

IDEAS+ Daily Report for NOP data:

01/06/2019



eport Production: Processor Used: Data Used: Ssion / Instrument Nev 1-May-2019 None 1-Jun-2019 None 2-Jun-2019 Nothing p		Loverview Check Server check: science-pds.cryosat.esa.int Server check: science-pds.cryosat.esa.int Server check: science-pds.cryosat.esa.int Product Software Check Product Software Check Product Header Analysis Auxiliary Data File Usage Check Auxiliary Correction Error Check Measurement Confidence Data Check Measurement Quality Flag Check Ocean Retracking Quality Check Ocean Retracking Quality Check	L1 & L2 Nominal Nominal Nominal See Sections 4.2 and 5.2 Nominal See Section 5.4 See Section 5.4 See Section 5.6 See Section 5.7
Processor Used: Data Used: ssion / Instrument New 1-May-2019 None 1-Jun-2019 None	CryoSat Ocean Processor Near Real Time Ocean Products (NOP) L1B & L2 Science Data	Server check: science-pds.cryosat.esa.int Server check: calval-pds.cryosat.esa.int Product Software Check Product Format Check Product Header Analysis Auxiliary Data File Usage Check Auxiliary Correction Error Check Measurement Confidence Data Check Measurement Quality Flag Check Ocean Retracking Quality Check	Nominal Nominal Nominal See Sections 4.2 and 5.2 Nominal See Section 5.4 See Section 5.4 See Section 4.5, 4.6 See Section 5.6
Processor Used: Data Used: ssion / Instrument New 1-May-2019 None 1-Jun-2019 None	CryoSat Ocean Processor Near Real Time Ocean Products (NOP) L1B & L2 Science Data	Server check: science-pds.cryosat.esa.int Server check: calval-pds.cryosat.esa.int Product Software Check Product Format Check Product Header Analysis Auxiliary Data File Usage Check Auxiliary Correction Error Check Measurement Confidence Data Check Measurement Quality Flag Check Ocean Retracking Quality Check	Nominal Nominal Nominal See Sections 4.2 and 5.2 Nominal See Section 5.4 See Section 5.4 See Section 4.5, 4.6 See Section 5.6
Data Used: ssion / Instrument New 1-May-2019 None 1-Jun-2019 None	Near Real Time Ocean Products (NOP) L1B & L2 Science Data	Server check: calval-pds.cryosat.esa.int Product Software Check Product Format Check Product Header Analysis Auxiliary Data File Usage Check Auxiliary Correction Error Check Measurement Confidence Data Check Measurement Quality Flag Check Ocean Retracking Quality Check	Nominal Nominal See Sections 4.2 and 5.2 Nominal See Section 5.4 See Section 4.5, 4.6 See Section 5.6
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sion / Instrument Nev May-2019 None -Jun-2019 None	L1B & L2 Science Data	Product Format Check Product Header Analysis Auxiliary Data File Usage Check Auxiliary Correction Error Check Measurement Confidence Data Check Measurement Quality Flag Check Ocean Retracking Quality Check	Nominal See Sections 4.2 and 5.2 Nominal See Section 5.4 See Section 4.5, 4.6 See Section 5.6
ion / Instrument Nev May-2019 None Jun-2019 None	L1B & L2 Science Data	Auxiliary Data File Usage Check Auxiliary Correction Error Check Measurement Confidence Data Check Measurement Quality Flag Check Ocean Retracking Quality Check	Nominal See Section 5.4 See Section 4.5, 4.6 See Section 5.6
May-2019 None Jun-2019 None		Auxiliary Correction Error Check Measurement Confidence Data Check Measurement Quality Flag Check Ocean Retracking Quality Check	See Section 5.4 See Section 4.5, 4.6 See Section 5.6
May-2019 None Jun-2019 None		Measurement Confidence Data Check Measurement Quality Flag Check Ocean Retracking Quality Check	See Section 4.5, 4.6 See Section 5.6
May-2019 None Jun-2019 None		Measurement Quality Flag Check Ocean Retracking Quality Check	See Section 5.6
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SIRAL instrument(s) in use:

4. NOP Level 1B Data Quality Check

4.1 L1B Product Format Check

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

Number of products with errors:

4.2 L1B Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. Number of products with errors: 0

4.3 L1B Auxilary 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.

Dynamic Atmospheric Correction: The DAC is missing in all products because the auxiliary files required are not available in time for processing. This known and expected behaviour.

