

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10416 - L2 Version 2  
Chandra X-Ray Center

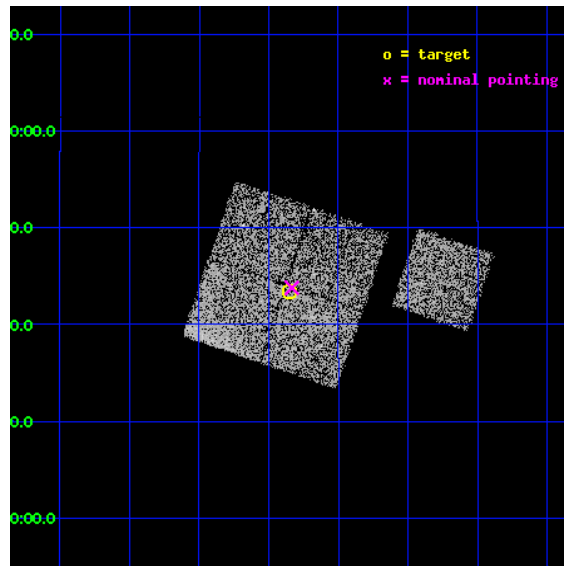
L2 Processing Date : Jun 9 2012

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# 1 Front

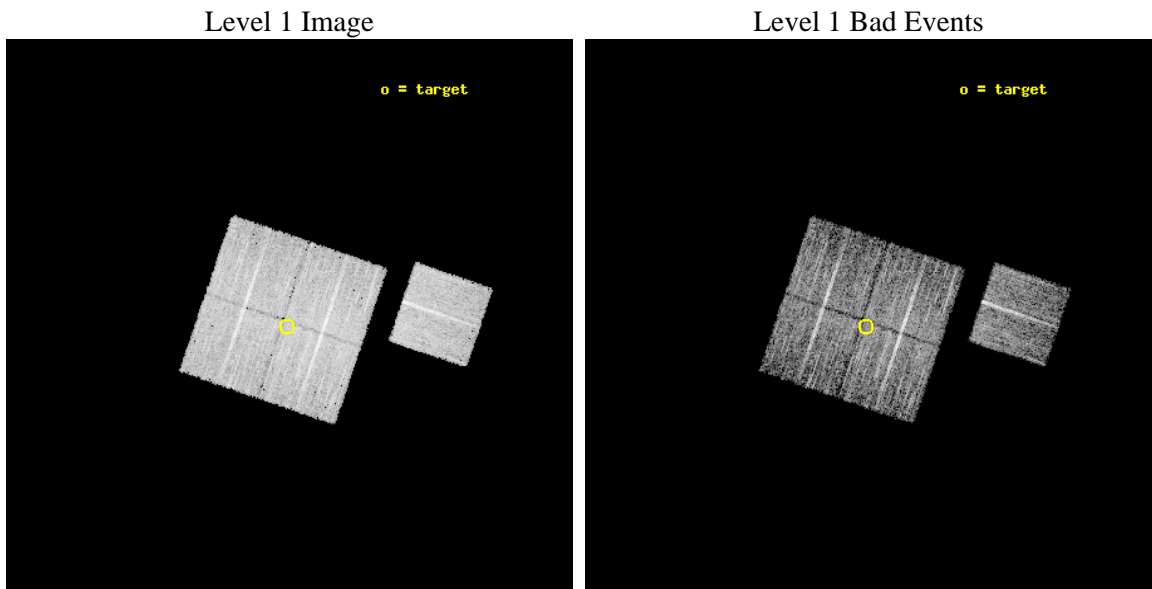
seq_num	800777	Sequence number
obs_id	10416	Observation id
title	A Chandra baseline for galaxy cluster evolution studies	Proposal t
observer	Dr Ben Maughan	Principal investigator
object	A401	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	44.588158	Observer's specified target RA [deg]
dec_targ	13.723361	Observer's specified target Dec [deg]
ra_nom	44.583321501095	Nominal RA [deg]
dec_nom	13.730001237412	Nominal Dec [deg]
roll_nom	108.85993792699	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5040.6000387669	Sum of GTIs [s]
livetime	4974.7408884246	Livetime [s]
ontime0	5040.6000387669	Sum of GTIs [s]
ontime1	5040.6000387669	Sum of GTIs [s]
ontime2	5037.4590784311	Sum of GTIs [s]
ontime3	5040.6000387669	Sum of GTIs [s]
ontime6	5040.6000387669	Sum of GTIs [s]
l2events	22302	Number of level 2 events



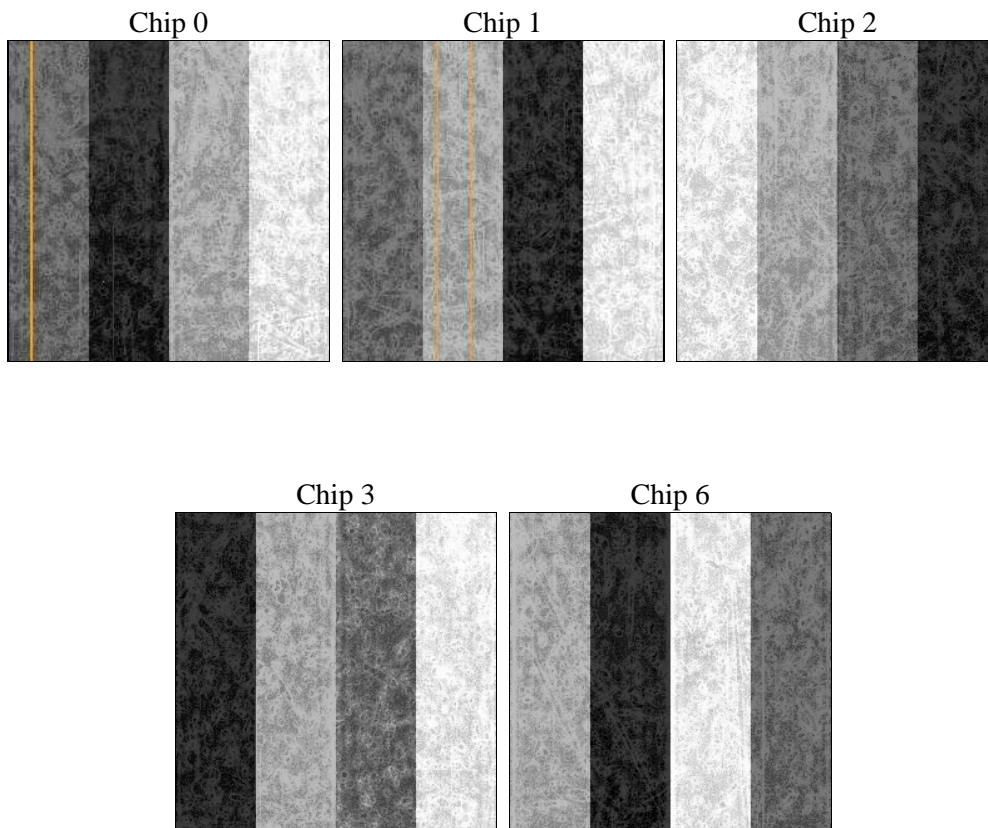
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5040.6000387669	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime0	5040.6000387669	Sum of GTIs [s]
date	2012-06-09T21:47:26	Date and time of file creation	ontime1	5040.6000387669	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5037.4590784311	Sum of GTIs [s]
			ontime3	5040.6000387669	Sum of GTIs [s]
			ontime6	5040.6000387669	Sum of GTIs [s]
			l1events	221909	Number of level 1 events

