

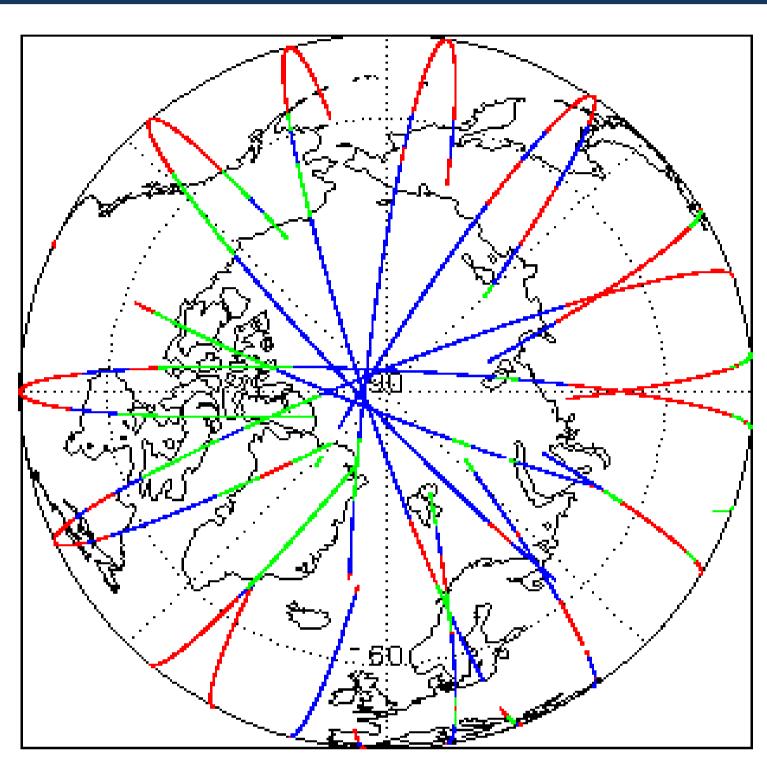
## 1. Overview

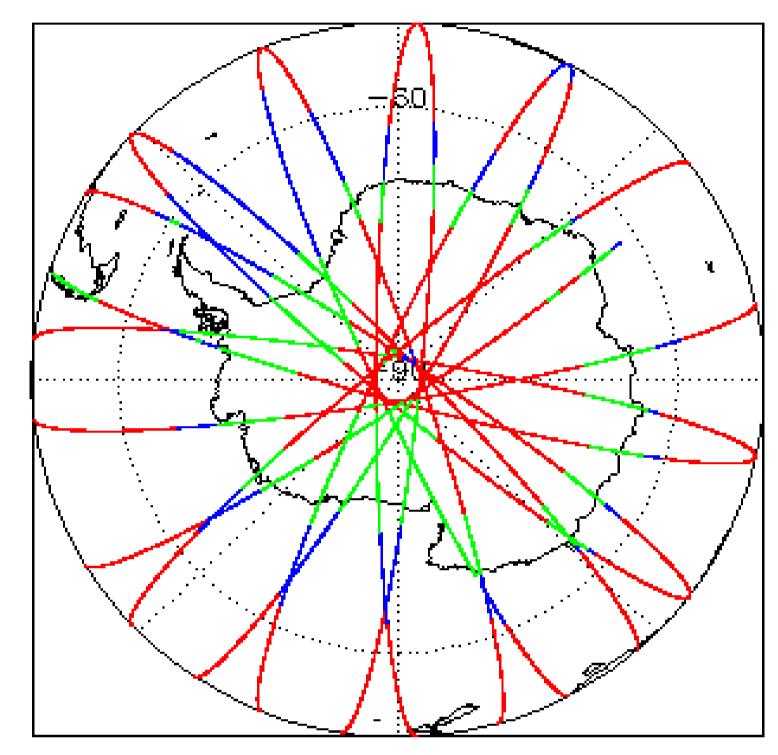
Report Production:	24-May-2021	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Near Real Time Ocean Products (NOP) L1B & L2 Science Data	