Number of products with errors:

4.4 L1B Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag for ea	ach measurement record. The bit value of this flag indicates any problems when set.
Number of products with errors:	0

4.5 L1B Measurement Confidence Data Check

CryoSat L1B data includes a measurement confidence flag for each measurement record. The bit value of this flag indicates any problems when set.

> Attitude Correction Missing: This flag is currently set in error for NOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.

 Number of products with errors:
 0

4.6 L1B Waveform Group Data Check

CryoSat L1B data includes a waveform data flag for each measurement record. The bit value of this flag indicates any problems when set.

> Loss of Echo Flag: This flag is currently set for products over land, but this is to be expected.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20190601T052859_20190601T054946_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190601T001626_20190601T002214_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190601T025445_20190601T025932_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190601T092233_20190601T092321_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190601T110624_20190601T110717_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20190601T224528_20190601T225002_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190601T055548_20190601T055650_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190601T120247_20190601T120709_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190601T123915_20190601T124030_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20190601T124327_20190601T124419_C001	Loss of Echo	The tracking echo is missing for one or more records

5. NOP Level 2 Data Quality Check

5.1 L2 Product Format Check

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

5.2 L2 Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. Number of products with errors: 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. Number of products with errors: 0

5.4 L2 Auxiliary Correction Error Check

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

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

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update.

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20190601T000446_20190601T001625_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_20190601T002214_20190601T002438_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPM_2_20190601T002508_20190601T002931_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPM_2_20190601T015959_20190601T020842_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPM_2_20190601T033918_20190601T034104_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPM_2_20190601T034206_20190601T034636_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPM_2_20190601T052122_20190601T052714_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPM_2_20190601T070028_20190601T070545_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPM_2_20190601T083909_20190601T084029_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPM_2_20190601T084036_20190601T084444_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records

CS_OFFL_SIR_NOPM_2_20190601T101408_20190601T101927_C001 CS_OFFL_SIR_NOPM_2_20190601T101933_20190601T101940_C001 CS_OFFL_SIR_NOPM_2_20190601T101947_20190601T102230_C001 CS_OFFL_SIR_NOPM_2_20190601T110215_20190601T110623_C001 CS_OFFL_SIR_NOPM_2_20190601T115832_20190601T115839_C001 CS_OFFL_SIR_NOPM_2_20190601T115845_20190601T115856_C001 CS_OFFL_SIR_NOPM_2_20190601T115845_20190601T115856_C001 CS_OFFL_SIR_NOPM_2_20190601T115904_20190601T120027_C001 CS_OFFL_SIR_NOPM_2_20190601T133236_20190601T133735_C001 CS_OFFL_SIR_NOPM_2_20190601T133743_20190601T133755_C001 CS_OFFL_SIR_NOPM_2_20190601T133801_20190601T133810_C001 CS_OFFL_SIR_NOPM_2_20190601T133817_20190601T133924_C001

