

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11070 - L2 Version 2  
Chandra X-Ray Center

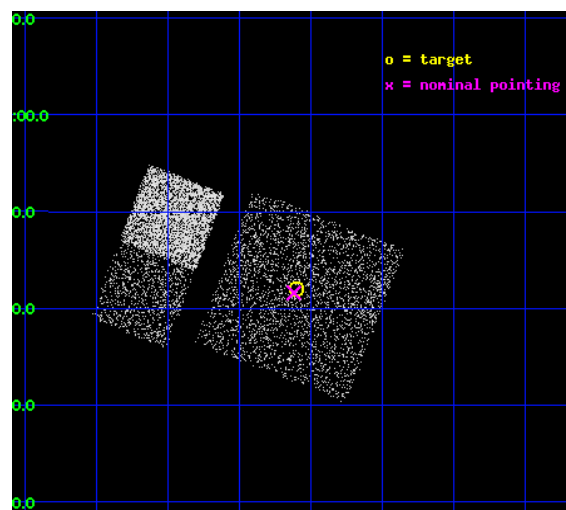
L2 Processing Date : Jun 16 2012

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# 1 Front

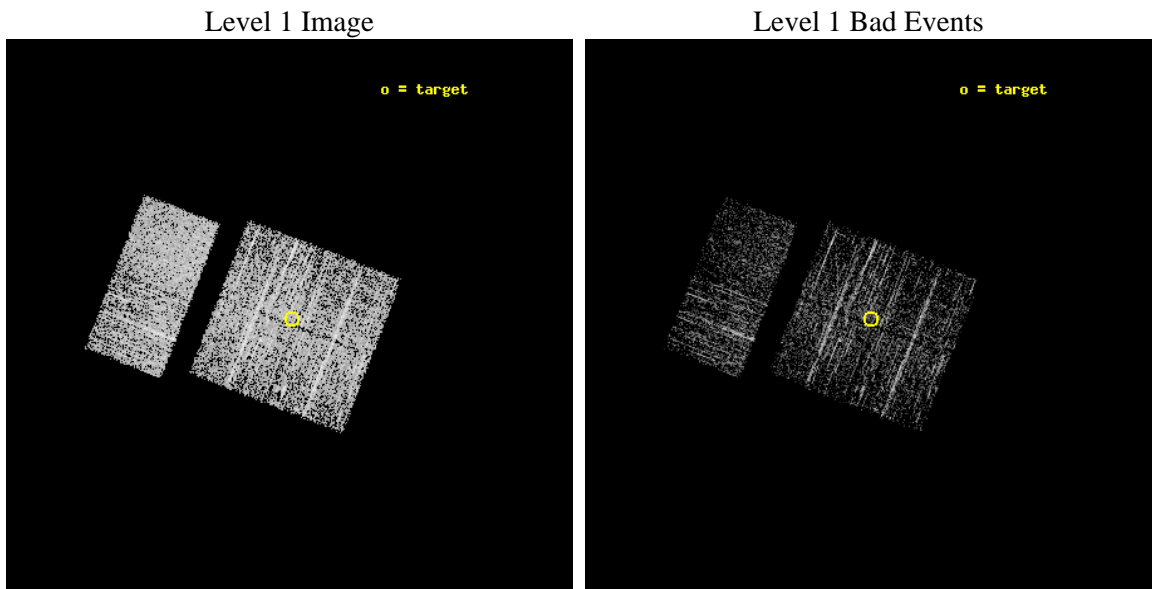
seq_num	401105	Sequence number
obs_id	11070	Observation id
title	Precise Positions of Historically Bright X-ray Binaries	Proposal t
observer	Dr. Alan Levine	Principal investigator
object	XTE J1837+037	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	279.15	Observer's specified target RA [deg]
dec_targ	3.7	Observer's specified target Dec [deg]
ra_nom	279.15522487684	Nominal RA [deg]
dec_nom	3.6934368101656	Nominal Dec [deg]
roll_nom	291.27931300081	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1183.9999956489	Sum of GTIs [s]
livetime	1169.0074747847	Livetime [s]
ontime0	1183.9999956489	Sum of GTIs [s]
ontime1	1183.9999956489	Sum of GTIs [s]
ontime2	1183.9999956489	Sum of GTIs [s]
ontime3	1183.9999956489	Sum of GTIs [s]
ontime6	1183.9999956489	Sum of GTIs [s]
ontime7	1183.9999956489	Sum of GTIs [s]
l2events	9495	Number of level 2 events



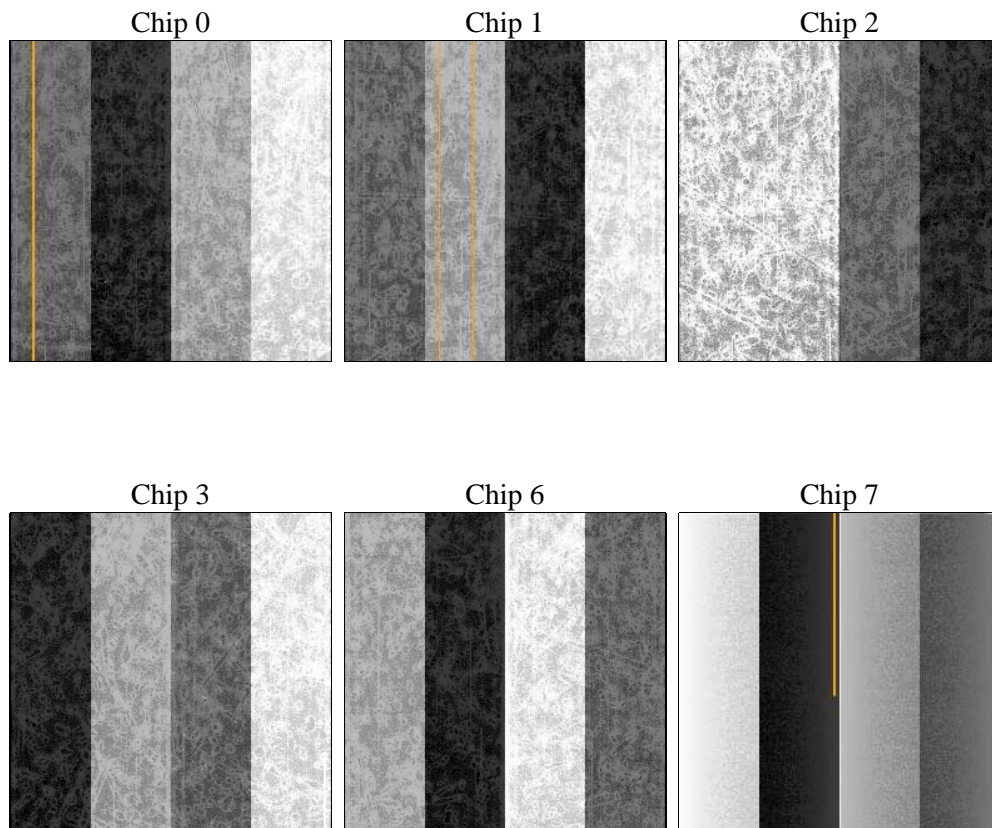
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1183.9999956489	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime0	1183.9999956489	Sum of GTIs [s]
date	2012-06-16T02:39:53	Date and time of file creation	ontime1	1183.9999956489	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	1183.9999956489	Sum of GTIs [s]
			ontime3	1183.9999956489	Sum of GTIs [s]
			ontime6	1183.9999956489	Sum of GTIs [s]
			ontime7	1183.9999956489	Sum of GTIs [s]
			l1events	86775	Number of level 1 events

