

80%

70% 60%

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40%

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10%

0%

Open ocean

LRM

Closed sea Continental ice

SAR

IDEAS Daily Report for OFFLINE data: 12/0

<u>12/04/2013</u>



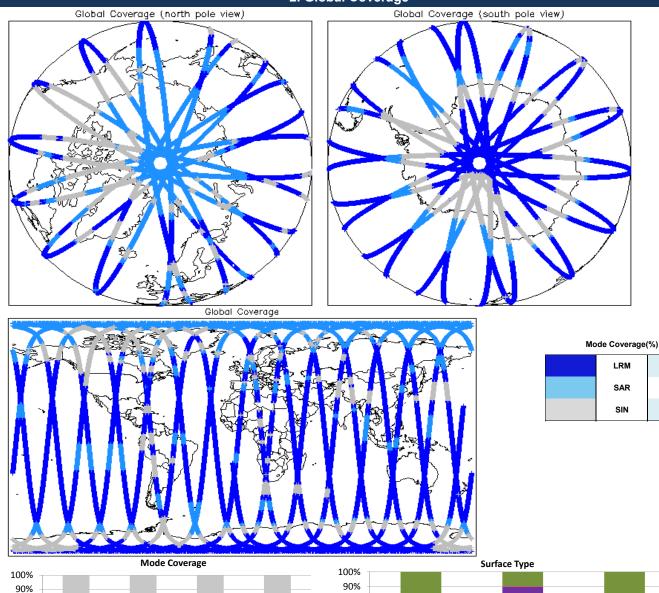
67.56

18.22

14.03

SARin ■ Open ocean

		Check	Status			
		Server check: science-pds.cryosat.esa.int	Nominal			
		Server check: calval-pds.cryosat.esa.int	Nominal			
		Product Software Check	Nominal			
Report Production Date:	20-May-2013	Product Format Check	Nominal			
		Product Header Analysis	Nominal			
Data Used:	OFFLINE L1B and L2 Science Data	Auxiliary Data File Usage	See Section 5.3			
		Auxiliary Correction Check	See Section 4.4 and 5.4			
		Measurement Data Set Check	Nominal			
ission / Instrument News						
	None					
12-Apr-2013 None 13-Apr-2013 Nothing plann	None					
	ed					



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LRM Land Continental ice SAR

Land

SARin

3. Instrument Configuration									
The SIRAL instrument configurati	on for the day of acquisition is prov	ided below.							
SIRAL instrument(s) in use:	SIRAL - A]							
Star Tracker(s) in use:	Star Tracker 2	-							
			Data Quality Chaole						
4. Level 1B Data Quality Check									
4.1 L1 Product Format									
Each product, retrieved and unpa Number of products with errors		ecked to ensure it cor	nsists of both an XML header file (.HDR) and a product	file (.DBL).					
4.2 L1B Product Heade	er Analysis								
For all products, a series of pre-de	efined checks are carried out on the	e MPH and SPH in or	der to identify any inconsistencies and/or errors raised t	by the ground-segment processing chain.					
Number of products with errors	s: 0								
4.3 L1B Auxilary Data I	File Usage Check								
Each product is checked for miss	ing Data Set Descriptors wrt a pre-	determined baseline :	and also to check the validity of Auxiliary Data Files is α	prract					
Number of products with errors		Jetermined baseline a							
		_							
4.4 L1B Flagged Auxili	ary Correction Error Ch	eck							
Each product is checked to spot a	auxiliary corrections flagged by the	ground-station proces	ssing chain as missing or containing errors						
Number of products with errors	s: 4								
Product	4447004040 00400440700040 0		Test Failed						
	411T234943_20130412T002316_B 412T055953_20130412T060006_B		Dynamic atmosphere correction error Dynamic atmosphere correction error						
	412T175916_20130412T180017_B		Dynamic atmosphere correction error						
CS_OFFL_SIR_SIN_1B_201304	12T115954_20130412T120136_B0)01	Dynamic atmosphere correction error						
4.5 L1B Measurement	Confidence Data Check								
CruoSat I 18 data includes a mea	surement confidence flag word (fie	ld 14) for each measu	urement record. The bit value of this flag indicates any p	roblems when set					
Number of products with errors	- .		archiert record. The bit value of this hag indicates any p						
		5. Level 2	Data Quality Check						
5.1 L2 Product Format	Check								
Each product, retrieved and uppa	cked from the science server is ch	ecked to ensure it cou	nsists of both an XML header file (.HDR) and a binary p	roduct file (DBL)					
Number of products with errors									
5.2 L2 Product Header	Analysis								
J.Z LZ FIOUUCI Header	Analysis								
For all products, a series of pre-de	efined checks are carried out on the	e MPH and SPH in or	der to identify any inconsistencies and/or errors raised l	by the ground-segment processing chain					
For all products, a series of pre-de Number of products with errors		e MPH and SPH in or	der to identify any inconsistencies and/or errors raised t	by the ground-segment processing chain					
	3: 0	e MPH and SPH in or	der to identify any inconsistencies and/or errors raised t	by the ground-segment processing chain					
Number of products with errors 5.3 L2 Auxiliary Data F	ile Usage Check		der to identify any inconsistencies and/or errors raised t and also to check the validity of Auxiliary Data Files is co						
Number of products with errors 5.3 L2 Auxiliary Data F	ile Usage Check								
Number of products with errors 5.3 L2 Auxiliary Data F Each product is checked for missi	ile Usage Check	determined baseline a	and also to check the validity of Auxiliary Data Files is co	orrect Comment					
Number of products with errors 5.3 L2 Auxiliary Data F Each product is checked for miss Number of products with errors Product	ile Usage Check	determined baseline a	and also to check the validity of Auxiliary Data Files is co File	prrect					
Number of products with errors 5.3 L2 Auxiliary Data F Each product is checked for missi Number of products with errors Product CS_OFFL_SIR_GDR_2A_201304	s: 0 ile Usage Check ing Data Set Descriptors wrt a pre-o s: 1	determined baseline a AUX F 3001 CS_O 00232	and also to check the validity of Auxiliary Data Files is co File	orrect Comment Coverage missing for intervals [2013-04-					
Number of products with errors 5.3 L2 Auxiliary Data F Each product is checked for missi Number of products with errors Product CS_OFFL_SIR_GDR_2A_20130 5.4 L2 Flagged Auxiliar	ile Usage Check ing Data Set Descriptors wrt a pre-dist 1 4111231627_20130412T005541_E ry Correction Error Check	determined baseline a AUX F 3001 CS_O 00232 CK	and also to check the validity of Auxiliary Data Files is co File	orrect Comment Coverage missing for intervals [2013-04-					
Number of products with errors 5.3 L2 Auxiliary Data F Each product is checked for missi Number of products with errors Product CS_OFFL_SIR_GDR_2A_20130 5.4 L2 Flagged Auxiliar	s: 0 ile Usage Check ing Data Set Descriptors wrt a pre-district s: 1 411T231627_20130412T005541_E ry Correction Error Check auxiliary corrections flagged by the	determined baseline a AUX F 3001 CS_O 00232 CK	and also to check the validity of Auxiliary Data Files is co File PER_AUX_ORBDOR_20130410T215525_20130412T 25_0001	orrect Comment Coverage missing for intervals [2013-04-					
Number of products with errors 5.3 L2 Auxiliary Data F Each product is checked for missi Number of products with errors Product CS_OFFL_SIR_GDR_2A_201304 5.4 L2 Flagged Auxilian Each product is checked to spot a	s: 0 ile Usage Check ing Data Set Descriptors wrt a pre-district s: 1 411T231627_20130412T005541_E ry Correction Error Check auxiliary corrections flagged by the	determined baseline a AUX F 3001 CS_O 00232 CK	and also to check the validity of Auxiliary Data Files is co File PER_AUX_ORBDOR_20130410T215525_20130412T 25_0001	orrect Comment Coverage missing for intervals [2013-04-					
Number of products with errors 5.3 L2 Auxiliary Data F Each product is checked for miss Number of products with errors Product CS_OFFL_SIR_GDR_2A_201304 5.4 L2 Flagged Auxilian Each product is checked to spot a Number of products with errors Product CS_OFFL_SIR_LRM_2_201304	iie Usage Check ing Data Set Descriptors wrt a pre-dist ing Data Set Descriptors wrt a pre-dist iii 11231627_20130412T005541_E ry Correction Error Check auxiliary corrections flagged by the s: 4 1111234943_20130412T002316_B	determined baseline a AUX F 3001 CS_0 00232 Ck ground-station proces	and also to check the validity of Auxiliary Data Files is co File PER_AUX_ORBDOR_20130410T215525_20130412T 25_0001 assing chain as missing or containing errors Test Failed Dynamic atmosphere correction error	orrect Comment Coverage missing for intervals [2013-04-					
Number of products with errors 5.3 L2 Auxiliary Data F Each product is checked for missi Number of products with errors Product CS_OFFL_SIR_GDR_2A_201304 5.4 L2 Flagged Auxiliar Each product is checked to spot a Number of products with errors Product CS_OFFL_SIR_LRM_2_201304 CS_OFFL_SIR_LRM_2_201304	iie Usage Check iig Data Set Descriptors wrt a pre-dist iig Data Set Descriptors wrt a pre-dist iii 11231627_20130412T005541_E ry Correction Error Check auxiliary corrections flagged by the s: 4	determined baseline a AUX F 3001 CS_O 00232 Ck ground-station proces 001	and also to check the validity of Auxiliary Data Files is co File PER_AUX_ORBDOR_20130410T215525_20130412T 25_0001 ssing chain as missing or containing errors Test Failed	orrect Comment Coverage missing for intervals [2013-04-					

5.5 L2 Measurement Quality Flag Check

CryoSat L2 data includes a quality flag word (field 43) for each 20-Hz measurement record. The bit value of this flag is an assessment of the measurement quality by the ground-segment processing chains

Presently, there are several common data Quality Flag errors raised by the Level 2 products which are either expected due to changes made to the IPF processor in Baseline B or else are due to known issues with the data processors. The investigation of the known issues are on-going and are due to be resolved with the next update of the Level 2 processors. All common known issues are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

Freeboard Error: This Quality Flag is correctly set in all products as this parameter is currently not provided in the L2 products and the Freeboard value is presently set to the default value of - 9999.

SARin x-track angle error: Currently there is an on-going investigation into the high number of errors from the 'SARIn x-track Error' Quality Flag over Antarctica.

0

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Height error and Backscatter error: It has been noted that the number of errors arising from the 'Backscatter Error' and 'Height Error' Quality Flag is much higher than expected over land areas and this is currently part of an on-going investigation by expert teams.

Number of products with errors:

6. QCC Check

The QCC is a CryoSat facility that 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.

Nb. There is currently a discrepancy between the number of QCC reports and the number of products reported. This is a known issue and investigation is on-going.

Product type	Nb. Products	Nb. QCC Reports	Nb. Valid	Nb. Warnings	Nb. Errors
SIR_GDR_2A	16	14	0	14	0
SIR_LRM_1B	145	144	111	33	0
SIR_LRM_2	143	142	1	141	0
SIR_SAR_1B	165	165	0	165	0
SIR_SAR_2A	116	116	2	114	0
SIR_SIN_1B	116	116	0	116	0
SIR_SIN_2	111	111	0	111	0

6.1 QCC Errors

Number of products with QCC errors:

6.2 Missing QCC Reports

Number of products with missing QCC reports:

Product name

CS_OFFL_SIR_GDR_2A_20130411T231627_20130412T005541_B001 CS_OFFL_SIR_LRM_1B_20130411T234943_20130412T002316_B001 CS_OFFL_SIR_LRM_2__20130411T234943_20130412T002316_B001