

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10434 - L2 Version 2  
Chandra X-Ray Center

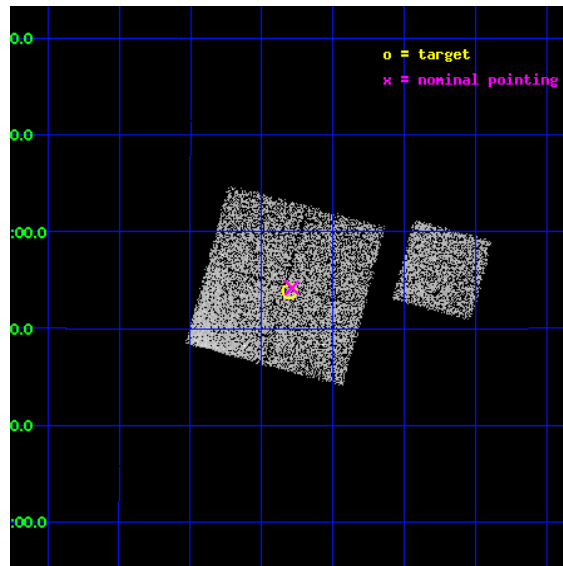
L2 Processing Date : Jun 3 2012

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# 1 Front

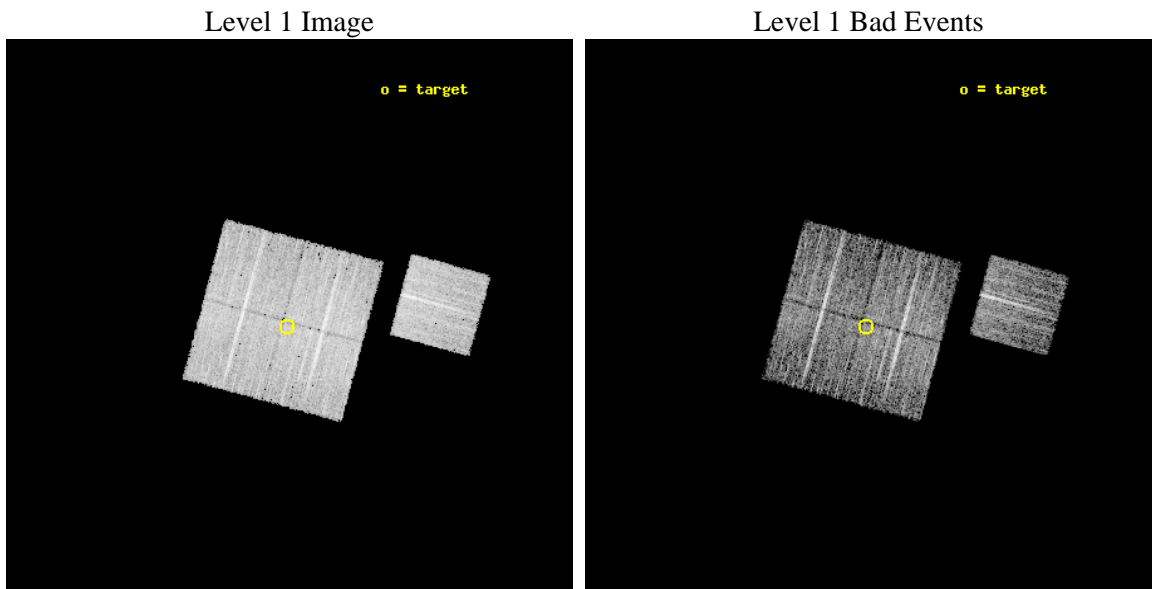
seq_num	800795	Sequence number
obs_id	10434	Observation id
title	A Chandra baseline for galaxy cluster evolution studies	Proposal t
observer	Dr Ben Maughan	Principal investigator
object	A2029	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	227.576358	Observer's specified target RA [deg]
dec_targ	5.896575	Observer's specified target Dec [deg]
ra_nom	227.57193124995	Nominal RA [deg]
dec_nom	5.9033650423974	Nominal Dec [deg]
roll_nom	105.20921019815	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5183.2000398636	Sum of GTIs [s]
livetime	5115.4777155264	Livetime [s]
ontime0	5183.2000398636	Sum of GTIs [s]
ontime1	5180.0590396523	Sum of GTIs [s]
ontime2	5183.2000398636	Sum of GTIs [s]
ontime3	5183.2000398636	Sum of GTIs [s]
ontime6	5183.2000398636	Sum of GTIs [s]
l2events	22847	Number of level 2 events



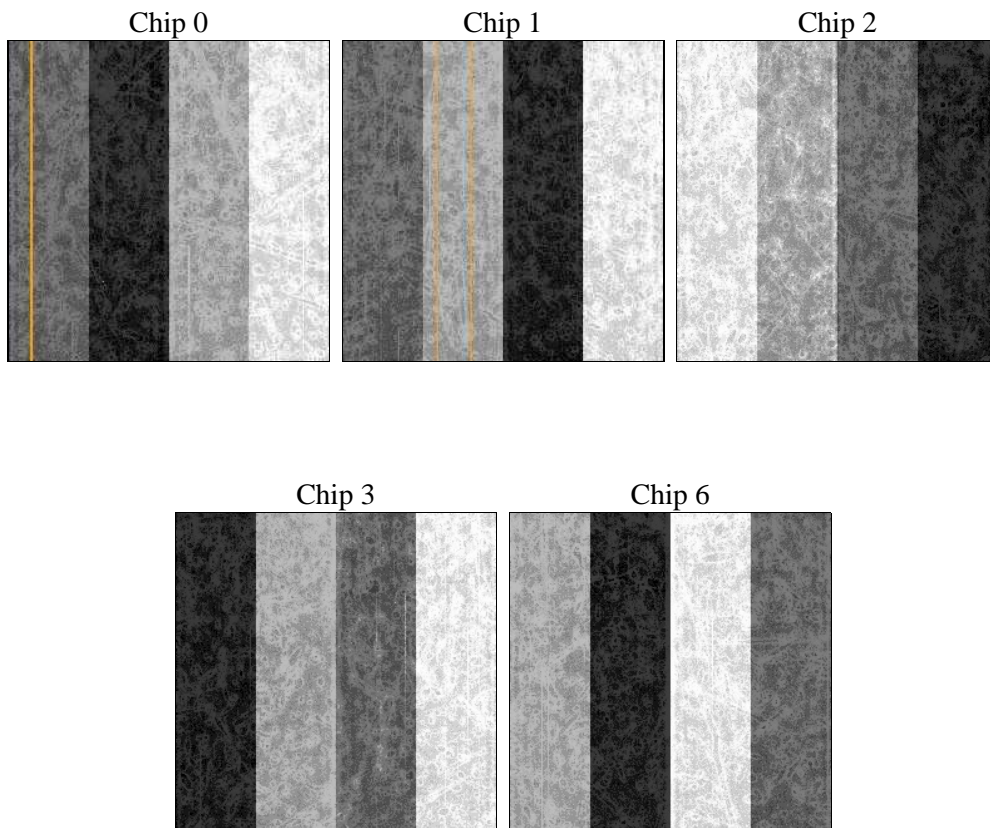
## 2 OBI

### 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	5183.2000398636	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime0	5183.2000398636	Sum of GTIs [s]
date	2012-06-03T08:01:38	Date and time of file creation	ontime1	5180.0590396523	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5183.2000398636	Sum of GTIs [s]
			ontime3	5183.2000398636	Sum of GTIs [s]
			ontime6	5183.2000398636	Sum of GTIs [s]
			l1events	240765	Number of level 1 events

