

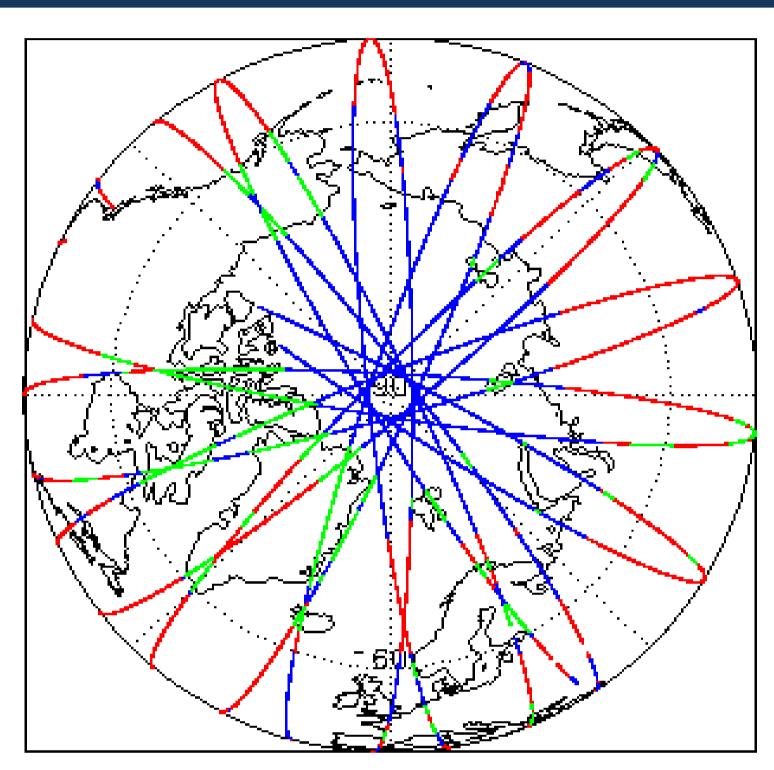
## 1. Overview

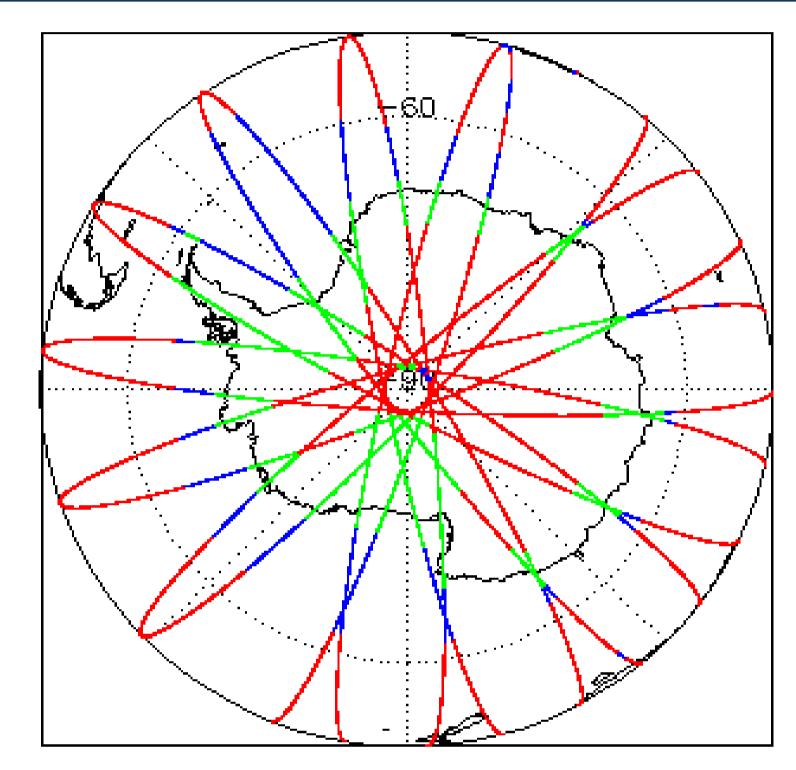
Report Production:	10-Jun-2020
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

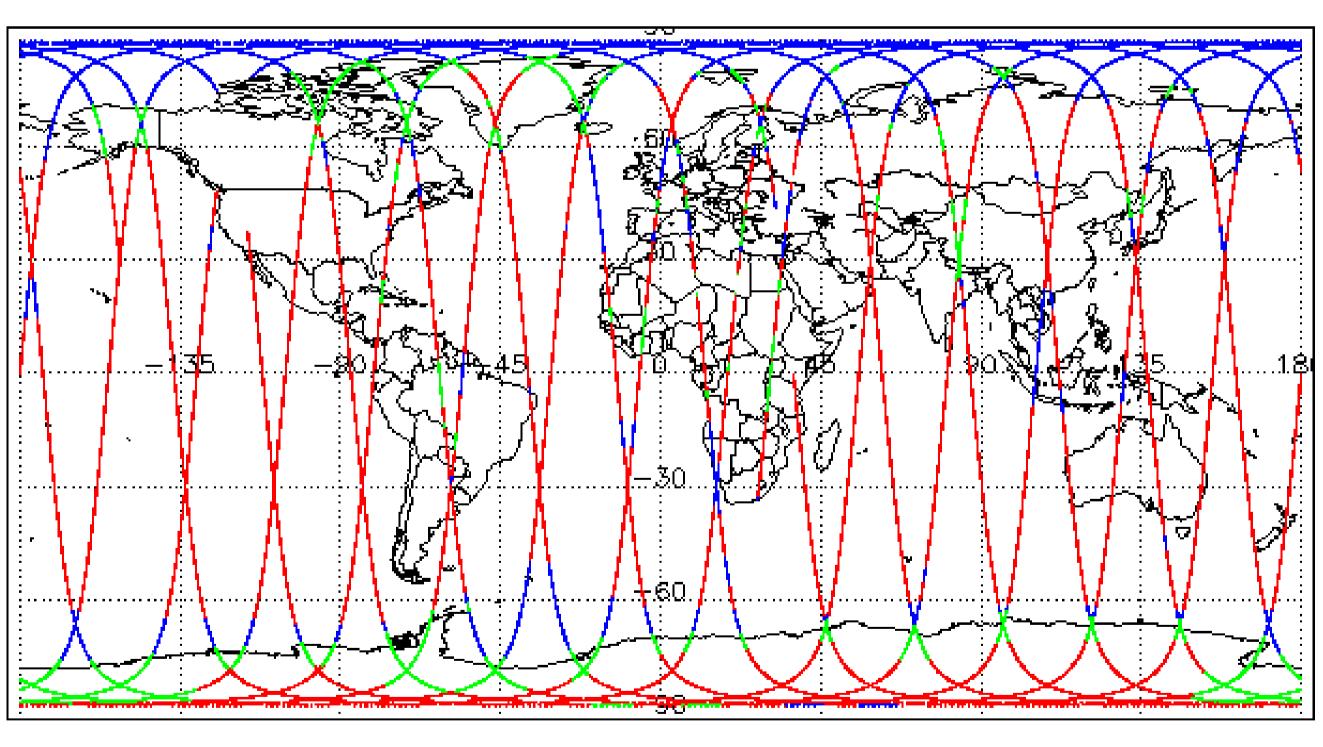
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary 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

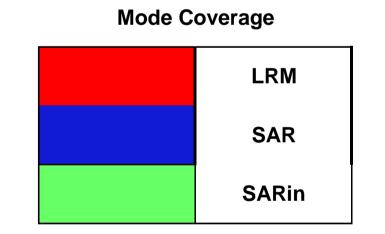
Mission / Instru	iment News
06-Jun-2020	None
07-Jun-2020	None
08-Jun-2020	Nothing planned

# 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:** 

0

## **4.4 L1B Auxiliary Correction Error Check**

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

Number of products with errors:

0

#### 4.5 L1B Measurement Confidence Data Check

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

Attitude Correction Missing: This flag is currently set in error for 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:** 

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20200607T215347_20200607T215842_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:** 

14

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20200607T002225_20200607T002257_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200607T070809_20200607T071157_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200607T115948_20200607T123340_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20200607T130227_20200607T130413_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200607T003023_20200607T003217_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200607T034150_20200607T034236_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200607T055639_20200607T060211_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200607T114757_20200607T114854_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20200607T150413_20200607T150822_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200607T024957_20200607T025315_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200607T033606_20200607T033727_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200607T150822_20200607T151614_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200607T181632_20200607T181729_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20200607T214241_20200607T215230_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:

## **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.

## **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.

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200607T082608_20200607T082708_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_IOPM_2_20200607T174734_20200607T175539_C001	Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20200607T003023_20200607T003217_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_20200607T010036_20200607T010201_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_20200607T010718_20200607T011024_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_20200607T020820_20200607T020844_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_20200607T024020_20200607T024321_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_20200607T024618_20200607T024957_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_20200607T034150_20200607T034236_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_20200607T042056_20200607T042330_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_20200607T051604_20200607T051724_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_20200607T055639_20200607T060211_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_20200607T065537_20200607T065746_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_20200607T065849_20200607T070119_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20200607T073819_20200607T073955_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_20200607T074844_20200607T075048_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_20200607T083449_20200607T083935_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_20200607T092635_20200607T092900_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_20200607T105731_20200607T110123_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20200607T114312_20200607T114435_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_20200607T123716_20200607T124029_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_20200607T124544_20200607T124655_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_20200607T142445_20200607T142606_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_20200607T150413_20200607T150822_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_20200607T160222_20200607T160409_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_20200607T164625_20200607T164720_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_20200607T174026_20200607T174249_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_20200607T182419_20200607T182631_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_20200607T191033_20200607T191246_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_20200607T191927_20200607T192354_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_20200607T200101_20200607T200453_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_20200607T205049_20200607T205322_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_20200607T210042_20200607T210225_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_20200607T223942_20200607T224118_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_20200607T001143_20200607T001810_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_20200607T001811_20200607T002112_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_20200607T014952_20200607T015708_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_20200607T015708_20200607T015852_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_20200607T033124_20200607T033605_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_20200607T033606_20200607T033727_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_20200607T050927_20200607T051444_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_20200607T051445_20200607T051604_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_20200607T065124_20200607T065202_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_20200607T065124_20200607T065202_C001  CS_OFFL_SIR_IOPR_2_20200607T065202_20200607T065536_C001	Mean Sea Surface (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
	Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_IOPR_2_20200607T065202_20200607T065536_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)  There is an error with the Mean Dynamic Topography height for one or
CS_OFFL_SIR_IOPR_2_20200607T065202_20200607T065536_C001 CS_OFFL_SIR_IOPR_2_20200607T082708_20200607T082727_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_IOPR_2_20200607T065202_20200607T065536_C001  CS_OFFL_SIR_IOPR_2_20200607T082708_20200607T082727_C001  CS_OFFL_SIR_IOPR_2_20200607T082727_20200607T083449_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_IOPR_2_20200607T065202_20200607T065536_C001  CS_OFFL_SIR_IOPR_2_20200607T082708_20200607T082727_C001  CS_OFFL_SIR_IOPR_2_20200607T082727_20200607T083449_C001  CS_OFFL_SIR_IOPR_2_20200607T100718_20200607T101519_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  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)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or
CS_OFFL_SIR_IOPR_2_20200607T065202_20200607T065536_C001  CS_OFFL_SIR_IOPR_2_20200607T082708_20200607T082727_C001  CS_OFFL_SIR_IOPR_2_20200607T082727_20200607T083449_C001  CS_OFFL_SIR_IOPR_2_20200607T100718_20200607T101519_C001  CS_OFFL_SIR_IOPR_2_20200607T113848_20200607T113937_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_IOPR_2_20200607T065202_20200607T065536_C001  CS_OFFL_SIR_IOPR_2_20200607T082708_20200607T082727_C001  CS_OFFL_SIR_IOPR_2_20200607T082727_20200607T083449_C001  CS_OFFL_SIR_IOPR_2_20200607T100718_20200607T101519_C001  CS_OFFL_SIR_IOPR_2_20200607T113848_20200607T113937_C001  CS_OFFL_SIR_IOPR_2_20200607T114854_20200607T115644_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200607T065202_20200607T065536_C001  CS_OFFL_SIR_IOPR_2_20200607T082708_20200607T082727_C001  CS_OFFL_SIR_IOPR_2_20200607T082727_20200607T083449_C001  CS_OFFL_SIR_IOPR_2_20200607T100718_20200607T101519_C001  CS_OFFL_SIR_IOPR_2_20200607T113848_20200607T113937_C001  CS_OFFL_SIR_IOPR_2_20200607T114854_20200607T115644_C001  CS_OFFL_SIR_IOPR_2_20200607T132659_20200607T133953_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  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)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20200607T065202_20200607T065536_C001  CS_OFFL_SIR_IOPR_2_20200607T082708_20200607T082727_C001  CS_OFFL_SIR_IOPR_2_20200607T082727_20200607T083449_C001  CS_OFFL_SIR_IOPR_2_20200607T100718_20200607T101519_C001  CS_OFFL_SIR_IOPR_2_20200607T113848_20200607T113937_C001  CS_OFFL_SIR_IOPR_2_20200607T114854_20200607T115644_C001  CS_OFFL_SIR_IOPR_2_20200607T132659_20200607T133953_C001  CS_OFFL_SIR_IOPR_2_20200607T150822_20200607T151614_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  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)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
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CS_OFFL_SIR_IOPR_2_20200607T082708_20200607T085536_C001  CS_OFFL_SIR_IOPR_2_20200607T082708_20200607T082727_C001  CS_OFFL_SIR_IOPR_2_20200607T082727_20200607T083449_C001  CS_OFFL_SIR_IOPR_2_20200607T100718_20200607T101519_C001  CS_OFFL_SIR_IOPR_2_20200607T113848_20200607T113937_C001  CS_OFFL_SIR_IOPR_2_20200607T113848_20200607T115644_C001  CS_OFFL_SIR_IOPR_2_20200607T1132659_20200607T1133953_C001  CS_OFFL_SIR_IOPR_2_20200607T150822_20200607T151614_C001  CS_OFFL_SIR_IOPR_2_20200607T164720_20200607T165258_C001  CS_OFFL_SIR_IOPR_2_20200607T181632_20200607T181729_C001  CS_OFFL_SIR_IOPR_2_20200607T182631_20200607T183324_C001  CS_OFFL_SIR_IOPR_2_20200607T182631_20200607T183324_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Dynamic Topography (1)  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)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  There is an error with the Mean Dynamic Topography height for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 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.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200607T215347_20200607T215842_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_20200606T233407_20200607T000751_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_20200607T002112_20200607T002208_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_20200607T003603_20200607T004059_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_20200607T005113_20200607T005853_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_20200607T010201_20200607T010718_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_20200607T011357_20200607T013528_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_20200607T013814_20200607T014730_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_20200607T015924_20200607T020350_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_20200607T020844_20200607T020857_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_20200607T021118_20200607T021610_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_20200607T021930_20200607T022423_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_20200607T022611_20200607T023718_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_20200607T025315_20200607T031933_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_20200607T032113_20200607T032616_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_20200607T034236_20200607T034929_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_20200607T034943_20200607T041356_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_20200607T043225_20200607T043704_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_20200607T043757_20200607T044836_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_20200607T044851_20200607T045925_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_20200607T051724_20200607T052127_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

Alliese Fage as disclassion Custor in order record.   The OCOO Alliese Fage as disclassion	CS_OFFL_SIR_IOPM_2_20200607T052252_20200607T053759_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Sentence Promises Sent Conference Sentence Sente	CS_OFFL_SIR_IOPM_2_20200607T054702_20200607T055639_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
GS OFFL SIR IOPN 2 absolute (Training absolute (Training) and Secretary Chaigh, COCID Alternate Range and Secretary Chaigh, COCID CS_OFFL_SIR_IOPN_2_200006771082791_2000067108359_2001  CS_OFFL_SIR_IOPN_2_200006771082791_2000067108359_2001  CS_OFFL_SIR_IOPN_2_200006771082791_2000067109359_2001  CS_OFFL_SIR_IOPN_2_20000677107309_2000067107309_2001  CS_OFFL_SIR_IOPN_2_20000677107309_2000067107309_2001  CS_OFFL_SIR_IOPN_2_20000677107309_2000067107309_2001  CS_OFFL_SIR_IOPN_2_20000677107309_2000067107309_2001  CS_OFFL_SIR_IOPN_2_20000677107309_2000067107309_2001  CS_OFFL_SIR_IOPN_2_20000677107309_2000067107309_2001  CS_OFFL_SIR_IOPN_2_20000677107309_2000067107309_2001  CS_OFFL_SIR_IOPN_2_20000677107309_2000067107309_2001  CS_OFFL_SIR_IOPN_2_20000677107309_20000677109204_2001  CS_OFFL_SIR_IOPN_2_20000677109309_20000677109204_2001  CS_OFFL_SIR_IOPN_2_200006771109309_20000677109204_2001  CS_OFFL_SIR_IOPN_2_200006771109309_20000677109204_2001  CS_OFFL_SIR_IOPN_2_200006771109309_200006771109204_2001  CS_OFFL_SIR_IOPN_2_200006771109309_200006771109304_2001  CS_OFFL_SIR_IOPN_2_200006771109309_200006771109304_2001  CS_OFFL_SIR_IOPN_2_200006771109309_200006771109304_2001  CS_OFFL_SIR_IOPN_2_200006771109309_200006771109304_2001  CS_OFFL_SIR_IOPN_2_200006771109304_2001  CS_OFFL_SIR_IOPN_2_200006771109304_2001  CS_OFFL_SIR_IOPN_2_200006771109304_2001  CS_OFFL_SIR_IOPN_2_2000067711	CS_OFFL_SIR_IOPM_2_20200607T060506_20200607T060930_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
And Residentian Country (2006) And Residentian Country (2006) And Residentian Country (2006) And Residentian Country (2006) And Residentian Residentian Country (2006) And Residentian Residentian Residentian Country (2006) And Residentian Resident	CS_OFFL_SIR_IOPM_2_20200607T061159_20200607T062614_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscated Quality, CODD and Atthreet Range, SSHA, SPH and Backscated Part Quality Flags have been set for one or more records.  CS_OFFL_SIR_JOPM_2_20200807107386_20008077073667_CO21  CS_OFFL_SIR_JOPM_2_20200807107366_20008077073667_CO21  CS_OFFL_SIR_JOPM_2_20200807107366_20008077073667_CO21  CS_OFFL_SIR_JOPM_2_20200807107366_20008077073667_CO21  CS_OFFL_SIR_JOPM_2_20200807107366_2000807708131_CO21  CS_OFFL_SIR_JOPM_2_20200807107366_2000807708131_CO21  CS_OFFL_SIR_JOPM_2_20200807108154_2000807708154_CO21  CS_OFFL_SIR_JOPM_2_20200807108154_2000807708154_CO21  CS_OFFL_SIR_JOPM_2_20200807108154_2000807708154_CO21  CS_OFFL_SIR_JOPM_2_20200807708155_2000807708154_CO21  CS_OFFL_SIR_JOPM_2_20200807708156_2000807708154_CO21  CS_OFFL_SIR_JOPM_2_20200807708156_2000807708154_CO21  CS_OFFL_SIR_JOPM_2_20200807708156_2000807708154_CO21  CS_OFFL_SIR_JOPM_2_20200807708156_2000807708156_CO21  CS_OFFL_SIR_JOPM_2_20200807708156_2000807708156_CO21  CS_OFFL_SIR_JOPM_2_20200807708156_CO21  CS_OFFL_SIR_JOPM_2_20200807708156_2000807708156_CO21  CS_OFFL_SIR_JOPM_2_20200807708156_CO21  CS_OF	CS_OFFL_SIR_IOPM_2_20200607T062754_20200607T063350_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscation Caulity, CICIG  CS_OFFL_SIR_IOPM_2_20200607T073656_20200607T0844_C001  CS_OFFL_SIR_IOPM_2_20200607T073656_20200607T0844_C001  CS_OFFL_SIR_IOPM_2_20200607T07516_20200607T0845_C001  CS_OFFL_SIR_IOPM_2_20200607T07516_20200607T08254_C001  CS_OFFL_SIR_IOPM_2_20200607T08256_20200607T108551 C001  CS_OFFL_SIR_IOPM_2_20200607T082032_20200607T108551 C001  CS_OFFL_SIR_IOPM_2_20200607T082032_20200607T108551 C001  CS_OFFL_SIR_IOPM_2_20200607T082032_20200607T108551 C001  CS_OFFL_SIR_IOPM_2_20200607T082032_20200607T108551 C001  CS_OFFL_SIR_IOPM_2_20200607T1082032_20200607T108551 C001  CS_OFFL_SIR_IOPM_2_20200607T1082032_20200607T108551 C001  CS_OFFL_SIR_IOPM_2_20200607T1082032_20200607T108551 C001  CS_OFFL_SIR_IOPM_2_20200607T102266_20200607T108550_C001  CS_OFFL_SIR_IOPM_2_20200607T102266_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102266_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102562_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102562_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102562_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102562_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102562_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102562_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102562_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102562_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T102562_20200607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T108530_2000607T108530_C001  CS_OFFL_SIR_IOPM_2_20200607T108530_2000607T108540_C001  CS_OFFL_SIR_IOPM_2_20200607T108530_20	CS_OFFL_SIR_IOPM_2_20200607T070809_20200607T071157_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS OFFL SIR IOPN 2 20200607709519 20200807708131 CO01  CS OFFL SIR IOPN 2 20200607709519 202008077081541 CO01  CS OFFL SIR IOPN 2 202006077085164 202008077081545 CO01  CS OFFL SIR IOPN 2 202006077085164 202008077081545 CO01  CS OFFL SIR IOPN 2 20200607708096164 202008077081545 CO01  CS OFFL SIR IOPN 2 2020060770809616 202008077082034 CO01  CS OFFL SIR IOPN 2 202006077082039 202008077082034 CO01  CS OFFL SIR IOPN 2 202006077082039 202008077082034 CO01  CS OFFL SIR IOPN 2 202006077082039 202008077082034 CO01  CS OFFL SIR IOPN 2 20200607708008 202008077082034 CO01  CS OFFL SIR IOPN 2 20200607708008 202008077082034 CO01  CS OFFL SIR IOPN 2 20200607708008 202008077082034 CO01  CS OFFL SIR IOPN 2 202006077102249 202008077102500 CO01  CS OFFL SIR IOPN 2 202006077102249 202008077102600 CO01  CS OFFL SIR IOPN 2 202006077102349 202008077102600 CO01  CS OFFL SIR IOPN 2 202006077102349 202008077102600 CO01  CS OFFL SIR IOPN 2 202006077102749 202008077102740 CO01  CS OFFL SIR IOPN 2 202006077102749 202008077102740 CO01  CS OFFL SIR IOPN 2 202006077110742 202008077102740 CO01  CS OFFL SIR IOPN 2 202006077108062 202008077102740 CO01  CS OFFL SIR IOPN 2 20200607710808	CS_OFFL_SIR_IOPM_2_20200607T071320_20200607T073657_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the COCG Allmeter Range and Backscatter Quality Flags have been and the COCG Allmeter Range and Backscatter Quality Flags have been and the COCG Allmeter Range and Backscatter Quality Flags have been and the COCG Allmeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200607T09259_20200607T092634_C001  CS_OFFL_SIR_IOPM_2_20200607T09209_20200607T092634_C001  CS_OFFL_SIR_IOPM_2_20200607T09209_20200607T092634_C001  CS_OFFL_SIR_IOPM_2_20200607T09209_20200607T092634_C001  CS_OFFL_SIR_IOPM_2_20200607T09209_20200607T092634_C001  CS_OFFL_SIR_IOPM_2_20200607T102349_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102349_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T102630_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T1025480_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T1025480_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T1025480_C001  CS_OFFL_SIR_IOPM_2_20200607T1023_20200607T1102001  CS_OFFL_SIR_IOPM_2_20200607T1023_20200607T1102001  CS_OFFL_SIR_IOPM_2_20200607T11023_20200607T112640_C001  CS_OFFL_SIR_IOPM_2_20200607T1102480_20200607T112640_C001	CS_OFFL_SIR_IOPM_2_20200607T073955_20200607T074844_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
S. OFFL SIR JOPM 2 20200607T09254 (2001 Allimeter Range and Backscatter Quality Flags have been set for one or more records.  CS OFFL SIR JOPM 2 20200607T09209 20200607T092634 (2001 CS OFFL SIR JOPM 2 20200607T09209 20200607T092634 (2001 CS OFFL SIR JOPM 2 20200607T093039 20200607T095751 (2001 CS OFFL SIR JOPM 2 20200607T093039 20200607T095751 (2001 CS OFFL SIR JOPM 2 20200607T102349 20200607T102830 (2001 CS OFFL SIR JOPM 2 20200607T102349 20200607T102830 (2001 CS OFFL SIR JOPM 2 20200607T102349 20200607T102830 (2001 CS OFFL SIR JOPM 2 20200607T102349 (2001 CS OFFL SIR JOPM 2 20200607T123440 (2001 CS OFF	CS_OFFL_SIR_IOPM_2_20200607T075115_20200607T081311_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20200607T093039_20200607T095751_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH	CS_OFFL_SIR_IOPM_2_20200607T085154_20200607T091546_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200607T102349_20200607T102630_C001  Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFF	CS_OFFL_SIR_IOPM_2_20200607T092209_20200607T092634_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T105458_C001  CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T105458_C001  CS_OFFL_SIR_IOPM_2_20200607T110123_20200607T110712_C001  CS_OFFL_SIR_IOPM_2_20200607T110123_20200607T110712_C001  CS_OFFL_SIR_IOPM_2_20200607T110855_20200607T110712_C001  CS_OFFL_SIR_IOPM_2_20200607T110855_20200607T112640_C001  CS_OFFL_SIR_IOPM_2_20200607T110855_20200607T112640_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T123340_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T123340_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T125346_C001  CS_OFFL_SIR_IOPM_2_20200607T124029_20200607T124543_C001  CS_OFFL_SIR_IOPM_2_20200607T124029_20200607T124543_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T125546_C00	CS_OFFL_SIR_IOPM_2_20200607T093039_20200607T095751_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200607T110123_20200607T110712_C001  CS_OFFL_SIR_IOPM_2_20200607T110855_20200607T112640_C001  CS_OFFL_SIR_IOPM_2_20200607T110855_20200607T112640_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T112640_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T112540_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T112540_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T123340_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T124543_C001  CS_OFFL_SIR_IOPM_2_20200607T1125226_20200607T124543_C001  CS_OFFL_SIR_IOPM_2_20200607T124029_20200607T124543_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T1255	CS_OFFL_SIR_IOPM_2_20200607T102349_20200607T102630_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20200607T110855_20200607T112640_C001  CS_OFFL_SIR_IOPM_2_20200607T110855_20200607T112640_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T123340_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T123340_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T124543_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T12	CS_OFFL_SIR_IOPM_2_20200607T102756_20200607T105458_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T123340_C001  CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T123340_C001  CS_OFFL_SIR_IOPM_2_20200607T125248_20200607T125548_C001  CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T125526_20200607T125546_C001  CS_OFFL_SIR_IOPM_2_20200607T125526_20200607T12554	CS_OFFL_SIR_IOPM_2_20200607T110123_20200607T110712_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records.  Ocean Altimeter Range and Backscatter Quality, OCOG Altimeter Range Quality, OCOG Backscatter Quality  CS_OFFL_SIR_IOPM_2_20200607T124029_20200607T124543_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range 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, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Al	CS_OFFL_SIR_IOPM_2_20200607T110855_20200607T112640_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T123340_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  OCOG Altimeter Range Quality, OCOG Backscatter Quality  OCOG Altimeter Range Quality, OCOG Backscatter Quality  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200607T114619_20200607T114710_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range 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 The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags	CS_OFFL_SIR_IOPM_2_20200607T115948_20200607T123340_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags	CS_OFFL_SIR_IOPM_2_20200607T124029_20200607T124543_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	CS_OFFL_SIR_IOPM_2_20200607T125226_20200607T125546_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality set for one or more records.	CS_OFFL_SIR_IOPM_2_20200607T132258_20200607T132659_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200607T133953_20200607T134835_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records.	CS_OFFL_SIR_IOPM_2_20200607T133953_20200607T134835_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200607T135121_20200607T141248_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags set for one or more records.	CS_OFFL_SIR_IOPM_2_20200607T135121_20200607T141248_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200607T141904_20200607T142030_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_20200607T141904_20200607T142030_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200607T142037_20200607T142445_C001  OCOG Altimeter Range Quality, OCOG for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200607T142037_20200607T142445_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200607T142807_20200607T143951_C001  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200607T142807_20200607T143951_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

COUNT DE CRIM - APPENTITURE ADMONTESSA COUNTY DE CRIM	CS_OFFL_SIR_IOPM_2_20200607T144139_20200607T144856_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.
DO-UPIL_SRIJUPPIL_DISCOSTTIGES_COOK_TITUDES_COOK_DISCOSTTIGES_COOK	CS_OFFL_SIR_IOPM_2_20200607T144951_20200607T145409_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
DELICATION JURISHOOT 16 SEL 200000T115201_COX  OCCUPATION JURISHOOT 16 S	CS_OFFL_SIR_IOPM_2_20200607T150136_20200607T150236_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Sea DEFEASE CASES TO A CONTROL OF THE CONTROL OF TH	CS_OFFL_SIR_IOPM_2_20200607T151958_20200607T152517_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Section   Sect	CS_OFFL_SIR_IOPM_2_20200607T152542_20200607T155201_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Existance Custry  CS_CPF_SIR_LOPN_2_2000569716129_2009567716409_2009567716409_C00067716409_C000667716409_C000667716409_C000667716409_C000667716409_C00067716409_C000667716409_C0006771640	CS_OFFL_SIR_IOPM_2_20200607T155402_20200607T155928_C001		
CS_OFF_SR_OPV_2_02000607119205_22000607116035_0001  Observable for supplications of the common control of the	CS_OFFL_SIR_IOPM_2_20200607T155948_20200607T160222_C001		
CS_OFF_SR_JOPM_2_2000697T19232_200067T19232_C00067T19232_	CS_OFFL_SIR_IOPM_2_20200607T161029_20200607T162258_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Buckscare Outley  CS OFFL SIR (DPM 2 20000607171012 20000607171055 COO  Allinear Range on Bedescare Outley Coo  Allinear Range on Bedescare Outley  CS OFFL SIR (DPM 2 20000607171057 20000607117005 COO  Allinear Range on Bedescare Outley  CS OFFL SIR (DPM 2 20000607171057 20000607117005 COO  Allinear Range on Bedescare Outley  CS OFFL SIR (DPM 2 20000607171057 20000607117005 COO  Allinear Range on Bedescare Outley  CS OFFL SIR (DPM 2 20000607117005 COO  CS OFFL SIR (DPM 2 2000060711000 COO  CS OFFL SIR (DPM	CS_OFFL_SIR_IOPM_2_20200607T162320_20200607T164035_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and desolosated Quality, COCO Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been and become the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimeter Range and Backscatter Quality Plags have been self-and and the Coco Altimete	CS_OFFL_SIR_IOPM_2_20200607T164422_20200607T164624_C001		
und the COGG Alternater Range and Backscaatter Quality Flags have been as familiar to Company and Backscaatter Quality Flags have been as familiar Range and Backscaatter Quality Flags have been as for one or none rocords.  CS_OFFL_SIR_IOPM_2_202000077173833_202000077173839_C001  CS_OFFL_SIR_IOPM_2_202000077173833_202000077173900000771739000771739000771739000771739000771739000771739000771739000771739000771739000771739007717390077173900771739007717390077173900771739007717390077173900771739007717390077717390077717390077173900777173900777173900777173900777173900777173900777173900777173900777173900777173900777717390077717390077717390077771739007771739007777173900777717390077771739007777173900777717390077771739007777173900777717390077771739007777173900777771739007777717390077777173900777771739007777717390077777717390077777717390077777717390077777717390077777717390077777717390077777717390077777717390077777717390077777717390077777771739007777771739007777771739007777771739007777771739007777771739007777771739007777771739007777777390077777717390077777717390077777717390077777739007777771739007777771739007777771739007777771739007777771739007777771739007777777173900777777173	CS_OFFL_SIR_IOPM_2_20200607T170212_20200607T171353_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality Cooperation of the COOP Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200007T19733_20200007T19539_C001  CS_OFFL_SIR_IOPM_2_20200007T197474_20200007T19539_C001  CS_OFFL_SIR_IOPM_2_20200007T198424_20200807T19532_C001  CS_OFFL_SIR_IOPM_2_20200007T198521_20200807T191802_C001  CS_OFFL_SIR_IOPM_2_20200007T198521_20200807T191802_C001  CS_OFFL_SIR_IOPM_2_20200007T195321_20200807T191803_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T191803_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T191803_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T191803_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T191803_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T195801_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T195801_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T295801_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T295801_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T295802_C001  CS_OFFL_SIR_IOPM_2_20200007T192435_20200807T295802_C001  CS_OFFL_SIR_IOPM_2_20200807T205323_20200807T295805_C001  CC_OFFL_SIR_IOPM_2_20200807T205323_2020	CS_OFFL_SIR_IOPM_2_20200607T171557_20200607T173058_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
So_CFFL_SIR_IOPM_2_20200607T19332_2020607T19539_C001  Sackscatter Quality  CS_OFFL_SIR_IOPM_2_20200607T19342_20200607T19539_C001  CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T181632_C001  CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T181632_C001  CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T181632_C001  CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T181632_C001  CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T181632_C001  CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T181632_C001  CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T180401_C001  CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T180401_C001  CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T180401_C001  CS_OFFL_SIR_IOPM_2_20200607T182435_20200607T195801_C001  CS_OFFL_SIR_IOPM_2_20200607T192447_20200607T195801_C001  CS_OFFL_SIR_IOPM_2_20200607T1204343_20200607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T120432_20200607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T204543_20200607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T204543_2020607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T204543_2020607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T204543_2020607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T204543_2020607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T20460_C001  CS_OFFL_SIR_IOPM_2_20200607T204640_C0010460_T00460_T004	CS_OFFL_SIR_IOPM_2_20200607T173327_20200607T173825_C001		
and Backscatter Quality COCG Altimeter Range and Backscatter Quality Flags have been and the OCCG Altimeter Range and Backscatter Quality Flags have been and the OCCG Altimeter Range and Backscatter Quality Flags have been and the OCCG Altimeter Range and Backscatter Quality Flags have been and the OCCG Altimeter Range and Backscatter Quality Flags have been and the OCCG Altimeter Range and Backscatter Quality Flags have been and the OCCG Altimeter Range and Backscatter Quality Flags have been and the OCCG Altimeter Range and Backscatter Quality Flags have been and the OCCG Altimeter Range and Backscatter Quality Flags have been set of one or more records.  CS_OFFL_SIR_JOPM_2_20200607T19247_20200607T191737_C001  CS_OFFL_SIR_JOPM_2_20200607T19247_20200607T191737_C001  CS_OFFL_SIR_JOPM_2_20200607T192435_20200607T195801_C001  CS_OFFL_SIR_JOPM_2_20200607T192435_20200607T195801_C001  CS_OFFL_SIR_JOPM_2_20200607T202543_20200607T204840_C001  CS_OFFL_SIR_JOPM_2_20200607T202543_20200607T204810_C001  CS_OFFL_SIR_JOPM_2_20200607T205323_20200607T204810_C001  CS_OFFL_SIR_JOPM_2_20200607T205323_20200607T205652_C001  CS_OFFL_SIR_JOPM_2_20200607T20543_20200607T205652_C001  CS_OFFL_SIR_JOPM_2_20200607T205432_20200607T205652_C001  CS_OFFL_SIR_JOPM_2_20200607T205432_20200607T205652_C001  CS_OFFL_SIR_JOPM_2_20200607T205432_20200607T205652_C001  CS_OFFL_SIR_JOPM_2_20200607T205432_20200607T205652_C001  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_JOPM_2_20200607T20340_20200607T223066_C001  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCG_Altimeter Range and Backscatter Quality Fl	CS_OFFL_SIR_IOPM_2_20200607T173833_20200607T173839_C001		
and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been ast from one or more records.  CS OFFL SIR IOPM 2 20200807T185521 20200807T191009 C001  CS_OFFL_SIR_JOPM_2_20200807T191247_20200607T191737_C001  CS_OFFL_SIR_JOPM_2_20200807T191247_20200607T191737_C001  CS_OFFL_SIR_JOPM_2_20200807T192435_20200807T191737_C001  CS_OFFL_SIR_JOPM_2_20200807T192435_20200807T196801_C001  CS_OFFL_SIR_JOPM_2_20200807T192435_20200807T196801_C001  CS_OFFL_SIR_JOPM_2_20200807T202543_20200807T204640_C001  CS_OFFL_SIR_JOPM_2_20200807T202543_20200807T204640_C001  CS_OFFL_SIR_JOPM_2_20200807T202543_20200807T204640_C001  CS_OFFL_SIR_JOPM_2_20200807T202543_20200807T204640_C001  CS_OFFL_SIR_JOPM_2_20200807T202543_20200807T204640_C001  CS_OFFL_SIR_JOPM_2_20200807T204728_20200807T204640_C001  CS_OFFL_SIR_JOPM_2_20200807T204728_20200807T204910_C001  CS_OFFL_SIR_JOPM_2_20200807T204728_20200807T204910_C001  CS_OFFL_SIR_JOPM_2_20200807T205523_20200807T206552_C001  CS_OFFL_SIR_JOPM_2_20200807T205523_20200807T206552_C001  CS_OFFL_SIR_JOPM_2_20200807T205323_20200807T206552_C001  CS_OFFL_SIR_JOPM_2_20200807T205323_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T205323_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T205323_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T205323_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_2020807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20200807T205652_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20208087T20366_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20208087T203660_C001  CS_OFFL_SIR_JOPM_2_20200807T20340_20208087T203660_C001  CS_OFF	CS_OFFL_SIR_IOPM_2_20200607T174734_20200607T175539_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Set for one or more records.  CS_OFFL_SIR_IOPM_2_20200607T191247_20200607T191737_C001  CS_OFFL_SIR_IOPM_2_20200607T192435_20200607T195801_C001  CS_OFFL_SIR_IOPM_2_20200607T192435_20200607T195801_C001  CS_OFFL_SIR_IOPM_2_20200607T192435_20200607T195801_C001  CS_OFFL_SIR_IOPM_2_20200607T202543_20200607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T202543_20200607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T202543_20200607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T202543_20200607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T204728_20200607T204910_C001  CS_OFFL_SIR_IOPM_2_20200607T204728_20200607T204910_C001  CS_OFFL_SIR_IOPM_2_20200607T204728_20200607T204910_C001  CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T206552_C001  CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T20335_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T20355_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T20355_20200607T205655_C001  CS_OFFL_SIR_IOPM_2_20200607T20355_20200607T205655_C001  CS_OFFL_SIR_IOPM_2_20200607T20355_20200607T205655_C001  CS_OFFL_SIR_IOPM_2_20200607T20355_20200607T205655_C001  CS_OFFL_SIR_IOPM_2_20200607T20355_20200607T205655_C001  CS_OFFL_SIR_IOPM_2_20200607T20355_20200607T205655_C001  CS_OFFL_SIR_IOPM_2_20200607T20355_20200607T205655_C001  CS_OFFL_SIR_I	CS_OFFL_SIR_IOPM_2_20200607T180424_20200607T181632_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS OFFL SIR IOPM 2 20200607T192435 20200607T195801 CO01  CS_OFFL_SIR_IOPM_2 20200607T202543 20200607T204640_CO01  CS_OFFL_SIR_IOPM_2 20200607T202543 20200607T204640_CO01  CS_OFFL_SIR_IOPM_2 20200607T202543 20200607T204640_CO01  CS_OFFL_SIR_IOPM_2 20200607T204728 20200607T204910 CO01  CS_OFFL_SIR_IOPM_2 20200607T204728 20200607T204910 CO01  CS_OFFL_SIR_IOPM_2 20200607T204728 20200607T205652 CO01  CS_OFFL_SIR_IOPM_2 20200607T205323 20200607T205652 CO01  CS_OFFL_SIR_IOPM_2 20200607T20340 20200607T213011 CO01  CS_OFFL_SIR_IOPM_2 20200607T20340 20200607T223202 CO01  CS_OFFL_SIR_IOPM_2 20200607T20340 20200607T223202 CO01  CS_OFFL_SIR_IOPM_2 20200607T20340 20200607T223200 CO01  CS_OFFL_SIR_IOPM_2 20200607T223108 20200607T223200 CO01  CCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200607T185521_20200607T191009_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 CS_OFFL_SIR_IOPM_2_20200607T202543_20200607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T202543_20200607T204640_C001  CS_OFFL_SIR_IOPM_2_20200607T204728_20200607T204910_C001  CS_OFFL_SIR_IOPM_2_20200607T204728_20200607T204910_C001  CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T210340_20200607T213011_C001  CS_OFFL_SIR_IOPM_2_20200607T210340_20200607T213011_C001  CS_OFFL_SIR_IOPM_2_20200607T210340_20200607T213011_C001  CS_OFFL_SIR_IOPM_2_20200607T210340_20200607T22920_C001  CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T22920_C001  CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T222920_C001  CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T222920_C001  CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T223606_C001  CS_OFFL_SIR_IOPM_2_20200607T223108_20200607T223606_C001  CS_OFFL_SIR_IOPM_2_20200607T223108_20200607T223304_C001  CCOGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200607T223108_20200607T223606_C001  CCOGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCOGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCOGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CCOGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCOGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CCOGA Altimeter Range Quality, OCOGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200607T191247_20200607T191737_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_IOPM_2_20200607T204728_20200607T204910_C001  CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205666_C001  CS_OFFL_SIR_IOPM_2_20200607T205666_C	CS_OFFL_SIR_IOPM_2_20200607T192435_20200607T195801_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range Quality, OCOG Backscatter Quality  CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T205652_C001  CS_OFFL_SIR_IOPM_2_20200607T210340_20200607T213011_C001  CS_OFFL_SIR_IOPM_2_20200607T210340_20200607T213011_C001  CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T222920_C001  CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T222920_C001  CS_OFFL_SIR_IOPM_2_20200607T223108_20200607T223606_C001  CS_OFFL_SIR_IOPM_2_20200607T223108_20200607T223606_C001  CS_OFFL_SIR_IOPM_2_20200607T223108_20200607T223041_C001  CS_OFFL_SIR_IOPM_2_20200607T223614_20200607T223041_C001  CS_OFFL_SIR_IOPM_2_	CS_OFFL_SIR_IOPM_2_20200607T202543_20200607T204640_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  Ocean Altimeter 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 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 Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags 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.  OCOG Altimeter Range Quality, OCOG Backscatter Quality  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20200607T204728_20200607T204910_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200607T210340_20200607T213011_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T222920_C001  CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T222920_C001  CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T222920_C001  CS_OFFL_SIR_IOPM_2_20200607T223108_20200607T223606_C001  CS_OFFL_SIR_IOPM_2_20200607T223108_20200607T223606_C001  CS_OFFL_SIR_IOPM_2_20200607T223614_20200607T223941_C001  CS_OFFL_SIR_IOPM_2_20200607T223614_20200607T223941_C001  CS_OFFL_SIR_IOPM_2_20200607T223614_20200607T223941_C001  CS_OFFL_SIR_IOPM_2_20200607T223614_20200607T223941_C001	CS_OFFL_SIR_IOPM_2_20200607T205323_20200607T205652_C001	•	
CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T222920_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOG	CS_OFFL_SIR_IOPM_2_20200607T210340_20200607T213011_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20200607T223614_20200607T223941_C001  Backscatter Quality  OCOG Altimeter Range Quality, OCOG  The OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_IOPM_2_20200607T220135_20200607T222920_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
US DEEL SIR IDPM / 202006071223614 202006071223941 C001	CS_OFFL_SIR_IOPM_2_20200607T223108_20200607T223606_C001	_	
	CS_OFFL_SIR_IOPM_2_20200607T223614_20200607T223941_C001		

CS_OFFL_SIR_IOPM_2_20200607T224322_20200607T231738_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_20200607T235335_20200607T235952_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_IOPN_2_20200607T004059_20200607T004127_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_IOPN_2_20200607T024618_20200607T024957_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_IOPN_2_20200607T043012_20200607T043149_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_IOPN_2_20200607T050109_20200607T050307_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_IOPN_2_20200607T081519_20200607T081825_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_IOPN_2_20200607T142445_20200607T142606_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_IOPN_2_20200607T210042_20200607T210225_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_IOPN_2_20200607T215324_20200607T215347_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_IOPN_2_20200607T234806_20200607T234944_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_IOPR_2_20200607T065746_20200607T065849_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_IOPR_2_20200607T091547_20200607T091754_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_IOPR_2_20200607T150822_20200607T151614_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_IOPR_2_20200607T152518_20200607T152542_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

## L2 Quality Flags (20Hz PLRM)

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20200607T001010_20200607T001142_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_20200607T004059_20200607T004127_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_20200607T021610_20200607T021930_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_20200607T024020_20200607T024321_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_20200607T024618_20200607T024957_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_20200607T033830_20200607T034002_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_20200607T034150_20200607T034236_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_20200607T042524_20200607T042752_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_20200607T043012_20200607T043149_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_20200607T050109_20200607T050307_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_20200607T051604_20200607T051724_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_20200607T055639_20200607T060211_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_20200607T060931_20200607T061110_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_20200607T065041_20200607T065124_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_20200607T065849_20200607T070119_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_20200607T073819_20200607T073955_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_20200607T074844_20200607T075048_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_20200607T081519_20200607T081825_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_20200607T083449_20200607T083935_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_20200607T084034_20200607T084156_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_20200607T092635_20200607T092900_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_20200607T105731_20200607T110123_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_20200607T114312_20200607T114435_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_20200607T115645_20200607T115745_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_20200607T115830_20200607T115948_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_20200607T123716_20200607T124029_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_20200607T130413_20200607T130431_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_20200607T131756_20200607T131849_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_20200607T132002_20200607T132020_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_20200607T141444_20200607T141904_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_20200607T150413_20200607T150822_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_20200607T155240_20200607T155402_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_20200607T165258_20200607T165347_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_20200607T173145_20200607T173327_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.

	Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_IOPN_2_20200607T174026_20200607T174249_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Occan Altimeter Bange, SSHA, SWH	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20200607T174616_20200607T174650_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_20200607T180249_20200607T180424_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_20200607T182041_20200607T182334_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_20200607T182419_20200607T182631_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_20200607T191033_20200607T191246_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_20200607T200101_20200607T200453_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_20200607T201008_20200607T201041_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_20200607T222939_20200607T223108_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_20200607T223942_20200607T224118_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_20200607T231738_20200607T231901_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_20200607T234406_20200607T234505_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_20200607T235001_20200607T235335_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_20200607T000921_20200607T001010_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_20200607T000921_20200607T001010_C001  CS_OFFL_SIR_IOPR_2_20200607T001143_20200607T001810_C001	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	, ,
	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20200607T001143_20200607T001810_C001	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20200607T001143_20200607T001810_C001  CS_OFFL_SIR_IOPR_2_20200607T001811_20200607T002112_C001	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM,	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_IOPR_2_20200607T001143_20200607T001810_C001  CS_OFFL_SIR_IOPR_2_20200607T001811_20200607T002112_C001  CS_OFFL_SIR_IOPR_2_20200607T002258_20200607T002346_C001	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20200607T001143_20200607T001810_C001  CS_OFFL_SIR_IOPR_2_20200607T001811_20200607T002112_C001  CS_OFFL_SIR_IOPR_2_20200607T002258_20200607T002346_C001  CS_OFFL_SIR_IOPR_2_20200607T011024_20200607T011357_C001	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM,	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200607T001143_20200607T001810_C001  CS_OFFL_SIR_IOPR_2_20200607T001811_20200607T002112_C001  CS_OFFL_SIR_IOPR_2_20200607T002258_20200607T002346_C001  CS_OFFL_SIR_IOPR_2_20200607T011024_20200607T011357_C001  CS_OFFL_SIR_IOPR_2_20200607T014731_20200607T014931_C001	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200607T001143_20200607T001810_C001  CS_OFFL_SIR_IOPR_2_20200607T001811_20200607T002112_C001  CS_OFFL_SIR_IOPR_2_20200607T002258_20200607T002346_C001  CS_OFFL_SIR_IOPR_2_20200607T011024_20200607T011357_C001  CS_OFFL_SIR_IOPR_2_20200607T014731_20200607T014931_C001  CS_OFFL_SIR_IOPR_2_20200607T014731_20200607T014931_C001	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200607T001143_20200607T001810_C001  CS_OFFL_SIR_IOPR_2_20200607T001811_20200607T002112_C001  CS_OFFL_SIR_IOPR_2_20200607T002258_20200607T002346_C001  CS_OFFL_SIR_IOPR_2_20200607T011024_20200607T011357_C001  CS_OFFL_SIR_IOPR_2_20200607T014731_20200607T014931_C001  CS_OFFL_SIR_IOPR_2_20200607T014952_20200607T015708_C001  CS_OFFL_SIR_IOPR_2_20200607T015708_20200607T015852_C001	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH 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_20200607T001143_20200607T001810_C001  CS_OFFL_SIR_IOPR_2_20200607T001811_20200607T002112_C001  CS_OFFL_SIR_IOPR_2_20200607T002258_20200607T002346_C001  CS_OFFL_SIR_IOPR_2_20200607T011024_20200607T011357_C001  CS_OFFL_SIR_IOPR_2_20200607T014731_20200607T014931_C001  CS_OFFL_SIR_IOPR_2_20200607T014952_20200607T015708_C001  CS_OFFL_SIR_IOPR_2_20200607T015708_20200607T015852_C001  CS_OFFL_SIR_IOPR_2_20200607T015708_20200607T024019_C001	OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH 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_20200607T001143_20200607T001810_C001  CS_OFFL_SIR_IOPR_2_20200607T001811_20200607T002112_C001  CS_OFFL_SIR_IOPR_2_20200607T002258_20200607T002346_C001  CS_OFFL_SIR_IOPR_2_20200607T011024_20200607T011357_C001  CS_OFFL_SIR_IOPR_2_20200607T014731_20200607T014931_C001  CS_OFFL_SIR_IOPR_2_20200607T014952_20200607T015708_C001  CS_OFFL_SIR_IOPR_2_20200607T015708_20200607T015852_C001  CS_OFFL_SIR_IOPR_2_20200607T023718_20200607T024019_C001  CS_OFFL_SIR_IOPR_2_20200607T033124_20200607T033605_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH 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_20200607T051445_20200607T051604_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_20200607T063350_20200607T063502_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_20200607T064936_20200607T065040_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_20200607T065202_20200607T065536_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_20200607T065746_20200607T065849_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_20200607T070119_20200607T070202_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_20200607T081444_20200607T081518_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_20200607T082727_20200607T083449_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_20200607T091547_20200607T091754_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_20200607T100527_20200607T100709_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_20200607T105458_20200607T105731_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_20200607T114854_20200607T115644_C001	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_20200607T123340_20200607T123716_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_20200607T125547_20200607T130213_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_20200607T132659_20200607T133953_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_20200607T141248_20200607T141444_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_20200607T150822_20200607T151614_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_20200607T151942_20200607T151957_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_20200607T160409_20200607T161029_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

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

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

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

Number of products with errors: 202

## 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: 67

### 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.

# 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:

### **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:

## 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:

## **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).

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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.

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220200606T232717_20200607T001655_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_220200607T001655_20200607T010630_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_220200607T010630_20200607T015608_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_220200607T015608_20200607T024544_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_220200607T024544_20200607T033522_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_220200607T033522_20200607T042457_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_220200607T042457_20200607T051435_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_220200607T051435_20200607T060411_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_220200607T060411_20200607T065349_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_220200607T065349_20200607T074325_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_220200607T074325_20200607T083302_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_220200607T083302_20200607T092238_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_220200607T092238_20200607T101216_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_220200607T101216_20200607T110152_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_IOP_220200607T110152_20200607T115130_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_220200607T115130_20200607T124105_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_220200607T124105_20200607T133043_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_220200607T133043_20200607T142019_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_220200607T142019_20200607T150957_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_220200607T150957_20200607T155932_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_220200607T155932_20200607T164910_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_220200607T164910_20200607T173846_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_220200607T173846_20200607T182824_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_220200607T182824_20200607T191800_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_220200607T191800_20200607T200738_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_220200607T200738_20200607T205713_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_220200607T205713_20200607T214651_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_220200607T214651_20200607T223627_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_220200607T223627_20200607T232605_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)

#### **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:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220200607T214651_20200607T223627_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: 29

#### 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: 30

#### 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: 30

## 6.8 P2P Ocean Retracking Quality Check

## P2P Retracking Flags (20Hz)

Cryosat 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: 29

### 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.