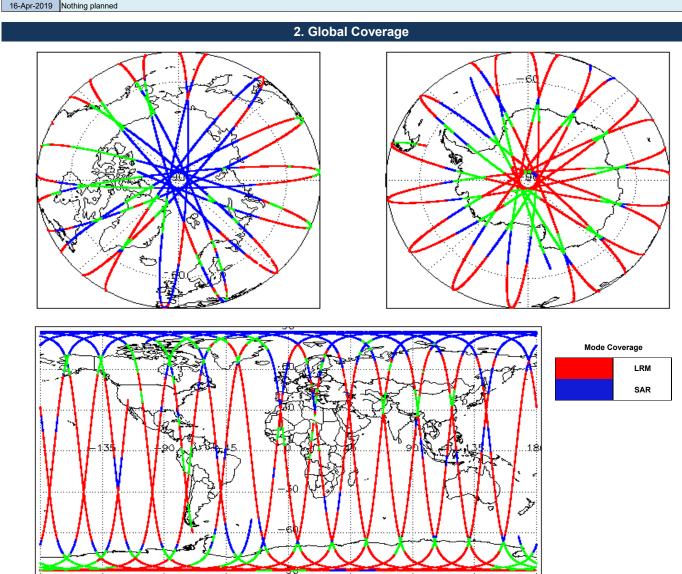


IDEAS+ Daily Report for IOP data:

15/04/2019

1. Overview				
		Check	L1 & L2	P2P
Report Production:	18-Apr-2019	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	One Onto One on Deservoir	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Usea:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Intermediate Ocean Products (IOP)	Product Format Check	Nominal	Nominal
Data Used:	L1B, L2 & P2P Science Data	Product Header Analysis	See Section 5.2	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	Nominal	Nominal
		Measurement Confidence Data Check	See Section 4.5, 4.6	Nominal
		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		
14-Apr-2019	None	
15-Apr-2019	None	
10.1.0010		



