

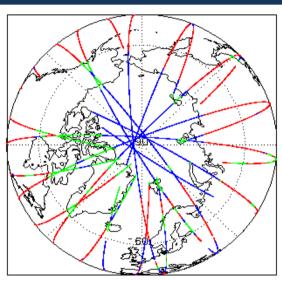
# 1. Overview

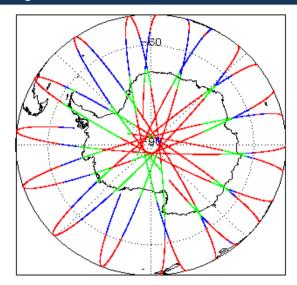
Report Production:	12-Nov-2021
•	
Processor Used:	CryoSat Ocean Processor
Data Used:	Near Real Time Ocean Products (NOP) L1B & L2 Science Data

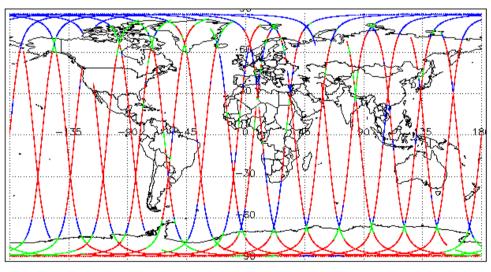
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement Confidence Data Check	See Section 4.5, 4.6 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 / Instr	ument News
10-Nov-2021	None
11-Nov-2021	None
12-Nov-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

#### 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:

15

Power scaling error  Power scaling error  Power scaling error  Power scaling error  There is an error in the scaling of the L1B waveform for one or more records  There is an error in the scaling of the L1B waveform for one or more records  There is an error in the scaling of the L1B waveform for one or more records  There is an error in the scaling of the L1B waveform for one or more records  There is an error in the scaling of the L1B waveform for one or more records  There is an error in the scaling of the L1B waveform for one or more records  There is an error in the scaling of the L1B waveform for one or more records  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected	Product	Test Failed	Description
Power scaling error  CS_OFFL_SIR_NOPM1B_20211111T083028_20211111T083311_C001  Power scaling error  There is an error in the scaling of the L1B waveform for one or more records  CS_OFFL_SIR_NOPR1B_20211111T212742_20211111T213513_C001  Attitude correction missing  The attitude has not been corrected  CS_OFFL_SIR_NOPR1B_20211111T213538_20211111T213647_C001  Attitude correction missing  The attitude has not been corrected  CS_OFFL_SIR_NOPR1B_20211111T214427_20211111T214623_C001  Attitude correction missing  The attitude has not been corrected  CS_OFFL_SIR_NOPR1B_20211111T214427_20211111T214623_C001  Attitude correction missing  The attitude has not been corrected  CS_OFFL_SIR_NOPR1B_20211111T214731_20211111T214910_C001  Attitude correction missing  The attitude has not been corrected  CS_OFFL_SIR_NOPR1B_20211111T220644_20211111T220945_C001  Attitude correction missing  The attitude has not been corrected  CS_OFFL_SIR_NOPR1B_20211111T22107_20211111T221638_C001  Attitude correction missing  The attitude has not been corrected  CS_OFFL_SIR_NOPR1B_20211111T222646_20211111T223046_C001  Attitude correction missing  The attitude has not been corrected  CS_OFFL_SIR_NOPR1B_20211111T231533_20211111T231626_C001  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPM1B_20211111T044140_20211111T044926_C001	Power scaling error	
Power scaling error records  CS_OFFL_SIR_NOPR1B_20211111T212742_20211111T213513_C001  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPM1B_202111111T051125_202111111T051430_C001	Power scaling error	
Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPM1B_202111111T083028_202111111T083311_C001	Power scaling error	
Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_202111111T212742_20211111T213513_C001	Attitude correction missing	The attitude has not been corrected
Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_20211111T213538_20211111T213647_C001	Attitude correction missing	The attitude has not been corrected
Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_20211111T213912_20211111T214030_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_NOPR1B_20211111T220644_20211111T220945_C001  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_20211111T214427_20211111T214623_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_NOPR1B_20211111T221107_20211111T221638_C001  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_20211111T214731_20211111T214910_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_NOPR1B_20211111T222646_20211111T223046_C001  Attitude correction missing  The attitude has not been corrected  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_20211111T220644_20211111T220945_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_NOPR1B_20211111T231533_20211111T231626_C001  Attitude correction missing  The attitude has not been corrected  The attitude has not been corrected  The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_20211111T221107_20211111T221638_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_NOPR1B_20211111T231923_20211111T232214_C001  Attitude correction missing  The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_20211111T222646_20211111T223046_C001	Attitude correction missing	The attitude has not been corrected
· · ·	CS_OFFL_SIR_NOPR1B_20211111T231533_20211111T231626_C001	Attitude correction missing	The attitude has not been corrected
S OFFL SIR NOPR1B 20211111T232430 20211111T232644 C001 Attitude correction missing The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_20211111T231923_20211111T232214_C001	Attitude correction missing	The attitude has not been corrected
	CS_OFFL_SIR_NOPR1B_20211111T232430_20211111T232644_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_NOPR1B_20211111T235142_20211111T235600_C001 Attitude correction missing The attitude has not been corrected	CS_OFFL_SIR_NOPR1B_20211111T235142_20211111T235600_C001	Attitude correction missing	The attitude has not been corrected

