

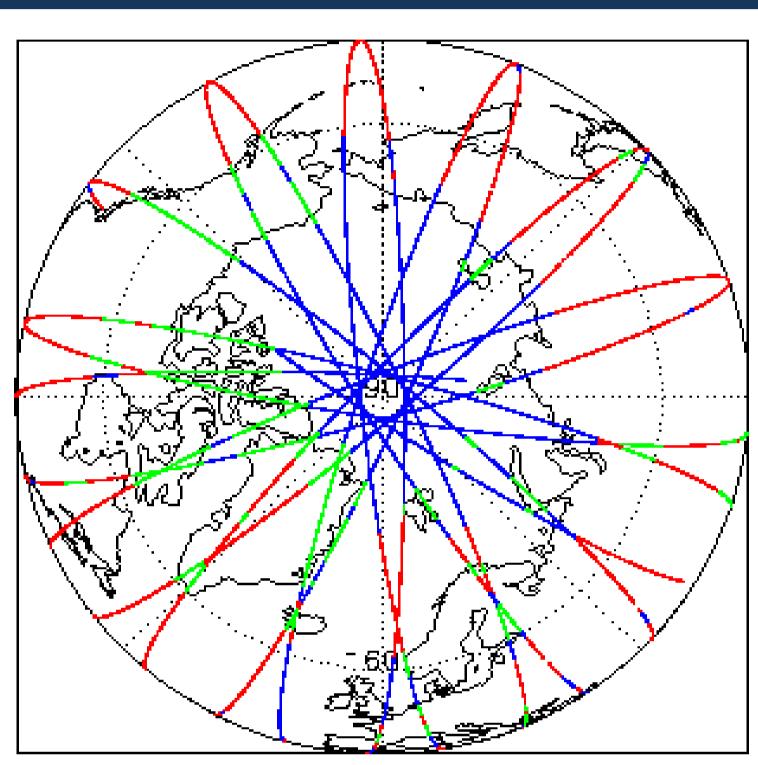
# 1. Overview

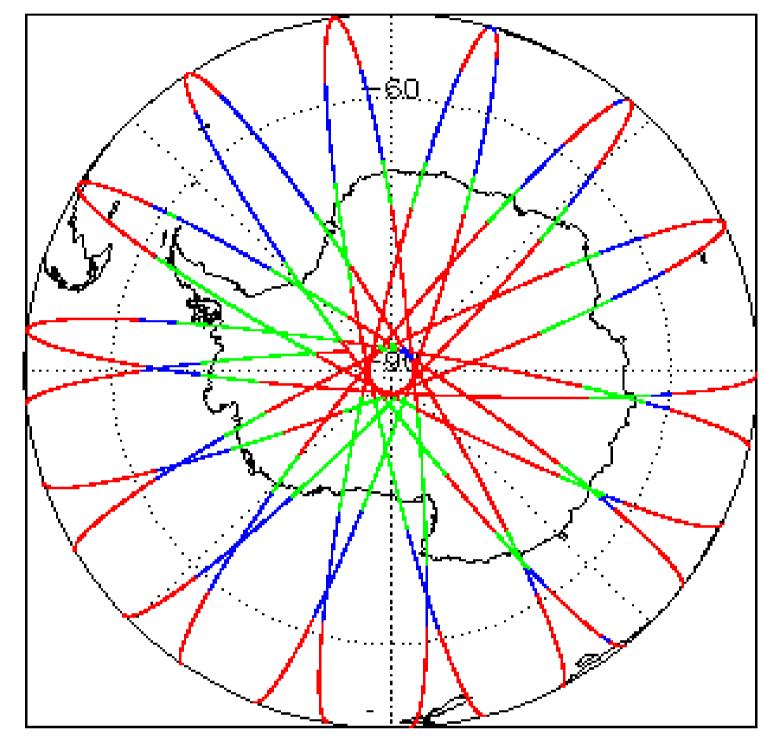
Report Production:	15-Dec-2022	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	

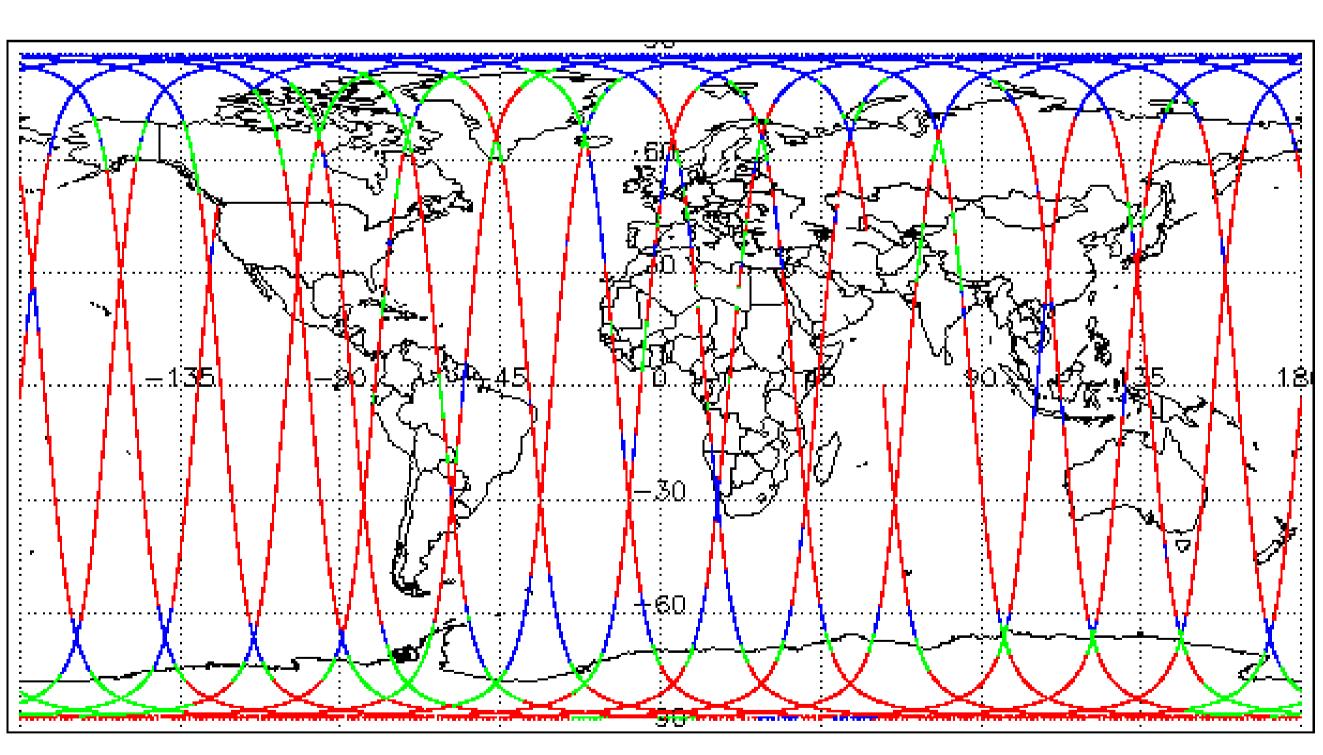
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary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

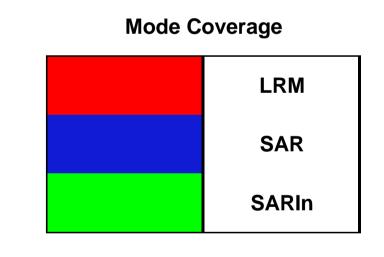
Mission / Instru	Mission / Instrument News		
13-Nov-2022	None		
14-Nov-2022	None		
15-Nov-2022	Nothing planned		

# 2. Global Coverage









# 3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

# 4. GOP Level 1B Data Quality Check

### **4.1 L1B Product Format Check**

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

### **4.2 L1B Product Header Analysis**

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

L1B Processing Quality HR: The I1b\_proc\_flag\_hr flag is currently set all L1B GOPR and GOPN products because the I1b\_processing\_quality\_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

#### 4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

0

### **4.4 L1B Auxiliary Correction Error Check**

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

Number of products with errors:

0

#### 4.5 L1B Measurement Confidence Data Check

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

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

**Number of products with errors:** 

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20221114T152957_20221114T153057_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.

