

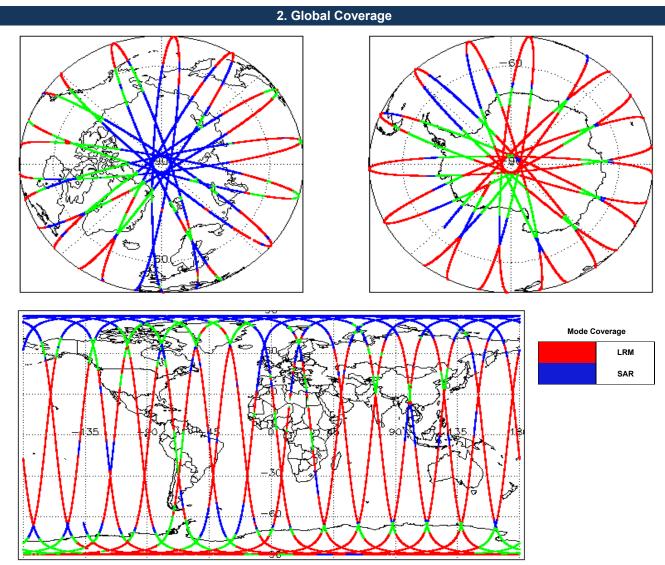
IDEAS+ Daily Report for IOP data:

02/02/2019

1. Overview				
		Check	L1 & L2	P2P
Report Production:	06-Feb-2019	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	Cause Cat Occasa Drassasa	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Intermediate Ocean Products (IOP)	Product Format Check	Nominal	Nominal
Data Useu.	L1B, L2 & P2P Science Data	Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	Nominal	Nominal
		Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
		Range, SWH & Backscatter Measurement Check	See Section 5.6, 5.7	See Section 6.6, 6.7
		Ocean Retracking Quality Check	See Section 5.8	See Section 6.8

Mission / Instrument News 01-Feb-2019 None 02-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-determined baseline and also to check 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 reco	ord. The bit value of this flag indicat	ies 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 measure	ement record. The bit value of this f	lag indicates any problems when set.		
Attitude Correction Missing: This flag is currently set in error for IOPR prod	lucts due to a configuration issue.	This is being investigated and will be updated in the next SW update.		
Number of products with errors: 0				
4.6 L1B Waveform Group Data Check				
4.6 L1B Waveform Group Data Check				
•	rd. The bit value of this flag indicate	es any problems when set.		
CryoSat L1B data includes a waveform data flag for each measurement reco	-	es any problems when set.		
4.6 L1B Waveform Group Data Check CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this i Number of products with errors: 12	-	es any problems when set.		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this in Number of products with errors: 12	-			
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this in Number of products with errors: 12 Product	s to be expected.	es any problems when set. Description The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this i Number of products with errors: 12 Product CS_OFFL_SIR_IOPM1B_20190202T225453_20190202T232253_C001	s to be expected. Test Failed	Description		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this in Number of products with errors: 12 Product CS_OFFL_SIR_IOPM1B_20190202T225453_20190202T232253_C001 CS_OFFL_SIR_IOPN1B_20190202T043021_20190202T043443_C001	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this in Number of products with errors: 12 Product CS_OFFL_SIR_IOPM1B_20190202T225453_20190202T232253_C001 CS_OFFL_SIR_IOPN1B_20190202T043021_20190202T043443_C001 CS_OFFL_SIR_IOPN1B_20190202T060917_20190202T061029_C001	s to be expected. Test Failed Loss of Echo Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this in Number of products with errors: 12 Product CS_OFFL_SIR_IOPM1B_20190202T225453_20190202T232253_C001 CS_OFFL_SIR_IOPN1B_20190202T043021_20190202T043443_C001 CS_OFFL_SIR_IOPN1B_20190202T060917_20190202T061029_C001 CS_OFFL_SIR_IOPN1B_20190202T061159_20190202T061423_C001	s to be expected. Test Failed Loss of Echo Loss of Echo Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this is Number of products with errors: 12 Product CS_OFFL_SIR_IOPM1B_20190202T225453_20190202T232253_C001 CS_OFFL_SIR_IOPM1B_20190202T043021_20190202T043443_C001 CS_OFFL_SIR_IOPN1B_20190202T060917_20190202T061029_C001 CS_OFFL_SIR_IOPN1B_20190202T061159_20190202T061423_C001 CS_OFFL_SIR_IOPN1B_20190202T061159_20190202T061423_C001 CS_OFFL_SIR_IOPN1B_20190202T070236_20190202T070422_C001	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this is Number of products with errors: 12 Product 12 CS_OFFL_SIR_IOPM1B_20190202T225453_20190202T232253_C001 CS_OFFL_SIR_IOPM1B_20190202T043021_20190202T043443_C001 CS_OFFL_SIR_IOPN1B_20190202T060917_20190202T061029_C001 CS_OFFL_SIR_IOPN1B_20190202T061159_20190202T061423_C001 CS_OFFL_SIR_IOPN1B_20190202T070236_20190202T070422_C001 CS_OFFL_SIR_IOPN1B_20190202T0101936_20190202T102230_C001	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this is Number of products with errors: 12 Product 12 CS_OFFL_SIR_IOPM1B_20190202T225453_20190202T232253_C001 CS_OFFL_SIR_IOPN1B_20190202T043021_20190202T043443_C001 CS_OFFL_SIR_IOPN1B_20190202T060917_20190202T061029_C001 CS_OFFL_SIR_IOPN1B_20190202T061159_20190202T061423_C001 CS_OFFL_SIR_IOPN1B_20190202T070236_20190202T070422_C001 CS_OFFL_SIR_IOPN1B_20190202T101936_20190202T102230_C001 CS_OFFL_SIR_IOPN1B_20190202T101936_20190202T102230_C001 CS_OFFL_SIR_IOPN1B_20190202T101936_20190202T102230_C001	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this in Number of products with errors: 12 Product 12 CS_OFFL_SIR_IOPM1B_20190202T225453_20190202T232253_C001 CS_OFFL_SIR_IOPN1B_20190202T043021_20190202T043443_C001 CS_OFFL_SIR_IOPN1B_20190202T060917_20190202T061029_C001 CS_OFFL_SIR_IOPN1B_20190202T061159_20190202T061423_C001 CS_OFFL_SIR_IOPN1B_20190202T070236_20190202T070422_C001 CS_OFFL_SIR_IOPN1B_20190202T101936_20190202T104223_C001 CS_OFFL_SIR_IOPN1B_20190202T101936_20190202T124155_C001 CS_OFFL_SIR_IOPN1B_20190202T124102_20190202T124155_C001 CS_OFFL_SIR_IOPN1B_20190202T191526_20190202T191928_C001 CS_OFFL_SIR_IOPN1B_20190202T191526_20190202T191928_C001	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this is Number of products with errors: 12 Product 12 CS_OFFL_SIR_IOPM1B_20190202T225453_20190202T232253_C001 CS_OFFL_SIR_IOPN1B_20190202T043021_20190202T043443_C001 CS_OFFL_SIR_IOPN1B_20190202T060917_20190202T061423_C001 CS_OFFL_SIR_IOPN1B_20190202T061159_20190202T061423_C001 CS_OFFL_SIR_IOPN1B_20190202T070236_20190202T070422_C001 CS_OFFL_SIR_IOPN1B_20190202T101936_20190202T102230_C001 CS_OFFL_SIR_IOPN1B_20190202T101936_20190202T102230_C001 CS_OFFL_SIR_IOPN1B_20190202T101936_20190202T124155_C001 CS_OFFL_SIR_IOPN1B_20190202T191526_20190202T191928_C001 CS_OFFL_SIR_IOPN1B_20190202T011629_20190202T012004_C001	s to be expected. Test Failed Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CryoSat L1B data includes a waveform data flag for each measurement record Loss of Echo Flag: This flag is currently set for products over land, but this i	s to be expected. Test Failed Loss of Echo Loss of Echo	Description The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		

5.1 L2 Product Format Check

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

Number of products with errors:

5.2 L2 Product Header Analysis

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

5.3 L2 Auxiliary Data File Usage Check

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

5.4 L2 Auxiliary Correction Error Check

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

1

0

5.5 L2 Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190202T211655_20190202T214314_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

5.6 L2 Range Measurement Check

CryoSat L2 data includes an Ocean and Ice Range Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are two common status flags raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

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

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 68

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190202T002725_20190202T010032_C001	Ocean Rande Averading Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T011428_20190202T011520_C001	IUcean Rande Averading Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T013358_20190202T015311_C001	Ocean Rande Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.

CS_OFFL_SIR_IOPM_2_20190202T015511_20190202T020021_C001 CS OFFL SIR IOPM 2 20190202T020559 20190202T024020 C001 CS_OFFL_SIR_IOPM_2_20190202T030457_20190202T030933_C001 CS_OFFL_SIR_IOPM_2_20190202T031013_20190202T032746_C001 CS_OFFL_SIR_IOPM_2_20190202T034626_20190202T041636_C001 CS_OFFL_SIR_IOPM_2_20190202T043520_20190202T045350_C001 CS OFFL SIR IOPM 2 20190202T045438 20190202T050800 C001 CS OFFL SIR IOPM 2 20190202T051956 20190202T052334 C001 CS_OFFL_SIR_IOPM_2_20190202T052516_20190202T054056_C001 CS_OFFL_SIR_IOPM_2_20190202T054258_20190202T055221_C001 CS_OFFL_SIR_IOPM_2_20190202T061502_20190202T061650_C001 CS_OFFL_SIR_IOPM_2_20190202T061950_20190202T063139_C001 CS_OFFL_SIR_IOPM_2_20190202T065802_20190202T070236_C001 CS_OFFL_SIR_IOPM_2_20190202T070451_20190202T072000_C001 CS_OFFL_SIR_IOPM_2_20190202T075757_20190202T083036_C001 CS OFFL SIR IOPM 2 20190202T083531 20190202T084130 C001 CS_OFFL_SIR_IOPM_2_20190202T084403_20190202T090958_C001 CS_OFFL_SIR_IOPM_2_20190202T094100_20190202T095218_C001 CS OFFL SIR IOPM 2 20190202T095752 20190202T100845 C001 CS_OFFL_SIR_IOPM_2_20190202T101519_20190202T101936_C001 CS_OFFL_SIR_IOPM_2_20190202T102256_20190202T105240_C001 CS OFFL SIR IOPM 2 20190202T110032 20190202T110108 C001 CS_OFFL_SIR_IOPM_2_20190202T111533_20190202T113131_C001 CS OFFL SIR IOPM 2 20190202T113359 20190202T114801 C001 CS OFFL SIR IOPM 2 20190202T115430 20190202T120010 C001 CS OFFL SIR IOPM 2 20190202T120143 20190202T120754 C001 CS_OFFL_SIR_IOPM_2_20190202T123912_20190202T124024_C001 CS_OFFL_SIR_IOPM_2_20190202T125343_20190202T132753_C001 CS_OFFL_SIR_IOPM_2_20190202T133334_20190202T133846_C001 CS OFFL SIR IOPM 2 20190202T134043 20190202T140026 C001 CS_OFFL_SIR_IOPM_2_20190202T143207_20190202T150555_C001 CS_OFFL_SIR_IOPM_2_20190202T151340_20190202T151753_C001 CS OFFL SIR IOPM 2 20190202T152124 20190202T154824 C001 CS_OFFL_SIR_IOPM_2_20190202T154847_20190202T155615_C001 CS_OFFL_SIR_IOPM_2_20190202T155838_20190202T160014_C001 CS OFFL SIR IOPM 2 20190202T161248 20190202T162309 C001 CS_OFFL_SIR_IOPM_2_20190202T162750_20190202T162924_C001 CS OFFL SIR IOPM 2 20190202T162945 20190202T164532 C001 CS OFFL SIR IOPM 2 20190202T164712 20190202T165232 C001 CS_OFFL_SIR_IOPM_2_20190202T165238_20190202T165244_C001 CS_OFFL_SIR_IOPM_2_20190202T170346_20190202T171609_C001 CS OFFL SIR IOPM 2 20190202T171809 20190202T173129 C001 CS_OFFL_SIR_IOPM_2_20190202T173219_20190202T173516_C001 CS_OFFL_SIR_IOPM_2_20190202T175740_20190202T180710_C001 CS_OFFL_SIR_IOPM_2_20190202T180912_20190202T182425_C001 CS_OFFL_SIR_IOPM_2_20190202T182637_20190202T183132_C001 CS OFFL SIR IOPM 2 20190202T183149 20190202T183200 C001 CS_OFFL_SIR_IOPM_2_20190202T183936_20190202T184210_C001 CS_OFFL_SIR_IOPM_2_20190202T185736_20190202T191034_C001 CS OFFL SIR IOPM 2 20190202T194718 20190202T200335 C001 CS_OFFL_SIR_IOPM_2_20190202T200620_20190202T201059_C001

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

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 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 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 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 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 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 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 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 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 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 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.

CS_OFFL_SIR_IOPM_2_20190202T201713_20190202T204112_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T211655_20190202T214314_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T215019_20190202T215344_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T215612_20190202T220815_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T221350_20190202T222345_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T222457_20190202T222839_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T225453_20190202T232252_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T232434_20190202T232913_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190202T061159_20190202T061423_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190202T215013_20190202T215019_C001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPN_2_20190202T222839_20190202T223442_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190202T011118_20190202T011242_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190202T025248_20190202T025439_C001	Ocean Range Averaging Status	The Ocean Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPR_2_20190202T075416_20190202T075634_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. 68

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20190202T002725_20190202T010032_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_20190202T011428_20190202T011520_C001	Backscatter Averaging Status	more records.
CS_OFFL_SIR_IOPM_2_20190202T013358_20190202T015311_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_20190202T015511_20190202T020021_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T020559_20190202T024020_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_20190202T030457_20190202T030933_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_20190202T031013_20190202T032746_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_20190202T033713_20190202T033924_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T034626_20190202T041636_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_20190202T043520_20190202T045350_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_20190202T045438_20190202T050800_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_20190202T051956_20190202T052334_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T052516_20190202T054056_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_20190202T054258_20190202T055221_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_20190202T061502_20190202T061650_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_20190202T061950_20190202T063139_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_20190202T064748_20190202T064900_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_20190202T065802_20190202T070236_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T070451_20190202T072000_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_20190202T075757_20190202T083036_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_20190202T083531_20190202T084130_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T084403_20190202T090958_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_20190202T094100_20190202T095218_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_20190202T095752_20190202T100845_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_20190202T101519_20190202T101936_C001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOPM_2_20190202T102256_20190202T105240_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_20190202T110032_20190202T110108_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_20190202T111533_20190202T113131_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_20190202T113359_20190202T114801_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_20190202T115430_20190202T120010_C001
CS_OFFL_SIR_IOPM_2_20190202T120143_20190202T120754_C001
CS_OFFL_SIR_IOPM_2_20190202T123912_20190202T124024_C001
CS_OFFL_SIR_IOPM_2_20190202T125343_20190202T132753_C001
CS_OFFL_SIR_IOPM_2_20190202T133334_20190202T133846_C001
CS_OFFL_SIR_IOPM_2_20190202T134043_20190202T140026_C001
CS_OFFL_SIR_IOPM_2_20190202T143207_20190202T150555_C001
CS_OFFL_SIR_IOPM_2_20190202T151340_20190202T151753_C001
CS_OFFL_SIR_IOPM_2_20190202T152124_20190202T154824_C001
CS_OFFL_SIR_IOPM_2_20190202T154847_20190202T155615_C001
CS_OFFL_SIR_IOPM_2_20190202T155838_20190202T160014_C001
CS_OFFL_SIR_IOPM_2_20190202T161248_20190202T162309_C001
CS_OFFL_SIR_IOPM_2_20190202T162750_20190202T162924_C001
CS_OFFL_SIR_IOPM_2_20190202T162945_20190202T164532_C001
CS_OFFL_SIR_IOPM_2_20190202T164712_20190202T165232_C001
CS_OFFL_SIR_IOPM_2_20190202T165238_20190202T165244_C001
CS OFFL SIR IOPM 2 20190202T170346 20190202T171609 C001
CS OFFL SIR IOPM 2 20190202T171809 20190202T173129 C001
CS_OFFL_SIR_IOPM_2_20190202T175740_20190202T180710_C001
CS_OFFL_SIR_IOPM_2_20190202T180912_20190202T182425_C001
CS_OFFL_SIR_IOPM_2_20190202T182637_20190202T183132_C001
CS_OFFL_SIR_IOPM_2_20190202T183149_20190202T183200_C001
CS_OFFL_SIR_IOPM_2_20190202T185736_20190202T191034_C001
CS_OFFL_SIR_IOPM_2_20190202T194718_20190202T200335_C001
CS_OFFL_SIR_IOPM_2_20190202T200620_20190202T201059_C001
CS_OFFL_SIR_IOPM_2_20190202T201713_20190202T204112_C001
CS_OFFL_SIR_IOPM_2_20190202T211655_20190202T214314_C001
CS_OFFL_SIR_IOPM_2_20190202T215019_20190202T215344_C001
CS_OFFL_SIR_IOPM_2_20190202T215612_20190202T220815_C001
CS_OFFL_SIR_IOPM_2_20190202T221350_20190202T222345_C001
CS_OFFL_SIR_IOPM_2_20190202T222457_20190202T222839_C001
CS_OFFL_SIR_IOPM_2_20190202T225453_20190202T232252_C001
CS_OFFL_SIR_IOPM_2_20190202T232434_20190202T232913_C001
CS_OFFL_SIR_IOPN_2_20190202T061159_20190202T061423_C001
CS_OFFL_SIR_IOPN_2_20190202T215013_20190202T215019_C001
CS_OFFL_SIR_IOPN_2_20190202T222839_20190202T223442_C001
CS_OFFL_SIR_IOPR_2_20190202T011118_20190202T011242_C001
CS_OFFL_SIR_IOPR_2_20190202T025248_20190202T025439_C001
CS_OFFL_SIR_IOPR_2_20190202T075416_20190202T075634_C001

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

5.8 L2 Ocean Retracking Quality Check

CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below. Number of products with errors: 44

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: 0				
6.4 P2P Auxiliary Correction Error Check				
For all products, the auxiliary corrections within the Geophysical Group are check	ked for the default error value (32767).			
Number of products with errors: 0				
6.5 P2P Measurement Confidence Data Check				
CryoSat P2P data includes a measurement confidence flag for each 20-Hz mea	surement record. The bit value of this flag	indicates any problems when set.		
Number of products with errors: 1				
Product	Test Failed	Description		
CS_OFFL_SIR_IOP_2_20190202T210046_20190202T215021_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records		

6.6 P2P Range Measurement Check

CryoSat P2P data includes an Ocean and Ice Range Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are two common status flags raised in the P2P products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

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

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

Co PFL_SIR_IOP 2_2019020710598_20190207104916_0001 Coans Range Averaging Status Find Decam and the Range Averaging Status Flag have been set for one or more coads. CS_OFFL_SIR_IOP 2_20190207104916_20190207103882_0001 Ocean Range Averaging Status Find Decam and the Range Averaging Status Flag have been set for one or more coads. CS_OFFL_SIR_IOP 2_20190207103802_0190207103802_0001 Ocean Range Averaging Status Find Decam and the Range Averaging Status Flag have been set for one or more coads. CS_OFFL_SIR_IOP 2_20190202103802_01902071051805_0001 Ocean Range Averaging Status Find Decam and the Range Averaging Status Flag have been set for one or more coads. CS_OFFL_SIR_IOP 2_20190202106743_20190202106749_0001 Ocean Range Averaging Status Find Decam and the Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP 2_20190202106743_201902021068719_0001 Ocean Range Averaging Status Find Decam and the Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP 2_20190202106743_201902021068719_0001 Ocean Range Averaging Status Find Ocean R	Product	Test Failed	Description
CS_DFL_SIR_UP_2_0100220710538_201902207024916_0001 Range Averaging Status in a fire or corrects. CS_OFFL_SIR_UP_2_20190220710538_201902207023955_2001 Ocean Range Averaging Status in a fire or corrects. CS_OFFL_SIR_UP_2_2019022071023955_20190207103555_001 Ocean Range Averaging Status in a fire or corrects. CS_OFFL_SIR_UP_2_201902207103355_20190207103555_001 Ocean Range Averaging Status in a fire or corrects. CS_OFFL_SIR_UP_2_20190207105450_001 Ocean Range Averaging Status in a fire or correct or corrects. CS_OFFL_SIR_UP_2_20190207105405_001 Ocean Range Averaging Status in a fire or correct or corrects. CS_OFFL_SIR_UP_2_20190207105405_001 Ocean Range Averaging Status in a fire or correct or core correcor cor correct or correct or correct or correct or core	CS_OFFL_SIR_IOP_220190202T002025_20190202T011003_C001	Ocean Range Averaging Status	
S3, OFL_SIR_UOP_2_20190202103496_00190202103352_0001 Range Averaging Status or more records. CS_OFFL_SIR_UOP_2_201902021032103202103352_0010 Ocean Range Averaging Status or more records. CS_OFFL_SIR_UOP_2_20190202103352_01900202104230_0001 Ocean Range Averaging Status The Ocean Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_UOP_2_201902021051805_01002021060743_0001 Ocean Range Averaging Status Flag The Ocean Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_UOP_2_201902021060743_01902021060716_0001 Ocean Range Averaging Status Flag The Ocean and Ice Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_UOP_2_201902021060743_01902021060710_0001 Ocean Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_UOP_2_201902021060743_01902021060710_0001 Ocean Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_UOP_2_20190202107074657_01190202103533_0001 Ocean Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_UOP_2_201902021020702010020110546_0001 Ocean Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_UOP_2_20190202110546_0001 Ocean Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_UOP_2_20190202110546_0001 Ocean Range Averaging Status Flag have been set for one records. <t< td=""><td>CS_OFFL_SIR_IOP_220190202T011003_20190202T015938_C001</td><td></td><td></td></t<>	CS_OFFL_SIR_IOP_220190202T011003_20190202T015938_C001		
CS, DFL_SIR, IOP_2_01902/02102476.2, 201902/07142830_C001 Ocean Range Averaging Status The Ocean Range Averaging Status CS_OFL_SIR_IOP_2_021902/0742830_20190207142830_C001 Ocean Range Averaging Status The Ocean Range Averaging Status	CS_OFFL_SIR_IOP_220190202T015938_20190202T024916_C001		or more records.
CS_DFL_SIR_IOP_2_01100202103482_011002021051805_C001 Coean Range Averaging Status The Ocean and to Range Averaging Status CS_OFL_SIR_IOP_2_011002021061805_C001 Coean Range Averaging Status The Ocean and to Range Averaging Status CS_OFL_SIR_IOP_2_011002021060743_00100201060743_C001 Coean Range Averaging Status The Ocean and to Range Averaging Status CS_OFFL_SIR_IOP_2_011002021060743_00100201060743_C001 Coean Range Averaging Status The Ocean and to Range Averaging Status CS_OFFL_SIR_IOP_2_011002021060714_00100201060710_00000 Coean Range Averaging Status The Ocean and to Range Averaging Status CS_OFFL_SIR_IOP_2_01002021066719_01002011074657_C001 Coean Range Averaging Status The Ocean and to Range Averaging Status CS_OFFL_SIR_IOP_2_01002021002011_201002021105457_C001 Coean Range Averaging Status The Ocean and to Range Averaging Status CS_OFFL_SIR_IOP_2_01002021002011_20100202110546_C001 Coean Range Averaging Status The Ocean and to Range Averaging Status CS_OFFL_SIR_IOP_2_0109202110546_201902021110542_C001 Coean Range Averaging Status The Ocean and to Range Averaging Status CS_OFFL_SIR_IOP_2_0109202110546_20190202110542_C001 Coean Range Averaging Status The Ocean and to Range Averaging Status Flag have been set for one or more more more more more formeds. CS_OFFL_SIR_IOP_2_0190202110542_019020111054_C001 </td <td>CS_OFFL_SIR_IOP_220190202T024916_20190202T033852_C001</td> <td>Ocean Range Averaging Status</td> <td>0 0 0</td>	CS_OFFL_SIR_IOP_220190202T024916_20190202T033852_C001	Ocean Range Averaging Status	0 0 0
CS_OFFL_SRL_IOPOTNB02021042303_0100022106105_001 Range Averaging Status or more records. CS_OFFL_SRL_IOPOTNB0202T06105_20190022T060743_C010 Cocana Range Averaging Status The Ocean Range Averaging Status. The	CS_OFFL_SIR_IOP_220190202T033852_20190202T042830_C001	Ocean Range Averaging Status	