#### 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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20211111T010006_20211111T012609_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20211111T083028_20211111T083311_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20211111T095301_20211111T095400_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20211111T110913_20211111T111054_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20211111T125635_20211111T130041_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20211111T131011_20211111T131021_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20211111T161111_20211111T162727_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20211111T173159_20211111T180537_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20211111T032803_20211111T032923_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20211111T064129_20211111T064615_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20211111T231440_20211111T231533_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20211111T231745_20211111T231906_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20211111T094441_20211111T094618_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20211111T105338_20211111T105909_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20211111T113347_20211111T114504_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20211111T131506_20211111T132233_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_202111111T221107_202111111T221638_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).

#### 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:

#### 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:

Product

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 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.

Description

Test Failed

- > 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: 43

CS_OFFL_SIR_NOPM_2_20211111T063247_20211111T063338_C001  CS_OFFL_SIR_NOPM_2_20211111T161110_20211111T162727_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_NOPM_2_20211111T161110_20211111T162727_C001		1 3 1 7 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20211111T004655_20211111T004957_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_20211111T005254_20211111T005633_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_20211111T014825_20211111T014912_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_20211111T022733_20211111T023007_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_20211111T032241_20211111T032400_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_20211111T040311_20211111T040849_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_20211111T050215_20211111T050424_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_20211111T050527_20211111T050756_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_20211111T054458_20211111T054633_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_20211111T055524_20211111T055727_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_20211111T064129_20211111T064615_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_20211111T073315_20211111T073541_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_20211111T090413_20211111T090804_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric 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_20211111T095438_20211111T095535_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_20211111T104358_20211111T104711_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_20211111T105226_20211111T105337_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_20211111T122126_20211111T122546_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_20211111T123129_20211111T123249_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_20211111T131056_20211111T131324_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20211111T140906_20211111T141053_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_20211111T145309_20211111T145406_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_20211111T154712_20211111T154935_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_20211111T163105_20211111T163316_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_20211111T171719_20211111T171933_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_20211111T180748_20211111T181140_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_20211111T185737_20211111T190009_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_20211111T190730_20211111T190913_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_202111111T204631_202111111T204808_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_20211111T221639_20211111T221756_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_202111111T235600_20211111T235716_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_202111111T081358_202111111T082200_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_20211111T094441_20211111T094618_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_20211111T095535_20211111T100325_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_20211111T113347_20211111T114504_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_20211111T131506_20211111T132233_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_20211111T145407_20211111T145942_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_20211111T163317_20211111T164009_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_20211111T181140_20211111T181653_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_20211111T194927_20211111T195715_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_20211111T212742_20211111T213513_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_20211111T214427_20211111T214623_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_20211111T044140_20211111T044926_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_NOPM_2_20211111T051124_20211111T051430_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_NOPM_2_202111111T083028_20211111T0833311_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 (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: 9

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20211111T000541_20211111T001024_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_20211111T001753_20211111T002245_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_20211111T002557_20211111T003058_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_20211111T003246_20211111T004259_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_20211111T010006_20211111T012609_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_20211111T012748_20211111T013356_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_20211111T014808_20211111T014824_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_20211111T014912_20211111T015603_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_20211111T015617_20211111T022032_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_20211111T023428_20211111T023649_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_202111111T023925_20211111T024337_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_20211111T024429_20211111T030601_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_202111111T032400_20211111T032802_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_20211111T032923_20211111T034447_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_202111111T035347_20211111T040311_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_20211111T041144_20211111T041608_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_20211111T041834_20211111T043252_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_20211111T043431_20211111T044008_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_20211111T044929_20211111T044932_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_20211111T051124_20211111T051430_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_20211111T051446_20211111T051835_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_20211111T051958_20211111T054303_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_20211111T054634_20211111T055523_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_20211111T055821_20211111T062123_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_202111111T065702_202111111T072155_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_202111111T072602_202111111T072743_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_202111111T072848_20211111T073314_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_20211111T073800_20211111T080423_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_202111111T083028_20211111T083311_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_202111111T083427_20211111T085955_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_20211111T090804_20211111T091353_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_20211111T091718_20211111T093103_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_20211111T093510_20211111T094107_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_202111111T095300_20211111T095400_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_20211111T100630_20211111T104007_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_20211111T104712_20211111T105225_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_20211111T105909_20211111T110233_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_20211111T110913_20211111T111054_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_20211111T112940_20211111T113346_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_20211111T114504_20211111T115517_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_20211111T115803_20211111T121918_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_20211111T122720_20211111T123128_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_20211111T123636_20211111T124634_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_20211111T124822_20211111T125539_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_20211111T125635_20211111T130041_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_20211111T132247_20211111T132250_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_20211111T132631_20211111T133128_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_20211111T133225_20211111T135818_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_20211111T140045_20211111T140612_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_20211111T141714_20211111T142943_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_20211111T143006_20211111T144730_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_20211111T150351_20211111T150409_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_20211111T150857_20211111T152038_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_20211111T152242_20211111T153749_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_20211111T154013_20211111T154510_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_20211111T154550_20211111T154711_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_20211111T155419_20211111T160220_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_20211111T161110_20211111T162727_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_20211111T164009_20211111T164403_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
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Company			
Description Coality	CS_OFFL_SIR_NOPM_2_20211111T170207_20211111T171625_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
66 GPT- SR NOPM 2 2011111110502 201111110502 2010  67 GPT- SR NOPM 2 2011111110502 201111110502 2010  67 GPT- SR NOPM 2 2011111110502 201111110502 2010  68 GPT- SR NOPM 2 2011111110502 201111110502 2010  68 GPT- SR NOPM 2 2011111110502 201111110502 2010  69 GPT- SR NOPM 2 2011111110502 201111110502 2010  60 GPT- SR NOPM 2 2011111110500 201111110502 2010  60 GPT- SR NOPM 2 2011111110500 201111110500 2010  60 GPT- SR NOPM 2 2011111110500 201111110500 201111110500 201111110500 2010  60 GPT- SR NOPM 2 2011111110500 2011111110500 2011111110500 2011111110500 2011111110500 2011111110500 2011111110500 2011111110500 2011111105	CS_OFFL_SIR_NOPM_2_20211111T171934_20211111T172424_C001		
