

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

<u>10/03/2023</u>

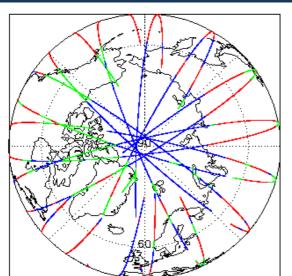
# IDEAS-QA4E0

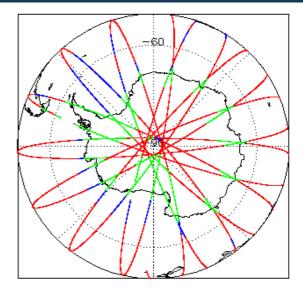
Panart Braduation	12 Mar 2022	Check	L1 & L2
Report Production:	13-Mar-2023	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	Crucest Ocean Brasses	Server check: calval-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ocean Processor	Product Software Check	Nominal
Data Used:	Near Real Time Ocean Products (NOP)	Product Format Check	Nominal
Data Used:	L1B & L2 Science Data	Product Header Analysis	Nominal
		Auxiliary Data File Usage Check	Nominal
We would love to hear from you! Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to		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
cs2 qc	team@telespazio.com	QCC Error/ Warning Check	See Section 7.2

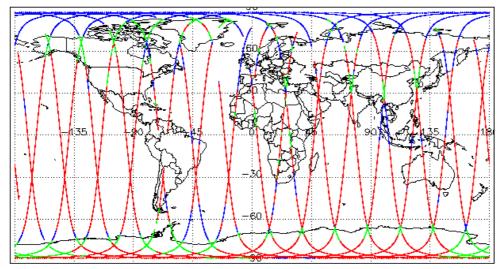
1. Overview

10-Mar-2023None11-Mar-2023Nothing planned

# 2. Global Coverage









# 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
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 NetCDF product file (.nc).
Number of products with errors:
0

4.2 L1B Product Header Analysis				
For all products, a series of pre-defined checks are performed on the MPH an	d SPH in order to identify any inconsi	istencies and/or errors raised by the ground-segment processing chain.		
L1B Processing Quality HR: The l1b_proc_flag_hr flag is currently set all l OSARIn chains. A modification is required in the next release.	1B NOPR and NOPN products beca	ause the I1b_processing_quality_hr field is not correctly configured in the OSAR a		
Number of products with errors: 0				
4.3 L1B Auxilary Data File Usage Check				
Each product is checked for missing Data Set Descriptors with respect to a pr	e-determined baseline and also to ch	neck the validity of Auxiliary Data Files is correct.		
> Dynamic Atmospheric Correction: The DAC is missing in all products become a product of the text of the text of the text of the text of te				
Number of products with errors: 0				
4.4 L1B Auxiliary Correction Error Check				
CryoSat L1B data includes a correction error flag for each measurement reconverted by the second sec	d. The bit value of this flag indicates	any problems when set.		
4.5 L1B Measurement Confidence Data Check				
CryoSat L1B data includes a measurement confidence flag for each measure	nent record. The bit value of this flag	indicates any problems when set.		
		The attitude correction is not actually missing, This is being investigated and will I		
updated in the next SW update.	Ū			
Number of products with errors: 1				
Product	roduct Test Failed Description			
CS_OFFL_SIR_NOPM1B_20230310T054618_20230310T061907_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records		
	I			
4.6 L1B Waveform Group Data Check				
CryoSat L1B data includes a waveform data flag for each measurement recor	d. The bit value of this flag indicates	any problems when set.		
Loss of Echo Flag: This flag is currently set for occasional products over la beta	and, but this is to be expected.			
Number of products with errors: 16				
Product	Test Failed	Description		
CS_OFFL_SIR_NOPM1B_20230310T101538_20230310T101655_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230310T155741_20230310T160545_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPN1B_20230310T012743_20230310T013306_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPN1B_20230310T035736_20230310T035848_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPN1B_20230310T045058_20230310T045212_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPN1B_20230310T071037_20230310T071053_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPN1B_20230310T085859_20230310T090352_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPN1B_20230310T101734_20230310T101935_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPN1B_20230310T104014_20230310T104209_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPN1B_20230310T162152_20230310T162805_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPN1B_20230310T201714_20230310T202311_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPR1B_20230310T025624_20230310T030219_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPR1B_20230310T075810_20230310T075917_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPR1B_20230310T103018_20230310T103804_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPR1B_20230310T115924_20230310T120032_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPR1B_20230310T121034_20230310T122045_C001	Loss of Echo	The tracking echo is missing for one or more records		
5. N	OP Level 2 Data Qual	ity Check		
5.1 L2 Product Format Check				
	······			
Each product, retrieved and unpacked from the science server, is checked to	ensure it consists of both an XML he	ader nie (.HDH) and a NetCDF product file (.nc).		
Number of products with errors: 0				
5.2 L2 Product Header Analysis				
For all products, a series of pre-defined checks are performed on the MPH an	d SPH in order to identify any incons	istencies and/or errors raised by the ground-segment processing chain.		
Number of products with errors: 0				
5.3 L2 Auxiliary Data File Usage Check				
Each product is checked for missing Data Set Descriptors with respect to a pr	e-determined baseline and also to ch	neck the validity of Auxiliary Data Files is correct.		
Wind Model File Usage: This file is currently not included in all L2 products.				

