

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4105 - L2 Version 3  
Chandra X-Ray Center

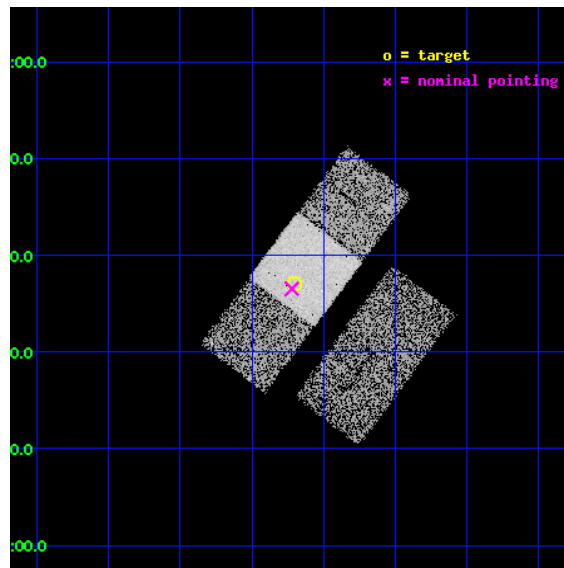
L2 Processing Date : Oct 19 2012

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# 1 Front

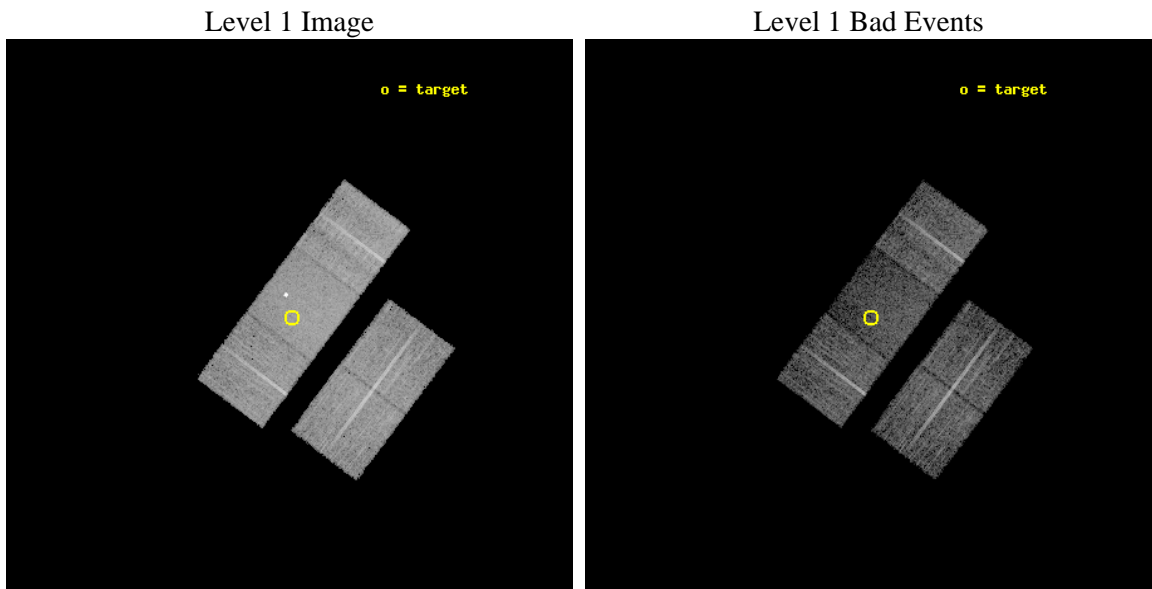
seq_num	700784	Sequence number
obs_id	4105	Observation id
title	THE X-RAY PROPERTIES OF ULTRALUMINOUS INFRARED GALAXIES (ULIGS)	Pr
observer	Professor Andrew Wilson	Principal investigator
object	Z03521+0028	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	58.675833	Observer's specified target RA [deg]
dec_targ	0.617333	Observer's specified target Dec [deg]
ra_nom	58.680220355611	Nominal RA [deg]
dec_nom	0.60876176850209	Nominal Dec [deg]
roll_nom	306.8954490783	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9909.6804664135	Sum of GTIs [s]
livetime	9780.2031957192	Livetime [s]
ontime2	9909.5163064003	Sum of GTIs [s]
ontime3	9906.457406193	Sum of GTIs [s]
ontime6	9909.6394264102	Sum of GTIs [s]
ontime7	9909.6804664135	Sum of GTIs [s]
ontime8	9909.5573464036	Sum of GTIs [s]
l2events	44026	Number of level 2 events



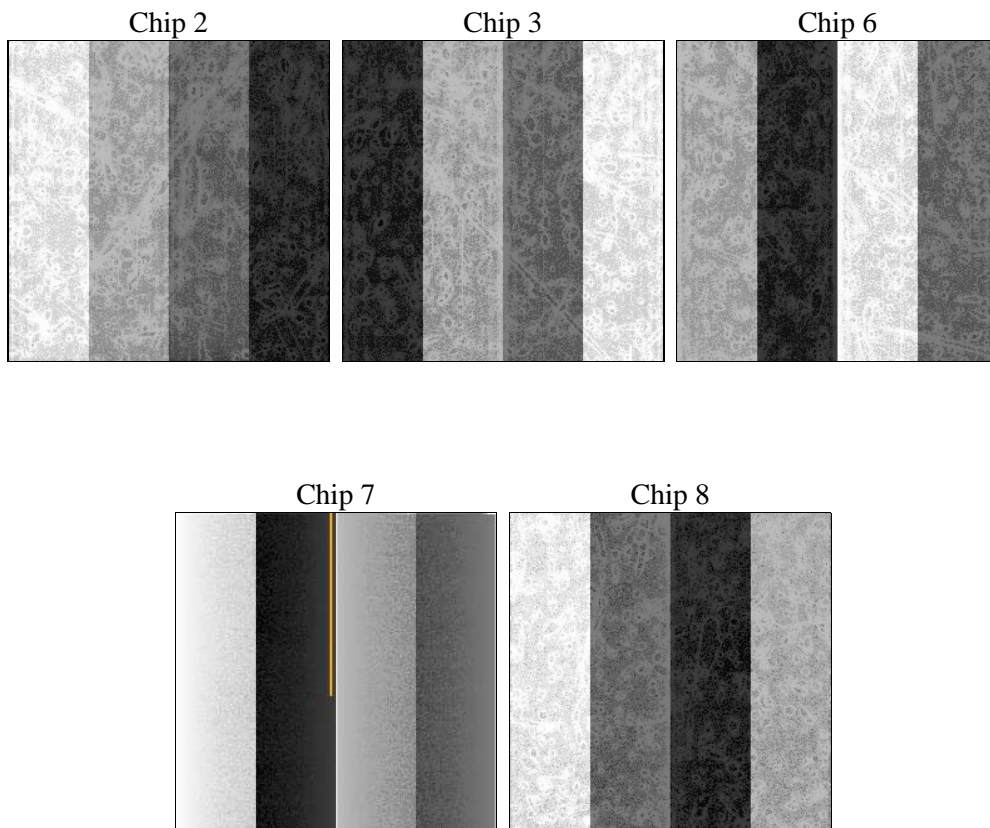
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9802.717000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9909.6804664135	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	9909.5163064003	Sum of GTIs [s]
date	2012-10-19T13:55:04	Date and time of file creation	ontime3	9906.457406193	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	9909.6394264102	Sum of GTIs [s]
			ontime7	9909.6804664135	Sum of GTIs [s]
			ontime8	9909.5573464036	Sum of GTIs [s]
			l1events	268160	Number of level 1 events

