

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11541 - L2 Version 2  
Chandra X-Ray Center

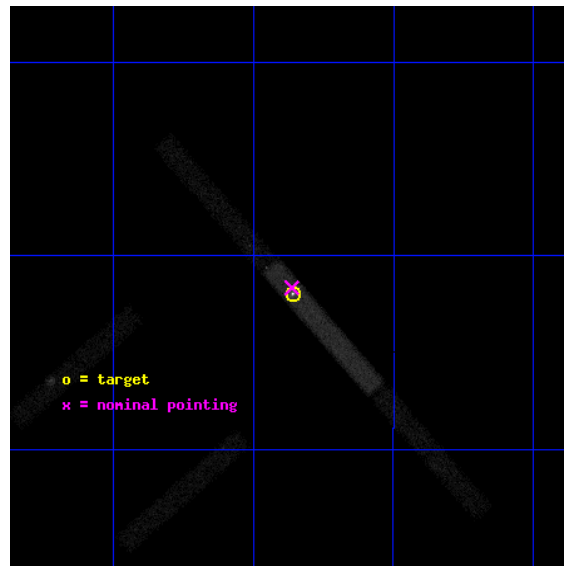
L2 Processing Date : Jun 21 2012

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# 1 Front

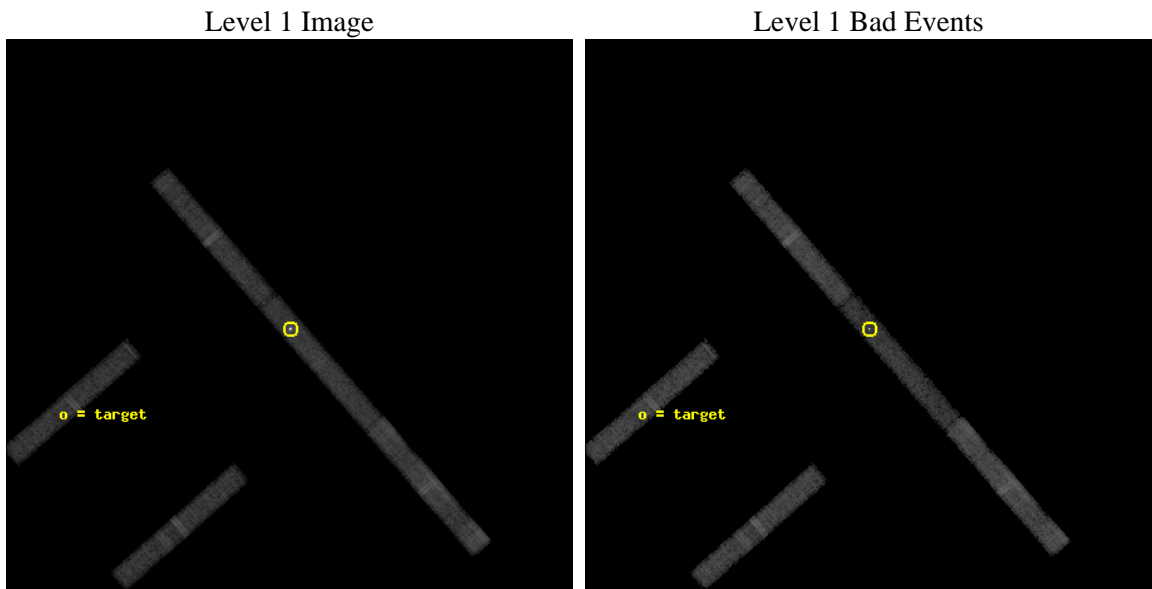
seq_num	702127	Sequence number
obs_id	11541	Observation id
title	The Size of Quasar Non-Thermal/X-ray Emission Regions	Proposal tit
observer	Prof. Christopher Kochanek	Principal investigator
object	RXJ1131-1231	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.96583267933	Nominal RA [deg]
dec_nom	-12.527717823593	Nominal Dec [deg]
roll_nom	48.810442133922	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27122.199538052	Sum of GTIs [s]
livetime	25620.128031734	Livetime [s]
ontime2	27122.199538052	Sum of GTIs [s]
ontime3	27122.199538052	Sum of GTIs [s]
ontime6	27122.199538052	Sum of GTIs [s]
ontime7	27122.199538052	Sum of GTIs [s]
ontime8	27122.199538052	Sum of GTIs [s]
l2events	60933	Number of level 2 events



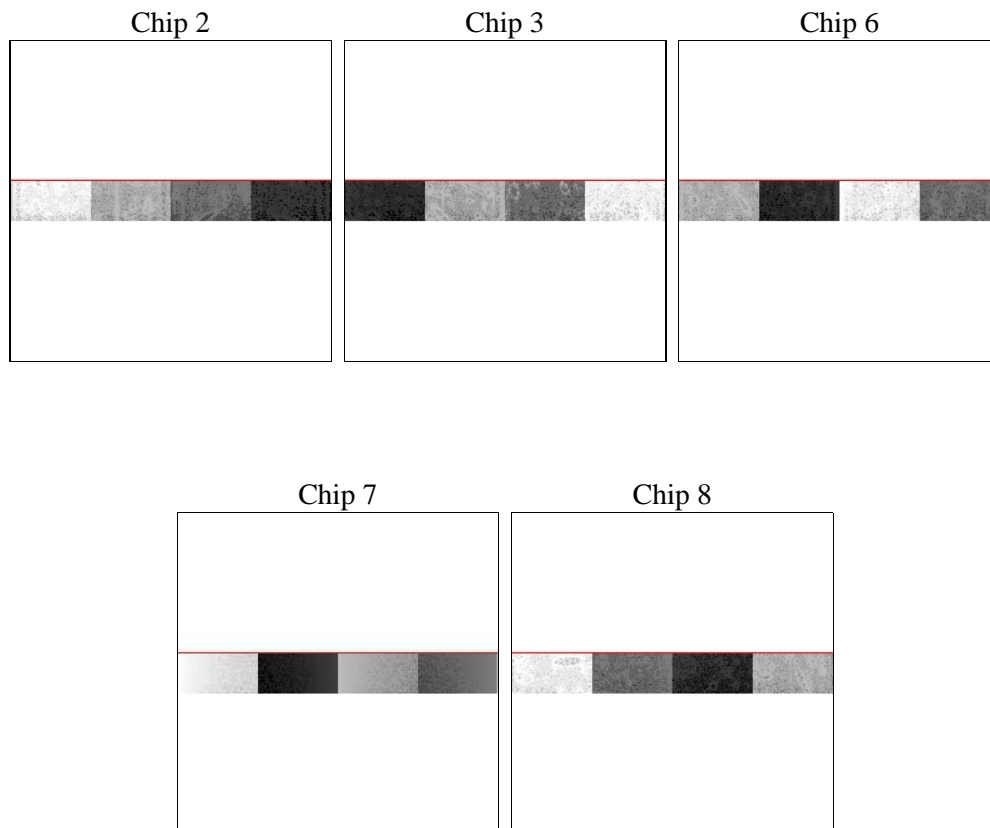
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	27122.199538052	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime2	27122.199538052	Sum of GTIs [s]
date	2012-06-21T02:08:34	Date and time of file creation	ontime3	27122.199538052	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	27122.199538052	Sum of GTIs [s]
			ontime7	27122.199538052	Sum of GTIs [s]
			ontime8	27122.199538052	Sum of GTIs [s]
			l1events	240231	Number of level 1 events

