

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2854 - L2 Version 3  
Chandra X-Ray Center

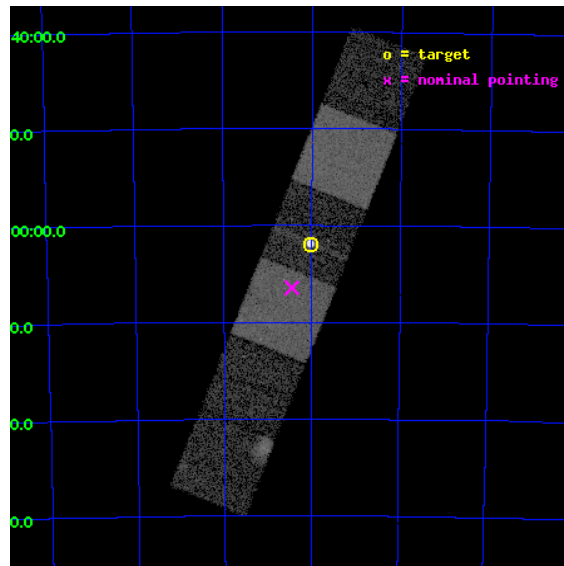
L2 Processing Date : Oct 9 2012

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# 1 Front

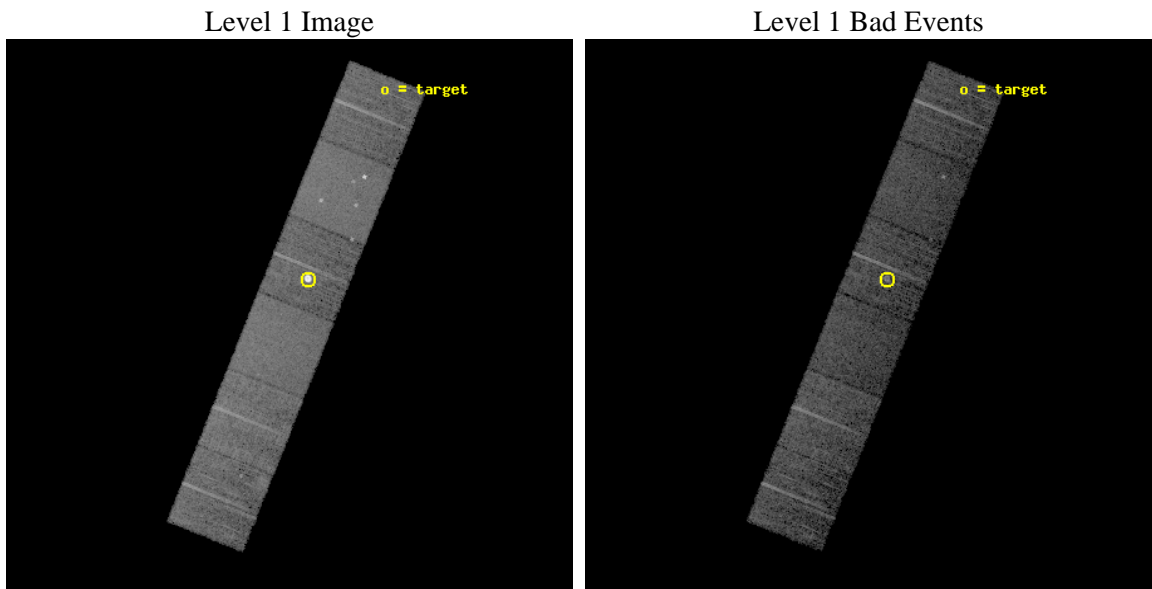
seq_num	590243	Sequence number
obs_id	2854	Observation id
title	AO3B ACIS-S CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip S2, T=120, Offsets=5,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.113147618242	Nominal RA [deg]
dec_nom	-72.107430980981	Nominal Dec [deg]
roll_nom	111.85386234898	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7654.2983232439	Sum of GTIs [s]
livetime	7557.3749890098	Livetime [s]
ontime4	7654.3999714851	Sum of GTIs [s]
ontime5	7654.3393632472	Sum of GTIs [s]
ontime6	7654.2983232439	Sum of GTIs [s]
ontime7	7654.3803833127	Sum of GTIs [s]
ontime8	7651.0162033737	Sum of GTIs [s]
ontime9	7654.2162233293	Sum of GTIs [s]
l2events	110480	Number of level 2 events



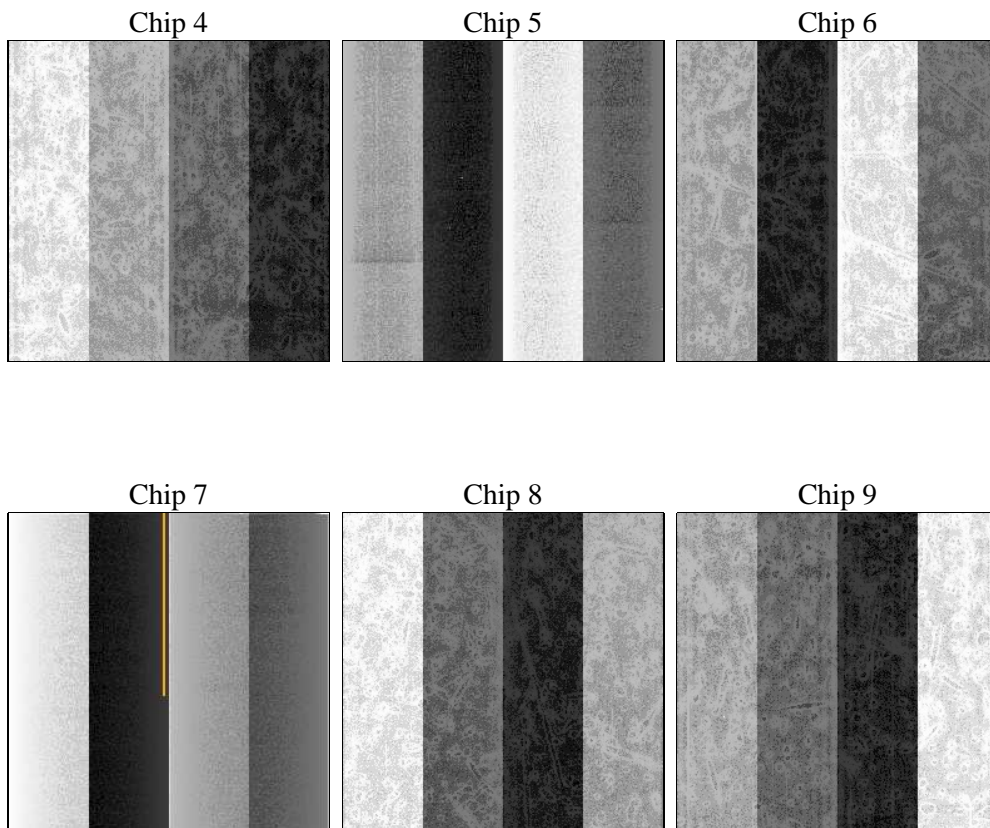
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7900.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7654.2983232439	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime4	7654.3999714851	Sum of GTIs [s]
date	2012-10-10T00:58:59	Date and time of file creation	ontime5	7654.3393632472	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	7654.2983232439	Sum of GTIs [s]
			ontime7	7654.3803833127	Sum of GTIs [s]
			ontime8	7651.0162033737	Sum of GTIs [s]
			ontime9	7654.2162233293	Sum of GTIs [s]
			l1events	396700	Number of level 1 events

