

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

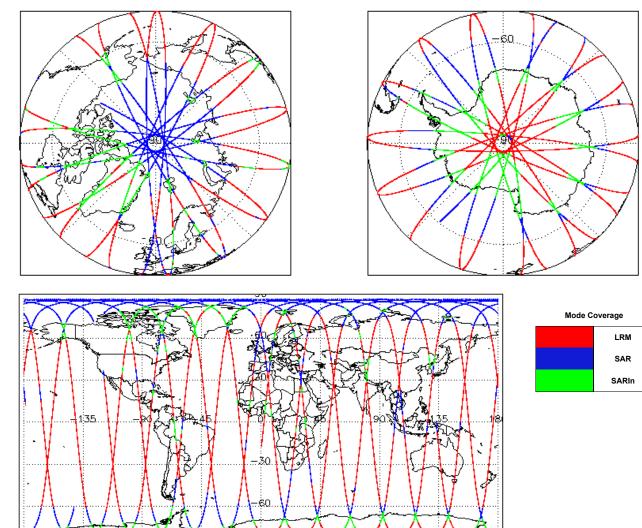
<u>14/07/2020</u>

an art Draduction.	13 Aug 2020	Check	L1 & L2	P2P
Report Production:	13-Aug-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 Used:	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 and 5.5	See Section 6.5
		Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
		Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
		QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1 and 7.

1. Overview

Mission / Instru	Mission / Instrument News		
13-Jul-2020	None		
14-Jul-2020	None		
15-Jul-2020	Nothing planned		





# 3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

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).

4.2 L1B Product Header Analysis					
For all products, a series of pre-defined checks are performed on the MPH a	nd SPH in order to identify any incon	sistencies and/or errors raised by the ground-segment processing chain.			
L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L OSARIn chains. A modification is required in the next release.	1B GOPR and GOPN products beca	use the I1b_processing_quality_hr field is not correctly configured in the OSAR and			
Number of products with errors: 0					
4.3 L1B Auxilary Data File Usage Check					
Each product is checked for missing Data Set Descriptors with respect to a p	pre-determined baseline and also to c	check the validity of Auxiliary Data Files is correct.			
Number of products with errors: 0					
4.4 L1B Auxiliary Correction Error Check					
CryoSat L1B data includes a correction error flag for each measurement reco	ord. The bit value of this flag indicate	s any problems when set.			
Number of products with errors: 0					
4.5 L1B Measurement Confidence Data Check					
CryoSat L1B data includes a measurement confidence flag for each measure	ement record. The bit value of this fla	ag indicates any problems when set.			
Attitude Correction Missing: This flag is currently set in error for GOPR pro	oducts due to a configuration issue. 1	This is being investigated and will be updated in the next SW update.			
Number of products with errors: 2					
Product	Test Failed	Description			
CS_OFFL_SIR_GOPM1B_20200714T053026_20200714T053556_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records			
CS_OFFL_SIR_GOPM1B_20200714T201804_20200714T202219_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records			
4.6 L1B Waveform Group Data Check					
CryoSat L1B data includes a waveform data flag for each measurement reco	ord. The bit value of this flag indicates	s any problems when set.			
Loss of Echo Flag: This flag is currently set for some products over land, but	ut this is to be expected.				
Number of products with errors: 15					
Product	Test Failed	Description			
CS_OFFL_SIR_GOPM1B_20200714T134125_20200714T140006_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T011137_20200714T011650_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T020241_20200714T020329_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T020343_20200714T020632_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T052054_20200714T052309_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T132920_20200714T133153_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T133220_20200714T133343_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T142725_20200714T142911_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T150621_20200714T151039_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T151143_20200714T151251_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20200714T164902_20200714T165148_C001	Loss of Echo	The tracking echo is missing for one or more records			

CS_OFFL_SIR_GOPN1B_20200714T233717_20200714T233919_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200714T091903_20200714T092253_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200714T192742_20200714T192926_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200714T234324_20200714T234517_C001	Loss of Echo	The tracking echo is missing for one or more records

# 5. GOP Level 2 Data Quality Check

## 5.1 L2 Product Format Check

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

Number of products with errors:

## 5.2 L2 Product Header Analysis

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

## 5.3 L2 Auxiliary Data File Usage Check

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

## Number of products with errors:

## 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).

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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.

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Product	<b>T</b> 4 <b>T</b> - 11 1	Description
Product CS_OFFL_SIR_GOPM_2_20200714T065131_20200714T065213_C001	Test Failed Mean Dynamic Topography (1)	Description There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200714T154120_20200714T155554_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_20200714T010601_20200714T010906_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_20200714T011137_20200714T011650_C001	Mean Sea 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_20200714T020241_20200714T020329_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200714T020343_20200714T020632_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_20200714T024614_20200714T024849_C001	Mean Sea 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_20200714T034126_20200714T034243_C001	Mean Sea 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_20200714T034449_20200714T034732_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_20200714T042113_20200714T042720_C001	Mean Sea 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_20200714T052054_20200714T052309_C001	Mean Sea 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_20200714T060333_20200714T060515_C001	Mean Sea 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_20200714T070018_20200714T070502_C001	Mean Sea 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_20200714T075151_20200714T075432_C001	Mean Sea 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_20200714T092253_20200714T092643_C001	Mean Sea 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_20200714T102355_20200714T102523_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20200714T110233_20200714T110548_C001	Mean Sea 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_20200714T111101_20200714T111219_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_20200714T115334_20200714T115402_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200714T125007_20200714T125120_C001	Mean Sea 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_20200714T132920_20200714T133153_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20200714T133220_20200714T133343_C001	Mean Sea 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_20200714T150621_20200714T151039_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_20200714T151143_20200714T151251_C001	Mean Sea 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_20200714T160541_20200714T160814_C001	Mean Sea 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_20200714T164622_20200714T164859_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_20200714T164902_20200714T165148_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_20200714T174450_20200714T174823_C001	Mean Sea 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_20200714T182619_20200714T183010_C001	Mean Sea 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_20200714T192559_20200714T192742_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_20200714T223506_20200714T223628_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 20200714T224155 20200714T224509 C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one
	Mean Sea Surface (1), Mean Dynamic	or more records There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_GOPR_2_20200714T001520_20200714T002231_C001	Topography (1)	Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200714T002231_20200714T002436_C001	Mean Sea 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_20200714T015652_20200714T020127_C001	Mean Sea 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_20200714T020127_20200714T020241_C001	Mean Sea 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_20200714T031312_20200714T031515_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_20200714T033449_20200714T034002_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_20200714T034002_20200714T034126_C001	Mean Sea 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_20200714T051632_20200714T052054_C001	Mean Sea 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_20200714T065213_20200714T065219_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_20200714T065219_20200714T065441_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_20200714T065611_20200714T070018_C001	Mean Sea 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_20200714T083359_20200714T084056_C001	Mean Sea 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_20200714T100305_20200714T100408_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_20200714T101412_20200714T102159_C001	Mean Sea 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_20200714T115402_20200714T120232_C001	Mean Sea 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_20200714T133343_20200714T134125_C001	Mean Sea 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_20200714T151251_20200714T151813_C001	Mean Sea 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_20200714T160814_20200714T161033_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200714T165148_20200714T165855_C001	Mean Sea 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_20200714T171726_20200714T172040_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_20200714T183010_20200714T183516_C001	Mean Sea 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_20200714T200715_20200714T201518_C001	Mean Sea 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_20200714T214621_20200714T215354_C001	Mean Sea 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_20200714T220310_20200714T220454_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_20200714T232410_20200714T233148_C001	Mean Sea 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_20200714T233148_20200714T233312_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

## 5.5 L2 Measurement Confidence Data Check

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

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20200714T053026_20200714T053556_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOPM_2_20200714T201804_20200714T202219_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

# 5.6 L2 Measurement Quality Flag Check

## L2 Quality Flags (20Hz)

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

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20200713T233933_20200714T000051_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_20200714T000336_20200714T001520_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T002436_20200714T002730_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T004334_20200714T004942_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T005129_20200714T010157_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T011902_20200714T015515_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_20200714T020705_20200714T023917_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T024849_20200714T025044_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_20200714T025241_20200714T025549_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_20200714T025816_20200714T031312_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T034243_20200714T034448_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_20200714T034732_20200714T040350_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T043020_20200714T043449_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_20200714T043744_20200714T045137_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T045317_20200714T045601_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T053026_20200714T053556_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T053839_20200714T054111_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T054114_20200714T060143_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T060516_20200714T061356_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T061715_20200714T064123_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T071403_20200714T074048_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T074730_20200714T075150_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_20200714T075633_20200714T082035_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T082815_20200714T083359_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 beer set for one or more records.
CS_OFFL_SIR_GOPM_2_20200714T092643_20200714T093230_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records.

CS_OFFL_SIR_GOPM_2.20200714T093026_20200714T094014_CO01         Coarn Altimeter Range and Backscatter Quarky Root Root Root Root Root Root Root Roo	ave been ty Flags ave been been set ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been
CS_OFFL_SIR_GOPM_2_20200714T094418_20200714T09508_C001     and Backscatter Quality COCG Backscatter Quality     and the CoCG Altimeter Range and Backscatter Quality Flags have for one or more records.       CS_OFFL_SIR_GOPM_2_20200714T100438_20200714T100555_C001     COCG Altimeter Range, SSHA, SWH and Backscatter Quality     The OCCG Altimeter Range, SSHA, SWH and the COCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags F and Backscatter Quality       CS_OFFL_SIR_GOPM_2_20200714T102523_20200714T105838_C001     Cocan Altimeter Range, SSHA, SWH and Backscatter Quality, COCG Altimeter Range, BSHA, SWH and Backscatter Quality Flags F and Backscatter Quality     The OCCG Altimeter Range, SSHA, SWH and the COCG Altimeter Range and Backscatter Quality Flags F and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags F and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags F and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags F and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags F and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags F and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags F and Backscatter Quality, COCG Altimeter Range and Backscatter Quality, Flags F and Backscatter Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality and the OCGO Altimeter Range, SSHA, SWH and Backscatter Quality Flags F and Backscatter Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags F Altimeter Range, SSHA, SWH and Backscatter Quality Flags F Altimeter Range, SSHA, SWH and Backscatter Quality Flags F and Backscatter Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags F Altimeter Range, SSHA, SWH and Backscatter	ave been been set ty Flags ave been ty Flags ave been been set ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been
DS_DFF_SIR_GOPM_2_20200714T10048_0000714T10058_0001       Backscatter Quality       for one or more records.         CS_OFFE_SIR_GOPM_2_20200714T101137_20200714T10138_C001       Coman Altimeter Range, SSHA, SWH and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFE_SIR_GOPM_2_20200714T102523_20200714T105839_C001       Coman Altimeter Range, SSHA, SWH and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFE_SIR_GOPM_2_20200714T10588_0200714T11101_C001       COGG Altimeter Range Quality, COGG       The OCEAN Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFE_SIR_GOPM_2_20200714T111528_0200714T11101_C001       COGG Altimeter Range Quality, COGG       The OCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags I and to COGG Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFE_SIR_GOPM_2_20200714T111528_0200714T111520_C001       Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFE_SIR_GOPM_2_20200714T111528_0200714T111210_C001       Altimeter Range, SSHA, SWH and Backscatter Quality       The OCEAN Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFE_SIR_GOPM_2_20200714T111262_0200714T111210_C001       Coean Altimeter Range, SSHA, SWH and Backscatter Quality       The OCEAN Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFE_SIR_GOPM_2_20200714T112023_0200714T11220_C001       Coean Altimeter Range, SSHA, SWH and Backscatter Quality       The OCEAN Altimeter Range, SSHA, SWH and Backscatter Quality       The OCEAN Altimeter Range, SSHA, SWH and	ty Flags ave been ty Flags ave been been set ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been
CS_OFFL_SIR_GOPM_2_20200714T10137_20200714T10308_0001       and Backscatter Quality. OCOG Altimeter Range and Backscatter Quality. COG Altimeter Range and Backscatter Quality. COG Backscatter Qual	ave been ty Flags ave been been set ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been
CS_OFFL_SIR_GOPM_2_20200714T102532_20200714T1105839_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T1110548_20200714T1111549_C001       DCOG Altimeter Range, Quality, OCOG       The OCoG Altimeter Range and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T1110548_20200714T111549_C001       Dcean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG       The OCoG Altimeter Range, and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T111528_20200714T111529_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, and Backscatter Quality, OCOG Altimeter Range, and Backscatter Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality, COCG Altimeter Range, and Backscatter Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality, COCG Altimeter Range, and Backscatter Quality, COCG Altimeter Range, and Backscatter Quality, COCG Altimeter Range, SSHA, SWH and Backscatter Quality, COCG Altimeter Range, and Backscatter Quality, COCG Altimeter Range, and Backscatter Quality, COCG Altimeter Range, and Backscatter Quality, Flags have for one or more records.         Cs_OFFL_SIR_GOPM_2_20200714T123241_20200714T123245_C001       Cocean Altimeter Range Quality, COCG Backscatter Quality, Flags have for one o	been set ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been
CS_OFFL_SIR_GOPM_2_20200714T111549_202011       Backscatter Quality       for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T111528_20200714T111549_202011       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality And Ba	ty Flags ave been ty Flags ave been ty Flags ave been ty Flags ave been ty Flags
CS_OFFL_SIR_GOPM_2_20200714T111528_20200714T111528_20200714T111549_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, SCOG Altimeter Range, SHA, SWH and Backscatter Quality, OCOG Altimeter Range, SHA, SWH and Backscatter Quality, OCOG Altimeter Range, SHA, SWH and Backscatter Quality, SCOG Altimeter Range and Backscatter Quality, SCOG Altimeter Range, SHA, SWH and Backscatter Quality, SCOG Altimeter Range and Backscatter Quality, SCOG         CS_OFFL_SIR_GOPM_2_20200714T123241_20200714T123745_C001       Ocean Altimeter Range Quality, SCOG Backscatter Quality, SCOG       The Ocean Altimeter Range and Backscatter Quality Staps set for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T12406_20200714T12507_C001       OCCOG Altimeter Range Quality, SCOG Backscatter Quality, SCOG Backsc	ave been ty Flags ave been ty Flags ave been ty Flags ave been ty Flags
CS_OFFL_SIR_GOPM_2_20200714T111626_20200714T113210_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality set for one or more records.       and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, DCOG Altimeter Range and Backscatter Quality, DCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, DCOG Cocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, DCOG Altimeter Range and Backscatter Quality, DCOG Altimeter Range and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality, DCOG Altimeter Range and Backscatter Quality, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags H and backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags H and backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags H and backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags H and backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags H and backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags H and backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags H and backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags H and backscatter Quality, OCOG Altimeter Range, SHA, SWH and Backscatter Quality, OCOG Altimeter Range, SHA,	ty Flags ave been ty Flags ave been ty Flags
CS_OFFL_SIR_GOPM_2_20200714T120233_20200714T121356_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality is set for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T121617_20200714T123231_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags F Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags F Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags F Altimeter Range Quality, OCOG Backscatter Quality       The OCOG Altimeter Range and Backscatter Quality Flags F Altimeter Range and Backscatter Quality Flags F Altimeter Range Quality, OCOG Backscatter Quality         CS_OFFL_SIR_GOPM_2_20200714T124406_20200714T124548_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality       The OCOG Altimeter Range and Backscatter Quality Flags F Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags F Altimeter Range, SSHA, SWH and Backscatter Quality       The OCOG Altimeter Range and Backscatter Quality Flags F for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T125501_20200714T131420_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range and Backscatter Quality set for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T131455_20200714T131435_2	ave been ty Flags ave been ty Flags
CS_OFFL_SIR_GOPM_2_20200714T121617_20200714T123231_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality as for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T123241_20200714T123745_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and Backscatter Quality Altimeter Range and Backscatter Quality and Backscatter Quality and Backscatter Quality and Backscatter Quality Altimeter Range and Backscatter Quality Altimeter Range and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T124406_20200714T124548_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T124555_20200714T125007_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T12555_20200714T125007_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T125501_20200714T131420_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T131455_20200714T131432_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T131455_20200714T131933_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T131455_20200714T131933_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_	ave been ty Flags
CS_OFFL_SIR_GOPM_2_20200714T123241_20200714T123745_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       and the OCOG Altimeter Range and Backscatter Quality Flags is set for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T124406_20200714T124548_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality       The OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T124555_20200714T125007_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality       The OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T125501_20200714T125007_C001       OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T125501_20200714T131420_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have and the OCOG Altimeter Range and Backscatter Quality Flags have and the OCOG Altimeter Range and Backscatter Quality Flags have and the OCOG Altimeter Range and Backscatter Quality Flags have and the OCOG Altimeter Range and Backscatter Quality Flags have and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flag	
CS_OFFL_SIR_GOPM_2_20200714T124406_20200714T124586_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T124555_20200714T125007_C001       OCOG Altimeter Range Quality, OCOG       The OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T125501_20200714T131420_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T131455_20200714T131933_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, Image and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Image and Backscatter Quality	
CS_OFFL_SIR_GOPM_2_20200714T124555_20200714T125501_20200714T131420_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_GOPM_2_20200714T125501_20200714T131420_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Inter Range and Backscatter Quality, Inter Range and Backscatter Quality, Set for one or more records.         Ocean Altimeter Range, SSHA, SWH       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range and Backscatter Quality, Inter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hard the OCOG Altimeter Range, SSHA, SWH and Backscatter Qualit	been set
CS_OFFL_SIR_GOPM_2_20200714T125501_20200714T131420_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags here         CS_OFFL_SIR_GOPM_2_20200714T131455_20200714T131933_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, Flags here         CS_OFFL_SIR_GOPM_2_20200714T131455_20200714T131933_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range and Backscatter Quality, Flags here         Ocean Altimeter Range and Backscatter Quality, OCOG       Altimeter Range and Backscatter Quality, Flags here       The Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range and Backscatter Quality Flags here         Ocean Altimeter Range, SSHA, SWH       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags here	been set
CS_OFFL_SIR_GOPM_2_20200714T131455_20200714T131933_C001 and Backscatter Quality, OCOG Additimeter Range and Backscatter Quality Flags H Altimeter Range and Backscatter Quality Cocod Sector Provide Additional Cocod Additional Co	
CS_OFFL_SIR_GOPM_2_20200714T131954_20200714T132738_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags h Altimeter Range and Backscatter Quality set for one or more records.	
CS_OFFL_SIR_GOPM_2_20200714T132738_20200714T132854_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been been been been been been been be	
CS_OFFL_SIR_GOPM_2_20200714T134125_20200714T140006_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been been been been been been been be	
CS_OFFL_SIR_GOPM_2_20200714T140139_20200714T141115_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Attimeter Range and Backscatter Quality Flags here and the OCOG Attimet	
CS_OFFL_SIR_GOPM_2_20200714T141120_20200714T141700_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have a constrained of the otean Altimeter Range and Backscatter Quality Flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a constrained of the otean Altimeter Range and Backscatter Quality flags have a co	
CS_OFFL_SIR_GOPM_2_20200714T141922_20200714T142446_C001 OCOG Altimeter Range Quality, OCOG In OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.	been set
CS_OFFL_SIR_GOPM_2_20200714T142505_20200714T142725_C001 OCOG Altimeter Range Quality, OCOG In OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.	been set
CS_OFFL_SIR_GOPM_2_20200714T143553_20200714T144821_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a constrained of the ocean Altimeter Range and Backscatter Quality flags have a co	
CS_OFFL_SIR_GOPM_2_20200714T144928_20200714T150620_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags here is the open of the	
CS_OFFL_SIR_GOPM_2_20200714T152924_20200714T153917_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags h and the OCOG Altimeter Range and Backscatter Quality Flags h set for one or more records.	tv Flags
CS_OFFL_SIR_GOPM_2_20200714T154120_20200714T155554_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags h set for one or more records.	

CS_OFFL_SIR_GOPM_2_20200714T155849_20200714T160344_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_20200714T160350_20200714T160357_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_20200714T161247_20200714T162507_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_20200714T162948_20200714T164244_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_20200714T170407_20200714T170409_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_20200714T172040_20200714T173447_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_20200714T173820_20200714T174258_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_20200714T175043_20200714T181223_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_20200714T181228_20200714T181619_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_20200714T181800_20200714T181802_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_20200714T184953_20200714T191019_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_20200714T191111_20200714T191343_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_20200714T191827_20200714T192211_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_20200714T192926_20200714T195601_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_20200714T202833_20200714T205335_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_20200714T205632_20200714T210125_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_20200714T210942_20200714T214304_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_20200714T215506_20200714T215842_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_20200714T222815_20200714T222938_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_20200714T223137_20200714T223222_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_20200714T223628_20200714T224155_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_20200714T224903_20200714T231014_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_20200714T231245_20200714T232410_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_20200714T233420_20200714T233717_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_20200714T235357_20200715T001043_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_20200714T004147_20200714T004333_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_20200714T015635_20200714T015652_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_20200714T034126_20200714T034243_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_20200714T065552_20200714T065611_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_20200714T123950_20200714T124405_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_20200714T164902_20200714T165148_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_20200714T191559_20200714T191827_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_20200714T052310_20200714T052358_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_20200714T052626_20200714T052843_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_20200714T053006_20200714T053026_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_20200714T053556_20200714T053717_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_20200714T224509_20200714T224903_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_20200714T232410_20200714T233148_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

## L2 Quality Flags (20Hz PLRM)

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20200714T004147_20200714T004333_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_20200714T010601_20200714T010906_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_20200714T011137_20200714T011650_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_20200714T020241_20200714T020329_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_20200714T020343_20200714T020632_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_20200714T025044_20200714T025241_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_20200714T032544_20200714T032831_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_20200714T034449_20200714T034732_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_20200714T042113_20200714T042720_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_20200714T043449_20200714T043631_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_20200714T052054_20200714T052309_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_20200714T052844_20200714T053006_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_20200714T061356_20200714T061538_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_20200714T065008_20200714T065131_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_20200714T070018_20200714T070502_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_20200714T070552_20200714T070714_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_20200714T074310_20200714T074443_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_20200714T075151_20200714T075432_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_20200714T095059_20200714T095254_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_20200714T095750_20200714T095856_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_20200714T100835_20200714T100958_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_20200714T101327_20200714T101412_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_20200714T102159_20200714T102312_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_20200714T102355_20200714T102523_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_20200714T111101_20200714T111219_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_20200714T113210_20200714T113357_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_20200714T123950_20200714T124405_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_20200714T125007_20200714T125120_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_20200714T133220_20200714T133343_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_20200714T150621_20200714T151039_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_20200714T152600_20200714T152801_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_20200714T160541_20200714T160814_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_20200714T162507_20200714T162936_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_20200714T164622_20200714T164859_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_20200714T164902_20200714T165148_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_20200714T173605_20200714T173819_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_20200714T174450_20200714T174823_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_20200714T182404_20200714T182527_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_20200714T182619_20200714T183010_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_20200714T184738_20200714T184953_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_20200714T191559_20200714T191827_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_20200714T205508_20200714T205632_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_20200714T210501_20200714T210643_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_20200714T214305_20200714T214421_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_20200714T224155_20200714T224509_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_20200714T233312_20200714T233420_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_20200714T233717_20200714T233919_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_20200714T234225_20200714T234324_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_20200714T235106_20200714T235357_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_20200714T001520_20200714T002231_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_20200714T002730_20200714T003423_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_20200714T003612_20200714T003627_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_20200714T010157_20200714T010601_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_20200714T011650_20200714T011902_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_20200714T023917_20200714T024614_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_20200714T031312_20200714T031515_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_20200714T033449_20200714T034002_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_20200714T040350_20200714T040602_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_20200714T041951_20200714T042014_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_20200714T045601_20200714T045858_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_20200714T051449_20200714T051614_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_20200714T051632_20200714T052054_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_20200714T053556_20200714T053717_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_20200714T060143_20200714T060332_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_20200714T065213_20200714T065219_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_20200714T075432_20200714T075633_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_20200714T082514_20200714T082550_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_20200714T091903_20200714T092253_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_20200714T101412_20200714T102159_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_20200714T102313_20200714T102354_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_20200714T105839_20200714T110233_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_20200714T111219_20200714T111528_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_20200714T114430_20200714T114446_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_20200714T123745_20200714T123949_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_20200714T125120_20200714T125501_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_20200714T131933_20200714T131954_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_20200714T142911_20200714T143553_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_20200714T144821_20200714T144928_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_20200714T160814_20200714T161033_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_20200714T165148_20200714T165855_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_20200714T171225_20200714T171723_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_20200714T171726_20200714T172040_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_20200714T174823_20200714T175043_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_20200714T181620_20200714T181759_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_20200714T191343_20200714T191559_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_20200714T192742_20200714T192926_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_20200714T195702_20200714T195732_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_20200714T200715_20200714T201518_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_20200714T210644_20200714T210941_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_20200714T214422_20200714T214453_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_20200714T215842_20200714T215931_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_20200714T220603_20200714T220833_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_20200714T222526_20200714T222815_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_20200714T223222_20200714T223505_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_20200714T224509_20200714T224903_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.					
L2 Quality Flags (1 Hz & 1Hz PLRM)							
Currently, there are several common flags raised in the Level 2 products, w	hich are summarised below.						
> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for pr	oducts over sea ice, which is to be expected	1.					
Number of products with errors: 193							
5.8 L2 Ocean Retracking Quality Check							
L2 Retracking Flags (20Hz)	L2 Retracking Flags (20Hz)						
CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measur	CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.						
Ocean Retracking Quality Flag: This flag is currently set for products over land	Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below.						
lumber of products with errors: 61							

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

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

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

149

0

Number of products with errors:

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

#### 6.1 P2P Product Format Check

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

Number of products with errors:

## 6.2 P2P Product Header Analysis

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

Number of products with errors:

#### 6.3 P2P Auxiliary Data File Usage Check

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

#### 6.4 P2P Auxiliary Correction Error Check

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

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

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric 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.

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Product	Test Failed	Description
CS_OFFL_SIR_GOP_220200713T233149_20200714T002127_C001	Mean Sea 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_20200714T002127_20200714T011102_C001	Mean Sea 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_220200714T011102_20200714T020041_C001	Mean Sea 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_220200714T020041_20200714T025016_C001		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_220200714T025016_20200714T033954_C001	Mean Sea 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_220200714T033954_20200714T042930_C001		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_20200714T042930_20200714T051908_C001	Mean Sea 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_20200714T051908_20200714T060843_C001	Mean Sea 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_20200714T060843_20200714T065821_C001	Mean Sea 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_20200714T065821_20200714T074757_C001	Mean Sea 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_20200714T074757_20200714T083735_C001	Mean Sea 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_20200714T083735_20200714T092711_C001	Mean Sea 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_20200714T092711_20200714T101649_C001	Mean Sea 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_20200714T101649_20200714T110624_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_220200714T110624_20200714T115602_C001	Mean Sea 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_20200714T115602_20200714T124538_C001	Mean Sea 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_220200714T124538_20200714T133516_C001	Mean Sea Surrace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) Non-Equilibrium Long Perior	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_20200714T133516_20200714T142451_C001	Mean Sea 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_20200714T142451_20200714T151429_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_20200714T151429_20200714T160405_C001	Mean Sea 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_20200714T160405_20200714T165343_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_20200714T165343_20200714T174318_C001	Mean Sea 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_220200714T174318_20200714T183256_C001	Mean Sea 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_220200714T183256_20200714T192232_C001	Mean Sea 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_20200714T192232_20200714T201210_C001	Mean Sea 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_20200714T201210_20200714T210146_C001	Mean Sea 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_20200714T210146_20200714T215124_C001	Mean Sea 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_20200714T215124_20200714T224059_C001	Mean Sea 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_220200714T224059_20200714T233037_C001	Mean Sea 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_20200714T233037_20200715T002013_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records				
6.5 P2P Measurement Confidence Data Check	6 E D2D Massurement Confidence Data Check					

Number of products with errors: 2

P2P Quality Flags (20Hz)		
CryoSat P2P data includes Quality Flags for	20 Hz, 20 Hz PLRM and 1 Hz measurement record, copied from the corresponding L2 produced	icts.
Since the P2P Quality Flags are copied di	r 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 (20Hz PLRM)		
Since the P2P Quality Flags are copied di	r from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.	
Number of products with errors:	28	
P2P Quality Flags (1 Hz & 1Hz PL		
Since the P2P Quality Flags are copied di	r from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.	
Number of products with errors:	30	

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

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

27

30

2145

Number of products with errors:

## P2P Retracking Flags PLRM

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

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

Number of products with errors:

## 7. GOP QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_GOPM1B	142	142	3	139	0
SIR_GOPR1B	123	123	0	123	0
SIR_GOPN1B	100	100	0	100	0
SIR_GOPM_2	142	142	89	53	0
SIR_GOPR_2	123	123	38	84	1
SIR_GOPN_2	100	100	37	63	0
SIR_GOP_P2P	29	29	0	28	1

## 7.1 QCC Errors

Number of QCC reports with errors:

Number of QC	Iber of QCC reports with errors: 2										
	Total number of occurrences of each error										
Product Type	RLOBOPNCDF	RL	RL	RLOBOPNCDF	RL	RL	-	-	-	-	-
SIR_GOPR_2	1	1	1	1	1	1					
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOP_2_	1	1	1	1							
				•		•	•				
Test Description	Fest Description Key:										
Abbreviation	Test	name		Details							
RLOBOPNCDF	Range	LatitudeOrBlankOP	7NetCDF	Latitude should be	between -90E7 ar	nd 90E7					

RLUBUFNUDF	RangeLatitudeOrbiankOF_/NetCDF	Latitude should be between -50E7 and 50E7
RL	RangeLatitude_6	#N/A
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7

## 7.2 QCC Warnings

#### Number of QCC reports with warnings

			Total nur	nber of occurrences of	each warning		
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC
SIR_GOPM1B	139	0	0	0	0	0	0
SIR_GOPM_2	0	0	34	38	0	37	0
SIR_GOPN1B	100	0	0	0	0	0	0
SIR GOPN 2	0	0	11	32	6	27	29
SIR GOPR1B	121	0	0	0	0	0	0
SIR GOPR 2	0	1	35	47	0	31	27
	1	1	1	1	1		1
Product Type	RBSZOPOEPNCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARN	CERPEPOPFDPLRMSINN	DIRPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF
SIR GOPM1B	0	0	0	0	0	0	0
SIR GOPM 2	24	30	0	0	0	0	23
SIR GOPN1B	0	0	0	0	0	0	0
SIR GOPN 2	20	0	0	27	0	32	0
SIR GOPR1B	0	0	0	0	0	0	0
SIR GOPR 2	13	0	51	0	57	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	6	28	0	4	33
SIR GOPN1B	0	0	0	0	0	0	0
SIR GOPN 2	0	29	17	41	50	31	23
SIR GOPR1B	0	0	0	0	0	0	0
SIR GOPR 2	48	0	1	71	44	9	39
		-				-	
Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-	-
SIR GOPM1B	0	0	0	0	0		
SIR GOPM 2	0	3	0	0	0		
SIR GOPN1B	0	0	0	50	0		
SIR GOPN 2	26	13	1	0	0		
SIR GOPR1B	0	0	0	123	7		
SIR GOPR 2	50	2	5	0	0		
	00	2	0	0	0		
Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMN	
SIR GOP 2	18	28	29	6	27	16	26
0		20	20	•			20
Product Type	RPEPOPFDPLRMSINNCD		RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR GOP 2	18	28	24	19	29	18	24
011_001_2_	10	20	2.	10	20	10	
Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNC	F RSWHOEPNCDF	SPHLPQWNCDF	-	-	-
SIR GOP 2	29	18	13	29			
011_001_2_	20	10	10	20			
Test Description Key	<i>r</i> :						
Abbreviation	Test name			Details			
BCSHNCDF	BurstCounterStep20HzNet	CDF		The burst counter should	be one higher with regard to t	he previous burst counter	
	Index Of Lie 201 at the size	OutOfDanas		The monning of OC Line to	d lie maaarmamanta ab sold b	in the sense O to (number	of ( ) la complete ( )
IOHHMOOR	IndexOf1Hzin20HzMapping	JOUIOIRange		i ne mapping of 20 Hz to	1 Hz measurements should be	e in the range 0 to (number of	or 1 Hz samples - 1)
MVIOEPFDNCDF	MissingValueIntOceanExcl	udingPolarFD2NetCDF		The value should not be a	a 'missing value' for surface ty	pe 0 only for latitudes betwe	en -70 and 70 degrees
		-					
MVIOEPNCDF	MissingValueIntOceanExcl	udingPolarNetCDF		The value should not be	a 'missing value' for surface ty	pe 0 only for latitudes betwe	en -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetC	DE		The value should not be	a 'missing value' for surface tw	ne () only	
NIN IONODI	in soing value in coosan were			The value should not be a 'missing value' for surface type 0 only			

RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF RBSZOPOEPFDNCDF

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 CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
	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
RSWHOEPFDPLRMNC	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
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