

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 6164 - L2 Version 3  
Chandra X-Ray Center

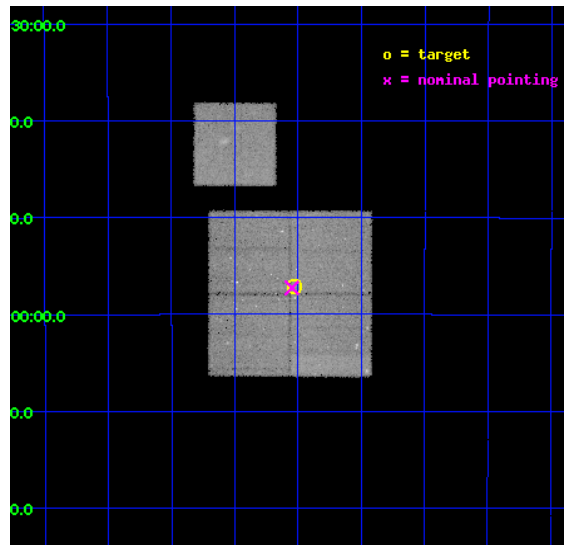
L2 Processing Date : Dec 12 2012

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# 1 Front

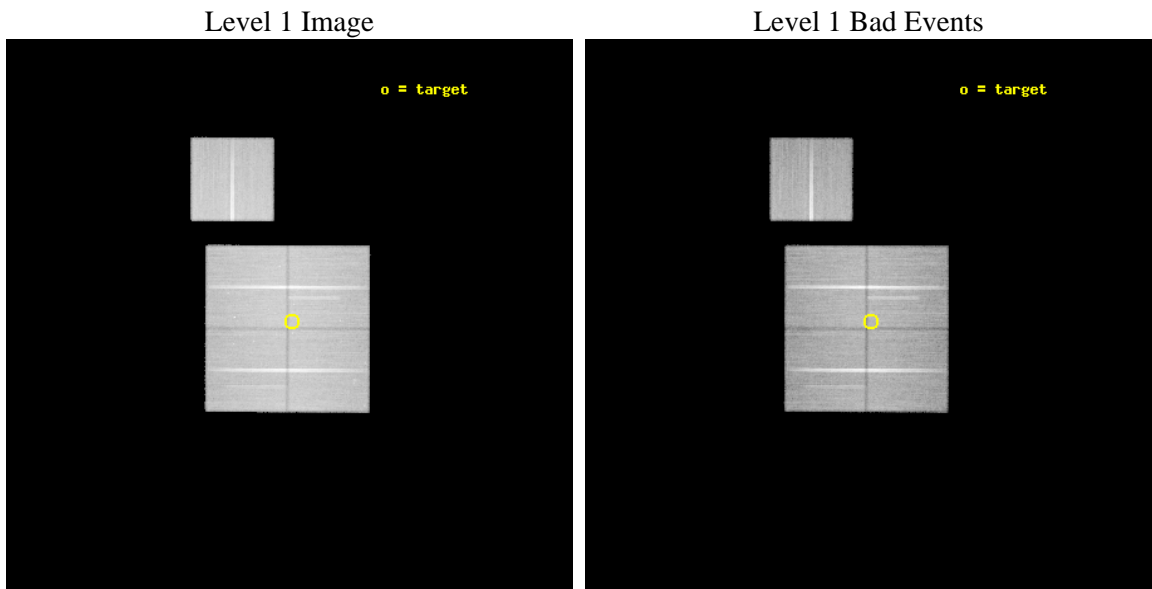
seq_num	900329	Sequence number
obs_id	6164	Observation id
title	The Extended Chandra Deep Field-South Survey: A Public Chandra Legacy	Proposal title
observer	Prof. William Brandt	Principal investigator
object	Extended CDF-S #4	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	53.2574	Observer's specified target RA [deg]
dec_targ	-27.95267	Observer's specified target Dec [deg]
ra_nom	53.262254303527	Nominal RA [deg]
dec_nom	-27.954456167436	Nominal Dec [deg]
roll_nom	0.21096058004339	Nominal Roll [deg]
revision	3	Processing version of data
ontime	70043.646299392	Sum of GTIs [s]
livetime	69128.474495108	Livetime [s]
ontime0	70043.523159534	Sum of GTIs [s]
ontime1	70034.141228825	Sum of GTIs [s]
ontime2	70046.746239841	Sum of GTIs [s]
ontime3	70043.646299392	Sum of GTIs [s]
ontime6	70043.48211959	Sum of GTIs [s]
l2events	190338	Number of level 2 events