Company   Comp	CS_OFFL_SIR_NOPM_2_20211111T173159_20211111T180537_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
De COPTL. SR. NOPM_2_32211111780001_20211117193040_0001  De COPTL. SR. NOPM_2_32211111780411_20211117193040_0001  DE COPTL. SR. NOPM_2_32211111780411_20211117193040_0001  DE COPTL. SR. NOPM_2_3221111780401_20211117193040_0001  DE COPTL. SR. NOPM_2_3221111780401_20211117130401_0001  DE COPTL. SR. NOPM_2_322111179110_20211117130401_0001  DE COPTL. SR. NOPM_2_3221111704010_20211117130401_0001  DE COPTL. SR. NOPM_2_3221111704010_20211117130401_0001  DE COPTL. SR. NOPM_2_3221111704010_20211117130401_0001  DE COPTL. SR. NOPM_2_3221111704001_20211117130401_0001  DE COPTL. SR. NOPM_2_3221111704001_20211117130401_0001  DE COPTL. SR. NOPM_2_3221111704001_20211117130401_0001  DE COPTL. SR. NOPM_2_322111171204001_20211117130401_0001  DE COPTL. SR. NOPM_2_322111171204001_2021111730401_0001  DE COPTL. SR. NOPM_2_322111171204001_2021111730401_0001  DE COPTL. SR. NOPM_2_322111171204001_0001  DE COPTL. SR. NOPM_2_32211117204001_0001  DE COPTL. SR. NOPM_2_322111172	CS_OFFL_SIR_NOPM_2_20211111T182516_20211111T182522_C001		
CR. DPR. SR. NOPM_2_30211117100112_002111171100310_0001   CR. DPR. SR. NOPM_2_30211117100112_00011_000111117100310_0001   CR. DPR. SR. NOPM_2_30211117100112_00011117100310_00011   CR. DPR. SR. NOPM_2_30211117100310_00011117100310_00011   CR. DPR. SR. NOPM_2_30211117100310_00011   CR. DPR. SR. NOPM_2_30211117100310_00011   CR. DPR. SR. NOPM_2_302111171003024_000111171200329_00011   CR. DPR. SR. NOPM_2_302111171003024_000111171200329_00011   CR. DPR. SR. NOPM_2_302111171003024_000111171200329_00011   CR. DPR. SR. NOPM_2_302111171200329_00011   CR. DPR. SR. NOPM_2_302111171200329_00011171200329_00011   CR. DPR. SR. NOPM_2_302111171200329_00011171200329_00011171200329_00011171200329_00011171200329_00011171200329_00011171200329_00011171200329_00011171200329_00011171200329_00011171200329_00011171200329_00011171200329_00011171200329_000117117200329_00011171200329_00011717200329_000	CS_OFFL_SIR_NOPM_2_20211111T183230_20211111T185324_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Security Company   Security Co	CS_OFFL_SIR_NOPM_2_20211111T185411_20211111T185510_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Section France in control records.  Section France in control reco	CS_OFFL_SIR_NOPM_2_20211111T190010_20211111T190340_C001		
SO OFFL SR NOPM 2 202111117201042 202111117201053 2011  CS OFFL SR NOPM 2 202111117201042 202111117201053 2011  CS OFFL SR NOPM 2 202111117201042 202111117201040 2011  CS OFFL SR NOPM 2 202111117201040 202111117201040 2011  CS OFFL SR NOPM 2 202111117201040 202111117201040 2011  CS OFFL SR NOPM 2 202111117201040 202111117204050 2011  CS OFFL SR NOPM 2 202111117204070 202111117204050 2011  CS OFFL SR NOPM 2 202111117204070 202111117204070 2011  CS OFFL SR NOPM 2 202111117204070 202111117214070 2011  CS OFFL SR NOPM 2 202111117221707 2021111721107 2001  CS OFFL SR NOPM 2 202111117221707 20211117221707 2001  CS OFFL SR NOPM 2 202111117231707 20211117231707 2001  CS OFFL SR NOPM 2 202111117231707 20211117231707 2001  CS OFFL SR NOPM 2 202111117231707 20011117231707 2001  CS OFFL SR NOPM 2 202111117231007 20211117231	CS_OFFL_SIR_NOPM_2_20211111T190403_20211111T190730_C001		
Backscatter Cuality  CS_OFFL_SR_NOPM_2_20211111720146_20211117203429_C001  CS_OFFL_SR_NOPM_2_202111117204525_C001  CS_OFFL_SR_NOPM_2_202111117204525_C001  CS_OFFL_SR_NOPM_2_202111117204526_20211117204529_C001  CS_OFFL_SR_NOPM_2_202111117204526_20211117204529_C001  CS_OFFL_SR_NOPM_2_202111117204526_20211117204529_C001  CS_OFFL_SR_NOPM_2_202111117205452_20211117204529_C001  CS_OFFL_SR_NOPM_2_202111117205452_20211117205452_C001  CS_OFFL_SR_NOPM_2_202111117205452_20211117205452_C001  CS_OFFL_SR_NOPM_2_20211117205452_20211117205452_C001  CS_OFFL_SR_NOPM_2_202111117205452_C001  CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	CS_OFFL_SIR_NOPM_2_20211111T191110_20211111T193717_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscarter Quality (COC Alimenter Range and Backscarter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_202111117203757_202111117204255_C001  CS_OFFL_SIR_NOPM_2_202111117204253_202111117204255_C001  CS_OFFL_SIR_NOPM_2_202111117204253_202111117204255_C001  CS_OFFL_SIR_NOPM_2_202111117204303_202111117204256_C001  CS_OFFL_SIR_NOPM_2_20211111720430_20211111720425_C001  CS_OFFL_SIR_NOPM_2_20211111720430_20211111721991.  CS_OFFL_SIR_NOPM_2_20211111721547_2021111721991.  CS_OFFL_SIR_NOPM_2_20211111721547_2021111721991.  CS_OFFL_SIR_NOPM_2_20211111721547_20221111721991.  CS_OFFL_SIR_NOPM_2_20211111721547_20221111721991.  CS_OFFL_SIR_NOPM_2_20211111721647_20221111721991.  CS_OFFL_SIR_NOPM_2_20211111721647_202211117221991.  CS_OFFL_SIR_NOPM_2_20211111722396_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111722396_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111722397_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111723047_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111723047_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111723047_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111723047_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111723047_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111723047_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20221111723047_C001  CC_OCA_Alimeter Range_Collably, COCO_Alimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA_Alimeter Range_Collably, COCO_Alimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA_Alimeter Range_Collably, COCO_Alimeter Range_SSHA_S	CS_OFFL_SIR_NOPM_2_20211111T200024_20211111T200529_C001		
