

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18320 - L2 Version 1  
Chandra X-Ray Center

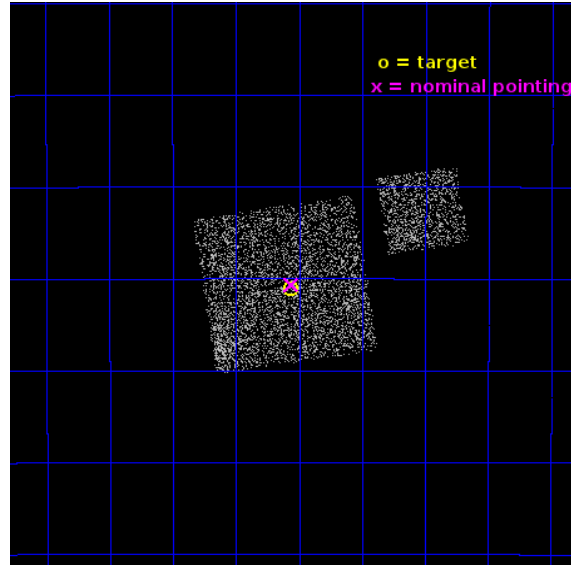
L2 Processing Date : May 12 2016

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# 1 Front

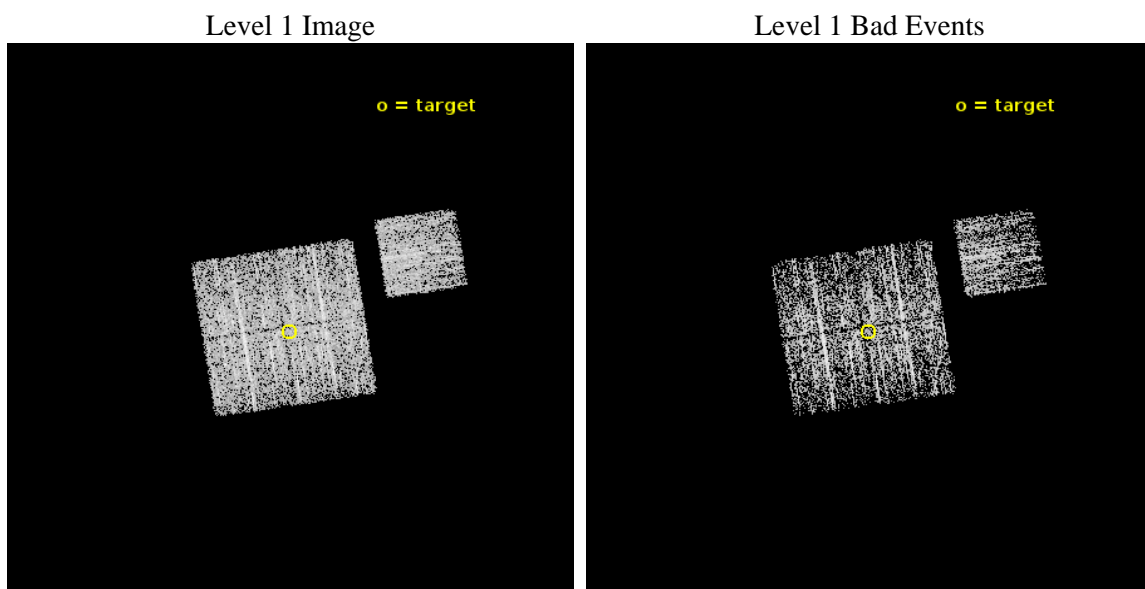
seq_num	300351	Sequence number
obs_id	18320	Observation id
title	X-raying the Galactic center/bulge interface	Proposal title
observer	Q. Daniel Wang	Principal investigator
object	GC-GB interface	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.01662	Observer's specified target RA [deg]
dec_targ	-28.18457	Observer's specified target Dec [deg]
ra_nom	265.01501902445	Nominal RA [deg]
dec_nom	-28.177733241036	Nominal Dec [deg]
roll_nom	81.185279201349	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1955.9456880093	Sum of GTIs [s]
livetime	1930.3898176492	Livetime [s]
ontime0	1952.6815079451	Sum of GTIs [s]
ontime1	1955.8636080027	Sum of GTIs [s]
ontime2	1955.9046480656	Sum of GTIs [s]
ontime3	1955.9456880093	Sum of GTIs [s]
ontime6	1955.7815279961	Sum of GTIs [s]
l2events	7011	Number of level 2 events



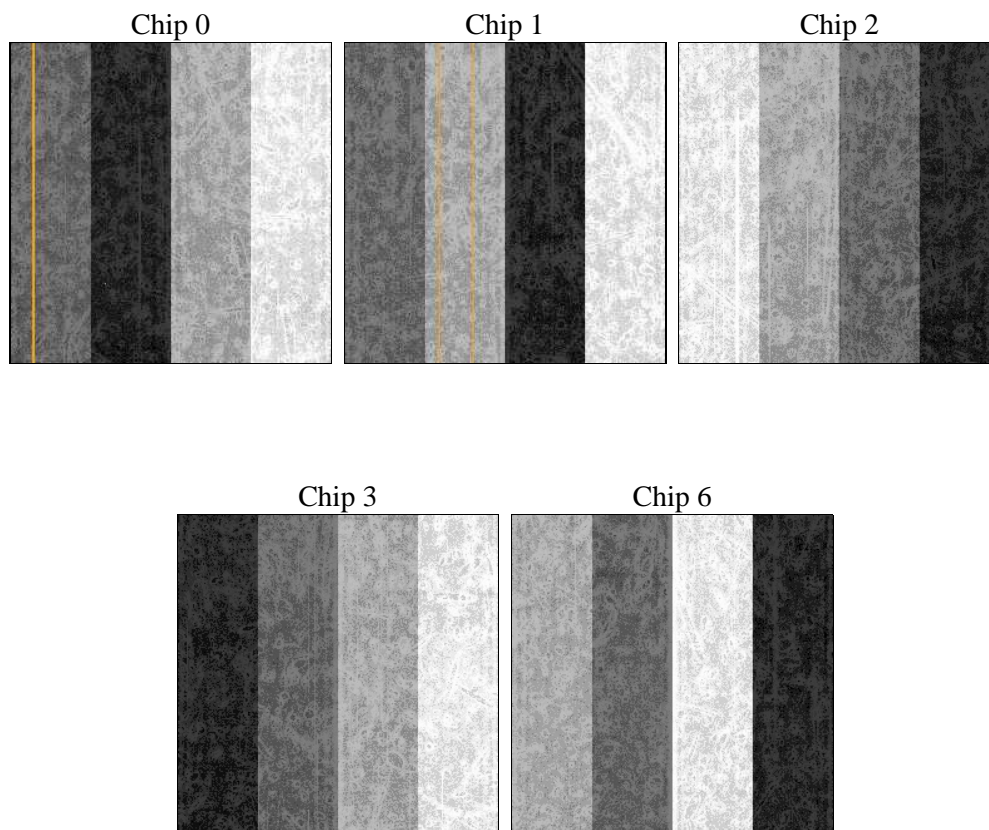
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2180.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	1955.9456880093	Sum of GTIs [s]
caldsver	4.7.1	&#160	ontime0	1952.6815079451	Sum of GTIs [s]
date	2016-05-12T06:24:11	Date and time of file creation	ontime1	1955.8636080027	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1955.9046480656	Sum of GTIs [s]
			ontime3	1955.9456880093	Sum of GTIs [s]
			ontime6	1955.7815279961	Sum of GTIs [s]
			l1events	62022	Number of level 1 events

### 2.1.4 Events

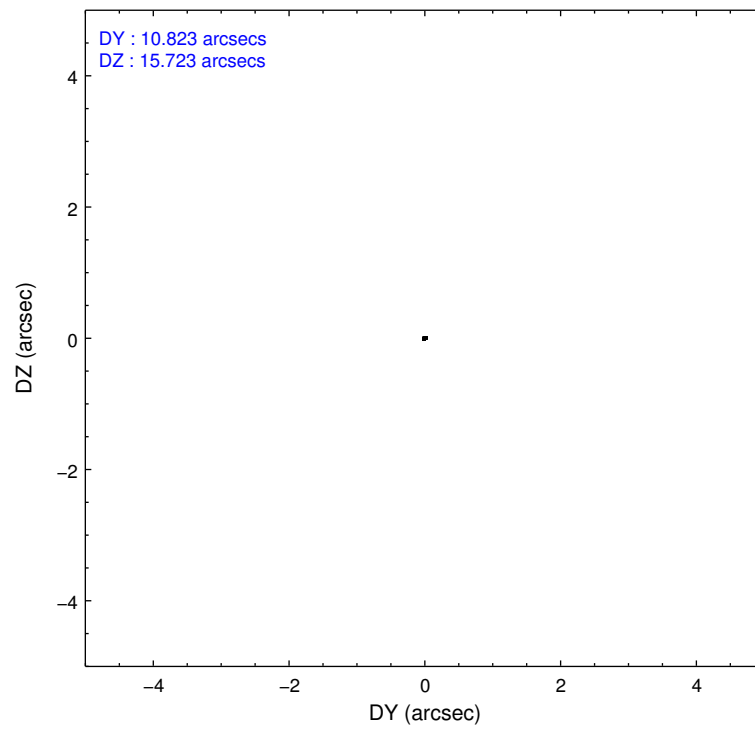
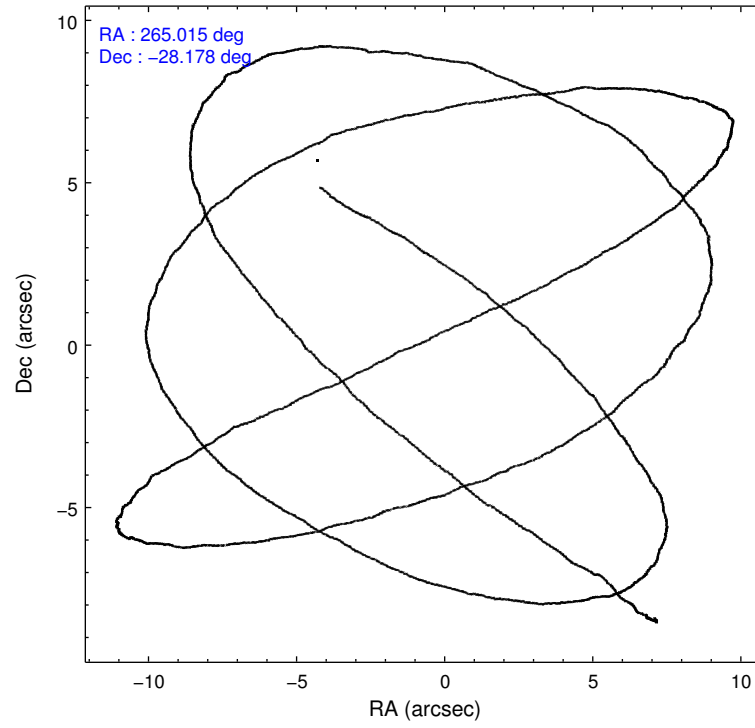
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	11788	12834	12669	12786	11945
rejected events	10246	10847	11180	11165	10410
rejected %	86%	84%	88%	87%	87%

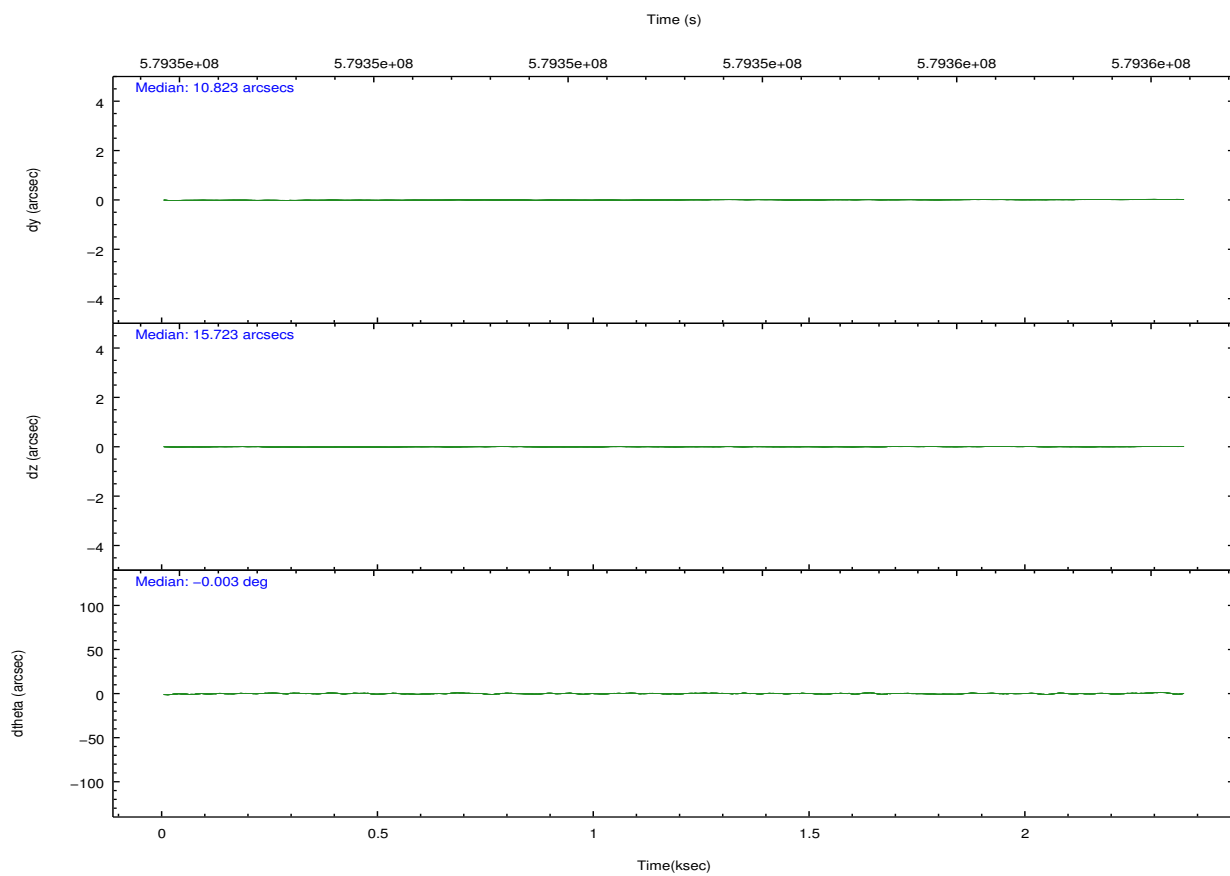
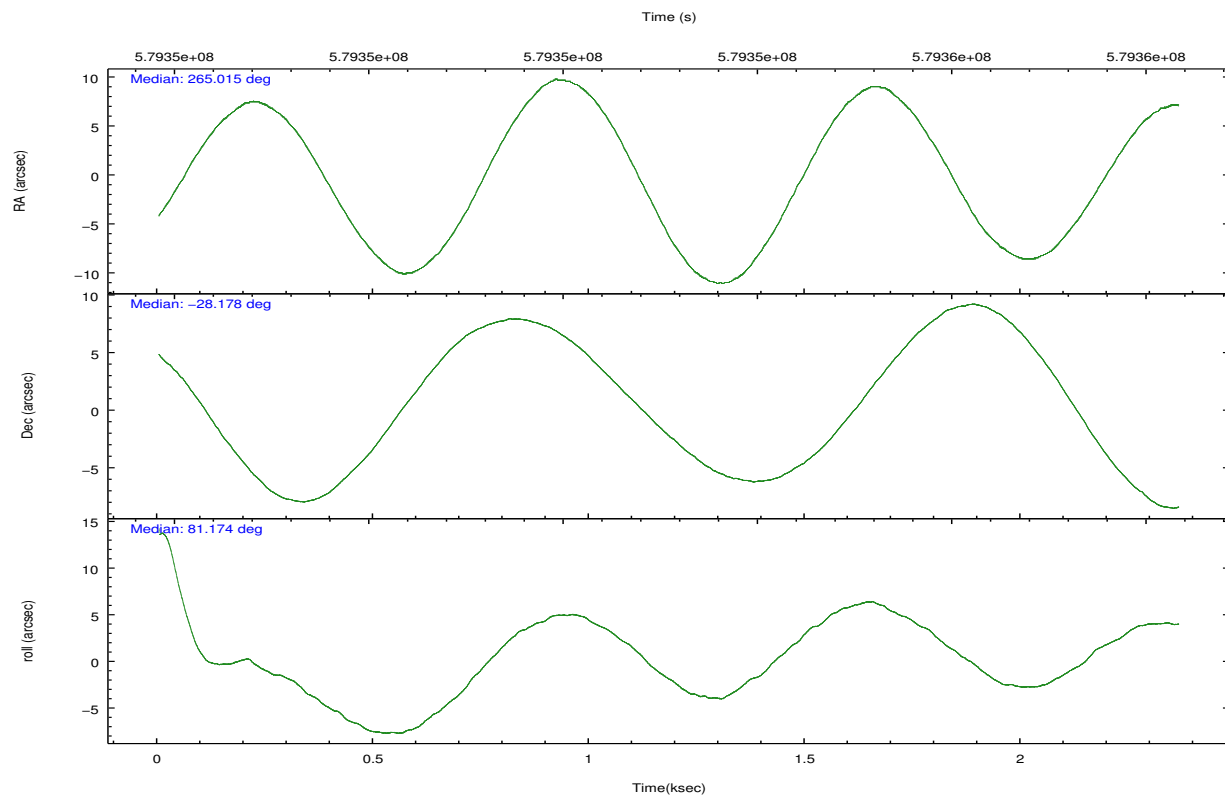
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	586	910	635	664	575
	4%	7%	5%	5%	4%
grade 1 events	11	11	10	6	2
	0%	0%	0%	0%	0%
grade 2 events	368	420	324	301	360
	3%	3%	2%	2%	3%
grade 3 events	165	164	149	161	135
	1%	1%	1%	1%	1%
grade 4 events	140	153	135	186	134
	1%	1%	1%	1%	1%
grade 5 events	528	565	524	604	565
	4%	4%	4%	4%	4%
grade 6 events	285	344	249	312	335
	2%	2%	1%	2%	2%
grade 7 events	9705	10267	10643	10552	9839
	82%	79%	84%	82%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	265.026422	265.0150190244544	CCD I2 on	Y	Y
[deg] Pointing Dec	-28.203270	-28.17773324103619	CCD I3 on	Y	Y
[deg] Pointing Roll	80.981947	81.18527920134888	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	579353276.184000	579352900.22276	CCD S5 on	N	N
Observation start date	2016-05-11T11:26:48	2016-05-11T11:21:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	579355456.184000	579356423.66046	On-chip summing requested	N	N
Observation end date	2016-05-11T12:03:08	2016-05-11T12:20:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





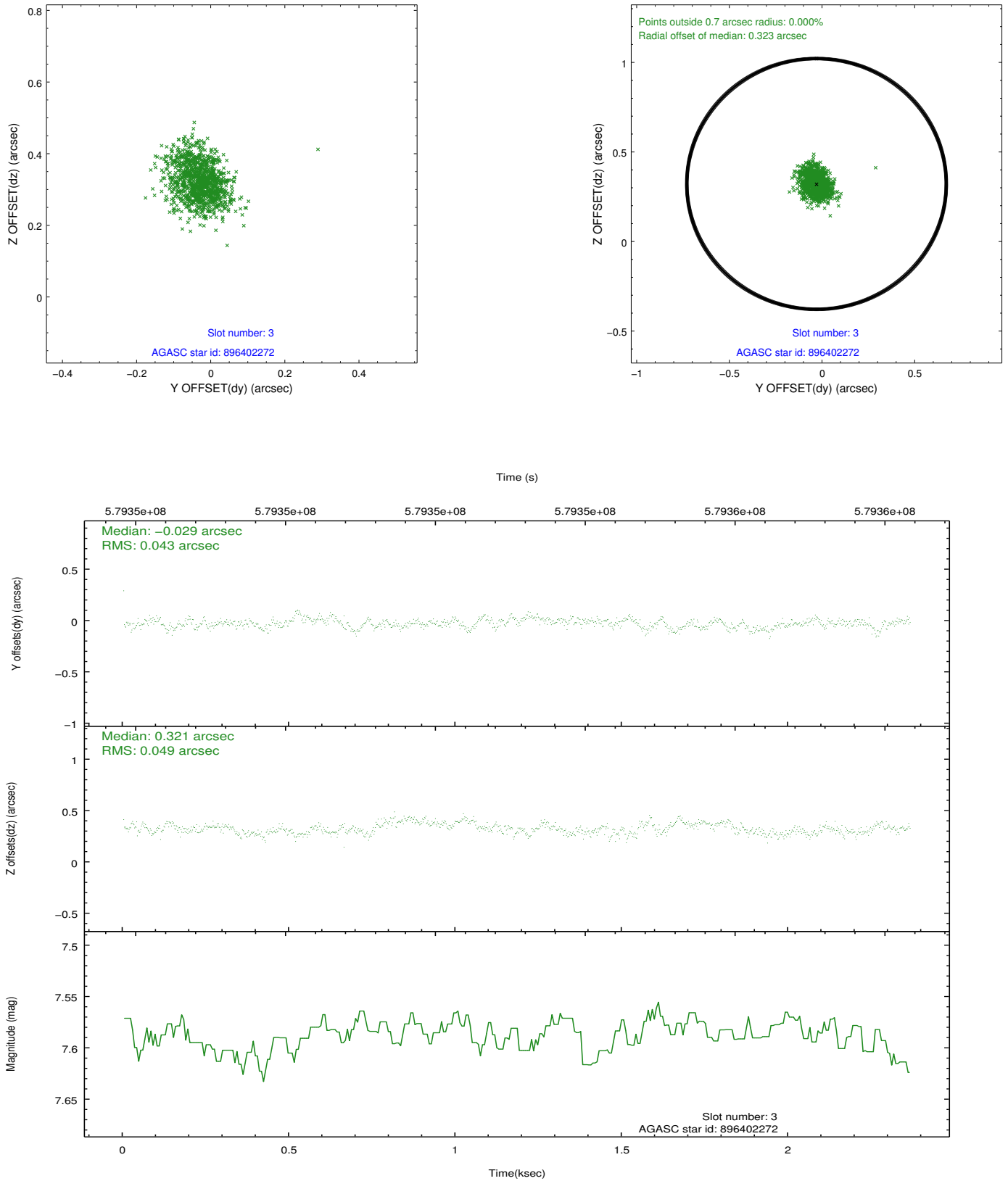
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.27	577	0.083	-0.098	0.005	0.009	0.000000	0.000000	928.85	-839.43
1	FID		ACIS-I-5	7.25	577	-0.298	0.047	0.006	0.011	0.000000	0.000000	-1818.15	1056.78
2	FID		ACIS-I-6	7.25	577	0.125	0.121	0.006	0.010	0.000000	0.000000	391.41	1704.51
3	GUIDE	used	896402272	7.59	1154	-0.029	0.321	0.069	0.113	265.637294	-28.313189	-90.98	-1974.23
4	GUIDE	used	896403960	8.57	1153	0.033	-0.219	0.080	0.127	264.379044	-28.245612	-477.42	2001.27
5	GUIDE	used	896404568	7.84	1154	0.014	0.391	0.073	0.116	265.687293	-28.431080	-486.84	-2193.37
6	GUIDE	used	896405048	8.27	1153	-0.003	-0.354	0.086	0.138	264.482575	-28.152230	-92.89	1731.18
7	GUIDE	used	896406568	8.22	1153	-0.008	-0.143	0.084	0.152	264.435951	-28.437282	-1129.17	1714.85

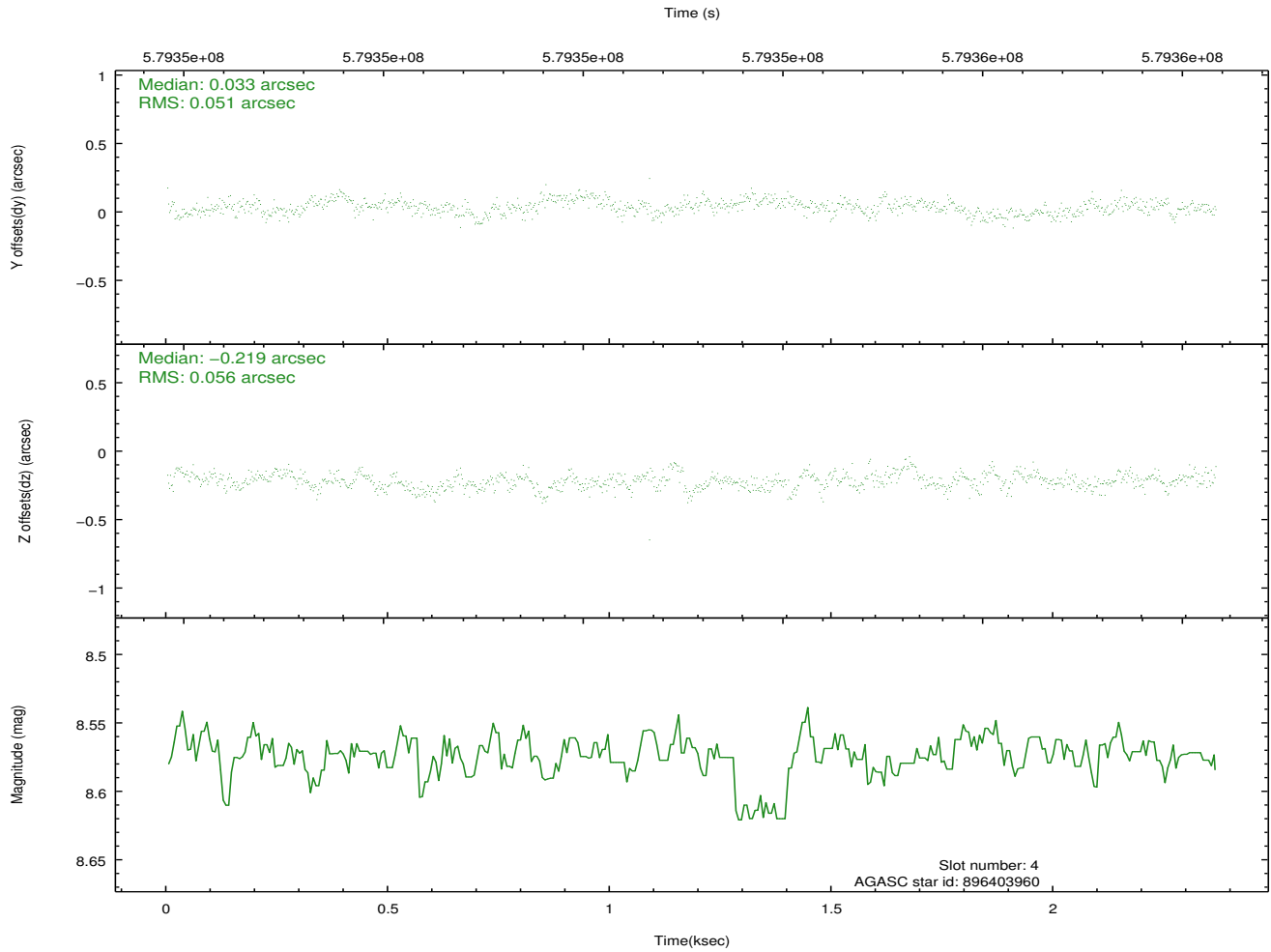
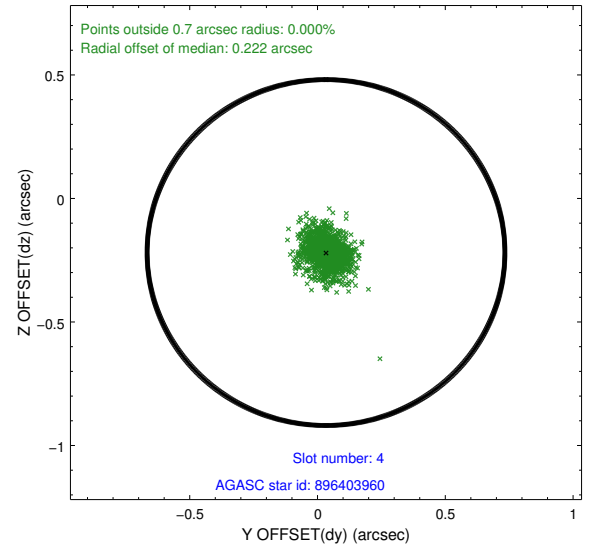
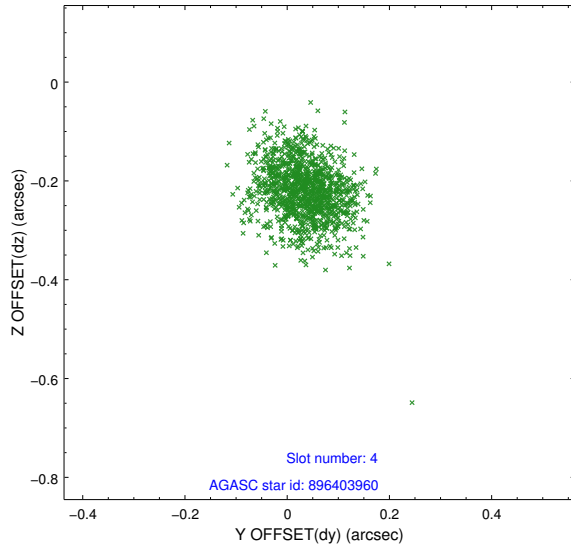


