

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10136 - L2 Version 2  
Chandra X-Ray Center

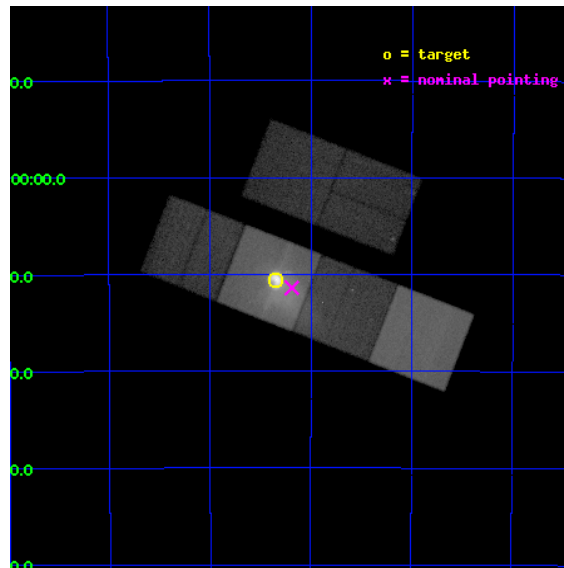
L2 Processing Date : Jun 30 2012

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# 1 Front

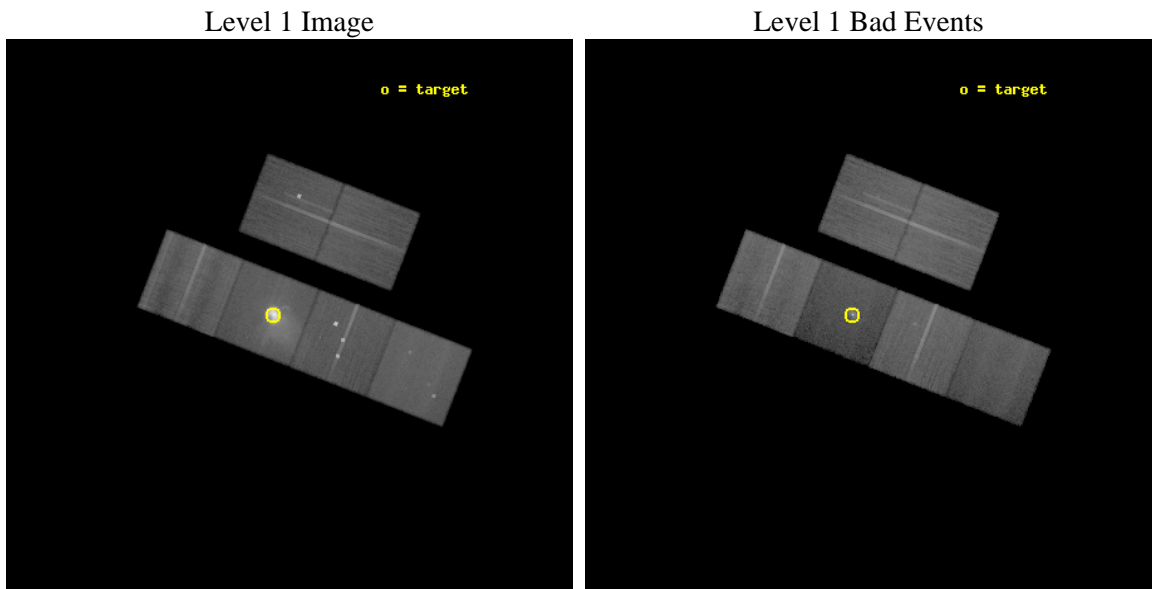
seq_num	501063	Sequence number
obs_id	10136	Observation id
title	The Unique Dynamical Vela Pulsar Wind Nebula	Proposal title
observer	Dr. George Pavlov	Principal investigator
object	Vela PWN	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	128.83625	Observer's specified target RA [deg]
dec_targ	-45.176583	Observer's specified target Dec [deg]
ra_nom	128.79680832576	Nominal RA [deg]
dec_nom	-45.190044164676	Nominal Dec [deg]
roll_nom	201.23963599979	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40047.999850869	Sum of GTIs [s]
livetime	39540.887962747	Livetime [s]
ontime2	40047.999850869	Sum of GTIs [s]
ontime3	40047.999850869	Sum of GTIs [s]
ontime5	40047.999850869	Sum of GTIs [s]
ontime6	40041.517900229	Sum of GTIs [s]
ontime7	40047.999850869	Sum of GTIs [s]
ontime8	40047.999850869	Sum of GTIs [s]
l2events	1025195	Number of level 2 events



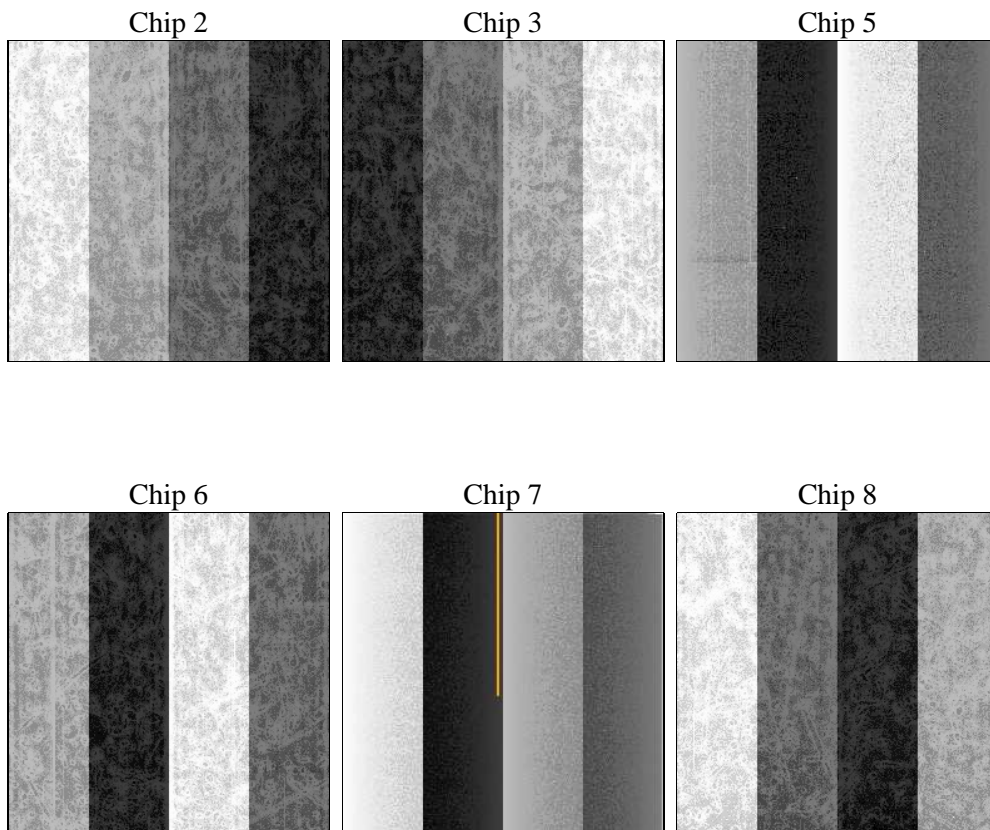
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	40047.999850869	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime2	40047.999850869	Sum of GTIs [s]
date	2012-06-30T01:24:34	Date and time of file creation	ontime3	40047.999850869	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	40047.999850869	Sum of GTIs [s]
			ontime6	40041.517900229	Sum of GTIs [s]
			ontime7	40047.999850869	Sum of GTIs [s]
			ontime8	40047.999850869	Sum of GTIs [s]
			l1events	2434157	Number of level 1 events

