

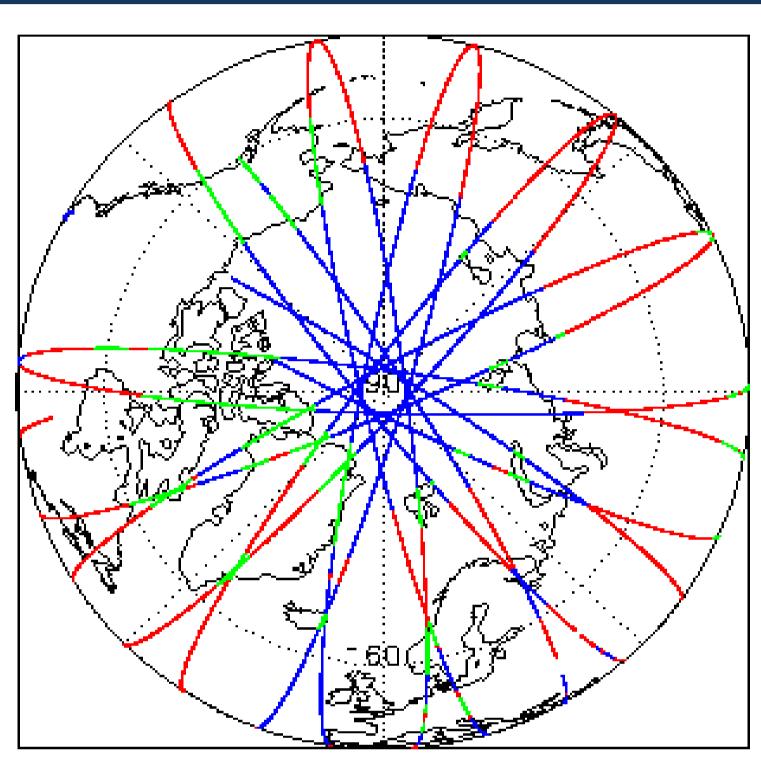
# 1. Overview

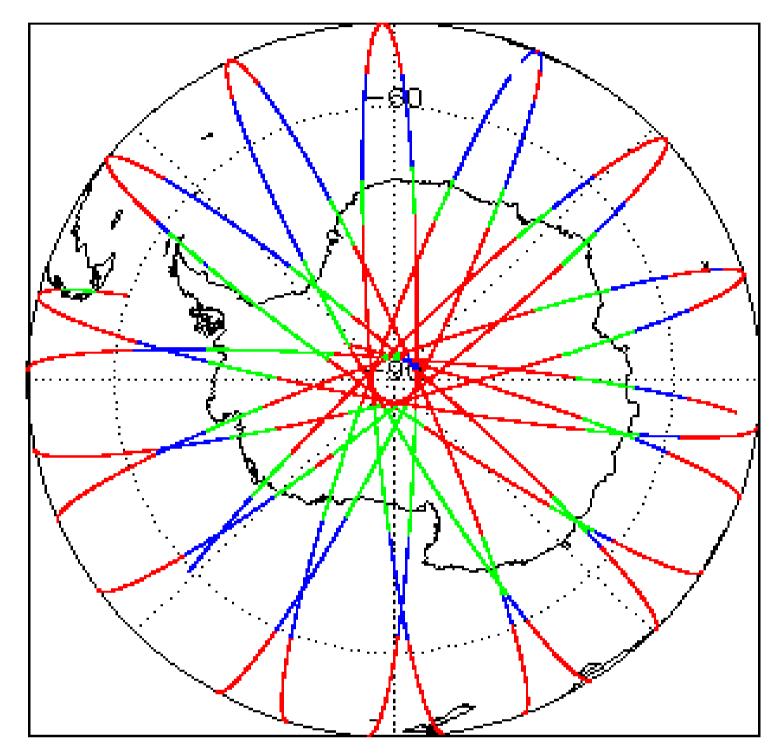
Report Production:	02-Dec-2022	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	

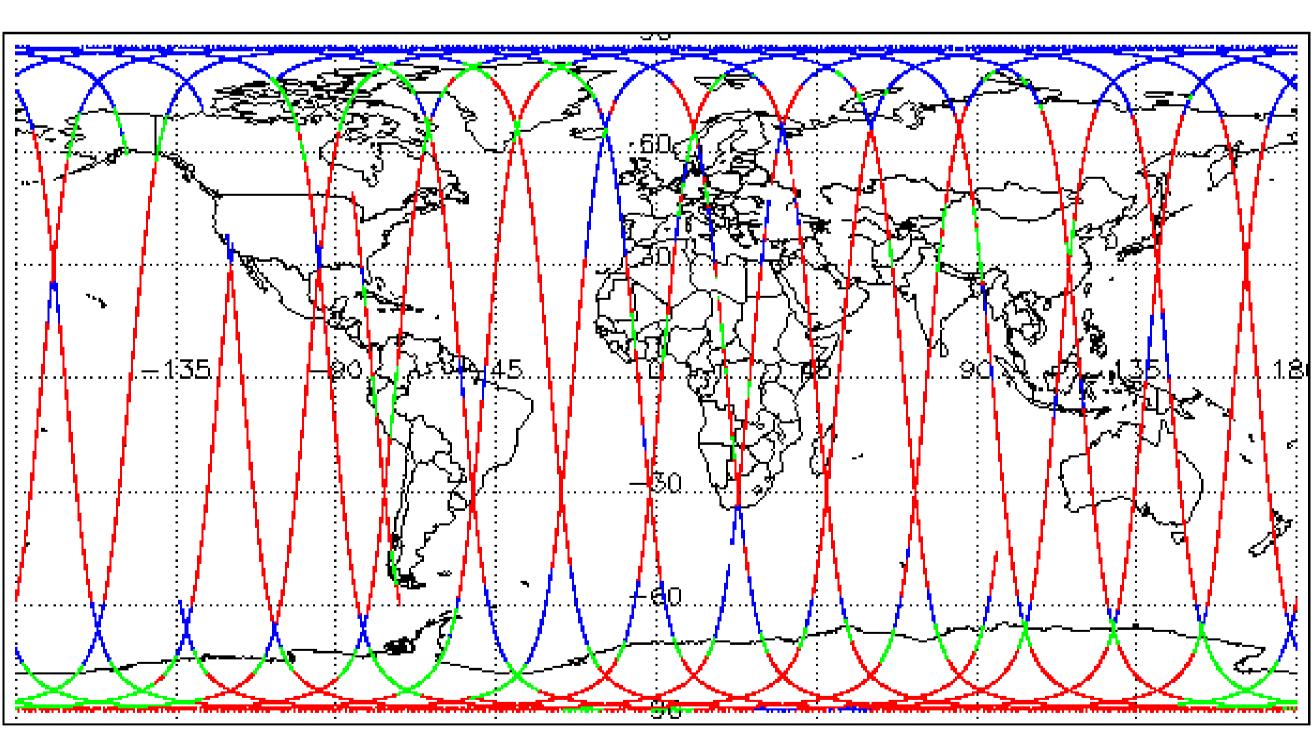
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary 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 7.2	See Section 7.2 and 7.3

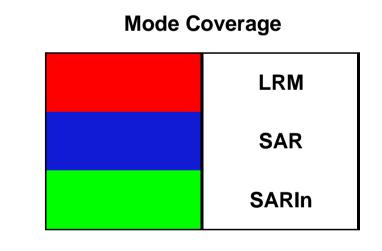
Mission / In	Mission / Instrument News		
30-Oct-20	None None		
31-Oct-20	None None		
01-Nov-20	Nothing planned		

# 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:

# 4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

#### 4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

2

0

0

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20221031T043400_20221031T043502_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20221031T220833_20221031T222432_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20221031T235431_20221101T000438_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

#### 4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

24

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20221031T001944_20221031T004124_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221031T013943_20221031T014232_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221031T044624_20221031T045427_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221031T065653_20221031T072937_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20221031T110529_20221031T111647_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221031T001347_20221031T001716_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221031T015456_20221031T015638_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221031T082858_20221031T083525_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221031T091944_20221031T092105_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221031T092356_20221031T092527_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221031T105407_20221031T105435_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221031T123816_20221031T124317_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221031T141118_20221031T141153_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20221031T190915_20221031T191205_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: 0

### **5.3 L2 Auxiliary Data File Usage Check**

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

Number of products with errors: 0

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

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

Currently, there are some common auxiliary correction errors raised in the Level 2 products 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.

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Target (PC)  Targe	CS_OFFL_SIR_GOPM_2_20221031T124317_20221031T125145_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
Segregation of the common and make a common and	CS_OFFL_SIR_GOPN_2_20221031T001347_20221031T001716_C001		
### Complete Code   2.000-Estational Code   2.000-Esta	CS_OFFL_SIR_GOPN_2_20221031T005513_20221031T005905_C001	` ''	
Security Cookers (Cooker 128 Department Cooker 128 Department Cook	CS_OFFL_SIR_GOPN_2_20221031T015456_20221031T015638_C001	Mean Dynamic Topography (1)	
DRIVERS OF THE RESIDENCE OF SECREPTIFIES OF SE	CS_OFFL_SIR_GOPN_2_20221031T041200_20221031T041319_C001		
DE CHAIL BIR CORPU 2, 2022 MOTTEROSCO 2022 2021 TOSCO 2022 CORPUS BIR CORPUS 2, 2022 MOTTEROSCO 2022 CORPUS BIR CO	CS_OFFL_SIR_GOPN_2_20221031T050404_20221031T050528_C001	Mean Dynamic Topography (1)	
Sec. OFT_SIR_GOPU_2_DOZY_GUTTGASEBDOZY_GUTTGASEBCOZY_GUTTG	CS_OFFL_SIR_GOPN_2_20221031T051053_20221031T051406_C001	Mean Dynamic Topography (1)	
Cappert   Standard   Cappert   Cap	CS_OFFL_SIR_GOPN_2_20221031T060212_20221031T060316_C001	Mean Dynamic Topography (1)	
Tourness (1) See 1 See 1 See 1 See 1 See 1 See 1 See 2 See 1 See 2	CS_OFFL_SIR_GOPN_2_20221031T064339_20221031T064454_C001	Mean Dynamic Topography (1)	
Taggraphy (1) Transparent (1) Man Dyromic Transparent (1)	CS_OFFL_SIR_GOPN_2_20221031T064952_20221031T065314_C001		
CS_OFF_SIR_GOPN_2_2222101T10741_20220101T102010_C001 Topography (1) Trail discoverant Obers Interpretation 1: 60.7 for one or more remote recently couldn't 1 and its Mean Desirt Topography (1) Trail discoverant Obers Interpretation 1: 60.7 for one or more remote remote recently couldn't 1 and its Mean Desirt Topography (1) Trail discoverant Programmy (1) Trail discoverant Program	CS_OFFL_SIR_GOPN_2_20221031T082429_20221031T082705_C001	· · · · · · · · · · · · · · · · · · ·	
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or more accodes  The set is an error with the MSS height (soution 1), the Mean Dynamic Tocography (1) Total Geocentric Ocean Total Set (1), Mean Dynamic Tocography (1), Total Geocentric Ocean Total Set (1), Mean Dynamic Tocography (1), Total Geocentric Ocean Total Set (1), Mean Dynamic Tocography (1), Total Geocentric Ocean Total Set (1), Mean Dynamic Tocography (1), Total Geocentric Ocean Total Set (1), Mean Dynamic Tocography (1), Total Geocentric Ocean Total Set (1), Mean Dynamic Tocography (1), Total Geocentric Ocean Total Set (1), Mean Dynamic Tocography (1), Total Geocentric Ocean Total Set (1), Mean Dynamic Tocography (1), Total Geocentric Ocean Total Set (1), Mean Dynamic Tocography (2), Mean Dynamic Tocography (3), Mean Dynamic Tocography (3), Mean Dynamic Tocography (4), Mean Dynamic Tocography	CS_OFFL_SIR_GOPN_2_20221031T114200_20221031T114353_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_GOPN_2_20221031T162616_20221031T165000 C001  CS_OFFL_SIR_GOPN_2_20221031T164040_20221031T165000 C001  CS_OFFL_SIR_GOPN_2_20221031T164040_20221031T165000 C001  CS_OFFL_SIR_GOPN_2_20221031T164040_20221031T165000 C001  CS_OFFL_SIR_GOPN_2_20221031T164040_20221031T165000 C001  CS_OFFL_SIR_GOPN_2_20221031T164040_20221031T165000 C001  CS_OFFL_SIR_GOPN_2_20221031T164040_20221031T165001 C001  CS_OFFL_SIR_GOPN_2_20221031T164040_20221031T165001 C001  CS_OFFL_SIR_GOPN_2_20221031T164040_20221031T165001 C001  CS_OFFL_SIR_GOPN_2_20221031T164040_20221031T165001 C001  CS_OFFL_SIR_GOPN_2_20221031T165001 C001  CS_OFFL_SIR_GOPN_2_20221031T165001 C001  CS_OFFL_SIR_GOPN_2_20221031T165001 C001  CS_OFFL_SIR_GOPN_2_20221031T165001 C001  CS_OFFL_SIR_GOPN_2_20221031T165001 C001  CS_OFFL_SIR_GOPN_2_20221031T165001 C0021031T16501 C001  CS_OFFL_SIR_GOPN_2_20221031T165001 C0021031T16501 C001  CS_OFFL_SIR_GOPN_2_20221031T16501 C0021031T16501 C001  CS_OFFL_SIR_GOPN_2_20221031T16501 C0021031T16501 C001  CS_OFFL_SIR_GOPN_2_20221031T16501 C0021031T16501 C0021031T1	CS_OFFL_SIR_GOPN_2_20221031T115216_20221031T115404_C001	Mean Dynamic Topography (1)	
CS OFFL SIR GOPN 2 20221031T150267 20221031T150500 CO01  Topography (1), Total Geocentric Ocean Tide (CPES), Non-Equilibrium Long Period Ocean Tide for Control Topography (1) Total Geocentric Ocean Tide for Control Tide for Con	CS_OFFL_SIR_GOPN_2_20221031T123816_20221031T124317_C001	Topography (1), Total Geocentric Ocean Tide (GOT)	Topography height (solution 1) and the Total Geocentric Ocean Tide
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CS_OFFL_SIR_GOPN_2_20221031T181944_20221031T182306_C001  Mean Sea Surface (1), Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  Mean Sea Surface (1), Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Total (GOT)  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Total (GOT)  Mean Sea Surface (1), Mean Dynamic Topography (1), Mean Dynamic Topogr	CS_OFFL_SIR_GOPN_2_20221031T164932_20221031T165051_C001	Mean Dynamic Topography (1)	
Topography (1) Topography height (solution 1) for one or more records  CS_OFFL_SIR_GOPN_2_20221031T182826_20221031T182951_C001 Mean Dynamic Topography (1) Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography (solution 1) for one or more records  There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1), Total Geocentric Ocean Tide height (solution 1) and the Total Geocentric Ocean Tide (GOT)  Mean Dynamic Topography (1)  Mean Dynamic Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) Topography (1) Topography (1) Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) Topography (1) Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and t	CS_OFFL_SIR_GOPN_2_20221031T173942_20221031T174300_C001	Mean Dynamic Topography (1)	
Mean Sea Surface (1), Mean Dynamic Topography (1)  CS_OFFL_SIR_GOPN_2_20221031T190915_20221031T191205_C001  Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)  Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)  Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) for one or more records  There is an error with the MSS height (solution 1) for one or more records  There is an error with the MSS height (solution 1) for one or more records  There is an error with the MSS height (solution 1) for one or more records  There is an error with the MSS height (solution 1) for one or more records  There is an error with the MSS height (solution 1) for one or more records  There is an error	CS_OFFL_SIR_GOPN_2_20221031T181944_20221031T182305_C001		
CS_OFFL_SIR_GOPN_2_20221031T190915_20221031T191205_C001  Topography (1), Total Geocentric Ocean Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records  There is an error with the Mean Dynamic Topography (solution 1) for one or more records  Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (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 Dynamic Topography (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 Topography height (solution 1) for one or more records  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 Topography height (solution 1) for one or more records	CS_OFFL_SIR_GOPN_2_20221031T182826_20221031T182951_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_GOPN_2_20221031T200652_20221031T200825_C001  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the Mean Dynamic Topography (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (sol	CS_OFFL_SIR_GOPN_2_20221031T190915_20221031T191205_C001	Topography (1), Total Geocentric Ocean	Topography height (solution 1) and the Total Geocentric Ocean Tide
Topography (1) Topography (202210311200692_202210311200692_20221031120506_C001 Topography (1) Topography (1) Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the Mean Dynamic Topography (solution 1) for one or more records  There is an error with the Mean Dynamic Topography (solution 1) for one or more records  There is an error with the Mean Dynamic Topography (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records	CS_OFFL_SIR_GOPN_2_20221031T195616_20221031T195814_C001	Mean Dynamic Topography (1)	
Topography (1)  Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) for one or more records  There is an error with the Mean Dynamic Topography (solution 1) for one or more records  There is an error with the Mean Dynamic Topography (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height	CS_OFFL_SIR_GOPN_2_20221031T200652_20221031T200825_C001		
Topography (1)  Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) for one or more records  Mean Dynamic Topography (1)  Topography height (solution 1) for one or more records  There is an error with the Mean Dynamic Topography (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records	CS_OFFL_SIR_GOPN_2_20221031T205005_20221031T205106_C001		
CS_OFFL_SIR_GOPN_2_20221031T223022_C001  Topography (1)  Topography height (solution 1) for one or more records  There is an error with the Mean Dynamic Topography (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)  Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Mean Dynamic	CS_OFFL_SIR_GOPN_2_20221031T214420_20221031T214627_C001	. , ,	
CS_OFFL_SIR_GOPN_2_20221031T233131_20221031T233350_C001  Mean Sea Surface (1), Mean Dynamic Topography (1)  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean	CS_OFFL_SIR_GOPN_2_20221031T222806_20221031T223022_C001		, , , , , , , , , , , , , , , , , , , ,
CS_OFFL_SIR_GOPN_2_202210311233131_202210311233350_C001  Topography (1)  Topography height (solution 1) for one or more records  Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records  CS_OFFL_SIR_GOPN_2_20221031T005905_20221031T010410_C001  Topography (1)  Topography height (solution 1) for one or more records  There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Ma	CS_OFFL_SIR_GOPN_2_20221031T231436_20221031T231623_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_GOFR_2_20221031T003905_20221031T010410_C001  Topography (1)  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_GOPN_2_20221031T233131_20221031T233350_C001		,
US OFFI SIR GOPR / /U//103110/3559 /U//103110/444/ C001	CS_OFFL_SIR_GOPR_2_20221031T005905_20221031T010410_C001	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	CS_OFFL_SIR_GOPR_2_20221031T023559_20221031T024447_C001	· · · · · · · · · · · · · · · · · · ·	

CS_OFFL_SIR_GOPR_2_20221031T041520_20221031T042337_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T042631_20221031T042834_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_20221031T043214_20221031T043358_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_20221031T055305_20221031T060047_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T060047_20221031T060212_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_20221031T073305_20221031T073946_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T073946_20221031T074318_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T091232_20221031T091835_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T091835_20221031T091944_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T094203_20221031T094417_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPR_2_20221031T105234_20221031T105407_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_20221031T105435_20221031T105631_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T105631_20221031T105902_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T123217_20221031T123816_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T141330_20221031T141837_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T154129_20221031T154219_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_20221031T154305_20221031T154325_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_20221031T154707_20221031T154857_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_20221031T155229_20221031T160039_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T173117_20221031T173942_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T191205_20221031T191948_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T205106_20221031T205650_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20221031T043400_20221031T043502_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOPM_2_20221031T220833_20221031T222432_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOPM_2_20221031T235431_20221101T000438_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.

3

Number of products with errors: 9

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20221030T234937_20221031T000322_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 OFFE SIR GOPM 2 202210311000718 202210311001153 C001	3	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_GOPM_2_20221031T001944_20221031T004124_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_20221031T004126_20221031T004510_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_20221031T004739_20221031T005300_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_20221031T010635_20221031T011335_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_20221031T011539_20221031T011631_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_20221031T011841_20221031T013859_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_20221031T013943_20221031T014232_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_20221031T015130_20221031T015455_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_20221031T015830_20221031T022453_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_20221031T025704_20221031T032156_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_20221031T032533_20221031T033023_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_20221031T033029_20221031T033359_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_20221031T042337_20221031T042631_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_20221031T044624_20221031T045427_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_20221031T050528_20221031T051053_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_20221031T051821_20221031T053859_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_20221031T054145_20221031T055305_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_20221031T060316_20221031T060634_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_20221031T062258_20221031T063911_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_20221031T065653_20221031T072937_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_20221031T074318_20221031T074419_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_20221031T075437_20221031T081730_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_20221031T082705_20221031T082858_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_20221031T083642_20221031T085142_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_20221031T085144_20221031T085321_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_20221031T085802_20221031T090926_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

Description (1996) 2 79 2 99 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CS_OFFL_SIR_GOPM_2_20221031T092105_20221031T092356_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
Company   Comp	CS_OFFL_SIR_GOPM_2_20221031T092527_20221031T094203_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Comparison of the Comparison	CS_OFFL_SIR_GOPM_2_20221031T094417_20221031T095859_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Security	CS_OFFL_SIR_GOPM_2_20221031T100856_20221031T101313_C001		
CS DPF   SR COM 2 2021251**10207 5027 (01111025 COM	CS_OFFL_SIR_GOPM_2_20221031T101540_20221031T103025_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
### COPPL_2 802103*T1*003_3022102*T1*003_0001  ### Debus about Country Company	CS_OFFL_SIR_GOPM_2_20221031T103225_20221031T104147_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Depth 2, 2022(101111-091), 2021(101111-091), 2021  CS. DFFL, SIR GOPM 2, 2022(101111-091), 2021(101111-091), 2021  CS. DFFL, SIR GOPM 2, 2022(101111-091), 2021(101111-091), 2021  CS. DFFL, SIR GOPM 2, 2022(101111-091), 2022(101111-091), 2021  CS. DFFL, SIR GOPM 2, 2022(	CS_OFFL_SIR_GOPM_2_20221031T110253_20221031T110323_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB_OFF_SIR_COPY_2_2022/05111/251_2022/05111/353_2020/05111/353_2022/05111/353_2020/05111/353_2022/05111/353_202	CS_OFFL_SIR_GOPM_2_20221031T110529_20221031T111647_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the COCGA Alternoter Range and Backscanter Quality Flags rover action on more records of the CoCGA Alternoter Range and Backscanter Quality Flags rover action on more records on more records.  CS_OFFL_SIR_OOPM_2_20221031T14545_30221031T12141_CODI	CS_OFFL_SIR_GOPM_2_20221031T111651_20221031T111959_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Buckscaster Country	CS_OFFL_SIR_GOPM_2_20221031T112618_20221031T113926_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCDG  CS_OFFL_SIR_GOPM_2_20221031T121695_C001  Another Range and Backscatter Quality. Plags have been been been been been been been be	CS_OFFL_SIR_GOPM_2_20221031T114353_20221031T115216_C001	1	
CS_OFFL_SIR_GOPM_2_20221031T121246_20221031T12616_C001  CS_OFFL_SIR_GOPM_2_20221031T12527_20221031T12616_C001  CS_OFFL_SIR_GOPM_2_20221031T12527_20221031T12616_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13030_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13030_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13030_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13030_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13030_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13000_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13000_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13000_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13000_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13000_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13000_C001  CS_OFFL_SIR_GOPM_2_20221031T13253_20221031T13000_C001  CS_OFFL_SIR_GOPM_2_20221031T13000_C001  CS_OFFL_SIR_GOPM_2_20221031T15000_C0021031T15	CS_OFFL_SIR_GOPM_2_20221031T115545_20221031T121141_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOS Allimenter Range and Backscatter Quality and the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all the OCOS Allimenter Range SSHA, SWH and Backscatter Quality Flags have been all the OCOS Allimenter Range and Backscatter Quality Flags have been all t	CS_OFFL_SIR_GOPM_2_20221031T121248_20221031T121635_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COC6 Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality Flags and the OCOC6 Altimeter Range and Backscatter Quality Flags and the OCOC6 Altimeter Range and Backscatter Quality Flags and the OCOC6 Altimeter Range and Backscatter Quality Flags and the OCOC6 Altimeter Range and Backscatter Quality Flags and the OCOC6 Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS OFFL SIR GOPM 2 20221031T13253 20221031T132452 C001  CS OFFL SIR GOPM 2 20221031T13253 20221031T133036 C001  CS OFFL SIR GOPM 2 20221031T135331 20221031T135911 C001  CS OFFL SIR GOPM 2 20221031T135331 20221031T135911 C001  CS OFFL SIR GOPM 2 20221031T135331 20221031T135911 C001  CS OFFL SIR GOPM 2 20221031T14153 20221031T145715 C001  CS OFFL SIR GOPM 2 20221031T145715 2001  CS OFFL SIR GOPM 2 20221031T145715 2001  CS OFFL SIR GOPM 2 20221031T145715 2001  CS OFFL SIR GOPM 2 20221031T150257 C001  CS OFFL SIR GOPM 2 20221031T150257 2001  CS OFFL SIR GOPM 2 20221031T15020 20221031T150257 C001  CS OFFL SIR GOPM 2 20	CS_OFFL_SIR_GOPM_2_20221031T124317_20221031T125145_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, CCG Altimeter Range and Backscatter Quality Flags have been a Altimeter Range and Backscatter Quality Flags have been a Altimeter Range Quality, CCG Altimeter Range Quality, CCG CS_OFFL_SIR_GOPM_2_20221031T132538_20221031T132452_C001  CS_OFFL_SIR_GOPM_2_20221031T132538_20221031T139335_C001  CS_OFFL_SIR_GOPM_2_20221031T132538_20221031T139335_C001  CS_OFFL_SIR_GOPM_2_20221031T132538_20221031T139335_C001  CS_OFFL_SIR_GOPM_2_20221031T132538_20221031T139391_C001  CS_OFFL_SIR_GOPM_2_20221031T133531_20221031T141223_C001  CS_OFFL_SIR_GOPM_2_20221031T14153_20221031T141223_C001  CS_OFFL_SIR_GOPM_2_20221031T14153_20221031T141223_C001  CS_OFFL_SIR_GOPM_2_20221031T14153_20221031T14123_C001  CS_OFFL_SIR_GOPM_2_20221031T1415_20221031T14123_C001  CS_OFFL_SIR_GOPM_2_20221031T1415_20221031T1415_C001  CS_OFFL_SIR_GOPM_2_20221031T140207_20221031T145_C001  CS_OFFL_SIR_GOPM_2_20221031T140207_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150209_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150209_20221031T150219_2022103	CS_OFFL_SIR_GOPM_2_20221031T125321_20221031T125653_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS OFFL SIR GOPM 2 20221031T13253 20221031T133036 C001  CS_OFFL_SIR_GOPM_2_20221031T132538 20221031T133036 C001  CS_OFFL_SIR_GOPM_2_20221031T133531_20221031T135911_C001  CS_OFFL_SIR_GOPM_2_20221031T1455110_C001  CS_OFFL_SIR_GOPM_2_20221031T1455142 20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T151101_C001  CS_OFFL_SIR_GOPM_2_20221031T151422 20221031T1514129 C001  CS_OFFL_SIR_GOPM_2_20221031T151422 20221031T1514129 C001  CS_OFFL_SIR_GOPM_2_20221031T151422 20221031T1514129 C001  CS_OFFL_SIR_GOPM_2_20221031T151422 20221031T1514129 C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T1514129 C001  CS_OFFL_SIR_GOPM_2_20221031T151422 20221031T1514129 C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T1514129 C001  CS_OFFL_SIR_GOPM_2_20221031T151422 20221031T1514129 C001  CS_OFFL_SIR_GOPM_2_20221031T151422 20221031T154129 C001  CS_OFFL_SIR_GOPM_2_20221031T154457_20221031T154429 C001  CS_OFFL_SIR_GOPM_2_20221031T154457_20221031T154429 C001  CS_OFFL_SIR_GOPM_2_20221031T154457_20221031T154429 C001  CS_OFFL_SIR_GOPM_2_20221031T154457_20221031T154429 C001  CS_OFFL_SIR_GOPM_2_20221031T154457_20221031T154429 C001  CS_OFFL_SIR_GOPM_2_20221031T154457_20221031T154429 C001  CS_OFFL_SIR_GOPM_2_20221031T154457_20221031T154459 C001  CS_OFFL_SIR_GOPM_2_20221031T15	CS_OFFL_SIR_GOPM_2_20221031T125656_20221031T131913_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20221031T135531_20221031T135911_C001  CS_OFFL_SIR_GOPM_2_20221031T141153_20221031T141223_C001  CS_OFFL_SIR_GOPM_2_20221031T141153_20221031T141223_C001  CS_OFFL_SIR_GOPM_2_20221031T141153_20221031T141223_C001  CS_OFFL_SIR_GOPM_2_20221031T14153_20221031T14123_C001  CS_OFFL_SIR_GOPM_2_20221031T14153_20221031T14123_C001  CS_OFFL_SIR_GOPM_2_20221031T143207_20221031T145715_C001  CS_OFFL_SIR_GOPM_2_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150209_20221031T151101_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T151101_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T154129_C001  CS_OFFL_SIR_GOPM_2_20221031T15422_20221031T154129_C001  CS_OFFL_SIR_GOPM_2_20221031T15422_20221031T155146_C001  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001  CS_OFFL_SIR_GOPM_2_20221031T154857_2	CS_OFFL_SIR_GOPM_2_20221031T132253_20221031T132452_C001	_	1.
and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T151101_C001  CS_OFFL_SIR_GOPM_2_20221031T15422_20221031T154129_C001  CS_OFFL_SIR_GOPM_2_20221031T15422_20221031T154129_C001  CS_OFFL_SIR_GOPM_2_20221031T15422_20221031T154129_C001  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001  COCAR Altimeter Range, SSHA, SWH and Backscatter Quality, CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001  COCAR Altimeter Range, SSHA, SWH and Backscatter Quality, CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  COCAR Altimeter Range, SSHA, SWH and Backscatter Quality, CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  COCAR Altimeter Range, SSHA, SWH and Backscatter Quality, CCOG Altimeter Range, SSHA, SWH and Back	CS_OFFL_SIR_GOPM_2_20221031T132538_20221031T133036_C001	_	
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality CS_OFFL_SIR_GOPM_2_20221031T143207_20221031T145715_C001  CS_OFFL_SIR_GOPM_2_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150209_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T150050_20221031T150050_2002210	CS_OFFL_SIR_GOPM_2_20221031T133531_20221031T135911_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_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150219_20221031T150257_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T151101_C001  CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T151101_C001  CS_OFFL_SIR_GOPM_2_20221031T151422_20221031T154129_C001  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T163612_C001  Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T163612_C001  COCOM Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records  CS_OFFL_SIR_GOPM_2_20221031T160357_20221031T163612_C001	CS_OFFL_SIR_GOPM_2_20221031T141153_20221031T141223_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20221031T150207_20221031T160207_20221031T160207_20221031T160307_202210	CS_OFFL_SIR_GOPM_2_20221031T143207_20221031T145715_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  CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001  Ocean Altimeter Range, SSHA, SWH 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 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  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, 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_GOPM_2_20221031T150219_20221031T150257_C001	_	
CS_OFFL_SIR_GOPM_2_20221031T151422_20221031T154129_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags 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, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been  Set for one or more records  The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records  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, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter	CS_OFFL_SIR_GOPM_2_20221031T150500_20221031T151101_C001		
CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records  Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backs	CS_OFFL_SIR_GOPM_2_20221031T151422_20221031T154129_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20221031T160357_20221031T163612_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_GOPM_2_20221031T154857_20221031T155146_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_GOPM_2_20221031T160357_20221031T163612_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_GOPM_2_20221031T164409_20221031T164932_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_20221031T165454_20221031T165728_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_20221031T172735_20221031T173117_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_20221031T174300_20221031T175213_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_20221031T175458_20221031T181619_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_20221031T182305_20221031T182413_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20221031T182419_20221031T182826_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_20221031T183351_20221031T184332_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_20221031T184520_20221031T185103_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_20221031T192011_20221031T195500_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_20221031T195814_20221031T200312_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_20221031T200333_20221031T200652_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_20221031T201413_20221031T204553_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_20221031T204802_20221031T205005_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_20221031T210011_20221031T211255_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_20221031T211843_20221031T213432_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_20221031T213700_20221031T214212_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_20221031T215208_20221031T220555_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_20221031T220833_20221031T222432_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_20221031T222616_20221031T222633_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_20221031T224738_20221031T225656_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_20221031T225936_20221031T231311_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_20221031T231623_20221031T232123_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_20221031T232148_20221031T232158_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_20221031T232203_20221031T232305_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_20221031T232959_20221031T233131_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

# L2 Quality Flags (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:

82

Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20221031T001347_20221031T001716_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_20221031T005300_20221031T005424_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_20221031T005513_20221031T005905_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_20221031T011631_20221031T011841_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_20221031T014454_20221031T014721_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_20221031T015456_20221031T015638_C001	TAITIMETER Range and Backscatter Cuality	The Ocean Altimeter Range, SSHA, SWH 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_20221031T041200_20221031T041319_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_20221031T041358_20221031T041520_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_20221031T044522_20221031T044624_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_20221031T050404_20221031T050528_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_20221031T060634_20221031T060824_C001	TAIRMETER RANGE AND BACKSCARER URAIRV	The Ocean Altimeter Range, SSHA, SWH 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_20221031T061015_20221031T061042_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_20221031T061950_20221031T062258_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_20221031T064952_20221031T065314_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_20221031T082429_20221031T082705_C001	TAITIMETER RANGE AND BACKSCATTER CHAITY	The Ocean Altimeter Range, SSHA, SWH 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_20221031T082858_20221031T083525_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_20221031T095944_20221031T100125_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_20221031T101313_20221031T101448_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_20221031T104147_20221031T104224_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_20221031T112118_20221031T112618_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_20221031T114200_20221031T114353_C001	TAITIMETER Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221031T121857_20221031T122244_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_20221031T122319_20221031T122418_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_20221031T123816_20221031T124317_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_20221031T133036_20221031T133305_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_20221031T151101_20221031T151231_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_20221031T164049_20221031T164409_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_20221031T171146_20221031T171331_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_20221031T172221_20221031T172300_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_20221031T182826_20221031T182951_C001	TAITIMETER Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221031T190915_20221031T191205_C001	TAITIMETER Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20221031T195616_20221031T195814_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_20221031T205005_20221031T205106_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_20221031T214420_20221031T214627_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_20221031T224604_20221031T224738_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_20221031T004511_20221031T004739_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_20221031T005905_20221031T010410_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_20221031T010450_20221031T010635_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_20221031T013859_20221031T013943_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_20221031T022617_20221031T022643_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_20221031T023559_20221031T024447_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_20221031T033539_20221031T033913_C001	TAITIMETER RANGE AND BACKSCATTER CHAITIVE	The Ocean Altimeter Range, SSHA, SWH 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_20221031T041520_20221031T042337_C001	TAITIMETER RANGE AND BACKSCATTER CHAITIVE	The Ocean Altimeter Range, SSHA, SWH 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_20221031T042631_20221031T042834_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_20221031T043502_20221031T043645_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_20221031T045837_20221031T050404_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_20221031T051406_20221031T051821_C001	TAITIMETER Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPR_2_20221031T055305_20221031T060047_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_20221031T060824_20221031T061006_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_20221031T063911_20221031T064339_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_20221031T065314_20221031T065653_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_20221031T073305_20221031T073946_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_20221031T073946_20221031T074318_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_20221031T085321_20221031T085802_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_20221031T091835_20221031T091944_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_20221031T094203_20221031T094417_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_20221031T105631_20221031T105902_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_20221031T123217_20221031T123816_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_20221031T125145_20221031T125321_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPR_2_20221031T131913_20221031T132134_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_20221031T141223_20221031T141309_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_20221031T141330_20221031T141837_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_20221031T143105_20221031T143207_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_20221031T145715_20221031T150059_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_20221031T151231_20221031T151422_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_20221031T154221_20221031T154232_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_20221031T154707_20221031T154857_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_20221031T155146_20221031T155223_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_20221031T155229_20221031T160039_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_20221031T163612_20221031T164049_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_20221031T165051_20221031T165454_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_20221031T171802_20221031T172151_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_20221031T172417_20221031T172625_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_20221031T173117_20221031T173942_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_20221031T182951_20221031T183351_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_20221031T185753_20221031T190425_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_20221031T191205_20221031T191948_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_20221031T200325_20221031T200333_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_20221031T200825_20221031T201223_C001	TAITIMETER Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPR_2_20221031T213432_20221031T213521_C001	TAITIMETER RANGE AND BACKSCATTER CHAITY	The Ocean Altimeter Range, SSHA, SWH 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_20221031T214627_20221031T215208_C001	TAITIMETER RANGE AND BACKSCATTER CHAITY	The Ocean Altimeter Range, SSHA, SWH 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_20221031T220555_20221031T220833_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.

189

66

> 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:

# 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:

#### 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: 143

# 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: 0

### **6.4 P2P Auxiliary Correction Error Check**

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

Currently, there are some common auxiliary correction errors raised in the Level 2 products 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: 29

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220221031T001211_20221031T010150_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_220221031T010150_20221031T015126_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T015126_20221031T024105_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T024105_20221031T033041_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T033041_20221031T042020_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_220221031T042020_20221031T050956_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T050956_20221031T055934_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T055934_20221031T064910_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T064910_20221031T073849_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T073849_20221031T082825_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T082825_20221031T091804_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T091804_20221031T100740_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_220221031T100740_20221031T105718_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T105718_20221031T114654_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T114654_20221031T123633_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T123633_20221031T132609_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_220221031T132609_20221031T141548_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T141548_20221031T150524_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_220221031T150524_20221031T155503_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T155503_20221031T164439_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T164439_20221031T173417_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T173417_20221031T182353_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T182353_20221031T191332_C001	Topography (1), Total Geocentric Ocean	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_220221031T191332_20221031T200308_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T200308_20221031T205247_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T205247_20221031T214222_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T214222_20221031T223201_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T223201_20221031T232137_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220221031T232137_20221101T001116_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

# 6.5 P2P Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220221031T042020_20221031T050956_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOP_220221031T214222_20221031T223201_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOP_220221031T232137_20221101T001116_C002	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:

#### 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:

# 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: 27

#### 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

30

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	173	173	3	170	0
SIR_GOPR1B	110	110	0	110	0
SIR_GOPN1B	97	97	0	97	0
SIR_GOPM_2	170	170	113	57	0
SIR_GOPR_2	110	110	29	81	0
SIR_GOPN_2	97	97	38	59	0
SIR GOP P2P	29	29	0	29	0

# 7.1 QCC Errors

Number of QCC reports with errors:

0

### 7.2 QCC Warnings

**Number of QCC reports with warnings** 

2186

### Total number of occurrences of each warning

					<u> </u>		
Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_GOPM1B	170	0	0	0	0	0	0
SIR_GOPM_2	0	43	42	0	44	0	41
SIR_GOPN1B	93	0	0	0	0	0	0
SIR_GOPN_2	0	11	30	5	26	28	21
SIR_GOPR1B	104	0	0	0	0	0	0
SIR_GOPR_2	0	40	49	1	38	28	17

Product Type	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCI	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	1	36	0	0	0	0	31
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	0	0	23	0	30	0
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	0	0	46	0	53	0	0

Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	0	0	8	27	0	2	41
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	24	15	36	49	26	28
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	42	0	5	73	44	10	44

Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
SIR_GOPM1B	0	0	0	0	0	0	
SIR_GOPM_2	0	3	0	0	0	0	
SIR_GOPN1B	0	0	1	0	45	3	
SIR_GOPN_2	26	11	0	1	0	0	
SIR_GOPR1B	0	0	0	0	110	2	
SIR_GOPR_2	50	1	1	1	0	0	

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	RBSZOPOEPNCDF
SIR_GOP_2_	14	29	29	5	29	17	28

Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNCI	PEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_GOP_2_	1	17	29	27	18	29	18
		•	•				
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-

ABDEVANCOF  SUSTICUTED STATES  BCSHNCDF  SUSTICUTED SUS	Test Description Key:						
MICEPENCOP Missing/stucket/CosenExcludingPolarPDNstCDF MissingRoducaterSigma2scoCPOceanExcludingPolarPDNstCDF MissingRoducaterSigma2scoCPOceanE		Test name	Details				
MICEPNODE MissingValueIntOceantExclusingPolanNetCDF The value should not be a finishing value for surface type 0 and y for failules between -70 and 70 degree MICONCDF RBSZOPGEPEDNODE RBSZOPG	BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter				
MICINIODE Missing ValuatiniOceanNetCDF RRSZOPGEPEDNODE RRSZOPG	MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
RSZOPOEPFDNODF RangeBackscatterSigmaZeroOPCosanExclusingPoturFDZMECDF DatabackscatterSigmaZeroOPCosanExclusingPoturFDZMERMNotCDF RRSZOPOEPFDLRM RungeBackscatterSigmaZeroOPCosanExclusingPoturFDZMERMNotCDF RRSZOPOEPNODF RangeBackscatterSigmaZeroOPCosanExclusingPoturPDZMERMNotCDF RRSZOPOEPNODF RangeBackscatterSigmaZeroOPCosanExclusingPoturNotCDF RNELPOTONCDF RungeNELPOcounTideOcumNotCDF RangePeakinessExclusingPotarNotCDF RepoPPDLRMNCDF RepoPPDLRMNCDF RepoPPDLRMNCDF RepoPPDLRMNCDF RepoPPDLRMSINN RangePeakinessExclusingPotarOPCDERMSARNotCDF RepoPPDLRMSINN RangePeakinessExclusingPotarOPCDERMSARNotCDF RepoPPDLRMSINN RangePeakinessExclusingPotarOPCDERMSARNotCDF RepoPPDLRMSINN RangePeakinessExclusingPotarOPCDERMSARNotCDF RepoPPDLRMSINN RangePeakinessExclusingPotarOPFDZPLRMSINNotCDF RepoPPDLRMSINN RangePeakinessExclusingPotarOPFDZPLRMSINNotCDF RepoPPDLRMSINN RangePeakinessExclusingPotarOPFDZPLRMSINNotCDF RepoPPDSARNCDF RepoPPDSARNCD	MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
NRSZOPOEPFODER  RRSZOPOEPFODER  RRSZOPOEPFODER	MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only				
RESZOPOEPNCDF RRSZOPOEPNCDF RRSZOPOEPNCDF RRSZOPOEPNCDF RRSZOPOEPNCDF RROBERSARGARESSIGMRAZEGOPOESGARESCULDING-OBSTRUCTAL KENNELUP The bindscater in long point of ocean loading lide helpful should be between 4000 and 7500 (or missing) for surface type = ocean for listudes between 40 months of type = ocean for listudes	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 RNELPOTONCDF RNELPOTONCDF RngpeNELPOceanTideOceanNetCDF The Non-aquilibria in image piot ocean loading 6de height should be between -40mm and 40mm (or missurface type - ocean RpePoPFDLRMNCDF RepPoPFDLRMSAR RCDF RPEPOPFDLRMSAR RCDF RPEPOPFDLRMSINN CDF RepPoPFDLRMSINN CDF RepPoPFDLRMSINN RangePeakinessExulutingPotarOPFD2HRMSARNetCDF RDF RPEPOPFDRSARNCDF RepPoPFDSARNCDF RangePeakinessExulutingPotarOPFD2HRMSINNetCDF RDF RPEPOPFDSARNCDF RangePeakinessExulutingPotarOPFD2HRMSINNetCDF RDF RPEPOPFDSARNCDF RangePeakinessExulutingPotarOPFD2SARNetCDF RDF RPEPOPFDSINNCDF RangePeakinessExulutingPotarOPFD2SINNetCDF RDF RPEPOPFDSINNCDF RangePeakinessExulutingPotarOPFD2SINNetCDF RDF RPEPOPFDSINNCDF RangePeakinessExulutingPotarOPFD2SINNetCDF RDF RPEPOPSARNCDF RAngePeakinessExulutingPotarOPFD2SINNetCDF RDF RPEPOPSARNCDF RAngePeakinessExulutingPotarOPFD2SINNetCDF RDF RPEPOPSINNCDF RAngePeakinessExulutingPotarOPFD2SINNetCDF RDF RPEPOPSINNCDF RAngePeakinessExulutingPotarOPFD2SINNetCDF RDF RPEPOPSINNCDF RAngePeakinessExulutingPotarOPSARNetCDF RDF RPEPOPSINNCDF RAngePeakinessExulutingPotarOPSARNetCDF RDF RPEPOPSINNCDF RAngePeakinessExulutingPotarOPSARNetCDF RDF RDF RDF RDF RDF RDF RDF RDF RDF R		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 RPEPOPFDLRMSAR NCDF RAngePeakinessExcludingPolarOPFD2LRMSARNeiCDF RPEPOPFDLRMSAR NCDF RAngePeakinessExcludingPolarOPFD2LRMSARNeiCDF RPEPOPFDLRMSINN CDF RPEPOPFDLRMSINN CDF RPEPOPFDLRMSINN CDF RPEPOPFDLRMSINN CDF RPEPOPFDSARNCDF RangePeakinessExcludingPolarOPFD2LRMSARNeiCDF RPEPOPFDSARNCDF RangePeakinessExcludingPolarOPFD2LRMSINNeiCDF RPEPOPFDSARNCDF RangePeakinessExcludingPolarOPFD2LRMSINNeiCDF RPEPOPFDSARNCDF RPEPOPFDSARNCDF RPEPOPFDSARNCDF RPEPOPFDSARNCDF RPEPOPFDSARNCDF RPEPOPFDSARNCDF RPEPOPFDSARNCDF RPEPOPFDSARNCDF RPEPOPPSARNCDF RPEPOPPSARNCDF RPEPOPSARNCDF RRESECONCDF RangePeakinessExcludingPolarOPFD2SINNeiCDF RPEPOPSINNCDF RangePeakinessExcludingPolarOPFD2SINNeiCDF RPEPOPSINNCDF RRESECONCDF RR	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				
RPEPOPFDLRMSAR RREPOPFDPLRMSAR RCDF RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF RAngePeakinessExcludingPolarOPFD2PLRMSARNetCDF REPOPFDPLRMSINN CDF RepopFDPLRMSINN CDF RepopFDPLRMSINN CDF RepopFDPLRMSINN CDF RepopFDPLRMSINN CDF RepopFDSINNCDF RepopFDSINNCDF RepopFDSINNCDF RepopFDSINNCDF RepopFDSINNCDF RepopPRDSINNCDF RepopPRDSINNC	RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean				
NCDF RPEPOPFDRMSINN CDF Range-PeakinessSExcludingPolarOPFD2PLRMSINNetCDF RPEPOPFDRMSINN CDF Range-PeakinessSExcludingPolarOPFD2PLRMSINNetCDF RPEPOPFDSARNCDF Range-PeakinessSExcludingPolarOPFD2SARNetCDF Range-PeakinessSExcludingPolarOPFD2SARNetCDF Range-PeakinessSExcludingPolarOPFD2SARNetCDF Range-PeakinessSExcludingPolarOPFD2SARNetCDF Repeoper Range-PeakinessSExcludingPolarOPFD2SINNetCDF Repeoper Range-PeakinessSExcludingPolarOPFD2SINNetCDF Repeoper Range-PeakinessSExcludingPolarOPFD2SINNetCDF Repeoper Range-PeakinessSExcludingPolarOPFD2SINNetCDF Repeoper Range-PeakinessSExcludingPolarOPFD2SINNetCDF Repeoper Range-PeakinessSExcludingPolarOPSARNetCDF Repeoper Range-PeakinessSExcludingPolarOPSARNetCDF Repeoper Range-PeakinessSExcludingPolarOPSARNetCDF Repeoper Range-PeakinessSExcludingPolarOPSINNetCDF Repeoper Range-PeakinessExcludingPolarOPSINNetCDF Repeoper Range-PeakinessExcludingPolarOPSINNetCDF Repeoper Range-PeakinessExcludingPolarNetCDF Repeoper Range-PeakinessExcludingPolarNetCDF Repeoper Range-PeakinessE	RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDSINNCDF RPEPOPFDSINNCDF RPEPOPFDSINNCDF RPEPOPFDSINNCDF RPEPOPRMNCDF RPEPORATION AND ADDRESS AN	NCDF		The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPTDSINNCDF RangePeakinessExcludingPolarOPFD2SINNetCDF RPEPOPLRMNCDF RangePeakinessExcludingPolarOPFD2SINNetCDF RPEPOPLRMNCDF Respective and 70 degrees  RPEPOPSARNCDF Respective RangePeakinessExcludingPolarOPSARNetCDF Respective RangePeakinessExcludingPolarOPSARNetCDF Respective RangePeakinessExcludingPolarOPSARNetCDF Respective RangePeakinessExcludingPolarOPSARNetCDF Respective RangePeakinessExcludingPolarOPSARNetCDF Respective RangePeakinessExcludingPolarOPSINNetCDF Respective RangePeakinessExcludingPolarOPSINNetCDF Respective RangePeakinessExcludingPolarOPSINNetCDF Respective RangeSeaStateBlasCorrectionOceanNetCDF Respective RangeSeaStateBlasCorrectionOceanNetCDF Respective RangeSeaStateBlasCorrectionOceanNetCDF Respective RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF Respective RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF Respective RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF Respective RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF Respective RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF Respective RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF Respective RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF Respective RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF Respective RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF Respective RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF Respective RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF Respective RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF Respective Respecti	RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPLAMNCDF RangePeakinessExcludingPolarOPLRMNetCDF RPEPOPSARNCDF ReperopsartinessExcludingPolarOPLRMNetCDF ReperopsartinessExcludingPolarOPLRMNetCDF ReperopsartinessExcludingPolarOPSARNetCDF ReperopsartinessExcludingPolarDateCDF Reperops	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 RPEPOPSINNCDF RangePeakinessExcludingPolarOPSARNetCDF RPEPOPSINNCDF RangePeakinessExcludingPolarOPSINNetCDF RPEPOPSINNCDF RangeSeaStateBiasCorrectionOceanNetCDF Resea state bias correction should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between and 70 degrees  RSSBCONCDF RangeSeaStateBiasCorrectionOceanNetCDF RangeSeaStateBiasCorrectionOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarPD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantW	RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
REPOPSINNCDF RangePeakinessExcludingPolarOPSRNetCDF RepeakinessExcludingPolarOPSINNetCDF Repeakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between and 70 degrees  RSSBCONCDF RangeSeaStateBiasCorrectionOceanNetCDF RSSHAOFDNCDF RSSHAOFDNCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanNetCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanNetCDF RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RSWH	RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSECONCDF RangeSeaStateBiasCorrectionOceanNetCDF RSSHAOFDNCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RSSHAOFDPLRMNCD RSSHAOFDPLRMNCD RSSHAOFDPLRMNCD RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAONCDF RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDLRMNCD DF RSWHOEPFDLRMNCD RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDNCDF RSWHOEPFDN	RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSHAOFDNCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RSSHAOFDPLRMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPROCDF RSW	RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSHAOFDRAMNCD RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSSHAONCDF RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDRAMNC DF RSWHOEPROB RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPROB RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPROB RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF	RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean				
RSSHAONCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RSWHOEPFDNCDF RSWHOEPFDNCDF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPFDPLRMNC DF RSWHOEPROCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RSWHOEPNCDF RAngeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RSWHOEPNCDF RAngeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantwave height should be between 0mm and 15000mm (or missing) for surface type = ocea latitudes between -70 and 70 degrees  Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)  SOOHHIFHD SameOrOneHigher1HzIndexFor20HzData  The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample	RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RSWHOEPFDNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantwave height should be between 0mm and 15000mm (or missing) for surface type = oceanlatitudes between -70 and 70 degrees Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)  SOOHHIFHD SameOrOneHigher1HzIndexFor20HzData  The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample	RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSWHOEPFDNCDF RSWHOEPFDLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPFDPLRMNC DF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF Rel_Time_ASC_Node_Start_v2_NetCDF Rel_Time_ASC_Node_Start_v2_NetCDF Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)  SOOHHIFHD SameOrOneHigher1HzIndexFor20HzData  Iatitudes between -70 and 70 degrees The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocea latitudes between -70 and 70 degrees The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocea latitudes between -70 and 70 degrees  SPH_Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)  The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample	RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSWHOEPNCDF RangeSignificantWaveHeightOceanExcludingPolarNetCDF SPHRTASCNSNCDF SPH_Rel_Time_ASC_Node_Start_v2_NetCDF SOOHHIFHD SameOrOneHigher1HzIndexFor20HzData The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocea latitudes between -70 and 70 degrees Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1) The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample			The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
SPHRTASCNSNCDF SPH_Rel_Time_ASC_Node_Start_v2_NetCDF 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	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
SOOHHIFHD SameOrOneHigher1HzIndexFor20HzData  The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample	RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
	SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)				
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				
SCSTODNCDF SequenceCounterStepTODNetCDF The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counters	SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter				

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

L1B and L2 Product name

n/a

**P2P Product name** 

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