

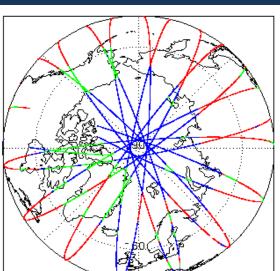
# **QA4EO Daily Report for GOP data:**

<u>17/11/2020</u>

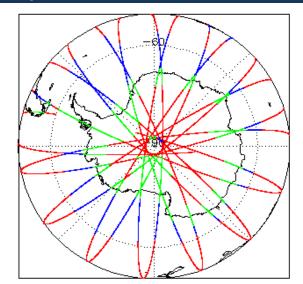
	17-Dec-2020	Check	L1 & L2	P2P
Report Production:	17-Dec-2020	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CrueSet Oscan Brassager	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor used.	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	d: Geophysical Ocean Products (GOP) L1B, L2 & P2P Science Data	Product Format Check	Nominal	Nominal
Data Useu.		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 and 5.5	See Section 6.5
		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, 7.2 and 7.

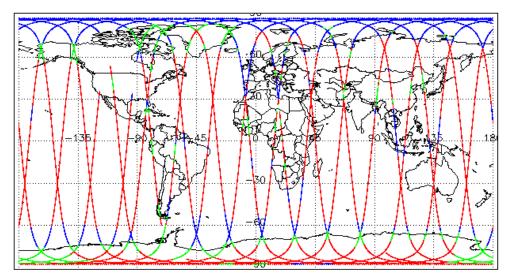
1. Overview

Mission / Instrument News	
16-Nov-2020	None
17-Nov-2020	None
18-Nov-2020	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. GOP 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).

