

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 7183 - L2 Version 4  
Chandra X-Ray Center

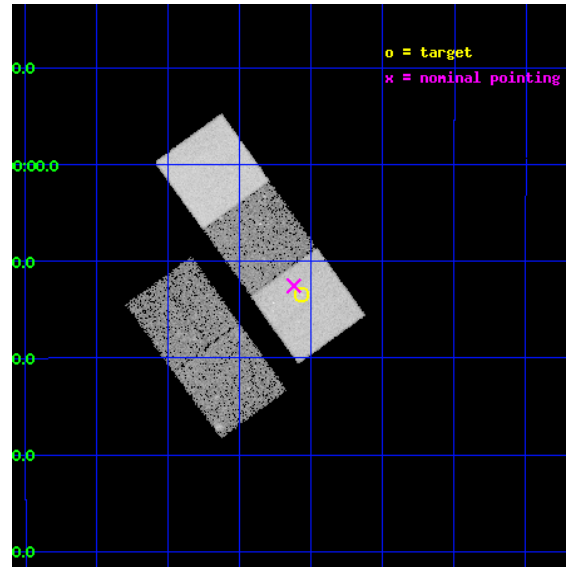
L2 Processing Date : Mar 7 2013

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# 1 Front

seq_num	800500	Sequence number
obs_id	7183	Observation id
title	A detailed study of a $z>1$ galaxy cluster	Proposal title
observer	Dr Laurence Jones	Principal investigator
object	XLSSJ022404.0-041328	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	36.017083	Observer's specified target RA [deg]
dec_targ	-4.224694	Observer's specified target Dec [deg]
ra_nom	36.030614307015	Nominal RA [deg]
dec_nom	-4.2089095413875	Nominal Dec [deg]
roll_nom	54.157613967181	Nominal Roll [deg]
revision	4	Processing version of data
ontime	20122.099961281	Sum of GTIs [s]
livetime	19859.189911612	Livetime [s]
ontime2	20118.958951086	Sum of GTIs [s]
ontime3	20118.958971024	Sum of GTIs [s]
ontime5	20122.099961281	Sum of GTIs [s]
ontime6	20115.818000764	Sum of GTIs [s]
ontime7	20122.099961281	Sum of GTIs [s]
l2events	176482	Number of level 2 events

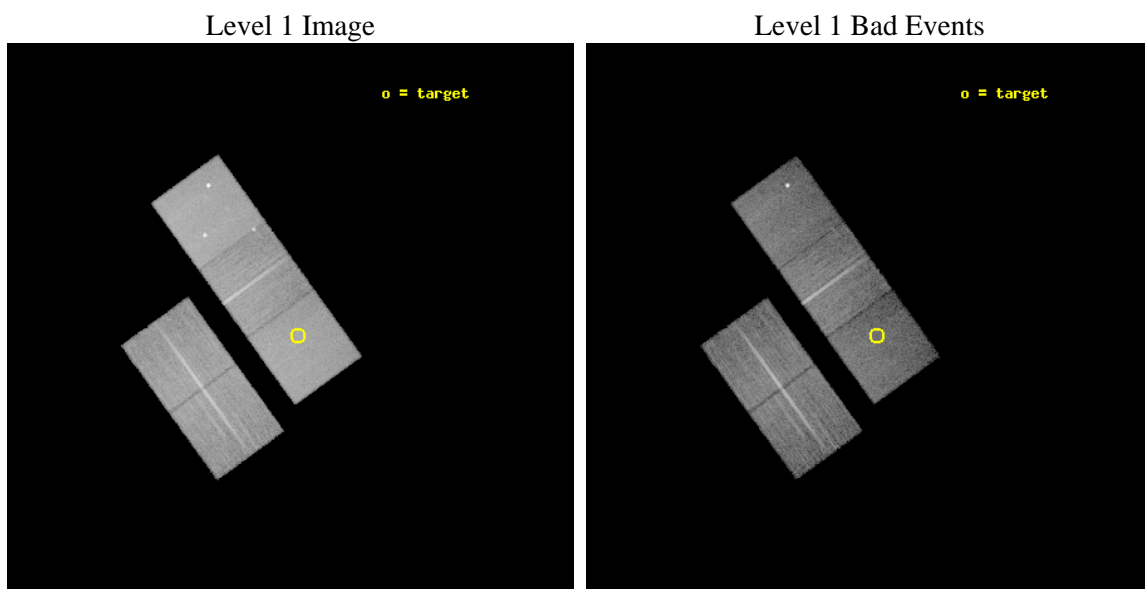




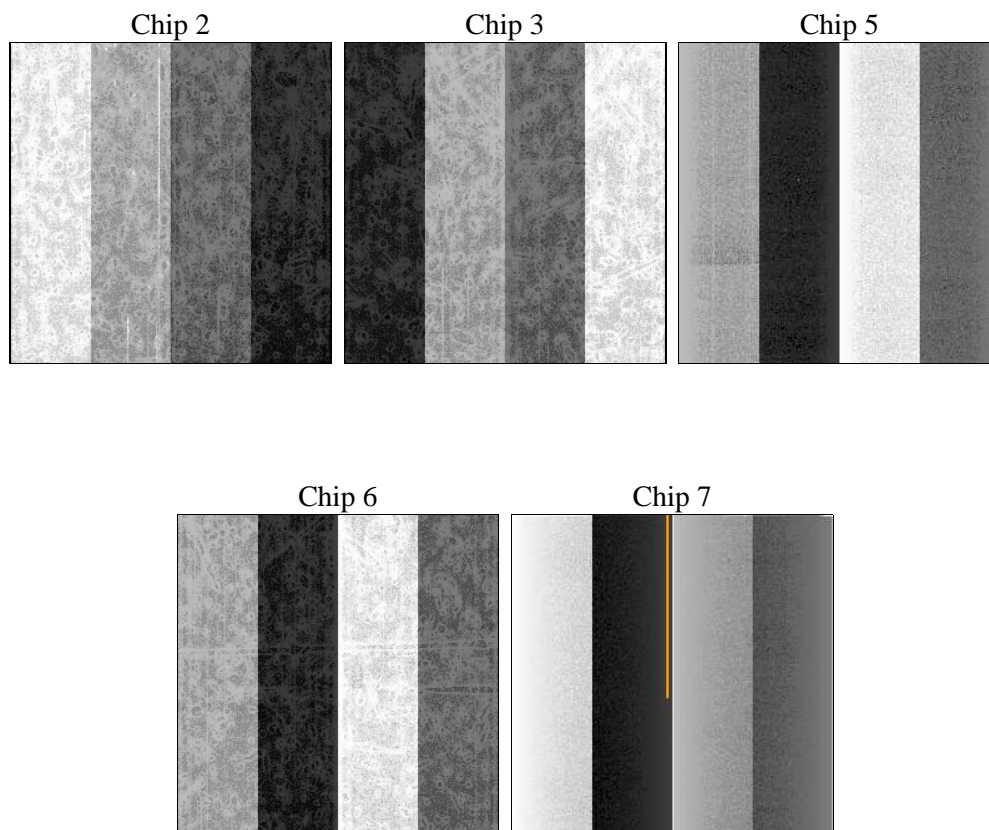
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19940.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	20122.099961281	Sum of GTIs [s]
caldsver	4.5.6	&#160	ontime2	20118.958951086	Sum of GTIs [s]
date	2013-03-08T00:39:20	Date and time of file creation	ontime3	20118.958971024	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	20122.099961281	Sum of GTIs [s]
			ontime6	20115.818000764	Sum of GTIs [s]
			ontime7	20122.099961281	Sum of GTIs [s]
			l1events	747196	Number of level 1 events

