

# IDEAS+ Daily Report for NOP data:

# <u>08/08/2019</u>



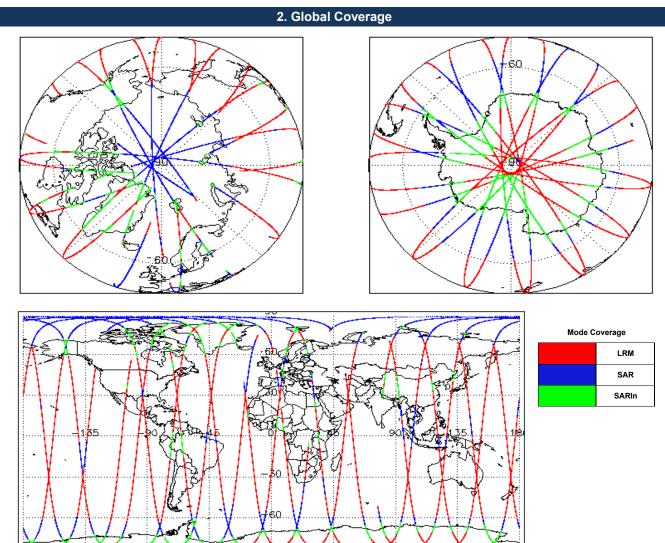
1. Overview			
	20.4 00.40	Check	L1 & L2
Report Production:	09-Aug-2019	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CraveSet Oscer Presses	Server check: calval-pds.cryosat.esa.int	Nominal
Processor Usea:	CryoSat Ocean Processor	Product Software Check	Nominal
Data Used:	Near Real Time Ocean Products (NOP)	Product Format Check	Nominal
Dala Useu.	L1B & L2 Science Data	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

#### Mission / Instrument News

### 07-Aug-2019 None

08-Aug-2019 SIRAL unavailability on 08-Aug-2019 from 14:47:08 to 15:09:44 due to a planned orbit manoeuvre.

## 09-Aug-2019 Nothing planned



# 3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

4. NOP Level 1B Data Quality Check

## 4.1 L1B Product Format Check

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

Number of products with errors:

0

#### 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 11b\_proc\_flag\_hr flag is currently set all L1B IOPR and IOPN products because the 11b\_processing\_quality\_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

#### 4.3 L1B Auxilary Data File Usage Check

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

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

Number of products with errors:

### 4.4 L1B Auxiliary Correction Error Check

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

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Number of products with errors:

#### 4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20190808T092201_20190808T093457_C001		There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_NOPM1B_20190808T111046_20190808T111616_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_NOPM1B_20190808T200730_20190808T202147_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_NOPM1B_20190808T210652_20190808T211518_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

### 4.6 L1B Waveform Group Data Check

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

> Loss of Echo Flag: This flag is currently set for 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_20190808T045452_20190808T050612_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20190808T093621_20190808T093833_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20190808T172011_20190808T175559_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20190808T205537_20190808T210500_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190808T062137_20190808T062343_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190808T075832_20190808T080246_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190808T090250_20190808T090415_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190808T143520_20190808T143636_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190808T212212_20190808T212318_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190808T230335_20190808T230403_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190808T043333_20190808T043532_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190808T072127_20190808T072805_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190808T081102_20190808T081224_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190808T083132_20190808T083335_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190808T104038_20190808T104259_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190808T151741_20190808T152030_C001	Loss of Echo	The tracking echo is missing for one or more records

## 5. NOP Level 2 Data Quality Check

#### 5.1 L2 Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL). Number of products with errors:
0

5.2 L2 Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. Number of products with errors: 0

#### 5.3 L2 Auxiliary Data File Usage Check

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

 Number of products with errors:
 0

## 5.4 L2 Auxiliary Correction Error Check

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

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

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update.

> Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.