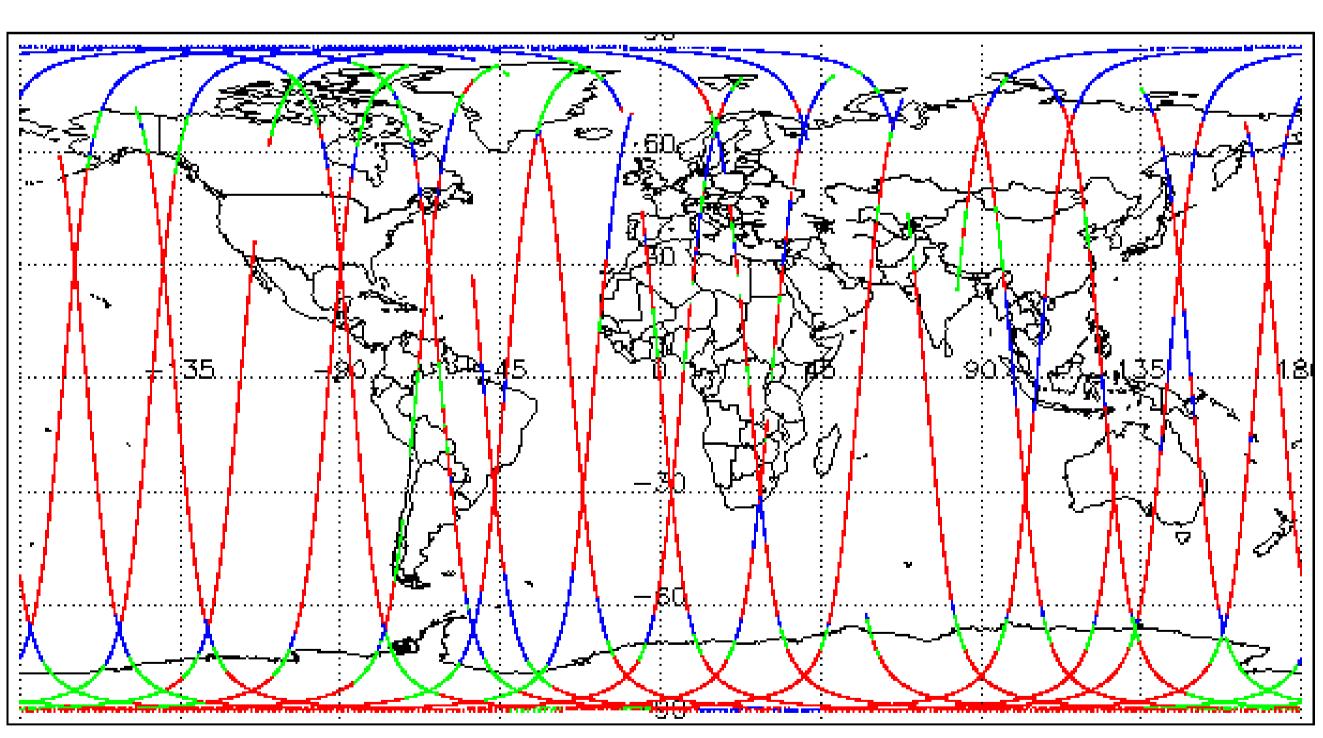
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement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

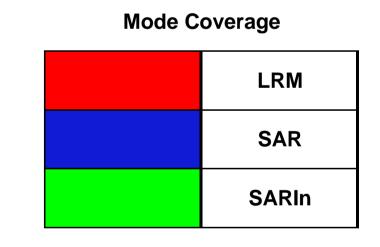
Mission / Instrument News		
22-May-2021	None	
23-May-2021	None	
24-May-2021	Nothing planned	

# 2. Global Coverage









# 3. Instrument Configuration

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

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

## 4. NOP Level 1B Data Quality Check

## 4.1 L1B Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL).

#### **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 IOPR and IOPN 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:** 

0

#### 4.5 L1B Measurement Confidence Data Check

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

> Attitude Correction Missing: This flag is currently set in error for NOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.

**Number of products with errors:** 

0

#### 4.6 L1B Waveform Group Data Check

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

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

**Number of products with errors:** 

19

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20210523T063453_20210523T063930_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210523T121756_20210523T122720_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210523T161605_20210523T164356_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210523T190224_20210523T190355_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210523T204315_20210523T204352_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210523T010023_20210523T010316_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210523T010403_20210523T010614_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210523T101424_20210523T101933_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210523T124423_20210523T124531_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210523T130643_20210523T131254_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210523T142340_20210523T142935_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210523T155832_20210523T155901_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210523T205552_20210523T205728_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210523T002229_20210523T002609_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210523T061723_20210523T061920_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210523T100253_20210523T100950_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210523T173257_20210523T173454_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210523T190943_20210523T191250_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210523T205729_20210523T210425_C001	Loss of Echo	The tracking echo is missing for one or more records

## 5. NOP Level 2 Data Quality Check

#### **5.1 L2 Product Format Check**

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL).

Number of products with errors:

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

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

**Number of products with errors:** 

7

Product	Test Failed
CS_OFFL_SIR_NOPR_2_20210523T043044_20210523T043256_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_NOPM_2_20210523T043256_20210523T043306_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_NOPN_2_20210523T043307_20210523T043345_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_NOPM_2_20210523T043346_20210523T043825_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_NOPN_2_20210523T043826_20210523T043931_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_NOPM_2_20210523T043932_20210523T044055_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_NOPM_2_20210523T044057_20210523T050901_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).

