

19-Jun-2023

20-Jun-2023

None

Nothing planned

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

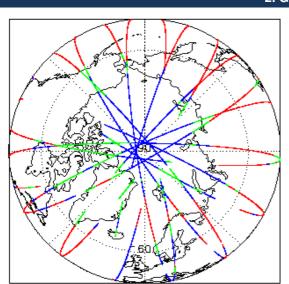
<u>19/06/2023</u>

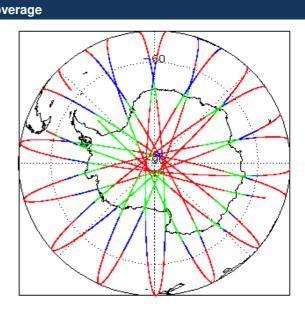
# IDEAS-QA4E0

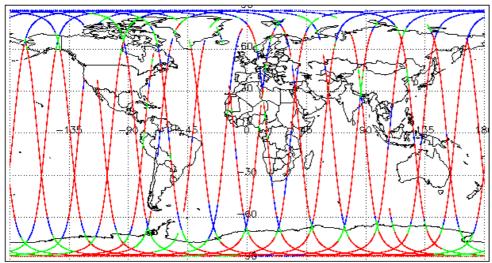
Panart Braduation	21-Jun-2023	Check	L1 & L2
Report Production:	21-3011-2023	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CriveCat Oscar Drassaur	Server check: calval-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ocean Processor	Product Software Check	Nominal
Data Used:	Near 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		Auxiliary Correction Error Check	See Section 5.4
		Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5
quality reports: Wha	t do you like/ dislike? What quality	Measurement Quality Flag Check	See Section 5.6
information do you need? Send your feedback to		Ocean Retracking Quality Check	See Section 5.7
cs2 gc	team@telespazio.com	QCC Error/ Warning Check	See Section 7.2