### 2.1.4 Events

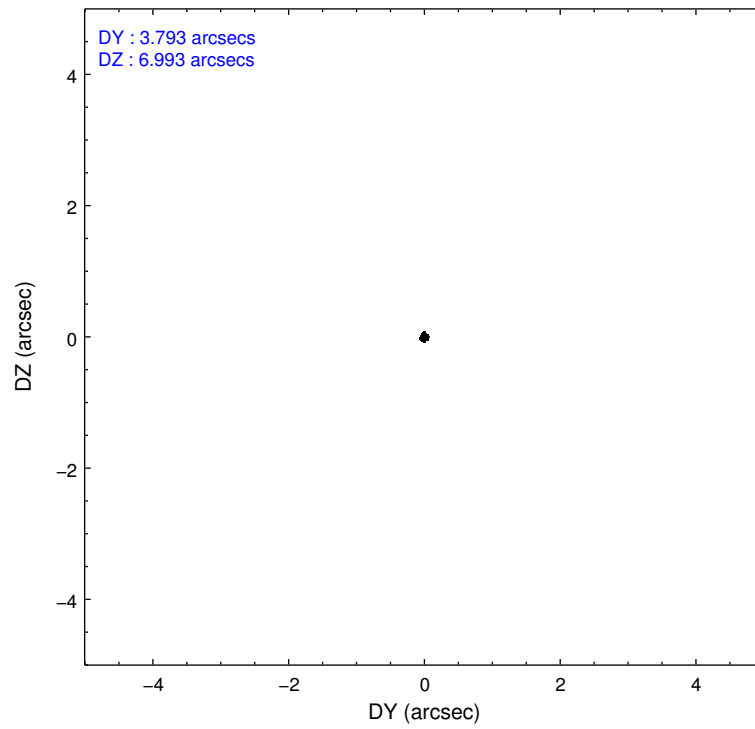
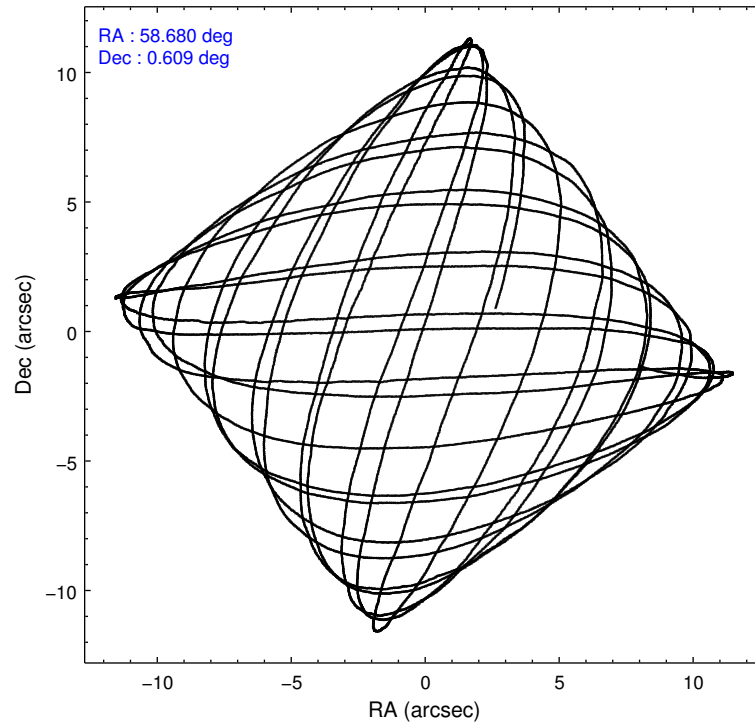
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	50098	45918	49265	59891	62988
rejected events	45359	41601	44079	29496	48674
rejected %	90%	90%	89%	49%	77%