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

4.3 L1B Auxilary Data File Usage Check		
ach product is checked for missing Data Set Descriptors with respect to a pr	e-determined baseline and also to check th	ne validity of Auxiliary Data Files is correct.
lumber of products with errors: 0		
.4 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag for each measurement record	d. The bit value of this flag indicates any p	roblems when set.
Number of products with errors: 0		
4.5 L1B Measurement Confidence Data Check		
CryoSat L1B data includes a measurement confidence flag for each measure	ment record. The bit value of this flag indic	ates any problems when set.
Attitude Correction Missing: This flag is currently set in error for IOPR produ	ucts due to a configuration issue. This is be	ing investigated and will be updated in the next SW update.
lumber of products with errors: 0		
4.6 L1B Waveform Group Data Check		
CryoSat L1B data includes a waveform data flag for each measurement recor	d. The hit value of this flag indicates any p	rablems when set
Loss of Echo Flag: This flag is currently set for products over land, but this is		obients when set.
	to be expected.	
lumber of products with errors: 8		
Product	Test Failed	Description
CS_OFFL_SIR_IOPN1B_20190415T030223_20190415T030330_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190415T035538_20190415T035726_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190415T061455_20190415T061524_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190415T093034_20190415T093121_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190415T142836_20190415T142908_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190415T192304_20190415T192728_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190415T030752_20190415T030958_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190415T031132_20190415T031255_C001	Loss of Echo	The tracking echo is missing for one or more records
F 1/	D Louis 2 Data Quality	2ho ali
5. <mark>I</mark>	OP Level 2 Data Quality (JNECK
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 f	ile (.HDR) and a binary product file (.DBL).
Number of products with errors: 0		
5.2 L2 Product Header Analysis		
For all modules, a conice of two defined aboves on motions of an the MDU on		iss and/se summer value of her the summer of a summer successing shalls
For all products, a series of pre-defined checks are performed on the MPH an Number of products with errors:	d SFH in order to identify any inconsistence	ies and/or errors raised by the ground-segment processing chain.
Number of products with errors: 1		
	Test Failed	
CS_OFFL_SIR_IOPR_2_20190415T130404_20190415T130406_C001.DBL	Percentage of processing e	rrors detected greater than minimum acceptable threshold.
5.3 L2 Auxiliary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pr	e-determined baseline and also to check th	ne validity of Auxiliary Data Files is correct.
Number of products with errors: 0		
5.4 L2 Auxiliary Correction Error Check		
For all products, the auxiliary corrections within the Geophysical Group are ch	ecked 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 mea	surement record. The bit value of this flag	indicates any problems when set.
	surement record. The bit value of this flag	indicates any problems when set.
Number of products with errors: 0	surement record. The bit value of this flag	indicates any problems when set.
Number of products with errors: 0	surement record. The bit value of this flag	indicates any problems when set.
Number of products with errors: 0 5.6 L2 Range Measurement Check		
Number of products with errors: 0 5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for a Currently, there are two common status flags raised in the Level 2 production	each measurement record. The bit value o	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 and Ice Range Averaging Status flag for a Currently, there are two common status flags raised in the Level 2 produable highlighting any additional issues which may arise from this test.	each measurement record. The bit value of cts which are expected due to surface t	this flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a
Number of products with errors: 0 5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for experimently, there are two common status flags raised in the Level 2 produces the highlighting any additional issues which may arise from this test. Ocean Range Averaging Status Flag: This flag is currently set for products of the flag.	each measurement record. The bit value of cts which are expected due to surface f over land and sea ice, but this is to be exp	this flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a
Number of products with errors: 0 5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for experimently, there are two common status flags raised in the Level 2 produces the highlighting any additional issues which may arise from this test. Ocean Range Averaging Status Flag: This flag is currently set for products of the flag.	each measurement record. The bit value of cts which are expected due to surface f over land and sea ice, but this is to be exp	this flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a
Jumber of products with errors: 0 5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for extremently, there are two common status flags raised in the Level 2 produable highlighting any additional issues which may arise from this test. Ocean Range Averaging Status Flag: This flag is currently set for products of the Range Averaging Status Flag: This flag is currently set for products of the Range Averaging Status Flag: This flag is currently set for products of the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag is currently set for products over the Range Averaging Status Flag is currently set for products over the Range Averaging Status Flag is currently set for products over the Range Av	each measurement record. The bit value of cts which are expected due to surface f over land and sea ice, but this is to be exp	this flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a
Aumber of products with errors: 0 5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for experimently, there are two common status flags raised in the Level 2 produces able highlighting any additional issues which may arise from this test. Decean Range Averaging Status Flag: This flag is currently set for products over the Range Averaging Status Flag: This flag is currently set for products over the set of products with errors: 75	each measurement record. The bit value of cts which are expected due to surface f over land and sea ice, but this is to be exp	this flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a acted. Description
Number of products with errors: 0 5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for e Currently, there are two common status flags raised in the Level 2 product able highlighting any additional issues which may arise from this test. Dcean Range Averaging Status Flag: This flag is currently set for products over Number of products with errors: 75 Product	each measurement record. The bit value of cts which are expected due to surface to over land and sea ice, but this is to be expe land, but this is to be expected.	this flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a acted.
Number of products with errors: 0 5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for exceeding the second status flags raised in the Level 2 products the highlighting any additional issues which may arise from this test. Ocean Range Averaging Status Flag: This flag is currently set for products over the second status flags is currently set for products over the second status flags. Number of products with errors: 75 Product CS_OFFL_SIR_IOPM_2_20190415T002404_20190415T002418_C001	each measurement record. The bit value of cts which are expected due to surface to over land and sea ice, but this is to be expe land, but this is to be expected. Test Failed Ocean Range Averaging Status	this flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a acted. Description 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
Number of products with errors: 0 5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for exclusion of the level 2 produce able highlighting any additional issues which may arise from this test. Ocean Range Averaging Status Flag: This flag is currently set for products of ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or c	each measurement record. The bit value of cts which are expected due to surface to over land and sea ice, but this is to be exp land, but this is to be expected. Test Failed Ocean Range Averaging Status Ice Range Averaging Status	this flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a acted. Description The Ocean Range Averaging Status Flag has been set for one or more records. The Lee Range Averaging Status Flag has been set for one or more records.
Jumber of products with errors: 0 5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for extremently, there are two common status flags raised in the Level 2 producable highlighting any additional issues which may arise from this test. Ocean Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: This flag is currently set for products or ce Range Averaging Status Flag: Th	each measurement record. The bit value of cts which are expected due to surface to over land and sea ice, but this is to be expe land, but this is to be expected. Test Failed Ocean Range Averaging Status	this flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a sected. Description The Ocean Range Averaging Status Flag has been set for one or more records. The locean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records.
5.6 L2 Range Measurement Check CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for e Currently, there are two common status flags raised in the Level 2 produ table highlighting any additional issues which may arise from this test. Ocean Range Averaging Status Flag: This flag is currently set for products of Ice Range Averaging Status Flag: This flag is currently set for products over	each measurement record. The bit value of cts which are expected due to surface to over land and sea ice, but this is to be exp land, but this is to be expected. Test Failed Ocean Range Averaging Status Ice Range Averaging Status	This flag indicates any problems when set. ype. All common flags are summarised in the list below, followed by a sected. Description 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 records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records.

Ice Range Averaging Status

Ocean Range Averaging Status

CS_OFFL_SIR_IOPM_2_20190415T012433_20190415T012707_C001

CS_OFFL_SIR_IOPM_2_20190415T012848_20190415T014545_C001

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

The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOPM_2_20190415T014743_20190415T020205_C001 CS OFFL SIR IOPM 2 20190415T020928 20190415T021135 C001 CS_OFFL_SIR_IOPM_2_20190415T021229_20190415T021636_C001 CS_OFFL_SIR_IOPM_2_20190415T021824_20190415T023350_C001 CS OFFL SIR IOPM 2 20190415T023551 20190415T024514 C001 CS OFFL SIR IOPM 2 20190415T030330 20190415T030422 C001 CS OFFL SIR IOPM 2 20190415T031255 20190415T032443 C001 CS OFFL SIR IOPM 2 20190415T033009 20190415T034428 C001 CS_OFFL_SIR_IOPM_2_20190415T034725_20190415T035538_C001 CS_OFFL_SIR_IOPM_2_20190415T035757_20190415T041357_C001 CS OFFL SIR IOPM 2 20190415T041742 20190415T042229 C001 CS_OFFL_SIR_IOPM_2_20190415T045640_20190415T052339_C001 CS OFFL SIR IOPM 2 20190415T052615 20190415T052817 C001 CS_OFFL_SIR_IOPM_2_20190415T052856_20190415T053411_C001 CS_OFFL_SIR_IOPM_2_20190415T053659_20190415T060206_C001 CS OFFL SIR IOPM 2 20190415T063439 20190415T064524 C001 CS OFFL SIR IOPM 2 20190415T065101 20190415T070211 C001 CS_OFFL_SIR_IOPM_2_20190415T070537_20190415T070629_C001 CS OFFL SIR IOPM 2 20190415T070822 20190415T071426 C001 CS_OFFL_SIR_IOPM_2_20190415T071550_20190415T074519_C001 CS_OFFL_SIR_IOPM_2_20190415T075229_20190415T075338_C001 CS OFFL SIR IOPM 2 20190415T080738 20190415T084118 C001 CS OFFL SIR IOPM 2 20190415T084730 20190415T085257 C001 CS OFFL SIR IOPM 2 20190415T085436 20190415T090048 C001 CS OFFL SIR IOPM 2 20190415T093140 20190415T093441 C001 CS OFFL SIR IOPM 2 20190415T094656 20190415T095536 C001 CS_OFFL_SIR_IOPM_2_20190415T095820_20190415T102041_C001 CS_OFFL_SIR_IOPM_2_20190415T102629_20190415T102734_C001 CS_OFFL_SIR_IOPM_2_20190415T102737_20190415T103146_C001 CS OFFL SIR IOPM 2 20190415T103348 20190415T105323 C001 CS_OFFL_SIR_IOPM_2_20190415T112522_20190415T115853_C001 CS_OFFL_SIR_IOPM_2_20190415T121342_20190415T121511_C001 CS OFFL SIR IOPM_2_20190415T121732_20190415T124859_C001 CS_OFFL_SIR_IOPM_2_20190415T130908_20190415T131613_C001 CS_OFFL_SIR_IOPM_2_20190415T132202_20190415T133826_C001 CS OFFL SIR IOPM 2 20190415T134013 20190415T134530 C001 CS_OFFL_SIR_IOPM_2_20190415T141123_20190415T142342_C001 CS_OFFL_SIR_IOPM_2_20190415T145051_20190415T145937_C001 CS OFFL SIR IOPM 2 20190415T150253 20190415T151722 C001 CS OFFL SIR IOPM 2 20190415T151939 20190415T152441 C001 CS_OFFL_SIR_IOPM_2_20190415T153313_20190415T153422_C001 CS_OFFL_SIR_IOPM_2_20190415T153905_20190415T154543_C001 CS_OFFL_SIR_IOPM_2_20190415T155027_20190415T155502_C001 CS OFFL SIR IOPM 2 20190415T163425 20190415T165640 C001 CS_OFFL_SIR_IOPM_2_20190415T170008_20190415T170357_C001 CS_OFFL_SIR_IOPM_2_20190415T171014_20190415T173803_C001 CS OFFL SIR IOPM 2 20190415T181054 20190415T183625 C001 CS_OFFL_SIR_IOPM_2_20190415T183751_20190415T184311_C001 CS_OFFL_SIR_IOPM_2_20190415T184317_20190415T184643_C001 CS OFFL SIR IOPM 2 20190415T184953 20190415T190111 C001 CS_OFFL_SIR_IOPM_2_20190415T190649_20190415T192304_C001

Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status Ice Range Averaging Status Ice Range Averaging Status Ocean Range Averaging Status Ocean Range Averaging Status

The Ocean Range Averaging Status Flag has been set for one or more reco The Ice Range Averaging Status Flag has been set for one or more ecord The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more 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 records The Ocean Range Averaging Status Flag has been set for one or more 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 records The Ocean Range Averaging Status Flag has been set for one or more The Ocean Range Averaging Status Flag has been set for one or more 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 record The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords 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 records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more 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 records The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ocean Range Averaging Status Flag has been set for one or more 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 records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more 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 records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more ecords The Ice Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more ecords The Ice 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 record The Ocean Range Averaging Status Flag has been set for one or more records The Ocean Range Averaging Status Flag has been set for one or more records

CS_OFFL_SIR_IOPM_2_20190415T194613_20190415T200611_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T200942_20190415T201603_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T201751_20190415T202548_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T202903_20190415T210302_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T211623_20190415T211725_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T213821_20190415T215518_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T215723_20190415T220237_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T220837_20190415T223050_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T223335_20190415T224306_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T225426_20190415T225816_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T231340_20190415T231945_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T232132_20190415T233359_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T233903_20190415T234138_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190415T030422_20190415T030518_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190415T070416_20190415T070537_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190415T192304_20190415T192728_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190415T121153_20190415T121342_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190415T231945_20190415T232132_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. 74

