

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7938 - L2 Version 2  
Chandra X-Ray Center

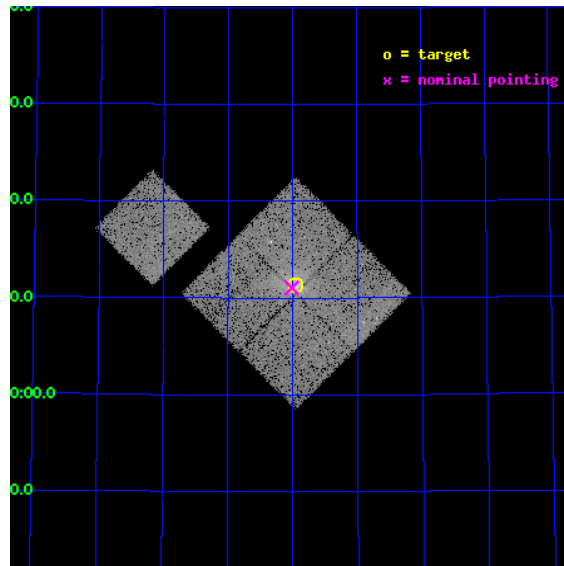
L2 Processing Date : Apr 29 2012

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# 1 Front

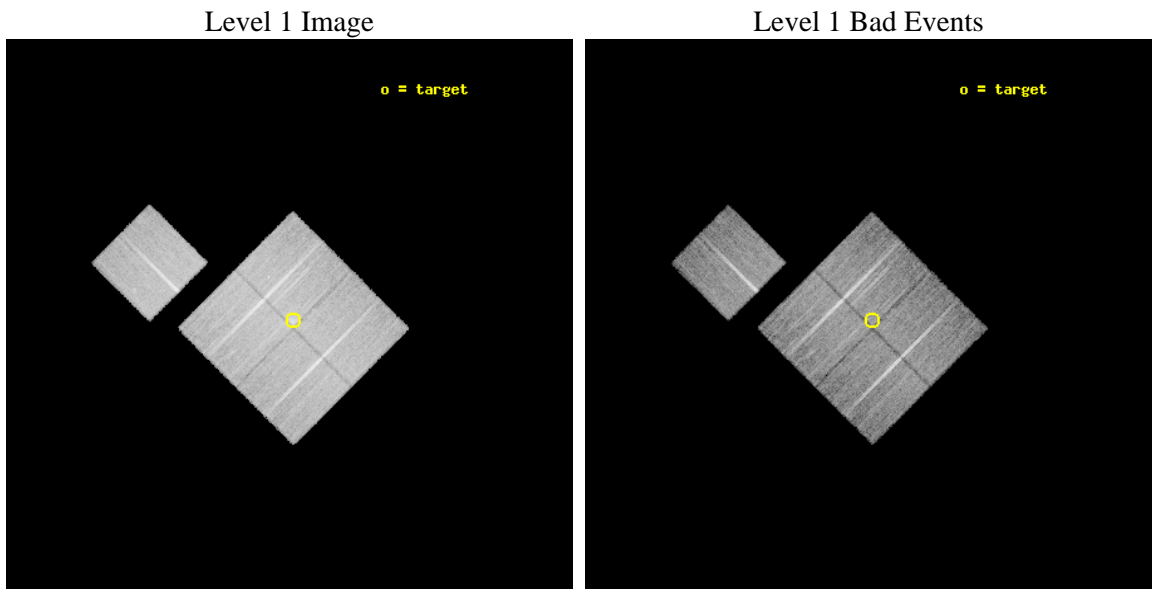
seq_num	800656	Sequence number
obs_id	7938	Observation id
title	An X-ray/lensing calibration of cluster mass estimates	Proposal ti
observer	Dr. Stephen Murray	Principal investigator
object	A1576	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	189.237083	Observer's specified target RA [deg]
dec_targ	63.188	Observer's specified target Dec [deg]
ra_nom	189.25295910303	Nominal RA [deg]
dec_nom	63.184251430123	Nominal Dec [deg]
roll_nom	314.95429560164	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15171.359126449	Sum of GTIs [s]
livetime	14973.134150469	Livetime [s]
ontime0	15174.500116706	Sum of GTIs [s]
ontime1	15168.218176067	Sum of GTIs [s]
ontime2	15171.359146357	Sum of GTIs [s]
ontime3	15171.359126449	Sum of GTIs [s]
ontime6	15171.35915643	Sum of GTIs [s]
l2events	57981	Number of level 2 events



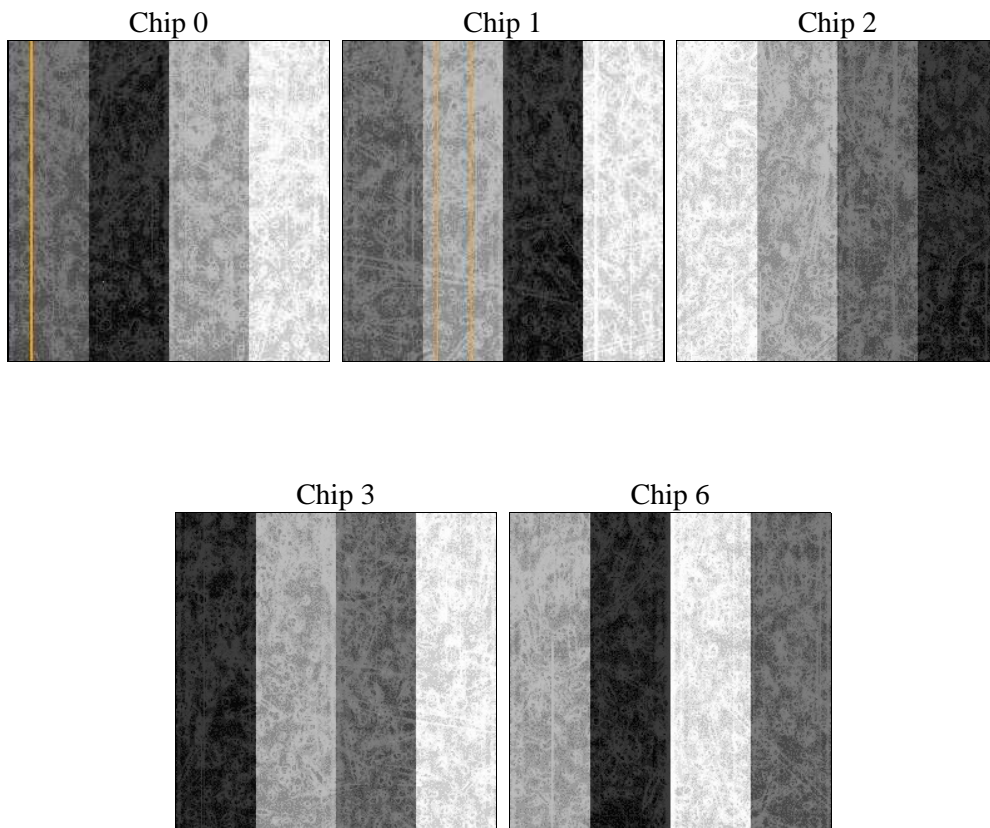
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	15171.359126449	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime0	15174.500116706	Sum of GTIs [s]
date	2012-04-30T01:24:31	Date and time of file creation	ontime1	15168.218176067	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15171.359146357	Sum of GTIs [s]
			ontime3	15171.359126449	Sum of GTIs [s]
			ontime6	15171.35915643	Sum of GTIs [s]
			l1events	633096	Number of level 1 events

### 2.1.4 Events

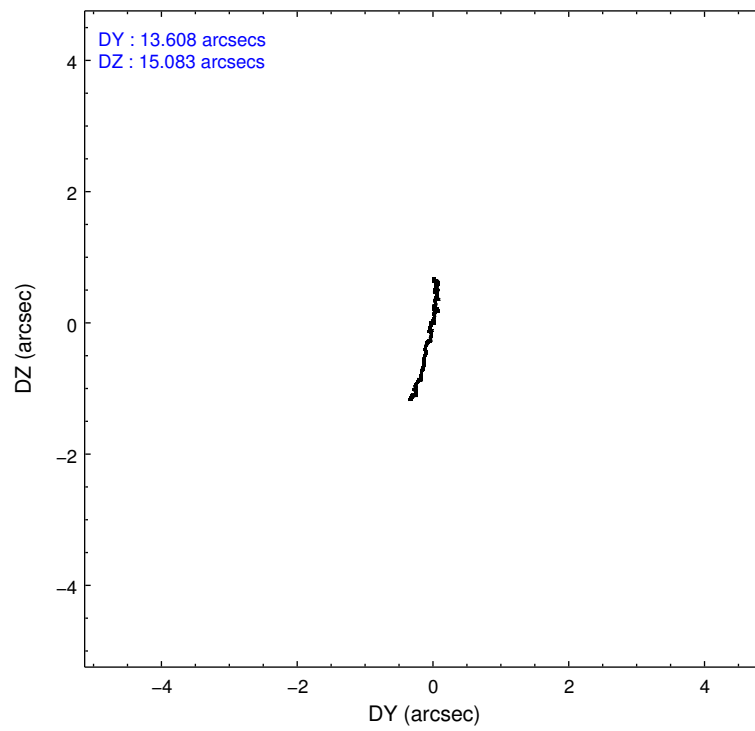
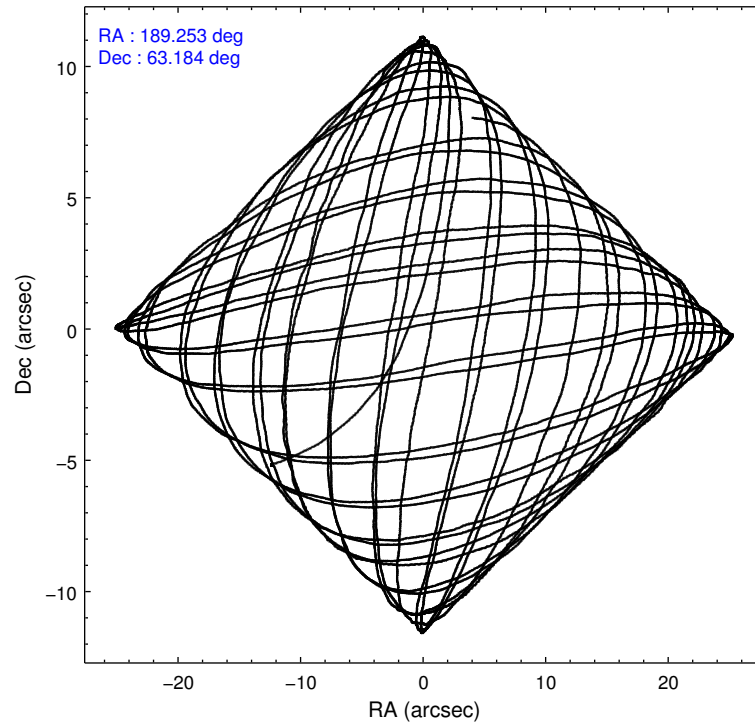
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	119209	118861	138258	132380	124388
rejected events	106746	103995	124727	116933	111565
rejected %	89%	87%	90%	88%	89%

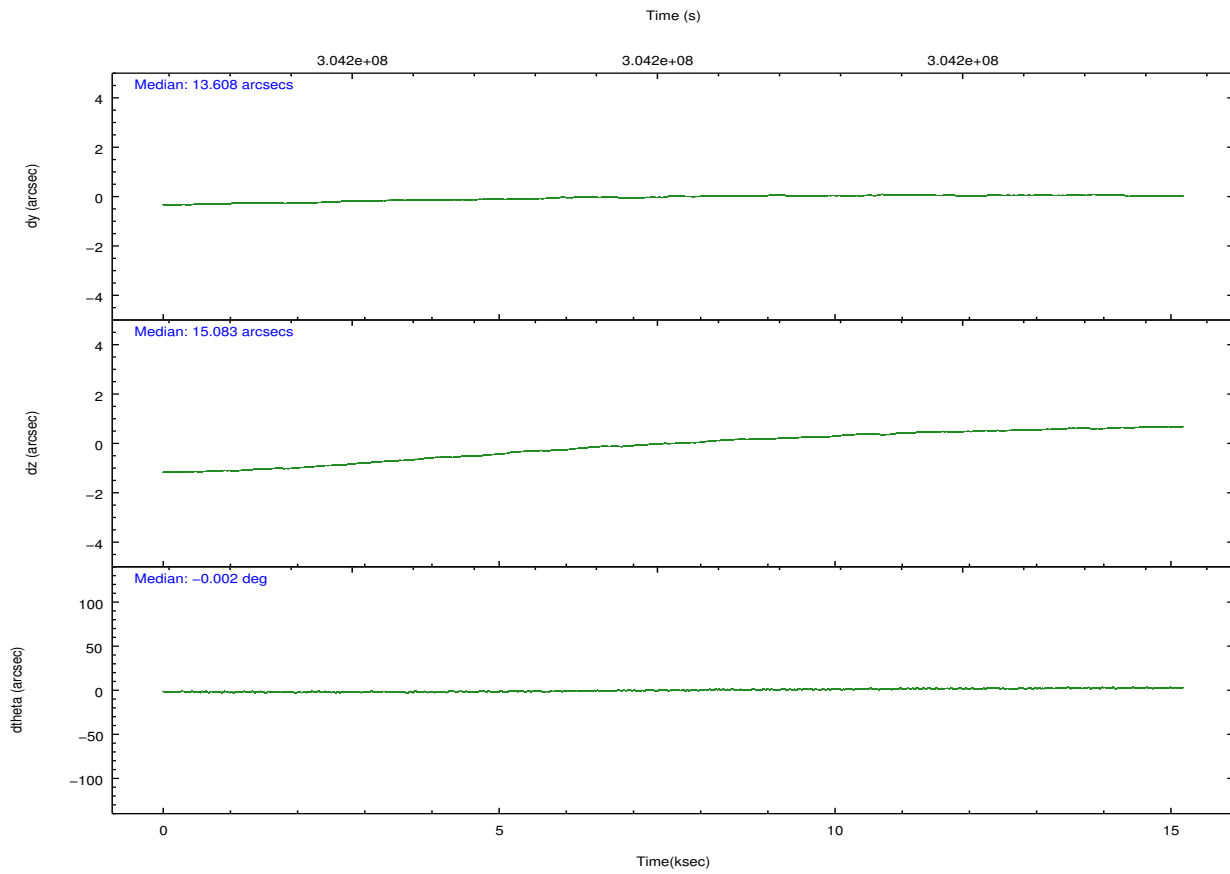
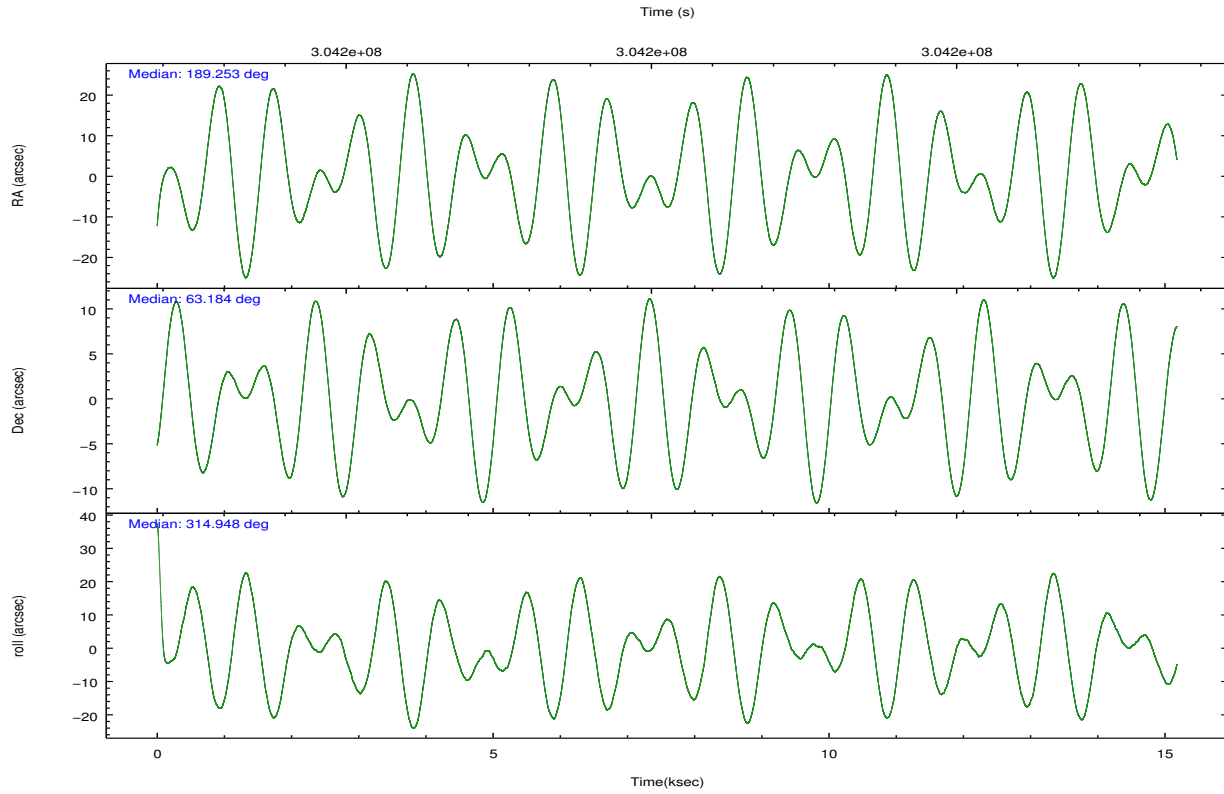
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4508	5765	5458	7141	4426
	3%	4%	3%	5%	3%
grade 1 events	59	82	81	101	60
	0%	0%	0%	0%	0%
grade 2 events	2989	3251	3054	2961	2878
	2%	2%	2%	2%	2%
grade 3 events	1361	1547	1336	1425	1435
	1%	1%	0%	1%	1%
grade 4 events	1296	1544	1391	1380	1426
	1%	1%	1%	1%	1%
grade 5 events	4169	4681	4099	5089	4893
	3%	3%	2%	3%	3%
grade 6 events	2344	2811	2334	2581	2685
	1%	2%	1%	1%	2%
grade 7 events	102483	99180	120505	111702	106585
	85%	83%	87%	84%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	189.193992	189.2529591030294	Subarray requested	NONE	NONE
[deg] Pointing Dec	63.191252	63.18425143012318	Alternating exposures requested	N	N
[deg] Pointing Roll	314.798205	314.9542956016384	[s] Primary exposure time	0.000000	3.1
[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)	304192851.184000	304191836.20583			
Observation start date	2007-08-22T17:59:46	2007-08-22T17:43:56			
[s] Observation end time (MET)	304207851.184000	304208110.64412			
Observation end date	2007-08-22T22:09:46	2007-08-22T22:15:10			
Read mode	TIMED	TIMED			

