

1. Overview

Report Production:	22-Dec-2022
Processor Used:	CryoSat Ocean Processor
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data

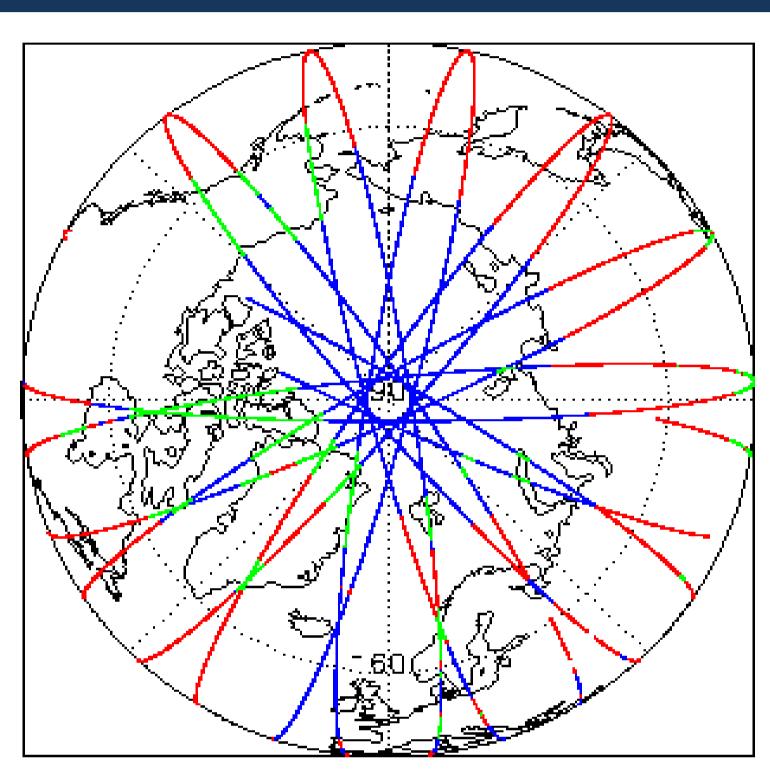
	We wou	<mark>ıld love</mark>	to hear f	rom yo	ou!	
Please	let us kn	<mark>ow your</mark>	^r feedback	about t	these da	aily
<mark>quality re</mark>	<mark>eports: W</mark>	<mark>/hat do y</mark>	<mark>/ou like/ di</mark>	<mark>slike? V</mark>	What qu	ality

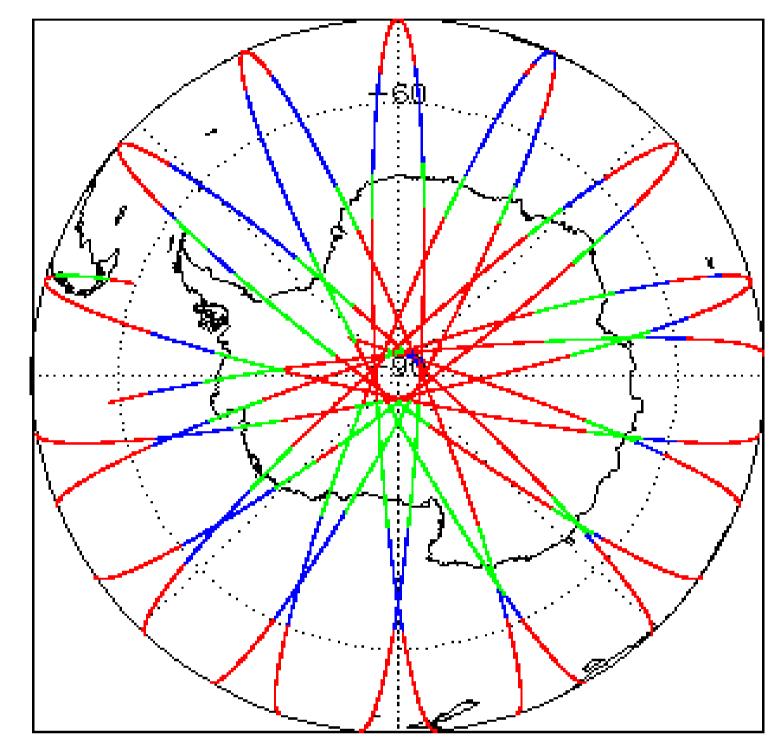
quality reports: What do you like/ dislike? What qualit information do you need? Send your feedback to cs2_qc_team@telespazio.com

