

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9406 - L2 Version 2  
Chandra X-Ray Center

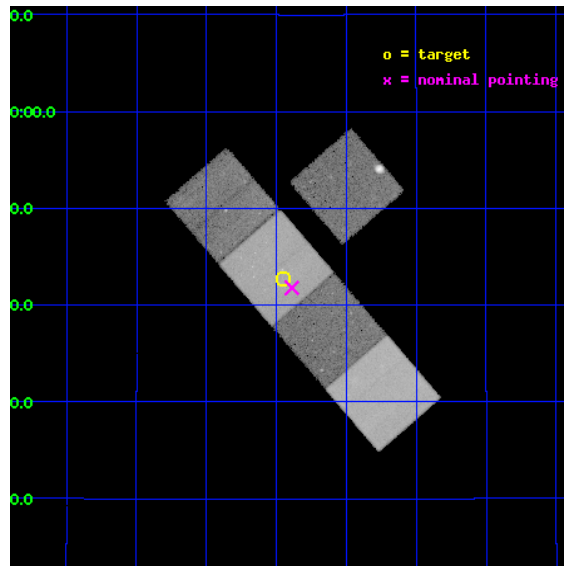
L2 Processing Date : May 13 2012

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# 1 Front

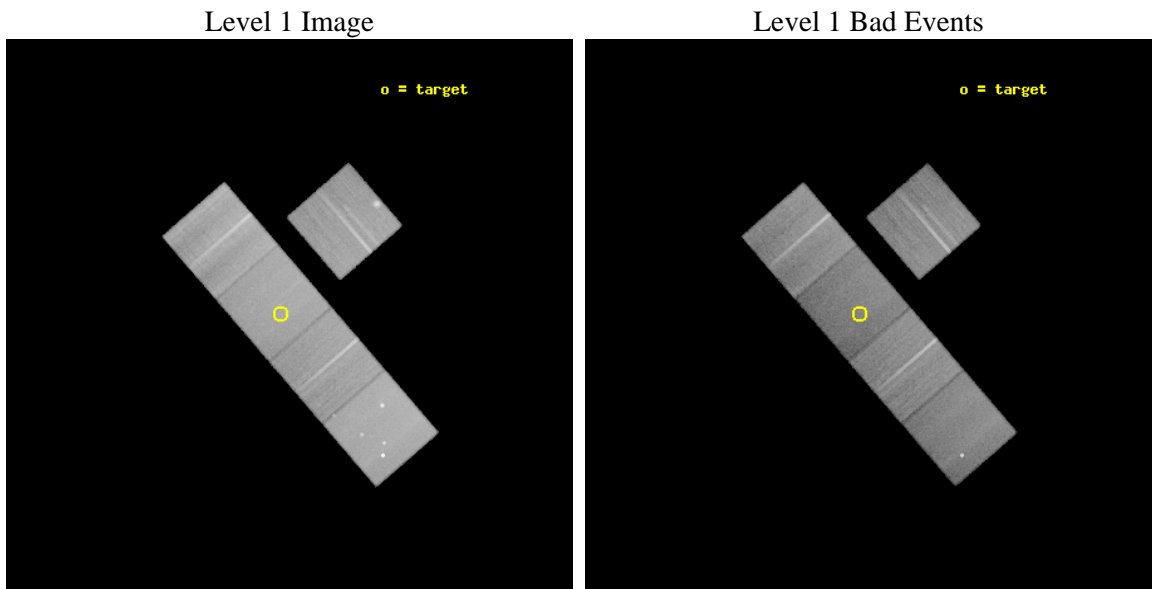
seq_num	800743	Sequence number
obs_id	9406	Observation id
title	Chandra/HST Coverage of Compact Galaxy Group Evolution	Proposal ti
observer	Dr. Sarah Gallagher	Principal investigator
object	HCG 59	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.1125	Observer's specified target RA [deg]
dec_targ	12.711111	Observer's specified target Dec [deg]
ra_nom	177.09728292072	Nominal RA [deg]
dec_nom	12.696485420416	Nominal Dec [deg]
roll_nom	229.13841949477	Nominal Roll [deg]
revision	2	Processing version of data
ontime	38911.200299263	Sum of GTIs [s]
livetime	38402.796821344	Livetime [s]
ontime3	38904.918298721	Sum of GTIs [s]
ontime5	38911.200299263	Sum of GTIs [s]
ontime6	38908.0593189	Sum of GTIs [s]
ontime7	38911.200299263	Sum of GTIs [s]
ontime8	38904.918288767	Sum of GTIs [s]
l2events	450954	Number of level 2 events



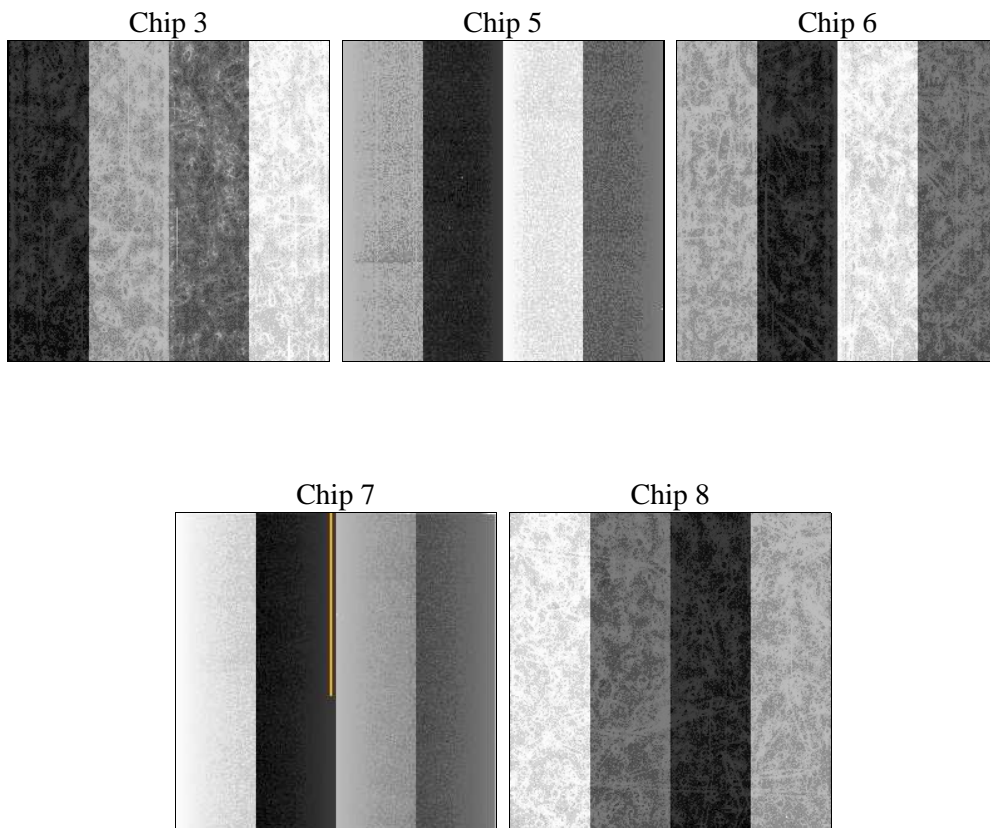
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38878.741000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	38911.200299263	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime3	38904.918298721	Sum of GTIs [s]
date	2012-05-13T01:13:25	Date and time of file creation	ontime5	38911.200299263	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	38908.0593189	Sum of GTIs [s]
			ontime7	38911.200299263	Sum of GTIs [s]
			ontime8	38904.918288767	Sum of GTIs [s]
			l1events	1815818	Number of level 1 events

