

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3576 - L2 Version 3  
Chandra X-Ray Center

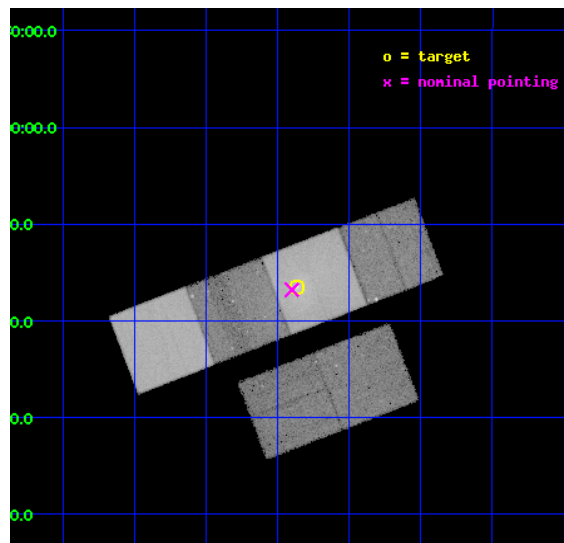
L2 Processing Date : Nov 8 2012

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# 1 Front

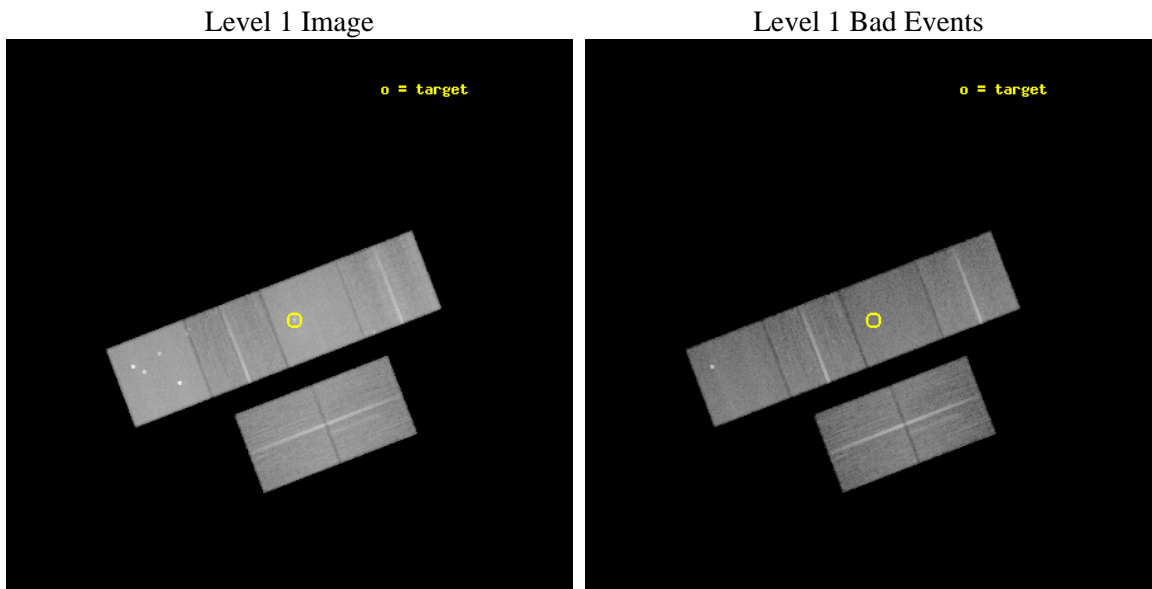
seq_num	800297	Sequence number
obs_id	3576	Observation id
title	SELF-INTERACTING DARK MATTER HALOS ON SUB-CLUSTER SCALES	Proposal
observer	Professor Gordon Garmire	Principal investigator
object	NGC 1132	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	43.216667	Observer's specified target RA [deg]
dec_targ	-1.274889	Observer's specified target Dec [deg]
ra_nom	43.224959970699	Nominal RA [deg]
dec_nom	-1.2798919879267	Nominal Dec [deg]
roll_nom	338.98496645197	Nominal Roll [deg]
revision	3	Processing version of data
ontime	40166.399850368	Sum of GTIs [s]
livetime	39657.788710161	Livetime [s]
ontime2	40166.399850368	Sum of GTIs [s]
ontime3	40166.399850368	Sum of GTIs [s]
ontime5	40166.399850368	Sum of GTIs [s]
ontime6	40166.399850368	Sum of GTIs [s]
ontime7	40166.399850368	Sum of GTIs [s]
ontime8	40166.399850368	Sum of GTIs [s]
l2events	433449	Number of level 2 events



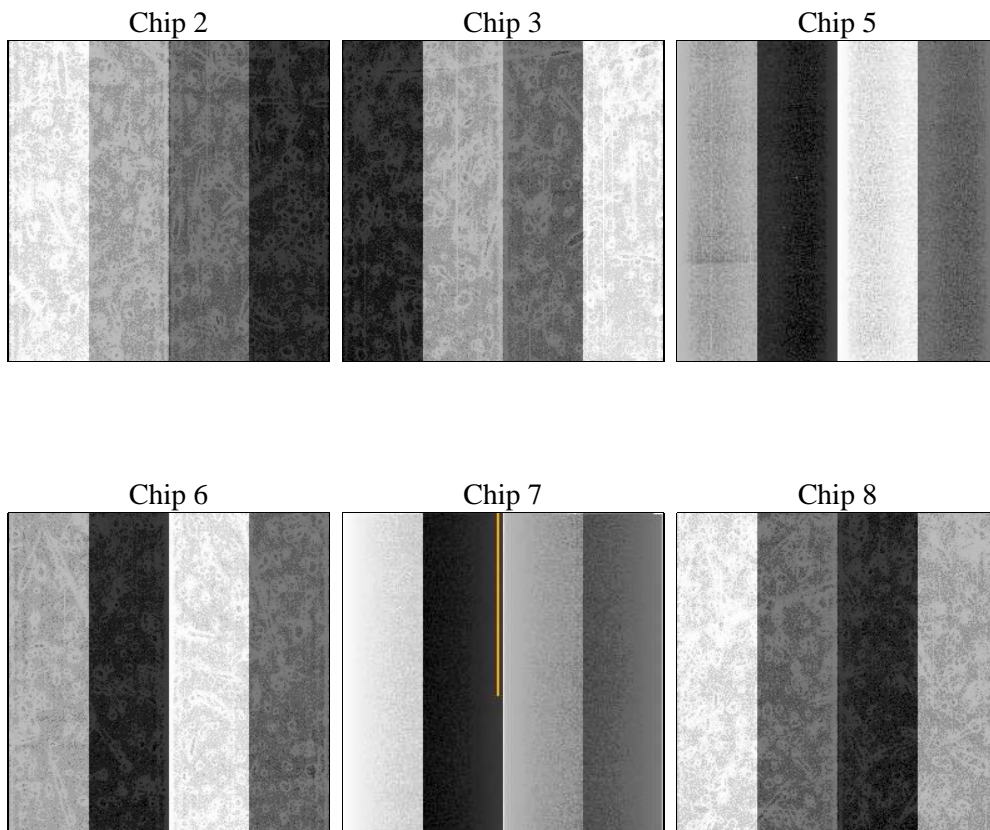
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	40166.399850368	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	40166.399850368	Sum of GTIs [s]
date	2012-11-08T03:18:27	Date and time of file creation	ontime3	40166.399850368	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	40166.399850368	Sum of GTIs [s]
			ontime6	40166.399850368	Sum of GTIs [s]
			ontime7	40166.399850368	Sum of GTIs [s]
			ontime8	40166.399850368	Sum of GTIs [s]
			l1events	1615732	Number of level 1 events