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190415T002404_20190415T002418_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_20190415T003031_20190415T003224_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T003930_20190415T005417_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_20190415T005421_20190415T005645_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_20190415T010126_20190415T011004_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_20190415T012433_20190415T012707_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T012848_20190415T014545_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_20190415T014743_20190415T020205_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_20190415T020928_20190415T021135_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T021229_20190415T021636_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T021824_20190415T023350_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_20190415T023551_20190415T024514_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_20190415T030330_20190415T030422_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T031255_20190415T032443_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_20190415T033009_20190415T034428_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_20190415T034725_20190415T035538_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T035757_20190415T041357_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_20190415T041742_20190415T042229_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_20190415T045640_20190415T052339_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_20190415T052615_20190415T052817_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T052856_20190415T053411_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190415T053659_20190415T060206_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_20190415T063439_20190415T064524_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_20190415T065101_20190415T070211_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_20190415T070822_20190415T071426_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOPM_2_20190415T071550_20190415T074519_C001 CS OFFL SIR IOPM 2 20190415T075229 20190415T075338 C001 CS_OFFL_SIR_IOPM_2_20190415T080738_20190415T084118_C001 CS_OFFL_SIR_IOPM_2_20190415T084730_20190415T085257_C001 CS_OFFL_SIR_IOPM_2_20190415T085436_20190415T090048_C001 CS_OFFL_SIR_IOPM_2_20190415T093140_20190415T093441_C001 CS OFFL SIR IOPM 2 20190415T094656 20190415T095536 C001 CS OFFL SIR IOPM 2 20190415T095820 20190415T102041 C001 CS_OFFL_SIR_IOPM_2_20190415T102737_20190415T103146_C001 CS_OFFL_SIR_IOPM_2_20190415T103348_20190415T105323_C001 CS OFFL SIR IOPM 2 20190415T112522 20190415T115853 C001 CS_OFFL_SIR_IOPM_2_20190415T121732_20190415T124859_C001 CS OFFL SIR IOPM 2 20190415T130908 20190415T131613 C001 CS_OFFL_SIR_IOPM_2_20190415T132202_20190415T133826_C001 CS_OFFL_SIR_IOPM_2_20190415T134013_20190415T134530_C001 CS OFFL SIR IOPM 2 20190415T135545 20190415T140909 C001 CS_OFFL_SIR_IOPM_2_20190415T141123_20190415T142342_C001 CS_OFFL_SIR_IOPM_2_20190415T145051_20190415T145937_C001 CS_OFFL_SIR_IOPM_2_20190415T150253_20190415T151722_C001 CS_OFFL_SIR_IOPM_2_20190415T151939_20190415T152441_C001 CS_OFFL_SIR_IOPM_2_20190415T152518_20190415T152619_C001 CS OFFL SIR IOPM 2 20190415T153313 20190415T153422 C001 CS_OFFL_SIR_IOPM_2_20190415T153905_20190415T154543_C001 CS OFFL SIR IOPM 2 20190415T155027 20190415T155502 C001 CS OFFL SIR IOPM 2 20190415T163425 20190415T165640 C001 CS OFFL SIR IOPM 2 20190415T170008 20190415T170357 C001 CS_OFFL_SIR_IOPM_2_20190415T171014_20190415T173803_C001 CS_OFFL_SIR_IOPM_2_20190415T181054_20190415T183625_C001 CS_OFFL_SIR_IOPM_2_20190415T183751_20190415T184311_C001 CS OFFL SIR IOPM 2 20190415T184317 20190415T184643 C001 CS_OFFL_SIR_IOPM_2_20190415T184953_20190415T190111_C001 CS_OFFL_SIR_IOPM_2_20190415T190649_20190415T192304_C001 CS OFFL SIR IOPM 2 20190415T194613 20190415T200611 C001 CS_OFFL_SIR_IOPM_2_20190415T200942_20190415T201603_C001 CS_OFFL_SIR_IOPM_2_20190415T201751_20190415T202548_C001 CS OFFL SIR IOPM 2 20190415T202903 20190415T210302 C001 CS_OFFL_SIR_IOPM_2_20190415T211623_20190415T211725_C001 CS OFFL SIR IOPM 2 20190415T213821 20190415T215518 C001 CS OFFL SIR IOPM 2 20190415T215723 20190415T220237 C001 CS_OFFL_SIR_IOPM_2_20190415T220837_20190415T223050_C001 CS_OFFL_SIR_IOPM_2_20190415T223335_20190415T224306_C001 CS OFFL SIR IOPM 2 20190415T225426 20190415T225816 C001 CS_OFFL_SIR_IOPM_2_20190415T232132_20190415T233359_C001 CS OFFL SIR IOPM 2 20190415T233903 20190415T234138 C001 CS_OFFL_SIR_IOPN_2_20190415T030422_20190415T030518_C001 CS_OFFL_SIR_IOPN_2_20190415T070416_20190415T070537_C001 CS OFFL SIR IOPN 2 20190415T192304 20190415T192728 C001 CS_OFFL_SIR_IOPR_2_20190415T121153_20190415T121342_C001 CS_OFFL_SIR_IOPR_2_20190415T231945_20190415T232132_C001

SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status

SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status

Ice Backscatter Averaging Status

SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status

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Ice Backscatter Averaging Status

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Ice Backscatter Averaging Status SWH Averaging Status, Ocean

Backscatter Averaging Status

SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status 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 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.

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.

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 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.

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.

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 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.

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.

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 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.

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.

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 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.

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

5.8 L2 Ocean Retracking Quality Check

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:

6.2 P2P Product Header Analysis

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

6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

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). Number of products with errors: 0

0

54

6.5 P2P Measurement Confidence Data Check

CryoSat P2P data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

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. 29

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220190414T234217_20190415T003152_C002	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T003152_20190415T012131_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T012131_20190415T021106_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_220190415T021106_20190415T030044_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_220190415T030044_20190415T035019_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_220190415T035019_20190415T043958_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_20190415T043958_20190415T052933_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T052933_20190415T061911_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_220190415T061911_20190415T070847_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T070847_20190415T075825_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_220190415T075825_20190415T084800_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T084800_20190415T093739_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_220190415T093739_20190415T102714_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T102714_20190415T111652_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_220190415T111652_20190415T120627_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T120627_20190415T125606_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_220190415T125606_20190415T134541_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_220190415T134541_20190415T143519_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_220190415T143519_20190415T152454_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_220190415T152454_20190415T161433_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_220190415T161433_20190415T170408_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_220190415T170408_20190415T175347_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_220190415T175347_20190415T184322_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_220190415T184322_20190415T193300_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_220190415T193300_20190415T202235_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_220190415T202235_20190415T211214_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_220190415T211214_20190415T220149_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__20190415T220149_20190415T225127_C001 CS_OFFL_SIR_IOP_2_20190415T225127_20190415T234102_C001 Ocean Range Averaging Status, Ice Range Averaging Status Ocean Range Averaging Status

records.

The Ocean and Ice Range Averaging Status Flags have been set for one or more records. The Ocean Range Averaging Status Flag has been set for one or more

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. 28

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220190415T003152_20190415T012131_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_220190415T012131_20190415T021106_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_220190415T021106_20190415T030044_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_220190415T030044_20190415T035019_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_220190415T035019_20190415T043958_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_220190415T043958_20190415T052933_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_220190415T052933_20190415T061911_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_220190415T061911_20190415T070847_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_220190415T070847_20190415T075825_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_220190415T075825_20190415T084800_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_220190415T084800_20190415T093739_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_220190415T093739_20190415T102714_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_220190415T102714_20190415T111652_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_220190415T111652_20190415T120627_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_220190415T120627_20190415T125606_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_220190415T125606_20190415T134541_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_220190415T134541_20190415T143519_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_220190415T143519_20190415T152454_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_220190415T152454_20190415T161433_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_220190415T161433_20190415T170408_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_220190415T170408_20190415T175347_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_220190415T175347_20190415T184322_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_220190415T184322_20190415T193300_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_220190415T193300_20190415T202235_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_220190415T202235_20190415T211214_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_220190415T211214_20190415T220149_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_220190415T220149_20190415T225127_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_220190415T225127_20190415T234102_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.

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_220190415T003152_20190415T012131_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T012131_20190415T021106_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T021106_20190415T030044_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T030044_20190415T035019_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T035019_20190415T043958_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T043958_20190415T052933_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T052933_20190415T061911_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T061911_20190415T070847_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T070847_20190415T075825_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T075825_20190415T084800_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T084800_20190415T093739_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T093739_20190415T102714_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190415T102714_20190415T111652_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T111652_20190415T120627_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T125606_20190415T134541_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T134541_20190415T143519_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T143519_20190415T152454_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T152454_20190415T161433_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T161433_20190415T170408_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T170408_20190415T175347_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T175347_20190415T184322_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T184322_20190415T193300_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T193300_20190415T202235_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T202235_20190415T211214_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T211214_20190415T220149_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T220149_20190415T225127_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190415T234102_20190416T003041_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.