

# IDEAS+ Daily Report for GOP data:

# <u>11/05/2019</u>



		1. Overview		
Poport Production	20 Jun 2010	Check	L1 & L2	P2P
Report Production:	20-Jun-2019	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
		Product Software Check	Nominal	Nominal
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	Product Format Check	Nominal	Nominal
	LIB, LZ & PZP Science Data	Product Header Analysis	Nominal Nominal	Nominal Nominal
		Auxiliary Data File Usage Check 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
ission / Instrument No 10-May-2019 None 11-May-2019 None	9WS			
11-May-2019 None 12-May-2019 Nothing	planned	2. Global Coverage		
				lode Coverage LRM SAR SARIn

# 3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

4. GOP Level 1B Data Quality Check

# 4.1 L1B Product Format Check

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

Number of products with errors:

0

4.2 L1B Product Header Analysis	6		
For all products, a series of pre-defined checks a	are performed on the MPH and SP	PH in order to identify any inconsistencies ar	nd/or errors raised by the ground-segment processing chain.
<b>1B Processing Quality HR:</b> The l1b_proc_flag DSARIn chains. A modification is required in the		DPR and GOPN products because the I1b_	processing_quality_hr field is not correctly configured in the OSAR and
Number of products with errors:	0		
4.3 L1B Auxilary Data File Usage	Check		
Each product is checked for missing Data Set De	escriptors with respect to a pre-de	termined baseline and also to check the val	idity of Auxiliary Data Files is correct.
Number of products with errors:	0		
4.4 L1B Auxiliary Correction Erro			
Number of products with errors:	0	ne bit value of this hag indicates any problem	ns when set.
4.5 L1B Measurement Confidenc	e Data Check		
CryoSat L1B data includes a measurement confi	dence flag for each measurement	record. The bit value of this flag indicates a	any problems when set.
Attitude Correction Missing: This flag is currer	ntly set in error for GOPR products	due to a configuration issue. This is being	investigated and will be updated in the next SW update.
Number of products with errors:	2		
Product		Test Failed	Description
CS_OFFL_SIR_GOPM1B_20190511T084235_2	20190511T084650_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

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

CS\_OFFL\_SIR\_GOPM1B\_20190511T172829\_20190511T173356\_C001

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:

Due duet	Test Failed	Description
Product		Description
CS_OFFL_SIR_GOPM1B_20190511T173835_20190511T180437_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T013105_20190511T013721_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T023054_20190511T023303_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T041008_20190511T041453_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T064225_20190511T064349_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T072101_20190511T072135_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T072314_20190511T072409_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T103756_20190511T103844_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T103924_20190511T104338_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T122141_20190511T122243_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T181455_20190511T181634_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190511T204306_20190511T204351_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T024633_20190511T024711_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T054039_20190511T055041_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T090130_20190511T090334_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T090344_20190511T091505_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T135135_20190511T135236_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T135512_20190511T135605_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T135910_20190511T135934_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T154008_20190511T154518_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T181634_20190511T181838_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190511T204814_20190511T205041_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 binary product file (.DBL). Number of products with errors: 0

# 5.2 L2 Product Header Analysis

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

# 5.3 L2 Auxiliary Data File Usage Check

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

## 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 which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.

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

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

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Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20190510T235843_20190511T000038_C001	GPD Wet Tropospheric Correction	There is an error with the GPD Wet Tropospheric correction for one or more records
CS_OFFL_SIR_GOPM_2_20190511T000253_20190511T000535_C001	GPD Wet Tropospheric Correction	There is an error with the GPD Wet Tropospheric correction for one or more records
CS_OFFL_SIR_GOPM_2_20190511T070849_20190511T071024_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_20190511T101511_20190511T102413_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_20190511T191738_20190511T191913_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_20190511T000038_20190511T000253_C001	GPD Wet Tropospheric Correction	There is an error with the GPD Wet Tropospheric correction for one or more records
CS_OFFL_SIR_GOPN_2_20190511T000535_20190511T000704_C001	GPD Wet Tropospheric Correction	There is an error with the GPD Wet Tropospheric correction for one or more records
CS_OFFL_SIR_GOPN_2_20190511T005120_20190511T005238_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20190511T005631_20190511T005758_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_20190511T013105_20190511T013721_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)
CS_OFFL_SIR_GOPN_2_20190511T023054_20190511T023303_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)
CS_OFFL_SIR_GOPN_2_20190511T031330_20190511T031506_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_20190511T041008_20190511T041453_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (ESS) Non-Equilibrium Long Period	Intere is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more recorde
CS_OFFL_SIR_GOPN_2_20190511T050146_20190511T050418_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)
CS_OFFL_SIR_GOPN_2_20190511T063245_20190511T063636_C001	Mean Sea Sunace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (ESS) Non-Equilibrium Long Period	Intere is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more recorde
CS_OFFL_SIR_GOPN_2_20190511T072314_20190511T072409_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_20190511T081228_20190511T081542_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)
CS_OFFL_SIR_GOPN_2_20190511T082056_20190511T082210_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_20190511T094946_20190511T095411_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)
CS_OFFL_SIR_GOPN_2_20190511T095959_20190511T100118_C001	Mean Sea Surface (1), Mean Dynamic Topography (1) Iviean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_GOPN_2_20190511T103924_20190511T104338_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean	Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more recorde
CS_OFFL_SIR_GOPN_2_20190511T113728_20190511T113915_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_20190511T122141_20190511T122243_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20190511T122811_20190511T122901_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_20190511T131537_20190511T131804_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)
CS_OFFL_SIR_GOPN_2_20190511T135935_20190511T140145_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)
CS_OFFL_SIR_GOPN_2_20190511T145441_20190511T145901_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)
CS_OFFL_SIR_GOPN_2_20190511T153616_20190511T154008_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)
CS_OFFL_SIR_GOPN_2_20190511T154518_20190511T154552_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_20190511T162559_20190511T162830_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)

CS_OFFL_SIR_GOPN_2_20190511T163555_20190511T163737_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_20190511T181455_20190511T181634_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_20190511T194501_20190511T194620_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_20190511T195150_20190511T195506_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)
CS_OFFL_SIR_GOPN_2_20190511T204306_20190511T204351_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_20190511T212425_20190511T212539_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_20190511T213047_20190511T213402_C001	International Season (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (GES) Non-Equilibrium Long Deriod	Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean
CS_OFFL_SIR_GOPN_2_20190511T230520_20190511T230757_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)
CS_OFFL_SIR_GOPN_2_20190511T230950_20190511T231532_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)
CS_OFFL_SIR_GOPR_2_20190511T000704_20190511T000738_C001	GPD Wet Tropospheric Correction	There is an error with the GPD Wet Tropospheric correction for one or more records
CS_OFFL_SIR_GOPR_2_20190511T004449_20190511T005001_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)
CS_OFFL_SIR_GOPR_2_20190511T005001_20190511T005120_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)
CS_OFFL_SIR_GOPR_2_20190511T022712_20190511T023054_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)
CS_OFFL_SIR_GOPR_2_20190511T040219_20190511T040233_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_20190511T040233_20190511T041008_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)
CS_OFFL_SIR_GOPR_2_20190511T054039_20190511T055041_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)
CS_OFFL_SIR_GOPR_2_20190511T071310_20190511T071449_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_20190511T072409_20190511T073157_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)
CS_OFFL_SIR_GOPR_2_20190511T090344_20190511T091505_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)
CS_OFFL_SIR_GOPR_2_20190511T104338_20190511T105122_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)
CS_OFFL_SIR_GOPR_2_20190511T122243_20190511T122811_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)
CS_OFFL_SIR_GOPR_2_20190511T122901_20190511T123000_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_20190511T135135_20190511T135236_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_20190511T140145_20190511T140840_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)
CS_OFFL_SIR_GOPR_2_20190511T142219_20190511T143034_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_20190511T154008_20190511T154518_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)
CS_OFFL_SIR_GOPR_2_20190511T171741_20190511T172501_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)
CS_OFFL_SIR_GOPR_2_20190511T185612_20190511T190342_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)
CS_OFFL_SIR_GOPR_2_20190511T190651_20190511T190901_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_20190511T191251_20190511T191342_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_20190511T191344_20190511T191444_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_20190511T203132_20190511T204143_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)
CS_OFFL_SIR_GOPR_2_20190511T204143_20190511T204306_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)
CS_OFFL_SIR_GOPR_2_20190511T221331_20190511T222042_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)
CS_OFFL_SIR_GOPR_2_20190511T222042_20190511T222458_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)

	GPD Wet Tropospheric Correction,	There is an error with the GPD Wet Tropospheric correction, the MSS
CS_OFFL_SIR_GOPR_2_20190511T235323_20190511T235932_C001	Mean Sea Surface (1), Mean Dynamic	height (solution 1) and the Mean Dynamic Topography height (solution 10
	Topography (1)	for one or more records
	GPD Wet Tropospheric Correction,	There is an error with the GPD Wet Tropospheric correction, the MSS
CS_OFFL_SIR_GOPR_2_20190511T235932_20190512T000040_C001	Mean Sea Surface (1), Mean Dynamic	height (solution 1) and the Mean Dynamic Topography height (solution 10
	Topography (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: 2		
Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20190511T084235_20190511T084650_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_20190511T172829_20190511T173356_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

# 5.6 L2 Measurement Quality Flag Check

# L2 Quality Flags (20Hz)

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

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

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

> OCOG Altimeter Range and Backscatter Quality Flags: These flags are currently set for some records over continental ice.

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Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20190511T000253_20190511T000535_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_20190511T000738_20190511T003615_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T005239_20190511T005631_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_20190511T005758_20190511T011344_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T012003_20190511T013105_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T014017_20190511T014443_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_20190511T014714_20190511T020130_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T020310_20190511T020553_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T024001_20190511T024633_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T024834_20190511T031211_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T031506_20190511T032356_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_20190511T032631_20190511T035010_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T041710_20190511T045100_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T045723_20190511T050146_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_20190511T050552_20190511T053057_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T055849_20190511T061339_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T061913_20190511T063017_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T063636_20190511T064225_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_20190511T064405_20190511T065131_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T065210_20190511T070001_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T070849_20190511T071024_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T072136_20190511T072225_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T073508_20190511T080851_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T081542_20190511T082056_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_20190511T082350_20190511T082541_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality,	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T082742_20190511T083148_C001	Ocean Backscatter Quality Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T083210_20190511T083622_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T083625_20190511T084201_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T085815_20190511T090130_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T091505_20190511T092349_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T092635_20190511T094800_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T095549_20190511T095959_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_20190511T100325_20190511T101507_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T101511_20190511T102413_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T102509_20190511T102914_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T103708_20190511T103755_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T105522_20190511T112716_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T112914_20190511T113441_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_20190511T113500_20190511T113728_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range Quality, Ocean	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T114545_20190511T115815_C001	SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality Ocean Altimeter Range Quality, Ocean	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T115854_20190511T121557_C001	SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality Ocean Altimeter Range Quality, Ocean	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T123737_20190511T124908_C001	SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality Ocean Altimeter Range Quality, Ocean	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T125112_20190511T130610_C001	SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T130841_20190511T131337_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_20190511T131416_20190511T131537_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality Ocean Altimeter Range Quality, Ocean	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T132240_20190511T133500_C001	SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality Ocean Backscatter Quality Ocean Altimeter Range Quality. Ocean	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T133941_20190511T135134_C001	SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T143034_20190511T144521_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T144805_20190511T145251_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_20190511T145950_20190511T152314_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T152317_20190511T152610_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T160013_20190511T162423_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T162830_20190511T163205_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_20190511T163228_20190511T163554_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_20190511T163856_20190511T165350_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T165556_20190511T170719_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T173835_20190511T180437_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T180622_20190511T181119_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_20190511T181126_20190511T181455_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_20190511T181838_20190511T182934_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T183509_20190511T185305_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T194130_20190511T194323_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T194620_20190511T195150_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_20190511T195811_20190511T203131_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T204448_20190511T204617_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T210407_20190511T212220_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T213653_20190511T221027_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T223542_20190511T225821_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T230757_20190511T230950_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_20190511T231704_20190511T232511_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T232515_20190511T233130_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T233134_20190511T233413_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190511T233855_20190511T234833_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20190511T050146_20190511T050418_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20190511T072314_20190511T072409_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T071807_20190511T071829_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T154008_20190511T154518_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T231533_20190511T231703_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.

# L2 Quality Flags (20Hz PLRM)

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

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

> OCOG Altimeter Range and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over continental ice.

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Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20190511T000038_20190511T000253_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_20190511T000535_20190511T000704_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_20190511T005120_20190511T005238_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_20190511T005631_20190511T005758_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_20190511T013105_20190511T013721_C001	OCCAR Attimeter Range Quality FLRM, OCCA Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality, OCCA Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags, and the OCOG Altimeter Range and Backscatter Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20190511T023054_20190511T023303_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_20190511T041008_20190511T041453_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20190511T045613_20190511T045722_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_20190511T050146_20190511T050418_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_20190511T063245_20190511T063636_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.

CUCUUT_GUCUUS_QUEUEETTERSEQ_CONSECTERSEQUE     Cocce Address Resp. Curity FLM, Married Resp. Curity FLM, Married Resp. Curity FLM, Married Resp. Curity FLM,	CS_OFFL_SIR_GOPN_2_20190511T094946_20190511T095411_C001	Ocean Alumeter Range Quality FLRM, OCOG Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality, OCCG Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags, and the OCOG Altimeter Range and Backscatter Flags have been set for one or more records.
Colored Bin Color         COCO Description Color         COCO Description Color           Colored Bin Color         Colored Bin Color         The Colored Bin Color           Colored Bin Color         Colored Bin Color         The Colored Bin Color           Colored Bin Color         Colored Bin Color         The Colored Bin Color           Colored Bin Color         Colored Bin Color         The Colored Bin Color           Colored Bin Color         Colored Bin Colored Bi	CS_OFFL_SIR_GOPN_2_20190511T095959_20190511T100118_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean	
BL, OFFL, JRE, COPYL, 2010011112211, 2010011112220     Door Allance frage Cash / SMI and Subscript Cash / SMI and Subscr	CS_OFFL_SIR_GOPN_2_20190511T103924_20190511T104338_C001		
Bit DPFL_JBR_DOPL_2_D116511170244_001001       Does SSAC_0010000       The Output Deflection of the Deflection of Def	CS_OFFL_SIR_GOPN_2_20190511T112753_20190511T112914_C001	Ocean SSHA Quality PLRM, Ocean	
DB, OFFL, SIR, GOPHL 2, 20100111122011, 20180111122001, COIT       Down Alenster Rang: Daily FURST With Daily, Course Response Respons	CS_OFFL_SIR_GOPN_2_20190511T122141_20190511T122243_C001	Ocean SSHA Quality PLRM, Ocean	
C2: OFL SR, GOPL 2.2116011712800, 201001172800, 201001172800,	CS_OFFL_SIR_GOPN_2_20190511T122811_20190511T122901_C001	Ocean SSHA Quality PLRM, Ocean	
CB, OFFL, SB, COPR, 2, 20180117163825, 2018011716414, 2018011716410, 2018     Deem SBN Calls / PLM, Coern, SBN Calls / PLM,	CS_OFFL_SIR_GOPN_2_20190511T132041_20190511T132200_C001	Ocean SSHA Quality PLRM, Ocean	
C2_0FPL_SBGOPN_2_2010011T146401_201001T146401_C011         CC00_Attractor Resp. Data/ CommoNumber CommoNumber App and Backscatter Clustry Flags have been set for rest in CC00_Backscatter Clustry Flags have been set for one or rest except.           C3_0FPL_SBGOPN_2_2010011T16450_201001T16450_20100         CC00_Attracter Resp. Data/ CC00_Backscatter Clustry Flags have been set for one or rest except.           C3_0FPL_SBGOPN_2_2010011T16450_201001T16450_20100         CC00_Attracter Resp. Data/ C00_Backscatter Clustry Flags have been set for one or rest except.           C3_0FPL_SBGOPN_2_2010001T16450_201001T16450_20100         CC00_Attracter Resp. Data/ C00_Backscatter Clustry Flags have been set for one or rest except.           C3_0FPL_SBGOPN_2_2010001T176450_201001T16450_2010001T16450_2010001T16450_2010001T176450_0000         CC00_Attracter Resp. Data/ C00_Backscatter Clustry Flags have been set for on rest rest.           C3_0FPL_SBGOPN_2_2010001T176450_2010001T176450_0001         CC00_Backscatter Clustry Flags have been set for on rest.           C3_0FPL_SBGOPN_2_2010001T176450_2010001T176450_0001         CC00_Backscatter Clustry Flags have been set for on rest.           C3_0FPL_SBGOPN_2_2010001T176450_2010001T176450_001         CC00_Backscatter Clustry Flags have been set for on rest.           C3_0FPL_SBGOPN_2_2010001T176450_2010001T1726450_001         CC00_BAttracter Resp. Stat.         Stat.           C3_0FPL_SBGOPN_2_2010001T176450_2010001T1726450_001         CC00_BAttracter Resp. Stat.         Stat.           C3_0FPL_SBGOPN_2_2010001T1726450_2010001T1726450_001         CC00_BAttracter R	CS_OFFL_SIR_GOPN_2_20190511T135935_20190511T140145_C001	Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	
Control, Sin, Control, Sin, Control, Sin, Control, Sin, Sonton, S	CS_OFFL_SIR_GOPN_2_20190511T145441_20190511T145901_C001	OCOG Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter	and the OCOG Altimeter Range and Backscatter Flags have been set for
Corp, Fin, Sun, GOPN, 2, 201905111102502, 201905111102502, 2019         OCCO 8 backscatter Quality         Imore records.           CS_OFFL_SIR_GOPN, 2, 201905111102502, 201905111102502, 2019         CCCO A limited Prage, Cuality PLRJ, Corean Bink Corean Planter Prage, SSHA, SWH and Backscatter Cuality Flags, and the COCO A limited Prage Bink Cuality PLRJ, Corean Bink Corean Planter Prage Bink Cuality PLRJ, Corean Bink Corean Planter Plags have been as for orange mecode.           CS_OFFL_SIR_GOPN_2, 20100511720430E, 20100511723452, 2001         CCCG A limited Prage Quality PLRJ, Corean Binker Brage Bink Cuality PLRJ, Corean Binker Brage Bink Bink Binker Brage Bink Binker Brage	CS_OFFL_SIR_GOPN_2_20190511T154518_20190511T154552_C001		
CB_OFFL_SIR_GOPN_2_20190511T194601_0015011T194500_000       OCC0 Attracter Range Databy FLRB, Ocean Attracter Caudity FLRB, Ocean Attracter Range Databy FLRB, Ocean Attracter Range Databy FLRB, Ocean Attracter Caudity FLRB, Ocean Attracter Range Databy FLRB, Ocean Attracter Caudity FLRB, Ocean Attracter Range Databy FLRB, Ocean Attracter Range	CS_OFFL_SIR_GOPN_2_20190511T162559_20190511T162830_C001	OCOG Backscatter Quality	
CS_OFFL_SIR_GOPN_2_20190511110550_01005         OCCOA Minnet Range Calify PLRM, Ocean SSHA, QMM and Backscatter Quality Flags and the XCOAD Alternet Range and Backscatter Quality Flags and the XCOAD Alternet Range and Backscatter Quality Flags.           CS_OFFL_SIR_GOPN_2_201905111204306_01005111204307_C001         OCCOA Alternet Range Calify PLRM, Ocean SSHA, QMM and Backscatter Quality Flags.           CS_OFFL_SIR_GOPN_2_201905111204306_01005111204307_C001         OCCOA Alternet Range Calify PLRM, Ocean SSHA, QMM and Backscatter Quality Flags.           CS_OFFL_SIR_GOPN_2_201905111204307_201905111213402_C001         OCCOA Alternet Range Quality PLRM, Ocean SSHA, QMM and Backscatter Quality Flags.           CS_OFFL_SIR_GOPN_2_20190511120440_01112014302_C001         OCCOA Alternet Range Quality PLRM, Ocean SSHA, QMM and Backscatter Quality Flags.           CS_OFFL_SIR_GOPN_2_20190511120440_201905111213132_C001         OCCOA Alternet Range Quality PLRM, Ocean SSHA, QMM and Backscatter Quality Flags.           CS_OFFL_SIR_GOPR_2_201905111022512_C001         OCCOA Alternet Range Quality PLRM, Ocean SSHA, QMM and Backscatter Quality Flags.           CS_OFFL_SIR_GOPR_2_201905111022512_C001         OCEAN Alternet Range Quality PLRM, Ocean SSHA, QMM and Backscatter Quality Flags.           CS_OFFL_SIR_GOPR_2_201905111022512_C001         OCEAN Alternet Range Quality PLRM, Ocean SSHA, QMM and Backscatter Quality Flags.           CS_OFFL_SIR_GOPR_2_201905111022712_C001         OCEAN Alternet Range Quality PLRM, Ocean SSHA, QMM and Backscatter Quality Flags.           CS_OFFL_SIR_GOPR_2_201905111022712_C0101         OCEAN Alternet Range Quality P	CS_OFFL_SIR_GOPN_2_20190511T194501_20190511T194620_C001	OCOG Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter	and the OCOG Altimeter Range and Backscatter Flags have been set for
CS_OFFL_SIR_GOPN_2_201905117204361_C010       DC0C0 Alimeter Range Quality PLRM, Conson Shith, Quality	CS_OFFL_SIR_GOPN_2_20190511T195150_20190511T195506_C001	OCOG Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter	and the OCOG Altimeter Range and Backscatter Flags have been set for
CS_OFFL_SIR_GOPN_2_201905117213047_20190511721302_C001       Ocean Altmeter Range Quality FLRM, Ocean Backscatter Quality Flags, SWH Quality, Ocean Backscatter Quality Flags, SWH Quality, Ocean Backscatter Quality Flags, War been set for one or more records.         CS_OFFL_SIR_GOPN_2_20190511723096_201905117231532_C001       OCCOA Altmeter Range Quality FLRM, Ocean SHA Quality FLRM, Ocean Altmeter Range Quality PLRM, Ocean Altmeter Range Quality PLRM, Ocean SHA Quality FLRM, Oc	CS_OFFL_SIR_GOPN_2_20190511T204306_20190511T204351_C001	OCOG Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter	and the OCOG Altimeter Range and Backscatter Flags have been set for
CS_OFFL_SIR_GOPR_2_20190511703449_201905117005001_C001         OCCOG Backscatter Quality         more records.           CS_OFFL_SIR_GOPR_2_201905117002449_201905117005001_C001         Ocean Altimeter Range Quality PLRM, Ocean SHA Quality, LPKM, Ocean SHA Quality, LPKM, Ocean SHA Quality, LPKM, Ocean SHA Quality, LPKM, Ocean Altimeter Range, SHA, SWH and Backscatter Quality Flags           CS_OFFL_SIR_GOPR_2_201905117022712_C001         Ocean Altimeter Range Quality PLRM, Ocean SHA Quality, LPKM, Ocean Altimeter Range Quality, LPKM, Ocean SHA Quality, LPKM, Ocean Altimeter Range Quality, LPKM, Ocean SHA	CS_OFFL_SIR_GOPN_2_20190511T213047_20190511T213402_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T004449_20190511T005001_C001       Ocean SSHA Quality PLRM, Ocean Backscatter Quality PLRM, Ocean Backscatter Quality PLRM, Ocean SSHA Quality PLRM, Ocean	CS_OFFL_SIR_GOPN_2_20190511T230950_20190511T231532_C001		
CS_OFFL_SIR_GOPR_2_20190511T022536_20190511T022712_C001       Ocean SSHA Quality PLRM, Ocean SSHA Quality CRAM, Ocean SSHA Quality PLRM, Ocean SSHA Quality	CS_OFFL_SIR_GOPR_2_20190511T004449_20190511T005001_C001	Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T022712_20190511T023054_C001       Ocean SIHA Quality PLRM, Ocean SWH Quality DCean Backscatter Quality FIAgS         CS_OFFL_SIR_GOPR_2_20190511T023628_20190511T023708_C001       Ocean Alimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality         CS_OFFL_SIR_GOPR_2_20190511T024633_20190511T024711_C001       Ocean Alimeter Range Quality PLRM, Ocean SWH Quality, PLRM, Ocean SWH Quality, DCean Backscatter Quality       The Ocean Alimeter Range, SSHA, SWH and Backscatter Quality Flags         CS_OFFL_SIR_GOPR_2_20190511T024633_20190511T024711_C001       Ocean Alimeter Range Quality PLRM, Ocean SWH Quality, DCean Backscatter Quality       The Ocean Alimeter Range, SSHA, SWH and Backscatter Quality Flags         CS_OFFL_SIR_GOPR_2_20190511T031211_20190511T031329_C001       Ocean Alimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Alimeter Range, SSHA, SWH and Backscatter Quality Flags         CS_OFFL_SIR_GOPR_2_20190511T032556_20190511T032631_C001       Ocean Alimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Alimeter Range, SSHA, SWH and Backscatter Quality Flags         CS_OFFL_SIR_GOPR_2_20190511T045100_20190511T045306_C001       Ocean Alimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Alimeter Range, SSHA, SWH and Backscatter Quality Flags         CS_OFFL_SIR_GOPR_2_20190511T045100_20190511T045306_C001       Ocean Alimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Alimeter Range, SSHA, SWH and Backscatter Quality Flags         CS_OFFL_SIR_GOPR_2_20190511T0	CS_OFFL_SIR_GOPR_2_20190511T022636_20190511T022712_C001	Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T023628_20190511T023708_C001       Deean SSHA Quality PLRM, Ocean SSHA Quality	CS_OFFL_SIR_GOPR_2_20190511T022712_20190511T023054_C001	Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T024633_20190511T024711_C001       Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20190511T031211_20190511T031329_C001       Ocean Attimeter Range Quality PLRM, Ocean SHA Quality PLRM, Ocean SSHA Qualit	CS_OFFL_SIR_GOPR_2_20190511T023628_20190511T023708_C001	Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T031211_20190511T031329_C001       Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20190511T032556_20190511T032631_C001       Ocean Altimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20190511T040233_20190511T041008_C001       Ocean Altimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20190511T045100_20190511T045306_C001       Ocean Altimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20190511T045100_20190511T045306_C001       Ocean Altimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20190511T050418_20190511T050552_C001       Ocean Altimeter Range Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_GOPR_2_20190511T072409_20190511T073157_C001       Ocean Altimeter Range Quality PLRM, Ocean SWH Quality PLRM, Ocean SSHA Quality PLRM, Ocean SSHA Quality PLRM, Oce	CS_OFFL_SIR_GOPR_2_20190511T024633_20190511T024711_C001	Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T032556_20190511T032631_C001       Ocean SSHA Quality PLRM, Ocean SWH Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags         CS_OFFL_SIR_GOPR_2_20190511T040233_20190511T041008_C001       Ocean Atimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Oce	CS_OFFL_SIR_GOPR_2_20190511T031211_20190511T031329_C001	Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T040233_20190511T041008_C001       Ocean SSHA Quality PLRM, Ocean SSHA Quality	CS_OFFL_SIR_GOPR_2_20190511T032556_20190511T032631_C001	Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T045100_20190511T045306_C001       Ocean SSHA Quality PLRM, Ócean SWH Quality PLRM, Ócean SWH Quality PLRM, Ócean SSHA Quality PLRM, Ócean SSHA Quality PLRM, Ocean SSHA QUALITY PL	CS_OFFL_SIR_GOPR_2_20190511T040233_20190511T041008_C001	Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T050418_20190511T050552_C001 Ocean SSHA Quality PLRM, Ocean SWH Quality PLRM, Ocean SWH Quality PLRM, Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Plags have been set for one or more records. Cean Altimeter Range, Quality PLRM, Ocean SHA Quality PLRM, Ocean SHA Quality PLRM, Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Plags have been set for one or more records.	CS_OFFL_SIR_GOPR_2_20190511T045100_20190511T045306_C001	Ocean SSHA Quality PLRM, Ocean	
CS_OFFL_SIR_GOPR_2_20190511T072409_20190511T073157_C001 Ocean SSHA Quality PLRM, Ocean SHA Quality PLRM, Ocean Automatic PLRM, Ocean	CS_OFFL_SIR_GOPR_2_20190511T050418_20190511T050552_C001	Ocean SSHA Quality PLRM, Ocean	
	CS_OFFL_SIR_GOPR_2_20190511T072409_20190511T073157_C001	Ocean SSHA Quality PLRM, Ocean	

	Ocean Altimeter Range Quality PLRM,	
CS_OFFL_SIR_GOPR_2_20190511T080851_20190511T081228_C001	Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T090130_20190511T090334_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T090344_20190511T091505_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T095542_20190511T095549_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_20190511T100118_20190511T100325_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T104338_20190511T105122_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T113915_20190511T114545_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T122243_20190511T122811_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T140145_20190511T140840_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T144521_20190511T144545_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T154008_20190511T154518_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T163737_20190511T163856_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T171741_20190511T172501_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T185612_20190511T190342_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T195506_20190511T195810_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T203132_20190511T204143_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T213402_20190511T213652_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T221331_20190511T222042_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T222042_20190511T222458_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T225821_20190511T230519_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T233413_20190511T233854_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20190511T235323_20190511T235932_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
L2 Quality Flags (1 Hz & 1Hz PLRM)		

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

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

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

Number of products with errors:

# 5.8 L2 Ocean Retracking Quality Check

# L2 Retracking Flags (20Hz)

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

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

## L2 Retracking Flags (20Hz, PLRM)

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

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

Number of products with errors:

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

#### 6.1 P2P Product Format Check

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

Number of products with errors:

## 6.2 P2P Product Header Analysis

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

### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

## 6.4 P2P Auxiliary Correction Error Check

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

0

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

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.

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

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

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Test Failed	Description
GPD Wet Tropospheric Correction	There is an error with the GPD Wet Tropospheric Correction for one or more records
GPD Wet Tropospheric Correction,	There is an error with the GPD Wet Troposheric Correction, the MSS
Mean Sea Surface (1), Mean Dynamic	height (solution 1) and the Mean Dynamic Topography (solution 1) for one
Topography (1)	or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1), Total Geocentric Ocean	Topography height (solution 1) and the Total Geocentric Ocean Tide height
Tide (GOT)	(solution 1: GOT) for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
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) and all Tidal corrections for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
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) and all Tidal corrections for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
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) and all Tidal corrections for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1), Total Geocentric Ocean	Topography height (solution 1) and the Total Geocentric Ocean Tide height
Tide (GOT)	(solution 1: GOT) for one or more records
Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
Topography (1)	Topography height (solution 1) for one or more records
	GPD Wet Tropospheric Correction GPD Wet Tropospheric Correction, Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (GOT)

CS_OFFL_SIR_GOP_220190511T131357_20190511T140336_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_20190511T140336_20190511T145311_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_20190511T145311_20190511T154250_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_20190511T154250_20190511T163225_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_20190511T163225_20190511T172204_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_20190511T172204_20190511T181138_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_20190511T181138_20190511T190117_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_20190511T190117_20190511T195052_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_20190511T195052_20190511T204031_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_220190511T204031_20190511T213005_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_220190511T213005_20190511T221944_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	Topography height (solution 1) and all Tidal corrections for one or more
CS_OFFL_SIR_GOP_2_20190511T221944_20190511T230919_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_20190511T230919_20190511T235858_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_220190511T235858_20190512T004832_C001	GPD Wet Tropospheric Correction, Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the GPD Wet Troposheric Correction, the MSS height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records

# 6.5 P2P Measurement Confidence Data Check

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

2 Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20190511T081617_20190511T090556_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOP_2_20190511T172204_20190511T181138_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

# 6.6 P2P Measurement Quality Flag Check

### P2P Quality Flags (20Hz)

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

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

P2P Quality Flags (20Hz PLRM)	
Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.	
Number of products with errors:	28
P2P Quality Flags (1 Hz & 1Hz PLRM)	
Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.	

Number of products with errors: 30

# 6.8 P2P Ocean Retracking Quality Check

## P2P Retracking Flags (20Hz)

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

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

28

Number of products with errors:

# P2P Retracking Flags PLRM

CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz PLRM measurement record. The bit value of this flag indicates any problems when set.		
Ocean Retracking Quality Flag (PLRM): This flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected.		
Number of products with errors:	30	