

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10423 - L2 Version 2  
Chandra X-Ray Center

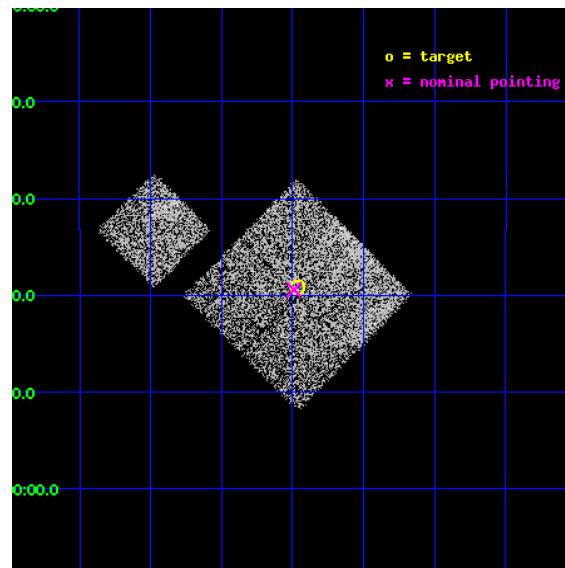
L2 Processing Date : May 30 2012

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# 1 Front

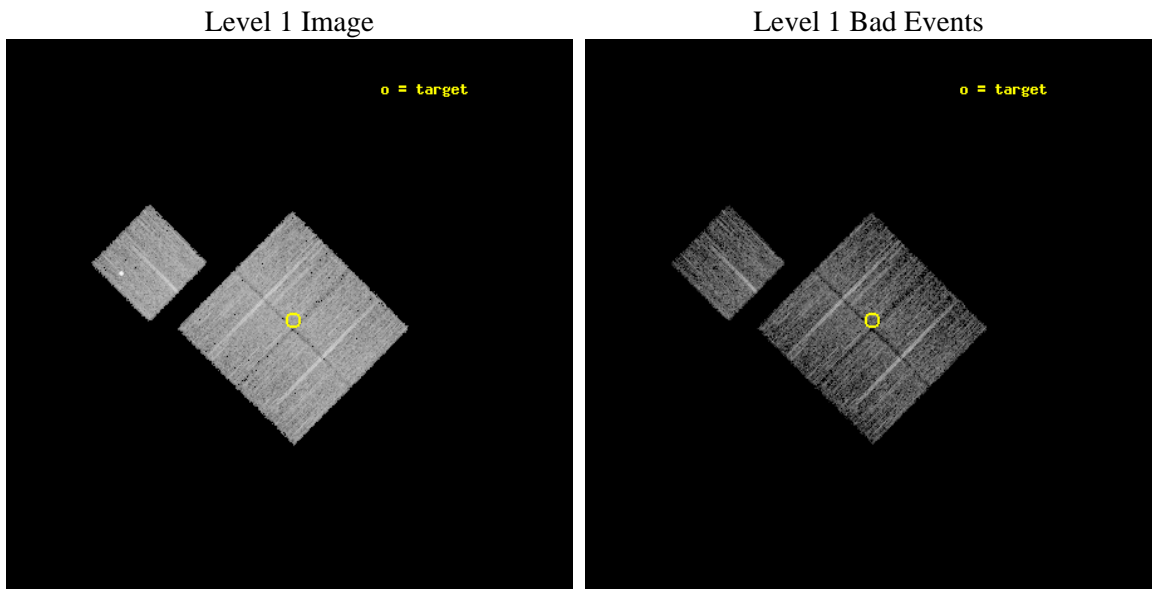
seq_num	800784	Sequence number
obs_id	10423	Observation id
title	A Chandra baseline for galaxy cluster evolution studies	Proposal t
observer	Dr Ben Maughan	Principal investigator
object	A644	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	124.490671	Observer's specified target RA [deg]
dec_targ	-7.653602	Observer's specified target Dec [deg]
ra_nom	124.49783722243	Nominal RA [deg]
dec_nom	-7.6574247368435	Nominal Dec [deg]
roll_nom	314.70958604057	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4776.5302082896	Sum of GTIs [s]
livetime	4714.1213246879	Livetime [s]
ontime0	4773.2660880685	Sum of GTIs [s]
ontime1	4776.448148191	Sum of GTIs [s]
ontime2	4773.3481779695	Sum of GTIs [s]
ontime3	4776.5302082896	Sum of GTIs [s]
ontime6	4776.3660482764	Sum of GTIs [s]
l2events	19720	Number of level 2 events



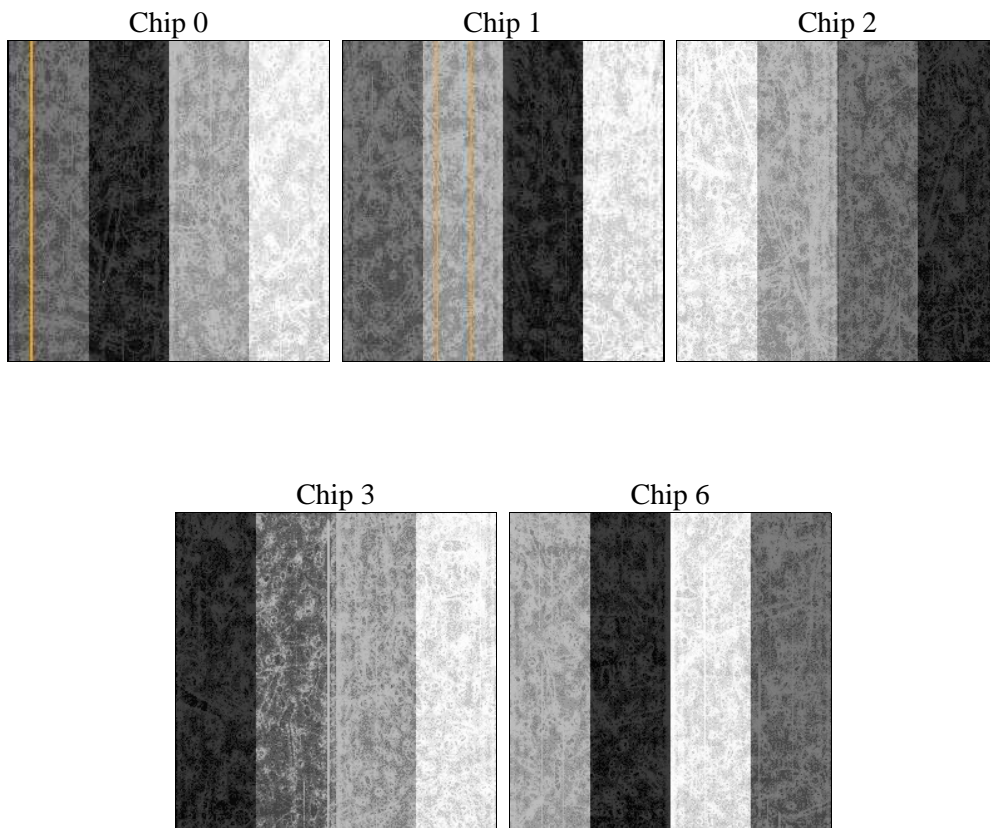
## 2 OBI

### 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	8.4.4	Processing system revision	ontime	4776.5302082896	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	4773.2660880685	Sum of GTIs [s]
date	2012-05-30T23:46:15	Date and time of file creation	ontime1	4776.448148191	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4773.3481779695	Sum of GTIs [s]
			ontime3	4776.5302082896	Sum of GTIs [s]
			ontime6	4776.3660482764	Sum of GTIs [s]
			l1events	197177	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	36720	38710	40537	40136	41074
rejected events	32611	32771	36452	35528	34892
rejected %	88%	84%	89%	88%	84%

