

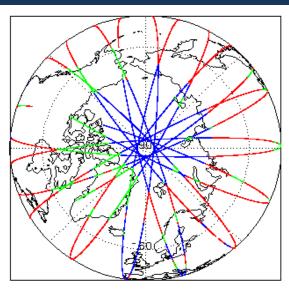
# 1. Overview

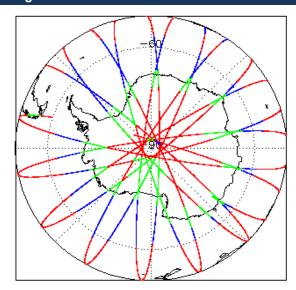
Report Production:	29-Oct-2020	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	

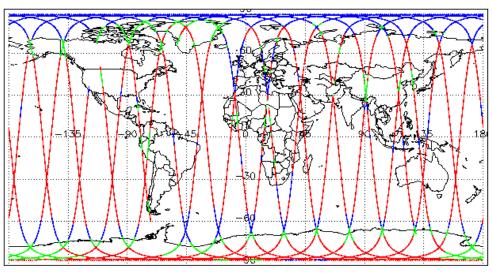
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1 and 7.2

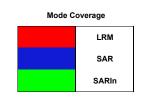
ı	Mission / Instru	ment News
	29-Sep-2020	None
	30-Sep-2020	None
	01-Oct-2020	Nothing planned

# 2. Global Coverage









# 3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

# 4. GOP Level 1B Data Quality Check

## 4.1 L1B Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a 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 L1B GOPR and GOPN products because the I1b\_processing\_quality\_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

#### 4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

#### 4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

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#### 4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20200930T090637_20200930T094130_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20200930T122350_20200930T123152_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20200930T234140_20200930T234813_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

#### 4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20200930T000220_20200930T001643_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20200930T001855_20200930T002819_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20200930T053415_20200930T053849_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20200930T084353_20200930T084426_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20200930T134104_20200930T135112_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200930T004957_20200930T005203_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200930T022450_20200930T022951_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200930T071313_20200930T071407_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200930T085547_20200930T085839_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200930T121102_20200930T121252_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200930T121440_20200930T121655_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200930T131806_20200930T132019_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200930T221603_20200930T222010_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200930T021847_20200930T022450_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200930T040004_20200930T040512_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200930T052803_20200930T052906_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200930T052934_20200930T052958_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200930T053903_20200930T054713_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200930T103740_20200930T104325_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200930T175700_20200930T175952_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200930T202826_20200930T203552_C001	Loss of Echo	The tracking echo is missing for one or more records
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# 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:

## 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:

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

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20200930T005203_20200930T010341_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200930T021051_20200930T021838_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200930T022951_20200930T023817_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200930T053415_20200930T053849_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200930T070826_20200930T070833_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112049_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200930T154125_20200930T154401_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_20200930T004536_20200930T004640_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_20200930T012834_20200930T013027_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_20200930T013849_20200930T014037_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_20200930T022450_20200930T022951_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_20200930T035751_20200930T035826_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_20200930T040512_20200930T040825_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_20200930T044930_20200930T045134_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20200930T062724_20200930T063043_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_20200930T063605_20200930T063724_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_20200930T080618_20200930T080938_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_20200930T081500_20200930T081624_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_20200930T085547_20200930T085839_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_20200930T094250_20200930T094448_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_20200930T095324_20200930T095457_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_20200930T103639_20200930T103740_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_20200930T113053_20200930T113300_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_20200930T121440_20200930T121655_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_20200930T130110_20200930T130256_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_20200930T131806_20200930T132020_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_20200930T135112_20200930T135524_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_20200930T145035_20200930T145238_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_20200930T170656_20200930T170819_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_20200930T175952_20200930T180117_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_20200930T180906_20200930T181019_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200930T193921_20200930T194046_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_20200930T194558_20200930T194900_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_20200930T211939_20200930T212240_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_20200930T212501_20200930T213017_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_20200930T221603_20200930T222010_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_20200930T225939_20200930T230213_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_20200930T235454_20200930T235608_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_GOPN_2_20200930T235758_20201001T000033_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPR_2_20200930T003908_20200930T004040_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_20200930T004110_20200930T004301_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_20200930T004301_20200930T004536_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_20200930T021847_20200930T022450_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_20200930T040004_20200930T040512_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_20200930T052803_20200930T052907_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_20200930T052934_20200930T052958_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_20200930T053903_20200930T054713_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_20200930T071755_20200930T072617_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_20200930T085839_20200930T090637_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_20200930T103740_20200930T104325_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_20200930T121656_20200930T122350_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_20200930T135524_20200930T140046_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_20200930T153348_20200930T154125_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_20200930T171057_20200930T171832_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_20200930T185027_20200930T185652_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_20200930T185652_20200930T185830_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_20200930T202826_20200930T203552_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_20200930T203552_20200930T203751_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_20200930T220825_20200930T220931_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_20200930T221021_20200930T221448_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_20200930T221448_20200930T221602_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200930T234814_20200930T235318_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_20200930T235318_20200930T235454_C001	Mean Sea Surface (1), Mean Dynamic	There is an error with the GPD Wet Tropospheric correction, the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

