

### 1. Overview

Report Production:	: 10-Mar-2023	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Near Real Time Ocean Products (NOP) L1B & L2 Science Data	

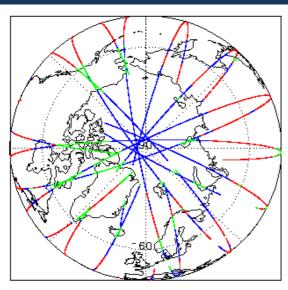
### We would love to hear from you!

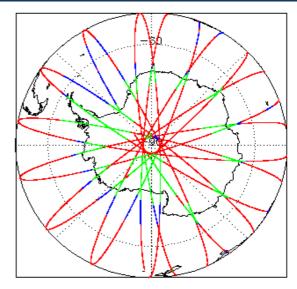
Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to cs2\_qc\_team@telespazio.com

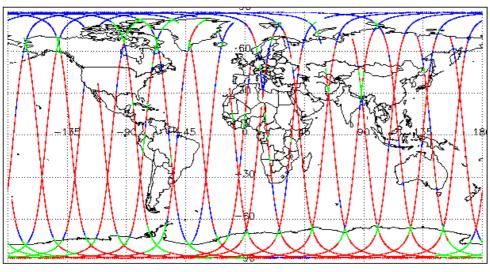
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5
Measurement Quality Flag Check	See Section 5.6
Ocean Retracking Quality Check	See Section 5.7
QCC Error/ Warning Check	See Section 7.1 and 7.2

Mission / Instrument News	
08-Mar-2023	None
09-Mar-2023	None
10-Mar-2023	Nothing planned

# 2. Global Coverage









## 3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A
Star Tracker(s) in use:	Star Tracker 1

### 4. NOP Level 1B Data Quality Check

## 4.1 L1B Product Format Check

#### 4.2 L1B Product Header Analysis

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

> L1B Processing Quality HR: The 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:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20230309T064513_20230309T070949_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

#### 4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

10

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20230309T022453_20230309T023118_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20230309T024100_20230309T024237_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230309T030855_20230309T031016_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230309T062734_20230309T063224_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230309T075943_20230309T080047_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230309T143921_20230309T144018_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230309T171223_20230309T171715_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20230309T224937_20230309T225100_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230309T093044_20230309T093249_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20230309T160853_20230309T161038_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:

48

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230309T092952_20230309T093044_C001	liviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

CS_OFFL_SIR_NOPN_2_20230309T003301_20230309T003424_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T003907_20230309T004235_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T021345_20230309T021431_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T030855_20230309T031016_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T031331_20230309T031509_C001	Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT and 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T034910_20230309T035510_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T040226_20230309T040404_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T044820_20230309T045033_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T054133_20230309T054327_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T062734_20230309T063224_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T075943_20230309T080047_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T085020_20230309T085140_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T085156_20230309T085417_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20230309T103012_20230309T103325_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T103844_20230309T104001_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T120854_20230309T121213_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T121742_20230309T121907_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T125804_20230309T125839_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T135545_20230309T135726_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T143921_20230309T144018_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T152438_20230309T152620_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T153331_20230309T153544_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T161719_20230309T161933_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T170350_20230309T170537_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T171223_20230309T171715_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T175402_20230309T175758_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T185332_20230309T185527_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T225111_20230309T225149_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20230309T234203_20230309T234329_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230309T234839_20230309T235146_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPR_2_20230309T044443_20230309T044820_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

CS_OFFL_SIR_NOPR_2_20230309T045748_20230309T045847_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T080243_20230309T080759_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T093044_20230309T093249_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20230309T093611_20230309T093812_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20230309T094148_20230309T094946_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T112022_20230309T112914_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T130120_20230309T130841_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T144018_20230309T144600_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T144616_20230309T144736_C001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_NOPR_2_20230309T161934_20230309T162238_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T162238_20230309T162619_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T175759_20230309T180319_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T193619_20230309T194626_C001	Topography (1), Total Geocentric Ocean	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T211346_20230309T211826_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T211826_20230309T212030_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230309T213143_20230309T213227_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