Backscatter Quality  CS_OFFL_SIR_NOPM_2_202111117204303_202111117204630_C001  CS_OFFL_SIR_NOPM_2_202111117204303_202111117204630_C001  CS_OFFL_SIR_NOPM_2_202111117205136_20211111721428_C001  CS_OFFL_SIR_NOPM_2_202111117205136_20211111721911_C001  CS_OFFL_SIR_NOPM_2_202111117205136_20211111721911_C001  CS_OFFL_SIR_NOPM_2_202111117213047_2021111721911_C001  CS_OFFL_SIR_NOPM_2_20211111723046_2021111172107_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20211111722107_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20211111722107_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20211111722107_C001  CS_OFFL_SIR_NOPM_2_20211111723046_2021111172317_C001  CS_OFFL_SIR_NOPM_2_20211111723046_2021111172317_C001  CS_OFFL_SIR_NOPM_2_20211111723046_2021111172317_C001  CS_OFFL_SIR_NOPM_2_20211111723046_20211111723047_C001  CCCOMA Altimeter Range_SINA_SWH and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_202111117231627_20211111723145_C001  CCCOMA Altimeter Range_SINA_SWH and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_202111117231627_20211111723145_C001  CCCOMA Altimeter Range_SINA_SWH and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_202111117231627_2021111723145_C001  CCCOMA Altimeter Range_SINA_SWH and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_202111117231627_20211117200224_C001  CCCOMA Altimeter Range_SINA_SWH and Backscatter Quality Plags have been set for one or more records.  CCCOMA Altimeter Range_S	CS_OFFL_SIR_NOPM_2_20211111T201046_20211111T203429_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscater Quality  CS_OFFL_SIR_NOPM_2_20211111720518_20211111721428_C001  CR_OFFL_SIR_NOPM_2_202111117213647_202111117213911_C001  CS_OFFL_SIR_NOPM_2_202111117223647_202111117223727_C001  CS_OFFL_SIR_NOPM_2_202111117231627_2021111723142_C001  CS_OFFL_SIR_NOPM_2_202111117231627_2021111723142_C001  CS_OFFL_SIR_NOPM_2_202111117231627_2021111723142_C001  CS_OFFL_SIR_NOPM_2_202111117231627_2021111723142_C001  CS_OFFL_SIR_NOPM_2_202111117231627_2021111723142_C001  CS_OFFL_SIR_NOPM_2_202111117231627_20211117231627_202101117231627_C001  CS_OFFL_SIR_NOPM_2_202111117231627_20211117231627_C001  CS_OFFL_SIR_NOPM_2_202111117231627_C001  CCOG_Alimeter Range_Quality_COCG_Alimeter Range and Backscatter Quality Plags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_202111117231627_C001  CCOG_Alimeter Range_Quality_COCG_Alimeter Range and Backscatter Quality_Flags have been set for one or more records.  CC_OFFL_SIR_NOPM_2_20211111723664_20211117236142_C001  CC_OG_Alimeter Range_Quality_COCG_Alimeter Range and Backscatter Quality_Flags have been set for one or more records.  CC_OFFL_SIR_NOPM_2_20211111704710_20211111704730_C001  CC_OG_Alimeter Range_Quality_COCG_Alimeter Range and Backscatter Quality_Flags have been set for one or more records.  CC_OG_Alimeter Range_Guality_COCG_Alimeter Range and Backscatter Quality_Flags have been set for one or more records	CS_OFFL_SIR_NOPM_2_20211111T203757_20211111T204255_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been est for one or necords.  CS_OFFL_SIR_NOPM_2_202111117213647_202111117213911_C001  CS_OFFL_SIR_NOPM_2_202111117213647_202111117213911_C001  CS_OFFL_SIR_NOPM_2_202111117223045_202111117223107_C001  CS_OFFL_SIR_NOPM_2_202111117220945_202111117223107_C001  CS_OFFL_SIR_NOPM_2_202111117223045_202111117223107_C001  CS_OFFL_SIR_NOPM_2_202111117223045_20211111722307_C001  CS_OFFL_SIR_NOPM_2_20211111723064_20211111723067_C001  CS_OFFL_SIR_NOPM_2_20211111723066_20211111723192_C001  CS_OFFL_SIR_NOPM_2_20211111723196_20211111723192_C001  CS_OFFL_SIR_NOPM_2_202111117235142_C001  CS_OFFL_SIR_NOPM_2_202111117235142_C001  CS_OFFL_SIR_NOPM_2_202111117235142_C001  CS_OFFL_SIR_NOPM_2_202111117235142_C001  CS_OFFL_SIR_NOPM_2_202111117235142_C001  CS_OFFL_SIR_NOPM_2_202111117235142_C001  CS_OFFL_SIR_NOPM_2_202111117235142_C001  CS_OFFL_SIR_NOPM_2_202111117047470_001  CS_OFFL_SIR_NOPM_2_202111117047470_001  CS_OFFL_SIR_NOPM_2_202111117047470_001  CS_OFFL_SIR_NOPM_2_202111117047470_001  CS_OFFL_SIR_NOPM_2_202111117047470_001  CS_OFFL_SIR_NOPM_2_202111117047470_001  CS_OFFL_SIR_NOPM_2_202	CS_OFFL_SIR_NOPM_2_20211111T204303_20211111T204630_C001		
and Backscatter Quality of SIR_NOPM_2_20211111T213647_2021111T22107_CO11  and Backscatter Quality of CS_OFFL_SIR_NOPM_2_20211111T220945_2021111T22107_CO11  CS_OFFL_SIR_NOPM_2_20211111T220945_20211111T22107_CO11  CS_OFFL_SIR_NOPM_2_20211111T221756_2021111T2212327_CO11  CS_OFFL_SIR_NOPM_2_20211111T221756_20211111T22327_CO11  CS_OFFL_SIR_NOPM_2_20211111T223046_20211111T230407_CO11  CS_OFFL_SIR_NOPM_2_20211111T23046_20211111T230407_CO11  CS_OFFL_SIR_NOPM_2_20211111T231627_20211111T23145_CO11  CS_OFFL_SIR_NOPM_2_20211111T231906_20211111T231922_CO11  CS_OFFL_SIR_NOPM_2_20211111T03354_20211111T033192_CO11  CS_OFFL_SIR_NOPM_2_20211111T03354_20211111T033192_CO11  CS_OFFL_SIR_NOPM_2_20211111T03354_20211111T033192_CO11  CS_OFFL_SIR_NOPM_2_20211111T03354_20211111T03356_20211111T033	CS_OFFL_SIR_NOPM_2_20211111T205136_20211111T212428_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been set Range and Backscatter Quality CocG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20211111T223756_20211111T22337_C001  CS_OFFL_SIR_NOPM_2_20211111T223046_20211111T230407_C001  CS_OFFL_SIR_NOPM_2_20211111T23046_20211111T230407_C001  CS_OFFL_SIR_NOPM_2_20211111T231627_20211111T231745_C001  CS_OFFL_SIR_NOPM_2_20211111T231627_20211111T231745_C001  CS_OFFL_SIR_NOPM_2_20211111T231906_20211111T23192_C001  CS_OFFL_SIR_NOPM_2_20211111T231906_20211111T23192_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T235554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T235554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T235554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T235554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T235717_20211112T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T04710_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_	