

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12010 - L2 Version 3  
Chandra X-Ray Center

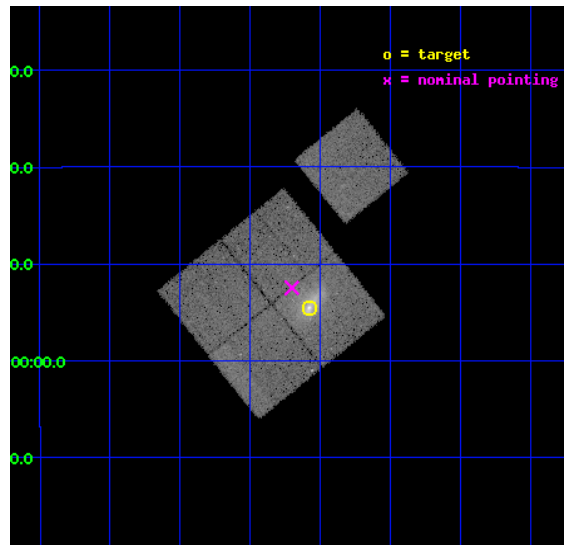
L2 Processing Date : Jun 16 2012

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# 1 Front

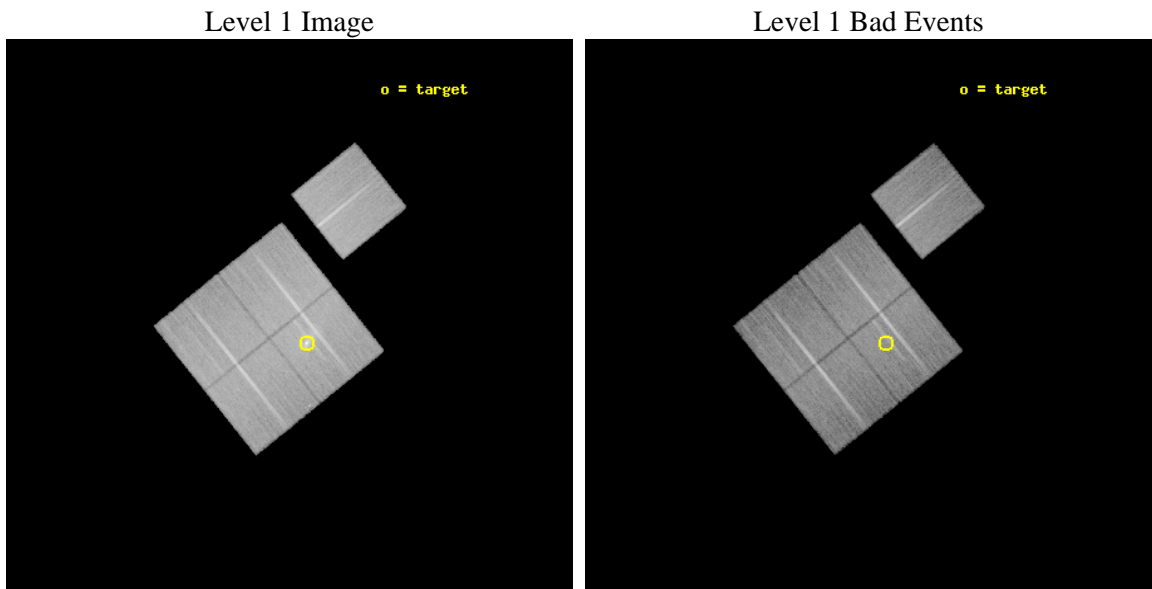
seq_num	800899	Sequence number
obs_id	12010	Observation id
title	Anatomy of a merger: the curious case of MACS J0417.5-1154	Proposa
observer	Dr Anja von der Linden	Principal investigator
object	J0417.5-1154	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	64.39456	Observer's specified target RA [deg]
dec_targ	-11.9094	Observer's specified target Dec [deg]
ra_nom	64.425545201864	Nominal RA [deg]
dec_nom	-11.874708062492	Nominal Dec [deg]
roll_nom	51.215050822619	Nominal Roll [deg]
revision	3	Processing version of data
ontime	26126.800200939	Sum of GTIs [s]
livetime	25785.434322043	Livetime [s]
ontime0	26120.51815027	Sum of GTIs [s]
ontime1	26117.377109885	Sum of GTIs [s]
ontime2	26126.800200939	Sum of GTIs [s]
ontime3	26126.800200939	Sum of GTIs [s]
ontime6	26126.800200939	Sum of GTIs [s]
l2events	117026	Number of level 2 events



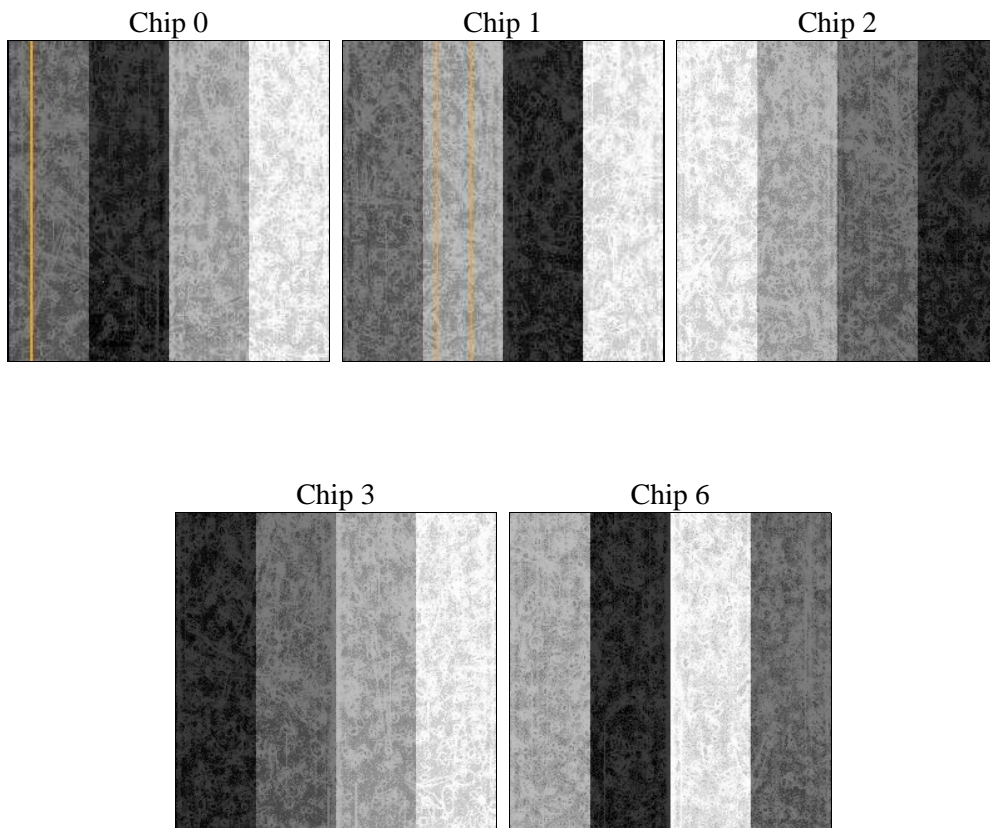
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	26126.800200939	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime0	26120.51815027	Sum of GTIs [s]
date	2012-06-16T02:03:22	Date and time of file creation	ontime1	26117.377109885	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	26126.800200939	Sum of GTIs [s]
			ontime3	26126.800200939	Sum of GTIs [s]
			ontime6	26126.800200939	Sum of GTIs [s]
			l1events	1178361	Number of level 1 events

