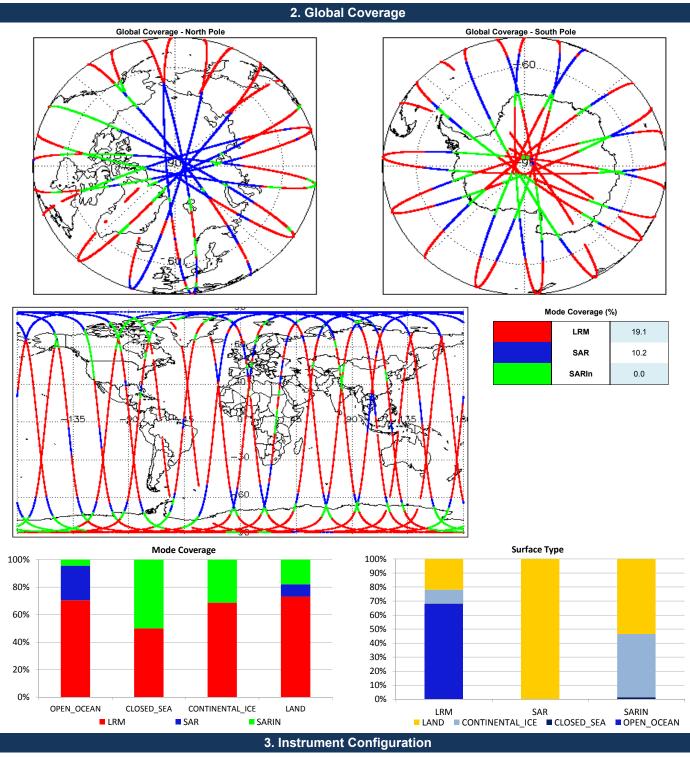


IDEAS+ Daily Report for OFFLINE data:

20/10/2016

1. Overview					
Report Production Date:	22-Nov-2016	Check	Status		
Report Production Date.	22-1100-2018	Server check: science-pds.cryosat.esa.int	Nominal		
Processor Used:	CryoSat Ice Processor	Server check: calval-pds.cryosat.esa.int	Nominal		
Processor Used.		Product Software Check	Nominal		
Dete Heed	L1B and L2 OFFLINE Data	Product Format Check	Nominal		
Data Used:		Product Header Analysis	Nominal		
		Star Tracker Usage Check	Nominal		
		L1B Calibration Usage Check	Nominal		
		L1B & L2 Auxiliary Data File Usage Check	Nominal		
		L1B & L2 Auxiliary Correction Error Check	Nominal		
		11B & 12 Measurement Confidence Data Check	See Section 4.7 and 5.5		

Mission / Instrument News				
19-Oct-2016	None			
20-Oct-2016	SIRAL unavailability on 20-Oct-2016 from 04:06:22 to 05:52:41 due to a planned orbit manoeuvre. L0 SAR & SARIn data missing from 08:56:54 to 12:12:53 due to an unplanned ground segment anomaly.			
21-Oct-2016	Nothing planned			



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

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.
Number of products with errors:
0

4.3 Star Tracker Usage Check

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

Number of products with errors:

4.4 L1B Calibration Usage Check

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

Number of products with errors:

4.5 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

Number of products with errors.

4.6 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:

4.7 L1B Measurement Confidence Data Check

CryoSat 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: 1

Test Failed

Number of products with errors

Product

CS_OFFL_SIR_LRM_1B_20161020T115836_20161020T121129_C001

Echo error, TRK echo error

Description The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo

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:

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. 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.

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.

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.

Product	Test Failed	Description
CS_0FFL_SIR_LRM_220161020T000644_20161020T002025_C001	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS OFFL SIR LRM 2 20161020T002205 20161020T002448 C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS OFFL SIR LRM 2 _20161020T005853 20161020T010443 C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220161020T010726_20161020T013014_C001	Error (Retracker 2)	records
CS_OFFL_SIR_LRM_220161020T013402_20161020T014249_C001	Surface Model Unavailable Height Error (Retracker 2), Backscatter	No DEM or Slope Model was used for the location of one or more records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220161020T014630_20161020T020904_C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220161020T023601_20161020T030934_C001	Error (Retracker 2)	records
CS_OFFL_SIR_LRM_220161020T032549_20161020T034925_C001	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_220161020T040042_20161020T040310_C001	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_220161020T055403_20161020T062705_C001	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_220161020T064635_20161020T070152_C001	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_220161020T071708_20161020T071915_C001	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_220161020T071921_20161020T072114_C001	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_220161020T073125_20161020T074242_C001	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_220161020T074527_20161020T080635_C001	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_220161020T082425_20161020T084822_C002	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_220161020T085735_20161020T085802_C001	Height Error (Retracker 2) 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_220161020T091003_20161020T094544_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	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_220161020T095355_20161020T095619_C001	(Retracker 2) Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_201610201095355_201610201095619_C001	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220161020T101757_20161020T103502_C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220161020T105635_20161020T110802_C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220161020T111005_20161020T112433_C001	Error (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_220161020T114131_20161020T115332_C001	Error (Retracker 2)	records
CS_OFFL_SIR_LRM_220161020T115836_20161020T121129_C001	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_220161020T121253_20161020T121501_C001	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_220161020T124927_20161020T130316_C001	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_220161020T131225_20161020T131337_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220161020T131941_20161020T134506_C001	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_220161020T141857_20161020T144218_C001	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_220161020T145123_20161020T145449_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220161020T145820_20161020T151050_C001	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_220161020T151451_20161020T152543_C001	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_220161020T155355_20161020T162139_C002	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_220161020T163021_20161020T163350_C002	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220161020T163852_20161020T164830_C002	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_220161020T165405_20161020T171156_C002	Height Error (Retracker 2) 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_220161020T172325_20161020T172612_C002	Height Error (Retracker 2) Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220161020T181817_20161020T185250_C002	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	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_220161020T190254_20161020T190516_C002	(Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	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_220161020T191404_20161020T193853_C002	(Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
	Error (Retracker 2) Surface Model Unavailable	records No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220161020T194436_20161020T194941_C002	Height Error (Retracker 2), Height Error	
CS_OFFL_SIR_LRM_220161020T195641_20161020T203243_C002	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220161020T205420_20161020T211715_C002	Error (Retracker 2)	records
CS_OFFL_SIR_LRM_220161020T212652_20161020T212845_C002	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records

