

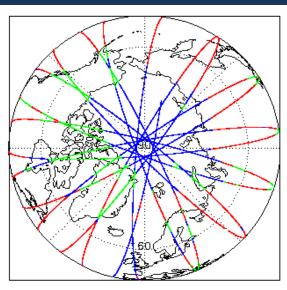
1. Overview

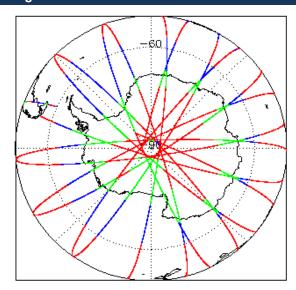
Report Production:	28-Aug-2020
Processor Used:	CryoSat Ocean Processor
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data

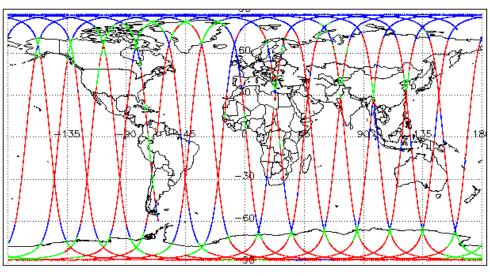
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1 and 7.2

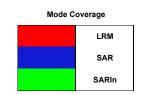
Mission / Instr	ument News
29-Jul-2020	None
30-Jul-2020	CRYO2ICE Orbit raising activities.
31-Jul-2020	Nothing planned

2. Global Coverage









3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

4. GOP Level 1B Data Quality Check

4.1 L1B Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a 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 inconsistencies and/or errors raised by the ground-segment processing chain.

L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L1B GOPR and GOPN products because the I1b_processing_quality_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

Ω

0

4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20200730T012244_20200730T013712_C001	iPower scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20200730T045030_20200730T045639_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20200730T051126_20200730T054401_C001		There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20200730T150241_20200730T150835_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_GOPM1B_20200730T164102_20200730T164631_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more record

4.6 L1B Waveform Group Data Check

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

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

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20200730T024013_20200730T025513_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20200730T025714_20200730T030638_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200730T014433_20200730T014855_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200730T014859_20200730T014909_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200730T032337_20200730T032411_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200730T063745_20200730T063818_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200730T082504_20200730T082928_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200730T095224_20200730T095323_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200730T145244_20200730T145506_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20200730T161628_20200730T161751_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200730T094304_20200730T094341_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20200730T112520_20200730T112827_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.

Number of products with errors:

0

5.4 L2 Auxiliary Correction Error Check

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

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

Number of products with errors.		
Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20200730T065517_20200730T065726_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200730T134410_20200730T135917_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPM_2_20200730T151209_20200730T152236_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_20200730T004859_20200730T005141_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T005342_20200730T005912_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T014433_20200730T014855_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T022816_20200730T023052_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T032337_20200730T032411_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T050255_20200730T050845_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T054543_20200730T054732_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_20200730T055546_20200730T055809_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T064305_20200730T064718_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) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20200730T082504_20200730T082928_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T090519_20200730T090853_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T104437_20200730T104758_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T105310_20200730T105435_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_20200730T113522_20200730T113640_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T123213_20200730T123322_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_20200730T131538_20200730T131551_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T140917_20200730T141108_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T145244_20200730T145506_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T162917_20200730T163348_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20200730T171821_20200730T172111_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_20200730T172733_20200730T173038_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_20200730T180826_20200730T181211_C001	mean Sea Surrace (1), mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FFS) Non-Fauilibrium Long Period	Inere is an error with the MsS neight (solution 1) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20200730T194343_20200730T194905_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPR_2_20200729T235714_20200730T000431_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T000431_20200730T000713_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T013905_20200730T014325_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

CS_OFFL_SIR_GOPR_2_20200730T014325_20200730T014433_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T031653_20200730T032007_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_20200730T032007_20200730T032337_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T045639_20200730T050255_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T063819_20200730T064305_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T081558_20200730T082504_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T095604_20200730T100401_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T113640_20200730T114428_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the GPD Wet Tropospheric correction, the MSS height (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_GOPR_2_20200730T131551_20200730T132301_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T145507_20200730T150240_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T163348_20200730T164101_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_20200730T181211_20200730T182055_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T194905_20200730T195642_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T212837_20200730T213503_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20200730T213503_20200730T213731_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

5.5 L2 Measurement Confidence Data Check

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

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20200730T012244_20200730T013712_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_20200730T045030_20200730T045639_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_20200730T051126_20200730T054401_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_20200730T150241_20200730T150835_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_20200730T164102_20200730T164631_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.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20200730T000806_20200730T000859_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T001914_20200730T002334_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T002430_20200730T004209_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T010117_20200730T011640_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T011759_20200730T011908_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T012244_20200730T013712_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

Does Alternating (1904). Shift of the County in page 1000 and the County in page 10000	CS_OFFL_SIR_GOPM_2_20200730T014933_20200730T020738_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFF_SR_GOMS_2_200073700902_2000731700902_	CS_OFFL_SIR_GOPM_2_20200730T020857_20200730T022249_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CR_OPT_SR_COPM_2_20007381706914_2000737109519_COIL CR_OPT_SR_COPM_2_20007381706914_2000737109519_COIL CR_OPT_SR_COPM_2_20007381706914_2000737109519_COIL CR_OPT_SR_COPM_2_20007381706908_2000737109500_COIL CR_OPT_SR_COPM_2_2	CS_OFFL_SIR_GOPM_2_20200730T023052_20200730T023252_C001	OCOG Altimeter Range Quality, OCOG	The OCOG Altimeter Range and Backscatter Quality Flags have been set
Sci. OFFL. SRIF, COPPL. 2. 2000/75/7182914_2000/75/7192914_COOPS/75/75/25/14_2000/75/7192914_COOPS/75/75/25/14_2000/75/75/25/25_20000/75/75/25/25_2000/75/75/25/25_2000/75/75/25/25_2000/75/75/25/25_2000/75/75/25	CS_OFFL_SIR_GOPM_2_20200730T023402_20200730T023754_C001		
CS_OFF_SR_GOPM_2_2020730T02014 22220730T04016 C01 CS_OFF_SR_GOPM_2_2020730T02014 22220730T04016 C01 CS_OFF_SR_GOPM_2_2020730T04016 22220730T04055 C01 CS_OFF_SR_GOPM_2_2020730T04016 22220730T04055 C01 CS_OFF_SR_GOPM_2_2020730T04016 C01 CS_OFF_SR_GOPM_2_2020730T0406 C01 CS_OFF_SR_GOPM_2_2020	CS_OFFL_SIR_GOPM_2_20200730T024013_20200730T025513_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFF_SR_COPM_2_2000730703514_2000730704955_0001 ADDITIONAL_PROPERTY COOKS AND ADDITIONAL COOKS ARRINGER Plangs and Backscales Causily Plags have been additioned from the condition of the COOKS Alterined Range and Backscales Causily Plags and Salkscales Causily Cooks Alterined Range and Backscales Causily Plags and Salkscales Causi	CS_OFFL_SIR_GOPM_2_20200730T025714_20200730T030638_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB_OFFL_SIR_GOPM_2_20000730T09359_2000730T09359_CO01 CB_OFFL_SIR_GOPM_2_20000730T094106_2000730T09359_CO01 CB_OFFL_SIR_GOPM_2_20000730T094007_20000730T09594_CO01 CB_OFFL_SIR_GOPM_2_20000730T095007_2000730T09594_CO01 CB_OFFL_SIR_GOPM_2_20000730T095007_20000730T09594_CO01 CB_OFFL_SIR_GOPM_2_20000730T095007_20000730T095007_CO01 CB_OFFL_SIR_GOPM_2_20000730T095007_20000730T095007_CO01 CB_OFFL_SIR_GOPM_2_20000730T095007_20000730T095000_CO01 CB_OFFL_SIR_GOPM_2_20000730T095007_CO01 CB_OFFL_SIR_GOPM_2_20	CS_OFFL_SIR_GOPM_2_20200730T032914_20200730T034558_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Bossesater Quality CS_OFFL_SIR_QCPM_2_20000730T041505_20000730T0443470_C001 Allerated Range, SSHA, SWH and Backscatter Quality Flags and the COCO Allerated Range and Endocated Quality Flags and the COCO Allerated Range a	CS_OFFL_SIR_GOPM_2_20200730T040146_20200730T040356_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the COCO Affireter Range and Backscatter Quality Flags have been set to one or more records. GS_OFFL_SIR_GOPM_2_20000730T051108_2000730T05440_C001 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T055940_C001 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T05339_C001 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T05339_C001 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T05339_C001 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T05339_C001 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T05339_C001 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T05339_C001 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T05595_C0000 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T05595_C0000 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T072242_C001 GS_OFFL_SIR_GOPM_2_20000730T055957_20000730T072242_C001 GS_OFFL_SIR_GOPM_2_20000730T072595_20000730T072242_C001 GS_OFFL_SIR_GOPM_2_20000730T072595_20000730T072240_C001 GS_OFFL_SIR_GOPM_2_20000730T072595_20000730T072280_C001 GS_OFFL_SIR_GOPM_2_20000730T072595_20	CS_OFFL_SIR_GOPM_2_20200730T040900_20200730T041657_C001		
and Backscatter Quality, COCG Spff_SiR_GOPM_2_20200730T055007_20200750T055546_CD01 CS_OFFL_SiR_GOPM_2_20200730T055507_20200750T055546_CD01 CS_OFFL_SiR_GOPM_2_20200730T055507_20200730T055546_CD01 CS_OFFL_SiR_GOPM_2_20200730T055507_20200730T055546_CD01 CS_OFFL_SiR_GOPM_2_20200730T055507_20200730T055546_CD01 CS_OFFL_SiR_GOPM_2_20200730T055507_20200730T055726_CD01 CS_OFFL_SiR_GOPM_2_20200730T055507_20200730T055726_CD01 CS_OFFL_SiR_GOPM_2_20200730T055732_20200730T055726_CD01 CS_OFFL_SiR_GOPM_2_20200730T055732_20200730T075264_CD01 CS_OFFL_SiR_GOPM_2_20200730T0755532_20200730T075264_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075812_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075852_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075852_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075566_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075556_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075556_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075556_CD01 CS_OFFL_SiR_GOPM_2_20200730T075552_20200730T075556_CD01 CS	CS_OFFL_SIR_GOPM_2_20200730T041955_20200730T043420_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backcaster Quality CS_OFFL_SIR_GOPM_2_20200730T05987_20200730T062339_C001 CS_OFFL_SIR_GOPM_2_20200730T065917_20200730T065726_C001 CS_OFFL_SIR_GOPM_2_20200730T065917_20200730T065726_C001 CS_OFFL_SIR_GOPM_2_20200730T065917_20200730T065726_C001 CS_OFFL_SIR_GOPM_2_20200730T06573_20200730T072242_C001 CS_OFFL_SIR_GOPM_2_20200730T06573_20200730T072242_C001 CS_OFFL_SIR_GOPM_2_20200730T072655_20200730T072242_C001 CS_OFFL_SIR_GOPM_2_20200730T072655_20200730T072804_C001 CS_OFFL_SIR_GOPM_2_20200730T072655_20200730T072804_C001 CS_OFFL_SIR_GOPM_2_20200730T072805_20200730T072804_C001 CS_OFFL_SIR_GOPM_2_20200730T078807_20200730T075808_C001 CS_OFFL_SIR_GOPM_2_20200730T078807_20200730T075808_C001 CS_OFFL_SIR_GOPM_2_20200730T078807_20200730T080560_C001 CS_OFFL_SIR_GOPM_2_20200730T078807_20200730T080560_C001 CS_OFFL_SIR_GOPM_2_20200730T078807_20200730T080560_C001 CS_OFFL_SIR_GOPM_2_20200730T078807_20200730T080560_C001 CS_OFFL_SIR_GOPM_2_20200730T078807_20200730T080560_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T080560_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T080057_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T080057_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T080057_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T080057_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T080057_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T080057_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T0805640_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T0805640_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T0805640_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T0805640_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T0805640_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T0805640_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T0805640_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T0805640_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T080510_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T080510_C001 CS_OFFL_SIR_GOPM_2_20200730T080832_20200730T064103_C001 CS_OFFL_SIR_GOPM_2_2020073	CS_OFFL_SIR_GOPM_2_20200730T051126_20200730T054401_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T08573_20200730T072242_C001 CS_OFFL_SIR_GOPM_2_20200730T07555_20200730T072242_C001 CS_OFFL_SIR_GOPM_2_20200730T07555_20200730T072242_C001 CS_OFFL_SIR_GOPM_2_20200730T07555_20200730T072304_C001 CS_OFFL_SIR_GOPM_2_20200730T07555_20200730T07550B_C001 CS_OFFL_SIR_GOPM_2_20200730T07550B_C001 CS_OFFL_SIR_GOPM_2_20200730T08525B_20200730T090557_C001 CS_OFFL_SIR_GOPM_2_20200730T08525B_20200730T090557_C001 CS_OFFL_SIR_GOPM_2_20200730T08525B_20200730T090554_C001 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T09142B_C001 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T095254_C001 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T09554B_C001 CS_OFFL_SIR_GOPM_2_20200730T10475B_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T10475B_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T10475B_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T10475B_20200730T104510_C001 CS_OFFL_SIR_GOPM_2_20200730T10475B_20200730T104510_C001 CS_OFFL_SIR_GOPM_2_20200730T104552_20200730T104510_C001 CS_OFFL_SIR_GOPM_2_20200730T104552_20200730T104510_C001 CS_OFFL_SIR_GOPM_2_20200730T104552_20200730T104510_C001 CS_	CS_OFFL_SIR_GOPM_2_20200730T055007_20200730T055546_C001		
and Backscatter Quality, OCOG Allmeter Range and Backscatter Quality Flags have been Allmeter Range, SSHA, SWH and Backscatter Quality, OCOG A	CS_OFFL_SIR_GOPM_2_20200730T055957_20200730T062339_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T072695_20200730T072804_C001 CS_OFFL_SIR_GOPM_2_20200730T072695_20200730T075808_C001 CS_OFFL_SIR_GOPM_2_20200730T073847_20200730T075808_C001 CS_OFFL_SIR_GOPM_2_20200730T075810_20200730T075808_C001 CS_OFFL_SIR_GOPM_2_20200730T075810_20200730T080540_C001 CS_OFFL_SIR_GOPM_2_20200730T075810_20200730T080540_C001 CS_OFFL_SIR_GOPM_2_20200730T082928_20200730T09057_C001 CS_OFFL_SIR_GOPM_2_20200730T082928_20200730T090057_C001 CS_OFFL_SIR_GOPM_2_20200730T080530_20200730T090554_C001 CS_OFFL_SIR_GOPM_2_20200730T09055323_20200730T0902214_C001 CS_OFFL_SIR_GOPM_2_20200730T0905323_20200730T0902214_C001 CS_OFFL_SIR_GOPM_2_20200730T0905323_20200730T0902548_C001 CS_OFFL_SIR_GOPM_2_20200730T0905323_20200730T0905548_C001 CS_OFFL_SIR_GOPM_2_20200730T104758_20200730T104103_C001 CS_OFFL_SI	CS_OFFL_SIR_GOPM_2_20200730T065517_20200730T065726_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_GOPM_2_20200730T073847_20200730T075808_CO11 CS_OFFL_SIR_GOPM_2_20200730T075810_20200730T080840_CO11 CS_OFFL_SIR_GOPM_2_20200730T075810_20200730T080540_CO11 CS_OFFL_SIR_GOPM_2_20200730T082928_20200730T080540_CO11 CS_OFFL_SIR_GOPM_2_20200730T082928_20200730T09057_CO11 CS_OFFL_SIR_GOPM_2_20200730T082928_20200730T09057_CO11 CS_OFFL_SIR_GOPM_2_20200730T08053_20200730T091428_CO11 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T091428_CO11 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T091428_CO11 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T091428_CO11 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T0905548_CO11 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T0905548_CO11 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T091438_CO11 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T091548_CO11 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T091548_CO11 CS_OFFL_SIR_GOPM_2_20200730T090553_20200730T091548_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T10413_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_CO11 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T111444_CO11 CS_OFFL_SIR_GOPM_2_20200730T1008	CS_OFFL_SIR_GOPM_2_20200730T065733_20200730T072242_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Plags have been attemption of the COG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T082928_20200730T090057_C001 CS_OFFL_SIR_GOPM_2_20200730T090853_20200730T091428_C001 CS_OFFL_SIR_GOPM_2_20200730T090853_20200730T091428_C001 CS_OFFL_SIR_GOPM_2_20200730T091748_20200730T092214_C001 CS_OFFL_SIR_GOPM_2_20200730T095232_20200730T095548_C001 CS_OFFL_SIR_GOPM_2_20200730T095232_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T1075820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T1104758_20200730T1111454_C001 CCS_OFFL_SIR_GOPM_2_20200730T1104758_20200730T1111454_C001 CCS_OFFL_SIR_GOPM_2_20200730T1104758_2	CS_OFFL_SIR_GOPM_2_20200730T072655_20200730T072804_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T082928_20200730T090057_C001 CS_OFFL_SIR_GOPM_2_20200730T082928_20200730T090057_C001 CS_OFFL_SIR_GOPM_2_20200730T090853_20200730T091428_C001 CS_OFFL_SIR_GOPM_2_20200730T090853_20200730T091428_C001 CS_OFFL_SIR_GOPM_2_20200730T091748_20200730T092214_C001 CS_OFFL_SIR_GOPM_2_20200730T095323_20200730T095548_C001 CS_OFFL_SIR_GOPM_2_20200730T095323_20200730T095548_C001 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T108520_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T11145	CS_OFFL_SIR_GOPM_2_20200730T073847_20200730T075808_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality CCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range Quality, OCOG Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T095323_20200730T095548_C001 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T107582_0200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T111458_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T1114428_20200730T1105310_C001 CS_OFFL_SIR_GOPM_2_20200730T1114428_20200730T1105310_C001 CS_OFFL_SIR_GOPM_2_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T1111454_C001 CS_OFFL_SIR_GOPM_2_20200730T10582	CS_OFFL_SIR_GOPM_2_20200730T075810_20200730T080540_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality Cs_OFFL_SIR_GOPM_2_20200730T091748_20200730T092214_C001 Cs_OFFL_SIR_GOPM_2_20200730T091748_20200730T092214_C001 Cs_OFFL_SIR_GOPM_2_20200730T095323_20200730T095548_C001 Cs_OFFL_SIR_GOPM_2_20200730T095323_20200730T095548_C001 Cs_OFFL_SIR_GOPM_2_20200730T095323_20200730T095548_C001 Cs_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 Cs_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 Cs_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 Cs_OFFL_SIR_GOPM_2_20200730T104758_20200730T105310_C001 Cs_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 Cs_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 Cs_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 Cs_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001 Ccan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. Cs_OFFL_SIR_GOPM_2_20200730T104758_20200730T105310_C001 Ccan Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. Ccan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. Cs_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 Ccan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. Cs_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 Ccan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. Cs_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 Ccan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. Ccan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. Ccan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. Ccan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. Ccan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. Ccan Altimeter Ra	CS_OFFL_SIR_GOPM_2_20200730T082928_20200730T090057_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T095323_20200730T095548_C001 CS_OFFL_SIR_GOPM_2_20200730T10810_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T10810_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T10820_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T114428_20200730T120741_C001 and the OCOG Altimeter Range and Backscatter Quality Set for one or more records. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T104758_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T11454_C001 CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T114428_20200730T120741_C001 CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T114428_20200730T120741_C001 and the OCOG Altimeter Range and Backscatter Quality Flags have been or more records. The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter	CS_OFFL_SIR_GOPM_2_20200730T090853_20200730T091428_C001		
CS_OFFL_SIR_GOPM_2_20200730T1095323_20200730T1095548_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 CS_OFFL_SIR_GOPM_2_20200730T104758_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T11454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T11454_C001 CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001 CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001 CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001 And Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T11454_C001 COCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001 COCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. COCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. COCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. COCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. COCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20200730T091748_20200730T092214_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Backscatter Quality, OCOG Backscatter Quality, OCOG Backscatter Quality CS_OFFL_SIR_GOPM_2_20200730T104758_20200730T105310_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001 CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001 And Backscatter Quality, OCOG Backscatter Quality, OCOG Altimeter Range Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001	CS_OFFL_SIR_GOPM_2_20200730T095323_20200730T095548_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality for one or more records. Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Scored Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been Scored Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Scored Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20200730T100810_20200730T104103_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been a	CS_OFFL_SIR_GOPM_2_20200730T104758_20200730T105310_C001		
CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_GOPM_2_20200730T105820_20200730T111454_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_GOPM_2_20200730T114428_20200730T120741_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_GOPM_2_20200730T120850_20200730T121948_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T122442_20200730T122758_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_20200730T123701_20200730T130316_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T130332_20200730T131048_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T131208_20200730T131441_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_20200730T132301_20200730T133734_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T134410_20200730T135917_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T140139_20200730T140657_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_20200730T141746_20200730T143035_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T143250_20200730T144956_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T151209_20200730T152236_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T152415_20200730T153809_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T154105_20200730T154609_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_20200730T154616_20200730T154627_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_20200730T160410_20200730T160628_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T161349_20200730T161628_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T161751_20200730T162435_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T165615_20200730T165849_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T170049_20200730T171701_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T172111_20200730T172526_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_20200730T173244_20200730T180623_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T183212_20200730T185611_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T185918_20200730T190441_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_20200730T191155_20200730T193849_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T193858_20200730T194343_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T201012_20200730T203014_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_GOPM_2_20200730T203101_20200730T203547_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T203912_20200730T204721_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_20200730T205212_20200730T212448_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T213731_20200730T213900_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T214232_20200730T214616_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_20200730T220818_20200730T221406_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPM_2_20200730T221851_20200730T222317_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_GOPN_2_20200730T005342_20200730T005912_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_GOPN_2_20200730T041657_20200730T041846_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20200730T062339_20200730T062409_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_GOPN_2_20200730T063745_20200730T063818_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20200730T073417_20200730T073525_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_GOPN_2_20200730T180826_20200730T181211_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_GOPR_2_20200730T094910_20200730T095219_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_GOPR_2_20200730T162435_20200730T162502_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_GOPR_2_20200730T171701_20200730T171821_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (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.

Number of products with errors:

Product	Test Failed	Description
	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_20200730T014433_20200730T014855_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
	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_20200730T050255_20200730T050845_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
	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_20200730T063745_20200730T063818_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_20200730T064305_20200730T064718_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_20200730T065120_20200730T065509_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_20200730T072514_20200730T072655_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_20200730T072805_20200730T072943_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_20200730T082504_20200730T082928_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_20200730T090519_20200730T090853_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20200730T093219_20200730T093402_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_20200730T094341_20200730T094529_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_20200730T100401_20200730T100542_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_20200730T100650_20200730T100810_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_20200730T105310_20200730T105435_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20200730T111454_20200730T111812_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_20200730T122150_20200730T122442_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20200730T131441_20200730T131535_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_20200730T135958_20200730T140139_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_20200730T145244_20200730T145506_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20200730T150835_20200730T151209_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_20200730T153918_20200730T154104_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20200730T155559_20200730T155627_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_20200730T160628_20200730T161204_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_20200730T162917_20200730T163348_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_20200730T171821_20200730T172111_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPN_2_20200730T172733_20200730T173038_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_20200730T180623_20200730T180745_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_20200730T180826_20200730T181211_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_20200730T194343_20200730T194905_C001 CS_OFFL_SIR_GOPN_2_20200730T203748_20200730T203912_C001 CS_OFFL_SIR_GOPN_2_20200730T203748_20200730T203912_C001 CS_OFFL_SIR_GOPN_2_20200730T203748_20200730T203912_C001 CS_OFFL_SIR_GOPN_2_20200730T204721_20200730T204834_C001 CS_OFFL_SIR_GOPN_2_20200730T204721_20200730T204834_C001 CS_OFFL_SIR_GOPN_2_20200730T212449_20200730T212621_C001 CS_OFFL_SIR_GOPN_2_20200730T212449_20200730T212621_C001 CS_OFFL_SIR_GOPN_2_20200730T212449_20200730T212621_C001 CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T214035_20200730T214158_C001 CS_OFFL_SIR_GOPN_2_20200730T214035_20200730T214158_C001 CCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality CCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set more records. The OCOG Range and Backscatter Quality Flags have been set more records. The OCOG Range and Backscatter Quality Flags have been set more records. CCOG Backscatter Quality CCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set more records. CCOG Backscatter Quality CCOG Backscatter Quality PLRM, OCOG Ba	ty Flags ave been ty Flags ave been for one or
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPN_2_20200730T204721_20200730T204834_C001 CS_OFFL_SIR_GOPN_2_20200730T204721_20200730T204834_C001 CS_OFFL_SIR_GOPN_2_20200730T212449_20200730T212621_C001 CS_OFFL_SIR_GOPN_2_20200730T212449_20200730T212621_C001 CS_OFFL_SIR_GOPN_2_20200730T212449_20200730T212621_C001 CS_OFFL_SIR_GOPN_2_20200730T212449_20200730T212621_C001 CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T214035_20200730T214158_C001 CS_OFFL_SIR_GOPN_2_20200730	ty Flags ave been for one or
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_GOPN_2_20200730T212449_20200730T212621_C001 CS_OFFL_SIR_GOPN_2_20200730T212449_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T214035_20200730T214158_C001 CCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality CCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set more records. CCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality CCOG Backscatter Quality CCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set more records. CCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality CCOG Backscatter Quality CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set more records. CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set more records. CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set more records. CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set more records. CCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set more records.	for one or
CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T212703_20200730T212836_C001 CS_OFFL_SIR_GOPN_2_20200730T214035_20200730T214158_C001 CS_OFFL_SIR_GOPN_2_20200730T214035_20200730T214158_C001 COG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set more records. CS_OFFL_SIR_GOPN_2_20200730T214035_20200730T214158_C001 COG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set more records.	for one or
OCOG Backscatter Quality CS_OFFL_SIR_GOPN_2_20200730T214035_20200730T214158_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set more records.	
OCOG Backscatter Quality OCOG Backscatter Quality OCOG Backscatter Quality More records. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG	for one or
and Backscatter Quality PLRM_OCOG_ The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality	
CS_OFFL_SIR_GOPR_2_20200729T235714_20200730T000431_C001 Altimeter Range and Backscatter Quality Flags h PLRM And the OCOG Altimeter Range and Backscatter Quality Flags h set for one or more records.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Quality Flags have for one or more records.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Quality PLRM The Ocean Altimeter Range and Backscatter Quality PLRM and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Quality PLRM The Ocean Altimeter Range and Backscatter Quality PLRM and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Qua	
CS_OFFL_SIR_GOPR_2_20200730T013712_20200730T013835_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set more records.	for one or
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been dependent on the Ocog Altimeter Range and Backscatter Quality Flags have for one or more records.	
CS_OFFL_SIR_GOPR_2_20200730T043544_20200730T044008_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set more records.	for one or
CS_OFFL_SIR_GOPR_2_20200730T044012_20200730T044235_C001 OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set more records.	for one or
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Quality PLRM.	
CS_OFFL_SIR_GOPR_2_20200730T063413_20200730T063631_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set more records.	for one or
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM of one or more records. Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Quality PLRM.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Quality PLRM.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM and Backscatter Quality PLRM.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM OCOG Altimeter Range and Backscatter Quality Flags here for one or more records.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM OCOG Altimeter Range and Backscatter Quality Flags her for one or more records.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality and the OCOG Altimeter Range and Backscatter Quality Flags have for one or more records.	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM The Ocean Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM The Ocean Altimeter Range and Backscatter Quality PLRM	
Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM The OCOG Altimeter Range and Backscatter Quality PLRM The OCOG Altimeter Range and Backscatter Quality PLRM The OCOG Altimeter Range and Backscatter Quality PLRM	
CS_OFFL_SIR_GOPR_2_20200730T143035_20200730T143249_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set more records.	for one or

CS_OFFL_SIR_GOPR_2_20200730T145507_20200730T150240_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T162435_20200730T162502_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T163348_20200730T164101_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T165442_20200730T165615_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T181211_20200730T182055_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T190932_20200730T191155_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T203547_20200730T203748_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T204834_20200730T205211_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T212837_20200730T213503_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T214005_20200730T214035_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T214158_20200730T214232_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_GOPR_2_20200730T221406_20200730T221725_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (1 Hz & 1Hz PLRM)

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.

Number of products with errors:

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: 13

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:

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).

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.

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

Number of products with errors:

28

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20200729T231358_20200730T000334_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T000334_20200730T005312_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T005312_20200730T014249_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T014249_20200730T023227_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_2_20200730T023227_20200730T032203_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T032203_20200730T041142_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T041142_20200730T050118_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T050118_20200730T055056_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T055056_20200730T064033_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T064033_20200730T073011_C001	mean sea surrace (1), mean uynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) Non-Equilibrium Long Perior	Inere is an error with the MSS neight (solution 1) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20200730T073011_20200730T081947_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T081947_20200730T090926_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_2_20200730T090926_20200730T095902_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T095902_20200730T104840_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T104840_20200730T113816_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T113816_20200730T122755_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T122755_20200730T131731_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T131731_20200730T140709_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T140709_20200730T145646_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T145646_20200730T154624_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T154624_20200730T163600_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_2_20200730T163600_20200730T172538_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) Mean Sea Surrace (1), Mean Dynamic	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 r more records
CS_OFFL_SIR_GOP_2_20200730T172538_20200730T181515_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) Non-Fauilibrium Long Perioc	Inére is an error with trie wss neight (solution 1) and the mean Lynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20200730T181515_20200730T190453_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T190453_20200730T195429_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_2_20200730T195429_20200730T204408_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T204408_20200730T213344_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20200730T213344_20200730T222322_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

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:

5

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20200730T005312_20200730T014249_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_GOP_220200730T041142_20200730T050118_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_20200730T050118_20200730T055056_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_20200730T145646_20200730T154624_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_20200730T163600_20200730T172538_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: 27

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:

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: 2

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:

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: 28

7. GOP QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_GOPM1B	138	138	4	134	0
SIR_GOPR1B	100	100	0	100	0
SIR_GOPN1B	97	97	4	93	0
SIR_GOPM_2	138	138	87	51	0
SIR_GOPR_2	100	100	26	73	1
SIR_GOPN_2	97	97	36	61	0
SIR_GOP_P2P	27	27	0	26	1

7.1 QCC Errors

Number of QCC reports with errors:

2

Total number of occurrences of each error

Product Type	RLOBOPNCDF	RL	RL	RLOBOPNCDF	RL	RL	-	•	-	-	•
SIR_GOPR_2	1	1	1	1	1	1					
'											
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-

Test Description Key:	est Description Key:						
Abbreviation	Test name	Details					
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7					
RL	RangeLatitude_6	Latitude should be between -90E6 and 90E6					
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7					
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7					
RL	RangeLongitude_6	Longitude should be between -180E6 and 180E6					
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7					

7.2 QCC Warnings

Number of QCC reports with warnings

2060

er of occurrences of	

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_GOPM1B	134	0	0	0	0	0	0
SIR_GOPM_2	0	0	38	45	0	38	0
SIR_GOPN1B	92	0	0	0	0	0	0
SIR_GOPN_2	0	0	12	33	6	28	32
SIR_GOPR1B	97	0	0	0	0	0	0
SIR GOPR 2	0	1	34	37	1	32	25

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCE	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	30	0	33	0	0	0	0
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	18	0	0	0	26	0	34
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	16	1	0	38	0	48	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	29	0	0	3	28	0	4
SIR_GOPN1B	0	0	0	0	0	0	0

SIR_GOPN_2	0	0	28	18	40	51	26
SIR_GOPR1B	0	0	0	0	0	0	0
	0	37	0	1	61	49	16

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	•
SIR_GOPM1B	0	0	0	0	0	0	
SIR_GOPM_2	32	0	1	0	0	0	
SIR_GOPN1B	0	0	0	0	45	1	
SIR_GOPN_2	31	32	15	5	0	0	
SIR_GOPR1B	0	0	0	0	100	4	
SIR_GOPR_2	39	48	1	2	0	0	

	Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
ſ	SIR_GOP_2_	18	27	27	7	27	17	25

Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_GOP_2_	1	18	27	21	16	27	17

Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	•
SIR_GOP_2_	22	27	18	15	27		

Test Description Key:		
Abbreviation	Test name	Details
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPFDPLRM	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between 70 and 70 degrees
NCDF RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

7.3 Missing QCC Reports