

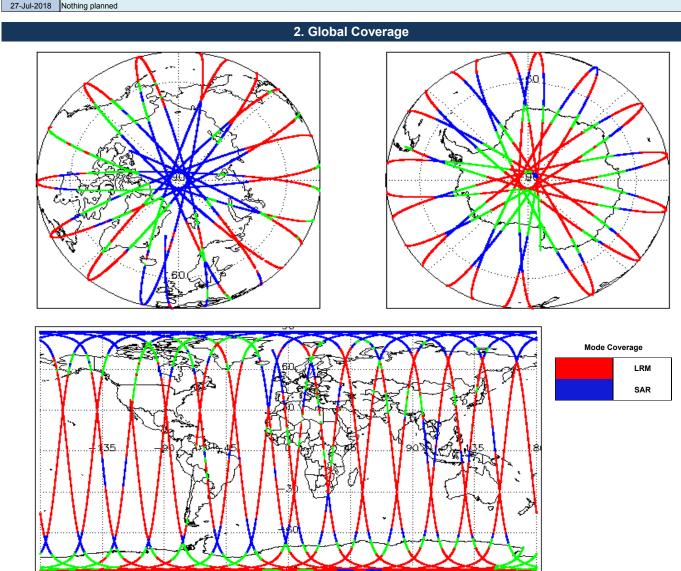
Rep Pr

# IDEAS+ Daily Report for IOP data:

# 26/07/2018

1. Overview					
eport Production:	30-Jul-2018	Check L1 & L2	P2P		
	30-Jui-2016	Server check: science-pds.cryosat.esa.int Nominal	Nominal		
		Server check: calval-pds.cryosat.esa.int Nominal	Nominal		
Processor Used:	CryoSat Ocean Processor	Product Software Check Nominal	Nominal		
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	Product Format Check Nominal	Nominal		
		Product Header Analysis Nominal	Nominal		
		Auxiliary Data File Usage Check Nominal	Nominal		
		Auxiliary Correction Error Check Nominal	Nominal		
		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, 5.7	See Section 6.6, 6.7		
		Ocean Retracking Quality Check See Section 5.8	See Section 6.8		

Mission / Instrument News				
25-Jul-2018	None			
26-Jul-2018	None			
07 1 1 00 10				



# 3. Instrument Configuration

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

SIRAL - A

0

SIRAL instrument(s) in use:

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. Number of products with errors: 0

ach product is checked for missing Data S	Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.
lumber of products with errors:	0
I.4 L1B Auxiliary Correction	Error Check
CryoSat L1B data includes a correction erro	or flag for each measurement record. The bit value of this flag indicates any problems when set.
lumber of products with errors:	0
I.5 L1B Measurement Confid	ence 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 o	currently set in error for IOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.
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Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20180726T093838_20180726T094436_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_IOPM1B_20180726T185333_20180726T185834_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 products over land, but this is to be expected.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20180726T010120_20180726T013639_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20180726T100908_20180726T104154_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20180726T134845_20180726T140312_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20180726T150613_20180726T152113_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180726T004924_20180726T005328_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180726T040540_20180726T040836_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180726T040926_20180726T041059_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180726T091329_20180726T091355_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180726T105326_20180726T105352_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180726T141033_20180726T141515_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180726T154937_20180726T155010_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180726T190343_20180726T190415_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20180726T205102_20180726T205520_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180726T063310_20180726T063557_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180726T082625_20180726T082907_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180726T190247_20180726T190343_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20180726T235115_20180726T235425_C001	Loss of Echo	The tracking echo is missing for one or more records

# 5. IOP Level 2 Data Quality Check

### 5.1 L2 Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL). Number of products with errors: 0

#### 5.2 L2 Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. Number of products with errors: 0

#### 5.3 L2 Auxiliary Data File Usage Check

#### Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct. Number of products with errors: 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). Number of products with errors: 0 5.5 L2 Measurement Confidence Data Check CryoSat L2 data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set. Number of products with errors: 2 Product Test Failed Description CS\_OFFL\_SIR\_IOPM\_2\_20180726T093838\_20180726T094436\_C001 Power scaling error There is an error in the scaling of the L2 waveform for one or more records CS\_OFFL\_SIR\_IOPM\_2\_20180726T185333\_20180726T185834\_C001 Power scaling error There is an error in the scaling of the L2 waveform for one or more records

#### 5.6 L2 Range Measurement Check

CryoSat L2 data includes an Ocean and Ice 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. 83