### 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230309T064513_20230309T070949_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

### 5.6 L2 Measurement Quality Flag Check

#### L2 Quality Flags (20 Hz)

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

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230309T001219_20230309T001708_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T001856_20230309T003201_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T003425_20230309T003907_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_20230309T004426_20230309T005123_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T005133_20230309T011739_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T013804_20230309T014218_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

COLORS SIR NORM 2 20200001120100 (2000)  COLORS SIR NORM 2 2020000112020 (2000)  COLORS SIR NOR	CS_OFFL_SIR_NOPM_2_20230309T014349_20230309T020646_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_SRI_NCPM_2_20200007104100_20200007124100_COINT SRI_NCPM_2_20200007104100_20200007124100_COINT SRI_NCPM_2_20200007104100_20200007104100_COINT SRI_NCPM_2_20200007104100_20200007104100_COINT SRI_NCPM_2_20200007104100_20200007104100_COINT SRI_NCPM_2_20200007104100_20200007104100_COINT SRI_NCPM_2_20200007104100_20200007104100_COINT SRI_NCPM_2_20200007104100_20200007104100_COINT SRI_NCPM_2_20200007104100_20200007104100_COINT SRI_NCPM_2_20200007104100_COINT SRI_NCPM_2_2020	CS_OFFL_SIR_NOPM_2_20230309T021006_20230309T021030_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
See DEFL. SRI NOPML 2 2022009T00501_2000007T05405_0000  The Education Coulty Program in the Reconstruct Coulty Program in the County	CS_OFFL_SIR_NOPM_2_20230309T022453_20230309T023118_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
SC. OFT. SIT. NOPM. 2. 20200091703109. 20200907103105. C0001  CO. OFT. SIT. NOPM. 2. 20200091703109. 20200907103109. C0001  CO. OFT. SIT. NOPM. 2. 20200091703109. C0001  CO. OFT. SIT. NOPM. 2. 20200091703090. C00010090100000000000000000000000000000	CS_OFFL_SIR_NOPM_2_20230309T024100_20230309T024237_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Seasonate Quality  CS_OFF_SR_NOPM_2_R000000010168_00001000100118_0001  CS_OFF_SR_NOPM_2_R0000000100105_0001000100118_0001  CS_OFF_SR_NOPM_2_R000000010000000000000000000000000000	CS_OFFL_SIR_NOPM_2_20230309T024718_20230309T025435_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Description (1971) (197	CS_OFFL_SIR_NOPM_2_20230309T030105_20230309T030108_C001		
and the COCO Alterneter Range, and Backscatter Quality Flags have been Alterneter Range and Backscatter Quality Flags have been Alterneter Range and Backscatter Quality Flags have been Alterneter Range and Backscatter Quality Flags have been as for one or more records.  CS_OFFL_SIR_NOPM_2_802808091058911_202389901058728_0001  CS_OFFL_SIR_NOPM_2_802808091058991_2022808091044028_0001  CS_OFFL_SIR_NOPM_2_802808091058991_2022808091044028_0001  CS_OFFL_SIR_NOPM_2_802808091058991_2022808091044028_0001  CS_OFFL_SIR_NOPM_2_802808091058991_2022808091044028_0001  CS_OFFL_SIR_NOPM_2_80280809104404_202280809104110_0001  CS_OFFL_SIR_NOPM_2_80280809104404_202280809104110_0001  CS_OFFL_SIR_NOPM_2_80280809104404_202280809104108_0001  CS_OFFL_SIR_NOPM_2_8028080910410408_000104108_00	CS_OFFL_SIR_NOPM_2_20230309T031016_20230309T031331_C001		, ,
and the OCOGA Affirmeter Flange and Blackscatter Quality Flags have been and flander Flange and Blackscatter Quality Flags have been and flander Flange and Blackscatter Quality Flags have been and flander Flange and Blackscatter Quality Flags have been and flander Flange and Blackscatter Quality Flags have been and flander Flange and Blackscatter Quality Flags have been and flander Flange and Blackscatter Quality Flags have been and flander Flange and Blackscatter Quality Flags have been and flander Flange Administer Flange and Blackscatter Quality Flags have been and flander Flange Administer Flang	CS_OFFL_SIR_NOPM_2_20230309T031554_20230309T032136_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 nor records  CS_OFFL_SIR_NOPM_2_2023009T055511_2023099T05728_CO01  CS_OFFL_SIR_NOPM_2_2023009T05505_2023009T04026_CO01  CS_OFFL_SIR_NOPM_2_2023009T05505_2023009T041026_CO01  CS_OFFL_SIR_NOPM_2_2023009T040404_2023009T041026_CO01  CS_OFFL_SIR_NOPM_2_2023009T040404_2023009T041026_CO01  CS_OFFL_SIR_NOPM_2_2023009T040404_2023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T040404_2023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T04102_C0023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T0410404_2023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T0410404_2023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T0410404_2023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T0410404_2023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T0410404_2023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T0410404_2023009T04106_CO01  CS_OFFL_SIR_NOPM_2_2023009T0410404_2023009T0410406_CO01  CS_OFFL_SIR_NOPM_2_2023009T0410404_2023009T0410406_CO01  CS_OFFL_SIR_NOPM_2_2023009T0410406_C001  CS_OFFL_SIR_NOPM_2_2023009T0410406_C001  CS_OFFL_SIR_NOPM_2_2023009T050093_C001  CS_OFFL_SIR_NOPM_2_2023009T050093_C001  CS_OFFL_SIR_NOPM_2_2023009T050090_2023009T050093_C001  CS_OFFL_SIR_NOPM_2_2023009T050090_2023009T050093_C001  CS_OFFL_SIR_NOPM_2_2023009T050090_2023009T050093_C001  CS_OFFL_SIR_NOPM_2_2023009T050090_2023009T050093_C001  CS_OFFL_SIR_NOPM_2_2023009T050090_2023009T050093_C001  CS_OFFL_SIR_NOPM_2_2023009T050090_202300	CS_OFFL_SIR_NOPM_2_20230309T032302_20230309T033118_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_NOPM_2_20230099T040404_2023009T041026_C001  CS_OFFL_SIR_NOPM_2_20230099T040404_2023009T04110_C001  CS_OFFL_SIR_NOPM_2_20230099T041232_2023009T041906_C001  CS_OFFL_SIR_NOPM_2_20230099T041232_2023009T041906_C001  CS_OFFL_SIR_NOPM_2_20230099T041232_2023009T041906_C001  CS_OFFL_SIR_NOPM_2_20230099T041232_2023009T041906_C001  CS_OFFL_SIR_NOPM_2_20230099T04220_3023009T043529_C001  CS_OFFL_SIR_NOPM_2_20230099T04220_3023009T043529_C001  CS_OFFL_SIR_NOPM_2_20230099T045848_2023009T054352_C001  