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	53231	75816	80211	67378	67891	52173	grade 0 events	2416	5156	29649	3071	4079	4021
rejected events	47242	39631	43843	38850	54816	44304		4%	6%	36%	4%	6%	7%
rejected %	88%	52%	54%	57%	80%	84%	grade 1 events	33	449	316	75	32	33
								0%	0%	0%	0%	0%	0%
							grade 2 events	1435	10827	3255	5800	2899	1424
								2%	14%	4%	8%	4%	2%
							grade 3 events	538	1527	1107	2588	1272	634
								1%	2%	1%	3%	1%	1%
							grade 4 events	559	1374	1070	2585	1218	575
								1%	1%	1%	3%	1%	1%
							grade 5 events	1902	5533	2288	6485	2838	2215
								3%	7%	2%	9%	4%	4%
							grade 6 events	1045	17312	1304	14496	3611	1220
								1%	22%	1%	21%	5%	2%
							grade 7 events	45303	33638	41222	32278	51942	42051
								85%	44%	51%	47%	76%	80%

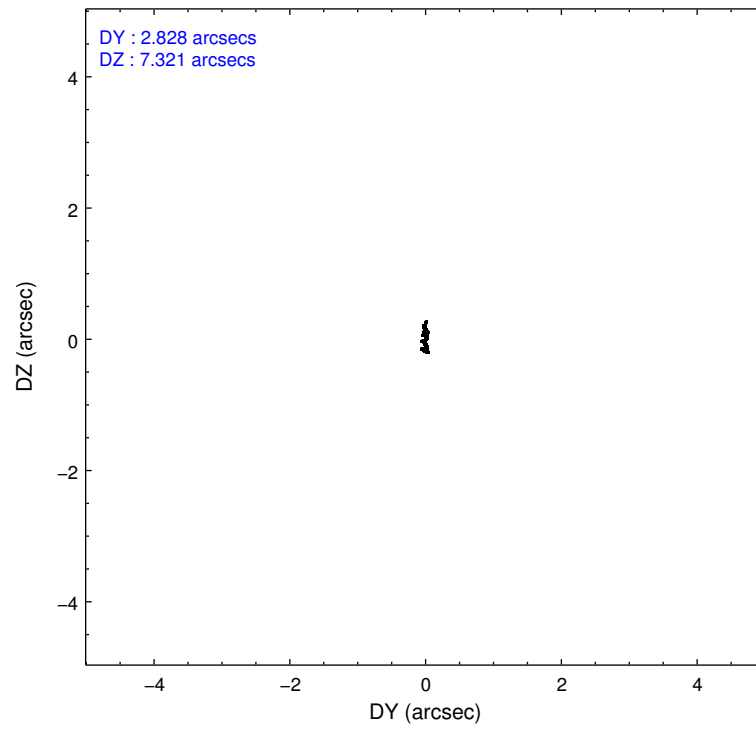
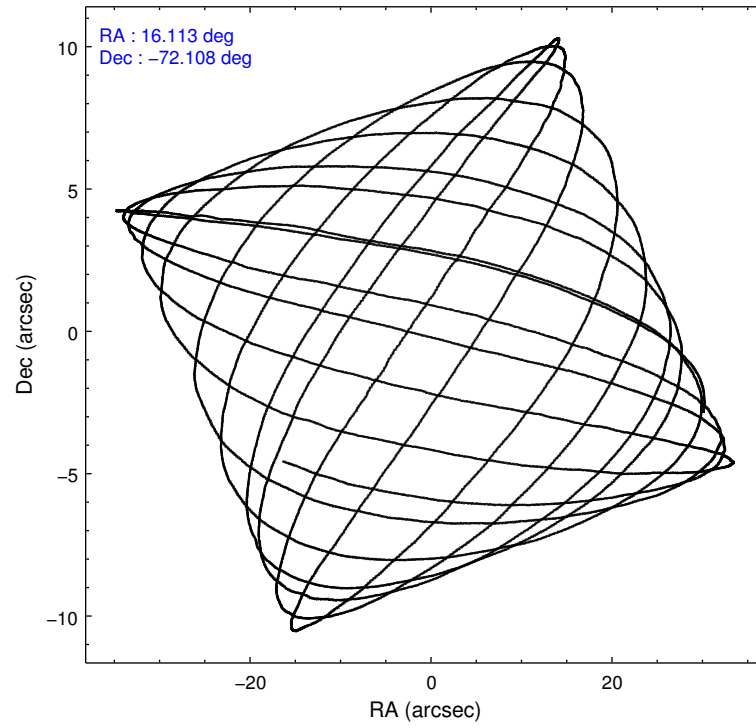


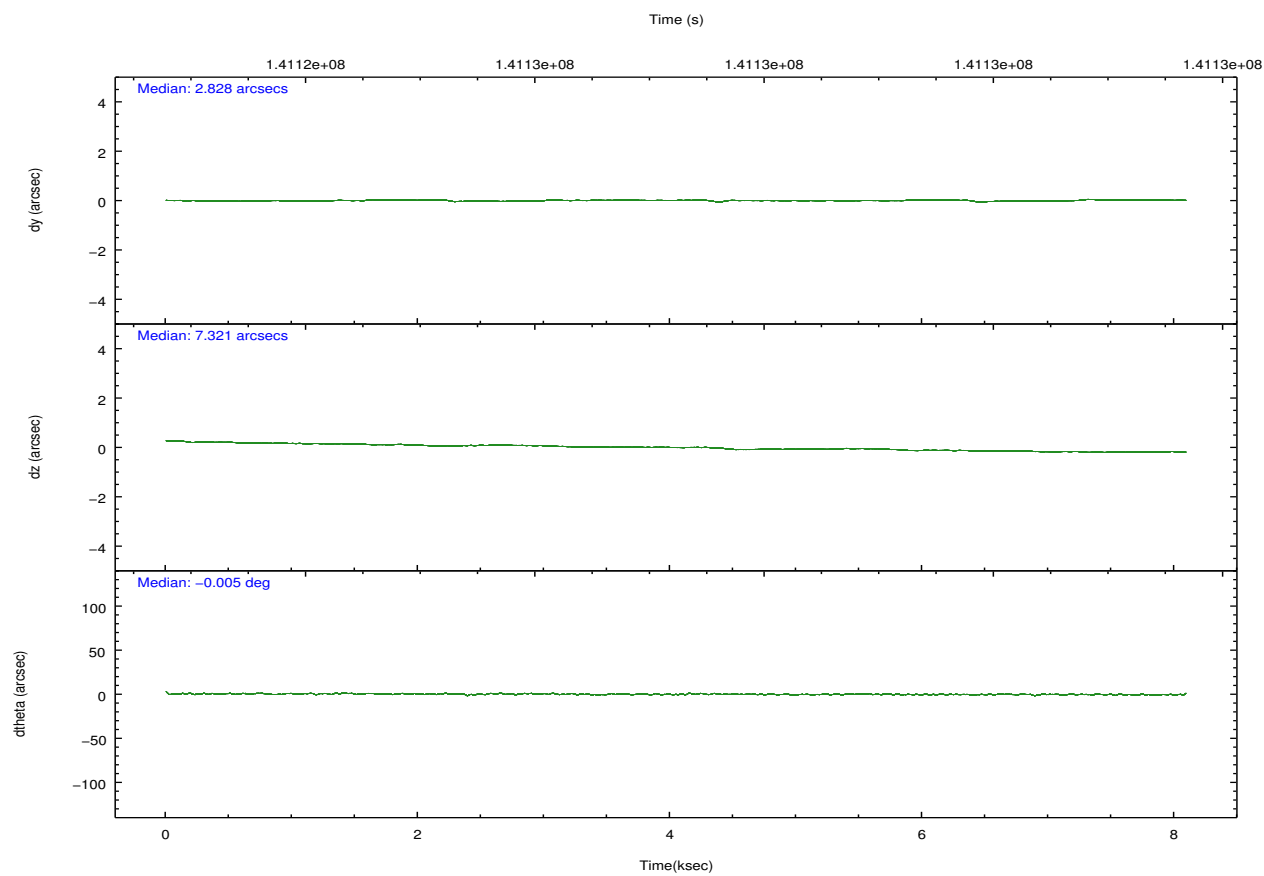
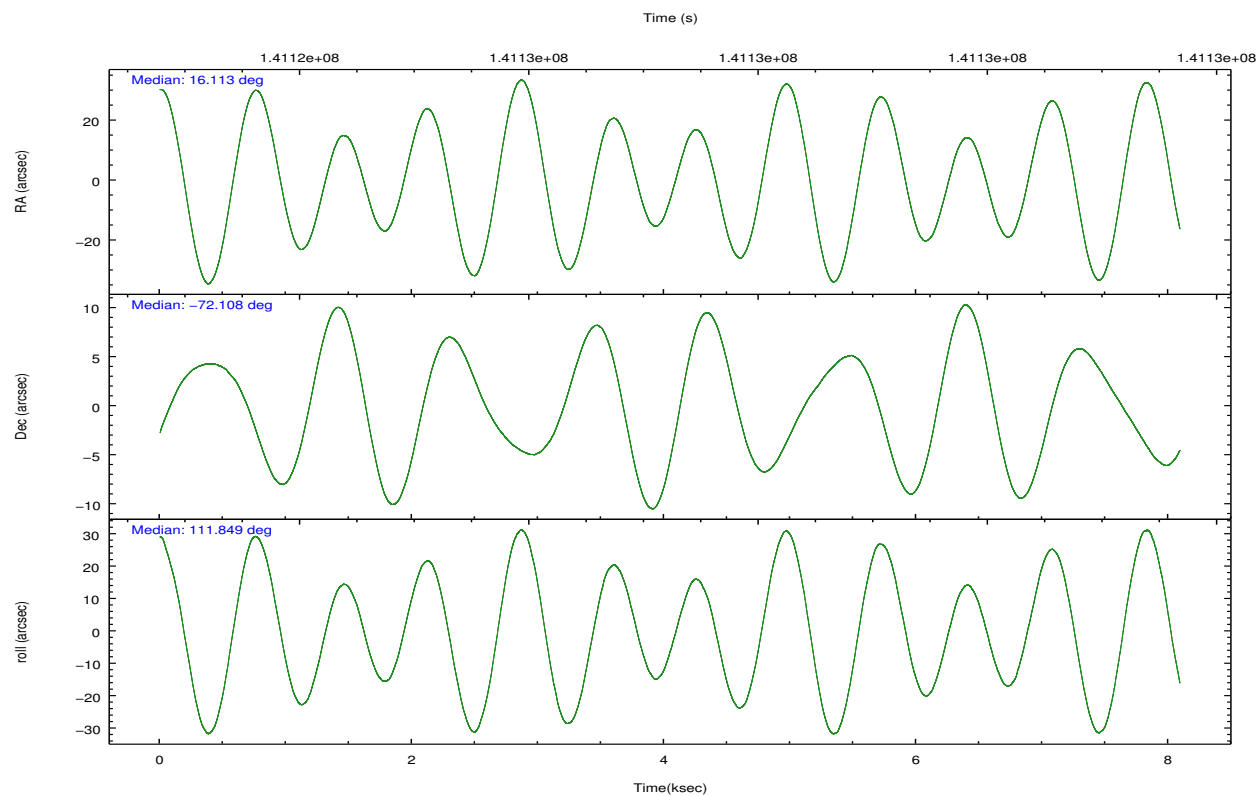
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	16.183556	16.11314761824216
[deg] Pointing Dec	-72.123967	-72.10743098098067
[deg] Pointing Roll	111.764238	111.8538623489815
[s] Window start time (MET)	139276864.184000	139276864.184000
[s] Window stop time (MET)	141782464.184000	141782464.184000
[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)	141123383.184000	141123007.0534
Observation start date	2002-06-22T08:55:19	2002-06-22T08:50:07
[s] Observation end time (MET)	141131283.184000	141131417.17874
Observation end date	2002-06-22T11:06:59	2002-06-22T11:10:17
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



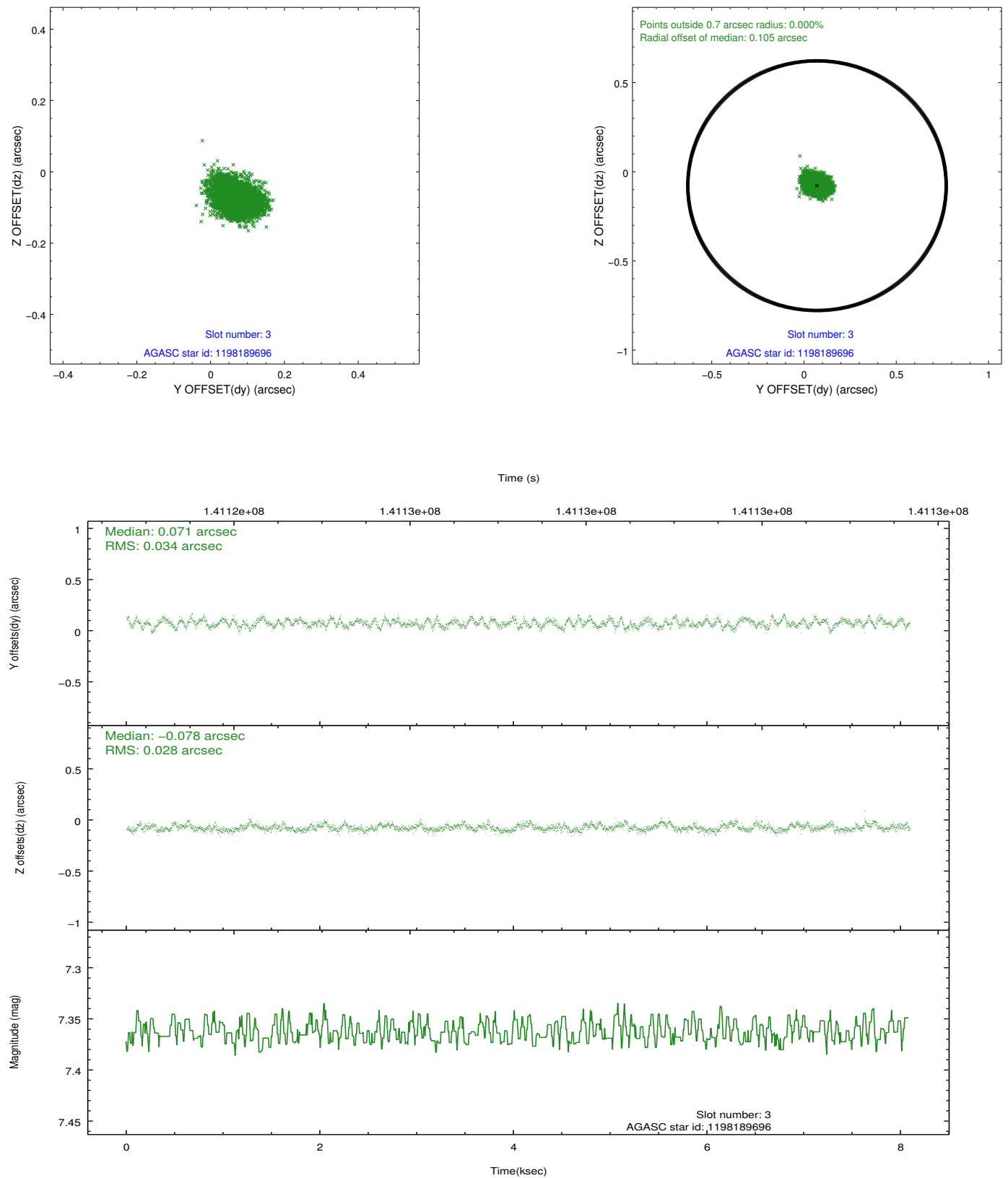


### Slot Statistics

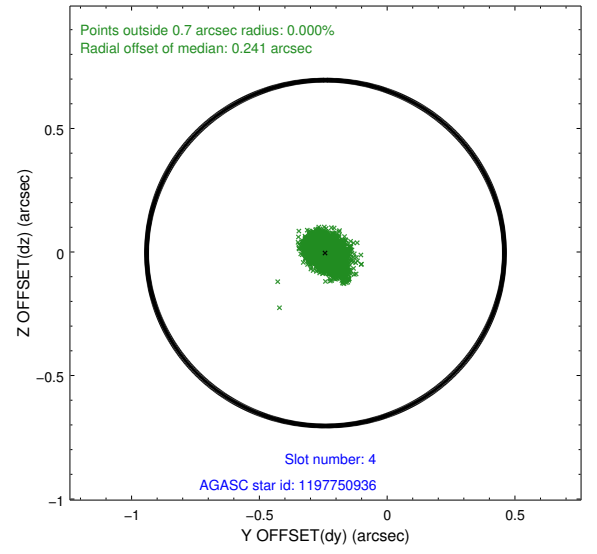
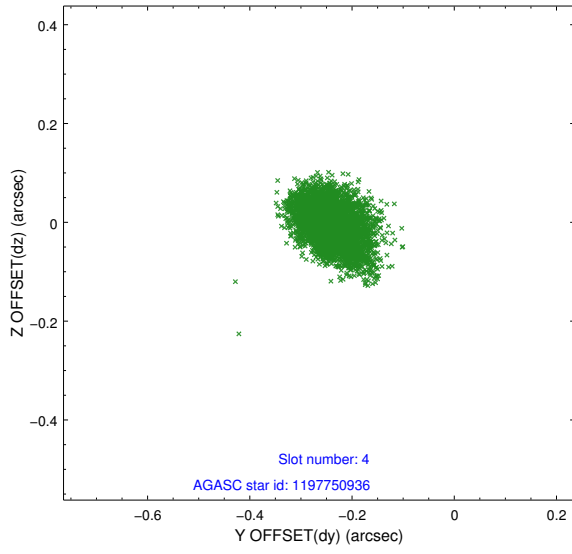
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	1974	0.034	-0.045	0.009	0.014	0.000000	0.000000	940.58	-1724.12
1	FID	ACIS-S-5	7.24	1974	-0.008	0.038	0.007	0.011	0.000000	0.000000	-1808.04	172.84
2	FID	ACIS-S-6	7.35	1974	-0.046	0.019	0.011	0.019	0.000000	0.000000	405.35	817.53
3	GUIDE	1198189696	7.36	3948	0.071	-0.078	0.047	0.076	15.223750	-72.697522	-1543.85	1722.81
4	GUIDE	1197750936	7.58	3947	-0.241	-0.004	0.059	0.094	15.387940	-71.549550	2250.81	77.96
5	GUIDE	1197884536	8.49	3948	0.007	0.129	0.062	0.097	17.160729	-71.835289	551.50	-1400.32
6	GUIDE	1197884712	8.31	3948	0.026	-0.047	0.055	0.087	16.087398	-72.252690	-390.69	269.40
7	GUIDE	1197749664	9.56	3946	0.136	0.002	0.089	0.149	15.809015	-72.366369	-659.69	703.34