## 2.4 Star Slots

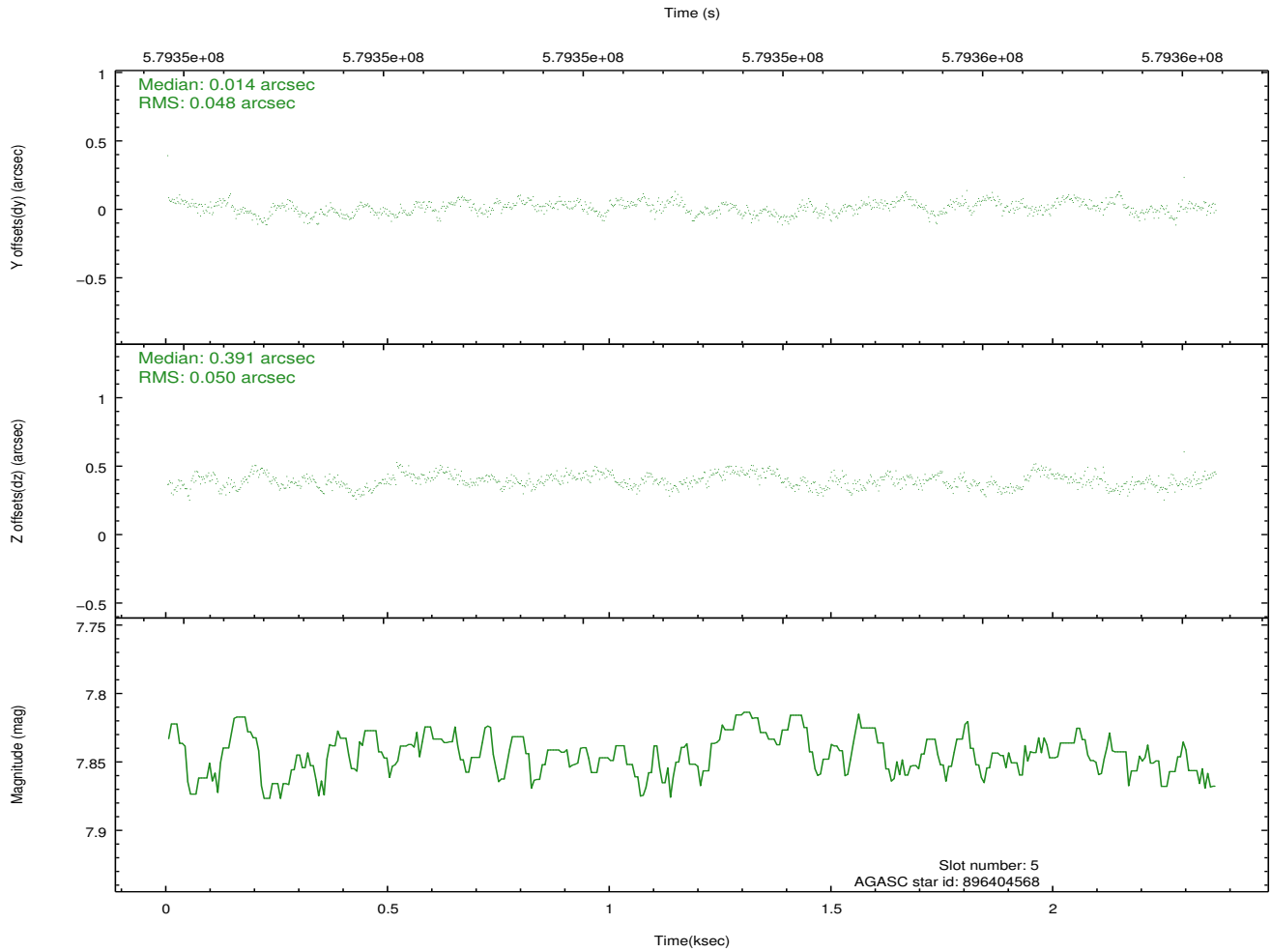
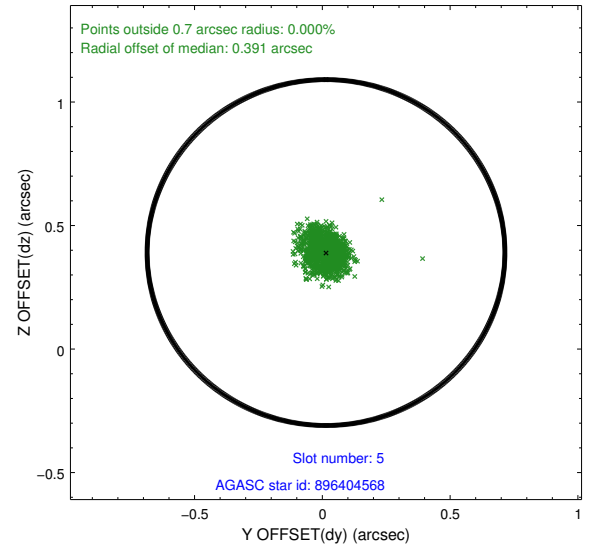
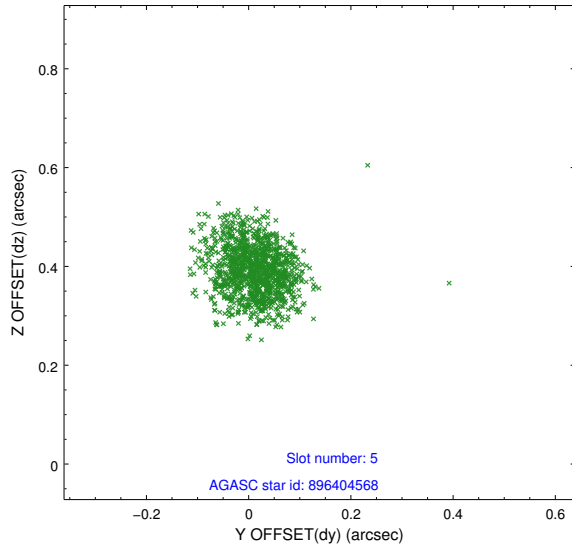
### 2.4.1 Slot 3



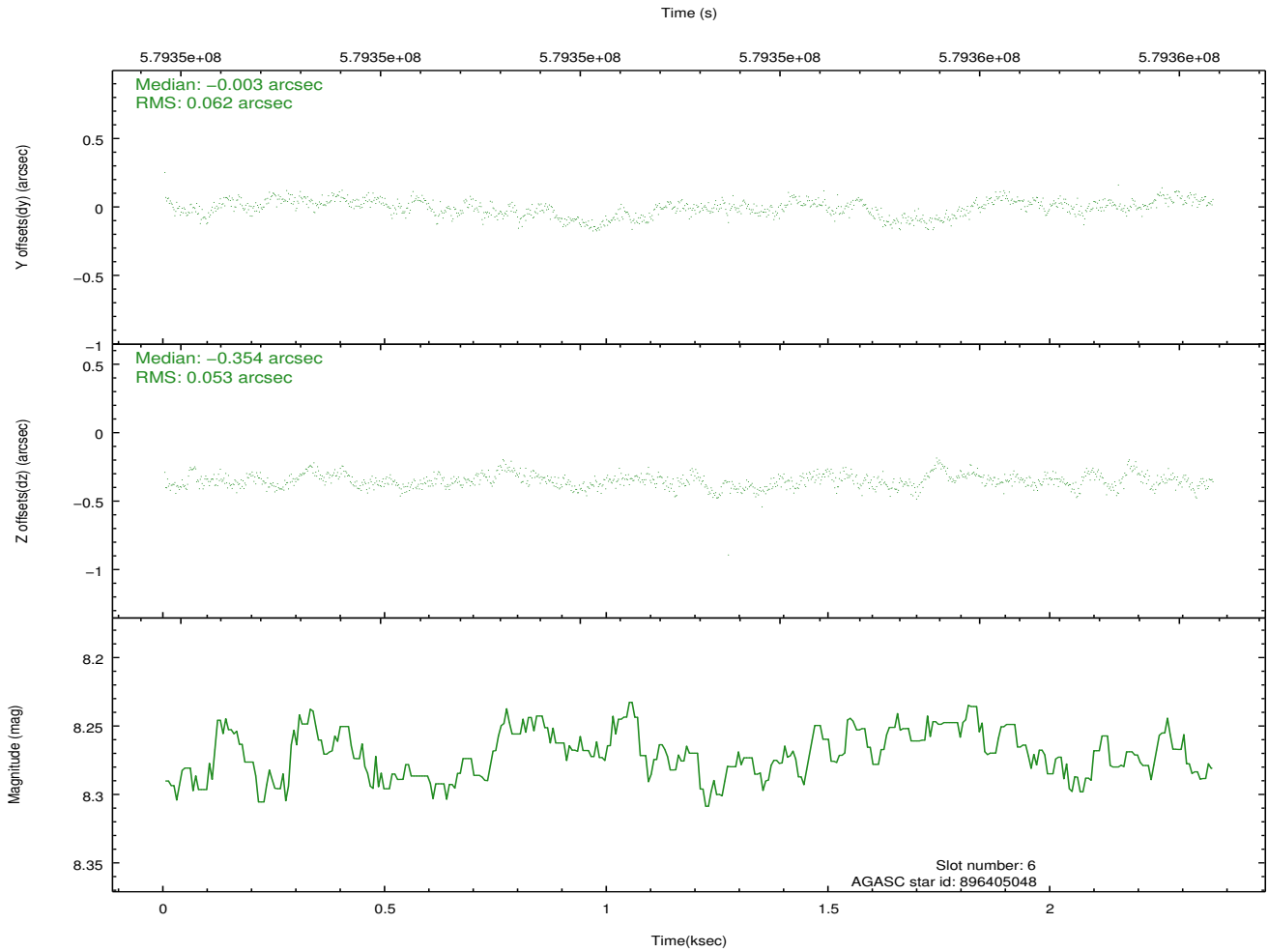
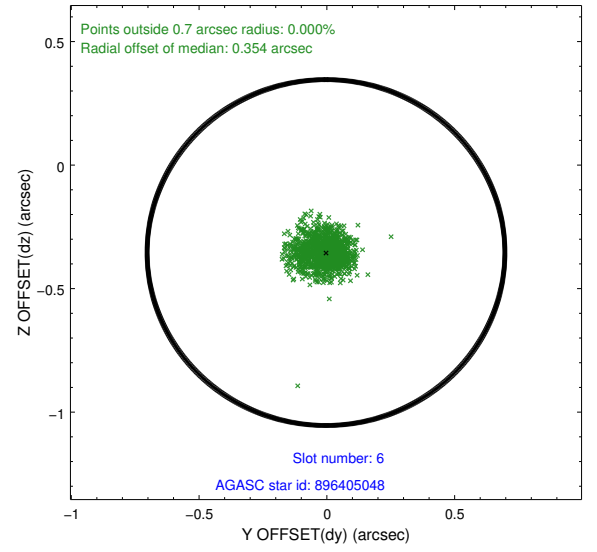
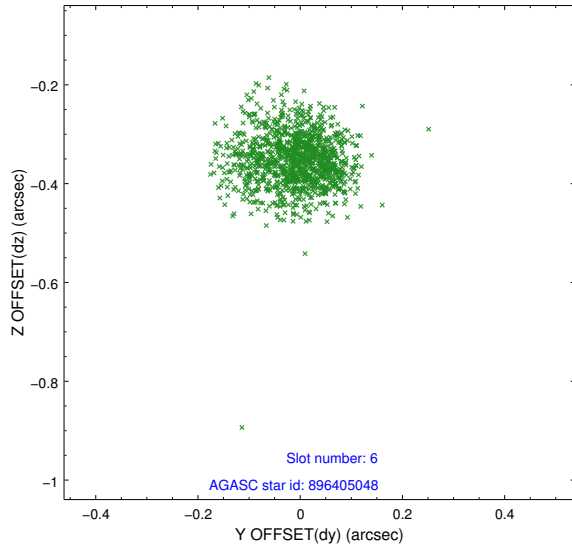
## 2.4.2 Slot 4



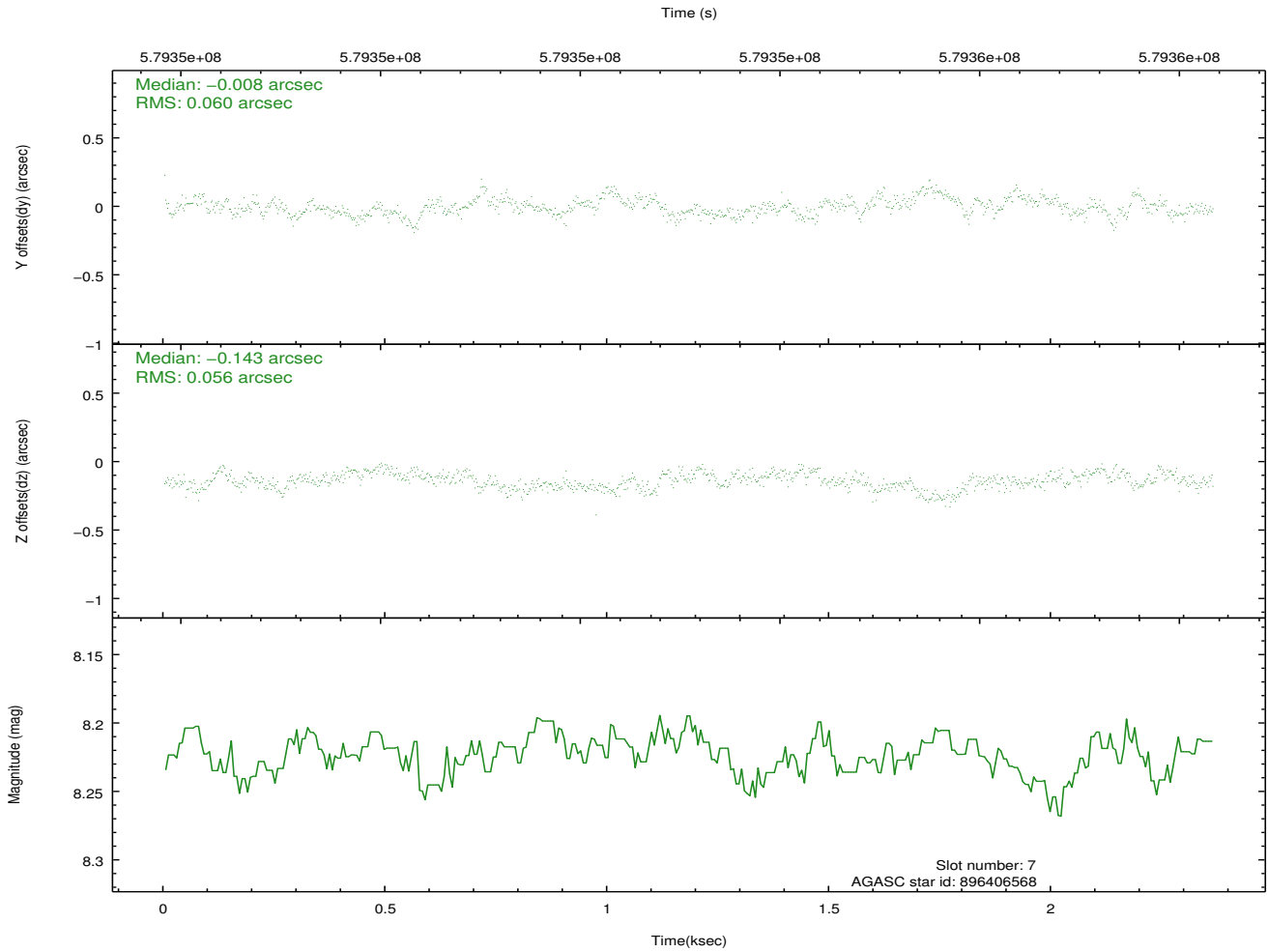
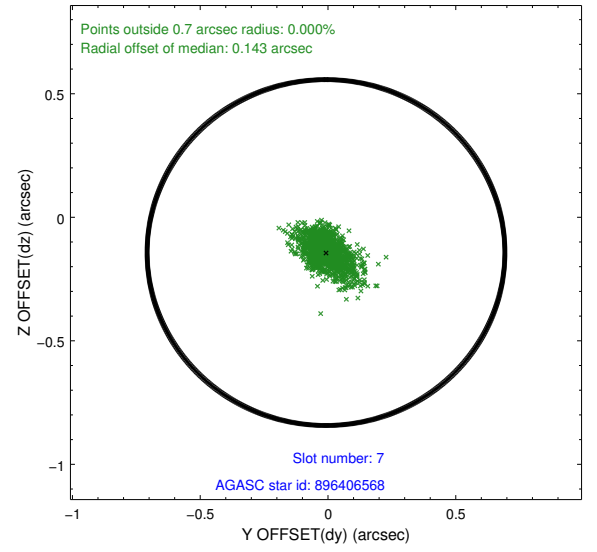
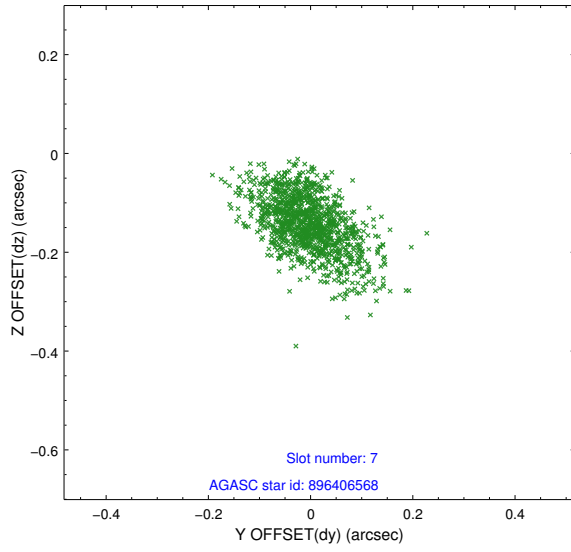
### 2.4.3 Slot 5



## 2.4.4 Slot 6

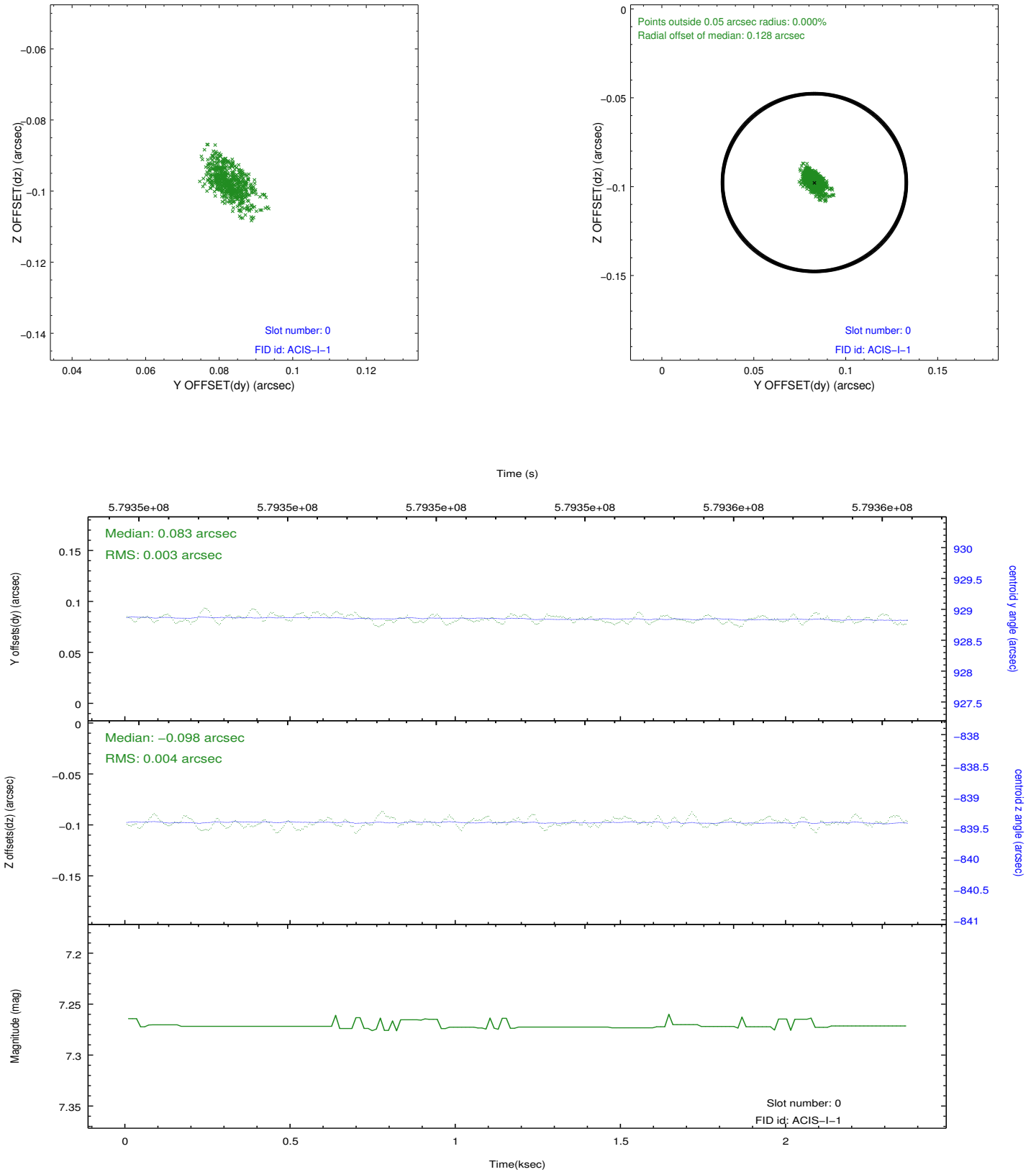


## 2.4.5 Slot 7

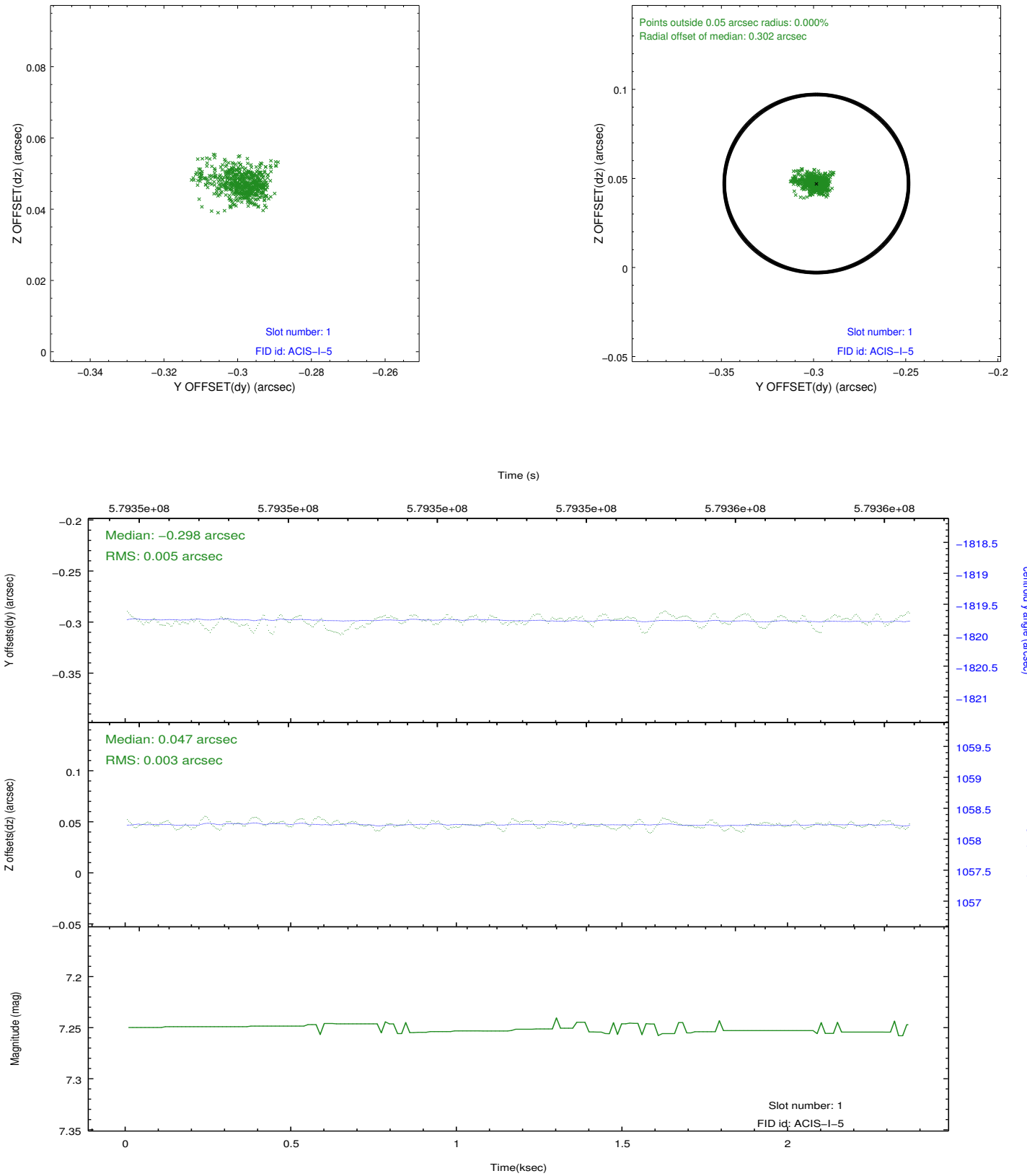


## 2.5 FID Slots

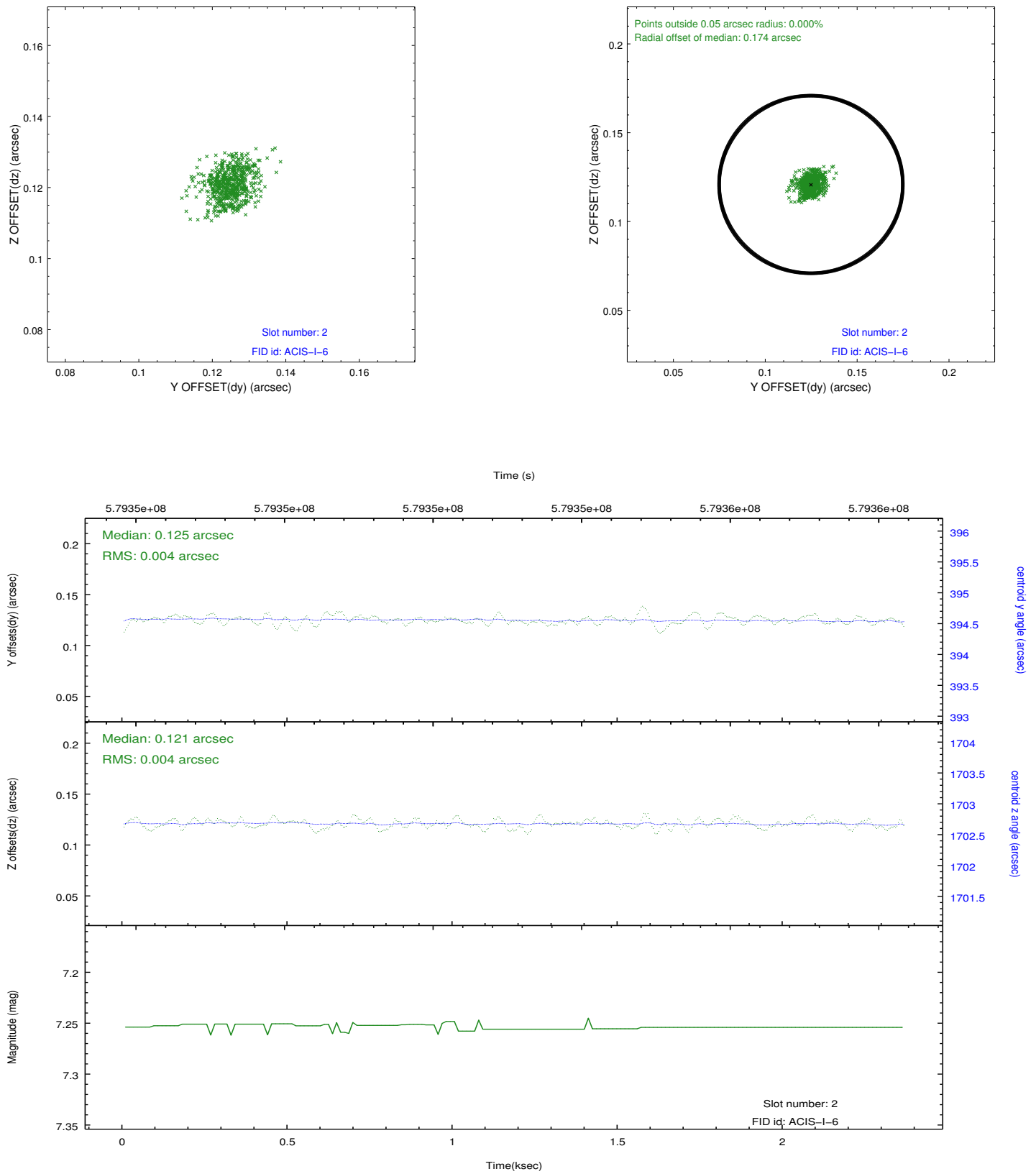
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.05.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9559456880093

### A.2 Comments