CS_OFFL_SIR_NOPM_2_20211111T213647_20211111T213911_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_NOPM_2_20211111T233046_20211111T230407_C001  CS_OFFL_SIR_NOPM_2_20211111T231627_20211111T23145_C001  CS_OFFL_SIR_NOPM_2_20211111T231627_20211111T231922_C001  CS_OFFL_SIR_NOPM_2_20211111T231906_20211111T231922_C001  CS_OFFL_SIR_NOPM_2_20211111T233554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T03554_20211111T030224_C001  CS_OFFL_SIR_NOPM_2_20211111T03554_20211111T030224_C001  CS_OFFL_SIR_NOPM_2_20211111T03554_20211111T030224_C001  CS_OFFL_SIR_NOPM_2_20211111T03554_20211111T030224_C001  CS_OFFL_SIR_NOPM_2_20211111T034710_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T034710_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T034710_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034710_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034710_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034710_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T03442_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL_SIR_NOPM_2_20211111T034730_C001  CS_OFFL	CS_OFFL_SIR_NOPM_2_20211111T220945_20211111T221107_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COG Altimeter Range and Backscatter Quality Flags have been Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20211111T231627_20211111T231745_C001  CS_OFFL_SIR_NOPM_2_20211111T231906_20211111T231922_C001  CS_OFFL_SIR_NOPM_2_20211111T231906_20211111T231922_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T231922_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T235717_20211112T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211112T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211111T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211111T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211111T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211111T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211111T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211111T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211111T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211111T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211111T035735_C001  CS_OFFL_SIR_NOPM_2_20211111T0354_20211111T0358_C001  CS_OFFL_SIR_NOPM_2_202	CS_OFFL_SIR_NOPM_2_20211111T221756_20211111T222327_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20211111T231906_20211111T231922_C001  CS_OFFL_SIR_NOPM_2_20211111T233554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04710_20211111T04735_C001  CS_OFFL_SIR_NOPM_2_20211111T04710_20211111T04735_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04735_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  COCG Altimeter Range Quality, OCOG Buttereter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  COCG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  COCG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20211111T04740_20211111T04740_C001  COCG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Fl	CS_OFFL_SIR_NOPM_2_20211111T223046_20211111T230407_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  Backscatter Quality  CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  CS_OFFL_SIR_NOPM_2_20211111T235717_20211112T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T035717_20211112T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T04710_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04710_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04710_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04710_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T04730_C001  CS_OFFL_SIR_NOPM_2_20211111T0426600_20211111T062735_C001  CS_OFFL_SIR_NOPM_2_20211111T0426600_20211111T042735_C001  CS_OFFL_SIR_NOPM_2_20211111T0426600_20211111T042735_C001  CS_OFFL_SIR_NOPM_2_20211111T0426600_20211111T04266001  CCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20211111T04266_C001  CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20211111T04266_C001  CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_NOPM_2_20211111T231627_20211111T231745_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPM_2_20211111T23554_20211111T235142_C001  and Backscatter Quality, OCOG Altimeter Range and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPM_2_20211111T235717_20211112T000224_C001  CS_OFFL_SIR_NOPM_2_20211111T014710_20211111T014730_C001  CS_OFFL_SIR_NOPN_2_20211111T014710_20211111T014730_C001  CS_OFFL_SIR_NOPN_2_20211111T014710_20211111T014730_C001  CS_OFFL_SIR_NOPN_2_20211111T062600_20211111T062735_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NO	CS_OFFL_SIR_NOPM_2_20211111T231906_20211111T231922_C001		
Backscatter Quality  CS_OFFL_SIR_NOPN_2_20211111T014710_20211111T014730_C001  CS_OFFL_SIR_NOPN_2_20211111T014710_20211111T014730_C001  CS_OFFL_SIR_NOPN_2_20211111T062600_20211111T062735_C001  CS_OFFL_SIR_NOPN_2_20211111T062600_20211111T062735_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_202111	CS_OFFL_SIR_NOPM_2_20211111T233554_20211111T235142_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPN_2_20211111T014710_20211111T014730_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_NOPN_2_20211111T062600_20211111T062735_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T1091518_C001  CS_OFFL_SIR_NOPN_2_20211111T1091354_20211111T1091518_C0	CS_OFFL_SIR_NOPM_2_20211111T235717_20211112T000224_C001		
Backscatter Quality  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.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the 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.	CS_OFFL_SIR_NOPN_2_20211111T014710_20211111T014730_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality, OCOG  The OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_NOPN_2_20211111T062600_20211111T062735_C001		
	CS_OFFL_SIR_NOPN_2_20211111T091354_20211111T091518_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_NOPN_2_20211111T100326_20211111T100426_C001		

