

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 5886 - L2 Version 4  
Chandra X-Ray Center

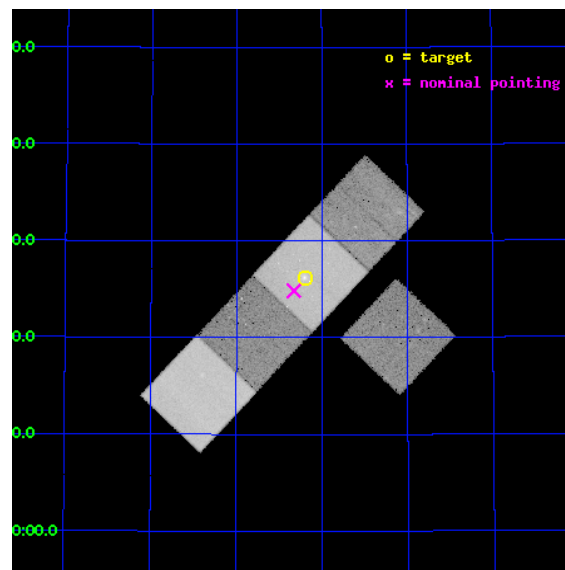
L2 Processing Date : Mar 7 2013

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# 1 Front

seq_num	900386	Sequence number
obs_id	5886	Observation id
title	X-ray Emission from Optically-Selected, High-Redshift Galaxy Clusters from the RCS Survey	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	RCS1419+5326	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.800417	Observer's specified target RA [deg]
dec_targ	53.436389	Observer's specified target Dec [deg]
ra_nom	214.83174601478	Nominal RA [deg]
dec_nom	53.414077756142	Nominal Dec [deg]
roll_nom	313.36074751057	Nominal Roll [deg]
revision	4	Processing version of data
ontime	48180.199907333	Sum of GTIs [s]
livetime	47550.690125796	Livetime [s]
ontime3	48180.199907333	Sum of GTIs [s]
ontime5	48180.199907333	Sum of GTIs [s]
ontime6	48177.058927089	Sum of GTIs [s]
ontime7	48180.199907333	Sum of GTIs [s]
ontime8	48180.199907333	Sum of GTIs [s]
l2events	406320	Number of level 2 events

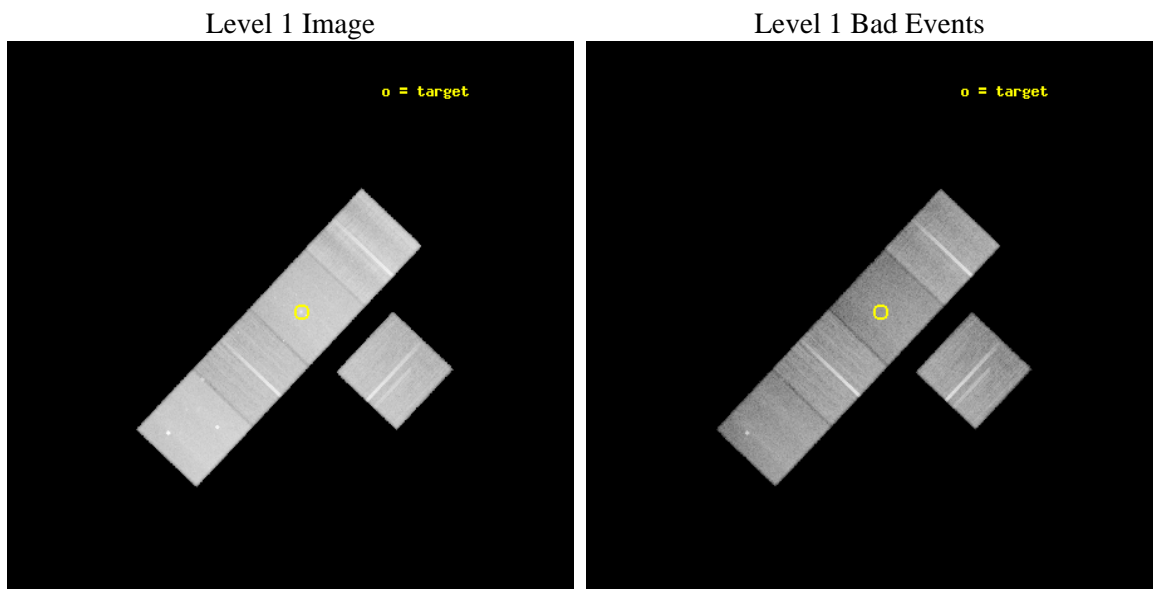




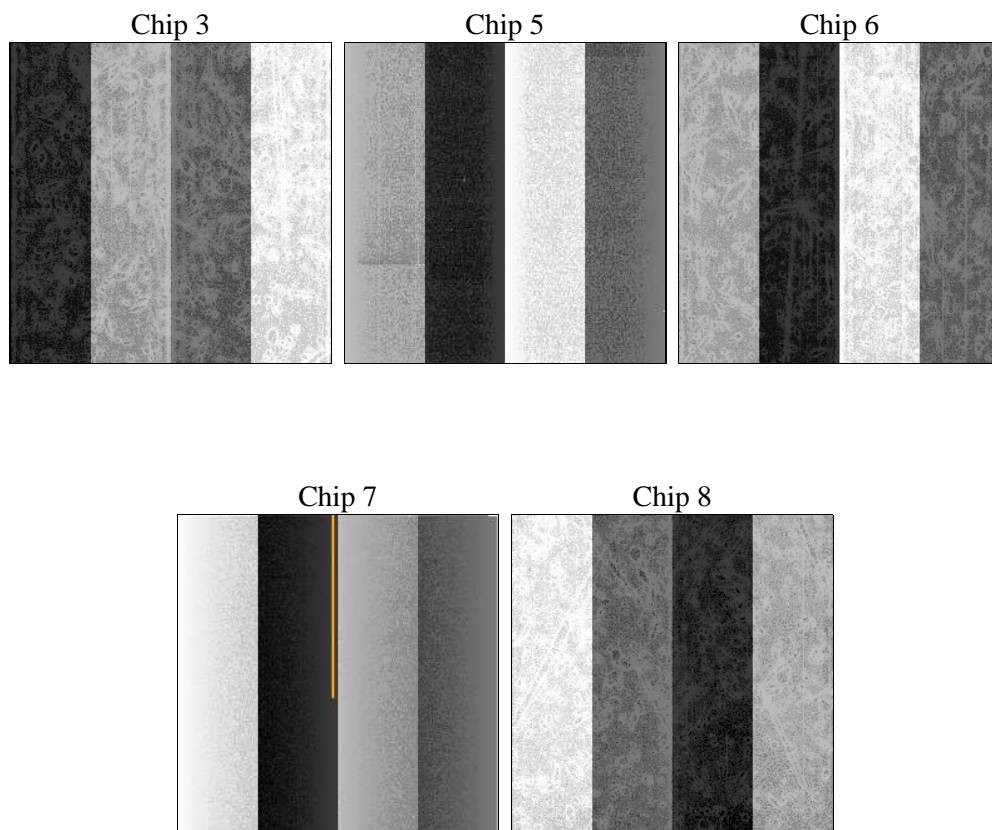
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	48000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	48180.199907333	Sum of GTIs [s]
caldbver	4.5.6	&#160	ontime3	48180.199907333	Sum of GTIs [s]
date	2013-03-07T19:03:15	Date and time of file creation	ontime5	48180.199907333	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	48177.058927089	Sum of GTIs [s]
			ontime7	48180.199907333	Sum of GTIs [s]
			ontime8	48180.199907333	Sum of GTIs [s]
			l1events	1545517	Number of level 1 events

