

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 617 - L2 Version 4  
Chandra X-Ray Center

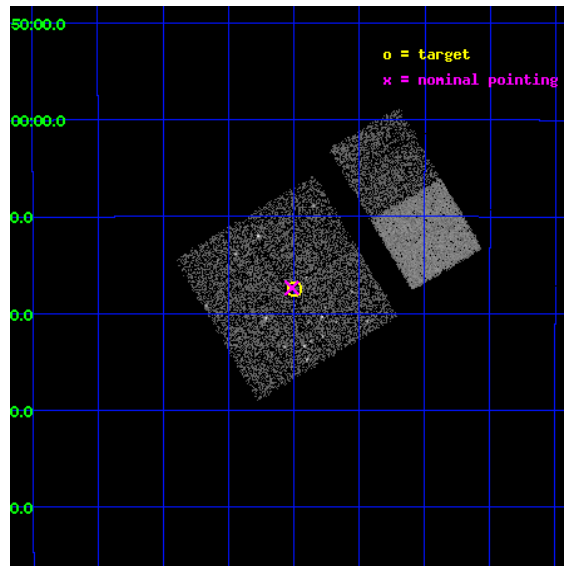
L2 Processing Date : Aug 28 2012

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# 1 Front

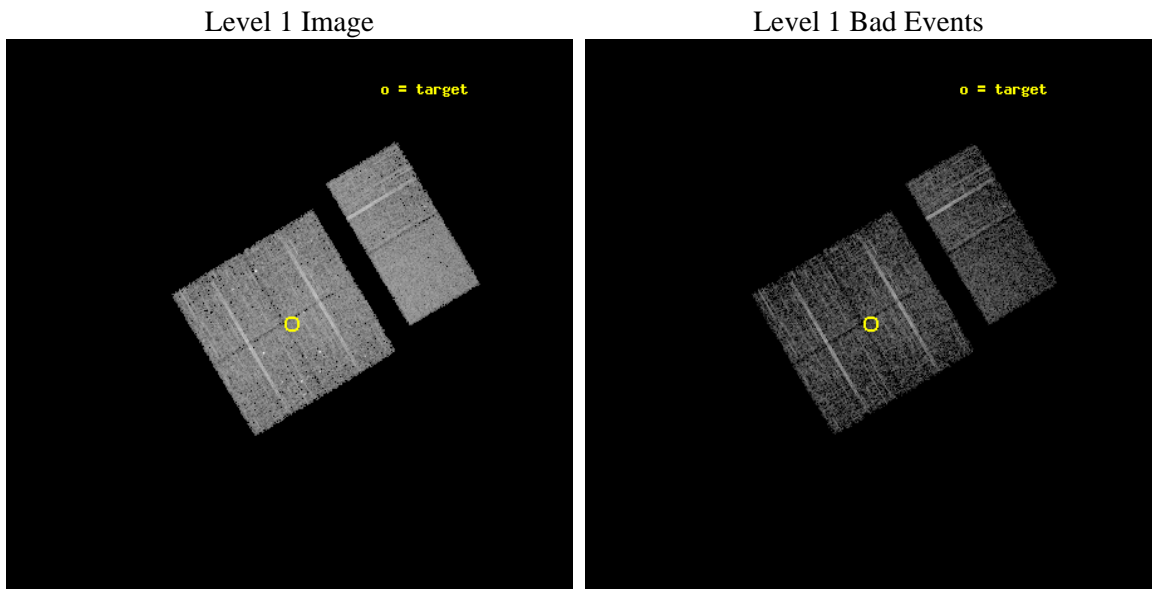
seq_num	200042	Sequence number
obs_id	617	Observation id
title	X-RAYS FROM THE RHO OPHIUCHI YOUNG STAR CLUSTER	Proposal title
observer	Dr. Thierry Montmerle	Principal investigator
object	OPHIUCHI MOSAIC #4	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	246.62458	Observer's specified target RA [deg]
dec_targ	-24.2925	Observer's specified target Dec [deg]
ra_nom	246.62902774338	Nominal RA [deg]
dec_nom	-24.289500260567	Nominal Dec [deg]
roll_nom	59.200206428232	Nominal Roll [deg]
revision	4	Processing version of data
ontime	4834.2568558753	Sum of GTIs [s]
livetime	4773.0425847262	Livetime [s]
ontime0	4834.1337358803	Sum of GTIs [s]
ontime1	4834.1747758836	Sum of GTIs [s]
ontime2	4834.2158158869	Sum of GTIs [s]
ontime3	4834.2568558753	Sum of GTIs [s]
ontime6	4834.3389358819	Sum of GTIs [s]
ontime7	4834.2978958786	Sum of GTIs [s]
l2events	32154	Number of level 2 events



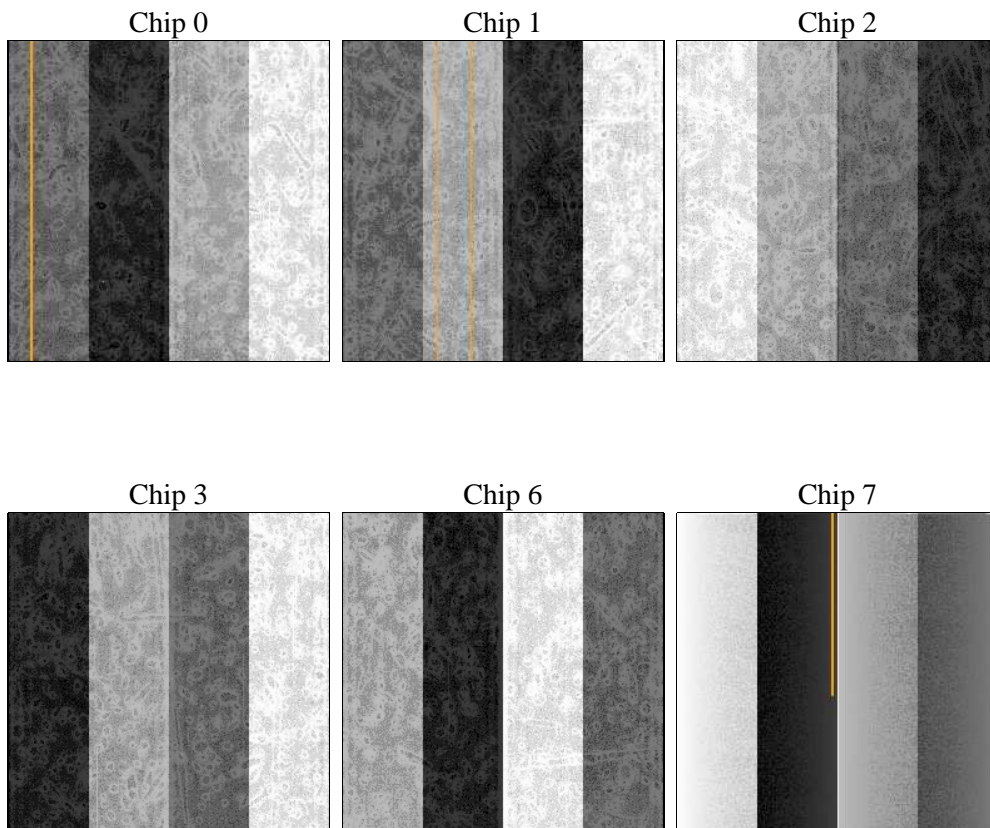
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4834.2568558753	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	4834.1337358803	Sum of GTIs [s]
date	2012-08-28T04:31:29	Date and time of file creation	ontime1	4834.1747758836	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	4834.2158158869	Sum of GTIs [s]
			ontime3	4834.2568558753	Sum of GTIs [s]
			ontime6	4834.3389358819	Sum of GTIs [s]
			ontime7	4834.2978958786	Sum of GTIs [s]
			l1events	190387	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	29613	29862	31171	31134	32713	35894	grade 0 events	1723	2530	1966	2121	1357	1359
rejected events	25844	24810	27154	26912	29241	20942		5%	8%	6%	6%	4%	3%
rejected %	87%	83%	87%	86%	89%	58%	grade 1 events	15	27	23	23	15	31
								0%	0%	0%	0%	0%	0%
							grade 2 events	793	908	774	770	757	2896
								2%	3%	2%	2%	2%	8%
							grade 3 events	357	441	334	335	338	1382
								1%	1%	1%	1%	1%	3%
							grade 4 events	313	443	359	362	341	1383
								1%	1%	1%	1%	1%	3%
							grade 5 events	932	1063	868	1034	1158	3491
								3%	3%	2%	3%	3%	9%
							grade 6 events	586	733	584	636	679	7942
								1%	2%	1%	2%	2%	22%
							grade 7 events	24894	23717	26263	25853	28068	17410
								84%	79%	84%	83%	85%	48%