### 2.1.4 Events

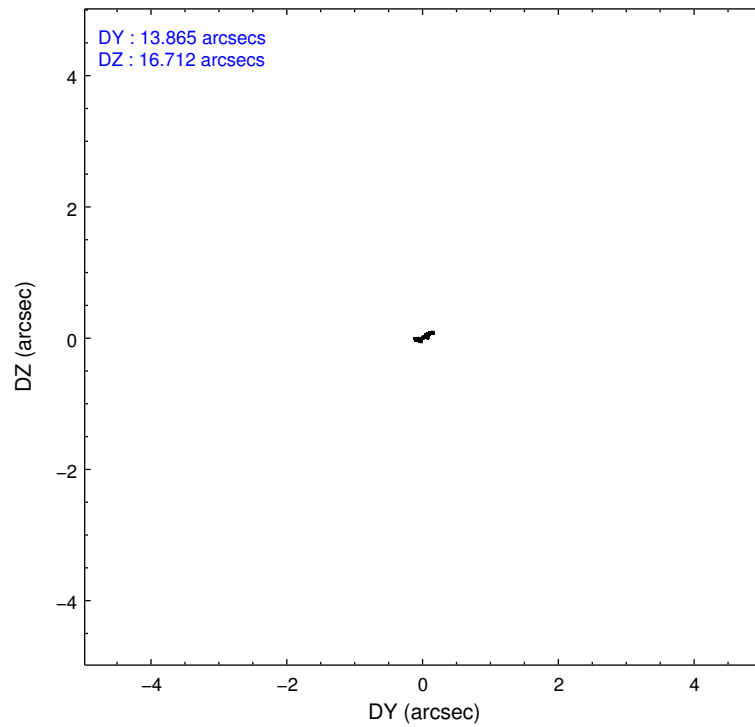
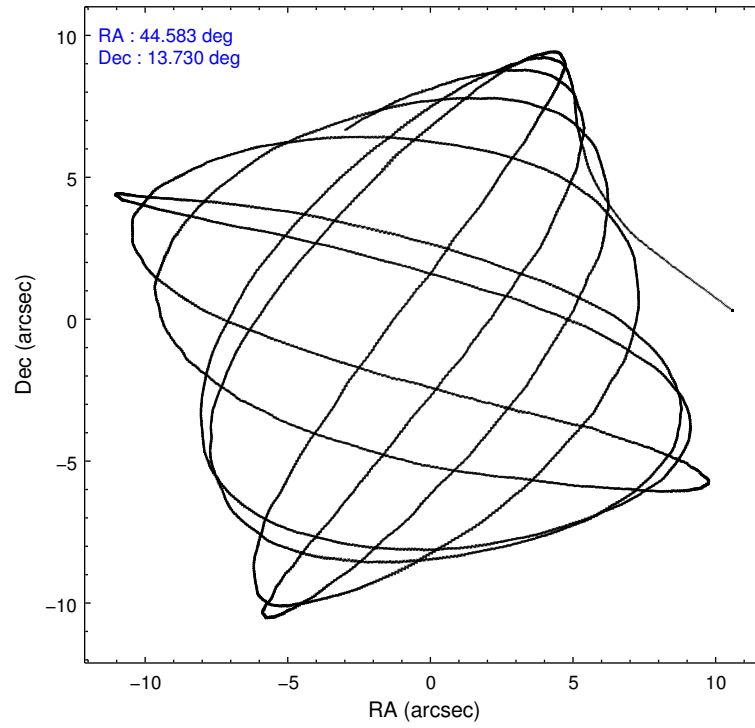
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	42013	42977	46829	46115	43975
rejected events	37164	35959	42207	41015	39206
rejected %	88%	83%	90%	88%	89%

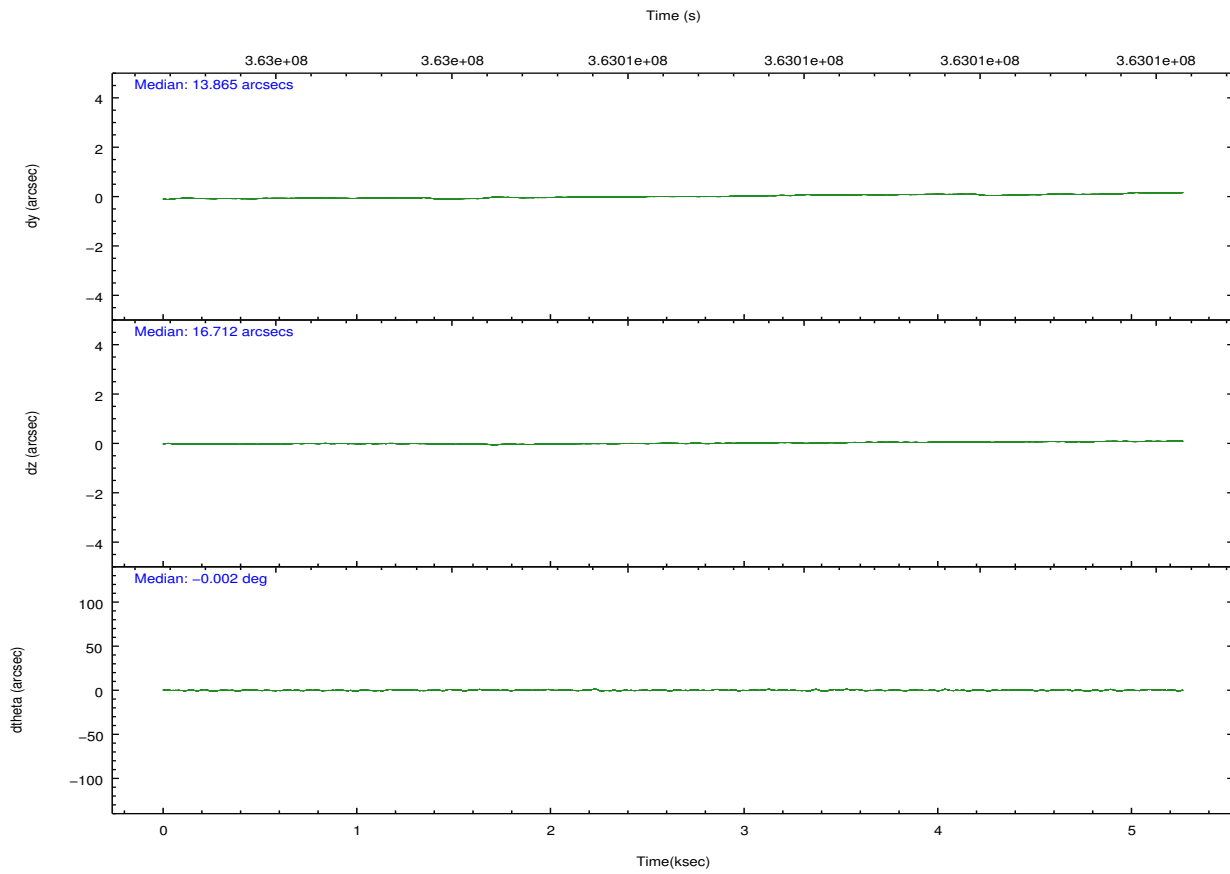
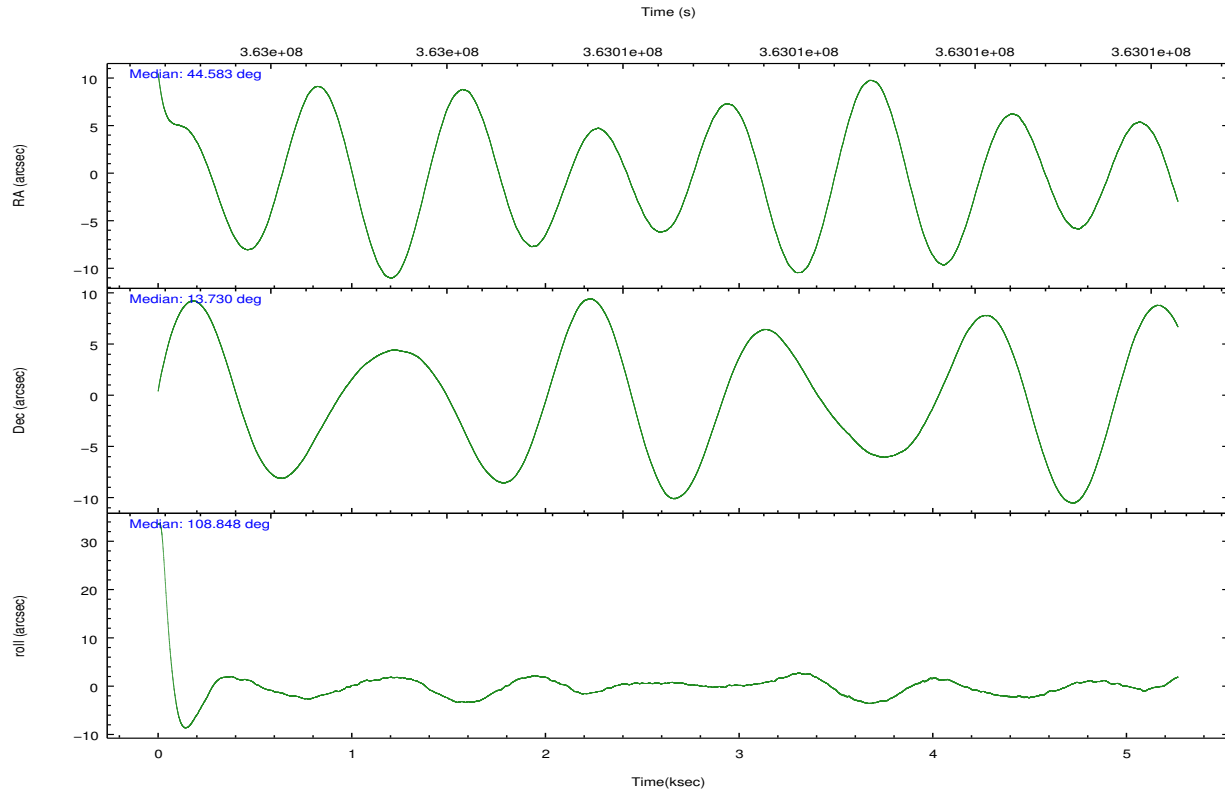
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1805	3312	1723	2182	1650
	4%	7%	3%	4%	3%
grade 1 events	29	34	33	26	27
	0%	0%	0%	0%	0%
grade 2 events	1147	1379	1102	1020	1050
	2%	3%	2%	2%	2%
grade 3 events	545	624	443	525	508
	1%	1%	0%	1%	1%
grade 4 events	486	654	506	464	512
	1%	1%	1%	1%	1%
grade 5 events	1659	1818	1574	1926	1800
	3%	4%	3%	4%	4%
grade 6 events	872	1061	853	921	1054
	2%	2%	1%	1%	2%
grade 7 events	35470	34095	40595	39051	37374
	84%	79%	86%	84%	84%

