

## IDEAS+ Daily Report for IOP data:

## 29/10/2016

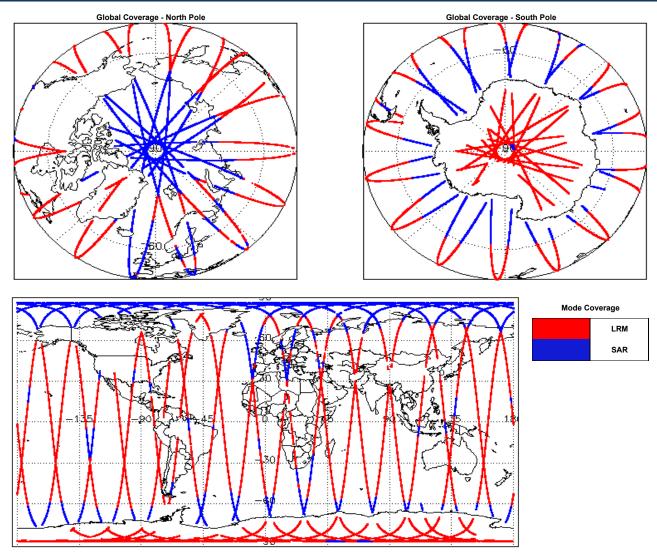


1. Overview			
		Check	Status
Report Production Date:	ate: 31-Oct-2016	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	ed: CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal
Processor Usea:		Product Software Check	Nominal
Data Used:	sed: Intermediate Ocean Products (IOP) L1B and L2 Science Data	Product Format Check	Nominal
Data Oseu.		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

# Mission / Instrument News

- 28-Oct-2016 IOP data missing from 0000 0600 due to missing Auxiliary files at the time of processing 29-Oct-2016 None
- 30-Oct-2016 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. IOP Level 1B Data Quality Check

