

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13173 - L2 Version 2  
Chandra X-Ray Center

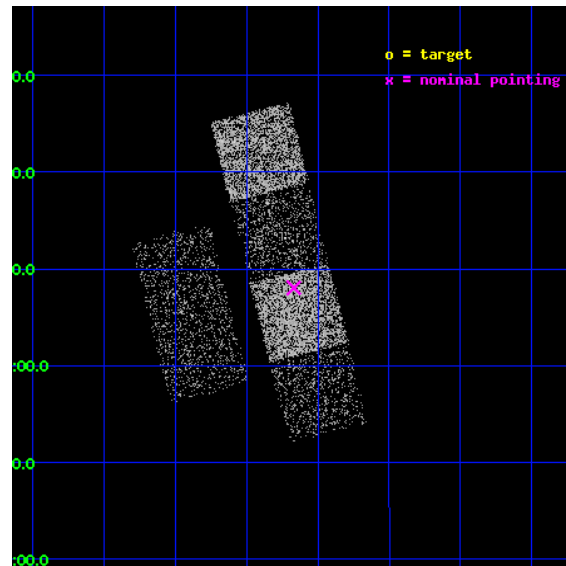
L2 Processing Date : Jul 6 2012

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# 1 Front

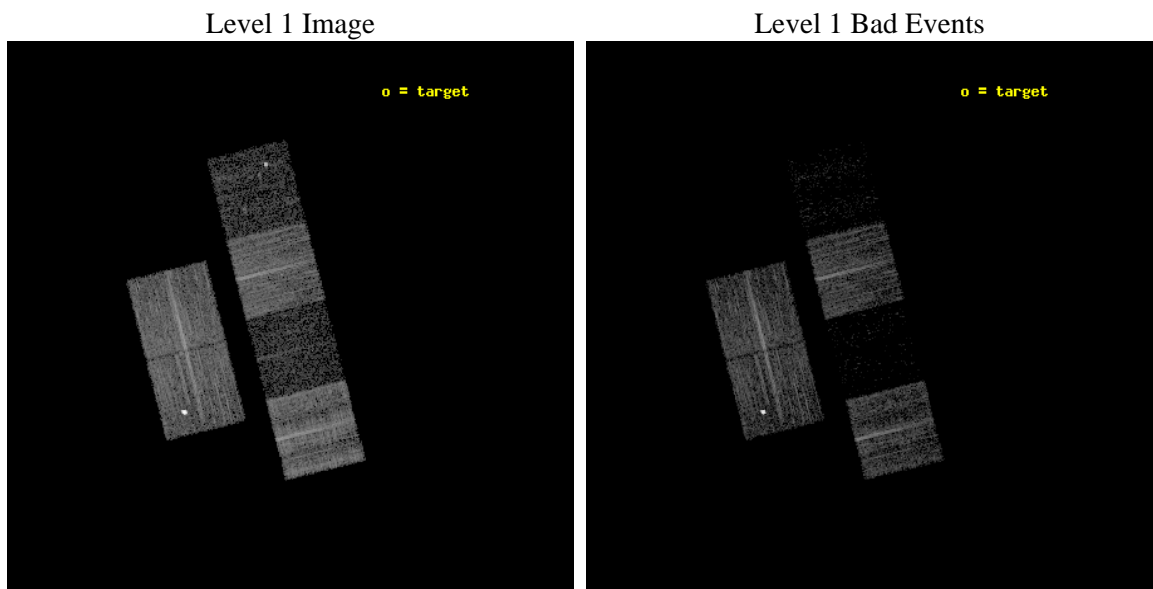
seq_num	100087	Sequence number
obs_id	13173	Observation id
title	Comet 103P/Hartley 2 During the EPOXI Spacecraft Encounter	Proposa
observer	Dr. Carey Lisse	Principal investigator
object	103P/Hartley 2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	106.306208	Observer's specified target RA [deg]
dec_targ	7.21925	Observer's specified target Dec [deg]
ra_nom	106.91711342539	Nominal RA [deg]
dec_nom	6.13421205053	Nominal Dec [deg]
roll_nom	75.89058929515	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6681.5999751687	Sum of GTIs [s]
livetime	6596.9935331066	Livetime [s]
ontime2	6681.5999751687	Sum of GTIs [s]
ontime3	6681.5999751687	Sum of GTIs [s]
ontime5	6681.5999751687	Sum of GTIs [s]
ontime6	6681.5999751687	Sum of GTIs [s]
ontime7	6681.5999751687	Sum of GTIs [s]
ontime8	6678.3589648604	Sum of GTIs [s]
l2events	12416	Number of level 2 events



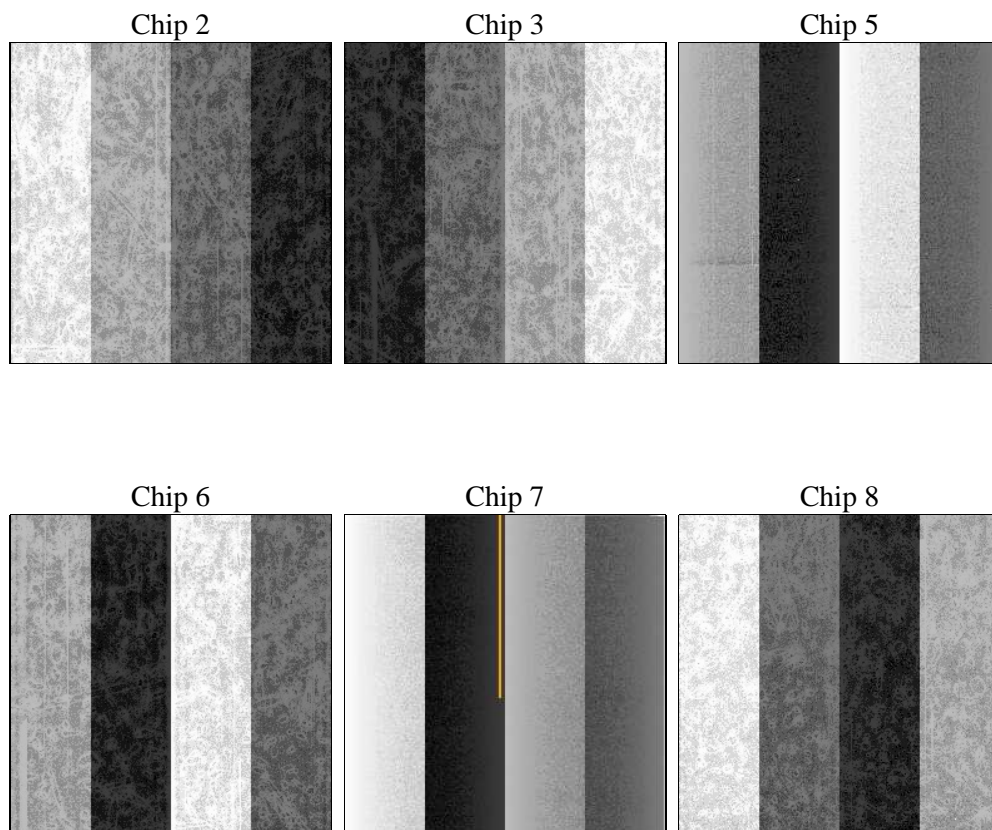
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	6681.5999751687	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime2	6681.5999751687	Sum of GTIs [s]
date	2012-07-06T12:24:24	Date and time of file creation	ontime3	6681.5999751687	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	6681.5999751687	Sum of GTIs [s]
			ontime6	6681.5999751687	Sum of GTIs [s]
			ontime7	6681.5999751687	Sum of GTIs [s]
			ontime8	6678.3589648604	Sum of GTIs [s]
			l1events	165133	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	35395	45355	8600	30924	6417	38442
rejected events	33829	38375	2556	29387	1388	27186
rejected %	95%	84%	29%	95%	21%	70%

