

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10642 - L2 Version 2  
Chandra X-Ray Center

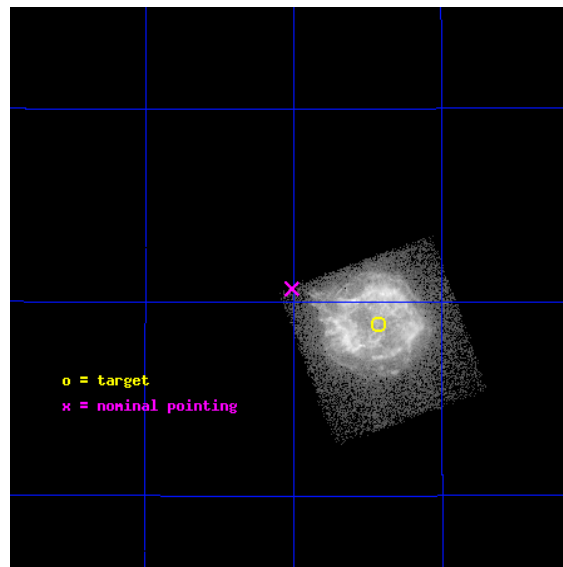
L2 Processing Date : Jun 6 2012

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# 1 Front

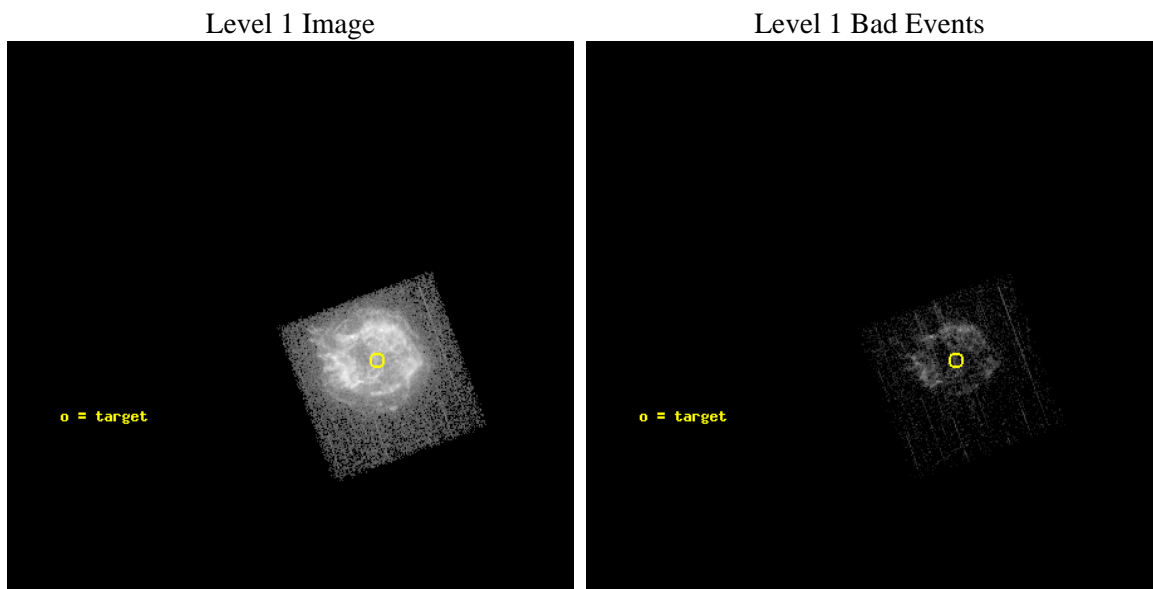
seq_num	590481	Sequence number
obs_id	10642	Observation id
title	AO-10 Observations of the Standard Candles Cas A and G21.5-09.	Pro
observer	Dr. CXC Calibration	Principal investigator
object	Cas A[I3,-120,-3.0,3.5,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA [deg]
dec_targ	58.814833	Observer's specified target Dec [deg]
ra_nom	351.00285523451	Nominal RA [deg]
dec_nom	58.845142074191	Nominal Dec [deg]
roll_nom	69.881648021854	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1802.9122092724	Sum of GTIs [s]
livetime	1779.3558339736	Livetime [s]
ontime0	2139.0000164509	Sum of GTIs [s]
ontime1	2139.0000164509	Sum of GTIs [s]
ontime2	2139.0000164509	Sum of GTIs [s]
ontime3	1802.9122092724	Sum of GTIs [s]
l2events	363781	Number of level 2 events



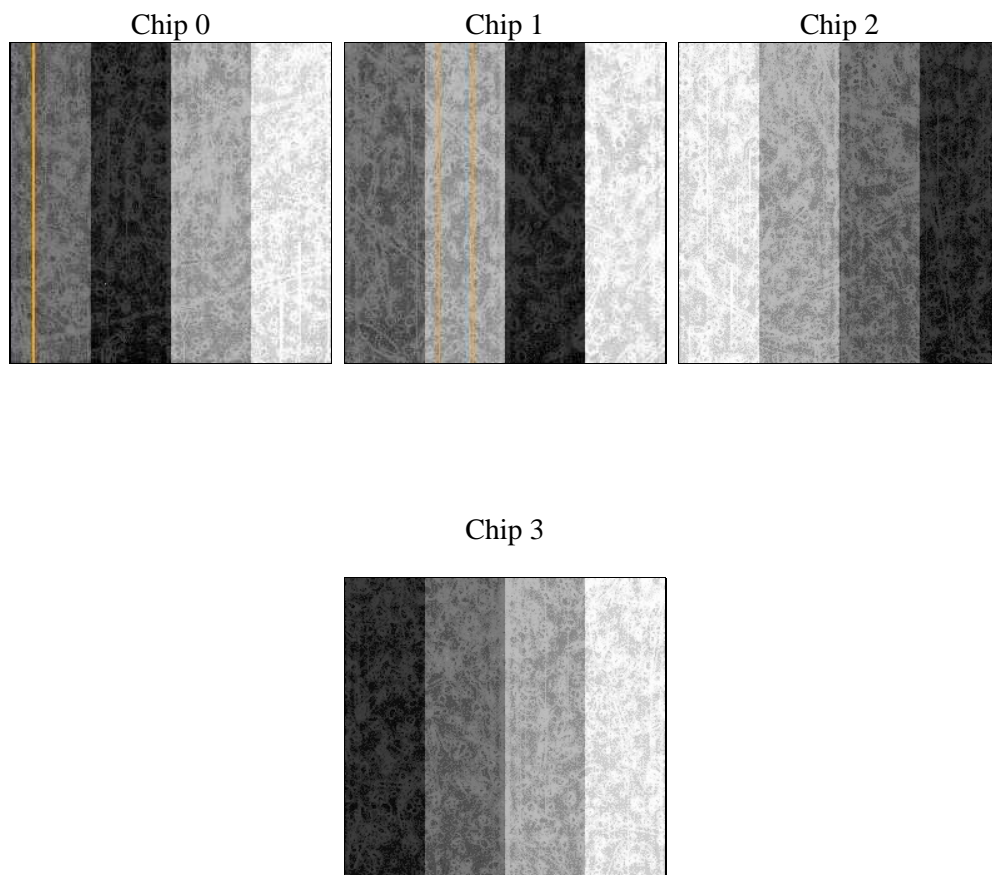
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1802.9122092724	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime0	2139.0000164509	Sum of GTIs [s]
date	2012-06-06T23:42:29	Date and time of file creation	ontime1	2139.0000164509	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	2139.0000164509	Sum of GTIs [s]
			ontime3	1802.9122092724	Sum of GTIs [s]
			l1events	450837	Number of level 1 events

### 2.1.4 Events

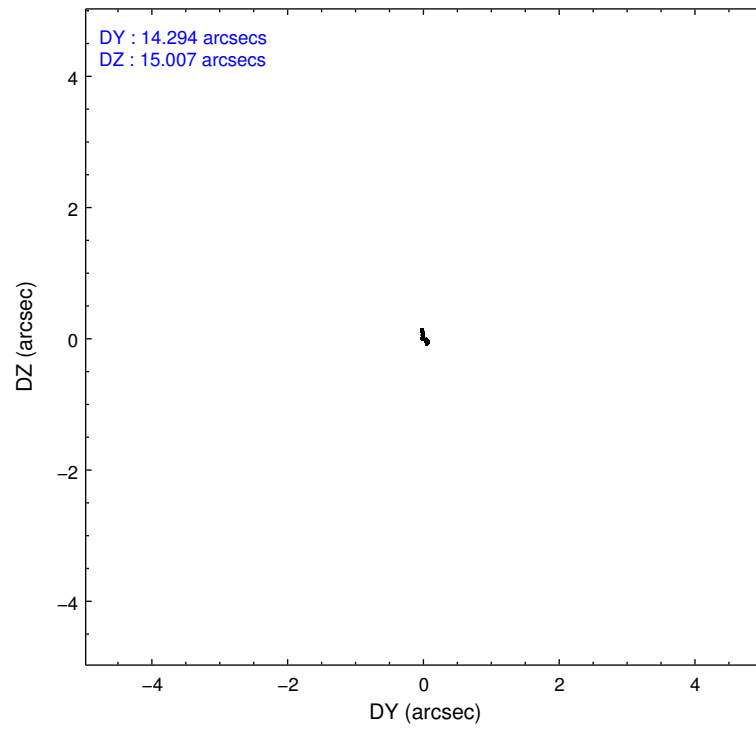
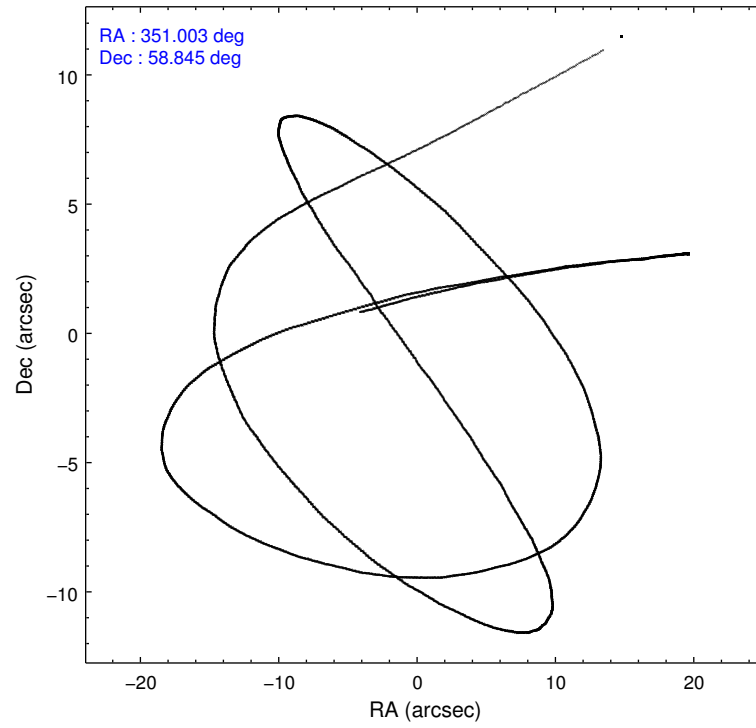
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	0	0	0	450837
rejected events	0	0	0	75992
rejected %	0%	0%	0%	16%

