

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5586 - L2 Version 3
Chandra X-Ray Center

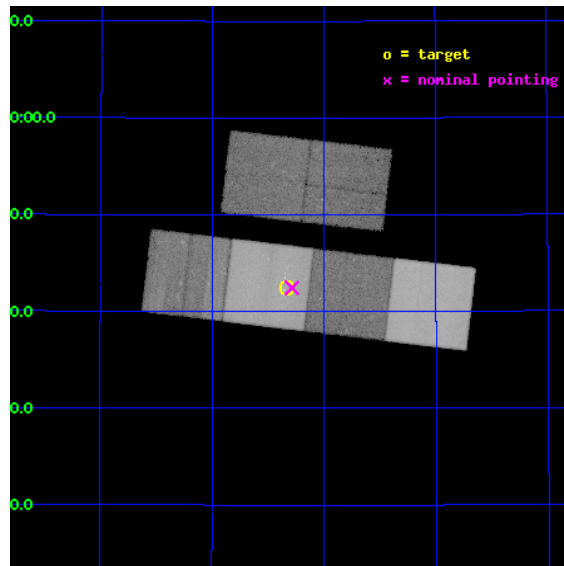
L2 Processing Date : Dec 27 2012

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

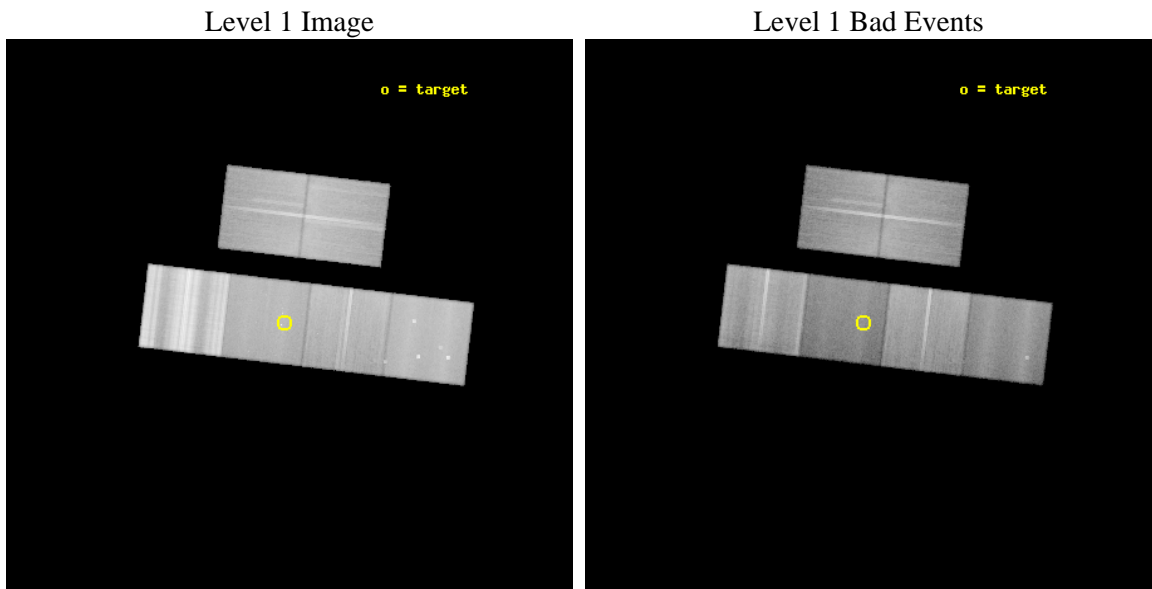
seq_num	500575	Sequence number
obs_id	5586	Observation id
title	In Search of Vela-like Pulsars and their Wind Nebulae	Proposal tit
observer	Zaven Arzoumanian	Principal investigator
object	G76.9+1.0	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	305.584167	Observer's specified target RA [deg]
dec_targ	38.706917	Observer's specified target Dec [deg]
ra_nom	305.57178188095	Nominal RA [deg]
dec_nom	38.70748413273	Nominal Dec [deg]
roll_nom	186.71845360781	Nominal Roll [deg]
revision	3	Processing version of data
ontime	54424.210888565	Sum of GTIs [s]
livetime	53735.058759968	Livetime [s]
ontime2	51040.664785773	Sum of GTIs [s]
ontime3	52281.797364712	Sum of GTIs [s]
ontime5	54424.169868469	Sum of GTIs [s]
ontime6	51773.00394994	Sum of GTIs [s]
ontime7	54424.210888565	Sum of GTIs [s]
ontime8	53299.425241888	Sum of GTIs [s]
l2events	669777	Number of level 2 events