#### **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:

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### **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 Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update.
- > Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20210523T121756_20210523T122720_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_20210523T002006_20210523T002229_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_20210523T010403_20210523T010614_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_20210523T015015_20210523T015225_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_20210523T015908_20210523T020336_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_20210523T024046_20210523T024438_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_20210523T051925_20210523T052102_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_20210523T064933_20210523T065049_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_20210523T065622_20210523T065941_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_20210523T082853_20210523T083010_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_20210523T083519_20210523T083831_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20210523T100950_20210523T101225_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_20210523T101424_20210523T101933_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_20210523T110517_20210523T111011_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_20210523T114854_20210523T115132_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_20210523T124423_20210523T124531_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_20210523T131739_20210523T132211_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_20210523T142340_20210523T142935_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_20210523T151625_20210523T151850_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_20210523T160354_20210523T160759_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_20210523T164555_20210523T164737_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_20210523T174553_20210523T175000_C001	Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20210523T182605_20210523T182935_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_20210523T200518_20210523T200839_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_20210523T201353_20210523T201516_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_20210523T205552_20210523T205728_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_20210523T215254_20210523T215402_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_20210523T232955_20210523T233151_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_20210523T010614_20210523T011306_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_20210523T024438_20210523T024952_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_20210523T061723_20210523T061920_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_20210523T114345_20210523T114854_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20210523T123745_20210523T123955_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_20210523T155901_20210523T160354_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_20210523T173554_20210523T174553_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_20210523T191612_20210523T192445_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_20210523T205729_20210523T210425_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_20210523T223636_20210523T224351_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

### **5.5 L2 Measurement Confidence Data Check**

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

Number of products with errors:

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## 5.6 L2 Measurement Quality Flag Check

### L2 Quality Flags (20Hz)

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

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

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

**Number of products with errors:** 

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20210522T235535_20210523T001039_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_20210523T001306_20210523T001805_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_20210523T001844_20210523T002006_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_20210523T002716_20210523T003529_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_20210523T004407_20210523T005618_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_20210523T013501_20210523T014949_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_20210523T015225_20210523T015717_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_20210523T020416_20210523T023743_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_20210523T030501_20210523T030518_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_20210523T044057_20210523T050901_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_20210523T051050_20210523T051549_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_20210523T051557_20210523T051925_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_20210523T052306_20210523T055723_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_20210523T064239_20210523T064756_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_20210523T065049_20210523T065622_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_20210523T070241_20210523T073615_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_20210523T074923_20210523T075039_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_20210523T080850_20210523T082655_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_20210523T083010_20210523T083519_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_20210523T084128_20210523T091534_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_20210523T092927_20210523T092944_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_20210523T093959_20210523T094429_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_20210523T094515_20210523T100252_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_20210523T102138_20210523T103550_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_20210523T103712_20210523T103846_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_20210523T104328_20210523T105132_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_20210523T111037_20210523T112807_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_20210523T112942_20210523T114345_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_20210523T115437_20210523T115836_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_20210523T120034_20210523T121551_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_20210523T121756_20210523T122720_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_20210523T125403_20210523T130622_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_20210523T132212_20210523T132546_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_20210523T132936_20210523T133739_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_20210523T134014_20210523T135503_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_20210523T143155_20210523T150509_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_20210523T151053_20210523T151624_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_20210523T151955_20210523T154413_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_20210523T155446_20210523T155455_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_20210523T160759_20210523T160847_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