### 4.1 L1B Product Format Check

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

# Number of products with errors:

### 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.

4.3 L1B Auxilary Data File Usage Check			
Each product is checked for missing Data Set Descriptors with respect to a pr	re-determined baseline and also to	o check the validity of Auxiliary Data Files is correct.	
Number of products with errors: 0			
I.4 L1B Auxiliary Correction Error Check			
CryoSat L1B data includes a correction error flag (field 60) 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 (field 12) for each	measurement record. The bit value	ue of this flag indicates any problems when set.	
lumber of products with errors: 0			
1.6 L1B Waveform Group Data Check			
	The bit set of the fit		
ryoSat L1B data includes a waveform data flag (field 65) for each measuren		ay mucates any problems when set.	
Loss of Echo Flag: This flag is currently set for products over land, but this is to be expected.			
lumber of products with errors: 16	Test Failed	Description	
	·	Description The tracking echo is missing for one or more records	
lumber of products with errors: 16 Product	Test Failed	•	
Number of products with errors:         16           Product	Test Failed Loss of Echo	The tracking echo is missing for one or more records	
Image: Second system         16           Product         SS_OFFL_SIR_IOP_1B_20161029T004402_20161029T004543_B001           CS_OFFL_SIR_IOP_1B_20161029T030324_20161029T030833_B001	Test Failed Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records	
Image: Number of products with errors:         16           Product         05           CS_OFFL_SIR_IOP_1B_20161029T004402_20161029T004543_B001         05           CS_OFFL_SIR_IOP_1B_20161029T030324_20161029T030833_B001         05           CS_OFFL_SIR_IOP_1B_20161029T032020_20161029T032159_B001         05	Test Failed Loss of Echo Loss of Echo Loss of Echo	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	
Image: Number of products with errors:         16           Product         Image: Number of Products	Test Failed Loss of Echo Loss of Echo Loss of Echo Loss of Echo	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	
Image: Number of products with errors:         16           Product         Image: Number of Products         Image: Number of Products         Number of Product	Test Failed         Loss of Echo	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	
Number of products with errors:         16           Product         S2_OFFL_SIR_IOP_1B_20161029T004402_20161029T004543_B001           S2_OFFL_SIR_IOP_1B_20161029T030324_20161029T030833_B001         S2_OFFL_SIR_IOP_1B_20161029T032020_20161029T032159_B001           S2_OFFL_SIR_IOP_1B_20161029T043122_20161029T043321_B001         S2_OFFL_SIR_IOP_1B_20161029T044223_20161029T045028_B001           S2_OFFL_SIR_IOP_1B_20161029T044223_20161029T045028_B001         S2_OFFL_SIR_IOP_1B_20161029T044223_20161029T061205_B001	Test Failed         Loss of Echo	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 The tracking echo is missing for one or more records	
Number of products with errors:         16           Product         S_OFFL_SIR_IOP_1B_20161029T004402_20161029T004543_B001           CS_OFFL_SIR_IOP_1B_20161029T03024_20161029T030833_B001         CS_OFFL_SIR_IOP_1B_20161029T032020_20161029T032159_B001           CS_OFFL_SIR_IOP_1B_20161029T043122_20161029T043321_B001         CS_OFFL_SIR_IOP_1B_20161029T044223_20161029T045028_B001           CS_OFFL_SIR_IOP_1B_20161029T044223_20161029T045028_B001         CS_OFFL_SIR_IOP_1B_20161029T060803_20161029T061205_B001           CS_OFFL_SIR_IOP_1B_20161029T062105_20161029T062938_B001         CS_OFFL_SIR_IOP_1B_20161029T062105_20161029T062938_B001	Test Failed         Loss of Echo	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 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	
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Humber of products with errors:         16           Product         50           CS_OFFL_SIR_IOP_1B_20161029T004402_20161029T004543_B001         53           CS_OFFL_SIR_IOP_1B_20161029T030324_20161029T030333_B001         53           CS_OFFL_SIR_IOP_1B_20161029T032020_20161029T032159_B001         53           CS_OFFL_SIR_IOP_1B_20161029T043122_20161029T043321_B001         53           CS_OFFL_SIR_IOP_1B_20161029T044223_20161029T045028_B001         53           CS_OFFL_SIR_IOP_1B_20161029T06205_20161029T062038_B001         53           CS_OFFL_SIR_IOP_1B_20161029T062105_20161029T062938_B001         53           CS_OFFL_SIR_IOP_1B_20161029T074745_20161029T075620_B001         53           CS_OFFL_SIR_IOP_1B_20161029T074745_20161029T075620_B001         53	Test Failed         Loss of Echo	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 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 The tracking echo is missing for one or more records	
Humber of products with errors:         16           Product         50           CS_OFFL_SIR_IOP_1B_20161029T004402_20161029T004543_B001         50           CS_OFFL_SIR_IOP_1B_20161029T030324_20161029T030333_B001         50           CS_OFFL_SIR_IOP_1B_20161029T032020_20161029T032159_B001         50           CS_OFFL_SIR_IOP_1B_20161029T043122_20161029T043321_B001         50           CS_OFFL_SIR_IOP_1B_20161029T044223_20161029T045028_B001         50           CS_OFFL_SIR_IOP_1B_20161029T060803_20161029T061205_B001         50           CS_OFFL_SIR_IOP_1B_20161029T062105_20161029T062038_B001         50           CS_OFFL_SIR_IOP_1B_20161029T074745_20161029T075620_B001         50           CS_OFFL_SIR_IOP_1B_20161029T103618_20161029T104150_B001         50           CS_OFFL_SIR_IOP_1B_20161029T112008_20161029T112652_B001         50	Test Failed         Loss of Echo	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 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 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	
Humber of products with errors:         16           Product         ScoFFL_SIR_IOP_1B_20161029T004402_20161029T004543_B001           CS_OFFL_SIR_IOP_1B_20161029T030324_20161029T030333_B001         CS_OFFL_SIR_IOP_1B_20161029T032020_20161029T032159_B001           CS_OFFL_SIR_IOP_1B_20161029T043122_20161029T043321_B001         CS_OFFL_SIR_IOP_1B_20161029T044223_20161029T045028_B001           CS_OFFL_SIR_IOP_1B_20161029T0620803_20161029T061205_B001         CS_OFFL_SIR_IOP_1B_20161029T0620803_20161029T062038_B001           CS_OFFL_SIR_IOP_1B_20161029T062105_20161029T076202_B001         CS_OFFL_SIR_IOP_1B_20161029T074745_20161029T075202_B001           CS_OFFL_SIR_IOP_1B_20161029T103618_20161029T104150_B001         CS_OFFL_SIR_IOP_1B_20161029T112008_20161029T112652_B001           CS_OFFL_SIR_IOP_1B_20161029T114744_20161029T114924_B001         CS_OFFL_SIR_IOP_1B_20161029T114744_20161029T114924_B001	Test Failed         Loss of Echo	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 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 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	
Jamme         Jamme           Product         5           SS_OFFL_SIR_IOP_1B_20161029T004402_20161029T004543_B001         5           SS_OFFL_SIR_IOP_1B_20161029T03024_20161029T030833_B001         5           SS_OFFL_SIR_IOP_1B_20161029T032020_20161029T032159_B001         5           SS_OFFL_SIR_IOP_1B_20161029T043122_20161029T043321_B001         5           SS_OFFL_SIR_IOP_1B_20161029T044223_20161029T045028_B001         5           SS_OFFL_SIR_IOP_1B_20161029T062033_20161029T062938_B001         5           SS_OFFL_SIR_IOP_1B_20161029T062105_20161029T062938_B001         5           SS_OFFL_SIR_IOP_1B_20161029T074745_20161029T075620_B001         5           SS_OFFL_SIR_IOP_1B_20161029T103618_20161029T104150_B001         5           SS_OFFL_SIR_IOP_1B_20161029T112008_20161029T1142652_B001         5           SS_OFFL_SIR_IOP_1B_20161029T114744_20161029T114924_B001         5           SS_OFFL_SIR_IOP_1B_20161029T114744_20161029T114924_B001         5	Test Failed         Loss of Echo	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 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 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 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	
Image: Number of products with errors:         16           roduct         S_OFFL_SIR_IOP_1B_20161029T004402_20161029T004543_B001         S_OFFL_SIR_IOP_1B_20161029T030324_20161029T030333_B001         S_OFFL_SIR_IOP_1B_20161029T032020_20161029T032159_B001         S_OFFL_SIR_IOP_1B_20161029T043122_20161029T043321_B001         S_OFFL_SIR_IOP_1B_20161029T043122_20161029T043321_B001         S_OFFL_SIR_IOP_1B_20161029T044223_20161029T045028_B001         S_OFFL_SIR_IOP_1B_20161029T062033_20161029T062938_B001         S_OFFL_SIR_IOP_1B_20161029T062035_20161029T062938_B001         S_OFFL_SIR_IOP_1B_20161029T074745_20161029T075620_B001         S_OFFL_SIR_IOP_1B_20161029T074745_20161029T075620_B001         S_OFFL_SIR_IOP_1B_20161029T103618_20161029T104150_B001         S_OFFL_SIR_IOP_1B_20161029T112008_20161029T1104150_B001         S_OFFL_SIR_IOP_1B_20161029T1103618_20161029T1104150_B001         S_OFFL_SIR_IOP_1B_20161029T1103618_20161029T1104150_B001         S_OFFL_SIR_IOP_1B_20161029T1103618_20161029T1104150_B001         S_OFFL_SIR_IOP_1B_20161029T1103618_20161029T1104150_B001         S_OFFL_SIR_IOP_1B_20161029T1103618_20161029T1104150_B001         S_OFFL_SIR_IOP_1B_20161029T1103618_20161029T1104150_B001         S_OFFL_SIR_IOP_1B_20161029T114744_20161029T110455_B001         S_OFFL_SIR_IOP_1B_20161029T114744_20161029T1104552_B001         S_OFFL_SIR_IOP_1B_20161029T114744_20161029T1165620_B001         S_OFFL_SIR_IOP_1B_20161029T1171800_20161029T174955_B001         S_OFFL_SIR_IOP_1B_20161029T1171800_20161029T174955_B001         S_OFFL_SIR_IOP_1B_20161029T171800_20161029T174955_B001         S_OFFL_SIR_IOP_1B_20161029T171800_20161029T174955_B001         S_OFFL_SIR_IOP_1B_20161029T171800_20161029T174955_B001         S_OFFL_SIR_IOP_	Test Failed         Loss of Echo	The tracking echo is missing for one or more records           The tracking echo is missing for one or more records	

### 5. IOP Level 2 Data Quality Check

The tracking echo is missing for one or more records

### 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

Loss of Echo

#### 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.

CS\_OFFL\_SIR\_IOP\_1B\_20161029T230326\_20161029T232023\_B001

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).

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.

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220161028T235518_20161029T000935_B001	Fauilibrium 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_IOP_220161029T012101_20161029T012811_B001	For Local 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_IOP_220161029T013306_20161029T014051_B001	Total Geocentric Ocean Tide (FES), Non-	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_IOP_220161029T030324_20161029T030833_B001	Equilibrium Long Period Ocean Tide	more records
CS_OFFL_SIR_IOP_220161029T040416_20161029T043122_B001	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_IOP_220161029T043122_20161029T043321_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_IOP_220161029T043846_20161029T044137_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_IOP_220161029T061407_20161029T061557_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_IOP_220161029T080155_20161029T080906_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_IOP_220161029T094919_20161029T100244_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_IOP_220161029T105759_20161029T111358_B001	Fotal Geocentric Ocean Tide (FES), Non-	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_IOP_220161029T112008_20161029T112652_B001		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_IOP_220161029T113727_20161029T114744_B001	Fouilibrium 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_IOP_220161029T122316_20161029T123420_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_IOP_220161029T143656_20161029T144702_B001	Foulibrium 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_IOP_220161029T180456_20161029T180851_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_IOP_220161029T194328_20161029T195054_B001	Fotal Geocentric Ocean Tide (FES), Non-	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_IOP_220161029T214322_20161029T215627_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_IOP_220161029T221455_20161029T222943_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_IOP_220161029T222943_20161029T223145_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_IOP_220161029T223145_20161029T224106_B001	Fotal Geocentric Ocean Tide (FES), Non-	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

### 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. Number of products with errors: 0

#### 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

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220161029T003348_20161029T004214_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T021249_20161029T021446_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T021535_20161029T022028_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T035216_20161029T035247_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T035456_20161029T040054_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T053403_20161029T053925_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T071256_20161029T071406_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T071412_20161029T071819_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T084802_20161029T085304_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T085310_20161029T085317_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T085317_20161029T085324_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T085324_20161029T085635_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T103208_20161029T103215_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T103215_20161029T103221_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T103221_20161029T103233_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T103239_20161029T103409_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T120611_20161029T121112_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T121137_20161029T121146_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOP_220161029T121153_20161029T121255_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T134649_20161029T135029_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T135035_20161029T135044_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T135050_20161029T135354_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T152431_20161029T152943_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T152949_20161029T153317_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T170430_20161029T171016_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T171039_20161029T171218_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T184357_20161029T184909_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T202553_20161029T202811_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T220522_20161029T220719_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T220853_20161029T221222_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T225913_20161029T230055_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T234345_20161029T234643_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T234650_20161029T235123_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. 26

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220161029T003348_20161029T004214_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T021249_20161029T021446_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T021535_20161029T022028_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T035216_20161029T035247_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T035456_20161029T040054_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T053403_20161029T053925_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T071256_20161029T071406_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T084802_20161029T085304_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T085310_20161029T085317_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T085324_20161029T085635_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T103215_20161029T103221_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T103239_20161029T103409_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T121153_20161029T121255_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T134649_20161029T135029_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T135035_20161029T135044_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T135050_20161029T135354_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T152431_20161029T152943_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T152949_20161029T153317_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T170430_20161029T171016_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T171039_20161029T171218_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T184357_20161029T184909_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T202553_20161029T202811_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T220522_20161029T220719_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T220853_20161029T221222_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T234345_20161029T234643_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161029T234650_20161029T235123_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.

### 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.

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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.