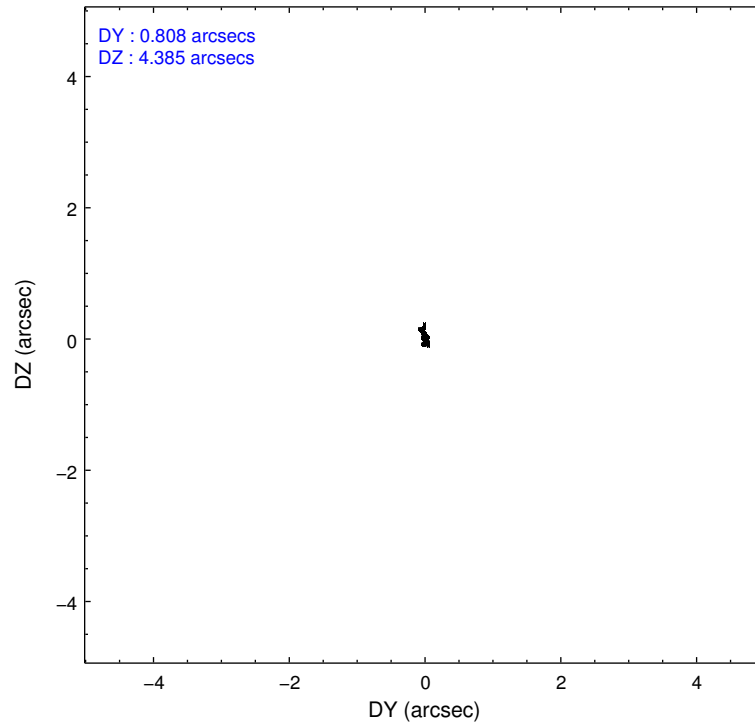
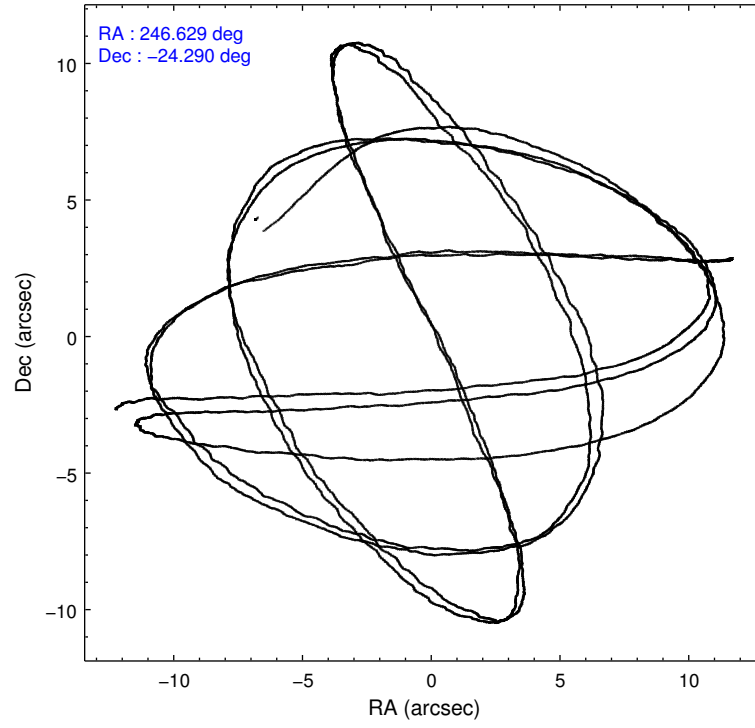


