

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3254 - L2 Version 3  
Chandra X-Ray Center

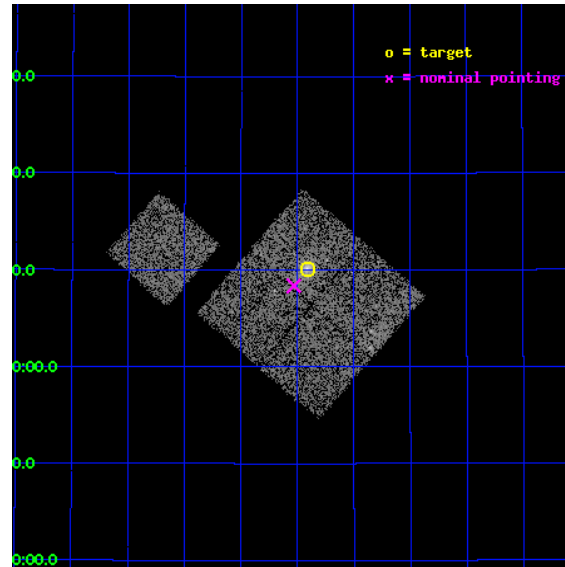
L2 Processing Date : Oct 16 2012

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# 1 Front

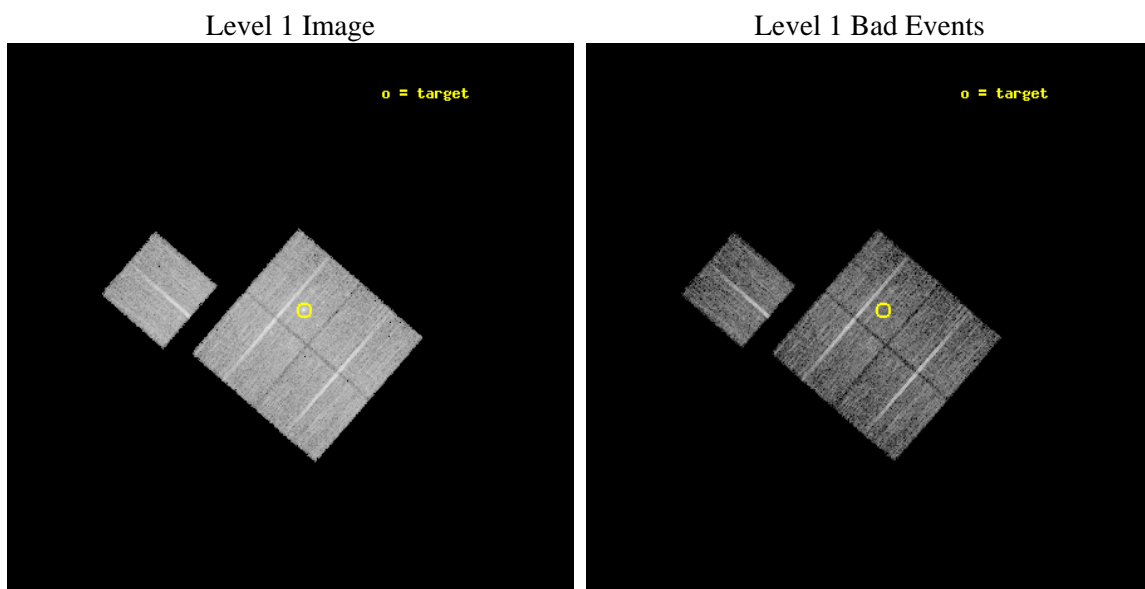
seq_num	800254	Sequence number
obs_id	3254	Observation id
title	OBSERVATION OF MACS CLUSTERS, 0.45	Proposal titl
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	MACS-J1621.3+3810	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	245.35333	Observer's specified target RA [deg]
dec_targ	38.169167	Observer's specified target Dec [deg]
ra_nom	245.38280339702	Nominal RA [deg]
dec_nom	38.139486700182	Nominal Dec [deg]
roll_nom	311.01091911987	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9975.7999807894	Sum of GTIs [s]
livetime	9845.4588099633	Livetime [s]
ontime0	9975.7999807894	Sum of GTIs [s]
ontime1	9975.7999807894	Sum of GTIs [s]
ontime2	9972.6589906216	Sum of GTIs [s]
ontime3	9975.7999807894	Sum of GTIs [s]
ontime6	9975.7999807894	Sum of GTIs [s]
l2events	24838	Number of level 2 events



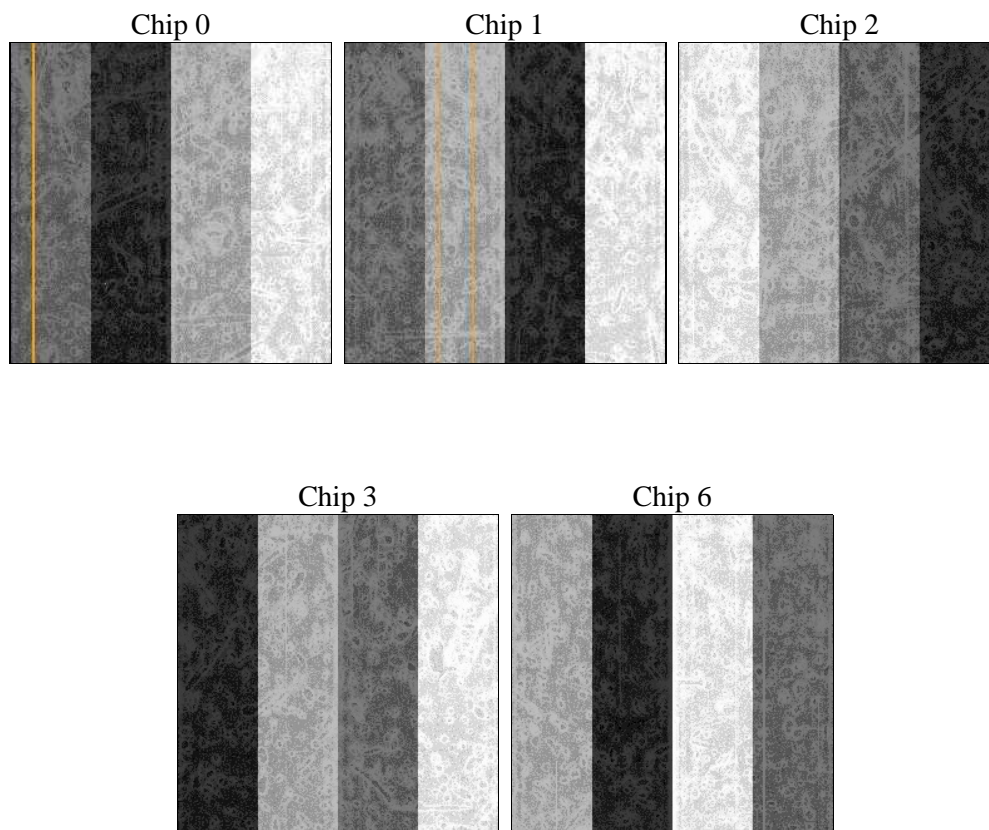
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9975.7999807894	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	9975.7999807894	Sum of GTIs [s]
date	2012-10-16T23:41:29	Date and time of file creation	ontime1	9975.7999807894	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9972.6589906216	Sum of GTIs [s]
			ontime3	9975.7999807894	Sum of GTIs [s]
			ontime6	9975.7999807894	Sum of GTIs [s]
			l1events	272774	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	52173	52616	57135	56984	53866
rejected events	46790	46325	51664	49890	48409
rejected %	89%	88%	90%	87%	89%