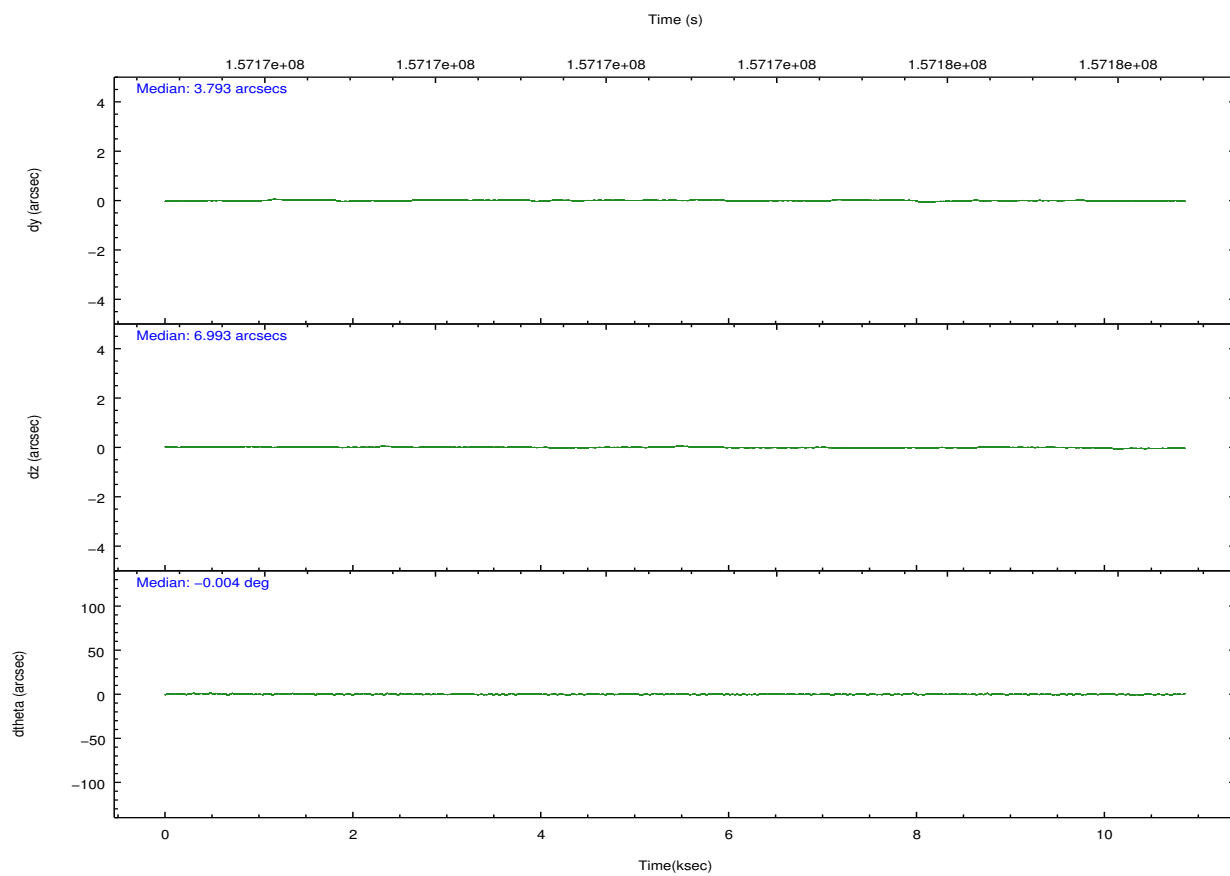
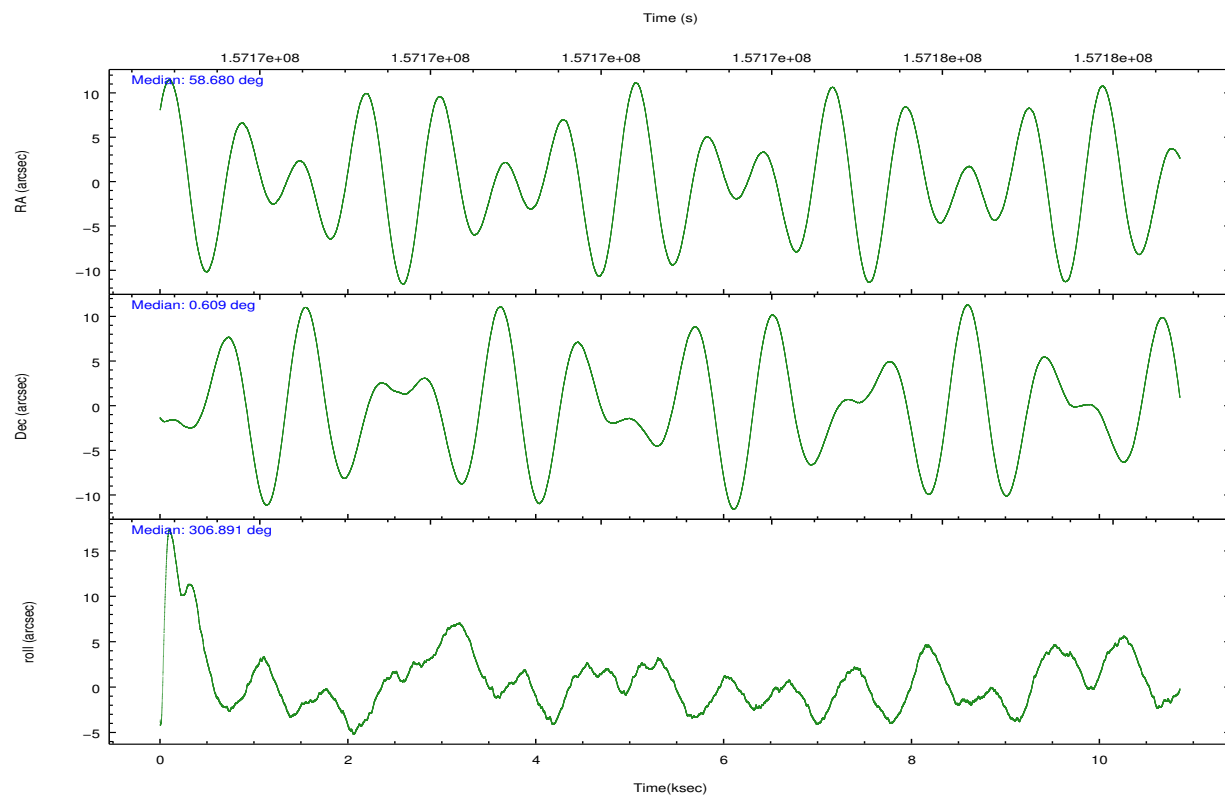
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1762	1595	1860	5605	4516
	3%	3%	3%	9%	7%
grade 1 events	16	31	27	50	49
	0%	0%	0%	0%	0%
grade 2 events	1010	933	1117	5414	3109
	2%	2%	2%	9%	4%
grade 3 events	567	503	577	2471	1592
	1%	1%	1%	4%	2%
grade 4 events	540	487	576	2517	1509
	1%	1%	1%	4%	2%
grade 5 events	1567	1750	1910	5566	2575
	3%	3%	3%	9%	4%
grade 6 events	860	800	1056	14399	3592
	1%	1%	2%	24%	5%
grade 7 events	43776	39819	42142	23869	46046
	87%	86%	85%	39%	73%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	58.655005	58.68022035561086	Subarray requested	NONE	NONE
[deg] Pointing Dec	0.619045	0.608761768502092	Alternating exposures requested	N	N
[deg] Pointing Roll	306.739080	306.8954490782982	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	157168431.184000	157167033.41724			
Observation start date	2002-12-25T01:52:47	2002-12-25T01:30:33			
[s] Observation end time (MET)	157178234.184000	157178548.78022			
Observation end date	2002-12-25T04:36:10	2002-12-25T04:42:28			
Read mode	TIMED	TIMED			

