







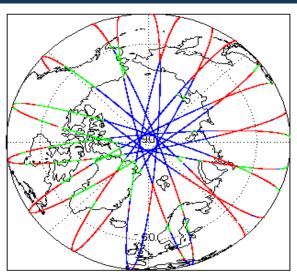
# 1. Overview

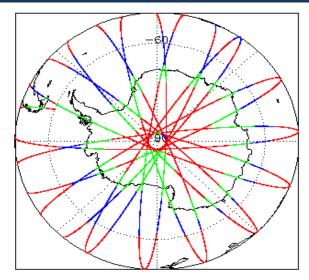
Report Production:	06-Nov-2019	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	

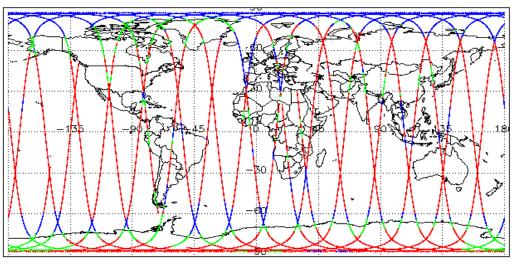
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary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

Mission / Instru	ment News
05-Oct-2019	None
06-Oct-2019	None
07-Oct-2019	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:

0

### 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:

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:

4

Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20191006T005627_20191006T005721_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

### 4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

20

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Product	Test Failed	Description
CS_OFFL_SIR_GOPM1B_20191006T054215_20191006T055749_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPM1B_20191006T070730_20191006T071614_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T005956_20191006T010048_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T024222_20191006T024506_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T060105_20191006T060320_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T070423_20191006T070730_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T073730_20191006T074151_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T091403_20191006T092013_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T105306_20191006T105715_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T172502_20191006T172807_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T192034_20191006T192252_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPN1B_20191006T215136_20191006T215421_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191006T010426_20191006T011238_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191006T020256_20191006T020701_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191006T064608_20191006T064737_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191006T074151_20191006T074712_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191006T083903_20191006T084111_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191006T110528_20191006T110606_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191006T132139_20191006T132543_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_GOPR1B_20191006T205554_20191006T210002_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:

### 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 Corection, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

Number of products with errors: 51 **Product** Test Failed Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), Total Geocentric Ocean Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean CS\_OFFL\_SIR\_GOPM\_2\_20191006T054215\_20191006T055749\_C001 Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Tide for one or more records Ocean Tide There is an error with the Mean Dynamic Topography (solution 1) for one CS OFFL SIR GOPM\_2\_20191006T092752\_20191006T093022\_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography (solution 1) for one CS OFFL SIR GOPM 2 20191006T205113 20191006T205150 C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography (solution 1) for one CS\_OFFL\_SIR\_GOPM\_2\_20191006T205150\_20191006T205419\_C001 Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_GOPN\_2\_20191006T001353\_20191006T001716\_C001 Topography height (solution 1) for one or more records Topography (1) There is an error with the Mean Dynamic Topography (solution 1) for one CS\_OFFL\_SIR\_GOPN\_2\_20191006T002240\_20191006T002358\_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography (solution 1) for one CS\_OFFL\_SIR\_GOPN\_2\_20191006T011238\_20191006T011605\_C001 Mean Dynamic Topography (1) or more records There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS\_OFFL\_SIR\_GOPN\_2\_20191006T015251\_20191006T015611\_C001 Topography height (solution 1) for one or more records Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_GOPN\_2\_20191006T024222\_20191006T024506\_C001 Topography height (solution 1) for one or more records Topography (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Mean Sea Surface (1), Mean Dynamic CS OFFL SIR GOPN 2 20191006T034004 20191006T034134 C001 Topography (1) Topography height (solution 1) for one or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_GOPN\_2\_20191006T042304\_20191006T042406\_C001 Topography height (solution 1) for one or more records Topography (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_GOPN\_2\_20191006T051725\_20191006T051929\_C001 Topography (1) Topography height (solution 1) for one or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_GOPN\_2\_20191006T060105\_20191006T060320\_C001 Topography (1) Topography height (solution 1) for one or more records There is an error with the Mean Dynamic Topography (solution 1) for one CS\_OFFL\_SIR\_GOPN\_2\_20191006T064737\_20191006T064924\_C001 Mean Dynamic Topography (1) or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), Total Geocentric Ocean Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total CS\_OFFL\_SIR\_GOPN\_2\_20191006T070423\_20191006T070730\_C001 Tide (GOT), Total Geocentric Ocean eocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide (FES), Non-Equilibrium Long Period Tide for one or more records There is an error with the Mean Dynamic Topography (solution 1) for one CS OFFL SIR GOPN 2 20191006T073730 20191006T074151 C001 Mean Dynamic Topography (1) or more records There is an error with the Mean Dynamic Topography (solution 1) for one CS OFFL SIR GOPN 2 20191006T083656 20191006T083903 C001 Mean Dynamic Topography (1) or more records There is an error with the Mean Dynamic Topography (solution 1) for one CS OFFL SIR GOPN 2 20191006T091403 20191006T092013 C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography (solution 1) for one Mean Dynamic Topography (1) CS\_OFFL\_SIR\_GOPN\_2\_20191006T114615\_20191006T114739\_C001 or more records There is an error with the Mean Dynamic Topography (solution 1) for one CS\_OFFL\_SIR\_GOPN\_2\_20191006T132543\_20191006T132709\_C001 Mean Dynamic Topography (1) or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_GOPN\_2\_20191006T133222\_20191006T133523\_C001 Topography (1) Topography height (solution 1) for one or more records There is an error with the Mean Dynamic Topography (solution 1) for one CS\_OFFL\_SIR\_GOPN\_2\_20191006T150553\_20191006T150857\_C001 Mean Dynamic Topography (1) or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS OFFL SIR GOPN 2 20191006T151123 20191006T151638 C001 Topography height (solution 1) for one or more records Topography (1) CS OFFL SIR GOPN 2 20191006T160222 20191006T160244 C001 There is an error with the MSS height (solution 1) for one or more records Mean Sea Surface (1) Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS OFFL SIR GOPN 2 20191006T164600 20191006T164835 C001 Topography (1) Γopography height (solution 1) for one or more re Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS\_OFFL\_SIR\_GOPN\_2\_20191006T174109\_20191006T174225\_C001 Topography (1) opography height (solution 1) for one or more records Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean opography height (solution 1), Total Geocentric Ocean Tide (GOT), Total CS OFFL SIR GOPN 2 20191006T174424 20191006T174703 C001 Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide (FES), Non-Equilibrium Long Period Tide for one or more records Ocean Tide

Mean Sea Surface (1), Mean Dynamic

Topography (1)

CS\_OFFL\_SIR\_GOPN\_2\_20191006T182100\_20191006T182704\_C001

There is an error with the MSS height (solution 1) and the Mean Dynamic

Topography height (solution 1) for one or more records

CS_OFFL_SIR_GOPN_2_20191006T192034_20191006T192252_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_20191006T200318_20191006T200503_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_20191006T210003_20191006T210425_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_20191006T215136_20191006T215421_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_20191006T232240_20191006T232629_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_20191006T010426_20191006T011238_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_20191006T024506_20191006T025301_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_20191006T042407_20191006T042953_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_20191006T060321_20191006T061018_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_20191006T074151_20191006T074712_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_20191006T092013_20191006T092751_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_20191006T105715_20191006T110452_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_20191006T123642_20191006T124314_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_20191006T124314_20191006T124450_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_20191006T141445_20191006T142213_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_20191006T142213_20191006T142403_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_20191006T155636_20191006T160108_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_20191006T160108_20191006T160222_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_20191006T173429_20191006T173941_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_20191006T173941_20191006T174109_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_20191006T191603_20191006T192034_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_20191006T205554_20191006T210002_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_20191006T223420_20191006T224043_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

# 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20191006T005627_20191006T005721_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: 83

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20191005T233707_20191006T000920_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_20191006T001716_20191006T002240_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_20191006T004319_20191006T004819_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