## 2.4 Star Slots

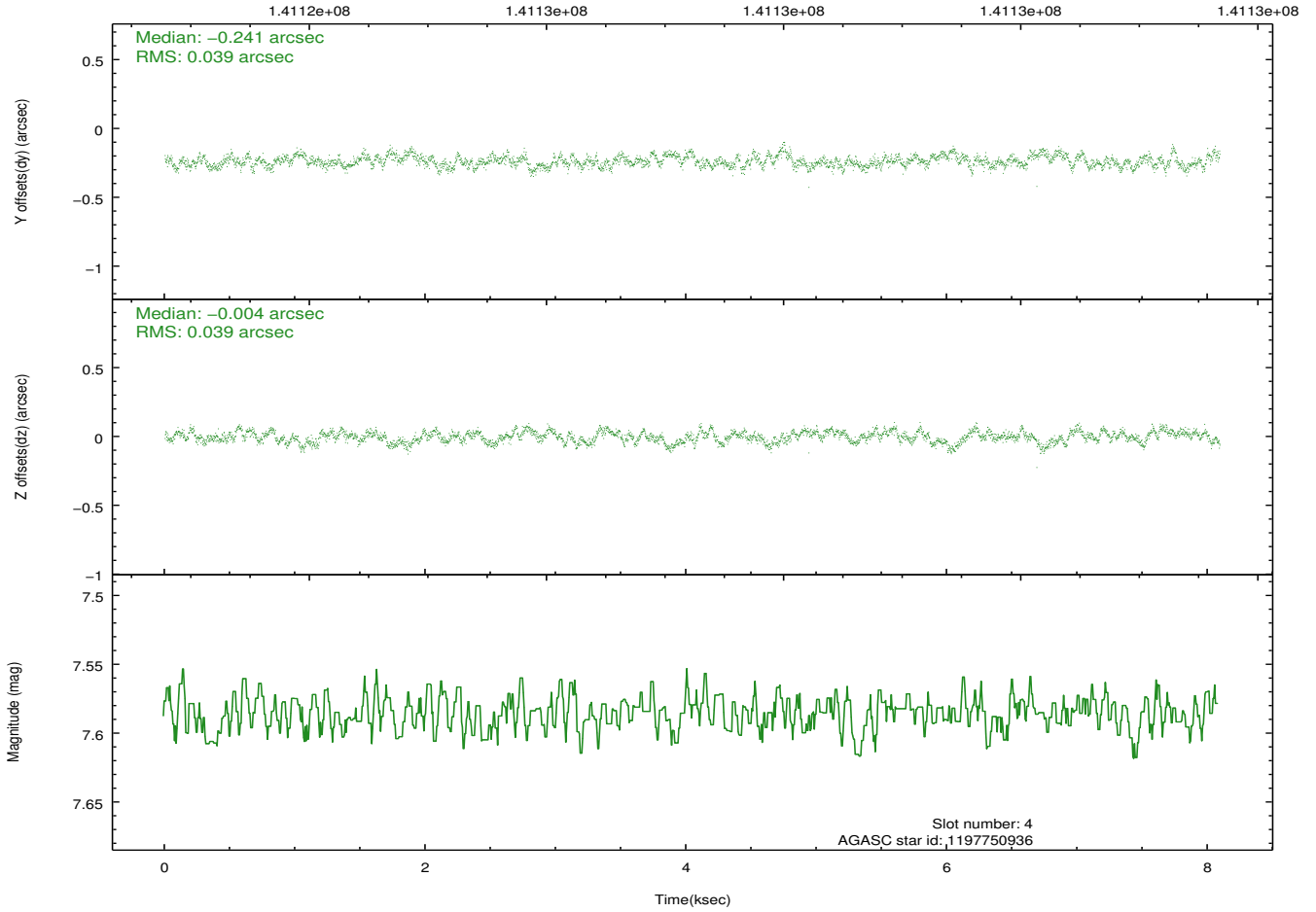
### 2.4.1 Slot 3



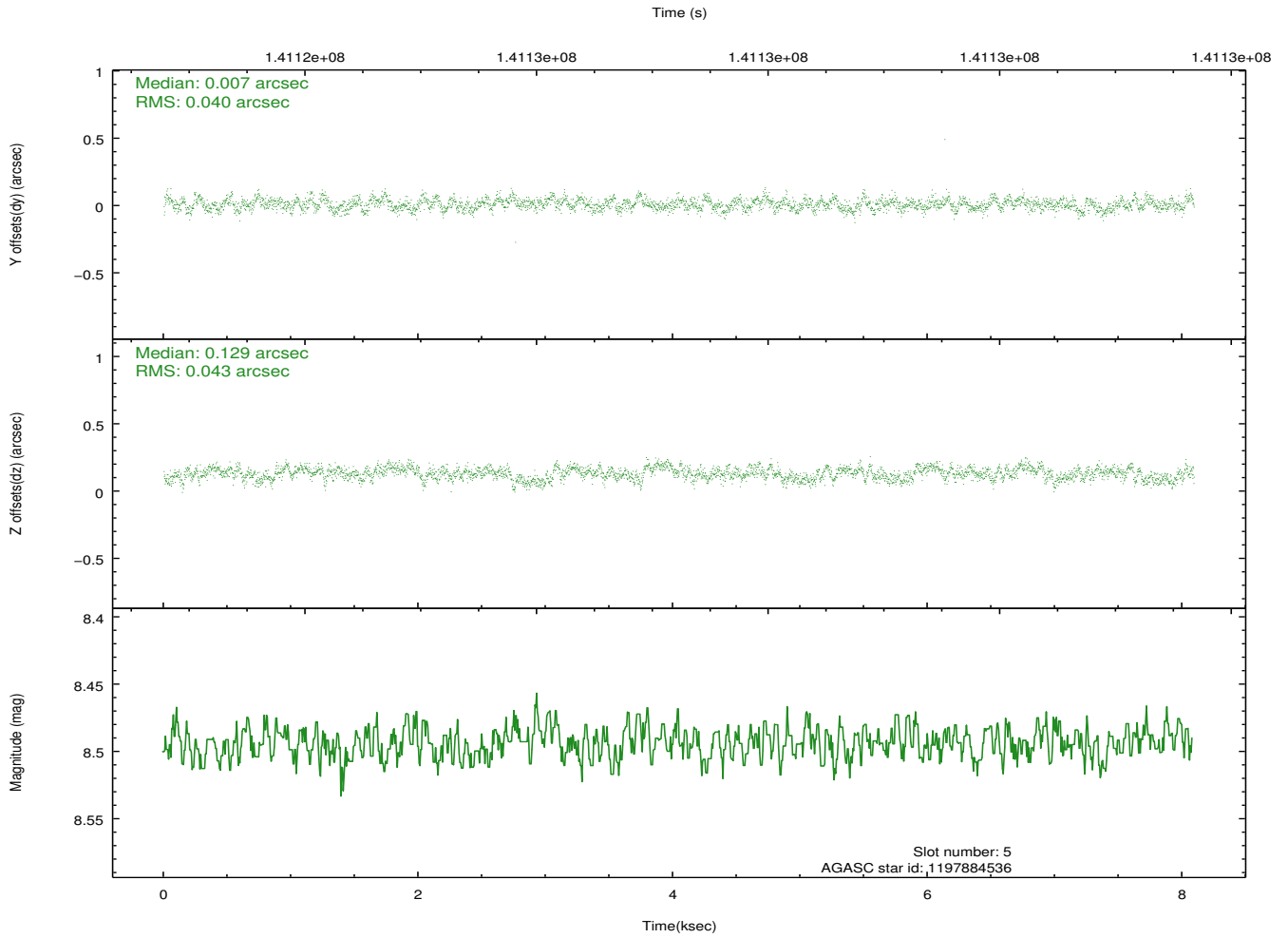
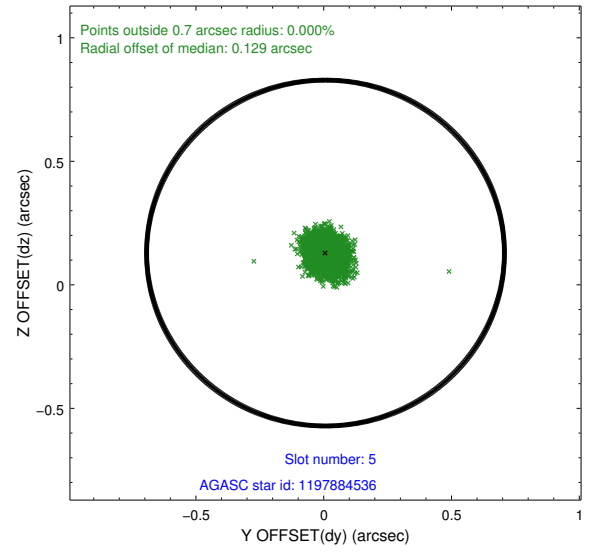
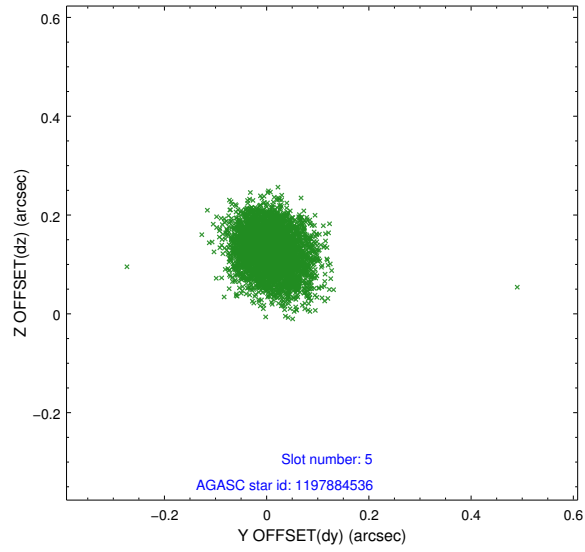
## 2.4.2 Slot 4



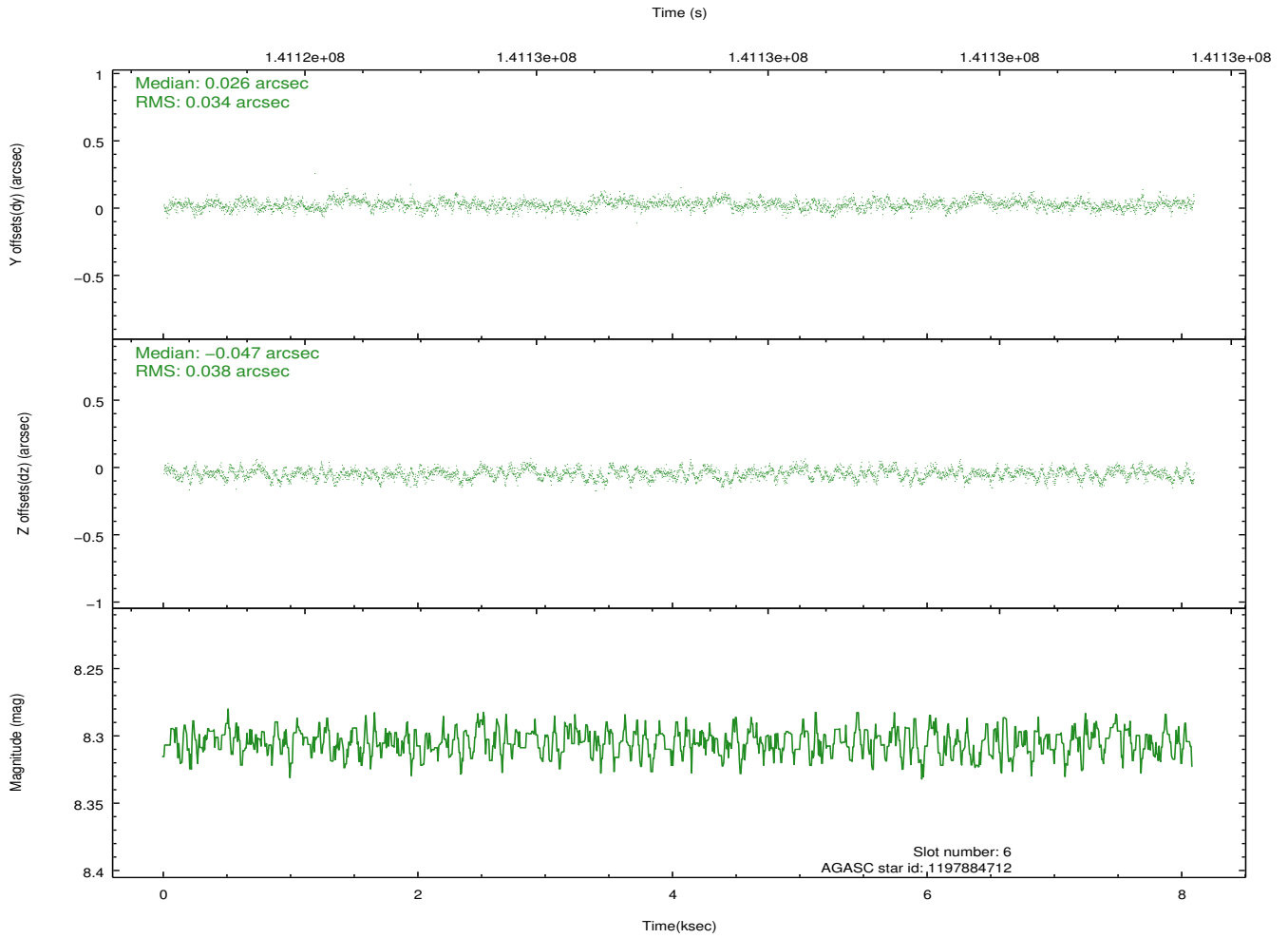
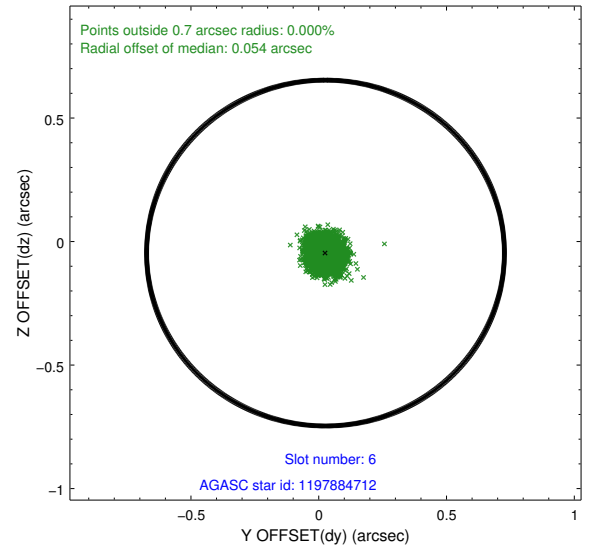
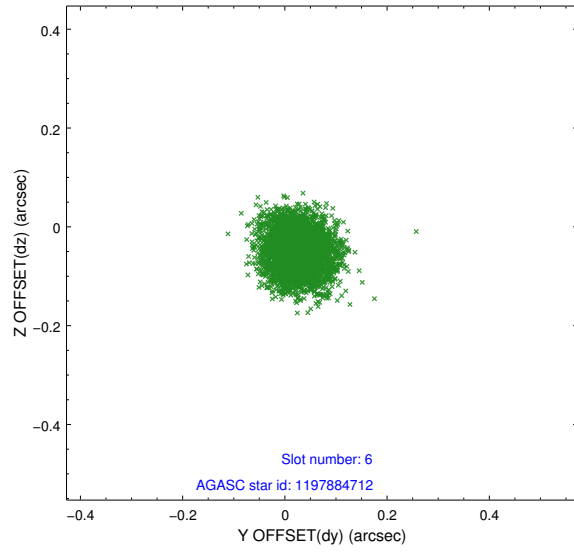
Time (s)



### 2.4.3 Slot 5

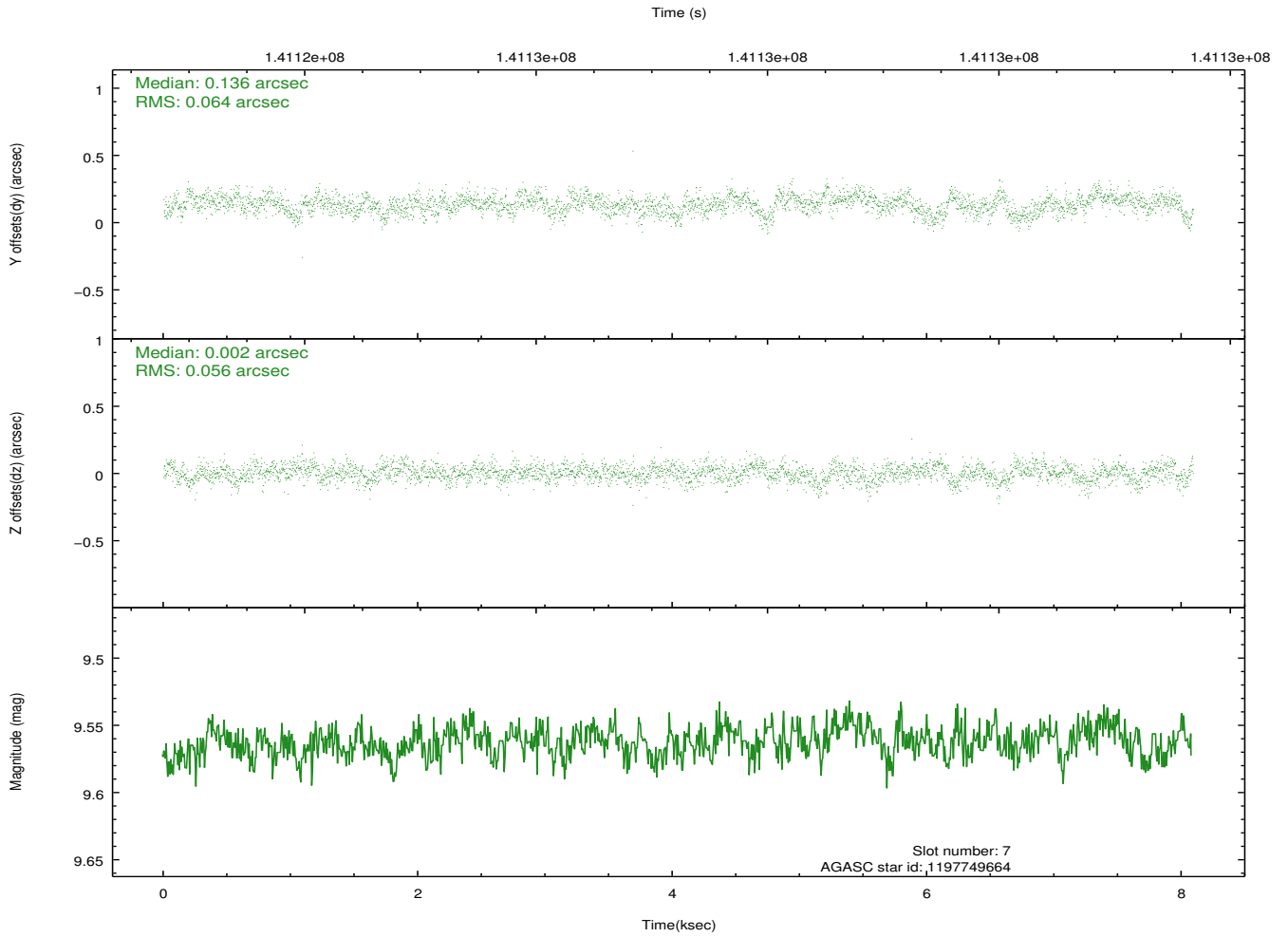
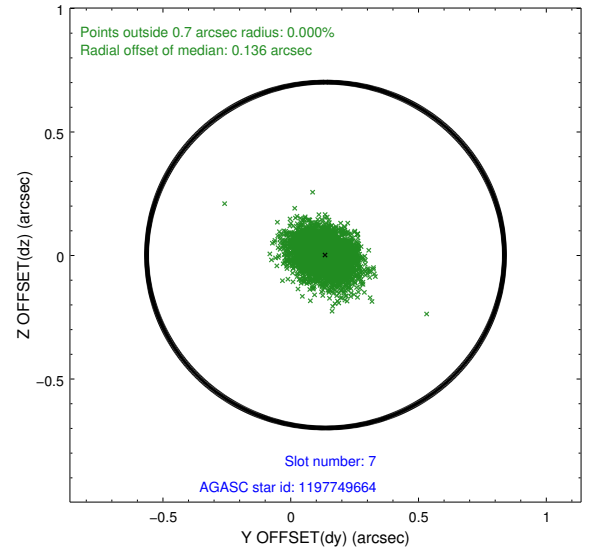
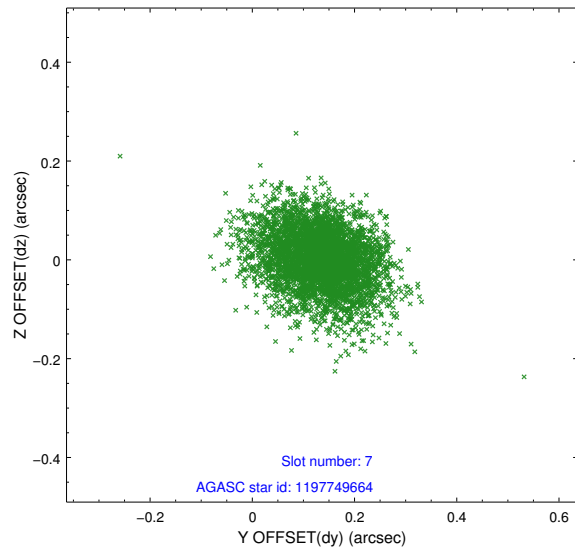


## 2.4.4 Slot 6



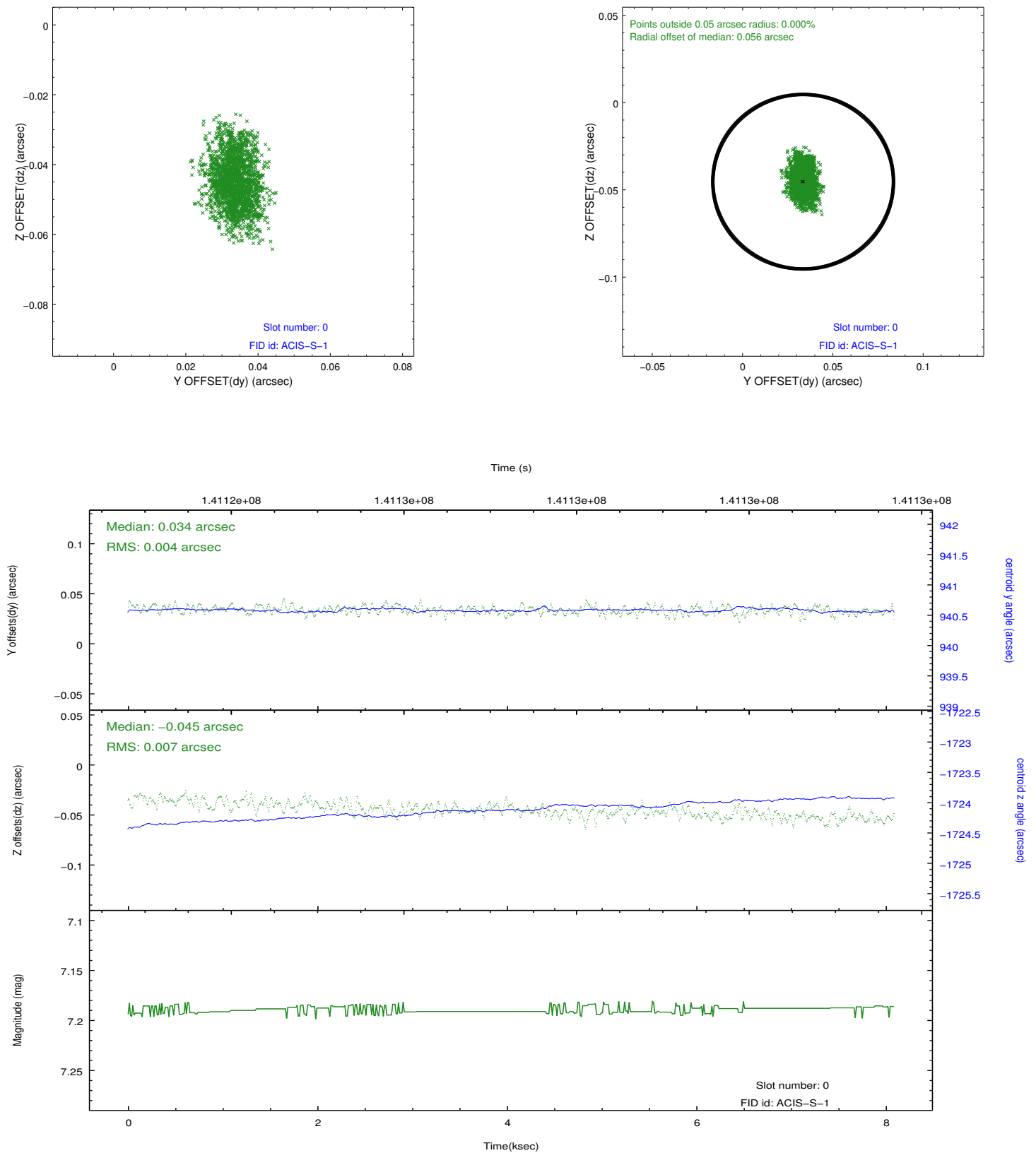


## 2.4.5 Slot 7

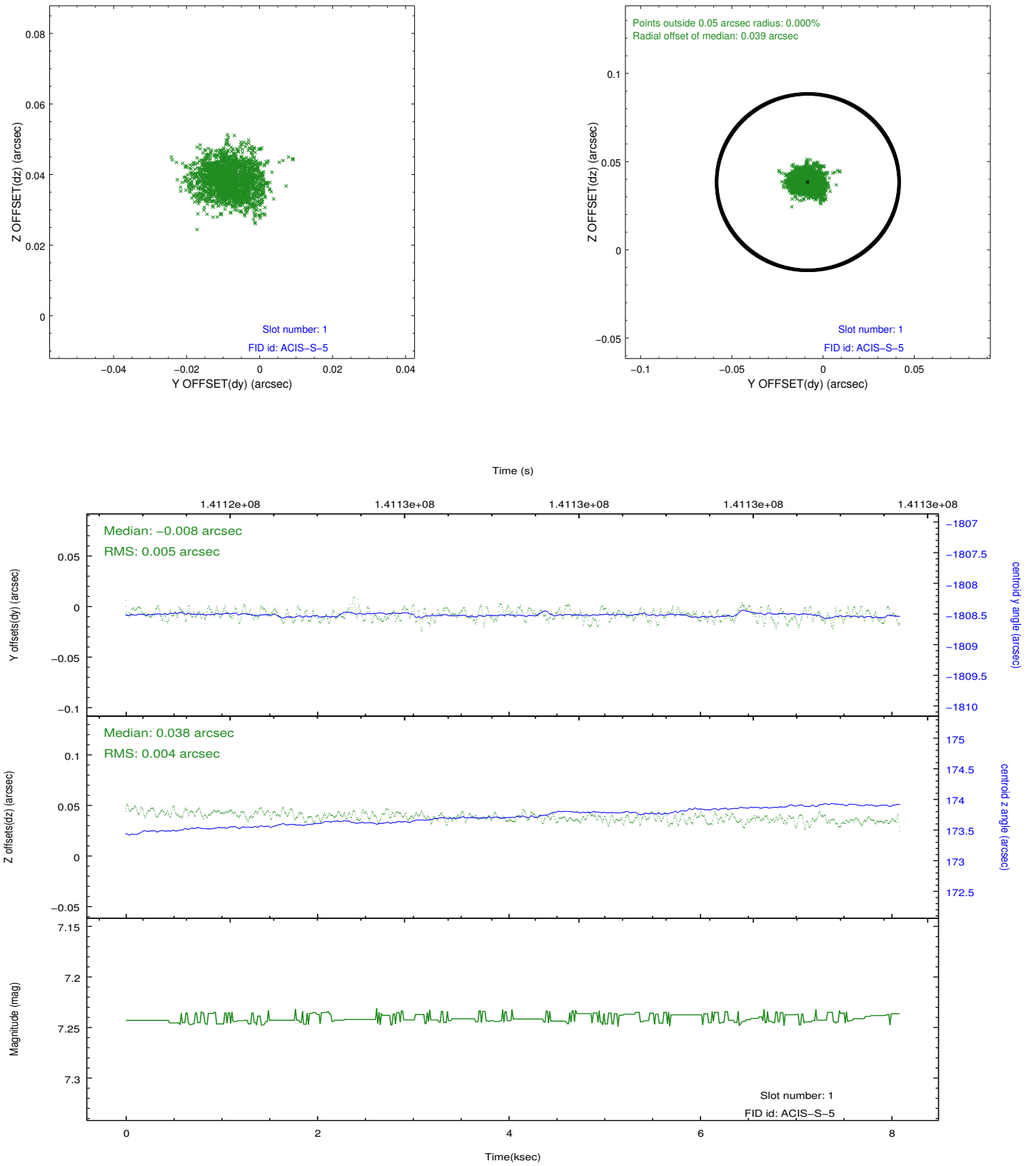


## 2.5 FID Slots

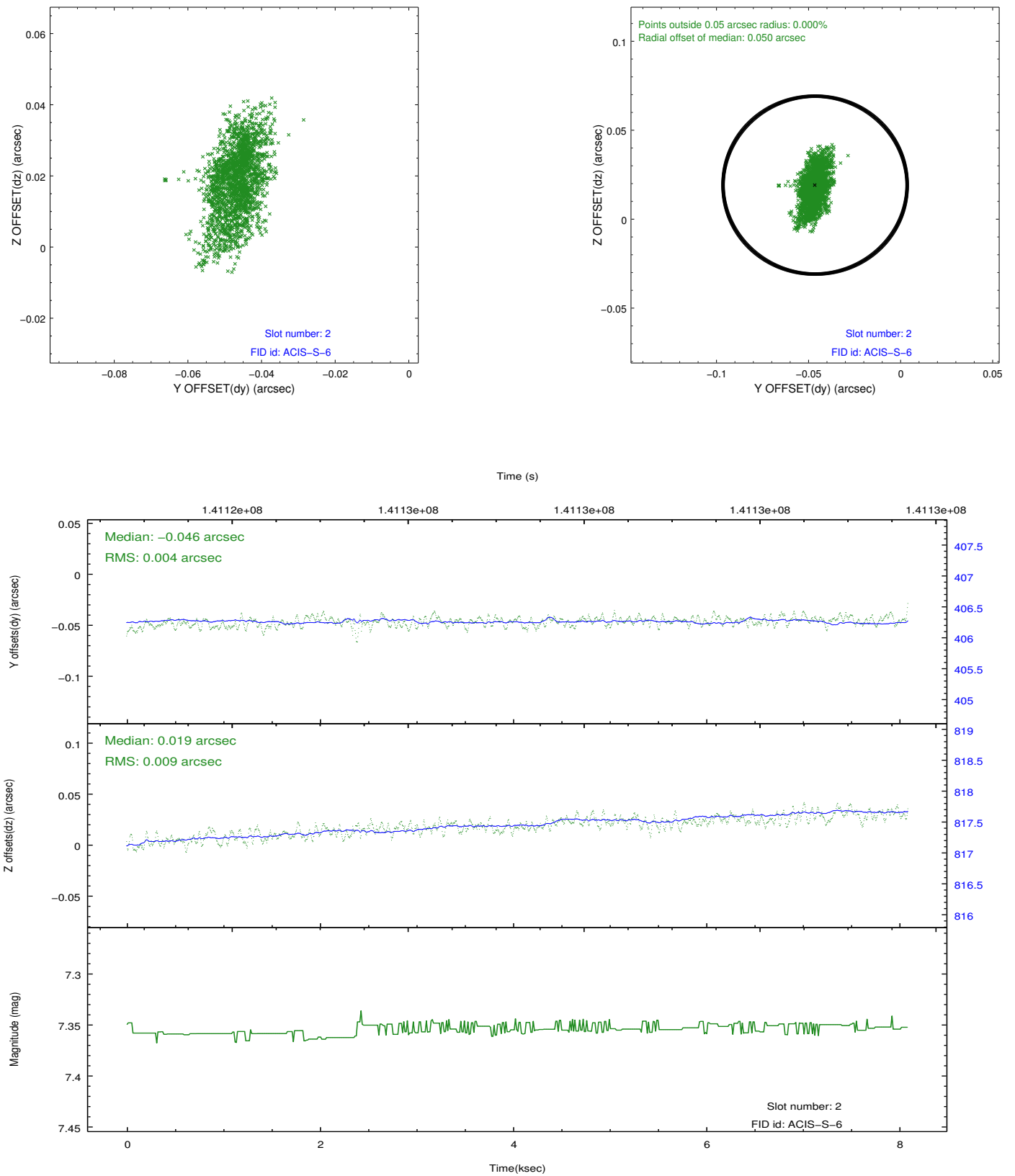
### 2.5.1 Slot 0



## 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)	2012.10.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.657

### A.2 Comments

Window constraint satisfied.