

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11560 - L2 Version 2  
Chandra X-Ray Center

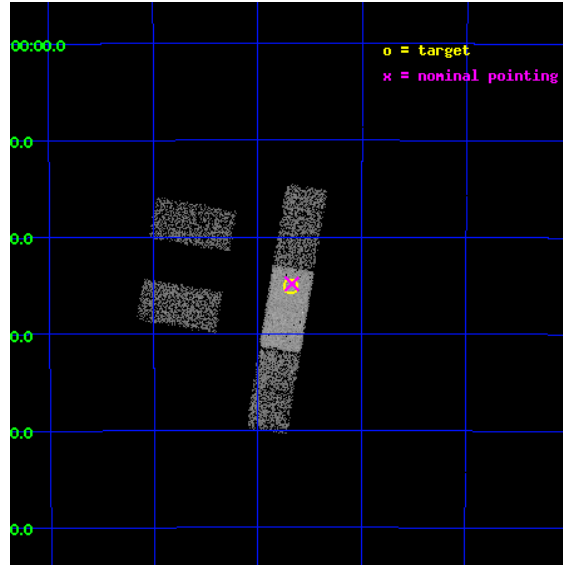
L2 Processing Date : Jun 30 2012

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# 1 Front

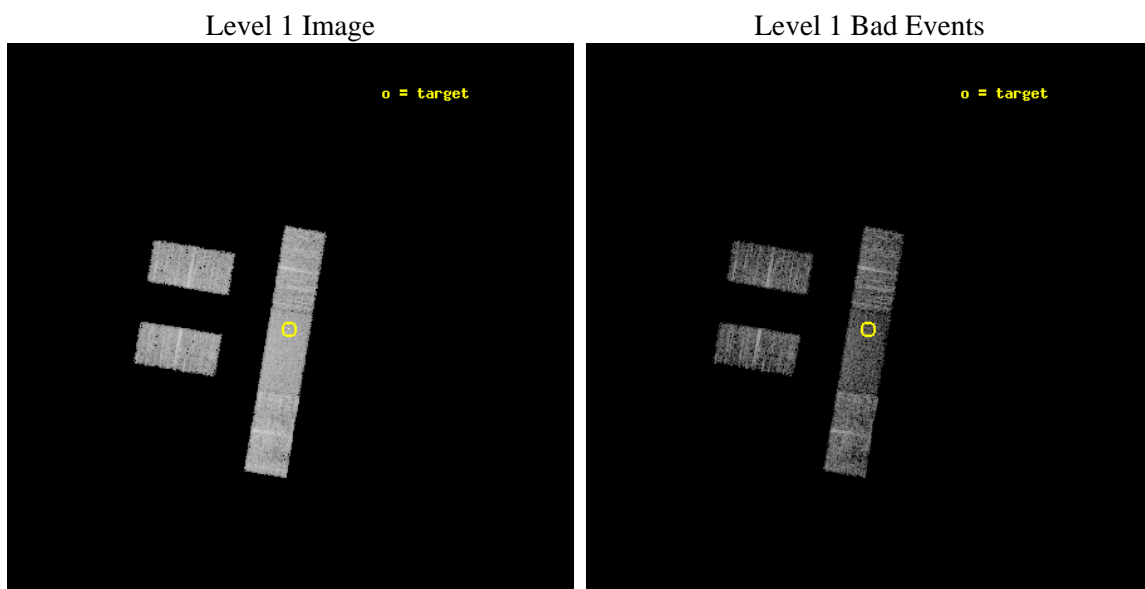
seq_num	702146	Sequence number
obs_id	11560	Observation id
title	The Size of Quasar Non-Thermal/X-ray Emission Regions	Proposal tit
observer	Prof. Christopher Kochanek	Principal investigator
object	QJ0158-4325	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	29.6725	Observer's specified target RA [deg]
dec_targ	-43.417833	Observer's specified target Dec [deg]
ra_nom	29.668102601673	Nominal RA [deg]
dec_nom	-43.414084380386	Nominal Dec [deg]
roll_nom	99.475422996756	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5065.6061430573	Sum of GTIs [s]
livetime	4946.1990782506	Livetime [s]
ontime2	5065.4419830441	Sum of GTIs [s]
ontime3	5065.5240630507	Sum of GTIs [s]
ontime6	5065.565103054	Sum of GTIs [s]
ontime7	5065.6061430573	Sum of GTIs [s]
ontime8	5065.4830230474	Sum of GTIs [s]
l2events	18978	Number of level 2 events



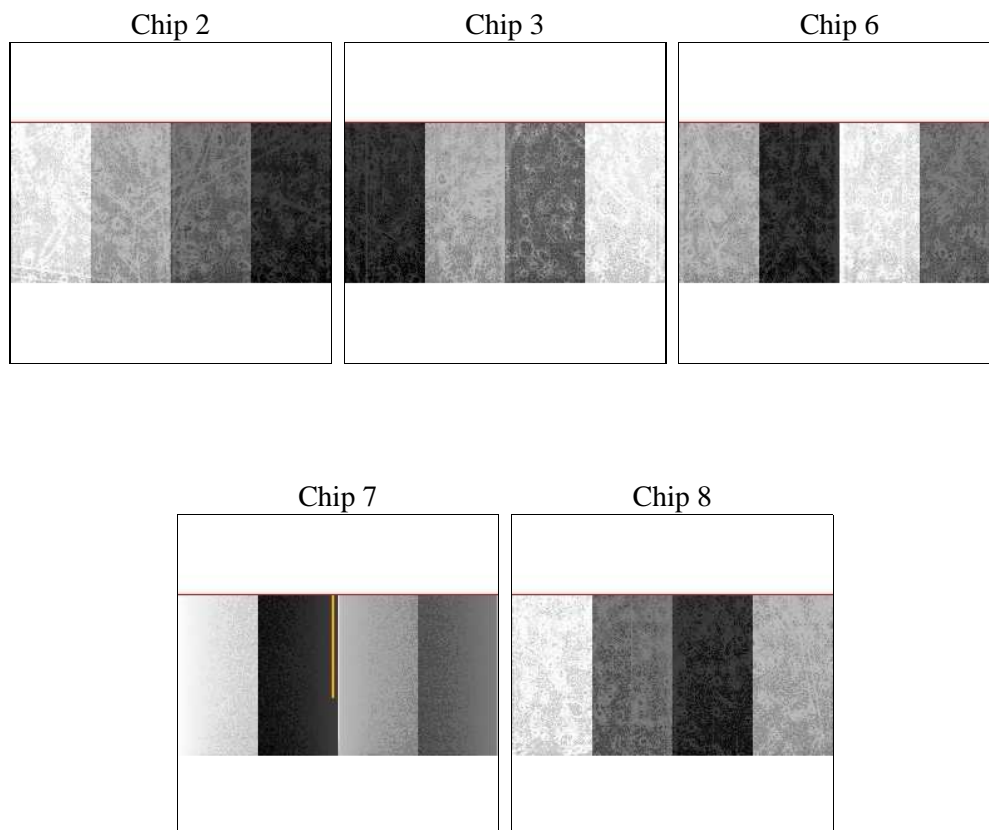
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5065.6061430573	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime2	5065.4419830441	Sum of GTIs [s]
date	2012-06-30T14:55:56	Date and time of file creation	ontime3	5065.5240630507	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	5065.565103054	Sum of GTIs [s]
			ontime7	5065.6061430573	Sum of GTIs [s]
			ontime8	5065.4830230474	Sum of GTIs [s]
			l1events	111317	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	19471	19365	21109	23797	27575
rejected events	17360	17234	18680	12497	20501
rejected %	89%	88%	88%	52%	74%

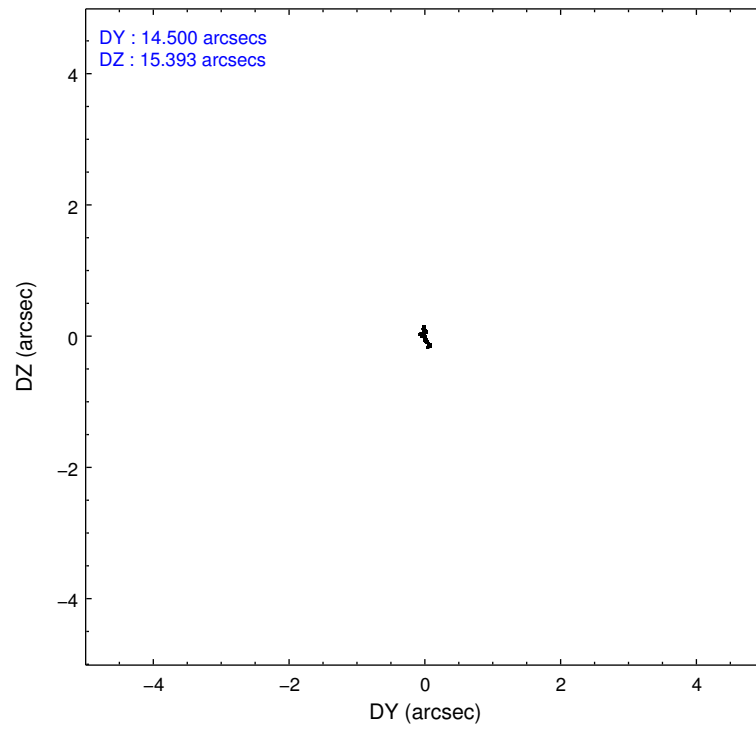
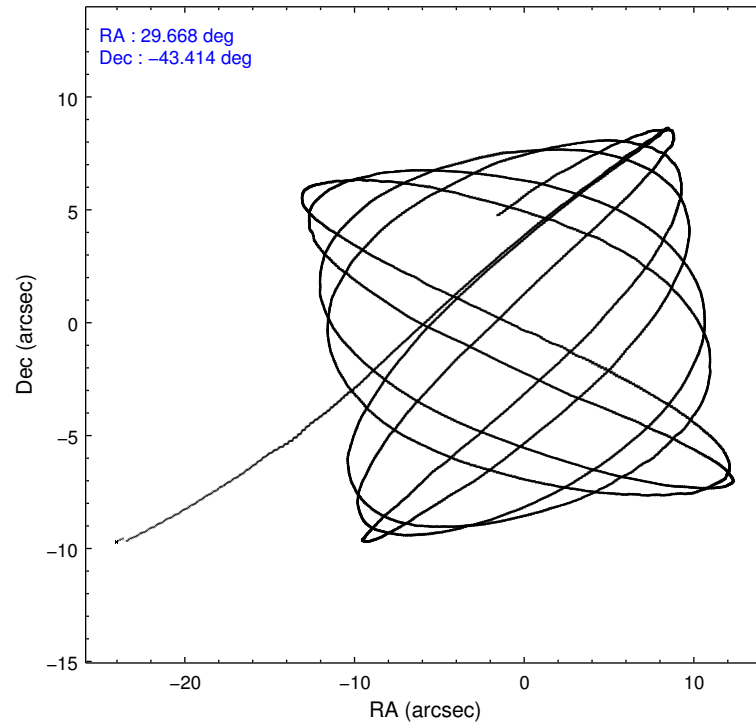
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	720	763	796	1153	2051
	3%	3%	3%	4%	7%
grade 1 events	14	12	8	22	13
	0%	0%	0%	0%	0%
grade 2 events	496	453	532	2386	1713
	2%	2%	2%	10%	6%
grade 3 events	244	275	297	1090	760
	1%	1%	1%	4%	2%
grade 4 events	300	273	302	1137	670
	1%	1%	1%	4%	2%
grade 5 events	727	848	869	2508	1301
	3%	4%	4%	10%	4%
grade 6 events	351	367	503	5536	1882
	1%	1%	2%	23%	6%
grade 7 events	16619	16374	17802	9965	19185
	85%	84%	84%	41%	69%

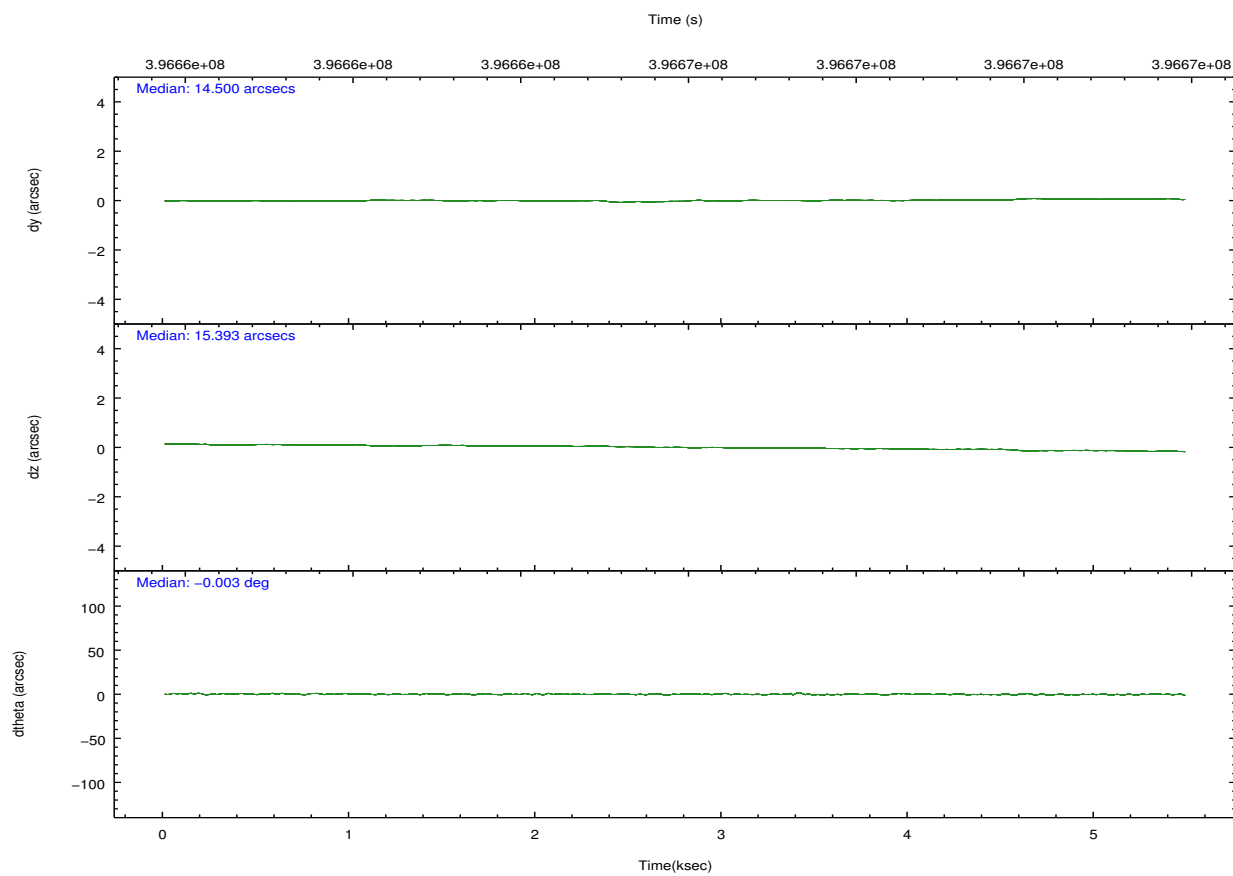
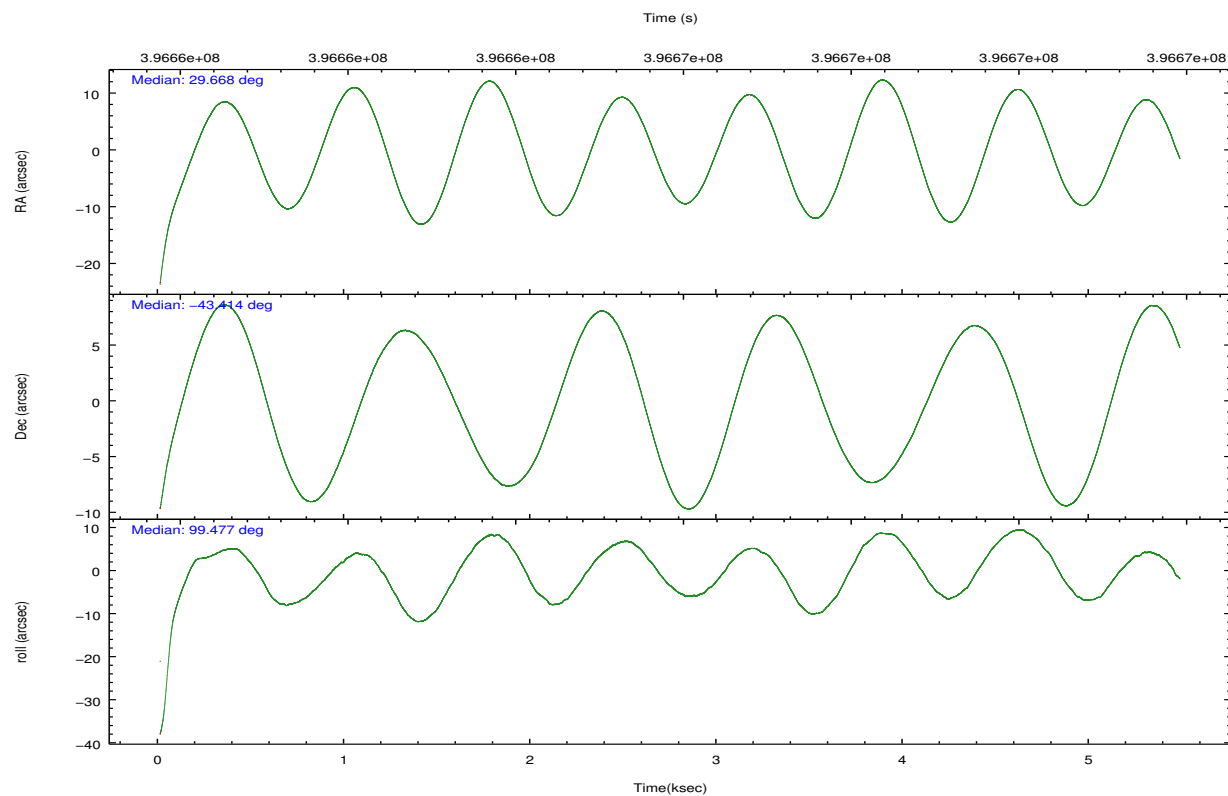


## 2.2 Compared Parameters

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	29.692445	29.66810260167335	CCD I2 on	O4	Y
[deg] Pointing Dec	-43.435041	-43.41408438038607	CCD I3 on	O3	Y
[deg] Pointing Roll	99.335577	99.47542299675629	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)	396663661.184000	396662411.33778	CCD S5 on	N	N
Observation start date	2010-07-28T00:19:55	2010-07-28T00:00:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	396668661.184000	396669315.22564	On-chip summing requested	N	N
Observation end date	2010-07-28T01:43:15	2010-07-28T01:55:15	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

## 2.3 Aspect



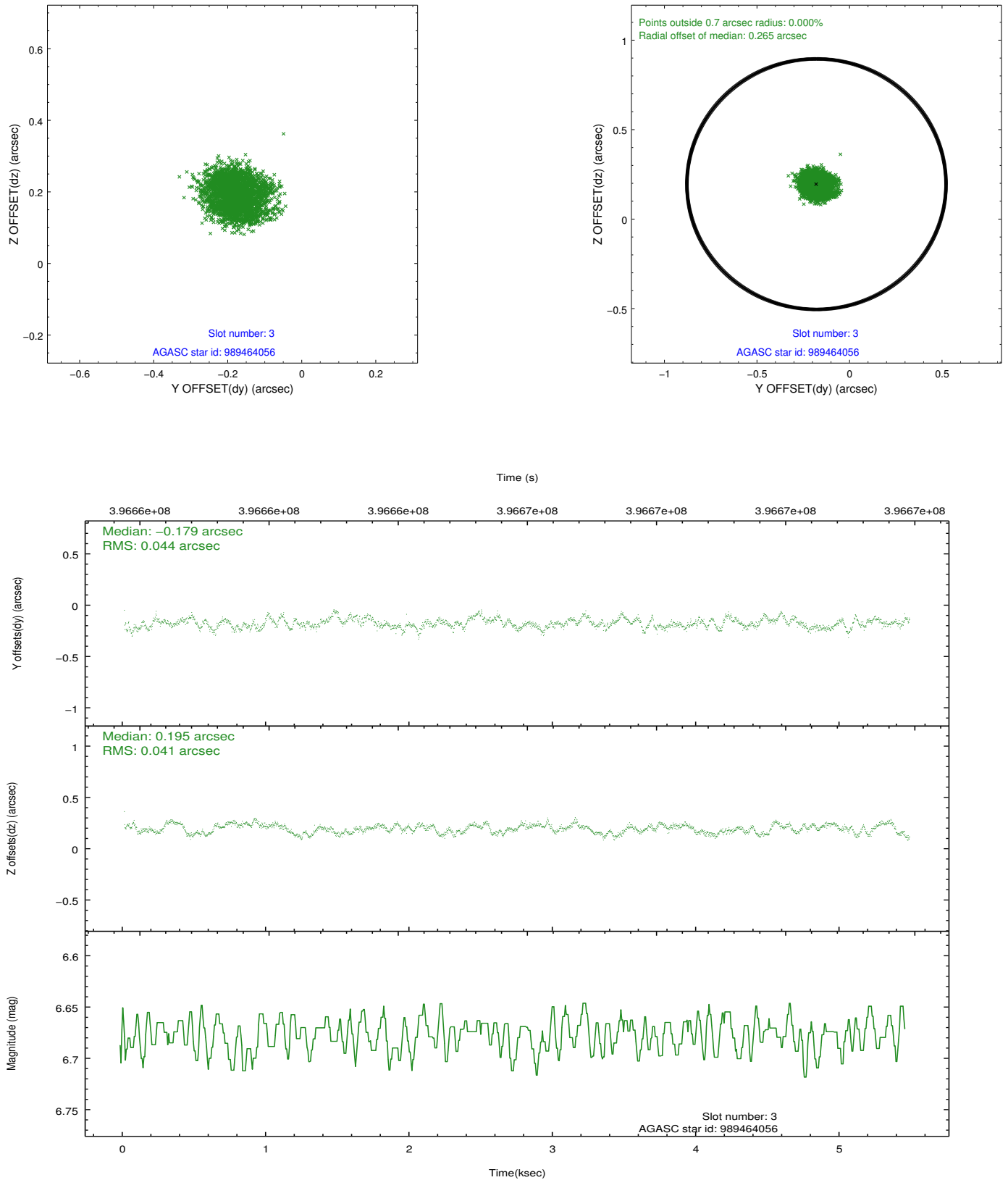


### Slot Statistics

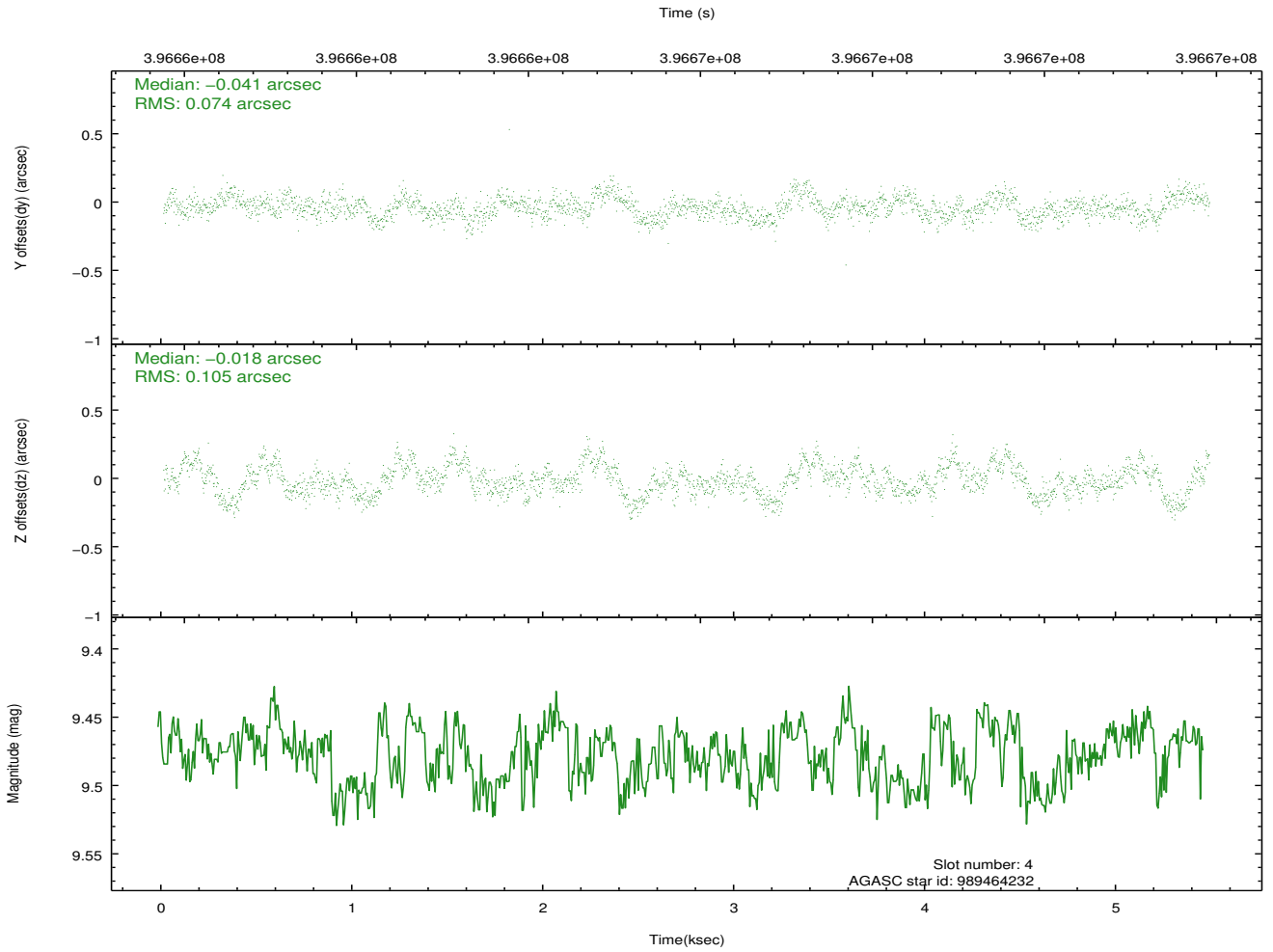
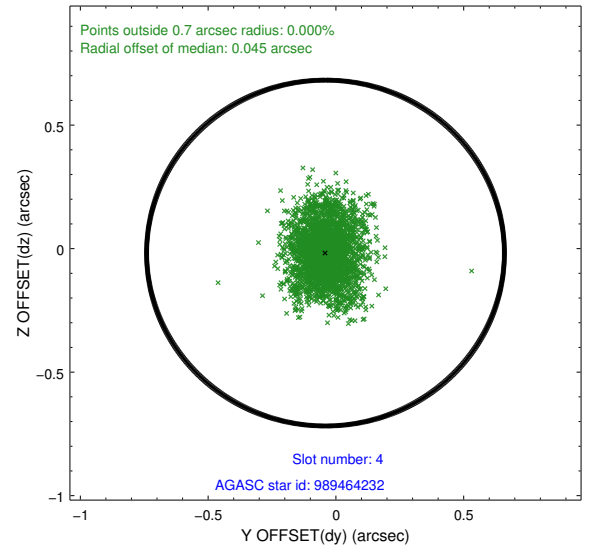
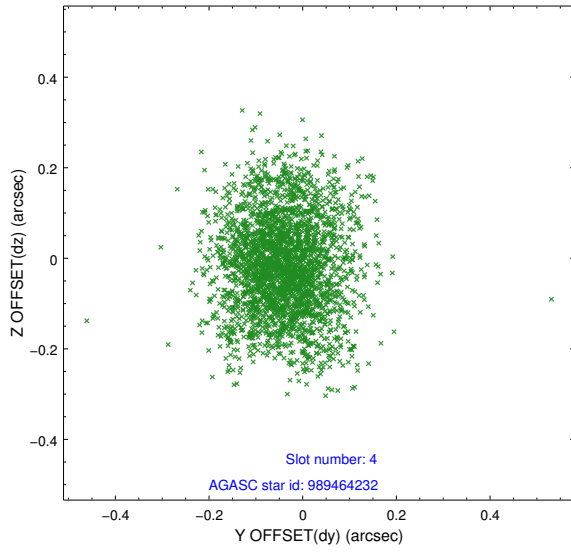
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.84	1337	-0.129	-0.093	0.007	0.013	0.000000	0.000000	-767.62	-1736.86
1	FID	ACIS-S-4	6.92	1337	0.133	0.065	0.007	0.012	0.000000	0.000000	2145.45	170.59
2	FID	ACIS-S-6	7.06	1334	-0.033	0.035	0.007	0.012	0.000000	0.000000	395.91	809.24
3	GUIDE	989464056	6.68	2673	-0.179	0.195	0.065	0.099	29.735893	-42.949136	1707.00	-396.33
4	GUIDE	989464232	9.48	2671	-0.041	-0.018	0.136	0.223	29.286358	-43.452579	107.57	1058.72
5	GUIDE	989464976	9.21	2665	-0.005	-0.087	0.099	0.154	28.960994	-43.047006	1682.29	1674.14
6	GUIDE	989467528	8.18	2672	-0.042	-0.112	0.068	0.106	29.209436	-43.178151	1114.81	1102.06
7	GUIDE	989470600	9.40	2669	0.262	0.026	0.107	0.173	29.755442	-43.921156	-1753.27	122.68

## 2.4 Star Slots

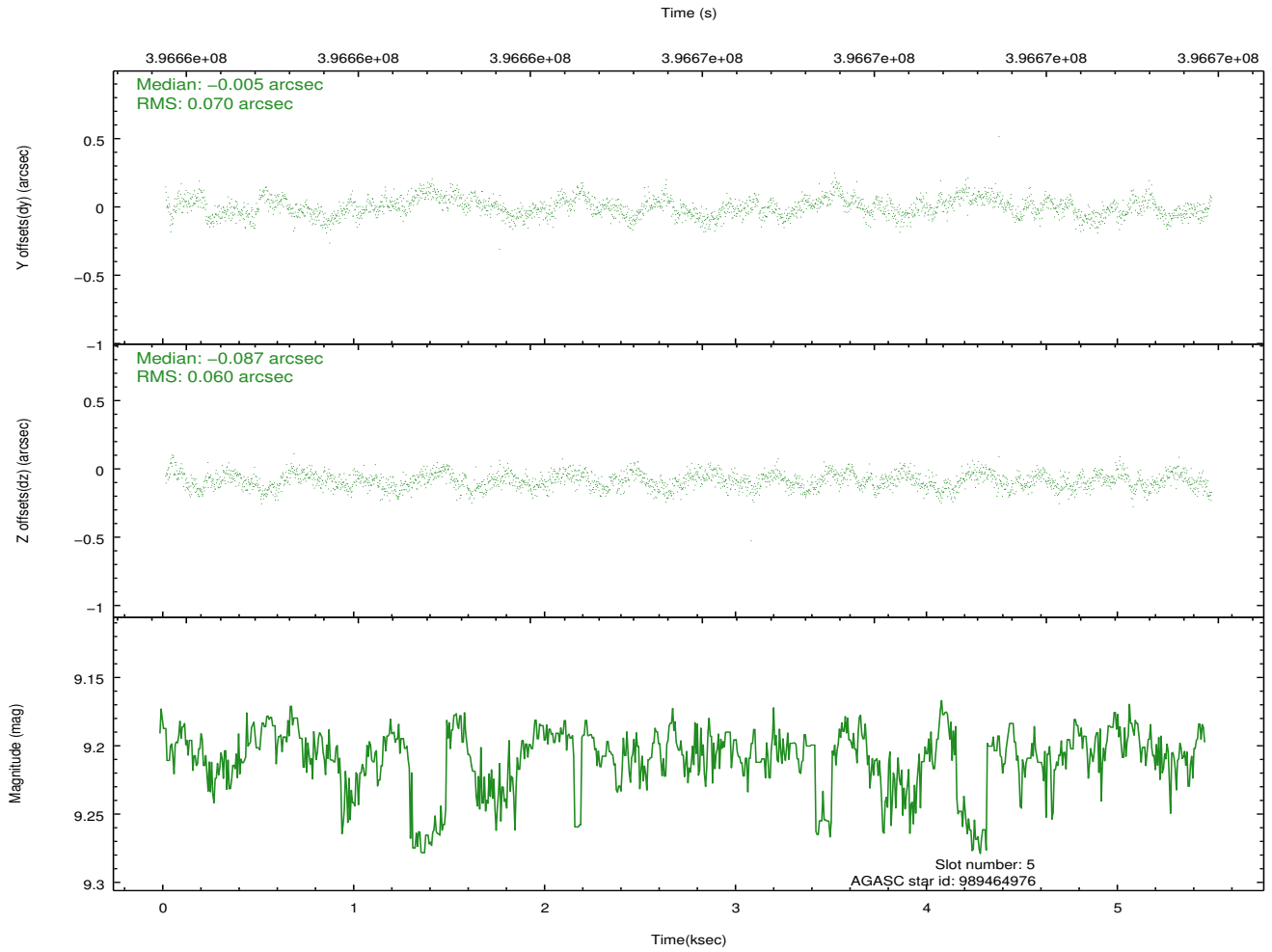
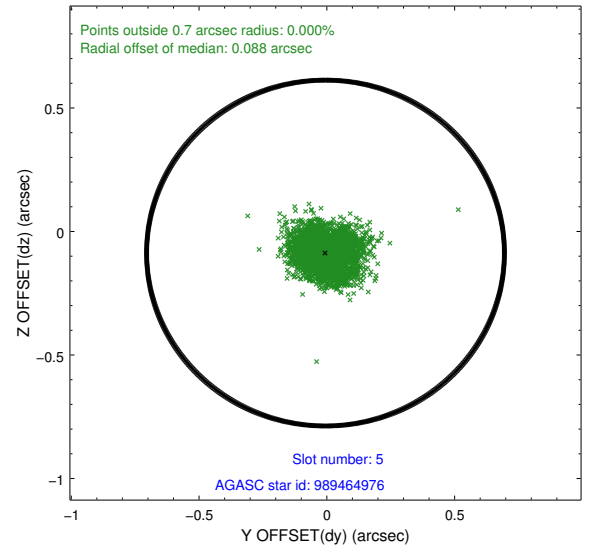
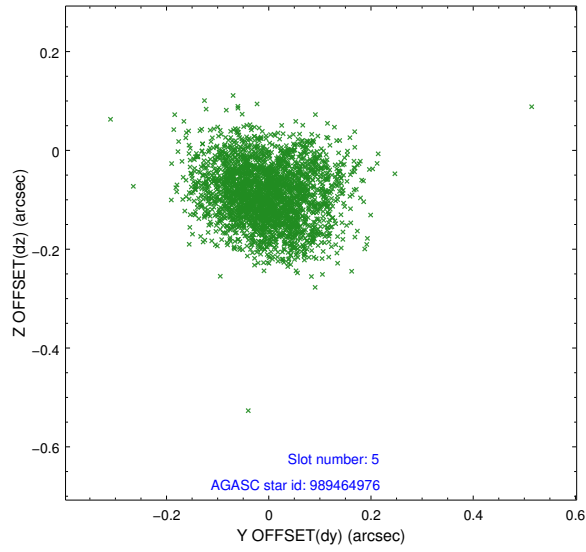
### 2.4.1 Slot 3



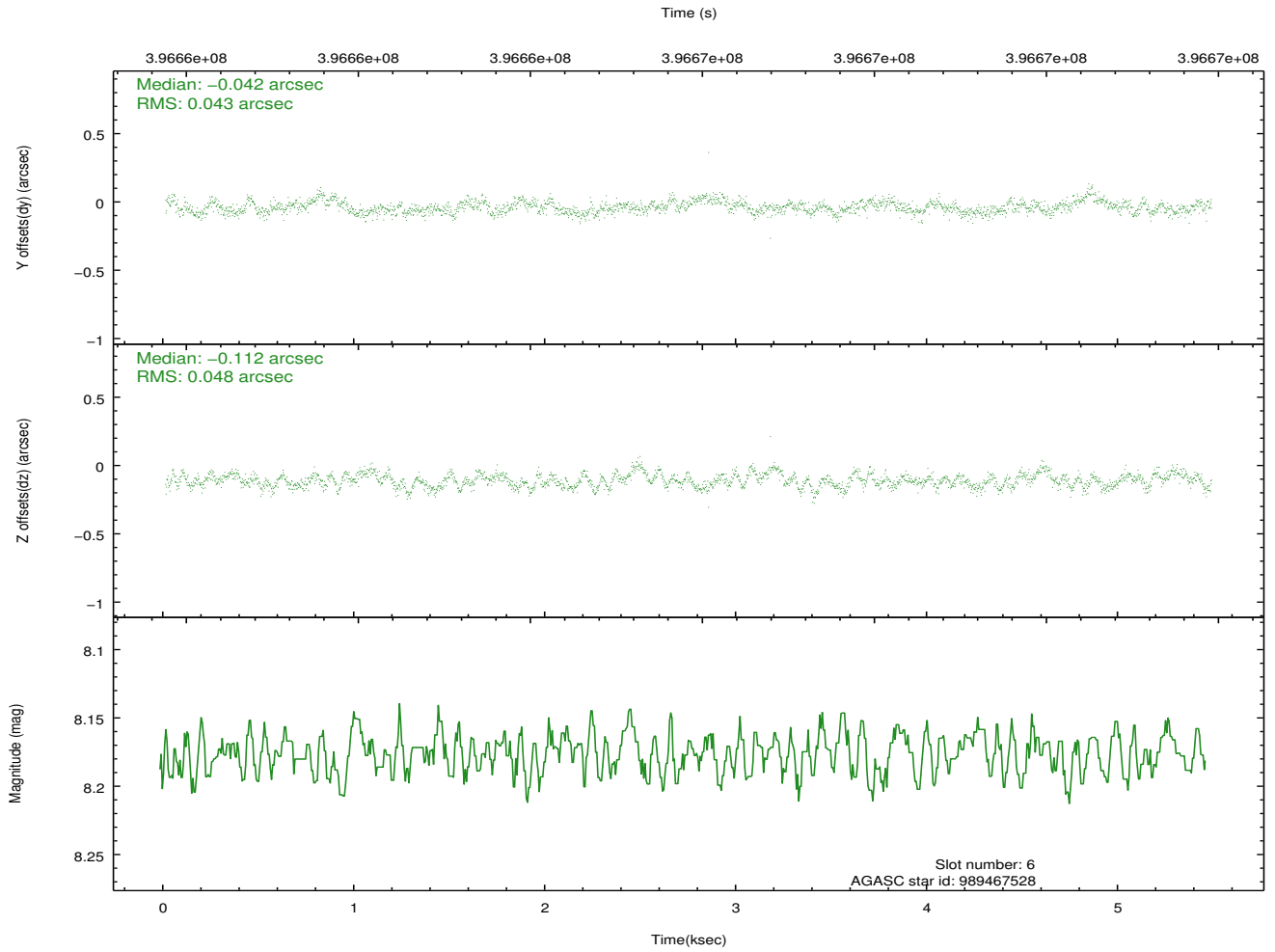
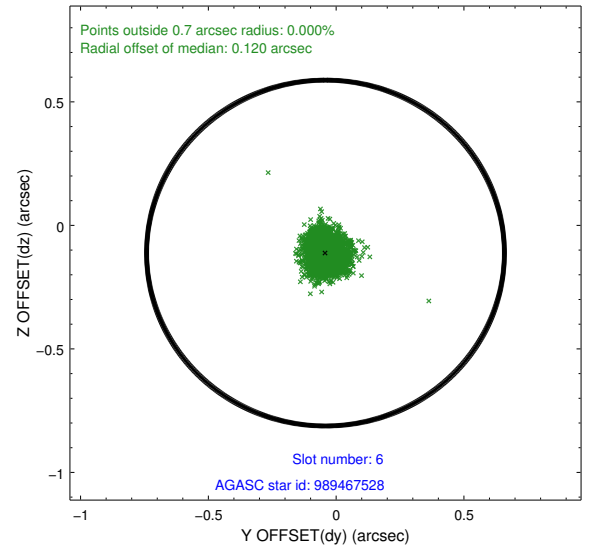
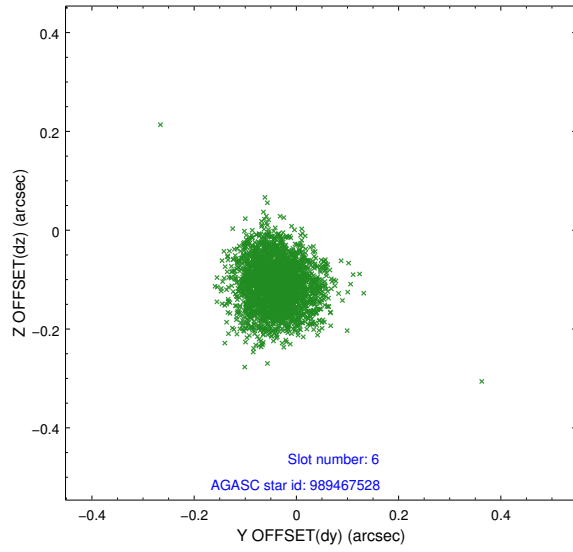
## 2.4.2 Slot 4



### 2.4.3 Slot 5

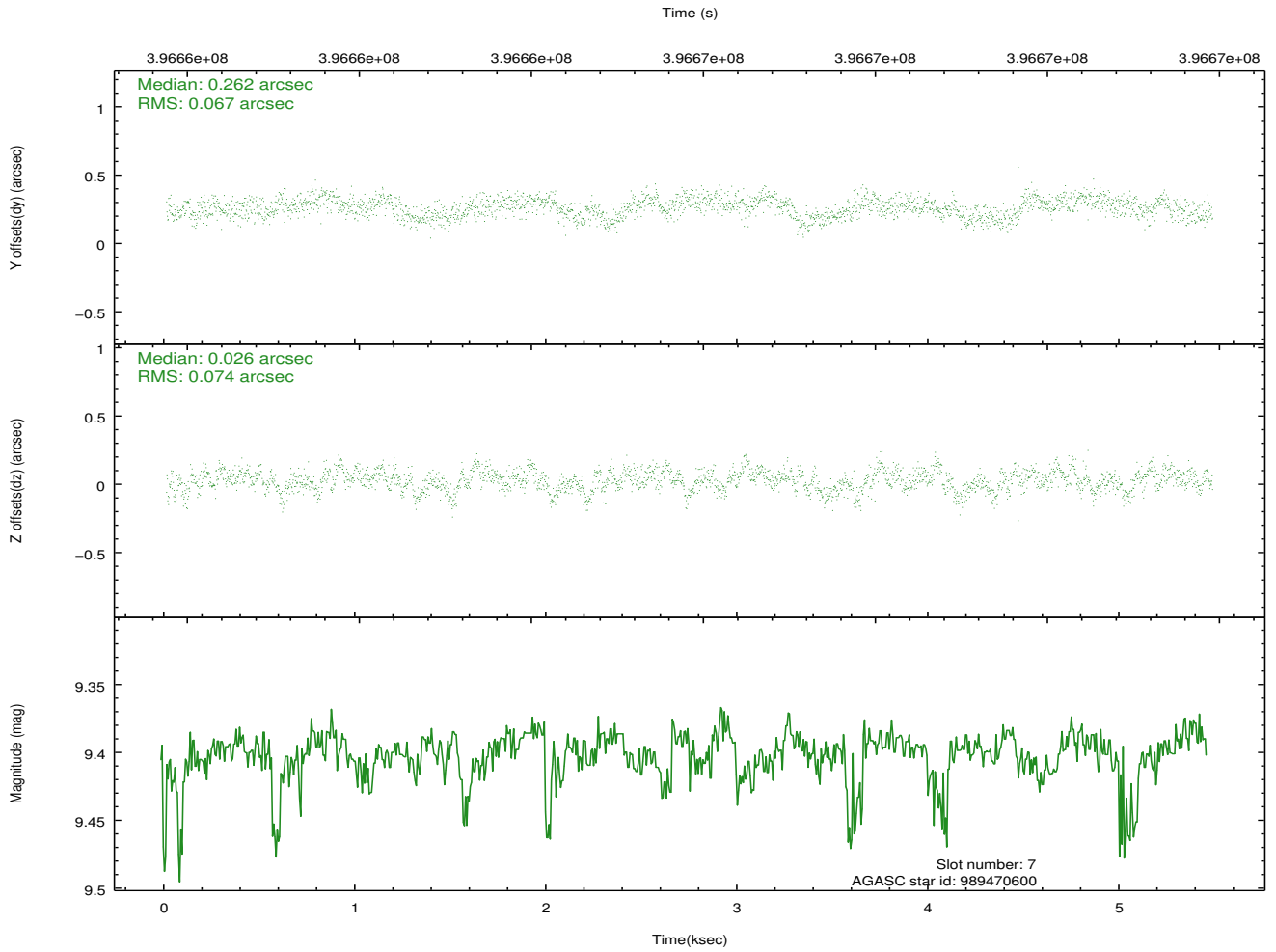
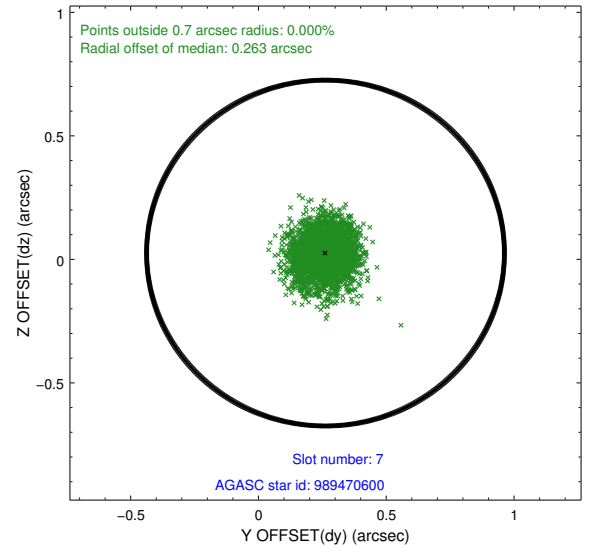
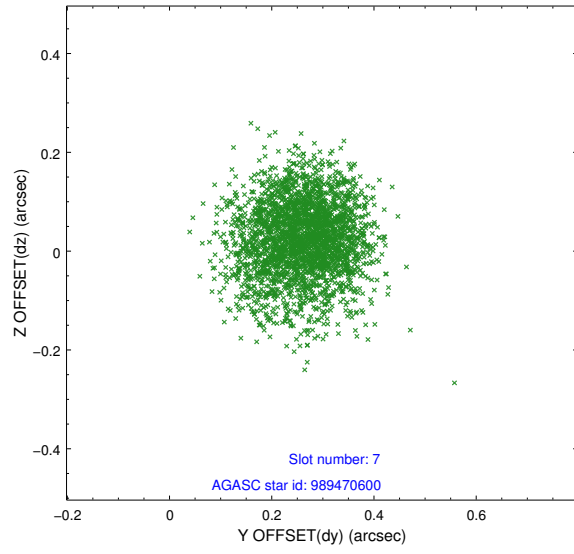


## 2.4.4 Slot 6



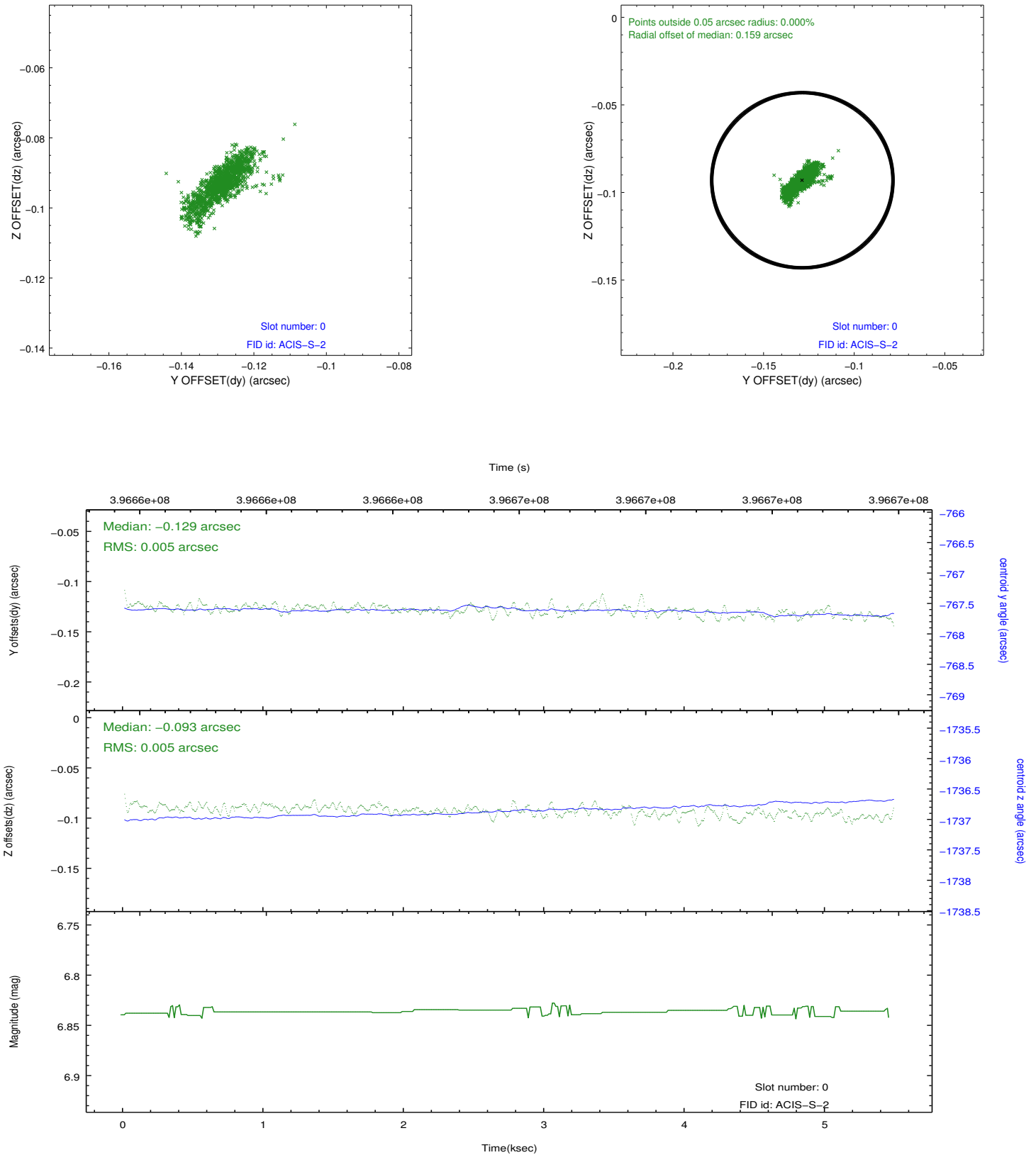


## 2.4.5 Slot 7

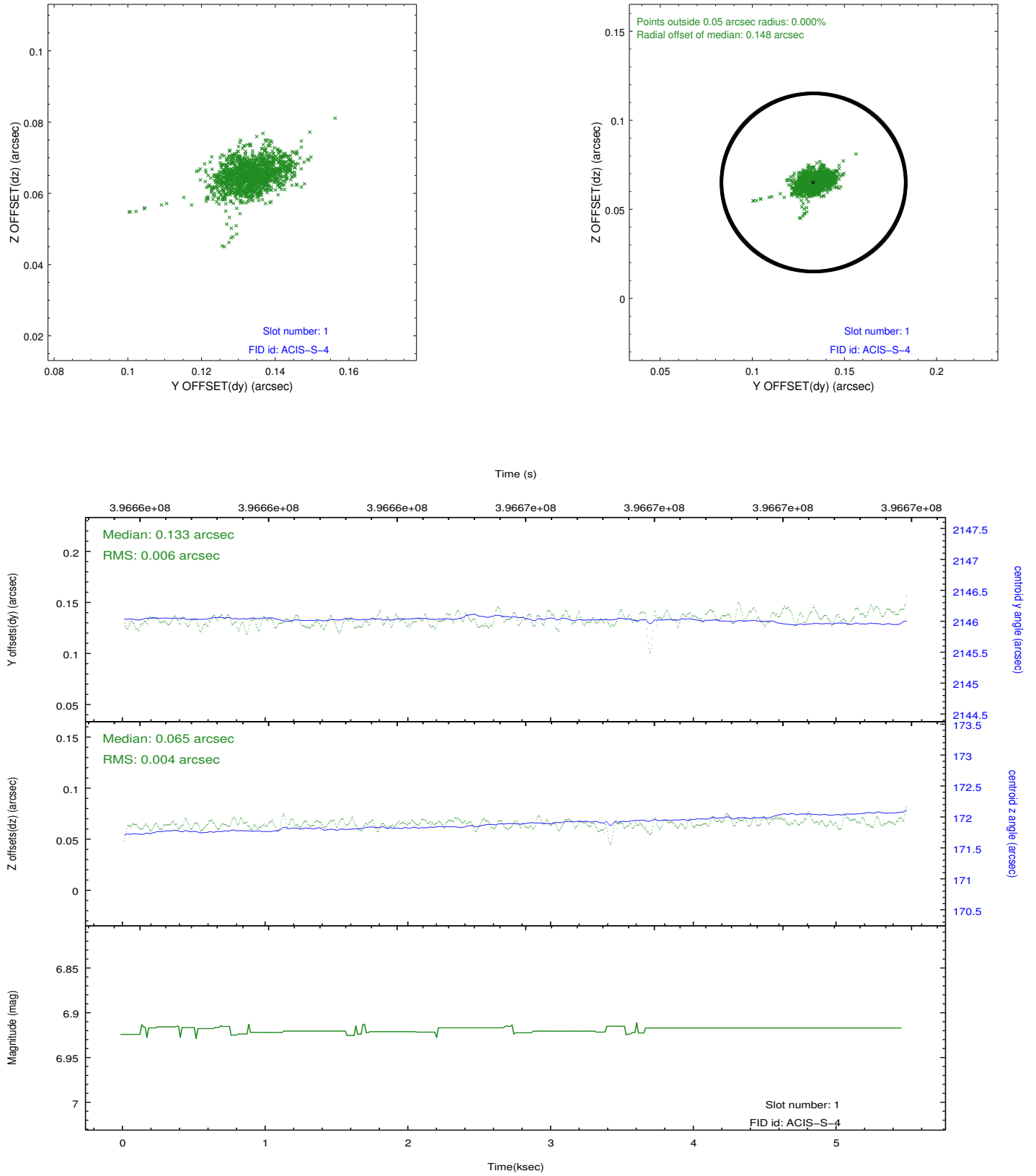


## 2.5 FID Slots

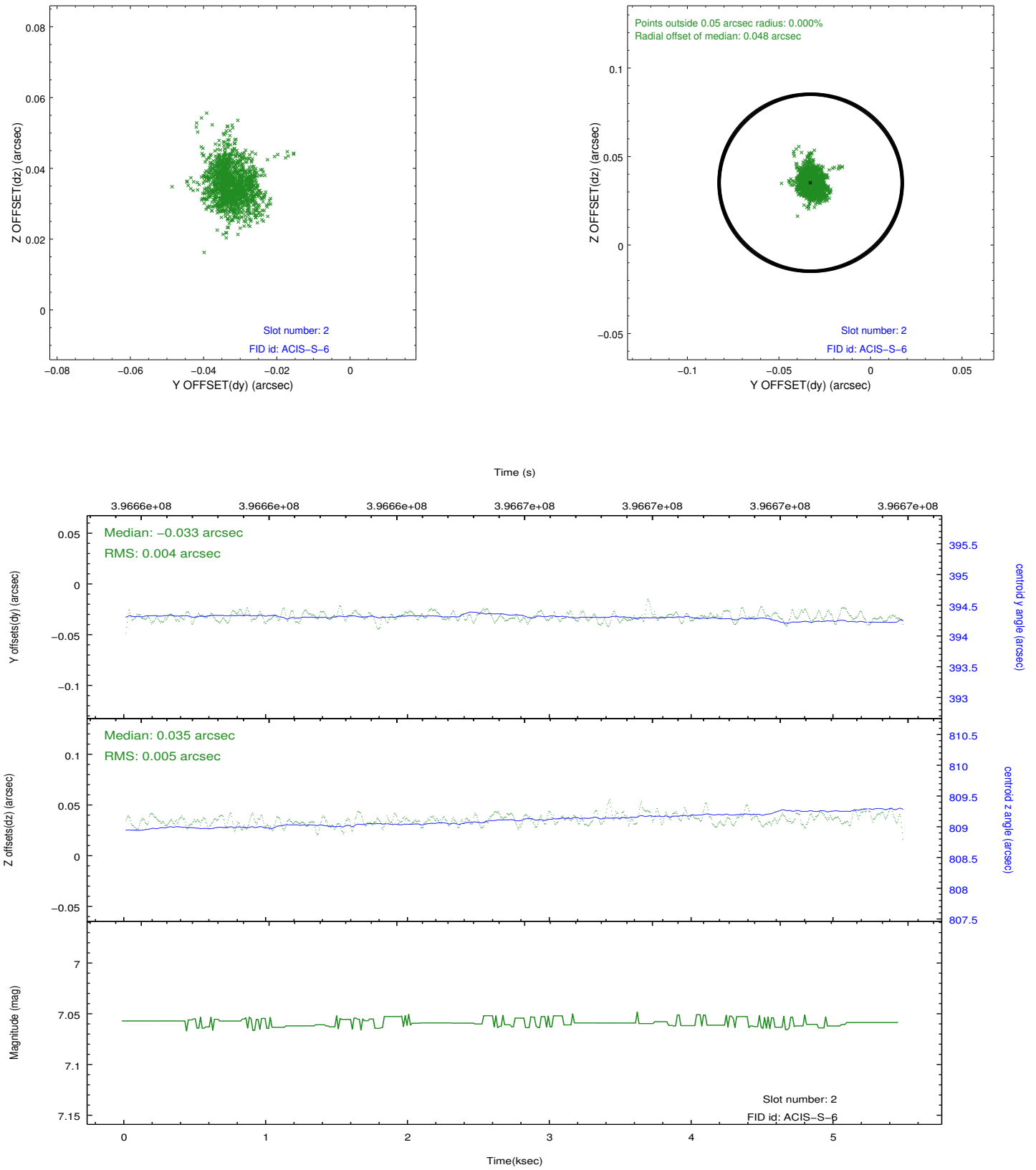
### 2.5.1 Slot 0



## 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)	2012.07.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.065606144011

### A.2 Comments