

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 14364 - L2 Version 1  
Chandra X-Ray Center

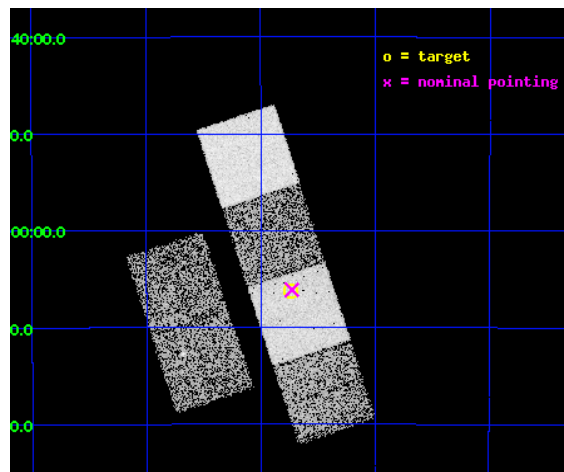
L2 Processing Date : Apr 25 2012

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# 1 Front

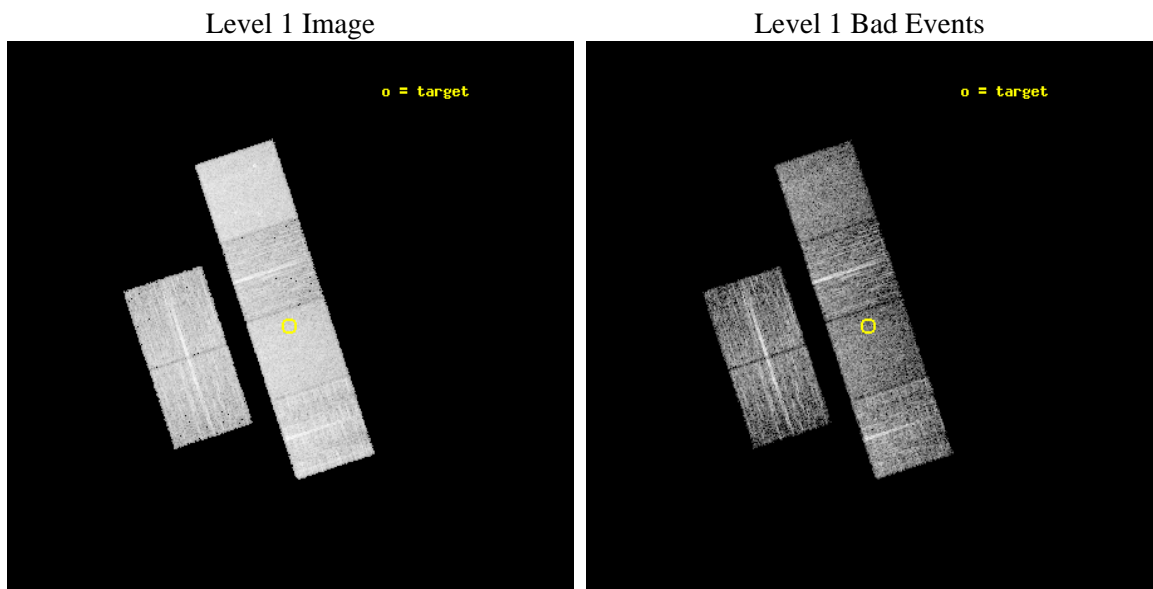
seq_num	200704	Sequence number
obs_id	14364	Observation id
title	X-rays from Planetary Nebulae: Unveiling Binarity, Magnetic Fields, and Wind Collisions	Proposal title
observer	Dr. Joel Kastner	Principal investigator
object	NGC 6302	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	258.434167	Observer's specified target RA [deg]
dec_targ	-37.104417	Observer's specified target Dec [deg]
ra_nom	258.43182718054	Nominal RA [deg]
dec_nom	-37.102044650451	Nominal Dec [deg]
roll_nom	71.835188318563	Nominal Roll [deg]
revision	1	Processing version of data
ontime	7465.5999722481	Sum of GTIs [s]
livetime	7371.0660501549	Livetime [s]
ontime2	7465.5999722481	Sum of GTIs [s]
ontime3	7465.5999722481	Sum of GTIs [s]
ontime5	7465.5999722481	Sum of GTIs [s]
ontime6	7465.5999722481	Sum of GTIs [s]
ontime7	7465.5999722481	Sum of GTIs [s]
ontime8	7465.5999722481	Sum of GTIs [s]
l2events	74691	Number of level 2 events



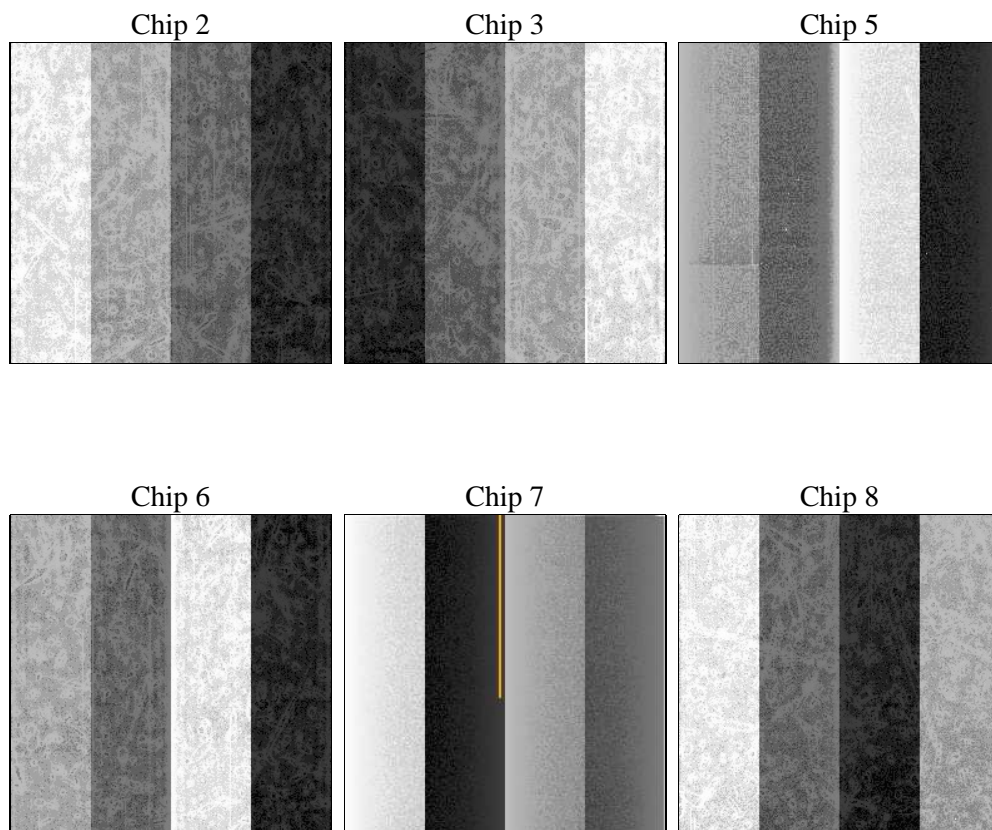
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	7465.5999722481	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	7465.5999722481	Sum of GTIs [s]
date	2012-04-26T03:01:44	Date and time of file creation	ontime3	7465.5999722481	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	7465.5999722481	Sum of GTIs [s]
			ontime6	7465.5999722481	Sum of GTIs [s]
			ontime7	7465.5999722481	Sum of GTIs [s]
			ontime8	7465.5999722481	Sum of GTIs [s]
			l1events	307291	Number of level 1 events