## 2.3 Aspect



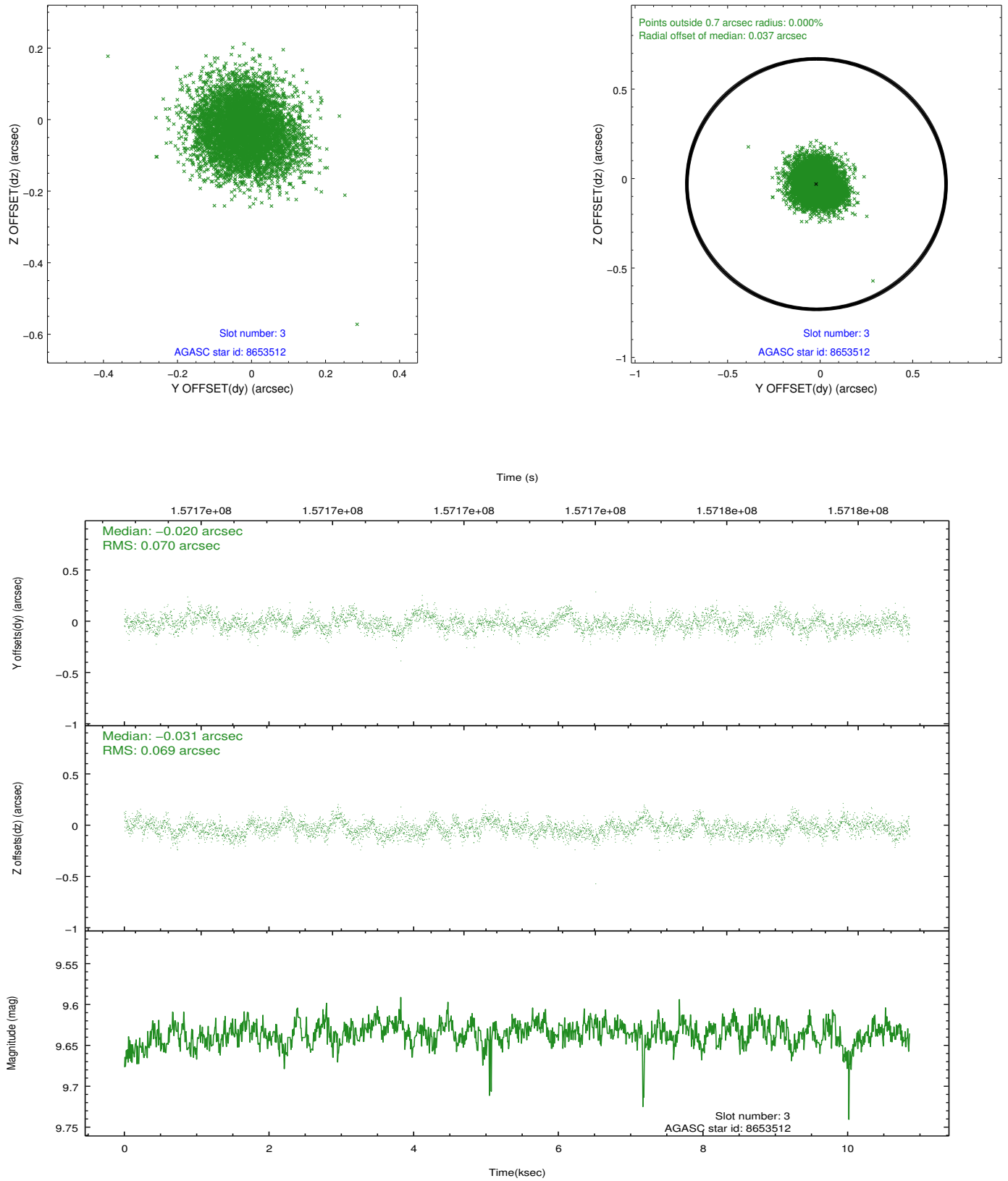


### Slot Statistics

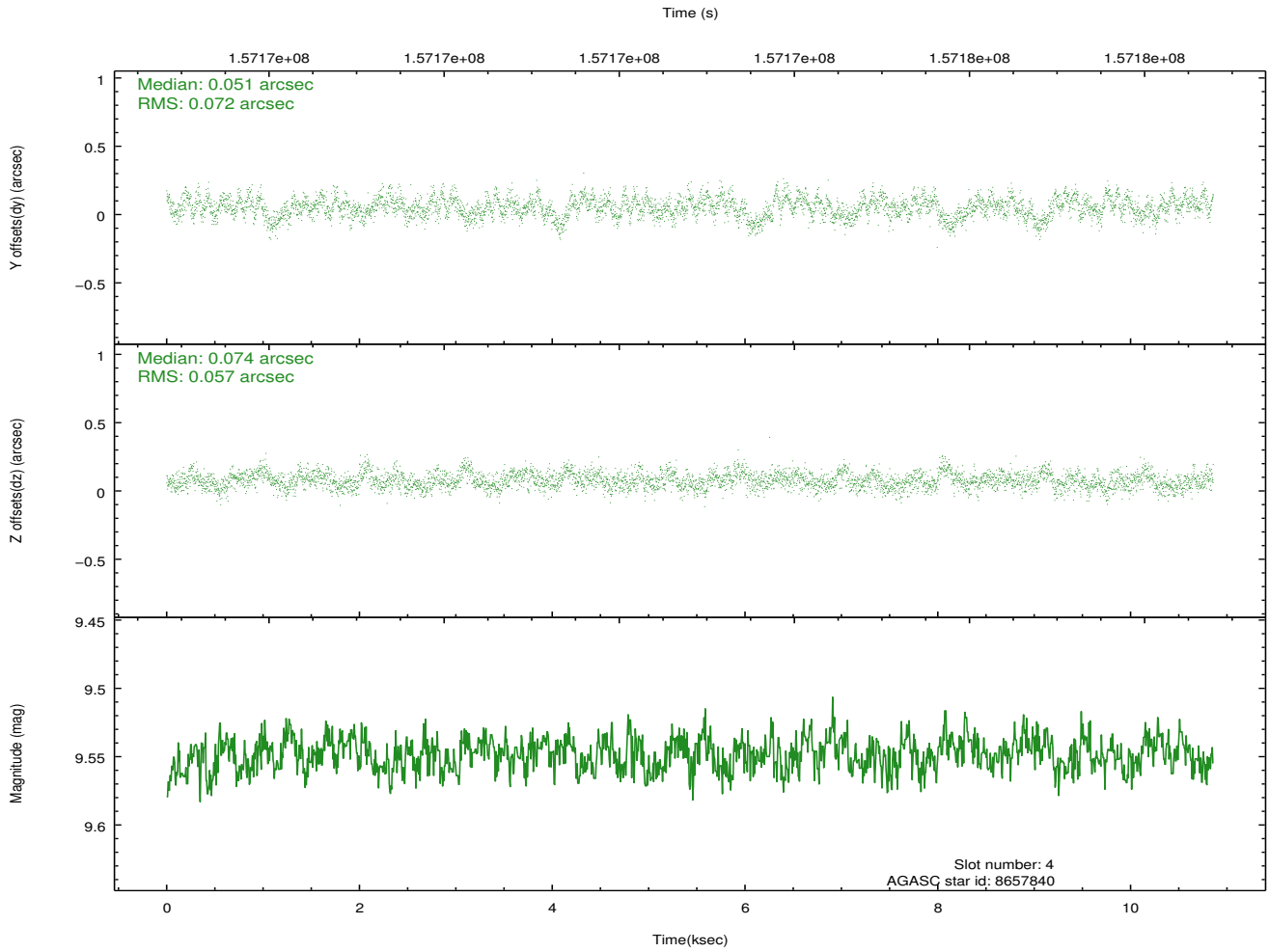
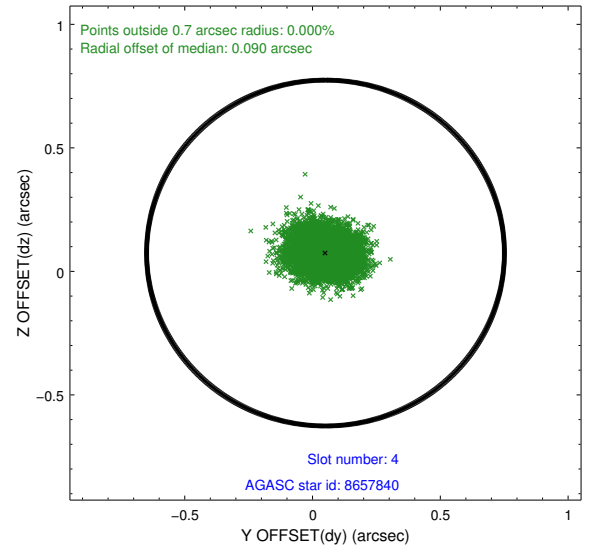
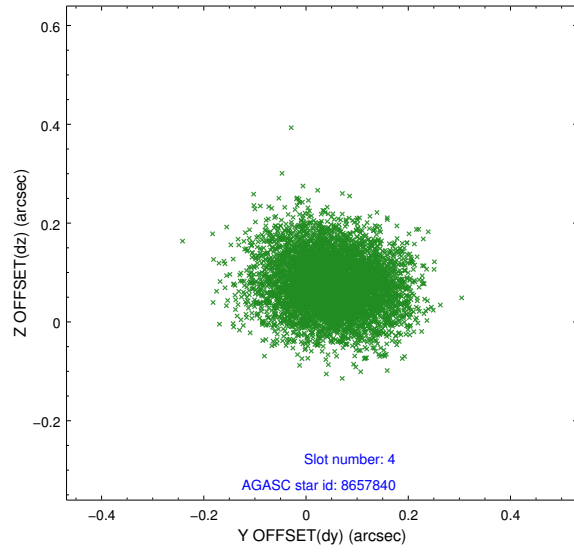
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	2648	-0.017	0.007	0.006	0.010	0.000000	0.000000	-756.47	-1728.10
1	FID	ACIS-S-4	7.21	2648	0.015	0.006	0.005	0.009	0.000000	0.000000	2156.62	179.90
2	FID	ACIS-S-5	7.24	2649	-0.029	-0.005	0.006	0.010	0.000000	0.000000	-1808.71	174.09
3	GUIDE	8653512	9.64	5274	-0.020	-0.031	0.105	0.168	58.520496	0.999820	-1387.74	431.85
4	GUIDE	8657840	9.55	5296	0.051	0.074	0.097	0.157	59.291205	0.381176	2056.28	1323.59
5	GUIDE	8658016	8.06	5297	-0.072	0.049	0.067	0.109	58.594308	1.261617	-1983.48	1208.71
6	GUIDE	8658136	8.77	5297	0.032	0.028	0.079	0.126	58.722317	0.010721	1900.23	-1115.33
7	GUIDE	618399720	9.68	5294	0.012	-0.117	0.114	0.190	58.556981	-0.140048	1979.93	-1917.70

## 2.4 Star Slots

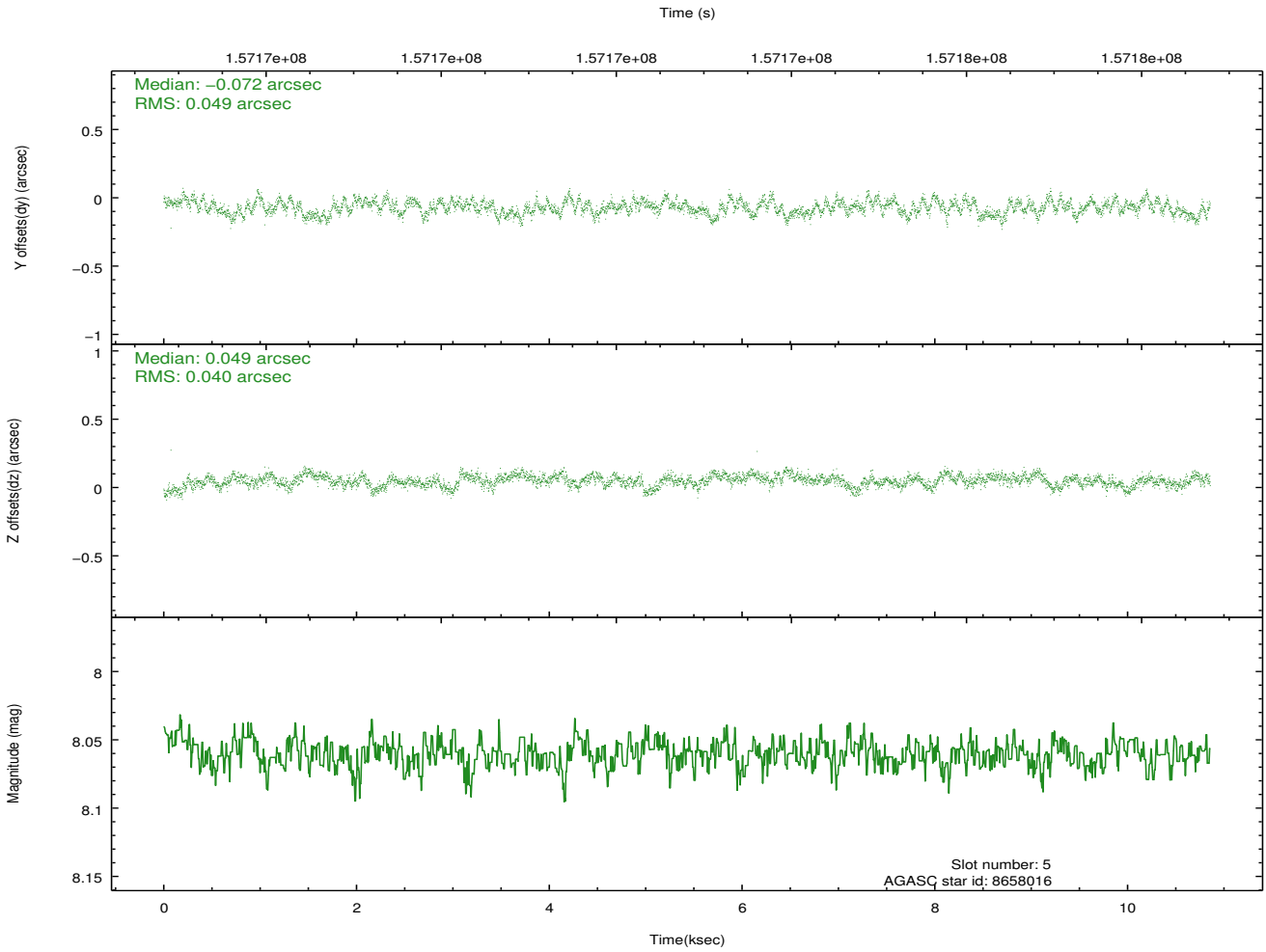
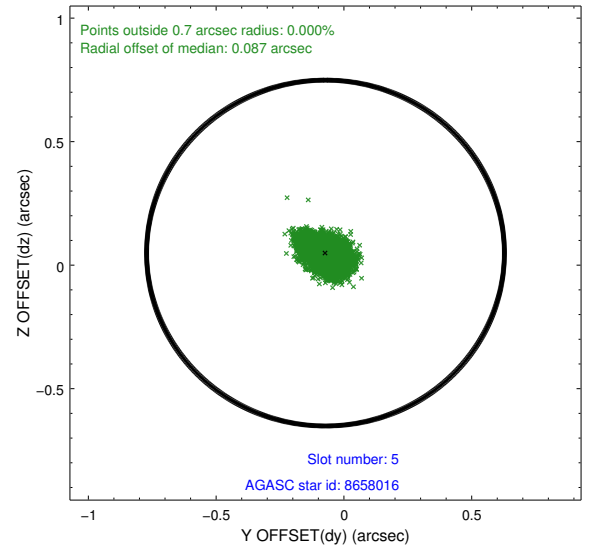
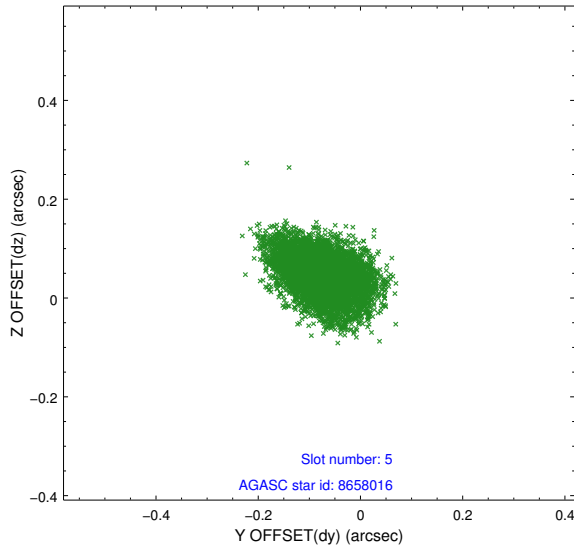
### 2.4.1 Slot 3



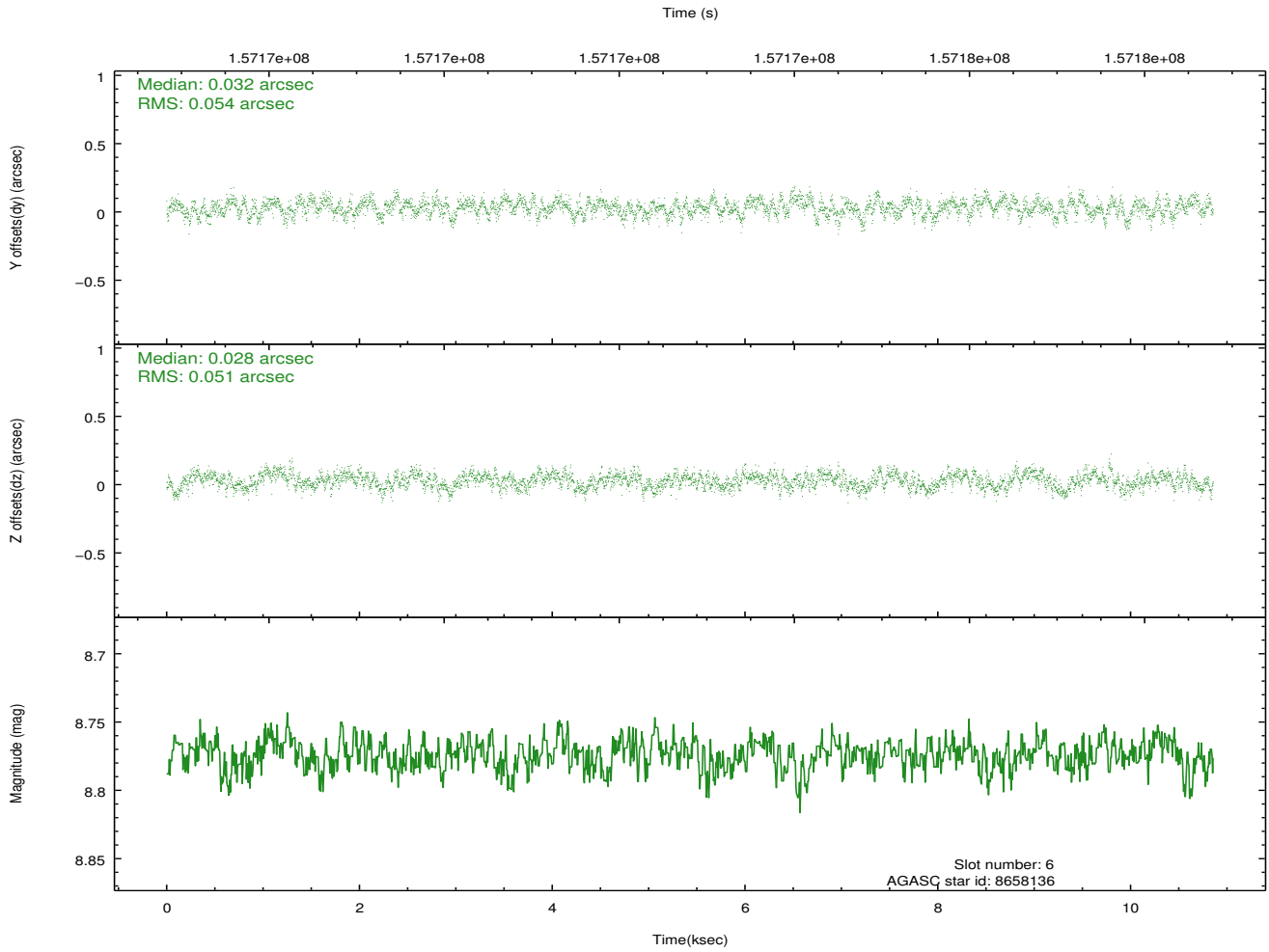
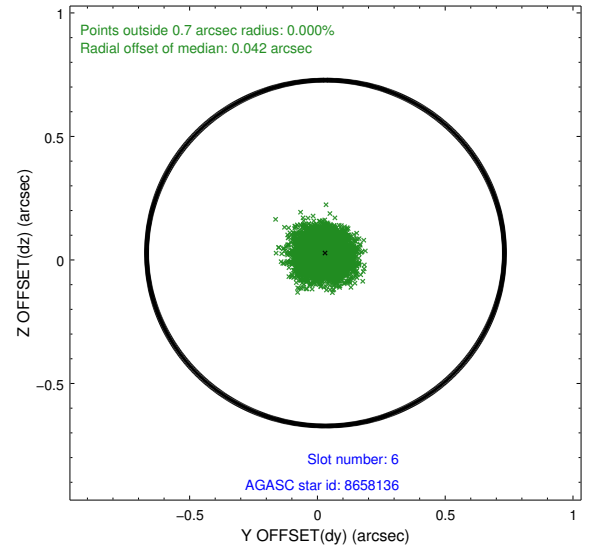
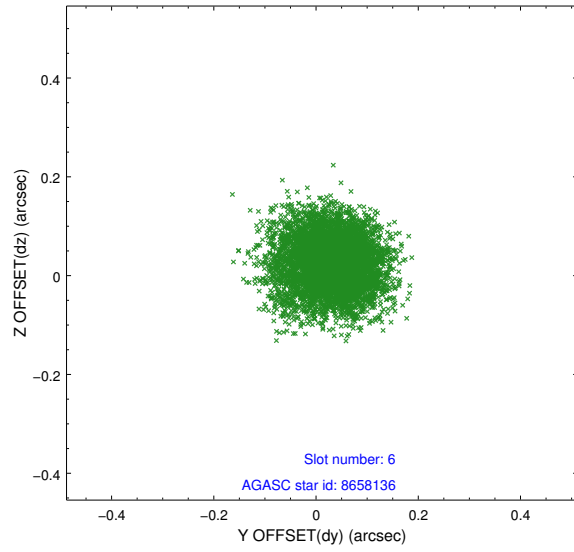
## 2.4.2 Slot 4