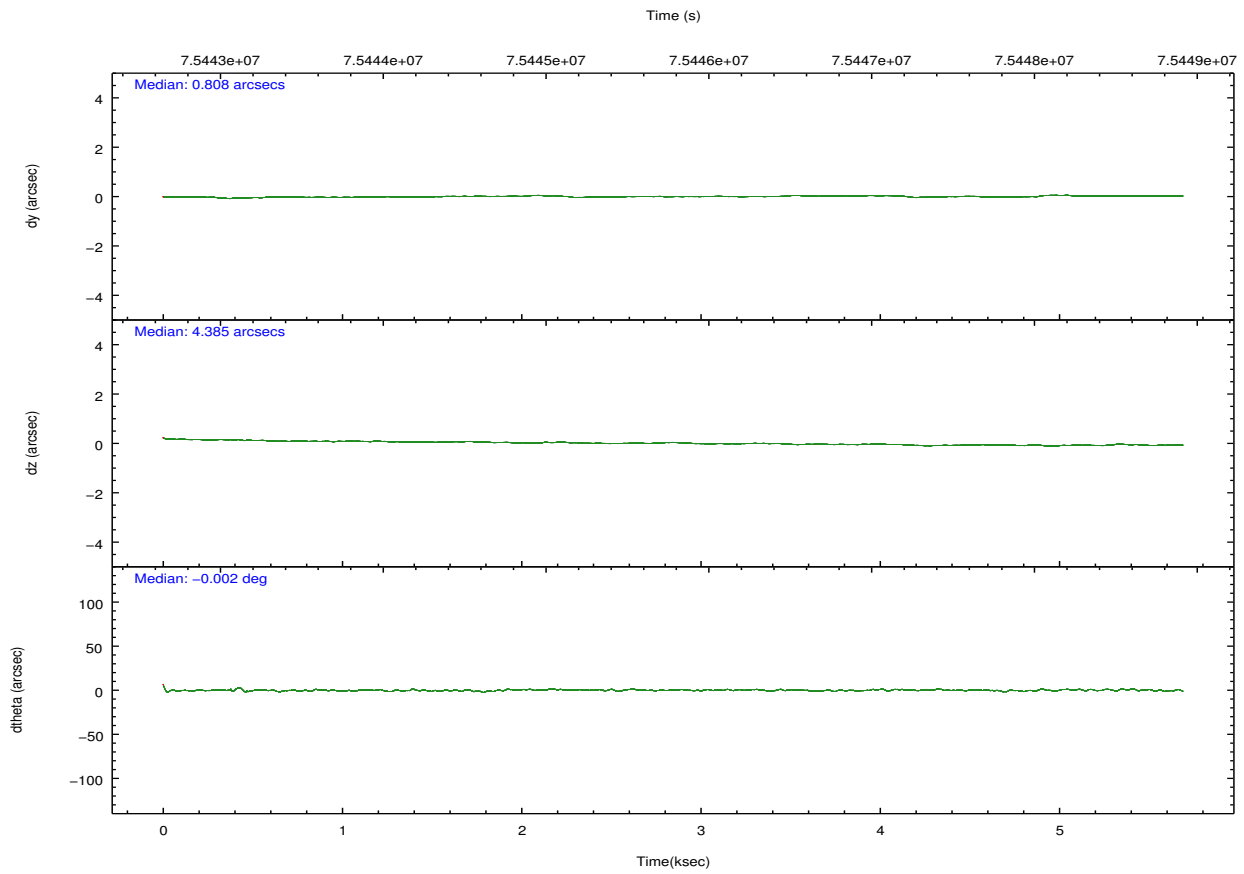
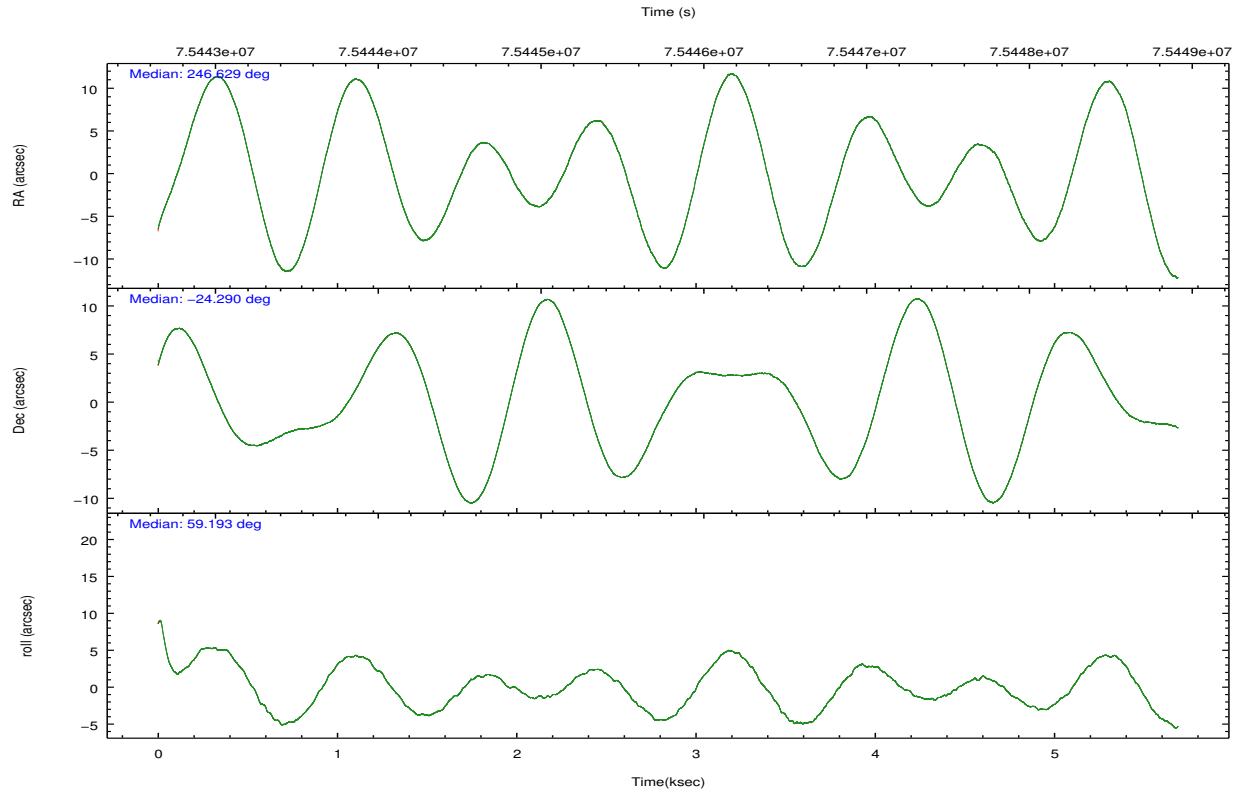
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	246.628383	246.6290277433814
[deg] Pointing Dec	-24.317135	-24.28950026056714
[deg] Pointing Roll	58.991232	59.20020642823243
[s] Window start time (MET)	63072064.184000	63072064.184000
[s] Window stop time (MET)	84153664.184000	84153664.184000
[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)	75443625.184000	75442419.50371701
Observation start date	2000-05-23T04:32:41	2000-05-23T04:13:39
[s] Observation end time (MET)	75448625.184000	75449074.828961
Observation end date	2000-05-23T05:56:01	2000-05-23T06:04:34
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



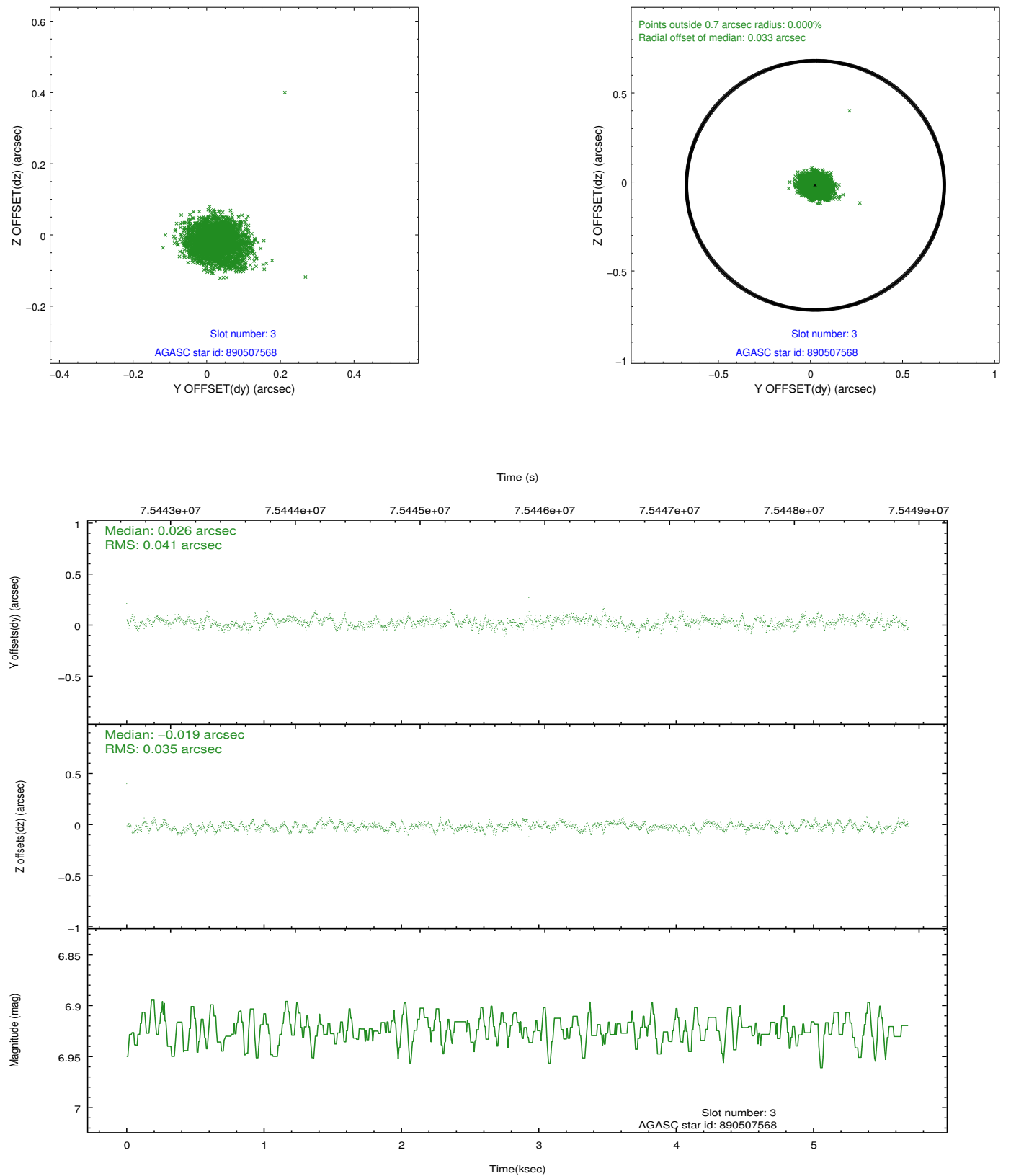


### Slot Statistics

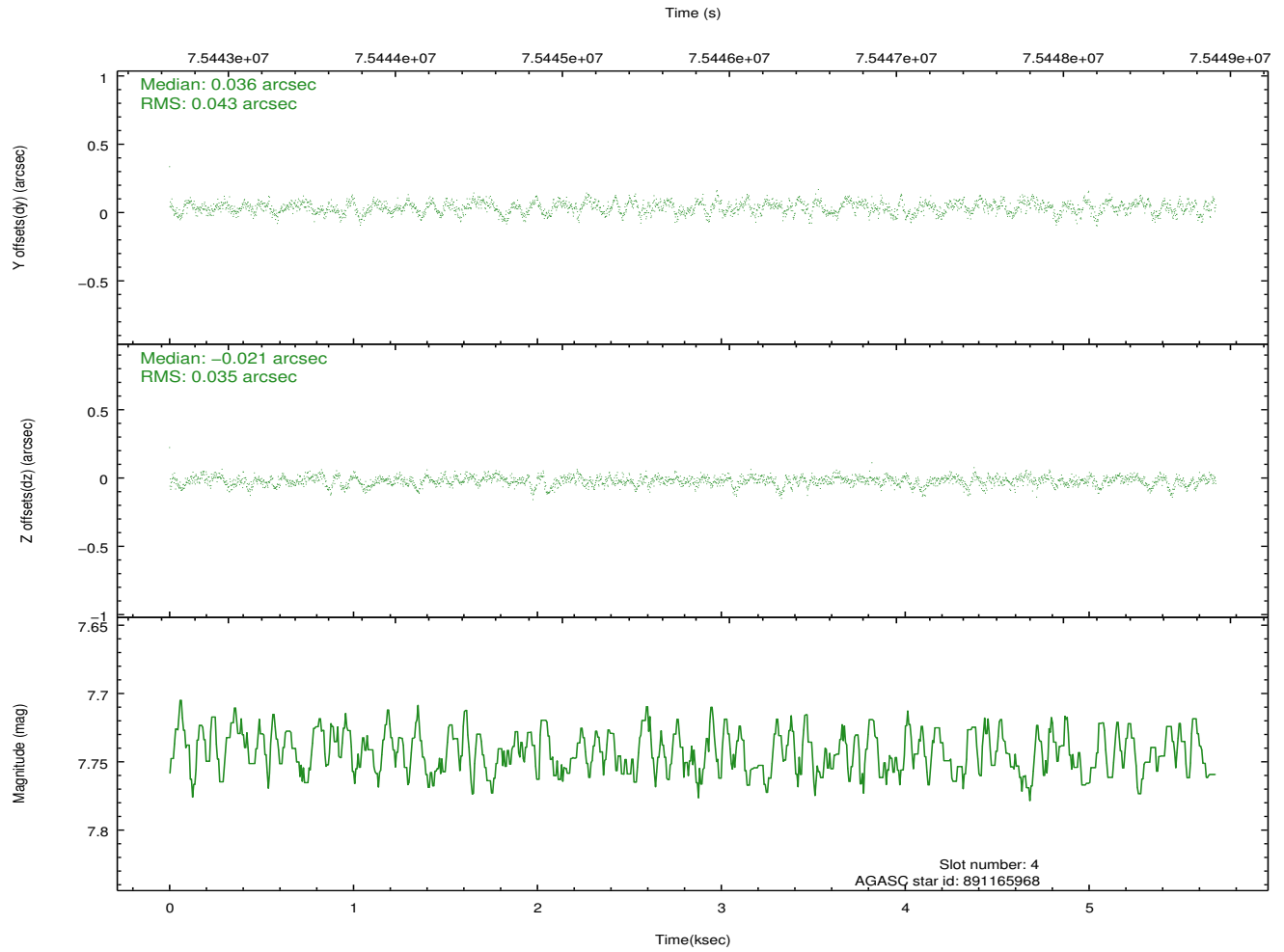
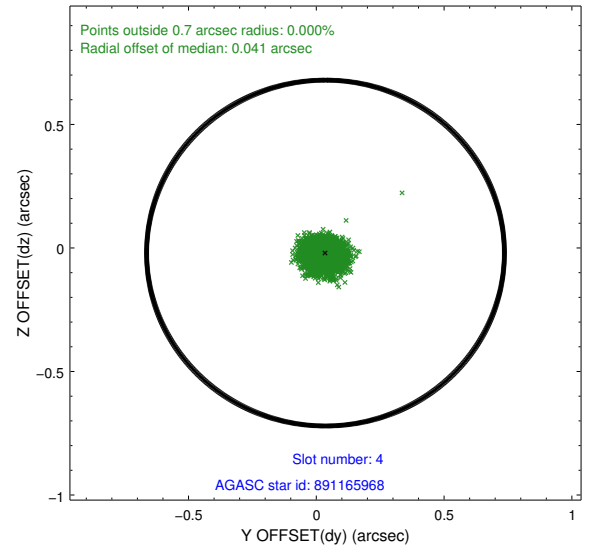
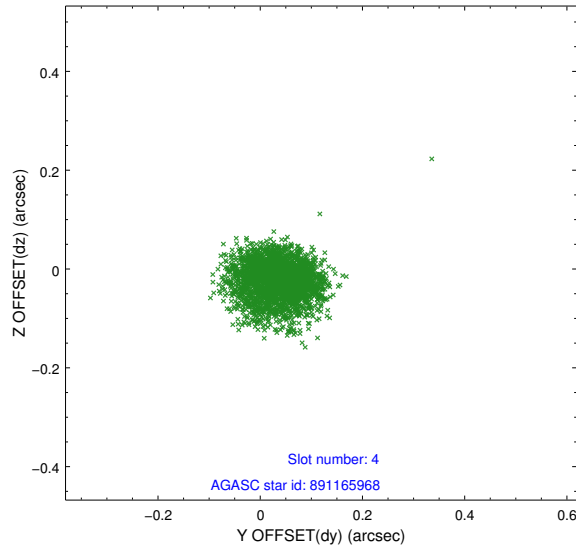
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.14	1388	-0.031	-0.020	0.009	0.014	0.000000	0.000000	-755.16	-834.10
1	FID	ACIS-I-4	7.19	1387	-0.030	0.032	0.006	0.012	0.000000	0.000000	2158.43	1071.60
2	FID	ACIS-I-5	7.23	1388	-0.039	0.057	0.009	0.014	0.000000	0.000000	-1807.64	1070.67
3	GUIDE	890507568	6.92	2776	0.026	-0.019	0.057	0.090	246.351169	-23.460216	2172.69	2373.61
4	GUIDE	891165968	7.74	2775	0.036	-0.021	0.059	0.097	247.104842	-24.750274	-534.03	-2139.16
5	GUIDE	891165960	7.62	2775	-0.019	0.104	0.065	0.104	247.245842	-24.537990	357.61	-2145.83
6	GUIDE	891031768	7.57	2776	-0.031	-0.087	0.051	0.086	246.351325	-24.465712	-925.64	500.97
7	GUIDE	891028200	9.67	2774	-0.009	0.024	0.091	0.149	246.880837	-25.150608	-2147.49	-2251.54

## 2.4 Star Slots

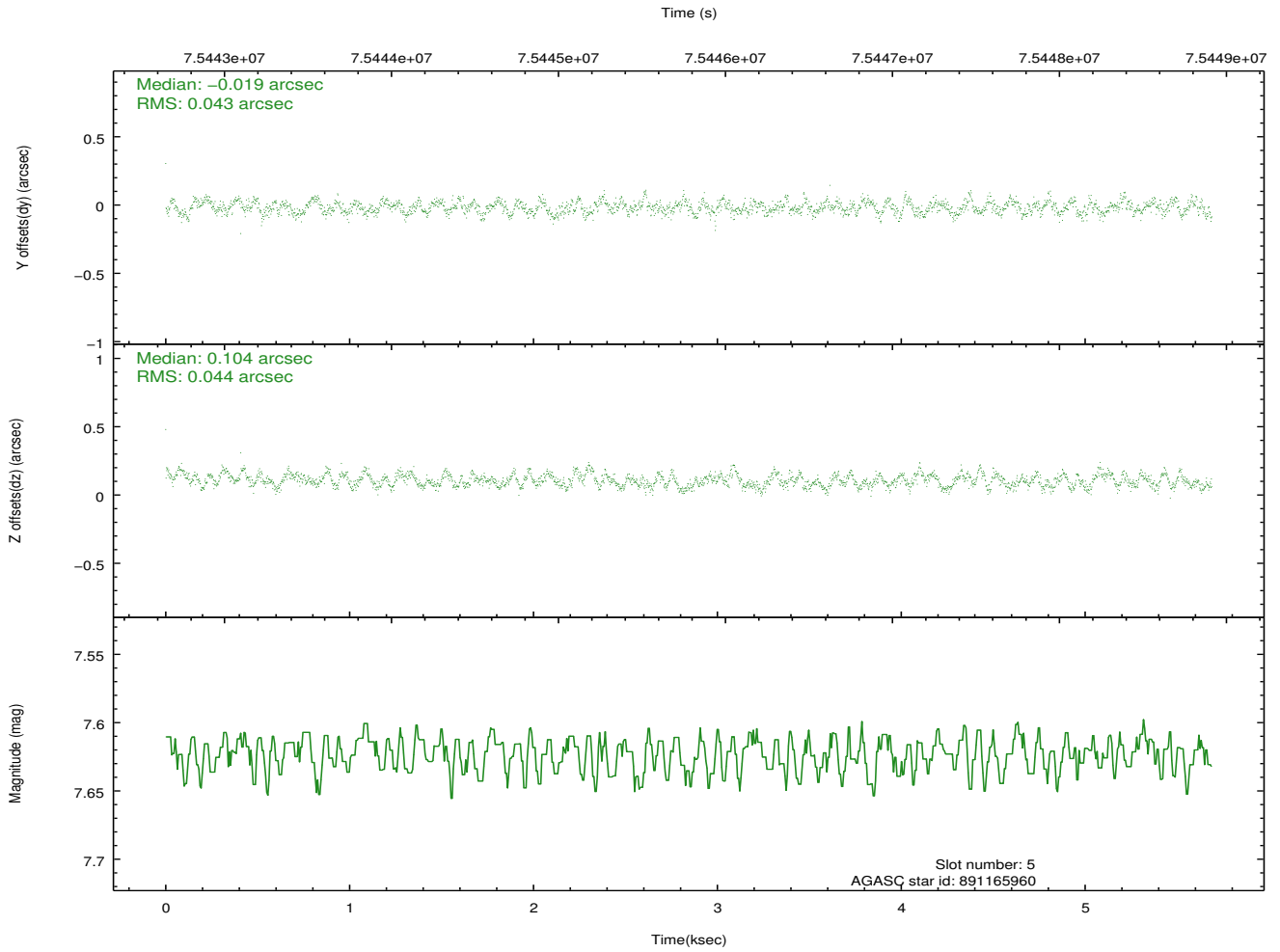
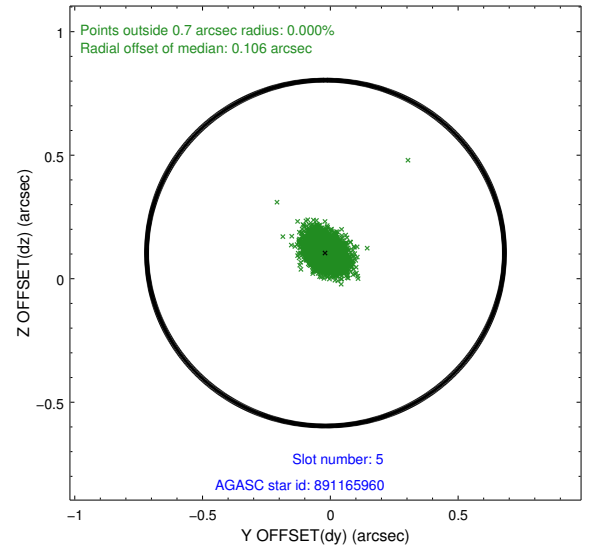
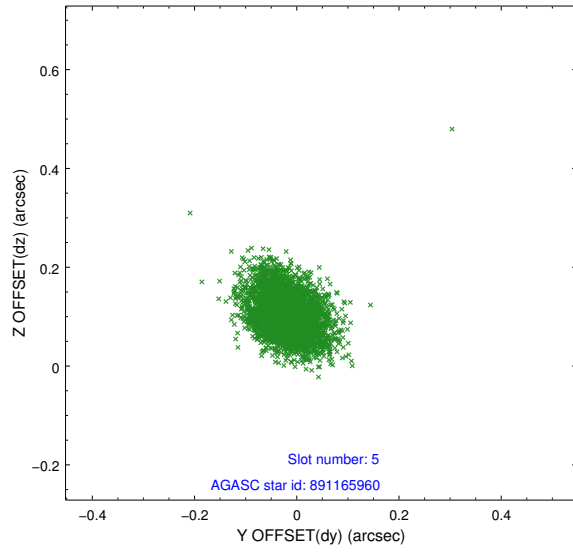
### 2.4.1 Slot 3



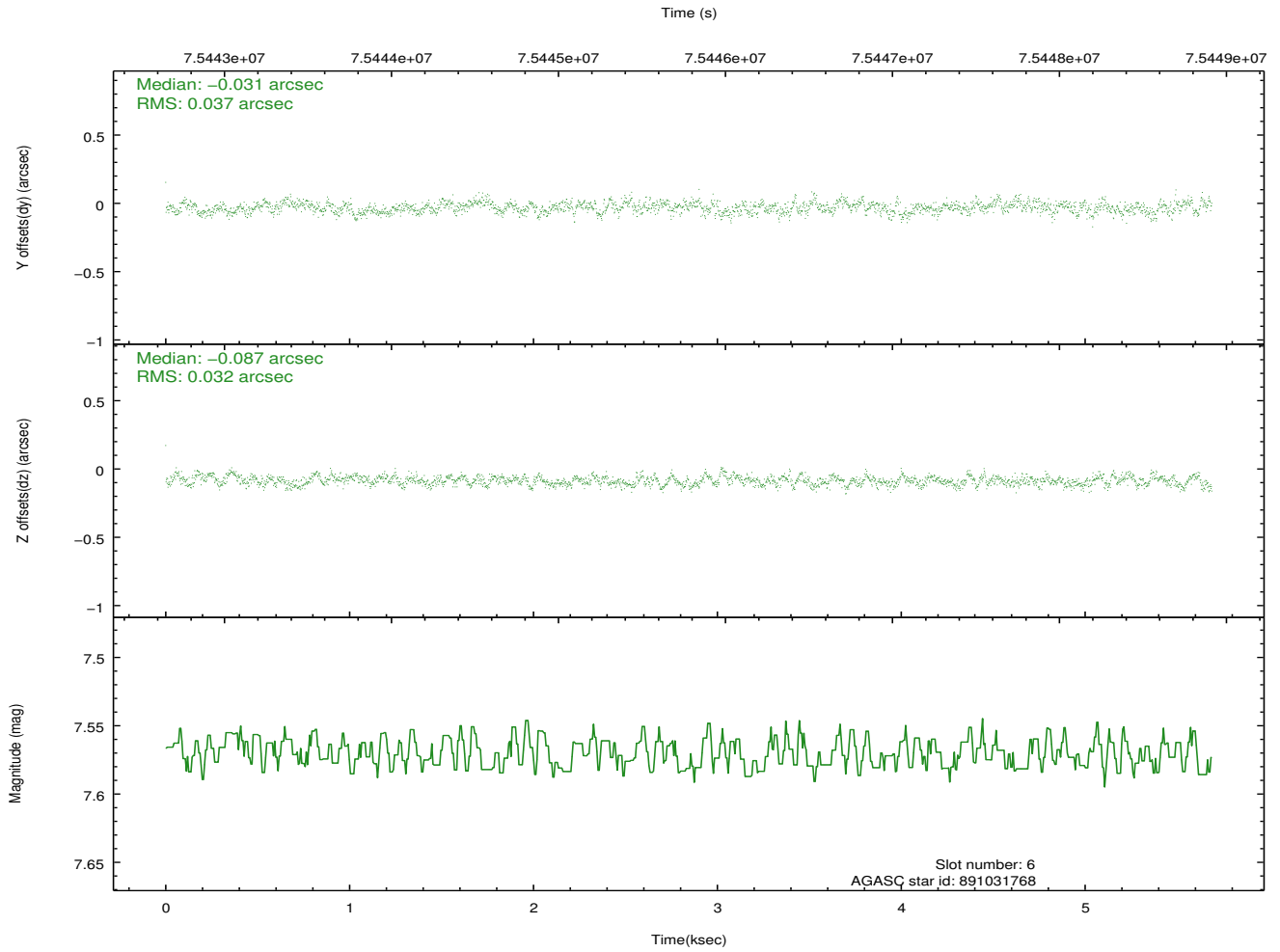
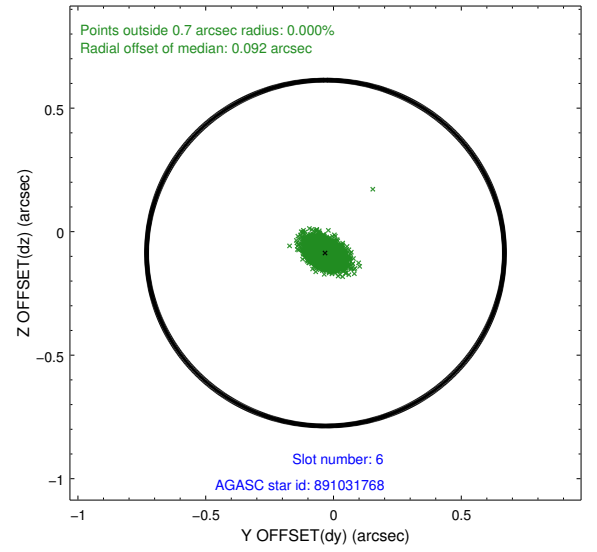
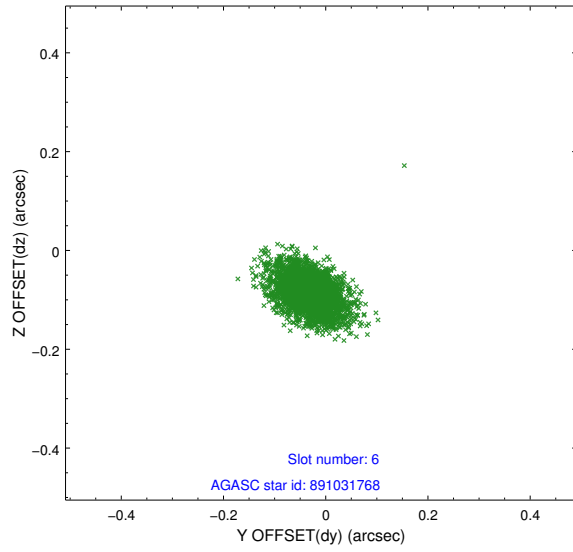
## 2.4.2 Slot 4



### 2.4.3 Slot 5

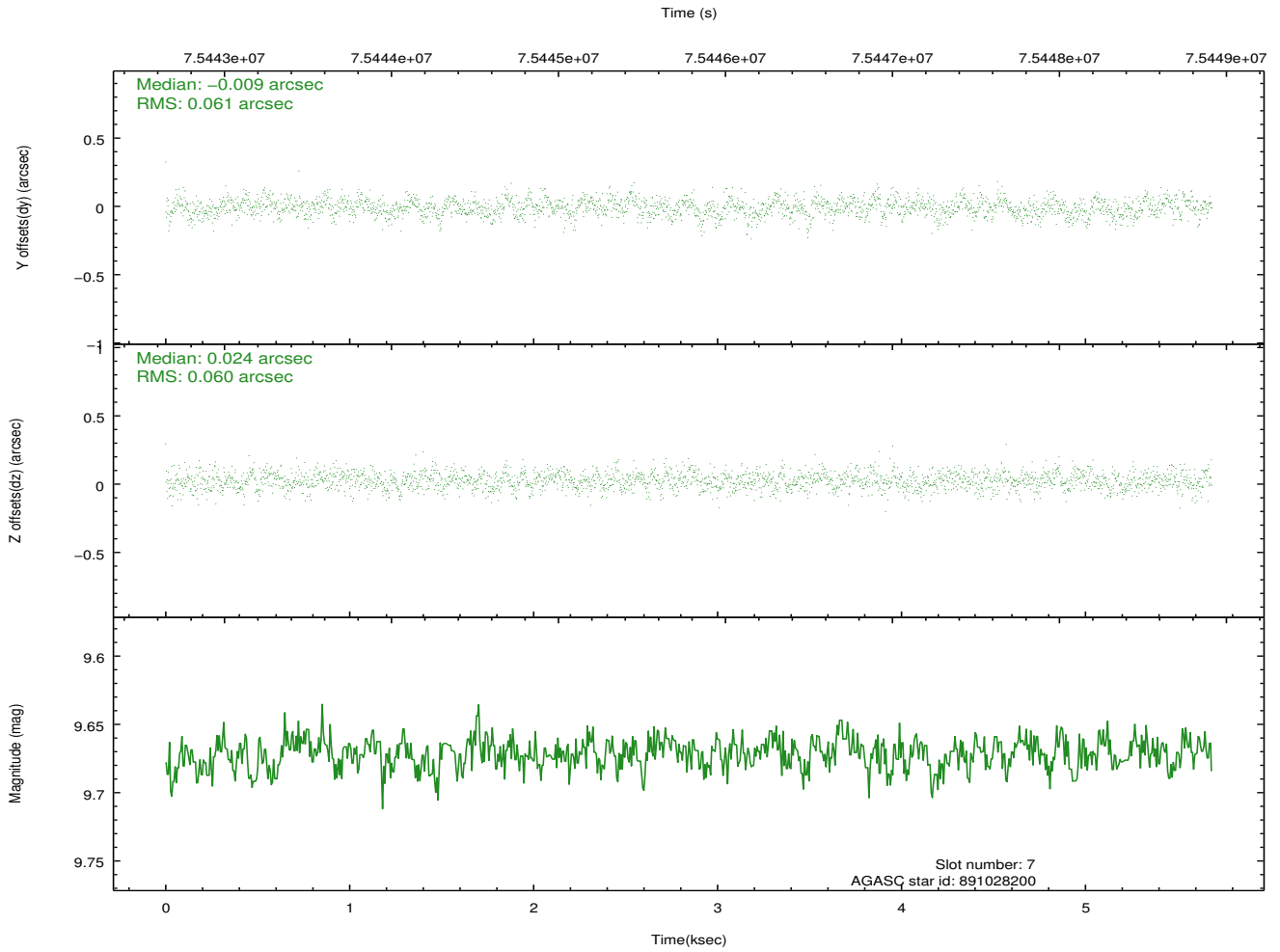
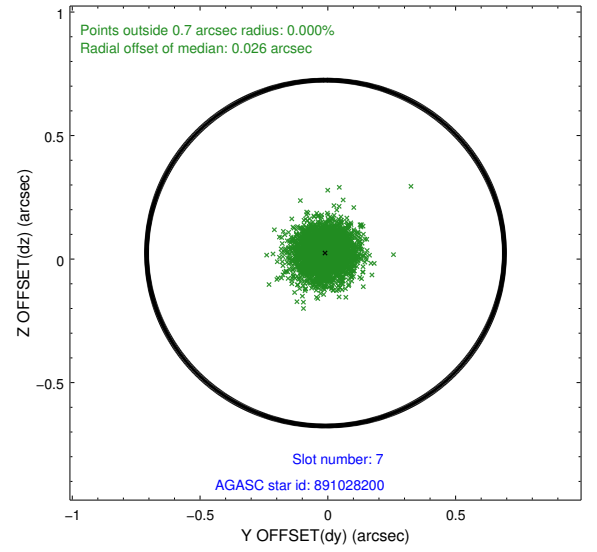
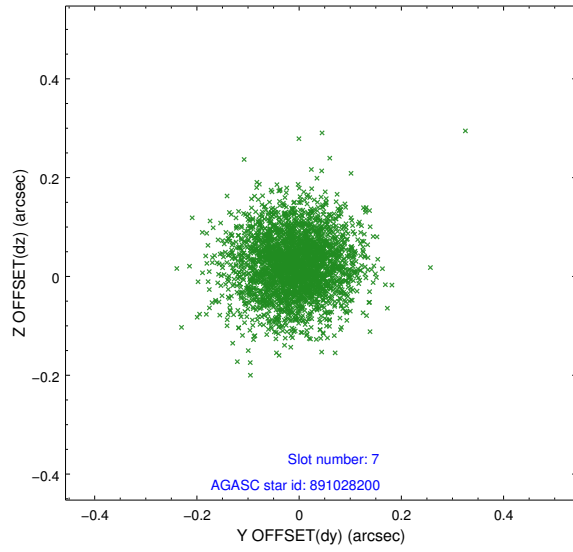


## 2.4.4 Slot 6



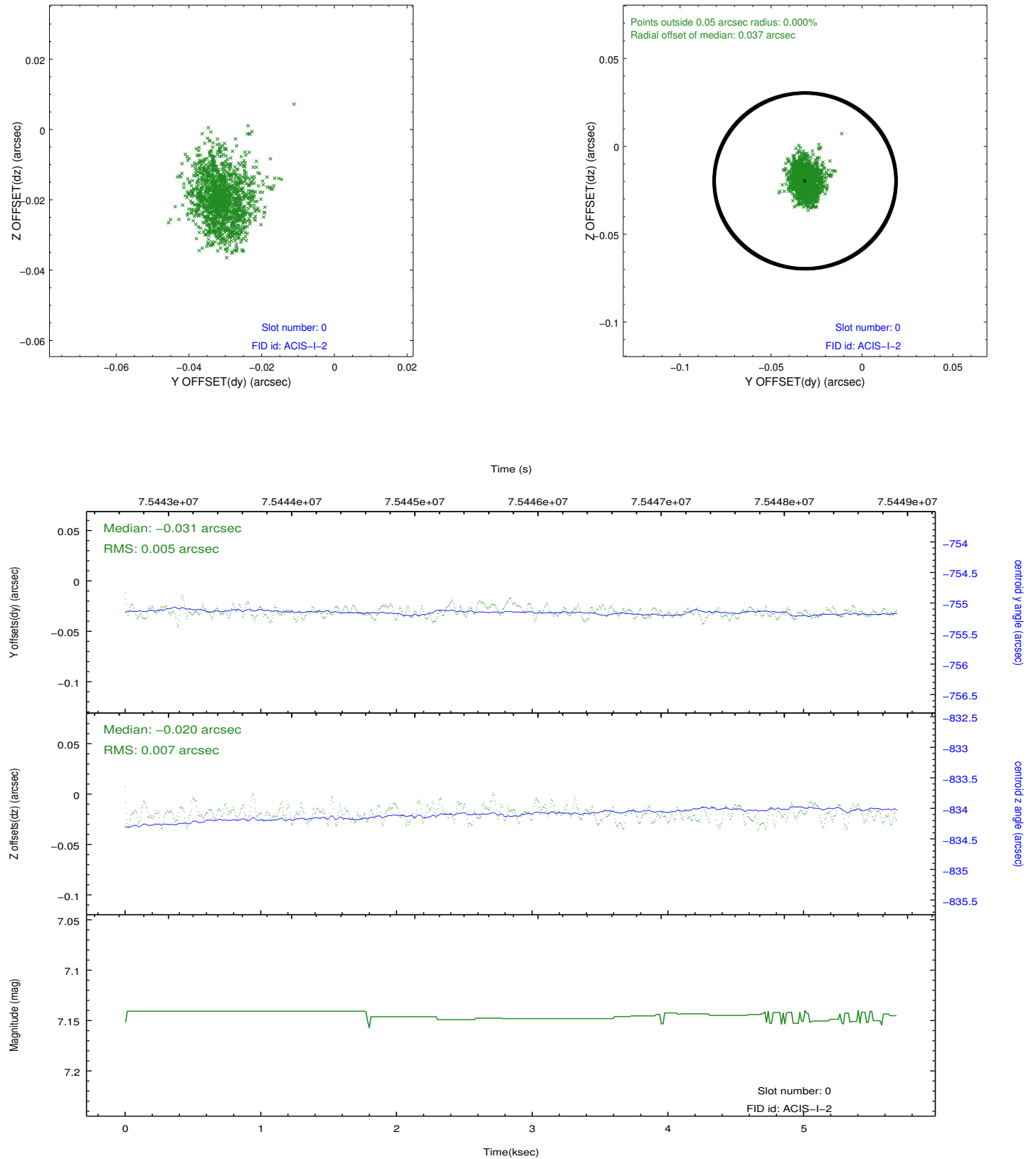


## 2.4.5 Slot 7

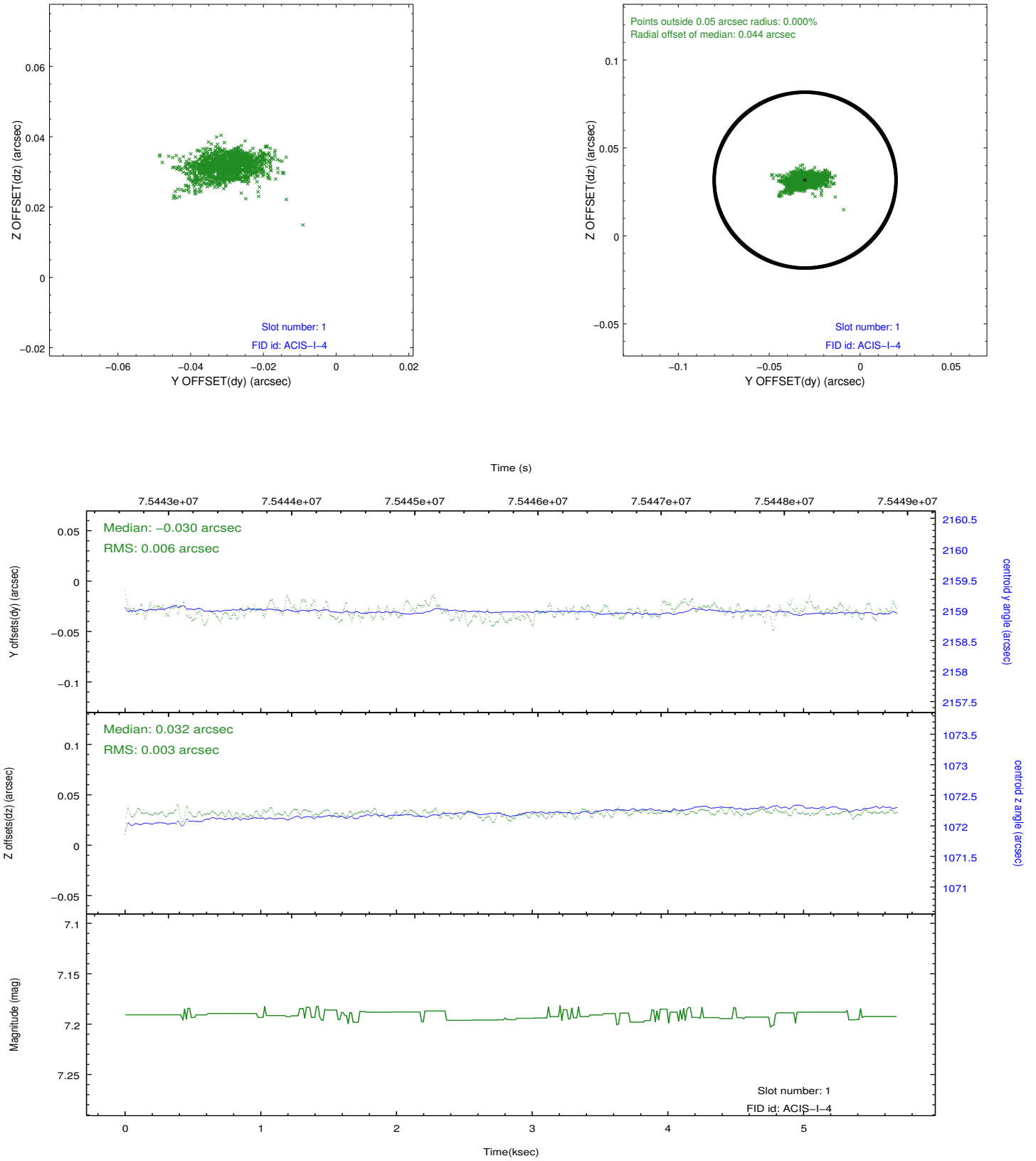


## 2.5 FID Slots

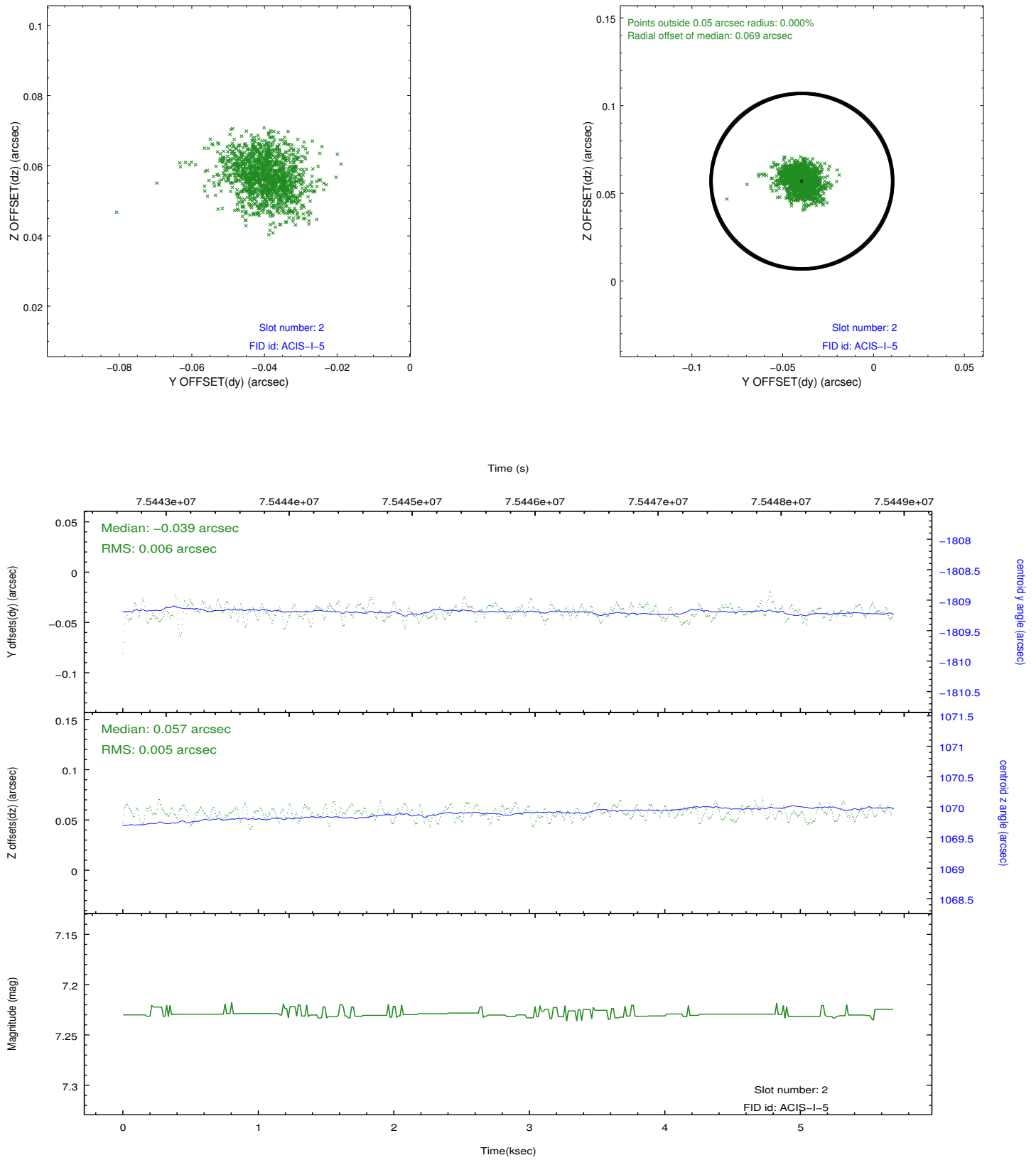
### 2.5.1 Slot 0



## 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)	2012.08.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.835

### A.2 Comments

Window constraint met.