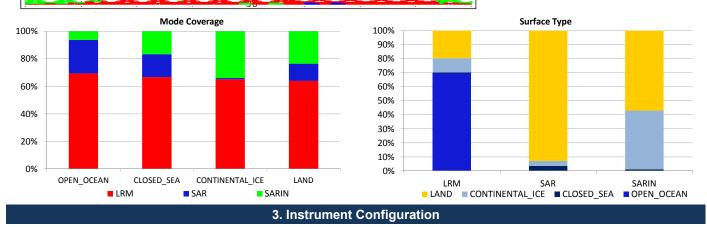


IDEAS+ Daily Report for OFFLINE data:

23/03/2017

1. Overview						
		Check	Clashua			
Report Production Date:	24-Apr-2017	Server check: science-pds.cryosat.esa.int	Status 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	Nominal			
		L1B & L2 Measurement Confidence Data Check	See Section 4.7 and 5.5			
		·				
Mission / Instrument News						
22-Mar-2017 None						
23-Mar-2017 None						

2. Globa	Il Coverage
Global Coverage - North Pole	Global Coverage - South Pole
	Mode Coverage (%)
	LRM 19.3
	A A A A
A A A A A A A A A A A A A A A A A A A	SAR 12.9



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

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.

100

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_OFFL_SIR_LRM_220170323T001419_20170323T002750_C001	S	There is a height and backscatter error for Retracker 2 for one or more records	
CS_OFFL_SIR_LRM_220170323T002937_20170323T003545_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_220170323T003728_20170323T004211_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_2__20170323T010652_20170323T014021_C001 CS OFFL SIR LRM 2 20170323T015338 20170323T015534 C001 CS_OFFL_SIR_LRM_2__20170323T015829_20170323T022906_C001 CS_OFFL_SIR_LRM_2__20170323T024901_20170323T031941_C001 CS_OFFL_SIR_LRM_2__20170323T033606_20170323T034604_C001 CS OFFL SIR LRM 2 20170323T035223 20170323T040355 C001 CS OFFL SIR LRM 2 20170323T042642 20170323T044215 C001 CS_OFFL_SIR_LRM_2__20170323T044354_20170323T045842_C001 CS_OFFL_SIR_LRM_2_20170323T051343_20170323T053328_C001 CS_OFFL_SIR_LRM_2__20170323T053331_20170323T053601_C001 CS_OFFL_SIR_LRM_2__20170323T053723_20170323T054548_C001 CS_OFFL_SIR_LRM_2__20170323T061457_20170323T063809_C001 CS OFFL SIR LRM 2 20170323T065058 20170323T071820 C001 CS_OFFL_SIR_LRM_2__20170323T074125_20170323T074240_C001 CS_OFFL_SIR_LRM_2__20170323T075106_20170323T081727_C001 CS OFFL SIR LRM 2 20170323T083022 20170323T084213 C001 CS_OFFL_SIR_LRM_2__20170323T084750_20170323T090456_C001 CS_OFFL_SIR_LRM_2__20170323T092741_20170323T093520_C001 CS_OFFL_SIR_LRM_2__20170323T095051_20170323T095723_C001 CS_OFFL_SIR_LRM_2__20170323T100943_20170323T104346_C001 CS_OFFL_SIR_LRM_2__20170323T111714_20170323T113652_C001 CS_OFFL_SIR_LRM_2__20170323T114851_20170323T122331_C001 CS_OFFL_SIR_LRM_2__20170323T123549_20170323T123608_C001 CS_OFFL_SIR_LRM_2__20170323T124812_20170323T125249_C001 CS_OFFL_SIR_LRM_2__20170323T125329_20170323T131127_C001 CS_OFFL_SIR_LRM_2__20170323T131354_20170323T131601_C001 CS OFFL SIR LRM 2 20170323T132937 20170323T135910 C001 CS_OFFL_SIR_LRM_2__20170323T141835_20170323T143708_C001 CS_OFFL_SIR_LRM_2__20170323T143753_20170323T145112_C001 CS OFFL SIR LRM 2 20170323T145949 20170323T150147 C001 CS_OFFL_SIR_LRM_2__20170323T150825_20170323T152407_C001 CS OFFL SIR LRM 2 20170323T152609 20170323T153532 C001 CS_OFFL_SIR_LRM_2__20170323T160316_20170323T161454_C001 CS_OFFL_SIR_LRM_2__20170323T163808_20170323T164113_C001 CS OFFL SIR LRM 2 20170323T164738 20170323T170311 C001 CS_OFFL_SIR_LRM_2__20170323T174110_20170323T174822_C001 CS_OFFL_SIR_LRM_2__20170323T174830_20170323T181400_C001 CS_OFFL_SIR_LRM_2__20170323T181623_20170323T181838_C001 CS_OFFL_SIR_LRM_2__20170323T181843_20170323T182445_C001 CS OFFL SIR LRM 2 20170323T182659 20170323T185312 C001 CS_OFFL_SIR_LRM_2__20170323T192414_20170323T193534_C001 CS OFFL SIR LRM 2 20170323T200550 20170323T203552 C001 CS_OFFL_SIR_LRM_2__20170323T205850_20170323T211447_C001 CS_OFFL_SIR_LRM_2__20170323T211805_20170323T213208_C001 CS OFFL SIR LRM 2 20170323T214443 20170323T215106 C001 CS_OFFL_SIR_LRM_2__20170323T221423_20170323T221458_C001 Height Error (Retracker 2), 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), 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), 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), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Surface Model Unavailable 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) Surface Model Unavailable Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Surface Model Unavailable Surface Model Unavailable 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), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more Error (Retracker 2) 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 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 ecords 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 for one or more ecords 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 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 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 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 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 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 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 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 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 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 No DEM or Slope Model was used for the location of 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 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 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 for one or more ecords

CS_OFFL_SIR_LRM_2__20170323T222224_20170323T222334_C001 CS OFFL SIR LRM 2 20170323T223654 20170323T231129 C001 CS OFFL SIR LRM 2 20170323T232343 20170323T234334 C001 CS OFFL SIR LRM 2 20170323T235319 20170323T235358 C001 CS_OFFL_SIR_SIN_2__20170323T000401_20170323T000719_C001 CS OFFL SIR SIN 2 20170323T001245 20170323T001410 C001 CS OFFL SIR SIN 2 20170323T005043 20170323T005128 C001 CS_OFFL_SIR_SIN_2__20170323T005313_20170323T005622_C001 CS OFFL SIR SIN 2 20170323T014037 20170323T014224 C001 CS_OFFL_SIR_SIN_2__20170323T015052_20170323T015231_C001 CS_OFFL_SIR_SIN_2__20170323T023423_20170323T023520_C001 CS OFFL SIR SIN 2 20170323T031941 20170323T032122 C001 CS OFFL SIR SIN 2 20170323T032700 20170323T032707 C001 CS OFFL SIR SIN 2 20170323T040810 20170323T041111 C001 CS OFFL SIR SIN 2 20170323T041220 20170323T041435 C001 CS_OFFL_SIR_SIN_2__20170323T045853_20170323T050039_C001 CS_OFFL_SIR_SIN_2__20170323T050558_20170323T050603_C001 CS OFFL SIR SIN 2 20170323T050723 20170323T051343 C001 CS_OFFL_SIR_SIN_2__20170323T063846_20170323T064119_C001 CS OFFL SIR SIN 2 20170323T064456 20170323T064502 C001 CS_OFFL_SIR_SIN_2__20170323T064828_20170323T065024_C001 CS_OFFL_SIR_SIN_2__20170323T081727_20170323T081901_C001 CS OFFL SIR SIN 2 20170323T082744 20170323T082912 C001 CS_OFFL_SIR_SIN_2__20170323T095740_20170323T095900_C001 CS_OFFL_SIR_SIN_2__20170323T100442_20170323T100521_C001 CS OFFL SIR SIN 2 20170323T100644 20170323T100758 C001 CS_OFFL_SIR_SIN_2__20170323T113700_20170323T113826_C001 CS OFFL SIR SIN 2 20170323T114336 20170323T114641 C001 CS OFFL SIR SIN 2 20170323T131730 20170323T132026 C001 CS_OFFL_SIR_SIN_2__20170323T132238_20170323T132759_C001 CS OFFL SIR SIN 2 20170323T141333 20170323T141755 C001 CS OFFL SIR SIN 2 20170323T150147 20170323T150311 C001 CS OFFL SIR SIN 2 20170323T150648 20170323T150825 C001 CS OFFL SIR SIN 2 20170323T155229 20170323T155341 C001 CS_OFFL_SIR_SIN_2__20170323T155514_20170323T155740_C001 CS_OFFL_SIR_SIN_2__20170323T163415_20170323T163545_C001 CS OFFL SIR SIN 2 20170323T163553 20170323T163807 C001 CS OFFL SIR SIN 2 20170323T164550 20170323T164734 C001 CS_OFFL_SIR_SIN_2__20170323T173150_20170323T173413_C001 CS_OFFL_SIR_SIN_2_20170323T181431_20170323T181622_C001 CS_OFFL_SIR_SIN_2__20170323T181839_20170323T181842_C001 CS_OFFL_SIR_SIN_2__20170323T182445_20170323T182653_C001 CS OFFL SIR SIN 2 20170323T190528 20170323T190545 C001 CS_OFFL_SIR_SIN_2__20170323T190646_20170323T190714_C001 CS OFFL SIR SIN 2 20170323T195409 20170323T195546 C001 CS OFFL SIR SIN 2 20170323T195706 20170323T195833 C001 CS OFFL SIR SIN 2 20170323T200248 20170323T200542 C001 CS_OFFL_SIR_SIN_2__20170323T213402_20170323T213744_C001 CS_OFFL_SIR_SIN_2__20170323T214325_20170323T214439_C001 CS_OFFL_SIR_SIN_2__20170323T231331_20170323T231648_C001 CS OFFL SIR SIN 2 20170323T232200 20170323T232325 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), Backscatter Error (Retracker 2) Height Error (Retracker 2), 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, 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 SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable 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 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 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 ambigu ous 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 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 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

6. QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or warnings is provided below.

Product type	Nb. Products	Nb. QCC Reports	Nb. Valid	Nb. Warnings	Nb. Errors
SIR_LRM_1B	154	154	154	0	0
SIR_LRM_2	154	154	154	0	0
SIR_LRMI2_	154	154	154	0	0
SIR_SAR_1B	99	99	99	0	0
SIR_SAR_2	99	99	99	0	0
SIR_SARI2_	99	99	99	0	0
SIR_SIN_1B	101	101	101	0	0
SIR_SIN_2	101	101	101	0	0
SIR_SINI2	101	101	101	0	0
SIR_GDR_2	15	15	15	0	0
CC Errors	errors:	0			

6.2 QCC Warnings Number of QCC reports with warnings 0

6.2 Missing QCC Reports

Number of products with missing QCC reports: 181