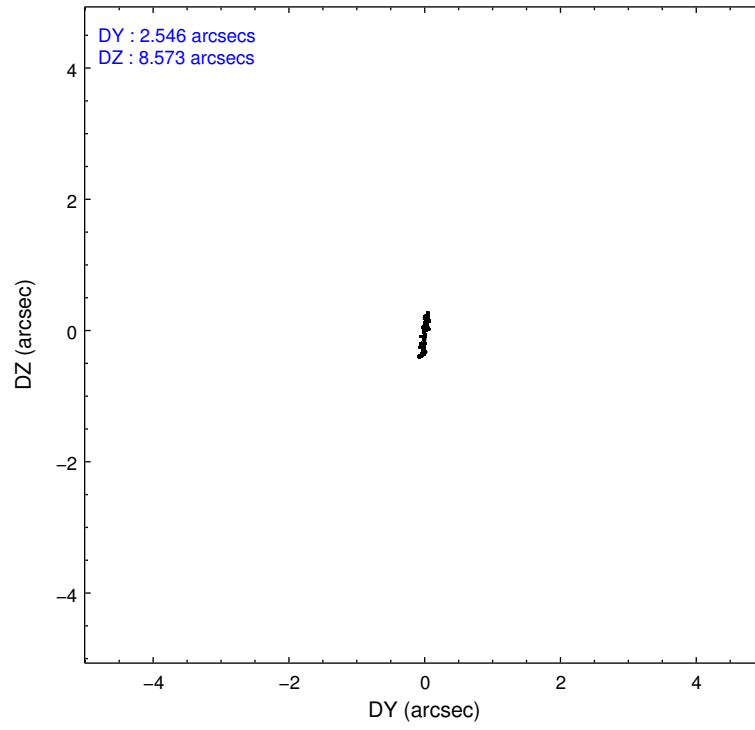
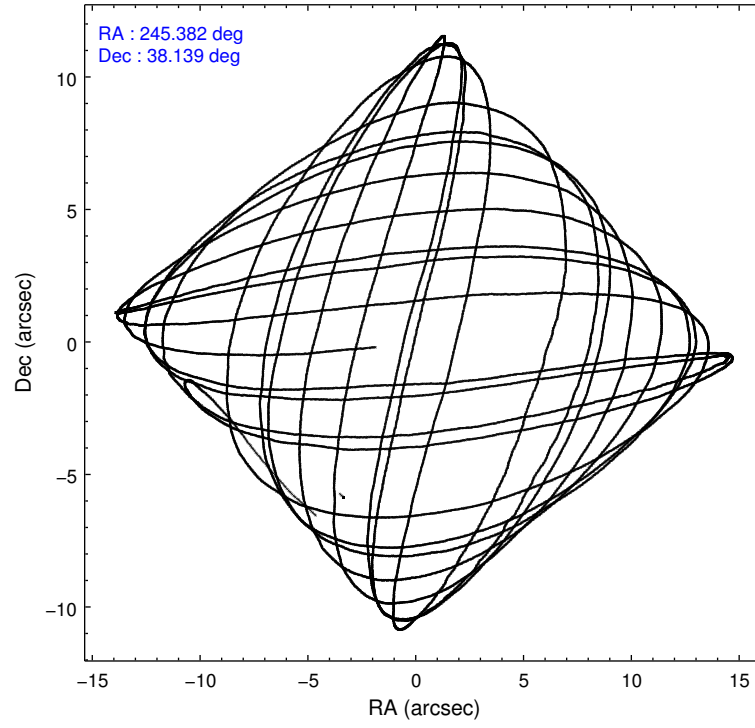
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1891	2404	2137	3561	1959
	3%	4%	3%	6%	3%
grade 1 events	19	25	32	32	22
	0%	0%	0%	0%	0%
grade 2 events	1229	1265	1232	1224	1158
	2%	2%	2%	2%	2%
grade 3 events	621	681	579	680	626
	1%	1%	1%	1%	1%
grade 4 events	589	717	587	609	571
	1%	1%	1%	1%	1%
grade 5 events	1932	1865	1773	2079	2025
	3%	3%	3%	3%	3%
grade 6 events	1060	1229	940	1023	1146
	2%	2%	1%	1%	2%
grade 7 events	44832	44430	49855	47776	46359
	85%	84%	87%	83%	86%

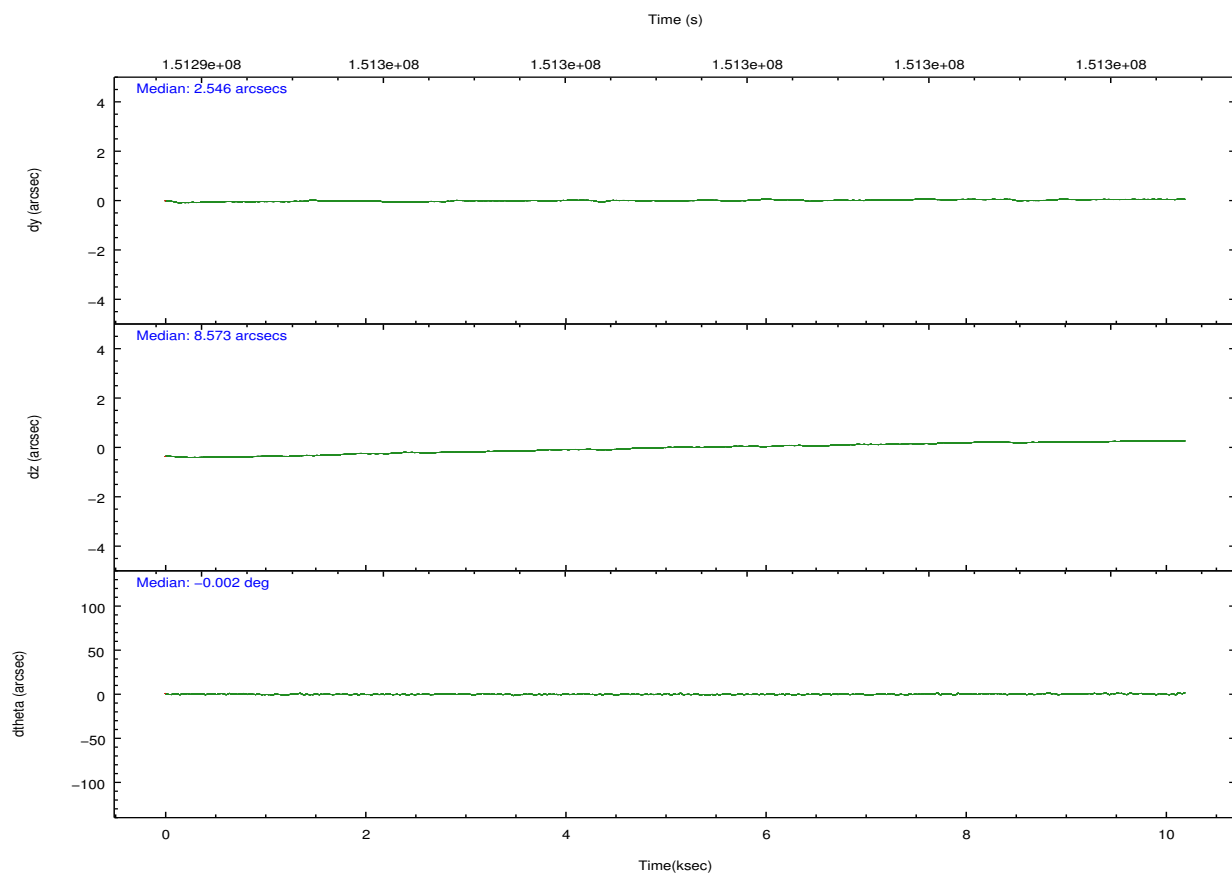
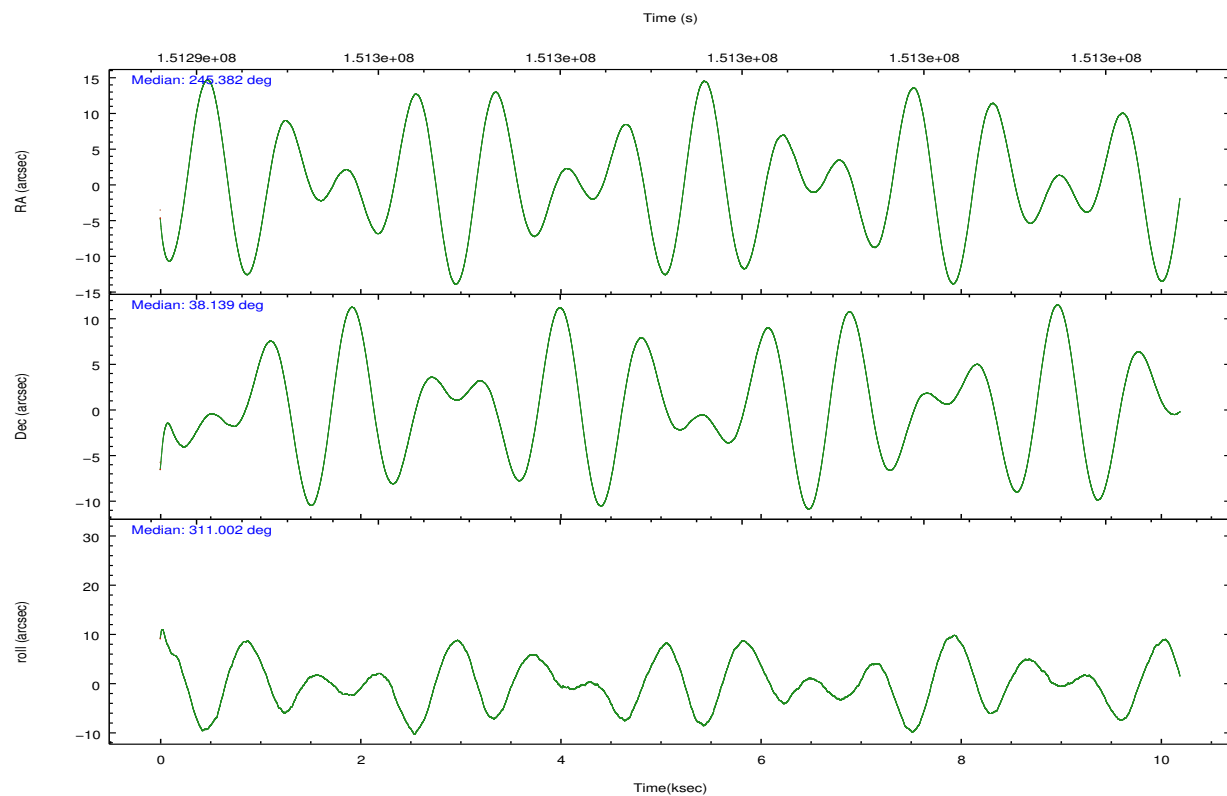


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	245.349882	245.382803397021	Subarray requested	NONE	NONE
[deg] Pointing Dec	38.148329	38.13948670018228	Alternating exposures requested	N	N
[deg] Pointing Roll	310.822562	311.0109191198673	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-227.742463	-227.734108438797			
[mm] SIM translation stage offset	-5.85	-5.858344564132665			
[s] Observation start time (MET)	151294298.184000	151293276.31016			
Observation start date	2002-10-18T02:10:34	2002-10-18T01:54:36			
[s] Observation end time (MET)	151304298.184000	151305378.48566			
Observation end date	2002-10-18T04:57:14	2002-10-18T05:16:18			
Read mode	TIMED	TIMED			

## 2.3 Aspect



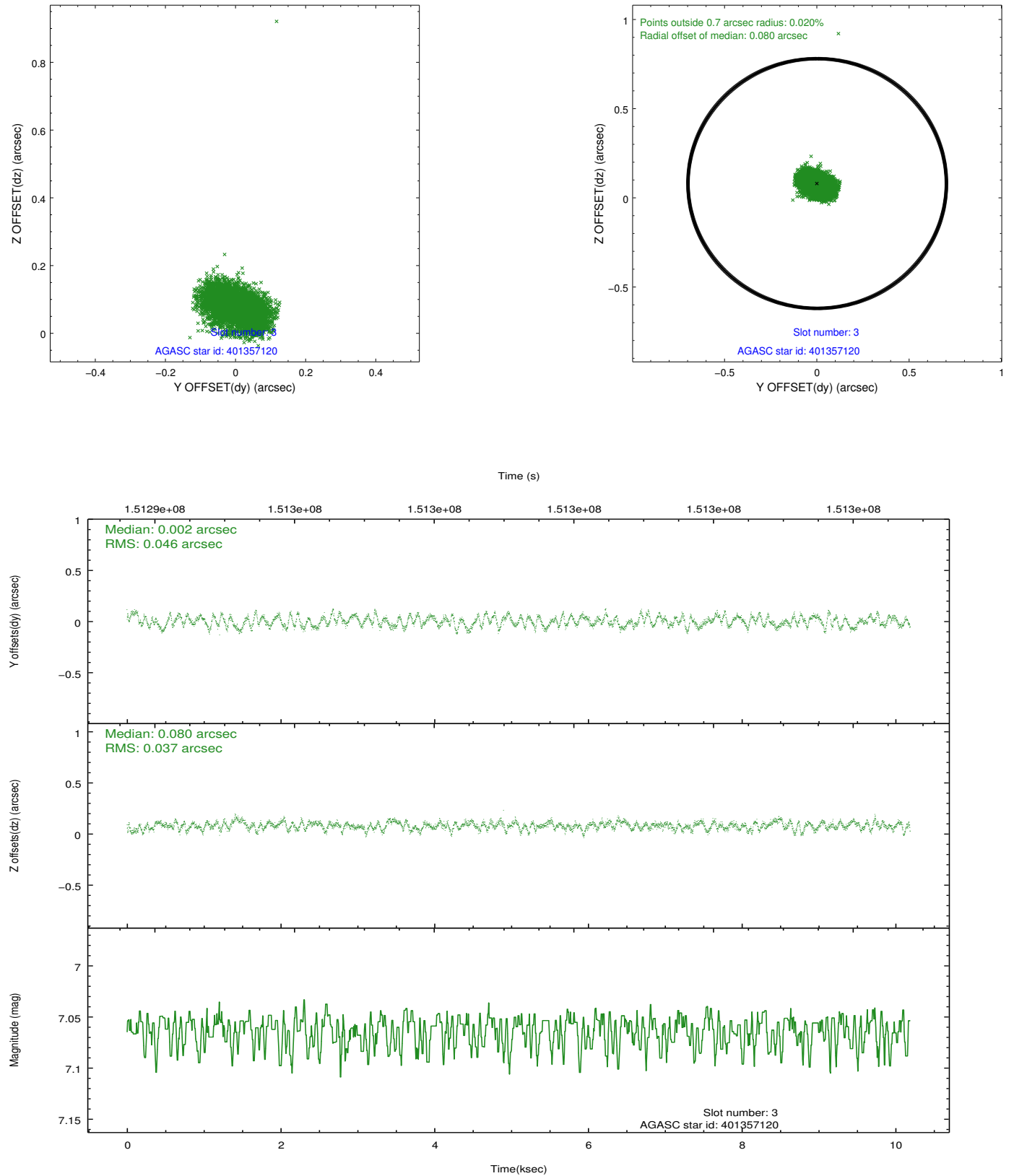


### Slot Statistics

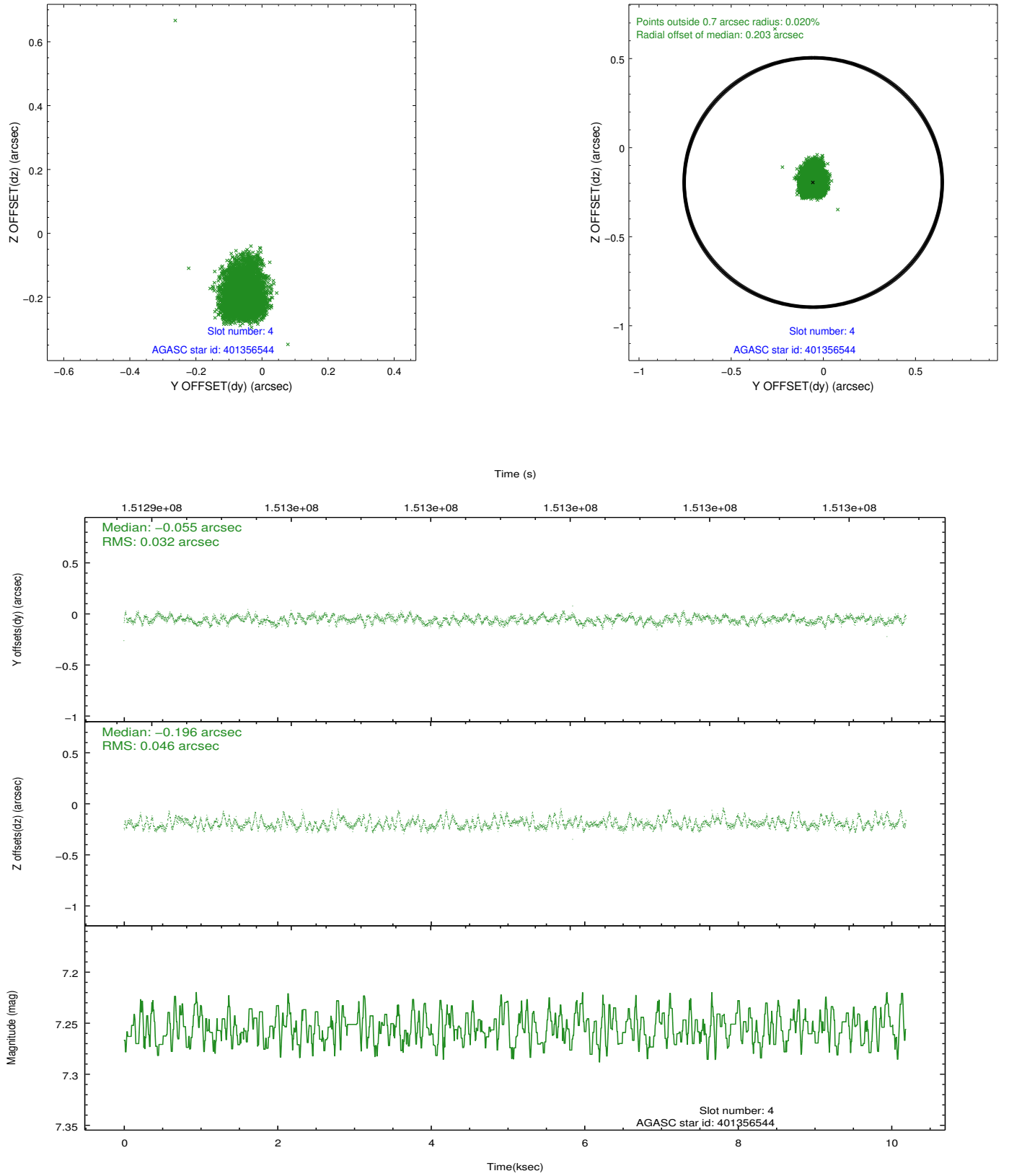
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	2486	0.022	-0.003	0.009	0.016	0.000000	0.000000	937.17	-952.21
1	FID	ACIS-I-5	7.23	2486	-0.131	0.050	0.007	0.011	0.000000	0.000000	-1810.80	945.02
2	FID	ACIS-I-6	7.25	2485	0.017	0.024	0.009	0.014	0.000000	0.000000	402.15	1590.09
3	GUIDE	401357120	7.06	4972	0.002	0.080	0.063	0.099	244.752378	37.765715	-72.18	-2183.00
4	GUIDE	401356544	7.25	4971	-0.055	-0.196	0.058	0.095	246.068366	38.478292	419.18	2314.07
5	GUIDE	401357920	8.38	4972	0.003	0.067	0.051	0.086	245.268524	37.658915	1182.75	-1325.79
6	GUIDE	401357888	8.52	4971	0.018	0.023	0.065	0.102	244.567474	38.275306	-1797.22	-1368.23
7	GUIDE	401358992	8.96	4971	0.031	0.025	0.084	0.136	245.392985	38.938928	-2074.75	1952.15