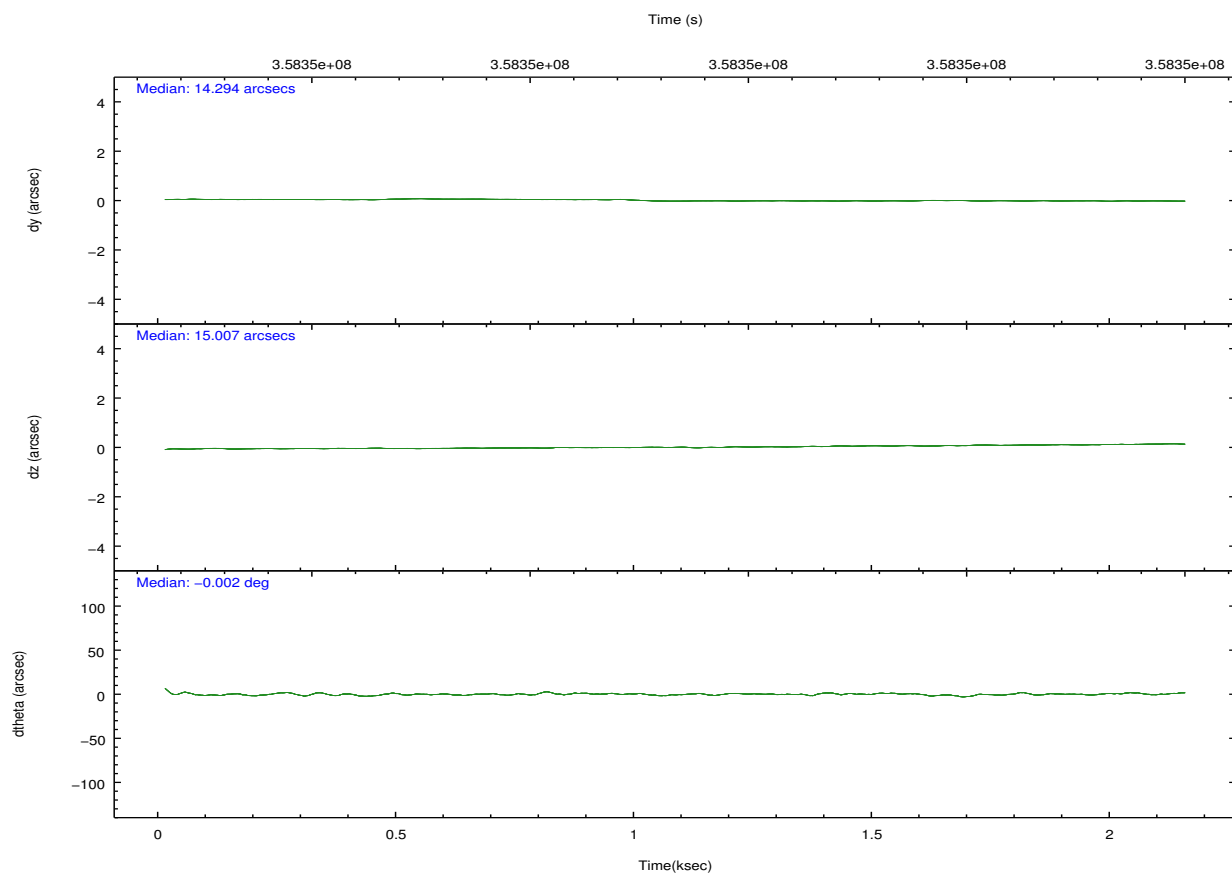
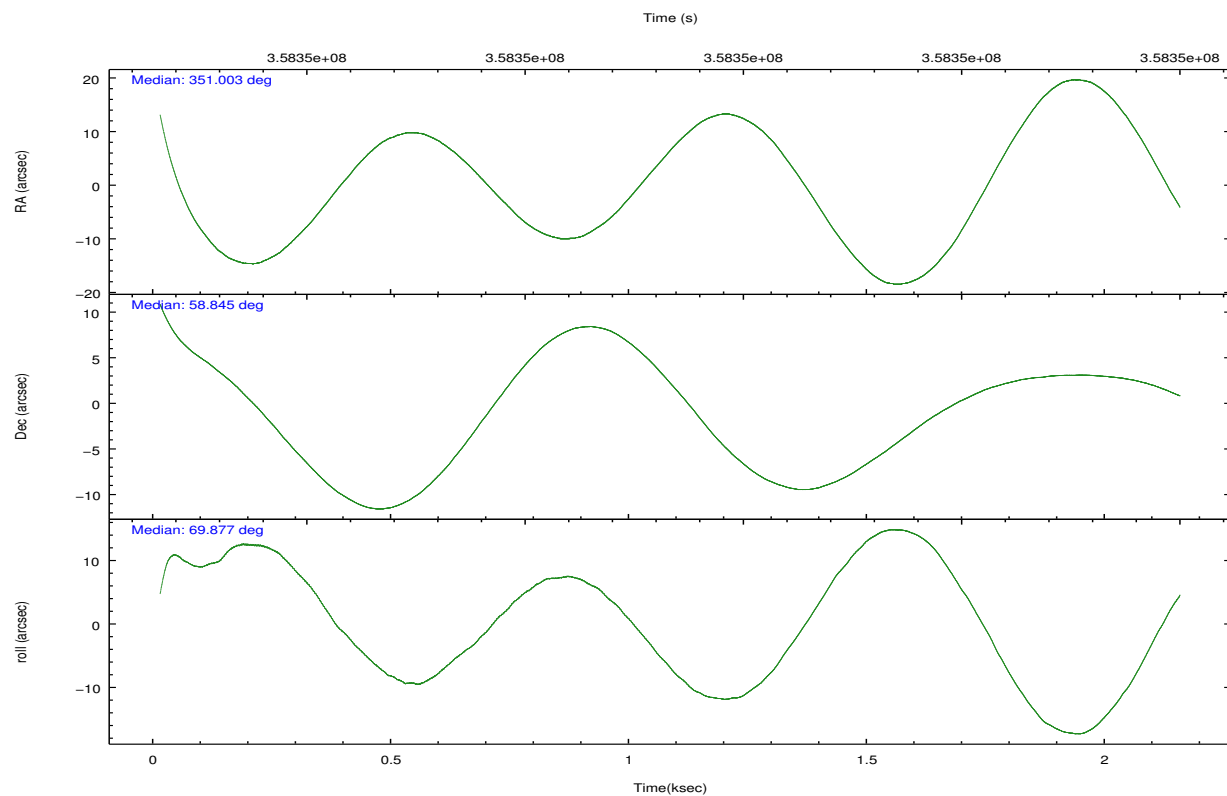
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	0	0	0	334246
	0%	0%	0%	74%
grade 1 events	0	0	0	5804
	0%	0%	0%	1%
grade 2 events	0	0	0	42262
	0%	0%	0%	9%
grade 3 events	0	0	0	13418
	0%	0%	0%	2%
grade 4 events	0	0	0	13473
	0%	0%	0%	2%
grade 5 events	0	0	0	4189
	0%	0%	0%	0%
grade 6 events	0	0	0	8972
	0%	0%	0%	1%
grade 7 events	0	0	0	28473
	0%	0%	0%	6%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	351.012078	351.0028552345105	Subarray requested	NONE	NONE
[deg] Pointing Dec	58.817969	58.84514207419067	Alternating exposures requested	N	N
[deg] Pointing Roll	69.665015	69.88164802185382	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	349833666.184000	349833666.184000			
[s] Window stop time (MET)	360115266.184000	360115266.184000			
[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)	358349920.184000	358348694.04097			
Observation start date	2009-05-10T13:37:34	2009-05-10T13:18:14			