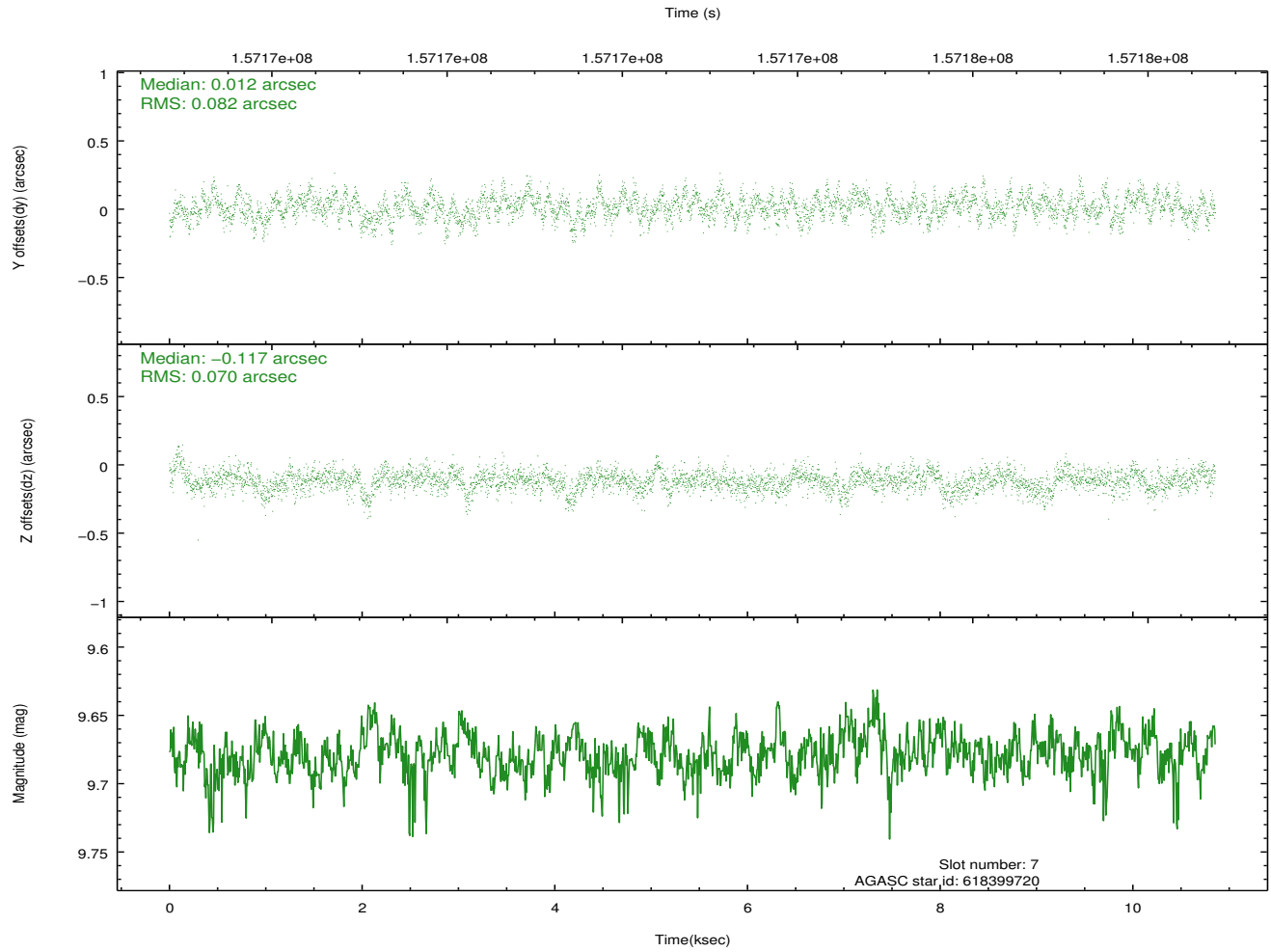
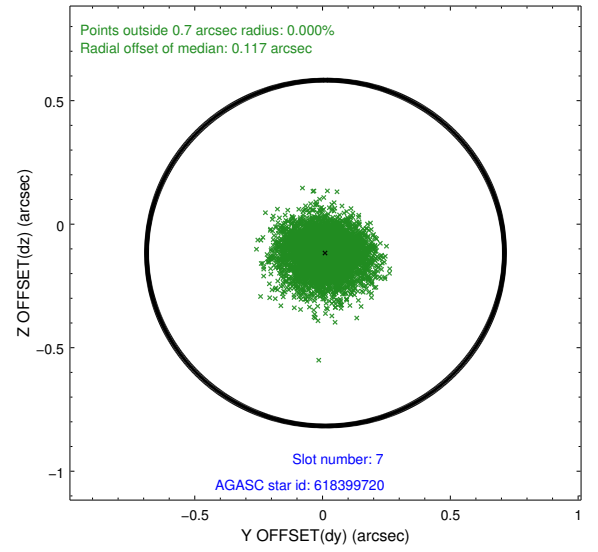
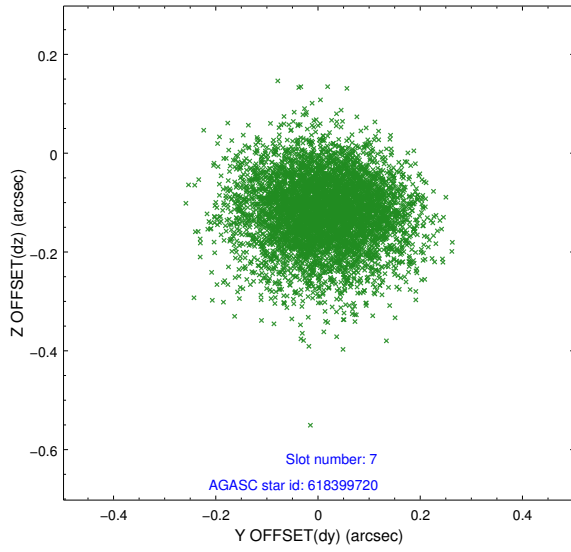
### 2.4.3 Slot 5



