



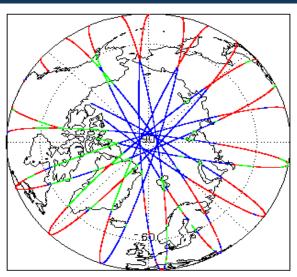
# 1. Overview

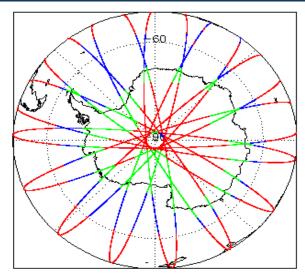
Report Production:	15-Jul-2019
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

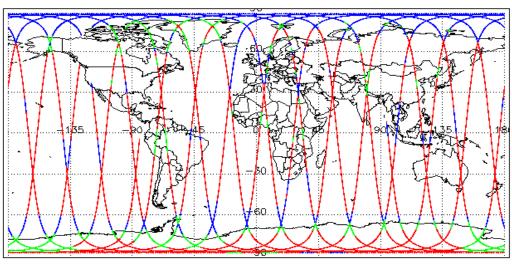
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
Ocean Retracking Quality Check	See Section 5.7	See Section 6.7

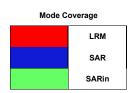
Mission / Instrument News		
11-Jul-2019	None	
12-Jul-2019	None	
13-Jul-2019	Nothing planned	

# 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

# 4. IOP Level 1B Data Quality Check

# 4.1 L1B Product Format Check

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

#### 4.2 L1B Product Header Analysis

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

L1B Processing Quality HR: The I1b\_proc\_flag\_hr flag is currently set all L1B IOPR and IOPN products because the I1b\_processing\_quality\_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

### 4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

Λ

#### 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:

Ω

#### 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 IOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.

Number of products with errors:

2

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20190712T143256_20190712T150830_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_IOPM1B_20190712T222944_20190712T223755_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.

Number of products with errors:

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Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20190712T184253_20190712T191840_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T033748_20190712T034137_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T074411_20190712T074644_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T074711_20190712T074834_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T092111_20190712T092529_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T092634_20190712T092742_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T110112_20190712T110639_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T155755_20190712T155912_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T175210_20190712T175411_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T193125_20190712T193142_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T210941_20190712T211055_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T223956_20190712T224019_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T224449_20190712T224515_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190712T224637_20190712T224727_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190712T051334_20190712T051728_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190712T102308_20190712T102526_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190712T110023_20190712T110112_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190712T214711_20190712T214757_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190712T232521_20190712T232751_C001	Loss of Echo	The tracking echo is missing for one or more records

### 5. IOP 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. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > 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:

58

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190712T010622_20190712T010703_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20190712T095615_20190712T101049_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20190712T001828_20190712T002010_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)
CS_OFFL_SIR_IOPN_2_20190712T011510_20190712T011647_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)
CS_OFFL_SIR_IOPN_2_20190712T020645_20190712T020926_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)
CS_OFFL_SIR_IOPN_2_20190712T025549_20190712T025551_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20190712T033748_20190712T034137_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)
CS_OFFL_SIR_IOPN_2_20190712T051728_20190712T052042_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)
CS_OFFL_SIR_IOPN_2_20190712T052555_20190712T052712_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20190712T070501_20190712T070614_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)
CS_OFFL_SIR_IOPN_2_20190712T074411_20190712T074644_C001	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_IOPN_2_20190712T074711_20190712T074834_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)
CS_OFFL_SIR_IOPN_2_20190712T092111_20190712T092529_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20190712T092634_20190712T092742_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)
CS_OFFL_SIR_IOPN_2_20190712T102035_20190712T102308_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)
CS_OFFL_SIR_IOPN_2_20190712T110112_20190712T110639_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 (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20190712T115945_20190712T120316_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)
CS_OFFL_SIR_IOPN_2_20190712T124109_20190712T124501_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)
CS_OFFL_SIR_IOPN_2_20190712T134053_20190712T134235_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20190712T165649_20190712T170002_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20190712T182932_20190712T183046_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20190712T201022_20190712T201258_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)
CS_OFFL_SIR_IOPN_2_20190712T201451_20190712T202116_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)
CS_OFFL_SIR_IOPN_2_20190712T210534_20190712T210655_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 (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20190712T214758_20190712T215153_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)
CS_OFFL_SIR_IOPN_2_20190712T224449_20190712T224515_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)
CS_OFFL_SIR_IOPN_2_20190712T232751_20190712T232947_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