	Test Failed	Description The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T000414_20180726T000537_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T000544_20180726T000952_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T001456_20180726T002459_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T002647_20180726T003404_C001	Ocean Range Averaging Status	records.
CS_OFFL_SIR_IOPM_2_20180726T003447_20180726T003920_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T010120_20180726T013639_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T013914_20180726T014435_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T015537_20180726T020807_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T020814_20180726T022547_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T024650_20180726T025855_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T030059_20180726T031551_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T031832_20180726T032332_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T032353_20180726T032404_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T033250_20180726T034314_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T034933_20180726T040424_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T043635_20180726T043723_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T044058_20180726T045429_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T045747_20180726T050244_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T051042_20180726T054304_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T061056_20180726T063310_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T063830_20180726T064200_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more
CS_0FFL_SIR_IOPM_2_20180726T064222_20180726T064550_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more records
CS_0FFL_SIR_IOPM_2_20180726T064912_20180726T071501_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more records.
CS_0FFL_SIR_IOPM_2_20180726T071504_20180726T071724_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180726T074902 20180726T081315 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T081612_20180726T082114_C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180726T082121 20180726T082449 C001	Ice Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180726T082908 20180726T083924 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T084500_20180726T090235_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180726T091447 20180726T092129 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180726T092758 20180726T093504 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS OFFL SIR IOPM 2 20180726T094759 20180726T095219 C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
		records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T095611_20180726T100146_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T100908_20180726T104154_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T104204_20180726T104441_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T105404_20180726T105552_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T111414_20180726T113018_C001	Ocean Range Averaging Status	records. The Ice Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T113532_20180726T114041_C001	Ice Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T114733_20180726T122315_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T123318_20180726T123357_C001	Ocean Range Averaging Status	records. The Ocean Range Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20180726T124516_20180726T124936_C001	Ocean Range Averaging Status	records.
CS_OFFL_SIR_IOPM_2_20180726T125032_20180726T130811_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T132719_20180726T134404_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T134845_20180726T140312_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T141536_20180726T143334_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T143458_20180726T144855_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T145653_20180726T145853_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOPM_2_20180726T150001_20180726T150356_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T150613_20180726T152113_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T152315_20180726T153237_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T155046_20180726T155156_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T155354_20180726T155414_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T155516_20180726T161138_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T162742_20180726T162958_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T163458_20180726T164257_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T164555_20180726T170020_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T173723_20180726T181000_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T181608_20180726T182144_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T182559_20180726T184930_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T192104_20180726T193239_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T193816_20180726T194839_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T195541_20180726T200018_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T200445_20180726T203157_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T203553_20180726T204153_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T205520_20180726T212653_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T213451_20180726T214024_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T221917_20180726T222159_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T223404_20180726T230700_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T231354_20180726T231906_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T232415_20180726T234049_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T064216_20180726T064222_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T113412_20180726T113532_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T131504_20180726T131744_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T155156_20180726T155328_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T172854_20180726T173010_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T190343_20180726T190415_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T195112_20180726T195253_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T043210_20180726T043635_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T045429_20180726T045544_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T123033_20180726T123318_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T130811_20180726T131504_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T194839_20180726T195112_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T220903_20180726T220943_C001	Ocean Range Averaging Status	The Ocean 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 and an Ocean and Ice 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. 86

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20180726T000414_20180726T000537_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T000544_20180726T000952_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T001456_20180726T002459_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T002647_20180726T003404_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T003447_20180726T003920_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T010120_20180726T013639_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T013914_20180726T014435_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.

