

# V&V Reference Report

## L2 ASCDS Version : 10.4

Observation 17188 - L2 Version 1  
Chandra X-Ray Center

L2 Processing Date : Jun 6 2015

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# 1 Front

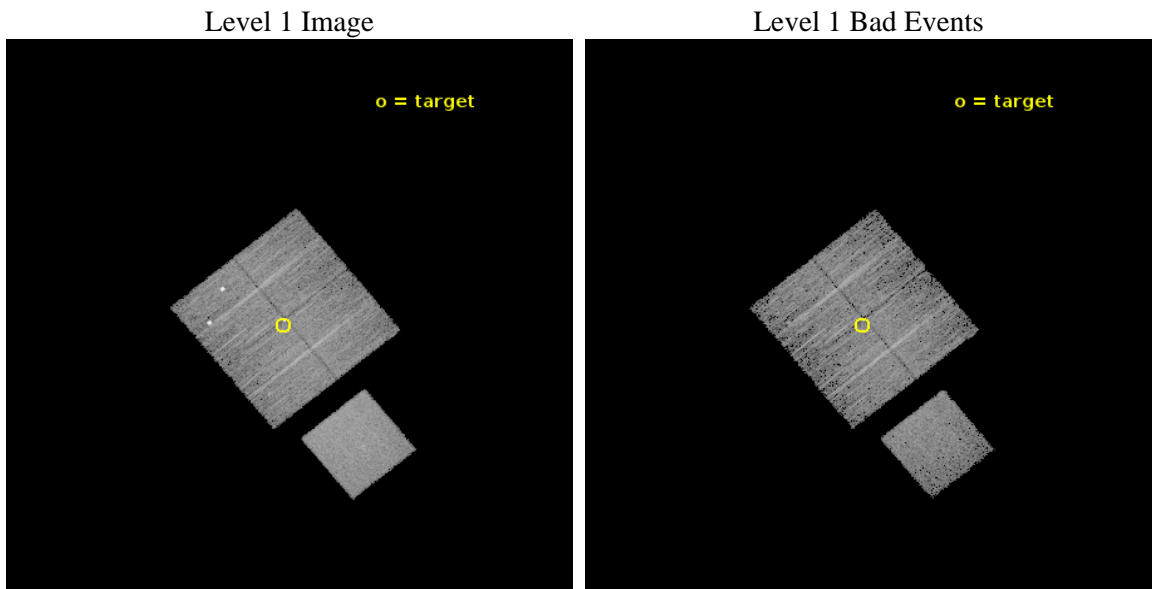
seq_num	801471	Sequence number
obs_id	17188	Observation id
title	Completing the survey of the most massive southern galaxy clusters	&#160
observer	Prof. Hans Boehringer	Principal investigator
object	RXCJ0219.8-3002	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	34.97125	Observer's specified target RA [deg]
dec_targ	-30.035389	Observer's specified target Dec [deg]
ra_nom	34.960470315298	Nominal RA [deg]
dec_nom	-30.031924869489	Nominal Dec [deg]
roll_nom	140.6757586433	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9380.46296525	Sum of GTIs [s]
livetime	9257.9003108127	Livetime [s]
ontime0	9380.3398451805	Sum of GTIs [s]
ontime1	9377.239855051	Sum of GTIs [s]
ontime2	9380.4219251871	Sum of GTIs [s]
ontime3	9380.46296525	Sum of GTIs [s]
ontime7	9380.5040051937	Sum of GTIs [s]
l2events	46335	Number of level 2 events



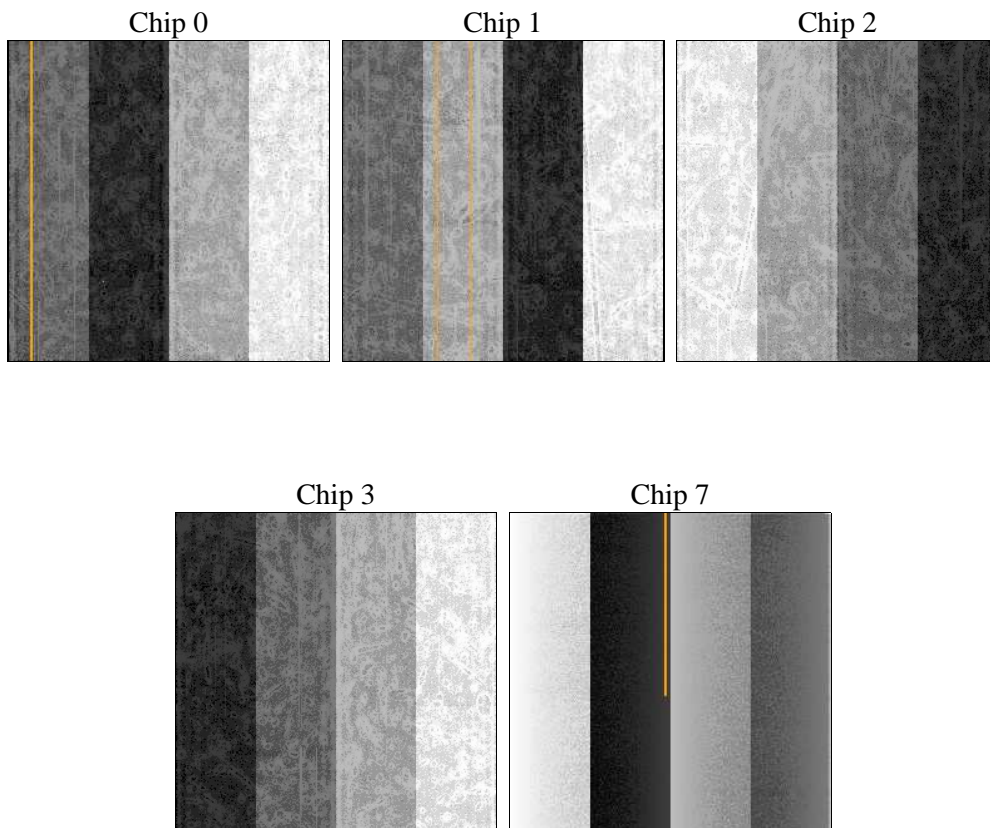
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9318.067000	[s] Scheduled observation exposure time
ascdsver	10.4	Processing system revision	ontime	9380.46296525	Sum of GTIs [s]
caldbver	4.6.7	&#160	ontime0	9380.3398451805	Sum of GTIs [s]
date	2015-06-06T15:34:58	Date and time of file creation	ontime1	9377.239855051	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	9380.4219251871	Sum of GTIs [s]
			ontime3	9380.46296525	Sum of GTIs [s]
			ontime7	9380.5040051937	Sum of GTIs [s]
			l1events	254847	Number of level 1 events

