

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10133 - L2 Version 2
Chandra X-Ray Center

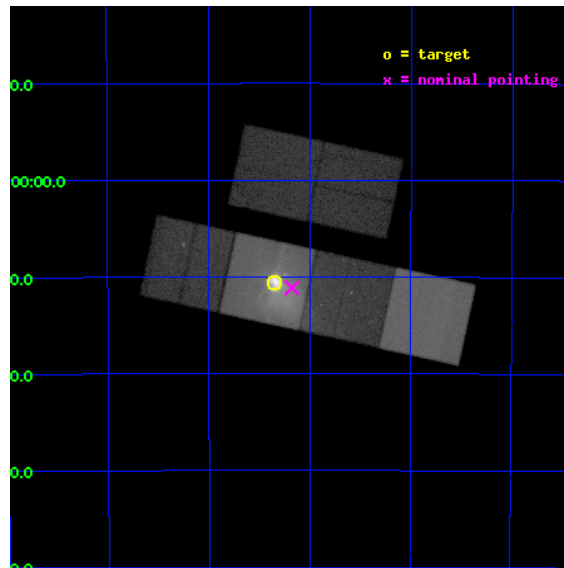
L2 Processing Date : Jun 10 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

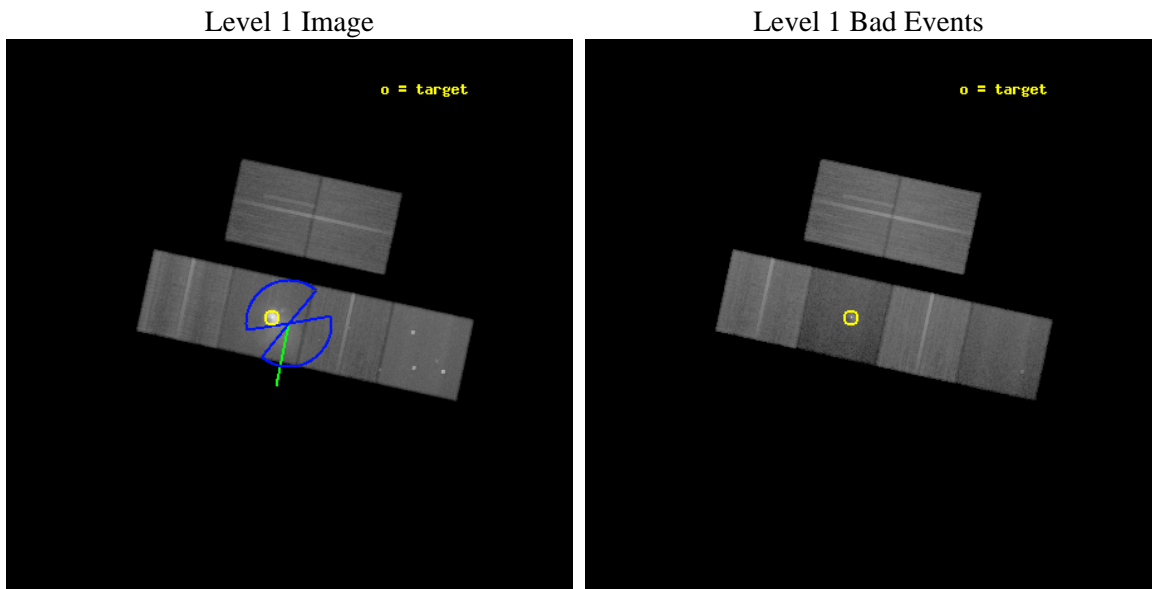
seq_num	501060	Sequence number
obs_id	10133	Observation id
title	The Unique Dynamical Vela Pulsar Wind Nebula	Proposal title
observer	Dr. George Pavlov	Principal investigator
object	Vela PWN	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	128.83625	Observer's specified target RA [deg]
dec_targ	-45.176583	Observer's specified target Dec [deg]
ra_nom	128.7942843912	Nominal RA [deg]
dec_nom	-45.185529675932	Nominal Dec [deg]
roll_nom	192.21991424478	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40041.599850893	Sum of GTIs [s]
livetime	39534.569003424	Livetime [s]
ontime2	40041.599850893	Sum of GTIs [s]
ontime3	40041.599850893	Sum of GTIs [s]
ontime5	40041.599850893	Sum of GTIs [s]
ontime6	40041.599850893	Sum of GTIs [s]
ontime7	40041.599850893	Sum of GTIs [s]
ontime8	40041.599850893	Sum of GTIs [s]
l2events	1071994	Number of level 2 events



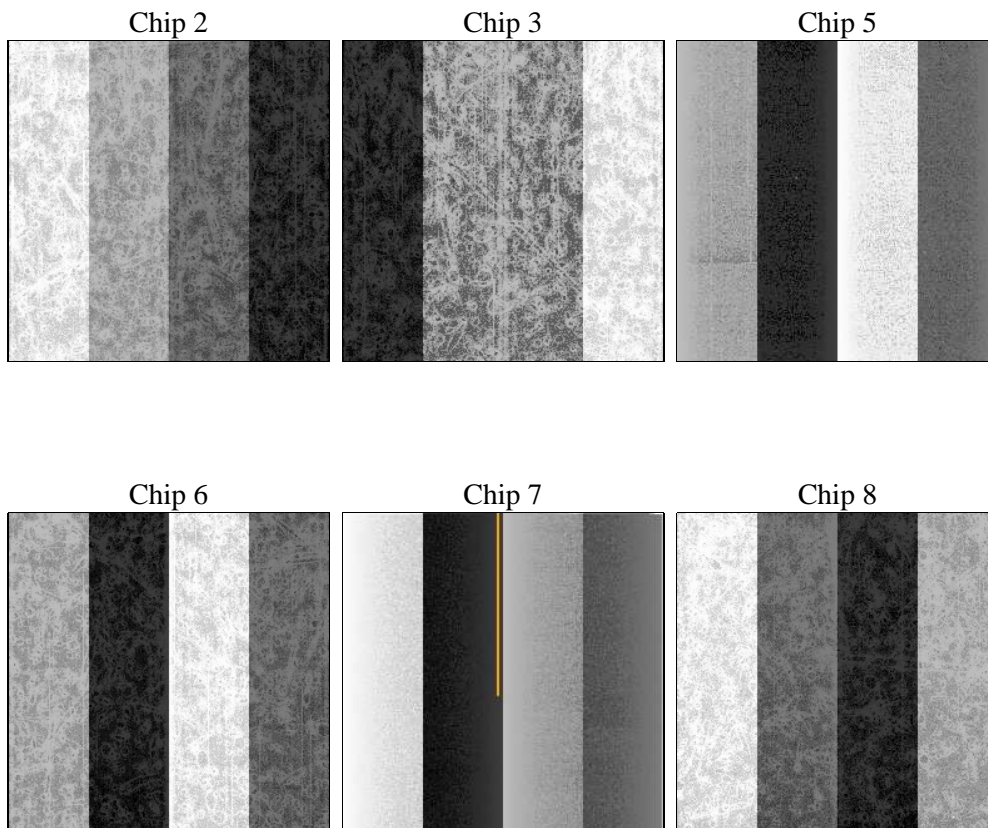
2 OBI

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	40041.599850893	Sum of GTIs [s]
caldbver	4.4.10	 	ontime2	40041.599850893	Sum of GTIs [s]
date	2012-06-10T13:32:40	Date and time of file creation	ontime3	40041.599850893	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	40041.599850893	Sum of GTIs [s]
			ontime6	40041.599850893	Sum of GTIs [s]
			ontime7	40041.599850893	Sum of GTIs [s]
			ontime8	40041.599850893	Sum of GTIs [s]
			l1events	2652700	Number of level 1 events

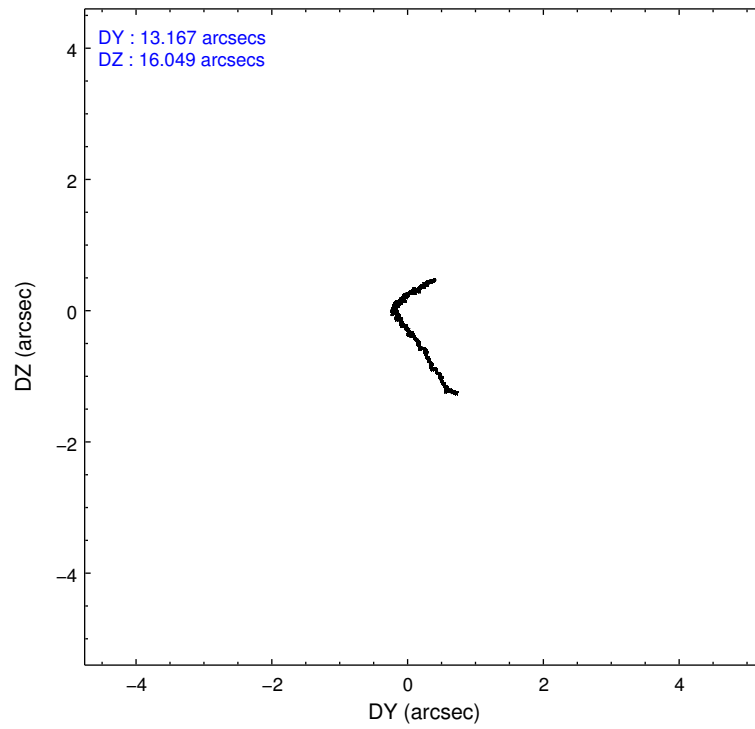
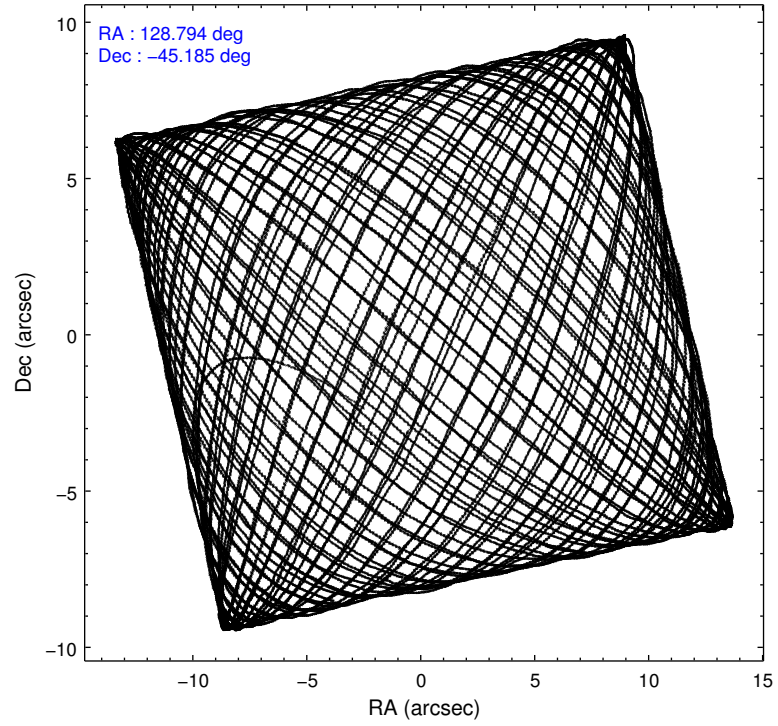
2.1.4 Events

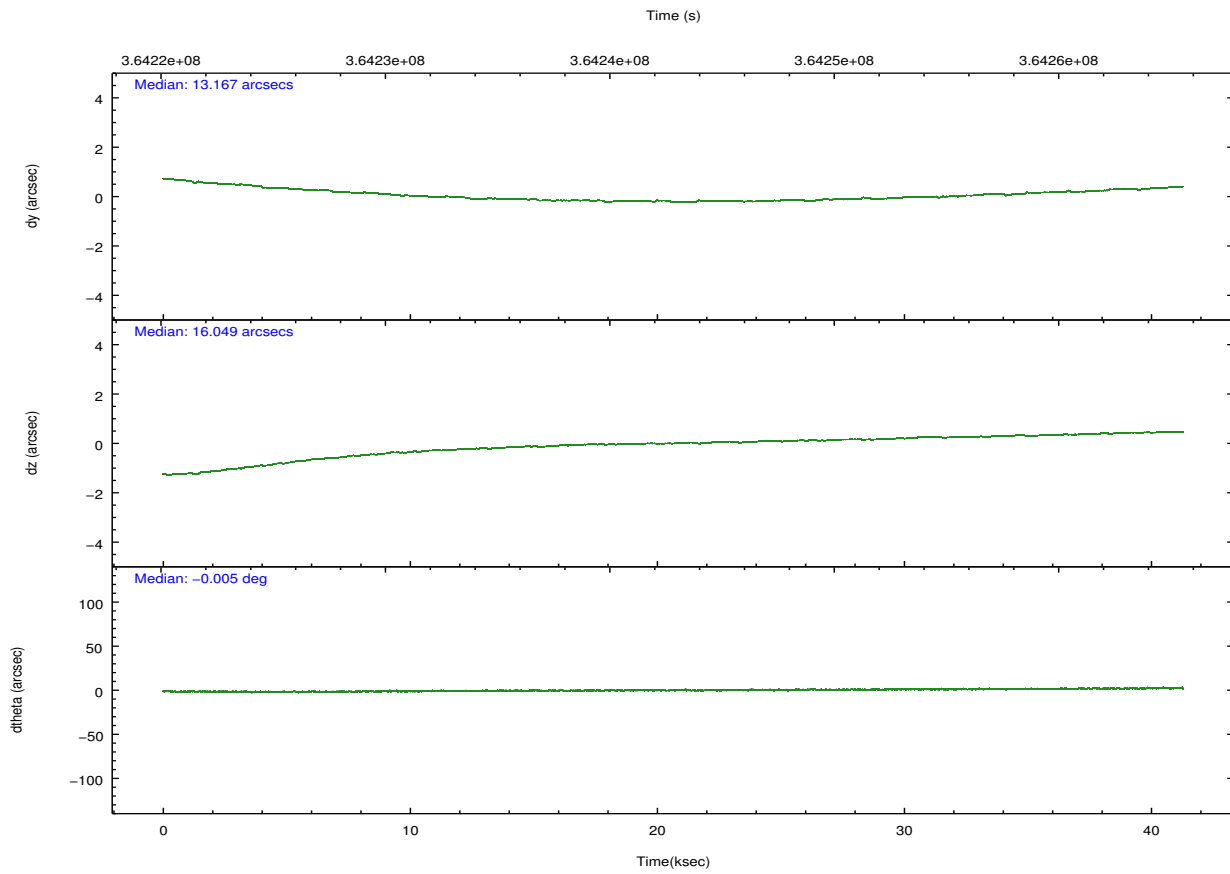
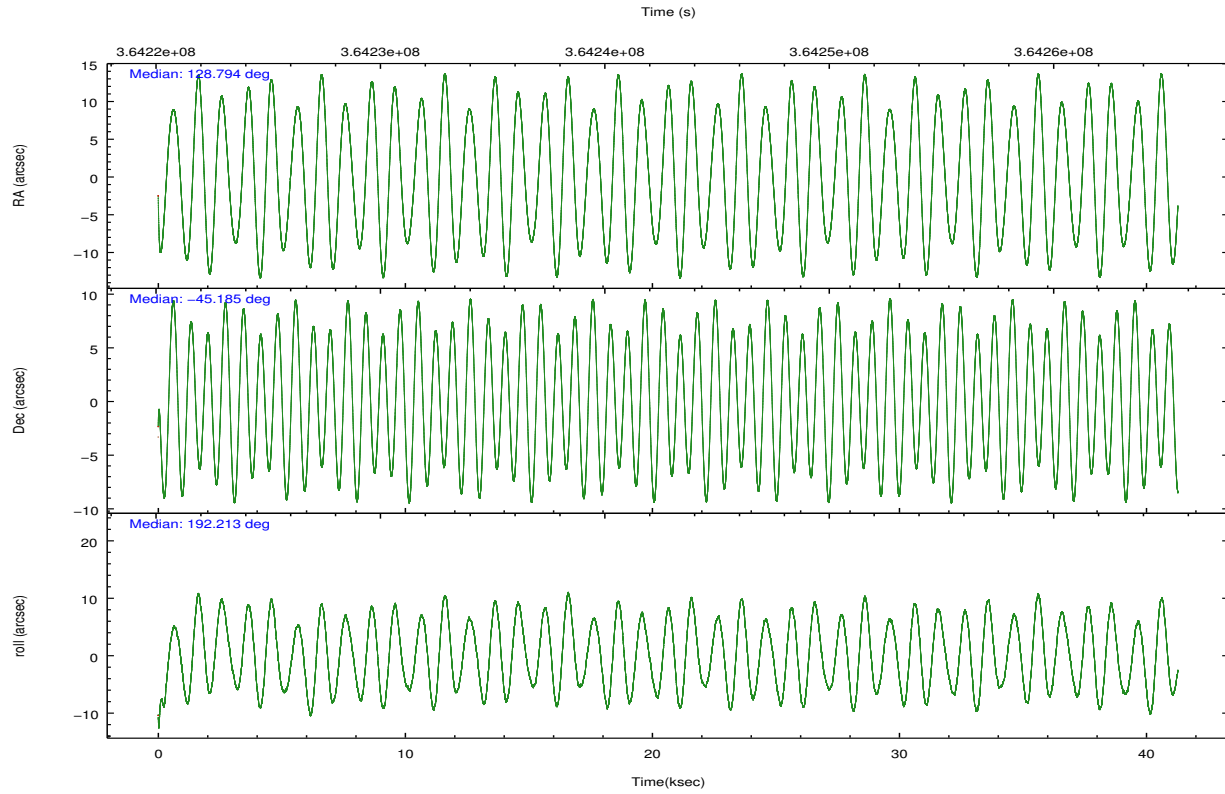
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	361027	326965	419631	358613	775484	410980	grade 0 events	28077	27131	67798	49123	184000	50447
rejected events	312653	280620	149736	284200	134676	282868		7%	8%	16%	13%	23%	12%
rejected %	86%	85%	35%	79%	17%	68%	grade 1 events	303	329	1399	343	1710	479
								0%	0%	0%	0%	0%	0%
							grade 2 events	8852	7376	76663	10465	161328	26552
								2%	2%	18%	2%	20%	6%
							grade 3 events	3265	3438	14165	4273	68314	11743
								0%	1%	3%	1%	8%	2%
							grade 4 events	3324	3399	13851	4116	68052	10894
								0%	1%	3%	1%	8%	2%
							grade 5 events	7515	8516	28538	8538	31657	14090
								2%	2%	6%	2%	4%	3%
							grade 6 events	4859	5001	97437	6437	159169	28488
								1%	1%	23%	1%	20%	6%
							grade 7 events	304832	271775	119780	275318	101254	268287
								84%	83%	28%	76%	13%	65%

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	128.822654	128.794284391201	CCD I2 on	O2	Y
[deg] Pointing Dec	-45.166865	-45.18552967593223	CCD I3 on	Y	Y
[deg] Pointing Roll	192.083415	192.2199142447807	CCD S0 on	N	N
[deg] Roll angle	150.000000	150.000000	CCD S1 on	O1	Y
[deg] Roll tolerance	70.000000	70.000000	CCD S2 on	Y	Y
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S4 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S5 on	N	N
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	Number of optional ACIS chips dropped	0	0
[mm] SIM translation stage offset	0	0.00754346686406393	On-chip summing requested	N	N
[s] Observation start time (MET)	364223449.184000	364221123.82159	Subarray requested	NONE	NONE
Observation start date	2009-07-17T13:09:43	2009-07-17T12:32:03	Alternating exposures requested	N	N
[s] Observation end time (MET)	364263449.184000	364264004.69873	[s] Primary exposure time	0.000000	3.2
Observation end date	2009-07-18T00:16:23	2009-07-18T00:26:44			
Read mode	TIMED	TIMED			

2.3 Aspect



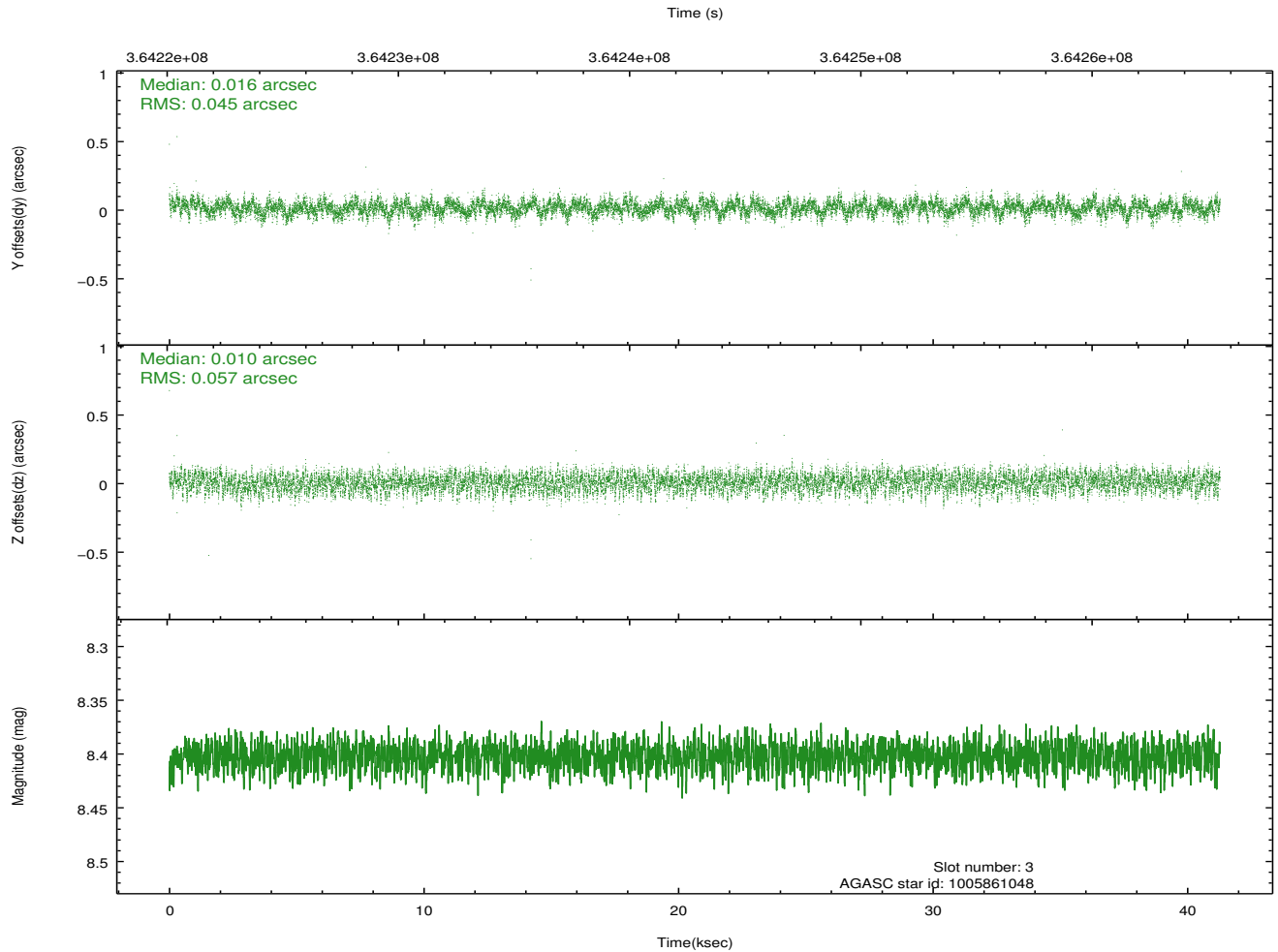
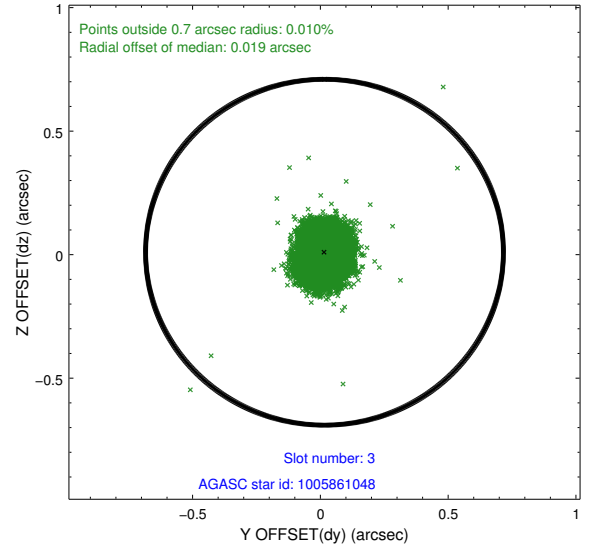
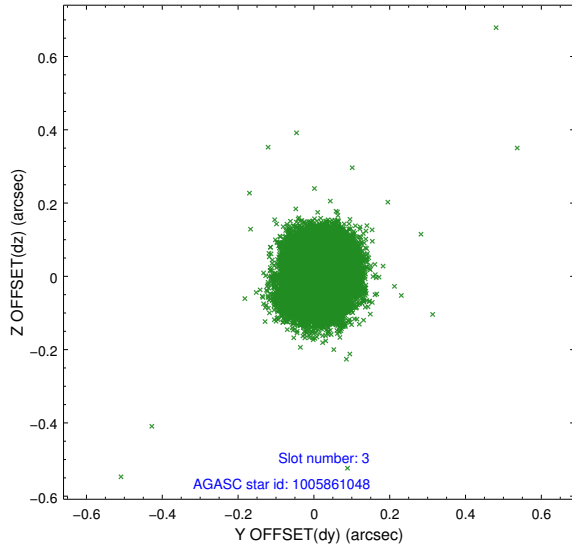


