

# IDEAS+ Daily Report for GOP data:

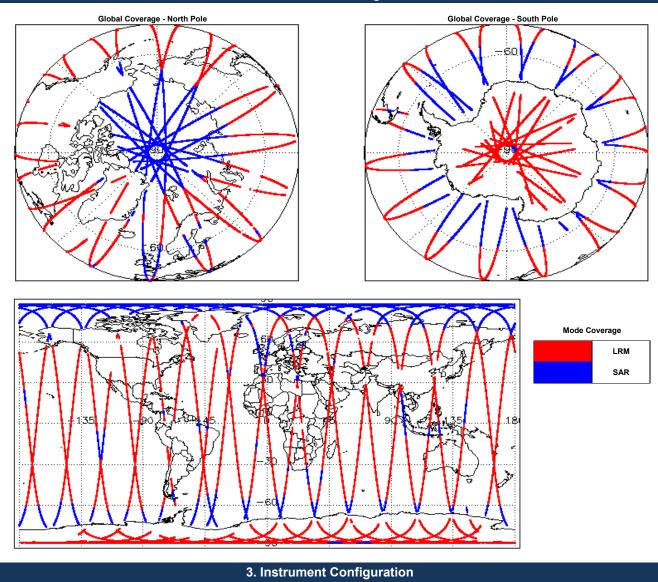
## <u>16/09/2016</u>

Report Production Date:	18-Oct-2016	Check	Status
		Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal
		Product Software Check	Nominal
Data Used:	Geophysical Ocean Products (GOP) L1B and L2 Science Data	Product Format Check	Nominal
		Product Header Analysis	Nominal
		Auxiliary Data File Usage Check	Nominal
		Auxiliary Correction Error Check	See Section 5.4
		Measurement Confidence Data Check	See Section 4.6, 5.6, 5.7 and 5.8

Overview

15-Sep-2016	None
16-Sep-2016	None
17-Sep-2016	Nothing planned

2. Global Coverage



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 product file (.DBL). Number of products with errors: 0

### 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. Number of products with errors: 0

4.3 L1B Auxilary Data File Usage Check			
Each product is checked for missing Data Set Descriptors with respect to a pre Number of products with errors: 0	-determined baseline and also	to check the validity of Auxiliary Data Files is correct.	
4.4 L1B Auxiliary Correction Error Check			
CryoSat L1B data includes a correction error flag (field 60) for each measurement Number of products with errors: 0	ent record. The bit value of this	flag indicates any problems when set.	
4.5 L1B Measurement Confidence Data Check			
CryoSat L1B data includes a measurement confidence flag (field 12) for each measurement record. The bit value of this flag indicates any problems when set.           Number of products with errors:         0			
4.6 L1B Waveform Group Data Check			
CryoSat L1B data includes a waveform data flag (field 65) 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 products over land, but this is to be expected. Number of products with errors: 14			
Product	Test Failed	Description	
CS_OFFL_SIR_GOP_1B_20160916T004754_20160916T010240_B001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOP_1B_20160916T010240_20160916T010442_B001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOP_1B_20160916T010442_20160916T011406_B001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOP_1B_20160916T013448_20160916T015308_B001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOP_1B_20160916T061725_20160916T062418_B001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOP_1B_20160916T090157_20160916T090559_B001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOP_1B_20160916T093033_20160916T093105_B001	Loss of Echo	The tracking echo is missing for one or more records	
CS_OFFL_SIR_GOP_1B_20160916T093246_20160916T094016_B001	Loss of Echo	The tracking echo is missing for one or more records	
CS OFFL SIR GOP 18 20160916T113037 20160916T114459 B001	Loss of Echo	The tracking echo is missing for one or more records	

Loss of Echo

5. GOP Level 2 Data Quality Check

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

The tracking echo is missing for one or more records

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:

5.2 L2 Product Header Analysis

5.1 L2 Product Format Check

Number of products with errors:

CS\_OFFL\_SIR\_GOP\_1B\_20160916T131934\_20160916T132959\_B001

CS\_OFFL\_SIR\_GOP\_1B\_20160916T142512\_20160916T143223\_B001

CS\_OFFL\_SIR\_GOP\_1B\_20160916T144108\_20160916T144827\_B001

CS\_OFFL\_SIR\_GOP\_1B\_20160916T185549\_20160916T190003\_B001

CS\_OFFL\_SIR\_GOP\_1B\_20160916T233803\_20160916T234503\_B001

### 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. Wind Model File Usage: This file is currently not included in all L2 products.