### 2.1.4 Events

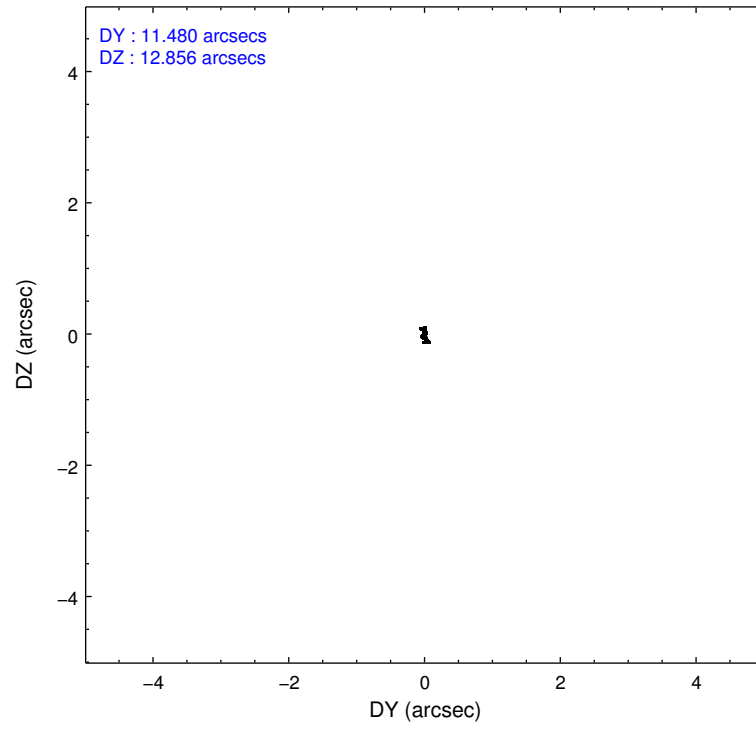
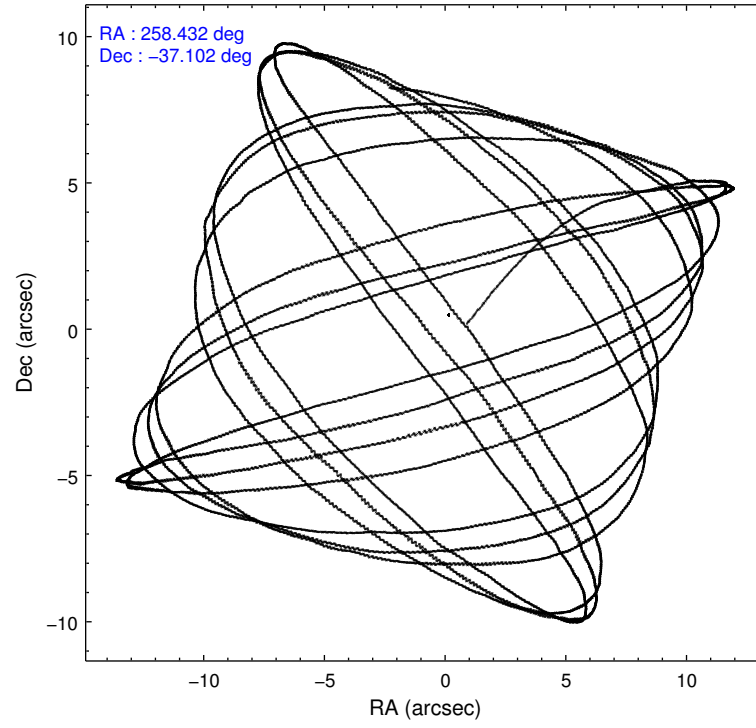
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	42621	40331	67806	42679	56539	57315	grade 0 events	1818	1840	2096	1868	2289	4578
rejected events	37619	35550	35091	37518	31286	41959		4%	4%	3%	4%	4%	7%
rejected %	88%	88%	51%	87%	55%	73%	grade 1 events	16	23	104	26	66	34
								0%	0%	0%	0%	0%	0%
							grade 2 events	1247	1040	10047	1128	5181	3559
								2%	2%	14%	2%	9%	6%
							grade 3 events	499	474	1202	494	2216	1583
								1%	1%	1%	1%	3%	2%
							grade 4 events	492	499	1218	498	2165	1523
								1%	1%	1%	1%	3%	2%
							grade 5 events	1786	2145	5221	2166	5852	3015
								4%	5%	7%	5%	10%	5%
							grade 6 events	947	931	18166	1174	13408	4118
								2%	2%	26%	2%	23%	7%
							grade 7 events	35816	33379	29752	35325	25362	38905
								84%	82%	43%	82%	44%	67%