Decay   All   Company   Decay   All   Company   Decay   Deca	CS_OFFL_SIR_GOPM_2_20191006T010048_20191006T010426_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.
65 GPM_SR_COMP_2_0010000001030103010000103010_0001   66 GPM_SR_COMP_2_00100000000103010_00010000103010_0001   66 GPM_SR_COMP_2_00100000000103010_00010000103010_0001   66 GPM_SR_COMP_2_00100000000103010_00010000103010_0001   66 GPM_SR_COMP_2_001000000000103010_00010000103010_0001   66 GPM_SR_COMP_2_001000000000103010_00010000103010_0001   66 GPM_SR_COMP_2_0010000000000103010_00010000103010_0001   66 GPM_SR_COMP_2_00100000000000103010_0001000000000000	CS_OFFL_SIR_GOPM_2_20191006T011606_20191006T012516_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Reconstant Quality  Co. CHTL.SR., COMM. 2. 2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/12/2019/08/07/09/2019/08/09/2019/0	CS_OFFL_SIR_GOPM_2_20191006T012801_20191006T014924_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Becasser Quality  CB OPH, SR GOPM 2 20191000112971 291910811021700 CO1  CB OPH, SR GOPM 2 20191000112912 291910811021704 CO1  CB OPH, SR GOPM 2 20191000112912 291910811021704 CO1  CB OPH, SR GOPM 2 20191000112912 291910811021004 CO1  CB OPH, SR GOPM 2 20191000112912 291910811021004 CO1  CB OPH, SR GOPM 2 20191000112912 2919108110210000, CO1  CB OPH, SR GOPM 2 20191000112912 2919108110001000, CO1  CB OPH, SR GOPM 2 20191000112912 2919108110001000, CO1  CB OPH, SR GOPM 2 20191000112912 29191081100000, CO1  CB OPH, SR GOPM 2 20191000112910 29191081100000, CO1  CB OPH, SR GOPM 2 20191000112910 29191081100000, CO1  CB OPH, SR GOPM 2 20191000112910 29191081100000, CO1  CB OPH, SR GOPM 2 2019100011292 2919108100000, CO1  CB OPH, SR GOPM 2 2019100011292 29191081000	CS_OFFL_SIR_GOPM_2_20191006T015612_20191006T015719_C001		
Se, OFFL_SR_COPM_2_20191008T02071_2019100T02035_C001  See Described Coality Code  See	CS_OFFL_SIR_GOPM_2_20191006T015723_20191006T020132_C001		
Microse Fixer Page 20 (2014)	CS_OFFL_SIR_GOPM_2_20191006T020701_20191006T021703_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
GB_OFFL_SR_GOPM_2_20191006T02410_2019106T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03302_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03302_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03302_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03302_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03302_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03302_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03302_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03302_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03200_20191006T03200_C001  SR_GOFFL_SR_GOPM_2_20191006T03200_C0191006T	CS_OFFL_SIR_GOPM_2_20191006T021823_20191006T022305_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality COGA Altimeter Range and Backscatter Quality Rage have been self-bridge and Backscat	CS_OFFL_SIR_GOPM_2_20191006T024110_20191006T024143_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backouster Cuality  OCCO Affirmeter Range Quality, COCO  Social Affirmeter Range Quality, COCO  Social Affirmeter Range Quality, COCO  Social Affirmeter Range and Backouster Quality Flags have been set for one or more records.  OCCO Affirmeter Range Quality, COCO  Social Affirmeter Range and Backouster Quality Flags have been set for one or more records.  The COCO Affirmeter Range and Backouster Quality Flags have been set for one or more records.  The COCO Affirmeter Range and Backouster Quality Flags have been set for one or more records.  The COCO Affirmeter Range and Backouster Quality Flags have been set for one or more records.  The COCO Affirmeter Range and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range SISHA, SWH and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range SISHA, SWH and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range SISHA, SWH and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range SISHA, SWH and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range SISHA, SWH and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range SISHA, SWH and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range SISHA, SWH and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range SISHA, SWH and Backouster Quality Flags have been set for one or more records.  Social Affirmeter Range SISHA, SWH and Backouster Quality Flags have been set for one or more records.	CS_OFFL_SIR_GOPM_2_20191006T025308_20191006T032806_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Bodoscater Quality  CS_OFFL_SIR_GOPM_2_2019100ET034387_2019100ET041855_CD01  CS_OFFL_SIR_GOPM_2_2019100ET034717_2019100ET041855_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054717_201910ET041855_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054209_201910ET044855_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054209_201910ET044855_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054209_201910ET044855_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054209_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054208_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054208_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054038_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054038_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054038_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054038_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054038_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054508_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET054038_201910ET05455_CD01  CS_OFFL_SIR_GOPM_2_2019100ET05455_CD01910ET	CS_OFFL_SIR_GOPM_2_20191006T033122_20191006T033617_C001		
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20191006T094797_20191006T094555_C001  CS_OFFL_SIR_GOPM_2_20191006T094309_20191006T094555_C001  CS_OFFL_SIR_GOPM_2_20191006T094309_20191006T094555_C001  CS_OFFL_SIR_GOPM_2_20191006T094309_20191006T094555_C001  CS_OFFL_SIR_GOPM_2_20191006T094309_20191006T094555_C001  CS_OFFL_SIR_GOPM_2_20191006T094309_20191006T094509_C0019106T	CS_OFFL_SIR_GOPM_2_20191006T033623_20191006T033630_C001		
and Backscater Coustly, OCOG Allimeter Range and Backscater Coustly Flags have been self or one or or or more records.  CS_OFFL_SIR_GOPM_2_20191006T043209_20191006T04555_CO01  CS_OFFL_SIR_GOPM_2_20191006T04309_20191006T05700_CO01  CS_OFFL_SIR_GOPM_2_20191006T04309_20191006T05700_CO01  CS_OFFL_SIR_GOPM_2_20191006T045095_20191006T051515_CO01  CS_OFFL_SIR_GOPM_2_20191006T051500_20191006T051515_CO01  CS_OFFL_SIR_GOPM_2_20191006T051500_20191006T051724_CO01  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T051724_CO01  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T053749_CO01  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T053749_CO01  CS_OFFL_SIR_GOPM_2_20191006T055004_20191006T053749_CO01  CS_OFFL_SIR_GOPM_2_20191006T055004_20191006T053749_CO01  CS_OFFL_SIR_GOPM_2_20191006T055004_20191006T053749_CO01  CS_OFFL_SIR_GOPM_2_20191006T055004_20191006T053749_CO01  CS_OFFL_SIR_GOPM_2_20191006T055004_20191006T053749_CO01  CS_OFFL_SIR_GOPM_2_20191006T055004_20191006T053749_CO01  CS_OFFL_SIR_GOPM_2_20191006T055004_20191006T0500044_CO01  CS_OFFL_SIR_GOPM_2_20191006T055004_20191006T0500044_CO01  CS_OFFL_SIR_GOPM_2_20191006T0500044_CO01  CS_OFFL_SIR_GOPM_2_20191006T05000044_CO01  CS_OFFL_SIR_GOPM_2_20191006T05000044_CO01  CS_OFFL_SIR_GOPM_2_20191006T05000044_CO01  CS_OFFL_SIR_GOPM_2_20191006T05000044_CO01  CS_OFFL_SIR_GOPM_2_20191006T05000044_CO01  CS_OFFL_SIR_GOPM_2_20191006T05000044_CO01  CS_OFFL_SIR_GOPM_2_20191006T05000044_CO01  CCCOMA Number Range SSHA, SWH and Backscatter Quality Flags have been self to one or one records.  CS_OFFL_SIR_GOPM_2_20191006T00000044_CO01  CCCOMA Number Range SSHA, SWH and Backscatter Quality F	CS_OFFL_SIR_GOPM_2_20191006T033637_20191006T034004_C001		