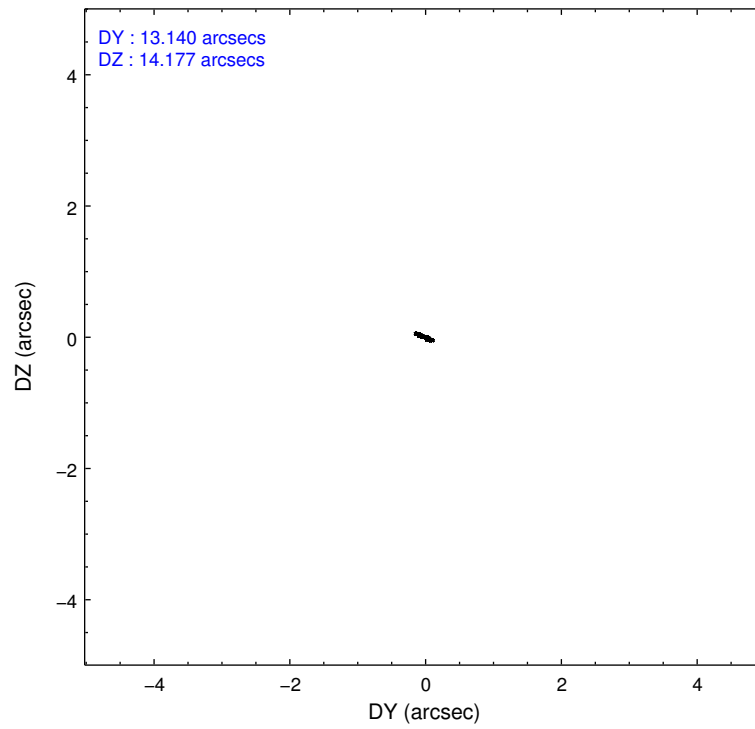
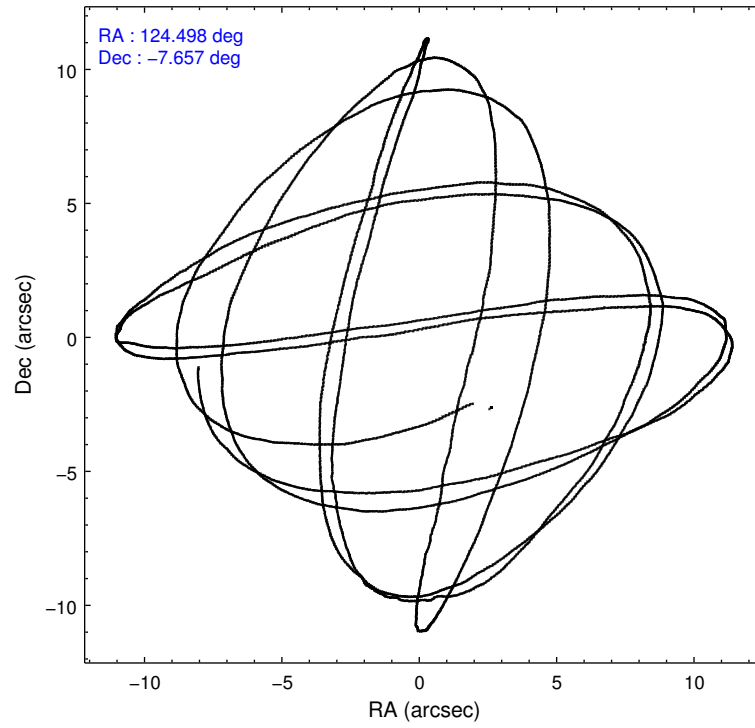
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1444	2598	1451	1945	3239
	3%	6%	3%	4%	7%
grade 1 events	17	25	20	30	27
	0%	0%	0%	0%	0%
grade 2 events	1033	1194	983	994	1030
	2%	3%	2%	2%	2%
grade 3 events	466	598	444	451	474
	1%	1%	1%	1%	1%
grade 4 events	391	552	430	435	494
	1%	1%	1%	1%	1%
grade 5 events	1473	1606	1350	1662	1661
	4%	4%	3%	4%	4%
grade 6 events	777	1000	782	785	949
	2%	2%	1%	1%	2%
grade 7 events	31119	31137	35077	33834	33200
	84%	80%	86%	84%	80%

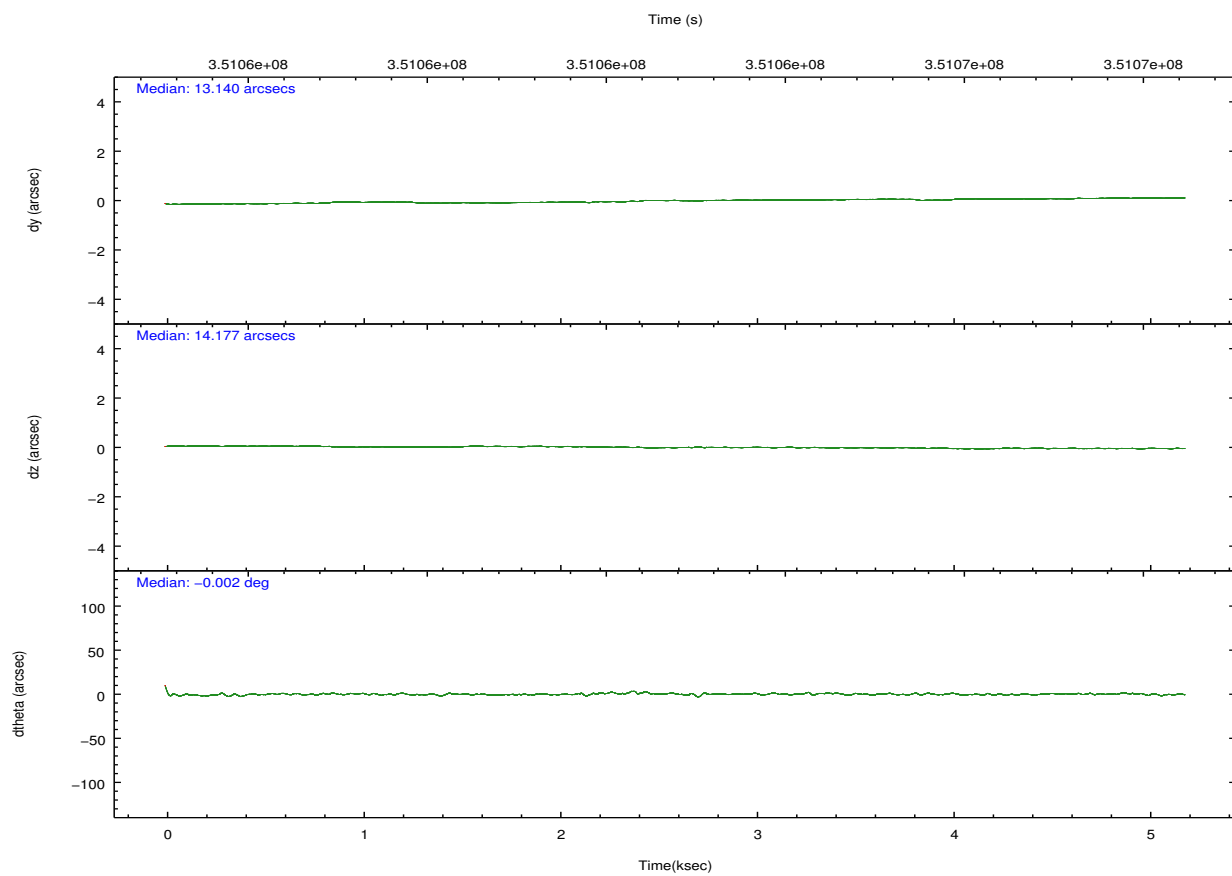
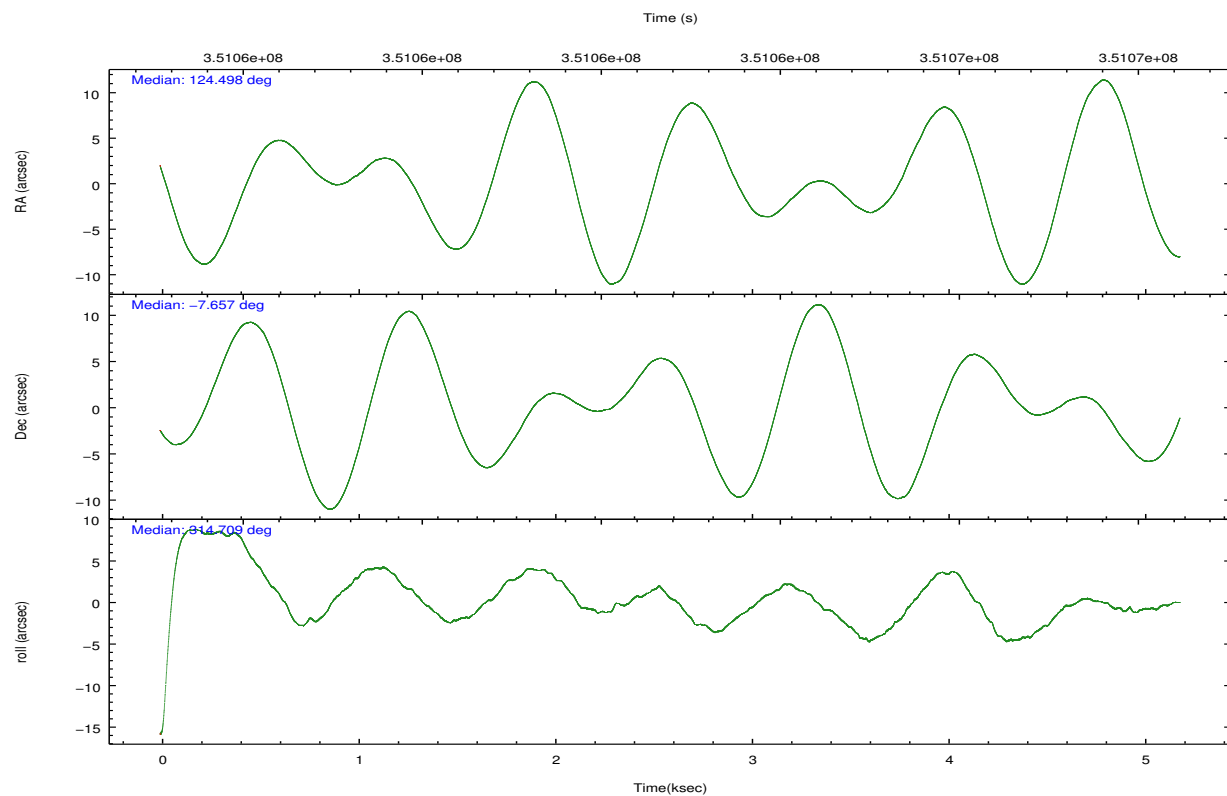


## 2.2 Compared Parameters

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	124.471079	124.4978372224265	CCD I2 on	Y	Y
[deg] Pointing Dec	-7.650245	-7.657424736843462	CCD I3 on	Y	Y
[deg] Pointing Roll	314.497395	314.7095860405714	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)	351061966.184000	351061590.45363	CCD S5 on	N	N
Observation start date	2009-02-15T05:11:40	2009-02-15T05:06:30	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	351066966.184000	351068289.85397	On-chip summing requested	N	N
Observation end date	2009-02-15T06:35:00	2009-02-15T06:58:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



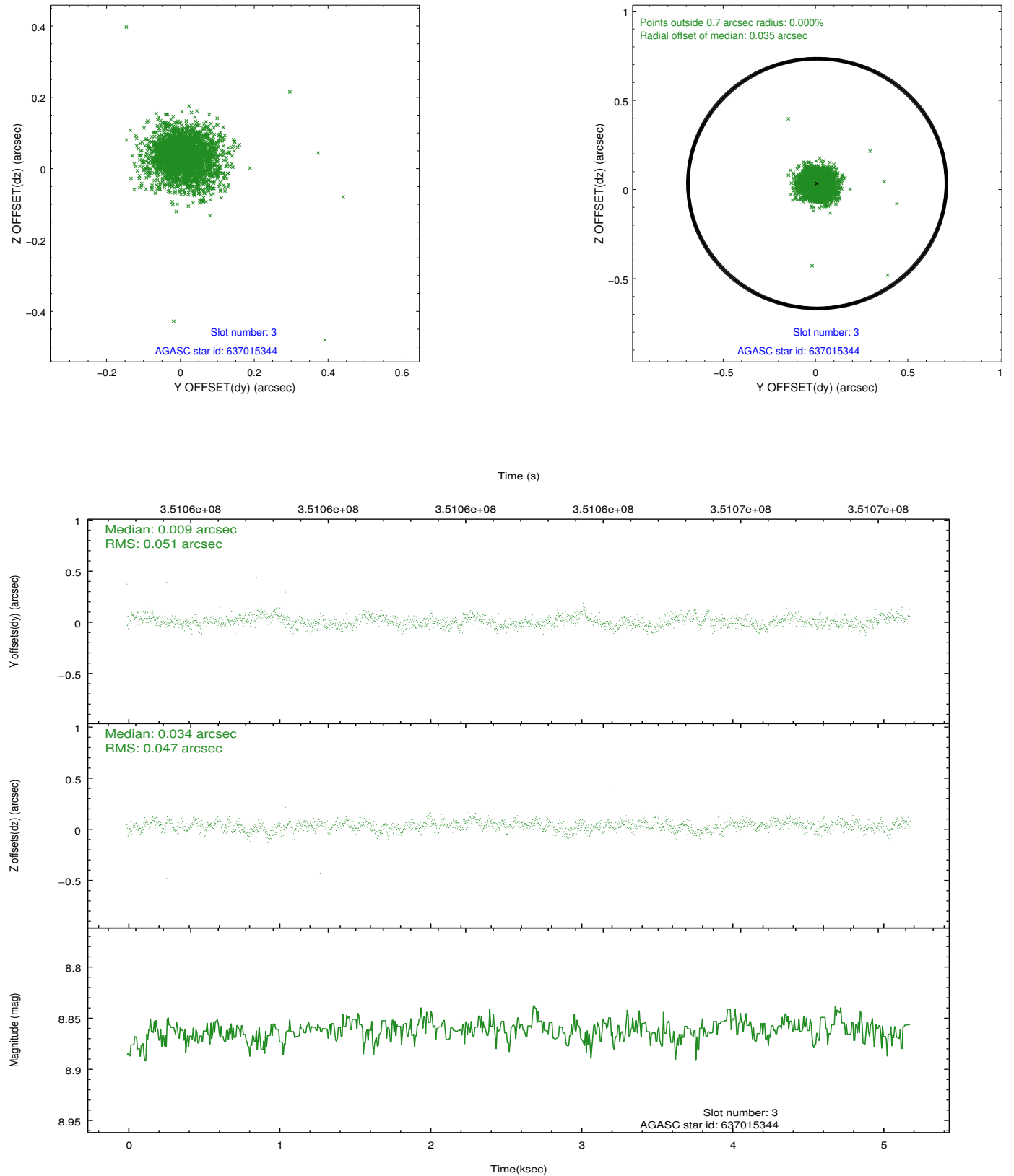


### Slot Statistics

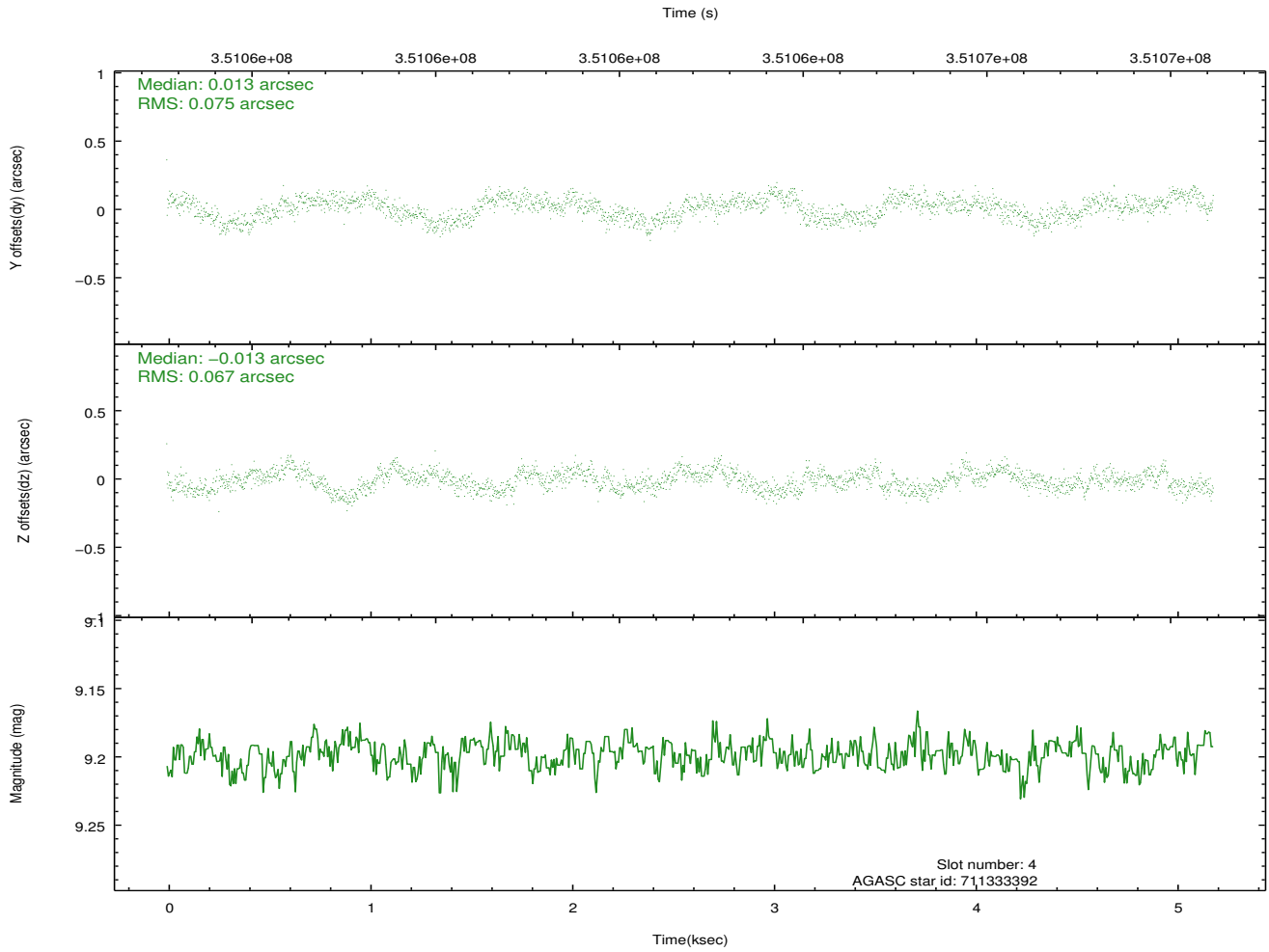
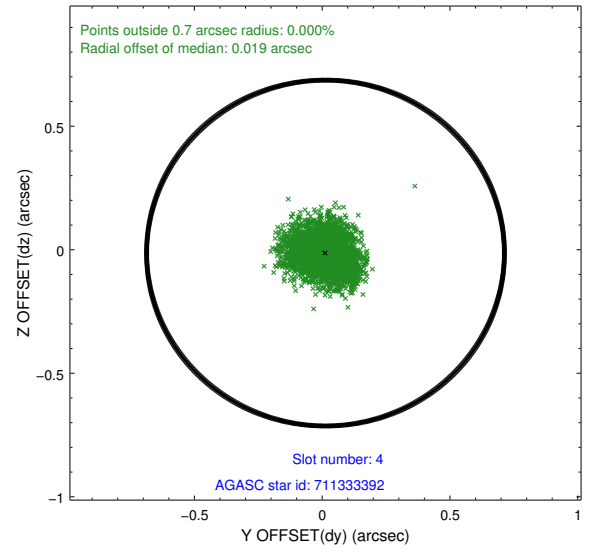
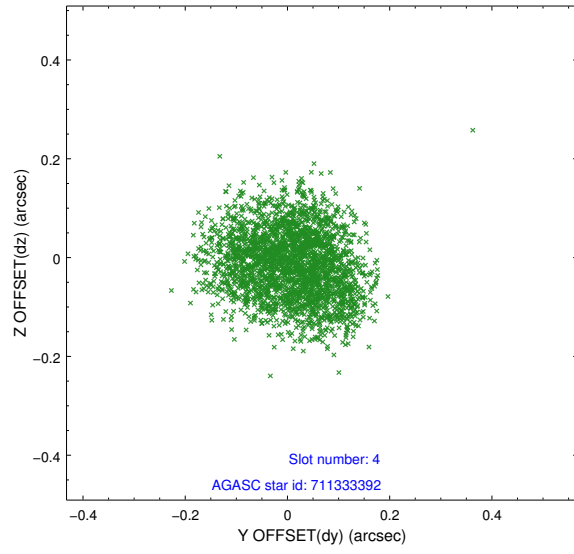
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	6.98	1264	-0.151	-0.070	0.007	0.021	0.000000	0.000000	-767.94	-844.18
1	FID	ACIS-I-4	6.98	1266	0.107	0.080	0.007	0.012	0.000000	0.000000	2145.85	1061.53
2	FID	ACIS-I-6	7.06	1266	-0.057	0.052	0.010	0.017	0.000000	0.000000	393.74	1705.03
3	GUIDE	637015344	8.86	2530	0.009	0.034	0.071	0.116	124.085835	-7.189754	-2146.32	180.36
4	GUIDE	711333392	9.20	2527	0.013	-0.013	0.110	0.167	124.748853	-7.629563	641.02	759.23
5	GUIDE	711335880	7.91	2531	-0.046	-0.040	0.090	0.139	124.602828	-7.571278	126.83	535.02
6	GUIDE	637014640	8.43	2530	-0.157	-0.026	0.067	0.108	124.901530	-7.342721	288.05	1872.20
7	GUIDE	711331392	8.98	2529	0.183	0.049	0.091	0.146	125.313915	-7.772199	2422.83	1835.65

## 2.4 Star Slots

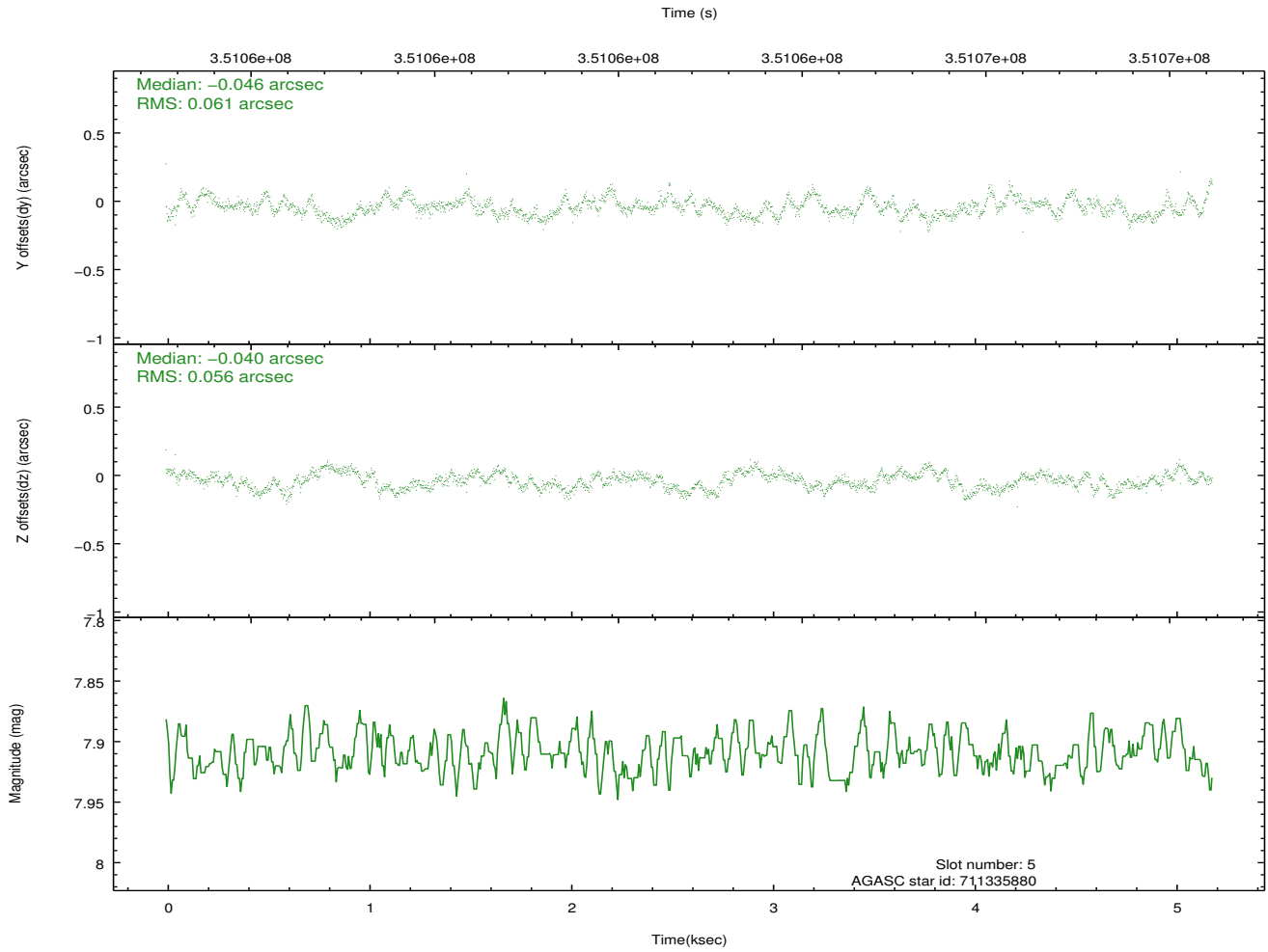
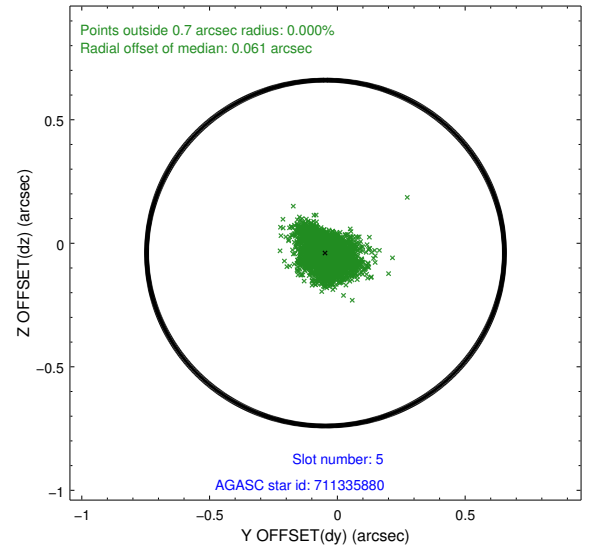
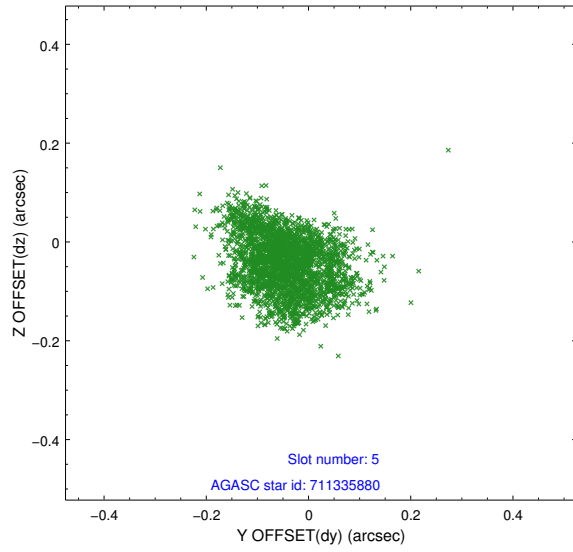
### 2.4.1 Slot 3



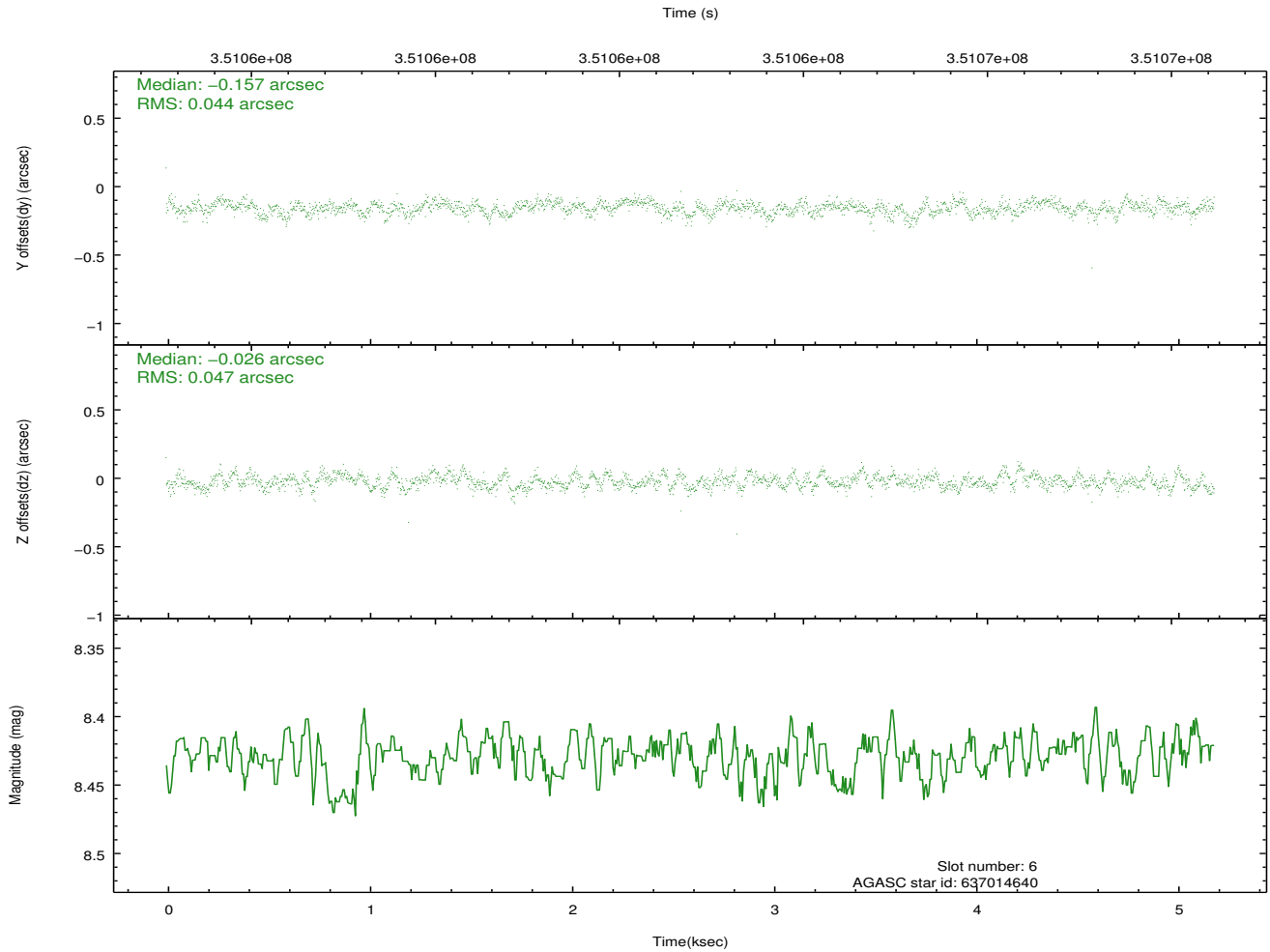
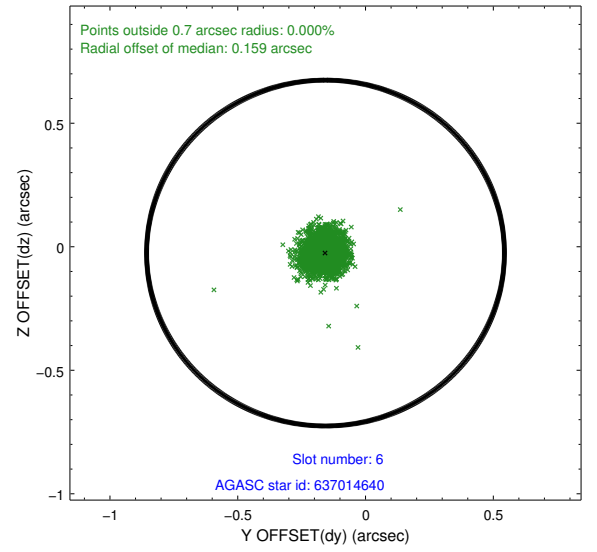
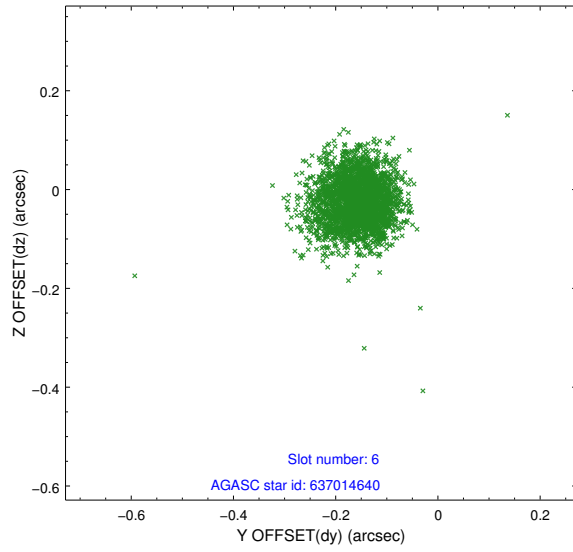
## 2.4.2 Slot 4



### 2.4.3 Slot 5

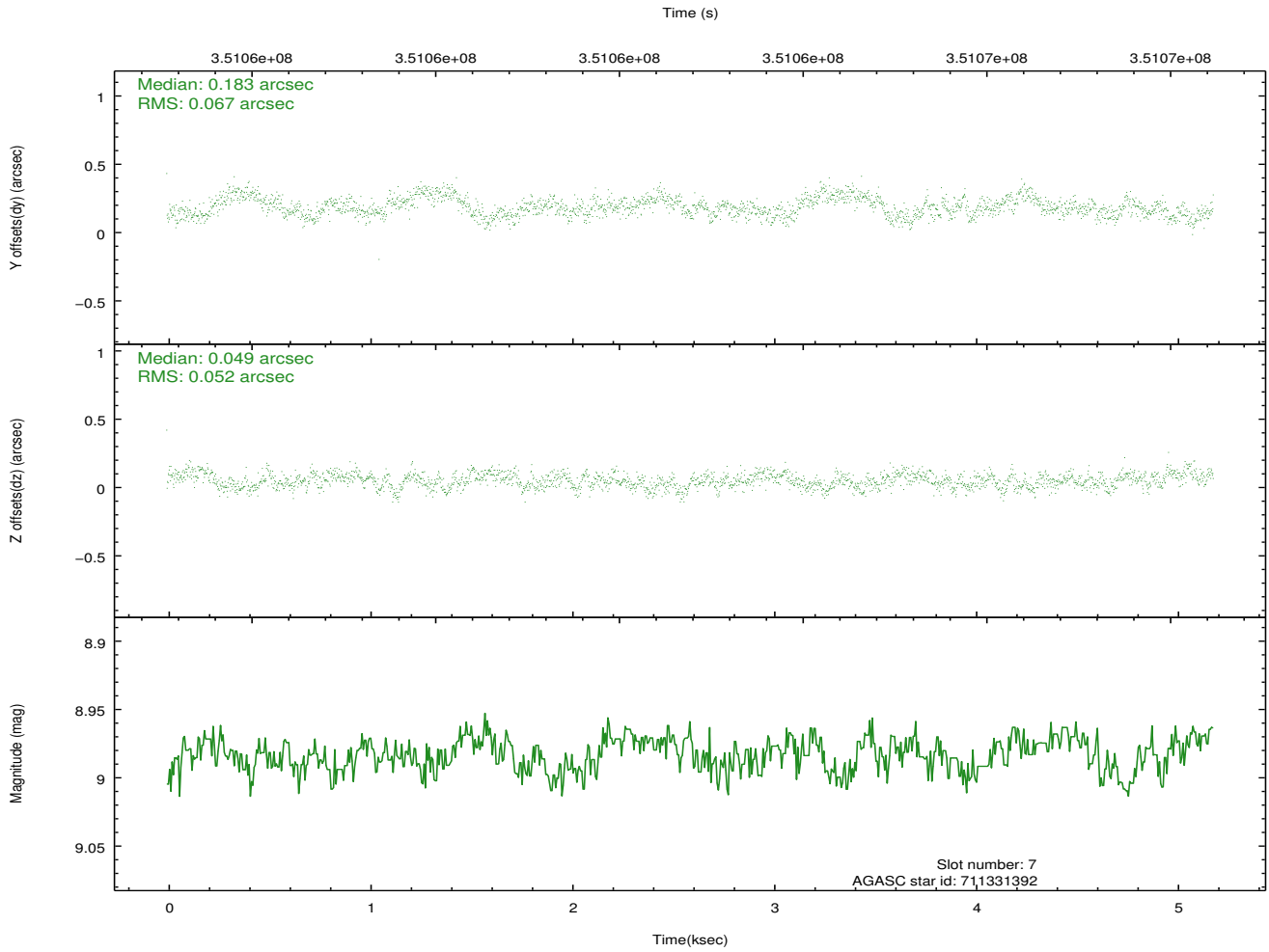
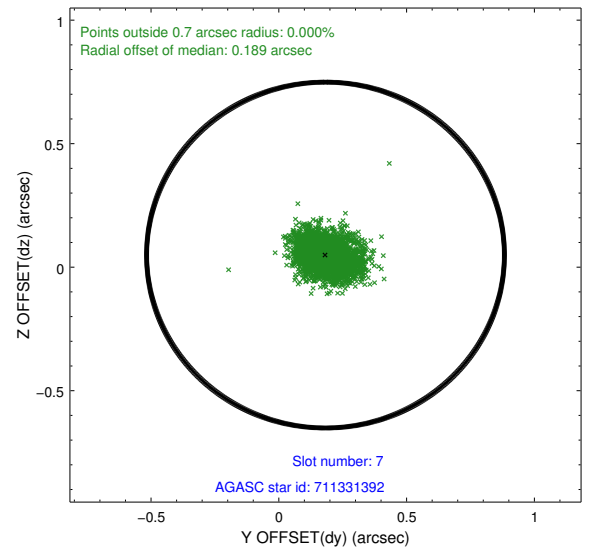
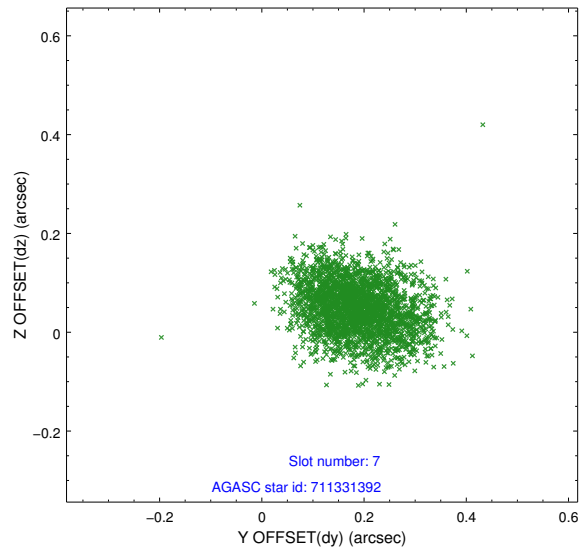


## 2.4.4 Slot 6



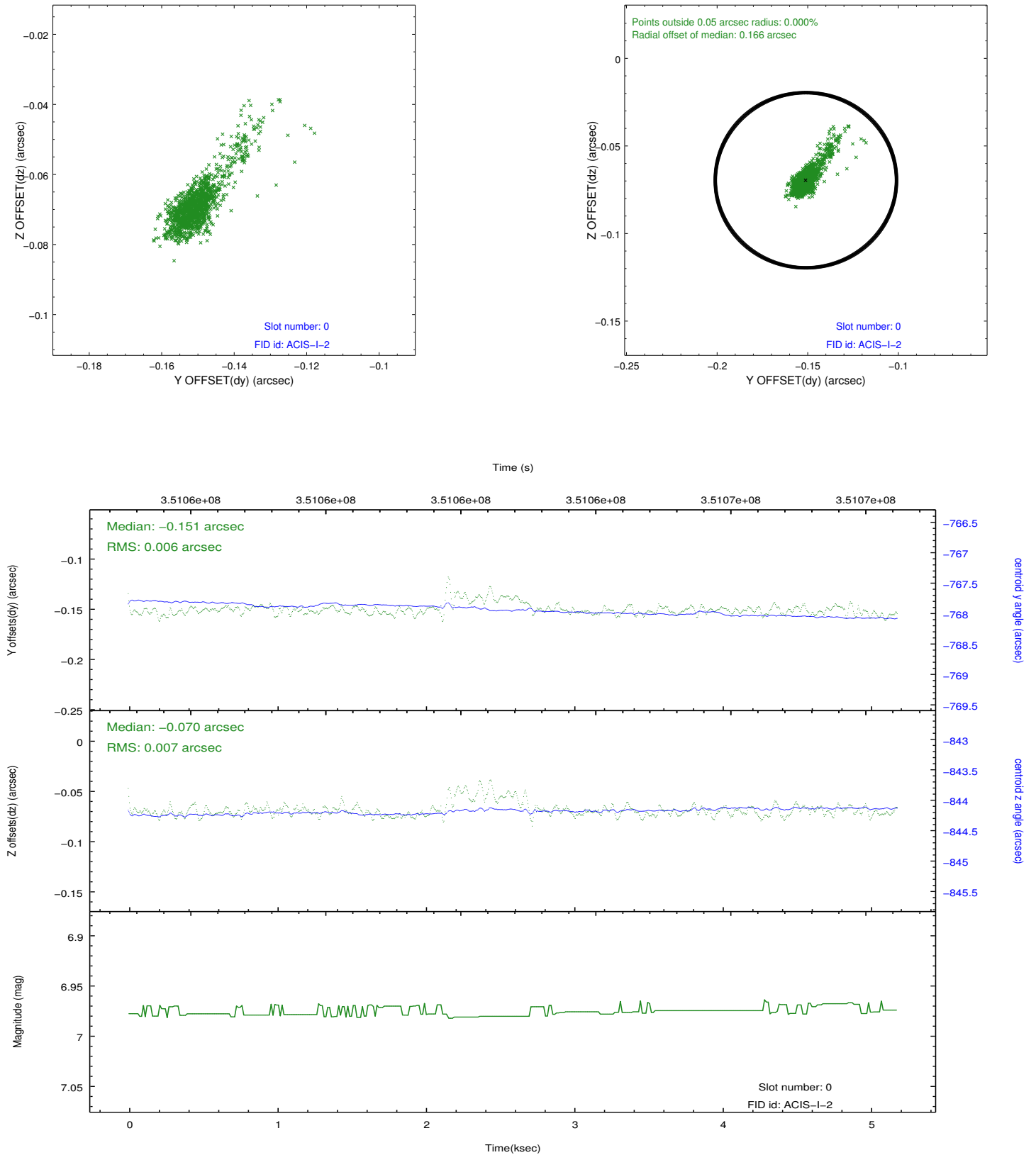


## 2.4.5 Slot 7

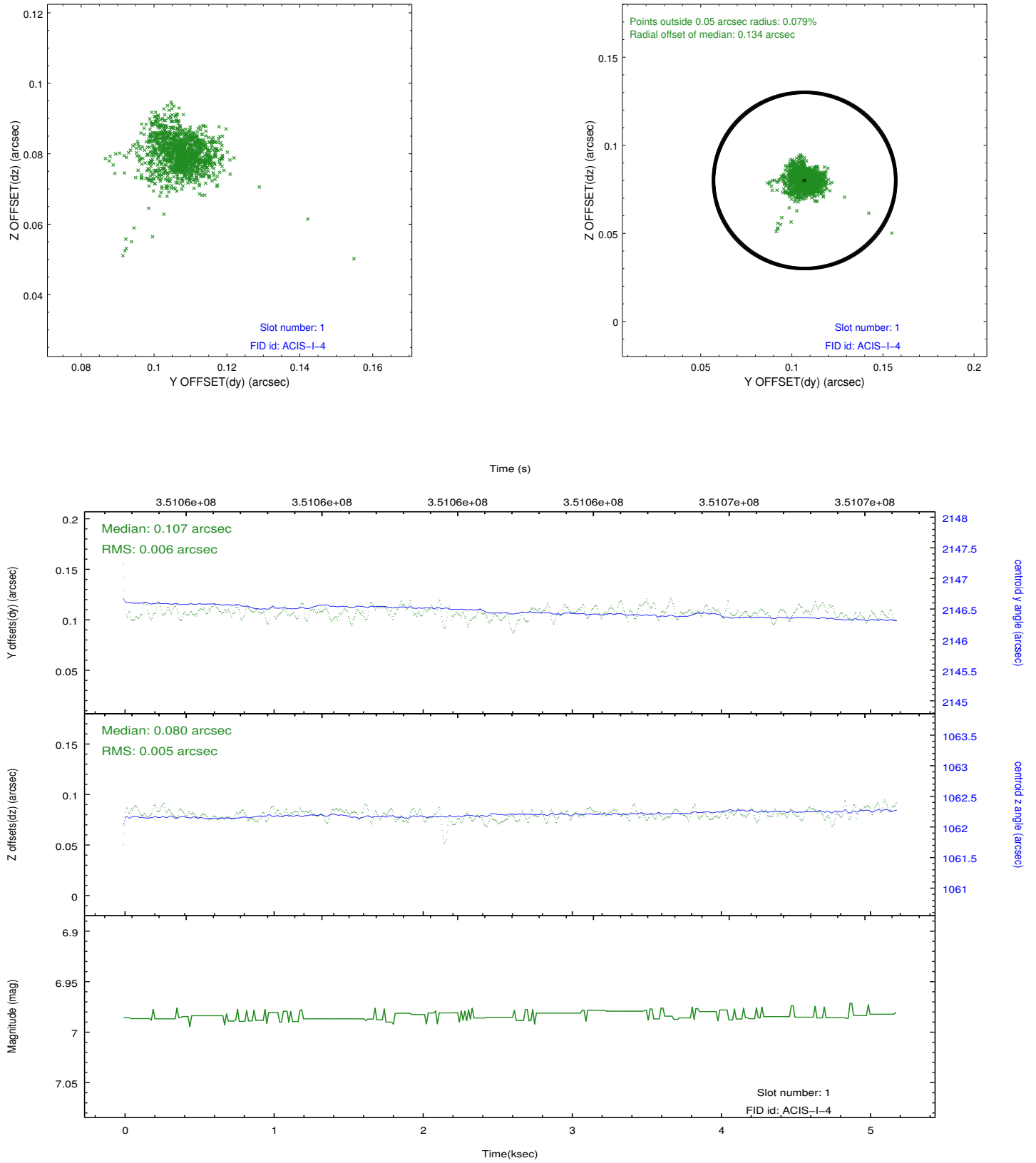


## 2.5 FID Slots

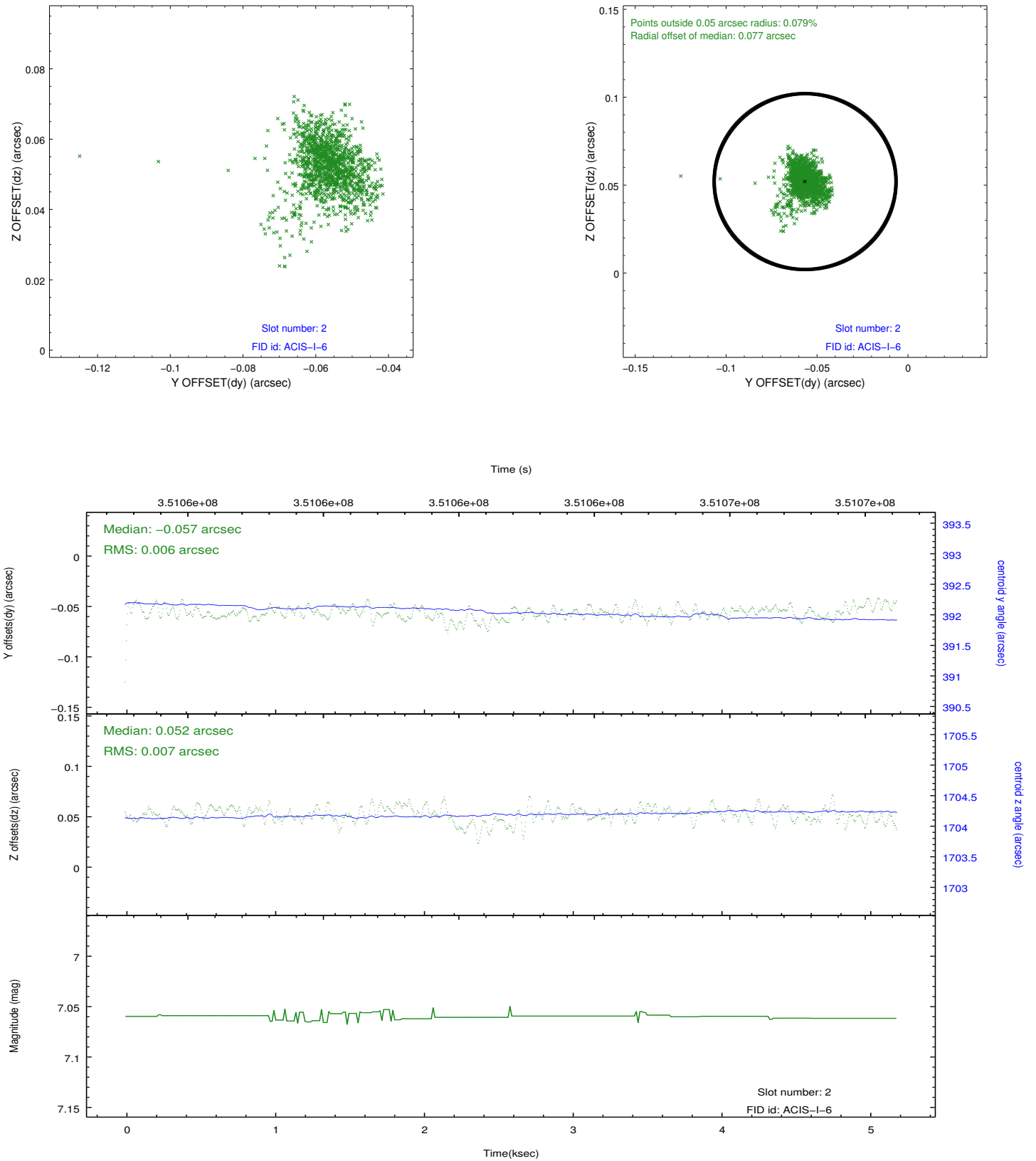
### 2.5.1 Slot 0



## 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)	2012.06.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.7771000367403

### A.2 Comments