### 2.1.4 Events

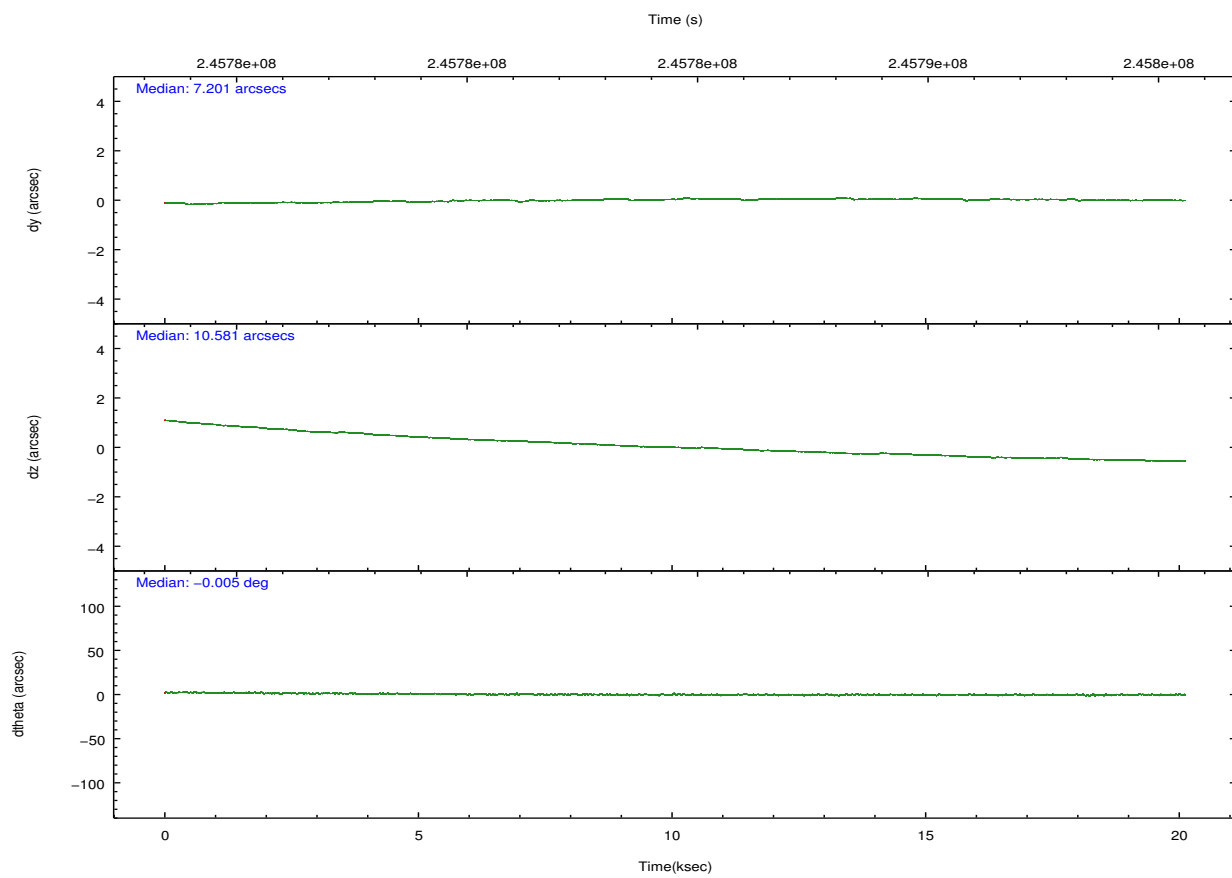
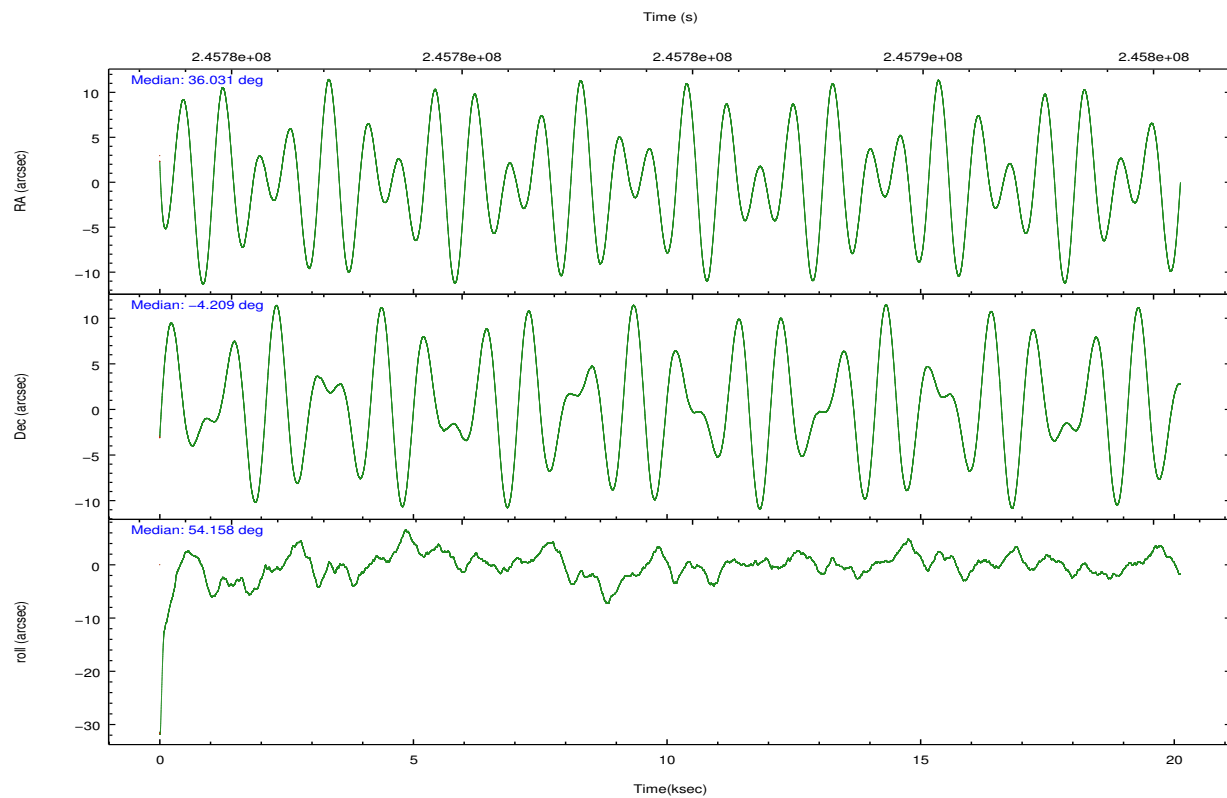
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	138762	130115	189871	137706	150742
rejected events	126325	118060	101718	124524	85875
rejected %	91%	90%	53%	90%	56%

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	4633	4594	8746	4789	5804
	3%	3%	4%	3%	3%
grade 1 events	72	61	281	58	132
	0%	0%	0%	0%	0%
grade 2 events	2969	2722	27821	3036	13560
	2%	2%	14%	2%	8%
grade 3 events	1508	1453	4232	1542	6495
	1%	1%	2%	1%	4%
grade 4 events	1501	1408	3815	1463	6449
	1%	1%	2%	1%	4%
grade 5 events	4243	5363	16709	5630	16040
	3%	4%	8%	4%	10%
grade 6 events	2367	2450	47866	2999	35590
	1%	1%	25%	2%	23%
grade 7 events	121469	112064	80401	118189	66672
	87%	86%	42%	85%	44%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	36.028223	36.03061430701545	Subarray requested	NONE	NONE
[deg] Pointing Dec	-4.236056	-4.208909541387501	Alternating exposures requested	N	N
[deg] Pointing Roll	54.000825	54.15761396718055	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	245774631.184000	245773154.11954			
Observation start date	2005-10-15T14:42:47	2005-10-15T14:19:14			
[s] Observation end time (MET)	245794571.184000	245795808.67058			
Observation end date	2005-10-15T20:15:07	2005-10-15T20:36:48			
Read mode	TIMED	TIMED			

