

# V&V Reference Report

## L2 ASCDS Version : 10.3.3

Observation 16149 - L2 Version 1  
Chandra X-Ray Center

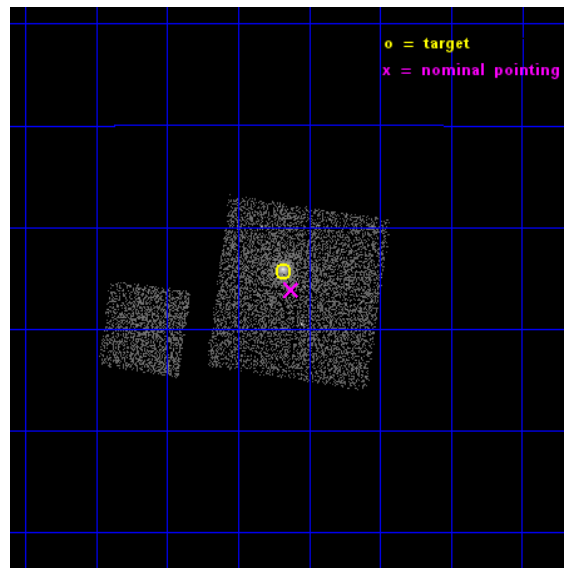
L2 Processing Date : Feb 19 2015

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# 1 Front

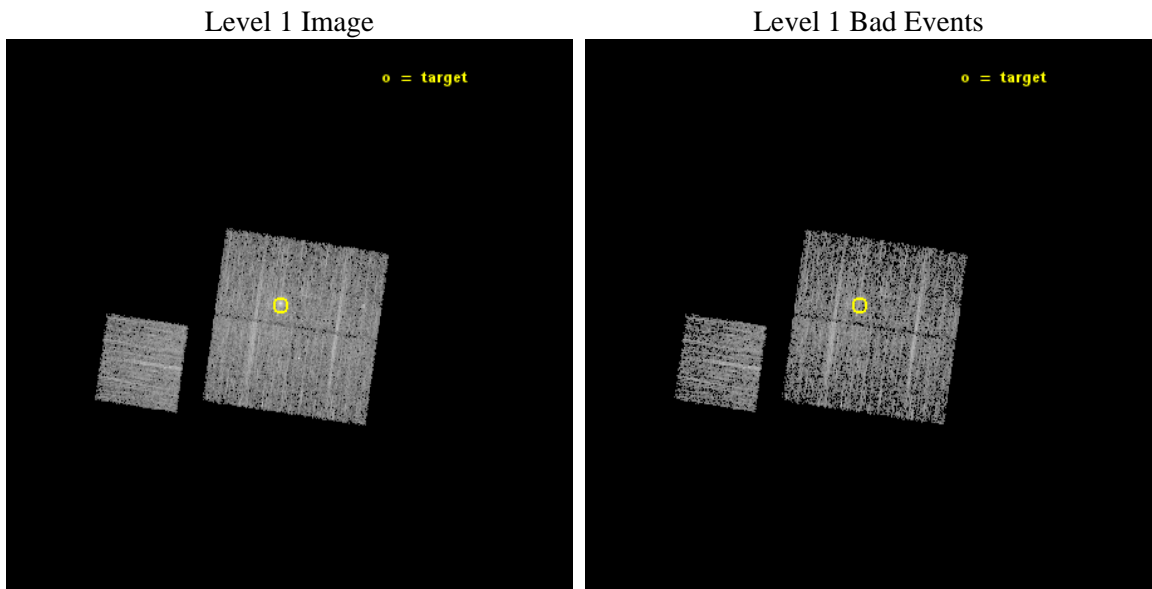
seq_num	801402	Sequence number
obs_id	16149	Observation id
title	Setting the Scale: Supporting precision cluster cosmology with Chandra observations of low-z lensing clusters	Proposal title
observer	Dr Adam Mantz	Principal investigator
object	RXJ0132.6-0804	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	23.170417	Observer's specified target RA [deg]
dec_targ	-8.072222	Observer's specified target Dec [deg]
ra_nom	23.155996328682	Nominal RA [deg]
dec_nom	-8.1023720127988	Nominal Dec [deg]
roll_nom	278.37943953419	Nominal Roll [deg]
revision	1	Processing version of data
ontime	6110.1000471115	Sum of GTIs [s]
livetime	6030.2670918058	Livetime [s]
ontime0	6110.1000471115	Sum of GTIs [s]
ontime1	6110.1000471115	Sum of GTIs [s]
ontime2	6110.1000471115	Sum of GTIs [s]
ontime3	6110.1000471115	Sum of GTIs [s]
ontime6	6110.1000471115	Sum of GTIs [s]
l2events	13729	Number of level 2 events



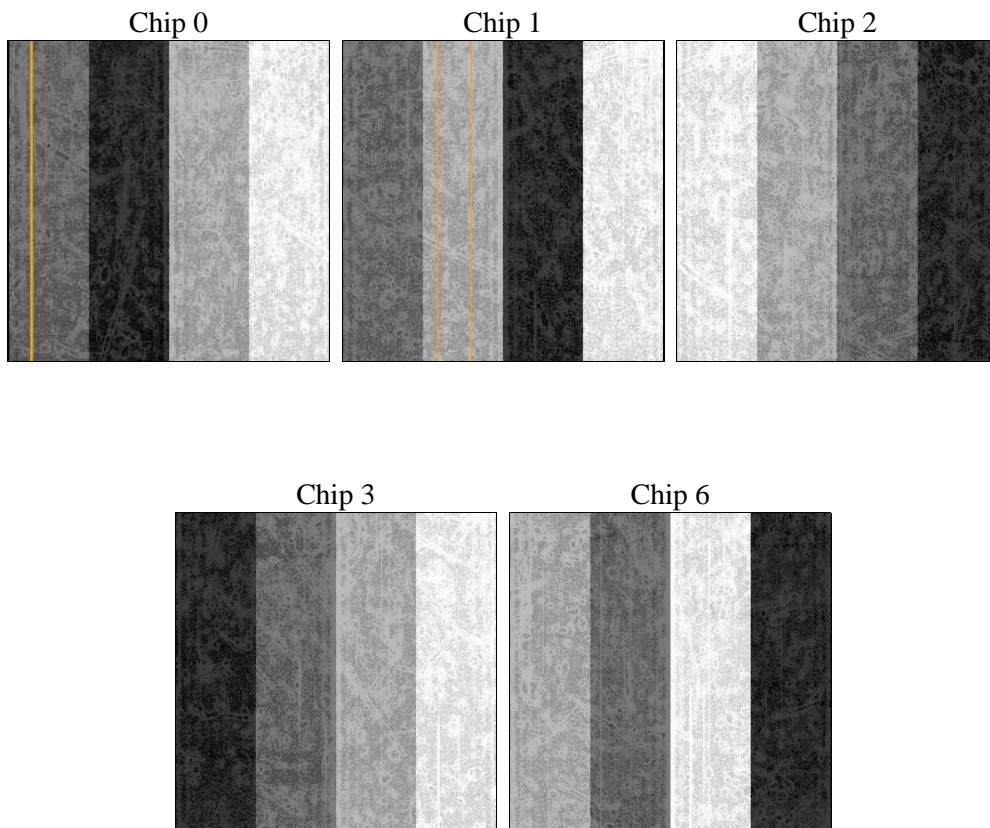
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	6110.1000471115	Sum of GTIs [s]
caldsver	4.6.6	&#160	ontime0	6110.1000471115	Sum of GTIs [s]
date	2015-02-20T00:52:43	Date and time of file creation	ontime1	6110.1000471115	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	6110.1000471115	Sum of GTIs [s]
			ontime3	6110.1000471115	Sum of GTIs [s]
			ontime6	6110.1000471115	Sum of GTIs [s]
			l1events	125906	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	23748	23597	26880	25947	25734
rejected events	20413	20439	24015	21549	22886
rejected %	85%	86%	89%	83%	88%