CS\_OFFL\_SIR\_IOPM\_2\_20180726T015537\_20180726T020807\_C001 CS OFFL SIR IOPM 2 20180726T020814 20180726T022547 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T024650\_20180726T025855\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T030059\_20180726T031551\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T031832\_20180726T032332\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T032353\_20180726T032404\_C001 CS OFFL SIR IOPM 2 20180726T033250 20180726T034314 C001 CS OFFL SIR IOPM 2 20180726T034933 20180726T040424 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T043635\_20180726T043723\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T044058\_20180726T045429\_C001 CS OFFL SIR IOPM 2 20180726T045747 20180726T050244 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T051042\_20180726T054304\_C001 CS OFFL SIR IOPM 2 20180726T061056 20180726T063310 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T063830\_20180726T064200\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T064222\_20180726T064550\_C001 CS OFFL SIR IOPM 2 20180726T064912 20180726T071501 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T071504\_20180726T071724\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T074902\_20180726T081315\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T081612\_20180726T082114\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T082121\_20180726T082449\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T082908\_20180726T083924\_C001 CS OFFL SIR IOPM 2 20180726T084500 20180726T090235 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T091447\_20180726T092129\_C001 CS OFFL SIR IOPM 2 20180726T092758 20180726T093504 C001 CS OFFL SIR IOPM 2 20180726T094759 20180726T095219 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T095611\_20180726T100146\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T100908\_20180726T104154\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T104204\_20180726T104441\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T105404\_20180726T105552\_C001 CS OFFL SIR IOPM 2 20180726T111414 20180726T113018 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T113532\_20180726T114041\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T114733\_20180726T122315\_C001 CS OFFL SIR IOPM 2 20180726T123318 20180726T123357 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T124516\_20180726T124936\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T125032\_20180726T130811\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T131744\_20180726T131944\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T132719\_20180726T134404\_C001 CS OFFL SIR IOPM 2 20180726T134845 20180726T140312 C001 CS OFFL SIR IOPM 2 20180726T141536 20180726T143334 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T143458\_20180726T144855\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T145653\_20180726T145853\_C001 CS OFFL SIR IOPM 2 20180726T150001 20180726T150356 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T150613\_20180726T152113\_C001 CS OFFL SIR IOPM 2 20180726T152315 20180726T153237 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T155046\_20180726T155156\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T155354\_20180726T155414\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T155516\_20180726T161138\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T162742\_20180726T162958\_C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T163458\_20180726T164257\_C001 CS OFFL SIR IOPM 2 20180726T164555 20180726T170020 C001 CS\_OFFL\_SIR\_IOPM\_2\_20180726T173723\_20180726T181000\_C001 SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status

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Ice Backscatter Averaging Status

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The SWH and Ocean Averaging Status Flags have been set for one or more records.

The SWH and Ocean Averaging Status Flags have been set for one or more records.

The Ice Backscatter Averaging Status Flag has been set for one or more records.

The Ice Backscatter Averaging Status Flag has been set for one or more records.

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The SWH and Ocean Averaging Status Flags have been set for one or more records.

The SWH and Ocean Averaging Status Flags have been set for one or more records.

The Ice Backscatter Averaging Status Flag has been set for one or more records.

The SWH and Ocean Averaging Status Flags have been set for one or more records.

The SWH and Ocean Averaging Status Flags have been set for one or more records.

CS_OFFL_SIR_IOPM_2_20180726T181332_20180726T181541_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T181608_20180726T182144_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T182559_20180726T184930_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T192104_20180726T193239_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T193816_20180726T194839_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T195541_20180726T200018_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T200112_20180726T200136_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T200445_20180726T203157_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T203553_20180726T204153_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T205520_20180726T212653_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T213451_20180726T214024_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T221917_20180726T222159_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T223404_20180726T230700_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T231354_20180726T231906_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20180726T232415_20180726T234049_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T064216_20180726T064222_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T113412_20180726T113532_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T131504_20180726T131744_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T155156_20180726T155328_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T172854_20180726T173010_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T190343_20180726T190415_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20180726T195112_20180726T195253_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T043210_20180726T043635_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T045429_20180726T045544_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T123033_20180726T123318_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T130811_20180726T131504_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T194839_20180726T195112_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20180726T220903_20180726T220943_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.

#### 5.8 L2 Ocean Retracking Quality Check

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:

# 6. IOP 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:

#### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

#### 6.4 P2P Auxiliary Correction Error Check

For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767). 0

0

54

Number of products with errors:

## 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.

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180726T091109_20180726T100048_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records
CS_OFFL_SIR_IOP_220180726T181656_20180726T190631_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

#### 6.6 P2P Range Measurement Check

CryoSat P2P data includes an Ocean and Ice 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 P2P 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.

