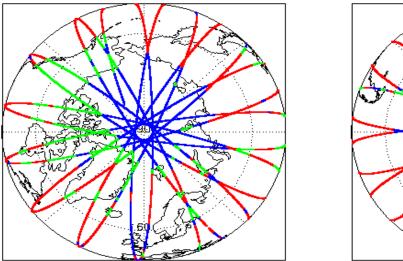


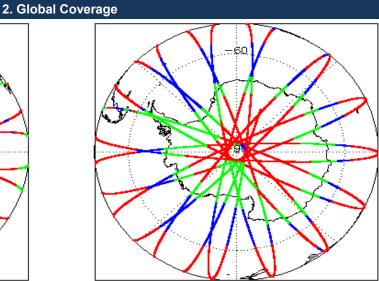
## IDEAS+ Daily Report for OFFLINE data:

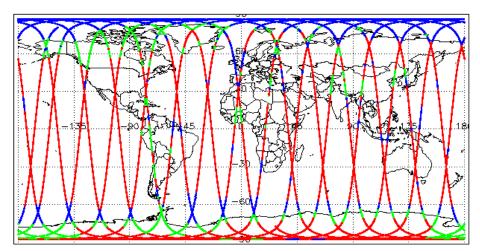
## <u>23/10/2019</u>

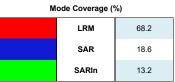
1. Overview			
Proved Production Proto		Check Status	
Report Production Date:	22-Nov-2019	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used: Data Used:	CryoSat Ice Processor	Server check: calval-pds.cryosat.esa.int	Nominal
		Product Software Check	Nominal
	L1B and L2 OFFLINE Data	Product Format Check	Nominal
		Product Header Analysis	Nominal
		Star Tracker Usage Check	Nominal
		L1B Tracking Flag Check	See Section 4.4
		L1B Calibration Usage Check	See Section 4.5
		L1B & L2 Auxiliary Data File Usage Check	Nominal
		L1B & L2 Auxiliary Correction Error Check	Nominal
		L1B & L2 Measurement Confidence Data Check	See Section 4.8 and 5.5

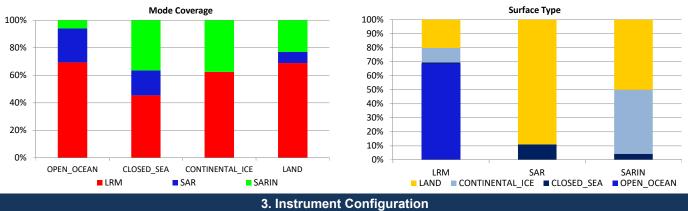
Mission / Instru	ment News	
22-Oct-2019	None	
23-Oct-2019	None	
24-Oct-2019	Nothing planned	











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

SIRAL - A

## 4. 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 product file (.DBL).

## Number of products with errors:

### 4.2 L1B Product Header Analysis

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

Number of products with errors:

### 4.3 Star Tracker Usage Check

Each product is checked in order to ensure a valid star tracker file has been used in processing.

0

Number of products with errors:

### 4.4 L1B Tracking Flags Check

CryoSat L1B data includes a tracking 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 some products over land, but this is to be expected.