[s] Observation end time (MET)	358351920.184000	358352071.92864			
Observation end date	2009-05-10T14:10:54	2009-05-10T14:14:31			
Read mode	TIMED	TIMED			

## 2.3 Aspect





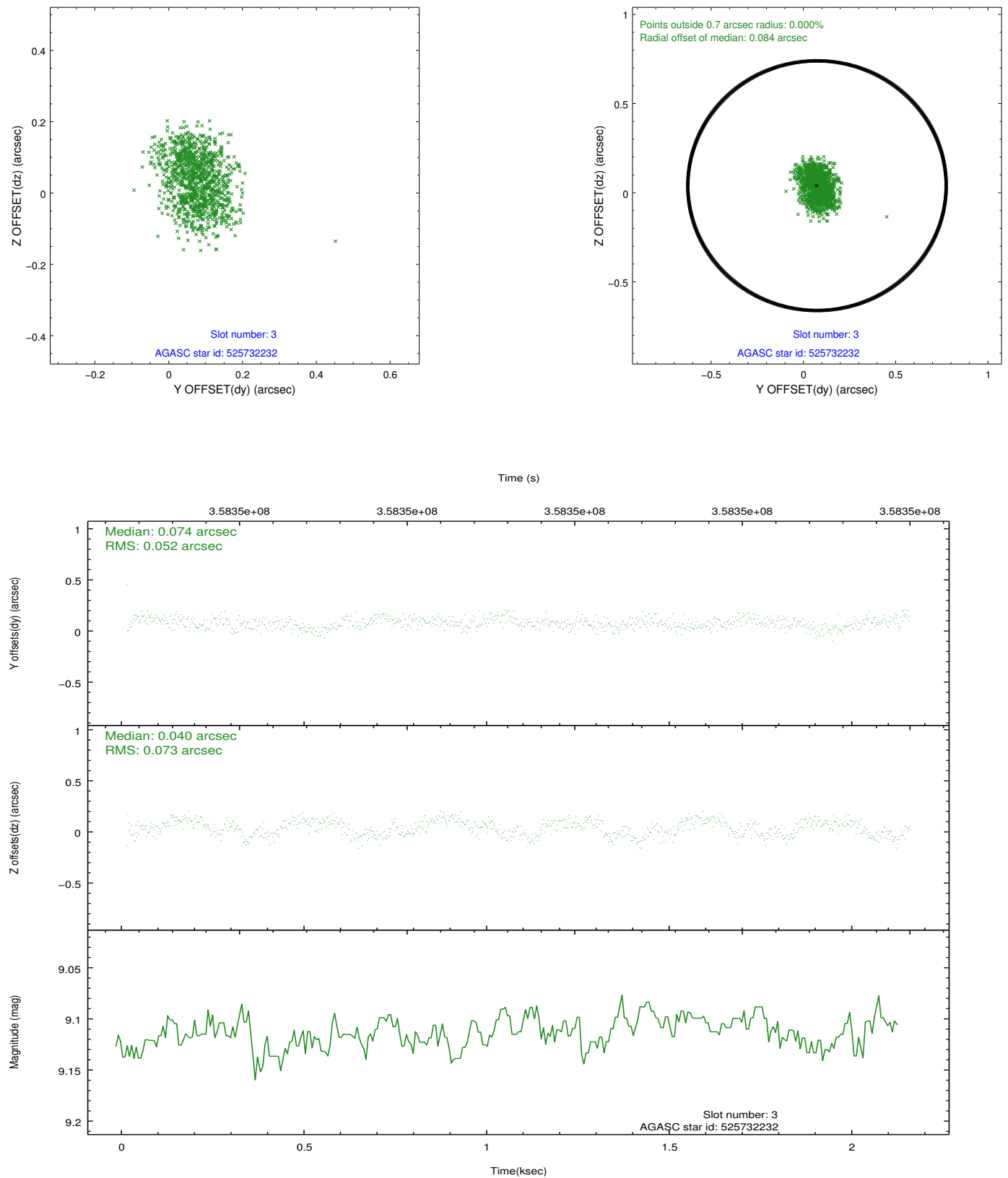
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.08	523	-0.033	0.037	0.010	0.017	0.000000	0.000000	925.14	-838.58
1	FID	ACIS-I-2	6.99	523	-0.169	-0.076	0.007	0.011	0.000000	0.000000	-767.40	-846.67
2	FID	ACIS-I-4	6.99	523	0.104	0.107	0.007	0.014	0.000000	0.000000	2143.76	1059.76
3	GUIDE	525732232	9.11	1045	0.074	0.040	0.096	0.148	351.669550	58.757012	225.82	-1226.36
4	GUIDE	525732488	8.40	1047	0.092	-0.025	0.072	0.117	350.087090	58.516915	-1609.27	1257.09
5	GUIDE	525609504	9.04	1043	0.215	-0.007	0.085	0.141	349.896632	58.356658	-2274.63	1406.00
6	GUIDE	525735456	7.01	1047	-0.227	-0.154	0.055	0.083	350.628183	59.307249	1405.61	1275.98
7	GUIDE	525737896	7.02	1046	-0.148	0.143	0.048	0.084	352.012180	59.335036	2397.56	-1068.47

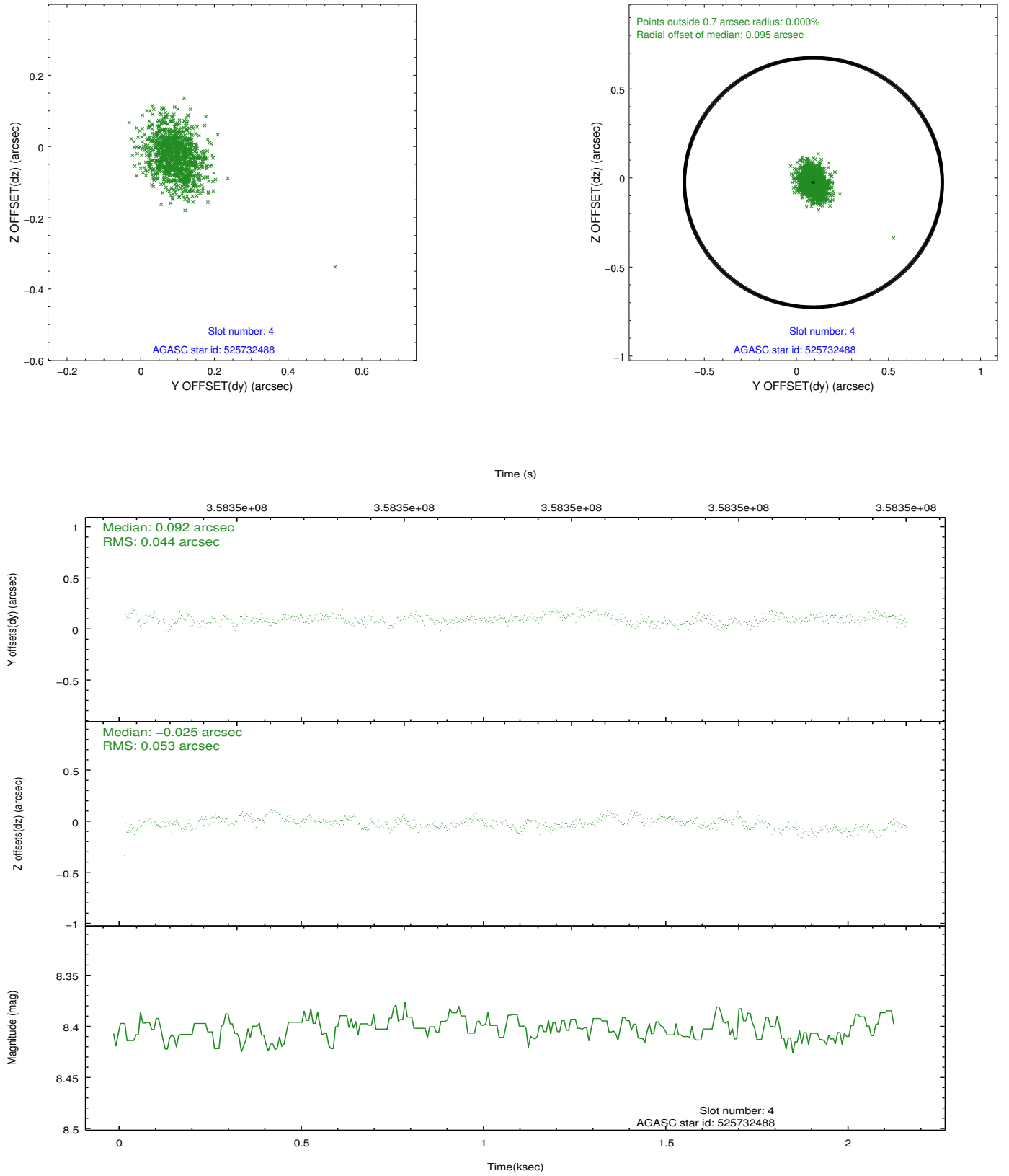


## 2.4 Star Slots

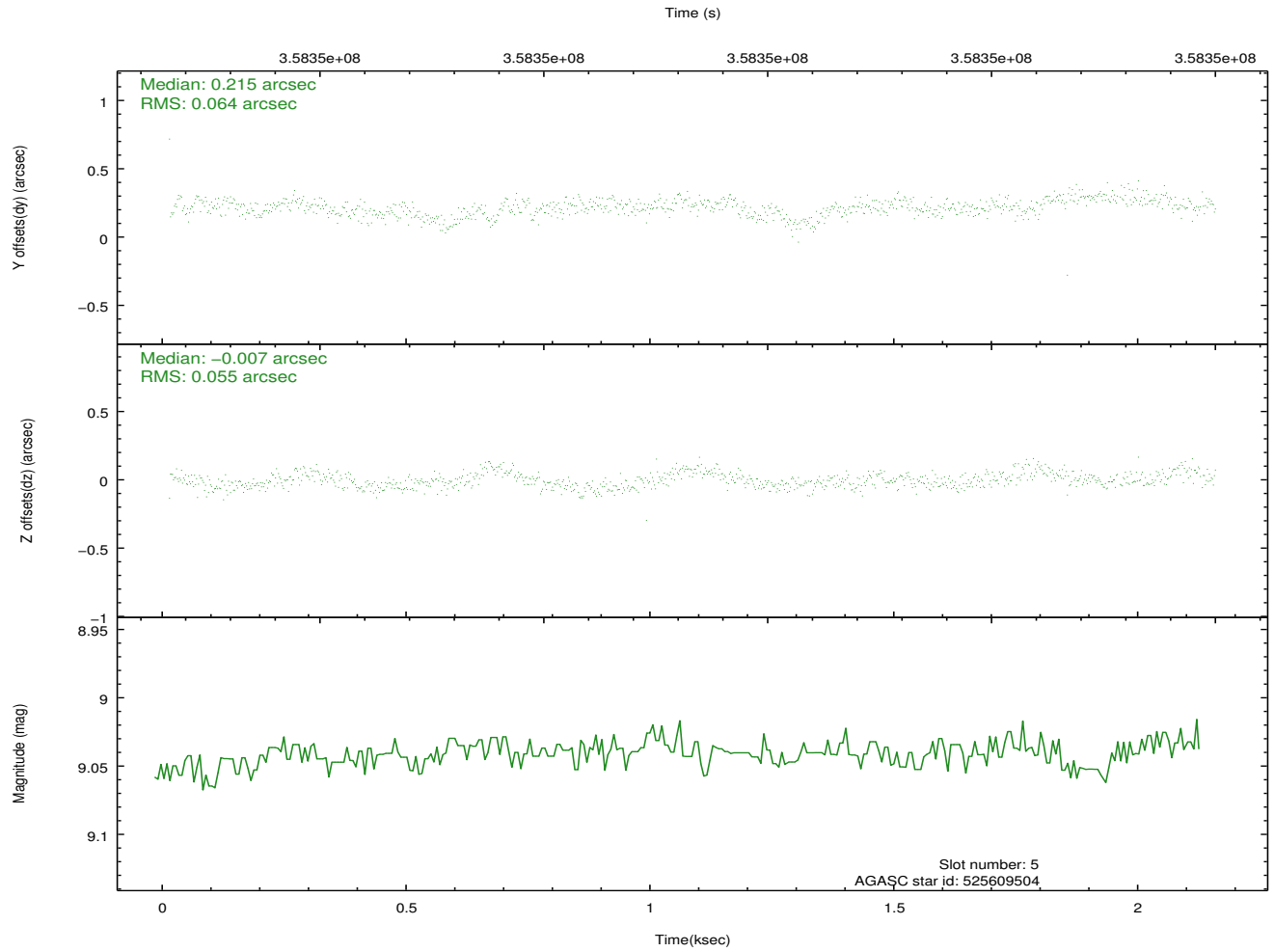
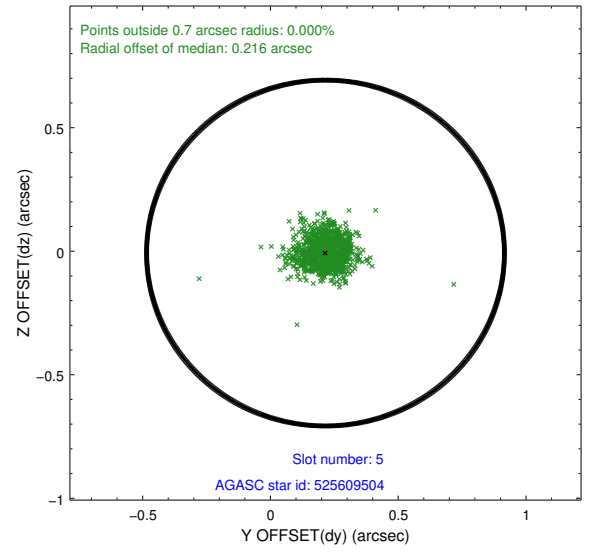
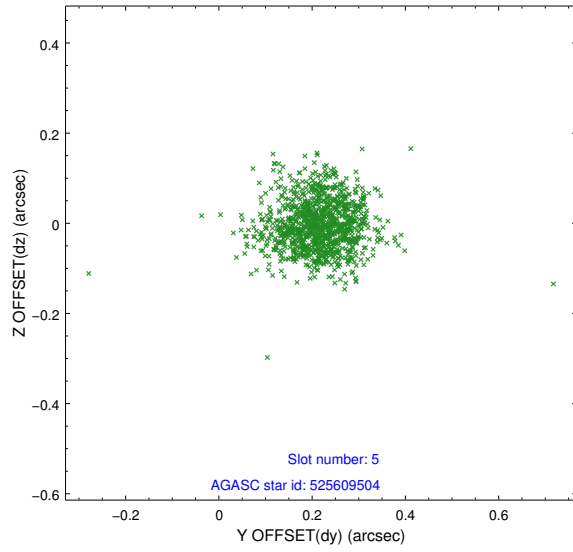
### 2.4.1 Slot 3