### 2.1.4 Events

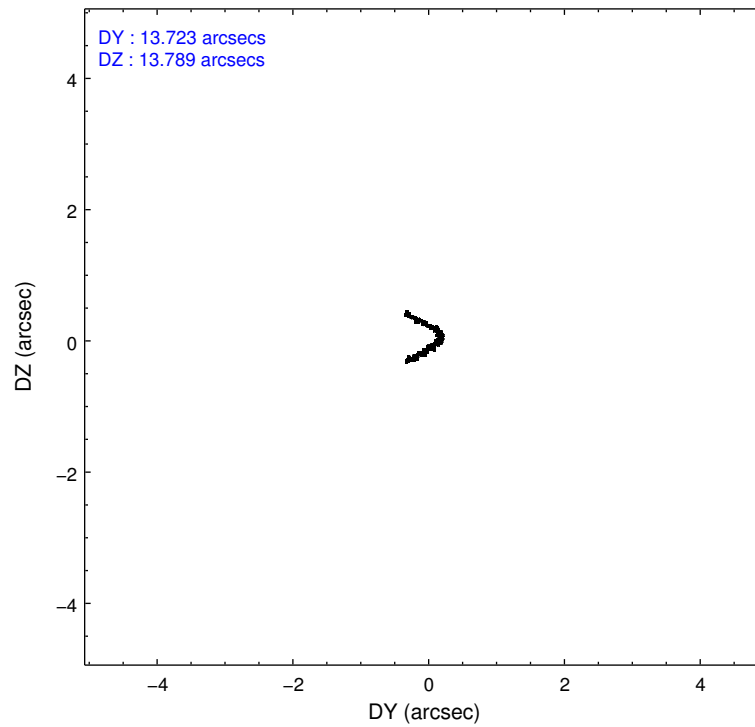
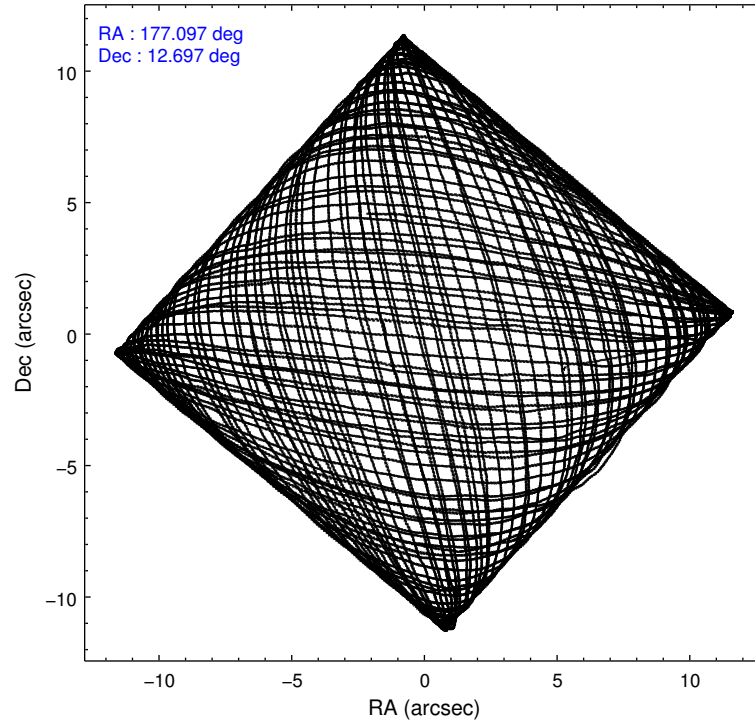
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	314421	443299	313195	350186	394717
rejected events	278182	221302	280578	191202	296497
rejected %	88%	49%	89%	54%	75%

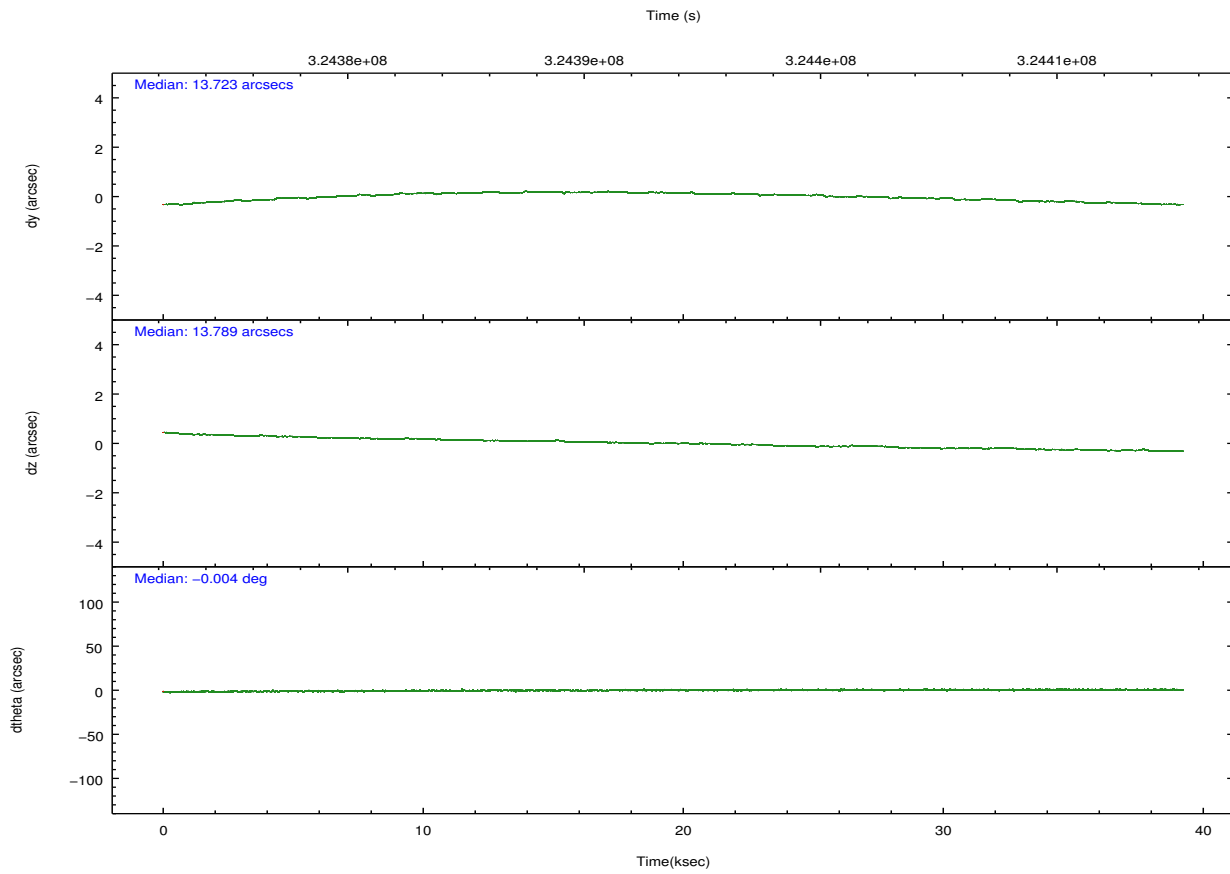
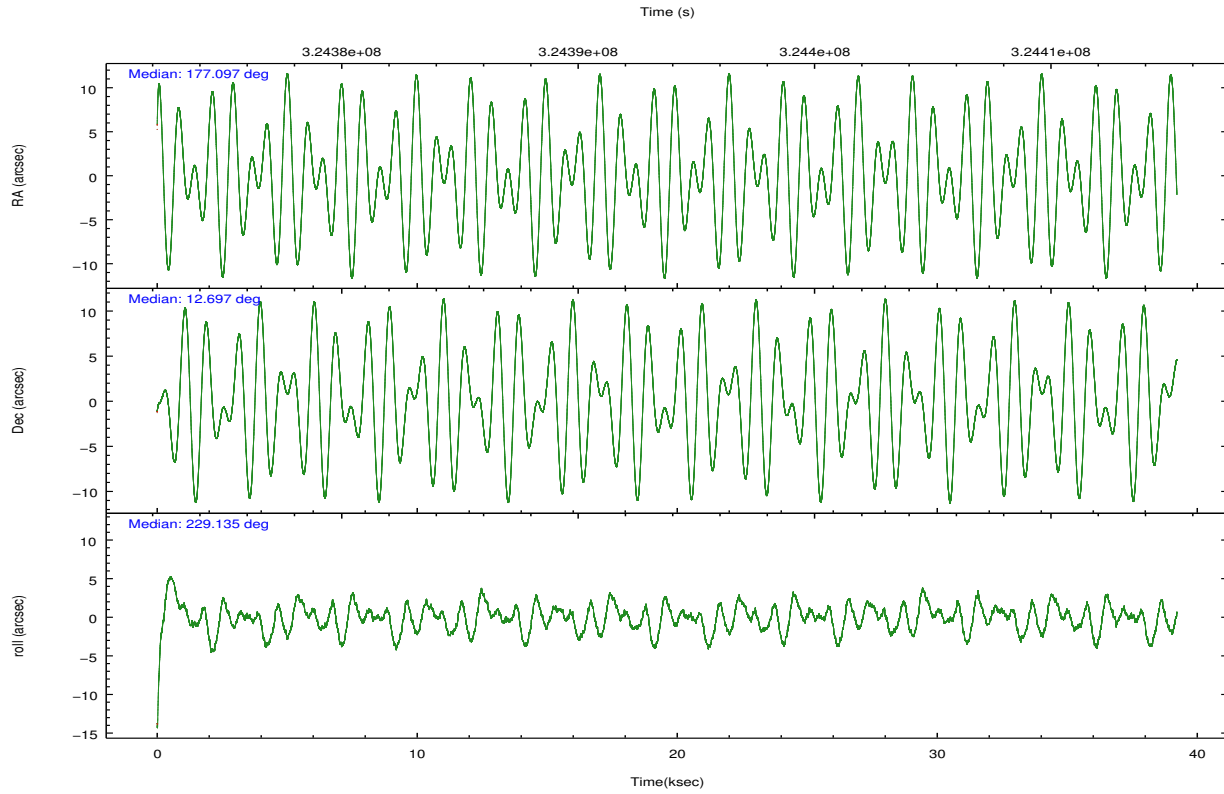
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	16486	23913	11352	15127	29700
	5%	5%	3%	4%	7%
grade 1 events	207	787	146	453	334
	0%	0%	0%	0%	0%
grade 2 events	6932	68412	7326	32246	22248
	2%	15%	2%	9%	5%
grade 3 events	3461	9052	3471	14435	10665
	1%	2%	1%	4%	2%
grade 4 events	3399	8607	3499	14257	9940
	1%	1%	1%	4%	2%
grade 5 events	12509	36579	12851	36792	18341
	3%	8%	4%	10%	4%
grade 6 events	5963	112061	6971	82949	25676
	1%	25%	2%	23%	6%
grade 7 events	265464	183888	267579	153927	277813
	84%	41%	85%	43%	70%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	177.102173	177.0972829207211	CCD I2 on	N	N
[deg] Pointing Dec	12.723406	12.69648542041618	CCD I3 on	O1	Y
[deg] Pointing Roll	228.980724	229.1384194947694	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	324374483.184000	324373479.35717	CCD S5 on	N	N
Observation start date	2008-04-12T08:00:18	2008-04-12T07:44:39	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	324413362.184000	324413586.07162	On-chip summing requested	N	N
Observation end date	2008-04-12T18:48:17	2008-04-12T18:53:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