1. Overview

 Global (	Covoro









# 3. Instrument Configuration

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

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

4. NOP Level 1B Data Quality Check

### 4.1 L1B Product Format Check

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

4.2 L1B Product Header Analysis				
	d SPH in order to identify any inconsisten	ries and/or errors raised by the ground-segment processing chain		
For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.				
OSARIn chains. A modification is required in the next release.          Number of products with errors:       0				
4.3 L1B Auxilary Data File Usage Check				
Each product is checked for missing Data Set Descriptors with respect to a pr				
> Dynamic Atmospheric Correction: The DAC is missing in all products bec	ause the auxiliary files required are not av	vailable in time for processing. This known and expected behaviour.		
Number of products with errors: 0				
4.4 L1B Auxiliary Correction Error Check				
CryoSat L1B data includes a correction error flag for each measurement recor	d. The bit value of this flag indicates any p	problems when set.		
Number of products with errors: 0				
4.5 L1B Measurement Confidence Data Check				
CryoSat L1B data includes a measurement confidence flag for each measurem	nent record. The bit value of this flag indic	cates any problems when set.		
> Attitude Correction Missing: This flag is currently set in error for NOPR pr updated in the next SW update.				
Number of products with errors: 1				
Product	Test Failed	Description		
CS_OFFL_SIR_NOPM1B_20230619T124412_20230619T125527_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records		
4.6 L1B Waveform Group Data Check				
CryoSat L1B data includes a waveform data flag for each measurement record	d. The bit value of this flag indicates any p	problems when set.		
> Loss of Echo Flag: This flag is currently set for occasional products over la	المعقم مسيم مطامة مأطلة فيبط المعر			
> Loss of Lono Flag. This hag is currently set for occasional products over la	ind, but this is to be expected.			
Number of products with errors: 28	na, bui this is to be expected.			
	Test Failed	Description		
Number of products with errors: 28		Description The tracking echo is missing for one or more records		
Number of products with errors: 28 Product	Test Failed			
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001	Test Failed Loss of Echo	The tracking echo is missing for one or more records		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T101323_20230619T102820_C001	Test Failed Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T101323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T165645_C001	Test Failed         Loss of Echo         Loss of Echo         Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T101323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165017_20230619T105645_C001           CS_OFFL_SIR_NOPM1B_20230619T165045_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T1223548_20230619T1224511_C001         CS_OFFL_SIR_NOPM1B_20230619T223548_20230619T224511_C001	Test Failed         Loss of Echo         Loss of Echo         Loss of Echo         Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T101323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T105645_C001           CS_OFFL_SIR_NOPM1B_20230619T165040_20230619T103546_C001         CS_OFFL_SIR_NOPM1B_20230619T1223548_20230619T224511_C001           CS_OFFL_SIR_NOPM1B_20230619T013210_20230619T013658_C001         CS_OFFL_SIR_NOPM1B_20230619T013210_20230619T013658_C001	Test Failed         Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T101323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T165645_C001           CS_OFFL_SIR_NOPM1B_20230619T165940_20230619T193546_C001         CS_OFFL_SIR_NOPM1B_20230619T223548_20230619T224511_C001           CS_OFFL_SIR_NOPM1B_20230619T013210_20230619T013658_C001         CS_OFFL_SIR_NOPM1B_20230619T03210_20230619T030754_C001	Test Failed         Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T101323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T105107_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165045_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T123548_20230619T193546_C001         CS_OFFL_SIR_NOPM1B_20230619T223548_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T013210_20230619T013658_C001         CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040609_C001	Test Failed         Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T101323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T1056645_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T1032548_20230619T103658_C001         CS_OFFL_SIR_NOPM1B_20230619T03210_20230619T03658_C001           CS_OFFL_SIR_NOPM1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPM1B_20230619T040443_20230619T040609_C001           CS_OFFL_SIR_NOPM1B_20230619T080152_20230619T040609_C001         CS_OFFL_SIR_NOPM1B_20230619T080152_20230619T080314_C001	Test Failed         Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T1056645_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T103548_20230619T103658_C001         CS_OFFL_SIR_NOPM1B_20230619T03210_20230619T030754_C001           CS_OFFL_SIR_NOPM1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPM1B_20230619T040443_20230619T040609_C001           CS_OFFL_SIR_NOPM1B_20230619T080152_20230619T080314_C001         CS_OFFL_SIR_NOPM1B_20230619T094354_20230619T094449_C001	Test Failed         Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