### 2.1.4 Events

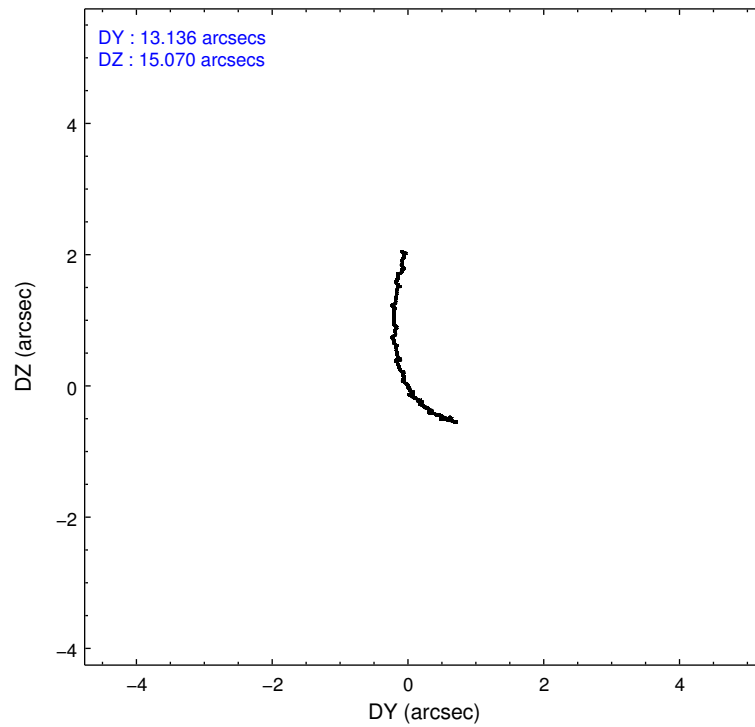
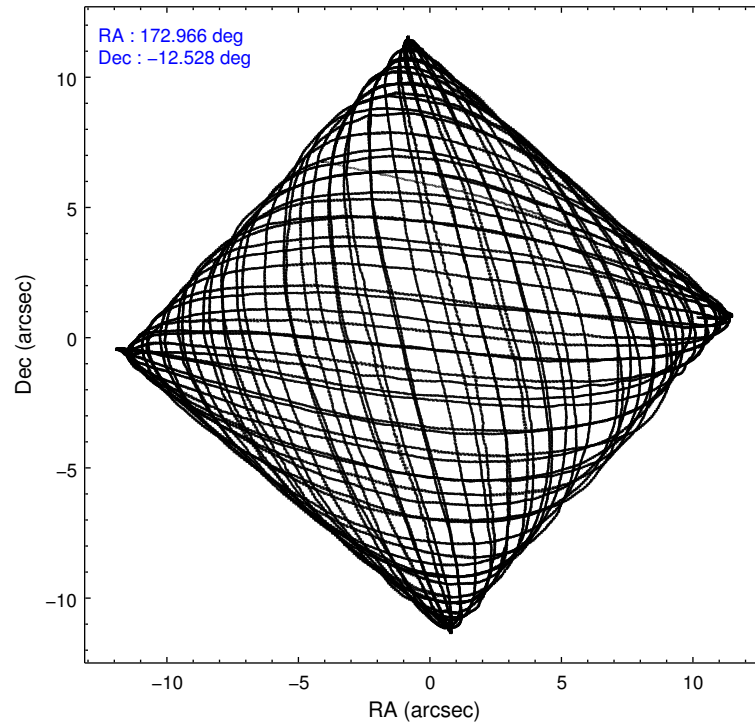
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	35361	36337	39423	73751	55359
rejected events	31323	32747	35136	25021	43486
rejected %	88%	90%	89%	33%	78%

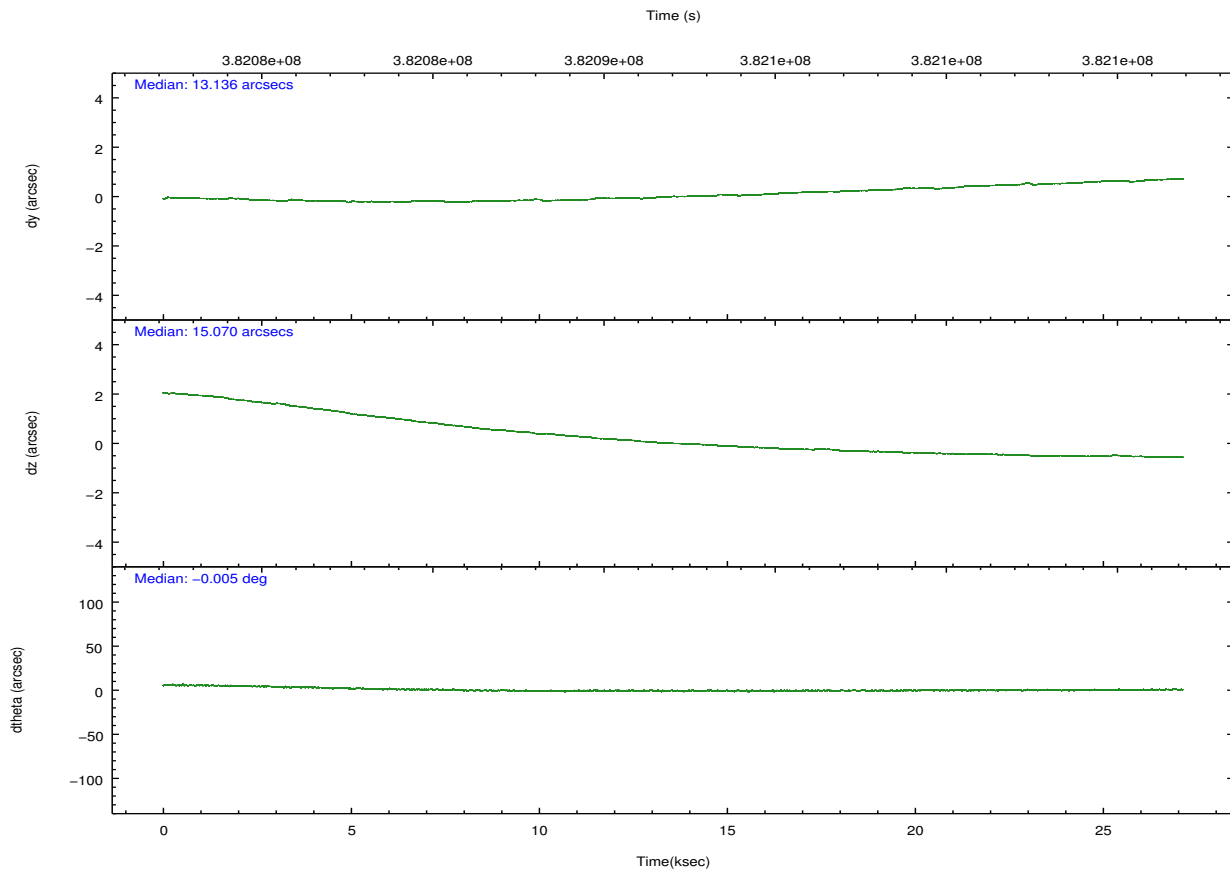
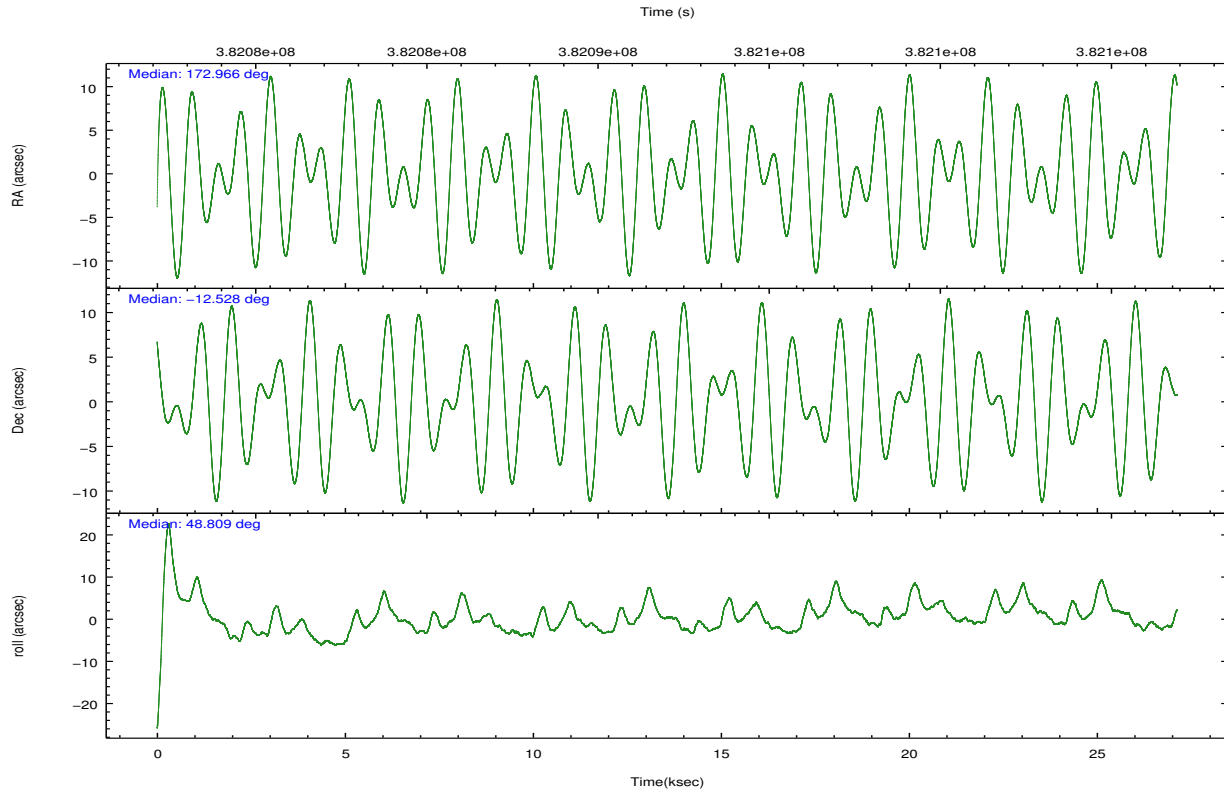
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1376	1034	1281	10088	2876
	3%	2%	3%	13%	5%
grade 1 events	18	16	9	616	17
	0%	0%	0%	0%	0%
grade 2 events	716	667	784	11526	2599
	2%	1%	1%	15%	4%
grade 3 events	705	669	754	5737	1337
	1%	1%	1%	7%	2%
grade 4 events	716	612	745	5509	1234
	2%	1%	1%	7%	2%
grade 5 events	1033	1250	1354	5813	1882
	2%	3%	3%	7%	3%
grade 6 events	616	684	818	16340	4097
	1%	1%	2%	22%	7%
grade 7 events	30181	31405	33678	18122	41317
	85%	86%	85%	24%	74%

## 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	172.960763	172.9658326793257	CCD I2 on	O4	Y
[deg] Pointing Dec	-12.554607	-12.52771782359305	CCD I3 on	O3	Y
[deg] Pointing Roll	48.652721	48.81044213392222	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	382078580.184000	382077395.0081	CCD S5 on	N	N
Observation start date	2010-02-09T04:55:14	2010-02-09T04:36:35	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	382105580.184000	382105950.99704	On-chip summing requested	N	N
Observation end date	2010-02-09T12:25:14	2010-02-09T12:32:30	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



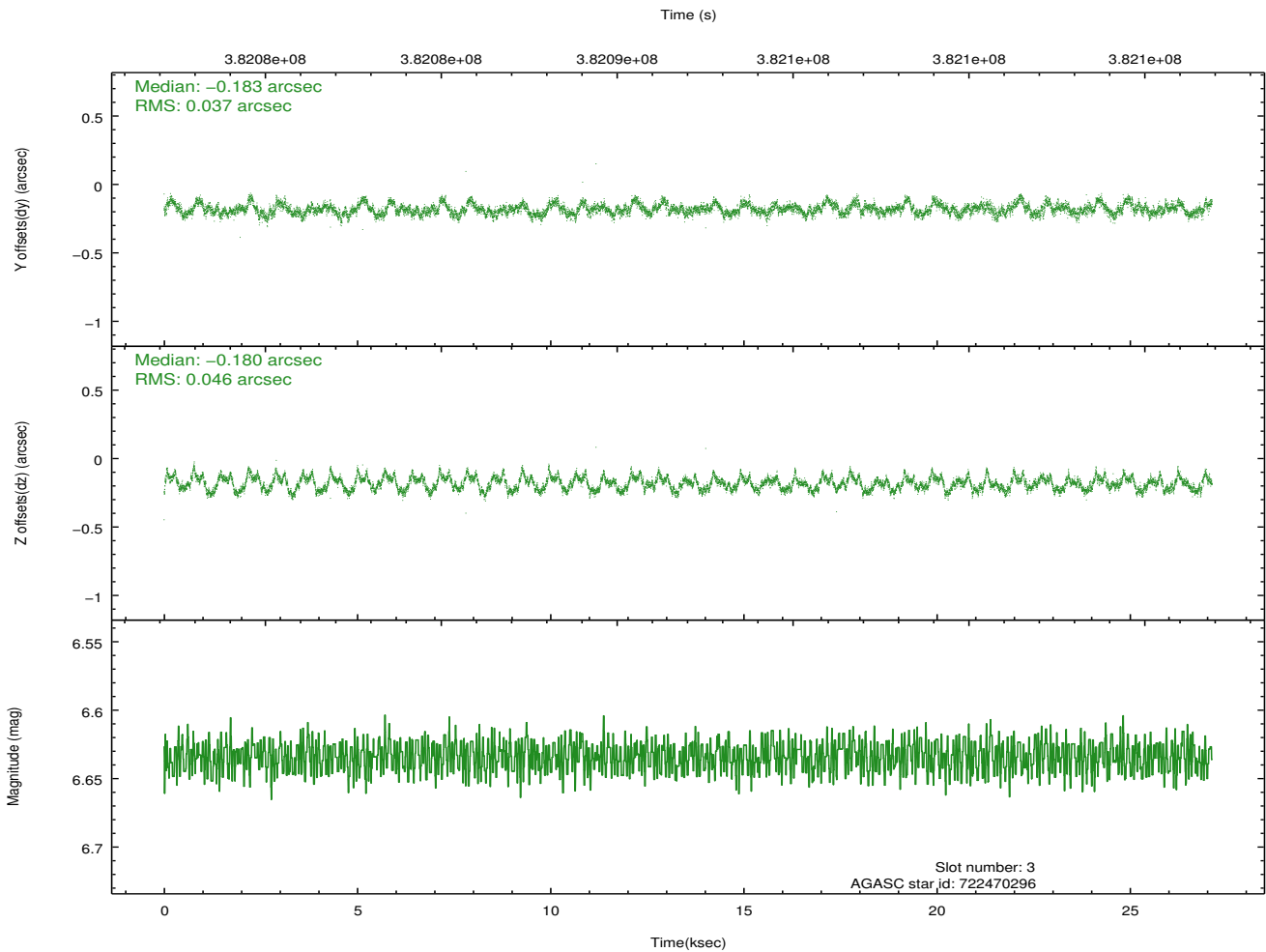
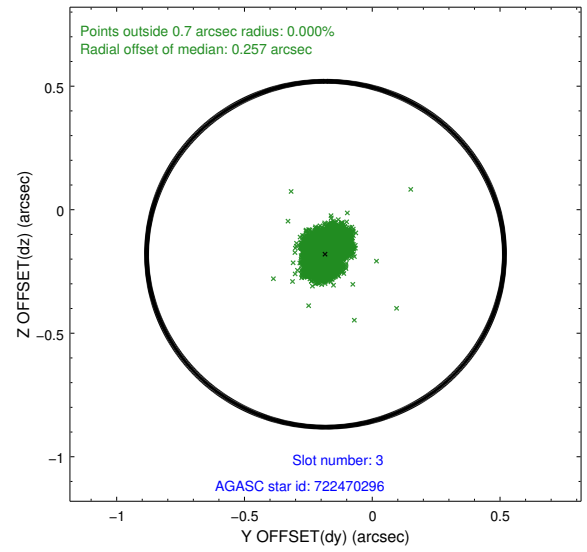
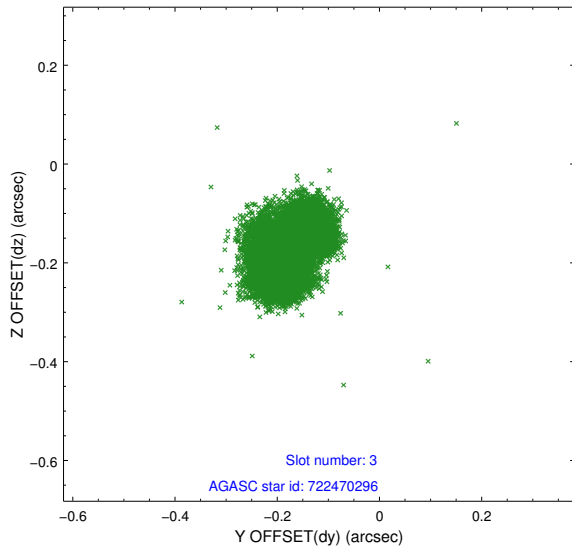


### Slot Statistics

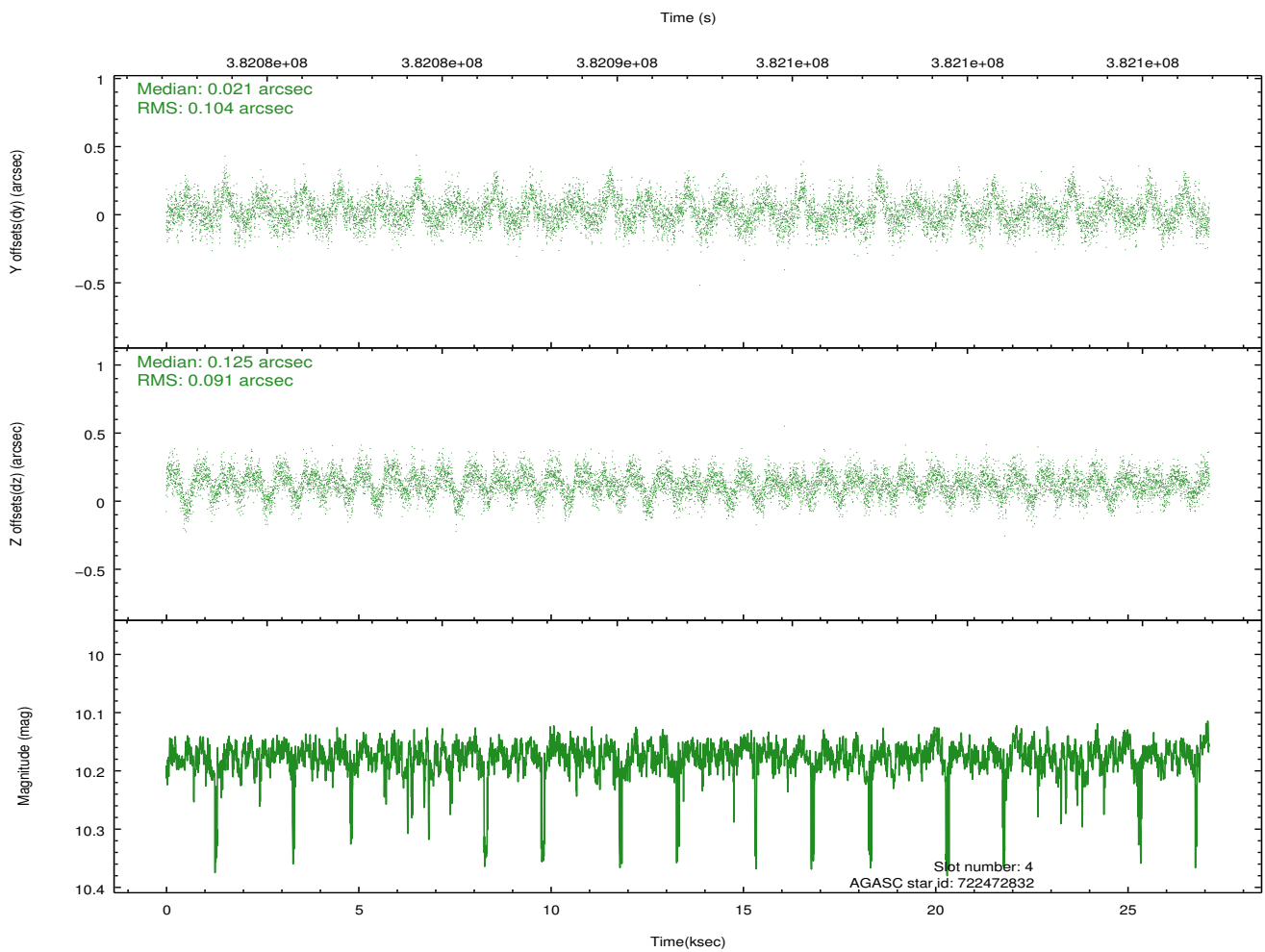
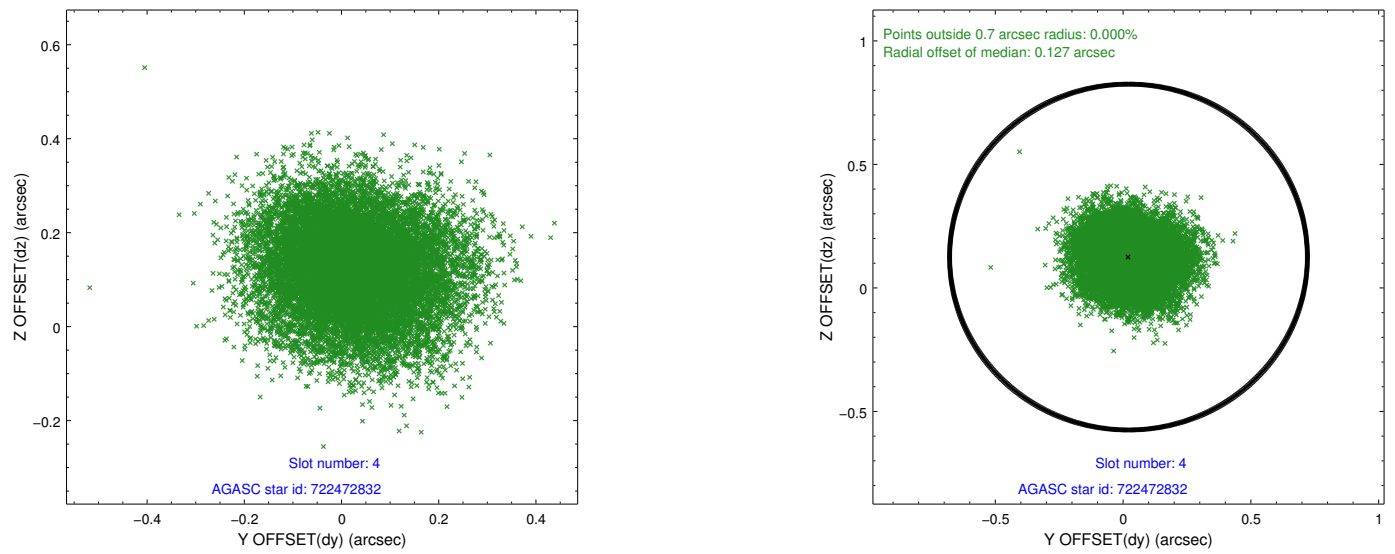
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	6616	-0.048	-0.027	0.013	0.030	0.000000	0.000000	-766.19	-1736.80
1	FID	ACIS-S-4	6.98	6616	0.163	0.029	0.011	0.018	0.000000	0.000000	2147.23	171.67
2	FID	ACIS-S-5	7.00	6616	-0.149	0.005	0.012	0.026	0.000000	0.000000	-1819.03	165.39
3	GUIDE	722470296	6.63	13232	-0.183	-0.180	0.065	0.099	172.921689	-12.381367	377.27	515.46
4	GUIDE	722472832	10.18	13181	0.021	0.125	0.148	0.238	173.078970	-12.015349	1732.45	970.42
5	GUIDE	722473176	9.48	13211	-0.113	-0.377	0.242	0.333	172.599746	-12.066793	477.92	2113.73
6	GUIDE	722871728	9.66	13219	0.127	0.156	0.153	0.235	173.202235	-12.568355	523.29	-669.21
7	GUIDE	722873464	7.30	13229	0.159	0.268	0.073	0.117	172.661543	-13.050266	-2033.13	-391.59

## 2.4 Star Slots

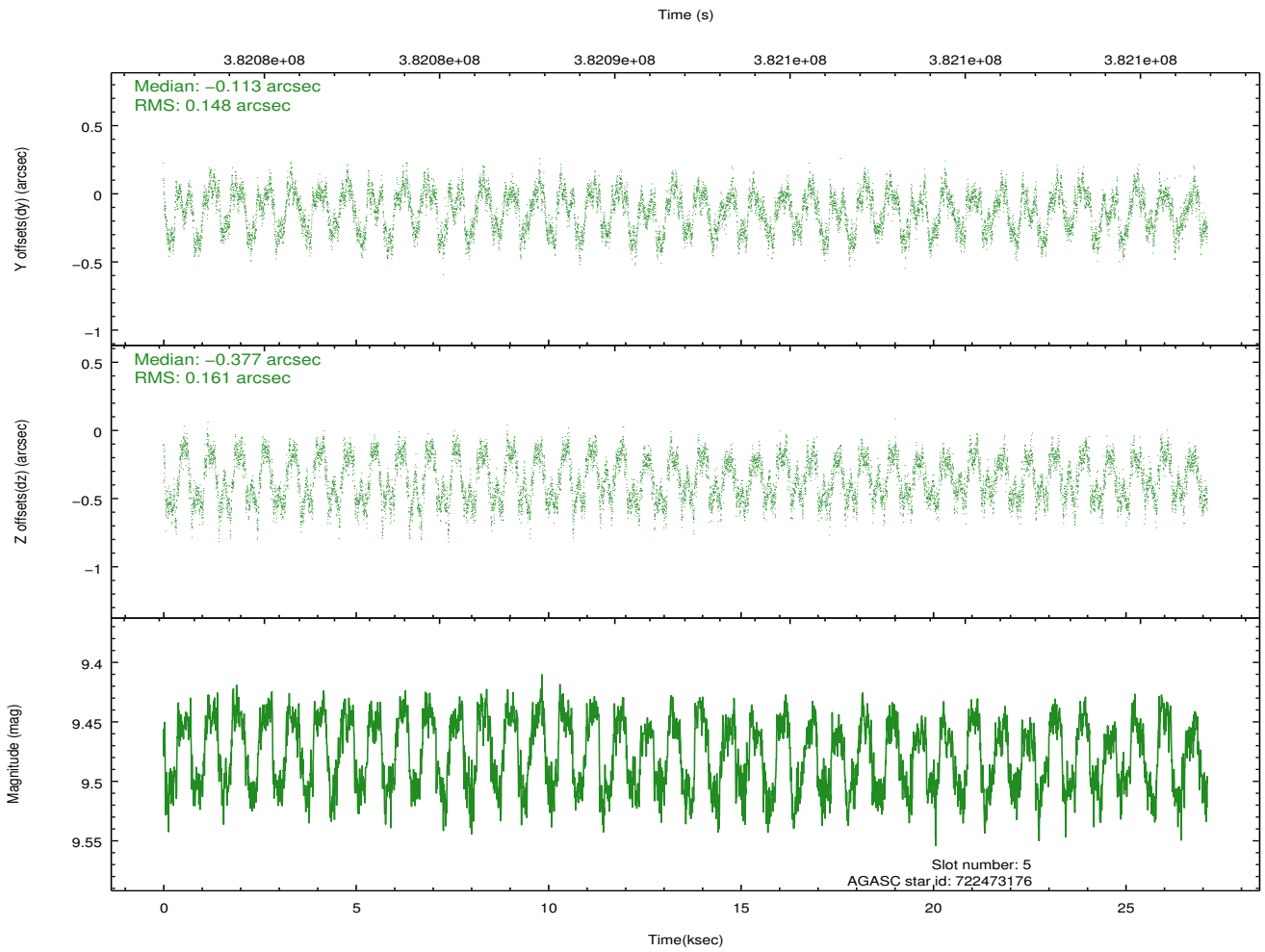
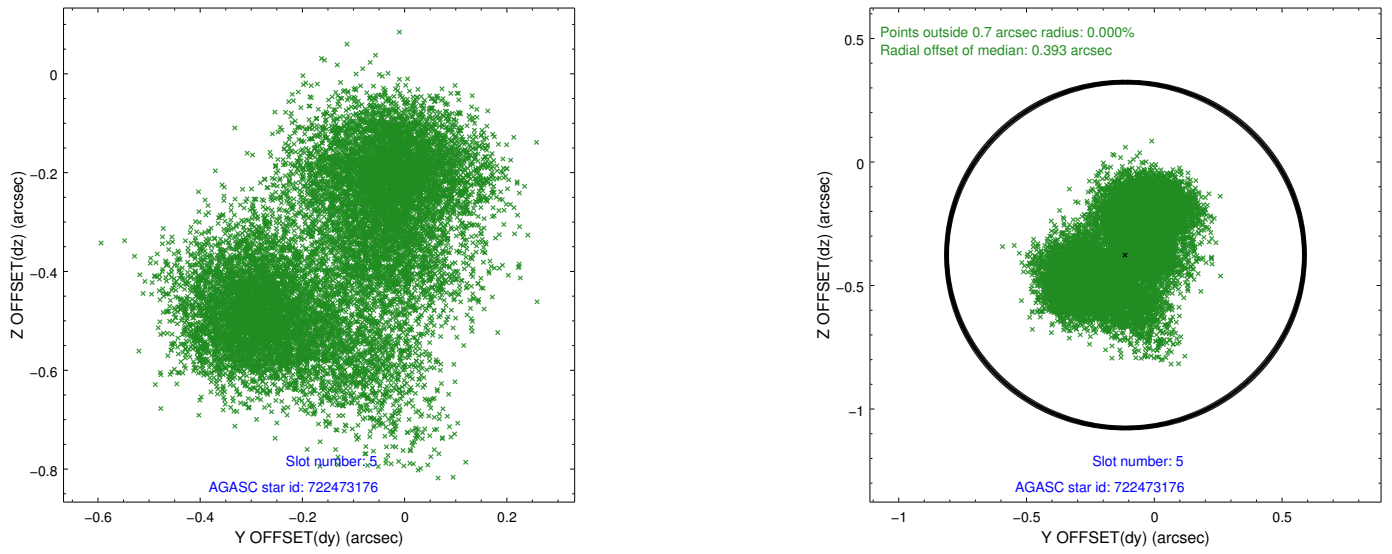
### 2.4.1 Slot 3



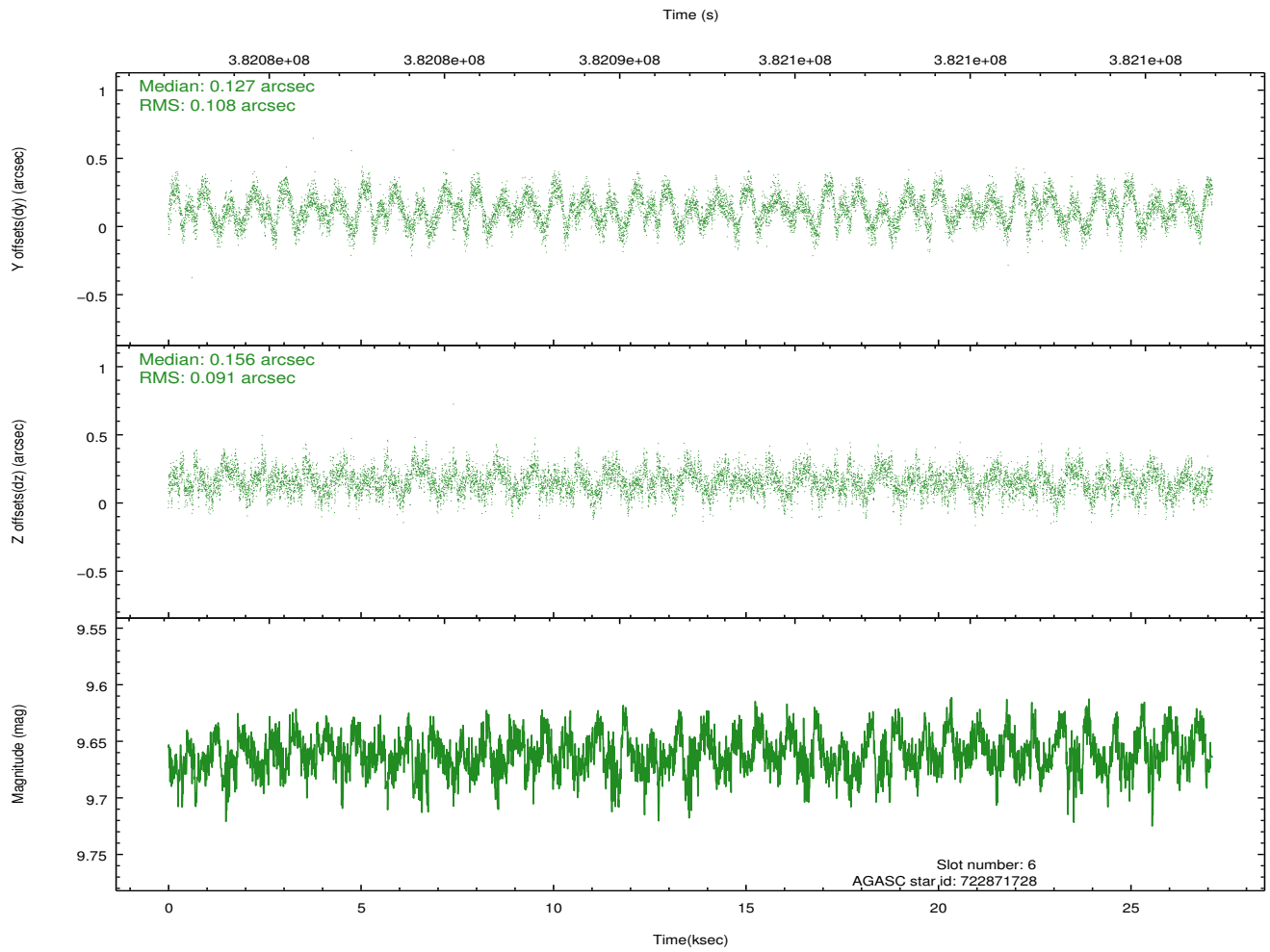
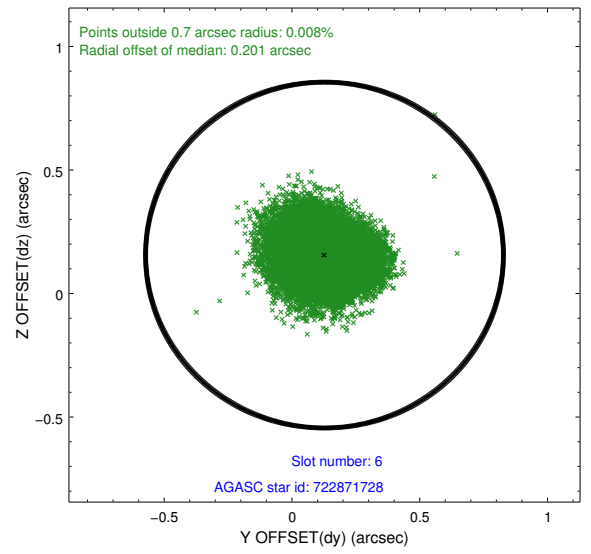
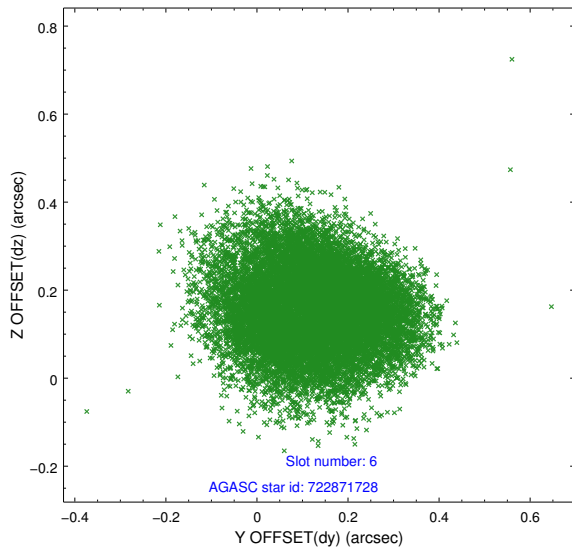
## 2.4.2 Slot 4



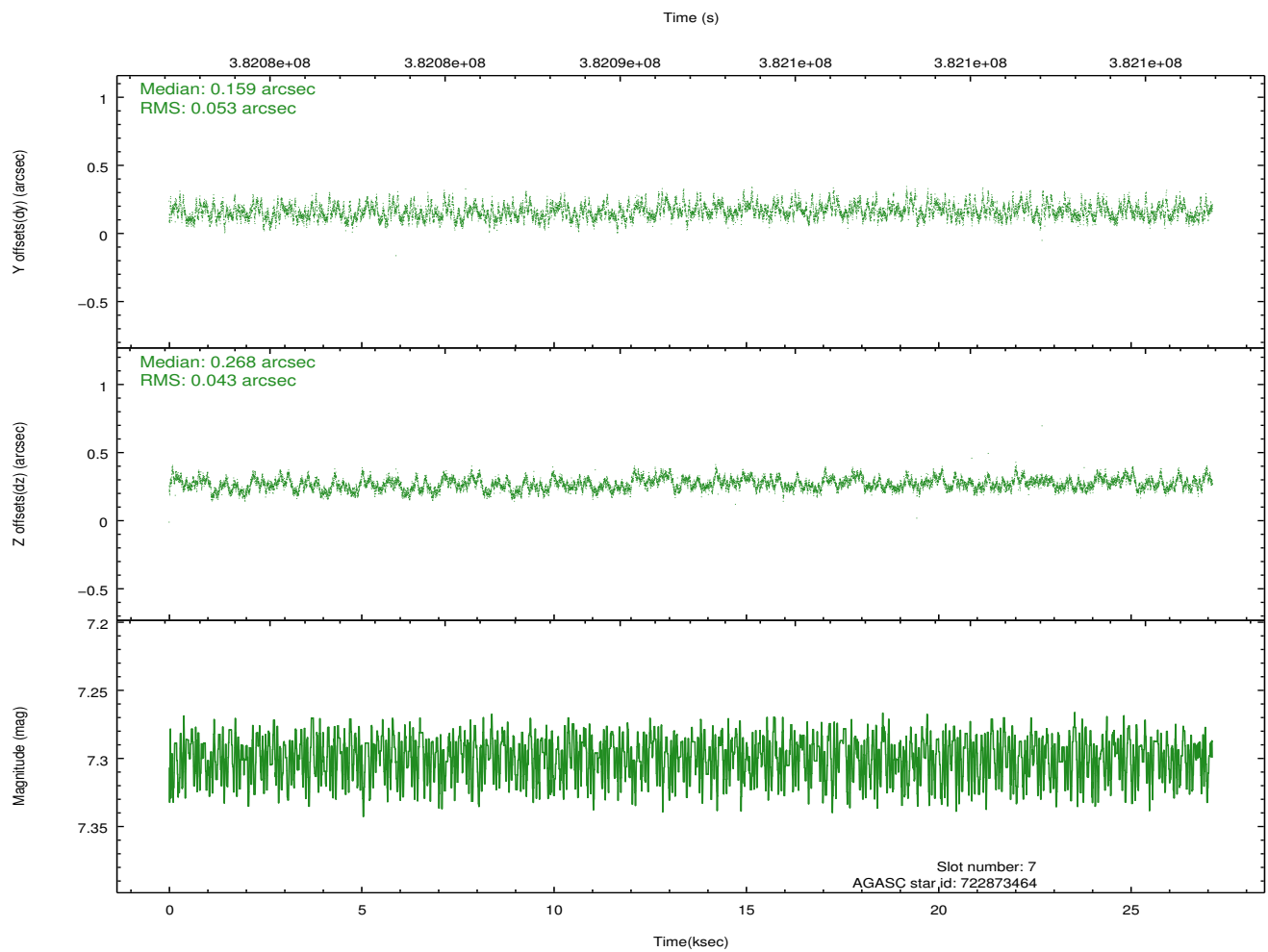
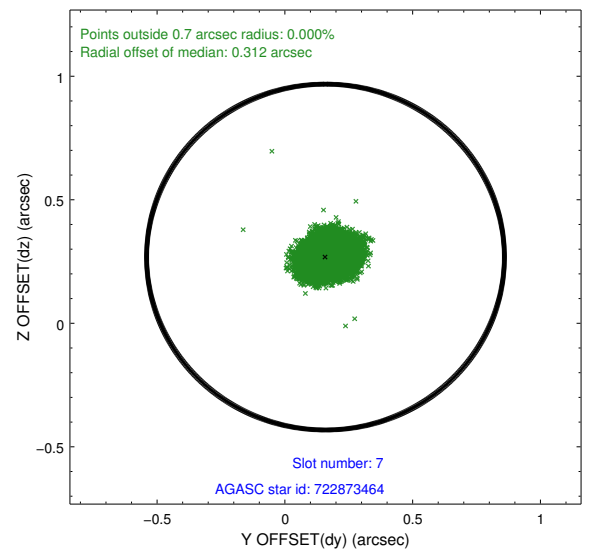
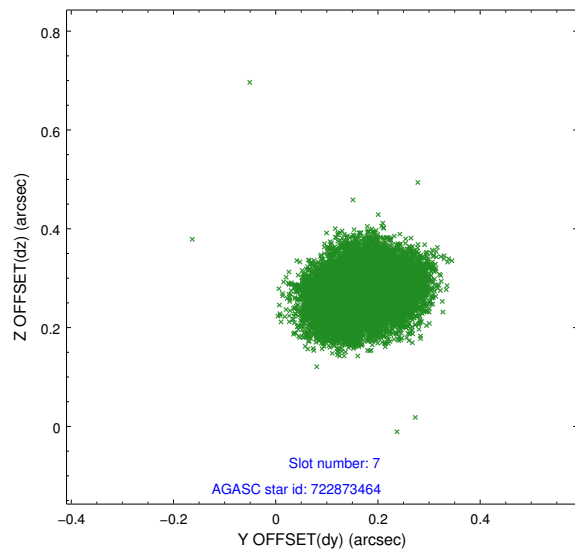
### 2.4.3 Slot 5



### 2.4.4 Slot 6

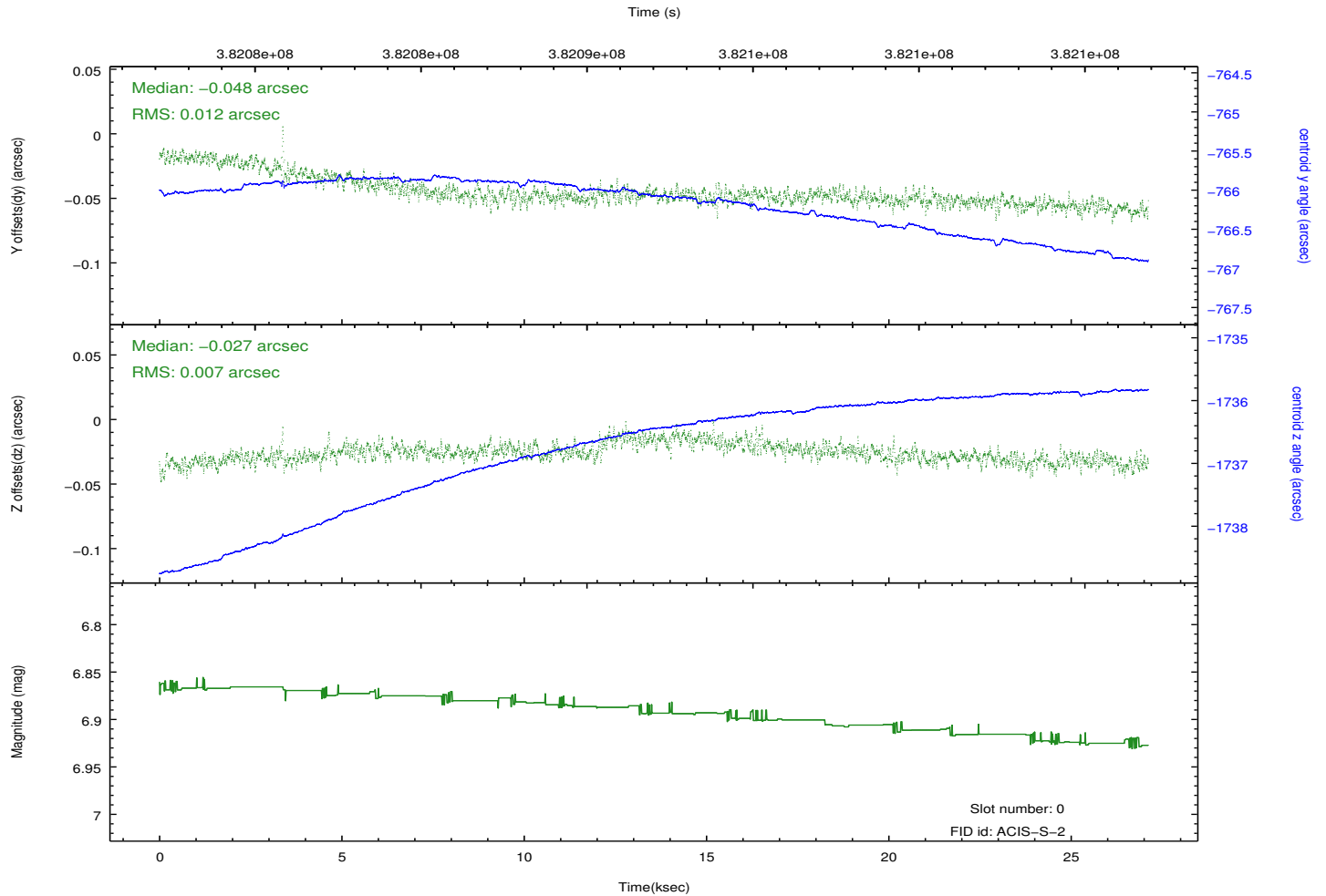
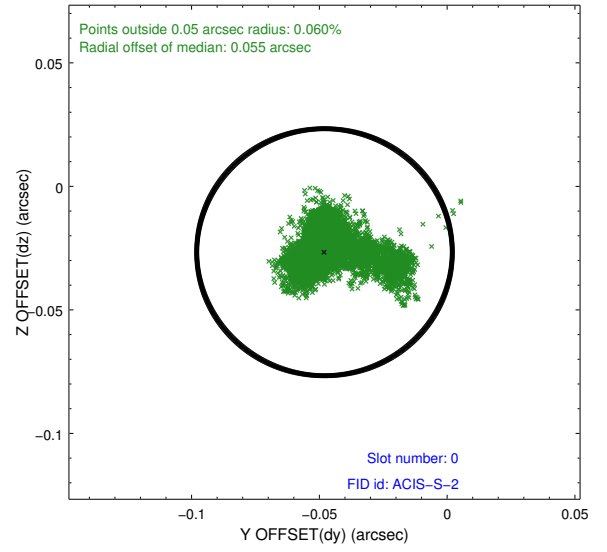
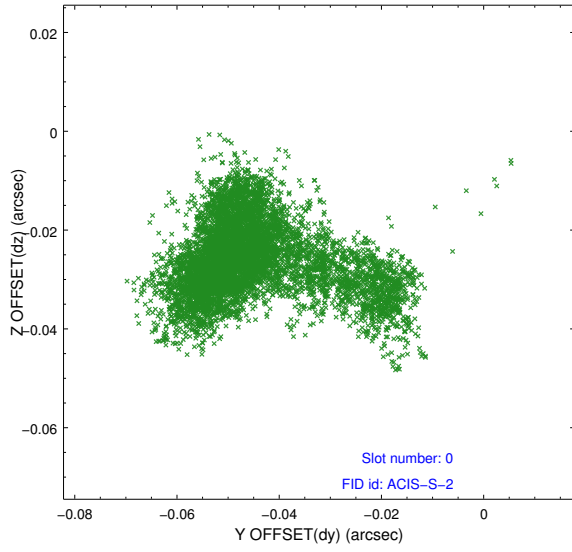


## 2.4.5 Slot 7

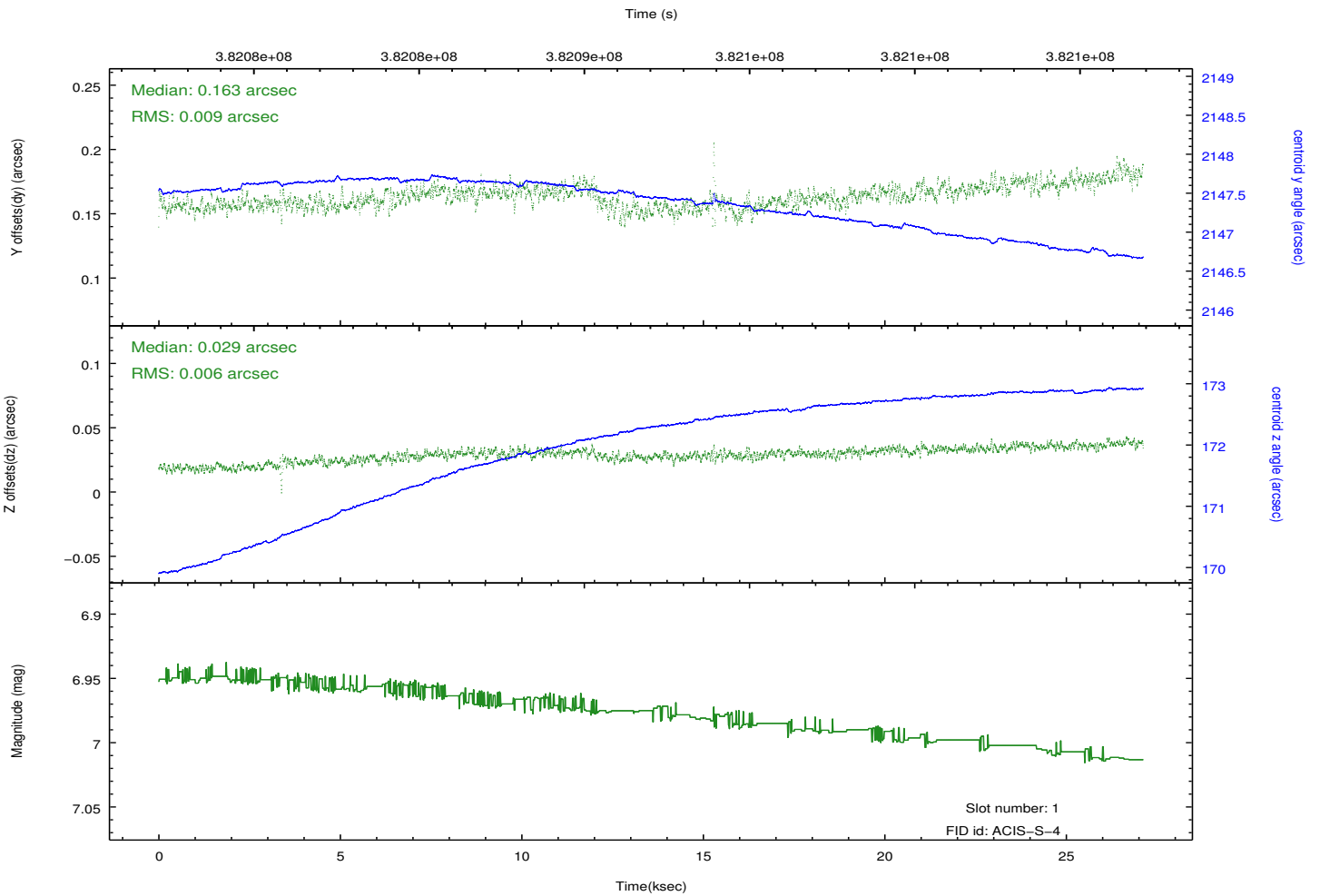
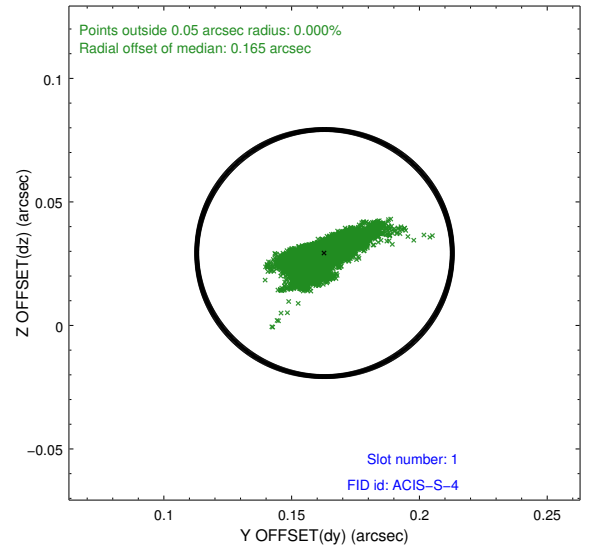
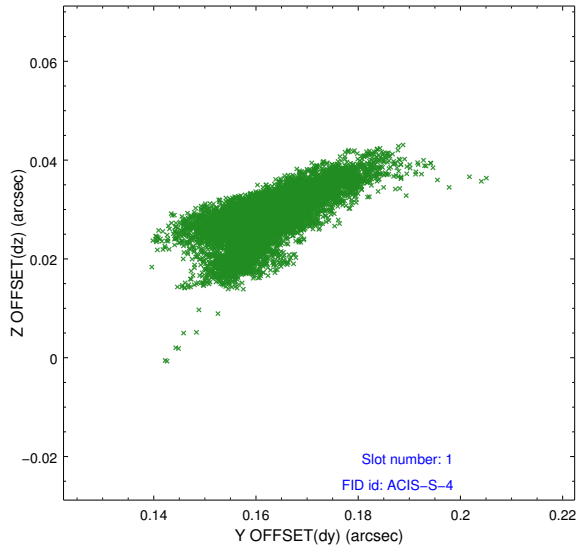


## 2.5 FID Slots

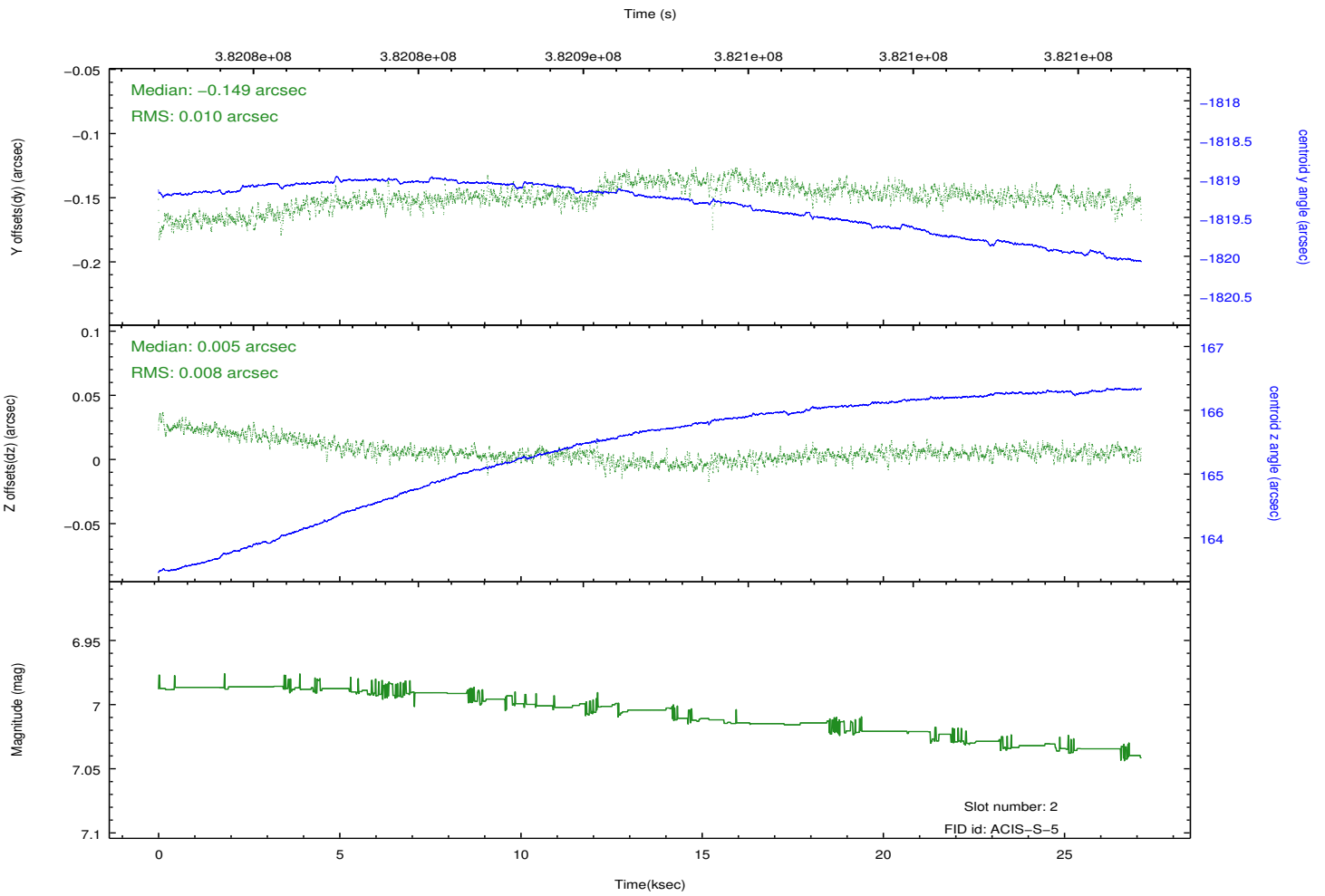
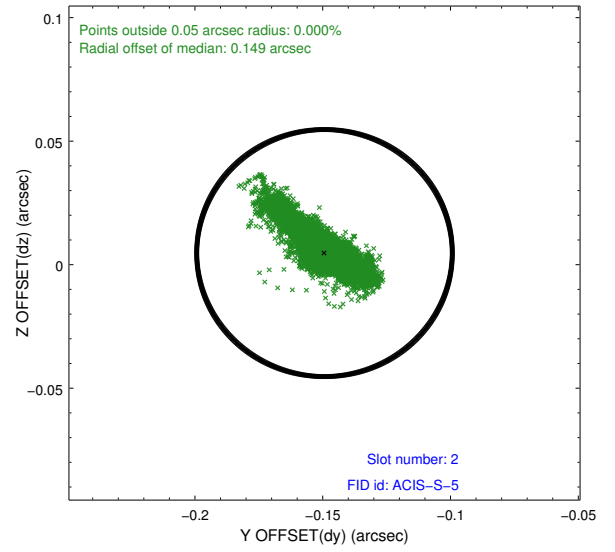
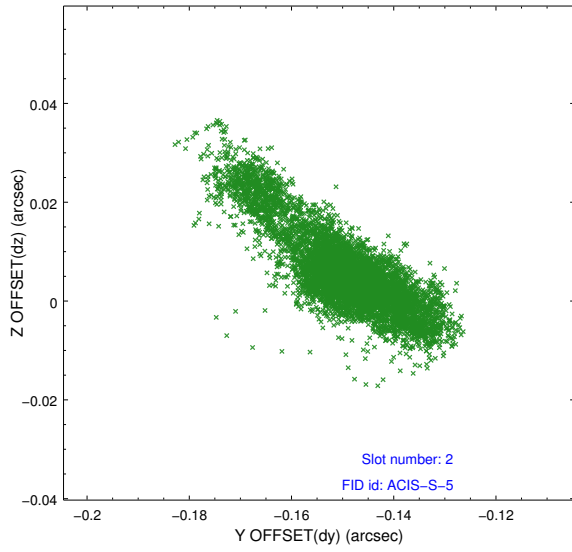
### 2.5.1 Slot 0



## 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)	2012.06.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.122199538052

## A.2 Comments