## 2.3 Aspect



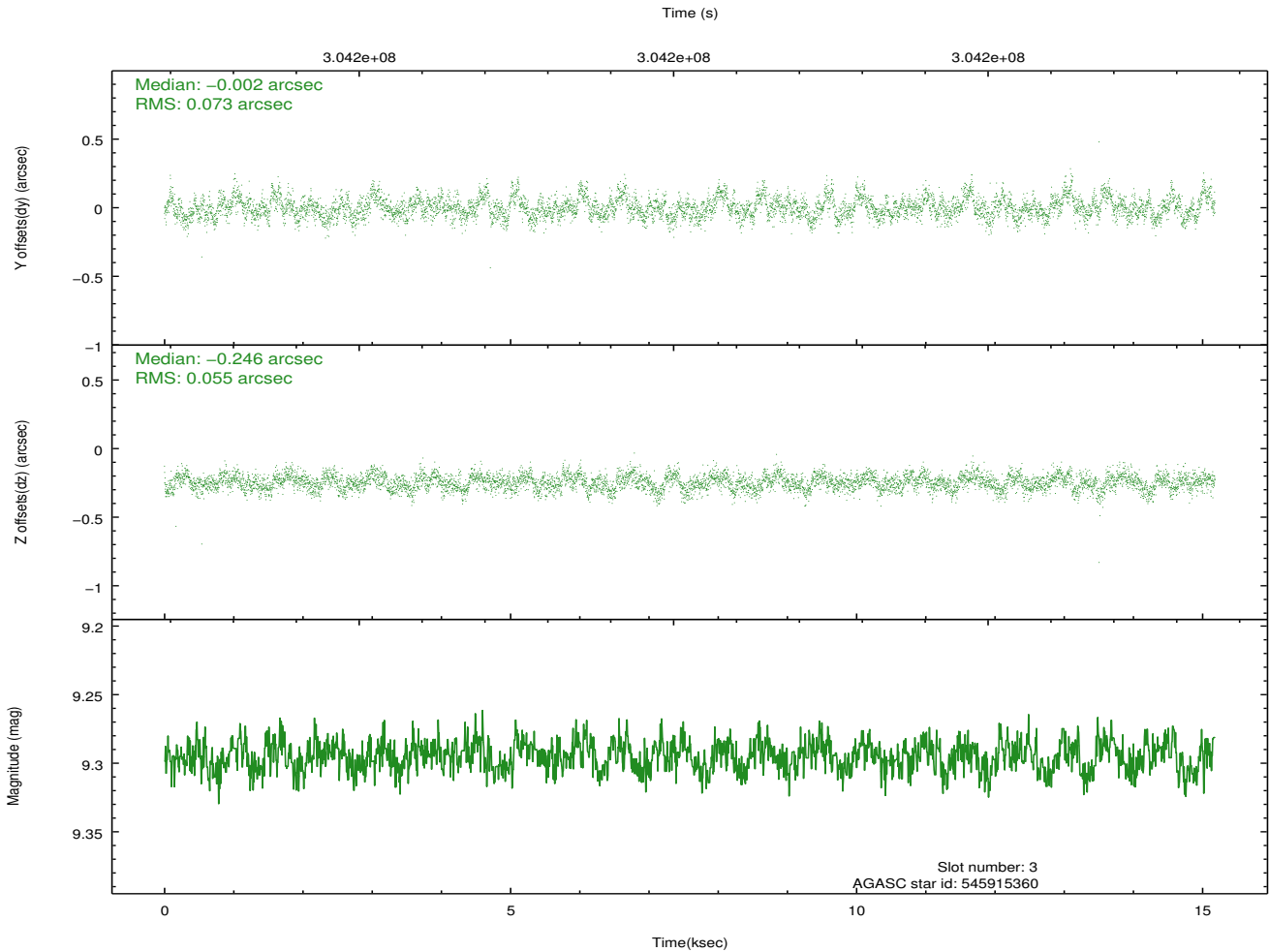
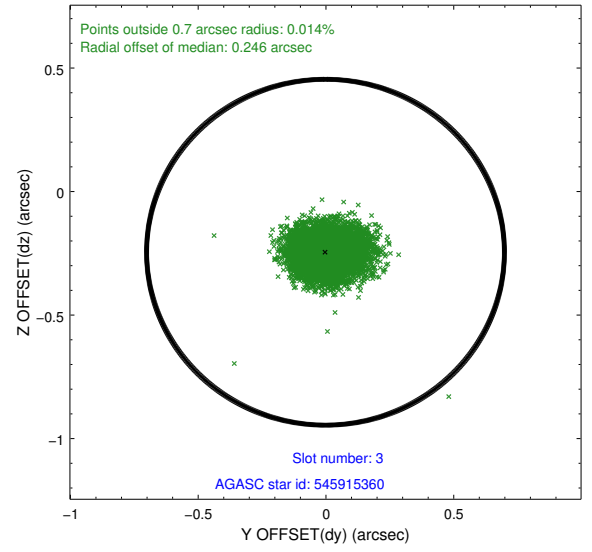
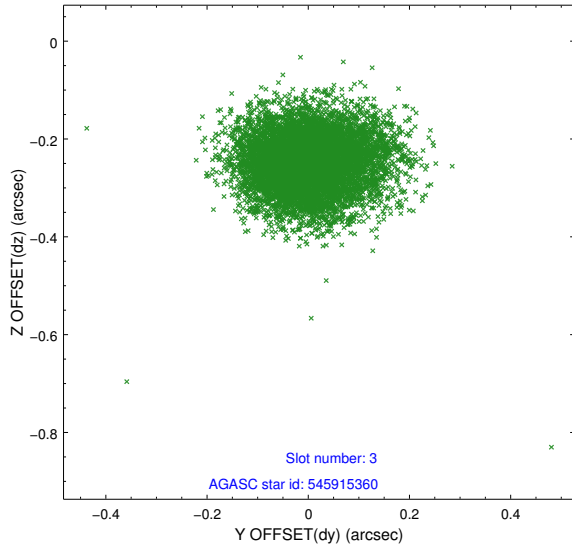