	1	
CS_OFFL_SIR_IOPN_2_20190712T233806_20190712T233953_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T010704_20190712T010707_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T010707_20190712T010932_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T011102_20190712T011510_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)
CS_OFFL_SIR_IOPR_2_20190712T024850_20190712T025549_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)
CS_OFFL_SIR_IOPR_2_20190712T041756_20190712T041858_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T042904_20190712T043651_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)
CS_OFFL_SIR_IOPR_2_20190712T060853_20190712T061725_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)
CS_OFFL_SIR_IOPR_2_20190712T074834_20190712T075243_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)
CS_OFFL_SIR_IOPR_2_20190712T075244_20190712T075617_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T092742_20190712T093305_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)
CS_OFFL_SIR_IOPR_2_20190712T102308_20190712T102526_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20190712T110639_20190712T111240_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)
CS_OFFL_SIR_IOPR_2_20190712T111240_20190712T111347_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T113222_20190712T113535_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T124501_20190712T125007_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)
CS_OFFL_SIR_IOPR_2_20190712T142206_20190712T143037_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)
CS_OFFL_SIR_IOPR_2_20190712T160111_20190712T160846_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)
CS_OFFL_SIR_IOPR_2_20190712T161803_20190712T161949_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T173900_20190712T174638_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)
CS_OFFL_SIR_IOPR_2_20190712T174638_20190712T174803_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)
CS_OFFL_SIR_IOPR_2_20190712T191840_20190712T192536_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)
CS_OFFL_SIR_IOPR_2_20190712T192536_20190712T192952_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)
CS_OFFL_SIR_IOPR_2_20190712T205810_20190712T210423_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)
CS_OFFL_SIR_IOPR_2_20190712T210423_20190712T210534_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)
CS_OFFL_SIR_IOPR_2_20190712T214711_20190712T214757_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20190712T221615_20190712T221745_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T223822_20190712T223956_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20190712T224019_20190712T224221_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)
CS_OFFL_SIR_IOPR_2_20190712T224221_20190712T224449_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)

# 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.

2

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190712T143256_20190712T150830_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOPM_2_20190712T222944_20190712T223755_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.

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190711T235334_20190712T001638_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_IOPM_2_20190712T002010_20190712T002849_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_IOPM_2_20190712T003208_20190712T005612_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_IOPM_2_20190712T012857_20190712T015543_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_IOPM_2_20190712T020224_20190712T020644_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_IOPM_2_20190712T021127_20190712T023739_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_IOPM_2_20190712T024305_20190712T024849_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_IOPM_2_20190712T030325_20190712T031839_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_IOPM_2_20190712T032412_20190712T033359_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_IOPM_2_20190712T034137_20190712T034724_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_IOPM_2_20190712T035019_20190712T035506_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_IOPM_2_20190712T035910_20190712T040549_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_IOPM_2_20190712T042627_20190712T042759_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_IOPM_2_20190712T044015_20190712T051334_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_IOPM_2_20190712T052042_20190712T052555_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_IOPM_2_20190712T053117_20190712T054700_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_IOPM_2_20190712T055808_20190712T055920_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_IOPM_2_20190712T060526_20190712T060707_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_IOPM_2_20190712T061725_20190712T062850_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_IOPM_2_20190712T063109_20190712T064727_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_IOPM_2_20190712T064737_20190712T065240_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_IOPM_2_20190712T070049_20190712T070500_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_IOPM_2_20190712T070954_20190712T072910_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_IOPM_2_20190712T072945_20190712T073423_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_IOPM_2_20190712T073447_20190712T074226_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_IOPM_2_20190712T075617_20190712T083155_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_IOPM_2_20190712T083417_20190712T083941_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_IOPM_2_20190712T084000_20190712T084218_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_IOPM_2_20190712T085046_20190712T090312_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_IOPM_2_20190712T090418_20190712T092110_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_IOPM_2_20190712T092529_20190712T092634_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_IOPM_2_20190712T093505_20190712T094053_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_IOPM_2_20190712T094254_20190712T095412_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_IOPM_2_20190712T095615_20190712T101049_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_IOPM_2_20190712T101343_20190712T101838_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_IOPM_2_20190712T102741_20190712T103958_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_IOPM_2_20190712T104439_20190712T105734_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_IOPM_2_20190712T112244_20190712T112547_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_IOPM_2_20190712T113535_20190712T114942_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_IOPM_2_20190712T115314_20190712T115752_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_IOPM_2_20190712T115756_20190712T115808_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_IOPM_2_20190712T120536_20190712T122715_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_IOPM_2_20190712T122719_20190712T123109_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_IOPM_2_20190712T130447_20190712T132838_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_IOPM_2_20190712T133322_20190712T133705_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_IOPM_2_20190712T133728_20190712T134053_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_IOPM_2_20190712T134419_20190712T135523_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_IOPM_2_20190712T140053_20190712T141054_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_IOPM_2_20190712T143256_20190712T150830_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_IOPM_2_20190712T151127_20190712T151619_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

