

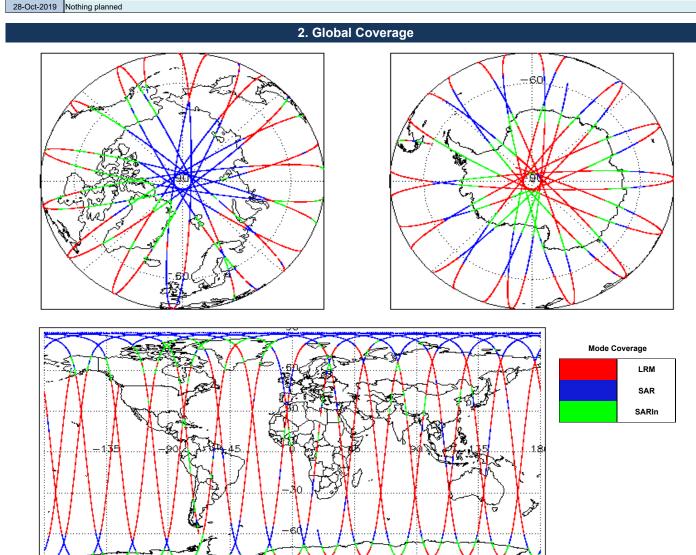
# **QA4EO Daily Report for GOP data:**

<u>27/10/2019</u>

an aut Duaduation.	02-Dec-2019	Check	L1 & L2	P2P
Report Production:	02-Dec-2019	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Useu.	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Geophysical Ocean Products (GOP)	Product Format Check	Nominal	Nominal
L1B, L2 & P2P Science Data		Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
		Measurement Confidence Data Check	See Section 4.5, 4.6 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

1. Overview

	Mission / Instrument News			
26-Oct-2019		None		
	27-Oct-2019	None		



## 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).

Number of products with errors:

0

4.2 L1B Product Header Analysis		
For all products, a series of pre-defined checks are performed o	n the MPH and SPH in order to identify any inconsistencies an	nd/or errors raised by the ground-segment processing chain.
<b>_1B Processing Quality HR:</b> The l1b_proc_flag_hr flag is current DSARIn chains. A modification is required in the next release.	ently set all L1B GOPR and GOPN products because the l1b_p	processing_quality_hr field is not correctly configured in the OSAR and
lumber of products with errors: 0		
4.3 L1B Auxilary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with r	espect to a pre-determined baseline and also to check the vali	idity 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 meas	urement record. The bit value of this flag indicates any probler	ns when set.
Number of products with errors: 0		
4.5 L1B Measurement Confidence Data Ch	eck	
CryoSat L1B data includes a measurement confidence flag for e	each measurement record. The bit value of this flag indicates a	ny problems when set.
Attitude Correction Missing: This flag is currently set in error f	for GOPR products due to a configuration issue. This is being i	investigated and will be updated in the next SW update.
Number of products with errors: 1		
Product	Test Failed	Description

# CS\_OFFL\_SIR\_GOPM1B\_20191027T060602\_20191027T060619\_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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20191027T042556_20191027T044421_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20191027T050521_20191027T051546_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20191027T155842_20191027T160908_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191027T012801_20191027T012954_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191027T040220_20191027T040417_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191027T044556_20191027T044812_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191027T062136_20191027T062649_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191027T144719_20191027T144936_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191027T163111_20191027T163237_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191027T180533_20191027T180741_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191027T194445_20191027T194931_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191027T230825_20191027T230946_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191027T022629_20191027T023043_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191027T030858_20191027T031611_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191027T062649_20191027T063348_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191027T080511_20191027T081146_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191027T122017_20191027T122429_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191027T125954_20191027T130702_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191027T162436_20191027T162558_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191027T175920_20191027T180041_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191027T234252_20191027T234710_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).

0

0

Number of products with errors:

## 5.2 L2 Product Header Analysis

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

## 5.3 L2 Auxiliary Data File Usage Check

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

## 5.4 L2 Auxiliary Correction Error Check

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

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

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.

> Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.

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

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Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20191027T124808_20191027T125953_C001	Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOPM_2_20191027T224327_20191027T224502_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_20191027T003746_20191027T004106_C001	Mean Sea 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_20191027T012801_20191027T012954_C001	Mean Sea 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_20191027T022520_20191027T022629_C001	Mean Sea 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_20191027T030751_20191027T030858_C001	Mean Sea 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_20191027T040220_20191027T040417_C001	Mean Sea 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_20191027T044556_20191027T044812_C001	Mean Sea 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_20191027T062136_20191027T062649_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20191027T071132_20191027T071433_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_20191027T072104_20191027T072347_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_20191027T080138_20191027T080511_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_20191027T093715_20191027T094203_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20191027T094945_20191027T095006_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_20191027T121032_20191027T121157_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_20191027T121713_20191027T122017_C001	Mean Sea 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_20191027T135018_20191027T135327_C001	Mean Sea 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_20191027T135613_20191027T135956_C001	Mean Sea 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_20191027T153051_20191027T153325_C001	Mean Sea 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_20191027T162558_20191027T162716_C001	Mean Sea 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_20191027T163111_20191027T163237_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_20191027T170548_20191027T171203_C001	Mean Sea 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_20191027T180533_20191027T180741_C001	Mean Sea 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_20191027T184812_20191027T184948_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_20191027T194445_20191027T194931_C001	Mean Sea 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_20191027T203629_20191027T203859_C001	Mean Sea 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_20191027T220728_20191027T221118_C001	Mean Sea Sunace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (EES) Non-Equilibrium Long Period	There is an error with the MSS height (solution 1) 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 recorde
CS_OFFL_SIR_GOPN_2_20191027T225751_20191027T225846_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_20191027T230825_20191027T230946_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20191027T234711_20191027T235024_C001	Mean Sea 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_20191027T012147_20191027T012559_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_20191027T012954_20191027T013718_C001	Mean Sea 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_20191027T030858_20191027T031611_C001	Mean Sea 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_20191027T042342_20191027T042556_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_GOPR_2_20191027T044813_20191027T045128_C001	Mean Sea 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_20191027T045128_20191027T045520_C001	Mean Sea 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_20191027T062649_20191027T063348_C001	Mean Sea 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_20191027T080511_20191027T081146_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_20191027T081146_20191027T081421_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPR_2_20191027T094204_20191027T094944_C001	Mean Sea 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_20191027T112132_20191027T112803_C001	Mean Sea 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_20191027T112804_20191027T113005_C001	Mean Sea 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_20191027T125954_20191027T130702_C001	Mean Sea 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_20191027T130702_20191027T130858_C001	Mean Sea 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_20191027T144120_20191027T144557_C001	Mean Sea 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_20191027T144558_20191027T144718_C001	Mean Sea 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_20191027T161926_20191027T162436_C001	Mean Sea 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_20191027T162437_20191027T162558_C001	Mean Sea 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_20191027T180146_20191027T180532_C001	Mean Sea 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_20191027T193647_20191027T193709_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_20191027T193709_20191027T194445_C001	Mean Sea 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_20191027T211854_20191027T212518_C001	Mean Sea 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_20191027T224748_20191027T224927_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_20191027T225847_20191027T230636_C001	Mean Sea 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

## 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_20191027T060602_20191027T060619_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.

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Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20191027T000111_20191027T003411_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 OFFE SIR GOPM 2 201910271004107 201910271004621 CO01	<b>o b</b>	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_GOPM_2_20191027T005148_20191027T010759_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_20191027T012600_20191027T012649_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_20191027T013731_20191027T021255_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_20191027T022125_20191027T022519_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_20191027T023043_20191027T030356_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_20191027T030502_20191027T030751_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_20191027T031611_20191027T033045_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_20191027T033527_20191027T033845_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_20191027T034001_20191027T035215_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_20191027T035449_20191027T040005_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_20191027T040012_20191027T040018_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_20191027T041034_20191027T042342_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_20191027T042556_20191027T044421_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_20191027T050521_20191027T051546_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_20191027T051726_20191027T053059_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_20191027T053414_20191027T053916_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_20191027T053941_20191027T054054_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_20191027T055503_20191027T055958_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_20191027T061057_20191027T061806_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_20191027T061929_20191027T062136_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_20191027T063348_20191027T063855_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_20191027T064947_20191027T070940_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_20191027T071433_20191027T071833_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_20191027T071839_20191027T071848_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_20191027T072601_20191027T075324_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_20191027T080050_20191027T080138_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_20191027T082526_20191027T084857_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_20191027T085222_20191027T085746_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_20191027T085753_20191027T090118_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_20191027T090511_20191027T093715_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_20191027T095251_20191027T095313_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_20191027T100134_20191027T102133_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_20191027T102413_20191027T102817_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_20191027T103223_20191027T104024_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_20191027T104603_20191027T111736_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_20191027T113006_20191027T113158_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_20191027T120008_20191027T120035_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_20191027T120038_20191027T120622_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_20191027T121157_20191027T121712_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_20191027T122429_20191027T124522_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_20191027T124808_20191027T125953_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_20191027T130859_20191027T131345_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_20191027T132819_20191027T133418_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_20191027T133606_20191027T134555_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_20191027T135327_20191027T135613_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_20191027T140333_20191027T142927_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_20191027T143107_20191027T143253_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_20191027T143309_20191027T143946_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_20191027T145222_20191027T145914_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_20191027T145930_20191027T152350_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_20191027T153736_20191027T154015_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_20191027T154247_20191027T154619_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_20191027T154709_20191027T155839_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_20191027T155841_20191027T160908_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_20191027T163237_20191027T164825_C001 Ai		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
		set for one or more records.
		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
		The OCOG 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_20191027T172229_20191027T173609_C001 an		The Ocean Altimeter Range, SSHA, SWH 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_20191027T173749_20191027T174031_C001 an	3.	The Ocean Altimeter Range, SSHA, SWH 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_20191027T181440_20191027T182137_C001 an		The Ocean Altimeter Range, SSHA, SWH 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_20191027T182314_20191027T184601_C001 an		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20191027T190213_20191027T192448_C001 an		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20191027T195149_20191027T202523_C001 an		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20191027T204132_20191027T210345_C001 an	icean Altimeter Range, SSHA, SWH nd Backscatter Quality, OCOG Itimeter 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.
		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20191027T211627_20191027T211854_C001 an		The Ocean Altimeter Range, SSHA, SWH 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_20191027T213329_20191027T220305_C001 an	nd Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20191027T222033_20191027T222636_C001 an		The Ocean Altimeter Range, SSHA, SWH 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_20191027T222644_20191027T224257_C001 an		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20191027T230947_20191027T234252_C001 an		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191027T000029_20191027T000111_C001 an		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
		The OCOG 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_GOPN_2_20191027T165339_20191027T165445_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_20191027T180533_20191027T180741_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_20191027T234711_20191027T235024_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_0FFL_SIR_GOPR_2_20191026T235917_20191027T000029_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_GOPR_2_20191027T053059_20191027T053226_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20191027T072347_20191027T072600_C001	and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20191027T113503_20191027T113600_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_GOPR_2_20191027T182137_20191027T182151_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_20191027T224748_20191027T224927_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

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## 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.

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

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

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Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20191027T004621_20191027T004744_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_20191027T010759_20191027T011126_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_20191027T021454_20191027T021644_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_20191027T040220_20191027T040417_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_20191027T050208_20191027T050521_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_20191027T055220_20191027T055503_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_20191027T055959_20191027T060450_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_20191027T062136_20191027T062649_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_20191027T072104_20191027T072347_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_20191027T080138_20191027T080511_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_20191027T081512_20191027T081635_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_20191027T082115_20191027T082308_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_20191027T082426_20191027T082525_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_20191027T093715_20191027T094203_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_20191027T094945_20191027T095006_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_20191027T103059_20191027T103222_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_20191027T104025_20191027T104136_C001	PN_2_20191027T104025_20191027T104136_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_20191027T111958_20191027T112131_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_20191027T114020_20191027T114158_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_20191027T115129_20191027T115237_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_20191027T121032_20191027T121157_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_20191027T132608_20191027T132819_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_20191027T135018_20191027T135327_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_20191027T135613_20191027T135956_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_20191027T144719_20191027T144936_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_20191027T144939_20191027T145053_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_20191027T153051_20191027T153325_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_20191027T153520_20191027T153736_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_20191027T161054_20191027T161308_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_20191027T163111_20191027T163237_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_20191027T170548_20191027T171203_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_20191027T171926_20191027T172105_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_20191027T180533_20191027T180741_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_20191027T181318_20191027T181440_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_20191027T182152_20191027T182314_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_20191027T184812_20191027T184948_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_20191027T192522_20191027T192815_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_20191027T192911_20191027T193044_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_20191027T193433_20191027T193602_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_20191027T194445_20191027T194931_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_20191027T202748_20191027T202918_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	I, The OCOG Range and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_GOPN_2_20191027T203056_20191027T203205_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_20191027T221707_20191027T221831_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_20191027T224257_20191027T224327_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_20191027T225751_20191027T225846_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_20191027T234711_20191027T235024_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_20191027T235538_20191027T235651_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_20191027T003411_20191027T003746_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Attimeter Range, SSHA, SWH 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_20191027T004745_20191027T005148_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_20191027T011830_20191027T012147_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_20191027T012954_20191027T013718_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_20191027T022629_20191027T023043_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_20191027T030858_20191027T031611_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_20191027T040417_20191027T041033_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_20191027T042342_20191027T042556_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_20191027T044813_20191027T045128_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_20191027T051547_20191027T051726_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_20191027T054955_20191027T055033_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_20191027T062649_20191027T063348_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_20191027T064821_20191027T064947_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_20191027T070941_20191027T071132_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_20191027T081146_20191027T081421_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_20191027T084857_20191027T085104_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_20191027T090239_20191027T090510_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_20191027T094204_20191027T094944_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_20191027T102818_20191027T103058_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_20191027T104136_20191027T104603_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_20191027T111900_20191027T111957_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_20191027T112132_20191027T112803_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_20191027T112804_20191027T113005_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_20191027T115709_20191027T120008_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_20191027T120622_20191027T121031_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_20191027T122017_20191027T122429_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_20191027T125954_20191027T130702_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_20191027T131346_20191027T131730_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_20191027T134555_20191027T135018_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_20191027T140104_20191027T140332_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_20191027T144120_20191027T144557_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_20191027T144558_20191027T144718_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_20191027T152350_20191027T153051_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_20191027T154145_20191027T154247_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_20191027T154619_20191027T154709_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_20191027T161926_20191027T162436_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_20191027T162437_20191027T162558_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_20191027T164826_20191027T165038_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_20191027T173609_20191027T173748_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_20191027T174031_20191027T174457_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_20191027T184601_20191027T184812_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_20191027T193647_20191027T193709_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_20191027T193709_20191027T194445_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_20191027T202523_20191027T202748_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_20191027T203900_20191027T204132_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_20191027T220305_20191027T220727_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_20191027T221831_20191027T222032_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_20191027T224748_20191027T224927_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_20191027T225847_20191027T230636_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.

187

140

> 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:

#### 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: 0

#### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

#### 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.

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Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20191026T235213_20191027T004151_C001	Mean Sea 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_20191027T004151_20191027T013127_C001	Mean Sea 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_220191027T013127_20191027T022105_C001	Mean Sea 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_20191027T022105_20191027T031040_C001	Mean Sea 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_220191027T031040_20191027T040018_C001	Mean Sea 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_220191027T040018_20191027T044954_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_220191027T044954_20191027T053932_C001	Mean Sea 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_220191027T053932_20191027T062908_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_220191027T062908_20191027T071845_C001	Mean Sea 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_20191027T071845_20191027T080821_C001	Mean Sea 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_220191027T080821_20191027T085759_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_220191027T085759_20191027T094735_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_20191027T103473_20191027T112646_0001         Topography (1)         Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T112646_0011         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T112646_0011         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T121626_0011         Mean Sea Surface (1), Mean Dynamic Topography Meight (solution 1), the Total Geocentric Ocean Tice for entropic to more records           CS_OFFL_SIR_GOP_2_20191027T121626_0011         Mean Sea Surface (1), Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T136602_0191027T136540_0001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T144516_0011         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T144516_00191027T183453_0001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T163453_0191027T163453_0001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T163453_0191027T163453_0001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T163453_0191027T163453_0001         Mean Sea	P2P Quality Flags (20Hz PLRM)	as please see Section 5.6 for the full list of pr	
Displant       Tapography (1)       Tapography (1)       Tapography (1)       Tapography (1)         CBOFFL_SRGOPO0191027T110246_0011       Mean See Sufface (1), Mean Dynamic       Tapography (1)       Tapography (1)         CBOFFL_SRGOP00191027T110246_0011027T12468_0011027T12468_0011027T12468_0011027T12468_0011027T12468_0011027T12468_0011027T12468_0011027T12468_0011027T12468_0011027T12468_000011027T12468_000011027T12468_000011027T12468_000011027T12468_000011027T12468_000011027T12468_000011027T12468_0000110000000000000000000000000000000			
CaperL, Sup, Coop 2, 20191027113248, 201910271112446, 2001       Tapography (1)       Tapography (2)         CaperL, Silk, Goop 2, 201910271121424, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 2019102711214246, 201910271130002, 20011       Mean Sea Strafes (1), Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an error with the MSS height (colution 1) and the Mean Dynamic Tape is an eror with the MSS height (colution 1) and the Mean Dynamic Tape is		yo, prease see section 5.6 for the full list of pr	
Cal_PFL_SR_GOP_2_0191027110248_2019102711031_001902711031_0019027110340_2001       Topography (1)       Topography (1)         Cal_OFFL_SR_GOP_2_01910271121648_201910271121626_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1)         Cal_OFFL_SIR_GOP_2_001910271121628_201910271121628_001910271121628_0001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1)         Cal_OFFL_SIR_GOP_2_001910271121628_001910271121628_001910271130602_0010       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1)         Cal_OFFL_SIR_GOP_2_001910271130602_01910271130602_001910271130602_01910271130602_001910271130602_001910271130602_001910271130602_001910271163430_001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1)         Cal_OFFL_SIR_GOP_2_001910271163450_0010       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1)         Cal_OFFL_SIR_GOP_2_001910271163450_0010       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1)         Cal_OFFL_SIR_GOP_2_001910271163450_0010       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1)			
Call, Der L, SH, Coop 2, 2019102/1103/40, 2001       Topography (1)       Topography (1)         Call, DeFL, SH, Coop 2, 2019102/1103/40, 2019102/1112648, 2019102/1112648, 2019102/1112648, 2019102/112626, 2019102/112668, 2019102/113660, 201910			popding 1.2 products
CS_OFFL_SIR_GOP_2_20191027110343_201910271112445_CO11 Mean Sar Sufface (1), Mean Dynamic Teography (notified) 1 for one or more records Mean Sar Sufface (1), Mean Dynamic Teography (notified) 1 for one or more records CS_OFFL_SIR_GOP_2_201910271112468_CO11 Mean Sar Sufface (1), Mean Dynamic Teography (notified) 1 for one or more records CS_OFFL_SIR_GOP_2_20191027112468_CO11 Mean Sar Sufface (1), Mean Dynamic Teorgraphy (notified) 1 for one or more records CS_OFFL_SIR_GOP_2_20191027112468_CO11 Mean Sar Sufface (1), Mean Dynamic Teorgraphy (notified) 1 for one or more records CS_OFFL_SIR_GOP_2_20191027113660_20191027113660_CO11 Mean Sar Sufface (1), Mean Dynamic Teorgraph (Notified) 1 for one or more records CS_OFFL_SIR_GOP_2_20191027113660_20191027113650_CO11 Mean Sar Sufface (1), Mean Dynamic Teorgraph (Notified) 1 for one or more records CS_OFFL_SIR_GOP_2_20191027113650_20191027113650_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_20191027113650_20191027113650_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_20191027113650_20191027113650_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_20191027113650_20191027113650_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_20191027113650_20191027113650_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_20191027113650_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_20191027113650_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_201910271162429_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_201910271162429_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_201910271162429_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders CS_OFFL_SIR_GOP_2_201910271162429_CO11 Mean Sar Sufface (1), Mean Dynamic Teorg Sar Physical Leaders Teorg Sar Physic			
CS_OFFL_SIR_GOP_2_20191027113248_001 Tooggaphy (1) Tooggaphy (1) Tooggaphy (1) Tooggaphy (1) Tooggaphy (1) There is an error with the MSS height (solution 1) for one or more records CS_OFFL_SIR_GOP_2_20191027112468_001 Mann Ses Surface (1), Mean Dynamic Tooggaphy height (solution 1) for one or more records Mann Ses Surface (1), Mean Dynamic Tooggaphy height (solution 1) for one or more records CS_OFFL_SIR_GOP_2_20191027112468_001 Mann Ses Surface (1), Mean Dynamic Tooggaphy height (solution 1) for one or more records Mann Ses Surface (1), Mean Dynamic Tooggaphy height (solution 1) for one or more records CS_OFFL_SIR_GOP_2_201910271135640_201910271135640_201 Mann Ses Surface (1), Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tooggaphy (1) There is an error with the MSS height (so	·		
CS_DFFL_SIR_GOP_2_201910271103713_201910271112648_0001       Toography (1)       Toography (1)         CS_OFFL_SIR_GOP_2_201910271103713_201910271112648_0001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_201910271112648_001910271112648_0001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_20191027112662_201910271130602_0001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_201910271130602_201910271130602_0001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_201910271130602_201910271136540_0001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_201910271136540_201910271136450_0001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_201910271136540_201910271162439_0001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_2019102771162439_00102711714671       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_2019102771162439_001027117146456_001		° °	
CS_DFFL_SIR_GOP_2_20191027113243_20191027112648_0001 Mean Ses Surface (1), Mean Dynamic Tapography (1) Tapograp	CryoSat P2P data includes a measurement confidence flag for each 20-Hz r	measurement record. The bit value of this flag ind	icates any problems when set.
CBCFFL_SIR_GOP_2_20191027T103413_20191027T112648_C001         Topography (1)         Topography height (calution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T112648_20191027T112648_C001         Mean Sea Surface (1), Mean Dynamic Topography height (calution 1) and the Mean Dynamic Topography height (calution 1) for one or more records         There is an error with the MSS height (calution 1) and the Mean Dynamic Topography height (calution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T112668_20191027T13660_C001         Mean Sea Surface (1), Mean Dynamic Topography height (calution 1) the Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Coean Tide height (colution 1), the Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Coean Tide height (colution 1), the Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Coean Tide (FES), Non-Equilibrium Long Period Coean Tide height (colution 1) and the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T13560_20191027T153653_C001         Mean Sea Surface (1), Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T162429_2001         Mean Sea Surface (1), Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T162429_2011         Mean Sea Surface (1), Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) for one or more records           CS_OFFL_S	6.5 P2P Measurement Confidence Data Check		
CBCFFL_SIR_GOP_2_20191027T103413_20191027T112648_C001         Topography (1)         Topography height (calution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T112648_20191027T112648_C001         Mean Sea Surface (1), Mean Dynamic Topography height (calution 1) and the Mean Dynamic Topography height (calution 1) for one or more records         There is an error with the MSS height (calution 1) and the Mean Dynamic Topography height (calution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T112668_20191027T13660_C001         Mean Sea Surface (1), Mean Dynamic Topography height (calution 1) the Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Coean Tide height (colution 1), the Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Coean Tide height (colution 1), the Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Coean Tide (FES), Non-Equilibrium Long Period Coean Tide height (colution 1) and the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T13560_20191027T153653_C001         Mean Sea Surface (1), Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T162429_2001         Mean Sea Surface (1), Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T162429_2011         Mean Sea Surface (1), Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) for one or more records           CS_OFFL_S		Tide (GOT)	(solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20191027110345_00191027112446_0001         Topography (1)         Topography (1)         Topography (1)           CS_OFFL_SIR_GOP_2_201910271112648_001910271121628_C0011         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_201910271121628_001910271121628_C0011         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), Tool Goocentric Coern Topography (1)           CS_OFFL_SIR_GOP_2_201910271121628_00191027113650_C0011         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027113650_C0011         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027113650_201910271136453_C0011         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_201910271164516_2019102711544516_C0011         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_201910271164562_001902711644516_C0011         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) <td>CS_OFFL_SIR_GOP_220191027T230124_20191027T235101_C002</td> <td>Topography (1), Total Geocentric Ocean</td> <td>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</td>	CS_OFFL_SIR_GOP_220191027T230124_20191027T235101_C002	Topography (1), Total Geocentric Ocean	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
Cis_DFFL_SiR_GOP_2_20191027T104435_20191027T112646_20191027T112646_20191027T112646_20191027T112646_20191027T112626_2001         Topography (1)         Topography (and the Man Dynamic Topography (and the Man Dynamic Topography (big) (abuiton 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T112626_20191027T112626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T121626_20191027T135540_2011         Mean Sea Surface (1), Mean Dynamic Topography (i), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period (Soution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T135450_20191027T136453_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T162429_20191027T162429_20191027T162429_20191027T162429_20191027T162429_20191027T162429_20191027T162429_20191027T162429_20191027T162429_2	CS_OFFL_SIR_GOP_220191027T221148_20191027T230124_C001		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_20191027T103713_20191027T112648_0001         Topography (1)         Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T112648_0001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T112648_0001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T121626_0010         Mean Sea Surface (1), Mean Dynamic Topography Leight (solution 1) to role or more records           CS_OFFL_SIR_GOP_2_20191027T121626_0010         Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tde (FES), Non-Equilibrium Long Period Cean Tide height (solution 2) FES) and the Non-equilibrium Long Period Cean Tide height (solution 2) FES) and the NSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T130602_0191027T135540_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T144516_20191027T144516_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T144516_20191027T144516_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T144516_2019027T162429_C001<	CS_OFFL_SIR_GOP_2_20191027T212210_20191027T221148_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	
CS_OFFL_SIR_GOP_2_20191027T103713_20191027T1103713_20191027T1103713_20191027T1103713_20191027T112648_2001         Topography (1)         Topography (2)           CS_OFFL_SIR_GOP_2_20191027T112648_20191027T112626_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T112668_20191027T121626_C001         Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean The field (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T121626_20191027T130602_C001         Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean The field (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T130602_20191027T136540_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T136540_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T144516_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T144516_20191027T145453_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T162429_20191027T163453_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)	CS_OFFL_SIR_GOP_2_20191027T203234_20191027T212210_C001	Topography (1)	
CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001         Topography (1)         Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001         Mean Sea 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_20191027T112648_20191027T112662_C001         Mean Sea Surface (1), Mean Dynamic Tipography (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_20191027T121626_20191027T130602_C001         Mean Sea Surface (1), Mean Dynamic Tipography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide heigh (solution 2: FES) and the Mon-equilibrium Long Period Ocean Tide heigh (solution 2: FES) and the Mon-equilibrium Long Period Ocean Tide heigh (solution 2: FES) and the Mon-equilibrium Long Period Ocean Tide for one or more records           CS_OFFL_SIR_GOP_2_20191027T136540_20191027T136540_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T136540_20191027T144516_C001         Mean Sea 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_20191027T144516_20191027T145453_C001	CS_OFFL_SIR_GOP_220191027T194256_20191027T203234_C001	Topography (1)	
CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001       Topography (1)       Topography leight (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T112648_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T112666_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T121626_C001       Mean Sea Surface (1), Mean Dynamic       Topography height (solution 1) the Total Geocentric Ocean         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T130602_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_20191027T130602_20191027T135540_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_20191027T135540_20191027T144516_2019       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_20191027T144516_20191027T144516_20191027T144516_20191027T144516_20191027T144516_20191027T144516_20191027T145453_20191027T162429_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_20191027T144516_20191027T145453_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (sol	CS_OFFL_SIR_GOP_220191027T185320_20191027T194256_C001		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_20191027T103713_20191027T112648_C001         Topography (1)         Topography height (solution 1) for one or more records           CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001         Mean Sea 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_20191027T112648_20191027T121626_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T121626_20191027T121626_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T121626_20191027T130602_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T130602_20191027T135540_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T135540_20191027T144516_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_GOP_2_20191027T144516_20191027T145453_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topog	CS_OFFL_SIR_GOP_220191027T180343_20191027T185320_C001		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_20191027T1034735_20191027T112648_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T112666_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T121626_20191027T130602_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (SS), Non-Equilibrium Long Period Ocean Tide (SS), Non-Equilibrium Long Period Ocean Tide heigh (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T130602_20191027T135540_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T135540_20191027T135540_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T135540_20191027T144516_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T144516_20191027T144516_20191027T144516_20191027T153453_C001       Mean	CS_OFFL_SIR_GOP_2_20191027T171407_20191027T180343_C001		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_201910277103713_20191027T112648_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T112648_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T1126648_20191027T121626_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T121626_2001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), the Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (SOLUTON 1), the Total Geocentric Ocean Tide heigh (solution 2): FES) and the Non-equilibrium Long Period Ocean Tide heigh (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T130602_20191027T135540_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T135540_20191027T144516_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T144516_20191027T153453_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T144516_20191027T153453_C001       Mean S	CS_OFFL_SIR_GOP_2_20191027T162429_20191027T171407_C001		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_20191027T103713_20191027T112648_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001       Mean Sea 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_20191027T112648_20191027T112666_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T121626_20191027T130602_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 for one or more records         CS_OFFL_SIR_GOP_2_20191027T130602_20191027T135540_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic for one or more records         CS_OFFL_SIR_GOP_2_20191027T135540_20191027T144516_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T135540_20191027T144516_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T135540_20191027T1452452_C001       Mean Sea Surface (1), Mean Dynamic	CS_OFFL_SIR_GOP_220191027T153453_20191027T162429_C001		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_20191027T103713_20191027T112648_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T121626_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T121626_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (Solution 2: FES) and the Non-equilibrium Long Period Ocean Tide heigh (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T130602_20191027T135540_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T130602_20191027T135540_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T135540_20191027T135540_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T135540_20191027T135540_C001       Mean Sea Surface (1), Mean Dynamic	CS_OFFL_SIR_GOP_220191027T144516_20191027T153453_C001		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_20191027T103713_20191027T112648_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T112648_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T112662_20191027T121626_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T121626_2001       Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (Solution 2: FES) and the Non-equilibrium Long Period Ocean Tide heigh for one or more records         CS_OFFL_SIR_GOP_2_20191027T130602_2011       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide heigh (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide heigh for one or more records	CS_OFFL_SIR_GOP_2_20191027T135540_20191027T144516_C001		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_20191027T103713_20191027T112648_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T121626_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T121626_C001       Mean Sea Surface (1), Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T121626_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1), for one or more records         CS_OFFL_SIR_GOP_2_20191027T121626_20191027T130602_C001       Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide height (solution 1), the Total Geocentric Ocean Tide height (solution 2), FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2). FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2). FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2). FES	CS_OFFL_SIR_GOP_2_20191027T130602_20191027T135540_C001		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_201910271103713_201910271103713_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_GOP_2_20191027T103713_20191027T112648_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T112648_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_GOP_2_20191027T112648_20191027T121626_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic	CS_OFFL_SIR_GOP_2_20191027T121626_20191027T130602_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	There is an error with the MSS 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_2019102/1094735_2019102/1103713_C001 Topography (1) Topography height (solution 1) for one or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic	CS_OFFL_SIR_GOP_2_20191027T112648_20191027T121626_C001		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_220191027T103713_20191027T112648_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Mean Sea Surface (1). Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic	CS_OFFL_SIR_GOP_2_20191027T094735_20191027T103713_C001	Mean Sea 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

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. 30

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.

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roducts with errors:
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#### 6.8 P2P Ocean Retracking Quality Check

## P2P Retracking Flags (20Hz)

Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

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

#### 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.