CS_OFFL_SIR_GOPM_2_20191006T04936_20191006T059720_C001  CS_OFFL_SIR_GOPM_2_20191006T04936_20191006T059720_C001  CS_OFFL_SIR_GOPM_2_20191006T04936_20191006T059720_C001  CS_OFFL_SIR_GOPM_2_20191006T051001_20191006T051515_C001  CS_OFFL_SIR_GOPM_2_20191006T051001_20191006T051515_C001  CS_OFFL_SIR_GOPM_2_20191006T051550_20191006T051724_C001  CS_OFFL_SIR_GOPM_2_20191006T051550_20191006T051724_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T0573855_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T055904_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T055904_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T050505_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T050505_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T050504_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T050505_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T060505_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T060505_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T060505_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T060505_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T060505_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T060505_20191006T050505_C001  CS_OFFL_SIR_GOPM_2_20191006T060505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_20191006T050505_201910	CS_OFFL_SIR_GOPM_2_20191006T034717_20191006T041855_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191006T045036_20191006T051724_C001  CS_OFFL_SIR_GOPM_2_20191006T05150_20191006T051724_C001  CS_OFFL_SIR_GOPM_2_20191006T05155_20191006T051724_C001  CS_OFFL_SIR_GOPM_2_20191006T05155_20191006T051724_C001  CS_OFFL_SIR_GOPM_2_20191006T05155_20191006T051724_C001  CS_OFFL_SIR_GOPM_2_20191006T05155_20191006T051724_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T053555_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T053555_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T052526_20191006T055749_C001  CS_OFFL_SIR_GOPM_2_20191006T052526_20191006T0505749_C001  CS_OFFL_SIR_GOPM_2_20191006T052504_20191006T060044_C001  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T060046_C001  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T0600646_C001  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T060408_C001  CS_OFFL_SIR_GOPM_2_20191006T0602035_20191006T064086_C001  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T064086_C001  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T064025_C001  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070424_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070424_C0	CS_OFFL_SIR_GOPM_2_20191006T043209_20191006T044555_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20191006T051550_20191006T051724_C001  DCGA Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T053855_C001  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T053855_C001  DCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20191006T054215_20191006T055749_C001  DCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  DCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.  The OCGA Altimeter Range and Backscatter Quality	CS_OFFL_SIR_GOPM_2_20191006T045036_20191006T050720_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T053855_CO01  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T053855_CO01  CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T05749_CO01  CS_OFFL_SIR_GOPM_2_20191006T054215_20191006T05749_CO01  CS_OFFL_SIR_GOPM_2_20191006T054215_20191006T05749_CO01  CS_OFFL_SIR_GOPM_2_20191006T055904_20191006T060044_CO01  CS_OFFL_SIR_GOPM_2_20191006T058042_20191006T060044_CO01  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T060044_CO01  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T060044_CO01  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T064082_CO01  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064082_CO01  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T064082_CO01  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T064082_CO01  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T064082_CO01  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T064242_CO01  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T064242_CO01  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T064242_CO01  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T064242_CO01  CS_OFFL_SIR_GOPM_2_20191006T064024_20191006T070423_CO01  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_CO01  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_CO01  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_CO01  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_CO01  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_CO01  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070446_CO01  CS_OFFL_SIR_GOPM_2_20191006T07030	CS_OFFL_SIR_GOPM_2_20191006T051001_20191006T051515_C001		
and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags and Backscatter Quality COCG Altimeter Range and Backscatter Quality Flags and Backscatter Quality COCG Altimeter Range and Backscatter Quality Flags and Backscatter Quality Flags and Backscatter Quality Flags and Backscatter Quality CS_OFFL_SIR_GOPM_2_20191006T055904_20191006T060044_C001  CS_OFFL_SIR_GOPM_2_20191006T065904_20191006T060044_C001  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T063056_C001  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T063056_C001  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T063056_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064608_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064608_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064608_C001  CS_OFFL_SIR_GOPM_2_20191006T064924_20191006T06425_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070	CS_OFFL_SIR_GOPM_2_20191006T051550_20191006T051724_C001		
and the OCGS Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been and the OCGS Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality Flags have been Altimeter Range RopM_2_20191006T062035_20191006T063056_C001  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T063056_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T06408_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T06408_C001  CS_OFFL_SIR_GOPM_2_20191006T064924_20191006T065425_C001  CS_OFFL_SIR_GOPM_2_20191006T064924_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T077446_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T077446_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T077653_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T077653_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T077653_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T077653_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T077653_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T0776402_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T0776402_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T0776402_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T0776402_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T0776402_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T0776402_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T0776402_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T0776402_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_20191006T0776402_20191006T0776653_C001  CS_OFFL_SIR_GOPM_2_2019100	