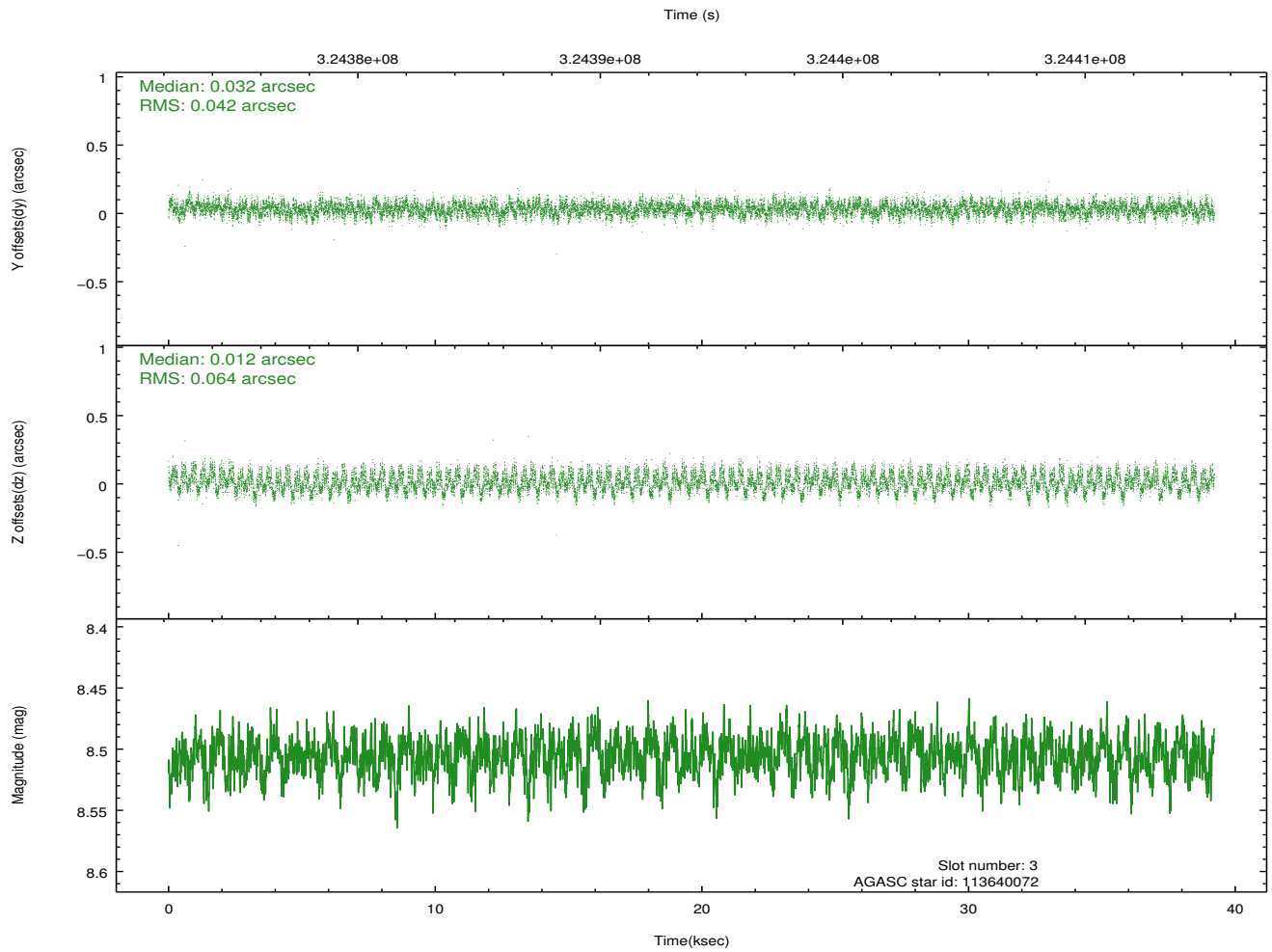
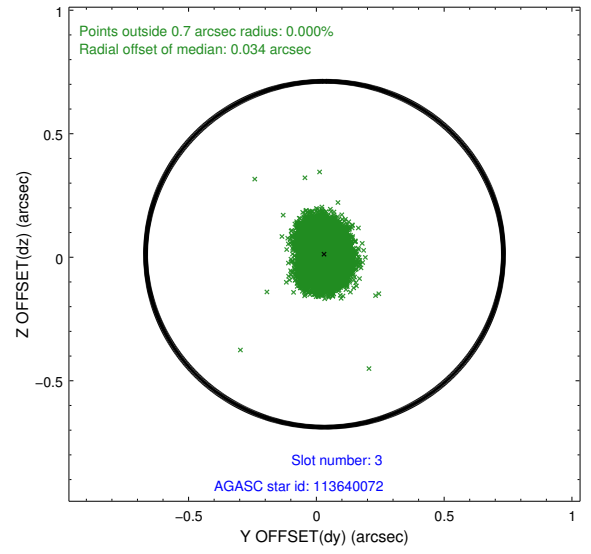
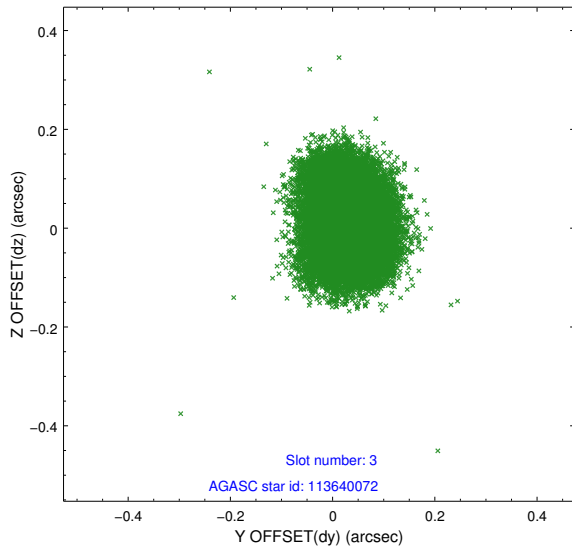


### Slot Statistics

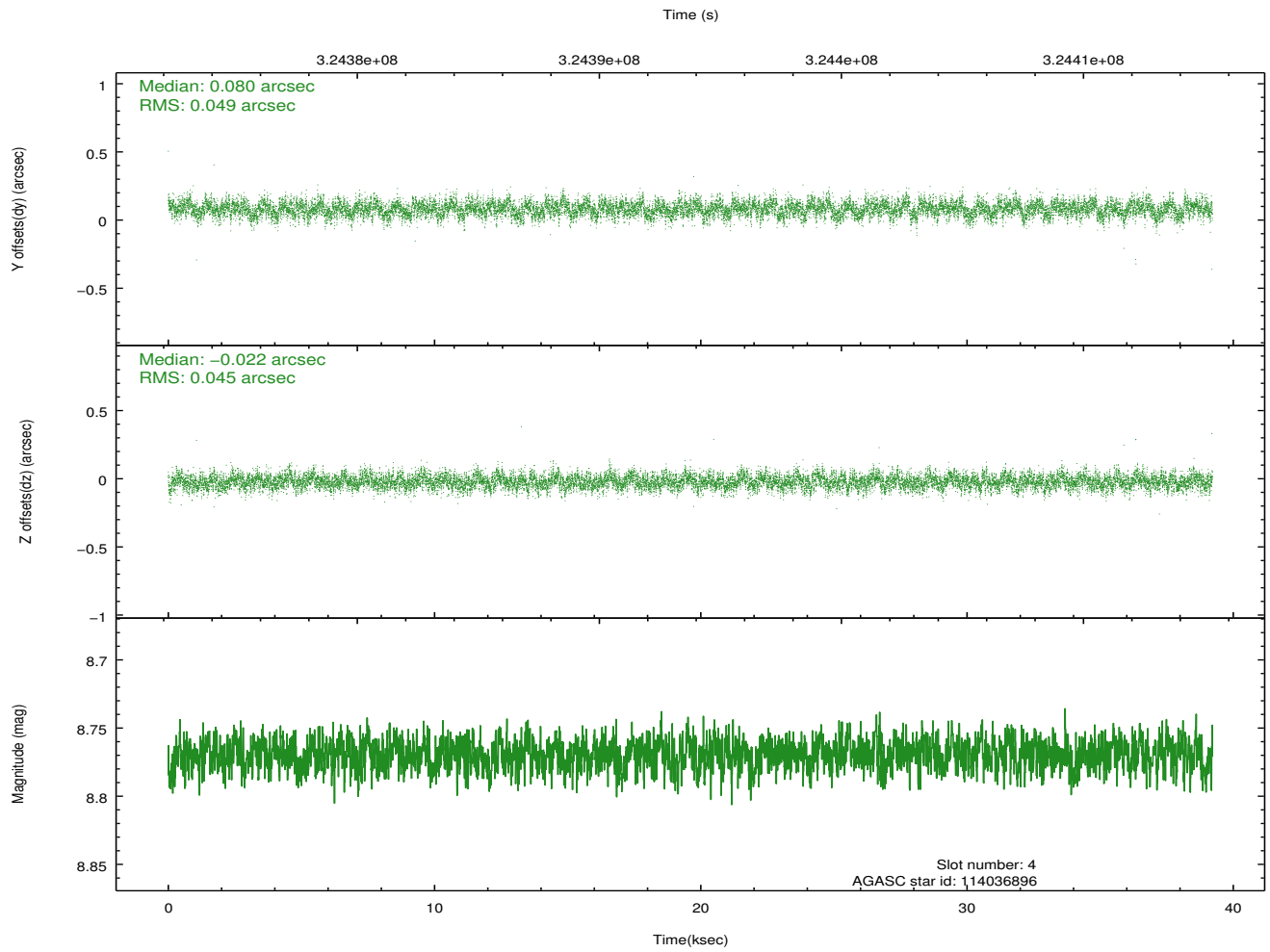
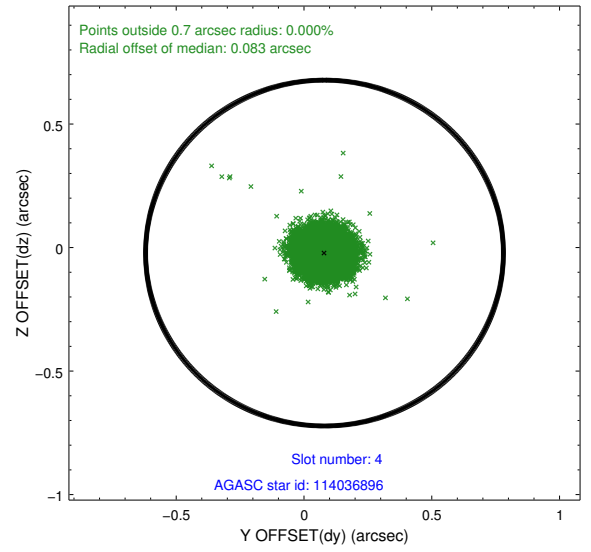
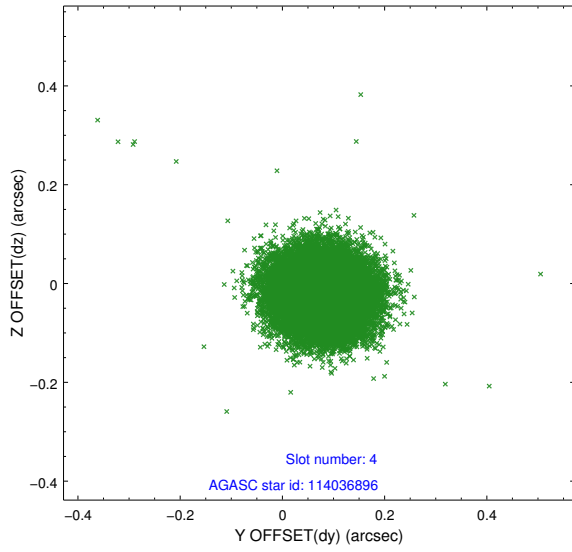
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.92	9566	-0.040	-0.024	0.010	0.017	0.000000	0.000000	-766.68	-1735.11
1	FID	ACIS-S-4	6.99	9566	0.144	0.026	0.010	0.022	0.000000	0.000000	2146.77	173.39
2	FID	ACIS-S-5	7.03	9566	-0.135	0.007	0.007	0.013	0.000000	0.000000	-1819.59	167.07
3	GUIDE	113640072	8.51	19119	0.032	0.012	0.083	0.130	177.262525	12.202641	1044.91	1655.89
4	GUIDE	114036896	8.77	19118	0.080	-0.022	0.070	0.113	176.495088	12.643285	1616.00	-1420.83
5	GUIDE	114037456	9.05	19112	-0.079	0.073	0.102	0.161	176.966223	13.456254	-1677.87	-2090.65
6	GUIDE	114037536	8.78	19121	-0.099	-0.071	0.074	0.119	177.560399	13.013670	-1844.22	525.93
7	GUIDE	114039232	8.22	19119	0.066	0.014	0.063	0.101	176.814178	12.664456	824.28	-624.03

