

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18593 - L2 Version 1  
Chandra X-Ray Center

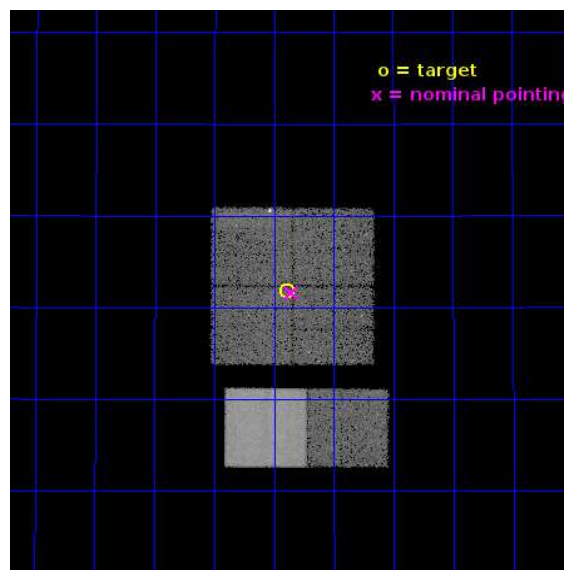
L2 Processing Date : Apr 28 2016

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# 1 Front

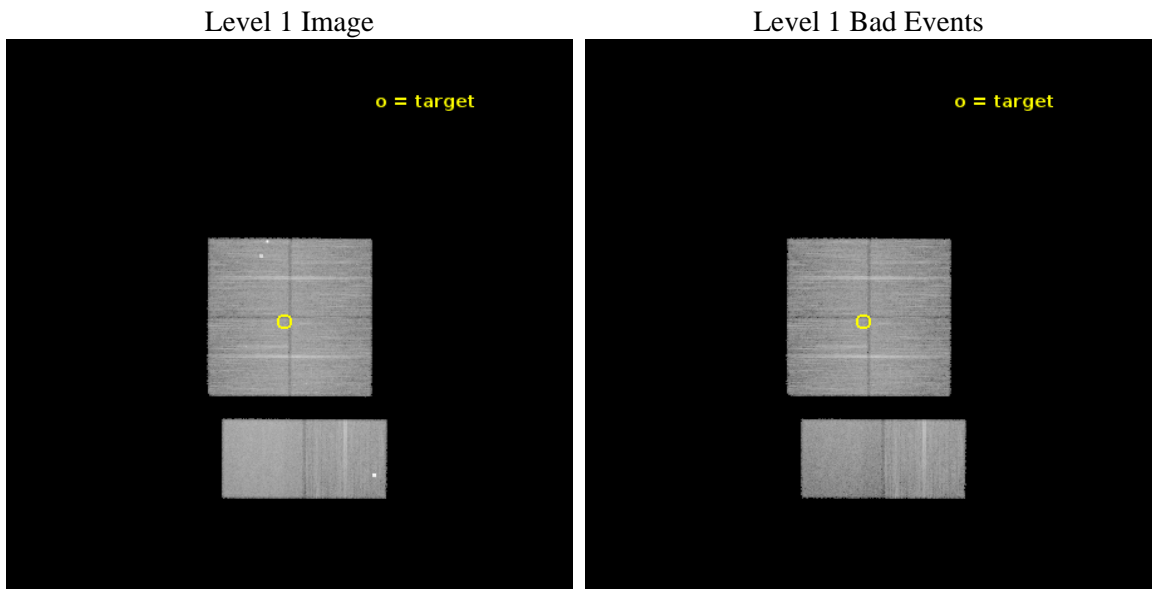
seq_num	901326	Sequence number
obs_id	18593	Observation id
title	An extended moderate-depth contiguous layer of the Chandra Bootes field -- further pointings	Proposal title
observer	Ralph Kraft	Principal investigator
object	Bootes Cy17-12	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	217.22204	Observer's specified target RA [deg]
dec_targ	33.696694	Observer's specified target Dec [deg]
ra_nom	217.21389760377	Nominal RA [deg]
dec_nom	33.694022312889	Nominal Dec [deg]
roll_nom	180.21320489151	Nominal Roll [deg]
revision	1	Processing version of data
ontime	24937.600371599	Sum of GTIs [s]
livetime	24621.825460074	Livetime [s]
ontime0	24937.600371599	Sum of GTIs [s]
ontime1	24937.600371599	Sum of GTIs [s]
ontime2	24937.600371599	Sum of GTIs [s]
ontime3	24937.600371599	Sum of GTIs [s]
ontime6	24937.600371599	Sum of GTIs [s]
ontime7	24937.600371599	Sum of GTIs [s]
l2events	155917	Number of level 2 events



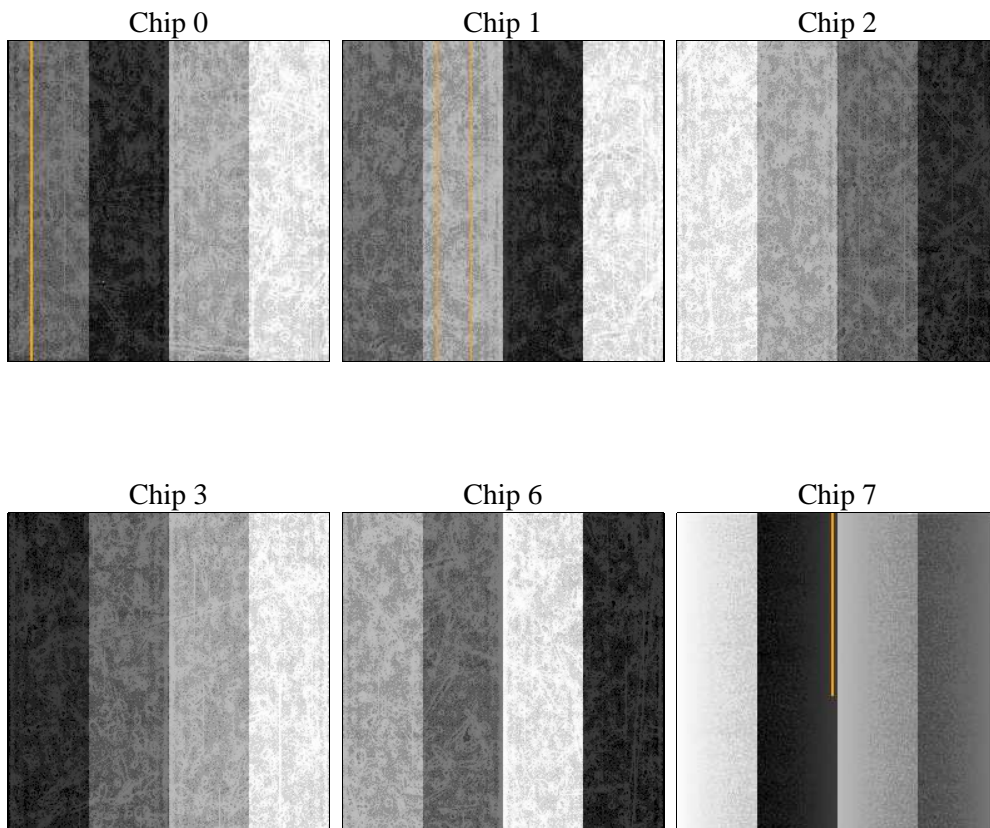
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	24937.600371599	Sum of GTIs [s]
caldbver	4.7.1	&#160	ontime0	24937.600371599	Sum of GTIs [s]
date	2016-04-28T05:54:58	Date and time of file creation	ontime1	24937.600371599	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	24937.600371599	Sum of GTIs [s]
			ontime3	24937.600371599	Sum of GTIs [s]
			ontime6	24937.600371599	Sum of GTIs [s]
			ontime7	24937.600371599	Sum of GTIs [s]
			l1events	971786	Number of level 1 events

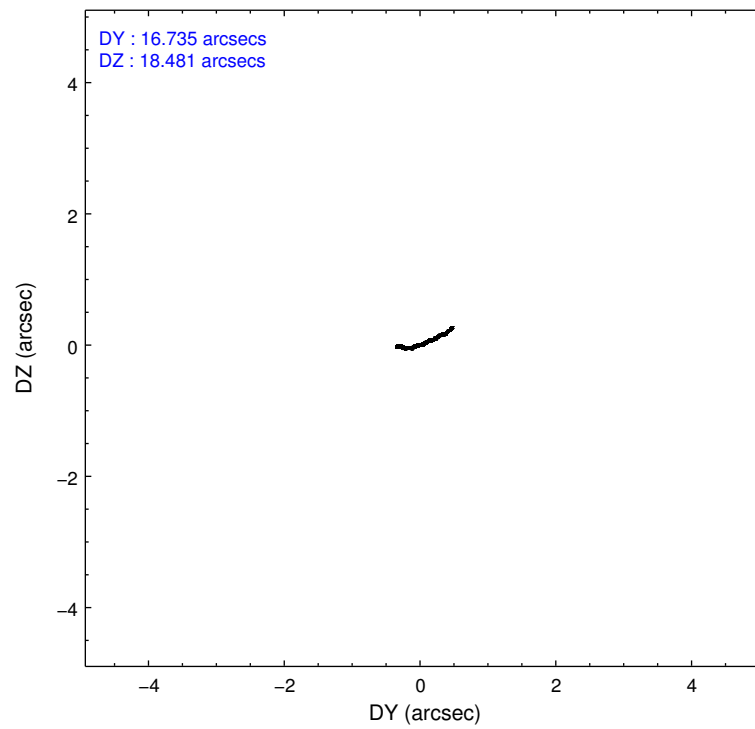
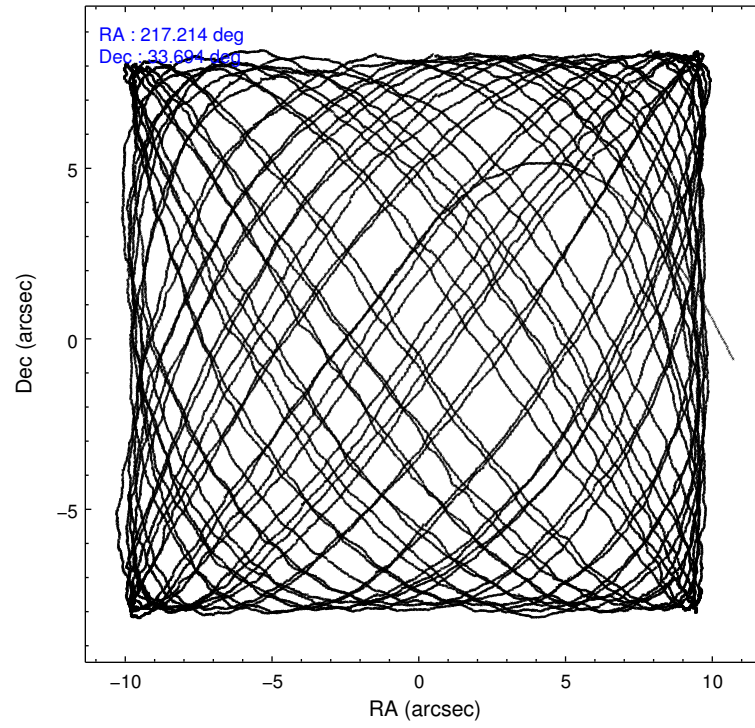
### 2.1.4 Events

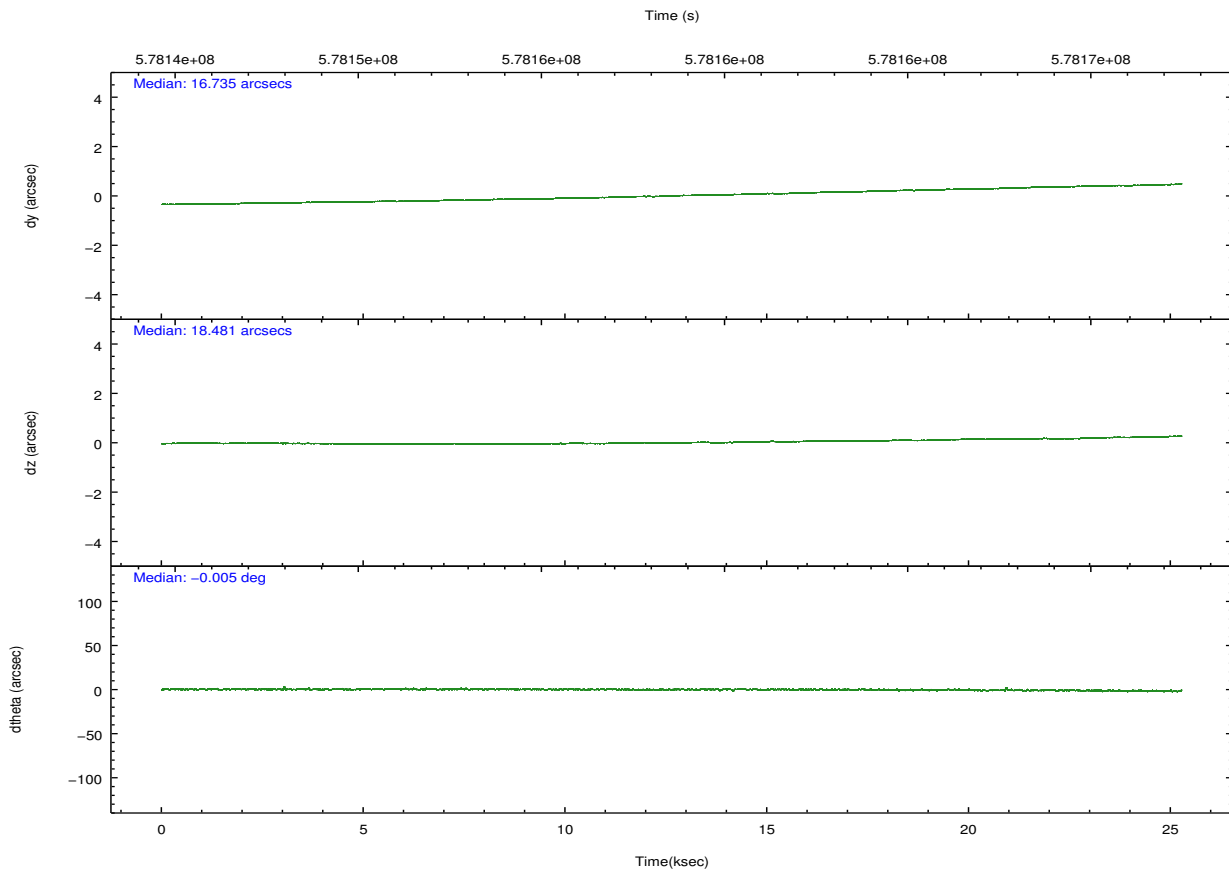
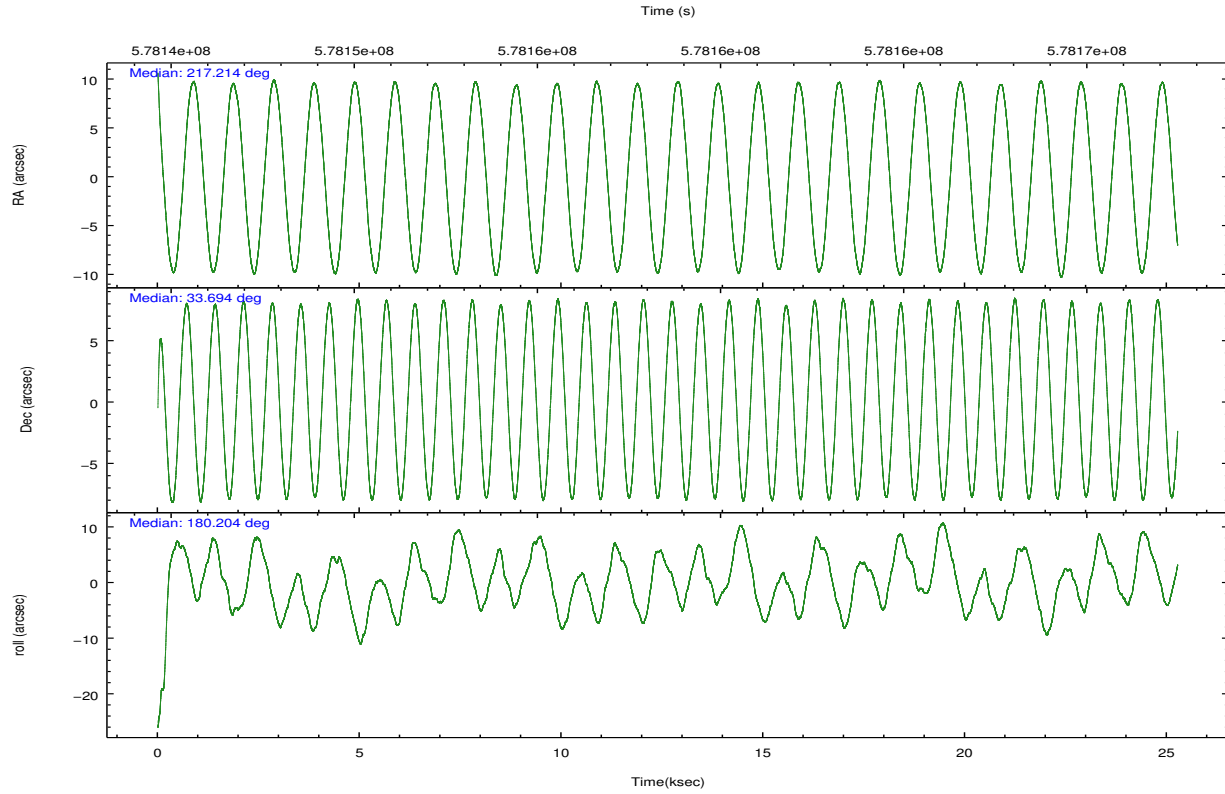
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	142412	150013	153722	152860	173409	199370	grade 0 events	5621	10025	5675	5385	12823	6944
rejected events	125663	127041	137755	137006	148833	114152		3%	6%	3%	3%	7%	3%
rejected %	88%	84%	89%	89%	85%	57%	grade 1 events	78	93	77	84	104	265
								0%	0%	0%	0%	0%	0%
							grade 2 events	4189	4968	3863	3542	4174	17906
								2%	3%	2%	2%	2%	8%
							grade 3 events	1751	1820	1616	1754	1608	6601
								1%	1%	1%	1%	0%	3%
							grade 4 events	1605	1759	1657	1651	1597	6419
								1%	1%	1%	1%	0%	3%
							grade 5 events	6405	6900	6060	7192	7283	19129
								4%	4%	3%	4%	4%	9%
							grade 6 events	3584	4404	3157	3525	4381	47361
								2%	2%	2%	2%	2%	23%
							grade 7 events	119179	120044	131617	129727	141439	94745
								83%	80%	85%	84%	81%	47%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	217.242515	217.2138976037657	CCD I2 on	Y	Y
[deg] Pointing Dec	33.708015	33.69402231288945	CCD I3 on	Y	Y
[deg] Pointing Roll	179.988640	180.2132048915118	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	O2	Y
[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)	578146201.184000	578145199.54119	CCD S5 on	N	N
Observation start date	2016-04-27T12:08:53	2016-04-27T11:53:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	578171201.184000	578171563.5677	On-chip summing requested	N	N
Observation end date	2016-04-27T19:05:33	2016-04-27T19:12:43	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



