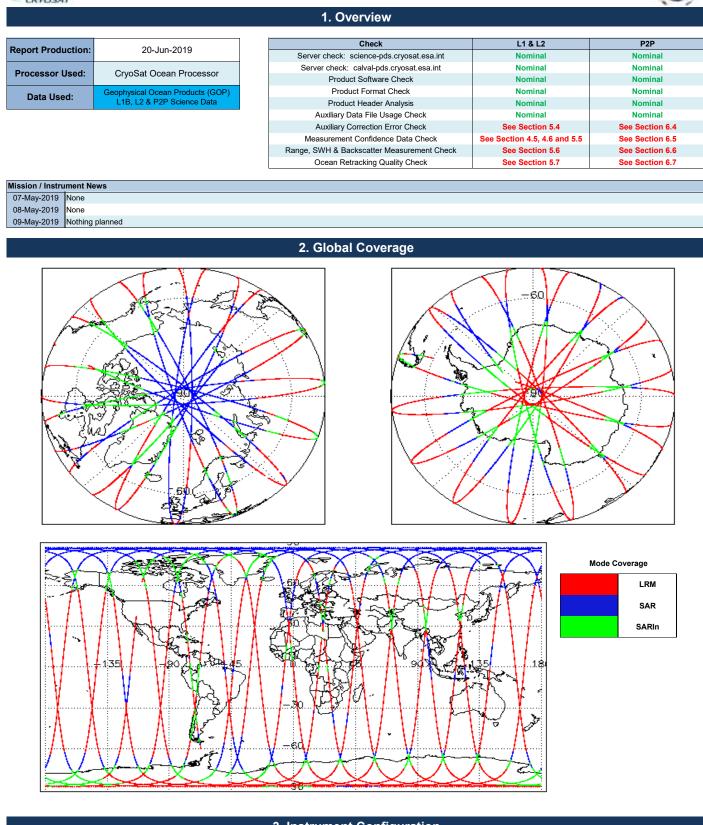


# IDEAS+ Daily Report for GOP data:

# 08/05/2019





## 3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

4. GOP Level 1B Data Quality Check

## 4.1 L1B Product Format Check

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

4.2 L1B Product Header Analysis		
For all products, a series of pre-defined checks are performed on the MPH	and SPH in order to identify any inconsistenc	cies and/or errors raised by the ground-segment processing chain.
L1B Processing Quality HR: The 1b_proc_flag_hr flag is currently set all OSARIn chains. A modification is required in the next release.	L1B GOPR and GOPN products because the	e 11b_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 Descriptors with respect to a	pre-determined baseline and also to check th	he validity of Auxiliary Data Files is correct.
Number of products with errors: 0		
4.4 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag for each measurement rea Number of products with errors: 0	cord. The bit value of this flag indicates any p	rodiems when set.
4.5 L1B Measurement Confidence Data Check		
CryoSat L1B data includes a measurement confidence flag for each measu	rement record. The bit value of this flag indic	ates any problems when set.
Attitude Correction Missing: This flag is currently set in error for GOPR p	roducts due to a configuration issue. This is b	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_20190508T015421_20190508T020640_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\_20190508T161923\_20190508T162717\_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:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20190508T011815_20190508T012738_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20190508T142334_20190508T142737_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190508T020701_20190508T021318_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190508T021747_20190508T022230_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190508T032357_20190508T032953_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190508T064608_20190508T065016_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190508T113540_20190508T113648_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190508T131345_20190508T131602_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190508T144928_20190508T145440_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20190508T231602_20190508T231755_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T000006_20190508T000427_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T032953_20190508T033213_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T045750_20190508T045847_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T045917_20190508T050410_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T063609_20190508T064608_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T080409_20190508T080456_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T094406_20190508T094436_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T094931_20190508T095348_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T131255_20190508T131345_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T141733_20190508T141828_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T180955_20190508T181733_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T181807_20190508T181922_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20190508T222739_20190508T222820_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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Predact     Test Prior     Description       Corput_BR_COMM_2_D010000000000000000000000000000000000			
Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels       Science Control Section 2010     Mark 1998 Section 2010     Prove excels <t< td=""><td>Product</td><td>Test Failed</td><td>Description</td></t<>	Product	Test Failed	Description
S0: 0015.0016.2.00000000000000000000000000000000	CS_OFFL_SIR_GOPM_2_20190508T011814_20190508T012738_C001	Mean Dynamic Topography (1)	
Big DPD_Big Control	CS_OFFL_SIR_GOPM_2_20190508T164157_20190508T164300_C001		
Start Confugation     Transport     Transport <thtransport< th=""></thtransport<>	CS_OFFL_SIR_GOPM_2_20190508T232718_20190508T235134_C001	GPD Wet Tropospheric Correction	
BLUE TRANSPORT     Transportsyn heft conton 11     Transportsyn heft conton 11       GS_OPPL_SRE_OOPL_2.2019030110441_20190301104552_00001     Moor She schwol 11, Moor Damarc     There is no even with the MSS heft (Linkin 1) and the Maen Durance       GS_OPPL_SRE_OOPL_2.20190301102352_D0110030110352_D01103001100302_D0110030110352_D0110030110352_D0110030110352_D0110030110352_D011003000000000000000000000	CS_OFFL_SIR_GOPN_2_20190508T000536_20190508T001030_C001		
CPUTL_SIN_CONV_2_0110000110001_2011S010100002_00011     Trapsgraphy (h)     Trapsgraphy (h)     Trapsgraphy (h)       CS_OPTL_SIN_CONV_2_0110000110001_2011S0105_000100001     Trapsgraphy (h)     Trapsgraphy (h)     Trapsgraphy (h)       CS_OPTL_SIN_CONV_2_00110000110001_2011S0105_000100001     Trapsgraphy (h)	CS_OFFL_SIR_GOPN_2_20190508T004913_20190508T005151_C001		5 ( )
CS, OFTL, SIR, GOPL, 2, 20190361702337, 20190361702373, 2001   Mean See Surface (1), Mean Dynamic Topography (1)   There is an error with the Mean Dynamic Topography (1)     CS, OFTL, SIR, GOPL, 2, 201903617036473, 2019   Mean See Surface (1), Mean Dynamic Topography (1)   There is an error with the MEan Dynamic Topography (10)     CS, OFTL, SIR, GOPL, 2, 201903617036473, 2019   Mean See Surface (1), Mean Dynamic Topography (10)   There is an error with the MEan Dynamic Topography (10)     CS, OFTL, SIR, GOPL, 2, 201903617036473, 2019   Mean See Surface (1), Mean Dynamic Topography (10)   There is an error with the MES Neght (exiden 1) and the Mean Dynamic Topography (1)     CS, OFTL, SIR, GOPL, 2, 201903617036473, 2019   Mean See Surface (1), Mean Dynamic Topography (1)   There is an error with the MES Neght (exiden 1) and the Mean Dynamic Topography (1)     CS, OFTL, SIR, GOPL, 2, 201903617036367, 201903687704, 2001   Mean See Surface (1), Mean Dynamic Topography (1)   There is an error with the MES Neght (exiden 1) and the Mean Dynamic Topography (1), Mean Dynamic Topography (1)     CS, OFTL, SIR, GOPL, 2, 201903617103636, 20190366771, 2001   Mean See Surface (1), Mean Dynamic Topography (1)   There is an eror with the MEan Dynami	CS_OFFL_SIR_GOPN_2_20190508T014441_20190508T014550_C001		
CSL, DEFL, SIR, GOPN, 2, 201000001102203, 201000001102203, 2001     Tapography (1)     Trade descertic Clean in Status (Control (Contro) (Control (Contro) (Control (Control (Control (Contr	CS_OFFL_SIR_GOPN_2_20190508T021747_20190508T022230_C001	Geocentric Ocean Tide (FES), Non-	Total Geocentric Ocean Tide (solution 2: FES) and the Non-equilibrium
CSUDFL_SIN_COPPL_2 and basis (or Her_2 in tables (or Her_2 in the State of the State o	CS_OFFL_SIR_GOPN_2_20190508T032357_20190508T032953_C001	Topography (1), Total Geocentric Ocean	Topography height (solution 1) and the Total Geocentric Ocean Tide heigh
CSL_DFL_SRL_GOPN_2_201905081103010_001000810_0001     Topography (1)     Topography (addition 1)       CS_OFFL_SIR_GOPN_2_2019050817054753_C001     Mean Set Sufface (1) Mean Dynamic Topography (addition 1) and the Mean Dynamic Topography (1)       CS_OFFL_SIR_GOPN_2_2019050817072450_C001     Mean Set Sufface (1) Mean Dynamic Topography (addition 1) and the Mean Dynamic Topography (1)       CS_OFFL_SIR_GOPN_2_201905081707250_C001     Mean Set Sufface (1), Mean Dynamic Topography (1)     There is an entry with the MSS height (addition 1) and the Mean Dynamic Topography (1)       CS_OFFL_SIR_GOPN_2_201905081708153_C001     Mean Set Sufface (1), Mean Dynamic Topography (1)     There is an entry with the MSS height (addition 1) and the Mean Dynamic Topography (1)       CS_OFFL_SIR_GOPN_2_201905081708153_C001     Mean Set Sufface (1), Mean Dynamic Topography (1)     There is an entry with the MSS height (addition 1) and the Mean Dynamic Topography (1)       CS_OFFL_SIR_GOPN_2_201905081710545_C001     Mean Set Sufface (1), Mean Dynamic Topography (1)     There is an entry with the MSS height (addition 1) and the Mean Dynamic Topography ingitit (suffacts 1)       CS_OFFL_SIR_GOPN_2_201905081713542_C001     Mean Set Sufface (1), Mean Dynamic Topography ingitit (suffacts 1)       CS_OFFL_SIR_GOPN_2_201905081713542_C001     Mean Set Sufface (1), Mean Dynamic Topography ingitit (suffacts 1)       CS_OFFL_SIR_GOPN_2_201905081713542_C001     Mean Set Sufface (1), Mean Dynamic Topography ingitit (suffacts 1)       CS_	CS_OFFL_SIR_GOPN_2_20190508T041641_20190508T041907_C001	Mean Dynamic Topography (1)	, , , , , , , , , , , , , , , , , , , ,
CS_OFFL_SIR_COPN_2_2019050810201102005109413_01001 (Main Sea Surface (1) Main Dynamic Topography (1) or more records Mean Sea Surface (1) Main Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography height (colution 1) CS_OFFL_SIR_GOPN_2_2019050671123007_201050507123202_C001 Mean Sa Sufface (1) Mean Dynamic Topography height (colution 1) CS_OFFL_SIR_GOPN_2_201905067113462_D1005067113462_D010007113462_C001 Mean Sas Sufface (1) Mean Dynamic Topography height (colution 1) CS_OFFL_SIR_GOPN_2_201905067113462_D010007114622_C001 Mean Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1) There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1) There is an error with the Mas Dynamic Topography (1) There is an error with the Mas Dynamic Topography (1) There is an error with the M	CS_OFFL_SIR_GOPN_2_20190508T050410_20190508T050815_C001		
CB_OFT_SBR_GOPN_2_201905081000811/2802_C001     Topography (1)     Topography begint (solution 1)       CB_OFFL_SIR_GOPN_2_201905081090081_201905081090502_C001     Mean Sea Sufface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CB_OFFL_SIR_GOPN_2_201905081091500_C0010085741_C001     Mean Sea Sufface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CB_OFFL_SIR_GOPN_2_201905081095081095741_C001     Mean Sea Sufface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CB_OFFL_SIR_GOPN_2_201905081105306_201905081105415_C0011     Mean Sea Sufface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CB_OFFL_SIR_GOPN_2_201905081123007_201905081123002_C0011     Mean Sea Sufface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CB_OFFL_SIR_GOPN_2_201905081123007_201905081123002_C0011     Mean Sea Sufface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CB_OFFL_SIR_GOPN_2_20190508113045_20190508113202_C0011     Mean Sea Sufface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CB_OFFL_SIR_GOPN_2_201905081132045_20190508113202_C0011     Mean Sea Sufface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CB_OFFL_SIR	CS_OFFL_SIR_GOPN_2_20190508T054611_20190508T054753_C001	Mean Dynamic Topography (1)	
Cis_UFFL_SIR_GOPN_2_20190308T09400_20190508T09450_20190508T09450_20190508T09450_20190508T09450_20190508T09450_20190508T09541_C001     Mean Sas Surface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CS_OFFL_SIR_GOPN_2_20190508T09508T09508T095741_C001     Mean Sas Surface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CS_OFFL_SIR_GOPN_2_20190508T105306_20190508T108415_C001     Mean Sas Surface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CS_OFFL_SIR_GOPN_2_20190508T103507_20190508T103202_C001     Mean Sas Surface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CS_OFFL_SIR_GOPN_2_20190508T123007_20190508T12302_2001     Mean Sas Surface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CS_OFFL_SIR_GOPN_2_20190508T123007_20190508T123202_C001     Mean Sas Surface (1), Mean Dynamic Topography height (solution 1)     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_20190508T163242_C0	CS_OFFL_SIR_GOPN_2_20190508T072619_20190508T072950_C001		
CBDFFL_SIR_GOPN_2_20190508T109506_20190508T095741_C001     Weals Dynamic     Torono records       CSOFFL_SIR_GOPN_2_20190508T109506_20190508T095741_C001     Mean Sea Surface (1), Mean Dynamic     Torography height (edulion 1)       CSOFFL_SIR_GOPN_2_20190508T105306_20190508T105415_C001     Mean Sea Surface (1), Mean Dynamic     There is an error with the MSS height (solution 1) and the Mean Dynamic       CSOFFL_SIR_GOPN_2_20190508T105405_D1090508T105415_C001     Mean Sea Surface (1), Mean Dynamic     Torography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T123202_C001     Mean Sea Surface (1), Mean Dynamic     Torography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T131345_20190508T131602_C001     Mean Sea Surface (1), Mean Dynamic     Torography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T14428_20190508T14540_C001     Mean Sea Surface (1), Mean Dynamic     Torography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T14542_D190508T145420_C001     Mean Sea Surface (1), Mean Dynamic     Torography height (solution 1)       Torography Light (solution 1)     Torography height (solution 1)     Torography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T145420_C001     Mean Sea Surface (1), Mean Dynamic     Torography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T163244_C001     Mean Sea Surface (1), Mean Dynamic     Torography height (solution 1) <tr< td=""><td>CS_OFFL_SIR_GOPN_2_20190508T090531_20190508T090852_C001</td><td></td><td></td></tr<>	CS_OFFL_SIR_GOPN_2_20190508T090531_20190508T090852_C001		
Cis_OFFL_SIR_GOPN_2_20190508T105306_20190508T10545_C001     Topography (1)     Topography (1)     Topography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T105306_20190508T10344_C001     Mean Sea Surface (1), Mean Dynamic Topography 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 Topography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T113540_20190508T113848_C001     Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)     There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T113145_20190508T1131602_C001     Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)     There is an error with the MASS height (solution 1) and the Mean Dynamic Topography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T144928_20190508T145440_C001     Geocontric Coean Tale (CON), Total Geo	CS_OFFL_SIR_GOPN_2_20190508T091406_20190508T091530_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_GOPN_2_201905081103306_201905081113640_C001     Topography (1)     Topography (1)     Topography (1)     Topography height (solution 1)       CS_OFFL_SIR_GOPN_2_201905081113640_C001     Mean Sea Surface (1), Mean Dynamic Topography (1)     There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)       CS_OFFL_SIR_GOPN_2_201905081132007_201905081123202_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_201905081131052_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_201905081163245_201905081164240_C001     Mean Dynamic Topography (1)     There is an error with the MSS height (solution 1)       CS_OFFL_SIR_GOPN_2_201905081163244_201905081163244_C001     Mean Sea Surface (1), Mean Dynamic Topography (1)     There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)       CS_OFFL_SIR_GOPN_2_201905081163244_201905081163244_C001     Mean Dynamic Topography (1)     There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)       CS_OFFL_SIR_GOPN_2_201905081163244_201905081182042_C001     Mean Dynamic Topography (1)     There is an error with the Mean Dynamic Topography (solution 1) for	CS_OFFL_SIR_GOPN_2_20190508T095606_20190508T095741_C001		
CS_OPPL_SIR_GOPN_2_20190508113304_20190508113302_20001     Topography (1)     Topography height (solution 1)       CS_OFFL_SIR_GOPN_2_201905081131045_20190508113102_20001     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_201905081131045_201905081131042_20001     Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)     There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)       CS_OFFL_SIR_GOPN_2_201905081144928_201905081145440_C001     Geocentric Ocean Tide (FES), Non- Equilibrium Long Parind Ocean Tide (FCS), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Parind Ocean Tide (FES), Non- Equilibrium Long Parind Ocean Tide (SOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Parind Ocean Tide (SOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Parind Ocean Tide (SOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Parind Ocean Tide (SOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Parind Ocean Tide (SOT), Total Geocentric Ocean Tide (SOT), Total	CS_OFFL_SIR_GOPN_2_20190508T105306_20190508T105415_C001		
CS_OFFL_SIR_GOPN_2_201905081123007_20190508112302_20001   Topography (1)   Topography Height (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T131602_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_20190508T144928_20190508T145440_C001   Geocentric Ocean Tide (CGD), Total Geocentric Ocean Tide (CGD), Total Geocentric Ocean Tide (CGD), Total Geocentric Ocean Tide (CGD), Total Geocentric Ocean Tide (CGD), Total Geocentric Ocean Tide (CGD), Total Geocentric Ocean Tide (CGD), and the Non-Faultifutur I once Teorods     CS_OFFL_SIR_GOPN_2_20190508T163244_20190508T163244_C001   Mean Dynamic Topography (1)   There is an error with the Mean Dynamic Topography (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T163244_20190508T163302_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_20190508T181322_20190508T181302_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_20190508T181922_20190508T200007_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_20190508T204805_20190508	CS_OFFL_SIR_GOPN_2_20190508T113540_20190508T113648_C001		
CS_OFFL_SIR_GOPN_2_20190508113145_201905081131462_0001     Topography (1)     Topography height (solution 1)       CS_OFFL_SIR_GOPN_2_20190508T144928_20190508T145440_C001     Geocentric Ocean Tide (COT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (SOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (SOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide for one or more records       CS_OFFL_SIR_GOPN_2_20190508T163245_20190508T163244_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_20190508T163244_20190508T163244_C001     Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)     There is an error with the Mean Dynamic Topography (solution 1) for one or more records       CS_OFFL_SIR_GOPN_2_20190508T163244_20190508T163202_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_20190508T195049_20190508T182042_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_20190508T195049_20190508T200007_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_20190508T204458_20190508T204683_C001     Mean Dynamic Topography (1)     There is an error with the Mean Dynamic To	CS_OFFL_SIR_GOPN_2_20190508T123007_20190508T123202_C001		
CS_OFFL_SIR_GOPN_2_20190508T144928_20190508T145440_C001   Geocentric Ocean Tide (GCT), Total   Geocentric Ocean Tide (GCS), Non- Equilibrium Loop Beriod Ocean Tide     CS_OFFL_SIR_GOPN_2_20190508T153915_20190508T164212_C001   Mean Dynamic Topography (1)   There is an error with the Mean Dynamic Topography (solution 1), roor roor records     CS_OFFL_SIR_GOPN_2_20190508T163945_20190508T163244_C001   Mean Sea Surface (1), Mean Dynamic Topography (1)   There is an error with the Mean Dynamic Topography (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T163244_20190508T163302_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_20190508T163244_20190508T163302_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_20190508T195949_20190508T182042_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_20190508T195949_20190508T200007_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_20190508T200805_20190508T200805_20100058T200805_20190508T200805_20190508T204803_C001   Mean Sea Surface (1), Mean Dynamic Topography (1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001   Mean S	CS_OFFL_SIR_GOPN_2_20190508T131345_20190508T131602_C001	Topography (1)	Topography height (solution 1)
CS_OFFL_SIR_GOPN_2_20190508T1632915_20190508T163244_C001   Mean Sea Surface (1), Mean Dynamic   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T163244_20190508T163244_C001   Mean Dynamic Topography (1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T163244_20190508T163302_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_20190508T181922_20190508T182042_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_20190508T195949_20190508T200007_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_20190508T200805_20190508T200952_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_20190508T204458_20190508T204803_C001   Mean Sea Surface (1), Mean Dynamic   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001   Mean Sea Surface (1), Mean Dynamic   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001   Mean Sea Surface (1), Mean Dy	CS_OFFL_SIR_GOPN_2_20190508T144928_20190508T145440_C001	Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-	Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES)
CS_OFFL_SIR_GOPN_2_201905081162926_201905081163244_0001Topography (1)Topography (1)Topography height (solution 1)CS_OFFL_SIR_GOPN_2_20190508T183244_20190508T183302_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T181922_20190508T182042_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T189549_20190508T200007_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T200805_20190508T200952_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T204458_20190508T204803_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_GOPN_2_20190508T2235836_20190508T222739_	CS_OFFL_SIR_GOPN_2_20190508T153915_20190508T154212_C001		
CS_OFFL_SIR_GOPN_2_20190508T183244_20190508T182042_C001Mean Dynamic Topography (1)or more recordsCS_OFFL_SIR_GOPN_2_20190508T181922_20190508T182042_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T195949_20190508T200007_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T200805_20190508T200952_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T204458_20190508T204803_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)There is an error with the GPD Wet Tropospheric correction or	CS_OFFL_SIR_GOPN_2_20190508T162925_20190508T163244_C001		
CS_OFFL_SIR_GOPN_2_20190508T195949_20190508T200007_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T200805_20190508T200952_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T200805_20190508T200952_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography (solution 1) for one or more recordsCS_OFFL_SIR_GOPN_2_20190508T204803_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T22105_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222739_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_GOPN_2_20190508T2235836_20190508T222739_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)There is an error with the GPD Wet Tropospheric correction for one orCS_OFFL_SIR_GOPN_2_20190508T2235836_20190509T000110_C001GPD Wet Tropospheric CorrectionThere is an error with the GPD Wet Tropospheric correction for one or <td>CS_OFFL_SIR_GOPN_2_20190508T163244_20190508T163302_C001</td> <td>Mean Dynamic Topography (1)</td> <td></td>	CS_OFFL_SIR_GOPN_2_20190508T163244_20190508T163302_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_GOPN_2_201905081200007_C001   Mean Dynamic Topography (1)   or more records     CS_OFFL_SIR_GOPN_2_20190508T200805_20190508T200952_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_20190508T204458_20190508T204803_C001   Mean Sea Surface (1), Mean Dynamic Topography (1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the GPD Wet Tropospheric correction for one or     CS_OFFL_SIR_GOPN_2_20190508T2235836_20190509T0001110_C001   GPD Wet Tropospheric Correction   There is an error with the GPD Wet Tropospheric correction for one or	CS_OFFL_SIR_GOPN_2_20190508T181922_20190508T182042_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_GOPN_2_201905081200805_201905081200932_C001   Inversion Dynamic Topography (1)   or more records     CS_OFFL_SIR_GOPN_2_20190508T204458_20190508T204803_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T2235836_20190508T222739_C001   GPD Wet Tropospheric Correction   There is an error with the GPD Wet Tropospheric correction for one or	CS_OFFL_SIR_GOPN_2_20190508T195949_20190508T200007_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_GOPN_2_201905081204435_201905081204805_C001   Topography (1)   Topography height (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)     CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)     CS_OFFL_SIR_GOPN_2_20190508T2253836_20190509T000110_C001   GPD Wet Tropospheric Correction   There is an error with the GPD Wet Tropospheric correction for one or	CS_OFFL_SIR_GOPN_2_20190508T200805_20190508T200952_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_GOPN_2_2019050812221800_201905081222105_C001   Topography (1)   Topography height (solution 1)     CS_OFFL_SIR_GOPN_2_201905087222358_201905087222739_C001   Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)   There is an error with the MSS height (solution 1)     CS_OFFL_SIR_GOPN_2_201905087222358_201905087222739_C001   GPD Wet Tropospheric Correction   There is an error with the GPD Wet Tropospheric correction for one or	CS_OFFL_SIR_GOPN_2_20190508T204458_20190508T204803_C001		
CS_OFFL_SIR_GOPN_2_201905081222358_2019050812227.39_C001 Topography (1) Topography height (solution 1) There is an error with the GPD Wet Tropospheric correction for one or	CS_OFFL_SIR_GOPN_2_20190508T221800_20190508T222105_C001		
	CS_OFFL_SIR_GOPN_2_20190508T222358_20190508T222739_C001		
	CS_OFFL_SIR_GOPN_2_20190508T235836_20190509T000110_C001	GPD Wet Tropospheric Correction	

CS_OFFL_SIR_GOPR_2_20190508T000006_20190508T000427_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_20190508T000427_20190508T000536_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_20190508T004404_20190508T004913_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20190508T013803_20190508T014026_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_20190508T014026_20190508T014441_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_20190508T031721_20190508T032357_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_20190508T045917_20190508T050410_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_20190508T063609_20190508T064608_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_20190508T081625_20190508T082459_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_20190508T095741_20190508T100528_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_20190508T100606_20190508T100729_C001	Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 1: -GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOPR_2_20190508T113648_20190508T114403_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_20190508T125130_20190508T125344_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_GOPR_2_20190508T131602_20190508T132304_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_20190508T145440_20190508T150051_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_20190508T163302_20190508T164157_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_20190508T180955_20190508T181734_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_20190508T194924_20190508T195554_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_20190508T195554_20190508T195854_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_20190508T212735_20190508T213453_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_20190508T213453_20190508T213635_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_20190508T230908_20190508T231349_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_20190508T231349_20190508T231508_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_20190508T235135_20190508T235835_C001	GPD Wet Tropospheric Correction	There is an error with the GPD Wet Tropospheric correction for one or more records

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# 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_20190508T015421_20190508T020640_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_20190508T161923_20190508T162717_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_20190508T001056_20190508T002827_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_20190508T003001_20190508T004404_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_20190508T005151_20190508T005353_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_20190508T005457_20190508T005855_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_20190508T010053_20190508T011613_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_20190508T011814_20190508T012738_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_20190508T014550_20190508T014654_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_20190508T015421_20190508T020640_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_20190508T021318_20190508T021746_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_20190508T022231_20190508T022604_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_20190508T022954_20190508T023757_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_20190508T024032_20190508T025521_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_20190508T033213_20190508T040526_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_20190508T041110_20190508T041641_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_20190508T042012_20190508T044430_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_20190508T051607_20190508T052741_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_20190508T053318_20190508T054412_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_20190508T055040_20190508T055524_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_20190508T055835_20190508T062649_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_20190508T063510_20190508T063609_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_20190508T065016_20190508T072304_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_20190508T072950_20190508T073521_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_20190508T073741_20190508T074309_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_20190508T081416_20190508T081625_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_20190508T082903_20190508T090243_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_20190508T090852_20190508T091405_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_20190508T091704_20190508T093548_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_20190508T100729_20190508T104102_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_20190508T104435_20190508T104851_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_20190508T104910_20190508T105305_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_20190508T105720_20190508T113127_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.

	Ocean Altimeter Range Quality, Ocean	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_GOPM_2_20190508T114751_20190508T115831_C001	SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality Ocean Altimeter Range Quality, Ocean	have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20190508T120432_20190508T122036_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_20190508T122232_20190508T122750_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_20190508T123826_20190508T125130_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_20190508T125344_20190508T130626_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_20190508T133307_20190508T134331_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_20190508T134511_20190508T135921_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_20190508T140158_20190508T140701_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_20190508T140725_20190508T140840_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_20190508T142334_20190508T142736_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_20190508T143413_20190508T143722_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_20190508T143845_20190508T144556_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_20190508T151732_20190508T153759_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_20190508T154212_20190508T154617_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_20190508T155256_20190508T161845_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_20190508T165431_20190508T171807_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_20190508T172005_20190508T172531_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_20190508T173234_20190508T174332_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_20190508T174910_20190508T180454_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_20190508T182849_20190508T184939_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_20190508T185155_20190508T185733_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_20190508T190005_20190508T190810_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_20190508T191145_20190508T194530_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_20190508T195854_20190508T195948_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_20190508T202014_20190508T202820_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_20190508T202839_20190508T203634_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_20190508T203941_20190508T204457_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_20190508T205136_20190508T211311_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_20190508T211557_20190508T212516_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_20190508T213700_20190508T214132_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_20190508T215633_20190508T220203_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_20190508T220350_20190508T221453_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_20190508T222105_20190508T222357_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_20190508T223056_20190508T230359_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_20190508T232015_20190508T232705_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_20190508T232718_20190508T235134_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_20190508T014654_20190508T014813_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_20190508T091406_20190508T091530_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_20190508T172903_20190508T173023_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_20190508T045917_20190508T050410_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_20190508T115831_20190508T120312_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_20190508T125130_20190508T125344_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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Number of	products with errors:	
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Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20190508T000536_20190508T001030_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_20190508T005855_20190508T010033_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_20190508T014441_20190508T014550_C001	OCCIA Attimeter Range Quality PLRM, OCOG Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Ouglity, OCCOG Rackscatter 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_20190508T014654_20190508T014813_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_20190508T020701_20190508T021318_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_20190508T021747_20190508T022230_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_20190508T022736_20190508T022954_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_20190508T023757_20190508T023946_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_20190508T032357_20190508T032953_C001	OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter	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_20190508T040644_20190508T040832_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_20190508T041641_20190508T041907_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_20190508T054611_20190508T054753_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_20190508T055639_20190508T055801_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_20190508T072619_20190508T072950_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_20190508T073521_20190508T073637_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_20190508T090531_20190508T090852_C001	OCCAR Attimeter Range Quality PLRM, OCCAR Attimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter	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_20190508T091406_20190508T091530_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_20190508T105306_20190508T105415_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_20190508T113232_20190508T113254_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_20190508T141640_20190508T141733_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_20190508T153915_20190508T154212_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_20190508T154839_20190508T155130_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_20190508T180455_20190508T180954_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_20190508T181922_20190508T182042_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_20190508T204458_20190508T204803_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_20190508T213636_20190508T213639_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_20190508T221800_20190508T222105_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_20190508T222358_20190508T222739_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_20190508T230850_20190508T230907_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_20190508T231602_20190508T231755_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_20190508T231805_20190508T231838_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_20190508T235836_20190509T000110_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_20190508T000006_20190508T000427_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_20190508T000427_20190508T000536_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_20190508T004404_20190508T004913_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_20190508T014026_20190508T014441_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_20190508T014813_20190508T015058_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_20190508T030000_20190508T030336_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_20190508T031721_20190508T032357_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_20190508T032953_20190508T033213_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_20190508T040526_20190508T040644_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_20190508T045750_20190508T045847_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_20190508T045917_20190508T050410_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_20190508T063312_20190508T063510_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_20190508T063609_20190508T064608_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_20190508T072305_20190508T072619_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_20190508T081625_20190508T082459_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_20190508T090244_20190508T090531_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_20190508T091530_20190508T091704_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_20190508T095741_20190508T100528_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_20190508T113648_20190508T114403_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_20190508T123202_20190508T123826_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_20190508T130626_20190508T130836_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_20190508T131019_20190508T131255_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_20190508T131602_20190508T132304_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_20190508T144718_20190508T144927_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_20190508T145440_20190508T150051_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_20190508T163302_20190508T164157_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_20190508T180955_20190508T181734_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_20190508T194924_20190508T195554_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_20190508T195554_20190508T195854_C001	Ocean Altimeter Range Quality PLRM, O	ter Range, SSHA, SWH and Backscatter Quality Flags have been set for c
CS_OFFL_SIR_GOPR_2_20190508T204803_20190508T205136_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_20190508T212735_20190508T213453_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_20190508T213453_20190508T213635_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_20190508T222841_20190508T223056_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_20190508T230908_20190508T231349_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_20190508T231349_20190508T231508_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.
	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.

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

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

Number of products with errors:

# 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.

200

#### 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

154

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.

30

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220190507T231412_20190508T000351_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_GOP_2_20190508T000351_20190508T005325_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_GOP_220190508T005325_20190508T014304_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_GOP_220190508T014304_20190508T023239_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), 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 products
CS_OFFL_SIR_GOP_220190508T023239_20190508T032218_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_GOP_2_20190508T032218_20190508T041152_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_220190508T041152_20190508T050132_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_GOP_220190508T050132_20190508T055106_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_GOP_220190508T055106_20190508T064045_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_GOP_220190508T064045_20190508T073020_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_GOP_220190508T073020_20190508T081959_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_GOP_2_20190508T081959_20190508T090933_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_GOP_220190508T090933_20190508T095912_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_GOP_2_20190508T095912_20190508T104847_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) and all Tidal corrections for one or more products
CS_OFFL_SIR_GOP_220190508T104847_20190508T113826_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_GOP_2_20190508T113826_20190508T122800_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_GOP_220190508T122800_20190508T131739_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_220190508T131739_20190508T140714_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_GOP_2_20190508T140714_20190508T145653_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) and all Tidal corrections for one or more products
CS_OFFL_SIR_GOP_2_20190508T145653_20190508T154627_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_GOP_2_20190508T154627_20190508T163607_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_GOP_2_20190508T163607_20190508T172541_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_GOP_220190508T172541_20190508T181520_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_GOP_2_20190508T181520_20190508T190455_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_GOP_220190508T190455_20190508T195434_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_GOP_2_20190508T195434_20190508T204408_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_GOP_2_20190508T204408_20190508T213347_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_GOP_2_20190508T213347_20190508T222322_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_GOP_2_20190508T222322_20190508T231301_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_GOP_2_20190508T231301_20190509T000235_C002	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		

## 6.5 P2P Measurement Confidence Data Check

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

# Number of products with errors: 2

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20190508T014304_20190508T023239_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_20190508T154627_20190508T163607_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

## 6.6 P2P Measurement Quality Flag Check

## P2P Quality Flags (20Hz) CryoSat P2P data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record, copied from the corresponding L2 products. Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected. Number of products with errors: 29 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: 30 P2P Quality Flags (1 Hz & 1Hz PLRM) Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected. Number of products with errors: 30 6.8 P2P Ocean Retracking Quality Check P2P Retracking Flags (20Hz) Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set. Ocean Retracking Quality Flag (PLRM): This flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected. Number of products with errors: 29 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