Number of products with errors: 30

CS_OFFL_SIR_UP_2_001007251723144_001007261000526_0003     ps: Ramp Averaging Status     The Les Range Averaging Status Flags have been set for one more process.       CS_OFFL_SIR_UP_2_001007261100526_011007261100440_0001     Cean Ramp Averaging Status. Flags have been set for one more process.     In the Range Averaging Status Flags have been set for one more process.       CS_OFFL_SIR_UP_2_0010072611002415_001007261102415_00107261102415_001007261102415_001007261102415_001007261102415_001007261102415_001007261102425_001007261102425_001007261102425_001007261102425_001007261102425_00107261102425_00107261102425_00107261102425_00107261102425_00107261102425_00107261102425_0000000000000000000000000000000000	Product	Test Failed	Description
Construction     Range Averaging Status     or more records.       CB_OFFL_SIR_UOP_2_20160726700561_201607207014440_C001     Cocean Range Averaging Status. En     The Ocean and to Range Averaging Status End       CB_OFFL_SIR_UOP_2_2016072671042440_20160772070145440_C001     Cocean Range Averaging Status. En     The Ocean and to Range Averaging Status End       CB_OFFL_SIR_UOP_2_201607267104233_201607267104328_C001     Cocean Range Averaging Status. En     The Ocean and to Range Averaging Status End       CB_OFFL_SIR_UOP_2_201607267104328_C001     Cocean Range Averaging Status. En     The Ocean and to Range Averaging Status End       CB_OFFL_SIR_UOP_2_201607267104328_C001     Cocean Range Averaging Status End     The Ocean and to Range Averaging Status End       CB_OFFL_SIR_UOP_2_201607267105270105027010000000000	CS_OFFL_SIR_IOP_220180725T231548_20180726T000526_C003	Ice Range Averaging Status	
CS_PFL_SH_UP_2_018072610440_28101440_0001   Range Averaging Status   or more records.     CS_OFFL_SH_UP_2_018072610440_28180721023415_0001   Coem Range Averaging Status   The Ocean and toe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SH_UP_2_0180726102345_0180725003253_0001   Coem Range Averaging Status   The Ocean and toe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SH_UP_2_0180726103235_0180726103235_0001   Coem Range Averaging Status   The Ocean and toe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SH_UP_2_0180726105325_01807_0011828_0001   Coem Range Averaging Status   The Ocean and toe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SH_UP_2_0180726105327_00180726105422_0001   Coem Range Averaging Status Flag   The Ocean and toe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SH_UP_2_0180726105421_0180726105422_001001   Coem Range Averaging Status Flag   The Ocean and toe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SH_UP_2_01807261054124_0180726105402_01001   Coem Range Averaging Status Flag   The Ocean and toe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SH_UP_2_0180726105402_0180726114001_CO01   Coem Range Averaging Status Flag   The Ocean and toe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SH_UP_2_018072611400	CS_OFFL_SIR_IOP_220180726T000526_20180726T005501_C001	Range Averaging Status	
Cold, DFL_SR_UP_2_0190726102416_001     Range Averaging Status     or more records.       CS_OFFL_SR_UP_2_01907261023416_0190726103253_0001     Ocean Range Averaging Status Flag     The Ocean Range Averaging Status Flag       CS_OFFL_SR_UP_2_0190726104138_0190726103037_0010     Ocean Range Averaging Status Flag     The Ocean Range Averaging Status Flag       CS_OFFL_SR_UP_2_0190726104138_01907261050307_0011     Ocean Range Averaging Status Flag     The Ocean Range Averaging Status Flag       CS_OFFL_SR_UP_2_01907261050307_01907261050242_0001     Ocean Range Averaging Status     The Ocean Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SR_UP_2_0190726105242_0190726105024_0001     Ocean Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SR_UP_2_0190726105242_0190726109126_0001     Ocean Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SR_UP_2_01907261072610922100010_0010     Ocean Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SR_UP_2_01907261092114_00192261092114_0001     Ocean Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SR_UP_2_01907261092134_019072611002_0001     Ocean Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SR_UP_2_019072611092134_0190726110023_0001     Ocean Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SR_UP_2_019072611	CS_OFFL_SIR_IOP_220180726T005501_20180726T014440_C001		
CB_CFFL_SIR_JOP_2_0180726103283_0180726104128_0001   Cean Range Averging Status   or more records.     CS_OFFL_SIR_JOP_2_0180726103233_0180726105422_0001   Ocean Range Averging Status   The Ocean Range Averging Status   The Ocean Range Averging Status   Figs Figs Figs Figs Figs Figs Figs Figs	CS_OFFL_SIR_IOP_220180726T014440_20180726T023415_C001		
Corpert_SiR_UOP_2_01807281042810241043282_01807261043282_00180726104328_0001   Doean Range Averaging Status   The Ocean and be Range Averaging Status     CS_OFFL_SIR_UOP_2_0180726105307_0180307_00180726105542_0001   Ocean Range Averaging Status   The Ocean and be Range Averaging Status     CS_OFFL_SIR_UOP_2_0180726105307_018026105242_01800726105242_01800726105242_0180726105242_0180726105242_0180726105242_0180726105242_0180726105242_0180726105242_01807261052134_0001   Ocean Range Averaging Status Ice Range Av	CS_OFFL_SIR_IOP_220180726T023415_20180726T032353_C001		
CS_OFFL_SIR_IOP201807/201041322_001807/201807267053242_0001   Ocean Range Averaging Status   The Ocean and loc Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807267064221_00107267064221_001   Ocean Range Averaging Status Ice Range Averaging Status Ic	CS_OFFL_SIR_IOP_220180726T032353_20180726T041328_C001	Ocean Range Averaging Status	
Column Fige Areaging Status The Ocean and loc Range Areaging Status Fige Areaging Status   CS_OFFL_SIR_IOP_2_201807261064221_201807261064221_001 Ocean Range Areaging Status ice Range	CS_OFFL_SIR_IOP_220180726T041328_20180726T050307_C001		
CS_OFFL_SIR_OP_2_2018072610622_00180726106221_001807261073156_0001   Range Averaging Status, fee mange Averaging Status, fee m	CS_OFFL_SIR_IOP_220180726T050307_20180726T055242_C001	Ocean Range Averaging Status	
CS_OFFL_SIR_IOP_2_20180/2610/31664221   Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_201807261082134_201807261082134_0001   Ocean Range Averaging Status   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261082134_201807261091109_0001   Ocean Range Averaging Status, Ice and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726110048_201807261100048_0001   Range Averaging Status, Ice and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726110048_201807261106023_0001   Range Averaging Status, Ice and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261114001_201807261140012_001   Ocean Range Averaging Status, Ice and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726114001_20180726114005_0001   Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726114085_0011   Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726114085_01001   Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261140850_201807261140850_001   Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261140850_20180726114683_0001   Ocean Range Averaging Status Flags have been set for	CS_OFFL_SIR_IOP_220180726T055242_20180726T064221_C001		
CLS_OFFL_SIR_IOP_2_2018072610/3168_20180/261092.001   Ocean Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_201807267082134_201807267109109_C001   Ocean Range Averaging Status, loc   The Ocean Range Averaging Status, loc     CS_OFFL_SIR_IOP_2_201807267109109_201807267100048_C001   Cean Range Averaging Status, loc   The Ocean and loc Range Averaging Status, loc     CS_OFFL_SIR_IOP_2_201807267100048_201807267105023_C001   Ocean Range Averaging Status   The Ocean and loc Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807267114001_C001   Ocean Range Averaging Status, loc   The Ocean and loc Range Averaging Status, loc     CS_OFFL_SIR_IOP_2_201807267114001_C011   Ocean Range Averaging Status, loc   The Ocean and loc Range Averaging Status, loc     CS_OFFL_SIR_IOP_2_201807267113015_201807267131915_C001   Ocean Range Averaging Status, loc   The Ocean Range Averaging Status, loc     CS_OFFL_SIR_IOP_2_2018072671140850_C001   Ocean Range Averaging Status, loc   The Ocean Range Averaging Status, loc     CS_OFFL_SIR_IOP_2_2018072671146850_2018072671145828_C001   Ocean Range Averaging Status, loc   The Ocean and loc Range Averaging Status, loc     CS_OFFL_SIR_IOP_2_2018072671145828_C001   Ocean Range Averaging Status, loc   The Ocean and loc Range Averaging Status, loc     CS_OFFL_SIR_IOP_2_2018072671172717_2018072671184580_2018072671145828_C001   Ocean Range Averaging Sta	CS_OFFL_SIR_IOP_220180726T064221_20180726T073156_C001		
CS_OFFL_SIR_IOP_2_201807261002/38_20180726110048_0001 CGean Range Averaging Status ice Range Averaging Status ic	CS_OFFL_SIR_IOP_220180726T073156_20180726T082134_C001		
CS_OFFL_SIR_IOP_2_2018072611009_201807261100048_20001   Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_201807261100048_201807261105023_0001   Ocean Range Averaging Status   The Ocean Range Averaging Status   The Ocean Range Averaging Status     CS_OFFL_SIR_IOP_2_201807261105023_01807261114001_0010   Ocean Range Averaging Status   The Ocean Range Averaging Status   The Ocean Range Averaging Status   Factor     CS_OFFL_SIR_IOP_2_201807261122936_0001   Ocean Range Averaging Status   The Ocean Range Averaging Status   Factor   or more records.     CS_OFFL_SIR_IOP_2_201807261122936_01807261140850_0001   Ocean Range Averaging Status   The Ocean Range Averaging Status   The Ocean Range Averaging Status   Fage Averaging Status <td>CS_OFFL_SIR_IOP_220180726T082134_20180726T091109_C001</td> <td>Ocean Range Averaging Status</td> <td></td>	CS_OFFL_SIR_IOP_220180726T082134_20180726T091109_C001	Ocean Range Averaging Status	
CS_OFFL_SIR_IOP_2_201807261100042_01807261100042_01807261100042_01807261100042_01807261100042_01807261100042_01807261100042_01807261100042_01807261100042_01807261100042_01807261100042_01807261100401_0014     Range Averaging Status     The Ocean Range Averaging Status Flag has been set for one or more records.       CS_OFFL_SIR_IOP_2_201807261114001_201807261122936_C001     Ocean Range Averaging Status     The Ocean Range Averaging Status Flag has been set for one or more records.       CS_OFFL_SIR_IOP_2_201807261131915_C001     Ocean Range Averaging Status     The Ocean Range Averaging Status Flag has been set for one or more records.       CS_OFFL_SIR_IOP_2_201807261131915_201807261140850_C001     Ocean Range Averaging Status     The Ocean Range Averaging Status Flag has been set for one or more records.       CS_OFFL_SIR_IOP_2_201807261140850_201807261146828_C001     Ocean Range Averaging Status     The Ocean Range Averaging Status Flag has been set for one or more records.       CS_OFFL_SIR_IOP_2_201807261146828_201807261146828_C001     Ocean Range Averaging Status     The Ocean Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SIR_IOP_2_201807261164828_20180726116482_201807261163742_C001     Ocean Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SIR_IOP_2_201807261186742_201807261172717_C001     Ceean Range Averaging Status Flag     The Ocean and Ice Range Averaging Status Flag have been set for one or more records.       CS_OFFL_SIR_IOP_2_20180726118724120180726119650_2001     Ocean	CS_OFFL_SIR_IOP_220180726T091109_20180726T100048_C001		