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

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

Number of products with errors:

Product		Description
CS_OFFL_SIR_NOPM_2_20190808T092201_20190808T093457_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 heigh (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPM_2_20190808T212834_20190808T214430_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_20190808T004405_20190808T004644_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_20190808T021507_20190808T021857_C001	Mean Sea Surtace (1), Mean Uynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES). Non-Eauilibrium Long Period	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_20190808T025629_20190808T025655_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_20190808T031609_20190808T031736_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_20190808T035448_20190808T035802_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_20190808T040315_20190808T040432_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_20190808T054220_20190808T054335_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_20190808T062137_20190808T062343_C001	Mean Dynamic Lopography (1), Lotal Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_NOPN_2_20190808T062433_20190808T062547_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_20190808T062552_20190808T062557_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 heigh (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20190808T075832_20190808T080246_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_20190808T080401_20190808T080505_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_20190808T085756_20190808T090027_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_20190808T103704_20190808T103945_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_20190808T111833_20190808T112225_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_20190808T152721_20190808T152842_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_20190808T153409_20190808T153723_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_20190808T170650_20190808T170804_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_20190808T171306_20190808T171625_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_20190808T184741_20190808T185018_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_20190808T185211_20190808T185837_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_20190808T194259_20190808T194419_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 heigh (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20190808T202533_20190808T202914_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_20190808T212212_20190808T212318_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_20190808T220511_20190808T220708_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_20190808T230125_20190808T230330_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_20190808T230409_20190808T230634_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_20190808T234444_20190808T234602_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_20190808T012649_20190808T013309_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_20190808T025521_20190808T025629_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_20190808T030627_20190808T031415_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_20190808T044614_20190808T045348_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_20190808T062558_20190808T063344_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_20190808T080505_20190808T081028_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_20190808T090027_20190808T090249_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20190808T094404_20190808T095111_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_20190808T100441_20190808T101256_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_20190808T112225_20190808T112701_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_20190808T143834_20190808T144608_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_20190808T202425_20190808T202533_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20190808T205337_20190808T205507_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_20190808T211518_20190808T211722_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: 4		
Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20190808T092201_20190808T093457_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_20190808T111046_20190808T111616_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_20190808T200730_20190808T202147_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_20190808T210652_20190808T211518_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.

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Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20190808T000532_20190808T003306_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_20190808T003944_20190808T004405_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_20190808T004857_20190808T011555_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_20190808T014054_20190808T015600_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_20190808T020133_20190808T021057_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_20190808T021857_20190808T022444_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_20190808T022802_20190808T023228_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_20190808T023557_20190808T024311_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_20190808T030352_20190808T030546_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_20190808T031736_20190808T035046_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_20190808T035802_20190808T040315_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_20190808T040908_20190808T042422_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_20190808T044035_20190808T044153_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_20190808T044249_20190808T044441_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_20190808T045452_20190808T050612_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_20190808T050857_20190808T052951_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_20190808T053624_20190808T053802_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_20190808T053809_20190808T054220_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_20190808T054719_20190808T060632_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_20190808T060714_20190808T061147_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_20190808T062051_20190808T062117_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_20190808T063707_20190808T070217_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_20190808T070221_20190808T070907_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_20190808T071136_20190808T071701_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_20190808T072806_20190808T074034_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_20190808T074133_20190808T075832_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_20190808T082012_20190808T083132_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_20190808T083335_20190808T084810_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_20190808T085103_20190808T085558_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_20190808T085636_20190808T085755_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_20190808T090531_20190808T091537_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_20190808T092201_20190808T093457_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_20190808T095618_20190808T100440_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_20190808T101256_20190808T102656_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_20190808T103032_20190808T103511_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_20190808T103550_20190808T103703_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_20190808T104259_20190808T110833_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_20190808T131901_20190808T134521_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_20190808T134845_20190808T135339_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_20190808T135346_20190808T135715_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_20190808T140154_20190808T141156_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_20190808T141729_20190808T143520_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_20190808T152030_20190808T152153_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_20190808T152842_20190808T153409_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_20190808T154115_20190808T160400_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_20190808T160457_20190808T161619_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_20190808T162638_20190808T162854_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_20190808T164617_20190808T170251_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_20190808T170804_20190808T171306_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_20190808T172011_20190808T175559_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_20190808T180624_20190808T180732_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_20190808T181750_20190808T184043_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_20190808T185957_20190808T191632_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_20190808T192114_20190808T193537_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_20190808T194816_20190808T200521_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_20190808T200730_20190808T202147_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_20190808T202914_20190808T203122_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_20190808T203212_20190808T203624_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_20190808T203854_20190808T205337_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_20190808T205537_20190808T210500_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_20190808T212834_20190808T214430_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_20190808T214945_20190808T220238_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_20190808T220709_20190808T221525_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_20190808T221840_20190808T223412_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_20190808T230708_20190808T231524_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_20190808T231626_20190808T234230_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_20190808T234844_20190808T235352_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_20190808T235846_20190809T002202_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190808T000459_20190808T000531_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190808T085756_20190808T090027_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190808T194259_20190808T194419_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190808T224211_20190808T224559_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190808T035047_20190808T035448_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_20190808T112701_20190808T112732_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_20190808T205510_20190808T205537_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_20190808T230635_20190808T230708_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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20190808T000459_20190808T000531_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_20190808T003831_20190808T003944_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_20190808T021507_20190808T021857_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_20190808T022444_20190808T022605_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_20190808T024311_20190808T024506_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_20190808T030049_20190808T030212_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_20190808T035448_20190808T035802_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

