

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11766 - L2 Version 2  
Chandra X-Ray Center

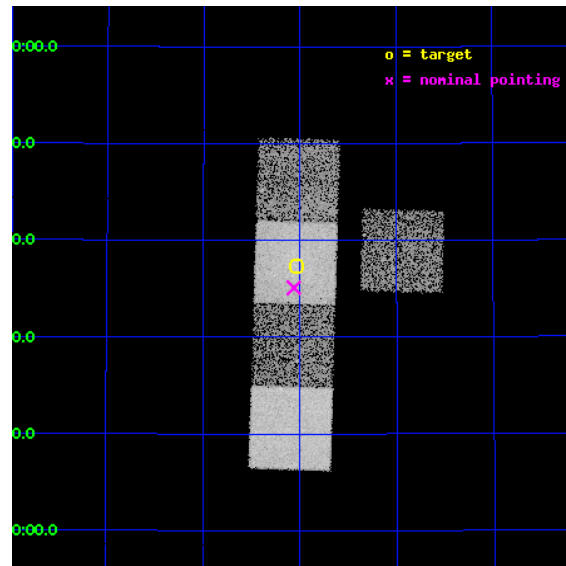
L2 Processing Date : Jun 30 2012

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# 1 Front

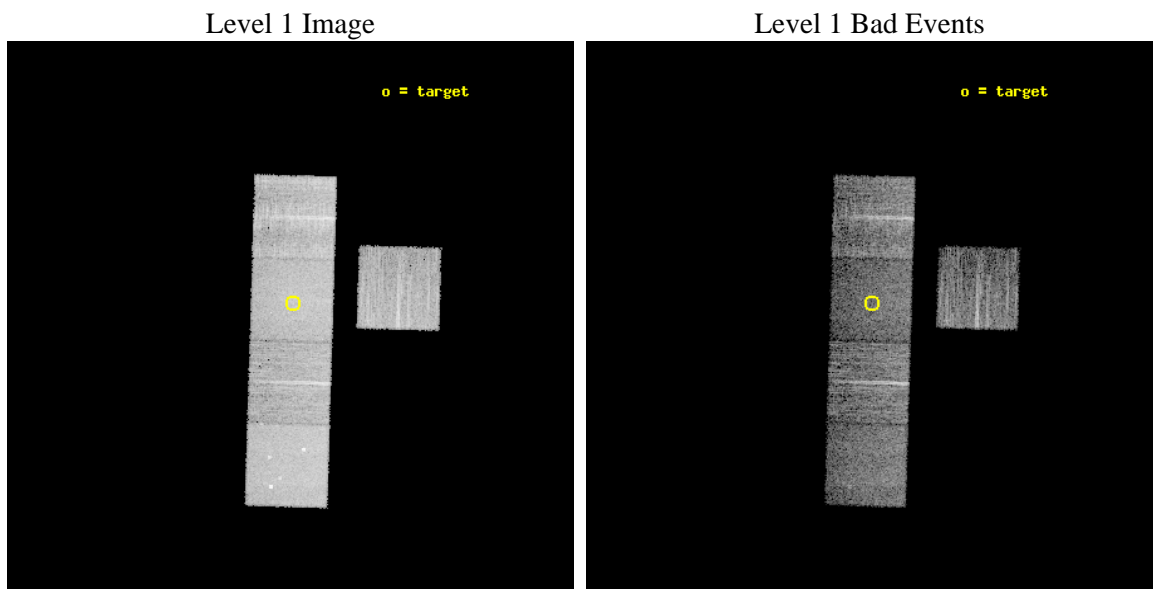
seq_num	800906	Sequence number
obs_id	11766	Observation id
title	The X-Ray, SZ, and Optical Scaling Relations of Massive Galaxy Clusters	Proposal title
observer	Dr. Eli Rykoff	Principal investigator
object	A1550	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.260417	Observer's specified target RA [deg]
dec_targ	47.622361	Observer's specified target Dec [deg]
ra_nom	187.26567635543	Nominal RA [deg]
dec_nom	47.585054133039	Nominal Dec [deg]
roll_nom	271.68565992908	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7036.4399287105	Sum of GTIs [s]
livetime	6944.5036608901	Livetime [s]
ontime3	7036.3168087006	Sum of GTIs [s]
ontime5	7036.3988887072	Sum of GTIs [s]
ontime6	7036.3578487039	Sum of GTIs [s]
ontime7	7036.4399287105	Sum of GTIs [s]
ontime8	7033.1348083019	Sum of GTIs [s]
l2events	85611	Number of level 2 events



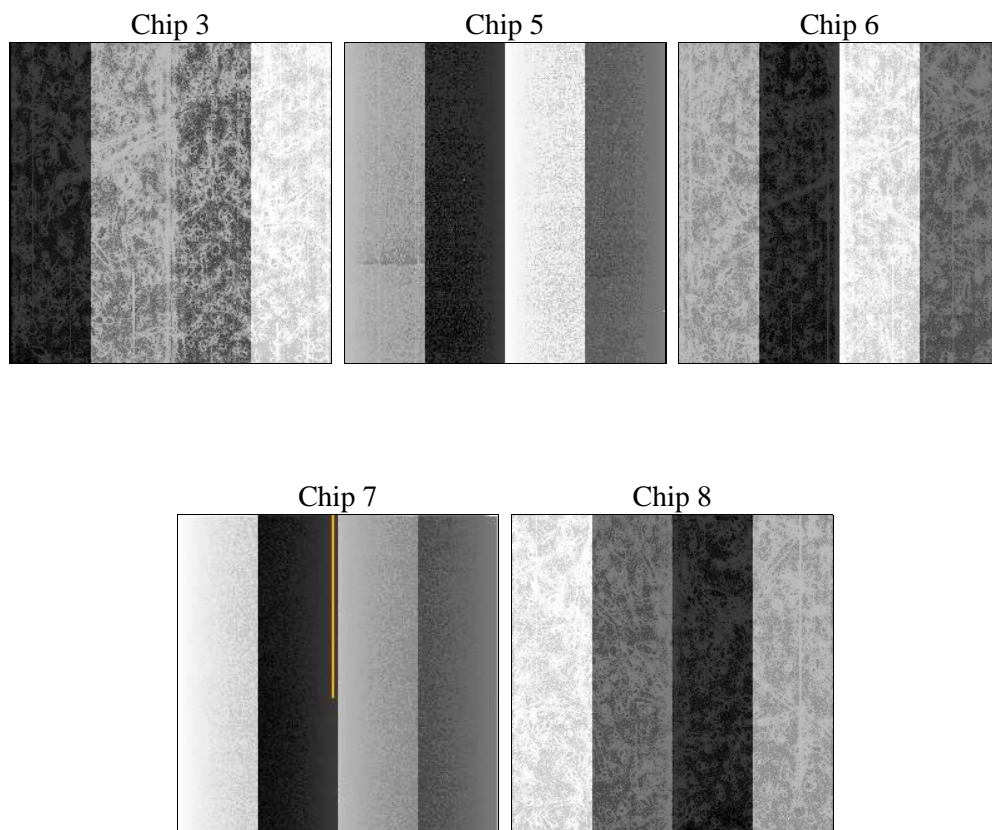
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7036.4399287105	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime3	7036.3168087006	Sum of GTIs [s]
date	2012-06-30T13:16:03	Date and time of file creation	ontime5	7036.3988887072	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	7036.3578487039	Sum of GTIs [s]
			ontime7	7036.4399287105	Sum of GTIs [s]
			ontime8	7033.1348083019	Sum of GTIs [s]
			l1events	326127	Number of level 1 events

### 2.1.4 Events

	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	51237	80956	53668	68652	71614
rejected events	45963	40577	47627	36093	52444
rejected %	89%	50%	88%	52%	73%

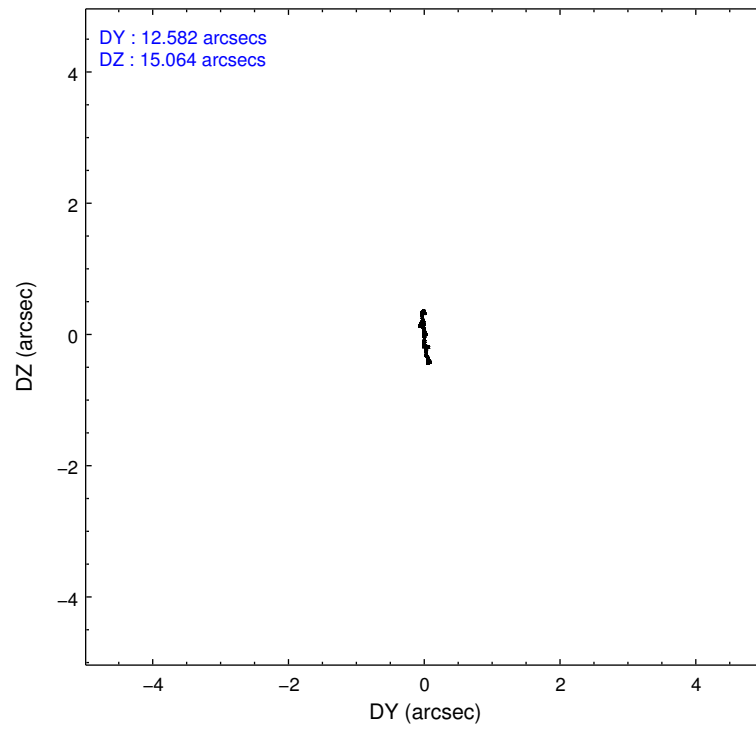
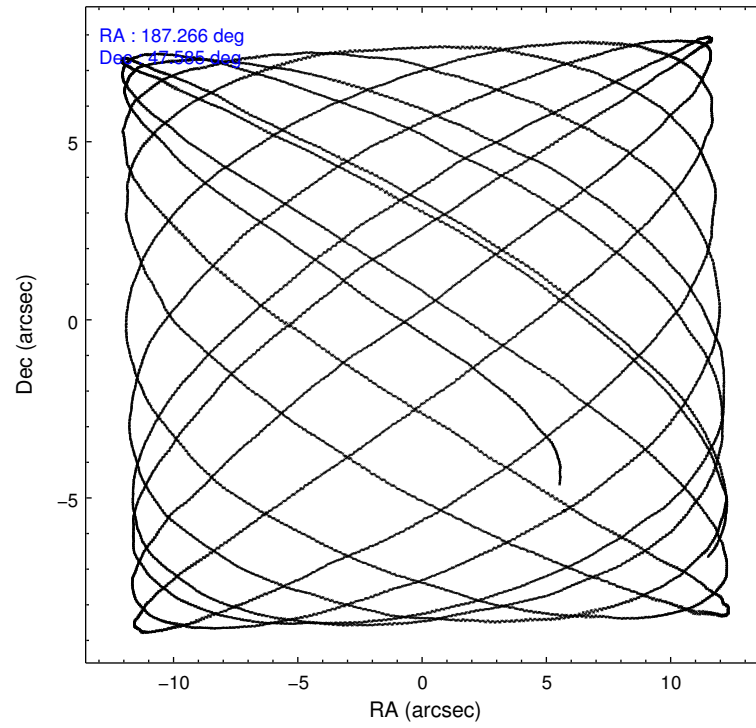
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1899	4274	2071	3755	5881
	3%	5%	3%	5%	8%
grade 1 events	41	228	36	88	63
	0%	0%	0%	0%	0%
grade 2 events	1224	11984	1407	6980	4460
	2%	14%	2%	10%	6%
grade 3 events	566	1598	633	2854	2035
	1%	1%	1%	4%	2%
grade 4 events	545	1479	634	2939	1821
	1%	1%	1%	4%	2%
grade 5 events	2409	6103	2415	6845	3490
	4%	7%	4%	9%	4%
grade 6 events	1046	21073	1298	16060	4989
	2%	26%	2%	23%	6%
grade 7 events	43507	34217	45174	29131	48875
	84%	42%	84%	42%	68%

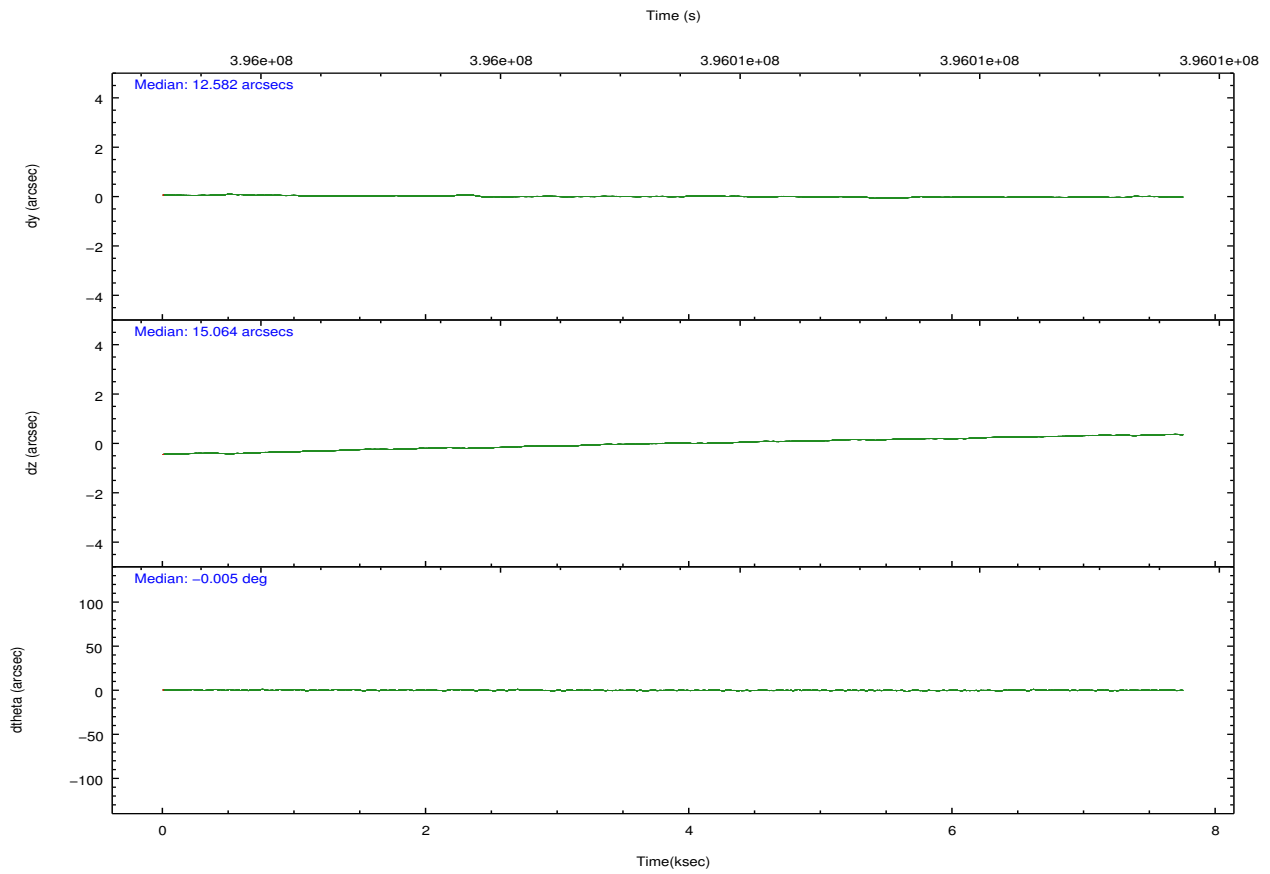
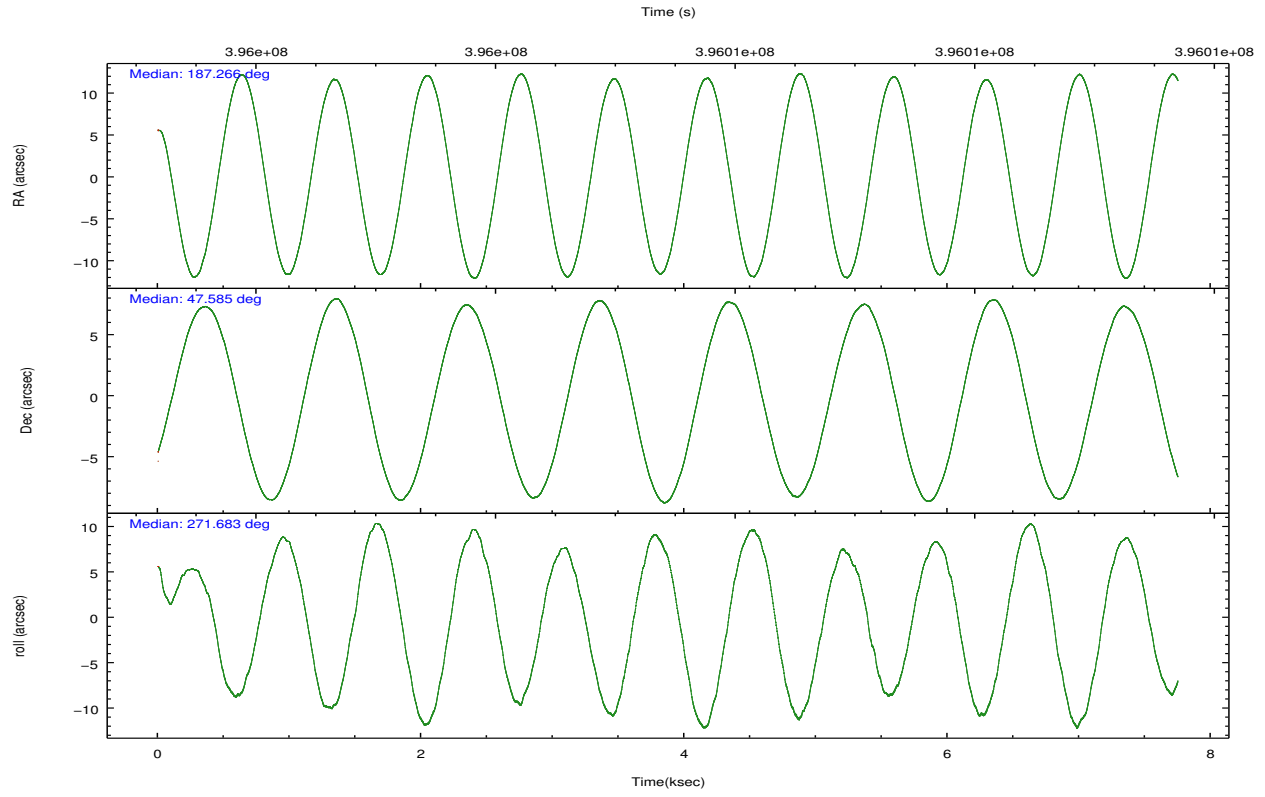


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	187.243924	187.2656763554347	Subarray requested	NONE	NONE
[deg] Pointing Dec	47.608056	47.5850541330391	Alternating exposures requested	N	N
[deg] Pointing Roll	271.545102	271.6856599290768	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	396002323.184000	396001115.12897			
Observation start date	2010-07-20T08:37:37	2010-07-20T08:18:35			
[s] Observation end time (MET)	396009323.184000	396010182.27944			
Observation end date	2010-07-20T10:34:17	2010-07-20T10:49:42			
Read mode	TIMED	TIMED			

## 2.3 Aspect



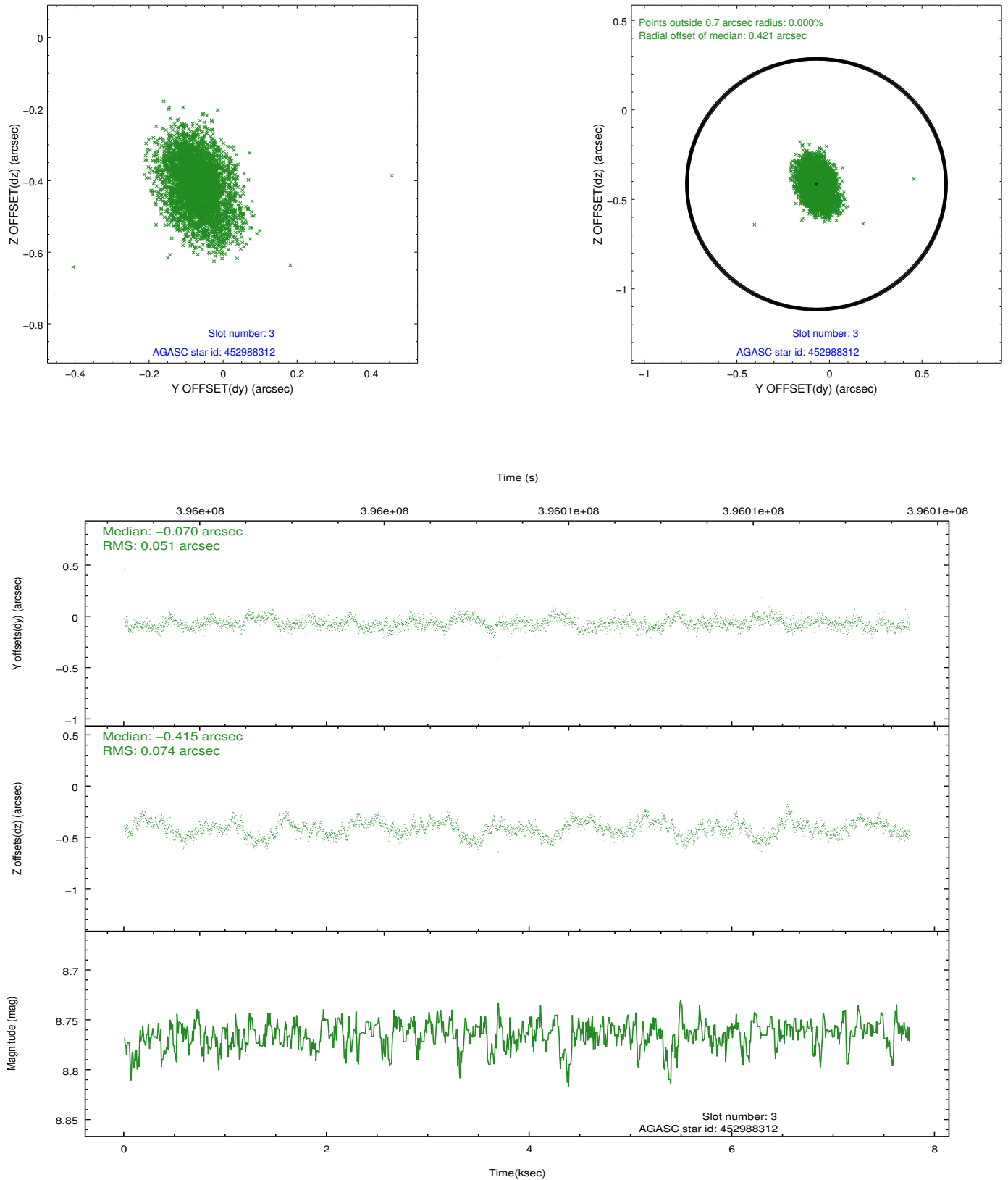


### Slot Statistics

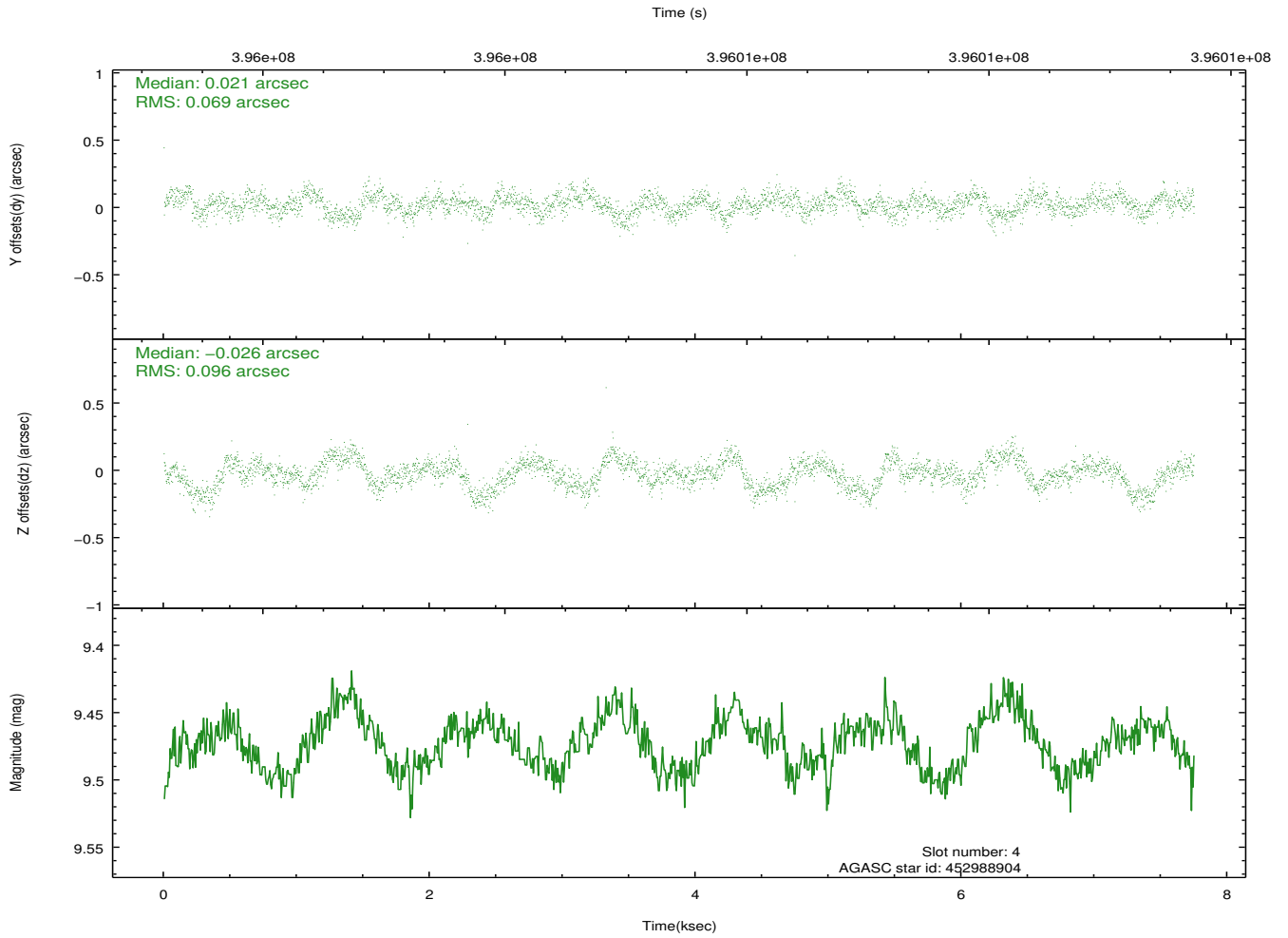
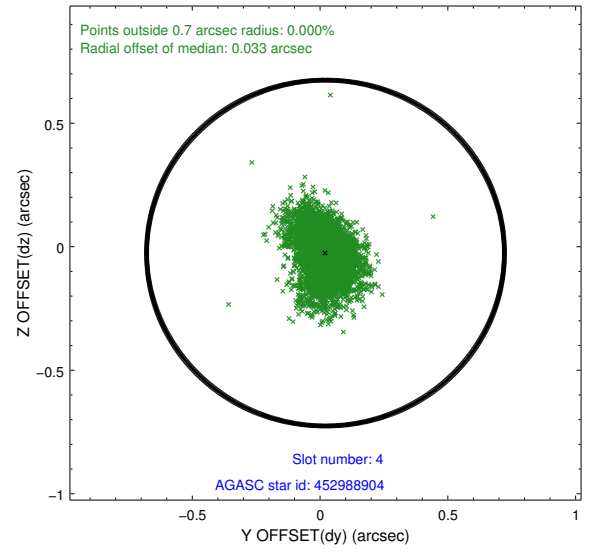
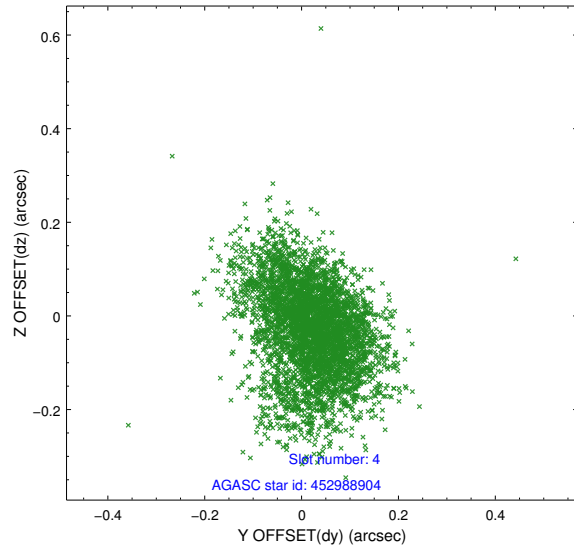
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	1891	-0.055	-0.028	0.008	0.014	0.000000	0.000000	-765.51	-1736.47
1	FID	ACIS-S-4	6.98	1891	0.173	0.035	0.006	0.010	0.000000	0.000000	2147.62	171.37
2	FID	ACIS-S-5	7.01	1890	-0.149	0.002	0.008	0.013	0.000000	0.000000	-1817.55	165.77
3	GUIDE	452988312	8.76	3779	-0.070	-0.415	0.097	0.158	187.147097	47.478619	459.73	-248.37
4	GUIDE	452988904	9.47	3780	0.021	-0.026	0.124	0.210	187.918892	48.028746	-1476.70	1665.38
5	GUIDE	452990328	8.94	3777	-0.041	0.164	0.085	0.136	187.139482	47.966878	-1298.75	-216.26
6	GUIDE	452990984	9.23	3780	-0.035	0.174	0.085	0.144	187.742810	46.960122	2361.00	1162.85
7	GUIDE	452991840	9.28	3778	0.120	0.103	0.086	0.154	188.203017	46.980826	2307.42	2294.95

## 2.4 Star Slots

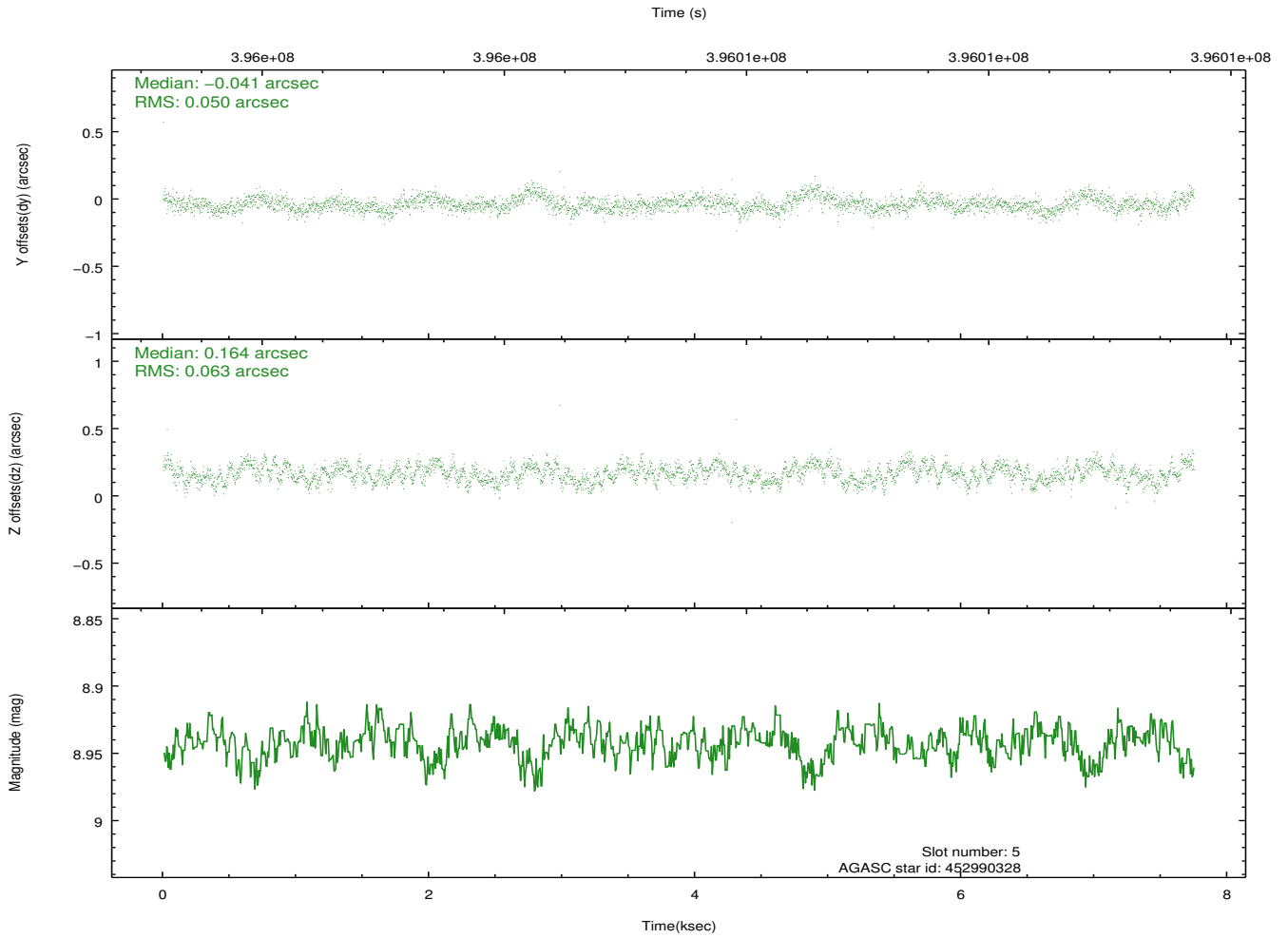
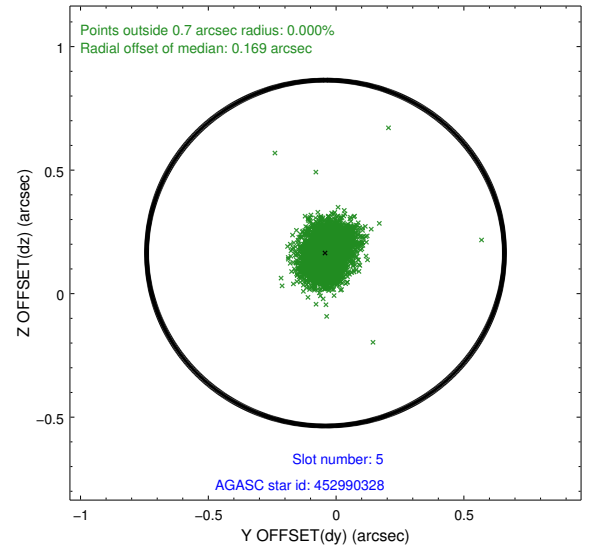
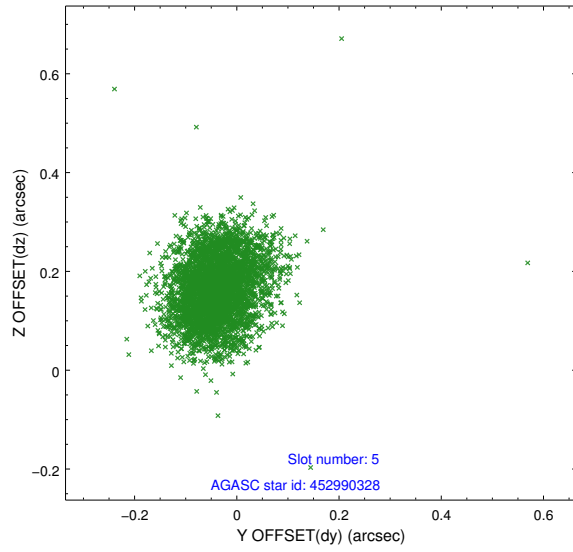
### 2.4.1 Slot 3



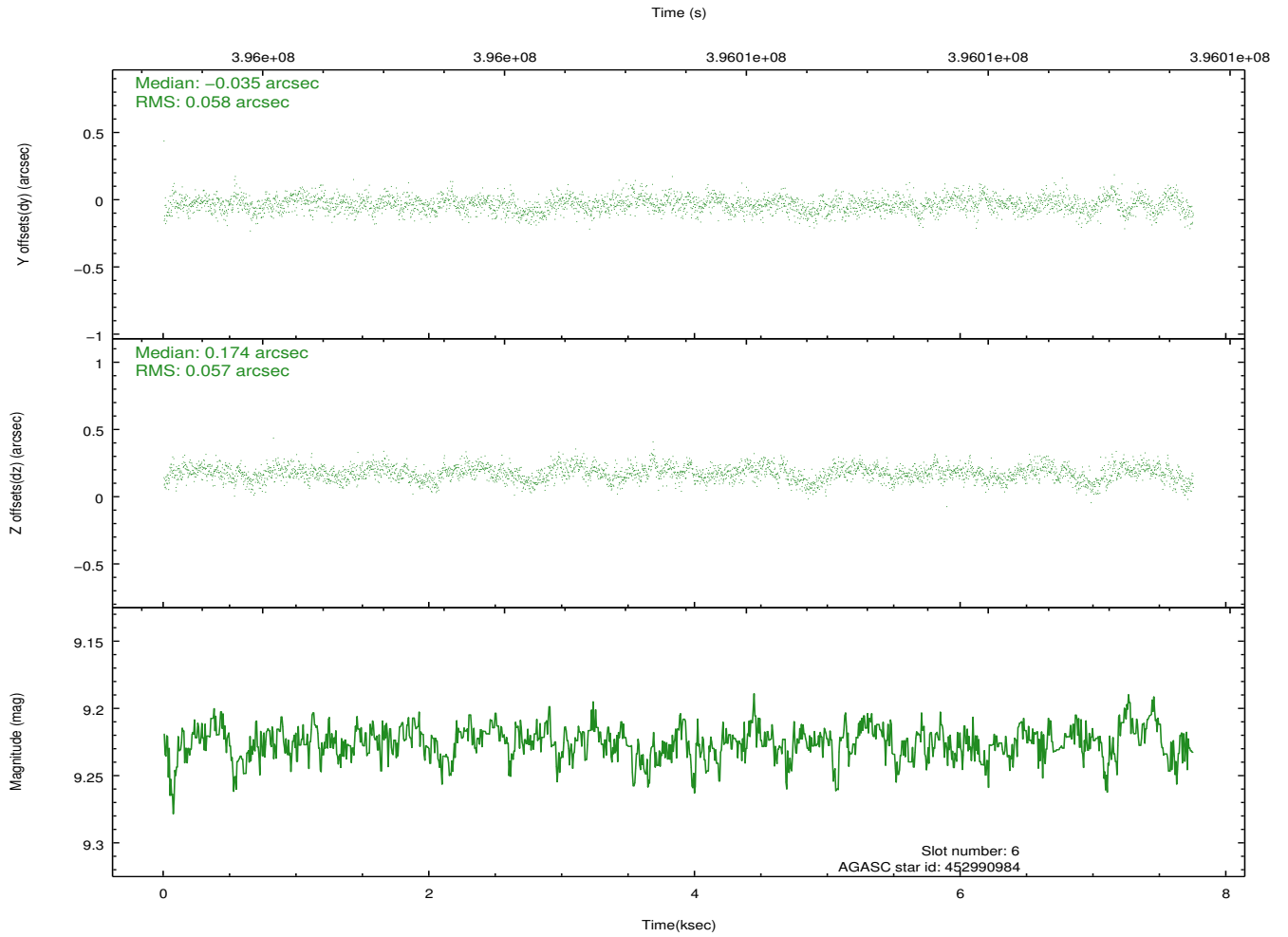
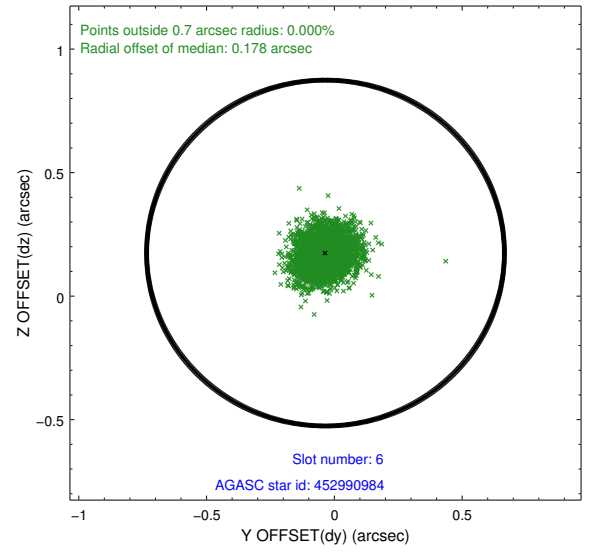
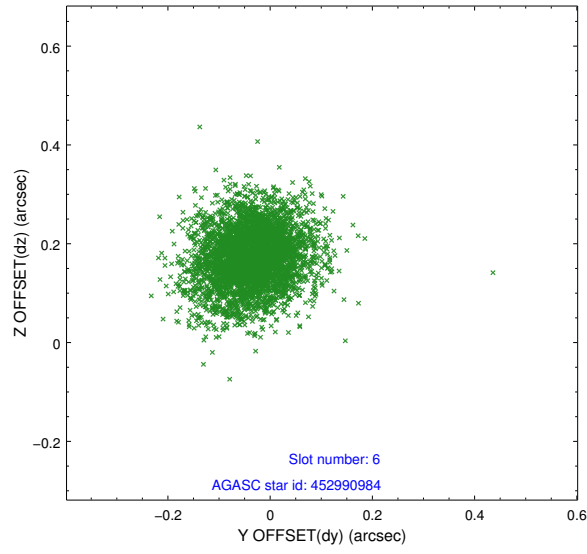
## 2.4.2 Slot 4



### 2.4.3 Slot 5

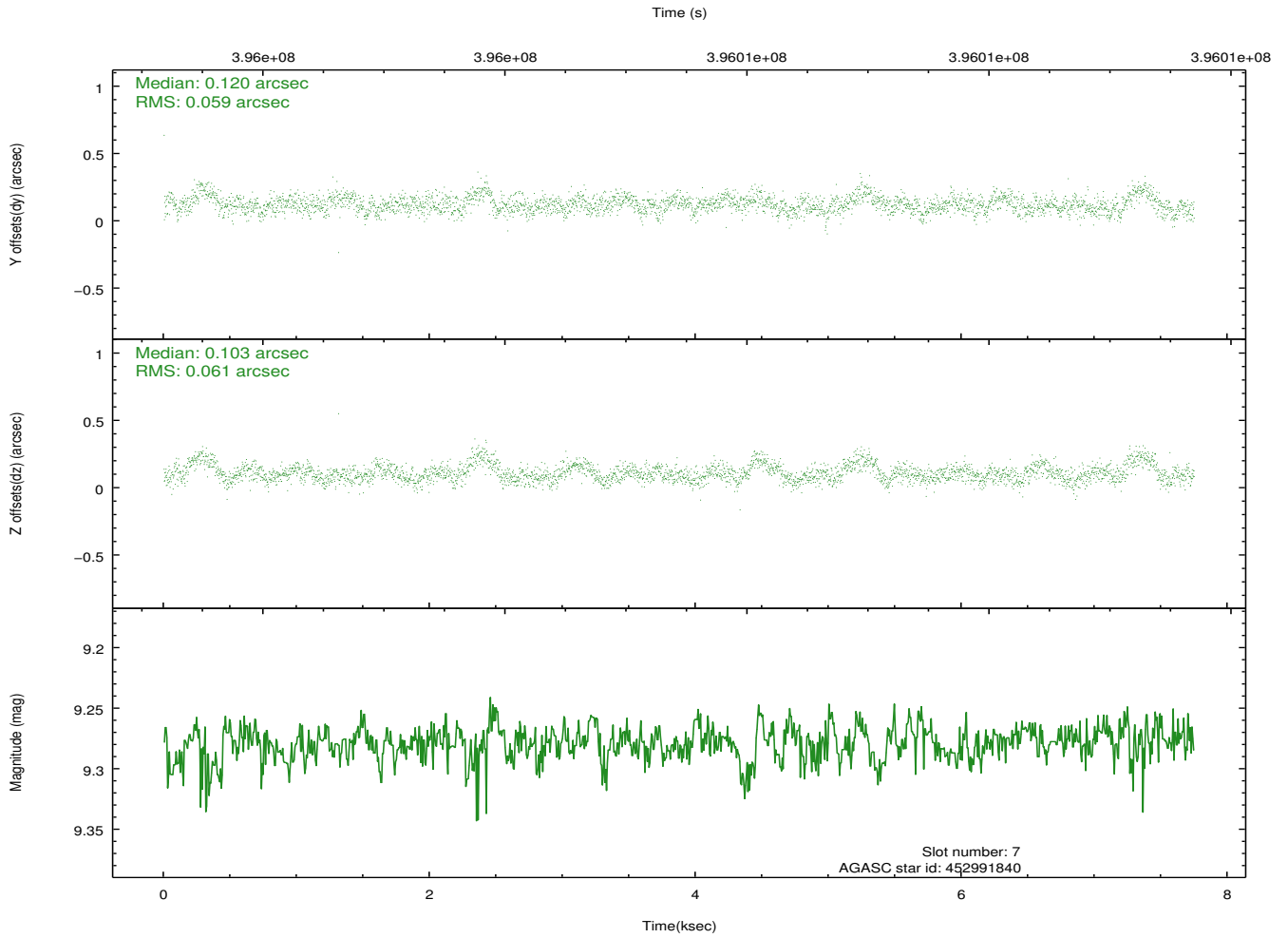
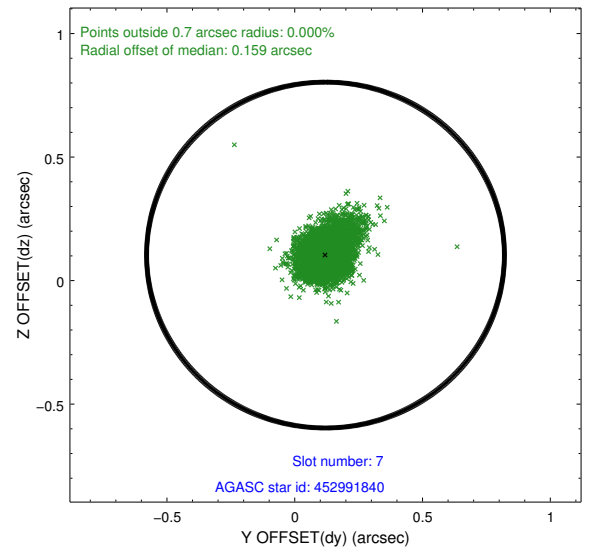
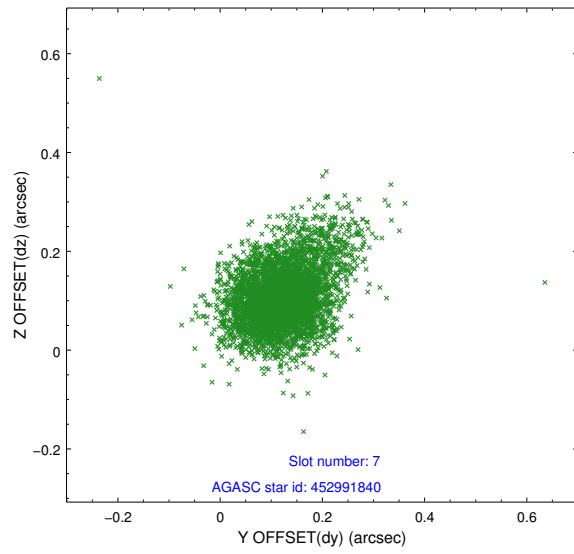


## 2.4.4 Slot 6



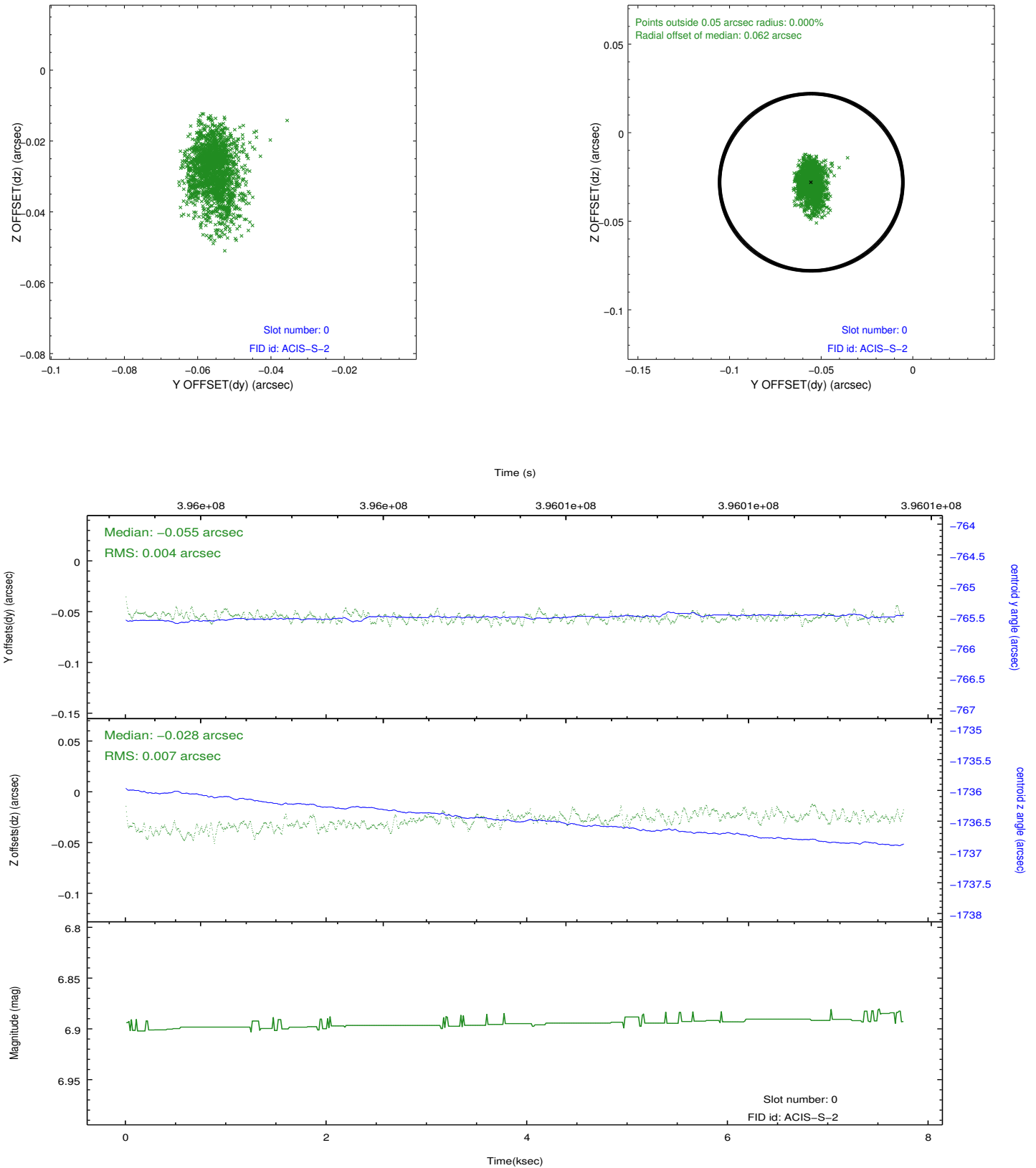


## 2.4.5 Slot 7

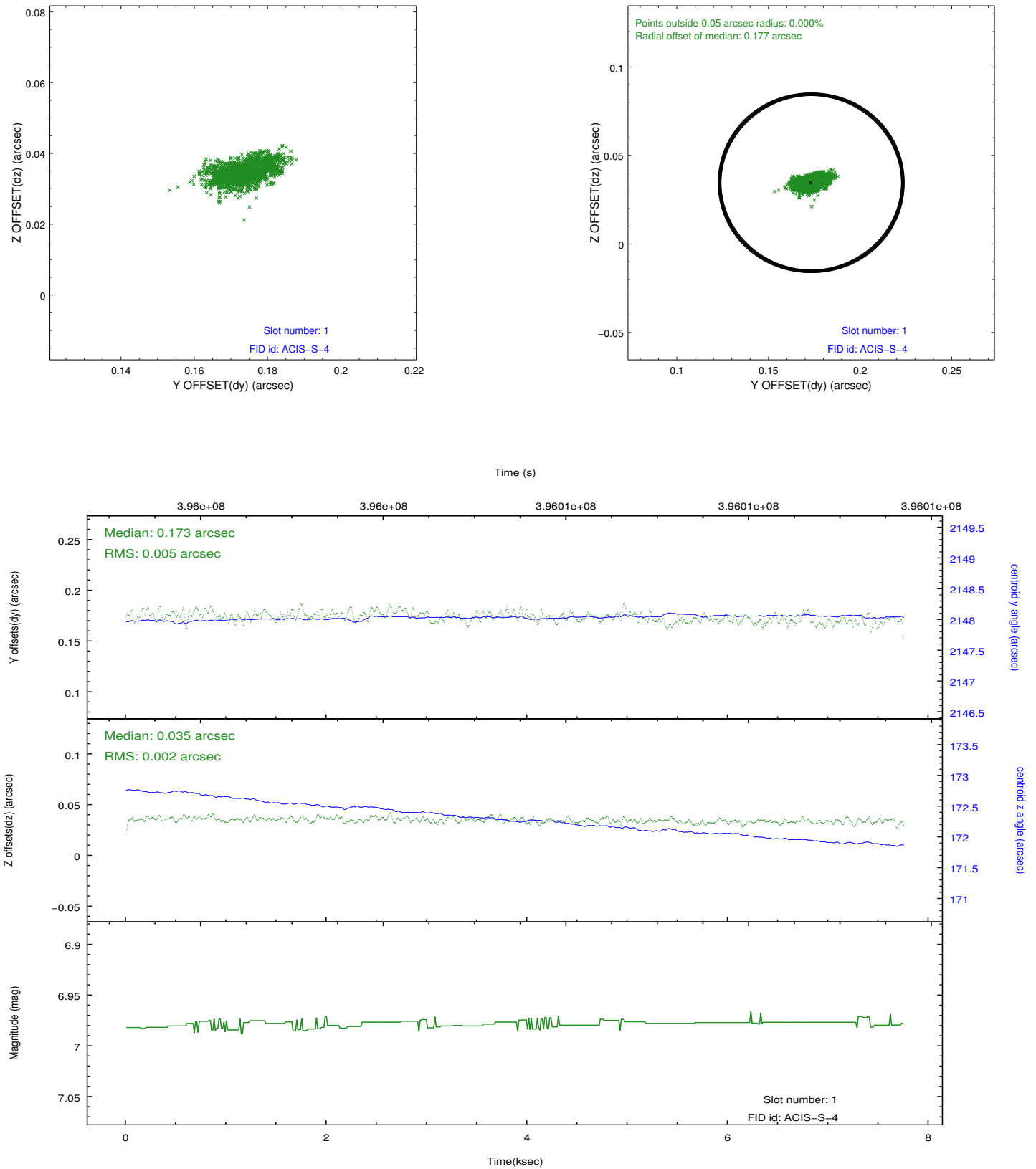


## 2.5 FID Slots

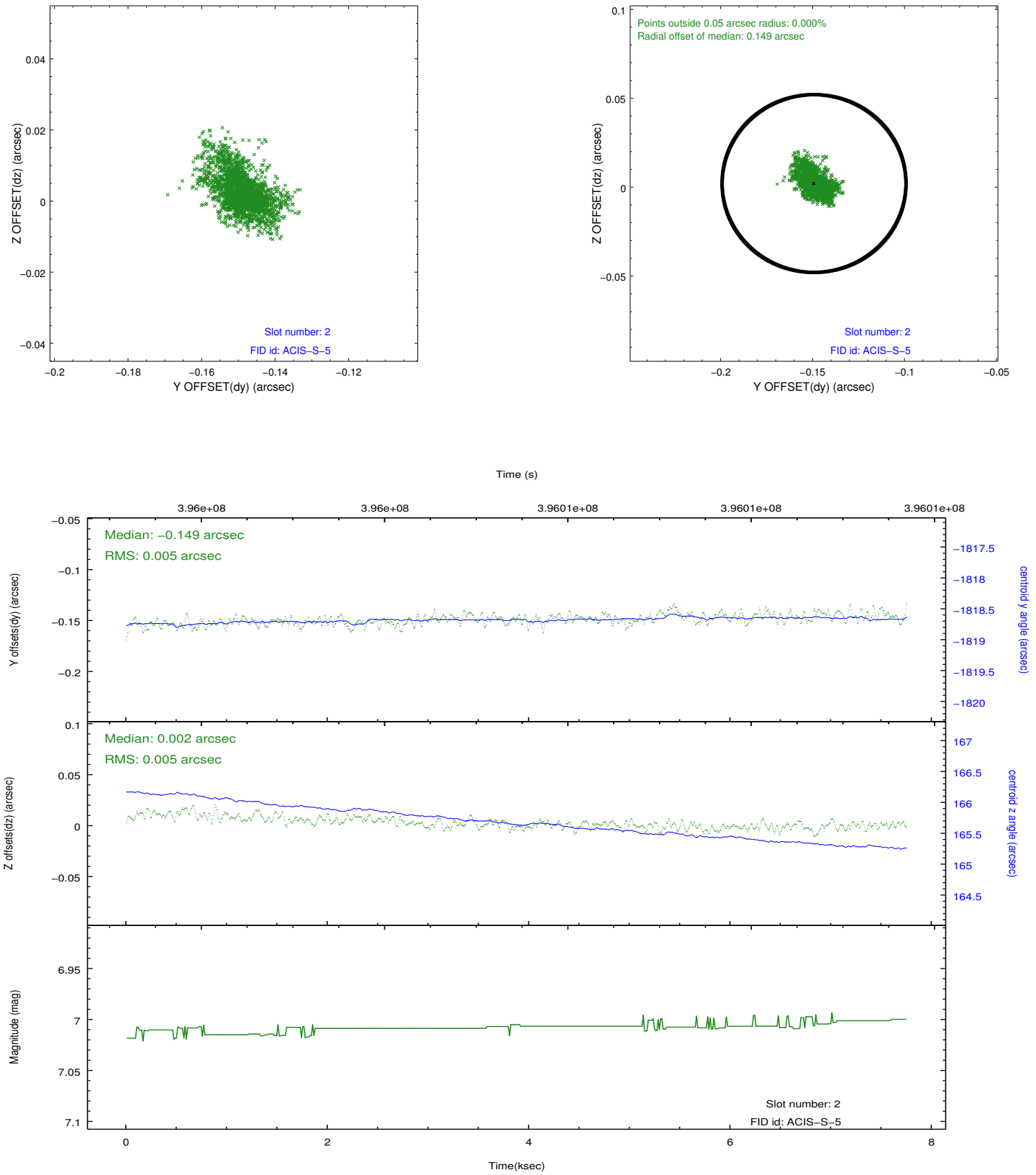
### 2.5.1 Slot 0



## 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	7.0364399359226

### **A.2 Comments**