### 2.1.4 Events

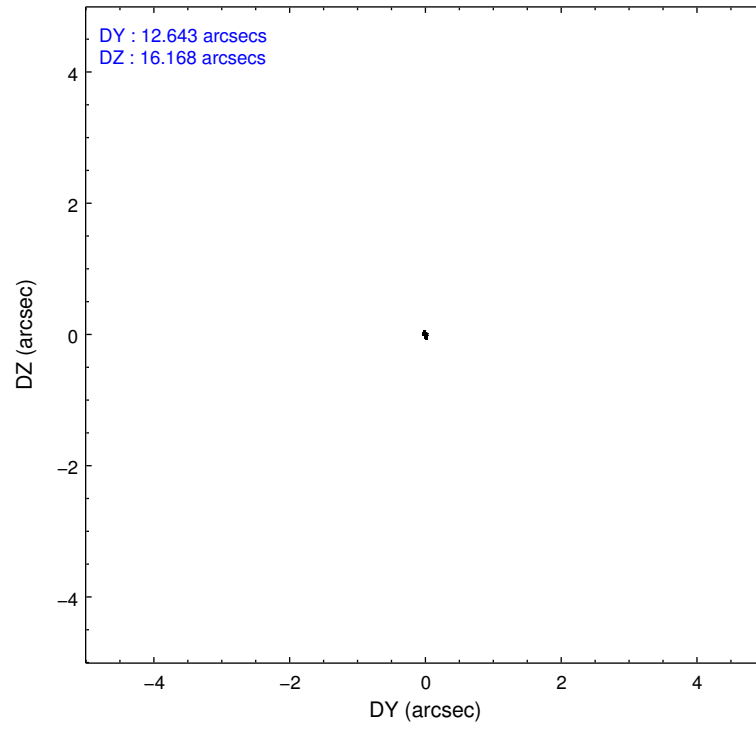
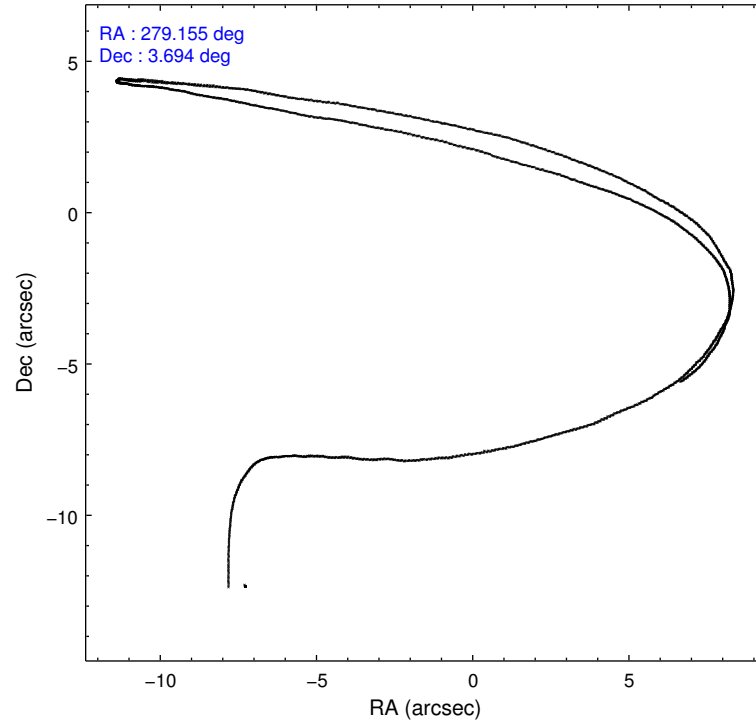
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	13649	13230	14533	14335	14580	16448
rejected events	12675	12030	13480	13349	13478	11198
rejected %	92%	90%	92%	93%	92%	68%

