

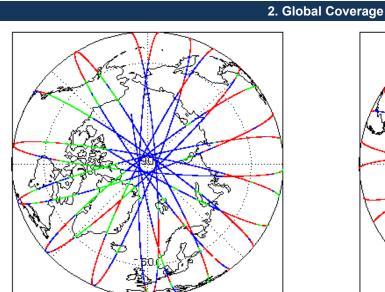
# **QA4EO Daily Report for IOP data:**

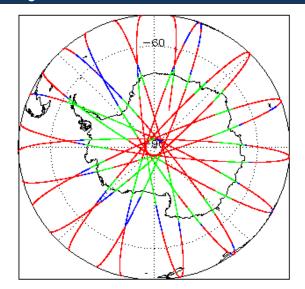
<u>02/03/2021</u>

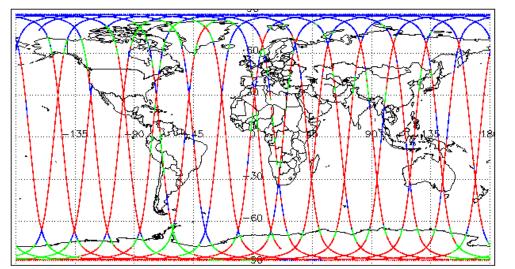
	05-Mar-2021	Check	L1 & L2	P2P
eport Production:	05-IVIAI-2021	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CrucSet Occor Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data 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	See Section 5.4	See Section 6.4
		Measurement Confidence Data Check	See Section 4.5, 4.6	Nominal
		Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
		Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
		QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1 and 7.

1. Overview

Mission / Instrument News		
01-Mar-2021	None	
02-Mar-2021	None	
03-Mar-2021	Nothing planned	











# 3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

0

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

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 an	d SPH in order to identify any in	consistencies and/or errors raised by the ground-segment processing chain.		
L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L1	B IOPR and IOPN products bec	ause the I1b_processing_quality_hr field is not correctly configured in the OSAR and		
OSARIn chains. A modification is required in the next release.				
Number of products with errors: 0				
4.3 L1B Auxilary Data File Usage Check				
Each product is checked for missing Data Set Descriptors with respect to a pr	e-determined baseline and also	to check 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	rd. The bit value of this flag indic	ates 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	ment record. The bit value of this	s flag indicates any problems when set.		
Attitude Correction Missing: This flag is currently set in error for IOPR prod	ucts due to a configuration issue	e. 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				
CryoSat L1B data includes a waveform data flag for each measurement recor	d. The bit value of this flag indic	ates 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: 17				
Product	Test Failed	Description		
CS_OFFL_SIR_IOPM1B_20210302T042051_20210302T043021_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPM1B_20210302T145740_20210302T150421_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20210302T031811_20210302T031954_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20210302T035838_20210302T040352_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20210302T045637_20210302T050250_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20210302T053841_20210302T054239_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20210302T105549_20210302T105757_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20210302T122909_20210302T123026_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20210302T154144_20210302T154305_C001 CS_OFFL_SIR_IOPN1B_20210302T154623_20210302T154836_C001	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_202103021194020_202103021194030_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20210302T203232_20210302T203333_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20210302T213302_20210302T213429_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20210302T003533_20210302T003655_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20210302T003655_20210302T004133_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20210302T053509_20210302T053739_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20210302T085756_20210302T090656_C001	Loss of Echo	The tracking echo is missing for one or more records		
5. <mark>IC</mark>	P Level 2 Data Qu	ality Check		
5.1 L2 Product Format Check				
Each product, retrieved and unpacked from the science server, is checked to	ensure it consists of both an XM	II. header file ( HDR) and a hinary product file ( DRI )		
Number of products with errors: 0				
5.2 L2 Product Header Analysis				
For all products, a series of pre-defined checks are performed on the MPH an	d SPH in order to identify any in	consistencies 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 pr	e-determined baseline and also	to check the validity of Auxiliary Data Files is correct.		
Number of products with errors: 0				
5.4 L2 Auxiliary Correction Error Check				
For all products, the auxiliary corrections within the Geophysical Group are ch	ecked for the default error value	9 (32767).		
Currently, there are some common auxiliary correction errors raised in t followed by a table highlighting any additional issues which may arise fr		e expected due to surface type. All common flags are summarised in the list belo	w,	
> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Corection, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.				
Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.				
> Mean Sea Surface: The error value is currently set for products over land a	nd sea ice, but this is to be expe	ected.		

> Mean Dynamic Topography: The error value is currently set for products over land and sea ice, but this is to be expected.

> Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

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Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20210302T000156_20210302T000322_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T003424_20210302T003448_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T004417_20210302T004514_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T022322_20210302T022437_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T035838_20210302T040352_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T045637_20210302T050250_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T053841_20210302T054239_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T063603_20210302T063920_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T071714_20210302T072102_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T085149_20210302T085756_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_IOPN_2_20210302T094626_20210302T094749_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T095606_20210302T095723_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T105549_20210302T105757_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T112609_20210302T112735_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T113259_20210302T113607_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T122909_20210302T123026_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T130551_20210302T130730_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T131158_20210302T131526_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T144636_20210302T144911_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T154144_20210302T154305_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20210302T163516_20210302T163654_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T172110_20210302T172322_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T181424_20210302T181620_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T190024_20210302T190514_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20210302T203508_20210302T203531_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T212444_20210302T212707_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20210302T213302_20210302T213429_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20210302T230302_20210302T230615_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T004515_20210302T005527_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T022438_20210302T023156_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T040352_20210302T040911_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

CS_OFFL_SIR_IOPR_2_20210302T054240_20210302T054244_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T054244_20210302T054835_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T054838_20210302T054931_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210302T072103_20210302T072928_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T085756_20210302T090656_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T103728_20210302T104350_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T104350_20210302T104702_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T105515_20210302T105548_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210302T121256_20210302T122249_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T122249_20210302T122422_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T135522_20210302T140148_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T140148_20210302T140314_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T153448_20210302T154035_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T154035_20210302T154143_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T171701_20210302T172109_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T185351_20210302T190023_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T203532_20210302T204049_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T220336_20210302T220539_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20210302T221437_20210302T222234_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20210302T235257_20210303T000205_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

#### 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:
0

#### 5.6 L2 Measurement Quality Flag Check

#### L2 Quality Flags (20Hz)

CryoSat L2 data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common flags raised in the Level 2 products, which are summarised below. The table provides the full list of products flagged.

> Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags: These flags are currently set for some records over ocean.

> OCOG Altimeter Range and Backscatter Quality Flags: These flags are currently set for some records over continental ice.

100

Number of products with errors:

Product	Test Failed	Description
	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T000339_20210302T002333_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T005527_20210302T012920_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T013433_20210302T013644_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T013651_20210302T014104_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

Altimeter Range and Backscatter Quality set for one or more records	le, SSHA, SWH and Backscatter Quality Flags Range and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags lange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags lange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags tange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags kange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags tange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags tange and Backscatter Quality Flags have been s.
CS_OFFL_SIR_IOPM_2_20210302T031024_20210302T031544_C001 OCOG Altimeter Range Quality, OCOG Altimeter Range for one or more records.	e and Backscatter Quality Flags have been set
CS_OFFL_SIR_IOPM_2_20210302T031603_20210302T031810_C001 OCOG Altimeter Range Quality, OCOG Altimeter Range for one or more records.	ge and Backscatter Quality Flags have been set
	e, SSHA, SWH and Backscatter Quality Flags tange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags lange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags lange and Backscatter Quality Flags have been s.
5 · · · · · · · · · · · · · · · · · · ·	e, SSHA, SWH and Backscatter Quality Flags tange and Backscatter Quality Flags have been s.
CS_OFFL_SIR_IOPM_2_20210302T041109_20210302T041112_C001 OCOG Altimeter Range Quality, OCOG Interesting Comparison of the OCOG Altimeter Range for one or more records.	je and Backscatter Quality Flags have been set
CS_OFFL_SIR_IOPM_2_20210302T041451_20210302T041647_C001 OCOG Altimeter Range Quality, OCOG Altimeter Range for one or more records.	e and Backscatter Quality Flags have been set
	e, SSHA, SWH and Backscatter Quality Flags ange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags tange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags Range and Backscatter Quality Flags have been s.
CS_OFFL_SIR_IOPM_2_20210302T044950_20210302T045446_C001 OCOG Altimeter Range Quality, OCOG Altimeter Range for one or more records.	e and Backscatter Quality Flags have been set
	e, SSHA, SWH and Backscatter Quality Flags tange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags tange and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags kange and Backscatter Quality Flags have been s.
CS_OFFL_SIR_IOPM_2_20210302T062934_20210302T063414_C001 OCOG Altimeter Range Quality, OCOG Itimeter Range for one or more records.	ge and Backscatter Quality Flags have been set
	e, SSHA, SWH and Backscatter Quality Flags Range and Backscatter Quality Flags have been s.
	e, SSHA, SWH and Backscatter Quality Flags tange and Backscatter Quality Flags have been s.
CS_OFFL_SIR_IOPM_2_20210302T080826_20210302T081315_C001 OCOG Altimeter Range Quality, OCOG In OCOG Altimeter Range for one or more records.	e and Backscatter Quality Flags have been set

