

QA4EO Daily Report for GOP data:

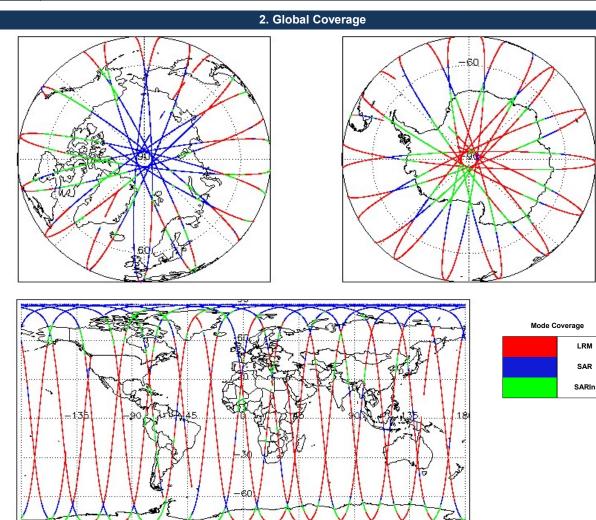
<u>23/05/2022</u>

IDEAS-QA4E0

Report Production:	24-Jun-2022	Check	L1 & L2	P2P
teport i roduction.	24-3011-2022	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Useu.	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	Product Format Check	Nominal	Nominal
Data Used:		Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
		Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
		Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
		Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
		QCC Error/ Warning Check	See Section 7.1, 7.2 and 7.3	See Section 7.1 and 7.2

23-May-2022 None

24-May-2022 SIRAL unavailability 14:20:23 to 16:07:11 due to Orbit Manoevre



3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

0

4. GOP Level 1B Data Quality Check

4.1 L1B Product Format Check

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

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.

0

0

3

Number of products with errors:

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.

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20220523T072556_20220523T073303_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20220523T185257_20220523T190818_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20220523T192949_20220523T193303_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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20220523T124720_20220523T124751_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20220523T193822_20220523T194312_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220523T060042_20220523T060313_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220523T073729_20220523T074156_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20220523T205950_20220523T210437_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220523T010421_20220523T011208_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220523T014951_20220523T015246_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220523T023325_20220523T023629_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220523T032817_20220523T032959_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220523T055746_20220523T060042_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220523T063045_20220523T063224_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220523T074156_20220523T074815_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220523T110719_20220523T110734_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20220523T155621_20220523T160230_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

Number of products with errors.

