

# V&V Reference Report

## L2 ASCDS Version : 10.5

Observation 18327 - L2 Version 1  
Chandra X-Ray Center

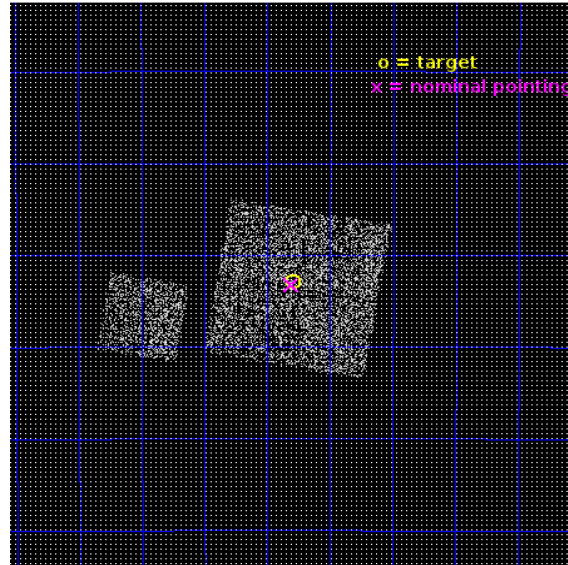
L2 Processing Date : Jul 15 2016

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# 1 Front

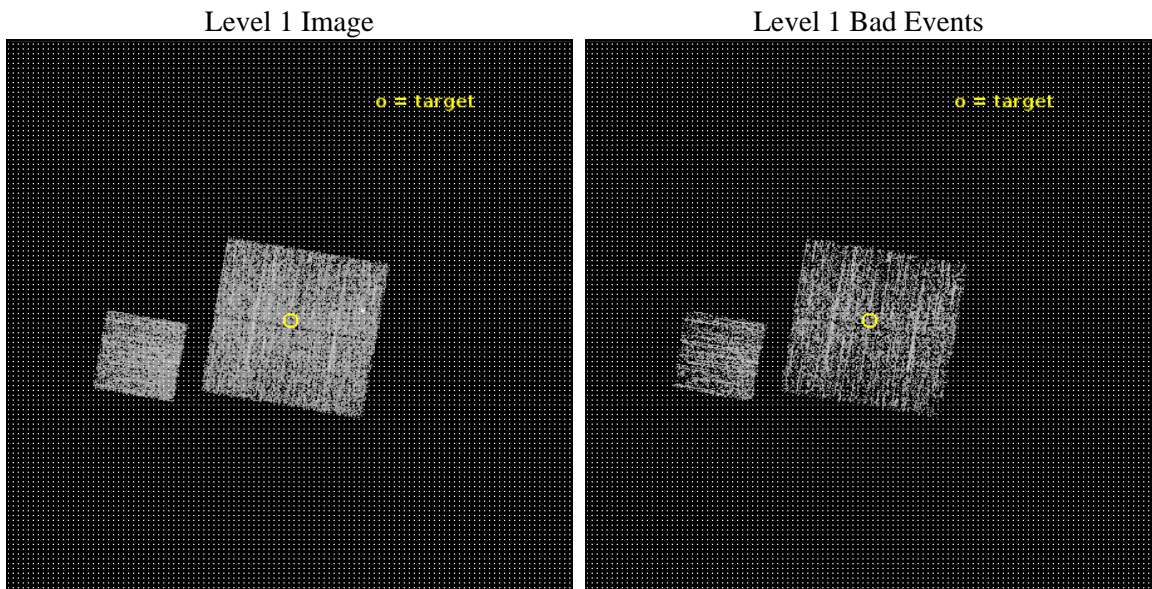
seq_num	300358	Sequence number
obs_id	18327	Observation id
title	X-raying the Galactic center/bulge interface	Proposal title
observer	Q. Daniel Wang	Principal investigator
object	GC-GB interface	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.94826	Observer's specified target RA [deg]
dec_targ	-28.71521	Observer's specified target Dec [deg]
ra_nom	266.95213628091	Nominal RA [deg]
dec_nom	-28.720739317009	Nominal Dec [deg]
roll_nom	279.86833468515	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1955.5228077173	Sum of GTIs [s]
livetime	1929.9724625995	Livetime [s]
ontime0	1955.399687767	Sum of GTIs [s]
ontime1	1955.4407277107	Sum of GTIs [s]
ontime2	1955.4817677736	Sum of GTIs [s]
ontime3	1955.5228077173	Sum of GTIs [s]
ontime6	1955.3586477041	Sum of GTIs [s]
l2events	7183	Number of level 2 events



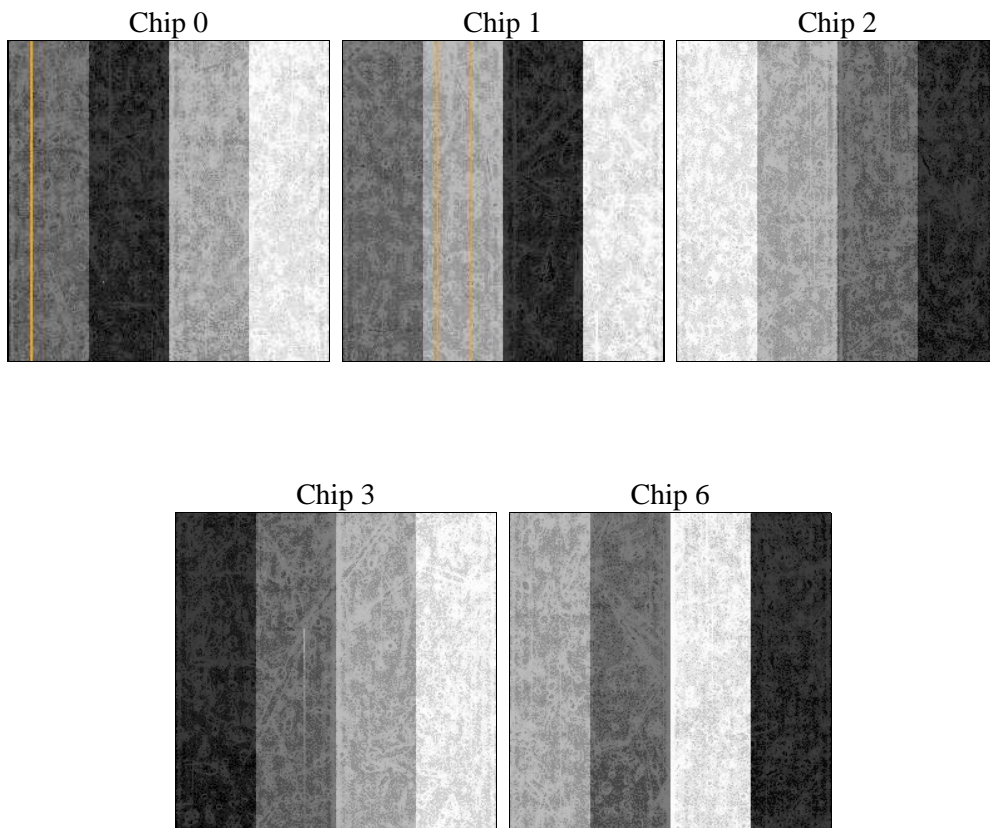
## 2 OBI

### 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	10.5	Processing system revision	ontime	1955.5228077173	Sum of GTIs [s]
caldbver	4.7.2	&#160	ontime0	1955.399687767	Sum of GTIs [s]
date	2016-07-16T03:25:54	Date and time of file creation	ontime1	1955.4407277107	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1955.4817677736	Sum of GTIs [s]
			ontime3	1955.5228077173	Sum of GTIs [s]
			ontime6	1955.3586477041	Sum of GTIs [s]
			l1events	60160	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	10600	12701	11751	12534	12574
rejected events	8756	10243	10214	10992	11039
rejected %	82%	80%	86%	87%	87%

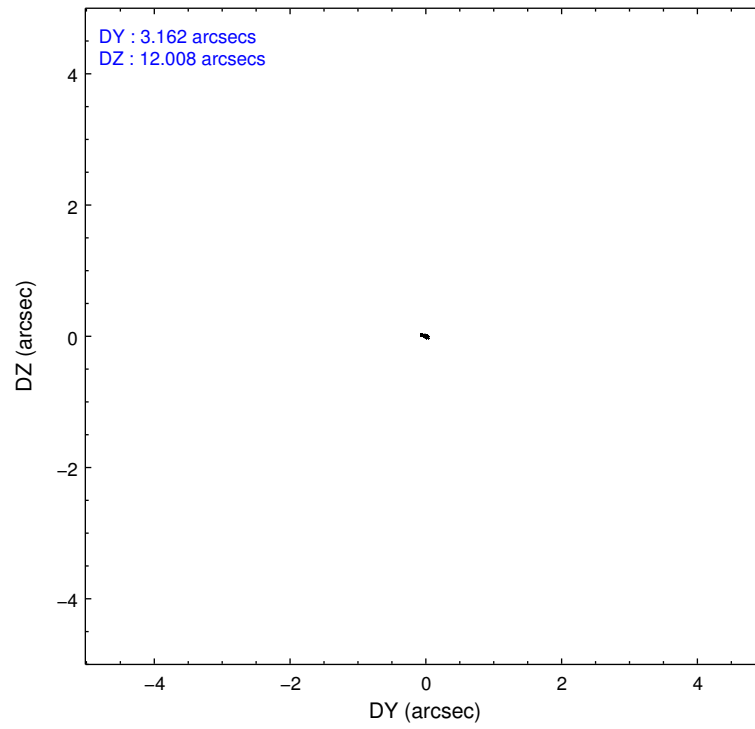
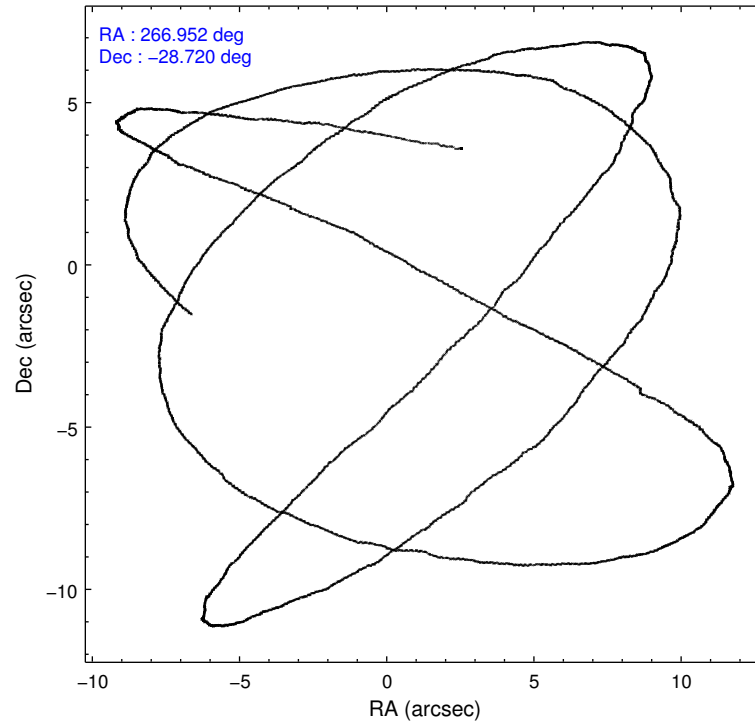
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	776	1320	687	602	600
	7%	10%	5%	4%	4%
grade 1 events	5	8	12	6	6
	0%	0%	0%	0%	0%
grade 2 events	391	416	316	307	331
	3%	3%	2%	2%	2%
grade 3 events	191	174	139	152	147
	1%	1%	1%	1%	1%
grade 4 events	169	175	147	159	143
	1%	1%	1%	1%	1%
grade 5 events	513	569	505	586	639
	4%	4%	4%	4%	5%
grade 6 events	319	376	256	326	317
	3%	2%	2%	2%	2%
grade 7 events	8236	9663	9689	10396	10391
	77%	76%	82%	82%	82%