## 2.4.4 Slot 6

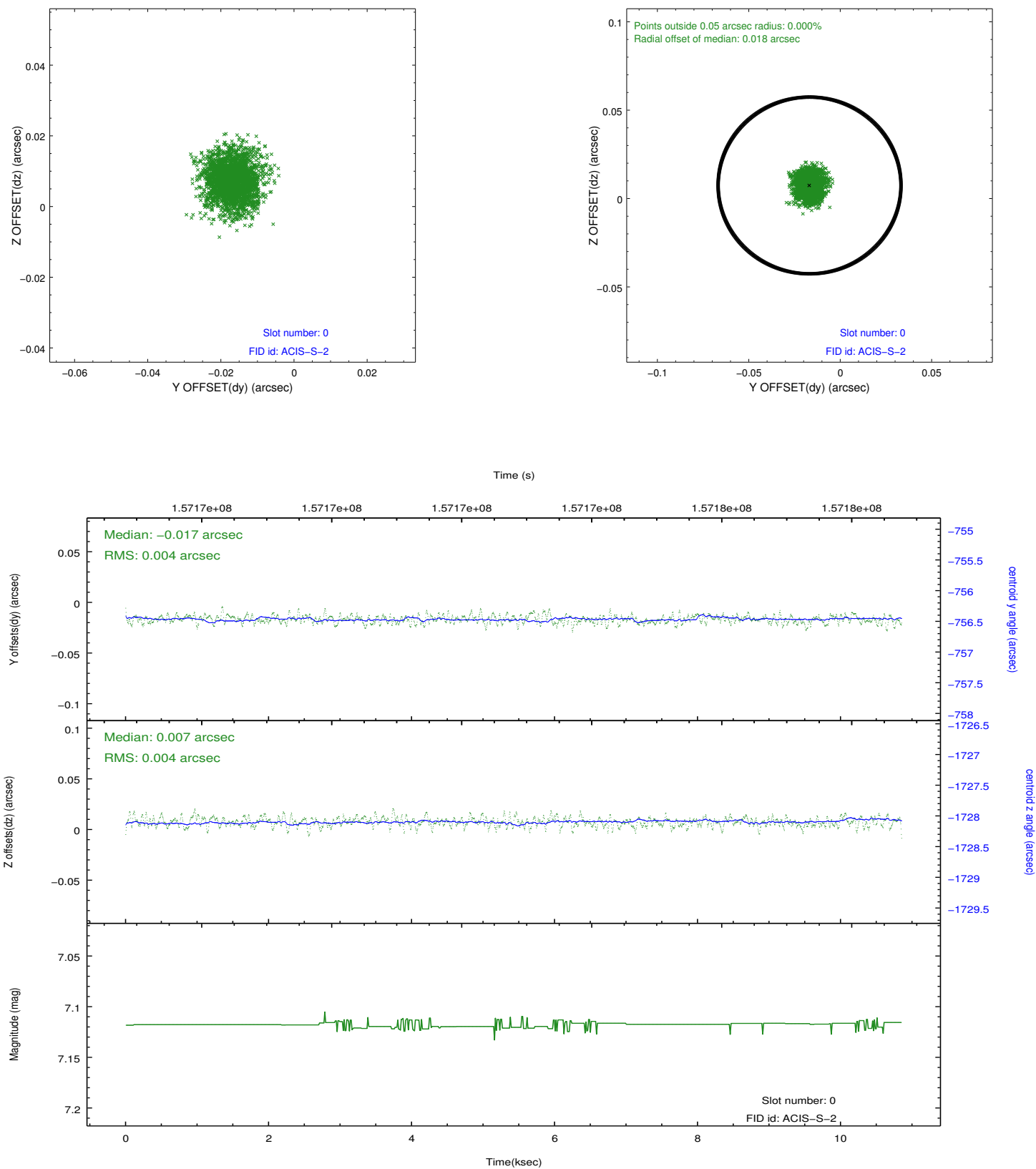


## 2.4.5 Slot 7

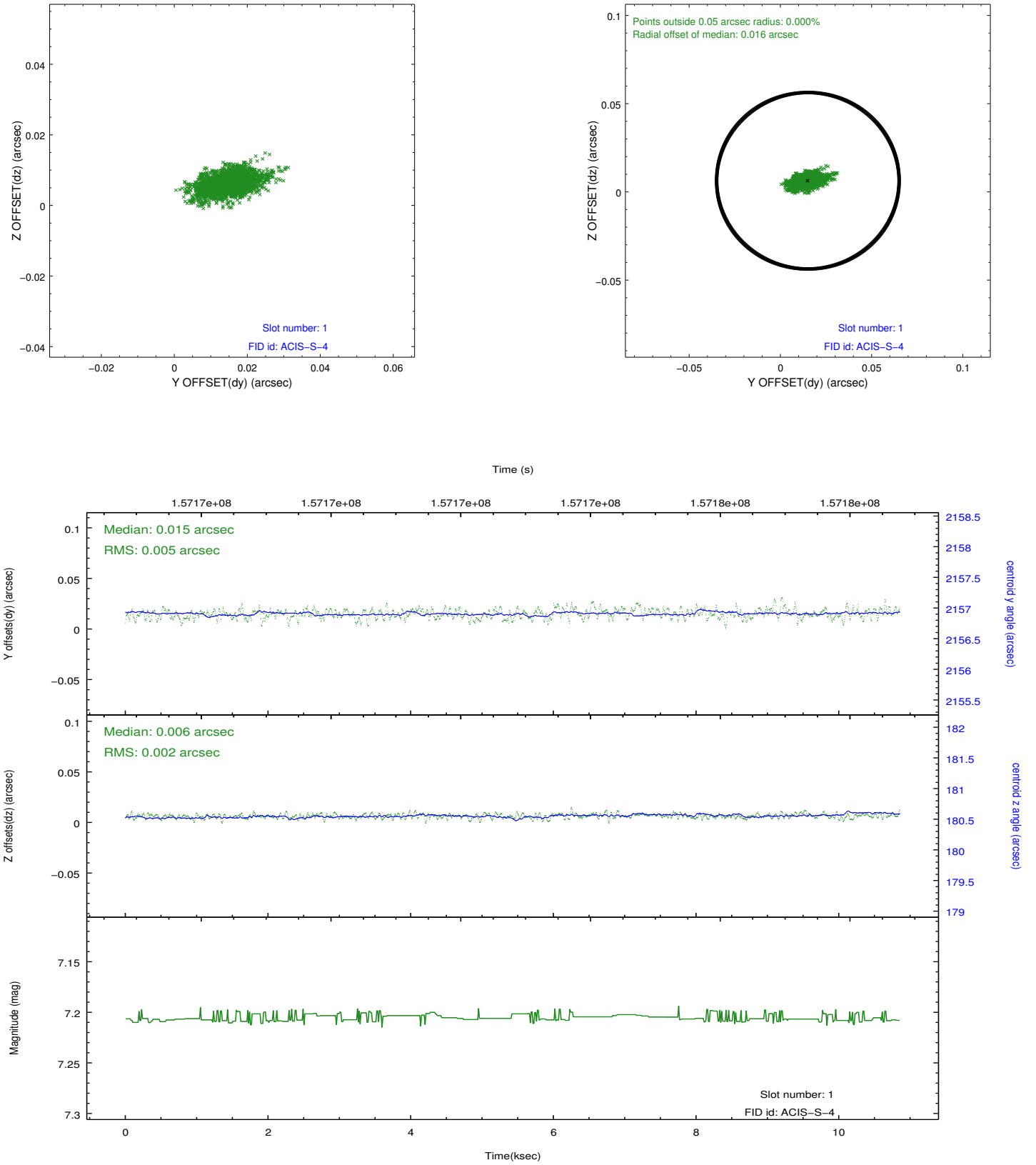


## 2.5 FID Slots

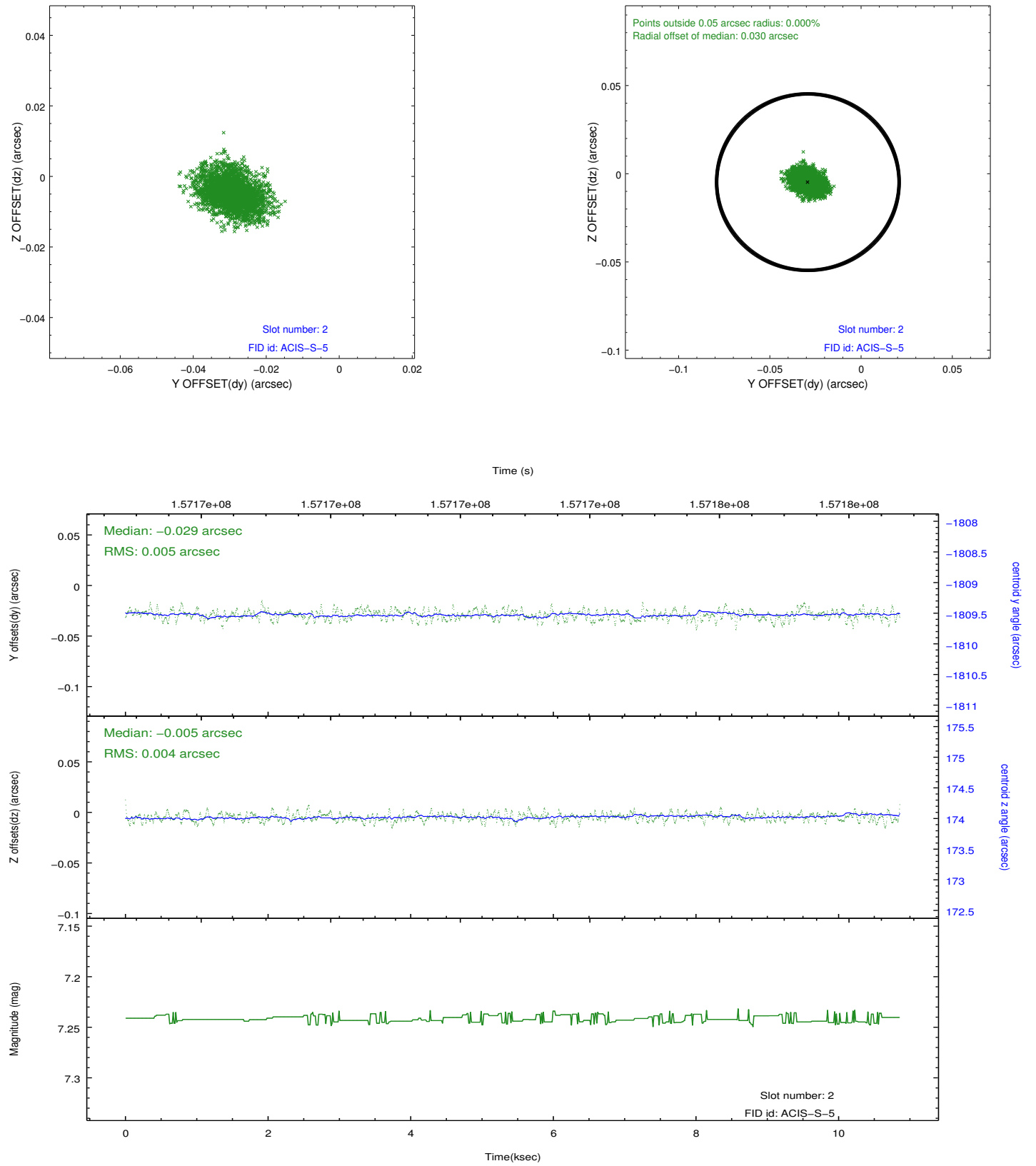
### 2.5.1 Slot 0



## 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)	2012.10.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.91

### A.2 Comments