CS_OFFL_SIR_IOP_2_201807/26110302_201807/261114001_0001   Ocean Range Averaging Status   records.     CS_OFFL_SIR_IOP_2_201807261114001_201807261122936_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261131915_201807261140850_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261140850_201807261145828_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261145828_01807261145828_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261145828_01807261145828_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261145828_01807261163742_C001   Ocean Range Averaging Status Flag   The Ocean and Ice Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261163742_201807261172717_C001   Ocean Range Averaging Status Flag   The Ocean and Ice Range Averaging Status Flag have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261190631_C001   Ocean Range Averaging Status Flag   The Ocean and Ice Range Averaging Status Flag have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726119631_2018072611	CS_OFFL_SIR_IOP_220180726T100048_20180726T105023_C001		
CS_OFFL_SIR_IOP_2_20180726T12936_20180726T131915_C001   Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_20180726T122936_20180726T131915_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T142936_20180726T140850_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T140850_20180726T145828_0001   Ocean Range Averaging Status, Ice Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T145828_0180726T154803_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T164803_20180726T154803_C001   Ocean Range Averaging Status, Ice Range Averaging Status Flag   The Ocean and Ice Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T164803_20180726T172717_0001   Ocean Range Averaging Status Lee Range Averaging Status Flag   The Ocean and Ice Range Averaging Status Flag have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T145828_20180726T190631_c001   Ocean Range Averaging Status Flag   The Ocean and Ice Range Averaging Status Flag have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T190631_c0180726T19609_C001   Ocean Range Averaging Status Flag   The Ocean Range Averaging Status Flag     CS_OFFL_SIR_IOP_2_201807	CS_OFFL_SIR_IOP_220180726T105023_20180726T114001_C001	Ocean Range Averaging Status	
CS_OFFL_SIR_IOP_2_201807261122936_201807261131915_0001   Ocean Range Averaging Status   records.     CS_OFFL_SIR_IOP_2_201807261131915_201807261140850_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261140850_201807261145828_C001   Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status Flag has been set for one or more records.   The Ocean and Ice Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261145828_201807261154803_C001   Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status   The Ocean and Ice Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261154803_201807261163742_C001   Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261163742_201807261172717_201807261181656_C001   Ocean Range Averaging Status flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261190631_201807261196631_C001   Ocean Range Averaging Status flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261195609_201807261195609_C001   Ocean Range Averaging Status   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261204544_201807261204544_C001   Ocean Range Averaging	CS_OFFL_SIR_IOP_220180726T114001_20180726T122936_C001		
CS_OFFL_SIR_IOP_2_20180726113515_20180726114863_C001   Ocean Range Averaging Status   records.     CS_OFFL_SIR_IOP_2_201807261148828_201807261145828_C001   Ocean Range Averaging Status   The Ocean and loc Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261145828_201807261154803_201807261154803_201807261163742_C001   Ocean Range Averaging Status   The Ocean and loc Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261163742_201807261163742_C001   Ocean Range Averaging Status   The Ocean and loc Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261163742_201807261163742_01807261172717_C001   Range Averaging Status   The Ocean and loc Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261181656_201807261181656_C001   Ocean Range Averaging Status, loe Range Averaging Status Flags have been set for one or more records.   The Ocean and loc Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261181656_201807261190631_20180726119603_201807261195609_C001   Ocean Range Averaging Status   The Ocean and loc Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261195609_201807261204544_201807261213523_C001   Ocean Range Averaging Status   The Ocean and loc Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_201807261204544_201807261213523_C001	CS_OFFL_SIR_IOP_220180726T122936_20180726T131915_C001	Ocean Range Averaging Status	records.
CS_OFFL_SIR_IOP_2_201807/261143632_0010   Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_20180726T145828_20180726T154803_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T154803_20180726T163742_C001   Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T163742_20180726T172717_C010   Ocean Range Averaging Status, Ice Range Averaging Statu	CS_OFFL_SIR_IOP_220180726T131915_20180726T140850_C001	Ocean Range Averaging Status	
CS_OFFL_SIR_IOP_2_20180726T145828_20180726T163742_C001Ocean Range Averaging Status Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20180726T163742_20180726T172717_C001Ocean Range Averaging Status, Ice Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20180726T172717_20180726T181656_C001Ocean Range Averaging Status, Ice Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20180726T181656_20180726T190631_C001Ocean Range Averaging Status, Ice Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20180726T190631_20180726T195609_C001Ocean Range Averaging StatusThe Ocean Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20180726T195609_20180726T204544_C001Ocean Range Averaging StatusThe Ocean Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20180726T204544_20180726T213523_C001Ocean Range Averaging StatusThe Ocean Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20180726T213523_20180726T222458_C001Ocean Range Averaging StatusThe Ocean Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20180726T213523_20180726T222458_C001Ocean Range Averaging StatusThe Ocean Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20	CS_OFFL_SIR_IOP_220180726T140850_20180726T145828_C001		
