

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12094 - L2 Version 2  
Chandra X-Ray Center

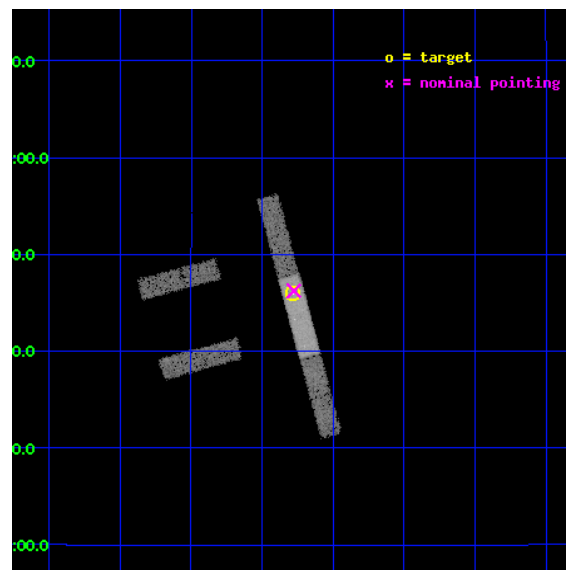
L2 Processing Date : Jun 21 2012

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# 1 Front

seq_num	702319	Sequence number
obs_id	12094	Observation id
title	Studying the Optical and X-ray Emission Regions of Quasar PG1115+080 by Monitoring Microlensing Events	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	PG 1115+080	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	169.570417	Observer's specified target RA [deg]
dec_targ	7.766111	Observer's specified target Dec [deg]
ra_nom	169.56905111769	Nominal RA [deg]
dec_nom	7.7707690985462	Nominal Dec [deg]
roll_nom	74.795399342374	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15183.0	Sum of GTIs [s]
livetime	14584.454007531	Livetime [s]
ontime2	15183.0	Sum of GTIs [s]
ontime3	15183.0	Sum of GTIs [s]
ontime6	15181.958969772	Sum of GTIs [s]
ontime7	15183.0	Sum of GTIs [s]
ontime8	15183.0	Sum of GTIs [s]
l2events	32876	Number of level 2 events

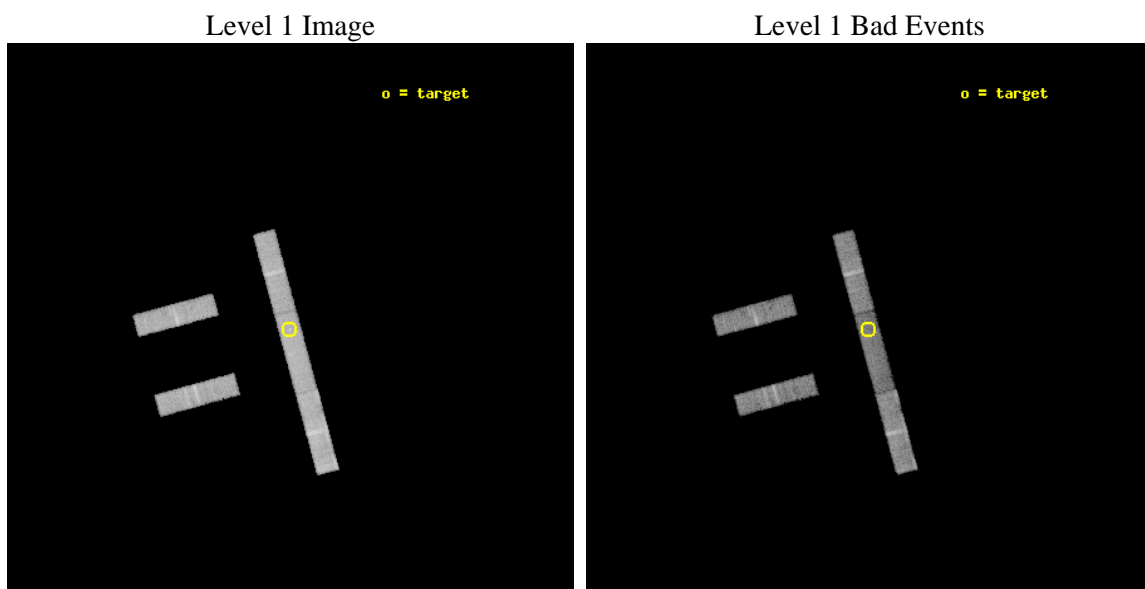




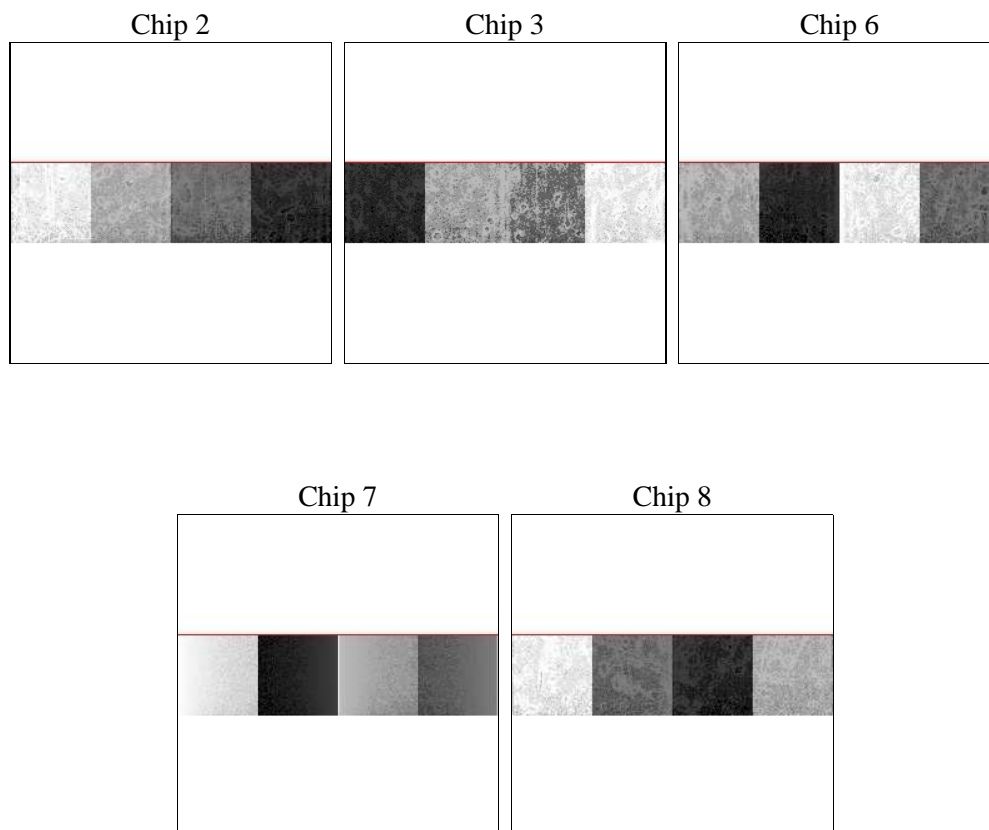
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	15183.0	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	15183.0	Sum of GTIs [s]
date	2012-06-21T14:49:36	Date and time of file creation	ontime3	15183.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15181.958969772	Sum of GTIs [s]
			ontime7	15183.0	Sum of GTIs [s]
			ontime8	15183.0	Sum of GTIs [s]
			l1events	217157	Number of level 1 events

### 2.1.4 Events

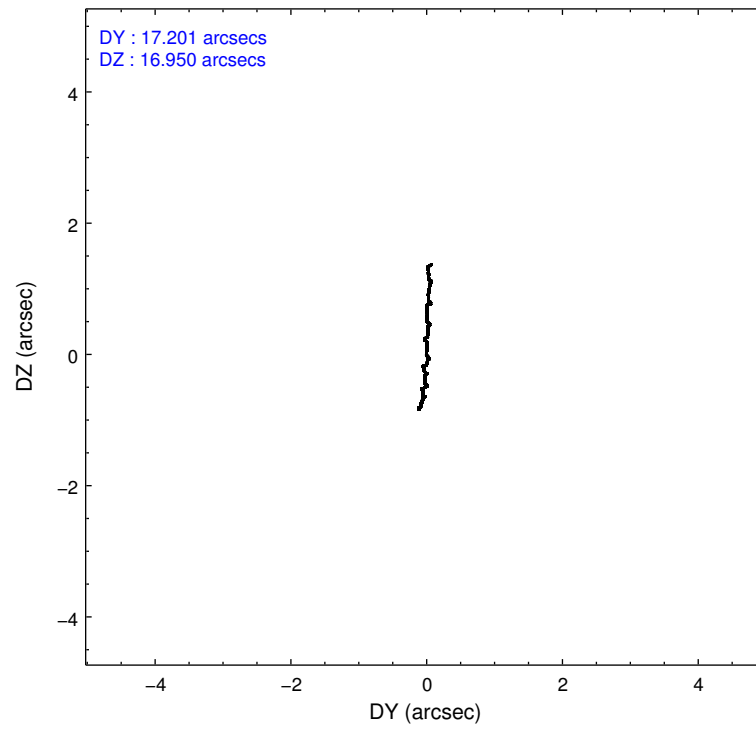
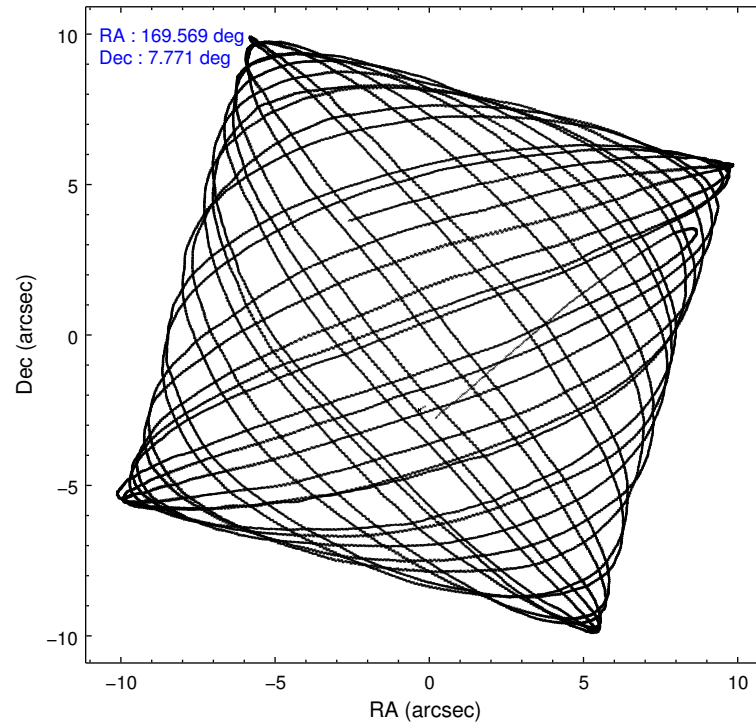
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	38226	37952	41498	44070	55411
rejected events	34339	34107	37197	24078	43167
rejected %	89%	89%	89%	54%	77%

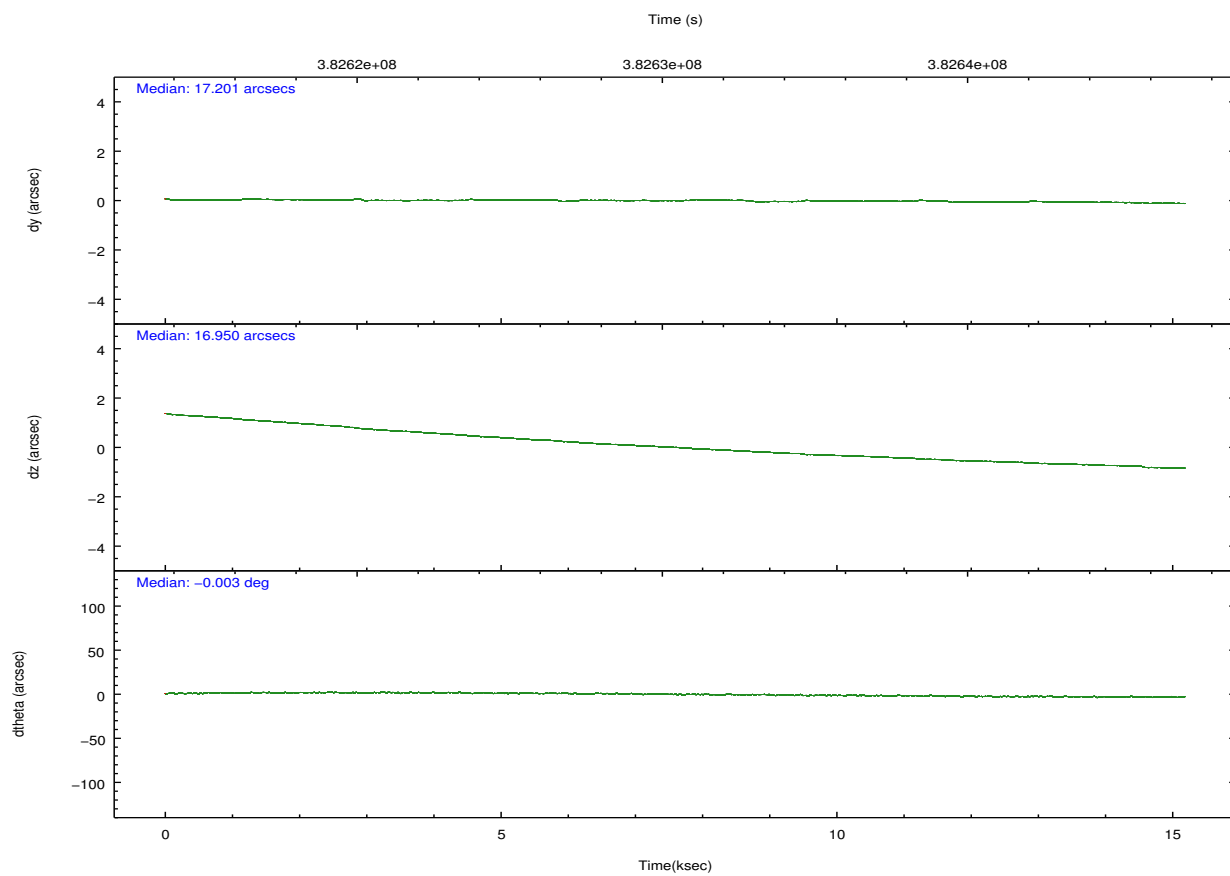
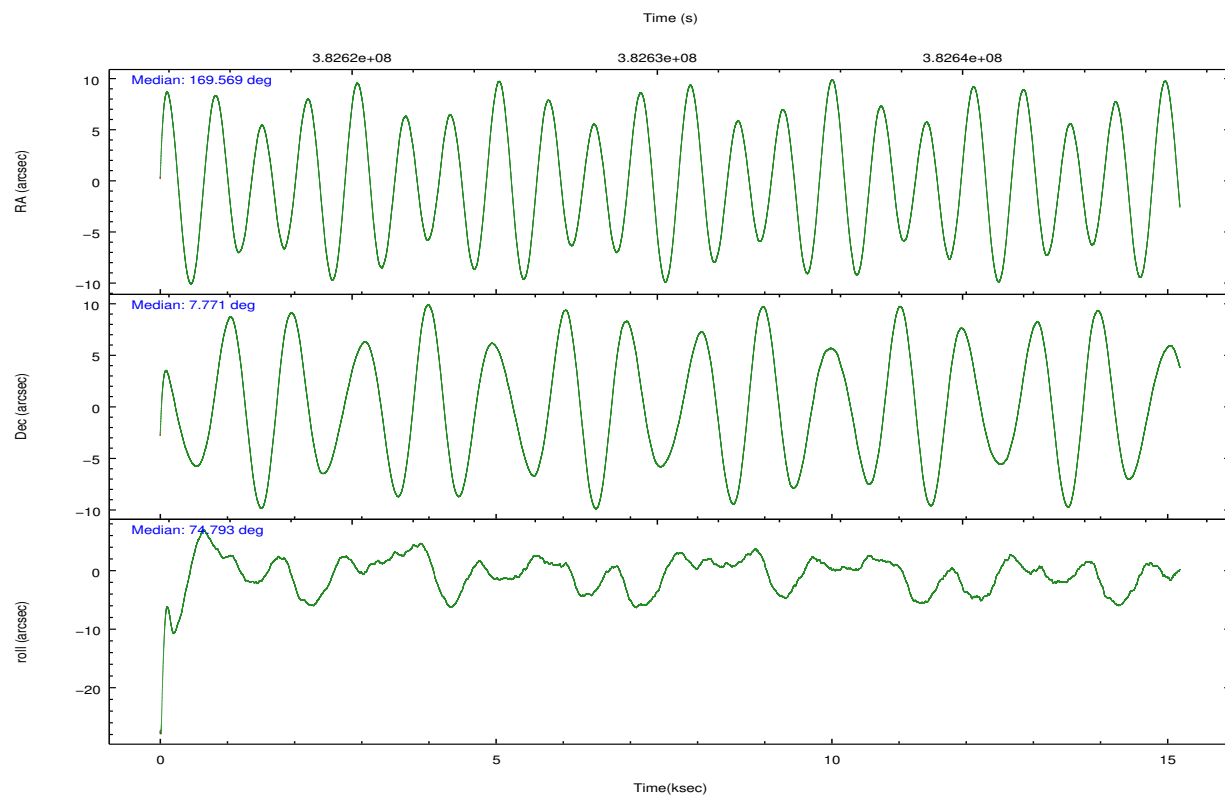
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1277	1231	1404	2237	3612
	3%	3%	3%	5%	6%
grade 1 events	13	17	14	53	30
	0%	0%	0%	0%	0%
grade 2 events	861	781	939	4505	2897
	2%	2%	2%	10%	5%
grade 3 events	606	685	678	2251	1477
	1%	1%	1%	5%	2%
grade 4 events	664	624	688	2236	1375
	1%	1%	1%	5%	2%
grade 5 events	1198	1525	1539	4509	2159
	3%	4%	3%	10%	3%
grade 6 events	692	746	871	9964	3695
	1%	1%	2%	22%	6%
grade 7 events	32915	32343	35365	18315	40166
	86%	85%	85%	41%	72%

## 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	169.576440	169.5690511176936	CCD I2 on	O1	Y
[deg] Pointing Dec	7.744425	7.77076909854617	CCD I3 on	O2	Y
[deg] Pointing Roll	74.637796	74.79539934237407	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	O4	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	O3	Y
[s] Observation start time (MET)	382622807.184000	382621595.21068	CCD S5 on	N	N
Observation start date	2010-02-15T12:05:41	2010-02-15T11:46:35	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	382637807.184000	382638849.03655	On-chip summing requested	N	N
Observation end date	2010-02-15T16:15:41	2010-02-15T16:34:09	Subarray requested	CUSTOM	1/4
Read mode	TIMED	TIMED	Subarray start row	385	385
			Subarray row count	256	256
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1

## 2.3 Aspect



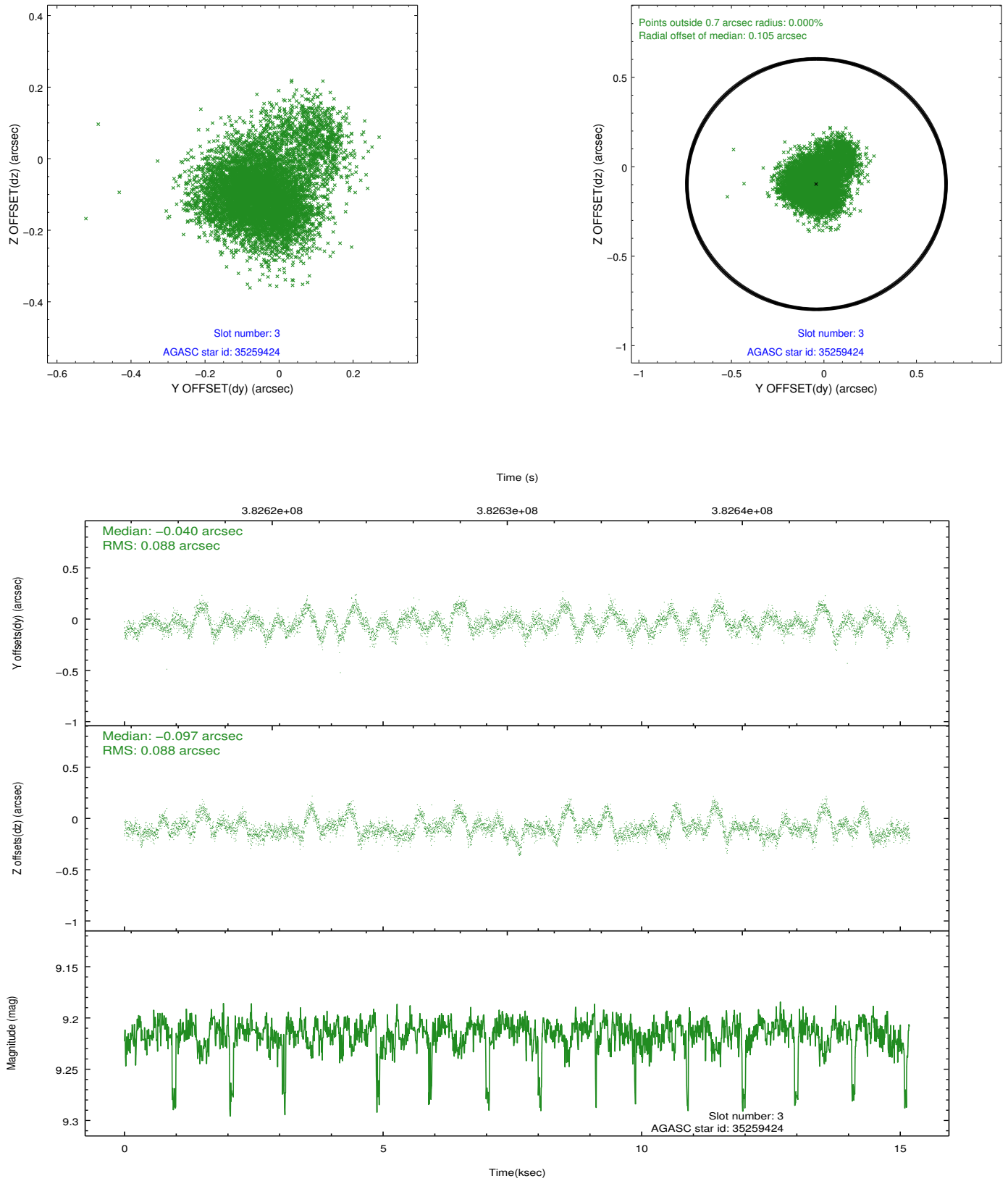


### Slot Statistics

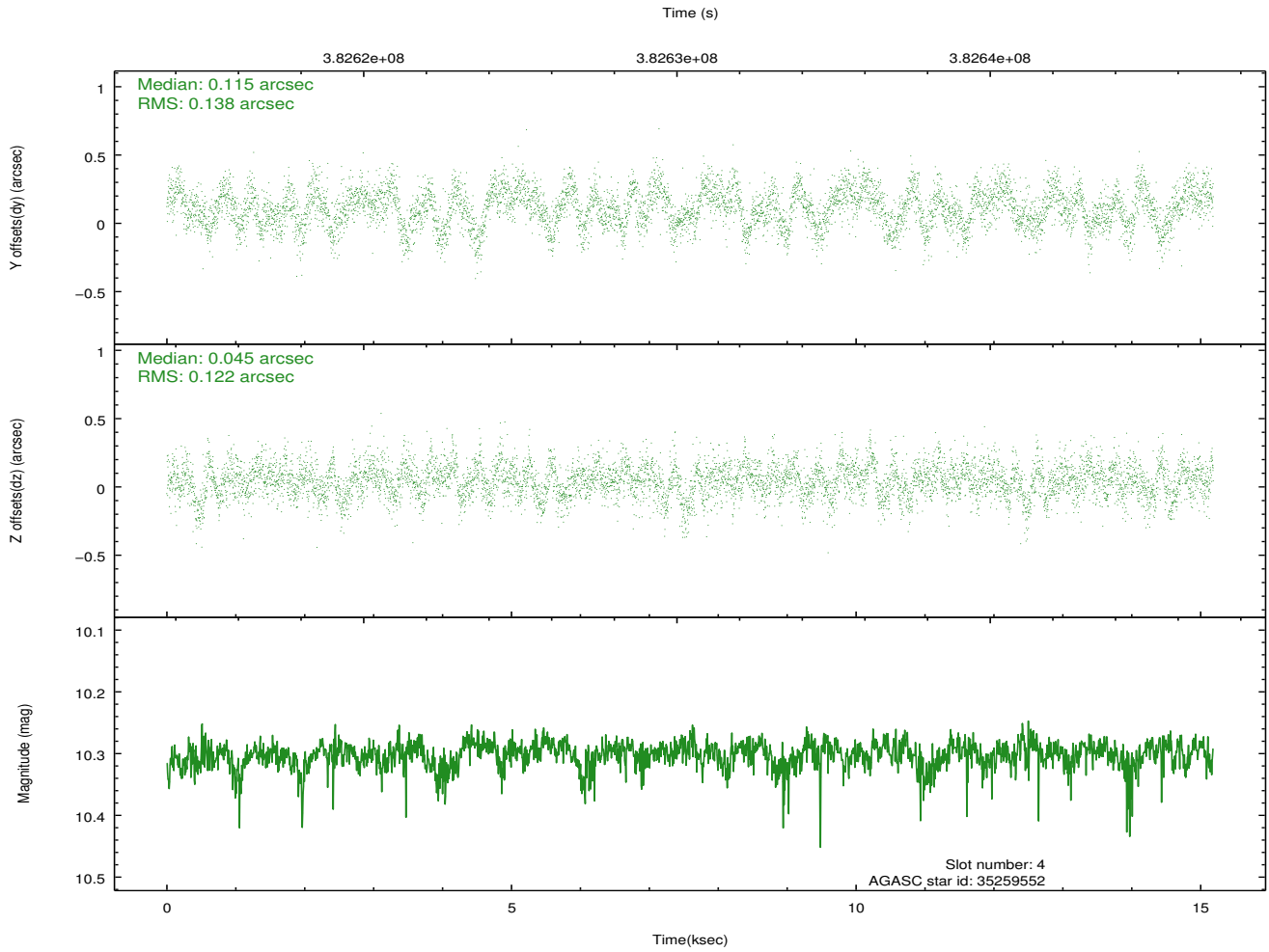
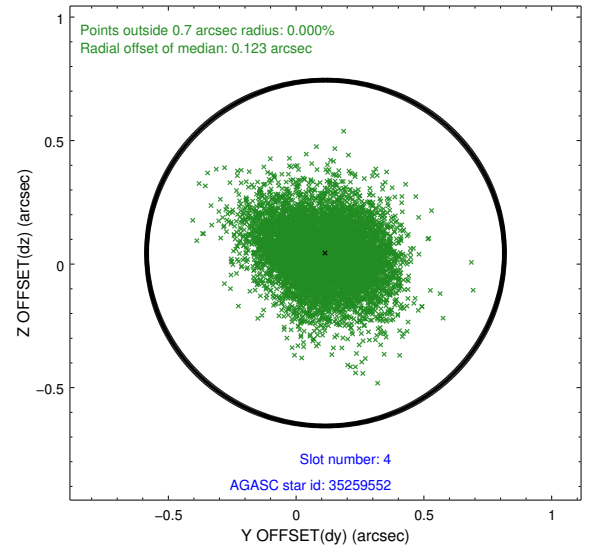
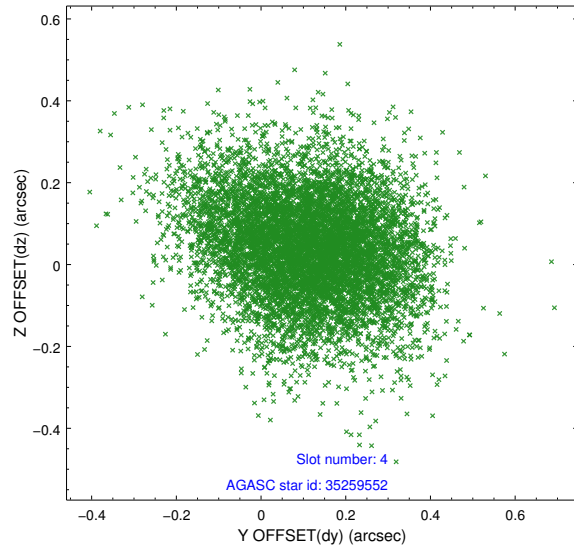
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	3704	-0.062	-0.019	0.023	0.037	0.000000	0.000000	-770.30	-1738.44
1	FID	ACIS-S-4	6.97	3704	0.166	0.037	0.011	0.018	0.000000	0.000000	2143.09	169.77
2	FID	ACIS-S-5	7.00	3704	-0.129	-0.007	0.022	0.038	0.000000	0.000000	-1822.81	163.78
3	GUIDE	35259424	9.22	7398	-0.040	-0.097	0.127	0.229	169.225147	7.406887	-1503.67	887.90
4	GUIDE	35259552	10.30	7390	0.115	0.045	0.195	0.317	169.021323	7.237315	-2284.79	1428.85
5	GUIDE	112067736	10.42	7252	-0.175	0.194	0.333	0.577	169.254540	7.940950	378.10	1294.94
6	GUIDE	112068312	9.87	7332	0.005	-0.259	0.197	0.303	169.673636	8.146330	1486.76	49.75
7	GUIDE	112068528	8.77	7403	0.090	0.104	0.147	0.246	169.984852	7.578312	-189.60	-1563.16

## 2.4 Star Slots

### 2.4.1 Slot 3

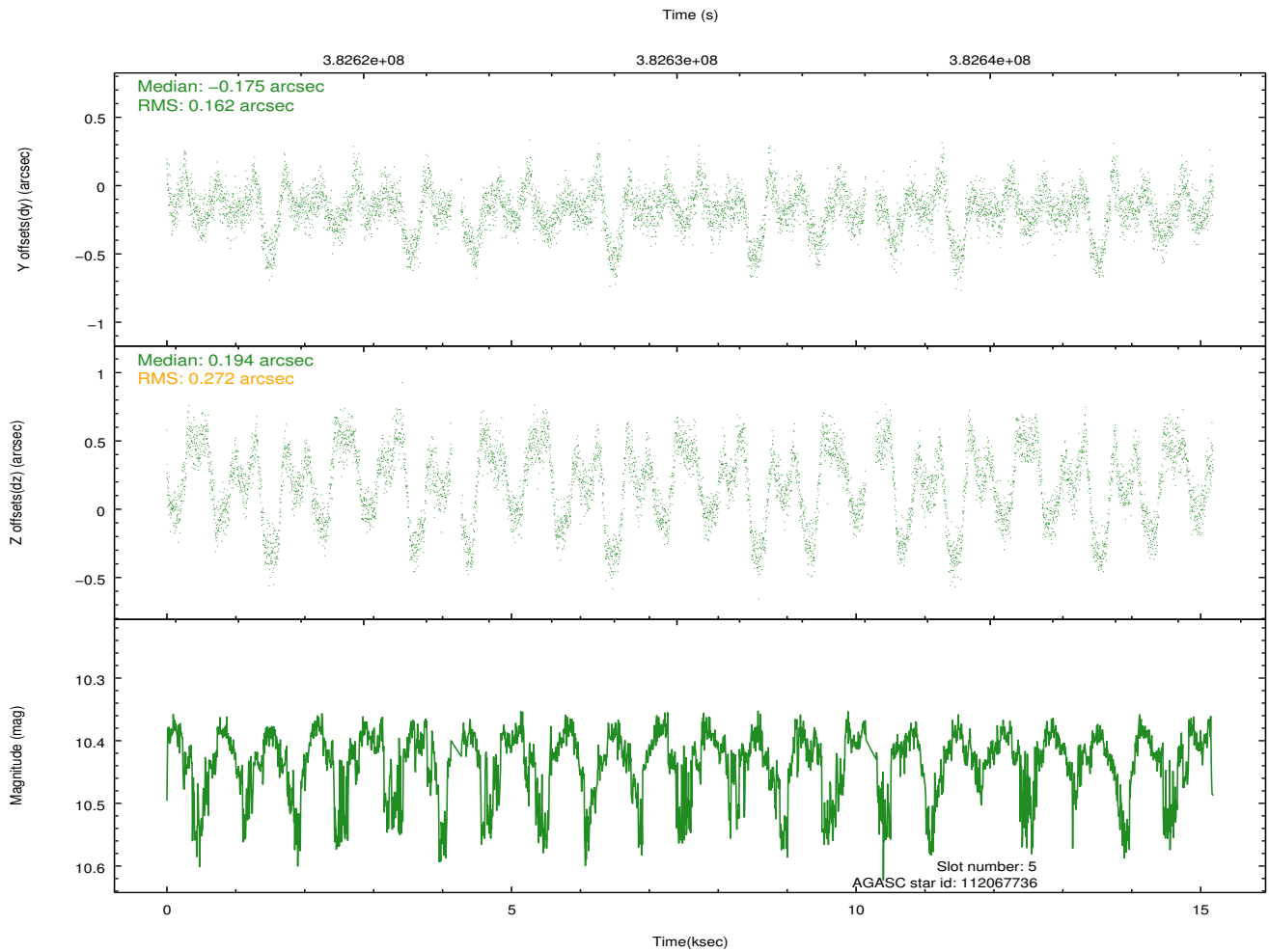
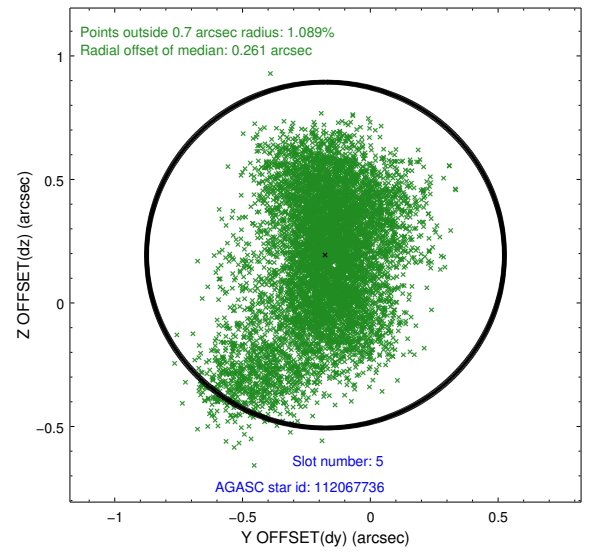
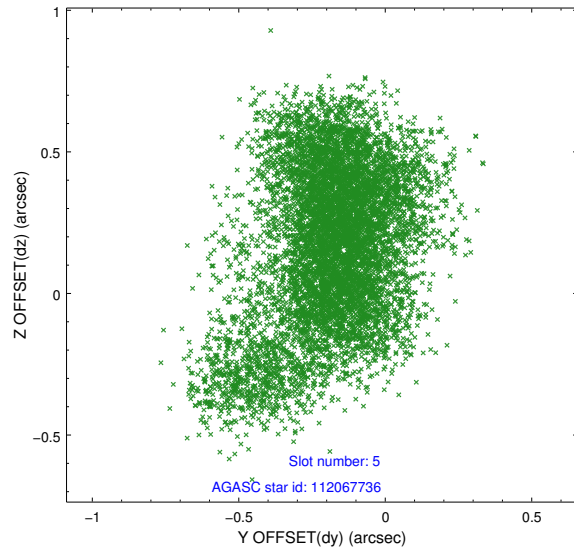


## 2.4.2 Slot 4

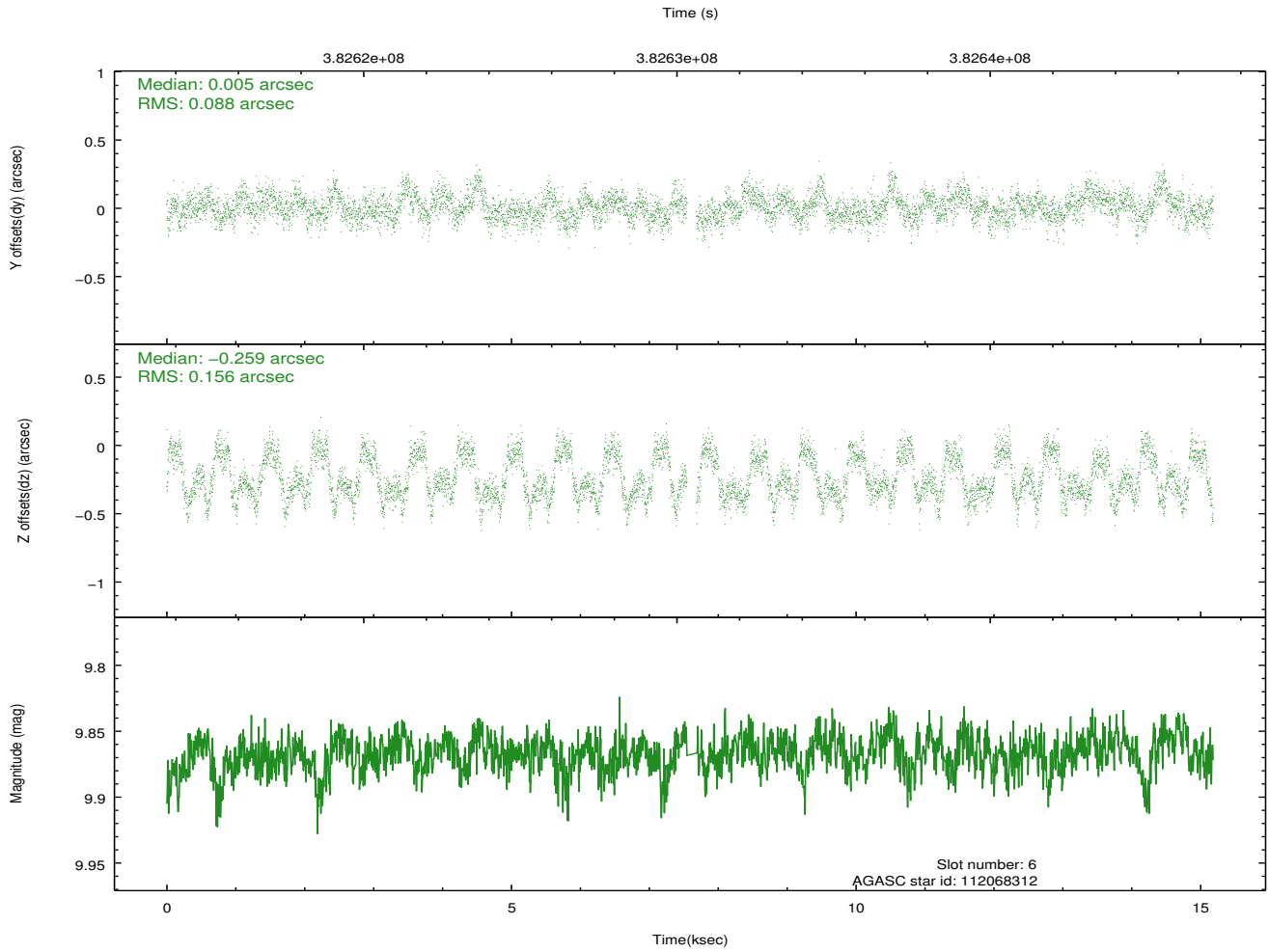
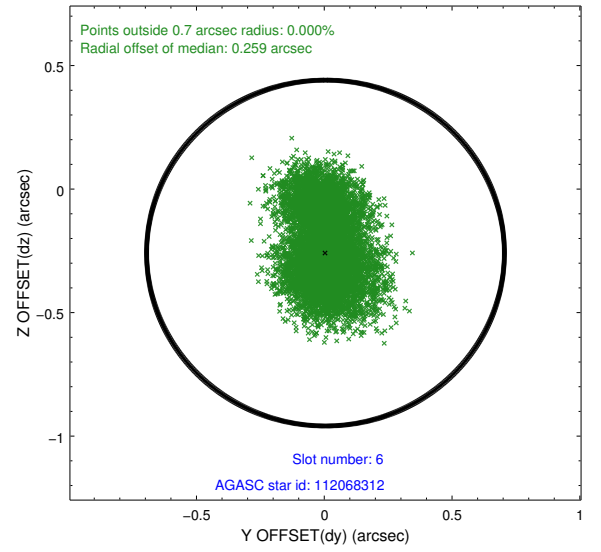
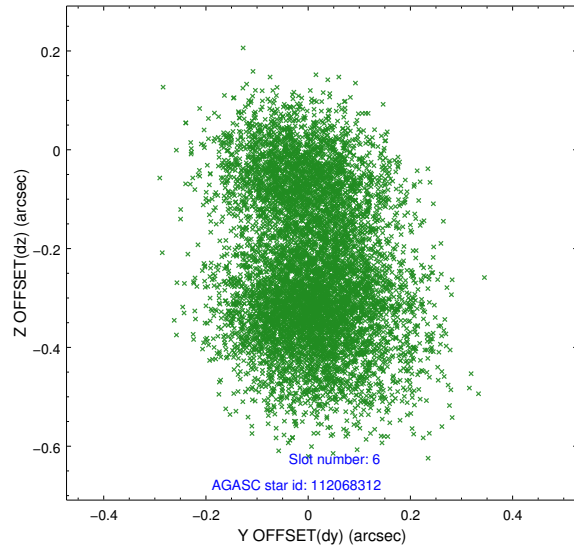




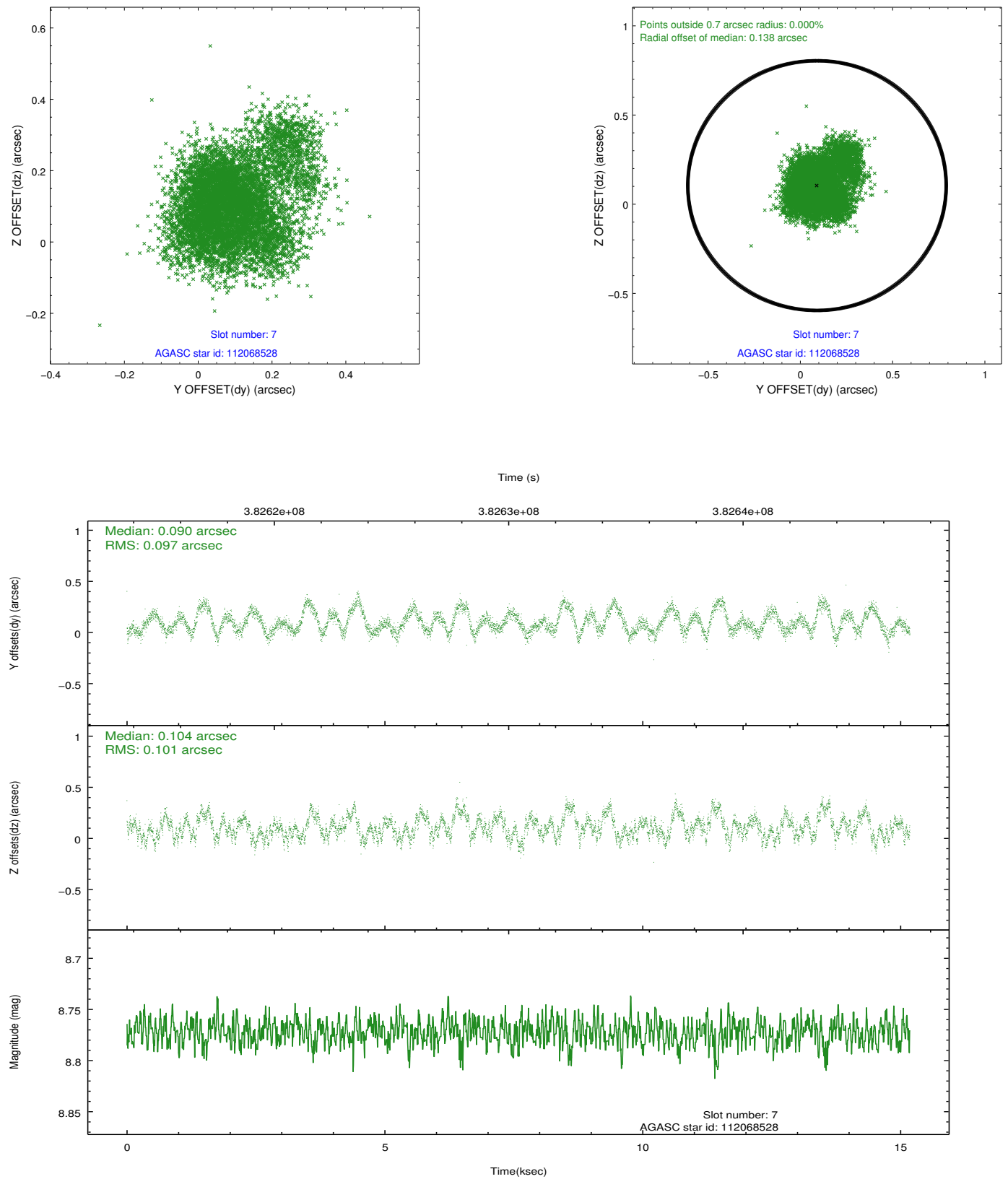
### 2.4.3 Slot 5



## 2.4.4 Slot 6

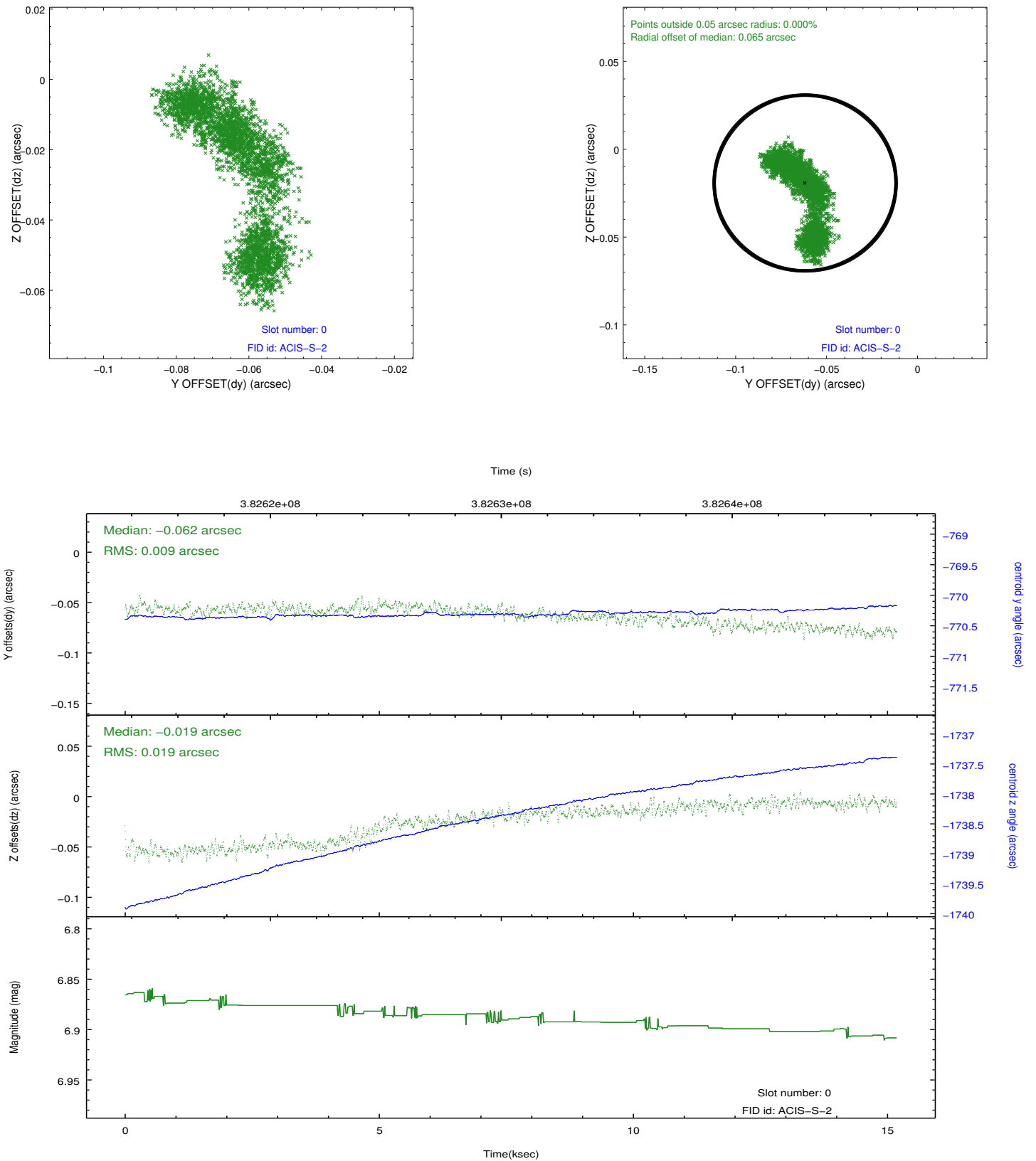


## 2.4.5 Slot 7

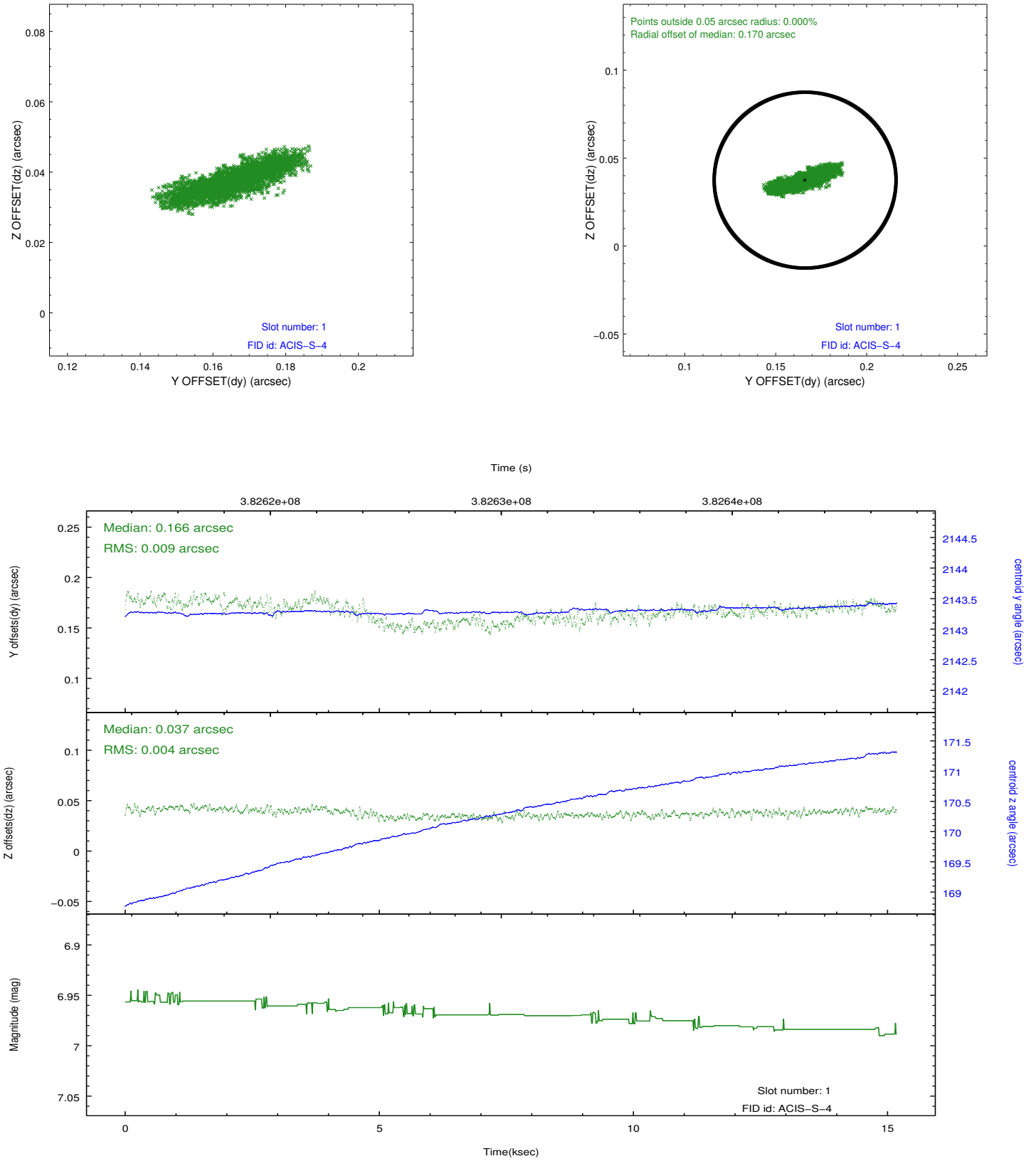


## 2.5 FID Slots

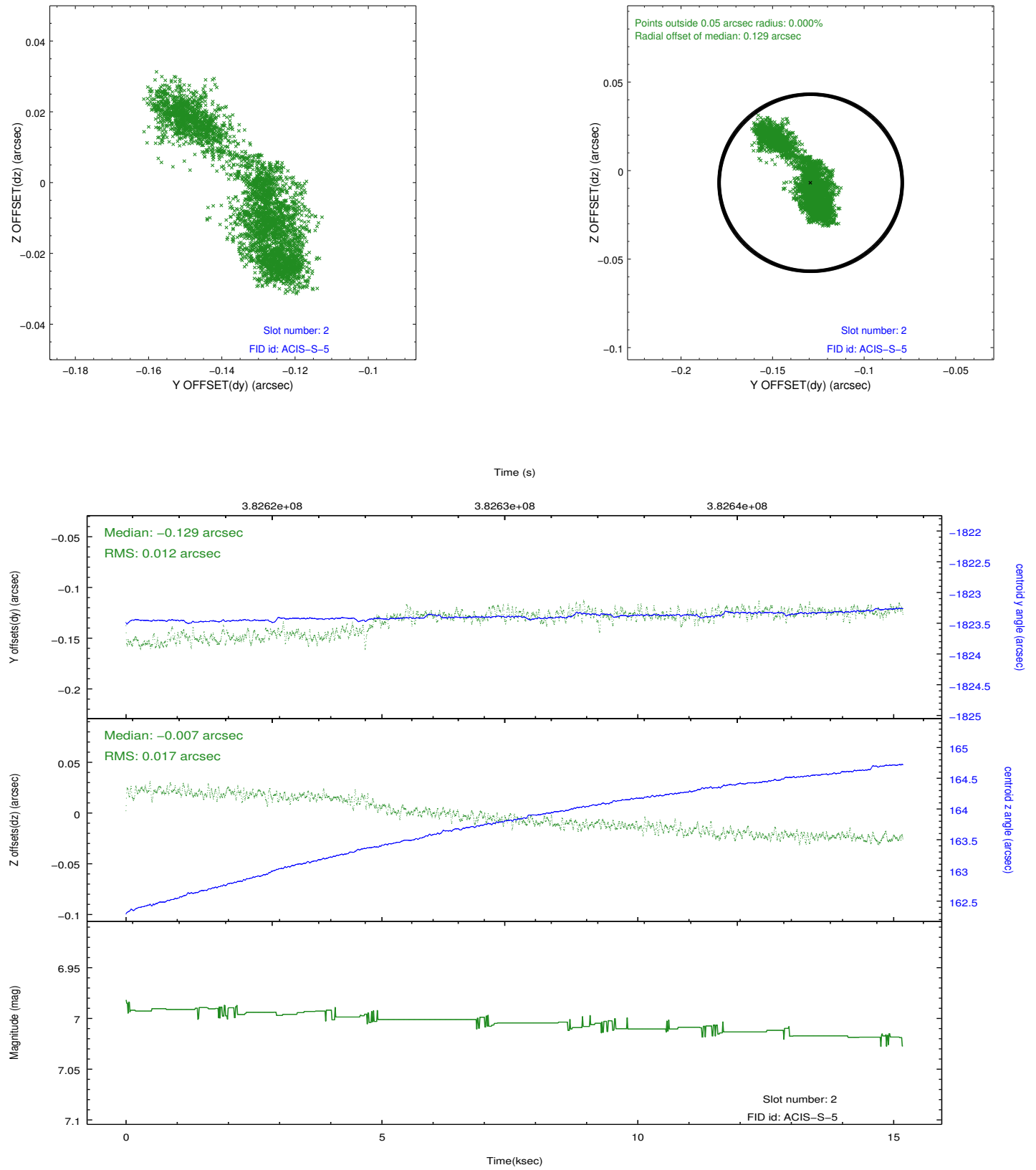
### 2.5.1 Slot 0



## 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	15.183

### A.2 Comments