CS_OFFL_SIR_GOPM_2_20191006T052518_20191006T053855_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T063056_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T06408_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T06408_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T06408_C001  CS_OFFL_SIR_GOPM_2_20191006T064924_20191006T06408_C001  CS_OFFL_SIR_GOPM_2_20191006T064924_20191006T065425_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T0704246_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C001  CS_OFFL_SIR_GOPM_2_20191006T070350_20191006T070446_C	CS_OFFL_SIR_GOPM_2_20191006T054215_20191006T055749_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064608_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064608_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064608_C001  CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064608_C001  CS_OFFL_SIR_GOPM_2_20191006T064924_20191006T065425_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T072446_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T072446_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T072446_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T072446_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T07073402_20191006	CS_OFFL_SIR_GOPM_2_20191006T055904_20191006T060044_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064608_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.  CS_OFFL_SIR_GOPM_2_20191006T064924_20191006T065425_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T072446_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T072446_C001  CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T072446_C001  CS_OFFL_SIR_GOPM_2_20191006T073402_20191006T073653_C001  And Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality Flags hav	CS_OFFL_SIR_GOPM_2_20191006T062035_20191006T063056_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality  CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  DOCEAN 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, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and t	CS_OFFL_SIR_GOPM_2_20191006T063236_20191006T064608_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range Altimeter Range, SSHA, SWH and Backscatter Quality	CS_OFFL_SIR_GOPM_2_20191006T064924_20191006T065425_C001		
CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001  and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA,	CS_OFFL_SIR_GOPM_2_20191006T070300_20191006T070423_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191006T071959_20191006T072446_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flag	CS_OFFL_SIR_GOPM_2_20191006T070730_20191006T071614_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_GOPM_2_20191006T073402_20191006T073653_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_GOPM_2_20191006T071959_20191006T072446_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_GOPM_2_20191006T073402_20191006T073653_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_GOPM_2_20191006T080157_20191006T080228_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_20191006T080334_20191006T082428_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_20191006T084111_20191006T090519_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_20191006T092752_20191006T093022_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_20191006T094020_20191006T100407_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_20191006T100739_20191006T101256_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_20191006T101302_20191006T101629_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_20191006T102022_20191006T105305_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_20191006T110606_20191006T111308_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_20191006T111718_20191006T113503_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_20191006T113929_20191006T114324_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_20191006T114739_20191006T115330_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_20191006T120123_20191006T123254_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_20191006T123629_20191006T123642_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_20191006T124450_20191006T124706_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_20191006T131220_20191006T132139_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_20191006T132709_20191006T133222_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_20191006T133939_20191006T140034_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_20191006T140318_20191006T141445_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_20191006T142404_20191006T142641_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_20191006T144315_20191006T144927_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_20191006T144931_20191006T150114_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_20191006T151856_20191006T155443_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_20191006T160627_20191006T162624_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_20191006T162634_20191006T163915_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_20191006T165220_20191006T165535_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_20191006T165807_20191006T171255_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_20191006T171458_20191006T172502_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_20191006T174704_20191006T180335_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_20191006T182001_20191006T182059_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_20191006T182704_20191006T182951_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_20191006T183006_20191006T183435_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_20191006T183738_20191006T185122_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_20191006T185301_20191006T185454_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_20191006T192608_20191006T192827_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_20191006T193824_20191006T200112_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_20191006T200503_20191006T201340_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_20191006T201723_20191006T204116_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_20191006T211258_20191006T214034_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_20191006T214717_20191006T215136_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_20191006T215645_20191006T222457_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_20191006T222754_20191006T223420_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_20191006T224808_20191006T231814_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_20191006T232629_20191006T233216_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_20191006T233545_20191006T233958_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_20191006T003653_20191006T003815_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_20191006T005534_20191006T005559_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_20191006T075757_20191006T080157_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_20191006T083656_20191006T083903_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_20191006T130752_20191006T130819_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_20191006T180756_20191006T180816_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_20191006T232240_20191006T232629_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_20191006T065426_20191006T065432_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	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.