Cl., OPTL_PRU_CIPUL_2/2012/DETURDING _2012/DETURDING _2012         Desc. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2012/DETURDING CO11         Desc. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2012/DETURDING CO11         Desc. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2012/DETURDING CO11         DESC. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2012/DETURDING CO11         DESC. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2012/DETURDING CO11         DESC. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2012/DETURDING CO11         DESC. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2014/DETURDING CO11         Desc. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2014/DETURDING CO11         Desc. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2014/DETURDING _2014/DETURDING _2014/DETURDING _2014/DETURDING _2014, 2914         Desc. Alterna Frage, 2914, 2914         Desc. Alterna Frage, 2914, 2914           Cl. OPTL_PRU_CIPUL_2/2012/DETURDING _2014/DETURDING _201	CS_OFFL_SIR_IOPM_2_20210302T081335_20210302T081700_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CB: 0FH, SR 10FH, 2.201302716140, 2010027101106, 2011       ord, Backatter Cally, Fregs Fach Loss, 2010027101106, 2011         CB: 0FH, SR 10FH, 2.2013027161706, 2010027101106, 2011       DEC. 0FH, SR 10FH, 2.2013027161706, 20110027101106, 2011         CB: 0FH, SR 10FH, 2.2013027161706, 20110027101106, 2011       DEC. 0FH, SR 10FH, 2.2013027161706, 201100271011060, 2011         CB: 0FH, SR 10FH, 2.2013027161706, 201100271010000, 2011       DEC. 0FH, SR 2010007161706, 201100271010000, 2011         CB: 0FH, SR 10FH, 2.2013027161707, 201100271010000, 2011       DEC. 0FH, SR 2010007161706, 20110027100000, 201100201, 2011         CB: 0FH, SR 10FH, 2.2013027161707, 201100271010000, 2011       DEC. 0FH, SR 20100071617076, 20110027110000, 201100201, 2011         CB: 0FH, SR 10FH, 2.2013027161707, 201100201, 2011       DEC. 0FH, SR 20100071617076, 201100201, 201100201, 2011         CB: 0FH, SR 10FH, 2.2013027161707, 201100201, 201100201, 2011       DEC. 0FH, SR 201000711, 20100001, 201100201, 201	CS_OFFL_SIR_IOPM_2_20210302T081919_20210302T084658_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
DC-011C-081C-0012_CAD INVECTION DISC. DOI: 10.0012 (1915)_CADI         Biological CodI         Device in monitorial           CD_011C_081C_0012_CADINOCTION DISC. DOI: 10.0012 (1915)_CADI         Device in monitorial         Device in monitorial           CD_011C_081C_0012_CADINOCTION DISC. DOI: 10.0012 (1915)_CADINOCTION DISC. DOI: 10.00	CS_OFFL_SIR_IOPM_2_20210302T084858_20210302T085149_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
C2: 0FH, SH (0FH, 2. 2010002119102 2021102100200 C011 and becketter Gualty C020 Attempt Rage and becketter Gualty Flags Faire See Attempt Rage, SH, SH, SH and Becketter Gualty Flags Faire See Attempt Rage, SH, SH, SH and Becketter Gualty Flags Faire See Attempt Rage, SH, SH, SH and Becketter Gualty Flags Faire See Attempt Rage See	CS_OFFL_SIR_IOPM_2_20210302T091535_20210302T091756_C001		
010,0FT_UBR_0FW_2.201000710449_021000710449_021000710449_0201000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000710449_021000711490_02210007111200_02210007111200_0210007112000_010000000000	CS_OFFL_SIR_IOPM_2_20210302T091758_20210302T092450_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Control         Execution Classing         End accent Classing         End accent Classing           CS, OFFL_SR_UCH4_2_202100027110082_0021010020110082_00210         Cocent Altereter Frages, SSIA, SWI Network Range, SSIA, SWI Network Range, SSIA, SWI Network Range, SSIA, SWI Network Range, SSIA, SWI Network Range, SSIA, SWI Network Rangee Range, SSIA, SWI Ne	CS_OFFL_SIR_IOPM_2_20210302T092454_20210302T094620_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_DFFL_SR_UPFL_2.0210027109382_001       and Backsenter Ouslity, Flags and Backsenter Ouslity, Flags have been Attempt Range and Backsenter Ouslity, Flags have been Atte	CS_OFFL_SIR_IOPM_2_20210302T094749_20210302T095230_C001		
CS_DFR_SR_UPH_2.20103027111282_001032711282_00102711285_0001       And the DCDC Allined Range and Backsatter Cualty Flags have been addressenter Cualty Flags have been ad	CS_OFFL_SIR_IOPM_2_20210302T095838_20210302T103352_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_JOPM_2_20210302112249_20210302112259_C001     and Backscatter Quality_Flags have been at the OCO Allimeter Range and Backscatter Quality Flags have been at the OCO Allimeter Range and Backscatter Quality Flags have been at the OCO Allimeter Range and Backscatter Quality Flags have been at the OCO Allimeter Range and Backscatter Quality Flags have been and the OCO Allimeter Range and Backscatter Quality Flags have been and the OCO Allimeter Range and Backscatter Quality Flags have been and the OCO Allimeter Range and Backscatter Quality Flags have been optimized and the OCO Allimeter Range and Backscatter Quality Flags have been optimized and the OCO Allimeter Range and Backscatter Quality Flags have been optimized and the OCO Allimeter Range and Backscatter Quality Flags have been all the OCO Allimeter Range and Backscatter Quality Flags have been optimized and the OCO Allimeter Range and Backscatter Quality Flags have been optimized and the OCO Allimeter Range and Backscatter Quality Flags have been optimized and the OCO Allimeter Range and Backscatter Quality Flags have been optimized and backscatter Quality Flags have been all to one or more recets.       CS_OFFL_SIR_JOPM_2_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_20210302712203_202103027112203_20210302712203_20210302712203_20210302712203_202103027112203_202103027112203_202103027112203_202103027112203_202103027112203_202103027112203_202103027112203_202103027112203_202103027112203_202103027112203_202103027112203_202103027113014_2020103027112203_202103027113014_2020103027112203_202103027113014_2020103027112203_202103027113014_2020103027113014_2020103027113014_2020103027113014_2020103027113014_2020103027113014_2020103027113014_2020103027113014_2020103027113014_2020103027113014_202010302711301	CS_OFFL_SIR_IOPM_2_20210302T111808_20210302T112042_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_DPR_SPL_DPR_2_D02103021113430_002103021130106_0001         Backscatter Quality         for one or more records.           CS_OPRISIR_JOPM_2_20210302113380_002103021120106_0001         Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been Attimeter Range, SSHA, SWH and Ba	CS_OFFL_SIR_IOPM_2_20210302T112242_20210302T112550_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SR_JOPM_2_20210302T12030_20210202T12256_0001       and Backscatter Quality CoGG         CS_OFFL_SIR_JOPM_2_20210302T122552_20210302T12256_0001       Code an Atimater Range and Backscatter Quality Flags have been at the over more records.         CS_OFFL_SIR_JOPM_2_20210302T122553_20210302T122566_0001       Code an Atimater Range and Backscatter Quality Flags have been at the over more records.         CS_OFFL_SIR_JOPM_2_20210302T122553_20210302T122506_0001       Code an Atimater Range and Backscatter Quality Flags have been at the over more records.         CS_OFFL_SIR_JOPM_2_20210302T124508_0001       Code an Atimater Range and Backscatter Quality Flags have been at the over more records.         CS_OFFL_SIR_JOPM_2_20210302T124508_001       Code an Atimater Range SHA, SWH and Backscatter Quality Flags have been at there records.         CS_OFFL_SIR_JOPM_2_20210302T124508_001       Code an Atimater Range SHA, SWH and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have been at there range and Backscatter Quality Flags have b	CS_OFFL_SIR_IOPM_2_20210302T112735_20210302T113257_C001		
CS_OFFL_SIR_JOPM_2_20210302T122352_20210302T122806_C001       and Backscatter Quality COCG Allmeter Range and Backscatter Quality Flags have been Allmeter Range SNA_SWH         CS_OFFL_SIR_JOPM_2_20210302T122832_00210302T122806_C001       Ocean Allmeter Range SNA_SWH       The Ocean Allmeter Range SNA_SWH and Backscatter Quality Flags have been all COCG Allmeter Range SNA_SWH and Backscatter Quality Flags have been all meter Range and Backscatter Quality Flags have been all for one or more records.         CS_OFFL_SIR_JOPM_2_20210302T130450_2010302T130450_C001       Ocean Allmeter Range SNA_SWH and Backscatter Quality Flags have been at for one or more records.         CS_OFFL_SIR_JOPM_2_20210302T130450_2010302T130450_C001       Ocean Allmeter Range SNA_SWH and Backscatter Quality Flags have been at for one or more records.         CS_OFFL_SIR_JOPM_2_20210302T13240_C001       Ocean Allmeter Range SNA_SWH and Backscatter Quality Flags have been at for one or more records.         CS_OFFL_SIR_JOPM_2_20210302T13240_C001       Ocean Allmeter Range SNA_SWH and Backscatter Quality Flags have been at for one or more records.         CS_OFFL_SIR_JOPM_2_20210302T14260_2010302T14260_C001       Ocean Allmeter Range.SNA_SWH and Backscatter Quality Flags	CS_OFFL_SIR_IOPM_2_20210302T113830_20210302T120106_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T122531_20210302T12269_C001       and backscatter Quality Flags have been Altmeter Range and Backscatter Quality Flags have been Altmeter Range and Backscatter Quality Flags have been Set Q	CS_OFFL_SIR_IOPM_2_20210302T120352_20210302T121256_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T124508_20210302T124597_C001       and Backscatter Quality, COCG       and the OCGG Allimeter Range and Backscatter Quality Flags have been Allimeter Range and Backscatter Quality Flags have been and be OCGG Allimeter Range and Backscatter Quality Flags have been and be OCGG Allimeter Range and Backscatter Quality Flags have been and be OCGG Allimeter Range and Backscatter Quality Flags have been and be OCGG Allimeter Range and Backscatter Quality Flags have been and be OCGG Allimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T130730_20210302T13157_C001       OCGG Allimeter Range Quality, OCGG Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T131742_20210302T132410_C001       OCGA Allimeter Range, SN4, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T13240_20210302T13240_C001       Ocean Allimeter Range, SN4, SWH and Backscatter Quality Flags have been and backscatter Quality COGE Allimeter Range, SN4, SWH and Backscatter Quality Flags have been and backscatter Quality COGE Allimeter Range, SN4, SWH and Backscatter Quality COGE Allimeter Range, SN4, SWH and Backscatter Quality Flags have been and backscatter	CS_OFFL_SIR_IOPM_2_20210302T122531_20210302T122908_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_JOPM_2_20210302T125145_20210302T130459_C001       and Backscatter Quality, COCG       and the OCOG Altimeter Range and Backscatter Quality Flags have been at for one or more records.         CS_OFFL_SIR_JOPM_2_20210302T131742_0210302T13157_C001       COCG Altimeter Range Quality, OCOG       The OCeG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_JOPM_2_20210302T131742_0210302T132410_C001       Cocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been at the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags and the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags and the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags and the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags and the OCG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags a	CS_OFFL_SIR_IOPM_2_20210302T124508_20210302T124957_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T131742_20210302T132410_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T131742_20210302T132410_C001       Doean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Cool Altimeter Range and Backscatter Quality Cool Altimeter Range and Backscatter Quality Flags and Ba	CS_OFFL_SIR_IOPM_2_20210302T125145_20210302T130459_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T13742_20210302T132410_C001       and Backscatter Quality.OCOG         Altimeter Range and Backscatter Quality       ext for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T132420_20210302T132949_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range and Backscatter Quality, COCG altimeter Range and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, Flags have been altimeter Range and Backscatter Quality, Flags have been altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20210302T144538_20210302T144311_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, Flags have bee	CS_OFFL_SIR_IOPM_2_20210302T130730_20210302T131157_C001		
CS_OFFL_SIR_IOPM_2_20210302T132420_20210302T132949_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags and the OCOG Altimeter Range, and Backscatter Quality, Flags and the OCOG Altimeter Range, and Backscatter Quality, Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags and the OCOG Altimeter Range, and Backscatter Quality, Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, Flags and the OCOG Altimeter Range, and Backscatter Quality, Flags have been Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags have been Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags have been Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags have been Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags have been Altimeter Range and Backscatter Quality, OCOG Altimeter Ra	CS_OFFL_SIR_IOPM_2_20210302T131742_20210302T132410_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T133024_20210302T135018_C001       and Backscatter Quality, OCOG       and He OCOG Altimeter Range and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20210302T141017_20210302T141507_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T141017_20210302T141507_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been at for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T141638_20210302T143936_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality, Flags have been Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality, Flags have been Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality, Flags have been Altimeter Range and Backscatter Quality, Flags have been Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been at the CCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flag	CS_OFFL_SIR_IOPM_2_20210302T132420_20210302T132949_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T141017_20210302T141507_C001and Backscatter Quality, OCOG Attimeter Range and Backscatter Qualityand the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Rang	CS_OFFL_SIR_IOPM_2_20210302T133024_20210302T135018_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T141638_20210302T143936_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T144256_20210302T144311_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20210302T145739_20210302T150421_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T151359_20210302T15127_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T152007_20210302T152717_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscat	CS_OFFL_SIR_IOPM_2_20210302T141017_20210302T141507_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T144256_20210302T144311_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T145739_20210302T150421_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20210302T15359_20210302T151527_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20210302T151527_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20210302T141638_20210302T143936_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T145739_20210302T150421_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have been         Attimeter Range and Backscatter Quality       Ocean Altimeter Range, SSHA, SWH       and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20210302T151359_20210302T151527_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been         Attimeter Range and Backscatter Quality       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20210302T15207_20210302T152717_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been         cS_OFFL_SIR_IOPM_2_20210302T152007_20210302T152717_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20210302T144256_20210302T144311_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T151359_20210302T151527_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20210302T152007_20210302T152717_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and backscatter Quality, OCOG       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and backscatter Quality Flags have been and backscatter Quality, OCOG	CS_OFFL_SIR_IOPM_2_20210302T145739_20210302T150421_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20210302T152007_20210302T152717_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20210302T151359_20210302T151527_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20210302T152007_20210302T152717_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_IOPM_2_20210302T153119_20210302T153126_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T153351_20210302T153429_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T154305_20210302T154623_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T154839_20210302T155206_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T155213_20210302T155425_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T155551_20210302T160407_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T160621_20210302T162127_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T163054_20210302T163515_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T163654_20210302T164400_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T164520_20210302T165156_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T165336_20210302T170741_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T172835_20210302T172911_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T173507_20210302T173736_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T173858_20210302T174202_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T174720_20210302T180317_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T180550_20210302T181423_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T181639_20210302T183925_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T191634_20210302T194237_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T194748_20210302T195228_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T195508_20210302T195906_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T200051_20210302T202153_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T205411_20210302T212150_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T212707_20210302T213301_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T213429_20210302T215350_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T215625_20210302T220335_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T222538_20210302T230026_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_IOPM_2_20210302T230615_20210302T231133_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T231313_20210302T231613_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T231812_20210302T231949_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20210302T234909_20210302T235143_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T002333_20210302T002650_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T062719_20210302T062934_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T081329_20210302T081335_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T103556_20210302T103728_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T154144_20210302T154305_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T163516_20210302T163654_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T180403_20210302T180549_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T232343_20210302T232347_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T054948_20210302T054951_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T143936_20210302T144256_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T150421_20210302T150453_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T153041_20210302T153051_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T172322_20210302T172455_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

#### L2 Quality Flags (20Hz PLRM)

Currently, there are several common flags raised in the Level 2 products, which are summarised below. The table provides the full list of products flagged.

> Ocean Altimeter Range, SSHA, SWH and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over sea ice.

> OCOG Altimeter Range and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over continental ice.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20210302T002333_20210302T002650_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T013041_20210302T013433_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T022002_20210302T022152_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T022322_20210302T022437_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T035838_20210302T040352_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T041647_20210302T042050_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_IOPN_2_20210302T045637_20210302T050250_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T051238_20210302T051415_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T051446_20210302T052048_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T053346_20210302T053508_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T053739_20210302T053753_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T053841_20210302T054239_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T063603_20210302T063920_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T071714_20210302T072102_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T073640_20210302T074010_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T081700_20210302T081815_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T085149_20210302T085756_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T103352_20210302T103519_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T105549_20210302T105757_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T111137_20210302T111243_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T113259_20210302T113607_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T122909_20210302T123026_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T124146_20210302T124508_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T130551_20210302T130730_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T144636_20210302T144911_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T145104_20210302T145417_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T145530_20210302T145731_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T154144_20210302T154305_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T162201_20210302T162800_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T163516_20210302T163654_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T172455_20210302T172715_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T172912_20210302T173027_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_IOPN_2_20210302T174348_20210302T174720_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T184515_20210302T184631_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T190024_20210302T190514_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T194339_20210302T194500_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T202459_20210302T202605_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T203508_20210302T203531_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T212444_20210302T212707_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T213302_20210302T213429_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T222235_20210302T222347_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T231134_20210302T231249_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20210302T233035_20210302T233120_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T004141_20210302T004417_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T004515_20210302T005527_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T022438_20210302T023156_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T023348_20210302T023702_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T023735_20210302T023756_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T034949_20210302T035116_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T040352_20210302T040911_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T040936_20210302T041109_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T050536_20210302T050848_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T053509_20210302T053739_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T053753_20210302T053841_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T054244_20210302T054835_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T060512_20210302T060534_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T060537_20210302T060827_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T060830_20210302T061036_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

PLRM Ocean and Ba CS_OFFL_SIR_IOPR_2_20210302T085756_20210302T090656_C001 Altimet PLRM Ocean and Ba	ter Range and Backscatter Quality 1 n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T085756_20210302T090656_C001 and Ba Attimete PLRM CS_OFFL_SIR_IOPR_2_20210302T095724_20210302T095838_C001 and Ba Altimete	ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality	The Original Altimates Device COULA, OVALL, and Device attact Original the Flores
CS_OFFL_SIR_IOPR_2_20210302T095724_20210302T095838_C001 and Ba Altimet	1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality 1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS OFEL SID LOPP 2 20210302T103728 20210302T104350 C001 and Ba	eter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS OFEL SIR IOPR 2 20210302T104350 20210302T104702 C001 and Ba	eter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	G Altimeter Range Quality PLRM, G Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS OFFL SIR IOPR 2 20210302T121256 20210302T1222249 C001	n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality 1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	G Altimeter Range Quality PLRM, G Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS OFFL SIR IOPR 2 20210302T124958 20210302T125145 C001 and Ba	n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality 1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS OFEL SIR IOPR 2 20210302T135105 20210302T135306 C001	n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality 1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFEL_SIR_IOPR_2_20210302T135522_20210302T140148_C001 and Ba	n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality 1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS OFEL SIR IOPR 2 20210302T140324 20210302T140725 C001 and Ba	n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality 1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS OFEL SID LODD 2 20210302T144311 20210302T144635 C001 and Ba	eter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	G Altimeter Range Quality PLRM, G Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
		The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS OFEL SIR LORD 2 20210302T154035 20210302T154143 C001 and Ba	n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality 1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	G Altimeter Range Quality PLRM, G Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
	G Altimeter Range Quality PLRM, G Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS OFEL SIR IOPR 2 20210302T171701 20210302T172109 C001 and Ba	eler Range and Backscaller Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
And Ba	eler Range and Backscaller Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS OFEL SIR LORD 2 20210302T172715 20210302T172835 C001 and Ba	n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality 1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	G Altimeter Range Quality PLRM, G Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
	G Altimeter Range Quality PLRM, G Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
	G Altimeter Range Quality PLRM, G Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS OFEL SID LOPP 2 20210302T185351 20210302T100023 C001 and Ba	n Altimeter Range, SSHA, SWH ackscatter Quality PLRM, OCOG eter Range and Backscatter Quality 1	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
	G Altimeter Range Quality PLRM, G Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

CS_OFFL_SIR_IOPR_2_20210302T203119_20210302T203232_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_IOPR_2_20210302T203532_20210302T204049_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T221248_20210302T221412_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T221437_20210302T222234_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T230026_20210302T230302_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T231250_20210302T231313_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20210302T234617_20210302T234741_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
L2 Quality Flags (1 Hz & 1Hz PLRM)		
Currently, there are several common flags raised in the Level 2 products, w	which are summarised below.	
> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for pr	oducts over sea ice, which is to be expected	L
Number of products with errors: 192		
5.8 L2 Ocean Retracking Quality Check		
L2 Retracking Flags (20Hz)		
CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measur	rement record. The bit value of this flag indic	ates 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: 59		
L2 Retracking Flags (20Hz, PLRM)		
CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz PLRM I	measurement record. The bit value of this fla	g indicates any problems when set.
Ocean Retracking Quality Flag (PLRM): This flag is currently set for products In	OPR and IOPN products over sea ice, but th	is is to be expected.
Number of products with errors: 144		
6. IOP L2	Pole-to-Pole Data Quality	Check
6.1 P2P Product Format Check		
	ouro it consists of both on XML booder file ( )	HDR) and a NatCDE product file ( no)
Each product, retrieved and unpacked from the science server, is checked to ens Number of products with errors: 0	sure it consists of both an XML header life (.	nuk) and a NetCur product life (.nc).
6.2 P2P Product Header Analysis		
For all products, a series of pre-defined checks are performed on the MPH and S	SPH in order to identify any inconsistencies a	ind/or errors raised by the ground-segment processing chain.
Number of products with errors: 0		
6.3 P2P Auxiliary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pre-d	letermined baseline and also to check the va	lidity 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).	
Currently, there are some common auxiliary correction errors raised in the followed by a table highlighting any additional issues which may arise from		to surface type. All common flags are summarised in the list below,
> ECMWF Meteo Corrections: Currently the following corrections are not comp Correction and the U-Wind and V-Wind components of the ECMWF model wind not reported in the table below.		
> Sea State Bias & Sea State Bias PLRM: The error value is currently set for pr	roducts over sea ice, but this is to be expect	ed.
> Mean Sea Surface: The error value is currently set for products over land and	sea ice, but this is to be expected.	
> Mean Dynamic Topography: The error value is currently set for products over	r land and sea ice, but this is to be expected	
> Altimetric Wind Speed Error: The error value is currently set for products over	er land and sea ice, but this is to be expected	i.
Number of products with errors: 29		
Product	Test Failed	Description
	Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic

 CS\_OFFL\_SIR\_IOP\_2\_20210301T235716\_20210302T004652\_C001
 Mean Sea Surface (1), Mean Dynamic Topography (1)
 There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

 CS\_OFFL\_SIR\_IOP\_2\_20210302T004652\_20210302T013630\_C001
 Mean Sea Surface (1), Mean Dynamic Topography (1)
 There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

 CS\_OFFL\_SIR\_IOP\_2\_20210302T013630\_20210302T022606\_C001
 Mean Sea Surface (1), Mean Dynamic Topography (1)
 There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

CS_OFFL_SIR_IOP_220210302T022606_20210302T031545_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T031545_20210302T040521_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T040521_20210302T045459_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T045459_20210302T054436_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T054436_20210302T063414_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T063414_20210302T072350_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T072350_20210302T081329_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T081329_20210302T090305_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_IOP_2_20210302T090305_20210302T095244_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210302T095244_20210302T104220_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T104220_20210302T113158_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T113158_20210302T122134_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210302T122134_20210302T131113_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210302T131113_20210302T140049_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T140049_20210302T145027_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T145027_20210302T154003_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T154003_20210302T162942_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_220210302T162942_20210302T171918_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210302T171918_20210302T180857_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210302T180857_20210302T185833_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210302T185833_20210302T194812_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210302T194812_20210302T203748_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210302T203748_20210302T212726_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220210302T212726_20210302T221702_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_2_20210302T221702_20210302T230641_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220210302T235617_20210303T004556_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
6.5 P2P Measurement Confidence Data Check		

#### 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:
 0

## 6.6 P2P Measurement Quality Flag Check

## P2P Quality Flags (20Hz)

CryoSat P2P data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record, copied from the corresponding L2 products.

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.

Number of products with errors:	29
P2P Quality Flags (20Hz PLRM)	
Since the P2P Quality Flags are copied direct	y from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.
Number of products with errors:	30
P2P Quality Flags (1 Hz & 1Hz PLRM	0
Since the P2P Quality Flags are copied direct	y from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.
Number of products with errors:	30
6.8 P2P Ocean Retracking Qualit	v Check
P2P Retracking Flags (20Hz) Cryosat P2P data includes an ocean retracking c	uality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.
,	ag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.
Number of products with errors:	27
P2P Retracking Flags PLRM	
CryoSat L2 data includes an ocean retracking qu	ality flag for each 20-Hz PLRM measurement record. The bit value of this flag indicates any problems when set.
Ocean Retracking Quality Flag (PLRM): This fl	ag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.
Number of products with errors:	30
	7. IOP QCC Report Analysis
The Quality Control for CryoSat (QCC) facility pe warnings is provided below.	forms a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_IOPM1B	212	212	4	208	0
SIR_IOPR1B	154	108	1	107	0
SIR_IOPN1B	108	154	0	154	0
SIR_IOPM_2	212	212	151	61	0
SIR_IOPR_2	154	108	41	67	0
SIR_IOPN_2	108	154	62	89	3
SIR_IOP_P2P	29	29	0	25	4

# 7.1 QCC Errors

					Total number	of occurrences	of each error				
Product Type RLOB	OPNCDF	RL	RL	RLOBOPNCDF	RL	RL	-	-	-	-	-
SIR_IOPR_2	3	1	3	3	1	3					
Product Type RLOB	OPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOP_2_	4	4	4	4							
, ,											

15

Test Description Key:		
Abbreviation	Test name	Details
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7
RL	RangeLatitude_6	Latitude should be between -90E6 and 90E6
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7
RL	RangeLongitude_6	Longitude should be between -180E6 and 180E6
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7

# 7.2 QCC Warnings

				ber of occurrences of e			
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRM
SIR_IOPM1B	208	0	0	0	0	0	0
SIR_IOPM_2	0	0	42	40	0	49	0
SIR_IOPN1B	105	0	0	0	0	0	0
SIR_IOPN_2	0	0	10	33	3	26	24
SIR_IOPR1B	149	0	0	0	0	0	0
SIR_IOPR_2	0	3	17	32	0	27	21
Product Type	RBSZOPOEPNCDF	RLPTONCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCI	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	41	2	0	37	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	19	30	0	0	0	23	0
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	13	36	3	0	35	0	45
	·						
Product Type	RPEPOPFDSINNCDF	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	30	0	0	9	32	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	36	0	0	27	15	43	54
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	0	33	0	4	58	32
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SPHRTASCNSNCDF	SOOHHIFHD
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	2	38	0	3	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	31	32	28	11	0	0	4
	0	0	0	0	1	1	0
SIR_IOPR1B SIR IOPR 2	11	24	38			0	8

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_IOP_2_	14	28	29	3	29	19	29

Product Type	RLPTONCDF	RNELPOTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF
SIR_IOP_2_	28	4	18	28	24	18	29
Product Type	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-

Test Description Key:		
Abbreviation	Test name	Details
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPFDPLRM	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RLPTONCDF	RangeLongPeriodTideOceanNetCDF	The Long period tide height should be between -50mm and 50mm (or missing) for surface type = ocean - NetCDF
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
	1	

7.3 Missing QCC Reports

Number of products with missing QCC reports:

0