#### 5.5 L2 Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20200930T090637_20200930T094130_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOPM_2_20200930T122350_20200930T123152_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOPM_2_20200930T234140_20200930T234813_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

# 5.6 L2 Measurement Quality Flag Check

# L2 Quality Flags (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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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20200930T000220_20200930T001643_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_20200930T001855_20200930T002819_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_20200930T004825_20200930T004956_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_20200930T005203_20200930T010341_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_20200930T010343_20200930T010753_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_20200930T011252_20200930T012600_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_20200930T013027_20200930T013849_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_20200930T014215_20200930T015817_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_20200930T015858_20200930T020333_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_20200930T022951_20200930T023817_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_20200930T023959_20200930T030543_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_20200930T030927_20200930T031125_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_20200930T031211_20200930T031709_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_20200930T032234_20200930T034545_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_20200930T035826_20200930T035859_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_20200930T041842_20200930T044411_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.

Septil Land Cortinal County of the common temporal Septil County of the county of the common temporal Septil Septil County of the county of	CS OFFI SID CODM 2 20200020T04F424 20200020T04F722 C004	OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
Comparison (Comparison (Comp	CS_OFFL_SIR_GOPM_2_20200930T045134_20200930T045733_C001	Backscatter Quality	for one or more records.
Col. Col.   Self. Col.   Col. Col. Col.   Col. Col.   Col. Col. Col. Col. Col.   Col. Col. Col. Col. Col. Col. Col. Col.	CS_OFFL_SIR_GOPM_2_20200930T050057_20200930T052144_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
## CODO Allineme Flarge and Develocation Quality (Flags have been set flames) and processors of the pr	CS_OFFL_SIR_GOPM_2_20200930T053415_20200930T053849_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Decembration (Page 2000)  CS_OFTL_SRL_GOPM_2_20209931704014_2020993170400_001  CS_OFTL_SRL_GOPM_2_20209931704014_2020993170400_001  CS_OFTL_SRL_GOPM_2_20209931704014_2020993170402_001  CS_OFTL_SRL_GOPM_2_20209931704014_2020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170400_0020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_0020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_0020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_0020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_0020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_0020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_0020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_0020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_0020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_00209931700020_001  CS_OFTL_SRL_GOPM_2_2020993170402_001  CS_OFTL_SRL_GOPM_2_2020993170402_	CS_OFFL_SIR_GOPM_2_20200930T055031_20200930T062253_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Sel _DeFL_SR_GOPM_2_20206607T04002_00000007T04402_C001  On the Selection Allerton Reaga and discovered Coulty Flags Table Selection Reaga and discovered Coulty Flags Table Selection Reaga and Resolution Coulty Flags Table Selection Flags and Resolution Coulty Flags Table Selection Flags and Resolution Coulty Flags Table Selection Coulty Flags Table Selection Flags and Resolution Coulty Flags Table Selection Coulty Flags Table Selection Coulty Flags Table Selection Flags and Resolution Coulty Flags Table Selection Coulty Flags Table Selection Flags and Resolution Coulty Flags Table Selection Coulty Flags Table Selection Flags and Resolution Coulty Flags Table Selection C	CS_OFFL_SIR_GOPM_2_20200930T063043_20200930T063605_C001		
de Bekerstelle Quelity COCS Allmenter Range, SSIA, SWH and Bekessteller Quelity Flags have been self to core or more records.  CR_GFF_SRF_GOPM_2_20008001707802_20018001707802_0011  CR_GFF_SRF_GOPM_2_20008001707802_20018001707803_0011  CR_GFF_SRF_GOPM_2_20008001707803_20008001708020_0011  CR_GFF_SRF_GOPM_2_20008001707803_20008001708020_0011  CR_GFF_SRF_GOPM_2_20008001708003_20008001708000_0011  CR_GFF_SRF_GOPM_2_20008001708003_20008001708000_0011  CR_GFF_SRF_GOPM_2_20008001708003_20008001708000_0011  CR_GFF_SRF_GOPM_2_20008001708000_00100010000_0011  CR_GFF_SRF_GOPM_2_20008001708000_00100010000_0011  CR_GFF_SRF_GOPM_2_20008001708000_00100010000_0011  CR_GFF_SRF_GOPM_2_200080017080000_0010000000000000000000000	CS_OFFL_SIR_GOPM_2_20200930T064020_20200930T064100_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
So. OFFL. SRF, GOPM. 2, 202009307079391, 20200930709396. COOR Allmorer Range. SSHA, SVH and Backcaster Quality. Flags and Backscaster Quality. Flags have been self or not on non-records.  Sc. OFFL. SRF, GOPM. 2, 20200930709398, 20200930709309. COOR Allmorer Range Quality. QCOG Backscaster Quality. Flags have been self or not on non-records.  CS. OFFL. SRF, GOPM. 2, 202009307093098, 202009307093094. COOR Allmorer Range Quality. QCOG Backscaster Quality. Flags have been self or not on non-records.  CS. OFFL. SRF, GOPM. 2, 202009307093098, 202009307093094. COOR Allmorer Range Quality. QCOG Backscaster Quality. Flags have been self or not on non-records.  CS. OFFL. SRF, GOPM. 2, 202009307093092, 202009307093094. COOR Allmorer Range Quality. QCOG Backscaster Quality. Flags have been self or not on non-records.  CS. OFFL. SRF, GOPM. 2, 202009307093092, 202009307093094. COOR Allmorer Range Charley. QCOG Backscaster Quality. Flags have been self or not on non-records.  CS. OFFL. SRF, GOPM. 2, 202009307093092, 202009307093094. COOR Allmorer Range SAMA, SVH and Backscaster Quality. Flags have been self or not on non-records.  CS. OFFL. SRF, GOPM. 2, 202009307093092, 202009307093094. COOR Allmorer Range SAMA, SVH and Backscaster Quality. Flags have been self or not on non-records.  CS. OFFL. SRF, GOPM. 2, 202009307093092, 202009307093094. COOR Allmorer Range SAMA, SVH and Backscaster Quality. Flags have been self or not on non-records.  CS. OFFL. SRF, GOPM. 2, 202009307093092, 202009307093094. COOR Allmorer Range SAMA, SVH and Backscaster Quality. Flags have been self or not on non-records.  CS. OFFL. SRF, GOPM. 2, 20200930710	CS_OFFL_SIR_GOPM_2_20200930T064114_20200930T064400_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Seg. OPFL_SRI_COPPL_2_200000017074914_2000000170739146_C001  Coper A Minneter Range and Blookscater Coulty Plags have been self core or in our secrotic.  Coper A Minneter Range and Blookscater Coulty Plags and the COCG A Minneter Range and Blookscater Coulty Plags and the COCG A Minneter Range and Blookscater Coulty Plags and the COCG A Minneter Range and Blookscater Coulty Plags and the COCG A Minneter Range and Blookscater Coulty Plags and the COCG A Minneter Range and Blookscater Coulty Plags and the COCG A Minneter Range and Blookscater Coulty Plags have been self core or in our secrotic.  Coper A Minneter Range and Blookscater County Plags and the COCG A Minneter Range and Blookscater County Plags have been self core or in our secrotic Plags and the COCG A Minneter Range and Blookscater County Plags have been self core or in our secrotic Plags and the COCG A Minneter Range and Blookscater County Plags have been self core or in our secrotic Plags and the COCG A Minneter Range and Blookscater County Plags have been self core or in our secrotic Plags and the COCG A Minneter Range and Blookscater County Plags have been self core or in our secrotic Range and Blookscater County Plags have been self core or in our secrotic Range and Blookscater County Plags have been self core or in our secrotic Range and Blookscater County Plags have been self core or in our secrotic Range and Blookscater County Plags and the COCG A Minneter Range and Blookscater County Plags and Blooksca	CS_OFFL_SIR_GOPM_2_20200930T070920_20200930T070922_C001		