## 2.4 Star Slots

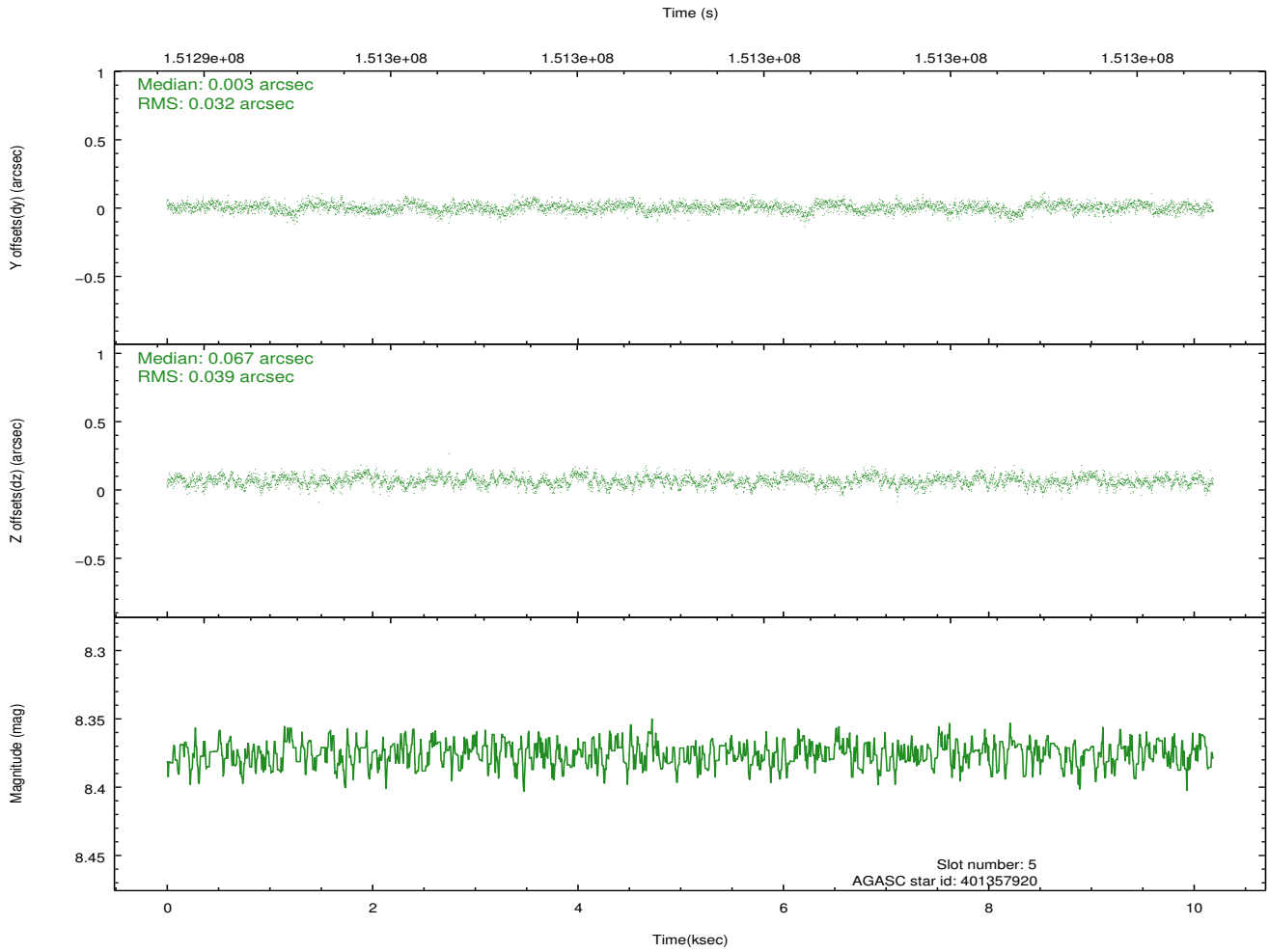
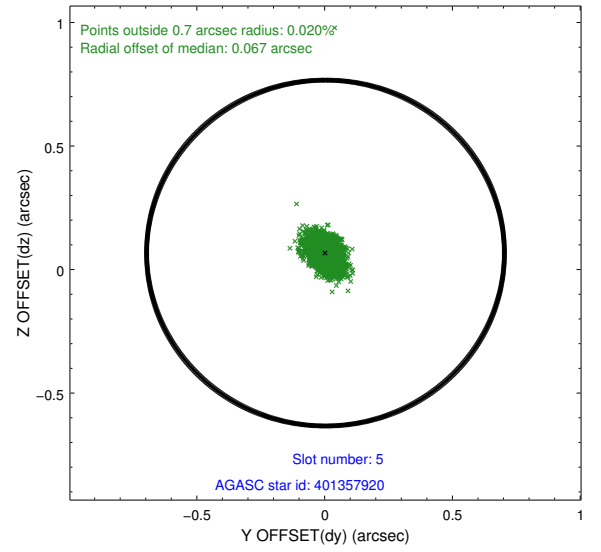
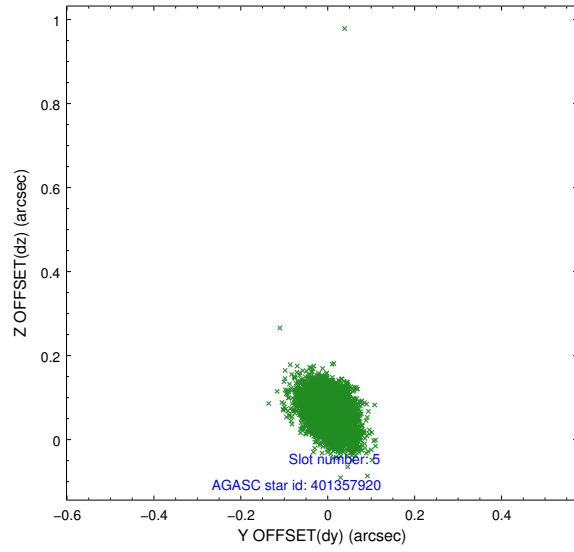
### 2.4.1 Slot 3



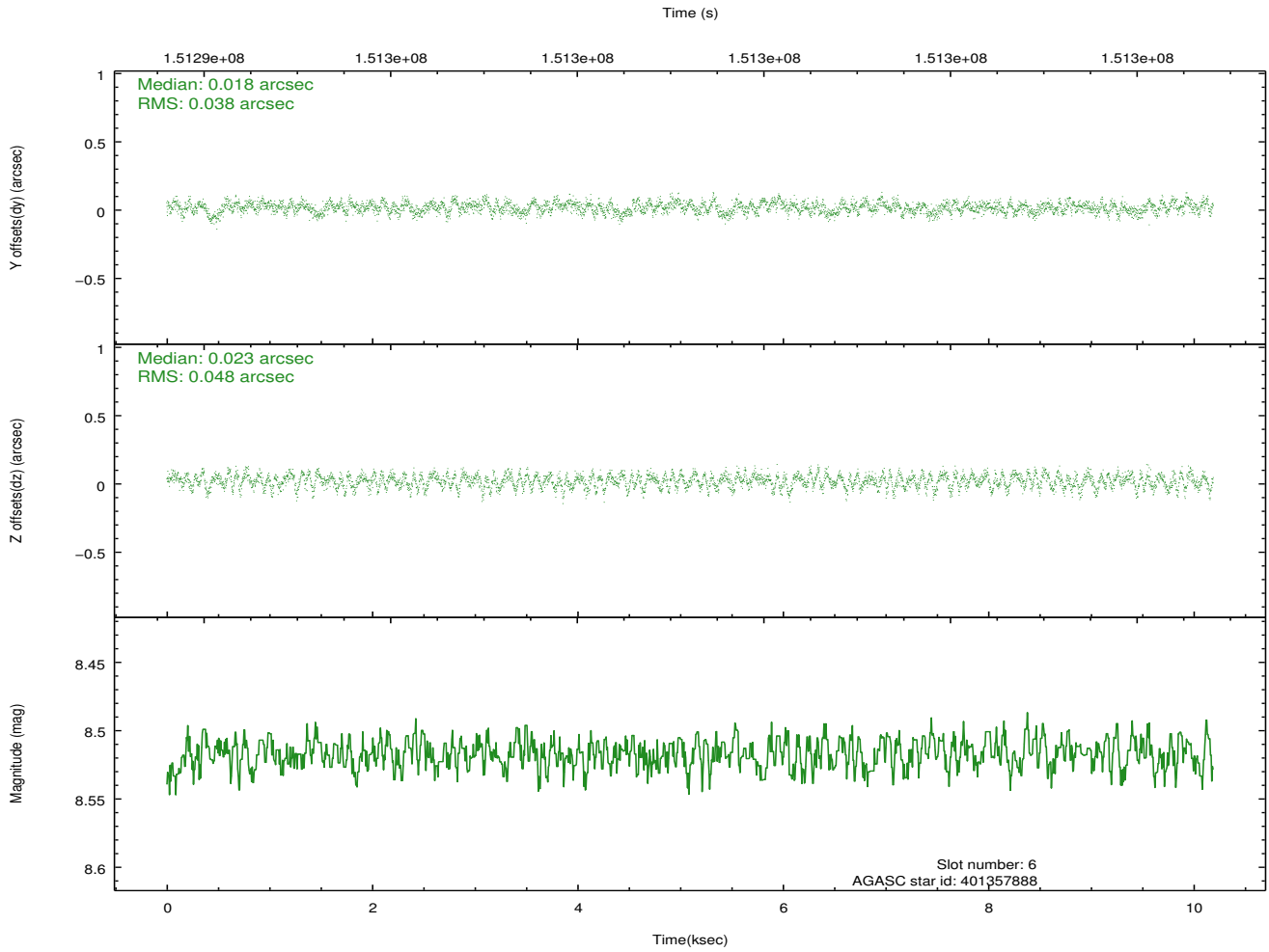
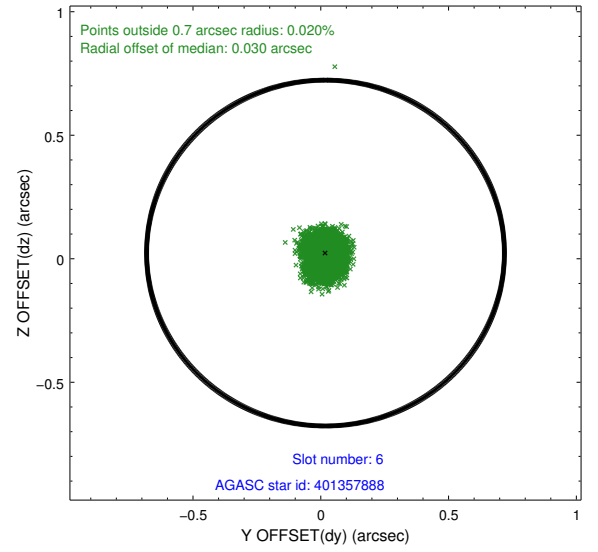
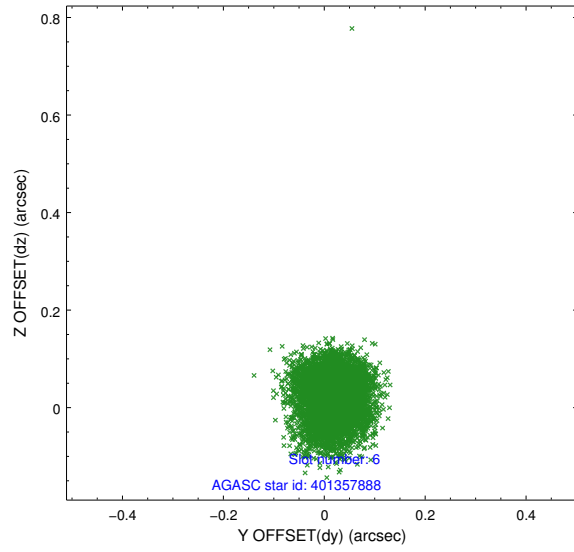