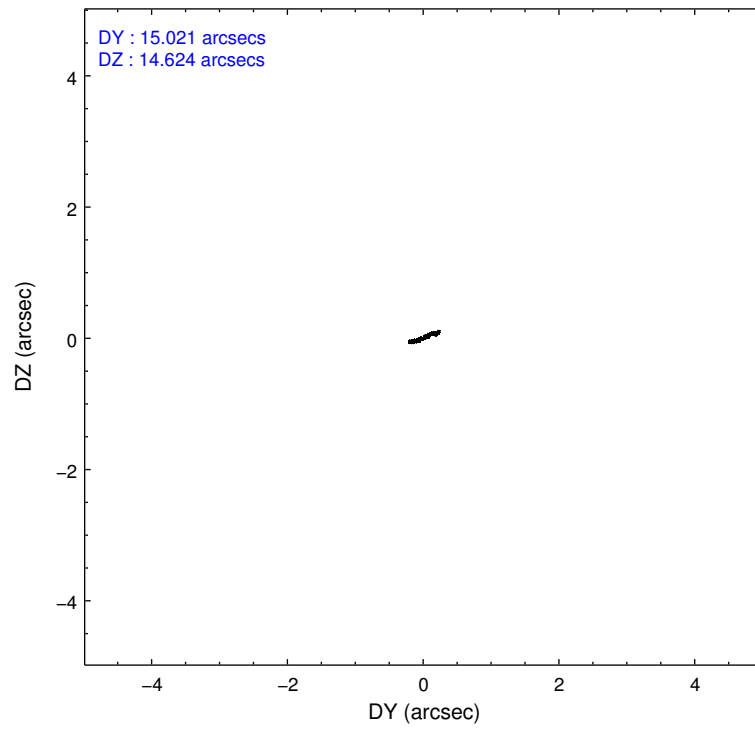
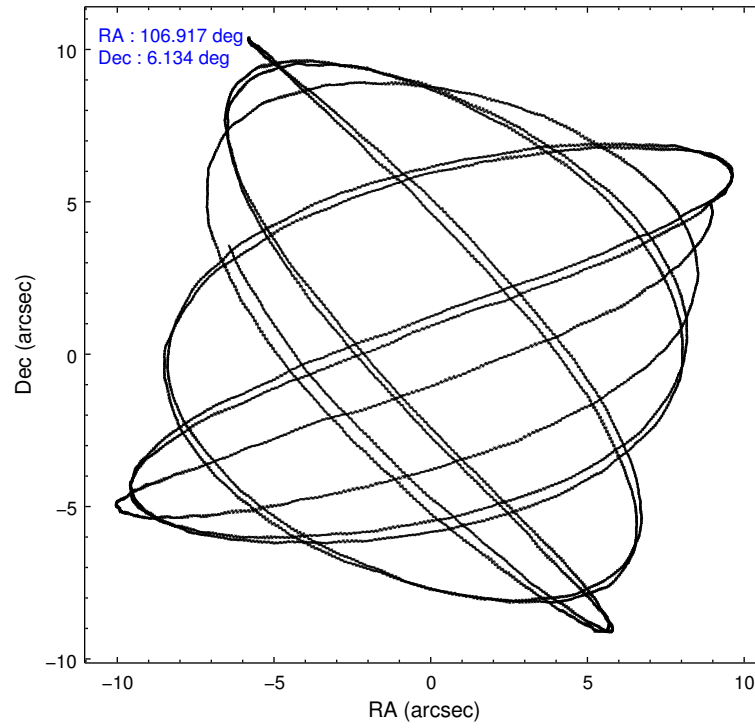
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	653	6540	2174	812	1931	3273
	1%	14%	25%	2%	30%	8%
grade 1 events	15	8048	123	11	40	34
	0%	17%	1%	0%	0%	0%
grade 2 events	406	204	2571	313	1560	2792
	1%	0%	29%	1%	24%	7%
grade 3 events	165	163	478	194	633	1270
	0%	0%	5%	0%	9%	3%
grade 4 events	213	149	470	166	555	1108
	0%	0%	5%	0%	8%	2%
grade 5 events	67	95	403	25	198	228
	0%	0%	4%	0%	3%	0%
grade 6 events	179	123	516	97	504	3073
	0%	0%	6%	0%	7%	7%
grade 7 events	33697	30033	1865	29306	996	26664
	95%	66%	21%	94%	15%	69%

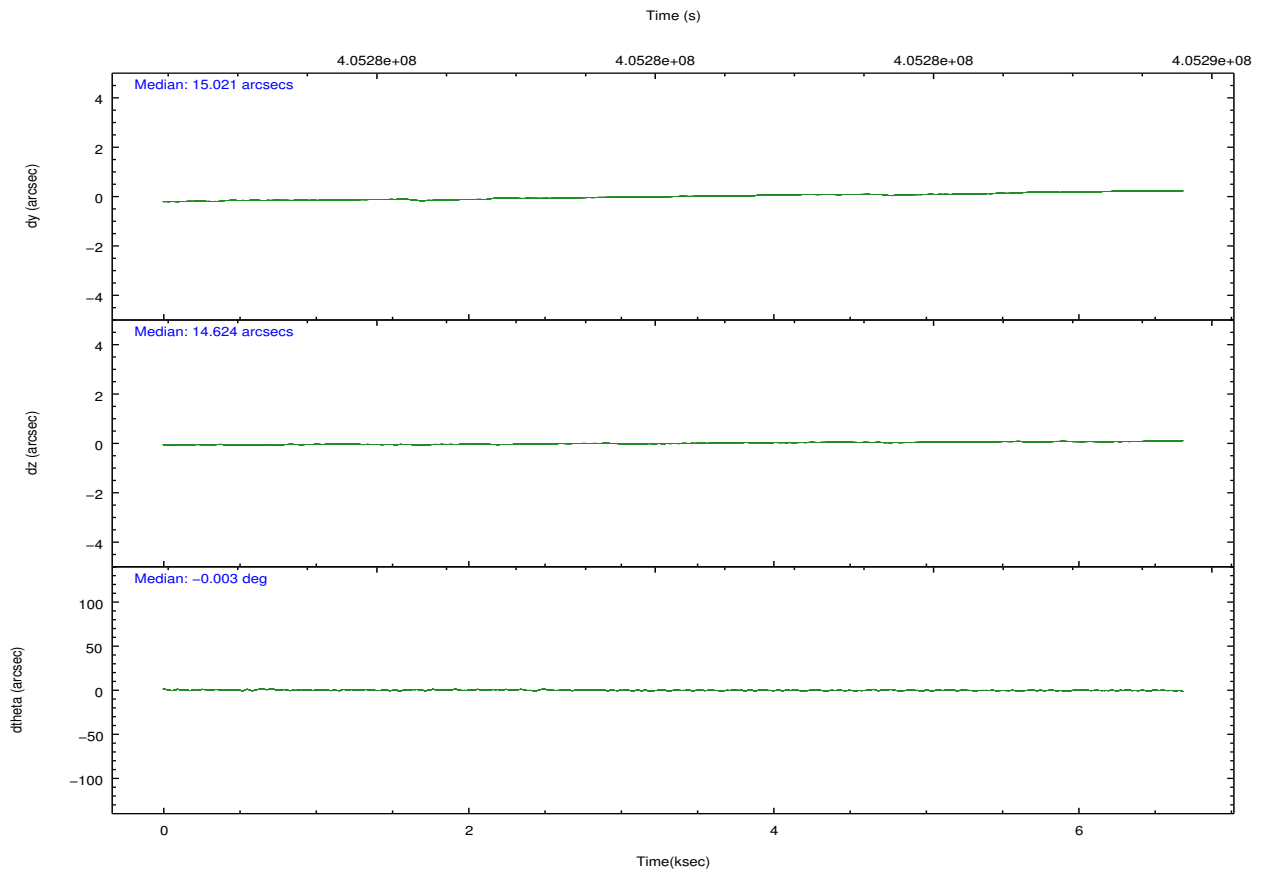
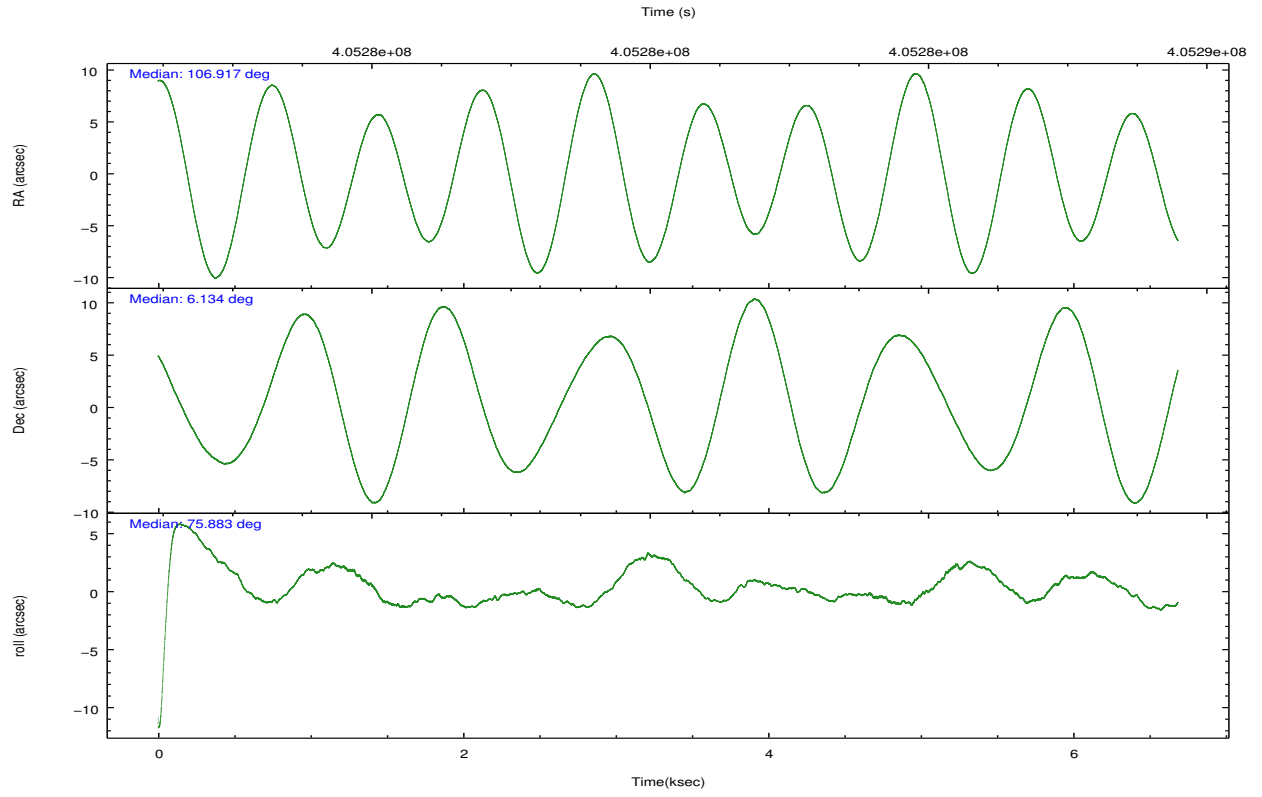