5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

5.4 L2 Auxiliary Correction Error Check

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

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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20220523T072556_20220523T073303_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20220523T205110_20220523T205216_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T001327_20220523T001702_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T015247_20220523T015606_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T020118_20220523T020243_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T024330_20220523T024445_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T034022_20220523T034130_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T051726_20220523T051831_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T060042_20220523T060313_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T073729_20220523T074156_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T082631_20220523T082832_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T091631_20220523T092019_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T105142_20220523T105712_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T133219_20220523T133526_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T150519_20220523T150805_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T151120_20220523T151455_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T160230_20220523T160302_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T164559_20220523T164833_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T174104_20220523T174225_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T182133_20220523T182718_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T191535_20220523T191629_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T192036_20220523T192247_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T192357_20220523T192626_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20220523T200324_20220523T200504_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T201348_20220523T201557_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T205950_20220523T210437_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20220523T232237_20220523T232630_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPR_2_20220523T010421_20220523T011208_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T024445_20220523T025251_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T042608_20220523T042747_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T060314_20220523T061026_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T074156_20220523T074815_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T074817_20220523T074911_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_20220523T092019_20220523T092902_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T105713_20220523T110451_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T123645_20220523T124610_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T141525_20220523T142349_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T155621_20220523T160230_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_20220523T173418_20220523T174104_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T191630_20220523T192036_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T205216_20220523T205950_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T223449_20220523T224019_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_20220523T072556_20220523T073303_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_20220523T185257_20220523T190818_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_20220523T192949_20220523T193303_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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20220522T233739_20220523T001017_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_20220523T001702_20220523T002236_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPM_2_20220523T002453_20220523T003021_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_20220523T010030_20220523T010033_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_20220523T010131_20220523T010310_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_20220523T011626_20220523T014951_C001	and Backscatter Quality, OCOG Altimeter	The Ocean Altimeter Range, SSHA, SWH 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_20220523T015606_20220523T020118_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_20220523T020421_20220523T022301_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_20220523T025447_20220523T031620_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_20220523T031729_20220523T032817_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_20220523T033312_20220523T033606_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_20220523T033623_20220523T034022_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_20220523T034439_20220523T041121_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_20220523T041136_20220523T041841_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_20220523T042024_20220523T042247_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_20220523T043450_20220523T044543_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_20220523T045025_20220523T045212_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_20220523T045214_20220523T050751_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_20220523T050948_20220523T051506_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_20220523T052559_20220523T053841_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_20220523T054055_20220523T055436_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_20220523T0555524_20220523T055746_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_20220523T062017_20220523T062949_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_20220523T063224_20220523T064638_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_20220523T064914_20220523T065418_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_20220523T065425_20220523T065436_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_20220523T071301_20220523T071428_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_20220523T072243_20220523T072433_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_20220523T072556_20220523T073303_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_20220523T080542_20220523T080658_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_20220523T080909_20220523T082528_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_20220523T082916_20220523T0833335_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_20220523T083357_20220523T083538_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_20220523T084013_20220523T090344_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_20220523T094012_20220523T100517_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_20220523T100728_20220523T101250_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_20220523T101257_20220523T101621_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_20220523T101952_20220523T104655_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_20220523T104820_20220523T105142_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_20220523T111517_20220523T111729_C002	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_20220523T111733_20220523T112447_C002	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_20220523T112450_20220523T114503_C002	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_20220523T114720_20220523T115529_C002	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_20220523T115911_20220523T123258_C002	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_20220523T124611_20220523T124709_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_20220523T125754_20220523T125918_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_20220523T131639_20220523T132351_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_20220523T132700_20220523T133219_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_20220523T133855_20220523T140028_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_20220523T140313_20220523T141223_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_20220523T142432_20220523T142848_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_20220523T144438_20220523T144923_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_20220523T145111_20220523T150226_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_20220523T150805_20220523T151120_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_20220523T151816_20220523T152312_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_20220523T152321_20220523T154520_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_20220523T154613_20220523T155120_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_20220523T160738_20220523T161439_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_20220523T161501_20220523T163859_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_20220523T164833_20220523T165027_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_20220523T165307_20220523T165507_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_20220523T165729_20220523T170248_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_20220523T170342_20220523T171214_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_20220523T171725_20220523T172508_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_20220523T174226_20220523T174638_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_20220523T174759_20220523T180137_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_20220523T180546_20220523T180846_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_20220523T180952_20220523T182132_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_20220523T182718_20220523T182943_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_20220523T183012_20220523T183435_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_20220523T183702_20220523T184326_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_20220523T184330_20220523T185118_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_20220523T185257_20220523T190818_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_20220523T190850_20220523T191440_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_20220523T193354_20220523T193659_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_20220523T193822_20220523T194312_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_20220523T194536_20220523T200201_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_20220523T200504_20220523T201348_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_20220523T201619_20220523T203828_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_20220523T204940_20220523T205034_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_20220523T211616_20220523T214053_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.

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Number of products with errors:

Product	Test Failed	Description
	Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_GOPN_2_20220523T005430_20220523T005443_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records
		The OCOG Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_GOPN_2_20220523T015247_20220523T015606_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_20220523T022301_20220523T022618_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_20220523T060042_20220523T060313_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_20220523T061638_20220523T062017_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_20220523T070927_20220523T071253_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_20220523T071428_20220523T072010_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_20220523T072434_20220523T072556_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_20220523T073644_20220523T073713_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_20220523T073729_20220523T074156_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_20220523T091429_20220523T091552_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_20220523T091631_20220523T092019_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_20220523T093014_20220523T093139_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_20220523T093611_20220523T094012_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_20220523T100613_20220523T100728_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_20220523T105142_20220523T105712_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_20220523T110626_20220523T110719_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_20220523T114556_20220523T114720_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_20220523T123259_20220523T123432_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_20220523T123511_20220523T123645_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_20220523T124843_20220523T125006_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_20220523T125517_20220523T125707_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_20220523T142349_20220523T142415_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_20220523T143402_20220523T143412_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_20220523T144106_20220523T144438_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_20220523T151120_20220523T151455_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_20220523T160230_20220523T160302_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_20220523T160351_20220523T160441_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_20220523T165027_20220523T165307_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_20220523T172619_20220523T172803_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_20220523T174104_20220523T174225_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_20220523T180846_20220523T180952_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_20220523T182133_20220523T182718_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_20220523T183606_20220523T183615_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_20220523T191535_20220523T191629_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_20220523T192036_20220523T192247_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_20220523T192357_20220523T192626_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_20220523T192827_20220523T192949_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_20220523T193700_20220523T193822_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_20220523T194312_20220523T194536_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_20220523T200324_20220523T200504_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_20220523T204024_20220523T204333_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_20220523T205950_20220523T210437_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_20220523T210538_20220523T210700_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_20220523T222421_20220523T222526_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_20220523T232237_20220523T232630_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_20220523T001017_20220523T001326_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_20220523T005712_20220523T010029_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_20220523T010421_20220523T011208_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_20220523T011348_20220523T011449_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_20220523T014951_20220523T015246_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_20220523T020243_20220523T020421_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_20220523T023112_20220523T023145_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_20220523T023325_20220523T023629_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_20220523T023629_20220523T024056_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_20220523T024445_20220523T025251_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_20220523T025253_20220523T025447_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_20220523T032817_20220523T032959_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_20220523T034130_20220523T034439_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_20220523T042608_20220523T042747_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_20220523T055746_20220523T060042_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_20220523T060314_20220523T061026_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_20220523T063045_20220523T063224_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_20220523T073304_20220523T073308_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_20220523T074156_20220523T074815_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_20220523T080300_20220523T080542_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_20220523T083845_20220523T084013_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_20220523T092019_20220523T092902_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_20220523T101740_20220523T101951_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_20220523T105713_20220523T110451_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_20220523T110800_20220523T110921_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_20220523T123433_20220523T123511_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_20220523T123645_20220523T124610_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_20220523T124752_20220523T124843_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_20220523T131448_20220523T131510_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_20220523T133526_20220523T133855_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_20220523T141450_20220523T141510_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_20220523T141513_20220523T141523_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_20220523T141525_20220523T142349_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_20220523T143456_20220523T143605_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_20220523T150227_20220523T150318_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_20220523T150318_20220523T150519_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_20220523T155621_20220523T160230_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_20220523T161440_20220523T161500_C001 CS_OFFL_SIR_GOPR_2_2020523T161440_20220523T161500_C001 CS_OFFL_SIR_GOPR_2_2020523T161440_20220523T161500_C001 CS_OFFL_SIR_GOPR_2_2020523T161500_C001 CS_OFFL_SIR_GOPR_2_2020523T161440_20220523T161500_C001 CS_OFFL_SIR_GOPR_2_2020523T161440_20220523T161500_C001 CS_OFFL_SIR_GOPR_2_2020523T161500_C001 CS_OFFL_SIR_GOPR_2_2020523T161500_C0000000000000000000000000000000000							
CS_OFFL_SIR_GOPR_2_20220523T165651_20220523T165729_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records					
L2 Quality Flags (1 Hz & 1 Hz PLRM)							
Currently, there are several common flags raised in the Level 2 products, wh	ich are summarised below.						
> 1 Hz and 1 Hz Ocean SSHA Quality Flags: These flags are currently set for pro-							
Number of products with errors: 207							
5.8 L2 Ocean Retracking Quality Check							
L2 Retracking Flags (20 Hz)	ment record. The hit value of this flag indicat	aa anu naklama udan aat					
CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz measure							
Ocean Retracking Quality Flag: This flag is currently set for products over land a	nd sea ice, but this is to be expected. The nu	imber of products with this error flag set is given below.					
Number of products with errors: 69							
L2 Retracking Flags (20 Hz PLRM)							
CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz PLRM m	easurement record. The bit value of this flag	indicates any problems when set.					
Ocean Retracking Quality Flag (PLRM): This flag is currently set for products Go	OPR and GOPN products over sea ice, but the	is is to be expected.					
Number of products with errors: 148							
	Pole-to-Pole Data Quality	^v Check					
	Pole-to-Pole Data Quality	⁷ Check					
6. GOP L2 6.1 P2P Product Format Check							
6. GOP L2							
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensu							
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensume of products with errors: 0 6.2 P2P Product Header Analysis	ure it consists of both an XML header file (.Hi	DR) and a NetCDF product file (.nc).					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensy Number of products with errors: 0	ure it consists of both an XML header file (.Hi	DR) and a NetCDF product file (.nc).					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensity 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 Site Number of products with errors: 0	ure it consists of both an XML header file (.Hi	DR) and a NetCDF product file (.nc).					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensite 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 SI Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check	ure it consists of both an XML header file (.Hl PH in order to identify any inconsistencies and	DR) and a NetCDF product file (.nc).					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensite 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 SI Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-defined	ure it consists of both an XML header file (.Hl PH in order to identify any inconsistencies and	DR) and a NetCDF product file (.nc).					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensite 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 SI Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check	ure it consists of both an XML header file (.Hl PH in order to identify any inconsistencies and	DR) and a NetCDF product file (.nc).					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensite 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 SI Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-defined	ure it consists of both an XML header file (.Hl PH in order to identify any inconsistencies and	DR) and a NetCDF product file (.nc).					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensite 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 St Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-defined Number of products with errors:	ure it consists of both an XML header file (.Hi PH in order to identify any inconsistencies and termined baseline and also to check the valie	DR) and a NetCDF product file (.nc).					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensite 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 St Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-defined on the NPP Auxiliary Correction Error Check	ure it consists of both an XML header file (.HI PH in order to identify any inconsistencies and stermined baseline and also to check the valie ed for the default error value (32767).	DR) and a NetCDF product file (.nc). I/or errors raised by the ground-segment processing chain.					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensity 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 Sit Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-defined on the NPH and Sit 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 Currently, there are some common auxiliary correction errors raised in the L	The it consists of both an XML header file (.Hi PH in order to identify any inconsistencies and itermined baseline and also to check the valie of for the default error value (32767). Evel 2 products that are expected, due to so to test. ed over CONTINENTAL ICE: Dry Tropospher	DR) and a NetCDF product file (.nc). //or errors raised by the ground-segment processing chain. dity of Auxiliary Data Files is correct. urface type. All common flags are summarised in the list below, ic Corection, Wet Tropospheric Correction, Inverse Barometric Correction					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensign 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 SI Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-defined 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 Currently, there are some common auxiliary correction errors raised in the L followed by a table highlighting any additional issues that may arise from this > ECMWF Meteo Corrections: Currently the following corrections are not compute and the U-Wind and V-Wind components of the ECMWF model wind vector. This	The it consists of both an XML header file (.Hi PH in order to identify any inconsistencies and itermined baseline and also to check the valid and for the default error value (32767). Evel 2 products that are expected, due to s is test. ed over CONTINENTAL ICE: Dry Troposphel is a known anomaly (CRYO-COP-3) and will	DR) and a NetCDF product file (.nc). //or errors raised by the ground-segment processing chain. fity of Auxiliary Data Files is correct. urface type. All common flags are summarised in the list below, ic Corection, Wet Tropospheric Correction, Inverse Barometric Correction be resolved in a future IPF update. The affected products are not reported					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensity 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 Site Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-defined on products with errors: 0 6.4 P2P Auxiliary Correction Error Check For all products, the auxiliary corrections within the Geophysical Group are checked. Currently, there are some common auxiliary correction errors raised in the L followed by a table highlighting any additional issues that may arise from this in the table below.	The it consists of both an XML header file (.HI PH in order to identify any inconsistencies and itermined baseline and also to check the valid and for the default error value (32767). Evel 2 products that are expected, due to s is test. ed over CONTINENTAL ICE: Dry Tropospher is a known anomaly (CRYO-COP-3) and will ducts over sea ice, but this is to be expected	DR) and a NetCDF product file (.nc). //or errors raised by the ground-segment processing chain. fity of Auxiliary Data Files is correct. urface type. All common flags are summarised in the list below, ic Corection, Wet Tropospheric Correction, Inverse Barometric Correction be resolved in a future IPF update. The affected products are not reported					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensity 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 SI Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-de 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 Currently, there are some common auxiliary correction errors raised in the L followed by a table highlighting any additional issues that may arise from this in the table below. > ECMWF Meteo Corrections: Currently the following corrections are not compute and the U-Wind and V-Wind components of the ECMWF model wind vector. This in the table below. > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products	The it consists of both an XML header file (.HI PH in order to identify any inconsistencies and itermined baseline and also to check the valid and for the default error value (32767). Evel 2 products that are expected, due to s is test. ed over CONTINENTAL ICE: Dry Tropospher is a known anomaly (CRYO-COP-3) and will ducts over sea ice, but this is to be expected	DR) and a NetCDF product file (.nc). //or errors raised by the ground-segment processing chain. fity of Auxiliary Data Files is correct. urface type. All common flags are summarised in the list below, ic Corection, Wet Tropospheric Correction, Inverse Barometric Correction be resolved in a future IPF update. The affected products are not reported					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensite 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 Site Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-defined 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 a lip roducts, the auxiliary corrections within the Geophysical Group are checked for a stable highlighting any additional issues that may arise from the second of the U-Wind and V-Wind components of the ECMWF model wind vector. This in the table below. > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over	The it consists of both an XML header file (.HI PH in order to identify any inconsistencies and itermined baseline and also to check the valid and for the default error value (32767). Evel 2 products that are expected, due to s is test. ed over CONTINENTAL ICE: Dry Tropospher is a known anomaly (CRYO-COP-3) and will ducts over sea ice, but this is to be expected	DR) and a NetCDF product file (.nc). //or errors raised by the ground-segment processing chain. fity of Auxiliary Data Files is correct. urface type. All common flags are summarised in the list below, ic Corection, Wet Tropospheric Correction, Inverse Barometric Correction be resolved in a future IPF update. The affected products are not reported					
6. GOP L2 6.1 P2P Product Format Check Each product, retrieved and unpacked from the science server, is checked to ensigned or 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 SF Number of products with errors: 0 6.3 P2P Auxiliary Data File Usage Check Each product is checked for missing Data Set Descriptors with respect to a pre-defined reproducts with errors: 0 6.4 P2P Auxiliary Correction Error Check For all products, the auxiliary corrections within the Geophysical Group are checker Currently, there are some common auxiliary correction errors raised in the L collowed by a table highlighting any additional issues that may arise from the second of the U-Wind and V-Wind components of the ECMWF model wind vector. This in the table below. > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over Number of products with errors:	The it consists of both an XML header file (.Hi PH in order to identify any inconsistencies and termined baseline and also to check the value and for the default error value (32767). Evel 2 products that are expected, due to so is test. ed over CONTINENTAL ICE: Dry Tropospher is a known anomaly (CRYO-COP-3) and will ducts over sea ice, but this is to be expected.	DR) and a NetCDF product file (.nc). I/or errors raised by the ground-segment processing chain. dity of Auxiliary Data Files is correct. urface type. All common flags are summarised in the list below, ric Corection, Wet Tropospheric Correction, Inverse Barometric Correction be resolved in a future IPF update. The affected products are not reported					

Mean Sea Surface (1), Mean Dynamic Topography (1)

Mean Sea Surface (1), Mean Dynamic Topography (1)

CS_OFFL_SIR_GOP_2__20220523T024640_20220523T033619_C001

CS_OFFL_SIR_GOP_2_20220523T015705_20220523T024640_C001

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_GOP_220220523T033619_20220523T042555_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_GOP_2_20220523T042555_20220523T051534_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T051534_20220523T060509_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220523T060509_20220523T065449_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T065449_20220523T074424_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20220523T074424_20220523T083403_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T083403_20220523T092339_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T092339_20220523T101318_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T101318_20220523T110254_C001	Mean Sea Surface (1), Mean Dynamic Topography (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_220220523T110254_20220523T115233_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T115233_20220523T124208_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T124208_20220523T133148_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T133148_20220523T142123_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T142123_20220523T151102_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T151102_20220523T160038_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T160038_20220523T165017_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T165017_20220523T173952_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T173952_20220523T182931_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T182931_20220523T191907_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20220523T191907_20220523T200846_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_2_20220523T200846_20220523T205822_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20220523T205822_20220523T214801_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T214801_20220523T223736_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20220523T223736_20220523T232716_C002	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

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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220220523T065449_20220523T074424_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOP_220220523T182931_20220523T191907_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOP_220220523T191907_20220523T200846_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

6.6 P2P Measurement Quality Flag Check

P2P Quality Flags (20 Hz)

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

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

P2P Quality Flags (20 Hz PLRM)	
Since the P2P Quality Flags are copied dire	ctly 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 PL	RM)
Since the P2P Quality Flags are copied dire	ctly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.
Number of products with errors:	29
6.8 P2P Ocean Retracking Qua	lity Check
6.8 P2P Ocean Retracking Qua	lity Check
P2P Retracking Flags (20 Hz)	lity Check g quality flag (field 19) for each 20 Hz measurement record. The bit value of this flag indicates any problems when set.
P2P Retracking Flags (20 Hz) Cryosat P2P data includes an ocean retrackir	
P2P Retracking Flags (20 Hz) Cryosat P2P data includes an ocean retrackir	g quality flag (field 19) for each 20 Hz measurement record. The bit value of this flag indicates any problems when set.
P2P Retracking Flags (20 Hz) Cryosat P2P data includes an ocean retrackir Ocean Retracking Quality Flag (PLRM): Thi	g quality flag (field 19) for each 20 Hz measurement record. The bit value of this flag indicates any problems when set. s flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected.
P2P Retracking Flags (20 Hz) Cryosat P2P data includes an ocean retrackin Ocean Retracking Quality Flag (PLRM): Thi Number of products with errors: P2P Retracking Flags PLRM	g quality flag (field 19) for each 20 Hz measurement record. The bit value of this flag indicates any problems when set. s flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected.
P2P Retracking Flags (20 Hz) Cryosat P2P data includes an ocean retrackin Ocean Retracking Quality Flag (PLRM): Thi Number of products with errors: P2P Retracking Flags PLRM CryoSat L2 data includes an ocean retracking	g quality flag (field 19) for each 20 Hz measurement record. The bit value of this flag indicates any problems when set. s flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected. 27

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	334	175	3	172	0
SIR_GOPR1B	127	127	0	127	0
SIR_GOPN1B	108	108	6	102	0
SIR_GOPM_2	173	173	108	65	0
SIR_GOPR_2	127	127	35	87	5
SIR_GOPN_2	108	108	47	61	0
SIR_GOP_P2P	28	28	0	25	3

7.1 QCC Errors

Number of QCC reports with errors:

Total number of occurrences of each error											
Product Type	RLOBOPNCDF	RL	RL	RLOBOPNCDF	RL	RL	-	-	-	-	-
SIR_GOPR_2	5	1	5	5	1	5					
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOP_2_	3	3	3	3							
										•	
Test Descriptio	Test Description Key:										

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Abbreviation	Test name	Details
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7
RL	RangeLatitude_6	Latitude should be between -90E6 and 90E6
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7

7.2 QCC Warnings

SIR_GOPM1B 170 SIR_GOPM1B 100 SIR_GOPM1B 100 SIR_GOPM2 0 SIR_GOPM2 0 SIR_GOPM1B 126 SIR_GOPM2 0 SIR_GOPM1B 126 SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM2 25 SIR_GOPR1B 0 SIR_GOPR1B 0 SIR_GOPR2 34)	IOHHMOOR 0 0 0 0 0 0 5 0 RBSZOPOEPNCDF 0 34 0 14 0 17 RPEPOPLRMNCDF 0 34	MVIOEPFDNCDF 0 49 0 5 0 35 RNELPOTONCDF 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 0	MVIOEPNCDF 0 51 0 51 0 47 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	MVIONCDF 0 1 0 4 0<	0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RBSZOPOEPFDNCD 0 45 0 28 0 41 RPEPOPFDSARNCD 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 S9 RSSHAOFDPLRMINC
SIR_GOPM_2 0 SIR_GOPN1B 100 SIR_GOPN2 0 SIR_GOPN2 0 SIR_GOPN2 0 Product Type RBS SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM2 0 SIR_GOPN2 25 SIR_GOPR1B 0 SIR_GOPR2 34 Product Type RPE SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0) SZOPOEPFDPLRMNCI	0 0 0 5 7 88520P0EPNCDF 0 34 0 14 0 17 7 8PEP0PLRMNCDF 0	49 0 5 0 35 RNELPOTONCDF 0 1 0 1 0 0 1 0 0 0 0	51 0 33 0 47 RPEPOPFDLRMNCDF 0 42 0 0 0 0 0 0 0 8 RPEPOPSINNCDF	1 0 4 0 0 0	0 0 1 2 RPEPOPFDPLRMSINNCDI 0 0 0 17 0 0 0 0 0 0 0 0 0 0 0 0 0	45 0 28 0 41 RPEPOPFDSARNCD 0 0 0 0 0 0 59
SIR_GOPN/B 100 SIR_GOPN_2 0 SIR_GOPR_2 0 Product Type RBS SIR_GOPM_2 0 SIR_GOPM_2 0 SIR_GOPM_2 0 SIR_GOPM_2 0 SIR_GOPM_2 0 SIR_GOPN_2 25 SIR_GOPN_2 25 SIR_GOPR_2 34 Product Type RPE SIR_GOPM_2 0 SIR_GOPM_2 0 SIR_GOPM_2 0 SIR_GOPN_2 35 SIR_GOPN_2 0 SIR_GOPN_2 0 SIR_GOPN_2 0 SIR_GOPN_2 0 SIR_GOPN_2 0 SIR_GOPN_2 0 SIR_GOPR_3 0	SZOPOEPFDPLRMNCL	0 0 0 5 5 8BSZOPOEPNCDF 0 34 0 14 0 17 7 8PEPOPLRMNCDF 0	0 5 0 35 RNELPOTONCDF 0 1 0 1 0 1 0 0 0 0 0 0	0 33 0 47 RPEPOPFDLRMNCDF 0 42 0 0 0 0 0 0 RPEPOPSINNCDF	0	0 0 1 0 RPEPOPFDPLRMSINNCDF 0 0 0 17 0 0 0 0 0 0 0 0 0 0 0 0 0	0 28 0 41 RPEPOPFDSARNCD 0 0 0 0 0 59
SIR_GOPN_2 0 SIR_GOPR1B 126 SIR_GOPR2 0 Product Type RBS SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM2 25 SIR_GOPM2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM1B 0	SZOPOEPFDPLRMNCL	5	35 RNELPOTONCDF 0 1 0 1 0 1 0 0 0 RPEPOPSARNCDF	33 0 47 RPEPOPFDLRMNCDF 0 42 0 0 0 0 0 0 8 RPEPOPSINNCDF	0	0 1 0 RPEPOPFDPLRMSINNCDI 0 0 0 17 0 0 0 0	28 0 41 RPEPOPFDSARNCD 0 0 0 0 59
SIR_GOPR1B 126 SIR_GOPR_2 0 Product Type RBS SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPR1B 0 SIR_GOPR1B 0 SIR_GOPR1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM2 0 SIR_GOPM3 0 SIR_GOPM3 0	SZOPOEPFDPLRMNCL	5	35 RNELPOTONCDF 0 1 0 1 0 1 0 0 0 RPEPOPSARNCDF	0 47 RPEPOPFDLRMNCDF 0 42 0 0 0 0 0 RPEPOPSINNCDF	0	1 0 PREPOPFDPLRMSINNCDI 0 0 17 0 0 0	0 41 RPEPOPFDSARNCD 0 0 0 0 59
SIR_GOPR_2 0 Product Type RBS SIR_GOPM1B 0 SIR_GOPM_2 0 SIR_GOPN_2 25 SIR_GOPR1B 0 SIR_GOPR2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPR2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM2 35 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0	SZOPOEPFDPLRMNCL	5	35 RNELPOTONCDF 0 1 0 1 0 1 0 0 0 RPEPOPSARNCDF	47 RPEPOPFDLRMNCDF 0 42 0 0 0 0 0 RPEPOPSINNCDF	0	0 RPEPOPFDPLRMSINNCDI 0 0 0 17 0 0 0	41 RPEPOPFDSARNCD 0 0 0 0 0 59
Product Type RBS SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPN1B 0 SIR_GOPN2 25 SIR_GOPR1B 0 SIR_GOPR2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0		RBSZOPOEPNCDF 0 34 0 14 0 17 RPEPOPLRMNCDF 0	RNELPOTONCDF 0 1 0 1 0 1 0 RPEPOPSARNCDF	RPEPOPFDLRMNCDF 0 42 0 0 0 0 RPEPOPSINNCDF	RPEPOPFDPLRMSARNCI 0 46	RPEPOPFDPLRMSINNCDF 0 0 0 17 0 0 0	RPEPOPFDSARNCE 0 0 0 0 0 0 0 59
SIR_GOPM/B 0 SIR_GOPM_2 0 SIR_GOPN1B 0 SIR_GOPN2 25 SIR_GOPR1B 0 SIR_GOPR2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM2 35		0 34 0 14 0 17 RPEPOPLRMNCDF 0	0 1 0 1 0 0 0 RPEPOPSARNCDF	0 42 0 0 0 0 RPEPOPSINNCDF	0 0 0 0 0 46	0 0 0 17 0 0	0 0 0 0 0 59
SIR_GOPM/B 0 SIR_GOPM_2 0 SIR_GOPN1B 0 SIR_GOPN2 25 SIR_GOPR1B 0 SIR_GOPR2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM2 35		0 34 0 14 0 17 RPEPOPLRMNCDF 0	0 1 0 1 0 0 0 RPEPOPSARNCDF	0 42 0 0 0 0 RPEPOPSINNCDF	0 0 0 0 0 46	0 0 0 17 0 0	0 0 0 0 0 59
SIR_GOPM_2 0 SIR_GOPN1B 0 SIR_GOPN2 25 SIR_GOPR2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPM2 0 SIR_GOPM2 0 SIR_GOPM2 0 SIR_GOPM1B 0 SIR_GOPM2 35	EPOPFDSINNCDF	34 0 14 0 17 7 RPEPOPLRMNCDF 0	1 0 1 0 0 RPEPOPSARNCDF	42 0 0 0 0 8 RPEPOPSINNCDF	0 0 0 0 46	0 0 17 0 0	0 0 0 0 59
SIR_GOPNIB 0 SIR_GOPN_2 25 SIR_GOPR1B 0 SIR_GOPR_2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPR1B 0	EPOPFDSINNCDF	0 14 0 17 RPEPOPLRMNCDF 0	0 0 0 RPEPOPSARNCDF	0 0 0 0 RPEPOPSINNCDF	0 0 0 46	0 17 0 0	0 0 59
SIR_GOPN_2 25 SIR_GOPR1B 0 SIR_GOPR2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPM1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPR1B 0	EPOPFDSINNCDF	8 14 0 17 RPEPOPLRMNCDF 0	0 0 0 RPEPOPSARNCDF	0 RPEPOPSINNCDF	0 0 46	17 0 0	0 0 59
SIR_GOPR1B 0 SIR_GOPR_2 34 Product Type RPE SIR_GOPM1B 0	EPOPFDSINNCDF	0 17 RPEPOPLRMNCDF 0	RPEPOPSARNCDF	0 RPEPOPSINNCDF	46	0 0	59
SIR_GOPR_2 34 Product Type RPE SIR_GOPM1B 0 SIR_GOPM2 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0 SIR_GOPN1B 0	EPOPFDSINNCDF	17 RPEPOPLRMNCDF 0	RPEPOPSARNCDF	0 RPEPOPSINNCDF	46	0	59
Product Type RPE SIR_GOPM1B 0 SIR_GOPM_2 0 SIR_GOPN1B 0 SIR_GOPN_2 35 SIR_GOPN1B 0	EPOPFDSINNCDF	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	-	*	
SIR_GOPM1B 0 SIR_GOPM_2 0 SIR_GOPN1B 0 SIR_GOPN_2 35 SIR_GOPR1B 0	EPOPFDSINNCDF	0			RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMN
SIR_GOPM1B 0 SIR_GOPM_2 0 SIR_GOPN1B 0 SIR_GOPN_2 35 SIR_GOPR1B 0	EPOPFDSINNCDF	0			RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNC
SIR_GOPM_2 0 SIR_GOPN1B 0 SIR_GOPN_2 35 SIR_GOPR1B 0			0	0			
SIR_GOPN1B 0 SIR_GOPN_2 35 SIR_GOPR1B 0		24	U U	0	0	0	0
SIR_GOPN_2 35 SIR_GOPR1B 0		34	0	0	6	34	0
SIR_GOPR1B 0		0	0	0	0	0	0
		0	0	27	24	42	52
SIR_GOPR_2 0		0	0	0	0	0	0
		0	48	0	3	76	46
			·		•		
	SHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_GOPM1B 0		0	0	0	0	0	0
SIR_GOPM_2 7		42	0	3	0	0	0
SIR_GOPN1B 0		0	0	0	0	51	5
SIR_GOPN_2 33		29	31	13	1	0	0
SIR_GOPR1B 0		0	0	0	0	127	16
SIR_GOPR_2 15		45	54	2	8	0	0
Product Type IOH			MVIOEPNCDF				

Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNCD		RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	
SIR_GOP_2_	1	15	27	21	21	28	15	
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-	
	26	28	17	16	28			
Test Description Key:	Test name			Details				
Abbreviation BCSHNCDF	Test name BurstCounterStep20HzNetC	DE						
BCSHNCDF	BursiCounterStep20H2NetC	UF		The burst counter should be	one higher with regard to the	previous burst counter		
IOHHMOOR	IndexOf1Hzin20HzMapping0	DutOfRange		The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)				
MVIOEPFDNCDF	MissingValueIntOceanExclud	dingPolarFD2NetCDF		The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIOEPNCDF	MissingValueIntOceanExclud	dingPolarNetCDF		The value should not be a 'm	issing value' for surface type	0 only for latitudes between -	70 and 70 degrees	
MVIONCDF	MissingValueIntOceanNetCE	DF		The value should not be a 'm	issing value' for surface type	0 only		
QFNCDF	QualityFlagNetCDF			#N/A				
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZer	oOPOceanExcludingPolarFD	2NetCDF	The backscatter sigma zero between -70 and 70 degrees		7500 (or missing) for surface t	ype = ocean for latitudes	
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZer	oOPOceanExcludingPolarFD	2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RBSZOPOEPNCDF	RangeBackscatterSigmaZer	oOPOceanExcludingPolarNe	tCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RNELPOTONCDF	RangeNELPOceanTideOcea	anNetCDF		The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean				
RPEPOPFDLRMNCDF	RangePeakinessExcludingP	olarOPFD2LRMNetCDF		The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingP	olarOPFD2PLRMSARNetCD	F	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingP	olarOPFD2PLRMSINNetCDF	-	The Peakiness should be be 70 degrees	tween 0 and 90000 (or missi	ng) for surface type = ocean fo	or latitudes between -70 and	
RPEPOPFDSARNCDF	RangePeakinessExcludingP	olarOPFD2SARNetCDF		The Peakiness should be be 70 degrees	tween 0 and 15000 (or missi	ng) for surface type = ocean fo	or latitudes between -70 and	
RPEPOPFDSINNCDF	RangePeakinessExcludingP	olarOPFD2SINNetCDF		70 degrees		ng) for surface type = ocean fo		
RPEPOPLRMNCDF	RangePeakinessExcludingP	olarOPLRMNetCDF		70 degrees	, ,	g) for surface type = ocean for		
RPEPOPSARNCDF	RangePeakinessExcludingPo	olarOPSARNetCDF		70 degrees	,	ng) for surface type = ocean fo		
RPEPOPSINNCDF	RangePeakinessExcludingP	olarOPSINNetCDF		The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSBCONCDF	RangeSeaStateBiasCorrecti	onOceanNetCDF		The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean				
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnd	omalyOceanFD3NetCDF		The sea surface height anon	naly should be between -3000	0mm and 3000mm (or missing) for surface type = ocean	
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnd	omalyOceanFD3PLRMNetCE	DF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSSHAONCDF	RangeSeaSurfaceHeightAnd	omalyOceanNetCDF		The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSWHOEPFDNCDF	RangeSignificantWaveHeigh	ntOceanExcludingPolarFD2Ne	etCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeigh	ntOceanExcludingPolarFD2PL	RMNetCDF	The significant wave height s latitudes between -70 and 70		15000mm (or missing) for sur	face type = ocean for	
RSWHOEPNCDF	RangeSignificantWaveHeigh	ntOceanExcludingPolarNetCD	DF	The significant wave height s latitudes between -70 and 70		15000mm (or missing) for sur	face type = ocean for	
SOOHHIFHD	SameOrOneHigher1HzIndex	For20HzData		The 1 Hz index of a 20 Hz s	ample should be the same or	1 higher than its previous sam	ple	
SCSTODHRNCDF	SequenceCounterStepTOD	HRNetCDF		The sequence counter shoul	d be modulo 4 higher with reg	gard to the previous sequence	counter	

7.3 Missing QCC Reports

Number of products with missing QCC reports:

162