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

Number of products with errors:

### 5.4 L2 Auxiliary Correction Error Check

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

0

0

Currently, there are two 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.

Sea State Bias Error: The error value is currently set for products over land and sea ice, but this is to be expected.

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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_220160916T010442_20160916T011406_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T013448_20160916T015308_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T020030_20160916T020148_B001		There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_220160916T024148_20160916T024918_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T030404_20160916T031025_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_20160916T040751_20160916T043057_B001		There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records

CS_OFFL_SIR_GOP_220160916T044132_20160916T044356_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T061725_20160916T062418_B001	Total Geocentric Ocean Tide (FES)	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_220160916T062418_20160916T063235_B001	Total Geocentric Ocean Tide (FES)	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_220160916T075634_20160916T075936_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T081532_20160916T084816_B001	Total Geocentric Ocean Tide (FES)	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_220160916T093246_20160916T094016_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T095208_20160916T102702_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T123757_20160916T124011_B001	Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_220160916T124011_20160916T125940_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T131934_20160916T132959_B001	Total Geocentric Ocean Tide (FES)	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_220160916T162705_20160916T162928_B001	Total Geocentric Ocean Tide (FES)	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_220160916T180710_20160916T181217_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T194635_20160916T194725_B001	Total Geocentric Ocean Tide (FES)	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_GOP_220160916T210224_20160916T211350_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T211351_20160916T212302_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T213221_20160916T213314_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with 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_220160916T221749_20160916T225348_B001	Mean Sea Surface (2)	There is an error with the MSS height (solution 2) for one or more records

### 5.5 L2 Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag (field 14) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set. 0 Number of products with errors:

### 5.6 L2 Range Measurement Check

CryoSat L2 data includes an Ocean (field 25) and Ice (field 30) Range Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set. Currently, there are two common status flags 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.

Ocean Range Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 33

Number of	products with	errors.
Number of	products with	enois.

Product	Test Failed	Description
CS_OFFL_SIR_GOP_220160916T003819_20160916T004021_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T004125_20160916T004522_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T013218_20160916T013324_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T021623_20160916T022424_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T035459_20160916T035707_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T035735_20160916T040309_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T044418_20160916T044435_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T044545_20160916T045037_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T053420_20160916T053526_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T053708_20160916T054148_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T054225_20160916T054304_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T071617_20160916T072149_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T085520_20160916T090033_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T103113_20160916T103519_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T103533_20160916T103537_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T103537_20160916T103933_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T111923_20160916T112206_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_GOP_220160916T121424_20160916T121430_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T121430_20160916T121436_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T121436_20160916T121634_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T134825_20160916T135328_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T135329_20160916T135335_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T135353_20160916T135507_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T152837_20160916T153245_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T153251_20160916T153300_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T153306_20160916T153501_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T170633_20160916T171159_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T171205_20160916T171530_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T184631_20160916T185438_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T202608_20160916T203125_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T220729_20160916T221025_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T234737_20160916T234931_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_GOP_220160916T235157_20160916T235420_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

#### 5.7 L2 SWH and Backscatter Measurement Check

CryoSat L2 data includes a SWH Averaging Status flag (field 49) and an Ocean (field 55) and Ice (field 61) Backscatter Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are three common status flags 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.

SWH Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ocean Backscatter Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ice Backscatter Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 28

Number of products with errors:

Product Test Failed Description The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T003819\_20160916T004021\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T004125 20160916T004522 B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T021623\_20160916T022424\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T035459 20160916T035707 B001 ce Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T035735 20160916T040309 B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T044418\_20160916T044435\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T053420\_20160916T053526\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T053708\_20160916T054148\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T054225\_20160916T054304\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T071617 20160916T072149 B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T085520\_20160916T090033\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T103113 20160916T103519 B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T103537 20160916T103933 B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T111923\_20160916T112206\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T121430\_20160916T121436\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T121436 20160916T121634 B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T134825\_20160916T135328\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T135329 20160916T135335 B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T135353 20160916T135507 B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T152837\_20160916T153245\_B001 ce Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T153306\_20160916T153501\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T170633\_20160916T171159\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T171205\_20160916T171530\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_20160916T184631\_20160916T185438\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T202608\_20160916T203125\_B001 Ice Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS\_OFFL\_SIR\_GOP\_2\_\_20160916T220729\_20160916T221025\_B001 ce Backscatter Averaging Status records The Ice Backscatter Averaging Status Flag has been set for one or more CS OFFL SIR GOP 2 20160916T234737 20160916T234931 B001 Ice Backscatter Averaging Status records

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## 5.8 L2 Ocean Retracking Quality Check

CryoSat L2 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: 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: