

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13141 - L2 Version 2  
Chandra X-Ray Center

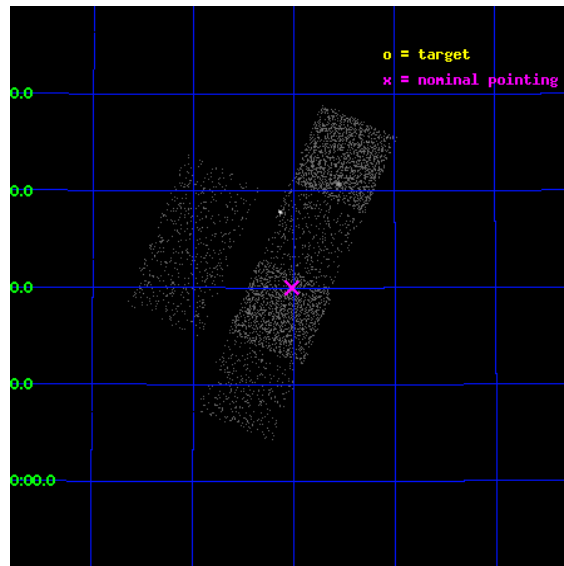
L2 Processing Date : Jul 5 2012

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# 1 Front

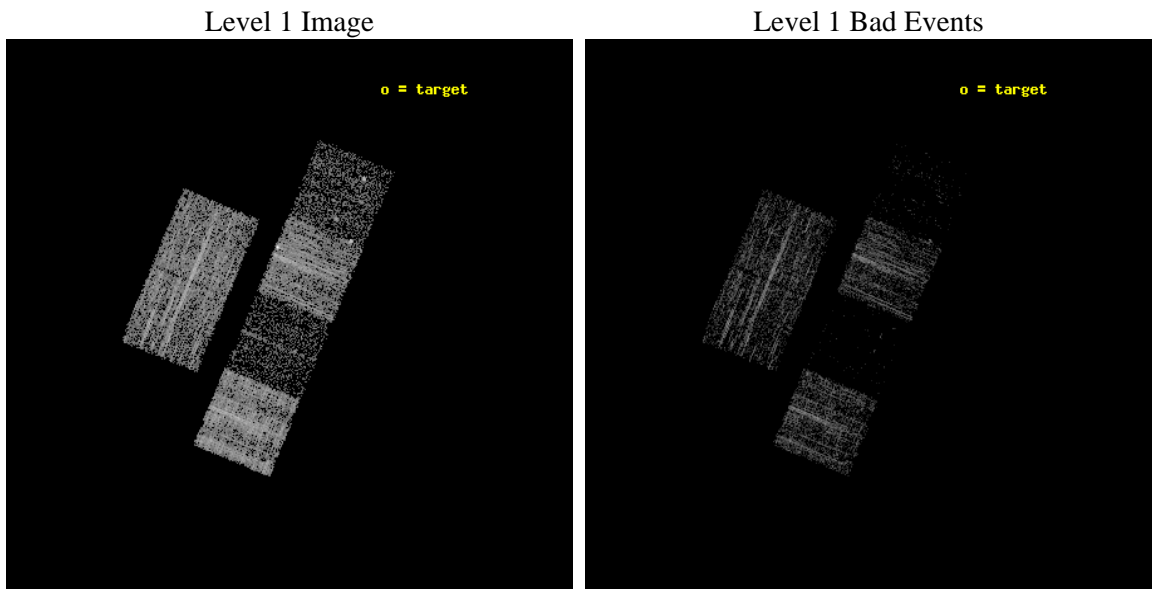
seq_num	100082	Sequence number
obs_id	13141	Observation id
title	Comet 103P/Hartley 2 During the EPOXI Spacecraft Encounter	Proposa
observer	Dr. Carey Lisse	Principal investigator
object	103P/Hartley 2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	81.25	Observer's specified target RA [deg]
dec_targ	39.0	Observer's specified target Dec [deg]
ra_nom	74.255421057309	Nominal RA [deg]
dec_nom	45.333349574763	Nominal Dec [deg]
roll_nom	112.5973349711	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2758.3999897838	Sum of GTIs [s]
livetime	2723.4714682041	Livetime [s]
ontime2	2758.3999897838	Sum of GTIs [s]
ontime3	2758.3999897838	Sum of GTIs [s]
ontime5	2758.3999897838	Sum of GTIs [s]
ontime6	2751.9179492593	Sum of GTIs [s]
ontime7	2758.3999897838	Sum of GTIs [s]
ontime8	2751.9179491997	Sum of GTIs [s]
l2events	5268	Number of level 2 events



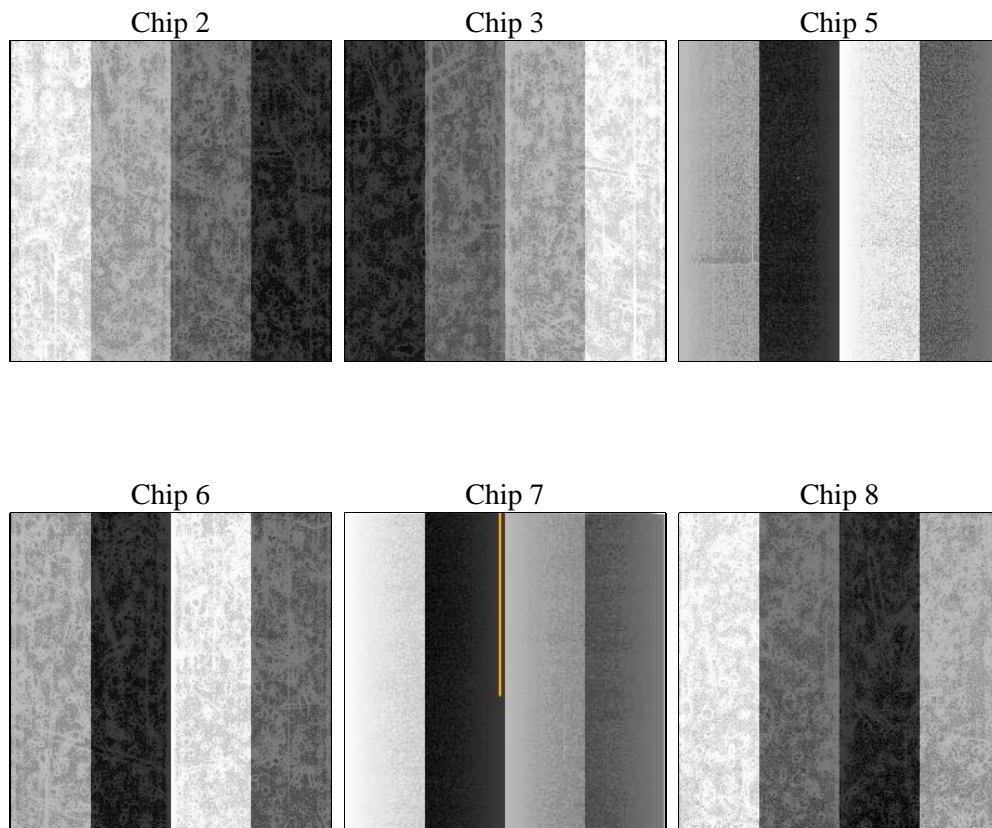
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2758.3999897838	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime2	2758.3999897838	Sum of GTIs [s]
date	2012-07-05T05:26:00	Date and time of file creation	ontime3	2758.3999897838	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	2758.3999897838	Sum of GTIs [s]
			ontime6	2751.9179492593	Sum of GTIs [s]
			ontime7	2758.3999897838	Sum of GTIs [s]
			ontime8	2751.9179491997	Sum of GTIs [s]
			l1events	63237	Number of level 1 events