CS_OFFL_SIR_NOPM_2_2023009T045948_2023009T050333_C001  CS_OFFL_SIR_NOPM_2_2023009T050609_2023009T050833_C001  CS_OFFL_SIR_NOPM_2_2023009T050433_2023009T050833_C001  CS_OFFL_SIR_NOPM_2_2023009T050433_2023009T054133_C001  CS_OFFL_SIR_NOPM_2_2023009T05440_2023009T050833_C001  CS_OFFL_SIR_NOPM_2_2023009T05433_2023009T054133_C001  CS_OFFL_SIR_NOPM_2_2023009T05433_2023009T054133_C001  CS_OFFL_SIR_NOPM_2_2023009T05433_2023009T054133_C001  CS_OFFL_SIR_NOPM_2_20230090T05433_2023009T064133_C001  CS_OFFL_SIR_NOPM_2_20230090T05433_2023009T064133_C001  CS_OFFL_SIR_NOPM_2_20230090T05433_2023009T064133_C001  CS_OFFL_SIR_NOPM_2_20230090T071210_20230090T07499_C001  CS_OFFL_SIR_NOPM_2_20230090T071210_20230090T07499_C001  CS_OFFL_SIR_NOPM_2_20230090T071210_20230090T07499_C001  CS_OFFL_SIR_NOPM_2_20230090T071210_20230090T07499_C001  CS_OFFL_SIR_NOPM_2_20230090T071210_20230090T07499_C001  CS_OFFL_SIR_NOPM_2_20230090T071210_20230090T07499_C001  CS_OFFL_SIR_NOPM_2_20230090T071210_20	CS_OFFL_SIR_NOPM_2_20230309T033333_20230309T034835_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPM_2_2023039T040404_2023039T04110_C001  CS_OFFL_SIR_NOPM_2_2023039T040404_2023039T041106_C001  CS_OFFL_SIR_NOPM_2_2023039T040222_2023039T041906_C001  CS_OFFL_SIR_NOPM_2_20230309T041222_2023039T041906_C001  CS_OFFL_SIR_NOPM_2_20230309T041222_20230309T041906_C001  CS_OFFL_SIR_NOPM_2_20230309T04220_20230309T041506_C001  CS_OFFL_SIR_NOPM_2_20230309T04220_20230309T04508_2001  CS_OFFL_SIR_NOPM_2_20230309T04220_20230309T04508_2001  CS_OFFL_SIR_NOPM_2_20230309T04508_20230309T050447_C001  CS_OFFL_SIR_NOPM_2_20230309T04508_20230309T050447_C001  CS_OFFL_SIR_NOPM_2_20230309T050609_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T050609_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T050609_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T050609_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T050609_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T050609_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050833_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050835_C001  CS_OFFL_SIR_NOPM_2_20230309T053031_20230309T050835_C001  CS_OFFL_SIR_NOPM_2_20230309T05433_20230309T074433_C001  CS_OFFL_SIR_NOPM_2_20230309T05433_20230309T07443_C001  CCCOR_Altimeter Range_Cuality, COCG Altimeter Range_Backscatter Quality Plags have been set for one or more records  CCCOR_Altimeter Range_Backscatter Quality Plags have been set for one or more records  CCCOR_Altimeter Range_Backscatter Quality Plags have been set for one or more records  CCCOR_Altimeter Range_Backscatter Quality Plags have been set for one or more records  CCCOR_Altimeter Range_Backscatter Quality Plags have been set for one or more records  CCC	CS_OFFL_SIR_NOPM_2_20230309T035511_20230309T035728_C001		
and the OCOG Altmere Plange and Backscatter Quality Cocog Altmeret Plange and Backscatter Quality Plange Plange Cocog Plange Plange and Backscatter Quality Plange Plange Cocog Plange Plange Altmeret Plange and Backscatter Quality Plange Plange Cocog Plange Plange and Backscatter Quality Plange Plange Cocog Plange Plange Plange Cocog Plange Coc	CS_OFFL_SIR_NOPM_2_20230309T035805_20230309T040226_C001		
and Backscatter Quality, COCG Allimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_NOPM_2_20230309T053331_20230309T053033_C001  CS_OFFL_SIR_NOPM_2_20230309T053331_20230309T054133_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T054337_20230309T056685_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T050685_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T070949_C001  CS_OFFL_SIR_NOPM_2_20230309T07458_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T07458_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071505_C001  Allimeter Range Quality, CCOG Backscatter Quality  CCOG Allimeter Range and Backscatter Quality Flags have been set for one or more records  CCOG Allimeter Range and Backscatter Quality Flags have been set for one or more records  CCOG Allimeter Range and Backscatter Quality Flags have been set for one or more records  CCOG Allimeter Ran	CS_OFFL_SIR_NOPM_2_20230309T040404_20230309T041110_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Allimeter Range and Backscatter Quality Flags have been Allimeter Range and Backscatter Quality Flags have been Allimeter Range and Backscatter Quality Flags have been Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags have been all Range and Backscatter Quality Flags and the OCGA Allimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_NOPM_2_20230309T051440_20230309T053033_C001  CS_OFFL_SIR_NOPM_2_20230309T053301_20230309T054133_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T054133_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T066535_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T060635_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T070949_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071231_20230309T0712555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T0712555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231	CS_OFFL_SIR_NOPM_2_20230309T041232_20230309T041906_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 altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality flags have been set for one or more records  CS_OFFL_SIR_NOPM_2_20230309T05331_20230309T054133_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T070949_C001  CS_OFFL_SIR_NOPM_2_20230309T07120_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071539_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071539_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071539_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071539_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071539_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071535_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071539_C001  CS_OFFL_SIR_NOPM_2_202	CS_OFFL_SIR_NOPM_2_20230309T042220_20230309T043529_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_NOPM_2_20230309T051440_20230309T053033_C001  CS_OFFL_SIR_NOPM_2_20230309T051440_20230309T053033_C001  CS_OFFL_SIR_NOPM_2_20230309T053301_20230309T054133_C001  CS_OFFL_SIR_NOPM_2_20230309T053301_20230309T054133_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T060635_C001  CS_OFFL_SIR_NOPM_2_20230309T064513_20230309T070949_C001  CS_OFFL_SIR_NOPM_2_20230309T064513_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071255_C001  CS_OFFL_SIR_NOPM_2_20230309T0712231_20230309T072255_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T07255	CS_OFFL_SIR_NOPM_2_20230309T045848_20230309T050447_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_NOPM_2_20230309T053301_20230309T054133_C001  CS_OFFL_SIR_NOPM_2_20230309T053301_20230309T054133_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T060635_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T060635_C001  CS_OFFL_SIR_NOPM_2_20230309T064513_20230309T070949_C001  CS_OFFL_SIR_NOPM_2_20230309T064513_20230309T070949_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071231_20230309T071939_C001  COGA Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_NOPM_2_20230309T071231_20230309T071939_C001  COGA Altimeter Range, SSHA, SWH And Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_NOPM_2_2	CS_OFFL_SIR_NOPM_2_20230309T050609_20230309T050833_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T060635_C001  CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T060635_C001  CS_OFFL_SIR_NOPM_2_20230309T064513_20230309T070949_C001  CS_OFFL_SIR_NOPM_2_20230309T064513_20230309T070949_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T0712555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T0	CS_OFFL_SIR_NOPM_2_20230309T051440_20230309T053033_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been  CS_OFFL_SIR_NOPM_2_20230309T064513_20230309T070949_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071231_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071231_20230309T0712555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001  And Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range Quality, OCOG Backscatter Quality  CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001	CS_OFFL_SIR_NOPM_2_20230309T053301_20230309T054133_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range Quality, OCOG Backscatter Quality  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071939_C001  CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071939_C001  OCOG Altimeter Range Quality, OCOG Backscatter 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  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPM_2_20230309T054337_20230309T060635_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001  Backscatter Quality  Gor 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 and Backscatter Quality Flags have been set for one or more records  The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPM_2_20230309T064513_20230309T070949_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  Backscatter Quality  for one or more records  Cs_OFFL_SIR_NOPM_2_20230309T071231_20230309T0712555_C001  Backscatter Quality  for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPM_2_20230309T071210_20230309T071403_C001		
CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPM_2_20230309T071458_20230309T071939_C001		
Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags	CS_OFFL_SIR_NOPM_2_20230309T072231_20230309T072555_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPM_2_20230309T072736_20230309T074859_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range	CS_OFFL_SIR_NOPM_2_20230309T072736_20230309T074859_C001		
CS_OFFL_SIR_NOPM_2_20230309T082122_20230309T084856_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_NOPM_2_20230309T082122_20230309T084856_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_NOPM_2_20230309T085417_20230309T090012_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_NOPM_2_20230309T090140_20230309T092303_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fl and the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T092306_20230309T092950_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality FI and the OCOG Altimeter Range and Backscatter Quality Flags have to set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T093903_20230309T094011_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Fland the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T095251_20230309T102757_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T103325_20230309T103844_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_NOPM_2_20230309T104016_20230309T104323_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T104522_20230309T104650_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T111622_20230309T111858_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T113253_20230309T114127_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T114413_20230309T120717_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T121213_20230309T121328_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_NOPM_2_20230309T121335_20230309T121742_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_NOPM_2_20230309T121916_20230309T123248_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality f and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T123436_20230309T124046_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T124230_20230309T124710_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T131152_20230309T134518_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T134718_20230309T135227_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_NOPM_2_20230309T135247_20230309T135545_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_NOPM_2_20230309T135835_20230309T140030_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T140328_20230309T143356_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T145357_20230309T150736_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T150849_20230309T152438_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPM_2_20230309T152620_20230309T153126_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_NOPM_2_20230309T153205_20230309T153331_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records
CS_OFFL_SIR_NOPM_2_20230309T154101_20230309T155105_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records