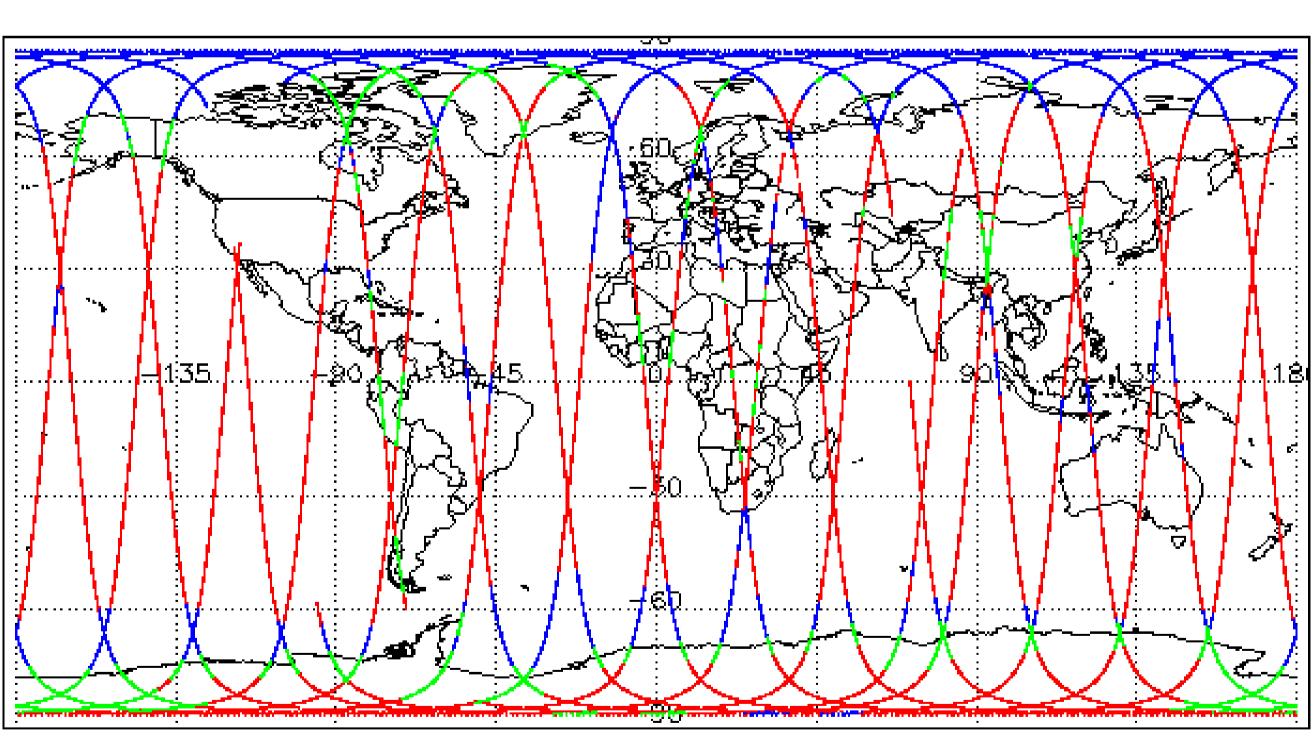
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary 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 7.1 and 7.2	See Section 7.1 and 7.2

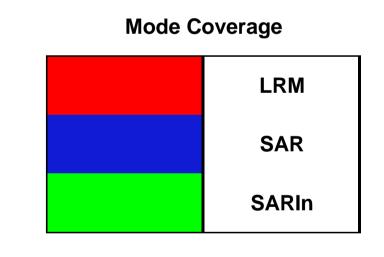
Mission / Instrument News		
20-Nov-2022	None	
21-Nov-2022	None	
22-Nov-2022 SIRAL Unavailability from 15:33:59 - 17:20:40 due to an orbit control manoeuvre		

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:

0

4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

 \cap

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:

15

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20221121T014817_20221121T021221_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221121T054706_20221121T062229_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221121T095523_20221121T101139_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221121T143855_20221121T144129_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221121T210014_20221121T211455_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221121T045232_20221121T045345_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221121T101139_20221121T101659_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221121T122109_20221121T122350_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221121T175949_20221121T180226_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221121T211528_20221121T211619_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221121T222137_20221121T222536_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20221121T012648_20221121T013501_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20221121T062319_20221121T063009_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20221121T063009_20221121T063420_C001	Loss of Echo	The tracking echo is missing for one or more records

5. GOP Level 2 Data Quality Check

5.1 L2 Product Format Check

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

Number of products with errors:

5.2 L2 Product Header Analysis

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

Number of products with errors:

5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors: 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:

N C	Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT), Total Geocentric	There is an error with the MSS height (solution 1), the Total Geocentric
	Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	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_20221121T004520_20221121T004703_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_20221121T035428_20221121T035550_C001	viean Dynamic Lopography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS OFFE SIR GOPN / /0//11/11/40119 /0//11/11/40433 C001	Mean Sea Surface (1), Mean Dynamic Fopography (1)	There is 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_20221121T045232_20221121T045345_C001	viean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_202211211053358_202211211053512_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_20221121T054016_20221121T054334_C001 T	Mean Sea Surface (1), Mean Dynamic Fopography (1), Total Geocentric Ocean Fide (GOT), Total Geocentric Ocean Fide (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 OFFE SIR GOPN / /0//11/110/1451 /0//11/110/11/8 C001	Mean Sea Surface (1), Mean Dynamic Fopography (1)	There is 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_2022112110/1921_2022112110/2548_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_20221121T081007_20221121T081128_C001	Fopography (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_20221121T081407_20221121T081523_C001	viean Dynamic Topodraphy (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
US OFFI SIR GOPIN / /U//11/11/085/5/ /U//11/11/0856/6 CUU1	Mean Sea Surface (1), Mean Dynamic Fopography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
L.S. LIFFL SIR GUPIN / /11//11/11/11/14/4//1 /11//11/11/14/14/// L.IIII		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
	viean Dynamic Topograpny (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20221121T112835_20221121T113346_C001 T	Fopography (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
	viean Dynamic Topograpny (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
TCS_OFFL_SIR_GOPN_2_20221121T135328_20221121T135523_C001 T	Mean Sea Surface (1), Mean Dynamic Fopography (1), Total Geocentric Ocean Fide (GOT), Total Geocentric Ocean Fide (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
LS OFFE SIR GOPN / /0//11/11/15/3109 /0//11/11/15/4/3/ C001	Mean Sea Surface (1), Mean Dynamic Fopography (1)	There is 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_20221121T162954_20221121T163329_C001	viean Dynamic Tobography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
LO UFFL OIR GUPIN / /U//11/11/1011 /U//11/11/11/133/ CUUT	• • • • • • • • • • • • • • • • • • • •	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
	viean Dynamic Topograpny (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20221121T175949_20221121T180226_C001	Γοροgraphy (1), Total Geocentric Ocean Γide (FES), Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
US OFFE SIR GOPN / /0//11/11/18573/ /0//11/11/185858 C001	Mean Sea Surface (1), Mean Dynamic Fopography (1)	There is 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_20221121T193620_20221121T193724_C001	viean Dynamic Tobodraphy (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
US OFFE SIR GOPN / /0//11/11/940/5 /0//11/11/941/9 COOL	Mean Sea Surface (1), Mean Dynamic Fopography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
US CIEFL SIR (30PN / 707711711703447 707711711703649 C.001	Mean Sea Surface (1), Mean Dynamic Fopography (1)	There is 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_202211211211828_202211211212044_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_20221121T222137_20221121T222536_C001	Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20221121T225413_20221121T225917_C001	viean Dynamic Tobodraphy (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20221121T235412_20221121T235625_C001	viean Dynamic Tobodraphy (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS OFFE SIR GOPR / /0//11/1101/648 /0//11/11013501 C001	Mean Sea Surface (1), Mean Dynamic Fopography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
US OFFE SIR GOPR / /0//11/11030539 /0//11/11031311 C001	Mean Sea Surface (1), Mean Dynamic Fopography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

