

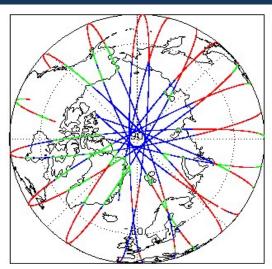
1. Overview

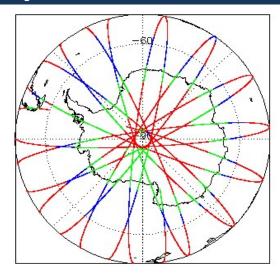
Report Production:	25-Aug-2022	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	

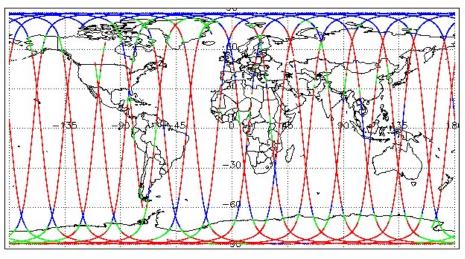
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
QCC Error/ Warning Check	See Section 7.2 and 7.3	See Section 7.2

Mission / Instrument News	
25-Jul-2022	None
26-Jul-2022	None
27-Jul-2022 Ground Segment Anomaly: Mutttiple Losses of SIRAL SAR and SARin data availability.	

2. Global Coverage









3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A

4. GOP Level 1B Data Quality Check

4.1 L1B Product Format Check

4.2 L1B Product Header Analysis

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

L1B Processing Quality HR: The Ib_proc_flag_hr flag is currently set all L1B GOPR and GOPN products because the I1b_processing_quality_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

4.3 L1B Auxilary Data File Usage Check

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

mber of products with errors:

4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

4

0

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20220726T044557_20220726T045240_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20220726T065136_20220726T065539_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20220726T123722_20220726T131329_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20220726T144817_20220726T145305_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

10

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20220726T042512_20220726T043524_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T000038_20220726T000330_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T031553_20220726T031744_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T031931_20220726T031959_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T132053_20220726T132500_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T150249_20220726T150523_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T153932_20220726T154532_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T163909_20220726T164129_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T181408_20220726T181432_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T212908_20220726T212954_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T213136_20220726T213231_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220726T231151_20220726T231234_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220726T014231_20220726T014815_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220726T045240_20220726T045601_C001	Loss of Echo	The tracking echo is missing for one or more records

5. GOP Level 2 Data Quality Check

5.1 L2 Product Format Check

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

Number of products with errors:

5.2 L2 Product Header Analysis

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

Number of products with errors:

5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

5.4 L2 Auxiliary Correction Error Check

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

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

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20220726T021009_20220726T022608_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20220726T045601_20220726T045604_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_GOPM_2_20220726T064817_20220726T064852_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20220726T180950_20220726T181015_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20220726T181015_20220726T181022_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_20220726T000038_20220726T000330_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_20220726T004741_20220726T004939_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_20220726T005817_20220726T005950_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T014130_20220726T014231_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T023546_20220726T023752_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T031931_20220726T031959_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_20220726T032031_20220726T032146_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T040601_20220726T040748_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_20220726T042259_20220726T042512_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T045604_20220726T050015_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_20220726T055527_20220726T055730_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_20220726T081148_20220726T081549_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_20220726T090443_20220726T090609_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_20220726T091358_20220726T091512_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220726T104412_20220726T104538_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T105050_20220726T105353_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T122431_20220726T122732_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_20220726T122953_20220726T123510_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T132053_20220726T132500_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_20220726T140430_20220726T140705_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T145945_20220726T150059_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T150249_20220726T150523_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (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_20220726T153932_20220726T154532_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_20220726T163909_20220726T164129_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T172149_20220726T172337_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T190128_20220726T190305_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_20220726T204116_20220726T204504_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T212006_20220726T212150_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_20220726T213136_20220726T213231_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_20220726T222054_20220726T222410_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T222923_20220726T223044_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_20220726T231151_20220726T231234_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T000330_20220726T001110_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the GPD Wet Tropospheric correction, the MSS height (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_GOPR_2_20220726T014231_20220726T014815_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T032147_20220726T032837_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T045240_20220726T045601_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20220726T050015_20220726T050537_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T063839_20220726T064817_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T081549_20220726T082322_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T095455_20220726T100145_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T100145_20220726T100412_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T113333_20220726T114045_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T114045_20220726T114259_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T131329_20220726T131422_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_20220726T131513_20220726T131940_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T131940_20220726T132053_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T145306_20220726T145812_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T145812_20220726T145944_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T160957_20220726T161609_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_20220726T163303_20220726T163909_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T044557_20220726T045240_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOPM_2_20220726T065136_20220726T065539_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOPM_2_20220726T123722_20220726T131329_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOPM_2_20220726T144817_20220726T145305_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.

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20220726T001111_20220726T004629_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_20220726T004939_20220726T005438_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_20220726T005459_20220726T005816_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_20220726T010539_20220726T013659_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_20220726T013932_20220726T014130_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_20220726T014942_20220726T020420_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_20220726T020901_20220726T020956_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_20220726T021009_20220726T022608_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_20220726T022826_20220726T023337_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_20220726T024332_20220726T025720_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_20220726T025951_20220726T031542_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_20220726T033903_20220726T034921_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_20220726T035101_20220726T040449_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_20220726T040748_20220726T041249_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_20220726T041256_20220726T041307_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_20220726T042125_20220726T042259_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_20220726T042512_20220726T043524_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_20220726T043753_20220726T044313_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_20220726T044557_20220726T045240_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_20220726T050655_20220726T051320_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_20220726T052201_20220726T054308_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_20220726T054825_20220726T055206_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_20220726T055919_20220726T062710_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_20220726T065616_20220726T065645_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_20220726T065837_20220726T072303_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_20220726T072608_20220726T073121_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_20220726T073128_20220726T073455_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_20220726T073853_20220726T081148_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_20220726T082458_20220726T083136_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_20220726T083541_20220726T084011_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_20220726T084553_20220726T085253_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_20220726T085759_20220726T090226_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_20220726T090609_20220726T091156_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_20220726T091911_20220726T095132_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_20220726T100412_20220726T100539_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_20220726T102701_20220726T102847_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_20220726T102939_20220726T104030_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_20220726T104538_20220726T105050_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_20220726T105745_20220726T111905_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_20220726T112149_20220726T113333_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_20220726T114259_20220726T114512_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_20220726T120142_20220726T122016_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_20220726T123722_20220726T131329_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_20220726T132522_20220726T134444_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_20220726T134506_20220726T135801_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_20220726T140705_20220726T140901_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_20220726T141043_20220726T141405_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_20220726T141630_20220726T143127_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_20220726T143330_20220726T144257_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_20220726T150059_20220726T150248_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_20220726T150523_20220726T152209_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_20220726T152649_20220726T152706_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_20220726T152823_20220726T152846_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_20220726T152849_20220726T153506_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_20220726T154532_20220726T154824_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_20220726T154836_20220726T155307_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_20220726T155602_20220726T160956_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_20220726T164839_20220726T165415_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_20220726T165700_20220726T172006_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_20220726T172338_20220726T173209_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_20220726T173534_20220726T180007_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_20220726T183133_20220726T185905_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_20220726T190552_20220726T191009_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_20220726T191456_20220726T193935_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_20220726T194106_20220726T194322_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_20220726T194624_20220726T195220_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_20220726T200633_20220726T203721_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_20220726T204505_20220726T205050_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_20220726T205350_20220726T205832_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_20220726T212954_20220726T213130_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_20220726T214356_20220726T221706_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_20220726T222410_20220726T222922_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_20220726T223356_20220726T225041_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_20220726T230900_20220726T230954_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_20220726T231005_20220726T231031_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_20220726T232051_20220726T235114_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_20220726T235125_20220726T235606_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_20220726T050537_20220726T050601_C001	and Backscatter Quality, OCOG Altimeter	The Ocean Altimeter Range, SSHA, SWH 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_20220726T055222_20220726T055228_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_20220726T090443_20220726T090609_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_20220726T100540_20220726T100626_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

L2 Quality Flags (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.

Number of products with errors: 95

Product	Test Failed	Description		
CS_OFFL_SIR_GOPN_2_20220726T000038_20220726T000330_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_20220726T004741_20220726T004939_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_20220726T005817_20220726T005950_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_20220726T013717_20220726T013817_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_20220726T014130_20220726T014231_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_20220726T031931_20220726T031959_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_20220726T032004_20220726T032025_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_20220726T042259_20220726T042512_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_20220726T043524_20220726T043753_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_20220726T045604_20220726T050015_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_20220726T051513_20220726T051542_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_20220726T051628_20220726T052028_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one more records		
CS_OFFL_SIR_GOPN_2_20220726T054515_20220726T054825_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_20220726T062710_20220726T062956_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_20220726T065743_20220726T065837_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_20220726T073456_20220726T073621_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_20220726T081148_20220726T081549_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_20220726T090443_20220726T090609_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_20220726T095243_20220726T095455_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_20220726T100540_20220726T100626_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_20220726T101202_20220726T101236_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_20220726T102643_20220726T102700_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_20220726T104412_20220726T104538_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_20220726T105050_20220726T105353_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_20220726T122431_20220726T122732_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_20220726T122953_20220726T123510_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_20220726T132053_20220726T132500_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_20220726T140902_20220726T141042_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_20220726T141405_20220726T141535_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_20220726T144257_20220726T144631_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_20220726T145945_20220726T150059_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records	
CS_OFFL_SIR_GOPN_2_20220726T150249_20220726T150523_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_20220726T152209_20220726T152552_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_20220726T153737_20220726T153829_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_20220726T163909_20220726T164129_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_20220726T164206_20220726T164351_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_20220726T164406_20220726T164441_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_20220726T164703_20220726T164826_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_20220726T172149_20220726T172337_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_20220726T173210_20220726T173401_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_20220726T180007_20220726T180356_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_20220726T181253_20220726T181311_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_20220726T190128_20220726T190305_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_20220726T204116_20220726T204504_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_20220726T210741_20220726T211115_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records	

CQ_CRT_SR_GORPL_2_202078T12822_202078T12824_C00 CQ_CRT_SR_GORPL_2_202078T12824_202078T12824_C00 CQ_CRT_SR_GORPL_2_202078T12824_202078	CS_OFFL_SIR_GOPN_2_20220726T212006_20220726T212150_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records	
Co. CHIL. SR. GOPN 2_2020721724198_20207217241465_CODI	CS_OFFL_SIR_GOPN_2_20220726T212221_20220726T212243_C001			
Co. OFFL. SR. GOMP 2. 2020/78172204 2020/78172314 CODE OFFL SR. GOMP 2. 2020/78172304 2020/78172314 CODE OFFL SR. GOMP 2. 2020/78172304 2020/78172304 CODE OFFL SR. GOMP 2. 2020/78172304 CODE OFFL	CS_OFFL_SIR_GOPN_2_20220726T212657_20220726T212819_C001			
CS_CRF_SR_COPR_2_20220720122234_20207201222410_CD01 CS_CRF_SR_COPR_2_20220720122234_20207201222410_CD01 CS_CRF_SR_COPR_2_20220720122234_20207201222410_CD01 CS_CRF_SR_COPR_2_20220720122234_20207201222410_CD01 CS_CRF_SR_COPR_2_20220720122234_2020720122354_CD01 CS_CRF_SR_COPR_2_20220720122351_2020720122354_CD01 CS_CRF_SR_COPR_2_20220720122351_2020720123534_CD01 CS_CRF_SR_COPR_2_20220720122351_2020720123534_CD01 CS_CRF_SR_COPR_2_2022072012351_2020720123534_CD01 CS_CRF_SR_COPR_2_2022072012351_2020720123534_CD01 CS_CRF_SR_COPR_2_2022072012351_2020720123534_CD01 CS_CRF_SR_COPR_2_2022072012351_2020720123534_CD01 CS_CRF_SR_COPR_2_2022072012351_2020720123534_CD01 CS_CRF_SR_COPR_2_2022072012351_2020720123534_CD01 CS_CRF_SR_COPR_2_2022072012351_2020720124351_CD01 CS_CRF_SR_COPR_2_2022072012351_2020720124351_CD01 CS_CRF_SR_COPR_2_2022072012352_2020720124351_CD01 CS_CRF_SR_COPR_2_20220720123532_2020720124351_CD01 CS_CRF_SR_COPR_2_20220720123532_2020720124351_CD01 CS_CRF_SR_COPR_2_20220720123532_2020720124351_CD01 CS_CRF_SR_COPR_2_20220720123532_20207201243532_CD01 CS_CRF_SR	CS_OFFL_SIR_GOPN_2_20220726T214018_20220726T214139_C001			
end Deters jam Conney 2 2022/2017/102004 (2007) ODFIL SRR GORN 2 2022/2017/20204 (2007) ODFIL SRR GORN 2 2022/2017/2010/2020 (2007) ODFIL SRR GORN 2 2022/2017/2000/2020/2010/2009) ODFIL SRR GORN 2 2022/2017/2000/2020/2010/2009 (2001) ODFIL SRR GORN 2 2022/2017/2000/2020/2017/2009/2009 (2001) ODFIL SRR GORN 2 2022/2017/2000/2020/2017/2009/2009 (2001) ODFIL SRR GORN 2 2022/2017/2000/2020/2017/2009/2009/2009/2009/2009/2009/2009/200	CS_OFFL_SIR_GOPN_2_20220726T214219_20220726T214356_C001			
CS_OFFL_SIR_GOPR_2_202207267109312_202217267100215_C011 CS_OFFL_SIR_GOPR_2_202207267109312_202217267100215_C011 CS_OFFL_SIR_GOPR_2_202207267109312_202217267100215_C011 CS_OFFL_SIR_GOPR_2_202207267104211_20221726710415_C011 CS_OFFL_SIR_GOPR_2_202207267104212_202217267104215_C011 CS_OFFL_SIR_GOPR_2_202207267104212_202217267104211_C011 CS_OFFL_SIR_GOPR_2_202207267104212_202217267104211_C011 CS_OFFL_SIR_GOPR_2_202207267104212_202217267104211_C011 CS_OFFL_SIR_GOPR_2_202207267104212_202217267104211_C011 CS_OFFL_SIR_GOPR_2_202207267104212_C01127104211_C011 CS_OFFL_SIR_GOPR_2	CS_OFFL_SIR_GOPN_2_20220726T222054_20220726T2222410_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_20220728T100910_2022728T10112_CD01 CS_OFFL_SIR_GOPR_2_20220728T100910_2022728T10112_CD01 CS_OFFL_SIR_GOPR_2_20220728T100910_2022728T10112_CD01 CS_OFFL_SIR_GOPR_2_20220728T100910_2022728T10112_CD01 CS_OFFL_SIR_GOPR_2_20220728T100910_2022728T10112_CD01 CS_OFFL_SIR_GOPR_2_20220728T100910_2022728T10112_CD01 CS_OFFL_SIR_GOPR_2_20220728T100910_2022728T10112_CD01 CS_OFFL_SIR_GOPR_2_20220728T100910_2022728T10112_CD01 CS_OFFL_SIR_GOPR_2_20220728T100910_2022728T10112_CD01 CS_OFFL_SIR_GOPR_2_20220728T100910_20227	CS_OFFL_SIR_GOPN_2_20220726T222923_20220726T223044_C001			
CS_OFFL_SIR_COPR_2_20220728T005503_02220728T00431_C0011 CS_OFFL_SIR_COPR_2_20220728T005503_02220728T00432_C0011 CS_OFFL_SIR_COPR_2_20220728T005503_02220728T00433_C0011 CS_OFFL_SIR_COPR_2_20220728T004331_02220728T00433_C0011 CS_OFFL_SIR_COPR_2_20220728T004331_02220728T00433_C0011 CS_OFFL_SIR_COPR_2_20220728T003737_02220728T00433_C0011 CS_OFFL_SIR_COPR_2_20220728T003737_02220728T00403_C0011 CS_OFFL_SIR_COPR_2_20220728T004043_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220728T004043_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004043_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004043_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004050_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_2_20220778T004053_02220728T004055_C0011 CS_OFFL_SIR_COPR_	CS_OFFL_SIR_GOPN_2_20220726T225041_20220726T225324_C001			
and Backscatter Quality PLBM. COCO. Altimoter Range and Backscatter Quality Plags, and Backscatter Quality Plags, and Backscatter Quality Plags, and Backscatter Quality Plags. And Backsc	CS_OFFL_SIR_GOPN_2_20220726T235811_20220727T000216_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_GOPR_2_20220726T02431_2022726T024332_CO11 CS_OFFL_SIR_GOPR_2_20220726T02432_20201 CS_OFFL_SIR_GOPR_2_20220726T02432_CO11 CS_OFFL_SIR_GOPR_2_20220726T024332_CO11 CS_OFFL_SIR_GOPR_2_20220726T024332_CO12 CS_OFFL_SIR_GOPR_2_20220726T02432_CO12 CS_OFFL_	CS_OFFL_SIR_GOPR_2_20220726T005950_20220726T010312_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
es official public publ	CS_OFFL_SIR_GOPR_2_20220726T014231_20220726T014815_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_20220728T032147_20220728T032837_C001 CS_OFFL_SIR_GOPR_2_20220728T040450_20220728T032837_C001 CS_OFFL_SIR_GOPR_2_20220728T040405_20220728T040601_C001 CS_OFFL_SIR_GOPR_2_20220728T040405_20220728T040601_C001 CS_OFFL_SIR_GOPR_2_20220728T050602_20220728T050655_C001 CS_OFFL_SIR_GOPR_2_20220728T050602_20220728T050655_C001 CS_OFFL_SIR_GOPR_2_20220728T050602_20220728T050655_C001 CS_OFFL_SIR_GOPR_2_20220728T050602_20220728T064817_C001 CS_OFFL_SIR_GOPR_2_20220728T0508339_20220728T064817_C001 CS_OFFL_SIR_GOPR_2_20220728T0508339_20220728T064817_C001 CS_OFFL_SIR_GOPR_2_20220728T073821_20220728T064817_C001 CS_OFFL_SIR_GOPR_2_20220728T073821_20220728T064817_C001 CS_OFFL_SIR_GOPR_2_20220728T073821_20220728T064817_C001 CS_OFFL_SIR_GOPR_2_20220728T073821_20220728T064817_C001 CS_OFFL_SIR_GOPR_2_20220728T0708226_20220728T060443_C001 CS_OFFL_SIR_GOPR_2_20220728T060226_20220728T060443_C001 CS_OFFL_SIR_GOPR_2_20220728T060326_20220728T060443_C001 CS_OFFL_SIR_GOPR_2_20220728T060326_20220728T060443_C001 CS_OFFL_SIR_GOPR_2_20220728T060326_20220728T060443_C001 CS_OFFL_SIR_GOPR_2_20220728T060326_20220728T060443_C001 CS_OFFL_SIR_GOPR_2_20220728T060326_20220728T060443_C001 CS_OFFL_SIR_GOPR_2_20220728T060326_2020728T060443_C001 CS_OFFL_SIR_GOPR_2_20220728T060326_2020728T060443_C001 CS_OFFL_SIR_GOPR_2_20220728T060326_2020728T060443_	CS_OFFL_SIR_GOPR_2_20220726T023752_20220726T024332_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have bee	
CS_OFFL_SIR_GOPR_2_20220726T092147_20220726T09061_C001 All meter Range and Backscatter Quality PLRM, CCG All meter Range, SSHA, SWH and Backscatter Quality PLRM, CCG All meter Range and Backscatt	CS_OFFL_SIR_GOPR_2_20220726T025720_20220726T025951_C001			
and Backscatter Quality PLRM, COCG Altimeter Range and Backscatter Quality PLRM, COCG Altimeter Range and Backscatter Quality PLRM, COCG Altimeter Range and Backscatter Quality Plags have been set for one or more records CS_OFFL_SIR_GOPR_2_20220726T050602_20220726T050919_C001 CS_OFFL_SIR_GOPR_2_20220726T050731_20220726T059919_C001 CS_OFFL_SIR_GOPR_2_20220726T050731_20220726T059919_C001 CS_OFFL_SIR_GOPR_2_20220726T050839_20220726T059919_C001 CS_OFFL_SIR_GOPR_2_20220726T063839_20220726T064817_C001 CS_OFFL_SIR_GOPR_2_20220726T07303_20220726T07431_C001 CS_OFFL_SIR_GOPR_2_20220726T07303_20220726T07431_C001 CS_OFFL_SIR_GOPR_2_20220726T07303_20220726T07431_C001 CS_OFFL_SIR_GOPR_2_20220726T07303_20220726T074431_C001 CS_OFFL_SIR_GOPR_2_20220726T07303_20220726T000443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T000443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T000443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T000443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T000443_C001 CS_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_C001 CS_OFFL_	CS_OFFL_SIR_GOPR_2_20220726T032147_20220726T032837_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
OCG Backscatter Quality CS_OFFL_SIR_GOPR_2_20220726T055731_20220726T055919_C001 CS_OFFL_SIR_GOPR_2_20220726T055731_20220726T055919_C001 CS_OFFL_SIR_GOPR_2_20220726T063839_20220726T064817_C001 CS_OFFL_SIR_GOPR_2_20220726T063839_20220726T064817_C001 CS_OFFL_SIR_GOPR_2_20220726T072303_20220726T072431_C001 CS_OFFL_SIR_GOPR_2_20220726T07303_20220726T072431_C001 CS_OFFL_SIR_GOPR_2_20220726T073821_20220726T073853_C001 CS_OFFL_SIR_GOPR_2_20220726T073821_20220726T073853_C001 CS_OFFL_SIR_GOPR_2_20220726T098226_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T09030_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T09030_2020726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T09030_202072	CS_OFFL_SIR_GOPR_2_20220726T040450_20220726T040601_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_20220726T055731_20220726T059919_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM ocog Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range a	CS_OFFL_SIR_GOPR_2_20220726T050602_20220726T050655_C001			
CS_OFFL_SIR_GOPR_2_20220726T063839_20220726T064817_C001 Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, 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, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter	CS_OFFL_SIR_GOPR_2_20220726T055731_20220726T055919_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
and Backscatter Quality PLRM, COG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPR_2_20220726T073621_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T090443_C001 CS_OFFL_SIR_GOPR_2_20220726T091512_20220726T091911_C001 CS_OFFL_SIR_GOPR_2_20220726T0404030_20220726T041412_C001 CS_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_C001 CS_OFFL_SIR_GOPR_2_20220726T122017_20220726T122431_C001 CS_OFFL_SIR_GOPR_2_20220726T13513_20220726T131940_C001 CS_OFFL_SI	CS_OFFL_SIR_GOPR_2_20220726T063839_20220726T064817_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
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_20220726T090226_20220726T090443_C001 Cs_OFFL_SIR_GOPR_2_20220726T091512_20220726T090443_C001 Cs_OFFL_SIR_GOPR_2_20220726T091512_20220726T091911_C001 Cs_OFFL_SIR_GOPR_2_20220726T091512_20220726T091911_C001 Cs_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_C001 Cs_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_C001 Cs_OFFL_SIR_GOPR_2_20220726T122017_20220726T104412_C001 Cs_OFFL_SIR_GOPR_2_20220726T122017_20220726T131940_C001 Cs_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 Cs_OFFL_SIR_GOPR_2_20220726T131513	CS_OFFL_SIR_GOPR_2_20220726T072303_20220726T072431_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_20220726T090226_20220726T090443_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPR_2_20220726T091512_20220726T091911_C001 CS_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_C001 CS_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_C001 CS_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_C001 CS_OFFL_SIR_GOPR_2_20220726T122017_20220726T122431_C001 CS_OFFL_SIR_GOPR_2_20220726T13513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726	CS_OFFL_SIR_GOPR_2_20220726T073621_20220726T073853_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_20220726T091512_20220726T091911_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_C001 CS_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_C001 CS_OFFL_SIR_GOPR_2_20220726T122017_20220726T122431_C001 CS_OFFL_SIR_GOPR_2_20220726T122017_20220726T122431_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T140430_C001 CS_OFFL_SIR_GOPR_2_20220726	CS_OFFL_SIR_GOPR_2_20220726T090226_20220726T090443_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_20220726T104030_20220726T104412_C001 and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM CS_OFFL_SIR_GOPR_2_20220726T122017_20220726T122431_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T140430_C001 CS_OFFL_SIR_GOPR	CS_OFFL_SIR_GOPR_2_20220726T091512_20220726T091911_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPR_2_20220726T122017_20220726T122431_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001 The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPR_2_20220726T104030_20220726T104412_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_20220726T131513_20220726T131940_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPR_2_20220726T122017_20220726T122431_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
and Backscatter Quality PLRM, OCOG and Humeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG and Humeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG and Humeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG	CS_OFFL_SIR_GOPR_2_20220726T131513_20220726T131940_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been	
Altimeter Range and Backscatter Quality PLRM Altimeter Range and Backscatter Quality PLRM And the OCOG Attimeter Range and Backscatter Quality PLRM and the OCOG Attimeter Range and Backscatter Quality PLRM	CS_OFFL_SIR_GOPR_2_20220726T135801_20220726T140430_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_20220726T153507_20220726T153604_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_20220726T160957_20220726T161609_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_20220726T161609_20220726T161846_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_20220726T163303_20220726T163909_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_20220726T164129_20220726T164206_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_20220726T165415_20220726T165537_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_20220726T172006_20220726T172149_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_20220726T173401_20220726T173534_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_20220726T181022_20220726T181253_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_20220726T181312_20220726T181408_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_20220726T185905_20220726T190128_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_20220726T191258_20220726T191456_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_20220726T194322_20220726T194410_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_20220726T203721_20220726T204116_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_20220726T205206_20220726T205349_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_20220726T211855_20220726T212006_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.

Number of products with errors:

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.

Number of products with errors: 143

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:

0

0

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.

6.3 P2P Auxiliary Data File Usage Check

6.4 P2P Auxiliary Correction Error 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:

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

Number of products with errors:

30

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20220725T231521_20220726T000459_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_20220726T000459_20220726T005435_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T005435_20220726T014413_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T014413_20220726T023350_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T023350_20220726T032328_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T032328_20220726T041305_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T041305_20220726T050243_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T050243_20220726T055219_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T055219_20220726T064158_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T064158_20220726T073134_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T073134_20220726T082112_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T082112_20220726T091049_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T091049_20220726T100027_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T100027_20220726T105004_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T105004_20220726T113942_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T113942_20220726T122918_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T122918_20220726T131856_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T131856_20220726T140833_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_220220726T140833_20220726T145811_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T145811_20220726T154748_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_220220726T154748_20220726T163726_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T163726_20220726T172702_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T172702_20220726T181641_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T181641_20220726T190617_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T190617_20220726T195555_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T195555_20220726T204532_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T204532_20220726T213510_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T213510_20220726T2222447_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220726T222447_20220726T231425_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220726T231425_20220727T000401_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

6.5 P2P Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description	
CS_OFFL_SIR_GOP_2_20220726T041305_20220726T050243_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records	
CS_OFFL_SIR_GOP_2_20220726T064158_20220726T073134_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records	
CS_OFFL_SIR_GOP_220220726T122918_20220726T131856_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more record	
CS_OFFL_SIR_GOP_220220726T140833_20220726T145811_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records	

6.6 P2P Measurement Quality Flag Check

P2P Quality Flags (20 Hz)

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

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

Number of products with errors: 29

P2P Quality Flags (20 Hz PLRM)

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

Number of products with errors: 29

P2P Quality Flags (1 Hz & 1 Hz PLRM)

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

Number of products with errors: 30

6.8 P2P Ocean Retracking Quality Check

P2P Retracking Flags (20 Hz)

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

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

Number of products with errors: 2

P2P Retracking Flags PLRM

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

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

Number of products with errors: 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	156	156	6	150	0
SIR_GOPR1B	104	104	0	104	0
SIR_GOPN1B	106	106	1	105	0
SIR_GOPM_2	156	156	104	52	0
SIR_GOPR_2	104	104	19	85	0
SIR_GOPN_2	106	106	40	66	0
SIR GOP P2P	29	29	0	29	0

7.1 QCC Errors

Number of QCC reports with warnings

2286

Total number of occurrences of each warning

	rotal number of occurrences of each warming						
Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_GOPM1B	150	0	0	0	0	0	0
SIR_GOPM_2	0	38	34	0	36	0	28
SIR_GOPN1B	105	0	0	0	0	0	0
SIR_GOPN_2	0	12	36	3	28	28	18
SIR_GOPR1B	103	0	0	0	0	0	0
SIR_GOPR_2	0	34	43	0	36	35	19

Product Type	RLPTONCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCD	RPEPOPFDPLRMSINNCDI	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	6	1	34	0	0	0	0
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	36	0	0	0	29	0	36
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	42	3	0	52	0	55	0

	Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
	SIR_GOPM1B	0	0	0	0	0	0	0
	SIR_GOPM_2	27	0	0	3	26	0	2
- 1	SIR_GOPN1B	0	0	0	0	0	0	0
	SIR_GOPN_2	0	0	33	17	44	58	34
- 1	SIR_GOPR1B	0	0	0	0	0	0	0
	SIR GOPR 2	0	47	n	4	66	48	11

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	Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
	SIR_GOPM1B	0	0	0	0	0	0	
	SIR_GOPM_2	31	0	1	0	0	0	
	SIR_GOPN1B	0	0	0	0	47	1	
	SIR_GOPN_2	29	30	17	4	0	0	
	SIR_GOPR1B	0	0	0	0	104	2	
	SIR GOPR 2	35	47	4	0	0	0	

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_GOP_2_	16	29	29	2	29		29

Product Type	RLPTONCDF	RNELPOTONCDF	RPEPOPFDPLRMSINNCDF	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF
SIR_GOP_2_	29	3	17	29	23	18	29

Product Type	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-
SIR_GOP_2_	18	25	29	19	14	29	

		•			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	MissingValueIntOceanExcludingPolarF	The value should not be a 'n	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees						
MVIOEPNCDF	MissingValueIntOceanExcludingPolarN	The value should not be a 'n	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 'n	The value should not be a 'missing value' for surface type 0 only						
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOcea		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	RangeBackscatterSigmaZeroOPOcea	nExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latit between -70 and 70 degrees						
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOcea	nExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for lati between -70 and 70 degrees						
RLPTONCDF	RangeLongPeriodTideOceanNetCDF		The Long period tide height	should be between -50mm ar	nd 50mm (or missing) for surfa	ace type = ocean			
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	:	The Non-equilibrium long pe surface type = ocean	riod ocean loading tide height	t should be between -40mm ar	nd 40mm (or missing) for			
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD	2LRMNetCDF	The Peakiness should be be 70 degrees	tween 0 and 6400 (or missing	g) for surface type = ocean for	latitudes between -70 and			
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD	2PLRMSARNetCDF	The Peakiness should be be 70 degrees	tween 0 and 15000 (or missi	ng) for surface type = ocean fo	or latitudes between -70 and			
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD	2PLRMSINNetCDF	The Peakiness should be be 70 degrees	tween 0 and 90000 (or missir	ng) for surface type = ocean fo	or latitudes between -70 and			
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD	2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees						
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD	2SINNetCDF	The Peakiness should be be 70 degrees	· ·					
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLR	MNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees						
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSA	RNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees						
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSIN	NNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees						
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanf	NetCDF	The sea state bias correction	n should be between -500mm	0mm and 0mm (or missing) for surface type = ocean				
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOce	anFD3NetCDF	The sea surface height anor	naly should be between -3000	0mm and 3000mm (or missing) for surface type = ocean			
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOce	anFD3PLRMNetCDF	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	RangeSignificantWaveHeightOceanEx	ccludingPolarFD2NetCDF	The significant wave height slatitudes between -70 and 7		15000mm (or missing) for sur	face type = ocean for			
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanEx	ccludingPolarFD2PLRMNetCDF	The significant wave height slatitudes between -70 and 70		15000mm (or missing) for sur	face type = ocean for			
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	SameOrOneHigher1HzIndexFor20HzI	Data	The 1 Hz index of a 20 Hz s	ample should be the same or	1 higher than its previous sam	ple			
SCSTODHRNCDF	SequenceCounterStepTODHRNetCD	F	The sequence counter should	d be modulo 4 higher with req	gard to the previous sequence	counter			
SCSTODNCDF	SequenceCounterStepTODNetCDF		The sequence counter should	d be one higher (modulo 163	84) with regard to the previous	s sequence counter			

7.3 Missing QCC Reports

Number of products with missing QCC reports:

4