

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13140 - L2 Version 2  
Chandra X-Ray Center

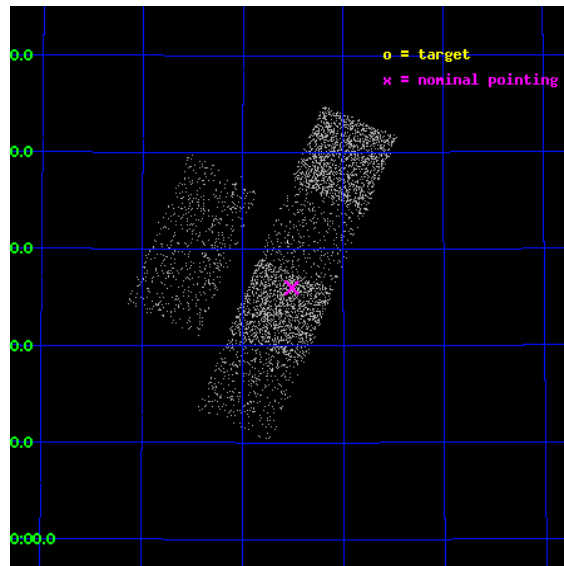
L2 Processing Date : Jul 5 2012

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# 1 Front

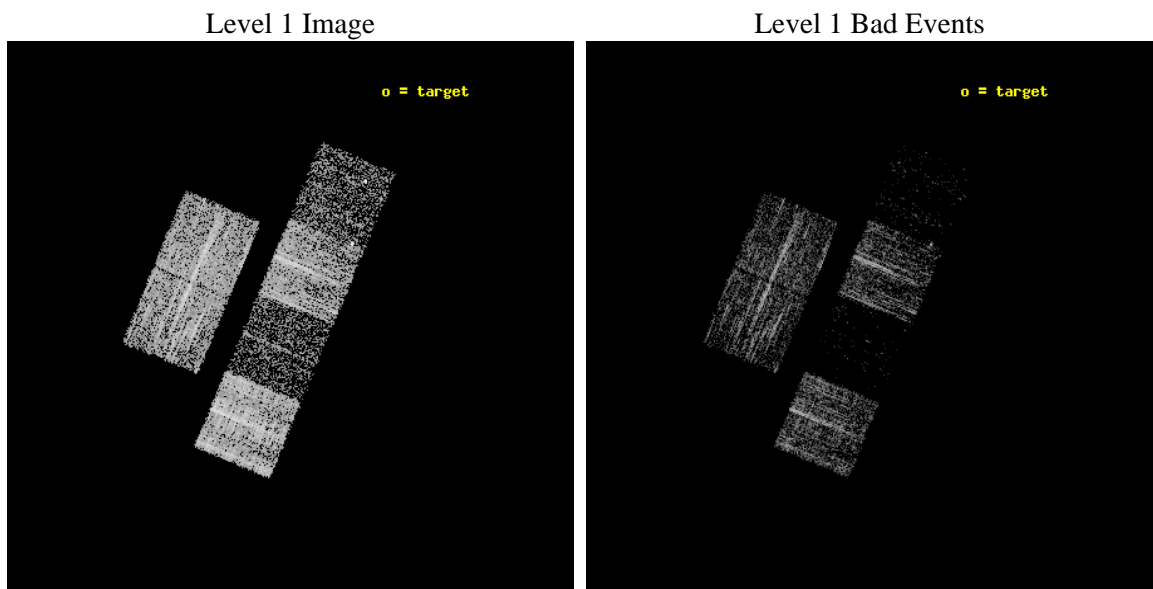
seq_num	100081	Sequence number
obs_id	13140	Observation id
title	Comet 103P/Hartley 2 During the EPOXI Spacecraft Encounter	Proposa
observer	Dr. Carey Lisse	Principal investigator
object	103P/Hartley 2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	81.25	Observer's specified target RA [deg]
dec_targ	39.0	Observer's specified target Dec [deg]
ra_nom	74.127797120937	Nominal RA [deg]
dec_nom	45.433553037524	Nominal Dec [deg]
roll_nom	112.75042993255	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2751.9535065889	Sum of GTIs [s]
livetime	2717.106614261	Livetime [s]
ontime2	2751.9945465922	Sum of GTIs [s]
ontime3	2751.830386579	Sum of GTIs [s]
ontime5	2751.9124665856	Sum of GTIs [s]
ontime6	2751.8714265823	Sum of GTIs [s]
ontime7	2751.9535065889	Sum of GTIs [s]
ontime8	2745.3072961569	Sum of GTIs [s]
l2events	5108	Number of level 2 events



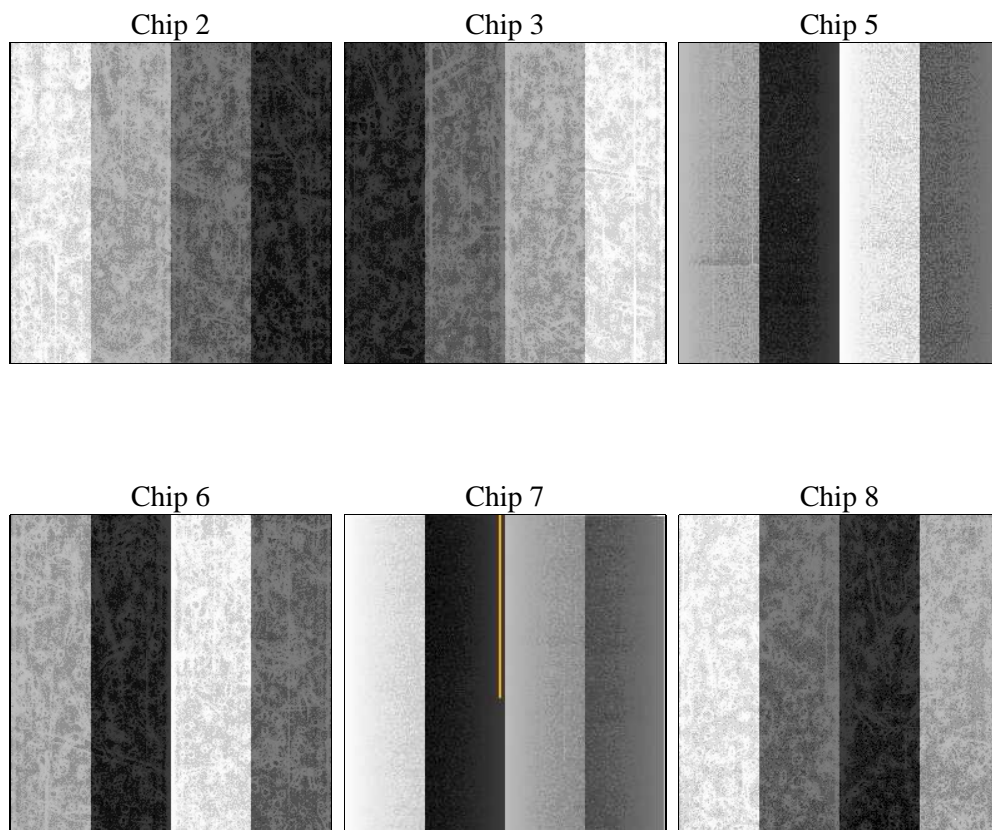
## 2 OBI

### 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	2751.9535065889	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime2	2751.9945465922	Sum of GTIs [s]
date	2012-07-05T05:26:29	Date and time of file creation	ontime3	2751.830386579	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	2751.9124665856	Sum of GTIs [s]
			ontime6	2751.8714265823	Sum of GTIs [s]
			ontime7	2751.9535065889	Sum of GTIs [s]
			ontime8	2745.3072961569	Sum of GTIs [s]
			l1events	62472	Number of level 1 events

### 2.1.4 Events

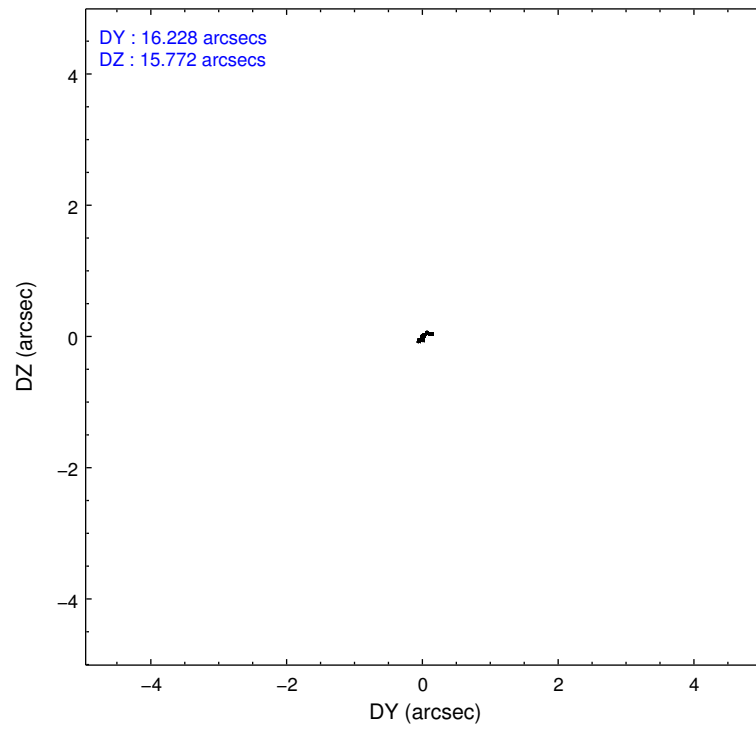
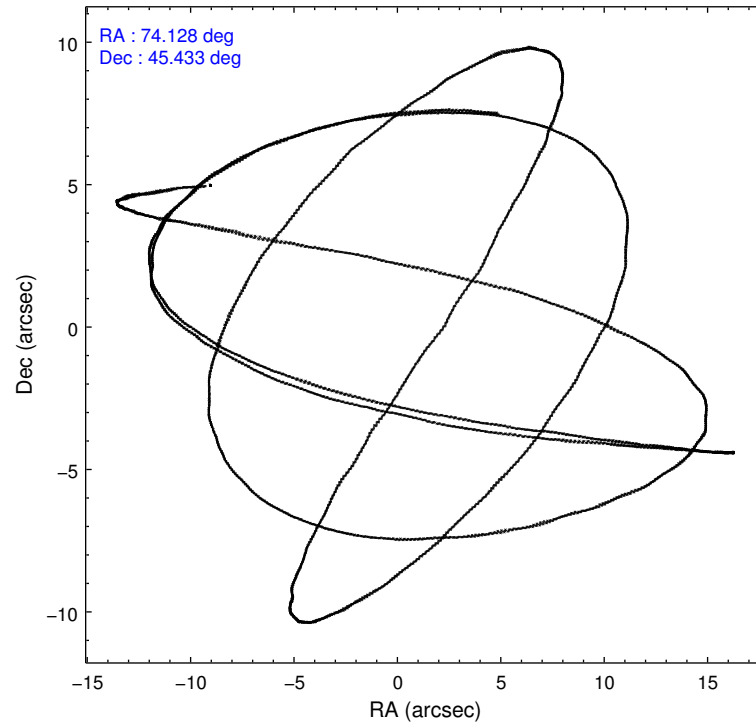
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	13048	12150	3470	12657	2486	18661
rejected events	12410	11693	1153	12061	530	14138
rejected %	95%	96%	33%	95%	21%	75%

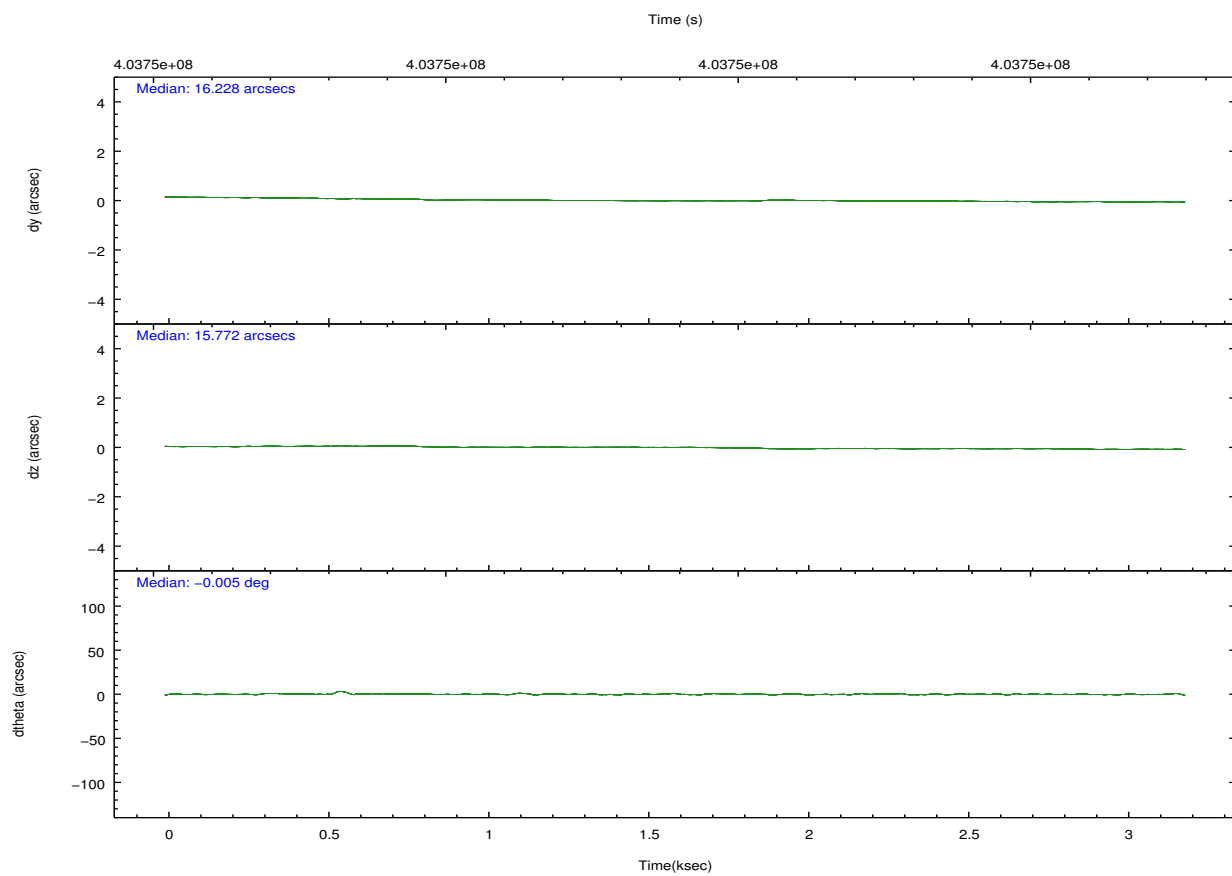
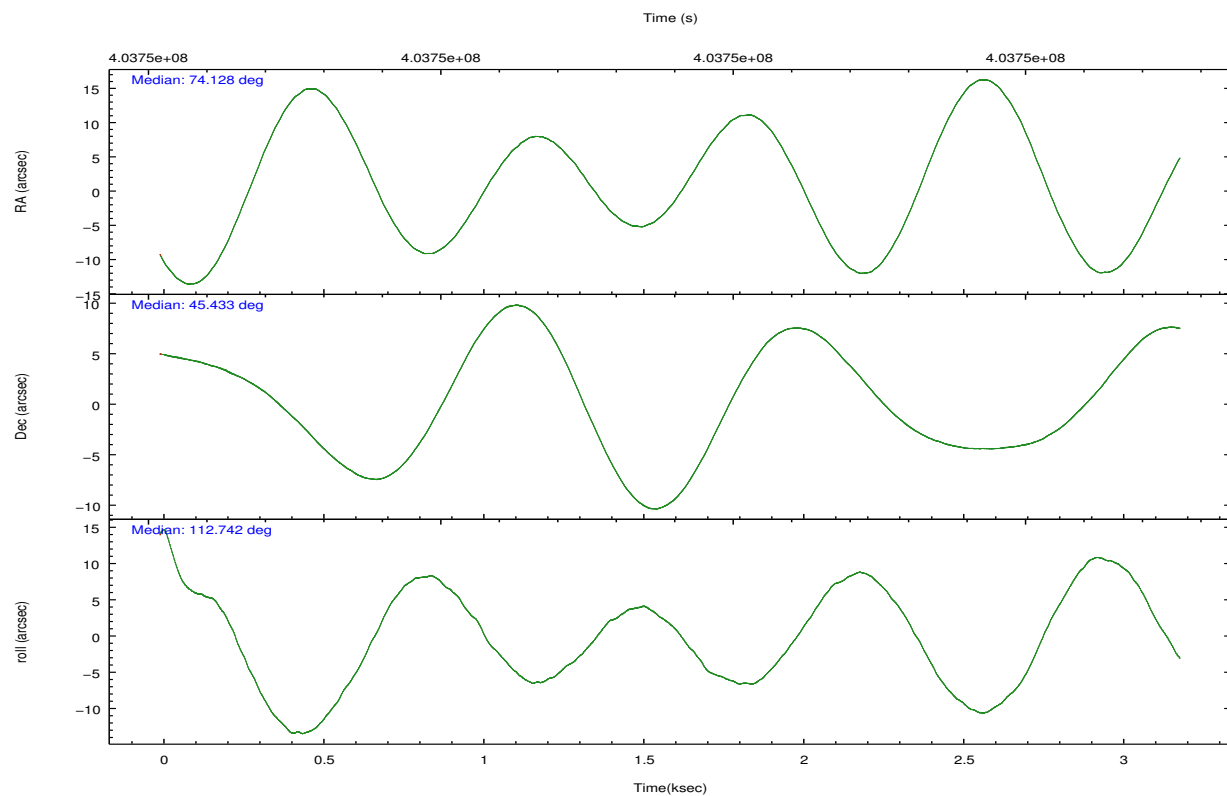
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	289	212	821	309	653	1283
	2%	1%	23%	2%	26%	6%
grade 1 events	6	2	92	8	19	21
	0%	0%	2%	0%	0%	0%
grade 2 events	151	59	798	115	607	1026
	1%	0%	22%	0%	24%	5%
grade 3 events	65	72	212	59	235	521
	0%	0%	6%	0%	9%	2%
grade 4 events	82	57	213	75	248	479
	0%	0%	6%	0%	9%	2%
grade 5 events	20	17	194	15	64	119
	0%	0%	5%	0%	2%	0%
grade 6 events	56	58	275	38	215	1214
	0%	0%	7%	0%	8%	6%
grade 7 events	12379	11673	865	12038	445	13998
	94%	96%	24%	95%	17%	75%

## 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	74.159402	74.12779712093736	Subarray requested	NONE	NONE
[deg] Pointing Dec	45.417244	45.43355303752399	Alternating exposures requested	N	N
[deg] Pointing Roll	112.571245	112.7504299325518	[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)	403747376.184000	403747000.0386			
Observation start date	2010-10-18T00:01:50	2010-10-17T23:56:40			
[s] Observation end time (MET)	403750376.184000	403750510.66378			
Observation end date	2010-10-18T00:51:50	2010-10-18T00:55:10			
Read mode	TIMED	TIMED			

## 2.3 Aspect





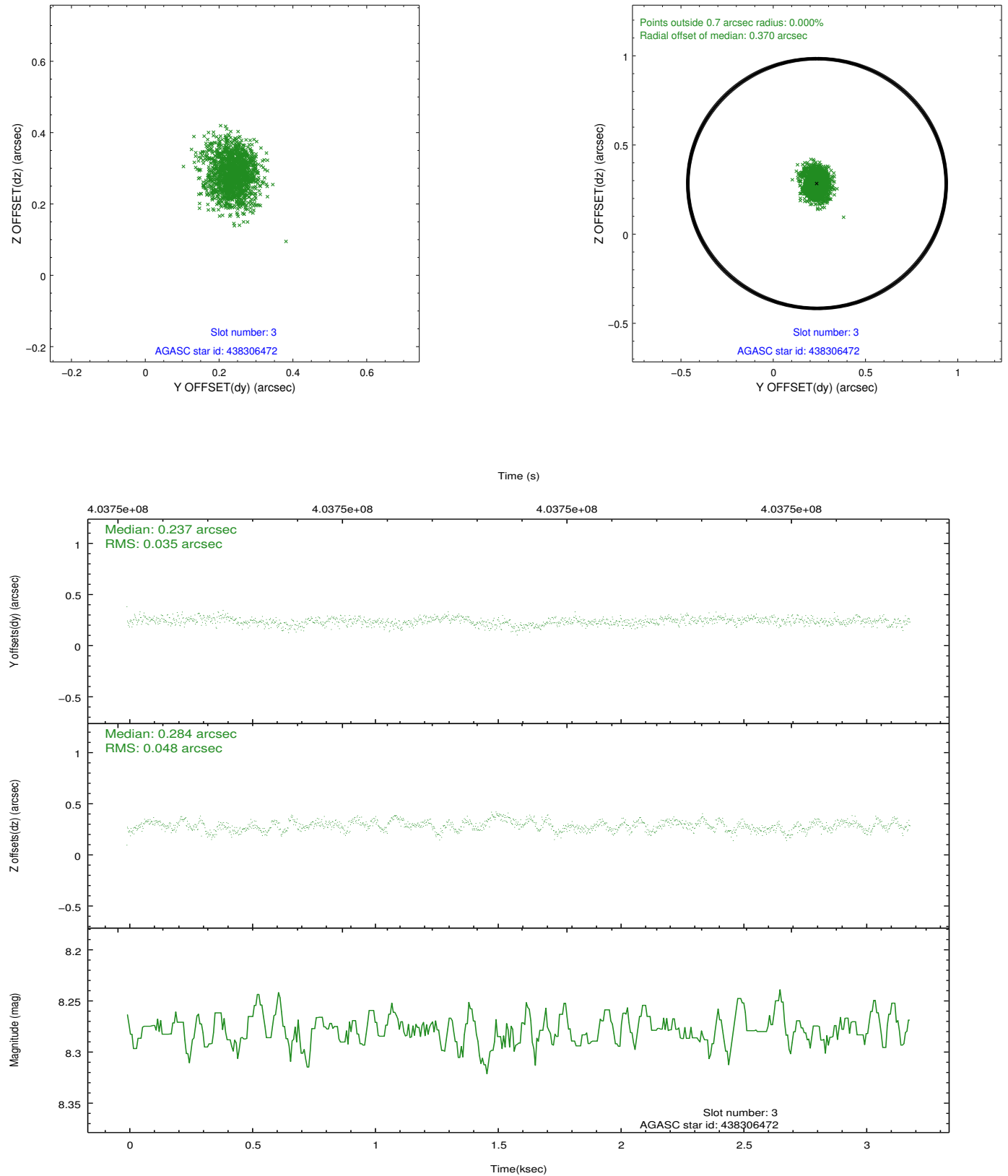
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	778	-0.098	-0.007	0.006	0.011	0.000000	0.000000	-769.33	-1737.17
1	FID	ACIS-S-4	7.02	778	0.173	0.049	0.005	0.010	0.000000	0.000000	2143.28	169.32
2	FID	ACIS-S-5	7.05	778	-0.106	-0.034	0.006	0.010	0.000000	0.000000	-1819.64	165.15
3	GUIDE	438306472	8.28	1556	0.237	0.284	0.063	0.103	75.140877	45.253790	-1483.98	-2076.79
4	GUIDE	438309984	9.29	1556	-0.089	0.138	0.125	0.207	74.725574	46.114243	1778.30	-2271.39
5	GUIDE	438315504	8.59	1555	0.101	-0.245	0.079	0.122	73.821517	45.156819	-534.24	1148.99
6	GUIDE	438322520	8.17	1556	-0.243	-0.096	0.069	0.118	73.688072	45.706515	1418.79	693.47
7	GUIDE	438327992	9.28	1553	-0.006	-0.081	0.117	0.189	73.572231	45.856259	2030.10	750.90

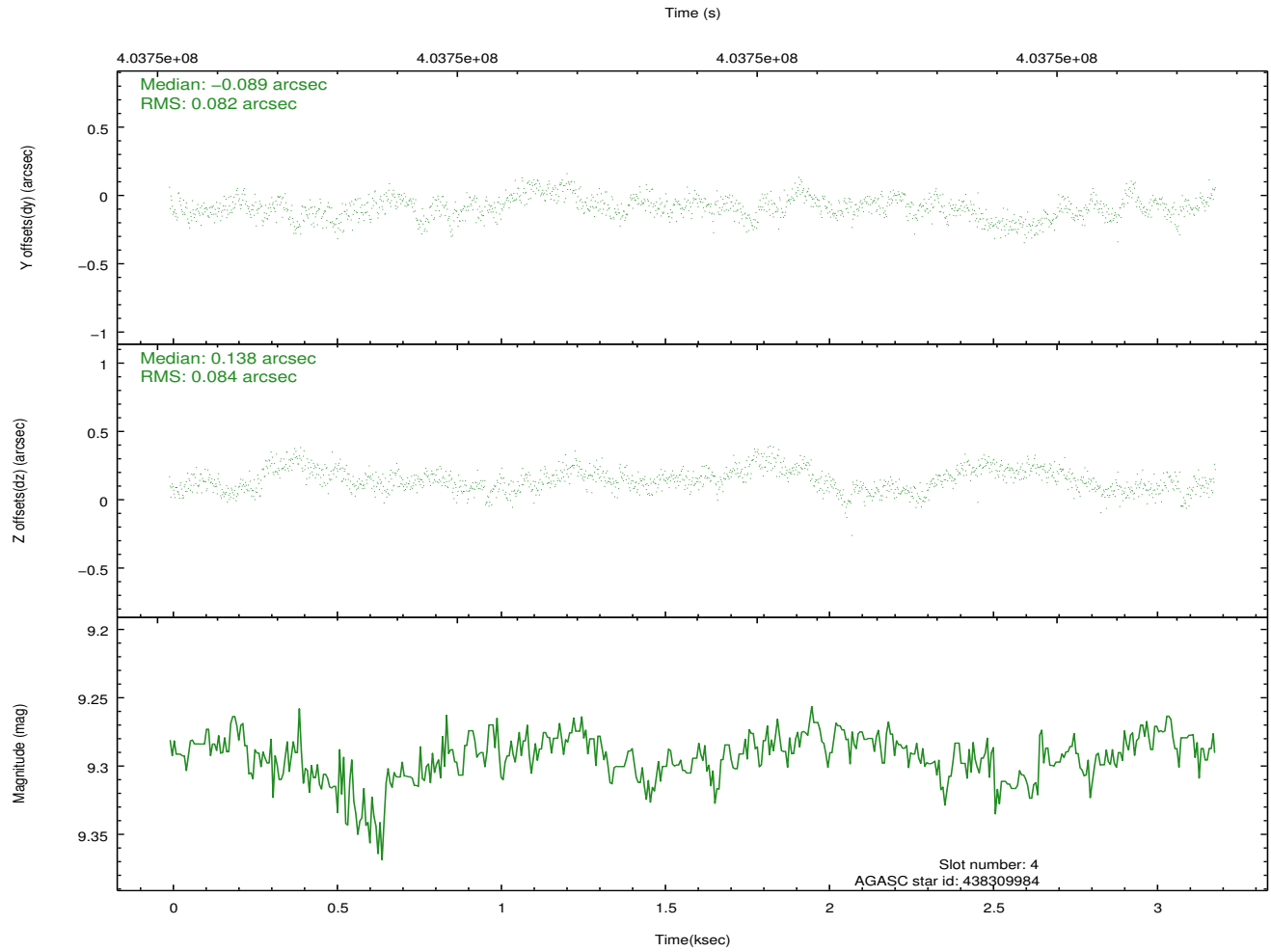
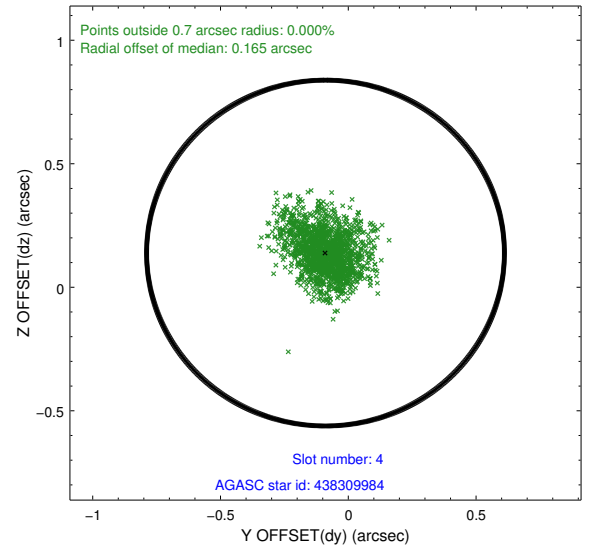
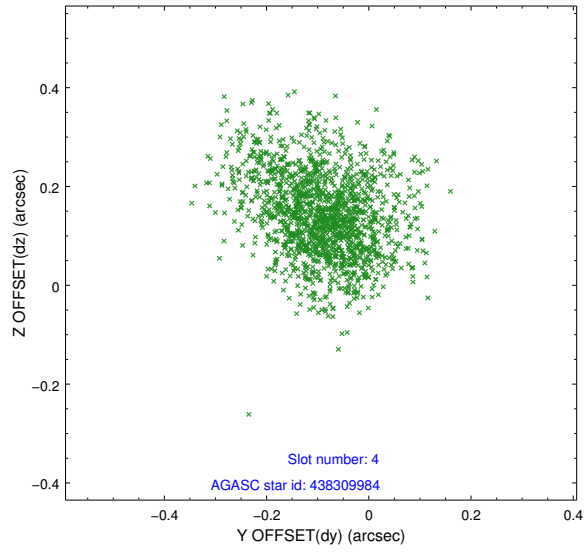


