

QA4EO Daily Report for NOP data:

<u>29/06/2023</u>

IDEAS-QA4E0

Panart Braduation	30-Jun-2023	Check	L1 & L2
Report Production:	30-Jun-2023	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal
Processor used:	CryoSal Ocean Frocessor	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!	Auxiliary Correction Error Check	See Section 5.4
Please let us know your feedback about these daily		Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5
quality reports: What 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_qc_team@telespazio.com		QCC Error/ Warning Check	See Section 7.1 and 7.2

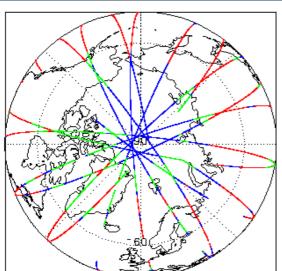
1. Overview

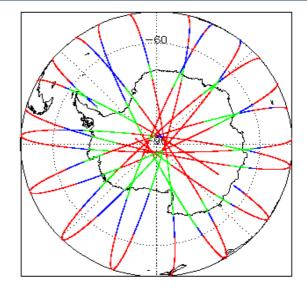
Mission / Instrument News 28-Jun-2023 None

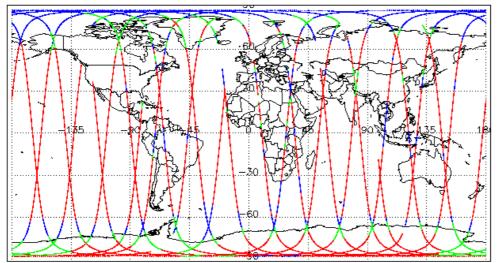
 29-Jun-2023
 SIRAL unavailability on 29 June 2023 from 17:52:58 to 19:48:18 due to a planned orbit manoeuvre.

