

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

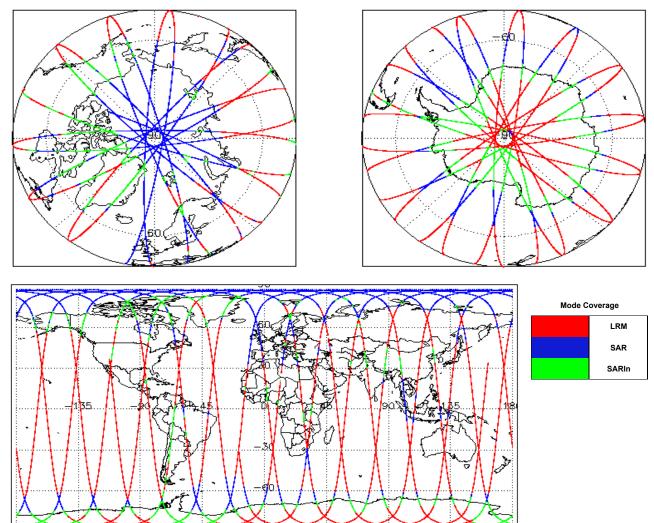
13/12/2019

Report Production:	13-Jan-2020	Check	L1 & L2	P2P
Report Production:	13-Jan-2020	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CrucSet Occan Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor used.	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Geophysical Ocean Products (GOP)	Product Format Check	Nominal	Nominal
Data Useu.	L1B, L2 & P2P Science Data	Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
		Measurement Confidence Data Check	See Section 4.5, 4.6	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

1. Overview

# Mission / Instrument News 12-Dec-2019 None 13-Dec-2019None14-Dec-2019Nothing planned

2. Global Coverage



# 3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

4. GOP Level 1B Data Quality Check

# 4.1 L1B Product Format Check

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

Number of products with errors:

0

4.2 L1B Product Header Analysis		
For all products, a series of pre-defined checks are performed on the MPH an	nd SPH in order to identify any incor	sistencies and/or errors raised by the ground-segment processing chain.
<b>_1B Processing Quality HR:</b> The I1b_proc_flag_hr flag is currently set all L1 DSARIn chains. A modification is required in the next release.	B GOPR and GOPN products beca	use the I1b_processing_quality_hr field is not correctly configured in the OSAR an
Number of products with errors: 0		
4.3 L1B Auxilary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pro	e-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 recor	rd. The bit value of this flag indicate	s any problems when set.
Number of products with errors: 0		
4.5 L1B Measurement Confidence Data Check		
CrucSat L1B data includes a measurement confidence flag for each measurer	mont record. The hit value of this fl	ag indicatos any problems when set
CryoSat L1B data includes a measurement confidence flag for each measurer		
CryoSat L1B data includes a measurement confidence flag for each measurer Attitude Correction Missing: This flag is currently set in error for GOPR proc		
Attitude Correction Missing: This flag is currently set in error for GOPR proc Number of products with errors: 0		
Attitude Correction Missing: This flag is currently set in error for GOPR proc         Number of products with errors:       0         4.6 L1B Waveform Group Data Check	ducts due to a configuration issue.	This is being investigated and will be updated in the next SW update.
Attitude Correction Missing: This flag is currently set in error for GOPR proc Number of products with errors: 0 4.6 L1B Waveform Group Data Check CryoSat L1B data includes a waveform data flag for each measurement record	ducts due to a configuration issue.	This is being investigated and will be updated in the next SW update.
Attitude Correction Missing: This flag is currently set in error for GOPR proc         Number of products with errors:       0         4.6 L1B Waveform Group Data Check	ducts due to a configuration issue.	This is being investigated and will be updated in the next SW update.
Attitude Correction Missing: This flag is currently set in error for GOPR proc Number of products with errors: 0 4.6 L1B Waveform Group Data Check CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 19	ducts due to a configuration issue.	This is being investigated and will be updated in the next SW update.
Attitude Correction Missing: This flag is currently set in error for GOPR products with errors:       0         Aumber of products with errors:       0         4.6 L1B Waveform Group Data Check       0         CryoSat L1B data includes a waveform data flag for each measurement recomposed of the products over land, but       0	ducts due to a configuration issue.	This is being investigated and will be updated in the next SW update.
Attitude Correction Missing: This flag is currently set in error for GOPR proc Number of products with errors: 0 4.6 L1B Waveform Group Data Check CryoSat L1B data includes a waveform data flag for each measurement recom- coss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 19 Product	ducts due to a configuration issue.	This is being investigated and will be updated in the next SW update. s any problems when set. Description
Attitude Correction Missing: This flag is currently set in error for GOPR products with errors:       0         A.6 L1B Waveform Group Data Check       0         CryoSat L1B data includes a waveform data flag for each measurement recomposed of Echo Flag: This flag is currently set for some products over land, but Number of products with errors:       19         Product       CS_OFFL_SIR_GOPM1B_20191213T023909_20191213T025127_C001       0	ducts due to a configuration issue. d. The bit value of this flag indicate t this is to be expected. Test Failed Loss of Echo	This is being investigated and will be updated in the next SW update. s any problems when set.           Description           The tracking echo is missing for one or more records
Attitude Correction Missing: This flag is currently set in error for GOPR products with errors:       0         A.6 L1B Waveform Group Data Check       0         CryoSat L1B data includes a waveform data flag for each measurement recombos of Echo Flag: This flag is currently set for some products over land, but Number of products with errors:       19         Product       CS_OFFL_SIR_GOPM1B_20191213T023909_20191213T025127_C001       CS_OFFL_SIR_GOPM1B_20191213T100354_20191213T102019_C001	ducts due to a configuration issue. d. The bit value of this flag indicate t this is to be expected. Test Failed Loss of Echo Loss of Echo	This is being investigated and will be updated in the next SW update.  s any problems when set.            Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records
Attitude Correction Missing: This flag is currently set in error for GOPR products with errors:       0         A.6 L1B Waveform Group Data Check       0         CryoSat L1B data includes a waveform data flag for each measurement recomboss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors:       19         Product       19         CS_OFFL_SIR_GOPM1B_20191213T023909_20191213T025127_C001       0         CS_OFFL_SIR_GOPM1B_20191213T100354_20191213T102019_C001       0	ducts due to a configuration issue. rd. The bit value of this flag indicate t this is to be expected. Test Failed Loss of Echo Loss of Echo Loss of Echo	This is being investigated and will be updated in the next SW update.  s any problems when set.            Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records
Attitude Correction Missing: This flag is currently set in error for GOPR proc Number of products with errors: 0 4.6 L1B Waveform Group Data Check CryoSat L1B data includes a waveform data flag for each measurement recom- coss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 19 Product CS_OFFL_SIR_GOPM1B_20191213T102354_20191213T1025127_C001 CS_OFFL_SIR_GOPM1B_20191213T10354_20191213T11042_C001 CS_OFFL_SIR_GOPM1B_20191213T103639_20191213T121445_C001	ducts due to a configuration issue. d. The bit value of this flag indicate t this is to be expected. <b>Test Failed</b> Loss of Echo Loss of Echo Loss of Echo Loss of Echo	This is being investigated and will be updated in the next SW update.  s any problems when set.           Description         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records
Attitude Correction Missing: This flag is currently set in error for GOPR products with errors:          A.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement record.         Coss of Echo Flag: This flag is currently set for some products over land, but         Number of products with errors:       19         Product       19         ScoFFL_SIR_GOPM1B_20191213T1023909_20191213T1025127_C001         CS_OFFL_SIR_GOPM1B_20191213T10354_20191213T102019_C001         CS_OFFL_SIR_GOPM1B_20191213T103639_20191213T11042_C001         CS_OFFL_SIR_GOPN1B_20191213T120919_20191213T121445_C001         CS_OFFL_SIR_GOPN1B_20191213T143914_20191213T144025_C001         CS_OFFL_SIR_GOPN1B_20191213T17015_20191213T170305_C001	ducts due to a configuration issue. d. The bit value of this flag indicate t this is to be expected. <b>Test Failed</b> Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo	This is being investigated and will be updated in the next SW update.  s any problems when set.            Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records
Attitude Correction Missing: This flag is currently set in error for GOPR process         Number of products with errors:       0         4.6 L1B Waveform Group Data Check         CryoSat L1B data includes a waveform data flag for each measurement recombers of Echo Flag: This flag is currently set for some products over land, but         Number of products with errors:       19         Product       19         CS_OFFL_SIR_GOPM1B_20191213T023909_20191213T025127_C001         CS_OFFL_SIR_GOPM1B_20191213T100354_20191213T102019_C001         CS_OFFL_SIR_GOPM1B_20191213T100354_20191213T11042_C001         CS_OFFL_SIR_GOPM1B_20191213T120919_20191213T121445_C001         CS_OFFL_SIR_GOPN1B_20191213T143914_20191213T144025_C001         CS_OFFL_SIR_GOPN1B_20191213T170115_20191213T170305_C001         CS_OFFL_SIR_GOPN1B_20191213T175211_20191213T175226_C001	ducts due to a configuration issue. d. The bit value of this flag indicate t this is to be expected. <b>Test Failed</b> Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo	This is being investigated and will be updated in the next SW update.  s any problems when set.           Description         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records
Attitude Correction Missing: This flag is currently set in error for GOPR proc Number of products with errors: 0 4.6 L1B Waveform Group Data Check CryoSat L1B data includes a waveform data flag for each measurement recom- coss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 19 Product CS_OFFL_SIR_GOPM1B_20191213T1023909_20191213T1025127_C001 CS_OFFL_SIR_GOPM1B_20191213T100354_20191213T102019_C001 CS_OFFL_SIR_GOPM1B_20191213T103639_20191213T111042_C001 CS_OFFL_SIR_GOPN1B_20191213T120919_20191213T121445_C001 CS_OFFL_SIR_GOPN1B_20191213T143914_20191213T144025_C001	ducts due to a configuration issue. d. The bit value of this flag indicate t this is to be expected. <b>Test Failed</b> Loss of Echo Loss of Echo	This is being investigated and will be updated in the next SW update.  s any problems when set.           Description         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records         The tracking echo is missing for one or more records
Attitude Correction Missing: This flag is currently set in error for GOPR products with errors: 0 4.6 L1B Waveform Group Data Check CryoSat L1B data includes a waveform data flag for each measurement recorrectors of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 19 Product CS_OFFL_SIR_GOPM1B_20191213T102354_20191213T102019_C001 CS_OFFL_SIR_GOPM1B_20191213T103639_20191213T11042_C001 CS_OFFL_SIR_GOPM1B_20191213T120919_20191213T121445_C001 CS_OFFL_SIR_GOPN1B_20191213T143914_20191213T144025_C001 CS_OFFL_SIR_GOPN1B_20191213T170115_20191213T170305_C001 CS_OFFL_SIR_GOPN1B_20191213T175211_20191213T175226_C001 CS_OFFL_SIR_GOPN1B_20191213T184049_20191213T184228_C001	ducts due to a configuration issue. rd. The bit value of this flag indicate t this is to be expected. <b>Test Failed</b> Loss of Echo Loss of Echo	This is being investigated and will be updated in the next SW update.  s any problems when set.           Description         The tracking echo is missing for one or more records

CS_OFFL_SIR_GOPR1B_20191213T174948_20191213T175210_C001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOPR1B_20191213T193115_20191213T194035_C001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOPR1B_20191213T205923_20191213T210001_C001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOPR1B_20191213T224350_20191213T224823_C001	Loss of Echo	The tracking echo is missing for one or more records	
5. GOP Level 2 Data Quality Check			

Loss of Echo

Loss of Echo

Loss of Echo

Loss of Echo

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

# 5.1 L2 Product Format Check

CS\_OFFL\_SIR\_GOPR1B\_20191213T021729\_20191213T022239\_C001

CS\_OFFL\_SIR\_GOPR1B\_20191213T071558\_20191213T071847\_C001

CS\_OFFL\_SIR\_GOPR1B\_20191213T075530\_20191213T080309\_C001

CS\_OFFL\_SIR\_GOPR1B\_20191213T085440\_20191213T085802\_C001

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL). Number of products with errors: 0

# 5.2 L2 Product Header Analysis

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

5.3 L2 Auxiliary Data File Usage Check						

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct. Number of products with errors: 0

# 5.4 L2 Auxiliary Correction Error Check

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

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

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

56

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20191213T023909_20191213T025127_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_20191213T003724_20191213T003906_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T012108_20191213T012204_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T020623_20191213T020805_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_20191213T021513_20191213T021728_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T025550_20191213T025806_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_20191213T025905_20191213T030118_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide heigh (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T034529_20191213T034719_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_20191213T035406_20191213T035853_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T043546_20191213T043942_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T053518_20191213T053710_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T102342_20191213T102507_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T103017_20191213T103324_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Perioc Ocean Tide	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Tota Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20191213T120424_20191213T120713_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T120920_20191213T121445_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T130016_20191213T130440_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T134354_20191213T134629_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T143914_20191213T144025_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T151557_20191213T151735_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T152107_20191213T152442_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_20191213T161834_20191213T162058_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T162106_20191213T162314_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_20191213T170115_20191213T170305_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_20191213T171124_20191213T171345_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_20191213T175829_20191213T180256_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_20191213T194035_20191213T194518_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T202048_20191213T202426_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T212157_20191213T212348_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_20191213T220011_20191213T220329_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

CS_OFFL_SIR_GOPN_2_20191213T220842_20191213T221007_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_20191213T225101_20191213T225208_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20191213T234746_20191213T234854_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_20191213T012204_20191213T012745_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_20191213T012800_20191213T012925_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_20191213T014905_20191213T015034_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_20191213T030118_20191213T030806_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_20191213T043231_20191213T043518_C001	Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOPR_2_20191213T043942_20191213T044501_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_20191213T061759_20191213T062753_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_20191213T075530_20191213T080309_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_20191213T081318_20191213T081423_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_20191213T093407_20191213T094114_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_20191213T094114_20191213T094237_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_20191213T111302_20191213T112012_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_20191213T112012_20191213T112429_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_20191213T112440_20191213T113453_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_20191213T125445_20191213T125906_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_20191213T125906_20191213T130015_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_20191213T143242_20191213T143610_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_20191213T143610_20191213T143914_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_20191213T155147_20191213T155812_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_20191213T161222_20191213T161833_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_20191213T175358_20191213T175829_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_20191213T193115_20191213T194035_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_20191213T211150_20191213T211937_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_20191213T225209_20191213T230159_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 (20Hz)

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

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

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

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

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Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20191212T235331_20191213T002643_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.

CIC:UML_DIM_COMM_2_DOUBLETUREUMUNITY DIM_COMM_       CIC:UML_DIM_COMM_2_DOUBLETUREUMUNITY DIM_COMMUNITY DIM_COMM			
Construction         Description         Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>	CS_OFFL_SIR_GOPM_2_20191213T002859_20191213T003411_C001		
CB_OFT_URE_COMPL_2019913110692_000123101952_0001         evel beschelle Coding CODIE         beschelle Coding CODIE           CB_OFT_URE_COMPL_2019913110621_000123101952_0001         CODIE Alleback Table and the codie of the cod	CS_OFFL_SIR_GOPM_2_20191213T003431_20191213T003724_C001		
Control         Bit Addate Codity         For data mate codits           Col, OTL_BILLOOPL_201912171131251_0019217114451_001         Aprix Alternet Rage SPR, SPN, The Code Materies Rage and Bascatter Codity         The Code Materies Rage and Bascatter Codity           CS, OTL_BILLOOPL_201912171131250_00192171131250_001         Opera Alternet Rage SPR, SPN, The Code Materies Rage and Bascatter Codity         The Code Materies Rage and Bascatter Codity           CS, OFL_BILLOOPL_20191217121200_001         Opera Alternet Rage SPR, SPN, The Code Materies Rage and Bascatter Codity         The Code Materies Rage and Bascatter Codity           CS, OFL_BILLOOPL_20191217121200_001         OCCOM Materies Rage and Bascatter Codity         The Code Materies Rage and Bascatter Codity           CS, OFL_BILLOOPL_2019121712200_0011121712200_0011         OCCOM Materies Rage and Bascatter Codity         The Code Materies Rage and Bascatter Codity           CS, OFL_BILLOOPL_2019121712200_0011121712200_0011         OCCOM Materies Rage SPR, SPN to SPR	CS_OFFL_SIR_GOPM_2_20191213T004512_20191213T011542_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Bit, Perty, J.R., CORM, 2, 20191210100051 2019210100000         and Rescarator Quality OBDO         and Rescarator Quality OBDO           CB, Cert, DR, OCEM, 2, 20191210100000, 20191210100000         CORD Alterets Range, SBN, SBN, Bolts Descarator Quality Range Range Range         The Ocean Alteret Range, SBN, SBN, Bolts Descarator Quality Range Range Range           CB, Cert, DR, OCEM, 2, 20191210100000, 201912	CS_OFFL_SIR_GOPM_2_20191213T011726_20191213T012020_C001		
CB_OPTL_SBL_OOPL_2_D101211702500_2019213702553_0011       and basesable Cuality COSD       and the COSD Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and the Cost Alterace Rags and Basesable Cuality Flags have been and Basesable Cuality Flags have been and the Cost Alterace Rags and	CS_OFFL_SIR_GOPM_2_20191213T013521_20191213T014851_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Control         Exclusion	CS_OFFL_SIR_GOPM_2_20191213T015034_20191213T020553_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Corp. Sec. Query 2, 20191213102280, 20191213102280, 20191213102280, 20191213102280, 20191213102280, 20191213102280, 20191213102280, 20191213102280, 20191213102280, 20191213102280, 20191213102280, 20191213108280, 201912131078180, 201912131078180, 20191213108280, 20191213108280, 2	CS_OFFL_SIR_GOPM_2_20191213T020805_20191213T021309_C001		
CB, OFFL, SR, GOPM, 2, 201912/31702239, 201912/317022349, C001       and Backsather Quality, C000       and the COCO Altimater Range and Backsather Quality, C000         CB, OFFL, SR, GOPM, 2, 201912/317022300, 201912/317023172, C001       CB and Rander Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Altimater Range, SSH, SWH and Sanksather Quality, Flags Fare been Al	CS_OFFL_SIR_GOPM_2_20191213T021348_20191213T021513_C001		
CS_OFIL_SIR_GOPM_2_20101213T022612_20101213T022612_2001 and Backstathe Quality COCCA Advances Range and Backstathe Quality Flags have been Advances Range an	CS_OFFL_SIR_GOPM_2_20191213T022239_20191213T023249_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB_OFFL_SIR_GOPM_2_20191213T03285_20191213T03285_2001       and Baskaathe Quality Code       and the OCOS Allineeter Range and Backaather Quality Flags have been at backaather Range at Backaather Range at Backaather Quality Flags have been at backaather Range at Backaather Range at Backaather Range at Backaather Range Attender Range at Backaather Quality Flags have been at backaather Range Attender Range at Backaather Quality Flags have been at backaather Range Attender Range at Backaather Quality Flags have been at backaather Range Attender Range at Backaather Quality Flags have been at backaather Range Attender Range Atte	CS_OFFL_SIR_GOPM_2_20191213T023909_20191213T025127_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB_OFFL_SIR_GOPM_2_20191213T03345_20191213T03449_C001       and Beckscatter Quality, COOS       and the COOS Altimeter Range and Beckscatter Quality Flags have been set for one more secods.         CB_OFFL_SIR_GOPM_2_20191213T03511_20191213T032249_C001       COCG Altimeter Range Quality, COOS Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CB_OFFL_SIR_GOPM_2_20191213T03251_0011       Cocean Altimeter Range, SSHA, SWH and Beckscatter Quality Flags have been set for one more secods.       The Ocean Altimeter Range, SSHA, SWH and Beckscatter Quality Flags have been set for one more secods.         CB_OFFL_SIR_GOPM_2_20191213T03251_0011       Cocean Altimeter Range, SSHA, SWH and Beckscatter Quality Flags have been set for one more secods.         CB_OFFL_SIR_GOPM_2_20191213T05216_0127_20191213T052444_C001       Cocean Altimeter Range, SSHA, SWH and Beckscatter Quality Flags have been set for one more secods.         CB_OFFL_SIR_GOPM_2_20191213T05216_20191213T05216_2011       Cocean Altimeter Range, SSHA, SWH and Beckscatter Quality Flags have been set for one more secods.         CB_OFFL_SIR_GOPM_2_20191213T053168_20191213T053168_2011       COCOA Altimeter Range Quality, COCOA Altimeter Range, SSHA, SWH and Beckscatter Quality Flags have been set for one or more secods.         CB_OFFL_SIR_GOPM_2_20191213T053168_20191213T053168_2011       Cocean Altimeter Range Quality, COCOA Altimeter Range, SSHA, SWH and Beckscatter Quality Flags have been set for one or more secods.         CB_OFFL_SIR_GOPM_2_20191213T053168_20191213T053168_2011       Cocean Altimeter Range Quality, COCOA Altimeter Range, SSHA, SWH and Beckscatter Quality Flags have been set	CS_OFFL_SIR_GOPM_2_20191213T032613_20191213T032855_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Open Def Level         Construction         Backstatter Quality         for one or more records.           C8_OFFL_SIR_GOPM_2_20191213T038911_20191213T042246_C001         Cocean Attinueter Range. SBHA, SWH and Backstatter Quality Flags and the OCGO Attinueter Range and Backstatter Quality Flags have been Attinueter Range and Backstatter Quality         The Ocean Attinueter Range and Backstatter Quality Flags have been Attinueter Range. SBHA, SWH and Backstatter Quality Flags have been Attinueter Range as SHA, SWH and Backscatter Quality Flags have been Attinueter Range as SHA, SWH and Backscatter Quality Flags have been Attinueter Range as SHA, SWH and Backscatter Quality Flags have been attinueter Range Astinueter Range Astinueter Range Astinueter Range Astinueter Range Astinueter Range and Backscatter Quality Flags have been attinueter Range and Backscatter Quality Flags have been ast for one or more records.           C8_OFFL_SIR_GOPM_2_20191213T053316_20101         OCCGA Attinueter Range Quality, OCCG         The OCCGA Attinueter Range and Backscatter Quality Flags have been ast for one or more records.           C8_OFFL_SIR_GOPM_2_20191213T053316_20101         OCCGA Attinueter Range Quality, OCCG         The OCCGA Attinueter Range and Backscatter Quality Flags have been ast for one or more records.           C8_OFFL_SIR_GOPM_2_20191213T053326_20191213T050356_2001         OCCGA Attinueter Range Quality, OCCG         The OCCGA Attinueter Range and Backscatter Quality Flags have been ast for one or more records.           C8_OFFL_SIR_GOPM	CS_OFFL_SIR_GOPM_2_20191213T033035_20191213T034449_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191213T035911_20191213T042240_0001       and Backscatter Quality COCG       minuter Range and Backscatter Quality Flags have been Attimeter Range, SSM, SWH         CS_OFFL_SIR_GOPM_2_20191213T042343_20191213T043231_C001       Ocean Attimeter Range, SSM, SWH       The Ocean Attimeter Range, SSM, SWH         CS_OFFL_SIR_GOPM_2_20191213T050157_20191213T052404_C001       Ocean Attimeter Range and Backscatter Quality CoCG       The Ocean Attimeter Range and Backscatter Quality Flags have been attimeter Range, SSM, SWH         CS_OFFL_SIR_GOPM_2_20191213T052002_20191213T053138_C001       OCCOA Attimeter Range Quality, COCG       The Ocean Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T053158_20191213T053518_C0011       OCCOA Attimeter Range Quality, COCG       The OCOC Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T053522_20191213T053518_C0011       OCCOA Attimeter Range Quality, COCG       The OCOCA Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T053522_20191213T050555_C0011       Ocean Attimeter Range, SNA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T070546_20191213T070516_C0011       Ocean Attimeter Range, SNA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T070545_20191213T070516_C0011       Ocean Attimeter Range, SNA, SWH and Backscatter Quality Flags have been set for one or more rec	CS_OFFL_SIR_GOPM_2_20191213T034719_20191213T035219_C001		
CS_OFFL_SIR_GOPM_2_20191213T043243_20191213T043231_C001       and Backscatter Quality, COCG Allimeter Range and Backscatter Quality, COCG and Rimeter Range. SSHA, SWH and Backscatter Quality, COCG Allimeter Range and Backscatter Quality, Flags have been Allimeter Range. SSHA, SWH and Backscatter Quality, COCG Allimeter Range and Backscatter Quality, Flags have been allimeter Range and Backscatter Quality, COCG Allimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T052168_20191213T053186_C001       COCG Allimeter Range Quality, COCG Backscatter Quality       The OCGA Allimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T053186_20191213T053186_C001       COCGA Alimeter Range Quality, OCCG Backscatter Quality       The OCGA Alimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T053186_20191213T055318_C001       COCGA Alimeter Range SSHA, SWH and Backscatter Quality       The OCGA Alimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T056373_20191213T070314_C001       COGGA Alimeter Range, SSHA, SWH and Backscatter Quality, COCG Alimeter Range and Backscatter Quality, COCG Alimeter Range and Backscatter Quality, COCG Alimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T070545_20191213T071556_C001       COGGA Alimeter Range, SSHA, SWH and Backscatter Quality, COCG Alimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T070645_20191213T076454_20191213T076454_201912	CS_OFFL_SIR_GOPM_2_20191213T035911_20191213T042246_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191213T050157_20191213T052404_C001       and Backscatter Quality, OCOG Altmeter Range and Backscatter Quality, Flags have been         CS_OFFL_SIR_GOPM_2_20191213T052802_20191213T053158_001       CCOG 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_20191213T053158_0191213T053518_001       CCOG 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_20191213T053822_20191213T050365_C001       COGA Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, COG Altimeter Range and Backscatter Quality, COGA Altimeter Range, SSHA, SWH, COGA Altimeter Range, SSHA, SWH, COGA Altimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T070314_C001       COGA Altimeter Range, SSHA, SWH and Backscatter Quality, COGA Altimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T070545_20191213T071050_0001       CCOGA Altimeter Range Quality, COGA Altimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T07847_20191213T075156_C001       COGA Altimeter Range, SSHA, SWH and Backscatter Quality, COGA Altimeter Range, SSHA, SWH and Backscatter Quality, COGA       The OCOGA Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20191213T042343_20191213T043231_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191213103280_201912131033130_2001         Backscatter Quality         for one or more records.           CS_OFFL_SIR_GOPM_2_201912131053158_201912131053518_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_201912131053822_201912131060655_C001         Ocean Altimeter Range, SHA, SWH and Backscatter Quality         The Ocean Altimeter Range, SHA, SWH and the OCOG Altimeter Range, SHA, SWH and the OCOG Altimeter Range, SHA, SWH and the OCOG Altimeter Range, SHA, SWH and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_GOPM_2_201912131063733_201912131070314_C001         Ocean 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.           CS_OFFL_SIR_GOPM_2_201912131070545_201912131071050_C001         OCOG Altimeter Range, SHA, SWH and Backscatter Quality         The OCEAn Altimeter Range and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_GOPM_2_201912131071847_201912131075156_C001         Ocean Altimeter Range, SHA, SWH and the OCOG Altimeter Range, SHA, SWH and Backscatter Quality Flags have been alt the OCOG Altimeter Range, SHA, SWH and Backscatter Quality Flags have been alt the OCOG Altimeter Range, SHA, SWH and Backscatter Quality Flags have been alt the OCOG Altimeter Range, SHA, SWH and Backscatter Quality Flags have been alt the OCOG Altimeter Range, SHA, SWH and Backscatter Quality Flags have bee	CS_OFFL_SIR_GOPM_2_20191213T050157_20191213T052404_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191213T08305_20191213T080655_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T083822_20191213T080655_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, and Backscatter Quality. COCG Altimeter Range and Backscatter Quality. Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T070545_20191213T070545_20191213T071050_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T070545_20191213T071050_C001       OCCG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T071847_20191213T075156_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at Immeter Range, SSHA, SWH and Backscatter Quality Flags have been at Immeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality COCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Q	CS_OFFL_SIR_GOPM_2_20191213T052802_20191213T053136_C001		
CS_OFFL_SIR_GOPM_2_20191213T060655_C001       and Backscatter Quality. OCCG         Altimeter Range and Backscatter Quality       and the OCCO Altimeter Range and Backscatter Quality Flags have been         CS_OFFL_SIR_GOPM_2_20191213T063733_20191213T070314_C001       Ocean Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_GOPM_2_20191213T070545_20191213T071050_C001       OCCG Altimeter Range Quality, OCCG       The OCCG Altimeter Range, and Backscatter Quality Flags have been set         CS_OFFL_SIR_GOPM_2_20191213T070545_20191213T071050_C001       DCCG Altimeter Range, SSHA, SWH       The OCCG Altimeter Range, and Backscatter Quality Flags have been set         CS_OFFL_SIR_GOPM_2_20191213T071847_20191213T075156_C001       DCCGA Altimeter Range, SSHA, SWH       The OCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set         CS_OFFL_SIR_GOPM_2_20191213T080610_20191213T080635_C001       Dcean Altimeter Range, SSHA, SWH       The OCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range and Backscatter Quality CCG<	CS_OFFL_SIR_GOPM_2_20191213T053158_20191213T053518_C001		
CS_OFFL_SIR_GOPM_2_20191213T063733_20191213T070314_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Backscatter Quality       in the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T070545_20191213T071050_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_20191213T071847_20191213T075156_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 have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T080610_20191213T080635_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean 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_20191213T084544_20191213T085122_C001       OCCGA Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T084504_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Qu	CS_OFFL_SIR_GOPM_2_20191213T053822_20191213T060655_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_2019121310/0343_201912131071030_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T071847_20191213T075156_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality, OCOG Attimeter Range and Backscatter Quality, OCOG Attimeter Range, SSHA, SWH and Backscatter Quality, OCOG Attimeter Range, SSHA, SWH and Backscatter Quality, OCOG Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality, OCOG Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality, OCOG Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range and Backscatter Quality, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T084544_20191213T085122_C001       OCCGA Attimeter Range Quality, OCOG Backscatter Quality, OCOG Attimeter Range, SSHA, SWH and Backscatter Quality, OCOG       The OCCGA Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T084544_20191213T093054_C001       OCCGA Attimeter Range, SSHA, SWH and Backscatter Quality, OCOG       The OCCGA Attimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T085803_20191213T093054_C001<	CS_OFFL_SIR_GOPM_2_20191213T063733_20191213T070314_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191213T071847_20191213T075156_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T083733_20191213T084141_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality F	CS_0FFL_SIR_GOPM_2_20191213T070545_20191213T071050_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set
CS_OFFL_SIR_GOPM_2_20191213T080610_20191213T080635_C001and Backscatter Quality, OCOG Altimeter Range and Backscatter Qualityand the OCOG Altimeter Range and Backscatter QualityCS_OFFL_SIR_GOPM_2_20191213T083733_20191213T084141_C001Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter QualityThe Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter QualityCS_OFFL_SIR_GOPM_2_20191213T084544_20191213T085122_C001OCOG Altimeter Range Quality, OCOG Backscatter QualityThe OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.CS_OFFL_SIR_GOPM_2_20191213T085803_20191213T093054_C001Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, 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, 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_20191213T085803_20191213T093054_C001Ocean 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_20191213T094420_20191213T094520_C001Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOGThe Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range, SSHA, SWH and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscat		Backscatter Quality	
CS_OFFL_SIR_GOPM_2_20191213T083733_20191213T084141_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       and the OCOG Altimeter Range and Backscatter Quality         CS_OFFL_SIR_GOPM_2_20191213T084544_20191213T085122_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_20191213T084544_20191213T085122_C001       Ocoean 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_20191213T085803_20191213T093054_C001       Ocean 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_20191213T09420_20191213T094520_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG       The Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20191213T071847_20191213T075156_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	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_20191213T084344_20191213T083122_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T085803_20191213T093054_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality, OCOG         CS_OFFL_SIR_GOPM_2_20191213T094420_20191213T094520_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Q		Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	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_20191213T085803_20191213T093054_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPM_2_20191213T09420_20191213T094520_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality, OCOG	CS_OFFL_SIR_GOPM_2_20191213T080610_20191213T080635_C001	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	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.
CS_OFFL_SIR_GOPM_2_20191213T094420_20191213T094520_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_GOPM_2_20191213T080610_20191213T080635_C001 CS_OFFL_SIR_GOPM_2_20191213T083733_20191213T084141_C001	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	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_20191213T080610_20191213T080635_C001 CS_OFFL_SIR_GOPM_2_20191213T083733_20191213T084141_C001 CS_OFFL_SIR_GOPM_2_20191213T084544_20191213T085122_C001	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 Quality, OCOG Backscatter Quality OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality	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. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for One or more records.

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CS_OFFL_SIR_GOPM_2_20191213T100353_20191213T102019_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_20191213T102507_20191213T103017_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_20191213T103639_20191213T111042_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_20191213T111252_20191213T111302_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_0FFL_SIR_GOPM_2_20191213T114010_20191213T115744_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_20191213T120713_20191213T120919_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_20191213T121630_20191213T124719_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_20191213T124825_20191213T124857_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_20191213T130519_20191213T132333_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_20191213T132435_20191213T132442_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_20191213T132445_20191213T133809_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_20191213T134946_20191213T135331_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_20191213T135530_20191213T141051_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_20191213T141253_20191213T142216_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_20191213T144426_20191213T144655_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_20191213T144804_20191213T150135_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_20191213T151735_20191213T151856_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_20191213T152442_20191213T153232_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_20191213T153513_20191213T154956_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_20191213T162755_20191213T170001_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_20191213T170305_20191213T170518_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_20191213T170535_20191213T171124_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_20191213T171452_20191213T173938_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_20191213T181056_20191213T183810_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_20191213T184516_20191213T184939_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_20191213T185331_20191213T192042_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_20191213T192154_20191213T192232_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_20191213T194518_20191213T201718_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_20191213T202426_20191213T203004_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_20191213T203308_20191213T203748_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_20191213T210904_20191213T211057_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_20191213T212349_20191213T215704_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_20191213T220330_20191213T220842_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_20191213T221319_20191213T223029_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_20191213T230159_20191213T232451_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_20191213T232456_20191213T233545_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_20191213T234335_20191213T234746_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_20191213T235230_20191214T001834_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T094521_20191213T094625_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T153232_20191213T153419_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T175829_20191213T180256_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T180819_20191213T181056_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20191213T003424_20191213T003431_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20191213T162417_20191213T162631_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20191213T212111_20191213T212136_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

# L2 Quality Flags (20Hz PLRM)

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

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

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

88

Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20191213T002718_20191213T002859_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T012108_20191213T012204_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T021513_20191213T021728_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T023250_20191213T023355_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_20191213T025550_20191213T025806_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_20191213T035406_20191213T035853_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_GOPN_2_20191213T043546_20191213T043942_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_20191213T044502_20191213T044536_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T045437_20191213T045538_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_20191213T053136_20191213T053143_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_20191213T053518_20191213T053710_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_20191213T070412_20191213T070545_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T075413_20191213T075530_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_20191213T082441_20191213T082636_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_20191213T085123_20191213T085227_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_20191213T094521_20191213T094625_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_20191213T100309_20191213T100353_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_20191213T102342_20191213T102507_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_20191213T103017_20191213T103324_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T113920_20191213T114010_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_20191213T120424_20191213T120713_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_20191213T120920_20191213T121445_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T125351_20191213T125444_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_20191213T130016_20191213T130440_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T142217_20191213T142524_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_20191213T144148_20191213T144357_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_20191213T150135_20191213T150737_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_20191213T150808_20191213T151311_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_20191213T151557_20191213T151735_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_20191213T152107_20191213T152442_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T162106_20191213T162314_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T171124_20191213T171345_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T173938_20191213T174315_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_20191213T174938_20191213T174948_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_20191213T175829_20191213T180256_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T180819_20191213T181056_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_20191213T184049_20191213T184228_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_20191213T184939_20191213T185228_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T194035_20191213T194518_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T202048_20191213T202426_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T203004_20191213T203119_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20191213T212157_20191213T212348_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_20191213T220842_20191213T221007_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_20191213T223029_20191213T223341_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_20191213T003424_20191213T003431_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_20191213T003906_20191213T004512_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_20191213T012204_20191213T012745_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_20191213T012800_20191213T012925_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_20191213T021729_20191213T022239_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_20191213T023656_20191213T023909_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_20191213T025246_20191213T025505_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_20191213T025806_20191213T025905_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_20191213T030118_20191213T030806_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_20191213T061759_20191213T062753_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_20191213T071558_20191213T071847_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_20191213T075352_20191213T075412_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_20191213T075530_20191213T080309_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_20191213T080333_20191213T080610_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_20191213T085440_20191213T085802_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_20191213T093407_20191213T094114_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_20191213T094114_20191213T094237_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_20191213T094627_20191213T095013_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_20191213T103325_20191213T103639_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_20191213T111042_20191213T111210_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_20191213T111302_20191213T112012_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_20191213T112012_20191213T112429_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_20191213T115745_20191213T120424_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_20191213T132334_20191213T132435_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_20191213T133810_20191213T134354_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_20191213T143242_20191213T143610_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_20191213T143610_20191213T143914_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_20191213T154956_20191213T155147_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_20191213T155147_20191213T155812_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_20191213T161222_20191213T161833_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_20191213T162314_20191213T162351_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_20191213T174948_20191213T175210_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_20191213T183810_20191213T184049_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_20191213T192232_20191213T192310_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_20191213T193115_20191213T194035_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_20191213T201719_20191213T202047_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_20191213T210434_20191213T210809_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_20191213T211150_20191213T211937_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_20191213T224218_20191213T224350_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_20191213T224826_20191213T225101_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_20191213T225209_20191213T230159_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_20191213T232452_20191213T232455_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_20191213T233546_20191213T233723_C001	Altimeter Rande and Backscatter (Juality	The Ocean Altimeter Range, SSHA, SWH 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_20191213T234855_20191213T235229_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.

#### L2 Quality Flags (1 Hz & 1Hz PLRM)

Currently, there are several common flags raised in the Level 2 products, which are summarised below.

195

159

> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for products over sea ice, which is to be expected.

Number of products with errors:

### 5.8 L2 Ocean Retracking Quality Check

#### L2 Retracking Flags (20Hz)

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

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

Number of products with errors:

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

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

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

Number of products with errors:

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

## 6.1 P2P Product Format Check

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

Number of products with errors:

## 6.2 P2P Product Header Analysis

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

0

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

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

29

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20191213T003413_20191213T012351_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T012351_20191213T021326_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T021326_20191213T030305_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_220191213T030305_20191213T035240_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_220191213T035240_20191213T044219_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) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20191213T044219_20191213T053154_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T053154_20191213T062132_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T062132_20191213T071107_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T071107_20191213T080046_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T080046_20191213T085021_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T085021_20191213T093959_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_220191213T093959_20191213T102934_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_220191213T102934_20191213T111913_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) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20191213T111913_20191213T120848_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T120848_20191213T125826_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T125826_20191213T134801_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_220191213T134801_20191213T143740_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_220191213T143740_20191213T152715_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide heigh (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20191213T152715_20191213T161654_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T161654_20191213T170629_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T170629_20191213T175607_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T175607_20191213T184542_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_220191213T184542_20191213T193521_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_220191213T193521_20191213T202456_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide heigh (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20191213T202456_20191213T211434_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20191213T211434_20191213T220410_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_220191213T220410_20191213T225348_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_220191213T225348_20191213T234323_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS OFFL SIR GOP 2 20191213T234323 20191214T003301 C002	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

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.

0

Number of products with errors: 

6.6 P2P Measurement Quality	ig Check
P2P Quality Flags (20Hz)	
CryoSat P2P data includes Quality Flags for	h 20 Hz, 20 Hz PLRM and 1 Hz measurement record, copied from the corresponding L2 products.
Since the P2P Quality Flags are copied d	ly 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 (20Hz PLRM)	
Since the P2P Quality Flags are copied d	ly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.
Number of products with errors:	29
P2P Quality Flags (1 Hz & 1Hz P	0
Since the P2P Quality Flags are copied d	ly 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 (20Hz) Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

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

27

P2P Retracking Flags PLRM	
CryoSat L2 data includes an ocean retracking quality fl	ag 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