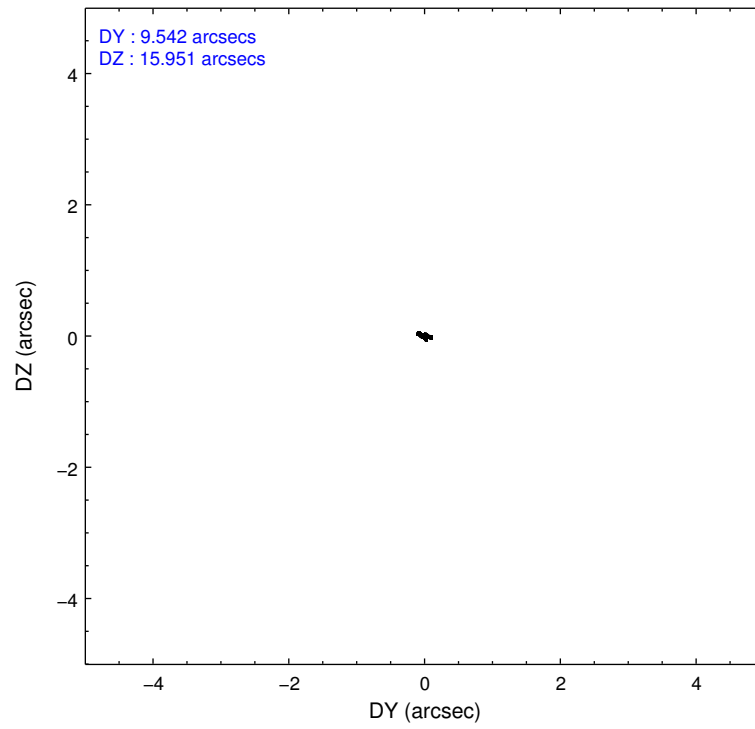
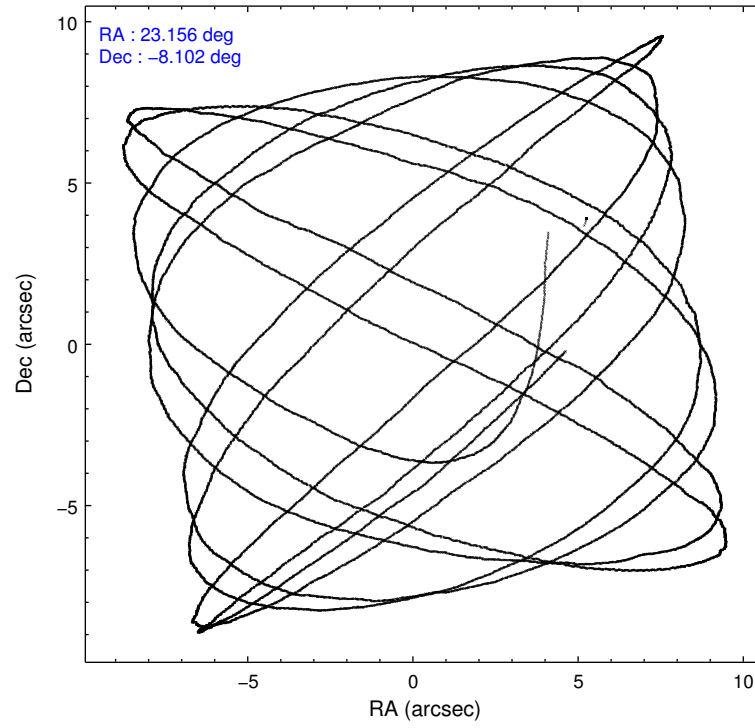
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1430	1252	1120	2425	1109
	6%	5%	4%	9%	4%
grade 1 events	19	9	9	21	17
	0%	0%	0%	0%	0%
grade 2 events	776	716	690	829	645
	3%	3%	2%	3%	2%
grade 3 events	311	303	250	328	276
	1%	1%	0%	1%	1%
grade 4 events	281	304	280	339	280
	1%	1%	1%	1%	1%
grade 5 events	801	901	681	964	888
	3%	3%	2%	3%	3%
grade 6 events	538	588	527	479	539
	2%	2%	1%	1%	2%
grade 7 events	19592	19524	23323	20562	21980
	82%	82%	86%	79%	85%

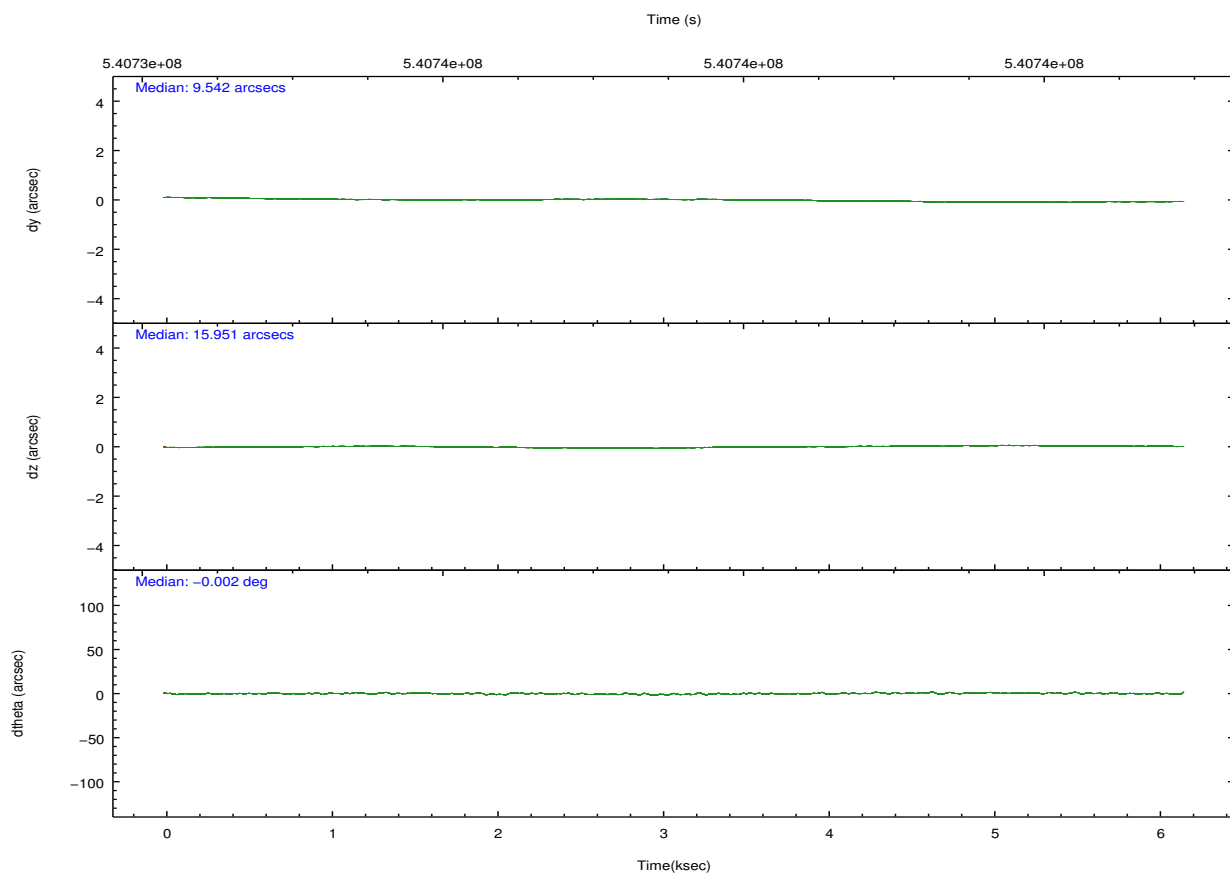
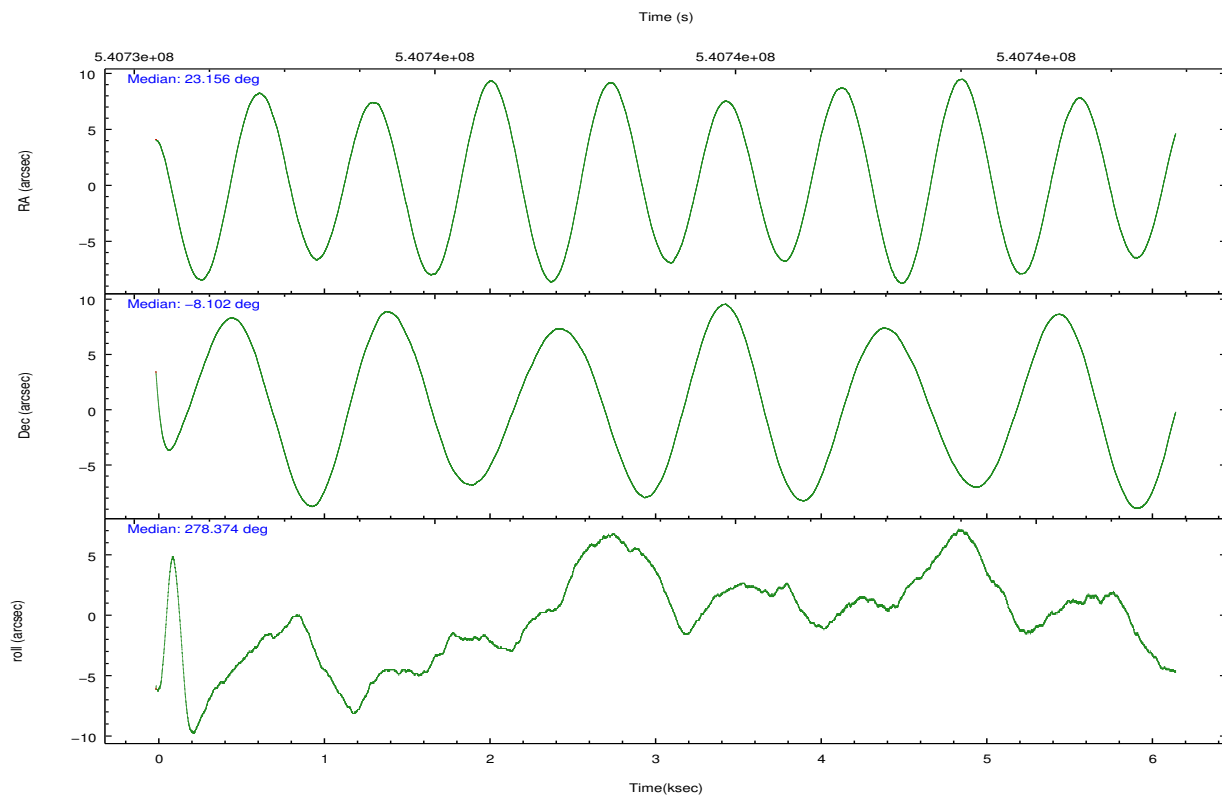
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	23.138666	23.1559963286817
[deg] Pointing Dec	-8.080777	-8.102372012798805
[deg] Pointing Roll	278.168336	278.3794395341867
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	540734604.184000	540733072.8782099
Observation start date	2015-02-19T12:02:17	2015-02-19T11:37:52
[s] Observation end time (MET)	540740604.184000	540741466.09118
Observation end date	2015-02-19T13:42:17	2015-02-19T13:57:46
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