## 2.4 Star Slots

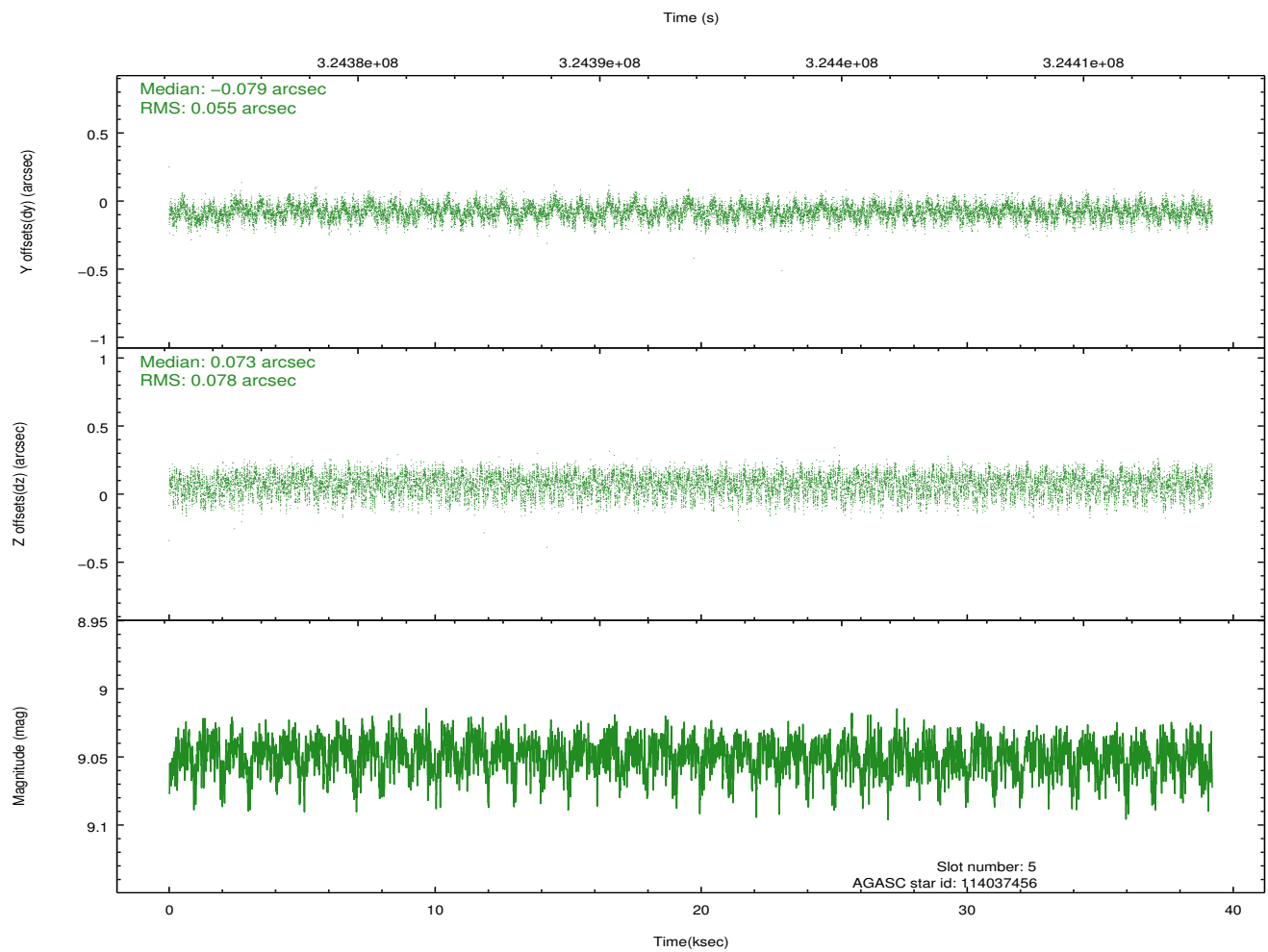
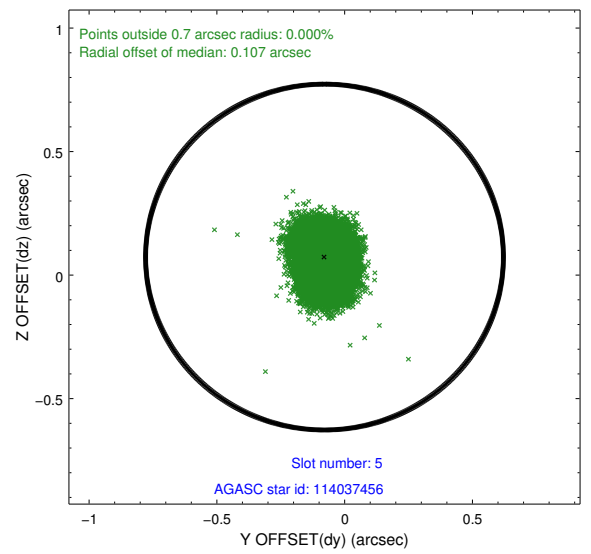
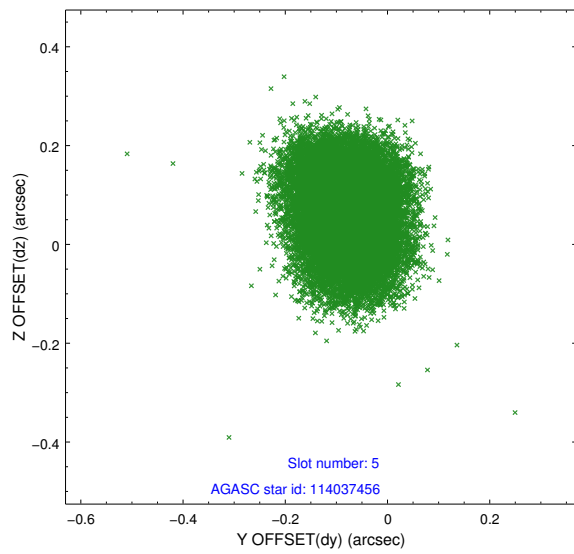
### 2.4.1 Slot 3



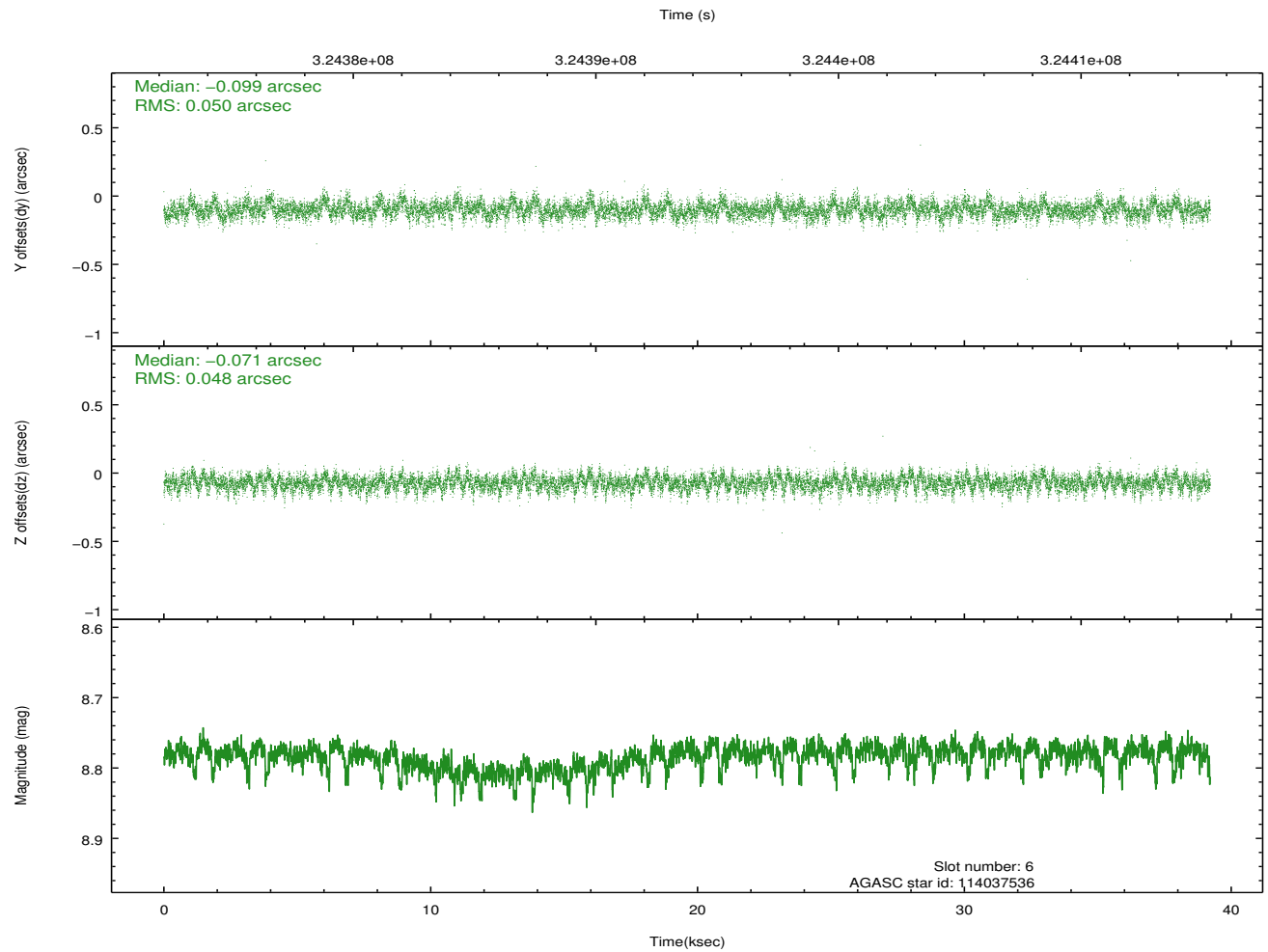
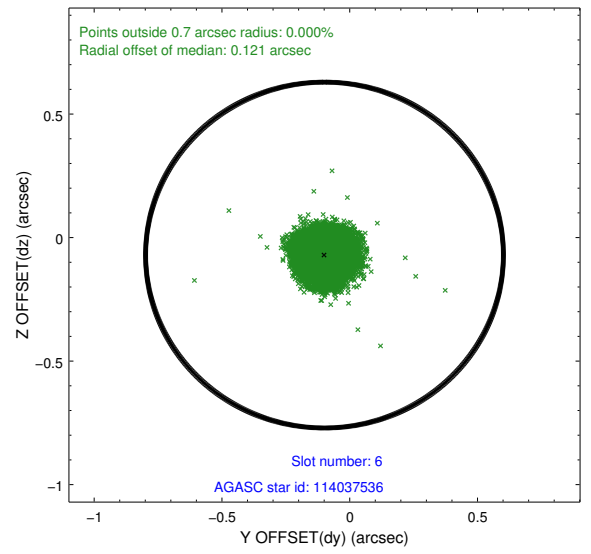
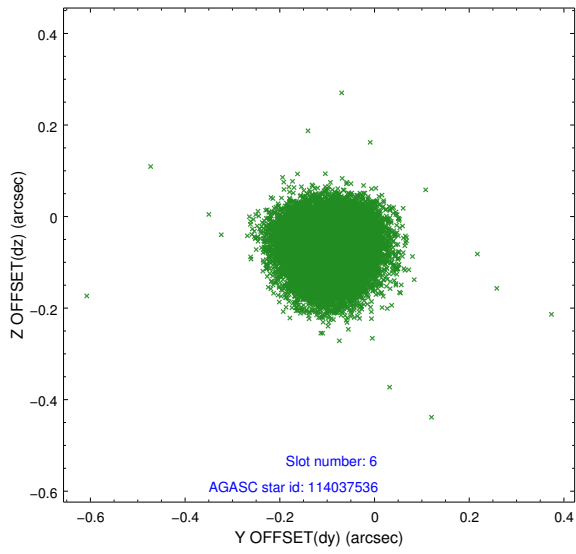
### 2.4.2 Slot 4



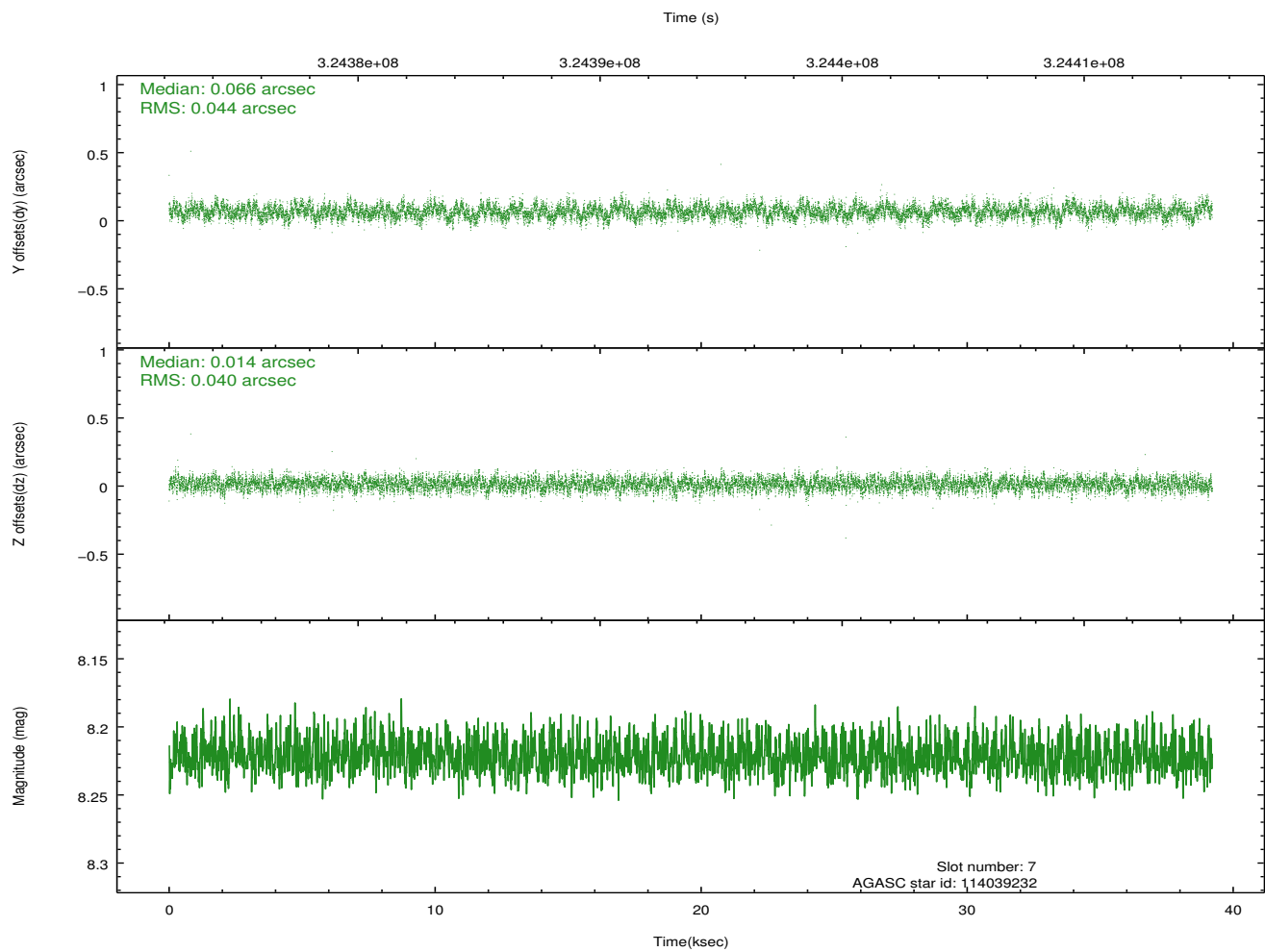
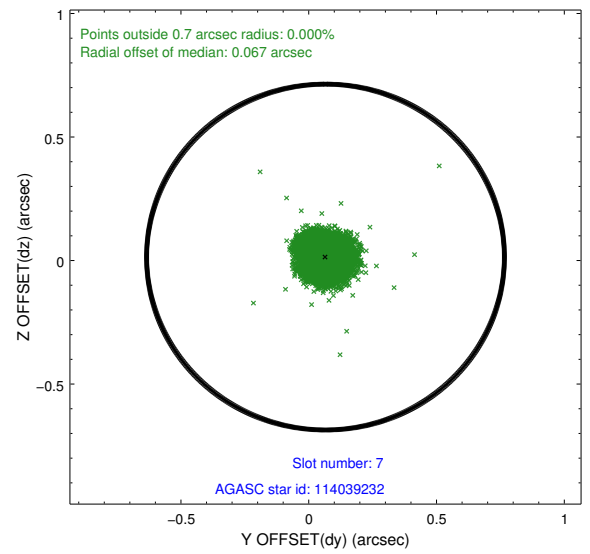
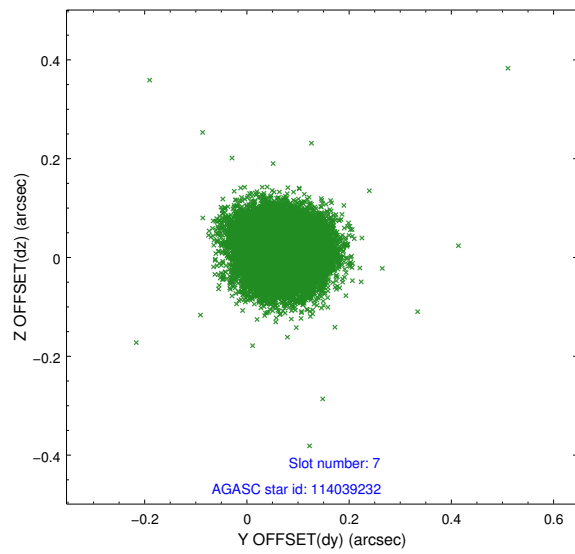
### 2.4.3 Slot 5



