

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9395 - L2 Version 2  
Chandra X-Ray Center

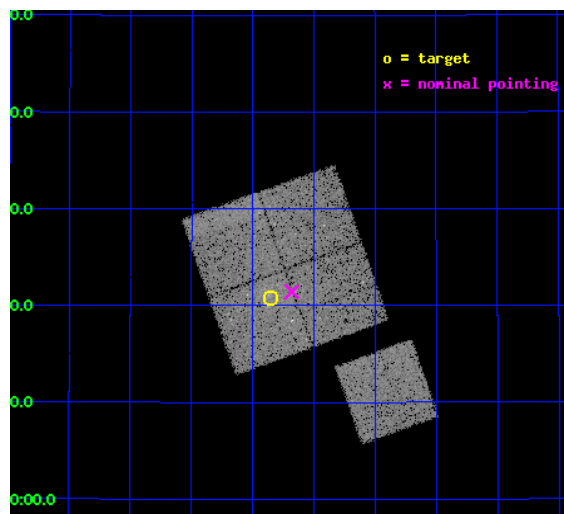
L2 Processing Date : May 11 2012

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# 1 Front

seq_num	800732	Sequence number
obs_id	9395	Observation id
title	SCALING RELATIONS FOR LOW-MASS GALAXY CLUSTERS AND GROUPS	Proposal
observer	Dr. Alexey Vikhlinin	Principal investigator
object	cl1259+3120	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.9625	Observer's specified target RA [deg]
dec_targ	31.346667	Observer's specified target Dec [deg]
ra_nom	194.91992922951	Nominal RA [deg]
dec_nom	31.357051789936	Nominal Dec [deg]
roll_nom	160.54495858129	Nominal Roll [deg]
revision	2	Processing version of data
ontime	18156.700139642	Sum of GTIs [s]
livetime	17919.469485549	Livetime [s]
ontime0	18153.559139431	Sum of GTIs [s]
ontime1	18153.559159279	Sum of GTIs [s]
ontime2	18156.700139642	Sum of GTIs [s]
ontime3	18156.700139642	Sum of GTIs [s]
ontime6	18156.700139642	Sum of GTIs [s]
l2events	63418	Number of level 2 events

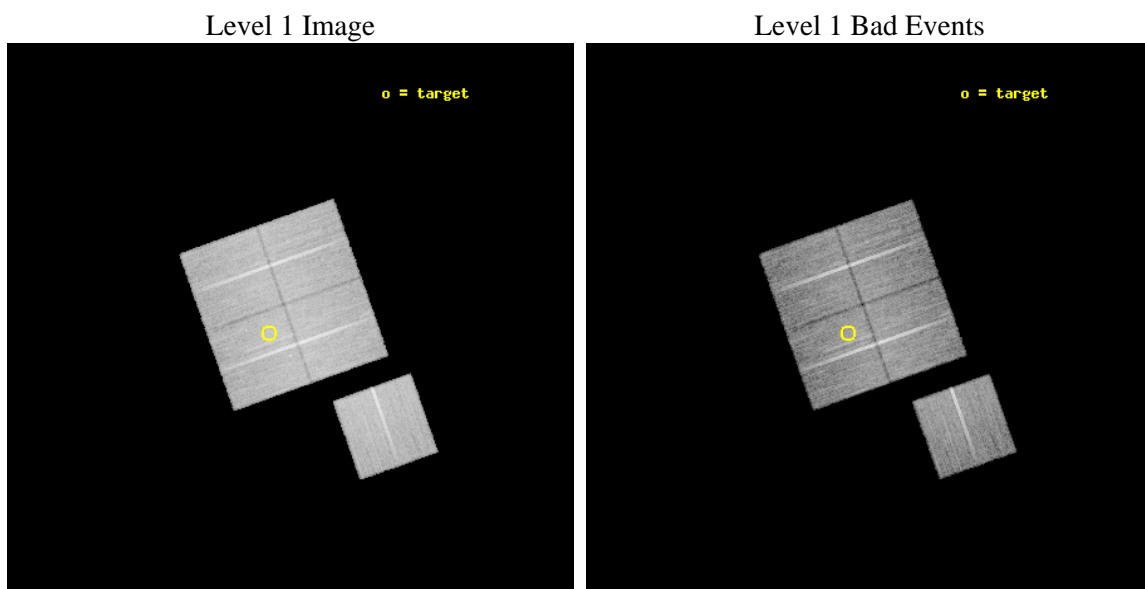




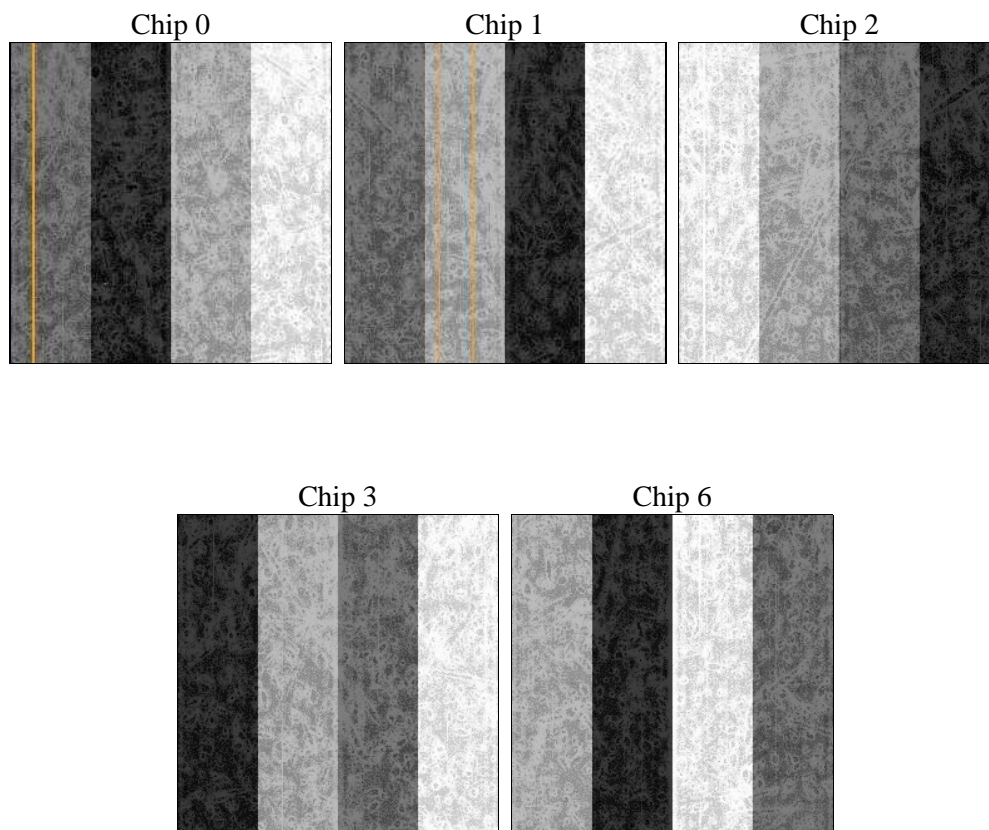
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	18156.700139642	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	18153.559139431	Sum of GTIs [s]
date	2012-05-12T00:53:46	Date and time of file creation	ontime1	18153.559159279	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	18156.700139642	Sum of GTIs [s]
			ontime3	18156.700139642	Sum of GTIs [s]
			ontime6	18156.700139642	Sum of GTIs [s]
			l1events	741522	Number of level 1 events