 30-Jun-2023
 Nothing planned

2. Global Coverage







Mode Coverage

SARIn

3. Instrument Configuration

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

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

4. NOP Level 1B Data Quality Check

4.1 L1B Product Format Check

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

4.2 L1B Product Header Analysis				
For all products, a series of pre-defined checks are performed on the MPH and	d SPH in order to identify any inconsis	tencies and/or errors raised by the ground-segment processing chain.		
		use the I1b_processing_quality_hr field is not correctly configured in the OSAR and		
Number of products with errors: 0				
4.3 L1B Auxilary Data File Usage Check				
Each product is checked for missing Data Set Descriptors with respect to a pre-	e-determined baseline and also to che	eck the validity of Auxiliary Data Files is correct.		
> Dynamic Atmospheric Correction: The DAC is missing in all products because	ause the auxiliary files required are no	t available in time for processing. This known and expected behaviour.		
Number of products with errors: 0				
4.4 L1B Auxiliary Correction Error Check				
CryoSat L1B data includes a correction error flag for each measurement record	d. The bit value of this flag indicates a	iny 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 measuren	nent record. The bit value of this flag i	ndicates any problems when set.		
> Attitude Correction Missing: This flag is currently set in error for NOPR pro updated in the next SW update.	oducts due to a configuration issue. T	he attitude correction is not actually missing, This is being investigated and will be		
Number of products with errors: 1				
	Table Called	B e a sector them		
	Test Failed	Description There is an error in the scaling of the L1B waveform for one or more		
CS_OFFL_SIR_NOPM1B_20230629T230240_20230629T231300_C001	Power scaling error	records		
4.6 L1B Waveform Group Data Check				
CryoSat L1B data includes a waveform data flag for each measurement record	I. The bit value of this flag indicates a	ny problems when set.		
> Loss of Echo Flag: This flag is currently set for occasional products over la	nd, but this is to be expected.			
Number of products with errors: 22				
Product	Test Failed			
		Description The tracking cohe is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T062543_20230629T070023_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001	Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001	Loss of Echo Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001	Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001	Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T12246_20230629T012730_C001	Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T22619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T012246_20230629T01230_C001 CS_OFFL_SIR_NOPN1B_20230629T012304_2001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T22558_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T0433555_20230629T043645_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T2225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T012246_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T044750_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T1210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T012246_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043455_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T044750_C001 CS_OFFL_SIR_NOPN1B_20230629T043422_20230629T04355_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T044750_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T093525_C001 CS_OFFL_SIR_NOPN1B_20230629T033422_0230629T03352_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043450_C001 CS_OFFL_SIR_NOPN1B_20230629T033422_20230629T033525_C001 CS_OFFL_SIR_NOPN1B_20230629T033422_0230629T033525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T15224_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T23532_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044565_2001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T044750_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T03352_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152244_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222519_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T03525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T112211328_20230629T211448_C001 CS_OFFL_SIR_NOPN1B_20230629T211328_20230629T211448_C001	Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T2259122030629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T03525_C001 CS_OFFL_SIR_NOPN1B_20230629T133441_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T1211448_C001 CS_OFFL_SIR_NOPN1B_20230629T25241_20230629T211448_C001 CS_OFFL_SIR_NOPN1B_20230629T25241_20230629T22547_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T033525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T1328_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T211328_20230629T11448_C001 CS_OFFL_SIR_NOPN1B_20230629T225241_20230629T211448_C001 CS_OFFL_SIR_NOPN1B_20230629T231915_20230629T23021_C001 CS_OFFL_SIR_NOPN1B_20230629T231915_20230629T23021_C001 CS_OFFL_SIR_NOPN1B_20230629T231915_20230629T232021_C001 CS_OFFL_SIR_NOPN1B_20230629T231915_20230629T1255757_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T0445255_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T033525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T211328_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T225241_20230629T213448_C001 CS_OFFL_SIR_NOPN1B_20230629T225241_20230629T2132021_C001 CS_OFFL_SIR_NOPN1B_20230629T2125420_20230629T12577_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T12577_C001 CS_OFFL_SIR_NOPR1B_20230629T162543_20230629T162730_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T22619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T044750_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T21328_20230629T211448_C001 CS_OFFL_SIR_NOPN1B_20230629T225241_20230629T232021_C001 CS_OFFL_SIR_NOPN1B_20230629T231915_20230629T232021_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T125757_C001 CS_OFFL_SIR_NOPR1B_20230629T162543_20230629T162730_C001 CS_OFFL_SIR_NOPR1B_20230629T125420_20230629T162730_C001 CS_OFFL_SIR_NOPR1B_20230629T125420_20230629T162730_C001 CS_OF	