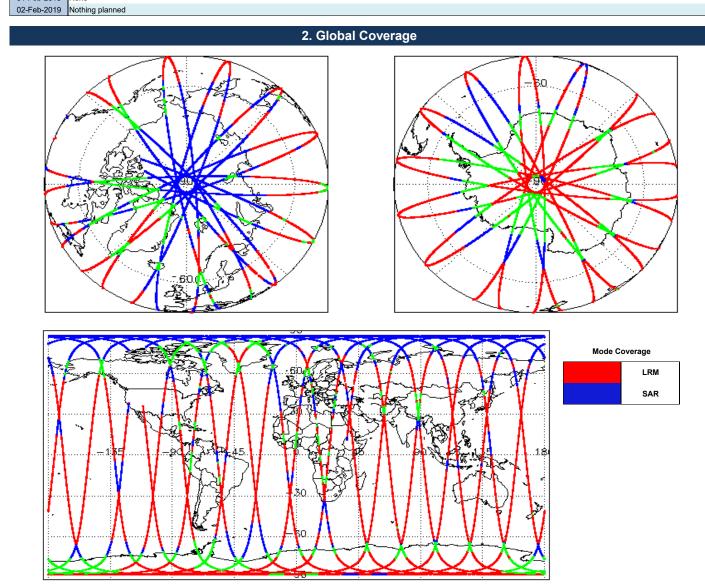


IDEAS+ Daily Report for IOP data:

<u>01/02/2019</u>

		1. Overview		
		Check	L1 & L2	P2P
Report Production:	oduction: 04-Feb-2019	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
		Product Software Check	Nominal	Nominal
Dete Herede	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	Product Format Check	Nominal	Nominal
Data Used:		Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	See Section 4.3 and 5.3	See Section 6.3
		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 31-Jan-2019 01-Feb-2019 None



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

Each product is checked for missing Data Set Descriptors with respect to a pre-	e-determined baseline and also to c	heck the validity of Auxiliary Data Files is correct.
Number of products with errors: 0		
4.4 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag for each measurement recor	d. The bit value of this flag indicate	s any problems when set.
Number of products with errors: 0		
4.5 L1B Measurement Confidence Data Check		
CryoSat L1B data includes a measurement confidence flag for each measurer	ment record. The hit value of this fis	a indicates any problems when set
Attitude Correction Missing: This flag is currently set in error for IOPR produ		• •
Number of products with errors: 0		
4.6.1.4.B. Wayeform Crown Data Chask		
4.6 L1B Waveform Group Data Check		
CryoSat L1B data includes a waveform data flag for each measurement record	-	any problems when set.
Loss of Echo Flag: This flag is currently set for products over land, but this is	to be expected.	
Number of products with errors: 11		
	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20190201T043647_20190201T044504_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190201T052053_20190201T052214_C001 CS_OFFL_SIR_IOPN1B_20190201T072249_20190201T072642_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_201902011072249_201902011072042_C001	Loss of Echo	The tracking echo is missing for one or more records
CS OFFL SIR IOPN1B 20190201T093134 20190201T093349 C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190201T150958_20190201T151311_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190201T164616_20190201T164744_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20190201T182909_20190201T183123_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190201T003424_20190201T003515_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190201T200947_20190201T201508_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20190201T214807_20190201T215751_C001	Loss of Echo	The tracking echo is missing for one or more records
5.10	OP Level 2 Data Qual	lity Chook
5.1 L2 Product Format Check		
Each product, retrieved and unpacked from the science server, is checked to e	ensure it consists of both an XML h	eader file (.HDR) and a binary product file (.DBL).
Number of products with errors: 0		
5.2 L2 Product Header Analysis		
•	d SPH in order to identify any incon	sistencies and/or errors raised by the ground-segment processing chain.
For all products, a series of pre-defined checks are performed on the MPH and	d SPH in order to identify any incon	sistencies and/or errors raised by the ground-segment processing chain.
For all products, a series of pre-defined checks are performed on the MPH and Number of products with errors: 0	d SPH in order to identify any incon	sistencies and/or errors raised by the ground-segment processing chain.
For all products, a series of pre-defined checks are performed on the MPH and Number of products with errors: 0 5.3 L2 Auxiliary Data File Usage Check		
For all products, a series of pre-defined checks are performed on the MPH and 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-		
For all products, a series of pre-defined checks are performed on the MPH and 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-		
For all products, a series of pre-defined checks are performed on the MPH and 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 Number of products with errors: 0		
For all products, a series of pre-defined checks are performed on the MPH and 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 Number of products with errors: 0 5.4 L2 Auxiliary Correction Error Check	e-determined baseline and also to c	heck the validity of Auxiliary Data Files is correct.
For all products, a series of pre-defined checks are performed on the MPH and 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 Number of products with errors: 0 5.4 L2 Auxiliary Correction Error Check For all products, the auxiliary corrections within the Geophysical Group are checked for a present of the second	e-determined baseline and also to c	heck the validity of Auxiliary Data Files is correct.
For all products, a series of pre-defined checks are performed on the MPH and 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 Number of products with errors: 0 5.4 L2 Auxiliary Correction Error Check For all products, the auxiliary corrections within the Geophysical Group are checked.	e-determined baseline and also to c	heck the validity of Auxiliary Data Files is correct.
For all products, a series of pre-defined checks are performed on the MPH and 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 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 Number of products with errors: 0	e-determined baseline and also to c ecked for the default error value (32	check the validity of Auxiliary Data Files is correct.
For all products, a series of pre-defined checks are performed on the MPH and 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 Number of products with errors: 0 5.4 L2 Auxiliary Correction Error Check For all products, the auxiliary corrections within the Geophysical Group are che Number of products with errors: 0 5.5 L2 Measurement Confidence Data Check	e-determined baseline and also to c ecked for the default error value (32	heck the validity of Auxiliary Data Files is correct.

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. 74

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190201T005729_20190201T005951_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T010151_20190201T010445_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T010644_20190201T011206_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T011755_20190201T014016_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T014302_20190201T015217_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T020444_20190201T020815_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOPM_2_20190201T022417_20190201T022907_C001 CS OFFL SIR IOPM 2 20190201T023054 20190201T024408 C001 CS_OFFL_SIR_IOPM_2_20190201T025717_20190201T030324_C001 CS_OFFL_SIR_IOPM_2_20190201T030333_20190201T032929_C001 CS OFFL SIR IOPM 2 20190201T035027 20190201T041843 C001 CS OFFL SIR IOPM 2 20190201T043334 20190201T043422 C001 CS OFFL SIR IOPM 2 20190201T043647 20190201T044504 C001 CS OFFL SIR IOPM 2 20190201T045915 20190201T050638 C001 CS_OFFL_SIR_IOPM_2_20190201T052214_20190201T052527_C001 CS_OFFL_SIR_IOPM_2_20190201T052747_20190201T054315_C001 CS_OFFL_SIR_IOPM_2_20190201T054529_20190201T060028_C001 CS_OFFL_SIR_IOPM_2_20190201T060706_20190201T060923_C001 CS OFFL SIR IOPM 2 20190201T061001 20190201T061421 C001 CS_OFFL_SIR_IOPM_2_20190201T061604_20190201T063102_C001 CS_OFFL_SIR_IOPM_2_20190201T063242_20190201T064757_C001 CS OFFL SIR IOPM 2 20190201T071050 20190201T071643 C001 CS_OFFL_SIR_IOPM_2_20190201T071805_20190201T072017_C001 CS_OFFL_SIR_IOPM_2_20190201T072642_20190201T074203_C001 CS OFFL SIR IOPM 2 20190201T074456 20190201T075327 C001 CS_OFFL_SIR_IOPM_2_20190201T075543_20190201T081831_C001 CS_OFFL_SIR_IOPM_2_20190201T085607_20190201T092131_C001 CS OFFL SIR IOPM 2 20190201T092650 20190201T093133 C001 CS_OFFL_SIR_IOPM_2_20190201T093410_20190201T093733_C001 CS OFFL SIR IOPM 2 20190201T093740 20190201T100051 C001 CS OFFL SIR IOPM 2 20190201T103316 20190201T104310 C001 CS_OFFL_SIR_IOPM_2_20190201T104847_20190201T105921_C001 CS_OFFL_SIR_IOPM_2_20190201T110609_20190201T111204_C001 CS_OFFL_SIR_IOPM_2_20190201T111339_20190201T114237_C001 CS_OFFL_SIR_IOPM_2_20190201T120446_20190201T123908_C001 CS OFFL SIR IOPM 2 20190201T124516 20190201T125035 C001 CS_OFFL_SIR_IOPM_2_20190201T125234_20190201T125514_C001 CS_OFFL_SIR_IOPM_2_20190201T125713_20190201T125836_C001 CS OFFL SIR IOPM 2 20190201T132816 20190201T133038 C001 CS_OFFL_SIR_IOPM_2_20190201T133144_20190201T133221_C001 CS_OFFL_SIR_IOPM_2_20190201T134446_20190201T135318_C001 CS OFFL SIR IOPM 2 20190201T135604 20190201T141817 C001 CS_OFFL_SIR_IOPM_2_20190201T142525_20190201T142931_C001 CS_OFFL_SIR_IOPM_2_20190201T143130_20190201T144438_C001 CS OFFL SIR IOPM 2 20190201T144626 20190201T145235 C001 CS OFFL SIR IOPM 2 20190201T145420 20190201T145901 C001 CS_OFFL_SIR_IOPM_2_20190201T152351_20190201T155710_C001 CS_OFFL_SIR_IOPM_2_20190201T155908_20190201T160416_C001 CS_OFFL_SIR_IOPM_2_20190201T161517_20190201T164606_C001 CS_OFFL_SIR_IOPM_2_20190201T170529_20190201T172018_C001 CS_OFFL_SIR_IOPM_2_20190201T172037_20190201T173620_C001 CS_OFFL_SIR_IOPM_2_20190201T173807_20190201T174314_C001 CS OFFL SIR IOPM 2 20190201T174352 20190201T174519 C001 CS_OFFL_SIR_IOPM_2_20190201T175251_20190201T180253_C001 CS_OFFL_SIR_IOPM_2_20190201T180913_20190201T182028_C001 CS OFFL SIR IOPM 2 20190201T184325 20190201T185859 C001 CS OFFL SIR IOPM 2 20190201T190038 20190201T191510 C001

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

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

CS_OFFL_SIR_IOPM_2_20190201T191724_20190201T192224_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T192306_20190201T192409_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T193007_20190201T195250_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T203146_20190201T205507_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T205805_20190201T210141_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T210203_20190201T210515_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T210755_20190201T213557_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T220749_20190201T223408_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T223547_20190201T224054_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T224816_20190201T225901_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190201T230440_20190201T232149_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190201T060105_20190201T060706_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190201T132649_20190201T132816_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190201T192409_20190201T193007_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190201T045434_20190201T045915_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190201T065433_20190201T065516_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190201T144438_20190201T144626_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 20190201T005729 20190201T005951 C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
	Backscatter Averaging Status	more records.
CS_OFFL_SIR_IOPM_2_20190201T010151_20190201T010445_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	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
CS_OFFL_SIR_IOPM_2_20190201T010644_20190201T011206_C001	Ice Backscatter Averaging Status	records.
CS OFFL SIR IOPM 2 20190201T011755 20190201T014016 C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20190201T014302_20190201T015217_C001	Backscatter Averaging Status	more records.
CS OFEL SID LODM 2 20100201T020444 20100201T020815 C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20190201T020444_20190201T020815_C001	Backscatter Averaging Status	more records.
CS_OFFL_SIR_IOPM_2_20190201T022417_20190201T022907_C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
	Backscatter Averaging Status SWH Averaging Status, Ocean	more records. The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20190201T023054_20190201T024408_C001	Backscatter Averaging Status	more records.
CS OFFL SIR IOPM 2 20190201T025717 20190201T030324 C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
C3_011E_311C_10F101_2_201902011023717_201902011030324_0001	Backscatter Averaging Status	more records.
CS_OFFL_SIR_IOPM_2_20190201T030333_20190201T032929_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20190201T035027_20190201T041843_C001	Backscatter Averaging Status	more records.
CS OFFL SIR IOPM 2 20190201T043334 20190201T043422 C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more
		records.
CS_OFFL_SIR_IOPM_2_20190201T043647_20190201T044504_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20190201T045915_20190201T050638_C001	Backscatter Averaging Status	more records.
CS OFFL SIR IOPM 2 20190201T052214 20190201T052527 C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more
		records.
CS_OFFL_SIR_IOPM_2_20190201T052747_20190201T054315_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
CC OFFL CID LODN 0 20100204T054520 20100204T060020 C004	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20190201T054529_20190201T060028_C001	Backscatter Averaging Status	more records.
CS OFFL SIR IOPM 2 20190201T060706 20190201T060923 C001	Ice Backscatter Averaging Status	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
CS_OFFL_SIR_IOPM_2_20190201T061001_20190201T061421_C001	Ice Backscatter Averaging Status	records.
CS OFFL SIR IOPM 2 20190201T061604 20190201T063102 C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
	Backscatter Averaging Status	more records.
CS_OFFL_SIR_IOPM_2_20190201T063242_20190201T064757_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
CS_OFFL_SIR_IOPM_2_20190201T071050_20190201T071643_C001	Backscatter Averaging Status	more records.
CS OFFL SIR IOPM 2 20190201T071805 20190201T072017 C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
	Backscatter Averaging Status	more records.
CS_OFFL_SIR_IOPM_2_20190201T072642_20190201T074203_C001	SWH Averaging Status, Ocean Backscatter Averaging Status	The SWH and Ocean Averaging Status Flags have been set for one or more records.
	0.0	The Ice Backscatter Averaging Status Flag has been set for one or more
CS_OFFL_SIR_IOPM_2_20190201T074456_20190201T075327_C001	Ice Backscatter Averaging Status	records.
CS OFFL SIR IOPM 2 20190201T075543 20190201T081831 C001	SWH Averaging Status, Ocean	The SWH and Ocean Averaging Status Flags have been set for one or
	Backscatter Averaging Status	more records.