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Number of products with errors:

Product **Test Failed** Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS OFFL SIR GOPN 2 20191006T001353 20191006T001716 C001 Altimeter Range and Backscatter Quality set for one or more records OCOG Altimeter Range Quality PLRM. The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR GOPN 2 20191006T002240 20191006T002358 C001 OCOG Backscatter Quality OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR GOPN 2 20191006T003653 20191006T003815 C001 OCOG Backscatter Quality more records. The OCOG Range and Backscatter Quality Flags have been set for one or OCOG Altimeter Range Quality PLRM, CS\_OFFL\_SIR\_GOPN\_2\_20191006T005956\_20191006T010048\_C001 OCOG Backscatter Quality more records. Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been CS OFFL SIR GOPN 2 20191006T011238 20191006T011605 C001 Altimeter Range and Backscatter Quality set for one or more records PI RM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality PLRM, OCOG CS\_OFFL\_SIR\_GOPN\_2\_20191006T015251\_20191006T015611\_C001 Altimeter Range and Backscatter Quality set for one or more records. PLRM The OCOG Range and Backscatter Quality Flags have been set for one or OCOG Altimeter Range Quality PLRM, CS\_OFFL\_SIR\_GOPN\_2\_20191006T020132\_20191006T020255\_C001 OCOG Backscatter Quality more records. OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR GOPN 2 20191006T022305 20191006T022630 C001 OCOG Backscatter Quality OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS\_OFFL\_SIR\_GOPN\_2\_20191006T024222\_20191006T024506\_C001 OCOG Backscatter Quality more records. Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags CS\_OFFL\_SIR\_GOPN\_2\_20191006T032919\_20191006T033121\_C001 and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality set for one or more records. PI RM OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR GOPN 2 20191006T051546 20191006T051550 C001 OCOG Backscatter Quality more records. Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG CS\_OFFL\_SIR\_GOPN\_2\_20191006T060105\_20191006T060320\_C001 and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality set for one or more records. PLRM The OCOG Range and Backscatter Quality Flags have been set for one or OCOG Altimeter Range Quality PLRM, CS OFFL SIR GOPN 2 20191006T061755 20191006T062035 C001 OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags CS OFFL SIR GOPN 2 20191006T064737 20191006T064924 C001 and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality set for one or more records OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR GOPN 2 20191006T065500 20191006T065504 C001 OCOG Backscatter Quality more records. The OCOG Range and Backscatter Quality Flags have been set for one or OCOG Altimeter Range Quality PLRM. CS\_OFFL\_SIR\_GOPN\_2\_20191006T070423\_20191006T070730\_C001 OCOG Backscatter Quality OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR GOPN 2 20191006T071615 20191006T071958 C001 OCOG Backscatter Quality more records. OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR GOPN 2 20191006T073730 20191006T074151 C001 OCOG Backscatter Quality more records. OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or CS OFFL SIR GOPN 2 20191006T075757 20191006T080157 C001 OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality PLRM, OCOG CS\_OFFL\_SIR\_GOPN\_2\_20191006T082642\_20191006T082958\_C001 Altimeter Range and Backscatter Quality set for one or more records PLRM Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been CS\_OFFL\_SIR\_GOPN\_2\_20191006T083656\_20191006T083903\_C001 Altimeter Range and Backscatter Quality set for one or more records PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags CS OFFL SIR GOPN 2 20191006T091403 20191006T092013 C001 and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality set for one or more records PI RM The OCOG Range and Backscatter Quality Flags have been set for one or OCOG Altimeter Range Quality PLRM, CS\_OFFL\_SIR\_GOPN\_2\_20191006T093813\_20191006T094020\_C001 OCOG Backscatter Quality more records. ean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM. OCOG CS\_OFFL\_SIR\_GOPN\_2\_20191006T105306\_20191006T105715\_C001 and the OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality set for one or more records. PI RM