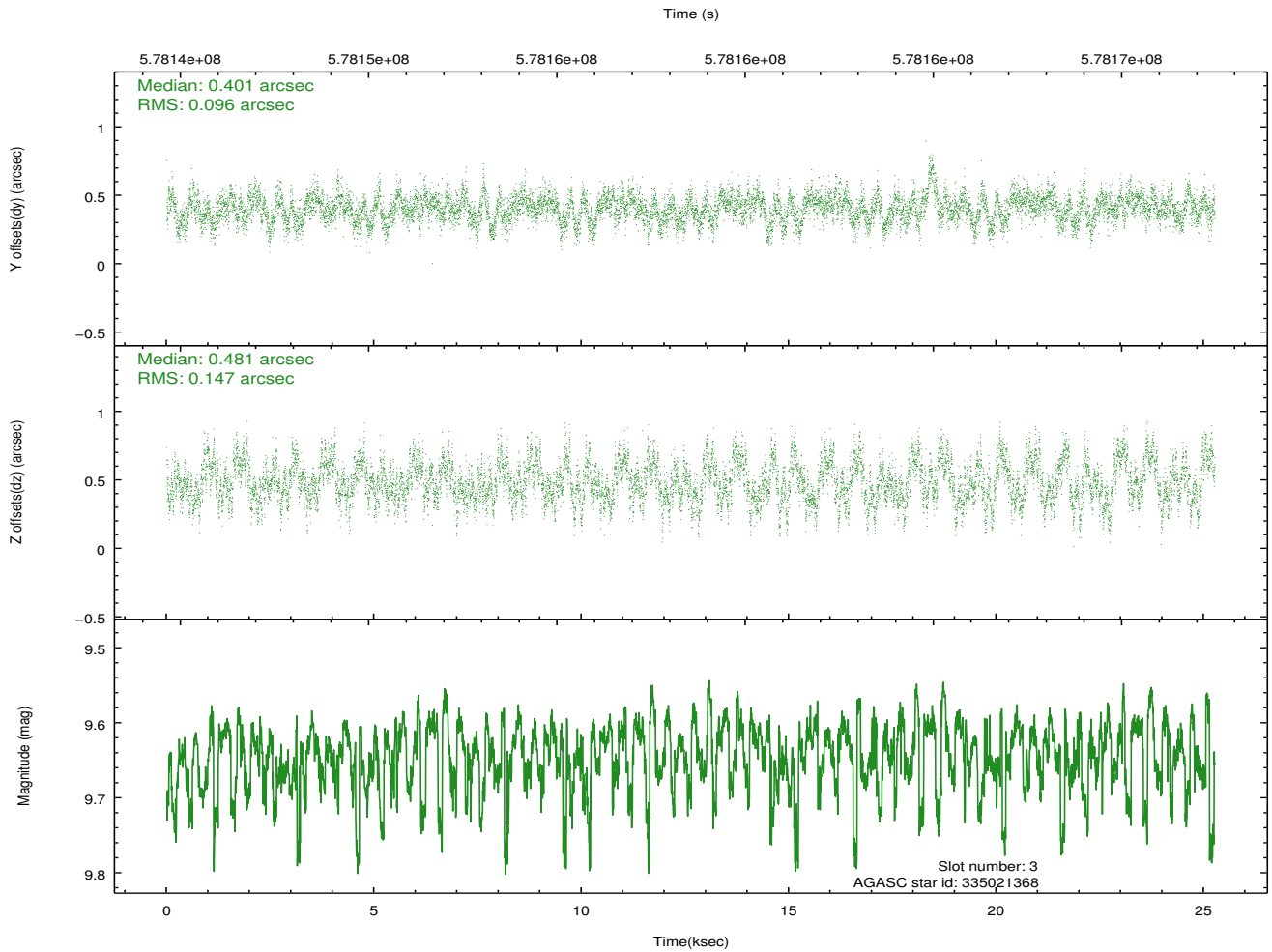
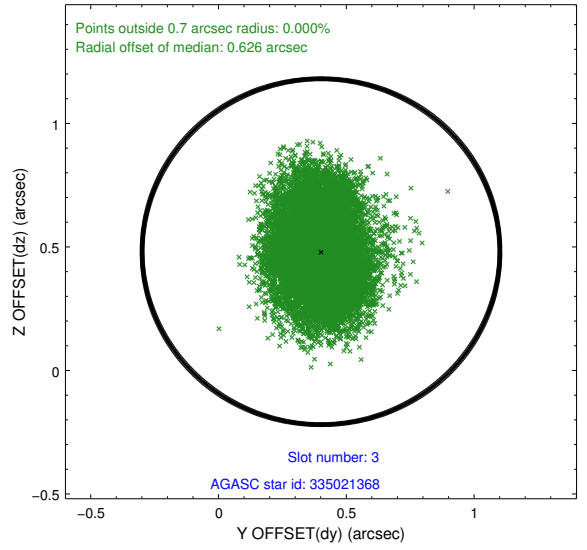
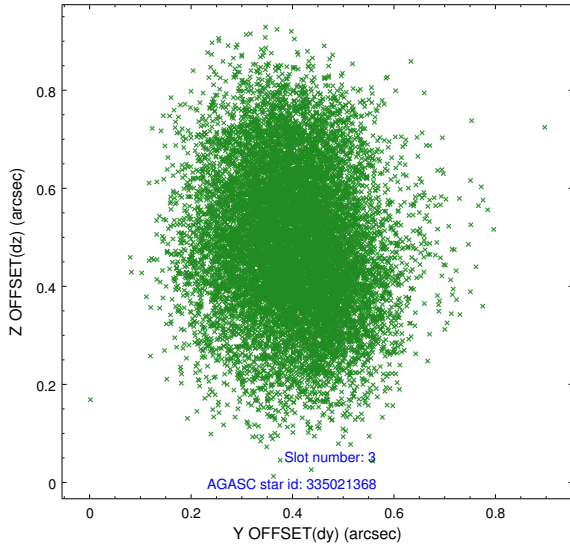


### Slot Statistics

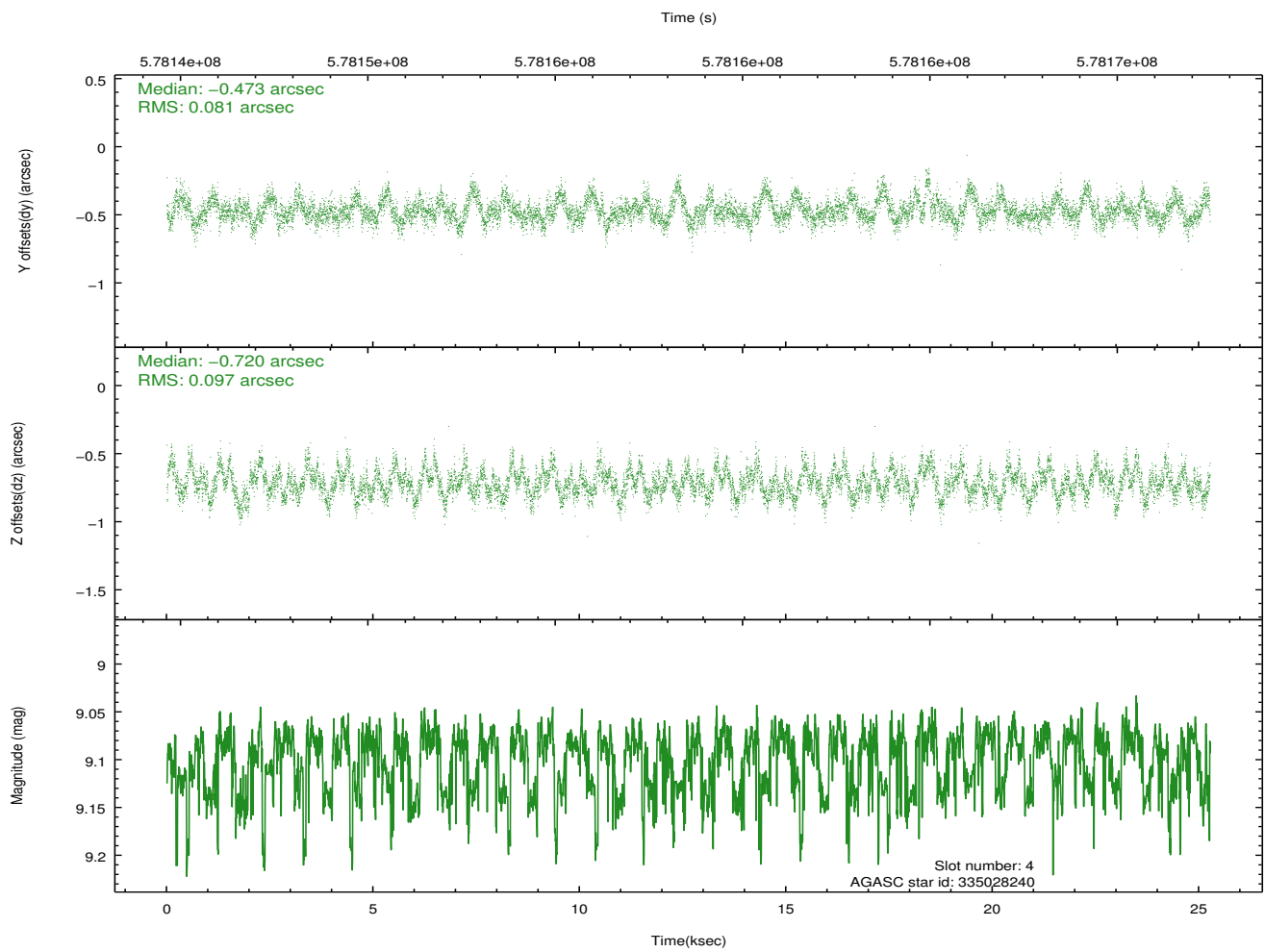
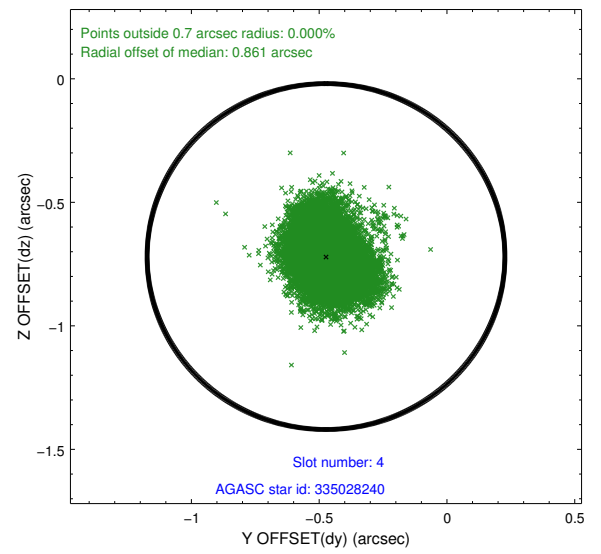
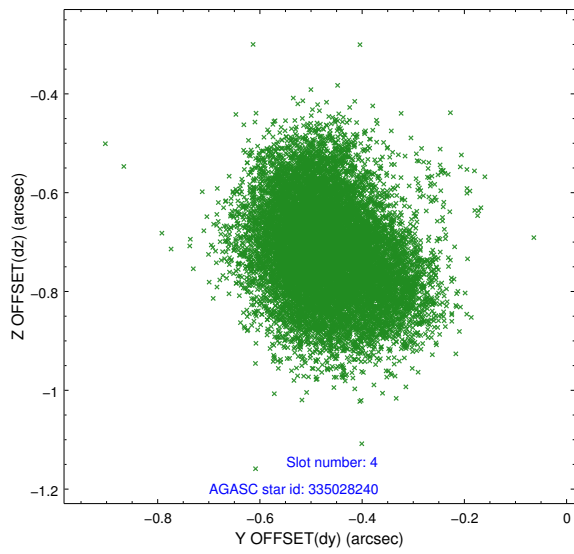
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	6163	0.061	-0.002	0.008	0.017	0.000000	0.000000	922.76	-842.17
1	FID		ACIS-I-5	7.25	6163	-0.362	0.027	0.008	0.013	0.000000	0.000000	-1825.81	1055.15
2	FID		ACIS-I-6	7.27	6162	0.210	0.045	0.009	0.015	0.000000	0.000000	388.20	1699.91
3	GUIDE	used	335021368	9.64	12311	0.401	0.481	0.188	0.303	217.529643	33.934817	-856.31	-817.35
4	GUIDE	used	335028240	9.10	12313	-0.473	-0.720	0.137	0.219	216.746851	33.385009	1490.61	1158.63
5	GUIDE	used	335028696	9.19	12258	0.832	0.247	0.128	0.201	217.260519	33.844112	-52.07	-489.51
6	GUIDE	used	335029384	8.50	12315	-0.254	0.402	0.155	0.238	217.848061	33.088477	-1827.38	2225.49
7	GUIDE	used	335029808	9.02	12317	-0.495	-0.412	0.121	0.202	216.789548	33.180488	1364.39	1896.36