CS\_OFFL\_SIR\_LRM\_1B\_20191023T132604\_20191023T133055\_D001

ProductTest FailedDescriptionCS_OFFL_SIR_LRM_1B_20191023T000613_20191023T002002_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T0112140_20191023T012140_20101Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T012140_20191023T022051_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T012207_20191023T02202_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T03207_20191023T03220_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032206_20191023T03220_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032206_20191023T03221_0001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032204_20191023T032317_0001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034019_20191023T03337_0001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034142_20191023T04284_0001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T043448_20191023T04284_0001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T04484_20191023T04284_0001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T0500502_20191023T050482_00101Loss of echoThe tracking echo is missi
CS_OFFL_SIR_LRM_18_20191023T011615_20191023T01210Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T012140_20191023T020251_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T02217_20191023T0220315_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T023012_2007_20191023T032202_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T032207_20191023T032224_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T032224_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T032237_D011023T032347_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T032340_20191023T033537_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T034405_20191023T034503_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T04436_20191023T04434_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T043043_20191023T044343_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T050403_20191023T04444_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T050403_20191023T04444_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_18_20191023T050403_20
CS_OFFL_SIR_LRM_1B_20191023T012140_20191023T012320_D0011Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T014221_20191023T022015_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T022017_20191023T022015_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032206_20191023T032202_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032206_20191023T032224_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032327_20191023T032314_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032317_20191023T03337_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T033414_D019_2019023T0334144_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034144_D019023T0434144_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T0434146_20191023T043041230_D011Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T043408_20191023T04284_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T043448_20191023T043443_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050407_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_2019
CS_OFFL_SIR_LRM_1B_20191023T014221_20191023T020521_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T022617_20191023T032202_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T03226_20191023T032224_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032226_20191023T03224_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032226_20191023T032337_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032304_02191023T033337_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T03240_20191023T033414_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034042_0191023T034144_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T04164_20191023T044084_20191023T044084_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T040454_20191023T044083_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050032_20191023T050047_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050032_20191023T050047_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050122_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_2
CS_OFFL_SIR_LRM_1B_20191023T022617_20191023T022015_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032206_20191023T032224_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032226_20191023T032224_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032226_20191023T032237_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T032340_20191023T03237_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T03240_20191023T033414_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034019_20191023T034144_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034019_20191023T034144_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034146_20191023T0340135703_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050032_20191023T050047_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050032_20191023T050042_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050032_20191023T050042_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050030_20191023T050042_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_L
CS_OFFL_SIR_LRM_112_20191023T032107_20191023T032202_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T03226_20191023T032234_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T03226_20191023T032337_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T032340_20191023T03337_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T03240_20191023T034144_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T034019_20191023T034146_20191023T03703_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T041543_20191023T042834_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T040408_20191023T0540438_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T050032_20191023T050047_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T050103_20191023T050012_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T050103_20191023T050012_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T050103_20191023T050012_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_118_20191023T0501042_20191023T050403_D001Loss of echoThe tracking echo is missing for one or more records </td
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CS_OFFL_SIR_LRM_1B_20191023T032340_20191023T033537_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034146_20191023T034144_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034146_20191023T042834_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T043048_20191023T042834_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T04048_20191023T0404938_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050032_20191023T050047_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T05005_2D01Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T05005_20191023T050052_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T05013_20191023T050112_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T05013_20191023T050122_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050142_20191023T050408_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050406_20191023T050400_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050406_20191023T05038_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050406_2
CS_OFFL_SIR_LRM_1B_20191023T034144_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T034146_20191023T035703_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T041543_20191023T044284_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T04048_20191023T044048_20191023T044038_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050032_20191023T050047_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050050_20191023T050052_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050103_20191023T050112_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050117_20191023T050112_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050117_20191023T050122_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050104_20191023T050403_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050104_20191023T050403_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050104_20191023T050543_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20191023T050104_2019023T055533_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1
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CS_OFFL_SIR_LRM_1B_20191023T050406_20191023T050640_D001       Loss of echo       The tracking echo is missing for one or more records         CS_OFFL_SIR_LRM_1B_20191023T051011_20191023T052038_D001       Loss of echo       The tracking echo is missing for one or more records         CS_OFFL_SIR_LRM_1B_20191023T052218_20191023T05552_D001       Loss of echo       The tracking echo is missing for one or more records         CS_OFFL_SIR_LRM_1B_20191023T055548_20191023T055833_D001       Loss of echo       The tracking echo is missing for one or more records         CS_OFFL_SIR_LRM_1B_20191023T055548_20191023T055833_D001       Loss of echo       The tracking echo is missing for one or more records         CS_OFFL_SIR_LRM_1B_20191023T060142_20191023T060430_D001       Loss of echo       The tracking echo is missing for one or more records
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CS_OFFL_SIR_LRM_1B_20191023T055548_20191023T055833_D001       Loss of echo       The tracking echo is missing for one or more records         CS_OFFL_SIR_LRM_1B_20191023T060142_20191023T060430_D001       Loss of echo       The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T060142_20191023T060430_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T061001_20191023T061013_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T061015_20191023T061116_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T061549_20191023T062259_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T063858_20191023T064114_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T064117_20191023T064440_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T064453_20191023T064455_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T064459_20191023T064758_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T064803_20191023T064805_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T065111_20191023T065243_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T073056_20191023T080420_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T082128_20191023T082603_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T083016_20191023T085350_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T090246_20191023T090611_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T095907_20191023T100421_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T100511_20191023T102735_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T113711_20191023T113801_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T114035_20191023T114413_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T114431_20191023T114508_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T115050_20191023T115545_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T115609_20191023T120322_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T125301_20191023T130446_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T132213_20191023T132314_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T132357_20191023T132519_D001 Loss of echo The tracking echo is missing for one or more records