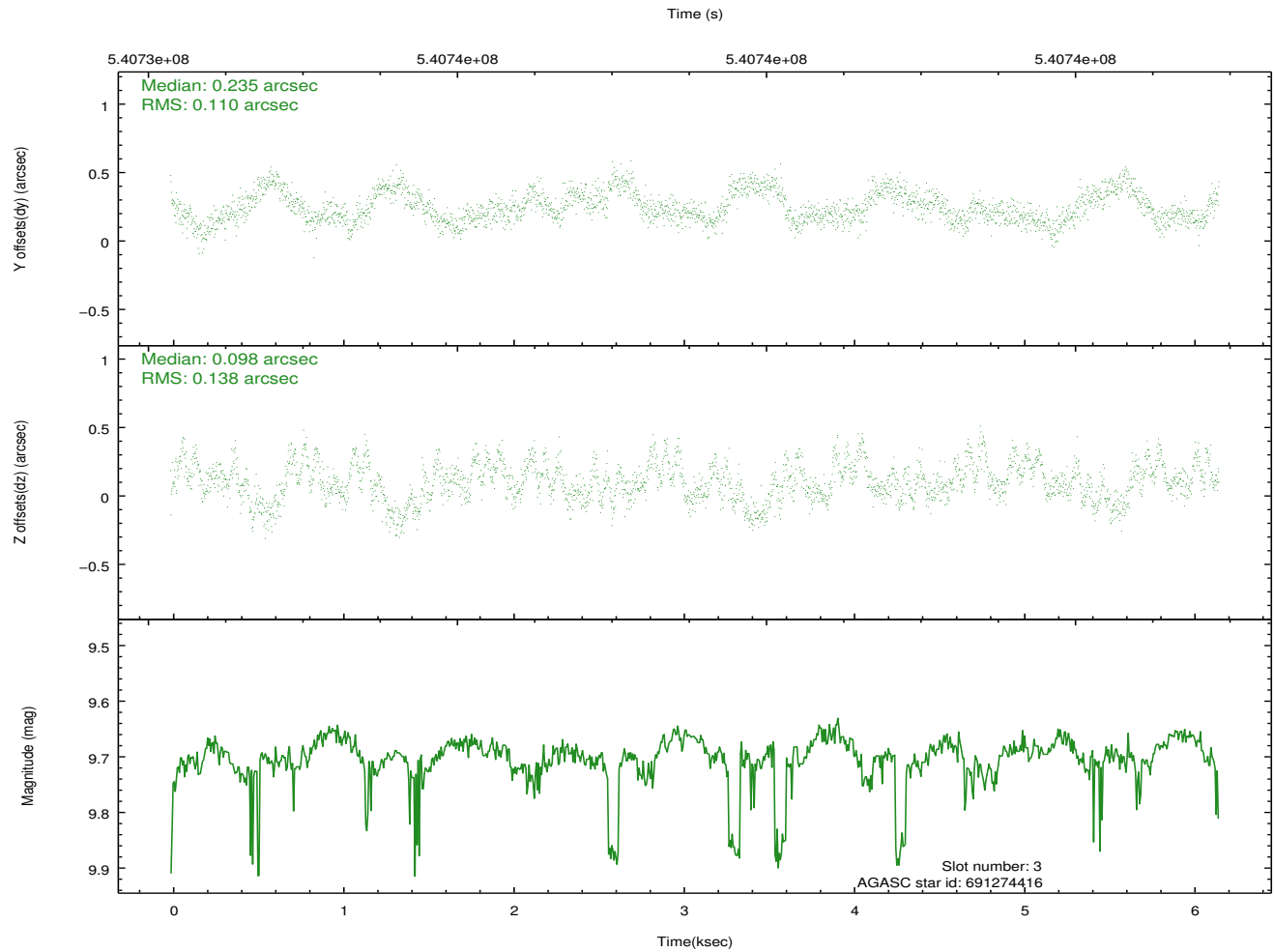
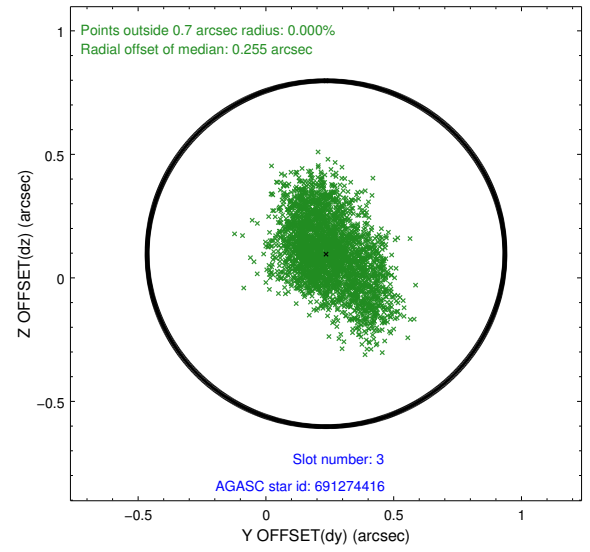
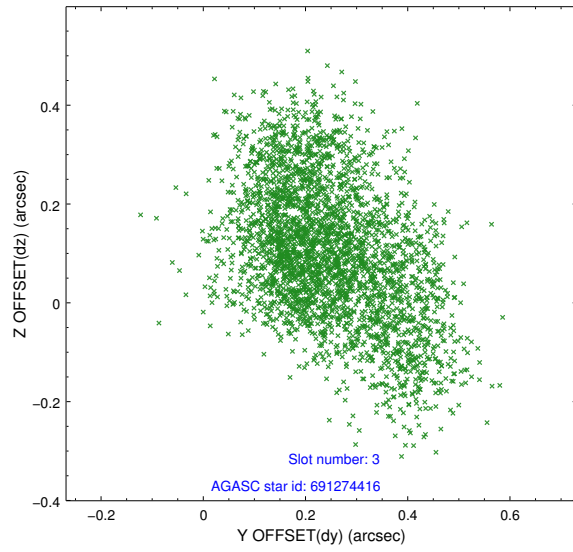


### Slot Statistics

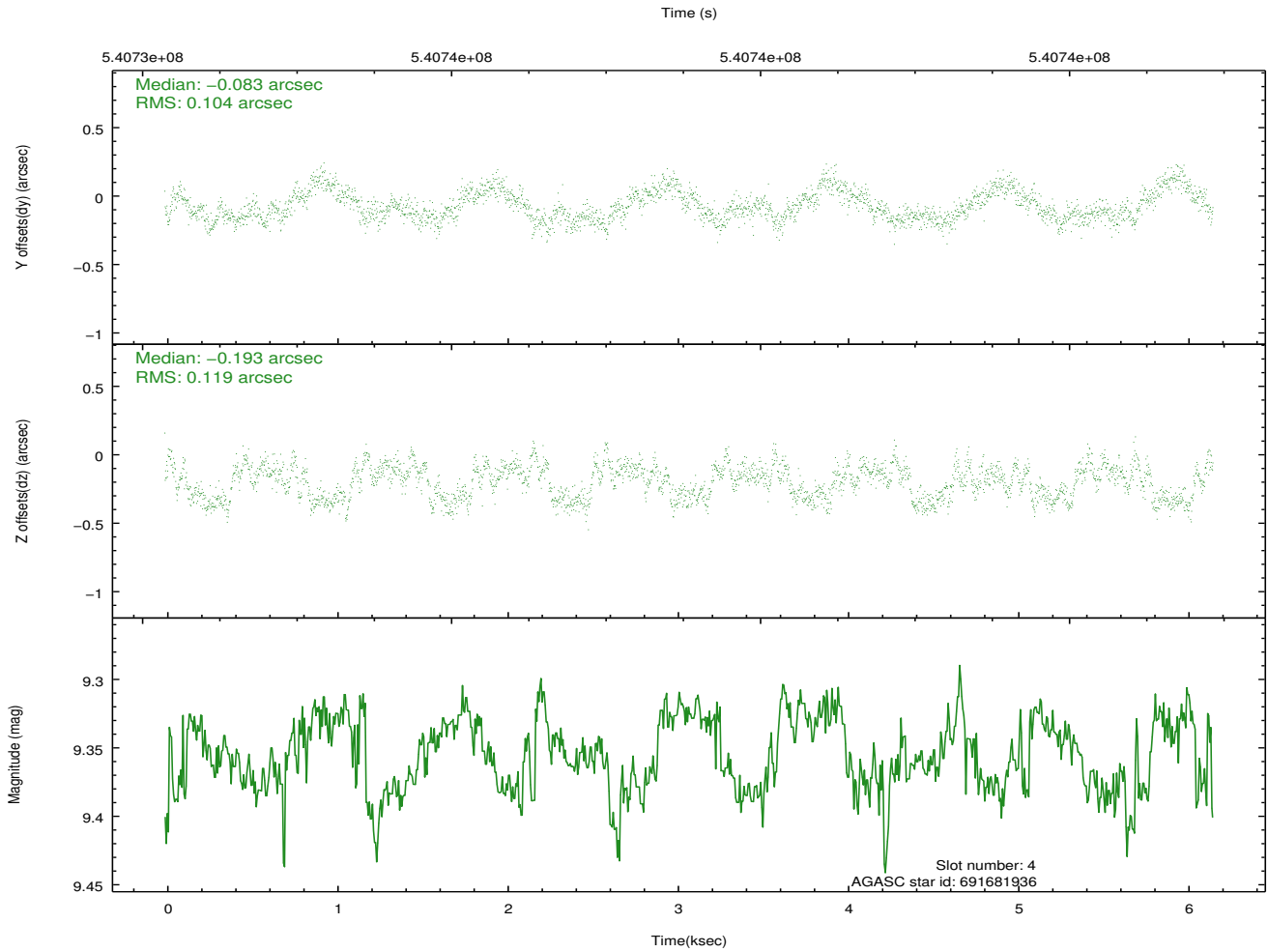
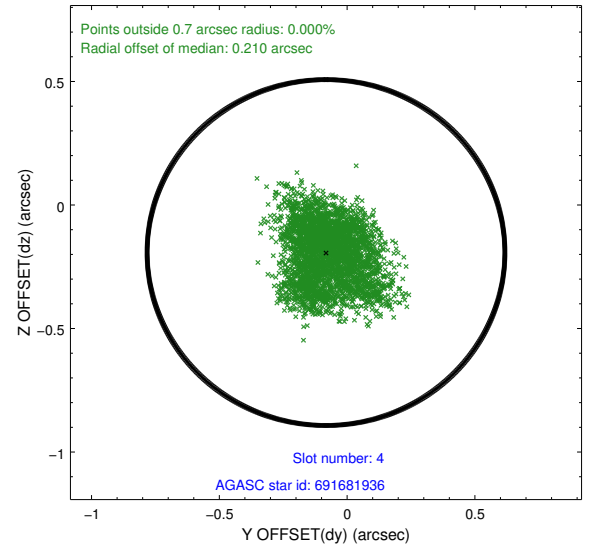
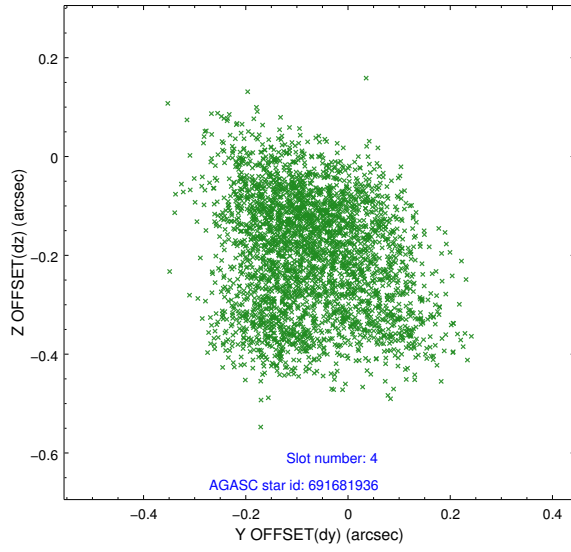
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	1502	0.037	-0.087	0.008	0.014	0.000000	0.000000	930.11	-839.67
1	FID		ACIS-I-4	7.17	1503	0.166	0.066	0.008	0.012	0.000000	0.000000	2150.82	1059.80
2	FID		ACIS-I-5	7.23	1503	-0.301	0.091	0.007	0.011	0.000000	0.000000	-1816.99	1058.79
3	GUIDE	used	691274416	9.70	3004	0.235	0.098	0.190	0.312	22.547044	-7.925039	-852.61	-2008.18
4	GUIDE	used	691681936	9.36	3005	-0.083	-0.193	0.173	0.262	23.217692	-8.149392	284.21	243.40
5	GUIDE	used	691683832	8.42	3005	-0.034	0.122	0.105	0.169	23.516842	-7.565326	-1644.42	1600.02
6	GUIDE	used	691685400	8.20	3004	0.048	-0.176	0.098	0.164	23.580857	-8.457750	1568.40	1366.28
7	GUIDE	used	614334944	9.51	2997	-0.199	0.142	0.148	0.246	23.690994	-7.375009	-2233.38	2313.73

## 2.4 Star Slots

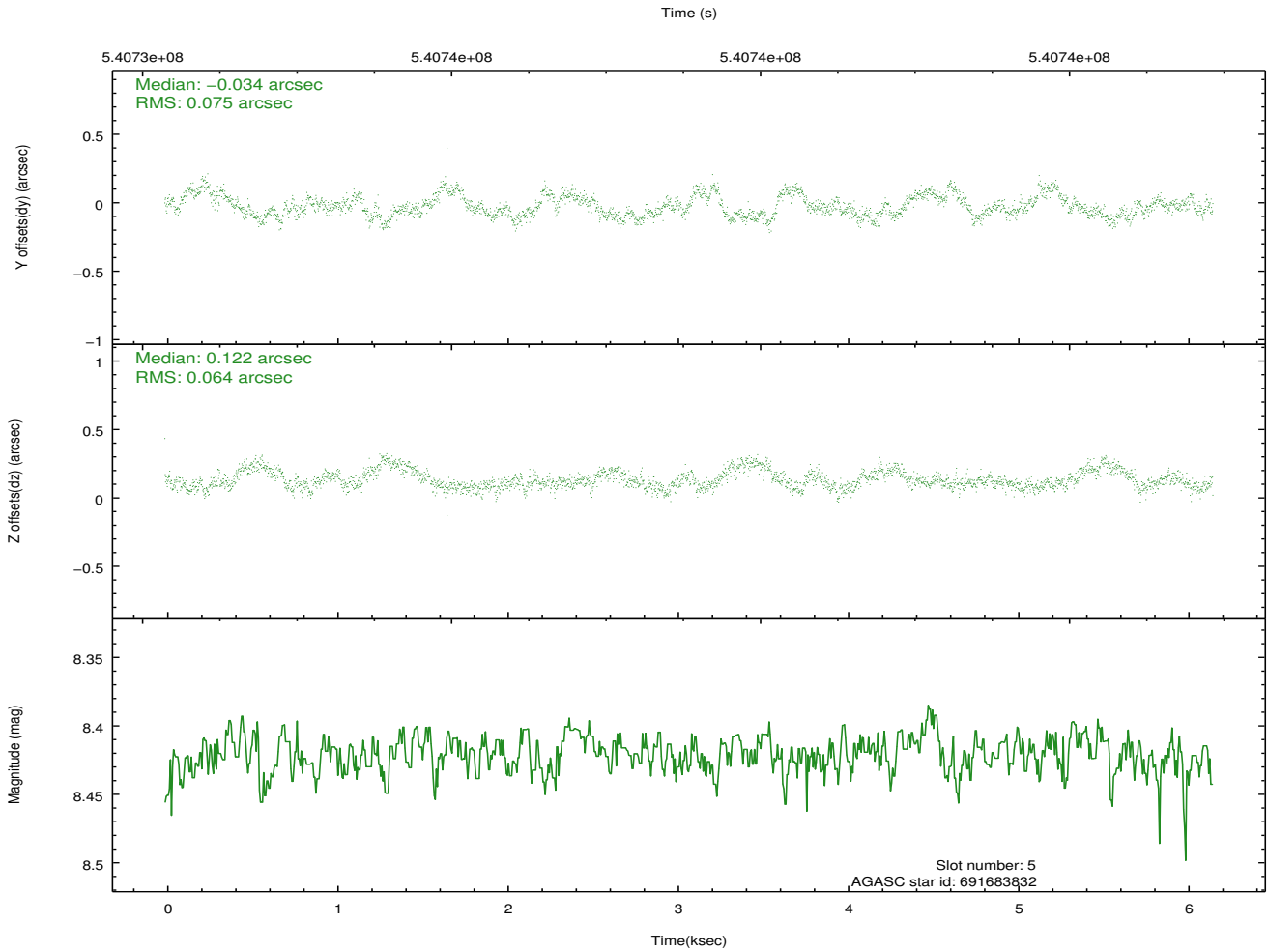
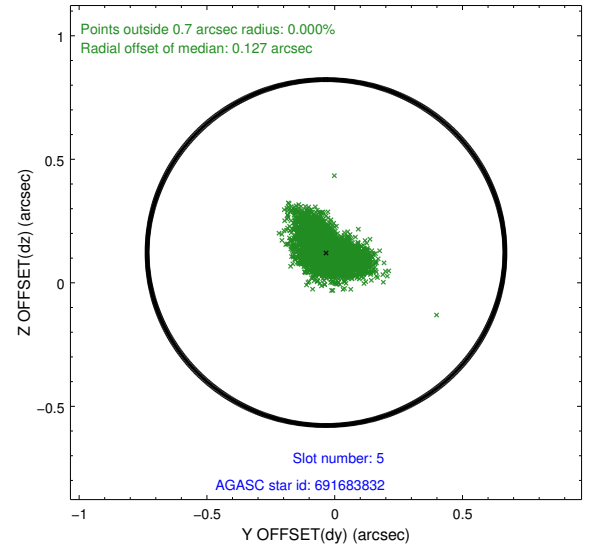
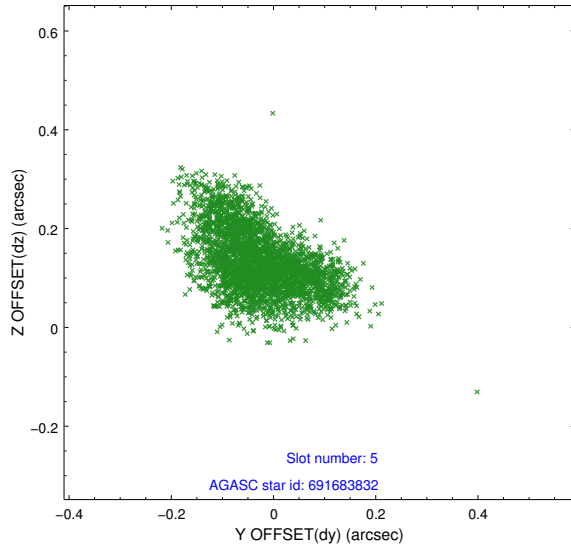
### 2.4.1 Slot 3



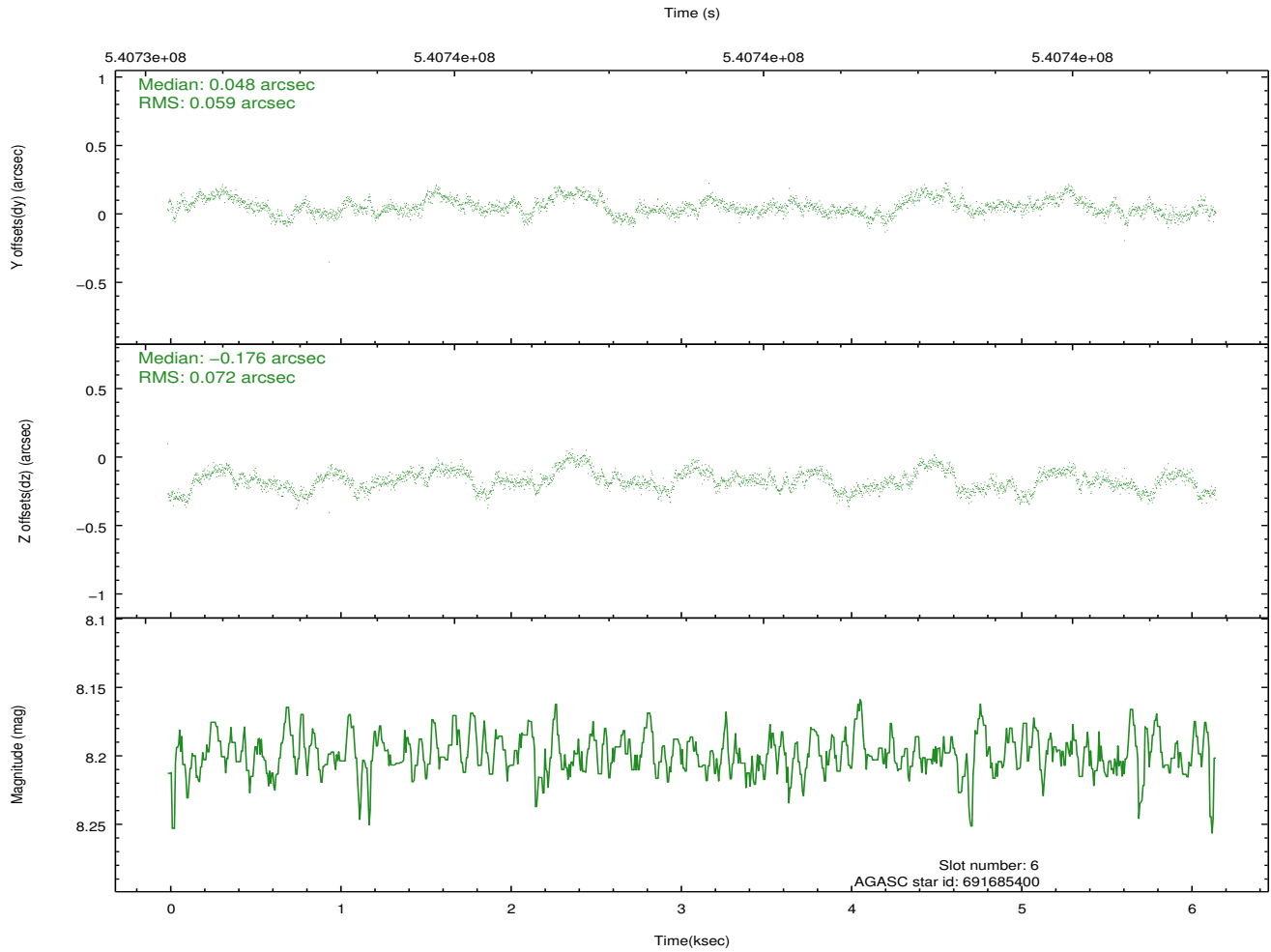
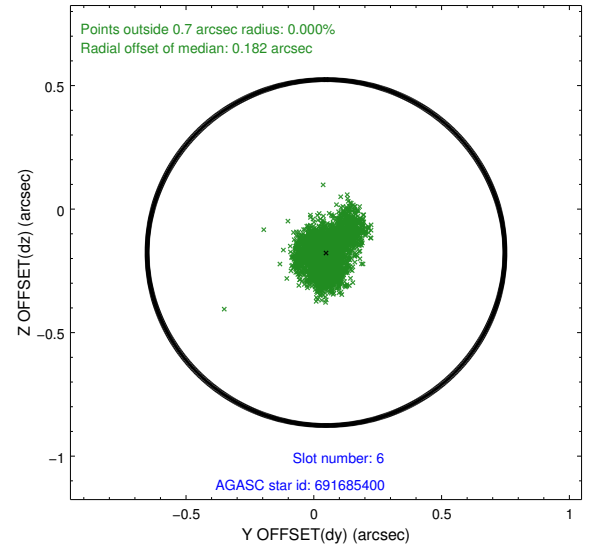
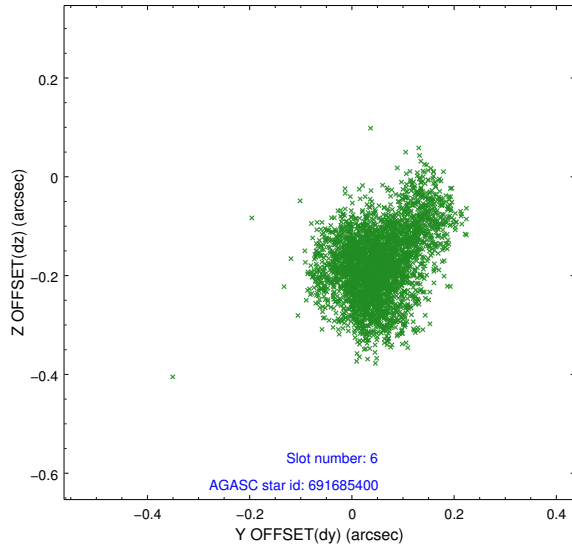
## 2.4.2 Slot 4



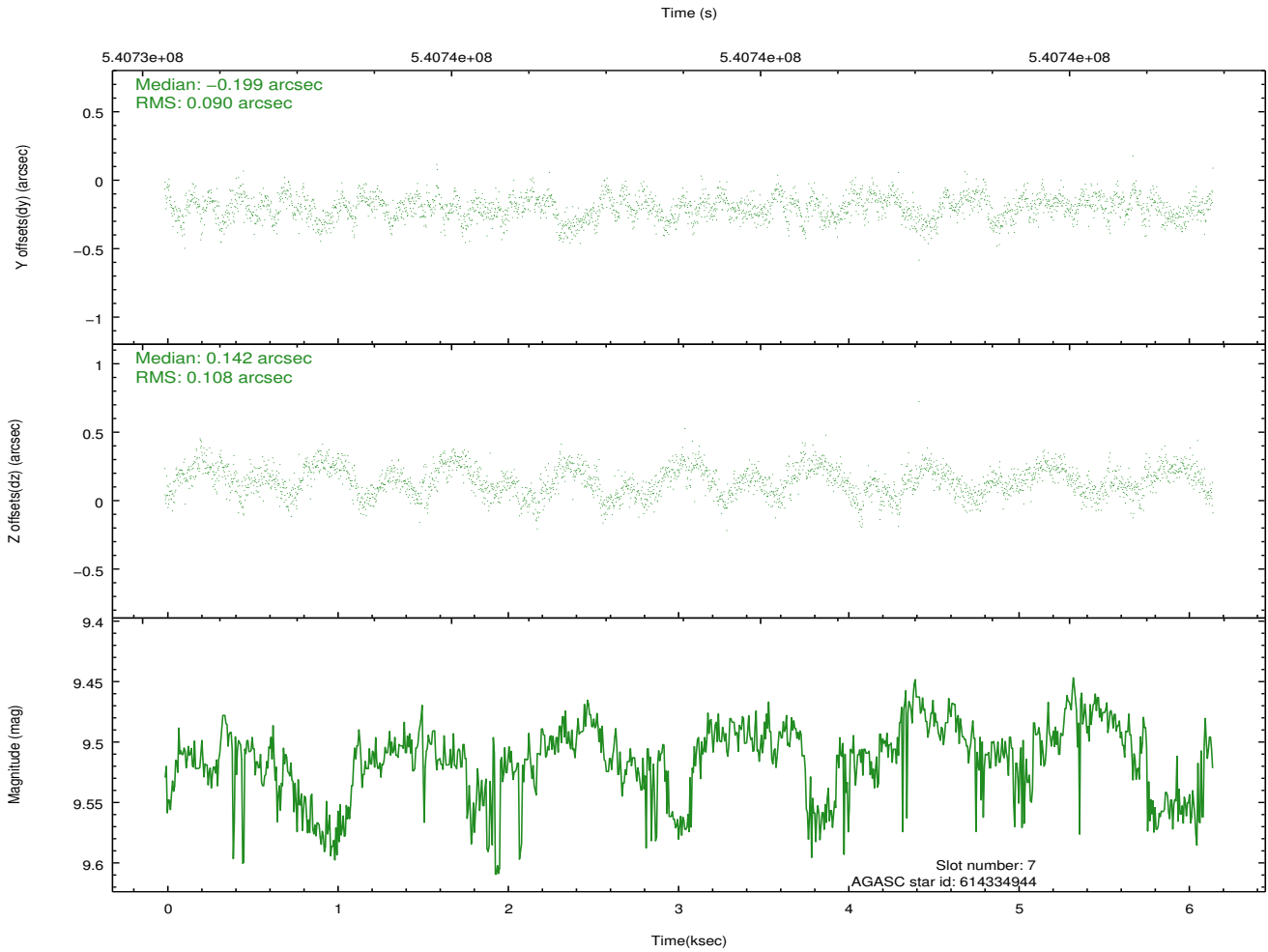
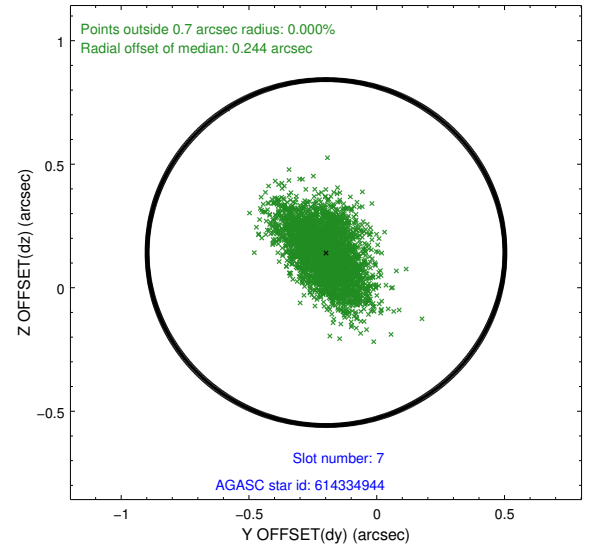
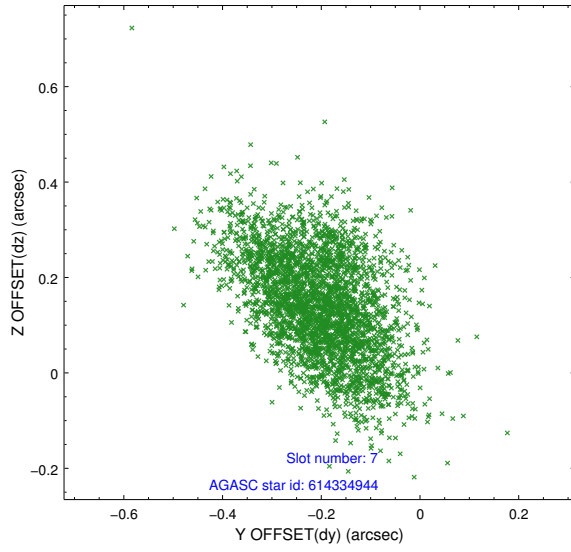
### 2.4.3 Slot 5



## 2.4.4 Slot 6

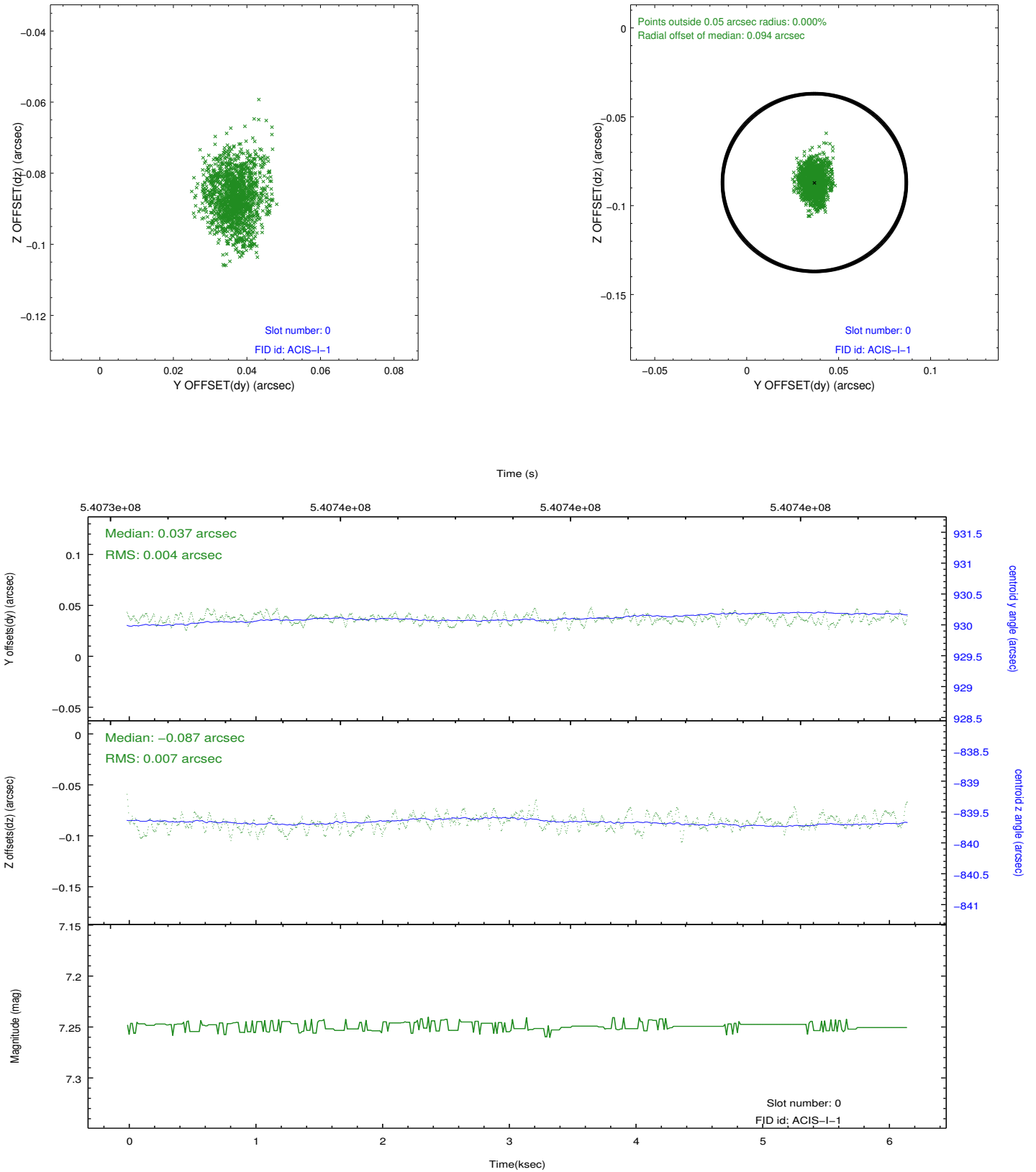


## 2.4.5 Slot 7

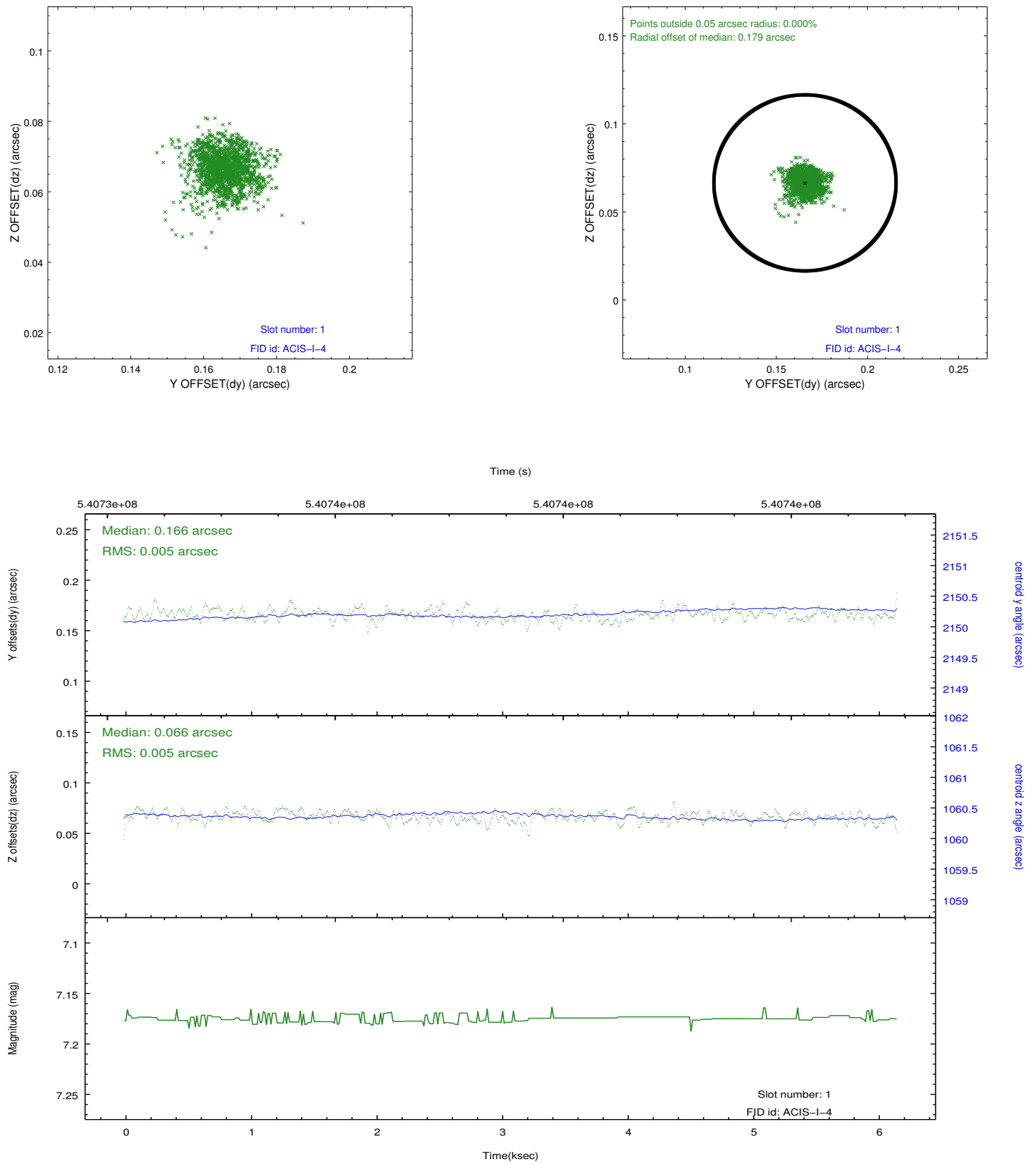


## 2.5 FID Slots

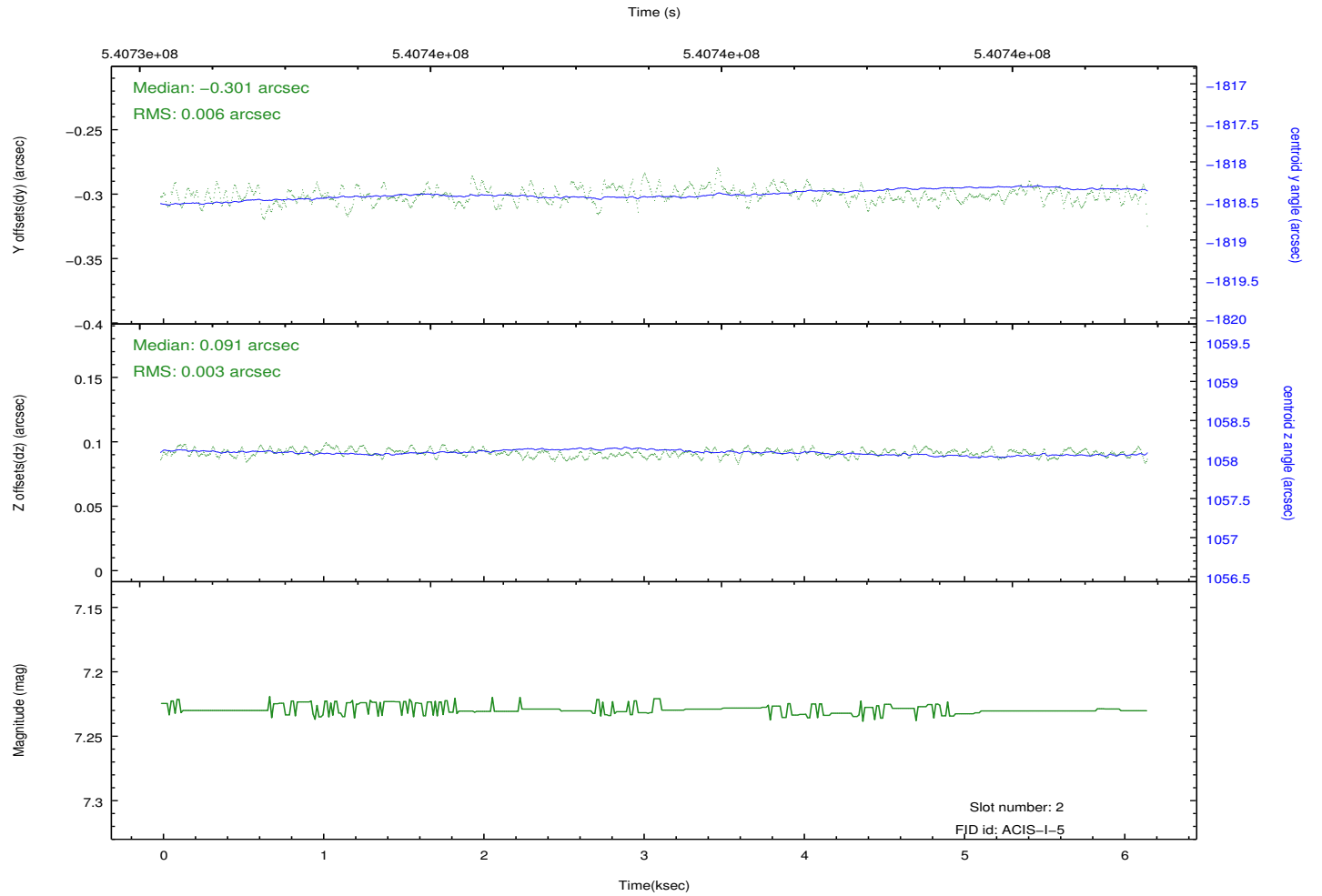
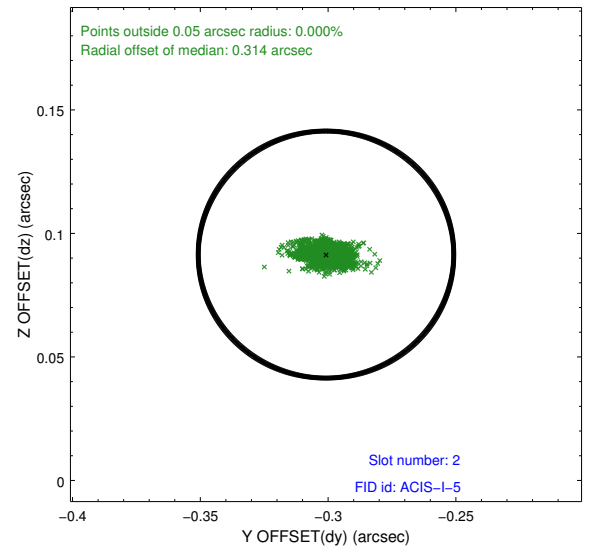
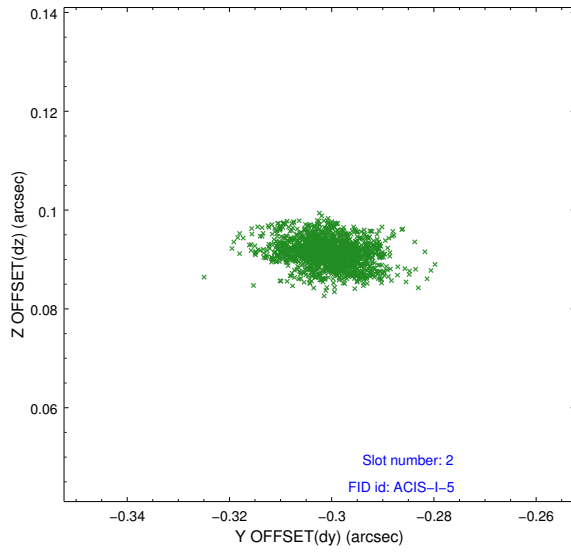
### 2.5.1 Slot 0



## 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)	2015.02.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.1101000471115

### A.2 Comments