

### 1. Overview

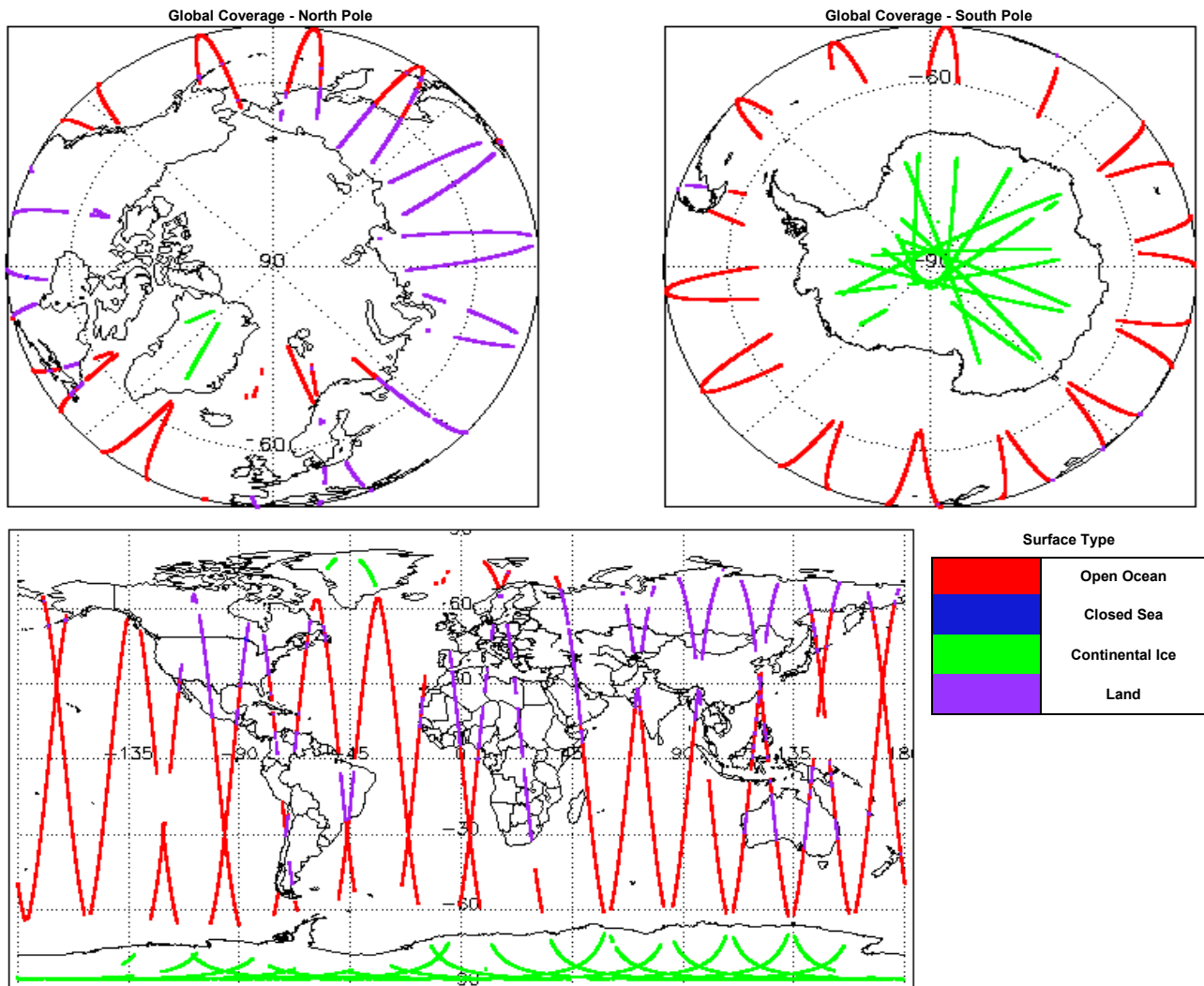
<b>Report Production Date:</b>	24-Jun-2016
<b>Processor Used:</b>	CryoSat Ice Processor
<b>Data Used:</b>	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data

Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
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

#### Mission / Instrument News

22-Jun-2016	None
23-Jun-2016	SIRAL unavailability on 23-Jun-2016 from 22:14:14 to 24-Jun-2016 00:00:20 due to a planned orbit manoeuvre.
24-Jun-2016	SIRAL unavailability on 23-Jun-2016 from 22:14:14 to 24-Jun-2016 00:00:20 due to a planned orbit manoeuvre.

### 2. Global Coverage



### 3. Instrument Configuration

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

<b>SIRAL instrument(s) in use:</b>	SIRAL - A
<b>Star Tracker(s) in use:</b>	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).

Number of products with errors: 0

## 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: 6

Product	Test Failed
CS_OPER_SIR1SAR_0__20160623T012506_20160623T012807_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0__20160623T155724_20160623T160205_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0__20160623T211622_20160623T211746_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20160623T180735_20160623T181428_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0__20160623T090303_20160623T090710_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0__20160623T212758_20160623T212918_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.

## 5. Level 1B FDM Data Quality Check

### 5.1 L1B FDM 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).

Number of products with errors: 0

### 5.2 L1B FDM 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 L1B FDM 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: 12

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20160623T085358_20160623T085405_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T090710_20160623T090757_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T091457_20160623T091514_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T091517_20160623T091538_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T091546_20160623T091606_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T091609_20160623T092635_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T093212_20160623T094252_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T094647_20160623T094753_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T094935_20160623T095416_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T095452_20160623T095532_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T095812_20160623T102919_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20160623T120639_20160623T120755_C001	No Star Tracker file used in the processing of this product

### 5.4 L1B FDM Calibration Usage Check

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

Number of products with errors: 0

### 5.5 L1B FDM 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

### 5.6 L1B FDM 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: 0

### 5.7 L1B FDM 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.

Number of products with errors: 12

Product	Test Failed	Description
CS_OFFL_SIR_FDM_1B_20160623T085358_20160623T085405_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T090710_20160623T090757_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T091457_20160623T091514_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T091517_20160623T091538_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T091546_20160623T091606_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T091609_20160623T092635_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T093212_20160623T094252_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T094647_20160623T094753_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T094935_20160623T095416_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T095452_20160623T095532_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T095812_20160623T102919_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20160623T120639_20160623T120755_C001	Attitude correction missing	The attitude has not been corrected

## 6. Level 2 FDM Data Quality Check

### 6.1 L2 FDM 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).

Number of products with errors: 0

### 6.2 L2 FDM 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

### 6.3 L2 FDM 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

### 6.4 L2 FDM Auxiliary Correction Error Check

Each product is checked to detect auxiliary corrections flagged by the ground-station processing chain as missing or containing errors.

Number of products with errors: 37

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20160623T000234_20160623T003729_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_2__20160623T005917_20160623T005928_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20160623T005951_20160623T010145_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_2__20160623T010328_20160623T012506_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_2__20160623T014102_20160623T021710_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_2__20160623T023913_20160623T030207_C001	Sea State Bias Correction, Mean Sea Surface height, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed, the Sea State Bias Correction and the Mean Sea Surface Height for one or more records
CS_OFFL_SIR_FDM_2__20160623T032110_20160623T033800_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_2__20160623T034242_20160623T035710_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_2__20160623T040953_20160623T042724_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_2__20160623T045958_20160623T051508_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_2__20160623T051710_20160623T052633_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_2__20160623T052916_20160623T053651_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_2__20160623T055325_20160623T060534_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_2__20160623T062850_20160623T063652_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_2__20160623T063934_20160623T065416_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_2__20160623T073112_20160623T080404_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_2__20160623T081931_20160623T084325_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_2__20160623T091609_20160623T092635_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20160623T093212_20160623T094252_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_2__20160623T095812_20160623T102919_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_2__20160623T102952_20160623T103504_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_2__20160623T104913_20160623T112127_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_2__20160623T122758_20160623T130119_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_2__20160623T140535_20160623T143941_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_2__20160623T145646_20160623T152302_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20160623T160342_20160623T161918_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_2__20160623T163725_20160623T165025_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_2__20160623T165239_20160623T170633_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_2__20160623T170658_20160623T170930_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_2__20160623T173200_20160623T174225_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_2__20160623T174404_20160623T175808_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20160623T182301_20160623T182628_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_2__20160623T183331_20160623T183617_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_2__20160623T183740_20160623T184445_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_2__20160623T191300_20160623T193647_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20160623T204052_20160623T204154_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_2__20160623T213134_20160623T214228_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

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: 12

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20160623T085358_20160623T085405_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T090710_20160623T090757_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T091457_20160623T091514_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T091517_20160623T091538_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T091546_20160623T091606_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T091609_20160623T092635_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T093212_20160623T094252_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T094647_20160623T094753_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T094935_20160623T095416_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T095452_20160623T095532_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T095812_20160623T102919_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20160623T120639_20160623T120755_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: 27

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20160623T000234_20160623T003729_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_2__20160623T005951_20160623T010145_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_2__20160623T010328_20160623T012506_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_2__20160623T014102_20160623T021710_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_2__20160623T023913_20160623T030207_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_2__20160623T032110_20160623T033800_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_2__20160623T034242_20160623T035710_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_2__20160623T040953_20160623T042724_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_2__20160623T045958_20160623T051508_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_2__20160623T051710_20160623T052633_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_2__20160623T055325_20160623T060534_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_2__20160623T063934_20160623T065416_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_2__20160623T073112_20160623T080404_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_2__20160623T081931_20160623T084325_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_2__20160623T095812_20160623T102919_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_2__20160623T102952_20160623T103504_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_2__20160623T104913_20160623T112127_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_2__20160623T122758_20160623T130119_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_2__20160623T140535_20160623T143941_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_2__20160623T160342_20160623T161918_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_2__20160623T163725_20160623T165025_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_2__20160623T165239_20160623T170633_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_2__20160623T170658_20160623T170930_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_2__20160623T173200_20160623T174225_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.