Loss of echo

The tracking echo is missing for one or more records

CS_OFFL_SIR_LRM_1B_20191023T140821_20191023T143420_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T143559_20191023T144249_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T144252_20191023T144303_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T144306_20191023T144316_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T144321_20191023T144328_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T144333_20191023T144337_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T155258_20191023T160335_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T160338_20191023T160433_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T160456_20191023T161415_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T161752_20191023T162008_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T162011_20191023T162051_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T162054_20191023T162244_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T162246_20191023T162248_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T162250_20191023T162251_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T162256_20191023T162302_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T162308_20191023T162309_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T162311_20191023T162408_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T165531_20191023T165831_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T165938_20191023T171052_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T171701_20191023T171928_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T172720_20191023T174101_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T174241_20191023T174336_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T174339_20191023T174939_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T174949_20191023T175305_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T175308_20191023T175731_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T175735_20191023T175755_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T175828_20191023T180413_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T181607_20191023T181810_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T181933_20191023T182238_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T182807_20191023T183346_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T183439_20191023T185049_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T192836_20191023T192930_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T193314_20191023T193408_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T193542_20191023T193912_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T195642_20191023T200451_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T200453_20191023T200732_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T204623_20191023T211159_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T211202_20191023T212020_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T213840_20191023T214117_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T222531_20191023T224957_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T225136_20191023T225248_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T225426_20191023T225546_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T225620_20191023T225748_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20191023T225951_20191023T230038_D001	Loss of echo	The tracking echo is missing for one or more records
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## 4.5 L1B Calibration Usage Check

Each product is checked in order to ensure that the necessary calibration files have been used in processing.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_SIN_1B_20191023T132349_20191023T132357_D001	Cal1 correction missing	The Cal1 correction has not been applied

# 4.6 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.
Number of products with errors:
0

## 4.7 L1B Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag (field 54) for each measurement record. The bit value of this flag indicates any problems when set.
Number of products with errors:
0

### 4.8 L1B Measurement Confidence Data Check

CrvoSat L1B data includes a measurement confidence flag (field 18) for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common error flags raised in the Level 1B products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Block Degraded Flag: This flag is currently set for a number of individual records generally at the start or end of products (all modes), but this is to be expected.

Phase Perturbation Flag: This flag is currently set for all L1B SARIn products, indicating that the ADC correction application is deactivated, but this is in line with the current configuration.

Number of products with errors: 2

Product	Test Failed	Description
CS_OFFL_SIR_LRM_1B_20191023T225426_20191023T225546_D001	Echo error IRK echo error	The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo
CS_OFFL_SIR_SIN_1B_20191023T132349_20191023T132357_D001	Cal1 Correction missing	The Cal1 correction has not been applied

5. 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 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 carried out on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

#### 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

CryoSat L2 data includes a correction error flag (field 30) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

#### 5.5 L2 Measurement Quality Flag Check

CryoSat L2 data includes a quality flag (field 50) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common error flags raised in the Level 2 products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Freeboard error: This flag is correctly set in all L2 SAR products that are not discriminated as sea-ice, and for which freeboard cannot be calculated.

Height and Backscatter errors: These flags are currently set for products over land, but this is to be expected. Retracker 1 Height and Backscatter error flags are also set for products over sea-ice, but this is to be expected.

Peakiness error: This flag is currently set for products over sea-ice, but this is to be expected.

65

SARIN X-Track Angle Error: This flag is set when the difference between the computed surface elevation and the DEM is >50 m. The DEM is only available over Greenland and Antarctica and as a result this flag is set for L2 SARIn products in all other locations as expected.

SSHA interpolation error: This flag is currently set for a number of SAR products occurring at surface type boundaries, but this is to be expected.