CB. OFFL_SIR, NOPN_2_201900001104242_201900001104250_0001         OCDO Allmeter França Outally PLRA. The Ocoor Render Angle SiRA SWH and Backscatter Outally PLRA. COCO Allmeter França Outally PLRA.         The Ocoor Render Angle SiRA SWH and Backscatter Outally PLRA. COCO Allmeter França Outally PLRA.         The Ocoor Render Angle SiRA SWH and Backscatter Outally PLRA. COCO Allmeter França Outally PLRA.           CS_OFFL_SIR_NOPN_2_2019000011062102_2019000011062143_CO01         OCDO Allmeter França Outally PLRA. COCO Render and Backscatter Outally PLRA.         The OCOOR Renge and Backscatter Outally PLRA. COCO Render and Backscatter Outally PLRA.           CS_OFFL_SIR_NOPN_2_2019000011062137_2019000011062143_CO01         OCDO Allmeter França Outally PLRA. COCO Renge and Backscatter Outally PLRA.         The OCOOR Renge and Backscatter Outally PLRA. The OCOOR Renge and Backscatter Outally PLRA.           CS_OFFL_SIR_NOPN_2_2019000011062143_201900011062043_CO01         OCDO Allmeter França Outally PLRA. COCO Renge and Backscatter Outally PLRA.         The OCOOR Renge and Backscatter Outally PLRA. The OCOOR Renge and Backscatter Outally PLRA.           CS_OFFL_SIR_NOPN_2_2019000011062042_0011         OCDO Allmeter França Outally PLRA. The OCOOR Renge and Backscatter Outally PLRA. The OCOOR Renge and Backscatter Outally PLRA.         The OCOOR Renge and Backscatter Outally PLRA. The OCOOR Renge and Backscatter Outally PLRA.           CS_OFFL_SIR_NOPN_2_2019000011064001_201900001060000_CO01         OCDO Allmeter França Outally PLRA. The OCOOR Renge and Backscatter Outally PLRA. The OCOOR Renge and Backscatter Outally PLRA.           CS_OFFL_SIR_NOPN_2_2019000011064001_201900001000000_CO01         OCDO Allmeter França Outall	Flags e been r one or r one or r one or
GS_OFFL_SIR_NOPN_2_20190808T05420_20190808T05423_001       md Backscatter Cuality PLM.       In the COOR Renge and Backscatter Cuality FLM.         GS_OFFL_SIR_NOPN_2_20190808T05420_20190808T054335_001       CCOG Altmeter Range Cuality PLM.       The COOR Renge and Backscatter Cuality FLM.         CS_OFFL_SIR_NOPN_2_20190808T05420_20190808T054335_001       CCOG Altmeter Range Cuality PLM.       The COOR Renge and Backscatter Cuality FLM.         CS_OFFL_SIR_NOPN_2_20190808T05420_20190808T05433_001       CCOG Altmeter Range Cuality PLM.       The COOR Renge and Backscatter Cuality FLM.         CS_OFFL_SIR_NOPN_2_20190808T05433_0010008T002547_001       CCOG Altmeter Range Cuality PLM.       The COOR Renge and Backscatter Cuality FLM.         CS_OFFL_SIR_NOPN_2_20190808T05432_0190808T08246_001       CCOG Altmeter Range Cuality PLM.       The COOR Renge and Backscatter Cuality FLags have been set 1 more records.         CS_OFFL_SIR_NOPN_2_20190808T08240_001       CCOG Altmeter Range Cuality PLM.       The COOR Renge and Backscatter Cuality FLags have been set 1 more records.         CS_OFFL_SIR_NOPN_2_20190808T05450_0108080T08240_001       CCOG Altmeter Range Cuality PLM.       The COOR Renge and Backscatter Cuality FLags have been set 1 more records.         CS_OFFL_SIR_NOPN_2_20190808T054500_001       CCord Altmeter Range Cuality PLM.       The COOR Renge and Backscatter Cuality FLM.         CS_OFFL_SIR_NOPN_2_20190808T05420_001       CCord Altmeter Range Cuality PLM.       The COOR Altmeter Range Sul, SWH and Matkscatter Cuality FLggs have been set 1 more records. </td <td>e been r one or r one or r one or r one or</td>	e been r one or r one or r one or r one or
CS_OFFL_SIR_NOPN_2_201908081064220_201908081064335_C001         CCCG Allmeter Range Quality PLRM, CCCG Backaster Quality FLRM, CCCG Backaster Quality FLRM, CS_OFFL_SIR_NOPN_2_201908081062137_201908081062345_C001         CCCG Allmeter Range Quality PLRM, CCCG Backaster Quality FLRM, CCCG Allmeter Range Quality PLRM, CCCG Backaster Quality FLRM, CCCG Allmeter Range Quality PLRM, CCCG Backaster Quality FLRM, CCCG Allmeter Range Quality PLRM, CCCG Allmeter Range Allextsatter Quality Flags have been set 1 more records.           CS_OFFL_SIR_NOPN_2_2019080810940570920_C001         CCCGA Allmeter Range Quality PLRM, CCCG Backaster Quality FLRM, CCCG Backaster Quality FLRM, CCCGG Backaster Quality FLRM, CCCG Backaster Quality FLRM, C	r one or r one or r one or
