

QA4EO Daily Report for GOP data:

<u>24/04/2023</u>

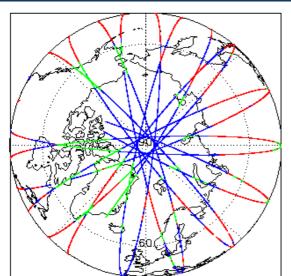
IDEAS-QA4E0

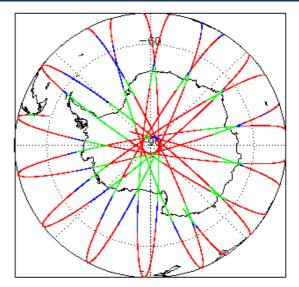
Panart Braduation	24 May 2022	Check	L1 & L2	P2P
Report Production:	24-May-2023	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used: CrvoSat Ocean Processor		Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Geophysical Ocean Products (GOP)	Product Format Check	Nominal	Nominal
L1B, L2 & P2P Science Data	L1B, L2 & P2P Science Data	Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
We would	love to hear from you!	Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Please let us know	your feedback about these daily	Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
quality reports: What	t do you like/ dislike? What quality	Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
information do you need? Send your feedback to		Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
cs2_qc_t	team@telespazio.com	QCC Error/ Warning Check	See Section 7.2	See Section 7.2

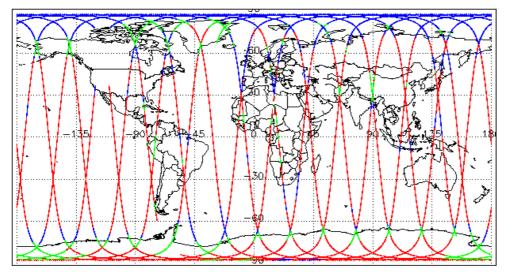
1. Overview

	Mission / Instrument News		
23-Apr-2023		None	
24-Apr-2023 25-Apr-2023		None	
		Nothing planned	

2. Global Coverage











3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

0

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

4. GOP Level 1B Data Quality Check

4.1 L1B Product Format Check

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

4.2 L1B Product Header Analysis					
For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.					
	OPR and GOPN products bec	ause the I1b_processing_quality_hr field is not correctly configured in the OSAR and			
OSARIn chains. A modification is required in the next release.					
Number of products with errors: 0					
4.3 L1B Auxilary Data File Usage Check					
Each product is checked for missing Data Set Descriptors with respect to a pre-d	letermined baseline and also to	check the validity of Auxiliary Data Files is correct.			
Number of products with errors: 0					
4.4 L1B Auxiliary Correction Error Check					
CryoSat L1B data includes a correction error flag for each measurement record.	The bit value of this flag indicate	es any problems when set.			
Number of products with errors: 0					
4.5 L1B Measurement Confidence Data Check					
CryoSat L1B data includes a measurement confidence flag for each measuremer	nt record. The bit value of this fi	ag indicates any problems when set.			
Attitude Correction Missing: This flag is currently set in error for GOPR product	ts due to a configuration issue.	This is being investigated and will be updated in the next SW update.			
Number of products with errors: 1	Ū				
Product	Test Failed	Description			
CS OFFL SIR GOPM1B 20230424T191904 20230424T192747 C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more			
		records			
4.6 L1B Waveform Group Data Check					
CryoSat L1B data includes a waveform data flag for each measurement record. T	The bit value of this flag indicate	es any problems when set.			
Loss of Echo Flag: This flag is currently set for some products over land, but thi	-				
Number of products with errors: 18					
·	To a Falled	Becauteday			
Product CS_OFFL_SIR_GOPM1B_20230424T000221_20230424T001737_C001	Test Failed Loss of Echo	Description The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPM1B_20230424T002425_20230424T003214_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPM1B_20230424T070722_20230424T070751_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPM1B_20230424T101934_20230424T102417_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20230424T040441_20230424T040935_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20230424T103527_20230424T103829_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20230424T121629_20230424T121729_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPN1B_20230424T135429_20230424T135644_C001 CS_OFFL_SIR_GOPN1B_20230424T230452_20230424T231011_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records			
CS OFFL SIR GOPN1B 20230424T235550 20230425T000007 C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPR1B_20230424T004041_20230424T004606_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPR1B_20230424T044640_20230424T044759_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPR1B_20230424T053705_20230424T053731_C001	Loss of Echo	The tracking echo is missing for one or more records			
CS_OFFL_SIR_GOPR1B_20230424T071855_20230424T072700_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 ens	sure it consists of both an XML	header file (.HDR) and a NetCDF product file (.nc).			
Number of products with errors: 0					
5.2 L2 Product Header Analysis					
For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.					
Number of products with errors: 0					
5.3 L2 Auxiliary Data File Usage Check					
ach 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.					
unber of products with errors: 0					
5.4 L2 Auxiliary Correction Error Check					
For all products, the auxiliary corrections within the Geophysical Group are check	ed for the default error value (3	2767).			
Currently, there are some common auxiliary correction errors raised in the followed by a table highlighting any additional issues that may arise from the second se		ected, due to surface type. All common flags are summarised in the list below,			
	> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.				
> Sea State Bias & Sea State Bias PLRM: The error value is currently set for pr	roducts over sea ice, but this is	to be expected.			
- Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.					
Number of products with errors: 56					
Product	Test Failed	Description			

Trouble	Test Fulled	Beschpach
CS_OFFL_SIR_GOPM_2_20230424T070722_20230424T070751_C001	Ilviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records

CS_OFFL_SIR_GOPM_2_20230424T172314_20230424T172352_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_20230423T235523_20230424T000149_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_20230424T004606_20230424T004727_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide
CS_OFFL_SIR_GOPN_2_20230424T005030_20230424T005243_C001	Tide (GOT) Mean Dynamic Topography (1)	height (solution 1: GOT) for one or more records There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20230424T012615_20230424T013222_C001	Mean Sea 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_20230424T022527_20230424T022647_C001	Mean Sea 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_20230424T030824_20230424T031015_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_20230424T031841_20230424T032029_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_20230424T040441_20230424T040935_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20230424T062915_20230424T063126_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20230424T080718_20230424T081034_C001	Mean Sea 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_20230424T081555_20230424T081714_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_20230424T094607_20230424T094926_C001	Mean Sea 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_20230424T095451_20230424T095615_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_20230424T103527_20230424T103829_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20230424T113305_20230424T113442_C001	Mean Sea 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_20230424T121629_20230424T121729_C001	Mean Sea 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_20230424T131042_20230424T131252_C001	Mean Sea 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_20230424T135429_20230424T135644_C001	Mean Sea 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_20230424T144101_20230424T144247_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_20230424T153108_20230424T153510_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_20230424T163032_20230424T163232_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_20230424T202637_20230424T202947_C001	Mean Dynamic Topography (1), 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 (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20230424T211913_20230424T212038_C001	Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic	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_20230424T212549_20230424T212853_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20230424T225938_20230424T230237_C001	Mean Sea 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_20230424T230452_20230424T231011_C001	Mean Sea 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_20230424T235550_20230425T000007_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
		There is an error with the Mean Dynamic Topography (solution 1) for one
CS_OFFL_SIR_GOPR_2_20230424T003845_20230424T004041_C001	Mean Dynamic Topography (1)	or more records
CS_OFFL_SIR_GOPR_2_20230424T003845_20230424T004041_C001 CS_OFFL_SIR_GOPR_2_20230424T004041_20230424T004606_C001	Mean Sea 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
	Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic

CS_OFFL_SIR_GOPR_2_20230424T022105_20230424T022527_C001	Mean Sea 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_20230424T023444_20230424T023557_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_20230424T035729_20230424T040441_C001	Mean Sea 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_20230424T053954_20230424T054504_C001	Mean Sea 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_20230424T070751_20230424T070952_C001	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_20230424T071325_20230424T071520_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_20230424T071855_20230424T072700_C001	Mean Sea 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_20230424T085037_20230424T085226_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_20230424T085733_20230424T090614_C001	Mean Sea 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_20230424T103829_20230424T104610_C001	Mean Sea 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_20230424T121729_20230424T122312_C001	Mean Sea 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_20230424T135644_20230424T135959_C001	Mean Sea 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_20230424T135959_20230424T140329_C001	Mean Sea 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_20230424T153510_20230424T154032_C001	Mean Sea 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_20230424T171333_20230424T172314_C001	Mean Sea 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_20230424T185050_20230424T185826_C001	Mean Sea 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_20230424T190908_20230424T190930_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_20230424T202947_20230424T203641_C001	Mean Sea 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_20230424T203641_20230424T203944_C001	Mean Sea 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_20230424T220826_20230424T221541_C001	Mean Sea 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_20230424T221541_20230424T221759_C001	Mean Sea 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_20230424T235014_20230424T235436_C001	Mean Sea 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_20230424T191904_20230424T192747_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 (20 Hz)

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

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

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

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

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Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20230424T000221_20230424T001737_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_20230424T002425_20230424T003214_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_20230424T003735_20230424T003743_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_20230424T004727_20230424T005030_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_20230424T005253_20230424T010829_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_20230424T011043_20230424T012534_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_20230424T013223_20230424T013436_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_20230424T013518_20230424T013936_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_20230424T014123_20230424T015614_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_20230424T015753_20230424T021412_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_20230424T022647_20230424T022703_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_20230424T023557_20230424T024524_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_20230424T024725_20230424T024747_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_20230424T025229_20230424T030722_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_20230424T031015_20230424T031841_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_20230424T032101_20230424T034343_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_20230424T035201_20230424T035728_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_20230424T041939_20230424T044640_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_20230424T045205_20230424T045655_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_20230424T045956_20230424T050223_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_20230424T050320_20230424T052436_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_20230424T055832_20230424T062522_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_20230424T062847_20230424T062914_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_20230424T063126_20230424T063723_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_20230424T063855_20230424T070718_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_20230424T073012_20230424T080423_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_20230424T081034_20230424T081555_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_20230424T081735_20230424T082130_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_20230424T083954_20230424T084139_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
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CS_OFFL_SIR_GOPM_2_20230424T084909_20230424T084919_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_20230424T085341_20230424T085733_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_20230424T090959_20230424T091838_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_20230424T092123_20230424T094343_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_20230424T095044_20230424T095450_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_20230424T095647_20230424T100955_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_20230424T101143_20230424T101746_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_20230424T101934_20230424T102417_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_20230424T104851_20230424T112206_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_20230424T112434_20230424T112937_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_20230424T112957_20230424T113305_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_20230424T113711_20230424T113743_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_20230424T114036_20230424T121131_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_20230424T121309_20230424T121446_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_20230424T121446_20230424T121629_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_20230424T123044_20230424T123921_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_20230424T124155_20230424T124450_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_20230424T124458_20230424T130137_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_20230424T130328_20230424T130836_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_20230424T131821_20230424T132812_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_20230424T133432_20230424T134614_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_20230424T134745_20230424T134910_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_20230424T141312_20230424T142314_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_20230424T142602_20230424T144028_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_20230424T144248_20230424T144747_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_20230424T145624_20230424T145819_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
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CS_OFFL_SIR_GOPM_2_20230424T145942_20230424T151109_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_20230424T151141_20230424T151810_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_20230424T154918_20230424T154931_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_20230424T155702_20230424T162000_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_20230424T162327_20230424T162705_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_20230424T162727_20230424T163032_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_20230424T163319_20230424T165937_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_20230424T172314_20230424T172352_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_20230424T173325_20230424T175932_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_20230424T180110_20230424T180620_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_20230424T180627_20230424T180954_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_20230424T181316_20230424T184659_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_20230424T191013_20230424T191607_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_20230424T193301_20230424T193923_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_20230424T194110_20230424T194654_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_20230424T195227_20230424T202611_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_20230424T205720_20230424T211840_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_20230424T212038_20230424T212549_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_20230424T213146_20230424T220614_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_20230424T221934_20230424T222011_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_20230424T223549_20230424T225510_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_20230424T230237_20230424T230452_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_20230424T231150_20230424T234133_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_20230424T063723_20230424T063852_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_20230424T172450_20230424T172507_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_20230424T173150_20230424T173325_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
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L2 Quality Flags (20 Hz PLRM)

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

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

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

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Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20230423T235523_20230424T000149_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_20230424T004606_20230424T004727_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_20230424T012615_20230424T013222_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_20230424T013436_20230424T013518_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_20230424T024748_20230424T025034_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_20230424T031841_20230424T032029_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_20230424T034515_20230424T034901_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_20230424T044759_20230424T044919_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_20230424T045115_20230424T045205_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_20230424T052550_20230424T052718_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_20230424T053650_20230424T053704_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_20230424T063723_20230424T063852_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_20230424T072700_20230424T072825_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_20230424T080718_20230424T081034_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_20230424T083028_20230424T083134_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_20230424T083520_20230424T083619_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_20230424T084834_20230424T084908_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_20230424T090802_20230424T090918_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_20230424T103527_20230424T103829_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_20230424T112242_20230424T112434_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_20230424T130148_20230424T130328_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_20230424T132813_20230424T132918_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_20230424T135024_20230424T135313_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

Description	CS_OFFL_SIR_GOPN_2_20230424T135429_20230424T135644_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
CPU - DRIV SUP C, ALCONSTRUCT, ALCONSTRUCT, SEED, CONT COOK Research Cushy motion in a cook of the set of the s	CS_OFFL_SIR_GOPN_2_20230424T153108_20230424T153510_C001	OCOG Altimeter Range Quality PLRM,	
00.0071_0071_0071_0071_0071_0071_0071_00	CS_OFFL_SIR_GOPN_2_20230424T155010_20230424T155051_C001		
CS_OFFL_BR_COPL_2_B0230-ATTREES_B0230-ATTREES_C031 and Backsteint Cably FLAN COCK brown and Cable FLAN Cock Ca	CS_OFFL_SIR_GOPN_2_20230424T155134_20230424T155520_C001		
OPD GHT, Sin CONL 2 SEXEMENT (1993) 2000 644116607, CBN OCCO Bestendier Cushy revere works CB_OFFL_SIN_COPL_2_SEXEMENT (1993) 2_000 6441116607, CBN COCO Altimiter Range, SSNA, SWN and Education Cushy Flags have been and for own and exceeds CB_OFFL_SIN_COPL_2_SEXEMENT (1995) 2_000 6441116607, CBN COCO Altimiter Range, SSNA, SWN and Education Cushy Flags have been and for own and exceeds CB_OFFL_SIN_COPL_2_SEXEMENT (1995) 2_000 6441116102, CBN Coco Altimiter Range, SSNA, SWN and Education Cushy Flags have been and for own and exceeds CB_OFFL_SIN_COPL_2_SEXEMENT (1995) 2_000 6441161002, CBN Coco Altimiter Range own Statescattic Cushy Flags have been and for own and exceeds CB_OFFL_SIN_COPL_2_SEXEMENT (1995) 2_000 6441166002, CBN Coco Altimiter Range own Statescattic Cushy Flags have been and for own and exceeds CB_OFFL_SIN_COPL_2_SEXEMENT (1995) 2_000 6441166002, CBN COCO Altimiter Range Own Statescattic Cushy Flags have been and for own and exceeds CB_OFFL_SIN_COPL_2_SEXEMENT (1995) 2_000 6441166002, CBN Flags have been and for own and exceeds COCO Altimiter Range Own Statescattic Cushy Flags have been and for own and exceeds CB_OFFL_SIN_COPL_2_SEXEMENT (1995) 2_000 6441166002, CBN Flags have been and for own and exceeds COCO Altimiter Range Own Statescattic Cushy Flags have been and for own and exceeds CB_OFFL_SIN_COPL_2_SEXEMENT (1995) 2_000 641166002, CBN Flags have been and for own and exceeds COCO Altimiter Range Own Statescattic Cushy Flags have been and for own and exceeds	CS_OFFL_SIR_GOPN_2_20230424T162050_20230424T162327_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Coord Basecaltr Guily 2 A020404118860 A0204118860 A0204118860 A0204118860 A0204118860 A0204118660 A0204118600 A02041186000 A0204118600 A0204118600 A02	CS_OFFL_SIR_GOPN_2_20230424T175935_20230424T180110_C001		
GB_DFL_SIR_GOPU_2_022044719056_022044719056_0200 Image Seasoneth Coulty FLAN COG Image Coll and Coll and FLAN COG Image Co	CS_OFFL_SIR_GOPN_2_20230424T180620_20230424T180627_C001	OCOG Backscatter Quality	
CB_OFFL_SIR_GOPH_2_022044119458_020244119458_020244119458_02021 PM Elaborator Curry PLML COOR Amount Public Coord Amount Publ	CS_OFFL_SIR_GOPN_2_20230424T180955_20230424T181122_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
GS OFFL_SIR_OOPN_2_20230421139495_023014 Description Descr	CS_OFFL_SIR_GOPN_2_20230424T185826_20230424T185855_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Corpert_sin_corpert_sin_corpert_sin_cound OCCOR Bitackscatter Quality more records OS_OFFL_SIN_COPM_2_20230424T204542_00250424T201544_OD01 OCCOR Alimeter Range Quality PLINL The OCCOR Range and Backscatter Quality Flags have been set for one or more records OS_OFFL_SIN_COPM_2_20230424T212549_20230424T212854_OD01 OCCOR Alimeter Range Quality PLINL The OCCOR Range and Backscatter Quality Flags have been set for one or more records OS_OFFL_SIN_COPM_2_20230424T223558_20230424T223558_D001 OCCOR Alimeter Range Quality PLINL The OCCOR Range and Backscatter Quality Flags have been set for one or more records OS_OFFL_SIN_COPM_2_20230424T223558_20230424T223558_D001 OCCOR Alimeter Range SINA SWH and Backscatter Quality Flags have been set for one or more records The OCCOR Range and Backscatter Quality Flags have been set for one or more records OS_OFFL_SIN_COPM_2_20230424T23558_20230424T223558_D0027 OCCOR Alimeter Range SINA SWH and Backscatter Quality Flags have been set for one or more records OS_OFFL_SIN_COPM_2_20230424T235501_C0007_C001 PLINH The Ocean Alimeter Range, SINA SWH and Backscatter Quality Flags have been set for one or more records OS_OFFL_SIN_GOPM_2_20230424T235501_C0230425T00007_C001 PCRM The Ocean Alimeter Range, SINA SWH and Backscatter Quality Flags have been set for one or more records OS_OFFL_SIN_GOPM_2_20230424T003510_20230424T003510_C0230425T00007_C001 PCOCA Alimeter Range Quality PLINL The OCCOR Range and Ba	CS_OFFL_SIR_GOPN_2_20230424T194856_20230424T195010_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Occos Ratescatter Quality more records Cos OFFL_SIR_GOPN_2_20230424T212549_20230424T212850_0001 Cos OfFL_SIR_GOPN_2_20230424T212549_20230424T212850_0001 Cos OfFL_SIR_GOPN_2_20230424T22549_20230424T212850_0001 Cos OfFL_SIR_GOPN_2_2023042T225508_20230424T223548_0001 COS OG Ratescenter Quality Fags and the COS OR Altereter Range and Backscatter Quality Fags have been set for one or more records The Ocean Altereter Range and Backscatter Quality Fags have been set for one or more records Cos OFFL_SIR_GOPN_2_20230424T223648_20230424T23548_0001 COS OG Ratescenter Quality Fags and the COS OR Altereter Range and Backscatter Quality Fags and the COS OR Range and Backscatter Quality Fags and the COS OR Range and Backscatter Quality Fags and the COS OR Range and	CS_OFFL_SIR_GOPN_2_20230424T202637_20230424T202947_C001		
CS_OFFL_SIR_GOPN_2_20230424T212550_20230424T22354E_C001 and Backscatter Quality FLM, OCCG File Orange and Backscatter Quality end to one or more records CS_OFFL_SIR_GOPN_2_20230424T223598_20230424T22354E_C001 OCCA Nitherter Range Quality FLM, OCCG The OCCOA Rimeter Cauge and Backscatter Quality end to one or more records CS_OFFL_SIR_GOPN_2_20230424T223598_20230424T223594_C001 OCCA Nitherter Range SSHA, WH The OCCOA Rimeter Range SSHA, WH The OCCOA Rimeter Range SSHA, WH CS_OFFL_SIR_GOPN_2_20230424T223042 Cocan Altmeter Range, SSHA, WH The OCCOA Rimeter Range SSHA, WH	CS_OFFL_SIR_GOPN_2_20230424T204042_20230424T204134_C001		
0.9.0PT_SIN_SUPPC_20230424123304_202304241233011_C001 OCOG Backscatter Quality more records 0.5_OFFL_SIR_GOPN_2_202304247230452_202304241231011_C001 Ocean Altimeter Range, SSHA. SWH and Backscatter Quality Flags and Backscatter Quality The Ocean Altimeter Range, SSHA. SWH and Backscatter Quality Flags and Backscatter Quality 0.5_OFFL_SIR_GOPN_2_202304247234918_202304247235014_C001 Ocean Altimeter Range, SSHA. SWH and Backscatter Quality Flags and Backscatter Quality The Ocean Altimeter Range, SSHA. SWH and Backscatter Quality Flags have been alto one or more records 0.5_OFFL_SIR_GOPN_2_20230424723550_202304251000007_C001 Altimeter Range and Backscatter Quality Flags have been alto for one or more records The OCCOR Altimeter Range, SSHA. SWH and Backscatter Quality Flags have been alto for one or more records 0.5_OFFL_SIR_GOPN_2_202304241003455_001 OCCOR Altimeter Range Quality PLRM. The OCCOR Altimeter Range and Backscatter Quality Flags have been alto rone or more records 0.5_OFFL_SIR_GOPR_2_202304241003455_002304261000302_C001 OCCOR Altimeter Range Quality PLRM. The OCCOR Altimeter Range SSHA. SWH and Backscatter Quality Flags have been alt for one or more records 0.5_OFFL_SIR_GOPR_2_202304241003845_202304241004041_C001 Ocean Altimeter Range, SSHA. SWH and Backscatter Quality Flags have been alt for one or more records 0.5_OFFL_SIR_GOPR_2_202304241003845_202304241004066_C001 Ocean Altimeter Range, SSHA. SWH and Backscatter Quality Flags have been alt for one or more records 0.5_OFFL_SIR_GOPR_2_202304241004041_202304241004086_C001 Ocean Altimeter Range aSHA. SWH and Backscatter Qual	CS_OFFL_SIR_GOPN_2_20230424T212549_20230424T212853_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
GS_OFFL_SIR_GOPN_2_202304247230452_202304247231011_001 and Backscater Quality FLM_M COCO Attemeter Range and Backscater Quality FLM_M COCO Attemeter R	CS_OFFL_SIR_GOPN_2_20230424T223508_20230424T223548_C001		
CS_OFFL_SIR_GOPN_2_20230424T234918_20230424T235014_C001 All Backscatter Quality PLRM, QCOG Ind Ocean Allmater Range, SSHA, SWH and Backscatter Quality PLRM, QCOG CS_OFFL_SIR_GOPN_2_20230424T23550_20230425T000007_C001 Allmater Range, SSHA, SWH and Backscatter Quality PLRM, QCOG CS_OFFL_SIR_GOPN_2_20230424T03310_20230424T003445_C001 OCGG Allmeter Range Quality PLRM, QCOG CS_OFFL_SIR_GOPR_2_20230424T003310_20230424T003445_C001 OCGG Allmeter Range Quality PLRM, QCOG CS_OFFL_SIR_GOPR_2_20230424T003465_20200424T003502_C001 OCGG Allmeter Range Quality PLRM, QCOG CS_OFFL_SIR_GOPR_2_20230424T003465_20230424T003502_C001 OCGG Allmeter Range Quality PLRM, QCOG CS_OFFL_SIR_GOPR_2_20230424T003465_20230424T003502_C001 OCGG Allmeter Range Quality PLRM, QCOG CS_OFFL_SIR_GOPR_2_20230424T003465_20230424T004041_C001 Allmeter Range, SSHA, SWH Matherer Range and Backscatter Quality PLRM, QCOG The OCCGA Allmeter Range, SSHA, SWH CS_OFFL_SIR_GOPR_2_20230424T004041_2021 OCGG Allmeter Range, SSHA, SWH CS_OFFL_SIR_GOPR_2_20230424T004041_20230424T004066_C001 Allmeter Range, SSHA, SWH CS_OFFL_SIR_GOPR_2_20230424T010429_20230424T010436_20201 The OCCGA Allmeter Range, SSHA, SWH CS_OFFL_SIR_GOPR_2_20230424T010829_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_20230424T01447_2	CS_OFFL_SIR_GOPN_2_20230424T230452_20230424T231011_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPN_2_20230424T23550_20230425T00007_C001 and Backscatter Quality PLRM, COCG Intel CoCG Allimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T003310_20230424T003445_C001 CCCG Allimeter Range Quality PLRM, CCG Backscatter Quality PLRM, CCG Altimeter Range and Backscatter Quality PLRM, CCG Altimeter Range ASHA, SWH and Backscatter Quality PLRM, CCG Altimeter Range ASHA, SWH and Backscatter Quality PLRM, CCG Altimeter Range ASHA, SWH and Backscatter Quality PLRM, CCG Altimeter Range ASHA, SWH and Backscatter Quality PLRM, CCG Altimeter Range ASHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T010429_20230424T011043_C001 CCGR Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The OCCGR Range and Backscatter Quality Flags have been set for one or more record	CS_OFFL_SIR_GOPN_2_20230424T234918_20230424T235014_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_202304241003310_202304241003302_C001 OCOG Backscatter Quality more records CS_OFFL_SIR_GOPR_2_202304241003458_202304241003502_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_202304241003845_202304241004041_C001 Mineter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, and Backscatter Quality PLRM, OCOG Altimeter Range, and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_202304241004041_202304241004606_C001 Decean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_202304241004041_202304241004606_C001 Decean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_202304241010829_202304241011043_C001 Decean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_202304241021835_202304241022527_C001 OcoG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_202304241022105_20230424102	CS_OFFL_SIR_GOPN_2_20230424T235550_20230425T000007_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20230424T003845_20230424T004041_C001 OCCG Backscatter Quality more records CS_OFFL_SIR_GOPR_2_20230424T003845_20230424T004041_C001 Occean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T021835_20230424T021936_C001 OCCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T022105_20230424T022527_C001 OCCGA Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T022105_20230424T022527_C001 OCCGA Altimeter Range, SSHA, SWH and	CS_OFFL_SIR_GOPR_2_20230424T003310_20230424T003445_C001		
CS_OFFL_SIR_GOPR_2_20230424T003845_20230424T004041_C001 and Backscatter Quality PLRM, COCG Attimeter Range and Backscatter Quality PLRM The OCCean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T004041_20230424T004606_C001 Ocean Attimeter Range, SSHA, SWH and Backscatter Quality PLRM The OCCean Attimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCCG Attimeter Range and Backscatter Quality Flags and the OCCG Attimeter Range and Backscatter Quality Flags and the OCCG Attimeter Range and Backscatter Quality Flags hand the OCCG Attimeter Range and Backscatter Quality Flags and the OCCG Attimeter Range and Backscatter Quality Flags hand backscatter Quality Flags <br< td=""><td>CS_OFFL_SIR_GOPR_2_20230424T003458_20230424T003502_C001</td><td></td><td></td></br<>	CS_OFFL_SIR_GOPR_2_20230424T003458_20230424T003502_C001		
CS_OFFL_SIR_GOPR_2_20230424T004041_20230424T004606_C001 and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM Ine Occean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T010829_20230424T011043_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T021835_20230424T021936_C001 OCCG Altimeter Range Quality PLRM, OCCG Backscatter Quality The OCCG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T022105_20230424T022527_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Ratimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCCG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T022105_20230424T022527_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags and the OCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records <td>CS_OFFL_SIR_GOPR_2_20230424T003845_20230424T004041_C001</td> <td>and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM</td> <td>and the OCOG Altimeter Range and Backscatter Quality Flags have been</td>	CS_OFFL_SIR_GOPR_2_20230424T003845_20230424T004041_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20230424T010829_20230424T011043_C001 and Backscatter Quality PLRM, OCOG Atimeter Range and Backscatter Quality PLRM and Backscatter Quality PLRM, OCOG Atimeter Range and Backscatter Quality PLRM, OCOG Atimeter Range Quality PLRM, OCOG Atimeter Range Quality PLRM, OCOG Backscatter Quality The OCOG Atimeter Range and Backscatter Quality Flags and the OCOG Atimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T021835_20230424T021936_C001 OCOG Atimeter Range, SSHA, SWH and Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T022105_20230424T022527_C001 Ocean Atimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Atimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Atimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Atimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T022745_20230424T022936_C001 Ocean Atimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Atimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Atimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20230424T022745_20230424T022936_C001 OCOG Atimeter Range Quality PLRM, OCOG Atimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Atimeter Range and Backscatter Quality Flags have been set for one or more re	CS_OFFL_SIR_GOPR_2_20230424T004041_20230424T004606_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_202304241021835_202304241021936_C001 OCOG Backscatter Quality more records CS_OFFL_SIR_GOPR_2_20230424T022105_20230424T022527_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality FLRM, OCOG Altimeter Range and Backscatter Quality FLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality FLRM CS_OFFL_SIR_GOPR_2_20230424T022745_20230424T022936_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range 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_20230424T023444_20230424T023557_C001 OCOG Altimeter Range Quality PLRM, The OCean Altimeter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPR_2_20230424T010829_20230424T011043_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20230424T022105_20230424T022527_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM In the OCGA Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags set for one or more records CS_OFFL_SIR_GOPR_2_20230424T022745_20230424T022936_C001 OCGA Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags set for one or more records CS_OFFL_SIR_GOPR_2_20230424T023557_C001 OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_GOPR_2_20230424T021835_20230424T021936_C001	OCOG Backscatter Quality	
CS_OFFL_SIR_GOPR_2_20230424T022745_20230424T022936_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG PLRM OCOG Altimeter Range Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been ocog Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_GOPR_2_20230424T022105_20230424T022527_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_GOPR_2_20230424T022745_20230424T022936_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_GOPR_2_20230424T023444_20230424T023557_C001		

	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_GOPR_2_20230424T035729_20230424T040441_C001	Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPR_2_20230424T040958_20230424T041241_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPR_2_20230424T041720_20230424T041938_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_20230424T053541_20230424T053650_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_20230424T053807_20230424T053929_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_20230424T055703_20230424T055832_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_20230424T062522_20230424T062727_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_20230424T070751_20230424T070952_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_20230424T071325_20230424T071520_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_20230424T071715_20230424T071839_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_20230424T071855_20230424T072700_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_20230424T085037_20230424T085226_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_20230424T085733_20230424T090614_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_20230424T094343_20230424T094607_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_20230424T103829_20230424T104610_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_20230424T104612_20230424T104616_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_20230424T121729_20230424T122312_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_20230424T131252_20230424T131821_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_20230424T133218_20230424T133431_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_20230424T135313_20230424T135428_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_20230424T135644_20230424T135959_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_20230424T135959_20230424T140329_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_20230424T152753_20230424T153048_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_20230424T153510_20230424T154032_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_20230424T162001_20230424T162050_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_20230424T171333_20230424T172314_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_20230424T185050_20230424T185826_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_20230424T195010_20230424T195227_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_20230424T203641_20230424T203944_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_20230424T204153_20230424T204540_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_20230424T212853_20230424T213146_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_20230424T220826_20230424T221541_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_20230424T221541_20230424T221759_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_20230424T222011_20230424T222739_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_20230424T235014_20230424T235436_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_20230424T235436_20230424T235550_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 & 1 Hz PLRM)						
Currently, there are several common flags raised in the Level 2 products, which are summarised below.						
> 1 Hz and 1 Hz Ocean SSHA Quality Flags: These flags are currently set for	products over sea ice, which is to be expected	əd.				
Number of products with errors: 197						

5.8 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20 Hz)

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

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

Number of products with errors:

L2 Retracking Flags (20 Hz 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.

70

143

Number of products with errors:

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

6.1 P2P Product Format Check

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

Number of products with errors:

6.2 P2P Product Header Analysis

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

Number of products with errors:

6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

6.4 P2P Auxiliary Correction Error Check

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

Currently, there are some common auxiliary correction errors raised in the Level 2 products that are expected, due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues that 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_2_20230423T235442_20230424T004419_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

CS_OFFL_SIR_GOP_220230424T004419_20230424T013356_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_220230424T013356_20230424T022334_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_220230424T022334_20230424T031311_C001	Mean Sea 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_220230424T031311_20230424T040248_C001	Mean Sea 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_220230424T040248_20230424T045226_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20230424T045226_20230424T054203_C001	Mean Sea 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_220230424T054203_20230424T063141_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography 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_220230424T063141_20230424T072118_C001	Mean Sea 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_220230424T072118_20230424T081055_C001	Mean Sea 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_220230424T081055_20230424T090033_C001	Mean Sea 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_220230424T090033_20230424T095010_C001	Mean Sea 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_220230424T095010_20230424T103947_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20230424T103947_20230424T112925_C001	Mean Sea 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_220230424T112925_20230424T121902_C001	Mean Sea 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_220230424T121902_20230424T130839_C001	Mean Sea 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_220230424T130839_20230424T135817_C001	Mean Sea 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_220230424T135817_20230424T144754_C001	Mean Sea 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_220230424T144754_20230424T153731_C001	Mean Sea 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_220230424T153731_20230424T162709_C001	Mean Sea 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_220230424T162709_20230424T171646_C001	Mean Sea 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_220230424T171646_20230424T180623_C001	Mean Sea 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_220230424T180623_20230424T185601_C001	Mean Sea 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_220230424T185601_20230424T194538_C001	Mean Sea 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_220230424T194538_20230424T203515_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography 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_220230424T203515_20230424T212453_C001	Mean Sea 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_220230424T212453_20230424T221430_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography 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_220230424T221430_20230424T230407_C001	Mean Sea 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_220230424T230407_20230424T235345_C001	Mean Sea 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_20230424T235345_20230425T004322_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography 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

6.5 P2P Measurement Confidence Data Check

1

Product		Test Failed	Description
CS_OFFL_SIR_GOP_2_20230424T185601_20230424T	F194538_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
6.6 P2P Measurement Quality Flag Che	eck		
P2P Quality Flags (20 Hz)			
CryoSat P2P data includes Quality Flags for each 20 Hz,	20 Hz PLRM and 1 Hz ı	measurement record, copied from the	ne corresponding L2 products.
Since the P2P Quality Flags are copied directly from	the L2 Quality Flags, p	please see Section 5.6 for the full	list of products affected.
Number of products with errors: 25	9		
P2P Quality Flags (20 Hz PLRM)			
Since the P2P Quality Flags are copied directly from	the L2 Quality Flags, p	blease see Section 5.6 for the full	list of products affected.
Number of products with errors: 30)		
P2P Quality Flags (1 Hz & 1 Hz PLRM)			
Since the P2P Quality Flags are copied directly from	the L2 Quality Flags, p	blease see Section 5.6 for the full	list of products affected.
Number of products with errors: 30)		
6.8 P2P Ocean Retracking Quality Che	ck		
P2P Retracking Flags (20 Hz)			
Cryosat P2P data includes an ocean retracking quality fla	g (field 19) for each 20 H	Hz measurement record. The bit va	ue of this flag indicates any problems when set.
Ocean Retracking Quality Flag (PLRM): This flag is cur	rently set for products G	GOPR and GOPN products over sea	a ice, but this is to be expected.
Number of products with errors: 25	9		
P2P Retracking Flags PLRM			
CryoSat L2 data includes an ocean retracking quality flag	for each 20 Hz PLRM n	neasurement record. The bit value	of this flag indicates any problems when set.
Ocean Retracking Quality Flag (PLRM): This flag is cur	rently set for products G	GOPR and GOPN products over sea	a ice, but this is to be expected.

Number of products with errors:

30

7. GOP QCC Report Analysis

The Quality Control for CryoSat (QCC) facility 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	187	187	4	183	0
SIR_GOPR1B	133	133	0	133	0
SIR_GOPN1B	97	97	3	94	0
SIR_GOPM_2	187	187	130	57	0
SIR_GOPR_2	133	133	46	87	0
SIR_GOPN_2	97	97	38	59	0
SIR_GOP_P2P	29	29	0	29	0

7.1 QCC Errors

Number of QCC repo	orts with errors:		0								
					Total number	of occurrences	of each error				
Product Type		•	-	-	-	-	-	-	-	-	-
Product Type		•	-	-	-	-	-	-	-	-	-
0											
Test Description Key	r:										
Abbreviation	Test name			Details							
0	0			#N/A							
0	0			#N/A							
0	0			#N/A							
0	0			#N/A							

7.2 QCC Warnings

umber of QCC repo	orts with warnings	2218					
	-			ber of occurrences of		1	
Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	DRBSZOPOEPNCDF
SIR_GOPM1B	183	0	0	0	0	0	0
SIR_GOPM_2	0	45	46	0	40	0	37
SIR_GOPN1B	93	0	0	0	0	0	0
SIR_GOPN_2	0	12	28	7	27	27	20
SIR GOPR1B	131	0	0	0	0	0	0
SIR_GOPR_2	0	29	49	2	30	26	16
Product Type	RLPTONCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARN	CERPEPOPFDPLRMSINNCI	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	0	1	34	0	0	0	0
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	3	2	0	0	20	0	29
SIR GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	0	7	0	45	0	50	0
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Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	32	0	0	8	32	0	5
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	0	24	19	38	48	23
SIR_GOPR1B	0	0	0	0	0	0	0
SIR GOPR 2	0	44	0	7	68	33	16

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	Soohhifhd	SCSTODHRNCDF	SCSTODNCDF	•
SIR_GOPM1B	0	0	0	0	0	0	
SIR_GOPM_2	42	0	1	0	0	0	
SIR_GOPN1B	0	0	0	0	42	1	
SIR_GOPN_2	25	24	13	0	0	0	
SIR_GOPR1B	0	0	0	0	133	7	
SIR_GOPR_2	29	46	0	2	0	0	
			·	·			
Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_GOP_2_	19	28	29	8	29	17	29
Product Type	RLPTONCDF	RNELPOTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF
SIR_GOP_2_	4	6	18	27	23	20	29
Product Type	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-
SIR GOP 2	19	23	29	19	12	29	

Test Description Key:							
Abbreviation	Test name	Details					
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter					
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only					
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RBSZOPOEPFDPLRM NCDF	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					
RLPTONCDF	RangeLongPeriodTideOceanNetCDF	The Long period tide height should be between -50mm and 50mm (or missing) for surface type = ocean					
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean					
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDPLRMSAR 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					
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean					
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean					
RSSHAOFDPLRMNCD F	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 DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
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