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	106.925009	106.917113425391	Subarray requested	NONE	NONE
[deg] Pointing Dec	6.108105	6.134212050529974	Alternating exposures requested	N	N
[deg] Pointing Roll	75.733111	75.89058929515022	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	405179766.184000	405179766.184000			
[s] Window stop time (MET)	405352566.184000	405352566.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	405278965.184000	405278589.45492			
Observation start date	2010-11-04T17:28:19	2010-11-04T17:23:09			
[s] Observation end time (MET)	405285465.184000	405286269.26782			
Observation end date	2010-11-04T19:16:39	2010-11-04T19:31:09			
Read mode	TIMED	TIMED			

## 2.3 Aspect



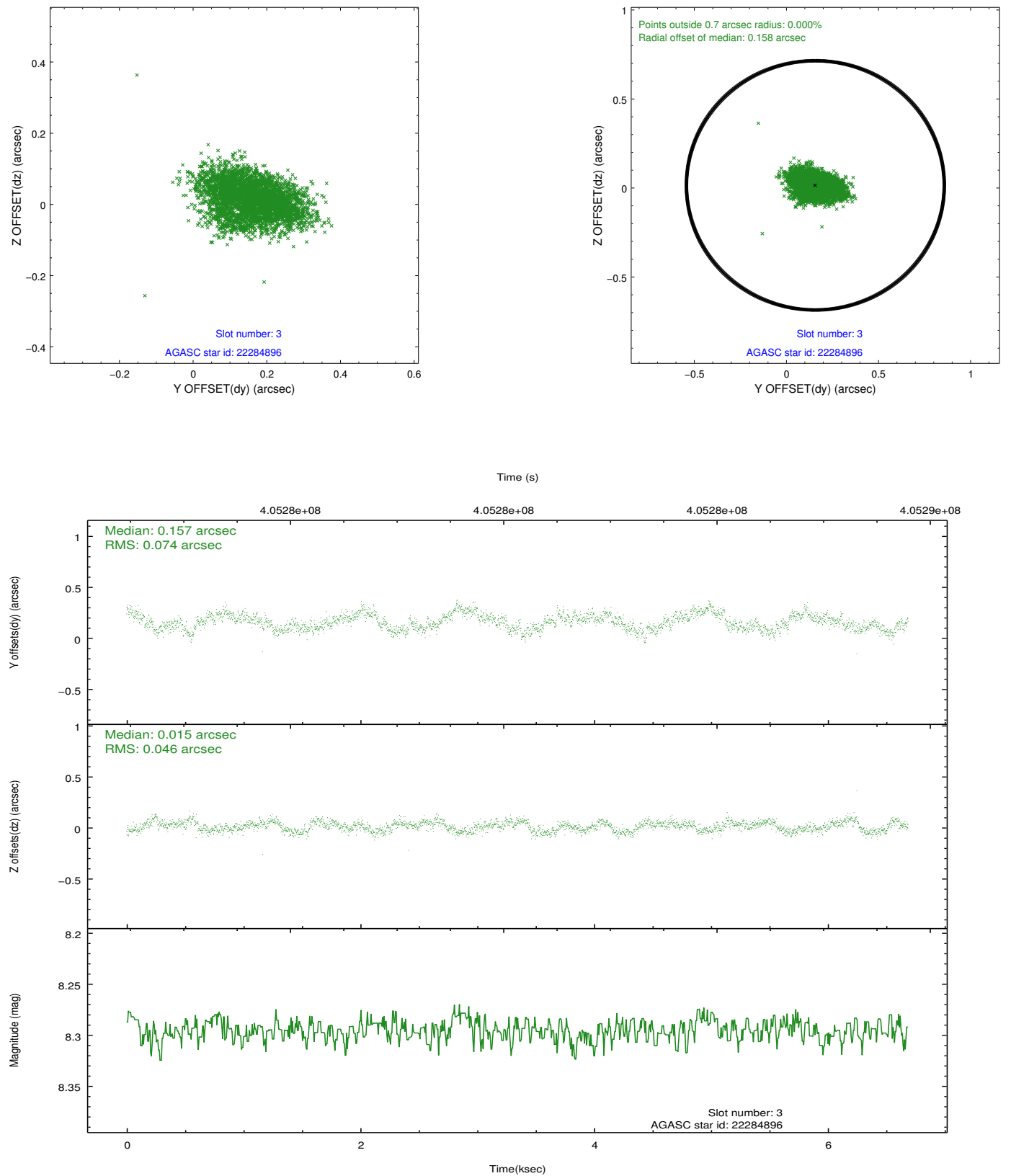


### Slot Statistics

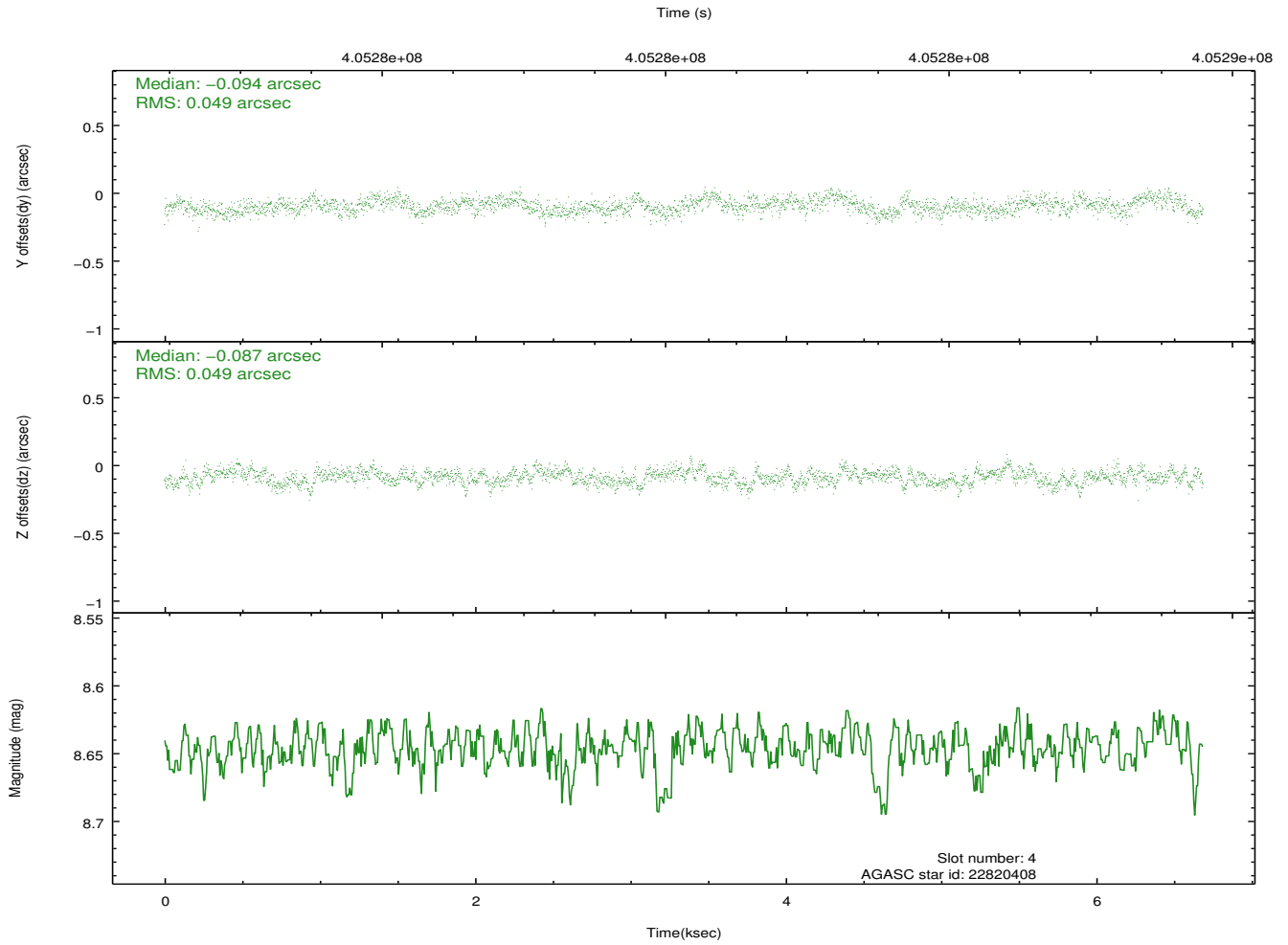
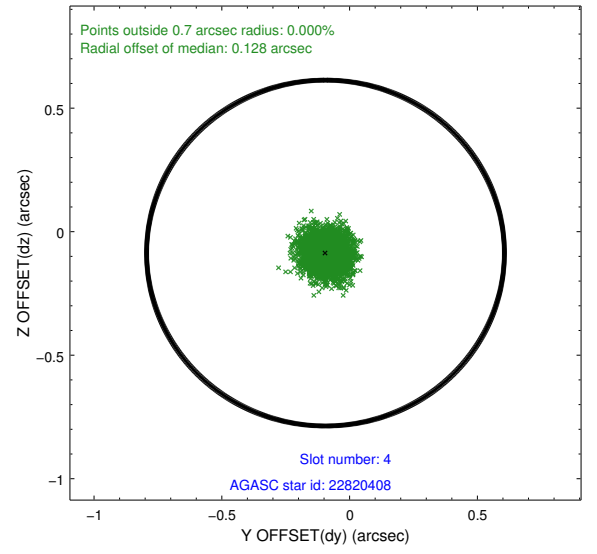
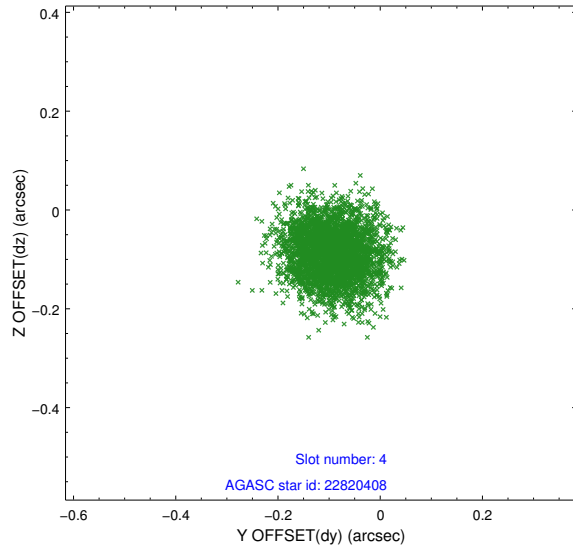
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	1631	-0.155	-0.114	0.005	0.010	0.000000	0.000000	-768.17	-1736.05
1	FID	ACIS-S-4	7.06	1631	0.168	0.077	0.006	0.010	0.000000	0.000000	2145.06	171.67
2	FID	ACIS-S-6	7.21	1631	-0.040	0.044	0.007	0.011	0.000000	0.000000	395.08	810.06
3	GUIDE	22284896	8.30	3260	0.157	0.015	0.092	0.149	106.439920	5.611766	-2159.28	1243.84
4	GUIDE	22820408	8.65	3259	-0.094	-0.087	0.074	0.118	106.724221	6.101405	-200.72	691.17
5	GUIDE	22824200	8.23	3261	0.088	-0.046	0.068	0.109	106.494056	5.889873	-1140.91	1302.34
6	GUIDE	22825224	8.00	3263	-0.022	-0.078	0.058	0.094	106.522122	6.119749	-314.47	1408.71
7	GUIDE	22966024	9.04	3260	-0.131	0.193	0.105	0.172	107.353977	6.445107	1555.01	-1187.02

## 2.4 Star Slots

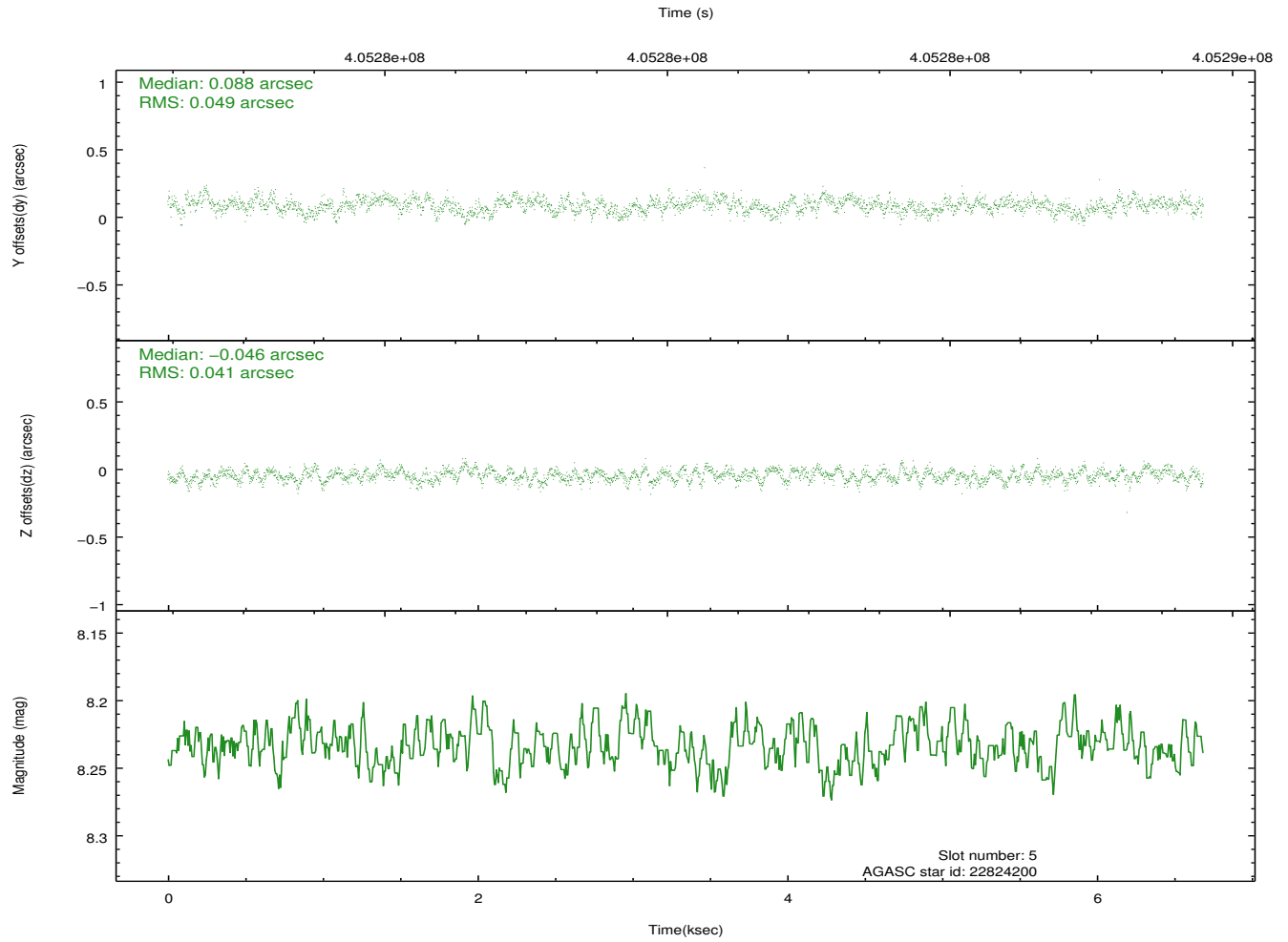
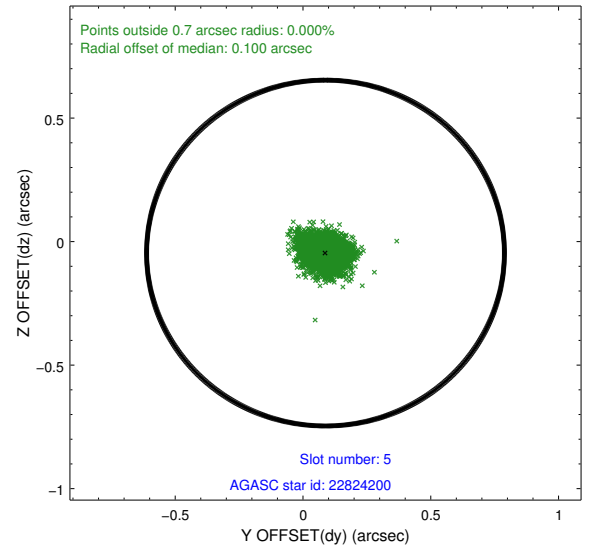
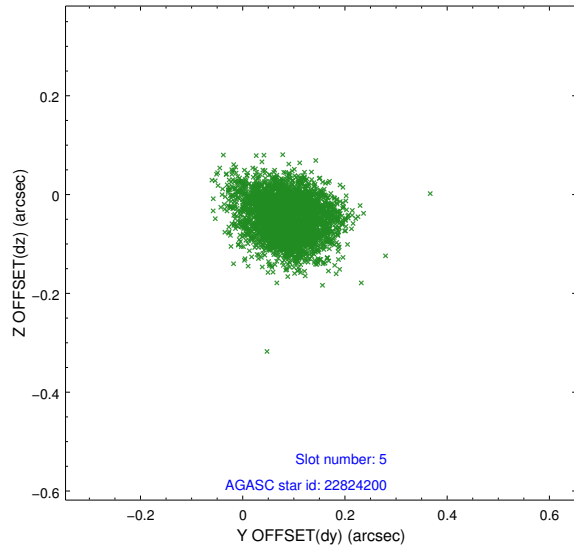
### 2.4.1 Slot 3



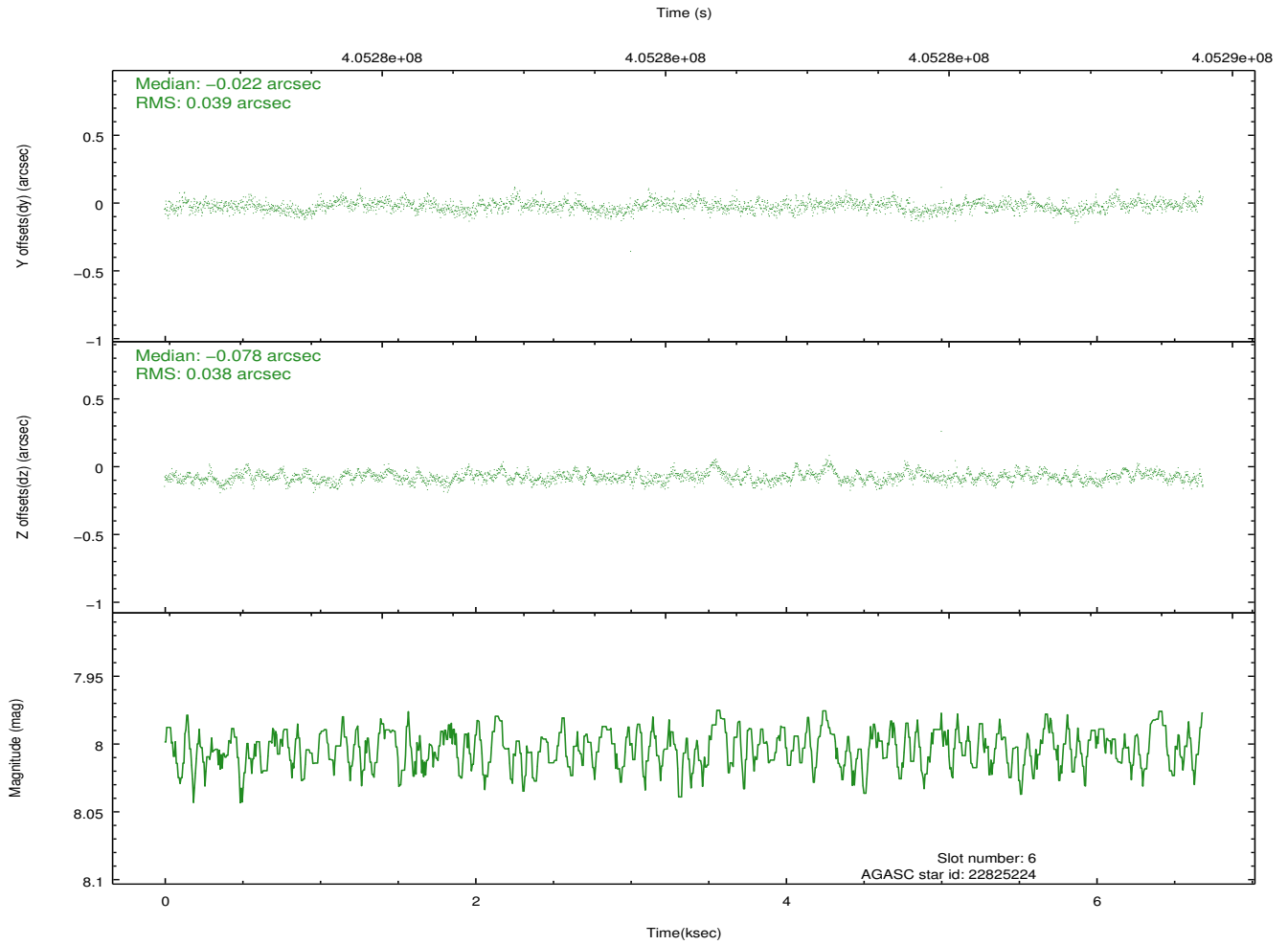
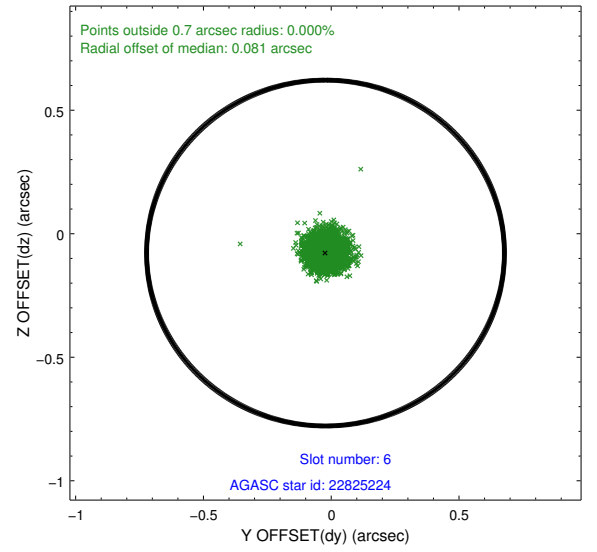
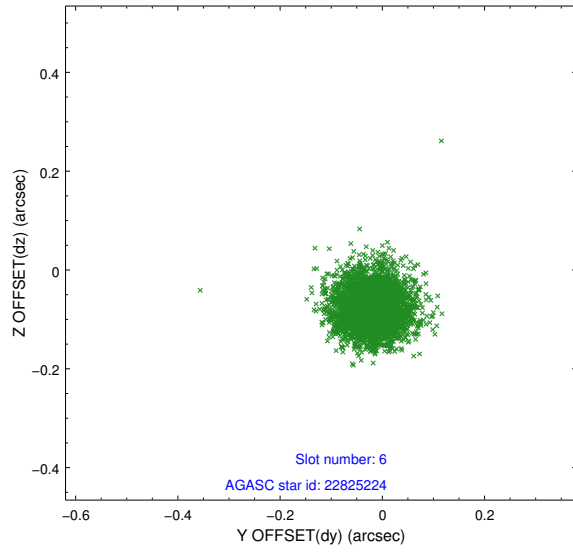
## 2.4.2 Slot 4



### 2.4.3 Slot 5

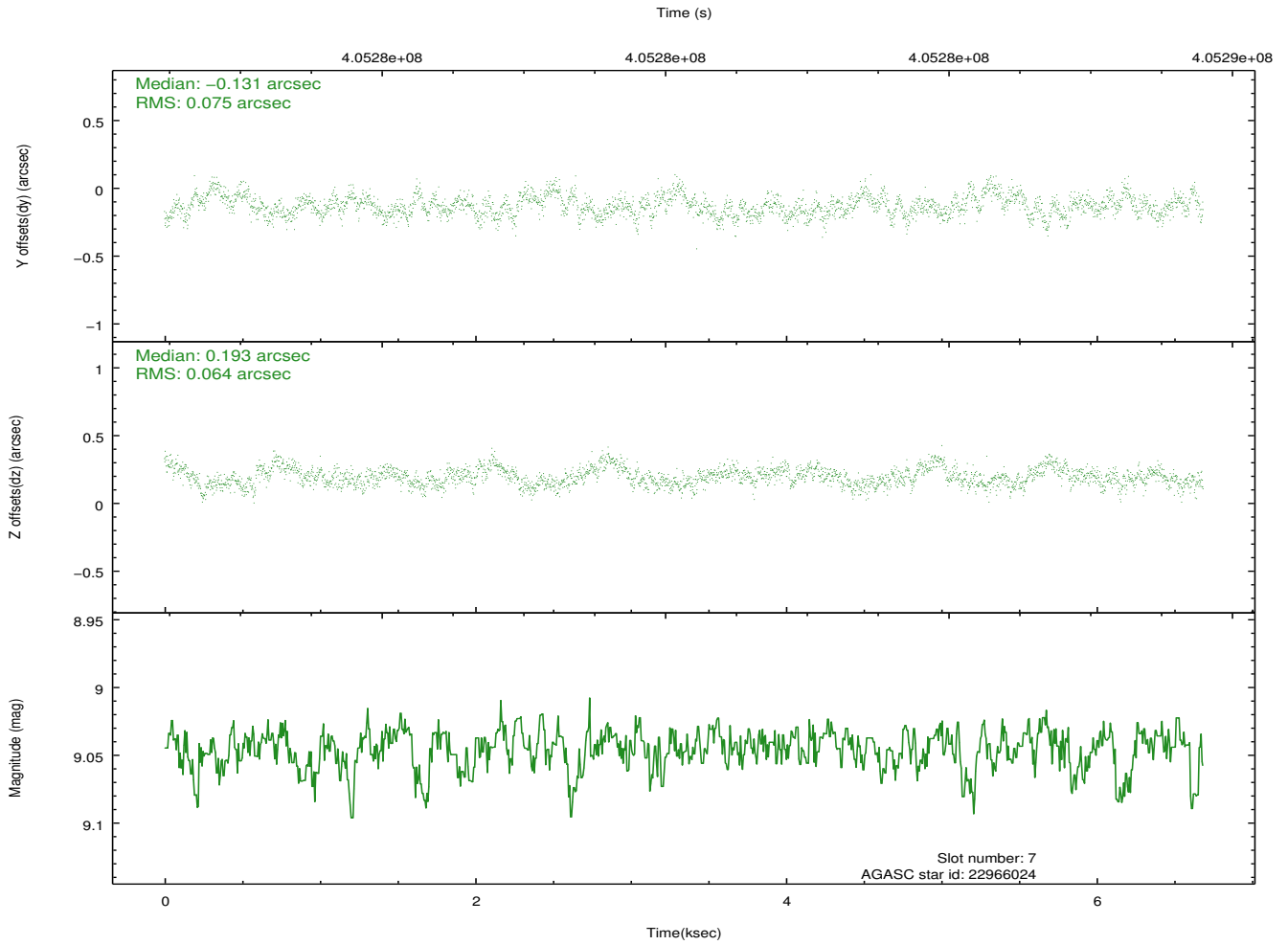
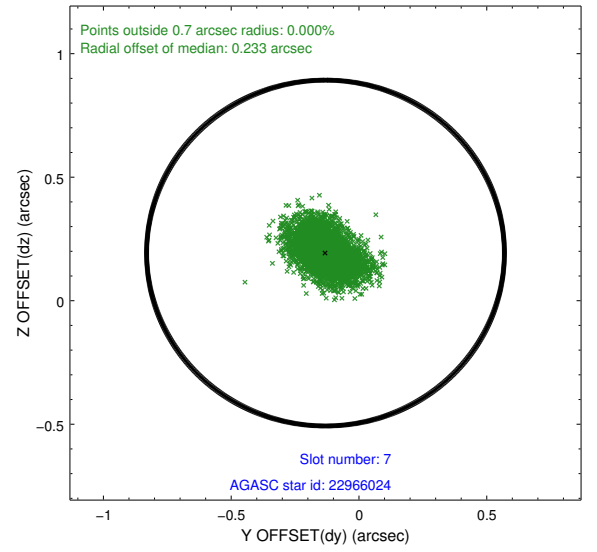
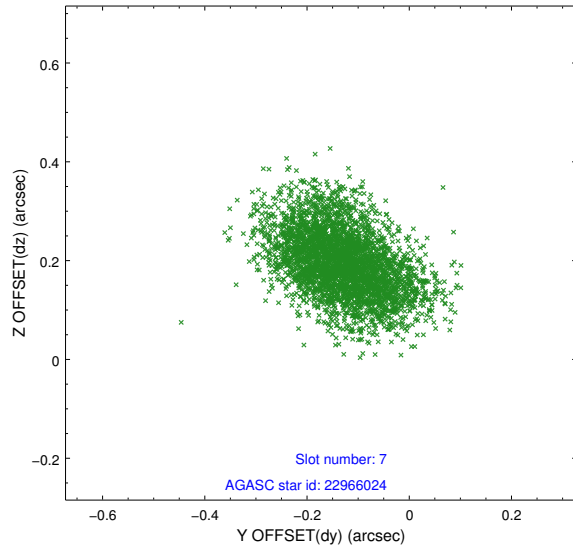


## 2.4.4 Slot 6



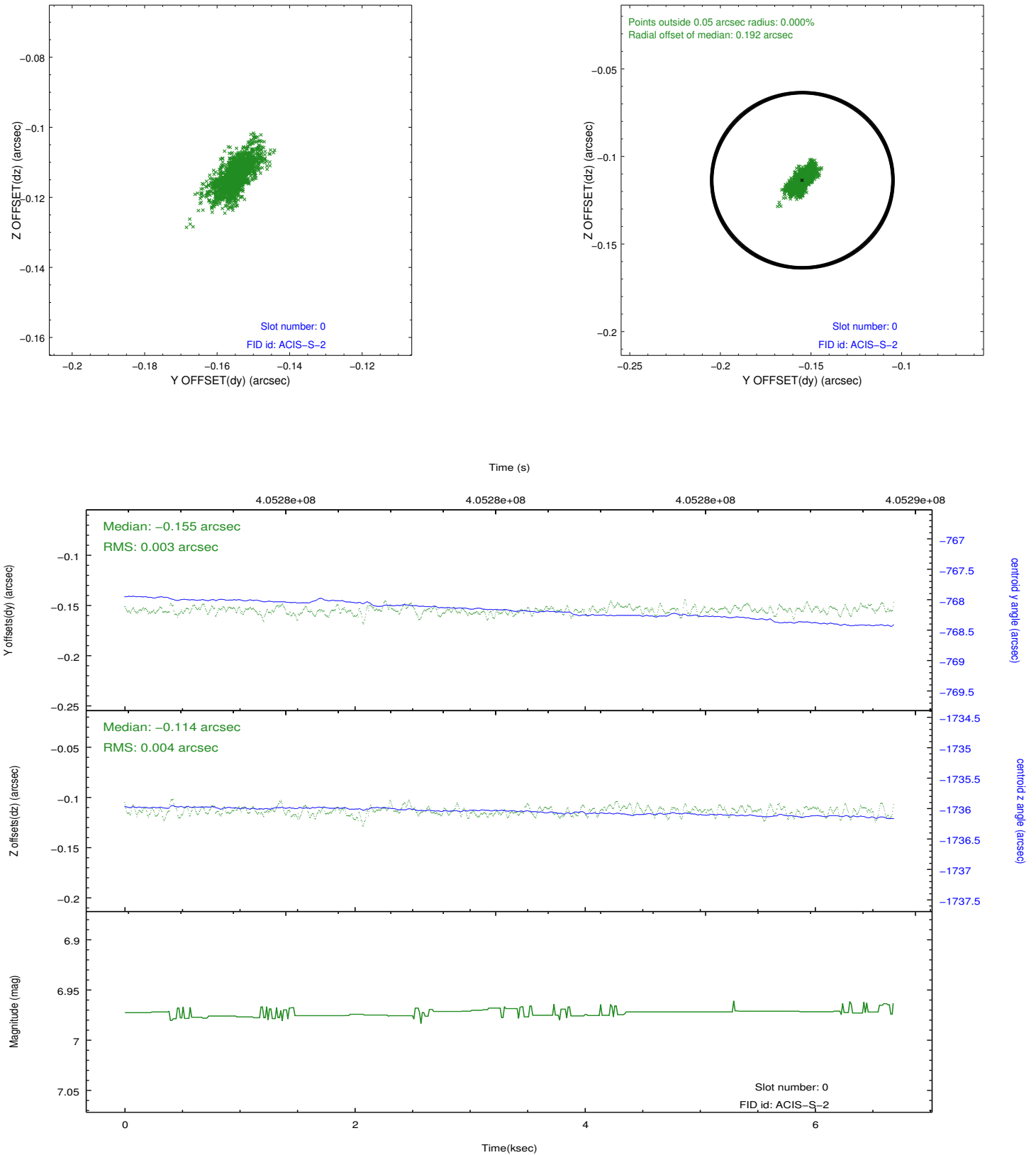


## 2.4.5 Slot 7

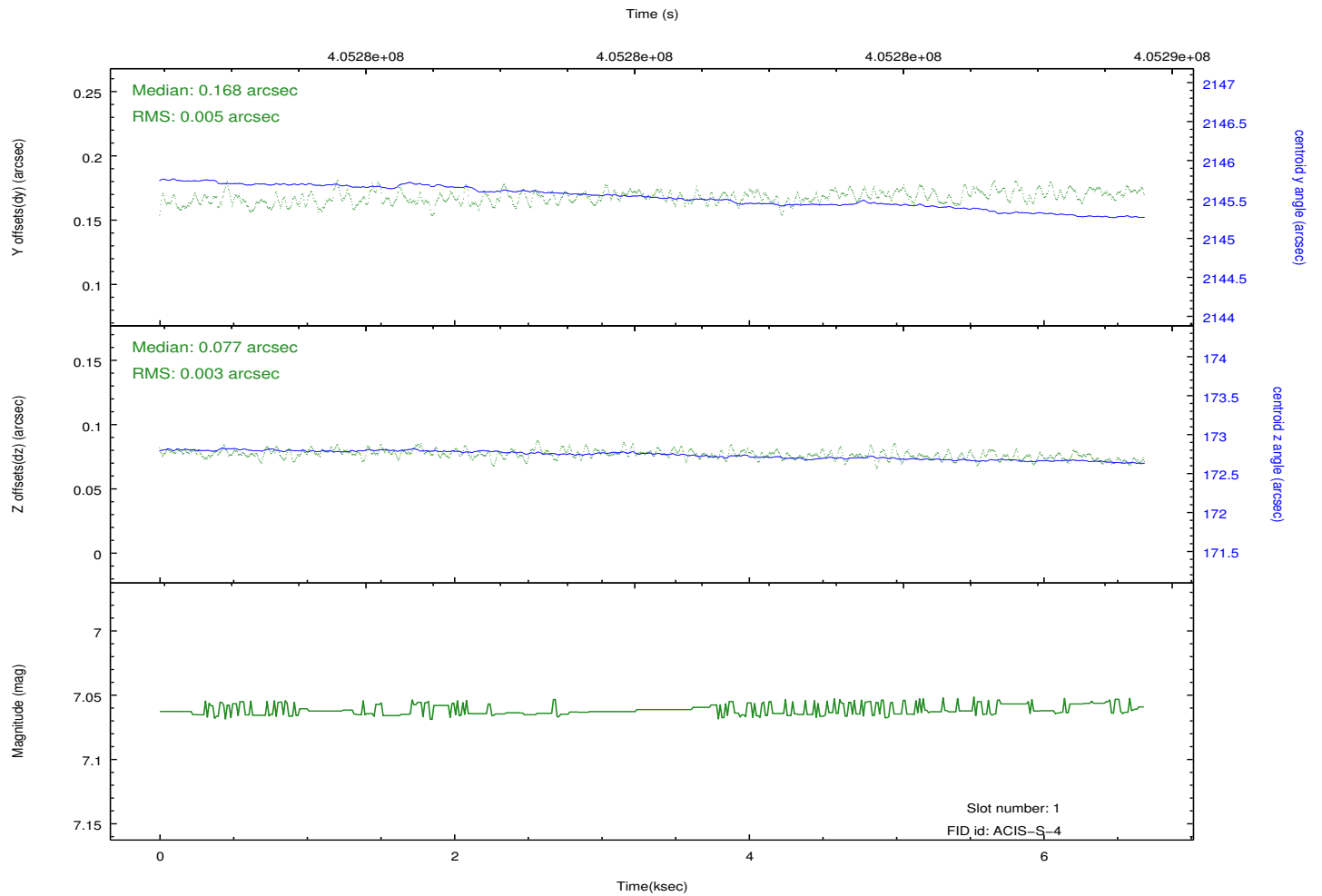
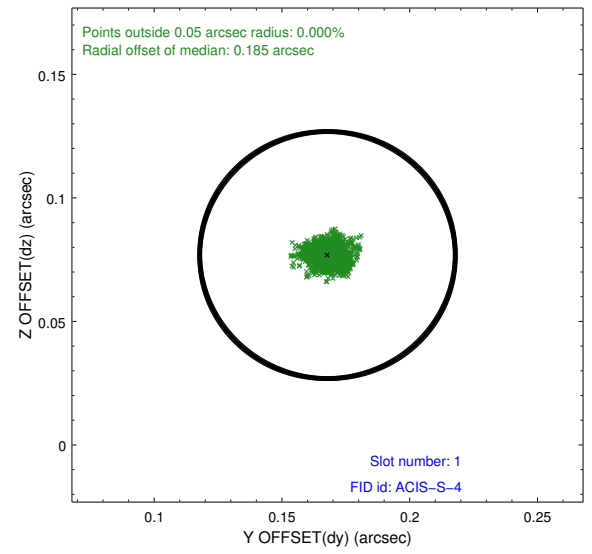
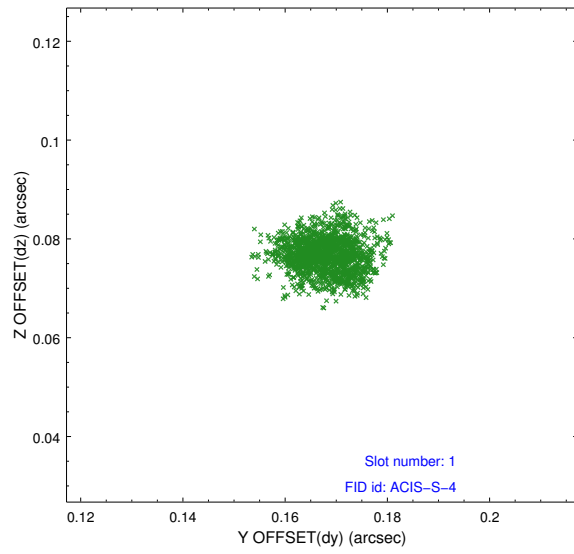


## 2.5 FID Slots

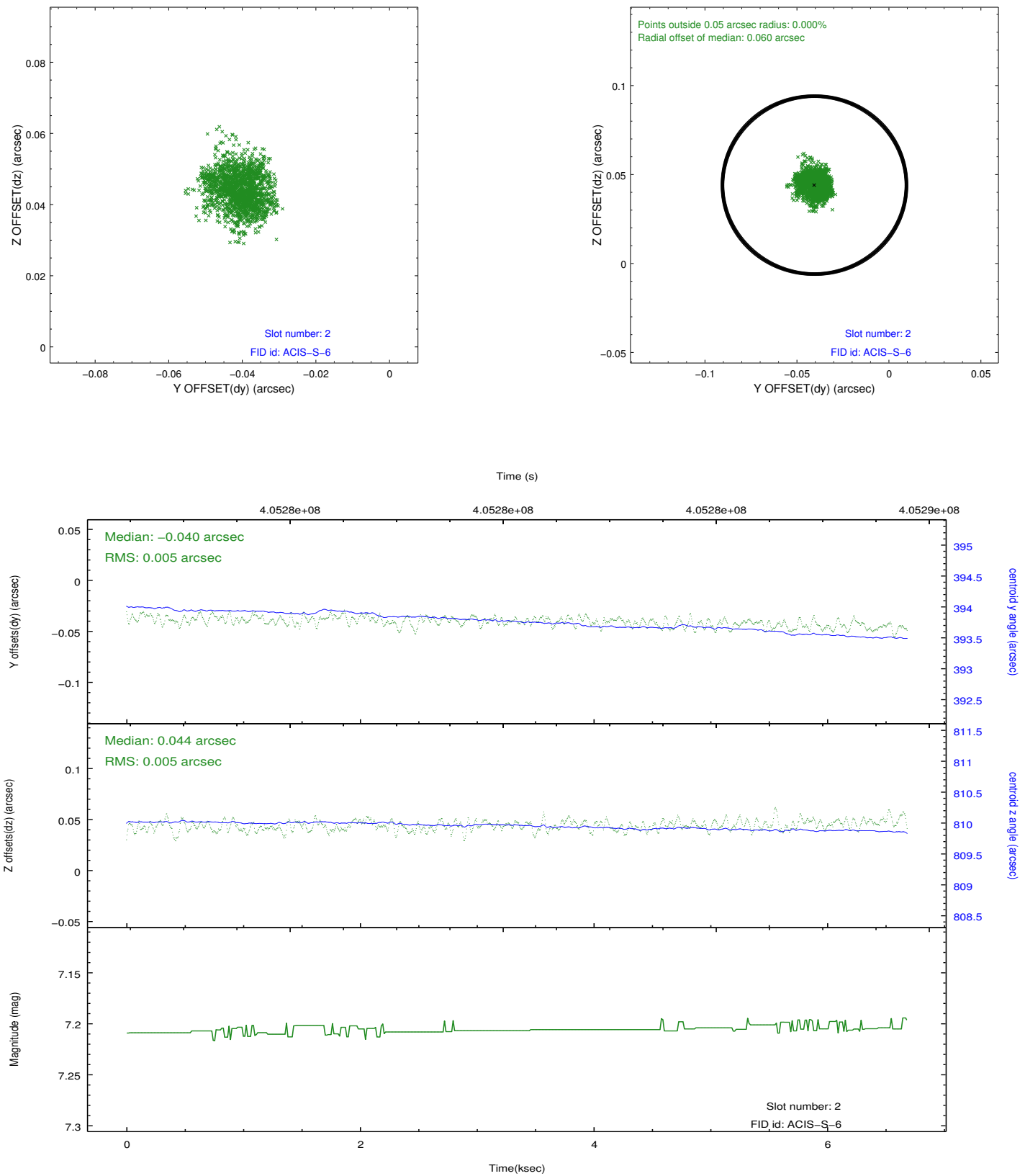
### 2.5.1 Slot 0



## 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)	2012.07.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.6815999751687

## A.2 Comments

The comet was moving with respect to the satellite during this observation. In order to analyze the data, the user should run sso\_freeze or a similar software package that reprojects the events into the coordinate system of the comet.

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Window constraint met.