### Slot Statistics

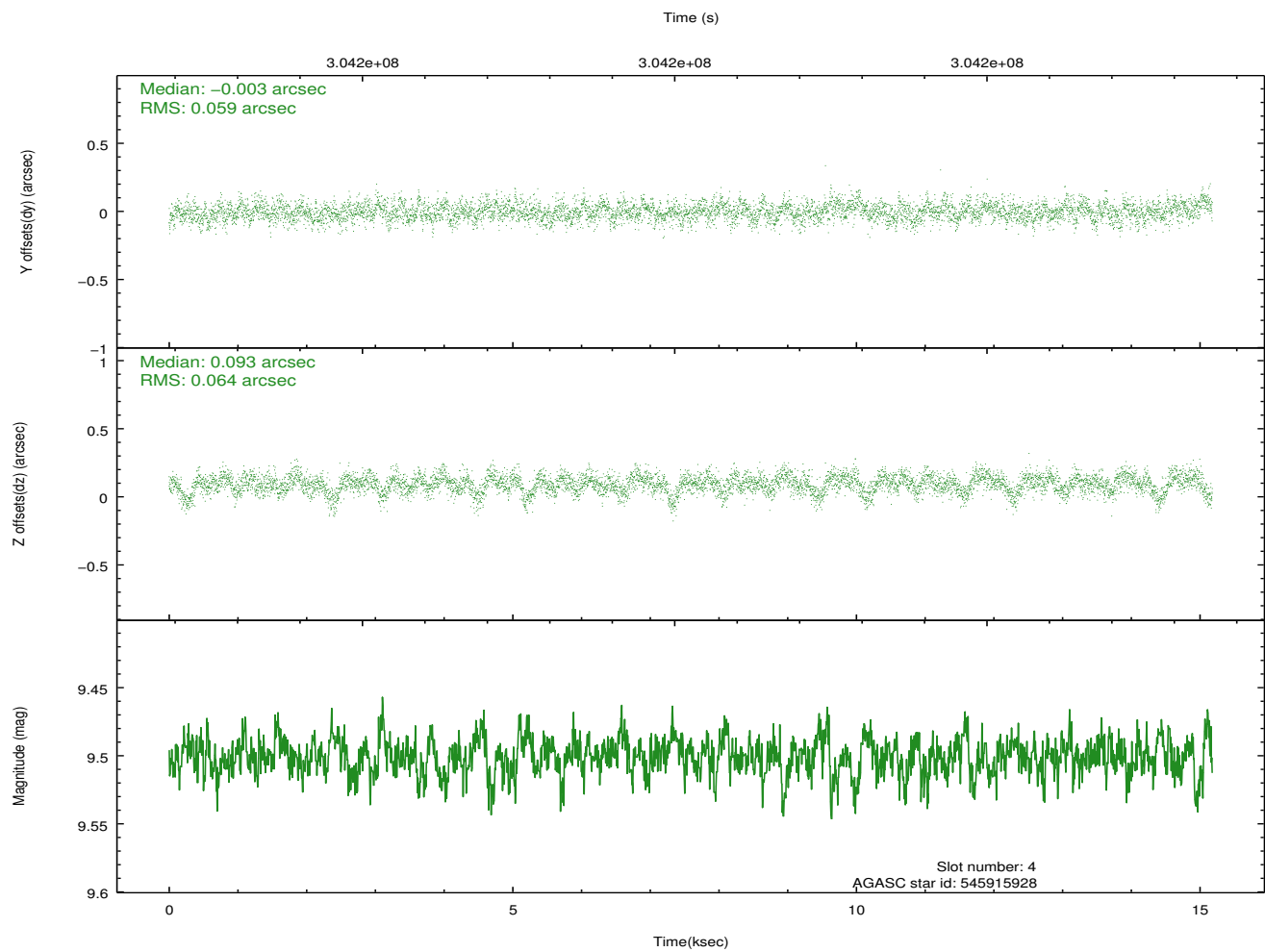
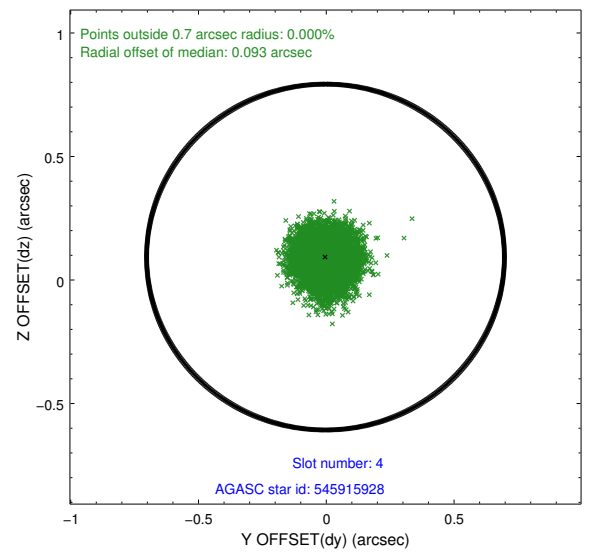
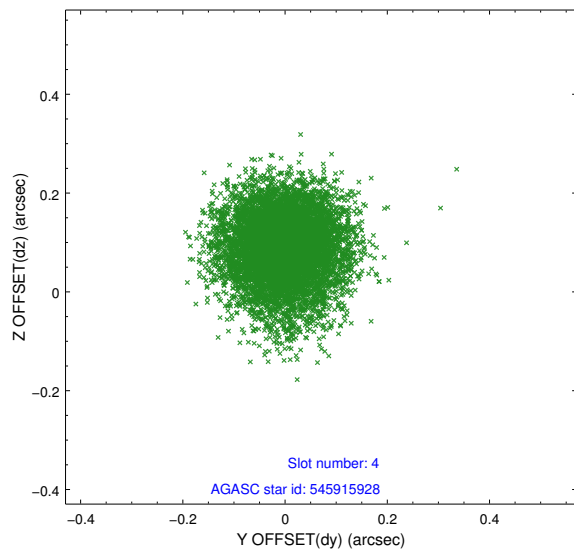
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	3703	0.037	-0.022	0.030	0.042	0.000000	0.000000	925.99	-838.59
1	FID	ACIS-I-5	7.22	3703	-0.217	0.038	0.009	0.015	0.000000	0.000000	-1822.21	1058.81
2	FID	ACIS-I-6	7.23	3701	0.088	0.056	0.022	0.040	0.000000	0.000000	391.26	1703.66
3	GUIDE	545915360	9.30	7386	-0.002	-0.246	0.096	0.157	190.127769	62.766153	2162.34	21.07
4	GUIDE	545915928	9.50	7398	-0.003	0.093	0.093	0.152	190.303554	62.949865	1886.03	688.07
5	GUIDE	545916224	9.59	7400	-0.103	0.223	0.106	0.171	188.817359	62.651242	940.09	-1810.17
6	GUIDE	545919000	9.66	7400	0.106	-0.162	0.107	0.176	188.923248	63.445434	-956.41	335.49
7	GUIDE	545920400	9.68	7401	0.006	0.099	0.110	0.179	190.797494	62.992793	2331.10	1380.08