#### Number of products with errors:

Test Failed Product Description There is a height and backscatter error for Retracker 2 , a height error for Height Error (Retracker 2), Height Error CS\_OFFL\_SIR\_LRM\_2\_\_20191023T000613\_20191023T003902\_D001 (Retracker 3), Backscatter Error Retracker 3 and no DEM or Slope Model was used for the location of one (Retracker 2). Surface Model Unavailable or more records Height Error (Retracker 2), Height Error There is a height and backscatter error for Retracker 2 and a height error CS\_OFFL\_SIR\_LRM\_2\_\_20191023T005642\_20191023T011254\_D001 (Retracker 3), Backscatter Error for Retracker 3 for one or more records (Retracker 2) Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 and no DEM or Slope Model was used for the location of one or more records CS\_OFFL\_SIR\_LRM\_2\_\_20191023T014221\_20191023T020521\_D001 Error (Retracker 2), Surface Model Unavailable Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20191023T020632\_20191023T021747\_D001 Error (Retracker 2) ecords Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20191023T023536\_20191023T030114\_D001 Error (Retracker 2) records Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20191023T030131\_20191023T030903\_D001 Error (Retracker 2) records Height Error (Retracker 2), Height Error There is a height and backscatter error for Retracker 2 and a height error CS OFFL SIR LRM 2 20191023T032340 20191023T033537 D001 (Retracker 3), Backscatter Error for Retracker 3 for one or more records (Retracker 2) Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS OFFL SIR LRM 2 20191023T034019 20191023T034144 D001 Error (Retracker 2) records Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20191023T034146\_20191023T035703\_D001 Error (Retracker 2) ecords Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20191023T041543\_20191023T042834\_D001 Error (Retracker 2) records Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20191023T043048\_20191023T044938\_D001 Error (Retracker 2) records CS OFFL SIR LRM 2 20191023T050032 20191023T050047 D001 Surface Model Unavailable No DEM or Slope Model was used for the location of one or more records Height Error (Retracker 2), Height Error There is a height and backscatter error for Retracker 2 and a height error CS\_OFFL\_SIR\_LRM\_2\_\_20191023T051011\_20191023T052038\_D001 (Retracker 3), Backscatter Error for Retracker 3 for one or more records (Retracker 2)

	Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_220191023T052218_20191023T053552_D001	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220191023T060142_20191023T060430_D001	(Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220191023T061215_20191023T061425_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T061549_20191023T062259_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T062422_20191023T062633_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220191023T064117_20191023T064440_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220191023T065111_20191023T065243_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220191023T065319_20191023T065650_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T065826_20191023T071445_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T073056_20191023T080420_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T081902_20191023T082004_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T082128_20191023T082603_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220191023T083016_20191023T085350_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T090959_20191023T094143_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T095600_20191023T095620_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T100511_20191023T102735_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220191023T102901_20191023T103310_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T105051_20191023T112240_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T113711_20191023T113801_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T122924_20191023T125015_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T125301_20191023T130446_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220191023T133428_20191023T133910_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T134058_20191023T135043_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T140821_20191023T143420_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220191023T143559_20191023T144249_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Surface Model Unavailable	There is a height and backscatter error for Retracker 2 , a height error for Retracker 3 and no DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220191023T145723_20191023T150418_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T150433_20191023T152844_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T155258_20191023T160335_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220191023T160338_20191023T160433_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T160456_20191023T161415_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T162256_20191023T162302_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220191023T162311_20191023T162408_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220191023T163734_20191023T165207_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T165938_20191023T171052_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T172720_20191023T174101_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records

CS_OFFL_SIR_LRM_220191023T174241_20191023T174336_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T174339_20191023T174939_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T181607_20191023T181810_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2), Surface Model Unavailable	There is a height and backscatter error for Retracker 2 and no DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220191023T182255_20191023T182643_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220191023T182807_20191023T183346_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T183439_20191023T185049_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T190703_20191023T192802_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T194054_20191023T194148_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T200736_20191023T203018_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T204623_20191023T211159_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T213840_20191023T214117_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T214243_20191023T220801_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T222531_20191023T224957_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220191023T225136_20191023T225248_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220191023T230105_20191023T230243_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220191023T231433_20191023T234741_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_SIN_220191023T132349_20191023T132357_D001	Calibration Warning	The Calibration correction is missing or has been taken from the IPFDB instead of the Calibration products for one or more records