CS_OFFL_SIR_IOPM_2_20190201T085607_20190201T092131_C001 CS OFFL SIR IOPM 2 20190201T092650 20190201T093133 C001 CS_OFFL_SIR_IOPM_2_20190201T093410_20190201T093733_C001 CS_OFFL_SIR_IOPM_2_20190201T093740_20190201T100051_C001 CS OFFL SIR IOPM 2 20190201T103316 20190201T104310 C001 CS OFFL SIR IOPM 2 20190201T104847 20190201T105921 C001 CS OFFL SIR IOPM 2 20190201T110609 20190201T111204 C001 CS OFFL SIR IOPM 2 20190201T111339 20190201T114237 C001 CS_OFFL_SIR_IOPM_2_20190201T115056_20190201T115159_C001 CS_OFFL_SIR_IOPM_2_20190201T120446_20190201T123908_C001 CS_OFFL_SIR_IOPM_2_20190201T124516_20190201T125035_C001 CS_OFFL_SIR_IOPM_2_20190201T125234_20190201T125514_C001 CS OFFL SIR IOPM 2 20190201T132816 20190201T133038 C001 CS_OFFL_SIR_IOPM_2_20190201T134446_20190201T135318_C001 CS_OFFL_SIR_IOPM_2_20190201T135604_20190201T141817_C001 CS OFFL SIR IOPM 2 20190201T142525 20190201T142931 C001 CS_OFFL_SIR_IOPM_2_20190201T143130_20190201T144438_C001 CS_OFFL_SIR_IOPM_2_20190201T144626_20190201T145235_C001 CS_OFFL_SIR_IOPM_2_20190201T152351_20190201T155710_C001 CS_OFFL_SIR_IOPM_2_20190201T155908_20190201T160416_C001 CS_OFFL_SIR_IOPM_2_20190201T160436_20190201T160736_C001 CS OFFL SIR IOPM 2 20190201T161517 20190201T164606 C001 CS_OFFL_SIR_IOPM_2_20190201T170529_20190201T172018_C001 CS OFFL SIR IOPM 2 20190201T172037 20190201T173620 C001 CS OFFL SIR IOPM 2 20190201T173807 20190201T174314 C001 CS OFFL SIR IOPM 2 20190201T174352 20190201T174519 C001 CS_OFFL_SIR_IOPM_2_20190201T175251_20190201T180253_C001 CS_OFFL_SIR_IOPM_2_20190201T180913_20190201T182028_C001 CS_OFFL_SIR_IOPM_2_20190201T184325_20190201T185859_C001 CS OFFL SIR IOPM 2 20190201T190038 20190201T191510 C001 CS_OFFL_SIR_IOPM_2_20190201T191724_20190201T192224_C001 CS_OFFL_SIR_IOPM_2_20190201T192306_20190201T192409_C001 CS OFFL SIR IOPM 2 20190201T193007 20190201T195250 C001 CS_OFFL_SIR_IOPM_2_20190201T203146_20190201T205507_C001 CS_OFFL_SIR_IOPM_2_20190201T205805_20190201T210141_C001 CS OFFL SIR IOPM 2 20190201T210203 20190201T210515 C001 CS_OFFL_SIR_IOPM_2_20190201T210755_20190201T213557_C001 CS_OFFL_SIR_IOPM_2_20190201T220749_20190201T223408_C001 CS OFFL SIR IOPM 2 20190201T223547 20190201T224054 C001 CS OFFL SIR IOPM 2 20190201T224102 20190201T224429 C001 CS_OFFL_SIR_IOPM_2_20190201T224816_20190201T225901_C001 CS_OFFL_SIR_IOPM_2_20190201T230440_20190201T232149_C001 CS_OFFL_SIR_IOPN_2_20190201T060105_20190201T060706_C001 CS OFFL SIR IOPN 2 20190201T132649 20190201T132816 C001 CS_OFFL_SIR_IOPN_2_20190201T192409_20190201T193007_C001 CS_OFFL_SIR_IOPR_2_20190201T045434_20190201T045915_C001 CS OFFL SIR IOPR 2 20190201T065433 20190201T065516 C001 CS_OFFL_SIR_IOPR_2_20190201T144438_20190201T144626_C001

SWH Averaging Status, Ocean Backscatter Averaging Status Ice 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 Ice 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 Ice 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 Ice Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status Ice Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status SWH Averaging Status, Ocean Backscatter Averaging Status Ice Backscatter Averaging Status Ice 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 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 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 ecords. 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 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 nore 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 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 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 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

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:

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).

65

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. 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_220190201T002140_20190201T011115_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_20190201T011115_20190201T020053_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_20190201T020053_20190201T025028_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190201T025028_20190201T034007_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190201T034007_20190201T042942_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T042942_20190201T051920_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190201T051920_20190201T060855_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_220190201T060855_20190201T065834_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_20190201T065834_20190201T074809_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_220190201T074809_20190201T083747_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_220190201T083747_20190201T092723_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T092723_20190201T101701_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_220190201T101701_20190201T110636_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T110636_20190201T115614_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_20190201T115614_20190201T124550_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T124550_20190201T133528_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_20190201T133528_20190201T142503_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T142503_20190201T151442_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_20190201T151442_20190201T160417_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_220190201T160417_20190201T165355_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_220190201T165355_20190201T174330_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_220190201T174330_20190201T183309_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_220190201T183309_20190201T192244_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_220190201T192244_20190201T201222_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_220190201T201222_20190201T210158_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_220190201T210158_20190201T215136_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T215136_20190201T224111_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_220190201T224111_20190201T233049_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_220190201T233049_20190202T002025_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

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_220190201T002140_20190201T011115_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_220190201T011115_20190201T020053_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_220190201T020053_20190201T025028_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_220190201T025028_20190201T034007_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_220190201T034007_20190201T042942_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_220190201T042942_20190201T051920_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_220190201T051920_20190201T060855_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_220190201T060855_20190201T065834_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_220190201T065834_20190201T074809_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_220190201T074809_20190201T083747_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_220190201T083747_20190201T092723_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_220190201T092723_20190201T101701_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_220190201T101701_20190201T110636_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_220190201T110636_20190201T115614_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_220190201T115614_20190201T124550_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_220190201T124550_20190201T133528_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_220190201T133528_20190201T142503_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_220190201T142503_20190201T151442_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_220190201T151442_20190201T160417_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_220190201T160417_20190201T165355_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_220190201T165355_20190201T174330_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_220190201T174330_20190201T183309_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_220190201T183309_20190201T192244_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_220190201T192244_20190201T201222_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_220190201T201222_20190201T210158_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_220190201T210158_20190201T215136_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_2_20190201T224111_20190201T233049_C001

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

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.

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: 28

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220190201T002140_20190201T011115_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T011115_20190201T020053_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T020053_20190201T025028_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T025028_20190201T034007_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T034007_20190201T042942_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T042942_20190201T051920_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T051920_20190201T060855_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T060855_20190201T065834_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T065834_20190201T074809_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T074809_20190201T083747_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T083747_20190201T092723_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T092723_20190201T101701_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T101701_20190201T110636_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T110636_20190201T115614_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T115614_20190201T124550_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T124550_20190201T133528_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T133528_20190201T142503_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T142503_20190201T151442_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T151442_20190201T160417_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T160417_20190201T165355_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T165355_20190201T174330_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T174330_20190201T183309_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T183309_20190201T192244_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T192244_20190201T201222_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T201222_20190201T210158_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T210158_20190201T215136_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T215136_20190201T224111_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190201T233049_20190202T002025_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
		'