

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

20/03/2020

Demont Due du etienu	22 Mar 2020	Check	L1 & L2
Report Production:	23-Mar-2020	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal
		Product Software Check	Nominal
Data Used: Near	Near Real Time Ocean Products (NOP) L1B & L2 Science Data	Product Format Check	Nominal
		Product Header Analysis	Nominal
		Auxiliary Data File Usage Check	Nominal
		Auxiliary Correction Error Check	See Section 5.4
		Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5
		Measurement Quality Flag Check	See Section 5.6
		Ocean Retracking Quality Check	See Section 5.7

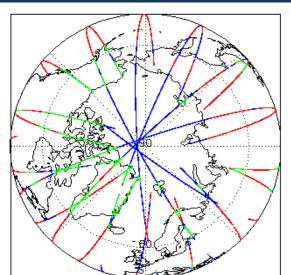
1. Overview

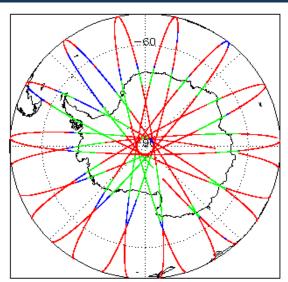
#### Mission / Instrument News 19-Mar-2020 None

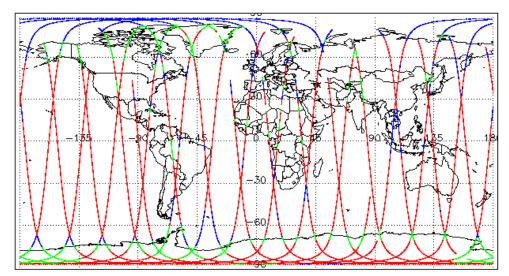
20-Mar-2020 None

21-Mar-2020 Nothing planned

# 2. Global Coverage







Mode	Coverage	2

LRM
SAR
SARIn

# 3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A
Star Tracker(s) in use:	Star Tracker 1

4. NOP Level 1B Data Quality Check

### 4.1 L1B Product Format Check

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

For all products, a series of pre-defined checks are benormed on the MPH and	d SPH in order to identify any inconsis	stencies and/or errors raised by the ground-segment processing chain.
		the I1b_processing_quality_hr field is not correctly configured in the OSAR and
DSARIn 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	e-determined baseline and also to che	eck the validity of Auxiliary Data Files is correct.
Dynamic Atmospheric Correction: The DAC is missing in all products becau	use the auxiliary files required are not	available in time for processing. This known and expected behaviour.
Number of products with errors: 0		
4.4 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag for each measurement recor	d. The bit value of this flag indicates a	any problems when set.
Number of products with errors: 0	-	
4.5 L1B Measurement Confidence Data Check		
CryoSat L1B data includes a measurement confidence flag for each measurer	nent record. The bit value of this flag	indicates any problems when set.
Attitude Correction Missing: This flag is currently set in error for NOPR pro- transformed by the set of th	-	
Number of products with errors: 1	5	
Product	Test Failed	Description
CS OFFL SIR NOPM1B 20200320T001941 20200320T004534 C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more
	r ower obtaining error	records
4.6 L1B Waveform Group Data Check		
CryoSat L1B data includes a waveform data flag for each measurement record	d. The bit value of this flag indicates a	ny problems when set.
> Loss of Echo Flag: This flag is currently set for products over land, but this	-	
Number of products with errors: 12		
	To the To Hand	<b>B</b> - a sub-them
	Test Failed	
	Loss of Echo	Description The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001 CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001	Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001 CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001 CS_OFFL_SIR_NOPN1B_20200320T023249_20200320T023716_C001		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_NOPM1B_20200320T085401_20200320T090559_C001           CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001           CS_OFFL_SIR_NOPN1B_20200320T023249_20200320T023716_C001           CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001           CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001           CS_OFFL_SIR_NOPN1B_20200320T1110045_20200320T074615_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
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001 CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001 CS_OFFL_SIR_NOPN1B_20200320T023249_20200320T023716_C001 CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_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
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001 CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001 CS_OFFL_SIR_NOPN1B_20200320T023249_20200320T023716_C001 CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001 CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_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 The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001 CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001 CS_OFFL_SIR_NOPN1B_20200320T023249_20200320T023716_C001 CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001 CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_C001 CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T114501_C001 CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_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 The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001 CS_OFFL_SIR_NOPM1B_20200320T11828_20200320T114246_C001 CS_OFFL_SIR_NOPN1B_20200320T023249_20200320T023716_C001 CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001 CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_C001 CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T114501_C001 CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001 CS_OFFL_SIR_NOPN1B_20200320T181939_20200320T182359_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         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
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CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001 CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001 CS_OFFL_SIR_NOPN1B_20200320T023249_20200320T023716_C001 CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001 CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_C001 CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T114501_C001 CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001 CS_OFFL_SIR_NOPN1B_20200320T181939_20200320T182359_C001 CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001 CS_OFFL_SIR_NOPN1B_20200320T25135_20200320T205238_C001 CS_OFFL_SIR_NOPN1B_20200320T222605_20200320T222919_C001 CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001 CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001 CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001 CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records         The tracking e
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001 CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001 CS_OFFL_SIR_NOPN1B_20200320T023249_20200320T023716_C001 CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001 CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_C001 CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T114501_C001 CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001 CS_OFFL_SIR_NOPN1B_20200320T1813939_20200320T182359_C001 CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001 CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T205238_C001 CS_OFFL_SIR_NOPN1B_20200320T222605_20200320T222919_C001 CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001 <b>S1_U2 Product Format Check</b> Each product, retrieved and unpacked from the science server, is checked to e	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records         The tracking e
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001 CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001 CS_OFFL_SIR_NOPN1B_20200320T023249_20200320T023716_C001 CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001 CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_C001 CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T114501_C001 CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001 CS_OFFL_SIR_NOPN1B_20200320T1813939_20200320T182359_C001 CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001 CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T205238_C001 CS_OFFL_SIR_NOPN1B_20200320T222605_20200320T222919_C001 CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001 <b>S1_U2 Product Format Check</b> Each product, retrieved and unpacked from the science server, is checked to e	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records         The tracking e
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001           CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001           CS_OFFL_SIR_NOPM1B_20200320T023249_20200320T023716_C001           CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001           CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_C001           CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_C001           CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T114501_C001           CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001           CS_OFFL_SIR_NOPN1B_20200320T181939_20200320T182359_C001           CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001           CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T205238_C001           CS_OFFL_SIR_NOPN1B_20200320T222605_20200320T222919_C001           CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001           CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001           CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001           CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001           CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records         The tracking e
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001         CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001         CS_OFFL_SIR_NOPM1B_20200320T023249_20200320T023716_C001         CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001         CS_OFFL_SIR_NOPN1B_20200320T11045_20200320T114230_C001         CS_OFFL_SIR_NOPN1B_20200320T110452_20200320T114501_C001         CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001         CS_OFFL_SIR_NOPN1B_20200320T181939_20200320T182359_C001         CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001         CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T205238_C001         CS_OFFL_SIR_NOPN1B_20200320T222605_20200320T222919_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T323436_2	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records         The tracking e
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001           CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001           CS_OFFL_SIR_NOPM1B_20200320T023249_20200320T023716_C001           CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001           CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_C001           CS_OFFL_SIR_NOPN1B_20200320T110452_20200320T114501_C001           CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T160507_C001           CS_OFFL_SIR_NOPN1B_20200320T181939_20200320T182359_C001           CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001           CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T205238_C001           CS_OFFL_SIR_NOPN1B_20200320T222605_20200320T222919_C001           CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001           CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001 <td< td=""><td>Loss of Echo Loss of Echo</td><td>The tracking echo is missing for one or more records         The tracking e</td></td<>	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records         The tracking e
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001           CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001           CS_OFFL_SIR_NOPM1B_20200320T023249_20200320T023716_C001           CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001           CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T110230_C001           CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T114501_C001           CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001           CS_OFFL_SIR_NOPN1B_20200320T181939_20200320T182359_C001           CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001           CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T205238_C001           CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T222919_C001           CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001           CS_OFFL_SIR_NOPN1B_S           C	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records         The tracking e
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001         CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001         CS_OFFL_SIR_NOPM1B_20200320T023249_20200320T023716_C001         CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001         CS_OFFL_SIR_NOPN1B_20200320T11045_20200320T114200_C001         CS_OFFL_SIR_NOPN1B_20200320T110452_20200320T114501_C001         CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001         CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T182359_C001         CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001         CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T205238_C001         CS_OFFL_SIR_NOPN1B_20200320T222605_20200320T222919_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T323813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_2	Loss of Echo Loss of Echo DP Level 2 Data Quali	The tracking echo is missing for one or more records         State tracking
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001         CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001         CS_OFFL_SIR_NOPM1B_20200320T023249_20200320T023716_C001         CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001         CS_OFFL_SIR_NOPN1B_20200320T11045_20200320T114200_C001         CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T114501_C001         CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001         CS_OFFL_SIR_NOPN1B_20200320T181939_20200320T182359_C001         CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001         CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T205238_C001         CS_OFFL_SIR_NOPN1B_20200320T222605_20200320T222919_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_2	Loss of Echo Loss of Echo DP Level 2 Data Quali	The tracking echo is missing for one or more records         State tracking
CS_OFFL_SIR_NOPM1B_20200320T085401_20200320T090559_C001         CS_OFFL_SIR_NOPM1B_20200320T111828_20200320T114246_C001         CS_OFFL_SIR_NOPM1B_20200320T023249_20200320T023716_C001         CS_OFFL_SIR_NOPN1B_20200320T074231_20200320T074615_C001         CS_OFFL_SIR_NOPN1B_20200320T110045_20200320T114200_C001         CS_OFFL_SIR_NOPN1B_20200320T114322_20200320T114501_C001         CS_OFFL_SIR_NOPN1B_20200320T160342_20200320T160507_C001         CS_OFFL_SIR_NOPN1B_20200320T181939_20200320T182359_C001         CS_OFFL_SIR_NOPN1B_20200320T190913_20200320T191114_C001         CS_OFFL_SIR_NOPN1B_20200320T205135_20200320T205238_C001         CS_OFFL_SIR_NOPN1B_20200320T222605_20200320T222919_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232446_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232446_20200320T232813_C001         CS_OFFL_SIR_NOPN1B_20200320T232436_	Loss of Echo Loss of Echo DP Level 2 Data Quali	The tracking echo is missing for one or more records         The tracking e

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, 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.

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

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

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

Product	Test Failed	Description
CS_0FFL_SIR_NOPM_2_20200320T084143_20200320T085359_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS OFFL SIR NOPN 2 20200320T001640 20200320T001901 C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or
CS OFFL SIR NOPN 2 20200320T005444 20200320T010024 C001	Mean Dynamic Topography (1)	more records There is an error with the Mean Dynamic Topography height for one or
CS OFFL SIR NOPN 2 20200320T014612 20200320T014736 C001		more records There is an error with the Mean Dynamic Topography height for one or
	Mean Dynamic Topography (1)	more records There is an error with the Mean Dynamic Topography height for one or
CS_OFFL_SIR_NOPN_2_20200320T023249_20200320T023716_C001	Mean Dynamic Topography (1)	more records There is an error with the Mean Dynamic Topography height for one or
CS_OFFL_SIR_NOPN_2_20200320T032612_20200320T032736_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or There is an error with the Mean Dynamic Topography height for one or
CS_OFFL_SIR_NOPN_2_20200320T041456_20200320T041642_C001	Mean Dynamic Topography (1)	more records
CS_OFFL_SIR_NOPN_2_20200320T050544_20200320T050709_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20200320T051224_20200320T051527_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_NOPN_2_20200320T064540_20200320T064847_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_NOPN_2_20200320T065125_20200320T065632_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_NOPN_2_20200320T074231_20200320T074615_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20200320T082602_20200320T082836_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_0FFL_SIR_NOPN_2_20200320T092115_20200320T092231_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_NOPN_2_20200320T092520_20200320T092736_C001	Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
	Topography (1) Mean Sea Surface (1), Mean Dynamic	Topography height (solution 1) for one or more records There is an error with the MSS height (solution 1), the Mean Dynamic
CS_OFFL_SIR_NOPN_2_20200320T100100_20200320T100711_C001	Topography (1), Total Geocentric Ocean Tide (GOT)	Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS OFFL SIR NOPN 2 20200320T110045 20200320T110230 C001	Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
CS OFFL SIR NOPN 2 20200320T114322 20200320T114501 C001	Topography (1) Mean Sea Surface (1), Mean Dynamic	Topography height (solution 1) for one or more records 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 There is an error with the Mean Dynamic Topography height for one or
CS_OFFL_SIR_NOPN_2_20200320T124004_20200320T124449_C001	Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic	more records There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_NOPN_2_20200320T133139_20200320T133415_C001	Topography (1) Mean Sea Surface (1), Mean Dynamic	Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20200320T150240_20200320T150630_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20200320T154407_20200320T154426_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20200320T160342_20200320T160507_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20200320T164221_20200320T164535_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_NOPN_2_20200320T165049_20200320T165205_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPN_2_20200320T182953_20200320T183109_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_NOPN_2_20200320T190913_20200320T191114_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic
CS_OFFL_SIR_NOPN_2_20200320T191207_20200320T191331_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_NOPN_2_20200320T204605_20200320T205014_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20200320T205135_20200320T205238_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_NOPN_2_20200320T214530_20200320T214759_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_NOPN_2_20200320T222605_20200320T222919_C001	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 Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_NOPN_2_20200320T222929_20200320T223137_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_NOPN_2_20200320T232436_20200320T232813_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_NOPR_2_20200320T010024_20200320T010112_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_NOPR_2_20200320T141019_20200320T142040_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_NOPR_2_20200320T154258_20200320T154407_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20200320T155401_20200320T160149_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_NOPR_2_20200320T173345_20200320T174441_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_NOPR_2_20200320T191332_20200320T192049_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_NOPR_2_20200320T205238_20200320T205802_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_NOPR_2_20200320T214800_20200320T215026_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20200320T222117_20200320T222220_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records