	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20211111T113347_20211111T114504_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_20211111T142944_20211111T143006_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.
	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_20211111T185324_20211111T185411_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.
	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20211111T214731_20211111T214910_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.

### 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:

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

CS_OFFL_SIR_NOPN_2_20211111T122126_20211111T122546_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_20211111T130920_20211111T131010_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_20211111T131056_20211111T131324_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_20211111T135925_20211111T140045_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_20211111T160755_20211111T161110_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_20211111T163105_20211111T163316_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_20211111T180748_20211111T181140_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_20211111T183224_20211111T183230_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_20211111T190730_20211111T190913_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_20211111T200014_20211111T200023_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_20211111T200530_20211111T200636_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_20211111T203628_20211111T203757_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_20211111T212634_20211111T212741_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_20211111T215048_20211111T215154_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_20211111T215455_20211111T215633_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_20211111T221639_20211111T221756_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_20211111T231440_20211111T231533_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_20211111T232218_20211111T232244_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_20211111T232346_20211111T232430_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_20211111T235600_20211111T235716_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_20211111T001025_20211111T001402_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_20211111T001449_20211111T001540_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_20211111T001715_20211111T001752_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_20211111T004259_20211111T004655_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_202111111T005731_20211111T010006_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_20211111T013625_20211111T013742_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

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CS_OFFL_SIR_NOPR_2_20211111T044009_20211111T044140_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_20211111T050424_20211111T050526_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_20211111T054304_20211111T054457_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_20211111T062123_20211111T062157_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_20211111T072156_20211111T072434_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_20211111T073541_20211111T073800_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_20211111T081358_20211111T082200_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_20211111T085956_20211111T090412_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_20211111T094151_20211111T094329_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_20211111T094441_20211111T094618_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_20211111T100427_20211111T100459_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_20211111T105338_20211111T105909_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_20211111T110657_20211111T110910_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_20211111T113347_20211111T114504_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_20211111T123250_20211111T123636_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_20211111T131506_20211111T132233_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_20211111T141053_20211111T141714_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_20211111T145407_20211111T145942_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_20211111T163317_20211111T164009_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_20211111T165352_20211111T170207_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_20211111T171625_20211111T171719_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_20211111T180538_20211111T180623_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_20211111T181140_20211111T181653_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_20211111T181728_20211111T181851_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_20211111T194927_20211111T195715_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_20211111T195722_20211111T200004_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_202111111T204808_202111111T205135_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_20211111T212742_20211111T213513_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_20211111T213912_20211111T214030_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_20211111T214731_20211111T214910_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_20211111T221107_20211111T221638_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_202111111T222646_20211111T223046_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_20211111T231923_20211111T232214_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_20211111T235142_20211111T235600_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 & 1Hz PLRM)

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

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> 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:

#### 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:

# 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	3	189	0
SIR_NOPR1B	112	112	0	112	0
SIR_NOPN1B	107	107	6	101	0
SIR_NOPM_2	192	192	134	58	0
SIR_NOPR_2	112	112	43	68	1
SIR_NOPN_2	107	107	47	60	0

#### 7.1 QCC Errors

Number of QCC reports with errors:

Total number of occurrences of each error

	Total number of occurrences of each error										
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-		-	-		-
SIR_NOPR_2	1	1	1	1							
<b>Test Descriptio</b>	Test Description Key:										
Abbreviation	Test na	me		Details							

rest besomption rey.					
Test name	Details				
RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7 - NetCDF				
RangeLatitude_7	Latitude should be between -90E7 and 90E7				
RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7 - NetCDF				
RangeLongitude_7	Longitude should be between -180E7 and 180E7				
	RangeLatitudeOrBlankOP_7NetCDF RangeLatitude_7 RangeLongitudeOrBlankOP_7NetCDF				

### 7.2 QCC Warnings

Number of QCC reports with warnings

1734

Total number of occurrences of each warning

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_NOPM1B	189	0	0	0	0	0	0
SIR_NOPM_2	0	0	43	43	0	46	0
SIR_NOPN1B	100	0	0	0	0	0	0
SIR_NOPN_2	0	0	10	30	4	23	25
SIR_NOPR1B	108	0	0	0	0	0	0
SIR_NOPR_2	0	1	34	45	0	35	27

Product	Туре	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCD	RPEPOPFDPLRMSINNCDF	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_NO	PM1B	0	0	0	0	0	0	0
SIR_NO	PM_2	38	1	38	0	0	0	0
SIR_NO	PN1B	0	0	0	0	0	0	0
SIR_NO	PN_2	17	0	0	0	21	0	31
SIR_NO	PR1B	0	0	0	0	0	0	0
SIR_NO	PR_2	17	0	0	45	0	50	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	31	0	0	4	23	0	3
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	0	25	20	36	54	26
SIR_NOPR1B	0	0	0	0	0	0	0
SIR NOPR 2	0	44	0	2	59	30	12

ı	Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
İ	SIR_NOPM1B	0	0	0	0	0	0	
	SIR_NOPM_2	32	0	2	0	0	0	
	SIR_NOPN1B	0	0	0	0	41	0	
	SIR_NOPN_2	28	23	13	0	0	0	
	SIR_NOPR1B	0	0	0	0	112	6	
	SIR NOPR 2	40	45	1	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	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees						
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees						
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees						
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: