

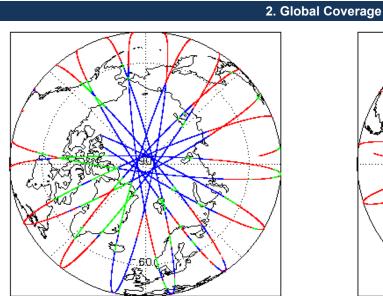
## **QA4EO Daily Report for GOP data:**

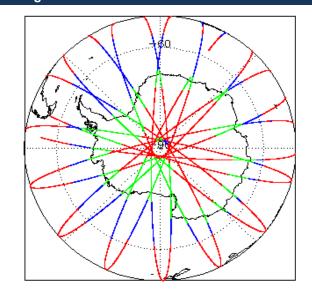
<u>04/11/2020</u>

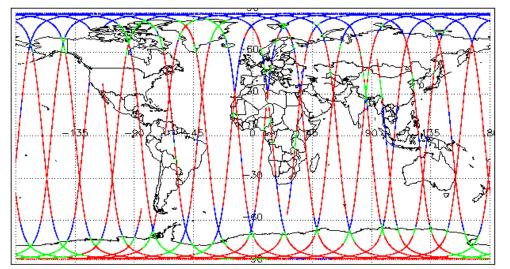
	00 D 0000	Check	L1 & L2	P2P
Report Production:	03-Dec-2020	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:		Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Usea:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Usadu	Geophysical Ocean Products (GOP)	Product Format Check	Nominal	Nominal
Data Used:	L1B, L2 & P2P Science Data	Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
		Measurement Confidence Data Check	See Section 4.5, 4.6	Nominal
		Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
		Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
		QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1 and 7.2

1. Overview

Mission / Instrument News	
03-Nov-2020	None
04-Nov-2020	None
05-Nov-2020	SIRAL unavailability on the 05/11/2020 13:28:24 to 13:34:01 due to MMFU packet store recovery











# 3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

0

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

# 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:

4.2 L1B Product Header Analysis				
For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.				
LIB Processing Quality HR: The 11b_proc_flag_hr flag is currently set all L1B GOPR and GOPN products because the 11b_processing_quality_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.				
Number of products with errors: 0				
4.3 L1B Auxilary Data File Usage Check				
Each product is checked for missing Data Set Descriptors with respect to a pre-de	termined baseline and also to check the va	lidity of Auxiliary Data Files is correct.		
Number of products with errors: 0				
4.4 L1B Auxiliary Correction Error Check				
CryoSat L1B data includes a correction error flag for each measurement record. T	he bit value of this flag indicates any proble	ems when set.		
Number of products with errors: 0				
4.5 L1B Measurement Confidence Data Check				
CryoSat L1B data includes a measurement confidence flag for each measuremen	t record. The bit value of this flag indicates	any problems when set.		
Attitude Correction Missing: This flag is currently set in error for GOPR products	s due to a configuration issue. This is being	investigated and will be updated in the next SW update.		
Number of products with errors: 0				
4.6 L1B Waveform Group Data Check				
CryoSat L1B data includes a waveform data flag for each measurement record. The	he bit value of this flag indicates any proble	ms when set.		
Loss of Echo Flag: This flag is currently set for some products over land, but this	is to be expected.			
Number of products with errors: 13				
Product	Test Failed	Description		
CS_OFFL_SIR_GOPM1B_20201104T103147_20201104T104752_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_GOPM1B_20201104T203106_20201104T204321_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_GOPM1B_20201104T214822_20201104T220336_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_GOPN1B_20201104T064215_20201104T064629_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_GOPN1B_20201104T091345_20201104T091439_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_GOPN1B_20201104T104752_20201104T105049_C001 CS_OFFL_SIR_GOPN1B_20201104T105142_20201104T105354_C001	Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_GOPN1B_20201104T205257_20201104T205731_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS OFFL SIR GOPN1B 20201104T223200 20201104T223310 C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_GOPR1B_20201104T040311_20201104T040408_C001	Loss of Echo	The tracking echo is missing for one or more records		
	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_GOPR1B_20201104T051413_20201104T051944_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_GOPR1B_20201104T204729_20201104T205149_C001	Loss of Echo	The tracking echo is missing for one or more records		
5. GOP	Level 2 Data Quality Ch	eck		
5.1 L2 Product Format Check				
Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL). Number of products with errors: 0				
5.2 L2 Product Header Analysis				
For all products, a series of pre-defined checks are performed on the MPH and SF	PH in order to identify any inconsistencies a	nd/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-de	termined baseline and also to check the va	lidity of Auxiliary Data Files is correct.		
Number of products with errors: 0				
5.4 L2 Auxiliary Correction Error Check				
For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767).				
Currently, there are some common auxiliary correction errors raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.				
> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Corection, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.				
> Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.				
> Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.				
Number of products with errors: 54				
Product	Test Failed	Description		
CS_OFFL_SIR_GOPM_2_20201104T041223_20201104T041313_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records		

CS_OFFL_SIR_GOPM_2_20201104T122733_20201104T122825_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPM_2_20201104T135706_20201104T135853_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_20201104T000533_20201104T000715_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_20201104T001557_20201104T001803_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_20201104T010200_20201104T010648_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_20201104T032444_20201104T032839_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20201104T050433_20201104T050746_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_20201104T054906_20201104T055032_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_20201104T064215_20201104T064629_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_20201104T065204_20201104T065329_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_20201104T073140_20201104T073542_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20201104T082952_20201104T083137_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_20201104T091345_20201104T091439_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_20201104T100749_20201104T101008_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_20201104T105142_20201104T105354_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20201104T113802_20201104T113958_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_20201104T114646_20201104T115125_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_20201104T122825_20201104T123219_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_20201104T131813_20201104T132045_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_20201104T132807_20201104T132951_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_20201104T150706_20201104T150841_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_20201104T163713_20201104T163828_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_20201104T164404_20201104T164722_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_20201104T181629_20201104T181751_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_20201104T182300_20201104T182610_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20201104T195719_20201104T200002_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_20201104T200204_20201104T200734_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_20201104T205257_20201104T205731_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20201104T213638_20201104T213914_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_20201104T214617_20201104T214757_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records

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CS_OFFL_SIR_GOPN_2_20201104T223200_20201104T223310_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_20201104T005424_20201104T005504_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_20201104T005505_20201104T010200_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_20201104T023702_20201104T024229_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_20201104T040518_20201104T040706_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_20201104T041612_20201104T042404_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_20201104T055431_20201104T060354_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_20201104T073542_20201104T074317_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_20201104T091439_20201104T092020_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_20201104T105354_20201104T110044_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_20201104T122610_20201104T122733_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_20201104T123219_20201104T123736_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_20201104T141031_20201104T141425_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_20201104T141425_20201104T142032_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_20201104T154814_20201104T155549_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_20201104T160506_20201104T160705_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_20201104T172601_20201104T173355_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_20201104T173355_20201104T173517_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_20201104T190544_20201104T191255_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_20201104T191255_20201104T191544_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_20201104T204729_20201104T205149_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_20201104T205149_20201104T205257_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_20201104T222526_20201104T222704_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_20201104T222704_20201104T223200_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:
0

## 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.

91

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20201104T000715_20201104T001557_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_20201104T001858_20201104T004047_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_GOPM_2_20201104T010911_20201104T014232_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_20201104T014921_20201104T015352_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_20201104T015839_20201104T022419_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_20201104T025509_20201104T032029_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_20201104T032839_20201104T033431_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_20201104T033754_20201104T035708_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_20201104T035729_20201104T040311_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_20201104T040801_20201104T040820_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_20201104T041333_20201104T041439_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_20201104T042659_20201104T050033_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_20201104T050746_20201104T051303_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_20201104T055032_20201104T055431_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_20201104T060553_20201104T061550_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_20201104T061835_20201104T063954_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_20201104T064756_20201104T065204_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_20201104T065728_20201104T070711_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_20201104T070859_20201104T071613_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_20201104T071655_20201104T072133_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_20201104T074358_20201104T081845_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_20201104T082129_20201104T082648_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_20201104T082654_20201104T082701_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_20201104T083750_20201104T090759_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_20201104T090939_20201104T091345_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_20201104T092257_20201104T092339_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_20201104T092520_20201104T092658_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_20201104T092846_20201104T094109_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_20201104T094313_20201104T095826_C001 Ocean Altimeter Range, S And Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T100045_20201104T100547_C001 OCOG Altimeter Range Q Backscatter Quality	uality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201104T100625_20201104T100749_C001 OCOG Altimeter Range Q Backscatter Quality	uality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201104T101507_20201104T102528_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T103147_20201104T104752_C001  Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T111851_20201104T112125_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20201104T112313_20201104T113655_C001 Ocean Altimeter Range, S And Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T113958_20201104T114458_C001 OCOG Altimeter Range Q Backscatter Quality	uality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201104T114540_20201104T114646_C001 OCOG Altimeter Range Q Backscatter Quality	uality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201104T115242_20201104T121417_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T121419_20201104T122610_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T125312_20201104T131444_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T131448_20201104T131538_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	ACOG and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20201104T132045_20201104T132416_C001 OCOG Altimeter Range Q Backscatter Quality	uality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201104T133135_20201104T135703_C001 Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T135706_20201104T135853_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T142155_20201104T145502_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T145828_20201104T150331_C001 OCOG Altimeter Range Q Backscatter Quality	uality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201104T150338_20201104T150706_C001 OCOG Altimeter Range Q Backscatter Quality	uality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201104T151158_20201104T154449_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20201104T155736_20201104T155936_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T163017_20201104T163339_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T163828_20201104T164404_C001 OCOG Altimeter Range Q Backscatter Quality	uality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201104T165131_20201104T172358_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T173657_20201104T173809_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	
CS_OFFL_SIR_GOPM_2_20201104T175634_20201104T181209_C001 Ocean Altimeter Range, S and Backscatter Quality, C Altimeter Range and Back	

CS_OFFL_SIR_GOPM_2_20201104T181751_20201104T182300_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_20201104T182959_20201104T190437_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_20201104T190454_20201104T190521_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_20201104T192737_20201104T193158_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_20201104T193253_20201104T195031_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_20201104T200002_20201104T200204_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_20201104T200938_20201104T202514_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_20201104T202621_20201104T202759_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_20201104T203106_20201104T204321_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_20201104T205759_20201104T211603_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_20201104T211720_20201104T213110_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_20201104T213914_20201104T214115_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_20201104T214224_20201104T214617_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_20201104T214822_20201104T220336_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_20201104T220538_20201104T221501_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_20201104T222011_20201104T222030_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_20201104T223723_20201104T225421_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_20201104T231010_20201104T231240_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_20201104T231723_20201104T232520_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_20201104T232819_20201104T234243_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_20201104T010200_20201104T010648_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_20201104T014821_20201104T014921_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_20201104T060354_20201104T060357_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_20201104T091345_20201104T091439_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_20201104T113802_20201104T113958_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_20201104T132432_20201104T132438_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_20201104T154709_20201104T154814_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_20201104T161722_20201104T162056_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_20201104T174416_20201104T174451_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_20201104T200204_20201104T200734_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_20201104T041023_20201104T041113_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_20201104T050033_20201104T050433_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_20201104T101008_20201104T101100_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_20201104T141425_20201104T142032_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_20201104T173927_20201104T174253_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_20201104T191255_20201104T191544_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_20201104T211603_20201104T211720_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (20Hz PLRM)

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

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

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

99

#### Number of products with errors:

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

CS_OFFL_SIR_GOPN_2_20201104T054906_20201104T055032_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_20201104T065204_20201104T065329_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_20201104T073140_20201104T073542_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_20201104T081956_20201104T082129_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_20201104T091345_20201104T091439_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_20201104T092020_20201104T092036_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_20201104T092826_20201104T092846_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_20201104T095902_20201104T100045_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_20201104T100749_20201104T101008_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_20201104T102528_20201104T102634_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_20201104T104752_20201104T105049_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_20201104T105142_20201104T105354_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_20201104T113802_20201104T113958_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_20201104T114646_20201104T115125_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_20201104T122825_20201104T123219_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_20201104T124712_20201104T124821_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_20201104T124909_20201104T125236_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_20201104T142101_20201104T142155_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_20201104T161722_20201104T162056_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_20201104T163713_20201104T163828_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_20201104T164404_20201104T164722_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_20201104T174359_20201104T174410_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_20201104T174416_20201104T174451_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_20201104T175516_20201104T175634_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_20201104T181629_20201104T181751_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_20201104T193158_20201104T193253_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_20201104T200204_20201104T200734_C001	OCOG Altimeter Range Quality PLRM,	The OCOG Range and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_GOPN_2_20201104T204658_20201104T204729_C001	OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG	more records. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
	Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH	set for one or more records.
CS_OFFL_SIR_GOPN_2_20201104T214617_20201104T214757_C001	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_20201104T221501_20201104T221755_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_20201104T223200_20201104T223310_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_20201104T223423_20201104T223605_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_20201104T231403_20201104T231723_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_20201104T004047_20201104T004134_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_20201104T005424_20201104T005504_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_20201104T005505_20201104T010200_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_20201104T014232_20201104T014509_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_20201104T015613_20201104T015839_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_20201104T023254_20201104T023411_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_20201104T023702_20201104T024229_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_20201104T032029_20201104T032444_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_20201104T033558_20201104T033754_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_20201104T035708_20201104T035729_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_20201104T040311_20201104T040408_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_20201104T040518_20201104T040706_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_20201104T041023_20201104T041113_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_20201104T041612_20201104T042404_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_20201104T050033_20201104T050433_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_20201104T051413_20201104T051944_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_20201104T052507_20201104T052532_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_20201104T054220_20201104T054251_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_20201104T054731_20201104T054906_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee additimeter Range and Backscatter Quality Flags have bee set for one or more records.         The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.           CS_OFFL_SIR_GOPR_2_20201104T065329_20201104T065728_C001         Cean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.           CS_OFFL_SIR_GOPR_2_20201104T075342_20201104T074317_C001         Cean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.           CS_OFFL_SIR_GOPR_2_20201104T073542_20201104T076317_C001         Cean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.           CS_OFFL_SIR_GOPR_2_20201104T081956_C001         Cean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.           CS_OFFL_SIR_GOPR_2_20201104T081956_C001         The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.           CS_OFFL_SIR_GOPR_2_20201104T081952_20201104T081950_C001         The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.           CS_OFFL_SIR_GOPR_2_20201104T092105_20201104T09200_C001         Altimeter Range, SSHA, SWH and Backscatter Quality FLMM, OCCO Altimeter Range and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.           CS_OFFL_SIR_GOPR_2_20201104T091439_20201104T092105_20201104T09200_C001
CS_OFFL_SIR_GOPR_2_20201104T065329_20201104T065728_C001       and Backscatter Quality Flagment Backscatter Quality Flagme
CS_OFFL_SIR_GOPR_2_20201104T073342_20201104T074317_C001       and Backscatter Quality PLRM, CCCG       The OCGG Altimeter Range, and Backscatter Quality Plags have bee set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T081845_20201104T081956_C001       Can Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSH, SWH and Backscatter Quality Flags have bee set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T091439_20201104T092020_C001       Occan Altimeter Range, SSH, SWH and Backscatter Quality Flags have been set for one more records.         CS_OFFL_SIR_GOPR_2_20201104T01008_20201104T10100_C001       Occan Altimeter Range, SSH, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T101008_20201104T10100_C001       Altimeter Range, SSH, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T101008_20201104T101000_C001       Altimeter Range, SSH, SWH and Ba
CS_OFFL_SIR_GOPR_2_20201104T081845_20201104T081966_C001       and Backscatter Quality PLRM, OCOG       Inter Canage, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T083137_20201104T083750_C001       Cocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T083137_20201104T092020_C001       Attimeter Range, SSHA, SWH and Backscatter Quality Flags have bee pLRM         CS_OFFL_SIR_GOPR_2_20201104T091439_20201104T092020_C001       Cocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have bee pLRM         CS_OFFL_SIR_GOPR_2_20201104T091439_20201104T092105_C001       Occean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have bee pLRM         CS_OFFL_SIR_GOPR_2_20201104T092105_20201104T092151_C001       OCCG Attimeter Range Quality PLRM, OCCG Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T092105_20201104T10100_C001       OCCGA Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T10100_20201104T10100_C001       Occean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T10100_20201104T10100_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T10100_20201104T1010507_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or mo
CS_OFFL_SIR_GOPR_2_20201104T083137_20201104T083750_C001       and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality PLRM         CS_OFFL_SIR_GOPR_2_20201104T091439_20201104T092020_C001       Cean Attimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Attimeter Range and Backscatter Quality Flags have bee set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T092105_20201104T092151_C001       OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T092105_20201104T092151_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T101008_20201104T10100_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality PLRM       The OCOG Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T10100_20201104T101507_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality PLRM       The OCOG Attimeter Range, SSHA, SWH and Backscatter Quality PLRM         CS_OFFL_SIR_GOPR_2_20201104T102935_20201104T1013147_C001       OCOG Attimeter Range Quality PLRM, OCOG Backscatter Quality PLRM       The OCOG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T102935_20201104T1103147_C001       OCOG Attimeter Range Quality PLRM, OCOG Backsc
CS_OFFL_SIR_GOPR_2_20201104T091439_20201104T092020_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, CS_OFFL_SIR_GOPR_2_20201104T092105_20201104T092151_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality       The OCOG Range and Backscatter Quality Flags have been set for one more records.         CS_OFFL_SIR_GOPR_2_20201104T101008_20201104T10100_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality       The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Ratimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Ratimeter Range and Backscatter Quality Flags and the OCOG Ratimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Ratimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Ratimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscater Quality Flags have been and Backscatter Quality PLR
CS_OFFL_SIR_GOPR_2_2020110411092105_2020110411092105_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_GOPR_2_20201104T101008_20201104T101100_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality FLRM, OCOG Altimeter Range and Backscatter Quality FLRM       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T101100_20201104T101507_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T1010920201104T101507_C001       Ocean Altimeter Range and Backscatter Quality Flags have bee set for one or more records.         CS_OFFL_SIR_GOPR_2_20201104T10109205_20201104T103147_C001       OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality         CS_OFFL_SIR_GOPR_2_20201104T102935_20201104T1103147_C001       OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one more records.         CS_OFFL_SIR_GOPR_2_20201104T105354_20201104T110044_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_GOPR_2_20201104T101008_20201104T101100_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM       Ine Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality PLRM         CS_OFFL_SIR_GOPR_2_20201104T101100_20201104T101507_C001       Cs_oFFL_SIR_GOPR_2_20201104T10100_20201104T101507_C001       The 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 and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one ocog Backscatter Quality OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one more records.         CS_OFFL_SIR_GOPR_2_20201104T102935_20201104T103147_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality       The OCean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one more records.         CS_OFFL_SIR_GOPR_2_20201104T105354_20201104T110044_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one more records.
CS_OFFL_SIR_GOPR_2_20201104T10100_20201104T101507_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM       Ind Bockscatter Quality PLRM, OCOG 
CS_OFFL_SIR_GOPR_2_20201104T102335_20201104T1003147_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_GOPR_2_20201104T105354_20201104T110044_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bee and the transport of the tran
CS_OFFL_SIR_GOPR_2_20201104T105354_20201104T110044_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been and backscatter Qua
CS_OFFL_SIR_GOPR_2_20201104T111426_20201104T111851_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, oc
CS_OFFL_SIR_GOPR_2_20201104T123219_20201104T123736_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality PLRM.
CS_OFFL_SIR_GOPR_2_20201104T131538_20201104T131813_C001 CS_OFFL_SIR_GOPR_2_20201104T131538_20201104T131813_C001 Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been PLRM
CS_OFFL_SIR_GOPR_2_20201104T132951_20201104T133135_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter
CS_OFFL_SIR_GOPR_2_20201104T141031_20201104T141425_C001 CS_OFFL_SIR_GOPR_2_20201104T141031_20201104T141425_C001 Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20201104T141425_20201104T142032_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have bee PLRM
CS_OFFL_SIR_GOPR_2_20201104T154814_20201104T155549_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been been appeared by the DRM.
CS_OFFL_SIR_GOPR_2_20201104T155936_20201104T160053_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, oc
CS_OFFL_SIR_GOPR_2_20201104T164722_20201104T165131_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been been been been been been been be
CS_OFFL_SIR_GOPR_2_20201104T172601_20201104T173355_C001 CS_OFFL_SIR_GOPR_2_20201104T172601_20201104T173355_C001 Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been pLRM
CS_OFFL_SIR_GOPR_2_20201104T173355_20201104T173517_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OC
CS_OFFL_SIR_GOPR_2_20201104T173927_20201104T174253_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OC
CS_OFFL_SIR_GOPR_2_20201104T181209_20201104T181629_C001 CS_OFFL_SIR_GOPR_2_20201104T181209_20201104T181629_C001 Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality FLRM, OCOG Altimeter Range and Ba
CS_OFFL_SIR_GOPR_2_20201104T190544_20201104T191255_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM
CS_OFFL_SIR_GOPR_2_20201104T195031_20201104T195719_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality PLRM.

CS_OFFL_SIR_GOPR_2_20201104T200734_20201104T200938_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_20201104T213110_20201104T213638_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_20201104T222526_20201104T222704_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_20201104T222704_20201104T223200_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_20201104T232708_20201104T232819_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_20201104T234300_20201104T234423_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_20201104T234426_20201104T234827_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_20201104T234830_20201104T235059_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG 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, wh	hich are summarised below.	
> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for pro	oducts over sea ice, which is to be expected	1.
Number of products with errors: 182		
5.8 L2 Ocean Retracking Quality Check		
L2 Retracking Flags (20Hz) CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measure	ement record. The bit value of this flag indic	cates any problems when set
Ocean Retracking Quality Flag: This flag is currently set for products over land a	-	
Number of products with errors: 61	, , ,	
L2 Retracking Flags (20Hz, PLRM)		
CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz PLRM m	neasurement record. The bit value of this fla	ag indicates any problems when set.
Ocean Retracking Quality Flag (PLRM): This flag is currently set for products G		
Number of products with errors: 146		
6 00012	Polo to Polo Data Quality	, Chook
8. GOP L2	Pole-to-Pole Data Quality	y Check
6.1 P2P Product Format Check		
Each product, retrieved and unpacked from the science server, is checked to ensu	ure it consists of both an XML header file (.	HDR) and a NetCDF product file (.nc).
Number of products with errors: 0		
6.2 P2P Product Header Analysis		
For all products, a series of pre-defined checks are performed on the MPH and SP Number of products with errors: 0	PH in order to identify any inconsistencies a	and/or errors raised by the ground-segment processing chain.
6.3 P2P Auxiliary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pre-denomination of products with errors: 0	etermined baseline and also to check the va	alidity of Auxiliary Data Files is correct.
6.4 P2P Auxiliary Correction Error Check		
For all products, the auxiliary corrections within the Geophysical Group are checked	ed for the default error value (20767)	
Currently, there are some common auxiliary correction errors raised in the L followed by a table highlighting any additional issues which may arise from	Level 2 products which are expected due	e to surface type. All common flags are summarised in the list below,
> ECMWF Meteo Corrections: Currently the following corrections are not compu Correction and the U-Wind and V-Wind components of the ECMWF model wind v not reported in the table below.		
> Sea State Bias & Sea State Bias PLRM: The error value is currently set for pro	oducts over sea ice, but this is to be expect	led.
> Altimetric Wind Speed Error: The error value is currently set for products over	r land and sea ice, but this is to be expected	d.
Number of products with errors: 29		
Product	Test Failed	Description
Product CS_OFFL_SIR_GOP_220201103T232057_20201104T001034_C002	Test Failed Mean Dynamic Topography (1)	Description There is an error with the Mean Dynamic Topography height for one or more records

CS_OFFL_SIR_GOP_220201104T010011_20201104T014948_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_20201104T014948_20201104T023926_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_20201104T023926_20201104T032903_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), 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_20201104T032903_20201104T041841_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_20201104T041841_20201104T050818_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_20201104T050818_20201104T055755_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_20201104T055755_20201104T064732_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_20201104T064732_20201104T073710_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_20201104T073710_20201104T082647_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_20201104T082647_20201104T091625_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_20201104T091625_20201104T100602_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_20201104T100602_20201104T105539_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_20201104T105539_20201104T114516_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_20201104T114516_20201104T123454_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), 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_20201104T123454_20201104T132431_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_220201104T132431_20201104T141409_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_20201104T141409_20201104T150346_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_20201104T150346_20201104T155323_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_220201104T155323_20201104T164301_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_220201104T164301_20201104T173238_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_220201104T173238_20201104T182215_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_220201104T182215_20201104T191153_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), 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_20201104T191153_20201104T200130_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_20201104T200130_20201104T205107_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_220201104T205107_20201104T214044_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_20201104T214044_20201104T223022_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_220201104T223022_20201104T231959_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
6.5 P2P Measurement Confidence Data Check		

## 6.5 P2P Measurement Confidence Data Check

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

 Number of products with errors:
 0

 Product
 Test Failed
 Description

 6.6 P2P Measurement Quality Flag Check
 End of the characteristic state of the characteristeristic state of the characteristic state of the c

## P2P Quality Flags (20Hz)

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

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

Number of products with errors:	30
P2P Quality Flags (20Hz PLRM)	
Since the P2P Quality Flags are copied directly	from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.
Number of products with errors:	29
P2P Quality Flags (1 Hz & 1Hz PLRM)	
Since the P2P Quality Flags are copied directly	from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.
Number of products with errors:	30
6.8 P2P Ocean Retracking Quality	Check
<b>P2P Retracking Flags (20Hz)</b> Cryosat P2P data includes an ocean retracking qua	ality 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:	27
P2P Retracking Flags PLRM	
CryoSat L2 data includes an ocean retracking qual	ity 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:	30
	7. GOP QCC Report Analysis
The Quality Control for CryoSat (QCC) facility performance warnings is provided below.	orms a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors of

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_GOPM1B	179	179	4	175	0
SIR_GOPR1B	120	120	0	120	0
SIR_GOPN1B	101	101	1	100	0
SIR_GOPM_2	179	179	130	49	0
SIR_GOPR_2	120	120	34	85	1
SIR_GOPN_2	101	101	43	58	0
SIR_GOP_P2P	29	29	0	28	1

# 7.1 QCC Errors

Number of QCC	reports with er	rors:	2								
					Total number	of occurrences	of each error				
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOPR_2	1	1	1	1							
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOP_2_	1	1	1	1							
					•			•		•	
Test Description	n Kasu										

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

# 7.2 QCC Warnings

			Total num	ber of occurrences of ea	ach warning		
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC
SIR_GOPM1B	175	0	0	0	0	0	0
SIR_GOPM_2	0	0	32	36	1	42	0
SIR_GOPN1B	98	0	0	0	0	0	0
SIR_GOPN_2	0	0	6	30	6	21	24
SIR_GOPR1B	114	0	0	0	0	0	0
SIR_GOPR_2	0	1	41	52	1	34	30
Product Type	RBSZOPOEPNCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNC	DRPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	35	29	0	0	0	0	23
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	16	0	0	18	0	28	0
SIR_GOPR1B	0	0	0	0	0	0	0
SIR GOPR 2	20	0	50	0	55	0	0

Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	0	0	3	20	0	3	27
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	23	25	38	42	30	23
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	50	0	2	69	51	15	43

Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_GOPM1B	0	0	0	1	0	0	3
SIR_GOPM_2	0	1	0	1	0	0	0
SIR_GOPN1B	0	0	2	0	0	40	3
SIR_GOPN_2	19	13	0	0	0	0	0
SIR_GOPR1B	0	0	0	1	0	120	8
SIR_GOPR_2	55	2	0	0	8	0	0
				·			
Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_GOP_2_	17	29	29	8	29	17	28

Product Type	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_GOP_2_	15	29	24	21	29	19	25
Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-	-
	RSWHOEPFDNCDF 29	RSWHOEPFDPLRMNCDF		SPHLPQWNCDF 29	-	-	-

Test Description Key:		
Abbreviation	Test name	Details
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPFDPLRM	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMN(	CRangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

7.3 Missing QCC Reports

Number of products with missing QCC reports:

0