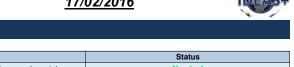


# **IDEAS+ Daily Report for FDM data:**

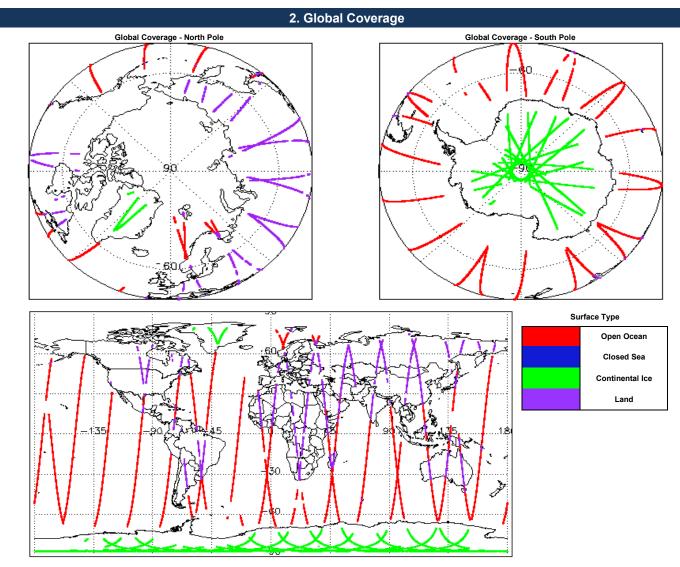
## 17/02/2016



Report Production Date: 18	18-Feb-2016	Check	Status
	18-Feb-2016	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	Cruce et les Presses	Server check: calval-pds.cryosat.esa.int	Nominal
	CryoSat Ice Processor	Product Software Check	Nominal
Data Used:	L1 and L2 Fast Delivery Marine (FDM)	Product Format Check	Nominal
	Mode and L0 Data	Product Header Analysis	See Section 4.2
		Star Tracker Usage Check	See Section 5.3
		Calibration Usage Check	Nominal
		Auxiliary Data File Usage Check	Nominal
		Auxiliary Correction Error Check	See Section 6.4
		Measurement Confidence Data Check	See Section 5.7, 6.5, 6.6, 6.7 and 6.8

1. Overview

Mission / Instrument News		
16-Feb-2016	None	
17-Feb-2016	None	
18-Feb-2016	Nothing planned	



## 3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A
Star Tracker(s) in use:	Star Tracker 1

4. Level 0 Data Quality Check

#### 4.1 L0 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 binary product file (.DBL).

0

Number of products with errors:

#### 4.2 L0 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 processing chain. Number of products with errors: 1

CS_OPER_SIR1SIN_020160217T185402_20160217T185501_0001.HDR	Test Failed Percentage of processing	errors detected greater than minimum acceptable threshold.
<u>5. Lev</u>	vel 1B FDM Data Qualit	y Check
5.1 L1B FDM Product Format Check		
Each product, retrieved and unpacked from the science server, is checked to e	nsure it consists of both an XML header	r file (.HDR) and a binary product file (.DBL).
lumber of products with errors: 0		
.2 L1B FDM Product Header Analysis		
or all products, a series of pre-defined checks are carried out on the MPH and lumber of products with errors: 0	I SPH in order to identify any inconsister	ncies and/or errors raised by the ground-segment processing chain.
5.3 L1B FDM Star Tracker Usage Check		
ach product is checked in order to ensure a valid star tracker file has been use	ed in processing.	
lumber of products with errors: 4		
roduct	Test Failed	
S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001	No Star Tracker file used	in the processing of this product
S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001		in the processing of this product
S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001		in the processing of this product in the processing of this product
4 L1B FDM Calibration Usage Check		
ach product is checked in order to ensure the necessary calibration files have umber of products with errors: 0	been used in processing.	
.5 L1B FDM Auxilary Data File Usage Check		
ach 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
umber of products with errors: 0		
.6 L1B FDM Auxiliary Correction Error Check		
ryoSat L1B data includes a correction error flag (field 54) for each measureme	ent record. The bit value of this flag indic	cates any problems when set.
umber of products with errors: 0		
aniser of products with errors. U		
Number of products with errors: 0 5.7 L1B FDM Measurement Confidence Data Check		
5.7 L1B FDM Measurement Confidence Data Check	nessurement record. The bit value of this	s flag indicates any problems when set
	neasurement record. The bit value of thi	s flag indicates any problems when set.
5.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each m         lumber of products with errors:       5		
5.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each m         umber of products with errors:       5         roduct	Test Failed	Description The tracking echo has returned an error and the Rx1 Echo Error flag is
a.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each m         umber of products with errors:       5         roduct         S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001	Test Failed Echo error, TRK echo error	Description The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo
a.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each m         umber of products with errors:       5         roduct         S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001	Test Failed	Description The tracking echo has returned an error and the Rx1 Echo Error flag is
.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each measurement of products with errors:         5         roduct         S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001         S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001	Test Failed Echo error, TRK echo error	Description The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo
.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each measurement confidence flag (field 18) for each measurement confidence flag (field 18) for each measurement of products with errors:         5         roduct         S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001         S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001         S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001         S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001	Test Failed           Echo error, TRK echo error           Attitude correction missing	Description The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo The attitude has not been corrected
State         State <th< td=""><td>Test Failed         Echo error, TRK echo error         Attitude correction missing         Attitude correction missing</td><td>Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected           The attitude has not been corrected</td></th<>	Test Failed         Echo error, TRK echo error         Attitude correction missing         Attitude correction missing	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected           The attitude has not been corrected
A.7 L1B FDM Measurement Confidence Data Check           ryoSat L1B data includes a measurement confidence flag (field 18) for each measurement confidence flag (field 18) for each measurement confidence flag (field 18) for each measurement of products with errors:           s           roduct           S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001           S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001           S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001           S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001           S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001	Test Failed         Echo error, TRK echo error         Attitude correction missing         Attitude correction missing         Attitude correction missing	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected
A.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each measurement confidence flag (field 18) for each measurement of products with errors:         s         roduct         S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001         S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001         S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001         S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001         S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T221558_C001	Test Failed         Echo error, TRK echo error         Attitude correction missing	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected
.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each measurement confidence flag (field 18) for each measurement of products with errors:         5         roduct         S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001         S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001         S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001         S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001         S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T221558_C001         S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001         Collect         1L2 FDM Product Format Check         ach product, retrieved and unpacked from the science server, is checked to end	Test Failed         Echo error, TRK echo error         Attitude correction missing	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected
The set of	Test Failed         Echo error, TRK echo error         Attitude correction missing	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected
5.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each measurement of products with errors:         5         roduct         S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001         S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001         S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001         S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001         S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T221558_C001         Contract         S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T221558_C001         S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T221558_C001         Contract         Contract         S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T221558_C001	Test Failed         Echo error, TRK echo error         Attitude correction missing	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected
5.7 L1B FDM Measurement Confidence Data Check ryoSat L1B data includes a measurement confidence flag (field 18) for each m umber of products with errors: 5 roduct S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001 S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001 S_OFFL_SIR_FDM_1B_20160217T17110_20160217T171214_C001 S_OFFL_SIR_FDM_1B_20160217T185047_20160217T121558_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001 C. Le	Test Failed         Echo error, TRK echo error         Attitude correction missing         Insure I 2 FDM Data Quality         Insure it consists of both an XML header	Description         The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo         The attitude has not been corrected         r flie (.HDR) and a binary product file (.DBL).
.7 L1B FDM Measurement Confidence Data Check         ryoSat L1B data includes a measurement confidence flag (field 18) for each measurement of products with errors:         5         roduct         S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001         S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001         S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001         S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001         S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T125158_C001         S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001         S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001         S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001         C       C         L2 FDM Product Format Check         ach product, retrieved and unpacked from the science server, is checked to end         umber of products with errors:       0         .2 L2 FDM Product Header Analysis         or all products, a series of pre-defined checks are carried out on the MPH and         umber of products with errors:       0	Test Failed         Echo error, TRK echo error         Attitude correction missing         Insure I 2 FDM Data Quality         Insure it consists of both an XML header	Description         The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo         The attitude has not been corrected         r flie (.HDR) and a binary product file (.DBL).
A.7 L1B FDM Measurement Confidence Data Check ryoSat L1B data includes a measurement confidence flag (field 18) for each m umber of products with errors: 5 roduct S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001 S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001 S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001 S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001 S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T221558_C001 Characteristic content of the science server, is checked to enumber of products with errors: 0 Characteristic content of the science server, is checked to enumber of products with errors: 0 Characteristic content of the science server, is checked to enumber of products with errors: 0 Characteristic content of the science server	Test Failed         Echo error, TRK echo error         Attitude correction missing         Attitude correction missing      <	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected           If the attit the attit the attitude has not been corrected
A.7 L1B FDM Measurement Confidence Data Check ryoSat L1B data includes a measurement confidence flag (field 18) for each m umber of products with errors: 5 roduct S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001 S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001 S_OFFL_SIR_FDM_1B_20160217T17110_20160217T171214_C001 S_OFFL_SIR_FDM_1B_20160217T185047_20160217T12558_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001 C. Le L12 FDM Product Format Check ach product, retrieved and unpacked from the science server, is checked to exampler of products with errors: 1 C.12 FDM Product Header Analysis or all products, a series of pre-defined checks are carried out on the MPH and umber of products with errors: 1 C.3 L2 FDM Auxiliary Data File Usage Check ach product is checked for missing Data Set Descriptors with respect to a pre-	Test Failed         Echo error, TRK echo error         Attitude correction missing         Attitude correction missing      <	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected           If the attit the attit the attitude has not been corrected
5.7 L1B FDM Measurement Confidence Data Check ryoSat L1B data includes a measurement confidence flag (field 18) for each m umber of products with errors: 5 roduct S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001 S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001 S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001 S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001 S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T221558_C001 Characteristic Content of the science server, is checked to each product, retrieved and unpacked from the science server, is checked to each product, retrieved and unpacked from the science server, is checked to each product, retrieved and unpacked from the science server, is checked to each product, a series of pre-defined checks are carried out on the MPH and umber of products with errors: 0 C.3 L2 FDM Auxiliary Data File Usage Check ach product is checked for missing Data Set Descriptors with respect to a pre- umber of products with errors: 0	Test Failed         Echo error, TRK echo error         Attitude correction missing         Attitude correction missing      <	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected           If the attit the attit the attitude has not been corrected
S.7 L1B FDM Measurement Confidence Data Check  ryoSat L1B data includes a measurement confidence flag (field 18) for each m umber of products with errors: 5  roduct S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001 S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001 S_OFFL_SIR_FDM_1B_20160217T17110_20160217T171214_C001 S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T1221558_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001 C. Lee S.1 L2 FDM Product Format Check ach product, retrieved and unpacked from the science server, is checked to en umber of products with errors: 0  S.2 L2 FDM Product Header Analysis or all products, a series of pre-defined checks are carried out on the MPH and umber of products with errors: 0  S.3 L2 FDM Auxiliary Data File Usage Check ach product is checked for missing Data Set Descriptors with respect to a pre- umber of products with errors: 0  A L2 FDM Auxiliary Correction Error Check	Test Failed         Echo error, TRK echo error         Attitude correction missing         evel 2 FDM Data Quality         Ispen in order to identify any inconsister         -determined baseline and also to check	Description         The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo         The attitude has not been corrected         Check         r file (.HDR) and a binary product file (.DBL).         ncies and/or errors raised by the ground-segment processing chain.         the validity of Auxiliary Data Files is correct.
5.7 L1B FDM Measurement Confidence Data Check  ryoSat L1B data includes a measurement confidence flag (field 18) for each m umber of products with errors: 5  roduct S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001 S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001 S_OFFL_SIR_FDM_1B_20160217T17110_20160217T171214_C001 S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T1221558_C001 C6. Lee C.1 L2 FDM Product Format Check ach product, retrieved and unpacked from the science server, is checked to eacumber of products with errors: 0  C.2 L2 FDM Product Header Analysis or all products, a series of pre-defined checks are carried out on the MPH and umber of products with errors: 0  C.3 L2 FDM Auxiliary Data File Usage Check ach product is checked for missing Data Set Descriptors with respect to a pre- umber of products with errors: 0  C.4 L2 FDM Auxiliary Correction Error Check ach product is checked to detect auxiliary corrections flagged by the ground-si	Test Failed         Echo error, TRK echo error         Attitude correction missing         evel 2 FDM Data Quality         Ispen in order to identify any inconsister         -determined baseline and also to check	Description         The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo         The attitude has not been corrected         Check         r file (.HDR) and a binary product file (.DBL).         ncies and/or errors raised by the ground-segment processing chain.         the validity of Auxiliary Data Files is correct.
S.7 L1B FDM Measurement Confidence Data Check ryoSat L1B data includes a measurement confidence flag (field 18) for each m umber of products with errors: 5 roduct S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001 S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001 S_OFFL_SIR_FDM_1B_20160217T17110_20160217T171214_C001 S_OFFL_SIR_FDM_1B_20160217T121455_20160217T12585_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T12555_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T12555_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T12555_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T12555_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221555_C001 S_OFFL_SIR_FDM_1D_1D_1D_1D_1D_1D_1D_1D_1D_1D_1D_1D_1D_	Test Failed         Echo error, TRK echo error         Attitude correction missing         Ispect attribute         A	Description         The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo         The attitude has not been corrected         The attitude has not been corrected <b>Check</b> r file (.HDR) and a binary product file (.DBL).         ncies and/or errors raised by the ground-segment processing chain.         the validity of Auxiliary Data Files is correct.         pontaining errors.
S.7 L1B FDM Measurement Confidence Data Check ryoSat L1B data includes a measurement confidence flag (field 18) for each m umber of products with errors: 5 roduct S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001 S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001 S_OFFL_SIR_FDM_1B_20160217T17110_20160217T171214_C001 S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001 S_OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001 C. Le	Test Failed         Echo error, TRK echo error         Attitude correction missing         evel 2 FDM Data Quality         Ispen in order to identify any inconsistent         -determined baseline and also to check         tation processing chain as missing or correction, altimed         Sea State Bias Correction, Altimed	Description         The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo         The attitude has not been corrected         Check         r file (.HDR) and a binary product file (.DBL).         ncies and/or errors raised by the ground-segment processing chain.         the validity of Auxiliary Data Files is correct.         ontaining errors.         Description         tric       There is an error with the Attimetric Wind Speed and Sea State Bias
S.7 L1B FDM Measurement Confidence Data Check  apposat L1B data includes a measurement confidence flag (field 18) for each m fumber of products with errors: 5  roduct  S_OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001  S_OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001  S_OFFL_SIR_FDM_1B_20160217T171110_20160217T171214_C001  S_OFFL_SIR_FDM_1B_20160217T185047_20160217T185105_C001  S_OFFL_SIR_FDM_1B_20160217T1221425_20160217T221558_C001  C. Le	Test Failed         Echo error, TRK echo error         Attitude correction missing         Ispect         Attitude correction missing         Attitude correction missing         Attitude correction missing         Ispect         Attitude correction missing         Attitude correction missing         Ispect         Attitude correction missing         Ispect         Attitude correction missing         Attitude correction missing         Attitude correction missing         Attitude correction missing         Attitude correction         Attitude correction         Attitude correction         Attitude correction <td>Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected           VCheck</td>	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected           VCheck
S.7 L1B FDM Measurement Confidence Data Check  AryoSat L1B data includes a measurement confidence flag (field 18) for each measurement of products with errors: 5  roduct  S. OFFL_SIR_FDM_1B_20160217T061339_20160217T061722_C001  S. OFFL_SIR_FDM_1B_20160217T152838_20160217T153517_C001  S. OFFL_SIR_FDM_1B_20160217T17110_20160217T171214_C001  S. OFFL_SIR_FDM_1B_20160217T12145_20160217T12558_C001  S. OFFL_SIR_FDM_1B_20160217T1221425_20160217T12558_C001  S. OFFL_SIR_FDM_1B_20160217T221425_20160217T221558_C001  C. Le  S. OFFL_SIR_FDM_NAURILIARY DATA FILE USAGE Check  ach products with errors: 0  S. A L2 FDM Auxiliary Data Set Descriptors with respect to a pre- Iumber of products with errors: 0  S. A L2 FDM Auxiliary Correction Flagged by the ground-set Iumber of products with errors: 20  S. A L2 FDM Auxiliary corrections flagged by the ground-set Iumber of products with errors: 29  roduct	Test Failed         Echo error, TRK echo error         Attitude correction missing         evel 2 FDM Data Quality         Ispen in order to identify any inconsistent         -determined baseline and also to check         tation processing chain as missing or correction, altimed         Sea State Bias Correction, Altimed	Description           The tracking echo has returned an error and the Rx1 Echo Error flag is indicating a degraded echo           The attitude has not been corrected           Check

CS_OFFL_SIR_FDM_220160217T060431_20160217T061239_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T062430_20160217T062626_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T064414_20160217T070647_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T073035_20160217T073051_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T100321_20160217T101058_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T101100_20160217T101913_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T101948_20160217T102106_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T105403_20160217T110950_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T114232_20160217T115735_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T115914_20160217T121406_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T123721_20160217T124855_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T125350_20160217T130900_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T132208_20160217T134511_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T142100_20160217T144814_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T164008_20160217T170853_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T171636_20160217T171823_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T185501_20160217T185741_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T192239_20160217T194523_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T195729_20160217T201110_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T201258_20160217T202533_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T205002_20160217T212341_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T223223_20160217T224034_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T224336_20160217T230259_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T231934_20160217T232932_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220160217T233545_20160217T234713_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records

## 6.5 L2 FDM Measurement Confidence Data Check

5

CryoSat L2 data includes a measurement confidence flag (field 8) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

# Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220160217T061339_20160217T061722_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_220160217T152838_20160217T153517_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220160217T171110_20160217T171214_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220160217T185047_20160217T185105_C001	Attitude correction missing	The attitude has not been corrected

### 6.6 L2 FDM Range Measurement Check

CryoSat L2 data includes a CFI (field 17) and OCOG (field 22) Range Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set. Number of products with errors: 17

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220160217T041533_20160217T045200_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T064414_20160217T070647_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T073035_20160217T073051_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T100321_20160217T101058_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T101100_20160217T101913_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T101948_20160217T102106_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T114232_20160217T115735_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T115914_20160217T121406_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T123721_20160217T124855_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T142100_20160217T144814_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T164008_20160217T170853_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.

CS_OFFL_SIR_FDM_220160217T171636_20160217T171823_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T192239_20160217T194523_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T201258_20160217T202533_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T205002_20160217T212341_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T224336_20160217T230259_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T233545_20160217T234713_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.

### 6.7 L2 FDM SWH and Backscatter Measurement Check

17

CryoSat L2 data includes a SWH-Squared Averaging Status flag (field 39) and an CFI (field 45) and OCOG (field 51) Backscatter Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220160217T041533_20160217T045200_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T064414_20160217T070647_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T073035_20160217T073051_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T100321_20160217T101058_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T101100_20160217T101913_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T101948_20160217T102106_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T114232_20160217T115735_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T115914_20160217T121406_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T123721_20160217T124855_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T142100_20160217T144814_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T164008_20160217T170853_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T171636_20160217T171823_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T192239_20160217T194523_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T201258_20160217T202533_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T205002_20160217T212341_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20160217T224336_20160217T230259_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_220160217T233545_20160217T234713_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.

## 6.8 L2 FDM Ocean Retracking Quality Check

CryoSat L2 data includes an ocean retracking quality flag (field 66) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

 Number of products with errors:
 30

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220160217T025155_20160217T031238_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220160217T041533_20160217T045200_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220160217T055252_20160217T055426_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220160217T060431_20160217T061239_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220160217T064414_20160217T070647_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220160217T073035_20160217T073051_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220160217T091950_20160217T094517_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220160217T100321_20160217T101058_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220160217T101100_20160217T101913_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220160217T101948_20160217T102106_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.

CS\_OFFL\_SIR\_FDM\_2\_\_20160217T105403\_20160217T110950\_C001 CS\_OFFL\_SIR\_EDM\_2\_\_20160217T111204\_20160217T112653\_C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T114232\_20160217T115735\_C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T115914\_20160217T121406\_C001 CS OFFL SIR FDM 2 20160217T123721 20160217T124855 C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T125350\_20160217T130900\_C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T132208\_20160217T134511\_C001 CS OFFL SIR FDM 2 20160217T142100 20160217T144814 C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T164008\_20160217T170853\_C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T171636\_20160217T171823\_C001 CS OFFL SIR FDM 2 20160217T173131 20160217T180556 C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T182753\_20160217T183144\_C001 CS OFFL SIR FDM 2 20160217T192239 20160217T194523 C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T201258\_20160217T202533\_C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T205002\_20160217T212341\_C001 CS OFFL SIR FDM 2 20160217T213652 20160217T213856 C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T223223\_20160217T224034\_C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T224336\_20160217T230259\_C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T231934\_20160217T232932\_C001 CS\_OFFL\_SIR\_FDM\_2\_\_20160217T233545\_20160217T234713\_C001 Ocean Retracking Quality Flag Ocean Retracking Quality Flag

The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.