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Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001         CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T123548_20230619T193546_C001         CS_OFFL_SIR_NOPM1B_20230619T03210_20230619T03658_C001           CS_OFFL_SIR_NOPN1B_20230619T03210_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T080152_20230619T080314_C001         CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040449_C001           CS_OFFL_SIR_NOPN1B_20230619T11759_20230619T112057_C001         CS_OFFL_SIR_NOPN1B_20230619T111759_20230619T112057_C001           CS_OFFL_SIR_NOPN1B_20230619T1112152_20230619T112405_C001         CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T112405_C001           CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T112405_C001         CS_OFFL_SIR_NOPN1B_20230619T112455_C001           CS_OFFL_SIR_NOPN1B_20230619T1242308_20230619T212455_C001         CS_OFFL_SIR_NOPN1B_20230619T212308_20230619T212455_C001	Test Failed         Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001         CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T1223548_20230619T193546_C001         CS_OFFL_SIR_NOPM1B_20230619T03210_20230619T03658_C001           CS_OFFL_SIR_NOPN1B_20230619T03210_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T030152_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T0305152_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T0305152_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T03054_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T0305152_20230619T0303754_C001           CS_OFFL_SIR_NOPN1B_20230619T03054_20230619T0303754_C001         CS_OFFL_SIR_NOPN1B_20230619T0305152_20230619T0303754_C001           CS_OFFL_SIR_NOPN1B_20230619T10305152_20230619T112057_C001         CS_OFFL_SIR_NOPN1B_20230619T111759_20230619T112405_C001           CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T1124055_C001         CS_OFFL_SIR_NOPN1B_20230619T1212308_20230619T212455_C001           CS_OFFL_SIR_NOPN1B_20230619T212308_20230619T212455_C001         CS_OFFL_SIR_NOPN1B_20230619T212308_20230619T230320_C001           CS_OFFL_SIR_NOPN1B_20230619T1230210_20230619T013209_C001         CS_OFFL_SIR_NOPN1B_20230619T01230210_2030619T013209_C001	Test Failed         Loss of Echo	The tracking echo is missing for one or more records         The tracking e		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T1085645_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T1223548_20230619T193546_C001         CS_OFFL_SIR_NOPM1B_20230619T03210_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T0306152_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T0306152_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T0306152_20230619T030449_C001         CS_OFFL_SIR_NOPN1B_20230619T0304354_20230619T030449_C001           CS_OFFL_SIR_NOPN1B_20230619T11759_20230619T112057_C001         CS_OFFL_SIR_NOPN1B_20230619T111759_20230619T112057_C001           CS_OFFL_SIR_NOPN1B_20230619T111252_20230619T112055_C001         CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T112055_C001           CS_OFFL_SIR_NOPN1B_20230619T212308_20230619T122455_C001         CS_OFFL_SIR_NOPN1B_20230619T212308_20230619T1230320_C001           CS_OFFL_SIR_NOPN1B_20230619T1230210_20230619T1320392_C001         CS_OFFL_SIR_NOPN1B_20230619T01230619T013209_C001           CS_OFFL_SIR_NOPN1B_20230619T01230619T013209_C001         CS_OFFL_SIR_NOPN1B_20230619T01230619T013209_C001	Test Failed         Loss of Echo	The tracking echo is missing for one or more records         The tracking e		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T1085645_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T103210_20230619T103658_C001         CS_OFFL_SIR_NOPM1B_20230619T033619_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T0306152_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T094449_C001           CS_OFFL_SIR_NOPN1B_20230619T030454_20230619T030754_C001         CS           CS_OFFL_SIR_NOPN1B_20230619T10305152_20230619T0304754_C001         CS           CS_OFFL_SIR_NOPN1B_20230619T0130454_20230619T1040609_C001         CS           CS_OFFL_SIR_NOPN1B_20230619T11252_20230619T102057_C001         CS           CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T1124055_C001         CS           CS_OFFL_SIR_NOPN1B_20230619T12308_20230619T12455_C001         CS           CS_OFFL_SIR_NOPN1B_20230619T0123020_02001         CS           CS_OFFL_SIR_NOPN1B_20230619T0123020_2001         CS           CS_OFFL_SIR_NOPN1B_20230619T0123020_2030619T013209_C001         CS           CS_OFFL_SIR	Test Failed         Loss of Echo	The tracking echo is missing for one or more records         The tracking e		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T105645_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T1223548_20230619T193546_C001         CS_OFFL_SIR_NOPM1B_20230619T013210_20230619T013658_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T04043_20230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T030454_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T104043_20230619T040409_C001           CS_OFFL_SIR_NOPN1B_20230619T0130454_20230619T1040609_C001         CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T040409_C001           CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T112405_C001         CS_OFFL_SIR_NOPN1B_20230619T1212308_20230619T112405_C001           CS_OFFL_SIR_NOPN1B_20230619T12308_20230619T1212455_C001         CS_OFFL_SIR_NOPN1B_20230619T12308_20230619T132032_0_001           CS_OFFL_SIR_NOPN1B_20230619T12308_20230619T13209_C001         CS_OFFL_SIR_NOPN1B_20230619T030755_20230619T031102_0_001           CS_OFFL_SIR_NOPR1B_20230619T030755_20230619T031102_C001         CS_OFFL_SIR_NOPR1B_20230619T0303755_20230619T045415_C001           C	Test Failed         Loss of Echo	The tracking echo is missing for one or more records         The tracking e		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T1056645_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T103210_20230619T103658_C001         CS_OFFL_SIR_NOPM1B_20230619T033619_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T04443_20230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T0306152_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T04043_20230619T094449_C001           