CS_OFFL_SIR_NOPM_2_20190601T142010_20190601T142101_C001

CS OFFL SIR NOPM 2 20190601T165103 20190601T165606 C001 CS_OFFL_SIR_NOPM_2_20190601T165613_20190601T165941_C001 CS OFFL SIR NOPM 2 20190601T183102 20190601T183637 C001 CS OFFL SIR NOPM 2 20190601T201023 20190601T201533 C001 CS_OFFL_SIR_NOPM_2_20190601T215234_20190601T215436_C001 CS_OFFL_SIR_NOPM_2_20190601T233145_20190601T233345_C001 CS_OFFL_SIR_NOPM_2_20190601T233455_20190601T233847_C001 CS_OFFL_SIR_NOPN_2_20190601T001626_20190601T002214_C001 CS_OFFL_SIR_NOPN_2_20190601T002439_20190601T002508_C001 CS_OFFL_SIR_NOPN_2_20190601T002932_20190601T003111_C001 CS OFFL SIR NOPN 2 20190601T011030 20190601T011127 C001 CS OFFL SIR NOPN 2 20190601T011532 20190601T011742 C001 CS OFFL SIR NOPN 2 20190601T015819 20190601T015959 C001 CS_OFFL_SIR_NOPN_2_20190601T020842_20190601T021049_C001 CS_OFFL_SIR_NOPN_2_20190601T025445_20190601T025932_C001 CS_OFFL_SIR_NOPN_2_20190601T033754_20190601T033918_C001 CS_OFFL_SIR_NOPN_2_20190601T034105_20190601T034205_C001 CS OFFL SIR NOPN 2 20190601T034637 20190601T034730 C001

CS OFFL SIR NOPN 2 20190601T051728 20190601T052121 C001

CS_OFFL_SIR_NOPN_2_20190601T052714_20190601T052840_C001
CS_OFFL_SIR_NOPN_2_20190601T060556_20190601T060616_C001
CS_OFFL_SIR_NOPN_2_20190601T065715_20190601T070028_C001
CS_OFFL_SIR_NOPN_2_20190601T070545_20190601T070654_C001
CS_OFFL_SIR_NOPN_2_20190601T074147_20190601T074311_C001
CS_OFFL_SIR_NOPN_2_20190601T083455_20190601T083908_C001
CS_OFFL_SIR_NOPN_2_20190601T084444_20190601T084609_C001
CS_OFFL_SIR_NOPN_2_20190601T092419_20190601T092620_C001
CS_OFFL_SIR_NOPN_2_20190601T101237_20190601T101408_C001
CS_OFFL_SIR_NOPN_2_20190601T102231_20190601T102415_C001

ECMWF Meteo Corrections
Mean Dynamic Topography (1)
ECMWF Meteo Corrections
ECMWF Meteo Corrections, Inverse Barometric Correction, Mean Sea Surface (1), Mean Dynamic Topography

ECMWF Meteo Corrections ECMWF Meteo Corrections. Mean Sea Surface (1), Mean Dynamic Topography (1)ECMWF Meteo Corrections ECMWF Meteo Corrections Mean Dynamic Topography (1) ECMWE Meteo Corrections Mean Sea Surface (1), Mean Dynamic Topography (1) ECMWF Meteo Corrections, Mean Dynamic Topography (1) ECMWF Meteo Corrections, Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic Topography (1) ECMWF Meteo Corrections ECMWF Meteo Corrections ECMWF Meteo Corrections ECMWF Meteo Corrections, Inverse Barometric Correction, Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non Equilibrium Long Period Ocean Tide ECMWF Meteo Corrections Mean Dynamic Topography (1) ECMWF Meteo Corrections, Mean Se Surface (1), Mean Dynamic Topograp (1)ECMWE Meteo Corrections Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT) ECMWF Meteo Corrections, Mean Se

Surface (1), Mean Dynamic Topograph (1) ECMWF Meteo Corrections, Mean Sea Surface (1), Mean Dynamic Topograph (1)

ECMWF Meteo Corrections

ECMWF Meteo Corrections

ECMWF Meteo Corrections, Mean Sea Surface (1), Mean Dynamic Topography (1)

There is an error with the ECMWF Meteo Corrections for one or more records
There is an error with the Mean Dynamic Topography height for one or more records
There is an error with the ECMWF Meteo Corrections for one or more records
There is an error with the ECMWF Meteo Corrections for one or more records
There is an error with the ECMWF Meteo Corrections for one or more records
There is an error with the ECMWF Meteo Corrections for one or more records
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There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections for one or more records

Barometric Correction, Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide

> There is an error with the ECMWF Meteo Corrections for one or more records There is an error with the ECMWF Meteo Corrections for one or more

> records There is an error with the ECMWF Meteo Corrections for one or more

> records There is an error with the ECMWF Meteo Corrections for one or more

records There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records

There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the Mean Dynamic Topography height for one or more records

There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records

There is an error with the ECMWF Meteo Corrections and the Mean Sea Surface Height (solution 1) for one or more records

There is an error with the ECMWF Meteo Corrections and the Mean Sea Surface Height (solution 1) for one or more records There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 2)

There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) , and the some tidal corrections for one or more records

	There is an error with the ECMWF Meteo Corrections for one or more records
	There is an error with the Mean Dynamic Topography height for one or more records
	There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
	There is an error with the ECMWF Meteo Corrections for one or more records
I	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide height (GOT) for one or more records
ea ohy	There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
	There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
	There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections for one or more records

There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records

		There is an error with the ECMWF Meteo Corrections for one or more
CS_OFFL_SIR_NOPN_2_20190601T110039_20190601T110215_C001	ECMWF Meteo Corrections ECMWF Meteo Corrections, Mean Sea	records There is an error with the ECMWF Meteo Corrections, the Mean Sea
CS_OFFL_SIR_NOPN_2_20190601T110624_20190601T110717_C001	Surface (1), Mean Dynamic Topography (1)	Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20190601T115141_20190601T115323_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPN_2_20190601T115856_20190601T115904_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPN_2_20190601T120027_20190601T120247_C001	ECMWF Meteo Corrections, Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20190601T124419_20190601T124631_C001	ECMWF Meteo Corrections, Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide height (GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20190601T133039_20190601T133236_C001	ECMWF Meteo Corrections, Mean Dynamic Topography (1)	There is an error with the ECMWF Meteo Corrections and the Mean Sea Surface Height (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20190601T133755_20190601T133800_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPN_2_20190601T133810_20190601T133817_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPN_2_20190601T142102_20190601T142454_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 2)
CS_OFFL_SIR_NOPN_2_20190601T164933_20190601T165103_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPN_2_20190601T165606_20190601T165613_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPN_2_20190601T165941_20190601T170116_C001	ECMWF Meteo Corrections, Mean Dynamic Topography (1)	There is an error with the ECMWF Meteo Corrections and the Mean Sea Surface Height (solution 1) for one or more records
	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more
	ECMWF Meteo Corrections, Mean Sea	records There is an error with the ECMWF Meteo Corrections, the Mean Sea
CS_OFFL_SIR_NOPN_2_20190601T200902_20190601T201023_C001	Surface (1), Mean Dynamic Topography (1)	Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20190601T201533_20190601T201843_C001	ECMWF Meteo Corrections, Inverse Barometric Correction, 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 ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) and some tidal corrections for one or more records
CS_OFFL_SIR_NOPN_2_20190601T214952_20190601T215234_C001	ECMWF Meteo Corrections, Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20190601T215436_20190601T215815_C001	ECMWF Meteo Corrections, Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20190601T224528_20190601T225002_C001	ECMWF Meteo Corrections, Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide height (GOT) for one or more records
CS_OFFL_SIR_NOPN_2_20190601T232909_20190601T233145_C001	ECMWF Meteo Corrections, Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the ECMWF Meteo Corrections, the Mean Sea Surface Height (solution 1) and the Mean Dynamic Topography (solution 1) for one or more records
CS_OFFL_SIR_NOPN_2_20190601T233346_20190601T233454_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPN_2_20190601T233848_20190601T234027_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPR_2_20190601T042945_20190601T043512_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 2)
CS_OFFL_SIR_NOPR_2_20190601T055801_20190601T055947_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_20190601T060854_20190601T061645_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 2)
CS_OFFL_SIR_NOPR_2_20190601T074712_20190601T075947_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 2)
CS_OFFL_SIR_NOPR_2_20190601T084030_20190601T084036_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPR_2_20190601T092822_20190601T093610_C001	Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_NOPR_2_20190601T101928_20190601T101933_C001	Topography (1) ECMWF Meteo Corrections	Topography height (solution 2) There is an error with the ECMWF Meteo Corrections for one or more
CS OFFL SIR NOPR 2 20190601T101941 20190601T101947 C001	ECMWF Meteo Corrections	records There is an error with the ECMWF Meteo Corrections for one or more
	Mean Sea Surface (1), Mean Dynamic	records There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_NOPR_2_20190601T110718_20190601T111258_C001	Topography (1)	Topography height (solution 2) There is an error with the ECMWF Meteo Corrections for one or more
CS_OFFL_SIR_NOPR_2_20190601T115825_20190601T115832_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more
CS_OFFL_SIR_NOPR_2_20190601T115839_20190601T115844_C001	ECMWF Meteo Corrections	records
CS_OFFL_SIR_NOPR_2_20190601T124632_20190601T125320_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 2)
CS_OFFL_SIR_NOPR_2_20190601T130704_20190601T131128_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_20190601T133736_20190601T133743_C001	ECMWF Meteo Corrections	There is an error with the ECMWF Meteo Corrections for one or more records
CS_OFFL_SIR_NOPR_2_20190601T142455_20190601T143012_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 2)
CS_OFFL_SIR_NOPR_2_20190601T175740_20190601T175938_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