COUNTY BELLOWING 2010/071976405 20109717110000 cold Alleand Finance and Daugh Cold Alleand Finance Cold Alleand Finance Cold Alleand Finance Cold Alleand Finance Cold Blood Finance Cold Alleand Finance Cold Alleand Finance Cold Alleand Finance Cold Blood Finance Cold Alleand Finance Cold Alleand Finance Cold Alleand Finance Cold Blood Finance Cold Alleand Finance Cold Blood Finance Cold Alleand Finance Cold Blood Finance Cold Blood Finance Cold Finance Cold Blood Finan	CS_OFFL_SIR_IOPM_2_20190712T151626_20190712T151955_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CELOFFE, SR. JOHA 2. 2610071716052. 20106717110516. 2010  CELOFFE, SR. JOHA 2. 2610071716052. 201067171105183. 2010  CELOFFE, SR. JOHA 2. 2610071716052. 20106717110518. 2010071710518. 20	CS_OFFL_SIR_IOPM_2_20190712T152435_20190712T153435_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CEL GEFEL SER JORN 2 28190712710059 29190712710048 CBB1  COD CARINERS Fragge Callety, CODD  CEL COPEL SER JORN 2 28190712710048 29190712710048 CBB1  COD CARINERS Fragge Callety, CODD  The CODD Allement Fragge and Bedescation Caulty Flags have been sell bedescated Callety  CEL COPEL SER JORN 2 28190712710049 29190712710048 CBB1  CEL COPEL SER JORN 2 28190712710049 29190712710058 CBB1  CEL COPEL SER JORN 2 28190712710049 29190712710058 CBB1  CEL COPEL SER JORN 2 28190712710059 29190712710059 CBB1  CEL CO	CS_OFFL_SIR_IOPM_2_20190712T154008_20190712T155754_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Co. OFFL. SRI, IOM. 2, 20100712119282, 20180712119280, CO. OFFL. SRI, IOM. 2, 20100712119284, 20180712119280, CO. OFFL. SRI, IOM. 2, 20100712119284, 20180712119280, CO. OFFL. SRI, IOM. 2, 20100712119284, 20180712119280, CO. OFFL. SRI, IOM. 2, 20100712119282, 20180712110380, CO. OFFL. SRI, IOM. 2, 20180712119380, 2018071210380, CO. OFFL. SRI, IOM. 2, 20180712119380, 20180712100080, CO. OFFL. SRI, IOM. 2, 20180712119380, 20180712100080, CO. OFFL. SRI, IOM. 2, 20180712119380, 20180712100080, CO. OFFL. SRI, IOM. 2, 20180712120280, 20180712100080, CO. OFFL. SRI, IOM. 2, 20180712120380, 20180712100080, CO. OFFL.	CS_OFFL_SIR_IOPM_2_20190712T160957_20190712T161333_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Section   Control   Cont	CS_OFFL_SIR_IOPM_2_20190712T161423_20190712T161643_C001		
CB_CFFL_SIR_JOPM_2_20190712T19205_2019	CS_OFFL_SIR_IOPM_2_20190712T165123_20190712T165649_C001		
GS_OFFL_SRI_IOPM_2_20190712719259_20190712719259 CDD1  OSE AN ABTERIOR Range, SSI44, SWM and Executed Classify Flags have been selected.  OSE OFFL_SRI_IOPM_2_20190712719292 20190712719259 CDD1  OSE AN ABTERIOR Range, SSI44, SWM and Executed Classify Flags have been selected.  OSE OFFL_SRI_IOPM_2_20190712719294 20190712719293 CDD1  OSE AN ABTERIOR Range, SSI44, SWM and Executed Classify Flags have been selected.  OSE OFFL_SRI_IOPM_2_20190712719294 20190712719295 CDD1  OSE AN ABTERIOR Range, SSI44, SWM and Executed Classify Flags have been selected.  OSE OFFL_SRI_IOPM_2_20190712719293 20190712719295 CDD1  OSE AN ABTERIOR Range, SSI44, SWM and Executed Classify Flags have been selected.  OSE OFFL_SRI_IOPM_2_20190712719293 20190712719295 CDD1  OSE AN ABTERIOR Range, SSI44, SWM and Executed Classify Flags have been selected.  OSE OFFL_SRI_IOPM_2_201907127194253 201907127100352 CDD1  OSE AN ABTERIOR Range, SSI44, SWM and Executed Classify Flags have been selected.  OSE OFFL_SRI_IOPM_2_201907127101299 201907127100352 CDD1  OSE AN ABTERIOR Range and Executed Classify Flags have been selected.  OSE OFFL_SRI_IOPM_2_201907127101299 201907127101299 CD1907127101299 CD1907127101399 CD190712710	CS_OFFL_SIR_IOPM_2_20190712T170356_20190712T172506_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Cauley, COCA Allineter Range and Backscatter Cauley, COCA Allineter Range, SSHA, SWH and Backscatter Cauley, Flags have been set for cor or more records.  CS_OFFL_SIR_IOPM_2_201807127184253_201807127103524_CO01  CS_OFFL_SIR_IOPM_2_201807127194263_201807127103524_CO01  CS_OFFL_SIR_IOPM_2_201807127194263_201807127103524_CO01  CS_OFFL_SIR_IOPM_2_201807127194263_201807127103524_CO01  CS_OFFL_SIR_IOPM_2_201807127104263_201807127103524_CO01  CS_OFFL_SIR_IOPM_2_201807127104263_201807127103524_CO01  CS_OFFL_SIR_IOPM_2_20180712710455_CO01  CS_OFFL_SIR_IOPM_2_201807127102034_20180712710055_CO01  CS_OFFL_SIR_IOPM_2_201807127102034_201807127100714_CO01  CS_OFFL_SIR_IOPM_2_201807127102034_201807127100714_CO01  CS_OFFL_SIR_IOPM_2_201807127100714_CO01  CS_OFFL_SIR_IOPM_2_2	CS_OFFL_SIR_IOPM_2_20190712T172735_20190712T173900_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality Flags have been all process of the Coop Allineeter Range and Backscatter Quality Flags have been set for one or more received.  