

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18311 - L2 Version 1  
Chandra X-Ray Center

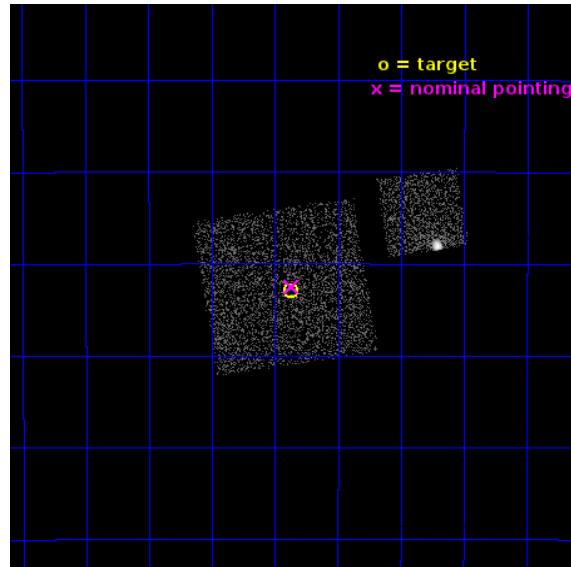
L2 Processing Date : May 11 2016

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# 1 Front

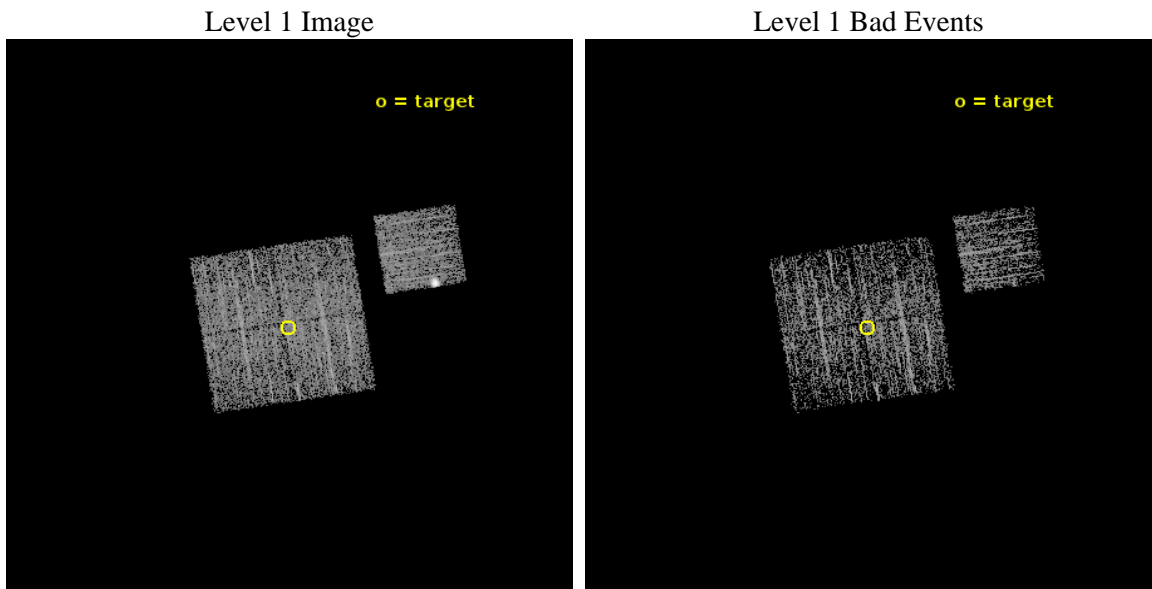
seq_num	300342	Sequence number
obs_id	18311	Observation id
title	X-raying the Galactic center/bulge interface	Proposal title
observer	Q. Daniel Wang	Principal investigator
object	GC-GB interface	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.46906	Observer's specified target RA [deg]
dec_targ	-28.38228	Observer's specified target Dec [deg]
ra_nom	265.46724444147	Nominal RA [deg]
dec_nom	-28.375044290043	Nominal Dec [deg]
roll_nom	81.270983716997	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1949.9000151157	Sum of GTIs [s]
livetime	1924.4231359227	Livetime [s]
ontime0	1946.7590148449	Sum of GTIs [s]
ontime1	1949.9000151157	Sum of GTIs [s]
ontime2	1949.9000151157	Sum of GTIs [s]
ontime3	1949.9000151157	Sum of GTIs [s]
ontime6	1949.9000151157	Sum of GTIs [s]
l2events	10709	Number of level 2 events



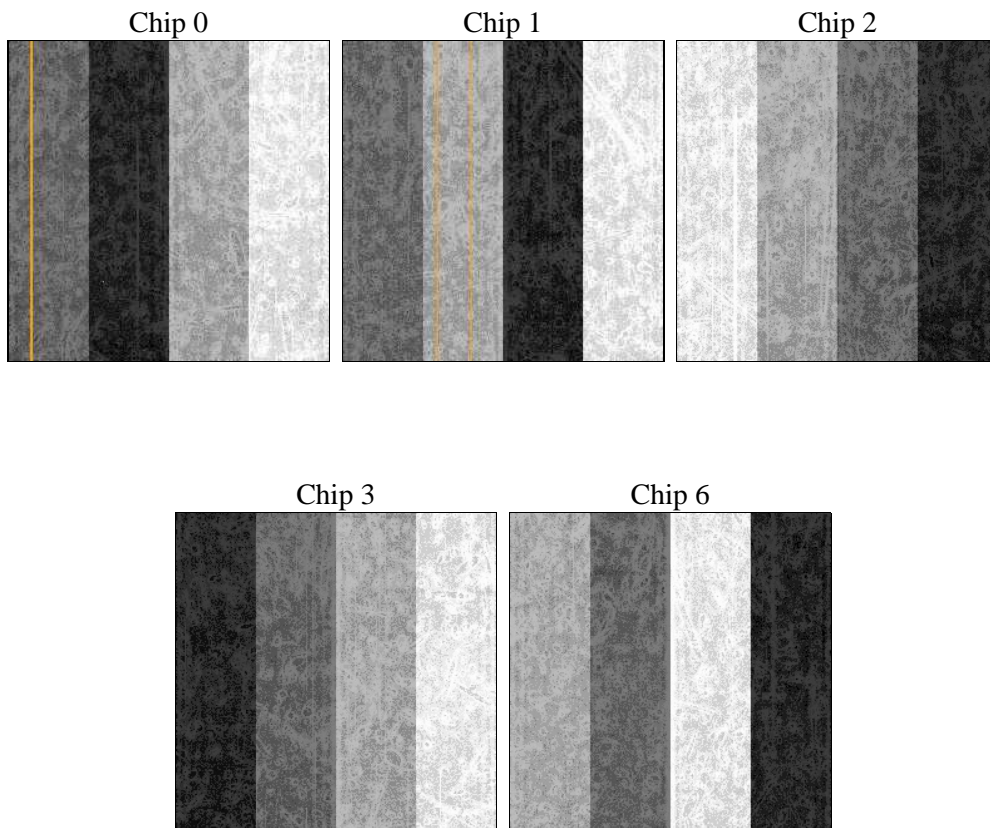
## 2 OBI

### 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	1949.9000151157	Sum of GTIs [s]
caldsver	4.7.1	&#160	ontime0	1946.7590148449	Sum of GTIs [s]
date	2016-05-11T15:40:26	Date and time of file creation	ontime1	1949.9000151157	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1949.9000151157	Sum of GTIs [s]
			ontime3	1949.9000151157	Sum of GTIs [s]
			ontime6	1949.9000151157	Sum of GTIs [s]
			l1events	65160	Number of level 1 events

### 2.1.4 Events

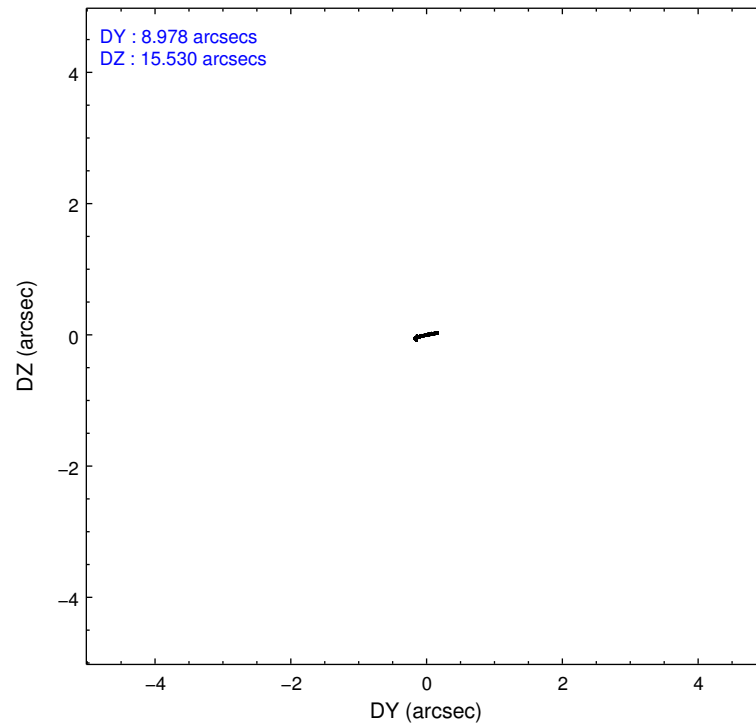
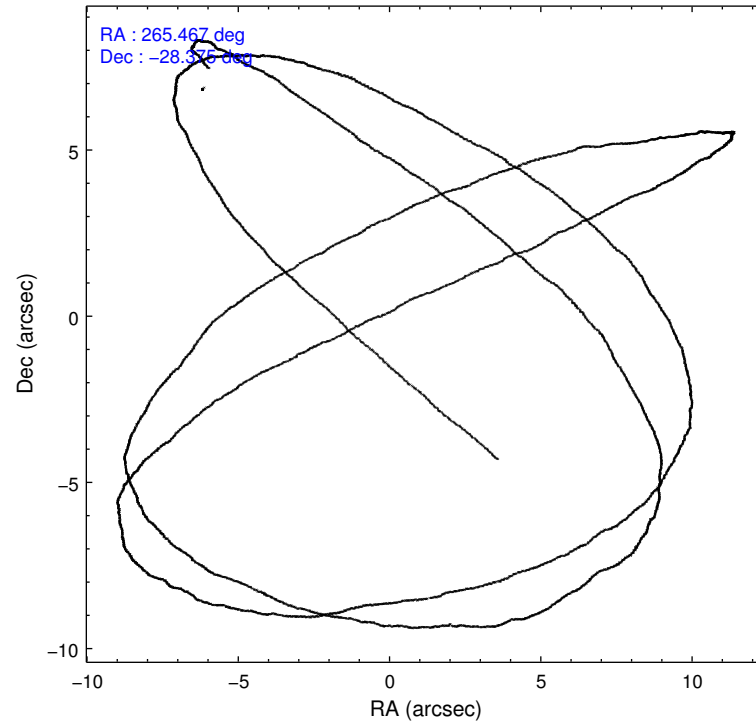
	<b>ccd 0</b>	<b>ccd 1</b>	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>
level 1 events	12702	11170	11467	13489	16332
rejected events	11056	9429	9876	11890	10798
rejected %	87%	84%	86%	88%	66%

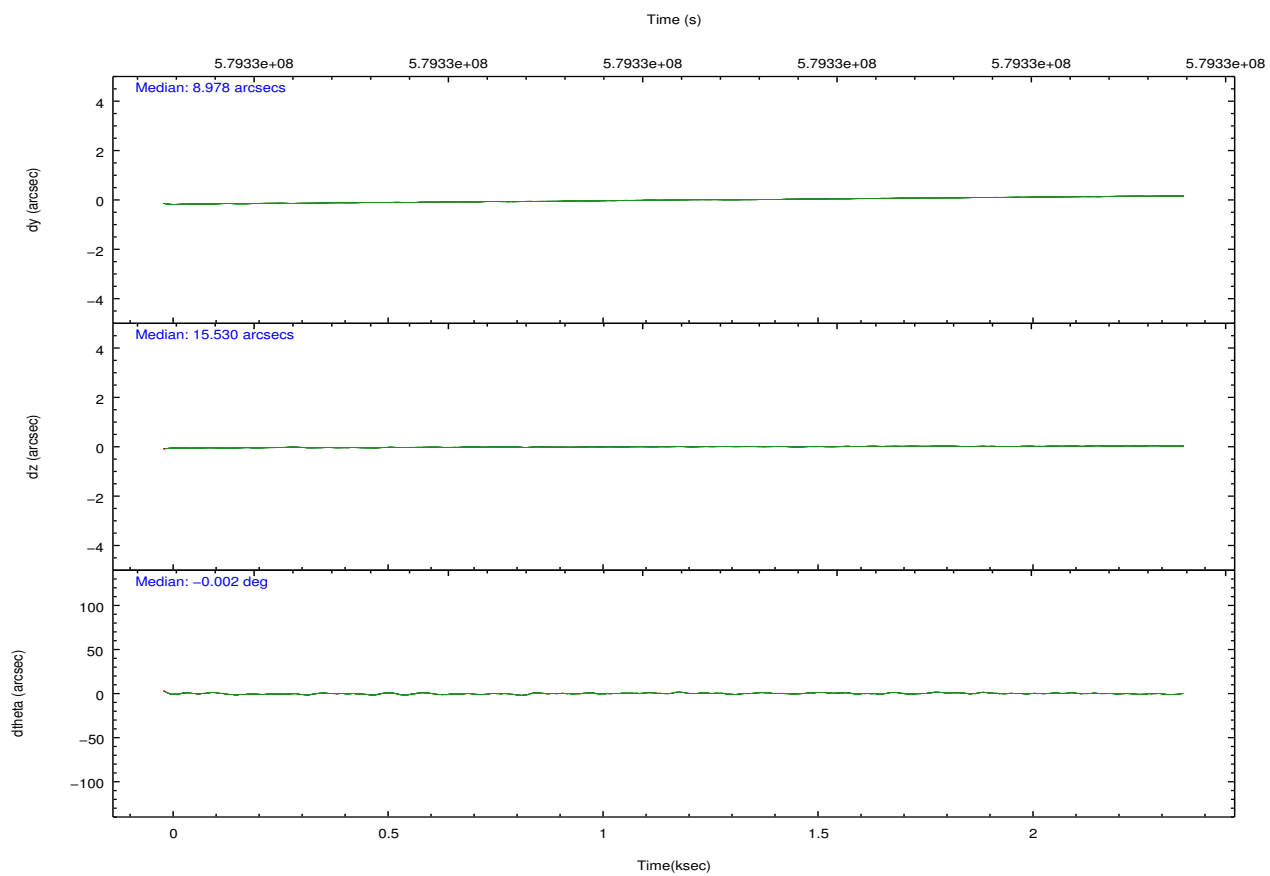
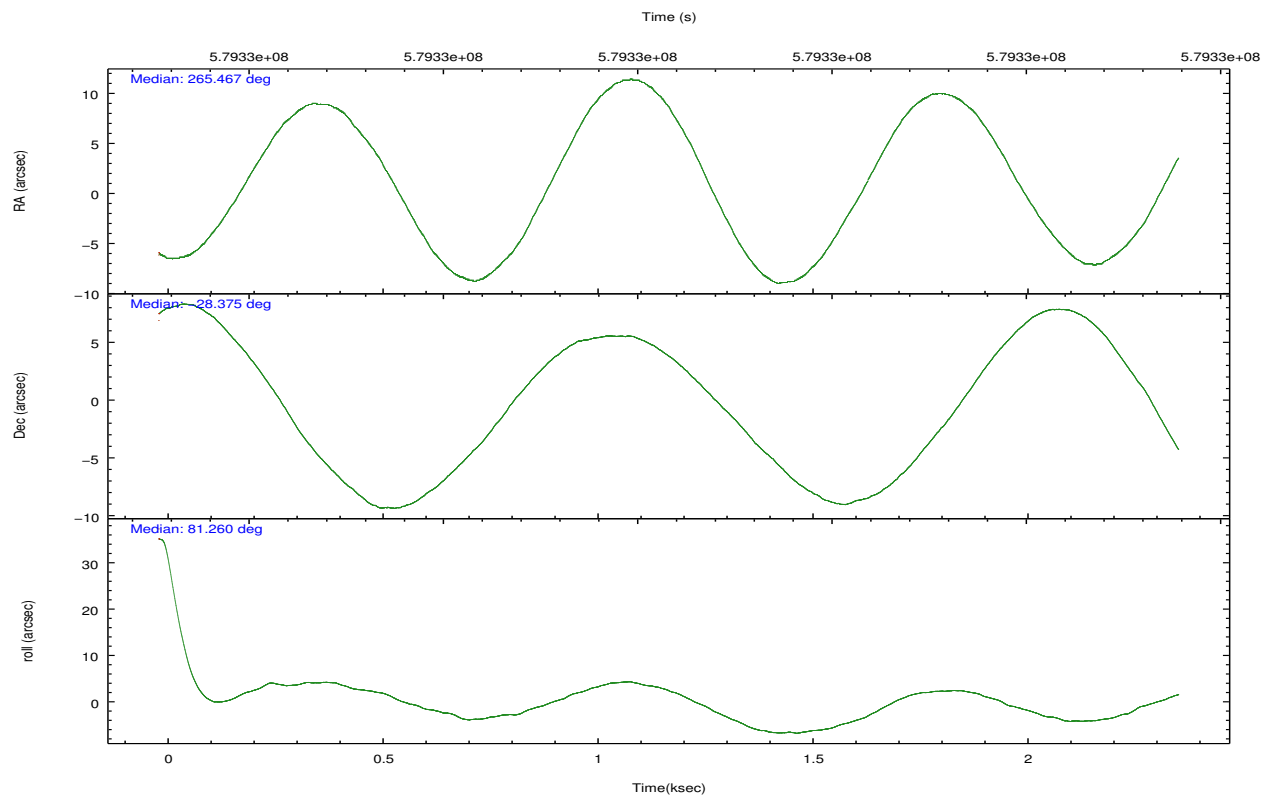
	<b>ccd 0</b>	<b>ccd 1</b>	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>
grade 0 events	678	716	688	732	3594
	5%	6%	5%	5%	22%
grade 1 events	10	10	8	3	32
	0%	0%	0%	0%	0%
grade 2 events	351	396	343	323	867
	2%	3%	2%	2%	5%
grade 3 events	162	158	162	149	276
	1%	1%	1%	1%	1%
grade 4 events	165	154	131	125	289
	1%	1%	1%	0%	1%
grade 5 events	536	529	487	620	582
	4%	4%	4%	4%	3%
grade 6 events	296	320	271	273	525
	2%	2%	2%	2%	3%
grade 7 events	10504	8887	9377	11264	10167
	82%	79%	81%	83%	62%

## 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	265.478908	265.4672444414749	CCD I2 on	Y	Y
[deg] Pointing Dec	-28.400969	-28.37504429004321	CCD I3 on	Y	Y
[deg] Pointing Roll	81.067620	81.27098371699738	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)	579329066.184000	579328689.72137	CCD S5 on	N	N
Observation start date	2016-05-11T04:43:18	2016-05-11T04:38:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	579331246.184000	579331380.34653	On-chip summing requested	N	N
Observation end date	2016-05-11T05:19:38	2016-05-11T05:23:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





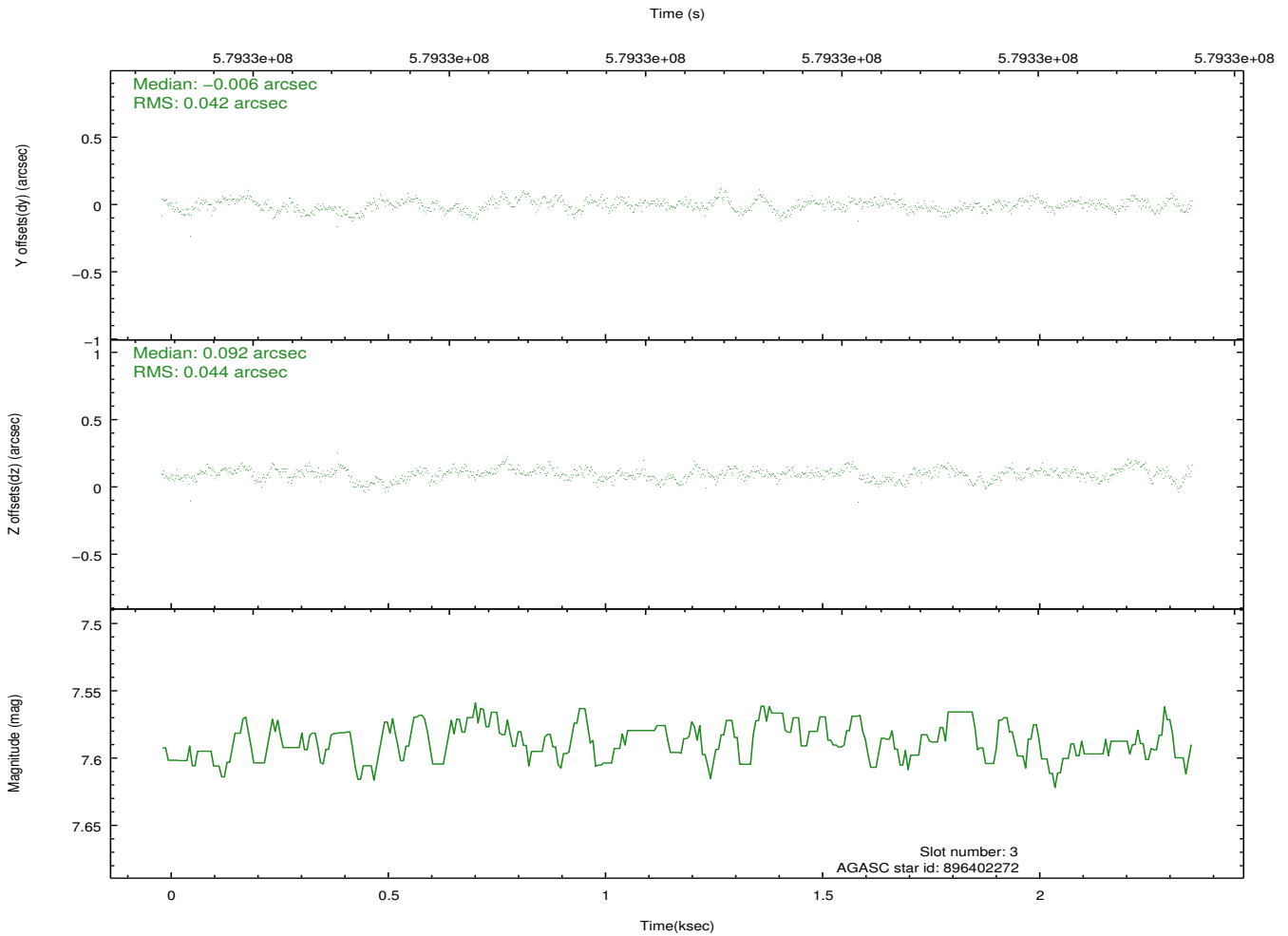
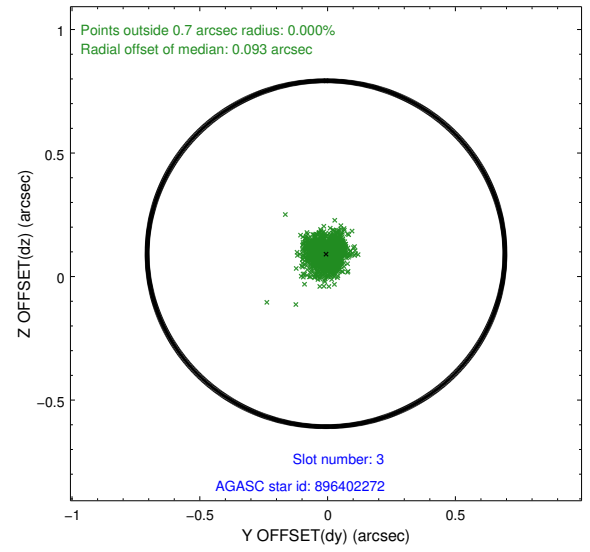
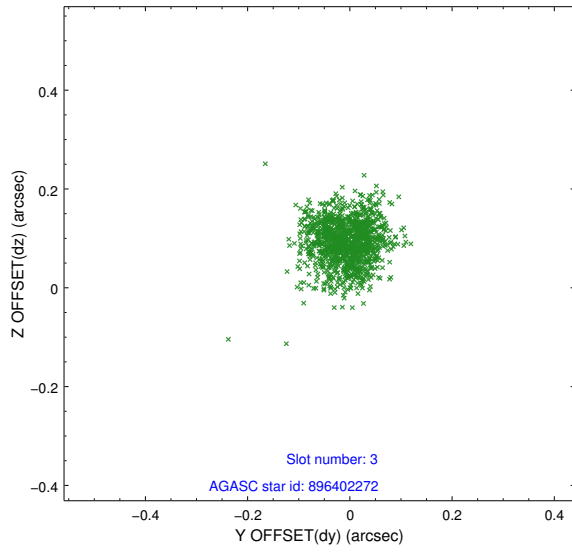
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.14	579	-0.187	-0.147	0.009	0.016	0.000000	0.000000	-763.72	-845.65
1	FID		ACIS-I-4	7.19	578	0.385	0.140	0.007	0.011	0.000000	0.000000	2149.68	1059.40
2	FID		ACIS-I-5	7.23	579	-0.300	0.076	0.009	0.017	0.000000	0.000000	-1814.12	1060.34
3	GUIDE	used	896402272	7.59	1158	-0.006	0.092	0.064	0.101	265.637294	-28.313189	389.34	-447.15
4	GUIDE	used	896402976	7.48	1158	0.040	0.010	0.108	0.169	265.099474	-28.923203	-2045.09	887.70
5	GUIDE	used	896405616	7.85	1158	0.090	-0.407	0.082	0.145	264.752771	-28.412560	-409.15	2264.57
6	GUIDE	used	896538248	8.89	1158	-0.141	0.138	0.181	0.309	266.238138	-28.240101	937.94	-2288.14
7	GUIDE	used	896539744	8.32	1156	0.019	0.193	0.081	0.137	266.154264	-28.178023	1120.43	-1995.49

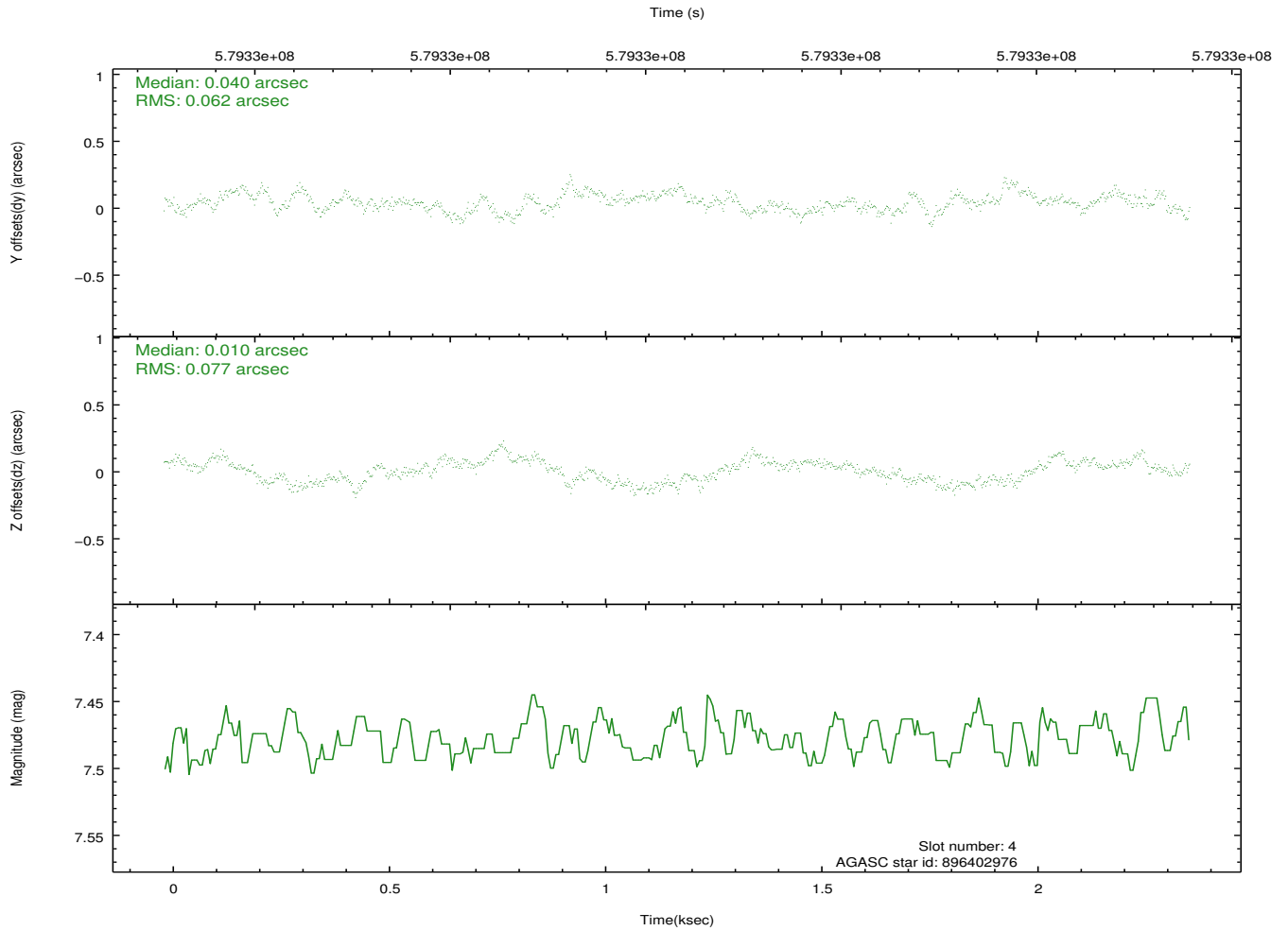
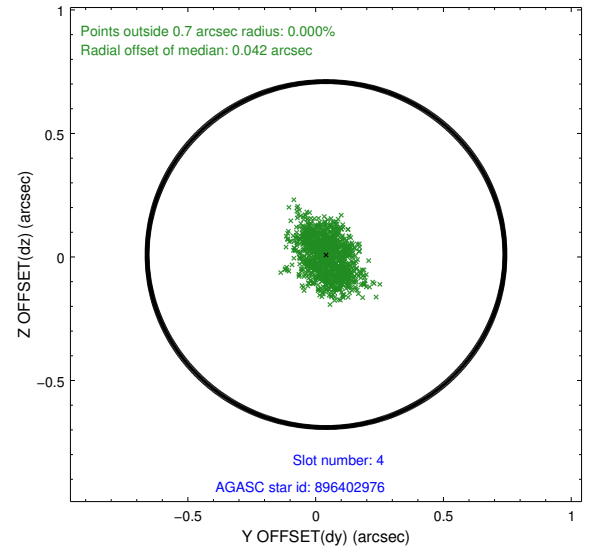
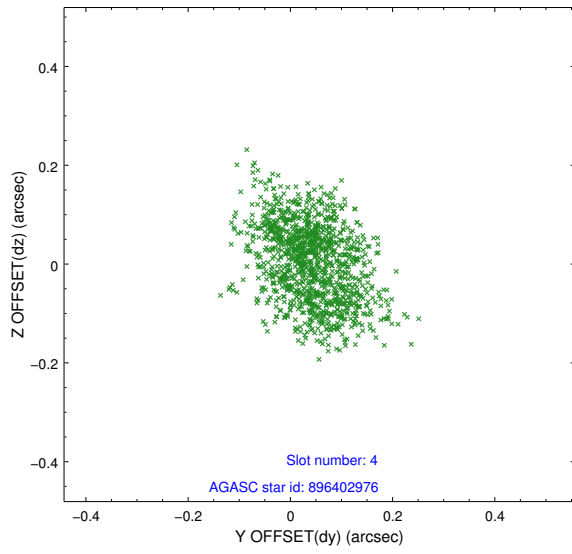


## 2.4 Star Slots

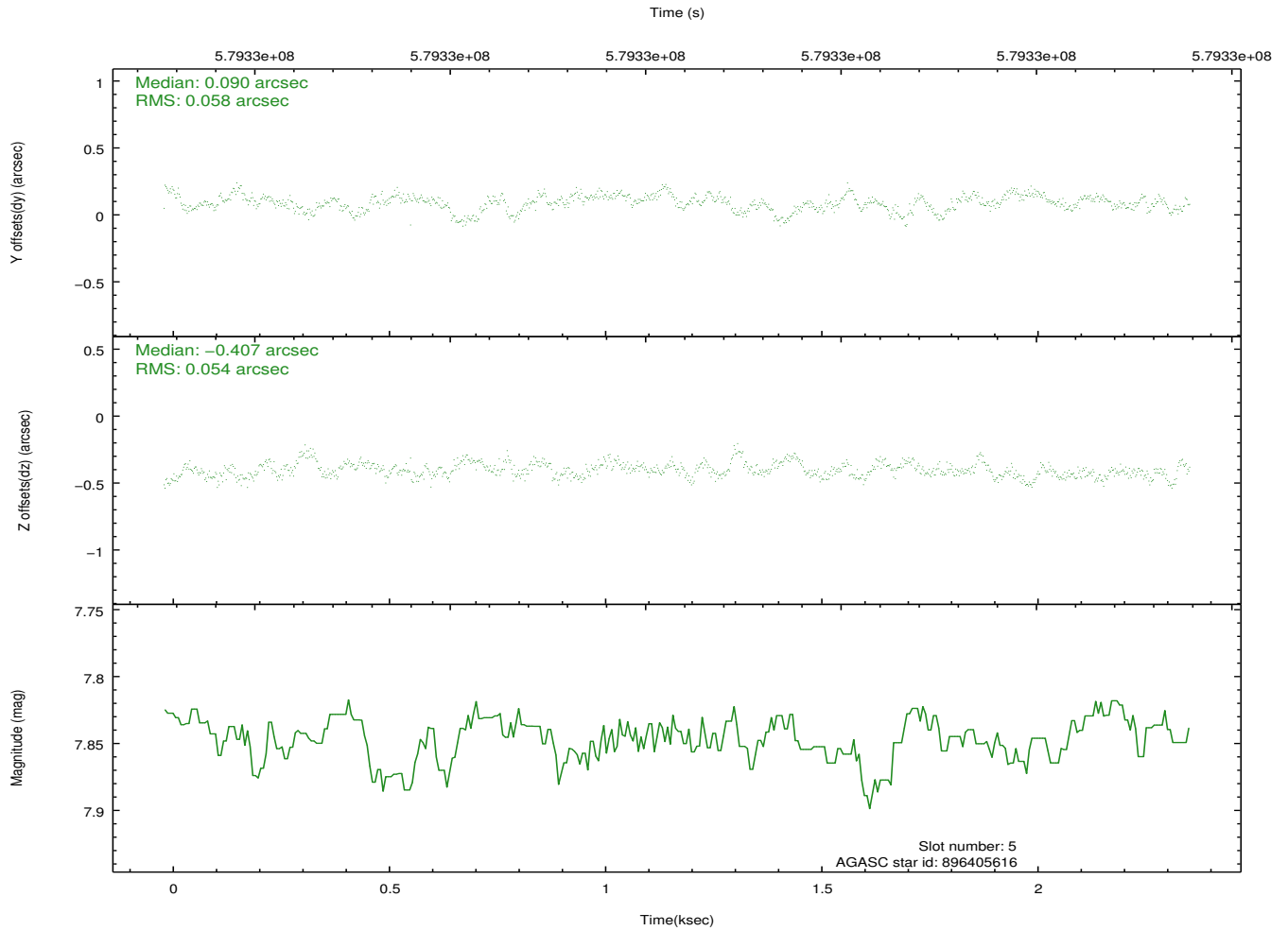
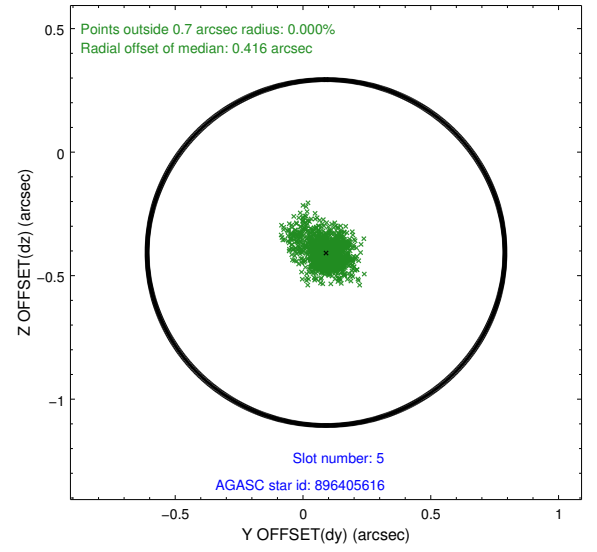
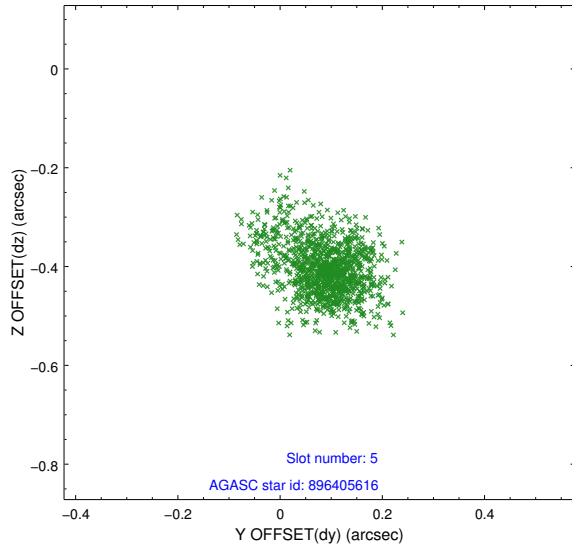
### 2.4.1 Slot 3



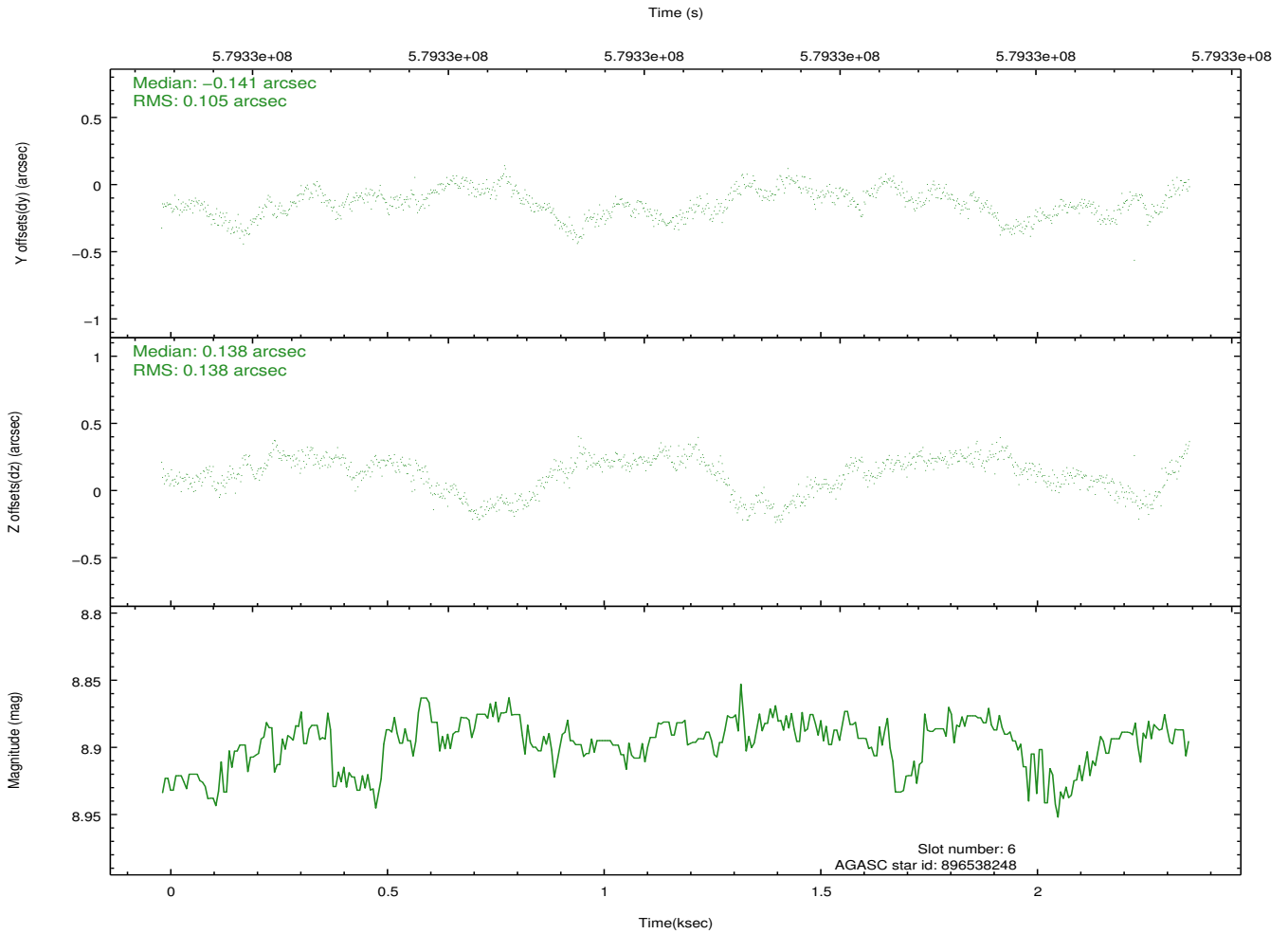
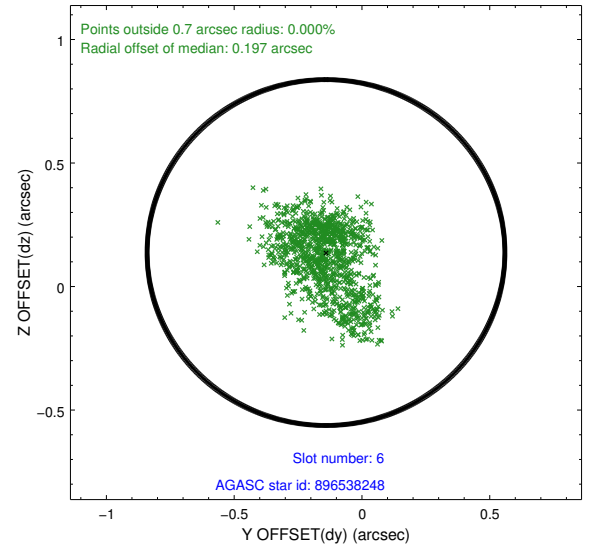
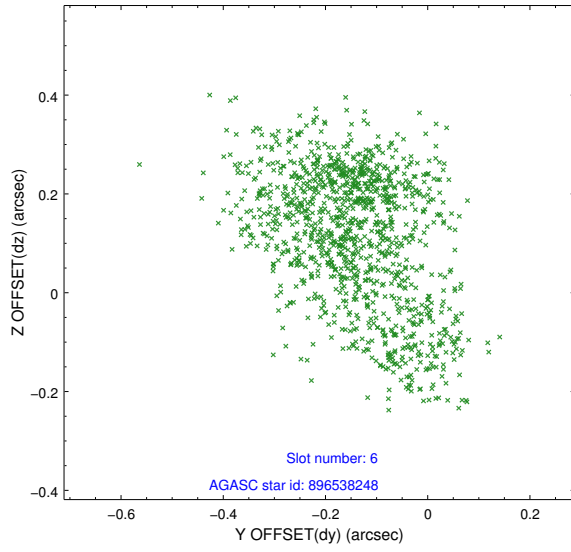
## 2.4.2 Slot 4



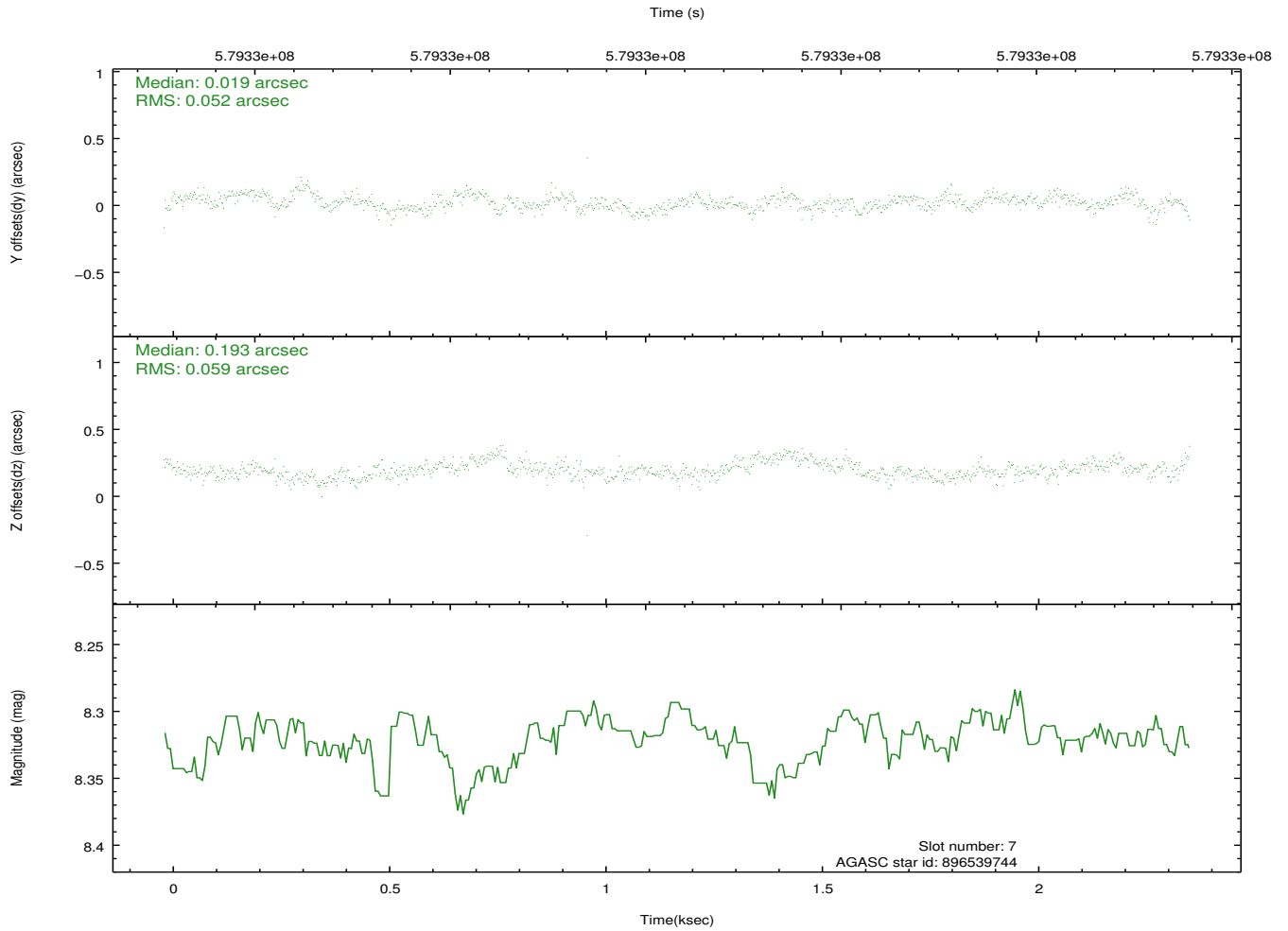
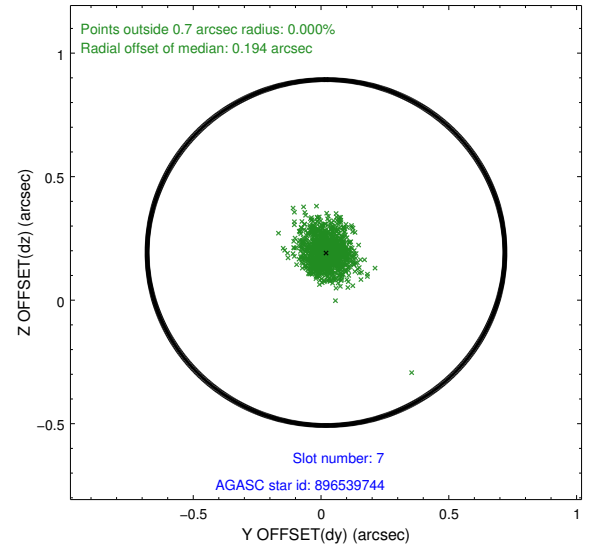
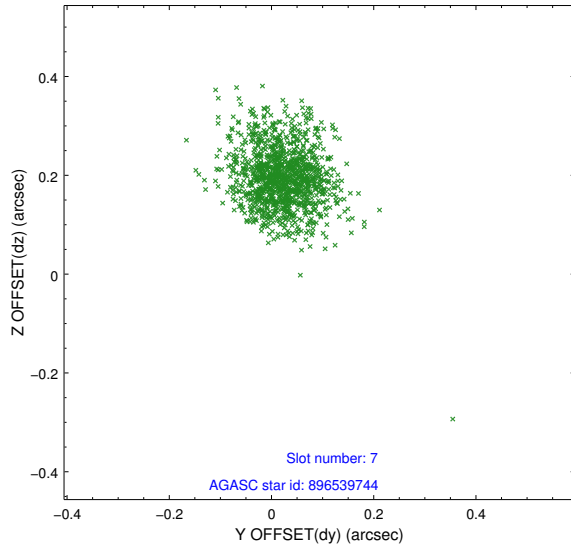
### 2.4.3 Slot 5



## 2.4.4 Slot 6

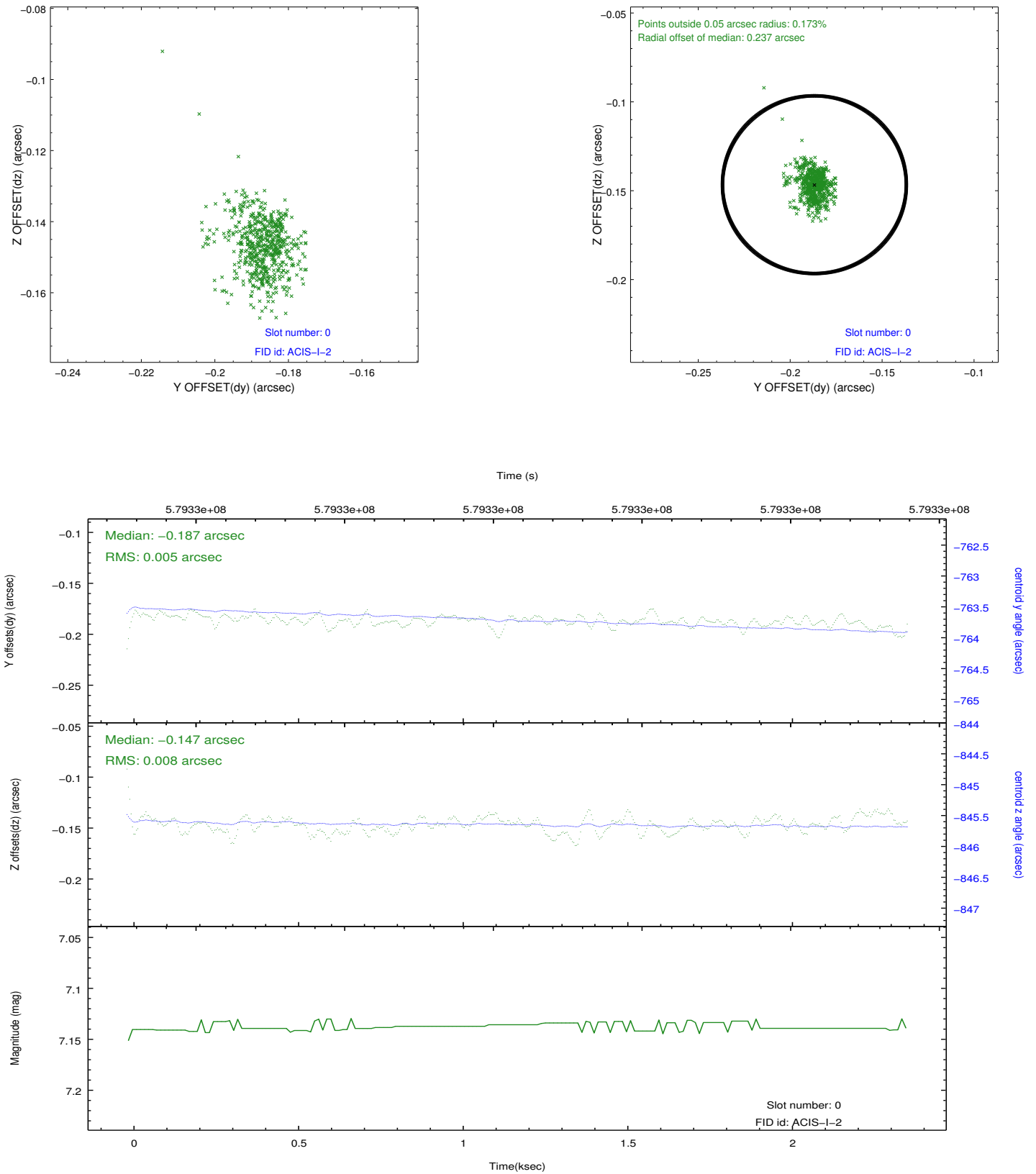


## 2.4.5 Slot 7

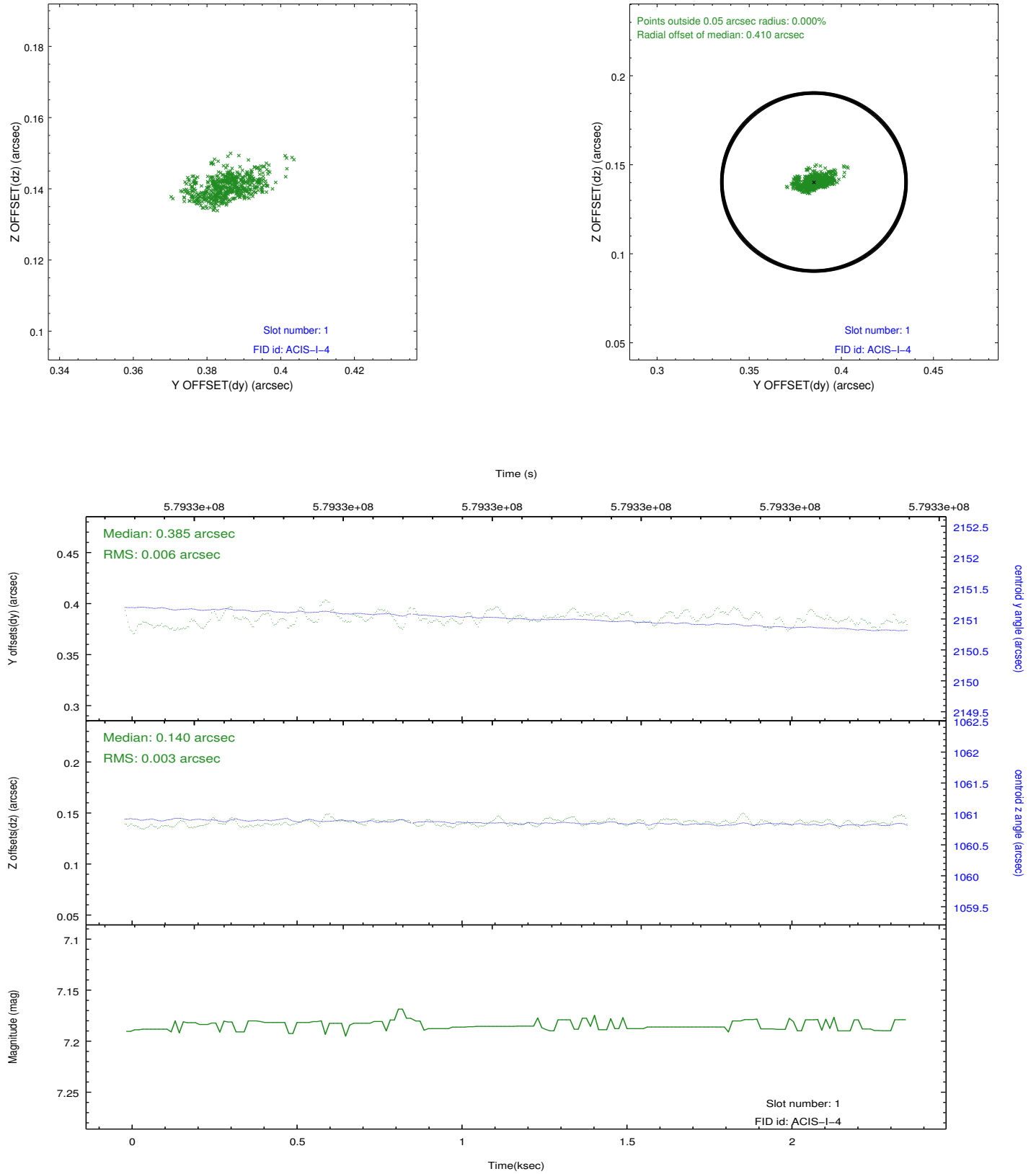


## 2.5 FID Slots

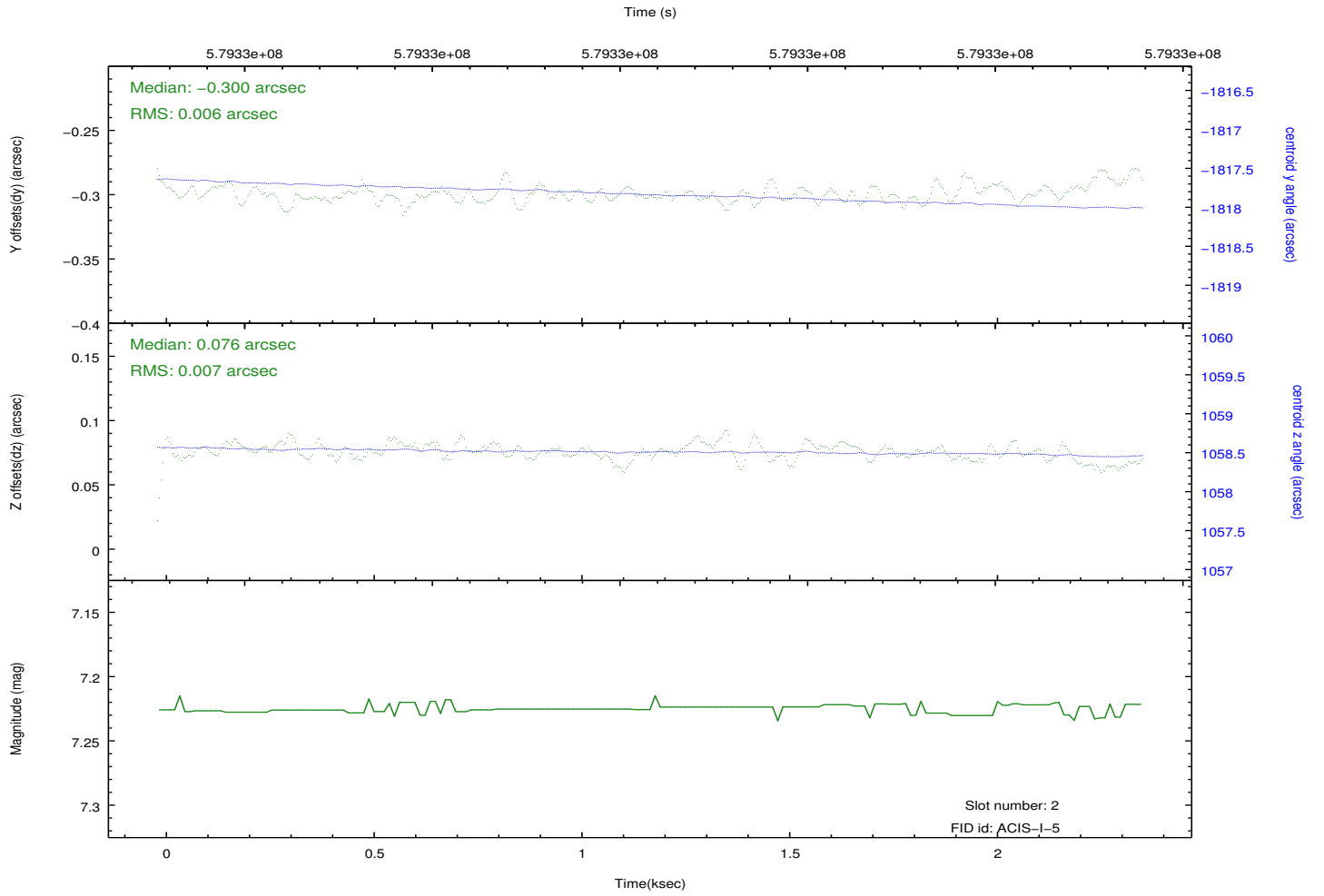
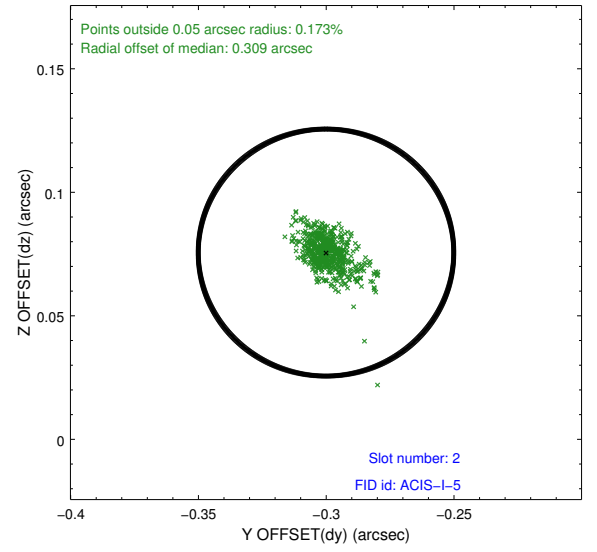
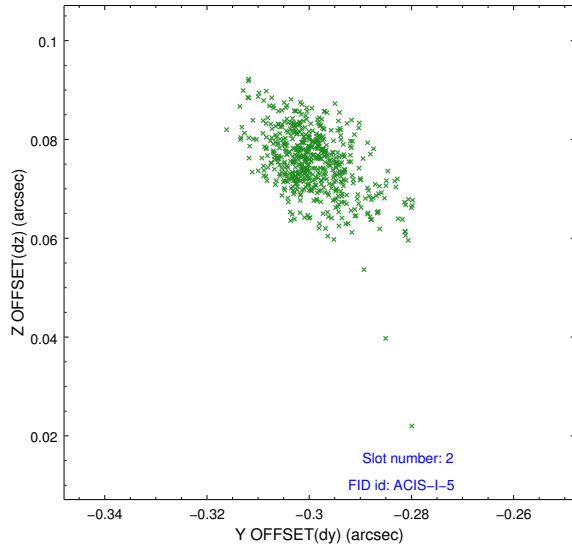
### 2.5.1 Slot 0



## 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)	2016.05.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9499000151157

### A.2 Comments