CS_OFFL_SIR_NOPN1B_20230619T04043_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T11252_20230619T030375_C001           CS_OFFL_SIR_NOPN1B_20230619T04043_20230619T040409_C001         CS_OFFL_SIR_NOPN1B_20230619T11252_20230619T112057_C001           CS_OFFL_SIR_NOPN1B_20230619T11252_20230619T1124052_C001         CS_OFFL_SIR_NOPN1B_20230619T11252_20230619T1124052_C001           CS_OFFL_SIR_NOPN1B_20230619T12308_20230619T12455_C001         CS_OFFL_SIR_NOPN1B_20230619T0123020_2001           CS_OFFL_SIR_NOPN1B_20230619T01230210_20230619T013209_C001         CS_OFFL_SIR_NOPR1B_20230619T012365_20230619T01310209_C001           CS_OFFL_SIR_NOPR1B_20230619T030755_20230619T031102_C001         CS_OFFL_SIR_NOPR1B_20230619T044621_20230619T0454515_C001	Test Failed         Loss of Echo	The tracking echo is missing for one or more records         The tracking e		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T105645_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T1223548_20230619T193546_C001         CS_OFFL_SIR_NOPM1B_20230619T013210_20230619T013658_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T04043_20230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T030454_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T104043_20230619T040409_C001           CS_OFFL_SIR_NOPN1B_20230619T0130454_20230619T1040609_C001         CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T040409_C001           CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T112405_C001         CS_OFFL_SIR_NOPN1B_20230619T1212308_20230619T112405_C001           CS_OFFL_SIR_NOPN1B_20230619T12308_20230619T1212455_C001         CS_OFFL_SIR_NOPN1B_20230619T12308_20230619T132032_0_001           CS_OFFL_SIR_NOPN1B_20230619T12308_20230619T13209_C001         CS_OFFL_SIR_NOPN1B_20230619T030755_20230619T031102_0_001           CS_OFFL_SIR_NOPR1B_20230619T030755_20230619T031102_C001         CS_OFFL_SIR_NOPR1B_20230619T0303755_20230619T045415_C001           C	Test Failed         Loss of Echo	The tracking echo is missing for one or more records         The tracking e		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T105645_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T1223548_20230619T193546_C001         CS_OFFL_SIR_NOPM1B_20230619T013210_20230619T013658_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T094432_0230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T080152_00230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T080454_02030619T094449_C001           CS_OFFL_SIR_NOPN1B_20230619T080152_00230619T112057_C001         CS_OFFL_SIR_NOPN1B_20230619T112152_00230619T112057_C001           CS_OFFL_SIR_NOPN1B_20230619T112152_00230619T112055_C001         CS_OFFL_SIR_NOPN1B_20230619T12308_0230619T122455_C001           CS_OFFL_SIR_NOPN1B_20230619T1230210_20230619T132032_0_C001         CS_OFFL_SIR_NOPN1B_20230619T12308_0230619T13209_001           CS_OFFL_SIR_NOPN1B_20230619T033075_20230619T031102_0_001         CS_OFFL_SIR_NOPR1B_20230619T030755_0230619T0345415_0001           CS_OFFL_SIR_NOPR1B_20230619T044621_20230619T0454451_0_001         CS_OFFL_SIR_NOPR1B_20230619T03815_0230619T038818_001	Test FailedLoss of EchoLoss of Echo <td>The tracking echo is missing for one or more records         The tracking e</td>	The tracking echo is missing for one or more records         The tracking e		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001           CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T105645_C001         CS_OFFL_SIR_NOPM1B_20230619T185940_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T1223548_20230619T193545_C001         CS_OFFL_SIR_NOPM1B_20230619T03201_20230619T013658_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001           CS_OFFL_SIR_NOPN1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPN1B_20230619T094443_20230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T090454_02030619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T0190443_20230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T0190454_02030619T112057_C001         CS_OFFL_SIR_NOPN1B_20230619T112152_00230619T112057_C001           CS_OFFL_SIR_NOPN1B_20230619T112152_0230619T112057_C001         CS_OFFL_SIR_NOPN1B_20230619T12308_0230619T112057_C001           CS_OFFL_SIR_NOPN1B_20230619T12308_0230619T112057_C001         CS_OFFL_SIR_NOPN1B_20230619T12308_0230619T112057_C001           CS_OFFL_SIR_NOPN1B_20230619T12308_0230619T112057_C001         CS_OFFL_SIR_NOPN1B_20230619T12308_0230619T103209_C001           CS_OFFL_SIR_NOPN1B_20230619T12308_0230619T13209_C001         CS_OFFL_SIR_NOPN1B_20230619T030755_20230619T031102_C001           CS_OFFL_SIR_NOPR	Test FailedLoss of EchoLoss of Echo <td>The tracking echo is missing for one or more records         The tracking e</td>	The tracking echo is missing for one or more records         The tracking e		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_202306197095210_202306197095724_C001         CS_OFFL_SIR_NOPM1B_202306197101323_202306197102820_C001           CS_OFFL_SIR_NOPM1B_202306197105507_2023061971085645_C001         CS_OFFL_SIR_NOPM1B_202306197165940_202306197193546_C001         CS_OFFL_SIR_NOPM1B_202306197103210_202306197103558_C001           CS_OFFL_SIR_NOPM1B_202306197103210_202306197103658_C001         CS_OFFL_SIR_NOPM1B_202306197030619_202306197030754_C001         CS_OFFL_SIR_NOPM1B_202306197040443_2023061971040609_C001           CS_OFFL_SIR_NOPN1B_202306197040443_202306197040609_C001         CS_OFFL_SIR_NOPN1B_20230619704443_202306197040449_C001         CS_OFFL_SIR_NOPN1B_20230619704443_202306197040449_C001           CS_OFFL_SIR_NOPN1B_20230619710405152_002306197112057_C001         CS_OFFL_SIR_NOPN1B_202306197112152_202306197112405_C001         CS_OFFL_SIR_NOPN1B_202306197112152_02306197112405_C001           CS_OFFL_SIR_NOPN1B_20230619712308_02306197112405_C001         CS_OFFL_SIR_NOPN1B_20230619712308_0230619713209_C001         