### 2.1.4 Events

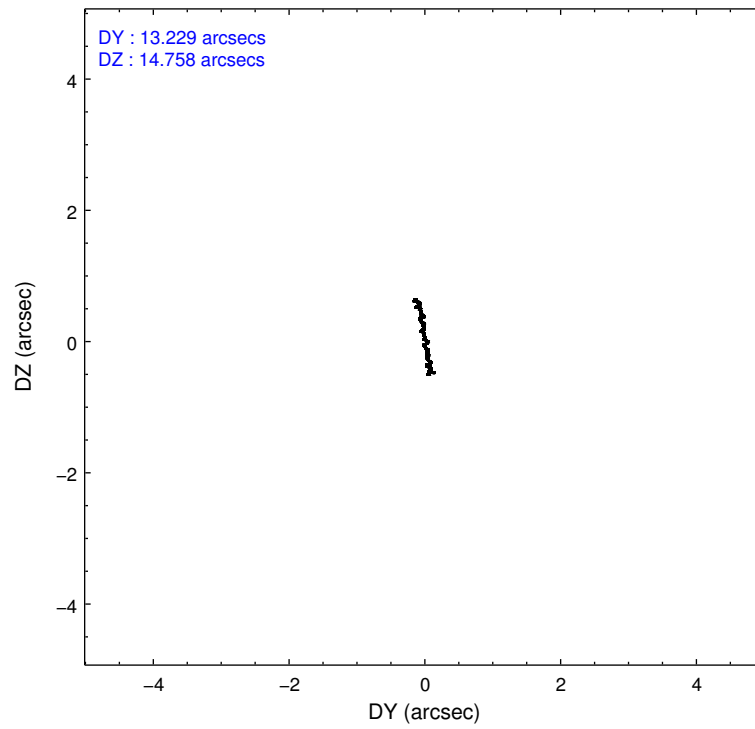
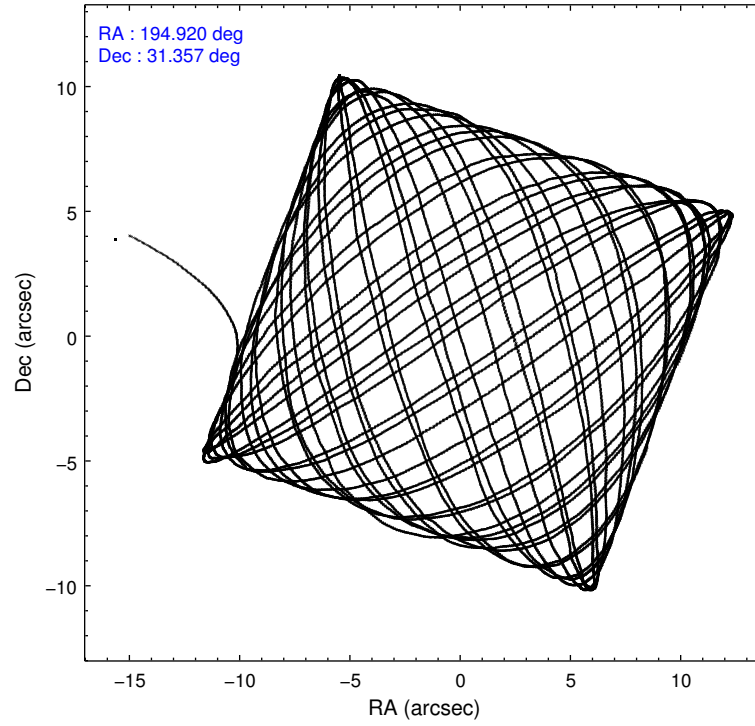
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	143266	139235	159822	149449	149750
rejected events	128592	122770	145005	133977	134863
rejected %	89%	88%	90%	89%	90%

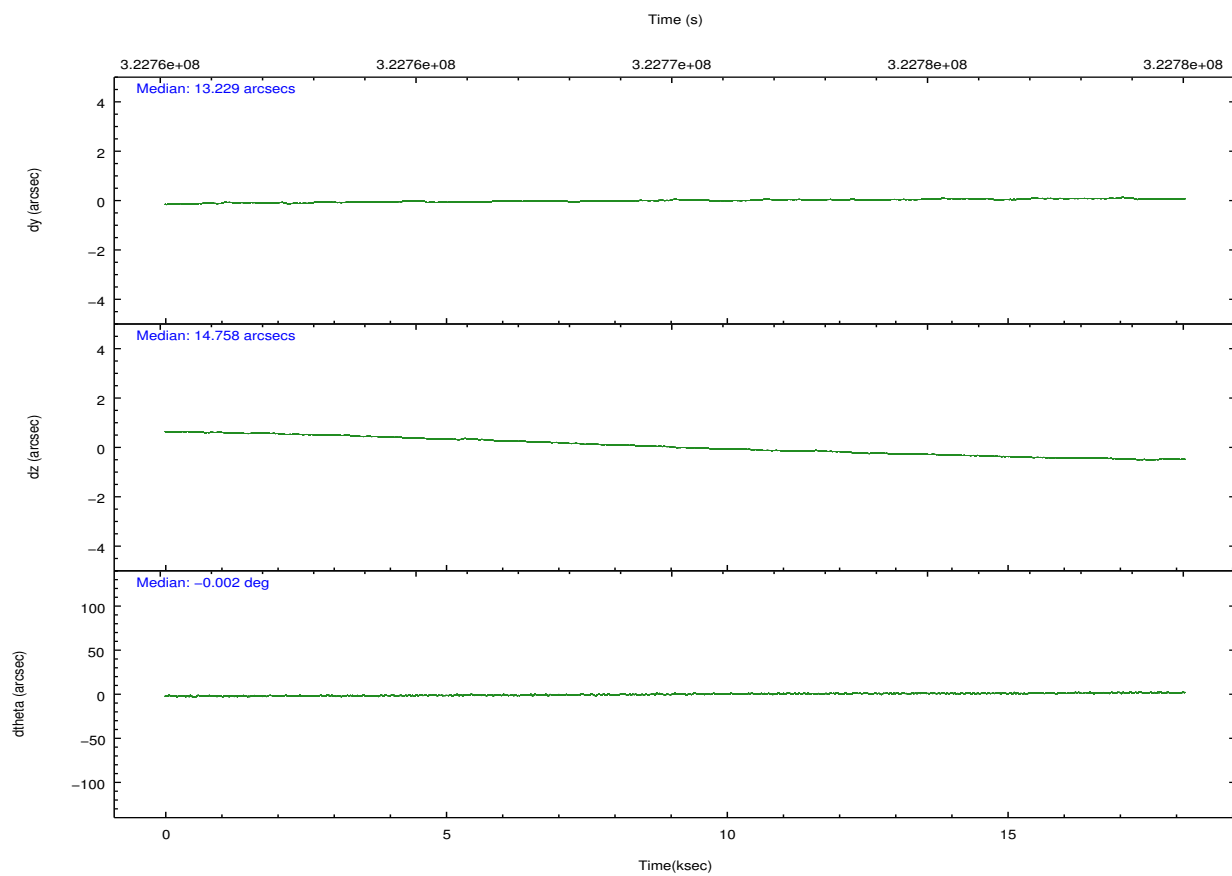
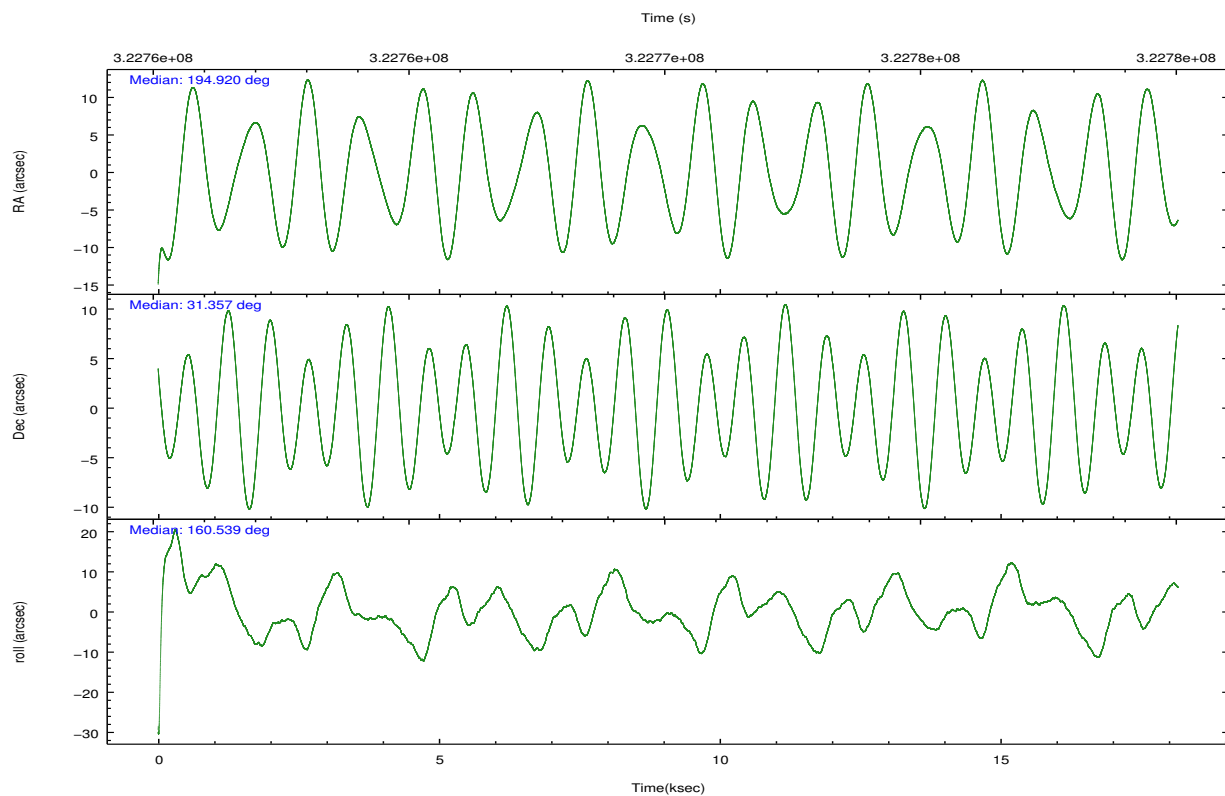
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5222	5944	5451	6301	5144
	3%	4%	3%	4%	3%
grade 1 events	77	83	81	97	65
	0%	0%	0%	0%	0%
grade 2 events	3630	3875	3676	3325	3375
	2%	2%	2%	2%	2%
grade 3 events	1667	1866	1620	1627	1717
	1%	1%	1%	1%	1%
grade 4 events	1532	1775	1604	1601	1649
	1%	1%	1%	1%	1%
grade 5 events	5389	5691	5035	6101	5984
	3%	4%	3%	4%	3%
grade 6 events	2918	3370	2752	2909	3284
	2%	2%	1%	1%	2%
grade 7 events	122831	116631	139603	127488	128532
	85%	83%	87%	85%	85%