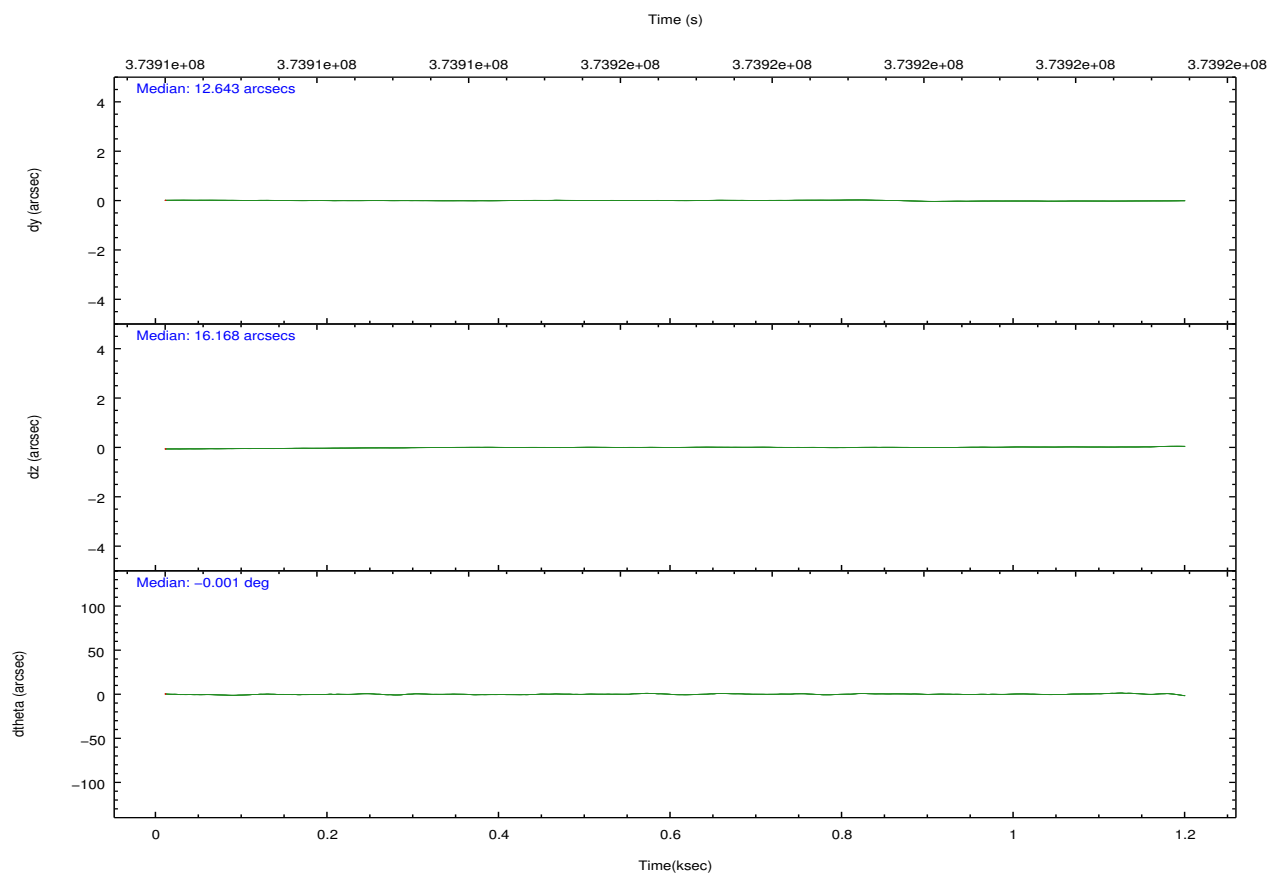
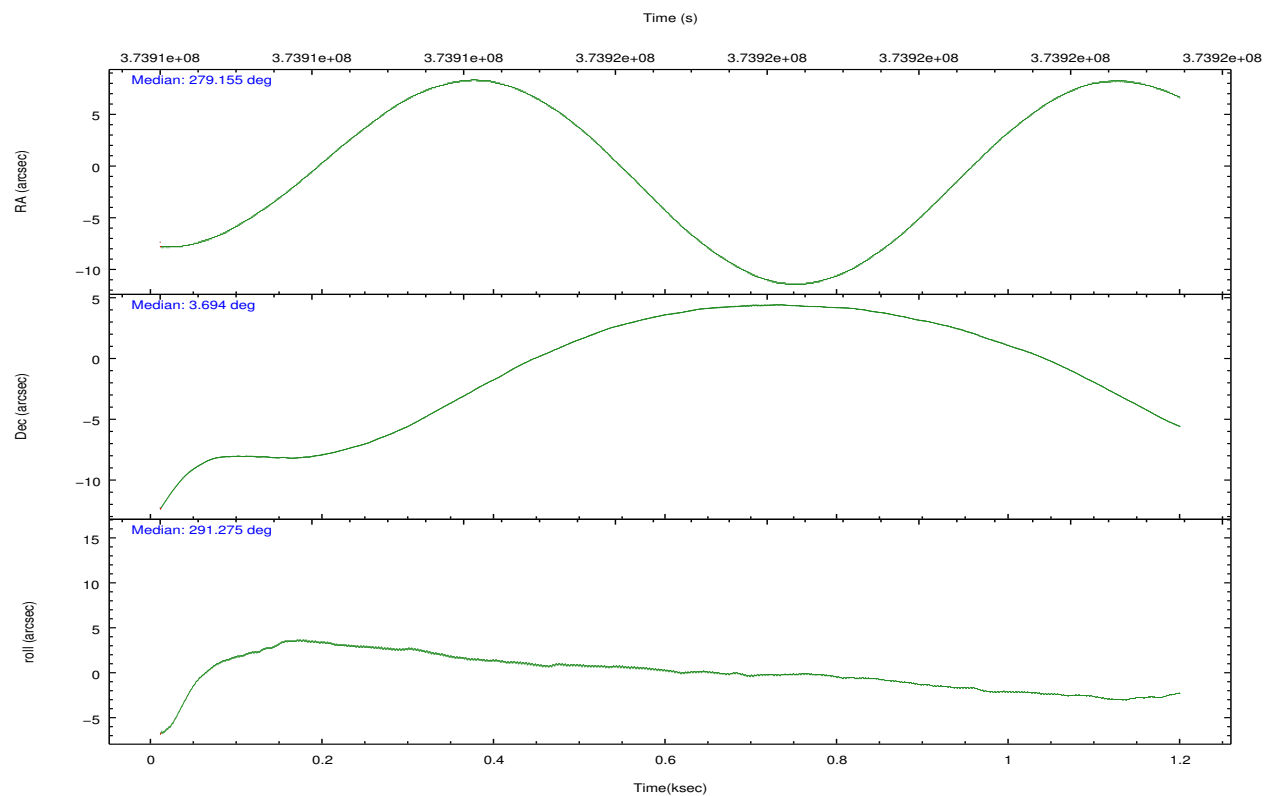
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	541	603	559	485	512	708
	3%	4%	3%	3%	3%	4%
grade 1 events	9	8	10	10	7	21
	0%	0%	0%	0%	0%	0%
grade 2 events	300	396	372	320	351	1502
	2%	2%	2%	2%	2%	9%
grade 3 events	148	184	143	169	180	688
	1%	1%	0%	1%	1%	4%
grade 4 events	140	187	153	135	154	654
	1%	1%	1%	0%	1%	3%
grade 5 events	490	556	491	606	602	1720
	3%	4%	3%	4%	4%	10%
grade 6 events	247	334	281	274	339	3825
	1%	2%	1%	1%	2%	23%
grade 7 events	11774	10962	12524	12336	12435	7330
	86%	82%	86%	86%	85%	44%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	279.133480	279.1552248768431	CCD I2 on	Y	Y
[deg] Pointing Dec	3.710797	3.69343681016558	CCD I3 on	Y	Y
[deg] Pointing Roll	291.072108	291.2793130008145	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	373914664.184000	373913359.79557	CCD S5 on	N	N
Observation start date	2009-11-06T17:09:58	2009-11-06T16:49:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	373915664.184000	373916545.49573	On-chip summing requested	N	N
Observation end date	2009-11-06T17:26:38	2009-11-06T17:42:25	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect





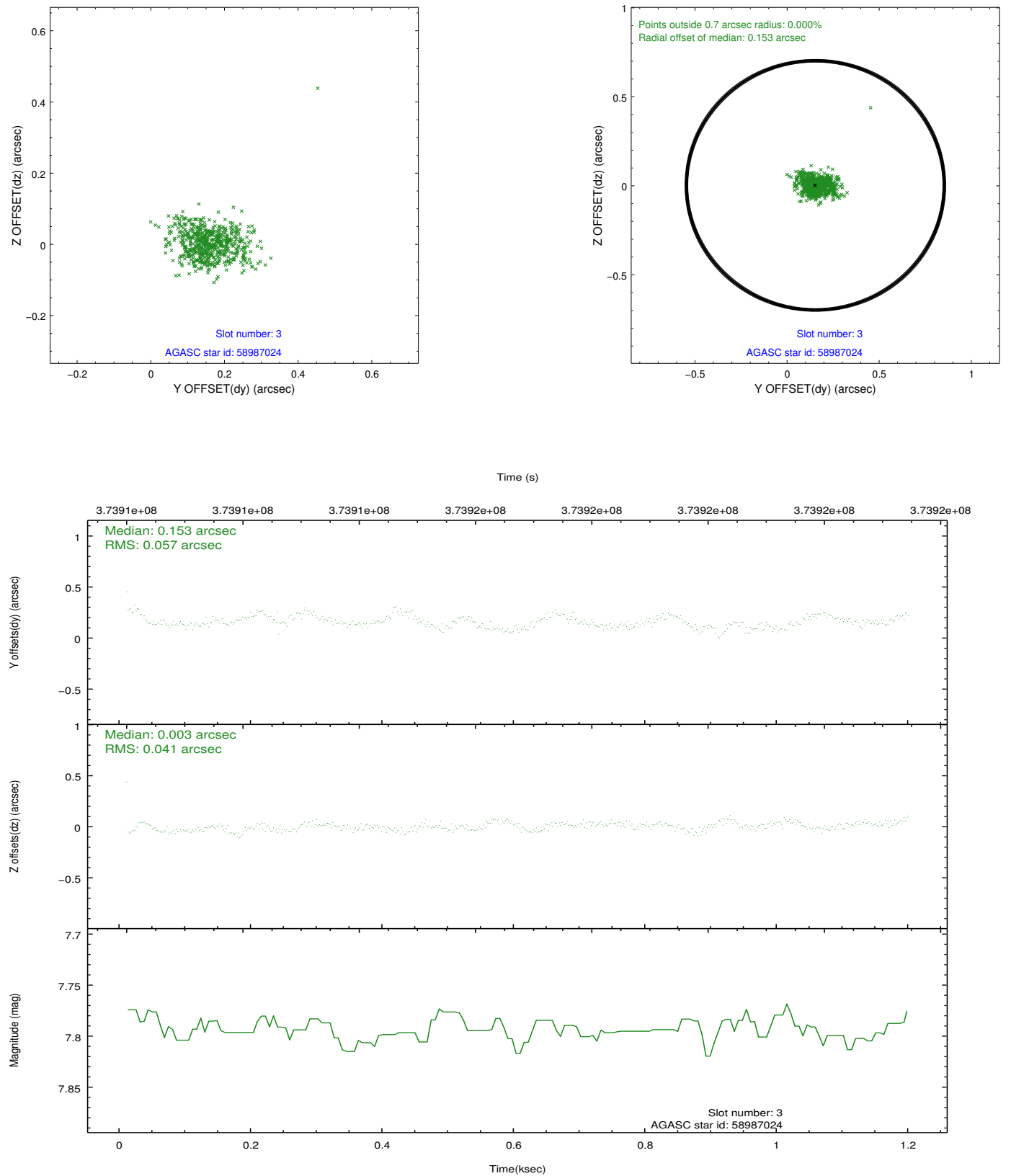
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	291	0.056	-0.049	0.006	0.008	0.000000	0.000000	926.93	-839.85
1	FID	ACIS-I-5	7.01	291	-0.197	0.058	0.005	0.009	0.000000	0.000000	-1818.31	1054.96
2	FID	ACIS-I-6	7.01	291	0.049	0.062	0.006	0.009	0.000000	0.000000	386.41	1705.78
3	GUIDE	58987024	7.79	581	0.153	0.003	0.069	0.118	278.647254	3.135777	1302.57	-2374.99
4	GUIDE	59114688	8.71	579	-0.027	0.052	0.061	0.099	279.386510	3.692778	388.74	820.90
5	GUIDE	59115016	8.71	581	0.105	-0.034	0.079	0.124	279.407479	3.522010	988.10	675.85
6	GUIDE	59507280	7.39	580	-0.078	-0.119	0.063	0.095	278.605302	3.830737	-1084.43	-1614.89
7	GUIDE	59510144	8.08	575	-0.168	0.093	0.045	0.072	278.744279	4.244250	-2299.02	-616.44

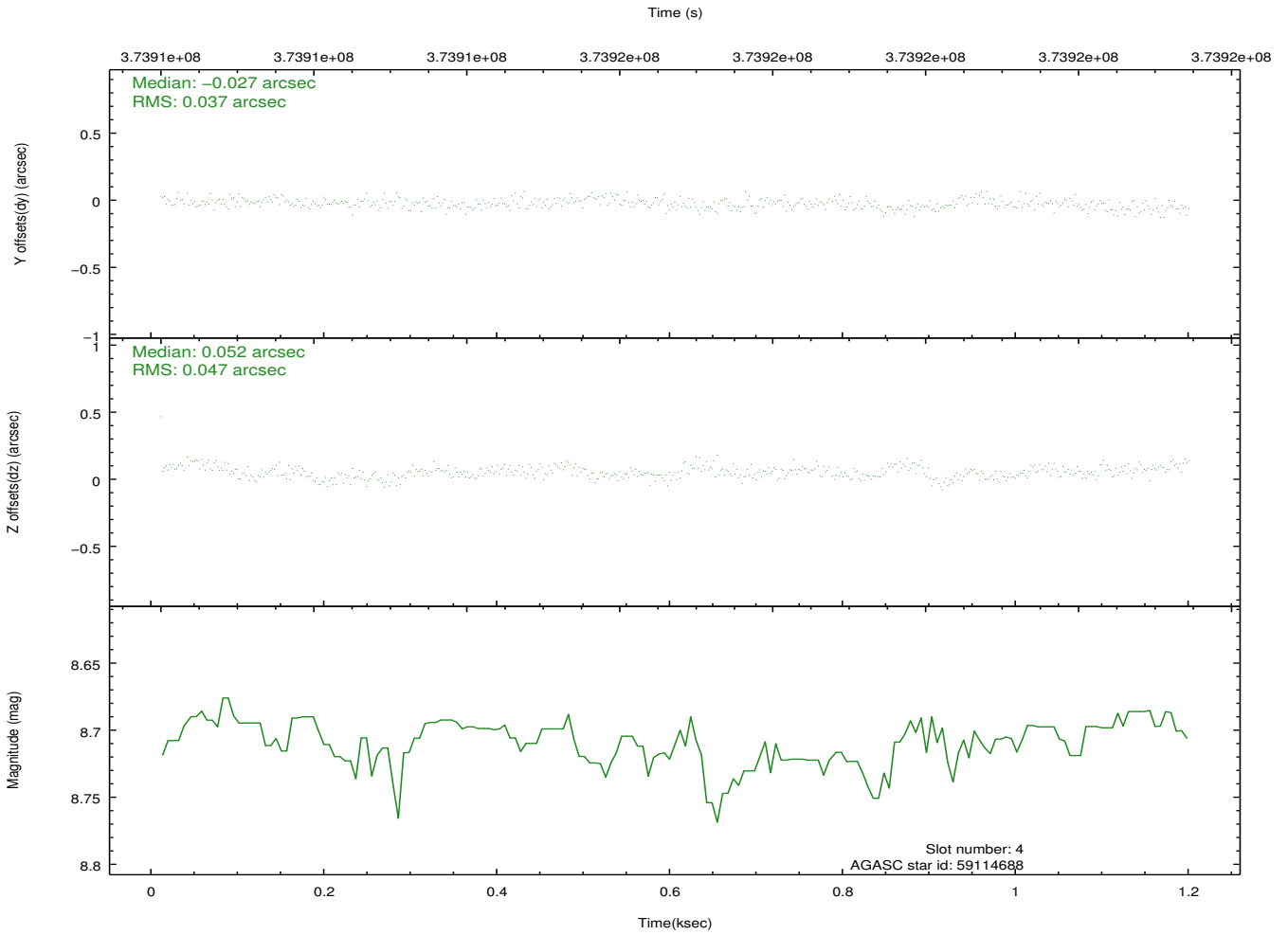
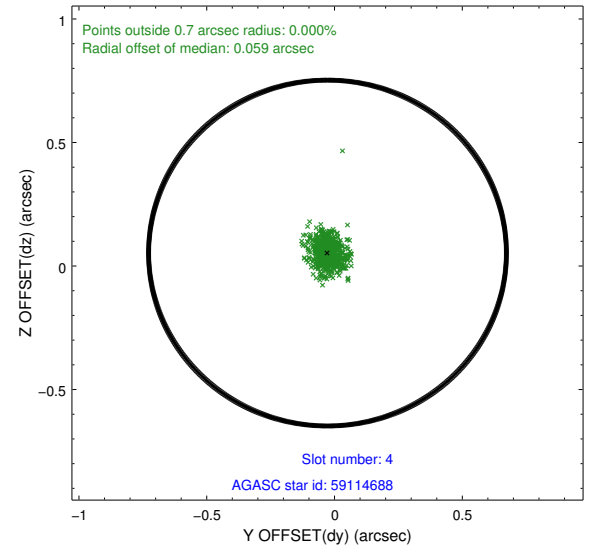
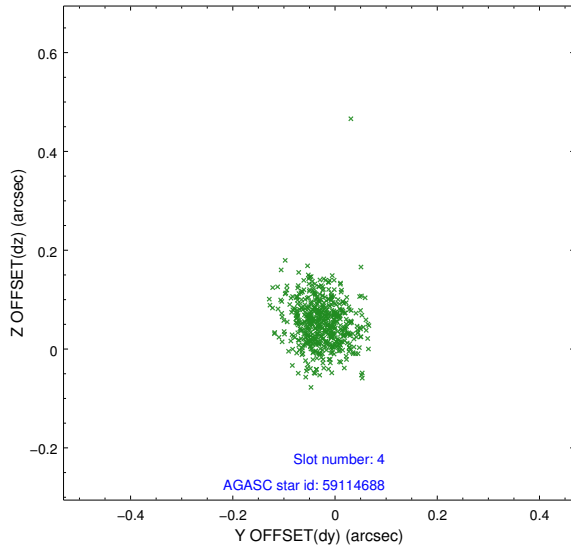


## 2.4 Star Slots

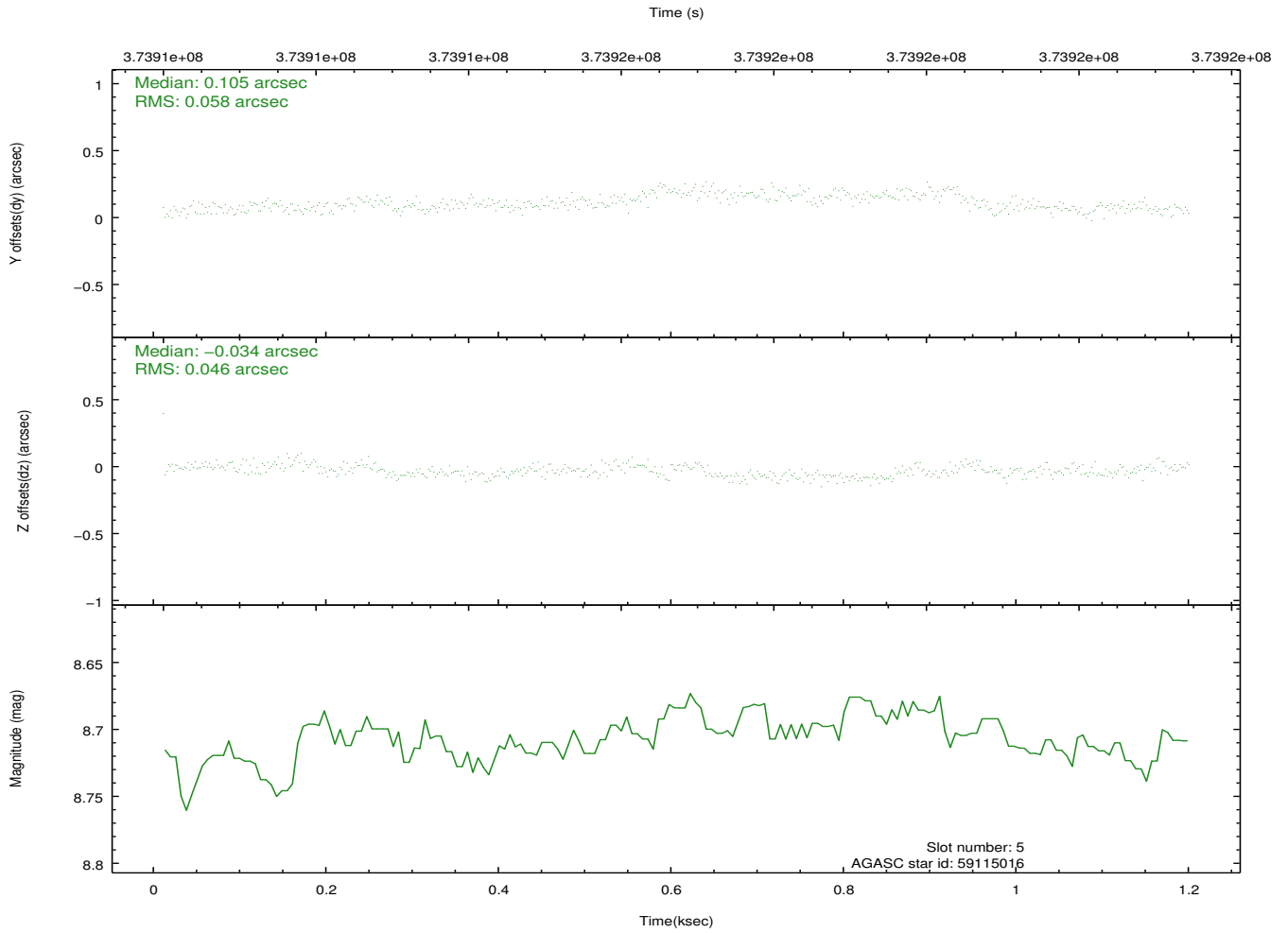
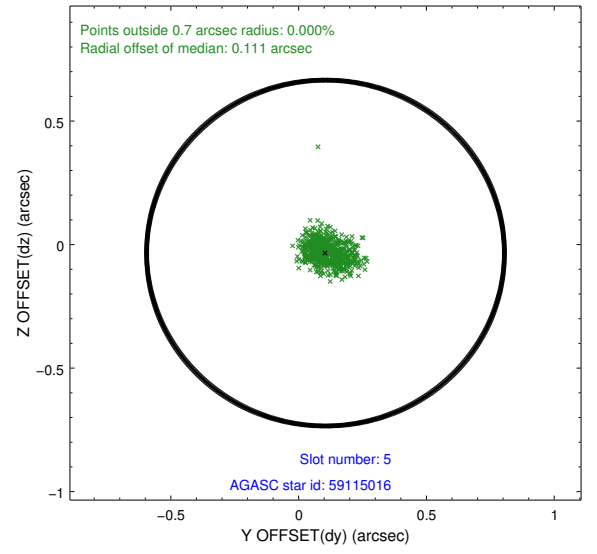
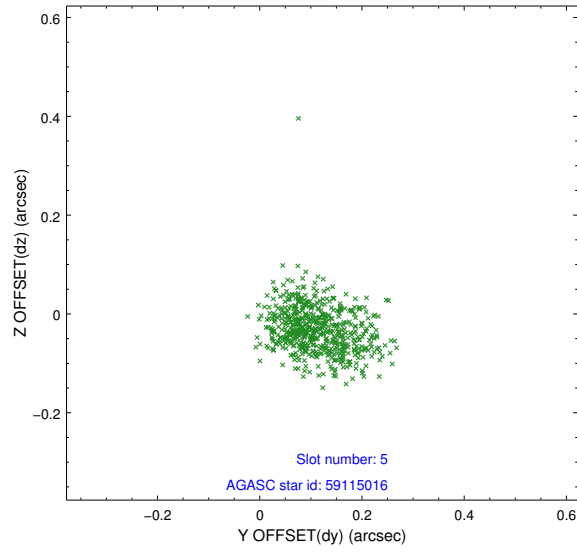
### 2.4.1 Slot 3