### 2.1.4 Events

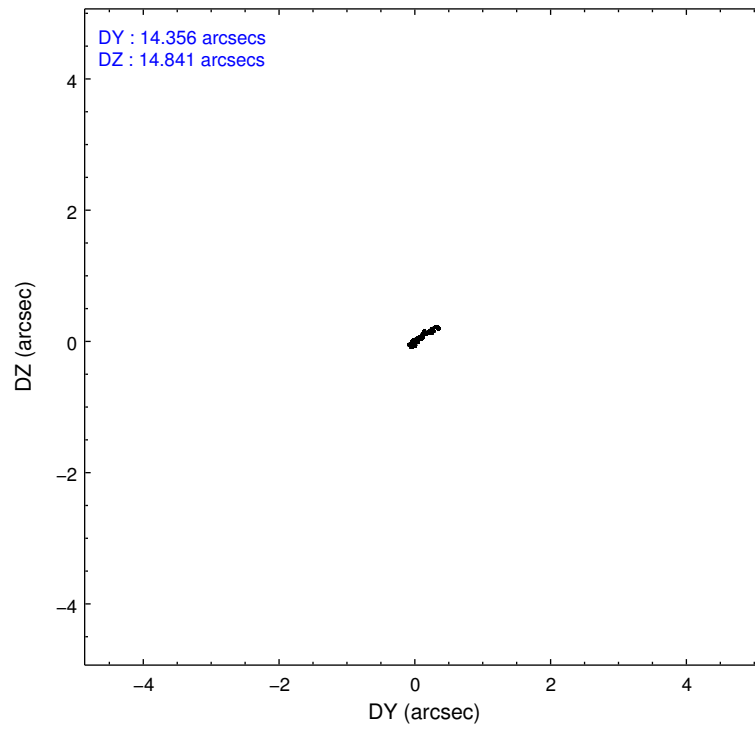
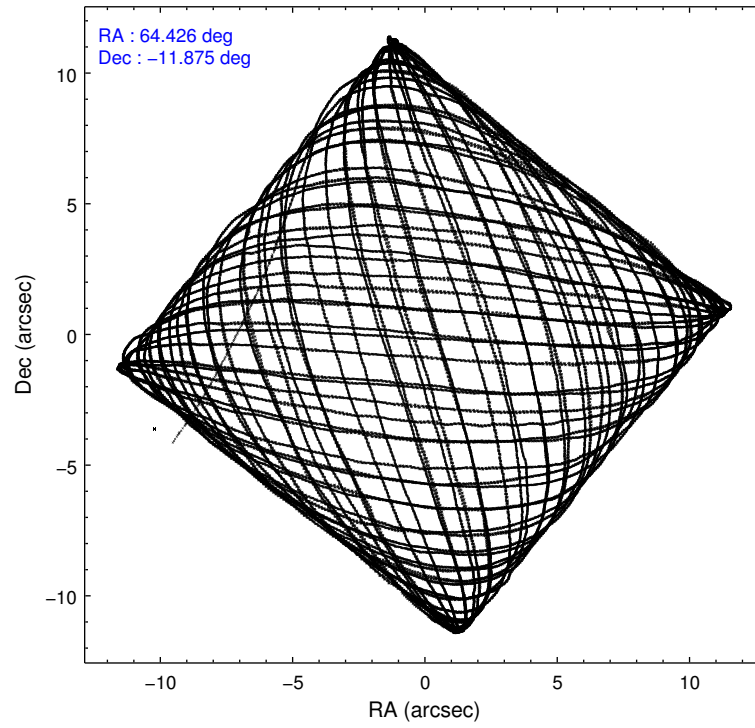
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	218991	220229	242776	255646	240719
rejected events	195745	193890	219892	215157	216851
rejected %	89%	88%	90%	84%	90%

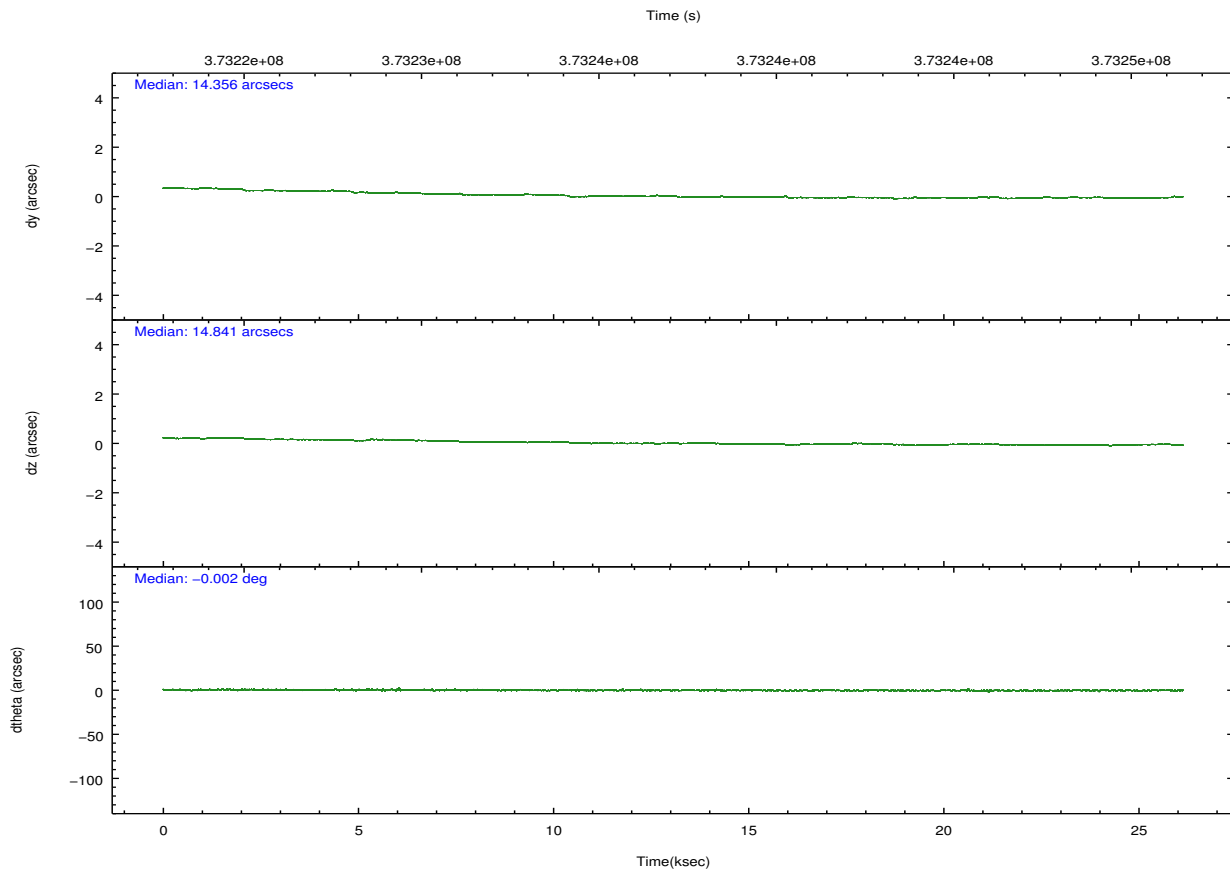
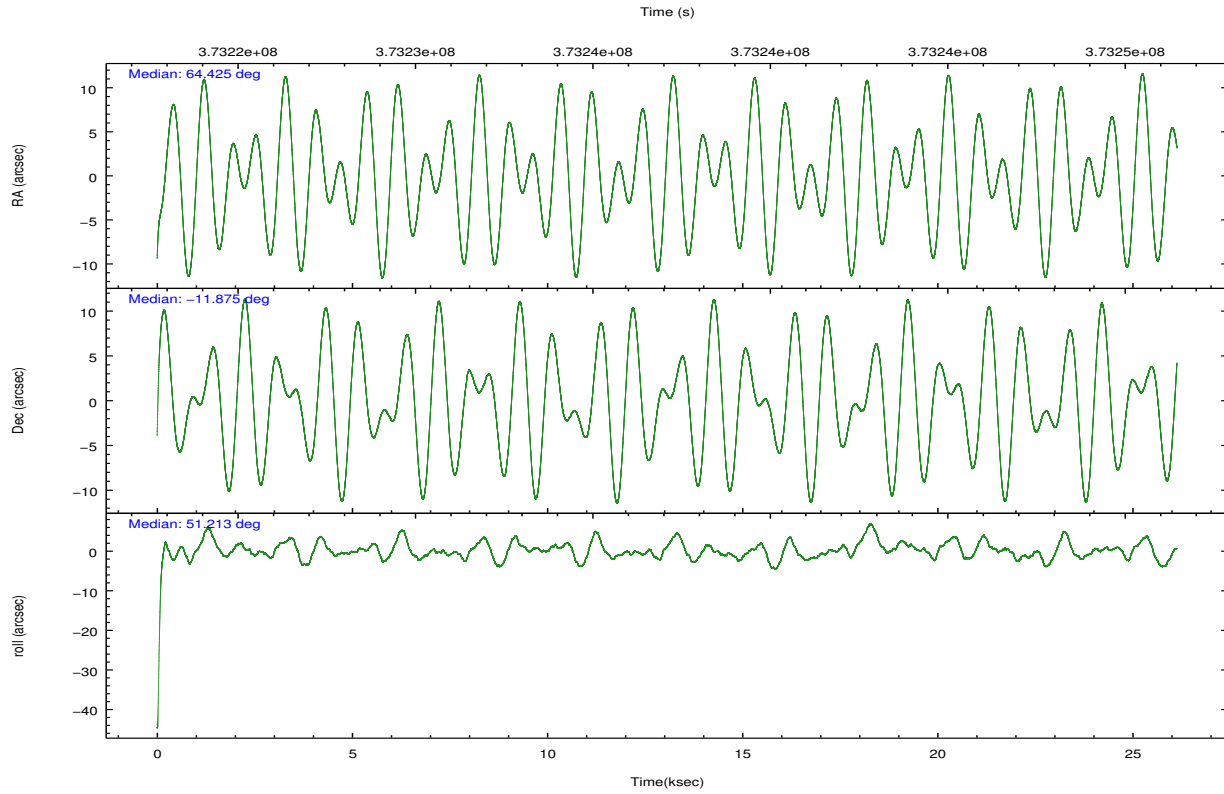
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8492	10192	8803	23382	8792
	3%	4%	3%	9%	3%
grade 1 events	156	124	172	232	108
	0%	0%	0%	0%	0%
grade 2 events	5822	6122	5802	6817	5419
	2%	2%	2%	2%	2%
grade 3 events	2696	2907	2405	3184	2650
	1%	1%	0%	1%	1%
grade 4 events	2442	2796	2537	3037	2642
	1%	1%	1%	1%	1%
grade 5 events	8822	9353	8259	10045	9729
	4%	4%	3%	3%	4%
grade 6 events	4823	5444	4402	5236	5381
	2%	2%	1%	2%	2%
grade 7 events	185738	183291	210396	203713	205998
	84%	83%	86%	79%	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	64.421365	64.42554520186444	CCD I2 on	Y	Y
[deg] Pointing Dec	-11.901898	-11.8747080624916	CCD I3 on	Y	Y
[deg] Pointing Roll	51.005530	51.21505082261911	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	-227.742463	-227.734108438797	CCD S3 on	N	N
[mm] SIM translation stage offset	-5.85	-5.858344564132665	CCD S4 on	N	N
[s] Observation start time (MET)	373224158.184000	373222615.84827	CCD S5 on	N	N
Observation start date	2009-10-29T17:21:32	2009-10-29T16:56:55	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	373250158.184000	373251377.86222	On-chip summing requested	N	N
Observation end date	2009-10-30T00:34:52	2009-10-30T00:56:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



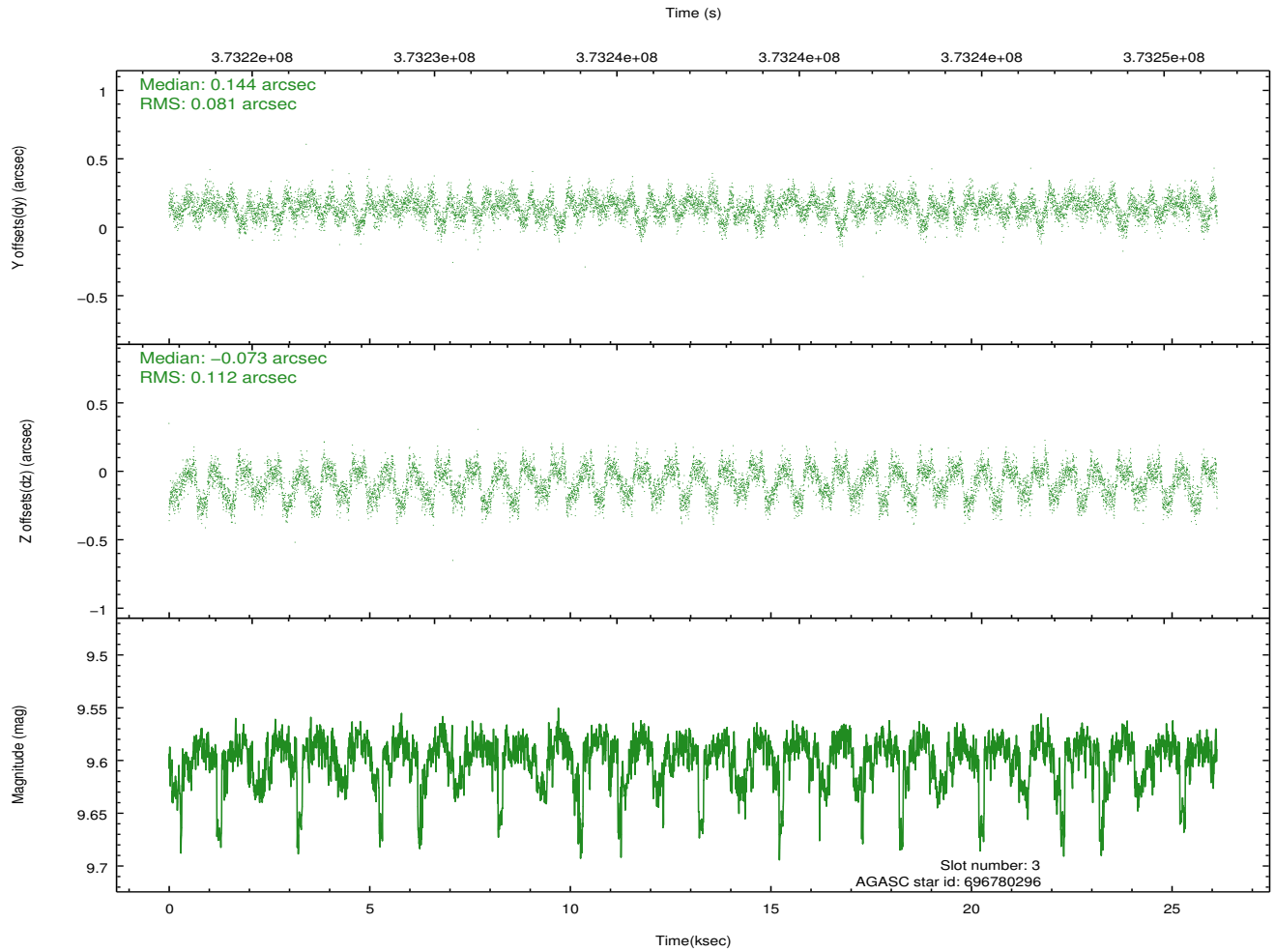
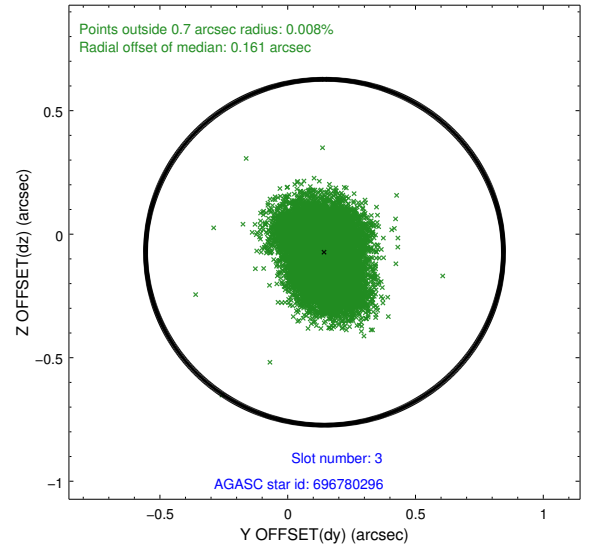
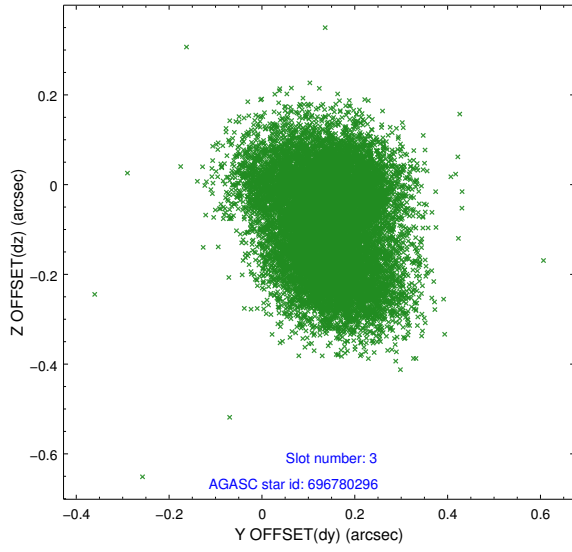


### Slot Statistics

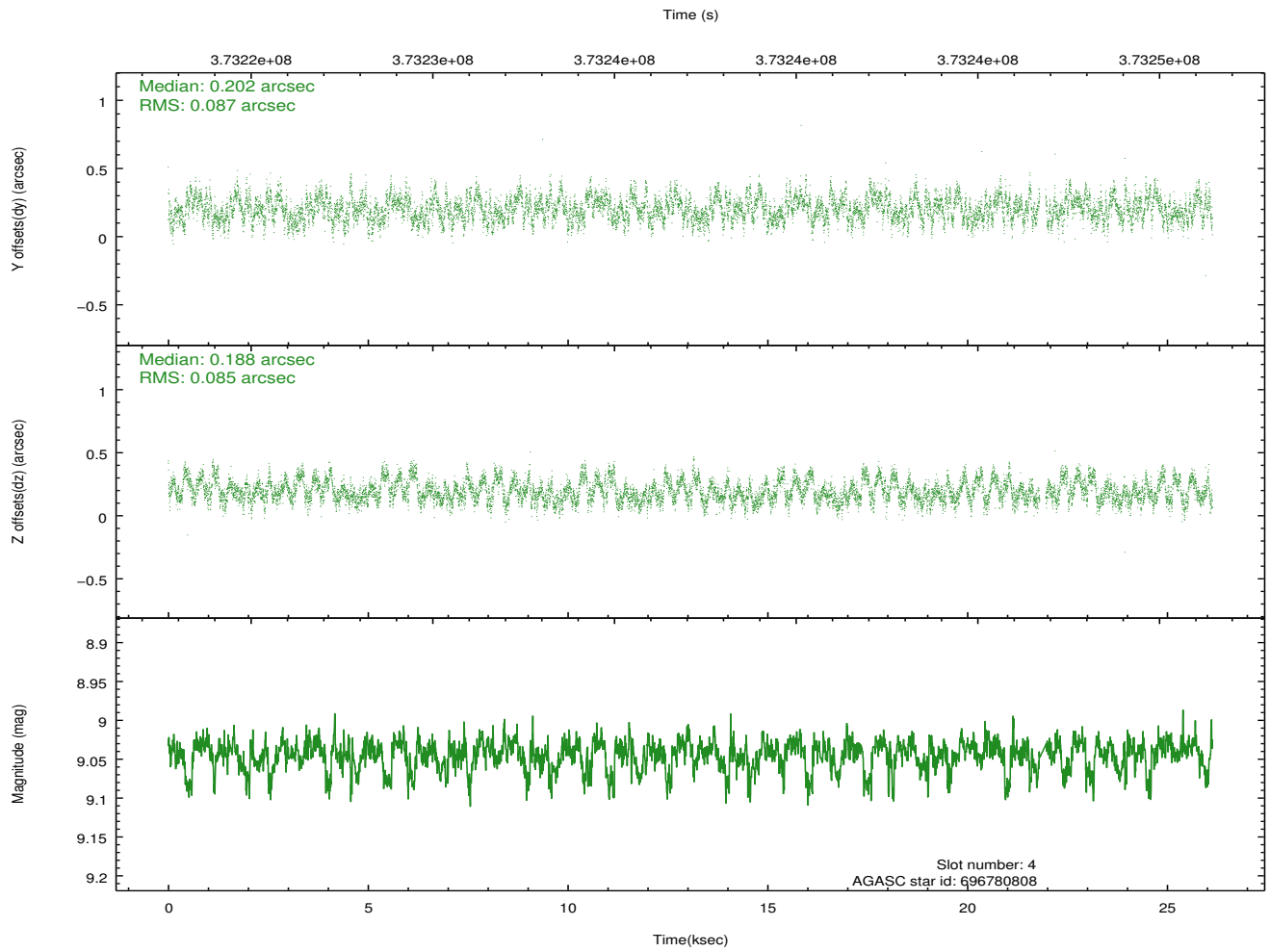
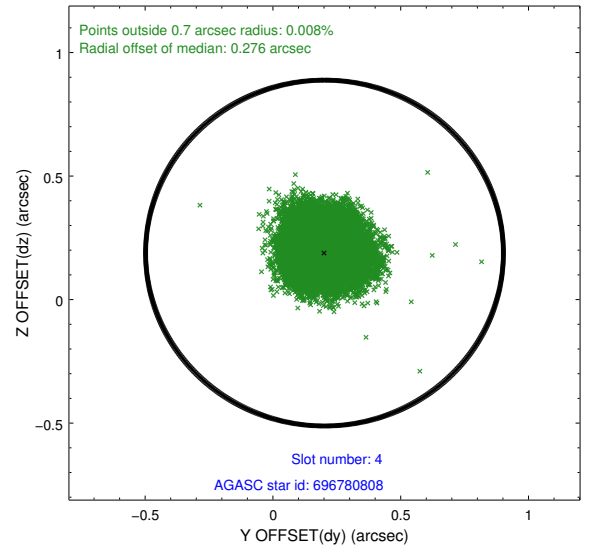
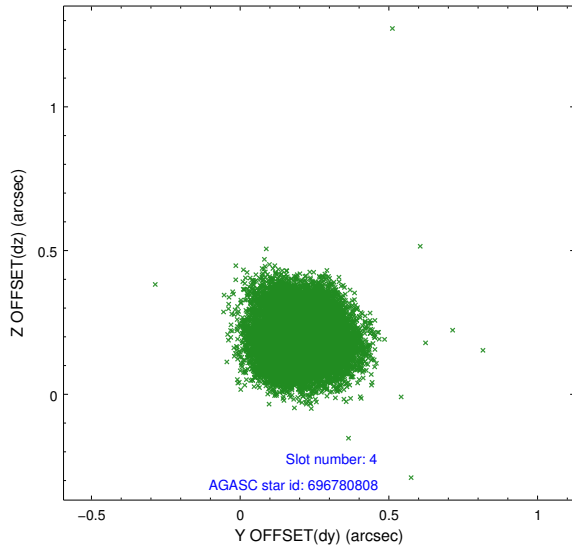
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.07	6373	0.128	-0.092	0.009	0.016	0.000000	0.000000	925.09	-958.80
1	FID	ACIS-I-5	7.07	6374	-0.298	0.101	0.008	0.015	0.000000	0.000000	-1823.39	938.81
2	FID	ACIS-I-6	7.07	6374	0.078	0.062	0.009	0.018	0.000000	0.000000	390.46	1583.40
3	GUIDE	696780296	9.59	12725	0.144	-0.073	0.149	0.230	64.345010	-11.884193	-118.97	249.12
4	GUIDE	696780808	9.04	12604	0.202	0.188	0.132	0.200	65.245788	-11.925999	1757.23	-2313.86
5	GUIDE	696796984	8.83	12740	-0.178	-0.150	0.109	0.169	65.033261	-11.560434	2312.07	-905.45
6	GUIDE	697174856	9.52	12725	-0.109	-0.068	0.147	0.257	64.310096	-12.613715	-2237.11	-1308.85
7	GUIDE	697172920	9.50	12733	-0.029	0.111	0.190	0.274	64.156225	-12.535921	-2360.34	-712.36

## 2.4 Star Slots

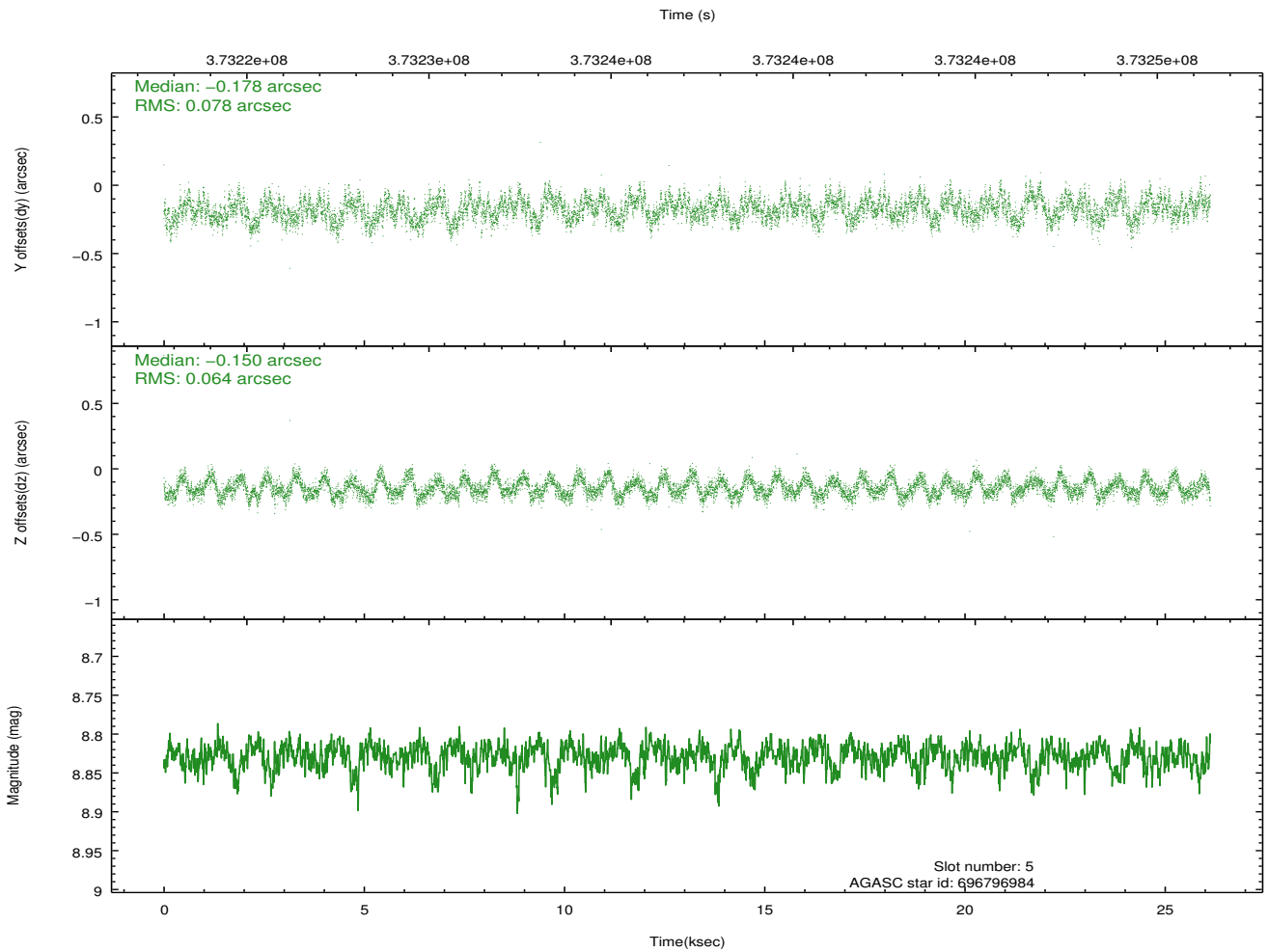
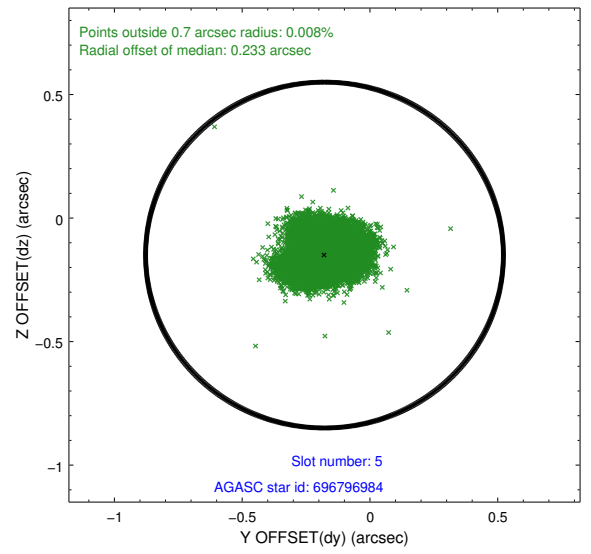
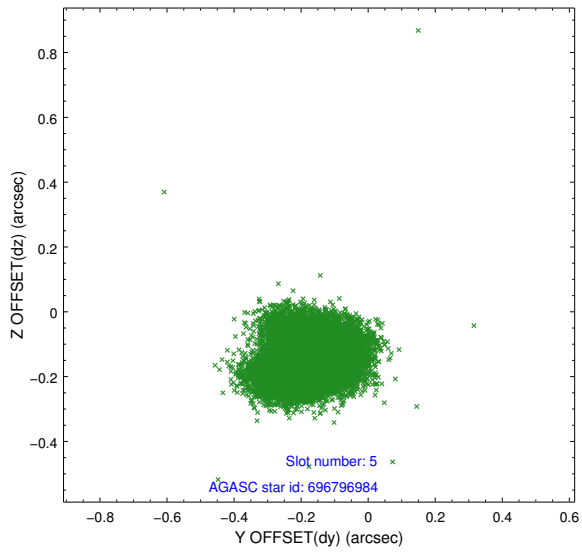
### 2.4.1 Slot 3



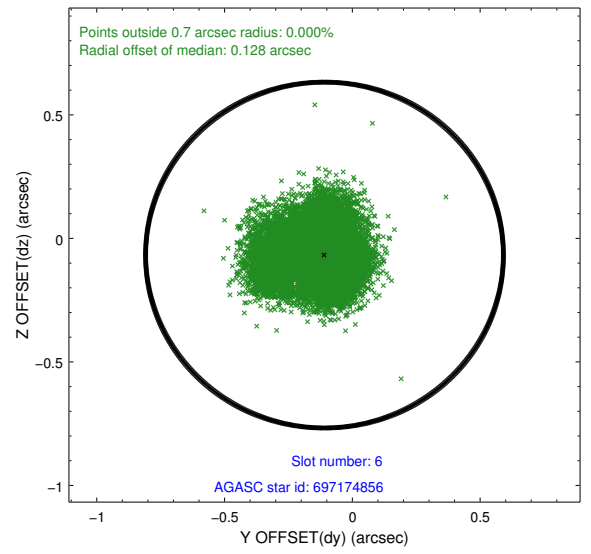
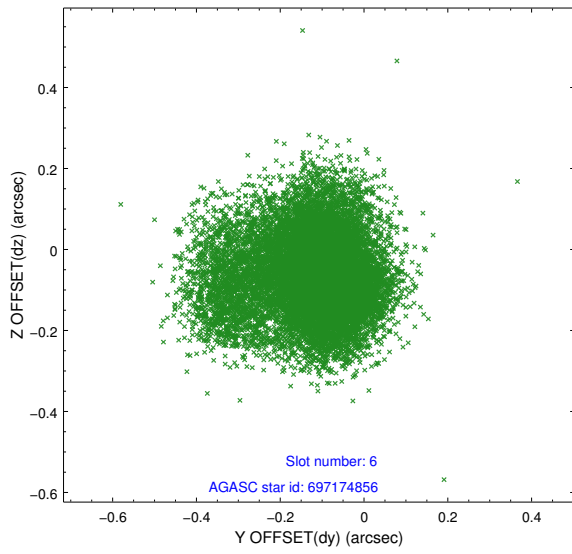
## 2.4.2 Slot 4



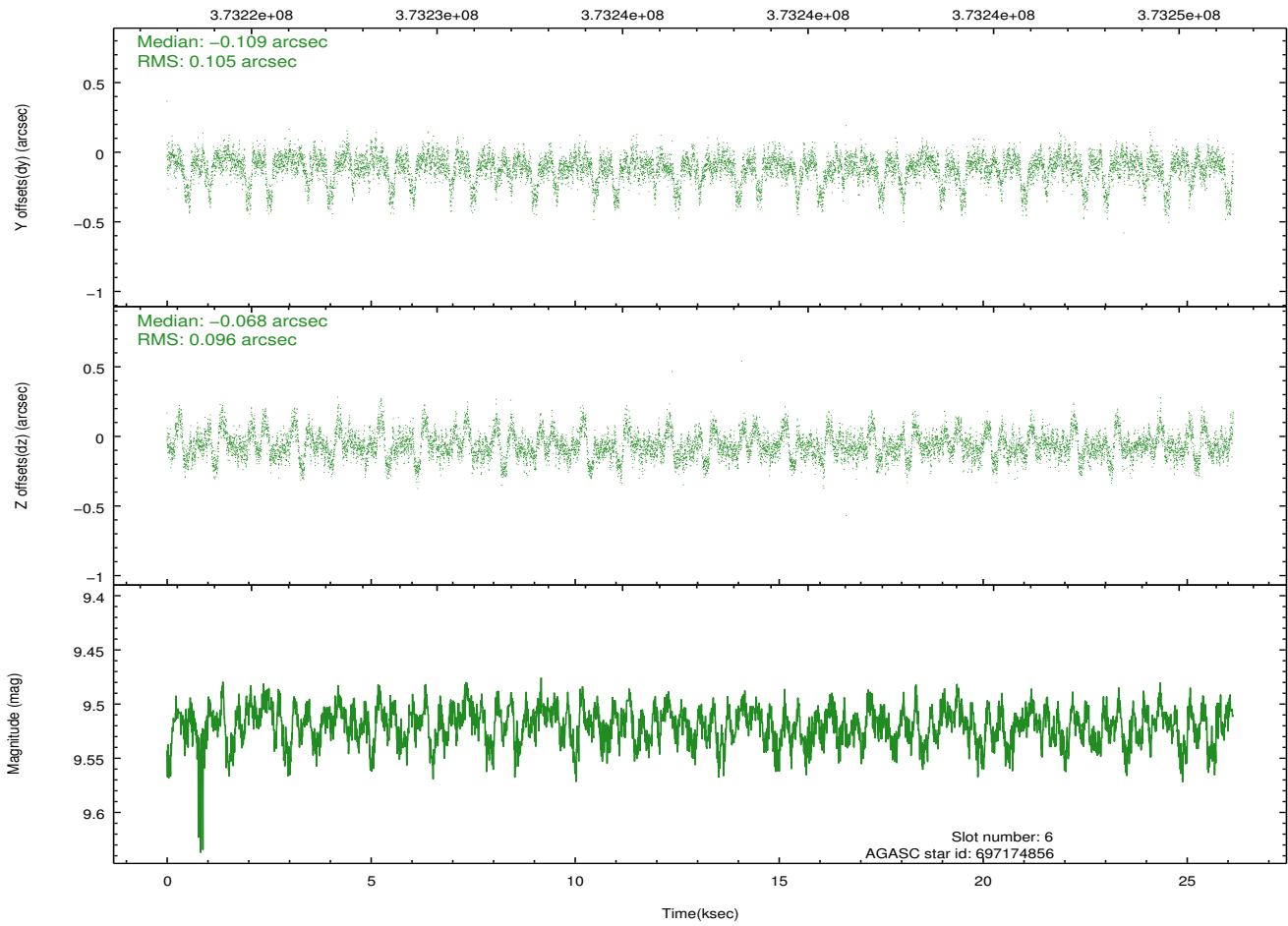
### 2.4.3 Slot 5



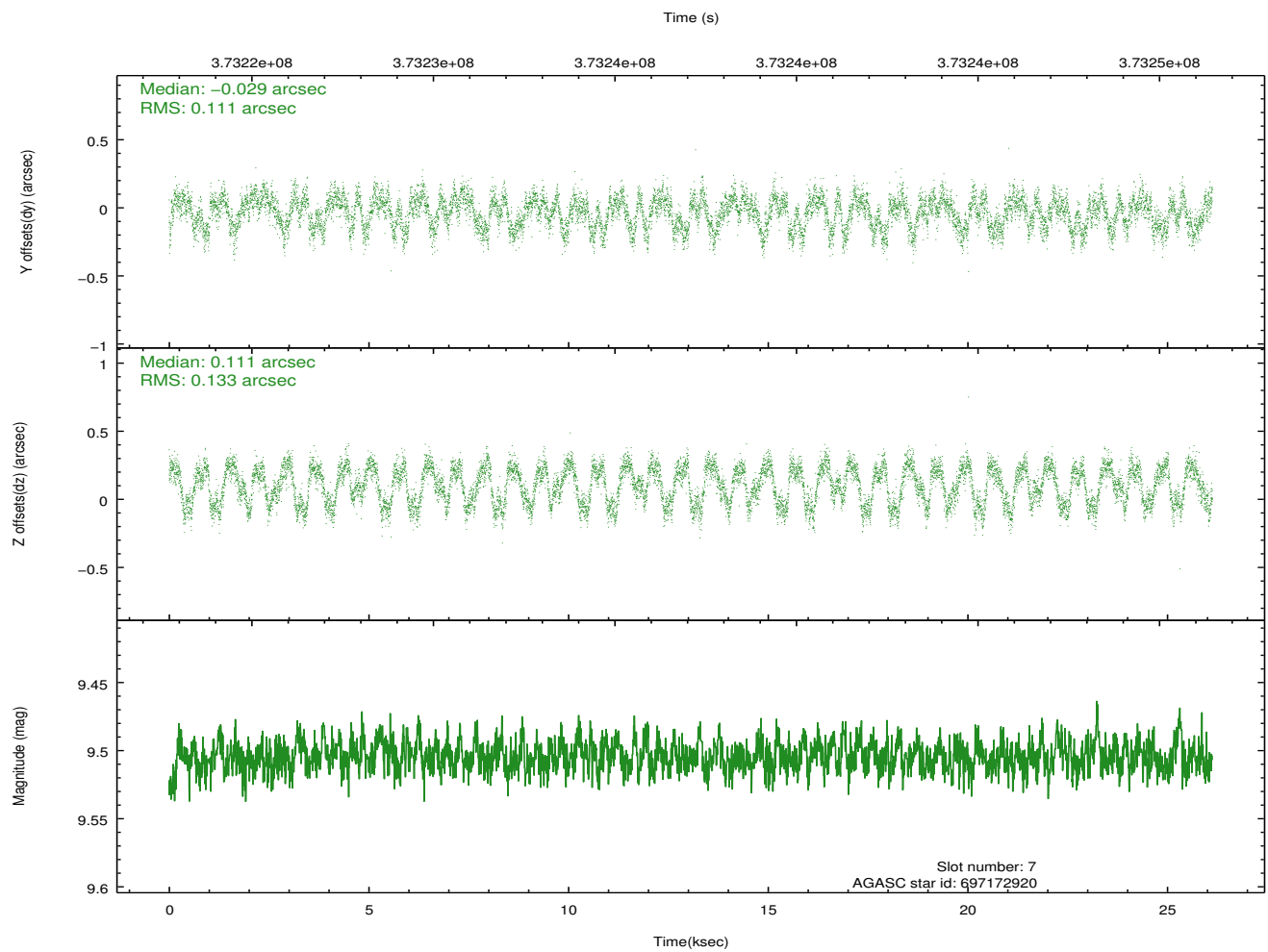
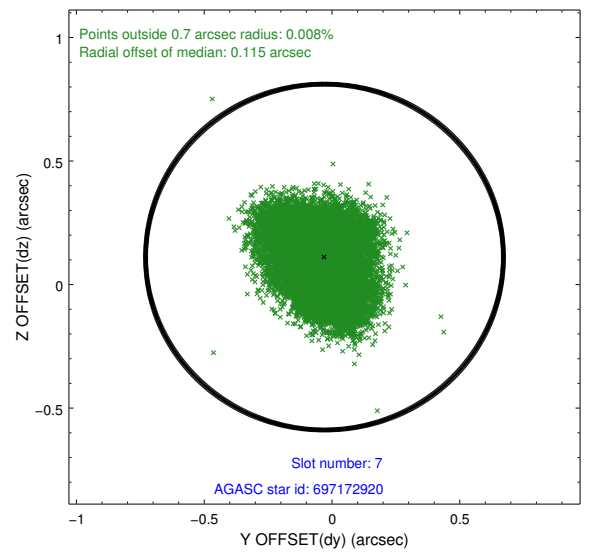
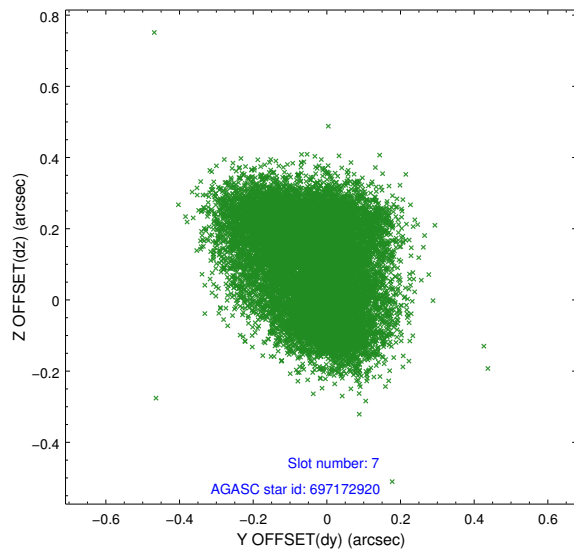
### 2.4.4 Slot 6



Time (s)

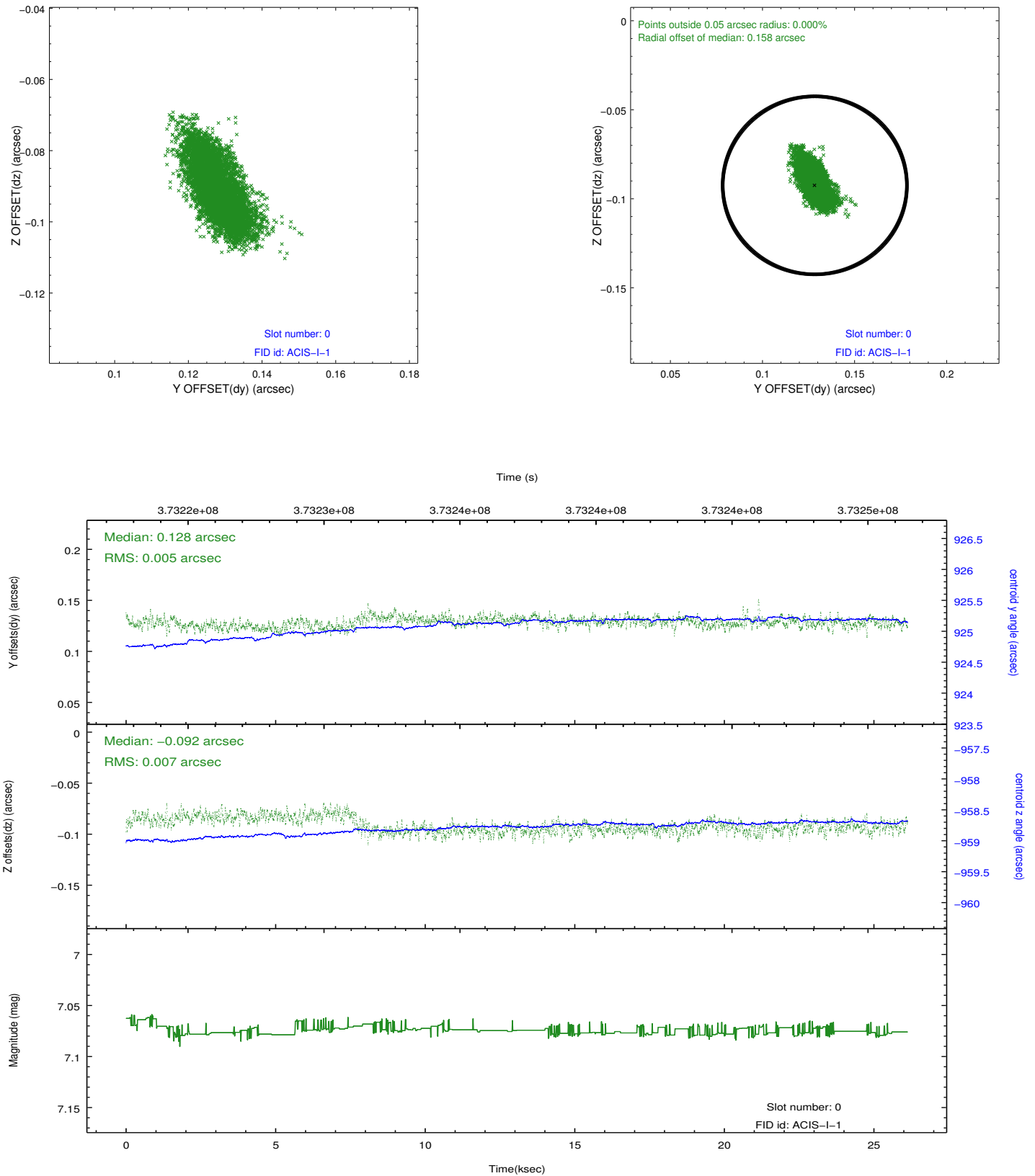


## 2.4.5 Slot 7

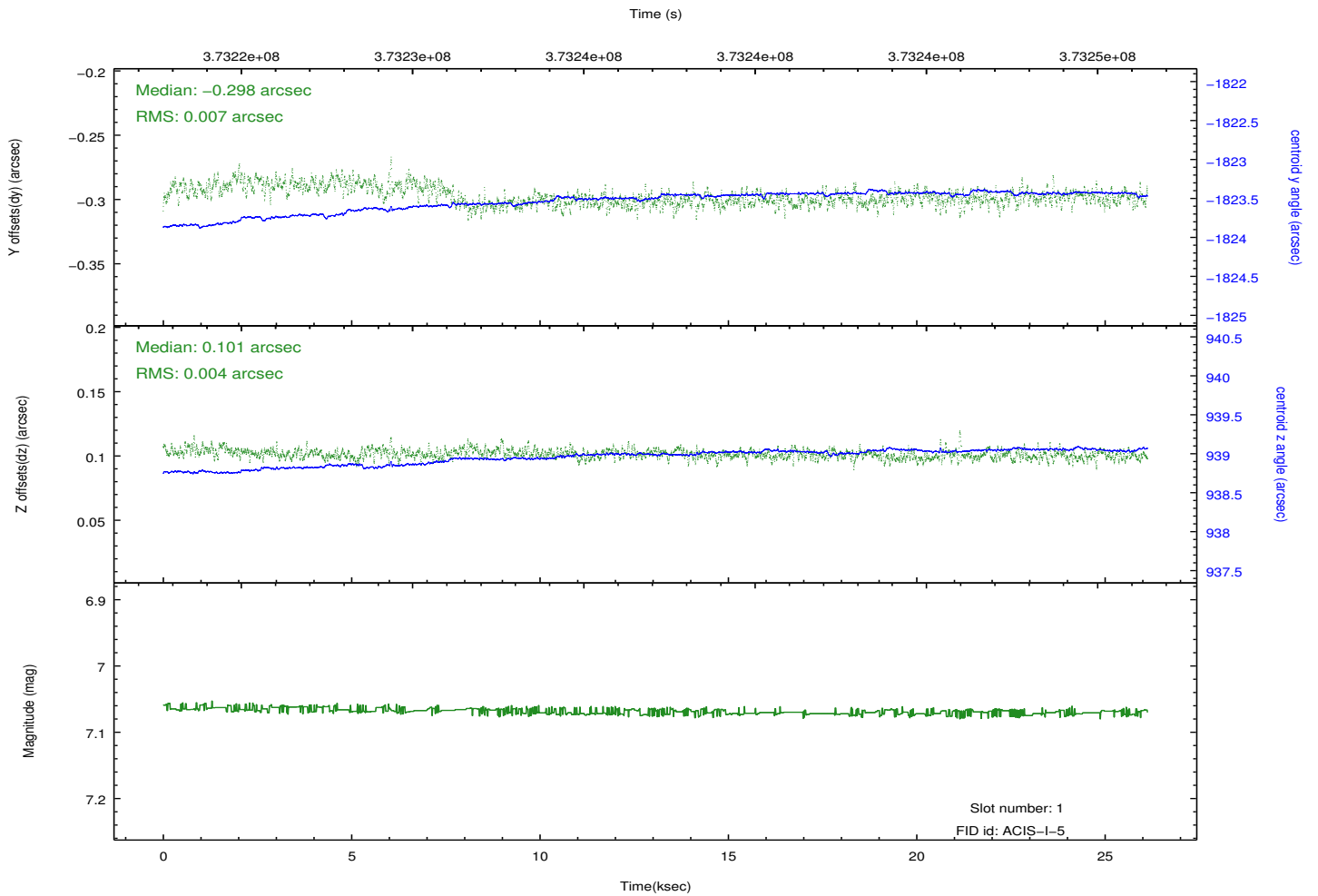
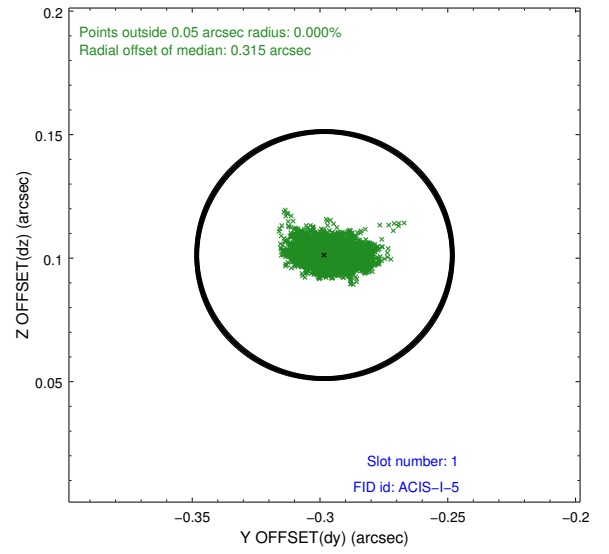
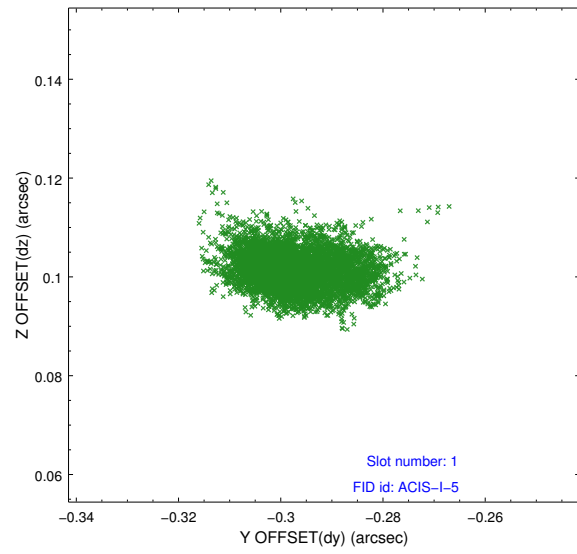


## 2.5 FID Slots

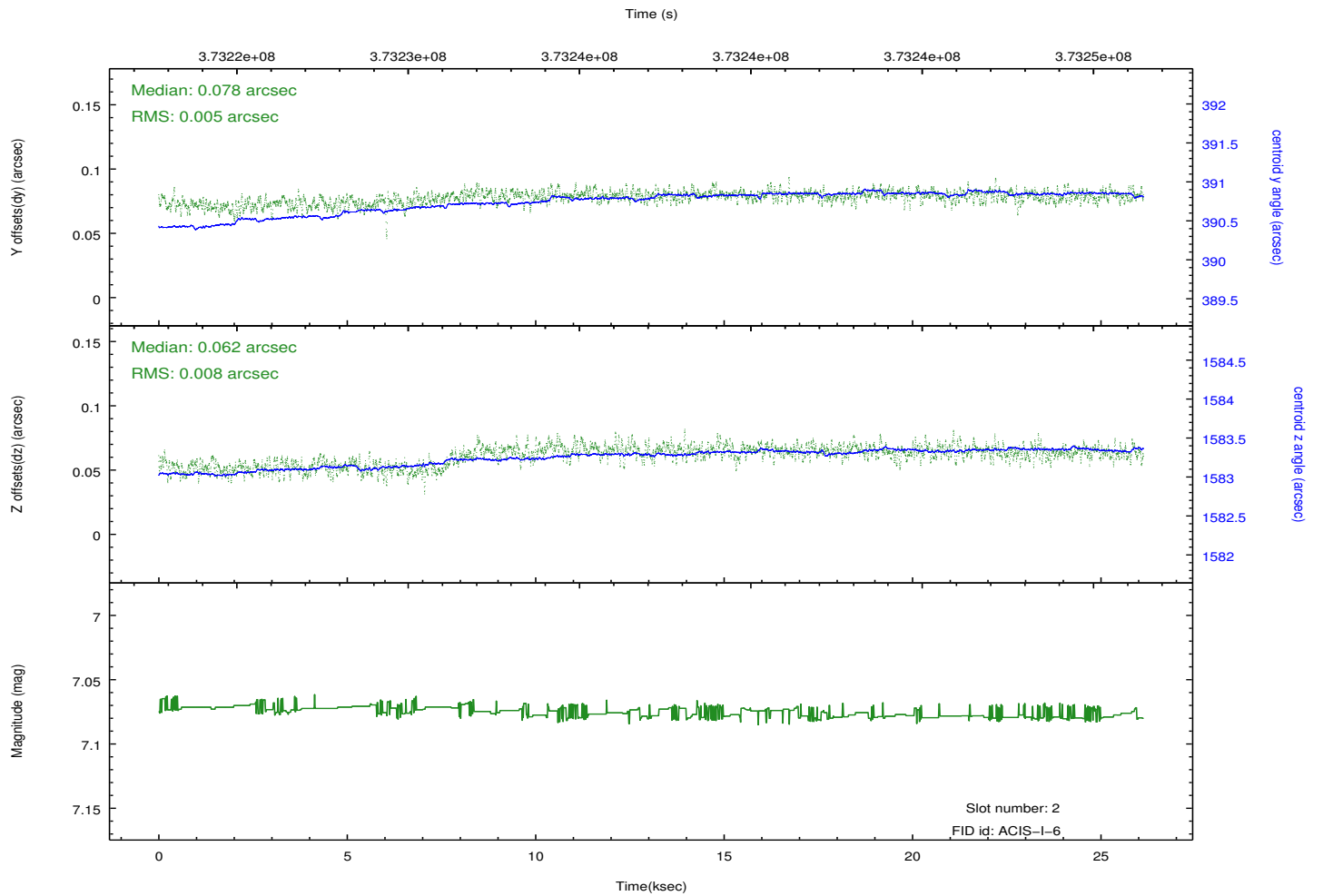
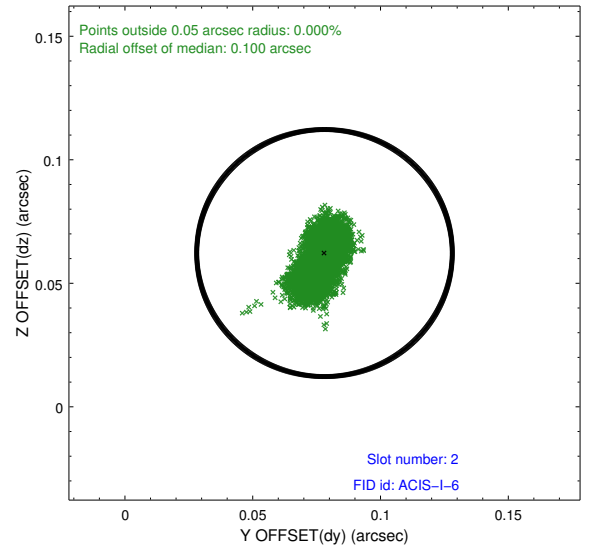
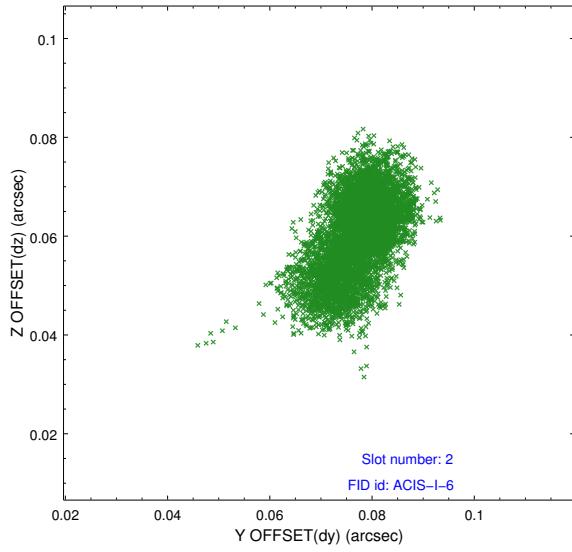
### 2.5.1 Slot 0



## 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)	2012.06.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.126800200939

## A.2 Comments

Joint proposal with HST.