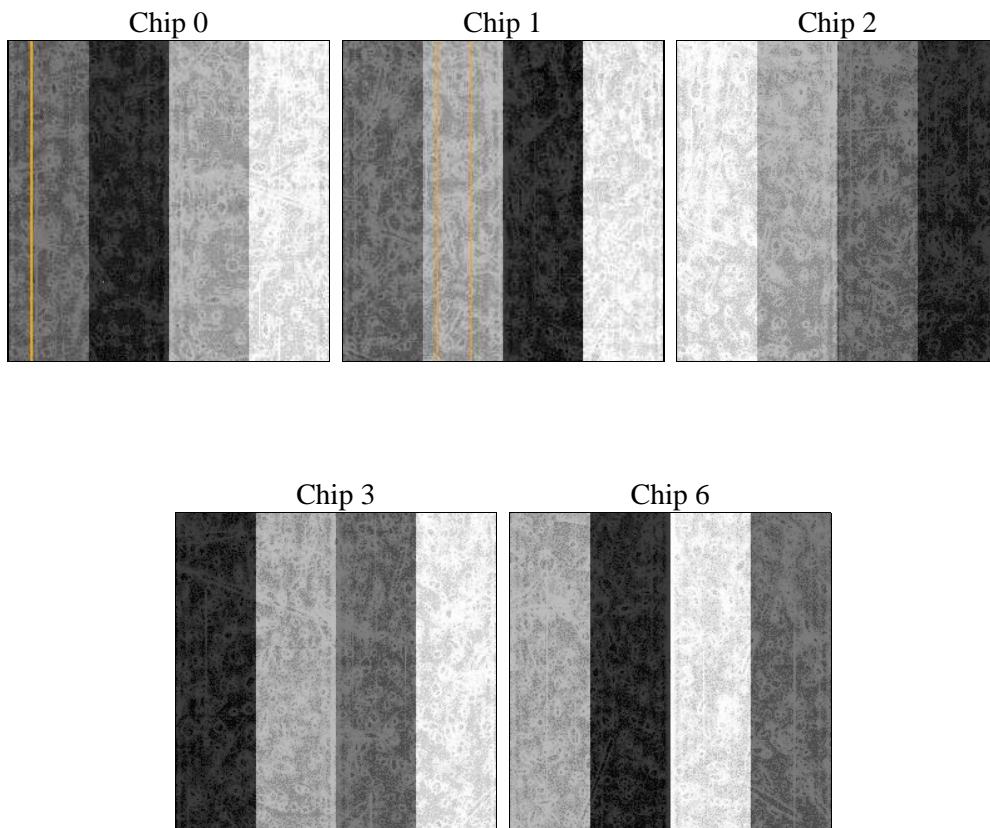
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	70000.000000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	70043.646299392	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime0	70043.523159534	Sum of GTIs [s]
date	2012-12-12T02:50:33	Date and time of file creation	ontime1	70034.141228825	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	70046.746239841	Sum of GTIs [s]
			ontime3	70043.646299392	Sum of GTIs [s]
			ontime6	70043.48211959	Sum of GTIs [s]
			l1events	2268860	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	430323	430042	482166	461758	464571
rejected events	385762	378567	437232	419688	417707
rejected %	89%	88%	90%	90%	89%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	15424	19186	16650	14662	16747
	3%	4%	3%	3%	3%
grade 1 events	220	247	269	270	202
	0%	0%	0%	0%	0%
grade 2 events	10428	11050	10456	9114	9897
	2%	2%	2%	1%	2%
grade 3 events	5225	5642	4826	4951	5321
	1%	1%	1%	1%	1%
grade 4 events	4813	5466	4909	5007	5191
	1%	1%	1%	1%	1%
grade 5 events	15927	17009	14986	17766	17698
	3%	3%	3%	3%	3%
grade 6 events	8673	10132	8096	8338	9710
	2%	2%	1%	1%	2%
grade 7 events	369613	361310	421974	401650	399805
	85%	84%	87%	86%	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	53.235516	53.26225430352692	Subarray requested	NONE	NONE
[deg] Pointing Dec	-27.968328	-27.95445616743596	Alternating exposures requested	N	N
[deg] Pointing Roll	359.989737	0.2109605800433902	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	0.000000	0.000000			
[deg] Roll tolerance	2.000000	2.000000			
Roll constraint allows 180D rotation	N	N			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	217373165.184000	217372159.16465			
Observation start date	2004-11-20T21:25:01	2004-11-20T21:09:19			
[s] Observation end time (MET)	217443165.184000	217443950.16787			
Observation end date	2004-11-21T16:51:41	2004-11-21T17:05:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect

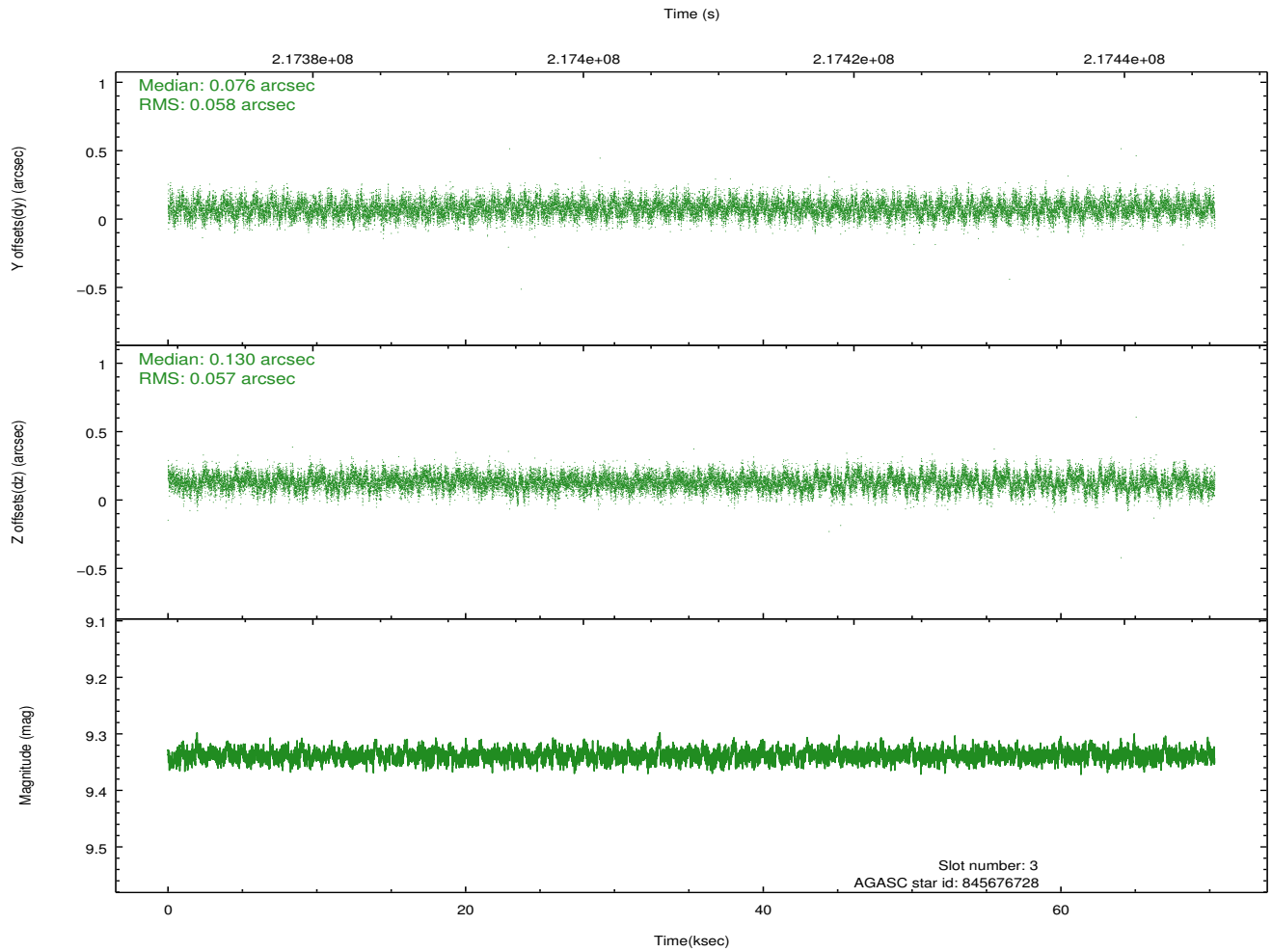
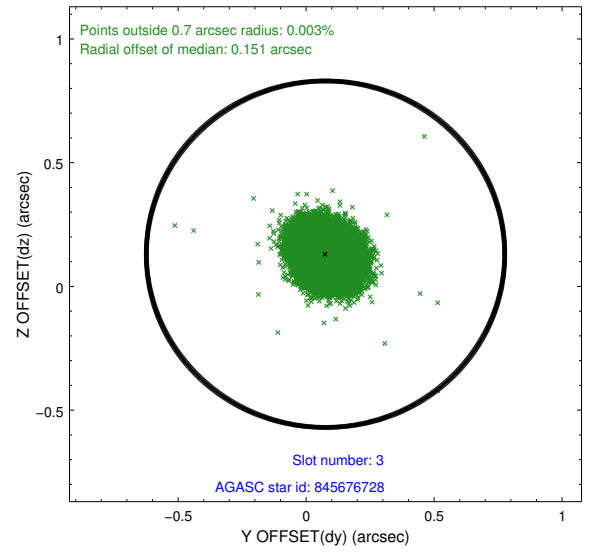
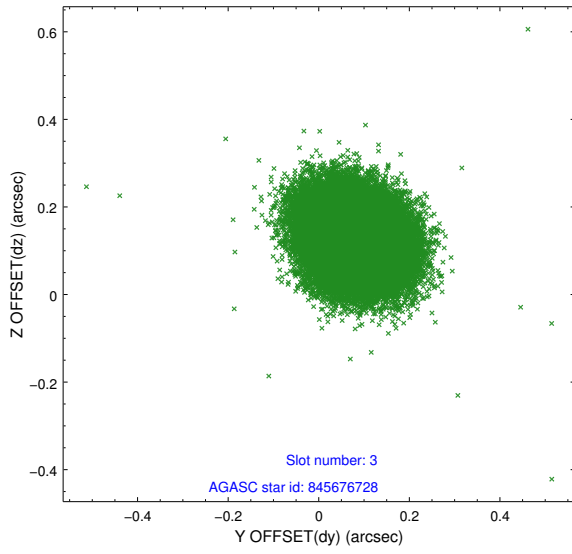