22 GHIL DA FRAM 3 201620110102 ADECRIFICATION CONTROL (1996) ADECR	CS_OFFL_SIR_NOPM_2_20210523T161605_20210523T164356_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
Comparison   Com	CS_OFFL_SIR_NOPM_2_20210523T164737_20210523T164842_C001	OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
DELIGNATION LEGISTERS AND RECEIPTION	CS_OFFL_SIR_NOPM_2_20210523T165025_20210523T165509_C001	-	
Date whether the special country and a sense of the country and a sense of	CS_OFFL_SIR_NOPM_2_20210523T175000_20210523T182250_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the decoder Country (1995)	CS_OFFL_SIR_NOPM_2_20210523T182936_20210523T183506_C001		
## Accordant Country    Count Airmoint Range_SSIR_SMI   The Ocean Airmoint Range_SSIR_SMI Part Range SSIR_SMI   The Ocean Airmoint Range_SSIR_SMI Part Range SSIR_SMI Part Ran	CS_OFFL_SIR_NOPM_2_20210523T183727_20210523T184255_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Badeacust Guisin, COOD Althreels Rings (1988), 2011 CS_OFF_SIR_VOPNI_2_80210532119261_20210532120030_CO01  CS_OFF_SIR_VOPNI_2_80210532119261_20210521212032_CO01  CS_OFF_SIR_VOPNI_2_80210532110352_20210521212032_CO01  CS_OFF_SIR_VOPNI_2_80210532100532_20210521212032_CO01  CS_OFF_SIR_VOPNI_2_80210532100532_202105212120332_CO01  CS_OFF_SIR_VOPNI_2_80210532100532_202105212120332_CO01  CS_OFF_SIR_VOPNI_2_80210532100532_202105212120332_CO01  CS_OFF_SIR_VOPNI_2_80210532100532_202105212120332_CO01  CS_OFF_SIR_VOPNI_2_80210532100532_202105212120332_CO01  CS_OFF_SIR_VOPNI_2_80210532100532_202105212120332_CO01  CS_OFF_SIR_VOPNI_2_80210532100532_20210521212034_CO01  CS_OFF_SIR_VOPNI_2_80210532101532_20210521212034_CO01  CS_OFF_SIR_VOPNI_2_80210532101532_202105212120352_CO01  CS_OFF_SIR_VOPNI_2_80210532101532_20210212120352_CO01  CS_OFF_SIR_VOPNI_2_8021053220	CS_OFFL_SIR_NOPM_2_20210523T184609_20210523T185412_C001	1	
CS_OFF_SIR_NOPW_2_202*0523790589_001*1532722355_COV  COOR_Minnets Pages Quality_COCQ Allineter Range and Backscatter Quality Page have been ast Database to Quality_COCQ Allineter Range and Backscatter Quality Page have been ast Database to Quality_COCQ Allineter Range and Backscatter Quality Page have been ast Database to Quality_COCQ Allineter Range and Backscatter Quality_COCQ Cocq Allineter Range and Backscatter Quality_COCQ Allineter Range and Backscatter Quality	CS_OFFL_SIR_NOPM_2_20210523T191402_20210523T191611_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Societation Cuality  CS_OFFI_SIR_NOPM_2_202*0523720538_202*0523720537_CO-  CS_OFFI_SIR_NOPM_2_202*0523720538_202*0523720537_CO-  CS_OFFI_SIR_NOPM_2_202*0523720538_202*0523720537_CO-  Almost Farage and Backerater Cuality, CO- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga and Device Co- Almost Farage and Backerater Cuality Faga have been and Device Cuality Faga have been and Dev	CS_OFFL_SIR_NOPM_2_20210523T192848_20210523T200230_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Raudscrotter Quality, COCG  GPTL SIR NOPM 2 20210527120338 202105237205347 0001  CS OFFL SIR NOPM 2 20210527120718 02010527120480 0001  CS OFFL SIR NOPM 2 202105271210718 02010527120480 0001  CS OFFL SIR NOPM 2 20210527121080 20210523721440 0001  CS OFFL SIR NOPM 2 20210527121080 20210523721440 0001  CS OFFL SIR NOPM 2 202105237210718 0201052721440 0001  CS OFFL SIR NOPM 2 20210523721080 20210523721409 0001  CS OFFL SIR NOPM 2 20210523721080 20210523721409 0001  CS OFFL SIR NOPM 2 20210523721400 0001  CS OFFL SIR NOPM 2 20210523721077 20210023722010 0001  CS OFFL SIR NOPM 2 2021052372077 20210023722010 0001  CS OFFL SIR NOPM 2 20210523720775 20210023720000 0001  CS OFFL SIR NOPM 2 20210523720775 20210523720000 0001  CS OFFL SIR NOPM 2 20210523720775 20210523720000 0001  CS OFFL SIR NOPM 2 20210523720775 20210523720000 0001  CS OFFL SIR NOPM 2 20210523720000 0001  CS O	CS_OFFL_SIR_NOPM_2_20210523T200839_20210523T201352_C001		
and the DOCG Altimeter Range and Backscatter Quality Flags have been altimeter Range Backscatter Quality Flags have been altimeter Range Backscatter Quality Flags have been altimeter Range and Backscatter Quality Flags have been altimeter Range Backscatter Quality Flags hav	CS_OFFL_SIR_NOPM_2_20210523T201650_20210523T203535_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPM_2_20210523T210716_20210523T214048_CO01  All moter Range and Backscatter Quality Flags have been after CS_OFFL_SIR_NOPM_2_20210523T214048_CO01  CS_OFFL_SIR_NOPM_2_20210523T214068_20210523T214048_CO01  CS_OFFL_SIR_NOPM_2_20210523T214068_20210523T214058_CO01  CS_OFFL_SIR_NOPM_2_20210523T214068_20210523T214058_CO01  CS_OFFL_SIR_NOPM_2_20210523T214068_20210523T214538_CO01  CS_OFFL_SIR_NOPM_2_20210523T214068_20210523T214538_CO01  CS_OFFL_SIR_NOPM_2_20210523T214068_20210523T215555_CO01  CS_OFFL_SIR_NOPM_2_20210523T214068_20210523T215555_CO01  CS_OFFL_SIR_NOPM_2_20210523T210523T223115_CO01  CS_OFFL_SIR_NOPM_2_20210523T2105025_CO01  CS_OFFL_SIR_NOPM_2_20210523T2105025_CO01  CS_OFFL_SIR_NOPM_2_20210523T220700_CO010525T223115_CO01  CS_OFFL_SIR_NOPM_2_20210523T220700_CO010525T223115_CO01  