## 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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	44.604644	44.58332150109481	CCD I2 on	Y	Y
[deg] Pointing Dec	13.711878	13.73000123741205	CCD I3 on	Y	Y
[deg] Pointing Roll	108.646096	108.8599379269906	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	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	363003882.184000	363002900.49813	CCD S5 on	N	N
Observation start date	2009-07-03T10:23:36	2009-07-03T10:08:20	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	363008882.184000	363009015.64844	On-chip summing requested	N	N
Observation end date	2009-07-03T11:46:56	2009-07-03T11:50:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



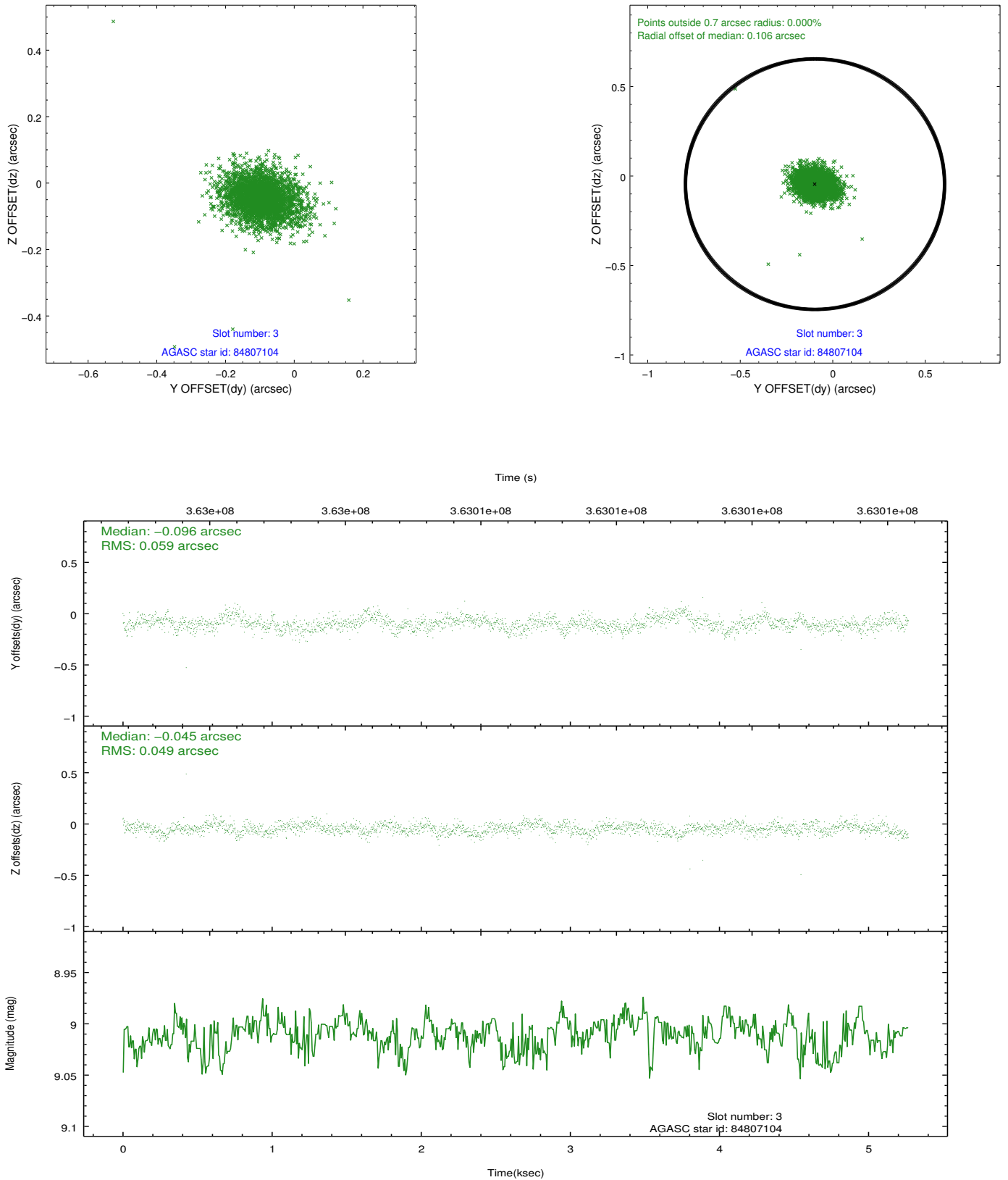


### Slot Statistics

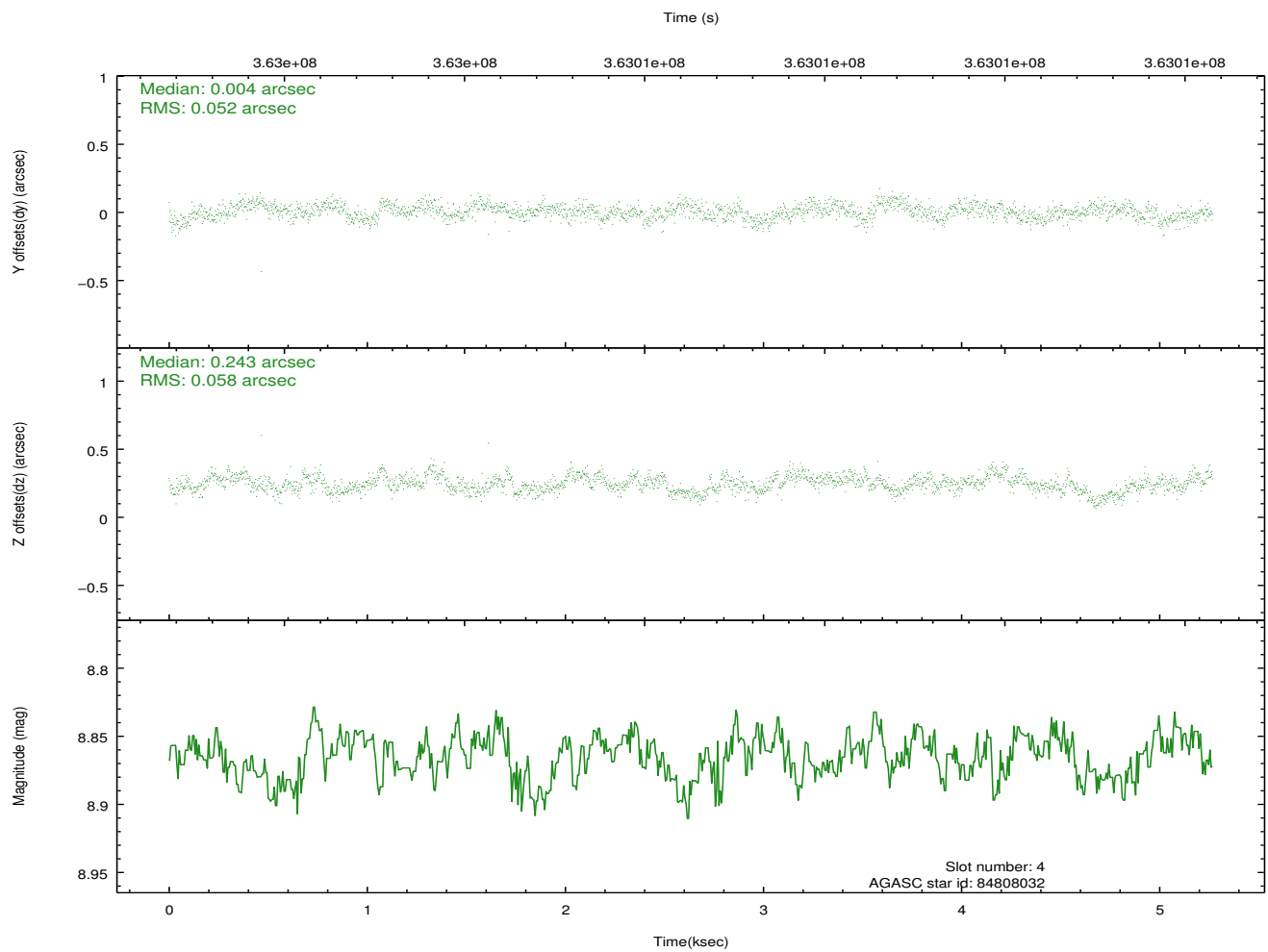
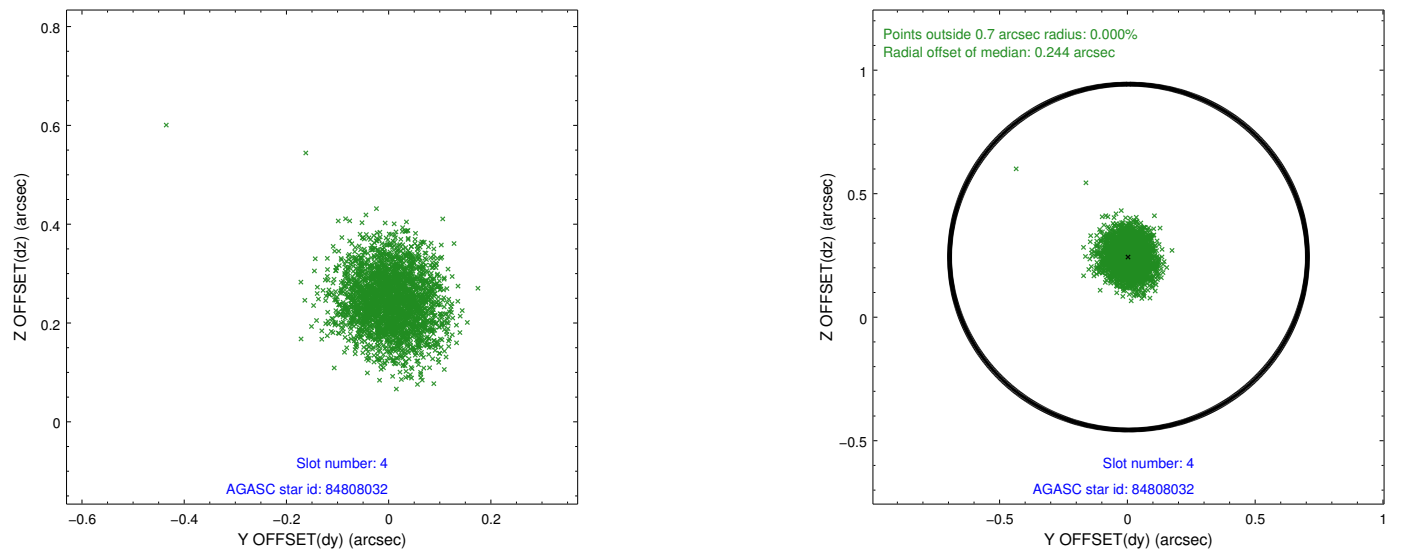
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	1285	0.095	-0.036	0.006	0.011	0.000000	0.000000	925.71	-840.40
1	FID	ACIS-I-2	6.94	1285	-0.034	-0.039	0.008	0.014	0.000000	0.000000	-767.87	-847.43
2	FID	ACIS-I-5	7.00	1285	-0.153	0.148	0.006	0.012	0.000000	0.000000	-1823.34	1056.67
3	GUIDE	84807104	9.01	2569	-0.096	-0.045	0.079	0.132	44.179643	14.224909	2225.07	815.09
4	GUIDE	84808032	8.86	2567	0.004	0.243	0.082	0.131	44.912435	14.042740	786.60	-1398.51
5	GUIDE	84808856	8.22	2570	-0.015	-0.064	0.090	0.148	44.040495	13.677607	516.15	1908.01
6	GUIDE	84808960	9.37	2569	0.122	-0.062	0.089	0.145	44.448867	14.070045	1396.22	104.37
7	GUIDE	84809112	8.96	2493	-0.008	-0.081	0.098	0.159	44.049948	13.913016	1307.58	1605.90

## 2.4 Star Slots

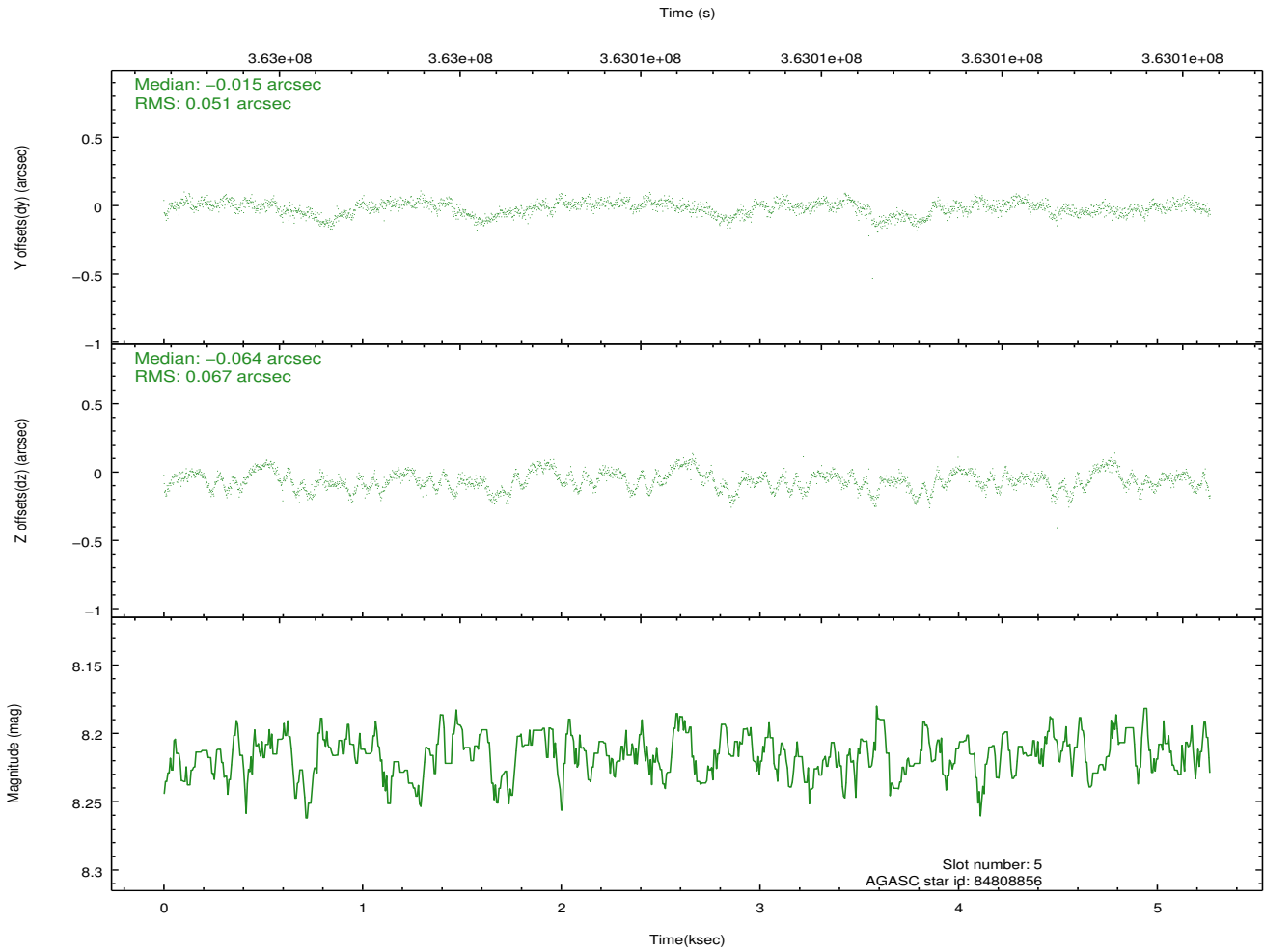
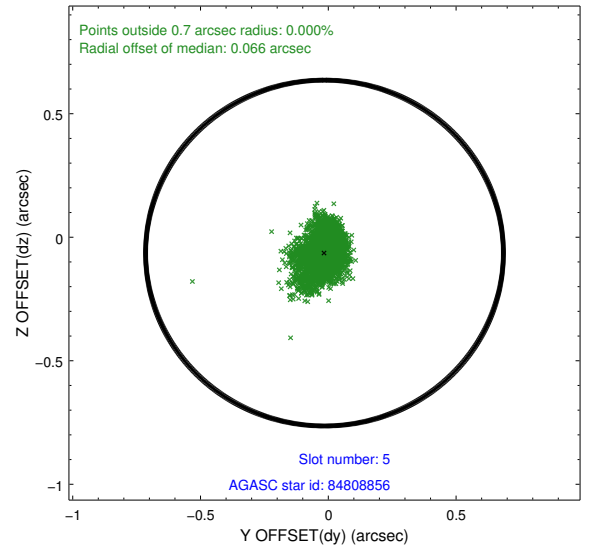
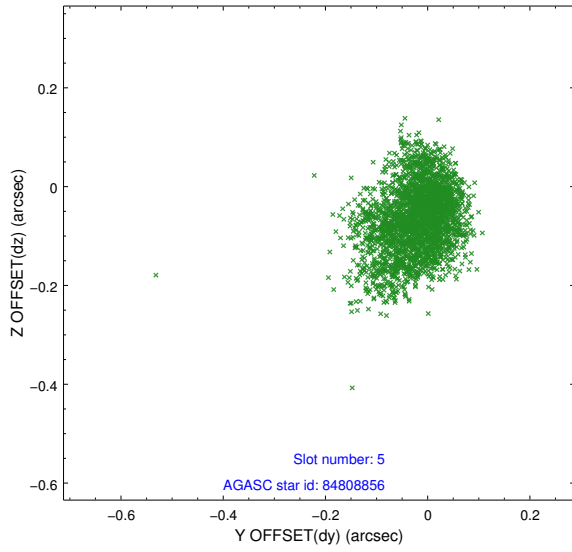
### 2.4.1 Slot 3



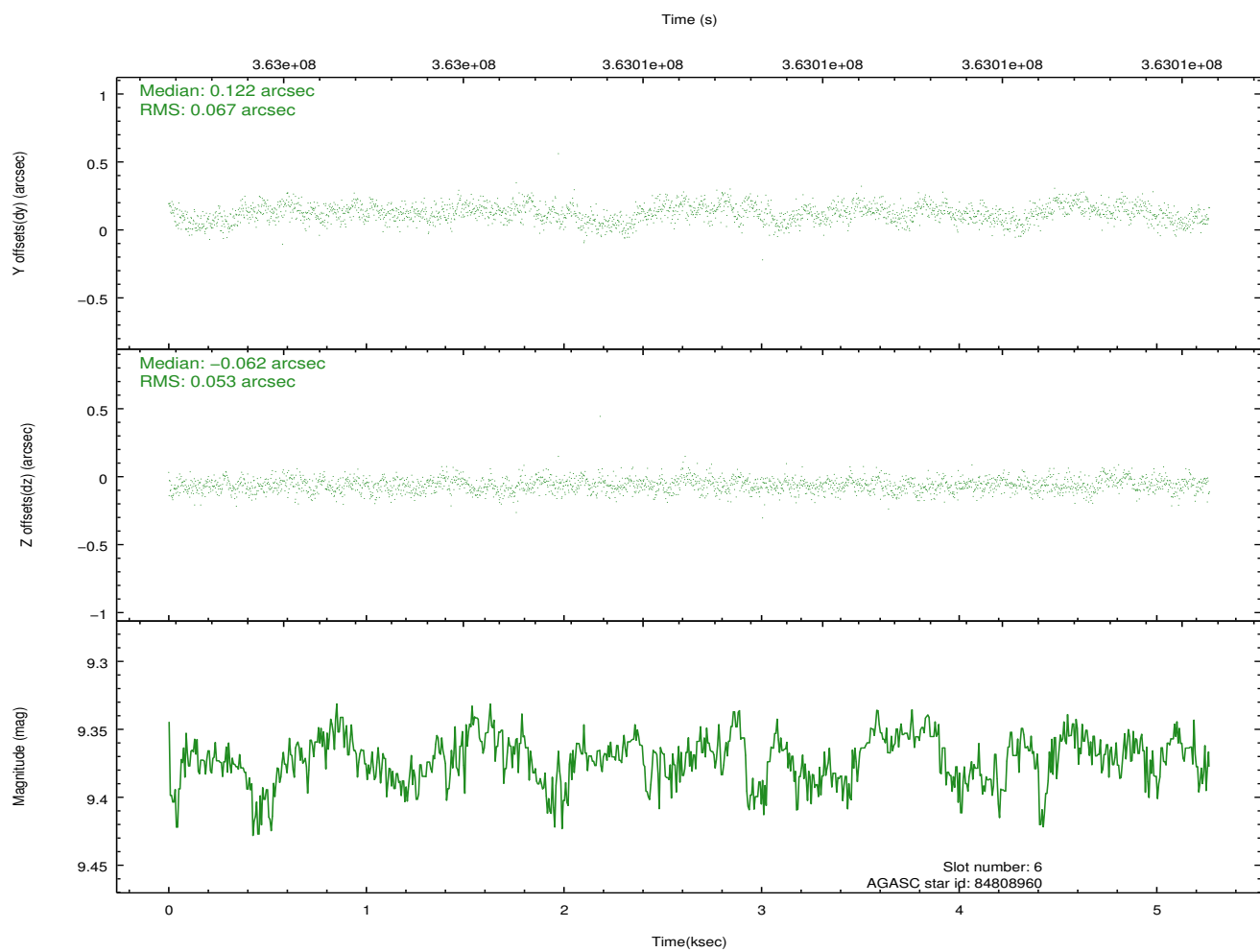
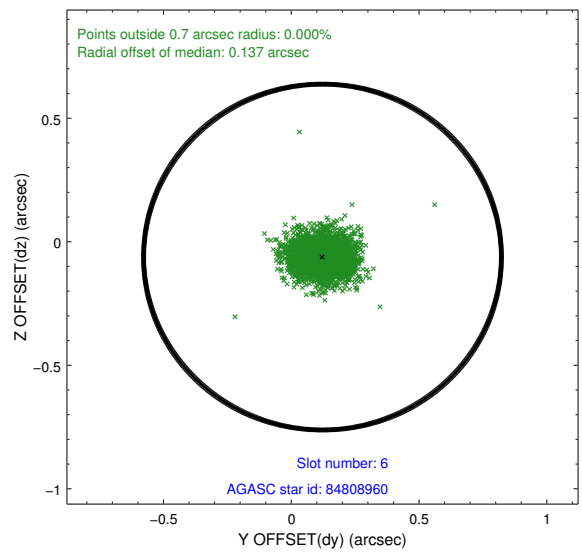
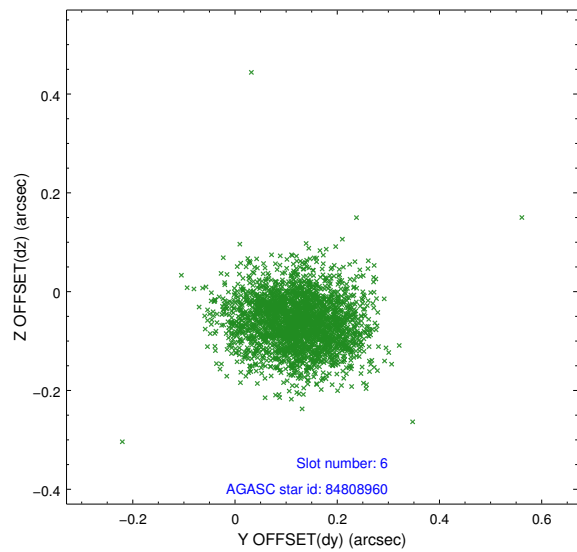
## 2.4.2 Slot 4



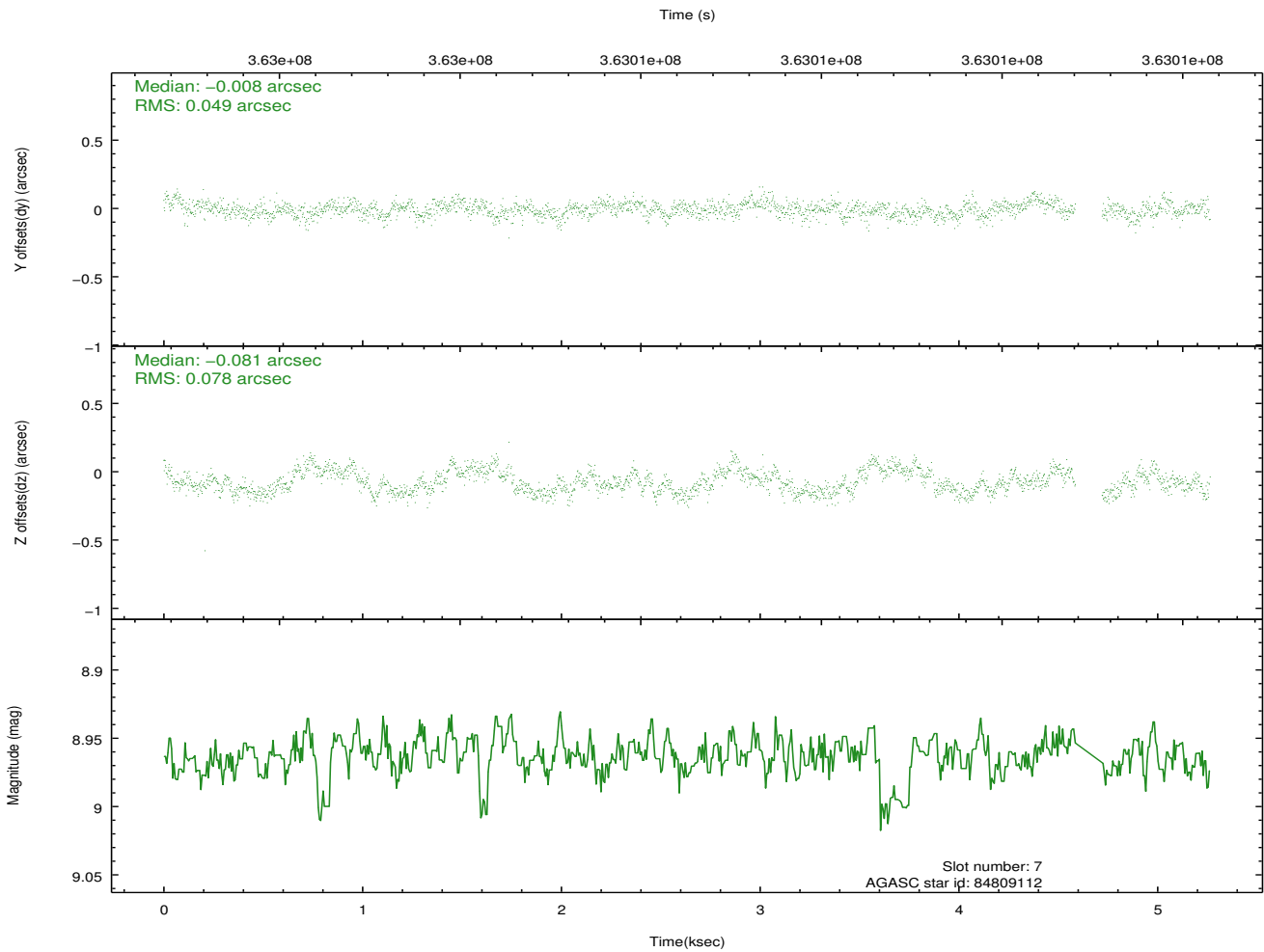
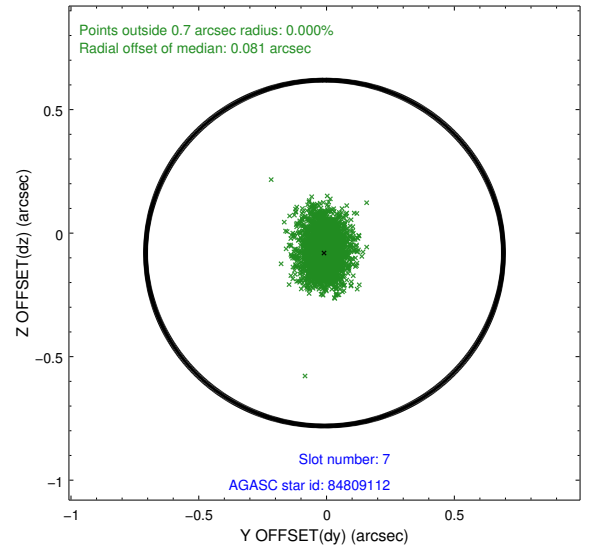
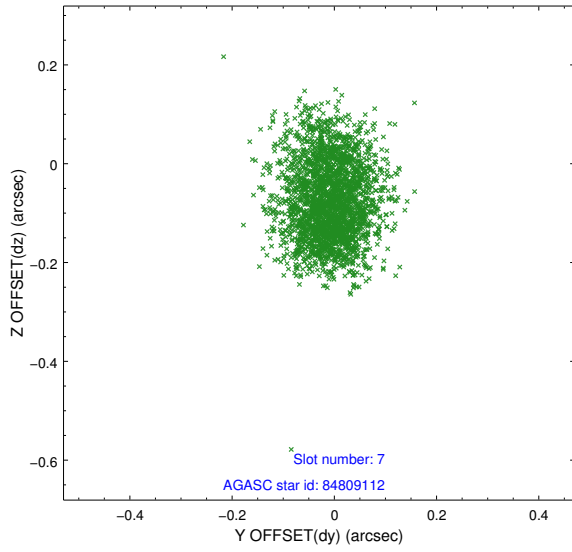
### 2.4.3 Slot 5



## 2.4.4 Slot 6

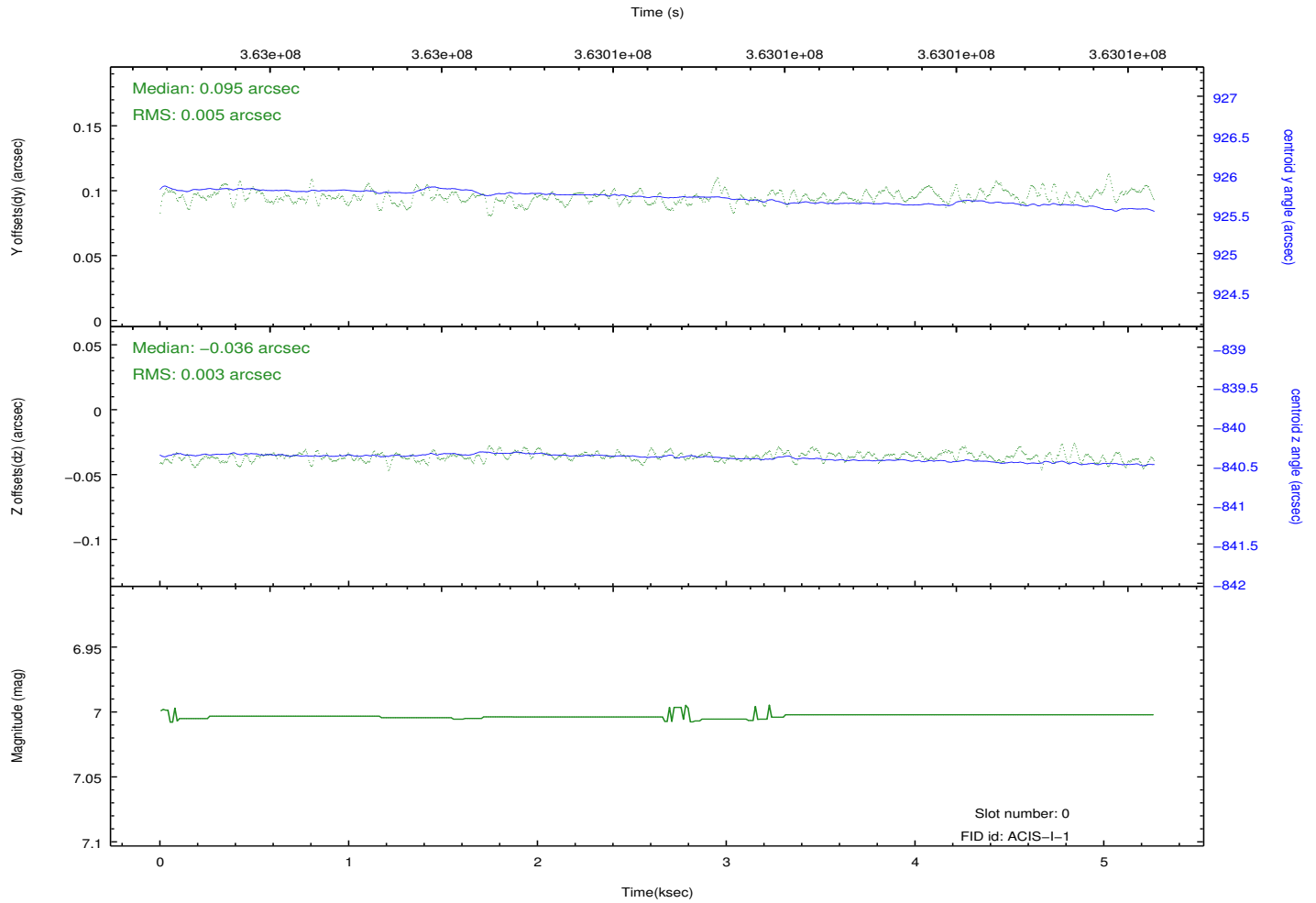
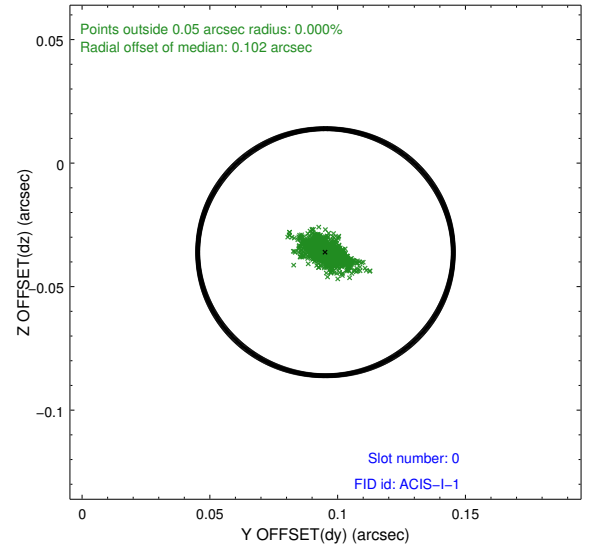
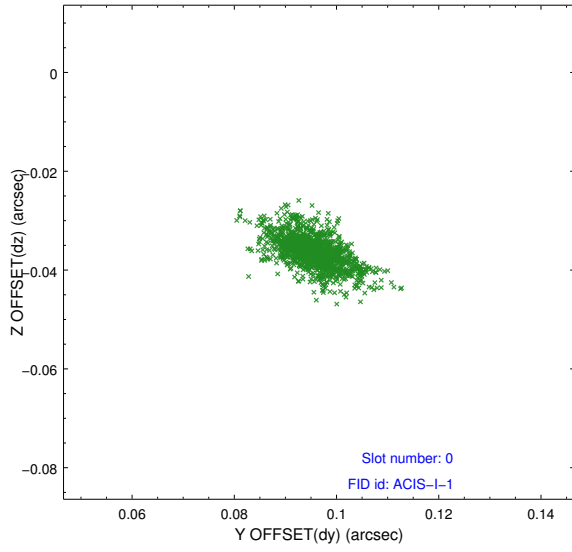


## 2.4.5 Slot 7

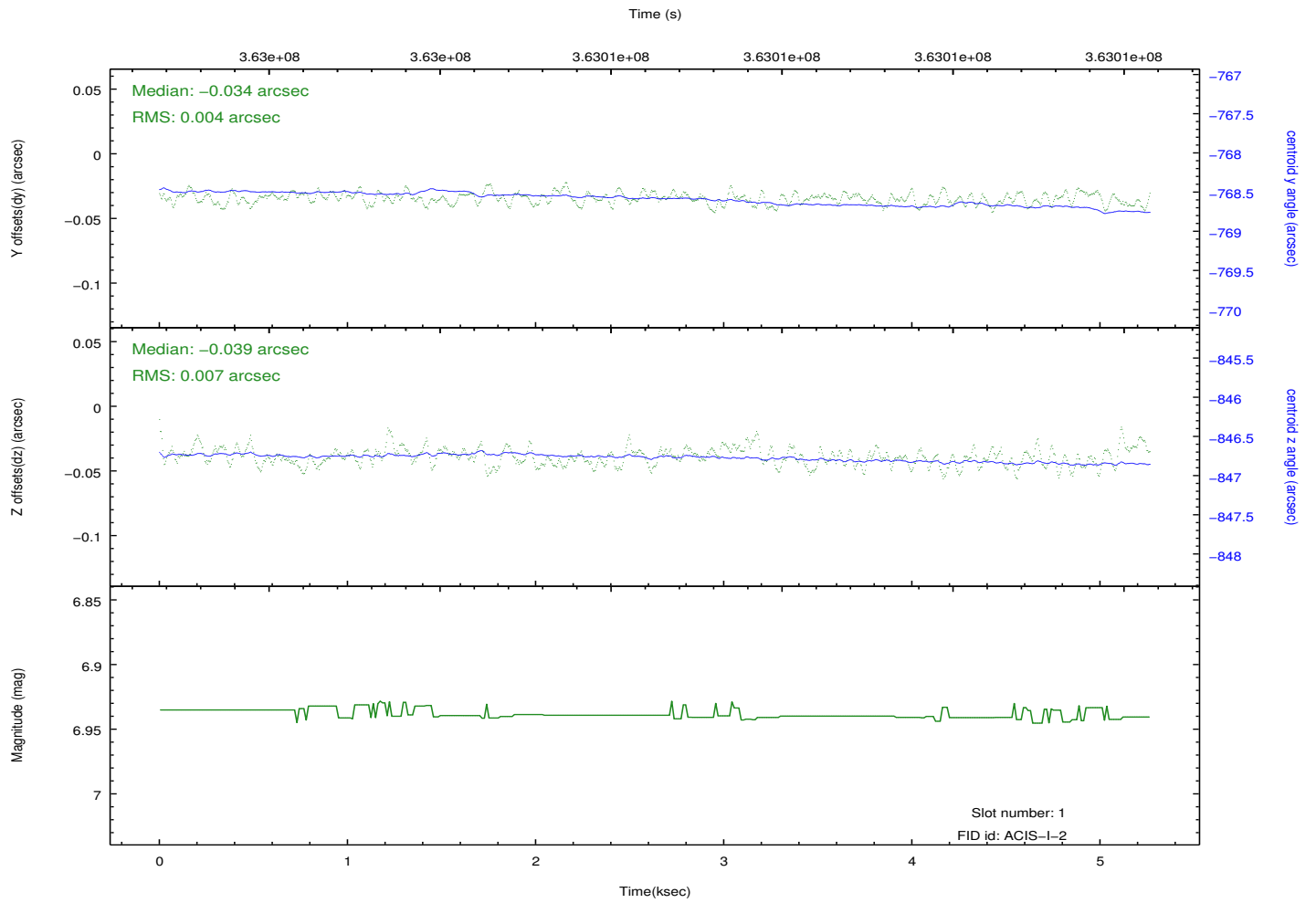
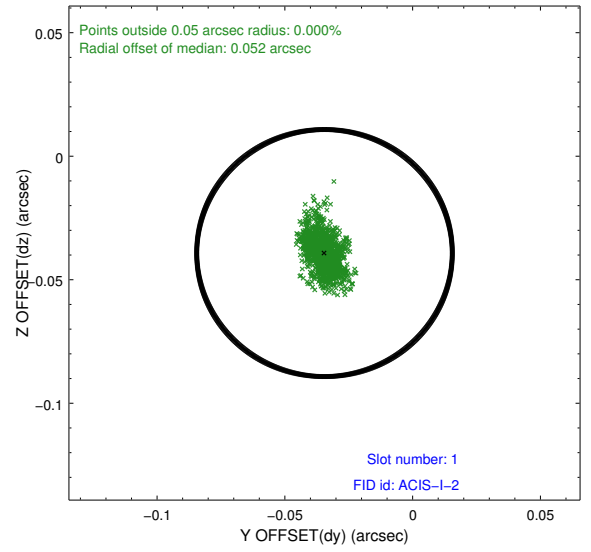
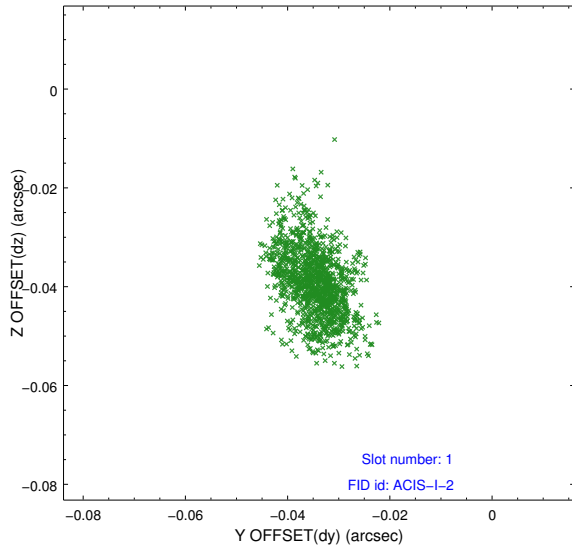


## 2.5 FID Slots

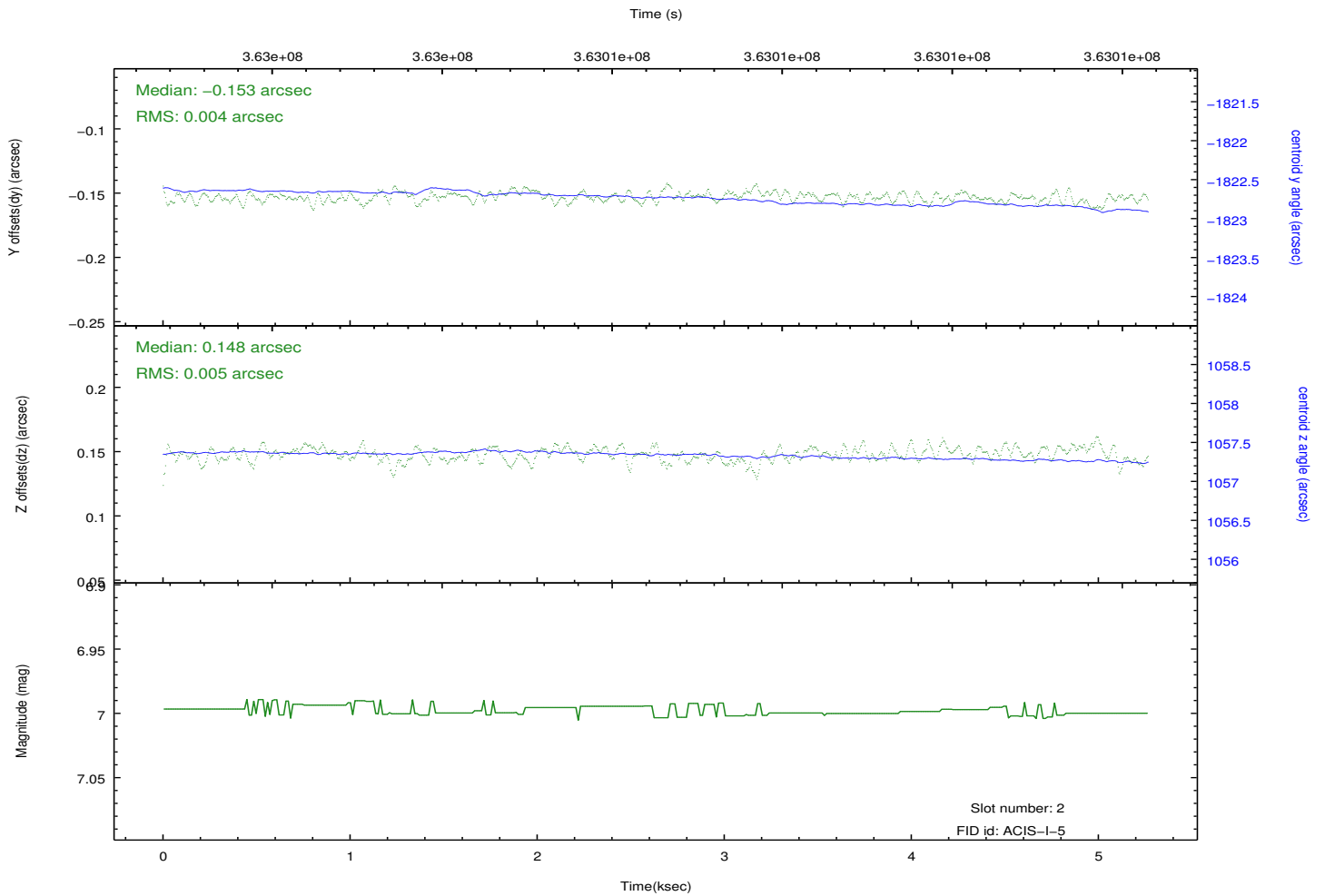
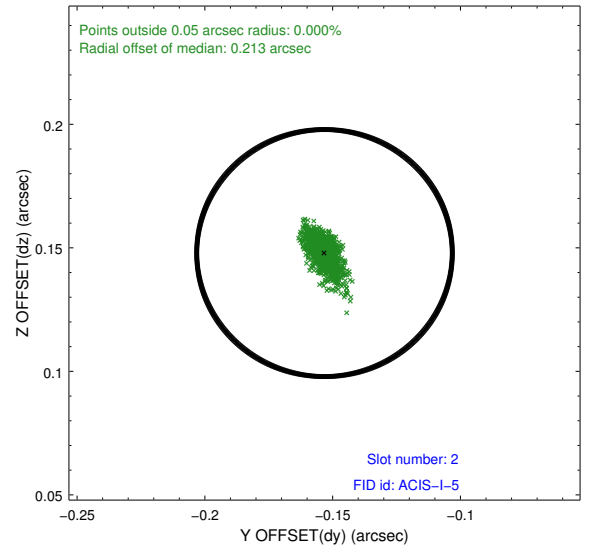
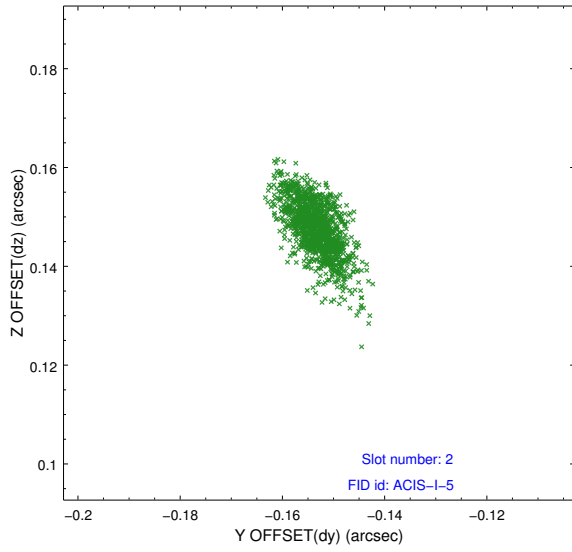
### 2.5.1 Slot 0



## 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)	2012.06.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.04060003

## A.2 Comments