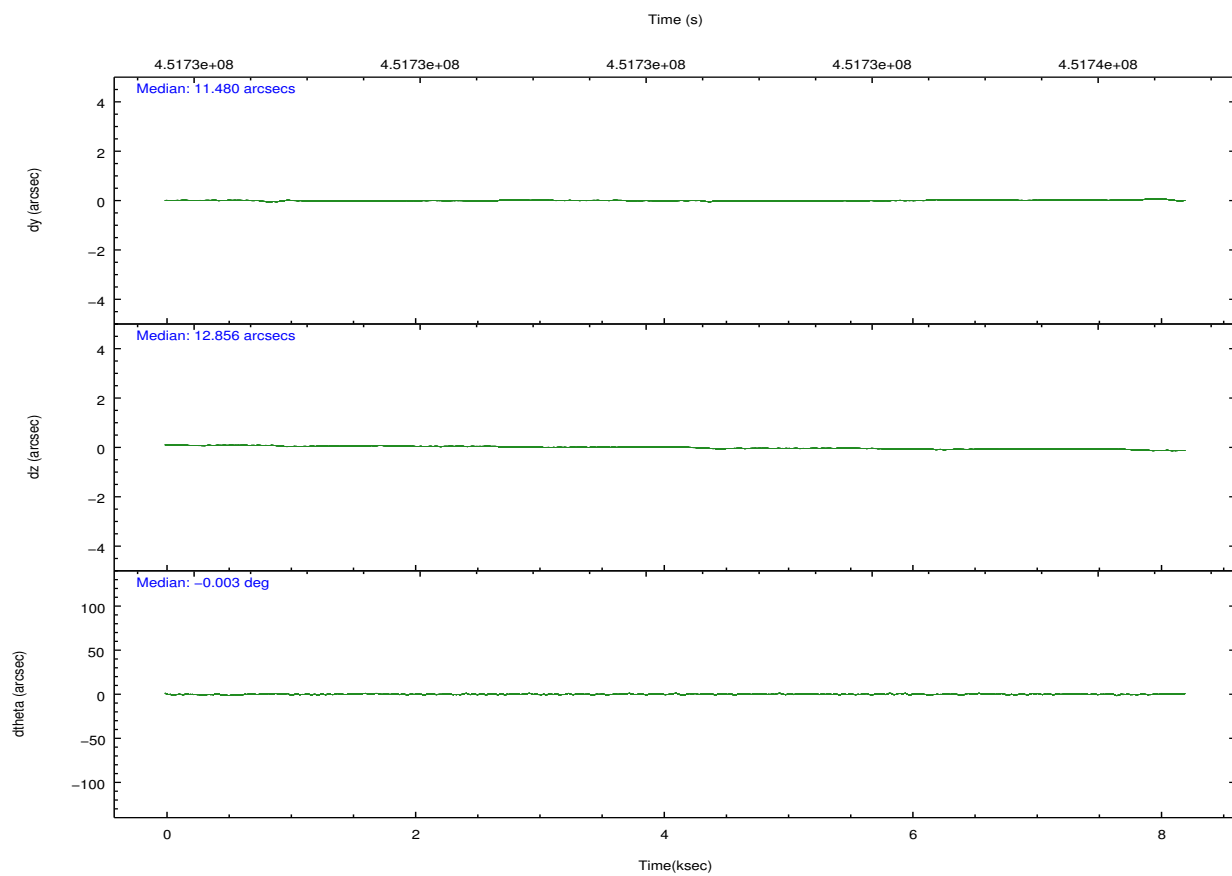
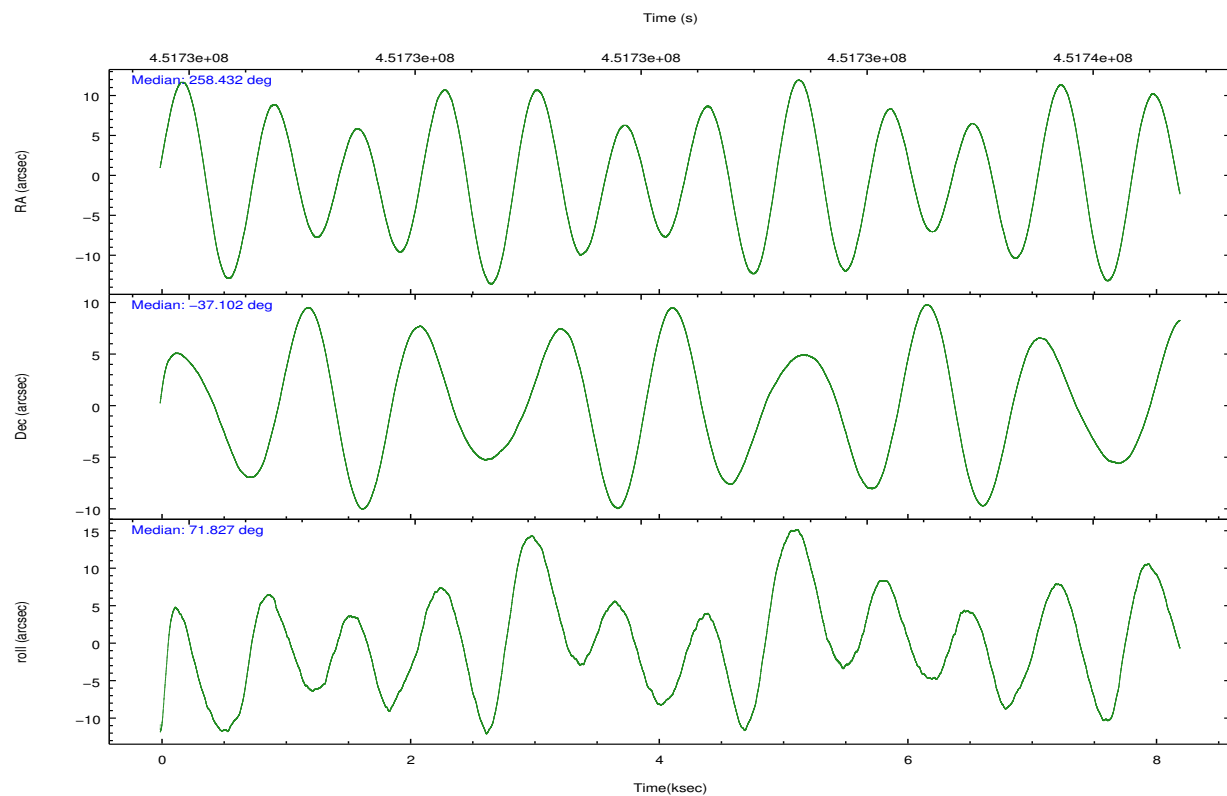


## 2.2 Compared Parameters

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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	258.439254	258.4318271805375	CCD I2 on	O4	Y
[deg] Pointing Dec	-37.128760	-37.10204465045086	CCD I3 on	O5	Y
[deg] Pointing Roll	71.683050	71.83518831856317	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	451728848.184000	451727627.62355	CCD S5 on	N	N
Observation start date	2012-04-25T08:13:02	2012-04-25T07:53:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	451736348.184000	451736950.51154	On-chip summing requested	N	N
Observation end date	2012-04-25T10:18:02	2012-04-25T10:29:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



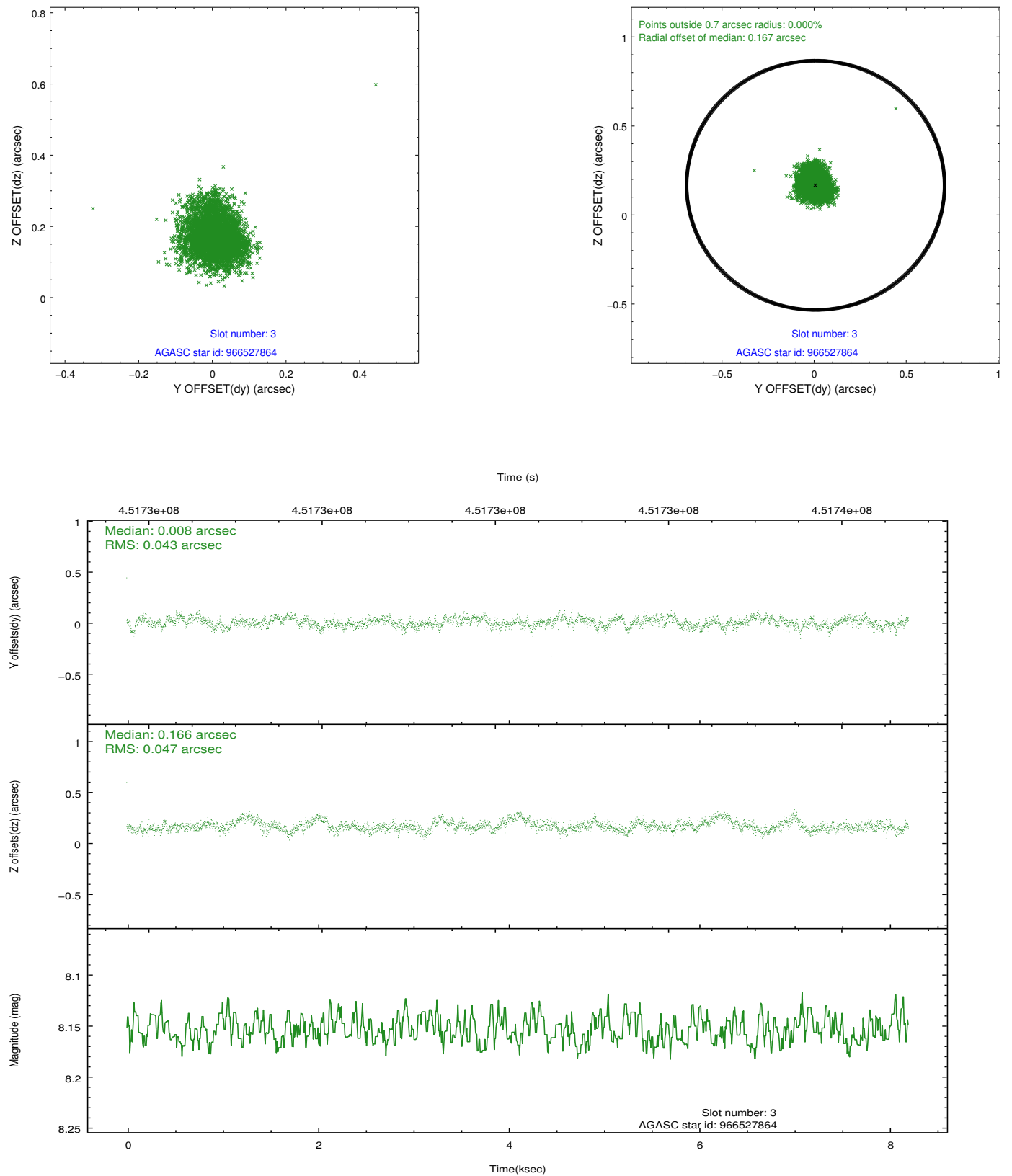


### Slot Statistics

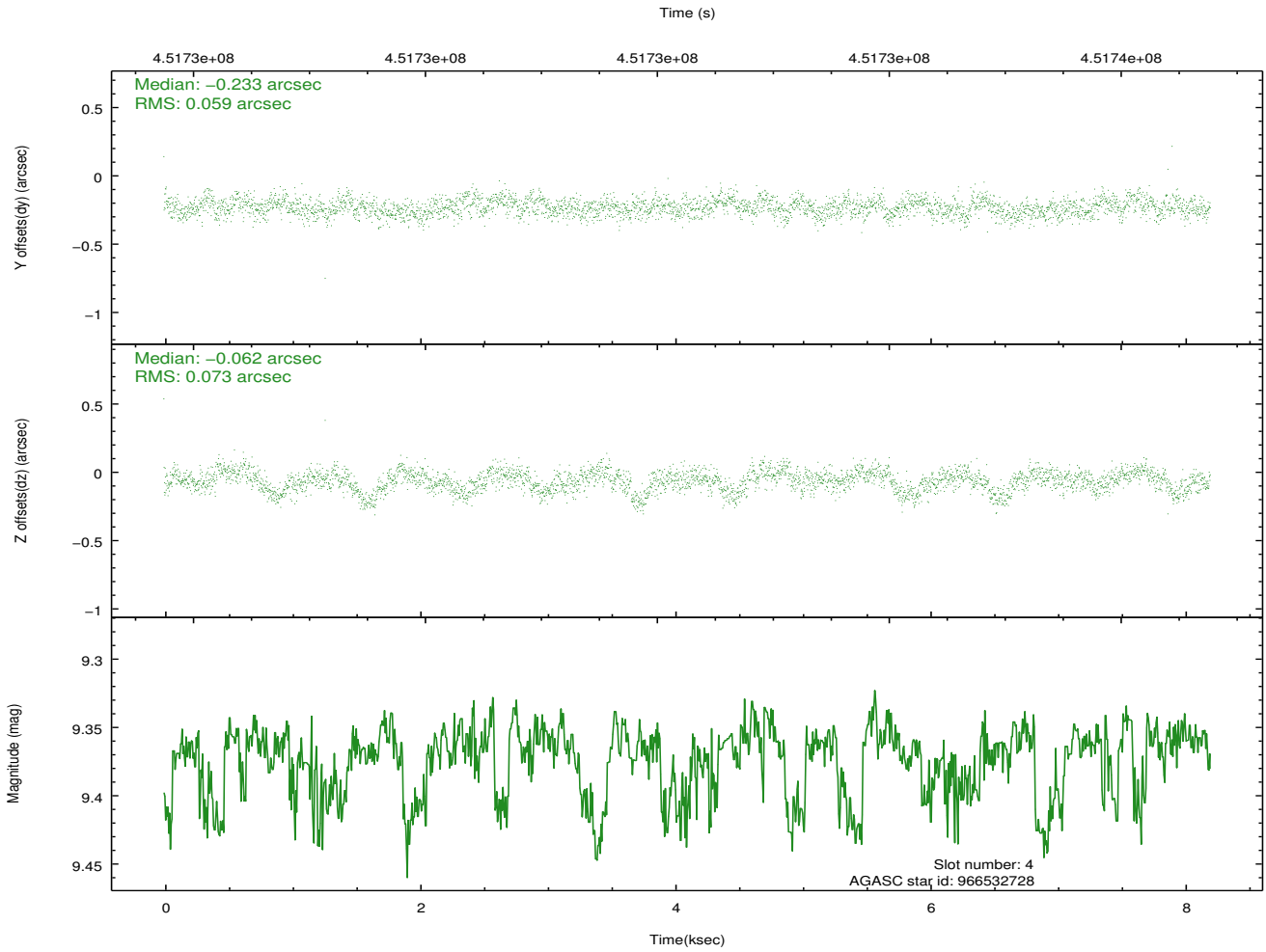
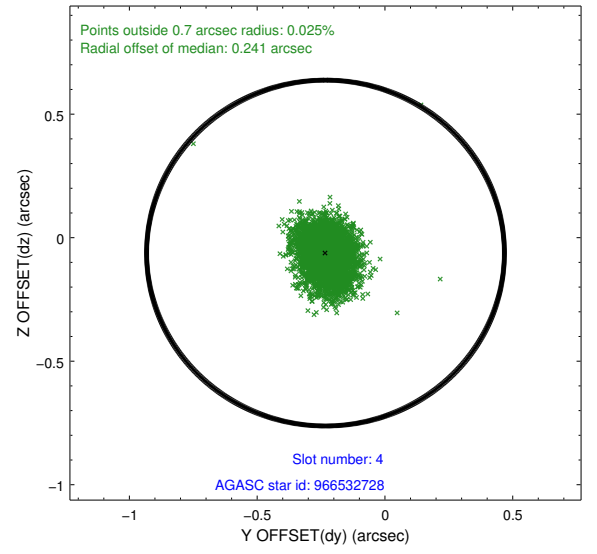
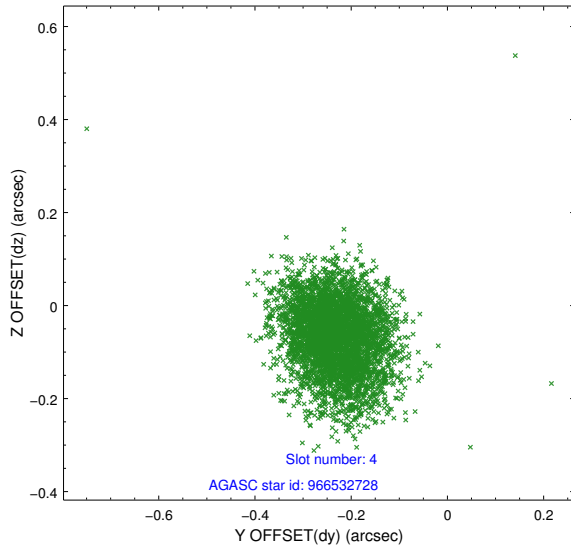
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	2001	-0.069	-0.034	0.006	0.010	0.000000	0.000000	-764.45	-1734.19
1	FID	ACIS-S-4	7.03	2001	0.113	0.025	0.006	0.010	0.000000	0.000000	2148.73	173.60
2	FID	ACIS-S-6	7.17	2001	-0.071	0.016	0.007	0.011	0.000000	0.000000	398.44	811.79
3	GUIDE	966527864	8.15	4002	0.008	0.166	0.066	0.111	259.198901	-37.409371	-284.35	-2381.70
4	GUIDE	966532728	9.37	3976	-0.233	-0.062	0.098	0.162	259.117845	-36.875724	1472.13	-1571.00
5	GUIDE	1031542824	9.16	4003	0.123	0.147	0.105	0.160	258.377451	-37.634213	-1782.40	-404.58
6	GUIDE	1031544936	9.05	3998	0.115	0.043	0.093	0.150	258.550668	-37.628655	-1609.08	-866.96
7	GUIDE	1031547784	8.75	3992	-0.017	-0.291	0.082	0.135	257.623567	-37.555906	-2201.76	1723.34

## 2.4 Star Slots

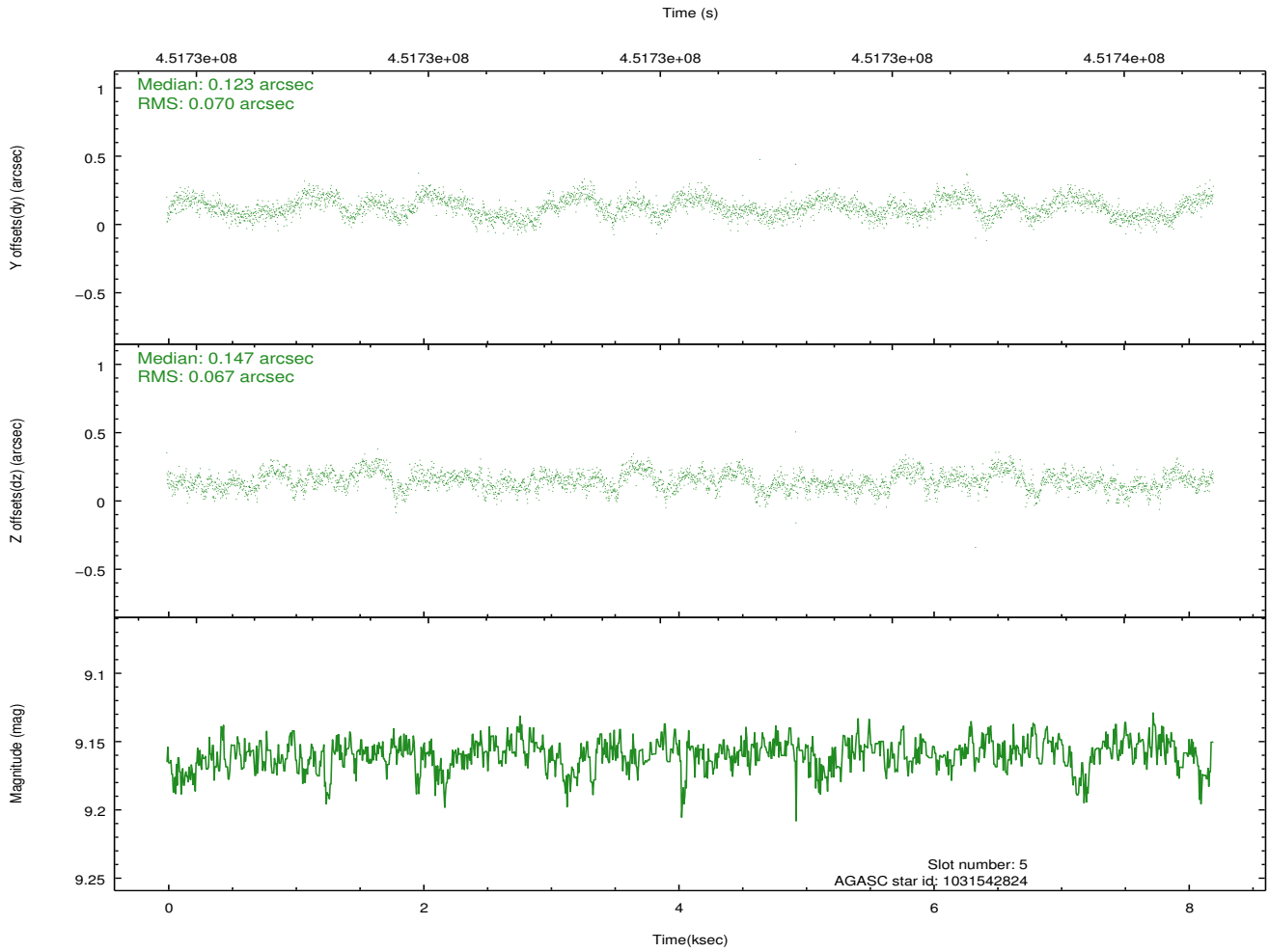
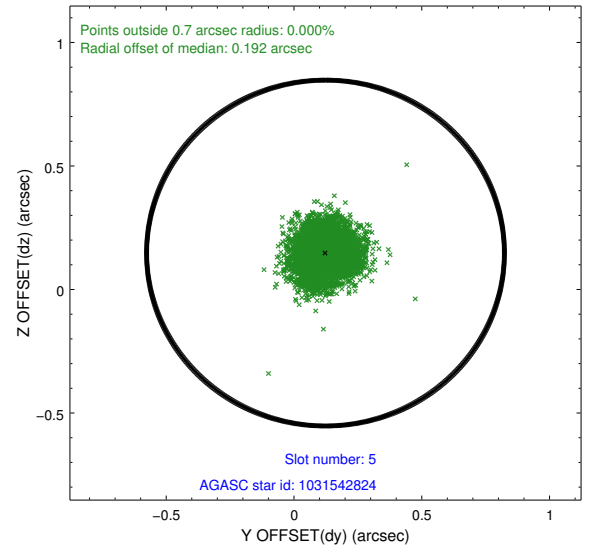
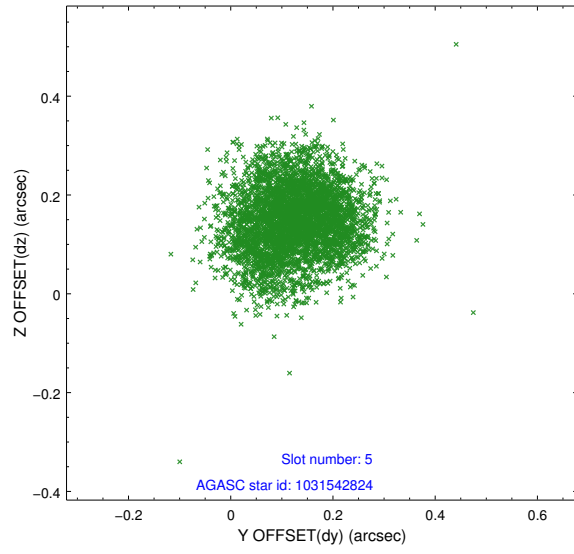
### 2.4.1 Slot 3



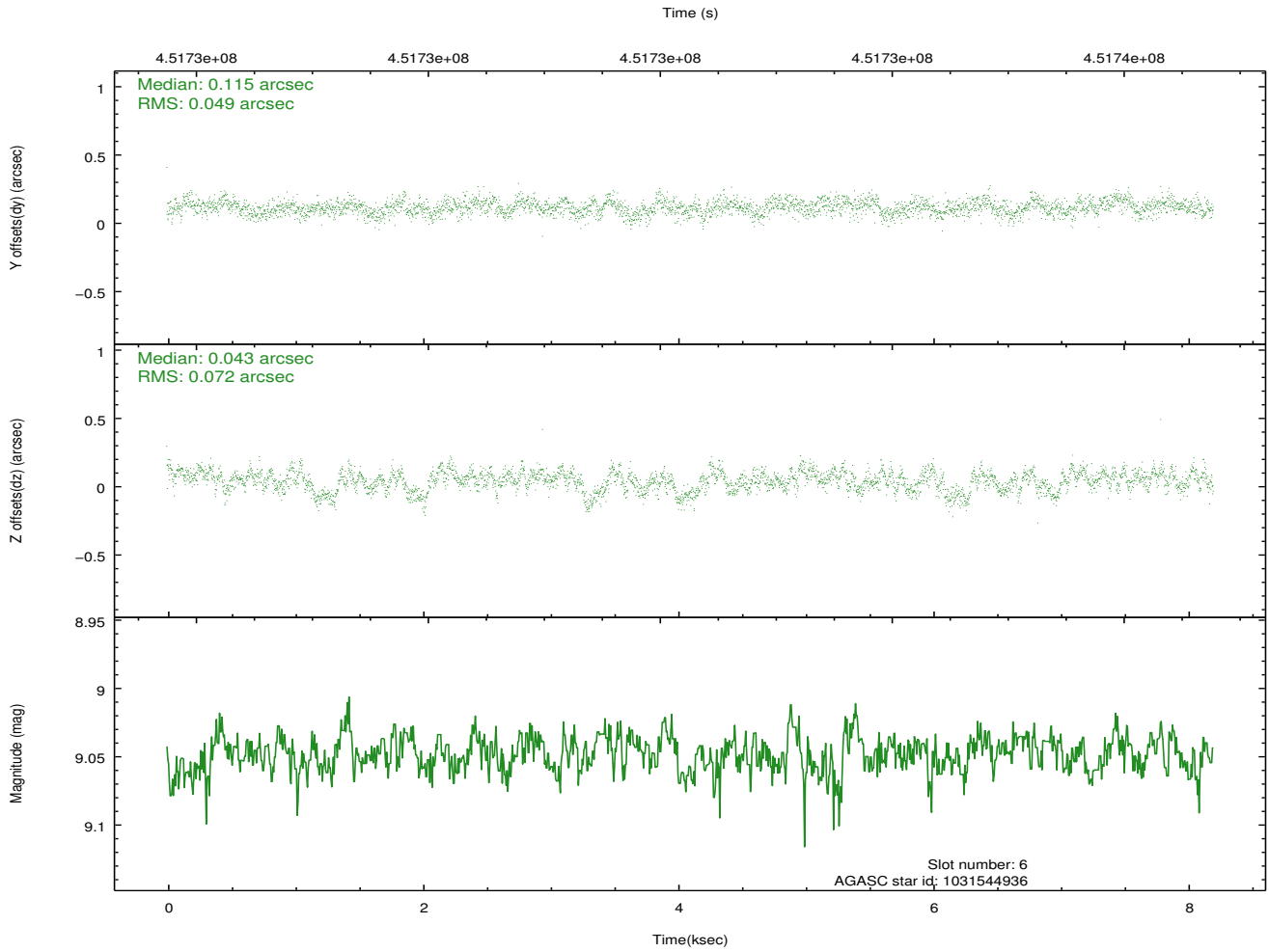
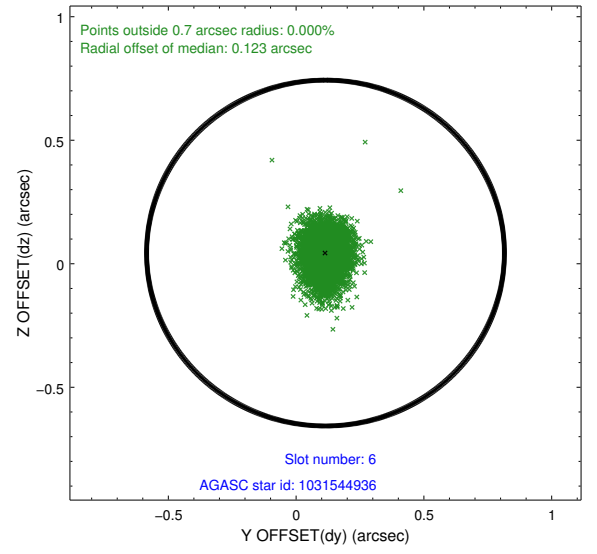
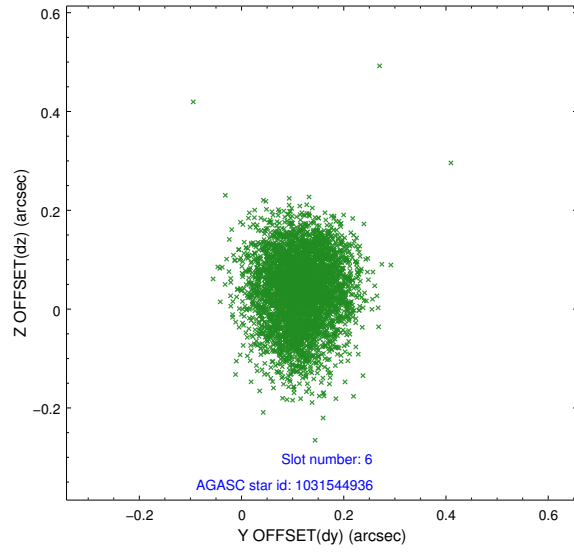
## 2.4.2 Slot 4



### 2.4.3 Slot 5

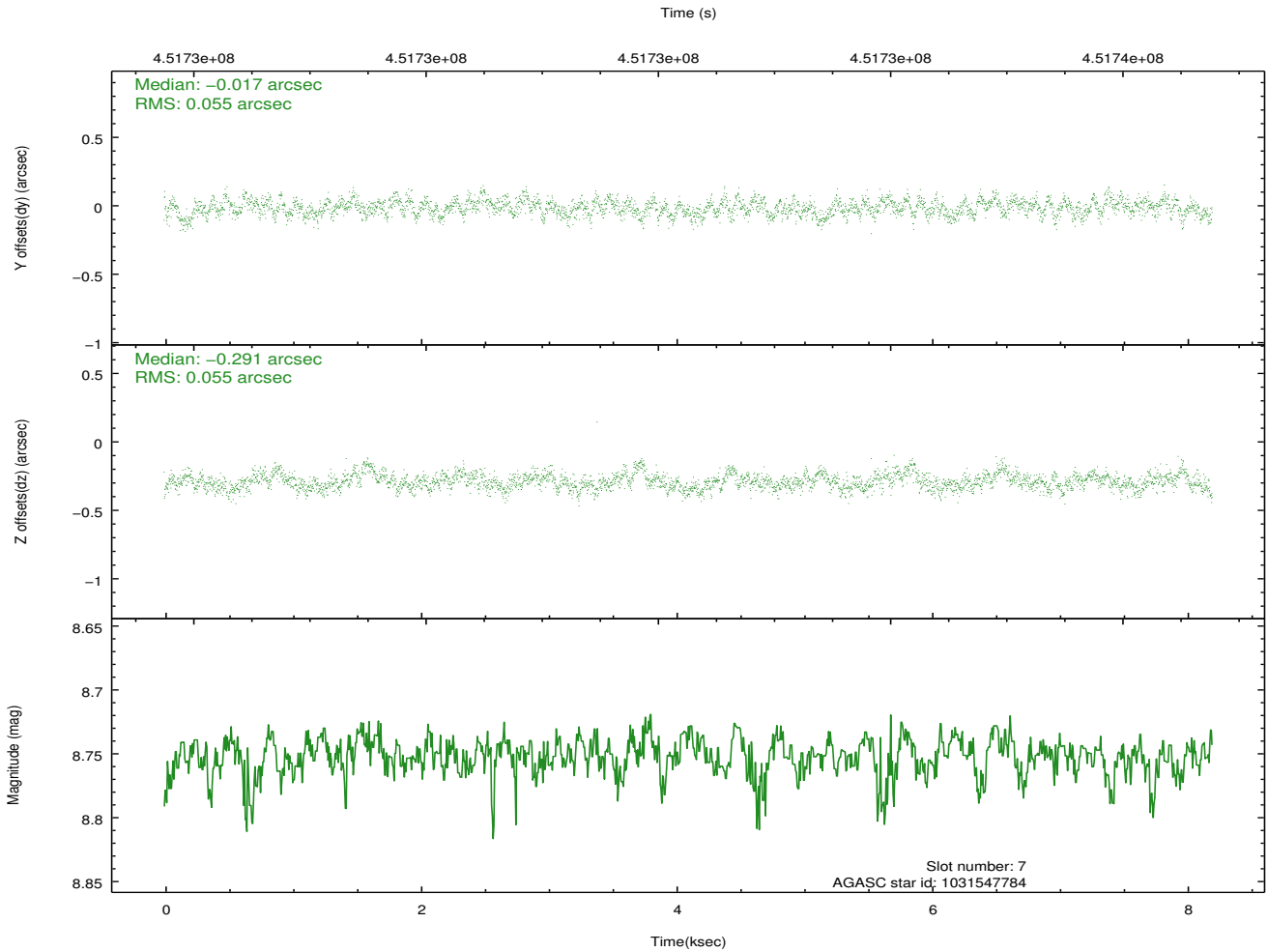
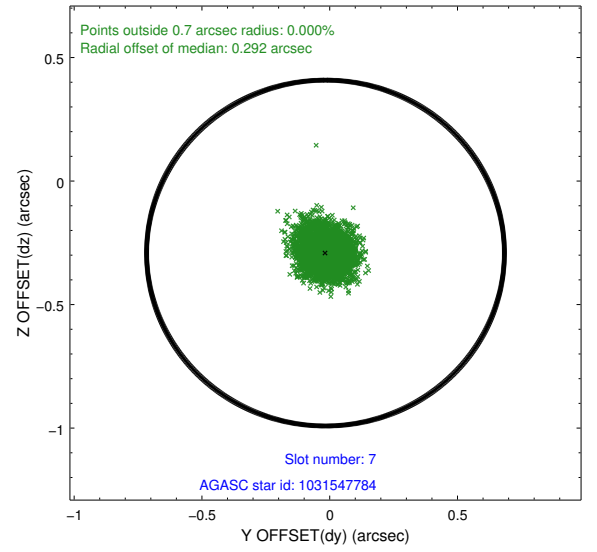
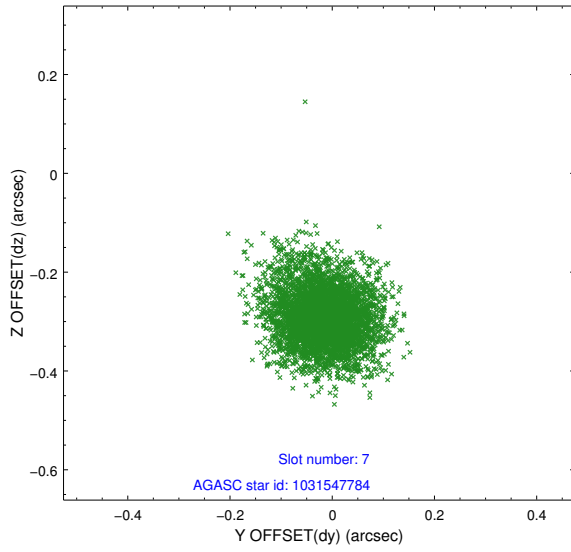


## 2.4.4 Slot 6



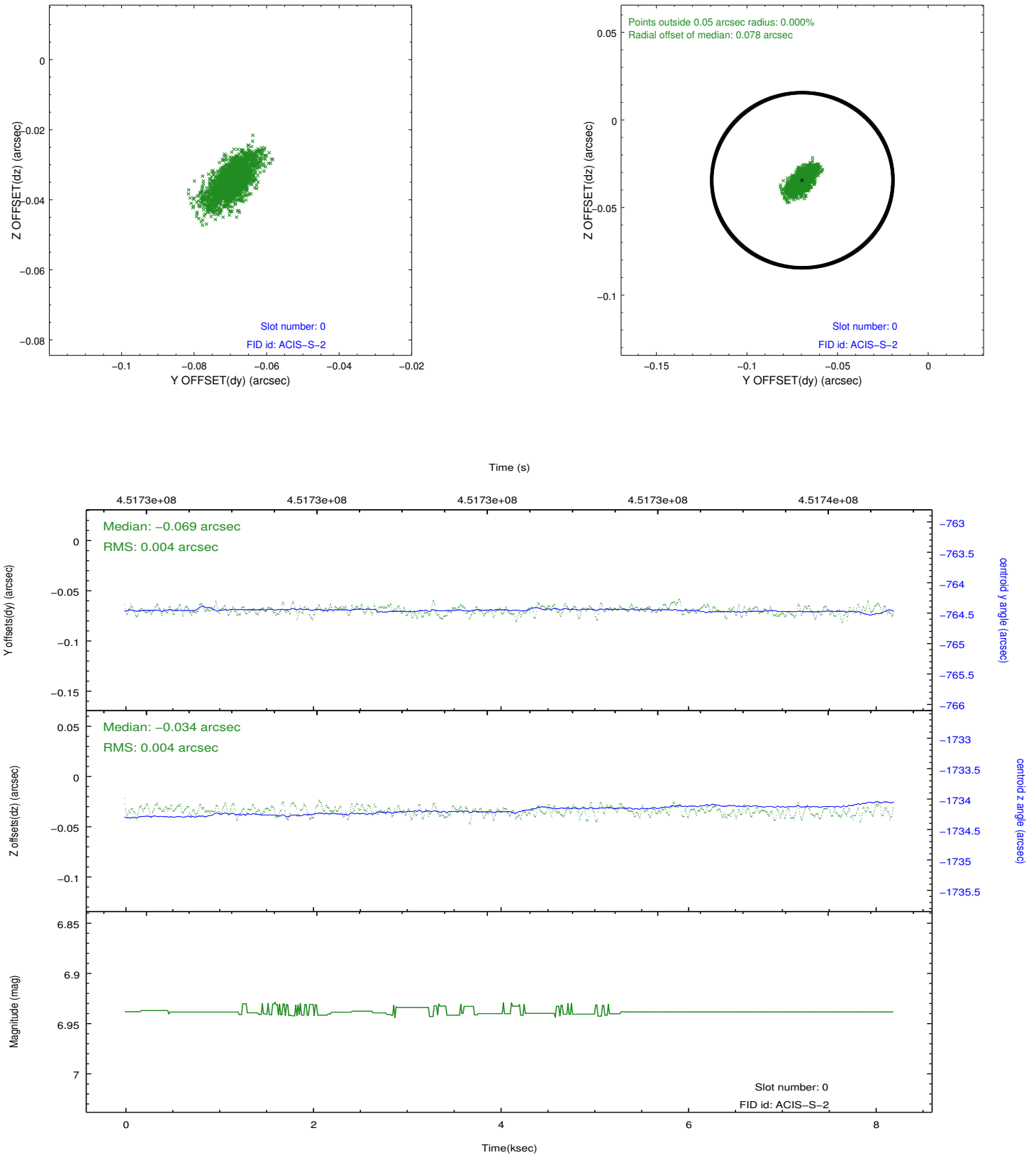


### 2.4.5 Slot 7

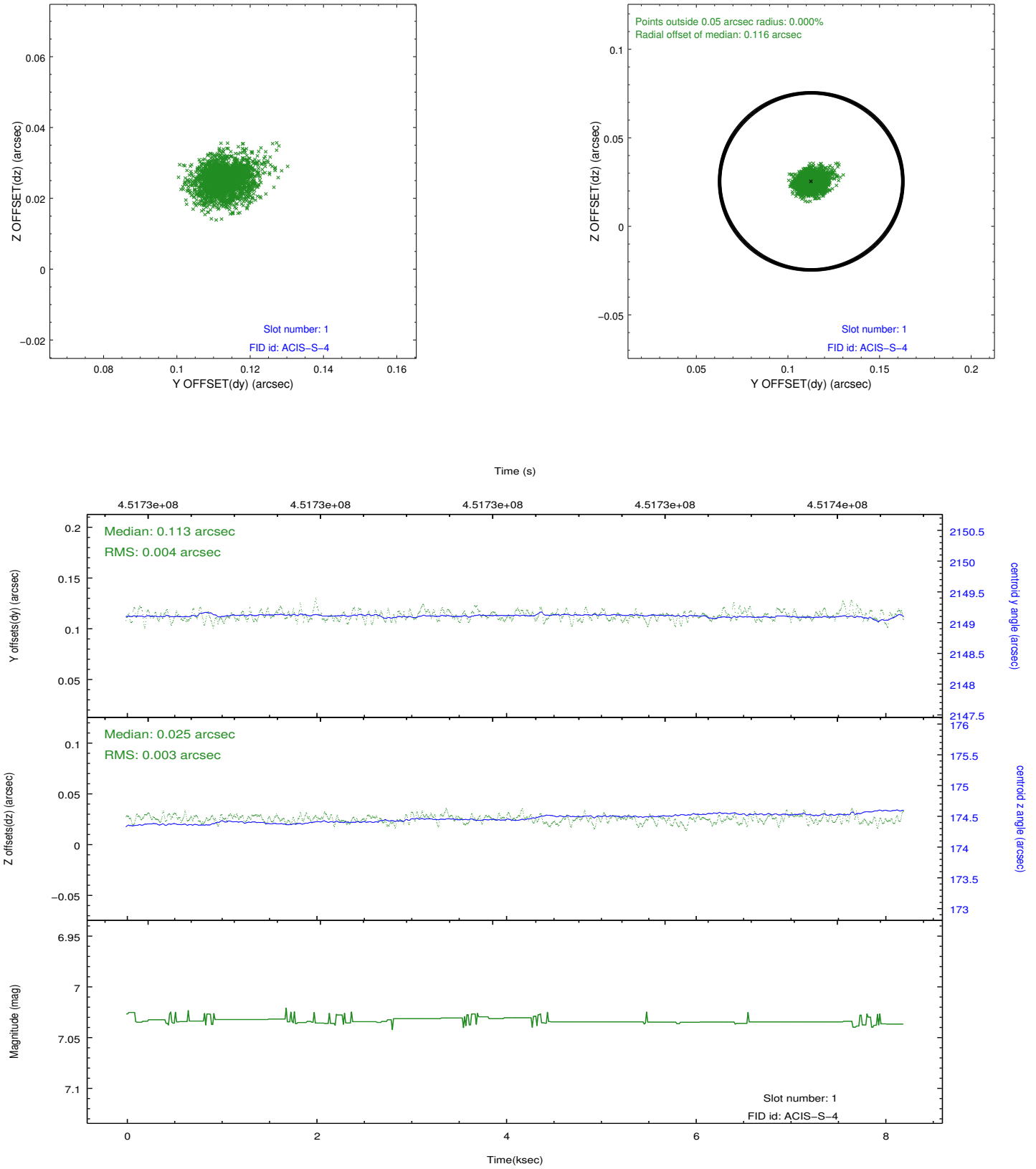


## 2.5 FID Slots

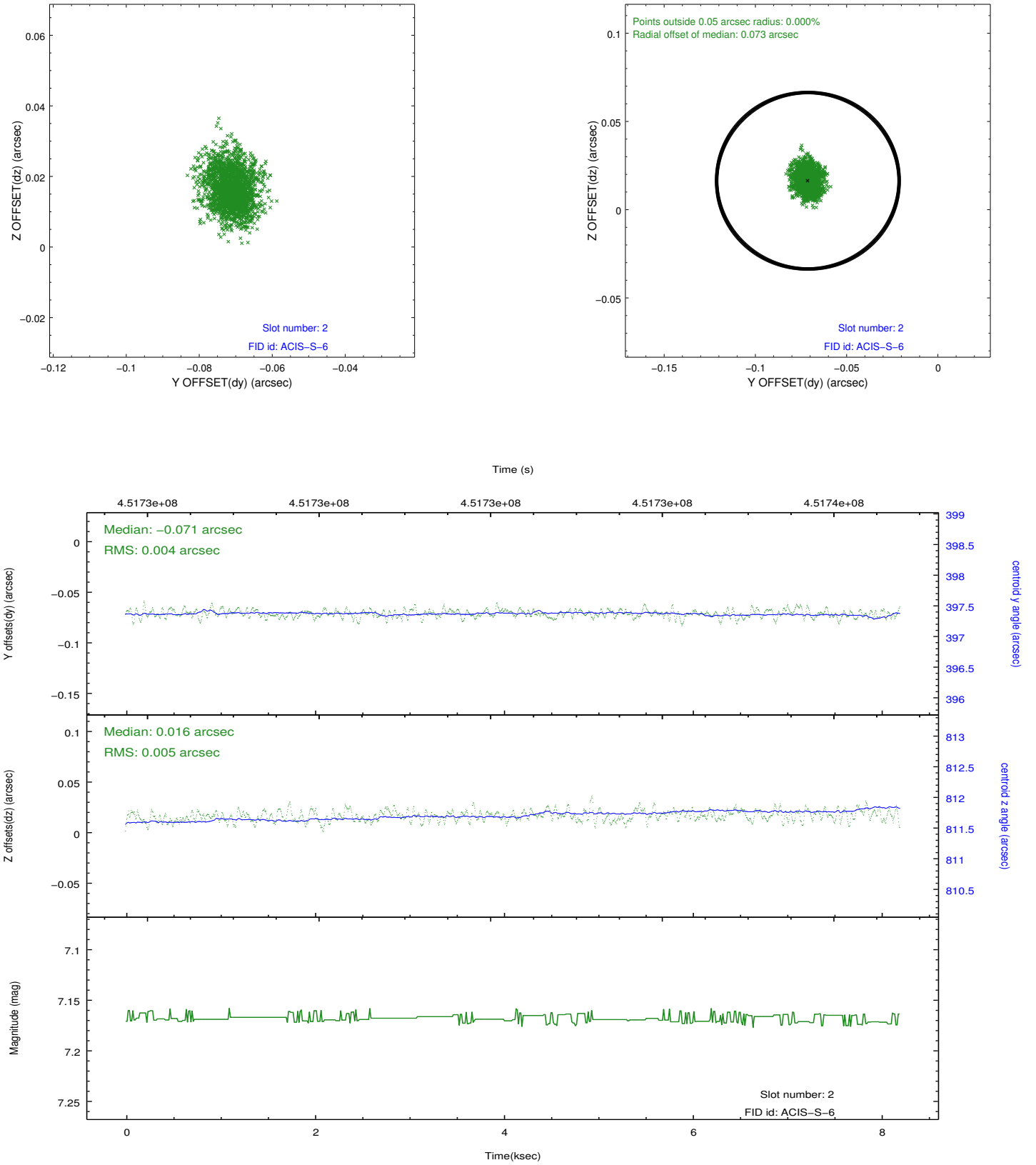
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.4655999722481

### A.2 Comments