## 2.4.2 Slot 4



### 2.4.3 Slot 5

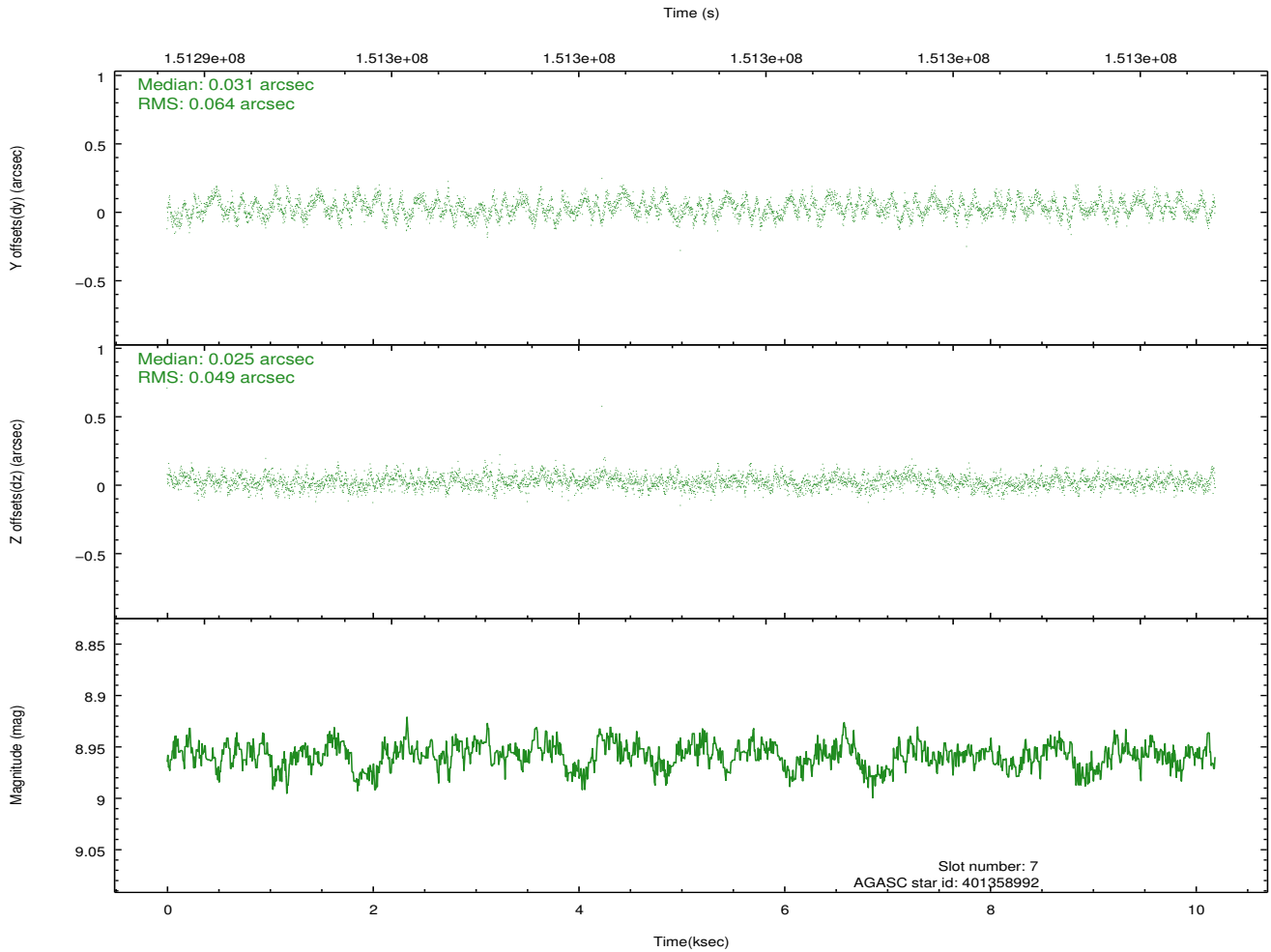
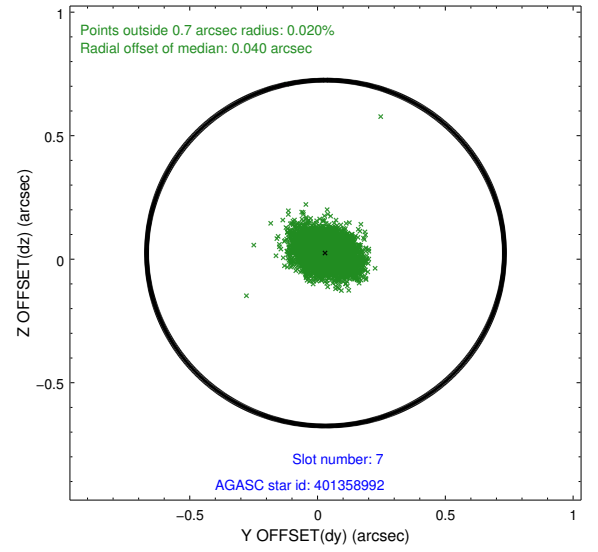
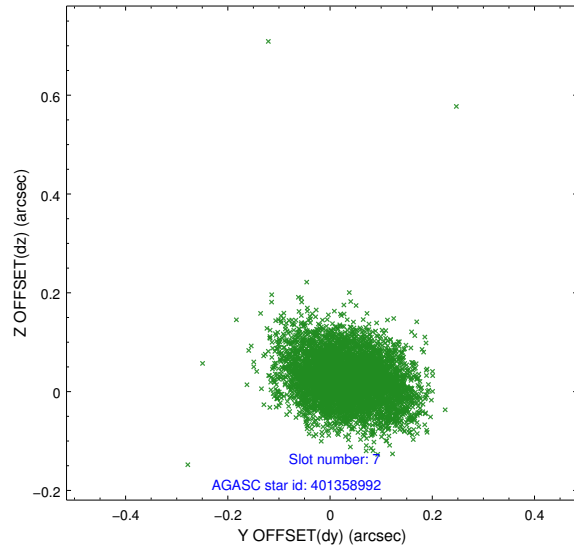


## 2.4.4 Slot 6



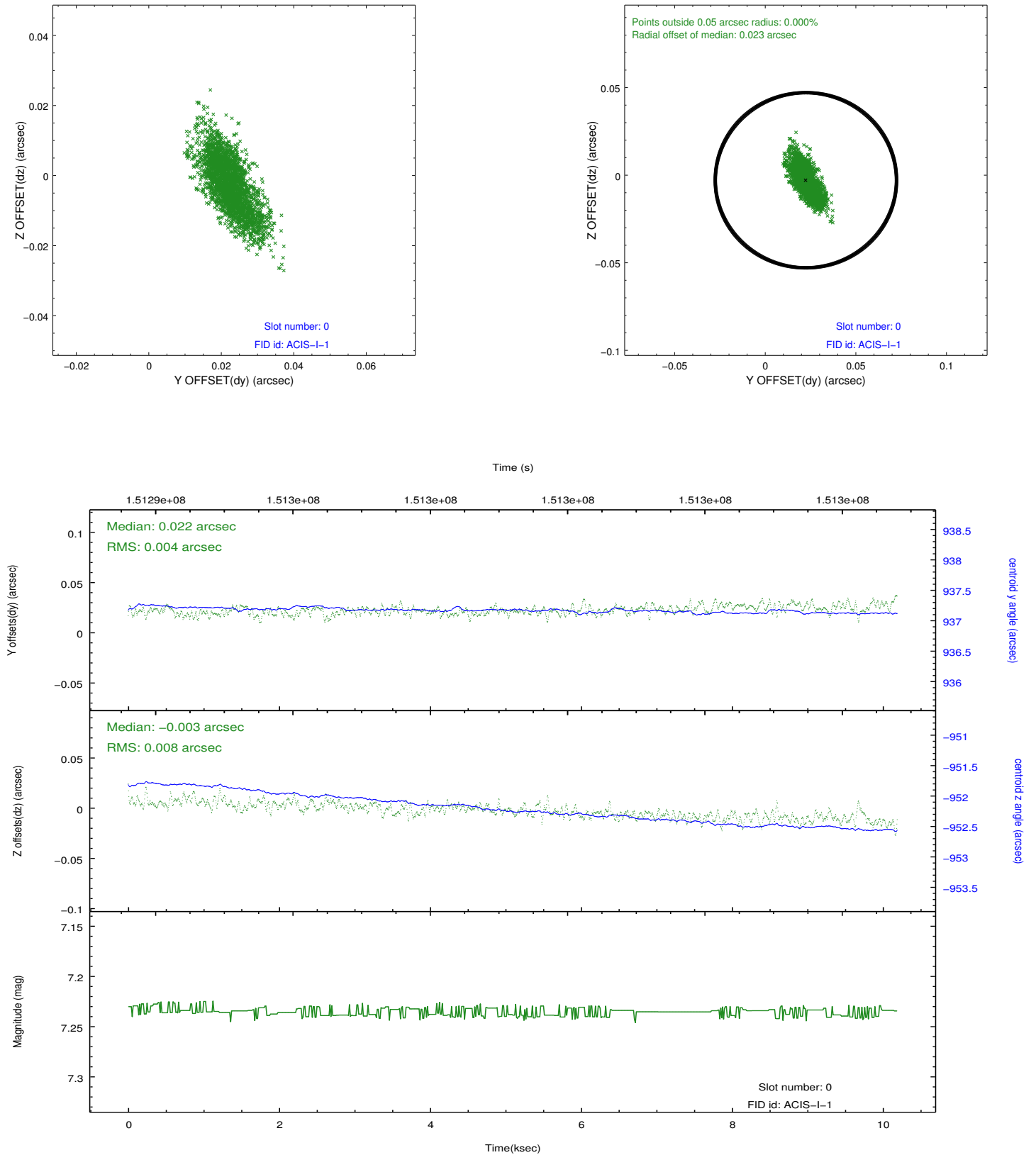


## 2.4.5 Slot 7

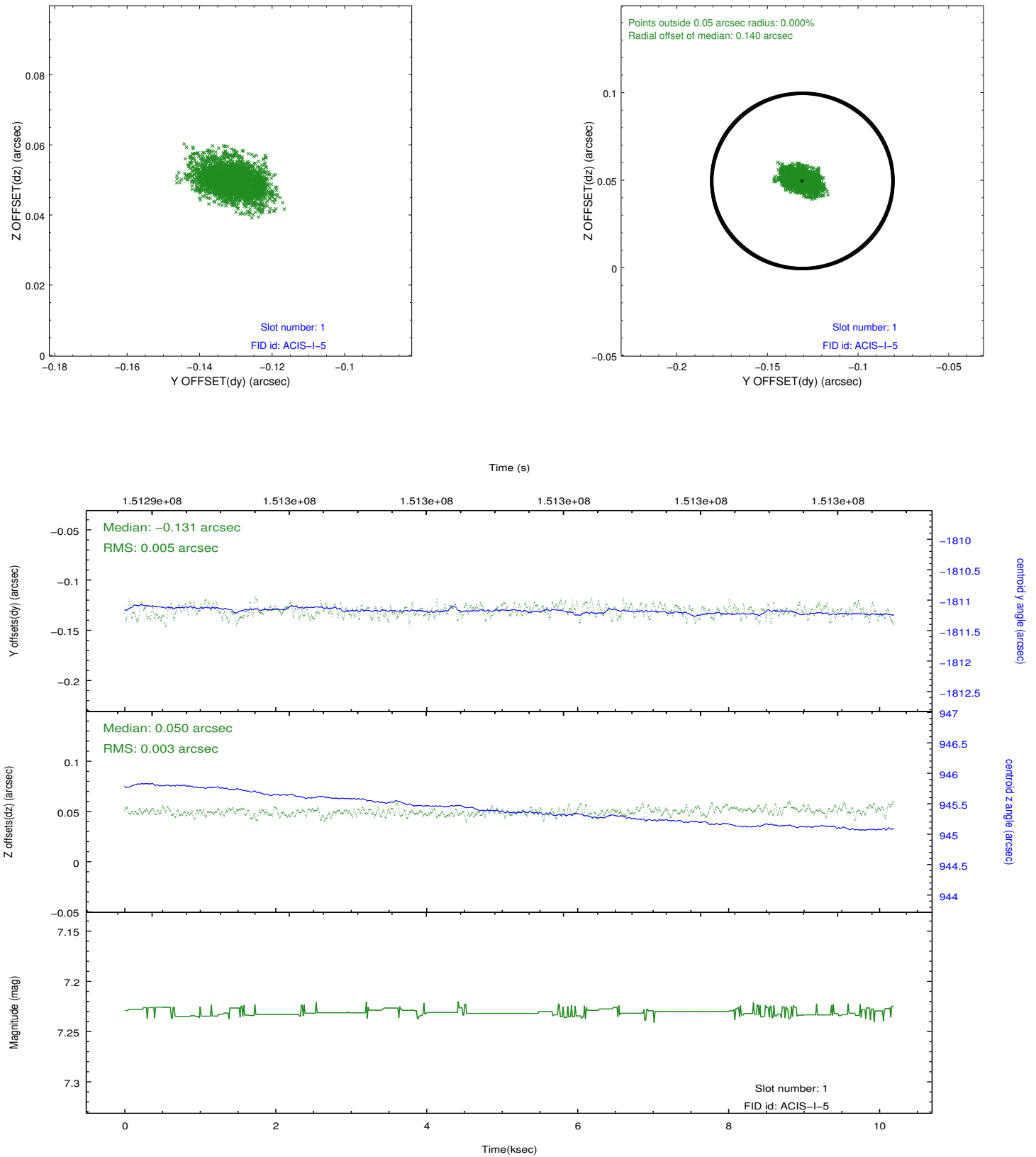


## 2.5 FID Slots

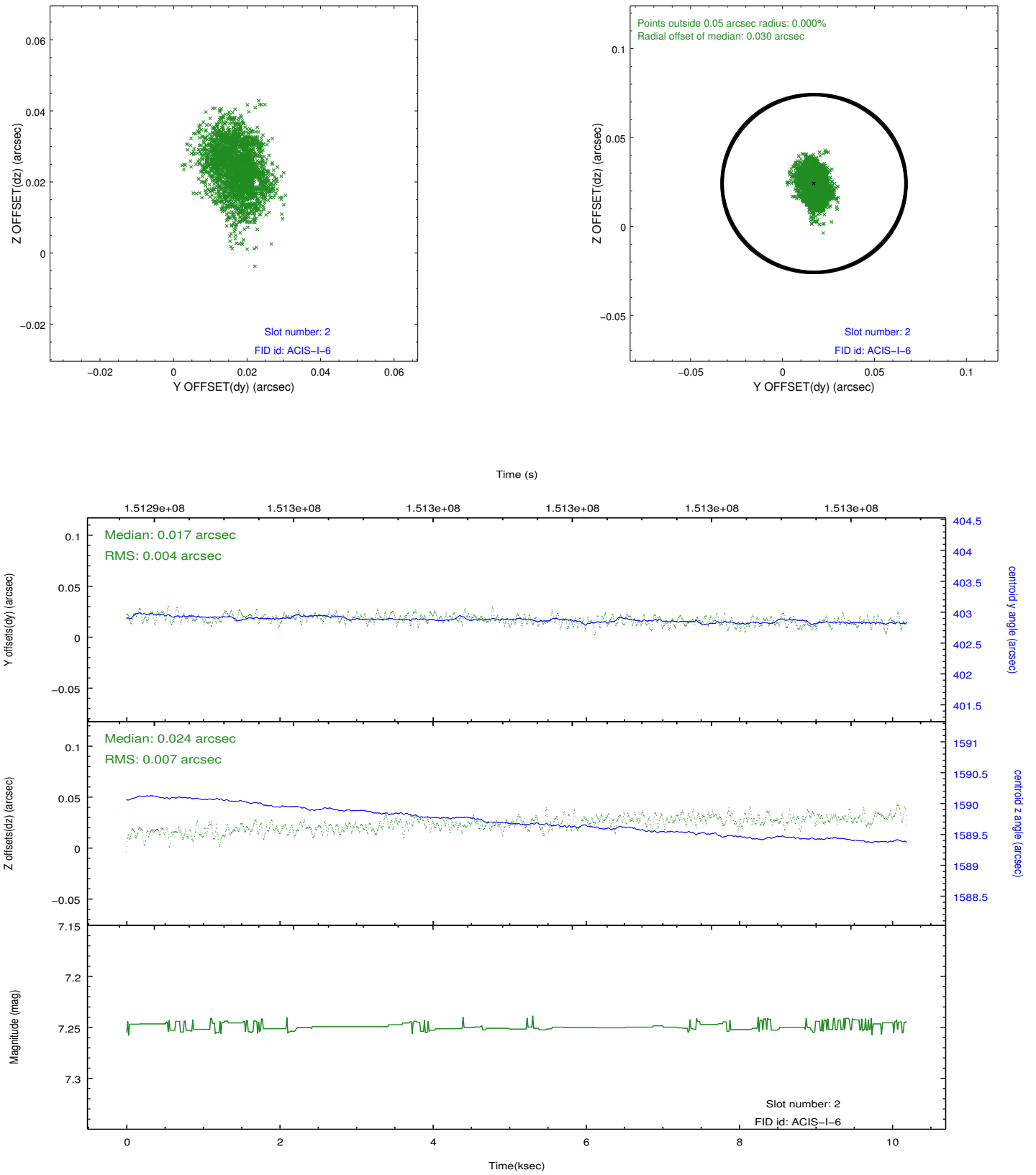
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.978

### A.2 Comments