4.2 L1B Product Header Analysis				
For all products, a series of pre-defined checks are performed on the MPH and Sf	PH in order to identify any inconsistencies	and/or errors raised by the ground-segment processing chain.		
L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L1B GOPR and GOPN products because 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 pre-de	etermined baseline and also to check the v	alidity 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 record. T	he bit value of this flag indicates any prob	lems 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 measuremen	t record. The bit value of this flag indicates	s any problems when set.		
Attitude Correction Missing: This flag is currently set in error for GOPR product	s due to a configuration issue. This is bein	g investigated and will be updated in the next SW update.		
Number of products with errors: 1				
Product	Test Failed	Description		
CS_OFFL_SIR_GOPM1B_20201117T023556_20201117T030307_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records		
4.6 L1B Waveform Group Data Check				
CryoSat L1B data includes a waveform data flag for each measurement record. T	he bit value of this flag indicates any probl	ems when set.		
Loss of Echo Flag: This flag is currently set for some products over land, but this	s is to be expected.			
Normalise and the state of the summary of the second				
Number of products with errors: 16				
Product	Test Failed	Description		
	Test Failed Loss of Echo	Description The tracking echo is missing for one or more records		
Product		· ·		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T231715_C001	Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T231715_C001           CS_OFFL_SIR_GOPM1B_20201116T235952_20201117T000455_C001	Loss of Echo Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T032734_C001           CS_OFFL_SIR_GOPM1B_20201117T235352_20201117T0355_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T003412_C001	Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T031536_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T031715_C001           CS_OFFL_SIR_GOPN1B_20201117T231536_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T023412_C001           CS_OFFL_SIR_GOPN1B_20201117T032247_20201117T032537_C001	Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091356_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T031715_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T032412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001	Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T031536_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T031715_C001           CS_OFFL_SIR_GOPM1B_20201116T235952_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T023412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T095159_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T09455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T023412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T190007_20201117T190523_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T031715_C001           CS_OFFL_SIR_GOPN1B_20201117T023552_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T032412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T190007_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T031536_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T190007_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T192637_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T192637_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T03274_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T023412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T190007_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T1220755_20201117T220837_C001           CS_OFFL_SIR_GOPN1B_20201117T035809_20201117T040228_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T090455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T023412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T19007_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T19508_2001           CS_OFFL_SIR_GOPN1B_20201117T035809_20201117T040228_C001           CS_OFFL_SIR_GOPR1B_20201117T043937_20201117T044323_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T092734_C001           CS_OFFL_SIR_GOPN1B_20201117T031536_20201117T030455_C001           CS_OFFL_SIR_GOPN1B_20201117T032241_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T035809_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T043937_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T055131_20201117T05545_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T092734_C001           CS_OFFL_SIR_GOPN1B_20201117T031536_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T190007_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T195080_20201117T042837_C001           CS_OFFL_SIR_GOPN1B_20201117T035809_20201117T04282_C001           CS_OFFL_SIR_GOPR1B_20201117T043937_20201117T045545_C001           CS_OFFL_SIR_GOPR1B_20201117T0455131_20201117T045344_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T092734_C001           CS_OFFL_SIR_GOPN1B_20201117T231536_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T035809_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T043937_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T055131_20201117T05545_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T092734_C001           CS_OFFL_SIR_GOPN1B_20201117T0235552_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T0923412_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T0946419_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T190007_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T195508_02011           CS_OFFL_SIR_GOPN1B_20201117T035809_20201117T040228_C001           CS_OFFL_SIR_GOPR1B_20201117T043937_20201117T04228_C001           CS_OFFL_SIR_GOPR1B_20201117T0455131_20201117T045545_C001           CS_OFFL_SIR_GOPR1B_20201117T144559_20201117T145334_C001           CS_OFFL_SIR_GOPR1B_20201117T144559_20201117T145434_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T092734_C001           CS_OFFL_SIR_GOPN1B_20201117T031536_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T032241_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T190007_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T195508_02001           CS_OFFL_SIR_GOPN1B_20201117T035809_20201117T040228_C001           CS_OFFL_SIR_GOPR1B_20201117T043937_20201117T045545_C001           CS_OFFL_SIR_GOPR1B_20201117T0455131_20201117T045545_C001           CS_OFFL_SIR_GOPR1B_20201117T144559_20201117T145334_C001           CS_OFFL_SIR_GOPR1B_20201117T144559_20201117T14534_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T031536_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T231536_20201117T092734_C001           CS_OFFL_SIR_GOPN1B_20201117T032552_20201117T00455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T032412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T195508_02001           CS_OFFL_SIR_GOPN1B_20201117T195508_02001           CS_OFFL_SIR_GOPN1B_20201117T195508_02001           CS_OFFL_SIR_GOPN1B_20201117T195508_02001           CS_OFFL_SIR_GOPR1B_20201117T055545_0001           CS_OFFL_SIR_GOPR1B_20201117T055131_20201117T04323_C001           CS_OFFL_SIR_GOPR1B_20201117T144559_20201117T145334_C001           CS_OFFL_SIR_GOPR1B_20201117T144259_20201117T145334_C001           CS_OFFL_SIR_GOPR1B_20201117T144259_20201117T145334_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPN1B_20201117T231536_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T032412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T19506_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T19506_20201117T195508_C001           CS_OFFL_SIR_GOPN1B_20201117T035809_20201117T040228_C001           CS_OFFL_SIR_GOPR1B_20201117T043937_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T055131_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T145534_C001           CS_OFFL_SIR_GOPR1B_20201117T144559_20201117T145334_C001           CS_OFFL_SIR_GOPR1B_20201117T210142_20201117T145344_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPN1B_20201117T231536_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201116T235952_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T032412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T19506_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T19506_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T035809_20201117T040228_C001           CS_OFFL_SIR_GOPR1B_20201117T035809_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T055131_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T145534_C001           CS_OFFL_SIR_GOPR1B_20201117T144559_20201117T145334_C001           CS_OFFL_SIR_GOPR1B_20201117T210142_20201117T145334_C001           CS_OFFL_SIR_GOPR1B_20201117T210142_20201117T210344_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Product           CS_OFFL_SIR_GOPM1B_20201117T031005_20201117T031244_C001           CS_OFFL_SIR_GOPM1B_20201117T091351_20201117T092734_C001           CS_OFFL_SIR_GOPM1B_20201117T031536_20201117T092734_C001           CS_OFFL_SIR_GOPN1B_20201117T031536_20201117T000455_C001           CS_OFFL_SIR_GOPN1B_20201117T023241_20201117T032412_C001           CS_OFFL_SIR_GOPN1B_20201117T032217_20201117T032537_C001           CS_OFFL_SIR_GOPN1B_20201117T094619_20201117T094747_C001           CS_OFFL_SIR_GOPN1B_20201117T094944_20201117T095159_C001           CS_OFFL_SIR_GOPN1B_20201117T19007_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T195106_20201117T190523_C001           CS_OFFL_SIR_GOPN1B_20201117T19508_00_20201117T040228_C001           CS_OFFL_SIR_GOPR1B_20201117T035809_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T055131_20201117T044323_C001           CS_OFFL_SIR_GOPR1B_20201117T145594_C001           CS_OFFL_SIR_GOPR1B_20201117T145534_C001           CS_OFFL_SIR_GOPR1B_20201117T144559_20201117T145334_C001           CS_OFFL_SIR_GOPR1B_20201117T210142_20201117T145344_C001           CS_OFFL_SIR_GOPR1B_20201117T210142_20201117T145344_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		