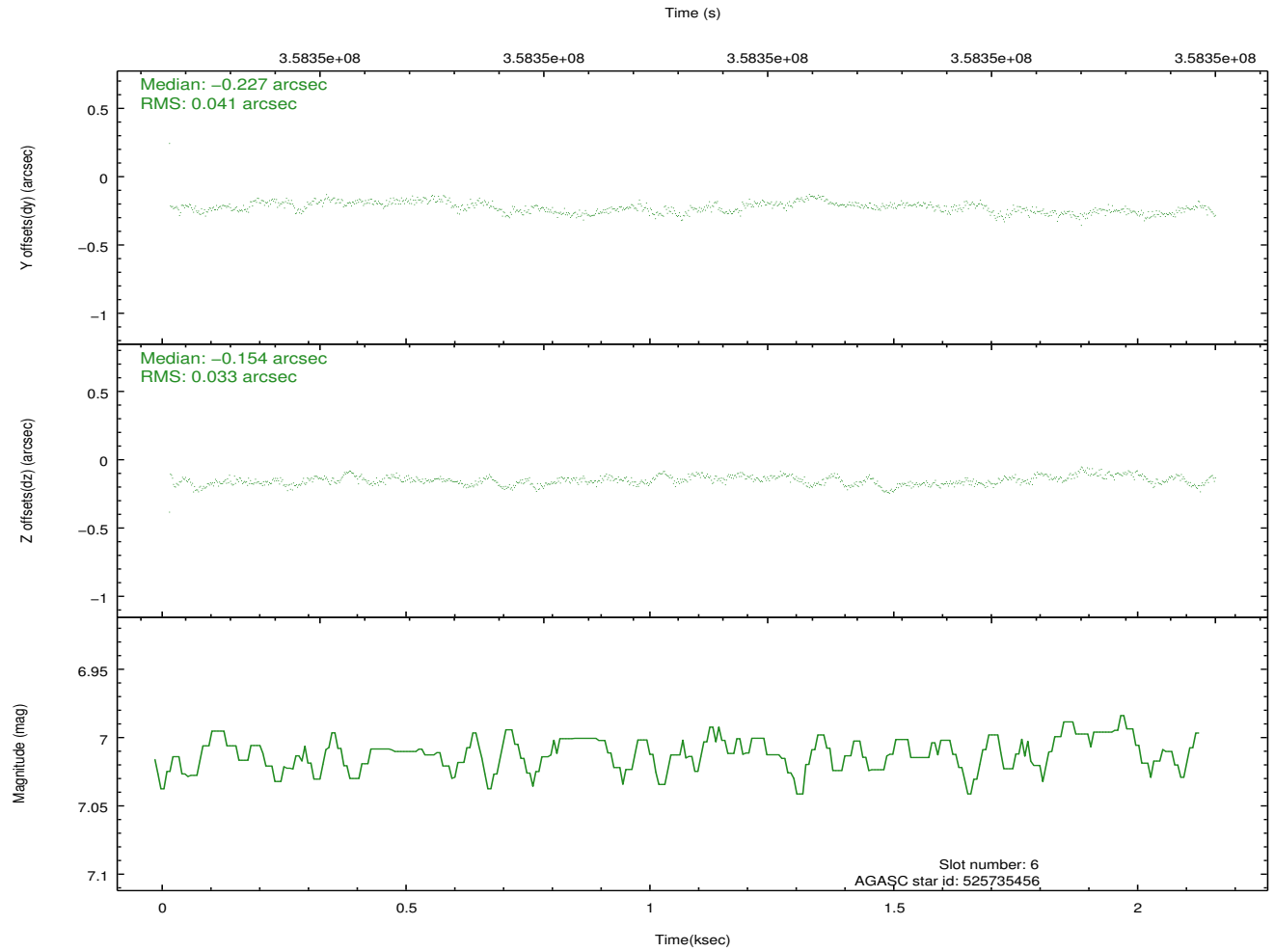
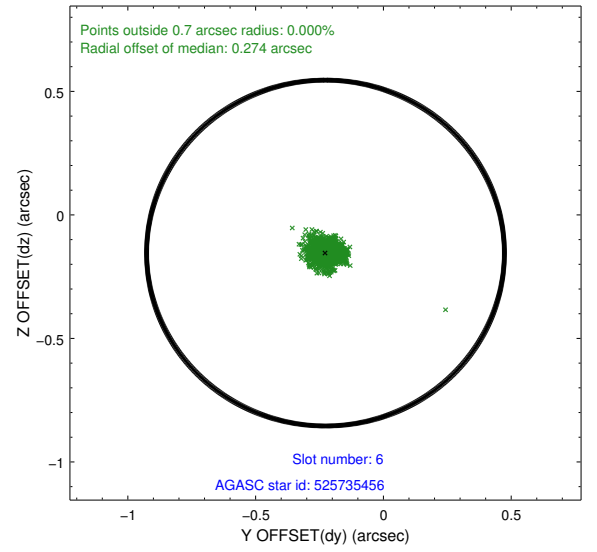
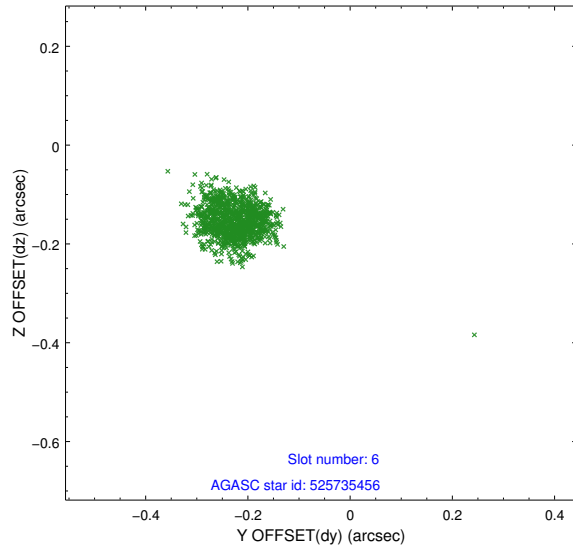
## 2.4.2 Slot 4



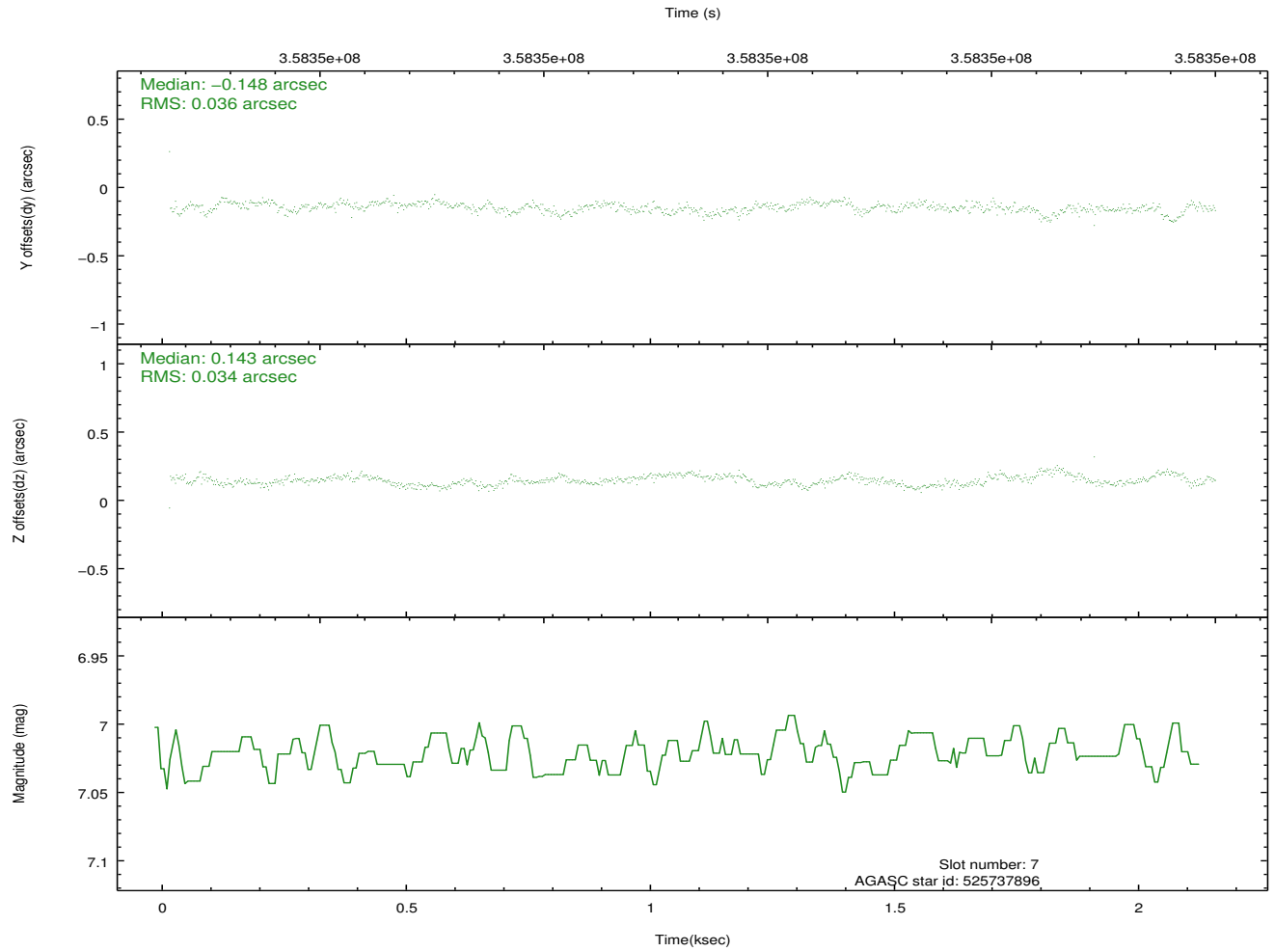
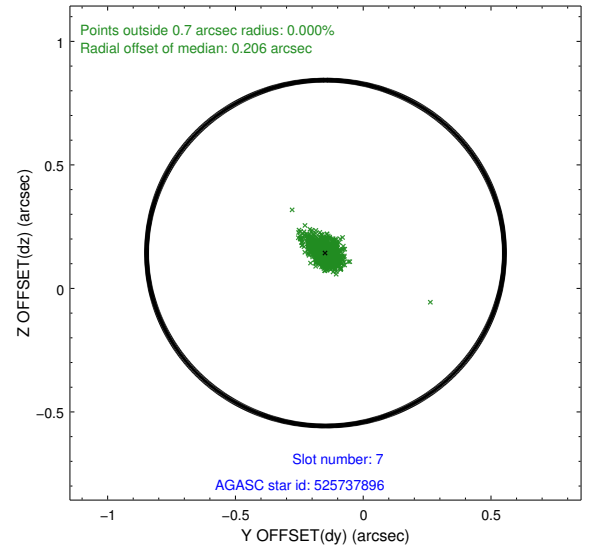
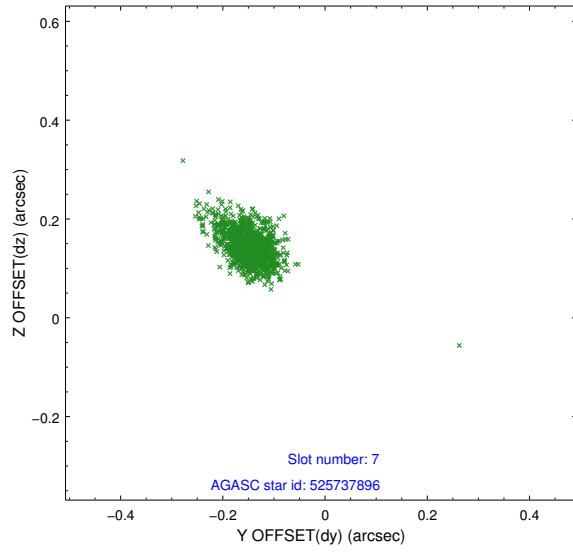
### 2.4.3 Slot 5



## 2.4.4 Slot 6

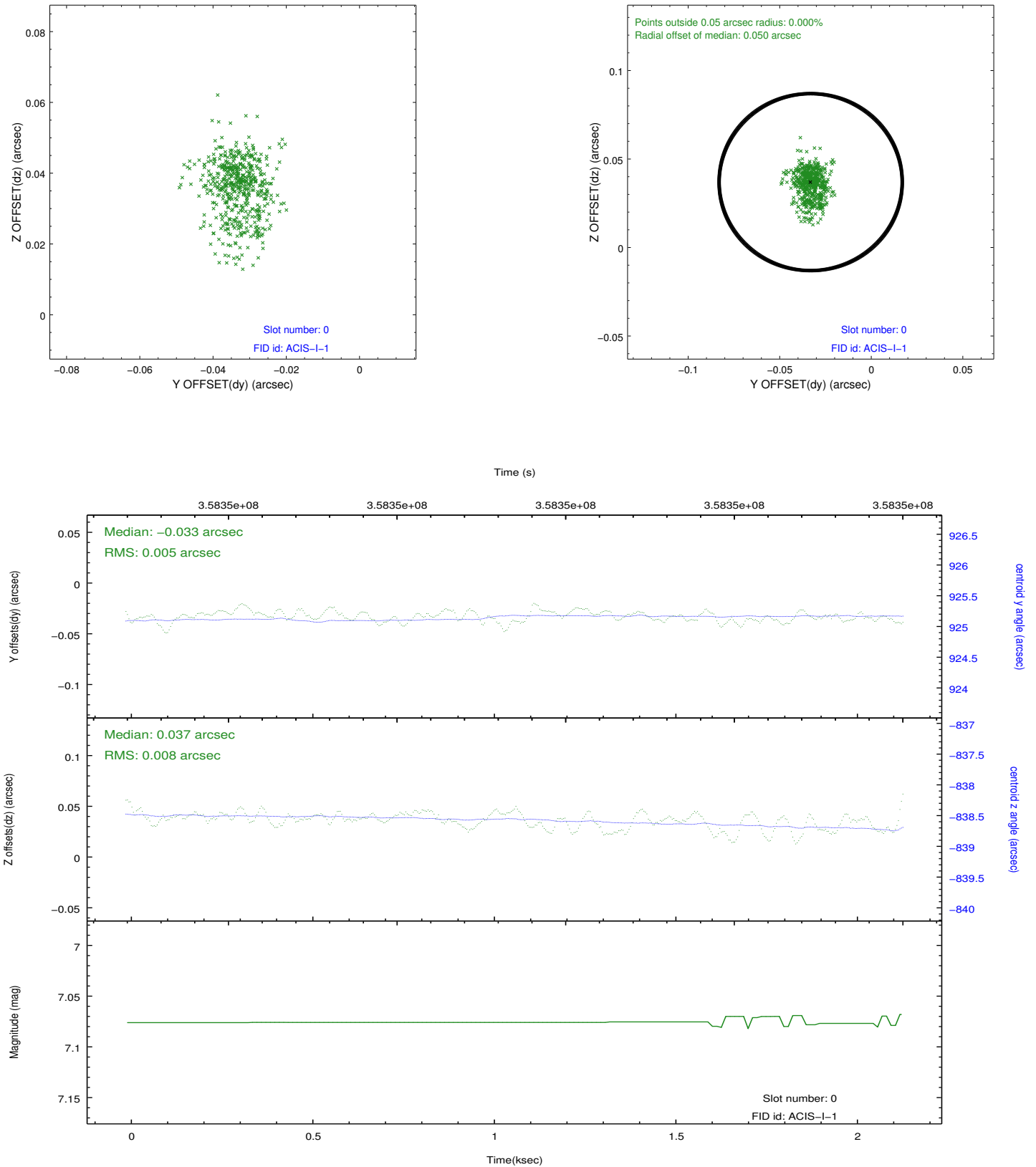


## 2.4.5 Slot 7

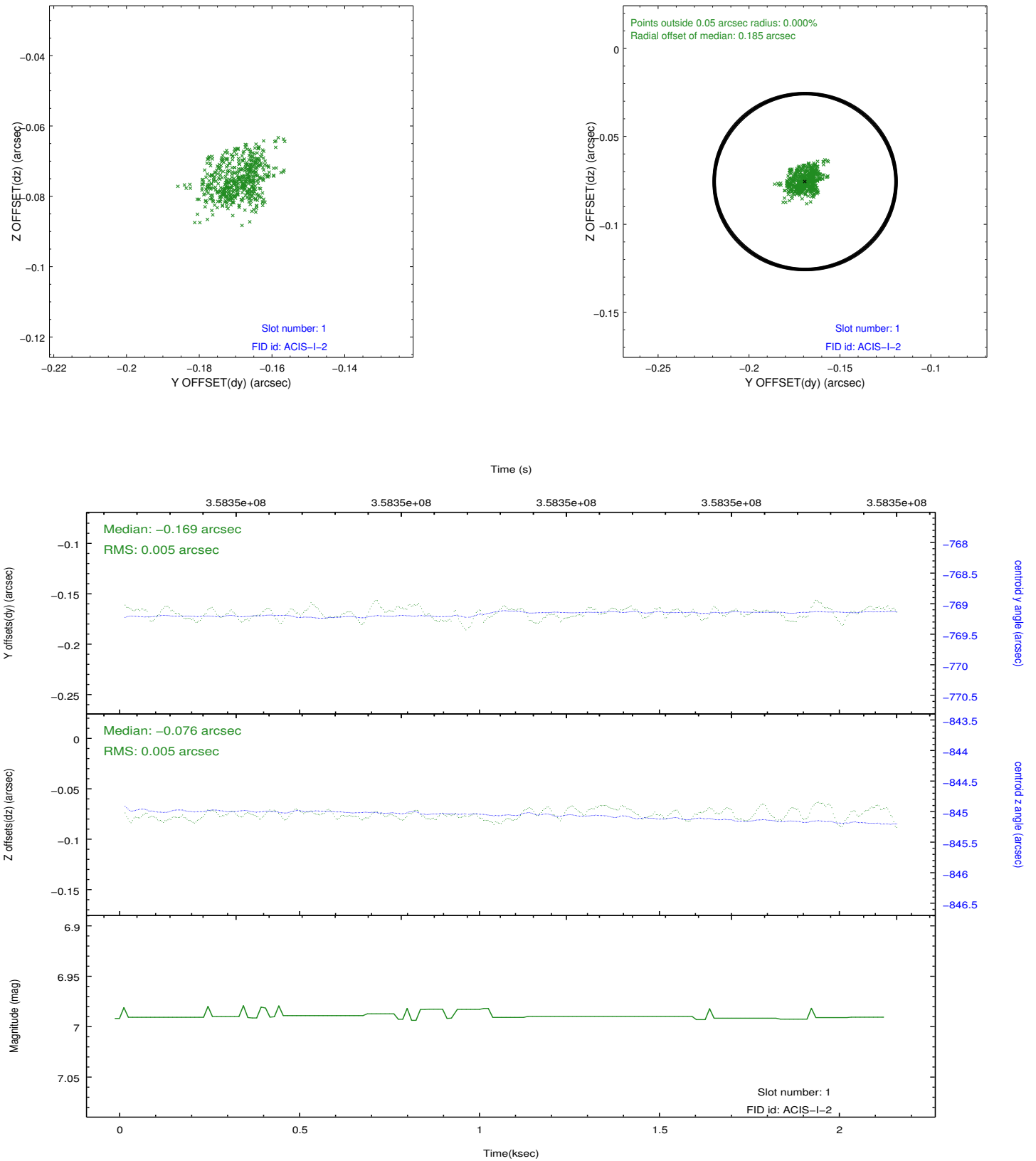


## 2.5 FID Slots

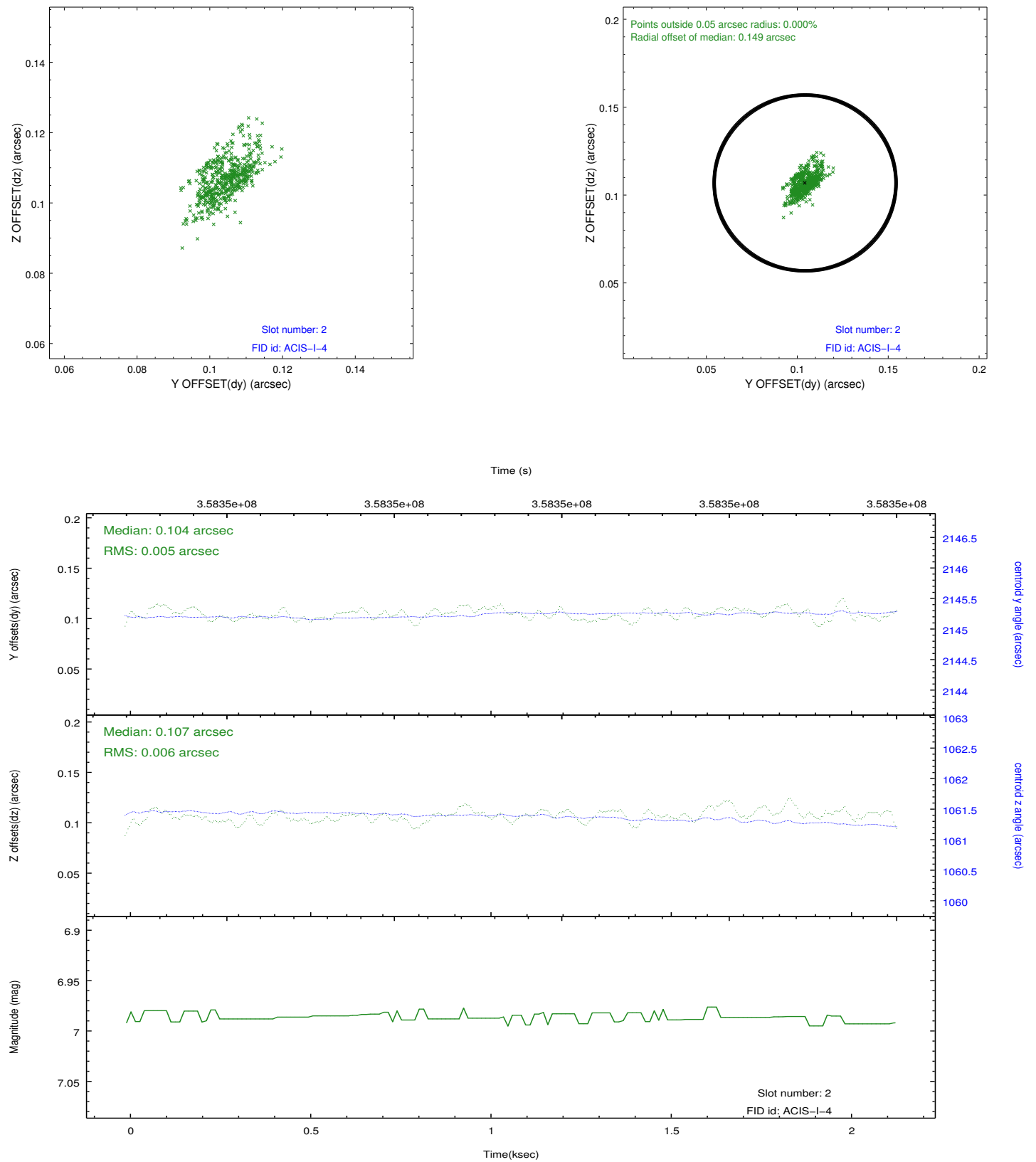
### 2.5.1 Slot 0



## 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)	2012.06.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.8029122

### A.2 Comments

Window constraint met.