

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11540 - L2 Version 2  
Chandra X-Ray Center

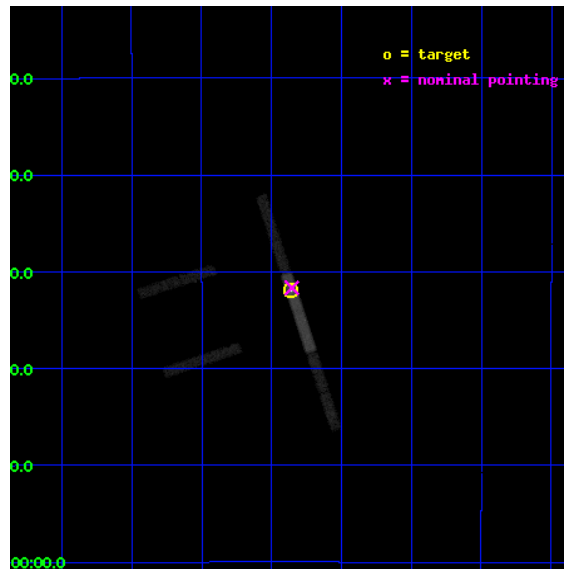
L2 Processing Date : Jun 17 2012

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# 1 Front

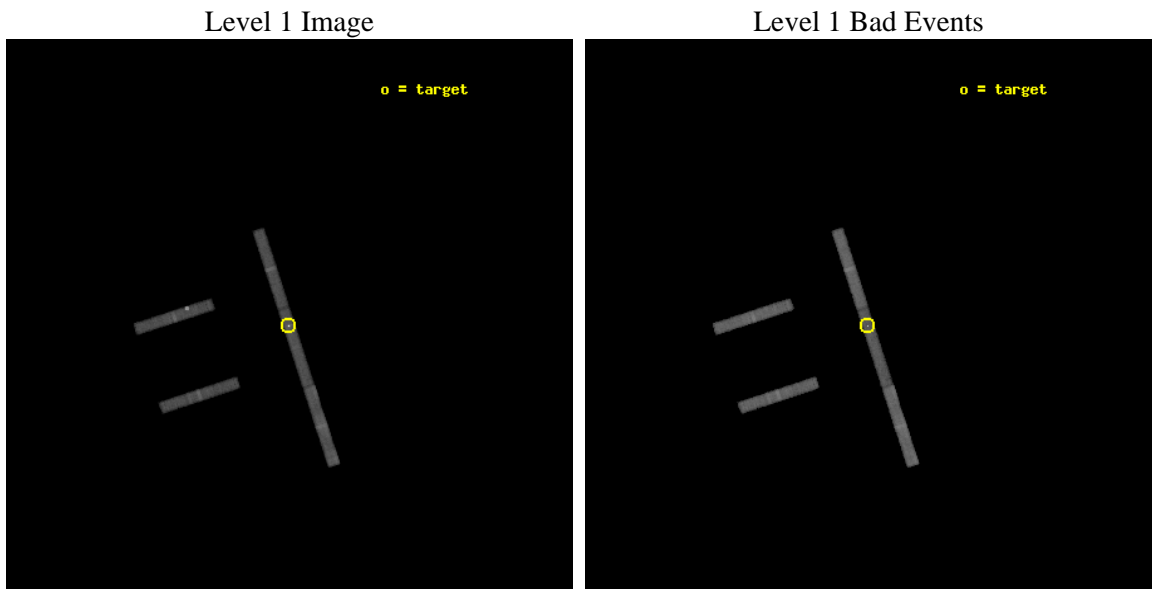
seq_num	702126	Sequence number
obs_id	11540	Observation id
title	The Size of Quasar Non-Thermal/X-ray Emission Regions	Proposal tit
observer	Prof. Christopher Kochanek	Principal investigator
object	RXJ1131-1231	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.96382700666	Nominal RA [deg]
dec_nom	-12.527794392908	Nominal Dec [deg]
roll_nom	71.943133678225	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29133.999503791	Sum of GTIs [s]
livetime	27520.51124454	Livetime [s]
ontime2	29133.999503791	Sum of GTIs [s]
ontime3	29133.258483708	Sum of GTIs [s]
ontime6	29133.999503791	Sum of GTIs [s]
ontime7	29133.999503791	Sum of GTIs [s]
ontime8	29133.2584638	Sum of GTIs [s]
l2events	73086	Number of level 2 events



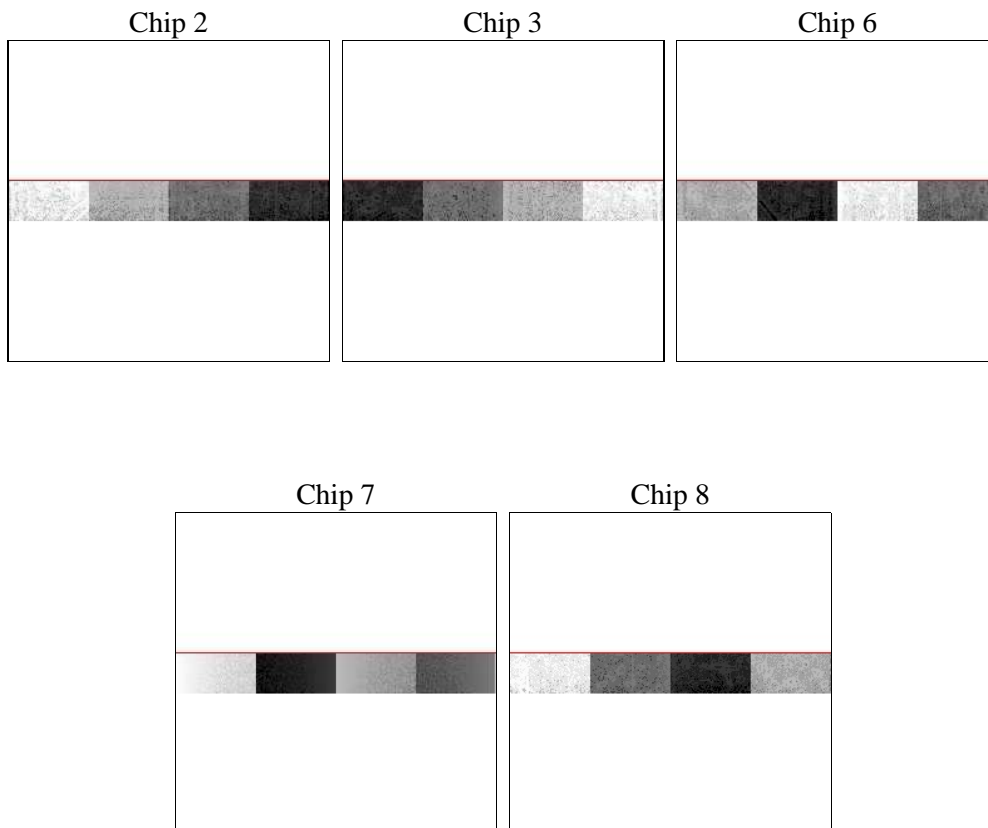
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	29133.999503791	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime2	29133.999503791	Sum of GTIs [s]
date	2012-06-17T07:44:12	Date and time of file creation	ontime3	29133.258483708	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	29133.999503791	Sum of GTIs [s]
			ontime7	29133.999503791	Sum of GTIs [s]
			ontime8	29133.2584638	Sum of GTIs [s]
			l1events	286970	Number of level 1 events