CS_OFFL_SIR_IOPM_2_20190712T185946_20190712T191840_0001  CS_OFFL_SIR_IOPM_2_20190712T194259_20190712T191840_0001  CS_OFFL_SIR_IOPM_2_20190712T194259_20190712T203244_0001  CS_OFFL_SIR_IOPM_2_20190712T201258_20190712T203244_0001  CS_OFFL_SIR_IOPM_2_20190712T201258_20190712T203244_0001  CS_OFFL_SIR_IOPM_2_20190712T201258_20190712T203245_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203344_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203545_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203545_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203545_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203545_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T20258_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203714_0001  CS_OFFL_SIR_IOPM_2_20190712T20352_20001  CS_OFFL_SIR_IOPM_2_20190712T20353_20190712T20352_20001  CS_OFFL_SIR_IOPM_2_20190712T20353_20190712T20352_20001  CS_OFFL_SIR_IOPM_2_20190712T20353_20190712T20352_20001  CS_OFFL_SIR_IOPM_2_20190712T20353_20190712T20352_20001  CC_OFFL_SIR_IOPM_2_20190712T20353_20190712T20352_20001  CC_OFFL_SIR_IOPM_2_20190712T20353_20190712T20353_20001  CC_OFFL_SIR_IOPM_2_20190712T20353_20190712T203	CS_OFFL_SIR_IOPM_2_20190712T174911_20190712T175209_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Beckscatter Quality  CS_OFFL_SIR_IOPM_2_201907127194255_201907127191840_CO01  CS_OFFL_SIR_IOPM_2_201907127194255_201907127200324_CO01  CS_OFFL_SIR_IOPM_2_201907127100324_CO01  CS_OFFL_SIR_IOPM_2_201907127100324_CO01  CS_OFFL_SIR_IOPM_2_201907127100324_CO01  CS_OFFL_SIR_IOPM_2_20190712720355_20190712720145_CO01  CS_OFFL_SIR_IOPM_2_20190712720355_20190712720255_CO01  CS_OFFL_SIR_IOPM_2_20190712720355_20190712720255_CO01  CS_OFFL_SIR_IOPM_2_20190712720355_20190712720355_CO01  CS_OFFL_SIR_IOPM_2_20190712720355_20190712720355_CO01  CS_OFFL_SIR_IOPM_2_20190712720355_CO01  CS_OFFL_SIR_IOPM_2_20190712721355_CO01  CS_OFFL_SIR_IOPM_2_20190712721355	CS_OFFL_SIR_IOPM_2_20190712T180852_20190712T182538_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscater Oually, COCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimeter Range and Backscater Oually Flags have been and the OCCG Altimete	CS_OFFL_SIR_IOPM_2_20190712T183046_20190712T183546_C001		
and Backscattler Quality, COCG Altimeter Range and Backscattler Quality Flags have been set for one or more records.  CS_OFFL_SIR_JOPM_2_20190712T201258_20190712T201451_CO01  CS_OFFL_SIR_JOPM_2_20190712T202258_20190712T202855_CO01  CS_OFFL_SIR_JOPM_2_20190712T202258_20190712T202855_CO01  CS_OFFL_SIR_JOPM_2_20190712T202258_20190712T202855_CO01  CS_OFFL_SIR_JOPM_2_20190712T202585_20190712T203910_CO01  CS_OFFL_SIR_JOPM_2_20190712T202585_20190712T203910_CO01  CS_OFFL_SIR_JOPM_2_20190712T203716_20190712T203910_CO01  CS_OFFL_SIR_JOPM_2_20190712T203716_20190712T203910_CO01  CS_OFFL_SIR_JOPM_2_20190712T203716_20190712T203910_CO01  CS_OFFL_SIR_JOPM_2_20190712T203716_20190712T203910_CO01  CS_OFFL_SIR_JOPM_2_20190712T203516_20190712T203910_CO01  CS_OFFL_SIR_JOPM_2_20190712T203516_20190712T203910_CO01  CS_OFFL_SIR_JOPM_2_20190712T211116_20190712T21755_CO01  CS_OFFL_SIR_JOPM_2_20190712T211116_20190712T214445_CO01  CS_OFFL_SIR_JOPM_2_20190712T213155_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T213155_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T213155_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T215153_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T215153_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T215153_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T215450_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T215450_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T215450_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T215450_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T225153_20190712T215402_CO01  CS_OFFL_SIR_JOPM_2_20190712T225153_20190712T22538_CO01  CCS_OFFL_SIR_JOPM_2_20190712T225153_20190712T22538_CO01  CCS_OFFL_SIR_JOPM_2_20190712T225153_20190712T22538_CO01  CCS_OFFL_SIR_JOPM_2_20190712T225153_20190712T22538_CO01  CCS_OFFL_SIR_JOPM_2_20190712T225153_20190712T22538_CO01  CCS_OFFL_SIR_JOPM_2_20190712T225153_20190712T22538_CO01  CCS_OFFL_SIR_JOPM_2_20190712T225153_20190712T2235251_CO01  CCS_OFFL_SIR_JOPM_2_20190712T225153_20190712T235251_CO01  CCS_OFFL_SIR_JOPM_2_20190712T235153_20190712T2	CS_OFFL_SIR_IOPM_2_20190712T184253_20190712T191840_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20190712T20234_20190712T202855_C001  CS_OFFL_SIR_IOPM_2_20190712T20234_20190712T203855_C001  CS_OFFL_SIR_IOPM_2_20190712T202385_20190712T203714_C001  CS_OFFL_SIR_IOPM_2_20190712T202376_20190712T203910_C001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203910_C001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203910_C001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203910_C001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T205226_C001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T205206_C001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T205226_C001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T205206_C001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T205226_C001  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T217755_C001  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T217755_C001  CS_OFFL_SIR_IOPM_2_20190712T215009_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215404_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215404_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215404_C001  CS_OFFL_SIR_IOPM_2_20190712T215150_20190712T215604_C001  CS_OFFL_SIR_IOPM_2_20190712T2215150_20190712T2256_C001  CS_OFFL_SIR_IOPM_2_20190712T2215150_20190712T2256_C001  CS_OFFL_SIR_IOPM_2_20190712T225150_20190712T2256_C001  CS_OFFL_SIR_IOPM_2_20190712T225150_20190712T2256_C001  CS_OFFL_SIR_IOPM_2_20190712T225150_20190712T2256_C001  CS_OFFL_SIR_IOPM_2_20190712T225150_20190712T2256_C001  CS_OFFL_SIR_IOPM_2_20190712T225150_20190712T2256_C001  CS_OFFL_SIR_IOPM_2_20190712T225150_20190712T2256_C001  CS_OFFL_SIR_IOPM_2_20190712T225150_20190712T2356_C001  CS_OFFL_SIR_IOPM_2_20190712T225150_20190712T2356	CS_OFFL_SIR_IOPM_2_20190712T194028_20190712T200324_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COCG Altimeter Range and Backscatter Quality Flags have been additioned from our more records.  