

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3957 - L2 Version 3  
Chandra X-Ray Center

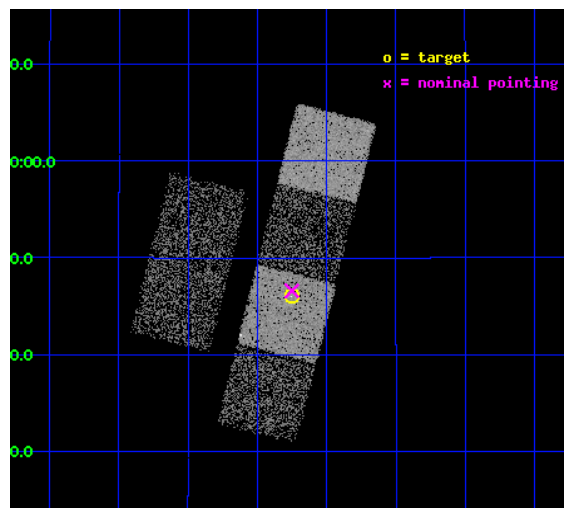
L2 Processing Date : Oct 28 2012

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# 1 Front

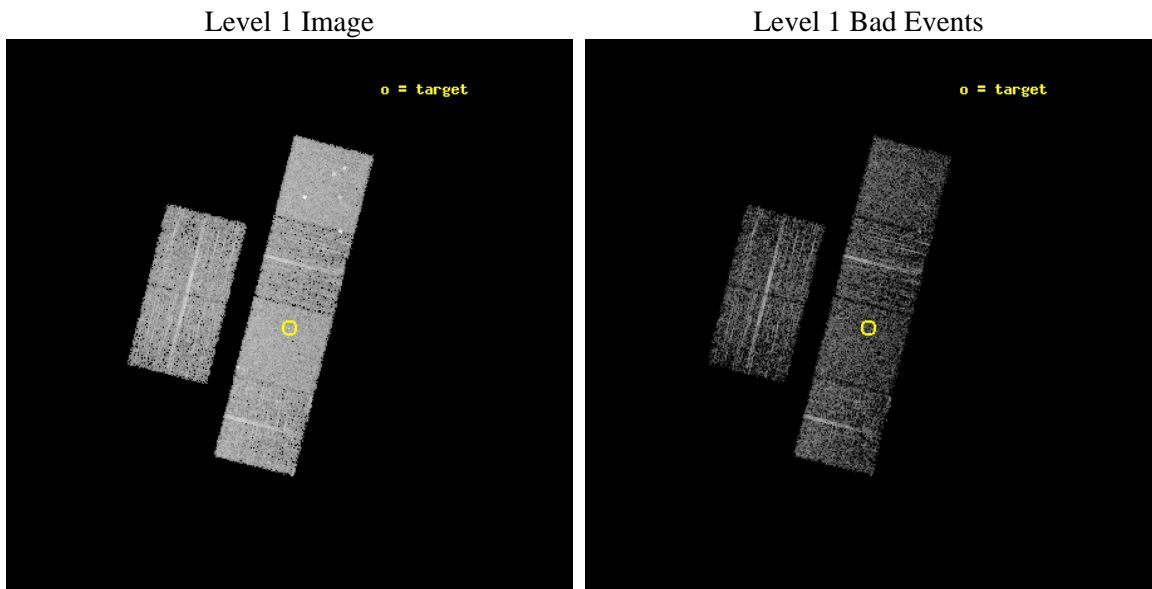
seq_num	700636	Sequence number
obs_id	3957	Observation id
title	A CHANDRA AND XMM-NEWTON STUDY OF THE MOST DISTANT QUASARS: X-RAYING THE FIRST MASSIVE BLACK HOLES	Proposal title
observer	Prof. William Brandt	Principal investigator
object	SDSS J001115+144601	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	2.813333	Observer's specified target RA [deg]
dec_targ	14.767167	Observer's specified target Dec [deg]
ra_nom	2.8126905718224	Nominal RA [deg]
dec_nom	14.776621003497	Nominal Dec [deg]
roll_nom	104.19672718582	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3539.1180561185	Sum of GTIs [s]
livetime	3494.3036122909	Livetime [s]
ontime2	3539.1180262566	Sum of GTIs [s]
ontime3	3542.359026432	Sum of GTIs [s]
ontime5	3539.1180760562	Sum of GTIs [s]
ontime6	3545.5999867916	Sum of GTIs [s]
ontime7	3539.1180561185	Sum of GTIs [s]
ontime8	3542.3590065241	Sum of GTIs [s]
l2events	34665	Number of level 2 events



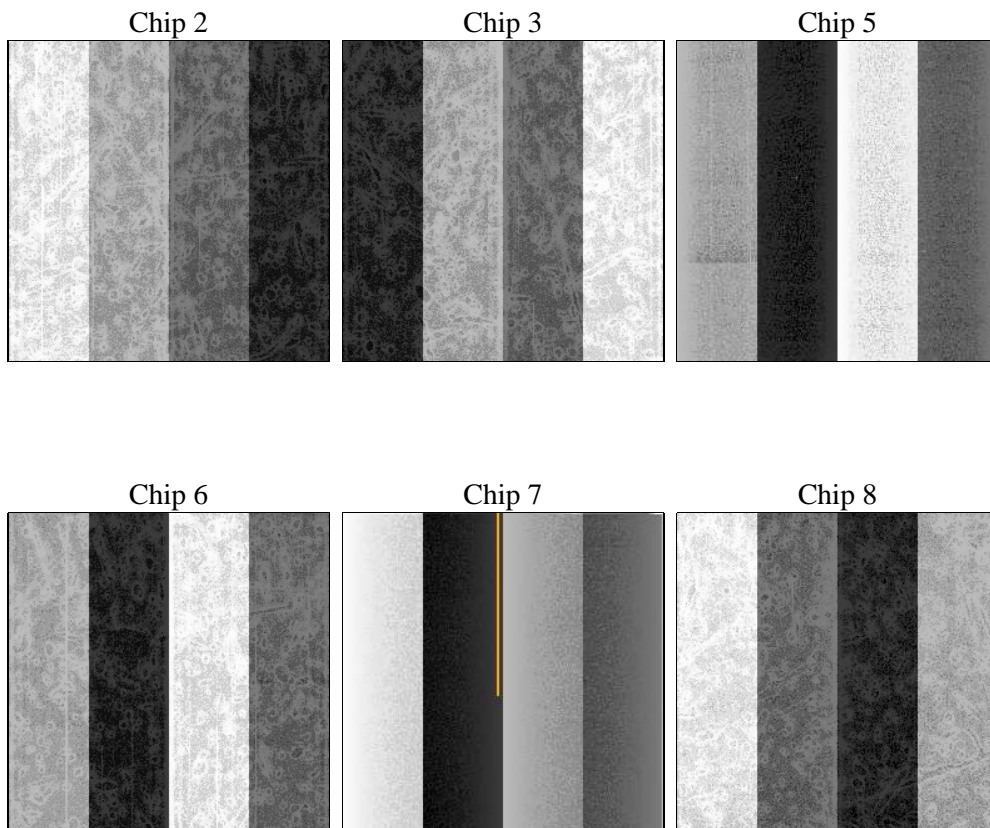
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3432.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3539.1180561185	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	3539.1180262566	Sum of GTIs [s]
date	2012-10-28T13:29:47	Date and time of file creation	ontime3	3542.359026432	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	3539.1180760562	Sum of GTIs [s]
			ontime6	3545.5999867916	Sum of GTIs [s]
			ontime7	3539.1180561185	Sum of GTIs [s]
			ontime8	3542.3590065241	Sum of GTIs [s]
			l1events	169053	Number of level 1 events