	1	
CS_OFFL_SIR_GOPR_2_20221121T032224_20221121T032357_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_20221121T044223_20221121T045109_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T045109_20221121T045232_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T062319_20221121T063009_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T063009_20221121T063420_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T080300_20221121T080859_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_20221121T080859_20221121T081007_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T085133_20221121T085252_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20221121T094243_20221121T094346_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_20221121T094348_20221121T094432_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_20221121T094449_20221121T094613_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T094613_20221121T094921_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T110619_20221121T110754_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_20221121T112258_20221121T112835_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T130351_20221121T130854_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T143748_20221121T143855_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_20221121T144129_20221121T145056_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T162138_20221121T162953_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T175103_20221121T175435_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_20221121T180227_20221121T181010_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T194129_20221121T194840_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T212044_20221121T212717_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_20221121T225917_20221121T230439_C001	Mean Sea Surface (1), Mean Dynamic Topography (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.

0

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20221121T000922_20221121T003007_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_20221121T003058_20221121T003307_C001	•	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221121T003751_20221121T004131_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

Comparison	CS_OFFL_SIR_GOPM_2_20221121T004154_20221121T004520_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
Des Delts, 1884, 60PPA, 2, 200211211012012121102024, CODI 10000 Allinere Renging Carely, OCOD Res Joseph Renging	CS_OFFL_SIR_GOPM_2_20221121T004906_20221121T011633_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Dec. Col.	CS_OFFL_SIR_GOPM_2_20221121T014817_20221121T021221_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Concentration Concentratio	CS_OFFL_SIR_GOPM_2_20221121T021551_20221121T022046_C001		1.
CS_OFFL_SIR_ODM_1_2.7822*121703140_2022*121703177_C001 CS_OFFL_SIR_ODM_1_2.7822*121703140_2022*121703177_C001 CS_OFFL_SIR_ODM_1_2.7822*121703140_2022*121703177_C001 CS_OFFL_SIR_ODM_1_2.7822*121703140_2022*1217003177_C001 CS_OFFL_SIR_ODM_1_2.7822*121703140_2022*1217003177_C001 CS_OFFL_SIR_ODM_1_2.7822*121703140_2022*121700320*_C001 CS_OFFL_SIR_ODM_1_2.7822*1217003140_2022*121700320*_C001 CS_OFFL_SIR_ODM_1_2.7822*1217003140_2022*121700320*_C001 CS_OFFL_SIR_ODM_1_2.7822*121700310_2022*121700310_2022* CS_OFFL_SIR_ODM_1_2.7822*121700310_2022*121700310_2022* CS_OFFL_SIR_ODM_1_2.7822*121700310_2022*121700310_2022* CS_OFFL_SIR_ODM_1_2.7822*121700310_2022*121700310_2022* CS_OFFL_SIR_ODM_1_2.7822*121700310_2022* CS_OFFL_SIR_ODM_1_2	CS_OFFL_SIR_GOPM_2_20221121T022053_20221121T022422_C001		
05. OFFL. SIR. GOPM 2. 20221/21T001442 20221/27T002244 COOL COOPER. SIR. GOPM 2. 20221/21T001412 20221/27T002244 COOL COOPER. SIR. GOPM 3. 20221/21T001412 20221/27T002480 COOL COOPER. SIR. GOPM 3. 20221/21T001412 20221/27T00480 COOL COOPER. SIR. GOPM 3. 20221/21T001412 20221/27T00480 COOL COOPER. SIR. GOPM 3. 20221/21T001412 20221/27T00480 COOL COOPER. SIR. GOPM 3. 20221/21T001422 20221/27T00480 COOL COOPER. SIR. GOPM 3. 20221/21T00142 20221/27T00480 COOL COOPER. SIR. GOPM 3. 20221/21T001480 COOL COOPER. SIR GOPM 3. 20221/21T001480	CS_OFFL_SIR_GOPM_2_20221121T022941_20221121T030227_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Daubscatter Outley CS_OFFL_SR_COPP_2_20221121T05405_0022121T05405_0001 CS_OFFL_SR_COPP_2_20221121T05405_0022121T05405_0001 CS_OFFL_SR_COPP_2_20221121T05405_0022121T05405_0001 CS_OFFL_SR_COPP_2_20221121T05405_00022121T05405_0001 CS_OFFL_SR_COPP_2_20221121T05405_00022121T05405_0001 CS_OFFL_SR_COPP_2_20221121T05405_00022121T05405_0001 CS_OFFL_SR_COPP_2_20221121T05405_00002121T05405_0001 CS_OFFL_SR_COPP_2_20221121T05405_000000000000000000000000000000000	CS_OFFL_SIR_GOPM_2_20221121T031440_20221121T031717_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
one Absorption Quality Code Allereder Range and deadscarter Quality Flage have been settlemen Range and Execution Quality Flage have been settlemen Range (Markey) (CODE Allereder Range SSHA, SVH) and Execution Quality Flage have been settlemen Range (Markey) (CODE Allereder Range and Execution Quality Flage have been settlemen Range (Markey) (CODE Allereder Range) (CODE Allerede	CS_OFFL_SIR_GOPM_2_20221121T032142_20221121T032224_C001		
Backscatter Quality CS_OFFL_SIR_GOPM_2_20221121T04829_2022121T043303_C001 CS_OFFL_SIR_GOPM_2_20221121T04925_20221121T043303_C001 CS_OFFL_SIR_GOPM_2_20221121T04925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T045925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T045925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T045925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T045925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T045925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T045925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T045925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T045925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T054925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T054925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T054925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T054925_20221121T045865_C001 CS_OFFL_SIR_GOPM_2_20221121T054925_20221121T045965_C001 CS_OFFL_SIR_GOPM_2_20221121T054925_20221121T045965_20211121T045965_	CS_OFFL_SIR_GOPM_2_20221121T034737_20221121T034859_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
GS_OFFL_SIR_GOPM_2_20221121T040205_2022121T044223_0001 CS_OFFL_SIR_GOPM_2_20221121T040205_2022121T044223_0001 CS_OFFL_SIR_GOPM_2_20221121T040205_2022121T040555_0001 CS_OFFL_SIR_GOPM_2_20221121T040402_20221121T040555_0001 CS_OFFL_SIR_GOPM_2_20221121T040402_20221121T040555_0001 CS_OFFL_SIR_GOPM_2_20221121T040402_20221121T040505_0001 CS_OFFL_SIR_GOPM_2_20221121T081325_20221121T062915_0001 CS_OFFL_SIR_GOPM_2_20221121T081325_20221121T062915_0001 CS_OFFL_SIR_GOPM_2_20221121T081325_20221121T062015_0001 CS_OFFL_SIR_GOPM_2_20221121T084705_20201 CS_OFFL_SIR_GOPM_2_20221121T084705_20201 CS_OFFL_SIR_GOPM_2_20221121T084705_20201 CS_OFFL_SIR_GOPM_2_20221121T084055_0001 CS_OFFL_SIR_GOPM_2_20221121T084055_0001 CS_OFFL_SIR_GOPM_2_20221121T084055_0001 CS_OFFL_SIR_GOPM_2_20221121T084055_0001 CS_OFFL_SIR_GOPM_2_20221121T08405_00021121T070752_0001 CS_OFFL_SIR_GOPM_2_20221121T08405_000221121T070752_0001 CS_OFFL_SIR_GOPM_2_20221121T08405_00021121T070752_0001 CS_OFFL_SIR_GOPM_2_20221121T074050_000000000000000000000000000000000	CS_OFFL_SIR_GOPM_2_20221121T035550_20221121T040117_C001		, ,
and Backscatter Quality, COCG Altmeter Range and Backscatter Quality Flags have been and the OCGG Altmeter Range and Backscatter Quality Flags have been and the OCGG Altmeter Range and Backscatter Quality Flags and the OCGG Altmeter Range and Backscatter Quality Flags and the OCGG Altmeter Range and Backscatter Quality Flags and the OCGG Altmeter Range and Backscatter Quality Flags have been and	CS_OFFL_SIR_GOPM_2_20221121T040829_20221121T043203_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Allmeter Range and Backscatter Quality COGO Allmeter Range and Backscatter Quality Cogo Allmeter Range and Backscatter Quality Cogo Allmeter Range and Backscatter Quality Flags have been and Backscatter Quality Cogo Allmeter Range and Backscatter Quality Flags have been set for an or more records CS_OFFL_SIR_GOPM_2_20221121T053512_20221121T054016_C001 CS_OFFL_SIR_GOPM_2_20221121T054016_C001 CS_OFFL_SIR_GOPM_2_20221121T074118_C001 CS_OFFL_SIR_GOPM_2_20221121T074106_C00221121T074118_C001 CS_OFFL_SIR_GOPM_2_20221121T074016_C00221121T074118_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074131_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T07536C_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T07536C_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T07536C_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T07536C_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T07536C_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T07536C_C001 CS_OFFL_SIR_GOPM_2_20221121T074020_20221121T07536C_C001 CS_OFFL_SIR_GOPM_2_202	CS_OFFL_SIR_GOPM_2_20221121T043205_20221121T044223_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range (S) A	CS_OFFL_SIR_GOPM_2_20221121T045402_20221121T045555_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_GOPM_2_20221121T054706_20221121T062229_C001 CS_OFFL_SIR_GOPM_2_20221121T054706_20221121T070752 C001 CS_OFFL_SIR_GOPM_2_20221121T064457 20221121T070752 C001 CS_OFFL_SIR_GOPM_2_20221121T076456 20221121T070752 C001 CS_OFFL_SIR_GOPM_2_20221121T07656 20221121T073814_C001 CS_OFFL_SIR_GOPM_2_20221121T07656 20221121T073814_C001 CS_OFFL_SIR_GOPM_2_20221121T073806 20221121T074118 C001 CS_OFFL_SIR_GOPM_2_20221121T074282 20221121T074118 C001 CS_OFFL_SIR_GOPM_2_20221121T074282 20221121T074343 C001 CS_OFFL_SIR_GOPM_2_20221121T074202 20221121T074343 C001 CS_OFFL_SIR_GOPM_2_20221121T074825 20221121T075736 C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CC_OGA_Milmeter Range_ASSHA_SWH and Backscatter Quality Flags have been set for one or more records CC_OGA_Milmeter Range_SSHA_SWH and Backscatter Quality Flags have been set for one or more records CC_OGA_Milmeter Range_SSHA_SWH and Backscatter Quality Flags have been set for one or more records CC_OGA_Milmeter Range_SSHA_SWH and Backscatter Quality Flags have been set for one or more records CC_OGA_Milmeter Range_SSHA_SWH and Backscatter Quality Flags have been set for one or more records CC_OGA_Milmeter Range_SSHA_SWH and Backscatter Quality Flags have been set for one or more records CC_OGA_Milmeter Range_SSHA_SWH and Backscatter Quality Flags have been set for one or more records CC_OGA_Milmeter Range_SSHA_SWH and Backscatter Quality Flags have been s	CS_OFFL_SIR_GOPM_2_20221121T051326_20221121T052943_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the OCGG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SHA, SWH and Backscatter Quality Flags have been Altimeter Range, SHA, SWH and Backscatter Quality COG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality Flags have been Altimeter Range, SHA, SWH and Backscatter Quality COG Altimeter Range, SHA, SWH and Backscatter Quality Flags have been a	CS_OFFL_SIR_GOPM_2_20221121T053512_20221121T054016_C001		
and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPM_2_20221121T073906_20221121T074118_C001 CS_OFFL_SIR_GOPM_2_20221121T074128_20221121T074131_C001 CS_OFFL_SIR_GOPM_2_20221121T074128_20221121T074131_C001 CS_OFFL_SIR_GOPM_2_20221121T074128_20221121T074131_C001 CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074825_20221121T075736_C001 CS_OFFL_SIR_GOPM_2_20221121T074825_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CCS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CCS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CCS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CCS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CCCCC_Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCCC_Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCCC_Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCCC_Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCCC_Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCCC_Altimeter Range and Backscatter Quality	CS_OFFL_SIR_GOPM_2_20221121T054706_20221121T062229_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records CS_OFFL_SIR_GOPM_2_20221121T073906_20221121T074118_C001 CS_OFFL_SIR_GOPM_2_20221121T074128_20221121T074131_C001 CS_OFFL_SIR_GOPM_2_20221121T074128_20221121T074131_C001 CS_OFFL_SIR_GOPM_2_20221121T074128_20221121T074131_C001 CS_OFFL_SIR_GOPM_2_20221121T074128_20221121T07433_C001 CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T075736_C001 CS_OFFL_SIR_GOPM_2_20221121T074825_20221121T075736_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 COCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CCGA Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGCA Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGCA Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPM_2_20221121T064457_20221121T070752_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221121T074118_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPM_2_20221121T074128_20221121T074131_C001 CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074825_20221121T075736_C001 CS_OFFL_SIR_GOPM_2_20221121T074825_20221121T075736_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075931_2021121T075922_C001 CS_OFFL_SI	CS_OFFL_SIR_GOPM_2_20221121T072656_20221121T073814_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001 CS_OFFL_SIR_GOPM_2_20221121T074825_20221121T075736_C001 CS_OFFL_SIR_GOPM_2_20221121T074825_20221121T075736_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075931_20221121T075932_20201121T075932_C001 CS_OFFL_SIR_GOPM_2_20221121T075931_	CS_OFFL_SIR_GOPM_2_20221121T073906_20221121T074118_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_GOPM_2_20221121T074128_20221121T074131_C001		
CS_OFFL_SIR_GOPM_2_20221121T074825_20221121T075736_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 CS_OFFL_SIR_GOPM_2_20221121T075931_20221121T080005_C001 and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_GOPM_2_20221121T075931_20221121T080005_C001 CS_OFFL_SIR_GOPM_2_20221121T075931_20221121T080005_C001 CS_OFFL_SIR_GOPM_2_20221121T075931_20221121T080005_C001	CS_OFFL_SIR_GOPM_2_20221121T074202_20221121T074343_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range	CS_OFFL_SIR_GOPM_2_20221121T074825_20221121T075736_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
U.S. DEFL. SIR (40PM) / 2022/12/10/5931 2022/12/10/80005 C001	CS_OFFL_SIR_GOPM_2_20221121T075807_20221121T075922_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_GOPM_2_20221121T075931_20221121T080005_C001		
CS_OFFL_SIR_GOPM_2_20221121T081526_20221121T083233_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records	CS_OFFL_SIR_GOPM_2_20221121T081526_20221121T083233_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221121T083439_20221121T084908_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags set for one or more records	CS_OFFL_SIR_GOPM_2_20221121T083439_20221121T084908_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_GOPM_2_20221121T085925_20221121T090336_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_20221121T090540_20221121T091750_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_20221121T091902_20221121T092049_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_20221121T092312_20221121T093212_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_20221121T095523_20221121T101139_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_20221121T101659_20221121T103011_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_20221121T103422_20221121T104238_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_20221121T104551_20221121T110116_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_20221121T110408_20221121T110619_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_20221121T111313_20221121T111353_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_20221121T114704_20221121T120923_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_20221121T121558_20221121T122108_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_20221121T122536_20221121T124127_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_20221121T132058_20221121T134731_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_20221121T135524_20221121T140127_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_20221121T140439_20221121T141523_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_20221121T141525_20221121T142416_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_20221121T143855_20221121T144129_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_20221121T145431_20221121T152645_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_20221121T153433_20221121T153959_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_20221121T154416_20221121T154751_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_20221121T161817_20221121T162138_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_20221121T163332_20221121T164235_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_20221121T164520_20221121T170647_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_20221121T172423_20221121T174027_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_20221121T181144_20221121T184532_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_20221121T185356_20221121T185732_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_20221121T190438_20221121T193616_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_20221121T194840_20221121T194945_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_20221121T195034_20221121T200316_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_20221121T200757_20221121T202517_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_20221121T202720_20221121T203236_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221121T203255_20221121T203307_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_20221121T204246_20221121T205617_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_20221121T210014_20221121T211455_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_20221121T213756_20221121T214818_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_20221121T214958_20221121T220350_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_20221121T220646_20221121T221147_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_20221121T221154_20221121T221206_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_20221121T222022_20221121T222137_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_20221121T222022_20221121T222137_C001 CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001 CS_OFFL_SIR_GOPM_2_20221121T223721_20221121T224210_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001 CS_OFFL_SIR_GOPM_2_20221121T223721_20221121T224210_C001 CS_OFFL_SIR_GOPM_2_20221121T225202_20221121T225248_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001 CS_OFFL_SIR_GOPM_2_20221121T223721_20221121T224210_C001 CS_OFFL_SIR_GOPM_2_20221121T225202_20221121T225248_C001 CS_OFFL_SIR_GOPM_2_20221121T225303_20221121T225338_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001 CS_OFFL_SIR_GOPM_2_20221121T223721_20221121T224210_C001 CS_OFFL_SIR_GOPM_2_20221121T225202_20221121T225248_C001 CS_OFFL_SIR_GOPM_2_20221121T225303_20221121T225338_C001 CS_OFFL_SIR_GOPM_2_20221121T231025_20221121T231217_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001 CS_OFFL_SIR_GOPM_2_20221121T223721_20221121T224210_C001 CS_OFFL_SIR_GOPM_2_20221121T225202_20221121T225248_C001 CS_OFFL_SIR_GOPM_2_20221121T225303_20221121T225338_C001 CS_OFFL_SIR_GOPM_2_20221121T231025_20221121T231217_C001 CS_OFFL_SIR_GOPM_2_20221121T231025_20221121T231217_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Ocean Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001 CS_OFFL_SIR_GOPM_2_20221121T223721_20221121T224210_C001 CS_OFFL_SIR_GOPM_2_20221121T225202_20221121T225248_C001 CS_OFFL_SIR_GOPM_2_20221121T225303_20221121T225338_C001 CS_OFFL_SIR_GOPM_2_20221121T231025_20221121T231217_C001 CS_OFFL_SIR_GOPM_2_20221121T232057_20221121T234225_C001 CS_OFFL_SIR_GOPM_2_20221121T232057_20221121T234225_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001 CS_OFFL_SIR_GOPM_2_20221121T223721_20221121T224210_C001 CS_OFFL_SIR_GOPM_2_20221121T225202_20221121T225248_C001 CS_OFFL_SIR_GOPM_2_20221121T225303_20221121T225338_C001 CS_OFFL_SIR_GOPM_2_20221121T231025_20221121T231217_C001 CS_OFFL_SIR_GOPM_2_20221121T232057_20221121T234225_C001 CS_OFFL_SIR_GOPM_2_20221121T235127_20221121T235412_C001 CS_OFFL_SIR_GOPM_2_20221121T235127_20221121T235412_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001 CS_OFFL_SIR_GOPM_2_20221121T223721_20221121T224210_C001 CS_OFFL_SIR_GOPM_2_20221121T225202_20221121T225248_C001 CS_OFFL_SIR_GOPM_2_20221121T225303_20221121T225338_C001 CS_OFFL_SIR_GOPM_2_20221121T231025_20221121T231217_C001 CS_OFFL_SIR_GOPM_2_20221121T232057_20221121T234225_C001 CS_OFFL_SIR_GOPM_2_20221121T235127_20221121T235412_C001 CS_OFFL_SIR_GOPM_2_20221121T235819_20221122T002532_C001 CS_OFFL_SIR_GOPM_2_20221121T235819_20221122T002534_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Ocean Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Altimeter Range Quality, OCOG Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221121T222536_20221121T223306_C001 CS_OFFL_SIR_GOPM_2_20221121T223721_20221121T224210_C001 CS_OFFL_SIR_GOPM_2_20221121T225202_20221121T225248_C001 CS_OFFL_SIR_GOPM_2_20221121T225303_20221121T225338_C001 CS_OFFL_SIR_GOPM_2_20221121T231025_20221121T231217_C001 CS_OFFL_SIR_GOPM_2_20221121T232057_20221121T234225_C001 CS_OFFL_SIR_GOPM_2_20221121T235127_20221121T235412_C001 CS_OFFL_SIR_GOPM_2_20221121T235819_20221122T002532_C001 CS_OFFL_SIR_GOPM_2_20221121T000422_20221121T000554_C001 CS_OFFL_SIR_GOPN_2_20221121T000652_20221121T000922_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records 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:

89

Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20221121T000652_20221121T000922_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221121T004520_20221121T004703_C001	TAIIIMeier Range and Backscarier 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_20221121T014321_20221121T014323_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221121T030227_20221121T030342_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_20221121T033441_20221121T033546_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221121T033654_20221121T033744_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_20221121T035428_20221121T035550_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221121T045556_20221121T045609_C001	TAITIMETER RANGE AND BACKSCATTER QUAITY	The Ocean Altimeter Range, SSHA, SWH 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_20221121T045621_20221121T045747_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221121T071451_20221121T071728_C001	TAITIMETER RANGE AND BACKSCATTER CJUAITIV	The Ocean Altimeter Range, SSHA, SWH 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_20221121T071921_20221121T072548_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221121T093212_20221121T093410_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_20221121T094921_20221121T095027_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_GOPN_2_20221121T095355_20221121T095523_C001	TAITIMETER RANGE AND BACKSCATTER CUBILITY	The Ocean Altimeter Range, SSHA, SWH 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_20221121T101139_20221121T101659_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221121T103224_20221121T103422_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_20221121T104239_20221121T104426_C001	OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221121T112835_20221121T113346_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_GOPN_2_20221121T122109_20221121T122350_C001	TAITIMETER RANGE AND BACKSCATTER CJUBITY	The Ocean Altimeter Range, SSHA, SWH 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_20221121T130150_20221121T130221_C001	,	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221121T140127_20221121T140256_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_GOPN_2_20221121T153959_20221121T154116_C001	TAITIMETER 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_20221121T155411_20221121T155533_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records

Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range and Backscatter Quality PLRM ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimeter Range and Backscatter Quality Flags have In the Ocean Altimet	ags been ags been ags been
CS_OFFL_SIR_GOPN_2_20221121T184654_20221121T184850_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPN_2_20221121T185732_20221121T185858_C001 CS_OFFL_SIR_GOPN_2_20221121T193620_20221121T193724_C001 CS_OFFL_SIR_GOPN_2_20221121	ags been ne or ags been
CS_OFFL_SIR_GOPN_2_20221121T185732_20221121T185858_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPN_2_20221121T193620_20221121T193724_C001 CS_OFFL_SIR_GOPN_2_20221121T193724_C001 CS_OFFL	ne or
OCOG Backscatter Quality OCOG Backscatter Quality OCOG Backscatter Quality More records OCOG Backscatter Quality The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have I and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have I and Backscatter Quality Fla	ags been
and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have I	peen
Altimeter Range and Backscatter Quality set for one or more records	ags
CS_OFFL_SIR_GOPN_2_20221121T203447_20221121T203649_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 Fl and the OCOG Altimeter Range and the OCOG	•
CS_OFFL_SIR_GOPN_2_20221121T211828_20221121T212044_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPN_2_20221121T213510_20221121T213756_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPN_2_20221121T222137_20221121T222536_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPN_2_20221121T223306_20221121T223721_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPN_2_20221121T225040_20221121T225202_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPN_2_20221121T225413_20221121T225917_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 Fl and the OCOG Altimeter Range and the OCOG	J
CS_OFFL_SIR_GOPN_2_20221121T230440_20221121T230455_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality FLRM, OCOG Altimeter Range and Backscatter Quality FLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have I set for one or more records	•
CS_OFFL_SIR_GOPN_2_20221121T231517_20221121T231916_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPN_2_20221121T234405_20221121T234718_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM In Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have I and the OCOG Altimeter Range and Backscatter Quality Flags have I set for one or more records	•
CS_OFFL_SIR_GOPN_2_20221121T235412_20221121T235625_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPR_2_20221121T003307_20221121T003522_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Altimeter Range and Backscatter Quality PLRM PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have I set for one or more records	•
CS_OFFL_SIR_GOPR_2_20221121T004703_20221121T004906_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 Fl and the OCOG Altimeter Range and the OCOG	•
CS_OFFL_SIR_GOPR_2_20221121T012648_20221121T013501_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM In Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have I set for one or more records	•
CS_OFFL_SIR_GOPR_2_20221121T013524_20221121T013752_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPR_2_20221121T021221_20221121T021425_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have I PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have I set for one or more records	•
CS_OFFL_SIR_GOPR_2_20221121T030342_20221121T030412_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPR_2_20221121T030539_20221121T031311_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 have I set for one or more records	•
CS_OFFL_SIR_GOPR_2_20221121T032523_20221121T032808_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for comparison of the compa	ne or
CS_OFFL_SIR_GOPR_2_20221121T034900_20221121T035428_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 have I set for one or more records	_

CS_OFFL_SIR_GOPR_2_20221121T040433_20221121T040829_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_20221121T044223_20221121T045109_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_20221121T045834_20221121T050028_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_20221121T052943_20221121T053358_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_20221121T063009_20221121T063420_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_20221121T070752_20221121T071451_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_20221121T080300_20221121T080859_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_20221121T083411_20221121T083438_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_20221121T085133_20221121T085252_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_20221121T091751_20221121T091901_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_20221121T094449_20221121T094613_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_20221121T094613_20221121T094921_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_20221121T112134_20221121T112258_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_20221121T112258_20221121T112835_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_20221121T114241_20221121T114335_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_20221121T120923_20221121T121157_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_20221121T122350_20221121T122536_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_20221121T130351_20221121T130854_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_20221121T134731_20221121T135119_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_20221121T143155_20221121T143234_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_20221121T144129_20221121T145056_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_20221121T152645_20221121T153108_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_20221121T154752_20221121T155042_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_20221121T161433_20221121T161712_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_20221121T162138_20221121T162953_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_20221121T170647_20221121T171011_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
00_0FFL_3IK_GOFK_Z_202Z11Z11170047_202Z11Z11171011_C001	Altimeter Range and Backscatter Quality	

CS_OFFL_SIR_GOPR_2_20221121T171438_20221121T171442_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_20221121T172014_20221121T172423_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_20221121T175103_20221121T175435_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_20221121T180227_20221121T181010_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_20221121T185858_20221121T190437_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_20221121T194129_20221121T194840_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_20221121T202517_20221121T202543_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_20221121T203649_20221121T204245_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_20221121T205617_20221121T205830_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_20221121T211620_20221121T211828_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_20221121T212044_20221121T212717_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_20221121T225338_20221121T225413_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: 191

5.8 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20 Hz)

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

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

Number of products with errors: 65

L2 Retracking Flags (20 Hz PLRM)

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

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

Number of products with errors: 148

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

6.1 P2P Product Format Check

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

Number of products with errors: 0

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: 0

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.

Number of products with errors.			
Product		Test Failed	Description
CS_OFFL_SIR_GOP_220221121T004148_	_20221121T013125_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T013125_	_20221121T022102_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T022102_	_20221121T031039_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T031039_	_20221121T040017_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T040017_	_20221121T044954_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T044954_	_20221121T053932_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T053932_	_20221121T062909_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_220221121T062909_	_20221121T071846_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T071846_	_20221121T080823_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T080823_	_20221121T085801_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_220221121T085801_	_20221121T094738_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T094738_	_20221121T103716_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T103716_	_20221121T112652_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T112652_	_20221121T121630_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_220221121T121630_	_20221121T130607_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T130607_	_20221121T135545_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_220221121T135545_	_20221121T144522_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T144522_	_20221121T153500_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T153500_	_20221121T162437_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T162437_	_20221121T171414_C001	Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records There is an error with the MSS height (solution 1), the Mean Dynamic
CS_OFFL_SIR_GOP_220221121T171414_	_20221121T180351_C001	Topography (1), Total Geocentric Ocean	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_220221121T180351_	_20221121T185329_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T185329_	_20221121T194306_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T194306_	_20221121T203243_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T203243_	_20221121T212220_C001	Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	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_220221121T212220_	_20221121T221158_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T221158_	_20221121T230135_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	for one or more records
CS_OFFL_SIR_GOP_220221121T230135_	_20221121T235113_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is 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_220221121T235113_	_20221122T004050_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height 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:

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.

0

Number of products with errors: 30

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: 28

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	196	196	4	192	0
SIR_GOPR1B	114	114	0	114	0
SIR_GOPN1B	97	97	1	96	0
SIR_GOPM_2	196	196	139	57	0
SIR_GOPR_2	114	114	33	80	1
SIR_GOPN_2	97	97	33	64	0
SIR_GOP_P2P	29	29	0	28	1

7.1 QCC Errors

Number of QCC reports with errors:

2

Total number of occurrences of each error

SIR_GOPR_2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 -	Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
	SIR_GOPR_2	1	1	1	1							
SIR_GOP_2_ 1 1 1 1 1 1 1 1	Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
	SIR_GOP_2_	1	1	1	1							

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

7.2 QCC Warnings

Number of QCC reports with warnings

2215

Total number of occurrences of each warning

	Total number of occurrences of each warning								
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD		
SIR_GOPM1B	192	0	0	0	0	0	0		
SIR_GOPM_2	0	0	40	41	1	44	0		
SIR_GOPN1B	92	0	0	0	0	0	0		
SIR_GOPN_2	0	0	14	32	6	27	26		
SIR_GOPR1B	114	0	0	0	0	0	0		
SIR_GOPR_2	0	1	41	51	0	34	27		

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSAR	NCCRPEPOPFDF	PLRMSINNCDIRPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	33	1	32	0	0	0	0
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	17	0	0	0	25	0	35
SIR_GOPR1B	0	0	0	0	0	0	0
SIR GOPR 2	8	0	0	55	0	58	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	26	0	0	1	24	0	3
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	0	30	14	47	51	31
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	0	52	0	1	64	41	8

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF
SIR_GOPM1B	0	0	0	2	1	0	0
SIR_GOPM_2	36	0	3	2	1	0	0
SIR_GOPN1B	0	0	0	0	0	0	45
SIR_GOPN_2	30	29	14	0	0	1	0
SIR_GOPR1B	0	0	0	0	0	0	114
SIR_GOPR_2	39	50	1	0	0	4	0

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_GOP_2_	14	29	29	7	29	15	28

Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNCDI	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_GOP_2_	1	17		24	15		20

Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-
SIR GOP 2	24	29	19	16	29		

Test Description Key:	est Description Key:					
Abbreviation	Test name	Details				
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter				
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)				
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only				
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RBSZOPOEPFDPLRM 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 latitude between -70 and 70 degrees				
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean				
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
INCDF	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				
	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				
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)				
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch				
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample				

7.3 Missing QCC Reports