## 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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	194.951603	194.9199292295057	CCD I2 on	Y	Y
[deg] Pointing Dec	31.362207	31.35705178993574	CCD I3 on	Y	Y
[deg] Pointing Roll	160.319817	160.5449585812873	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-228.592463	-228.5990329025337	CCD S3 on	N	N
[mm] SIM translation stage offset	-5	-4.993420100396037	CCD S4 on	N	N
[s] Observation start time (MET)	322761142.184000	322759972.45364	CCD S5 on	N	N
Observation start date	2008-03-24T15:51:17	2008-03-24T15:32:52	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	322779142.184000	322779816.4546	On-chip summing requested	N	N
Observation end date	2008-03-24T20:51:17	2008-03-24T21:03:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



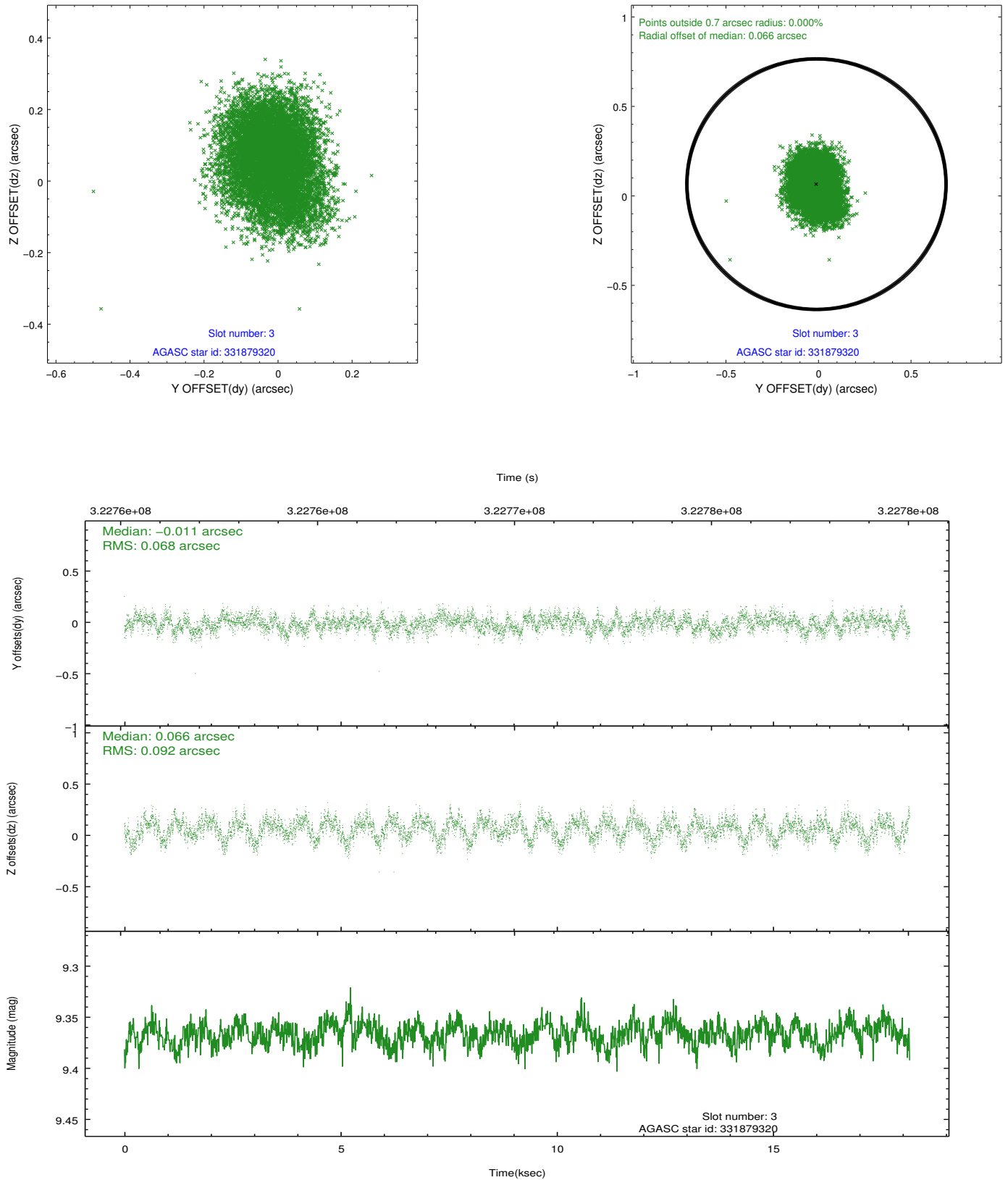


### Slot Statistics

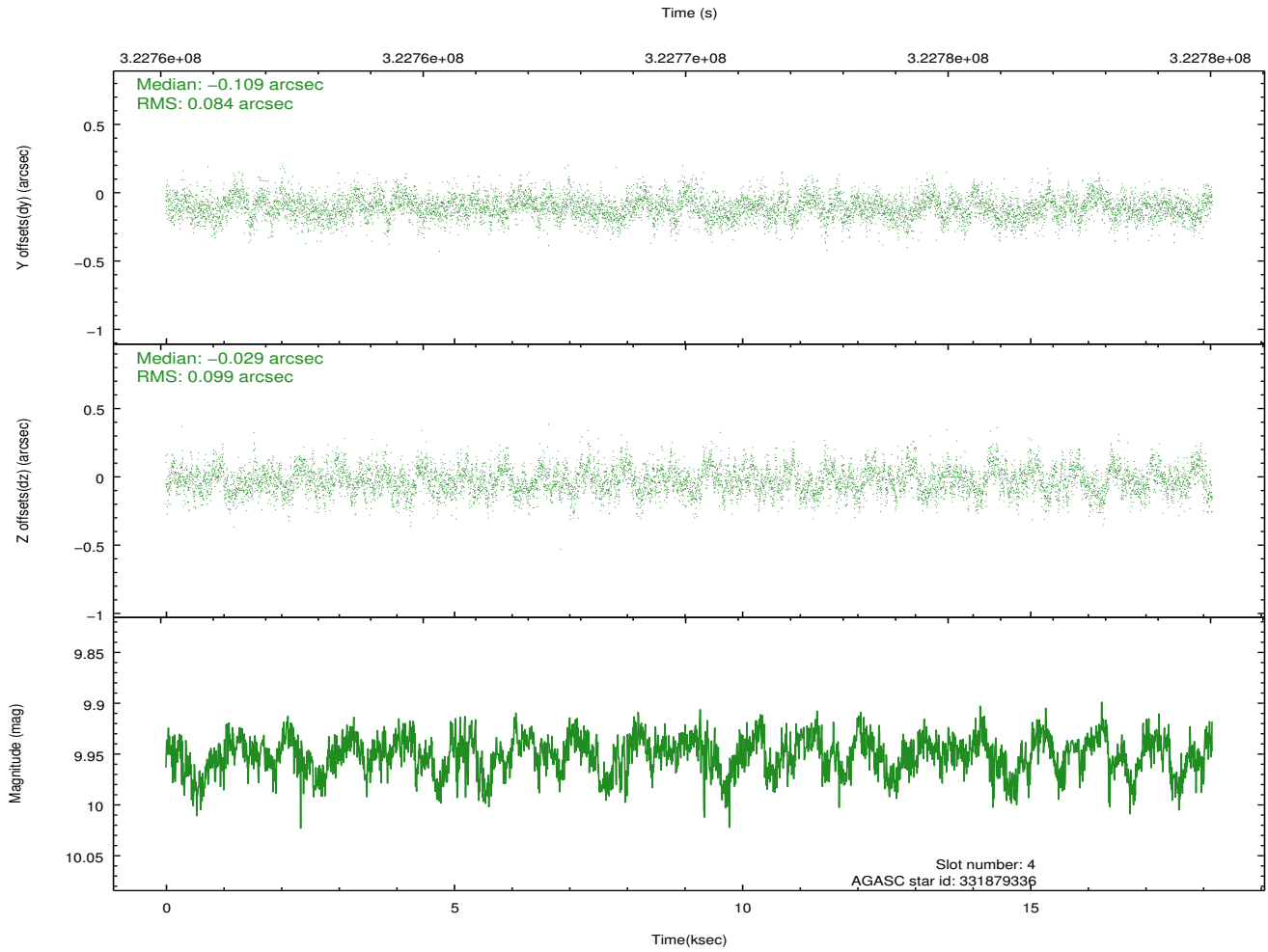
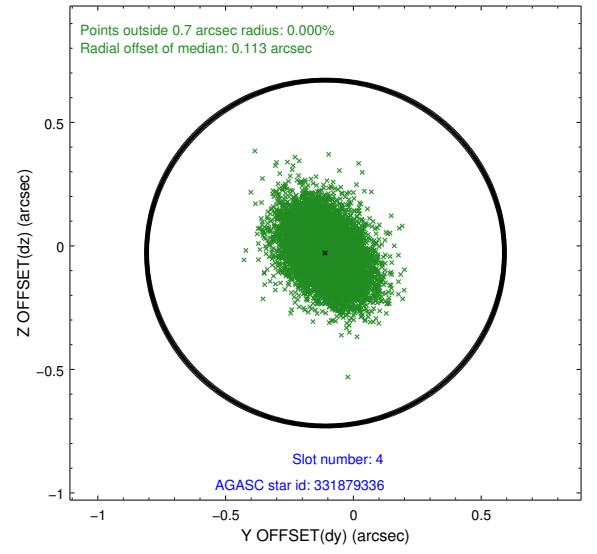
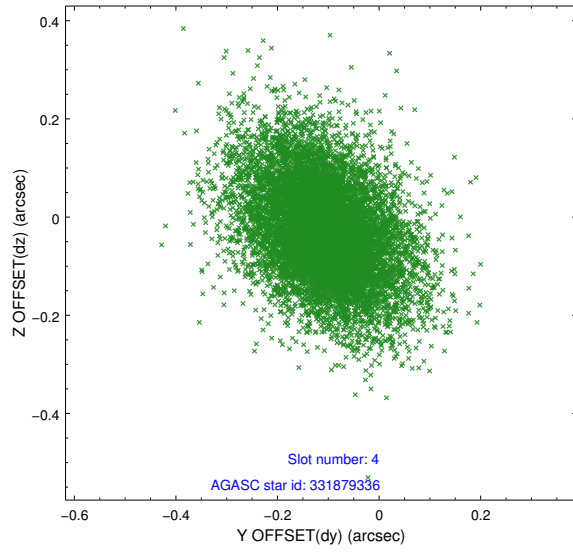
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	4430	0.086	-0.024	0.022	0.031	0.000000	0.000000	926.27	-940.90
1	FID	ACIS-I-5	7.21	4430	-0.239	0.087	0.014	0.021	0.000000	0.000000	-1822.03	956.58
2	FID	ACIS-I-6	7.23	4429	0.061	0.009	0.011	0.016	0.000000	0.000000	391.56	1601.25
3	GUIDE	331879320	9.37	8850	-0.011	0.066	0.123	0.195	195.358079	31.376542	-1157.41	-469.99
4	GUIDE	331879336	9.95	8842	-0.109	-0.029	0.135	0.232	195.436427	30.690852	-2227.72	1768.77
5	GUIDE	331879888	9.54	8858	-0.015	-0.110	0.114	0.182	195.429563	31.161618	-1628.41	181.20
6	GUIDE	331880416	9.57	8848	0.132	-0.097	0.103	0.168	194.559881	31.001672	701.74	1627.51
7	GUIDE	331891936	9.65	8847	0.006	0.177	0.113	0.181	195.229558	31.616769	-492.96	-1150.24

## 2.4 Star Slots

### 2.4.1 Slot 3

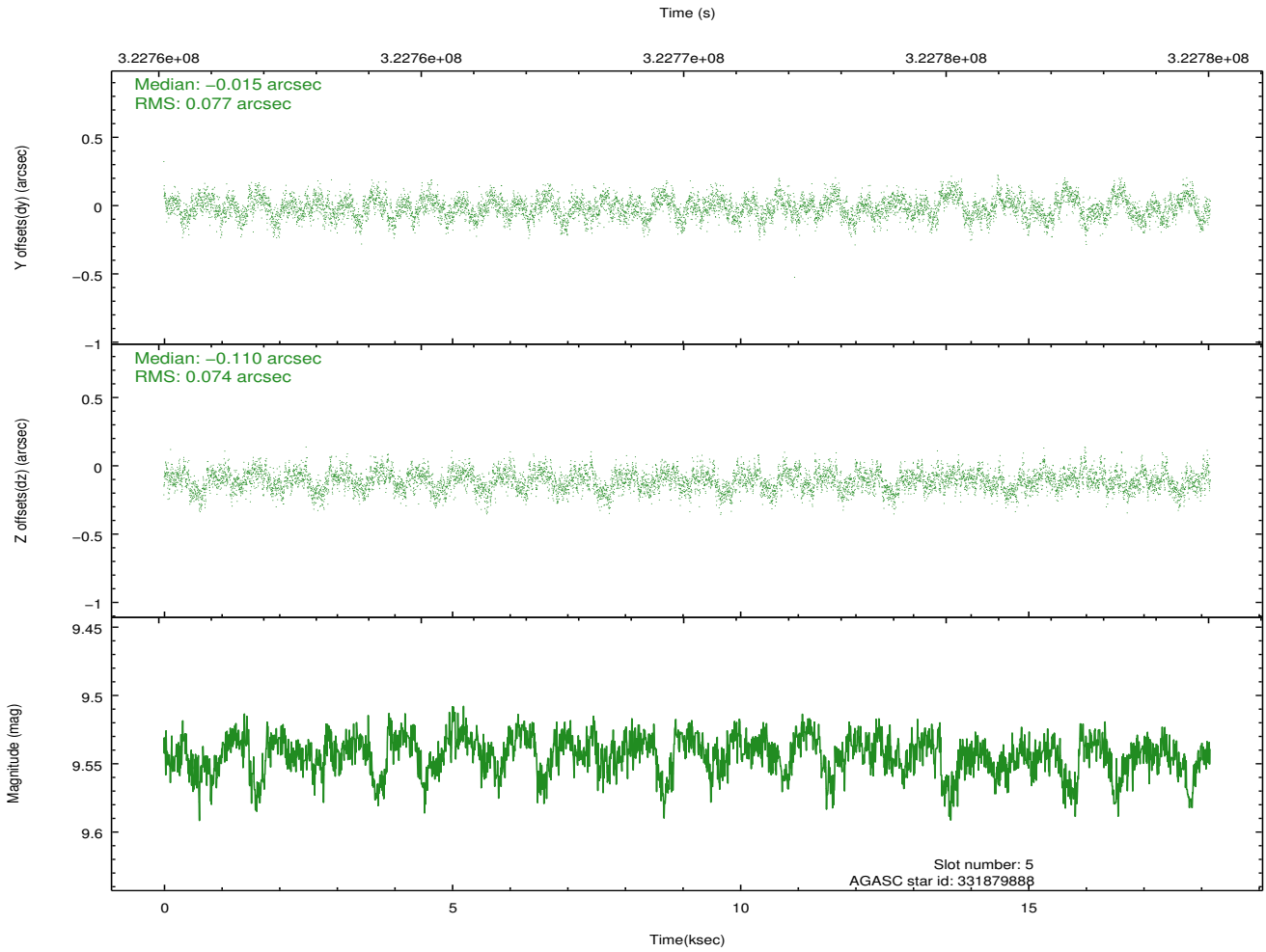
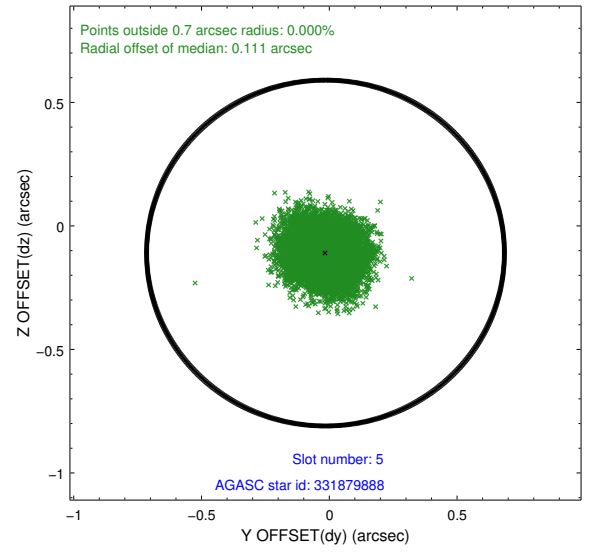
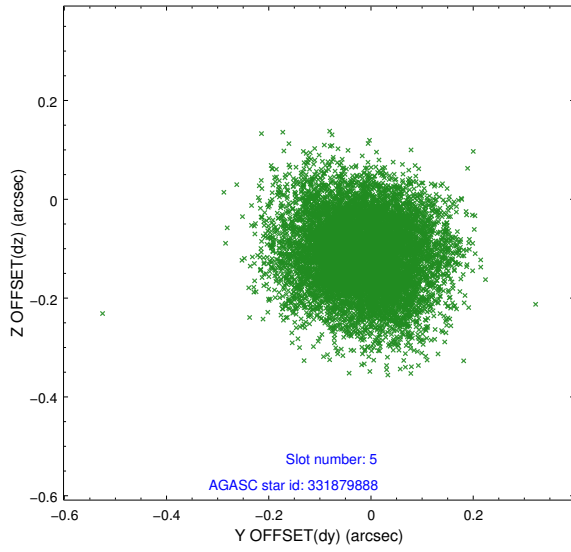