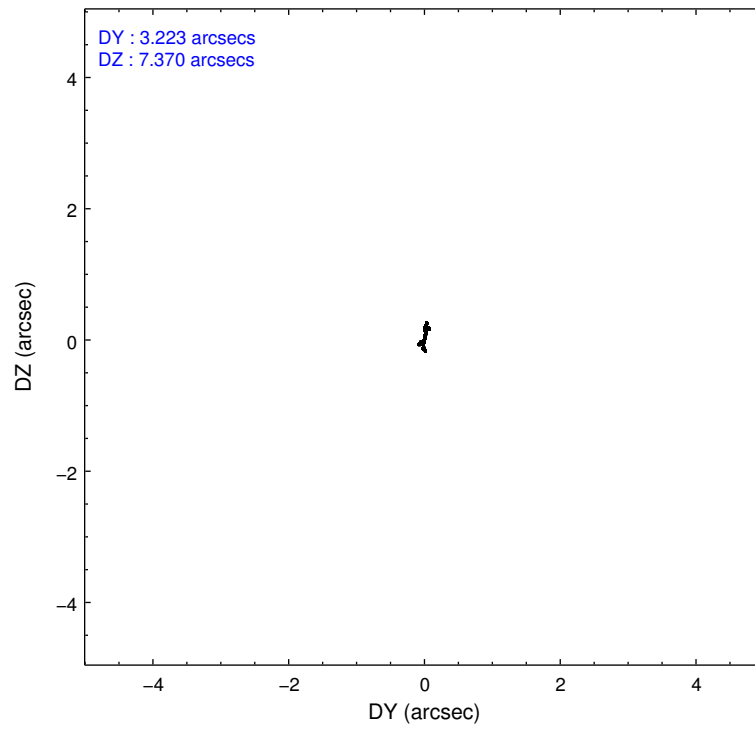
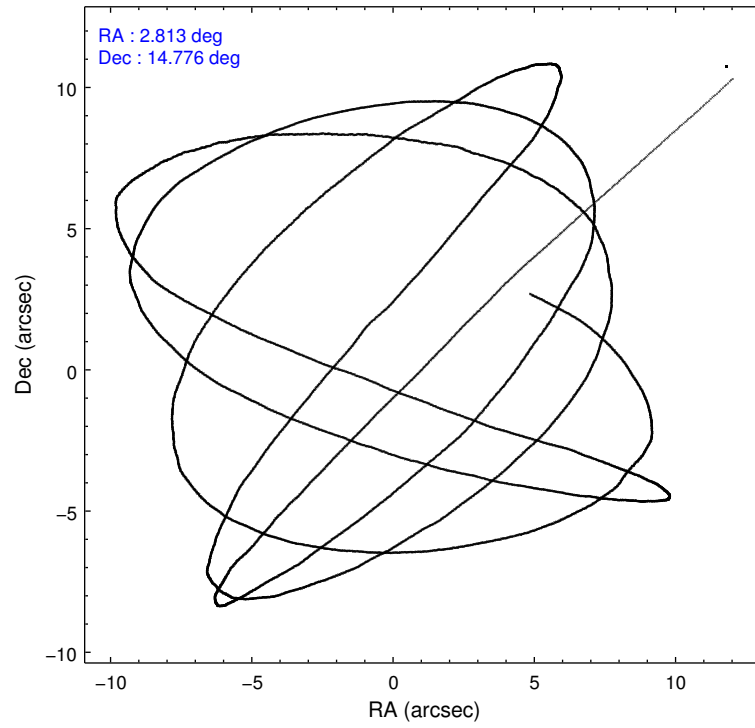
### 2.1.4 Events

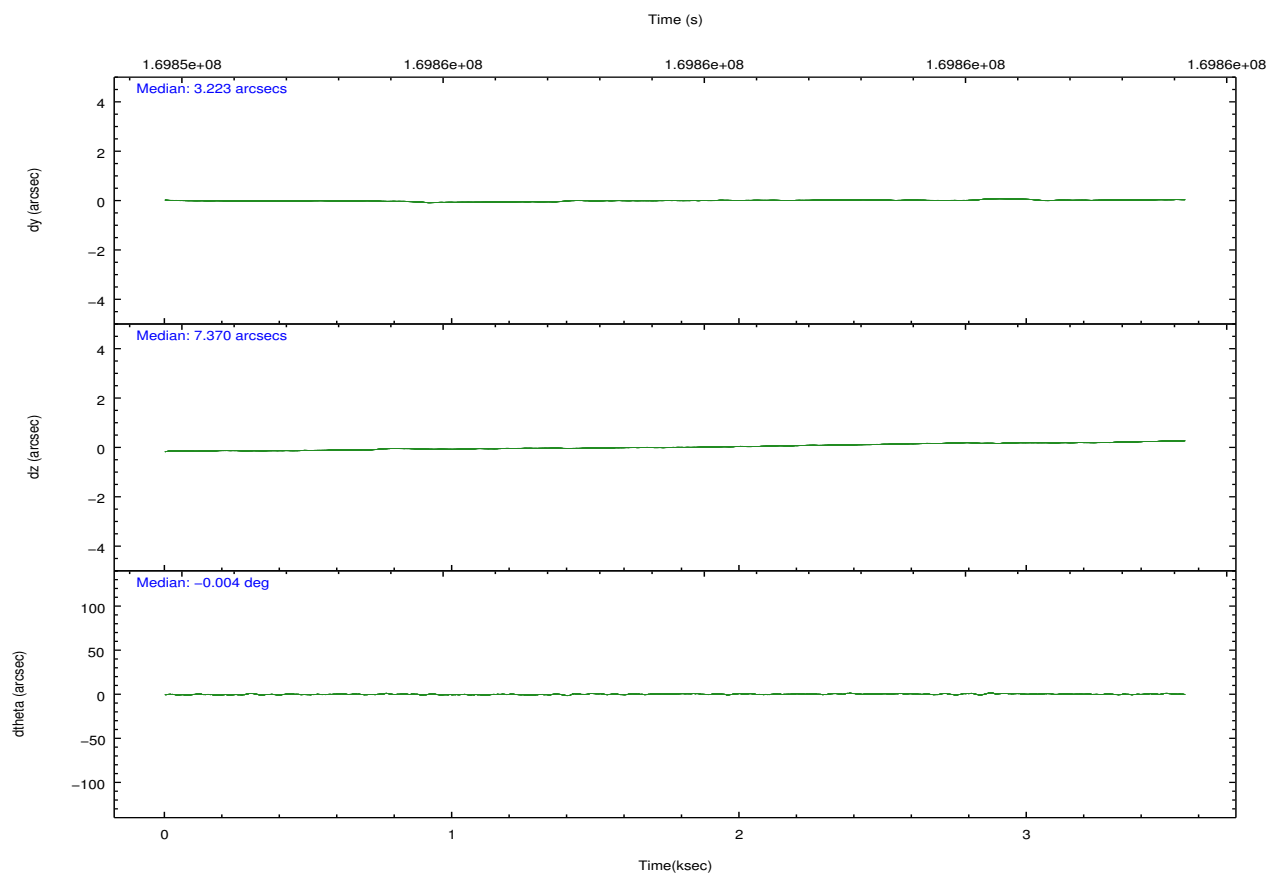
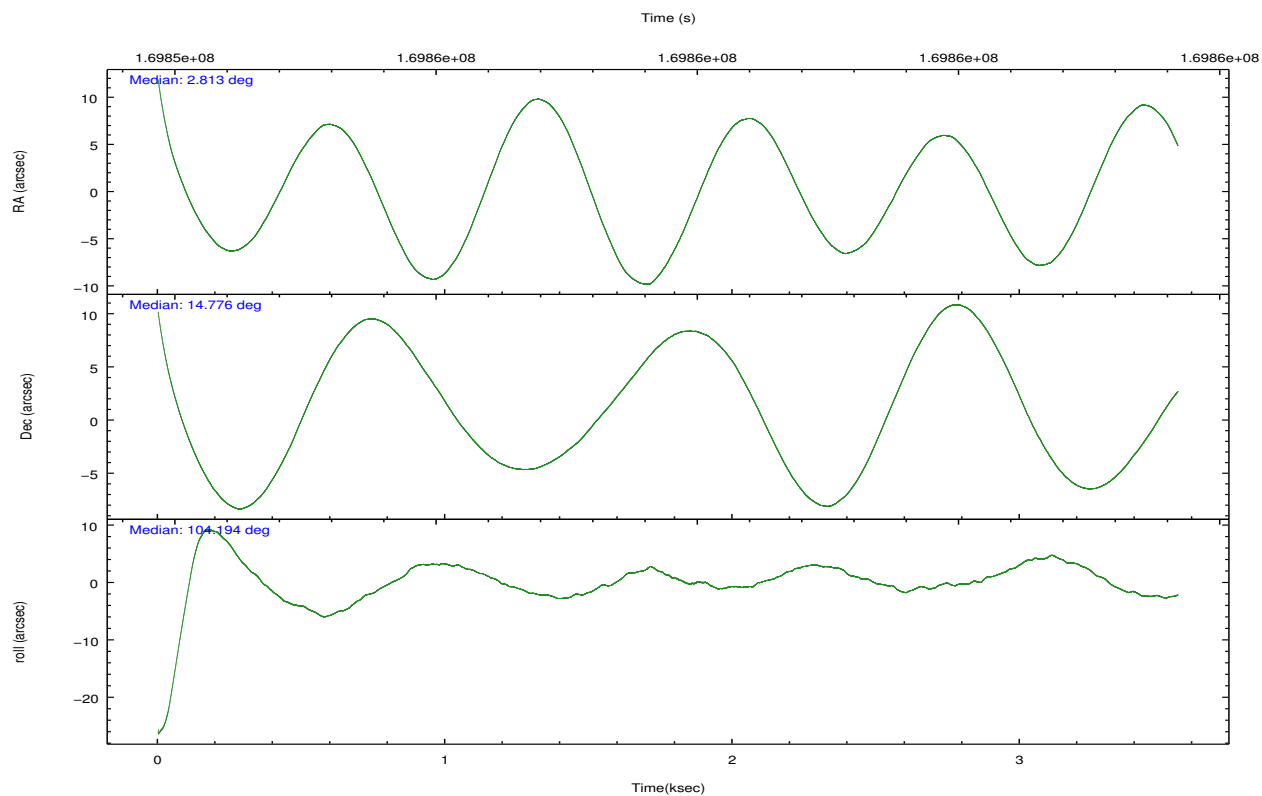
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	24550	23317	35852	23805	32387	29142	grade 0 events	1185	1152	2587	1017	1308	1938
rejected events	22054	20838	20212	21284	20109	23739		4%	4%	7%	4%	4%	6%
rejected %	89%	89%	56%	89%	62%	81%	grade 1 events	10	18	119	13	34	12
								0%	0%	0%	0%	0%	0%
							grade 2 events	537	542	4584	564	2676	1289
								2%	2%	12%	2%	8%	4%
							grade 3 events	263	268	689	286	1267	634
								1%	1%	1%	1%	3%	2%
							grade 4 events	273	261	715	266	1151	604
								1%	1%	1%	1%	3%	2%
							grade 5 events	964	1071	2679	1074	3114	1438
								3%	4%	7%	4%	9%	4%
							grade 6 events	435	466	8250	602	6869	1389
								1%	1%	23%	2%	21%	4%
							grade 7 events	20883	19539	16229	19983	15968	21838
								85%	83%	45%	83%	49%	74%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	2.832516	2.812690571822429	Subarray requested	NONE	NONE
[deg] Pointing Dec	14.757548	14.77662100349686	Alternating exposures requested	N	N
[deg] Pointing Roll	104.035162	104.1967271858201	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	169854233.184000	169853066.37607			
Observation start date	2003-05-20T21:42:49	2003-05-20T21:24:26			
[s] Observation end time (MET)	169857665.184000	169858588.0513			
Observation end date	2003-05-20T22:40:01	2003-05-20T22:56:28			
Read mode	TIMED	TIMED			

## 2.3 Aspect



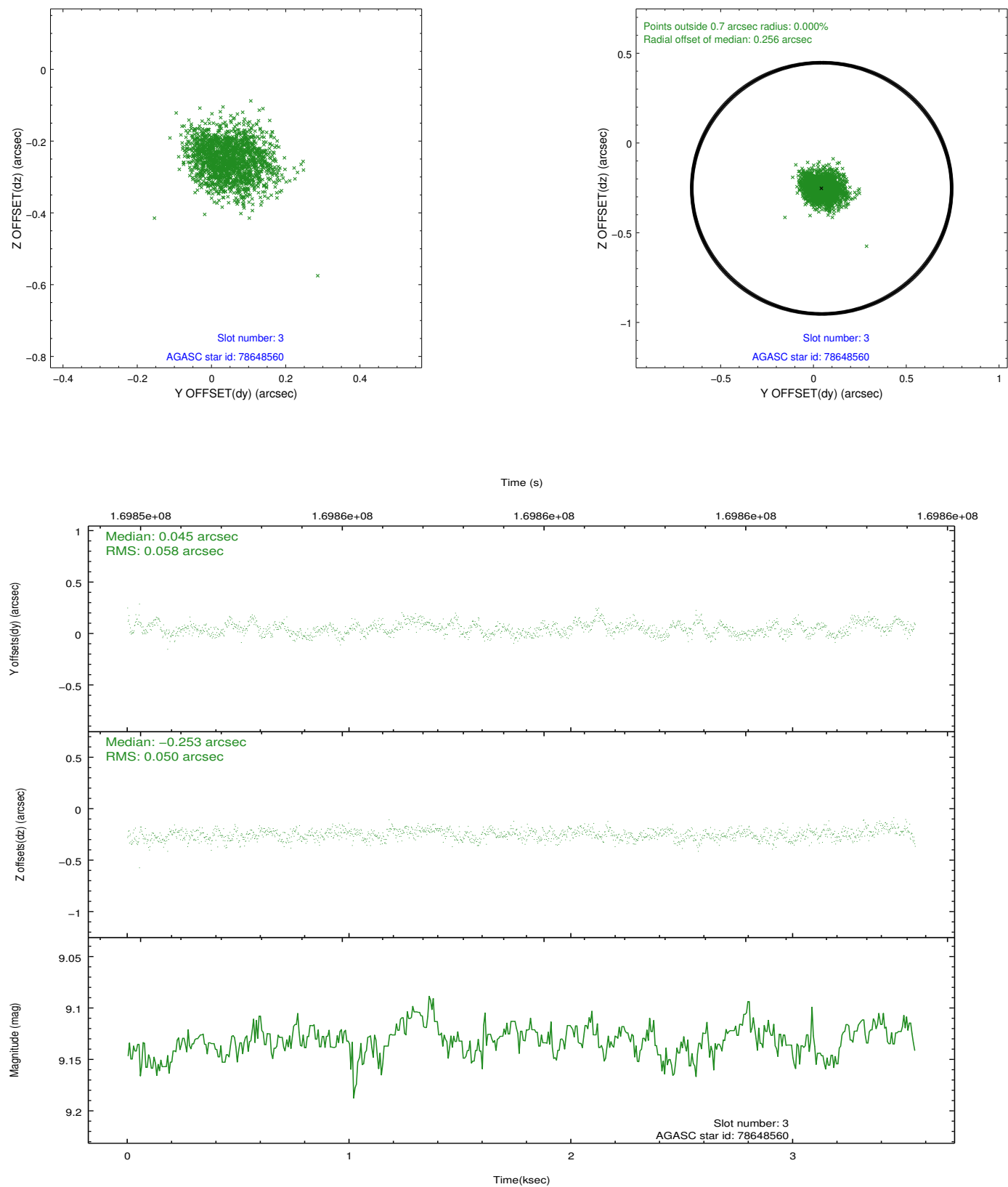


### Slot Statistics

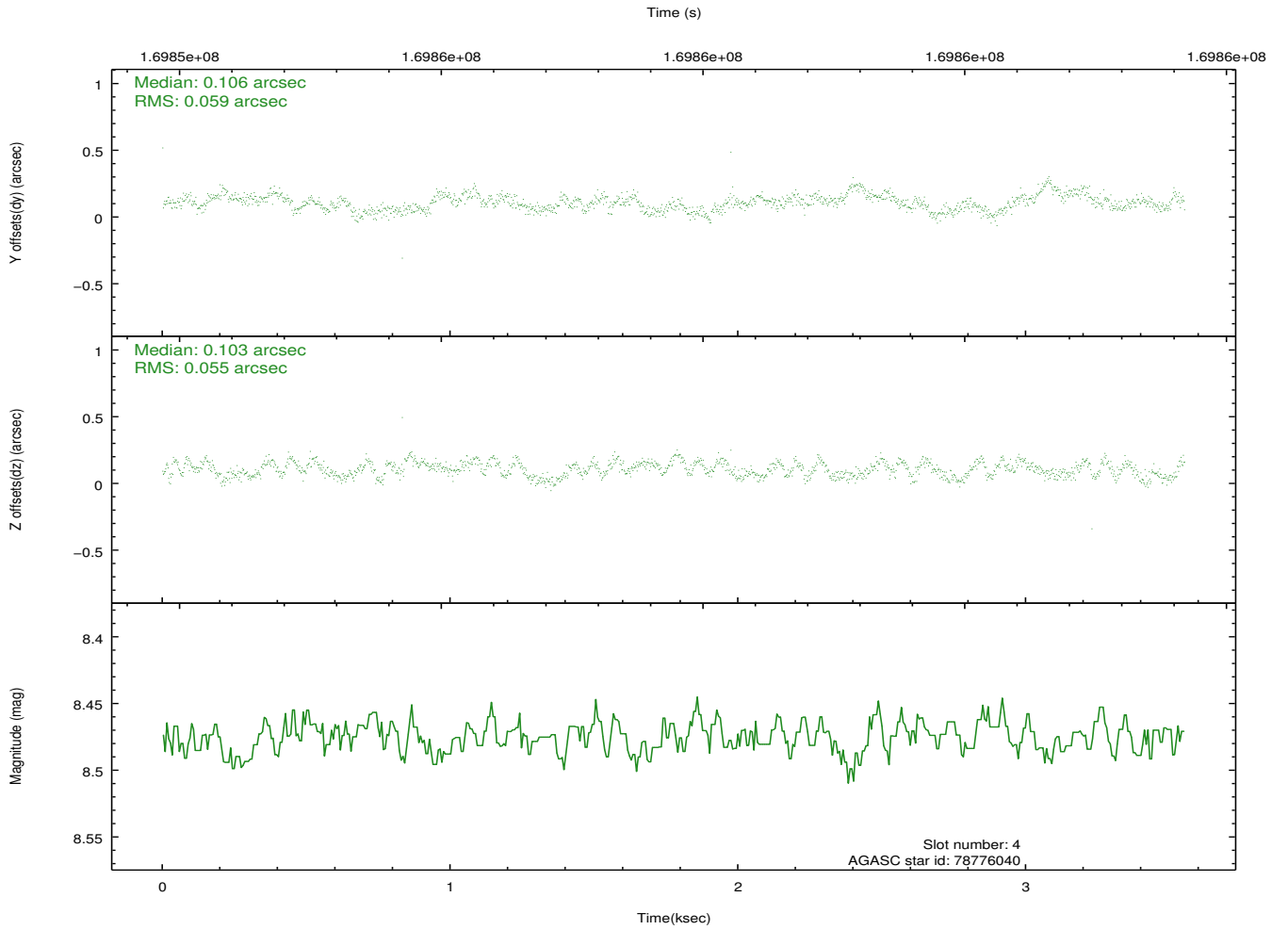
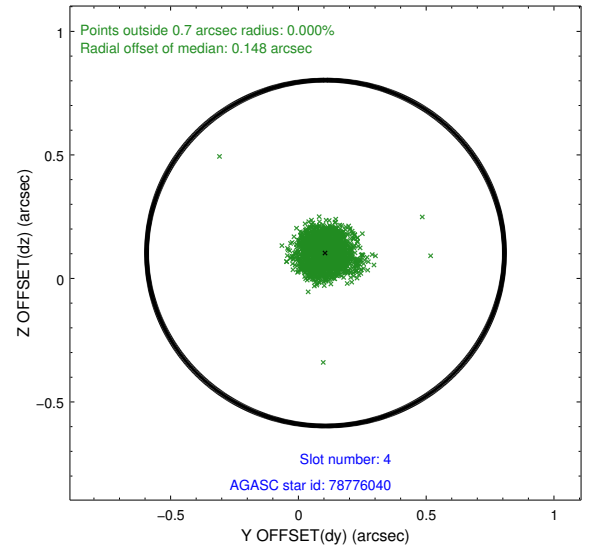
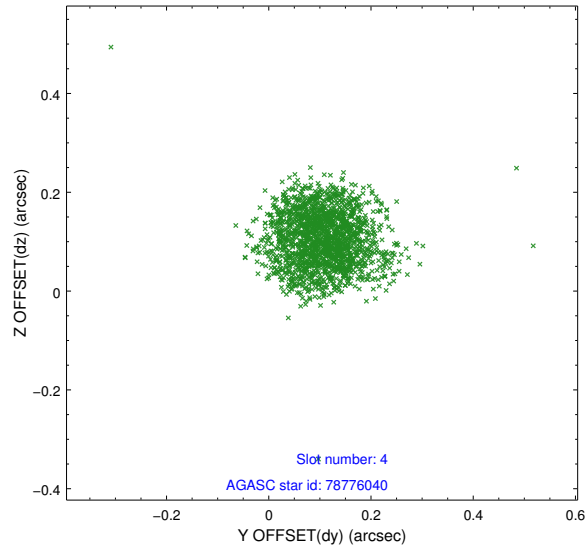
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	862	0.043	-0.044	0.008	0.013	0.000000	0.000000	940.18	-1724.21
1	FID	ACIS-S-5	7.24	862	-0.039	0.040	0.007	0.011	0.000000	0.000000	-1807.86	171.64
2	FID	ACIS-S-6	7.35	862	-0.026	0.016	0.011	0.016	0.000000	0.000000	403.79	817.56
3	GUIDE	78648560	9.13	1728	0.045	-0.253	0.082	0.129	2.349516	14.417641	-776.14	1930.00
4	GUIDE	78776040	8.47	1729	0.106	0.103	0.085	0.131	3.126305	14.563523	-925.11	-823.49
5	GUIDE	78779992	9.09	1729	0.165	0.212	0.079	0.129	3.476341	14.467673	-1552.95	-1925.15
6	GUIDE	154417160	8.42	1729	-0.215	-0.177	0.058	0.093	2.623213	15.231776	1832.58	290.49
7	GUIDE	154546408	9.53	1724	-0.099	0.117	0.101	0.164	2.801627	15.282058	1859.75	-353.38

## 2.4 Star Slots

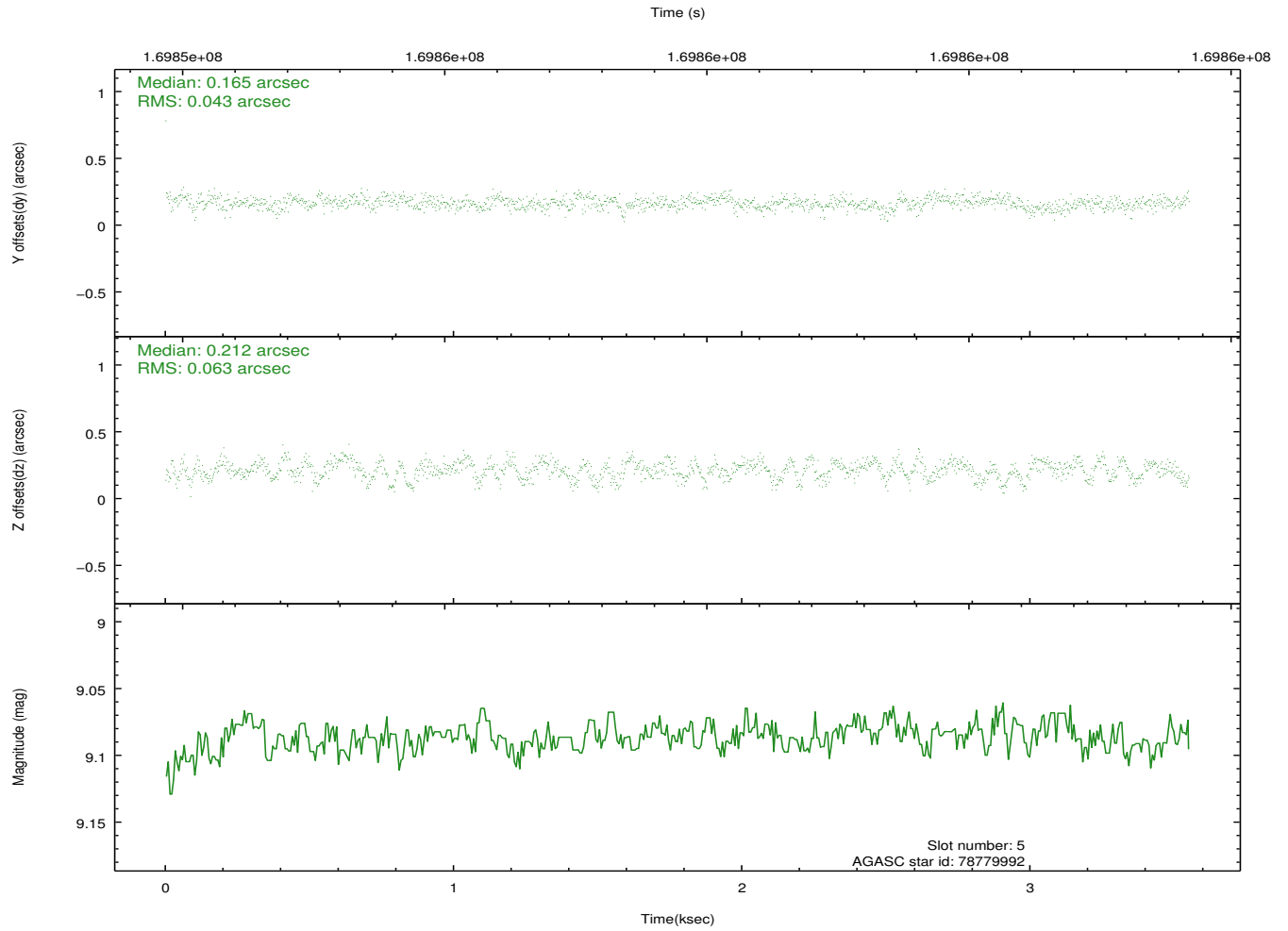
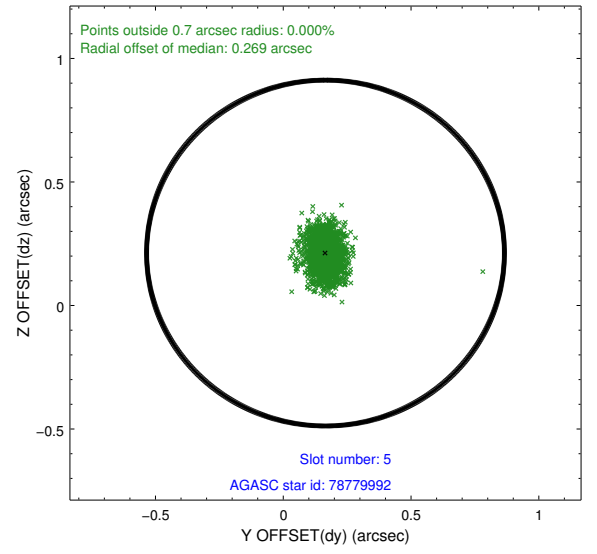
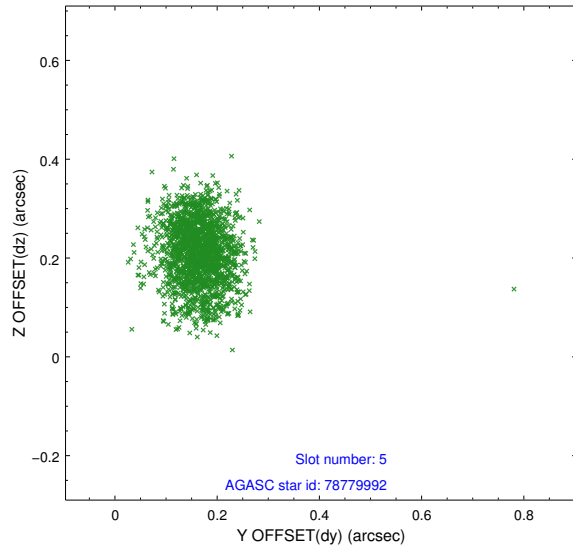
### 2.4.1 Slot 3



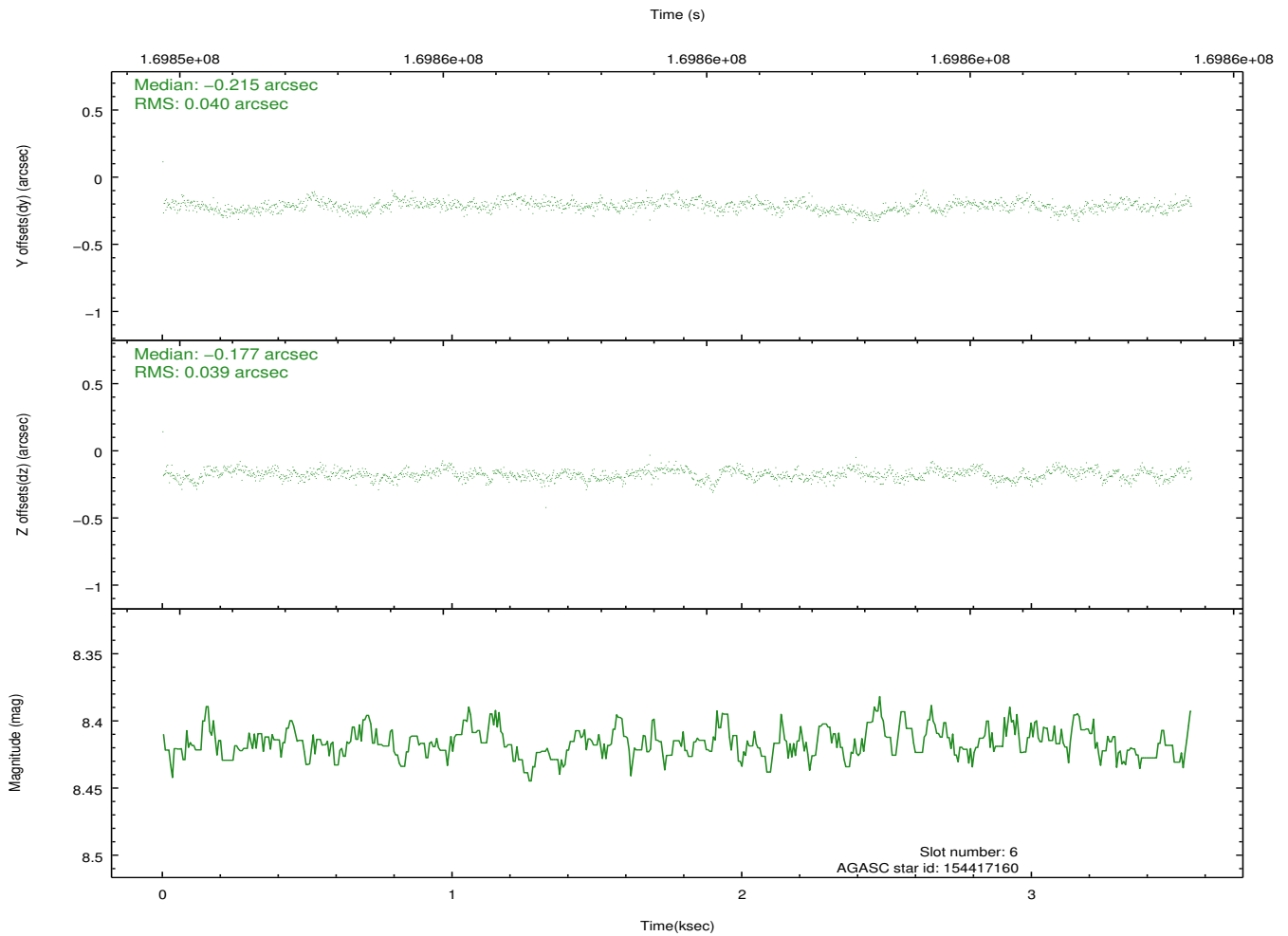
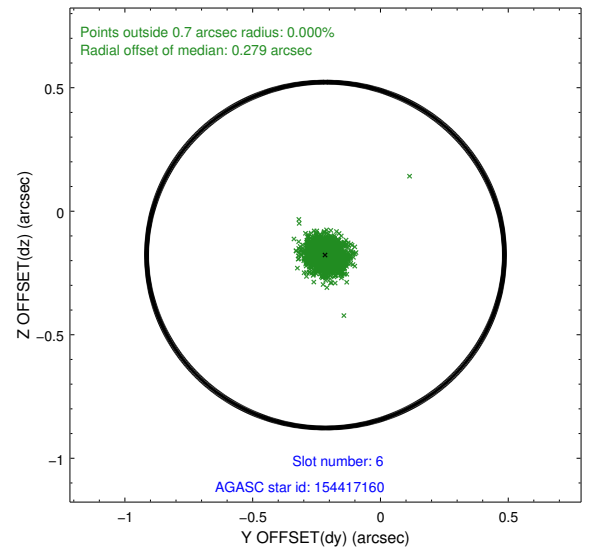
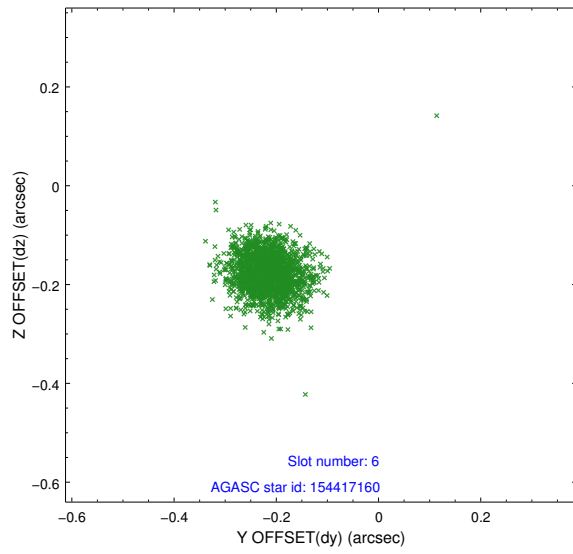
## 2.4.2 Slot 4



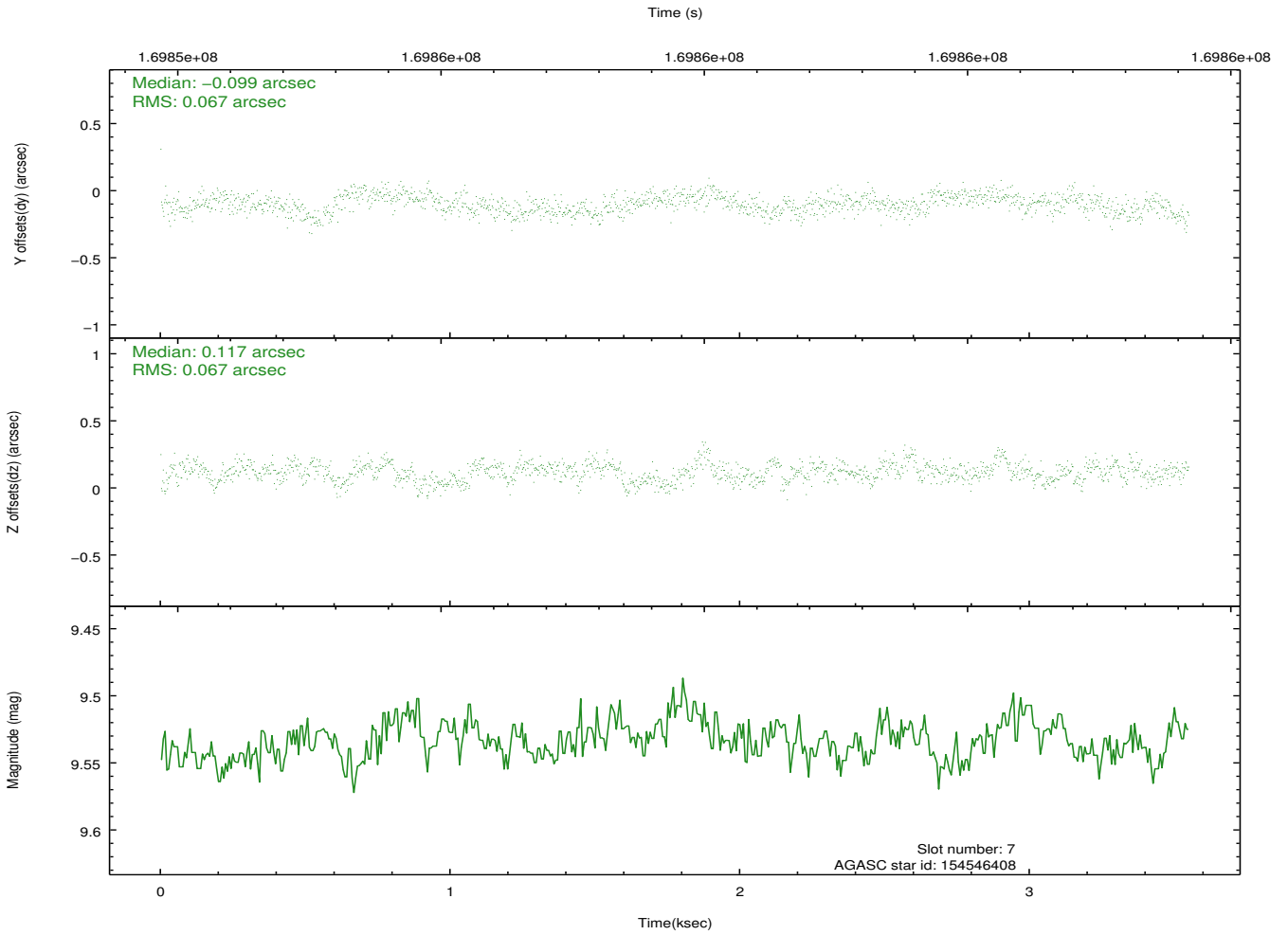
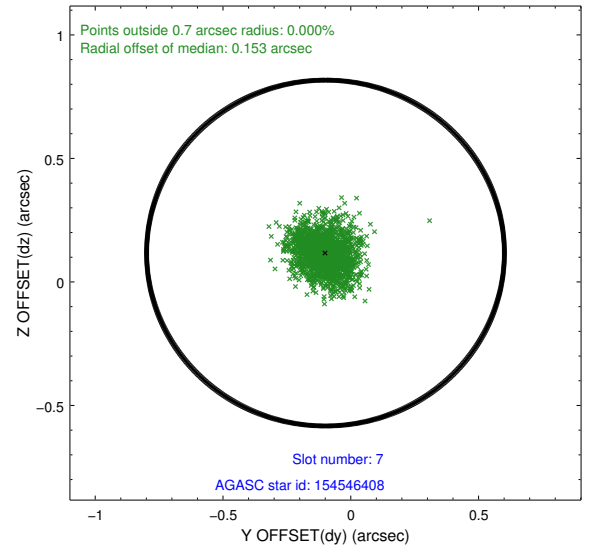
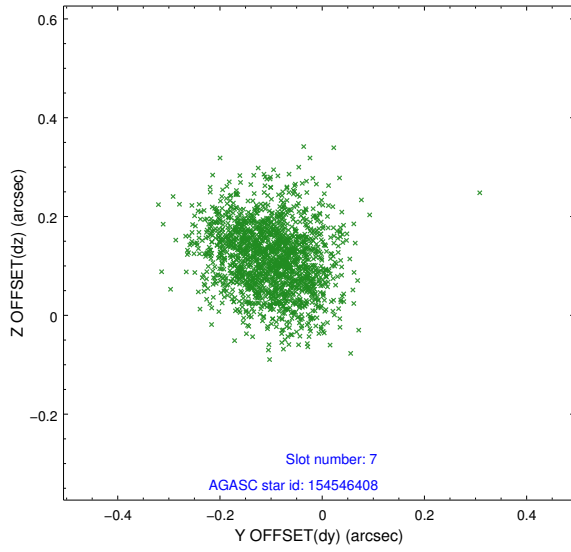
### 2.4.3 Slot 5



## 2.4.4 Slot 6

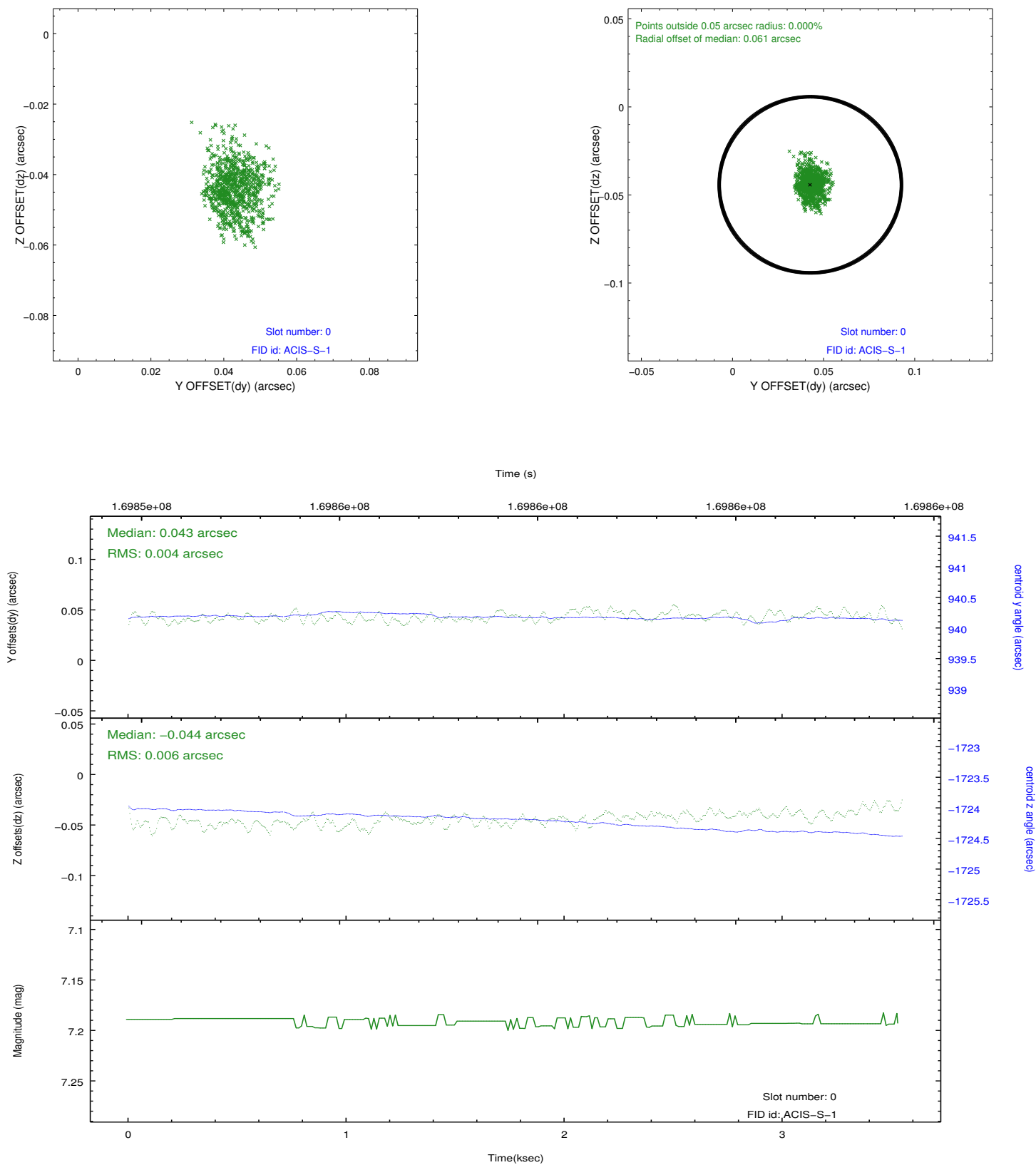


## 2.4.5 Slot 7

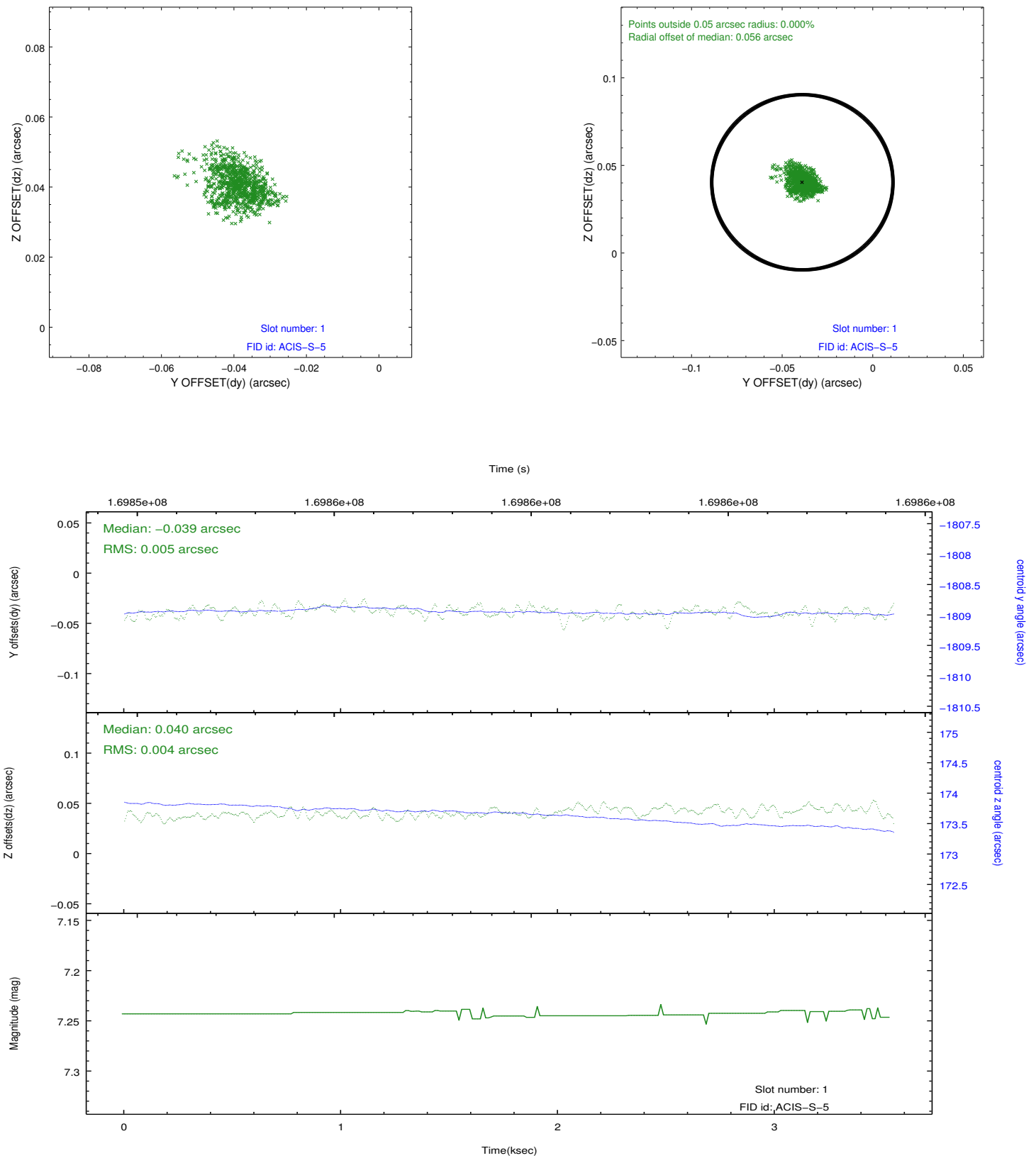


## 2.5 FID Slots

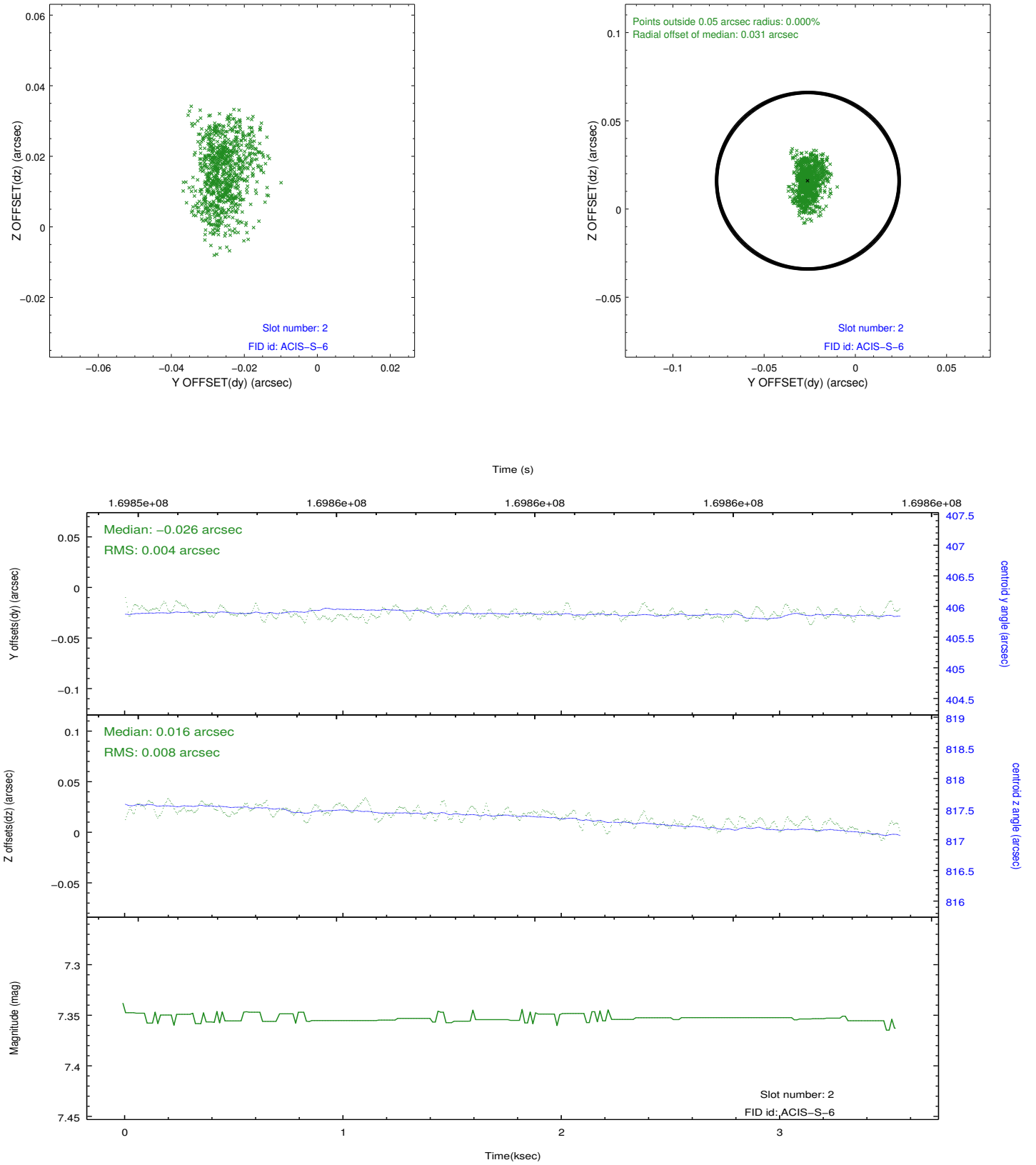
### 2.5.1 Slot 0



## 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)	2012.11.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.539

### **A.2 Comments**