## 2.4 Star Slots

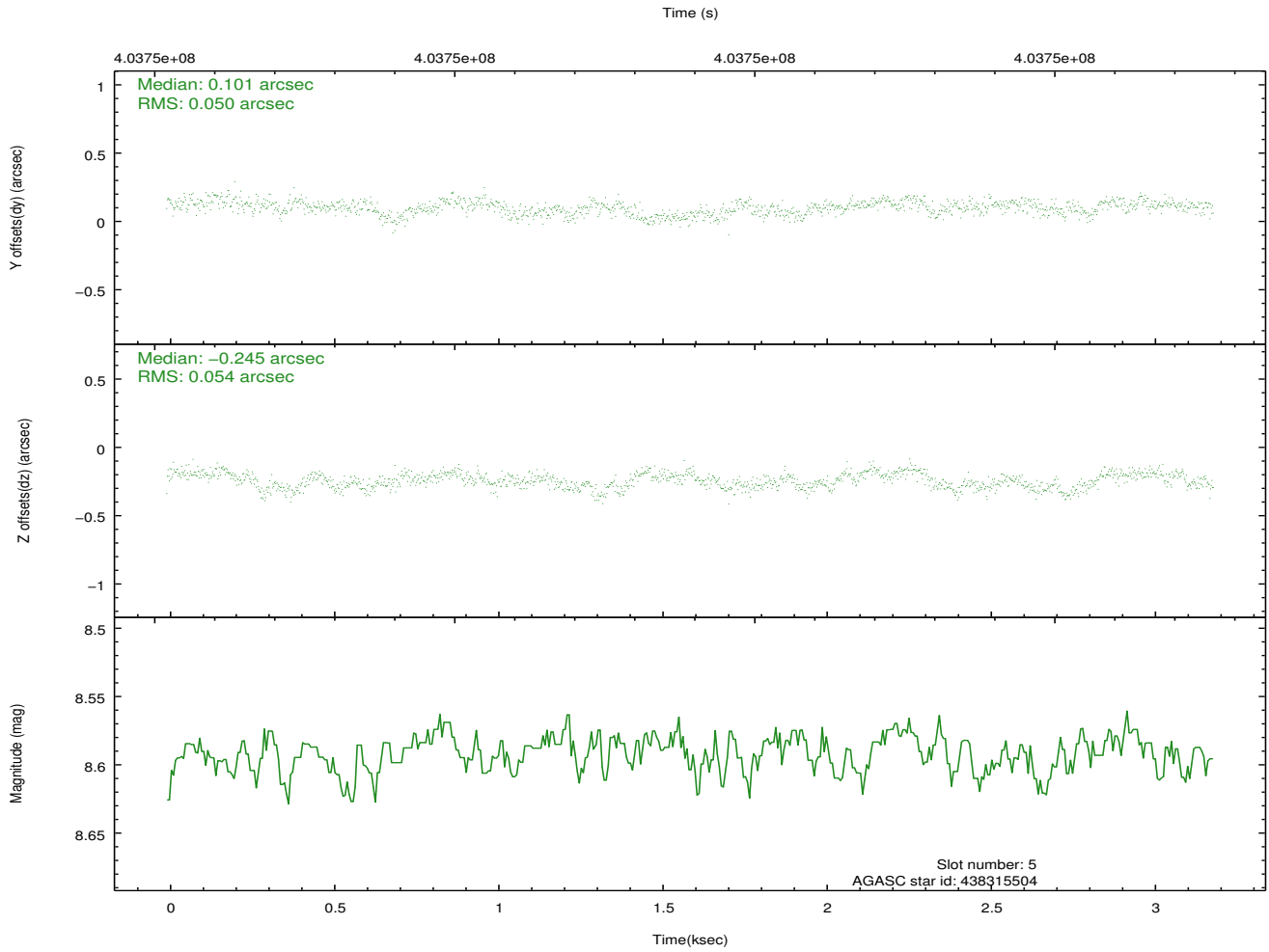
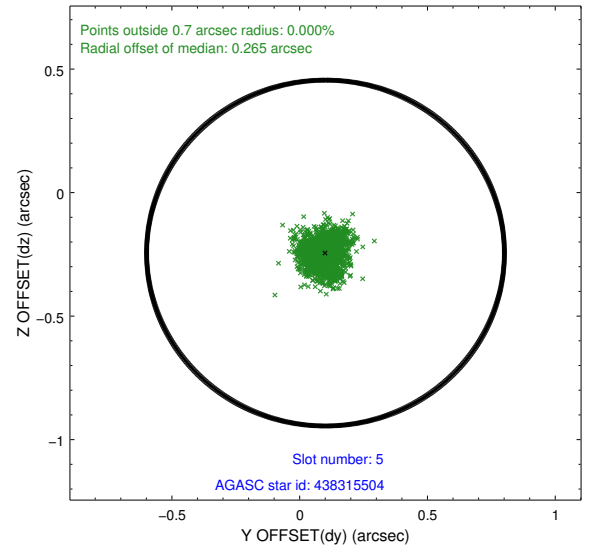
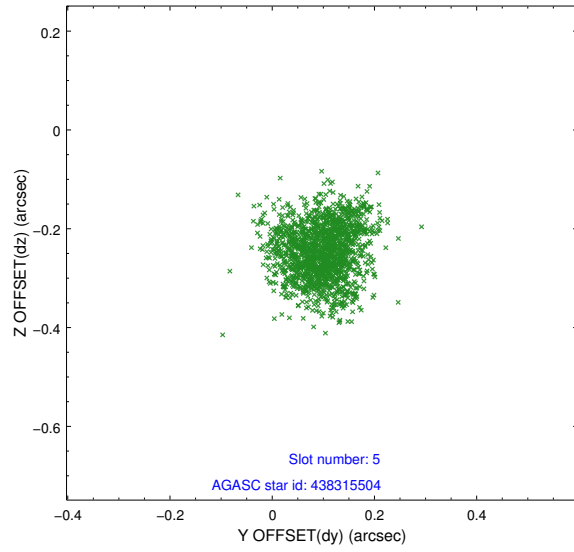
### 2.4.1 Slot 3



