

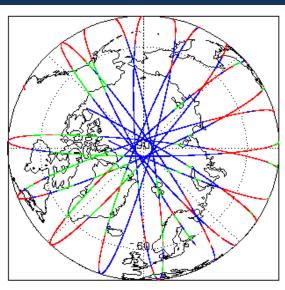
## 1. Overview

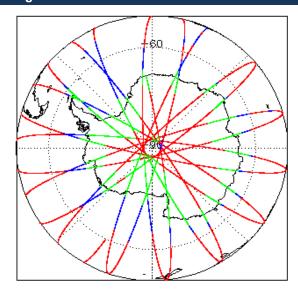
Report Production:	14-Jun-2022	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	

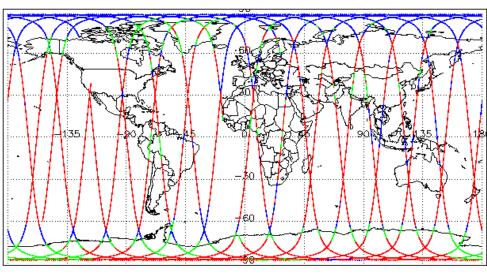
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary 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
QCC Error/ Warning Check	See Section 7.1, 7.2	See Section 7.1, 7.2

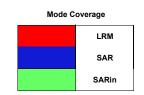
Mission / Instru	ment News
31-May-2022	None
01-Jun-2022	None
02-Jun-2022	Nothing planned

# 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 NetCDF product file (.nc).

#### 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.

Number of products with errors:

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### 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:

#### 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

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. The attitude correction is actually not missing. This will be resolved in the next SW update.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20220601T230549_20220601T230801_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. The table provides the full list of products flagged.

Number of products with errors:

CS_OFFL_SIR_IOPM1B_20220601T053335_20220601T054832_C001  Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPM1B_20220601T165932_20220601T161110_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPM1B_20220601T155932_20220601T122150_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPM1B_20220601T325409_20220601T222150_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPN1B_20220601T032135_20220601T022150_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPN1B_20220601T064153_20220601T064440_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPN1B_20220601T064153_20220601T064402_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPN1B_20220601T20542_20220601T2064402_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPN1B_20220601T205406_20220601T206447_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPN1B_20220601T009406_20220601T205647_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T009446_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T013331_20220601T013519_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T104807_20220601T0171575_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T103407_20220601T101054_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T13472_02220601T101054_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T13472_0220601T1162457_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145052_20220601T1182218_C001 Loss of Echo The tracking echo is mis			I
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CS_OFFL_SIR_IOPN1B_20220601T205406_20220601T001410_C001	CS_OFFL_SIR_IOPN1B_20220601T064153_20220601T064402_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T000622_20220601T001410_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T005114_20220601T013519_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T013331_20220601T013519_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T010622_20220601T015715_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T100822_20220601T101054_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T131347_20220601T132530_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145237_20220601T145457_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145606_20220601T150726_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T181746_20220601T18218218_C001  Loss of Echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPN1B_20220601T200132_20220601T200643_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T005114_20220601T005446_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T013331_20220601T015715_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T100822_20220601T01054_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T100822_20220601T101054_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T131347_20220601T132530_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145237_20220601T145457_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145606_20220601T150726_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T181746_20220601T182218_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T181746_20220601T182652_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T18217_20220601T18212_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T183126_2020601T183212_C001 Loss of Echo The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPN1B_20220601T205406_20220601T205647_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T013331_20220601T013519_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T0100822_20220601T01054_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T131347_20220601T101054_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T131347_20220601T132530_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145237_20220601T145457_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T14506_20220601T145457_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001  Loss of Echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T000622_20220601T001410_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T014607_20220601T015715_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T1100822_20220601T101054_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T131347_20220601T132530_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145237_20220601T145457_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T14506_20220601T1450726_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T18746_20220601T182218_C001  Loss of Echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T005114_20220601T005446_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T100822_20220601T101054_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T131347_20220601T132530_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145237_20220601T145457_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145606_20220601T150726_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T18746_20220601T182218_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T182506_20220601T182652_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T123648_20220601T2414152_C001 Loss of Echo The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T013331_20220601T013519_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T131347_20220601T132530_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145237_20220601T145457_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T14506_20220601T150726_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T181746_20220601T182218_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T182506_20220601T182652_C001  Loss of Echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T014607_20220601T015715_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T145237_20220601T145457_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T145606_20220601T150726_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T181746_20220601T182218_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T182506_20220601T182518_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T23648_20220601T24152_C001 Loss of Echo The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T100822_20220601T101054_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T145606_20220601T150726_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T181746_20220601T182218_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T182506_20220601T182652_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001  Loss of Echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T131347_20220601T132530_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T181746_20220601T182218_C001  Loss of Echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T145237_20220601T145457_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T181746_20220601T182218_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T182506_20220601T182652_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001 Loss of Echo The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T213648_20220601T214152_C001 Loss of Echo The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T145606_20220601T150726_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T182506_20220601T182652_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001  Loss of Echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_IOPR1B_20220601T213648_20220601T214152_C001  Loss of Echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T154052_20220601T154749_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001  Loss of Echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T181746_20220601T182218_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T213648_20220601T214152_C001  Loss of Echo  The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T182506_20220601T182652_C001	Loss of Echo	The tracking echo is missing for one or more records
	CS_OFFL_SIR_IOPR1B_20220601T183127_20220601T183212_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20220601T231038_20220601T231225_C001 Loss of Echo The tracking echo is missing for one or more records	CS_OFFL_SIR_IOPR1B_20220601T213648_20220601T214152_C001	Loss of Echo	The tracking echo is missing for one or more records
	CS_OFFL_SIR_IOPR1B_20220601T231038_20220601T231225_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 NetCDF product file (.nc).

Number of products with errors:

0

#### 5.2 L2 Product Header Analysis

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

Number of products with errors:

### 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

0

### 5.4 L2 Auxiliary Correction Error Check

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

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

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.
- > Mean Dynamic Topography: The error value is currently set for products over land and sea ice, but this is to be expected.
- > Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20220601T115710_20220601T115821_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T001604_20220601T001729_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_20220601T005447_20220601T005800_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_20220601T010314_20220601T010430_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T024220_20220601T024335_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_20220601T032135_20220601T032414_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20220601T045829_20220601T050239_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T050359_20220601T050502_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_20220601T055758_20220601T060028_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_20220601T064153_20220601T064402_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T073706_20220601T074042_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_20220601T081834_20220601T082225_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T091818_20220601T092000_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T122727_20220601T122848_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T123416_20220601T123730_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_20220601T132530_20220601T132642_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T140657_20220601T140811_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_20220601T141314_20220601T141631_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	Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20220601T154750_20220601T155027_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_20220601T155220_20220601T155432_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_20220601T164305_20220601T164425_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_20220601T172549_20220601T172924_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_20220601T190523_20220601T190720_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T200132_20220601T200643_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_20220601T204456_20220601T204614_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20220601T222626_20220601T222822_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_IOPR_2_20220601T000622_20220601T001410_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_20220601T014607_20220601T015715_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)

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CS_OFFL_SIR_IOPR_2_20220601T032554_20220601T0333339_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_20220601T050503_20220601T051026_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_20220601T060028_20220601T060254_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_20220601T063346_20220601T063444_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_IOPR_2_20220601T064403_20220601T065101_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_20220601T070749_20220601T071257_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20220601T082226_20220601T082733_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_20220601T095944_20220601T100758_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_20220601T113836_20220601T114609_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_20220601T114930_20220601T115145_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20220601T115523_20220601T115710_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20220601T131347_20220601T132530_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_20220601T133132_20220601T133326_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20220601T145606_20220601T150726_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_20220601T163546_20220601T164304_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_20220601T172433_20220601T172549_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_20220601T181534_20220601T181706_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20220601T181709_20220601T181729_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20220601T181746_20220601T182218_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_20220601T193916_20220601T194111_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20220601T195432_20220601T200132_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_20220601T213648_20220601T214152_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_20220601T230449_20220601T230531_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20220601T231038_20220601T231225_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20220601T231403_20220601T232354_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

## 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20220601T230549_20220601T230801_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

### 5.6 L2 Measurement Quality Flag Check

### L2 Quality Flags (20 Hz)

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

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

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

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Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20220601T001729_20220601T002839_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