CS_OFFL_SIR_NOPM_2_20230309T155724_20230309T160853_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_20230309T163115_20230309T163119_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_20230309T163125_20230309T164712_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_20230309T164851_20230309T170338_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_20230309T170537_20230309T171038_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_20230309T171801_20230309T173814_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_20230309T173816_20230309T174102_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_20230309T174225_20230309T175051_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_20230309T181117_20230309T181118_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_20230309T182003_20230309T184309_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_20230309T184620_20230309T184955_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_20230309T185018_20230309T185332_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_20230309T185559_20230309T192117_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_20230309T195600_20230309T202229_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_20230309T202403_20230309T202910_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_20230309T203525_20230309T211006_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_20230309T213252_20230309T213841_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_20230309T215553_20230309T220225_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_20230309T220403_20230309T220944_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_20230309T221448_20230309T224852_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_20230309T232215_20230309T234155_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_20230309T234329_20230309T234839_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_20230309T235356_20230310T002835_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T025436_20230309T025535_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T040226_20230309T040404_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T093855_20230309T093903_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_NOPN_2_20230309T185012_20230309T185017_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230309T022441_20230309T022453_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230309T045033_20230309T045211_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230309T111327_20230309T111454_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230309T180354_20230309T180451_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230309T213143_20230309T213227_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

## L2 Quality Flags (20 Hz PLRM)

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20230309T000858_20230309T001218_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_20230309T003907_20230309T004235_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_20230309T022233_20230309T022441_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_20230309T034910_20230309T035510_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_20230309T035728_20230309T035805_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_20230309T040226_20230309T040404_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_20230309T044319_20230309T044408_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_20230309T044820_20230309T045033_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_20230309T045211_20230309T045428_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_20230309T051057_20230309T051440_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_20230309T054133_20230309T054327_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_20230309T060817_20230309T061142_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_20230309T062734_20230309T063224_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_20230309T071049_20230309T071210_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_20230309T074900_20230309T075004_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_20230309T090012_20230309T090140_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_20230309T103012_20230309T103325_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_20230309T103844_20230309T104001_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_20230309T110103_20230309T110247_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_20230309T111209_20230309T111218_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for ormore records
CS_OFFL_SIR_NOPN_2_20230309T111454_20230309T111622_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_NOPN_2_20230309T112914_20230309T112948_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 lest for one or more records
CS_OFFL_SIR_NOPN_2_20230309T113158_20230309T113202_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 Fl and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T120854_20230309T121213_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 Fl and the OCOG Altimeter Range and Backscatter Quality Flags have I set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T121742_20230309T121907_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T143420_20230309T143551_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 F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T143921_20230309T144018_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 F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T153331_20230309T153544_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 F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T155105_20230309T155211_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T161314_20230309T161615_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 F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T161719_20230309T161933_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 F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T170350_20230309T170537_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T171223_20230309T171715_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T184347_20230309T184620_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T185012_20230309T185017_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T195446_20230309T195600_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T203245_20230309T203416_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T211006_20230309T211205_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T211220_20230309T211345_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 F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T212123_20230309T212148_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T214415_20230309T214455_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for omore records
CS_OFFL_SIR_NOPN_2_20230309T220246_20230309T220403_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 F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records
CS_OFFL_SIR_NOPN_2_20230309T224937_20230309T225100_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 F and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records

OC OFFI OID NODN A COCCOCCATOROGA COCCOCCATOROGA COCC	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_20230309T225212_20230309T225230_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_20230309T234839_20230309T235146_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_20230309T000141_20230309T000338_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_20230309T011837_20230309T012016_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_20230309T013033_20230309T013434_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_20230309T023118_20230309T023201_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_20230309T033119_20230309T033332_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_20230309T041110_20230309T041232_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_20230309T043632_20230309T043719_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_20230309T044235_20230309T044319_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_20230309T045033_20230309T045211_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_20230309T045748_20230309T045847_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_20230309T050833_20230309T050925_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_20230309T060636_20230309T060816_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_20230309T063308_20230309T063513_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_20230309T064000_20230309T064148_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_20230309T070950_20230309T071049_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_20230309T080047_20230309T080219_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_20230309T080243_20230309T080759_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_20230309T093044_20230309T093249_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_20230309T093611_20230309T093812_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_20230309T094012_20230309T094124_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_20230309T094148_20230309T094946_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_20230309T112022_20230309T112914_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_20230309T120717_20230309T120854_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_20230309T130120_20230309T130841_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_20230309T131024_20230309T131051_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_20230309T144616_20230309T144736_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_20230309T145010_20230309T145017_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_20230309T145225_20230309T145357_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_20230309T153545_20230309T154101_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_20230309T155512_20230309T155724_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_20230309T160853_20230309T161038_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_20230309T161225_20230309T161314_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_20230309T162238_20230309T162619_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_20230309T175759_20230309T180319_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_20230309T193619_20230309T194626_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_20230309T203416_20230309T203525_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_20230309T211346_20230309T211826_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_20230309T211826_20230309T212030_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_20230309T212148_20230309T212635_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_20230309T213233_20230309T213241_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_20230309T215106_20230309T215553_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_20230309T230445_20230309T230832_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_20230309T231056_20230309T231416_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_20230309T235146_20230309T235356_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

#### L2 Quality Flags (1 Hz & 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:

## 5.7 L2 Ocean Retracking Quality Check

### L2 Retracking Flags (20 Hz)

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

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

Number of products with errors:

#### 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.

## 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	192	192	7	185	0
SIR_NOPR1B	151	151	0	151	0
SIR_NOPN1B	111	111	2	109	0
SIR_NOPM_2	192	192	128	64	0
SIR_NOPR_2	151	151	73	77	1
SIR NOPN 2	111	111	40	71	0

## 7.1 QCC Errors

#### Number of QCC reports with errors:

4

Total number of occurrences of each error
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Product Type	REOBOPINEDE	RL	REOBOPNEDE	RL.	-	-	-	-	-	-	-
SIR_NOPR_2	1	1	1	1							
	'		•		'					•	

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

1736

Total number of occurrences of each warning

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCI
SIR_NOPM1B	185	0	0	0	0	0	0
SIR_NOPM_2	0	0	40	45	0	42	0
SIR_NOPN1B	109	0	0	0	0	0	0
SIR_NOPN_2	0	0	13	25	6	29	32
SIR_NOPR1B	145	0	0	0	0	0	0
SIR NOPR 2	0	1	19	40	3	23	18

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCE	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	36	0	33	0	0	0	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	16	0	0	0	18	0	28
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	7	1	0	38	0	49	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	27	0	0	9	26	0	7
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	0	19	11	46	53	28
SIR_NOPR1B	0	0	0	0	0	0	0
SIR NOPR 2	0	39	0	1	54	31	10

	Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
ſ	SIR_NOPM1B	0	0	0	0	0	0	
	SIR_NOPM_2	37	0	3	0	0	0	
	SIR_NOPN1B	0	0	0	0	45	0	
	SIR_NOPN_2	27	26	11	2	0	0	
	SIR_NOPR1B	0	0	0	0	151	7	
	SIR NOPR 2	24	37	3	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	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean				
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				

RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF		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		The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
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:

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