CS_UFH_E_SIR_LOP_2_20190202106780_201902021067719_201902021067719_201902021067719_201902021067719_201902021067719_201902021067719_201902021074657_201902021074657_201902021074657_201902021074657_201902021074657_201902021074657_201902021074657_201902021074657_201902021074657_201902021074657_201902021074657_201902021074657_201902021074657_201902021092631_201902021092631_201902021092631_201902021092631_201902021092631_201902021092611_2001 Cocan Range Averaging Status, tee Range Averaging Statu	CS_OFFL_SIR_IOP_220190202T042830_20190202T051805_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_IOP_2_20190202T065719_20190202T074657_001 Ocean Range Averaging Status records. CS_OFFL_SIR_IOP_2_20190202T07657_0190202T074657_001 Ocean Range Averaging Status rm ore records. CS_OFFL_SIR_IOP_2_20190202T07657_0190202T038633_0001 Ocean Range Averaging Status rm ore records. CS_OFFL_SIR_IOP_2_20190202T038633_0190202T092611_0001 Ocean Range Averaging Status rm ore records. CS_OFFL_SIR_IOP_2_20190202T0302011_00541_00102021101546_0001 Ocean Range Averaging Status rm ore records. CS_OFFL_SIR_IOP_2_20190202T101546_0001 Ocean Range Averaging Status rm ore records. CS_OFFL_SIR_IOP_2_20190202T110542_0001 Range Averaging Status rm ore records. CS_OFFL_SIR_IOP_2_20190202T110542_0100202T110524_0001 Range Averaging Status rm ore records. CS_OFFL_SIR_IOP_2_20190202T115500_0001 Ocean Range Averaging Status records. CS_OFFL_SIR_IOP_2_20190202T124438_0001 Ocean Range Averaging Status records. CS_OFFL_SIR_IOP_2_20190202T124438_02190202T1243413_0001 Ocean Range Averaging Status records. CS_OFFL_SIR_IOP_2_20190202T164235_0001 Ocean Range Averaging Status records. CS_OFFL_SIR_IOP_2_20190202T164245_0001 Cocean Range Averaging Status records.	CS_OFFL_SIR_IOP_220190202T051805_20190202T060743_C001		or more records.
CS_OFFL_SIR_IOP_2_20190202T07467_20190202T03863_C001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T07667_20190202T038633_C010 Ocean Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T08633_20190202T092611_C001 Ocean Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T092611_20190202T101546_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T101546_20190202T110542_C001 Range Averaging Status. The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T110524_20190202T110524_20190202T115500_C001 Ocean Range Averaging Status. The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T124438_20190202T124438_C001 Range Averaging Status. The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T124331_20190202T1132413_C001 Coean Range Averaging Status. The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T112321_20190202T1132413_C001 Coean Range Averaging Status. The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T112325_C001 Ceean Range Averaging Status. The Ocean and Ic	CS_OFFL_SIR_IOP_220190202T060743_20190202T065719_C001		records.
CS_OFFL_SIR_IOP_2_20190202T092612_001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T092611_20190202T101546_C001 Ocean Range Averaging Status The Ocean and the Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T101546_C001 Ocean Range Averaging Status The Ocean and the Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T110524_C001 Ocean Range Averaging Status The Ocean and the Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T110524_C001 Ocean Range Averaging Status The Ocean and the Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T115500_C001 Ocean Range Averaging Status The Ocean and the Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T113413_0010202T113413_C001 Ocean Range Averaging Status The Ocean and the Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T142435_0190202T116327_C001 Ocean Range Averaging Status The Ocean and the Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T16324_C001 Ocean Range Averaging Status flag The Ocean and the Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T16324_C0101 Ocean Range Averaging Sta	CS_OFFL_SIR_IOP_220190202T065719_20190202T074657_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_IOP_2_201902021002201092011_01546_C001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_201902021101546_201902021110524_C001 Ocean Range Averaging Status The Ocean and ice Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_IOP_2_201902021110524_201902021110524_C001 Ocean Range Averaging Status ice range Averaging Status ice range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_IOP_2_201902021110524_201902021115500_C001 Ocean Range Averaging Status ice racords. CS_OFFL_SIR_IOP_2_201902021124438_201902021134413_C001 Ocean Range Averaging Status ice range Averaging	CS_OFFL_SIR_IOP_220190202T074657_20190202T083633_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_IOP_2_20190202T101546_20190202T110524_C001 Ocean Range Averaging Status records. CS_OFFL_SIR_IOP_2_20190202T110524_0190202T110524_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T110524_0190202T114438_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T124438_20190202T124438_C001 Ocean Range Averaging Status, Ice Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T124438_20190202T133413_C001 Ocean Range Averaging Status, Ice Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T142351_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T142351_20190202T16327_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T160305_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T165240_20190202T165240_C001 Range Averaging Status The Ocean and Ice Range Averaging Status Flag have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T165240_20190202T165240	CS_OFFL_SIR_IOP_220190202T083633_20190202T092611_C001		or more records.
CS_OFFL_SIR_IOP_2_20190202111054_20190202111054_201902021115500_C001 Ocean Range Averaging Status The Ocean Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_IOP_2_201902021115500_201902021124438_C001 Cocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status Flag have been set for one or more records. The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_201902021142438_201902021142351_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_201902021142351_201902021142351_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_201902021142351_20190202116327_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202116305_C001 Ocean Range Averaging Status, Ice Range Aver	CS_OFFL_SIR_IOP_220190202T092611_20190202T101546_C001		records.
CS_OFFL_SIR_IOP_2_20190202T110524_20190202T124438_C001 Ocean Range Averaging Status, lee Range Averaging Status, lee Range Averaging Status flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T124438_20190202T133413_C001 Ocean Range Averaging Status flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T14438_20190202T153413_C001 Ocean Range Averaging Status flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T142351_20190202T151327_C001 Ocean Range Averaging Status The Ocean and loc Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T151327_20190202T161327_C001 Ocean Range Averaging Status The Ocean and loc Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T161327_20190202T161327_C0010 Ocean Range Averaging Status, lee Range Averaging Status, lee Range Averaging Status flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T160305_20190202T165240_C001 Ocean Range Averaging Status, lee Range Averaging Status flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T165240_20190202T174218_C001 Ocean Range Averaging Status flags flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T183154_C001 Ocean Range Averaging Status flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T183154_20190202T183154_C001 Ocean Range Averaging Status flags have been set for one or more records.	CS_OFFL_SIR_IOP_220190202T101546_20190202T110524_C001		or more records.
CS_OFFL_SIR_IOP_2_201902021124438_20190202T134413_C001Range Averaging Statusor more records.CS_OFFL_SIR_IOP_2_20190202T124438_20190202T133413_C001Cocan Range Averaging Status, Ice Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T142351_20190202T142351_C001Ocean Range Averaging StatusThe Ocean Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T142351_20190202T151327_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T161327_20190202T165240_C001Cocan Range Averaging Status, Ice Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T165240_20190202T165240_C001Ocean Range Averaging Status, Ice Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T165240_20190202T174218_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T165240_20190202T174218_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T192132_C011Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T192132_20190202T2101046_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one 	CS_OFFL_SIR_IOP_220190202T110524_20190202T115500_C001	0 0 0	records.
CS_OFFL_SIR_IOP_2_20190202T133413_20190202T142351_C001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T133413_20190202T142351_C001 Ocean Range Averaging Status The Ocean and loc Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T142351_20190202T151327_C001 Ocean Range Averaging Status The Ocean and loc Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T151327_20190202T160305_C001 Ocean Range Averaging Status, loe Range Averaging Status, loe Range Averaging Status The Ocean and loc Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T165240_20190202T165240_C001 Ocean Range Averaging Status, loe Range Averaging Status, loe Range Averaging Status, loe Range Averaging Status The Ocean and loc Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T165240_20190202T165240_2011 Ocean Range Averaging Status, loe Rang	CS_OFFL_SIR_IOP_220190202T115500_20190202T124438_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_IOP_2_201902021133413_201902021142351_2001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T142351_20190202T151327_C001 Ocean Range Averaging Status The Ocean Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T160305_20190202T160305_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T160305_20190202T165240_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T165240_20190202T174218_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status Flags have been set for one or more records. The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T174218_20190202T183154_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T183154_20190202T192132_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T1021021108_20190202T210108_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status The Ocean and Ice	CS_OFFL_SIR_IOP_220190202T124438_20190202T133413_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_IOP_2_20190202T151327_20190202T160305_C001Ocean Range Averaging Statusrecords.CS_OFFL_SIR_IOP_2_20190202T160305_20190202T165240_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T165240_20190202T165240_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T165240_20190202T165240_20190202T174218_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T174218_20190202T183154_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T174218_20190202T183154_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T192132_20190202T192132_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T192132_20190202T201108_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T210046_20190202T215021_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T215021_20046_20190202T215021_C001Ocean Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_2	CS_OFFL_SIR_IOP_220190202T133413_20190202T142351_C001		or more records.
CS_OFFL_SIR_IOP_2_20190202T165327_20190202T165240_C001Range Averaging Statusor more records.CS_OFFL_SIR_IOP_2_20190202T165240_20190202T165240_C001Ocean Range Averaging Status, Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T174218_20190202T183154_C001Ocean Range Averaging Status Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T192132_20190202T192132_C001Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging StatusThe Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T192132_20190202T201046_C001Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice rom re records.The Ocean and Ice Range Averaging Status Flags have been set for one or more records.CS_OFFL_SIR_IOP_2_20190202T210046_20190202T215021_C001Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, IceThe Ocean Range Averaging Status Flags	CS_OFFL_SIR_IOP_220190202T142351_20190202T151327_C001		records.
CS_OFFL_SIR_IOP_2_20190202T165240_20190202T174218_C001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T165240_20190202T174218_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_20190202T174218_20190202T174218_20190202T192132_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T183154_20190202T192132_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T192132_20190202T192132_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T192132_20190202T20108_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T20108_20190202T210046_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T210046_20190202T215021_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_20190202T215021_20190202T215021_C001 </td <td>CS_OFFL_SIR_IOP_220190202T151327_20190202T160305_C001</td> <td>Range Averaging Status</td> <td>or more records.</td>	CS_OFFL_SIR_IOP_220190202T151327_20190202T160305_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_IOP_2_201902021165240_201902021174218_C001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T174218_20190202T183154_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_20190202T183154_20190202T192132_C001 Ocean Range Averaging Status The Ocean Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T192132_20190202T201108_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_20190202T201108_20190202T201108_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_20190202T201108_00190202T210046_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status, Ice or more records. The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T210046_20190202T215021_C001 Ocean Range Averaging Status, Ice Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or or more records. <	CS_OFFL_SIR_IOP_220190202T160305_20190202T165240_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_IOP_2_20190202T174218_20190202T192132_C001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T183154_20190202T192132_C001 Ocean Range Averaging Status The Ocean Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T192132_20190202T201108_C001 Range Averaging Status, Ice Range Averaging Status, Ice CS_OFFL_SIR_IOP_2_20190202T201108_20190202T210046_C001 The Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T201108_20190202T210046_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T210046_20190202T215021_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. <	CS_OFFL_SIR_IOP_220190202T165240_20190202T174218_C001	Range Averaging Status	
CS_OFFL_SIR_IOP_2_20190202T192132_20190202T201108_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_20190202T210046_20190202T215021_C001 Ocean Range Averaging Status, Ice Range Averaging Status, Ice Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status, Ice The Ocean and Ice Range Averaging Status Flags have been set for one or more records.	CS_OFFL_SIR_IOP_220190202T174218_20190202T183154_C001		or more records.
CS_OFFL_SIR_IOP_2_201902021192132_201902021201108_C001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T201108_20190202T210046_C001 Ocean Range Averaging Status, loc Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T210046_20190202T210046_20190202T215021_C001 Ocean Range Averaging Status, loc Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T215021_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status, Ice The Ocean and Ice Range Averaging Status Flag has been set for one or more records.	CS_OFFL_SIR_IOP_220190202T183154_20190202T192132_C001		records.
CS_OFFL_SIR_IOP_2_201902021210108_201902021210046_C001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T210046_20190202T215021_C001 Ocean Range Averaging Status, Ice The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T215021_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean Range Averaging Status Flags have been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean and Ice Range Averaging Status Flags have been set for one or more records.	CS_OFFL_SIR_IOP_220190202T192132_20190202T201108_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_IOP_2_201902021210046_201902021215021_C001 Range Averaging Status or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean Range Averaging Status Flag has been set for one or more records. CS_OFFL_SIR_IOP_2_20190202T215021_20190202T223959_C001 Ocean Range Averaging Status The Ocean Range Averaging Status Flag has been set for one or more records.	CS_OFFL_SIR_IOP_220190202T201108_20190202T210046_C001	Range Averaging Status	or more records.
CS_OFFL_SIR_IOP_2_201902021215021_201902021223959_C001 Ocean Range Averaging Status records.	CS_OFFL_SIR_IOP_220190202T210046_20190202T215021_C001		or more records.
	CS_OFFL_SIR_IOP_220190202T215021_20190202T223959_C001	Ocean Range Averaging Status	
	CS_OFFL_SIR_IOP_220190202T223959_20190202T232935_C001		

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_220190202T002025_20190202T011003_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_220190202T011003_20190202T015938_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_220190202T015938_20190202T024916_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_220190202T024916_20190202T033852_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_220190202T033852_20190202T042830_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_220190202T042830_20190202T051805_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_220190202T051805_20190202T060743_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_220190202T060743_20190202T065719_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_220190202T065719_20190202T074657_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_220190202T074657_20190202T083633_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_220190202T083633_20190202T092611_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_220190202T092611_20190202T101546_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_220190202T101546_20190202T110524_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_220190202T110524_20190202T115500_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_220190202T115500_20190202T124438_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_220190202T124438_20190202T133413_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for on or more records.
CS_OFFL_SIR_IOP_220190202T133413_20190202T142351_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_220190202T142351_20190202T151327_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_220190202T151327_20190202T160305_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_220190202T160305_20190202T165240_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_220190202T165240_20190202T174218_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status SWH Averaging Status, Ocean	The SWH, Ocean and Ice Averaging Status Flags have been set for one or more records.
CS_OFFL_SIR_IOP_220190202T174218_20190202T183154_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_220190202T183154_20190202T192132_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_220190202T192132_20190202T201108_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_220190202T201108_20190202T210046_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_220190202T210046_20190202T215021_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_220190202T215021_20190202T223959_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_220190202T223959_20190202T232935_C001	SWH Averaging Status, Ocean Backscatter Averaging Status, Ice Backscatter Averaging Status	The SWH, Ocean and Ice Averaging Status Flags have been set for on 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.

25

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_220190202T002025_20190202T011003_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T015938_20190202T024916_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T024916_20190202T033852_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T033852_20190202T042830_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T042830_20190202T051805_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T051805_20190202T060743_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T060743_20190202T065719_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T065719_20190202T074657_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T074657_20190202T083633_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T083633_20190202T092611_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T092611_20190202T101546_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190202T101546_20190202T110524_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T110524_20190202T115500_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_2_20190202T115500_20190202T124438_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T124438_20190202T133413_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T142351_20190202T151327_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T151327_20190202T160305_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T160305_20190202T165240_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T165240_20190202T174218_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T174218_20190202T183154_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T183154_20190202T192132_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T201108_20190202T210046_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T210046_20190202T215021_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T215021_20190202T223959_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220190202T223959_20190202T232935_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag has been set for one or more records.