### 2.4.4 Slot 6

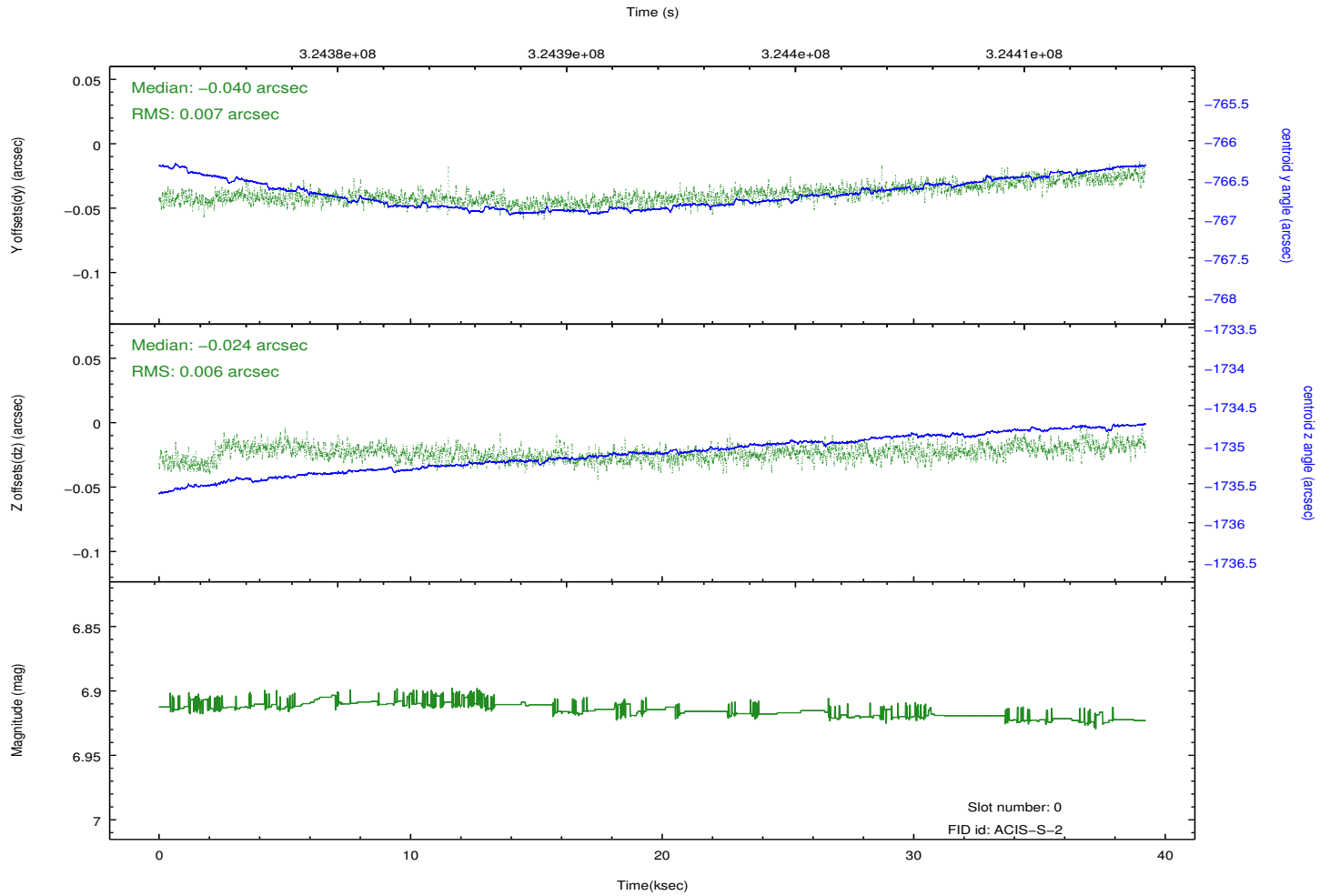
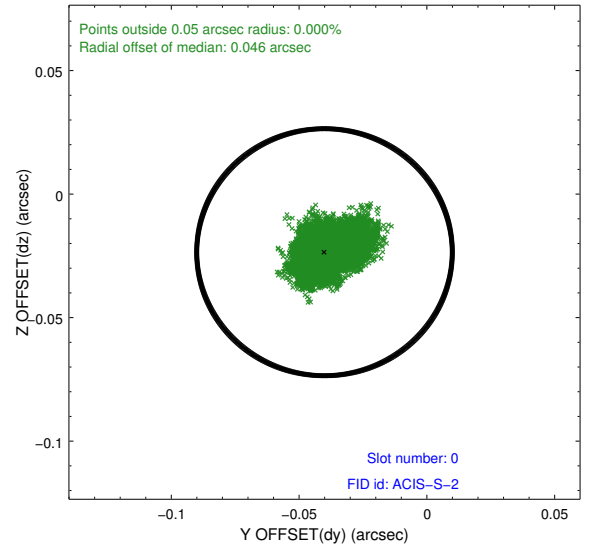
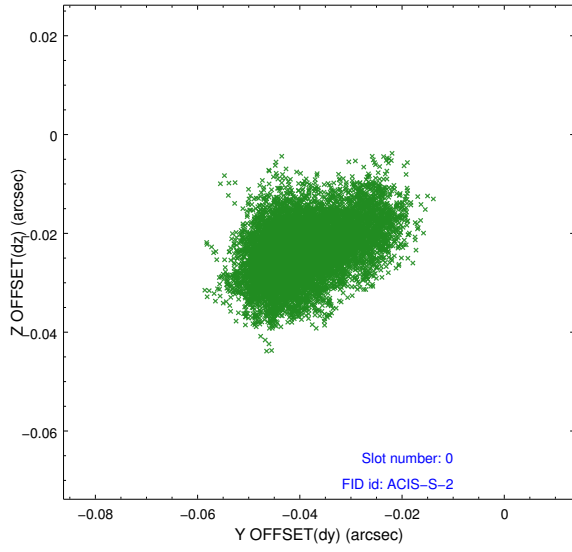