CS_OFF_SR_NOPN_2_20108087108243_201080871082547_C001         OCCG Backscatter Quality         The OCCG Range and Backscatter Quality Flags have been set for records.           CS_OFFL_SIR_NOPN_2_201080871082547_C001         OCCG Attracter Range Quality PLRM, OCCG Backscatter Quality         The OCCG Range and Backscatter Quality Flags have been set for records.           CS_OFFL_SIR_NOPN_2_201080871076832_001080871080505_C001         OCCG Attracter Range Quality PLRM, OCCG Backscatter Quality         The OCCG Range and Backscatter Quality Flags have been set for records.           CS_OFFL_SIR_NOPN_2_201080871084001_201080871080505_C001         OCCG Attracter Range Quality PLRM, OCCG Backscatter Quality         The OCCG Range and Backscatter Quality Flags have been set for records.           CS_OFFL_SIR_NOPN_2_20108087108420_201080871080505_0001         OCCG Attracter Range SSHA, SWH and Backscatter Quality Flags have been set for records.         The OCCG Range and Backscatter Quality Flags have been set for records.           CS_OFFL_SIR_NOPN_2_20108087108470_00007         OCCG Attracter Range, SSHA, SWH and Backscatter Quality Flags have been set for records.         The OCCG Range and Backscatter Quality Flags have been set for the OCGG Range and Backscatter Quality Flags have been set for records.           CS_OFFL_SIR_NOPN_2_20108087109270_0_0001         OCCG Attracter Quality PLRM, OCGG Range and Backscatter Quality Flags have been set for records.           CS_OFFL_SIR_NOPN_2_20108087102345_2010808710332_0001         OCCG Attracter Range Quality PLRM, OCCG Range and Backscatter Quality Flags have been set for records.           CS_OFFL_SIR_NOPN_2_2010808	r one or r one or
CS_OFFL_SIR_NOPN_2_20190808108/283_20190808108/284_2001         OCOG Backscatter Quality         more records.           CS_OFFL_SIR_NOPN_2_20190808108/283_20190808108/286_C001         OCOG Altimeter Range Quality PLRM, CCOG Backscatter Quality         The OCOG Range and Backscatter Quality Flags have been set f more records.           CS_OFFL_SIR_NOPN_2_20190808108/2820_20190808108/0820_20190808108/0820_20190808108/202_001         OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set f more records.           CS_OFFL_SIR_NOPN_2_20190808108/08420_20190808108/0027_C001         Cocoan Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set f more records.           CS_OFFL_SIR_NOPN_2_20190808109/027_C001         OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, CCGG Backscatter Quality PLRM, PLRM         The OCOG Range and Backscatter Quality Flags have been set f more records.           CS_OFFL_SIR_NOPN_2_20190808109/027_C001         OCOG Altimeter Range Quality PLRM, PLRM         The OCOG Range and Backscatter Quality Flags have been set f more records.           CS_OFFL_SIR_NOPN_2_20190808109/027_C001         OCOG Altimeter Range Quality PLRM, PLRM         The OCOG Range and Backscatter Quality Flags have been set f more records.           CS_OFFL_SIR_NOPN_2_201908081103/045_C001         OCOG Altimeter Range Quality PLRM, COGG Backscatter Quality         The OCOG Range and Backscatter Quality Flags have been set f more records.	r one or
CS_OFFL_SIR_NOPN_2_20190808109.0532_201908081080240_2001         OCOG Backscatter Quality         Imore records.           CS_OFFL_SIR_NOPN_2_20190808T080401_20190808T080505_C001         OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality         The OCOG Ange and Backscatter Quality Flags have been set f more records.           CS_OFFL_SIR_NOPN_2_20190808T084920_20190808T085103_C001         Adtimeter Range SNA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range SNA, SWH and Backscatter Quality Flags have to come or more records.         The OCEG Altimeter Range SNA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range SNA, SWH and Backscatter Quality Flags have to come or more records.           CS_OFFL_SIR_NOPN_2_20190808T085756_20190808T090027_C001         OCOG Altimeter Range SNA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Gaskscatter Quality Flags have been set f more records.         The OCEG Altimeter Range SNA, SWH and Backscatter Quality Flags have been set f oCCG Backscatter Quality Flags have been set f more records.           CS_OFFL_SIR_NOPN_2_20190808T091720_20190808T093620_C001         OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality Flags have been set f oCCG Backscatter Quality Flags CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T103032_C001         OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality Flags CCG Backscatter Quality         The OCOG Range and Backscatter Quality Flags have been set f more records.           CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T112810_C001         OCCG Altimeter Range Quality PLRM, OCCG Backscatter Quality         The OCOG Range and Backscatter Quality Flags have been set f more records.           CS_OFFL_SI	
CS_OFFL_SIR_NOPN_2_20190808108400_20101       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_NOPN_2_20190808T084020_20190808T085103_C001       and Backscatter Quality PLRM_OCOG Altimeter Range and Backscatter Quality PLRM       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM         CS_OFFL_SIR_NOPN_2_20190808T085756_20190808T090027_C001       Cocan Altimeter Range and Backscatter Quality PLRM       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM         CS_OFFL_SIR_NOPN_2_20190808T091720_20190808T092200_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T093457_20190808T093620_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T103032_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T103032_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T112733_20190808T112810_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_2019080	one or