### 2.1.4 Events

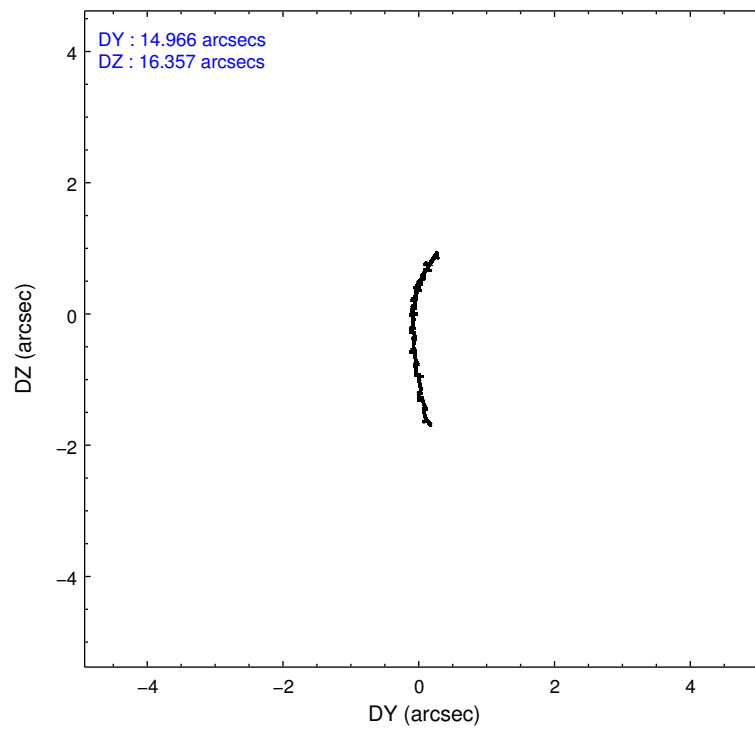
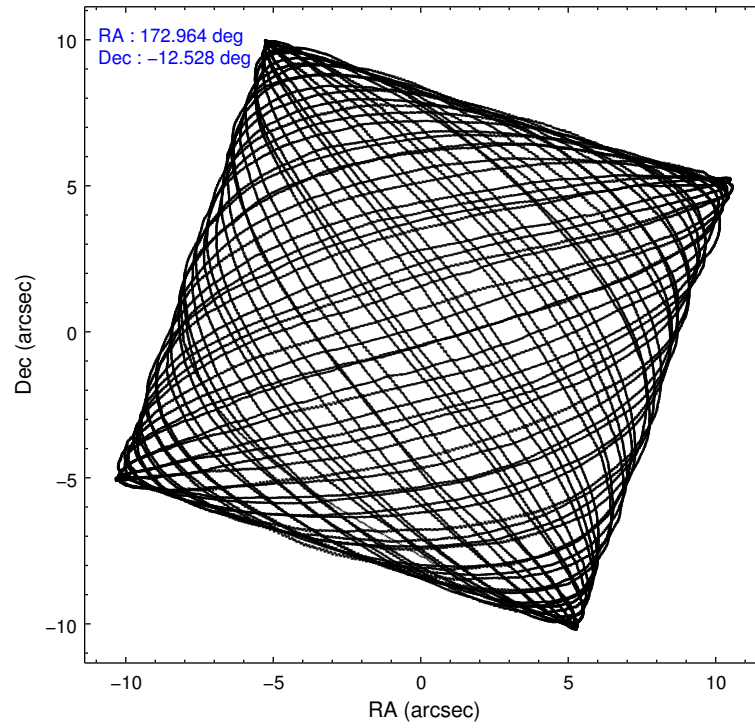
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	49170	40522	43404	92304	61570
rejected events	38227	36571	38888	31849	49190
rejected %	77%	90%	89%	34%	79%

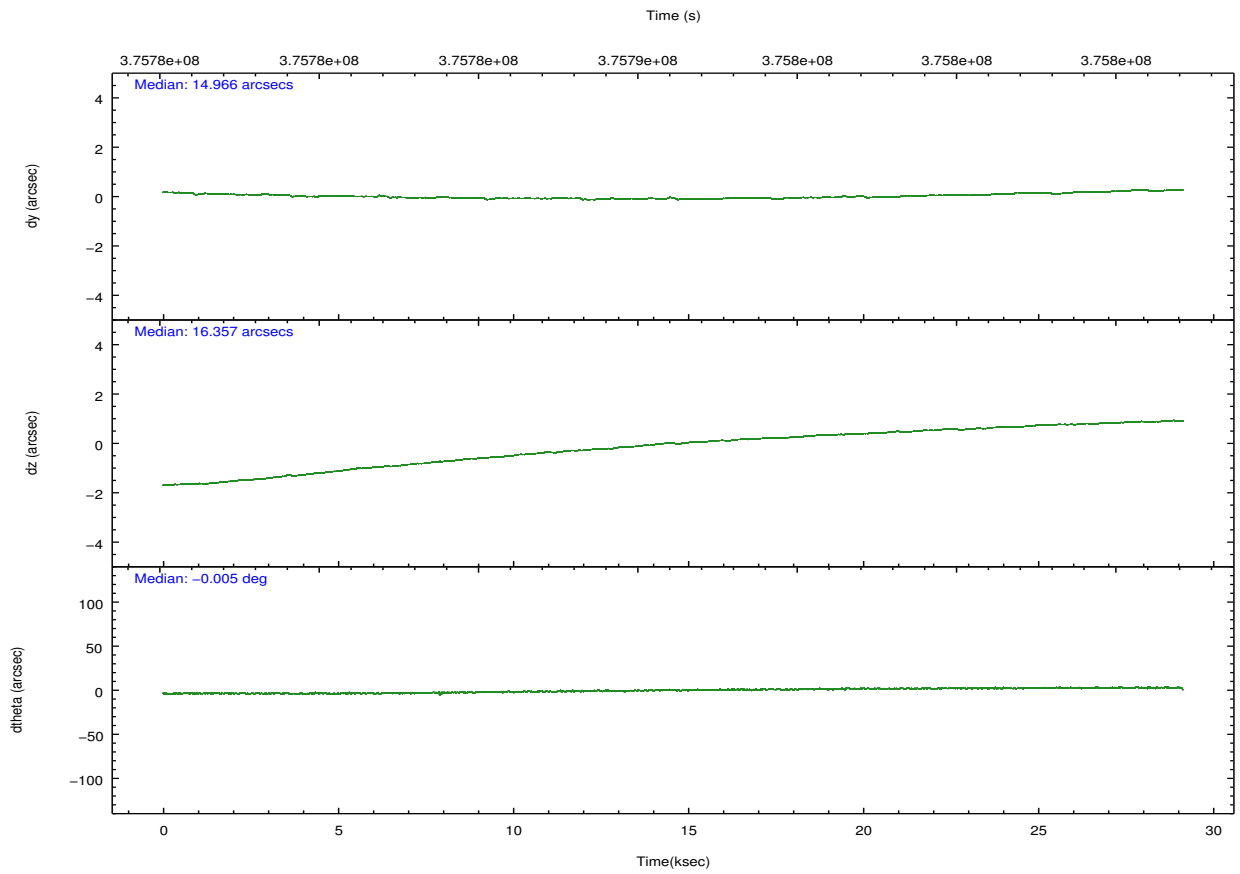
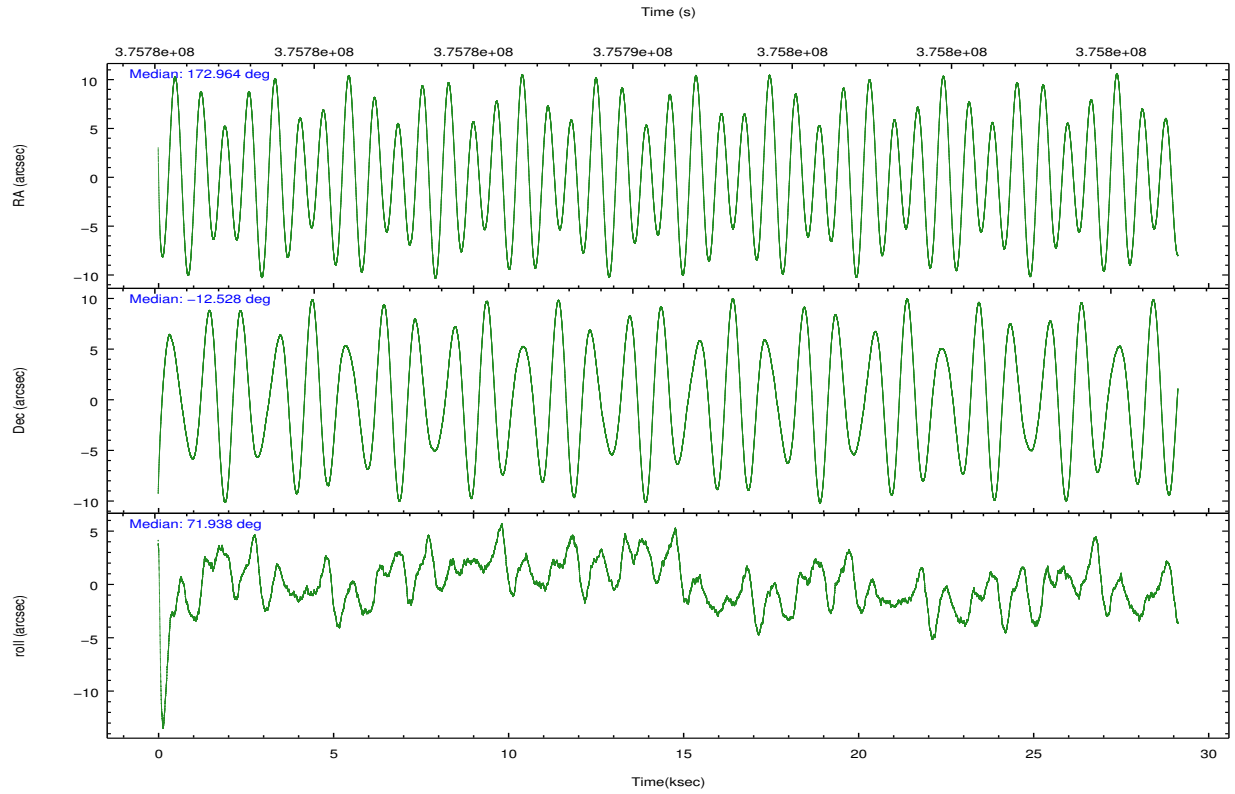
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	8260	1144	1324	12271	3224
	16%	2%	3%	13%	5%
grade 1 events	79	16	21	914	26
	0%	0%	0%	0%	0%
grade 2 events	768	749	904	14281	2768
	1%	1%	2%	15%	4%
grade 3 events	818	748	799	6895	1477
	1%	1%	1%	7%	2%
grade 4 events	752	698	787	6821	1435
	1%	1%	1%	7%	2%
grade 5 events	1113	1391	1429	7676	2110
	2%	3%	3%	8%	3%
grade 6 events	672	737	842	20870	3974
	1%	1%	1%	22%	6%
grade 7 events	36708	35039	37298	22576	46556
	74%	86%	85%	24%	75%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	172.969999	172.9638270066622	CCD I2 on	O4	Y
[deg] Pointing Dec	-12.554457	-12.52779439290786	CCD I3 on	O3	Y
[deg] Pointing Roll	71.787843	71.94313367822541	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	375776666.184000	375775499.93947	CCD S5 on	N	N
Observation start date	2009-11-28T06:23:20	2009-11-28T06:04:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	375805666.184000	375806378.57852	On-chip summing requested	N	N
Observation end date	2009-11-28T14:26:40	2009-11-28T14:39:38	Subarray requested	CUSTOM	1/8
Read mode	TIMED	TIMED	Subarray start row	449	449
			Subarray row count	128	128
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.7

## 2.3 Aspect



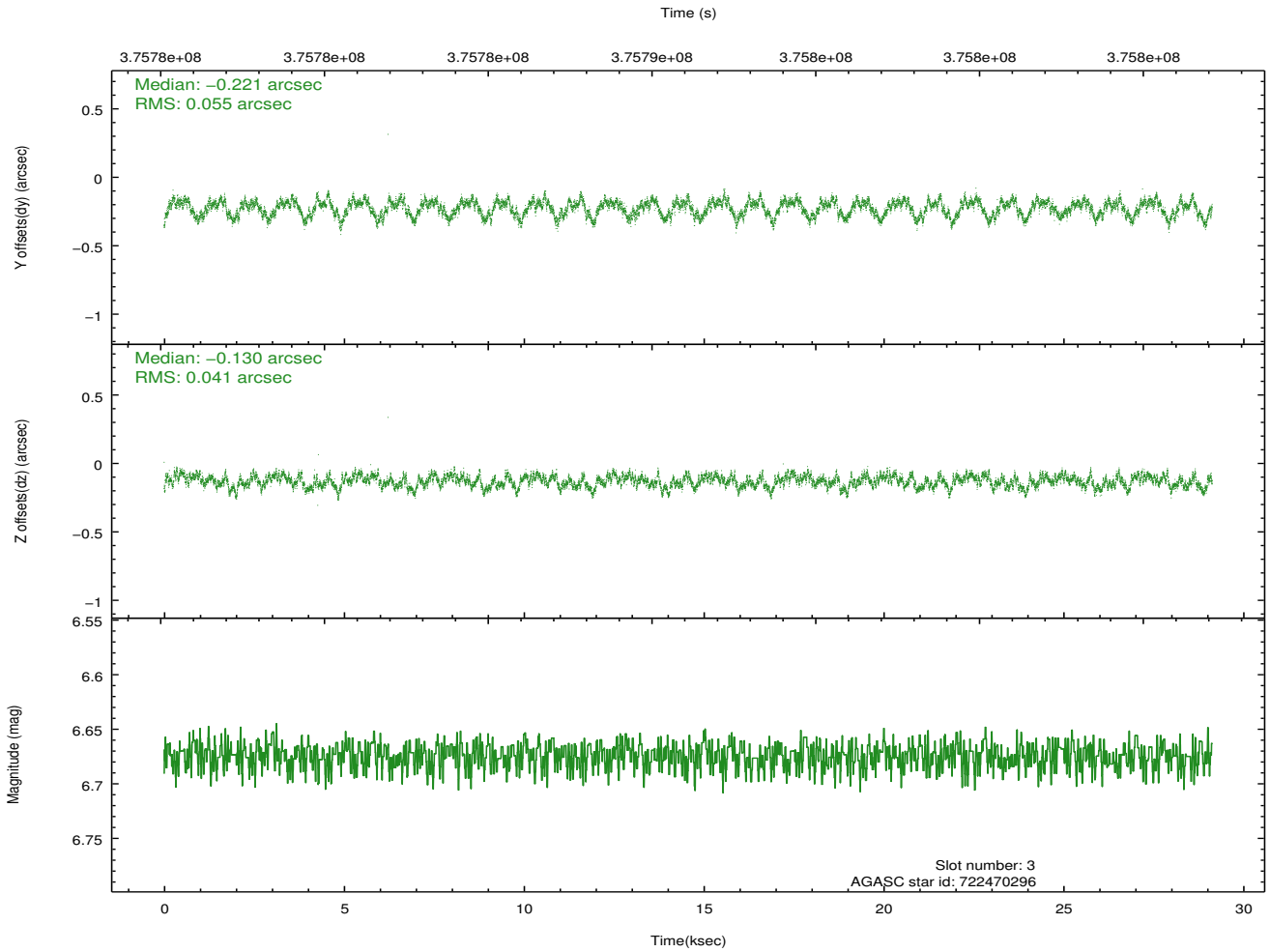
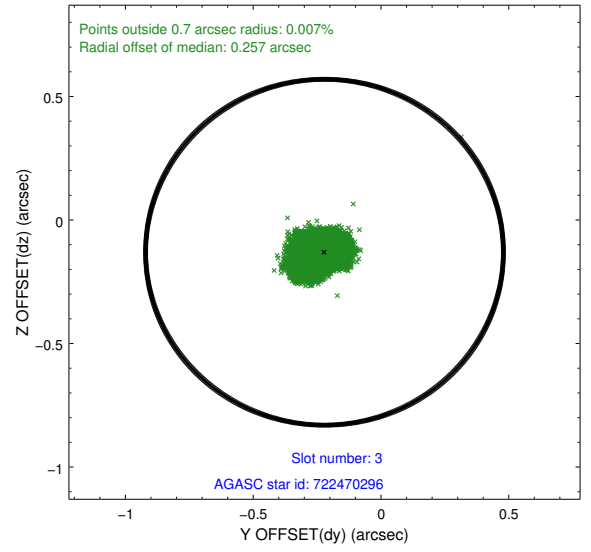
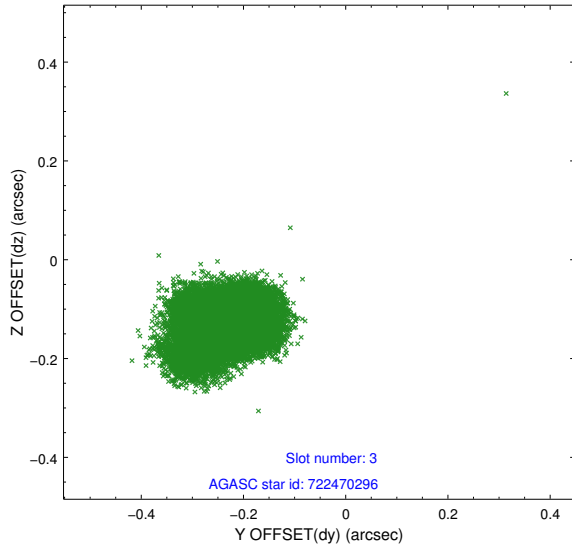


### Slot Statistics

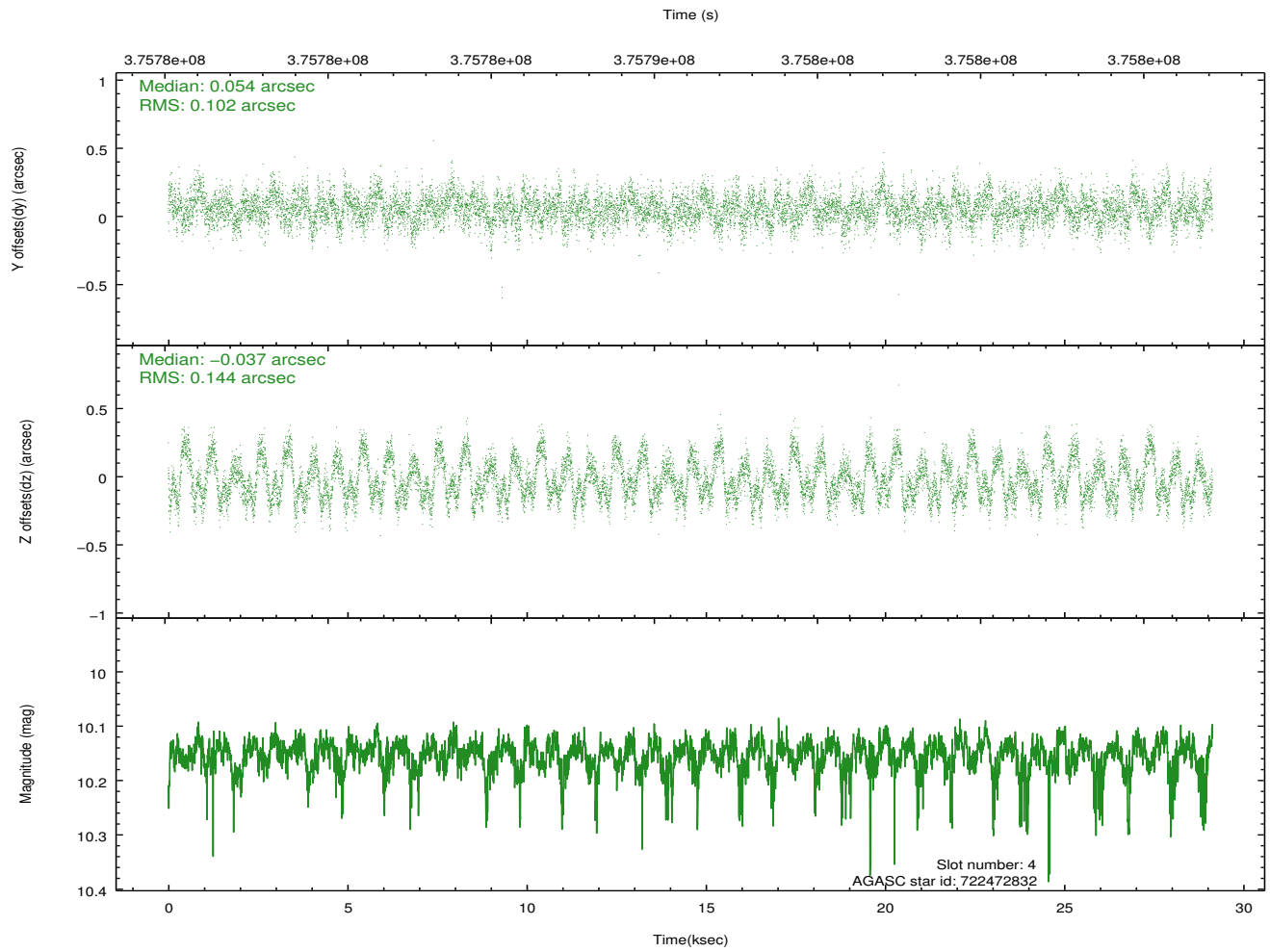
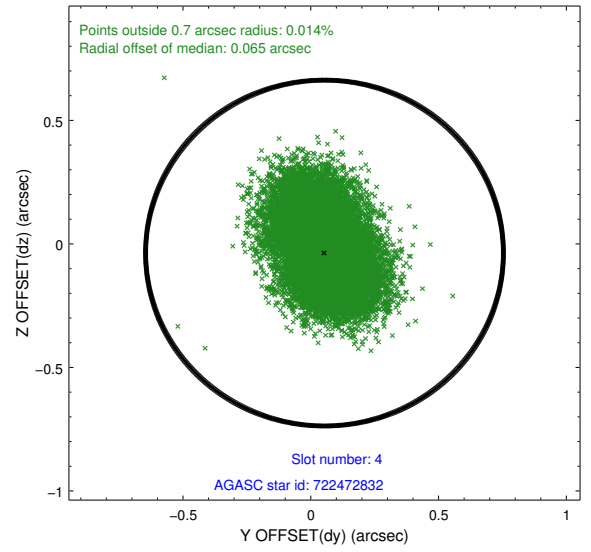
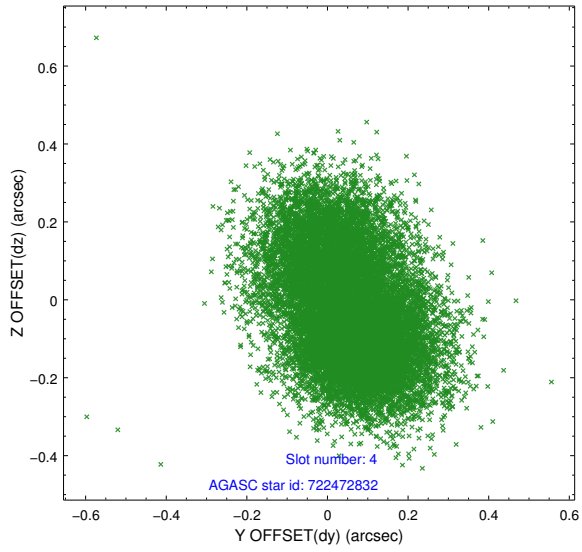
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.00	7106	0.080	-0.079	0.022	0.063	0.000000	0.000000	928.14	-1733.25
1	FID	ACIS-S-5	7.05	7105	-0.152	0.040	0.020	0.027	0.000000	0.000000	-1821.02	164.35
2	FID	ACIS-S-6	7.15	7105	0.053	0.044	0.022	0.035	0.000000	0.000000	393.61	808.39
3	GUIDE	722470296	6.67	14213	-0.221	-0.130	0.072	0.119	172.921689	-12.381367	538.90	356.45
4	GUIDE	722472832	10.15	14179	0.054	-0.037	0.190	0.302	173.078970	-12.015349	1963.82	242.39
5	GUIDE	722473176	9.46	14108	-0.104	-0.101	0.152	0.237	172.599746	-12.066793	1259.44	1786.95
6	GUIDE	722871728	9.63	14182	0.087	0.241	0.160	0.248	173.202235	-12.568355	207.73	-790.19
7	GUIDE	722873464	7.29	14211	0.188	0.024	0.088	0.145	172.661543	-13.050266	-2034.11	469.07

## 2.4 Star Slots

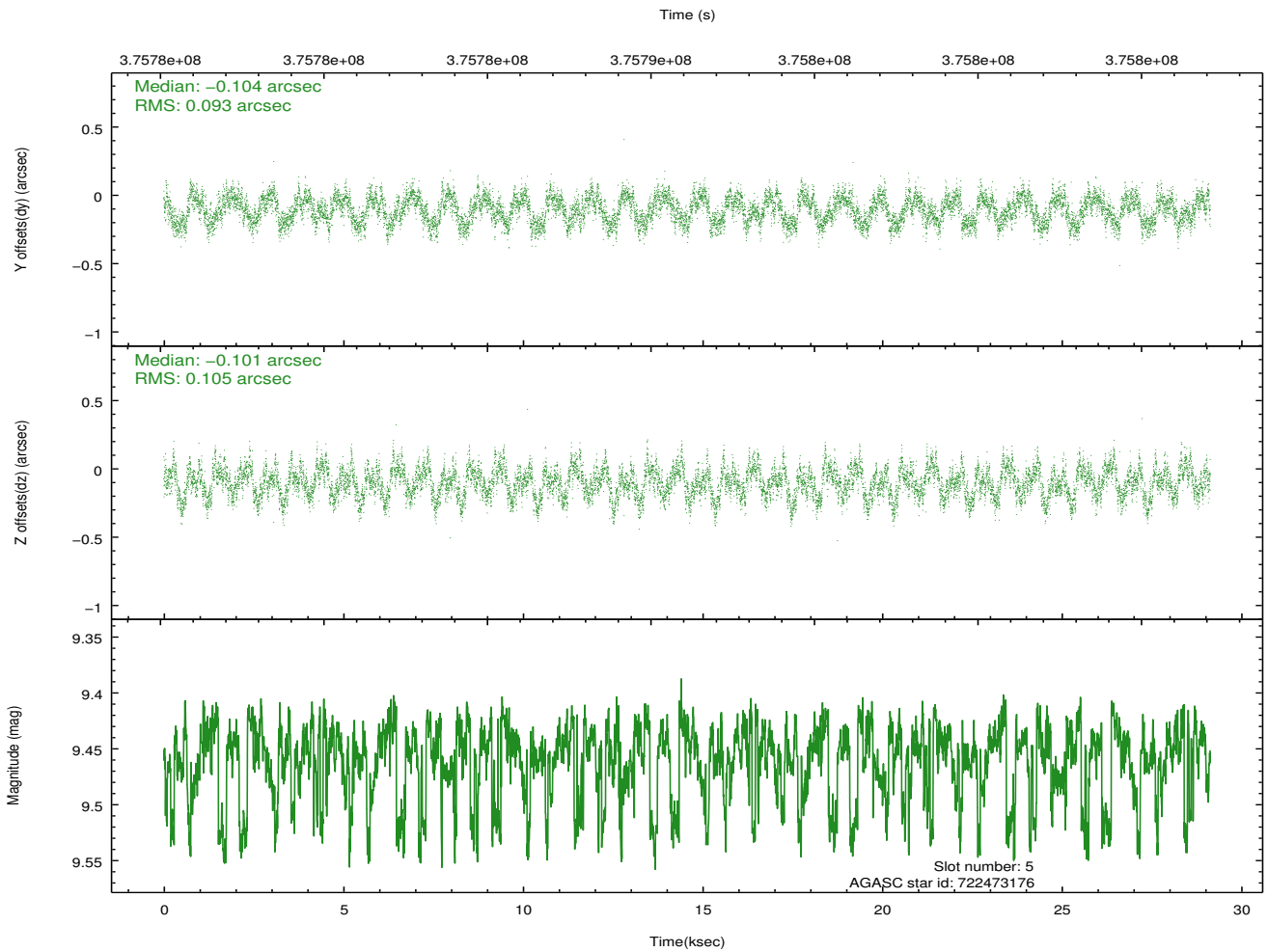
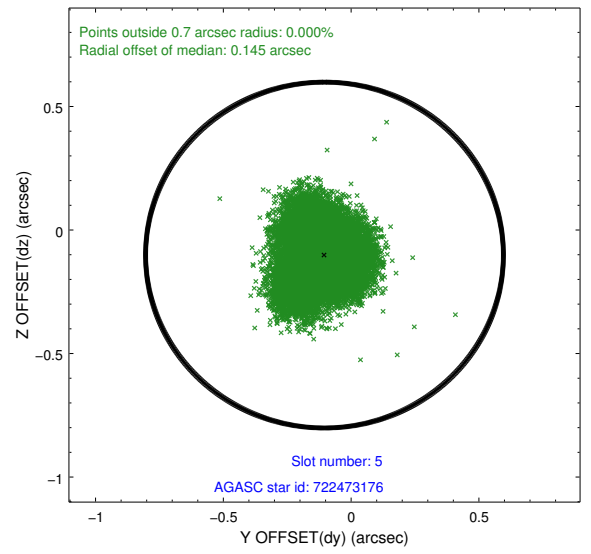
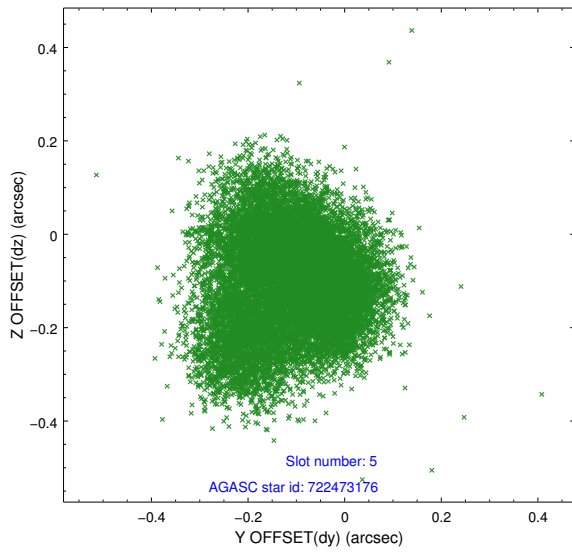
### 2.4.1 Slot 3



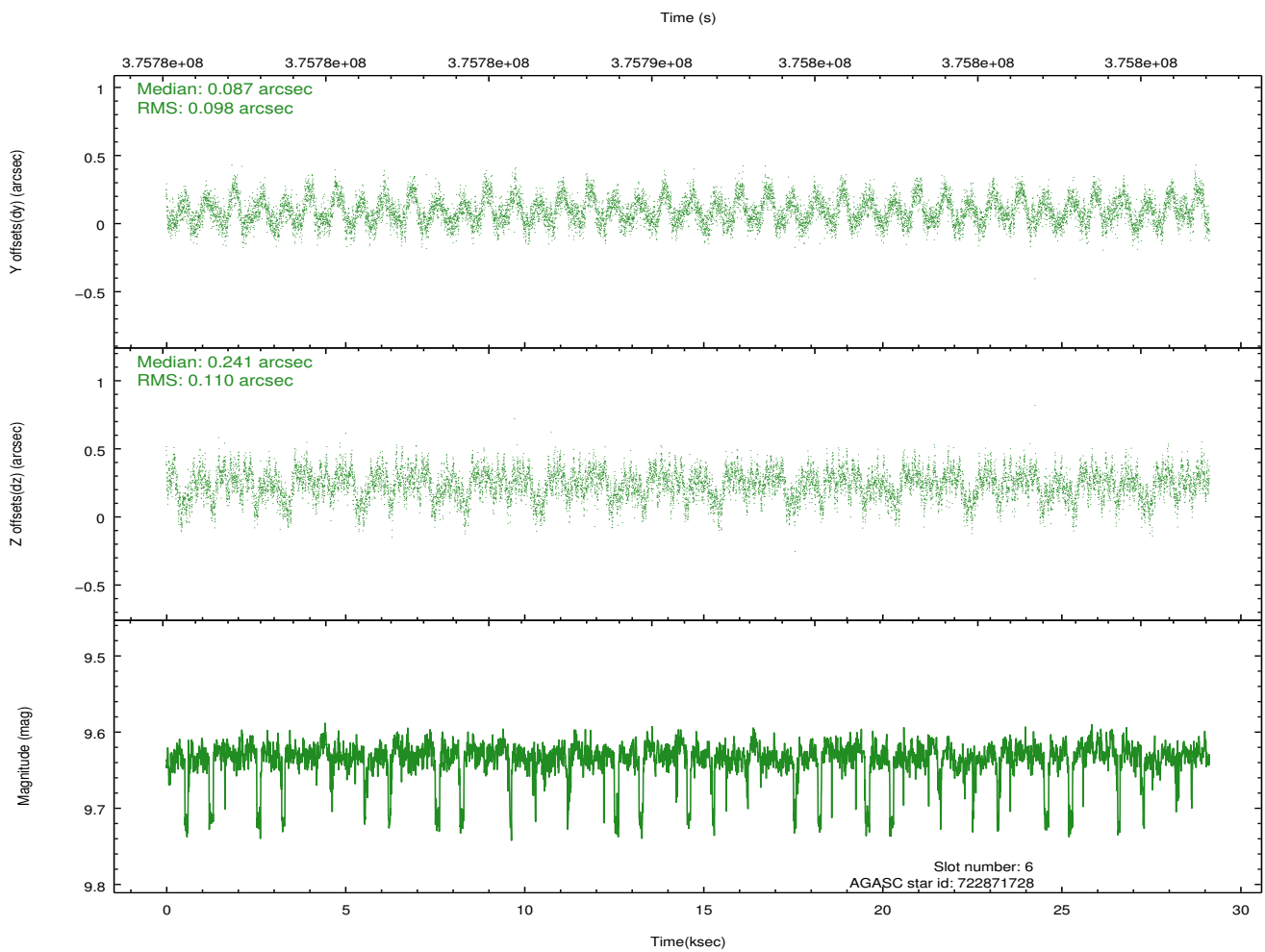
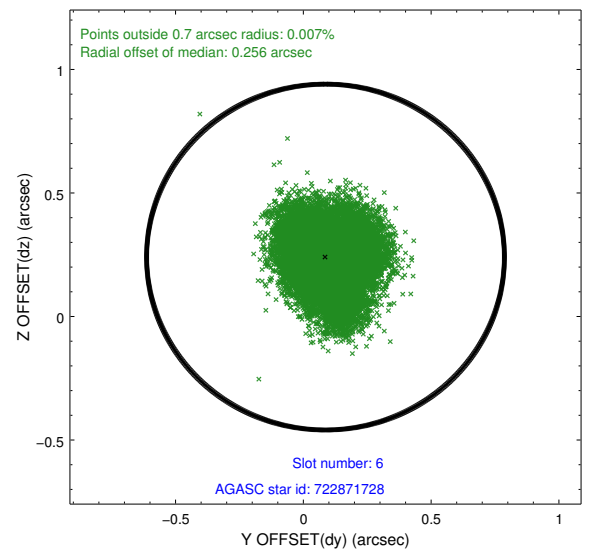
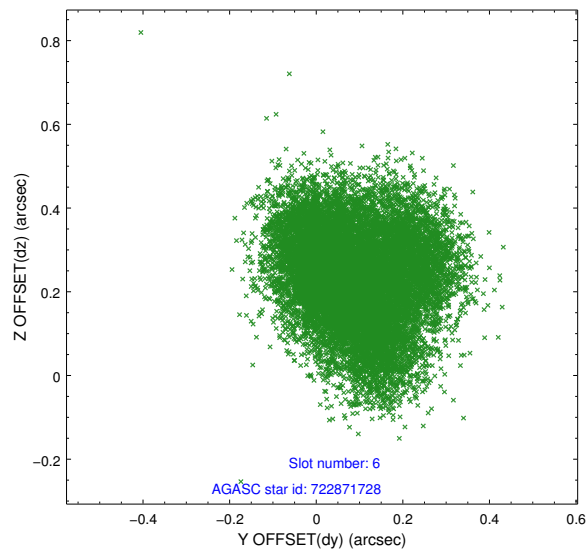
## 2.4.2 Slot 4



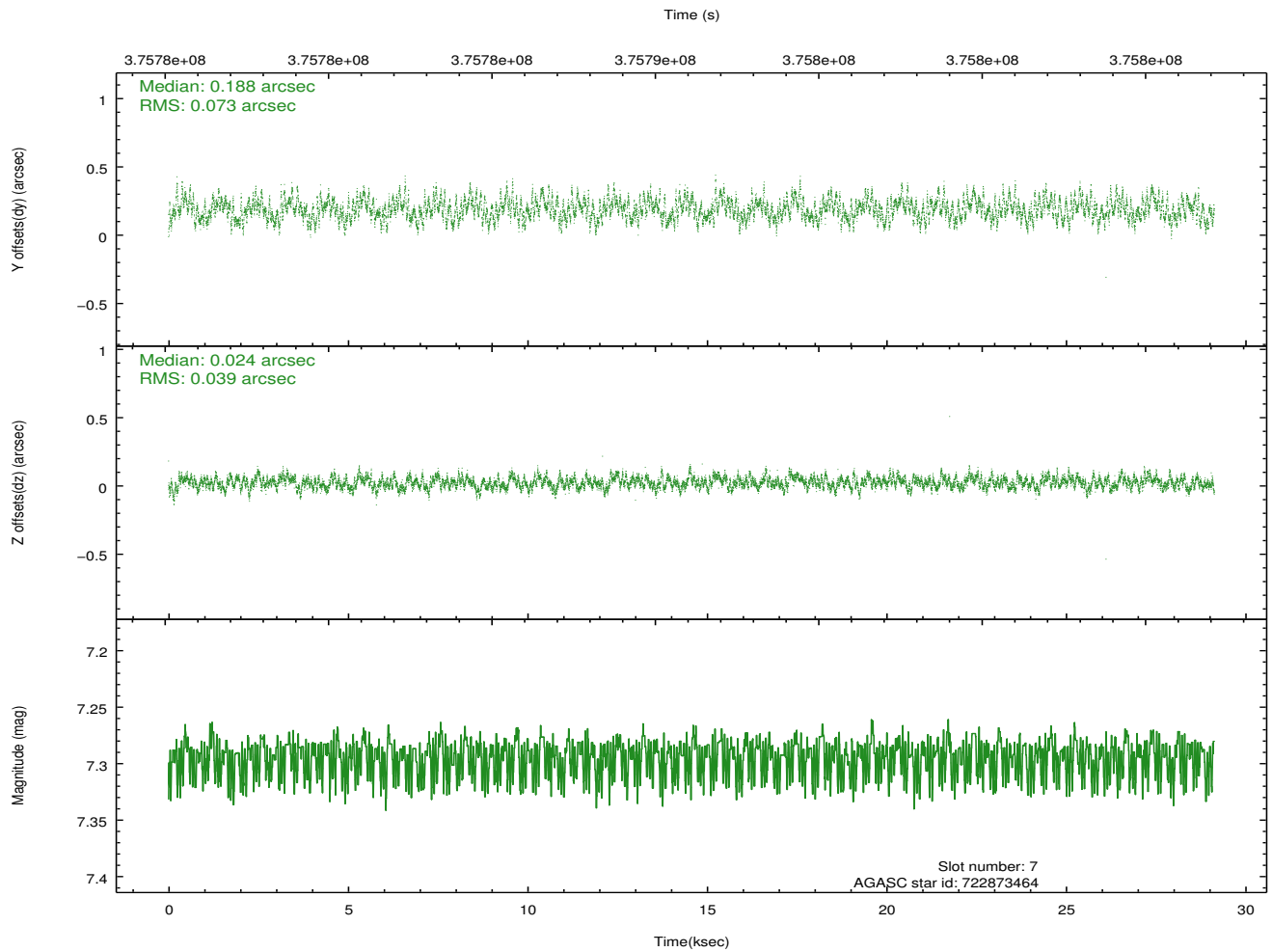
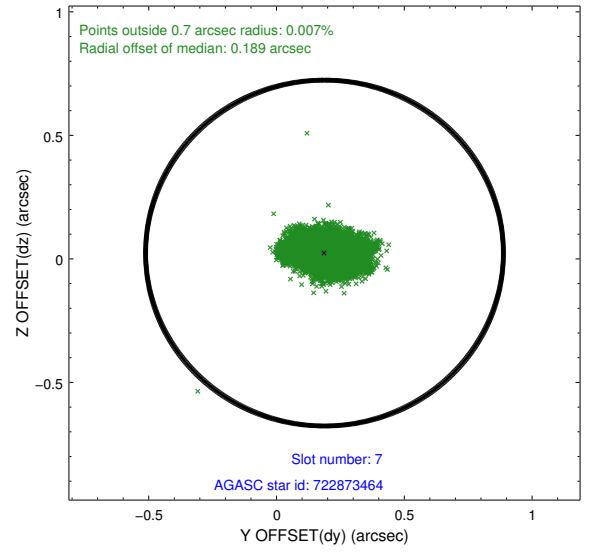
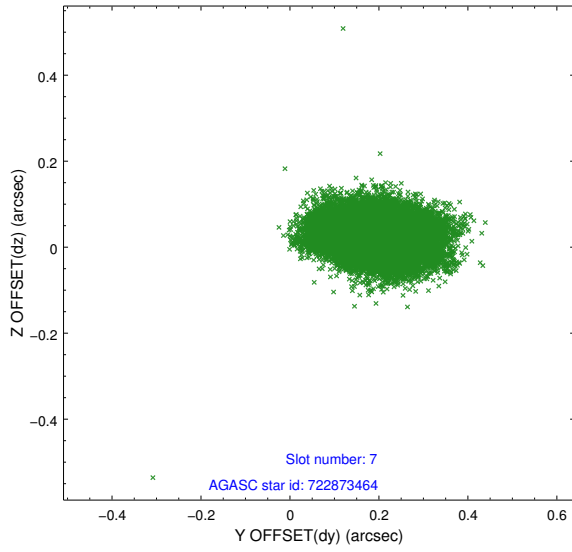
### 2.4.3 Slot 5



## 2.4.4 Slot 6

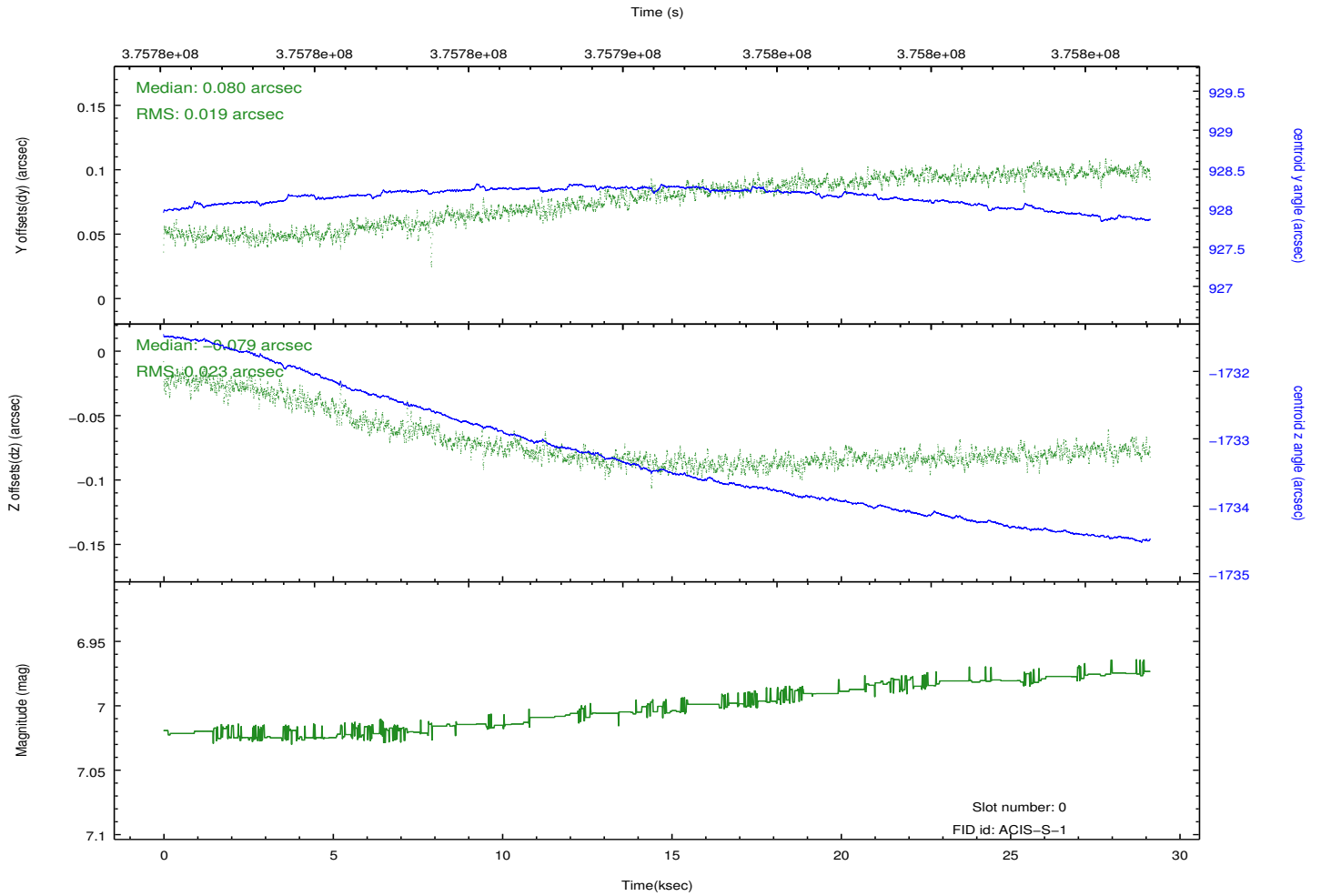
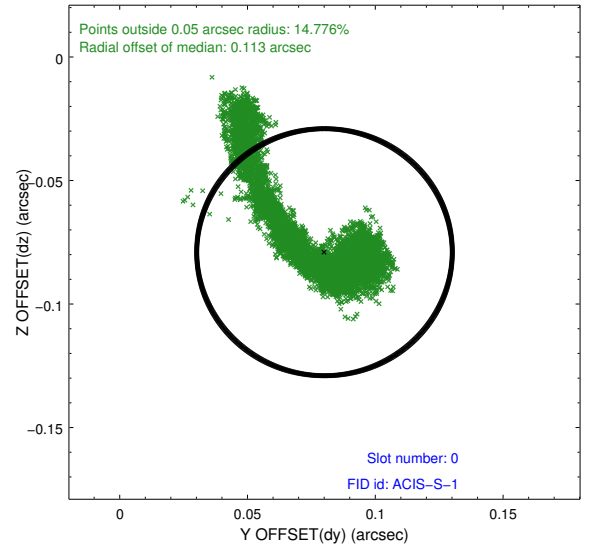
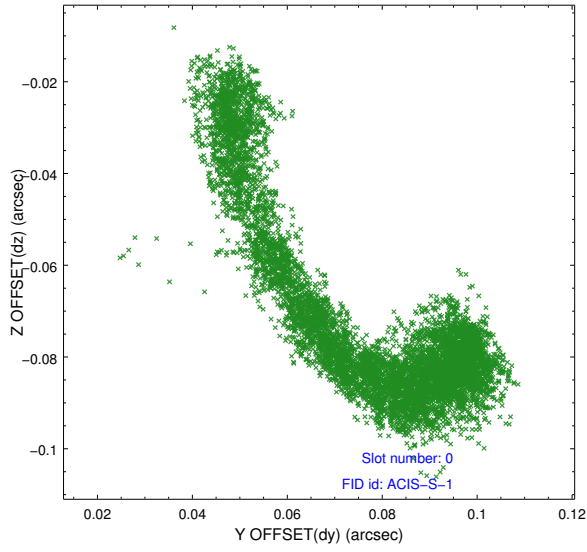


### 2.4.5 Slot 7

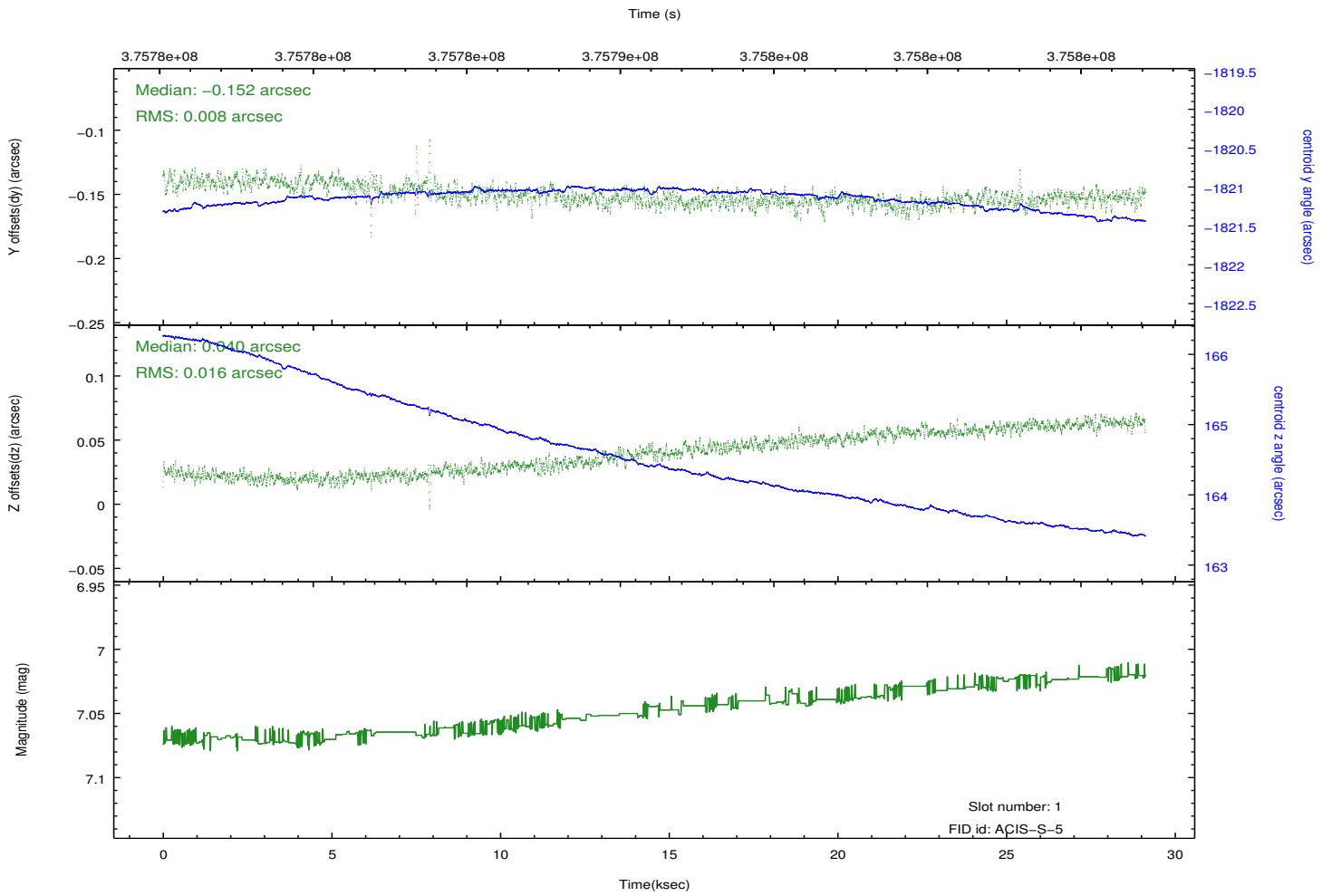
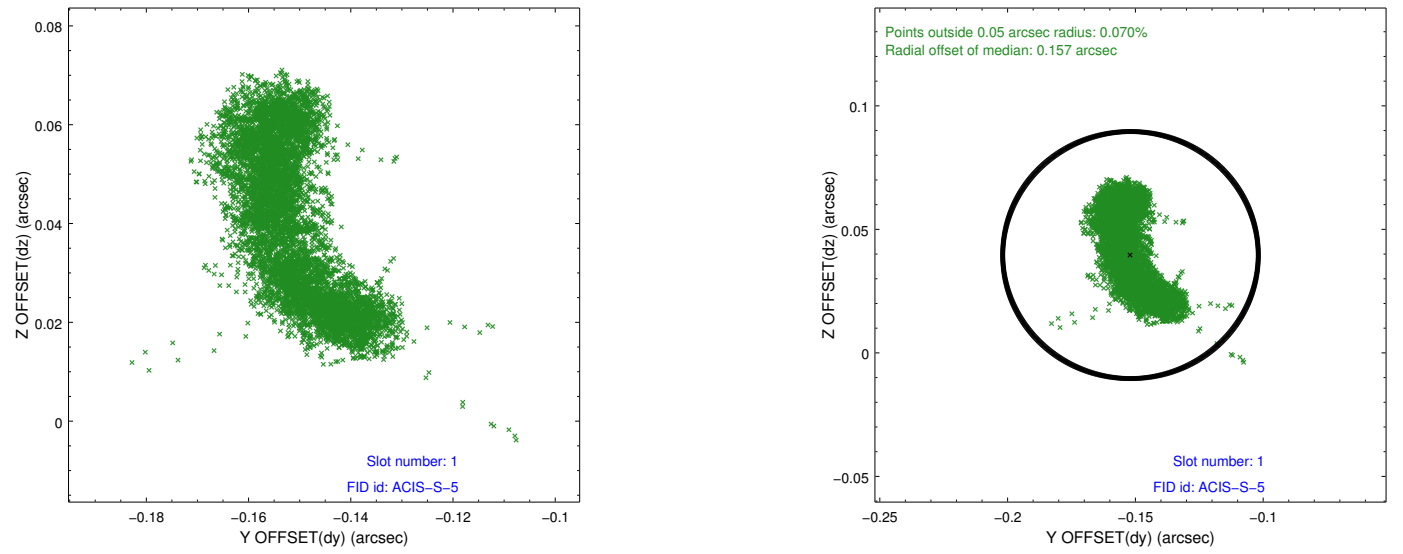


## 2.5 FID Slots

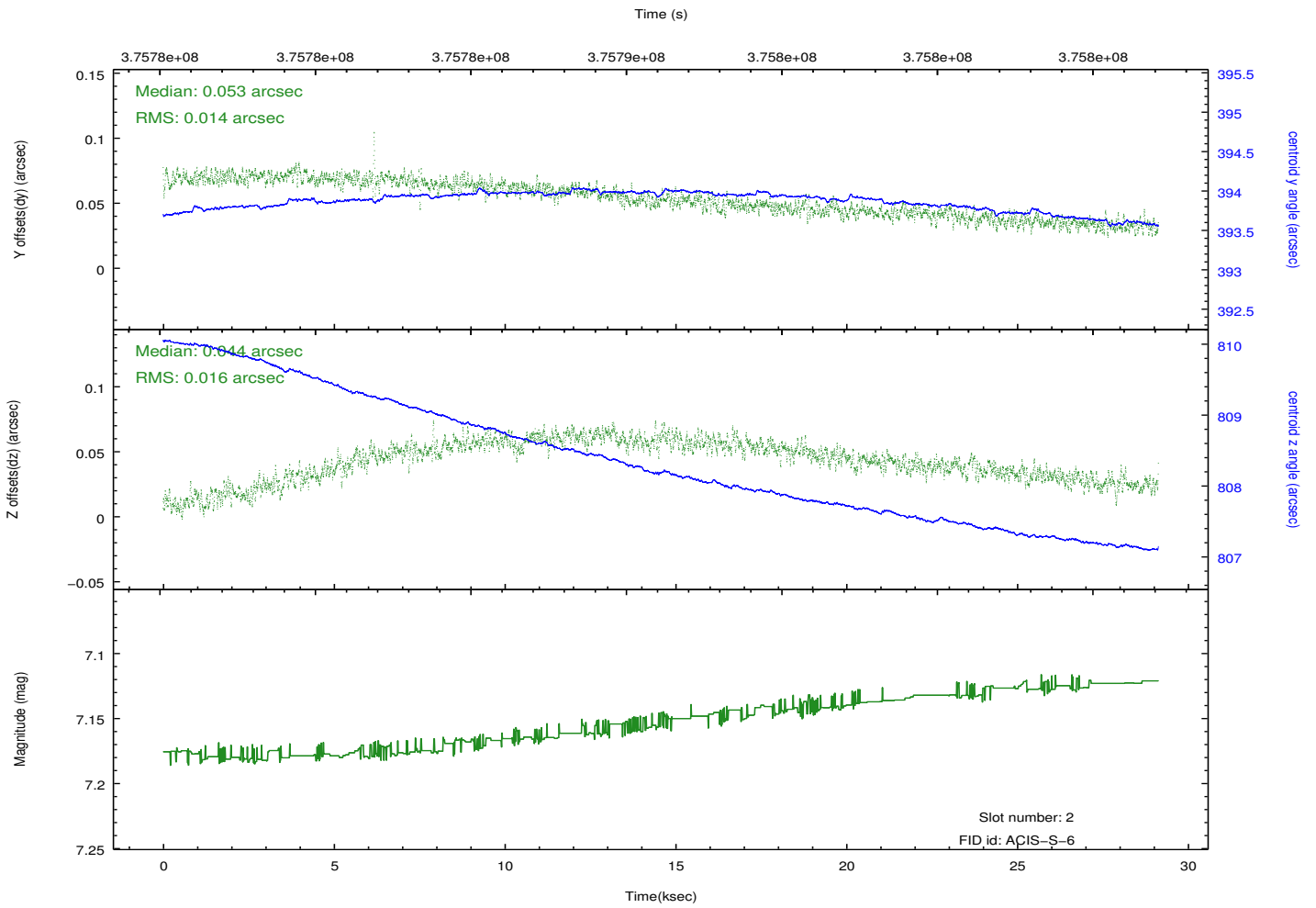
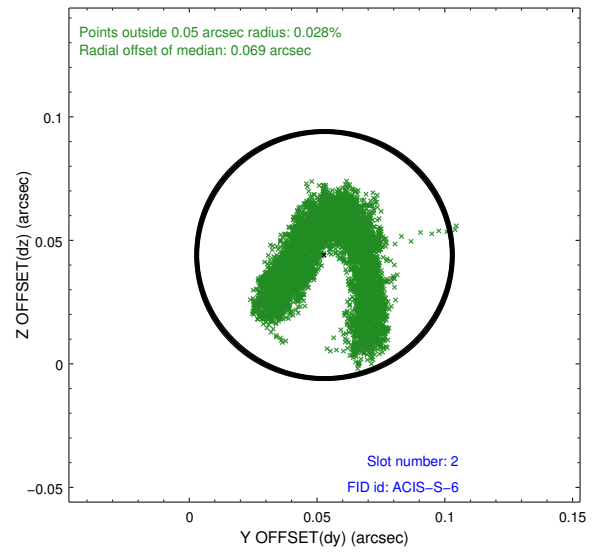
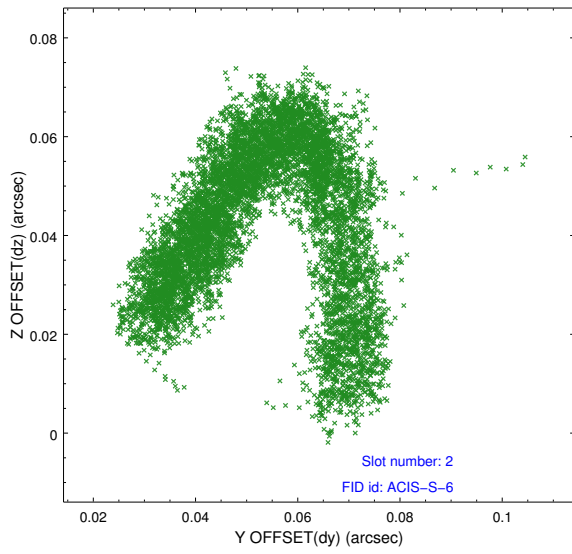
### 2.5.1 Slot 0



## 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)	2012.06.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.133999503791

## A.2 Comments