## 2.3 Aspect

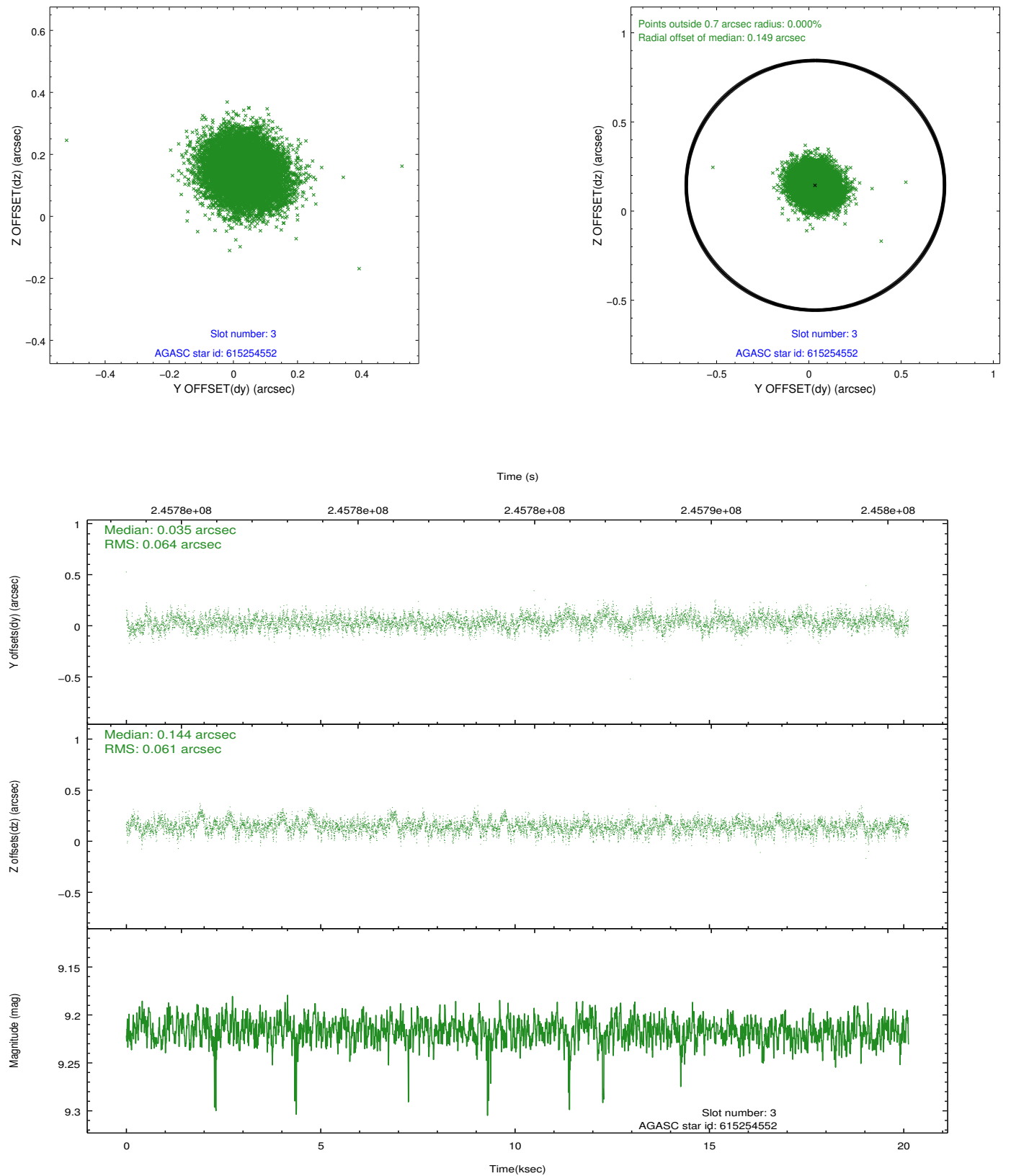


### Slot Statistics

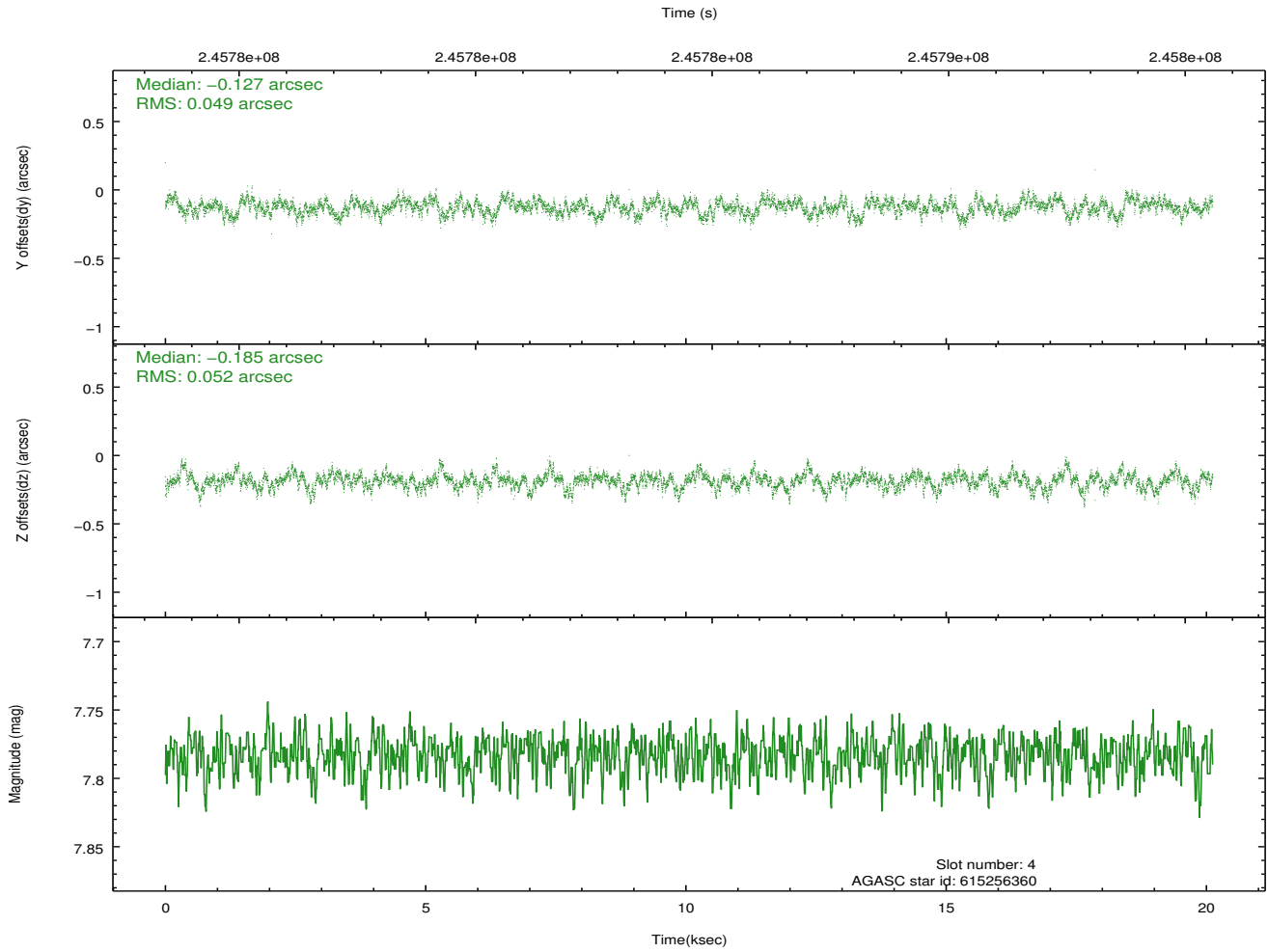
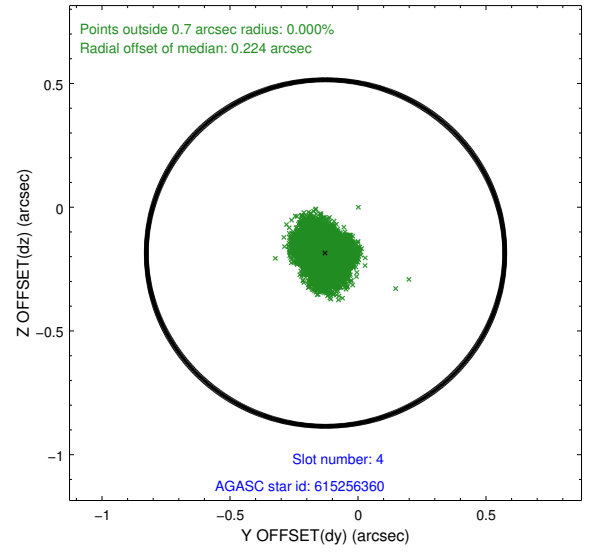
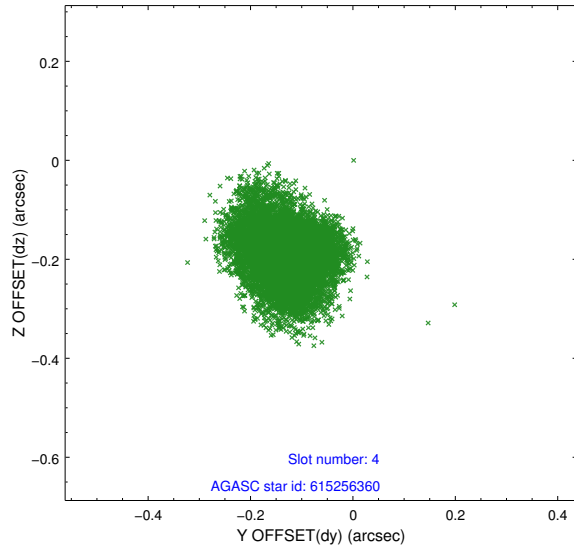
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4909	-0.070	-0.052	0.009	0.017	0.000000	0.000000	-759.99	-1731.93
1	FID	ACIS-S-4	7.21	4908	0.073	0.028	0.009	0.014	0.000000	0.000000	2153.32	176.48
2	FID	ACIS-S-6	7.36	4909	-0.032	0.031	0.008	0.013	0.000000	0.000000	402.23	814.06
3	GUIDE	615254552	9.22	9810	0.035	0.144	0.095	0.150	36.600600	-3.877551	2251.98	-904.89
4	GUIDE	615256360	7.78	9817	-0.127	-0.185	0.077	0.124	36.286608	-3.875886	1594.69	10.76
5	GUIDE	615256944	9.80	9794	0.217	0.027	0.116	0.227	35.497386	-4.510719	-1919.85	959.79
6	GUIDE	615260160	9.70	9810	0.008	0.045	0.138	0.219	35.737387	-3.921265	302.20	1510.79
7	GUIDE	615260392	7.62	9817	-0.139	-0.037	0.059	0.096	35.914136	-3.376682	2261.90	2150.41

## 2.4 Star Slots

### 2.4.1 Slot 3

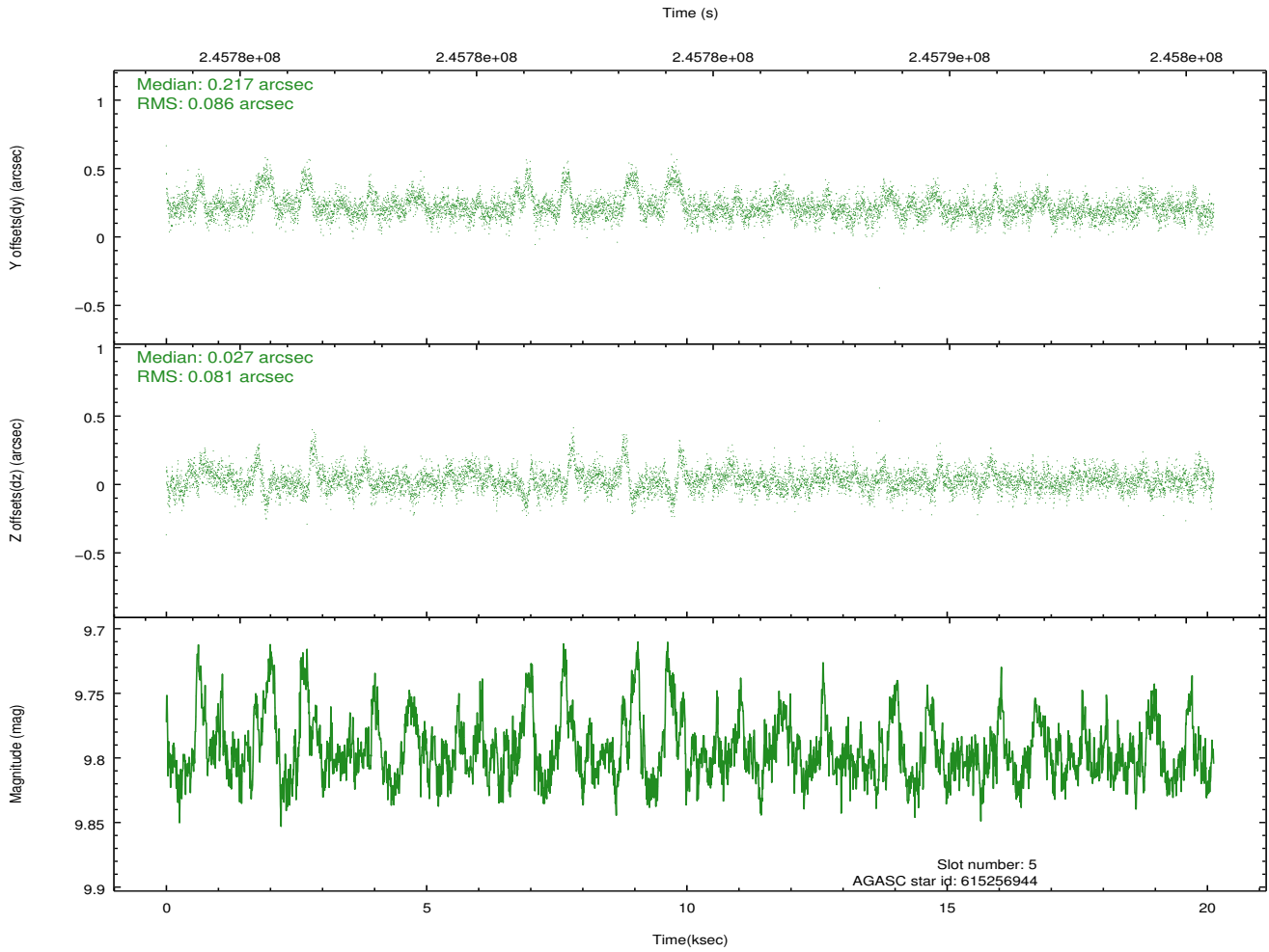
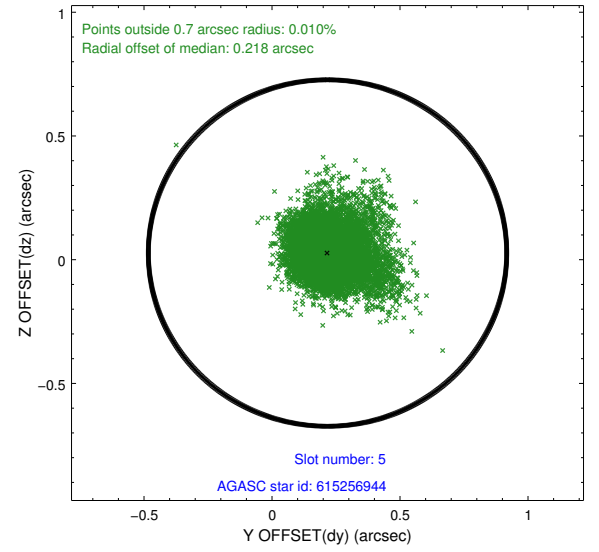
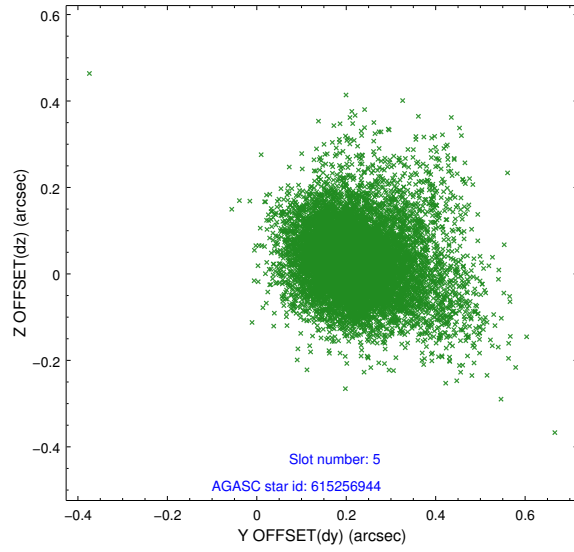


## 2.4.2 Slot 4

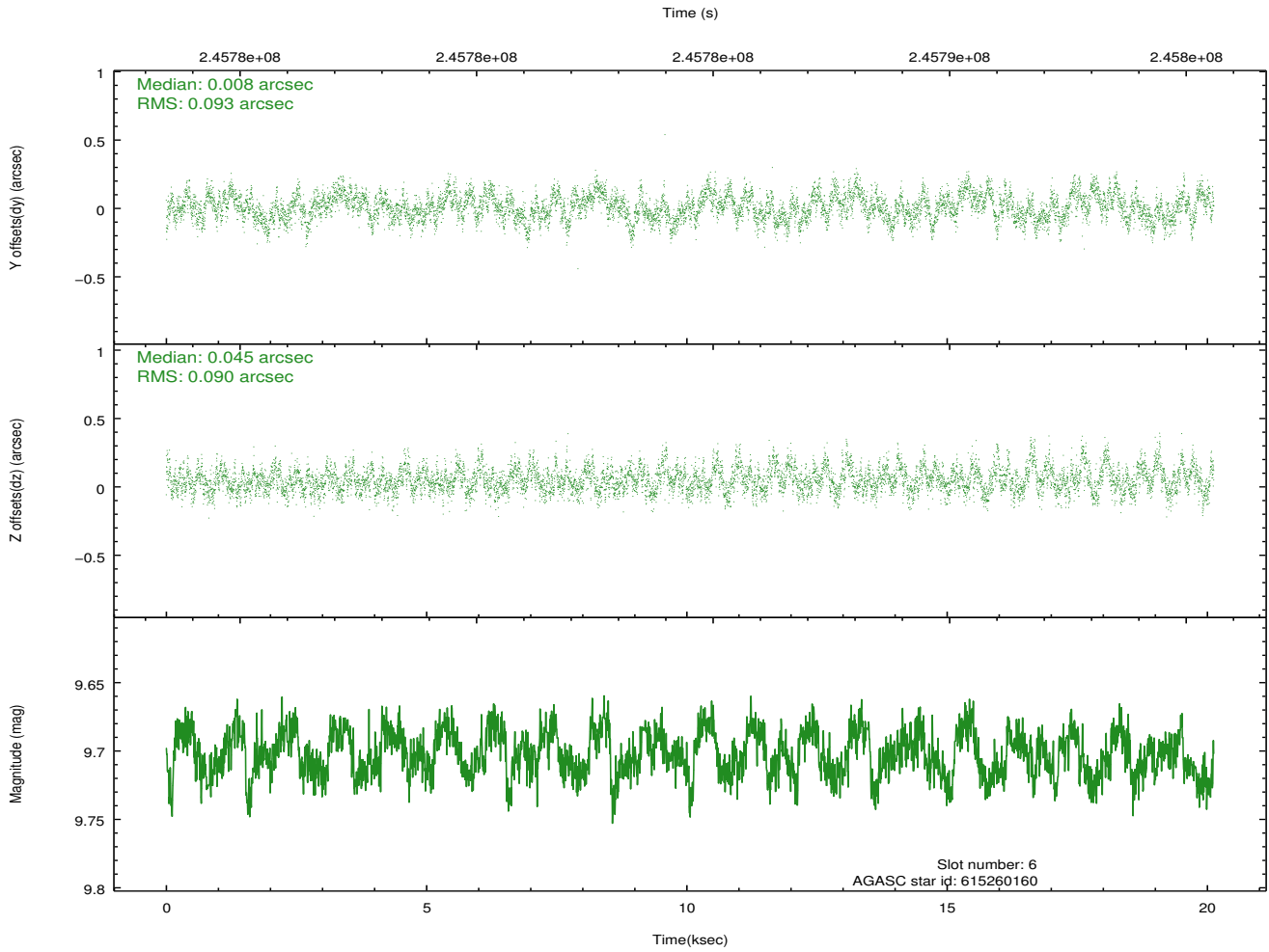
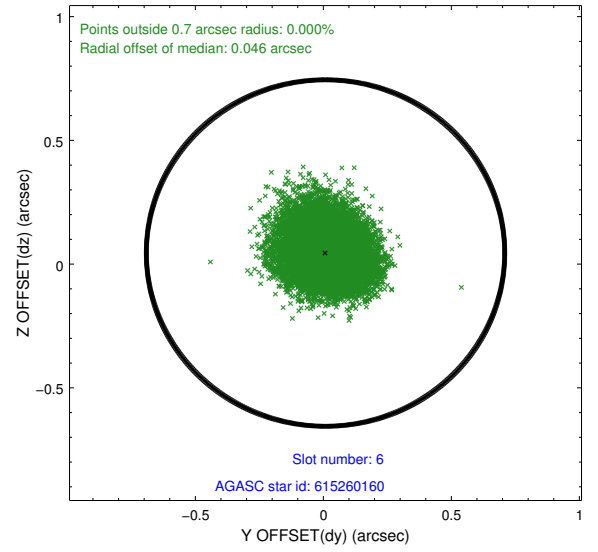
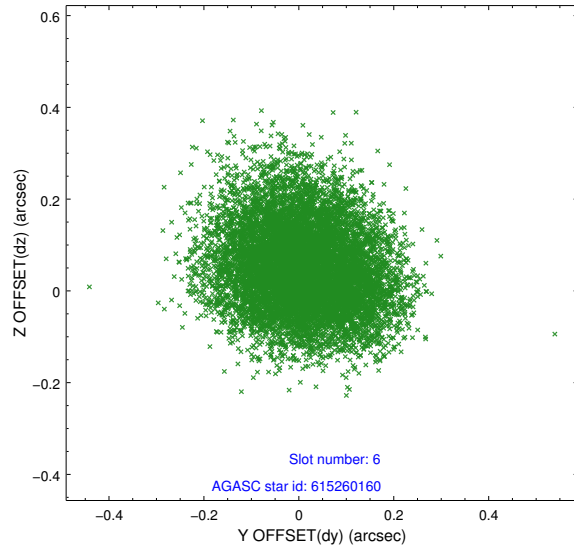




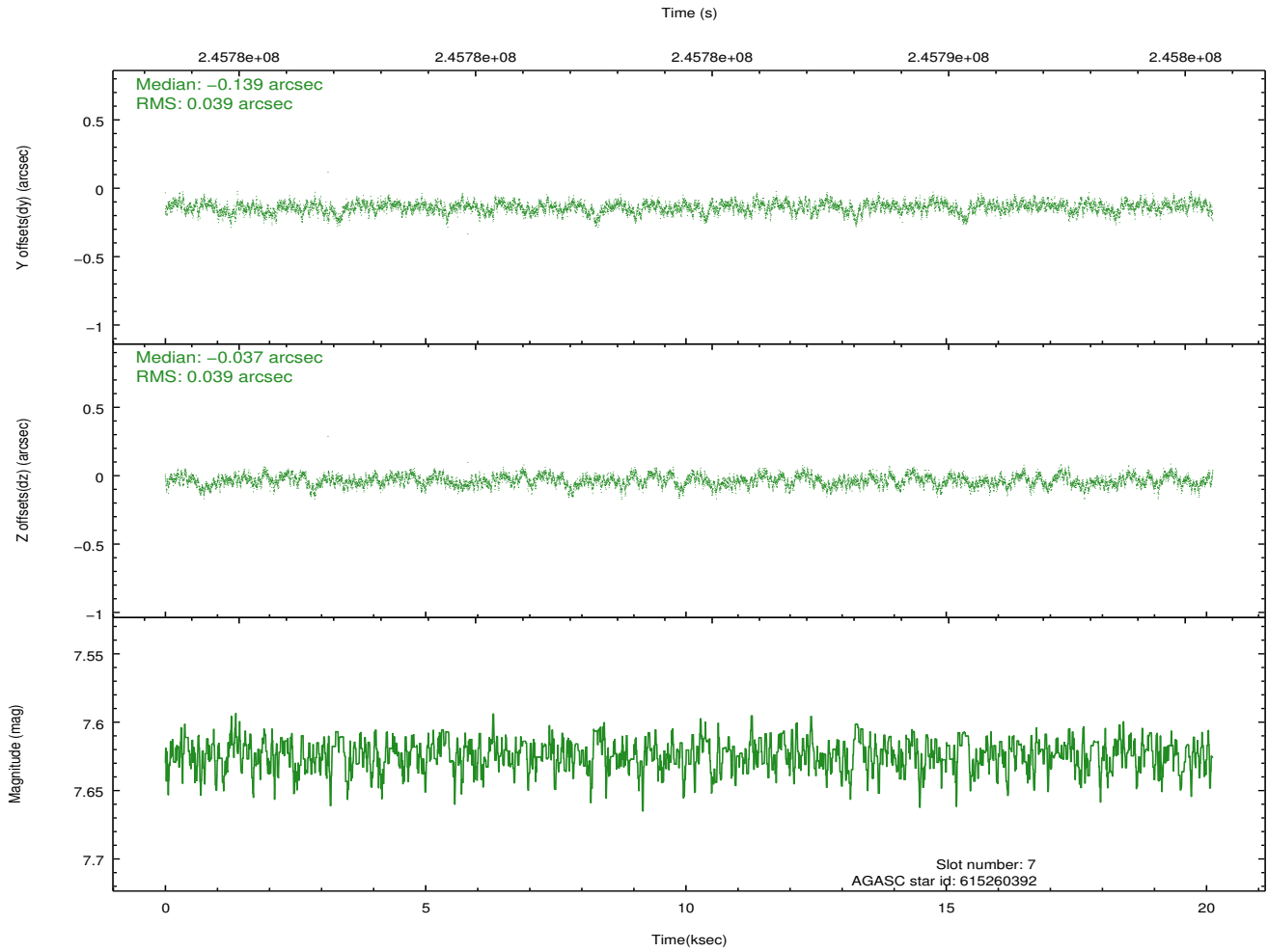
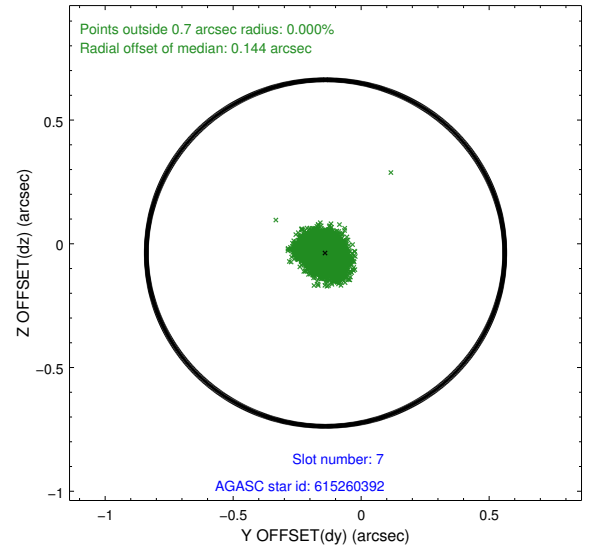
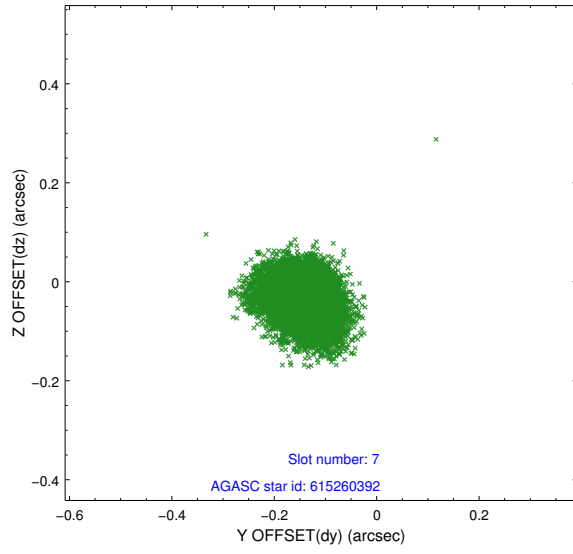
### 2.4.3 Slot 5



## 2.4.4 Slot 6

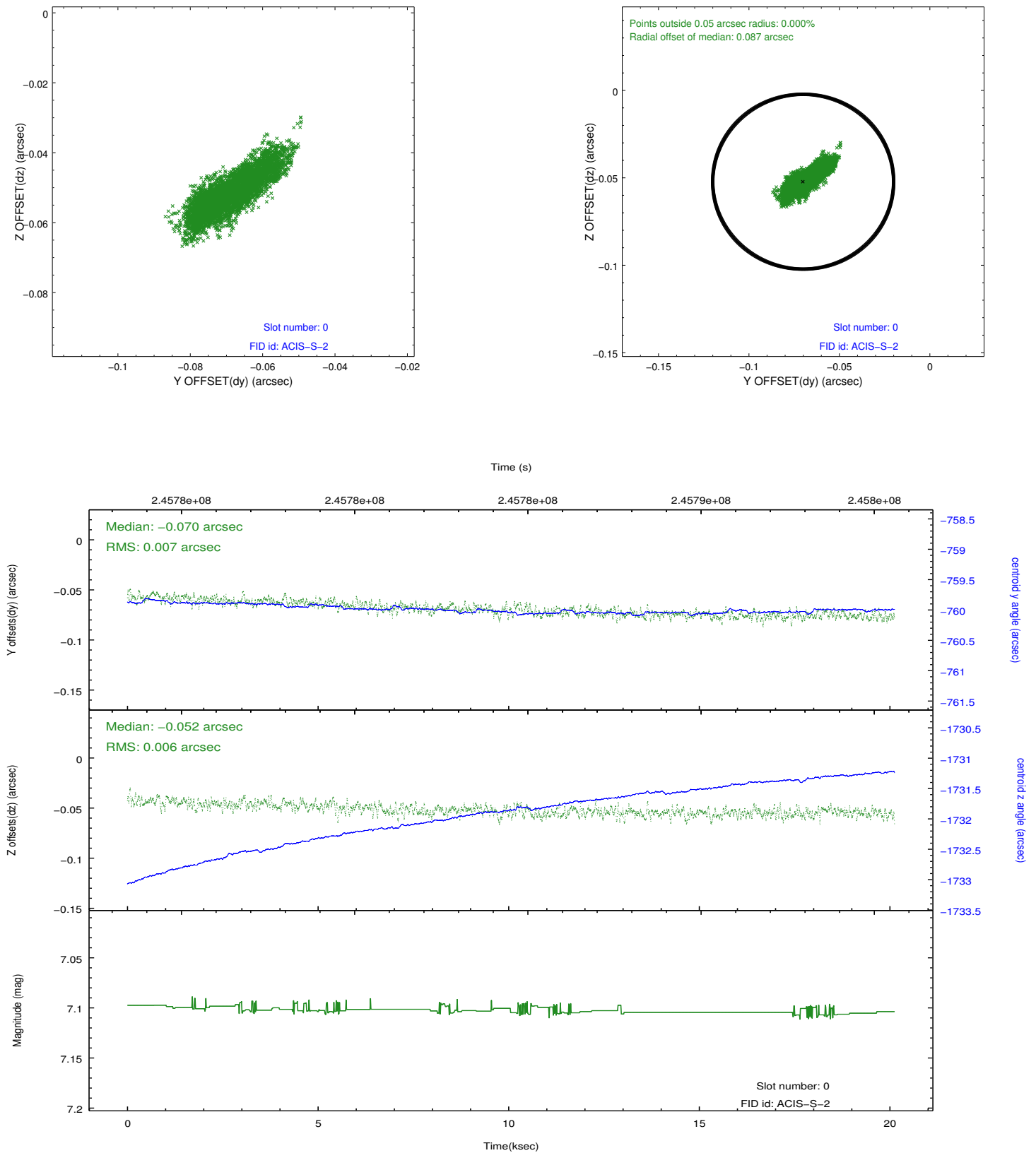


## 2.4.5 Slot 7

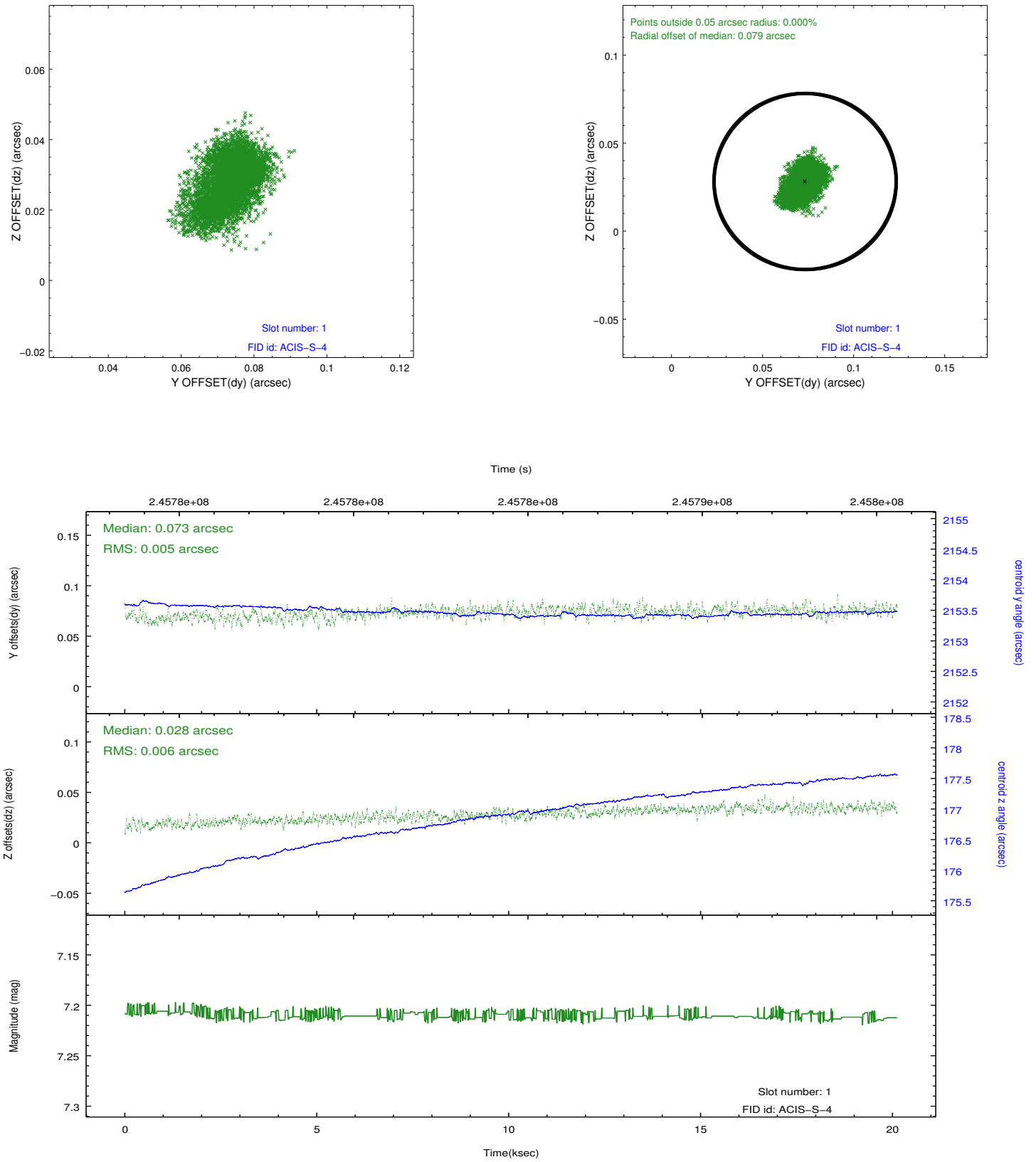


## 2.5 FID Slots

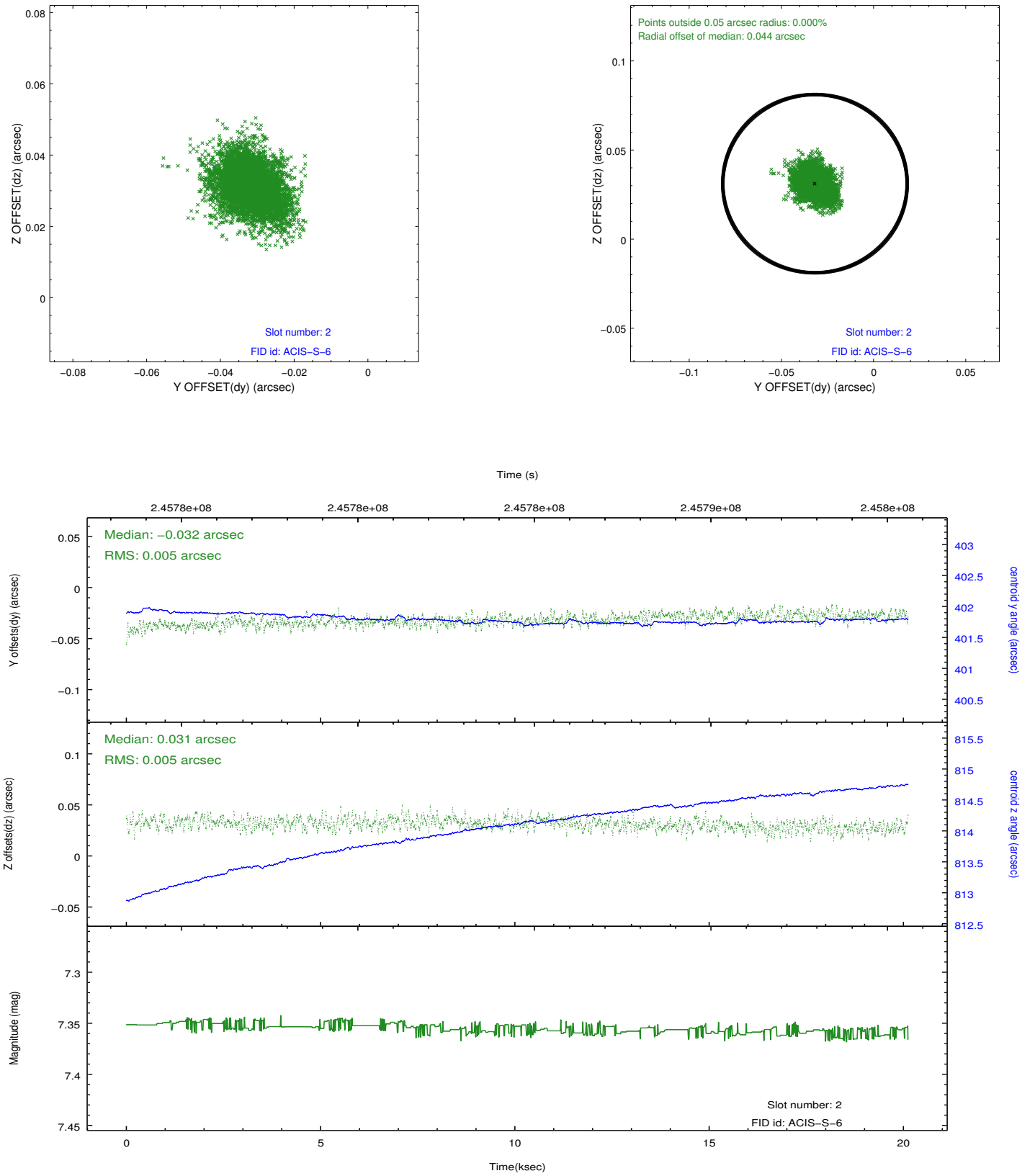
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.03.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.12209

## A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files are incorrect by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct. If using the FP temp values in the headers of data files (some CIAO tools require this information), investigators should subtract 1.3 degrees from the reported temperature to determine the true temperature.

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Joint Proposal: XMM