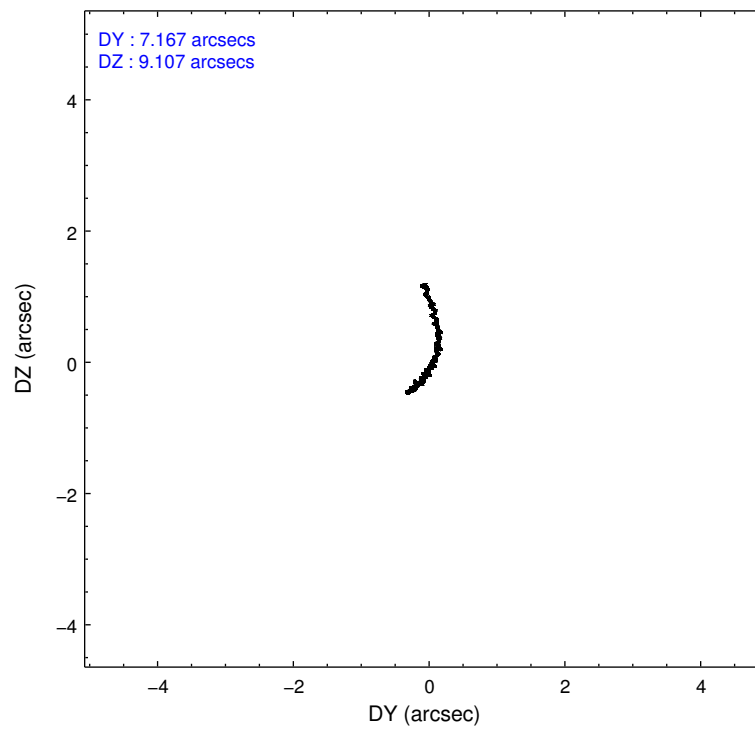
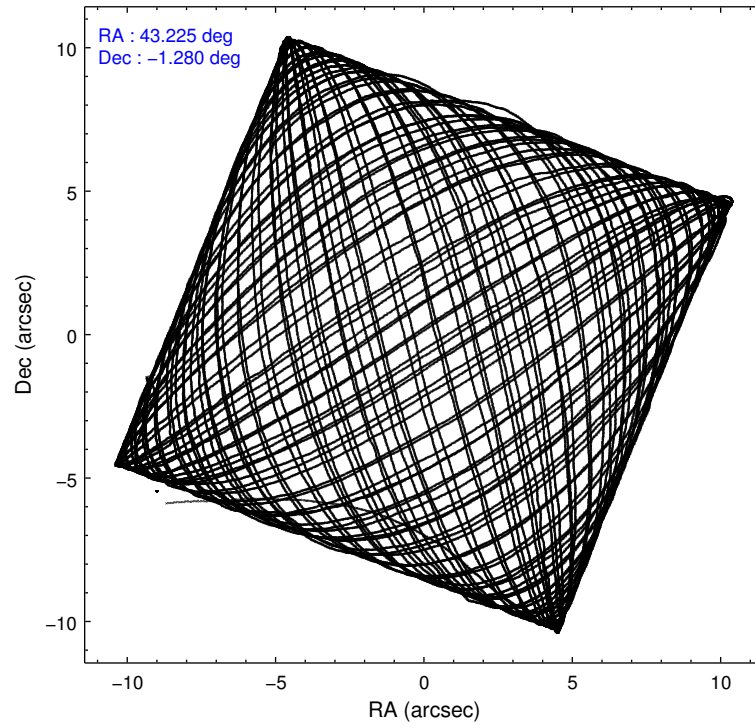
### 2.1.4 Events

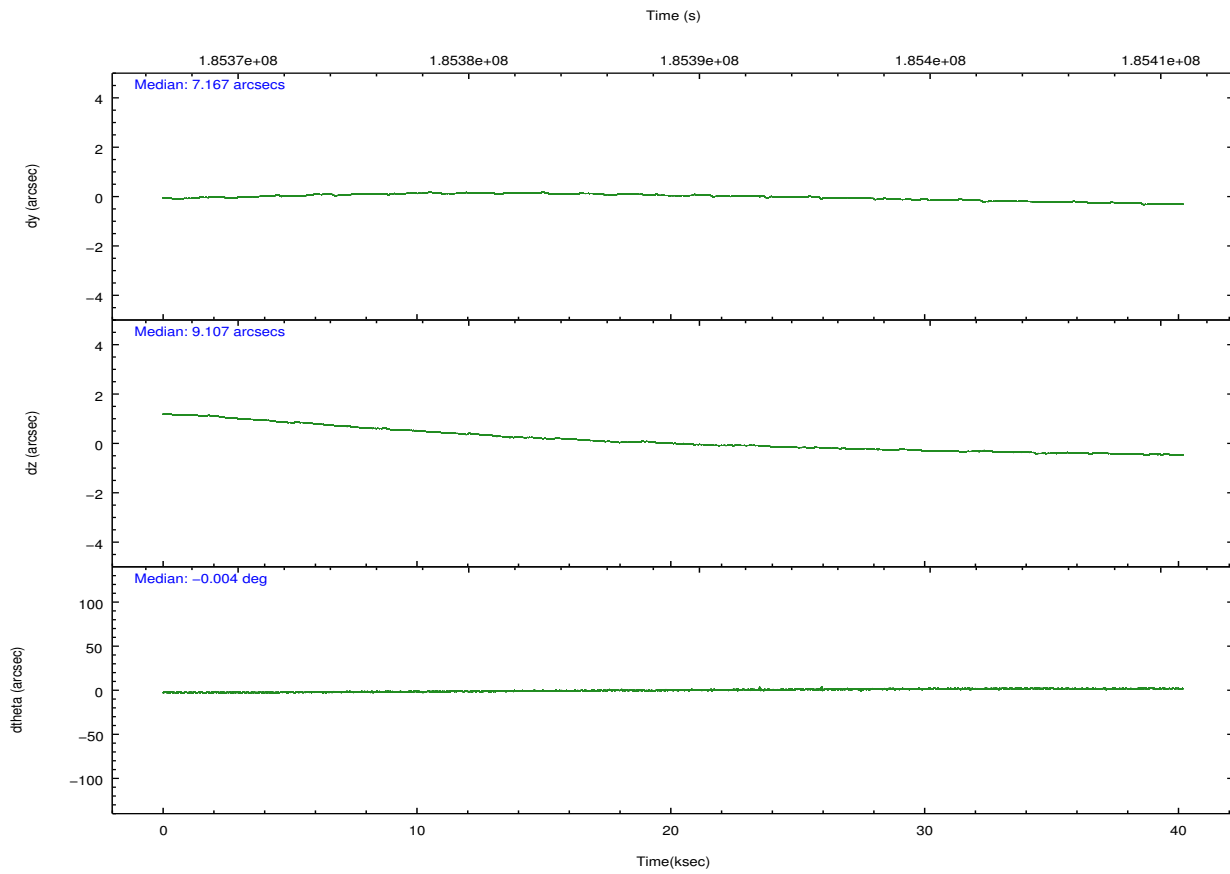
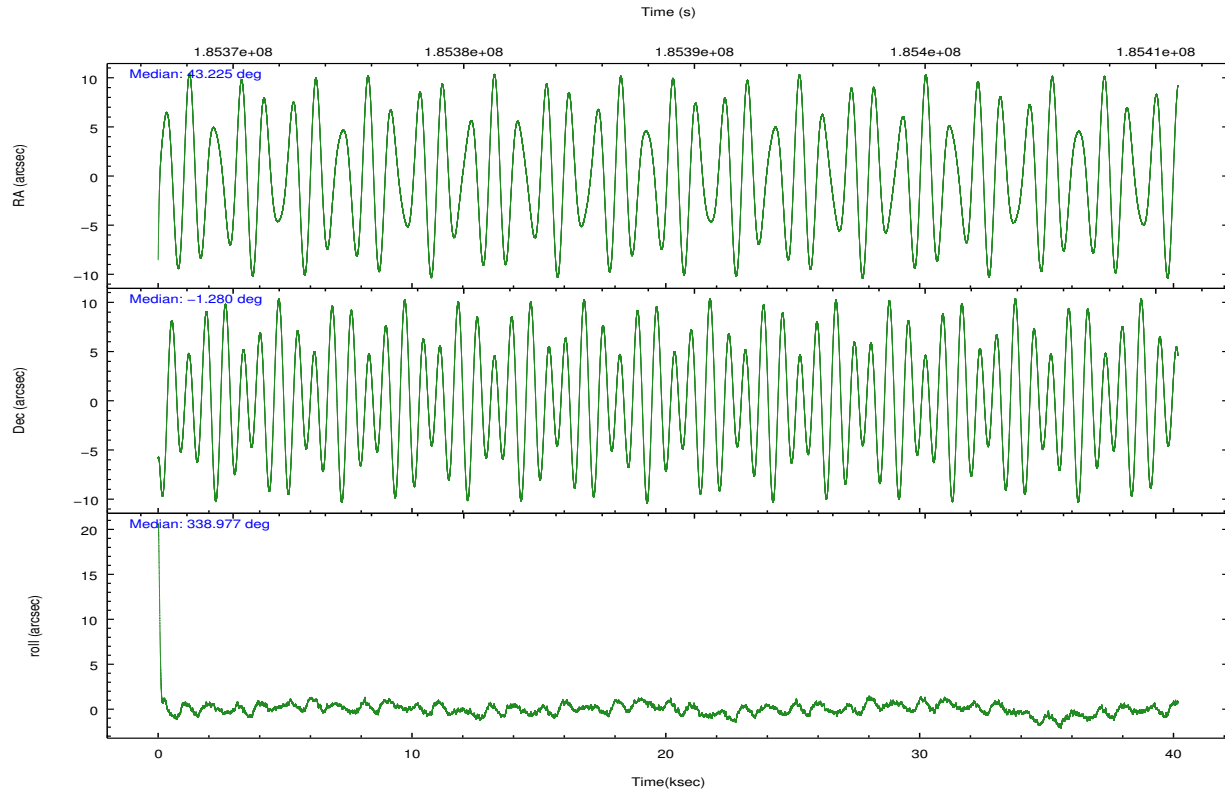
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	214859	209063	353260	223110	326401	289039	grade 0 events	14795	14647	31027	18656	19639	32681
rejected events	183160	177013	175894	184819	166893	205320		6%	7%	8%	8%	6%	11%
rejected %	85%	84%	49%	82%	51%	71%	grade 1 events	155	131	434	139	268	278
								0%	0%	0%	0%	0%	0%
							grade 2 events	6574	7018	50043	8300	32704	15165
								3%	3%	14%	3%	10%	5%
							grade 3 events	2527	2497	7223	2657	14467	9994
								1%	1%	2%	1%	4%	3%
							grade 4 events	2544	2542	6943	2580	14499	9440
								1%	1%	1%	1%	4%	3%
							grade 5 events	8466	9247	23749	9750	27146	12838
								3%	4%	6%	4%	8%	4%
							grade 6 events	5273	5365	82262	6116	78300	16504
								2%	2%	23%	2%	23%	5%
							grade 7 events	174525	167616	151579	174912	139378	192139
								81%	80%	42%	78%	42%	66%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	43.198100	43.22495997069942	Subarray requested	NONE	NONE
[deg] Pointing Dec	-1.284497	-1.279891987926731	Alternating exposures requested	N	N
[deg] Pointing Roll	338.827733	338.9849664519746	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	185368942.184000	185367868.32719			
Observation start date	2003-11-16T11:21:18	2003-11-16T11:04:28			
[s] Observation end time (MET)	185408942.184000	185409619.654			
Observation end date	2003-11-16T22:27:58	2003-11-16T22:40:19			
Read mode	TIMED	TIMED			

## 2.3 Aspect



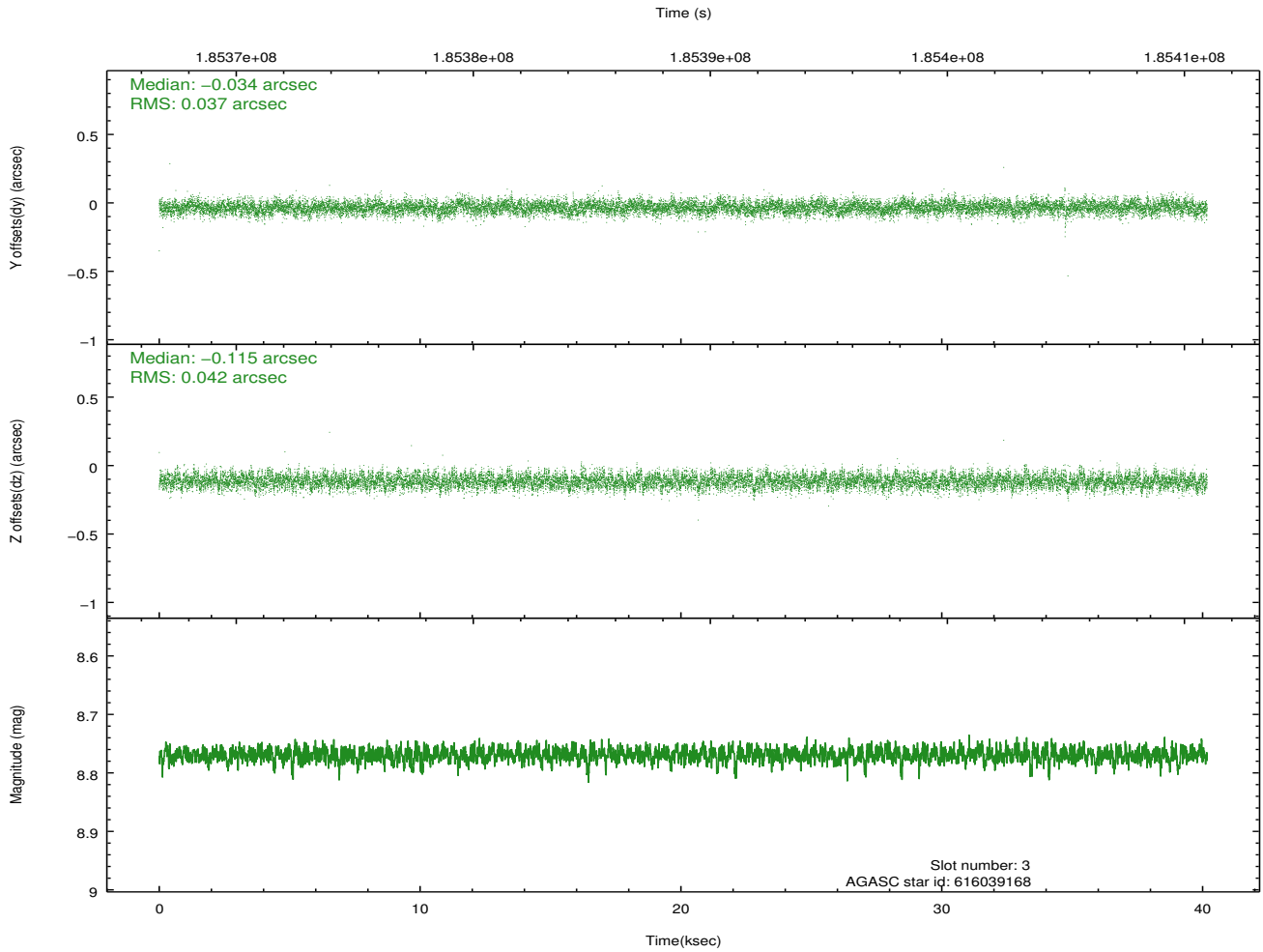
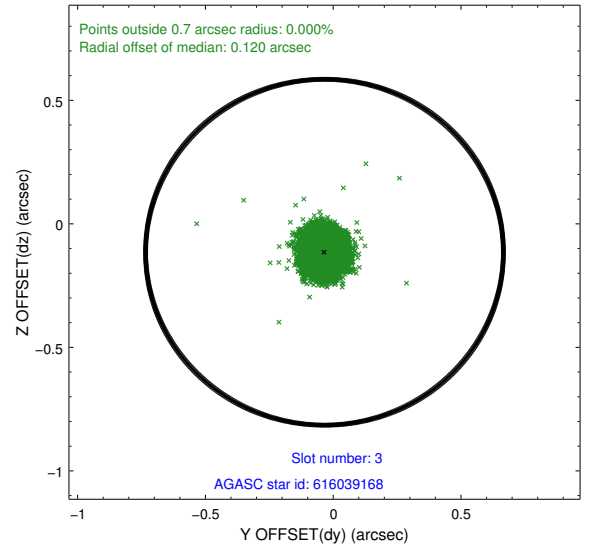
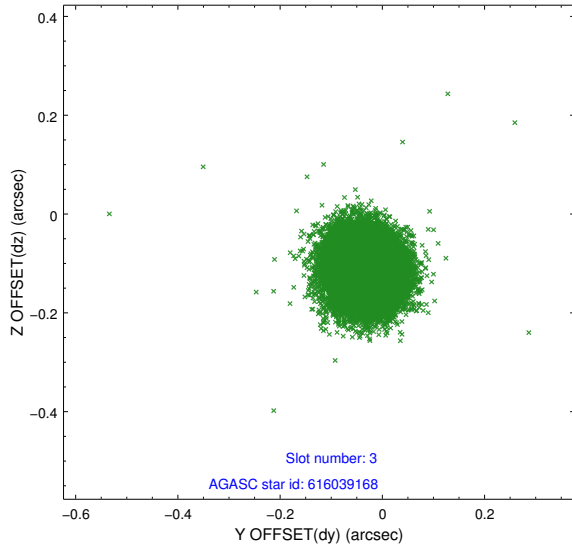


### Slot Statistics

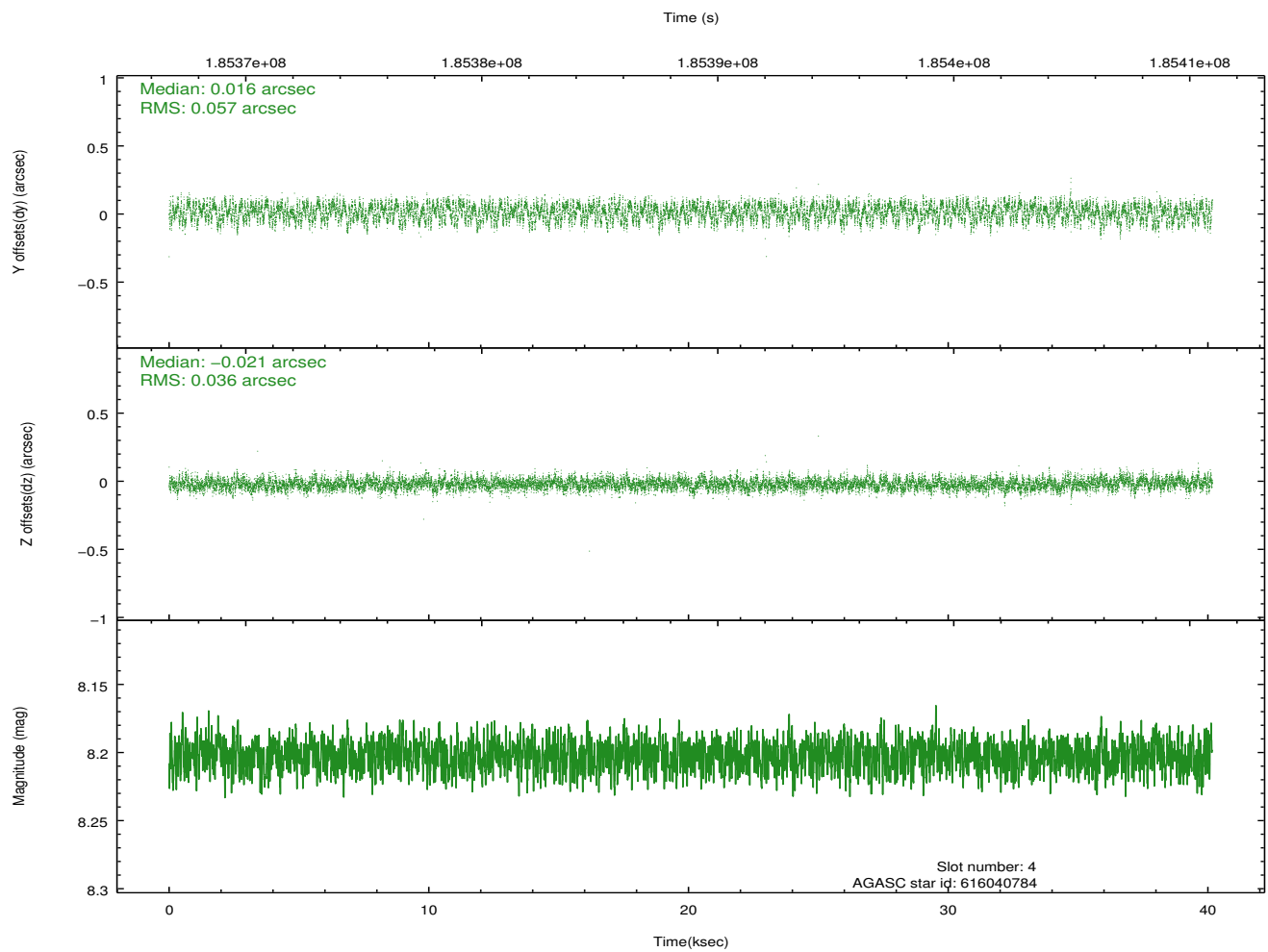
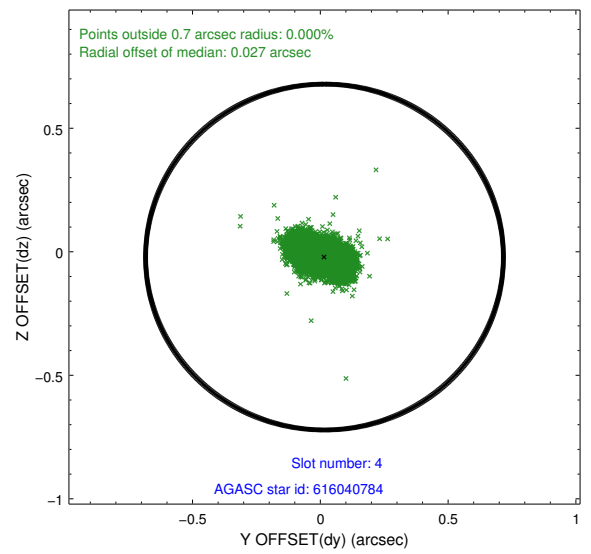
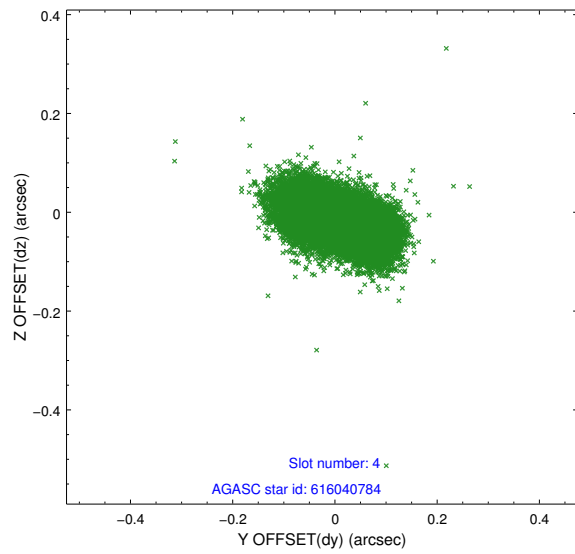
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	9798	-0.031	-0.026	0.014	0.026	0.000000	0.000000	-759.91	-1730.50
1	FID	ACIS-S-4	7.20	9799	0.055	0.022	0.009	0.019	0.000000	0.000000	2153.43	178.04
2	FID	ACIS-S-5	7.23	9799	-0.055	0.014	0.013	0.026	0.000000	0.000000	-1812.77	171.69
3	GUIDE	616039168	8.77	19584	-0.034	-0.115	0.059	0.095	43.286541	-1.259161	264.15	200.07
4	GUIDE	616040784	8.20	19595	0.016	-0.021	0.071	0.117	43.048598	-0.650379	-1326.39	1934.32
5	GUIDE	616041600	7.58	19597	-0.046	0.069	0.059	0.102	42.861991	-0.687877	-1903.96	1566.16
6	GUIDE	616041760	8.38	19593	0.078	0.043	0.057	0.093	43.423751	-1.458435	983.61	-290.13
7	GUIDE	616041576	7.38	19597	-0.016	0.026	0.051	0.081	43.396487	-1.641039	1129.63	-938.68

## 2.4 Star Slots

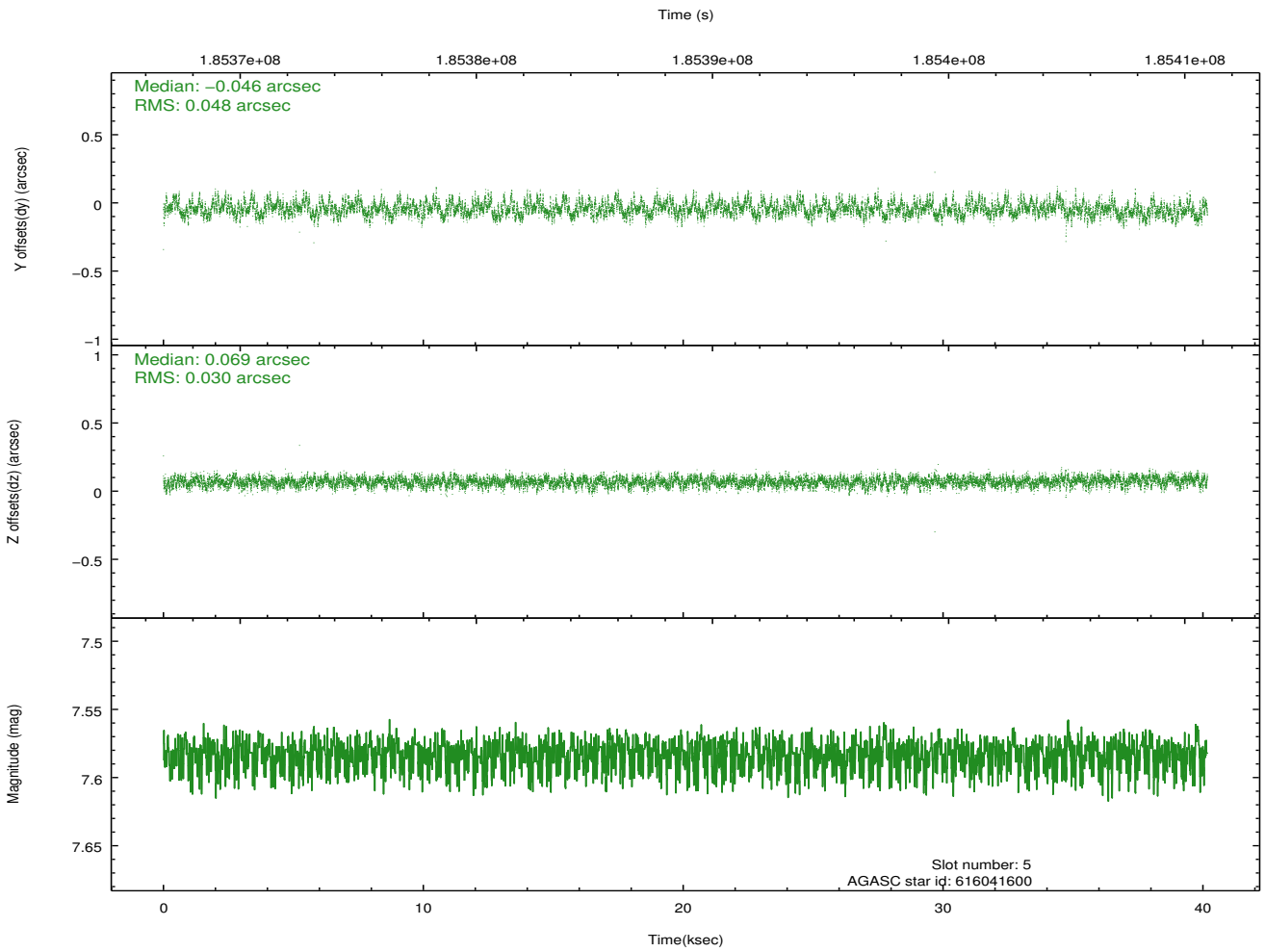
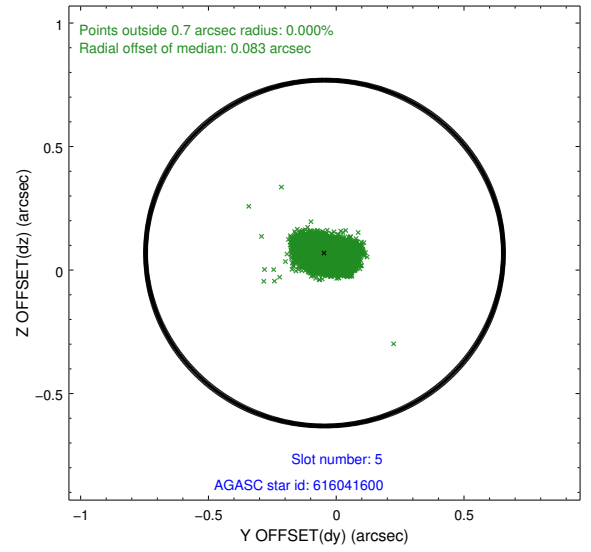
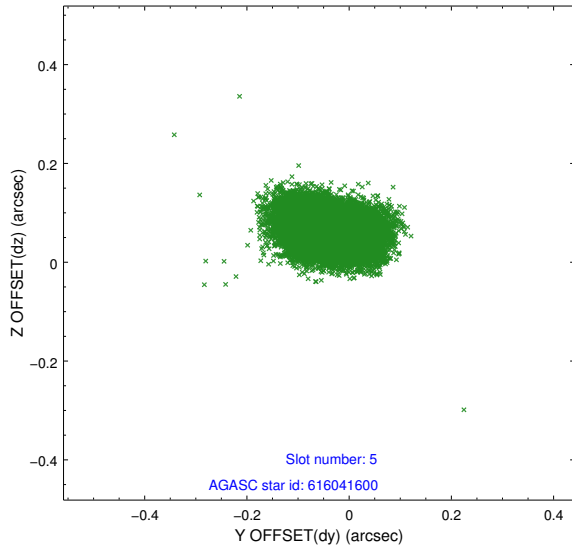
### 2.4.1 Slot 3



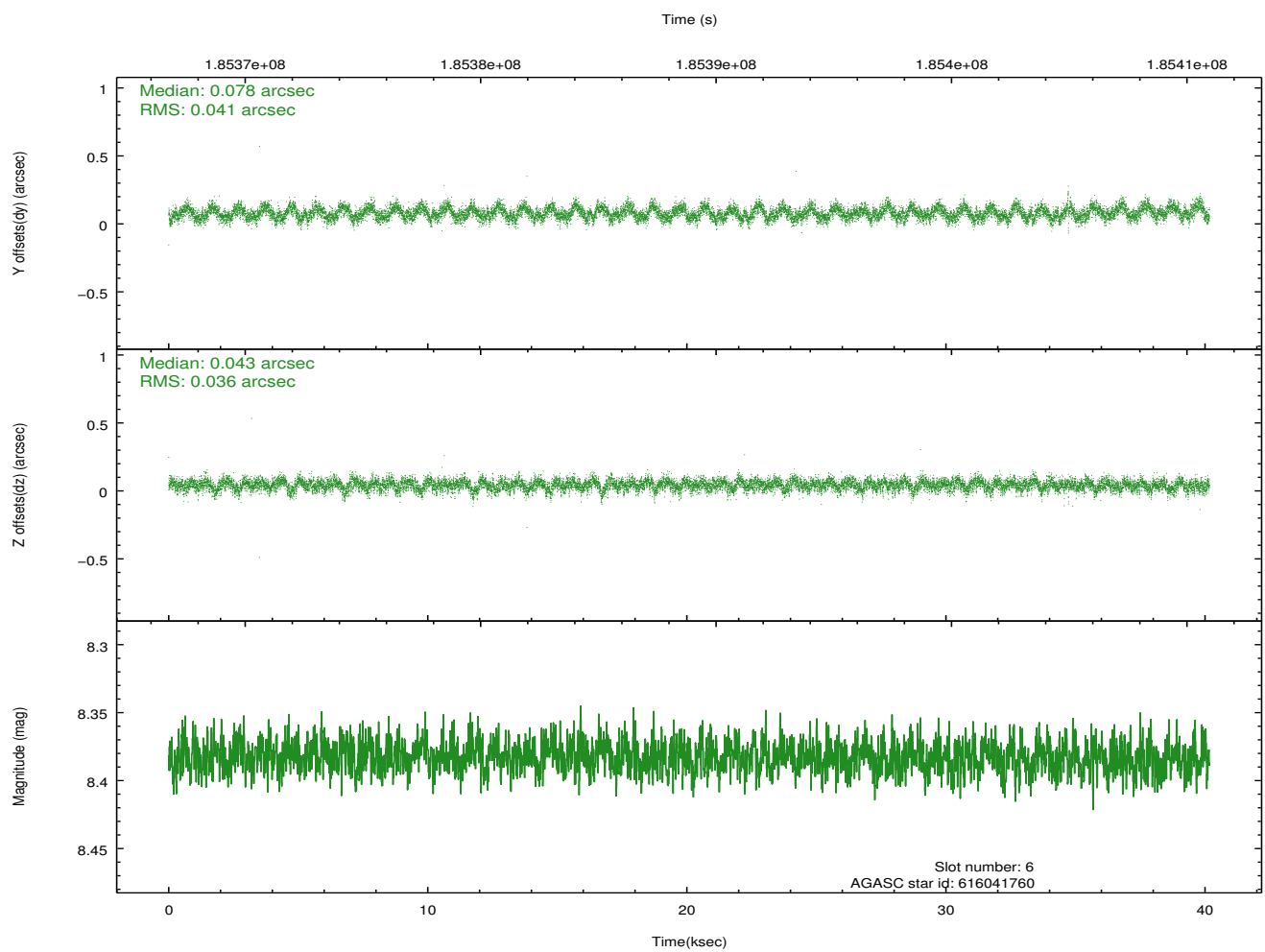
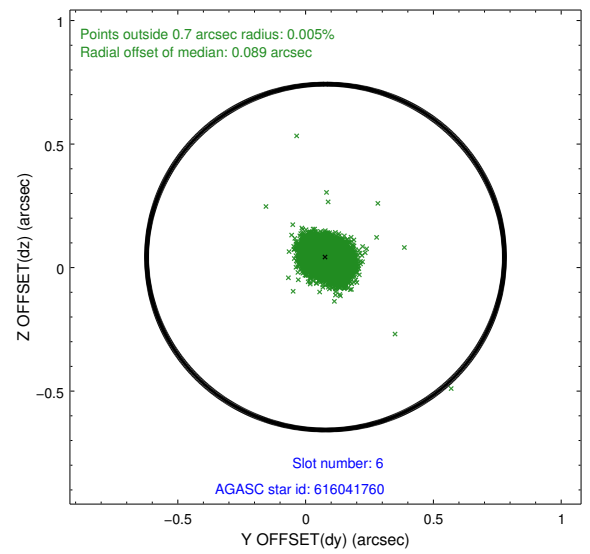
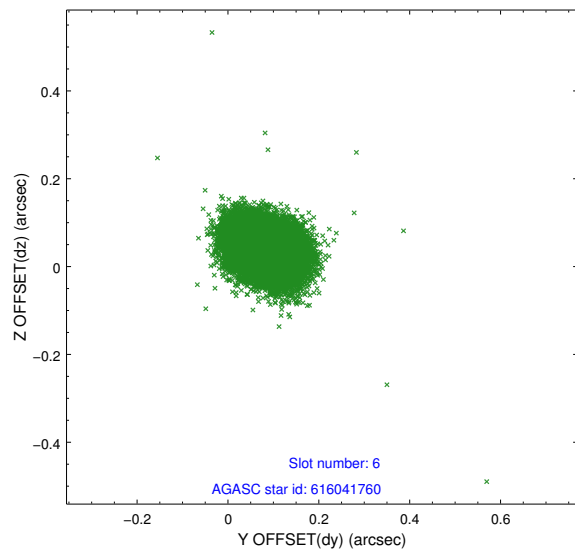
## 2.4.2 Slot 4