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 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.

47

Number of products with errors:

Mail Description         Transport         Transport         Transport         Transport           GR_OFFL_BRUXCPU_2.000001112146_000000         Mail See Series (1).         There is an evolution MSD have includes 1) and the Main Draws           GR_OFFL_BRUXCPU_2.000001112146_0000000         Mail See Series (1).         There is an evolution MSD have includes 1) and the Main Draws           GR_OFFL_BRUXCPU_2.000001112146_000000000000000000000000000000000000			
Deck/TIC_DIFLOR/UNDECLEDUCUUTURECLEDUCUUTURECLEDUCUT         Mase Drame Taggerary ()         mese encode           D2_0171_DEL_NOR_2_RESOLUTION_CLEDUCUUTURECLEDUCUT         Mase Drame Taggerary ()         Tests in most thin Mass Drame Taggerary ()         Tests in most thin Mass Drame Taggerary ()           D2_0171_DEL_NOR_2_RESOLUTION_CLEDUCUUTURESCODUT         Mase Drame Taggerary ()         Tests in most thin Mass Drame Taggerary ()         Tests in most thin Mass Drame Taggerary ()           D3_0171_DEL_NOR_2_RESOLUTION_CLEDUCUUTURESCODUT         Mase Drame Taggerary ()         Tests in most thin Mass Drame Taggerary ()         Tests in more wind in Mass Drame Taggerary ()         Tes	Product	Test Failed	
CLUT CHART         CLUT CHART         Parts is a constant         Parts	CS_OFFL_SIR_NOPM_2_20230310T031334_20230310T032916_C001	Mean Dynamic Topography (1)	
<ul> <li>In Sum 2010 (Control Control Contro Control Control Control Control Control Control Control Contr</li></ul>	CS_OFFL_SIR_NOPM_2_20230310T164605_20230310T165027_C001	Mean Dynamic Topography (1)	
Display Control         Display Number 2         Display Number 2 <thdisplay 2<="" number="" th=""> <thdisplay 2<="" number="" td="" th<=""><td>CS_OFFL_SIR_NOPN_2_20230310T012240_20230310T012533_C001</td><td></td><td>There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records</td></thdisplay></thdisplay>	CS_OFFL_SIR_NOPN_2_20230310T012240_20230310T012533_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Non-Site Softier (1), Man Dynam, Transparately 10, 100 and an ear of the MSD byte (sale of 1), the Man Dynam, Transparately 10, 100 and	CS_OFFL_SIR_NOPN_2_20230310T012743_20230310T013306_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Oct, DFL_SR_VDPL_2_D020011700200_002001703244_C001         Engagery (I), that decords that indigit locus. To the document Ocen The Table COT.           C6_DFL_SR_VDPL_2_D020011703249_0120301703244_C001         Meen Tes Stripe (T), that decords that indigit locus. To the MSD Teyring (I) and the MSD	CS_OFFL_SIR_NOPN_2_20230310T021838_20230310T022012_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
GE_OFFL_SIF_NOPPL_2_R0030107035785_20030107035784_0001         Topography III, Total Bescenic Color         Topography III, Total Bescenic Color           GE_OFFL_SIF_NOPPL_2_R0030107035867_20020010704311_0001         Wan See Suffac (1), Maar Dynamic         Topography III, Total Bescenic Color         Topography III, Total Bescenic Color           GE_OFFL_SIF_NOPPL_2_R0030107053867_200200107053867_00001         Maar See Suffac (1), Maar Dynamic         Topography III, Total Bescenic Color         Maar See Suffac (1), Maar Dynamic           GE_OFFL_SIF_NOPPL_2_R0030107053867_200200107053867_00001         Maar Dynamic Topography (1)         There is a ner with the Mean Dynamic Topography height for one or more encode           GE_OFFL_SIF_NOPPL_2_R0030107053867_0000107053867_00001         Maar Dynamic Topography (1)         There is a ner with the Mean Dynamic Topography height for one or more encode           GE_OFFL_SIF_NOPPL_2_R0030107053867_0000107063910_000001         Maar Dynamic Topography (1)         There is a ner with the Mean Dynamic Topography height for one or more encode           GE_OFFL_SIF_NOPPL_2_R0030107053867_00010706390_00010706390_0001         Maan Dynamic Topography (1)         There is a ner with the Mean Dynamic Topography height for one or more encode           GE_OFFL_SIF_NOPPL_2_R00301070706390_00010706390_0001         Maan Dynamic Topography (1)         There is a ner with the Mean Dynamic Topography height for one or more encode           GE_OFFL_SIF_NOPPL_2_R00301070706390_00010706490_0001         Maan Dynamic Topography (1)         There is an enry with the Mean Dynamic Topogra	CS_OFFL_SIR_NOPN_2_20230310T030219_20230310T030454_C001	Topography (1), Total Geocentric Ocean	Topography height (solution 1) and the Total Geocentric Ocean Tide
Control         Endpanding         Employing ()         Employing ()         Employing ()         Employing ()           CS         OFL_SIN_NONL2_0000010106466_0000000000000000000000000	CS_OFFL_SIR_NOPN_2_20230310T035736_20230310T035848_C001	Topography (1), Total Geocentric Ocean	Topography height (solution 1) and the Total Geocentric Ocean Tide
Conf., Sint, North 2, 2020310706385, 20203107064191, 2001         Teopography (1)         Teopography (2)         Teopography (2)         Teopography (2)         Teopography (2)           CS_OFR_SIN_NORM_2, 2020310706385, 2020310706386, 2001         Mean Dynamic Teopography (1)         There is an error with the Mean Dynamic T	CS_OFFL_SIR_NOPN_2_20230310T043926_20230310T044311_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Cold         Description         Mean Dynamic Topography (1)         more records           CS         OFFL_SIR_NOPN_2_202203101053105_000         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography (1)           CS         OFFL_SIR_NOPN_2_202203101052058_202203101052058_20001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_202203101052058_202203101052058_20001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height for one or more records           CS_OFFL_SIR_NOPN_2_202203101050569_202203101050058_20001         Total Generative Corem Total (GOT)         Total Genera	CS_OFFL_SIR_NOPN_2_20230310T053657_20230310T053921_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Dec.         Dec. <thdec.< th="">         Dec.         Dec.         <thd< td=""><td>CS_OFFL_SIR_NOPN_2_20230310T053935_20230310T054121_C001</td><td>Mean Dynamic Topography (1)</td><td></td></thd<></thdec.<>	CS_OFFL_SIR_NOPN_2_20230310T053935_20230310T054121_C001	Mean Dynamic Topography (1)	
Clic         CPFL_SIR_NOPNL_2_20220310171649_2022031010725119_C001         Mean Dynamic Topography (1)         There is a merror with the Mean Dynamic Topography (2)           CS_OFFL_SIR_NOPNL_2_2022031017075817_2022031017020139_C001         Mean Dynamic Topography (1)         There is a merror with the Mean Dynamic Topography (2)           CS_OFFL_SIR_NOPNL_2_2022031017058158_2022031017058039_C001         Total Gencemtric Ocean Tide (SOT)         There is a merror with the Mean Dynamic Topography (2)           CS_OFFL_SIR_NOPNL_2_2022031017058158_2022031017058039_C001         Mean Ses Surface (1), Mean Dynamic         There is a merror with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_NOPNL_2_202203101711811         Su22031017112159_C001         Mean Ses Surface (1), Mean Dynamic         There is a meror with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_NOPNL_2_2022031017112159_C001         Mean Ses Surface (1), Mean Dynamic         There is a meror with the Mean Dynamic Topography height (colution 1) for one or more records           CS_OFFL_SIR_NOPNL_2_2022031017112103_20200107112103_202001         Mean Ses Surface (1), Mean Dynamic         There is a meror with the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colu	CS_OFFL_SIR_NOPN_2_20230310T061940_20230310T062131_C001	Mean Dynamic Topography (1)	
CS_OFF_SIR_NOPN_2_20230310T1079917_20230310T1080059_C001         Mean Dyname Topography (1)         There is a nerror with the Mean Dynamic Topography (1)           CS_OFFE_SIR_NOPN_2_20230310T080594_20230310T080552_C001         Total Geocentric Ocean Tule (Q0T)         There is an error with the Mean Dynamic Topography (1)           CS_OFFE_SIR_NOPN_2_20230310T080594_20230310T080552_C001         Total Geocentric Ocean Tule (Q0T)         There is an error with the XSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFE_SIR_NOPN_2_20230310T182192_20230310T18255_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFE_SIR_NOPN_2_20230310T112712_20230310T112585_C001         Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFE_SIR_NOPN_2_20230310T120302_20230310T12033_C001         Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFE_SIR_NOPN_2_20230310T130619_20230310T130726_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFE_SIR_NOPN_2_20230310T130619_20230310T130726_C001         Mean Sea Surface (1), Mean Dynamic Topography height for one or more records           CS_OFFE_SIR_NOPN_2_20230310T130646_20230310T130756_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more recor	CS_OFFL_SIR_NOPN_2_20230310T062953_20230310T063206_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_00230310T03517_002352_00310T000352_0001       Total Geocentric Ocean Tole (GOT)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (f)         CS_OFFL_SIR_NOPN_2_00230310T03514_00230310T04255_0001       Mean Ses Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (f)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (f)         CS_OFFL_SIR_NOPN_2_00230310T112712_00230310T112712_00230310T112712_00230310T112713_00001       Mean Ses Surface (1), Mean Dynamic Topography (f)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (f)         CS_OFFL_SIR_NOPN_2_00230310T100362_00230310T112713_00001       Mean Ses Surface (1), Mean Dynamic Topography height docution 1) and the Mean Dynamic Topography (f)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (f)         CS_OFFL_SIR_NOPN_2_00230310T100362_00230310T130726_0001       Mean Dynamic Topography (f)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (f)         CS_OFFL_SIR_NOPN_2_00230310T130519_00230310T130726_0001       Mean Surface (f), Mean Dynamic Topography (f)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (f)         CS_OFFL_SIR_NOPN_2_00230310T130519_00230310T130726_0001       Mean Sarface (f), Mean Dynamic Topography (f)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (f)         CS_OFFL_SIR_NOPN_2_00230310T130549_00230310T162459_0001       Mean Sarface (f), Mean Dynamic Topography height for	CS_OFFL_SIR_NOPN_2_20230310T071649_20230310T072119_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_2023031071093914_2022031071094255_0001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records CS_OFFL_SIR_NOPN_2_2023031071112112_202303107112159_0001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records CS_OFFL_SIR_NOPN_2_2023031071122712_202303107112159_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_2023031071122712_202303107112058_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_202303107112052_202303107112058_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_202303107112052_202303107112033_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_202303107112052_202303107112033_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_2023031071130619_202303107130726_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_202303107130619_202303107130726_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_202303107130619_202303107130526_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_202303107130619_20230310713454_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_202303107136450_20230310713456_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_202303107136450_20230310713456_0001 Mean Dynamic CS_OFFL_SIR_NOPN_2_202303107162152_20230310716285_0001 Mean Dynamic Topography height (solution 1) for one or more records Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records CS_OFFL_SIR_NOPN_2_202303107162152_20230310716285_0001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records CS_OFFL_SIR_NOPN_2_202303107162152_20230310717655_0001 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_2023031071180152_20230310717655_0001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height (solution 1) for one or more records CS_OFFL_SIR_NOPN_2_2023031071180122_2023031071184586_0001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or more records CS_OFFL_SIR_NOPN_2_2023031071194215_2023031071194582_0001 Mean Dynamic Topogr	CS_OFFL_SIR_NOPN_2_20230310T075917_20230310T080056_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_20230310T11841_20230310T112159_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_0230310T111212       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_0230310T11212       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_0230310T1120332_0020310T1120332_0001       Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_0230310T130519_0230310T130326_0001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_0230310T130519_0230310T130256_0001       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_0230310T134640_0230310T134954_0001       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_0230310T16252_0230310T162685_0001       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_0230310T175322_0230310T175755_0001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_0230310T175232_0230310T175452_0001	CS_OFFL_SIR_NOPN_2_20230310T085859_20230310T090352_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
Mail OFFL_SIR_NOPN_2_0020310T112612_0020310T112638_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_00203010T112712_00203010T112638_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_00200310T130619_20200310T130726_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_00200310T130726_C001       Mean Sea Surface (1), Mean Dynamic Topography (solution 1) and the Mean Dynamic Topography (solution 1) and the Mean Dynamic Topography (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_00200310T162152_00200310T170755_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_00200310T170745_0020310T170755_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_00203010T180436_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_00203010T180436_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height for one or more records <td>CS_OFFL_SIR_NOPN_2_20230310T093914_20230310T094255_C001</td> <td></td> <td>There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records</td>	CS_OFFL_SIR_NOPN_2_20230310T093914_20230310T094255_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
US_OFFL_SIR_NOPN_2_20230310T120932_20230310T121033_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_20230310T130619_20230310T130726_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) and the Mean Dynamic         CS_OFFL_SIR_NOPN_2_20230310T130619_20230310T134654_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20230310T162152_20230310T162805_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20230310T162152_20230310T162805_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20230310T170455_20230310T170755_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_NOPN_2_20230310T176452_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_20230310T180121_20230310T180436_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_20230310T180436_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynami	CS_OFFL_SIR_NOPN_2_20230310T111841_20230310T112159_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
OS_OFFL_SIR_NOPN_2_20230310T120619_20230310T120726_C001       Mean Dynamic Topography (1)       Topography (1)       Topography height (solution 1) for one or more records         OS_OFFL_SIR_NOPN_2_20230310T130619_20230310T130726_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)         OS_OFFL_SIR_NOPN_2_20230310T162152_20230310T16205_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         OS_OFFL_SIR_NOPN_2_20230310T162152_20230310T16205_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) or one or more records         CS_OFFL_SIR_NOPN_2_20230310T170345_20230310T170755_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20230310T175452_C001       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_20230310T175232_20230310T175452_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_20230310T184230_20230310T184366_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_20230310T184230_20230310T184331_C001       Mean Dynamic Topography (1) <t< td=""><td>CS_OFFL_SIR_NOPN_2_20230310T112712_20230310T112838_C001</td><td>Mean Dynamic Topography (1)</td><td></td></t<>	CS_OFFL_SIR_NOPN_2_20230310T112712_20230310T112838_C001	Mean Dynamic Topography (1)	
US_OFFL_SIR_NOPN_2_20230310T134840_20230310T134954_C001         Mean Dynamic Topography (1)         more records           CS_OFFL_SIR_NOPN_2_20230310T134840_20230310T134954_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_20230310T162152_20230310T162805_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_20230310T162152_20230310T162805_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_20230310T170345_20230310T170345_20230310T17055_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_20230310T175232_20230310T175452_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_20230310T175432_20230310T184506_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_20230310T184230_20230310T194331_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_20230310T201714_20230310T202311_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height for one or more records </td <td>CS_OFFL_SIR_NOPN_2_20230310T120932_20230310T121033_C001</td> <td></td> <td>There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records</td>	CS_OFFL_SIR_NOPN_2_20230310T120932_20230310T121033_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_NOPN_2_20230310T134984_2001       Topography (1)       Topography (2)       Topography (2)       Topography (1)       Topography (2)       Topography (2)       Topography (1)       Topography (2)       Topography	CS_OFFL_SIR_NOPN_2_20230310T130619_20230310T130726_C001	Mean Dynamic Topography (1)	, , , , , ,
CS_OFFL_SIR_NOPN_2_20230310T162132_20230310T162452_20230310T170755_C001       Mean Sea Surface (1), Mean Dynamic       Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20230310T170345_20230310T170755_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20230310T175232_20230310T175452_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_20230310T180121_20230310T180436_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_20230310T184230_20230310T184506_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_20230310T184230_20230310T184506_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_20230310T194215_20230310T194331_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_20230310T2012114_20230310T202311_C001       Mean Sea Surface (1)       There is an error with the Mean Dynamic Topography height for one or more records         CS_OFFL_SIR_NOPN_2_20230310T2121222_20230310T2122236_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height for one or	CS_OFFL_SIR_NOPN_2_20230310T134840_20230310T134954_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_NOPN_2_20230310T170345_20230310T170755_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20230310T175232_20230310T175452_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_20230310T180121_20230310T180436_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_20230310T184230_20230310T184506_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_20230310T184230_20230310T184506_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_20230310T194215_20230310T194331_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_20230310T201714_20230310T202311_C001       Mean Sea Surface (1)       There is an error with the Mean Dynamic Topography height for one or more records         CS_OFFL_SIR_NOPN_2_20230310T2121222_20230310T212238_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_20230310T2122122_20230310T212238_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_20230310T162152_20230310T162805_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_NOPN_2_202303101173232_202303101173232_202303101173432_C001       Mean Dynamic Topography (1)       more records         CS_OFFL_SIR_NOPN_2_20230310T180121_20230310T180436_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_20230310T184230_20230310T184506_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_20230310T194215_20230310T194331_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_20230310T201714_20230310T202311_C001       Mean Sea Surface (1)       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20230310T2121222_20230310T212238_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_20230310T2121222_20230310T212238_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_20230310T2212441_20230310T2212460_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_20230310T170345_20230310T170755_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_NOPN_2_202303101180121_202303101180436_C001       Mean Dynamic Topography (1)       more records         CS_OFFL_SIR_NOPN_2_20230310T184230_20230310T184506_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_20230310T194215_20230310T194331_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_20230310T201714_20230310T202311_C001       Mean Sea Surface (1)       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20230310T212122_20230310T2122238_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_20230310T212122_20230310T2122238_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_20230310T212122_20230310T2122238_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_20230310T221441_20230310T221600_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_20230310T175232_20230310T175452_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_20230310T194215_20230310T194331_C001       Mean Dynamic Topography (1)       more records         CS_OFFL_SIR_NOPN_2_20230310T194215_20230310T194331_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_20230310T201714_20230310T202311_C001       Mean Sea Surface (1)       There is an error with the MSS height (solution 1) for one or more records         CS_OFFL_SIR_NOPN_2_20230310T2121222_20230310T212238_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_20230310T2212441_20230310T221228_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_20230310T180121_20230310T180436_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_20230310T194215_20230310T194331_C001 Mean Dynamic Topography (1) more records CS_OFFL_SIR_NOPN_2_20230310T201714_20230310T202311_C001 Mean Dynamic Topography (1) There is an error with the MSS height (solution 1) for one or more records CS_OFFL_SIR_NOPN_2_20230310T212122_20230310T212238_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_20230310T2212441_20230310T221208_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_20230310T2212441_20230310T2212600_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_20230310T184230_20230310T184506_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_20230310T212122_20230310T212238_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_20230310T221441_20230310T221600_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or	CS_OFFL_SIR_NOPN_2_20230310T194215_20230310T194331_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_202303101212122_202303101212236_C001 Mean Dynamic Topography (1) more records CS_OFFL_SIR_NOPN_2_202303101221441_202303101221600_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or	CS_OFFL_SIR_NOPN_2_20230310T201714_20230310T202311_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
	CS_OFFL_SIR_NOPN_2_20230310T212122_20230310T212238_C001	Mean Dynamic Topography (1)	
	CS_OFFL_SIR_NOPN_2_20230310T221441_20230310T221600_C001	Mean Dynamic Topography (1)	

CS_OFFL_SIR_NOPN_2_20230310T222106_20230310T222313_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_20230310T225125_20230310T225251_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_20230310T225813_20230310T230001_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_20230310T035102_20230310T035519_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_20230310T035519_20230310T035735_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_20230310T050820_20230310T051214_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_20230310T053042_20230310T053657_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_20230310T071224_20230310T071648_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_20230310T084623_20230310T085859_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_20230310T103018_20230310T103804_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_20230310T121034_20230310T122045_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_20230310T134954_20230310T135710_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_20230310T152910_20230310T153627_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_20230310T170755_20230310T171006_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_20230310T171006_20230310T171448_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_20230310T184618_20230310T185504_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_20230310T202312_20230310T203054_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

### 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: 1		
Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230310T054618_20230310T061907_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more record

# 5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20 Hz)

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.

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Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230309T235356_20230310T002835_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_20230310T005314_20230310T005748_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_20230310T005831_20230310T011606_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_20230310T011900_20230310T012052_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_NOPM_2_20230310T012534_20230310T012743_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_20230310T013443_20230310T020412_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_20230310T020849_20230310T020921_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_20230310T022342_20230310T024205_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_20230310T024258_20230310T025624_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_20230310T030815_20230310T031155_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_20230310T031334_20230310T032916_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_20230310T033118_20230310T034040_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_20230310T035848_20230310T040016_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_20230310T040824_20230310T041954_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_20230310T043607_20230310T043722_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_20230310T044312_20230310T044620_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_20230310T044623_20230310T045057_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_20230310T045246_20230310T050820_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_20230310T052100_20230310T052103_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_20230310T054618_20230310T061907_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_20230310T062356_20230310T062952_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_20230310T063211_20230310T065815_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_20230310T072921_20230310T075810_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_20230310T080056_20230310T080213_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_20230310T080343_20230310T080802_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_20230310T081059_20230310T084101_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_20230310T090353_20230310T093716_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_20230310T094255_20230310T094835_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_20230310T094954_20230310T095618_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_20230310T102734_20230310T102851_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_20230310T104210_20230310T111639_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_20230310T112200_20230310T112712_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_20230310T112856_20230310T114853_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_20230310T120032_20230310T120047_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_20230310T122046_20230310T125427_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_20230310T125942_20230310T130200_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_20230310T130207_20230310T130619_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_20230310T130822_20230310T133649_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_20230310T134657_20230310T134839_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_20230310T140253_20230310T141136_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_20230310T141617_20230310T141739_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_20230310T141808_20230310T142801_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_20230310T142951_20230310T143403_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_20230310T143540_20230310T144100_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_20230310T144119_20230310T144324_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_20230310T145214_20230310T150436_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_20230310T150641_20230310T151854_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_20230310T154608_20230310T155539_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_20230310T155741_20230310T160545_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_20230310T160610_20230310T161318_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_20230310T161506_20230310T162002_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_20230310T162018_20230310T162029_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_20230310T162036_20230310T162152_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_20230310T162805_20230310T163024_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_20230310T165150_20230310T165417_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_20230310T173540_20230310T175227_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_20230310T175452_20230310T175929_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_20230310T175951_20230310T180121_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

	Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_NOPM_2_20230310T180517_20230310T182854_C001	and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230310T190529_20230310T193202_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_20230310T193326_20230310T193831_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_20230310T194434_20230310T201215_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_20230310T201415_20230310T201713_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_20230310T204051_20230310T204305_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_20230310T204909_20230310T205004_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_20230310T205006_20230310T211139_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_20230310T211307_20230310T211746_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_20230310T211749_20230310T212122_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_20230310T212355_20230310T215906_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_20230310T223055_20230310T223123_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_20230310T224312_20230310T224558_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_20230310T224758_20230310T225105_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_20230310T225251_20230310T225813_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_20230310T230324_20230310T232622_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_20230310T232908_20230310T233819_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_20230310T235043_20230310T235430_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_20230310T043722_20230310T043756_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_20230310T054222_20230310T054237_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_20230310T193844_20230310T193850_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_20230310T194215_20230310T194331_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_20230310T201714_20230310T202311_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_20230310T215906_20230310T220035_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_20230310T235431_20230310T235526_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
12 Quality Flags (20 Hz PL RM)		

# L2 Quality Flags (20 Hz 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.

Product	Test Failed Ocean Altimeter Range, SSHA, SWH	Description
CS_OFFL_SIR_NOPN_2_20230310T012743_20230310T013306_C001	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_20230310T021211_20230310T021305_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T034040_20230310T034355_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T040016_20230310T040239_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T043926_20230310T044311_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T051738_20230310T052059_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T053657_20230310T053921_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 beer set for one or more records
CS_OFFL_SIR_NOPN_2_20230310T061940_20230310T062131_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 beer set for one or more records
CS_OFFL_SIR_NOPN_2_20230310T072201_20230310T072323_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T072701_20230310T072921_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T080213_20230310T080343_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T080802_20230310T081054_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one on more records
CS_OFFL_SIR_NOPN_2_20230310T085859_20230310T090352_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 beer set for one or more records
CS_OFFL_SIR_NOPN_2_20230310T094835_20230310T094949_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 beer set for one or more records
CS_OFFL_SIR_NOPN_2_20230310T101734_20230310T101935_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T103805_20230310T103935_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T111841_20230310T112159_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records
CS_OFFL_SIR_NOPN_2_20230310T112712_20230310T112838_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_20230310T114853_20230310T115208_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one on more records
CS_OFFL_SIR_NOPN_2_20230310T115915_20230310T115921_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one on more records
CS_OFFL_SIR_NOPN_2_20230310T125556_20230310T125941_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one on more records
CS_OFFL_SIR_NOPN_2_20230310T134840_20230310T134954_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one on more records
CS_OFFL_SIR_NOPN_2_20230310T144325_20230310T144510_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one on more records
CS_OFFL_SIR_NOPN_2_20230310T154210_20230310T154608_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 beer set for one or more records
CS_OFFL_SIR_NOPN_2_20230310T162152_20230310T162805_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 beer set for one or more records

CS_OFFL_SIR_NOPN_2_20230310T170345_20230310T170755_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_20230310T172512_20230310T172741_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_20230310T184230_20230310T184506_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_20230310T201714_20230310T202311_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_20230310T203213_20230310T203250_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_20230310T212122_20230310T212238_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_20230310T215906_20230310T220035_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_20230310T221441_20230310T221600_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_20230310T222007_20230310T222033_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_20230310T222106_20230310T222313_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_20230310T223654_20230310T223800_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_20230310T225125_20230310T225251_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_20230310T002937_20230310T002940_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_20230310T004301_20230310T005314_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_20230310T020412_20230310T020846_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_20230310T022301_20230310T022341_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_20230310T025625_20230310T030219_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_20230310T035102_20230310T035519_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_20230310T035519_20230310T035735_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_20230310T040501_20230310T040824_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_20230310T050820_20230310T051214_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_20230310T051214_20230310T051531_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_20230310T051534_20230310T051636_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_20230310T053042_20230310T053657_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_20230310T053921_20230310T053935_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_20230310T054121_20230310T054222_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_20230310T054237_20230310T054454_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_20230310T070756_20230310T071036_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_20230310T071224_20230310T071648_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_20230310T084623_20230310T085859_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_20230310T102313_20230310T102635_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_20230310T102851_20230310T102928_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_20230310T103018_20230310T103804_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_20230310T120656_20230310T120931_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_20230310T121034_20230310T122045_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_20230310T134954_20230310T135710_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_20230310T135902_20230310T135917_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_20230310T135922_20230310T140253_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_20230310T150437_20230310T150641_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_20230310T152910_20230310T153627_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_20230310T155549_20230310T155616_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_20230310T170026_20230310T170345_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_20230310T170755_20230310T171006_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_20230310T171006_20230310T171448_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_20230310T172919_20230310T173020_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_20230310T173038_20230310T173325_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_20230310T184618_20230310T185504_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_20230310T194332_20230310T194434_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_20230310T202312_20230310T203054_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_20230310T203251_20230310T203345_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_20230310T203355_20230310T203523_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_20230310T220035_20230310T220111_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_20230310T224130_20230310T224138_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_20230310T230122_20230310T230324_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_NOPR_2_20230310T235527_20230310T235749_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records

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#### L2 Quality Flags (1 Hz & 1 Hz PLRM)

Currently, there are several common flags raised in the Level 2 products, which are summarised below.

177

70

128

> 1 Hz and 1 Hz Ocean SSHA Quality Flags: These flags are currently set for products over sea ice, which is to be expected.

Number of products with errors:

#### 5.7 L2 Ocean Retracking Quality Check

# L2 Retracking Flags (20 Hz)

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.

0

Number of products with errors:

### L2 Retracking Flags (20 Hz 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.

#### Number of products with errors:

# 7. NOP 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_NOPM1B	199	199	4	195	0
SIR_NOPR1B	119	119	0	119	0
SIR_NOPN1B	103	103	3	100	0
SIR_NOPM_2	199	199	146	53	0
SIR_NOPR_2	119	119	51	68	0
SIR_NOPN_2	103	103	40	63	0

### 7.1 QCC Errors

Number of QCC reports with errors:

# 7.2 QCC Warnings

	r.			per of occurrences of ea			
Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	RBSZOPOEPNCD
SIR_NOPM1B	195	0	0	0	0	0	0
SIR_NOPM_2	0	38	38	0	40	0	30
SIR_NOPN1B	99	0	0	0	0	0	0
SIR_NOPN_2	0	16	35	3	27	32	19
SIR_NOPR1B	119	0	0	0	0	0	0
	0	24	28	0	19	12	7
SIR_NOPR_2	0	24	20	0	19	12	/
SIK_NOPR_2	0	24	20	0	19	12	1
Product Type	RNELPOTONCDF	RPEPOPFDLRMNCDF	ł	RPEPOPFDPLRMSINNCD	-		RPEPOPLRMNCD
	0 RNELPOTONCDF 0		ł	RPEPOPFDPLRMSINNCD	-		RPEPOPLRMNCDI
Product Type	0 RNELPOTONCDF 0 0 0		ł	RPEPOPFDPLRMSINNCD	-		RPEPOPLRMNCDI 0 23
Product Type SIR_NOPM1B	0 RNELPOTONCDF 0 0 0 0		ł	0 RPEPOPFDPLRMSINNCD 0 0 0	-		r RPEPOPLRMNCD 0 23 0
Product Type SIR_NOPM1B SIR_NOPM_2 SIR_NOPN1B	BRELPOTONCDF           0           0           0           0           0           0           0           0		ł	0 RPEPOPFDPLRMSINNCD 0 0 17	-		RPEPOPLRMNCD 0 23 0 0
Product Type SIR_NOPM1B SIR_NOPM_2	Image: Net Poton CDF           0           0           0           0           0           0           0           0           0           0           0		ł	0 RPEPOPFDPLRMSINNCD 0 0 17 0	-	RPEPOPFDSINNCDF 0 0 0	7 <b>RPEPOPLRMNCD</b> 0 23 0 0 0 0

Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	0	0	5	24	0	3	31
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	20	20	40	50	21	26
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	29	0	1	51	28	10	25

Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	Soohhifhd	SCSTODHRNCDF	SCSTODNCDF	-	-
SIR_NOPM1B	0	0	0	0	0		
SIR_NOPM_2	0	2	0	0	0		
SIR_NOPN1B	0	0	0	46	0		
SIR_NOPN_2	28	12	1	0	0		
SIR_NOPR1B	0	0	0	119	7		
SIR_NOPR_2	27	2	5	0	0		

Test Description Key:	Test Description Key:					
Abbreviation	Test name	Details				
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter				
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				

		The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes
	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	between -70 and 70 degrees
RBSZOPOEPFDPLRM NCDF	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
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 F	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
	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 DF	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
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

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

0