

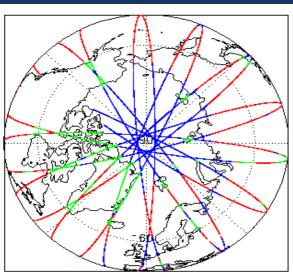
## 1. Overview

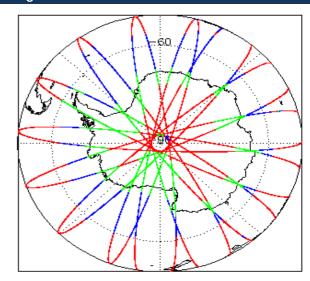
Report Production:	: 19-Nov-2021	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	

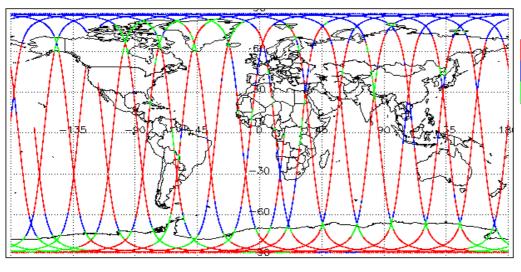
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1 and 7.2

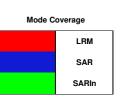
Mis	ssion / Instru	ment News
- 18	8-Oct-2021	None
- 19	9-Oct-2021	None
2	0-Oct-2021	Nothing planned

## 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. GOP Level 1B Data Quality Check

### 4.1 L1B Product Format Check

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

#### 4.2 L1B Product Header Analysis

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

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

Number of products with errors:

#### 4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

0

#### 4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

0

#### 4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

2

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20211019T050257_20211019T051400_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20211019T211131_20211019T211659_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

### 4.6 L1B Waveform Group Data Check

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

Loss of Echo Flag: This flag is currently set for some products over land, but this is to be expected.

Number of products with errors:

...

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20211019T111802_20211019T115109_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20211019T172242_20211019T173901_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20211019T025951_20211019T030035_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20211019T043410_20211019T043529_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20211019T043926_20211019T044050_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20211019T061347_20211019T061554_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20211019T075300_20211019T075745_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20211019T111642_20211019T111802_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20211019T142223_20211019T142635_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20211019T174234_20211019T174445_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20211019T201901_20211019T202043_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20211019T041726_20211019T041910_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20211019T110704_20211019T111453_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20211019T120510_20211019T121041_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20211019T121430_20211019T122039_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20211019T124522_20211019T124631_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20211019T133045_20211019T133250_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20211019T174445_20211019T175134_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20211019T192309_20211019T192820_C001	Loss of Echo	The tracking echo is missing for one or more records

### 5. GOP Level 2 Data Quality Check

## 5.1 L2 Product Format Check

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

Number of products with errors:

0

#### 5.2 L2 Product Header Analysis

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

Number of products with errors:

0

### 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

0

#### 5.4 L2 Auxiliary Correction Error Check

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

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

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

54

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20211019T172242_20211019T173901_C001	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 Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPM_2_20211019T230041_20211019T230217_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T002523_20211019T002828_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T015827_20211019T020135_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T020425_20211019T020806_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T033904_20211019T034138_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T043410_20211019T043529_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T051401_20211019T052018_C001	GPD Wet Tropospheric Correction, Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the GPD Wet Tropospheric correction, the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T061347_20211019T061554_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T065627_20211019T065802_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T070655_20211019T070855_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T075300_20211019T075745_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T084445_20211019T084715_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T101544_20211019T101935_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) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20211019T110606_20211019T110704_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T115529_20211019T115842_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T133251_20211019T133715_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T134300_20211019T134420_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T142223_20211019T142635_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T152033_20211019T152220_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T160439_20211019T160541_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T165842_20211019T170107_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T174234_20211019T174445_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T182847_20211019T183107_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T183746_20211019T184207_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T191917_20211019T192308_C001	mean Sea Suriace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	There is an error with the Mos neight (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more
CS_OFFL_SIR_GOPN_2_20211019T192820_20211019T192854_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T200905_20211019T201137_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T201901_20211019T202043_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records

CS_OFFL_SIR_GOPN_2_20211019T232809_20211019T232928_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20211019T233458_20211019T233815_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T010805_20211019T011514_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T011514_20211019T011709_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T012154_20211019T012539_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T024931_20211019T025411_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T025411_20211019T025530_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T042739_20211019T043251_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T043251_20211019T043410_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the GPD Wet Tropospheric correction, the MSS height (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_GOPR_2_20211019T061006_20211019T061347_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T074505_20211019T074530_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T074530_20211019T075259_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T092709_20211019T093333_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T105608_20211019T105746_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T110704_20211019T111453_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T124636_20211019T125426_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T142635_20211019T143412_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T160541_20211019T161110_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T174445_20211019T175134_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T192309_20211019T192820_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T210048_20211019T210837_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T223913_20211019T224643_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20211019T225553_20211019T225749_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records

## 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20211019T050257_20211019T051400_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOPM_2_20211019T211131_20211019T211659_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

## 5.6 L2 Measurement Quality Flag Check

### L2 Quality Flags (20Hz)

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

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

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

2

Number of products with errors: 10

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20211019T000839_20211019T000844_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20211019T000857_20211019T001430_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.

Deep Afficient Program (2014). 2014  Deep Affici	CS_OFFL_SIR_GOPM_2_20211019T002007_20211019T002523_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
## COOPM_SECTION************************************	CS_OFFL_SIR_GOPM_2_20211019T003241_20211019T005334_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CGL DFFL_SE_COM2_201191791088 20211018701428 CDD  GD DFFL_SE_COM2_201191791095 CDD  GD DFFL_SE_	CS_OFFL_SIR_GOPM_2_20211019T005619_20211019T010805_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFF_SR_COPM_2_X011019701418_X011019705405_COD  CS_OFF_SR_COPM_2_X011019701418_X011019705405_COD  CS_OFF_SR_COPM_2_X011019701418_X011019705405_COD  CS_OFF_SR_COPM_2_X011019700183_X011019700485_COD  CS_OFF_SR_COPM_2_X011019700183_X011019700485_COD  CS_OFF_SR_COPM_2_X011019700183_X011019700485_COD  CS_OFF_SR_COPM_2_X011019700183_X011019700485_COD  CS_OFF_SR_COPM_2_X011019700183_X011019700485_COD  CS_OFF_SR_COPM_2_X011019700183_X011019700485_COD  CS_OFF_SR_COPM_2_X011019700183_X011019700185_COD  CS_OFF_SR_COPM_2_X011019700183_X011019700185_COD  CS_OFF_SR_COPM_2_X011019700103_X011019700185_COD  CS_OFF_SR_COPM_2_X011019700103_X011019700185_COD  CS_OFF_SR_COPM_2_X011019700103_X011019700103_COD  CS_OFF_SR_COPM_2_X011019700103_X011019700103_COD  CS_OFF_SR_COPM_2_X011019700103_X011019700103_COD  CS_OFF_SR_COPM_2_X011019700103_COD  CS_OFF_SR_COPM_2_X0110	CS_OFFL_SIR_GOPM_2_20211019T011709_20211019T012154_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
So OFFL SIR GOPM 2 20211019700192,202110197020	CS_OFFL_SIR_GOPM_2_20211019T013638_20211019T014228_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Section of Calify  General Plantine Rosp, SSMA, SWM and Each control Calify Riggs  General Plantine Rosp, SSMA, SWM and Each control Calify Riggs  General Plantine Rosp, SSMA, SWM and Each control Calify Riggs  and Each Control Calify  General Plantine Rosp, SSMA, SWM and Each control Calify Riggs  and Each Control Calify  General Plantine Rosp, SSMA, SWM and Each control Calify Riggs  and Each Control Calify  General Plantine Rosp, SSMA, SWM and Each control Calify Riggs  and Each Control Calify  General Plantine Rosp, SSMA, SWM and Each control Calify Riggs  and Each Control Calify  General Plantine Rosp, SSMA, SWM and Each control Calify Riggs  and Each Control Calify  General Plantine Rosp, SSMA, SWM and Each control Calify Riggs  and Each Control Calify  CE, OFFL, SIRL, COPML 2, 20211019T000149, 20211019T0	CS_OFFL_SIR_GOPM_2_20211019T014416_20211019T015405_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20211019T00056_20211019T000056_20211019T000056_20211019T00006_20211019T00006_20211019T00006_20211019T00006_20211019T00006_	CS_OFFL_SIR_GOPM_2_20211019T020135_20211019T020425_C001		
and Badescater Caulity, COCA Affinited Range and Badescater Caulity Cocan Affinited Range and Badescater Caulity Cocan Affinited Range SSHA, SWH and Badescater Caulity Cocan Affinited Range and Badescater Caulity Range Badescater Caulity Cocan Affinited Range and Badescater Caulity Range Badescater Caulity Cocan Affinited Range and Badescater Caulity Range Badescater Caulity Range Badescater Caulity Cocan Affinited Range Caulity Cocan Affinited Range Caulity Cocan Affinited Range Caulity Cocan Affinited Range and Badescater Caulity Range Badescater Caulity Cocan Affinited Range Caulity Cocan Affinit	CS_OFFL_SIR_GOPM_2_20211019T021144_20211019T023740_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the COCO Attender Flange and Backscatter Coustly Flags have been attended and the Coco Attender Flange and Backscatter Coustly Flags have been attended and the Coco Attender Flange and Backscatter Coustly Flags and Backscatter Coustly Flags and Backscatter Coustly Flags and Backscatter Coustly Flags have been attended and the Coco Attender Flange and Backscatter Coustly Flags and Backscatter Coustly Flags have been attended and the Coco Attender Flange and Backscatter Coustly Flags have been attended and the Coco Attender Flange and Backscatter Coustly Flags have been attended and the Coco Attender Flange and Backscatter Coustly Flags have been attended and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange, SSHA, SWH and Backscatter Coustly Flags have been attended and the Coco Attender Flange, SSHA, SWH and Backscatter Coustly Flags and the Coco Attender Flange, SSHA, SWH and Backscatter Coustly Flags and the Coco Attender Flange, SSHA, SWH and Backscatter Coustly Flags and the Coco Attender Flange, SSHA, SWH and Backscatter Coustly Flags and the Coco Attender Flange, SSHA, SWH and Backscatter Coustly Flags and the Coco Attender Flange, SSHA, SWH and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags have been attended and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags have been attended and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags and the Coco Attender Flange and Backscatter Coustly Flags and the	CS_OFFL_SIR_GOPM_2_20211019T023919_20211019T024607_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the COCG Altimeter Range and Backscatter Quality Flags have been set or on one records on a more records.  CS_OFFL_SIR_GOPM_2_20211019T034052_20211019T034446_CO01  CS_OFFL_SIR_GOPM_2_20211019T035400_20211019T034446_CO01  CS_OFFL_SIR_GOPM_2_20211019T035505_20211019T041726_CO01  CS_OFFL_SIR_GOPM_2_20211019T045052_20211019T041726_CO01  CS_OFFL_SIR_GOPM_2_20211019T045052_20211019T041726_CO01  CS_OFFL_SIR_GOPM_2_20211019T045052_20211019T045040_CO01  CS_OFFL_SIR_GOPM_2_20211019T045052_20211019T045040_CO01  CS_OFFL_SIR_GOPM_2_20211019T045052_20211019T045040_CO01  CS_OFFL_SIR_GOPM_2_20211019T045052_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T045052_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T045052_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T045050_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T045050_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T050500_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T050500_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T050500_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T050500_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T050500_20211019T055400_CO01  CS_OFFL_SIR_GOPM_2_20211019T050500_20211019T05400_CO01  CS_OFFL_SIR_GOPM_2_20211019T050500_20211019T05400_CO01  CS_OFFL_SIR_GOPM_2_20211019T05000_20211019T05400_CO01  CS_OFFL_SIR_GOPM_2_20211019T05000_20211019T05400_CO01  CS_OFFL_SIR_GOPM_2_20211019T05000_20211019T05400_CO01  CS_OFFL_SIR_GOPM_2_20211019T05000_20211019T05400_CO01  CS_OFFL_SIR_GOPM_2_20211019T050000_20211019T05400_CO01  CS_OFFL_SIR_GOPM_2_20211019T050000_20211019T05000_CO01  CS_OFFL_SIR_GOPM_2_20211019T050000_20211019T05000_CO01  CS_OFFL_SIR_GOPM_2_20211019T050000_20211019T050000_CO01  CS_OFFL_SIR_GOPM_2_20211019T050000_20211019T050000_CO01  CS_OFFL_SIR_GOPM_2_20211019T050000_20211019T050000_CO01  CS_OFFL_SIR_GOPM_2_20211019T050000_20211019T050000_CO01  CS_OFFL_SIR_GOPM_2_20211019T0500000_CO01  CS_OFFL_SIR_GOPM_2_20211019T0500000_CO01  CS_OFFL_SIR_GOPM_2_20211019T0500000_CO01  CS_OFFL_SIR_GOPM_2_20211019T0500000_CO01  CS_OFFL_SIR_G	CS_OFFL_SIR_GOPM_2_20211019T030036_20211019T030727_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  For one or more records.  CS_OFFL_SIR_GOPM_2_20211019T085102_80211019T085444_C001  CS_OFFL_SIR_GOPM_2_20211019T085353_20211019T04701_C001  CS_OFFL_SIR_GOPM_2_20211019T085353_20211019T04701_C001  CS_OFFL_SIR_GOPM_2_20211019T047078_20211019T04701_C001  CS_OFFL_SIR_GOPM_2_20211019T047078_20211019T047079_C001  CS_OFFL_SIR_GOPM_2_20211019T047079_20211019T047079_C001  CS_OFFL_SIR_GOPM_2_20211019T040708_20211019T047079_C001  CS_OFFL_SIR_GOPM_2_20211019T040708_20211019T04709_C001  CS_OFFL_SIR_GOPM_2_20211019T040708_20211019T04709_C001  CS_OFFL_SIR_GOPM_2_20211019T040708_20211019T04709_C001  CS_OFFL_SIR_GOPM_2_20211019T040708_20211019T04709_C001  CS_OFFL_SIR_GOPM_2_20211019T040512_20211019T04090_C001  CS_OFFL_SIR_GOPM_2_20211019T040512_20211019T04090_C001  CS_OFFL_SIR_GOPM_2_20211019T040512_20211019T04090_C001  CS_OFFL_SIR_GOPM_2_20211019T040512_20211019T04090_C001  CS_OFFL_SIR_GOPM_2_20211019T040512_20211019T05400_C001  CS_OFFL_SIR_GOPM_2_20211019T05404_C001  CS_OFFL_SIR_GOPM_2_20211019T05404_20211019T05400_C001  CS_OFFL_SIR_GOPM_2_20211019T05404_C001  CS_OFFL_SIR_GOPM_2_20211019T05444_C001  CS_OFFL_SIR_GOPM_2_20211019T056012_20211019T05444_C001  CS_OFFL_SIR_GOPM_2_20211019T056012_20211019T056442_C001  CS_OFFL_SIR_GOPM_2_20211019T056442_C001	CS_OFFL_SIR_GOPM_2_20211019T030740_20211019T033202_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Room and Backscatter Quality Room Altimeter Range and Backscatter Quality Room and Backscatter Quality Room Altimeter Range and Backscatter Quality Room and Backscatter Quality Room Altimeter Range and Backscatter Quality Room Altimeter Range and Backscatter Quality Room and Backscatter Quality Room Altimeter Range and Backscatter Quality Room Room Room Room Room Room Room Roo	CS_OFFL_SIR_GOPM_2_20211019T034552_20211019T034826_C001		
CS_OFFL_SIR_GOPM_2_20211019T040705_20211019T041725_C001  Anal Backscatter Cousility, COCG Altimeter Range and Backscatter Cousility Flags have been and Backscatter Cousility CoCG Altimeter Range and Backscatter Cousility Flags have been and Backscatter Cousility CoCG Altimeter Range and Backscatter Cousility Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T040529_20211019T049255_C001  CS_OFFL_SIR_GOPM_2_20211019T040529_20211019T049537_C001  CS_OFFL_SIR_GOPM_2_20211019T040527_20211019T0540527_20211019T0540527_20211019T05279_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T05279_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054424_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054424_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054424_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054424_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T05403_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054034_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054034_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054034_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054034_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054034_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T053034_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T053034_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T063044_C001  CS_OFFL_SIR_GOPM_2_20211019T063145_20211019T063044_C001  CS_OFFL_SIR_GOPM_	CS_OFFL_SIR_GOPM_2_20211019T035100_20211019T035444_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T043529_20211019T043925_C001  CS_OFFL_SIR_GOPM_2_20211019T044051_20211019T043925_C001  CS_OFFL_SIR_GOPM_2_20211019T044051_20211019T045037_C001  CS_OFFL_SIR_GOPM_2_20211019T060257_20211019T051400_C001  CS_OFFL_SIR_GOPM_2_20211019T060257_20211019T051400_C001  CS_OFFL_SIR_GOPM_2_20211019T060257_20211019T051400_C001  CS_OFFL_SIR_GOPM_2_20211019T050342_20211019T05239_C001  CS_OFFL_SIR_GOPM_2_20211019T050342_20211019T05424_C001  CS_OFFL_SIR_GOPM_2_20211019T053042_20211019T05424_C001  CS_OFFL_SIR_GOPM_2_20211019T053042_20211019T05403_2 C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T05403_2 C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T06404_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T06404_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T06404_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T06404_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065442_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065442_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065442_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065442_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065442_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065514_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065514_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065514_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065514_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065514_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065514_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065514_C001  CS_OFFL	CS_OFFL_SIR_GOPM_2_20211019T035535_20211019T040701_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20211019T05325_20211019T05403_C001  CS_OFFL_SIR_GOPM_2_20211019T054051_20211019T05400_C001  CS_OFFL_SIR_GOPM_2_20211019T05257_20211019T051400_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T052739_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T052739_C001  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054424_C001  CS_OFFL_SIR_GOPM_2_20211019T053042_20211019T054423_C001  CS_OFFL_SIR_GOPM_2_20211019T053042_20211019T054424_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T054424_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T054933_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T054933_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T054933_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T065403_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T065403_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T065403_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T065403_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065010_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065010_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065010_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065010_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065010_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065010_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065010_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T065004_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065044_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T065544_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T065345_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T0658602_20211019T07655_C001  CS_OFFL_SIR_GOPM_2_20211019T0658602_20211019T07655_C001  CS_OFFL_SIR_GOPM_2_20211019T065445_20211019T065514_C001  CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	CS_OFFL_SIR_GOPM_2_20211019T040705_20211019T041725_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T05424_C001  CS_OFFL_SIR_GOPM_2_20211019T053042_20211019T054424_C001  CS_OFFL_SIR_GOPM_2_20211019T054003_20211019T054933_C001  CS_OFFL_SIR_GOPM_2_20211019T054003_20211019T054933_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T064010_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T060110_C001  CS_OFFL_SIR_GOPM_2_20211019T056312_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T063045_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T0630442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T0630442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T0630442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T0630442_C001  CS_OFFL_SIR_GOPM_2_20211019T063045_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T063045_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T063045_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T063045_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T065602_20211019T076555_C001  CS_OFFL_SIR_GOPM_2_20211019T065602_20211019	CS_OFFL_SIR_GOPM_2_20211019T043529_20211019T043925_C001		
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Backscatter Quality Flags have been Altimeter Range Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T054244_CO01  CS_OFFL_SIR_GOPM_2_20211019T053042_20211019T054424_CO01  CS_OFFL_SIR_GOPM_2_20211019T054603_20211019T054933_CO01  CS_OFFL_SIR_GOPM_2_20211019T054603_20211019T054933_CO01  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T060110_CO01  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T060110_CO01  CS_OFFL_SIR_GOPM_2_20211019T062254_20211019T063004_CO01  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T0630442_CO01  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_CO01  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_CO01  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_CO01  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_CO01  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T0655_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T0655_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T0655_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T0655_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T0655_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T0655_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T0765802_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T0765802_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T0765802_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T0765802_20211019T07655_CO01  CS_OFFL_SIR_GOPM_2_20211019T0765802_20211019T07655_CO01	CS_OFFL_SIR_GOPM_2_20211019T044051_20211019T045637_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20211019T053042_20211019T054424_C001  CS_OFFL_SIR_GOPM_2_20211019T054603_20211019T054933_C001  CS_OFFL_SIR_GOPM_2_20211019T054603_20211019T054933_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T064933_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T060110_C001  CS_OFFL_SIR_GOPM_2_20211019T065312_20211019T060110_C001  CS_OFFL_SIR_GOPM_2_20211019T06254_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T063442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_C001  CS_OFFL_SIR_GOPM_2_20211019T063442_C001  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07028_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T07063445_D0211019T070655_C001  COCOM Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019	CS_OFFL_SIR_GOPM_2_20211019T050257_20211019T051400_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T054603_20211019T064933_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T060110_C001  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T060110_C001  CS_OFFL_SIR_GOPM_2_20211019T062254_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T062254_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T0630442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T0706555_C001  CS_OFFL_SIR_GOPM_2_20211019T07065802_20211019T0706555_C001  Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CC_OCA Altimeter Range Quality, OCOG Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CC_OCA A	CS_OFFL_SIR_GOPM_2_20211019T052314_20211019T052739_C001		
Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T060110_C001  CS_OFFL_SIR_GOPM_2_20211019T062254_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T062254_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T0630442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T06555_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T073030_C001  And Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073030_C001  CCaan Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073030_C001  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T070855_C001  CCEAN Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20211019T053042_20211019T054424_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20211019T062254_20211019T063004_C001  Backscatter Quality  CS_OFFL_SIR_GOPM_2_20211019T062254_20211019T063004_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_C001  CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_C001  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073303_C001  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.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073303_C001  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073303_C001  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20211019T054603_20211019T054933_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T0765802_20211019T07303_C001  Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T07333_C001  Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20211019T055312_20211019T060110_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been set for one or more records.  OCOG Altimeter Range Quality, OCOG Backscatter Quality  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20211019T062254_20211019T063004_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073303_C001  and Backscatter Quality, OCOG Backscatter Quality, OCOG Backscatter Quality  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073303_C001  CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073303_C001  and Backscatter Quality, OCOG	CS_OFFL_SIR_GOPM_2_20211019T063127_20211019T063442_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG and Itimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_GOPM_2_20211019T063445_20211019T065414_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073303_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_GOPM_2_20211019T065802_20211019T070655_C001		
	CS_OFFL_SIR_GOPM_2_20211019T071028_20211019T073303_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_GOPM_2_20211019T073310_20211019T073331_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_GOPM_2_20211019T074417_20211019T074504_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_GOPM_2_20211019T081040_20211019T083339_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_GOPM_2_20211019T084948_20211019T091347_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_GOPM_2_20211019T091557_20211019T091616_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_GOPM_2_20211019T091618_20211019T092120_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_GOPM_2_20211019T092444_20211019T092709_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_GOPM_2_20211019T094149_20211019T101122_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_GOPM_2_20211019T101936_20211019T102524_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_GOPM_2_20211019T102851_20211019T104255_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_GOPM_2_20211019T110430_20211019T110606_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_GOPM_2_20211019T111802_20211019T115109_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_GOPM_2_20211019T115842_20211019T120356_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_GOPM_2_20211019T121041_20211019T121430_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_GOPM_2_20211019T122039_20211019T122227_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_GOPM_2_20211019T123656_20211019T123812_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_GOPM_2_20211019T124111_20211019T124522_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_GOPM_2_20211019T125426_20211019T125455_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_GOPM_2_20211019T125529_20211019T130647_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_GOPM_2_20211019T130933_20211019T133045_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_GOPM_2_20211019T133715_20211019T133844_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_GOPM_2_20211019T133851_20211019T134300_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_GOPM_2_20211019T134832_20211019T135806_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_GOPM_2_20211019T135930_20211019T140711_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_GOPM_2_20211019T140806_20211019T141212_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_GOPM_2_20211019T141827_20211019T142001_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_GOPM_2_20211019T143522_20211019T143639_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_GOPM_2_20211019T143728_20211019T144215_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_GOPM_2_20211019T144355_20211019T150950_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_GOPM_2_20211019T151216_20211019T151743_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_GOPM_2_20211019T151803_20211019T152033_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_GOPM_2_20211019T152846_20211019T154115_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_GOPM_2_20211019T154147_20211019T155903_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_GOPM_2_20211019T160253_20211019T160439_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_GOPM_2_20211019T161637_20211019T161906_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_GOPM_2_20211019T162228_20211019T163209_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_GOPM_2_20211019T163413_20211019T164847_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_GOPM_2_20211019T165144_20211019T165641_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_GOPM_2_20211019T165702_20211019T165713_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_GOPM_2_20211019T170546_20211019T171715_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_GOPM_2_20211019T172242_20211019T173901_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_GOPM_2_20211019T180215_20211019T180521_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_GOPM_2_20211019T181337_20211019T182728_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_GOPM_2_20211019T183108_20211019T183555_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_GOPM_2_20211019T184351_20211019T190924_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_GOPM_2_20211019T194359_20211019T200435_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_GOPM_2_20211019T200522_20211019T200627_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_GOPM_2_20211019T201138_20211019T201511_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_GOPM_2_20211019T201518_20211019T201527_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_GOPM_2_20211019T202229_20211019T204903_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_GOPM_2_20211019T212249_20211019T214553_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_GOPM_2_20211019T214929_20211019T215426_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_GOPM_2_20211019T215433_20211019T215801_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_GOPM_2_20211019T220255_20211019T223604_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_GOPM_2_20211019T224735_20211019T225020_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_GOPM_2_20211019T232116_20211019T232238_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_GOPM_2_20211019T232928_20211019T233458_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_GOPM_2_20211019T234232_20211020T001700_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_GOPN_2_20211019T034826_20211019T034958_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20211019T052740_20211019T052920_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_GOPN_2_20211019T063005_20211019T063127_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_GOPN_2_20211019T070655_20211019T070855_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_GOPN_2_20211019T084445_20211019T084715_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_GOPN_2_20211019T110358_20211019T110430_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_GOPN_2_20211019T233458_20211019T233815_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	
CS_OFFL_SIR_GOPR_2_20211019T020911_20211019T021144_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_GOPR_2_20211019T025903_20211019T025917_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_GOPR_2_20211019T060734_20211019T060853_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_GOPR_2_20211019T074505_20211019T074530_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_GOPR_2_20211019T130647_20211019T130933_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_GOPR_2_20211019T152220_20211019T152846_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_GOPR_2_20211019T174201_20211019T174234_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_GOPR_2_20211019T180521_20211019T181337_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

### L2 Quality Flags (20Hz PLRM)

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20211019T001841_20211019T002007_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_GOPN_2_20211019T002523_20211019T002828_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_GOPN_2_20211019T013417_20211019T013638_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_GOPN_2_20211019T020840_20211019T020911_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_GOPN_2_20211019T024912_20211019T024930_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_GOPN_2_20211019T025531_20211019T025750_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_GOPN_2_20211019T043410_20211019T043529_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_GOPN_2_20211019T043926_20211019T044050_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_GOPN_2_20211019T045851_20211019T045908_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_GOPN_2_20211019T051401_20211019T052018_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_GOPN_2_20211019T061347_20211019T061554_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_GOPN_2_20211019T061653_20211019T061922_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_GOPN_2_20211019T062131_20211019T062253_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_GOPN_2_20211019T065627_20211019T065802_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_GOPN_2_20211019T073304_20211019T073310_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_GOPN_2_20211019T073331_20211019T073632_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_GOPN_2_20211019T073728_20211019T073903_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_GOPN_2_20211019T075300_20211019T075745_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_GOPN_2_20211019T083913_20211019T084020_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_GOPN_2_20211019T101544_20211019T101935_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_GOPN_2_20211019T102524_20211019T102649_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_GOPN_2_20211019T110123_20211019T110246_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_GOPN_2_20211019T110358_20211019T110430_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_GOPN_2_20211019T110606_20211019T110704_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_GOPN_2_20211019T111453_20211019T111557_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_GOPN_2_20211019T111642_20211019T111802_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_GOPN_2_20211019T120357_20211019T120509_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_GOPN_2_20211019T133251_20211019T133715_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_GOPN_2_20211019T142223_20211019T142635_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_GOPN_2_20211019T151055_20211019T151216_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_GOPN_2_20211019T155903_20211019T160032_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_GOPN_2_20211019T160137_20211019T160253_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_GOPN_2_20211019T161110_20211019T161200_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_GOPN_2_20211019T161907_20211019T162032_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_GOPN_2_20211019T171910_20211019T172152_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_GOPN_2_20211019T173901_20211019T174201_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_GOPN_2_20211019T182847_20211019T183107_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_GOPN_2_20211019T183746_20211019T184207_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_GOPN_2_20211019T191917_20211019T192308_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_GOPN_2_20211019T192820_20211019T192854_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_GOPN_2_20211019T193802_20211019T193926_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_GOPN_2_20211019T194025_20211019T194321_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_GOPN_2_20211019T194353_20211019T194359_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_GOPN_2_20211019T200905_20211019T201137_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_GOPN_2_20211019T211659_20211019T211805_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_GOPN_2_20211019T215802_20211019T215940_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_GOPN_2_20211019T223604_20211019T223720_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_GOPN_2_20211019T230217_20211019T230323_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_GOPN_2_20211019T230820_20211019T231154_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_GOPN_2_20211019T232809_20211019T232928_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_GOPR_2_20211019T000539_20211019T000839_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_GOPR_2_20211019T001431_20211019T001841_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_GOPR_2_20211019T002828_20211019T003241_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_GOPR_2_20211019T010805_20211019T011514_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_GOPR_2_20211019T011514_20211019T011709_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_GOPR_2_20211019T012154_20211019T012539_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_GOPR_2_20211019T015405_20211019T015827_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_GOPR_2_20211019T020911_20211019T021144_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_GOPR_2_20211019T025411_20211019T025530_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_GOPR_2_20211019T033202_20211019T033904_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_GOPR_2_20211019T041726_20211019T041910_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_GOPR_2_20211019T060734_20211019T060853_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_GOPR_2_20211019T061006_20211019T061347_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_GOPR_2_20211019T074505_20211019T074530_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_GOPR_2_20211019T074530_20211019T075259_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_GOPR_2_20211019T083339_20211019T083604_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_GOPR_2_20211019T092341_20211019T092443_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_GOPR_2_20211019T092709_20211019T093333_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_GOPR_2_20211019T101122_20211019T101544_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_GOPR_2_20211019T110104_20211019T110123_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_GOPR_2_20211019T110704_20211019T111453_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_GOPR_2_20211019T111557_20211019T111641_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_GOPR_2_20211019T115109_20211019T115529_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_GOPR_2_20211019T120510_20211019T121041_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_GOPR_2_20211019T121430_20211019T122039_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_GOPR_2_20211019T124636_20211019T125426_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_GOPR_2_20211019T133045_20211019T133250_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_GOPR_2_20211019T134420_20211019T134832_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_GOPR_2_20211019T142635_20211019T143412_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_GOPR_2_20211019T152220_20211019T152846_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_GOPR_2_20211019T160541_20211019T161110_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_GOPR_2_20211019T170107_20211019T170348_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_GOPR_2_20211019T174445_20211019T175134_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_GOPR_2_20211019T180521_20211019T181337_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_GOPR_2_20211019T190924_20211019T190936_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_GOPR_2_20211019T192309_20211019T192820_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_GOPR_2_20211019T192854_20211019T193024_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_GOPR_2_20211019T200627_20211019T200905_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_GOPR_2_20211019T202044_20211019T202229_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	set for one or more records.
CS_OFFL_SIR_GOPR_2_20211019T210048_20211019T210837_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Rackscatter Quality	The Ocean Allimeter Hange, Sona, Swin and backscalter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_GOPR_2_20211019T210856_20211019T211039_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_GOPR_2_20211019T223913_20211019T224643_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_GOPR_2_20211019T225020_20211019T225159_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_GOPR_2_20211019T225903_20211019T230041_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_GOPR_2_20211019T232238_20211019T232809_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_GOPR_2_20211019T233815_20211019T234232_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

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

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

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

Number of products with errors: 19

### 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:

#### 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 GOPR and GOPN products over sea ice, but this is to be expected.

Number of products with errors:

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

#### 6.1 P2P Product Format Check

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

Number of products with errors:

### 6.2 P2P Product Header Analysis

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

Number of products with errors:

## 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

### 6.4 P2P Auxiliary Correction Error Check

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

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.
- > 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: 2

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20211019T002440_20211019T011415_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T011415_20211019T020355_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T020355_20211019T025330_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T025330_20211019T034309_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T034309_20211019T043244_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T043244_20211019T052224_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean	Innere is an error with the GPD wet reposition correction for one or more records, the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records.

CS_OFFL_SIR_GOP_2_20211019T052224_20211019T061159_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T061159_20211019T070139_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T070139_20211019T075114_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T075114_20211019T084053_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T084053_20211019T093029_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T093029_20211019T102008_C001	Mean Sea Surrace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	There is an error with the was neight (solution 1) and the mean dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records.
CS_OFFL_SIR_GOP_2_20211019T102008_20211019T110943_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T110943_20211019T115923_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T115923_20211019T124858_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T124858_20211019T133837_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T133837_20211019T142813_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20211019T142813_20211019T151752_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T151752_20211019T160727_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T160727_20211019T165707_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T165707_20211019T174642_C001	Mean Sea Suriace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (EFS), Non-Equilibrium Long Pariod	Triple is an error with the MoSo height (solution 1) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20211019T174642_20211019T183621_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T183621_20211019T192557_C001	Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	Triple is an error with the MoSo neight (solution 1) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records.
CS_OFFL_SIR_GOP_2_20211019T192557_20211019T201536_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T201536_20211019T210511_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T210511_20211019T215451_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T215451_20211019T224426_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T224426_20211019T233406_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20211019T233406_20211020T002341_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

## 6.5 P2P Measurement Confidence Data Check

CryoSat P2P data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

2

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20211019T043244_20211019T052224_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOP_220211019T210511_20211019T215451_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

### 6.6 P2P Measurement Quality Flag Check

#### P2P Quality Flags (20Hz)

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

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

Number of products with errors:

### P2P Quality Flags (20Hz PLRM)

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

Number of products with errors:

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

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

Number of products with errors:

## 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.

Number of products with errors:

#### 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 GOPR and GOPN products over sea ice, but this is to be expected.

Number of products with errors:

## 7. GOP QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or warnings is provided below.

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_GOPM1B	179	179	5	174	0
SIR_GOPR1B	110	110	0	110	0
SIR_GOPN1B	103	103	3	100	0
SIR_GOPM_2	179	179	120	59	0
SIR_GOPR_2	110	110	35	70	5
SIR_GOPN_2	103	103	40	63	0
SIR GOP P2P	29	29	0	25	4

#### 7.1 QCC Errors

#### Number of QCC reports with errors:

9

Total number of occurrences of each error

Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOPR_2	5	5	5	5							
			•								
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL		-	-	-	-	-	
SIR_GOP_2_	4	4	4	4							

Test Description Key:					
Abbreviation	Test name	Details			
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7			
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7			
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7			
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7			

## 7.2 QCC Warnings

Product Type

RNELPOTONCDF

Number of QCC reports with warnings

2200

Total number of occurrences of each warning

			i otal mann	oci di dodaniciloco di ci	aon warming		
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_GOPM1B	174	0	0	0	0	0	0
SIR_GOPM_2	0	0	38	38	1	48	0
SIR_GOPN1B	99	0	0	0	0	0	0
SIR_GOPN_2	0	0	6	32	5	23	25
SIR_GOPR1B	107	0	0	0	0	0	0
SIR GOPR 2	0	5	39	48	0	40	38

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSA	ARNCE RPEPOPFDPL	RMSINNCD RPEPOPFDSARNCI	DF RPEPOPFDSINNCDF
SIR GOPM1B	0	0	0	0	0	0	0
SIR GOPM 2	43	1	34	0	0	0	0
SIR GOPN1B	0	0	0	0	0	0	0
SIR GOPN 2	16	0	0	0	24	0	34
SIR GOPR1B	0	0	0	0	0	0	0
SIR GOPR 2	19	0	0	48	0	53	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	21	0	0	5	23	0	2
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	0	27	17	49	54	36
SIR_GOPR1B	0	0	0	0	0	0	0
SIR GOPR 2	0	45	0	3	66	39	13

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF
SIR_GOPM1B	0	0	0	1	1	0	0
SIR_GOPM_2	31	0	3	1	1	0	0
SIR_GOPN1B	0	0	0	0	0	0	47
SIR_GOPN_2	32	29	10	0	0	0	0
SIR_GOPR1B	0	0	0	0	0	0	110
SIR_GOPR_2	40	46	2	0	0	7	0

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	RBSZOPOEPNCDF
SIR_GOP_2_	17	29	29	5	29	16	29

RPEPOPFDPLRMSINNCDI RPEPOPFDSINNCDF

SIR_GOP_2_	1	16	29	21	20	29	18
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	•	-

Test Description Key:								
Abbreviation	Test name	Details						
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter						
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)						
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees						
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees						
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only						

The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes  $RBSZOPOEPFDNCDF \begin{tabular}{ll} RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF \end{tabular}$ 

RBSZOPOEPFDPLRM RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees NCDF RBSZOPOEPNCDF RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF

RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for
RNELPOTONCDF	RangeNELPOceanineCope	surface type = ocean
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70
		and 70 degrees
RPEPOPFDPLRMSAR	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70
NCDF		and 70 degrees
	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70
CDF RPEPOPEDSARNODE	RangePeakinessExcludingPolarOPFD2SARNetCDF	and 70 degrees The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70
RPEPOPFDSARNODF	HangereakinessExcludingPolarOPFD25ARivetODF	and 70 degrees
RPEPOPEDSINNCDE	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70
THE OF TECHNOOD		and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70
		and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70
		and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70
DOODOONODE	Dance Con Ctate Dise Competion Consultat CDE	and 70 degrees The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -southin and unith (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =
TICOLING! BIYOB!		ocean
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =
F		ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =
		ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for
RSWHOEPFDPLRMN	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	latitudes between -70 and 70 degrees The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for
CDE	TrangeoignincantwaveneigntoceanExcludingrolan bzr Entwivetobi	latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for
1.0111.02.1102.		latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch
000111115115	00 0	The A He is described to CO He and the should be the second bishes
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
303 TODI INNODE	ocquenocoduniciotep i obi il il tetobi	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

0