## 2.4.2 Slot 4

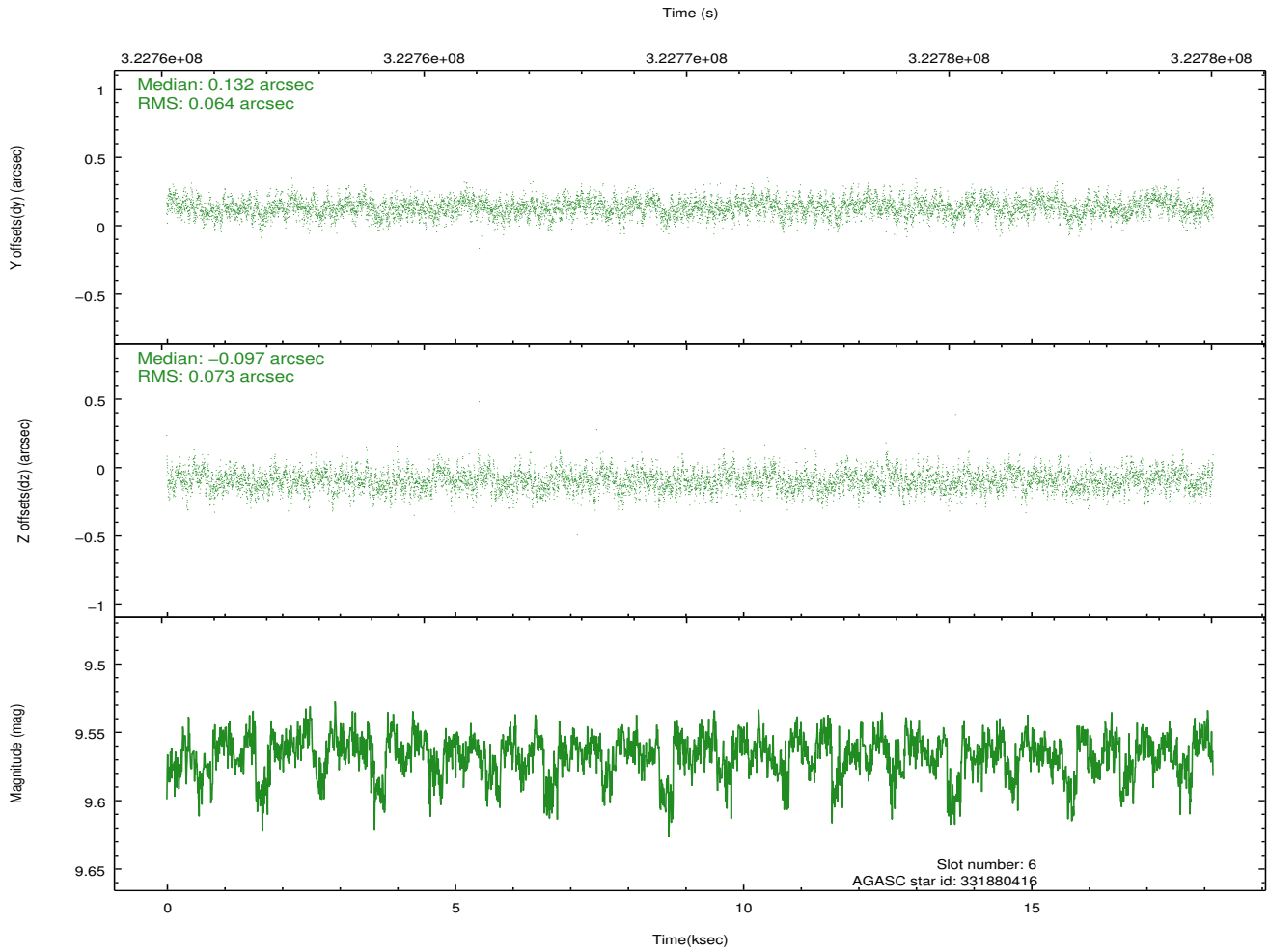
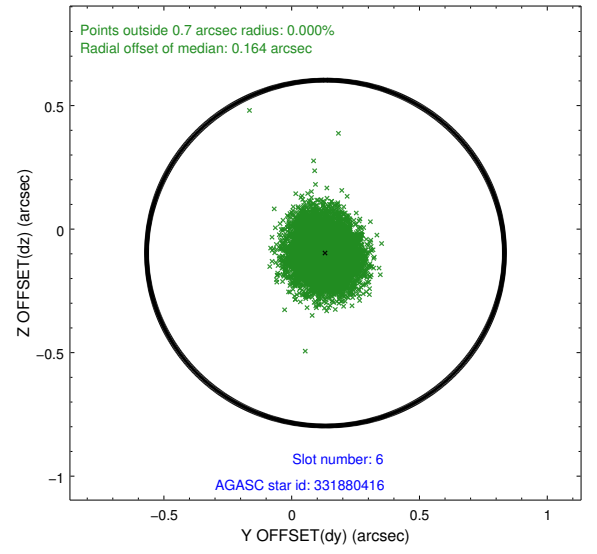
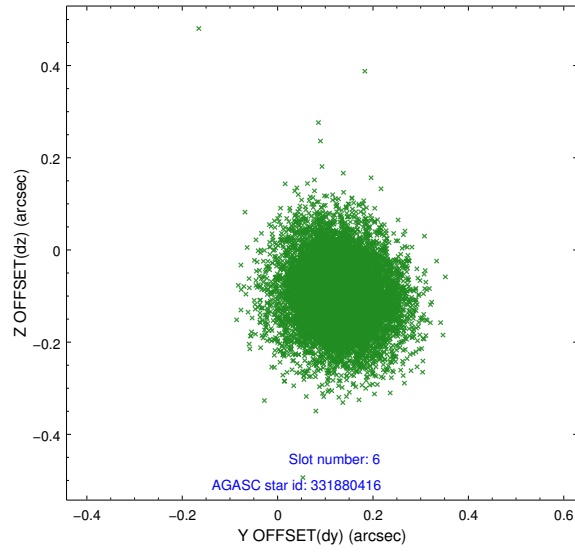




