

# **QA4EO Daily Report for IOP data:**

<u>01/02/2020</u>

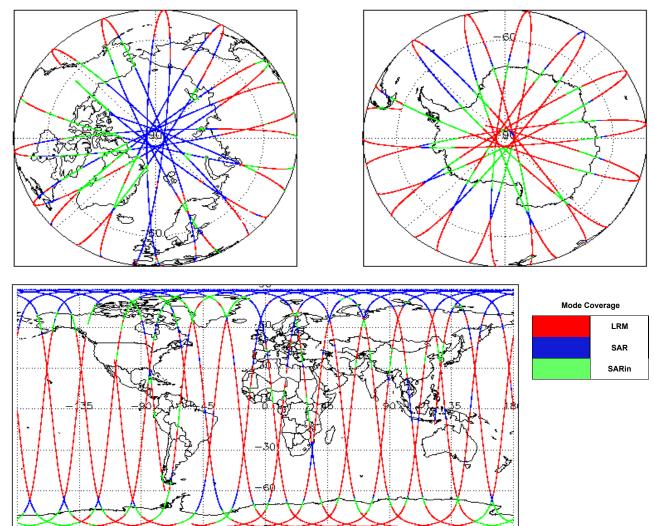
Panart Braduction	04-Feb-2020	Check	L1 & L2	P2P
Report Production:	04-Peb-2020	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CrucSet Occan Brosson	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor useu.	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Intermediate Ocean Products (IOP)	Product Format Check	Nominal	Nominal
Data Useu.	L1B, L2 & P2P Science Data	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	Nominal
		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

1. Overview

Mission / Instrument News			
31-Jan-2020	None		
01-Feb-2020	None		

02-Feb-2020 Nothing planned

2. Global Coverage



# 3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

4. IOP Level 1B Data Quality Check

## 4.1 L1B Product Format Check

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

Number of products with errors:

0

4.2 L1B Product Header Analysis						
For all products, a series of pre-defined checks are performed on the MPH an	nd SPH in order to identify any inco	nsistencies and/or errors raised by the ground-segment processing chain.				
L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L1 DSARIn chains. A modification is required in the next release.	B IOPR and IOPN products because	se the I1b_processing_quality_hr field is not correctly configured in the OSAR and				
Number of products with errors: 0						
4.3 L1B Auxilary Data File Usage Check						
Each product is checked for missing Data Set Descriptors with respect to a pro	e-determined baseline and also to	check the validity of Auxiliary Data Files is correct.				
Number of products with errors: 0						
4.4 L1B Auxiliary Correction Error Check						
CryoSat L1B data includes a correction error flag for each measurement recor	rd. The bit value of this flag indicate	es any problems when set.				
Number of products with errors: 0						
4.5 L1B Measurement Confidence Data Check						
CryoSat L1B data includes a measurement confidence flag for each measurer	ment record. The bit value of this fl	ag indicates any problems when set.				
Attitude Correction Missing: This flag is currently set in error for IOPR produ	ucts due to a configuration issue. T	Attitude Correction Missing: This flag is currently set in error for IOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.				
Number of products with errors: 0						
Number of products with errors: 0						
Number of products with errors:     0       4.6 L1B Waveform Group Data Check						
	d. The bit value of this flag indicate					
4.6 L1B Waveform Group Data Check CryoSat L1B data includes a waveform data flag for each measurement record	-					
4.6 L1B Waveform Group Data Check	-					
4.6 L1B Waveform Group Data Check CryoSat L1B data includes a waveform data flag for each measurement recorn Loss of Echo Flag: This flag is currently set for products over land, but this is	-					
4.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement record         Loss of Echo Flag: This flag is currently set for products over land, but this is         Number of products with errors:       15         Product	s to be expected.	is any problems when set.				
4.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement recorn.         coss of Echo Flag: This flag is currently set for products over land, but this is         Number of products with errors:       15         Product         CS_OFFL_SIR_IOPM1B_20200201T015508_20200201T015531_C001	s to be expected.	is any problems when set.  Description				
4.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement record         coss of Echo Flag: This flag is currently set for products over land, but this is         Number of products with errors:       15         Product         CS_OFFL_SIR_IOPM1B_20200201T015508_20200201T015531_C001         CS_OFFL_SIR_IOPM1B_20200201T104427_20200201T105731_C001	s to be expected. Test Failed Loss of Echo	s any problems when set.           Description           The tracking echo is missing for one or more records				
4.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement record         Loss of Echo Flag: This flag is currently set for products over land, but this is         Number of products with errors:       15         Product         CS_OFFL_SIR_IOPM1B_20200201T015508_20200201T105531_C001         CS_OFFL_SIR_IOPM1B_20200201T104427_20200201T105731_C001         CS_OFFL_SIR_IOPN1B_20200201T001855_20200201T002110_C001	s to be expected.           Test Failed           Loss of Echo           Loss of Echo	be any problems when set.           Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records				
4.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement record         coss of Echo Flag: This flag is currently set for products over land, but this is         Number of products with errors:       15         Product         CS_OFFL_SIR_IOPM1B_20200201T015508_20200201T015531_C001         CS_OFFL_SIR_IOPM1B_20200201T104427_20200201T105731_C001         CS_OFFL_SIR_IOPN1B_20200201T001855_20200201T002110_C001         CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001	s to be expected.           Test Failed           Loss of Echo           Loss of Echo           Loss of Echo	Description         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				
A.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement record         coss of Echo Flag: This flag is currently set for products over land, but this is         Jumber of products with errors:       15         Product         CS_OFFL_SIR_IOPM1B_20200201T015508_20200201T015531_C001         CS_OFFL_SIR_IOPM1B_20200201T104427_20200201T105731_C001         CS_OFFL_SIR_IOPN1B_20200201T001855_20200201T002110_C001         CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001         CS_OFFL_SIR_IOPN1B_20200201T092914_20200201T093432_C001	s to be expected.           Test Failed           Loss of Echo	Description         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				
<b>4.6 L1B Waveform Group Data Check</b> CryoSat L1B data includes a waveform data flag for each measurement recorn.         coss of Echo Flag: This flag is currently set for products over land, but this is         cumber of products with errors:       15         Product         CS_OFFL_SIR_IOPM1B_20200201T015508_20200201T015531_C001         CS_OFFL_SIR_IOPM1B_20200201T104427_20200201T105731_C001         CS_OFFL_SIR_IOPN1B_20200201T001855_20200201T002110_C001         CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001         CS_OFFL_SIR_IOPN1B_20200201T0192914_20200201T093432_C001         CS_OFFL_SIR_IOPN1B_20200201T111325_20200201T111457_C001	s to be expected.           Test Failed           Loss of Echo	Description         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				
4.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement recornors of Echo Flag: This flag is currently set for products over land, but this is sumber of products with errors:         15         Product         CS_OFFL_SIR_IOPM1B_20200201T015508_20200201T015531_C001         CS_OFFL_SIR_IOPM1B_20200201T104427_20200201T005731_C001         CS_OFFL_SIR_IOPM1B_20200201T01855_20200201T002110_C001         CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001         CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001         CS_OFFL_SIR_IOPN1B_20200201T012413_C001         CS_OFFL_SIR_IOPN1B_20200201T111325_20200201T111457_C001         CS_OFFL_SIR_IOPN1B_20200201T181859_20200201T182100_C001	s to be expected.           Test Failed           Loss of Echo	Description         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				
4.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement record         Loss of Echo Flag: This flag is currently set for products over land, but this is         Number of products with errors:       15	s to be expected.           Test Failed           Loss of Echo	Description         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				
4.6 L1B Waveform Group Data Check           CryoSat L1B data includes a waveform data flag for each measurement record.           Loss of Echo Flag: This flag is currently set for products over land, but this is           Number of products with errors:         15           Product         15           CS_OFFL_SIR_IOPM1B_20200201T015508_20200201T015531_C001         CS_OFFL_SIR_IOPM1B_20200201T001855_20200201T002110_C001           CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001         CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001           CS_OFFL_SIR_IOPN1B_20200201T01325_20200201T1013432_C001         CS_OFFL_SIR_IOPN1B_20200201T111325_20200201T111457_C001           CS_OFFL_SIR_IOPN1B_20200201T111325_20200201T182100_C001         CS_OFFL_SIR_IOPN1B_20200201T181859_20200201T182100_C001	to be expected.	Description         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         The tracking echo is missing for one or more records				
A.6 L1B Waveform Group Data Check           CryoSat L1B data includes a waveform data flag for each measurement record           coss of Echo Flag: This flag is currently set for products over land, but this is           Number of products with errors:         15           Product         15           So OFFL_SIR_IOPM1B_20200201T015508_20200201T015531_C001         25           CS_OFFL_SIR_IOPM1B_20200201T01855_20200201T002110_C001         25           CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001         25           CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001         25           CS_OFFL_SIR_IOPN1B_20200201T012233_20200201T012419_C001         25           CS_OFFL_SIR_IOPN1B_20200201T111325_20200201T013432_C001         25           CS_OFFL_SIR_IOPN1B_20200201T111325_20200201T181100_C001         25           CS_OFFL_SIR_IOPN1B_20200201T1114155_C001         25           CS_OFFL_SIR_IOPN1B_20200201T214957_20200201T215115_C001         25           CS_OFFL_SIR_IOPN1B_20200201T232443_20200201T232839_C001         27	Test Failed         Loss of Echo         Loss of Echo	Description         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         The tracking echo is missing for one or more records				

CS_OFFL_SIR_IOPR1B_20200201T085331_20200201T085445_C001	Loss of Echo
CS_OFFL_SIR_IOPR1B_20200201T120656_20200201T120921_C001	Loss of Echo
CS_OFFL_SIR_IOPR1B_20200201T200324_20200201T200810_C001	Loss of Echo

## 5. IOP Level 2 Data Quality Check

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

### 5.1 L2 Product Format Check

CS\_OFFL\_SIR\_IOPR1B\_20200201T065011\_20200201T065056\_C001

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

Number of products with errors:

#### 5.2 L2 Product Header Analysis

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

Loss of Echo

### 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:

## 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.

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200201T015508_20200201T015531_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

CS_OFFL_SIR_IOPM_2_20200201T034736_20200201T034815_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPM_2_20200201T150922_20200201T150942_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T001855_20200201T002110_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_20200201T010528_20200201T010715_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T013518_20200201T013650_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T015531_20200201T015936_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T025456_20200201T025657_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T074335_20200201T074501_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_20200201T075012_20200201T075315_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_20200201T092357_20200201T092656_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T092914_20200201T093432_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_20200201T102009_20200201T102422_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_20200201T110350_20200201T110625_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_20200201T115901_20200201T120015_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_20200201T120159_20200201T120430_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_20200201T123851_20200201T124448_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T133824_20200201T134045_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_20200201T142106_20200201T142256_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_20200201T151802_20200201T152240_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_20200201T165845_20200201T170245_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T174034_20200201T174420_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_20200201T192008_20200201T192324_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_20200201T192836_20200201T192959_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T201059_20200201T201147_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_20200201T210745_20200201T210852_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_20200201T214957_20200201T215115_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_20200201T232443_20200201T232839_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20200201T232857_20200201T233026_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_20200201T002110_20200201T002455_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_20200201T002455_20200201T002754_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20200201T015936_20200201T020458_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_20200201T033758_20200201T034735_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_20200201T051511_20200201T052246_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_20200201T065410_20200201T070103_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_20200201T070103_20200201T070411_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_20200201T083247_20200201T084002_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_20200201T084002_20200201T084209_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_20200201T101432_20200201T101856_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_20200201T101856_20200201T102009_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_20200201T115229_20200201T115724_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_20200201T115724_20200201T115901_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_20200201T133214_20200201T133824_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_20200201T151347_20200201T151802_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_20200201T165100_20200201T165845_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_20200201T183103_20200201T183929_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_20200201T201147_20200201T202201_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_20200201T215115_20200201T215841_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_20200201T233027_20200201T233547_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. 0

Number of products with errors:

## 5.6 L2 Measurement Quality Flag Check

## L2 Quality Flags (20Hz)

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

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

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

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20200131T235859_20200201T001028_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_20200201T003831_20200201T004848_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_20200201T005028_20200201T010500_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_20200201T010715_20200201T011215_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_20200201T012051_20200201T012233_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_20200201T012419_20200201T013518_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_20200201T013651_20200201T014236_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_20200201T014520_20200201T015217_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_20200201T021223_20200201T021234_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_20200201T022126_20200201T024430_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.

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CB: DFL SR: (DFL 2.4000201100428_2000001100428_2000001100428_00001       per balanceter balance balanceter balanceter balance balanceter b	CS_OFFL_SIR_IOPM_2_20200201T024752_20200201T025132_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Cal_DPL_SR_UPM_2_X000001TB0702_0000001TB0702_0000001TB00004_COST     and blackscatter Cubity     and blackscatter Cubity       Cal_DPL_SR_UPM_2_X000001TB0703_0000001TB07014_COST     COSCA Minister Regins and blackscatter Cubity     File Open America Regins and blackscatter Cubity       Cal_DPL_SR_UPM_2_X000001TB0703_0000001TB01110_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins Cubity       Cal_DPL_SR_UPM_2_X000001TB0703_0000001TB01110_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins Cubity       Cal_DPL_SR_UPM_2_X000001TB0703_0000001TB01110_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins Cubity       Cal_DPL_SR_UPM_2_X000001TB0703_0000001TB01110_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins Cubity       Cal_DPL_SR_UPM_2_X000001TB010270_000001TB01000_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins Cubity       Cal_DPL_SR_UPM_2_X000001TB010270_000001TB01000_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins Cubity       Cal_DPL_SR_UPM_2_X000001TB010270_000001TB01000_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins Cubity       Cal_DPL_SR_UPM_2_X000001TB010270_X000001TB0100_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins Cubity       Cal_DPL_SR_UPM_2_X000001TB010270_X000001TB00070_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins Cubity       Cal_DPL_SR_UPM_2_X000001TB010270_X000001TB00070_COST     Costa Affinietr Regins Cubity     File Open Affinietr Regins	CS_OFFL_SIR_IOPM_2_20200201T025746_20200201T032632_C001	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 set for one or more records.
<ul> <li>Marther, SMP, SMP, SMP, SMP, SMP, SMP, SMP, SMP</li></ul>	CS_OFFL_SIR_IOPM_2_20200201T035753_20200201T042358_C001	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 set for one or more records.
CB, OFFL_SIR_UOP4_2_00000011951792_0000001195591_00000	CS_OFFL_SIR_IOPM_2_20200201T042534_20200201T043046_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Open Perf SH, UMM 2, 20200201109328, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109402, 20200201109501, 20200201109502, 20200201109501, 20	CS_OFFL_SIR_IOPM_2_20200201T043759_20200201T051116_C001	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 set for one or more records.
CS_OFFL_SIR_JOPM_2_2020201T05420_2020201T054520_C001         and Backsatter Quality Flags have be flagscatter Quality Flags have be flags are on non-record.           CS_OFFL_SIR_JOPM_2_2020201T080544_20200201T080544_20200201T080511_C001         OCCOA Attrinuter Flagss_SSHA, SWH and backscatter Quality Flags have be flagscatter Quality Flags have be flags are on non-record.           CS_OFFL_SIR_JOPM_2_2020201T080517_22_2020201T080517_C001         OCCOA Attrinuter Flagss_SSHA, SWH and backscatter Quality Flags have be flagscatter Quality Flags have be flagscatter Quality Flags	CS_OFFL_SIR_IOPM_2_20200201T052752_20200201T053059_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_JOPM_2_2000201106527_0_2000001105530_C001         and Backscatter Quality Flags have b and Backscatter Quality Flags have b Backscatter Quality Flags have	CS_OFFL_SIR_IOPM_2_20200201T053420_20200201T054523_C001	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 set for one or more records.
CS_OFFL_SIR_JOPM_2_202002011065724_20200201106034       and Backscatter Quality, Plags have be Minimeter Range and Backscatter Quality, Plags have be Backscatter Quality       The OCOG Allimeter Range and Backscatter Quality Flags have be for one or more records.         CS_OFFL_SIR_JOPM_2_202002011000534_202002011060111_0_0011       OCOG Allimeter Range, SHA, SWH and Backscatter Quality. COOG Allimeter Range. SHA, SWH and Backscatter Quality Flags have be for one or more records.         CS_OFFL_SIR_JOPM_2_202002011001701_12_20200201100501_CO01       Ocean Allimeter Range, SHA, SWH and Backscatter Quality Flags have be and the OCOG Allimeter Range and Backscatter Quality Flags have be are for one or more records.         CS_OFFL_SIR_JOPM_2_20200201107011_02002_01100501_CO01       Ocean Allimeter Range, SHA, SWH and Backscatter Quality Flags have be are for one or more records.         CS_OFFL_SIR_JOPM_2_202002011070225_202002011074243_C001       Ocean Allimeter Range, SHA, SWH and Backscatter Quality Flags have be are for one or more records.         CS_OFFL_SIR_JOPM_2_202002011075252_202002011074243_C001       Ocean Allimeter Range Quality.COOG Allimeter Range and Backscatter Quality Flags have be are for one or more records.         CS_OFFL_SIR_JOPM_2_202002011075252_202002011075212_C001       Ocean Allimeter Range, SHA, SWH and Backscatter Quality Flags have be aff cone or more records.         CS_OFFL_SIR_JOPM_2_202002011076301_C001       Ocean Allimeter Range, SHA, SWH and Backscatter Quality Flags have be aff cone or more records.         CS_OFFL_SIR_JOPM_2_202002011076013_202002011081931_C001       Ocean Allimeter Range, SHA, SWH and Backscatter Quality Flags have be aff backscatt	CS_OFFL_SIR_IOPM_2_20200201T054527_20200201T055207_C001	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 set for one or more records.
Carl Print_Sint_UorM_2_2000001108036_20000011080112_0001         Backscatter Quality         For one or more records.           CS_OFFL_SIR_IOPM_2_20200201081712_202002011086011_C001         Ocean Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allineter Range, SHA, SWH and Backscatter Quality, Fig. New Decomposition of the COG Allinete	CS_OFFL_SIR_IOPM_2_20200201T055724_20200201T060326_C001	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 set for one or more records.
CS_OFFL_SIR_JOPM_2_2020201T051712_2020201T05601_C001       and Backscatter Quality Flags have b         CS_OFFL_SIR_JOPM_2_202020201T070411_2020201T076501_C001       Ocean Altimeter Range, SSHA, SVH and Backscatter Quality, C000 Altimeter Range, SSHA, SVH and Backscatter Quality, Flags have b         CS_OFFL_SIR_JOPM_2_202020201T072225_2020201T074243_C001       Ocean Altimeter Range, SSHA, SVH and Backscatter Quality, Flags have b         CS_OFFL_SIR_JOPM_2_202020201T075205_2020201T074243_C001       Ocean Altimeter Range, SSHA, SVH and Backscatter Quality       The Ocean Altimeter Range and Backscatter Quality Flags have b         CS_OFFL_SIR_JOPM_2_202020201T075552_0202021T075512_C001       OCGA Altimeter Range, SSHA, SVH and Backscatter Quality       The OCGO Altimeter Range and Backscatter Quality Flags have b         CS_OFFL_SIR_JOPM_2_202020201T075552_0202021T081R23_C001       Ocean Altimeter Range, SSHA, SVH and Backscatter Quality       The OCGO Altimeter Range and Backscatter Quality Flags have b         CS_OFFL_SIR_JOPM_2_20202021T075552_0202021T083019_C001       Ocean Altimeter Range, SSHA, SVH and Backscatter Quality       The OCGO Altimeter Range and Backscatter Quality Flags have b         CS_OFFL_SIR_JOPM_2_20202021T08019_2020201T082012_C001       Ocean Altimeter Range, SSHA, SVH and Backscatter Quality, COG Altimeter Range and Backscatter Quality Flags have b       The OCean Altimeter Range and Backscatter Quality Flags have b         CS_OFFL_SIR_JOPM_2_20202021T080013_2020201T082012_C001       Ocean Altimeter Range, SSHA, SVH and Backscatter Quality, COG Altimeter Range and Backscatter Quality, COG Altimeter Range and Backscatter Quality	CS_OFFL_SIR_IOPM_2_20200201T060534_20200201T061119_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20202011070501_C001         and Backscatter Quality. COCG           Attemeter Range and Backscatter Quality.         Decen Attemeter Range and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_202002011072225_202002011074243_0001         Ocean Attemeter Range and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_202002011074501_202002011075012_C001         Ocean Attemeter Range and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_202002011074501_202002011075012_C001         OCCG Attemeter Range and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_202002011075552_202002011081823_C001         OCCG Attemeter Range, SNA. SWH and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_202002011075552_202002011081923_C001         OCean Attemeter Range, SNA. SWH and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_202002011081918_20002011083019_C001         Ocean Attemeter Range, SNA. SWH and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_202002011081918_20002011083019_C001         Ocean Attemeter Range, SNA. SWH and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_202002011081918_20002011082012_C001         Ocean Attemeter Range, SNA. SWH and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_202002011082013_20200211092012_C001         Ocean Attemeter Range, SNA. SWH and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_20200201108203_20200211092036_C001         Ocean Attemeter Range, SNA. SWH and Backscatter Quality.           CS_OFFL_SIR_IOPM_2_20200201108203_20200211092036_C001         Ocean Attemeter Range, SNA. SWH and Backscatter Quality.     <	CS_OFFL_SIR_IOPM_2_20200201T061712_20200201T065011_C001	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 set for one or more records.
CS_OFFL_SIR_JOPM_2_20200201T072225_20200201T074243_C001       and Backscatter Quality, COCG       and the OCCG Altimeter Range and Backscatter Quality Flags have be and to core or more records.         CS_OFFL_SIR_IOPM_2_20200201T092013_20200201T092012_C001       Ocean Altimeter Range Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be and to core or more records.         CS_OFFL_SIR_IOPM_2_20200201T092013_20200201T092014_C001       Ocean Altimeter Range Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be and to core or more records. <td>CS_OFFL_SIR_IOPM_2_20200201T070411_20200201T070501_C001</td> <td>and Backscatter Quality, OCOG</td> <td>The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.</td>	CS_OFFL_SIR_IOPM_2_20200201T070411_20200201T070501_C001	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 set for one or more records.
OS_OFFL_SIR_IOPM_2_202002011074501_20201       Backscatter Quality       for one or more records.         OS_OFFL_SIR_IOPM_2_202002011075552_202002011081823_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality COCG Altimeter Range and Backscatter Quality COCG Altimeter Range, SSHA, SWH and Backscatter Quality COCG Altimeter Range and Backscatter Quality Flags have be set for one or more records.         CS_OFFL_SIR_IOPM_2_202002011081918_202002011083019_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality COCG Altimeter Range and Backscatter Quality COCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be set for one or more records.         CS_OFFL_SIR_IOPM_2_202002011092012_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be and backscatter Quality COCG Altimeter Range and Backscatter Quality Flags have be and backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and Backscatter Quality COCG Backscatter Quality COCG Backscatter Quality COCG Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have be and the COCG Altimeter Range and Backscatter Quality Flags have beand to one or more records.	CS_OFFL_SIR_IOPM_2_20200201T072225_20200201T074243_C001	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 set for one or more records.
CS_OFFL_SIR_IOPM_2_20200201T075552_20200201T081823_C001       and Backscatter Quality, COG Altimeter Range and Backscatter Quality       and the OCG Altimeter Range, SHA, SWH and Backscatter Quality       The Ocean Altimeter Range, SHA, SWH and Backscatter Quality       The Ocean Altimeter Range, SHA, SWH and Backscatter Quality       The Ocean Altimeter Range, SHA, SWH and Backscatter Quality, OCG Altimeter Range, SHA, SWH         CS_OFFL_SIR_IOPM_2_20200201T080013_20200201T092012_C001       Ocean Altimeter Range, SHA, SWH and Backscatter Quality, OCG Altimeter Range and Backscatter Quality, OCG Altimeter Range, SHA, SWH       The Ocean Altimeter Range, SHA, SWH and Backscatter Quality Flags have be Altimeter Range and Backscatter Quality, OCG Altimeter Range and Backscatter Quality, OCG Altimeter Range and Backscatter Quality, OCG Altimeter Range and Backscatter Quality, Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be and the OCG Altimeter Range and Backscatter Quality Flags have be for one or more records. </td <td>CS_OFFL_SIR_IOPM_2_20200201T074501_20200201T075012_C001</td> <td></td> <td>The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.</td>	CS_OFFL_SIR_IOPM_2_20200201T074501_20200201T075012_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200201T081918_20200201T083019_C001       and Backscatter Quality, OCCG       and the OCCG Altimeter Range and Backscatter Quality Flags have be         CS_OFFL_SIR_IOPM_2_20200201T090013_20200201T092012_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20200201T09203_20200201T092036_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20200201T09203_20200201T092036_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20200201T09203_20200201T092036_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20200201T09203_20200201T092036_C001       Ocean Altimeter Range, Quality, OCOG       The OCCG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T092657_20200201T092914_C001       OCCG Altimeter Range, SSHA, SWH       The OCCG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T093613_20200201T100728_C001       Ocean Altimeter Range, SSHA, SWH       The OCCG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101727_2000201T101728_C001       OCCG Altimeter Range, SSHA, SWH       The OCCG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101727_2000201T10140_C001	CS_OFFL_SIR_IOPM_2_20200201T075552_20200201T081823_C001	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 set for one or more records.
CS_OFFL_SIR_IOPM_2_20200201T090013_20200201T092012_C001       and Backscatter Quality, COGG Altimeter Range and Backscatter Quality       and the OCGG Altimeter Range, SSHA, SWH and Backscatter Quality, COGG Altimeter Range, SSHA, SWH and Backscatter Quality, COGG Backscatter Quality, COGG Altimeter Range, SSHA, SWH and Backscatter Quality, COGG Backscatter Quality, COGG Altimeter Range, SSHA, SWH and Backscatter Quality, COGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T093613_20200201T100728_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, COGG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T101140_C001       OCCG Altimeter Range Quality, OCCG Backscatter Quality       The Ocean Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T102503_20200201T104356_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCCG Altimeter Range and Backscatter Quality Flags have bean for one or more records.       The Ocean Altimeter Range, SSHA, SWH and the OCCG Altimeter Range and Backscatter Quality Flags have bean for one or more records. <t< td=""><td>CS_OFFL_SIR_IOPM_2_20200201T081918_20200201T083019_C001</td><td>and Backscatter Quality, OCOG</td><td>The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.</td></t<>	CS_OFFL_SIR_IOPM_2_20200201T081918_20200201T083019_C001	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 set for one or more records.
CS_OFFL_SIR_IOPM_2_20200201T092032_20200201T092036_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have be         CS_OFFL_SIR_IOPM_2_20200201T092657_20200201T092914_C001       OCOG Altimeter Range Quality, OCOG       The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T093613_20200201T100728_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T101728_C001       Ocean Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T101140_C001       OcCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T101140_C001       OcCOG Altimeter Range Quality, OCOG Backscatter Quality       The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101102503_20200201T104356_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T104427_20200201T104356_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T104427_20200201T105731_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.         Ocean Altimeter Range and Ba	CS_OFFL_SIR_IOPM_2_20200201T090013_20200201T092012_C001	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 set for one or more records.
CS_OFFL_SIR_IOPM_2_202002011092637_2020020111092914_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T093613_20200201T100728_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       The Ocean Altimeter Range and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T101140_C001       OCCG Altimeter Range Quality, OCOG Backscatter Quality       The OCCG Altimeter Range and Backscatter Quality       The OCCG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T1014356_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.       The OCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T102503_20200201T104356_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T104427_20200201T105731_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality, 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 Flags have been and the OCOG Altimeter Rang	CS_OFFL_SIR_IOPM_2_20200201T092023_20200201T092036_C001	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 set for one or more records.
CS_OFFL_SIR_IOPM_2_20200201T093613_20200201T100728_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T101140_C001       OCOG Altimeter Range Quality, OCOG       The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T1014356_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.       The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T102503_20200201T104356_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.       The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T104427_20200201T105731_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Flags have been for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T104427_20200201T105731_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Flags have been for one or more records.         OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records.       The OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records.	CS_OFFL_SIR_IOPM_2_20200201T092657_20200201T092914_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T101140_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20200201T102503_20200201T104356_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be and Backscatter Quality Flags have	CS_OFFL_SIR_IOPM_2_20200201T093613_20200201T100728_C001	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 set for one or more records.
CS_OFFL_SIR_IOPM_2_20200201T102503_20200201T104356_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have been of the occog Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20200201T104427_20200201T105731_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality, OCOG       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backsc	CS_OFFL_SIR_IOPM_2_20200201T101127_20200201T101140_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20200201T104427_20200201T105731_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and Backscatter Quality Flags have been compared by the ocoge Altimeter Range and	CS_OFFL_SIR_IOPM_2_20200201T102503_20200201T104356_C001	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 set for one or more records.
OCOG Altimeter Range Quality OCOG. The OCOG Altimeter Range and Rackscatter Quality Elege have been	CS_OFFL_SIR_IOPM_2_20200201T104427_20200201T105731_C001	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 set for one or more records.
CS_OFFL_SIR_IOPM_2_20200201T110625_20200201T110822_C001 Backscatter Quality GCOG Addition for one or more records.	CS_OFFL_SIR_IOPM_2_20200201T110625_20200201T110822_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_20200201T110956_20200201T111324_C001 OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been for one or more records.	CS_OFFL_SIR_IOPM_2_20200201T110956_20200201T111324_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	CS_OFFL_SIR_IOPM_2_20200201T111502_20200201T113044_C001	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 set for one or more records.
	CS_OFFL_SIR_IOPM_2_20200201T113246_20200201T114207_C001	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 set for one or more records.

CS_OFFL_SIR_IOPM_2_20200201T114701_20200201T114807_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_20200201T120015_20200201T120159_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_20200201T120430_20200201T120655_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_20200201T120921_20200201T122127_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_20200201T124449_20200201T124745_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_20200201T124754_20200201T125225_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_20200201T125436_20200201T130913_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_20200201T134743_20200201T135332_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_20200201T135617_20200201T135716_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_20200201T135718_20200201T142024_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_20200201T142257_20200201T143124_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_20200201T143353_20200201T145930_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_20200201T150922_20200201T150942_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_20200201T153314_20200201T155839_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_20200201T160509_20200201T160925_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_20200201T161241_20200201T164020_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_20200201T164022_20200201T164232_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_20200201T165029_20200201T165100_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_20200201T170538_20200201T173752_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_20200201T174420_20200201T175005_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_20200201T175128_20200201T175744_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_20200201T182325_20200201T182504_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_20200201T184315_20200201T191740_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_20200201T192324_20200201T192836_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_20200201T193033_20200201T194958_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_20200201T200810_20200201T200813_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_20200201T202201_20200201T205034_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_20200201T205046_20200201T205557_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_20200201T210125_20200201T210324_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_20200201T210330_20200201T210745_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_20200201T210938_20200201T211052_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_20200201T211104_20200201T213709_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_20200201T213839_20200201T214539_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_20200201T214539_20200201T214605_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_20200201T214852_20200201T214957_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_20200201T220257_20200201T220425_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_20200201T220517_20200201T221405_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_20200201T221739_20200201T222005_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_20200201T222833_20200201T223528_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_20200201T223701_20200201T224222_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_20200201T224241_20200201T224452_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_20200201T225332_20200201T230411_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_20200201T230734_20200201T231624_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_20200201T231751_20200201T232442_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_20200201T234657_20200201T235657_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_20200201T010528_20200201T010715_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_20200201T025456_20200201T025657_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_20200201T120159_20200201T120430_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_20200201T151321_20200201T151347_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_20200201T033758_20200201T034735_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_0FFL_SIR_IOPR_2_20200201T105731_20200201T110350_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_0FFL_SIR_IOPR_2_20200201T175744_20200201T180247_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_20200201T184113_20200201T184133_C001	S	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20200201T233027_20200201T233547_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.

## L2 Quality Flags (20Hz PLRM)

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

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

> OCOG Altimeter Range and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over continental ice.

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Number of	products wit	h errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20200201T001500_20200201T001724_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_20200201T001855_20200201T002110_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_20200201T003633_20200201T003831_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_20200201T015531_20200201T015936_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_20200201T020458_20200201T020526_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_20200201T021556_20200201T021949_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_20200201T025456_20200201T025657_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_20200201T042358_20200201T042534_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_20200201T060408_20200201T060534_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_20200201T065056_20200201T065410_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_20200201T070502_20200201T070552_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_20200201T074335_20200201T074501_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_20200201T075012_20200201T075315_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_20200201T085929_20200201T090012_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_20200201T092357_20200201T092656_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_20200201T092914_20200201T093432_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_20200201T102009_20200201T102422_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_20200201T110350_20200201T110625_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_20200201T110822_20200201T110956_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_20200201T111325_20200201T111457_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_20200201T114207_20200201T114541_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_20200201T120159_20200201T120430_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.

CS_OFFL_SIR_IOPN_2_20200201T122128_20200201T122532_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_20200201T123650_20200201T123751_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_20200201T123851_20200201T124448_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_20200201T125225_20200201T125409_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_20200201T133824_20200201T134045_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_20200201T134116_20200201T134304_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_20200201T143125_20200201T143322_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_20200201T145930_20200201T150308_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_20200201T152326_20200201T152448_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_20200201T152843_20200201T153048_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_20200201T160044_20200201T160222_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_20200201T160346_20200201T160508_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_20200201T160925_20200201T161215_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_20200201T174034_20200201T174420_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_20200201T180654_20200201T181028_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_20200201T181859_20200201T182100_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_20200201T182608_20200201T182728_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_20200201T182815_20200201T182903_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_20200201T184133_20200201T184314_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_20200201T192836_20200201T192959_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_20200201T194958_20200201T195257_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_20200201T200028_20200201T200039_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_20200201T201059_20200201T201147_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_20200201T205723_20200201T210124_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_20200201T214640_20200201T214852_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_20200201T214957_20200201T215115_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_20200201T223530_20200201T223701_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_20200201T232443_20200201T232839_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_20200201T232857_20200201T233026_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_20200201T233547_20200201T233614_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_20200201T234323_20200201T234657_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_20200201T001028_20200201T001215_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_20200201T001331_20200201T001500_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_20200201T001725_20200201T001854_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_20200201T002110_20200201T002455_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_20200201T004848_20200201T005028_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_20200201T022020_20200201T022126_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_20200201T033758_20200201T034735_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_20200201T051511_20200201T052246_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_20200201T052318_20200201T052752_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_20200201T053335_20200201T053414_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_20200201T065410_20200201T070103_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_20200201T070103_20200201T070411_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_20200201T083247_20200201T084002_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_20200201T084431_20200201T085157_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_20200201T100729_20200201T101019_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_20200201T101244_20200201T101336_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_20200201T101432_20200201T101856_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_20200201T115229_20200201T115724_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_20200201T115724_20200201T115901_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_20200201T120656_20200201T120921_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_20200201T123443_20200201T123520_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_20200201T130913_20200201T131558_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_20200201T131558_20200201T131801_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_20200201T133214_20200201T133824_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_20200201T134354_20200201T134619_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_20200201T143322_20200201T143353_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_20200201T165100_20200201T165845_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_20200201T183103_20200201T183929_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_20200201T200218_20200201T200324_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_20200201T200814_20200201T201059_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_20200201T201147_20200201T202201_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_20200201T210324_20200201T210330_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_20200201T215115_20200201T215841_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_20200201T220016_20200201T220034_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_20200201T224635_20200201T225332_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_20200201T230555_20200201T230734_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_20200201T233027_20200201T233547_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
L2 Quality Flags (1 Hz & 1Hz PLRM)		
Currently, there are several common flags raised in the Level 2 products, which are summarised below.		
> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for products over sea ice, which is to be expected.		

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

197

Number of products with errors:

### 5.8 L2 Ocean Retracking Quality Check

#### L2 Retracking Flags (20Hz)

CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below. Number of products with errors: 66

### L2 Retracking Flags (20Hz, PLRM)

CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz PLRM measurement record. The bit value of this flag indicates any problems when set.

Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.

Number of products with errors:

143

0

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

## 6.1 P2P Product Format Check

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

Number of products with errors:

## 6.2 P2P Product Header Analysis

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

30

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

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

### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220200131T233319_20200201T002254_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_20200201T002254_20200201T011232_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_20200201T011232_20200201T020207_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_20200201T020207_20200201T025146_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_20200201T025146_20200201T034121_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_20200201T034121_20200201T043100_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_20200201T043100_20200201T052034_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_20200201T052034_20200201T061013_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_20200201T061013_20200201T065948_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_20200201T065948_20200201T074927_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_220200201T074927_20200201T083902_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_2_20200201T083902_20200201T092840_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_20200201T092840_20200201T101815_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_20200201T101815_20200201T110754_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_2_20200201T110754_20200201T115729_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_20200201T115729_20200201T124707_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_220200201T124707_20200201T133642_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_220200201T133642_20200201T142621_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_220200201T142621_20200201T151556_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_220200201T151556_20200201T160535_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_220200201T160535_20200201T165509_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_20200201T165509_20200201T174448_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_220200201T174448_20200201T183423_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_20200201T183423_20200201T192402_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_20200201T192402_20200201T201337_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_20200201T201337_20200201T210315_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_220200201T210315_20200201T215250_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_20200201T215250_20200	201T224229_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_220200201T224229_20200	201T233204_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_220200201T233204_20200	202T002142_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)
6.5 P2P Measurement Confidence	Data Check		
CryoSat P2P data includes a measurement confider	nce flag for each 20-Hz measu	rement record. The bit value of this flag ind	icates any problems when set.
Number of products with errors:	0		
6.6. P2P Massurament Quality Flag	Chook		
6.6 P2P Measurement Quality Flag	Check		
P2P Quality Flags (20Hz)			
CryoSat P2P data includes Quality Flags for each 2		•	
	Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.		
Number of products with errors:	Number of products with errors: 30		
P2P Quality Flags (20Hz PLRM)			
Since the P2P Quality Flags are copied directly f	rom the L2 Quality Flags, ple	ease see Section 5.6 for the full list of pro	oducts affected.
Number of products with errors:	30		
P2P Quality Flags (1 Hz & 1Hz PLRM)			
Since the P2P Quality Flags are copied directly f	rom the L2 Quality Flags, ple	ase see Section 5.6 for the full list of pro	oducts affected.
Number of products with errors:	30		
6.8 P2P Ocean Retracking Quality Check			
P2P Retracking Flags (20Hz)			
Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.			
Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.			
Number of products with errors:	29		
P2P Retracking Flags PLRM			
CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz PLRM measurement record. The bit value of this flag indicates any problems when set.			
Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.			
Number of products with errors:	30		