### 2.1.4 Events

	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	253113	369998	261619	309225	351562	grade 0 events	9754	16775	11208	15472	33319
rejected events	226863	183007	231351	160173	247931		3%	4%	4%	5%	9%
rejected %	89%	49%	88%	51%	70%	grade 1 events	123	1360	135	222	273
							0%	0%	0%	0%	0%
						grade 2 events	5567	57105	6765	30436	20582
							2%	15%	2%	9%	5%
						grade 3 events	3029	9505	3091	14398	12944
							1%	2%	1%	4%	3%
						grade 4 events	2826	9319	3108	14531	11936
							1%	2%	1%	4%	3%
						grade 5 events	10400	30518	10683	31418	15538
							4%	8%	4%	10%	4%
						grade 6 events	5304	96084	6328	75463	25676
							2%	25%	2%	24%	7%
						grade 7 events	216110	149332	220301	127285	231294
							85%	40%	84%	41%	65%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	214.787773	214.8317460147819	Subarray requested	NONE	NONE
[deg] Pointing Dec	53.421526	53.41407775614183	Alternating exposures requested	N	N
[deg] Pointing Roll	313.239426	313.3607475105651	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	243366877.184000	243365684.23377			
Observation start date	2005-09-17T17:53:33	2005-09-17T17:34:44			
[s] Observation end time (MET)	243414877.184000	243415884.12357			
Observation end date	2005-09-18T07:13:33	2005-09-18T07:31:24			
Read mode	TIMED	TIMED			

## 2.3 Aspect

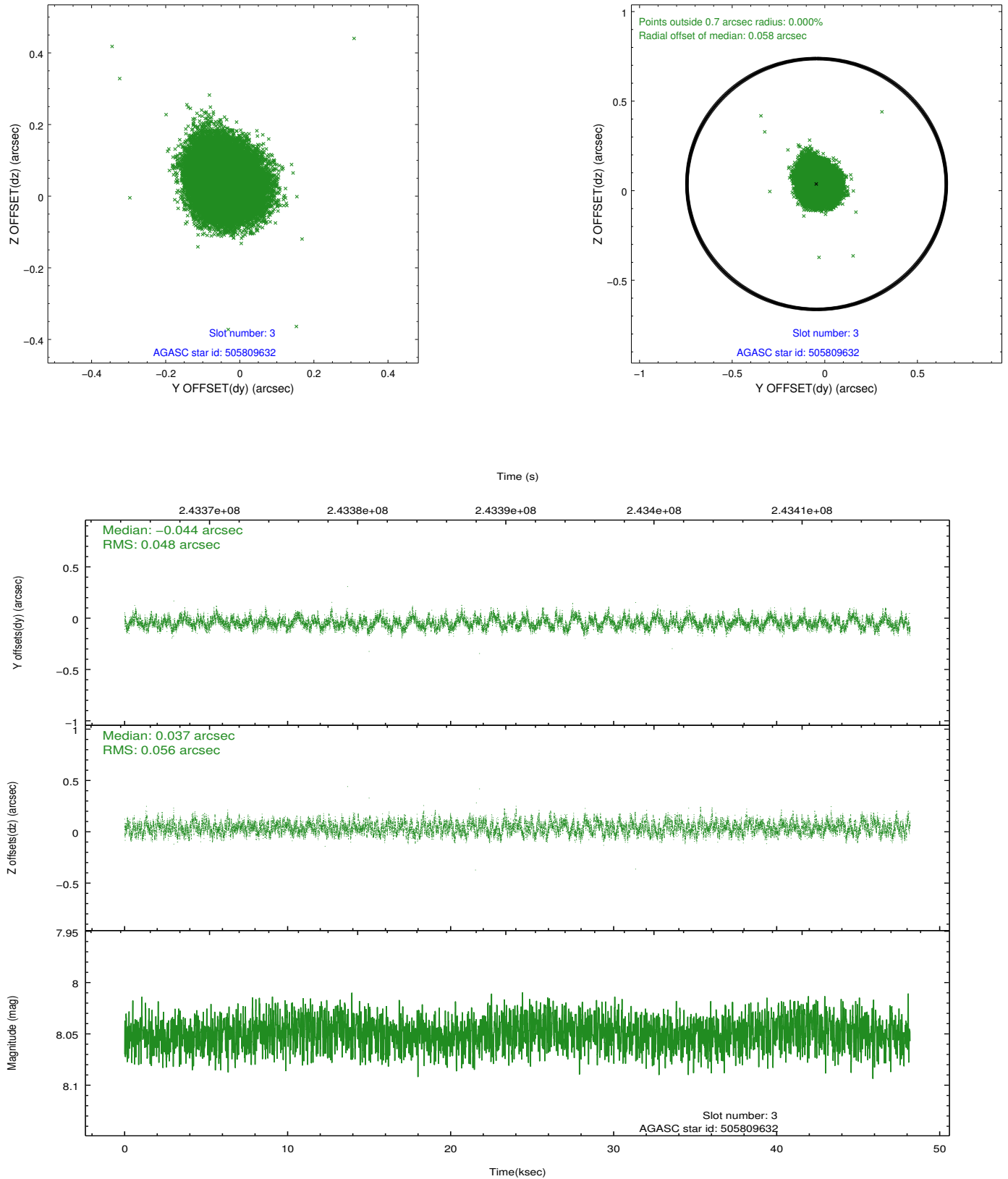


### Slot Statistics

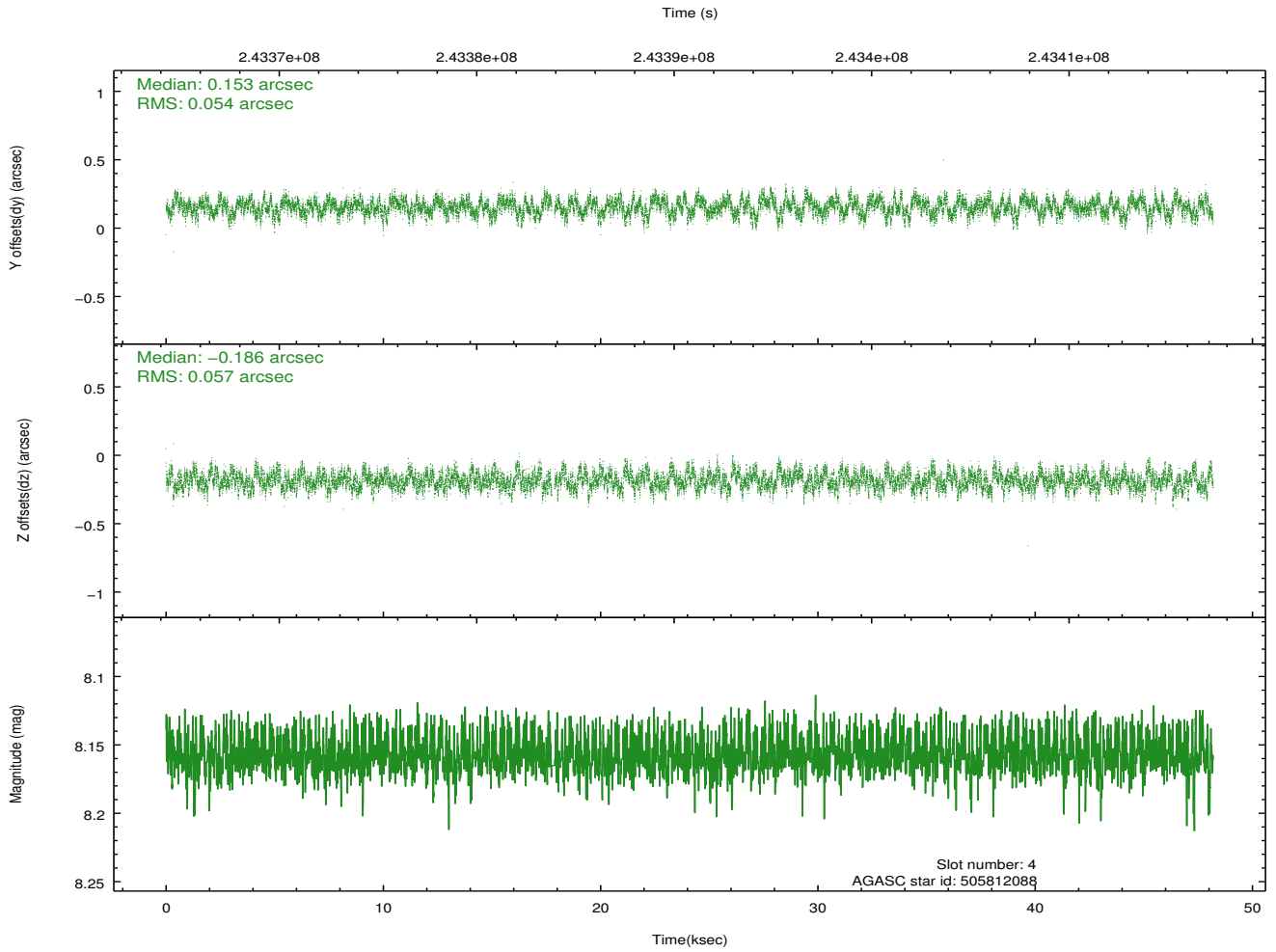
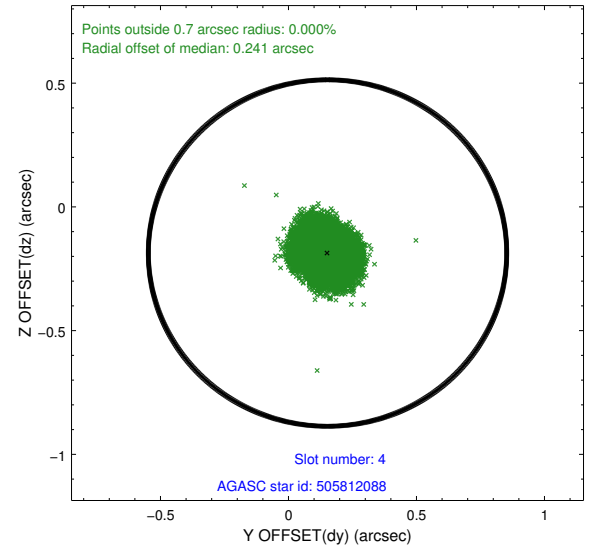
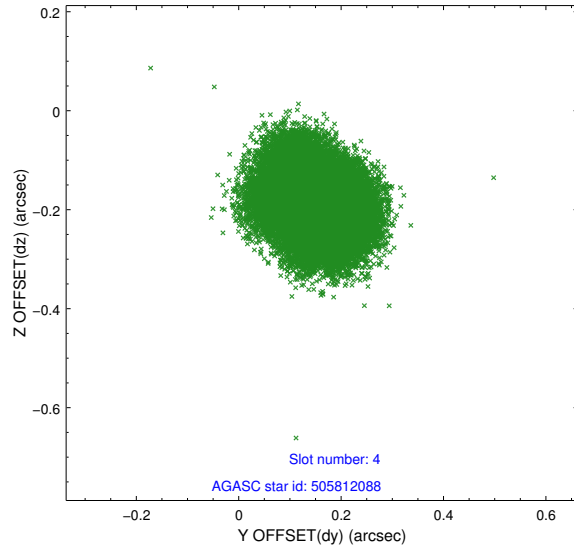
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	11753	-0.038	-0.023	0.015	0.029	0.000000	0.000000	-759.50	-1732.89
1	FID	ACIS-S-4	7.20	11753	0.077	0.025	0.013	0.031	0.000000	0.000000	2153.89	175.67
2	FID	ACIS-S-5	7.23	11751	-0.070	0.008	0.012	0.019	0.000000	0.000000	-1812.40	169.28
3	GUIDE	505809632	8.05	23500	-0.044	0.037	0.079	0.124	215.499426	53.521185	776.58	1360.78
4	GUIDE	505812088	8.16	23432	0.153	-0.186	0.086	0.132	214.186617	53.263562	-475.89	-1328.96
5	GUIDE	505817208	10.14	23452	0.042	0.019	0.163	0.269	216.079038	53.466425	1759.54	2143.95
6	GUIDE	505817616	10.10	23297	0.047	0.140	0.152	0.243	216.040487	53.402541	1874.26	1928.38
7	GUIDE	505812376	7.65	23504	-0.197	-0.012	0.079	0.124	214.039537	52.937930	150.39	-2369.29

## 2.4 Star Slots

### 2.4.1 Slot 3

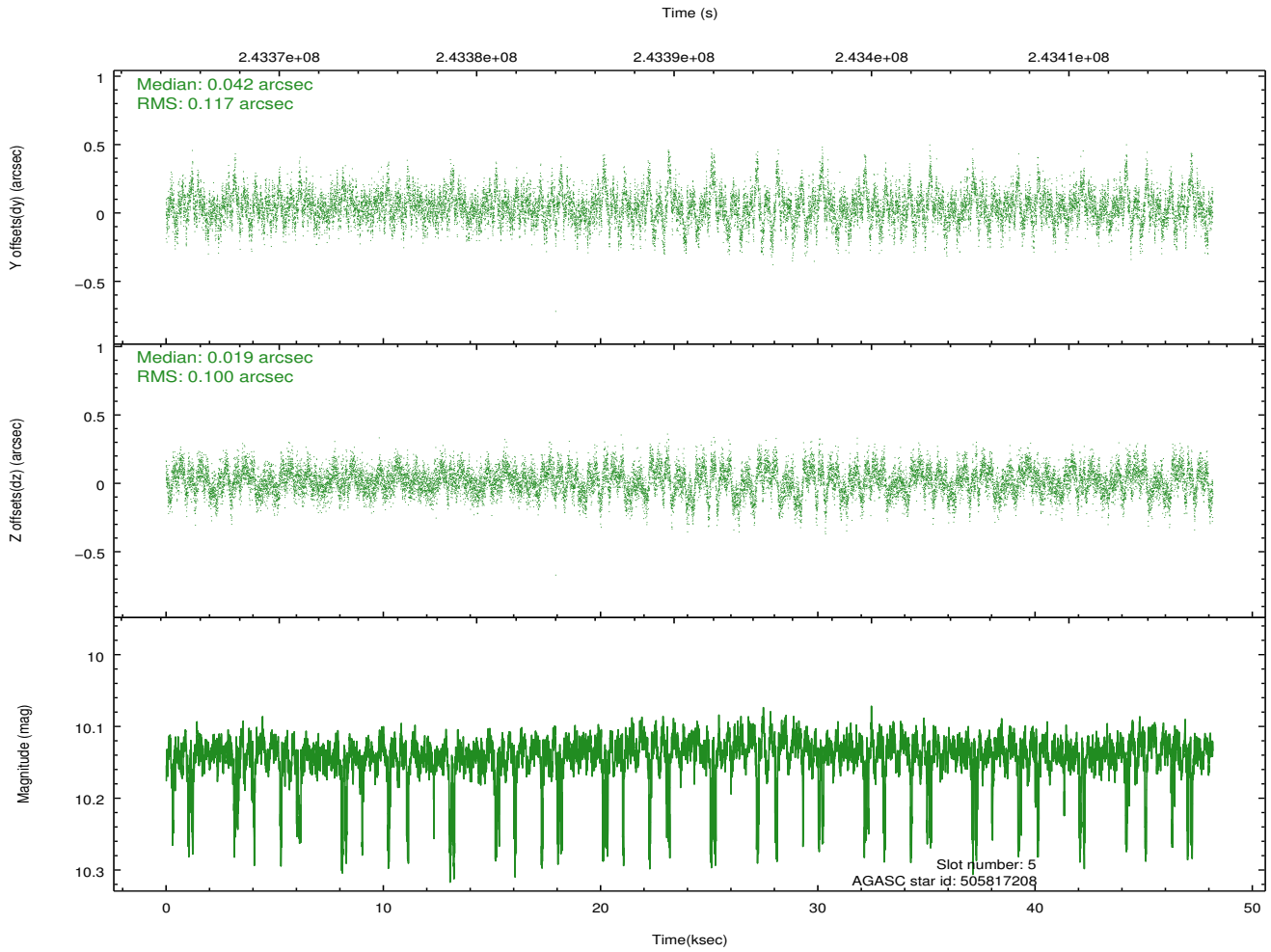
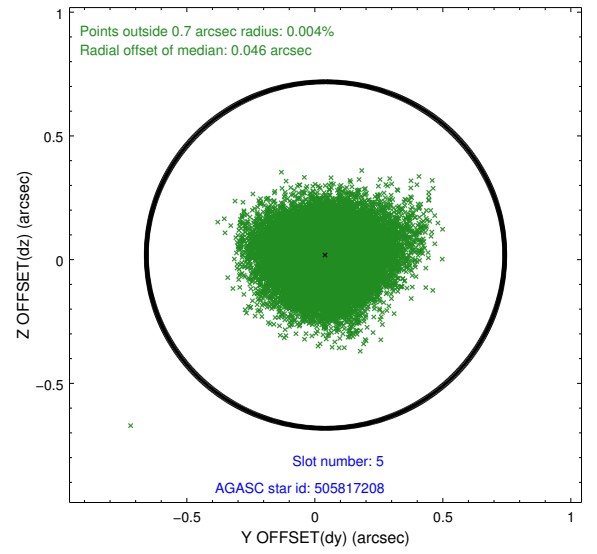
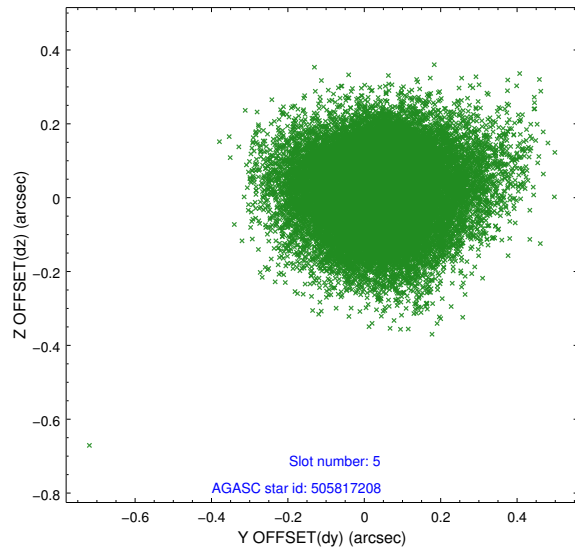


## 2.4.2 Slot 4

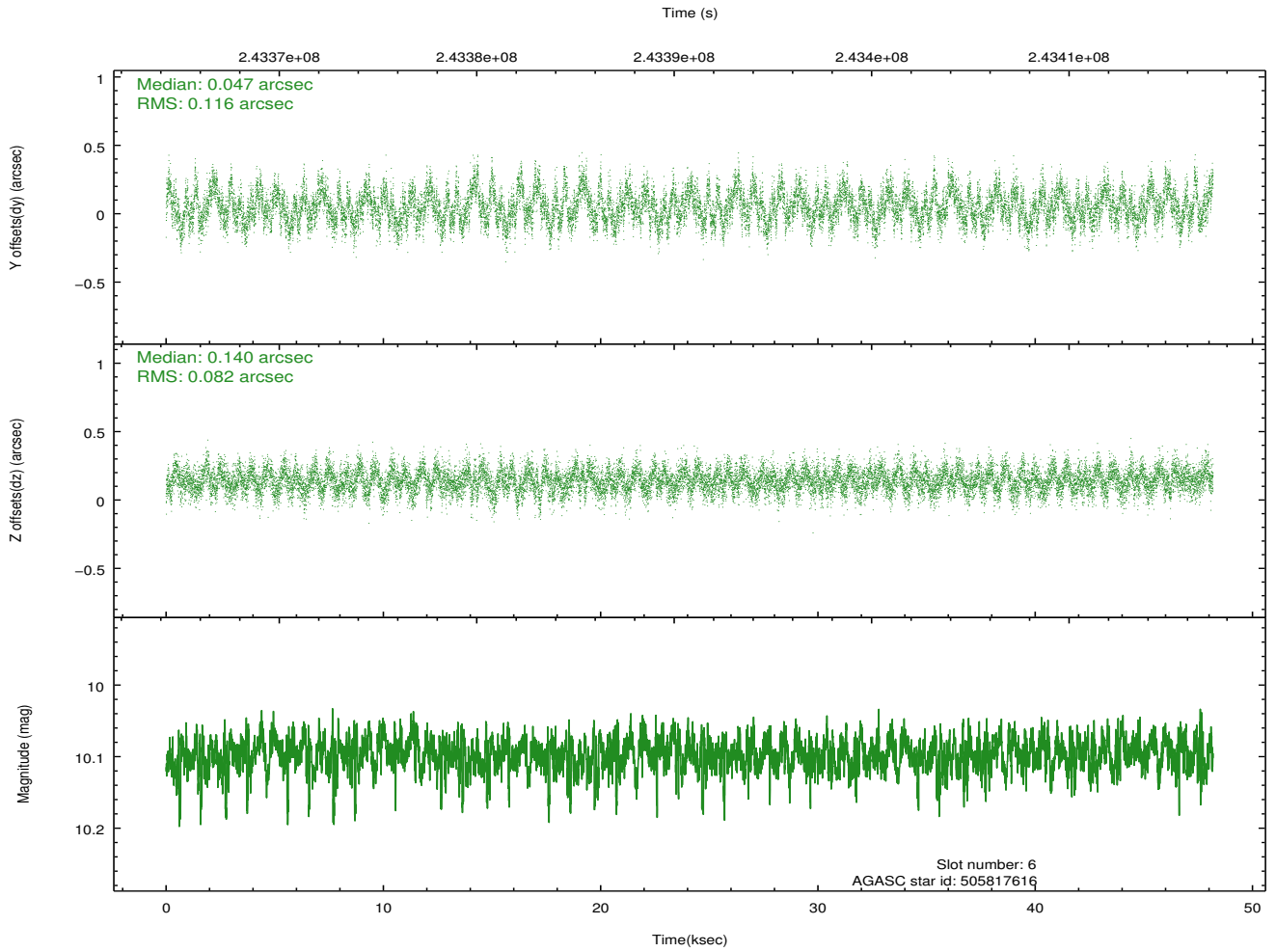
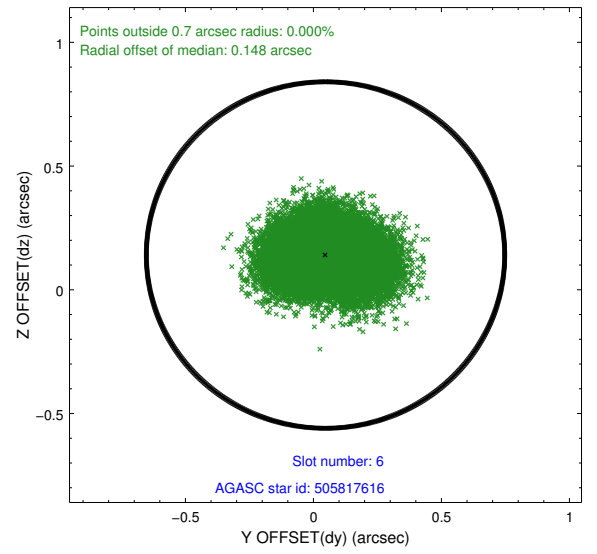
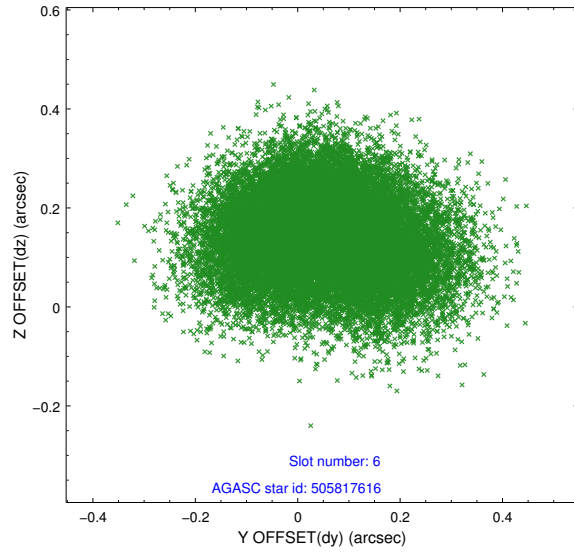




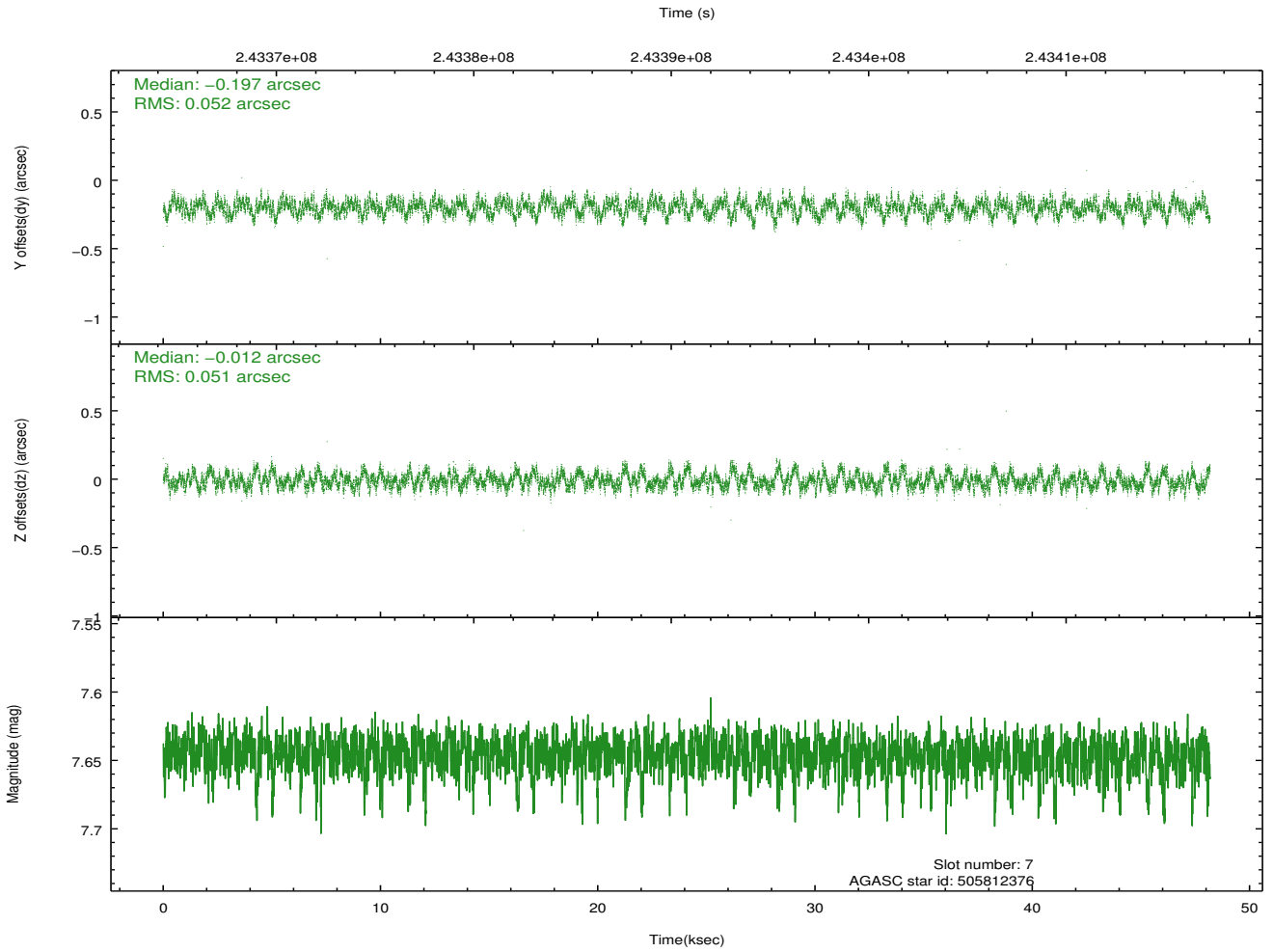
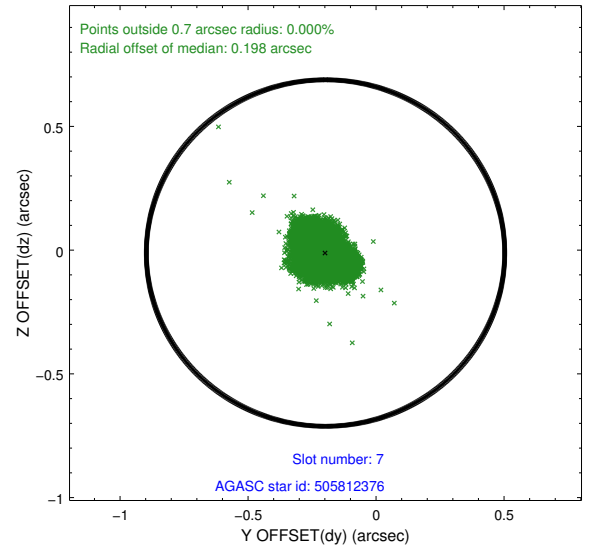
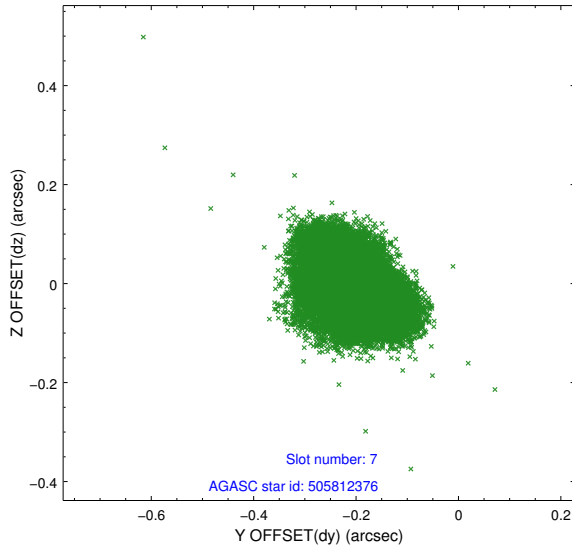
### 2.4.3 Slot 5



## 2.4.4 Slot 6

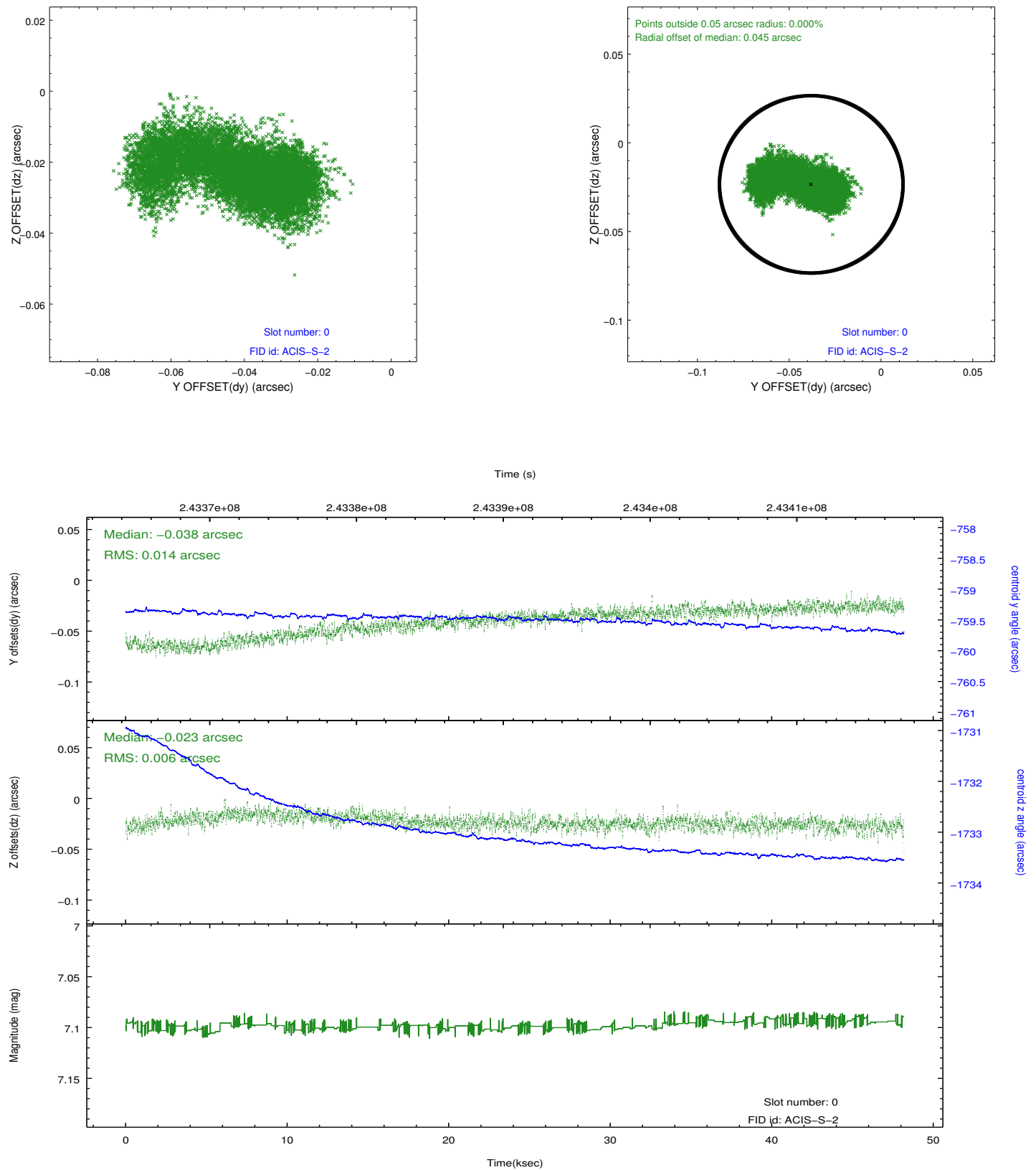


## 2.4.5 Slot 7

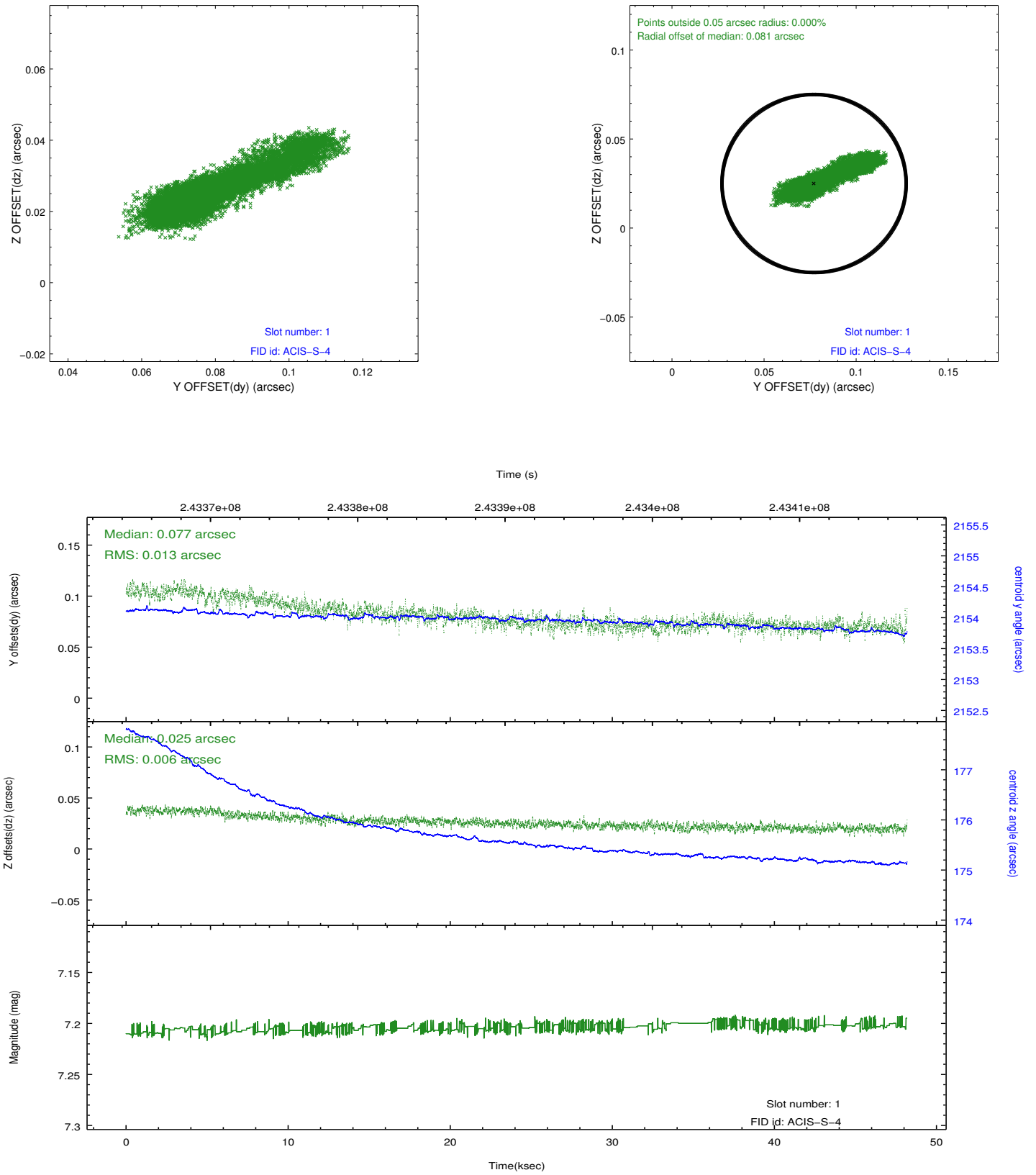


## 2.5 FID Slots

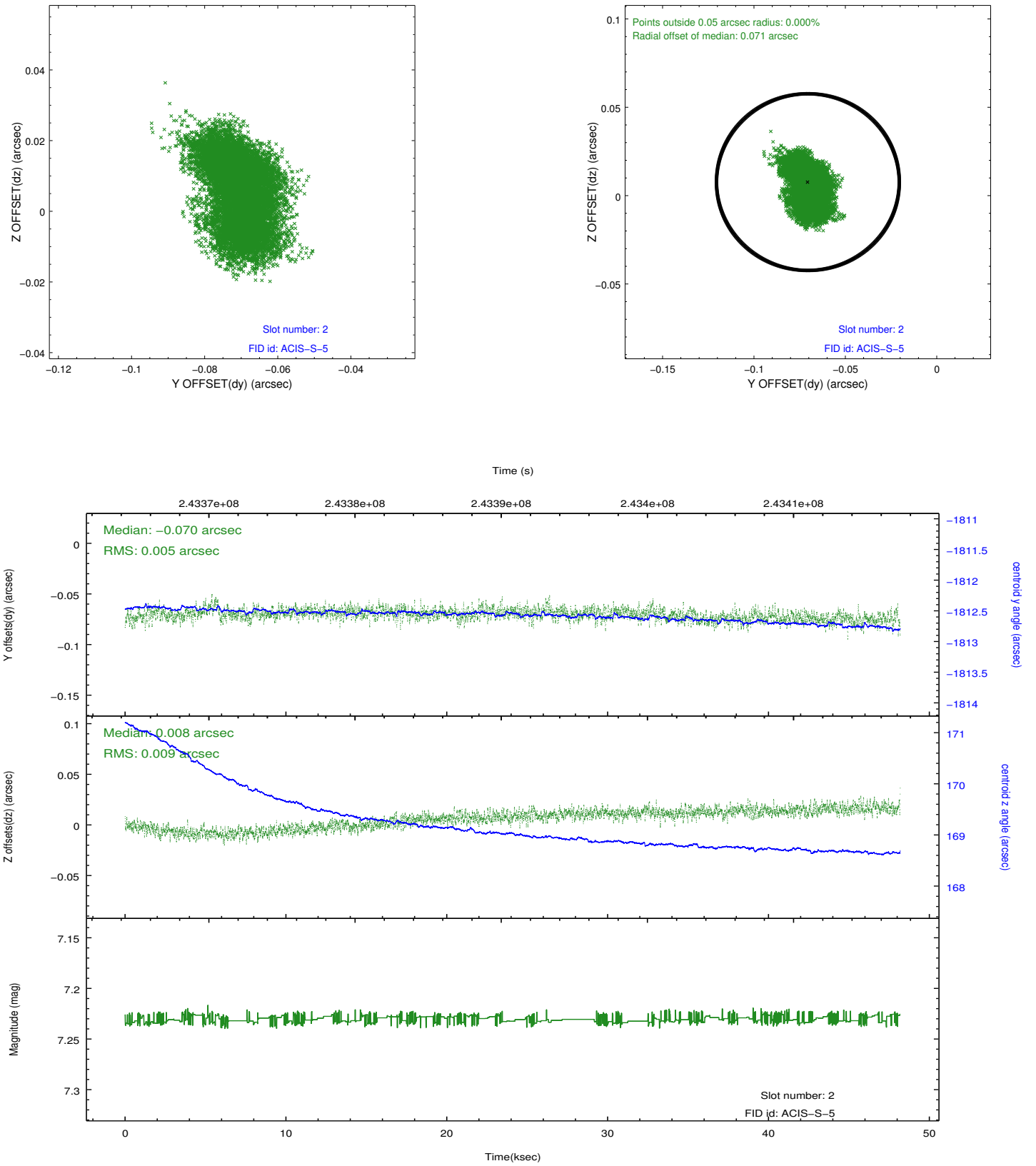
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.03.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.18019

## 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.