### Slot Statistics

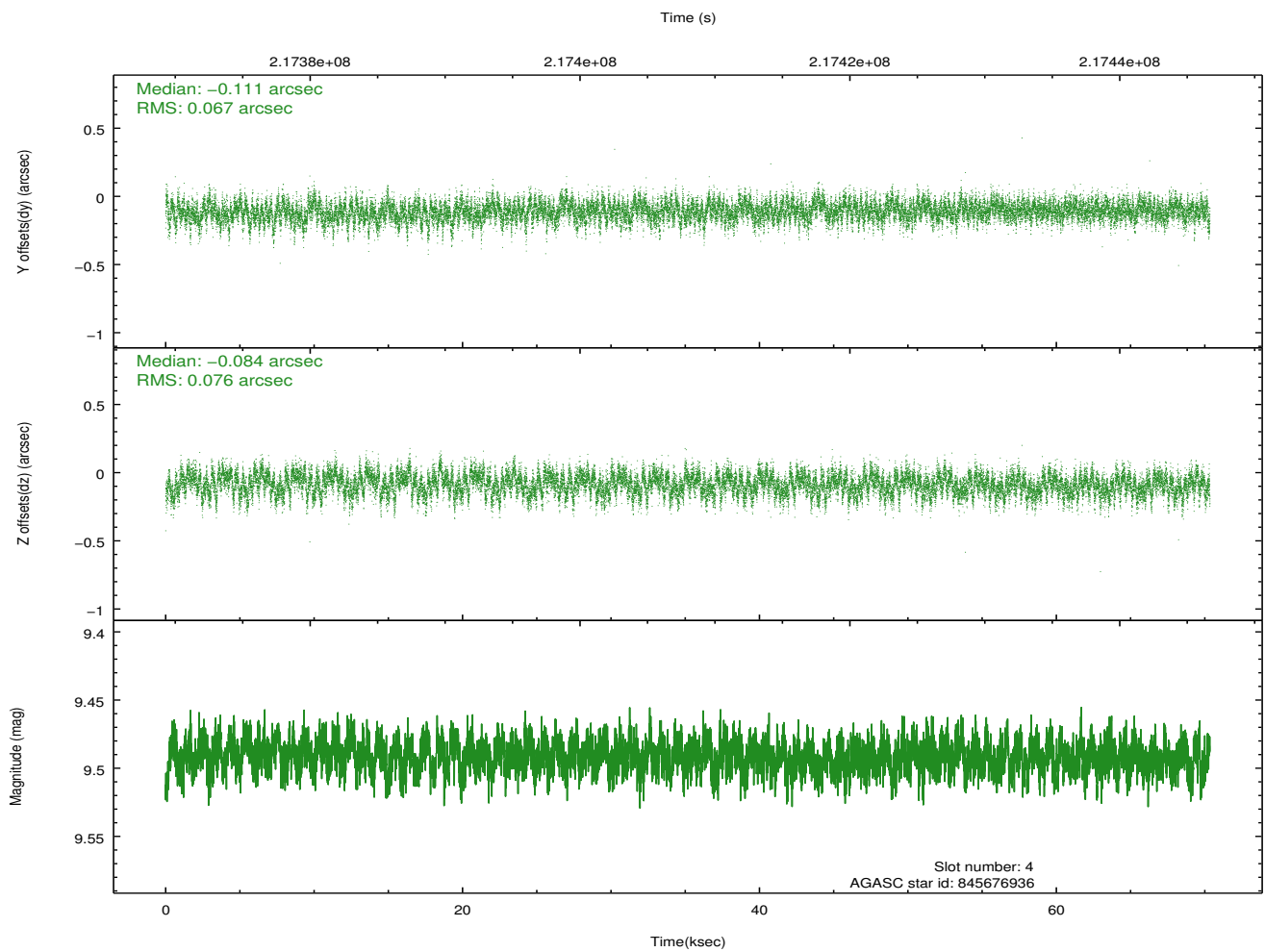
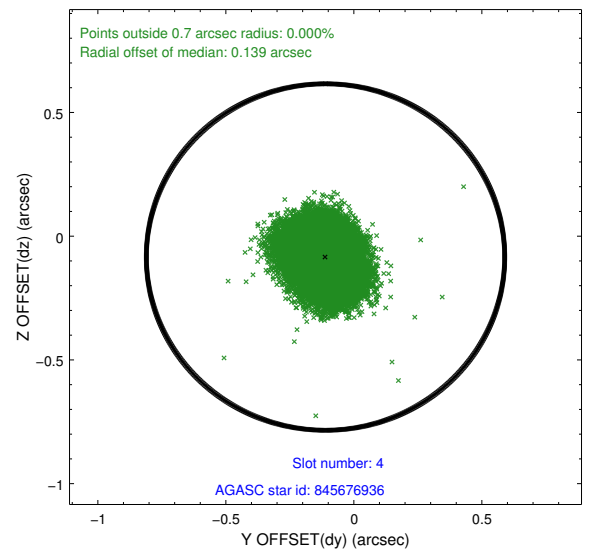
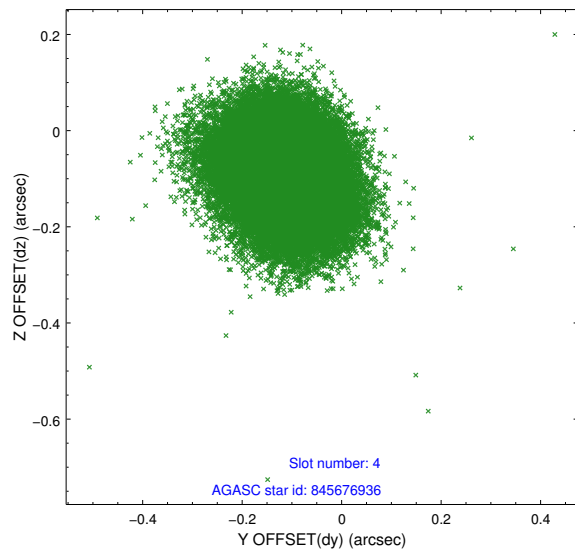
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	17157	0.039	-0.015	0.010	0.016	0.000000	0.000000	931.81	-833.58
1	FID	ACIS-I-5	7.23	17158	-0.109	0.073	0.035	0.048	0.000000	0.000000	-1816.53	1063.95
2	FID	ACIS-I-6	7.25	17158	-0.021	0.012	0.032	0.046	0.000000	0.000000	397.29	1708.39
3	GUIDE	845676728	9.34	34291	0.076	0.130	0.087	0.140	52.877179	-27.664318	-1142.44	1092.72
4	GUIDE	845676936	9.49	34291	-0.111	-0.084	0.108	0.173	52.843773	-27.880153	-1246.23	315.22
5	GUIDE	845807880	8.78	34293	-0.013	-0.108	0.081	0.129	53.382027	-27.886093	466.46	296.04
6	GUIDE	845814592	9.04	34270	0.053	0.007	0.091	0.146	53.853010	-28.336603	1958.22	-1330.55
7	GUIDE	845816224	10.20	34273	-0.006	0.061	0.139	0.229	53.578992	-28.631005	1086.69	-2386.59

## 2.4 Star Slots

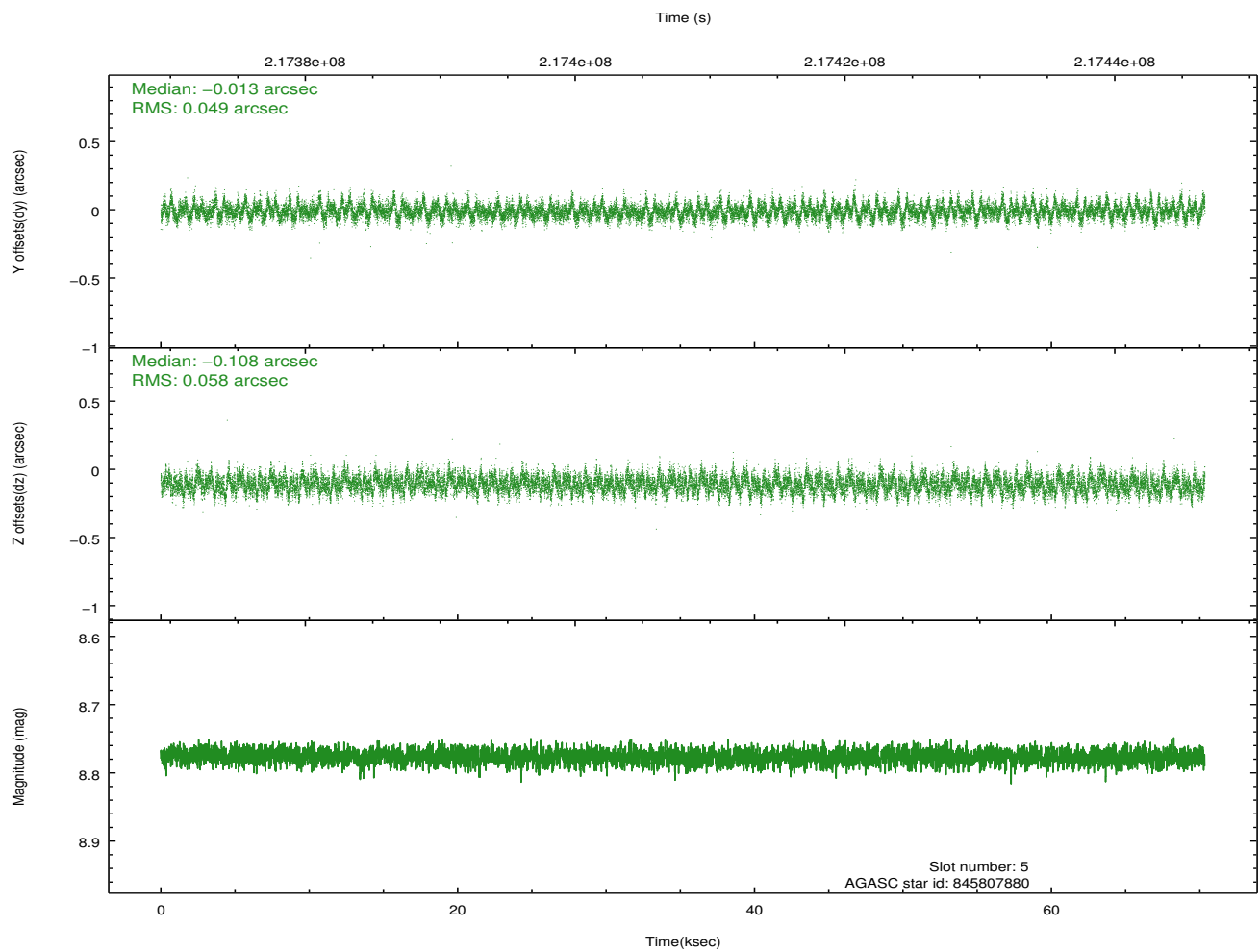
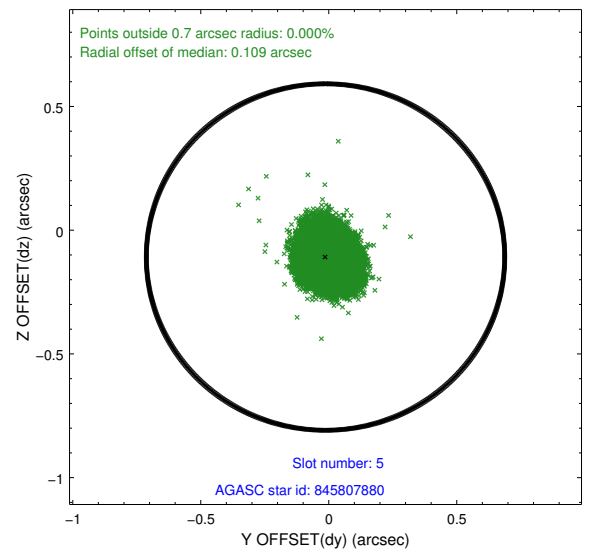
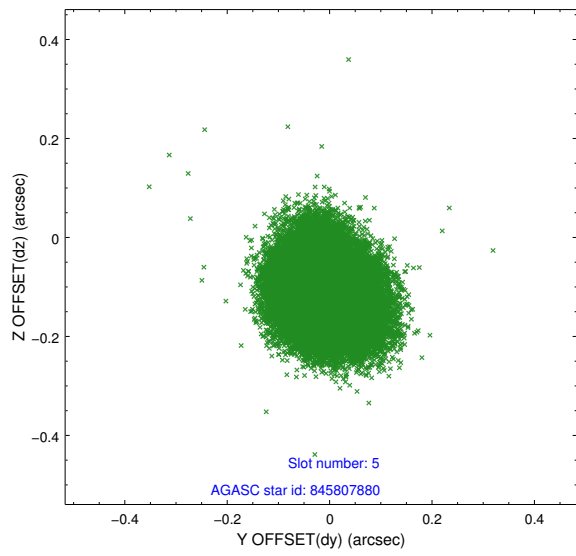
### 2.4.1 Slot 3



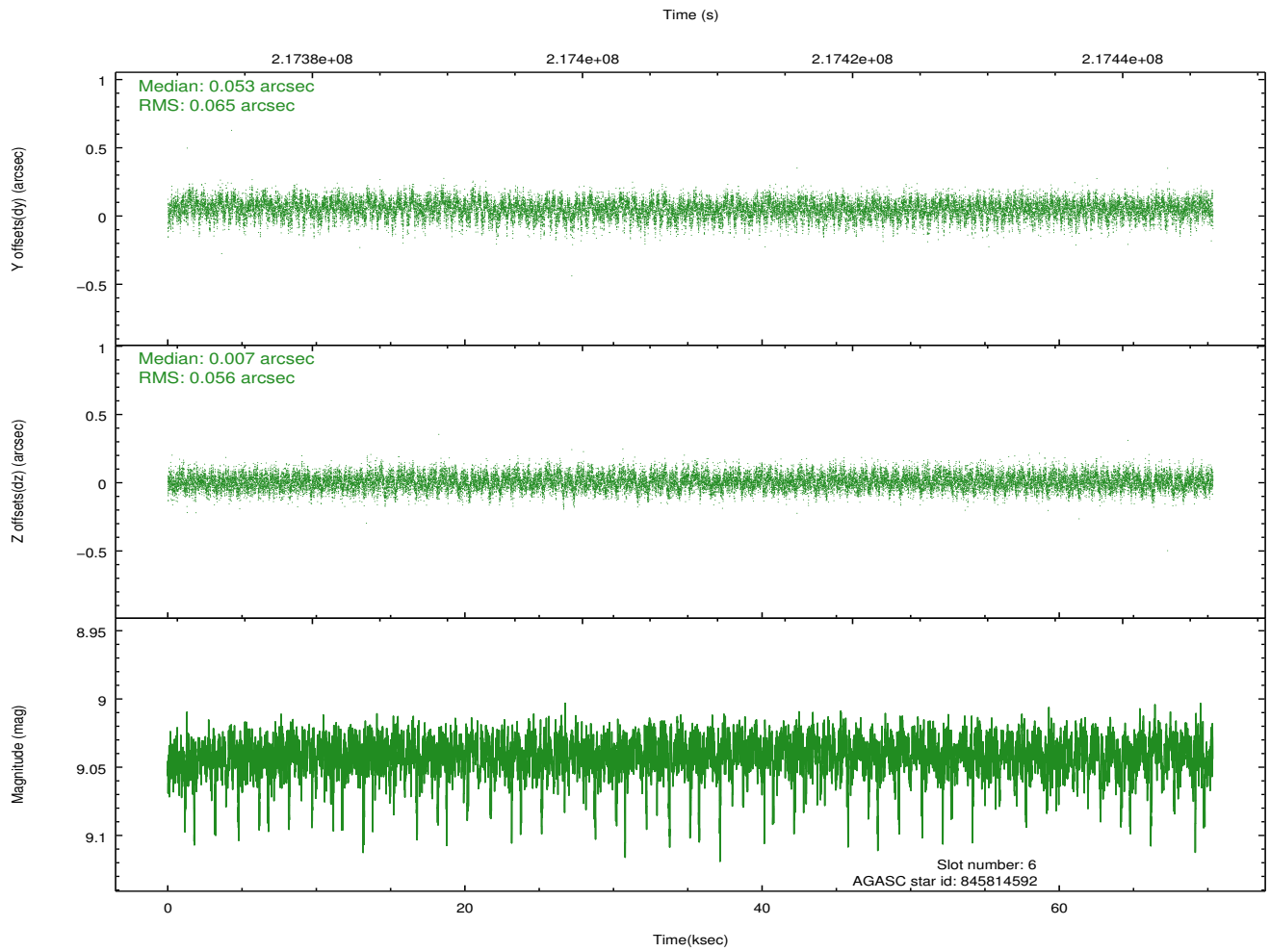
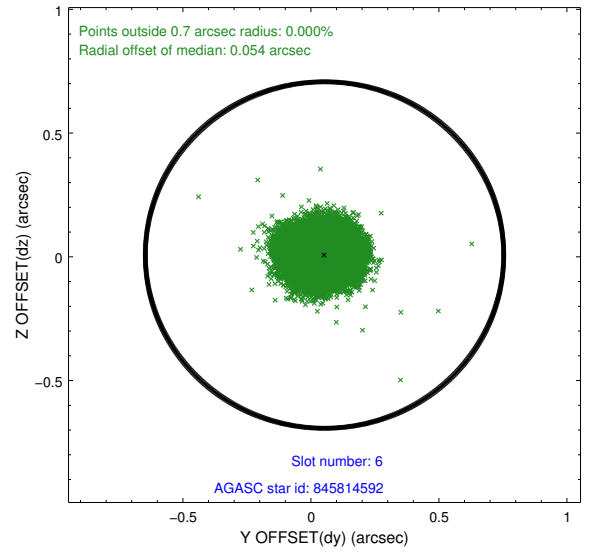
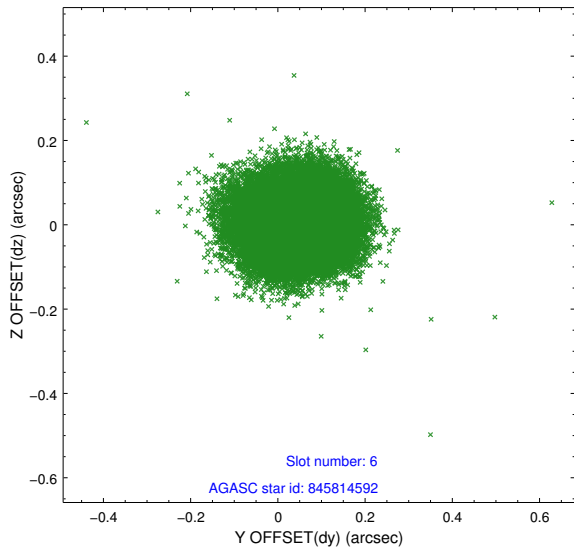
## 2.4.2 Slot 4



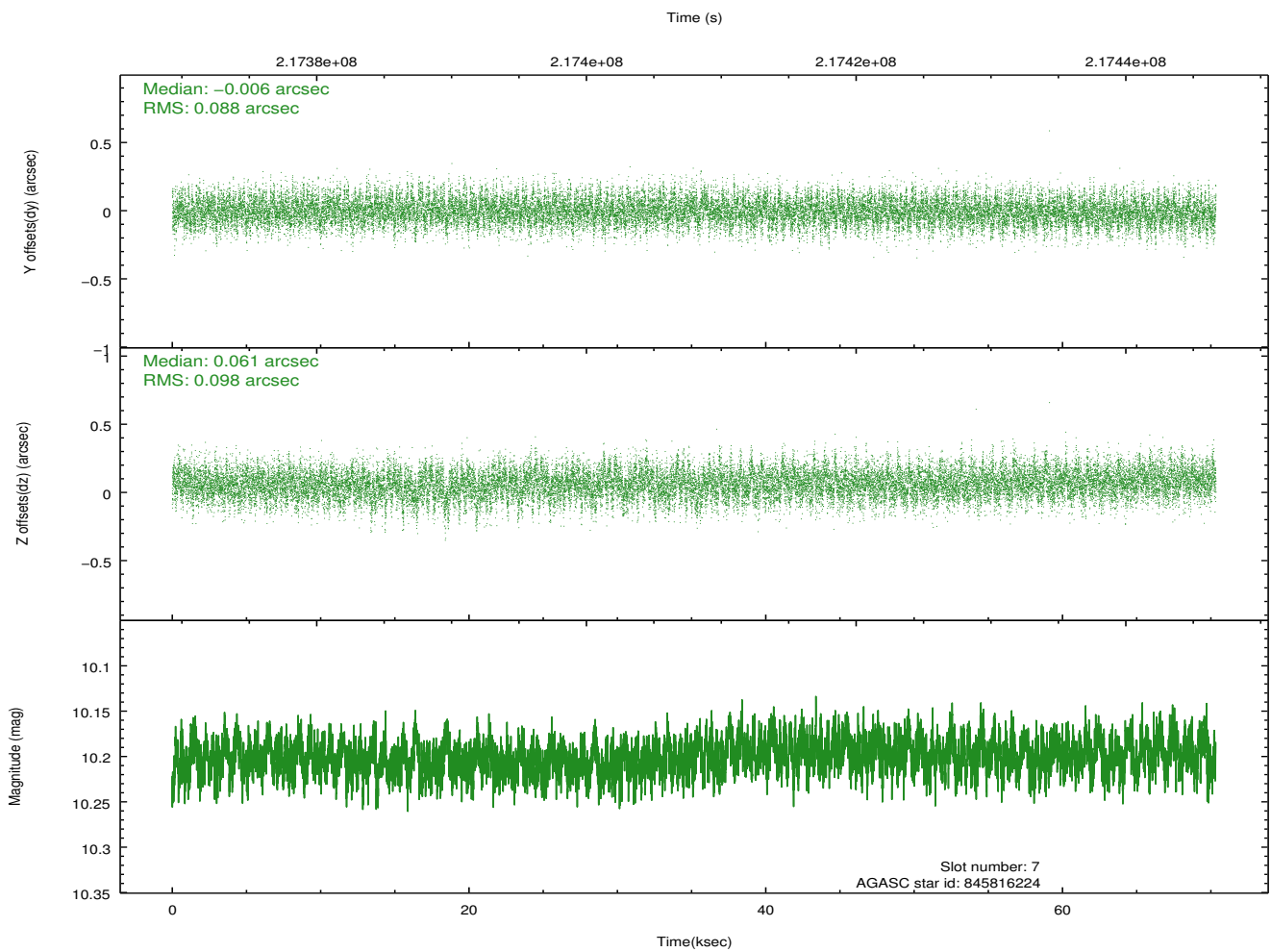
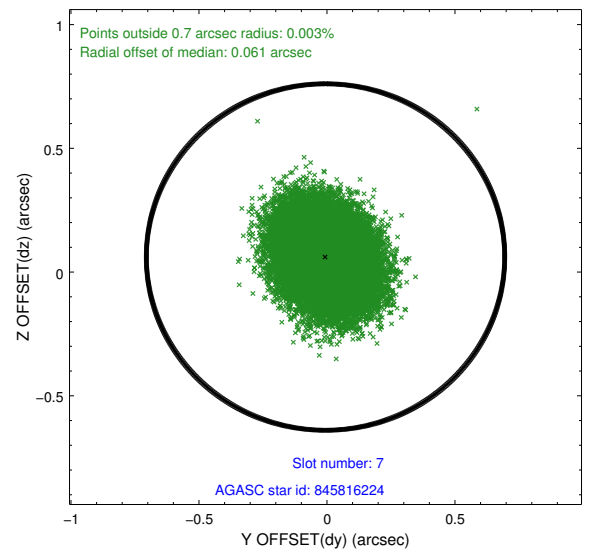
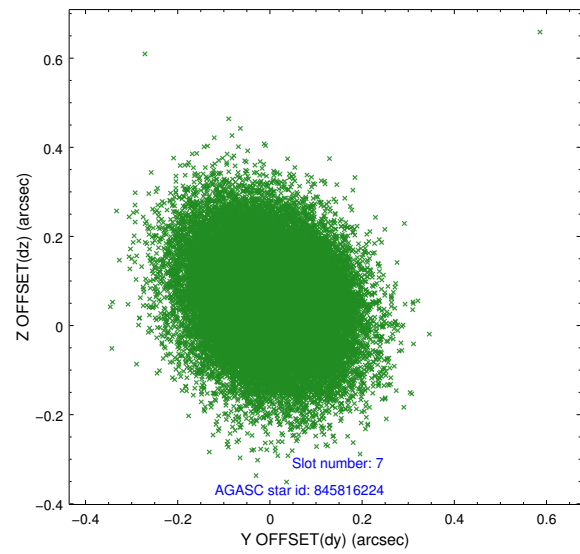
### 2.4.3 Slot 5



## 2.4.4 Slot 6

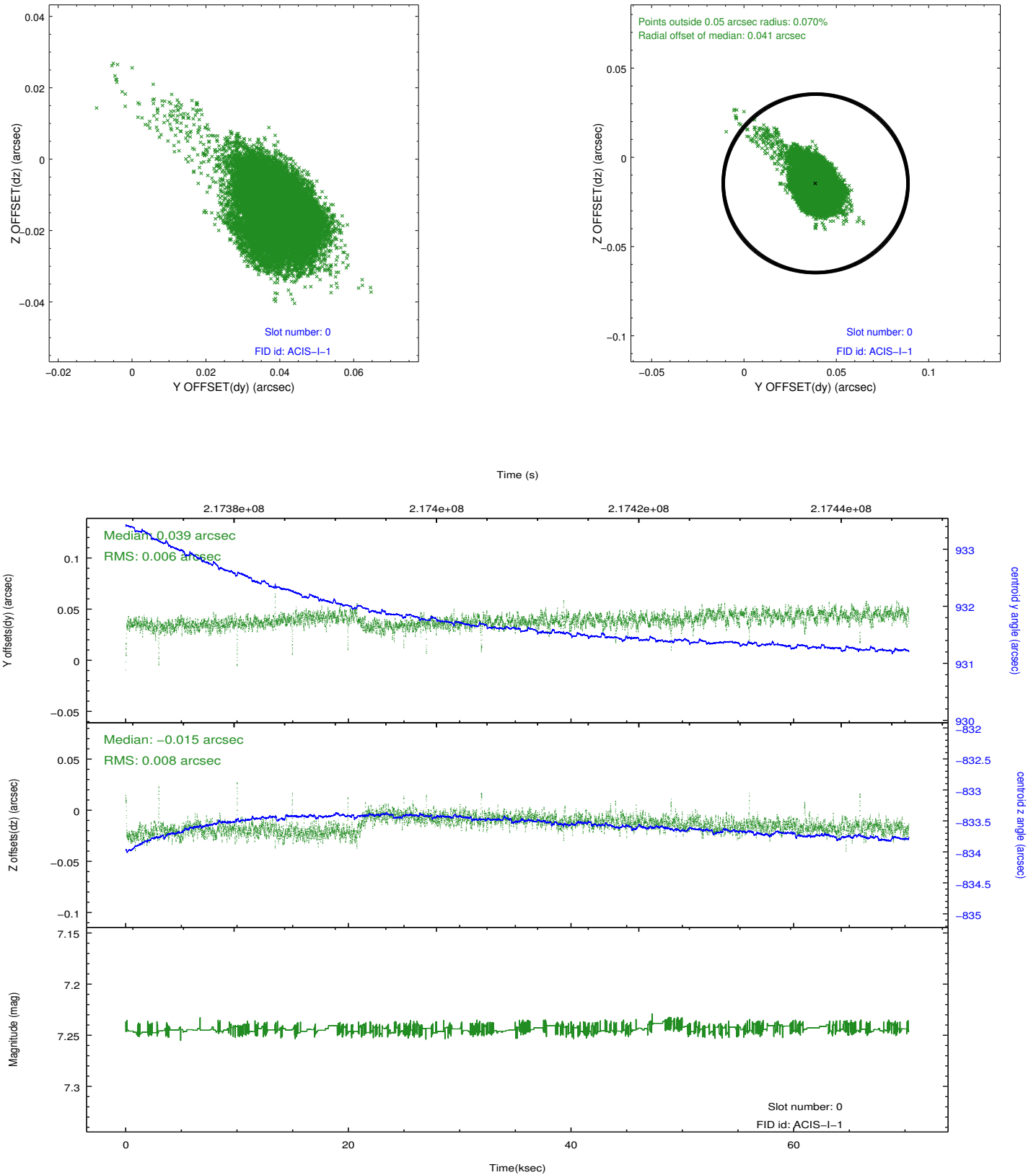


## 2.4.5 Slot 7

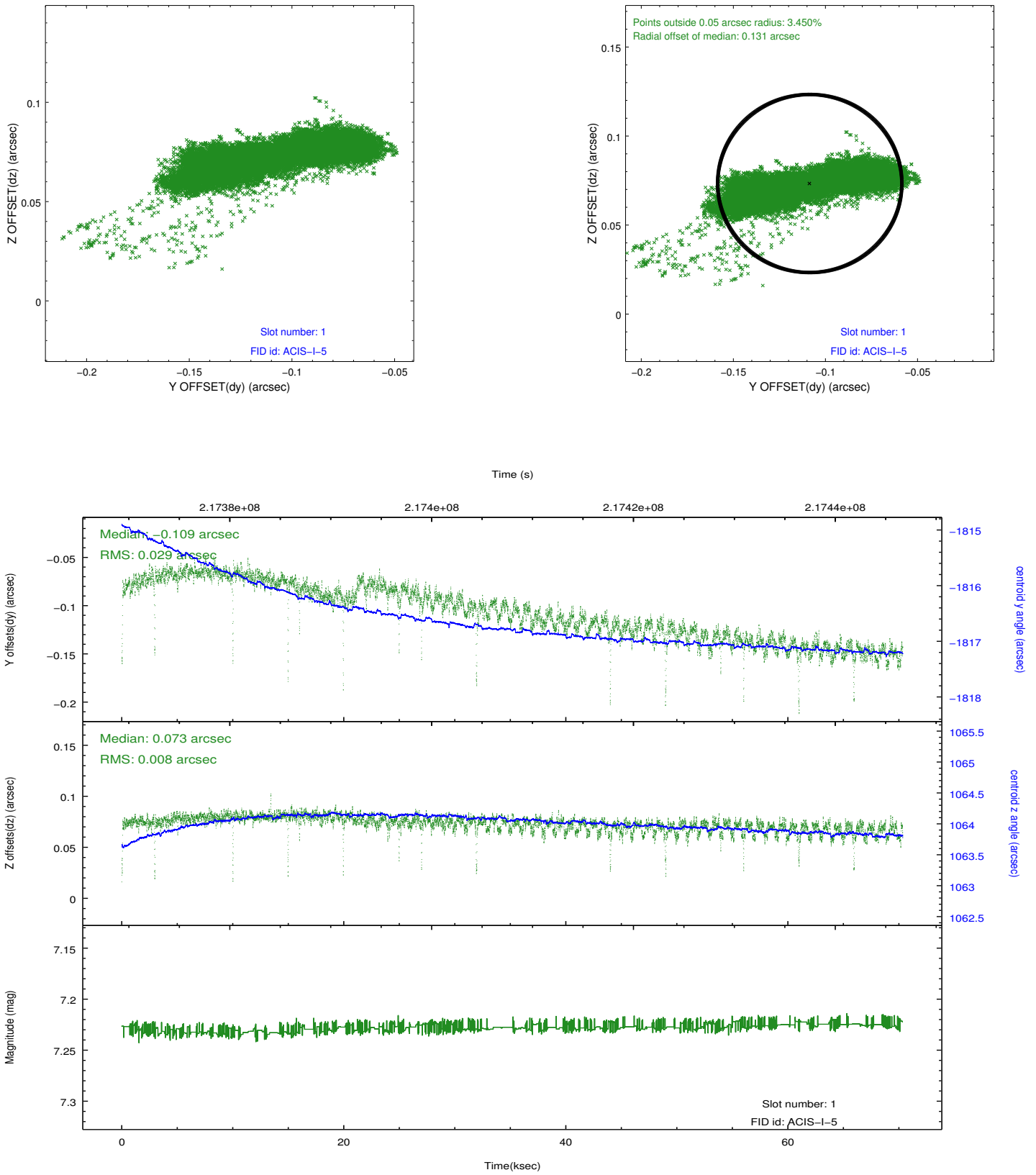


## 2.5 FID Slots

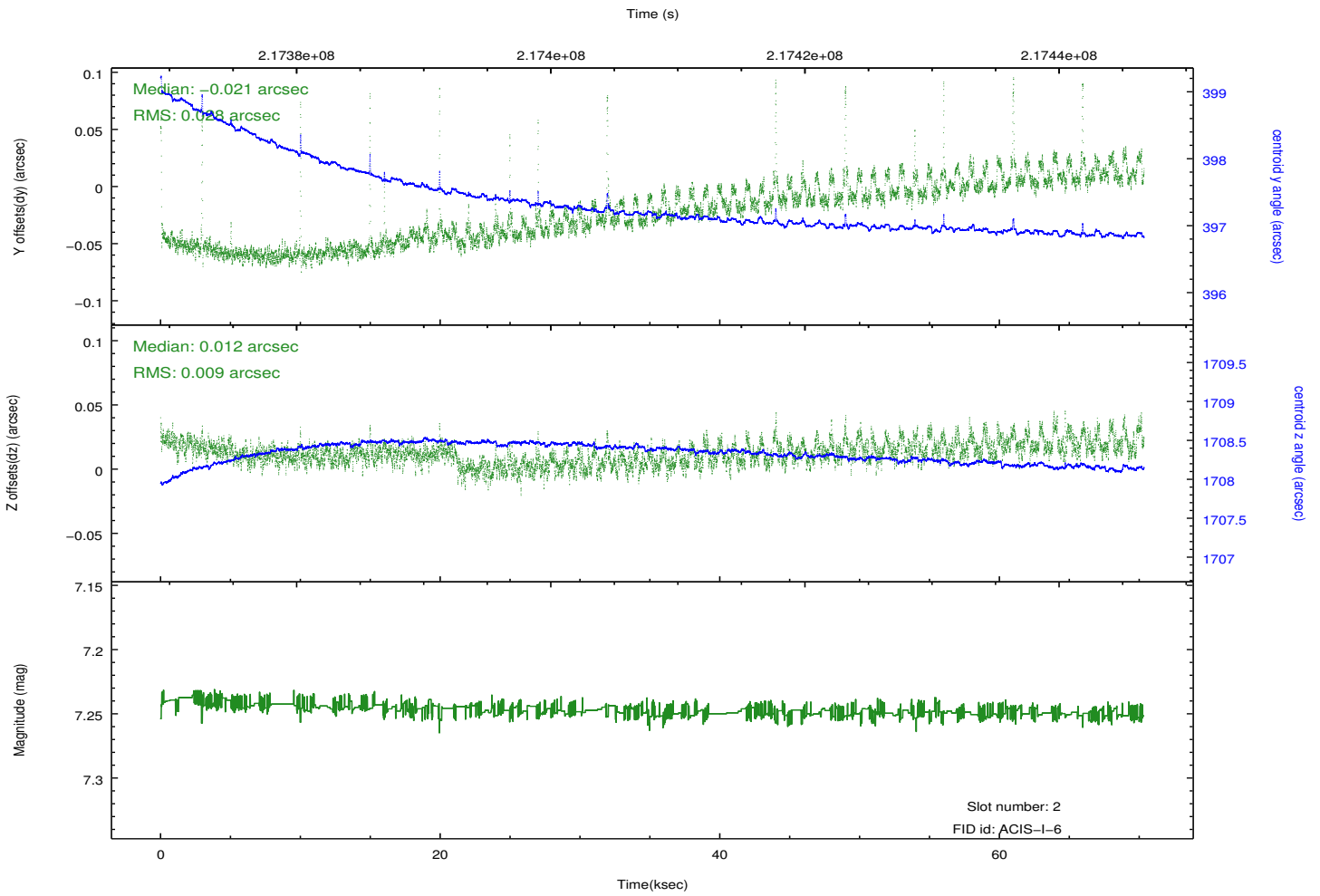
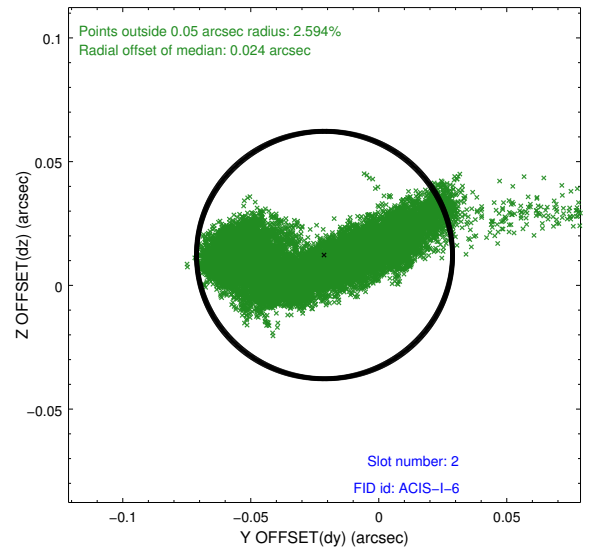
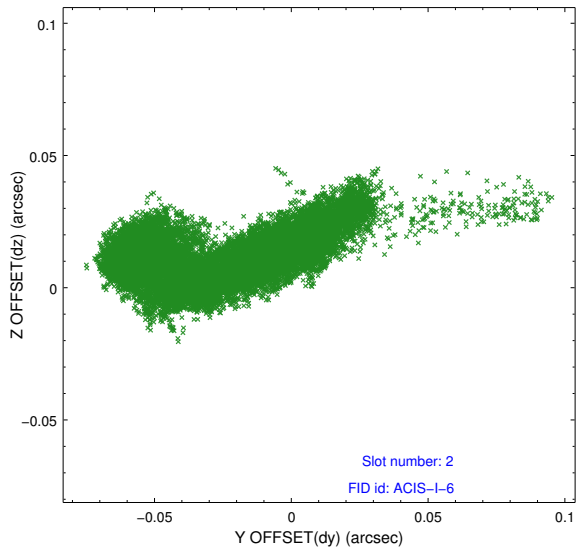
### 2.5.1 Slot 0



## 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)	2013.01.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	70.044

## A.2 Comments

Roll constraint met.