CS_OFFL_SIR_NOPN_2_20190808T084920_20190808T085103_C001       and Backscatter Quality PLRM. OCOG       and Backscatter Quality SetM, OCOG         CS_OFFL_SIR_NOPN_2_20190808T085756_20190808T090027_C001       Affiniter Range and Backscatter Quality SetM, OCOG       and Backscatter Quality SetM, OCOG         CS_OFFL_SIR_NOPN_2_20190808T085756_20190808T090027_C001       Affiniter Range, SSHA, SWH and Backscatter Quality SetM, OCOG       and Backscatter Quality SetM, OCOG         CS_OFFL_SIR_NOPN_2_20190808T091720_20190808T092200_C001       OCOG Altimeter Range Quality PLRM, OCOG       The OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPN_2_20190808T0933457_20190808T093620_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality Flags have been set for one records.       The OCOG Range and Backscatter Quality Flags have been set for one records.         CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T093620_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for one records.         CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T103302_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for one records.         CS_OFFL_SIR_NOPN_2_20190808T112733_20190808T112810_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_20190808T113718_20190808T113853_C001       OCCOG Altimeter R	
CS_OFFL_SIR_NOPN_2_20190808T085756_20190808T090027_C001       and Backscatter Quality Alimeter Range and Backscatter Quality PLRM       in the OCGA Alimeter Range and Backscatter Quality PLRM         CS_OFFL_SIR_NOPN_2_20190808T091720_20190808T092200_C001       OCGA Alimeter Range Quality PLRM, OCGG Backscatter Quality       The OCGA Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T093457_20190808T093620_C001       OCGA Alimeter Range Quality PLRM, OCGG Backscatter Quality       The OCGG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T103032_C001       OCCGA Altimeter Range Quality PLRM, OCGG Backscatter Quality       The OCGG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T103032_C001       OCCGA Altimeter Range Quality PLRM, OCGG Backscatter Quality       The OCGG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T103704_20190808T1103945_C001       OCCGA Altimeter Range Quality PLRM, OCGG Backscatter Quality       The OCCG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T112733_20190808T112810_C001       OCCGA Altimeter Range Quality PLRM, OCCG Backscatter Quality       The OCCG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T113718_20190808T113853_C001       OCCGA Altimeter Range Quality PLRM, OCCG Backscatter Quality PLRM, OCCG Backscatter Quality PLRM, OCCGG Backscatter Quality PLRM, OCCG Backscatter Quality PLRM, OCCG B	
CS_OFFL_SIR_NOPN_2_201908081093457_201908081093620_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_NOPN_2_20190808T093457_20190808T093620_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T103032_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T103704_20190808T103945_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T112733_20190808T112810_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T112733_20190808T112810_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T113718_20190808T113853_C001       OCCG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T113952_20190808T114216_C001       OCCG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T1143717_20190808T1143834_C001 <t< td=""><td></td></t<>	
CS_OFFL_SIR_NOPN_2_201908081103457_20190808110332_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_NOPN_2_20190808T102817_20190808T103032_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T103704_20190808T103945_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T112733_20190808T112810_C001       OCOG Attimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T113718_20190808T113853_C001       OCOG Attimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T113718_20190808T113853_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T113952_20190808T114216_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T114216_C001       OCOG Attimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Attimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_	one or
CS_OFFL_SIR_NOPN_2_201908081102817_201908081103032_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_NOPN_2_201908081103704_201908081103945_C001       OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Attimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T112733_20190808T112810_C001       OCOG Attimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality PLRM, OCOG Backscatter Quality PLRM,       The Ocog Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T113718_20190808T113853_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T113952_20190808T114216_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_2019	one or