Affects Flags and Backscath Caulty  COLOR Allerand Region (Color Color Allerand Region (Color Color Allerand Region (Color Color Col	CS_OFFL_SIR_IOPM_2_20220601T002842_20220601T005114_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
Substitution (Party		,	
So CREL SRI LIPRIL 2 20200011101001 202000011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 20200011101001 202000011101001 20200011101001 20200011101001 20200011101001 202000011101001 20200011101001 20200011101001 20200011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 202000011101001 20200001101001 20200001101001 20200001101001 20200001101001 20200001101001 20200001101001 20200001101001001 20200001101001001 20200001101001001 202000001101001001 20200001101001001 20200001101001001 2020000110100100100100100100100100100100	CS_OFFL_SIR_IOPM_2_20220601T005801_20220601T010313_C001	0 ,	
CR. OFFL. SRI JOPM 2 20200011014002 2020001101400. 0001   CR. OFFL. SRI JOPM 2 20200011014002 2020001101000. 0001   CR. OFFL. SRI JOPM 2 20200011014002 20200011010000. 0001   CR. OFFL. SRI JOPM 2 20200011014002 20200011010000. 0001   CR. OFFL. SRI JOPM 2 20200011004002 20200011010000. 0001   CR. OFFL. SRI JOPM 2 20200011004002 2020001100400. 0001   CR. OFFL. SRI JOPM 2 202000011004002 2020001100400. 0001   CR. OFFL. SRI JOPM 2 20200011004002 2020001100400. 0001   CR. OFFL. SRI JOPM 2 202000011004002 2020001100400. 0001   CR. OFFL. SRI JOPM 2 202000011004002 20200011004000. 0001   CR. OFFL. SRI JOPM 2 202000011004002 20200011004000. 0001   CR. OFFL. SRI JOPM 2 202000011004000. 0001   CR. OFF	CS_OFFL_SIR_IOPM_2_20220601T010610_20220601T010800_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and flavoridation flavoridation and processing and the condition flavoridation flavoridation (analysts) conditions flavoridation and substances (analysting have been been different flavoridation). The condition flavoridation and processing and the condition and	CS_OFFL_SIR_IOPM_2_20220601T010925_20220601T011942_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Set (1971_SR_I) OPM_2_7022081101715_0022881109706_0001  or Set (1971_SR_I) OPM_2_7022081101715_0022881109706_0001  or Set (1971_SR_I) OPM_2_7022081101715_0022881109706_0001  or Set (1971_SR_I) OPM_2_7022081101715_0022881109706_0001  or Set (1971_SR_I) OPM_2_7022081101715_0002881_000088	CS_OFFL_SIR_IOPM_2_20220601T011951_20220601T012418_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OPPL_SRI_OPPL_2_20220011103078_2020011103019_C001  Allesee Range_SSHA_SWH and Resource Range Range_SSHA_SWH a	CS_OFFL_SIR_IOPM_2_20220601T014030_20220601T014206_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB_OFFL_SIR_IOFM_2_70270611703762_2022061703424_CDD1  OSC Allement Range of Balleconter Quality, OCOS Allement Range of Balleconter Quality, CDD Received From the Code Allement Range of Balleconter Quality, CDD Received From the CDD Allement Range, SSHA, SWH and Balleconter Quality Flags have been set for one or more received.  OSC Allements Range of Balleconter Quality, CDD Received From the CDD Allement Range, SSHA, SWH and Balleconter Quality Flags Inverben and Balleconter Quality Flags Inverben and Balleconter Quality Flags Inverben and	CS_OFFL_SIR_IOPM_2_20220601T015715_20220601T020608_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter (Daily)*  Backscatter (Daily)*  Backscatter (Daily)*  CS. OFFL_SIR_IOPM_2_20220901T031142_0020001T031144_0001  Doesn Alternater Range, SSHA, SWH and Backscatter Quality Plags have been effective to more records of the cord of the cord of more records of the cord of more records of the cord	CS_OFFL_SIR_IOPM_2_20220601T020854_20220601T023019_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the COGO Allimeter Range and Backscatter Quality Flags have been all backs	CS_OFFL_SIR_IOPM_2_20220601T023809_20220601T024219_C001		
and Backscatter Quality, COOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_JOPM_2_2022001T031938_2022001T032923_COO1  CS_OFFL_SIR_JOPM_2_2022001T031938_2022001T032923_COO1  CS_OFFL_SIR_JOPM_2_2022001T033742_2022001T033752_COO1  CS_OFFL_SIR_JOPM_2_2022001T033742_2022001T033752_COO1  CS_OFFL_SIR_JOPM_2_2022001T033752_202001T034135_COO1  CS_OFFL_SIR_JOPM_2_2022001T033752_202001T034135_COO1  CS_OFFL_SIR_JOPM_2_2022001T034752_202001T034135_COO1  CS_OFFL_SIR_JOPM_2_2022001T034752_2020001T034135_COO1  CS_OFFL_SIR_JOPM_2_2022001T034752_2020001T034135_COO1  CS_OFFL_SIR_JOPM_2_20220001T034752_2020001T034135_COO1  CS_OFFL_SIR_JOPM_2_20220001T034258_20220001T034135_COO1  CS_OFFL_SIR_JOPM_2_20220001T034258_20220001T034135_COO1  CS_OFFL_SIR_JOPM_2_20220001T034258_20220001T03536_COO1  CS_OFFL_SIR_JOPM_2_20220001T034258_20220001T040939_COO1  CS_OFFL_SIR_JOPM_2_20220001T034752_CO020001T040939_COO1  CS_OFFL_SIR_JOPM_2_20220001T041737_20220601T041701_COO1  CS_OFFL_SIR_JOPM_2_20220001T041737_20220601T041701_COO1  CS_OFFL_SIR_JOPM_2_20220001T041721_20220601T041704_COO1  CS_OFFL_SIR_JOPM_2_20220001T041722_20220601T041704_COO1  CS_OFFL_SIR_JOPM_2_20220001T041722_20220001T041933_COO1  Altimater Range and Backscatter Country Flags have been set for one or more records  CS_OFFL_SIR_JOPM_2_20220001T041722_20220601T04193_COO1  Altimater Range and Backscatter Country Flags have been set for one or more records  CS_OFFL_SIR_JOPM_2_20220001T041722_20220001T04193_COO1  Altimater Range and Backscatter Country Flags have been set for one or more records  CS_OFFL_SIR_JOPM_2_20220001T041722_20220001T041932_COO1  CS_OFFL_SIR_JOPM_2_20220001T041722_20220001T041932_COO1  CS_OFFL_SIR_JOPM_2_20220001T041723_20220001T041932_COO1  CS_OFFL_SIR_JOPM_2_20220001T041723_20220001T041932_COO1  CS_OFFL_SIR_JOPM_2_20220001T041723_20220001T041933_COO1  Altimater Range and Backscatter Country Flags have been set for one or more records  CS_OFFL_SIR_JOPM_2_20220001T04193333_C0220001T045820_COO1  CS_OFFL_SIR_JOPM_2	CS_OFFL_SIR_IOPM_2_20220601T030715_20220601T031144_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality Flags have been set for nor or more records  CS_OFFL_SIR_JOPM_2_20220801T033742_20220801T033782_C001  CS_OFFL_SIR_JOPM_2_20220801T033742_20220801T033782_C001  CS_OFFL_SIR_JOPM_2_20220801T033762_0220801T033782_C001  CS_OFFL_SIR_JOPM_2_20220801T033762_0220801T033782_C001  CS_OFFL_SIR_JOPM_2_20220801T034288_20220801T033382_C001  CS_OFFL_SIR_JOPM_2_20220801T034288_20220801T040392_C001  CS_OFFL_SIR_JOPM_2_20220801T034280_20220801T040392_C001  CS_OFFL_SIR_JOPM_2_20220801T041372_20220801T040392_C001  CS_OFFL_SIR_JOPM_2_20220801T041372_20220801T040332_C001  CS_OFFL_SIR_JOPM_2_20220801T041372_20220801T040433_C001  CS_OFFL_SIR_JOPM_2_20220801T041372_20220801T040433_C001  CS_OFFL_SIR_JOPM_2_20220801T041382_20220801T040433_C001  CS_OFFL_SIR_JOPM_2_20220801T0412806_20220801T040433_C001  CS_OFFL_SIR_JOPM_2_20220801T0412806_20220801T040433_C001  CS_OFFL_SIR_JOPM_2_20220801T0412806_20220801T04033_C001  CS_OFFL_SIR_JOPM_2_20220801T05105133_C001  CS_OFFL_SIR_JOPM_2_20220801T05105254_20220801T054832_C001  CS_OFFL_SIR_JOPM_2_20220801T054582_C001  CS_OFFL_SIR_JOPM_2_20220801T054582_C001011765800_C001  CS_OFFL_SIR_JOPM_2_20220801T054582_C001017	CS_OFFL_SIR_IOPM_2_20220601T031424_20220601T031938_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_JOPM_2_20220001T033756_20220001T034135_C001  CS_OFFL_SIR_JOPM_2_20220001T033756_20220001T034135_C001  CS_OFFL_SIR_JOPM_2_20220001T034258_20220001T034355_C001  CS_OFFL_SIR_JOPM_2_20220001T034258_20220001T035358_C001  CS_OFFL_SIR_JOPM_2_20220001T034258_20220001T040039_C001  CS_OFFL_SIR_JOPM_2_20220001T034400_20220001T040039_C001  CS_OFFL_SIR_JOPM_2_20220001T034400_20220001T040039_C001  CS_OFFL_SIR_JOPM_2_20220001T034400_20220001T041943_C001  CS_OFFL_SIR_JOPM_2_20220001T041721_20220001T041943_C001  CS_OFFL_SIR_JOPM_2_20220001T041721_20220001T041943_C001  CS_OFFL_SIR_JOPM_2_20220001T041724_20220001T04193_C001  CS_OFFL_SIR_JOPM_2_20220001T0412806_20220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T0412806_20220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T0412806_20220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T0412806_20220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T0412806_20220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T0412806_20220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T0412806_20220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T04128_00220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T04128_00220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T04128_00220001T044033_C001  CS_OFFL_SIR_JOPM_2_20220001T052254_20220001T053131_C001  CS_OFFL_SIR_JOPM_2_20220001T052254_20220001T053131_C001  CS_OFFL_SIR_JOPM_2_20220001T053335_20220001T054832_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T054832_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T054832_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T054832_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T054832_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T053366_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T053366_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T053366_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T053366_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T053366_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T053366_C001  CS_OFFL_SIR_JOPM_2_20220001T050155_00220001T053366_C001  CS_OFFL_SIR_JOPM_2_20220001	CS_OFFL_SIR_IOPM_2_20220601T031938_20220601T032023_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range. SSHA, SWH and Backscatter Quality Flags have been Altimeter Range. SSHA, SWH and Backscatter Quality Flags have been Altimeter Range. SSHA, SWH and Backscatter Quality Flags have been Altimeter Range. SSHA, SWH and Backscatter Quality Flags have been Altimeter Range. SSHA, SWH and Backscatter Quality Flags have been Altimeter Range. SSHA, SWH and Backscatter Quality Flags have been Altimeter Range. SSHA, SWH and Backscatter Quality Flags have been Set for one or more records.  CS_OFFL_SIR_IOPM_2_20220601T035400_20220601T04193_C001  CS_OFFL_SIR_IOPM_2_20220601T041137_20220601T04194_C001  CS_OFFL_SIR_IOPM_2_20220601T0412200_20001T04194_C001  CS_OFFL_SIR_IOPM_2_20220601T0412200_20001T04193_C001  CS_OFFL_SIR_IOPM_2_20220601T0412200_20001T04193_C001  CS_OFFL_SIR_IOPM_2_20220601T042800_20220601T044033_C001  CS_OFFL_SIR_IOPM_2_20220601T042800_20220601T044033_C001  CS_OFFL_SIR_IOPM_2_20220601T042800_20220601T045822_C001  CS_OFFL_SIR_IOPM_2_20220601T042800_20220601T05331_C001  CS_OFFL_SIR_IOPM_2_20220601T052254_20220601T05331_C001  CS_OFFL_SIR_IOPM_2_20220601T052524_20220601T05331_C001  CS_OFFL_SIR_IOPM_2_20220601T052524_20220601T05331_C001  CS_OFFL_SIR_IOPM_2_20220601T052524_20220601T05331_C001  CS_OFFL_SIR_IOPM_2_20220601T052524_20220601T05331_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055300_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055300_C001  CS_OFFL_SIR_IOPM_2_20220601T065005_20220601T055300_C001  CS_OFFL_SIR_IOPM_2_20220601T065005_20220601T055000_C001  CS_OFFL_SIR_IOPM_2_20220601T065005_20220601T055300_C001  CS_OFFL_SIR_IOPM_2_20220601T06201_20220601T053346_C001  CS_OFFL_SIR_IOPM_2_20220601T06201_20220601T053346_C001  CS_OFFL_SIR_IOPM_2_20220601T06201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T06201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T06201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T06201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T06201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_2	CS_OFFL_SIR_IOPM_2_20220601T033742_20220601T033752_C001		
and Backscatter Quality. COCG Altimeter Range Quality. COCG Altimeter Range and Backscatter Quality. COCG Backscatter Quality. COCG Altimeter Range Quality. COCG Backscatter Qual	CS_OFFL_SIR_IOPM_2_20220601T033756_20220601T034135_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_20220601T041137_20220601T041701_CO01  Backscatter Quality, CCCG Backscatter Quality, CCCG CS_OFFL_SIR_IOPM_2_20220601T041721_20220601T041943_CO01  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T041943_CO01  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T044033_CO01  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T044033_CO01  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T044033_CO01  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T045822_CO01  CS_OFFL_SIR_IOPM_2_20220601T044128_20220601T045822_CO01  CS_OFFL_SIR_IOPM_2_20220601T044128_20220601T045822_CO01  CS_OFFL_SIR_IOPM_2_20220601T052254_20220601T053131_CO01  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_CO01  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_CO01  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_CO01  CS_OFFL_SIR_IOPM_2_20220601T06444_20220601T055600_CO01  CS_OFFL_SIR_IOPM_2_20220601T06454_20220601T065346_CO01  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_CO01  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_CO01  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_CO01  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_CO01  CS_OFFL_SIR_IOPM_2_202206001T062201_20220601T063346_CO01  CS_OFFL_SIR_IOPM_2_202206001T062201_20220601T0	CS_OFFL_SIR_IOPM_2_20220601T034258_20220601T035358_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_IOPM_2_20220601T041721_20220601T041943_C001  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T041943_C001  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T044033_C001  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T044033_C001  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T044033_C001  CS_OFFL_SIR_IOPM_2_20220601T044128_20220601T045822_C001  CS_OFFL_SIR_IOPM_2_20220601T044128_20220601T045822_C001  CS_OFFL_SIR_IOPM_2_20220601T052254_20220601T053131_C001  CS_OFFL_SIR_IOPM_2_20220601T052254_20220601T053131_C001  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T0505105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T0505105_20220601T053346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T0763446_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T0763446_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T0763446_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T0763446_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T0763446_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T06346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201	CS_OFFL_SIR_IOPM_2_20220601T035400_20220601T040939_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T044033_C001  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T044033_C001  CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T045822_C001  CS_OFFL_SIR_IOPM_2_20220601T042826_20220601T045822_C001  CS_OFFL_SIR_IOPM_2_20220601T042826_20220601T045822_C001  CS_OFFL_SIR_IOPM_2_20220601T05254_20220601T053131_C001  CS_OFFL_SIR_IOPM_2_20220601T052554_20220601T053131_C001  CS_OFFL_SIR_IOPM_2_20220601T052554_20220601T053131_C001  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C	CS_OFFL_SIR_IOPM_2_20220601T041137_20220601T041701_C001		
and Backscatter Quality CSC Altimeter Range and Backscatter Quality Flags have been Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Set for one or more records  CS_OFFL_SIR_IOPM_2_20220601T052254_20220601T053131_C001  CS_OFFL_SIR_IOPM_2_20220601T052254_20220601T053131_C001  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601	CS_OFFL_SIR_IOPM_2_20220601T041721_20220601T041943_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20220601T052254_20220601T053131_C001  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T053131_C001  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T0572020601T05720C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T0727744_C001  And Backscatter Quality, COCG 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, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20220601T060201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T0727744_C001  And Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  COCOR Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  COCOR Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_202206	CS_OFFL_SIR_IOPM_2_20220601T042806_20220601T044033_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_20220601T053335_20220601T054832_C001  CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T072744_C001  Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and backscatter Quality Fl	CS_OFFL_SIR_IOPM_2_20220601T044128_20220601T045822_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Backscatter Quality  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T071257_20220601T072744_C001  And Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T072744_C001  CS_OFFL_SIR_IOPM_2_20220601T071257_20220601T072744_C001  And Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_IOPM_2_20220601T0722744_C001  CS_OFFL_SIR_IOPM_2_20220601T071257_20220601T072744_C001  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 and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Fl	CS_OFFL_SIR_IOPM_2_20220601T052254_20220601T053131_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 Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags a	CS_OFFL_SIR_IOPM_2_20220601T053335_20220601T054832_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, 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 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 and Backscatter Quality Fla	CS_OFFL_SIR_IOPM_2_20220601T055105_20220601T055600_C001		
CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Bac	CS_OFFL_SIR_IOPM_2_20220601T060454_20220601T061720_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20220601T071257_20220601T072744_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20220601T062201_20220601T063346_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20220601T071257_20220601T072744_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_IOPM_2_20220601T073034_20220601T073514_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_20220601T074212_20220601T080834_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_20220601T084221_20220601T090304_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_20220601T090355_20220601T090649_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_20220601T091452_20220601T091818_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_20220601T092123_20220601T094930_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_20220601T102139_20220601T104706_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_20220601T104850_20220601T105344_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_20220601T110106_20220601T113523_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_20220601T114828_20220601T114930_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_20220601T121042_20220601T121746_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_20220601T122358_20220601T122550_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_20220601T122849_20220601T123416_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_20220601T124038_20220601T130452_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_20220601T130501_20220601T131346_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_20220601T132708_20220601T132853_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_20220601T134625_20220601T140445_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_20220601T140811_20220601T141314_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_20220601T141923_20220601T145236_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_20220601T151756_20220601T154051_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_20220601T155027_20220601T155219_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_20220601T155932_20220601T161110_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_20220601T161200_20220601T161445_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_20220601T161523_20220601T161639_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_20220601T162121_20220601T163059_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_20220601T164426_20220601T164704_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_20220601T164848_20220601T170532_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_20220601T170738_20220601T172207_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_20220601T172924_20220601T173131_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_20220601T173223_20220601T173633_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_20220601T173832_20220601T175046_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_20220601T175155_20220601T175345_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_20220601T175546_20220601T175623_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_20220601T175625_20220601T180507_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_20220601T183213_20220601T184313_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_20220601T185002_20220601T190343_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_20220601T190721_20220601T191536_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_20220601T191809_20220601T193413_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_20220601T193704_20220601T193915_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_20220601T201634_20220601T202024_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_20220601T202026_20220601T204301_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_20220601T204857_20220601T205406_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_20220601T205742_20220601T212208_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_20220601T215409_20220601T222149_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_20220601T222822_20220601T223424_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_20220601T223610_20220601T225736_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_20220601T231225_20220601T231402_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_20220601T232730_20220602T000047_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_20220601T012419_20220601T012535_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_20220601T064153_20220601T064402_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_20220601T073546_20220601T073553_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_20220601T191536_20220601T191718_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_20220601T213447_20220601T213518_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_20220601T032059_20220601T032134_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20220601T064403_20220601T065101_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_20220601T123731_20220601T124038_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_20220601T195432_20220601T200132_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 (20 Hz PLRM)

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

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

Number of products with errors:

95

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20220601T000044_20220601T000206_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_20220601T001604_20220601T001729_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_20220601T005447_20220601T005800_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_20220601T014546_20220601T014607_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_20220601T023205_20220601T023624_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_20220601T024220_20220601T024335_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_20220601T032024_20220601T032051_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_20220601T032135_20220601T032414_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_20220601T041014_20220601T041136_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_20220601T045829_20220601T050239_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_20220601T054922_20220601T055104_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_20220601T060254_20220601T060418_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_20220601T061721_20220601T061859_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_20220601T061859_20220601T062200_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_20220601T063456_20220601T063619_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_20220601T063830_20220601T064146_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_20220601T064153_20220601T064402_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_20220601T072818_20220601T073034_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_20220601T081616_20220601T081740_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_20220601T081834_20220601T082225_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_20220601T083720_20220601T083853_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_20220601T083951_20220601T084220_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_20220601T090821_20220601T091049_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_20220601T120138_20220601T120208_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_20220601T122727_20220601T122848_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_20220601T132920_20220601T133046_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_20220601T133354_20220601T133537_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_20220601T134347_20220601T134625_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_20220601T154750_20220601T155027_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_20220601T155220_20220601T155432_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_20220601T155433_20220601T155845_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_20220601T173634_20220601T173809_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_20220601T180508_20220601T180706_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_20220601T184439_20220601T184958_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_20220601T190523_20220601T190720_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_20220601T191536_20220601T191718_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_20220601T200132_20220601T200643_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_20220601T204456_20220601T204614_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_20220601T205406_20220601T205647_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_20220601T212208_20220601T212306_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_20220601T223425_20220601T223553_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_20220601T232355_20220601T232729_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_20220601T000206_20220601T000242_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_20220601T000438_20220601T000542_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_20220601T000622_20220601T001410_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_20220601T001521_20220601T001603_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_20220601T005114_20220601T005446_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_20220601T013331_20220601T013519_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_20220601T013743_20220601T014030_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_20220601T014328_20220601T014546_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_20220601T014607_20220601T015715_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_20220601T032554_20220601T033339_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_20220601T033446_20220601T033736_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_20220601T042130_20220601T042806_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_20220601T050503_20220601T051026_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_20220601T051119_20220601T051220_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_20220601T053132_20220601T053335_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_20220601T060028_20220601T060254_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_20220601T063741_20220601T063830_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_20220601T064403_20220601T065101_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_20220601T070441_20220601T070552_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_20220601T070749_20220601T071257_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_20220601T082226_20220601T082733_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_20220601T082811_20220601T083000_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_20220601T095944_20220601T100758_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_20220601T100822_20220601T101054_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_20220601T113639_20220601T113719_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_20220601T113836_20220601T114609_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_20220601T114930_20220601T115145_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_20220601T115843_20220601T120106_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records

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CS_OFFL_SIR_IOPR_2_20220601T123731_20220601T124038_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_20220601T131347_20220601T132530_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_20220601T133132_20220601T133326_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_20220601T141632_20220601T141923_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_20220601T145237_20220601T145457_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_20220601T145606_20220601T150726_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_20220601T154052_20220601T154750_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_20220601T163100_20220601T163304_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_20220601T163546_20220601T164304_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_20220601T172433_20220601T172549_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_20220601T175047_20220601T175155_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_20220601T181709_20220601T181729_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_20220601T181746_20220601T182218_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_20220601T182506_20220601T182652_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_20220601T183127_20220601T183212_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_20220601T191724_20220601T191808_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_20220601T193916_20220601T194111_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_20220601T195432_20220601T200132_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_20220601T200716_20220601T200940_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_20220601T201540_20220601T201634_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_20220601T204302_20220601T204456_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_20220601T213243_20220601T213447_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_20220601T213648_20220601T214152_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_20220601T223553_20220601T223610_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_20220601T231403_20220601T232354_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 & 1 Hz PLRM)

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

> 1 Hz and 1 Hz Ocean SSHA Quality Flags: These flags are currently set for products over sea ice, which is to be expected. The number of products with this error flag set is given below.

Number of products with errors:

203

#### 5.8 L2 Ocean Retracking Quality Check

#### L2 Retracking Flags (20 Hz)

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:

61

#### L2 Retracking Flags (20 Hz 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. The number of products with this error flag set is given below.

Number of products with errors:

148

## 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:

0

#### 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:

0

#### 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:

0

#### 6.4 P2P Auxiliary Correction Error Check

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

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

- > 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_2_20220531T231941_20220601T000917_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T000917_20220601T005855_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_2_20220601T005855_20220601T014832_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T014832_20220601T023810_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_220220601T023810_20220601T032746_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	
CS_OFFL_SIR_IOP_2_20220601T041725_20220601T050701_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_2_20220601T050701_20220601T055639_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T055639_20220601T064616_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_2_20220601T064616_20220601T073554_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T073554_20220601T082530_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T082530_20220601T091509_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T091509_20220601T100445_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T100445_20220601T105424_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

CS_OFFL_SIR_IOP_220220601T105424_20220601T114400_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_220220601T114400_20220601T123338_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T123338_20220601T132314_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_220220601T132314_20220601T141253_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_220220601T141253_20220601T150229_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_220220601T150229_20220601T155208_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_220220601T155208_20220601T164144_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_220220601T164144_20220601T173122_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_220220601T173122_20220601T182058_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_220220601T182058_20220601T191037_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T191037_20220601T200013_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T200013_20220601T204952_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20220601T204952_20220601T213928_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_220220601T213928_20220601T222906_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_220220601T2222906_20220601T231843_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_220220601T231843_20220602T000821_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_220220601T222906_20220601T231843_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

### 6.6 P2P Measurement Quality Flag Check

#### P2P Quality Flags (20 Hz)

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. The number of P2P products affected is given below.

Number of products with errors: 29

### P2P Quality Flags (20 Hz 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. The number of P2P products affected is given below.

Number of products with errors: 29

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

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the number of L2 products affected. The number of P2P products affected is given below.

Number of products with errors: 2

### 6.8 P2P Ocean Retracking Quality Check

## P2P Retracking Flags (20 Hz)

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: 26

#### 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.