_20230220T155642_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_20230220T155819_20230220T155908_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_20230220T161233_20230220T161436_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_20230220T165437_20230220T165457_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_20230220T171425_20230220T171452_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_20230220T171757_20230220T171922_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_20230220T172514_20230220T173206_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_20230220T174547_20230220T175413_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_20230220T185646_20230220T185839_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_20230220T204131_20230220T205155_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_20230220T221759_20230220T221826_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_20230220T221827_20230220T221832_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_20230220T221939_20230220T222710_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_20230220T222735_20230220T223238_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:

218

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.

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:

122

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	11	188	0
SIR_NOPR1B	133	133	0	133	0
SIR_NOPN1B	102	102	7	95	0
SIR_NOPM_2	199	199	133	66	0
SIR_NOPR_2	133	133	43	89	1
SIR NOPN 2	102	102	37	65	0

7.1 QCC Errors

Number of QCC reports with errors:

Product Type RLOBOPNCDF

4

RLOBOPNCDF

Total number of occurrences of each error

SIR_NOPR_2	1	1	1	1				
Test Description Ke	y:							

Test Description Key:					
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

1582

Total number of occurrences of each warning

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_NOPM1B	188	0	0	0	0	0	0
SIR_NOPM_2	0	0	48	40	66	50	0
SIR_NOPN1B	91	0	0	0	0	0	0
SIR_NOPN_2	0	0	8	27	65	18	21
SIR_NOPR1B	127	0	0	0	0	0	0
SIR_NOPR_2	0	1	19	32	88	29	18

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCD	RPEPOPFDPLRMSINNCDI	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	37	0	35	0	0	0	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	11	1	0	0	12	0	27
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	13	6	0	32	0	36	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	29	0	0	3	34	0	1
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	0	19	13	21	22	11
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	0	33	0	3	26	33	1

Product Type	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-	-	-
SIR_NOPM1B	0	0	0	0			
SIR_NOPM_2	0	0	0	0			
SIR_NOPN1B	0	0	43	0			
SIR_NOPN_2	0	0	0	0			
SIR_NOPR1B	0	0	133	8			
SIR_NOPR_2	2	1	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			
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			

RPEPOPSINNCDF		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
		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		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:

0