CS_OFFL_SIR_NOPN1B_20230619703755_02306197031102_C001           CS_OFFL_SIR_NOPR1B_202306197044621_0230619703314_2001         CS_OFFL_SIR_NOPR1B_20230619703815_0230619703318_001         CS_OFFL_SIR_NOPR1B_20230619703815_0230619703318_001           CS_OFFL_SIR_NOPR1B_202306197093815_0230619703818_001         CS_OFFL_SIR_NOPR1B_202306197093815_02306197093818_001         CS_OFFL_SIR_NOPR1B_202306197093815_02306197093818_001           CS_OFFL_SIR_NOPR1B_202306197093815_0230306197093818_001         CS_OFFL_SIR_NOPR1B_2023061970	Test FailedLoss of EchoLoss of Echo <td>The tracking echo is missing for one or more records         The tracking e</td>	The tracking echo is missing for one or more records         The tracking e		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001         CS_OFFL_SIR_NOPM1B_20230619T101323_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T165107_20230619T1085645_C001         CS_OFFL_SIR_NOPM1B_20230619T165040_20230619T193546_C001         CS_OFFL_SIR_NOPM1B_20230619T103210_20230619T103658_C001           CS_OFFL_SIR_NOPM1B_20230619T0330519_20230619T030554_C001         CS_OFFL_SIR_NOPM1B_20230619T030619_20230619T030554_C001         CS_OFFL_SIR_NOPM1B_20230619T030619_20230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040449_C001         CS_OFFL_SIR_NOPN1B_20230619T04443_20230619T040449_C001           CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T112405_C001         CS_OFFL_SIR_NOPN1B_20230619T112152_0230619T112405_C001         CS_OFFL_SIR_NOPN1B_20230619T012836_20230619T124255_C001           CS_OFFL_SIR_NOPN1B_20230619T012836_20230619T013209_C001         CS_OFFL_SIR_NOPN1B_20230619T030755_20230619T03102_C001         CS_OFFL_SIR_NOPN1B_20230619T044621_20230619T045415_C001         CS_OFFL_SIR_NOPR1B_20230619T093815_20230619T093818_C001         CS_OFFL_SIR_NOPR1B_20230619T093815_20230619T093818_C001         CS_OFFL_SIR_NOPR1B_20230619T093815_20230619T093818_C001         CS_OFFL_SIR_NOPR1B_20230619T04450_20230619T093818_C001         CS_OFFL_SIR_NOPR1B_20230619T04450_20230619T112	Test FailedLoss of EchoLoss of Echo <td>The tracking echo is missing for one or more records The tracking echo is missing for</td>	The tracking echo is missing for one or more records The tracking echo is missing for		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_20230619T095210_20230619T095724_C001         CS_OFFL_SIR_NOPM1B_20230619T10323_20230619T102820_C001           CS_OFFL_SIR_NOPM1B_20230619T105507_20230619T102820_C001         CS_OFFL_SIR_NOPM1B_20230619T165045_C001         CS_OFFL_SIR_NOPM1B_20230619T103544_20230619T193546_C001           CS_OFFL_SIR_NOPM1B_20230619T032548_20230619T103658_C001         CS_OFFL_SIR_NOPM1B_20230619T030619_20230619T030754_C001         CS_OFFL_SIR_NOPM1B_20230619T030619_20230619T040609_C001           CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040609_C001         CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040449_C001         CS_OFFL_SIR_NOPN1B_20230619T040443_20230619T040449_C001           CS_OFFL_SIR_NOPN1B_20230619T1040443_20230619T040449_C001         CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T04449_C001         CS_OFFL_SIR_NOPN1B_20230619T112152_20230619T112405_C001           CS_OFFL_SIR_NOPN1B_20230619T112152_0230619T112405_C001         CS_OFFL_SIR_NOPN1B_20230619T12308_20230619T112405_C001         CS_OFFL_SIR_NOPN1B_20230619T012836_20230619T103209_C001           CS_OFFL_SIR_NOPN1B_20230619T012836_20230619T013209_C001         CS_OFFL_SIR_NOPR1B_20230619T044621_20230619T045415_C001         CS_OFFL_SIR_NOPR1B_20230619T04355_20230619T033184_C001           CS_OFFL_SIR_NOPR1B_20230619T044621_20230619T063540_C001         CS_OFFL_SIR_NOPR1B_20230619T044621_20230619T0933818_C001         CS_OFFL_SIR_NOPR1B_20230619T044545_20230619T0393818_C001           CS_OFFL_SIR_NOPR1B_20230619T0494450_20230619T112935_C001         CS_OFFL_SIR_NOPR1B_2023	Test FailedLoss of EchoLoss of Echo <td>The tracking echo is missing for one or more records The tracking echo is missing for</td>	The tracking echo is missing for one or more records The tracking echo is missing for		
Number of products with errors:         28           Product         CS_OFFL_SIR_NOPM1B_202306197095210_202306197095724_C001         CS_OFFL_SIR_NOPM1B_20230619710323_202306197102820_C001           CS_OFFL_SIR_NOPM1B_20230619710350_2023061971035645_C001         CS_OFFL_SIR_NOPM1B_202306197103544_202306197193546_C001         CS_OFFL_SIR_NOPM1B_2023061971032054_202306197103658_C001           CS_OFFL_SIR_NOPM1B_2023061970330619_202306197103658_C001         CS_OFFL_SIR_NOPN1B_202306197030619_202306197030754_C001         CS_OFFL_SIR_NOPN1B_202306197040443_202306197040609_C001           CS_OFFL_SIR_NOPN1B_202306197040443_202306197030754_C001         CS_OFFL_SIR_NOPN1B_202306197040443_202306197040449_C001         CS_OFFL_SIR_NOPN1B_202306197040443_202306197040449_C001           CS_OFFL_SIR_NOPN1B_202306197112152_2023061970304449_C001         CS_OFFL_SIR_NOPN1B_202306197112152_202306197112405_C001         CS_OFFL_SIR_NOPN1B_202306197112152_202306197112405_C001           CS_OFFL_SIR_NOPN1B_202306197112038_202306197112405_C001         CS_OFFL_SIR_NOPN1B_20230619713020_2001         CS_OFFL_SIR_NOPN1B_202306197030755_20230619713209_C001           CS_OFFL_SIR_NOPR1B_202306197030755_20230619703318_C001         CS_OFFL_SIR_NOPR1B_202306197039315_20230619703318_C001         CS_OFFL_SIR_NOPR1B_202306197039315_20230619703318_C001           CS_OFFL_SIR_NOPR1B_202306197039315_20230619703318_C001         CS_OFFL_SIR_NOPR1B_202306197039315_20230619703318_C001         CS_OFFL_SIR_NOPR1B_202306197039315_20230619703318_C001           CS_OFFL_SIR_NOPR1B_202306197039315_2023061970130353_20230619711300747_C001         CS_OFFL_S	Test FailedLoss of EchoLoss of Echo <td>The tracking echo is missing for one or more records The tracking echo is missing for</td>	The tracking echo is missing for one or more records The tracking echo is missing for		