CS_OFFL_SIR_NOPN_2_20190808T103704_20190808T103945_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_NOPN_2_20190808T112733_20190808T112810_C001       Ocog Backscatter Quality PLRN, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, DCOG Altimeter Range and Backscatter Quality PLRM       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPN_2_20190808T113718_20190808T113853_C001       OCOG Altimeter Range Quality PLRM, DCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_NOPN_2_20190808T113952_20190808T114216_C001       OCOG Altimeter Range Quality PLRM, DCOG Range and Backscatter Quality Flags have been set for one records.         CS_OFFL_SIR_NOPN_2_20190808T1143717_20190808T143834_C001       OCOG Altimeter Range Quality PLRM, DCOG Range and Backscatter Quality Flags have been set for one records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Altimeter Range Quality PLRM, DCOG Range and Backscatter Quality Flags have been set for one records.         CS_OFFL_SIR_NOPN_2_20190808T143814_C001       OCOG Altimeter Range Quality PLRM, DCOG Range and Backscatter Quality Flags have been set for one records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one records.         CS_OFFL_SIR_NOPN_2_20190808T153703_C001       OCOG Range and Backscatter Quality Flags have been set for one records.         CS_OFFL_SIR_NOPN_2_20190808T153709_20190808T153723_C001	<sup>.</sup> one or
CS_OFFL_SIR_NOPN_2_20190808T112733_20190808T112810_C001       and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality       The Ocean Attimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFL_SIR_NOPN_2_20190808T113718_20190808T113853_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T113952_20190808T114216_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T153409_20190808T153723_C001       OCean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, ocog Altimeter Range and Backscatter Quality PLRM, ocog and the OCOG Altimeter Range and Backscatter Quality PLRM, ocog and the OCOG Altimeter Range and Backscatter Quality PLRM, ocog and the OCOG Altimeter Range and Backscatter Qu	one or
CS_OFFL_SIR_NOPN_2_20190808T113952_20190808T113953_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_NOPN_2_20190808T113952_20190808T114216_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Altimeter Range, Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T153409_20190808T153723_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set f more records.	
CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_NOPN_2_20190808T143717_20190808T143834_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set f more records.         CS_OFFL_SIR_NOPN_2_20190808T153409_20190808T153723_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Qu	one or
CS_OFFL_SIR_NOPN_2_20190808T153409_20190808T153723_C001 CS_OFFL_SIR_NOPN_2_20190808T153723_C001 CS_OFFL_SIR_NOPN_2_201908T153723_C001 CS_OFFL_SIR_NOPN_2_201908T153723_C001 CS_OFFL_SIR_NOPN_2_20190808T153723_C001 CS_OFFL_SIR_NOPN_2_20190808T153723_C001 CS_OFFL_SIR_NOPN_2_20190808T153723_C001 CS_OFFL_SIR_NOPN_2_20190808T153723_C001 CS_OFFL_SIR_NOPN_2_2008T153723_C001 CS_OFF	<sup>.</sup> one or
CS_OFFL_SIR_NOPN_2_20190808T153409_20190808T153723_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG and the OCCGA Itimeter Range and Backscatter Quality Flags ha	one or
CS_OFFL_SIR_NOPN_2_20190808T162854_20190808T162901_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 has been been been been been been been bee	
CS_OFFL_SIR_NOPN_2_20190808T170650_20190808T170804_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for more records.	<sup>.</sup> one or
CS_OFFL_SIR_NOPN_2_20190808T171306_20190808T171625_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for more records.	one or
CS_OFFL_SIR_NOPN_2_20190808T184741_20190808T185018_C001 CS_OFFL_SIR_NOPN_2_20190808T185018_C001 CS_OFFL_SIR_NOPN_2_200808T185018_C001 CS_OFFL_SIR_NOPN_2_2008 CS_OFFL_SIR_NOPN_2_2008 CS_OFFL_SIR_NOPN_2_2008 CS_OFFL_SIR_NOPN_2_2008 CS_OFFL_SIR_NOPN CS_OFFL_SIR_NOPN_2_2008 CS_OFFL_SIR_NOPN CS_OFFL_SIR_NOPN CS_OFFL_SIR_NOPN CS_OFFL_SIR_NOPN CS_OFFL_SIR_NOPN CS_OFFL_SIR_NOPN CS_OFFL_SIR_NOPN CS_OFFL_SIR_NOPN CS_OFFL	
CS_OFFL_SIR_NOPN_2_20190808T185211_20190808T185837_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality COCOG Backscatter QUAL QUAL QUAL QUAL QUAL QUAL QUAL QUAL	one or
CS_OFFL_SIR_NOPN_2_20190808T194701_20190808T194816_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality COG Backsc	one or
CS_OFFL_SIR_NOPN_2_20190808T202251_20190808T202425_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 has to for one or more records.	
CS_OFFL_SIR_NOPN_2_20190808T202533_20190808T202914_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality COG Backscatter QUA QUA QUA QUA QU	

CS_OFFL_SIR_NOPN_2_20190808T203624_20190808T203759_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_20190808T210500_20190808T210652_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_20190808T211722_20190808T211740_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_20190808T214430_20190808T214945_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_20190808T220511_20190808T220708_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_20190808T224211_20190808T224559_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_20190808T230335_20190808T230403_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_20190808T230409_20190808T230634_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_20190808T235352_20190808T235635_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_20190808T003306_20190808T003525_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_20190808T021057_20190808T021507_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_20190808T022605_20190808T022802_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_20190808T031527_20190808T031609_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_20190808T035047_20190808T035448_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Attimeter Range, SSHA, SWH 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_20190808T040432_20190808T040908_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_20190808T054335_20190808T054719_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_20190808T062558_20190808T063344_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_20190808T070907_20190808T071013_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_20190808T072127_20190808T072805_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_20190808T074034_20190808T074133_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_20190808T083132_20190808T083335_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_20190808T084811_20190808T084920_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_20190808T085558_20190808T085605_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_20190808T090027_20190808T090249_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_20190808T094404_20190808T095111_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_20190808T095517_20190808T095617_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_20190808T100441_20190808T101256_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_20190808T104038_20190808T104259_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_20190808T110833_20190808T110956_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_20190808T112810_20190808T112954_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_20190808T134521_20190808T134720_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_20190808T135856_20190808T140154_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_20190808T152153_20190808T152720_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_20190808T153723_20190808T153810_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_20190808T153810_20190808T154115_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_20190808T170252_20190808T170650_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_20190808T171625_20190808T172011_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_20190808T184043_20190808T184741_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_20190808T200521_20190808T200730_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_20190808T205337_20190808T205507_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_20190808T211518_20190808T211722_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_20190808T212456_20190808T212643_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_20190808T220239_20190808T220511_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_20190808T224055_20190808T224058_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_20190808T231525_20190808T231625_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_20190808T234230_20190808T234443_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_20190808T235635_20190808T235846_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.			
> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for p	products over sea ice, which is to be expected.		
Number of products with errors: 175			

# 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)

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:

136

54