

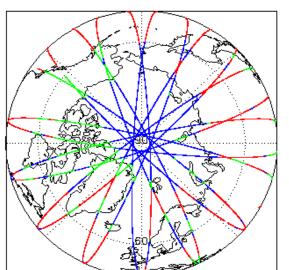
## **QA4EO Daily Report for GOP data:**

<u>21/12/2020</u>

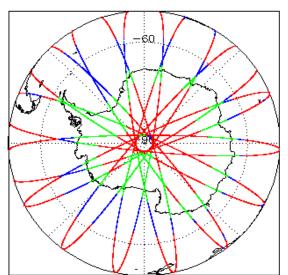
	21-Jan-2021	Check	L1 & L2	P2P
eport Production:	21-Jan-2021	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
rocessor used.	CryoSal Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	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
		QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1, 7.2 and 7.3

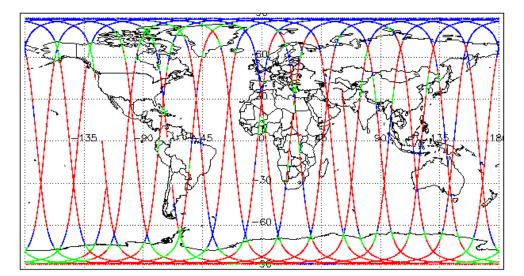
1. Overview

Mission / Instrument News	
20-Dec-2020	None
21-Dec-2020	None
22-Dec-2020	Nothing planned













## 3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

0

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

4. GOP Level 1B Data Quality Check

### 4.1 L1B Product Format Check

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

4.2 L1B Product Header Analysis		
For all products, a series of pre-defined checks are performed on the MPH and	SPH in order to identify any inconsistencies	and/or errors raised by the ground-segment processing chain.
L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L1E OSARIn chains. A modification is required in the next release.	B GOPR and GOPN products because the I1	b_processing_quality_hr field is not correctly configured in the OSAR and
Number of products with errors: 0		
4.3 L1B Auxilary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pre	e-determined baseline and also to check the v	validity of Auxiliary Data Files is correct.
Number of products with errors: 0		
4.4 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag for each measurement record	d. The bit value of this flag indicates any prob	olems when set.
Number of products with errors: 0		
4.5 L1B Measurement Confidence Data Check		
CryoSat L1B data includes a measurement confidence flag for each measurem	nent record. The bit value of this flag indicate	s any problems when set.
Attitude Correction Missing: This flag is currently set in error for GOPR prod	ucts due to a configuration issue. This is beir	ng investigated and will be updated in the next SW update.
Number of products with errors: 0		
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		lems when set.
Loss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 19	this is to be expected.	
Loss of Echo Flag: This flag is currently set for some products over land, but         Number of products with errors:       19         Product		Description
Loss 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_20201221T075728_20201221T080634_C001	this is to be expected.	
Loss of Echo Flag: This flag is currently set for some products over land, but Number of products with errors: 19	Test Failed         Loss of Echo	Description The tracking echo is missing for one or more records
Loss 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_20201221T075728_20201221T080634_C001       10         CS_OFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001       10         CS_OFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001       10	this is to be expected.           Test Failed           Loss of Echo           Loss of Echo	Description           The tracking echo is missing for one or more records           The tracking echo is missing for one or more records
Loss 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_20201221T075728_20201221T080634_C001       1000000000000000000000000000000000000	Test Failed         Loss of Echo         Loss of Echo         Loss of Echo	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
Loss 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_20201221T075728_20201221T080634_C001         000000000000000000000000000000000000	Test Failed         Loss of Echo	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
Coss 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_20201221T075728_20201221T080634_C001         02           CS_OFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         02           CS_OFFL_SIR_GOPM1B_20201221T073727_20201221T074025_C001         02           CS_OFFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001         02           CS_OFFL_SIR_GOPN1B_20201221T12838_20201221T123426_C001         02           CS_OFFL_SIR_GOPN1B_20201221T124207_20201221T124221_C001         02	Test Failed         Loss of Echo	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
Ausses of Echo Flag: This flag is currently set for some products over land, but           Number of products with errors:         19           Product         19           Sg.OFFL_SIR_GOPM1B_20201221T075728_20201221T080634_C001         25           CSFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         25           CSFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001         25           CSFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001         25           CSFL_SIR_GOPN1B_20201221T122838_20201221T123426_C001         25           CSFL_SIR_GOPN1B_20201221T124207_20201221T124221_C001         25           COFFL_SIR_GOPN1B_20201221T141107_20201221T141150_C001         25	this is to be expected.           Test Failed           Loss of Echo	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
Access of Echo Flag: This flag is currently set for some products over land, but           Jumber of products with errors:         19           Product         19           SS_OFFL_SIR_GOPM1B_20201221T075728_20201221T080634_C001         35           SS_OFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         35           SS_OFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001         35           SS_OFFL_SIR_GOPN1B_20201221T1091454_20201221T091910_C001         35           SS_OFFL_SIR_GOPN1B_20201221T122838_20201221T123426_C001         35           SS_OFFL_SIR_GOPN1B_20201221T124207_20201221T124221_C001         35           SS_OFFL_SIR_GOPN1B_20201221T141017_20201221T14150_C001         35           SS_OFFL_SIR_GOPN1B_20201221T1433226_20201221T143431_C001         35	Test Failed         Loss of Echo	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
Loss of Echo Flag: This flag is currently set for some products over land, but           Rumber of products with errors:         19           Product         19           CS_OFFL_SIR_GOPM1B_20201221T075728_20201221T080634_C001         02           CS_OFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         02           CS_OFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001         02           CS_OFFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001         02           CS_OFFL_SIR_GOPN1B_20201221T12838_20201221T123426_C001         02           CS_OFFL_SIR_GOPN1B_20201221T124207_20201221T124221_C001         02           CS_OFFL_SIR_GOPN1B_20201221T141017_20201221T141405_C001         02           CS_OFFL_SIR_GOPN1B_20201221T1433226_20201221T143431_C001         02           CS_OFFL_SIR_GOPN1B_20201221T160058_20201221T160130_C001         03	Test Failed         Loss of Echo	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
Access of Echo Flag: This flag is currently set for some products over land, but           Jumber of products with errors:         19           Product         19           CS_OFFL_SIR_GOPM1B_20201221T075728_20201221T080634_C001         25           COFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         25           COFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001         25           COFFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001         25           COFFL_SIR_GOPN1B_20201221T1242838_20201221T123426_C001         25           COFFL_SIR_GOPN1B_20201221T124207_20201221T124221_C001         25           COFFL_SIR_GOPN1B_20201221T141017_20201221T14150_C001         25           COFFL_SIR_GOPN1B_20201221T143226_20201221T143431_C001         25           COFFL_SIR_GOPN1B_20201221T160058_20201221T160130_C001         25           COFFL_SIR_GOPN1B_20201221T191816_20201221T191938_C001         25	this is to be expected.          Test Failed         Loss of Echo	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
Soss of Echo Flag: This flag is currently set for some products over land, but lumber of products with errors:         19           roduct         19           rs_OFFL_SIR_GOPM1B_20201221T075728_20201221T080634_C001         55           SS_OFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         55           SS_OFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001         55           SS_OFFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001         55           SS_OFFL_SIR_GOPN1B_20201221T12838_20201221T123426_C001         55           SS_OFFL_SIR_GOPN1B_20201221T142407_20201221T124221_C001         55           SS_OFFL_SIR_GOPN1B_20201221T141017_20201221T141150_C001         55           SS_OFFL_SIR_GOPN1B_20201221T143326_20201221T143431_C001         55           SS_OFFL_SIR_GOPN1B_20201221T191816_20201221T191938_C001         55           SS_OFFL_SIR_GOPN1B_20201221T1918816_20201221T190431_C001         55	Test Failed         Loss of Echo	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
Access of Echo Flag: This flag is currently set for some products over land, but lumber of products with errors:         19           Product         19           Product         19           SS_OFFL_SIR_GOPM1B_20201221T075728_20201221T080634_C001         20           SS_OFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         20           SS_OFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001         20           SS_OFFL_SIR_GOPN1B_20201221T091454_20201221T123426_C001         20           SS_OFFL_SIR_GOPN1B_20201221T124207_20201221T124221_C001         20           SS_OFFL_SIR_GOPN1B_20201221T141017_20201221T141450_C001         20           SS_OFFL_SIR_GOPN1B_20201221T143226_20201221T143431_C001         20           SS_OFFL_SIR_GOPN1B_20201221T191816_20201221T191938_C001         20           SS_OFFL_SIR_GOPN1B_20201221T191816_20201221T1200431_C001         20           SS_OFFL_SIR_GOPN1B_20201221T1253700_20201221T224148_C001         20	Test Failed         Loss of Echo         Loss of Echo	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
Access of Echo Flag: This flag is currently set for some products over land, but lumber of products with errors:         19           Product         19           SS_OFFL_SIR_GOPM1B_20201221T075728_20201221T080634_C001         25           SS_OFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         25           SS_OFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001         25           SS_OFFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001         25           SS_OFFL_SIR_GOPN1B_20201221T124388_20201221T123426_C001         25           SS_OFFL_SIR_GOPN1B_20201221T124207_20201221T124221_C001         25           SS_OFFL_SIR_GOPN1B_20201221T141017_20201221T14150_C001         25           SS_OFFL_SIR_GOPN1B_20201221T143226_20201221T143431_C001         25           SS_OFFL_SIR_GOPN1B_20201221T160058_20201221T160130_C001         25           SS_OFFL_SIR_GOPN1B_20201221T191816_20201221T191938_C001         25           SS_OFFL_SIR_GOPN1B_20201221T195840_20201221T200431_C001         25           SS_OFFL_SIR_GOPN1B_20201221T1223700_20201221T224148_C001         25           SS_OFFL_SIR_GOPN1B_20201221T041035_20201221T041155_C001         25	Test Failed         Loss of Echo         Loss of Echo	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           The tracking echo is missing for one or more records
Access of Echo Flag: This flag is currently set for some products over land, but           Jumber of products with errors:         19           Product         19           CS_OFFL_SIR_GOPM1B_20201221T075728_20201221T080634_C001         25           COFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         25           CS_OFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001         25           COFFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001         25           COFFL_SIR_GOPN1B_20201221T124207_20201221T123426_C001         25           COFFL_SIR_GOPN1B_20201221T141017_20201221T124221_C001         25           COFFL_SIR_GOPN1B_20201221T141017_20201221T141431_C001         25           COFFL_SIR_GOPN1B_20201221T143226_20201221T143431_C001         25           COFFL_SIR_GOPN1B_20201221T140058_20201221T160130_C001         25           COFFL_SIR_GOPN1B_20201221T191816_20201221T191938_C001         25           COFFL_SIR_GOPN1B_20201221T195840_20201221T200431_C001         25           COFFL_SIR_GOPN1B_20201221T055_20201221T041155_C001         25           COFFL_SIR_GOPN1B_20201221T041035_20201221T041155_C001         25	Test Failed         Loss of Echo         Loss of Echo	Description           The tracking echo is missing for one or more records
Loss 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_20201221T075728_20201221T080634_C001         10           CS_OFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001         10           CS_OFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001         10           CS_OFFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001         10           CS_OFFL_SIR_GOPN1B_20201221T1242838_20201221T123426_C001         10           CS_OFFL_SIR_GOPN1B_20201221T124207_20201221T124221_C001         10           CS_OFFL_SIR_GOPN1B_20201221T141017_20201221T14150_C001         10           CS_OFFL_SIR_GOPN1B_20201221T143226_20201221T143431_C001         10           CS_OFFL_SIR_GOPN1B_20201221T191816_20201221T191938_C001         10           CS_OFFL_SIR_GOPN1B_20201221T195840_20201221T120431_C001         10           CS_OFFL_SIR_GOPN1B_20201221T041035_20201221T04315_C001         10           CS_OFFL_SIR_GOPN1B_20201221T041035_20201221T041045_C001         10           CS_OFFL_SIR_GOPN1B_20201221T041035_20201221T042046_C001         10           CS_OFFL_SIR_GOPR1B_20201221T042152_20201221T043145_C001         10	Test Failed         Loss of Echo         Loss of Echo	Description           The tracking echo is missing for one or more records
Loss 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_20201221T075728_20201221T080634_C001         CS_OFFL_SIR_GOPM1B_20201221T073727_20201221T170804_C001           CS_OFFL_SIR_GOPM1B_20201221T073727_20201221T074025_C001         CS_OFFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001           CS_OFFL_SIR_GOPN1B_20201221T091454_20201221T123426_C001         CS_OFFL_SIR_GOPN1B_20201221T14207_20201221T124221_C001           CS_OFFL_SIR_GOPN1B_20201221T141017_20201221T14150_C001         CS_OFFL_SIR_GOPN1B_20201221T143226_20201221T143431_C001           CS_OFFL_SIR_GOPN1B_20201221T191816_20201221T160130_C001         CS_OFFL_SIR_GOPN1B_20201221T191816_20201221T19138_C001           CS_OFFL_SIR_GOPN1B_20201221T191816_20201221T104331_C001         CS_OFFL_SIR_GOPN1B_20201221T041035_20201221T04431_C001           CS_OFFL_SIR_GOPN1B_20201221T041035_20201221T04431_C001         CS_OFFL_SIR_GOPN1B_20201221T044345_C001           CS_OFFL_SIR_GOPN1B_20201221T041035_20201221T04431_C001         CS_OFFL_SIR_GOPN1B_20201221T044345_C001           CS_OFFL_SIR_GOPN1B_20201221T044345_20201221T044345_C001         CS_OFFL_SIR_GOPR1B_20201221T044345_C001           CS_OFFL_SIR_GOPR1B_20201221T044345_20201221T043345_C001         CS_OFFL_SIR_GOPR1B_20201221T044345_C001	Test Failed         Loss of Echo         Loss of Echo	Description           The tracking echo is missing for one or more records           The tracking echo
Loss 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_20201221T075728_20201221T080634_C001 CS_OFFL_SIR_GOPM1B_20201221T170041_20201221T170804_C001 CS_OFFL_SIR_GOPN1B_20201221T073727_20201221T074025_C001 CS_OFFL_SIR_GOPN1B_20201221T091454_20201221T091910_C001	Test Failed         Loss of Echo         Loss of Echo	Description           The tracking echo is missing for one or more records           The tracking echo

## 5. GOP Level 2 Data Quality Check

#### 5.1 L2 Product Format Check

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

Number of products with errors:

#### 5.2 L2 Product Header Analysis

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

#### 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).

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 Corection, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.

> Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.

> Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

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Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20201221T015034_20201221T015412_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_20201221T025141_20201221T025333_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_20201221T032959_20201221T033317_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_20201221T033829_20201221T033954_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_20201221T042046_20201221T042152_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_20201221T051735_20201221T051842_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_20201221T055957_20201221T060110_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_20201221T073727_20201221T074025_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_20201221T083309_20201221T083918_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_20201221T091454_20201221T091910_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_20201221T100348_20201221T100617_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_20201221T101243_20201221T101554_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_20201221T105344_20201221T105733_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_20201221T115332_20201221T115449_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_20201221T150244_20201221T150409_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_20201221T150930_20201221T151238_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_20201221T164228_20201221T164448_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_20201221T164831_20201221T165203_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_20201221T182310_20201221T182544_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_20201221T191816_20201221T191938_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_GOPN_2_20201221T195840_20201221T200431_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_20201221T205746_20201221T205957_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_20201221T214036_20201221T214219_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_20201221T215057_20201221T215300_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_20201221T223700_20201221T224148_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_20201221T232855_20201221T233115_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_20201221T010057_20201221T011019_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_20201221T024133_20201221T024921_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_20201221T042152_20201221T043145_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_20201221T060110_20201221T060834_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_20201221T074026_20201221T074739_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

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CS_OFFL_SIR_GOPR_2_20201221T080729_20201221T080901_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_20201221T091910_20201221T092606_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_20201221T105733_20201221T110611_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_20201221T123426_20201221T124207_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_20201221T141512_20201221T142309_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_20201221T155220_20201221T155920_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_20201221T155920_20201221T160058_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_20201221T173329_20201221T173818_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_20201221T173818_20201221T173944_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_20201221T191127_20201221T191701_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_20201221T191701_20201221T191816_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_20201221T205344_20201221T205434_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_20201221T205434_20201221T205746_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_20201221T210343_20201221T210500_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPR_2_20201221T223006_20201221T223659_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:
0

### 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_20201220T234320_20201221T000757_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201221T001501_20201221T001924_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201221T002316_20201221T004425_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_20201221T005907_20201221T010057_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201221T011503_20201221T014706_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201221T015412_20201221T015950_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_20201221T020254_20201221T020733_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_20201221T023847_20201221T024038_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201221T025334_20201221T032652_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_20201221T033317_20201221T033829_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_20201221T034305_20201221T040013_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_20201221T040908_20201221T041035_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_20201221T043145_20201221T050535_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_20201221T051052_20201221T051317_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_20201221T051334_20201221T051735_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_20201221T052217_20201221T054816_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_20201221T054835_20201221T055556_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_20201221T061138_20201221T062255_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_20201221T062736_20201221T062909_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_20201221T062922_20201221T064013_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_20201221T064123_20201221T064456_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_20201221T064659_20201221T065217_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_20201221T070322_20201221T071550_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_20201221T071805_20201221T073523_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_20201221T075728_20201221T080634_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_20201221T080935_20201221T082349_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_20201221T082625_20201221T083119_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_20201221T083122_20201221T083129_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_20201221T083136_20201221T083147_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_20201221T083153_20201221T083309_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_20201221T083918_20201221T084113_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_20201221T085926_20201221T090143_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_20201221T090306_20201221T090532_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_20201221T090613_20201221T090656_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_20201221T094645_20201221T100259_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
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CS_OFFL_SIR_GOPM_2_20201221T100617_20201221T101047_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_20201221T101720_20201221T104228_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_20201221T111702_20201221T114226_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_20201221T114442_20201221T114949_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_20201221T115706_20201221T121459_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_20201221T122707_20201221T122838_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_20201221T125428_20201221T132114_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_20201221T132428_20201221T132903_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_20201221T132906_20201221T133239_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_20201221T133724_20201221T141017_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_20201221T142309_20201221T142519_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_20201221T145416_20201221T145931_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_20201221T150410_20201221T150930_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_20201221T151603_20201221T153738_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_20201221T154024_20201221T155006_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_20201221T160136_20201221T160554_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_20201221T162147_20201221T162634_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_20201221T162822_20201221T163846_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_20201221T165518_20201221T170031_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_20201221T170041_20201221T170804_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_20201221T170841_20201221T172728_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_20201221T174457_20201221T181610_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_20201221T182544_20201221T182737_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_20201221T183430_20201221T184043_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_20201221T185040_20201221T185158_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_20201221T185638_20201221T190331_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
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CS_OFFL_SIR_GOPM_2_20201221T191938_20201221T192340_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20201221T192506_20201221T193100_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_20201221T193155_20201221T194044_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_20201221T194703_20201221T195840_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_20201221T200725_20201221T201147_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_20201221T201401_20201221T202034_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_20201221T202143_20201221T202827_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_20201221T203007_20201221T204413_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_20201221T211145_20201221T211411_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_20201221T211534_20201221T212022_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_20201221T212320_20201221T213915_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_20201221T214219_20201221T215057_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_20201221T215323_20201221T221551_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_20201221T224423_20201221T225353_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_20201221T225507_20201221T231801_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_20201221T232422_20201221T232855_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_20201221T233242_20201221T233704_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_20201221T233721_20201221T235720_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_20201221T064520_20201221T064658_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_20201221T101243_20201221T101554_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_20201221T133239_20201221T133354_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_20201221T145144_20201221T145147_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_20201221T211412_20201221T211534_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_20201221T223700_20201221T224148_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_20201221T025141_20201221T025141_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_20201221T041201_20201221T041332_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
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CS_OFFL_SIR_GOPR_2_20201221T055557_20201221T055610_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_GOPR_2_20201221T091910_20201221T092606_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_20201221T205146_20201221T205240_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_20201221T205344_20201221T205434_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_GOPR_2_20201221T205958_20201221T210114_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_GOPR_2_20201221T211014_20201221T211145_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.

#### 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.

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Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20201221T001330_20201221T001501_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_20201221T021648_20201221T021913_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_20201221T024921_20201221T025056_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_20201221T032959_20201221T033317_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_20201221T040013_20201221T040325_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_20201221T065440_20201221T065627_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_20201221T073727_20201221T074025_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_20201221T091454_20201221T091910_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_20201221T093544_20201221T093852_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_20201221T105140_20201221T105302_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_202012211105344_202012211105733_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_20201221T110726_20201221T110858_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_20201221T111321_20201221T111702_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_20201221T122838_20201221T123426_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_202012211124207_202012211124221_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_20201221T133239_20201221T133354_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_20201221T141017_20201221T141150_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_20201221T142555_20201221T142718_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

Class Control         Participant of Subscription (Control         Participant of Subscripant of Subscription (Cont	CS_OFFL_SIR_GOPN_2_20201221T150930_20201221T151238_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
BL_COPPSPI_COPPL_2020121110218_20211112111         Answer the space of the		PLRM Ocean Altimeter Range, SSHA, SWH	set for one of more records.
CB: 0HL SR: 00HL 2200121110210 (2012112110244 CD)     mth Shahman Chairy Fills, 00CD       CB: 0HL SR: 00HL 2 200121110207 (201211210344 CD)     COO Almed Fills, 00CD       CB: 0HL SR: 00HL 2 200121110207 (201211210344 CD)     COO Almed Fills, 00CD       CB: 0HL SR: 00HL 2 200121110207 (201211210344 CD)     COO Almed Fills, 00CD       CB: 0HL SR: 00HL 2 200121110207 (201211210344 CD)     COO Almed Fills, 00CD       CB: 0HL SR: 00HL 2 200121110204 (20121120344 CD)     COO Almed Fills, 00CD       CB: 0HL SR: 00HL 2 200121110204 (20121120344 CD)     COO Almed Fills, 00CD       CB: 0HL SR: 00HL 2 200121110204 (20121120344 CD)     COO Almed Fills, 00CD       CB: 0HL SR: 00HL 2 200121110204 (20121120344 CD)     COO Almed Fills, 00CD       CB: 0HL SR: 00HL 2 200121110204 (20121120344 CD)     COO Almed Fills, 00CD       CB: 0HL SR: 00HL 2 200121110204 (20121120344 CD)     COO Almed Fills, 00CD       CD: 0HL SR: 00HL 2 200121110204 (20121110204) (20121110204 (2012) Fills) Fills (2012) Fills (2	CS_OFFL_SIR_GOPN_2_20201221T174129_20201221T174136_C001	Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCCUP_LENC_CONC_LENCIPTION DOUBLET TRANSPORT     DOUBLE SERVICUP     Inter COOR Brance and Backetine Cultify Flags have been and for one of mode.       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The COOR Brance and Backetine Cultify Flags have been and for one of mode.       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The COOR Brance and Backetine Cultify Flags have been and for one of mode.       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The Coore Andrees frags. SERVICUP       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The Coore Andrees frags. SERVICUP       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The Coore Andrees frags. SERVICUP       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The Coore Andrees frags. SERVICUP       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The Coore Andrees frags. SERVICUP       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The Coore Andrees frags. SERVICUP       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The Coore Andrees frags. SERVICUP       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The Coore Andrees frags. SERVICUP       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The Coore Andrees frags. SERVICUP       CIL_CEPT_LENC_CONC_LENCIPTION DUIDET TRANSPORT     DOUBLE SERVICUP     The C	CS_OFFL_SIR_GOPN_2_20201221T182310_20201221T182544_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Cold Differ         State Cold         State Cold         State Cold           Cold Differ         State Cold         State Cold <td>CS_OFFL_SIR_GOPN_2_20201221T194557_20201221T194703_C001</td> <td></td> <td></td>	CS_OFFL_SIR_GOPN_2_20201221T194557_20201221T194703_C001		
Call_DefF_UBL_ODEV_2_70011211710114_20011211710114_0001     Interface March 2000 and the space of the standard Couldy Physics Network 2000 and the space of the standard Couldy Physics Network 2000 and the standard Physics Network 2000 and the standard Couldy Physics Network 2000 and the standard Physics Network 2000 Physics	CS_OFFL_SIR_GOPN_2_20201221T205240_20201221T205344_C001		
C2: OFFL SR: GOPL 2.2021211214058, 2021221124149, 0001 C2: OFFL SR: GOPL 2.202122112468, 2021221124149, 0001 C2: OFFL SR: GOPL 2.202122112469, 202122112249, 2021221122112249, 202122112249, 202122110229, 202122110229, 202122110229, 202122110229, 202122110229, 202122110229, 202122110229, 202122110229, 2021221101297, 202122110229, 2021221101297, 202122110229, 2021221101297, 2021221102197, 2021221102197, 2021221102197, 20212211	CS_OFFL_SIR_GOPN_2_20201221T210114_20201221T210343_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
c2     OFTL_SR_0OPN_2 20201221T24409_0201221T22419_001     Image: State S	CS_OFFL_SIR_GOPN_2_20201221T210539_20201221T210701_C001		
<ul> <li>Cal, DFL, SRL, GOPL J, 202012211223102, 202012211223118, CO31</li> <li>Cal, OFL, SRL, GOPL J, 202012211223012, 202012211223118, CO31</li> <li>Cal, OFL, SRL, GOPL J, 202012211223012, 202012211223118, CO31</li> <li>CoCO A Minister Range, AND Backstatter Quality Flags, North And Backs</li></ul>	CS_OFFL_SIR_GOPN_2_20201221T214036_20201221T214219_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFIL_SIR_GOPN_2_20001221T22310_20201221T22314_0.001       and Backsatter Quality PLRM. OCCO       and Backsatter Quality PLRM. OCCO         CS_OFIL_SIR_GOPN_2_20001221T223012_20201221T22314_0.001       OCCO Allineter Range Quality PLRM. OCCO       The OCCIO Range and Backsatter Quality PLRM. OCCO         CS_OFIL_SIR_GOPN_2_20001221T223256_20201221T223115_C001       OCCO Allineter Range Quality PLRM. OCCO       The OCCIO Range and Backsatter Quality FLRM. OCCO         CS_OFIL_SIR_GOPN_2_20001221T00231_0C011       OCCO Allineter Range SNA. SVM. and Backsatter Quality FLRM. OCCO       The OCCIO Range and Backsatter Quality FLRM. OCCO         CS_OFIL_SIR_GOPR_2_20001221T00231_0C012       OCCIO Allineter Range SNA. SVM. and Backsatter Quality FLRM. OCCO       The OCCIO Range and Backsatter Quality FLRM. OCCO         CS_OFIL_SIR_GOPR_2_20001221T00231_0C012       OCCIO Allineter Range SSNA. SVM. and Backsatter Quality FLRM. OCCO       The OCCIO Range and Backsatter Quality FLRM. OCCO         CS_OFFL_SIR_GOPR_2_20001221T000570_20201221T005007_C001       Ocean Allineter Range, SSNA. SVM. and Backsatter Quality FLRM. OCCO       The OCCIO Allineter Range SSNA. SVM and Backsatter Quality FLRM. OCCO         CS_OFFL_SIR_GOPR_2_20001221T010503_20201221T010503_C001       Ocean Allineter Range, SSNA. SVM and Backsatter Quality FLRM. OCCO         CS_OFFL_SIR_GOPR_2_20201221T010503_20201221T010503_C001       Ocean Allineter Range, SSNA. SVM and Backsatter Quality FLRM. OCCO         CS_OFFL_SIR_GOPR_2_20201221T010503_20201221T010503_C001       Ocean Allineter Range, SSNA. SVM and Backsatter Quality FLRM. OCCO	CS_0FFL_SIR_GOPN_2_20201221T222143_20201221T222305_C001		
CS_DFFL_SIR_GOPR_2_302012211232158_20201221123315_C001         OCC0 Elackscatter Cuality         The OCC0 Animeter Range SHA SWH and Backscatter Cuality Flags have been set for one or moores.           CS_DFFL_SIR_GOPR_2_302012211232355_202012211002316_C001         OCC0 Elackscatter Cuality PLRM, OCC0         The OCC0 Animeter Range SHA SWH and Backscatter Cuality Flags have been set for one or moores.           CS_DFFL_SIR_GOPR_2_302012211002315_C02012211002307_C001         OCC0 Elackscatter Cuality PLRM, OCC0         The OCC0 Animeter Range SHA SWH and Backscatter Cuality Flags have been set for one or moore records.           CS_DFFL_SIR_GOPR_2_302012211005750_20201221100597_C001         OCC0 Animeter Range SHA, SWH and Backscatter Cuality Flags have been set for one or moce records.         The OCC0A Animeter Range SHA, SWH and Backscatter Cuality Flags have been set for one or moce records.           CS_DFFL_SIR_GOPR_2_302012211001057_202012211011019_C001         OCC0A Animeter Range SHA, SWH and Backscatter Cuality Flags have been set for one or moce records.         The OCC0A Animeter Range SHA, SWH and Backscatter Cuality Flags have been set for one or moce records.           CS_DFFL_SIR_GOPR_2_30201221100105_202012211002054_C001         OCC0A Animeter Range, SHA, SWH and Backscatter Cuality Flags have been set for one or moce records.         The OCC0A Animeter Range, SHA, SWH and Backscatter Cuality Flags have been set for one or moce records.           CS_DFFL_SIR_GOPR_2_30201221100105_202012211002054_C001         OCC0A Animeter Range, SHA, SWH and Backscatter Cuality Flags have been set for one or moce records.         The OCC0A Animeter Range, SHA, SWH and Backscatter Cuality Flags have been set for	CS_OFFL_SIR_GOPN_2_20201221T223700_20201221T224148_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCCUPPLESIN_GORPL_2000121102311_000121102311_0001         OCCOG Backscatter Quality         more records.           CS_OFFL_SIR_GOPR_2_202012211002213_202012211002316_0001         Decan Attimeter Range, SSHA, SWH and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags and the COCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_GOPR_2_20201221T010105_20201221T01034_COUI         Occean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_GOPR_2_20201221T02105_20201221T022762_COUI         Occean Attimeter Range, SSHA, SWH and Backscatter Quality Flags and backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_GOPR_2_20201221T02417_20201221T02472_COUI         OCCCA Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_GOPR_2_20201221T024	CS_OFFL_SIR_GOPN_2_20201221T232012_20201221T232136_C001		
GB_OFFL_SIR_GOPR_2_20201221T002213_20201221T002316_C001       Ind backscatter Quality Figs, Minister Range, SNA, SWH and Backscatter Quality Figs, have been aff or or or more records.         CB_OFFL_SIR_GOPR_2_20201221T00057_0_20201221T010057_0_00201221T01019_C001       Decar, Altimeter Range, SNA, SWH and Backscatter Quality Figs and the QCOOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the QCOOR Altimeter Range and Backscatter Quality Figs and the QCOOR Altimeter Range and Backscatter Quality Figs and the QCOOR Altimeter Range and Backscatter Quality Figs and the QCOOR Altimeter Range and Backscatter Quality Figs and the QCOOR Altimeter Range and Backscatter Quality Figs and the QCOOR Altimeter Range and Backscatter Quality Figs and the QCOOR Altimeter Range and Backscatter Quality Figs and the QCOOR Altimeter Range and Backscatter Quality Figs and the COCOR Altimeter Range and Backscatter Quality Figs and the COCOR Altimeter Range and Backscatter Quality Figs and the COCOR Altimeter Range and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimeter Range, SNA, SWH and Backscatter Quality Figs and the COCOR Altimete	CS_OFFL_SIR_GOPN_2_20201221T232855_20201221T233115_C001		
CS_OFFL_SIR_GOPR_2_20201221T000576_02021221T0109C001         and Backscatter Quality PLRM_OCOG Altimeter Range and Backscatter Quality PLRM_OCOG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been aff COG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been aff COG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been aff COG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been aff COG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been aff COG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been aff COG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been aff COG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been aff COG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been pLRM           CS_OFFL_SIR_GOPR_2_20201221T02015_20201221T020254_C001         CCG Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been pLRM         The Ocean Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been pLRM           CS_OFFL_SIR_GOPR_2_20201221T02015_20201221T020254_C001         CCGO Altimeter Range CSHA. SWH and Backscatter Quality Flags have been pLRM           CS_OFFL_SIR_GOPR_2_20201221T02015_20201221T020254_C001         CCGO Altimeter Range CSHA. SWH and Backscatter Quality Flags have been pLRM           CS_OFFL_SIR_GOPR_2_20201221T024172_20201221T024052_C001         CCGO Altimeter Range. SSHA. SWH and Backscatter Quality Flags have been pLRM           CS_OFFL_SIR_GOPR_2_20201221T024052_20201221T03436_C001         CCGO Altimeter Range. SSHA. SWH and Backscatter Quality PLRM. COCOG Altimeter Range and Backscatter Quality Flags have been aft for one or more records.           CS_OFFL_SIR_GOPR_2_20201221T04180_Q0201221T04436_C001	CS_OFFL_SIR_GOPR_2_20201221T002213_20201221T002316_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T010057_20201221T01019_C001       and Backscatter Quality FLM, CCCO         Attemeter Range and Backscatter Quality FLM, CCCO       Attemeter Range and Backscatter Quality FLM, CCCO         CS_OFFL_SIR_GOPR_2_20201221T014706_20201221T015034_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality FLM, CCCO         Attemeter Range and Backscatter Quality FLM, CCCO       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality FLM, CCCO         CS_OFFL_SIR_GOPR_2_20201221T020105_20201221T020254_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality FLM, CCCO         CS_OFFL_SIR_GOPR_2_20201221T023417_20201221T023752_C001       OCCCA Altimeter Range, SSHA, SWH and Backscatter Quality FLM, CCCO         CS_OFFL_SIR_GOPR_2_20201221T023417_20201221T023752_C001       OCCCA Altimeter Range, SSHA, SWH and Backscatter Quality FLM, MCCOO         CS_OFFL_SIR_GOPR_2_20201221T024121_20201221T024621_C001       OCCCA Altimeter Range, SSHA, SWH and Backscatter Quality FLM, MCCOO         CS_OFFL_SIR_GOPR_2_20201221T024622_0001       OCCCA Altimeter Range, SSHA, SWH and Backscatter Quality FLM, MCCOO         Altimeter Range, SSHA, SWH and Backscatter Quality FLM, MCCOO       The OCCA Altimeter Range, SSHA, SWH and Backscatter Quality FLM, MCCOO         CS_OFFL_SIR_GOPR_2_20201221T024132_O201221T02462_C001       OCCCA Altimeter Range, SSHA, SWH and Backscatter Quality FLM, MCCOO         CS_OFFL_SIR_GOPR_2_20201221T033654_20201221T033959_C001       OCCCAA Mimeter Range, SSHA, SWH and Backscatter Quality FLM, MCCOO         Altimeter Rang	CS_OFFL_SIR_GOPR_2_20201221T005750_20201221T005907_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T014706_20201221T015034_C001       and Backscatter Quality PLRM_OCO_ Altimeter Range and Backscatter Quality Plags have been set for one or more records.       Ine Ocean Altimeter Range and Backscatter Quality Plags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T020105_20201221T020254_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCO Altimeter Range, and Backscatter Quality Plags have been set for one or more records.       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCO Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T024132_20201221T024921_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCO Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCO Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCO Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T033954_20201221T034305_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T041810_20201221T041332_C001       OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.       T	CS_OFFL_SIR_GOPR_2_20201221T010057_20201221T011019_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T020105_20201221T020254_C001       and Backsaater Quality PLRM, QCG       Interfex Range, SSHA, SWH and Backsaater Quality Plags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T020121T020121T0201221T020752_C001       OCCG Altimeter Range Quality PLRM, OCG       The OCCG Range and Backscatter Quality Plags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T024133_20201221T024921_C001       OCCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCG       The OCCean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T024921_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T032652_20201221T032959_C001       Matheer Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T033964_20201221T034305_C001       Matheer Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T041201_20201221T041332_C001       OCCean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T041130_2001212T042046_C001       OCCean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T042145_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOP	CS_OFFL_SIR_GOPR_2_20201221T014706_20201221T015034_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T024133_20201221T024921_C001       OCCG Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCCG Altimeter Range and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T024133_20201221T024921_C001       Decean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T032652_20201221T032959_C001       Decean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T032652_20201221T032959_C001       Decean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T033954_20201221T034305_C001       Decean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T041201_20201221T041305_C001       Decean Altimeter Range and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T041201_20201221T041332_C001       DCCGG Altimeter Range Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T041810_20201221T041332_C001       DCCGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T041810_20201221T042046_C001       Decean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T043145_C001       Decean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T043145_C001       Decean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T0421	CS_OFFL_SIR_GOPR_2_20201221T020105_20201221T020254_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T024133_20201221T024921_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags, SNA, SWH and Backscatter Quality Flags, NA, S	CS_OFFL_SIR_GOPR_2_20201221T023417_20201221T023752_C001		
CS_OFFL_SIR_GOPR_2_20201221T032652_20201221T032959_C001       and Backscatter Quality PLRM, OCCG       and Backscatter Quality PLRM, OCCG         CS_OFFL_SIR_GOPR_2_20201221T033954_20201221T034305_C001       Cean Altimeter Range and Backscatter Quality PLRM, OCCG       The OCean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCCG Altimeter Range and Backscatter Quality PLRM, OCCG         CS_OFFL_SIR_GOPR_2_20201221T041201_20201221T041332_C001       OCCG Altimeter Range Quality PLRM, OCCG       The OCean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCCG Range and Backscatter Quality Flags and the OCCG Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T041201_20201221T041332_C001       OCCG Altimeter Range Quality PLRM, OCCG       The OCean Altimeter Range, SSHA, SWH and Backscatter Quality Flags nave been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T041810_20201221T042046_C001       OCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags nave been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T043145_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags nave been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T050535_20201221T050713_C001       Altimeter Range, SSHA, SWH and Backscatter Quality Flags nave been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T051842_20201221T052217_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags nave been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T051842_20201221T052217_C001	CS_OFFL_SIR_GOPR_2_20201221T024133_20201221T024921_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T033954_20201221T034305_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T041201_20201221T041332_C001       OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T041810_20201221T042046_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T043145_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20201221T050355_20201221T050713_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have bee	CS_OFFL_SIR_GOPR_2_20201221T032652_20201221T032959_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T041201_2001221T041352_C001       OCOG Backscatter Quality       more records.         CS_OFFL_SIR_GOPR_2_20201221T041810_20201221T042046_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags.       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T043145_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T050713_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T050355_20201221T050713_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T051842_20201221T052217_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         CS_OFFL_SIR_GOPR_2_20201221T051842_20201221T052217_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         More records.       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags.         Milmeter Range and Backscatter Quality PLRM.       The Ocean Altimeter Range and Backscatter Quality Flags.         Milmeter Range and Backscatter Quality PLRM.       The Ocean Altimeter Range. SSHA, SWH and Backscatter Quality Flags.         Milmeter Range and Backscatter Quality PLRM.       Ocean Altimeter Range. SSHA, SWH and Backscatter Quality Flags.         Milmeter Range and Backscatter Quality P	CS_OFFL_SIR_GOPR_2_20201221T033954_20201221T034305_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T041810_20201221T042046_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM       In Bocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality PLRM         CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T043145_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and	CS_OFFL_SIR_GOPR_2_20201221T041201_20201221T041332_C001		
CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T043145_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM         CS_OFFL_SIR_GOPR_2_20201221T050535_20201221T050713_C001       and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hat the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hat the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPR_2_20201221T041810_20201221T042046_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T050535_20201221T050713_C001       and Backscatter Quality PLRM, OCOG       Altimeter Range and Backscatter Quality       and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags and the OCOG Altimeter Range and Backscatter Quality       Flags have been set for one or more records.	CS_OFFL_SIR_GOPR_2_20201221T042152_20201221T043145_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20201221T051842_20201221T052217_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPR_2_20201221T050535_20201221T050713_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_GOPR_2_20201221T051842_20201221T052217_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_GOPR_2_20201221T060110_20201221T060834_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_20201221T065627_20201221T070120_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_20201221T071553_20201221T071805_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_20201221T073523_20201221T073726_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_20201221T074026_20201221T074739_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_20201221T080729_20201221T080901_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_20201221T084113_20201221T084420_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_20201221T090931_20201221T091018_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_20201221T091141_20201221T091358_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_20201221T091408_20201221T091454_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_20201221T091910_20201221T092606_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_20201221T094002_20201221T094117_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_20201221T094443_20201221T094644_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_0FFL_SIR_G0PR_2_20201221T101555_20201221T101719_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_20201221T105733_20201221T110611_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_20201221T111215_20201221T111245_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_20201221T114226_20201221T114326_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_20201221T123426_20201221T124207_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_20201221T124512_20201221T124624_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_20201221T132115_20201221T132304_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_20201221T141401_20201221T141512_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_20201221T141512_20201221T142309_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_0FFL_SIR_G0PR_2_20201221T142718_20201221T142752_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_20201221T143432_20201221T143509_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_20201221T151238_20201221T151603_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_20201221T155006_20201221T155216_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_20201221T155220_20201221T155920_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_20201221T163912_20201221T164228_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_20201221T173148_20201221T173324_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_20201221T173329_20201221T173818_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_20201221T173818_20201221T173944_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_20201221T174006_20201221T174129_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_20201221T174136_20201221T174403_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_20201221T181611_20201221T182309_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_20201221T191127_20201221T191701_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_20201221T205146_20201221T205240_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_20201221T205344_20201221T205434_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_20201221T205434_20201221T205746_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_20201221T221551_20201221T221644_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_20201221T222927_20201221T223006_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_20201221T223006_20201221T223659_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
L2 Quality Flags (1 Hz & 1Hz PLRM)		

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

198

63

157

> 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: 0

#### 6.2 P2P Product Header Analysis

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

#### 6.3 P2P Auxiliary Data File Usage Check

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

#### 6.4 P2P Auxiliary Correction Error Check

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

Currently, there are some common auxiliary correction errors raised in the Level 2 products 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 Corection, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.

> Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.

> Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

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Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20201221T001524_20201221T010500_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_20201221T010500_20201221T015438_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_20201221T015438_20201221T024415_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_20201221T024415_20201221T033353_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_20201221T033353_20201221T042329_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_20201221T042329_20201221T051308_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_220201221T051308_20201221T060244_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_20201221T060244_20201221T065222_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_20201221T065222_20201221T074159_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_20201221T074159_20201221T083137_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_20201221T083137_20201221T092113_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_20201221T092113_20201221T101052_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
S_OFFL_SIR_GOP_220201221T101052_20201221T110028_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
SS_OFFL_SIR_GOP_220201221T110028_20201221T115006_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_220201221T115006_20201221T123943_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_220201221T123943_20201221T132921_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
S_OFFL_SIR_GOP_220201221T132921_20201221T141857_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_220201221T141857_20201221T150836_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_220201221T150836_20201221T155812_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_220201221T155812_20201221T164750_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_220201221T164750_20201221T173727_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_220201221T173727_20201221T182705_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_220201221T182705_20201221T191641_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_220201221T191641_20201221T200619_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_220201221T200619_20201221T205556_C001	Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surrace (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records I nere is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_GOP_220201221T205556_20201221T214534_C001	Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	Topography height (solution 1), the Total Geocentric Ocean Tide height
CS_OFFL_SIR_GOP_2_20201221T214534_20201221T223511_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_20201221T223511_20201221T232449_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
S_OFFL_SIR_GOP_220201221T232449_20201222T001425_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

6.5 P2P Measurement C	onfidence Data Chec	k			
ryoSat P2P data includes a meas	urement confidence flag for eac	ch 20-Hz measurement record. Th	e bit value of this flag indicate	es any problems when set.	
umber of products with errors:	0				
Product		Test Failed	Des	cription	
6.6 P2P Measurement Q	uality Flag Check				
P2P Quality Flags (20Hz)					
CryoSat P2P data includes Quality	Flags for each 20 Hz, 20 Hz PL	RM and 1 Hz measurement reco	d, copied from the correspon	ding L2 products.	
Since the P2P Quality Flags are o	copied directly from the L2 Q	uality Flags, please see Section	5.6 for the full list of produ	cts affected.	
lumber of products with errors:	30				
P2P Quality Flags (20Hz P	PLRM)				
ince the P2P Quality Flags are o	copied directly from the L2 Q	uality Flags, please see Section	5.6 for the full list of produ	cts affected.	
Number of products with errors:	30				
P2P Quality Flags (1 Hz &	1Hz PLRM)				
ince the P2P Quality Flags are o	copied directly from the L2 Q	uality Flags, please see Section	5.6 for the full list of produ	cts affected.	
Number of products with errors:	30				
6.8 P2P Ocean Retracki	ng Quality Check				
P2P Retracking Flags (20)		a) for each 20-Hz measurement r	acord. The hit value of this fla	g indicates any problems when set.	
Dcean Retracking Quality Flag (P		,			
Number of products with errors:	29				
tumber of products with errors.	25				
P2P Retracking Flags PLR	RM				
CryoSat L2 data includes an ocean	retracking quality flag for each	20-Hz PLRM measurement record	d. The bit value of this flag ind	dicates any problems when set.	
Cean Retracking Quality Flag (P	PLRM): This flag is currently set	for products GOPR and GOPN p	roducts over sea ice, but this	is to be expected.	
Number of products with errors:	30				
		7. GOP QCC R	eport Analysis		
The Quality Control for CryoSat (Q0 varnings is provided below.	CC) facility performs a primary s	survey of data products immediat	ely atter production by the PD	S and LTA processing facilities. A list of	of the tests which raised erro
Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR GOPM1B	195	195	4	191	0

Product type	NO. Products	No. QCC Reports	No. valid	No. warnings	NO. Errors
SIR_GOPM1B	195	195	4	191	0
SIR_GOPR1B	146	146	1	145	0
SIR_GOPN1B	105	105	1	104	0
SIR_GOPM_2	195	195	137	58	0
SIR_GOPR_2	146	146	56	86	4
SIR_GOPN_2	105	105	36	69	0
SIR_GOP_P2P	29	29	0	26	3

## 7.1 QCC Errors

Number of QCC reports with errors:

Number of QCC	reports with er	rors:	7								
Total number of occurrences of each error											
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOPR_2	4	4	4	4							
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOP_2_	3	3	3	3							

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

## 7.2 QCC Warnings

Total number of occurrences of each warning Product Type BCSHNCDF IOHHMOOR MVIOEPFDNCDF MVIOEPFDNCDF MVIOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDPLRMNCD									
Product Type		IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCI		
SIR_GOPM1B	191	0	0	0	0	0	0		
SIR_GOPM_2	0	0	40	39	0	42	0		
SIR_GOPN1B	104	0	0	0	0	0	0		
SIR_GOPN_2	0	0	11	35	2	28	28		
SIR_GOPR1B	143	0	0	0	0	0	0		
SIR GOPR 2	0	4	36	48	1	32	18		
			4						
Product Type	RBSZOPOEPNCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSAR	RNCORPEPOPFDPLRMSIN	NCDIRPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF		
SIR GOPM1B	0	0	0	0	0	0	0		
SIR GOPM 2	36	31	0	0	0	0	26		
SIR GOPN1B	0	0	0	0	0	0	0		
SIR_GOPN_2	20	0	0	28	0	38	0		
SIR GOPR1B	0	0	0	0	0	0	0		
SIR GOPR 2	7	0	48	0	59	0	0		
Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF		
SIR GOPM1B	0	0	0	0	0	0	0		
	0	0	6	24	0	2	34		
SIR GOPM 2	0	0							

SIR_GOPN_2	0	28	12	44	60	32	29	
	0	0	0	0	0	0	0	
SIR_GOPR_2	49	0	1	65	40	12	38	
				00070511511055				
	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	0 SOOHHIFHD	0	SCSTODNCDF	•	•	
	0	4	0	0	0			
	0	0	0	51	2			
	31	12	1	0	0			
	0	0	0	145	6			
SIR_GOPR_2	56	1	10	0	0			
	IOHHMOOR	MU//OEDEDNODE	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC		
	18	29	29	3	29	17	28	
3IN_60F_2_	10	29	29	5	29	11	20	
Product Type	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	
	17	29	23	16	29	19	27	
		I						
	RSWHOEPFDNCDF 29	RSWHOEPFDPLRMNCDF	16	SPHLPQWNCDF	-	-	-	
SIR_GOP_2_	29	19	16	29				
Test Description Key:								
	Test name			Details				
BCSHNCDF	BurstCounterStep20HzNetC	CDF		The burst counter should b	e one higher with regard to the	ne previous burst counter		
IOHHMOOR	IndexOf1Hzin20HzMapping	OutOfRange		The mapping of 20 Hz to 1	Hz measurements should be	e in the range 0 to (number o	f 1 Hz samples - 1)	
MVIOEPFDNCDF	MissingValueIntOceanExclu	udingPolarFD2NetCDF		The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
	MissingValueIntOceanExclu			The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
	MissingValueIntOceanNetC			The value should not be a 'missing value' for surface type 0 only The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes				
		roOPOceanExcludingPolarF		between -70 and 70 degree	es			
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZe	roOPOceanExcludingPolarF	-D2PLRMNetCDF	between -70 and 70 degree	o should be between 700 and es	1 7500 (or missing) for surfac	e type = ocean for latitudes	
	RangeBackscatterSigmaZe	roOPOceanExcludingPolarN	NetCDF	The backscatter sigma zero between -70 and 70 degree	o should be between 700 and es	d 7500 (or missing) for surfac	e type = ocean for latitudes	
RPEPOPFDLRMNCDF	RangePeakinessExcluding	PolarOPFD2LRMNetCDF		The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcluding	PolarOPFD2PLRMSARNetC	DF	The Peakiness should be t and 70 degrees	etween 0 and 15000 (or mis	sing) for surface type = ocea	n for latitudes between -70	
RPEPOPFDPLRMSINN CDF	RangePeakinessExcluding	PolarOPFD2PLRMSINNetCI	DF	The Peakiness should be t and 70 degrees	etween 0 and 90000 (or mis	sing) for surface type = ocea	n for latitudes between -70	
	RangePeakinessExcluding	PolarOPFD2SARNetCDF		The Peakiness should be t and 70 degrees	etween 0 and 15000 (or mis	sing) for surface type = ocea	n for latitudes between -70	
	RangePeakinessExcluding			and 70 degrees	etween 0 and 90000 (or mis			
	RangePeakinessExcluding			and 70 degrees	between 0 and 6400 (or missi			
	RangePeakinessExcluding			The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees The Peakiness should be between 0 and 00000 (or missing) for surface type = ocean for latitudes between -70.				
	RangePeakinessExcludingF RangeSeaStateBiasCorrect			The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean				
	RangeSeaSurfaceHeightAn			The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =				
		iomalyOceanFD3PLRMNet0	CDF	Cocean The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =				
F	RangeSeaSurfaceHeightAn			ocean The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =				
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF			ocean The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for				
RSWHOEPFDPLRMNC	RangeSignificantWaveHeig	htOceanExcludingPolarFD2	PLRMNetCDF	latitudes between -70 and 70 degrees The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for				
DF RSWHOEPNCDF	RangeSignificantWaveHeig	htOceanExcludingPolarNet0	CDF		t should be between 0mm an	d 15000mm (or missing) for	surface type = ocean for	
SOOHHIFHD	SameOrOneHigher1HzInde	xFor20HzData		latitudes between -70 and 70 degrees The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample				
SCSTODHRNCDF	SequenceCounterStepTOD	HRNetCDF		The sequence counter sho	uld be modulo 4 higher with r	regard to the previous seque	nce counter	
	SequenceCounterStepTOD			The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter				

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

1

Product name 0 Product name CS\_OFFL\_SIR\_GOP\_2\_20201221T223511\_20201221T232449\_C002