17

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20221114T172842_20221114T173851_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221114T205229_20221114T210412_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221114T215448_20221114T221101_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221114T014131_20221114T014250_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221114T094647_20221114T095225_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221114T104903_20221114T105133_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221114T154847_20221114T155003_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221114T185434_20221114T185842_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221114T203106_20221114T203225_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221114T221200_20221114T221355_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221114T230948_20221114T231417_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20221114T014250_20221114T014535_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20221114T080407_20221114T081108_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20221114T130531_20221114T130809_C001	Loss of Echo	The tracking echo is missing for one or more records

# 5. GOP Level 2 Data Quality Check

### **5.1 L2 Product Format Check**

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

Number of products with errors:

### **5.2 L2 Product Header Analysis**

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

Number of products with errors:

### 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

### **5.4 L2 Auxiliary Correction Error Check**

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

0

0

0

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

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

**Number of products with errors:** 

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20221114T005426_20221114T005525_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_20221114T121623_20221114T121716_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_20221114T000055_20221114T000356_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_20221114T004147_20221114T004457_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20221114T004457_20221114T004529_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_20221114T023143_20221114T023309_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_20221114T045044_20221114T045210_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_20221114T045728_20221114T050035_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_20221114T063029_20221114T063328_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_20221114T063629_20221114T064007_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_20221114T081108_20221114T081342_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_20221114T090616_20221114T090736_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20221114T094647_20221114T095225_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_20221114T104550_20221114T104759_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_20221114T112832_20221114T113010_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_20221114T113859_20221114T114105_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_20221114T122504_20221114T122949_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_20221114T131651_20221114T131916_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_20221114T144747_20221114T145139_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20221114T153815_20221114T153912_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_20221114T162733_20221114T163046_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_20221114T163602_20221114T163713_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_20221114T180504_20221114T180923_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_20221114T181504_20221114T181626_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_20221114T185434_20221114T185842_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20221114T195243_20221114T195430_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_20221114T203645_20221114T203736_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_20221114T213047_20221114T213310_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_20221114T221200_20221114T221355_C001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_GOPN_2_20221114T221441_20221114T221653_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20221114T230055_20221114T230306_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_20221114T230948_20221114T231417_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_20221114T235125_20221114T235517_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_20221114T004529_20221114T005425_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_20221114T022223_20221114T023000_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_20221114T040154_20221114T040822_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_20221114T040822_20221114T041102_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_20221114T054011_20221114T054722_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the GPD Wet Tropospheric correction, the MSS height (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_GOPR_2_20221114T054722_20221114T054902_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_20221114T072135_20221114T072619_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_20221114T072619_20221114T072739_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_20221114T085932_20221114T090502_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_20221114T090502_20221114T090616_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_20221114T104139_20221114T104224_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_20221114T104224_20221114T104550_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_20221114T121717_20221114T121749_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_20221114T121749_20221114T122503_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_20221114T135959_20221114T140534_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_20221114T152821_20221114T152957_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_20221114T153312_20221114T153329_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_20221114T153912_20221114T154701_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_20221114T171725_20221114T172842_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_20221114T185842_20221114T190556_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_20221114T203736_20221114T204318_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_20221114T221653_20221114T222344_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

## 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20221114T152957_20221114T153057_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 (20 Hz)

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

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

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

Number of products with errors: 84

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20221113T235906_20221114T000055_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221114T000558_20221114T002831_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_GOPM_2_20221114T010535_20221114T012925_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_20221114T013235_20221114T013759_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_20221114T013806_20221114T014131_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_20221114T014535_20221114T021708_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_20221114T024032_20221114T024841_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_20221114T024843_20221114T030246_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221114T030421_20221114T030837_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_20221114T031231_20221114T032039_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_20221114T032604_20221114T035804_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_20221114T041102_20221114T041218_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_20221114T044128_20221114T044630_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_20221114T045210_20221114T045728_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_20221114T050420_20221114T052540_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_20221114T052826_20221114T053846_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_20221114T054920_20221114T055359_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_20221114T060950_20221114T061432_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_20221114T061620_20221114T062633_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_20221114T063328_20221114T063629_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_20221114T064341_20221114T070946_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_20221114T071126_20221114T071734_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_20221114T073248_20221114T073941_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_20221114T073955_20221114T080407_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221114T082302_20221114T082727_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_20221114T082820_20221114T083845_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_20221114T084004_20221114T084942_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_20221114T091300_20221114T092741_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

DE CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS 28311 CTROMS COV.  20 CORP. 48 COM 2 58311 CTROMS COV.  20 CORP. 48 COV.  20 CORP. 48 COV.  20 CORP. 48 COV.  20 CORP. 48 COV.  2	CS_OFFL_SIR_GOPM_2_20221114T093501_20221114T094643_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
Columbia C	CS_OFFL_SIR_GOPM_2_20221114T095225_20221114T095453_C001		, ,
### CODE A PROPRIET SWEET SWEE	CS_OFFL_SIR_GOPM_2_20221114T095520_20221114T095945_C001		
Description (2011)	CS_OFFL_SIR_GOPM_2_20221114T100209_20221114T101629_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CR. DPF_SIR_GDP4_2_722711411/CR22_20271141112011_CO01	CS_OFFL_SIR_GOPM_2_20221114T101809_20221114T102449_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
28. CPF_SR_50P4_2_2022*14F1132F3_2222114F1132F0_DDD1 29. CPF_SR_50P4_2_2022*14F1132F0_2222114F1132F0_DDD1 20. CPF_SR_50P4_2_2022*14F1132F0_DDD1 20. CPF_SR_50P4_2_2022*14F1132F0_DD1 20. CPF_SR_50P4_2_20	CS_OFFL_SIR_GOPM_2_20221114T105821_20221114T110209_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
12. DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13150, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13150, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13150, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13150, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13150, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13150, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13150, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13150, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13151, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13151, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13151, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13151, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 13151, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, 2007-1141* 1310, DDT DEP. 314. COPM 2. 2007-1141* 1310, DDT DEP.	CS_OFFL_SIR_GOPM_2_20221114T110332_20221114T110918_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Dashscatter Quality   Dashscatter   Quality   Dash	CS_OFFL_SIR_GOPM_2_20221114T110957_20221114T112639_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SR_COPM_2_2022114T12405 2022114T120301 CDD1  Alternative Range and Bookscaler Quality Riggs have been Affaired Range, SSIA_SWH and Backscaler Quality Riggs have been and advanced to the Copy Alternative Range and Backscaler Quality Riggs have been set and advanced to the Copy Alternative Range and Backscaler Quality Riggs have been set and advanced to the Copy Alternative Range and Backscaler Quality Riggs have been set and advanced to the Copy Alternative Range and Backscaler Quality Riggs have been set and advanced to the Copy Alternative Range and Backscaler Quality Riggs have been set and advanced to the Copy Alternative Range and Backscaler Quality Riggs have been set and advanced to the Copy Alternative Range and Backscaler Quality Riggs and the COQS Alternative Range and Backscaler Quality Riggs and the COQS Alternative Range and Backscaler Quality Riggs and the COQS Alternative Range and Backscaler Quality Riggs and the COQS Alternative Range and Backscaler Quality Riggs and the COQS Alternative Range and Backscaler Quality Riggs and the COQS Alternative Range and Backscaler Quality Riggs have been set and the Copy Alternative Range and Backscaler Quality Riggs have been set and the Copy and Alternative Range and Backscaler Quality Riggs have been set and the Copy and Alternative Range and Backscaler Quality Riggs have been set and the Copy and Alternative Range and Backscaler Quality Riggs have been set and the Copy and Alternative Range and Backscaler Quality Riggs have been set and the Copy and Alternative Range and Backscaler Quality Riggs have been set and the Copy and Alternative Range and Backscaler Quality Riggs have been set and the Copy and Alternative Range and Backscaler Quality Riggs have been set and the Copy and Alternative Range and Backscaler Quality Riggs have been set and backscaler Quality Riggs have been s	CS_OFFL_SIR_GOPM_2_20221114T113010_20221114T113859_C001		
and Backscates Quality, CODS Altimeter Range and Backscates Quality, CODS Backscater Quality, CODS Backscater Classify  CS_OFFL_SIR_GOPM_2_2022114713122 2022114713151 C001  CS_OFFL_SIR_GOPM_2_2022114713123 20221147131551 C001  CS_OFFL_SIR_GOPM_2_2022114713137_C021  CS_OFFL_SIR_GOPM_2_2022114714147_C0221147141455 C001  CS_OFFL_SIR_GOPM_2_2022114714187_C0221147141480_C001  CS_OFFL_SIR_GOPM_2_2022114714180_C022114715510 C001  CS_OFFL_SIR_GOPM_2_202211471480_C022114715510 C001  CS_OFFL_SIR_GOPM_2_202211471480_C022114715510 C001  CS_OFFL_SIR_GOPM_2_202211471480_C022114715510 C001  CS_OFFL_SIR_GOPM_2_202211471480_C022114715510 C001  CS_OFFL_SIR_GOPM_2_20221147150064 C022114715500 C001  CS_OFFL_SIR_GOPM_2_20221147150064 C022114715500 C001  CS_OFFL_SIR_GOPM_2_20221147150064 C022114715500 C001  CS_OFFL_SIR_GOPM_2_20221147150064 C022114715500 C001  CS_OFFL_SIR_GOPM_2_20221147150064 C02211471500 C001  CS_OFFL_SIR_GOPM_2_20221147150064 C022114715500 C001  CS_OFFL_SIR_GOPM_2_20221147150002_C022114715000 C001  CS_OFFL_SIR_GOPM_2_20221147150002_C022114715000 C001  CS_OFFL_SIR_GOPM_2_20221147150002_C022114715000 C001  CS_OFFL_SIR_GOPM_2_20221147150002_C022114715000 C001  CS_OFFL_SIR_GOPM_2_20221147150002_C022114715000 C001  CS_OFFL_SIR_GOPM_2_20221147150002_C0221147115000 C001  CS_OFFL_SIR_GOPM_2_20221147150002_C0221147115000 C001  CS_OFFL_SIR_GOPM_2_20221147150002_C0221147115000 C001  CS_OFFL_SIR_GOPM_2_20221147150002_C022114711000 C001  CS_OFFL_SIR_GOPM_2_202211471500002_C022114711000 C001  CS_OFFL_SIR_GOPM_2_2022114710000000000000000000000000000000	CS_OFFL_SIR_GOPM_2_20221114T114157_20221114T120330_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backcaster Duality CS_OFFL_SIR_COPM_2_2022114T132137_2022114T133744_CO01  Ocean Arimeter Range and Backcaster Duality Aimster Range SSHA_SWH are Backscaster Quality Flags and the COOS Aimster Range SSHA_SWH are Backscaster Quality Flags and Backcaster Duality Aimster Range SSHA_SWH are Backscaster Quality Flags and Backcaster Duality Aimster Range SSHA_SWH are Backscaster Quality Flags and Backcaster Duality Aimster Range SSHA_SWH are Backscaster Quality Flags and Backcaster Duality Aimster Range SSHA_SWH are Backcaster Quality Flags and Backcaster Duality Aimster Range SSHA_SWH are Backscaster Quality Flags and the COOS Aimster Range SSHA_SWH are Backscaster Quality Flags and the COOS Aimster Range SSHA_SWH are Backscaster Quality Flags and the COOS Aimster Range SSHA_SWH are Backscaster Quality Flags and the COOS Aimster Range are Backscaster Quality Flags and the COOS Aimster Range are Backscaster Quality Flags and the COOS Aimster Range are Backscaster Quality Flags and the COOS Aimster Range are Backscaster Quality Flags and the COOS Aimster Range are Backscaster Quality Flags and the COOS Aimster Range are Backscaster Quality Flags and the COOS Aimster Range and Backscaster Quality Flags and the COOS Aimster Range and Backscaster Quality Flags have been set for one or none records  CS_OFFL_SIR_COPM_2_2022114T150010_2022114T150333_CO01  CS_OFFL_SIR_GOPM_2_2022114T150010_2022114T150333_CO01  CS_OFFL_SIR_GOPM_2_2022114T150010_2022114T17100010_202114T17100010_2022114T17100010_2	CS_OFFL_SIR_GOPM_2_20221114T124005_20221114T130531_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Bascasater Quality, COCG Altrineder Range and Backscater Quality Flags have been advanced to the COCG Altrineder Range and Backscater Quality Flags have been advanced Range Ran	CS_OFFL_SIR_GOPM_2_20221114T131223_20221114T131651_C001		
and Backscatter Quality, COCS Altimeter Range and Backscatter Quality Flags have been and the OCOS Altimeter Range and Backscatter Quality Flags have been and the OCOS Altimeter Range and Backscatter Quality Flags have been and the OCOS Altimeter Range and Backscatter Quality Flags have been and the OCOS Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221114T145139_20221114T161849_C001  CS_OFFL_SIR_GOPM_2_20221114T15004_20221114T161849_C001  CS_OFFL_SIR_GOPM_2_20221114T15004_20221114T161849_C001  CS_OFFL_SIR_GOPM_2_20221114T15003_20221114T162333_C001  CS_OFFL_SIR_GOPM_2_20221114T15003_20221114T162340_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17325_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17325_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17325_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17325_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17325_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T18048_C001  CS_OFFL_SIR_GOPM_2_20221114T17403_20221114T18048_C001  CS_OFFL_SIR_GOPM_2_20221114T178066_20221114T18048_C001  CS_OFFL_SIR_GOPM_2_20221114T18066_20221114T18066_20221114T18066_20221114T18066_20221114T18066_20221114T18066_2022114T1806	CS_OFFL_SIR_GOPM_2_20221114T132137_20221114T133744_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality and the COCG Altimeter Range and Backscatter Quality Flags have been ast for one or more records  CS_OFFL_SIR_GOPM_2_20221114T145139_20221114T145730_C001  CS_OFFL_SIR_GOPM_2_20221114T145139_20221114T15848_C001  CS_OFFL_SIR_GOPM_2_20221114T150054_20221114T151848_C001  CS_OFFL_SIR_GOPM_2_20221114T150054_20221114T152333_C001  CS_OFFL_SIR_GOPM_2_20221114T152310_20221114T152333_C001  CS_OFFL_SIR_GOPM_2_20221114T152310_20221114T152333_C001  CS_OFFL_SIR_GOPM_2_20221114T152310_20221114T152333_C001  CS_OFFL_SIR_GOPM_2_20221114T152310_20221114T152333_C001  CS_OFFL_SIR_GOPM_2_20221114T15230_20221114T152333_C001  CS_OFFL_SIR_GOPM_2_20221114T15230_20221114T152333_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17725_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17725_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17725_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T173851_C001  CS_OFFL_SIR_GOPM_2_20221114T173242_20221114T173851_C001  CS_OFFL_SIR_GOPM_2_20221114T173861_C001  CS_OFFL_SIR_GOPM_2_20221114T1738012_C001  CS_OFFL_SIR_GOPM_2_20221114T1738012_C001  CS_OFFL_SIR_GOPM_2_20221114T1738012_C001  CS_OFFL_SI	CS_OFFL_SIR_GOPM_2_20221114T141407_20221114T141645_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS OFFL SIR GOPM 2 20221114T150054 20221114T151848 C001  CS OFFL SIR GOPM 2 20221114T150054 20221114T151848 C001  CS OFFL SIR GOPM 2 20221114T152310 20221114T152333 C001  CS OFFL SIR GOPM 2 20221114T152310 20221114T162340 C001  CS OFFL SIR GOPM 2 20221114T17322 20221114T17725 C001  CS OFFL SIR GOPM 2 20221114T17322 20221114T17325 C001  CS OFFL SIR GOPM 2 20221114T173242 20221114T17325 C001  CS OFFL SIR GOPM 2 20221114T173861 C001  CS OFFL SIR GOPM 2 20221114T173802 C001  CS OFFL SIR GOPM 2 20221114T180924 20221114T181048 C001  CS OFFL SIR GOPM 2 20221114T180924 20221114T180912 C001  Allimeter Range Cuality COOG Allimeter Range Cuality COOG Allimeter Range and Backscatter Quality Flags have been set for one or more records  The OCOG Allimeter Range and Backscatter Quality Flags have been set for one or more records  The OCOG Allimeter Range and Backscatter Quality Flags have been set for one or more records  The OCOG Allimeter Range and Backscatter Qua	CS_OFFL_SIR_GOPM_2_20221114T141810_20221114T144330_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_20221114T152310_20221114T152333_CO01  CS_OFFL_SIR_GOPM_2_20221114T152310_20221114T152333_CO01  CS_OFFL_SIR_GOPM_2_20221114T152310_20221114T152333_CO01  CS_OFFL_SIR_GOPM_2_20221114T152310_20221114T152333_CO01  CS_OFFL_SIR_GOPM_2_20221114T152310_20221114T152340_CO01  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T171725_CO01  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T173851_CO01  CS_OFFL_SIR_GOPM_2_20221114T173842_20221114T173851_CO01  CS_OFFL_SIR_GOPM_2_20221114T173842_20221114T18053_CO01  CS_OFFL_SIR_GOPM_2_20221114T173842_20221114T18053_CO01  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_CO01  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181504_CO01  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T18053_CO01  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T18053_CO01  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T180912_CO02  Altimeter Range 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 Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocoan Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221114T181066_20221114T18104C001  COCGA Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  COCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be	CS_OFFL_SIR_GOPM_2_20221114T145139_20221114T145730_C001		
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20221114T155003_20221114T162340_C001  CS_OFFL_SIR_GOPM_2_20221114T155003_20221114T162340_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17725_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T17725_C001  CS_OFFL_SIR_GOPM_2_20221114T17322_20221114T173851_C001  CS_OFFL_SIR_GOPM_2_20221114T173242_20221114T173851_C001  CS_OFFL_SIR_GOPM_2_20221114T173842_20221114T173851_C001  CS_OFFL_SIR_GOPM_2_20221114T173842_20221114T173851_C001  CS_OFFL_SIR_GOPM_2_20221114T174137_20221114T180253_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001	CS_OFFL_SIR_GOPM_2_20221114T150054_20221114T151848_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 Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags 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 and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221114T172842_20221114T173851_C001  CS_OFFL_SIR_GOPM_2_20221114T174137_20221114T180253_C001  CS_OFFL_SIR_GOPM_2_20221114T174137_20221114T180253_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T180253_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T181056_20221114T18104_C001  CS_OFFL_SIR_GOPM_2_20221114T181056_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCOG Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCOG Altimeter Range Altimeter Range Altimeter Range Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCOG Altimeter Range Altimeter Range Altimeter Range Altimeter Range Altimet	CS_OFFL_SIR_GOPM_2_20221114T152310_20221114T152333_C001		, ,
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221114T172842_20221114T173851_C001  CS_OFFL_SIR_GOPM_2_20221114T172842_20221114T180253_C001  CS_OFFL_SIR_GOPM_2_20221114T180253_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T180253_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T18048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18094_C001  CS_OFFL_SIR_GOPM_2_20221114T18096_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T18006_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183	CS_OFFL_SIR_GOPM_2_20221114T155003_20221114T162340_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_20221114T172842_20221114T180253_C001  CS_OFFL_SIR_GOPM_2_20221114T180253_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T181056_20221114T181048_C001  CS_OFFL_SIR_GOPM_2_20221114T181056_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T183002_20221114T183012_C001	CS_OFFL_SIR_GOPM_2_20221114T171322_20221114T171725_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221114T180253_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOG	CS_OFFL_SIR_GOPM_2_20221114T172842_20221114T173851_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221114T181048_C001  Backscatter Quality  CS_OFFL_SIR_GOPM_2_20221114T181056_20221114T181504_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T183012_C001  CS_OFFL_SIR_GOPM_2_20221114T18300_20221114T183917_C001  Backscatter Quality  For one or more records  The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221114T183200_20221114T183917_C001  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 have been set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range 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	CS_OFFL_SIR_GOPM_2_20221114T174137_20221114T180253_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been  CS_OFFL_SIR_GOPM_2_20221114T183200_20221114T183917_C001  Backscatter Quality  for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Flags and Backscatter Quality, OCOG  CS_OFFL_SIR_GOPM_2_20221114T183200_20221114T183917_C001  Backscatter Quality  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Flags and Backscatter Quality, OCOG	CS_OFFL_SIR_GOPM_2_20221114T180924_20221114T181048_C001		
CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, 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	CS_OFFL_SIR_GOPM_2_20221114T181056_20221114T181504_C001		
CS_OFFL_SIR_GOPM_2_20221114T183200_20221114T183917_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_GOPM_2_20221114T182016_20221114T183012_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_GOPM_2_20221114T183200_20221114T183917_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

Description of Supply and Supply	CS_OFFL_SIR_GOPM_2_20221114T184010_20221114T184433_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
20.011_38_00M_2_2021114_2000_20211412000_2000   20.011_38_00M_2_202114_2000_20211412000_2000   20.011_38_00M_2_202114_2000_20211412000_2000   20.011_38_00M_2_202114_2000_20211412000_2000   20.011_38_00M_2_20211412000_2000_2000_2000_2000_2000_	CS_OFFL_SIR_GOPM_2_20221114T190726_20221114T194151_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
20.0011_0R_GOPN_2_022****12**129_022****12**129_022***129_022***129_	CS_OFFL_SIR_GOPM_2_20221114T200050_20221114T201321_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
DELIGNATION CONTRIBUTION OF A	CS_OFFL_SIR_GOPM_2_20221114T201339_20221114T203105_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
E. C.P.P. S.R. COPM_2.0021111720372.0021111721319.0031   All cope   Copy   Co	CS_OFFL_SIR_GOPM_2_20221114T204833_20221114T204933_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Company   Comp	CS_OFFL_SIR_GOPM_2_20221114T205229_20221114T210412_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Recognitive California   Recognitive Califor	CS_OFFL_SIR_GOPM_2_20221114T210615_20221114T212124_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
are Descented Dusly, COOPH_SIN_COMPL_2022*1147210756_002114721646_0001  CS_OPH_SIN_COMPL_2022*114721676_002114721646_0001  CS_OPH_SIN_COMPL_2022*114721646_0001  CS_OPH_SIN_COMPL_2022*114721646_0001  CS_OPH_SIN_COMPL_2022*114722546_002114722101 C01  CS_OPH_SIN_COMPL_2022*114722546_002114722266_0001  CS_OPH_SIN_COMPL_2022*114722546_002114722266_0001  CS_OPH_SIN_COMPL_2022*114722546_002114722266_0001  CS_OPH_SIN_COMPL_2022*114722366_0001  CS_OPH_SIN_COMPL_2022*114723666_0001  CS_OPH_SIN	CS_OFFL_SIR_GOPM_2_20221114T212347_20221114T212846_C001	_	· · ·
Backsoater Quality	CS_OFFL_SIR_GOPM_2_20221114T213758_20221114T214610_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and backscriber Quality, CCOS Allmeter Range and Backscriber Quality Flags have been set for or or or or or cross of or or or or or cross of or or or or or or cross  CS OFFL SIR GOPM 2 20221114T22044 20221114T222858 CO01  CS_OFFL SIR GOPM 2 20221114T22044 20221114T222858 CO01  CS_OFFL SIR GOPM 2 20221114T22044 20221114T222858 CO01  CS_OFFL SIR GOPM 2 20221114T22054 L20221114T222858 CO01  CS_OFFL SIR GOPM 2 20221114T22054 L20221114T220559 CO01  CS_OFFL SIR GOPM 2 20221114T22054 L20221114T220559 CO01  CS_OFFL SIR GOPM 2 20221114T20550 CO02  Allmeter Range Quality, CCOG Burkerster Range and Backscatter Quality Flags have been set for or or or or or cross  CS_OFFL SIR GOPM 2 20221114T20006 20221114T200759 CO01  CS_OFFL SIR GOPM 2 20221114T20002 20221114T200759 CO01  CS_OFFL SIR GOPM 2 20221114T20002 20221114T200755 CO01  CS_OFFL SIR GOPM 2 20221114T20002 20221114T00555 CO01  CS_OFFL SIR GOPM 2 20221114T001012 20221114T00555 CO01  CS_OFFL SIR GOPM 2 20221114T005004 20221114T00555 CO01  CS_OFFL SIR GOPM 2 20221114T005005 20221114T005005 CO01  CS_OFFL SIR GOPM 2 20221114T005005 20221114T00500	CS_OFFL_SIR_GOPM_2_20221114T215021_20221114T215140_C001	_	
Backscatter Quality  CS_OFFL_SIR_GOPM_2_2022***14T22949_2022***14T22978_CO01  CS_OFFL_SIR_GOPM_2_2022***14T22949_2022***14T229868_CO01  CS_OFFL_SIR_GOPM_2_2022***14T229568_CO01  CS_OFFL_SIR_GOPM_2_2022***14T239568_2022***14T23979_CO01  CS_OFFL_SIR_GOPM_2_2022***14T239568_2022***14T23979_CO01  CS_OFFL_SIR_GOPM_2_2022***14T239568_2022***14T23979_CO01  CS_OFFL_SIR_GOPM_2_2022***14T239568_2022***14T23959_CO01  CS_OFFL_SIR_GOPM_2_2022***14T239568_2022***14T23959_CO01  CS_OFFL_SIR_GOPM_2_2022****14T239583_2022***14T23959_CO01  CS_OFFL_SIR_GOPM_2_2022****14T23959_CO01  CS_OFFL_SIR_GOPM_2_2022****14T23959_CO01  CS_OFFL_SIR_GOPM_2_2022****14T23959_CO01  CS_OFFL_SIR_GOPM_2_2022****14T23959_CO01  CS_OFFL_SIR_GOPM_2_2022*****14T23959_CO01  CS_OFFL_SIR_GOPM_2_2022****14T0359_CO01  CS_OFFL_SIR_GOPM_2_2022******14T0359_CO01  CS_OFFL_SIR_GOPM_2_2022******14T0359_CO01  CS_OFFL_SIR_GOPM_2_2022*****14T0359_CO01  CS_OFFL_SIR_GOPM_2_2022********************************	CS_OFFL_SIR_GOPM_2_20221114T215448_20221114T221101_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Spickscatter Quality  CS_OFFL_SIR_GOPM_2_20221114T224541_20221114T225088_C001  CS_OFFL_SIR_GOPM_2_20221114T230308_20221114T230759_C001  CS_OFFL_SIR_GOPM_2_20221114T230308_20221114T230939_C001  CS_OFFL_SIR_GOPM_2_20221114T230308_20221114T230939_C001  CS_OFFL_SIR_GOPM_2_20221114T230308_20221114T230939_C001  CS_OFFL_SIR_GOPM_2_20221114T230537_20221114T230939_C001  CS_OFFL_SIR_GOPM_2_20221114T230537_20221114T230939_C001  CS_OFFL_SIR_GOPM_2_20221114T230537_20221114T230939_C001  CS_OFFL_SIR_GOPM_2_20221114T30535_C001  CS_OFFL_SIR_GOPM_2_20221114T30535_C001  CS_OFFL_SIR_GOPM_2_20221114T30535_C001  CS_OFFL_SIR_GOPM_2_20221114T30503_20221114T05835_C001  CS_OFFL_SIR_GOPM_2_20221114T30503_20221114T05835_C001  CS_OFFL_SIR_GOPM_2_20221114T30503_20221114T05835_C001  CS_OFFL_SIR_GOPM_2_20221114T30503_20221114T05835_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T05804_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T06405_20221114T05805_C001  CS_OFFL_SIR_GOPM_2_20221114T06405_20221114T06805_C001  CS_OFFL_SIR_GOPM_2_20221114T06405_20221114T06805_C001  CS_OFFL_SIR_GOPM_2_20221114T06405_20221114T06805_C001  CC_OCA_Minmeter Range_C0_s184_SWH and Backscatter Quality Flags have been set for one or more records  CC_OCA_Minmeter Range_SSHA_SWH and Backscatter Quality Flags have been set for one or more records  CC_OCA_Minmeter Range_SSHA_SWH and Backscatter Quality Flags have been set for one or more records  CC_OCA_Minmeter Range_SSHA_SWH and Backscatter Quality Flags have been set for one or more records  CC_OCA_Minmeter	CS_OFFL_SIR_GOPM_2_20221114T222344_20221114T222656_C001		
and Backscatter Quality OCOS Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221114T230932_20221114T230939_C001  CS_OFFL_SIR_GOPM_2_20221114T230932_20221114T230932_C001  CS_OFFL_SIR_GOPM_2_20221114T230932_20221114T230932_C001  CS_OFFL_SIR_GOPM_2_20221114T230932_20221114T230932_C001  CS_OFFL_SIR_GOPM_2_20221114T032303_20221114T032353_C001  CS_OFFL_SIR_GOPM_2_20221114T032303_20221114T032352_C001  CS_OFFL_SIR_GOPM_2_20221114T032303_20221114T032353_C001  CS_OFFL_SIR_GOPM_2_20221114T032303_20221114T032303_C001  CS_OFFL_SIR_GOPM_2_20221114T135948_20221114T135959_C001  CS_OFFL_SIR_GOPM_2_20221114T135948_20221114T135959_	CS_OFFL_SIR_GOPM_2_20221114T222940_20221114T223726_C001		
CS_OFFL_SIR_GOPM_2_20221114T230823_20221114T230832_C001  CS_OFFL_SIR_GOPM_2_20221114T230823_20221114T230832_C001  CS_OFFL_SIR_GOPM_2_20221114T231537_20221114T230832_C001  CS_OFFL_SIR_GOPM_2_20221114T010123_20221114T010535_C001  CS_OFFL_SIR_GOPM_2_20221114T010123_20221114T010535_C001  CS_OFFL_SIR_GOPM_2_20221114T035984_20221114T035985_C001  CS_OFFL_SIR_GOPM_2_20221114T035984_20221114T035985_C001  CS_OFFL_SIR_GOPM_2_20221114T035984_20221114T035985_C001  CS_OFFL_SIR_GOPM_2_20221114T035985_2001  CS_OFFL_SIR_GOPM_2_20221114T035985_C001  CS_OFFL_SIR_GOPM_2_20221114T030357_20221114T035985_C001  CCCCA Altimeter Range CSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCCCA Altimeter Range and Backscatter Quality Flags have been set for one or more records  CCCCA Altimeter Range CSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCCCA Altimeter Range CSHA, SWH and Backscatter Quality Flags have been set for one or more records  CCCCA Altimeter Range CSHA, SWH and Backscatter Quality Flags have been s	CS_OFFL_SIR_GOPM_2_20221114T224541_20221114T225958_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS OFFL SIR GOPM 2 20221114T231537 20221114T234913 CO01  CS OFFL SIR GOPM 2 20221114T231537 20221114T234913 CO01  CS OFFL SIR GOPN 2 20221114T010123 20221114T010535 CO01  CS OFFL SIR GOPN 2 20221114T010123 20221114T010535 CO01  CS OFFL SIR GOPN 2 20221114T035804 20221114T035935 CO01  CS OFFL SIR GOPN 2 20221114T035804 20221114T035935 CO01  CS OFFL SIR GOPN 2 20221114T032502 20221114T035935 CO01  CS OFFL SIR GOPN 2 20221114T035935 CO01  CS OFFL SIR GOPR 2 20221114T032152 20221114T036945 CO01  CS OFFL SIR GOPR 2 20221114T036455 CO01  CS OFFL SIR GOPR 2 20221114T0	CS_OFFL_SIR_GOPM_2_20221114T230306_20221114T230759_C001		, ,
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPN_2_20221114T010123_20221114T010535_C001  CS_OFFL_SIR_GOPN_2_20221114T035804_20221114T035935_C001  CS_OFFL_SIR_GOPN_2_20221114T035804_20221114T035935_C001  CS_OFFL_SIR_GOPN_2_20221114T035804_20221114T035935_C001  CS_OFFL_SIR_GOPN_2_20221114T035804_20221114T035935_C001  CS_OFFL_SIR_GOPN_2_20221114T035804_20221114T035935_C001  CS_OFFL_SIR_GOPN_2_20221114T035935_C001  CS_OFFL_SIR_GOPR_2_20221114T03259_C0021114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T03259_C0021114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T0547	CS_OFFL_SIR_GOPM_2_20221114T230823_20221114T230832_C001	_	
Backscatter Quality  CS_OFFL_SIR_GOPN_2_20221114T035804_20221114T035935_C001  CS_OFFL_SIR_GOPN_2_20221114T035804_20221114T035935_C001  CS_OFFL_SIR_GOPN_2_20221114T035804_20221114T035935_C001  CS_OFFL_SIR_GOPN_2_20221114T032023_20221114T032202_C001  CS_OFFL_SIR_GOPN_2_20221114T135948_20221114T135958_C001  CS_OFFL_SIR_GOPN_2_20221114T135948_20221114T135958_C001  CS_OFFL_SIR_GOPN_2_20221114T135948_20221114T135958_C001  CS_OFFL_SIR_GOPN_2_20221114T135948_20221114T135958_C001  CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T165455_C001  CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T100557_C001  CS_OFFL_SIR_GOPN_2_20221114T000357_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000357_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T0000557_C001  CS_OFFL_SIR_	CS_OFFL_SIR_GOPM_2_20221114T231537_20221114T234913_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPN_2_20221114T082023_20221114T082202_C001  CS_OFFL_SIR_GOPN_2_20221114T082023_20221114T082202_C001  CS_OFFL_SIR_GOPN_2_20221114T135948_20221114T135958_C001  CS_OFFL_SIR_GOPN_2_20221114T135948_20221114T135958_C001  CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T165455_C001  CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T165455_C001  CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T1000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000357_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T0000557_C001  CS_OFFL_SIR_GOPR_2_20221114T0000557_C001  CS_OFFL_SIR_GOPR_2_20221114T0000557_C001  CS_OFFL_SIR_GOPR_2_20221114T0000557_C001  CS_OFFL_SIR_GOPR_2_20221114T0000557_C001  CS_OFFL_SIR_GOPR_2_20221114T0000557_C001  CS_OFFL_SIR_GOPR_2_20221114T0000557_C001  CS_OFFL_SIR_GOPR_2_20221114T0000557_C001  C	CS_OFFL_SIR_GOPN_2_20221114T010123_20221114T010535_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPN_2_20221114T135948_20221114T135958_C001  CS_OFFL_SIR_GOPN_2_20221114T135948_20221114T135958_C001  CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T165455_C001  CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T165455_C001  CS_OFFL_SIR_GOPR_2_20221114T000357_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000357_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  CS_O	CS_OFFL_SIR_GOPN_2_20221114T035804_20221114T035935_C001		1
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T165455_C001  CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T165455_C001  CS_OFFL_SIR_GOPR_2_20221114T000357_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000357_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T000357_20221114T000557_C001  CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722	CS_OFFL_SIR_GOPN_2_20221114T082023_20221114T082202_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags 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 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 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 and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_GOPN_2_20221114T135948_20221114T135958_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20221114T000357_20221114T000557_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001  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 have been set for one or more records  CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001	CS_OFFL_SIR_GOPN_2_20221114T165435_20221114T165455_C001		
CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatte	CS_OFFL_SIR_GOPR_2_20221114T000357_20221114T000557_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality set for one or more records	CS_OFFL_SIR_GOPR_2_20221114T032152_20221114T032604_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
00000 Altimates Developed TL 00000 Alti	CS_OFFL_SIR_GOPR_2_20221114T054011_20221114T054722_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPR_2_20221114T054722_20221114T054902_C001  CS_OFFL_SIR_GOPR_2_20221114T054722_20221114T054902_C001  Backscatter Quality  For one or more records	CS_OFFL_SIR_GOPR_2_20221114T054722_20221114T054902_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

### L2 Quality Flags (20 Hz PLRM)

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

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

Number of products with errors:

88

Number of products with errors: 88		
Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20221114T000055_20221114T000356_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_20221114T003942_20221114T004104_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_20221114T004147_20221114T004457_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_20221114T010123_20221114T010535_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_20221114T014131_20221114T014250_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_20221114T021708_20221114T022222_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_20221114T023143_20221114T023309_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_20221114T032040_20221114T032152_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_20221114T040021_20221114T040154_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_20221114T041355_20221114T041517_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_20221114T045044_20221114T045210_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_20221114T060618_20221114T060950_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_20221114T072740_20221114T072820_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_20221114T072845_20221114T073008_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_20221114T081108_20221114T081342_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_20221114T081537_20221114T081807_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_20221114T082023_20221114T082202_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_20221114T085125_20221114T085320_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_20221114T090616_20221114T090736_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_20221114T093355_20221114T093501_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_20221114T094647_20221114T095225_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_20221114T095945_20221114T100124_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_20221114T104053_20221114T104139_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_20221114T112832_20221114T113010_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_20221114T121442_20221114T121623_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_20221114T122504_20221114T122949_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_20221114T123048_20221114T123210_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_20221114T144747_20221114T145139_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221114T145730_20221114T145855_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_20221114T153330_20221114T153453_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_20221114T171215_20221114T171322_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_20221114T180504_20221114T180923_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_20221114T185434_20221114T185842_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_20221114T195243_20221114T195430_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_20221114T203645_20221114T203736_C001	PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221114T212205_20221114T212347_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_20221114T213047_20221114T213310_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_20221114T214829_20221114T214904_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_20221114T215141_20221114T215447_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_20221114T221102_20221114T221200_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_20221114T221200_20221114T221355_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_20221114T221441_20221114T221653_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_20221114T230055_20221114T230306_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_20221114T000357_20221114T000557_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_20221114T004529_20221114T005425_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_20221114T014250_20221114T014535_C001	PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPR_2_20221114T022223_20221114T023000_C001	PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPR_2_20221114T030837_20221114T031107_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_20221114T035949_20221114T040021_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_20221114T040154_20221114T040822_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_20221114T041517_20221114T041608_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_20221114T044630_20221114T045044_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_20221114T050035_20221114T050420_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_20221114T053847_20221114T053951_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_20221114T054011_20221114T054722_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_20221114T055400_20221114T055736_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_20221114T062633_20221114T063029_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_20221114T064008_20221114T064341_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_20221114T072000_20221114T072119_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_20221114T072135_20221114T072619_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_20221114T080407_20221114T081108_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_20221114T085932_20221114T090502_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_20221114T092742_20221114T093055_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_20221114T103346_20221114T103355_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_20221114T104224_20221114T104550_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_20221114T120330_20221114T120403_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_20221114T120500_20221114T120535_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_20221114T121749_20221114T122503_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_20221114T130531_20221114T130809_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_20221114T131916_20221114T132137_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_20221114T135550_20221114T135723_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_20221114T135959_20221114T140534_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_20221114T144330_20221114T144746_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_20221114T145855_20221114T150054_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_20221114T153912_20221114T154701_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_20221114T154801_20221114T154827_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_20221114T154833_20221114T154846_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_20221114T162340_20221114T162733_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_20221114T171725_20221114T172842_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_20221114T180253_20221114T180504_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_20221114T181626_20221114T182016_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_20221114T185842_20221114T190556_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_20221114T195430_20221114T200050_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_20221114T203736_20221114T204318_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_20221114T213310_20221114T213651_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_20221114T221653_20221114T222344_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_20221114T223929_20221114T224541_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records

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

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

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

Number of products with errors: 200

### 5.8 L2 Ocean Retracking Quality Check

### L2 Retracking Flags (20 Hz)

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

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

Number of products with errors: 71

### L2 Retracking Flags (20 Hz PLRM)

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

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

Number of products with errors: 155

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

## **6.1 P2P Product Format Check**

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

Number of products with errors: 0

### **6.2 P2P Product Header Analysis**

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

Number of products with errors:

### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

# 6.4 P2P Auxiliary Correction Error Check

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

0

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

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

Number of products with errors: 30

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220221113T235852_20221114T004830_C001	THOE (FES) NON-FOUNDHUM LONG PENOG	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_220221114T004830_20221114T013807_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_220221114T013807_20221114T022744_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_220221114T022744_20221114T031721_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_220221114T031721_20221114T040659_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_220221114T040659_20221114T045636_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_220221114T045636_20221114T054614_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_220221114T054614_20221114T063551_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_220221114T063551_20221114T072528_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_220221114T072528_20221114T081505_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_220221114T081505_20221114T090443_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_220221114T090443_20221114T095420_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_220221114T095420_20221114T104357_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_GOP_220221114T104357_20221114T113335_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_220221114T113335_20221114T122312_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_220221114T122312_20221114T131249_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_220221114T131249_20221114T140227_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_220221114T140227_20221114T145204_C001	Tilde (FES) Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_220221114T145204_20221114T154142_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_220221114T154142_20221114T163119_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_220221114T163119_20221114T172056_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_220221114T172056_20221114T181033_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_220221114T181033_20221114T190011_C001		There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_220221114T190011_20221114T194948_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_220221114T194948_20221114T203925_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_220221114T203925_20221114T212902_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_220221114T212902_20221114T221840_C001	Tinge (FES) Non-Equilibrium Long Period	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_220221114T221840_20221114T230817_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

Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_GOP\_2\_\_20221114T230817\_20221114T235755\_C001 Topography height (solution 1) for one or more records Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS\_OFFL\_SIR\_GOP\_2\_\_20221114T235755\_20221115T004732\_C001 Topography (1) Topography height (solution 1) for one or more records

#### 6.5 P2P Measurement Confidence Data Check

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

**Number of products with errors:** 

Test Failed **Product** Description CS\_OFFL\_SIR\_GOP\_2\_\_20221114T145204\_20221114T154142\_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 (20 Hz)

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

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

**Number of products with errors:** 29

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

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

**Number of products with errors:** 29

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

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

**Number of products with errors:** 30

### 6.8 P2P Ocean Retracking Quality Check

#### P2P Retracking Flags (20 Hz)

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

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

**Number of products with errors:** 28

#### P2P Retracking Flags PLRM

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

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

**Number of products with errors:** 30

# 7. GOP QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_GOPM1B	193	193	2	191	0
SIR_GOPR1B	123	123	0	123	0
SIR_GOPN1B	106	106	4	102	0
SIR_GOPM_2	193	193	140	53	0
SIR_GOPR_2	123	123	42	80	1
SIR_GOPN_2	106	106	34	72	0
SIR_GOP_P2P	29	29	0	28	1

# 7.1 QCC Errors

### **Number of QCC reports with errors:**

2

Total number of occurrences of each error

<b>Product Type</b>	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOPR_2	1	1	1	1							
<b>Product Type</b>	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	•	-	-	-	-	-
SIR_GOP_2_	1	1	1	1							

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

## 7.2 QCC Warnings

**Number of QCC reports with warnings** 

2208

Total number of occurrences of each warning

 Total number of occurrences of each warning									
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD		
SIR_GOPM1B	191	0	0	0	0	0	0		
SIR_GOPM_2	0	0	38	43	0	43	0		
SIR_GOPN1B	101	0	0	0	0	0	0		
SIR_GOPN_2	0	0	8	31	6	25	29		
SIR_GOPR1B	120	0	0	0	0	0	0		
SIR_GOPR_2	0	1	33	49	0	30	26		

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCD	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	33	1	31	0	0	0	0
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	14	0	0	0	21	0	31
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	15	0	0	49	0	54	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	26	0	0	10	24	0	6
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	0	22	17	51	56	26
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	0	47	0	2	61	35	12

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	35	0	2	0	0	0	0
SIR_GOPN1B	0	0	0	0	0	48	3
SIR_GOPN_2	26	23	12	1	2	0	0
SIR_GOPR1B	0	0	0	1	0	123	9
SIR_GOPR_2	35	47	2	0	6	0	0

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_GOP_2_	17	29	29	4	29	19	27

Product Type	RNELPOTONCDF	RPEPOPEDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_GOP_2_	1	19	29	21		29	21

Г	Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-
	1 Toddot Type	Tree in terres	ROMING ZI I DRODI	TOTAL DE LIGHT CONTROL	NOTHIO ZI NODI	01 11 <u>2</u> 1		
	SIR GOP 2	25	29	21	14	29		

SUBSCOPEDED A SUBSCOPEDED AND STATE OF THE SUBSCOPED AND STATE OF THE SUBSC	Test Description Key:						
INFORMATION INTERPRETATION OF Missing ValuatintOceanExcludingPositiveOper Total Control on the surpression of the surpression o	Abbreviation	Test name	Details				
MYIOEPFDICDF Missing Value into surface type 0 only for listitudes between 70 and 70 organs MYIOEPRODF Missing Value indicesse Excluding Post-NorCDF The value should not be a missing value for surface type 0 only for listitudes between 70 and 70 organs MYIONCDF RESCODE PEPDICOF RESCODE PEDICOF RESCODE PEDDICOF	BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter				
MYIORDROFF Misang/saleshtoceant-soluding/foisn/NetCDF The value should not be a misang value for surface type 0 only for latitudes between 70 and 70 degrees  MYIONDF Misang/saleshtoceant-scope RBSZOPOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPFDNCDF RBSZOPOEPPNCDF	IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)				
MVIONODE  Assign/valueIndOceanNetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarFD2NetCDF  RBSZOPOEPFDRURM RBSZOPOEPFDRURM RBSZOPOEPFDRURM RBSZOPOEPFDRURM RBSZOPOEPFDRURM RBSZOPOEPFDRURM RBSZOPOEPFDRURM RBSZOPOEPFDRURM RapgeBackscasterSigmaZeroOPOceanExcludingPolarFD2NetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarFD2NetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarFD2NetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarFD2NetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarNetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarNetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarNetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarNetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarNetCDF  RapgeBackscasterSigmaZeroOPOceanExcludingPolarNetCDF  RapgePackinessExcludingPolarOPFD2ERNetNetCDF  RapgePackinessExcludingPolarOPFD2ERNetCDF  RapgePackinessExcludingPolarOPF	MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
RBSZOPOEPFDNCDF RBSZOPOEPFDLRM NCDF RBSZOPOEPFDLRM NCDF RBSZOPOEPFDLRM RBSZOPOEPF	MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
hetween 7:0 and 7:0 degrees  RESZOPOEFPDLRM RODF  RangeBackscatterSigmaZeroOPOceanExcludingPolarD2PLRNNetCDF  RangeBackscatterSigmaZeroOPOceanExcludingPolarD2PLRNNetCDF  RangeBackscatterSigmaZeroOPOceanExcludingPolarD2PLRNNetCDF  RangeBackscatterSigmaZeroOPOceanExcludingPolarD2PLRNNetCDF  RangeBackscatterSigmaZeroOPOceanExcludingPolarD2PLRNNetCDF  ResPOPFDLRNNCDP  RangeBackscatterSigmaZeroOPOceanExcludingPolarD2PLRNNetCDF  ResPOPFDLRNNCDP  RangeBackscatterSigmaZeroOPOceanExcludingPolarD2PLRNNetCDF  ResPOPFDLRNNCDP  ResPOPFDLRNNCDP  ResPOPFDLRNNCDP  ResPOPFDLRNNSNN  RangeBackscatterSigmaZeroOPOceanExcludingPolarOFD2PLRNNetCDF  ResPOPFDLRNNCDP  ResPOPFDLRNNSNN  RangeBackscatterSigmaZeroOPOceanExcludingPolarOFD2PLRNNetCDF  ResPOPFDLRNNSNN  RangeBackscatterSigmaZeroOPOceanExcludingPolarOFD2PLRNNetCDF  ResPOPFDLRNNSNN  RangeBackscatterSigmaZeroOPOceanExcludingPolarOFD2PLRNNetCDF  ResPOPFDLRNNSNN  RangeBackscatterSigmaZeroOPOceanExcludingPolarOFD2PLRNNetCDF  ResPOPFDLRNNSNN  RangeBackscatterSigmaZeroOPOceanExcludingPolarOFD2PLRNNetCDF  ResPOPFDLRNNSNN  RangeBackscatterSigmaZeroOPOceanExcludingPolarOFD2PLRNNetCDF  ResPOPFDSINNCDF  RangeBackinessExcludingPolarOFD2PLRNNNetCDF  ResPOPFDSINNCDF  RangeBackinessExcludingPolarOFD2PLRNNNetCDF  ResPOPFDSINNCDF  RangeBackinessExcludingPolarOFD2SINNetCDF  ResPOPFDSINNCDF  RangeBackinessExcludingPolarOFD2SINNetCDF  ResPOPSINNCDF  RangeBackinessExcludingPolarOFD2SINNetCDF  ResPOPSINNCDF  RangeBackinessExcludingPolarOFD2SINNetCDF  Respopsional be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees.  The Peakings should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees.  The Peakings should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees.  The Peakings should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees.  The Peakings should be between 0 and 90000 (or missing) for surface type	MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only				
NODF RBSZOPOEPNCDF RBSZOPOEPNC	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				
RNELPOTONCDF RNELPOTONCDF RAGENELPOceanTideOceanNetCDF Starface Standard (Company of the Starface Starface) Starface Sta	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				
RPEPOPFDLRMNCDF RRPEPOPFDLRMSAR RRPEPOPFDLRMSAR RRPEPOPFDLRMSAR RRPEPOPFDLRMSAR RRPEPOPFDLRMSAR RCDF RRPEPOPFDLRMSAR RCDF RRPEPOPFDRRSINN CDF RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees RRPEPOPFDSARNCDF RRPEPOPSARNCDF R	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				
REPEPOPEDRIANSAR RODE RANGED PROPERMISAR RODE RANGED PROPERMISAR RODE REPEPOPEDRIANSAR RODE REPEPOPEDRIANSAR RODE REPEPOPEDRIANSAR RODE REPEPOPEDRIANSAR RODE REPEPOPEDRIANSIN CDF REPEPOPEDRIANSIN RangePeakinessExcludingPolarOPFDZSARNetCDF RODE POLARIES REPEPOPEDRIANSOR RepePeakinessExcludingPolarOPFDZSARNetCDF RODE POLARIES REPEPOPEDRIANSOR RepePeakinessExcludingPolarOPFDZSARNetCDF RODE POLARIES REPEPOPEDRIANSOR RepePeakinessExcludingPolarOPFDZSARNetCDF RODE POLARIES REPEPOPEDRIANSOR RODE RANGE REPEPOPEDRIANSOR RODE REPEPOPEDRIANSOR RODE RANGE REPEPOPERMINOR RODE RANGE RANGE REPERMINOR RODE RANGE REPEPOPERMINOR RODE RANGE REPEPOPERMINOR RODE RANGE REPEPOPERMINOR RODE RANGE REPEPOPERMINOR RODE RANGE REPERMINOR RODE RANGE REPEPOPERMINOR RODE RANGE REPEPOPERMINOR RODE RANGE REPEPOPERMINOR RODE RANGE REPEPOPERMINOR RODE RANGE REPERMINOR RODE REPEPOPERMINOR RODE RANGE REPERMINOR RODE REPEPOPERMINOR ROD	RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean				
REPEPOPFDRMSINN CDF RAngePeakinessExcludingPolarOPFD2PLRMSINNetCDF RPEPOPFDSARNCDF ReagePeakinessExcludingPolarOPFD2SARNetCDF RPEPOPFDSINNCDF ReagePeakinessExcludingPolarOPFD2SINNetCDF ReagePeakinessExcludingPolarOPSARNetCDF ReagePeakinessExcludingPolarOPSINNetCDF ReagePeakinessExcludingPolarOpSinN	RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	· · · · · · · · · · · · · · · · · · ·				
RPEPOPFDSINNCDF RangePeakinessExcludingPolarOPFD2SARNetCDF RPEPOPFDSINNCDF RangePeakinessExcludingPolarOPFD2SINNetCDF RangeSeaSurfaceHeightAnomalyOceanFb3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFb3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFb3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFb3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFb3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFb3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFb3PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFb2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFb2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFb2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFb2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPb2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExclud	INCDF		The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDSINNCDF RangePeakinessExcludingPolarOPFD2SANNetCDF RPEPOPLRMNCDF RangePeakinessExcludingPolarOPFD2SANNetCDF RPEPOPLRMNCDF RangePeakinessExcludingPolarOPFD2SANNetCDF Reperoproper RangePeakinessExcludingPolarOPFD2SANNetCDF Reperoproper RangePeakinessExcludingPolarOPSARNetCDF Reperoproper RangePeakinessExcludingPolarOPSARNetCDF Reperoproper RangePeakinessExcludingPolarOPSARNetCDF Reperoproper RangePeakinessExcludingPolarOPSARNetCDF Reperoproper RangePeakinessExcludingPolarOPSARNetCDF Reperoproper RangePeakinessExcludingPolarOPSARNetCDF Reperoproper RangeSeaStateBiasCorrectionOceanNetCDF Resperoproper RangeSignificantWaveHeightAnomalyOceanFD3PLRMNetCDF Resperoproper RangeSignificantWaveHeightCoeanExcludingPolarFD2NetCDF Resperoproper RangeSignificantWaveHeightCoeanExcludingPolarFD2PLRMNetCDF Resperoproper RangeSignificantWaveHeightCoeanExcludingPolarFD2PLRMNetCDF Resperoproper RangeSignificantWaveHeightCoeanExcludingPolarPD2PLRMNetCDF Reperioproper RangeSignificantWaveHeightCoeanExcludingPolarPD2PLRMNetCDF Reperioproper RangeSignificantWaveHeightCoeanExcludingPolarPD2PLRMNetCDF Reperioproper RangeSignificantWaveHeightCoeanExcludingPolarNetCDF Reperioproper RangeSignificantWaveHeightCoeanExcludingPolarNetCDF Reperioproper RangeSignificantWaveHeightCoeanExcludingPolarNetCDF Reperioproper RangeSignificantWaveHeightCoeanExcludingPolarNetCDF Reperioproper RangeSignificantWaveHeightCoeanEx	RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPLRMNCDF RangePeakinessExcludingPolarOPERMNetCDF RangePeakinessExcludingPolarOPERMNetCDF Respendence of the peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be between 0 and 15000 mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees  Respendence of the peakiness should be the same of 1 higher than its previous sample  Respendence of the peakiness should be the same of 1 higher than its previous sample  Respendence of a 20 Hz sample should be the same of 1 higher than its previous sample	RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPSARNCDF RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSARNetCDF ReperopsinnCDF Re	RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPSIARNODF RangePeakinessExcludingPolarOPSIRNetCDF RangePeakinessExcludingPolarOPSIRNetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RSSBCONCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RSSHAOFDPLRMNCD RSSHAOFDPLRMNCD RSSHAOFDPLRMNCD RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanNetCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanNetCDF RSSHAOFDPLRMNCD RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RSWHOEPFDNCDF RSWHOEPFDPLRMNCD RSWHOEPFDPLRMNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDPLRMNCD RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDPLRMNCD RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificant	RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF					
RSSECONCDF 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 RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDRINCD RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF Rel_Time_ASC_Node_Stop mismatch  SOOHHIFHD SameOrOneHigher1HzIndexFor2OHzData  The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample	RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSHAOFDNCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantwave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees Rel_Time_ASC_Node_Stop mismatch Rel_Time_ASC_Node_Stop mismatch Rel_Time_ASC_Node_Stop mismatch Rel_Time_ASC_Node_Stop mismatch Rel_Time_ASC_Node_Stop mismatch	RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSHAOFDREMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF  RSSHAONCDF  RangeSeaSurfaceHeightAnomalyOceanNetCDF  RangeSeaSurfaceHeightAnomalyOceanNetCDF  RangeSeaSurfaceHeightAnomalyOceanNetCDF  RangeSeaSurfaceHeightAnomalyOceanNetCDF  RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF  RSWHOEPFDNCDF  RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF  RSWHOEPFDPLRMNC  DF  RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF  RangeSignificantWaveHeightOceanExcl	RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean				
RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RSWHOEPNCDF RSWHOEPNCDF RSWHOEPNCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD	RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF					
RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF Rel_Time_ASC_Node_Stop mismatch Rel_Time_ASC_Node_Stop mismatch  The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample	RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF					
RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RSWHOEPNCDF RSWHOEPNCDF RSWHOEPNCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RSWHOEPNCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF Rel_Time_ASC_Node_Stop.v2_NetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF Rel_Time_ASC_Node_Stop mismatch Rel_Time_ASC_Node_Stop mismatch The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample	RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF					
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_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							
SPHRTASCNSNCDF SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF 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	RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF					
SOOHHIFHD SameOrOneHigher1HzIndexFor20HzData The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample	RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF					
	SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch				
SCSTODHRNCDF SequenceCounterStepTODHRNetCDF The sequence counter should be modulo 4 higher with regard to the previous sequence counter	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				

# 7.3 Missing QCC Reports