CS_OFFL_SIR_IOPM_2_20190712T202858_20190712T203714_CO01  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203910_CO01  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203910_CO01  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203910_CO01  CS_OFFL_SIR_IOPM_2_20190712T203310_CO01  CS_OFFL_SIR_IOPM_2_20190712T203310_CO01  CS_OFFL_SIR_IOPM_2_20190712T204351_20190712T20526_CO01  CS_OFFL_SIR_IOPM_2_20190712T204351_20190712T20526_CO01  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T20526_CO01  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T2155_CO01  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T214445_CO01  CS_OFFL_SIR_IOPM_2_20190712T213009_20190712T214445_CO01  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T215604_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T21550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T22560_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T230760_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T230760_CO01  CS_OFFL_SIR_IOPM_2_20190712T2550_20190712T230760_CO01  CS_OFFL_SIR_	CS_OFFL_SIR_IOPM_2_20190712T201258_20190712T201451_C001		
and Backscatter Quality, OCOG Allimeter Range and Backscatter Quality, Plags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203910_C001  CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203910_C001  CS_OFFL_SIR_IOPM_2_20190712T204351_20190712T205226_C001  CS_OFFL_SIR_IOPM_2_20190712T204351_20190712T205226_C001  CS_OFFL_SIR_IOPM_2_20190712T204351_20190712T205226_C001  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T212755_C001  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T212155_C001  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T214445_C001  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T214445_C001  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T215904_C001  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T215904_C001  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T221516_C001  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T221516_C001  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T221516_C001  CS_OFFL_SIR_IOPM_2_20190712T215153_20190712T221516_C001  CS_OFFL_SIR_IOPM_2_20190712T215153_20190712T221516_C001  CS_OFFL_SIR_IOPM_2_20190712T215153_20190712T221516_C001  CS_OFFL_SIR_IOPM_2_20190712T215153_20190712T221516_C001  CS_OFFL_SIR_IOPM_2_20190712T215153_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T221515_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T22315_20190712T223008_C001  CS_OFFL_SIR_IOPM_2_20190712T22315_20190712T223008_C001  CS_OFFL_SIR_IOPM_2_20190712T22315_20190712T223008_C001  C	CS_OFFL_SIR_IOPM_2_20190712T202234_20190712T202855_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T204351_20190712T205226_CO01  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T2155_CO01  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T2155_CO01  CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T2155_CO01  CS_OFFL_SIR_IOPM_2_20190712T213009_20190712T214445_CO01  CS_OFFL_SIR_IOPM_2_20190712T213009_20190712T214445_CO01  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T215402_CO01  CS_OFFL_SIR_IOPM_2_20190712T21553_20190712T215402_CO01  CS_OFFL_SIR_IOPM_2_20190712T215450_20190712T215904_CO01  CS_OFFL_SIR_IOPM_2_20190712T2215450_20190712T215904_CO01  CS_OFFL_SIR_IOPM_2_20190712T2215450_20190712T221504_CO01  CS_OFFL_SIR_IOPM_2_20190712T2215450_20190712T221504_CO01  CS_OFFL_SIR_IOPM_2_20190712T2215153_20190712T221504_CO01  CS_OFFL_SIR_IOPM_2_20190712T2215153_20190712T22504_CO01  CS_OFFL_SIR_IOPM_2_20190712T2215153_20190712T22504_CO01  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T22504_CO01  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T22504_CO01  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T22504_CO01  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T225153_20190712T22506_CO01  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T22506_CO01  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T2251506_CO01  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T233708_CO01  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T233708_CO01  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T233708_CO01  CS_OFFL_SIR_IOPM_2_20190712T23128_20190712T233521_CO01  CS_OFFL_SIR_IOPM_2_20190712T23128_20190712T233521_CO01  CS_OFFL_SIR_IOPM_2_20190712T23128_20190712T233521_CO01  CS_OFFL_SIR_IOPM_2_20190712T23128_20190712T233508_CO01  CS_OFFL_SIR_IOPM_2_20190712T23128_20190712T233508_CO01  CS_OFFL_SIR_IOPM_2_20190712T23128_20190712T233508_CO01  CS_OFFL_SIR_IOPM_2_20190712T23128_20190712T233508_CO01  CS_OFFL_SIR_IOPM_2_20190712T23128_20190712T233508_CO01  CS_OFFL_SIR	CS_OFFL_SIR_IOPM_2_20190712T202858_20190712T203714_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Plags have been set for one or more records.  Ocean Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Alti	CS_OFFL_SIR_IOPM_2_20190712T203716_20190712T203910_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, CCG Altimeter Range and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T213009_20190712T214445_C001  CS_OFFL_SIR_IOPM_2_20190712T215153_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215153_20190712T215904_C001  CS_OFFL_SIR_IOPM_2_20190712T215450_20190712T215904_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T2215904_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T22736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T22736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T223521_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T23128_20190712T23308_C001  CS_OFFL_SIR_IOPM_2_20190712T	CS_OFFL_SIR_IOPM_2_20190712T204351_20190712T205226_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG CS_OFFL_SIR_IOPM_2_20190712T215153_20190712T215402_C001  CS_OFFL_SIR_IOPM_2_20190712T215450_20190712T215904_C001  CS_OFFL_SIR_IOPM_2_20190712T215450_20190712T215904_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T215904_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T220010  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T22736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T22000  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T22000  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T23305_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T23305_C001  Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T23305_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T23305_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T23305_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T23305_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T23305_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T23305_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233251_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233251_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233251_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233251_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233251_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233251_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233251_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233251_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190	CS_OFFL_SIR_IOPM_2_20190712T211116_20190712T212755_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20190712T215450_20190712T215904_C001  DCGG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  DCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  DCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  DCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  DCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001  DCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  DCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  DCGG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  DCGG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  DCGG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20190712T213009_20190712T214445_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  Backscatter Quality  CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T22736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T22736_C001  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233551_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233551_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233555_C001  CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCGA Altimeter Range Quality, OCOG  Altimeter Range Quality, OCOG  Altimeter Range Quality, OCOG  Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20190712T215153_20190712T215402_C001		
CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T2332501  COCOR Altimeter Range R	CS_OFFL_SIR_IOPM_2_20190712T215450_20190712T215904_C001		
CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T2332505_C001  CS_OFFL_SIR_IOPM_2_20190712T233247_20190712T233805_C001  CS_OFFL_SIR_IOPM_2_20190712T233247_20190712T233805_C001  COCOG Altimeter Range Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_IOPM_2_20190712T220121_20190712T221614_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001  Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T2332521_C001  CS_OFFL_SIR_IOPM_2_20190712T2332047_20190712T233805_C001  CS_OFFL_SIR_IOPM_2_20190712T2332047_20190712T233805_C001  CS_OFFL_SIR_IOPM_2_20190712T2332047_20190712T233805_C001  CS_OFFL_SIR_IOPM_2_20190712T2332047_20190712T233805_C001  CS_OFFL_SIR_IOPM_2_20190712T2332047_20190712T233805_C001	CS_OFFL_SIR_IOPM_2_20190712T221815_20190712T222736_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T233805_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range Altimeter Range Quality Flags have been set OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range Altimeter Range Quality Flags have been set OCOG Altimeter Range Altimeter Range Quality Flags have been set OCOG Altimeter Range Altimeter Range Quality Flags have been set OCOG Altimeter Range Altimeter Range Quality Flags have been set OCOG	CS_OFFL_SIR_IOPM_2_20190712T225153_20190712T230708_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20190712T231218_20190712T232521_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
backscarter Quality for one or more records.	CS_OFFL_SIR_IOPM_2_20190712T232947_20190712T233805_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, 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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  OCOG Altimeter Range Quality, OCOG Backscatter Quality  OCOG Altimeter Range Quality, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG

### 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.

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20190712T001828_20190712T002010_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_IOPN_2_20190712T005613_20190712T005842_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_IOPN_2_20190712T005923_20190712T010039_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_IOPN_2_20190712T011043_20190712T011101_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_IOPN_2_20190712T012045_20190712T012206_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_IOPN_2_20190712T015805_20190712T015938_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_IOPN_2_20190712T020110_20190712T020224_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_IOPN_2_20190712T020645_20190712T020926_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_IOPN_2_20190712T034724_20190712T034843_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_IOPN_2_20190712T040549_20190712T040744_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T041858_20190712T041928_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T042326_20190712T042409_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T043651_20190712T043805_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T043847_20190712T044015_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T051728_20190712T052042_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 I and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20190712T054701_20190712T054847_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T083253_20190712T083417_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T092111_20190712T092529_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T092634_20190712T092742_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T093305_20190712T093337_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T094053_20190712T094254_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T101201_20190712T101343_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 I and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20190712T102035_20190712T102308_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 I and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20190712T103958_20190712T104438_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T105734_20190712T105857_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T110112_20190712T110639_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 I and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20190712T115100_20190712T115314_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20190712T115945_20190712T120316_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T123854_20190712T124017_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T124109_20190712T124501_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T130231_20190712T130439_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T151619_20190712T151626_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20190712T151955_20190712T152137_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20190712T155952_20190712T160111_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20190712T165649_20190712T170002_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20190712T174803_20190712T174911_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.

CS_OFFL_SIR_IOPN_2_20190712T175210_20190712T175411_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_IOPN_2_20190712T180600_20190712T180852_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_IOPN_2_20190712T201451_20190712T202116_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_IOPN_2_20190712T214533_20190712T214710_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_IOPN_2_20190712T214758_20190712T215153_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_IOPN_2_20190712T215904_20190712T220039_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_IOPN_2_20190712T222736_20190712T222916_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_IOPN_2_20190712T224917_20190712T225123_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_IOPN_2_20190712T230709_20190712T231218_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_IOPN_2_20190712T232751_20190712T232947_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_IOPR_2_20190712T003031_20190712T003208_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_IOPR_2_20190712T010707_20190712T010932_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_IOPR_2_20190712T020926_20190712T021126_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_IOPR_2_20190712T033359_20190712T033748_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_IOPR_2_20190712T041756_20190712T041858_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_IOPR_2_20190712T042247_20190712T042325_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_IOPR_2_20190712T042904_20190712T043651_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_IOPR_2_20190712T043805_20190712T043847_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_IOPR_2_20190712T051334_20190712T051728_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_IOPR_2_20190712T052713_20190712T053021_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_IOPR_2_20190712T055958_20190712T060029_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_IOPR_2_20190712T060707_20190712T060825_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_IOPR_2_20190712T065240_20190712T065445_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_IOPR_2_20190712T070614_20190712T070954_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_IOPR_2_20190712T075244_20190712T075617_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_IOPR_2_20190712T084404_20190712T085046_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_IOPR_2_20190712T090312_20190712T090418_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_IOPR_2_20190712T102308_20190712T102526_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, 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_IOPR_2_20190712T102653_20190712T102740_C001	PLRM 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_IOPR_2_20190712T110023_20190712T110112_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_IOPR_2_20190712T111240_20190712T111347_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_IOPR_2_20190712T112719_20190712T113218_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_IOPR_2_20190712T113222_20190712T113535_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_IOPR_2_20190712T120316_20190712T120536_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_IOPR_2_20190712T123109_20190712T123249_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_IOPR_2_20190712T125046_20190712T125229_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_IOPR_2_20190712T132838_20190712T133054_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_IOPR_2_20190712T142206_20190712T143037_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_IOPR_2_20190712T160111_20190712T160846_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_IOPR_2_20190712T164022_20190712T164310_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_IOPR_2_20190712T170002_20190712T170356_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_IOPR_2_20190712T175412_20190712T175559_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_IOPR_2_20190712T182539_20190712T182931_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_IOPR_2_20190712T183906_20190712T184253_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_IOPR_2_20190712T192536_20190712T192952_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_IOPR_2_20190712T200324_20190712T201022_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_IOPR_2_20190712T205810_20190712T210423_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_IOPR_2_20190712T212755_20190712T213009_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_IOPR_2_20190712T214711_20190712T214757_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_IOPR_2_20190712T220039_20190712T220121_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_IOPR_2_20190712T223822_20190712T223956_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

# L2 Quality Flags (1 Hz & 1Hz PLRM)

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

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

#### 5.8 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 over land and sea ice, but this is to be expected. The number of products with this error flag set is given below.

Number of products with errors:

63

#### 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 IOPR and IOPN products over sea ice, but this is to be expected.

Number of products with errors:

150

### 6. IOP L2 Pole-to-Pole Data Quality Check

#### 6.1 P2P Product Format Check

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

Number of products with errors:

Ω

#### 6.2 P2P 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:

Λ

# 6.3 P2P 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:

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### 6.4 P2P 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. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > 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:

29

Product	Test Failed	Description
CS_OFFL_SIR_IOP_2_20190711T233401_20190712T002338_C002	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)
CS_OFFL_SIR_IOP_2_20190712T002338_20190712T011314_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)
CS_OFFL_SIR_IOP_2_20190712T011314_20190712T020252_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)
CS_OFFL_SIR_IOP_2_20190712T025228_20190712T034206_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)
CS_OFFL_SIR_IOP_2_20190712T034206_20190712T043141_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)
CS_OFFL_SIR_IOP_2_20190712T043141_20190712T052119_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)
CS_OFFL_SIR_IOP_2_20190712T052119_20190712T061055_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)
CS_OFFL_SIR_IOP_2_20190712T061055_20190712T070033_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)
CS_OFFL_SIR_IOP_2_20190712T070033_20190712T075008_C001	Mean Sea Suriace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (EES), Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_2_20190712T075008_20190712T083946_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)
CS_OFFL_SIR_IOP_2_20190712T083946_20190712T092922_C001	Mean Sea Suriace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_2_20190712T092922_20190712T101900_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)
CS_OFFL_SIR_IOP_2_20190712T101900_20190712T110835_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 (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_2_20190712T110835_20190712T115813_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)
CS_OFFL_SIR_IOP_2_20190712T115813_20190712T124749_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)
CS_OFFL_SIR_IOP_2_20190712T124749_20190712T133727_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)

CS_OFFL_SIR_IOP_220190712T133727_20190712T142703_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)
CS_OFFL_SIR_IOP_220190712T142703_20190712T151641_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)
CS_OFFL_SIR_IOP_220190712T151641_20190712T160616_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)
CS_OFFL_SIR_IOP_220190712T160616_20190712T165554_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)
CS_OFFL_SIR_IOP_220190712T165554_20190712T174530_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)
CS_OFFL_SIR_IOP_220190712T174530_20190712T183508_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)
CS_OFFL_SIR_IOP_220190712T183508_20190712T192443_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)
CS_OFFL_SIR_IOP_220190712T192443_20190712T201421_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)
CS_OFFL_SIR_IOP_220190712T201421_20190712T210357_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)
CS_OFFL_SIR_IOP_2_20190712T210357_20190712T215335_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 (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_220190712T215335_20190712T224310_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)
CS_OFFL_SIR_IOP_220190712T224310_20190712T233248_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)
CS_OFFL_SIR_IOP_220190712T233248_20190713T002224_C002	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

### 6.5 P2P Measurement Confidence Data Check

CryoSat P2P 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:

2

29

29

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220190712T142703_20190712T151641_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOP_220190712T215335_20190712T224310_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

### 6.6 P2P Measurement Quality Flag Check

#### P2P Quality Flags (20Hz)

CryoSat P2P data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record, copied from the corresponding L2 products.

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

Number of products with errors:

# P2P Quality Flags (20Hz PLRM)

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

Number of products with errors: 28

# P2P Quality Flags (1 Hz & 1Hz PLRM)

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

Number of products with errors: 2

#### 6.8 P2P Ocean Retracking Quality Check

# P2P Retracking Flags (20Hz)

Cryosal P2P data includes an ocean retracking quality flag (field 19) for each 20-Hz 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 IOPR and IOPN products over sea ice, but this is to be expected.

Number of products with errors: 2

# P2P Retracking Flags 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 IOPR and IOPN products over sea ice, but this is to be expected.