Slot Statistics

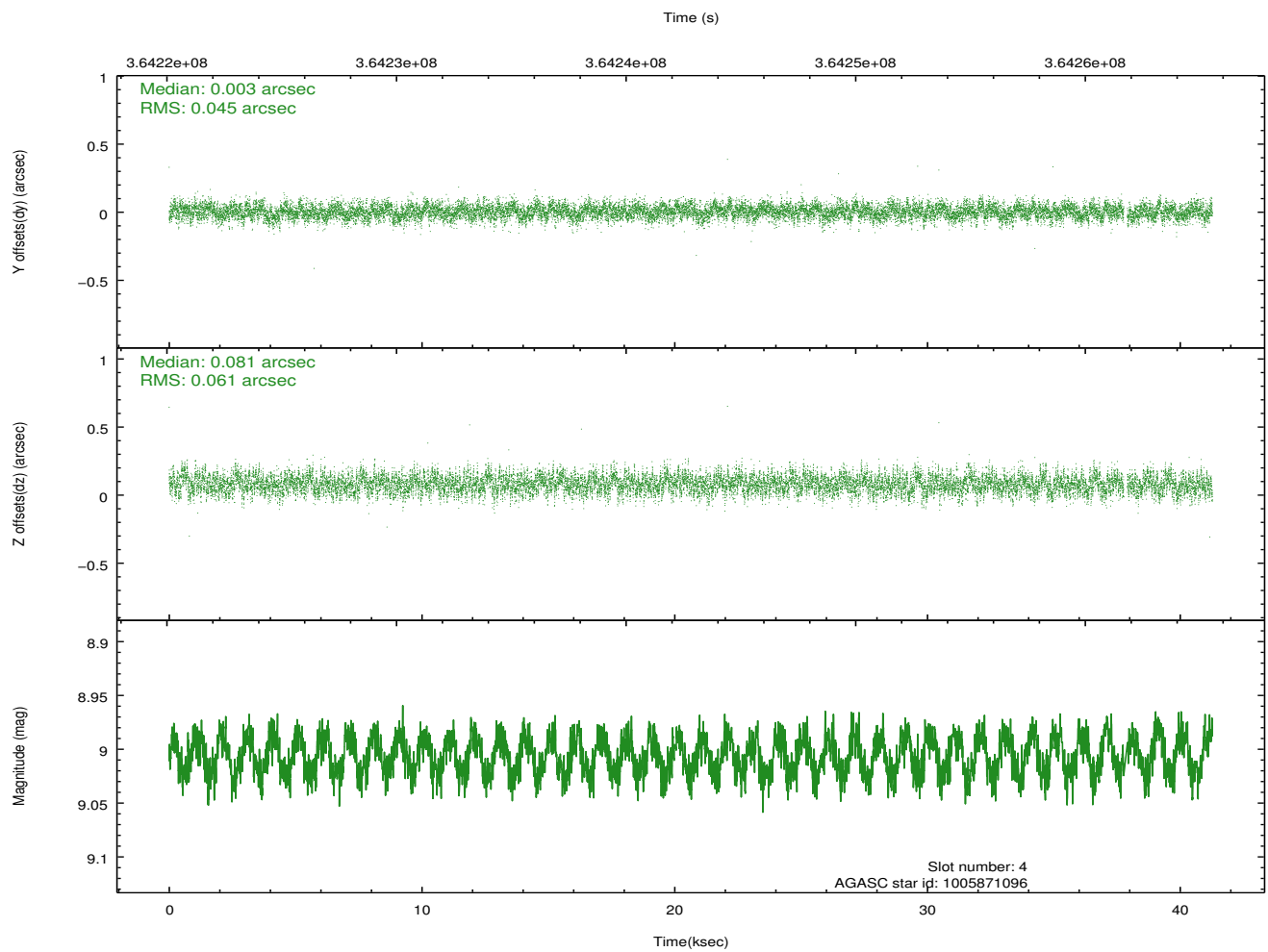
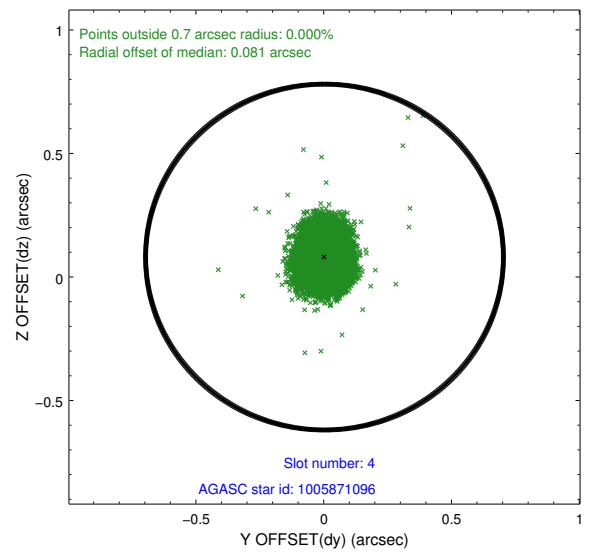
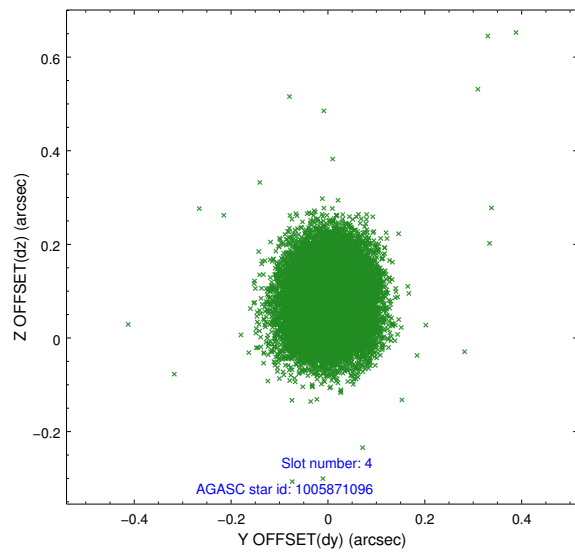
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.98	10067	0.053	-0.076	0.015	0.052	0.000000	0.000000	929.93	-1733.04
1	FID	ACIS-S-4	6.97	10069	0.119	0.031	0.013	0.053	0.000000	0.000000	2147.41	171.21
2	FID	ACIS-S-5	7.00	10069	-0.204	0.057	0.014	0.034	0.000000	0.000000	-1819.19	164.82
3	GUIDE	1005861048	8.40	20120	0.016	0.010	0.076	0.121	128.669106	-44.528323	-95.20	-2329.87
4	GUIDE	1005871096	9.01	20052	0.003	0.081	0.080	0.129	128.774147	-44.764566	-181.68	-1441.81
5	GUIDE	1068263200	9.13	20114	0.072	-0.182	0.084	0.135	128.222628	-45.344390	1619.82	312.60
6	GUIDE	1068270344	8.51	20133	-0.039	0.159	0.062	0.103	128.097487	-45.785157	2248.14	1803.98
7	GUIDE	1005871784	7.99	20132	-0.054	-0.065	0.077	0.124	128.533947	-44.544833	256.44	-2343.28

2.4 Star Slots

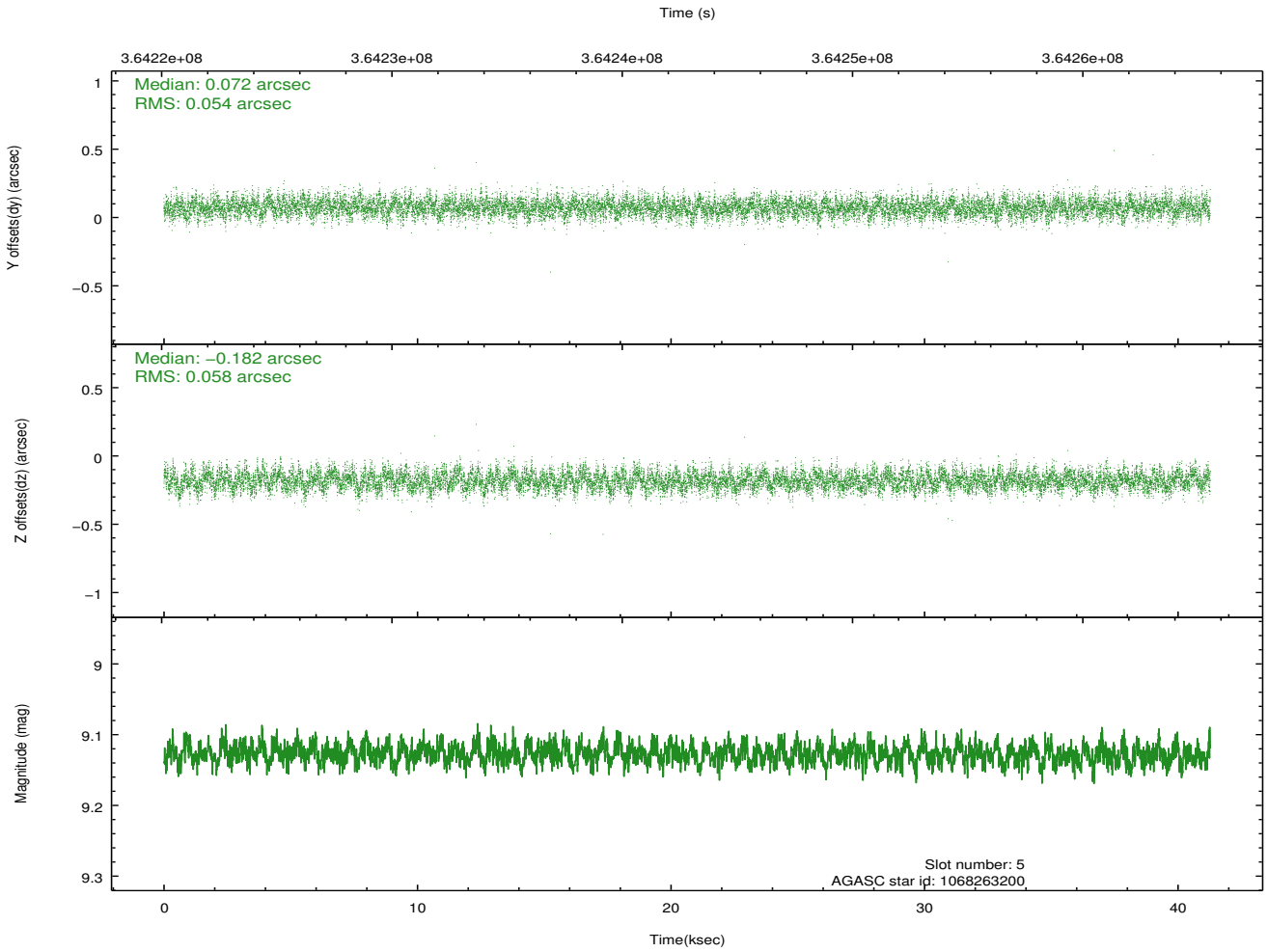
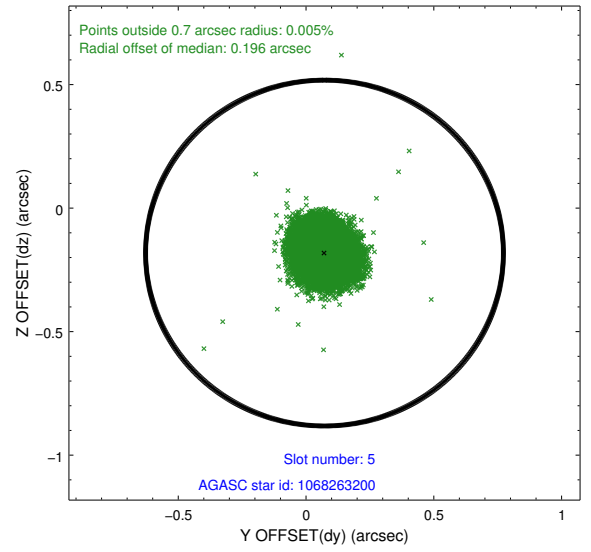
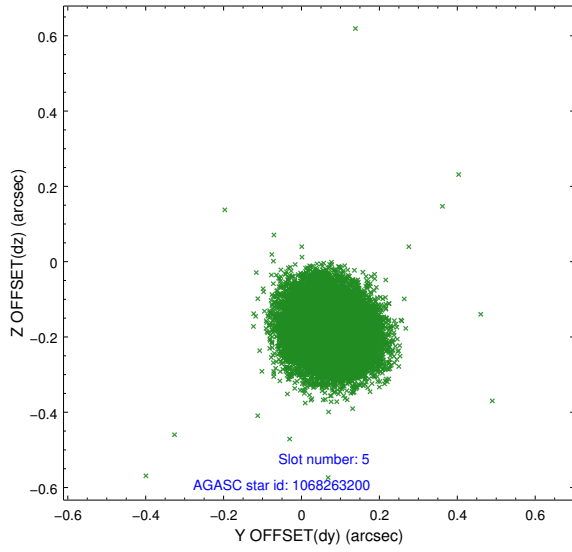
2.4.1 Slot 3



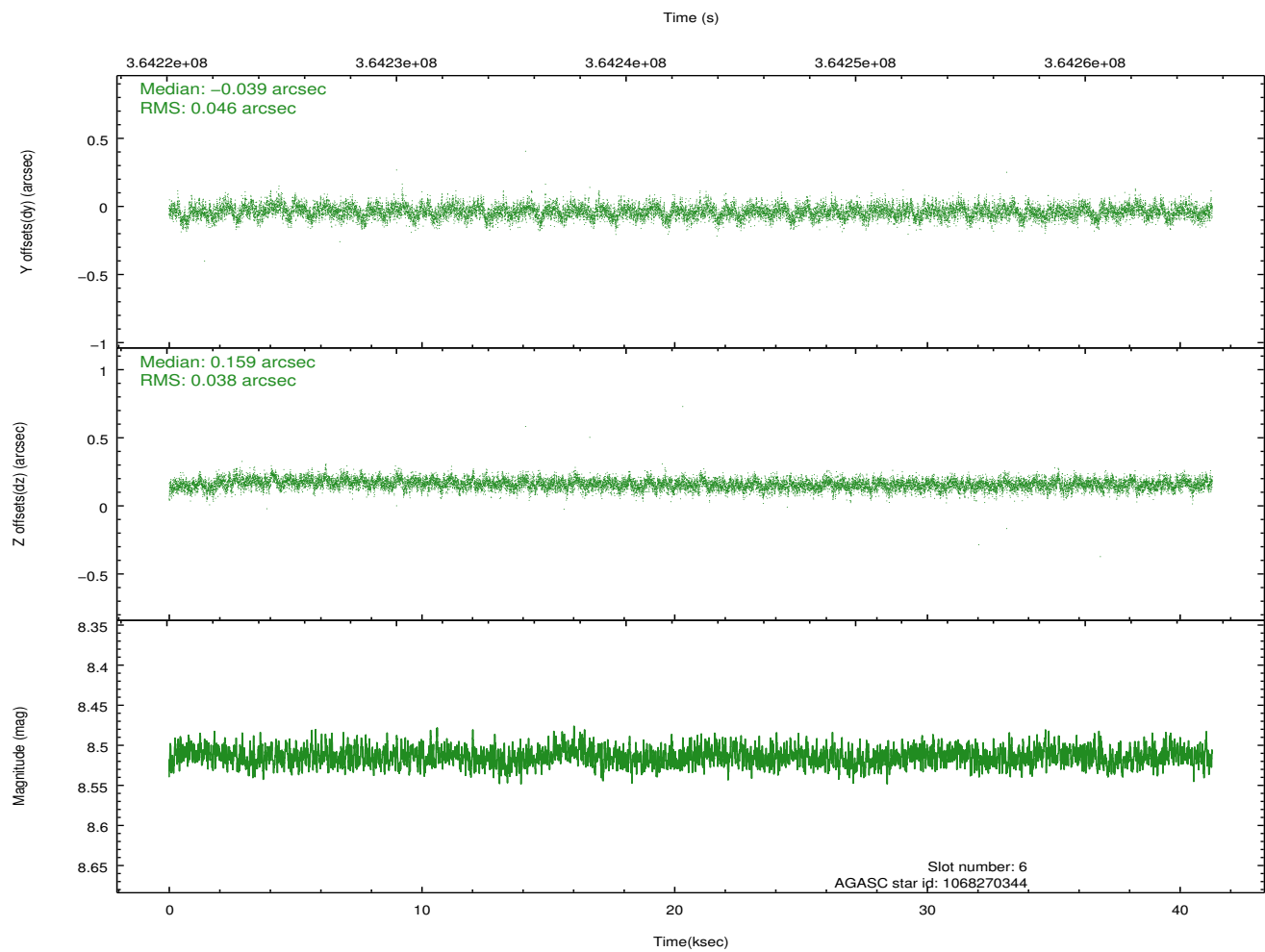
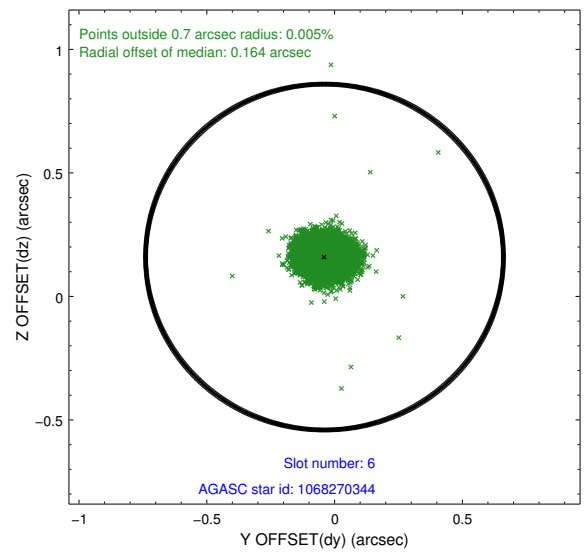
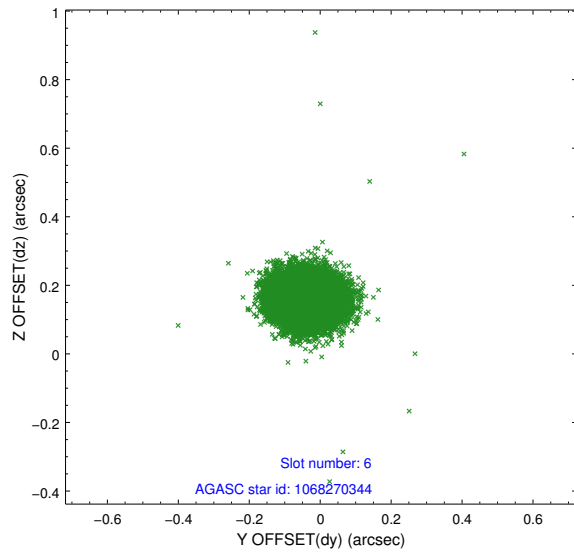
2.4.2 Slot 4



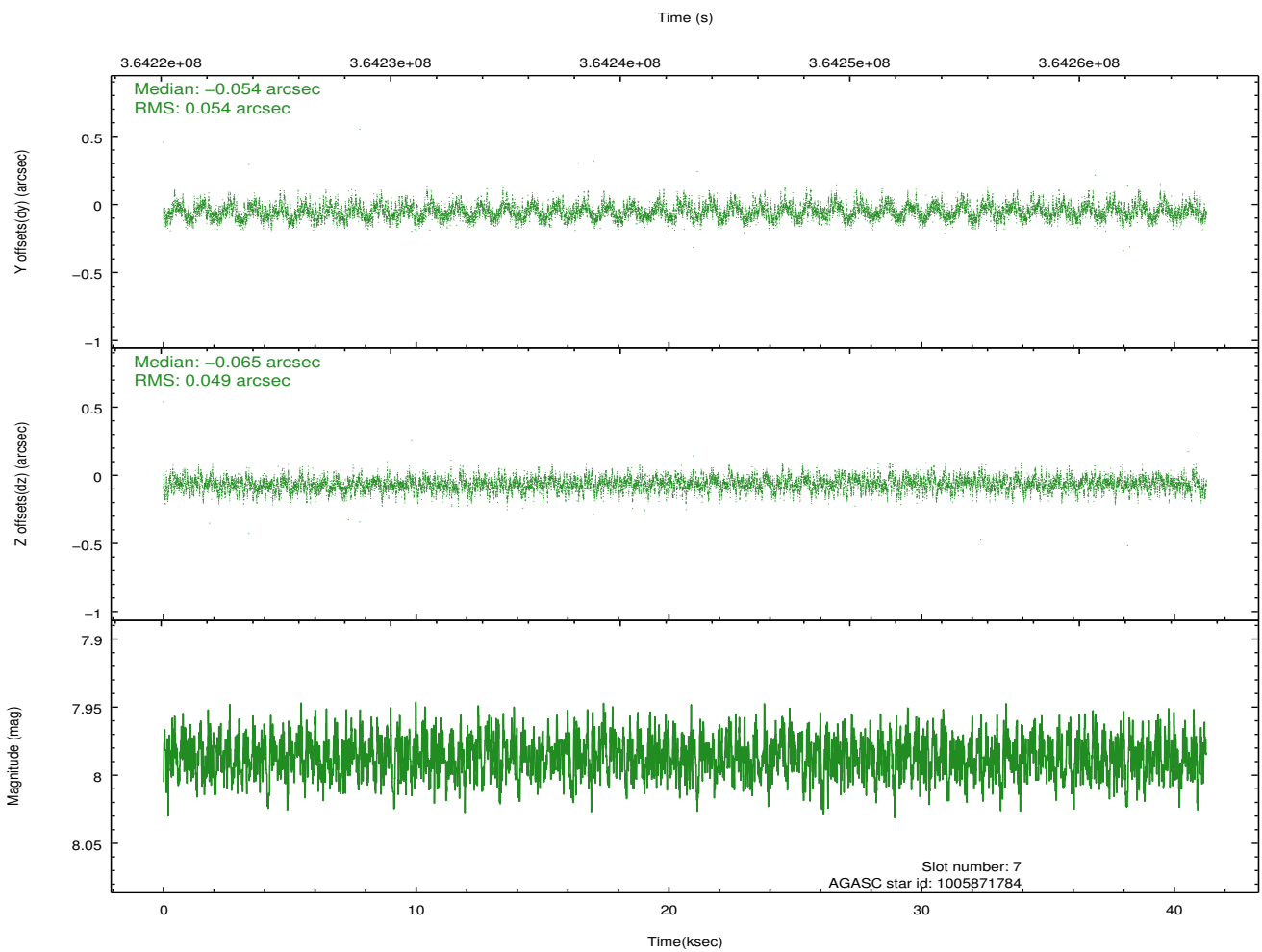
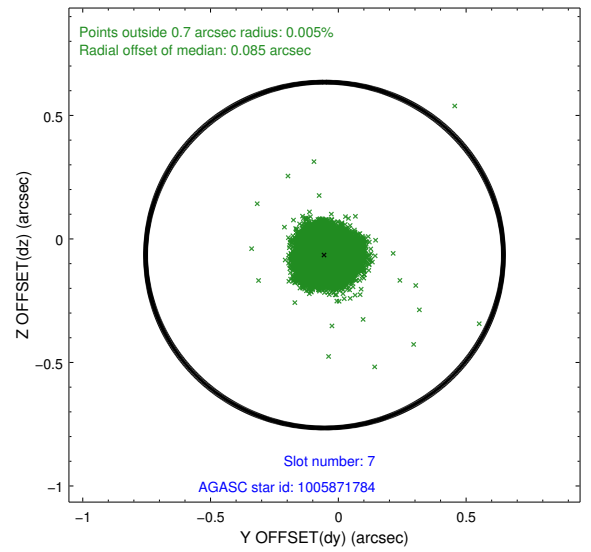
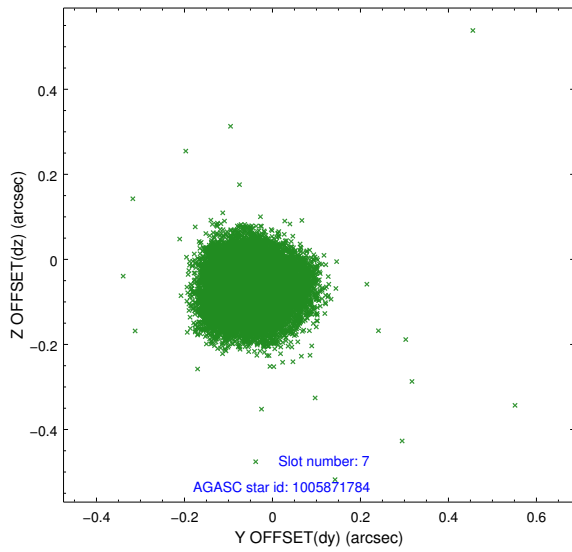
2.4.3 Slot 5



2.4.4 Slot 6

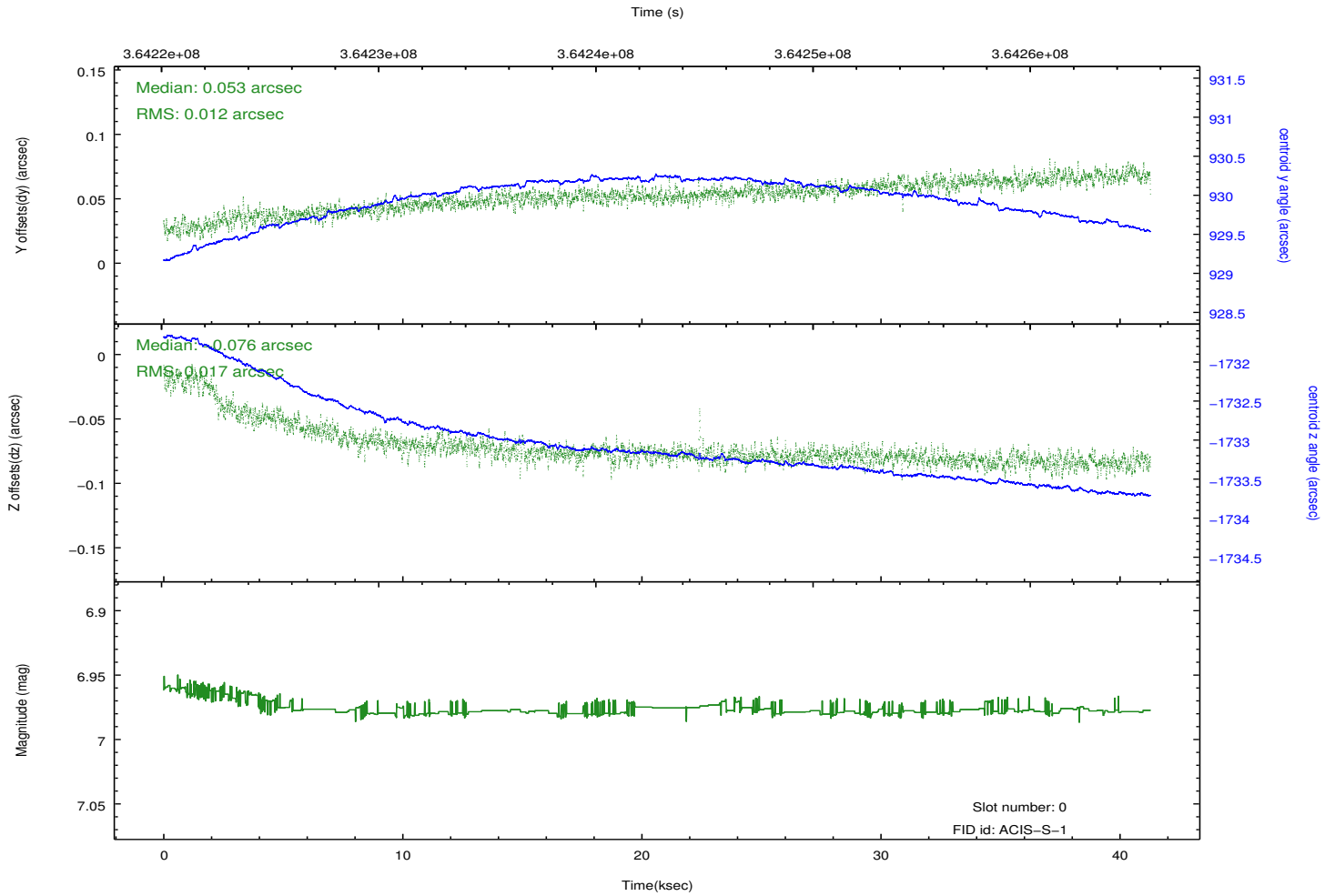
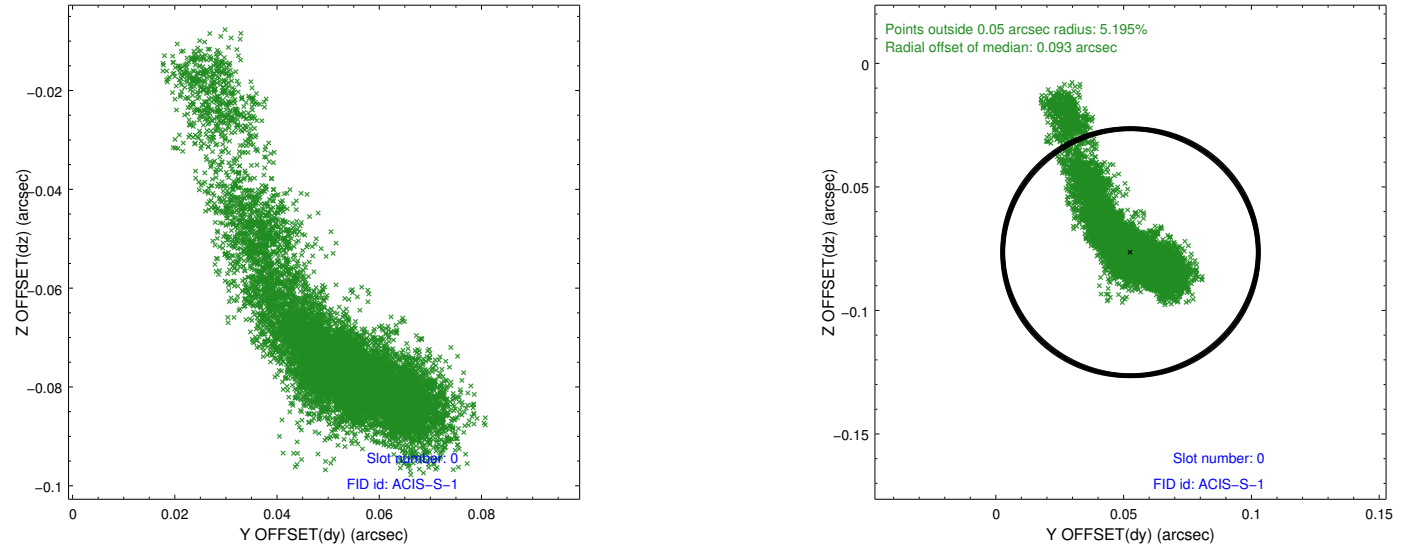