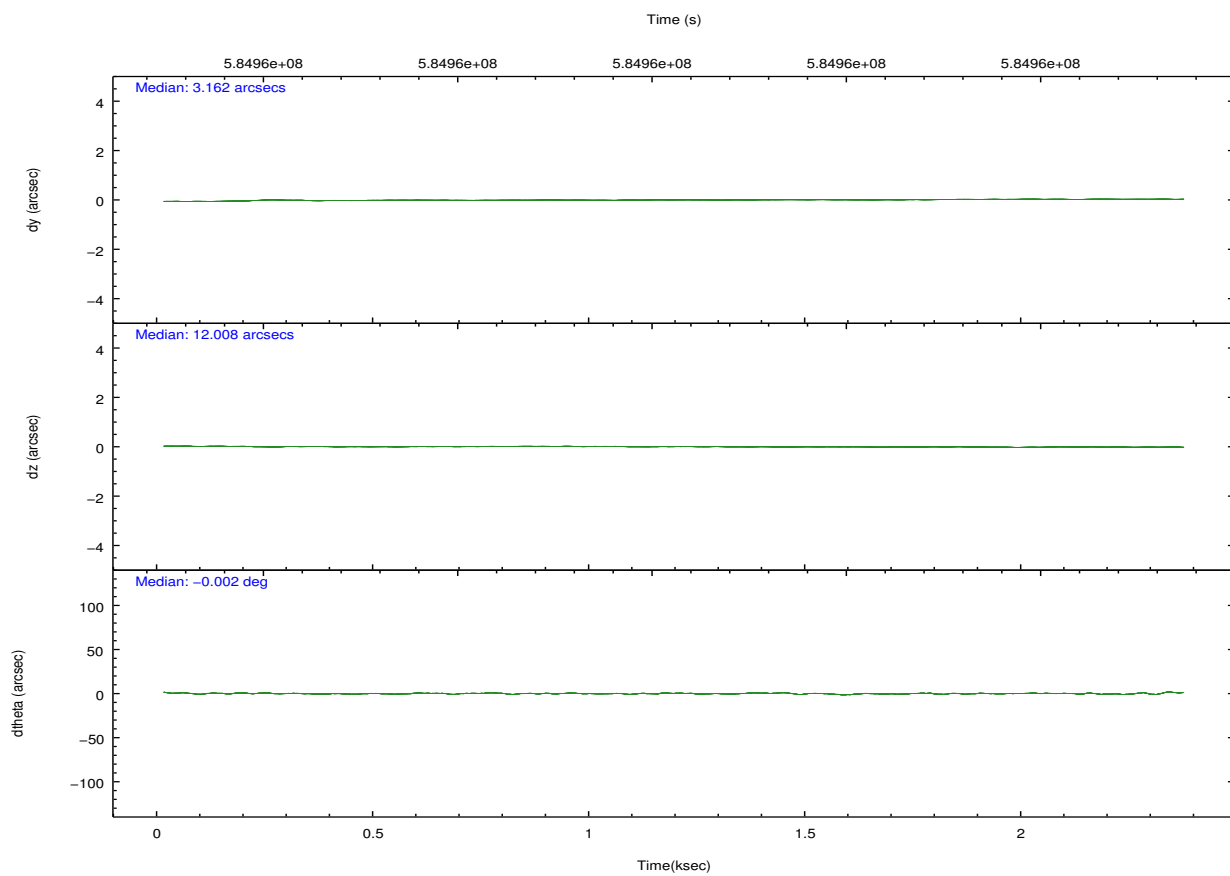
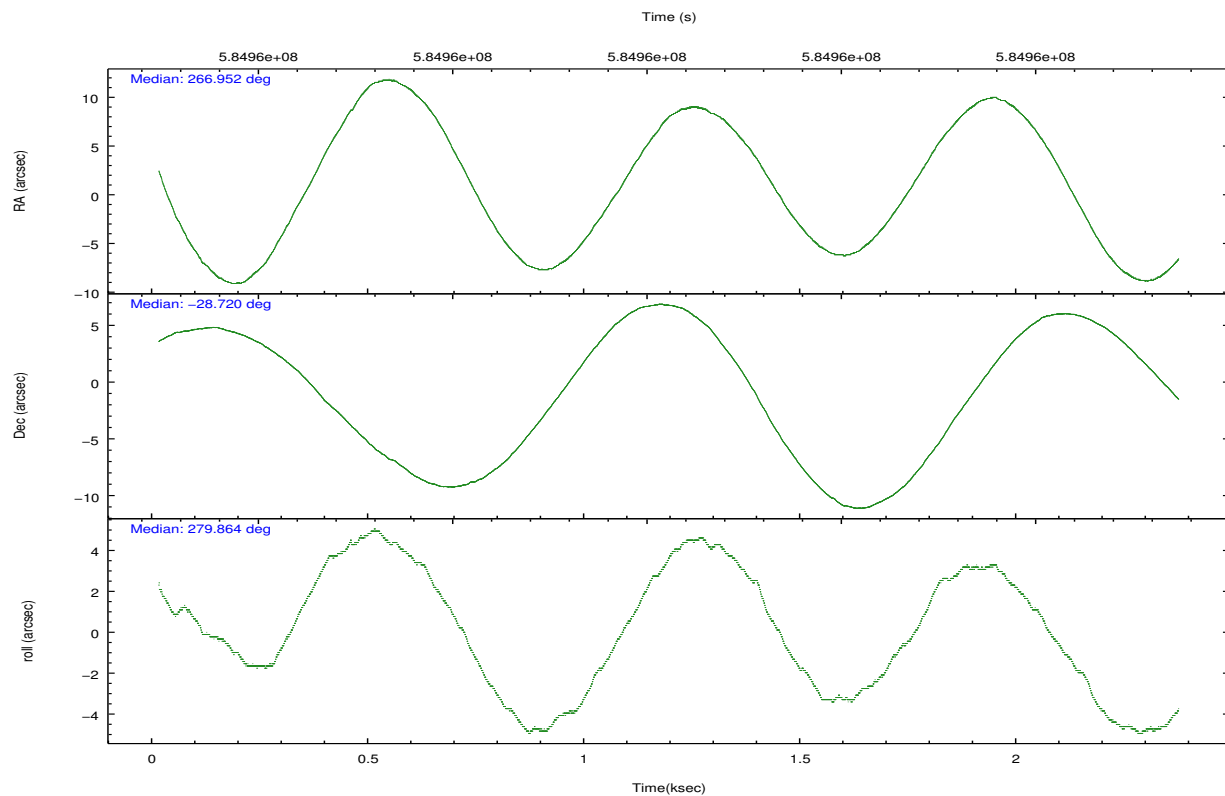
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	266.932068	266.9521362809075
[deg] Pointing Dec	-28.699848	-28.72073931700874
[deg] Pointing Roll	279.650009	279.8683346851483
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	584960070.184000	584959694.1064301
Observation start date	2016-07-15T08:53:22	2016-07-15T08:48:14
[s] Observation end time (MET)	584962250.184000	584962384.21908
Observation end date	2016-07-15T09:29:42	2016-07-15T09:33:04
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
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	3.1

## 2.3 Aspect





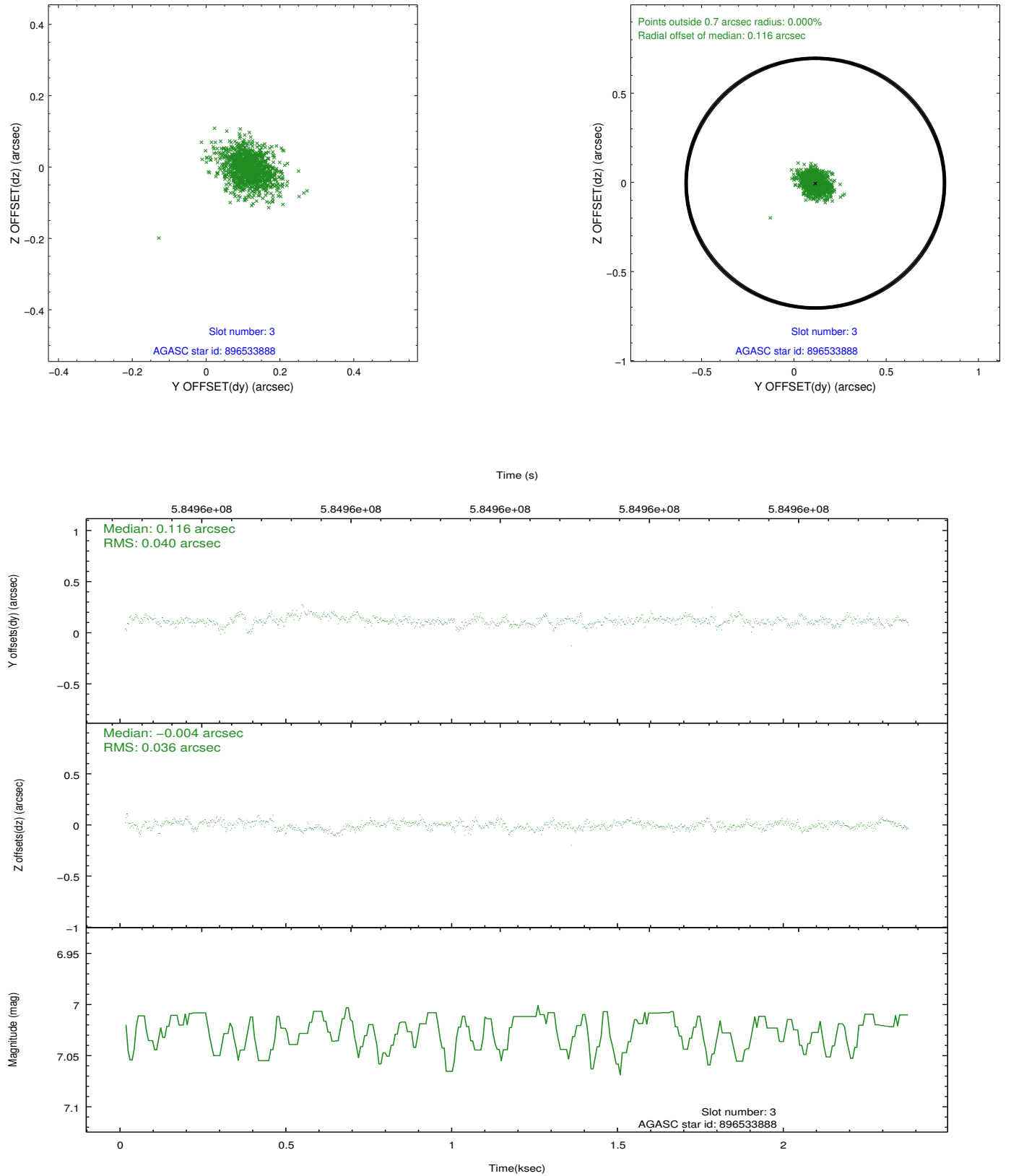
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	576	0.067	-0.108	0.007	0.013	0.000000	0.000000	936.69	-835.64
1	FID		ACIS-I-4	7.19	576	0.207	0.067	0.007	0.011	0.000000	0.000000	2158.42	1062.96
2	FID		ACIS-I-5	7.22	577	-0.371	0.112	0.006	0.011	0.000000	0.000000	-1808.20	1063.98
3	GUIDE	used	896533888	7.02	1152	0.116	-0.004	0.055	0.096	266.666434	-29.392757	2321.82	-1238.98
4	GUIDE	used	896538696	6.78	1153	0.021	0.110	0.077	0.114	266.298470	-28.325572	-1656.39	-1754.97
5	GUIDE	used	896539744	8.29	1152	-0.051	0.078	0.077	0.120	266.154264	-28.178023	-2258.11	-2120.84
6	GUIDE	used	896540528	8.25	1152	0.096	-0.073	0.067	0.112	267.368305	-29.314773	2414.05	978.09
7	GUIDE	used	896532608	8.51	1152	-0.178	-0.108	0.088	0.147	267.503801	-28.129741	-1711.95	2134.07

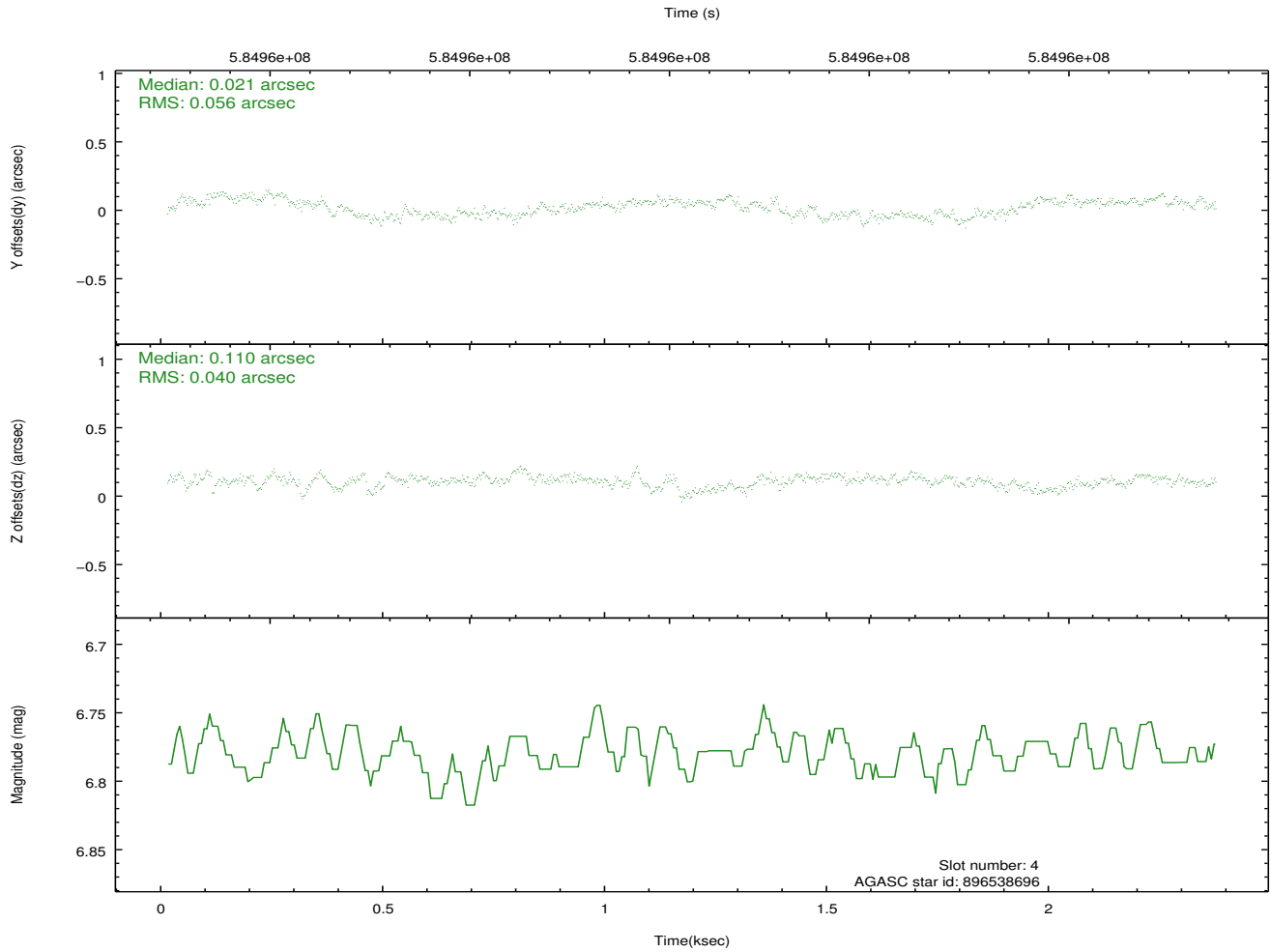
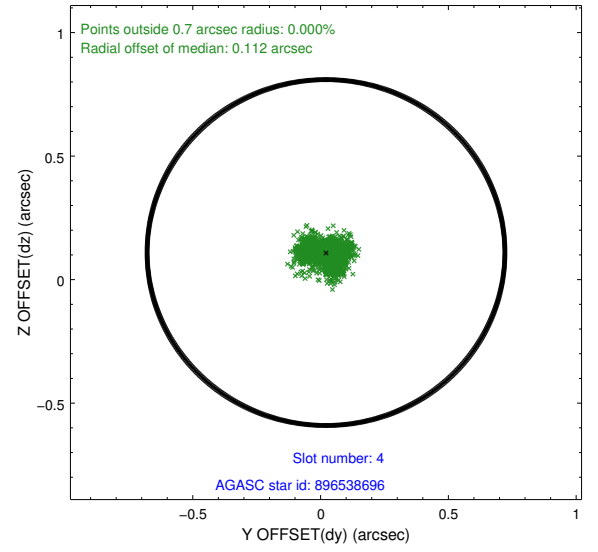
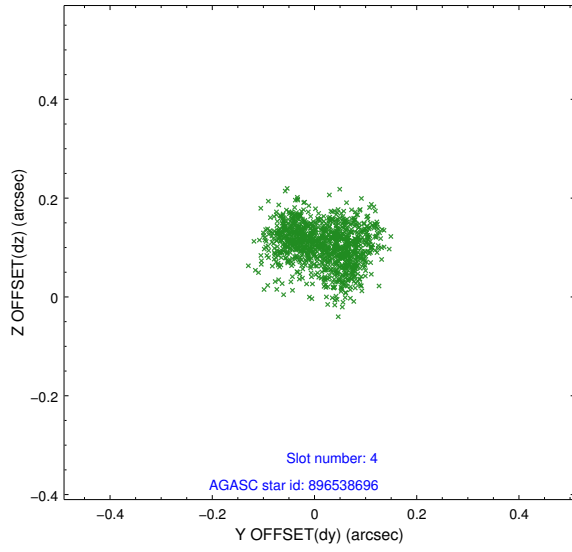


## 2.4 Star Slots

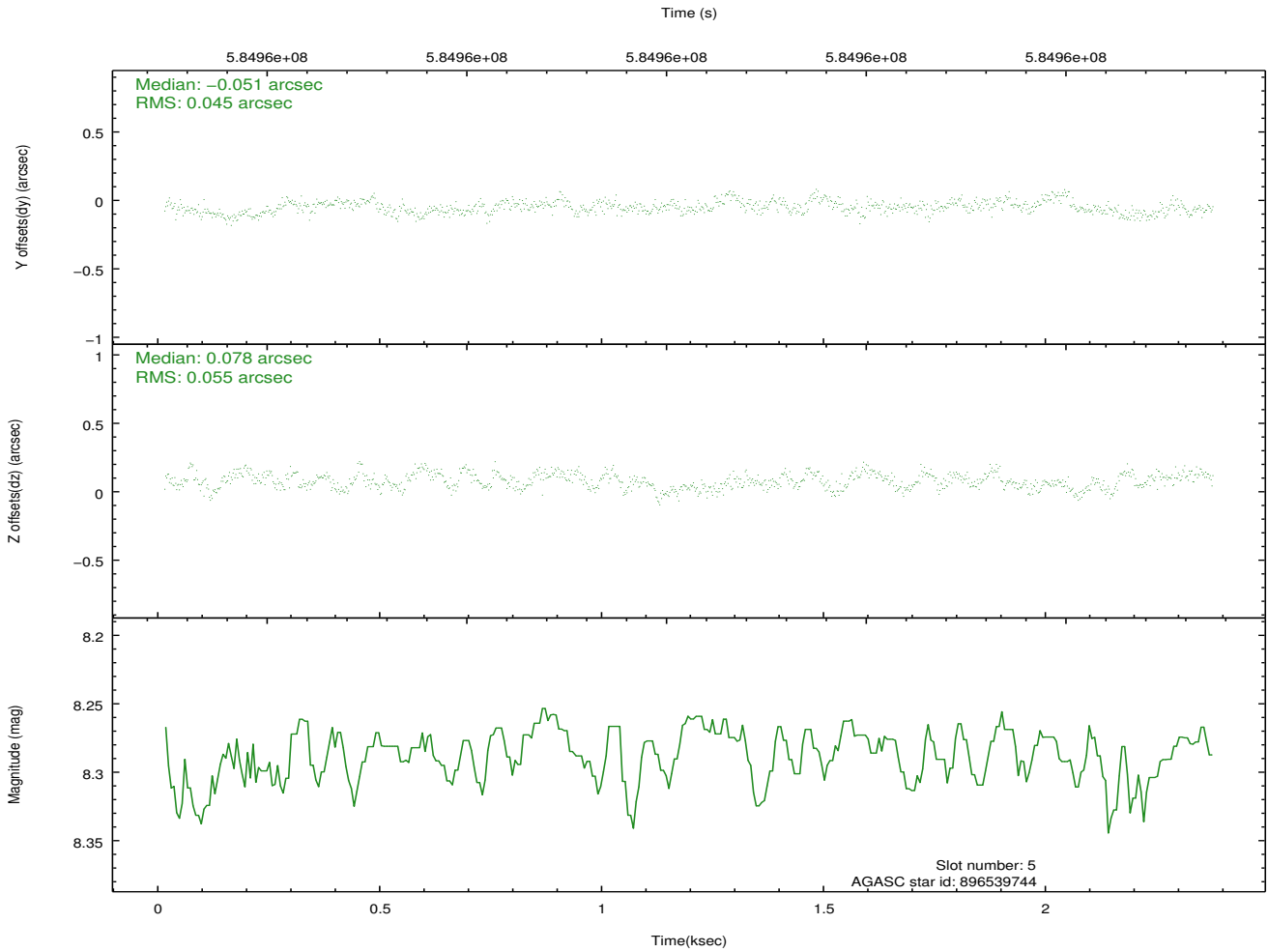
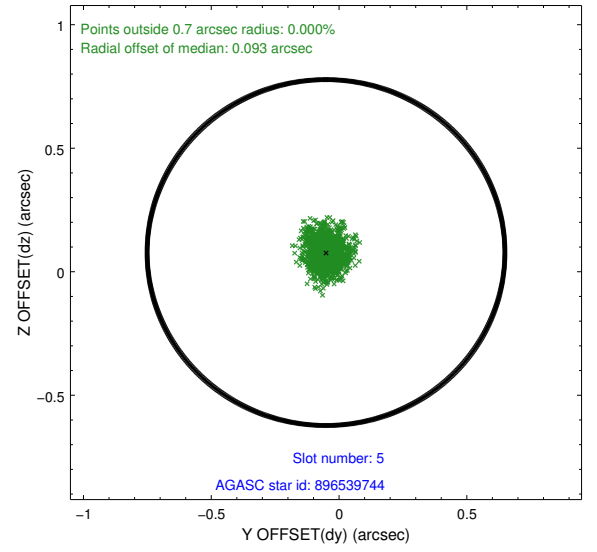
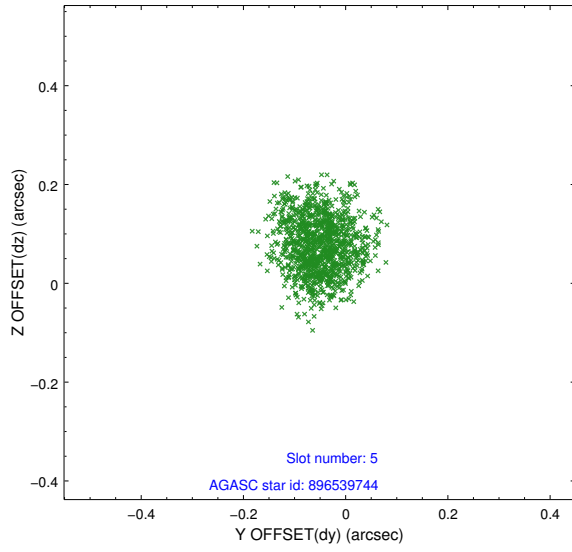
### 2.4.1 Slot 3



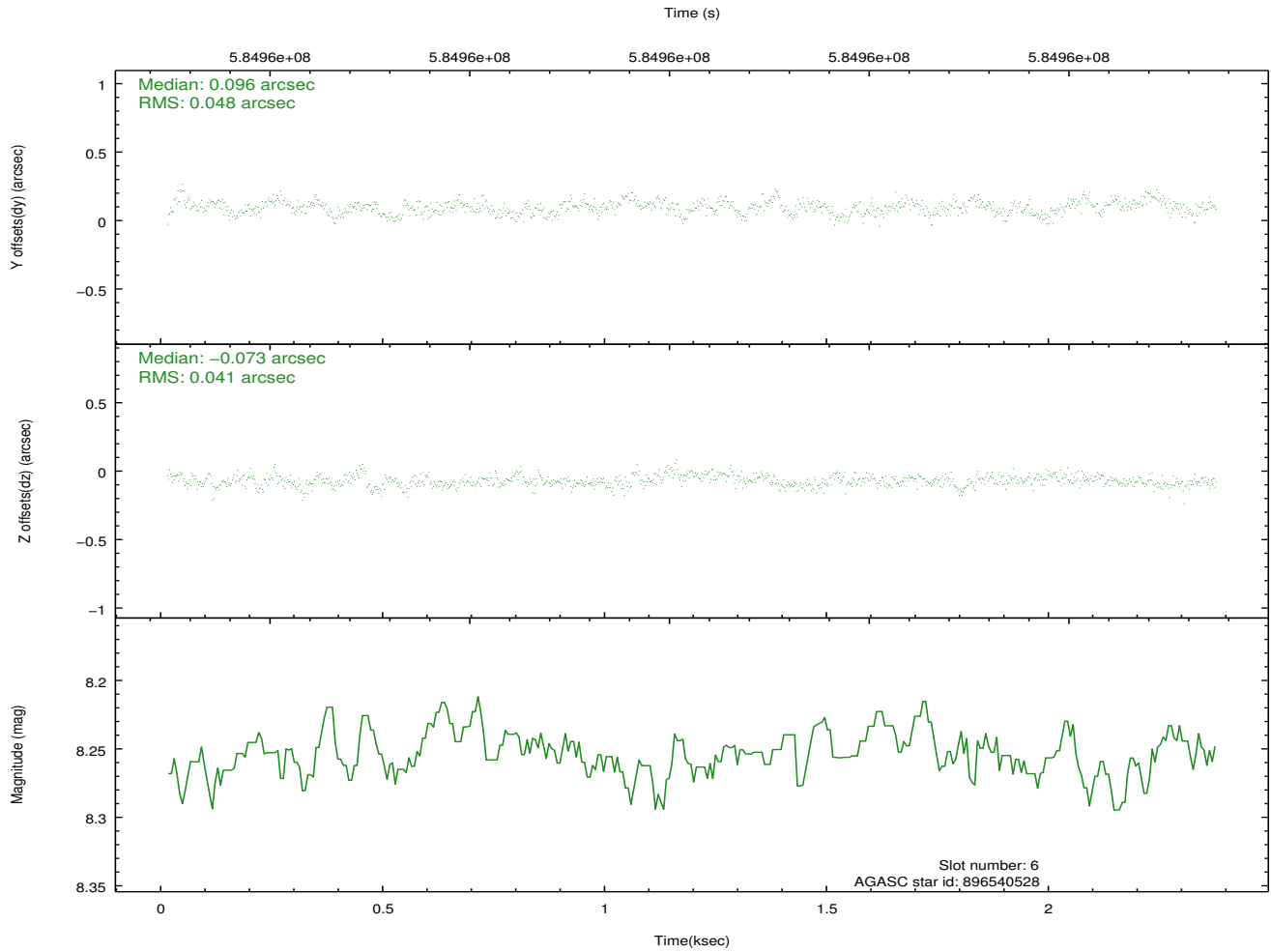
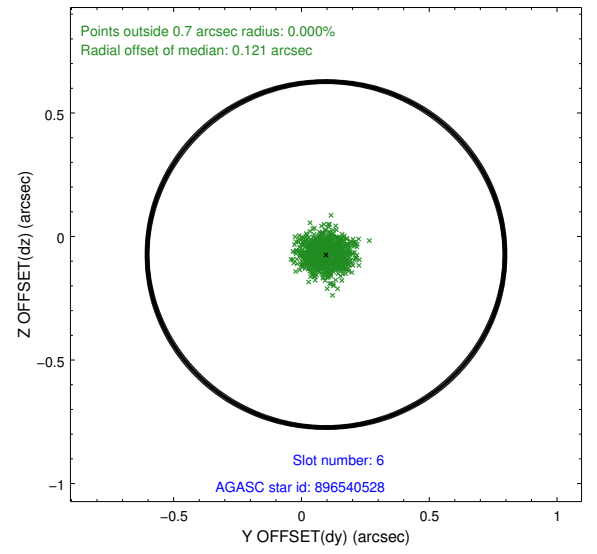
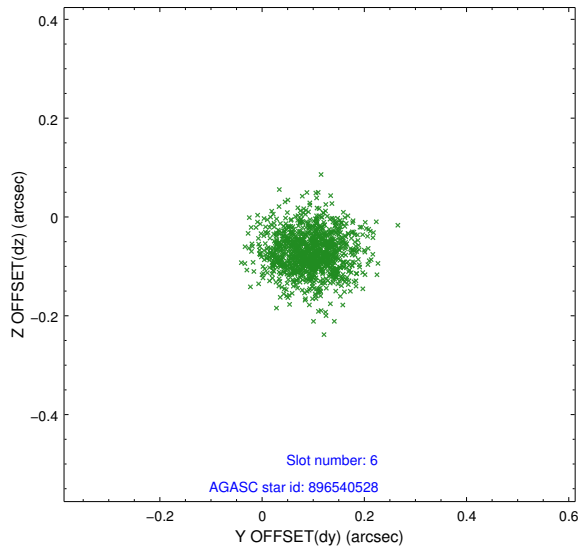
## 2.4.2 Slot 4



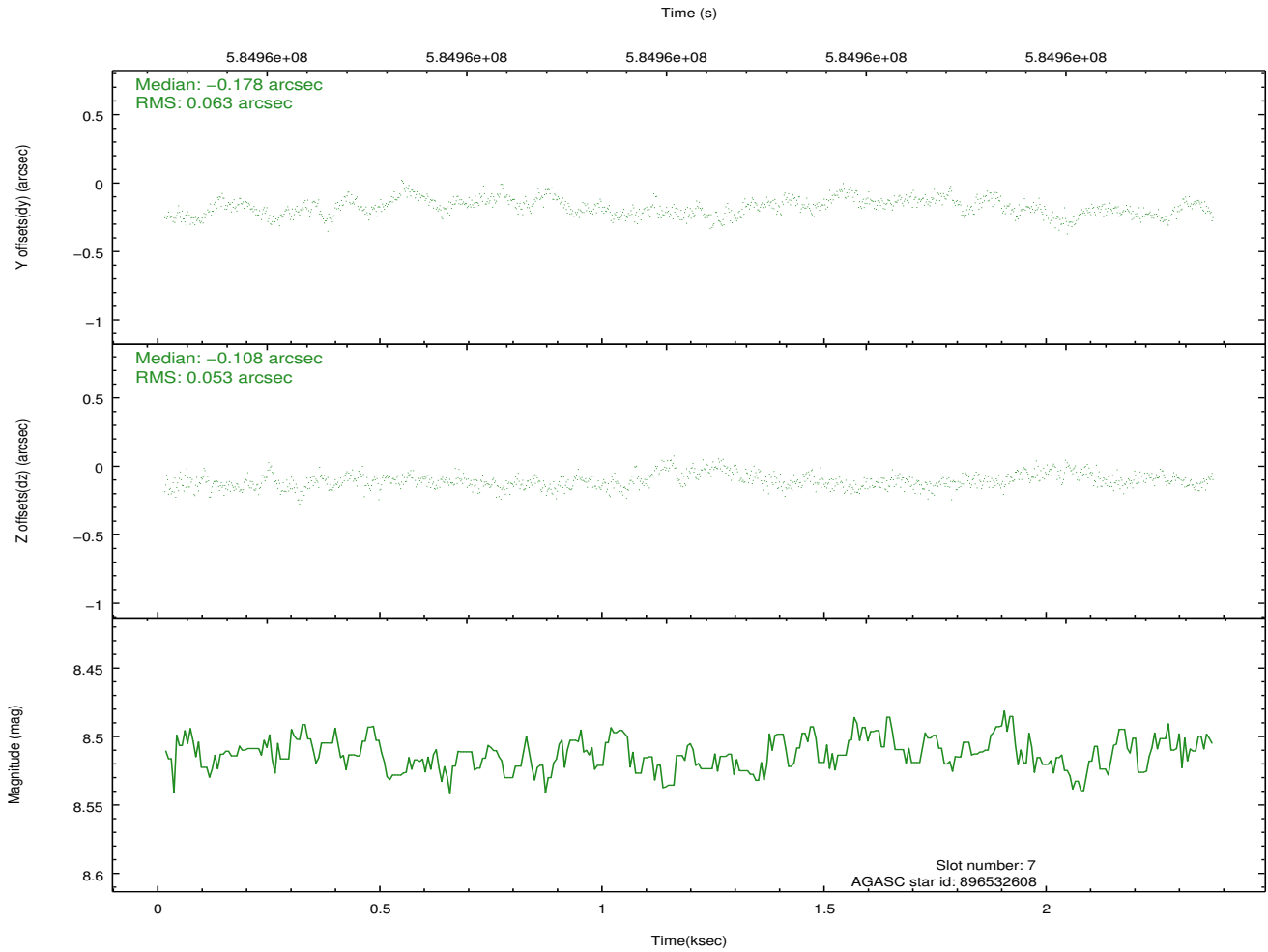
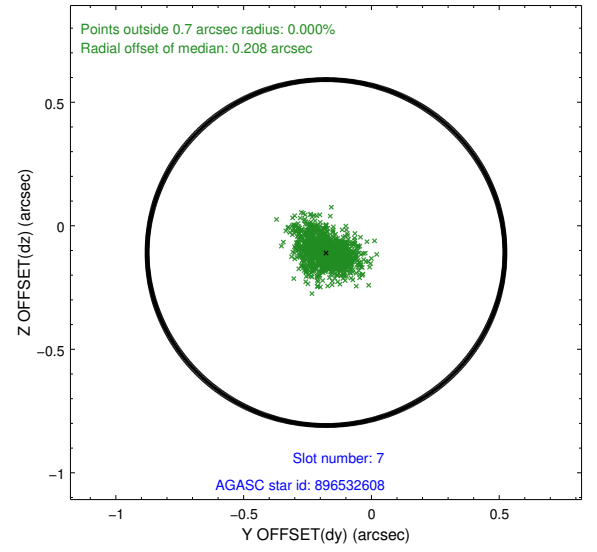
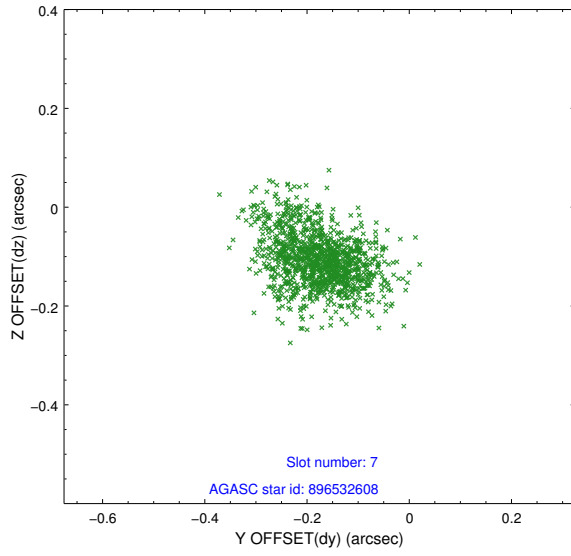
### 2.4.3 Slot 5



## 2.4.4 Slot 6

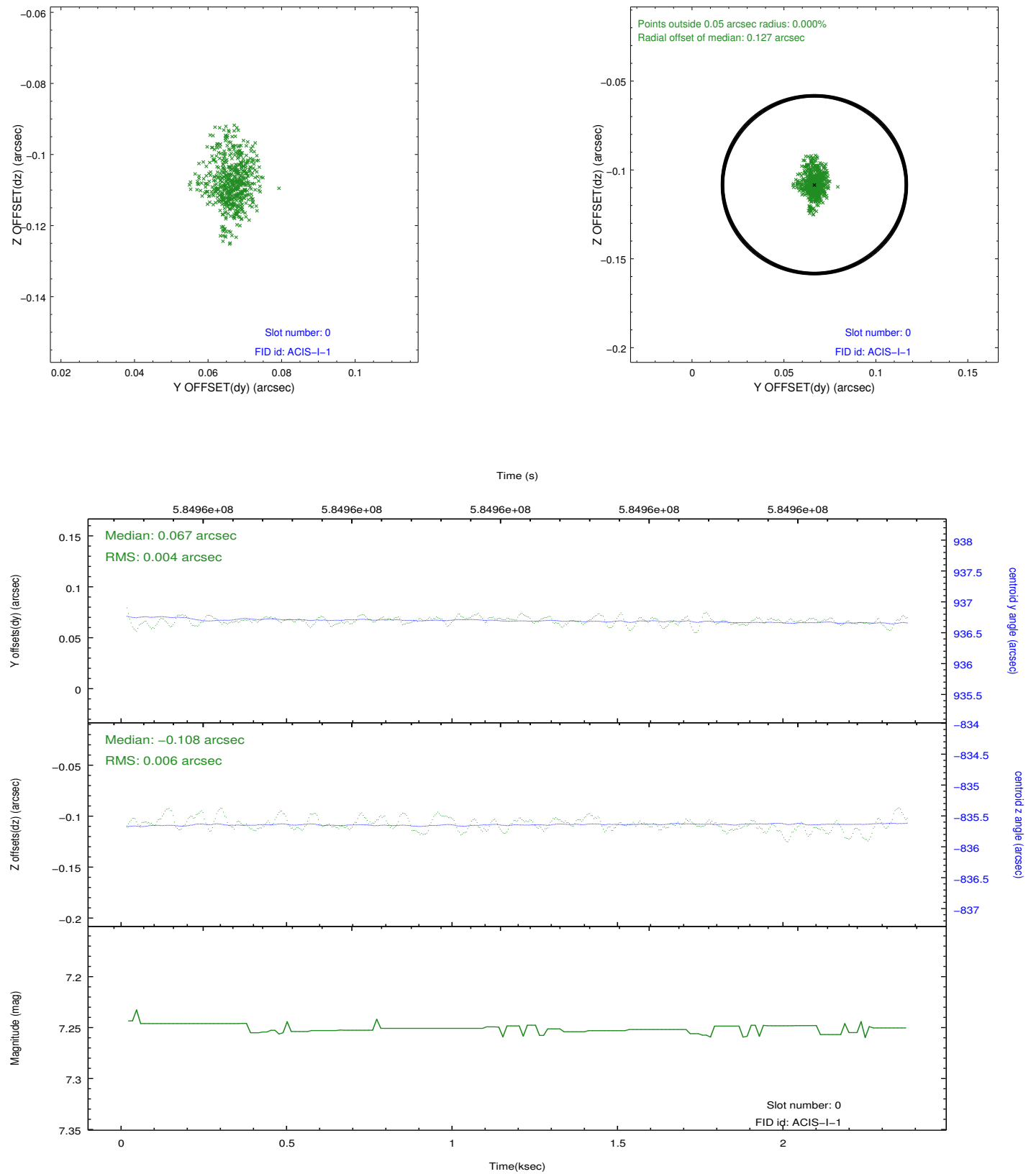


## 2.4.5 Slot 7

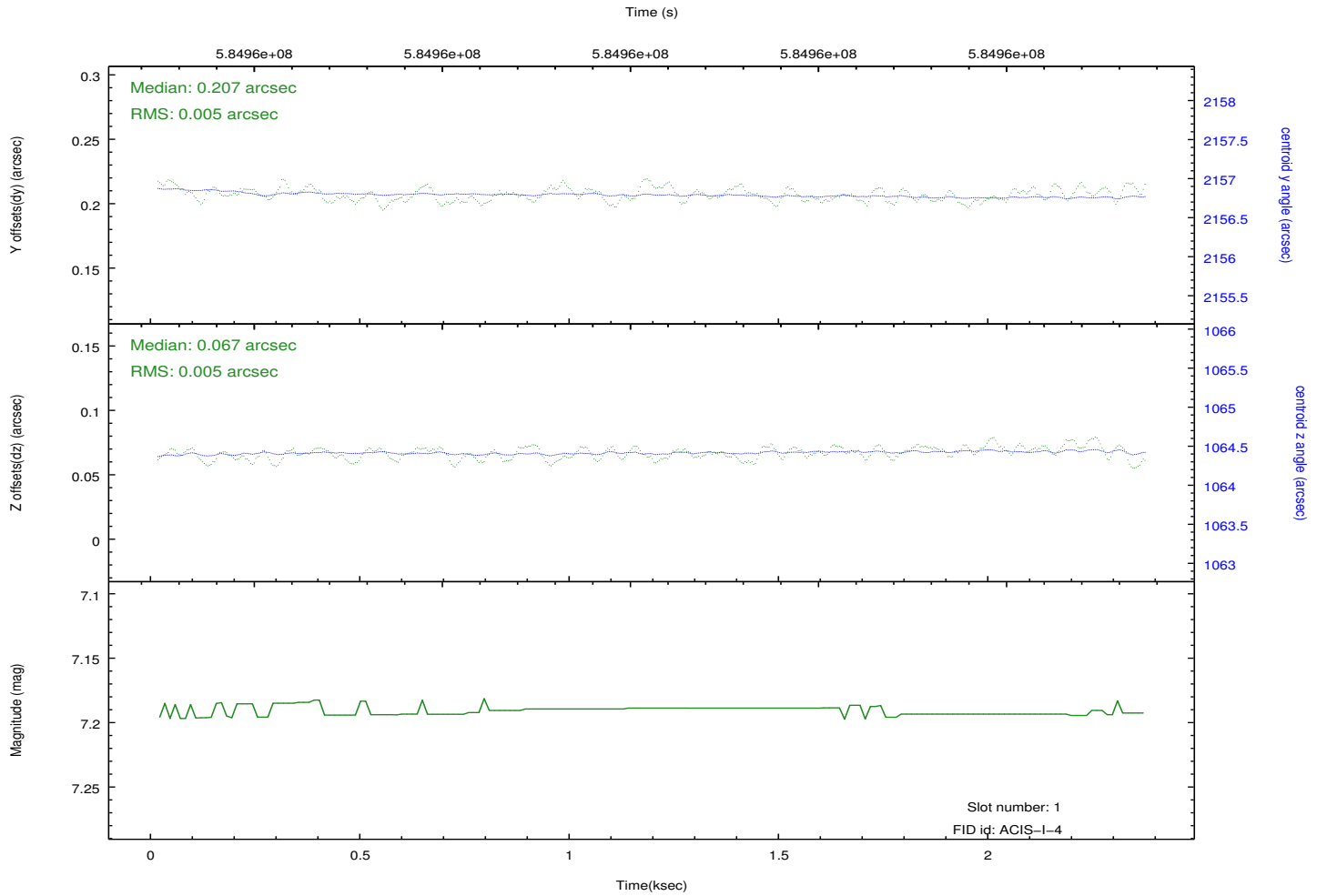
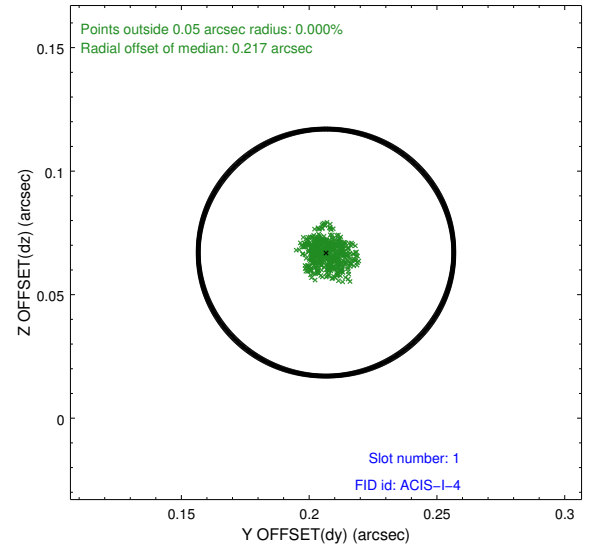
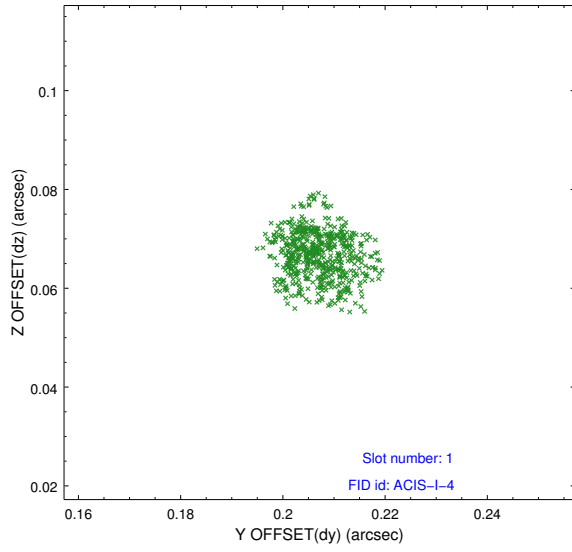


## 2.5 FID Slots

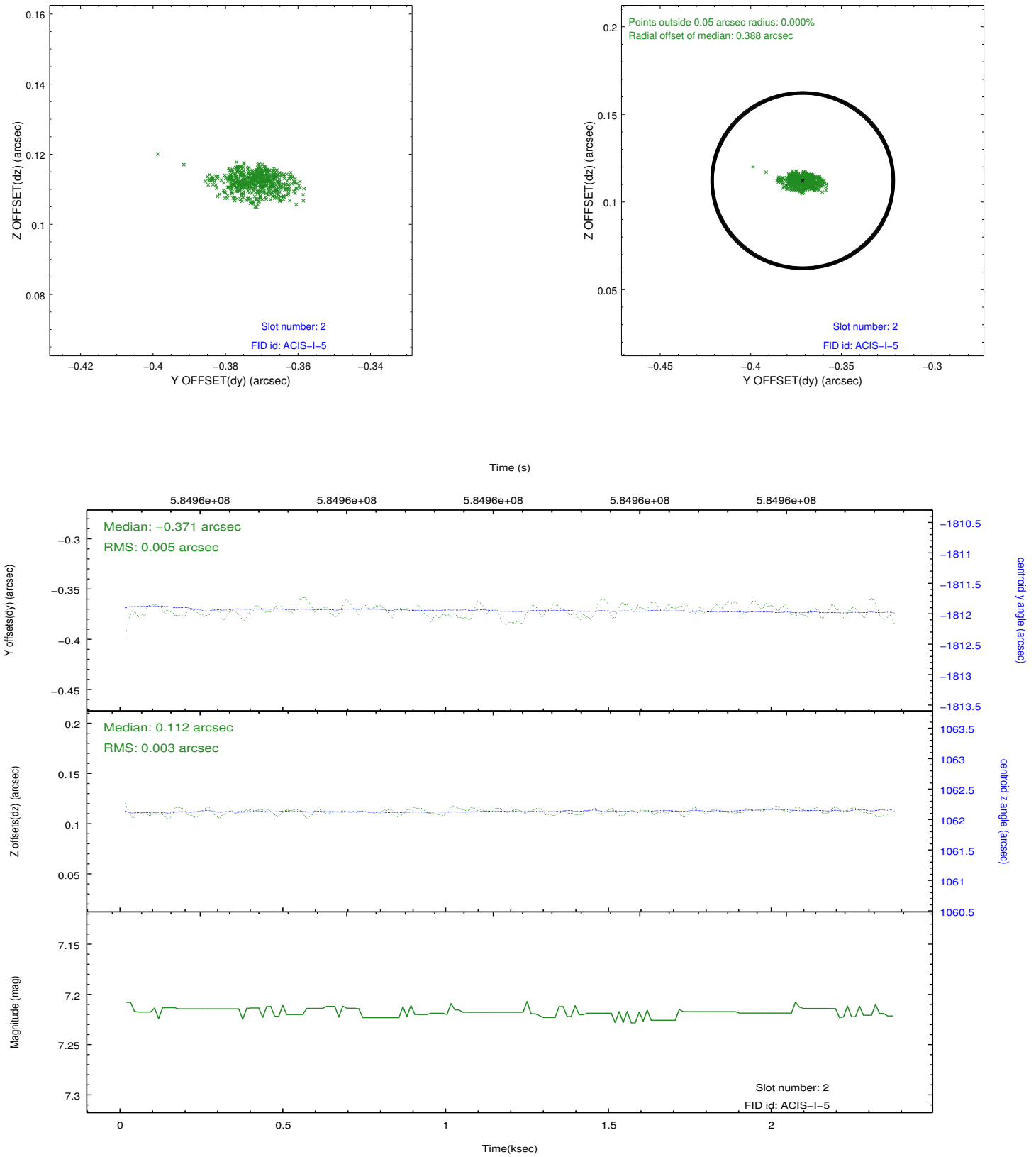
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.07.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9555228077173

### A.2 Comments