CS_OFFL_SIR_GOPN_2_20191006T114615_20191006T114739_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_20191006T115532_20191006T115645_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_20191006T124850_20191006T125010_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_20191006T130248_20191006T130432_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_20191006T133222_20191006T133523_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_20191006T144138_20191006T144154_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_20191006T144207_20191006T144315_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_20191006T150553_20191006T150857_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_20191006T151123_20191006T151638_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_20191006T155614_20191006T155635_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_20191006T165031_20191006T165220_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_20191006T172502_20191006T172807_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_20191006T174424_20191006T174703_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_20191006T180756_20191006T180816_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_20191006T182100_20191006T182704_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_20191006T192034_20191006T192252_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_20191006T192339_20191006T192517_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_20191006T200318_20191006T200503_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_20191006T204116_20191006T204341_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_20191006T204951_20191006T205113_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_20191006T210003_20191006T210425_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_20191006T210535_20191006T210657_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_20191006T211121_20191006T211258_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_20191006T214600_20191006T214717_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_20191006T232240_20191006T232629_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_20191006T235043_20191006T235238_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_20191006T002358_20191006T002651_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_20191006T005059_20191006T005441_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_20191006T005721_20191006T005941_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_20191006T010426_20191006T011238_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_20191006T014924_20191006T015251_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_20191006T020256_20191006T020701_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_20191006T023058_20191006T023208_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_20191006T024506_20191006T025301_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_20191006T032806_20191006T032919_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_20191006T034134_20191006T034717_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_20191006T042407_20191006T042953_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_20191006T042958_20191006T043130_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_20191006T051929_20191006T052517_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_20191006T053856_20191006T054215_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_20191006T064608_20191006T064737_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_20191006T072609_20191006T072729_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_20191006T074151_20191006T074712_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_20191006T074733_20191006T074904_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_20191006T083903_20191006T084111_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_20191006T092013_20191006T092751_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_20191006T101753_20191006T102022_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_20191006T105715_20191006T110452_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_20191006T114324_20191006T114614_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_20191006T123642_20191006T124314_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_20191006T124314_20191006T124450_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_20191006T125506_20191006T125823_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_20191006T131013_20191006T131220_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_20191006T132139_20191006T132543_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_20191006T133524_20191006T133939_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_20191006T141445_20191006T142213_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_20191006T142213_20191006T142403_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_20191006T142641_20191006T143406_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_20191006T150115_20191006T150553_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_20191006T151638_20191006T151856_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_20191006T155443_20191006T155613_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_20191006T155636_20191006T160108_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_20191006T160108_20191006T160222_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_20191006T163915_20191006T164600_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_20191006T173429_20191006T173941_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_20191006T180335_20191006T180547_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_20191006T181946_20191006T182001_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_20191006T183618_20191006T183738_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_20191006T185122_20191006T185301_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_20191006T185734_20191006T190011_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_20191006T191413_20191006T191557_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_20191006T191603_20191006T192034_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_20191006T201523_20191006T201722_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_20191006T204524_20191006T204624_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_20191006T215421_20191006T215645_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_20191006T223420_20191006T224043_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_20191006T231814_20191006T232240_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_20191006T233334_20191006T233545_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.

### 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:

59

### 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:

139

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

### 6.1 P2P Product Format Check

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

Number of products with errors:

0

#### 6.2 P2P Product Header Analysis

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

Number of products with errors:

0

#### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

0

## 6.4 P2P Auxiliary Correction Error Check

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

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

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20191005T232811_20191006T001750_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_220191006T001750_20191006T010724_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_20191006T010724_20191006T015704_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_20191006T015704_20191006T024638_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_20191006T024638_20191006T033617_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_20191006T033617_20191006T042551_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_20191006T042551_20191006T051531_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_220191006T051531_20191006T060505_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), 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_20191006T060505_20191006T065444_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_20191006T065444_20191006T074419_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), 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_20191006T074419_20191006T083358_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_20191006T083358_20191006T092332_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_20191006T092332_20191006T101312_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_20191006T101312_20191006T110246_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_20191006T110246_20191006T115225_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_20191006T115225_20191006T124159_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_220191006T124159_20191006T133139_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_220191006T133139_20191006T142113_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_20191006T142113_20191006T151052_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_220191006T151052_20191006T160026_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_220191006T160026_20191006T165006_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_220191006T165006_20191006T173940_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_220191006T173940_20191006T182919_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), 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_20191006T182919_20191006T191854_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_20191006T191854_20191006T200833_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_220191006T200833_20191006T205807_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_220191006T205807_20191006T214747_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_20191006T214747_20191006T223721_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_20191006T223721_20191006T232700_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:

products with errors:

### 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:

### 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: 2

### 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: 3

## 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: 28

## P2P Retracking Flags PLRM

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

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

Number of products with errors: 30