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T22619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T093525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T225241_20230629T211448_C001 CS_OFFL_SIR_NOPN1B_20230629T231915_2023629T225347_C001 CS_OFFL_SIR_NOPN1B_20230629T231915_20230629T225347_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T125757_C001 CS_OFFL_SIR_NOPN1B_20230629T12543_20230629T162733_C001 CS_OFFL_SIR_NOPR1B_20230629T12543_20230629T201811_C001 CS_OFFL_SIR_NOPR1B_20230629T2011113_20230629T201811_C001 CS	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T22619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043451_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T03422_20230629T044750_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T213282_20230629T211448_C001 CS_OFFL_SIR_NOPN1B_20230629T225241_20230629T232021_C001 CS_OFFL_SIR_NOPN1B_20230629T231915_20230629T232021_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T125757_C001 CS_OFFL_SIR_NOPR1B_20230629T162543_20230629T162730_C001 CS_OFFL_SIR_NOPR1B_20230629T162543_20230629T162730_C001 CS_OFFL_SIR_NOPR1B_20230629T162543_20230629T162730_C001 CS_O	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T204505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T22619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T033525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T213128_20230629T11448_C001 CS_OFFL_SIR_NOPN1B_20230629T225241_20230629T225347_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T125757_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T162730_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T201811_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T201811_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T224916_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225716_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T22619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043451_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T093525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T11328_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T211328_20230629T211448_C001 CS_OFFL_SIR_NOPN1B_20230629T25241_20230629T25347_C001 CS_OFFL_SIR_NOPN1B_20230629T25241_20230629T25347_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T125757_C001 CS_OFFL_SIR_NOPN1B_20230629T1125420_20230629T125757_C001 CS_OFFL_SIR_NOPR1B_20230629T2115243_20230629T162730_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T21811_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T215557_C001 CS_OFFL_SIR_NOPR1B_20230629T25530_20230629T225716_C001 CS_OFFL_SIR_NOPR1B_20230629T25530_20230629T225716_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T22619_20230629T223532_C001 CS_OFFL_SIR_NOPM1B_20230629T225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T02246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T012246_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043355_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T093525_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T093525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T211328_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T25241_20230629T25347_C001 CS_OFFL_SIR_NOPN1B_20230629T2152420_20230629T23021_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T125757_C001 CS_OFFL_SIR_NOPN1B_20230629T11328_20230629T125757_C001 CS_OFFL_SIR_NOPR1B_20230629T162543_20230629T201111_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T225716_C001 CS_OFFL_SIR_NOPR1B_20230629T25530_20230629T225716_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225716_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225716_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T22619_20230629T220532_C001 CS_OFFL_SIR_NOPM1B_20230629T222619_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T012246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T093525_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T093525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T11328_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T25241_20230629T25347_C001 CS_OFFL_SIR_NOPN1B_20230629T25241_20230629T25347_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T125757_C001 CS_OFFL_SIR_NOPN1B_20230629T11328_20230629T125757_C001 CS_OFFL_SIR_NOPN1B_20230629T11328_20230629T125757_C001 CS_OFFL_SIR_NOPR1B_20230629T2114522_20230629T125757_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T215411_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T2255716_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225716_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225716_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225716_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225716_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		
CS_OFFL_SIR_NOPM1B_20230629T105253_20230629T110402_C001 CS_OFFL_SIR_NOPM1B_20230629T161848_20230629T162137_C001 CS_OFFL_SIR_NOPM1B_20230629T224505_20230629T210608_C001 CS_OFFL_SIR_NOPM1B_20230629T2225958_20230629T230147_C001 CS_OFFL_SIR_NOPM1B_20230629T02246_20230629T012730_C001 CS_OFFL_SIR_NOPN1B_20230629T012246_20230629T043411_C001 CS_OFFL_SIR_NOPN1B_20230629T043334_20230629T043455_C001 CS_OFFL_SIR_NOPN1B_20230629T043555_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T044626_20230629T043645_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T093525_C001 CS_OFFL_SIR_NOPN1B_20230629T093422_20230629T093525_C001 CS_OFFL_SIR_NOPN1B_20230629T134841_20230629T135023_C001 CS_OFFL_SIR_NOPN1B_20230629T152743_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T211328_20230629T152924_C001 CS_OFFL_SIR_NOPN1B_20230629T25241_20230629T25347_C001 CS_OFFL_SIR_NOPN1B_20230629T2152420_20230629T23021_C001 CS_OFFL_SIR_NOPN1B_20230629T125420_20230629T125757_C001 CS_OFFL_SIR_NOPN1B_20230629T162543_20230629T125757_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T21811_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T225776_C001 CS_OFFL_SIR_NOPR1B_20230629T215452_20230629T225776_C001 CS_OFFL_SIR_NOPR1B_20230629T25530_20230629T225776_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225776_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225776_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225716_C001 CS_OFFL_SIR_NOPR1B_20230629T225530_20230629T225716_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for		