### 2.1.4 Events

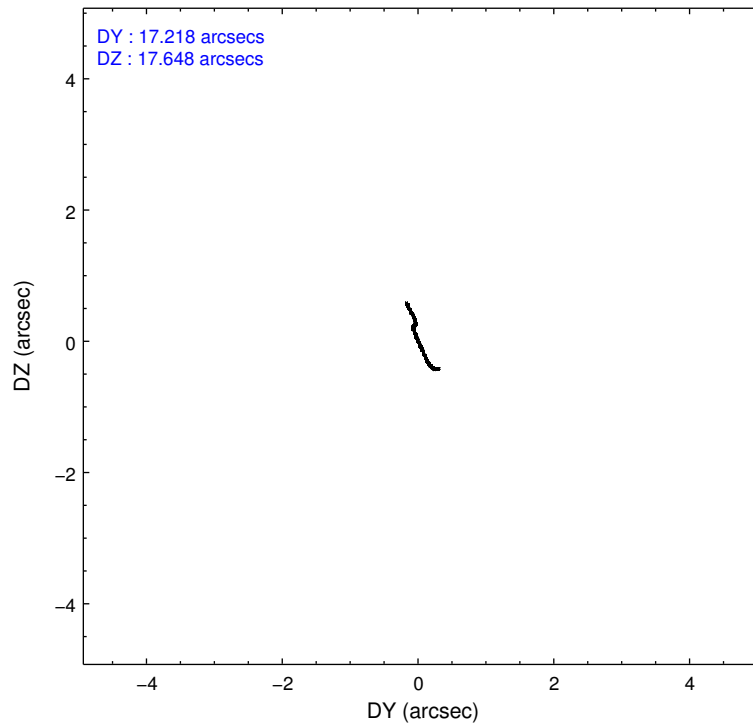
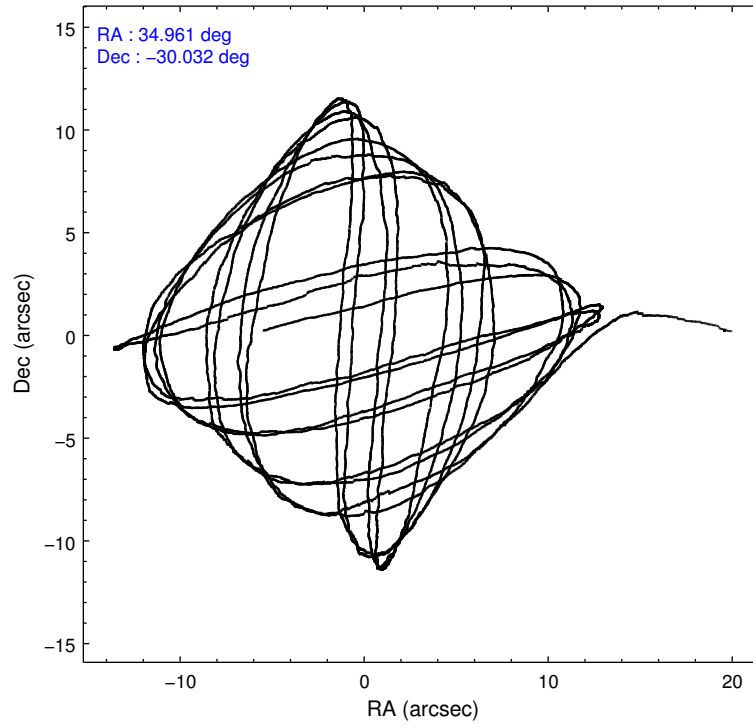
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	43729	50824	46605	48516	65173
rejected events	38352	40240	41341	42415	37397
rejected %	87%	79%	88%	87%	57%

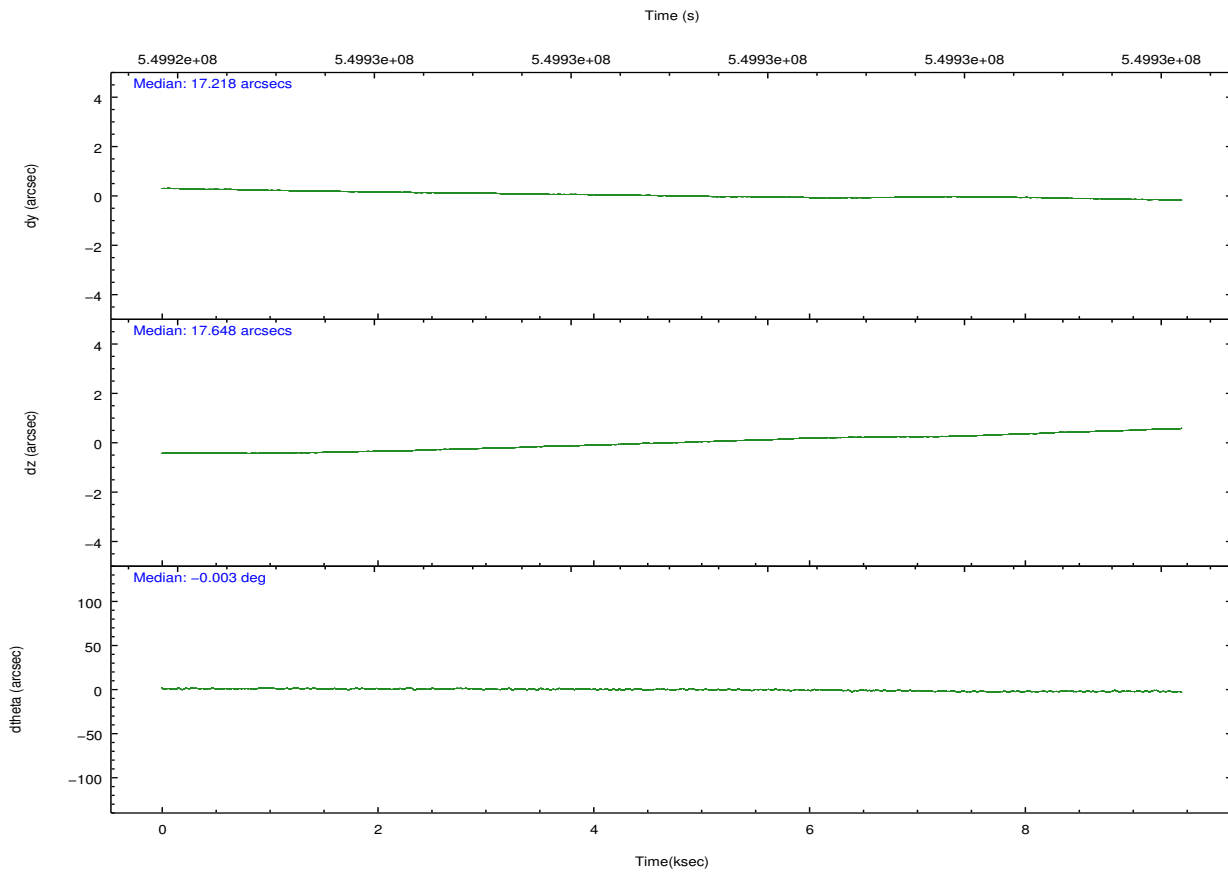
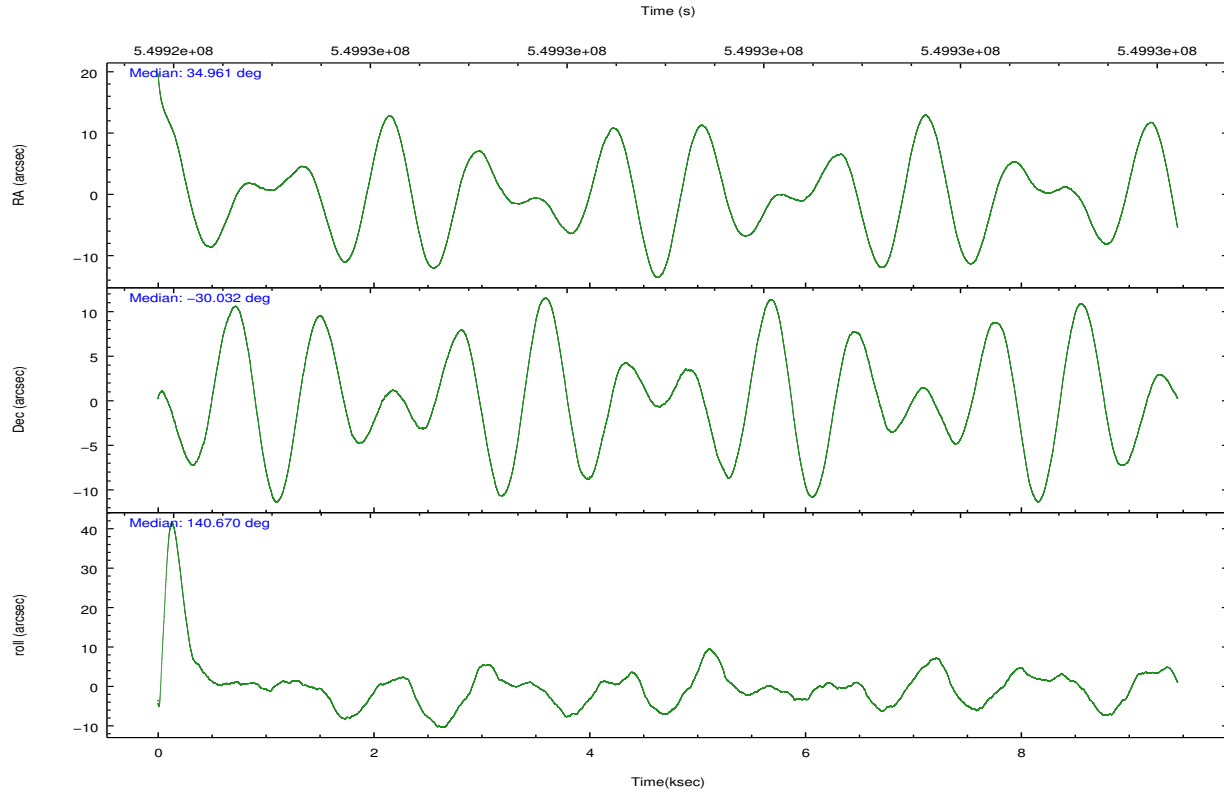
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	1791	4421	1823	2590	2397
	4%	8%	3%	5%	3%
grade 1 events	18	28	20	62	82
	0%	0%	0%	0%	0%
grade 2 events	1308	3668	1264	1196	5761
	2%	7%	2%	2%	8%
grade 3 events	571	586	553	549	2182
	1%	1%	1%	1%	3%
grade 4 events	533	546	551	605	2193
	1%	1%	1%	1%	3%
grade 5 events	2091	2262	2036	2487	6412
	4%	4%	4%	5%	9%
grade 6 events	1177	1372	1078	1163	15268
	2%	2%	2%	2%	23%
grade 7 events	36240	37941	39280	39864	30878
	82%	74%	84%	82%	47%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	34.991866	34.96047031529844	CCD I2 on	Y	Y
[deg] Pointing Dec	-30.036285	-30.03192486948916	CCD I3 on	Y	Y
[deg] Pointing Roll	140.482877	140.6757586432954	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	549924419.184000	549923256.19303	CCD S5 on	N	N
Observation start date	2015-06-05T20:45:52	2015-06-05T20:27:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	549933737.184000	549933973.59364	On-chip summing requested	N	N
Observation end date	2015-06-05T23:21:10	2015-06-05T23:26:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





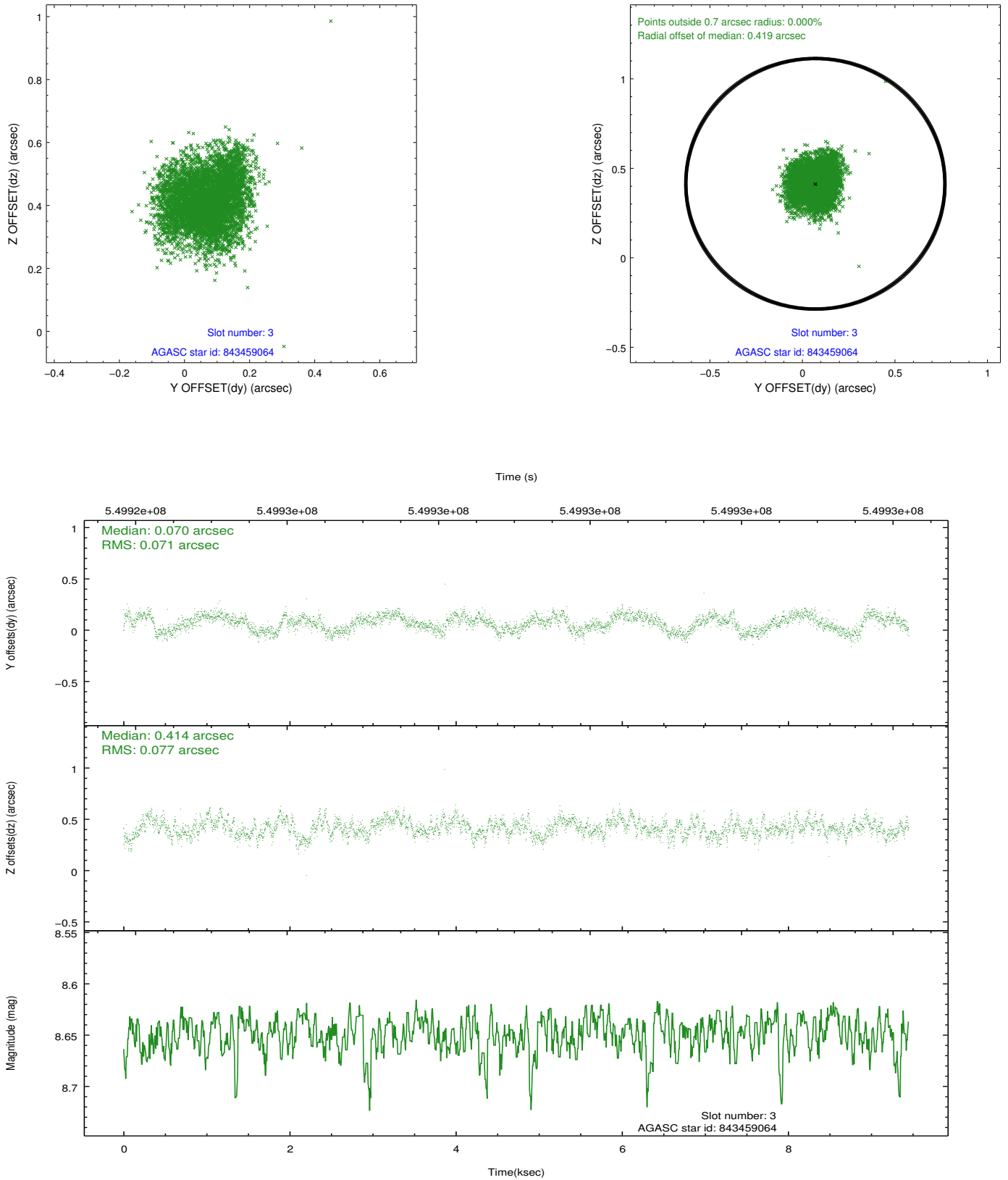
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.17	2306	0.089	-0.027	0.027	0.039	0.000000	0.000000	922.24	-841.33
1	FID		ACIS-I-5	7.16	2304	-0.332	0.062	0.011	0.017	0.000000	0.000000	-1826.00	1055.91
2	FID		ACIS-I-6	7.16	2306	0.152	0.035	0.020	0.028	0.000000	0.000000	387.18	1701.08
3	GUIDE	used	843459064	8.65	4610	0.070	0.414	0.113	0.173	35.719073	-29.914220	-1475.10	-1776.70
4	GUIDE	used	843460504	8.83	4609	0.119	0.200	0.125	0.209	35.404554	-29.610151	-21.22	-2003.33
5	GUIDE	used	918434280	9.27	4606	0.092	-0.221	0.160	0.250	35.337956	-30.547831	-2004.88	741.01
6	GUIDE	used	918435624	9.16	4609	0.006	-0.217	0.121	0.199	35.122193	-30.170337	-620.52	115.70
7	GUIDE	used	843463752	10.32	4489	-0.306	-0.171	0.387	0.570	34.875004	-29.823021	769.98	-360.70