and the COGO Altimeter Range and Backscaatter Quality Flags have been at the Cogo Altimeter Range and Backscaatter Quality Flags have been at the Cogo Altimeter Range and Backscaatter Quality Flags have been at the Cogo Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  Sept. SIR, GOPM 2, 202009391090392, 202009301081047, C001  Sociotaria Cogo Altimeter Range Quality, COGO Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  Sept. SIR, GOPM 2, 202009391090392, 202009301081047, C001  Sociotaria Cogo Altimeter Range Quality, COGO Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM 2, 20200939109030, 202009301083094, C001  Sociotaria Cogo Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM 2, 202009391083094, C001  Sociotaria Cogo Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM 2, 202009391083094, C001  Sociotaria Cogo Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM 2, 202009391083094, C001  Sociotaria Cogo Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM 2, 202009391083595, 202009391083790, C001  Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM 2, 20200939108439, 202009391084428, C001  Societaria Cogo Altimeter Range, SSHA, SWH and Backscaatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM 2, 202009391094343, 202009391094440, C001  Societaria Cogo Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM 2, 202009391094440, C001  Societaria Cogo Altimeter Range and Backscaatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM 2, 202009391094440, C001  Societaria Cogo Altimeter Range and Backscaatter Quality Flags have been set for on	CS_OFFL_SIR_GOPM_2_20200930T071407_20200930T071755_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and flackscarler Quality, COCG Altimeter Range and Backscarler Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200930T080938_20200930T081047_C0001  CS_OFFL_SIR_GOPM_2_20200930T080938_20200930T081047_C0001  CS_OFFL_SIR_GOPM_2_20200930T081052_20200930T081049_C0001  CS_OFFL_SIR_GOPM_2_20200930T081052_20200930T081004_C0001  CS_OFFL_SIR_GOPM_2_20200930T082039_20200930T083004_C0001  CS_OFFL_SIR_GOPM_2_20200930T082039_20200930T083004_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T083004_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T083004_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T083004_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T083004_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T083004_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T083004_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T083004_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T08428_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T08428_C0001  CS_OFFL_SIR_GOPM_2_20200930T083039_20200930T08428_C0001  CS_OFFL_SIR_GOPM_2_20200930T085037_20200930T085007_C001  CS_OFFL_SIR_GOPM_2_20200930T085037_20200930T085007_C001  CS_OFFL_SIR_GOPM_2_20200930T085037_20200930T085007_C001  CS_OFFL_SIR_GOPM_2_20200930T090448_20200930T094496_C001  CS_OFFL_SIR_GOPM_2_20200930T090448_20200930T09496_C001  CS_OFFL_SIR_GOPM_2_20200930T10045_20200930T109430_C001  CS_OFFL_SIR_GOPM_2_20200930T10045_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10045_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10045_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10045_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T109496_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T10949	CS_OFFL_SIR_GOPM_2_20200930T072934_20200930T073848_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality for one or more records,  CS_OFFL_SIR_GOPM_2_202009301081082_202009301081459_C001  CS_OFFL_SIR_GOPM_2_202009301082030_202009301083004_C001  CS_OFFL_SIR_GOPM_2_202009301082030_202009301083004_C001  CS_OFFL_SIR_GOPM_2_202009301083162_202009301083750_C001  CS_OFFL_SIR_GOPM_2_202009301083162_202009301083750_C001  CS_OFFL_SIR_GOPM_2_202009301084383_202009301084426_C001  CS_OFFL_SIR_GOPM_2_202009301084383_202009301084426_C001  CS_OFFL_SIR_GOPM_2_202009301084383_202009301084426_C001  CS_OFFL_SIR_GOPM_2_202009301084383_202009301084426_C001  CS_OFFL_SIR_GOPM_2_202009301084438_202009301084430_C001  CS_OFFL_SIR_GOPM_2_202009301084430_C001  CS_OFFL_SIR_GOPM_2_202009301094448_202009301084446_C001  CS_OFFL_SIR_GOPM_2_202009301094448_202009301084946_C001  CS_OFFL_SIR_GOPM_2_202009301094448_202009301094946_C001  CS_OFFL_SIR_GOPM_2_202009301094507_20200930109599_C001  CS_OFFL_SIR_GOPM_2_202009301094507_20200930109599_C001  CS_OFFL_SIR_GOPM_2_202009301094507_20200930109599_C001  CS_OFFL_SIR_GOPM_2_202009301094507_20200930109599_C001  CS_OFFL_SIR_GOPM_2_20200930109599_C001  CS_OFFL_SIR_GOPM_2_20200	CS_OFFL_SIR_GOPM_2_20200930T074133_20200930T080253_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
South PL_SIR_GOPM_2_20200930T08030_20200930T08004_C001  CS_OFFL_SIR_GOPM_2_20200930T080302_20200930T08004_C001  CS_OFFL_SIR_GOPM_2_20200930T0803552_20200930T080750_C001  CS_OFFL_SIR_GOPM_2_20200930T0803552_20200930T080750_C001  CS_OFFL_SIR_GOPM_2_20200930T0803552_20200930T080750_C001  CS_OFFL_SIR_GOPM_2_20200930T080352_20200930T080428_C001  CS_OFFL_SIR_GOPM_2_20200930T080438_20200930T080428_C001  CS_OFFL_SIR_GOPM_2_20200930T080438_20200930T080428_C001  CS_OFFL_SIR_GOPM_2_20200930T080408_C001  CS_OFFL_SIR_GOPM_2_20200930T080408_C001  CS_OFFL_SIR_GOPM_2_20200930T080507_20200930T080507_C001  CS_OFFL_SIR_GOPM_2_20200930T080507_20200930T080507_C001  CS_OFFL_SIR_GOPM_2_20200930T080507_20200930T080507_C001  CS_OFFL_SIR_GOPM_2_20200930T080507_20200930T080507_C001  CS_OFFL_SIR_GOPM_2_20200930T080507_20200930T080507_C001  CS_OFFL_SIR_GOPM_2_20200930T080507_20200930T080507_C001  CS_OFFL_SIR_GOPM_2_20200930T080507_20200930T080507_C001  CS_OFFL_SIR_GOPM_2_20200930T080507_20200930T080507_C001  CS_OFFL_SIR_GOPM_2_20200930T080507_20200930T080507_C001  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T1090404_C001  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T1090507_C001  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T1090507_C001  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T105000_C001  CS_OFFL_SIR_GOPM_2_20200930T105000_C001  CS_OFFL_SIR_GOPM_2_20200930T105000_C001  CS_OFFL_SIR_GOPM_2_20200930T105000_C001  CS_OFFL_SIR_G	CS_OFFL_SIR_GOPM_2_20200930T080938_20200930T081047_C001		
CS_OFFL_SIR_GOPM_2_20200930T083152_20200930T083750_CO01  CS_OFFL_SIR_GOPM_2_20200930T083152_20200930T083750_CO01  CS_OFFL_SIR_GOPM_2_20200930T083152_20200930T083750_CO01  CS_OFFL_SIR_GOPM_2_20200930T083152_20200930T08426_CO01  CS_OFFL_SIR_GOPM_2_20200930T084353_20200930T08426_CO01  CS_OFFL_SIR_GOPM_2_20200930T084353_20200930T08426_CO01  CS_OFFL_SIR_GOPM_2_20200930T08443_20200930T08426_CO01  CS_OFFL_SIR_GOPM_2_20200930T08443_20200930T08426_CO01  CS_OFFL_SIR_GOPM_2_20200930T08443_20200930T08420_CO01  CS_OFFL_SIR_GOPM_2_20200930T086443_20200930T08410_CO01  CS_OFFL_SIR_GOPM_2_20200930T086443_20200930T08410_CO01  CS_OFFL_SIR_GOPM_2_20200930T086443_20200930T08410_CO01  CS_OFFL_SIR_GOPM_2_20200930T086443_20200930T08410_CO01  CS_OFFL_SIR_GOPM_2_20200930T0964448_20200930T084406_CO01  CS_OFFL_SIR_GOPM_2_20200930T0964448_20200930T096496_CO01  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T109286_CO01  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T109390_CO01  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T109390_CO01  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T109390_CO01  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T109390_CO01  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T109390_CO01  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T109390_CO01  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T109390_CO01  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T110990_CO01  CS_OFFL_SIR_GOPM_2_20200930T1100045_20200930T110990_CO01  CS_OFFL_SIR_GOPM_2_20200930T1100045_20200930T110990_CO01  CS_OFFL_SIR_GOPM_2_20200930T1100045_20200930T112090_CO01  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112845_CO01  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112845_CO01  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112090_CO01  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112090_CO01  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112090_CO01  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112090_CO01  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112090_CO01  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112090_CO01  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112090_CO01  CS	CS_OFFL_SIR_GOPM_2_20200930T081052_20200930T081459_C001		
CS_OFFL_SIR_GOPM_2_20200930T08435_20200930T08426_C001  CS_OFFL_SIR_GOPM_2_20200930T08435_20200930T08426_C001  CS_OFFL_SIR_GOPM_2_20200930T08435_20200930T08426_C001  CS_OFFL_SIR_GOPM_2_20200930T08435_20200930T085507_C001  CS_OFFL_SIR_GOPM_2_20200930T08543_20200930T085507_C001  CS_OFFL_SIR_GOPM_2_20200930T085443_20200930T085507_C001  CS_OFFL_SIR_GOPM_2_20200930T08507_2001  CS_OFFL_SIR_GOPM_2_20200930T08507_2001  CS_OFFL_SIR_GOPM_2_20200930T08507_2001  CS_OFFL_SIR_GOPM_2_20200930T08507_2000930T08430_C001  CS_OFFL_SIR_GOPM_2_20200930T08507_2000930T08430_C001  CS_OFFL_SIR_GOPM_2_20200930T08507_2000930T08448_C001  CS_OFFL_SIR_GOPM_2_20200930T08448_20200930T084946_C001  CS_OFFL_SIR_GOPM_2_20200930T104448_20200930T084946_C001  CS_OFFL_SIR_GOPM_2_20200930T104448_20200930T105300_C001  CS_OFFL_SIR_GOPM_2_20200930T104507_20200930T105300_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T112040_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T112040_C001  CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112445_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112386_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112386_C001  CS_OFFL_SIR_GOPM_2_20200930T113389_20200930T112386_C001  CS_OFFL_	CS_OFFL_SIR_GOPM_2_20200930T082030_20200930T083004_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags have been altimeter Range and Backscatter Quality Flags and the COCG Altimeter Range and Backscatter Quality Flags have been altimeter Range and Backscatter	