## 2.4 Star Slots

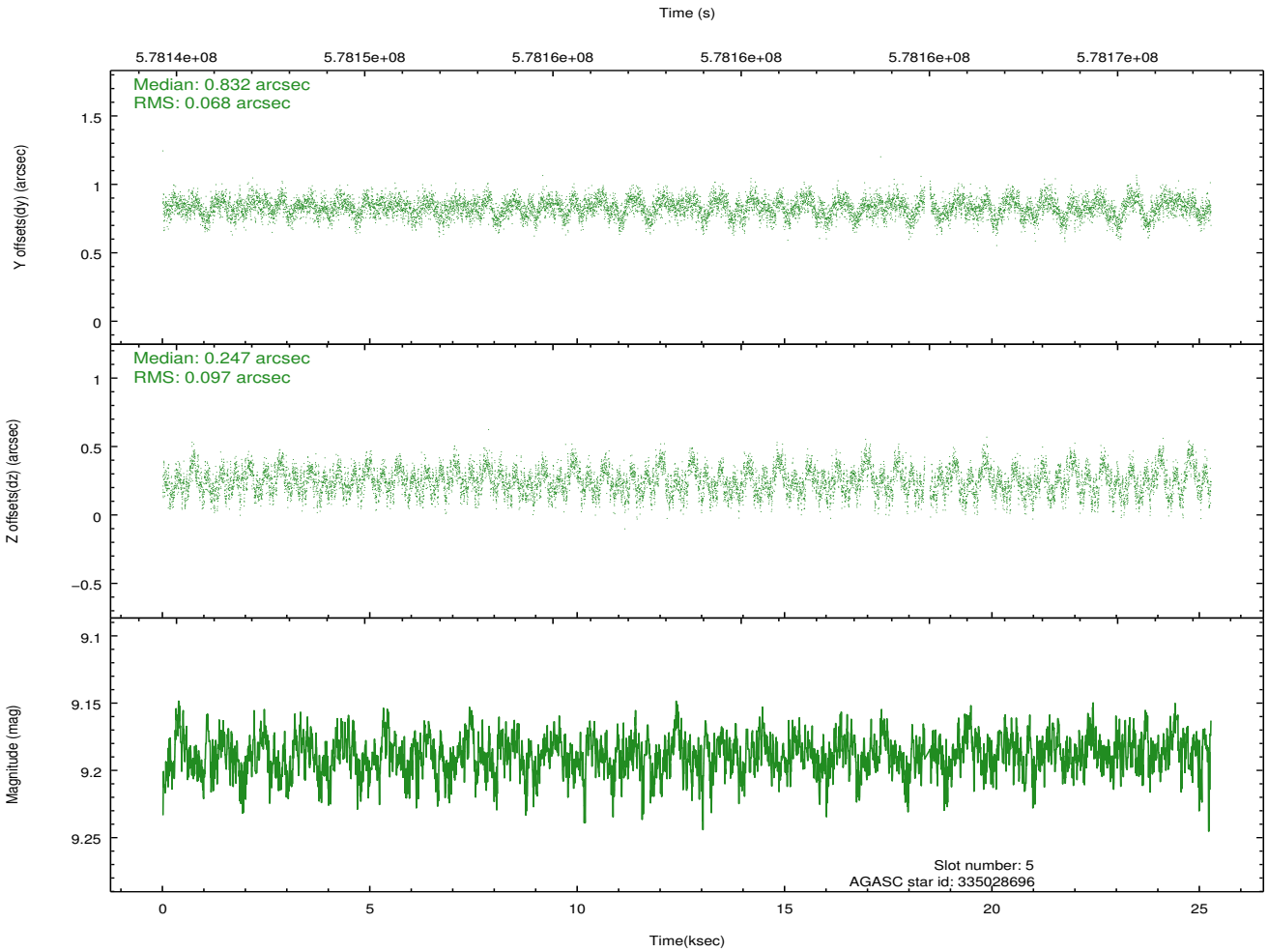
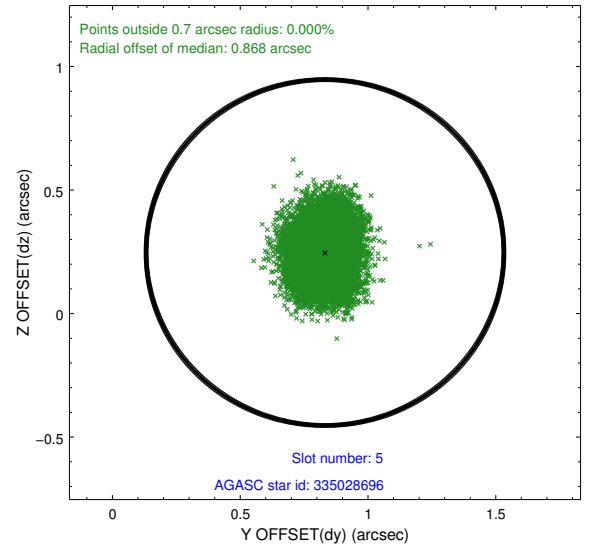
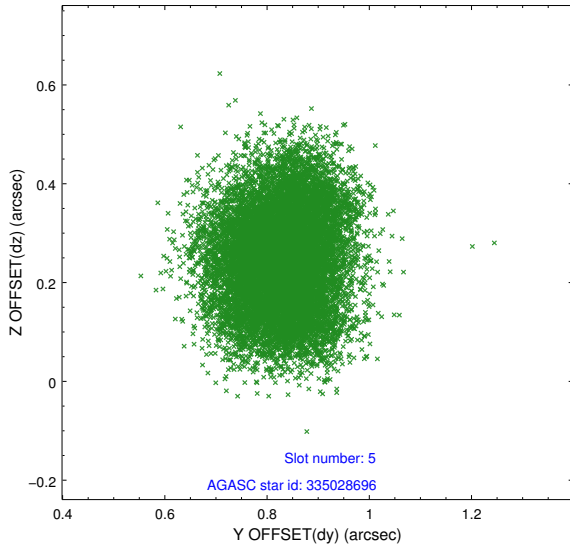
### 2.4.1 Slot 3



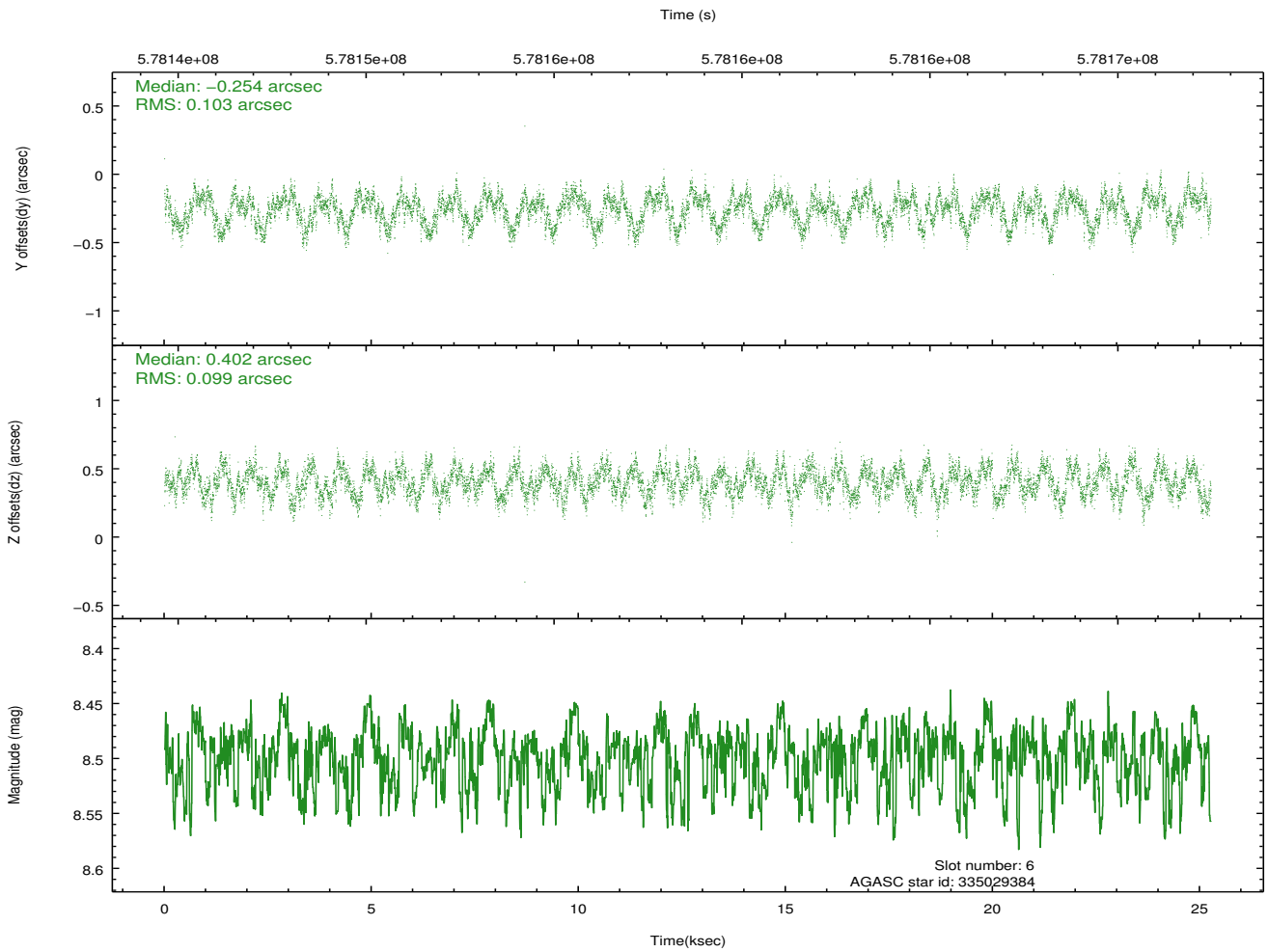
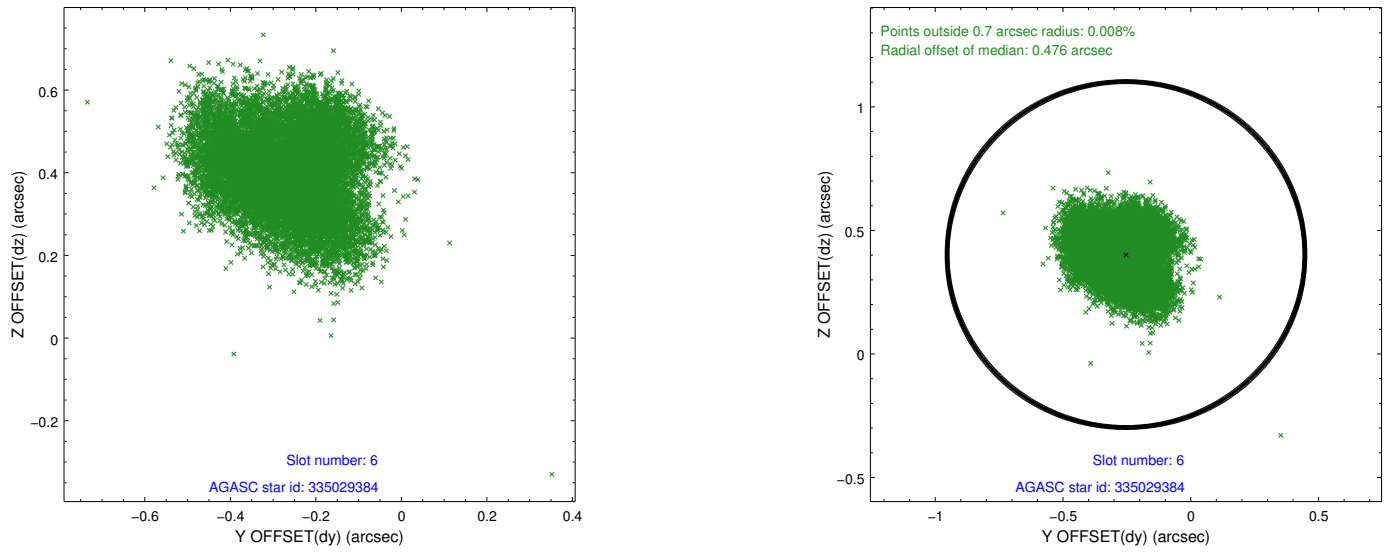
## 2.4.2 Slot 4



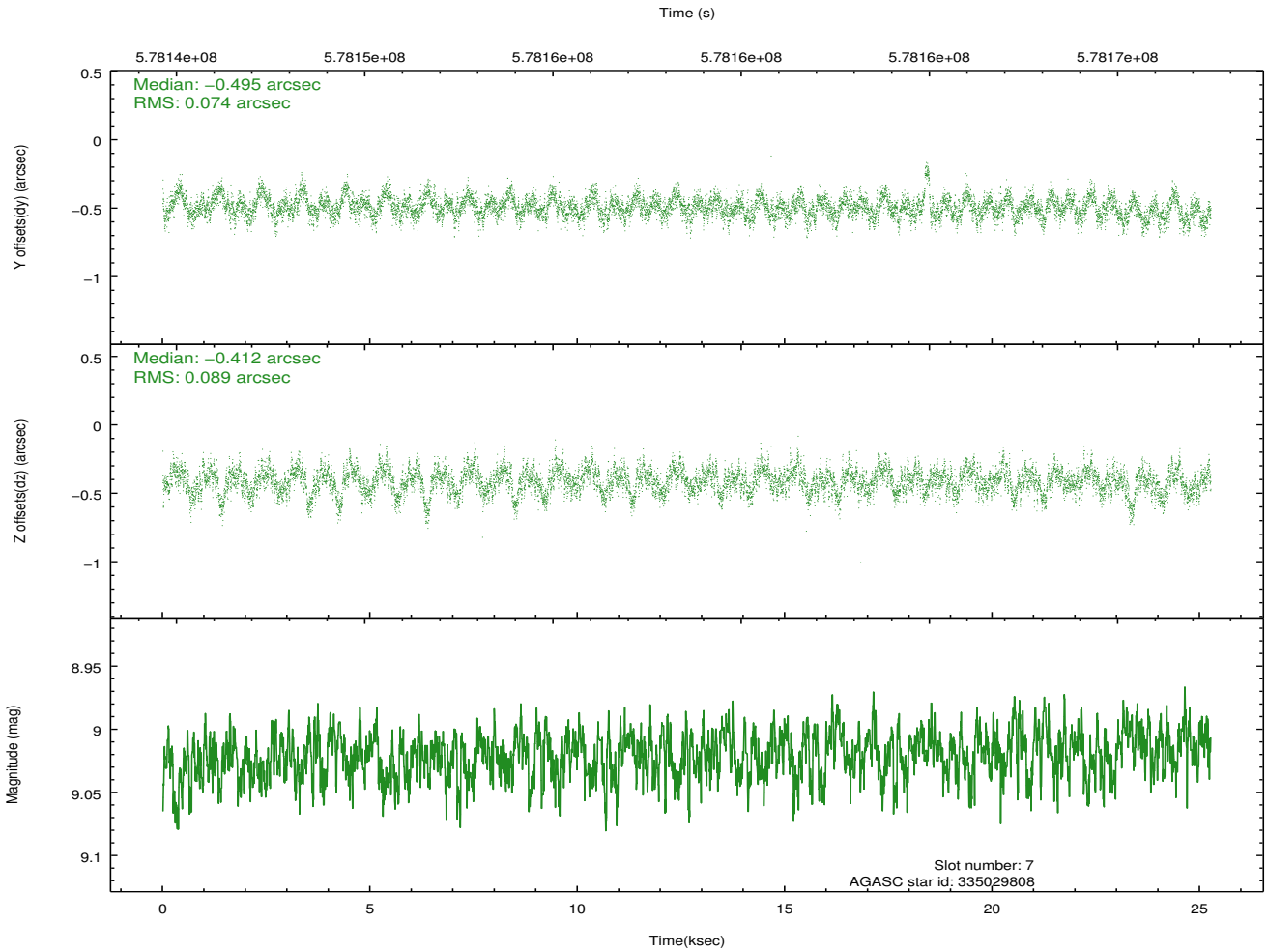
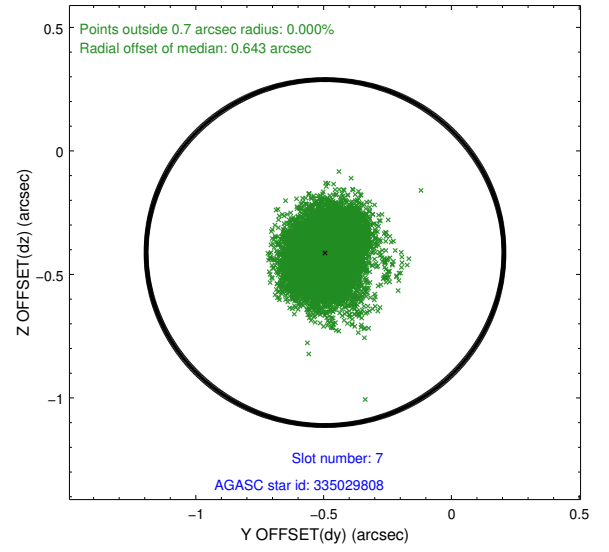
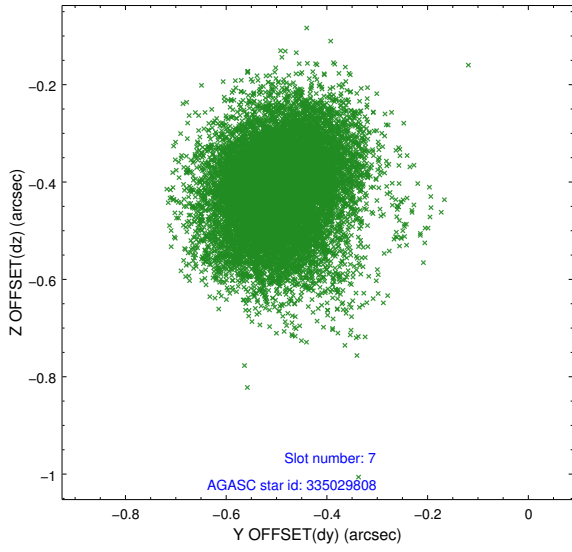
### 2.4.3 Slot 5



## 2.4.4 Slot 6

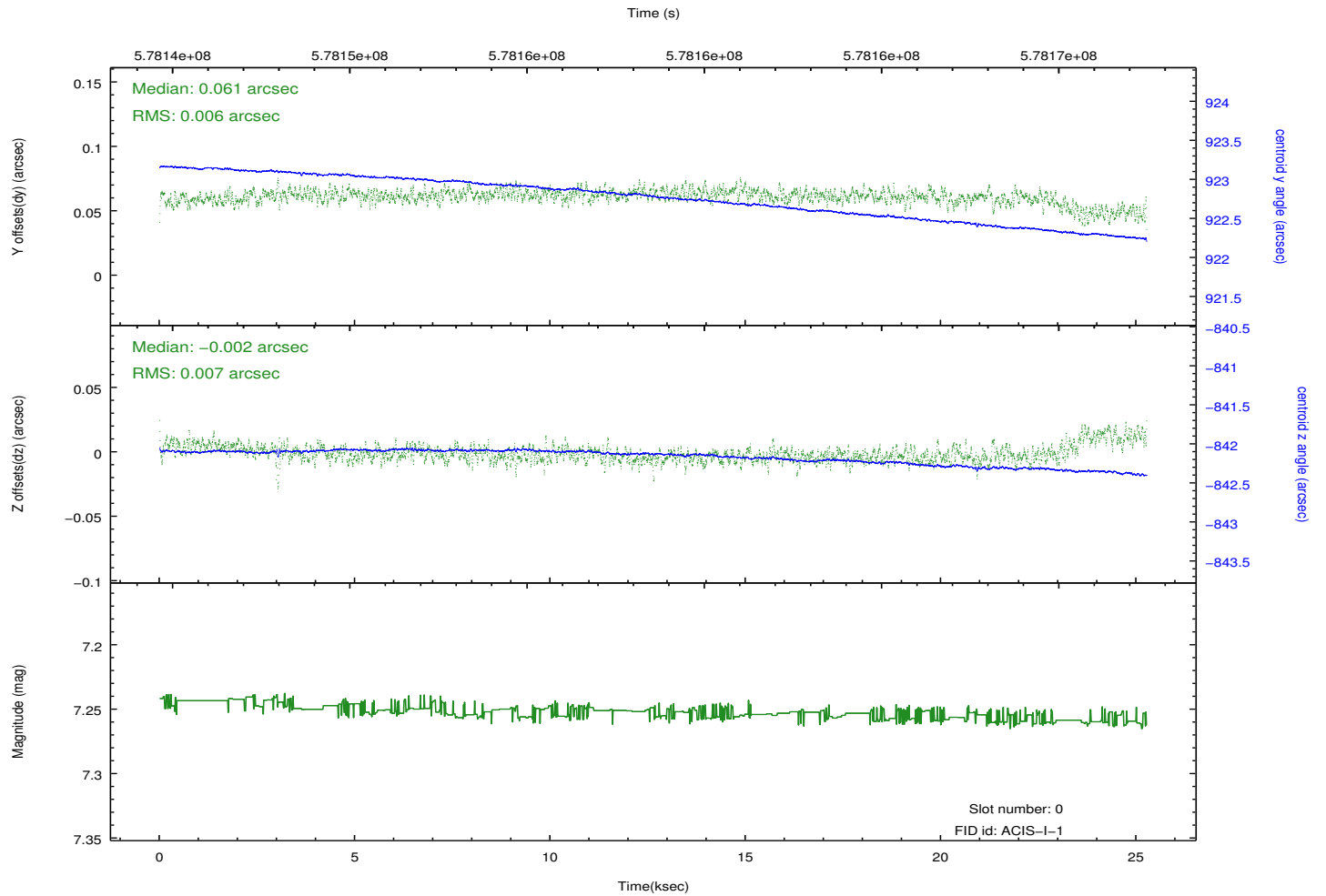
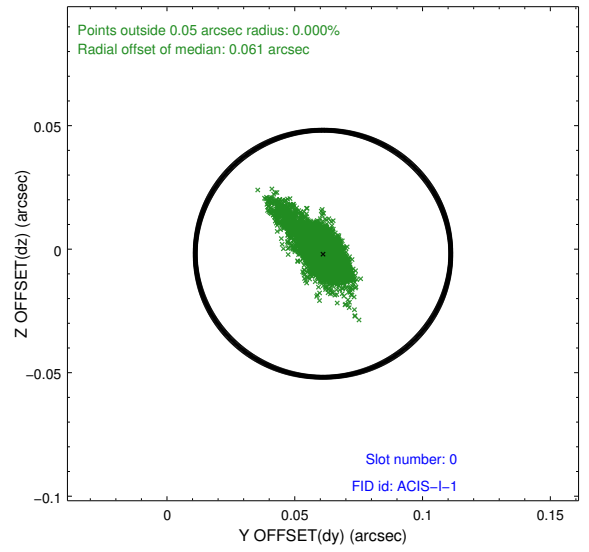
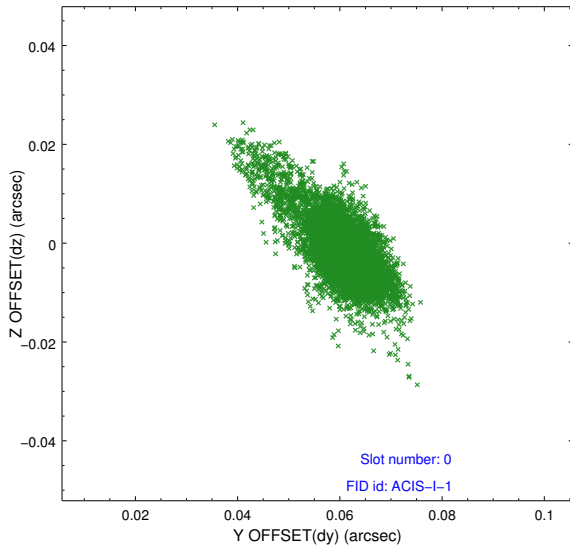


### 2.4.5 Slot 7

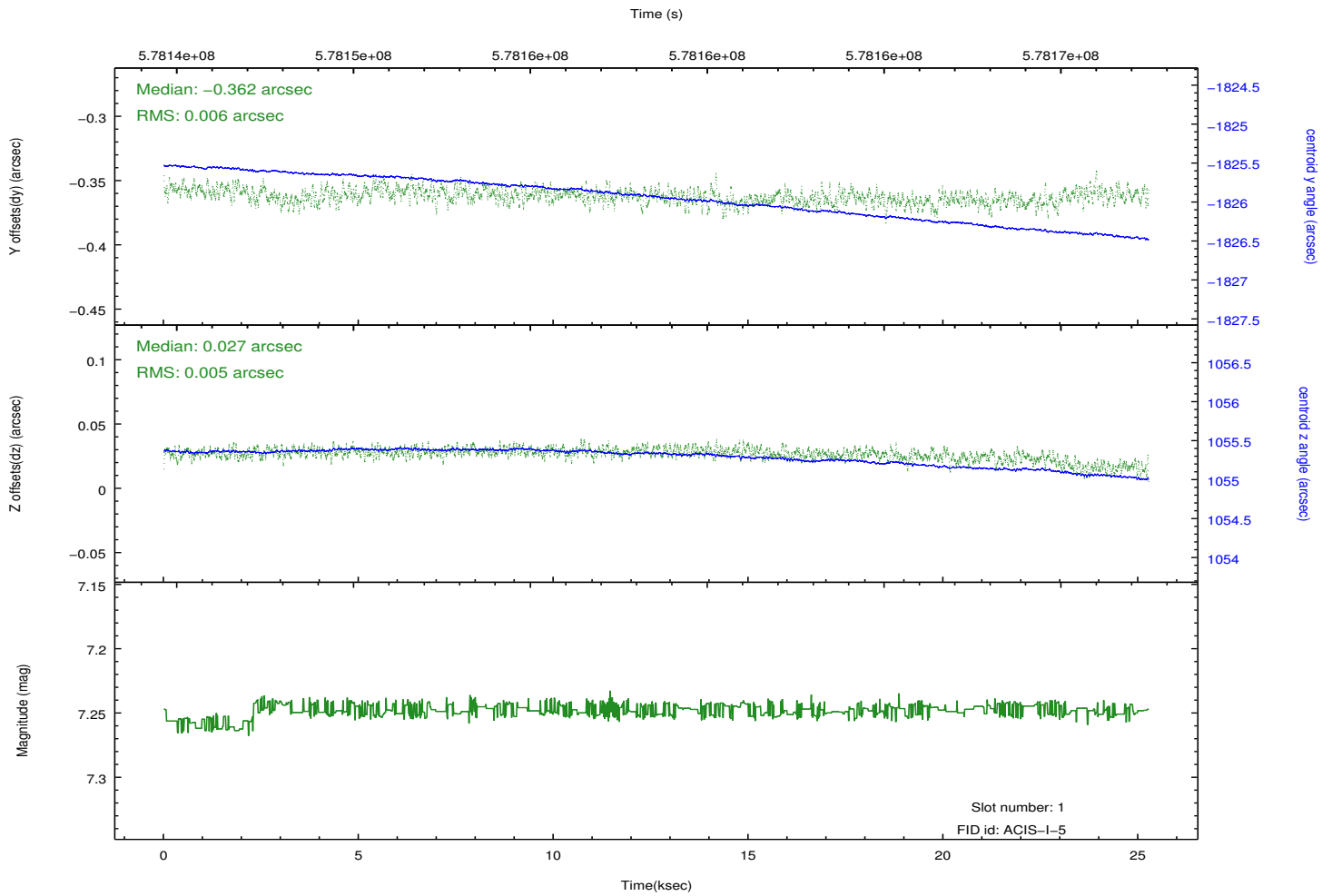
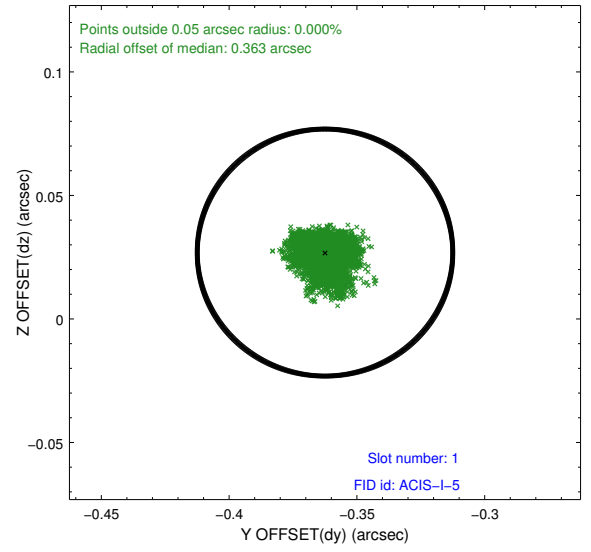
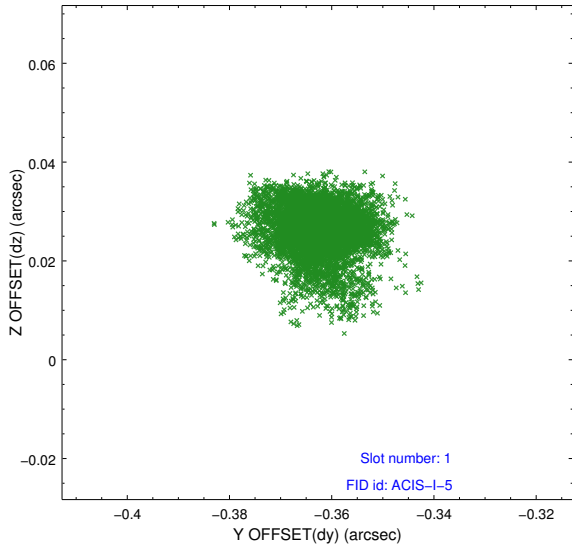


## 2.5 FID Slots

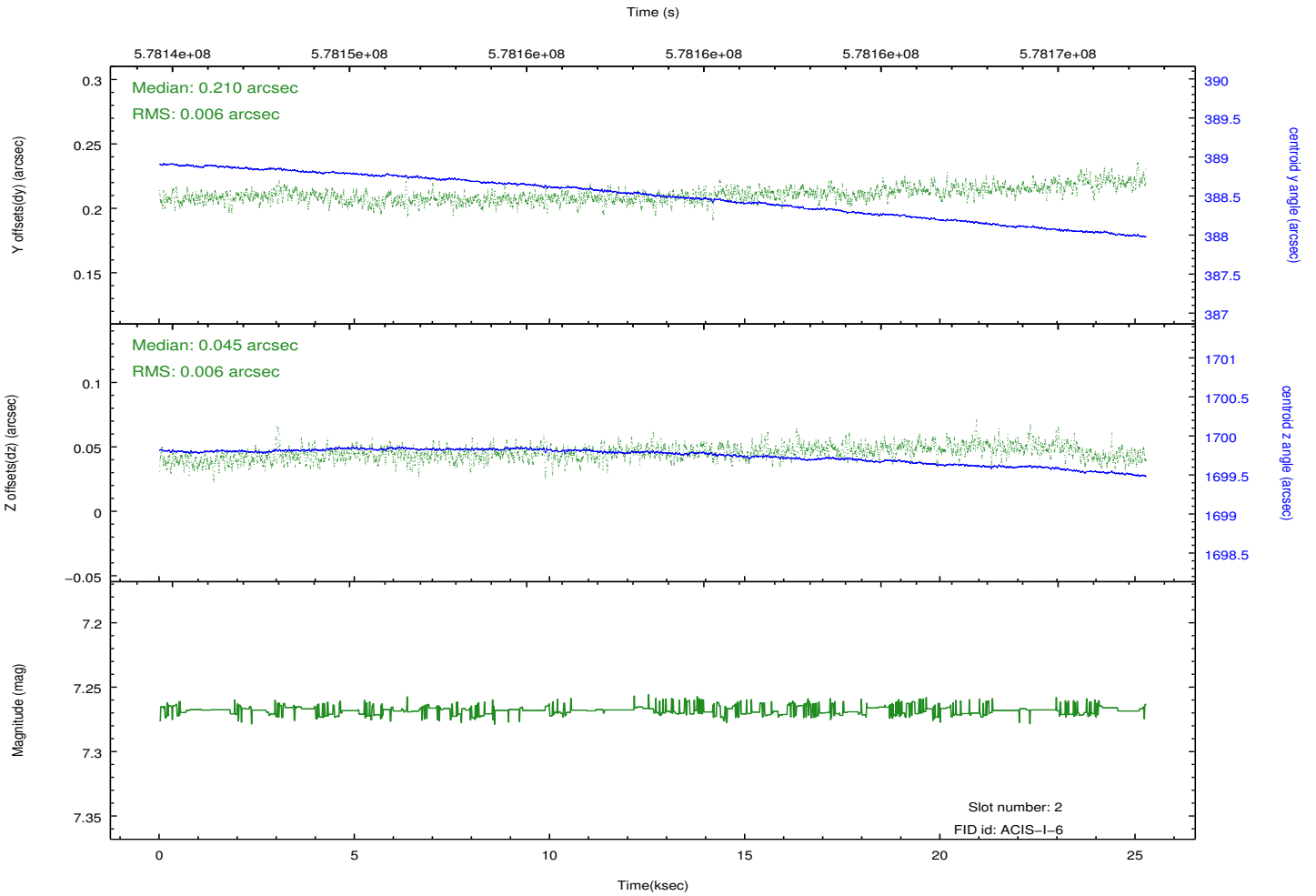
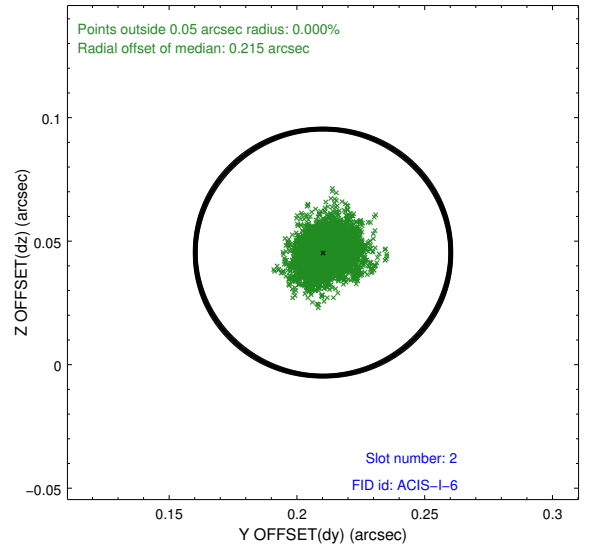
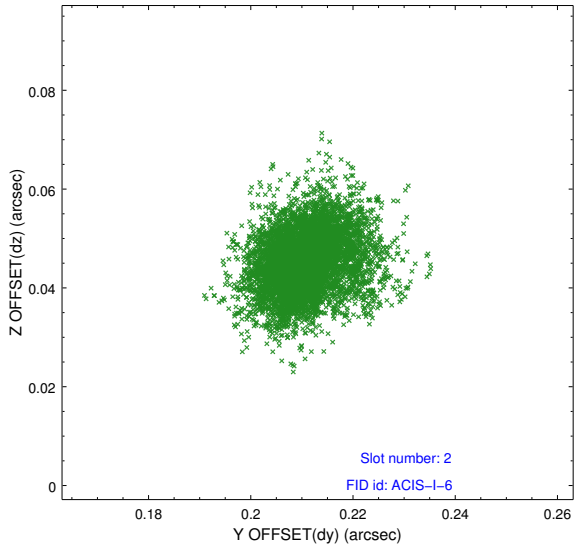
### 2.5.1 Slot 0



## 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)	2016.04.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.937600371599

## A.2 Comments