CS_OFFL_SIR_IOP_2_20180726T183742_20180726T172717_C001Range Averaging Status Ocean Range Averaging Status, Ice Range Averagin	CS_OFFL_SIR_IOP_220180726T145828_20180726T154803_C001	Ocean Range Averaging Status	
CS_OFFL_SIR_IOP_2_20180726T172717_20180726T181656_C001   Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_20180726T172717_20180726T181656_C001   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T181656_20180726T190631_C001   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T190631_20180726T195609_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T195609_20180726T204544_C001   Ocean Range Averaging Status, Ice   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T204544_20180726T204544_C001   Ocean Range Averaging Status, Ice   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T204544_20180726T213523_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T213523_20180726T222458_C001   Ocean Range Averaging Status   The Ocean and Ice Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T222458_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SI	CS_OFFL_SIR_IOP_220180726T154803_20180726T163742_C001		
CS_OFFL_SIR_IOP_2_20180726T181656_20180726T190631_C001   Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_20180726T181656_20180726T190631_C001   Ocean Range Averaging Status   The Ocean and loe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T190631_20180726T195609_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T195609_20180726T204544_C001   Ocean Range Averaging Status   The Ocean and loe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T204544_20180726T213523_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T204544_20180726T213523_C001   Ocean Range Averaging Status   The Ocean and loe Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T213523_20180726T222458_C001   Ocean Range Averaging Status, loe Range Averaging Status, loe Range Averaging Status   The Ocean and loe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T2213453_C001   Ocean Range Averaging Status   The Ocean and loe Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T222458_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or mor	CS_OFFL_SIR_IOP_220180726T163742_20180726T172717_C001		
CS_OFFL_SIR_IOP_2_20180726T190631_20180726T195609_C001   Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_20180726T190631_20180726T195609_C001   Ocean Range Averaging Status, Ice   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T195609_20180726T204544_C001   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T204544_20180726T213523_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T213523_20180726T213523_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T213523_20180726T224588_C001   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T224588_20180726T2231437_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T224588_20180726T231437_20180727T000411_C002   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flag has been set for one or more records.	CS_OFFL_SIR_IOP_220180726T172717_20180726T181656_C001		
CS_OFFL_SIR_IOP_2_20180726T195609_20180726T204544_C001   Ocean Range Averaging Status   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T204544_20180726T213523_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T204544_20180726T213523_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T213523_20180726T222458_C001   Ocean Range Averaging Status, Ice Range Averaging Status   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T222458_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T22131437_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T22458_20180726T2214317_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T22458_20180726T221453_1437_20180727T000411_C002   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.	CS_OFFL_SIR_IOP_220180726T181656_20180726T190631_C001		
CS_OFFL_SIR_IOP_2_20180726T204544_20180726T213523_C001   Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_20180726T204544_20180726T213523_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T213523_20180726T222458_C001   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T221437_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T231437_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T231437_C001   Ocean Range Averaging Status   The Ocean and Ice Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T231437_20180727T000411_C002   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.	CS_OFFL_SIR_IOP_220180726T190631_20180726T195609_C001	Ocean Range Averaging Status	
CS_OFFL_SIR_IOP_2_201807261204544_201807261213523_C001   Ocean Range Averaging Status   records.     CS_OFFL_SIR_IOP_2_20180726T213523_20180726T222458_C001   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T222458_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T221437_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flags have been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T22458_20180726T221437_20180727T000411_C002   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one or more records.	CS_OFFL_SIR_IOP_220180726T195609_20180726T204544_C001		
CS_OFFL_SIR_IOP_2_201807261213523_201807261222458_C001   Range Averaging Status   or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T231437_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T222458_20180726T231437_C001   Ocean Range Averaging Status   The Ocean Range Averaging Status Flag has been set for one or more records.     CS_OFFL_SIR_IOP_2_20180726T231437_20180727T000411_C002   Ocean Range Averaging Status, Ice   The Ocean and Ice Range Averaging Status Flags have been set for one	CS_OFFL_SIR_IOP_220180726T204544_20180726T213523_C001	Ocean Range Averaging Status	
CS_OFFL_SIR_IOP_2_20180726122438_201807261231437_C001 Ocean Range Averaging Status records.	CS_OFFL_SIR_IOP_220180726T213523_20180726T222458_C001		
	CS_OFFL_SIR_IOP_220180726T222458_20180726T231437_C001	Ocean Range Averaging Status	
	CS_OFFL_SIR_IOP_220180726T231437_20180727T000411_C002		