CS_OFFL_SIR_NOPM_2_20210523T220700_CO010525T223055_CO01  CS_OFFL_SIR_NOPM_2_20210523T220700_CO010525T223055_CO01  CS_OFFL_SIR_NOPM_2_20210523T230705_CO010525T23055_CO01  CS_OFFL_SIR_NOPM_2_20210523T230755_CO010525T23055_CO01  CS_OFFL_SIR_NOPM_2_20210523T230755_CO010525T23055_CO01  CS_OFFL_SIR_NOPM_2_20210523T230755_CO010525T23055_CO01  CS_OFFL_SIR_NOPM_2_20210523T230755_CO010525T23055_CO01  CS_OFFL_SIR_NOPM_2_20210523T230755_CO010525T23055_CO01  CS_OFFL_SIR_NOPM_2_20210523T230755_CO010525T23055_CO01  CS_OFFL_SIR_NOPM_2_20210523T23055_CO010525T23055_CO01  CS_OFFL_SIR_NOPM_2_20210523T23055_CO010525T23055_CO01  CS_OFFL_SIR_NOPM_2_20210523T23055_CO010525T23055_CO0105	CS_OFFL_SIR_NOPM_2_20210523T205336_20210523T205347_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 20210523T214823 20210523T215253 C001  CS OFFL SIR NOPM 2 20210523T214828 20210523T215253 C001  CS OFFL SIR NOPM 2 20210523T214828 20210523T215253 C001  CS OFFL SIR NOPM 2 20210523T214828 20210523T215253 C001  CS OFFL SIR NOPM 2 20210523T216707 20210523T223115 C001  CS OFFL SIR NOPM 2 20210523T216707 20210523T223115 C001  CS OFFL SIR NOPM 2 20210523T216707 20210523T223115 C001  CS OFFL SIR NOPM 2 20210523T224740 20210523T225319 C001  CS OFFL SIR NOPM 2 20210523T220301 20210523T225659 C001  CS OFFL SIR NOPM 2 20210523T220301 20210523T225659 C001  CS OFFL SIR NOPM 2 20210523T230301 20210523T225055 C001  CS OFFL SIR NOPM 2 20210523T230301 20210523T23025 C001  CS OFFL SIR NOPM 2 20210523T230303 20210523T23035 2000000000000000000000000000000000	CS_OFFL_SIR_NOPM_2_20210523T210716_20210523T212748_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_NOPM_2_20210523T214858_20210523T215253_C001  CS_OFFL_SIR_NOPM_2_20210523T215707_20210523T223115_C001  CS_OFFL_SIR_NOPM_2_20210523T215707_20210523T223115_C001  CS_OFFL_SIR_NOPM_2_20210523T215707_20210523T223115_C001  CS_OFFL_SIR_NOPM_2_20210523T224740_20210523T225819_C001  CS_OFFL_SIR_NOPM_2_20210523T220059_C001  CS_OFFL_SIR_NOPM_2_20210523T230301_20210523T220059_C001  CS_OFFL_SIR_NOPM_2_20210523T230301_20210523T230059_C001  CS_OFFL_SIR_NOPM_2_20210523T230301_20210523T230505_C001  CS_OFFL_SIR_NOPM_2_20210523T230301_20210523T230519_C001  CS_OFFL_SIR_NOPM_2_20210523T230303_20210523T230519_C001  CS_OFFL_SIR_NOPM_2_20210523T230333_20210523T200514_C0001  CCS_OFFL_SIR_NOPM_2_20210523T205235333_20210523T010316_C001  CCS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CCS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CCS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CCS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CCS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CCS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CCS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CCS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CCS_OFFL_SIR_NOPM_2_20210523T0100	CS_OFFL_SIR_NOPM_2_20210523T212806_20210523T214049_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS OFFL SIR NOPM 2 20210523T215707 20210523T223115 CO01  CS OFFL SIR NOPM 2 20210523T224740 20210523T225119 CO01  CS OFFL SIR NOPM 2 20210523T224740 20210523T225819 CO01  CS OFFL SIR NOPM 2 20210523T224740 20210523T225819 CO01  CS OFFL SIR NOPM 2 20210523T224740 20210523T225819 CO01  CS OFFL SIR NOPM 2 20210523T224740 20210523T230559 CO01  CS OFFL SIR NOPM 2 20210523T230301 20210523T230559 CO01  CS OFFL SIR NOPM 2 20210523T230301 20210523T230559 CO01  CS OFFL SIR NOPM 2 20210523T230301 20210523T230559 CO01  CS OFFL SIR NOPM 2 20210523T230755 20210523T230255 CO01  CS OFFL SIR NOPM 2 20210523T230755 20210523T232025 CO01  CS OFFL SIR NOPM 2 20210523T230755 20210523T232025 CO01  CS OFFL SIR NOPM 2 20210523T230351 20210523T2320750 CO01  CS OFFL SIR NOPM 2 20210523T230351 20210523T2320750 CO01  CS OFFL SIR NOPM 2 20210523T230351 20210523T2320750 CO01  CS OFFL SIR NOPM 2 20210523T230351 20210523T230750 CO01  CS OFFL SIR NOPM 2 20210523T230351 20210523T230750 CO01  CS OFFL SIR NOPM 2 20210523T230353 20210523T230750 CO01  CS OFFL SIR NOPM 2 20210523T230353 20210523T230750 CO01  CS OFFL SIR NOPM 2 20210523T230353 20210523T03016 CO01  CS OFFL SIR NOPM 2 20210523T230353 20210523T03016 CO01  CS OFFL SIR NOPM 2 20210523T205333 20210523T03016 CO01  CS OFFL SIR NOPM 2 20210523T00033 20210523T010316 CO01  CS OFFL SIR NOPM 2 20210523T00033 20210523T010316 CO01  CS OFFL SIR NOPM 2 20210523T010033 20210523T010316 CO01  CS OFFL SIR NOPM 2 20210523T010033 20210523T010316 CO01  CS OFFL SIR NOPM 2 20210523T010337 20210523T010316 CO01  CS OFFL SIR NOPM 2 20210523T010337 20210523T010316 CO01  CS OFFL SIR NOPM 2 20210523T010313 CO01  CS OFFL SIR NOPM 2 20210523T010316 CO01  CS OFFL SIR NOPM 2 20	CS_OFFL_SIR_NOPM_2_20210523T214423_20210523T214839_C001		
and Backscatter Quality, COG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Altimeter Range and Backscatter Quality Backscatter Quality Altimeter Range and Backscatter Quality Backscatter Q	CS_OFFL_SIR_NOPM_2_20210523T214858_20210523T215253_C001	_	
S. OFFL_SIR_NOPM_2_20210523T224740_20210523T225819_C001  and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20210523T230301_20210523T230559_C001  CS_OFFL_SIR_NOPM_2_20210523T230755_20210523T23025_C001  CS_OFFL_SIR_NOPM_2_20210523T230755_20210523T232025_C001  CS_OFFL_SIR_NOPM_2_20210523T230755_20210523T232025_C001  CS_OFFL_SIR_NOPM_2_20210523T233815_20210523T232739_C001  CS_OFFL_SIR_NOPM_2_20210523T233815_20210523T235119_C001  CS_OFFL_SIR_NOPM_2_20210523T233815_20210523T235119_C001  CS_OFFL_SIR_NOPM_2_20210523T235333_20210524T000614_C001  CS_OFFL_SIR_NOPM_2_20210523T235333_20210524T000614_C001  CS_OFFL_SIR_NOPM_2_20210523T0003_20210523T010016_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010016_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010016_C	CS_OFFL_SIR_NOPM_2_20210523T215707_20210523T223115_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
S. OFFL_SIR_NOPM_2_20210523T230301_20210523T230659_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean 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.  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.  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.  Ocean Altimeter Range and Backscatter Quality Flags have be	CS_OFFL_SIR_NOPM_2_20210523T224740_20210523T225819_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_20210523T232221_20210523T232739_C001  CS_OFFL_SIR_NOPM_2_20210523T232221_20210523T232739_C001  CS_OFFL_SIR_NOPM_2_20210523T233815_20210523T235119_C001  CS_OFFL_SIR_NOPM_2_20210523T233815_20210523T235119_C001  CS_OFFL_SIR_NOPM_2_20210523T233815_20210523T235119_C001  CS_OFFL_SIR_NOPM_2_20210523T235333_20210524T000614_C001  CS_OFFL_SIR_NOPM_2_20210523T235333_20210524T000614_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T024952_20210523T025025_C001  CS_OFFL_SIR_NOPM_2_20210523T024952_20210523T025025_C001  CS_OFFL_SIR_NOPM_2_20210523T043377_20210523T043345_C001  COOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20210523T04952_20210523T025025_C001  CS_OFFL_SIR_NOPM_2_20210523T043377_20210523T025025_C001  CS_OFFL_SIR_NOPM_2_20210523T043377_20210523T043345_C001  COOG Altimeter Range Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20210523T043377_20210523T025025_C001  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags ha	CS_OFFL_SIR_NOPM_2_20210523T230301_20210523T230659_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_NOPM_2_20210523T233815_20210523T235119_C001  CS_OFFL_SIR_NOPM_2_20210523T233815_20210523T235119_C001  CS_OFFL_SIR_NOPM_2_20210523T235333_20210523T00614_C001  CS_OFFL_SIR_NOPM_2_20210523T235333_20210524T000614_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T025025_C001  CS_OFFL_SIR_NOPM_2_20210523T024952_20210523T025025_C001  CS_OFFL_SIR_NOPM_2_20210523T043307_20210523T043345_C001  CCean 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 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 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_NOPN_2_20210523T043307_20210523T043345_C001  CCGA Altimeter Range Quality, OCOG  Altimeter Range Altimeter Range and Backscatter Quality Flags hav	CS_OFFL_SIR_NOPM_2_20210523T230755_20210523T232025_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  CS_OFFL_SIR_NOPM_2_20210523T235333_20210524T000614_C001  CS_OFFL_SIR_NOPM_2_20210523T235333_20210524T000614_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPM_2_20210523T024952_20210523T025025_C001  CS_OFFL_SIR_NOPM_2_20210523T024952_20210523T025025_C001  CS_OFFL_SIR_NOPM_2_20210523T024952_20210523T025025_C001  CS_OFFL_SIR_NOPM_2_20210523T0243307_20210523T043345_C001  CS_OFFL_SIR_NOPM_2_20210523T043307_20210523T043345_C001  CS_OFFL_SIR_NOPM_2_20210523T043345_C001  CS_OFFL_SIR_NOPM_2_20210523T043345_C001  CS_OFFL_SIR_NOPM_2_20210523T043345_C001  CS_OFFL_SIR_NOPM_2_20210523T043307_20210523T043345_C001  CS_OFFL_SIR_NOPM_2_20210523T043345_C001  CS_OFFL_SIR_NOPM_2	CS_OFFL_SIR_NOPM_2_20210523T232221_20210523T232739_C001		
CS_OFFL_SIR_NOPM_2_20210523T235333_20210524T000614_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  CS_OFFL_SIR_NOPN_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPN_2_20210523T010023_20210523T010316_C001  CS_OFFL_SIR_NOPN_2_20210523T024952_20210523T025025_C001  CS_OFFL_SIR_NOPN_2_20210523T024952_20210523T025025_C001  and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPN_2_20210523T043307_20210523T043345_C001	CS_OFFL_SIR_NOPM_2_20210523T233815_20210523T235119_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPN_2_20210523T010023_20210523T010316_C001  and Backscatter Quality, 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 the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG Altimeter Range Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_NOPM_2_20210523T235333_20210524T000614_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPN_2_20210523T024952_20210523T025025_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range	CS_OFFL_SIR_NOPN_2_20210523T010023_20210523T010316_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
US OFFI SIR NOPN / 202105231043307 202105231043345 C001	CS_OFFL_SIR_NOPN_2_20210523T024952_20210523T025025_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_NOPN_2_20210523T043307_20210523T043345_C001	•	

CS_OFFL_SIR_NOPN_2_20210523T043826_20210523T043931_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_20210523T124423_20210523T124531_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_20210523T130622_20210523T130629_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_20210523T132718_20210523T132936_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_20210523T155832_20210523T155901_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_20210523T164842_20210523T165025_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_20210523T190047_20210523T190049_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_20210523T014949_20210523T015014_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_20210523T063931_20210523T064238_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_20210523T103846_20210523T104327_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_20210523T142936_20210523T143155_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 (20Hz PLRM)

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

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

Number of products with errors: 80

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20210523T001124_20210523T001306_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_20210523T003811_20210523T003824_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_20210523T004101_20210523T004407_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_20210523T010403_20210523T010614_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_20210523T015015_20210523T015225_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_20210523T015908_20210523T020336_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_20210523T024046_20210523T024438_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_20210523T051925_20210523T052102_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_20210523T055932_20210523T060038_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_20210523T062425_20210523T062448_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_20210523T062817_20210523T062927_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20210523T075515_20210523T075545_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_20210523T080701_20210523T080850_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_20210523T083519_20210523T083831_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_20210523T101424_20210523T101933_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_20210523T110517_20210523T111011_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_20210523T122720_20210523T122959_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_20210523T124423_20210523T124531_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_20210523T124635_20210523T124753_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_20210523T130622_20210523T130629_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_20210523T130643_20210523T131254_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_20210523T131739_20210523T132211_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_20210523T132633_20210523T132643_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_20210523T132718_20210523T132936_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_20210523T133740_20210523T133928_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_20210523T140450_20210523T140826_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_20210523T142340_20210523T142935_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_20210523T150628_20210523T150815_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_20210523T151023_20210523T151052_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_20210523T160354_20210523T160759_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_20210523T165624_20210523T165746_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_20210523T182605_20210523T182935_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_20210523T183507_20210523T183623_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_20210523T185412_20210523T185532_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_20210523T191259_20210523T191402_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_20210523T192446_20210523T192635_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_20210523T200518_20210523T200839_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_20210523T205552_20210523T205728_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.

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CS_OFFL_SIR_NOPN_2_20210523T232955_20210523T233151_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_20210523T002229_20210523T002610_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_20210523T005859_20210523T010022_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_20210523T010614_20210523T011306_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_20210523T012647_20210523T013501_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_20210523T023743_20210523T023939_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_20210523T024438_20210523T024952_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_20210523T025026_20210523T025151_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_20210523T043044_20210523T043256_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_20210523T052102_20210523T052306_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_20210523T061057_20210523T061335_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_20210523T061723_20210523T061920_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_20210523T062026_20210523T062204_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_20210523T075213_20210523T075509_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_20210523T082656_20210523T082853_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_20210523T091535_20210523T091659_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_20210523T100253_20210523T100950_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_20210523T105133_20210523T105526_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_20210523T105757_20210523T105923_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_20210523T112808_20210523T112941_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_20210523T114345_20210523T114854_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_20210523T123745_20210523T123955_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_20210523T135942_20210523T140319_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_20210523T142936_20210523T143155_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_20210523T150510_20210523T150627_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_20210523T155456_20210523T155711_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_20210523T155901_20210523T160354_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_20210523T164357_20210523T164555_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_20210523T173554_20210523T174553_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_20210523T182250_20210523T182605_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_20210523T184255_20210523T184608_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_20210523T190943_20210523T191250_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_20210523T191612_20210523T192445_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_20210523T204353_20210523T204423_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_20210523T205347_20210523T205552_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_20210523T205729_20210523T210425_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_20210523T210555_20210523T210716_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_20210523T215403_20210523T215707_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_20210523T223636_20210523T224351_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_20210523T230659_20210523T230754_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_20210523T233151_20210523T233814_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_20210523T235119_20210523T235333_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 & 1Hz PLRM)

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

163

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

Number of products with errors:

### 5.7 L2 Ocean Retracking Quality Check

### L2 Retracking Flags (20Hz)

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

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

Number of products with errors: 60

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

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

Ocean Retracking Quality Flag (PLRM): This flag is currently set for products NOPR and NOPN products over sea ice, but this is to be expected.

Number of products with errors: 128

## 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	133	133	3	130	0
SIR_NOPR1B	96	96	0	96	0
SIR_NOPN1B	94	94	1	92	1
SIR_NOPM_2	133	133	86	43	4
SIR_NOPR_2	96	96	23	70	3
SIR_NOPN_2	94	94	36	55	3

Number of QCC reports with errors:

22

#### Total number of occurrences of each error

					. • • • • • • • • • • • • • • • • • • •		J. J				
<b>Product Type</b>	EOVSNCDF	MPHSVSNCDF	RLOBOPNCDF	RL	RL	RLOBOPNCDF	RL	RL	ISSOPOBHRN(	-	-
SIR_NOPM_2	4	4	0	0	0	0	0	0	0		
SIR_NOPN1B	0	0	0	0	0	0	0	0	1		
SIR_NOPN_2	2	2	1	1	1	1	1	1	0		
SIR_NOPR_2	1	1	2	0	2	2	0	2	0		

Test Description Key:							
Abbreviation	Test name	Details					
EOVSNCDF	EnumOrbitVectorSourceNetCDF	Orbit vector source should match one of the allowed enumeration values - NetCDF					
MPHSVSNCDF	MPH_State_Vector_Source_NetCDF	State_Vector_Source mismatch					
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7 - NetCDF					
RL	RangeLatitude_6	Latitude should be between -90E6 and 90E6					
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7					
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7 - NetCDF					
RL	RangeLongitude_6	Longitude should be between -180E6 and 180E6					
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7					

## 7.2 QCC Warnings

Number of QCC reports with warnings

	Total Hamber of Occarrences of each warming							
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCI	
SIR_NOPM1B	130	0	0	0	0	0	0	
SIR_NOPM_2	0	0	35	38	0	35	0	
SIR_NOPN1B	91	0	0	0	0	0	0	
SIR_NOPN_2	0	1	9	27	4	21	23	
SIR_NOPR1B	90	0	0	0	0	0	0	
SIR_NOPR_2	0	2	37	48	0	30	22	

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMS	SARNCE RPEPOPFDF	LRMSINNCDIRPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	32	0	31	0	0	0	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	16	0	0	0	15	0	27
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	14	2	0	48	0	55	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	28	0	0	4	18	0	3
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	0	24	20	35	49	26
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	0	47	0	2	61	38	7

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
SIR_NOPM1B	0	0	0	0	0	0	
SIR_NOPM_2	33	0	4	0	0	0	
SIR_NOPN1B	0	0	0	0	40	0	
SIR_NOPN_2	23	24	10	1	0	0	
SIR_NOPR1B	0	0	0	0	96	3	
SIR_NOPR_2	37	51	1	3	0	0	

Test Description Key:		
Abbreviation	Test name	Details
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
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: