

1. Overview

Report Production:	22-Mar-2023
Processor Used:	CryoSat Ocean Processor
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data

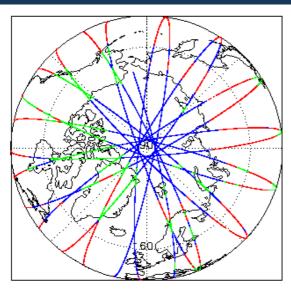
We would love to hear from you!

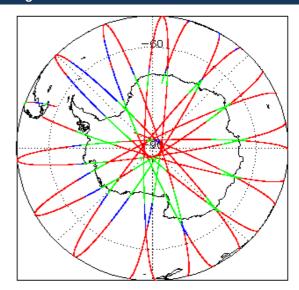
Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to cs2_qc_team@telespazio.com

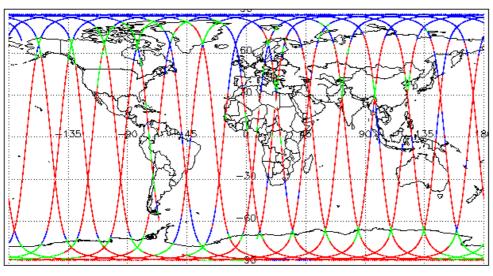
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary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

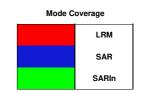
Mission / Instrument News		
18-Feb-2023	None	
19-Feb-2023	None	
20-Feb-2023	Nothing planned	

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

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

4.2 L1B Product Header Analysis

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

L1B Processing Quality HR: The I1b_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.

Number of products with errors:

C

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

0

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:

0

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:

9

Product	Test Failed	Description
CS_OFFL_SIR_GOPN1B_20230219T032613_20230219T033052_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20230219T123448_20230219T123613_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20230219T155054_20230219T155246_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20230219T031128_20230219T031622_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20230219T043651_20230219T043852_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20230219T050913_20230219T051335_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20230219T112445_20230219T112523_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20230219T163021_20230219T163429_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20230219T195351_20230219T200238_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:

0

5.2 L2 Product Header Analysis

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

Number of products with errors:

0

5.3 L2 Auxiliary Data File Usage Check

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:

0

5.4 L2 Auxiliary Correction Error Check

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

Currently, there are some common auxiliary correction errors raised in the Level 2 products 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:

52

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20230219T083647_20230219T090521_C001	IMean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20230219T200238_20230219T200347_C001	Topography (1), Total Geocentric Ocean	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20230219T004946_20230219T005106_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

CS_OFFL_SIR_GOPN_2_20230219T005615_20230219T005926_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_20230219T023038_20230219T023319_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T023520_20230219T024050_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T032613_20230219T033052_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_20230219T040953_20230219T041229_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T050517_20230219T050626_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T050737_20230219T050912_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_20230219T064435_20230219T065026_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T072722_20230219T072911_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_20230219T073723_20230219T073946_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_20230219T082447_20230219T082857_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_20230219T100645_20230219T101105_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20230219T104658_20230219T105031_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T122615_20230219T122936_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T123448_20230219T123613_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_20230219T131701_20230219T131820_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T141351_20230219T141500_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_20230219T145622_20230219T145731_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T155054_20230219T155246_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T163429_20230219T163646_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T181016_20230219T181528_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_20230219T190001_20230219T190252_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_20230219T190913_20230219T191216_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_20230219T195007_20230219T195351_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_20230219T212527_20230219T213044_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20230219T214004_20230219T214131_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_20230219T235905_20230220T000030_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_20230218T235914_20230219T000710_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T000710_20230219T000833_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T013914_20230219T014610_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T014610_20230219T015033_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T032045_20230219T032503_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T032503_20230219T032612_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T045840_20230219T050158_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T050158_20230219T050517_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_20230219T063811_20230219T064435_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T081958_20230219T082446_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T095650_20230219T100645_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T113647_20230219T114541_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T131821_20230219T132536_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T145731_20230219T150444_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T161214_20230219T161319_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_20230219T163647_20230219T164348_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T181528_20230219T182134_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T182139_20230219T182245_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPR_2_20230219T195351_20230219T200238_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T213044_20230219T213822_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T231016_20230219T231643_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T231643_20230219T231949_C001	Mean Sea Surface (1), Mean Dynamic Topography (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:

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.