# 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

# 5.4 L2 Auxiliary Correction Error Check

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

0

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

> 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.

> 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_GOPN_2_20201116T235952_20201117T000455_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T004314_20201117T004433_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T022439_20201117T022640_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) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20201117T040228_20201117T040549_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T041113_20201117T041232_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T050117_20201117T050438_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T054125_20201117T054446_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T063055_20201117T063342_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T071755_20201117T071956_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T072836_20201117T073007_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T081142_20201117T081244_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T090601_20201117T090807_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T094619_20201117T094747_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T094944_20201117T095159_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T103615_20201117T103802_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T105307_20201117T105543_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_GOPN_2_20201117T112613_20201117T113029_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T122539_20201117T122744_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T144154_20201117T144559_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T154413_20201117T154526_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T171426_20201117T171552_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T172105_20201117T172407_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T185441_20201117T185743_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T190007_20201117T190523_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T195106_20201117T195508_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) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_GOPN_2_20201117T203445_20201117T203719_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T212956_20201117T213111_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T213305_20201117T213542_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) and the Mean Dynamic Topography height (solution 1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records

CS_OFFL_SIR_GOPN_2_20201117T220945_20201117T221549_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T230922_20201117T231141_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) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T231222_20201117T231404_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOPN_2_20201117T235204_20201117T235351_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T013507_20201117T014013_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T030307_20201117T030405_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T030857_20201117T031005_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T031244_20201117T032217_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T043937_20201117T044323_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T045250_20201117T050117_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the GPD Wet Tropospheric correction, the MSS height (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_GOPR_2_20201117T055131_20201117T055545_C001	GPD Wet Tropospheric Correction	There is an error with the GPD Wet Tropospheric correction for one or more records
CS_OFFL_SIR_GOPR_2_20201117T063342_20201117T064130_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T081244_20201117T081828_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T081839_20201117T081953_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T095159_20201117T095847_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T112549_20201117T112613_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T113030_20201117T113550_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T130853_20201117T131838_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T144559_20201117T145334_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T162510_20201117T163157_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T163157_20201117T163446_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T180337_20201117T181057_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T181057_20201117T181307_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T194348_20201117T194452_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	#N/A
CS_OFFL_SIR_GOPR_2_20201117T194523_20201117T194953_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T194953_20201117T195106_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T212322_20201117T212827_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T212827_20201117T212956_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) for one or more records
CS_OFFL_SIR_GOPR_2_20201117T230316_20201117T230921_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) for one or more records

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: 1		
Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20201117T023555_20201117T030307_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