## 2.4.5 Slot 7

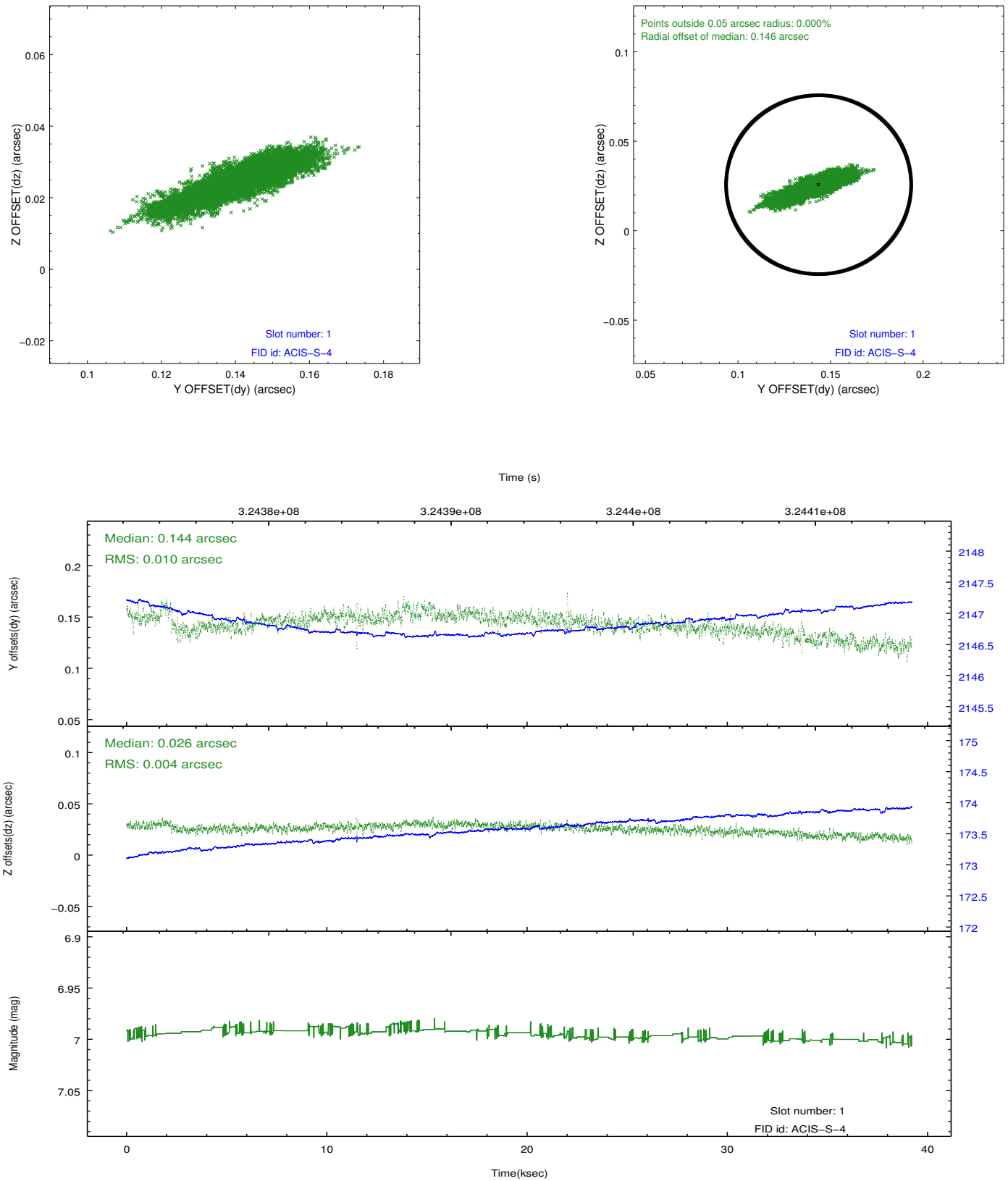


## 2.5 FID Slots

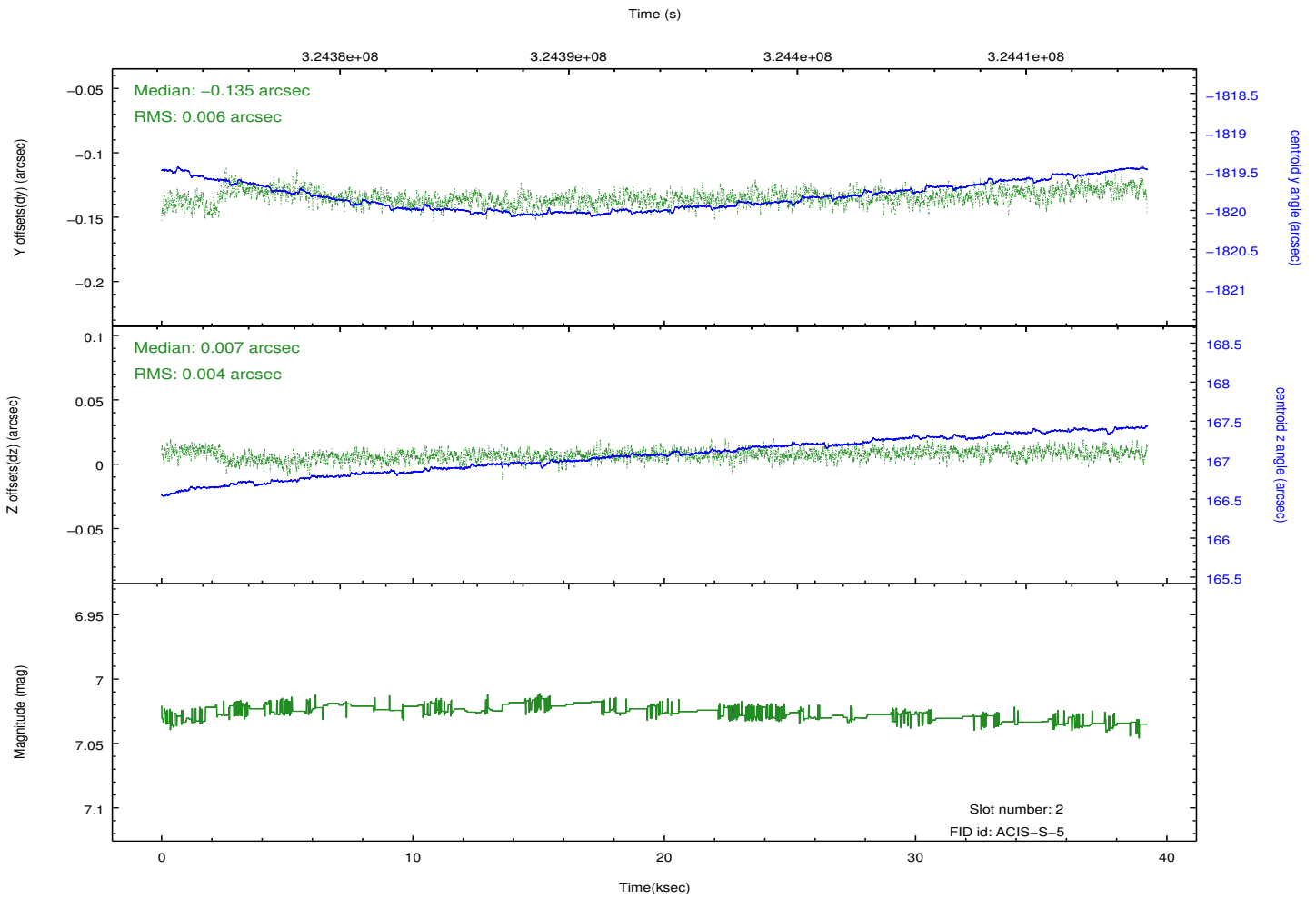
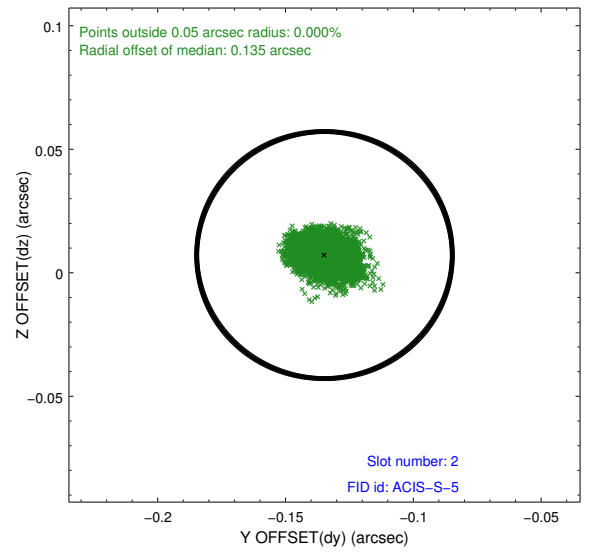
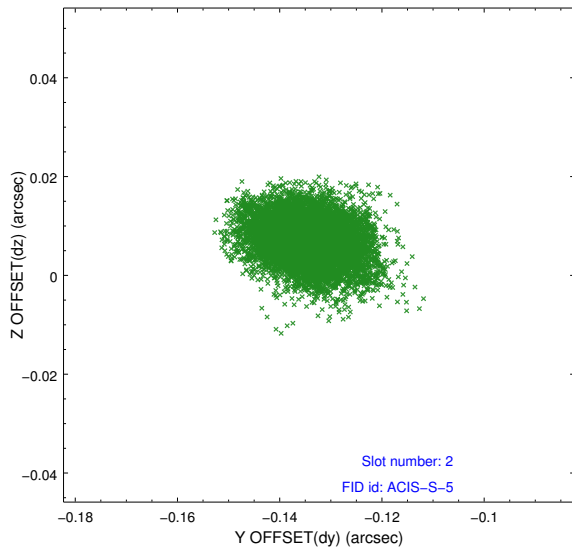
### 2.5.1 Slot 0



## 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)	2012.05.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.9112002

## A.2 Comments