5.5 L2 Measurement Confidence Data Check

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

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20Hz)

CryoSat L2 data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record. The bit value of this flag indicates any problems when set.

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

> Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags: These flags are currently set for some records over ocean.

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

Product	Test Failed	Description
	Ocean Altimeter Range Quality, Ocean	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_NOPM_2_20190601T000446_20190601T001625_C001	SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T002508_20190601T002931_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_20190601T003158_20190601T004615_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T004755_20190601T010319_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T012444_20190601T013153_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T013316_20190601T013804_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T014043_20190601T015654_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T015959_20190601T020842_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_20190601T021114_20190601T023330_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T031245_20190601T033547_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T033918_20190601T034104_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_20190601T034206_20190601T034636_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_20190601T035039_20190601T041916_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T044522_20190601T045822_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T050359_20190601T051447_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T052122_20190601T052714_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_20190601T052859_20190601T054946_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality Ocean Altimeter Range Quality, Ocean	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T055225_20190601T055548_C001	SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T061940_20190601T065339_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T070028_20190601T070545_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_20190601T070831_20190601T071026_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T074311_20190601T074711_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T075947_20190601T080830_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T081116_20190601T083247_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T084036_20190601T084444_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_20190601T084802_20190601T085951_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T090139_20190601T090854_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T090936_20190601T091413_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T092332_20190601T092344_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T093932_20190601T101156_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T101408_20190601T101927_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_20190601T103030_20190601T110038_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T110215_20190601T110623_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_20190601T112128_20190601T113347_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T113551_20190601T115108_C001	Ocean Backscatter Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T115323_20190601T115825_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_20190601T120745_20190601T121806_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T122425_20190601T123649_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T131128_20190601T131341_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T131550_20190601T133007_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T133236_20190601T133735_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_20190601T134433_20190601T141755_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T161429_20190601T164911_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T165103_20190601T165606_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_20190601T165613_20190601T165941_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_20190601T170320_20190601T171416_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T171953_20190601T173724_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T182251_20190601T182813_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T183102_20190601T183637_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_20190601T184255_20190601T191638_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T192939_20190601T193042_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T194907_20190601T200715_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T202145_20190601T205554_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T212008_20190601T212429_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T212525_20190601T214302_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T220151_20190601T222013_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T222337_20190601T223144_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T225040_20190601T230832_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T230950_20190601T232341_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T233145_20190601T233345_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_20190601T233455_20190601T233847_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_20190601T234044_20190601T235606_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20190601T235808_20190602T000731_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T110039_20190601T110215_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_20190601T110624_20190601T110717_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality Ocean Altimeter Range Quality Ocean	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T192821_20190601T192846_C001	Ocean Altimeter Range Quality, Ocean SSHA Quality, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.

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

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

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

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Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20190601T001626_20190601T002214_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records.
S_OFFL_SIR_NOPN_2_20190601T002932_20190601T003111_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T025445_20190601T025932_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
S_OFFL_SIR_NOPN_2_20190601T034105_20190601T034205_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records.
CS_OFFL_SIR_NOPN_2_20190601T042929_20190601T042944_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
S_OFFL_SIR_NOPN_2_20190601T051728_20190601T052121_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records.
CS_OFFL_SIR_NOPN_2_20190601T052714_20190601T052840_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records.
CS_OFFL_SIR_NOPN_2_20190601T065715_20190601T070028_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one on more records.
CS_OFFL_SIR_NOPN_2_20190601T070545_20190601T070654_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records.
CS_OFFL_SIR_NOPN_2_20190601T083455_20190601T083908_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T084444_20190601T084609_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T092419_20190601T092620_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T110039_20190601T110215_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records.
CS_OFFL_SIR_NOPN_2_20190601T124031_20190601T124327_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
S_OFFL_SIR_NOPN_2_20190601T124419_20190601T124631_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T142102_20190601T142454_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T174823_20190601T174849_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T201533_20190601T201843_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one on more records.
CS_OFFL_SIR_NOPN_2_20190601T215436_20190601T215815_C001	OCOG Altimeter Range Quanty PLRM, OCOG Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality Ocean Backcotter	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags, and the OCOG Altimeter Range and Backscatter Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20190601T224528_20190601T225002_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
S_OFFL_SIR_NOPN_2_20190601T233848_20190601T234027_C001	Ocean Aumieter Range Quanty PLRW, OCOG Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality Crean Backscatter	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags, and the OCOG Altimeter Range and Backscatter Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T011743_20190601T011855_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T033547_20190601T033753_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T034858_20190601T035039_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T042945_20190601T043512_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T051447_20190601T051727_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T052841_20190601T052858_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T060710_20190601T060803_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T060854_20190601T061645_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T065340_20190601T065715_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPR_2_20190601T070655_20190601T070831_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
S_OFFL_SIR_NOPR_2_20190601T074712_20190601T075947_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.
	Ocean Altimeter Range Quality PLRM,	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags

CS_OFFL_SIR_NOPR_2_20190601T092822_20190601T093610_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T102416_20190601T103029_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T110718_20190601T111258_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T111716_20190601T111930_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T120247_20190601T120709_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T124632_20190601T125320_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T142455_20190601T143012_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T161012_20190601T161308_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T164912_20190601T164932_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T170117_20190601T170319_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T182814_20190601T182947_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T183957_20190601T184255_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T192814_20190601T192821_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T200716_20190601T200902_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T201844_20190601T202145_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T210954_20190601T212008_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T214303_20190601T214952_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T220006_20190601T220151_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
CS_OFFL_SIR_NOPR_2_20190601T232342_20190601T232908_C001	Ocean Altimeter Range Quality PLRM, Ocean SSHA Quality PLRM, Ocean SWH Quality, Ocean Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	
L2 Quality Flags (1 Hz & 1Hz PLRM)			
Currently, there are several common flags raised in the Level 2 products	which are summarized below		

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

166

129

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

Number of products with errors:

5.7 L2 Ocean Retracking Quality Check			
L2 Quality Flags (20Hz)			
CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.			
Ocean Retracking Quality Flag: This flag is currently set for products falling at ocean/ land boundaries, but this is expected.			
Number of products with errors:	56		
L2 Quality Flags (20Hz, PLRM)			
CryoSat L2 data includes an ocean retracking quality flag for each 20-Hz PLRM measurement record. The bit value of this flag indicates any problems when set.			
Ocean Retracking Quality Flag (PLRM): This flag is currently set for products NOPR and NOPN products over sea ice, but this is to be expected.			