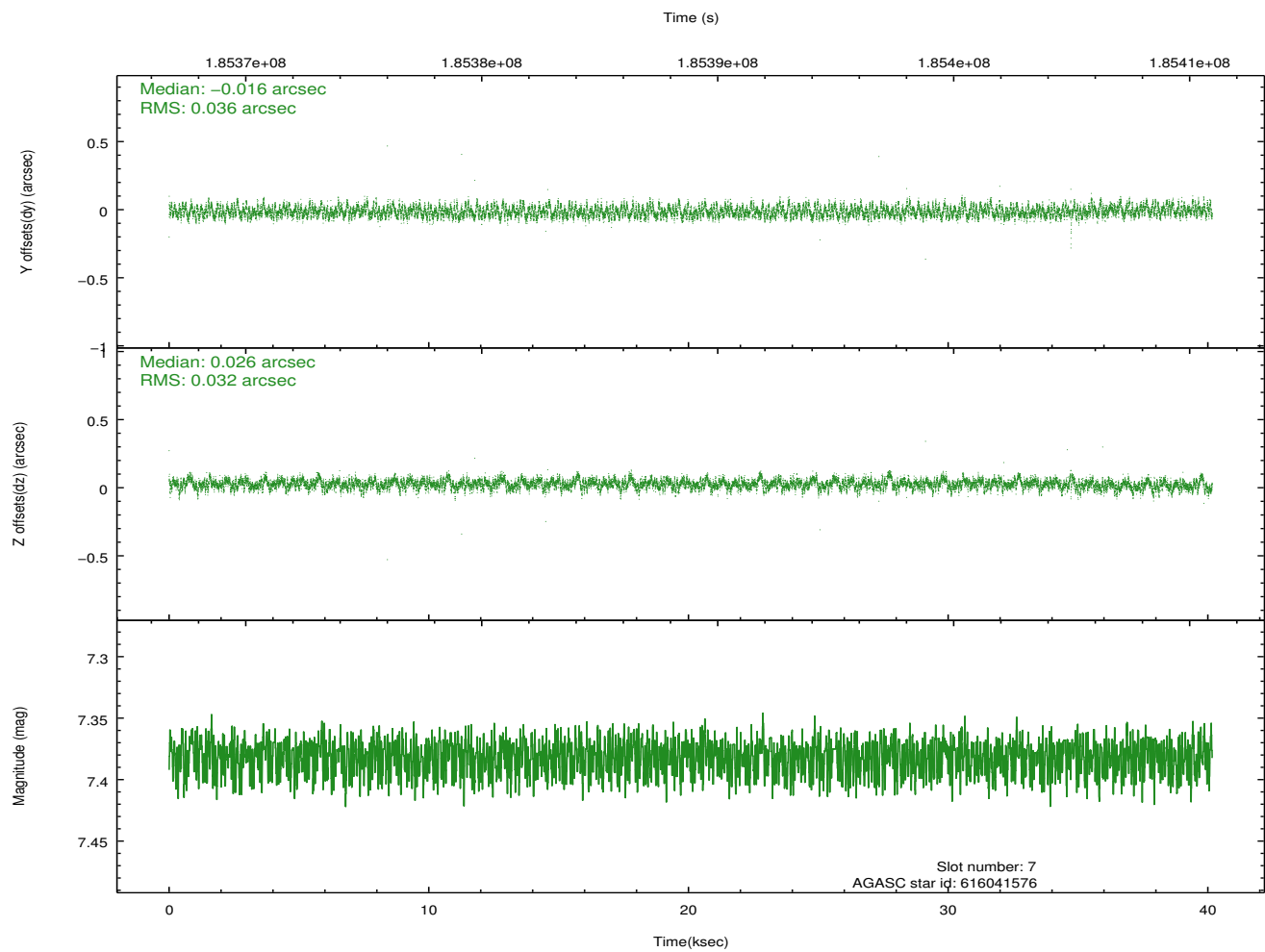
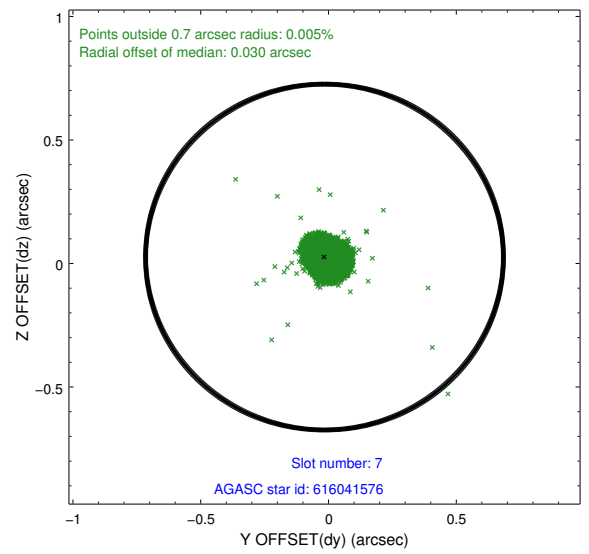
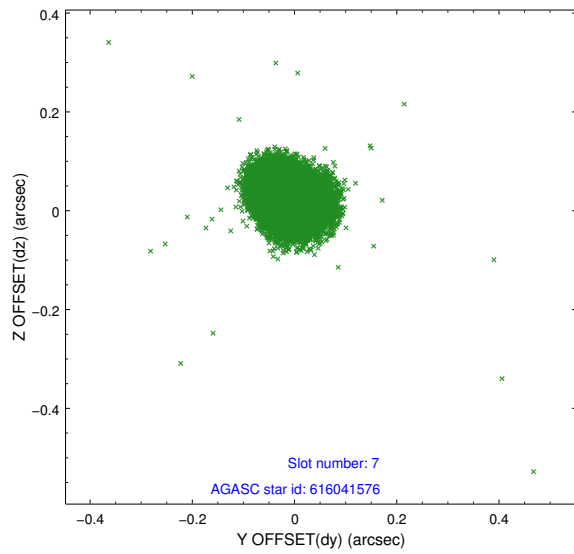
### 2.4.3 Slot 5



## 2.4.4 Slot 6

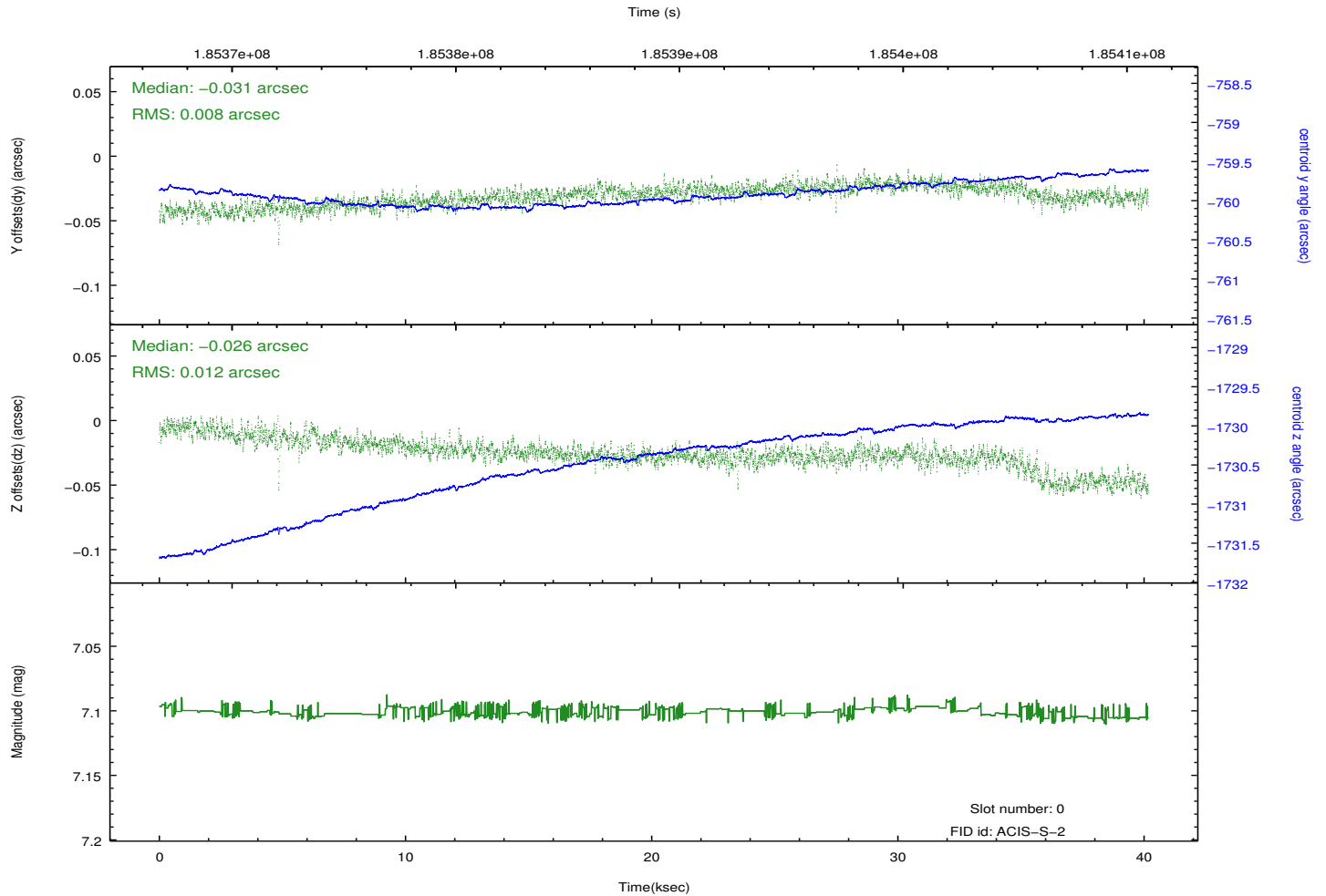
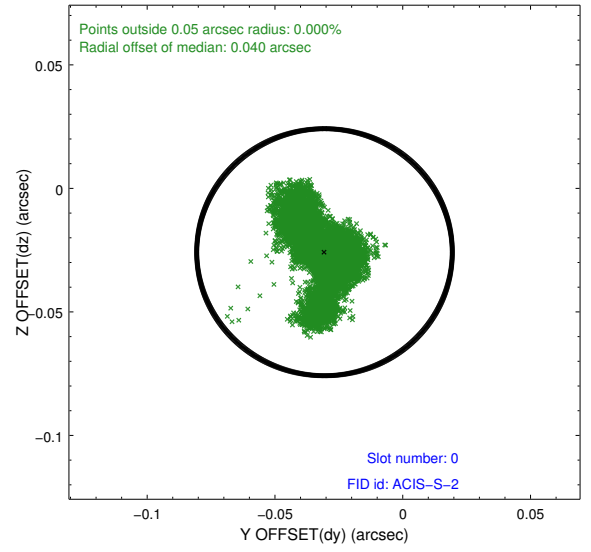
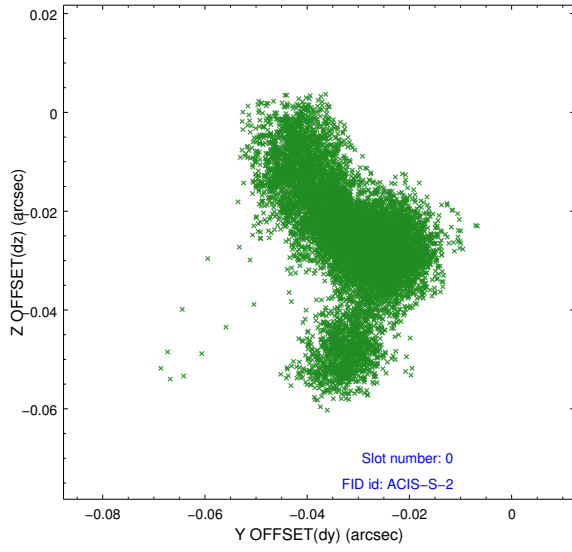


## 2.4.5 Slot 7

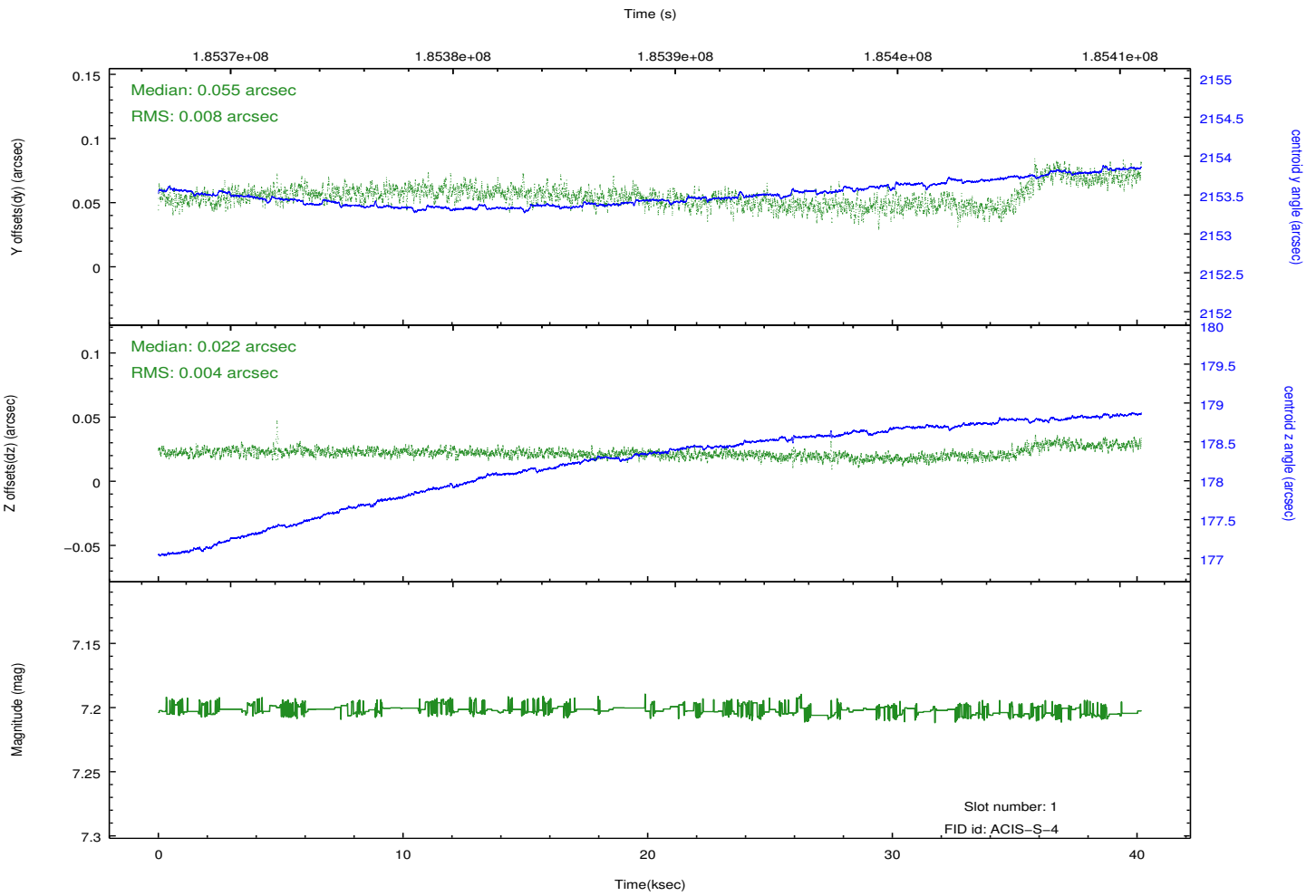
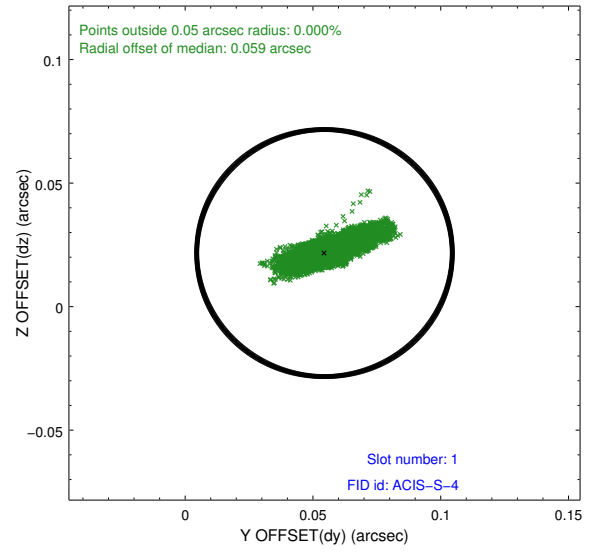
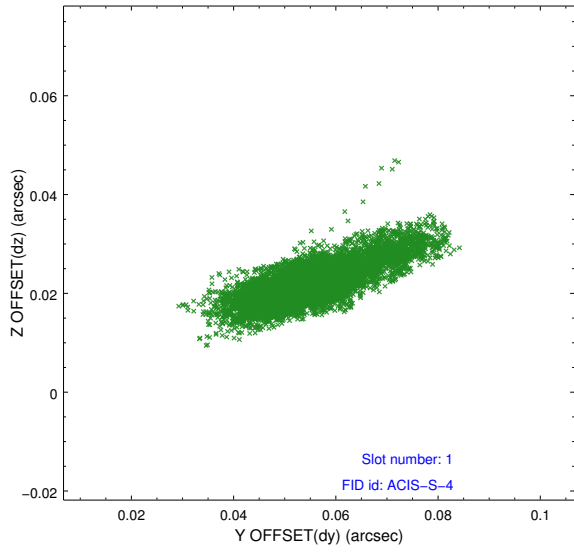


## 2.5 FID Slots

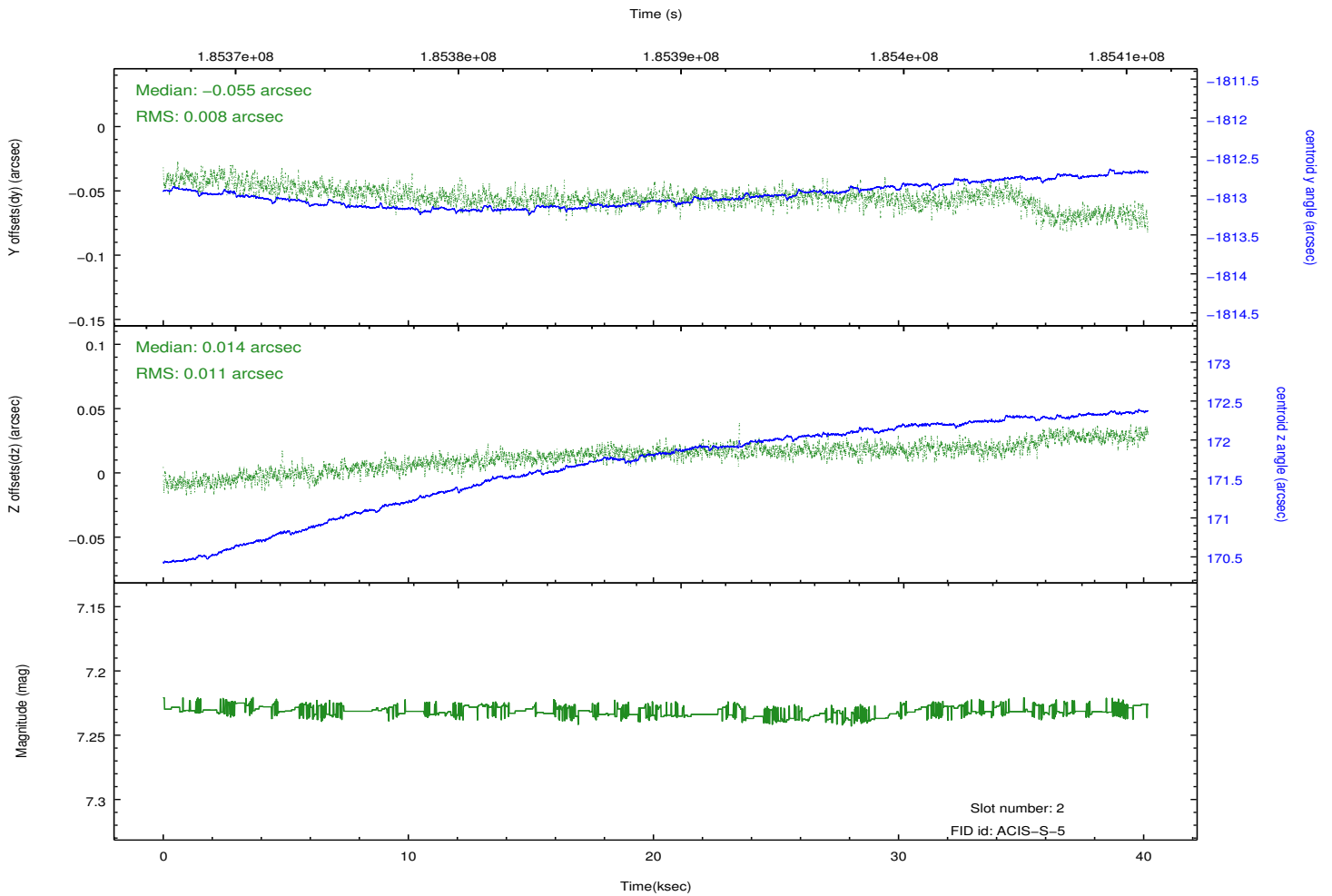
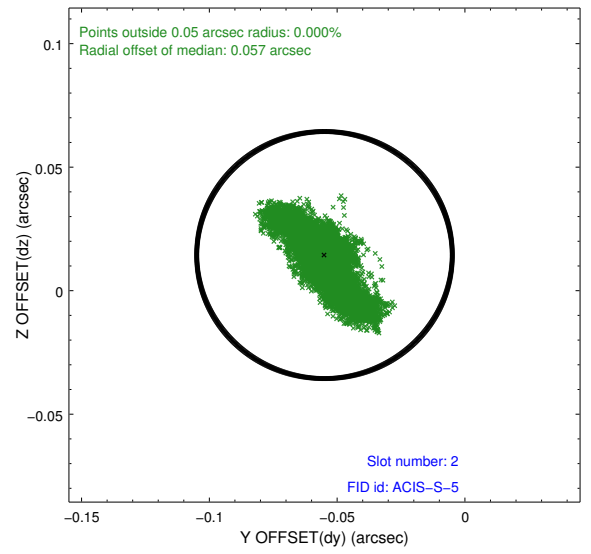
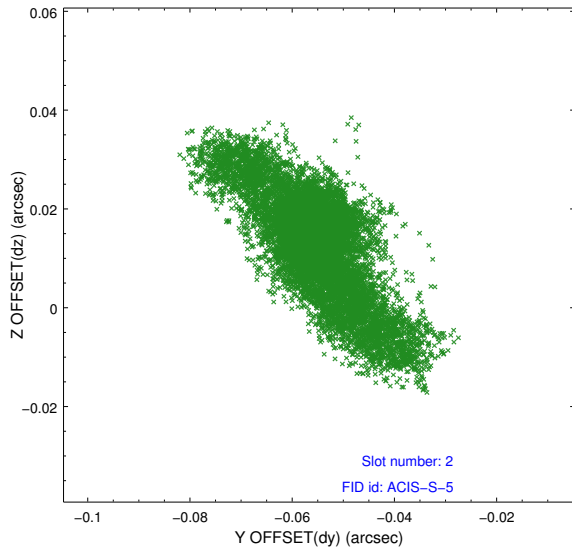
### 2.5.1 Slot 0



## 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)	2012.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.166

## A.2 Comments