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:
0

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

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.

53

> 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_20230629T011401_20230629T011448_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_20230629T042444_20230629T042543_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_20230629T161848_20230629T162137_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_20230629T002606_20230629T002746_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_20230629T011727_20230629T011906_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_20230629T012246_20230629T012730_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_20230629T021425_20230629T021701_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_20230629T025646_20230629T025820_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_20230629T030123_20230629T030231_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_20230629T034526_20230629T034917_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_20230629T044626_20230629T044750_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_20230629T052509_20230629T052823_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_20230629T053337_20230629T053453_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_20230629T061459_20230629T061630_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_20230629T071242_20230629T071358_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_20230629T075159_20230629T075349_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_20230629T075452_20230629T075617_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_20230629T093422_20230629T093525_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_20230629T102821_20230629T103212_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_20230629T110853_20230629T111112_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_20230629T111216_20230629T111426_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_20230629T112005_20230629T112146_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_20230629T120729_20230629T121105_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_20230629T124858_20230629T125249_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_20230629T125312_20230629T125419_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_20230629T134841_20230629T135023_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_20230629T170439_20230629T170753_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_20230629T201812_20230629T202049_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_20230629T202242_20230629T202906_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_20230629T210624_20230629T210804_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_20230629T211328_20230629T211448_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_20230629T225241_20230629T225347_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_20230629T233544_20230629T233743_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_20230629T011906_20230629T012245_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_20230629T025820_20230629T030122_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_20230629T030231_20230629T030322_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_20230629T042543_20230629T042652_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_20230629T043645_20230629T044433_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_20230629T061630_20230629T062542_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_20230629T075618_20230629T080404_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_20230629T093525_20230629T094049_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_20230629T110402_20230629T110503_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_NOPR_2_20230629T111426_20230629T112005_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_20230629T113502_20230629T114318_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_20230629T125249_20230629T125312_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_20230629T125420_20230629T125757_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_20230629T160859_20230629T161549_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_20230629T162543_20230629T162730_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_20230629T174615_20230629T175258_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_20230629T215452_20230629T215557_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_NOPR_2_20230629T224609_20230629T224754_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_20230629T224808_20230629T224916_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_20230629T224916_20230629T225241_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
5.5.1.2 Measurement Confidence Data Check		

5.5 L2 Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230629T230240_20230629T231300_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.

1

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

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20230629T000109_20230629T002431_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T002746_20230629T003631_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records
CS_OFFL_SIR_NOPM_2_20230629T003938_20230629T010337_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T013700_20230629T020332_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T021002_20230629T021425_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records
CS_OFFL_SIR_NOPM_2_20230629T021840_20230629T024237_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T031115_20230629T034208_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T034917_20230629T035505_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records
CS_OFFL_SIR_NOPM_2_20230629T035739_20230629T040250_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T040546_20230629T041351_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T043411_20230629T043511_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T044751_20230629T045821_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T045833_20230629T052124_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T052823_20230629T053337_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records
CS_OFFL_SIR_NOPM_2_20230629T054000_20230629T054904_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T055016_20230629T055442_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T061054_20230629T061242_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T061307_20230629T061443_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T062543_20230629T070023_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T070649_20230629T070825_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records
CS_OFFL_SIR_NOPM_2_20230629T070831_20230629T071242_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been se for one or more records
CS_OFFL_SIR_NOPM_2_20230629T071720_20230629T073654_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T073741_20230629T074208_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T080404_20230629T080653_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 beer set for one or more records
CS_OFFL_SIR_NOPM_2_20230629T080742_20230629T081157_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 beer set for one or more records

CS_OFFL_SIR_NOPM_2_20230629T081337_20230629T082335_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_20230629T082340_20230629T083226_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_20230629T083229_20230629T083935_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_20230629T084159_20230629T084724_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_20230629T084743_20230629T085007_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_20230629T085829_20230629T091057_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_20230629T091150_20230629T092852_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_20230629T093300_20230629T093422_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_20230629T095226_20230629T100152_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_20230629T100356_20230629T101834_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_20230629T102701_20230629T102821_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_20230629T103519_20230629T104744_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_20230629T105253_20230629T110402_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_20230629T114318_20230629T115743_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_20230629T120055_20230629T120537_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_20230629T121324_20230629T123858_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_20230629T131245_20230629T133333_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_20230629T133423_20230629T133649_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_20230629T134113_20230629T134452_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_20230629T135203_20230629T141927_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_20230629T145045_20230629T151638_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_20230629T151911_20230629T152406_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_20230629T152414_20230629T152743_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_20230629T153158_20230629T160547_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_20230629T162731_20230629T162843_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_20230629T164110_20230629T164807_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_20230629T165057_20230629T165220_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_20230629T165420_20230629T165534_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_20230629T171128_20230629T174615_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_20230629T194818_20230629T201113_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_20230629T203017_20230629T204133_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_20230629T204236_20230629T204428_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_20230629T204448_20230629T204500_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_20230629T204505_20230629T210608_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_20230629T211915_20230629T213555_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_20230629T213759_20230629T215227_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_20230629T220246_20230629T220656_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_20230629T220909_20230629T222117_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_20230629T222233_20230629T222410_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_20230629T222619_20230629T223532_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_20230629T225958_20230629T230147_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_20230629T230240_20230629T231300_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_20230629T232021_20230629T233312_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_20230629T234834_20230630T000432_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_20230629T044433_20230629T044543_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_20230629T111216_20230629T111426_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_20230629T124858_20230629T125249_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_20230629T134509_20230629T134514_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_20230629T163606_20230629T163655_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_20230629T160859_20230629T161549_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_20230629T162843_20230629T163035_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_20230629T163045_20230629T163129_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_20230629T202906_20230629T203017_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_20230629T204133_20230629T204236_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_20230629T215227_20230629T215320_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_20230629T225530_20230629T225716_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

L2 Quality Flags (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.

84

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20230629T010337_20230629T010613_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_20230629T012246_20230629T012730_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_20230629T012823_20230629T012945_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_20230629T020544_20230629T020715_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_20230629T025646_20230629T025820_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_20230629T034526_20230629T034917_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_20230629T042022_20230629T042128_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_20230629T042652_20230629T042710_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_20230629T052509_20230629T052823_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_20230629T055442_20230629T055552_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_20230629T060544_20230629T060624_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_20230629T070228_20230629T070649_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_20230629T071242_20230629T071358_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_20230629T075159_20230629T075349_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_20230629T085007_20230629T085153_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_20230629T092852_20230629T093300_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_20230629T102821_20230629T103212_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_20230629T110519_20230629T110643_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_20230629T110853_20230629T111112_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_20230629T112005_20230629T112146_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_20230629T115838_20230629T120055_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_20230629T120729_20230629T121105_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_20230629T125312_20230629T125419_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_20230629T133843_20230629T134112_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_20230629T134841_20230629T135023_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_20230629T152743_20230629T152924_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_20230629T160744_20230629T160859_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_20230629T163159_20230629T163303_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_20230629T165749_20230629T165910_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_20230629T170439_20230629T170753_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_20230629T201812_20230629T202049_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_20230629T211328_20230629T211448_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_20230629T215320_20230629T215452_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_20230629T220656_20230629T220832_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_20230629T223532_20230629T223734_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_20230629T231915_20230629T232021_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_20230629T234559_20230629T234747_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_20230629T002431_20230629T002606_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_20230629T011238_20230629T011401_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_20230629T011906_20230629T012245_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_20230629T020332_20230629T020544_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_20230629T025315_20230629T025514_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_20230629T025820_20230629T030122_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_20230629T034208_20230629T034526_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_20230629T042252_20230629T042444_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_20230629T043645_20230629T044433_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_20230629T052124_20230629T052509_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_20230629T061630_20230629T062542_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_20230629T075125_20230629T075159_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_20230629T075618_20230629T080404_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_20230629T083935_20230629T084036_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_20230629T085154_20230629T085829_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_20230629T093525_20230629T094049_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_20230629T103212_20230629T103318_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_20230629T104745_20230629T104816_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_20230629T104820_20230629T104933_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_20230629T104933_20230629T105126_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_20230629T105133_20230629T105225_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_20230629T110402_20230629T110503_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_20230629T110759_20230629T110853_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_20230629T111426_20230629T112005_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_20230629T113502_20230629T114318_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_20230629T115743_20230629T115838_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_20230629T125420_20230629T125757_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_20230629T125833_20230629T130010_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_20230629T135024_20230629T135203_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_20230629T143844_20230629T144116_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_20230629T144641_20230629T144744_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_20230629T160702_20230629T160743_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_20230629T160859_20230629T161549_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_20230629T162543_20230629T162730_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_20230629T163801_20230629T163934_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_20230629T170754_20230629T171128_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_20230629T201113_20230629T201811_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_20230629T213555_20230629T213718_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_20230629T213722_20230629T213759_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_20230629T215452_20230629T215557_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_20230629T222410_20230629T222504_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_20230629T222534_20230629T222609_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_20230629T224609_20230629T224754_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_20230629T224916_20230629T225241_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_20230629T225834_20230629T225957_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_20230629T231500_20230629T231642_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_20230629T231657_20230629T231857_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.

180

133

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

```
Number of products with errors:
```

5.7 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20 Hz)

CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz measurement record. The bit value of this flag indicates any problems when set.

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

Number of products with errors:

th errors: 55

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	140	140	4	136	0
SIR_NOPR1B	117	117	0	117	0
SIR_NOPN1B	94	94	1	93	0
SIR_NOPM_2	140	140	85	55	0
SIR_NOPR_2	117	117	53	63	1
SIR_NOPN_2	94	94	40	54	0

7.1 QCC Errors

Number of QCC reports with errors: 4 Total number of occurrences of each error											
			1		i otai number	of occurrences	s of each error				
Product Type RI	OBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_NOPR_2	1	1	1	1							
Test Description Key:											
Abbreviation	Test name			Details							
RLOBOPNCDF	RangeLa	RangeLatitudeOrBlankOP_7NetCDF			Latitude should be between -90E7 and 90E7 - NetCDF						
	RangeLa	RangeLatitude_7 Latitude should be between -90E7 and 90E7									
RL		ngitudeOrBlankO		Longitude should be between -180E7 and 180E7 - NetCDF							

7.2 QCC Warnings

Total number of occurrences of each warning								
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMN	
SIR_NOPM1B	136	0	0	0	0	0	0	
SIR_NOPM_2	0	0	41	42	0	46	0	
SIR_NOPN1B	93	0	0	0	0	0	0	
SIR_NOPN_2	0	0	6	22	4	18	20	
SIR_NOPR1B	113	0	0	0	0	0	0	
SIR_NOPR_2	0	1	35	49	1	28	22	
Product Type	RBSZOPOEPNCDF	RDTCONCDF	RIBCONCDF	RMSSGHOPONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNO	CRPEPOPFDPLRMSINNC	
SIR_NOPM1B	0	0	0	0	0	0	0	
SIR_NOPM_2	37	0	0	1	35	0	0	
SIR_NOPN1B	0	0	0	0	0	0	0	
SIR_NOPN_2	15	1	1	0	0	0	18	
SIR_NOPR1B	0	0	0	0	0	0	0	
SIR_NOPR_2	15	0	0	0	0	50	0	
Product Type	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	
SIR_NOPM1B	0	0	0	0	0	0	0	
SIR_NOPM_2	0	0	29	0	0	9	24	
SIR_NOPN1B	0	0	0	0	0	0	0	
SIR_NOPN_2	0	22	0	0	21	19	33	
SIR_NOPR1B	0	0	0	0	0	0	0	
SIR_NOPR_2	50	0	0	49	0	1	45	
Product Type	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SOOHHIFHD	
SIR_NOPM1B	0	0	0	0	0	0	0	
SIR_NOPM_2	0	4	34	0	6	0	0	
SIR_NOPN1B	0	0	0	0	0	0	0	
SIR_NOPN_2	43	25	19	21	6	1	1	
SIR_NOPR1B	0	0	0	0	0	0	0	
	31							

Test Description Key:					
Abbreviation	Test name	Details			
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter			
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)			
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees			
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees			
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only			
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees			
RBSZOPOEPFDPLRM 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			
RDTCONCDF	RangeDryTroposphericCorrectionOceanNetCDF	The Dry tropospheric correction should be between -2500mm and -1900mm (or missing) for surface type = ocean - NetCDF			
RIBCONCDF	RangeInverseBarometricCorrectionOceanNetCDF	The Inverse barometric correction should be between -2000mm and 2000mm (or missing) for surface type = ocean - NetCDF			
RMSSGHOPONCDF	RangeMSSGeoidHeightOPOceanNetCDF	#N/A			
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			
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch			
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample			

7.3 Missing QCC Reports

Number of products with missing QCC reports:

0