CS_OFFL_SIR_LRM_220161020T213629_20161020T215103_C002
CS_OFFL_SIR_LRM_220161020T215105_20161020T215124_C002
CS_OFFL_SIR_LRM_220161020T215128_20161020T215307_C002
CS_OFFL_SIR_LRM_220161020T215749_20161020T221010_C002
CS_OFFL_SIR_LRM_220161020T222444_20161020T224201_C002
CS_OFFL_SIR_LRM_220161020T224408_20161020T225826_C002
CS_OFFL_SIR_LRM_220161020T231524_20161020T233013_C002
CS_OFFL_SIR_LRM_220161020T233214_20161020T234136_C002
CS_OFFL_SIR_SIN_220161020T000339_20161020T000519_C001
CS_OFFL_SIR_SIN_220161020T004945_20161020T005155_C001
CS_OFFL_SIR_SIN_220161020T005249_20161020T005517_C001
CS_OFFL_SIR_SIN_220161020T013223_20161020T013401_C001
CS_OFFL_SIR_SIN_220161020T014250_20161020T014448_C001
CS_OFFL_SIR_SIN_220161020T022902_20161020T023346_C001
CS_OFFL_SIR_SIN_220161020T031200_20161020T031331_C001
CS OFFL SIR SIN 2 20161020T031507 20161020T031617 C001
CS_OFFL_SIR_SIN_220161020T032041_20161020T032316_C001
CS_OFFL_SIR_SIN_220161020T063123_20161020T063437_C001
CS_OFFL_SIR_SIN_220161020T063951_20161020T064106_C001
CS_OFFL_SIR_SIN_220161020T080840_20161020T081303_C001
CS_OFFL_SIR_SIN_220161020T081855_20161020T082011_C001
CS_OFFL_SIR_SIN_220161020T121827_20161020T122037_C001
CS_OFFL_SIR_SIN_220161020T130444_20161020T130702_C001
CS_OFFL_SIR_SIN_220161020T131203_20161020T131208_C001
CS_OFFL_SIR_SIN_220161020T131338_20161020T131716_C001
CS_OFFL_SIR_SIN_220161020T140408_20161020T140443_C001
CS_OFFL_SIR_SIN_220161020T144451_20161020T144722_C001
CS_OFFL_SIR_SIN_220161020T145649_20161020T145632_C001
CS_OFFL_SIR_SIN_220161020T154429_20161020T154450_C001
CS_OFFL_SIR_SIN_220161020T162350_20161020T162517_C001
CS_OFFL_SIR_SIN_220161020T163014_20161020T163021_C001
CS_OFFL_SIR_SIN_220161020T163350_20161020T163530_C001
CS_OFFL_SIR_SIN_220161020T180355_20161020T180515_C001
CS_OFFL_SIR_SIN_220161020T181045_20161020T181400_C001
CS_OFFL_SIR_SIN_220161020T190158_20161020T190253_C001
CS_OFFL_SIR_SIN_220161020T194321_20161020T194435_C001
CS_OFFL_SIR_SIN_220161020T194941_20161020T195258_C001
CS_OFFL_SIR_SIN_220161020T212415_20161020T212652_C001
CS_OFFL_SIR_SIN_220161020T212846_20161020T213432_C001
CS_OFFL_SIR_SIN_2_20161020T221932_20161020T222052_C001
CS_OFFL_SIR_SIN_220161020T222327_20161020T2222444_C001
CS_OFFL_SIR_SIN_220161020T230756_20161020T230849_C001
CS_OFFL_SIR_SIN_2_20161020T231259_20161020T231435_C001
CS_OFFL_SIR_SIN_220161020T235843_20161020T235949_C001

Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)
Height Error (Retracker 2), Backscatter Error (Retracker 2)
Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error
(Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error
(Retracker 2) Height Error (Retracker 2), Backscatter
Error (Retracker 2) Height Error (Retracker 2), Backscatter
Error (Retracker 2) Height Error (Retracker 2), Height Error
(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error
(Retracker 3), Backscatter Error (Retracker 2)
SARIn X-track Angle Error
SARIn X-track Angle Error
SARIn X-track Angle Error, Surface Model Unavailable
SARIn X-track Angle Error
SARIn X-track Angle Error
SARIn X-track Angle Error, Surface Model Unavailable
SARIn X-track Angle Error
-
SARIn X-track Angle Error
SARIn X-track Angle Error SARIn X-track Angle Error, Surface
Model Unavailable
SARIn X-track Angle Error
SARIn X-track Angle Error
SARIn X-track Angle Error
SARIn X-track Angle Error, Surface Model Unavailable
SARIn X-track Angle Error
SARIn X-track Angle Error
SARIn X-track Angle Error
SARIn X-track Angle Error, Surface Model Unavailable
SARIn X-track Angle Error
SARIn X-track Angle Error, Surface
Model Unavailable
SARIn X-track Angle Error
·

ĺ	There is a bright and backgapter over far Datracker 2 and a bright over
	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
	There is a height and backscatter error for Retracker 2 for one or more records
	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
	There is a height and backscatter error for Retracker 2 for one or more records
	There is a height and backscatter error for Retracker 2 for one or more records
	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode and no DEM or Slope
	Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode for one or more
	records
	An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode for one or more
	records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more
_	records An ambiguous angle was detected for SARIn mode and no DEM or Slope
	Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode for one or more
	records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode and no DEM or Slope
	Model was used for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more records
	An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode for one or more
_	records An ambiguous angle was detected for SARIn mode for one or more
	records An ambiguous angle was detected for SARIn mode for one or more
	An ambiguous angle was detected for SARIn mode for one or more
	records
	An ambiguous angle was detected for SARIn mode for one or more records