Number of products with errors:

87

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20230219T001029_20230219T001128_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have beer set for one or more records
CS_OFFL_SIR_GOPM_2_20230219T002951_20230219T004920_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have beer set for one or more records
CS_OFFL_SIR_GOPM_2_20230219T005106_20230219T005615_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_20230219T010131_20230219T013621_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have beer set for one or more records
CS_OFFL_SIR_GOPM_2_20230219T020054_20230219T020514_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have beer set for one or more records
CS_OFFL_SIR_GOPM_2_20230219T020610_20230219T022347_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have beer set for one or more records
CS_OFFL_SIR_GOPM_2_20230219T022648_20230219T022747_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have beer set for one or more records

CS_OFFL_SIR_GOPM_2_20230219T023319_20230219T023519_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_20230219T024208_20230219T025801_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_20230219T030422_20230219T031128_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_20230219T031623_20230219T031701_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_20230219T033125_20230219T034915_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_20230219T035037_20230219T040430_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_20230219T041229_20230219T041430_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_20230219T042112_20230219T043651_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_20230219T043852_20230219T044816_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_20230219T045404_20230219T045406_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_20230219T050626_20230219T050737_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_20230219T051608_20230219T052717_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_20230219T054323_20230219T054722_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_20230219T055036_20230219T055835_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_20230219T060024_20230219T061558_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_20230219T063303_20230219T063304_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_20230219T065253_20230219T070217_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_20230219T070232_20230219T072644_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_20230219T072911_20230219T073120_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_20230219T073146_20230219T073723_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_20230219T073946_20230219T080513_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_20230219T083647_20230219T090521_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_20230219T091121_20230219T091556_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_20230219T091838_20230219T094548_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_20230219T094550_20230219T094648_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_20230219T095616_20230219T095650_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_20230219T101106_20230219T104431_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_20230219T105032_20230219T105605_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_20230219T105731_20230219T110352_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_20230219T113502_20230219T113646_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_20230219T115009_20230219T122421_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_20230219T122936_20230219T123448_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_20230219T123627_20230219T125632_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_20230219T125953_20230219T130446_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_20230219T132814_20230219T134904_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_20230219T135014_20230219T140212_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_20230219T140608_20230219T140936_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_20230219T140953_20230219T141351_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_20230219T141546_20230219T144454_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_20230219T144511_20230219T145215_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_20230219T145343_20230219T145621_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_20230219T151130_20230219T151914_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_20230219T152537_20230219T154137_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_20230219T154317_20230219T154836_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_20230219T155922_20230219T161214_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_20230219T161428_20230219T162615_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_20230219T162916_20230219T163021_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_20230219T164404_20230219T164406_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_20230219T164656_20230219T164726_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_20230219T170555_20230219T172056_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_20230219T172244_20230219T172748_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_20230219T172812_20230219T172927_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_20230219T173619_20230219T173717_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_20230219T174529_20230219T174809_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_20230219T175530_20230219T175807_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_20230219T175930_20230219T180629_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_20230219T183714_20230219T184029_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_20230219T184222_20230219T190001_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_20230219T190252_20230219T190705_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_20230219T191309_20230219T193842_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_20230219T201356_20230219T203941_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_20230219T204056_20230219T204620_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_20230219T204626_20230219T204951_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_20230219T205217_20230219T212526_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_20230219T214932_20230219T221126_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_20230219T221241_20230219T221917_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_20230219T222052_20230219T222900_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_20230219T223125_20230219T230626_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_20230219T234953_20230219T235853_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_20230219T032015_20230219T032044_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_20230219T050517_20230219T050626_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_20230219T073120_20230219T073146_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_20230219T100645_20230219T101105_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_20230219T114541_20230219T114723_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:

86

Product	Test Failed	Description	
	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records	

Does Affirmed Pages 2 20000017000404 20000017000404 (2000 17000040 2000017000404 20000017000404	CS_OFFL_SIR_GOPN_2_20230219T001733_20230219T001810_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
Sep CPFL_SIR_COMPL_2_0230019T03405_2003019T03305_0301 SEP CPFL_SIR_COMPL_2_0230019T03405_03010703305_0301 SEP CPFL_SIR_COMPL_2_0230019T03405_03010703305_0301 SEP CPFL_SIR_COMPL_2_0230019T03405_03010703305_0301 SEP CPFL_SIR_COMPL_2_0230019T03405_03010703305_0301 SEP CPFL_SIR_COMPL_2_0230019T03405_03010703305_03010703305_0301070305_0301	CS_OFFL_SIR_GOPN_2_20230219T004946_20230219T005106_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
DOOR Administred Residence (Surkey)	CS_OFFL_SIR_GOPN_2_20230219T023038_20230219T023319_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SR_GOPN_2_20202219T06504_20202219T0650924_C081 CS_OFFL_SR_GOPN_2_20202219T06504_202020219T0650924_C081 CS_OFFL_SR_GOPN_2_20202219T064092_20202219T0650924_C081 CS_OFFL_SR_GOPN_2_20202219T064092_20202219T0650924_C081 CS_OFFL_SR_GOPN_2_20202219T064092_20202219T0650924_C081 CS_OFFL_SR_GOPN_2_20202219T064092_20202219T0650924_C081 CS_OFFL_SR_GOPN_2_20202219T064092_20202219T06109294_C081 CS_OFFL_SR_GOPN_2_20202219T064092_20202219T064092_2020219T064092_20202219T064092_20202219T064092_20202219	CS_OFFL_SIR_GOPN_2_20230219T032613_20230219T033052_C001		
DOCA Basecatine Cashly CS. OFFL. SR. GOPN 2. 20202219108994_2020219108990_C081 All reads Farger Services (Assessment Cashly Farger Services) CS. OFFL. SR. GOPN 2. 20202219108994_2020219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108994_2020219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108994_2020219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108999_2020219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108999_2020219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108999_2020219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108990_2020219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108990_2020219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108990_2020219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108990_C0820191079911_C081 CS. OFFL. SR. GOPN 2. 20202219108990_C0820191079911_C081 CS. OFFL. SR. GOPN 2. 20202219108990_C0820191079911_C081 CS. OFFL. SR. GOPN 2. 20202219108994_20202219108990_C081 CS. OFFL. SR. GOPN 2. 20202219108994_20202219108950_C081 CS. OFFL. SR. GOPN 2. 202022191089950_C081111080_C081 CS. OFFL. SR. GOPN 2. 202022191089950_C081111080_C081 CS. OFFL. SR. GOPN 2. 202022191089950_C081111080_C081 CS. OF	CS_OFFL_SIR_GOPN_2_20230219T041430_20230219T041538_C001		
Seg. OFFL. SRI. GOPN. 2. 2022/21971002912 (2022) Seg. OFFL. SRI. GOPN. 2. 2022/2197100292 (2022) Seg. OFFL. SRI. GOPN. 2. 2022/2197100292 (2022) Seg. OFFL. SRI. GOPN. 2. 2022/2197100292 (2022) Seg. OFFL. SRI. GOPN. 2. 2022/2197100429 (2022) Seg. OFFL. SRI. GOPN. 2. 2022/219710044 (2022) Seg. OFFL. SRI. GOPN. 2. 2022/219710149 (2022) Seg. OFFL. SRI. GOPN. 2. 2022/21971014	CS_OFFL_SIR_GOPN_2_20230219T044816_20230219T045106_C001		
SO OFFL SIR GOPN 2 2020219709339 2020219709395 COOK Almeter Range Coulty PLIN. COOK Almeter Range SSA SWA SWA and Exclosurate Coulty Plags have been set for one or more conductive control of the cook and the cook	CS_OFFL_SIR_GOPN_2_20230219T050737_20230219T050912_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCOS Backscatter Caulty The Cozen Altimeter Range SSIA, SWH and Backscatter Qualty Flags have been set for one or necessors. OCS OFFL SIR, GOPN 2 20202019T072122 20202019T072141, C001 OCOS Altimeter Range and Backscatter Qualty Flags have been set for one or necessors. OCS Altimeter Range and Backscatter Qualty Flags have been set for one or necessors. OCS Backscatter Caulty The COCO Range and Backscatter Qualty Flags have been set for one or necessors. OCS Backscatter Caulty OCS OFFL SIR, GOPN 2 20202019T081904 20202019T081964, 20202019T081964, 20202019T081964, 20202019T081964, 20202019T081964, 20202019T081964, 20202019T081964, 20202019T081964, 20202019T082967, C001 OCS OFFL SIR, GOPN 2 20202019T081964, 20202019T082967, C001 OCS OFFL SIR, GOPN 2 20202019T082967, 20202019T081930, C001 OCS OFFL SIR, GOPN 2 20202019T082967, 20202019T081930, C001 OCS OFFL SIR, GOPN 2 20202019T081930, C001 OCS OFFL SIR, GOPN 2 20202019T081930, C001 OCS OFFL SIR, GOPN 2 20202019T091930, C001 OCS OFFL SIR, GOPN 3 20202019T114941, C0202019T114920, C001 OCS OFFL SIR, GOPN 3 20202019T0912290, C001 OCS OFFL SIR, GOPN 3 20202019T0912290, C001 OCS OFFL SIR, GOPN 3 20202019T0912290, C001 OCS OFFL SIR, GOPN 3 20202019T114941, C0202019T114920, C001 OCS OF	CS_OFFL_SIR_GOPN_2_20230219T055934_20230219T060024_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and deadoceater Cuality PLIM. COOS Alternater Range Quality PLIM. CS. OFFL SIR, OOPN 2, 20200219T072722, 20202219T072141, CO01 CS. OFFL SIR, OOPN 2, 20200219T072722, 20202219T073146, CO01 CS. OFFL SIR, OOPN 2, 20200219T073142, 20202219T073146, CO01 CS. OFFL SIR, OOPN 2, 20200219T073142, 20202219T073146, CO01 CS. OFFL SIR, OOPN 2, 20200219T081904, 20202219T081905, CO01 CS. OFFL SIR, OOPN 2, 20200219T081904, 20202219T081905, CO01 CS. OFFL SIR, OOPN 2, 20200219T081904, 20202219T081905, CO01 CS. OFFL SIR, OOPN 2, 20200219T081904, 20202219T082807, CO01 CS. OFFL SIR, OOPN 2, 20200219T081904, 20202219T082807, CO01 CS. OFFL SIR, OOPN 2, 20200219T081904, 20202219T082807, CO01 CS. OFFL SIR, OOPN 2, 20200219T081904, 20202219T083047, CO01 CS. OFFL SIR, OOPN 2, 20200219T081904, 20202219T091905, CO01 CS. OFFL SIR, OOPN 2, 20200219T082047, 20202219T091905, CO01 CS. OFFL SIR, OOPN 2, 20200219T080904, 20202219T091905, CO01 CS. OFFL SIR, OOPN 2, 20200219T080904, 20202219T091905, CO01 CS. OFFL SIR, OOPN 2, 20202219T091905, 20202219T091905, CO01 CS. OFFL SIR, OOPN 2, 20202219T11200, 20202219T11200, CO01 CS. OFFL SIR, OOPN 2, 20202219T11200, 20202219T	CS_OFFL_SIR_GOPN_2_20230219T062539_20230219T062925_C001		
CS_OFFL_SIR_GOPN_2_20230219708124_20230219708198_O01 CS_OFFL_SIR_GOPN_2_202302197081924_20230219708198_O01 CS_OFFL_SIR_GOPN_2_20230219708247_20230219708198_O01 CS_OFFL_SIR_GOPN_2_20230219708247_202302197082857_O01 CS_OFFL_SIR_GOPN_2_20230219708247_202302197082857_O01 CS_OFFL_SIR_GOPN_2_20230219708247_202302197082857_O01 CS_OFFL_SIR_GOPN_2_20230219708247_202302197082857_O01 CS_OFFL_SIR_GOPN_2_20230219708221_202302197082857_O01 CS_OFFL_SIR_GOPN_2_20230219708221_202302197082857_O01 CS_OFFL_SIR_GOPN_2_20230219708221_202302197083647_O01 CS_OFFL_SIR_GOPN_2_20230219708221_20230219708193_O01 CS_OFFL_SIR_GOPN_2_20230219708194_20230219708193_O01 CS_OFFL_SIR_GOPN_2_202302197081715_20230219708183_O01 CS_OFFL_SIR_GOPN_2_202302197111412_202302197111580_O01 CS_OFFL_SIR_GOPN_2_202302197111412_202302197111580_O01 CCCG_Allimeter Range_Quality PLRM. CCCG_Allimeter Range Guality PLRM	CS_OFFL_SIR_GOPN_2_20230219T064435_20230219T065026_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCOG Backscatter Quality CS_OFFL_SIR_GOPN_2_202302197081924_202302197081982_C001 OCOG Allimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_20230219708247_20230219708287_C001 OCOG Allimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_20230219708221_20230219708287_C001 OCOG Allimeter Range Cuality PLRM. OCOG Allimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_202302197083221_202302197083647_C001 OCOG Allimeter Range Quality PLRM. OCOG Backscatter Qu	CS_OFFL_SIR_GOPN_2_20230219T072722_20230219T072911_C001		
CS_OFFL_SIR_GOPN_2_20230219T081924_20230219T082857_C001 CS_OFFL_SIR_GOPN_2_20230219T08247_20230219T082857_C001 CS_OFFL_SIR_GOPN_2_20230219T08247_20230219T082857_C001 CS_OFFL_SIR_GOPN_2_20230219T083221_20230219T083647_C001 CS_OFFL_SIR_GOPN_2_20230219T083221_20230219T083647_C001 CS_OFFL_SIR_GOPN_2_20230219T083221_20230219T083647_C001 CS_OFFL_SIR_GOPN_2_20230219T0803221_20230219T083647_C001 CS_OFFL_SIR_GOPN_2_20230219T0803221_20230219T083647_C001 CS_OFFL_SIR_GOPN_2_20230219T0803221_20230219T091838_C001 CS_OFFL_SIR_GOPN_2_20230219T11412_20230219T091838_C001 CS_OFFL_SIR_GOPN_2_20230219T11412_20230219T111556_C001 CS_OFFL_SIR_GOPN_2_20230219T11412_20230219T1112820_C001 CS_OFFL_SIR_GOPN_2_20230219T11412_20230219T1112820_C001 CS_OFFL_SIR_GOPN_2_20230219T114288_20230219T114230_C001 CS_OFFL_SIR_GOPN_2_20230219T114288_20230219T114230_C001 CS_OFFL_SIR_GOPN_2_20230219T114041_20230219T114723_C001 CS_OFFL_SIR_GOPN_2_20230219T114641_20230219T114723_C001 CS_OFFL_SIR_GOPN_2_20230219T114641_20230219T114723_C001 CS_OFFL_SIR_GOPN_2_20230219T14641_20230219T114723_C001 CS_OFFL_SIR_GOPN_2_20230219T14641_20230219T114723_C001 CS_OFFL_SIR_GOPN_2_20230219T14641_20230219T114723_C001 CS_OFFL_SIR_GOPN_2_20230219T14641_20230219T14723_C001 CS_OFFL_SIR_GOPN_2_20230219T14641_20230219T147239_C001 CS_OFFL_SIR_GOPN_2_20230219T14642_20230219T146688_C001 CS_OFFL_SIR_GOPN_2_20230219T146682_20230219T146688_C001 CCG_OFFL_SIR_GOPN_2_20230219T146682_20230219T146688_C001 CCG_OFFL_SIR_GOPN_2_20230219T146682_20230219T146688_C001 CCG_OFFL_SIR_GOPN_2_20230219T146682_20230219T146688_C001 CCG_OFFL_SIR_GOPN_2_20230219T146682_20230219T146688_C001 CCG_OFFL_SIR_GOPN_2_20230219T146682_20230219T146688_C001 CCG_OFFL_SIR_GOPN_2_20230219T146682_20230219T146688_C001 CCG_OFFL_SIR_GOPN_2_20230219T146682_20230219T146688_C001 CCG_OFFL_SIR_GOPN_2_20230219T146682_20230219T146688_C001 CCG_OFFL_SIR_GOPN_2_20230219T146682_20230219T165684_C001 CCG_OFFL_SIR_GOPN_2_20230219T165684_20230219T165684_C001 CCG_OFFL_SIR_GOPN_2_20230219T165684_20230219T1656	CS_OFFL_SIR_GOPN_2_20230219T073120_20230219T073146_C001		
CS_OFFL_SIR_GOPN_2_20230219T083247_20230219T082857_C001 CS_OFFL_SIR_GOPN_2_20230219T083221_20230219T083647_C001 CS_OFFL_SIR_GOPN_2_20230219T083221_20230219T083647_C001 CS_OFFL_SIR_GOPN_2_20230219T083221_20230219T091121_C001 CS_OFFL_SIR_GOPN_2_20230219T080942_20230219T091121_C001 CS_OFFL_SIR_GOPN_2_20230219T091715_20230219T091838_C001 CS_OFFL_SIR_GOPN_2_20230219T091715_20230219T091838_C001 CS_OFFL_SIR_GOPN_2_20230219T111412_20230219T111558_C001 CS_OFFL_SIR_GOPN_2_20230219T111412_20230219T111588_C001 CS_OFFL_SIR_GOPN_2_20230219T11442_20230219T112800_C001 CS_OFFL_SIR_GOPN_2_20230219T114641_20230219T11420_C001 CS_OFFL_SIR_GOPN_2_20230219T114641_20230219T11420_C001 CS_OFFL_SIR_GOPN_2_20230219T112806_20230219T112800_C001 CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112800_C001 CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112800_C001 CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112800_C001 CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112800_C001 CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112800_C001 CS_OFFL_SIR_GOPN_2_20230219T112815_20230219T112800_C001 CS_OFFL_SIR_GOPN_2_20230219T112815_20230219T112800_C001 CS_OFFL_SIR_GOPN_2_20230219T112815_20230219T112800_C001 CCS_OFFL_SIR_GOPN_2_20230219T112815_20230219T112800_C001 CCS_OFFL_SIR_GOPN_2_20230219T128632_20230219T128963_C001 CCG_Allimeter Range_Quality PLRM. CCGG Backscatter Quality The OCGG Range and Backscatter Quality Flags have been set for one or more records The OCGG Range and Backscatter Quality Flags have been set for one or more records The OCGG Range and Backscatter Quality Flags have been set for one or more records The OCGG Range and Backscatter Quality Flags have been set for one or more records The OCGG Range and Backscatter Quality Flags have been set for one or more records The OCGG Range and Backscatter Quality Flags have been set for one or more records The OCGG Range and Backscatter Quality Flags have been set for one or more records The OCGG Range and Backscatter Quality Flags have been set for one or more records The	CS_OFFL_SIR_GOPN_2_20230219T081924_20230219T081958_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCOG Backscatter Quality CS_OFFL_SIR_GOPN_2_20230219T09042_20230219T091121_C001 OCOG Altimeter Range Quality PLRM. OCOG Bange and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPN_2_20230219T082447_20230219T082857_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCOG Backscatter Quality PLRM.	CS_OFFL_SIR_GOPN_2_20230219T083221_20230219T083647_C001		
OCOG Backscatter Quality PLRM, DCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112820_C001 CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112820_C001 CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112820_C001 CS_OFFL_SIR_GOPN_2_20230219T114541_20230219T114723_C001 CS_OFFL_SIR_GOPN_2_20230219T114541_20230219T114723_C001 CS_OFFL_SIR_GOPN_2_20230219T122615_20230219T1122306_C001 CS_OFFL_SIR_GOPN_2_20230219T122615_20230219T122306_C001 CS_OFFL_SIR_GOPN_2_20230219T122615_20230219T122936_C001 CS_OFFL_SIR_GOPN_2_20230219T125632_20230219T125953_C001 CS_OFFL_SIR_GOPN_2_20230219T125632_20230219T125953_C001 CS_OFFL_SIR_GOPN_2_20230219T140328_20230219T140608_C001 CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001 CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001 CCG_Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backsca	CS_OFFL_SIR_GOPN_2_20230219T090942_20230219T091121_C001		
OCOG Backscatter Quality PLRM. CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112820_C001 OCOG Altimeter Range Quality PLRM. OCOG Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPN_2_20230219T091715_20230219T091838_C001		
CS_OFFL_SIR_GOPN_2_20230219T112615_20230219T114541_20230219T114723_C001 CS_OFFL_SIR_GOPN_2_20230219T126615_20230219T122936_C001 CS_OFFL_SIR_GOPN_2_20230219T126615_20230219T125953_C001 CS_OFFL_SIR_GOPN_2_20230219T125632_20230219T125953_C001 CS_OFFL_SIR_GOPN_2_20230219T125632_20230219T125953_C001 CS_OFFL_SIR_GOPN_2_20230219T125632_20230219T140608_C001 CS_OFFL_SIR_GOPN_2_20230219T140328_20230219T140608_C001 CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001 CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001 CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 CCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001 CCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records CCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPN_2_20230219T111412_20230219T111558_C001		
CS_OFFL_SIR_GOPN_2_20230219T122615_20230219T122936_C001 CS_OFFL_SIR_GOPN_2_20230219T122615_20230219T122936_C001 CS_OFFL_SIR_GOPN_2_20230219T125632_20230219T125953_C001 CS_OFFL_SIR_GOPN_2_20230219T125632_20230219T125953_C001 CS_OFFL_SIR_GOPN_2_20230219T140328_20230219T140608_C001 CS_OFFL_SIR_GOPN_2_20230219T140328_20230219T140608_C001 CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001 CS_OFFL_SIR_GOPN_2_20230219T163649_20230219T163646_C001 CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 CCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 CCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records CCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPN_2_20230219T112808_20230219T112820_C001		
CS_OFFL_SIR_GOPN_2_20230219T125632_20230219T125953_C001 OCOG Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_20230219T140328_20230219T140608_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_20230219T140328_20230219T140608_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPN_2_20230219T114541_20230219T114723_C001		
CS_OFFL_SIR_GOPN_2_20230219T125932_20230219T140608_C001 CS_OFFL_SIR_GOPN_2_20230219T140328_20230219T140608_C001 CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001 CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001 CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001 CS_OFFL_SIR_GOPN_2_20230219T165010_20230219T165640_C001 CS_OFFL_SIR_GOPN_2_20230219T165010_20230219T165640_C001 CS_OFFL_SIR_GOPN_3_20230219T165010_20230219T165640_C001 CS_OFFL_SIR_GOPN_3_20230219T165010_20230219T165640_C001 CS_OFFL_SIR_GOPN_3_20230219T165010_20230219T165640_C001 CS_OFFL_SIR_GOPN_3_20230219T165010_20230219T165640_C001 CS_OFFL_SIR_GOPN_3_20230219T165010_20230219T165640_C001 CS_OFFL_SIR_GOPN_3_20230219T165010_20230219T165640_C001 CS_OFFL_SIR_GOPN_3_20230219T165010_20230219T165640_C001 CS_OFFL_SIR_GOPN_3_20230219T165010_20	CS_OFFL_SIR_GOPN_2_20230219T122615_20230219T122936_C001		
CS_OFFL_SIR_GOPN_2_20230219T140326_20230219T140006_C001 OCOG Backscatter Quality OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPN_2_20230219T125632_20230219T125953_C001		
CS_OFFL_SIR_GOPN_2_20230219T135094_20230219T135246_C001 OCOG Backscatter Quality OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPN_2_20230219T140328_20230219T140608_C001		
OCOG Backscatter Quality OCOG Rackscatter Quality more records OCOG Range and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_GOPN_2_20230219T155054_20230219T155246_C001		
	CS_OFFL_SIR_GOPN_2_20230219T163429_20230219T163646_C001		
	CS_OFFL_SIR_GOPN_2_20230219T165019_20230219T165349_C001		

CS_OFFL_SIR_GOPN_2_20230219T173735_20230219T173808_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_20230219T174219_20230219T174529_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_20230219T174809_20230219T175342_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_20230219T180641_20230219T180804_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_20230219T181016_20230219T181528_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_20230219T194803_20230219T194925_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_20230219T200347_20230219T200509_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_20230219T200945_20230219T201356_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_20230219T212527_20230219T213044_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_20230219T213822_20230219T213846_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_20230219T230627_20230219T230758_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_20230219T232216_20230219T232339_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_20230219T235905_20230220T000030_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_20230218T235914_20230219T000710_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_20230219T001249_20230219T001608_C001	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_20230219T013914_20230219T014610_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_20230219T014610_20230219T015033_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_20230219T022747_20230219T023038_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_20230219T031128_20230219T031622_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_20230219T032045_20230219T032503_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_20230219T032503_20230219T032612_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_20230219T040430_20230219T040953_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_20230219T043651_20230219T043852_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_20230219T045840_20230219T050158_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_20230219T050158_20230219T050517_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_20230219T050913_20230219T051335_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_20230219T061803_20230219T062024_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T062329_20230219T062412_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T063811_20230219T064435_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 Quali and the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T072644_20230219T072722_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 and the OCOG Altimeter Range and Backscatter Quality Flags has to one or more records
CS_OFFL_SIR_GOPR_2_20230219T081552_20230219T081810_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 Quali and the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T095355_20230219T095616_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T095650_20230219T100645_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 and the OCOG Altimeter Range and Backscatter Quality Flags has to one or more records
CS_OFFL_SIR_GOPR_2_20230219T104432_20230219T104658_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 Quali and the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T112445_20230219T112523_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 and the OCOG Altimeter Range and Backscatter Quality Flags have for one or more records
CS_OFFL_SIR_GOPR_2_20230219T113044_20230219T113356_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T113647_20230219T114541_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 Qualiand the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T114723_20230219T114835_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T130511_20230219T130518_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T130659_20230219T131007_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T131007_20230219T131701_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 Quali and the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T131821_20230219T132536_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 and the OCOG Altimeter Range and Backscatter Quality Flags has to one or more records
CS_OFFL_SIR_GOPR_2_20230219T132538_20230219T132555_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T132629_20230219T132814_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T145731_20230219T150444_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 and the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T155247_20230219T155922_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 Quali and the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T163021_20230219T163429_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 Quali and the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T163647_20230219T164348_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 Qualiand the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T173717_20230219T173734_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 and the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T175502_20230219T175529_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set more records
CS_OFFL_SIR_GOPR_2_20230219T180804_20230219T181016_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 Quali and the OCOG Altimeter Range and Backscatter Quality Flags has set for one or more records
CS_OFFL_SIR_GOPR_2_20230219T181528_20230219T182134_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 Quali and the OCOG Altimeter Range and Backscatter Quality Flags ha set for one or more records

CS_OFFL_SIR_GOPR_2_20230219T182139_20230219T182245_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_20230219T183623_20230219T183713_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_20230219T213044_20230219T213822_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_20230219T214803_20230219T214852_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_20230219T231016_20230219T231643_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_20230219T231643_20230219T231949_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_20230219T235853_20230219T235905_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.

umber 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.

lumber of products with errors:

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

6.1 P2P Product Format Check

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

Number of products with errors:

6.2 P2P Product Header Analysis

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

Number of products with errors:

6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

6.4 P2P Auxiliary Correction Error Check

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

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

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric 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_20230218T231609_20230219T000548_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T000548_20230219T005524_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T005524_20230219T014502_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	Topography height (solution 1), the Total Geocentric Ocean Tide height

CS_OFFL_SIR_GOP_2_20230219T014502_20230219T023438_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T023438_20230219T032417_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T032417_20230219T041353_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_20230219T041353_20230219T050331_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T050331_20230219T055308_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T055308_20230219T064246_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T064246_20230219T073223_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T073223_20230219T082201_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T082201_20230219T091137_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_2_20230219T091137_20230219T100116_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T100116_20230219T105052_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_20230219T105052_20230219T114030_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T114030_20230219T123007_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T123007_20230219T131945_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T131945_20230219T140921_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T140921_20230219T145900_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T145900_20230219T154836_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T154836_20230219T163814_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T163814_20230219T172751_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T172751_20230219T181729_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_20230219T181729_20230219T190705_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_20230219T190705_20230219T195644_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_2_20230219T195644_20230219T204620_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_20230219T204620_20230219T213559_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20230219T213559_20230219T222535_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T222535_20230219T231513_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20230219T231513_20230220T000450_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:

0

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.

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:

30

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:

27

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	204	204	4	200	0
SIR_GOPR1B	121	121	0	121	0
SIR_GOPN1B	105	105	4	101	0
SIR_GOPM_2	204	204	155	49	0
SIR_GOPR_2	121	121	47	74	0
SIR_GOPN_2	105	105	44	61	0
SIR GOP P2P	29	29	0	29	0

7.1 QCC Errors

Number of QCC reports with errors:

0

7.2 QCC Warnings

Number of QCC reports with warnings

2054

Total number of occurrences of each warning

	Total number of occurrences of each warning							
Ī	Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
	SIR_GOPM1B	200	0	0	0	0	0	0
	SIR_GOPM_2	0	37	37	1	38	0	34
	SIR_GOPN1B	99	0	0	0	0	0	0
	SIR_GOPN_2	0	9	32	7	22	31	13
	SIR_GOPR1B	119	0	0	0	0	0	0
	SIR GOPR 2	0	23	34	1	23	26	15

Dona danak Tama	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCI	DDEDODEDDI DMCINICO	DDEDODEDC A DNODE	RPEPOPFDSINNCDF	RPEPOPLRMNCDF	RPEPOPSARNCDF
Product Type	RPEPOPPDLRIMINGUE	RPEPOPFDPLRWSARNCI	RPEPOPFDPLRMSINNCD	RPEPOPPDSARNODF	RPEPOPPUSINNOUP	RPEPOPLRIMINGUE	RPEPOPSARNODE
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	25	0	0	0	0	21	0
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	0	18	0	36	0	0
SIR_GOPR1B	0	0	0	0	0	0	0
SIR GOPR 2	0	39	0	45	0	0	40

Product Type	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	0	3	21	0	4	30	0
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	27	11	45	47	28	29	29
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	0	1	64	34	10	30	40

Product Type	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-	-	-
SIR_GOPM1B	0	0	0	0			
SIR_GOPM_2	1	0	0	0			
SIR_GOPN1B	0	0	46	0			
SIR_GOPN_2	9	2	0	0			
SIR_GOPR1B	0	0	121	9			
SIR_GOPR_2	1	2	0	0			

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_GOP_2_	13	29	29	9	29	18	27

Product Type	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_GOP_2_	16	27	23	10	29	17	24

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-	-
SIR_GOP_2_	29	19	8	29			

Test Description Key:					
Abbreviation	Test name	Details			
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter			
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees			
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees			
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only			

RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

7.3 Missing QCC Reports

Number of products with missing QCC reports: