

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11857 - L2 Version 2  
Chandra X-Ray Center

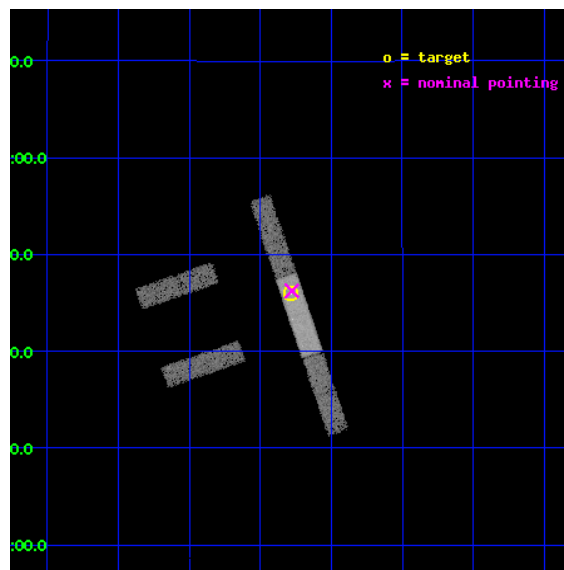
L2 Processing Date : Jun 20 2012

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# 1 Front

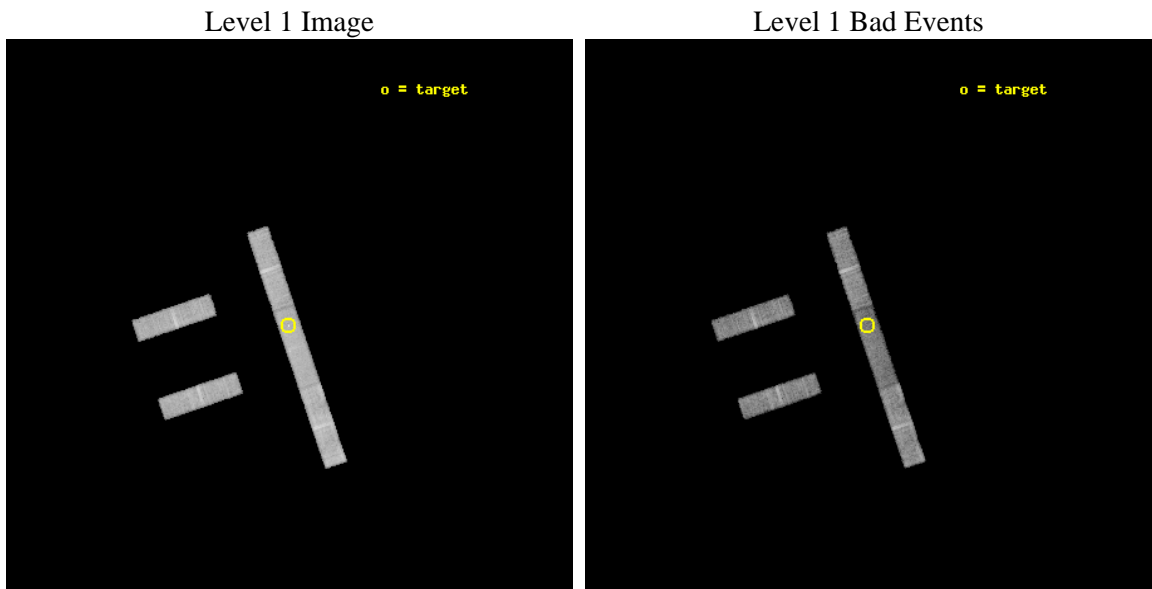
seq_num	702304	Sequence number
obs_id	11857	Observation id
title	Studying the Optical and X-ray Emission Regions of Quasar PG1115+080 by Monitoring Microlensing Events	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	PG 1115+080	Source name
dtcycle	0	&#160
cycle	P	events 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	169.56930205921	Nominal RA [deg]
dec_nom	7.7708462034107	Nominal Dec [deg]
roll_nom	71.254331266025	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15180.0	Sum of GTIs [s]
livetime	14581.57227388	Livetime [s]
ontime2	15180.0	Sum of GTIs [s]
ontime3	15180.0	Sum of GTIs [s]
ontime6	15180.0	Sum of GTIs [s]
ontime7	15180.0	Sum of GTIs [s]
ontime8	15180.0	Sum of GTIs [s]
l2events	32782	Number of level 2 events



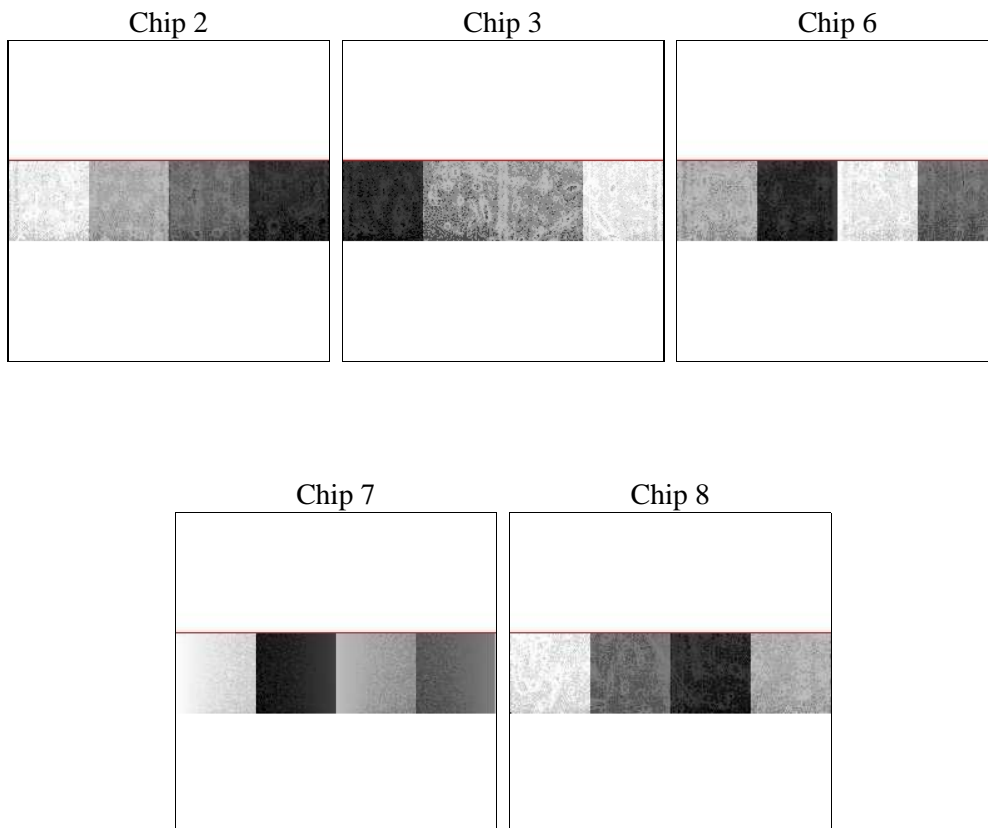
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	15180.0	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime2	15180.0	Sum of GTIs [s]
date	2012-06-20T13:45:35	Date and time of file creation	ontime3	15180.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15180.0	Sum of GTIs [s]
			ontime7	15180.0	Sum of GTIs [s]
			ontime8	15180.0	Sum of GTIs [s]
			l1events	221414	Number of level 1 events

### 2.1.4 Events

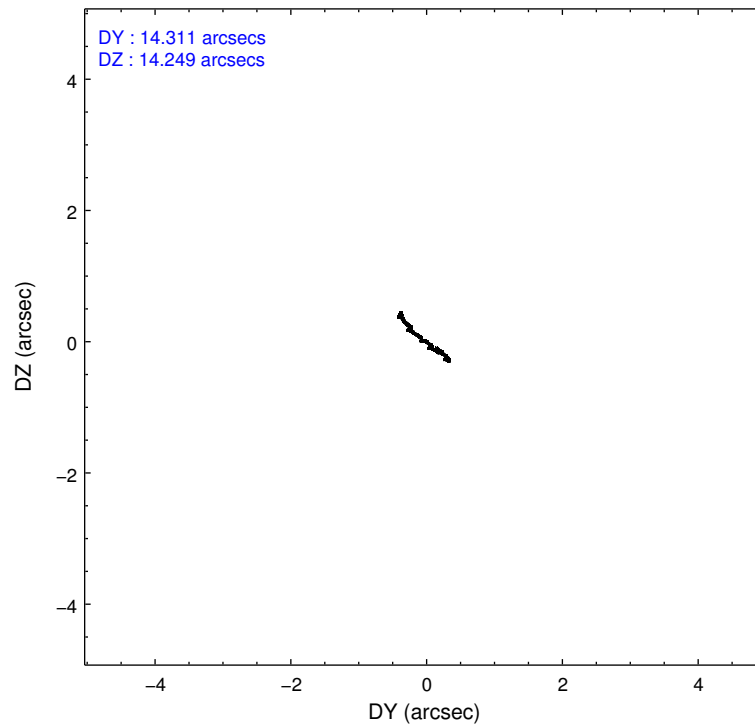
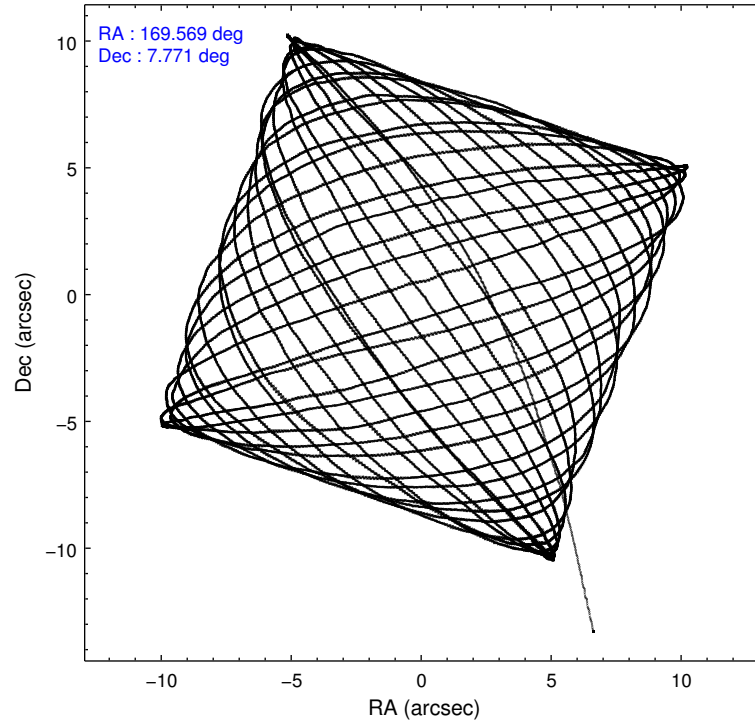
	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	39005	38915	42695	44352	56447
rejected events	35152	35162	38438	24269	44141
rejected %	90%	90%	90%	54%	78%

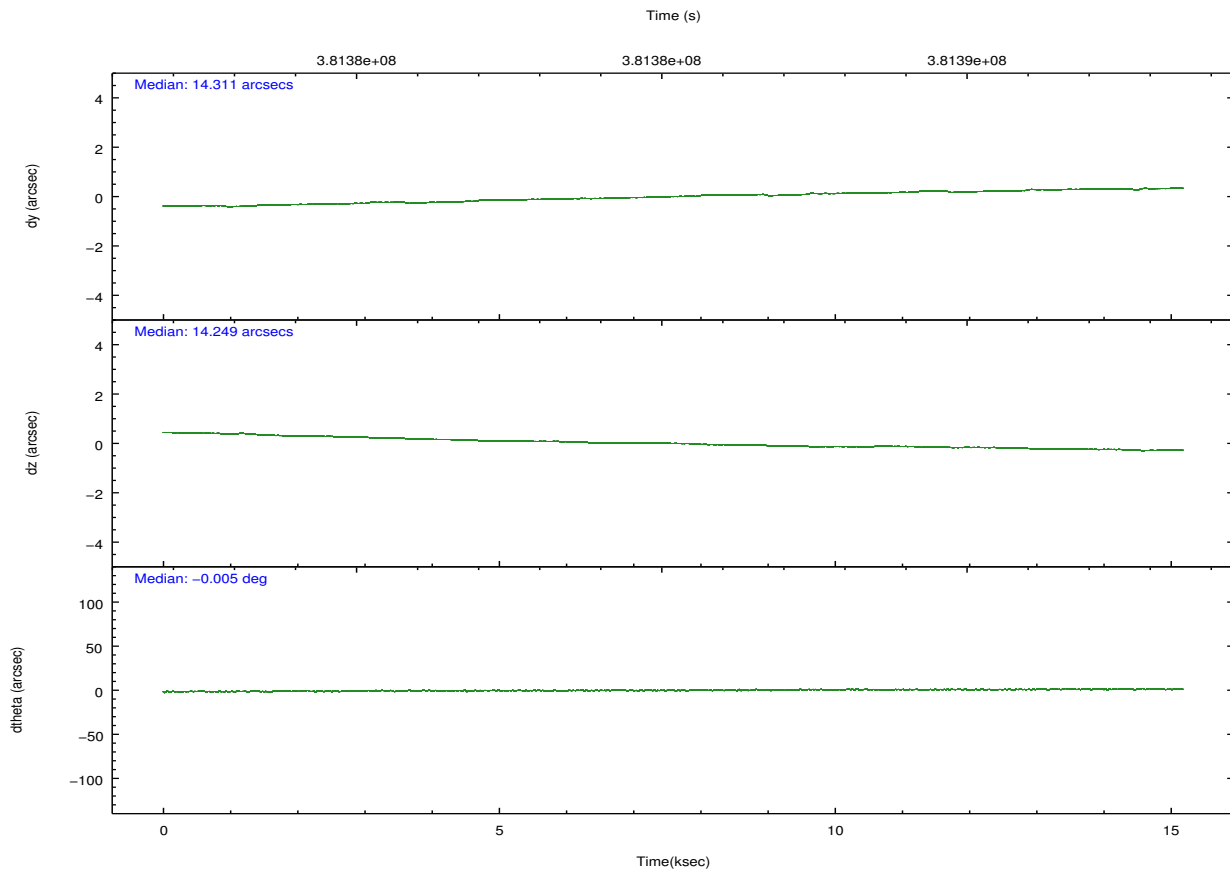
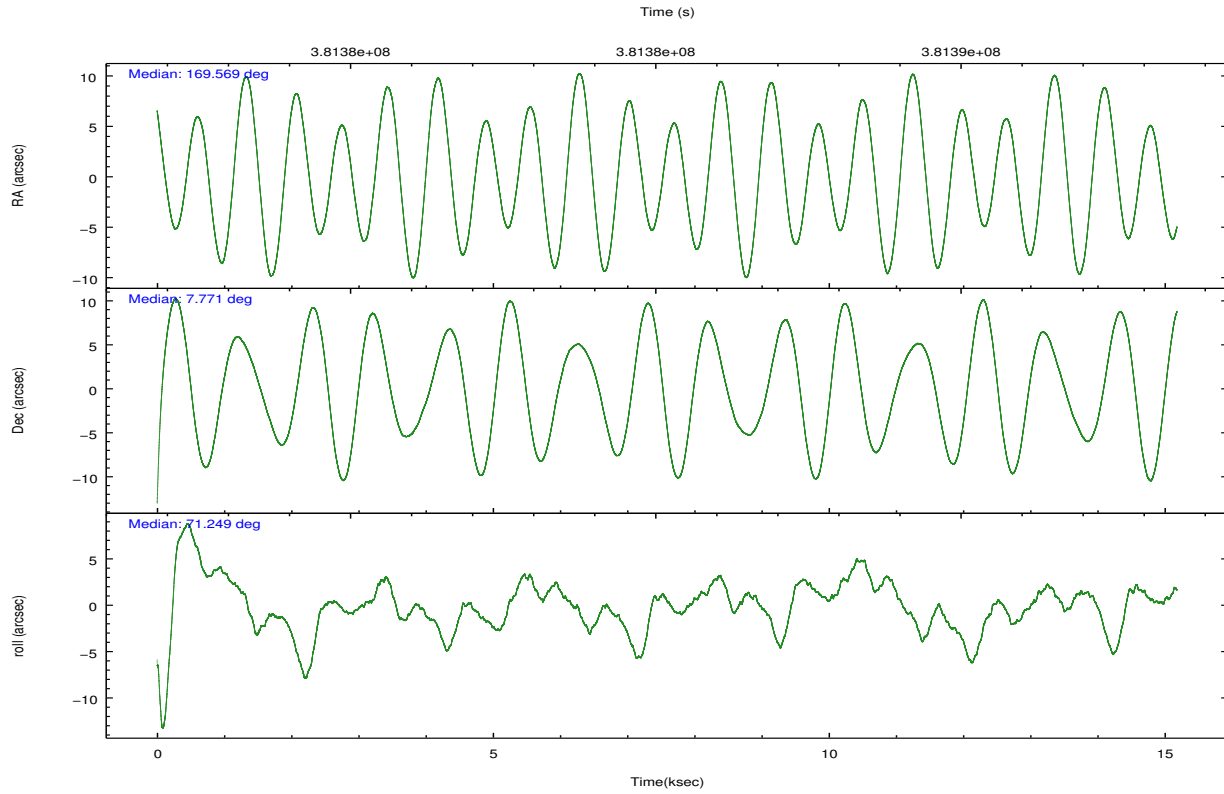
	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	1271	1180	1279	2320	3374
	3%	3%	2%	5%	5%
grade 1 events	9	15	13	67	24
	0%	0%	0%	0%	0%
grade 2 events	824	819	892	4574	2880
	2%	2%	2%	10%	5%
grade 3 events	645	630	713	2323	1431
	1%	1%	1%	5%	2%
grade 4 events	648	625	711	2257	1316
	1%	1%	1%	5%	2%
grade 5 events	1294	1510	1551	4512	2129
	3%	3%	3%	10%	3%
grade 6 events	681	725	896	9737	3872
	1%	1%	2%	21%	6%
grade 7 events	33633	33411	36640	18562	41421
	86%	85%	85%	41%	73%

## 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	169.575076	169.5693020592101	CCD I2 on	O1	Y
[deg] Pointing Dec	7.744094	7.770846203410693	CCD I3 on	O2	Y
[deg] Pointing Roll	71.096918	71.25433126602481	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O3	Y
[s] Observation start time (MET)	381377776.184000	381376607.5976	CCD S5 on	N	N
Observation start date	2010-02-01T02:15:10	2010-02-01T01:56:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	381392776.184000	381393612.34846	On-chip summing requested	N	N
Observation end date	2010-02-01T06:25:10	2010-02-01T06:40:12	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



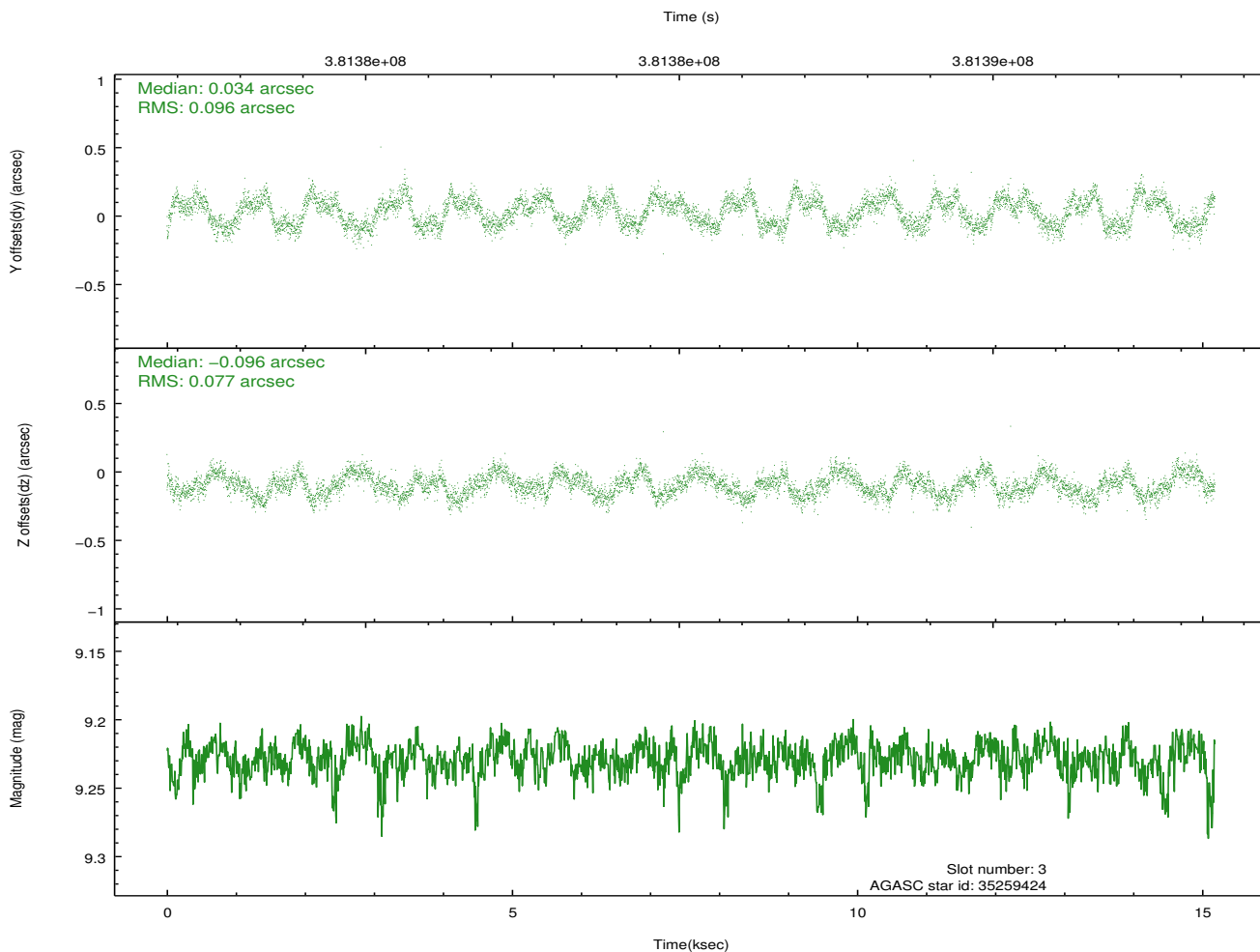
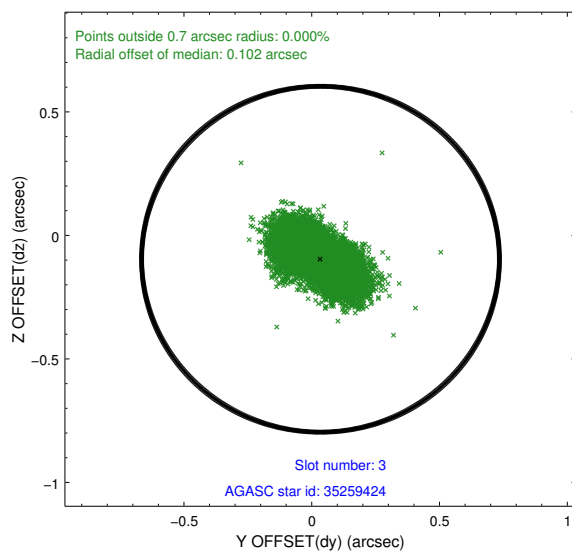
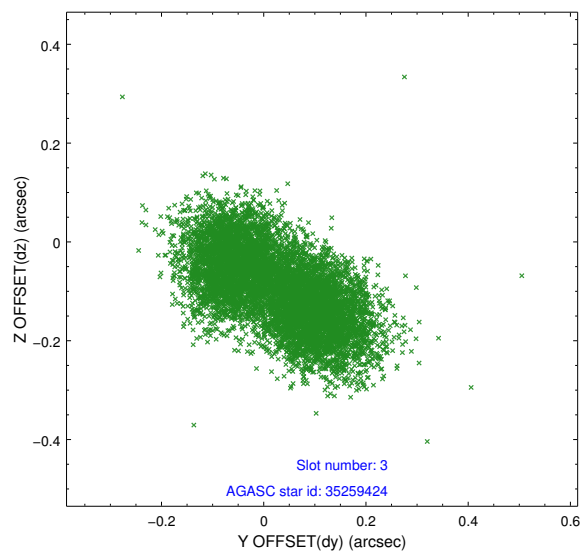


### Slot Statistics

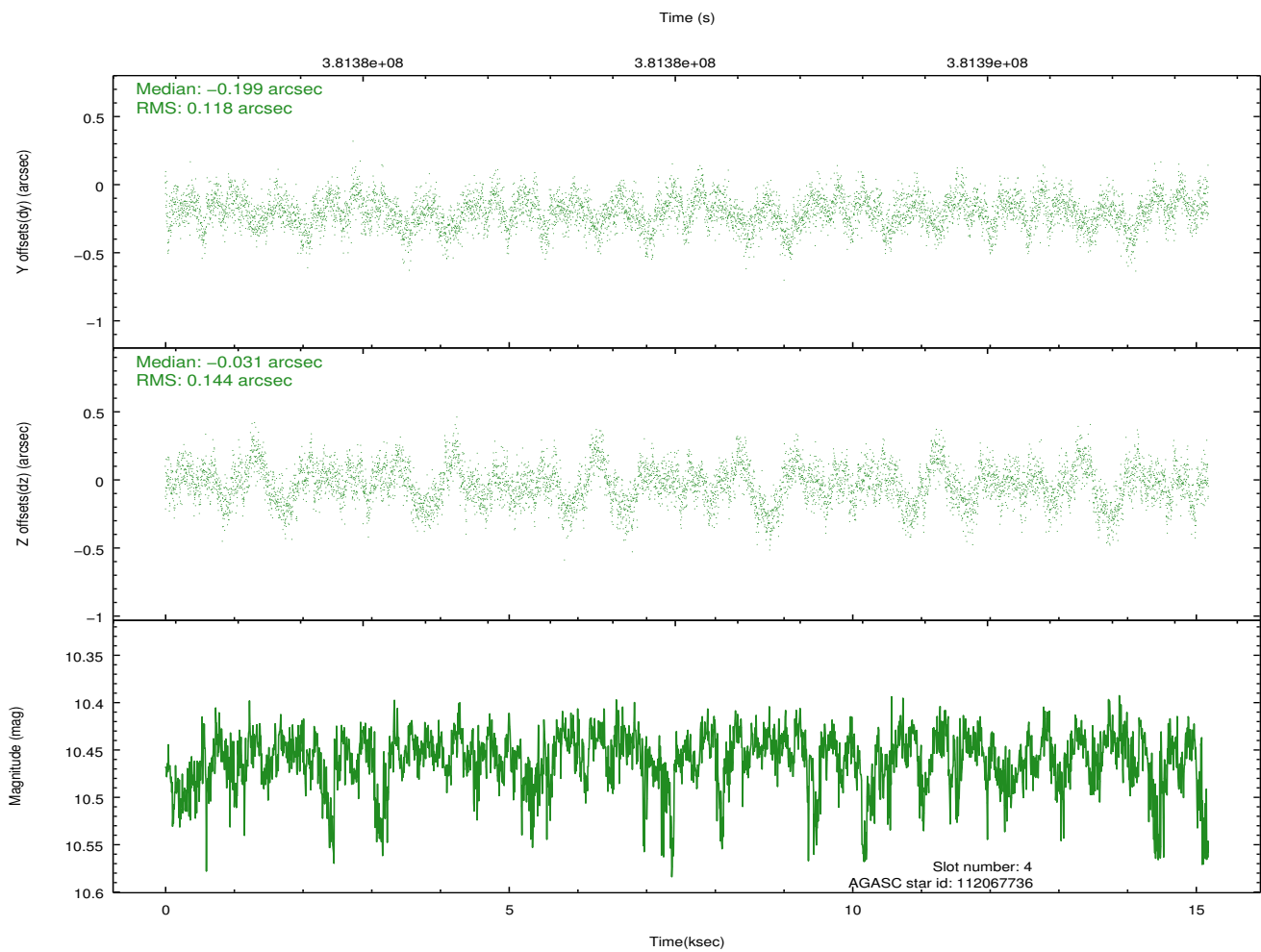
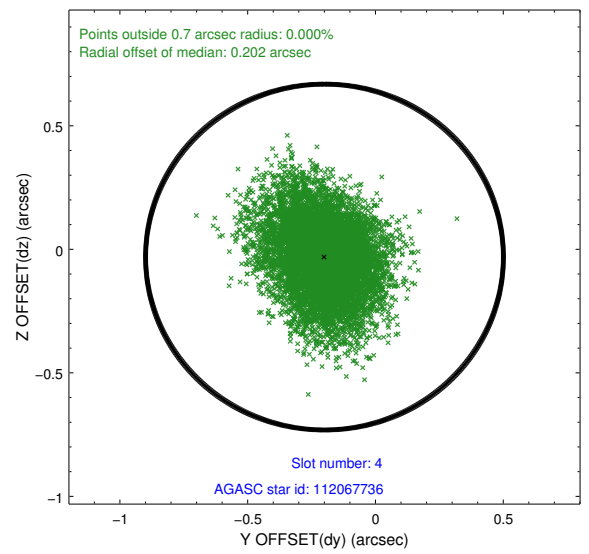
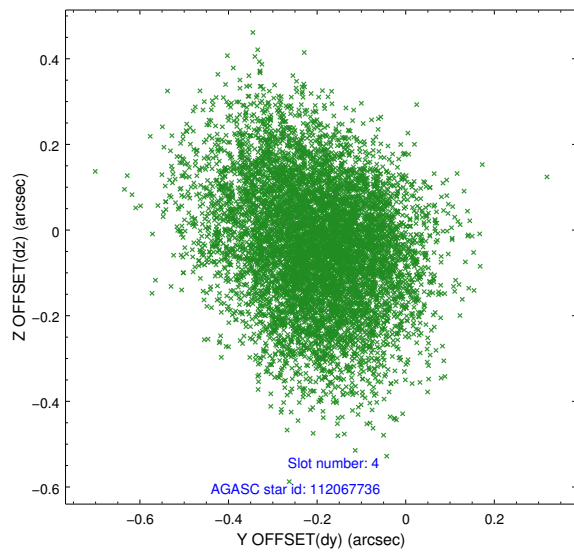
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.98	3703	0.030	-0.007	0.010	0.022	0.000000	0.000000	928.81	-1731.27
1	FID	ACIS-S-4	6.98	3703	0.155	-0.004	0.009	0.020	0.000000	0.000000	2146.51	172.58
2	FID	ACIS-S-5	7.01	3703	-0.211	0.025	0.010	0.025	0.000000	0.000000	-1819.92	166.54
3	GUIDE	35259424	9.23	7398	0.034	-0.096	0.134	0.201	169.225147	7.406887	-1552.70	789.05
4	GUIDE	112067736	10.46	7387	-0.199	-0.031	0.199	0.323	169.254540	7.940950	300.33	1311.34
5	GUIDE	112068312	9.85	7385	-0.144	-0.129	0.162	0.287	169.673636	8.146330	1483.64	137.36
6	GUIDE	112068528	8.78	7399	0.134	0.194	0.134	0.241	169.984852	7.578312	-89.70	-1576.05
7	GUIDE	35259552	10.33	7298	0.172	0.088	0.293	0.452	169.021323	7.237315	-2365.65	1280.33

## 2.4 Star Slots

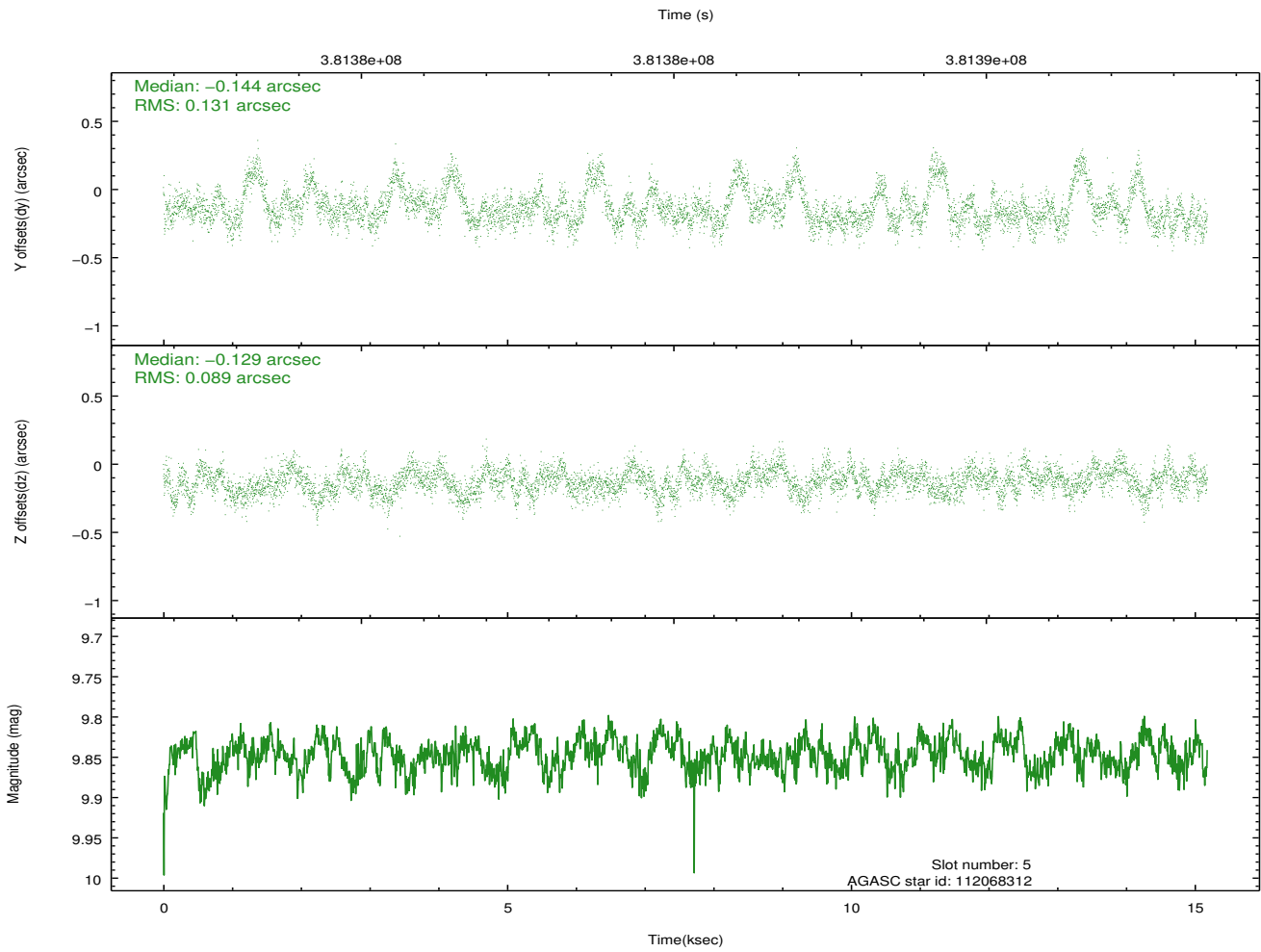
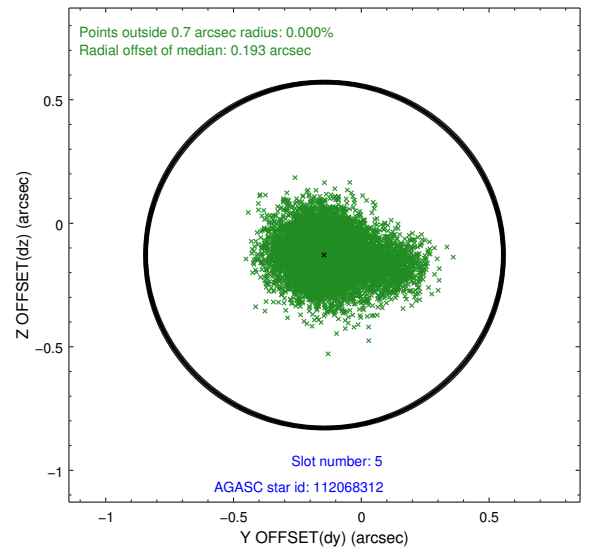
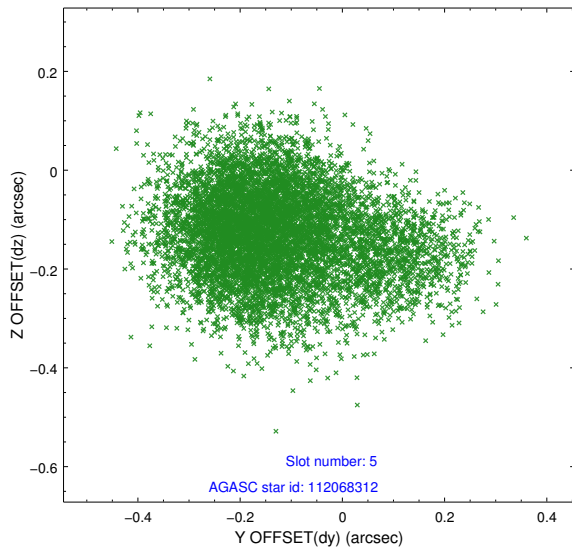
### 2.4.1 Slot 3



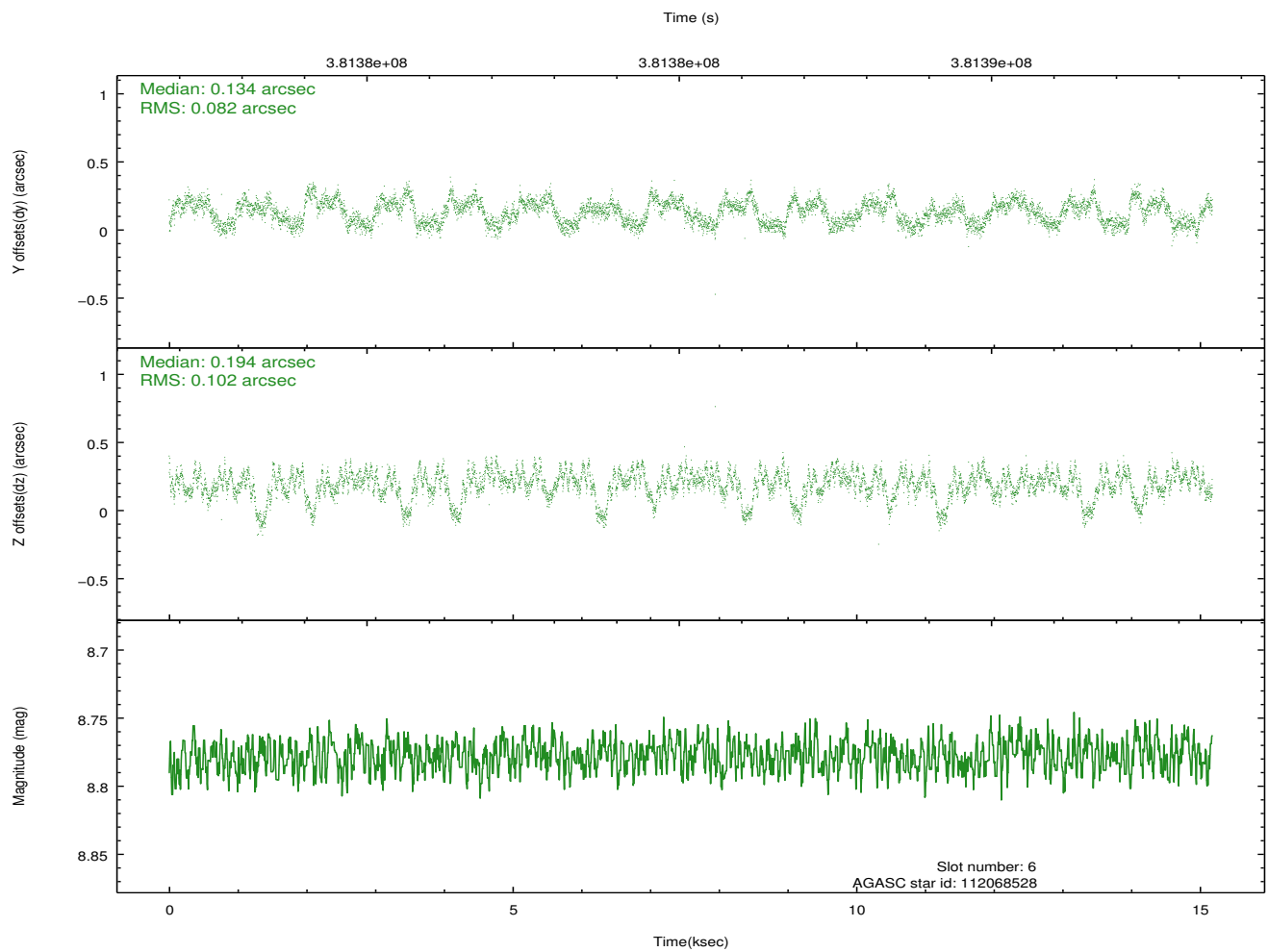
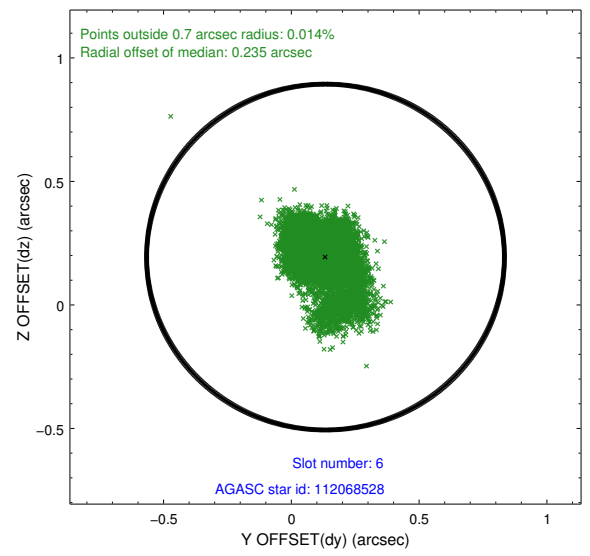
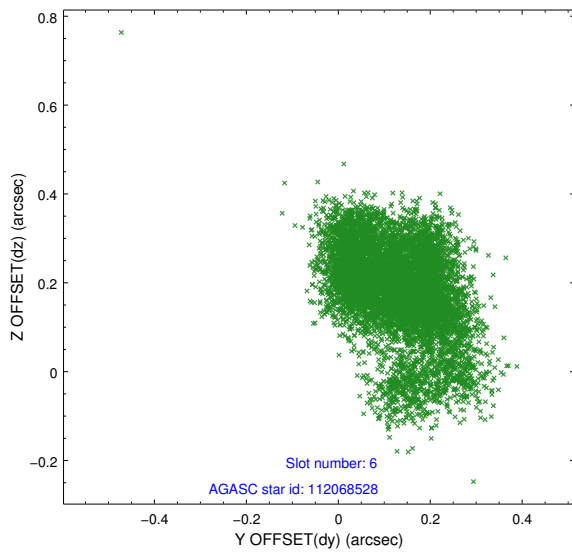
## 2.4.2 Slot 4



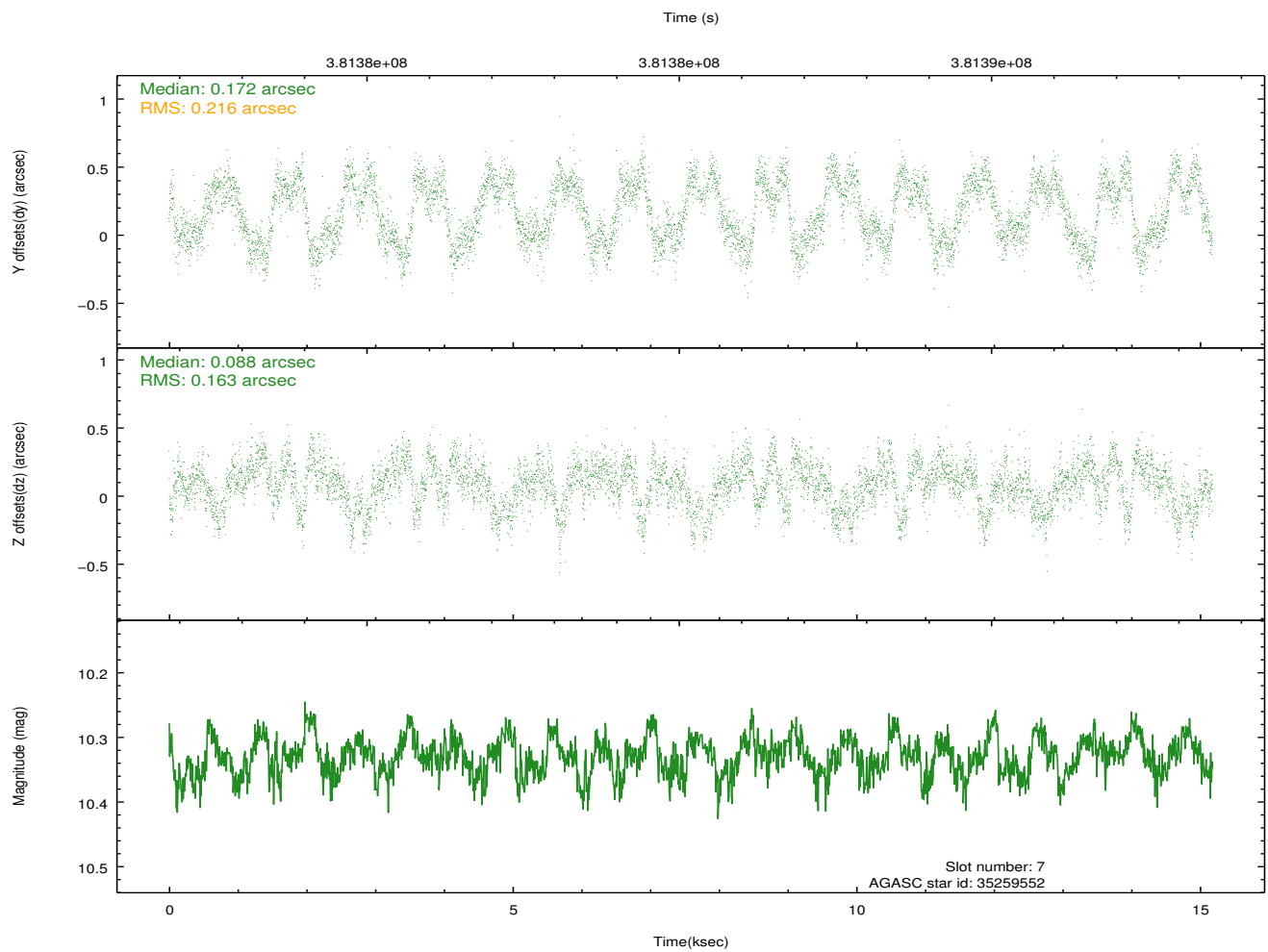
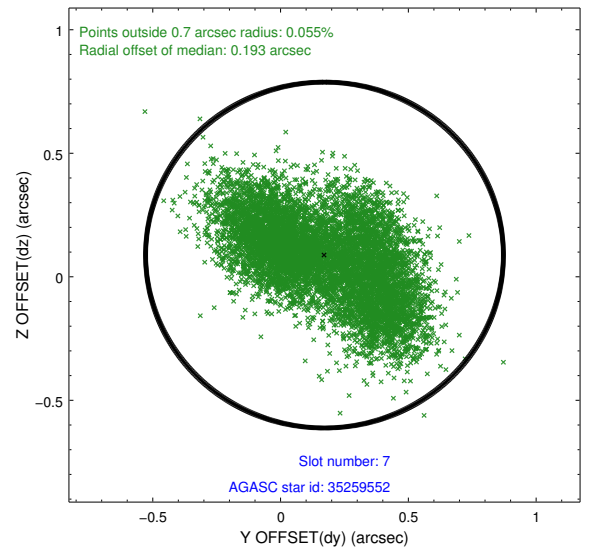
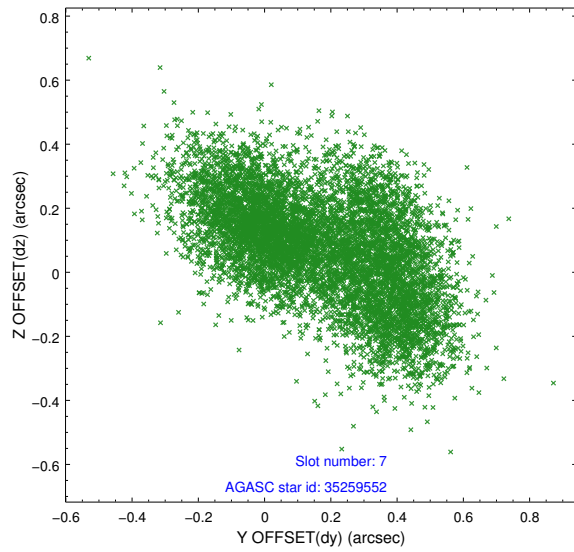
### 2.4.3 Slot 5



## 2.4.4 Slot 6

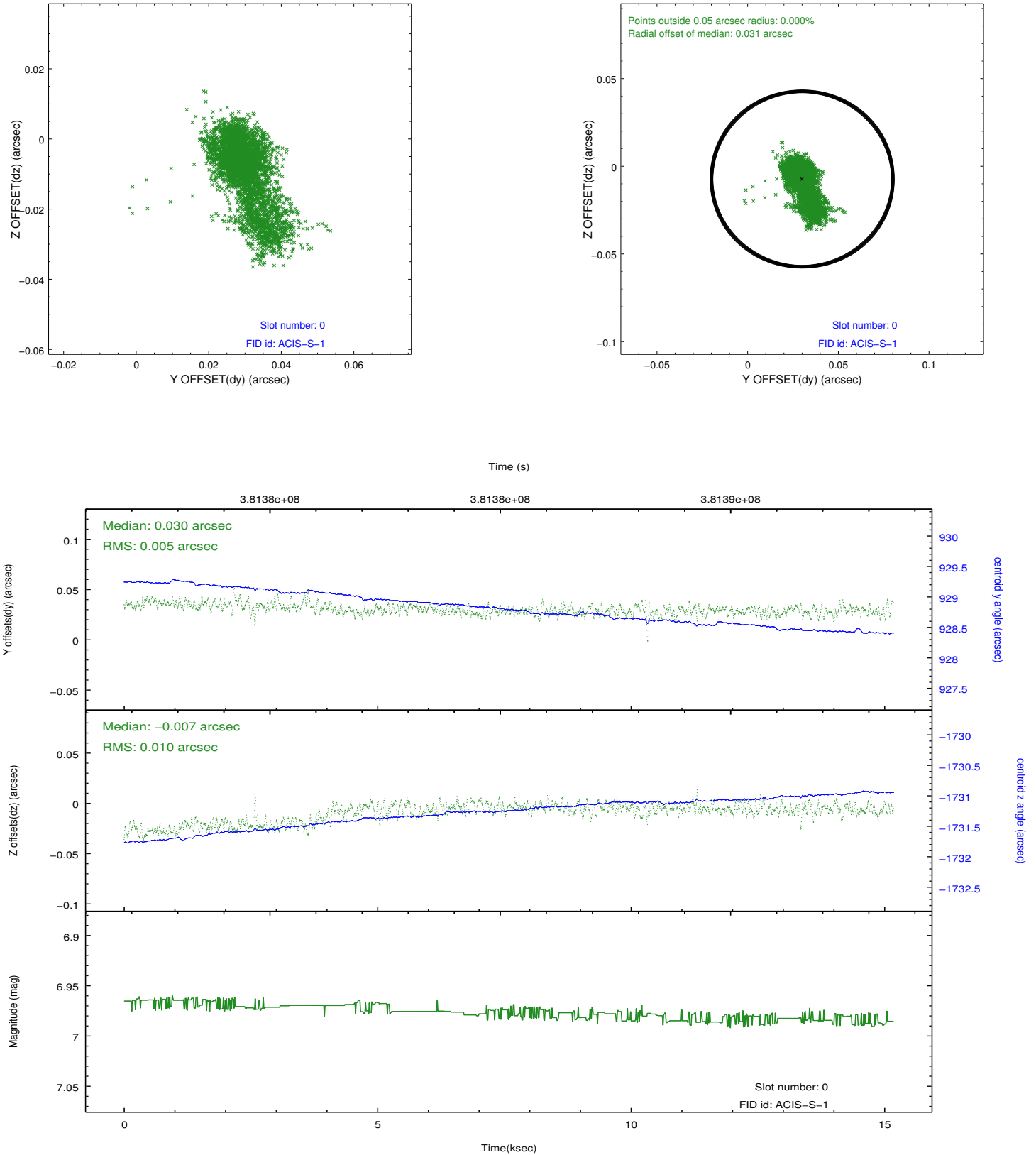


## 2.4.5 Slot 7

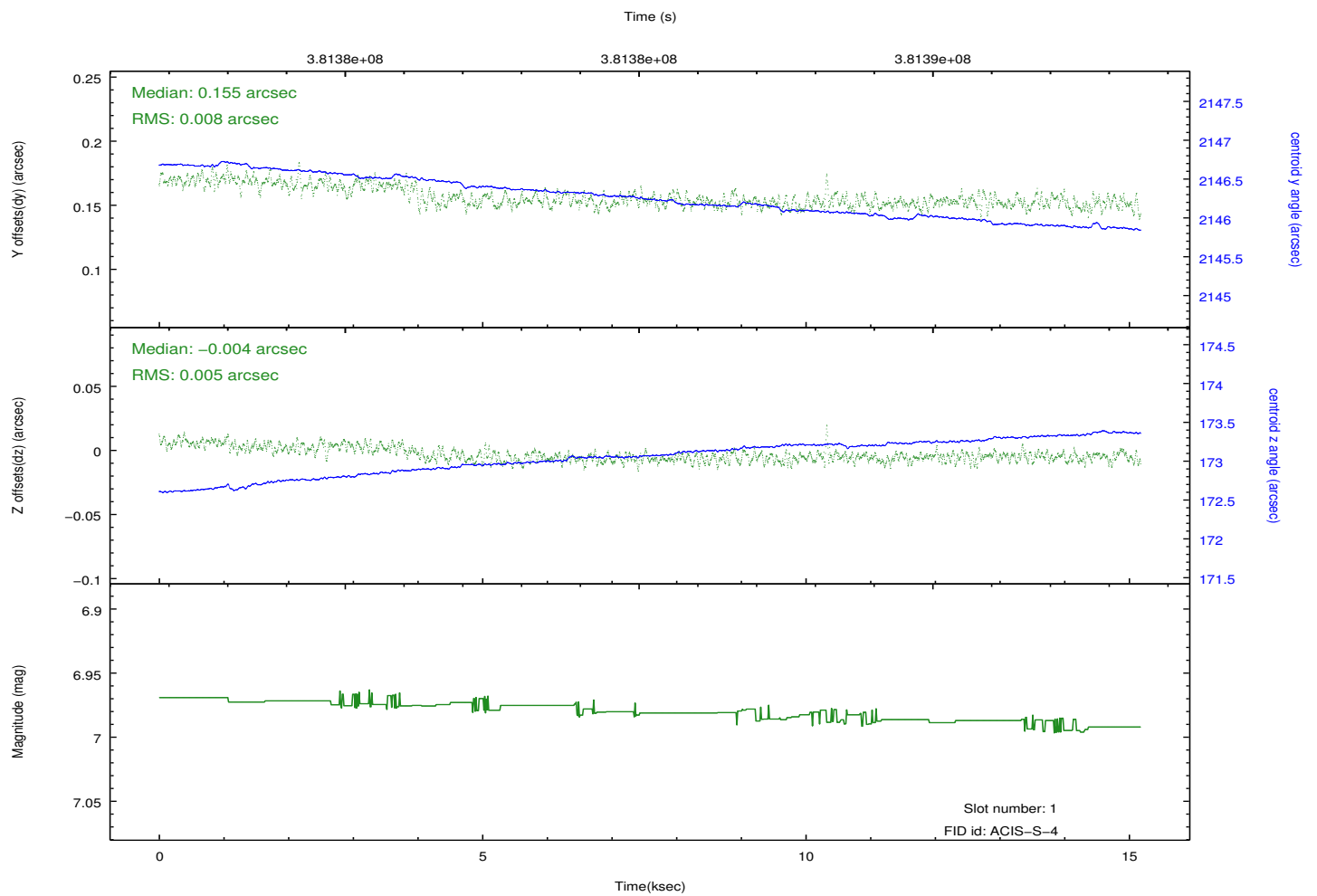
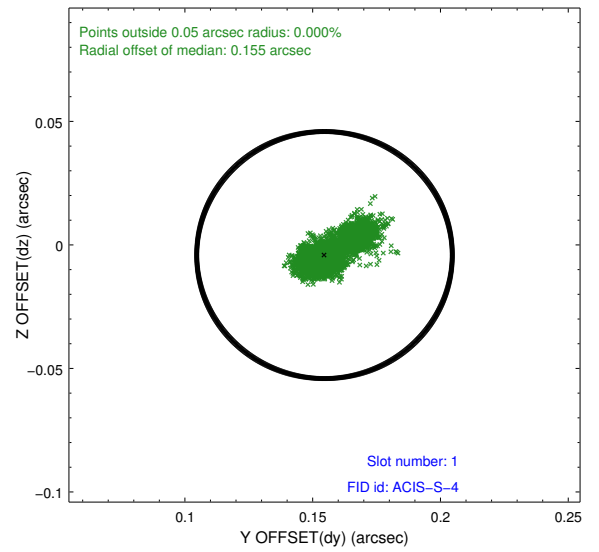
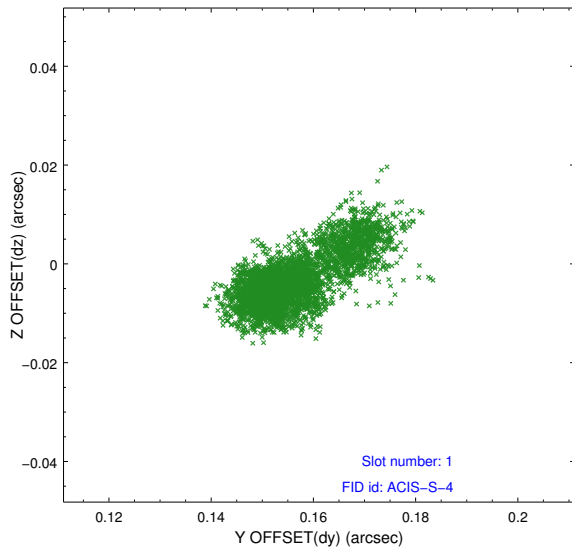


## 2.5 FID Slots

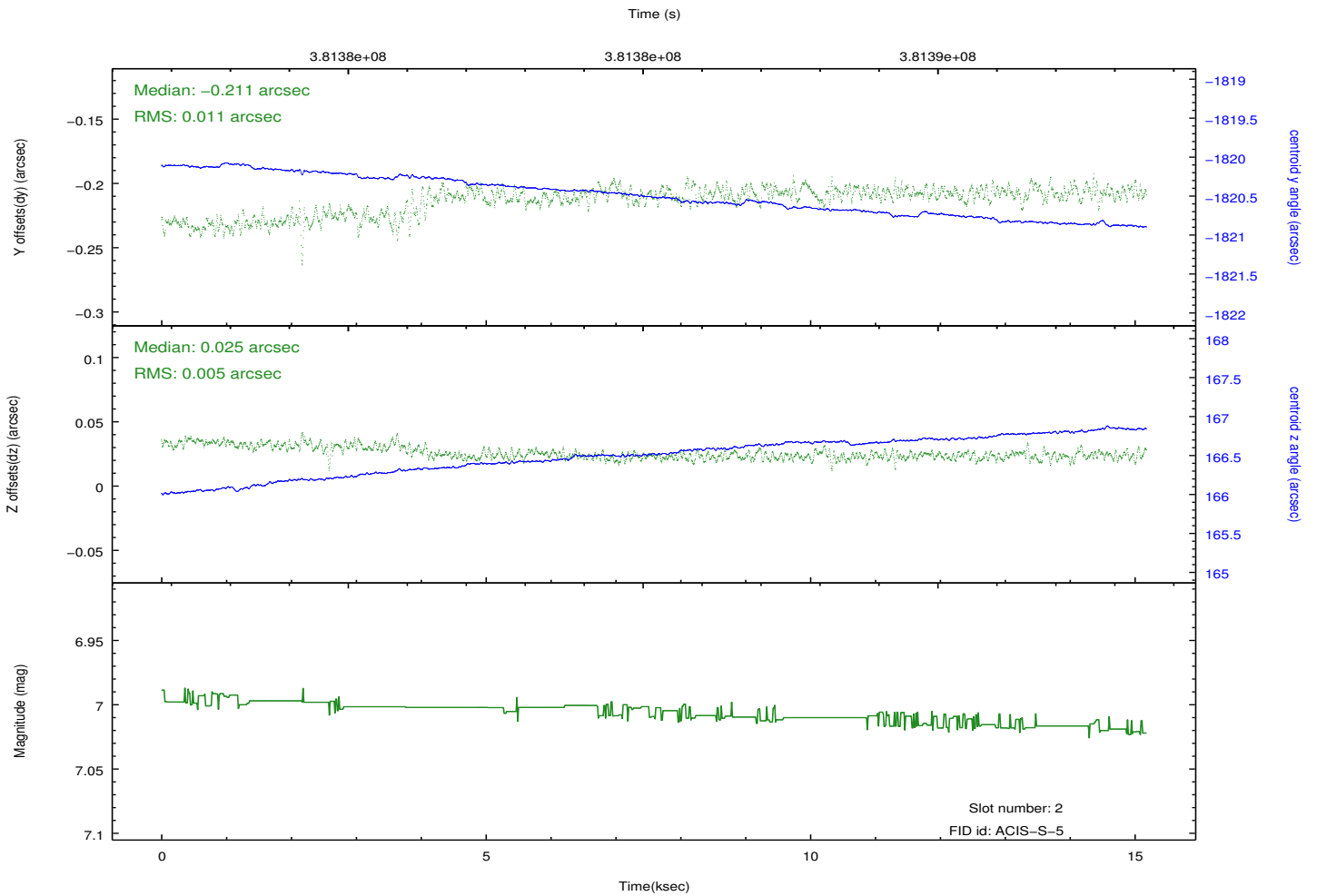
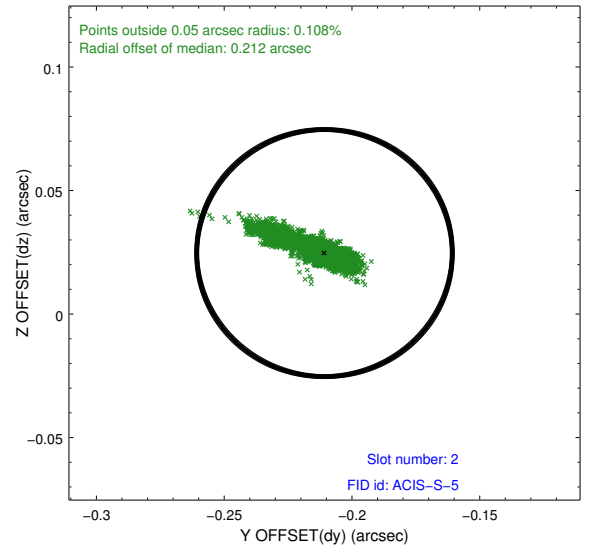
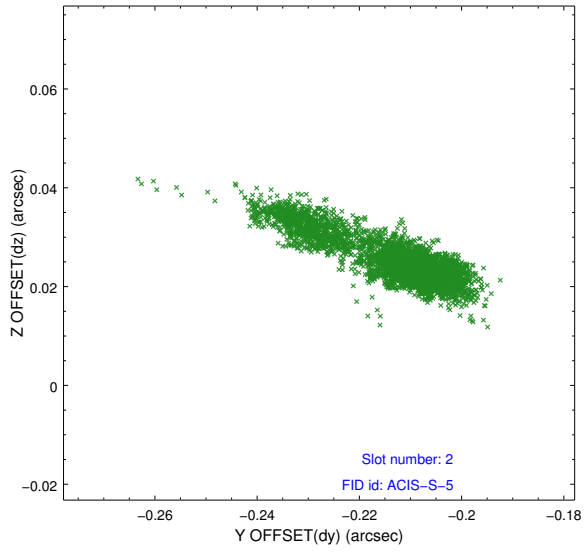
### 2.5.1 Slot 0



## 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)	2012.06.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.18

## A.2 Comments