### 2.1.4 Events

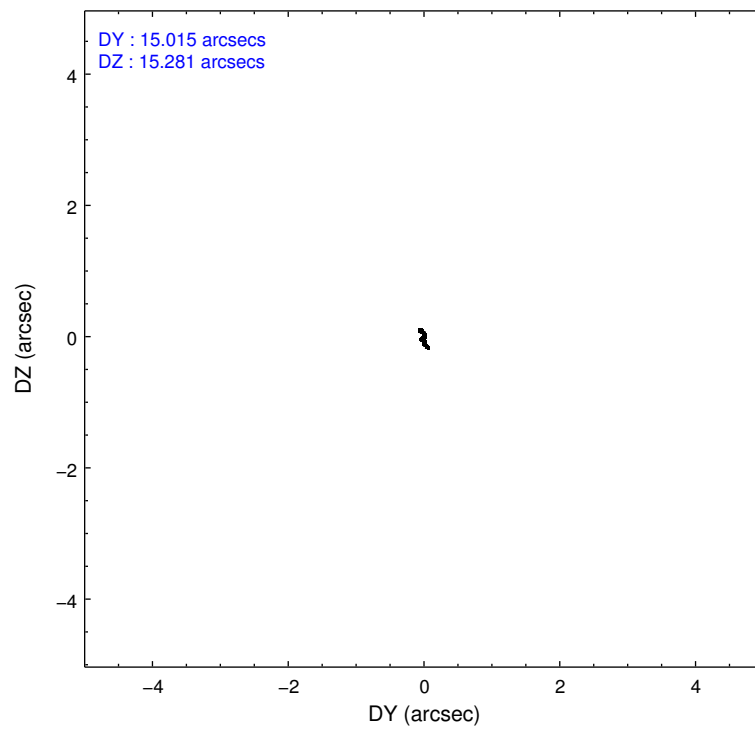
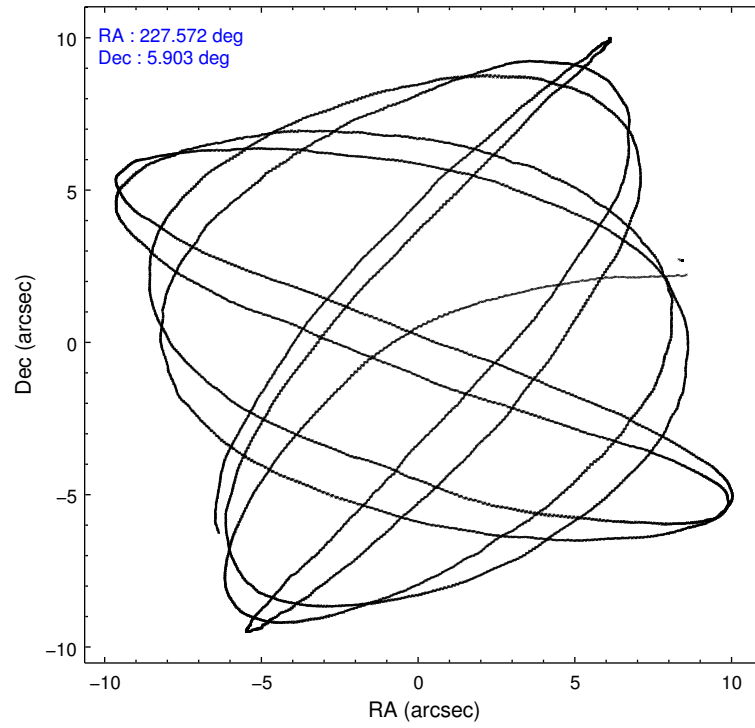
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	44692	46900	49555	50829	48789
rejected events	39761	39432	44686	46026	43913
rejected %	88%	84%	90%	90%	90%

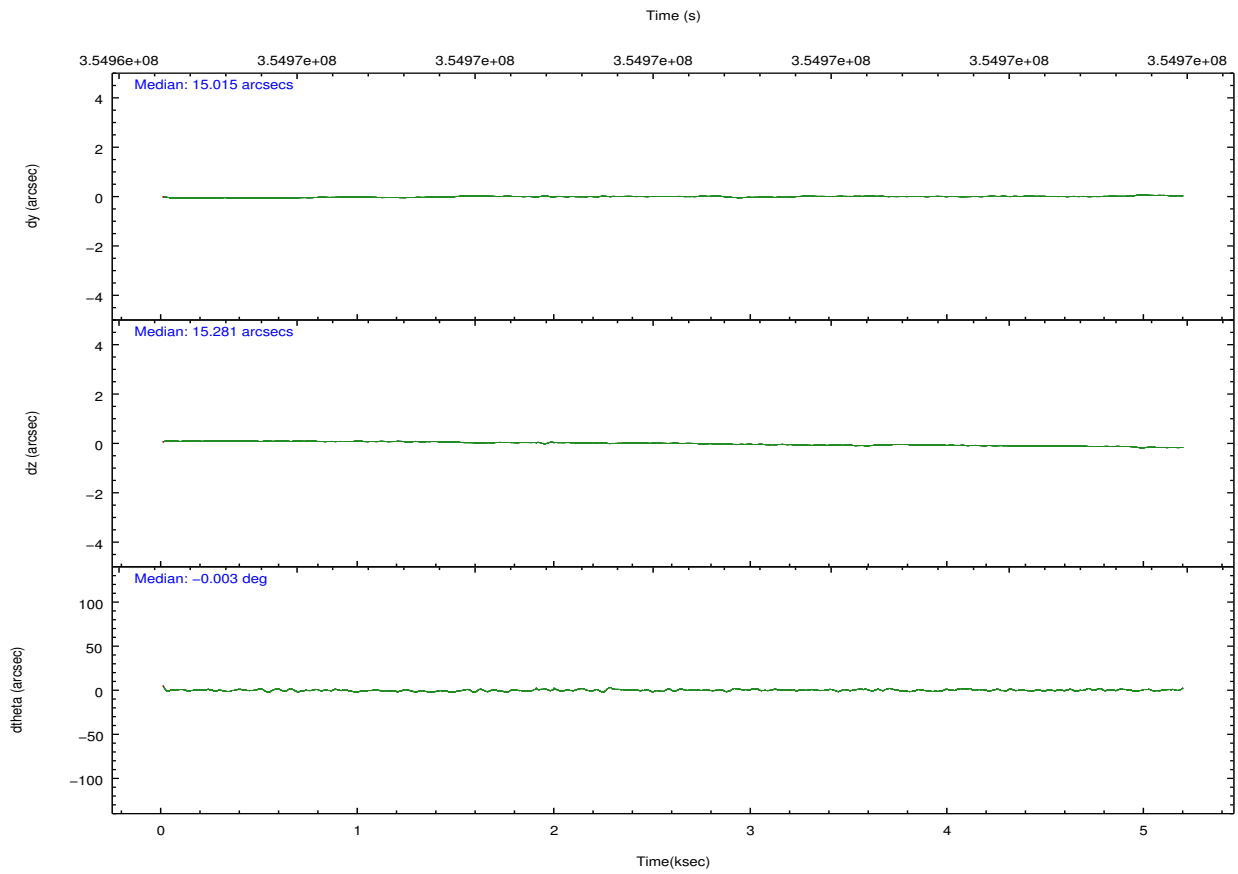
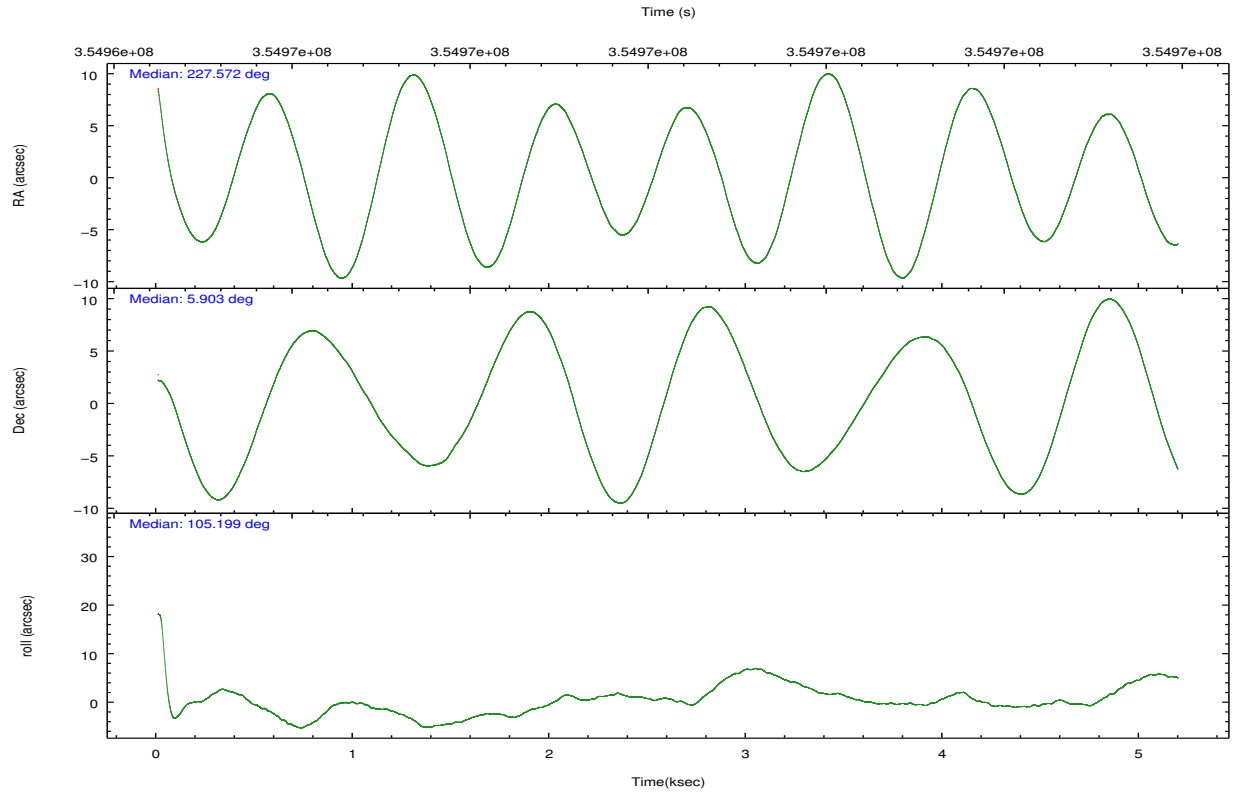
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1931	3887	2000	2005	1812
	4%	8%	4%	3%	3%
grade 1 events	31	34	39	27	35
	0%	0%	0%	0%	0%
grade 2 events	1314	1475	1173	1106	1172
	2%	3%	2%	2%	2%
grade 3 events	545	623	503	537	574
	1%	1%	1%	1%	1%
grade 4 events	497	657	540	522	522
	1%	1%	1%	1%	1%
grade 5 events	1809	1817	1674	2002	1864
	4%	3%	3%	3%	3%
grade 6 events	957	1179	941	941	1081
	2%	2%	1%	1%	2%
grade 7 events	37608	37228	42685	43689	41729
	84%	79%	86%	85%	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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	227.591694	227.5719312499461	CCD I2 on	Y	Y
[deg] Pointing Dec	5.884094	5.90336504239739	CCD I3 on	Y	Y
[deg] Pointing Roll	104.998431	105.2092101981454	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)	354965706.184000	354964544.13495	CCD S5 on	N	N
Observation start date	2009-04-01T09:34:00	2009-04-01T09:15:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	354970706.184000	354970847.37277	On-chip summing requested	N	N
Observation end date	2009-04-01T10:57:20	2009-04-01T11:00:47	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





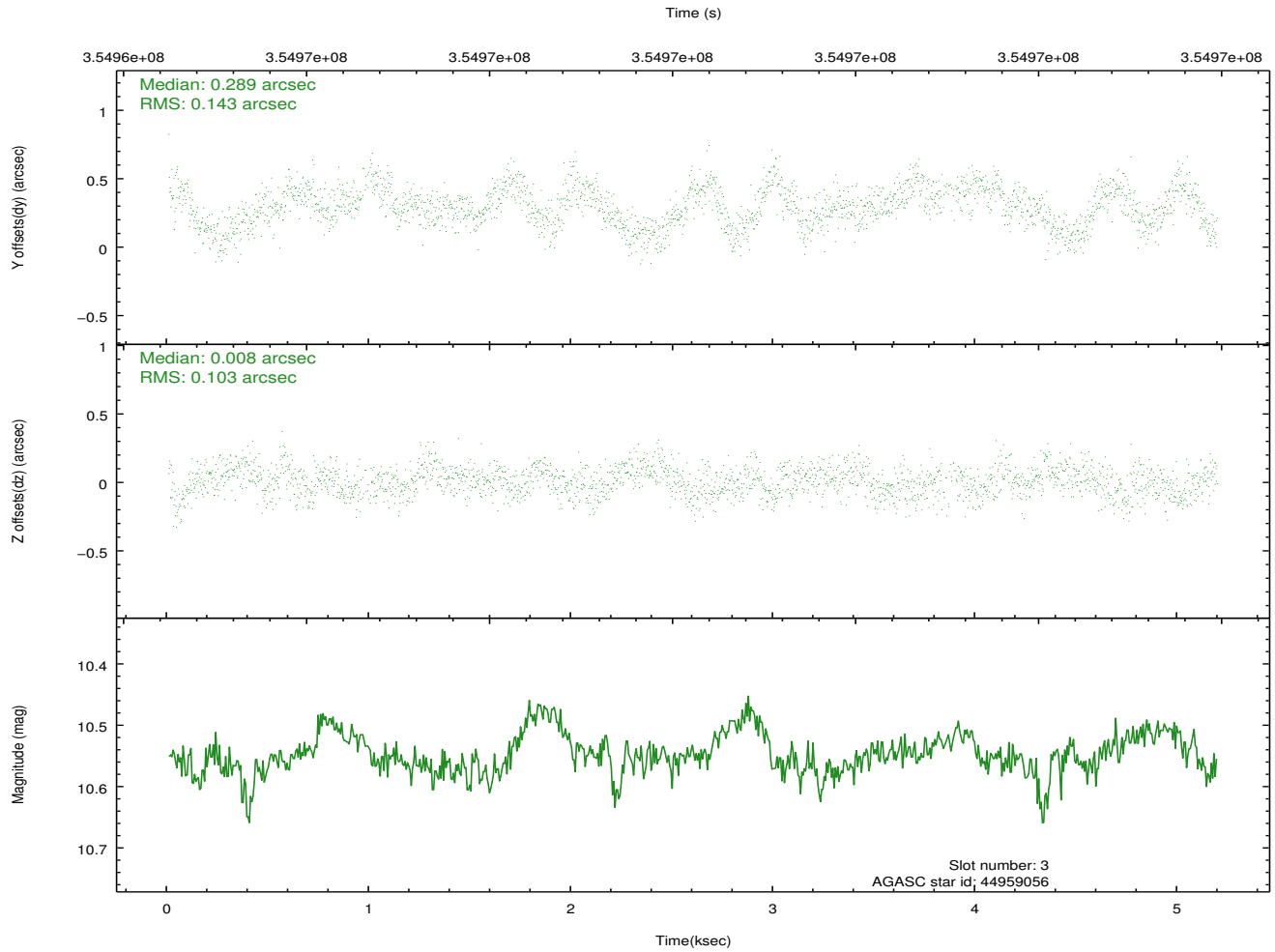
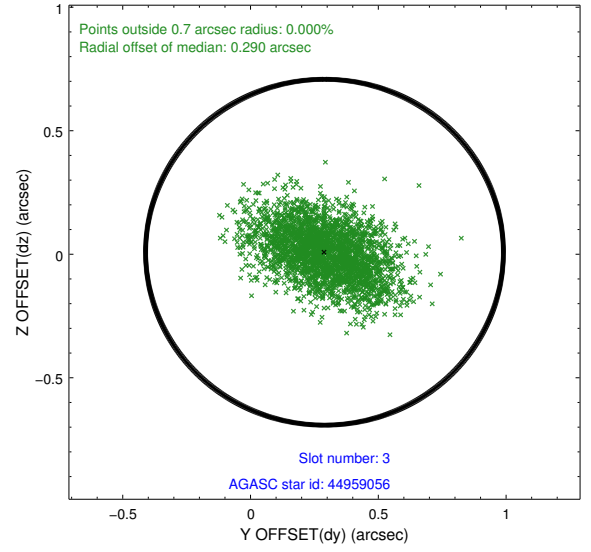
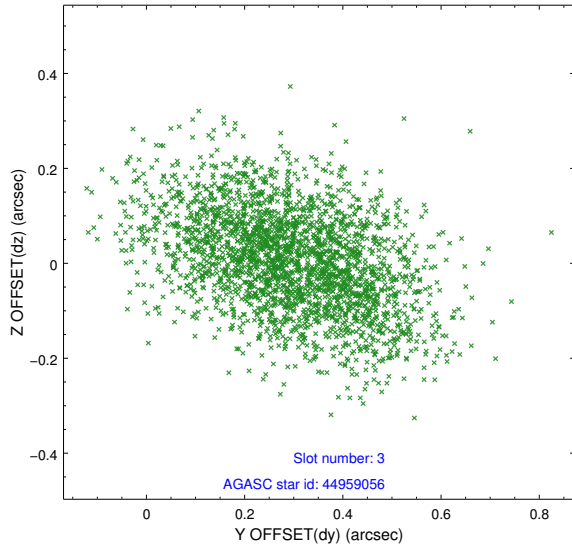
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	6.97	1266	-0.037	0.037	0.011	0.019	0.000000	0.000000	924.43	-838.82
1	FID	ACIS-I-2	6.88	1266	-0.140	-0.059	0.007	0.011	0.000000	0.000000	-769.12	-845.97
2	FID	ACIS-I-4	6.89	1265	0.078	0.088	0.007	0.012	0.000000	0.000000	2143.87	1060.46
3	GUIDE	44959056	10.55	2497	0.289	0.008	0.186	0.312	227.388506	5.331015	-1734.29	1218.52
4	GUIDE	45483400	9.59	2527	0.124	0.130	0.157	0.255	228.040804	6.636037	2200.04	-2250.91
5	GUIDE	45486896	10.20	2530	0.039	-0.311	0.227	0.357	227.000545	5.964623	829.79	1967.92
6	GUIDE	45488080	9.54	2525	-0.231	-0.165	0.141	0.217	226.925531	5.883747	617.55	2304.73
7	GUIDE	45485880	9.67	2531	-0.230	0.337	0.139	0.227	228.190636	6.293142	869.68	-2450.09

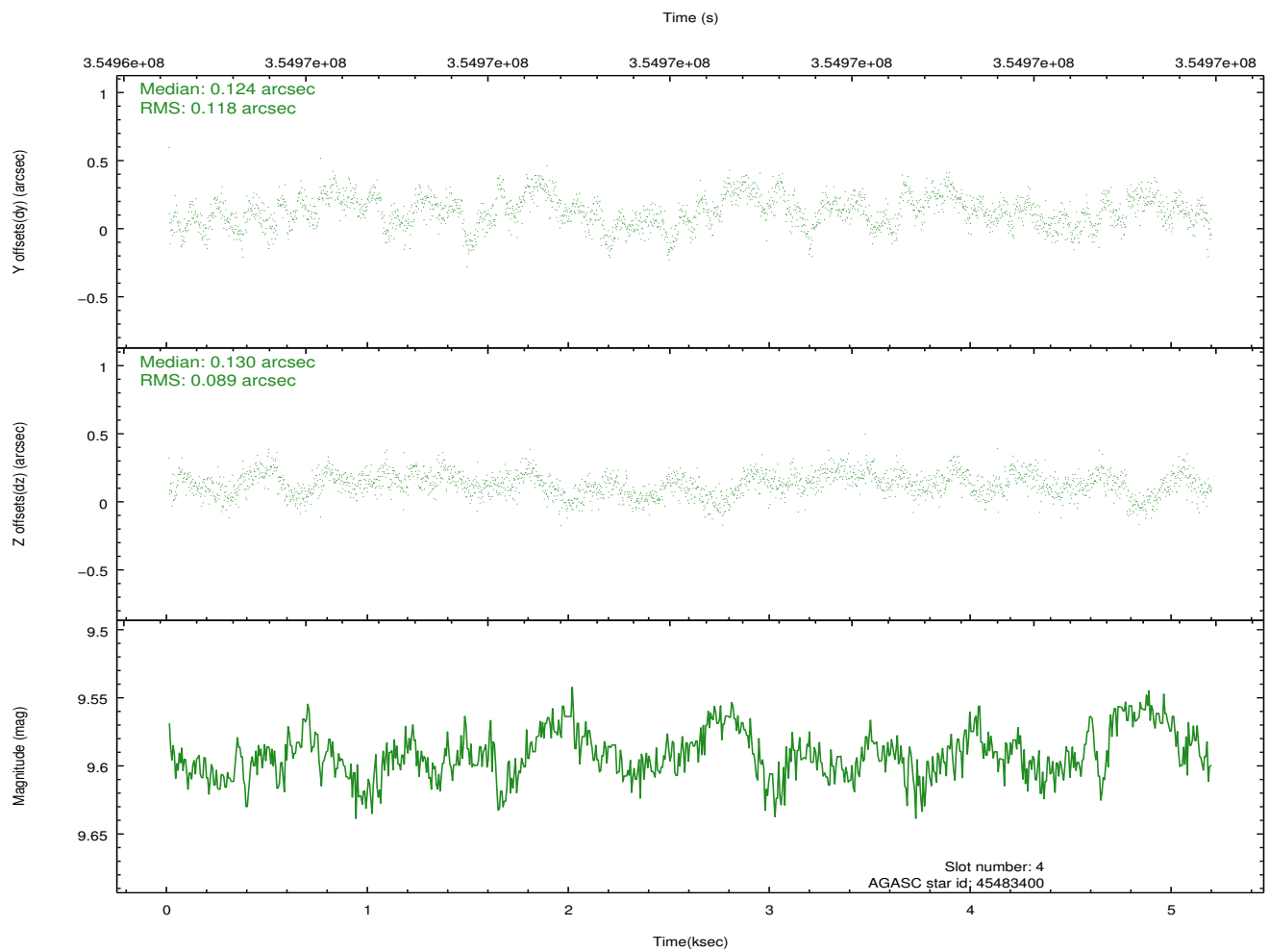
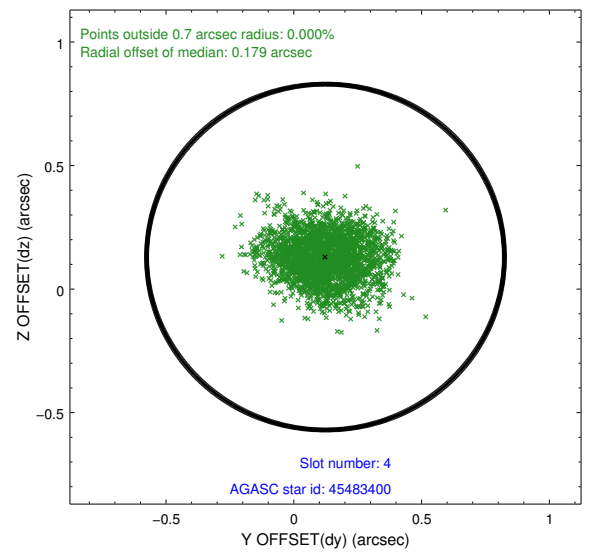
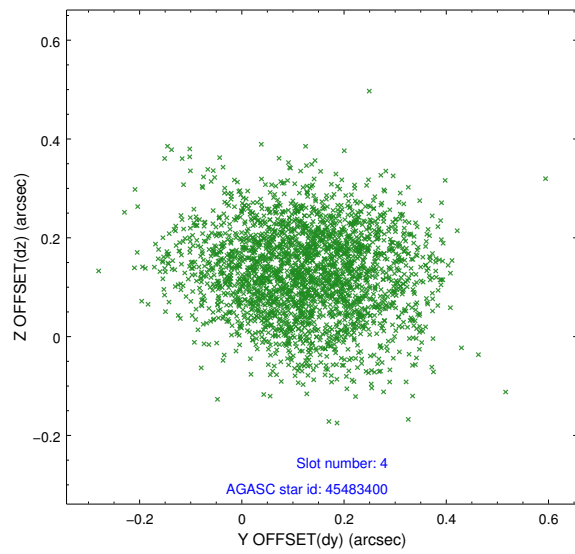
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## 2.4 Star Slots

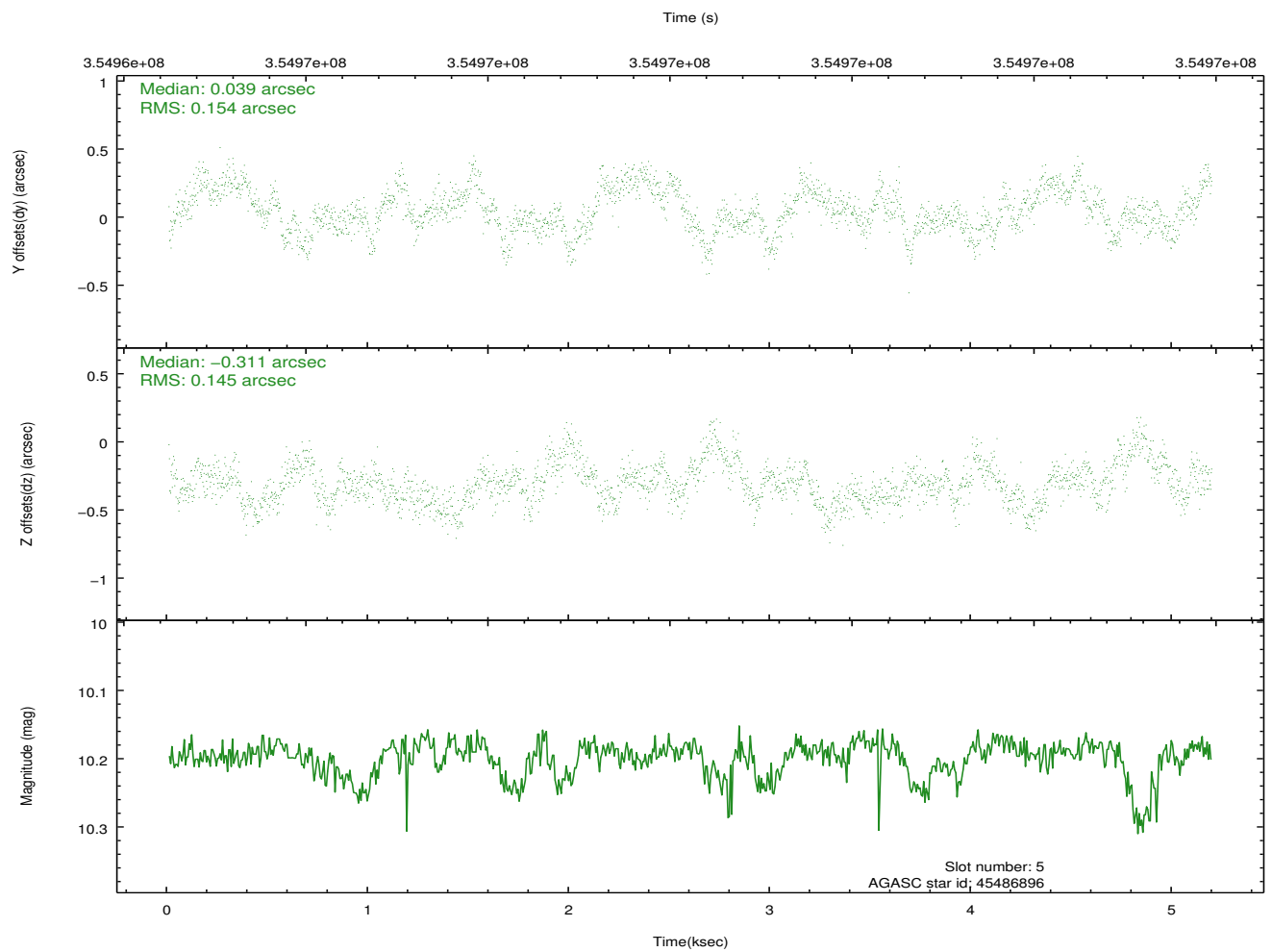
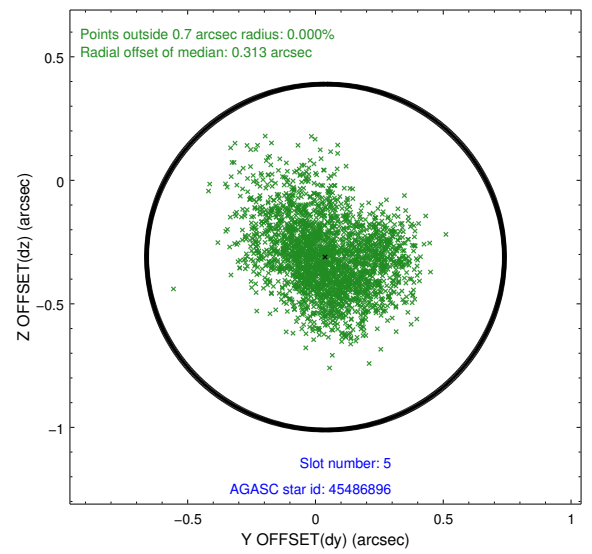
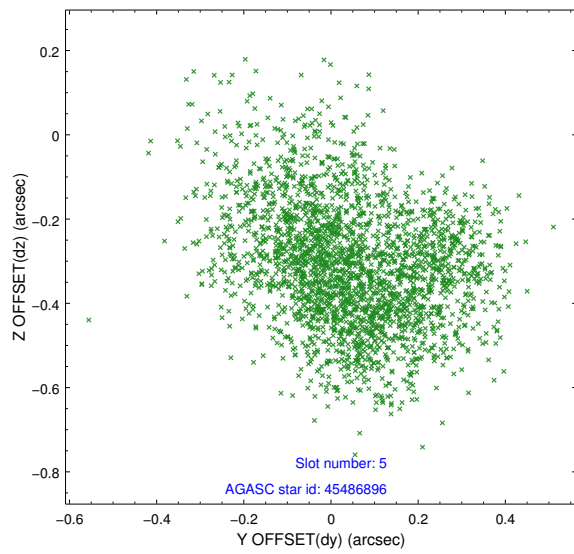
### 2.4.1 Slot 3



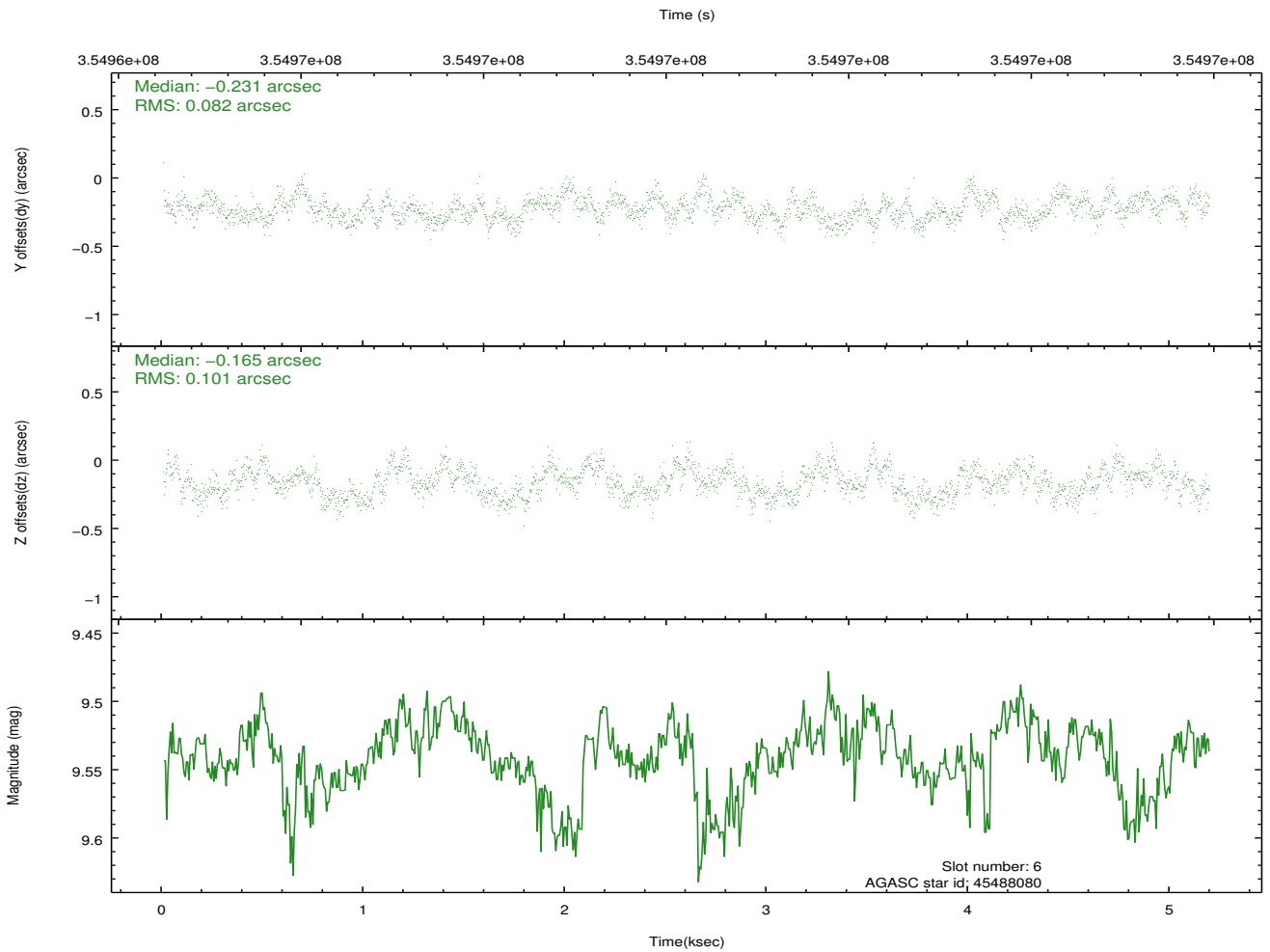
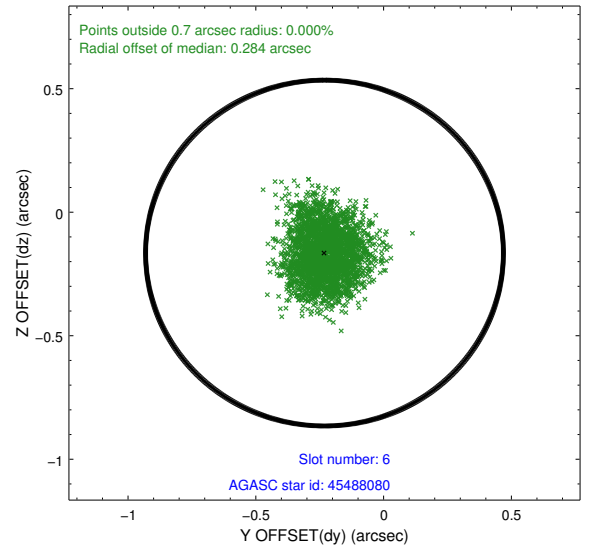
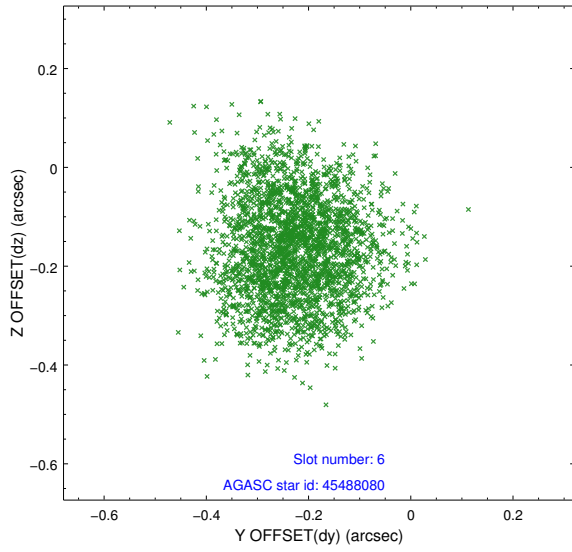
## 2.4.2 Slot 4



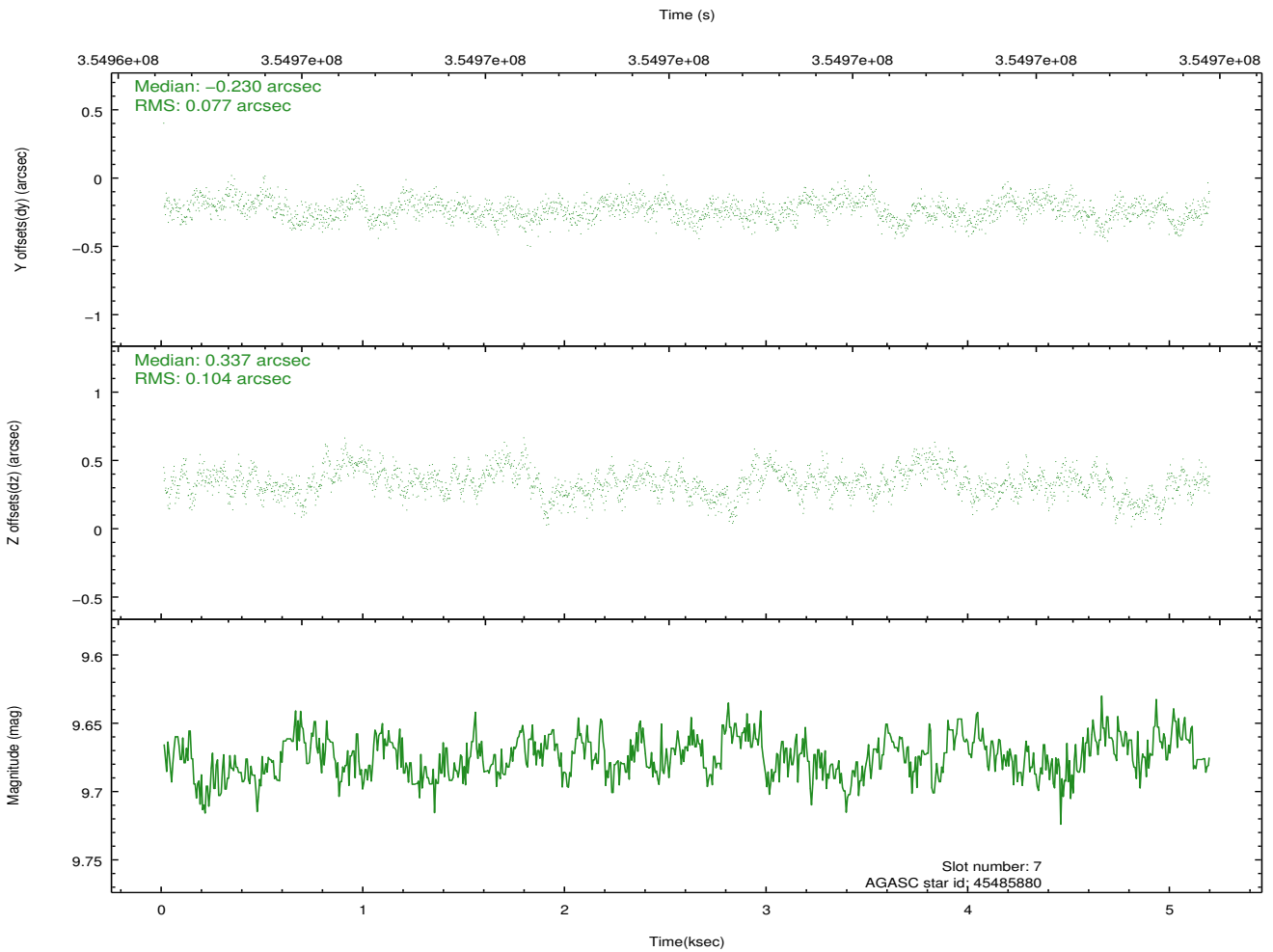
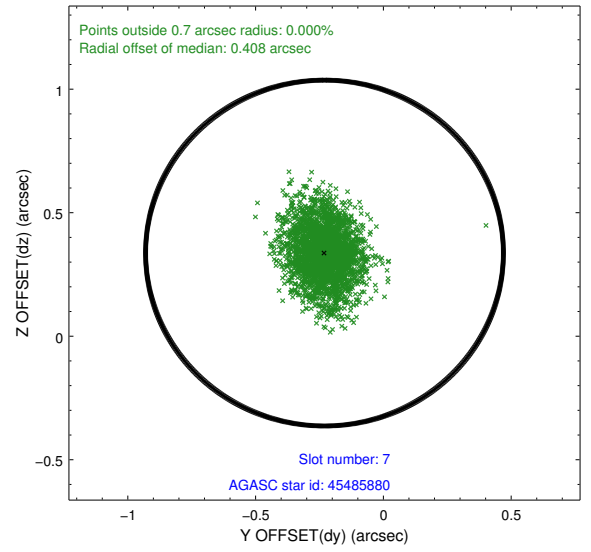
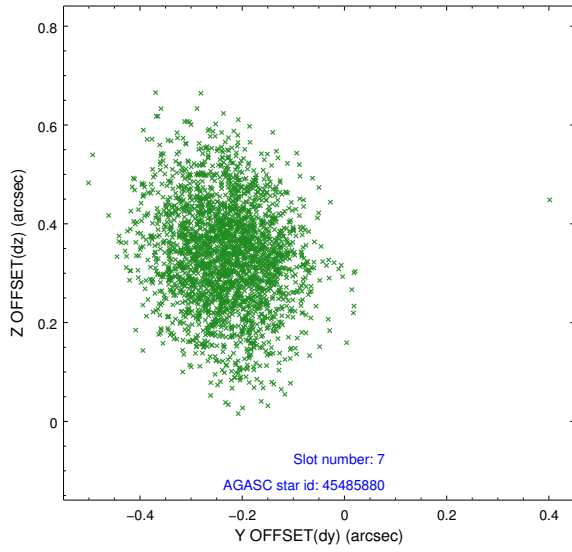
### 2.4.3 Slot 5



## 2.4.4 Slot 6

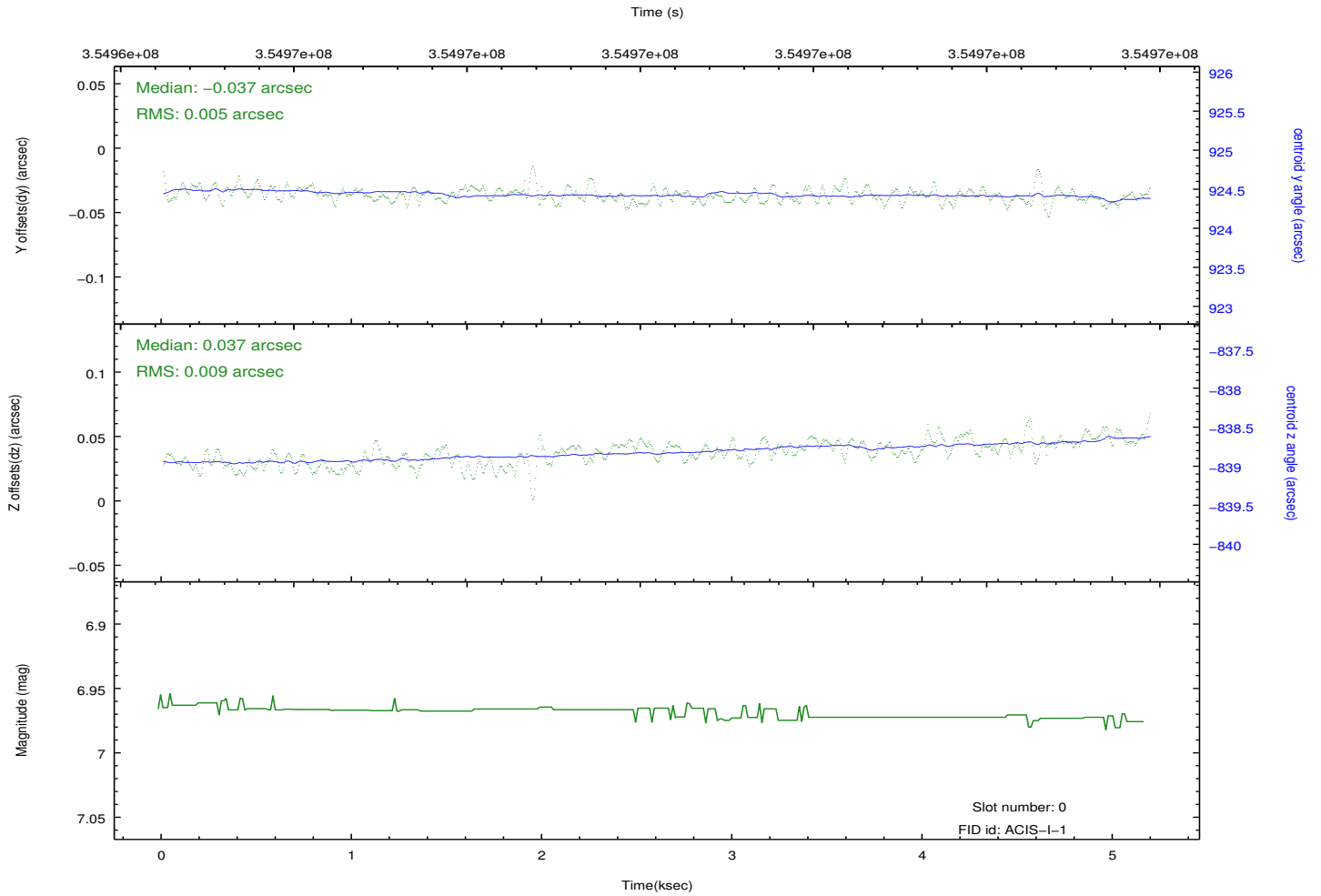
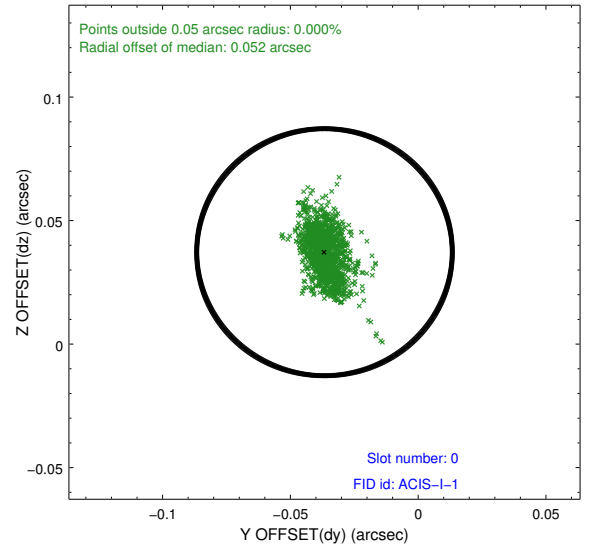
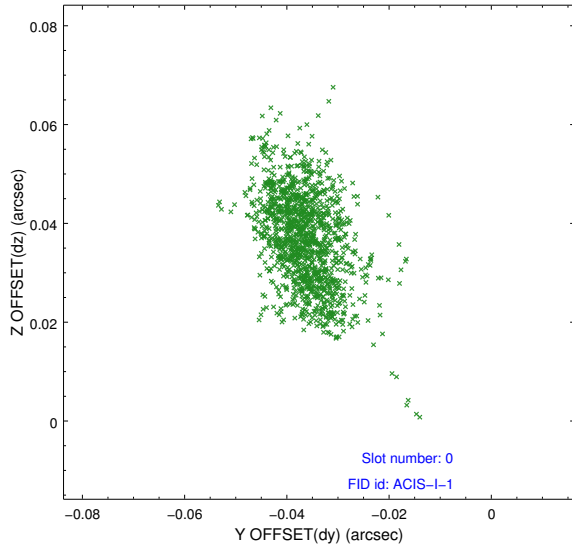


### 2.4.5 Slot 7

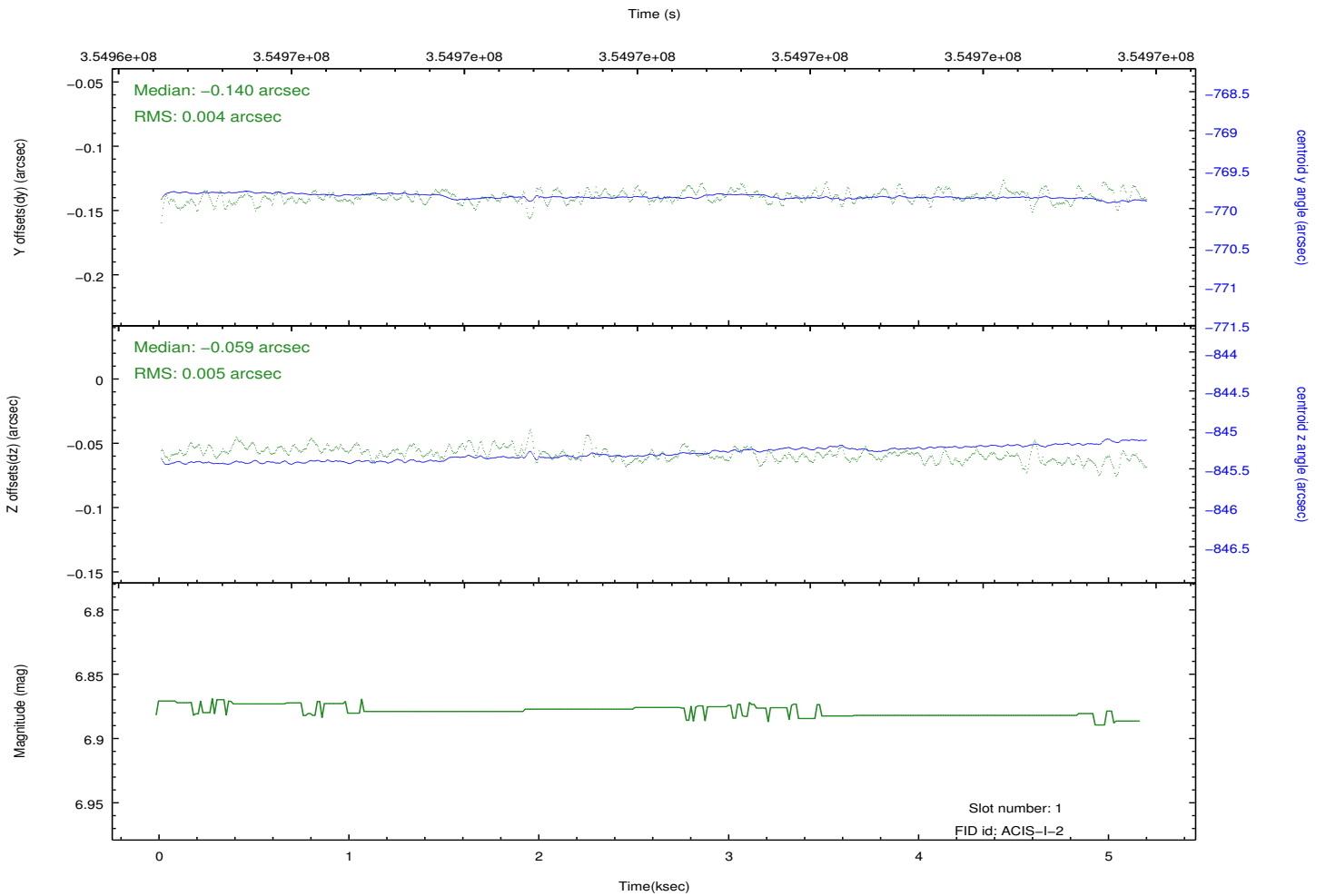
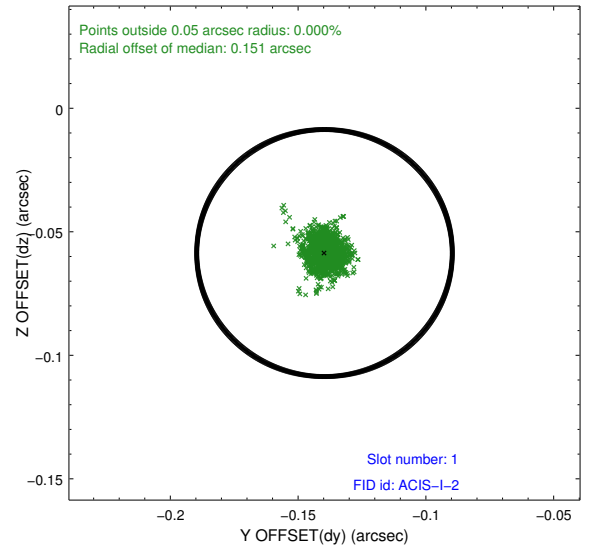
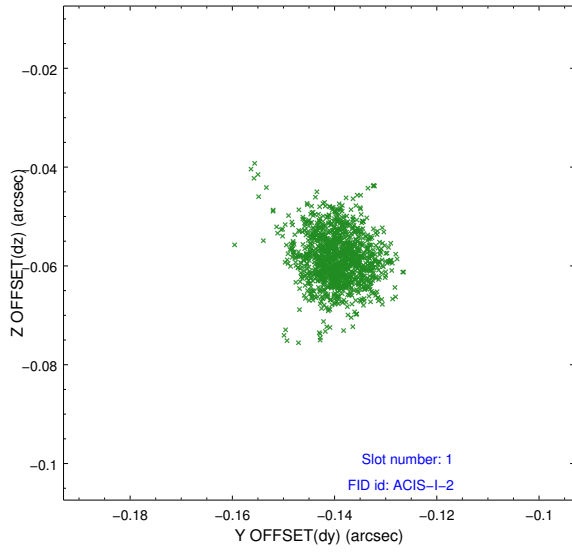


## 2.5 FID Slots

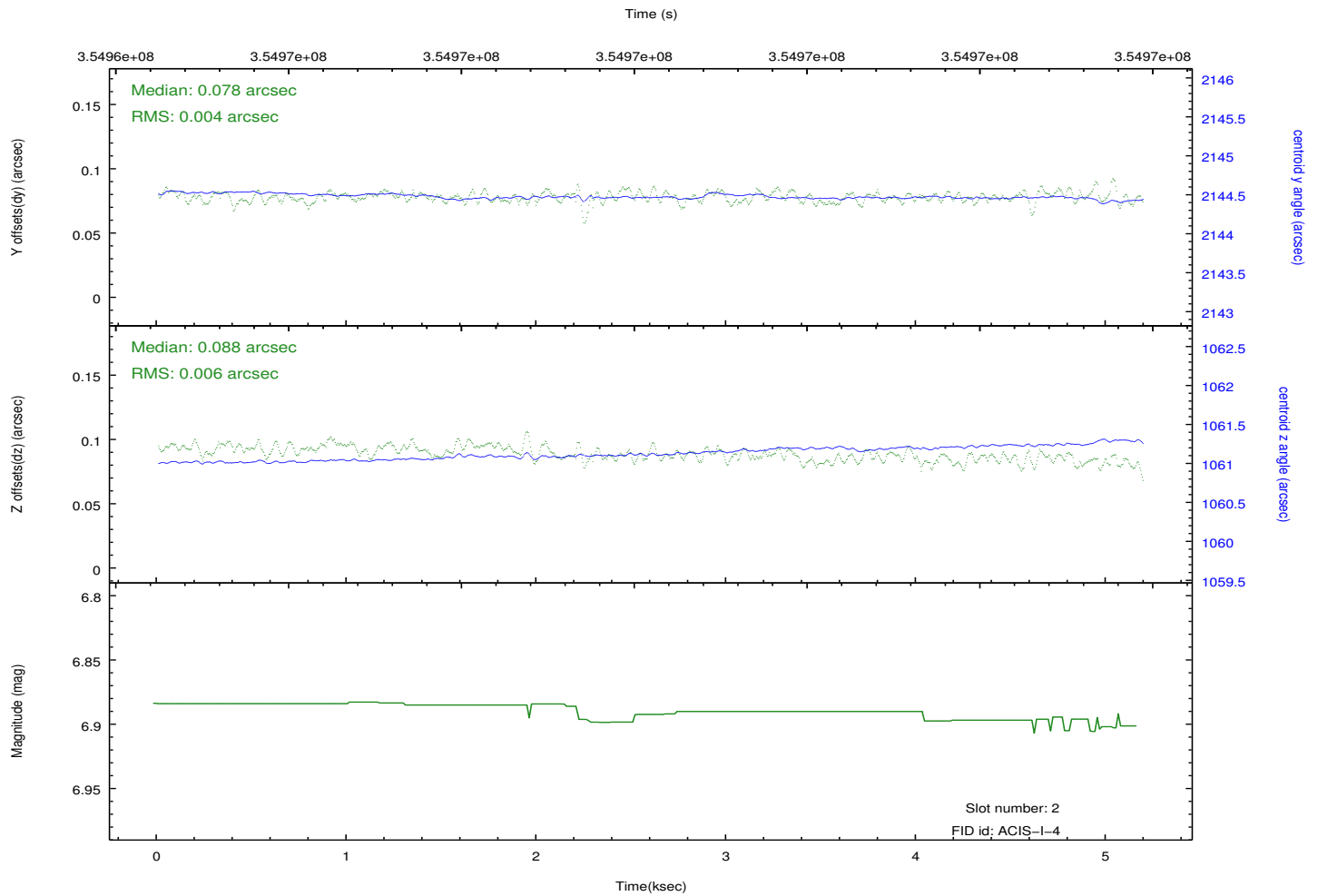
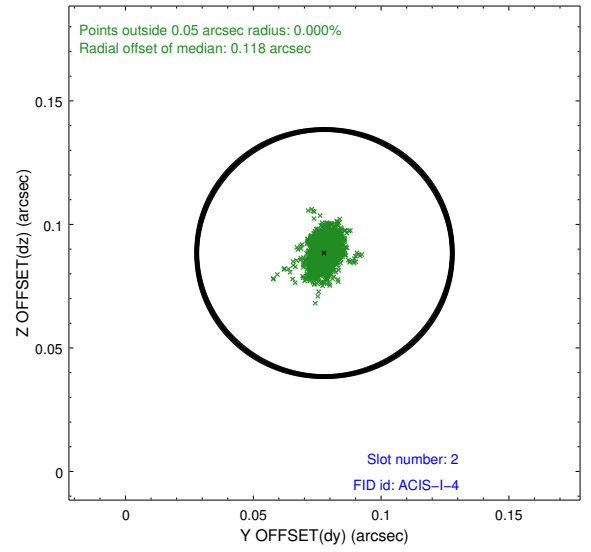
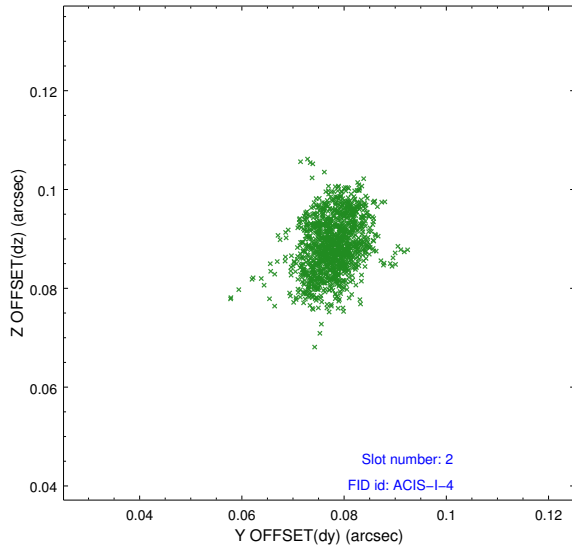
### 2.5.1 Slot 0



## 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)	2012.06.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.18320003

## A.2 Comments