# 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.

Product	Test Failed	Description
CS_OFFL_SIR_GOPM_2_20201117T001453_20201117T004039_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T004716_20201117T005218_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been so for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T005653_20201117T012044_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T015344_20201117T021843_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T022640_20201117T023241_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been so for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T023555_20201117T030307_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T031005_20201117T031244_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T032537_20201117T035809_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T040549_20201117T041113_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been so for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T041541_20201117T041908_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T042157_20201117T042528_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been see for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T044918_20201117T045250_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T050446_20201117T051351_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T051635_20201117T053809_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T054446_20201117T054554_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been see for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T054559_20201117T055007_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been so for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T055545_20201117T060512_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T060659_20201117T061141_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T061506_20201117T061853_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T064301_20201117T071650_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T072513_20201117T072835_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T073553_20201117T080729_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 bee set for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T080833_20201117T080935_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records.
CS_OFFL_SIR_GOPM_2_20201117T082155_20201117T083432_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 bee set for one or more records.

CS_OFFL_SIR_GOPM_2_20201117T084022_20201117T085633_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_GOPM_2_20201117T085839_20201117T090352_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_GOPM_2_20201117T090428_20201117T090601_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_GOPM_2_20201117T091351_20201117T092734_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_GOPM_2_20201117T093031_20201117T094603_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_GOPM_2_20201117T100914_20201117T101934_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_GOPM_2_20201117T102114_20201117T103508_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_GOPM_2_20201117T103802_20201117T104304_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_GOPM_2_20201117T105543_20201117T110515_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_GOPM_2_20201117T110828_20201117T111326_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_GOPM_2_20201117T111609_20201117T112355_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_GOPM_2_20201117T112435_20201117T112448_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_GOPM_2_20201117T115213_20201117T121335_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_GOPM_2_20201117T121838_20201117T122221_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_GOPM_2_20201117T122935_20201117T125527_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_GOPM_2_20201117T132855_20201117T135259_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_GOPM_2_20201117T135621_20201117T140136_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_GOPM_2_20201117T140143_20201117T140510_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_GOPM_2_20201117T140917_20201117T144154_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_GOPM_2_20201117T150425_20201117T152327_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_GOPM_2_20201117T152811_20201117T153208_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_GOPM_2_20201117T153622_20201117T154211_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_GOPM_2_20201117T154950_20201117T162140_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_GOPM_2_20201117T163446_20201117T163550_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_GOPM_2_20201117T165708_20201117T165858_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_GOPM_2_20201117T170030_20201117T171016_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_GOPM_2_20201117T171552_20201117T172104_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_GOPM_2_20201117T172802_20201117T174918_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_GOPM_2_20201117T175203_20201117T180337_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_GOPM_2_20201117T181307_20201117T181525_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_GOPM_2_20201117T183156_20201117T185017_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_GOPM_2_20201117T185743_20201117T190007_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_GOPM_2_20201117T190734_20201117T194059_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_GOPM_2_20201117T195547_20201117T201503_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_GOPM_2_20201117T201519_20201117T202806_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_GOPM_2_20201117T203719_20201117T203916_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_GOPM_2_20201117T204100_20201117T204420_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_GOPM_2_20201117T204641_20201117T210141_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_GOPM_2_20201117T210344_20201117T211330_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_GOPM_2_20201117T211831_20201117T211834_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_GOPM_2_20201117T213542_20201117T215221_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_GOPM_2_20201117T220503_20201117T220506_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_GOPM_2_20201117T221850_20201117T222321_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_GOPM_2_20201117T222606_20201117T224010_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_GOPM_2_20201117T231536_20201117T231715_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_GOPM_2_20201117T232711_20201117T235017_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_GOPM_2_20201117T235351_20201118T000225_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_GOPN_2_20201117T044403_20201117T044436_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_GOPN_2_20201117T122237_20201117T122243_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_GOPN_2_20201117T132806_20201117T132855_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_GOPN_2_20201117T154413_20201117T154526_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_GOPR_2_20201117T013332_20201117T013448_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_GOPR_2_20201117T045250_20201117T050117_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_GOPR_2_20201117T122744_20201117T122935_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_GOPR_2_20201117T194348_20201117T194452_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_GOPR_2_20201117T194953_20201117T195106_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_GOPR_2_20201117T230316_20201117T230921_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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Product	Test Failed	Description
CS_OFFL_SIR_GOPN_2_20201116T235952_20201117T000455_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_GOPN_2_20201117T004314_20201117T004433_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_GOPN_2_20201117T023242_20201117T023412_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_GOPN_2_20201117T040228_20201117T040549_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_GOPN_2_20201117T044441_20201117T044506_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_GOPN_2_20201117T044825_20201117T044918_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_GOPN_2_20201117T050117_20201117T050438_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_GOPN_2_20201117T055007_20201117T055131_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_GOPN_2_20201117T063055_20201117T063342_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_GOPN_2_20201117T081142_20201117T081244_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_GOPN_2_20201117T094619_20201117T094747_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_GOPN_2_20201117T103615_20201117T103802_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_GOPN_2_20201117T105307_20201117T105543_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_GOPN_2_20201117T110515_20201117T110828_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_GOPN_2_20201117T112536_20201117T112548_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_GOPN_2_20201117T112613_20201117T113029_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_GOPN_2_20201117T113550_20201117T113613_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_GOPN_2_20201117T121521_20201117T121838_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_GOPN_2_20201117T122539_20201117T122744_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_GOPN_2_20201117T125722_20201117T125950_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_GOPN_2_20201117T145335_20201117T145410_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_GOPN_2_20201117T162141_20201117T162236_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_GOPN_2_20201117T163734_20201117T163810_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_GOPN_2_20201117T165130_20201117T165315_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_GOPN_2_20201117T171426_20201117T171552_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_GOPN_2_20201117T172105_20201117T172407_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_GOPN_2_20201117T183113_20201117T183156_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_GOPN_2_20201117T185441_20201117T185743_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_GOPN_2_20201117T190007_20201117T190523_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_GOPN_2_20201117T195106_20201117T195508_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_GOPN_2_20201117T203916_20201117T204100_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_GOPN_2_20201117T204420_20201117T204548_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_GOPN_2_20201117T211330_20201117T211649_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_GOPN_2_20201117T215339_20201117T215547_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_GOPN_2_20201117T215638_20201117T215702_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_GOPN_2_20201117T220945_20201117T221549_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_GOPN_2_20201117T225017_20201117T225105_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_GOPN_2_20201117T230922_20201117T231141_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_GOPN_2_20201117T231222_20201117T231404_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_GOPN_2_20201117T235204_20201117T235351_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_GOPR_2_20201117T000456_20201117T000706_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_GOPR_2_20201117T001330_20201117T001453_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_GOPR_2_20201117T004039_20201117T004314_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_GOPR_2_20201117T005452_20201117T005653_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.