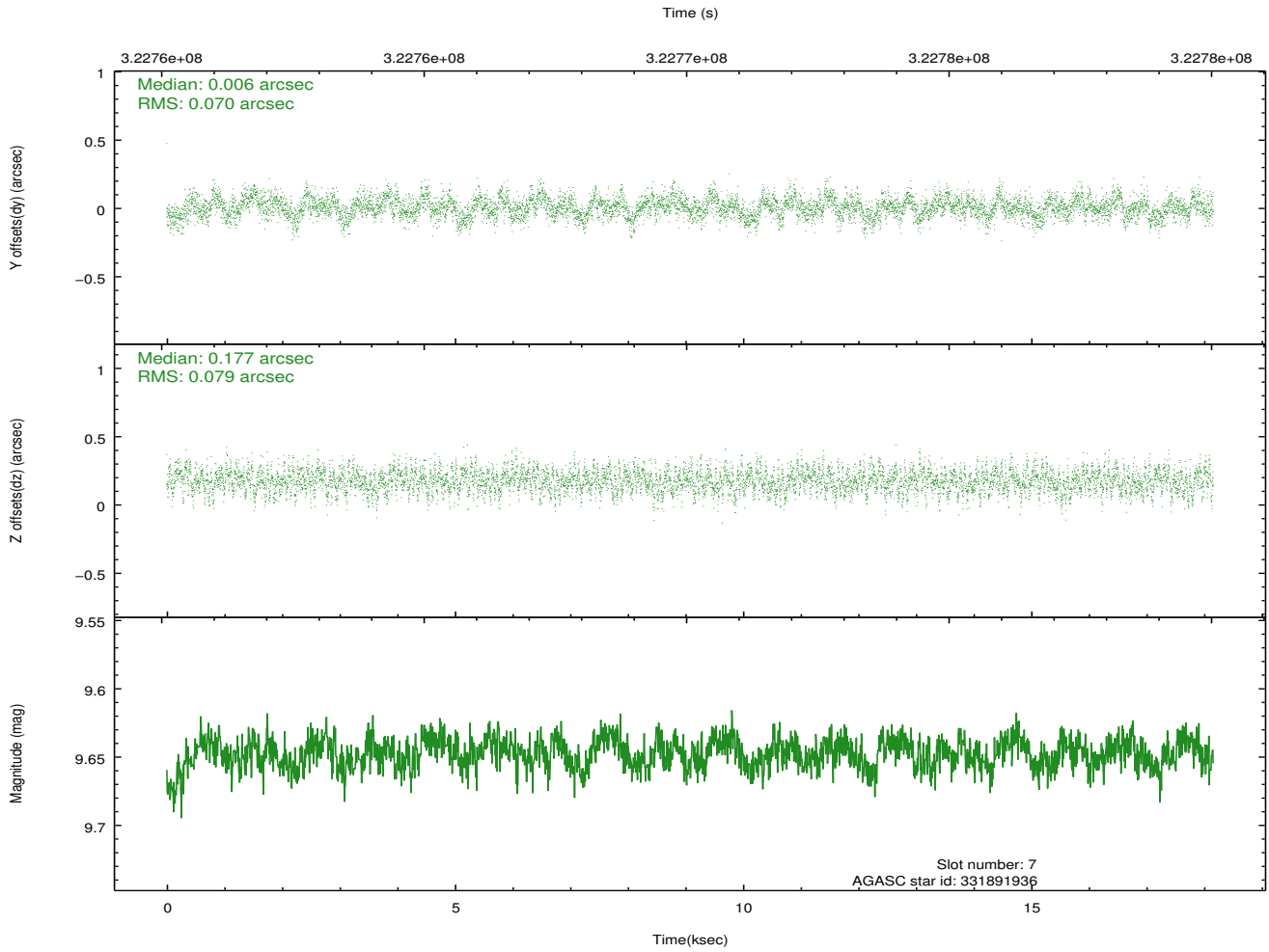
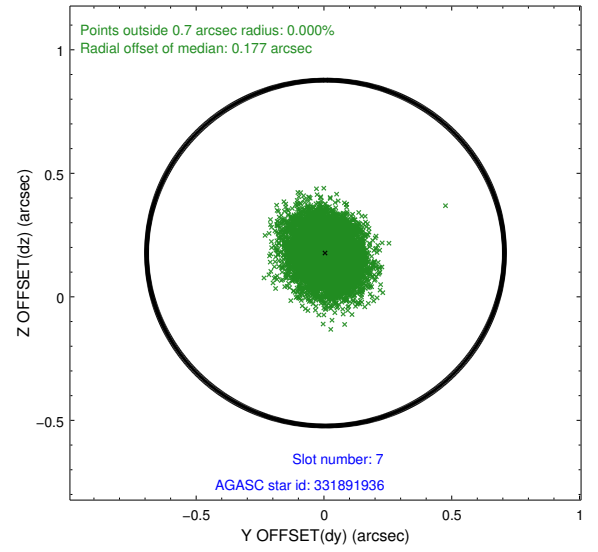
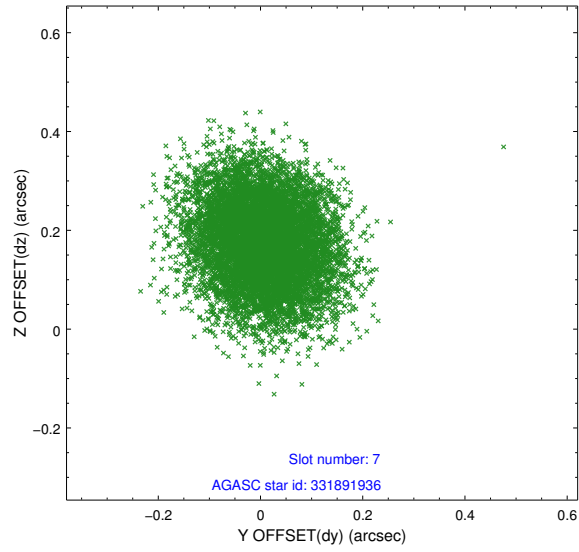
### 2.4.3 Slot 5



## 2.4.4 Slot 6

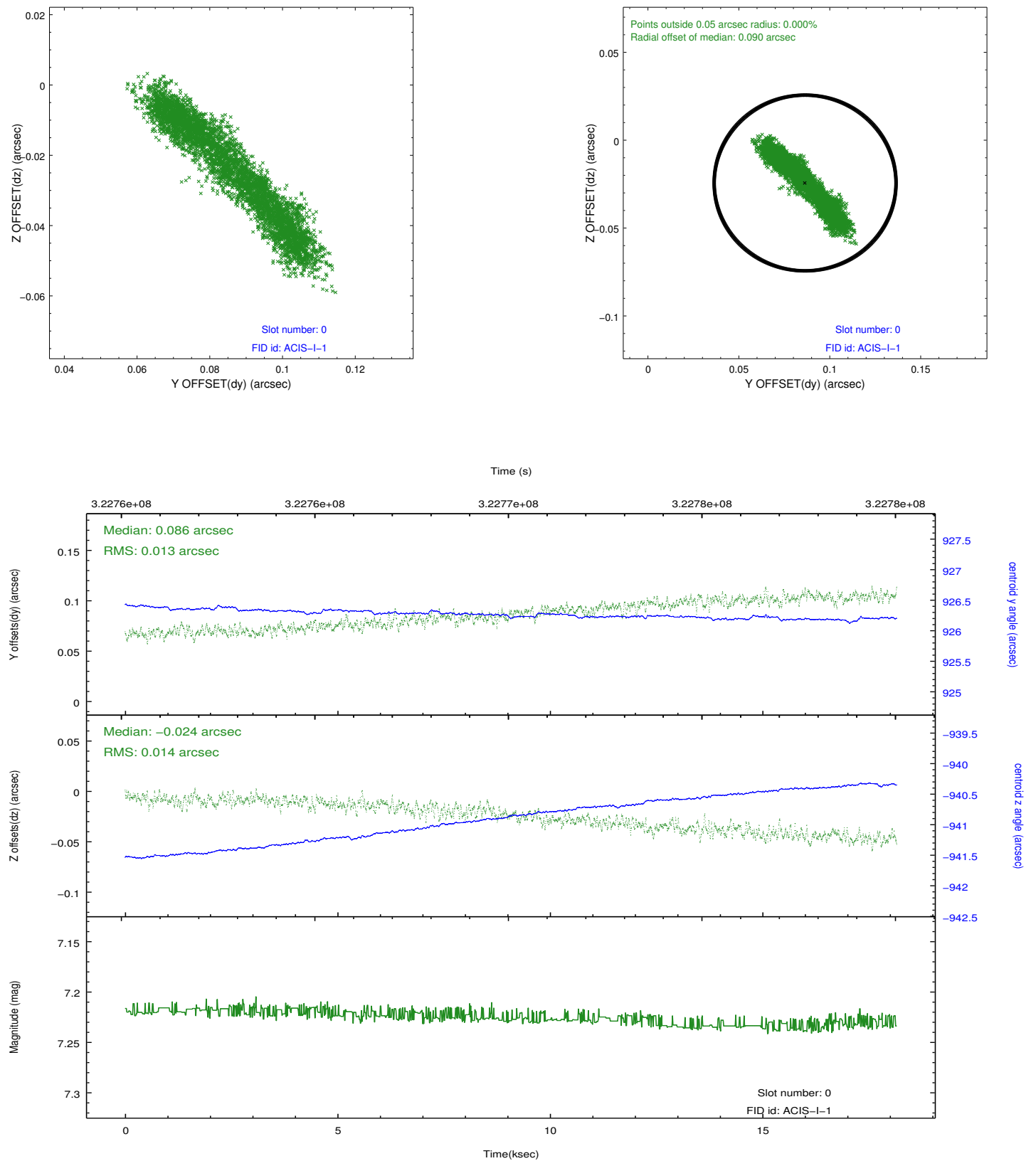


## 2.4.5 Slot 7

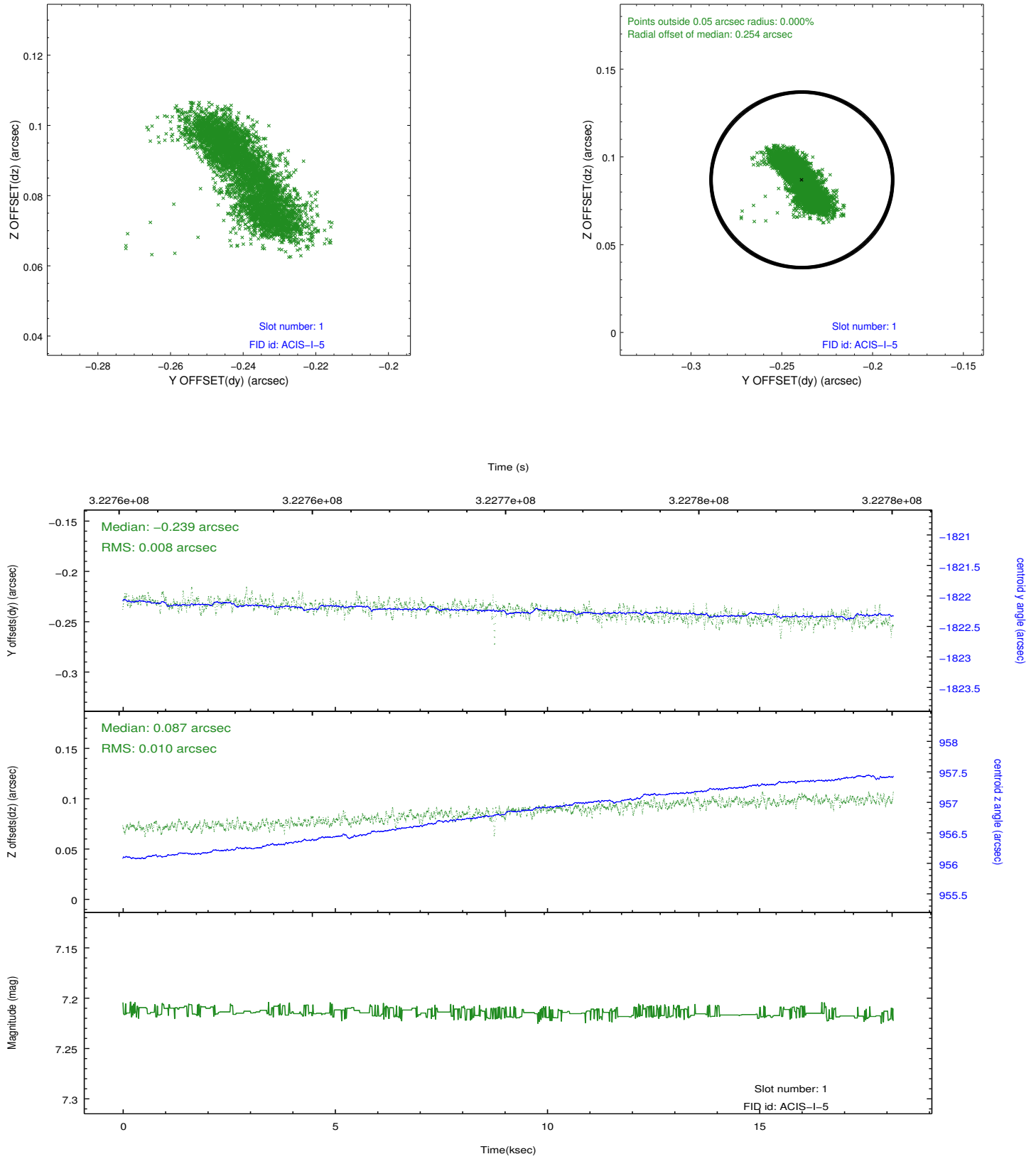


## 2.5 FID Slots

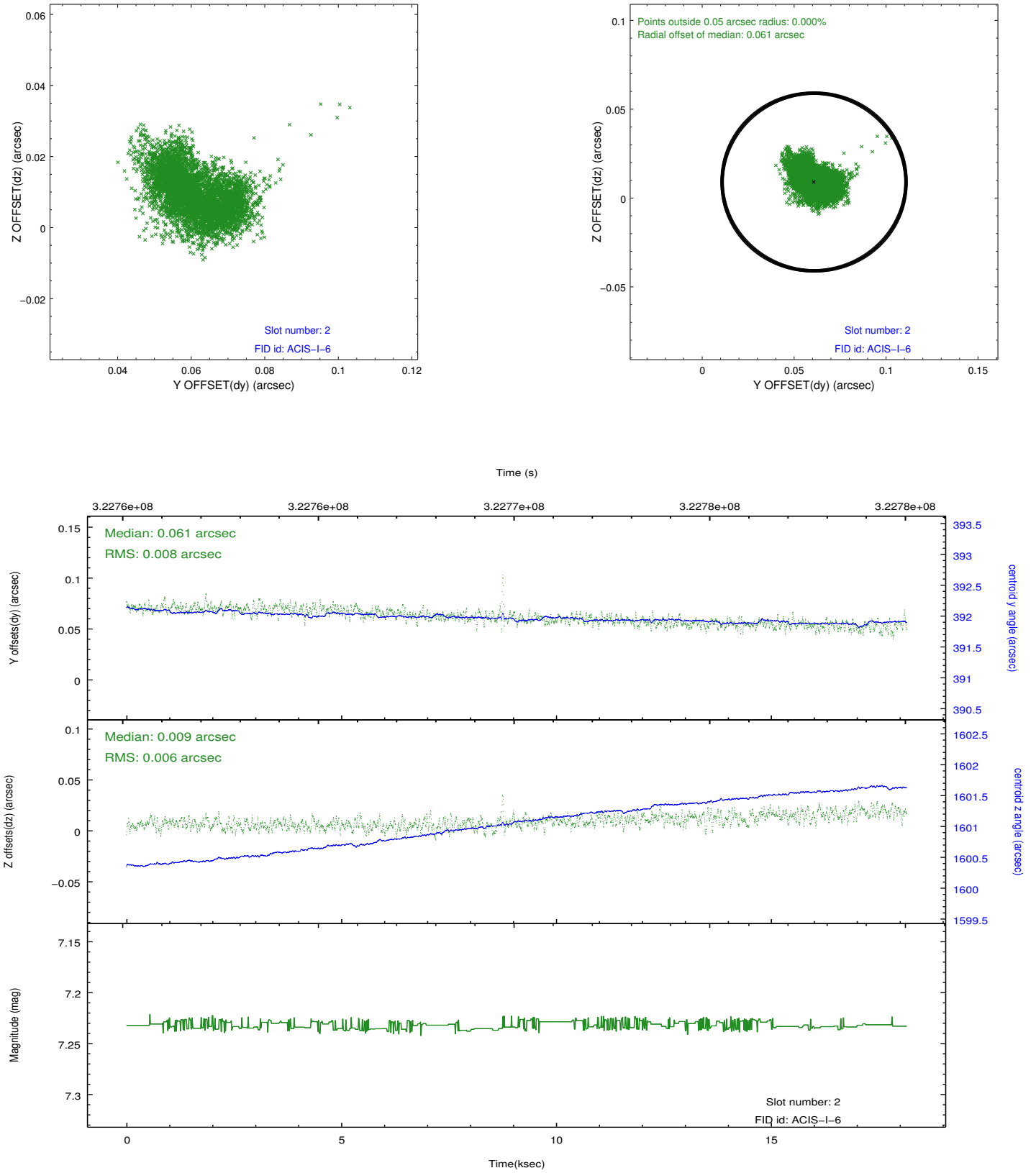
### 2.5.1 Slot 0



## 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)	2012.05.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.1567001

### A.2 Comments