# 5. NOP Level 2 Data Quality 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 header file (.HDR) 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 and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

# Number of products with errors:

5.3 L2 Auxiliary Data File Usage Check

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

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.

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230619T043419_20230619T043525_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPM_2_20230619T142645_20230619T142926_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPM_2_20230619T163432_20230619T163517_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPM_2_20230619T200304_20230619T202041_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_20230619T003545_20230619T003728_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_20230619T004607_20230619T004810_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_20230619T012811_20230619T012836_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T013210_20230619T013658_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T022405_20230619T022625_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_20230619T030619_20230619T030754_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T031102_20230619T031203_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T035454_20230619T035615_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_20230619T035618_20230619T035849_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20230619T053444_20230619T053757_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T062549_20230619T062601_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_20230619T071230_20230619T071641_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T072214_20230619T072340_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T080152_20230619T080314_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T090006_20230619T090150_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T094354_20230619T094449_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T103801_20230619T104018_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T111759_20230619T112057_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T112152_20230619T112405_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T120816_20230619T121009_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_20230619T121657_20230619T122138_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records

CS_OFFL_SIR_NOPN_2_20230619T125835_20230619T130229_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T130243_20230619T130353_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T134824_20230619T135055_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T135816_20230619T140002_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T170724_20230619T170838_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_20230619T171617_20230619T171733_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_20230619T181426_20230619T181458_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_20230619T184638_20230619T184801_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T185311_20230619T185620_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20230619T202726_20230619T203011_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T203215_20230619T203743_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T211624_20230619T211738_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_20230619T212308_20230619T212455_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T220531_20230619T220925_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T225512_20230619T225648_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_20230619T230210_20230619T230320_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20230619T230436_20230619T230531_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPR_2_20230619T003355_20230619T003545_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_20230619T012836_20230619T013209_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_20230619T030755_20230619T031102_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_20230619T031203_20230619T031237_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_20230619T043525_20230619T043718_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_20230619T044621_20230619T045415_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_20230619T062601_20230619T063400_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_20230619T080552_20230619T080556_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_20230619T080556_20230619T081343_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_20230619T094450_20230619T095030_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_20230619T112405_20230619T112935_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_20230619T130229_20230619T130243_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_20230619T130353_20230619T130747_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_20230619T144045_20230619T145042_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_20230619T161823_20230619T162502_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_20230619T163518_20230619T163715_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_20230619T225649_20230619T225702_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_20230619T225702_20230619T230209_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_20230619T230934_20230619T231048_C001		There is an error with the MSS height (solution 1), the Mean Dynamic

## 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_20230619T124412_20230619T125527_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

## 5.6 L2 Measurement Quality Flag Check

#### L2 Quality Flags (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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#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230619T000210_20230619T000522_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_20230619T000653_20230619T000919_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_20230619T001042_20230619T001325_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_20230619T001827_20230619T003355_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_20230619T003728_20230619T004607_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_20230619T004900_20230619T011102_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_20230619T015001_20230619T021310_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_20230619T021932_20230619T022405_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_20230619T022836_20230619T023218_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_20230619T023232_20230619T025219_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_20230619T032326_20230619T032359_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_20230619T032520_20230619T035141_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_20230619T035850_20230619T040442_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_20230619T040704_20230619T042839_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_20230619T042846_20230619T043117_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

	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_20230619T044342_20230619T044451_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_20230619T045713_20230619T053052_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
	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_20230619T054639_20230619T054755_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_20230619T054955_20230619T055208_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_20230619T062045_20230619T062437_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_20230619T063503_20230619T071005_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
	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
	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_20230619T072637_20230619T073721_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_20230619T073909_20230619T074617_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_20230619T074702_20230619T075143_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_20230619T081343_20230619T084857_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
	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_20230619T090800_20230619T093814_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_20230619T095807_20230619T101118_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_20230619T101323_20230619T102820_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
	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_20230619T104522_20230619T105538_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_20230619T110157_20230619T111421_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_20230619T114902_20230619T115144_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_20230619T115324_20230619T120724_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
	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_20230619T122306_20230619T124410_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_20230619T124412_20230619T125527_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_20230619T132448_20230619T134605_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_20230619T135055_20230619T135427_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_20230619T140126_20230619T142634_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_20230619T142645_20230619T142926_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_20230619T150121_20230619T152615_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_20230619T152838_20230619T153342_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_20230619T154109_20230619T161454_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_20230619T162816_20230619T163358_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_20230619T163715_20230619T164733_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_20230619T170027_20230619T170509_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_20230619T170838_20230619T171415_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_20230619T172104_20230619T175419_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_20230619T175541_20230619T175546_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_20230619T181405_20230619T181412_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_20230619T182646_20230619T184353_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_20230619T184802_20230619T185311_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_20230619T185940_20230619T193546_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_20230619T195747_20230619T200208_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_20230619T200304_20230619T202041_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
		and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPM_2_20230619T203946_20230619T205600_C001		
CS_OFFL_SIR_NOPM_2_20230619T203946_20230619T205600_C001 CS_OFFL_SIR_NOPM_2_20230619T205631_20230619T211547_C001	Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
	Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_NOPM_2_20230619T205631_20230619T211547_C001	Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags
CS_OFFL_SIR_NOPM_2_20230619T205631_20230619T211547_C001 CS_OFFL_SIR_NOPM_2_20230619T212819_20230619T214619_C001	Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags
CS_OFFL_SIR_NOPM_2_20230619T205631_20230619T211547_C001 CS_OFFL_SIR_NOPM_2_20230619T212819_20230619T214619_C001 CS_OFFL_SIR_NOPM_2_20230619T214903_20230619T220115_C001	Altimeter Range and Backscatter Quality         Ocean Altimeter Range, SSHA, SWH         and Backscatter Quality, OCOG         Altimeter Range and Backscatter Quality         Ocean Altimeter Range, SSHA, SWH         and Backscatter Quality, OCOG         Altimeter Range and Backscatter Quality         Ocean Altimeter Range, SSHA, SWH         and Backscatter Quality, OCOG         Altimeter Range and Backscatter Quality         Ocean Altimeter Range, SSHA, SWH         and Backscatter Quality, OCOG         Altimeter Range and Backscatter Quality         Ocean Altimeter Range, SSHA, SWH         and Backscatter Quality, OCOG         Altimeter Range and Backscatter Quality         Ocean Altimeter Range Quality, OCOG         Altimeter Range Quality, OCOG         Backscatter Quality         Ocean Altimeter Range, SSHA, SWH         and Backscatter Quality         Ocean Altimeter Range, Quality, OCOG	set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_NOPM_2_20230619T230320_20230619T230436_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_20230619T230732_20230619T230934_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_20230619T231131_20230619T232405_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_20230619T234026_20230619T234154_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_20230619T234736_20230619T235530_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_20230619T235815_20230620T001253_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_20230619T001530_20230619T001827_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_20230619T030619_20230619T030754_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_20230619T125835_20230619T130229_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_20230619T135443_20230619T135449_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_20230619T180442_20230619T180449_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230619T030755_20230619T031102_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230619T035142_20230619T035454_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230619T045520_20230619T045554_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_NOPR_2_20230619T054756_20230619T054955_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230619T062438_20230619T062549_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230619T063410_20230619T063450_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230619T072340_20230619T072637_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230619T080552_20230619T080556_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_NOPR_2_20230619T180551_20230619T180601_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_NOPR_2_20230619T231101_20230619T231131_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
1 2 Quality Flags (20 Hz PI 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.

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Number of products with errors:

Product	Test Failed	Description
	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
	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_20230619T012811_20230619T012836_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_20230619T013818_20230619T013921_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_20230619T021521_20230619T021645_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_20230619T021833_20230619T021932_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_20230619T030619_20230619T030754_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_20230619T035454_20230619T035615_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_20230619T035618_20230619T035849_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_20230619T040443_20230619T040609_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_20230619T044534_20230619T044537_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_20230619T053444_20230619T053757_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_20230619T060205_20230619T060238_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_20230619T060536_20230619T060720_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_20230619T061917_20230619T062044_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_20230619T062549_20230619T062601_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_20230619T080005_20230619T080052_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_20230619T080152_20230619T080314_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_20230619T090006_20230619T090150_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_20230619T094354_20230619T094449_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_20230619T103801_20230619T104018_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_20230619T105538_20230619T105644_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_20230619T111759_20230619T112057_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_20230619T112152_20230619T112405_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_20230619T112936_20230619T113114_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_20230619T121657_20230619T122138_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_20230619T125835_20230619T130229_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_20230619T134824_20230619T135055_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_20230619T135816_20230619T140002_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_20230619T145928_20230619T145934_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_20230619T153841_20230619T153851_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_20230619T161454_20230619T161637_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_20230619T180817_20230619T180925_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_20230619T181341_20230619T181405_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_20230619T185311_20230619T185620_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_20230619T202726_20230619T203011_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_20230619T220531_20230619T220925_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_20230619T221628_20230619T221808_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_20230619T224511_20230619T224810_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_20230619T230210_20230619T230320_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_20230619T235546_20230619T235718_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_20230619T000523_20230619T000653_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_20230619T003355_20230619T003545_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_20230619T011102_20230619T011155_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_20230619T011210_20230619T011248_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_20230619T012836_20230619T013209_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_20230619T021310_20230619T021520_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_20230619T022625_20230619T022836_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_20230619T025643_20230619T025749_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_20230619T030301_20230619T030419_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_20230619T030755_20230619T031102_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_20230619T035142_20230619T035454_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_20230619T043525_20230619T043718_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_20230619T044621_20230619T045415_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_20230619T053052_20230619T053444_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_20230619T055208_20230619T055414_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_20230619T061741_20230619T061917_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_20230619T062601_20230619T063400_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_20230619T072340_20230619T072637_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_20230619T080556_20230619T081343_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_20230619T084857_20230619T085007_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_20230619T085712_20230619T085719_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_20230619T090150_20230619T090800_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_20230619T094450_20230619T095030_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_20230619T095045_20230619T095210_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_20230619T104144_20230619T104521_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_20230619T105913_20230619T110157_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_20230619T111422_20230619T111508_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_20230619T111643_20230619T111758_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_20230619T112405_20230619T112935_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_20230619T114509_20230619T114901_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_20230619T122139_20230619T122306_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_20230619T125528_20230619T125754_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_20230619T130353_20230619T130747_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_20230619T130821_20230619T130927_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_20230619T140003_20230619T140125_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_20230619T144045_20230619T145042_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_20230619T153852_20230619T154109_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_20230619T161823_20230619T162502_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_20230619T163518_20230619T163715_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_20230619T164733_20230619T165107_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_20230619T170510_20230619T170724_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_20230619T171733_20230619T172104_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_20230619T180930_20230619T181252_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_20230619T181501_20230619T181533_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_20230619T184353_20230619T184638_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_20230619T185621_20230619T185940_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_20230619T202041_20230619T202726_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_20230619T214620_20230619T214730_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_20230619T225702_20230619T230209_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_20230619T230628_20230619T230732_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_20230619T230934_20230619T231048_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_20230619T232432_20230619T232524_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_20230619T232531_20230619T232932_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records

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

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

72

153

> 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:

rs: 203

# 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.
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> Ocean Retracking Quality Flag: This flag is currently set for products falling at ocean/ land boundaries, but this is expected.

Number of products with errors:

#### 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	147	147	2	145	0
SIR_NOPR1B	116	116	0	116	0
SIR_NOPN1B	110	110	4	106	0
SIR_NOPM_2	147	147	82	65	0
SIR_NOPR_2	116	116	25	91	0
SIR_NOPN_2	110	110	33	77	0

## 7.1 QCC Errors

Number of QCC reports with errors: 0

Test Description Key:				
Abbreviation	Test name	Details		

## Total number of occurrences of each warning

Product Type	BCSHNCDF	MVIOEPFDNCDF		MVIONCDF		RBSZOPOEPFDPLRMNCE	RBSZOPOEPNCDF
SIR_NOPM1B	145	0	0	0	0	0	0
SIR_NOPM_2	0	48	47	0	43	0	34
SIR_NOPN1B	103	0	0	0	0	0	0
SIR_NOPN_2	0	8	28	6	21	27	17
SIR_NOPR1B	114	0	0	0	0	0	0
SIR_NOPR_2	0	31	44	1	30	28	15
Product Type	RLPTONCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCE	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	11	0	45	0	0	0	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	64	0	0	0	23	0	31
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	62	1	0	50	0	53	0
	- <del>.</del>	r	i			i	
Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	35	0	0	1	29	0	1
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	0	0	25	19	42	51	34
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	0	48	0	4	51	38	6
<b>.</b>							
Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	Soohhifhd	SCSTODHRNCDF	SCSTODNCDF	
SIR_NOPM1B	0	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD 0	SCSTODHRNCDF 0	SCSTODNCDF 0	-
SIR_NOPM1B SIR_NOPM_2		RSWHOEPFDPLRMNCDF	RSWHOEPNCDF 0 2	0	0	SCSTODNCDF 0 0	•
SIR_NOPM1B SIR_NOPM_2 SIR_NOPN1B	0 46 0	0 0 0	0 2 0	0	SCSTODHRNCDF 0 0 43	SCSTODNCDF 0 0 0	•
SIR_NOPM1B SIR_NOPM_2 SIR_NOPN1B SIR_NOPN_2	0 46 0 20	RSWHOEPFDPLRMNCDF 0 0 0 23	0 2 0 12	0	0 0 43 0	<b>SCSTODNCDF</b> 0 0 0 0	•
SIR_NOPM1B SIR_NOPM_2 SIR_NOPN1B	0 46 0	0 0 0	0 2 0	0	0	SCSTODNCDF 0 0 0 0 5	•

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		
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees		
RBSZOPOEPFDPLRM 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		
RLPTONCDF	RangeLongPeriodTideOceanNetCDF	The Long period tide height should be between -50mm and 50mm (or missing) for surface type = ocean - NetCDF		
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean		
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees		
RPEPOPFDPLRMSAR 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		
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees		
RSWHOEPFDPLRMNC 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: