

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12185 - L2 Version 2  
Chandra X-Ray Center

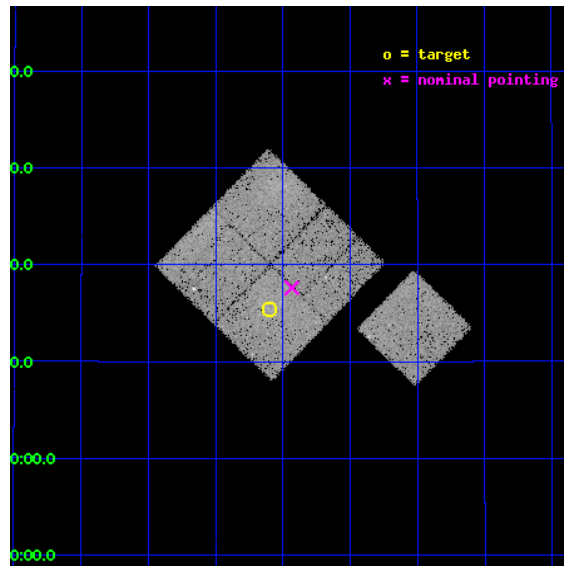
L2 Processing Date : Jul 2 2012

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# 1 Front

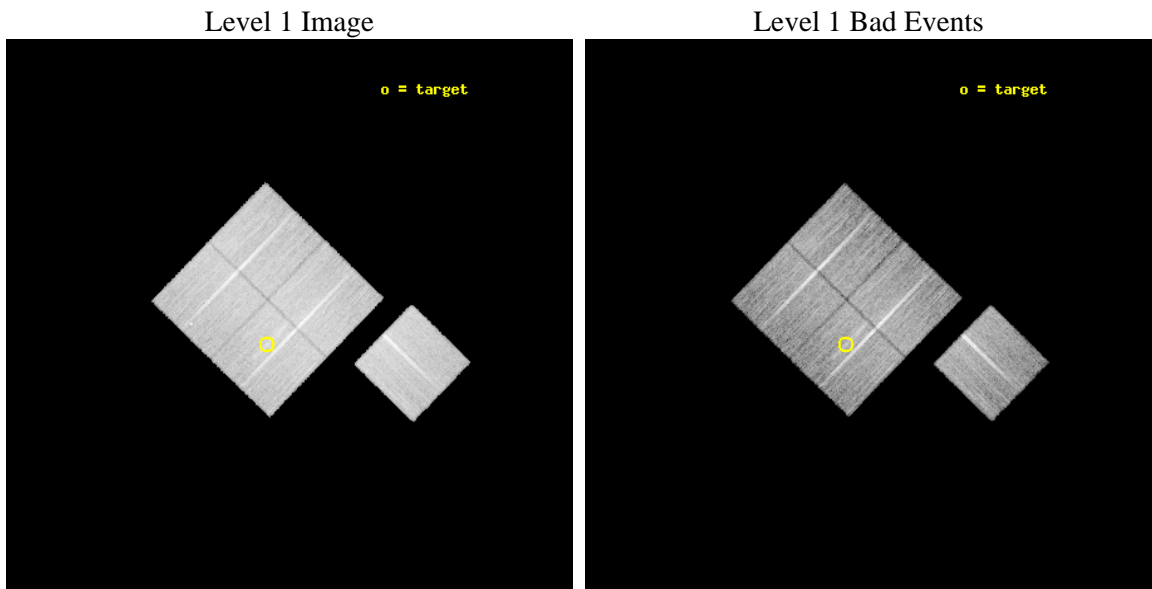
seq_num	800951	Sequence number
obs_id	12185	Observation id
title	Probing the Dynamics of Major Mergers	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	A98ss	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	11.650417	Observer's specified target RA [deg]
dec_targ	20.25625	Observer's specified target Dec [deg]
ra_nom	11.608349820702	Nominal RA [deg]
dec_nom	20.29372576341	Nominal Dec [deg]
roll_nom	134.14531404765	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20047.659133852	Sum of GTIs [s]
livetime	19785.721708396	Livetime [s]
ontime0	20047.659143865	Sum of GTIs [s]
ontime1	20044.51815325	Sum of GTIs [s]
ontime2	20044.518123567	Sum of GTIs [s]
ontime3	20047.659133852	Sum of GTIs [s]
ontime6	20050.800154209	Sum of GTIs [s]
l2events	73559	Number of level 2 events



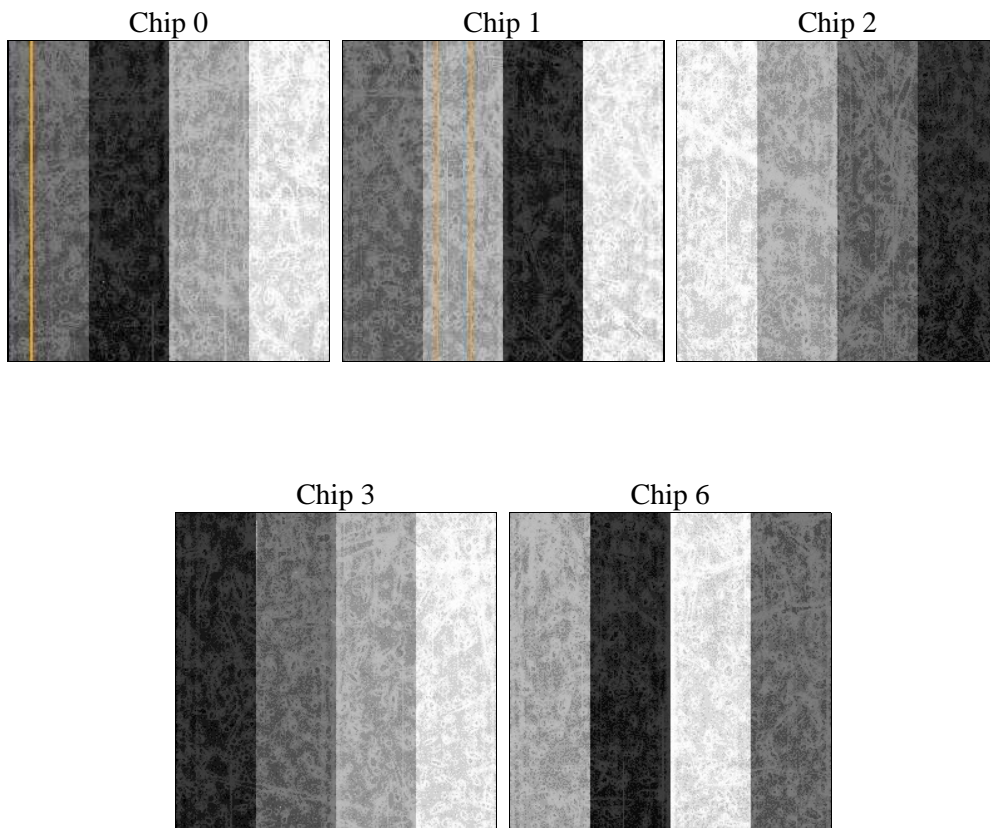
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20047.659133852	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime0	20047.659143865	Sum of GTIs [s]
date	2012-07-02T19:43:57	Date and time of file creation	ontime1	20044.51815325	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20044.518123567	Sum of GTIs [s]
			ontime3	20047.659133852	Sum of GTIs [s]
			ontime6	20050.800154209	Sum of GTIs [s]
			l1events	741631	Number of level 1 events

### 2.1.4 Events

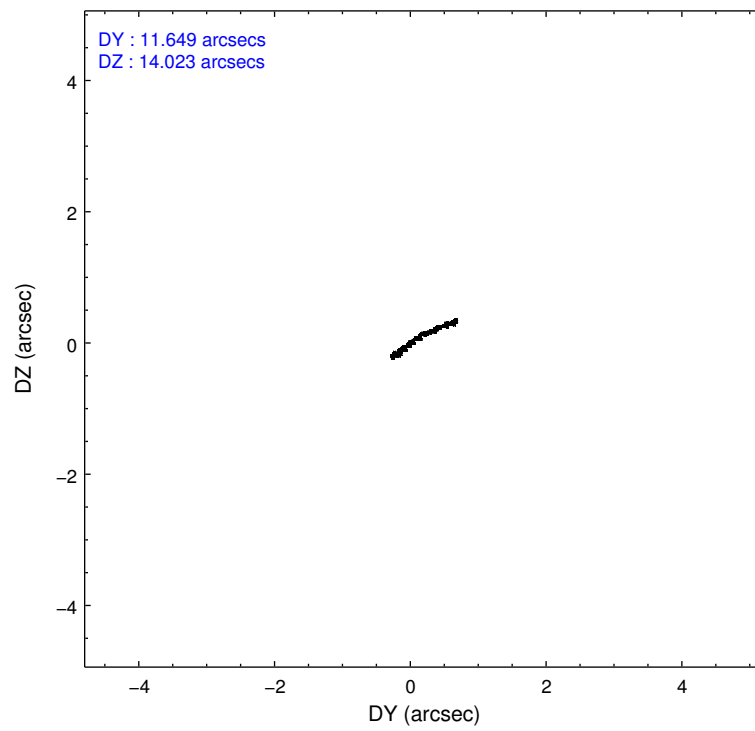
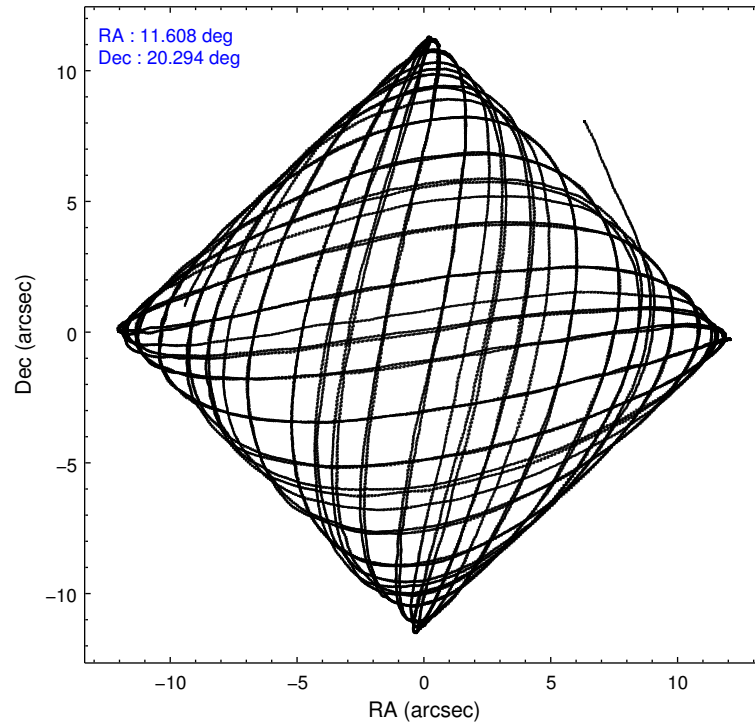
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	142782	141970	156163	150202	150514
rejected events	124039	123644	140417	132876	133929
rejected %	86%	87%	89%	88%	88%

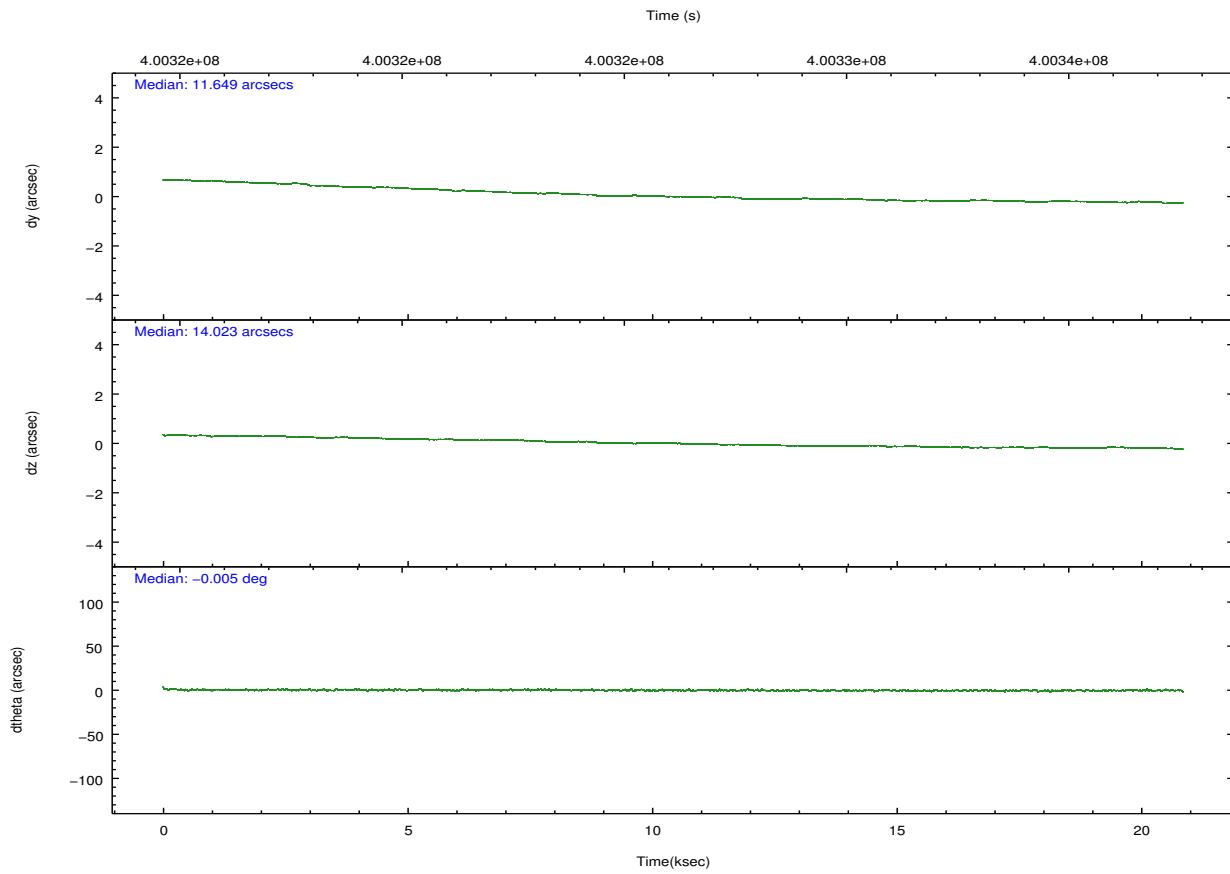
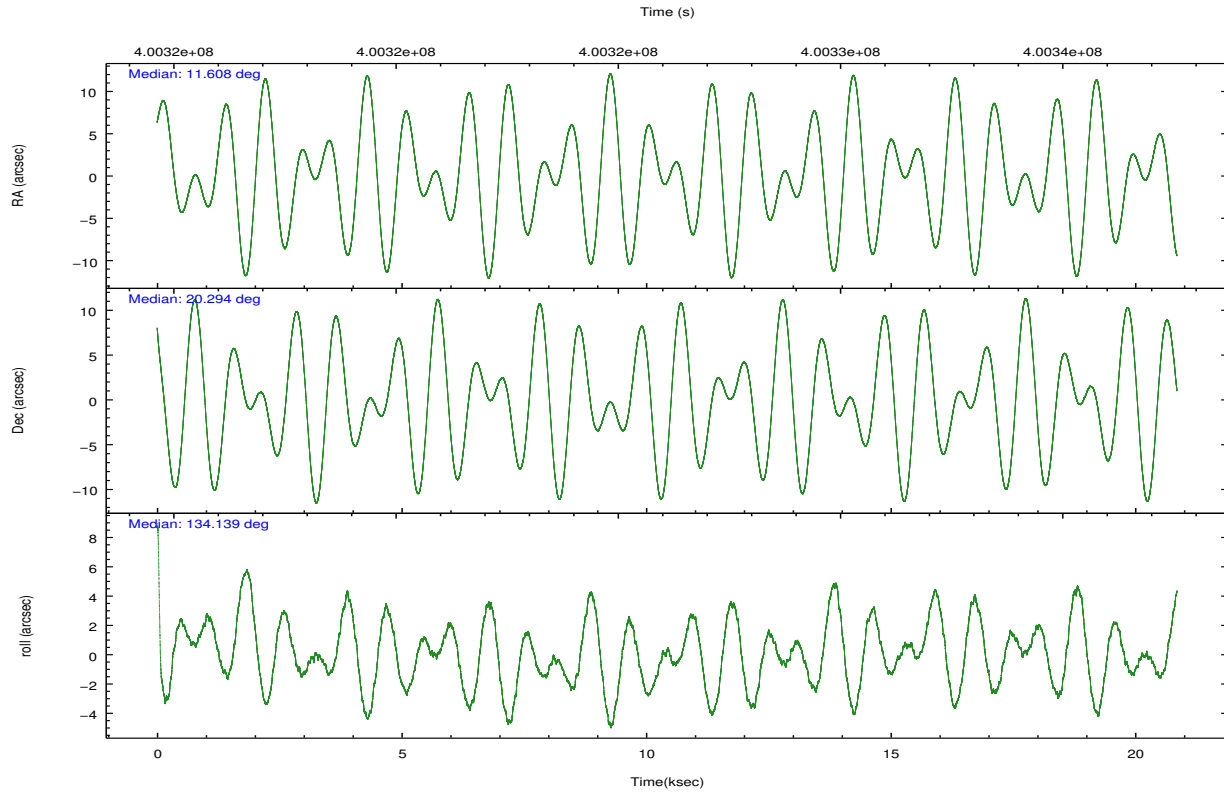
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	7874	6701	5710	7025	5787
	5%	4%	3%	4%	3%
grade 1 events	90	89	88	90	65
	0%	0%	0%	0%	0%
grade 2 events	4026	4152	3625	3498	3705
	2%	2%	2%	2%	2%
grade 3 events	1911	1870	1701	1792	1788
	1%	1%	1%	1%	1%
grade 4 events	1672	1889	1730	1773	1729
	1%	1%	1%	1%	1%
grade 5 events	5942	6308	5435	6669	6592
	4%	4%	3%	4%	4%
grade 6 events	3262	3717	2985	3243	3576
	2%	2%	1%	2%	2%
grade 7 events	118005	117244	134889	126112	127272
	82%	82%	86%	83%	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	11.636573	11.60834982070168	CCD I2 on	Y	Y
[deg] Pointing Dec	20.286314	20.2937257634099	CCD I3 on	Y	Y
[deg] Pointing Roll	133.926833	134.1453140476501	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	-225.840463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	400316523.184000	400315258.34987	CCD S5 on	N	N
Observation start date	2010-09-08T07:00:57	2010-09-08T06:40:58	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	400336523.184000	400337475.22601	On-chip summing requested	N	N
Observation end date	2010-09-08T12:34:17	2010-09-08T12:51:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



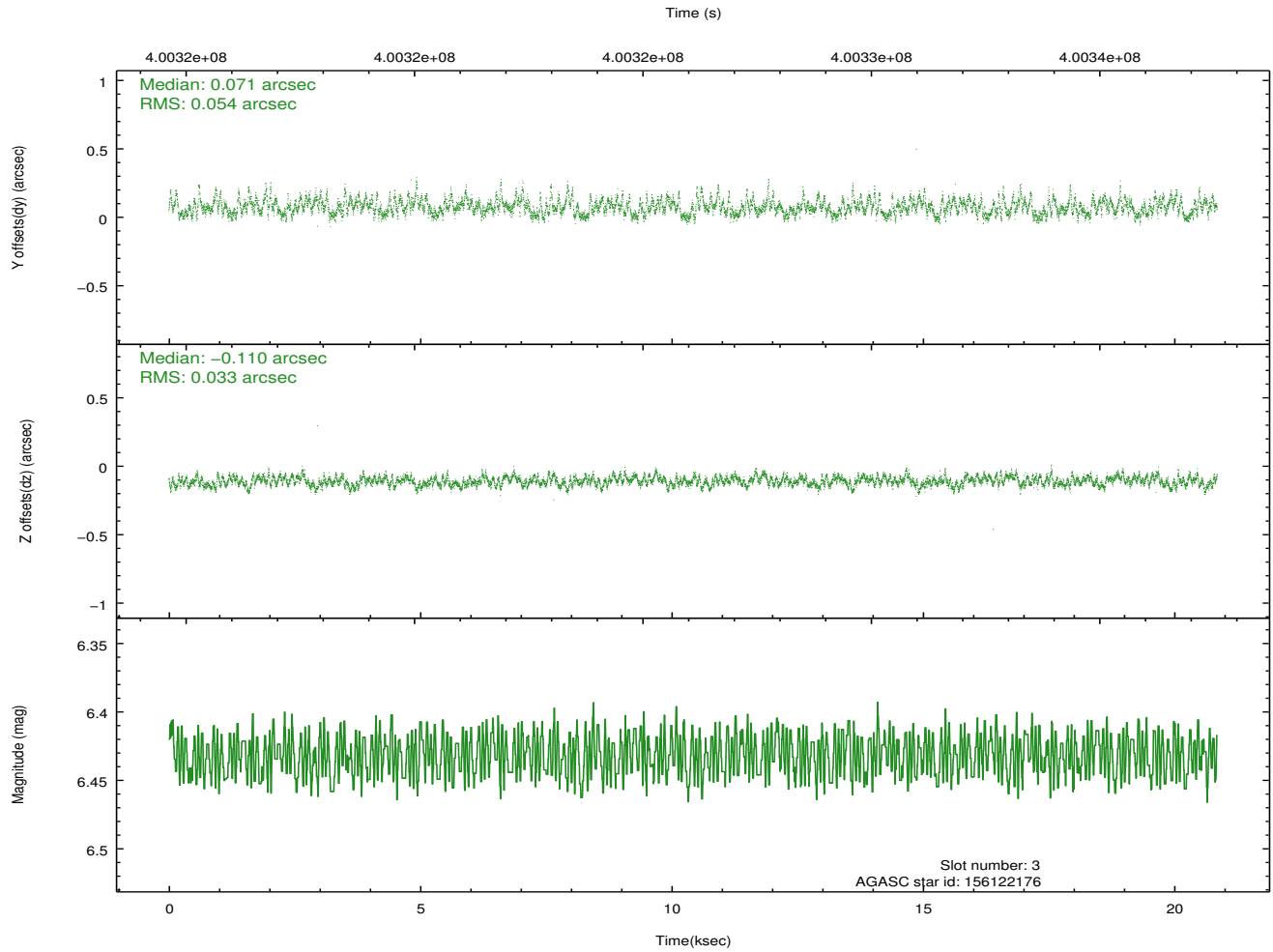
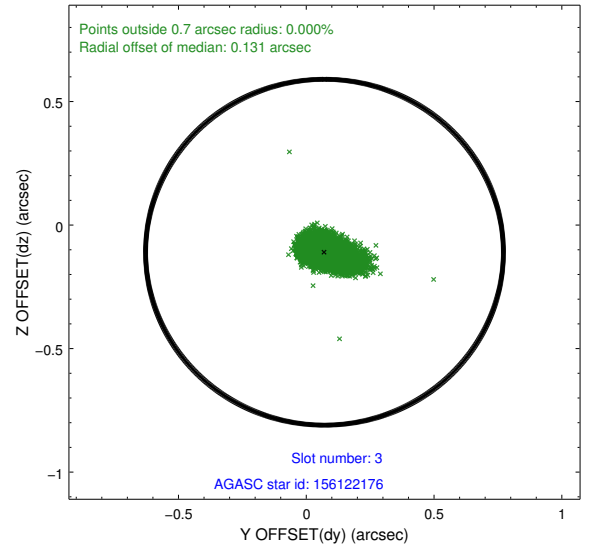
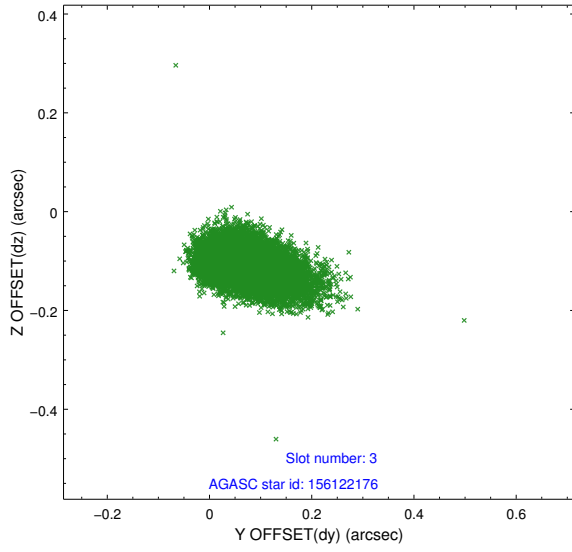


### Slot Statistics

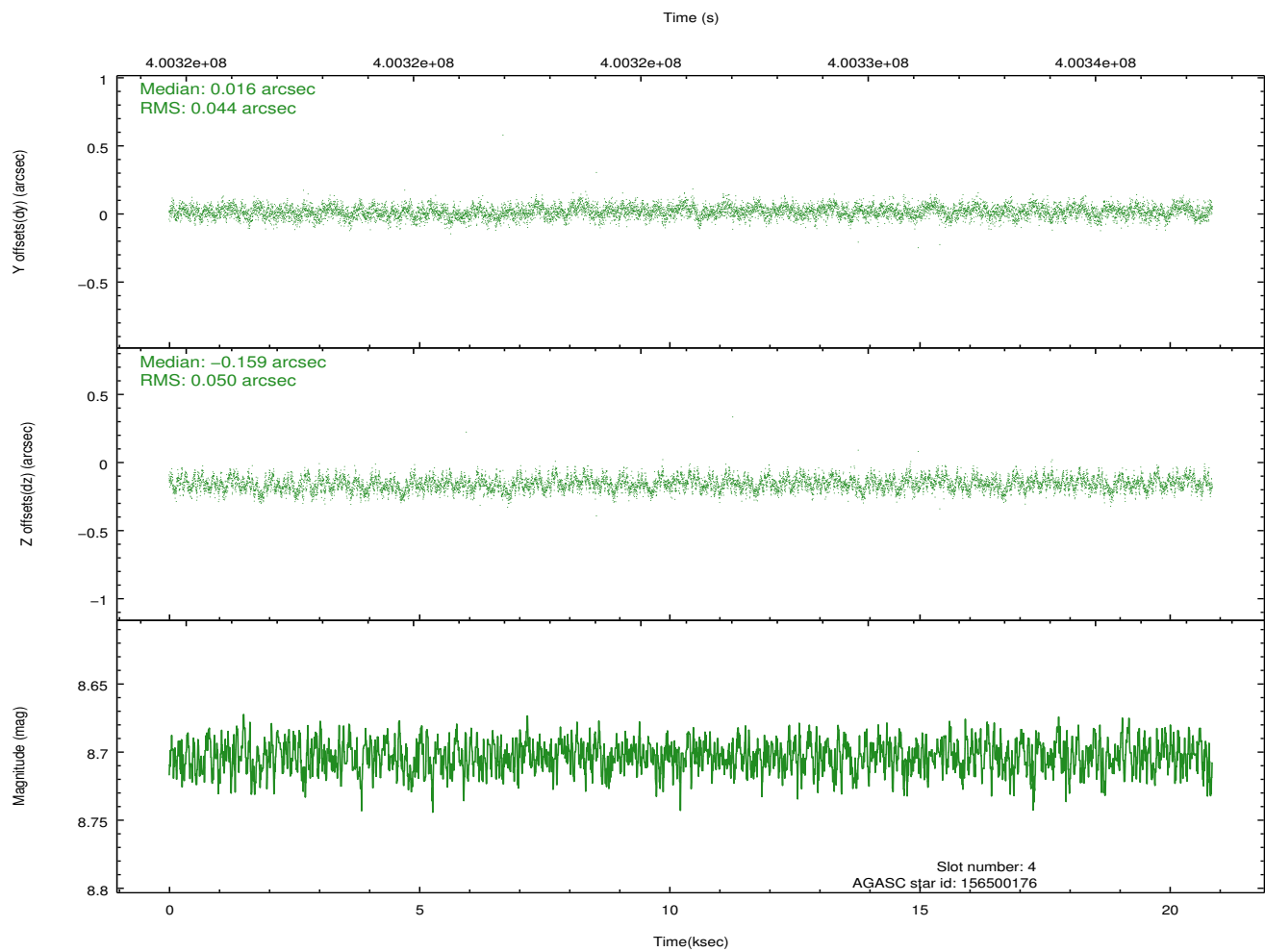
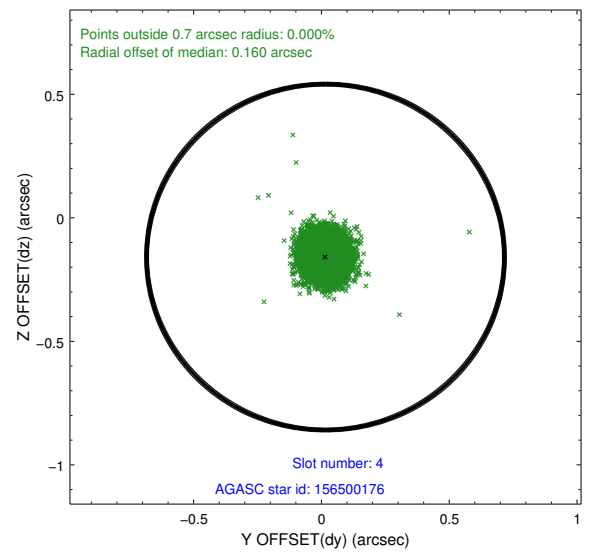
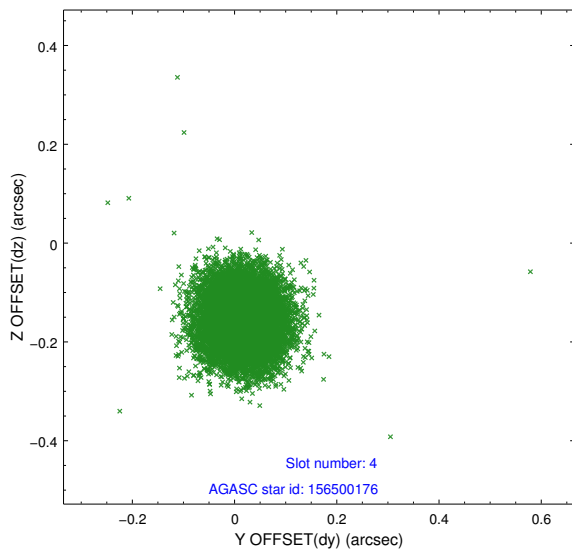
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.05	5085	0.066	-0.080	0.013	0.021	0.000000	0.000000	927.78	-996.74
1	FID	ACIS-I-4	6.96	5085	0.041	0.048	0.013	0.021	0.000000	0.000000	2147.37	904.10
2	FID	ACIS-I-5	7.03	5085	-0.204	0.103	0.010	0.017	0.000000	0.000000	-1820.35	901.06
3	GUIDE	156122176	6.43	10172	0.071	-0.110	0.065	0.111	11.806778	19.578703	-2235.61	1350.36
4	GUIDE	156500176	8.70	10168	0.016	-0.159	0.071	0.112	11.171670	20.448926	1509.22	722.24
5	GUIDE	156500608	9.09	10166	-0.122	-0.130	0.100	0.157	11.245383	20.021682	232.58	1613.05
6	GUIDE	156509336	7.49	10172	0.112	0.130	0.122	0.184	12.201488	20.214746	-1506.77	-1197.55
7	GUIDE	156501376	6.72	10170	-0.103	0.261	0.077	0.144	11.978451	20.925347	859.47	-2425.57

## 2.4 Star Slots

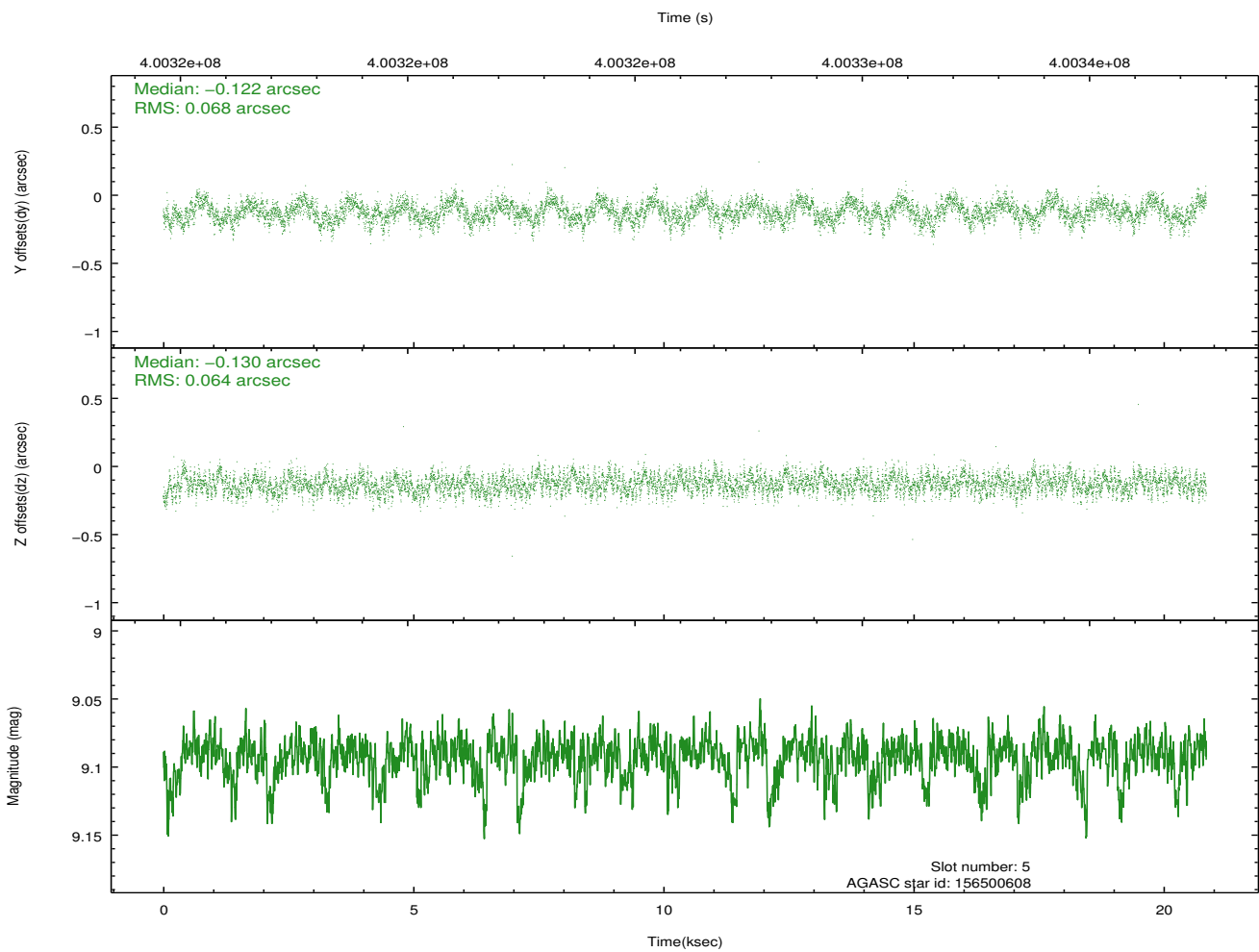
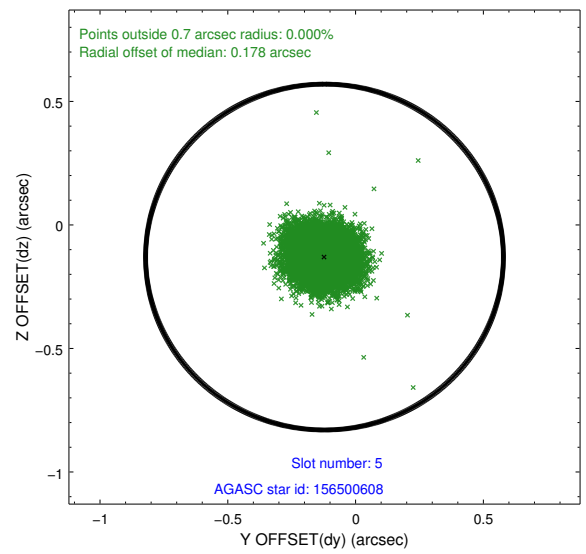
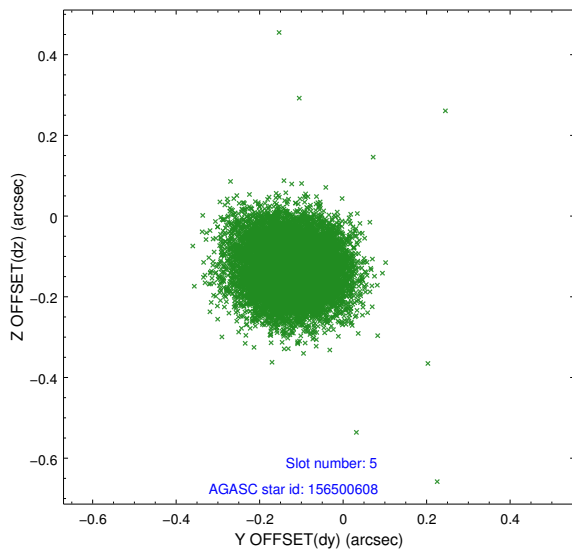
### 2.4.1 Slot 3



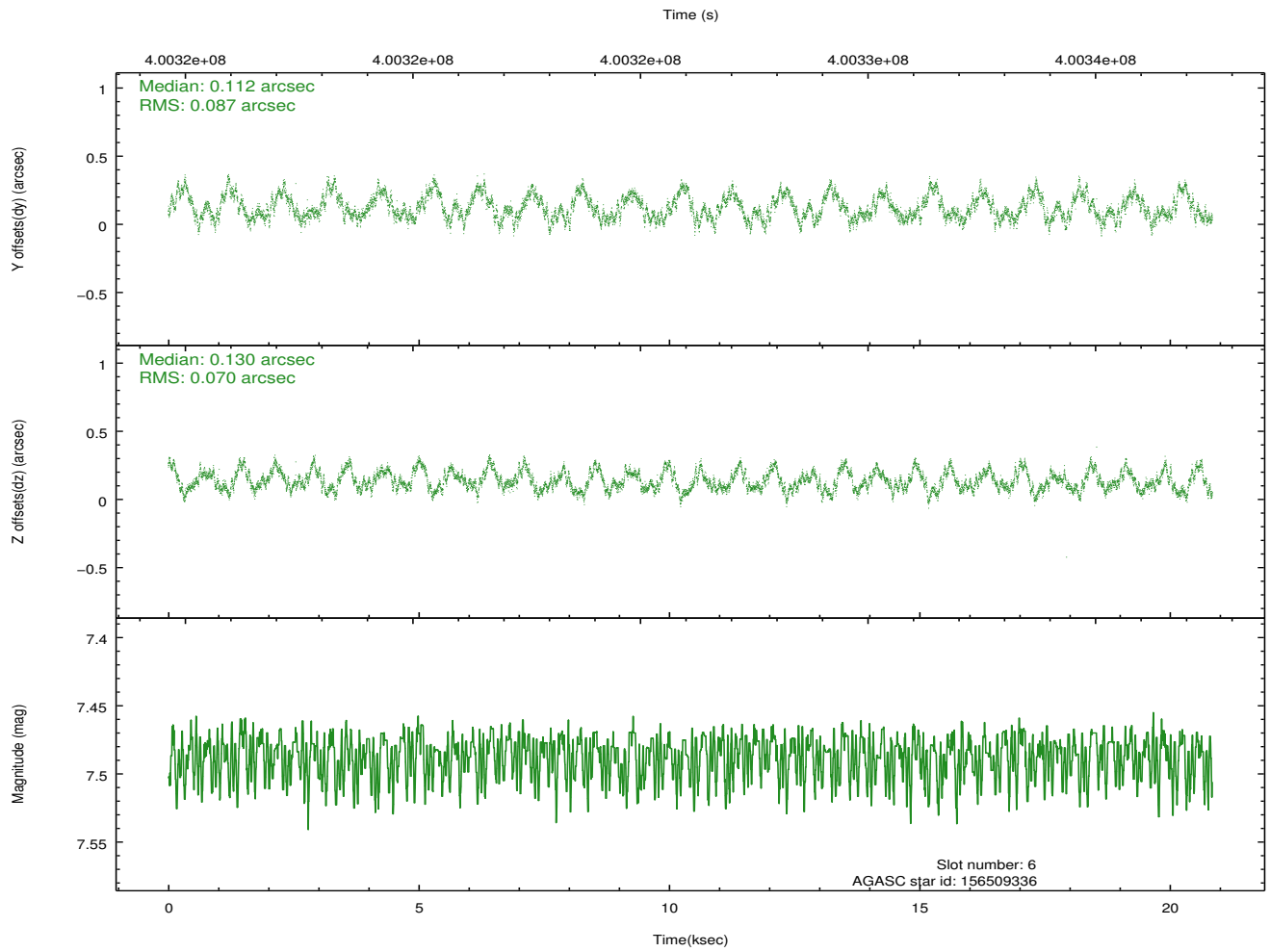
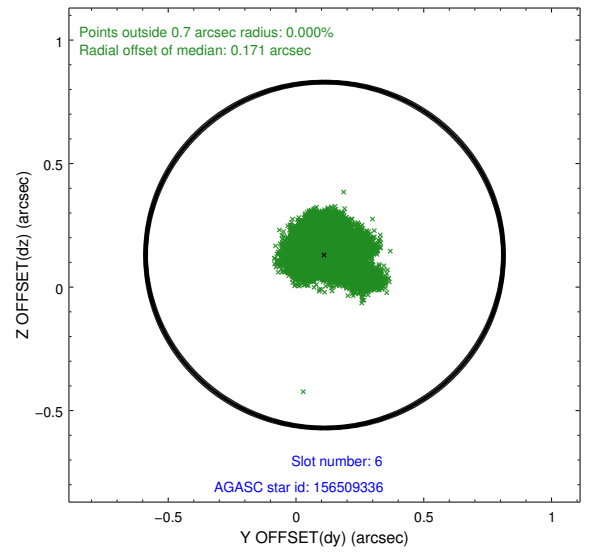
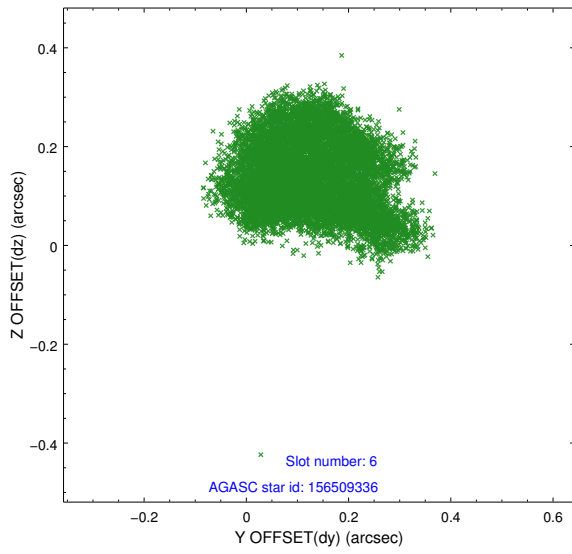
## 2.4.2 Slot 4



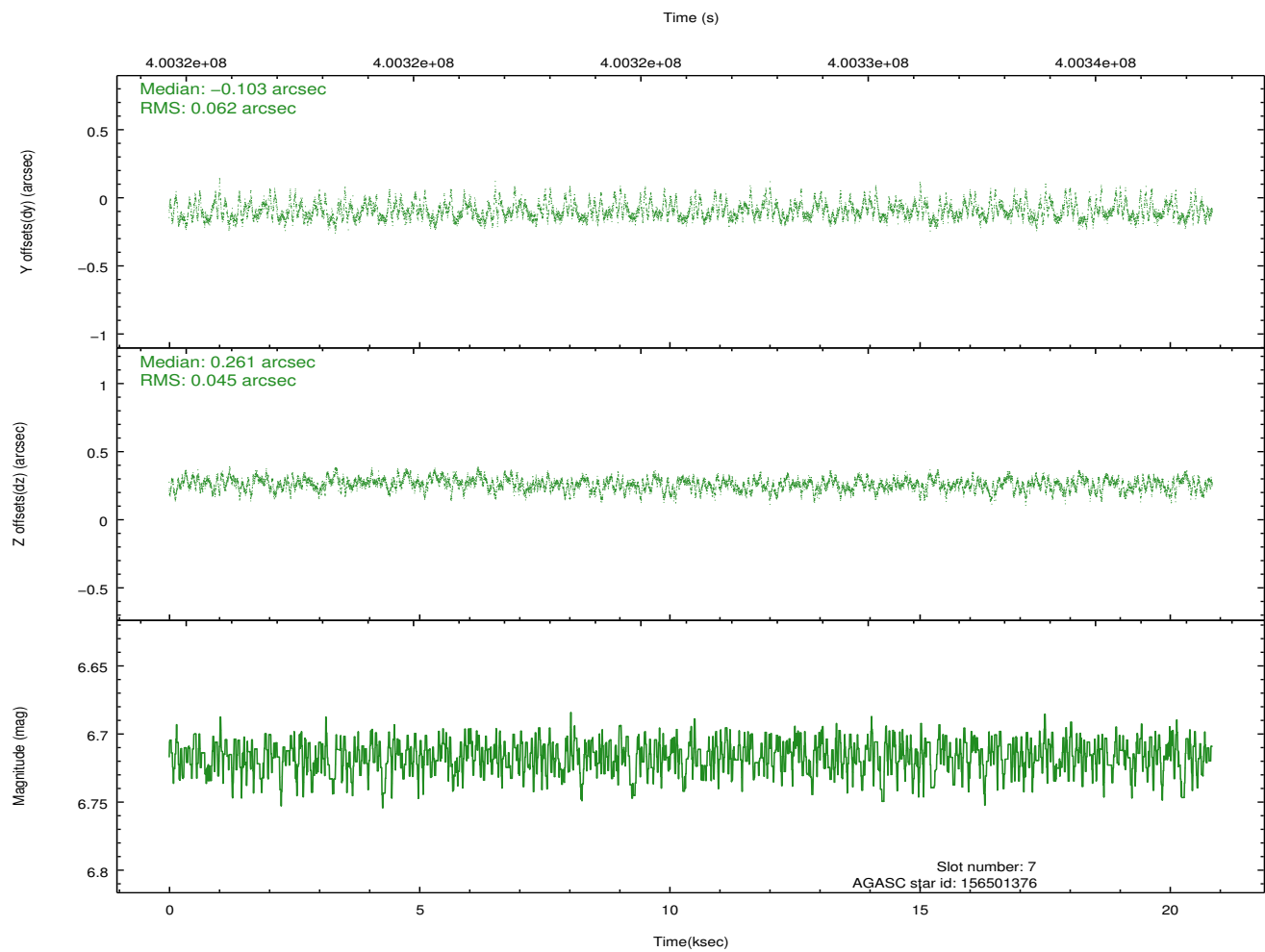
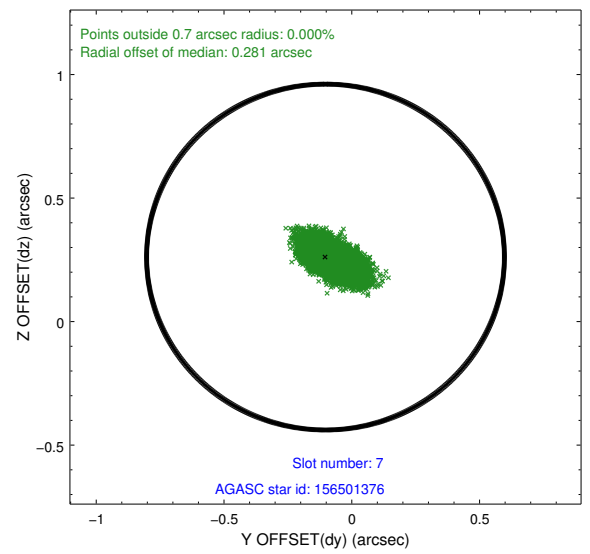
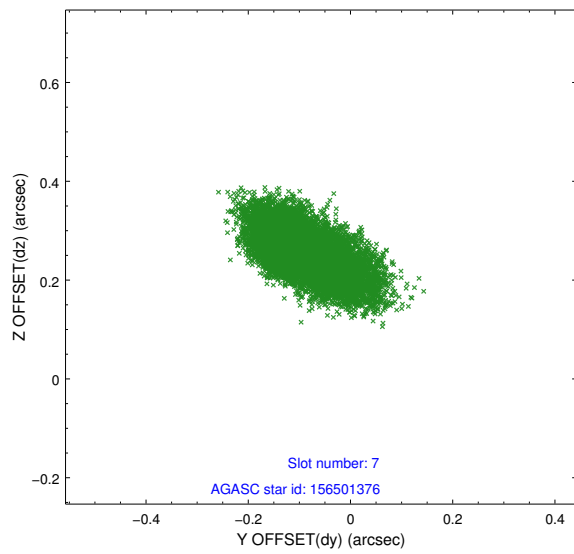
### 2.4.3 Slot 5



### 2.4.4 Slot 6

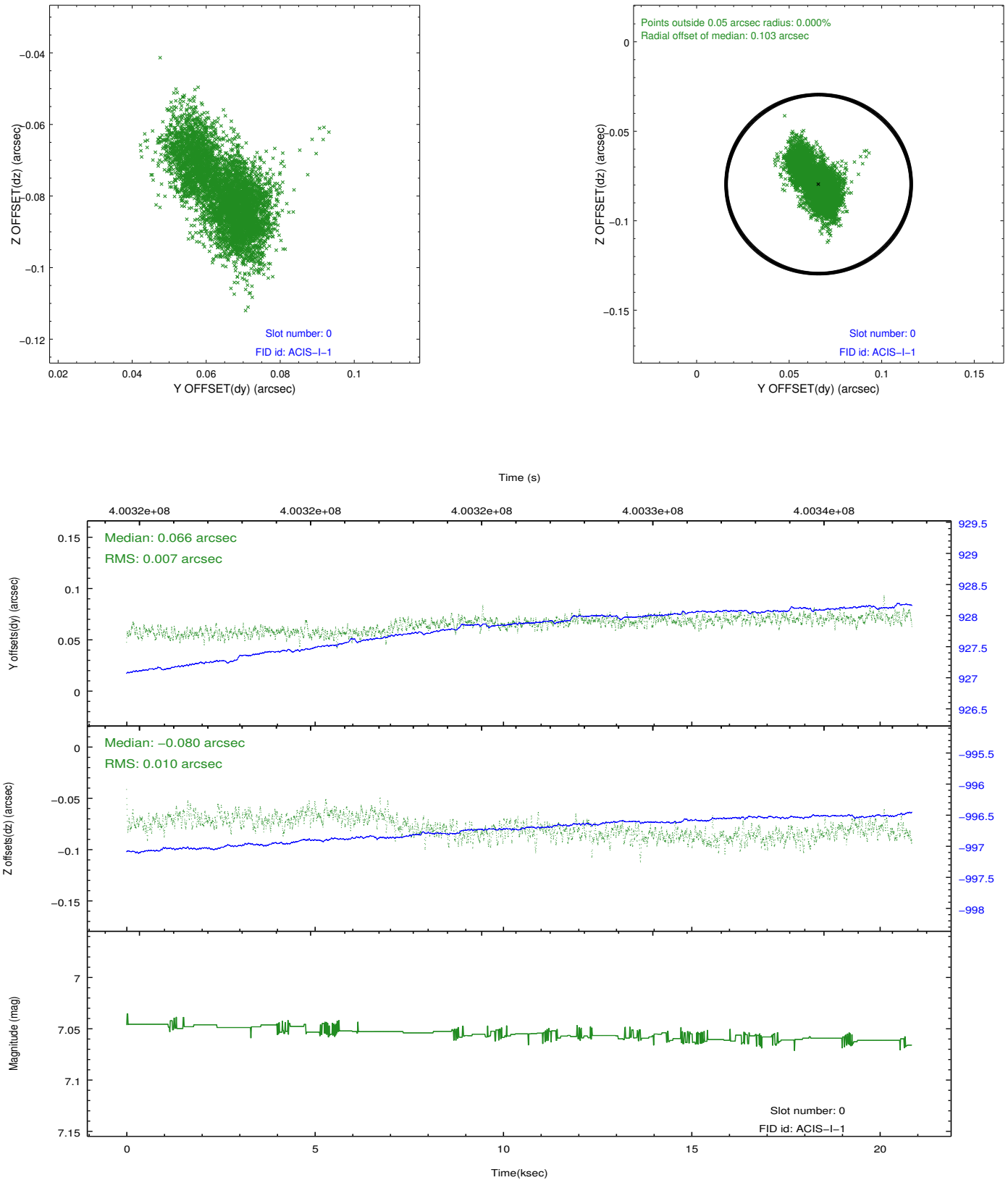


## 2.4.5 Slot 7

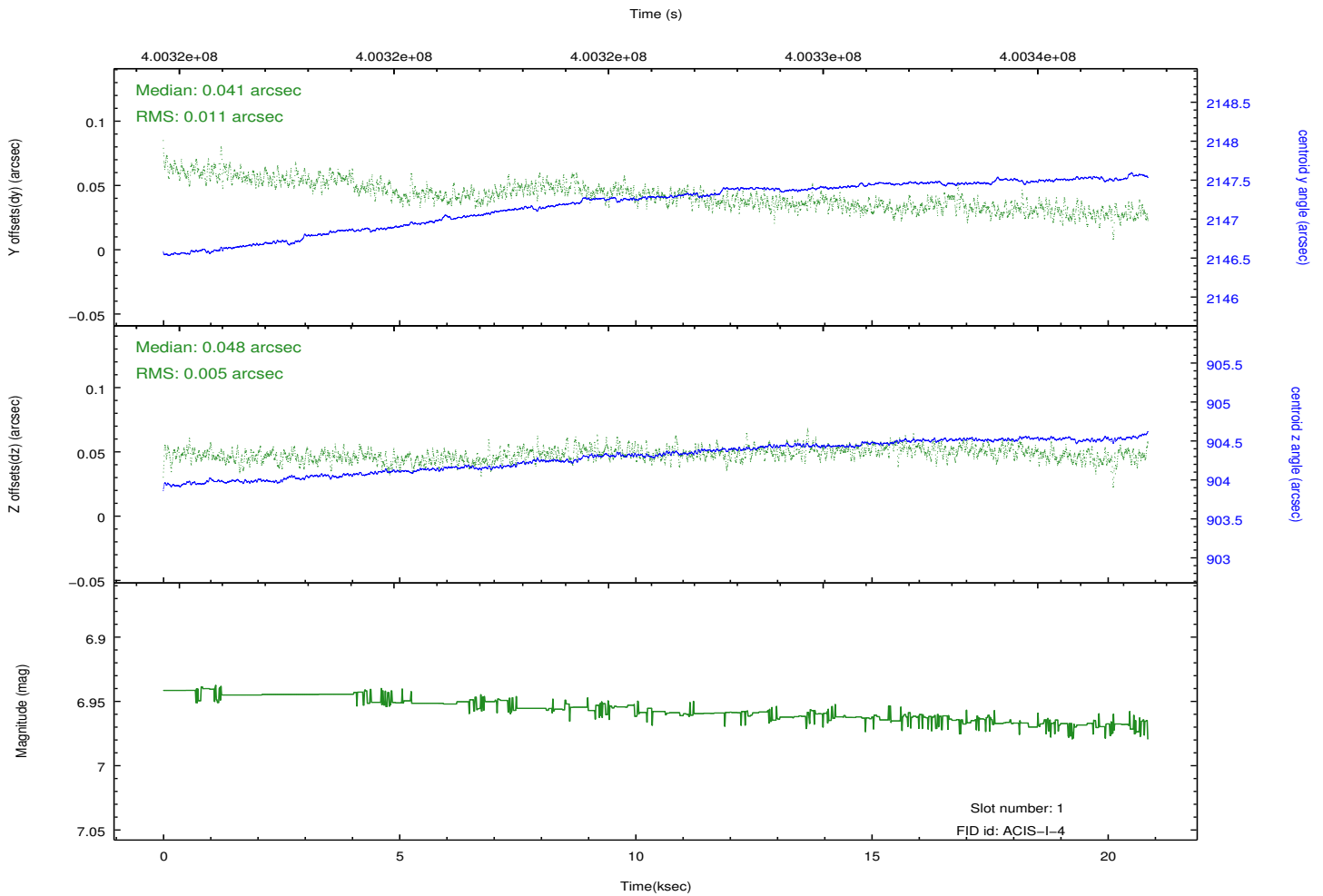
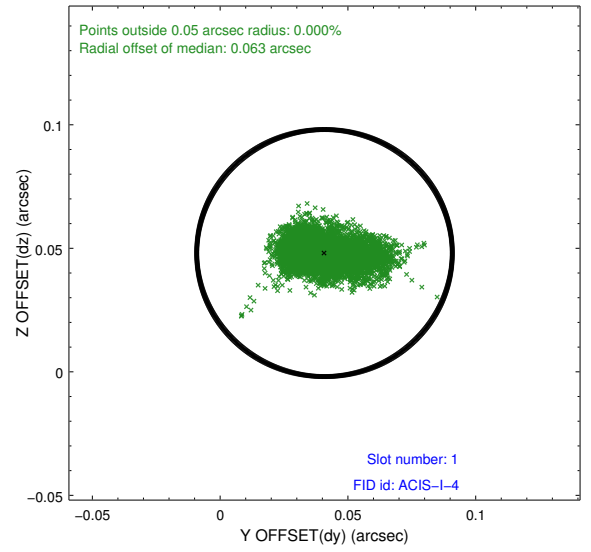
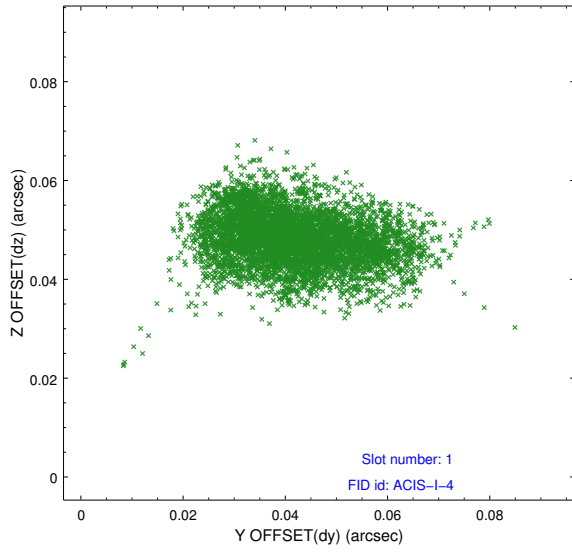


## 2.5 FID Slots

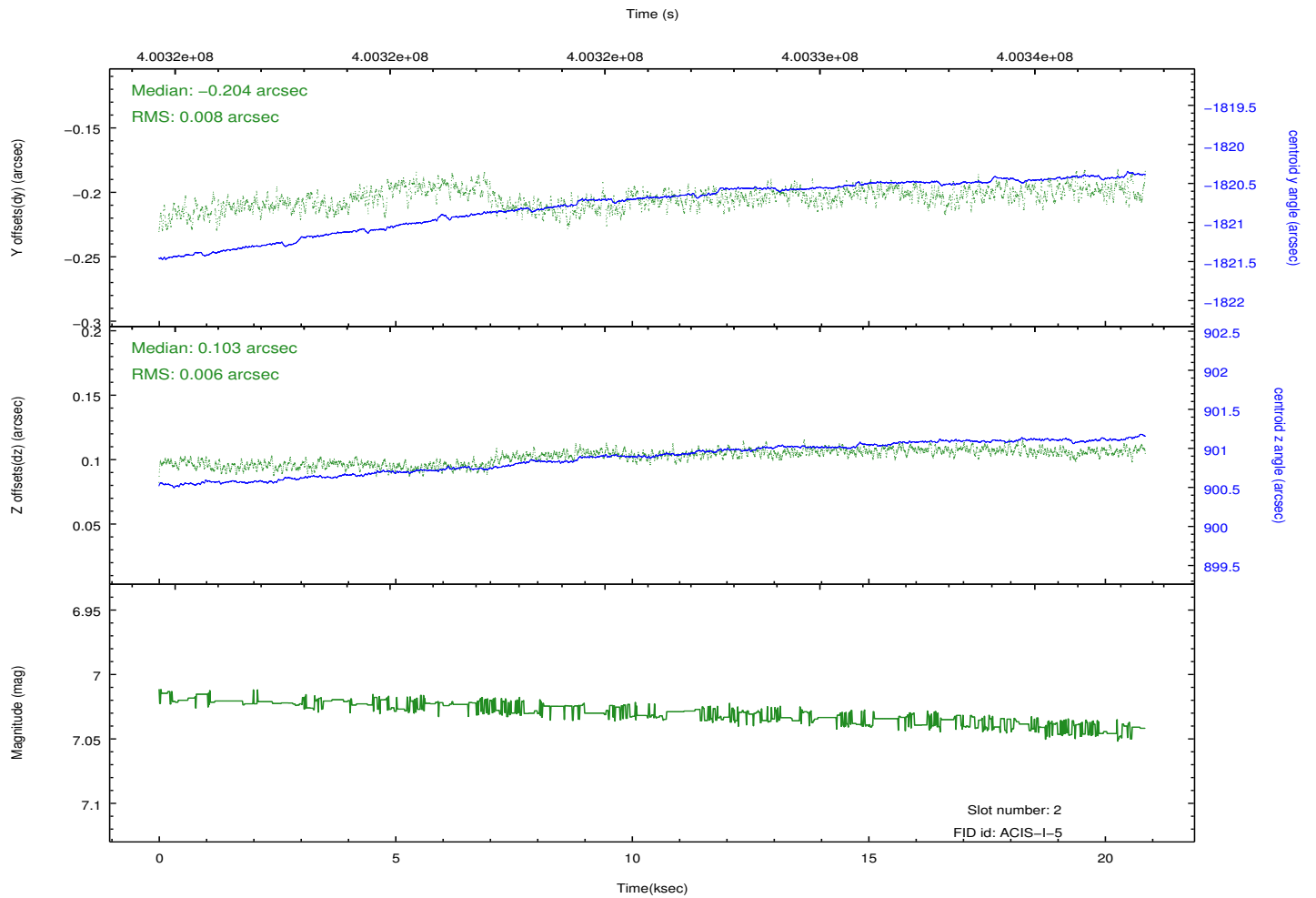
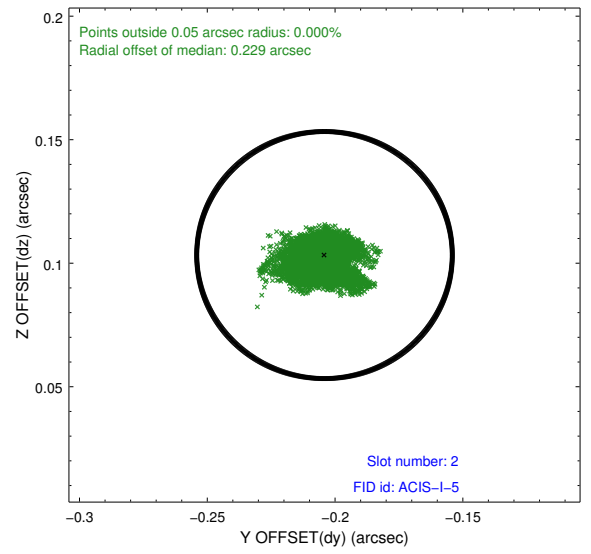
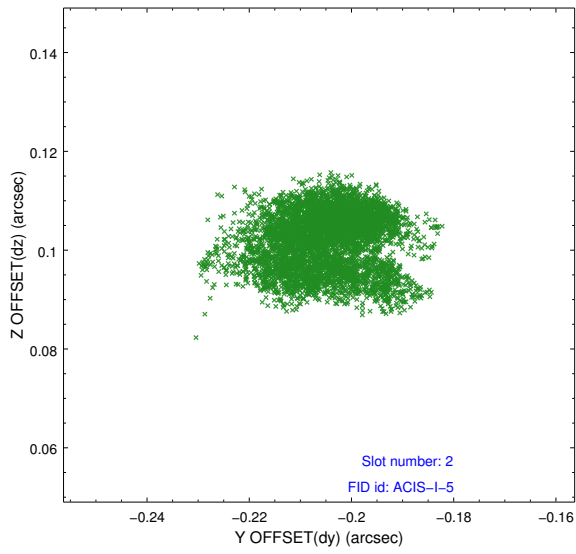
### 2.5.1 Slot 0



## 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)	2012.07.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.047659133852

### A.2 Comments