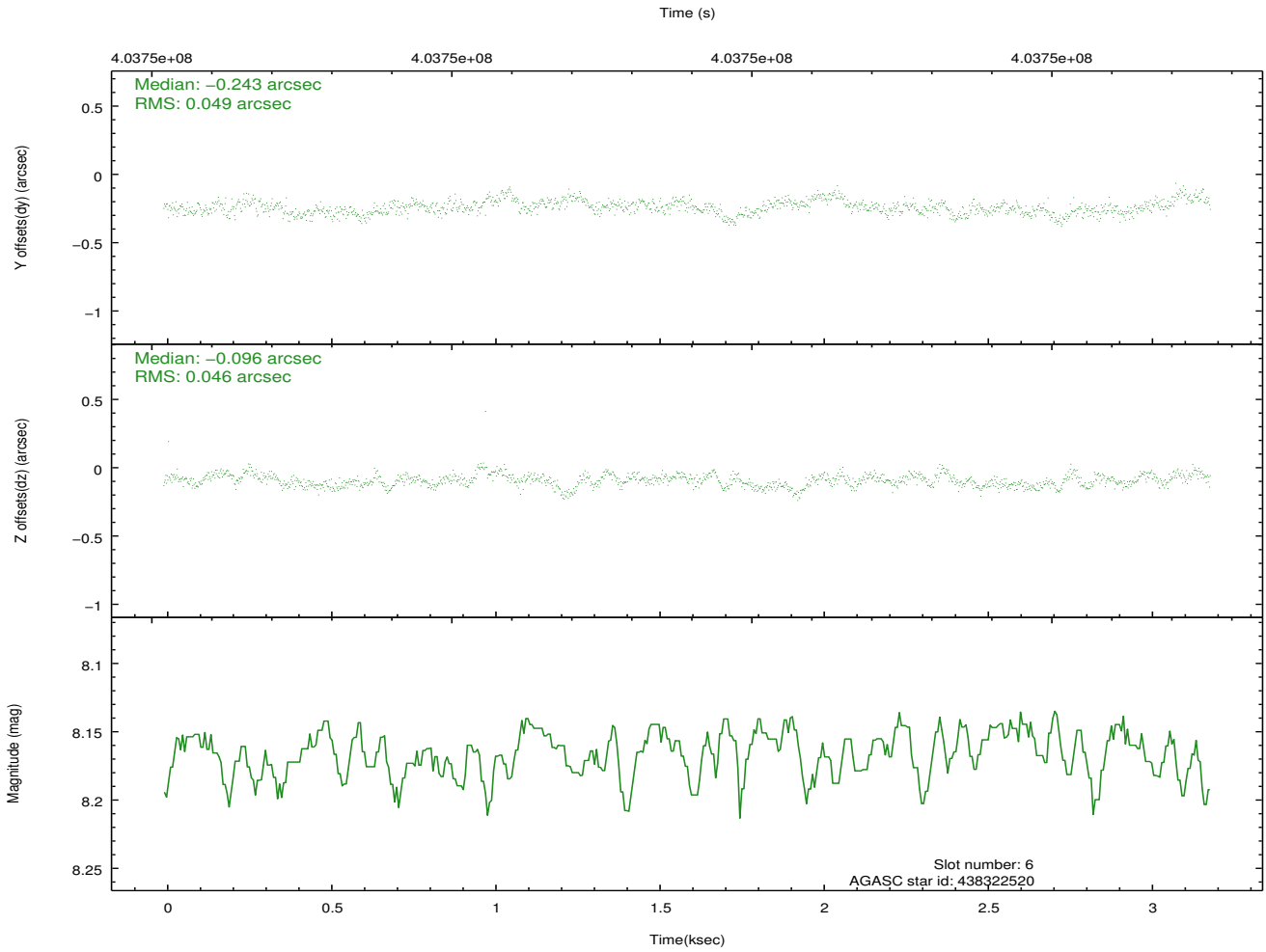
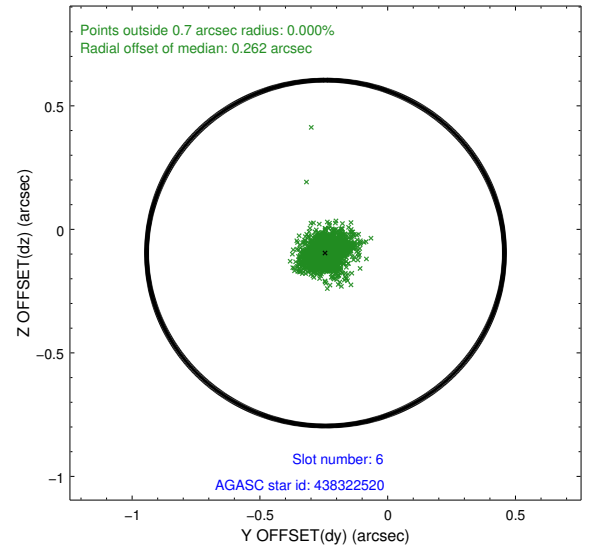
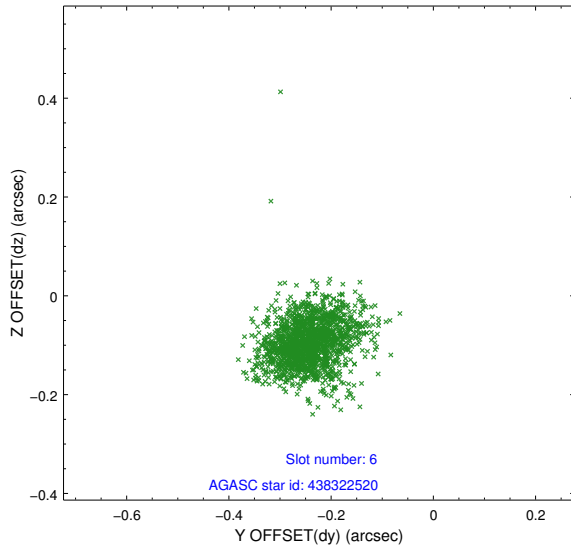
## 2.4.2 Slot 4



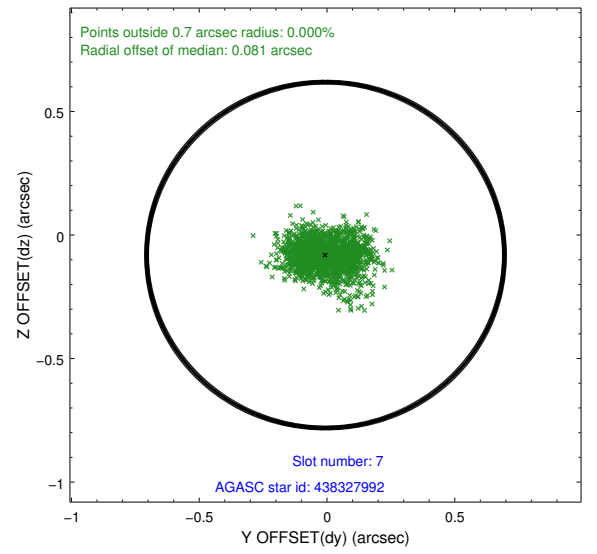
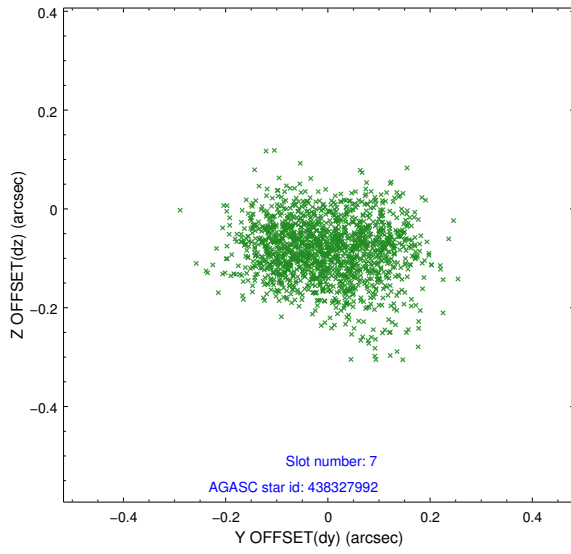
### 2.4.3 Slot 5



## 2.4.4 Slot 6

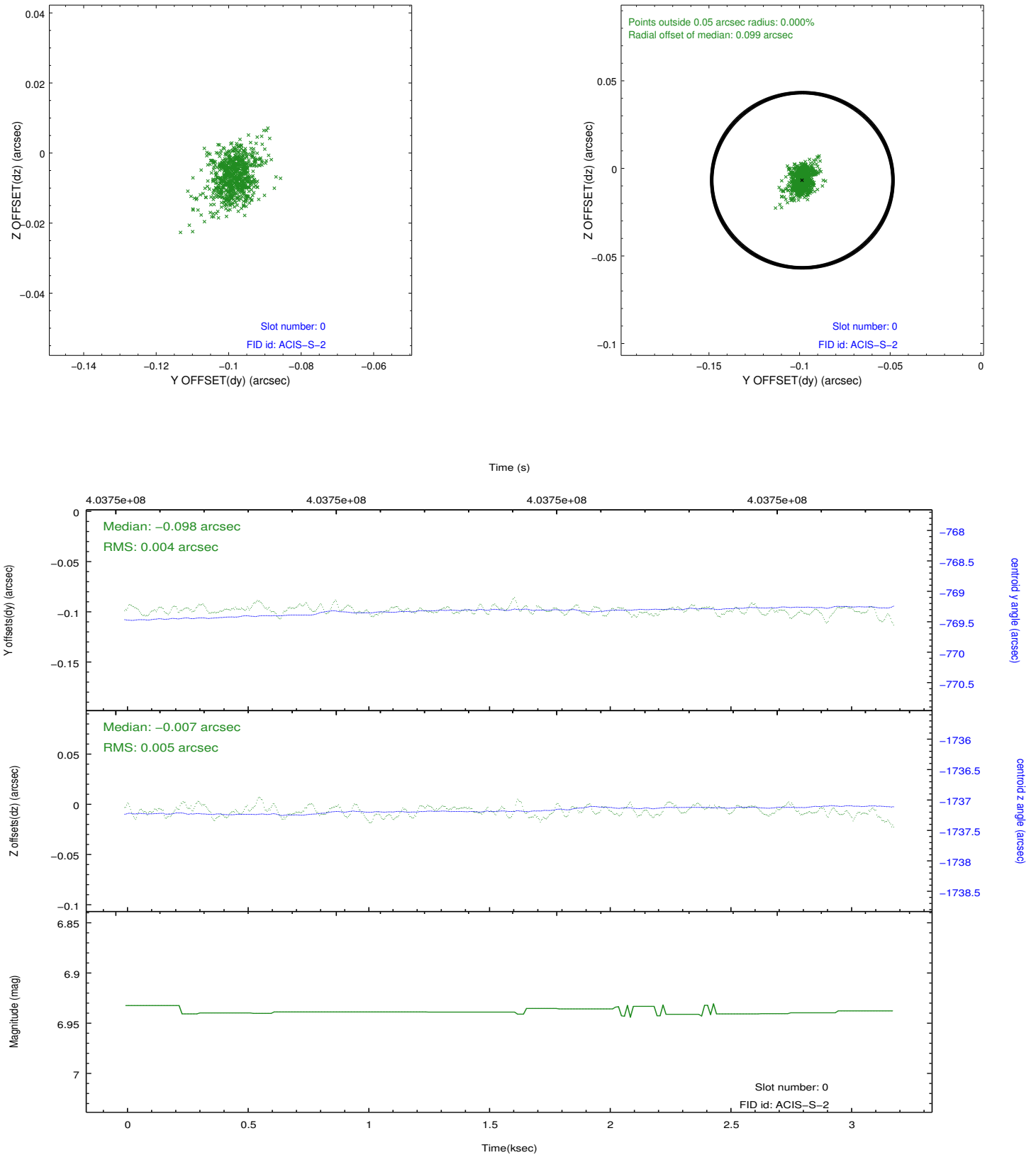


### 2.4.5 Slot 7

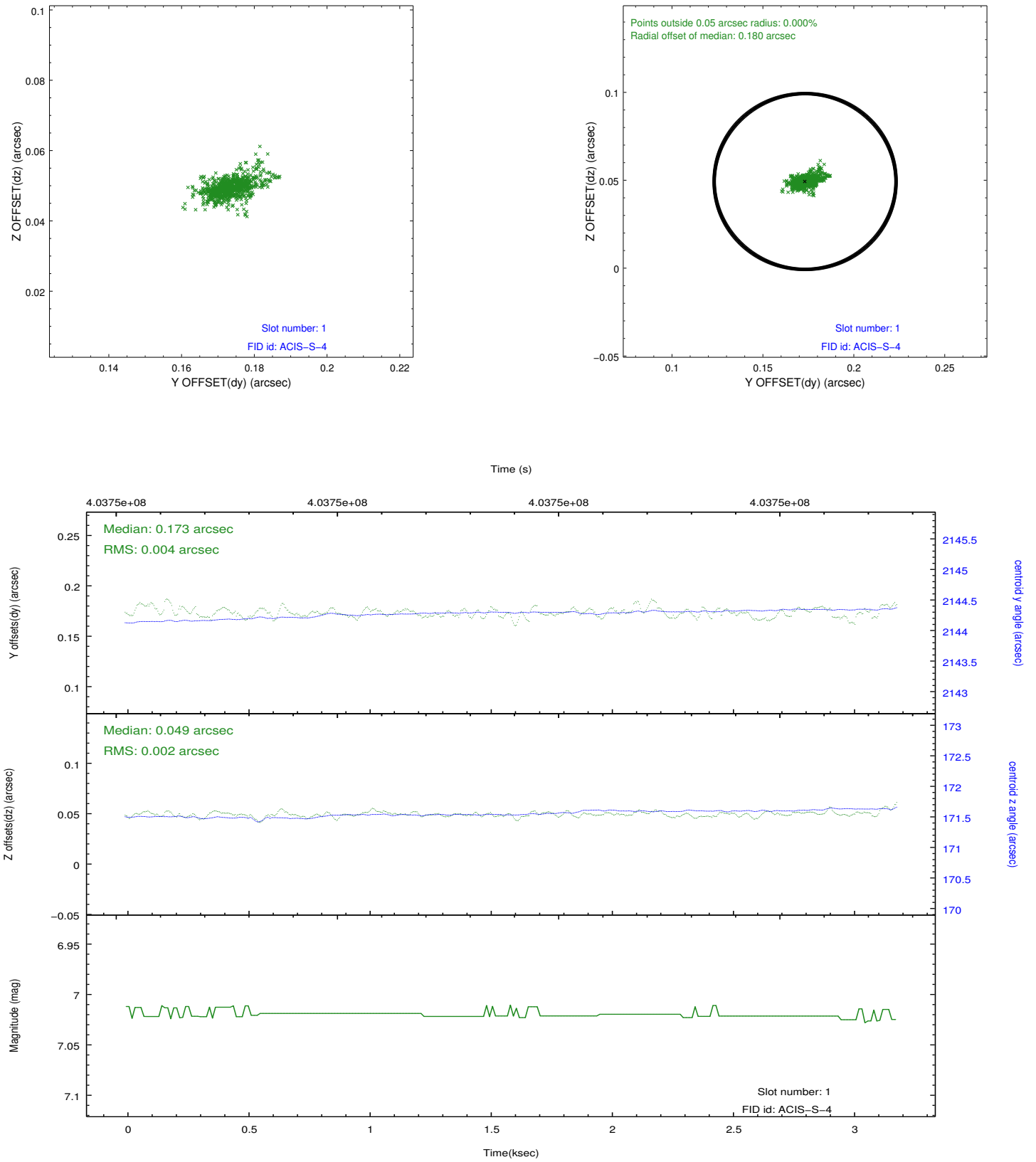


## 2.5 FID Slots

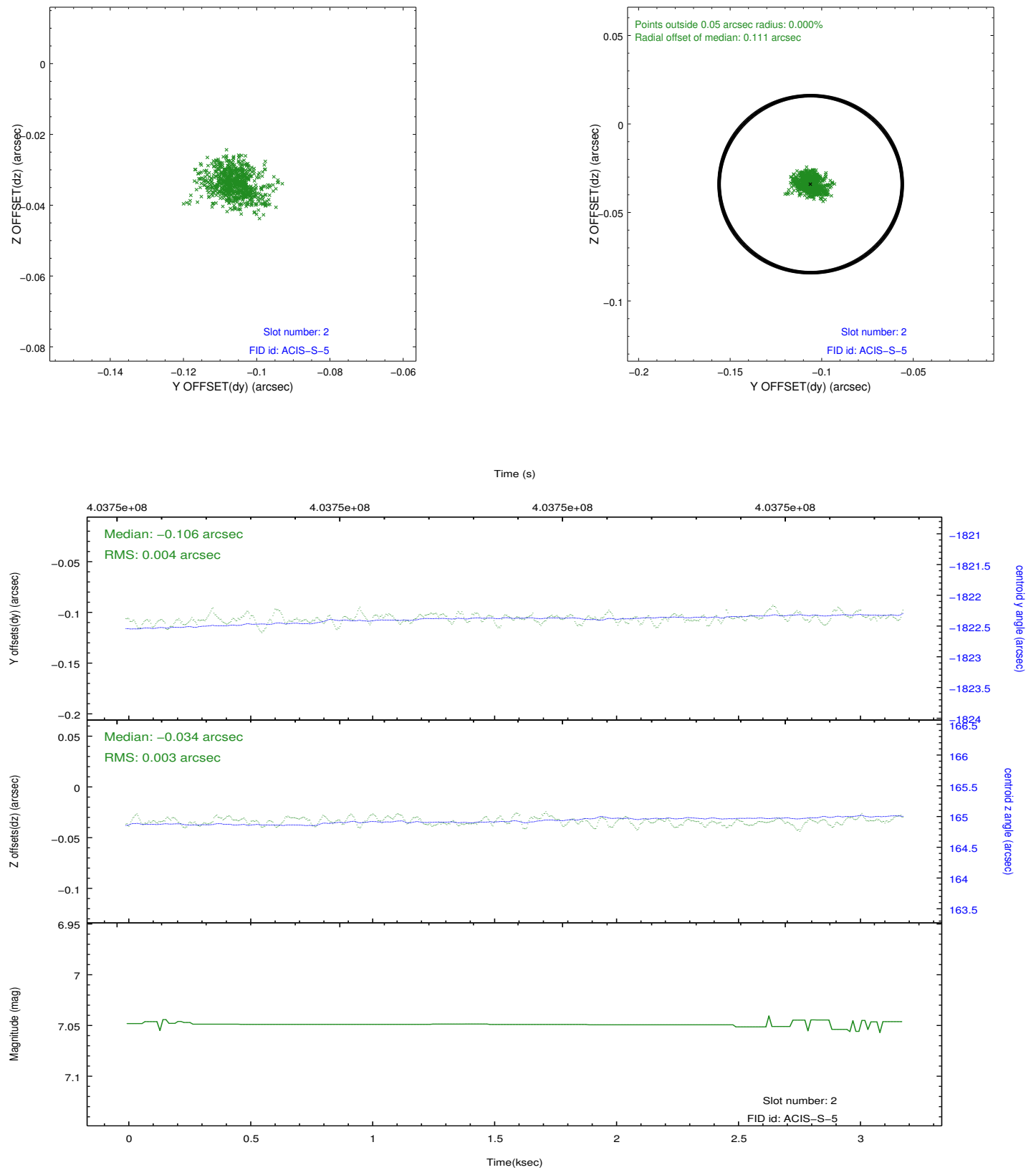
### 2.5.1 Slot 0



## 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	2.7519535038471

## 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.