### 2.1.4 Events

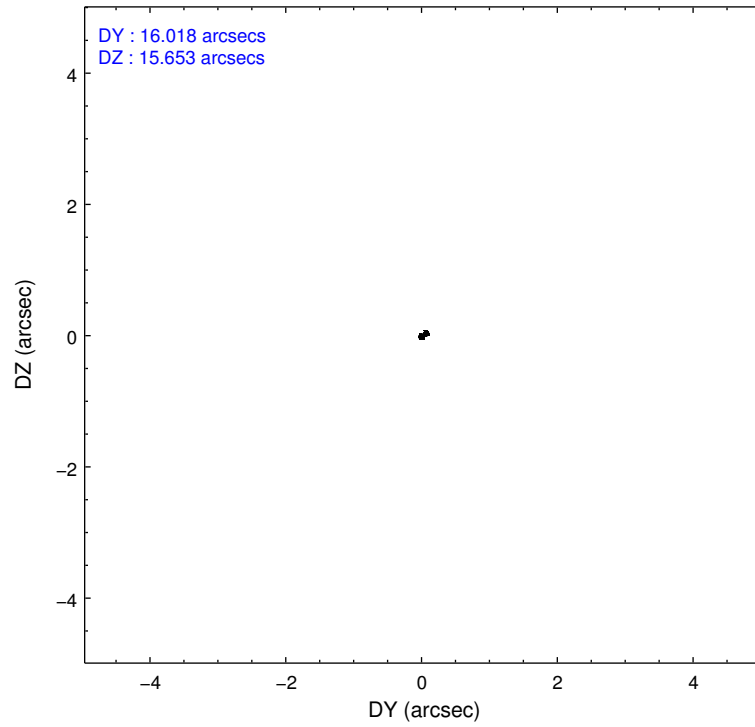
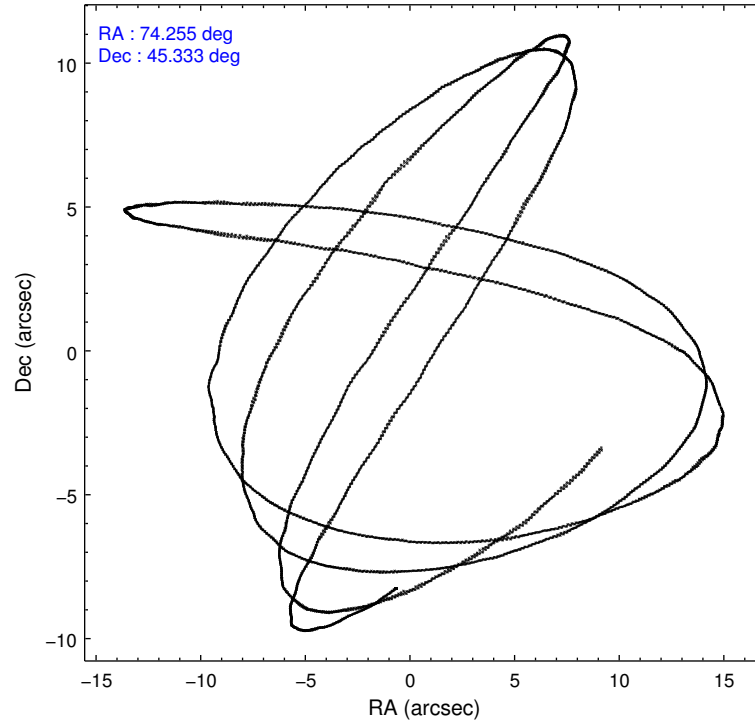
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	12983	12474	3408	13675	2197	18500
rejected events	12396	12014	1085	12589	452	13797
rejected %	95%	96%	31%	92%	20%	74%