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CS_OFFL_SIR_GOPR_2_20201117T013507_20201117T014013_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_GOPR_2_20201117T021843_20201117T022238_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_GOPR_2_20201117T031244_20201117T032217_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_GOPR_2_20201117T035809_20201117T040228_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_GOPR_2_20201117T041232_20201117T041541_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_GOPR_2_20201117T043937_20201117T044323_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_GOPR_2_20201117T053809_20201117T054125_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_GOPR_2_20201117T055131_20201117T055545_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_GOPR_2_20201117T063342_20201117T064130_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_GOPR_2_20201117T073008_20201117T073431_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_GOPR_2_20201117T090807_20201117T091351_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_GOPR_2_20201117T092735_20201117T093031_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_GOPR_2_20201117T094747_20201117T094944_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_GOPR_2_20201117T095159_20201117T095847_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_GOPR_2_20201117T101934_20201117T102114_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_GOPR_2_20201117T113030_20201117T113550_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_GOPR_2_20201117T113613_20201117T113710_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_GOPR_2_20201117T122744_20201117T122935_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_GOPR_2_20201117T130853_20201117T131838_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_GOPR_2_20201117T144559_20201117T145334_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_GOPR_2_20201117T145410_20201117T145826_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_GOPR_2_20201117T153208_20201117T153456_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_GOPR_2_20201117T154527_20201117T154950_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_GOPR_2_20201117T162510_20201117T163157_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_GOPR_2_20201117T163157_20201117T163446_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_GOPR_2_20201117T163655_20201117T163734_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_GOPR_2_20201117T165858_20201117T170030_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_GOPR_2_20201117T171016_20201117T171426_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_GOPR_2_20201117T172407_20201117T172802_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_GOPR_2_20201117T180337_20201117T181057_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_GOPR_2_20201117T181525_20201117T182249_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_GOPR_2_20201117T185017_20201117T185440_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_GOPR_2_20201117T190523_20201117T190734_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_GOPR_2_20201117T194523_20201117T194953_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_GOPR_2_20201117T194953_20201117T195106_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_GOPR_2_20201117T202807_20201117T203445_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_GOPR_2_20201117T210142_20201117T210344_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_GOPR_2_20201117T212322_20201117T212827_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_GOPR_2_20201117T215222_20201117T215339_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_GOPR_2_20201117T220506_20201117T220755_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_GOPR_2_20201117T224458_20201117T224859_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_GOPR_2_20201117T225649_20201117T225706_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_GOPR_2_20201117T230316_20201117T230921_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_GOPR_2_20201117T235018_20201117T235204_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.
L2 Quality Flags (1 Hz & 1Hz PLRM)		
Currently, there are several common flags raised in the Level 2 products,	which are summarised below.	
> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for p	products over sea ice, which is to be expected	L
Number of products with errors: 184		
5.8 L2 Ocean Retracking Quality Check		
L2 Retracking Flags (20Hz)		
CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measu	urement 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	-	
Number of products with errors: 56		
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	ag indicates any problems when set.
Ocean Retracking Quality Flag (PLRM): This flag is currently set for products	GOPR and GOPN products over sea ice, but	this is to be expected.
Number of products with errors: 146		
6. GOP L2	Pole-to-Pole Data Quality	/ Check

6. GOP L2 Pole-to-Pole Data Quality Check

# 6.1 P2P Product Format Check

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

# 6.2 P2P Product Header Analysis

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

Number of products with errors:

# 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

# 6.4 P2P Auxiliary Correction Error Check

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

0

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

> 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.

> 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_GOP_2_20201116T235810_20201117T004748_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_GOP_2_20201117T004748_20201117T013724_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) for one or more records
CS_OFFL_SIR_GOP_220201117T013724_20201117T022703_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) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20201117T022703_20201117T031639_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T031639_20201117T040618_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T040618_20201117T045554_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T045554_20201117T054532_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T054532_20201117T063508_C001	GPD Wet Tropospheric Correction, Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the GPD Wet Troposheric Correction, the MSS height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20201117T063508_20201117T072447_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T072447_20201117T081423_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T081423_20201117T090401_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T090401_20201117T095338_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T095338_20201117T104316_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) for one or more records
CS_OFFL_SIR_GOP_220201117T104316_20201117T113252_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) and the Mean Dynamic Topography height (solution 1), the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_GOP_2_20201117T113252_20201117T122231_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T122231_20201117T131207_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T131207_20201117T140146_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T140146_20201117T145122_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T145122_20201117T154100_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T154100_20201117T163036_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T163036_20201117T172015_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T172015_20201117T180951_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T180951_20201117T185930_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) for one or more records

CS_OFFL_SIR_GOP_220201117T185930_20201117T194906_C001	Inere is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height Crean Tide
CS_OFFL_SIR_GOP_2_20201117T194906_20201117T203844_C001	Mean Stall         Suntace (1), wean uynamic         Mean Stall         Mean Stall
CS_OFFL_SIR_GOP_220201117T203844_20201117T212820_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) for one or more records
CS_OFFL_SIR_GOP_2_20201117T212820_20201117T221759_C001	Mean Sea Surrace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide height Tide (GOT), Total Geocentric Ocean Tide height (solution 2: FES) Non-Fauilibrium Long Period Ocean Tide height
CS_OFFL_SIR_GOP_2_20201117T221759_20201117T230735_C001	Mean Sea Surface (1), Mean Dynamic         There is an error with the MSS height (solution 1) and the Mean Dynamic           Topography (1)         Topography height (solution 1) for one or more records
CS_OFFL_SIR_GOP_2_20201117T230735_20201117T235714_C002	Mean Sea Surface (1), Mean Dynamic         There is an error with the MSS height (solution 1) and the Mean Dynamic           Topography (1), Total Geocentric Ocean         Topography height (solution 1) and the Total Geocentric Ocean Tide           Tide (GOT)         height (solution 1: GOT) for one or more records
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:

Product	Test Failed	Description
CS_OFFL_SIR_GOP_2_20201117T022703_20201117T031639_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

# 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.

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2208

#### Number of products with errors:

#### P2P Quality Flags (20Hz PLRM)

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
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# P2P Quality Flags (1 Hz & 1Hz PLRM)

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:

# 6.8 P2P Ocean Retracking Quality Check

#### P2P Retracking Flags (20Hz)

Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Ocean Retracking Quality Flag (PLRM): This flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected.

Number of products with errors:

# P2P Retracking Flags PLRM

CryoSat L2 data includes an ocean retracking quality 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 flag is currently set for products GOPR and GOPN products over sea ice, but this is to be expected.

#### Number of products with errors:

# 7. GOP QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs 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 warnings is provided below.

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_GOPM1B	183	183	5	178	0
SIR_GOPR1B	109	109	0	109	0
SIR_GOPN1B	105	105	4	101	0
SIR_GOPM_2	183	183	133	50	0
SIR_GOPR_2	109	109	29	78	2
SIR_GOPN_2	105	105	43	62	0
SIR_GOP_P2P	29	29	0	27	2

# 7.1 QCC Errors

#### Number of QCC reports with errors:

Total number of occurrences of each error

Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOPR_2	2	2	2	2							
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_GOP_2_	2	2	2	2							

# Test Description Key:

Abbreviation	Test name	Details
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7

# 7.2 QCC Warnings

Number of QCC reports with warnings

SIR_GOPM1B	178	0	0	0	0	0	0
SIR_GOPM_2	0	0	38	38	0	42	0
SIR_GOPN1B	99	0	0	0	0	0	0
SIR_GOPN_2	0	0	7	35	5	29	30
SIR_GOPR1B	103	0	0	0	0	0	0
SIR_GOPR_2	0	2	36	50	2	34	24
Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARN	CERPEPOPFDPLRMSINNC	DIRPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	38	0	27	0	0	0	0
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	20	2	0	0	29	0	36
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	11	6	0	54	0	58	0
Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_GOPM1B	0	0	0	0	0	0	0
SIR_GOPM_2	23	0	0	4	30	0	4
SIR_GOPN1B	0	0	0	0	0	0	0
SIR_GOPN_2	0	0	31	11	44	53	27
SIR_GOPR1B	0	0	0	0	0	0	0
SIR_GOPR_2	0	53	0	4	64	40	8
Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_GOPM1B	0	0	0	1	0	0	5
SIR_GOPM_2	35	0	2	1	0	0	0
SIR_GOPN1B	0	0	0	0	0	45	2
SIR_GOPN_2	29	32	12	0	1	0	0
SIR_GOPR1B	0	0	0	0	0	109	8
SIR_GOPR_2	42	52	1	0	4	0	0
Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	
SIR_GOP_2_	14	29	29	7	29	17	29
Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPEDSINNCDE	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR GOP 2	6	17	29	23	12	29	16
3IN_00F_2_	V	17	20	25	14	2.5	10
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-
SIR_GOP_2_	21	29	18	15	29		
Test Description Kar							
Test Description Key Abbreviation	/: Test name			Details			
BCSHNCDE	BurstCounterStep20Hzt	1.4005			be one higher with regard to	41	

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
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 NCDF	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)
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter
	1	I

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

1

Product name

Product name CS\_OFFL\_SIR\_GOP\_2\_20201117T230735\_20201117T235714\_C002