#### 6.7 P2P SWH and Backscatter Measurement Check

CryoSat P2P data includes a SWH Averaging Status flag and an Ocean and Ice 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 P2P 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. 30

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180725T231548_20180726T000526_C003	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T000526_20180726T005501_C001	Backscatter Averaging Status Ice	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T005501_20180726T014440_C001	Backscatter Averaging Status Ice	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T014440_20180726T023415_C001	Backscatter Averaging Status Ice	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T023415_20180726T032353_C001		The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.

CS_OFFL_SIR_IOP_220180726T032353_20180726T041328_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T041328_20180726T050307_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_2_20180726T050307_20180726T055242_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T055242_20180726T064221_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T064221_20180726T073156_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T073156_20180726T082134_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T082134_20180726T091109_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T091109_20180726T100048_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T100048_20180726T105023_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T105023_20180726T114001_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T114001_20180726T122936_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T122936_20180726T131915_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T131915_20180726T140850_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T140850_20180726T145828_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T145828_20180726T154803_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T154803_20180726T163742_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T163742_20180726T172717_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T172717_20180726T181656_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T181656_20180726T190631_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T190631_20180726T195609_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T195609_20180726T204544_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T204544_20180726T213523_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T213523_20180726T222458_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T222458_20180726T231437_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220180726T231437_20180727T000411_C002	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.

# 6.8 P2P Ocean Retracking Quality Check

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.

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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.

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220180726T000526_20180726T005501_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T005501_20180726T014440_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T014440_20180726T023415_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T023415_20180726T032353_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T032353_20180726T041328_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T050307_20180726T055242_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T064221_20180726T073156_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T073156_20180726T082134_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T082134_20180726T091109_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20180726T091109_20180726T100048_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.

CS_OFFL_SIR_IOP_220180726T100048_20180726T105023_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T105023_20180726T114001_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T114001_20180726T122936_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T122936_20180726T131915_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T131915_20180726T140850_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T140850_20180726T145828_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T145828_20180726T154803_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T154803_20180726T163742_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T172717_20180726T181656_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T181656_20180726T190631_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T190631_20180726T195609_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T195609_20180726T204544_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T204544_20180726T213523_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T213523_20180726T222458_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220180726T222458_20180726T231437_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.