CS_OFFL_SIR_GOPM_2_20200930T083152_20200930T083750_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range Altimeter Range Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200930T100045_2020930T103226_C001  CS_OFFL_SIR_GOPM_2_20200930T100045_2020930T103226_C001  CS_OFFL_SIR_GOPM_2_20200930T10507_2020930T105930_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_2020930T105930_C001  CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112000_C002  Altimeter Range and Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200930T113339_20200930T112000_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112000_C002  Altimeter Range Altimeter Range Quality, OCOG  Altimeter Range Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112000_C002  Altimeter Range Alti	CS_OFFL_SIR_GOPM_2_20200930T084353_20200930T084426_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Backscatter Quality Flags have been Backscatter Quality Flags have been Altimeter Range Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T103226_C001  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T103226_C001  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T103226_C001  CS_OFFL_SIR_GOPM_2_20200930T105930_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T105930_C001  CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112845_C001  CS_OFFL_SIR_GOPM_2_20200930T113839_20200930T115038_C001  CS_OFFL_SIR_GOPM_2_20200930T113839_20200930T115038_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T11202_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T11202_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T11202_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T11202_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T11202_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T11202_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T11202_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T121102_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T121102_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T12102_C001  CS_OFFL_SIR_GOPM_2_20200930T1	CS_OFFL_SIR_GOPM_2_20200930T085443_20200930T085507_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T103226_C001  CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T103226_C001  CS_OFFL_SIR_GOPM_2_20200930T104507_20200930T105930_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T105930_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T105930_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112344_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112344_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112344_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112344_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T12102_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T12102_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T121102_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_	CS_OFFL_SIR_GOPM_2_20200930T090637_20200930T094130_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20200930T104507_20200930T105930_C001  CS_OFFL_SIR_GOPM_2_20200930T10508_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112049_C001  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112845_C001  CS_OFFL_SIR_GOPM_2_20200930T113339_20200930T115038_C001  CS_OFFL_SIR_GOPM_2_20200930T113839_20200930T115038_C001  CS_OFFL_SIR_GOPM_2_20200930T11500_20200930T112000  CS_OFFL_SIR_GOPM_2_20200930T11500_20200930T112000  CS_OFFL_SIR_GOPM_2_20200930T11500_20200930T112000  CS_OFFL_SIR_GOPM_2_20200930T11500_20200930T112000  CS_OFFL_SIR_GOPM_2_20200930T11500_20200930T121100_C001  CS_OFFL_SIR_GOPM_2_20200930T115000_20200	CS_OFFL_SIR_GOPM_2_20200930T094448_20200930T094946_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112845_C001  OCOG Altimeter Range Quality, OCOG Backscatter Quality  OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20200930T100045_20200930T103226_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112049_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200930T112334_20200930T112845_C001  CS_OFFL_SIR_GOPM_2_20200930T113839_20200930T115038_C001  CS_OFFL_SIR_GOPM_2_20200930T113839_20200930T115038_C001  CS_OFFL_SIR_GOPM_2_20200930T11500_20200930T115038_C001  CS_OFFL_SIR_GOPM_2_20200930T11500_20200930T121102_C001  CS_OFFL_SIR_GOPM_2_20200930T11500_20200930T121102_C001  CS_OFFL_SIR_GOPM_2_20200930T121252_20200930T121423_C001  COCOM Altimeter Range Quality, 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 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	CS_OFFL_SIR_GOPM_2_20200930T104507_20200930T105930_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20200930T112839_20200930T115038_C001  CS_OFFL_SIR_GOPM_2_20200930T113839_20200930T115038_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T121102_C001  CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T121102_C001  CS_OFFL_SIR_GOPM_2_20200930T121520_20200930T121102_C001  CS_OFFL_SIR_GOPM_2_20200930T121252_20200930T121423_C001  Backscatter Quality  for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, S	CS_OFFL_SIR_GOPM_2_20200930T110508_20200930T112049_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T113839_20200930T115038_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Set for one or more records.  The Ocean Altimeter Range and Backscatter Quality Flags have been Set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Set for one or more records.  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Set for one or more records.  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_GOPM_2_20200930T112334_20200930T112845_C001		
CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T121102_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG 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 have been and Backscatter Quality Fl	CS_OFFL_SIR_GOPM_2_20200930T113839_20200930T115038_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T121252_20200930T121423_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_GOPM_2_20200930T115500_20200930T121102_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_GOPM_2_20200930T121252_20200930T121423_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_GOPM_2_20200930T123414_20200930T124431_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T124611_20200930T125939_C001	Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200930T130257_20200930T130757_C001	Altimeter Range and Backscatter Quality  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_20200930T131632_20200930T131805_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T132020_20200930T133029_C001	Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T133302_20200930T133820_C001	Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG  Altimeter Bange and Backscatter Quality.	set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200930T134104_20200930T135112_C001	Altimeter Range and Backscatter Quality  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
CS_OFFL_SIR_GOPM_2_20200930T141711_20200930T143756_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T144333_20200930T144714_C001	Altimeter Range and Backscatter Quality  OCOG Altimeter Range Quality, OCOG Backscatter Quality	set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200930T144736_20200930T145034_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_20200930T145443_20200930T151920_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T152134_20200930T152138_C001	Altimeter Range and Backscatter Quality  OCOG Altimeter Range Quality, OCOG Backscatter Quality	set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200930T152141_20200930T152217_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_20200930T154125_20200930T154401_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T154525_20200930T155101_C001	Altimeter Range and Backscatter Quality  OCOG Altimeter Range Quality, OCOG Backscatter Quality	set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200930T155354_20200930T161744_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T162116_20200930T162629_C001	Altimeter Range and Backscatter Quality  OCOG Altimeter Range Quality, OCOG	set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200930T162636_20200930T163003_C001	Backscatter Quality  OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
CS_OFFL_SIR_GOPM_2_20200930T163358_20200930T170656_C001	Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T171943_20200930T172646_C001	Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200930T174102_20200930T174803_C001		
	Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH	set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_GOPM_2_20200930T175308_20200930T175659_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality OCOG Altimeter Range Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCOG Altimeter Range and Backscatter Quality Flags have been set
CS_OFFL_SIR_GOPM_2_20200930T180117_20200930T180704_C001	Backscatter Quality  Ocean Altimeter Range, SSHA, SWH	for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_GOPM_2_20200930T181458_20200930T184640_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_GOPM_2_20200930T185830_20200930T190049_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_GOPM_2_20200930T192211_20200930T192357_C001	and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

Altimeter Range SSHA SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range Quality, OCOG catter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
ackscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range, SSHA, SWH ackscatter Quality, OCOG er 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.
Altimeter Range, SSHA, SWH ackscatter Quality, OCOG ier 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.
Altimeter Range Quality, OCOG catter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range Quality, OCOG catter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range Quality, OCOG catter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range, SSHA, SWH ackscatter Quality, OCOG er 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.
Altimeter Range, SSHA, SWH ackscatter Quality, OCOG ier 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.
	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range, SSHA, SWH ackscatter Quality, OCOG ier 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.
	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range Quality, OCOG catter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range, SSHA, SWH ackscatter Quality, OCOG ier 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.
Altimeter Range, SSHA, SWH ackscatter Quality, OCOG er 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.
Altimeter Range Quality, OCOG catter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range, SSHA, SWH ackscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
Altimeter Range, SSHA, SWH tokscatter Quality, OCOG ter 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.
	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	ar Range and Backscatter Quality Altimeter Range Quality, OCOG atter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range Quality, OCOG ar Range and Backscatter Quality  Altimeter Range Quality, OCOG ar Range and Backscatter Quality  Altimeter Range Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscatter Quality, OCOG ar Range and Backscatter Quality  Altimeter Range, SSHA, SWH ckscat

CS_OFFL_SIR_GOPR_2_20200930T124432_20200930T124558_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_GOPR_2_20200930T161744_20200930T161939_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_GOPR_2_20200930T190837_20200930T191158_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	and Backscatter Quality, OCOG	The Ocean Altimeter 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.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20200929T235946_20200930T000121_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_20200930T002819_20200930T002841_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_20200930T010753_20200930T011252_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_20200930T020530_20200930T020917_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_20200930T022450_20200930T022951_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_20200930T030808_20200930T030927_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_20200930T031125_20200930T031211_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_20200930T031709_20200930T031936_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_20200930T035943_20200930T040004_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_20200930T040512_20200930T040825_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_20200930T045733_20200930T045903_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_20200930T054714_20200930T055031_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_20200930T063605_20200930T063724_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_20200930T065021_20200930T065143_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_20200930T065819_20200930T070004_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_20200930T071313_20200930T071407_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_20200930T072618_20200930T072634_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_20200930T081500_20200930T081624_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_20200930T083750_20200930T083958_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_20200930T085310_20200930T085335_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_20200930T085547_20200930T085839_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_20200930T094250_20200930T094448_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_20200930T095324_20200930T095457_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_20200930T113053_20200930T113300_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_20200930T121102_20200930T121252_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_20200930T121440_20200930T121655_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_20200930T131806_20200930T132020_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_20200930T133029_20200930T133301_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_20200930T133820_20200930T133943_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_20200930T135112_20200930T135524_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_20200930T141138_20200930T141538_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_20200930T144021_20200930T144333_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_20200930T145035_20200930T145238_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_20200930T161939_20200930T162116_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_20200930T162630_20200930T162636_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_20200930T170819_20200930T171057_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_20200930T175952_20200930T180117_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_20200930T184752_20200930T185003_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_20200930T190712_20200930T190747_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_20200930T191628_20200930T191812_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_20200930T193921_20200930T194046_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_20200930T194558_20200930T194900_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_20200930T211939_20200930T212240_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_20200930T212501_20200930T213017_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_20200930T220932_20200930T221021_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

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	Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Bongs, SSUA, SWILL and Beckgootter Quality Flores
CS_OFFL_SIR_GOPN_2_20200930T221603_20200930T222010_C001	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_20200930T225939_20200930T230213_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_20200930T230913_20200930T231043_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_20200930T233806_20200930T234140_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_20200930T235758_20201001T000033_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_20200930T001823_20200930T001855_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_20200930T003908_20200930T004040_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_20200930T004301_20200930T004536_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_20200930T012600_20200930T012834_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_20200930T021847_20200930T022450_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_20200930T023817_20200930T023959_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_20200930T040004_20200930T040512_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_20200930T052934_20200930T052958_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_20200930T053340_20200930T053415_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_20200930T053903_20200930T054713_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_20200930T062253_20200930T062723_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_20200930T063724_20200930T064020_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_20200930T071755_20200930T072617_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_20200930T080254_20200930T080618_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_20200930T081624_20200930T082030_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_20200930T085335_20200930T085442_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_20200930T085839_20200930T090637_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_20200930T095457_20200930T095940_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_20200930T103740_20200930T104325_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_20200930T113300_20200930T113839_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_20200930T115227_20200930T115459_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_20200930T121656_20200930T122350_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_20200930T135524_20200930T140046_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_20200930T140111_20200930T140238_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_20200930T145238_20200930T145442_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_20200930T153348_20200930T154125_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_20200930T163129_20200930T163358_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_20200930T171057_20200930T171832_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_20200930T175700_20200930T175952_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_20200930T181019_20200930T181458_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_20200930T185027_20200930T185652_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_20200930T190203_20200930T190530_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_20200930T193517_20200930T193920_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_20200930T194901_20200930T195311_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_20200930T202826_20200930T203552_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_20200930T211454_20200930T211939_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_20200930T213017_20200930T213236_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_20200930T221021_20200930T221448_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_20200930T221448_20200930T221602_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_20200930T225309_20200930T225939_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	Ine Ocean Altimeter Kange, SSHA, SWH 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_20200930T234814_20200930T235318_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.

> 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: 19

## 5.8 L2 Ocean Retracking Quality Check

#### L2 Retracking Flags (20Hz)

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

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

Number of products with errors:

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

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

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

Number of products with errors:

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

#### 6.1 P2P Product Format Check

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

Number of products with errors:

#### 6.2 P2P Product Header Analysis

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

Number of products with errors:

#### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

0

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220200929T235415_20200930T004354_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_20200930T004354_20200930T013330_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_220200930T013330_20200930T022309_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_20200930T022309_20200930T031244_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_220200930T031244_20200930T040224_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  There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_GOP_220200930T040224_20200930T045159_C001	Mean Sea Surrace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_220200930T045159_20200930T054138_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_220200930T054138_20200930T063114_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_220200930T063114_20200930T072053_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_220200930T072053_20200930T081029_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_220200930T081029_20200930T090008_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_220200930T090008_20200930T094943_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_220200930T094943_20200930T103922_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_220200930T103922_20200930T112858_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_220200930T112858_20200930T121837_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_220200930T121837_20200930T130812_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_220200930T130812_20200930T135752_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_220200930T135752_20200930T144727_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_220200930T144727_20200930T153706_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_220200930T153706_20200930T162642_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_220200930T162642_20200930T171621_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_220200930T171621_20200930T180557_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_220200930T180557_20200930T185536_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_220200930T185536_20200930T194511_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_20200930T194511_20200930T203450_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_20200930T203450_20200930T212426_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_20200930T212426_20200930T221405_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_20200930T221405_20200930T230341_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_2_20200930T230341_20200930T235320_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_20200930T235320_20201001T004255_C001	Mean Sea Surrace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	(solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height

#### 6.5 P2P Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220200930T090008_20200930T094943_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOP_2_20200930T121837_20200930T130812_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOP_220200930T230341_20200930T235320_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

#### 6.6 P2P Measurement Quality Flag Check

## P2P Quality Flags (20Hz)

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

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

Number of products with errors: 30

#### P2P Quality Flags (20Hz PLRM)

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

Number of products with errors: 3

#### P2P Quality Flags (1 Hz & 1Hz PLRM)

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

Number of products with errors: 30

## 6.8 P2P Ocean Retracking Quality Check

#### P2P Retracking Flags (20Hz)

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

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

Number of products with errors: 28

## P2P Retracking Flags PLRM

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

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

Number of products with errors: 30

# 7. GOP QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or warnings is provided below.

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_GOPM1B	154	154	4	150	0
SIR_GOPR1B	105	105	0	105	0
SIR_GOPN1B	102	102	1	101	0
SIR_GOPM_2	154	154	97	57	0
SIR_GOPR_2	105	105	25	76	4
SIR_GOPN_2	102	102	43	59	0
SIR GOP P2P	29	29	0	25	4

# 7.1 QCC Errors

Number of QCC reports with errors:

Total number	of	occurrences	of	each	error

Total number of occurrences of each error											
Product Type	RLOBOPNCDF	RL	RL	RLOBOPNCDF	RL	RL	-	-	-	-	-
SIR_GOPR_2	4	1	4	4	1	4					
	•				•	•		•			
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR GOP 2	4	4	4	4							

Test Description Key:		
Abbreviation	Test name	Details
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7
RL	RangeLatitude_6	Latitude should be between -90E6 and 90E6
RL	RangeLatitude 7	Latitude should be between -90E7 and 90E7

RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7
RL	RangeLongitude_6	Longitude should be between -180E6 and 180E6
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7

# 7.2 QCC Warnings

Number of QCC reports with warnings

2191

Total number of occurrences of each warning									
IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD				
0	0	0	0	0	0				
0	45	44	0	45	0				
0	0	0	0	0	0				
0	9	28	5	22	28				
0	0	0	0	0	0				
4	37	40	1	40	35				

Total number of occurrences of each warning								
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	
SIR_GOPM1B	150	0	0	0	0	0	0	
SIR_GOPM_2	0	0	45	44	0	45	0	
SIR_GOPN1B	100	0	0	0	0	0	0	
SIR_GOPN_2	0	0	9	28	5	22	28	
SIR_GOPR1B	100	0	0	0	0	0	0	
SIR_GOPR_2	0	4	37	40	1	40	35	
Product Type	RBSZOPOEPNCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARN	CORPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF	
SIR_GOPM1B	0	0	0	0	0	0	0	
SIR_GOPM_2	38	37	0	0	0	0	30	
SIR_GOPN1B	0	0	0	0	0	0	0	
SIR_GOPN_2	16	0	0	23	0	33	0	
SIR_GOPR1B	0	0	0	0	0	0	0	
SIR GOPR 2	20	0	42	n	50	0	0	

Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	0	0	8	34	0	4	44
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	24	18	48	50	30	25
SIR_GOPR1B	0	0	0	0	0	0	0
SIR GOPR 2	42	0	2	67	39	14	44

Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_GOPM1B	0	0	0	1	0	0	0
SIR_GOPM_2	0	5	0	1	0	0	0
SIR_GOPN1B	0	0	0	0	0	42	0
SIR_GOPN_2	23	15	0	0	2	0	0
SIR_GOPR1B	0	0	0	0	0	105	4
SIR_GOPR_2	48	0	1	0	7	0	0

Product	ype	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFUNCUF	RBSZOPOEPFDPLRMNCL	RBSZOPOEPNCDF
SIR_GOF	2_	21	29	29	5	29	19	29
•				•	•	•		
Product 1	Гуре	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF

	Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	•	•	
- [	CID COD 2	20	10	16	20			

Test Description Key:		
Abbreviation	Test name	Details
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

# 7.3 Missing QCC Reports