## 2.4 Star Slots

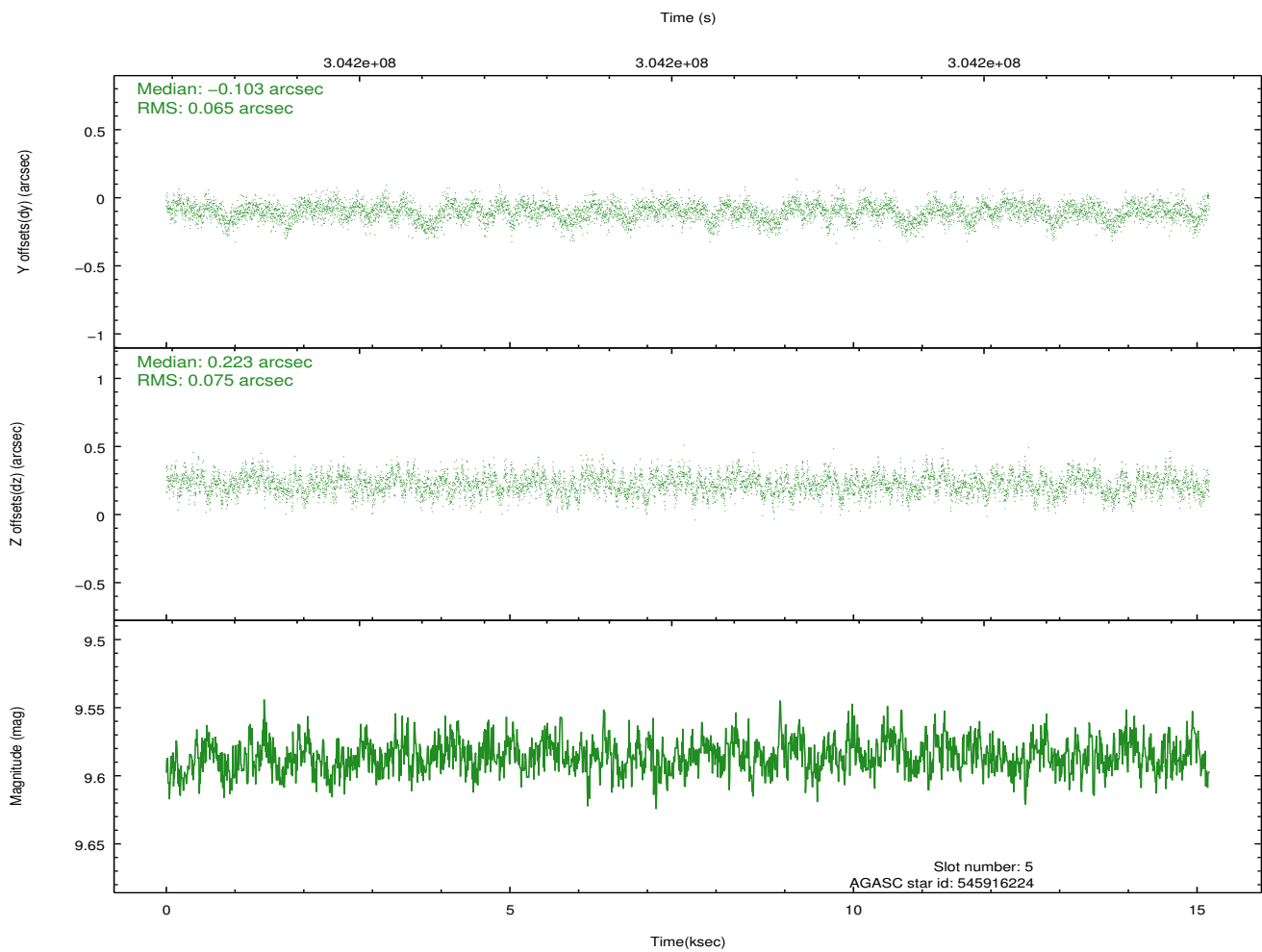
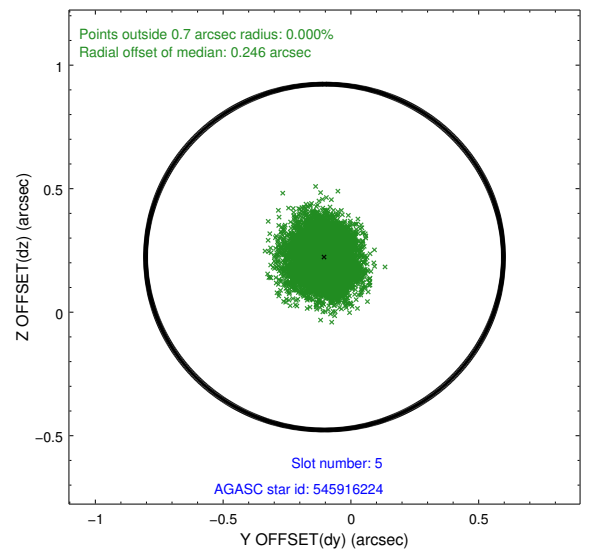
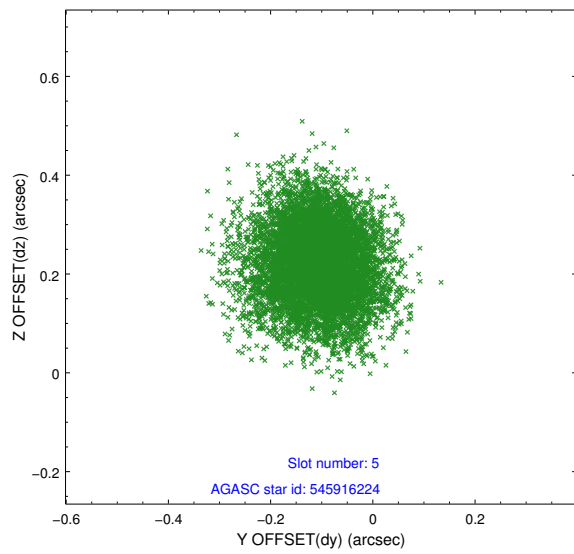
### 2.4.1 Slot 3



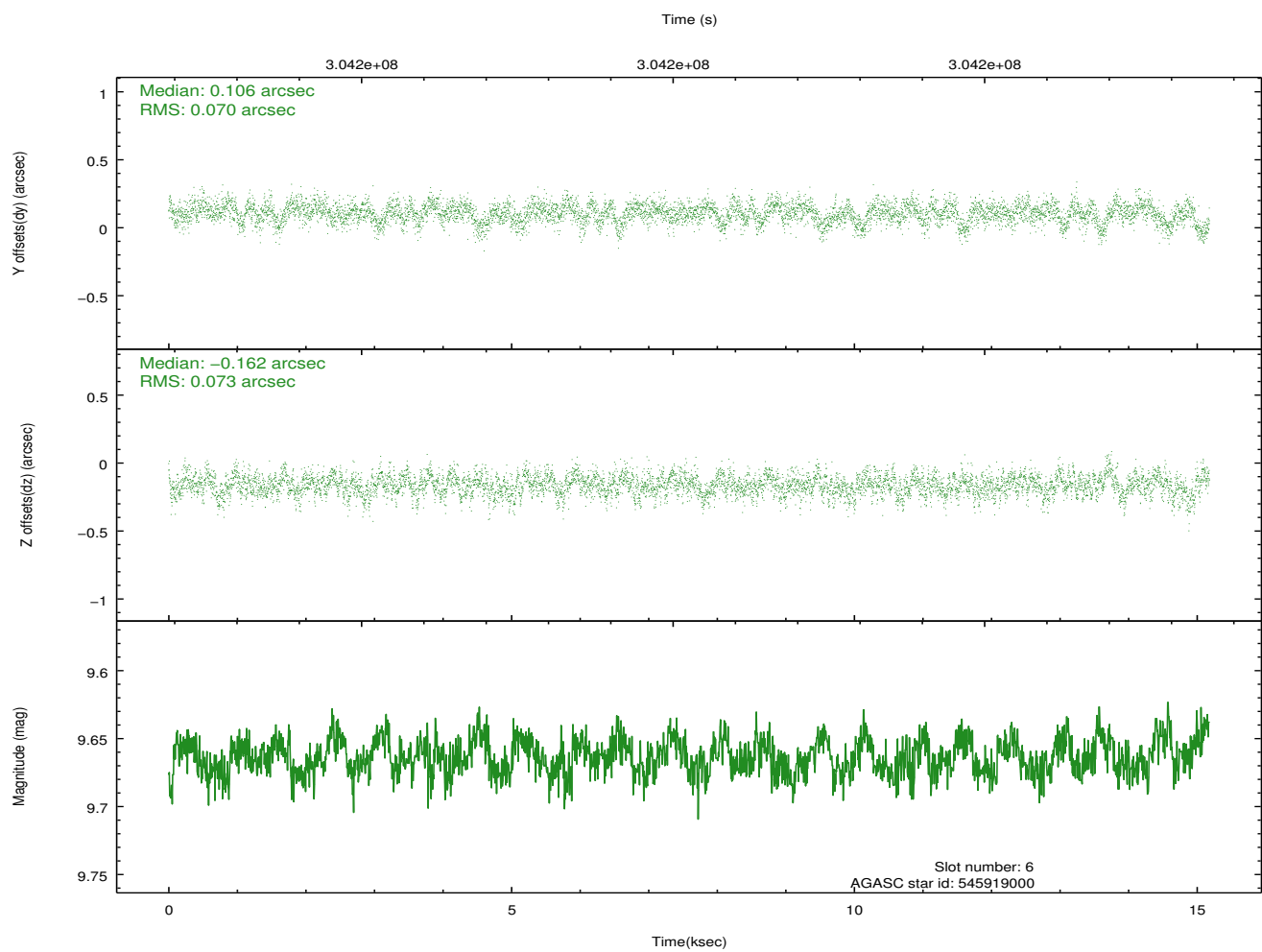
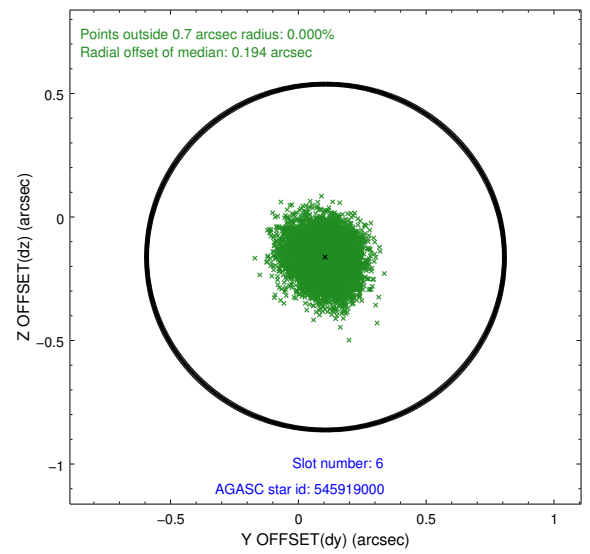
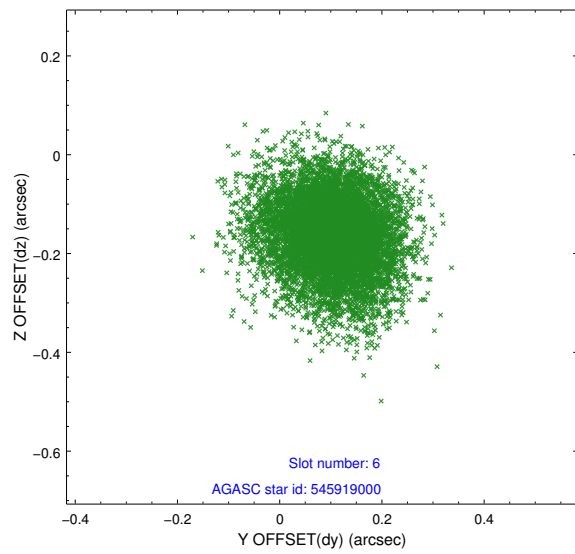
## 2.4.2 Slot 4



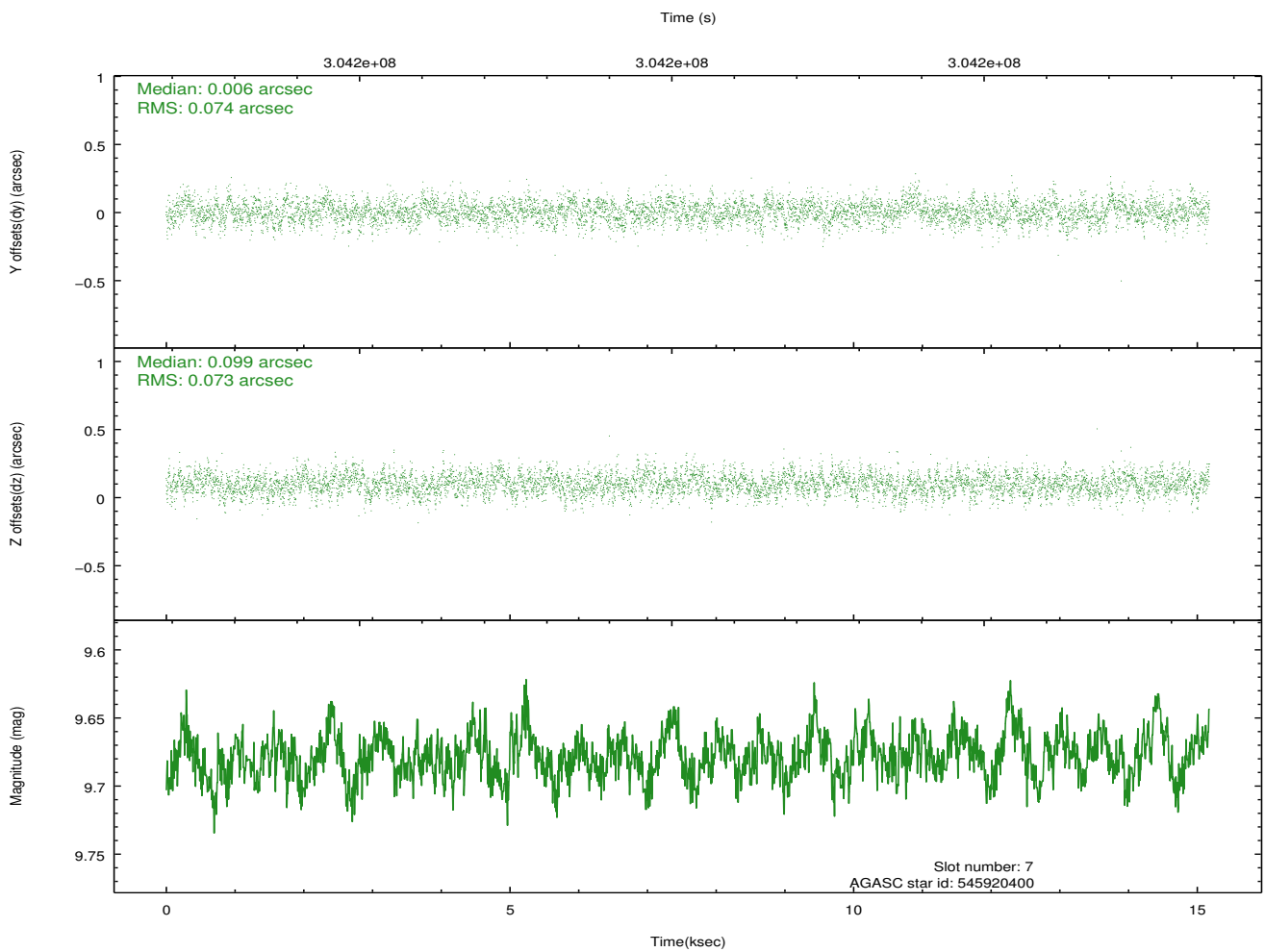
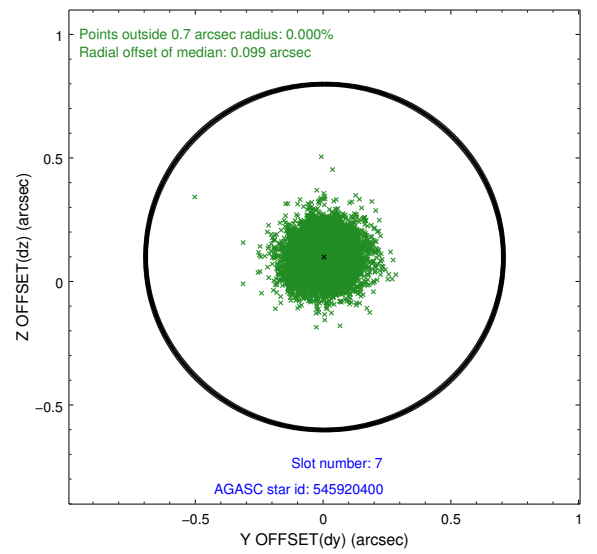
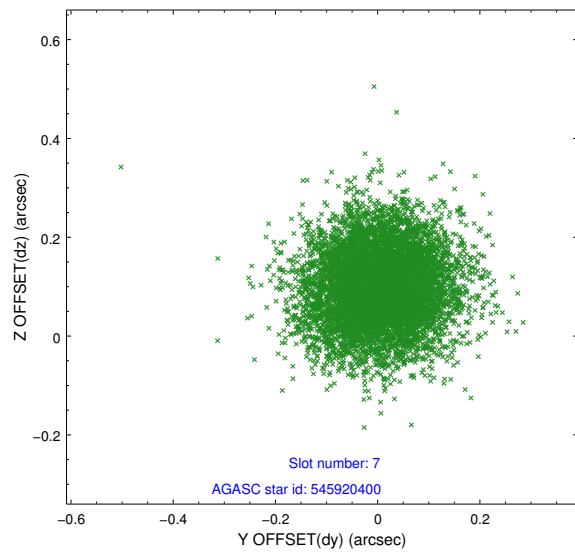
### 2.4.3 Slot 5



## 2.4.4 Slot 6

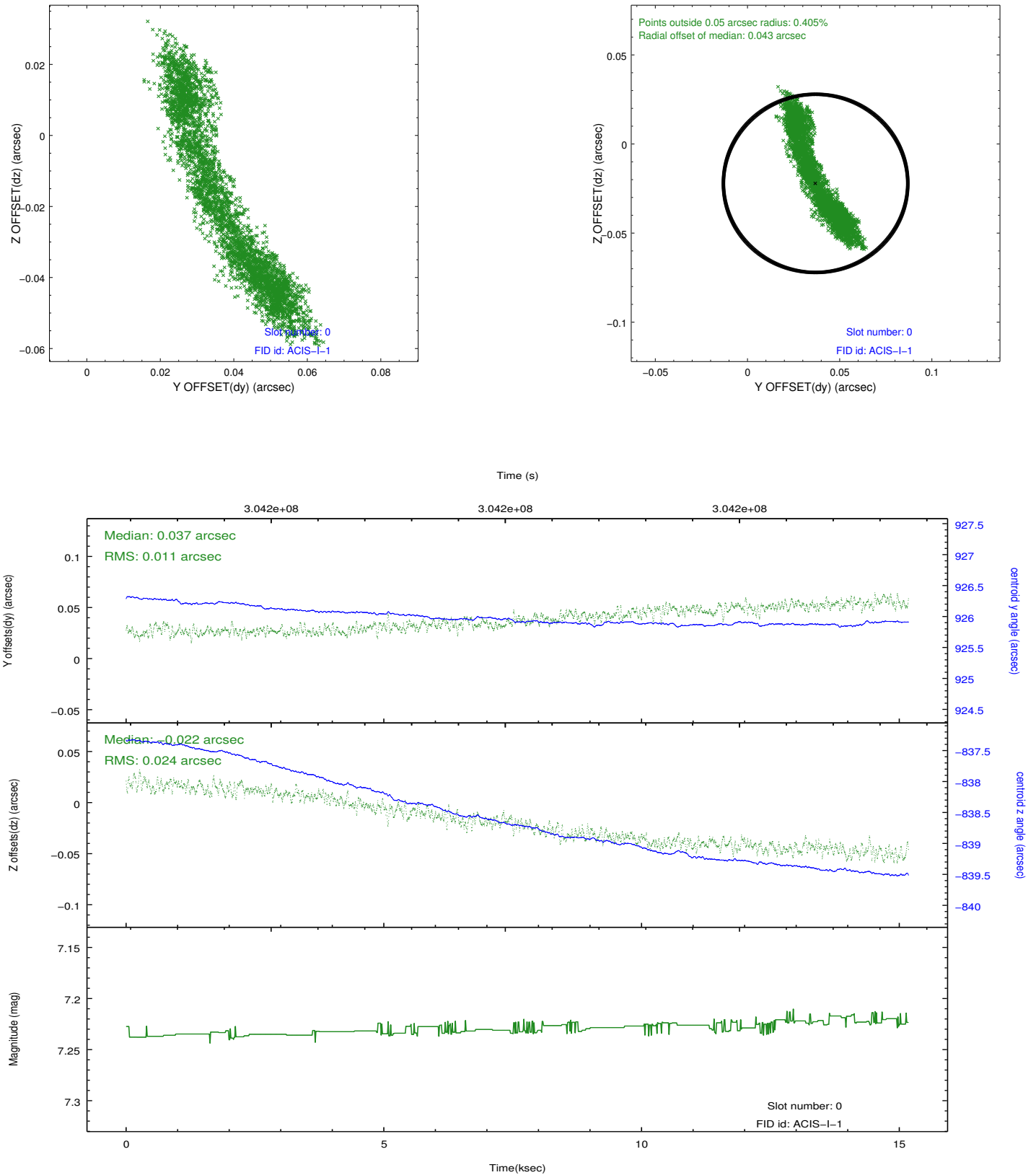


## 2.4.5 Slot 7

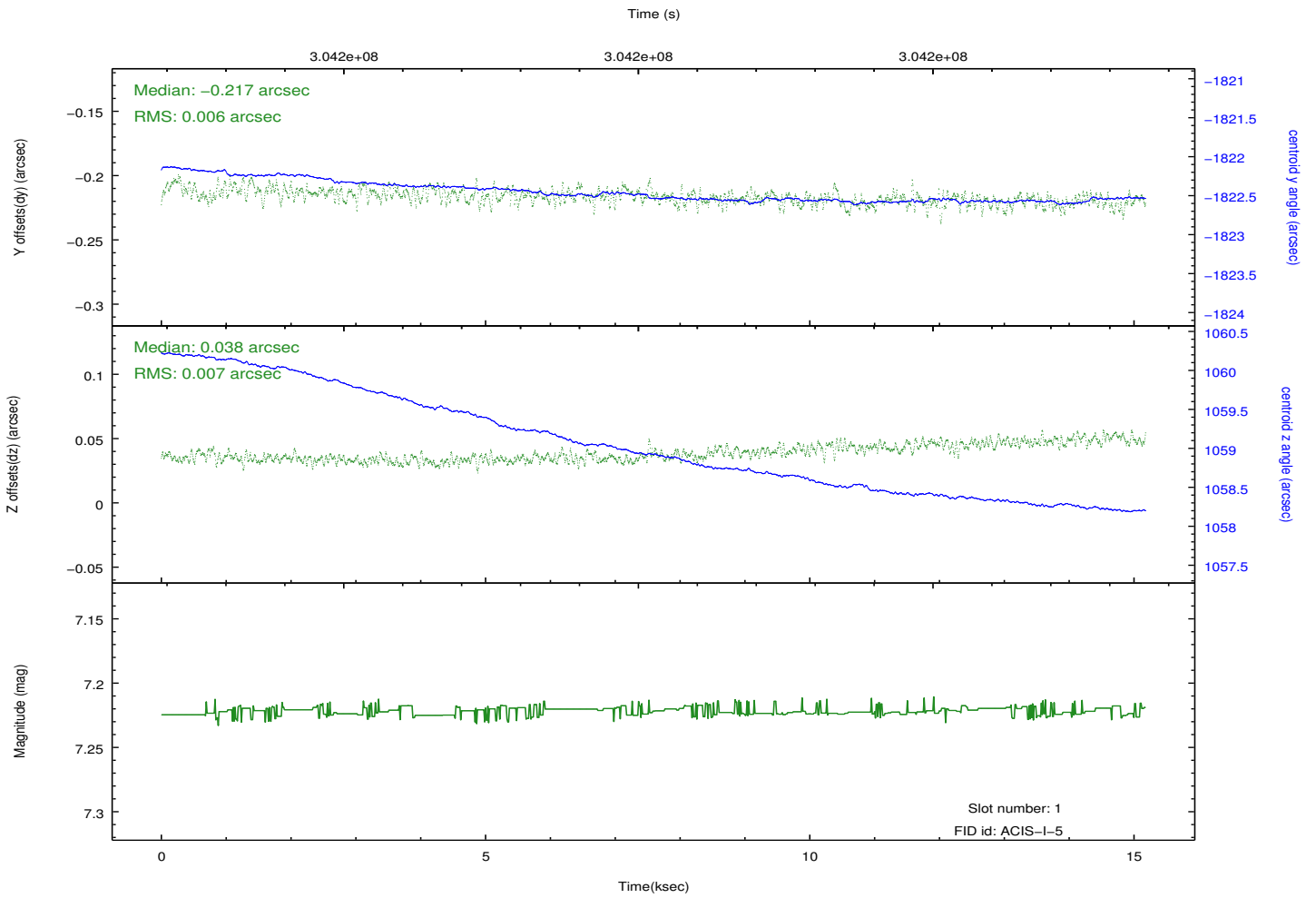
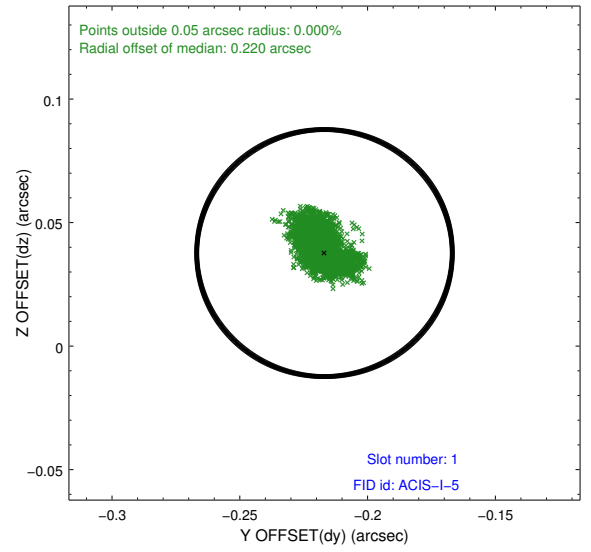
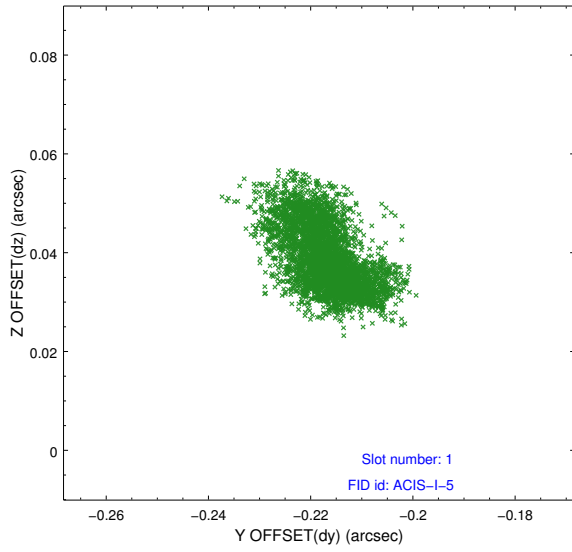


## 2.5 FID Slots

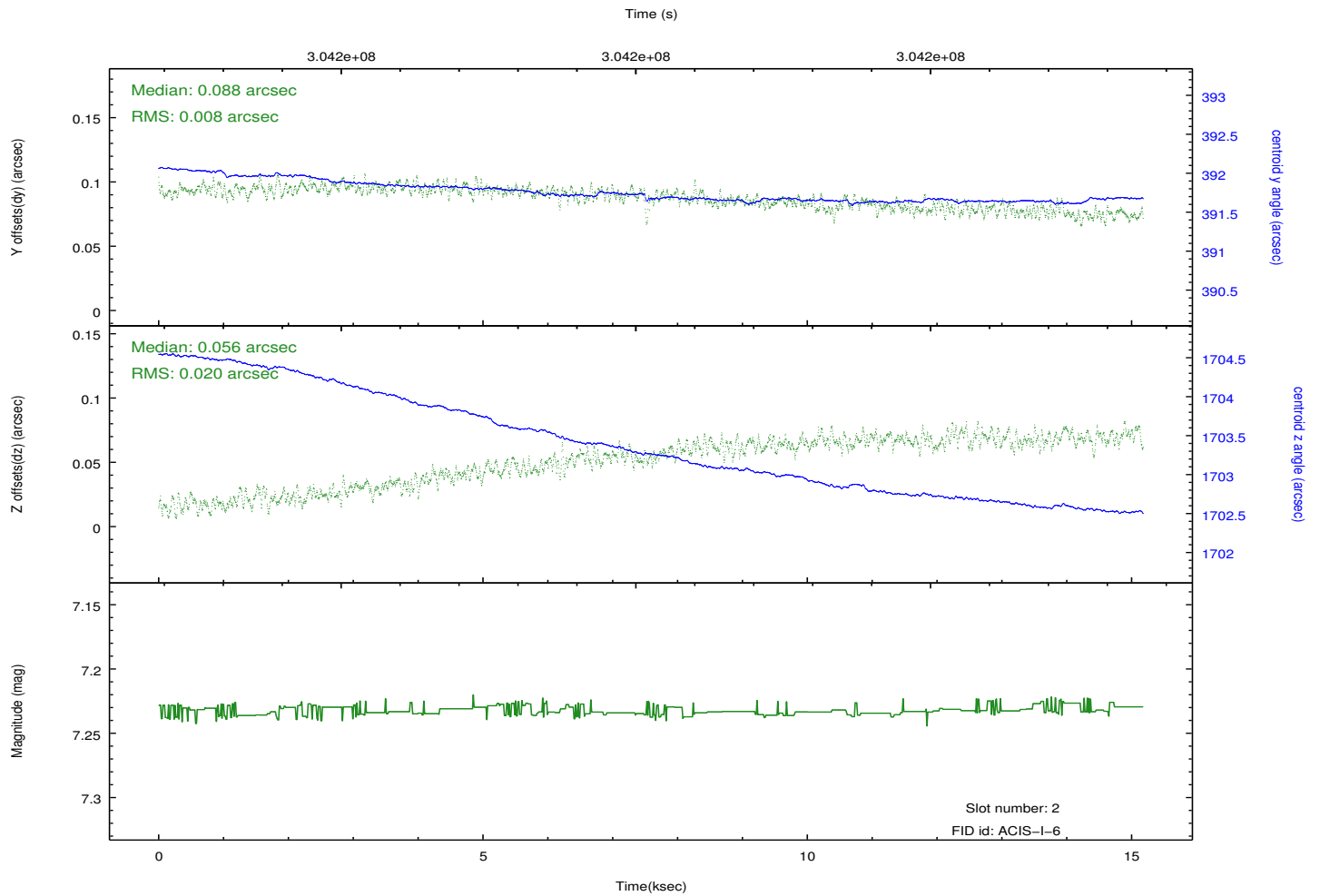
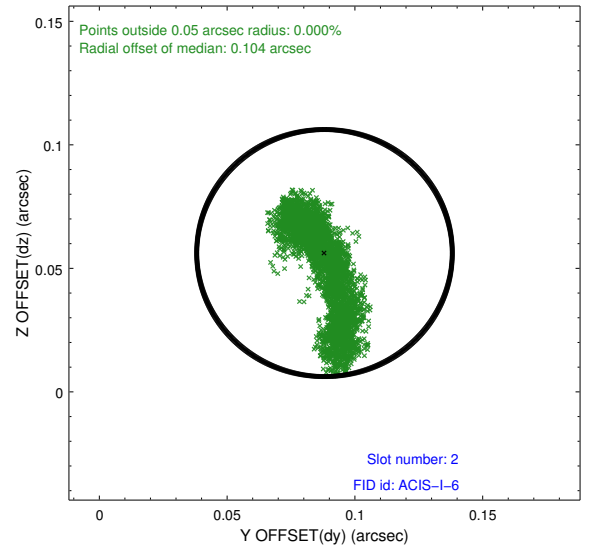
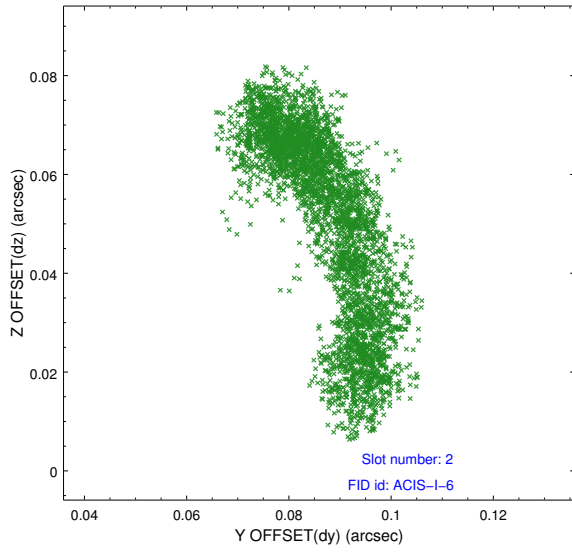
### 2.5.1 Slot 0



## 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)	2012.05.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.1713591

## A.2 Comments