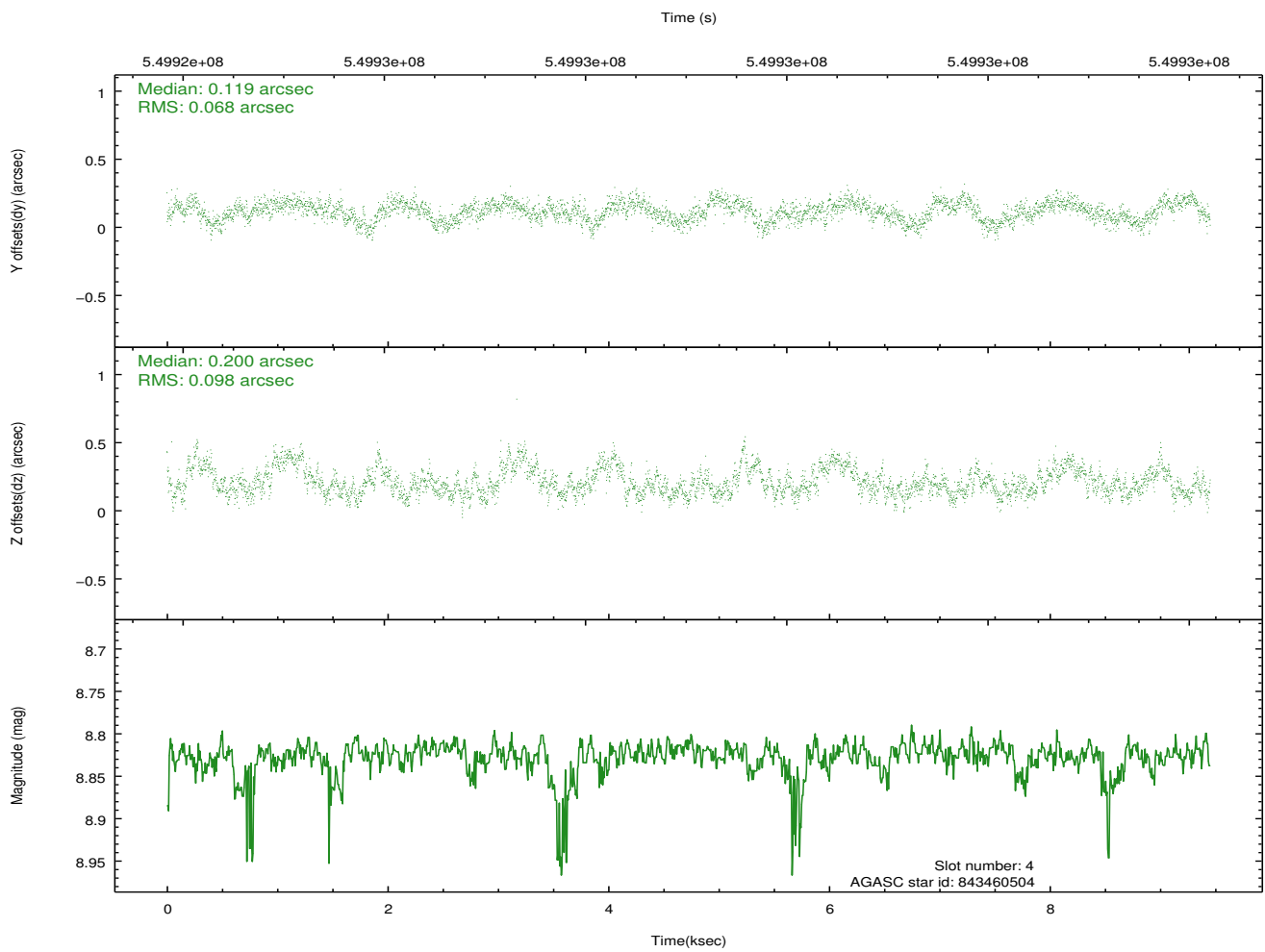
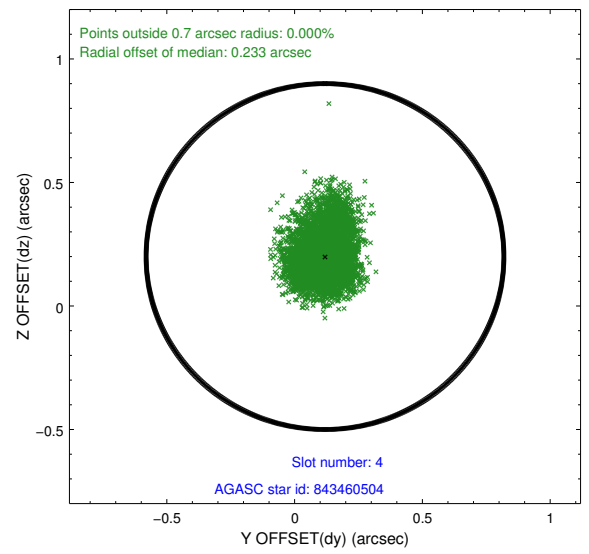
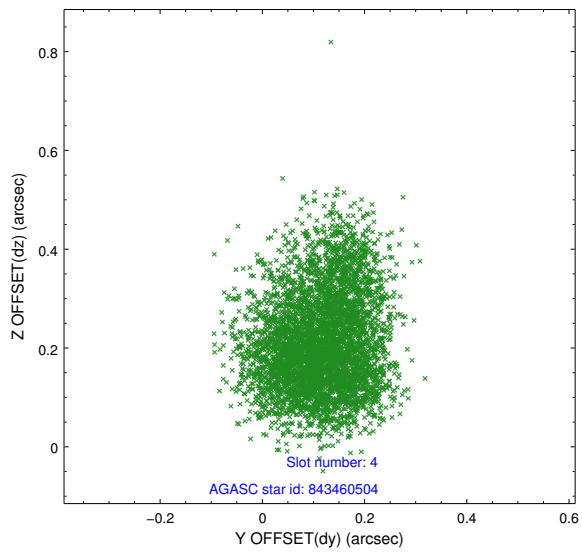
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## 2.4 Star Slots

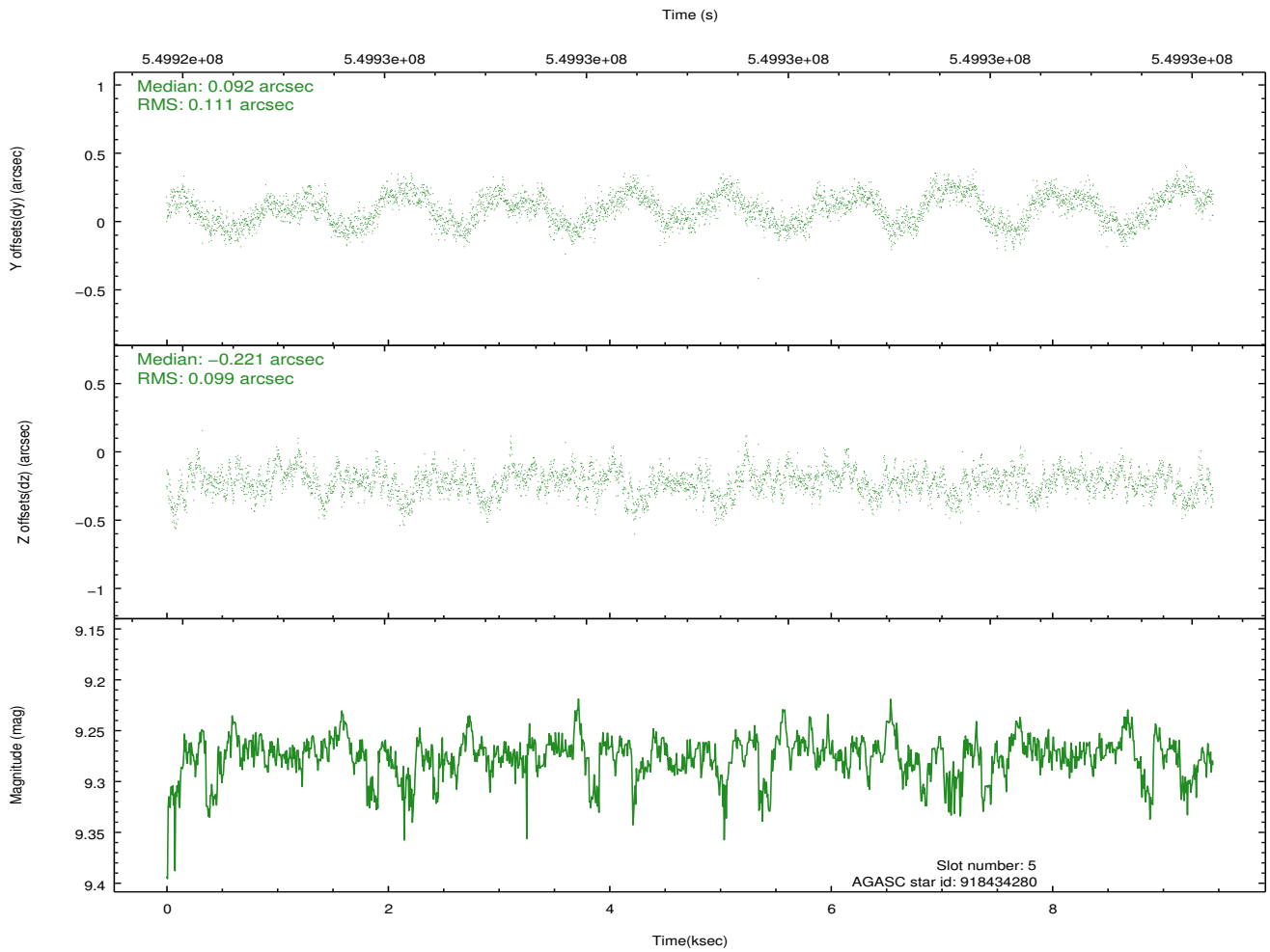
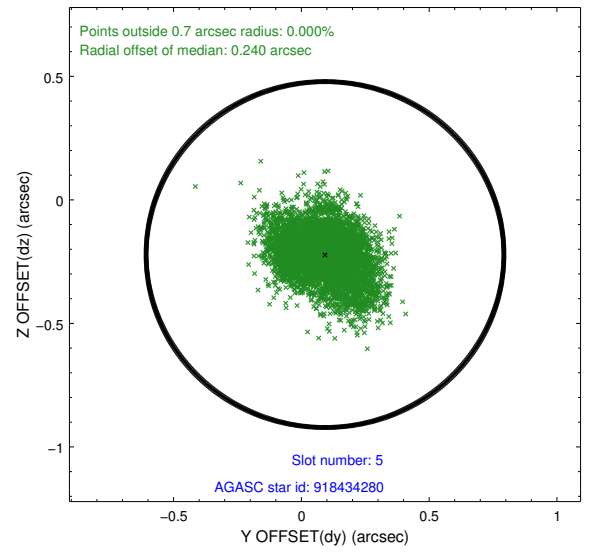
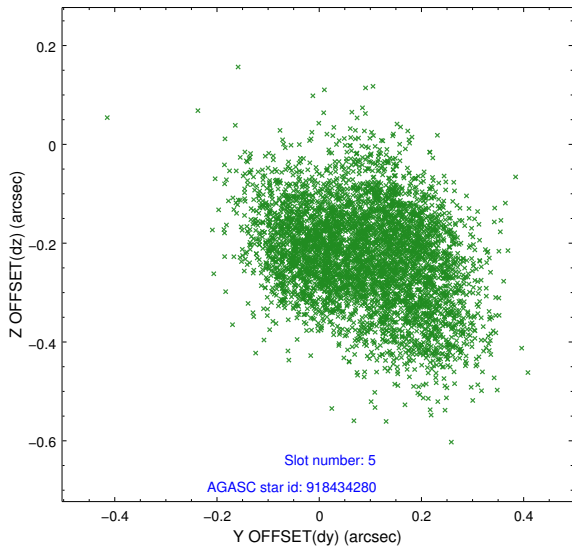
### 2.4.1 Slot 3



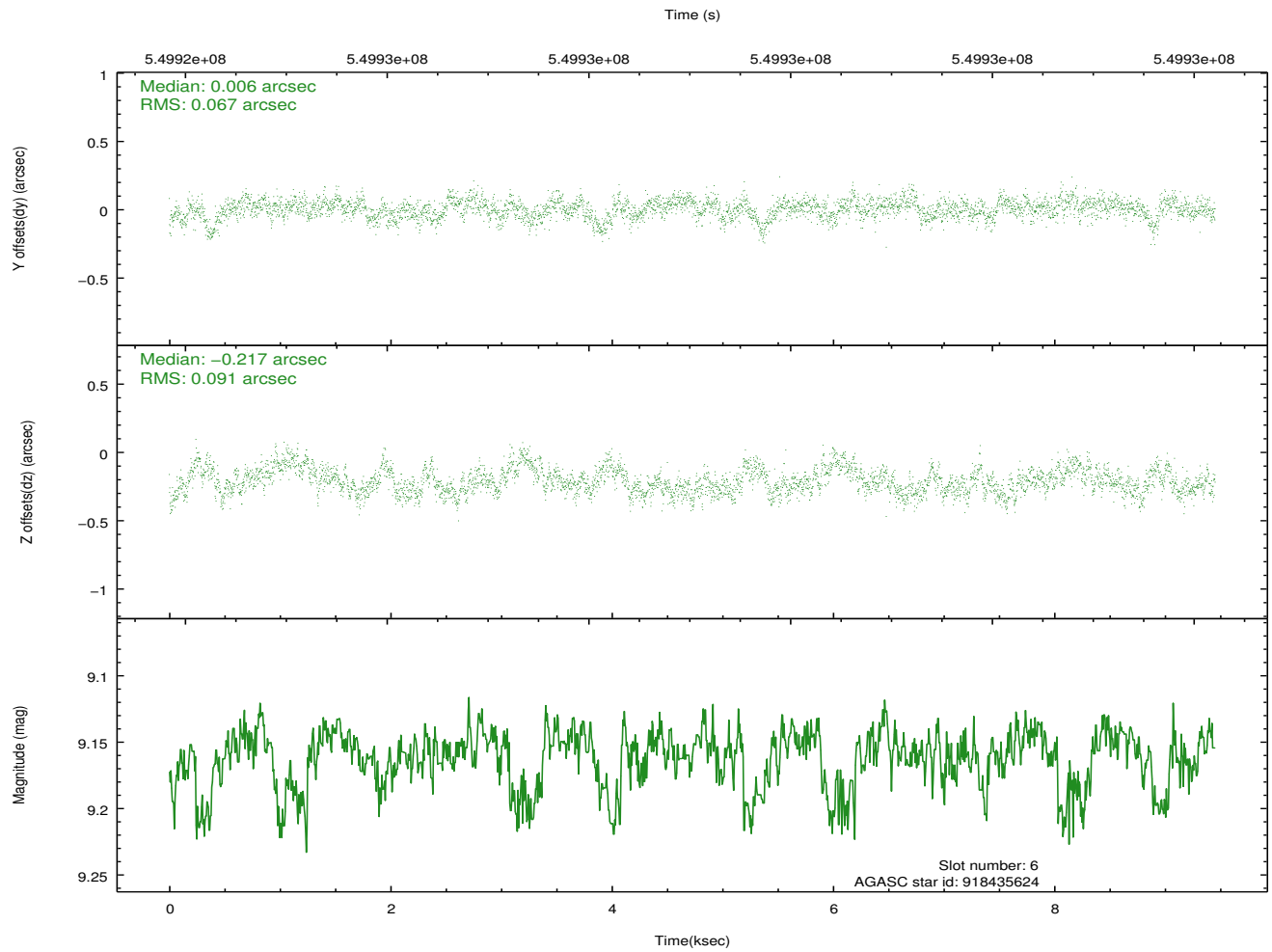
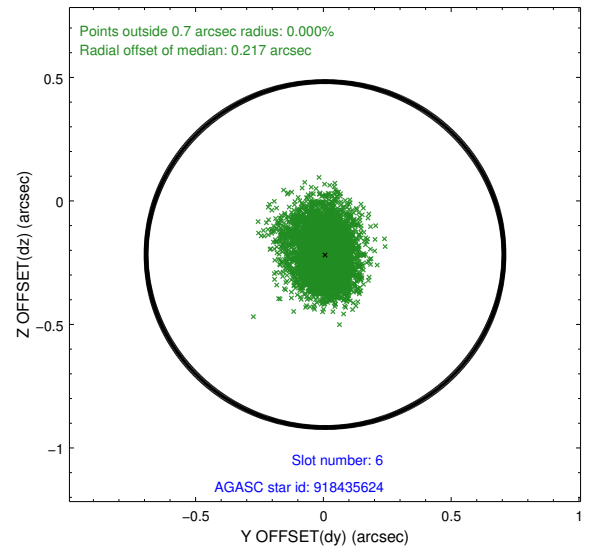
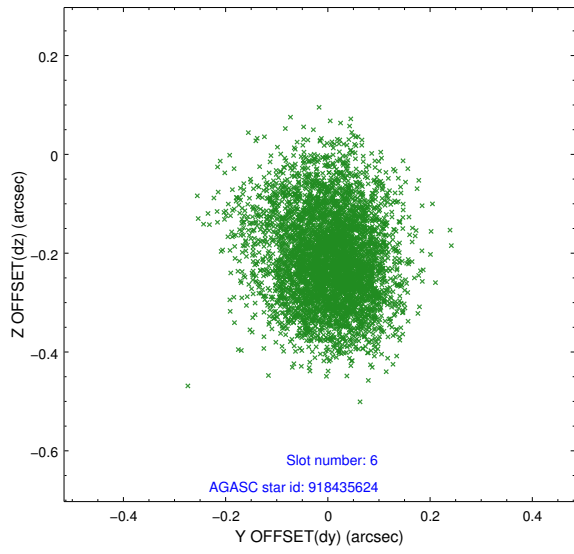
## 2.4.2 Slot 4



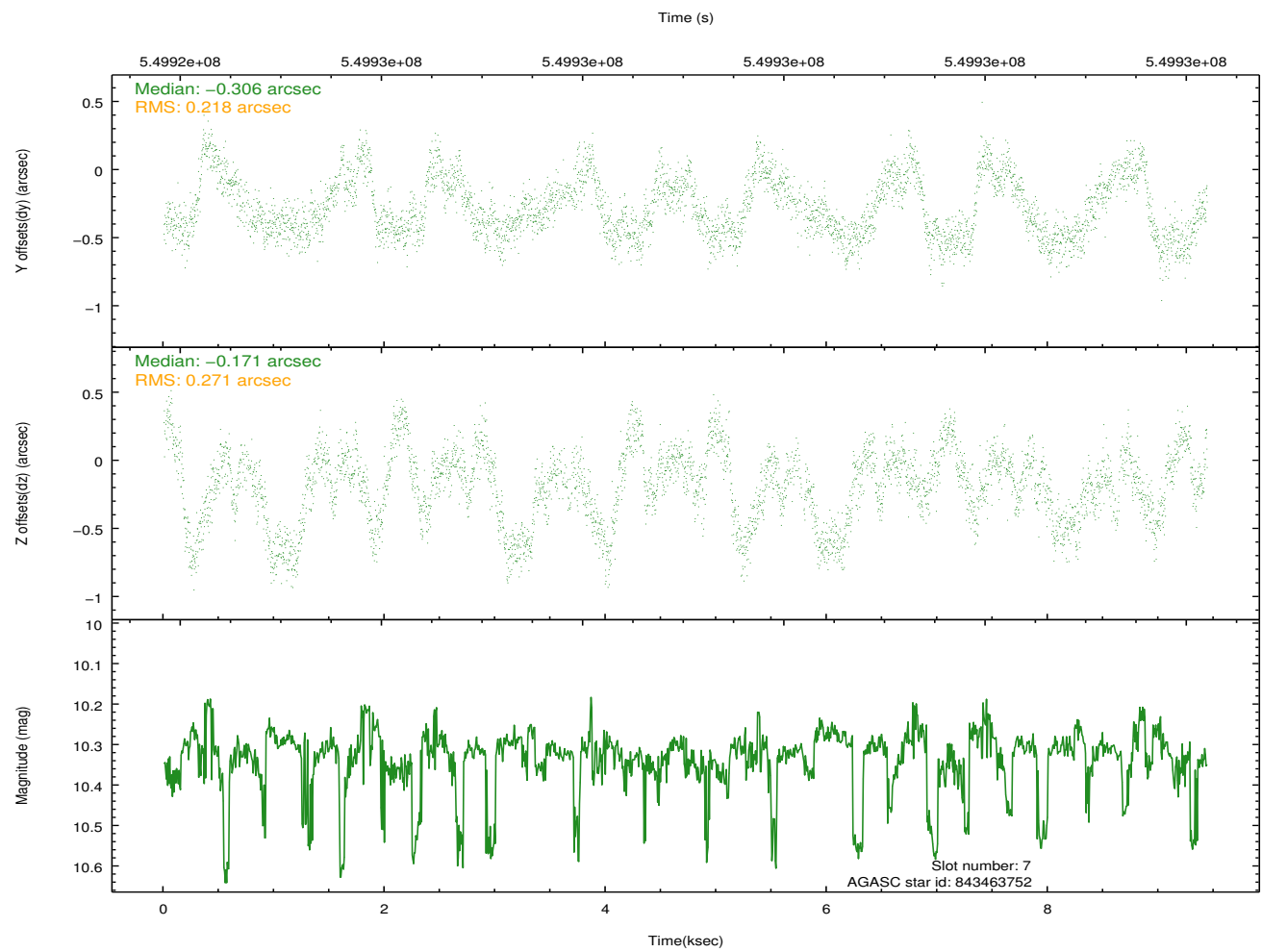
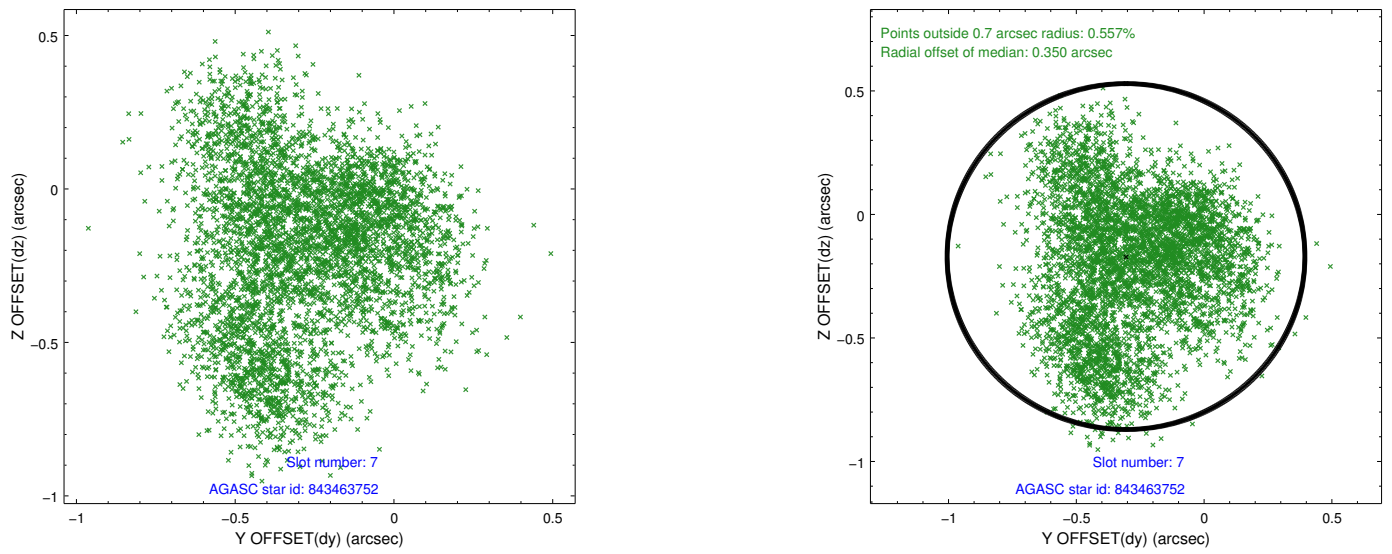
### 2.4.3 Slot 5



## 2.4.4 Slot 6

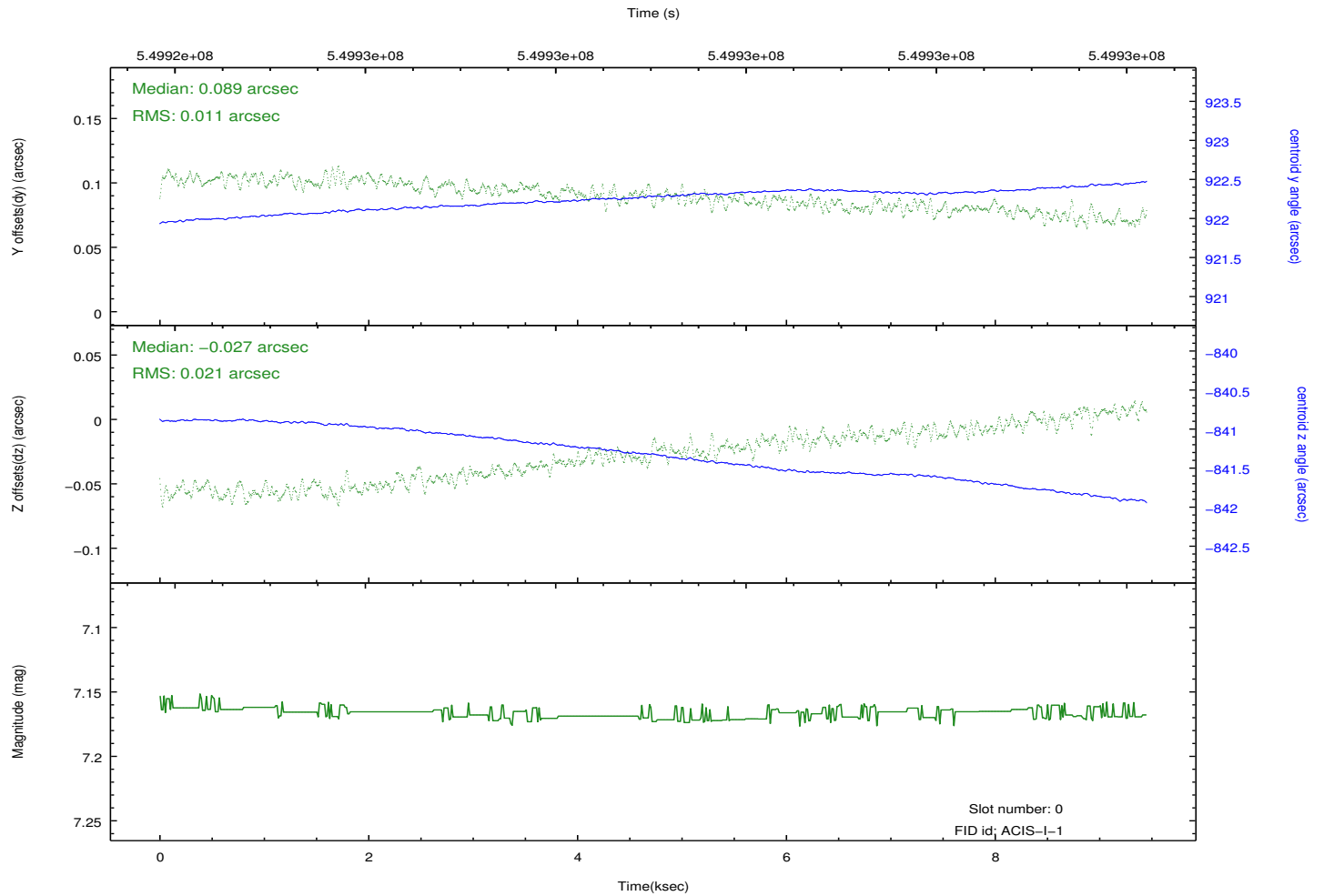
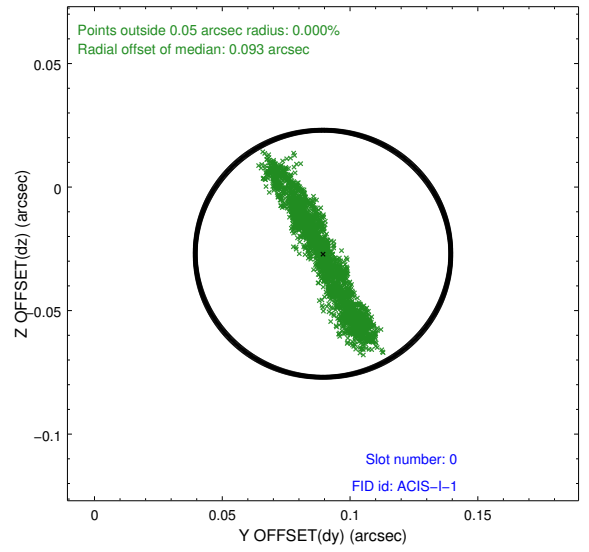
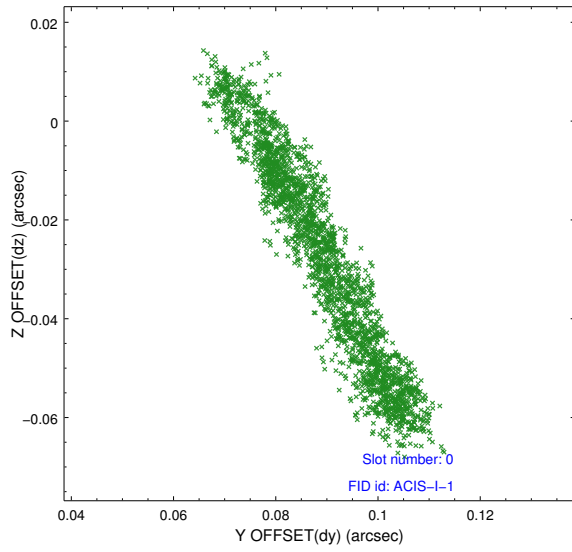


## 2.4.5 Slot 7

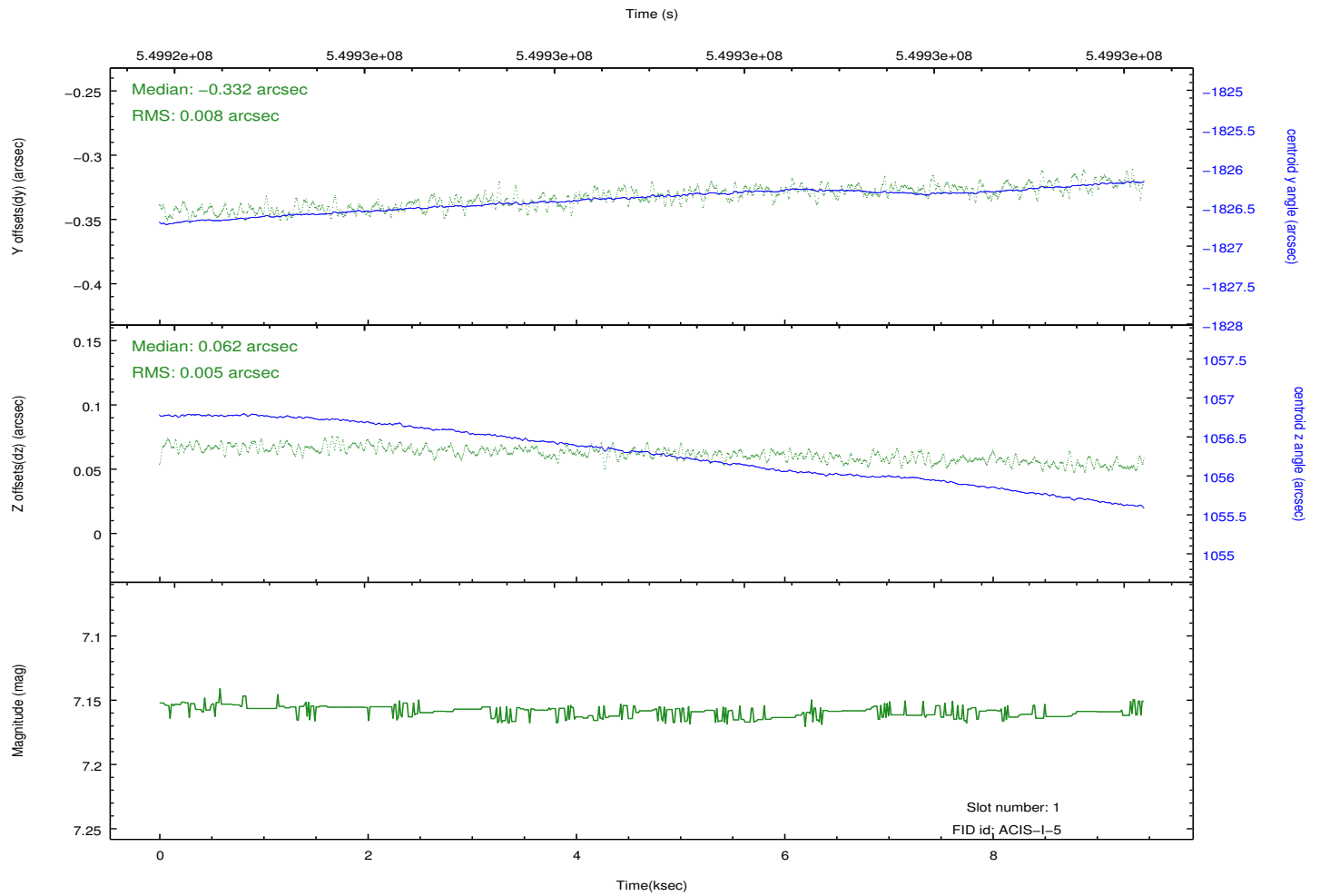
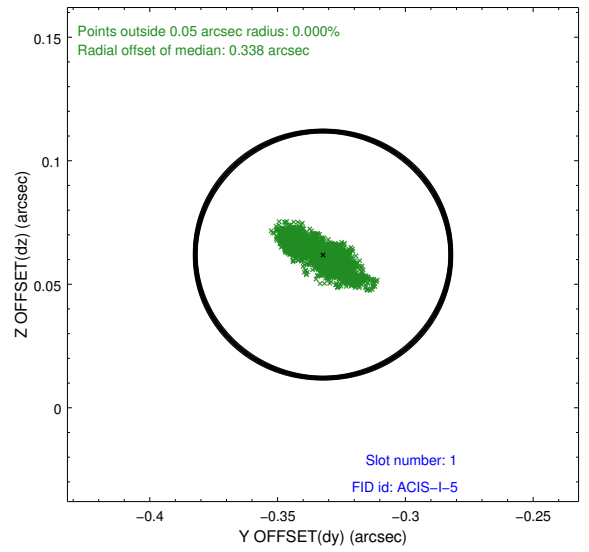
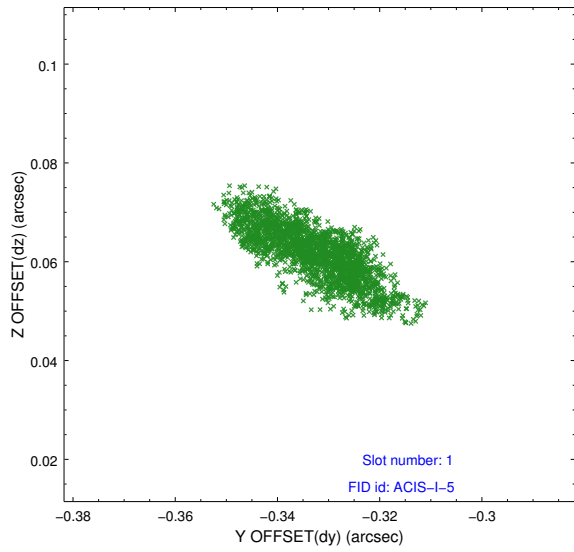


## 2.5 FID Slots

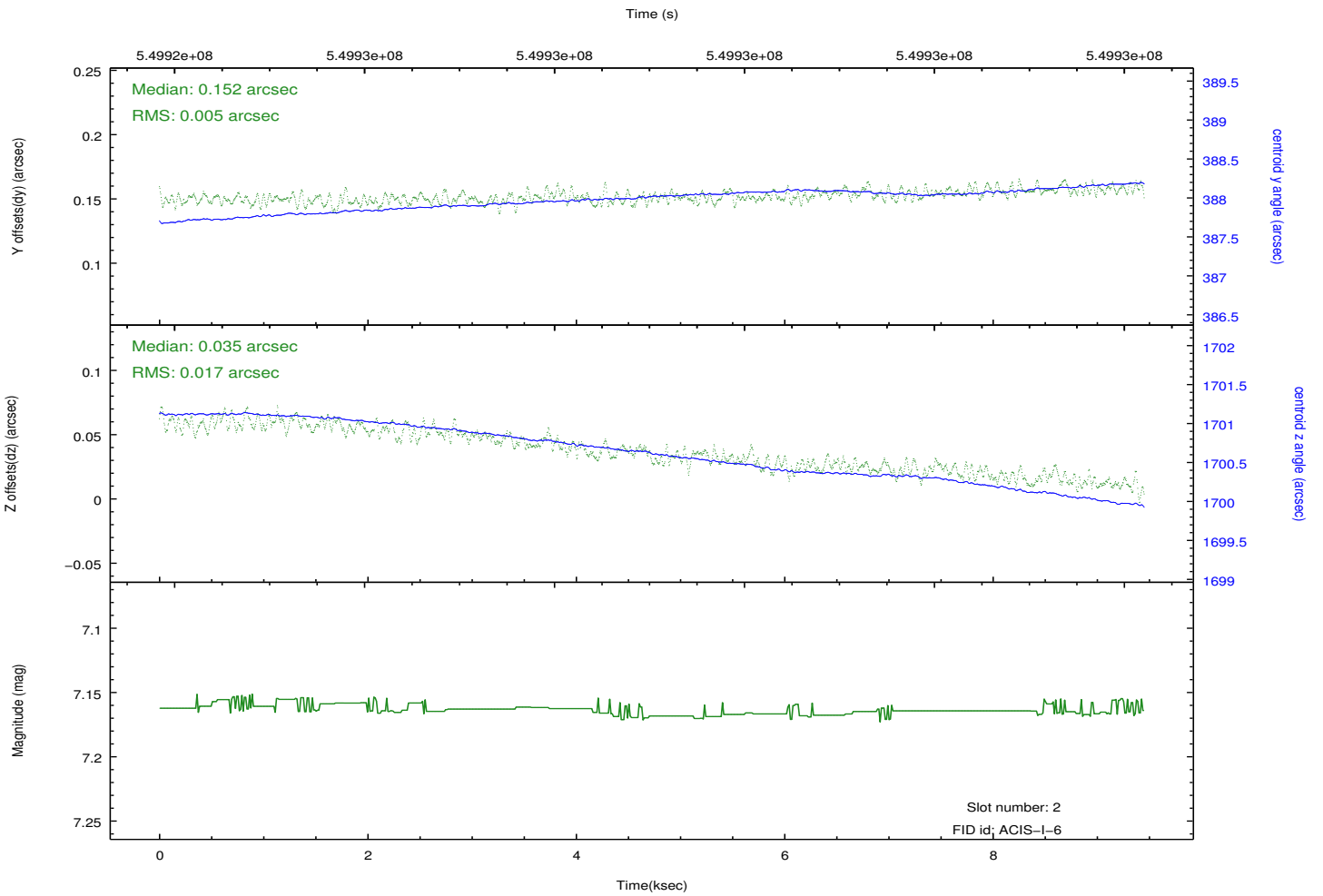
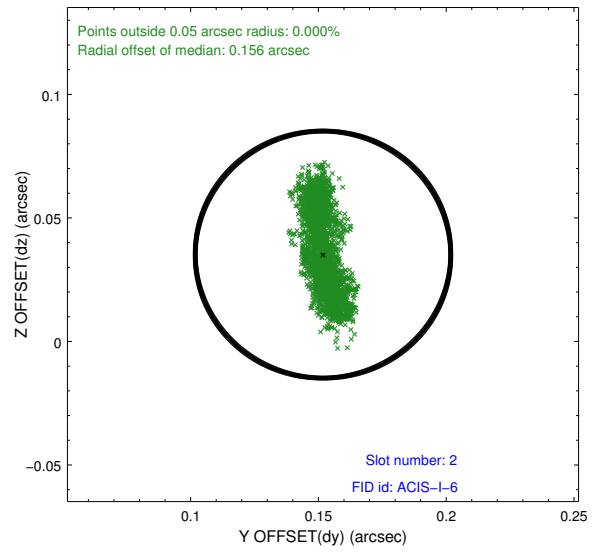
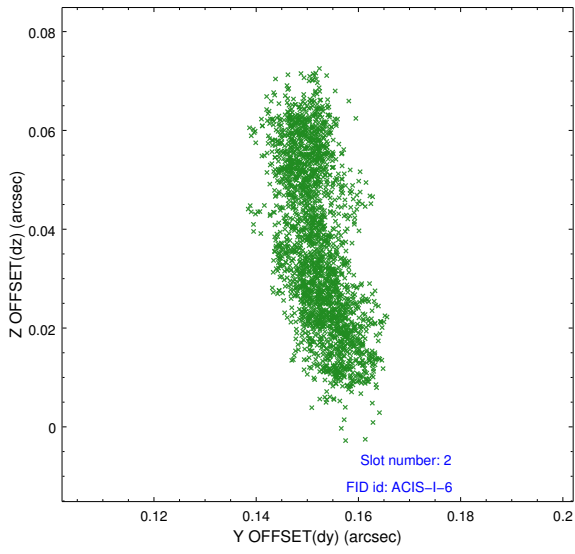
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.06.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.38046296525

## A.2 Comments

Position off by at least 3 arcsec in ra and 30 arcsec in dec. Position apparently based on ROSAT. Probably due to the error in coordinates, the source dithers in and out of the chip gap, resulting in the loss of some counts and possible false variability detection.