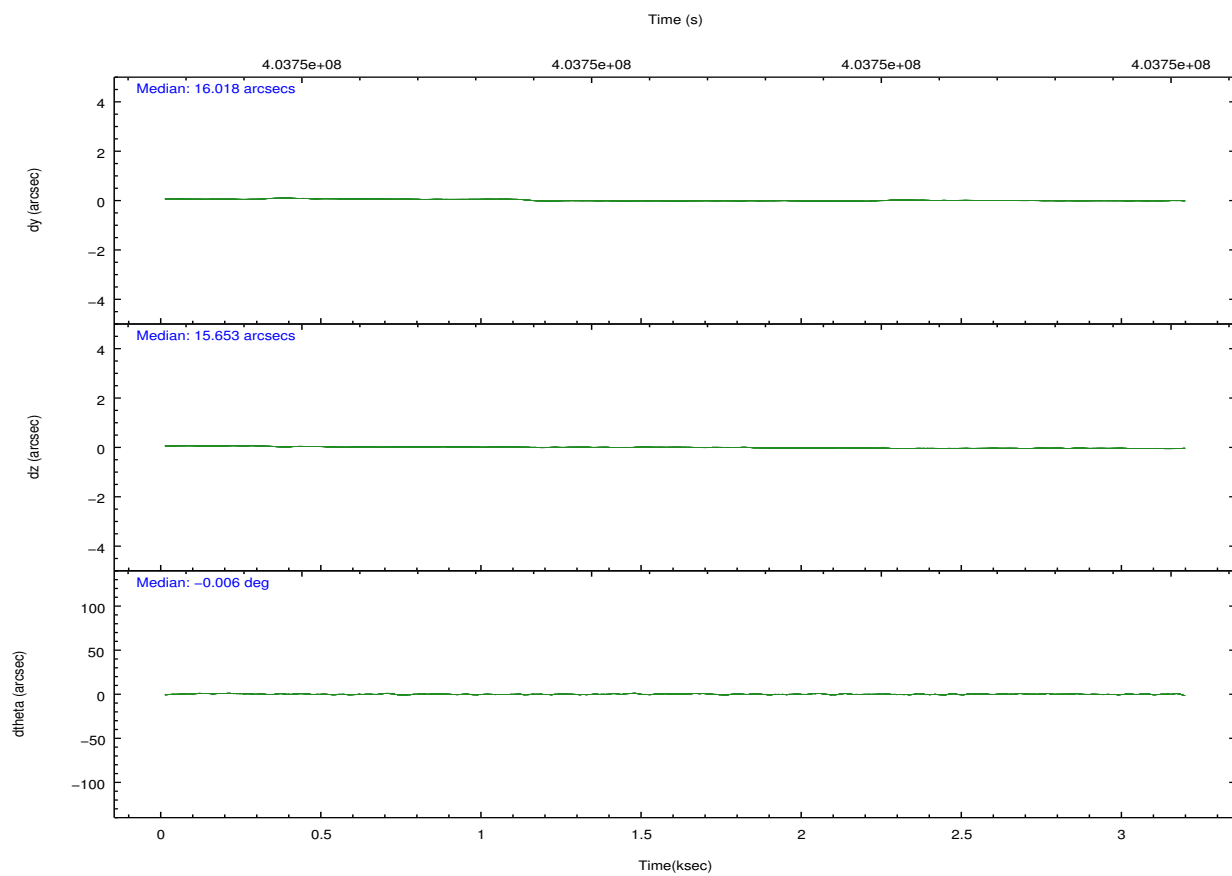
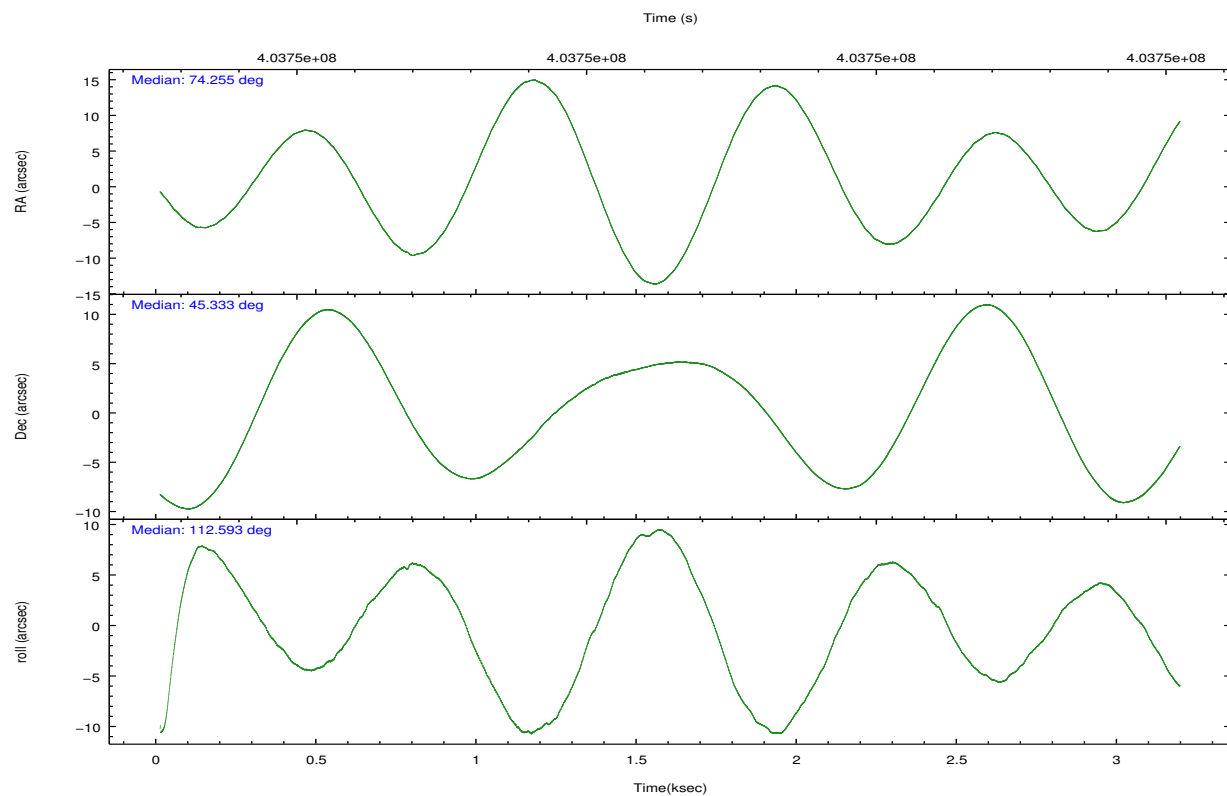
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	219	207	819	702	581	1283
	1%	1%	24%	5%	26%	6%
grade 1 events	4	4	72	10	19	22
	0%	0%	2%	0%	0%	0%
grade 2 events	162	72	817	156	566	1046
	1%	0%	23%	1%	25%	5%
grade 3 events	57	73	219	84	200	600
	0%	0%	6%	0%	9%	3%
grade 4 events	78	58	214	95	195	510
	0%	0%	6%	0%	8%	2%
grade 5 events	27	16	231	12	88	98
	0%	0%	6%	0%	4%	0%
grade 6 events	74	51	254	52	203	1265
	0%	0%	7%	0%	9%	6%
grade 7 events	12362	11993	782	12564	345	13676
	95%	96%	22%	91%	15%	73%

## 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	74.286799	74.25542105730862	Subarray requested	NONE	NONE
[deg] Pointing Dec	45.317210	45.3333495747627	Alternating exposures requested	N	N
[deg] Pointing Roll	112.418392	112.5973349711036	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	403750886.184000	403750510.66378			
Observation start date	2010-10-18T01:00:20	2010-10-18T00:55:10			
[s] Observation end time (MET)	403753886.184000	403754020.26396			
Observation end date	2010-10-18T01:50:20	2010-10-18T01:53:40			
Read mode	TIMED	TIMED			

## 2.3 Aspect





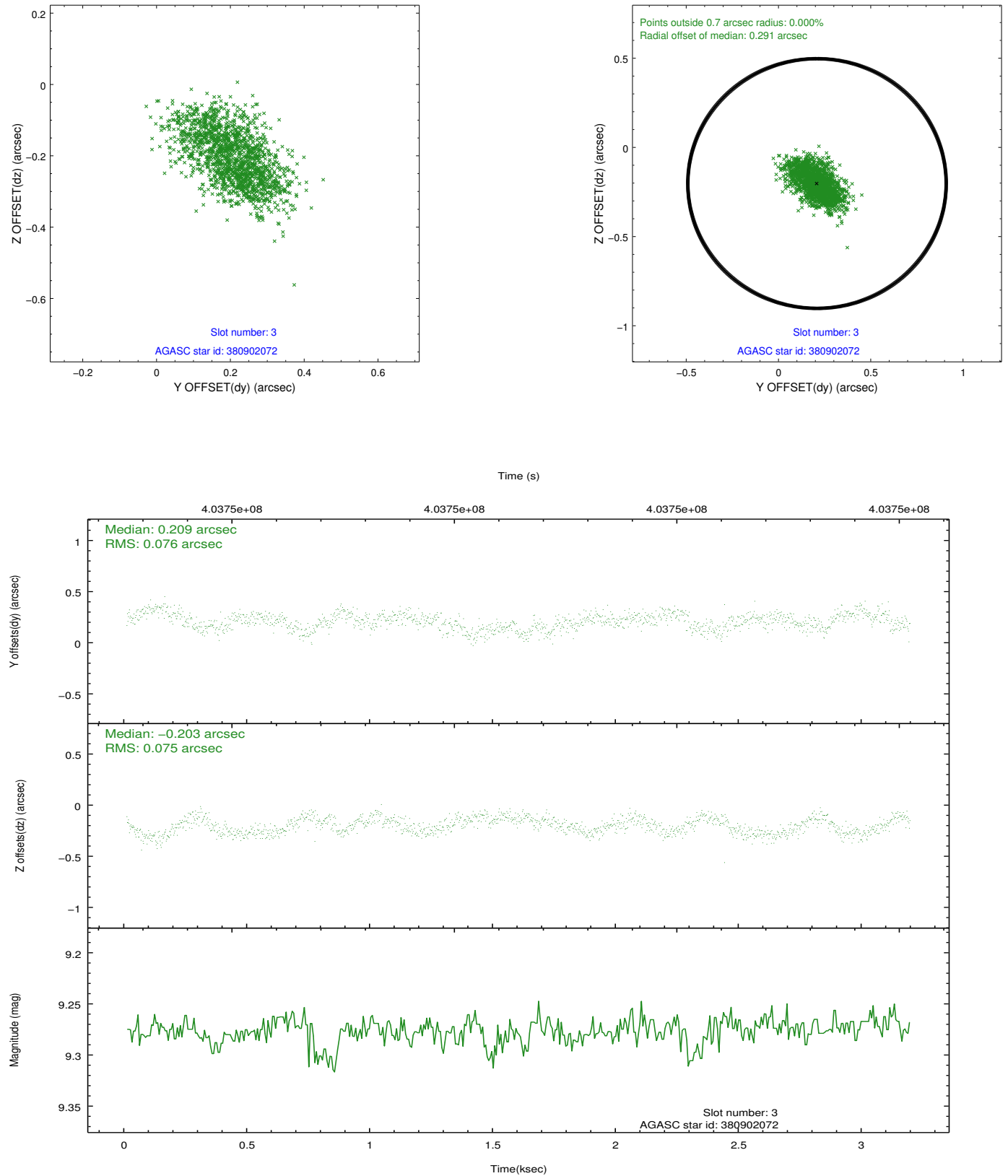
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.01	777	0.019	-0.043	0.007	0.011	0.000000	0.000000	927.04	-1732.71
1	FID	ACIS-S-4	7.02	777	0.115	0.025	0.007	0.011	0.000000	0.000000	2145.62	169.46
2	FID	ACIS-S-5	7.05	777	-0.161	0.031	0.006	0.011	0.000000	0.000000	-1819.48	165.28
3	GUIDE	380902072	9.28	1551	0.209	-0.203	0.115	0.182	74.236272	44.653942	-2157.34	1029.59
4	GUIDE	381030024	8.33	1555	0.226	0.165	0.075	0.123	75.061936	44.874027	-2221.10	-1223.07
5	GUIDE	438306472	8.28	1555	0.150	0.189	0.090	0.153	75.140877	45.253790	-1026.65	-1918.90
6	GUIDE	438322520	8.19	1555	-0.424	-0.161	0.073	0.112	73.688072	45.706515	1874.29	853.16
7	GUIDE	438309984	9.30	1554	-0.147	0.009	0.111	0.186	74.725574	46.114243	2239.42	-2107.59

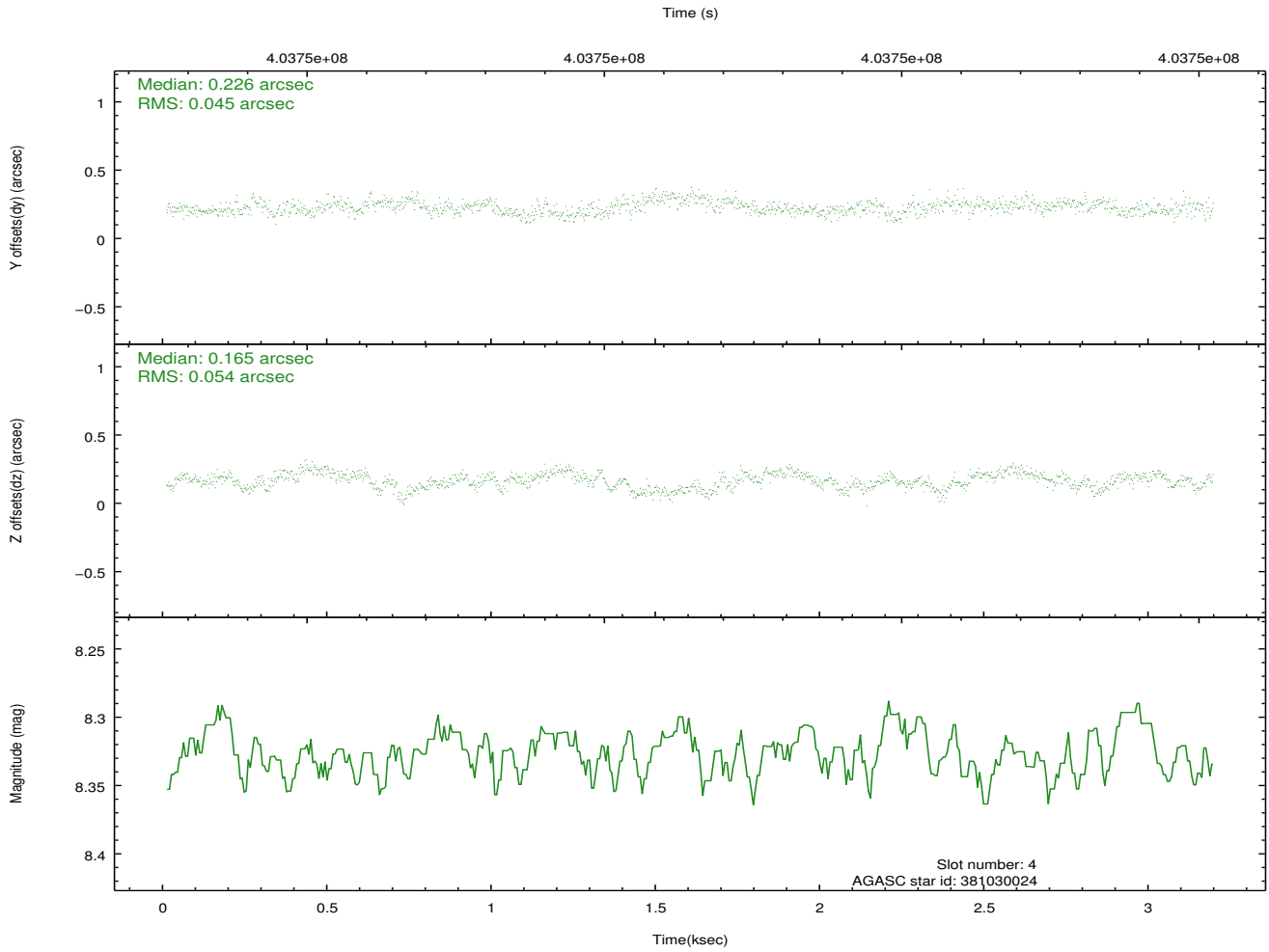
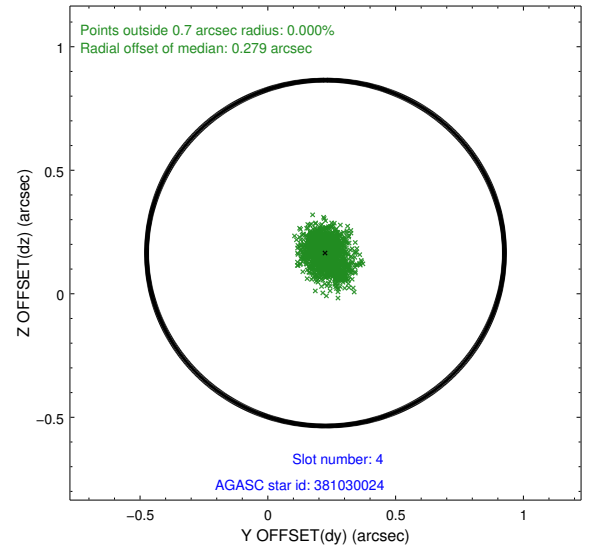
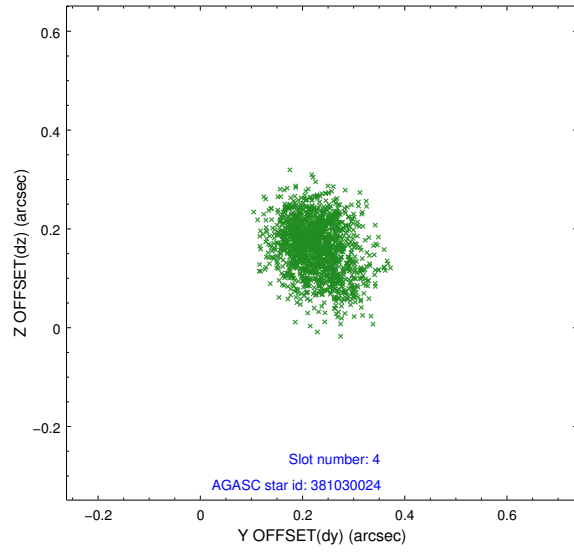


## 2.4 Star Slots

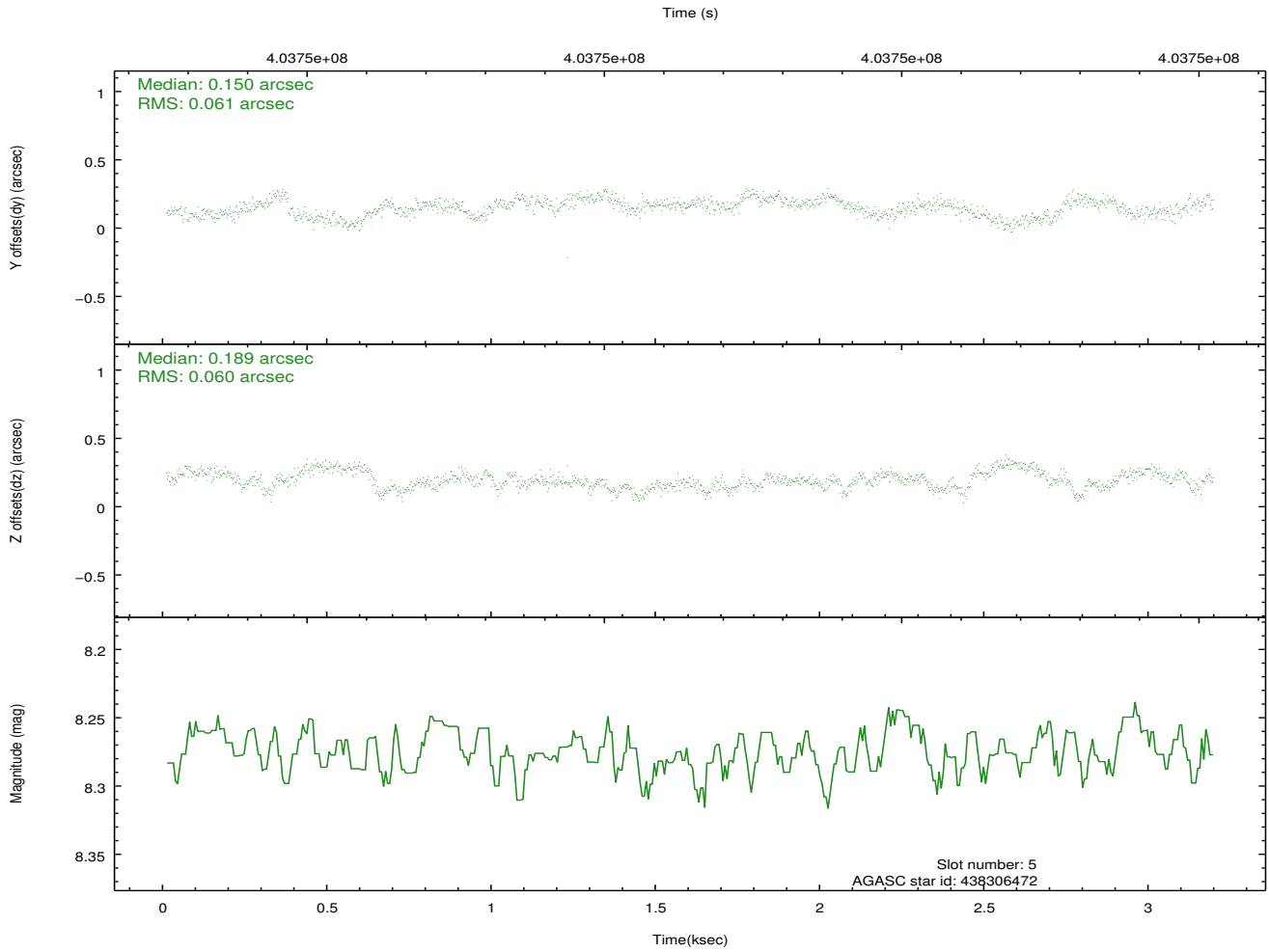
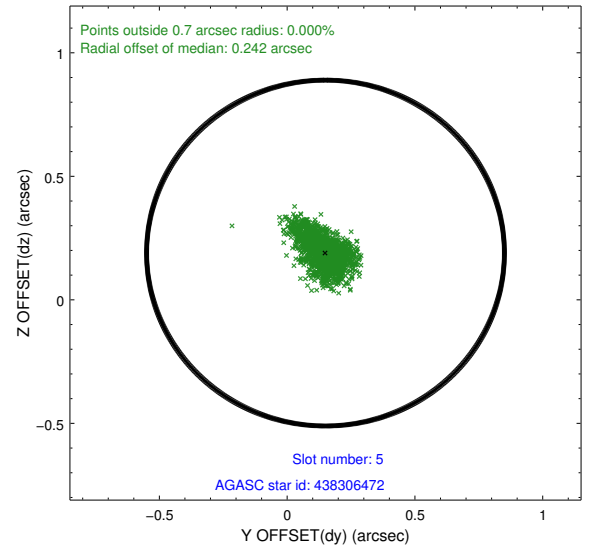
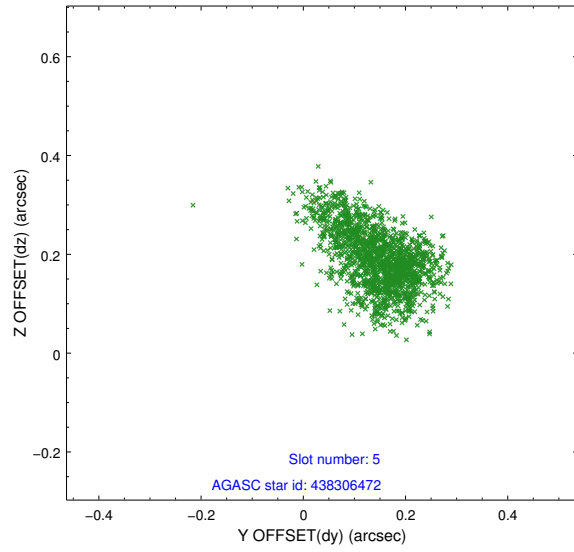
### 2.4.1 Slot 3



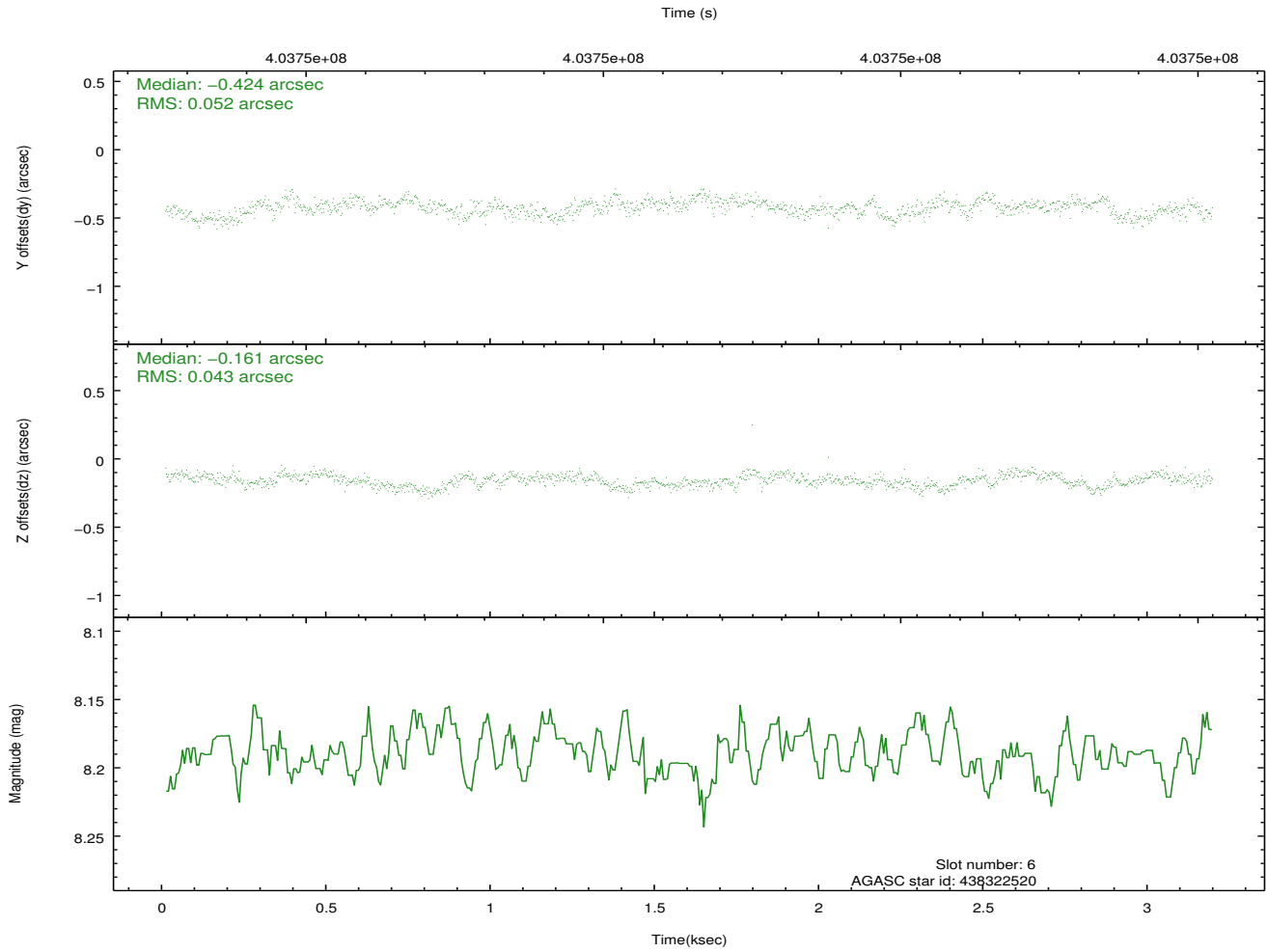
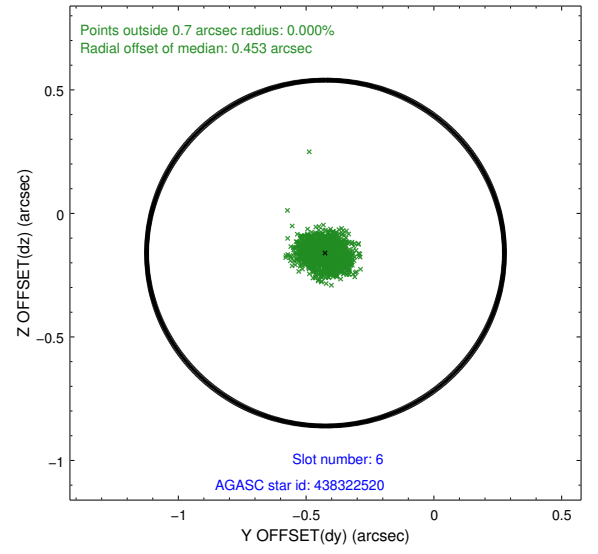
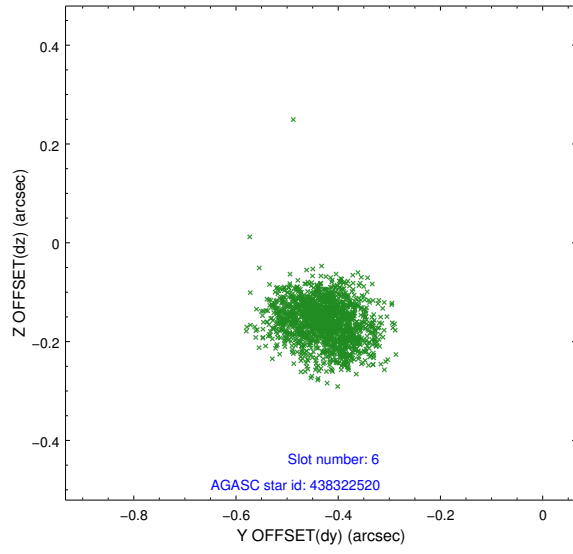
## 2.4.2 Slot 4



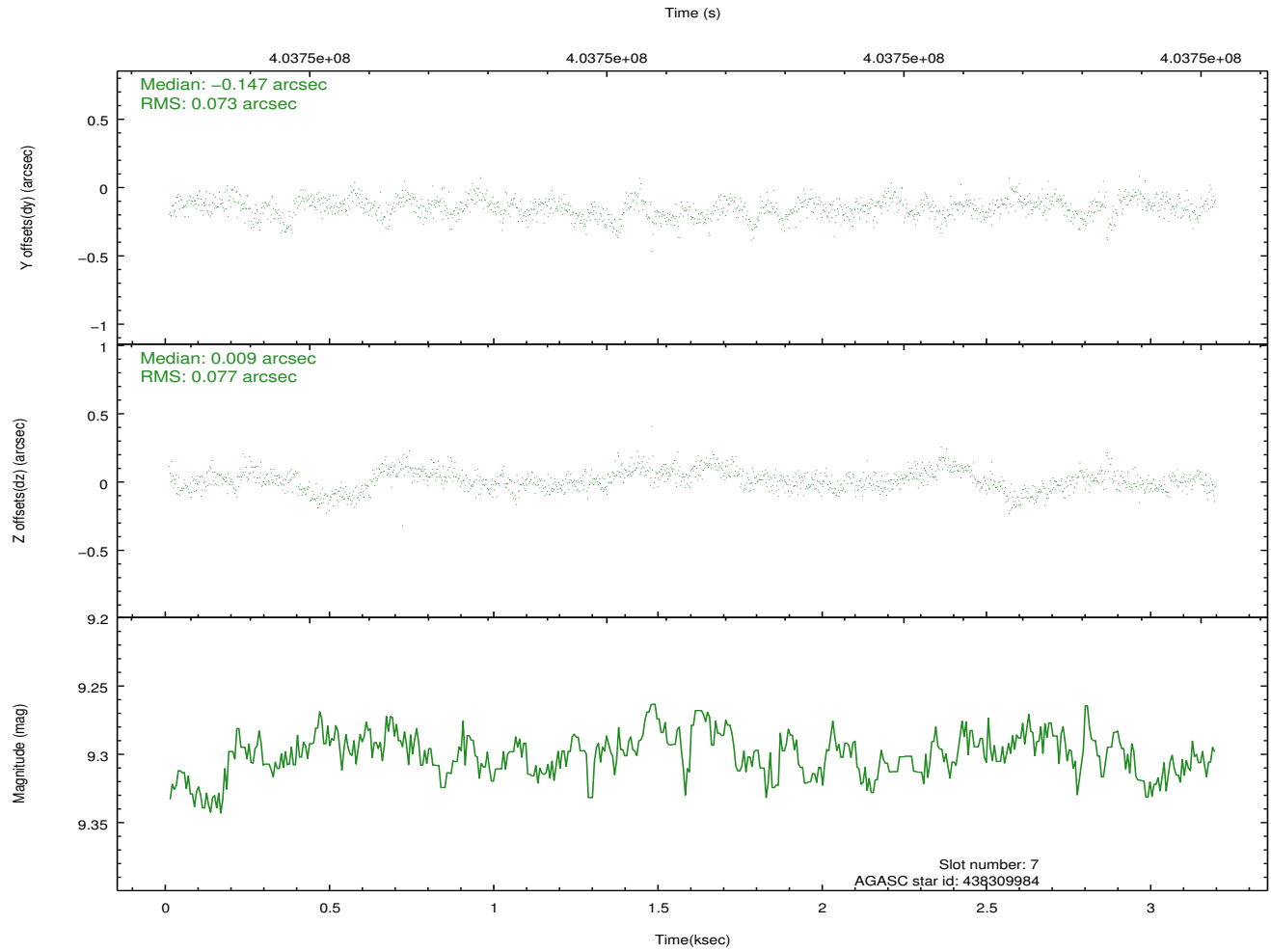
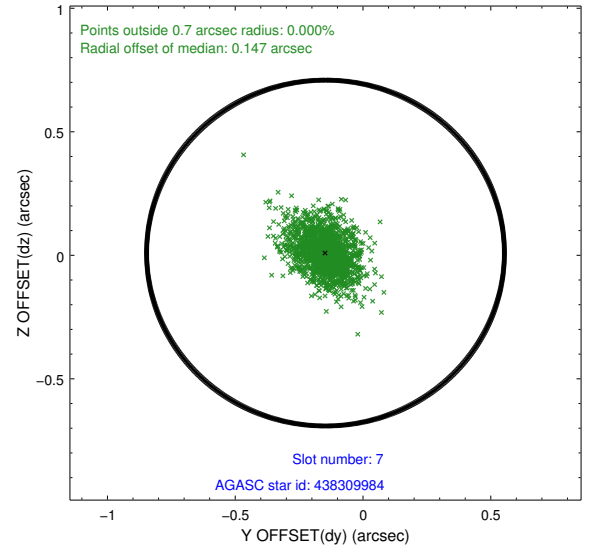
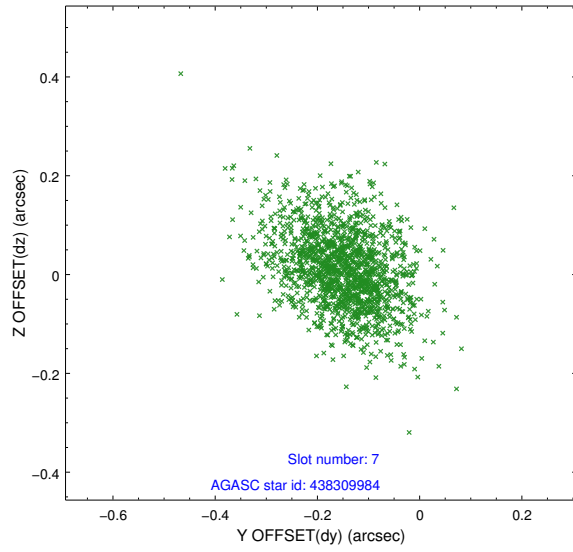
### 2.4.3 Slot 5



## 2.4.4 Slot 6

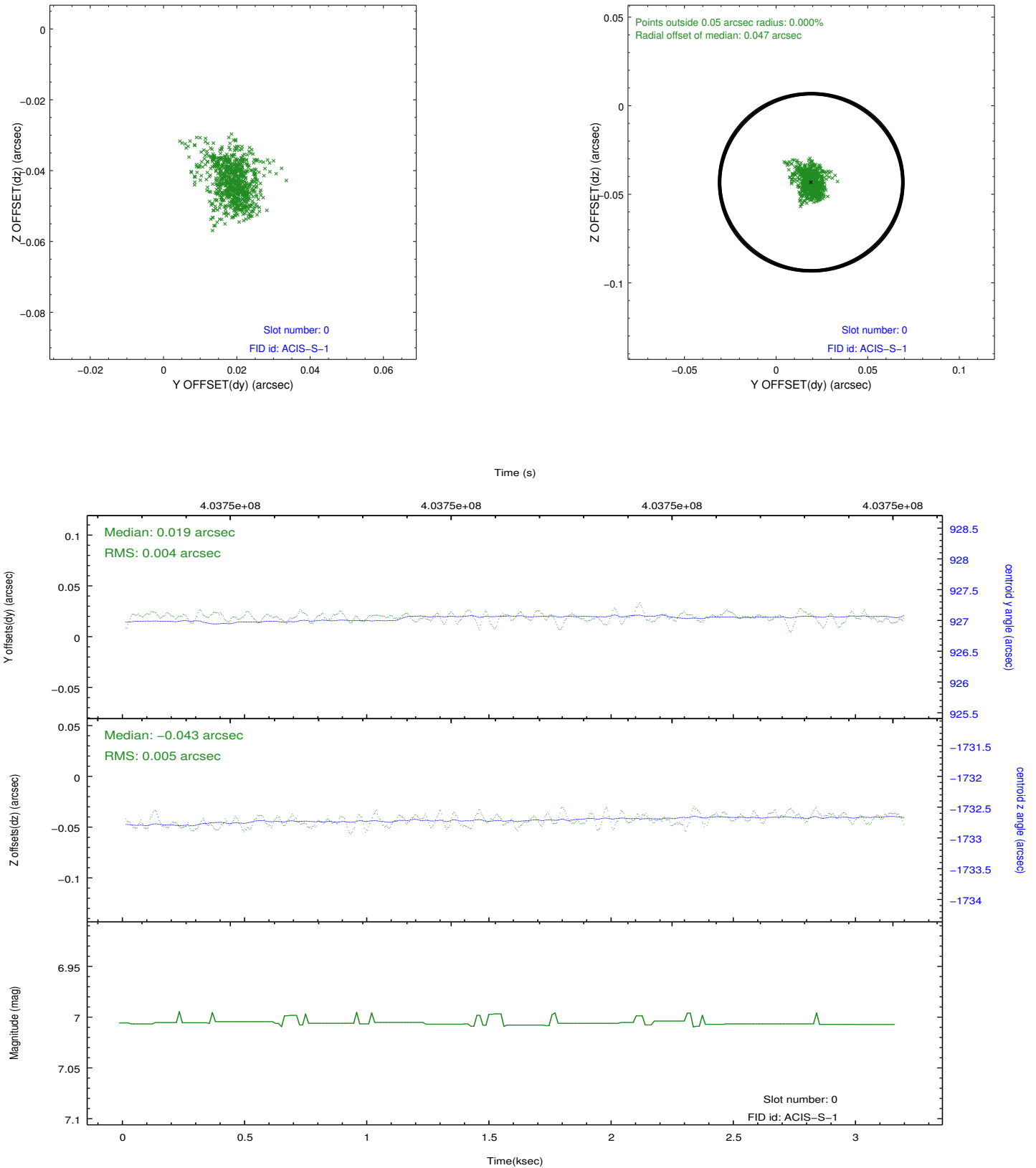


## 2.4.5 Slot 7

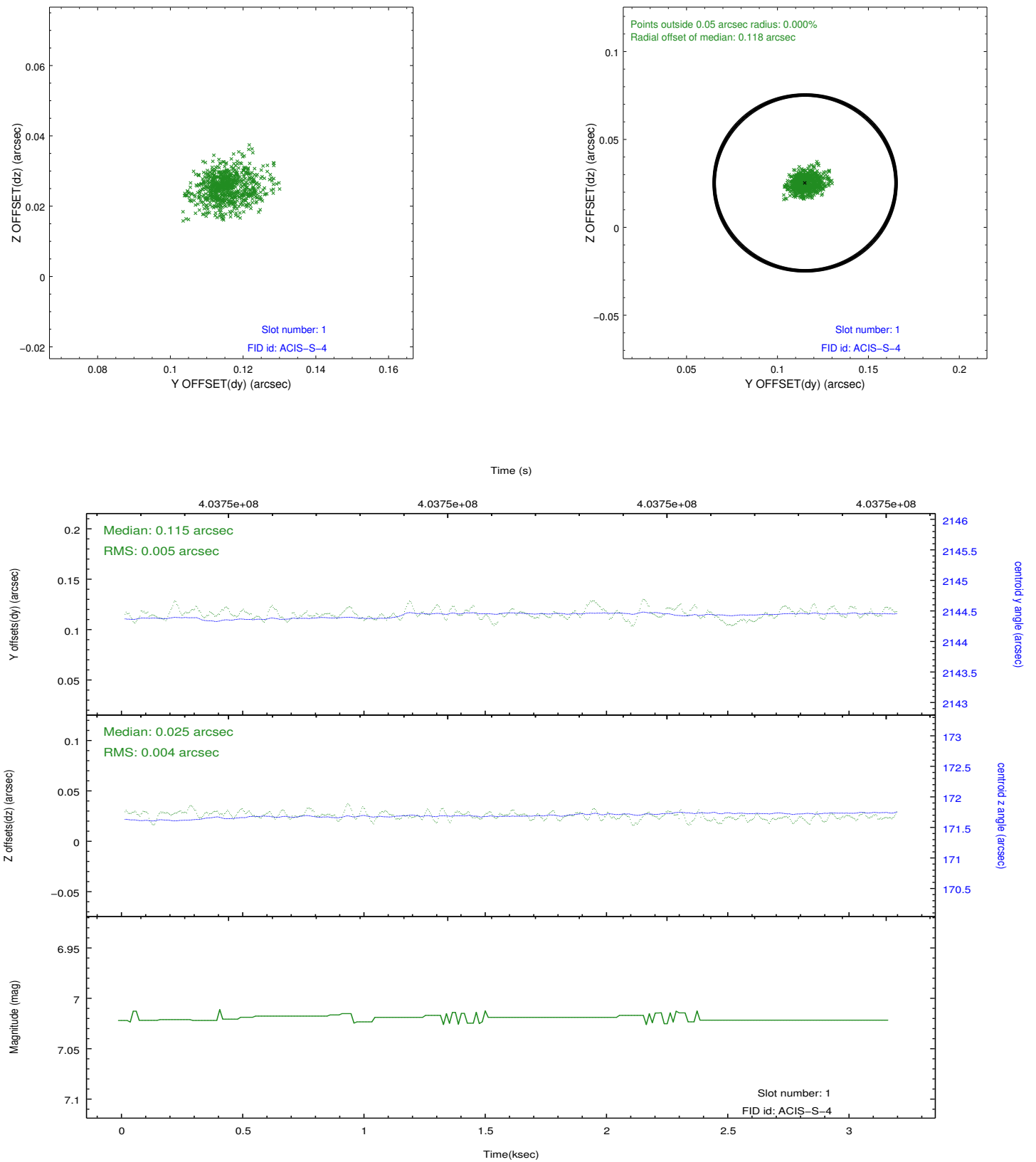


## 2.5 FID Slots

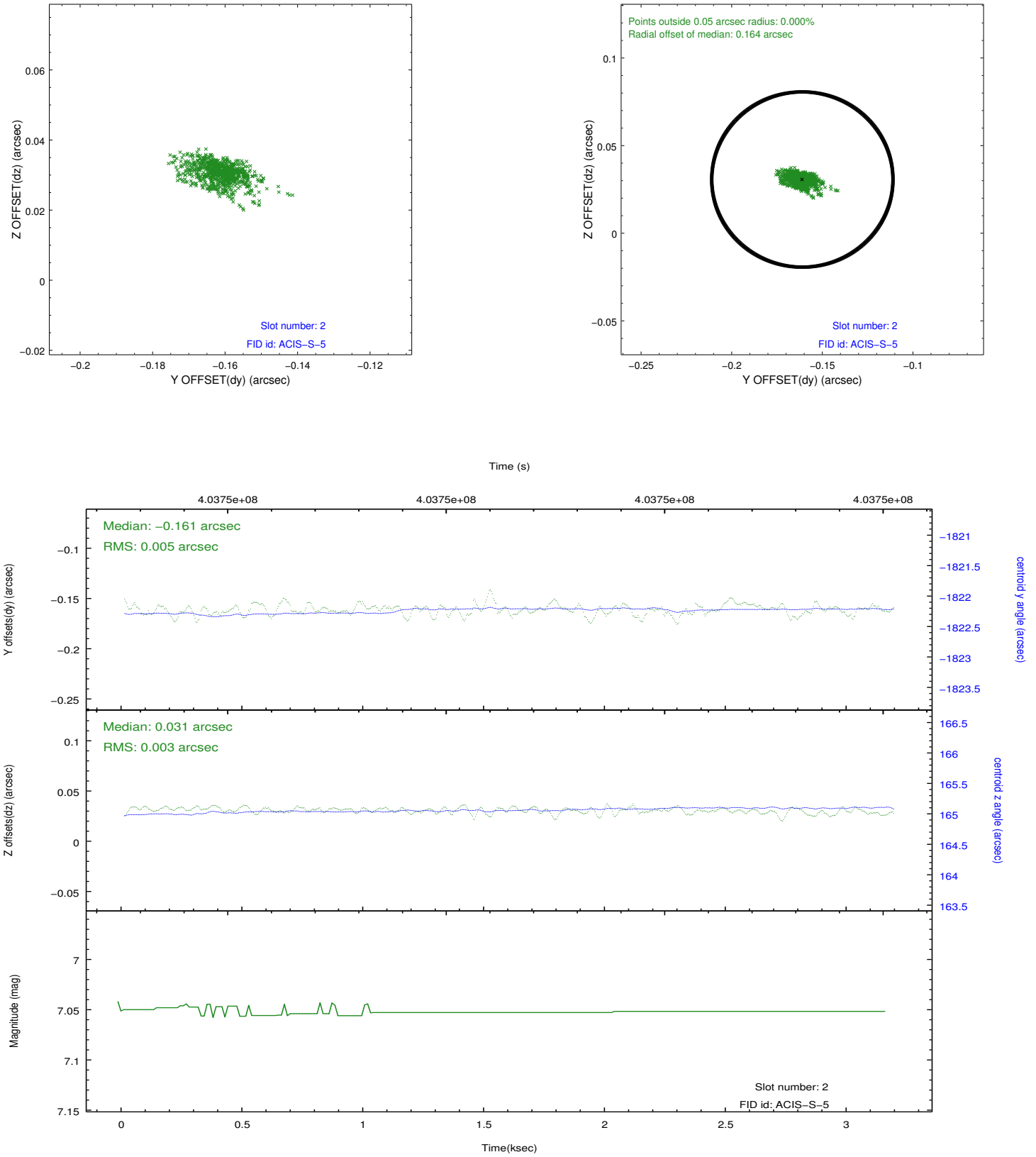
### 2.5.1 Slot 0



## 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)	2012.07.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.7583999897838

## A.2 Comments

This is a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the comet.