

# IDEAS+ Daily Report for OFFLINE data:

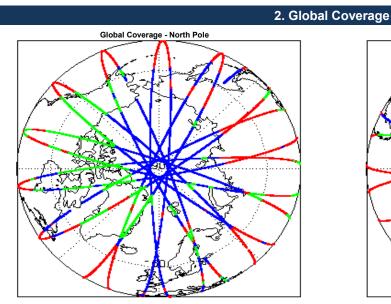
## <u>16/01/2016</u>

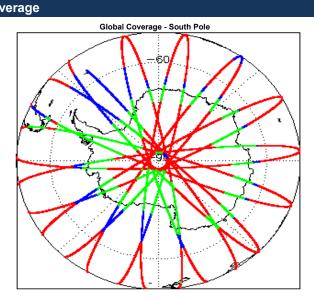
1. Overview						
Report Production Date:	11-Feb-2016	Check	Status			
		Server check: science-pds.cryosat.esa.int	Nominal			
Processor Used:	CryoSat Ice Processor	Server check: calval-pds.cryosat.esa.int	Nominal			
		Product Software Check	Nominal			
Data Used:	L1B and L2 OFFLINE Data	Product Format Check	Nominal			
		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

L1B & L2 Measurement Confidence Data Check

Mission / Instrument News				
15-Jan-2016	SIRAL unavailability on 15-Jan-2016 from 06:28:28 to 08:14:31 due to a planned orbit manoeuvre.			
16-Jan-2016	None			
17-Jan-2016	Nothing planned			

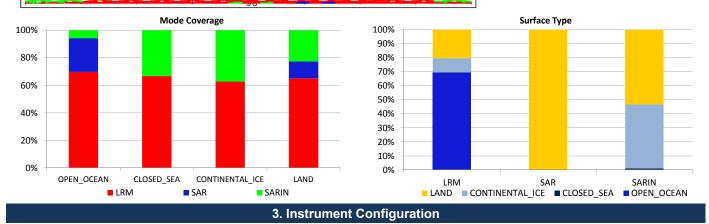




Mode Coverage (%)				
	LRM	19.2		
	SAR	12.9		
	SARIn	0.0		

Nominal

See Section 4.7 and 5.5



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

SIRAL instrument(s) in use: 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. 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

0

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:

### 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. 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.

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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:

Product	Test Failed	Description
CS_OFFL_SIR_LRM_220160116T000330_20160116T001026_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_220160116T001507_20160116T003243_C001		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_220160116T004945_20160116T010219_C001	0	There is a height and backscatter error for Retracker 2 for one or more records

CS\_OFFL\_SIR\_LRM\_2\_20160116T010537\_20160116T011721\_C001 CS OFFL SIR LRM 2 20160116T014506 20160116T015527 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T015707\_20160116T021137\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T022729\_20160116T022854\_C001 CS OFFL SIR LRM 2 20160116T023149 20160116T024050 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T024427\_20160116T024915\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T030145\_20160116T030200\_C001 CS OFFL SIR LRM 2 20160116T032757 20160116T035105 C001 CS\_OFFL\_SIR\_LRM\_2\_20160116T040425\_20160116T043227\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T045410\_20160116T045453\_C001 CS\_OFFL\_SIR\_LRM\_2\_20160116T050449\_20160116T053033\_C001 CS OFFL SIR LRM 2 20160116T053732 20160116T054058 C001 CS OFFL SIR LRM 2 20160116T054432 20160116T061737 C001 CS OFFL SIR LRM 2 20160116T064024 20160116T065927 C001 CS OFFL SIR LRM 2 20160116T071210 20160116T071759 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T071805\_20160116T072001\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T072350\_20160116T074702\_C001 CS OFFL SIR LRM 2 20160116T074713 20160116T075652 C001 CS OFFL SIR LRM 2 20160116T081047 20160116T081136 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T083253\_20160116T084931\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T090234\_20160116T092502\_C001 CS OFFL SIR LRM 2 20160116T094847 20160116T094924 C001 CS OFFL SIR LRM 2 20160116T100113 20160116T102713 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T103328\_20160116T103553\_C001 CS OFFL SIR LRM 2 20160116T104237 20160116T111505 C001 CS\_OFFL\_SIR\_LRM\_2\_20160116T113138\_20160116T115053\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T115105\_20160116T120348\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T121304\_20160116T121500\_C001 CS OFFL SIR LRM 2 20160116T122131 20160116T123724 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T123926\_20160116T124924\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T131546\_20160116T132806\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T135133\_20160116T135421\_C001 CS OFFL SIR LRM 2 20160116T140112 20160116T141550 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T141730\_20160116T141851\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T150255\_20160116T152702\_C001 CS OFFL SIR LRM 2 20160116T152933 20160116T153808 C001 CS OFFL SIR LRM 2 20160116T154033 20160116T155922 C001 CS OFFL SIR LRM 2 20160116T161543 20160116T161622 C001 CS OFFL SIR LRM 2 20160116T163756 20160116T170522 C001 CS OFFL SIR LRM 2 20160116T171916 20160116T174927 C001 CS OFFL SIR LRM 2 20160116T181236 20160116T184431 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T185827\_20160116T190426\_C001 CS\_OFFL\_SIR\_LRM\_2\_20160116T190933\_20160116T191501\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T194941\_20160116T202414\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T203712\_20160116T210535\_C001 CS OFFL SIR LRM 2 20160116T212848 20160116T215658 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160116T215708\_20160116T220243\_C001 CS OFFL SIR LRM 2 20160116T221010 20160116T221423 C001 CS\_OFFL\_SIR\_LRM\_2\_20160116T221621\_20160116T225246\_C001

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There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more 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 There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more 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 There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2; a height error for Retracker 3 and a Calibration Warning for one or more records 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 There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more 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 There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more 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 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 There is a height and backscatter error for Retracker 2 for one or more 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 There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records 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 There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more 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 There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more 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 There is a height and backscatter error for Retracker 2 for one or more There is a height and backscatter error for Retracker 2 for one or more 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 and a height error for Retracker 3 for one or more records

CS OFFL SIR LRM 2 20160116T231041 20160116T234212 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T003254\_20160116T003432\_C001 CS OFFL SIR SIN 2 20160116T004154 20160116T004358 C001 CS OFFL SIR SIN 2 20160116T012534 20160116T012750 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T021207\_20160116T021354\_C001 CS OFFL SIR SIN 2 20160116T021913 20160116T021919 C001 CS OFFL SIR SIN 2 20160116T021929 20160116T021933 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T022035\_20160116T022729\_C001 CS OFFL SIR SIN 2 20160116T022854 20160116T023149 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T035112\_20160116T035428\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T035811\_20160116T035818\_C001 CS OFFL SIR SIN 2 20160116T040126 20160116T040333 C001 CS OFFL SIR SIN 2 20160116T053035 20160116T053210 C001 CS OFFL SIR SIN 2 20160116T054058 20160116T054223 C001 CS OFFL SIR SIN 2 20160116T062922 20160116T062958 C001 CS\_OFFL\_SIR\_SIN\_2\_20160116T071045\_20160116T071210\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T071759\_20160116T071805\_C001 CS\_OFFL\_SIR\_SIN\_2\_20160116T072001\_20160116T072114\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T085013\_20160116T085139\_C001 CS OFFL SIR SIN 2 20160116T085651 20160116T085952 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T103025\_20160116T103328\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T103553\_20160116T104107\_C001 CS OFFL SIR SIN 2 20160116T112651 20160116T113051 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T121030\_20160116T121304\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T121500\_20160116T121648\_C001 CS OFFL SIR SIN 2 20160116T122004 20160116T122131 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T130539\_20160116T130655\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T130852\_20160116T131131\_C001 CS OFFL SIR SIN 2 20160116T134530 20160116T135133 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T135421\_20160116T135435\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T135904\_20160116T140047\_C001 CS OFFL SIR SIN 2 20160116T144504 20160116T144723 C001 CS OFFL SIR SIN 2 20160116T152747 20160116T152933 C001 CS\_OFFL\_SIR\_SIN\_2\_20160116T153808\_20160116T153952\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T162433\_20160116T162917\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T170725\_20160116T170900\_C001 CS OFFL SIR SIN 2 20160116T171029 20160116T171146 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T171605\_20160116T171851\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T184710\_20160116T185058\_C001 CS\_OFFL\_SIR\_SIN\_2\_20160116T185645\_20160116T185802\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T193734\_20160116T193822\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T202648\_20160116T203004\_C001 CS OFFL SIR SIN 2 20160116T203516 20160116T203635 C001 CS OFFL SIR SIN 2 20160116T220405 20160116T220816 C001 CS OFFL SIR SIN 2 20160116T221423 20160116T221533 C001 CS OFFL SIR SIN 2 20160116T225327 20160116T225553 C001 CS OFFL SIR SIN 2 20160116T225633 20160116T225754 C001 CS OFFL SIR SIN 2 20160116T234212 20160116T234339 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160116T235136\_20160116T235322\_C001

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 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 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 SARIn X-track Angle Error

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 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 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 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 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 for one or more