CS_OFFL_SIR_NOPR_2_20200320T223138_20200320T223835_C001		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_NOPR_2_20200320T225213_20200320T230028_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

### 5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20200320T001941_20200320T004534_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.

85

1

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Number of products with errors:
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Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20200319T234425_20200320T000643_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_NOPM_2_20200320T000953_20200320T001343_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_NOPM_2_20200320T001405_20200320T001639_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_NOPM_2_20200320T001941_20200320T004534_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_NOPM_2_20200320T012042_20200320T014612_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_NOPM_2_20200320T014736_20200320T015257_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_NOPM_2_20200320T015848_20200320T023249_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_NOPM_2_20200320T025734_20200320T031605_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_NOPM_2_20200320T031927_20200320T032602_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_NOPM_2_20200320T032737_20200320T033535_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_NOPM_2_20200320T033818_20200320T041243_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_NOPM_2_20200320T042614_20200320T042711_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_NOPM_2_20200320T045409_20200320T050530_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_NOPM_2_20200320T050709_20200320T051223_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_NOPM_2_20200320T051744_20200320T054038_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_NOPM_2_20200320T054324_20200320T055251_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_NOPM_2_20200320T060432_20200320T060516_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_NOPM_2_20200320T060607_20200320T060818_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_NOPM_2_20200320T061624_20200320T062125_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_NOPM_2_20200320T062327_20200320T062930_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_NOPM_2_20200320T063118_20200320T064437_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_NOPM_2_20200320T064847_20200320T065124_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_NOPM_2_20200320T065727_20200320T072803_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_NOPM_2_20200320T073246_20200320T073328_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_NOPM_2_20200320T074722_20200320T081900_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_NOPM_2_20200320T083237_20200320T083536_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_NOPM_2_20200320T083702_20200320T084108_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_NOPM_2_20200320T084143_20200320T085359_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_NOPM_2_20200320T085401_20200320T090559_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_NOPM_2_20200320T092740_20200320T092930_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Attimeter 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_NOPM_2_20200320T093139_20200320T094338_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_NOPM_2_20200320T100711_20200320T100950_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_NOPM_2_20200320T101009_20200320T101437_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_NOPM_2_20200320T101622_20200320T103124_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_NOPM_2_20200320T103304_20200320T103547_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_NOPM_2_20200320T111828_20200320T114246_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_NOPM_2_20200320T114501_20200320T115346_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_NOPM_2_20200320T115548_20200320T122055_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_NOPM_2_20200320T125305_20200320T132157_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_NOPM_2_20200320T132430_20200320T132604_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_NOPM_2_20200320T132717_20200320T133138_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_NOPM_2_20200320T133438_20200320T140028_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_NOPM_2_20200320T142831_20200320T150102_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_NOPM_2_20200320T150630_20200320T151217_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_NOPM_2_20200320T151340_20200320T152003_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_NOPM_2_20200320T152305_20200320T153048_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_NOPM_2_20200320T160507_20200320T161556_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_NOPM_2_20200320T161605_20200320T164005_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_NOPM_2_20200320T164536_20200320T165048_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_NOPM_2_20200320T165227_20200320T165535_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_NOPM_2_20200320T165707_20200320T170645_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_NOPM_2_20200320T170728_20200320T171155_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_NOPM_2_20200320T172809_20200320T172951_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_NOPM_2_20200320T174442_20200320T175344_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_NOPM_2_20200320T175629_20200320T181850_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_NOPM_2_20200320T182359_20200320T182535_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_NOPM_2_20200320T182542_20200320T182953_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_NOPM_2_20200320T183149_20200320T185406_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_NOPM_2_20200320T185453_20200320T185921_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_NOPM_2_20200320T192543_20200320T192911_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_NOPM_2_20200320T193047_20200320T194929_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_NOPM_2_20200320T194933_20200320T195741_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_NOPM_2_20200320T195909_20200320T200434_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_NOPM_2_20200320T201539_20200320T202808_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_NOPM_2_20200320T202902_20200320T204600_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_NOPM_2_20200320T210131_20200320T210253_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_NOPM_2_20200320T210940_20200320T211903_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_NOPM_2_20200320T212107_20200320T213653_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_NOPM_2_20200320T213836_20200320T214331_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_NOPM_2_20200320T214338_20200320T214345_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_NOPM_2_20200320T214410_20200320T214529_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_NOPM_2_20200320T215227_20200320T220454_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_NOPM_2_20200320T220935_20200320T222117_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_NOPM_2_20200320T230028_20200320T231546_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_NOPM_2_20200320T231803_20200320T232244_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_NOPM_2_20200320T232842_20200320T235212_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_NOPM_2_20200320T235234_20200320T235607_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_NOPN_2_20200320T033535_20200320T033647_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_NOPN_2_20200320T043427_20200320T043438_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_NOPN_2_20200320T043538_20200320T043659_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_NOPN_2_20200320T051224_20200320T051527_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_NOPN_2_20200320T083537_20200320T083658_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_NOPN_2_20200320T092520_20200320T092736_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_NOPN_2_20200320T101437_20200320T101618_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_NOPR_2_20200320T043019_20200320T043138_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

### L2 Quality Flags (20Hz PLRM)

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

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

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

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20200320T000643_20200320T000952_C001		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_NOPN_2_20200320T001640_20200320T001901_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_NOPN_2_20200320T004843_20200320T005047_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_NOPN_2_20200320T005444_20200320T010024_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_NOPN_2_20200320T011944_20200320T012041_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_NOPN_2_20200320T014612_20200320T014736_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_NOPN_2_20200320T023249_20200320T023716_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_NOPN_2_20200320T024727_20200320T024759_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_NOPN_2_20200320T041248_20200320T041400_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_NOPN_2_20200320T041456_20200320T041642_C001 Altimeter Ra PLRM	er Quality PLRM, OCOG and the OCOG Altii set for one or more	er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been e records.
		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T044252_20200320T044436_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T044720_20200320T044803_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS OFEL SIR NORN 2 20200320T051224 20200320T051527 C001 and Backsca		er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been records.
CS_OFFL_SIR_NOPN_2_20200320T062125_20200320T062326_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T065125_20200320T065632_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T074231_20200320T074615_C001 and Backsca Altimeter Ra PLRM	e and Backscatter Quality set for one or more	er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been records.
CS OFEL SIR NORN 2 20200320T082602 20200320T082836 C001		er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been records.
CS_OFFL_SIR_NOPN_2_20200320T083032_20200320T083135_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T090600_20200320T090827_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T092520_20200320T092736_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T100100_20200320T100711_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFEL_SIR_NOPN_2_20200320T101437_20200320T101618_C001 and Backsca		er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been records.
CS_0FFL_SIK_NOPN_Z_202003201110045_202003201110230_C001 OCOG Back	atter Quality more records.	and Backscatter Quality Flags have been set for one or
CS OFEL SID NORN 2 20200320T110350 20200320T110617 C001 and Backsca		er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been records.
CS_0FFL_SIK_NOFN_Z_202003201110633_202003201110935_C001 OCOG Back	atter Quality more records.	and Backscatter Quality Flags have been set for one or
CS OFEL SIR NORN 2 20200320T114322 20200320T114501 C001 and Backsca		er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been records.
CS_OFFL_SIR_NOPN_2_20200320T124004_20200320T124449_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T132258_20200320T132430_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T132605_20200320T132716_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T133139_20200320T133415_C001 and Backsca Altimeter Ra PLRM	and Backscatter Quality set for one or more	er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been records.
CS_OFFL_SIR_NOPN_2_20200320T150240_20200320T150630_C001 and Backsca Altimeter Ra PLRM	and Backscatter Quality and the OCOG Altii set for one or more	er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been records.
CS OFEL SIR NORN 2 20200320T151218 20200320T151340 C001 and Backsca		er Range, SSHA, SWH and Backscatter Quality Flags meter Range and Backscatter Quality Flags have been records.
CS_OFFL_SIR_NOPN_2_20200320T153049_20200320T153240_C001		and Backscatter Quality Flags have been set for one or
CS_OFFL_SIR_NOPN_2_20200320T153737_20200320T153843_C001 OCOG Altim OCOG Back		and Backscatter Quality Flags have been set for one or

CS_OFFL_SIR_NOPN_2_20200320T155323_20200320T155401_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_NOPN_2_20200320T160149_20200320T160259_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_NOPN_2_20200320T165049_20200320T165205_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_NOPN_2_20200320T171156_20200320T171309_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_NOPN_2_20200320T181939_20200320T182359_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_NOPN_2_20200320T190913_20200320T191114_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_NOPN_2_20200320T191207_20200320T191331_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_NOPN_2_20200320T195746_20200320T195909_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_NOPN_2_20200320T200716_20200320T200903_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_NOPN_2_20200320T204605_20200320T205014_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_NOPN_2_20200320T210553_20200320T210740_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_NOPN_2_20200320T220544_20200320T220935_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_NOPN_2_20200320T222605_20200320T222919_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_NOPN_2_20200320T222929_20200320T223137_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_NOPR_2_20200320T024800_20200320T024959_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_NOPR_2_20200320T033647_20200320T033818_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_NOPR_2_20200320T043019_20200320T043138_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_NOPR_2_20200320T045116_20200320T045409_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_NOPR_2_20200320T081900_20200320T082602_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_NOPR_2_20200320T094339_20200320T094550_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_NOPR_2_20200320T101618_20200320T101622_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_NOPR_2_20200320T103547_20200320T103735_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_0FFL_SIR_NOPR_2_20200320T105439_20200320T105600_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_NOPR_2_20200320T110258_20200320T110349_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_NOPR_2_20200320T110716_20200320T110832_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_NOPR_2_20200320T132158_20200320T132258_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_NOPR_2_20200320T141019_20200320T142040_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_NOPR_2_20200320T154427_20200320T154434_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_NOPR_2_20200320T154946_20200320T155016_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_NOPR_2_20200320T155401_20200320T160149_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_NOPR_2_20200320T164006_20200320T164221_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_NOPR_2_20200320T172952_20200320T173022_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_NOPR_2_20200320T173045_20200320T173325_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_NOPR_2_20200320T173345_20200320T174441_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_NOPR_2_20200320T191332_20200320T192049_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_NOPR_2_20200320T192228_20200320T192419_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_NOPR_2_20200320T200903_20200320T201156_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_NOPR_2_20200320T205238_20200320T205802_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_NOPR_2_20200320T210324_20200320T210344_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_NOPR_2_20200320T210434_20200320T210445_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_NOPR_2_20200320T210741_20200320T210939_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_NOPR_2_20200320T214800_20200320T215026_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_NOPR_2_20200320T222117_20200320T222220_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_NOPR_2_20200320T222515_20200320T222604_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_NOPR_2_20200320T223138_20200320T223835_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_NOPR_2_20200320T225213_20200320T230028_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.

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 products over sea ice, which is to be expected.

Number of products with errors: 167

Number of products with errors: 122

5.7 L2 Ocean Retracking Quality Check				
L2 Retracking Flags (20Hz)				
CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.				
Ocean Retracking Quality Flag: This flag is currently set for products falling at ocean/ land boundaries, but this is expected.				
Number of products with errors: 55				
L2 Retracking Flags (20Hz, 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 NOPR and NOPN products over sea ice, but this is to be expected.				