2.4.5 Slot 7

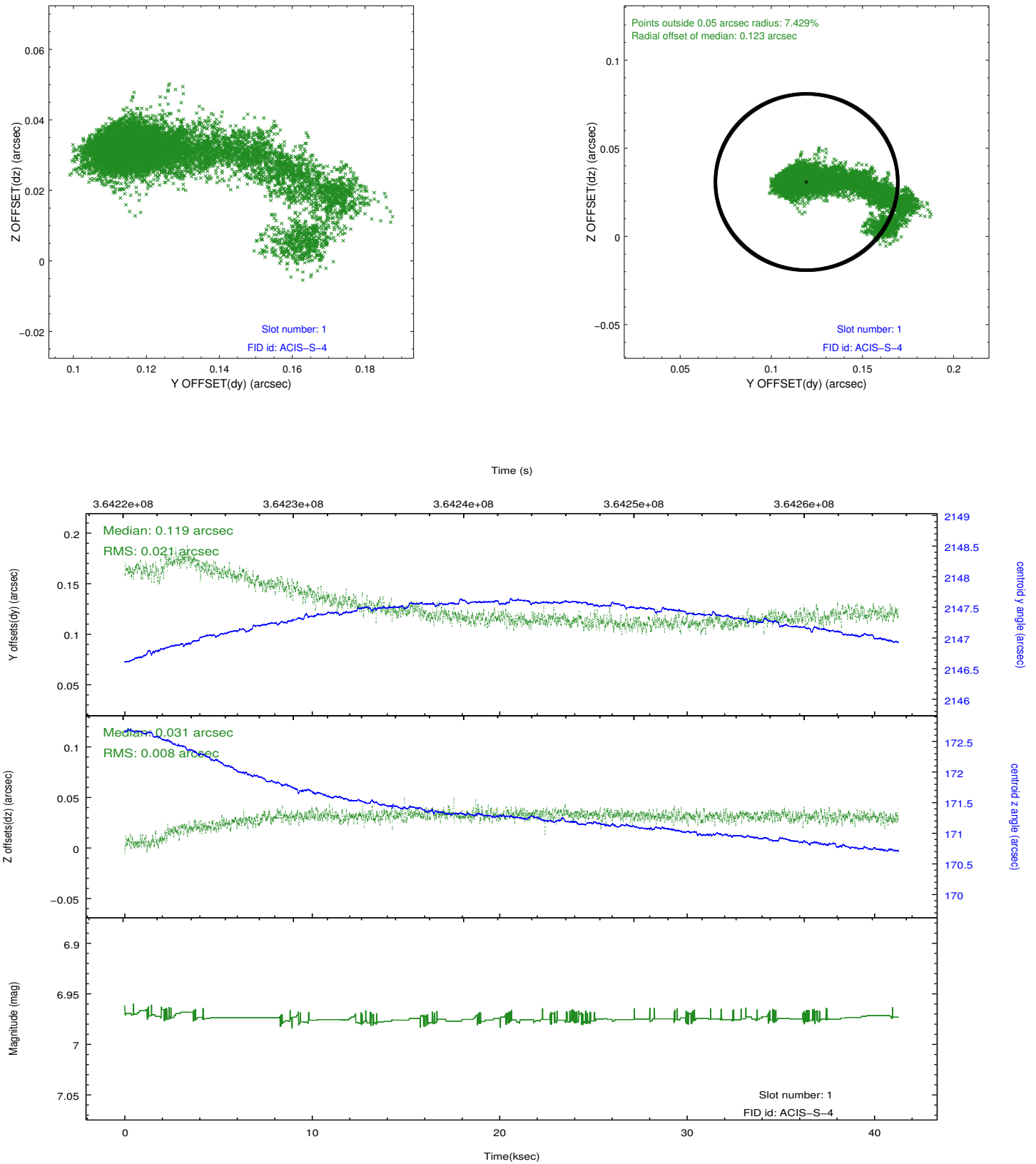


2.5 FID Slots

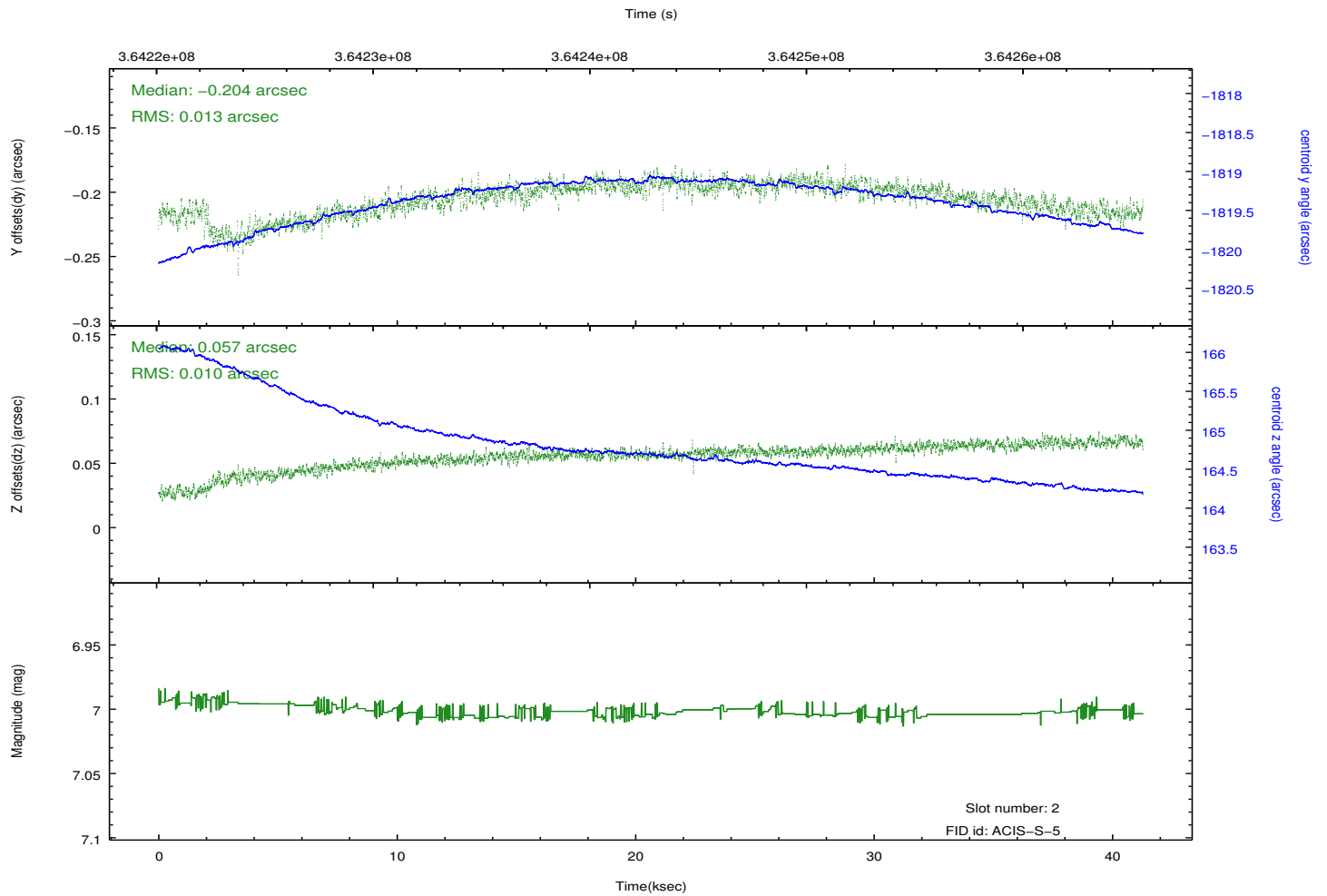
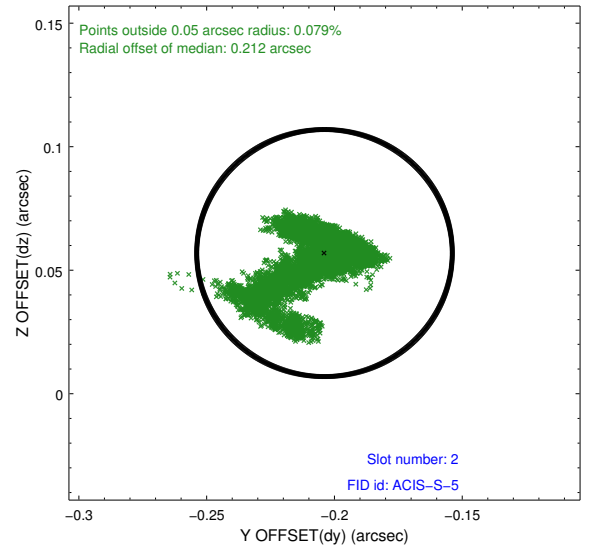
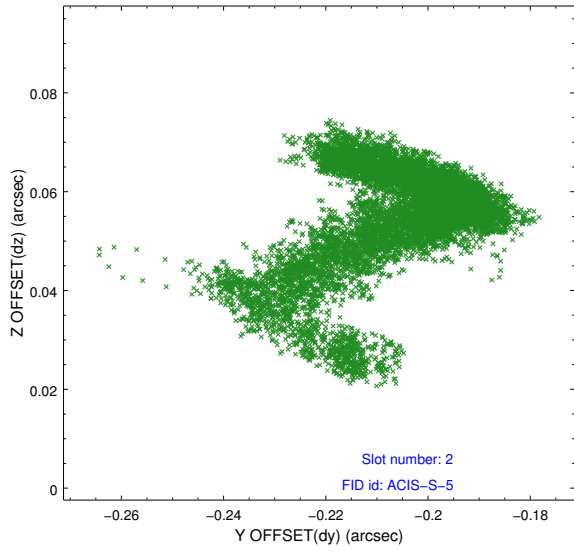
2.5.1 Slot 0



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)	2012.06.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.041599850893

A.2 Comments

Roll constraint met.