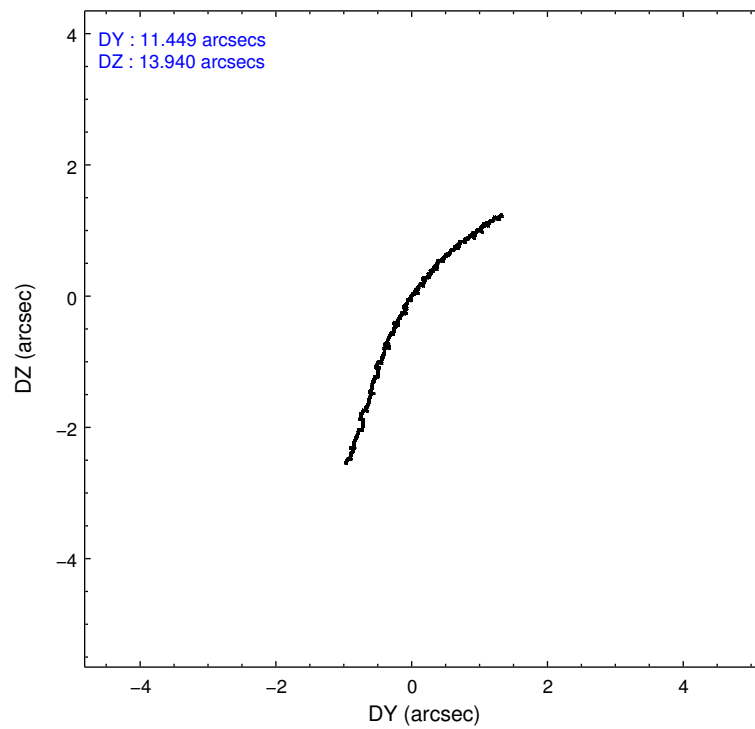
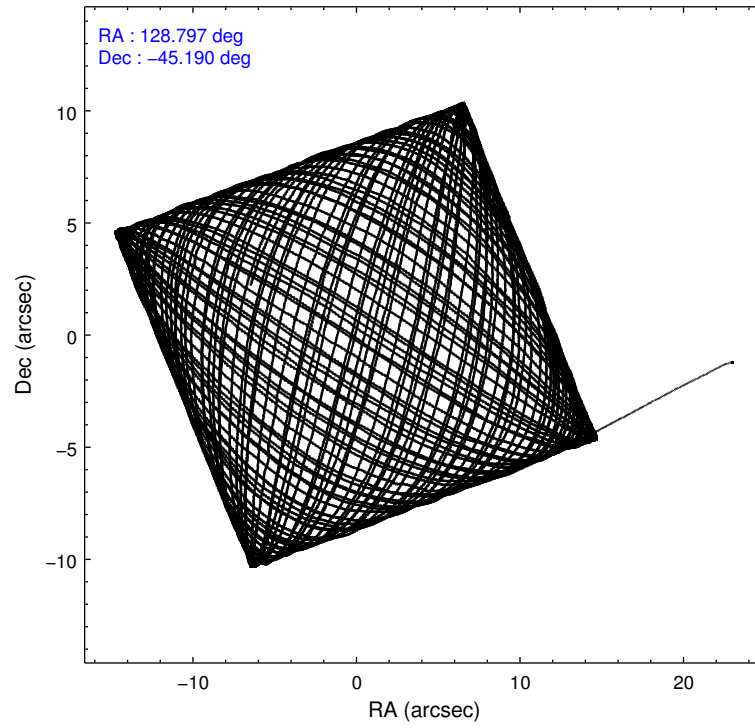
### 2.1.4 Events

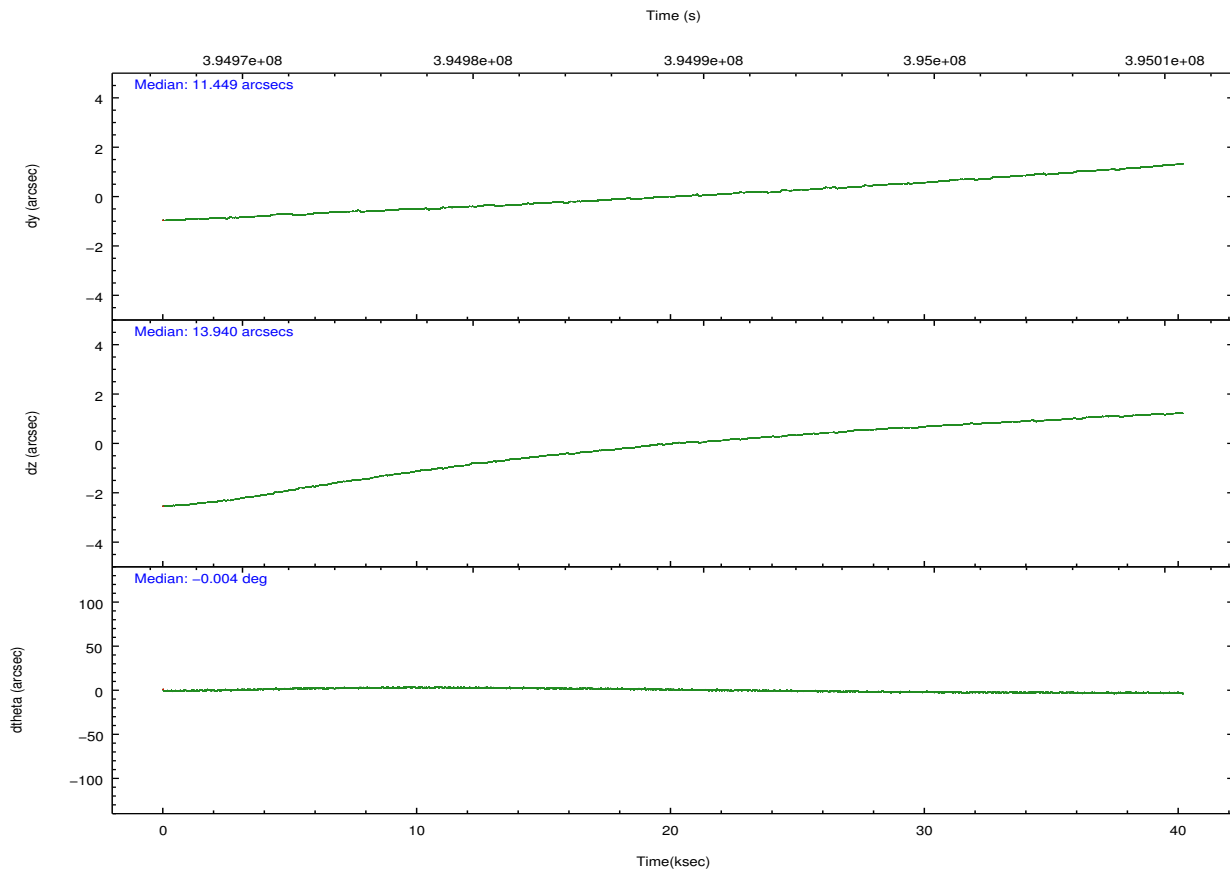
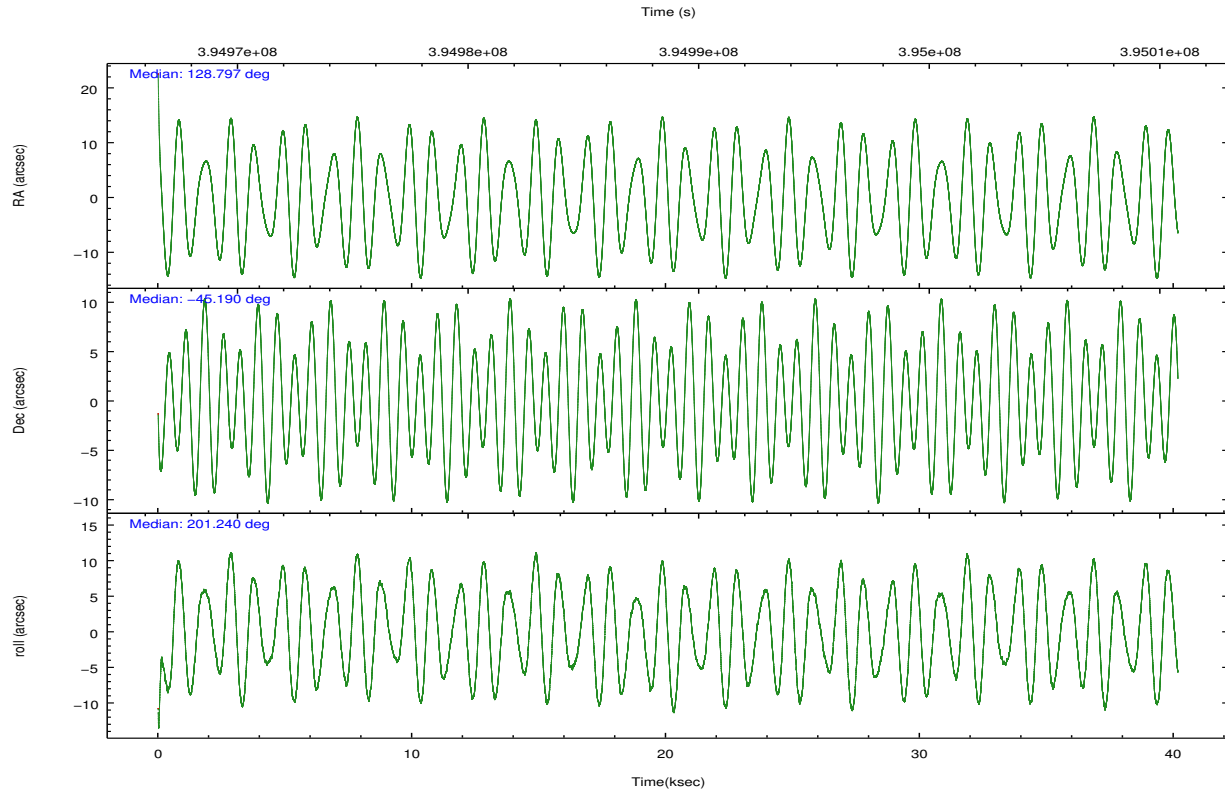
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	309990	287939	368349	364596	742839	360444	grade 0 events	26950	36266	43983	97425	178143	48124
rejected events	263908	233924	139376	242399	124309	240006		8%	12%	11%	26%	23%	13%
rejected %	85%	81%	37%	66%	16%	66%	grade 1 events	249	303	800	621	1605	355
								0%	0%	0%	0%	0%	0%
							grade 2 events	8260	6755	69761	10473	156445	25162
								2%	2%	18%	2%	21%	6%
							grade 3 events	3121	3237	12339	4095	66350	10942
								1%	1%	3%	1%	8%	3%
							grade 4 events	3062	3072	12178	4102	65809	10320
								0%	1%	3%	1%	8%	2%
							grade 5 events	6702	8182	26116	8481	30014	13448
								2%	2%	7%	2%	4%	3%
							grade 6 events	4693	4688	90734	6115	151839	25903
								1%	1%	24%	1%	20%	7%
							grade 7 events	256953	225436	112438	233284	92634	226190
								82%	78%	30%	63%	12%	62%

## 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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	128.820673	128.7968083257573	CCD I2 on	O2	Y
[deg] Pointing Dec	-45.168495	-45.19004416467568	CCD I3 on	Y	Y
[deg] Pointing Roll	201.099941	201.2396359997897	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	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)	394968764.184000	394967705.97617	CCD S5 on	N	N
Observation start date	2010-07-08T09:31:38	2010-07-08T09:15:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	395008764.184000	395009482.41581	On-chip summing requested	N	N
Observation end date	2010-07-08T20:38:18	2010-07-08T20:51:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



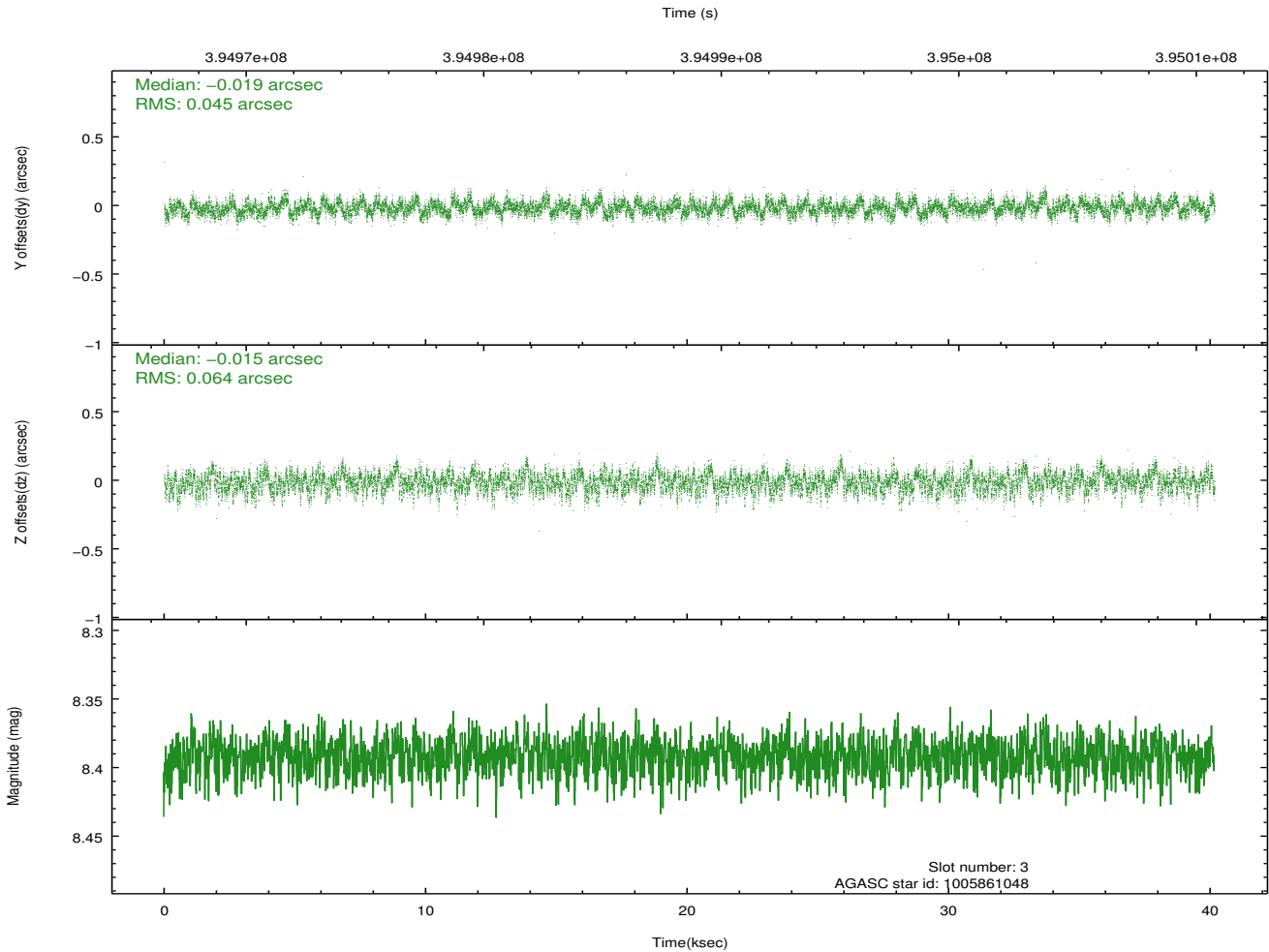
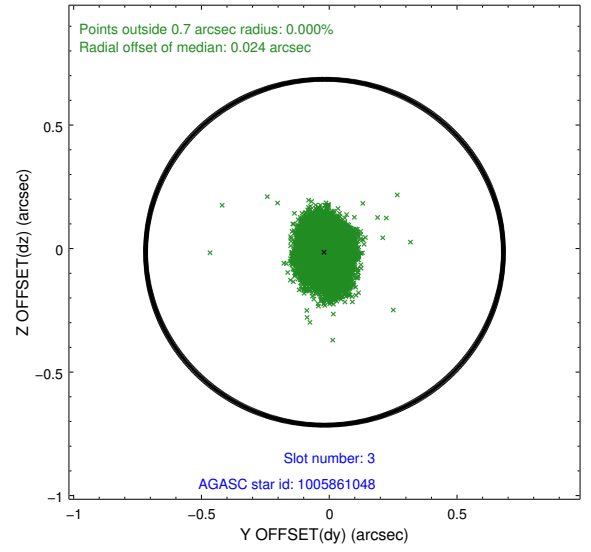
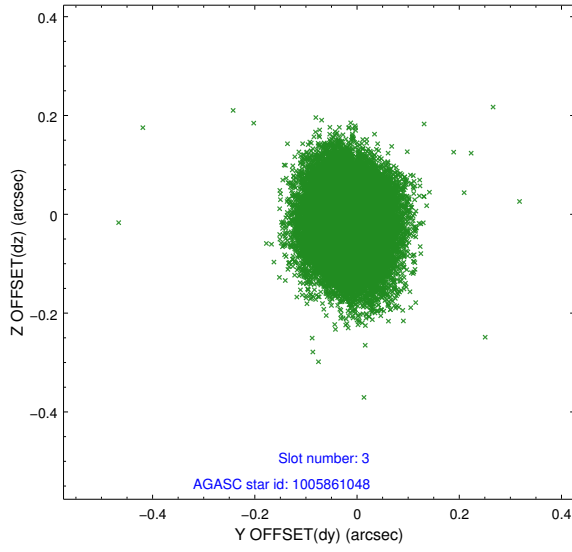


### Slot Statistics

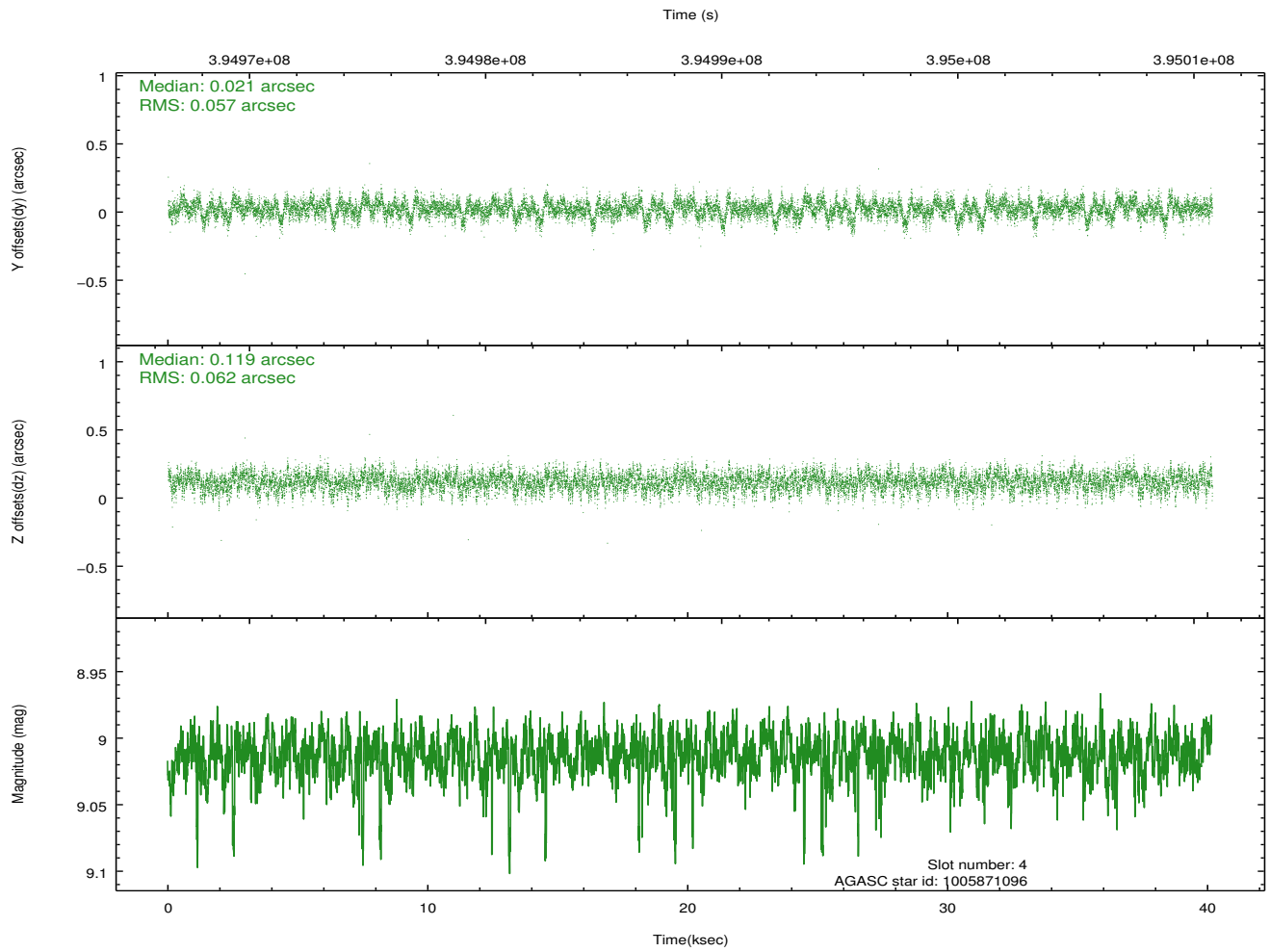
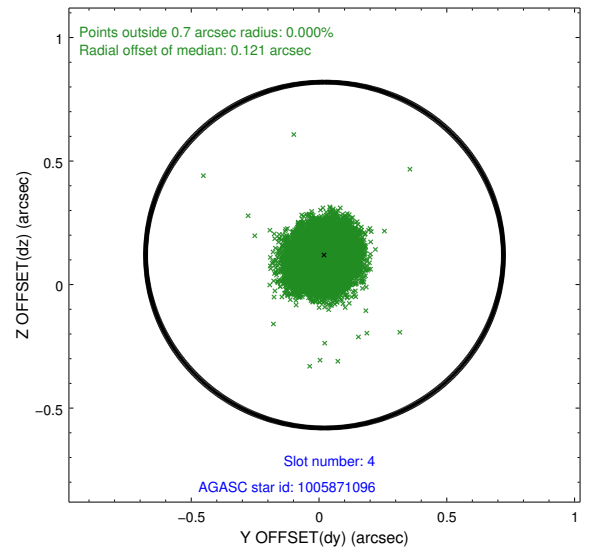
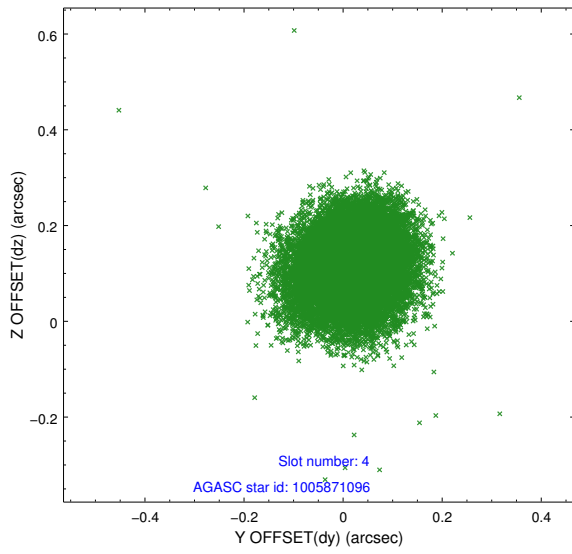
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	9799	-0.037	-0.030	0.016	0.026	0.000000	0.000000	-764.41	-1734.99
1	FID	ACIS-S-4	7.02	9798	0.126	0.025	0.019	0.031	0.000000	0.000000	2149.02	173.54
2	FID	ACIS-S-5	7.06	9798	-0.120	0.014	0.016	0.026	0.000000	0.000000	-1817.32	167.20
3	GUIDE	1005861048	8.39	19586	-0.019	-0.015	0.083	0.135	128.669106	-44.528323	-466.08	-2289.59
4	GUIDE	1005871096	9.01	19572	0.021	0.119	0.089	0.147	128.774147	-44.764566	-412.14	-1398.89
5	GUIDE	1068249640	9.70	19574	-0.093	0.078	0.177	0.289	128.287925	-45.181418	1279.98	-438.77
6	GUIDE	1068263200	9.11	19574	0.031	-0.096	0.132	0.205	128.222628	-45.344390	1642.36	51.29
7	GUIDE	1005871784	8.00	19590	0.053	-0.096	0.068	0.109	128.533947	-44.544833	-120.79	-2358.06

## 2.4 Star Slots

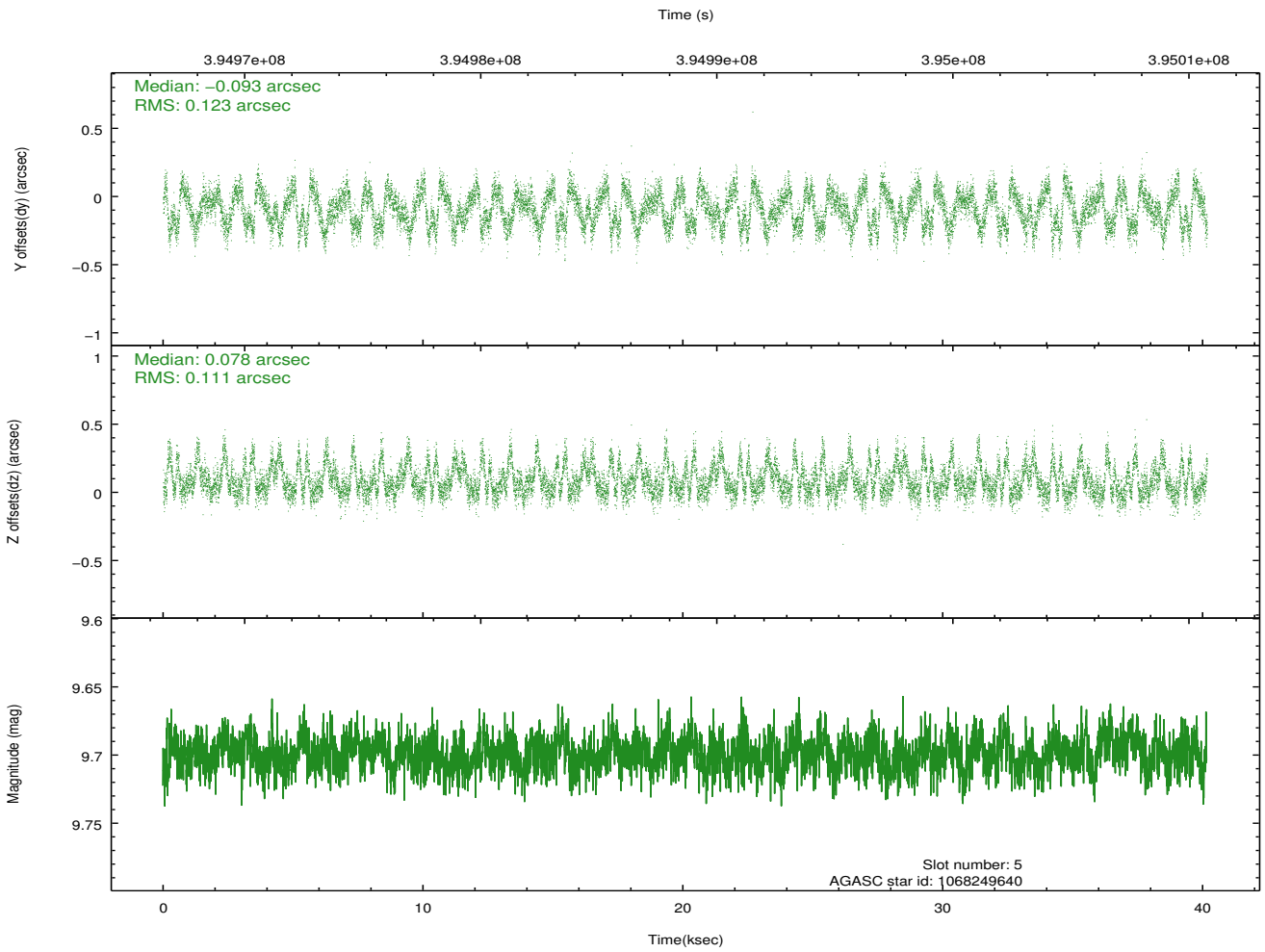
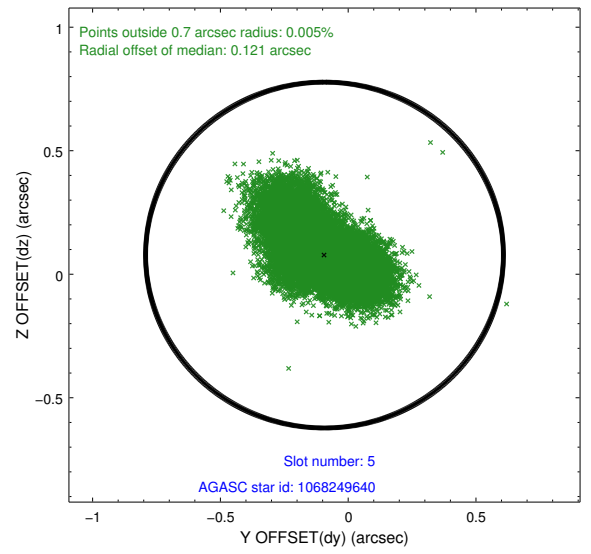
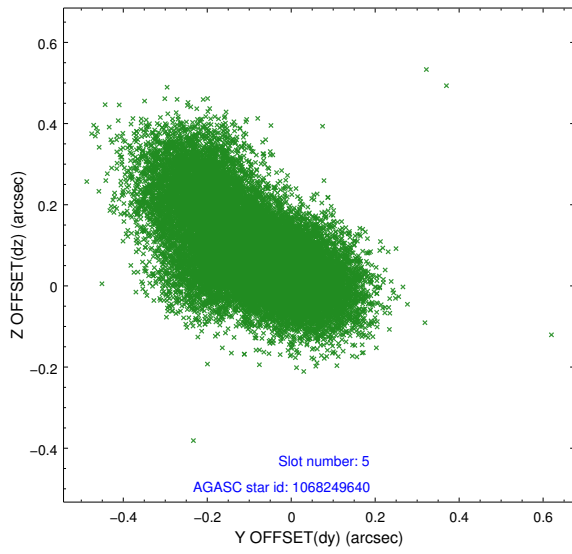
### 2.4.1 Slot 3



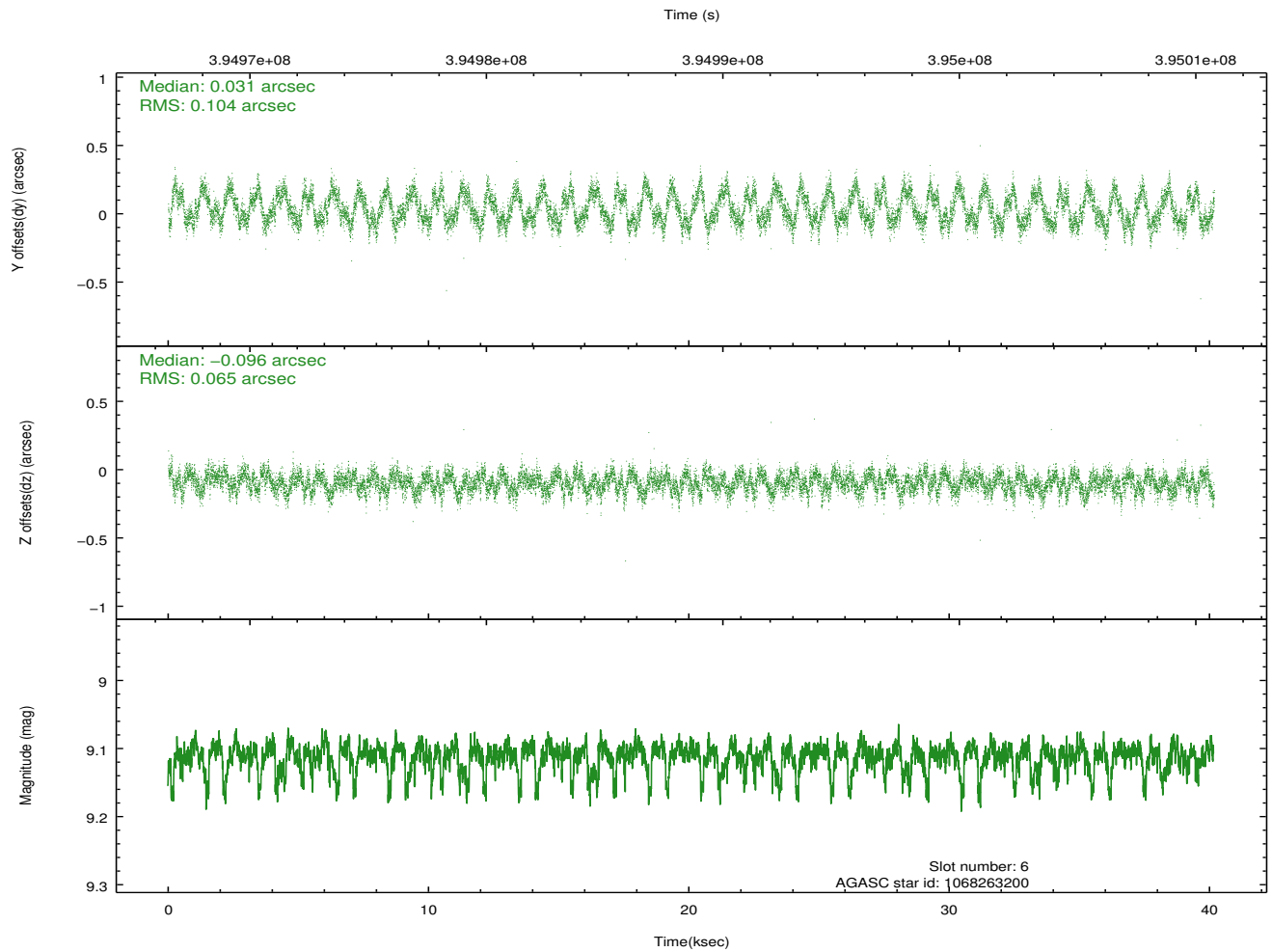
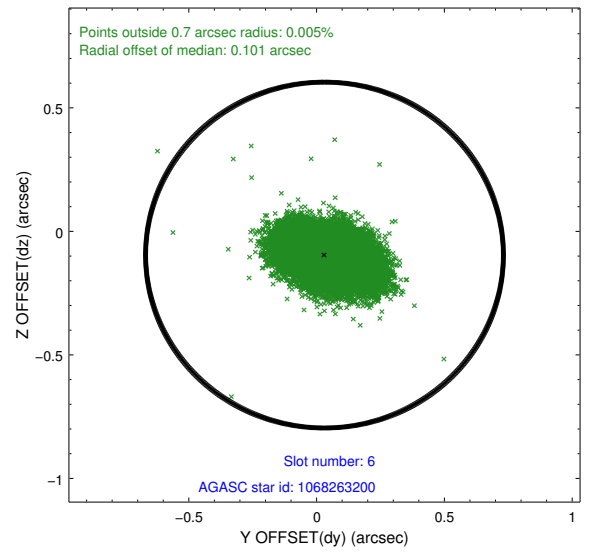
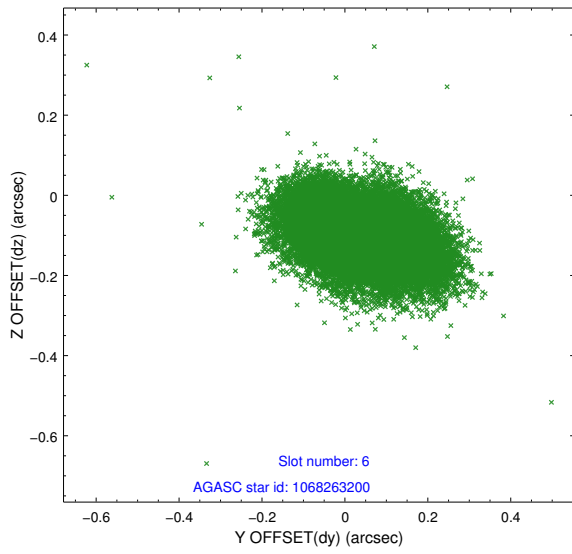
## 2.4.2 Slot 4



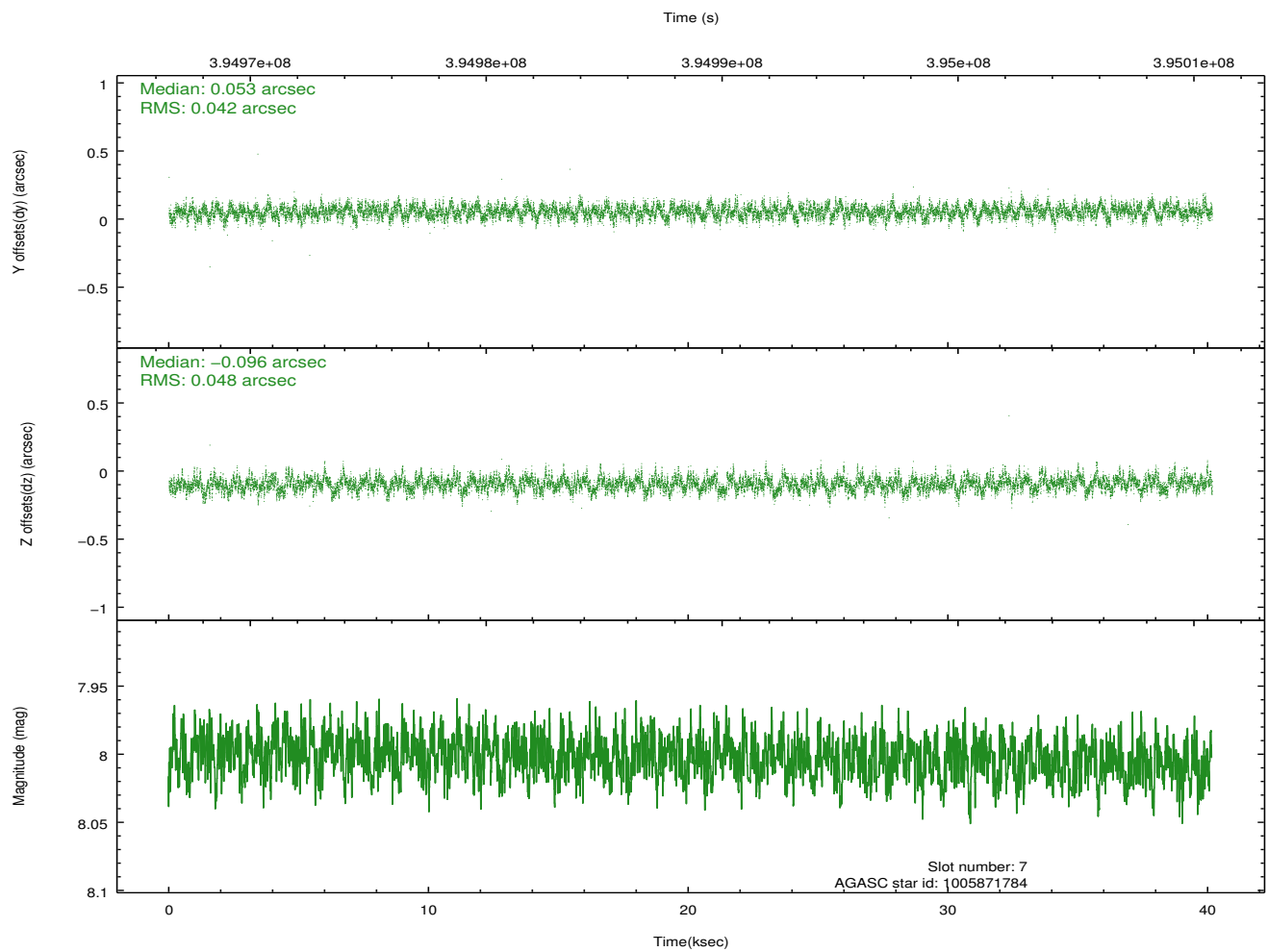
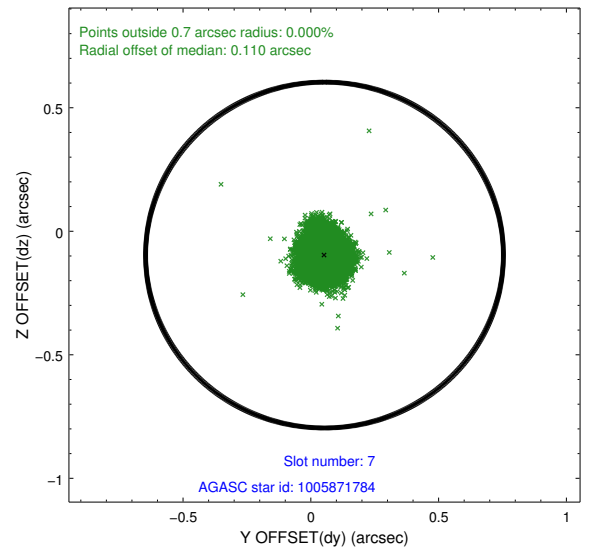
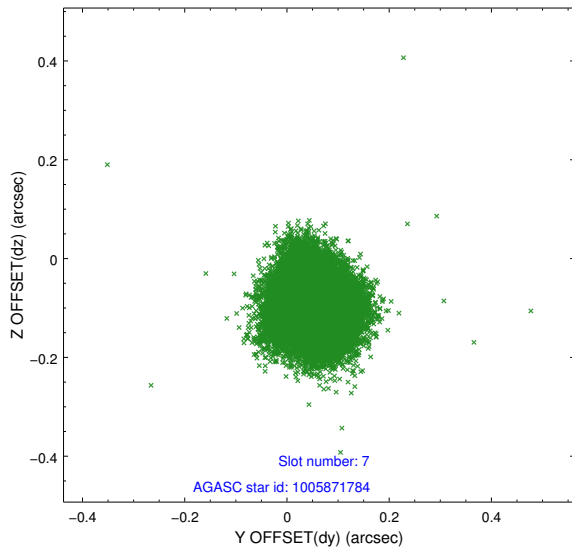
### 2.4.3 Slot 5



## 2.4.4 Slot 6

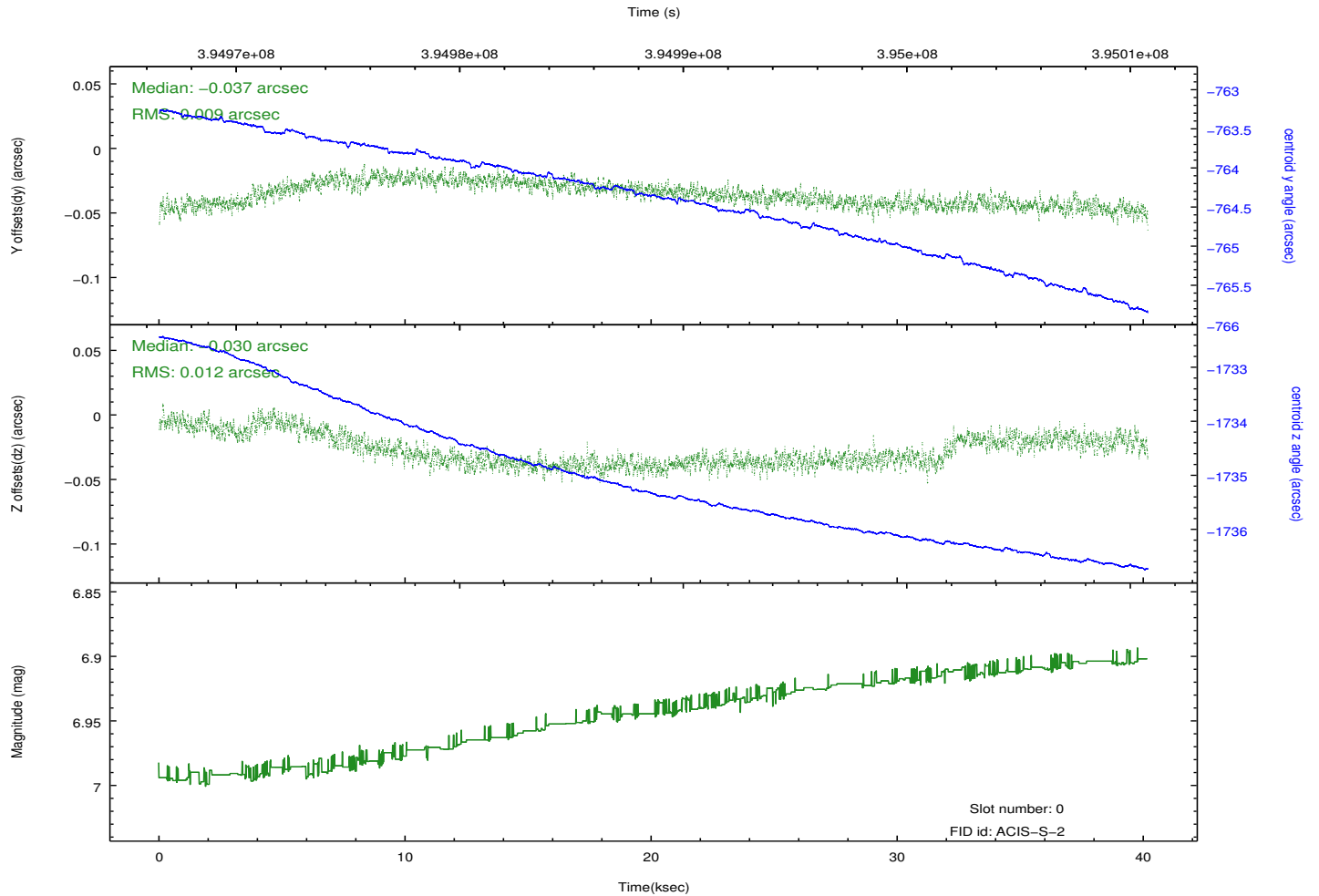
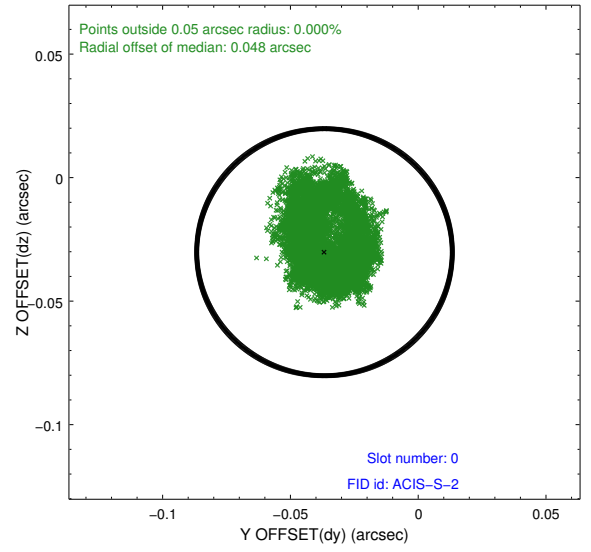
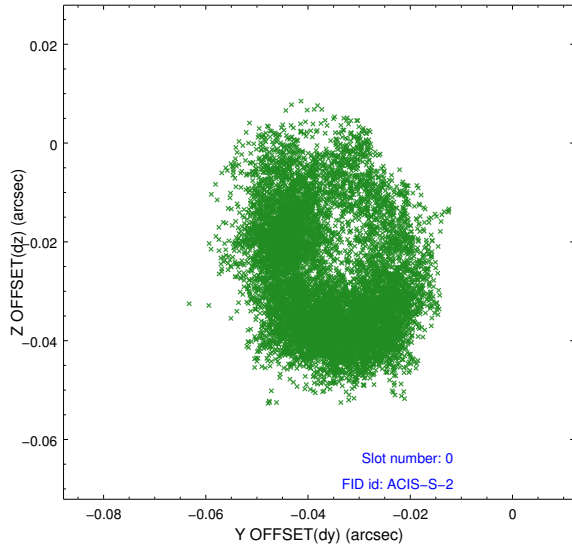


## 2.4.5 Slot 7

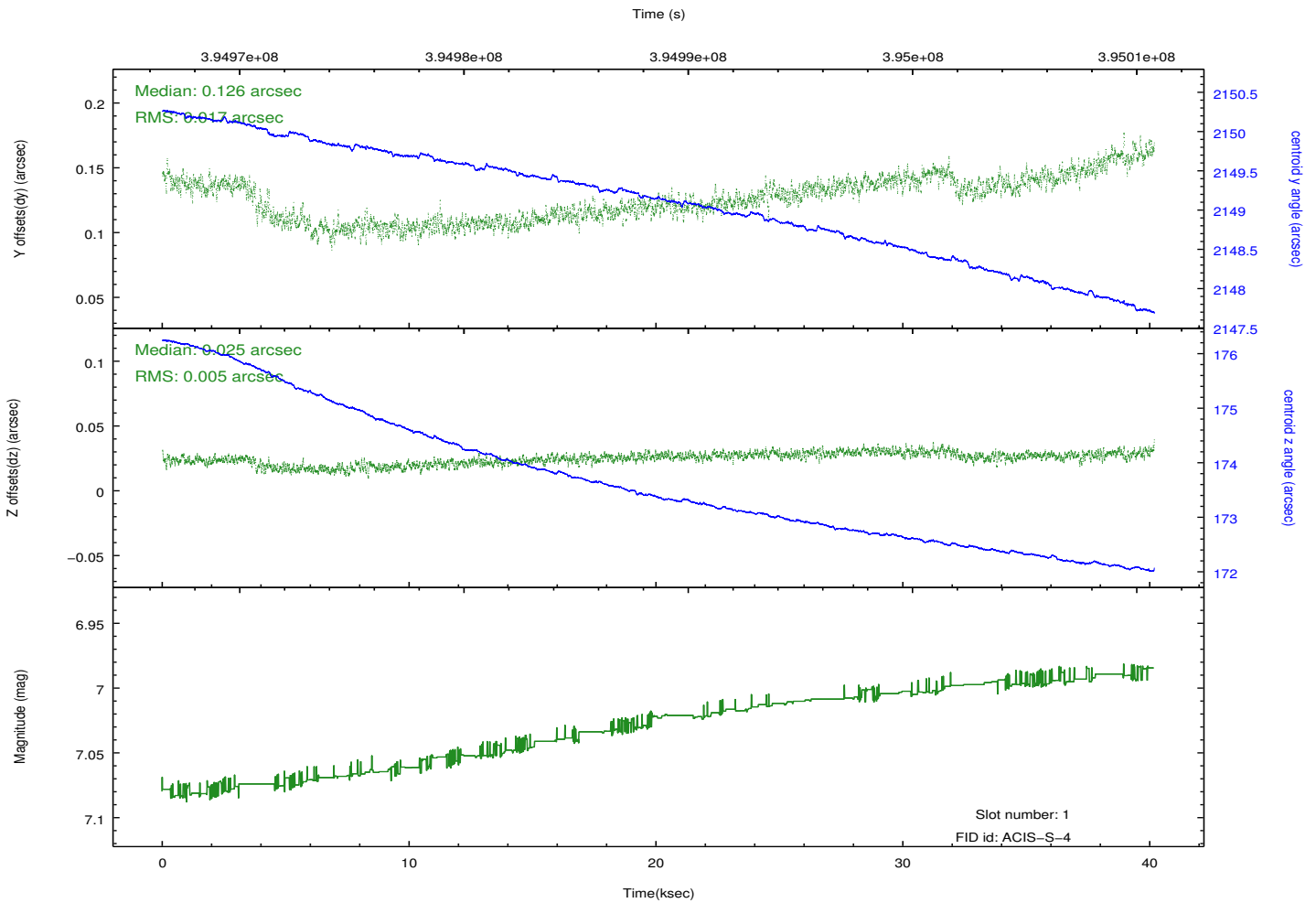
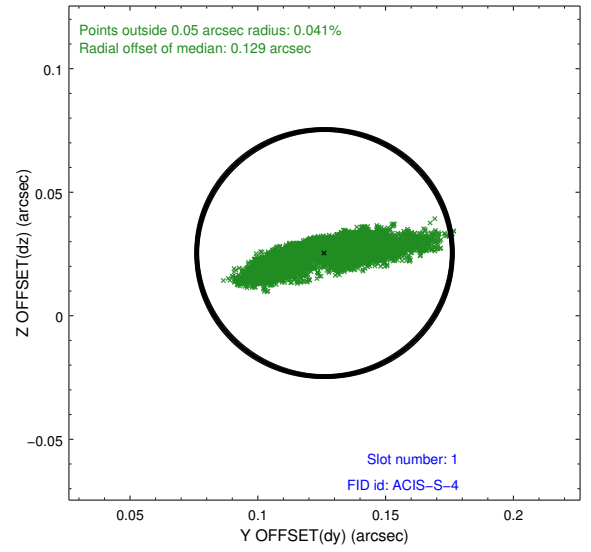
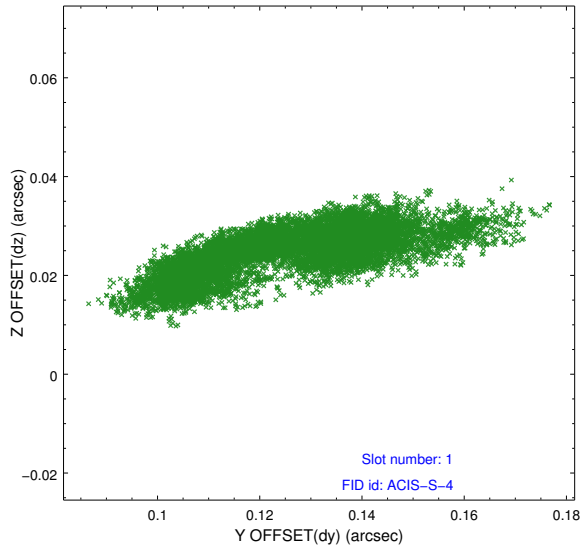


## 2.5 FID Slots

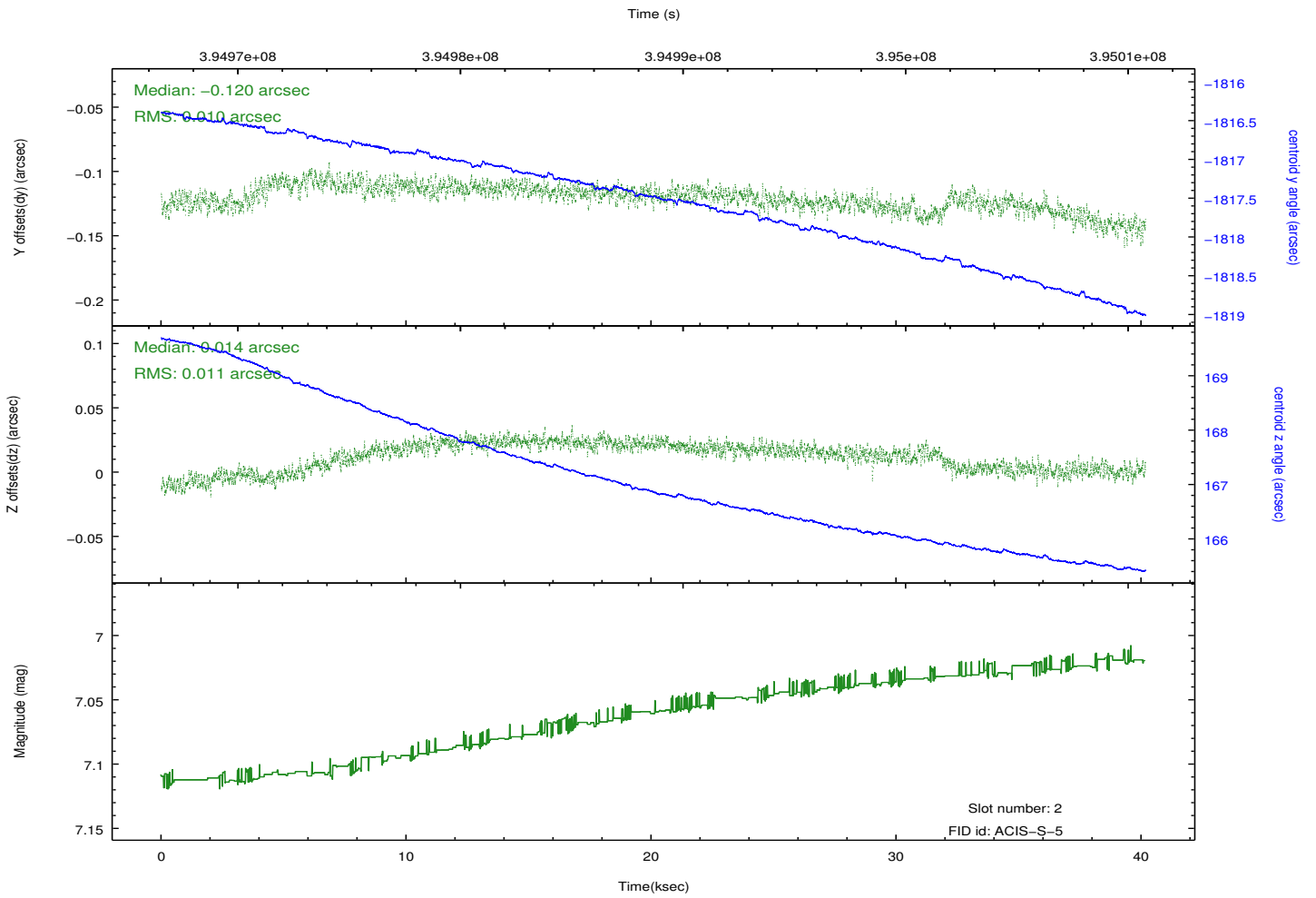
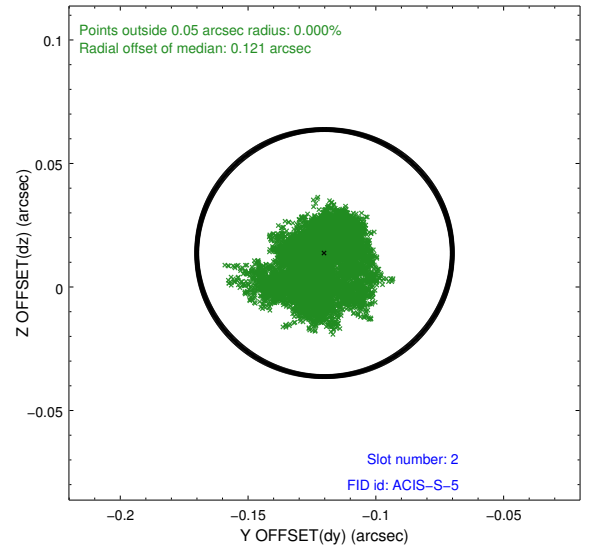
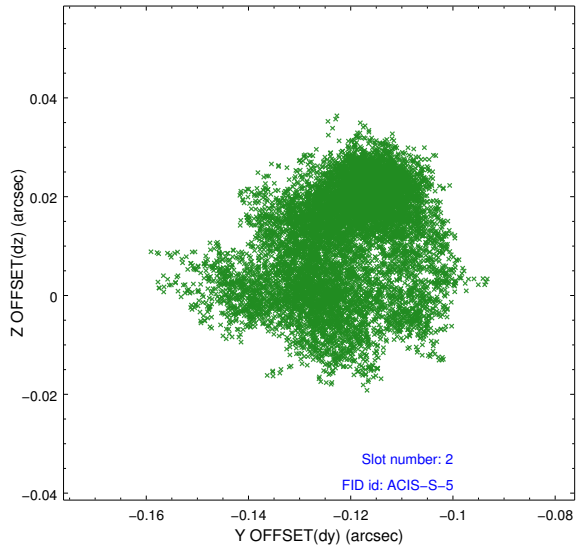
### 2.5.1 Slot 0



## 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)	2012.07.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.047999850869

## A.2 Comments

Monitor constraint met, follows obs10135 by 9 days.