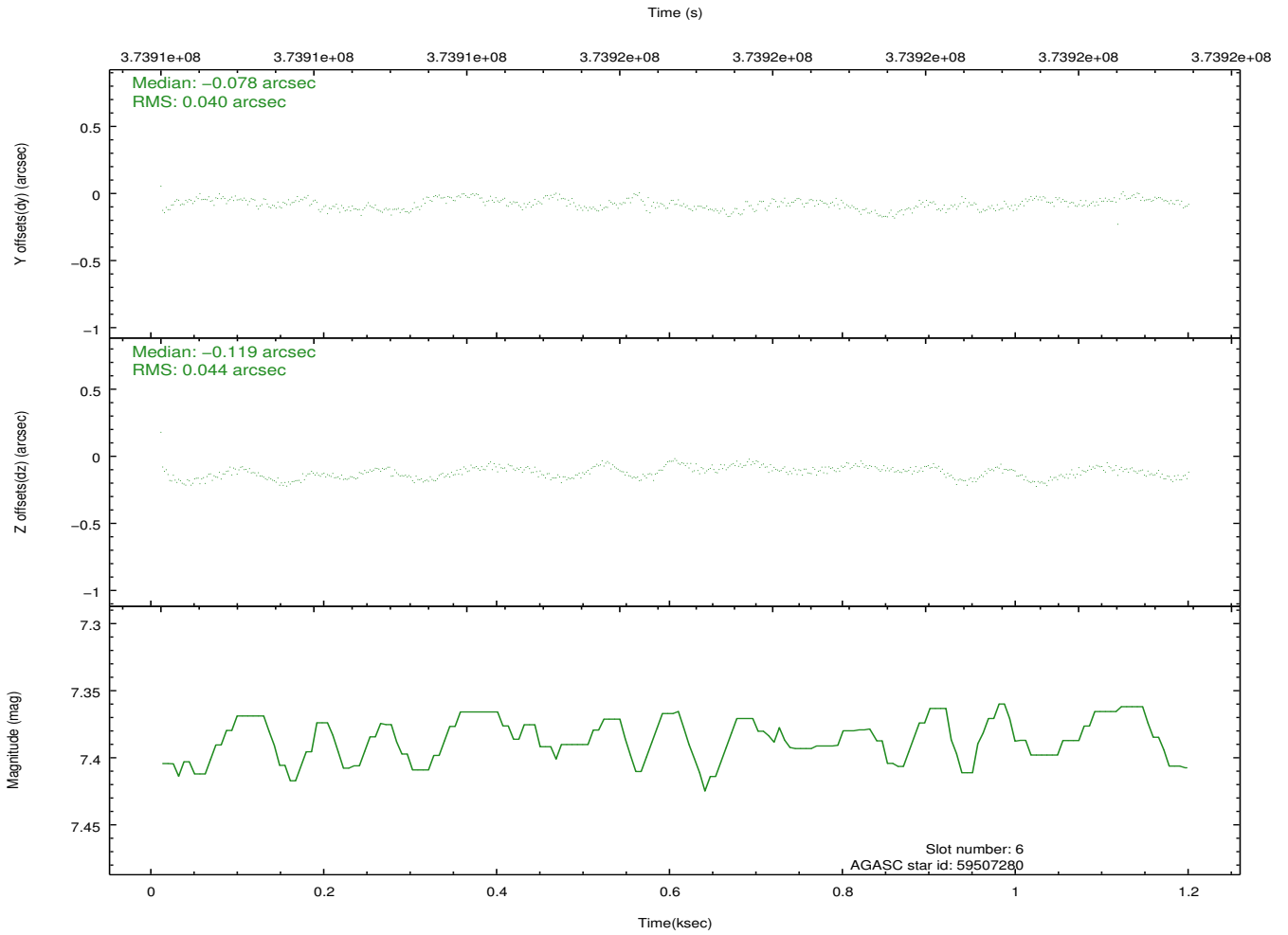
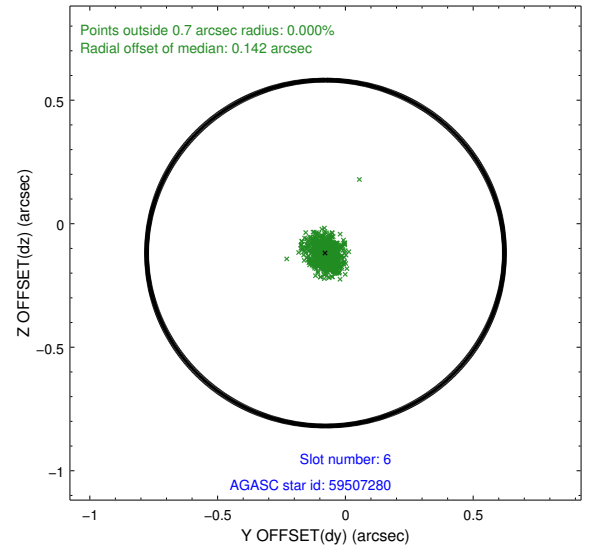
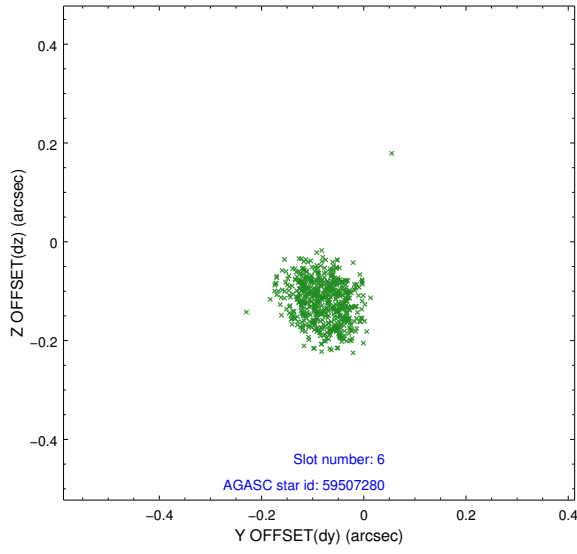
## 2.4.2 Slot 4



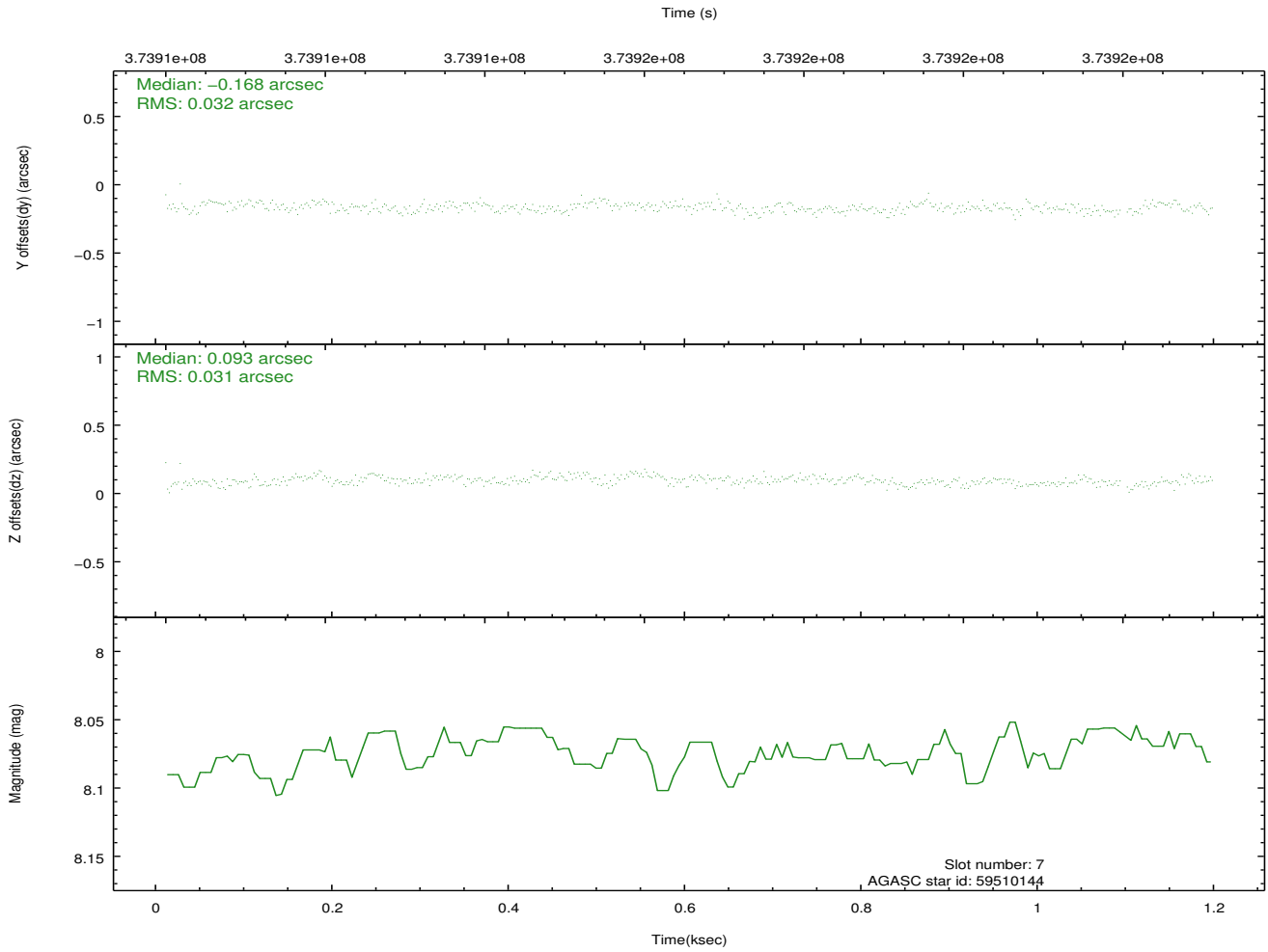
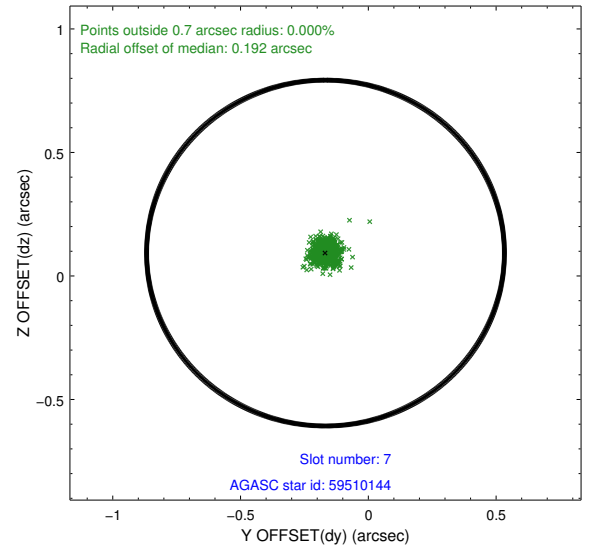
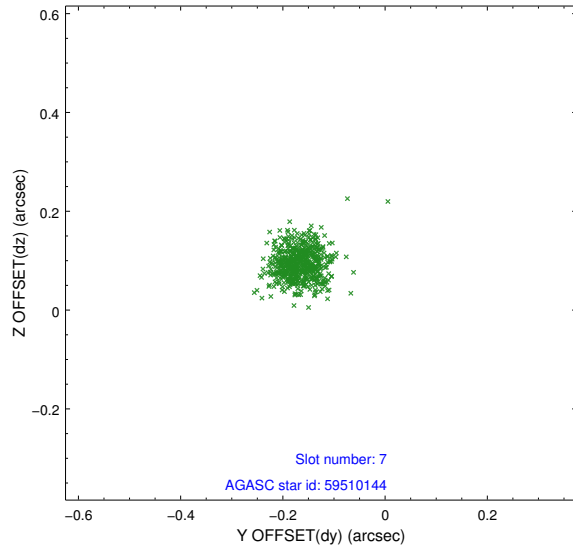
### 2.4.3 Slot 5



## 2.4.4 Slot 6

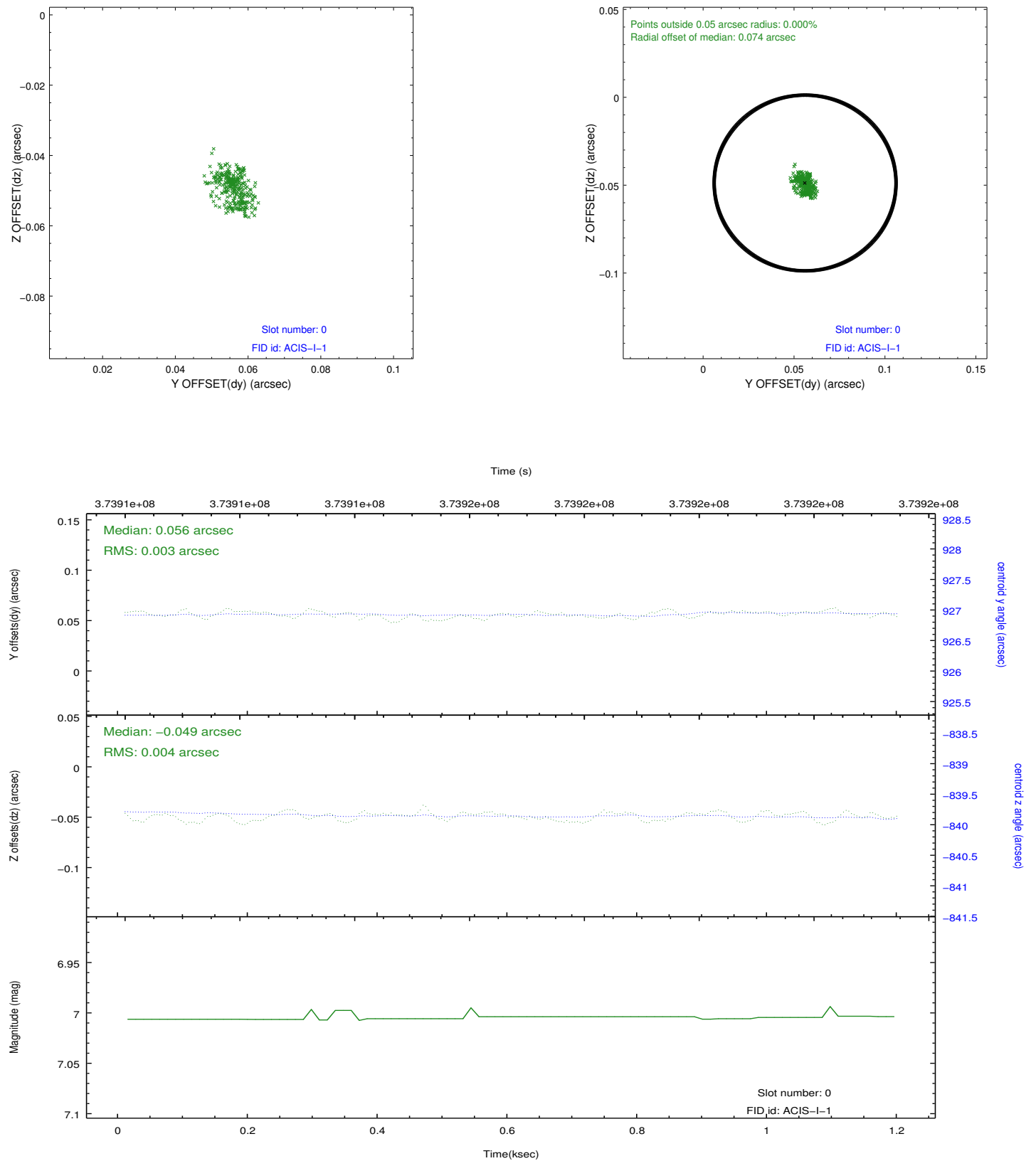


## 2.4.5 Slot 7

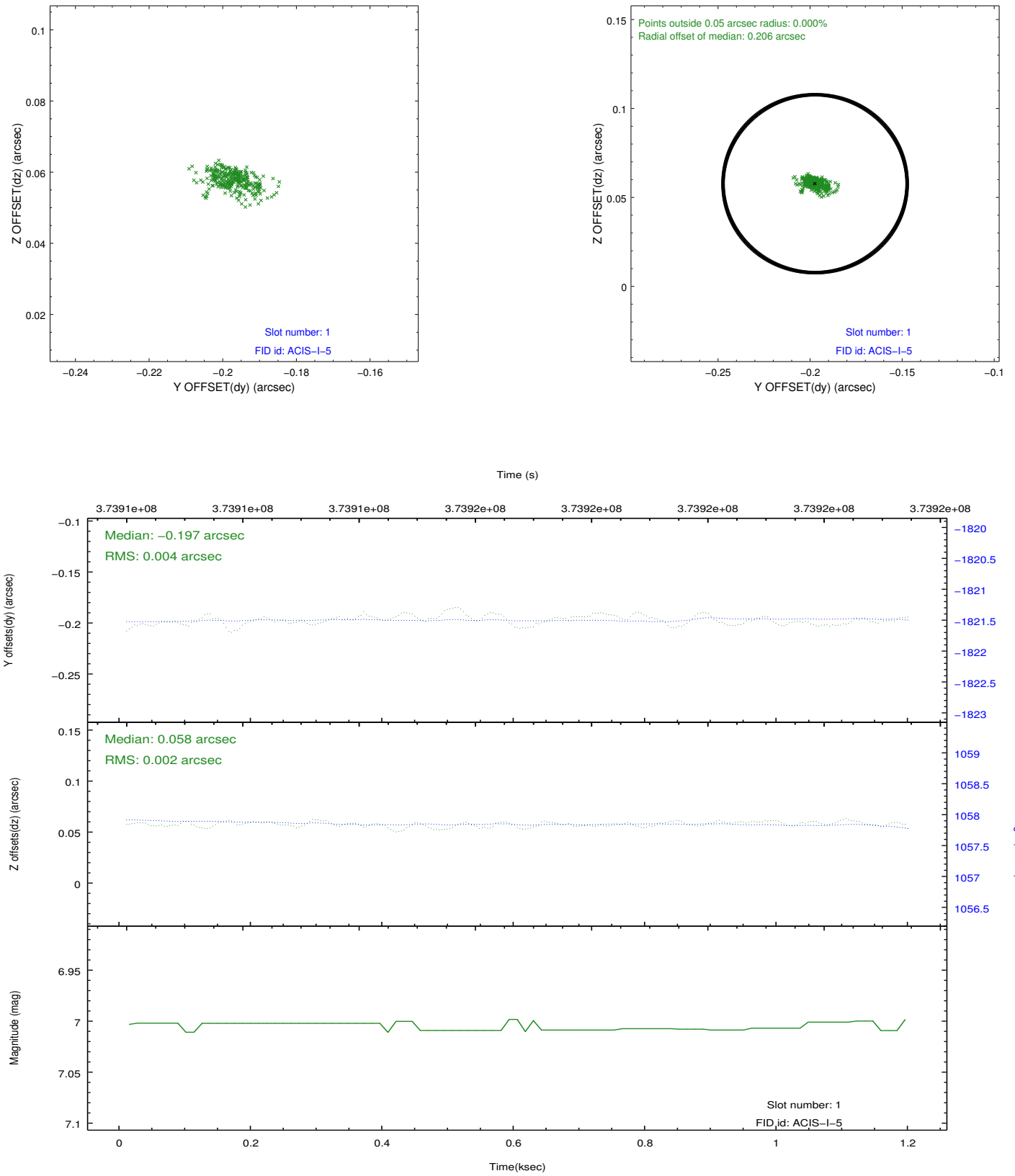


## 2.5 FID Slots

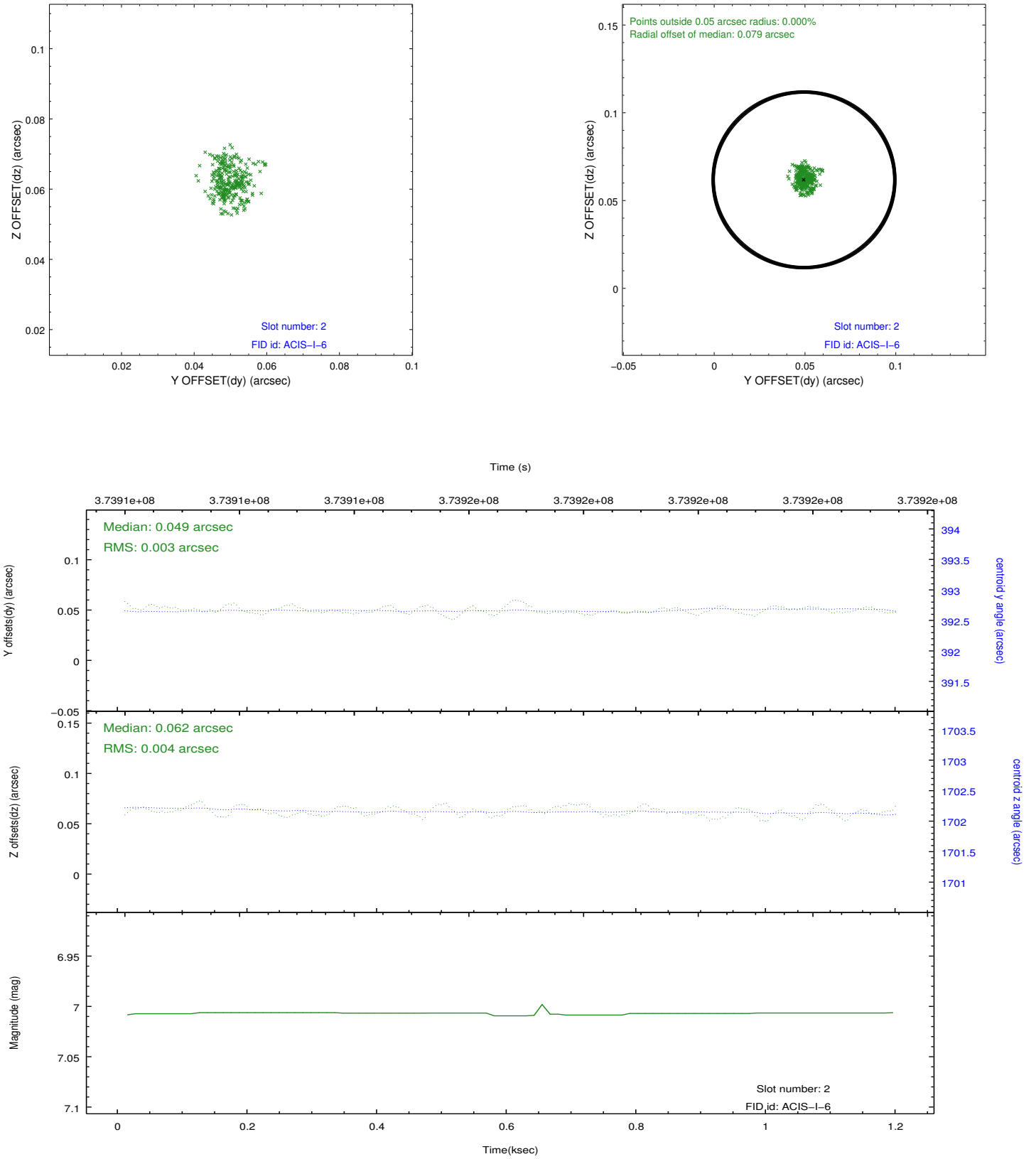
### 2.5.1 Slot 0



## 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)	2012.06.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1839999956489

### A.2 Comments