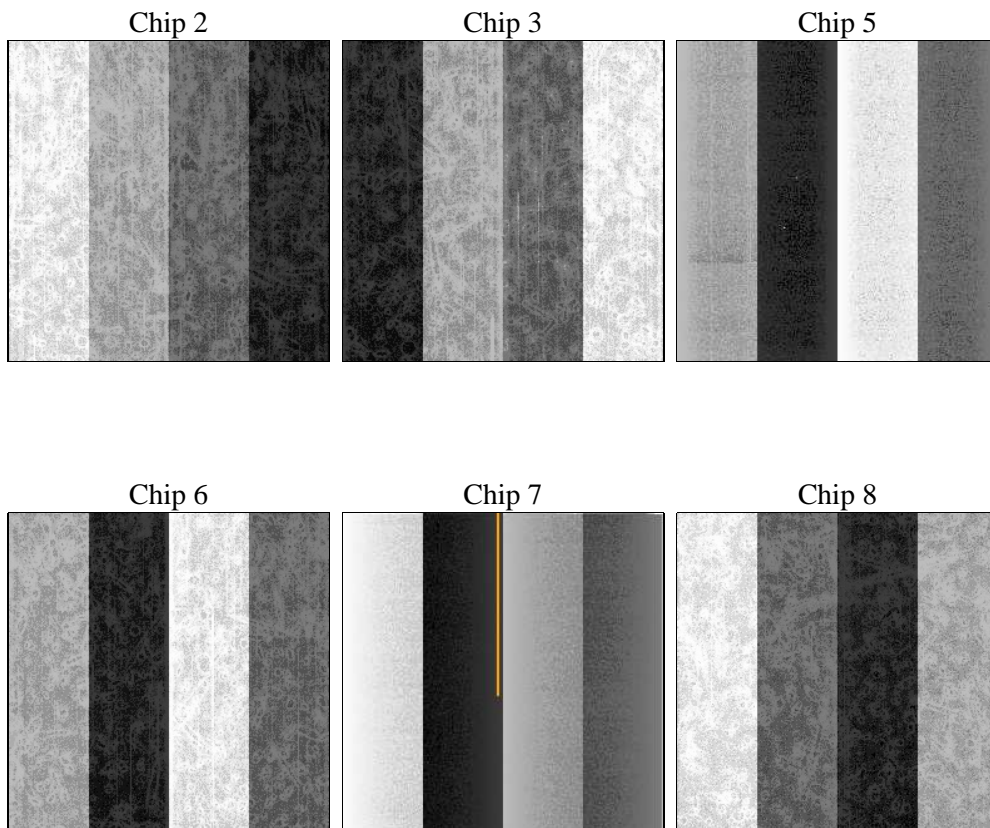
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	54500.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	54424.210888565	Sum of GTIs [s]
caldbver	4.5.5	 	ontime2	51040.664785773	Sum of GTIs [s]
date	2012-12-27T03:42:06	Date and time of file creation	ontime3	52281.797364712	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	54424.169868469	Sum of GTIs [s]
			ontime6	51773.00394994	Sum of GTIs [s]
			ontime7	54424.210888565	Sum of GTIs [s]
			ontime8	53299.425241888	Sum of GTIs [s]
			l1events	3671240	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	505918	440383	565504	494616	451482	1213337	grade 0 events	30294	19339	28919	29322	21880	259871
rejected events	441953	397170	279576	433808	221478	468719		5%	4%	5%	5%	4%	21%
rejected %	87%	90%	49%	87%	49%	38%	grade 1 events	388	216	2007	303	430	2296
								0%	0%	0%	0%	0%	0%
							grade 2 events	16105	9009	88654	14506	50114	94944
								3%	2%	15%	2%	11%	7%
							grade 3 events	3676	3987	16000	4320	21960	135203
								0%	0%	2%	0%	4%	11%
							grade 4 events	6103	3885	15626	4172	21735	118980
								1%	0%	2%	0%	4%	9%
							grade 5 events	10738	12669	38714	12695	42184	27252
								2%	2%	6%	2%	9%	2%
							grade 6 events	7792	6998	136761	8494	114338	135645
								1%	1%	24%	1%	25%	11%
							grade 7 events	430822	384280	238823	420804	178841	439146
								85%	87%	42%	85%	39%	36%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	305.599492	305.5717818809514	Subarray requested	NONE	NONE
[deg] Pointing Dec	38.724063	38.70748413273033	Alternating exposures requested	N	N
[deg] Pointing Roll	186.544492	186.7184536078064	[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)	239257684.184000	239256536.43272			
Observation start date	2005-08-01T04:27:00	2005-08-01T04:08:56			
[s] Observation end time (MET)	239312184.184000	239313253.27281			
Observation end date	2005-08-01T19:35:20	2005-08-01T19:54:13			
Read mode	TIMED	TIMED			

2.3 Aspect

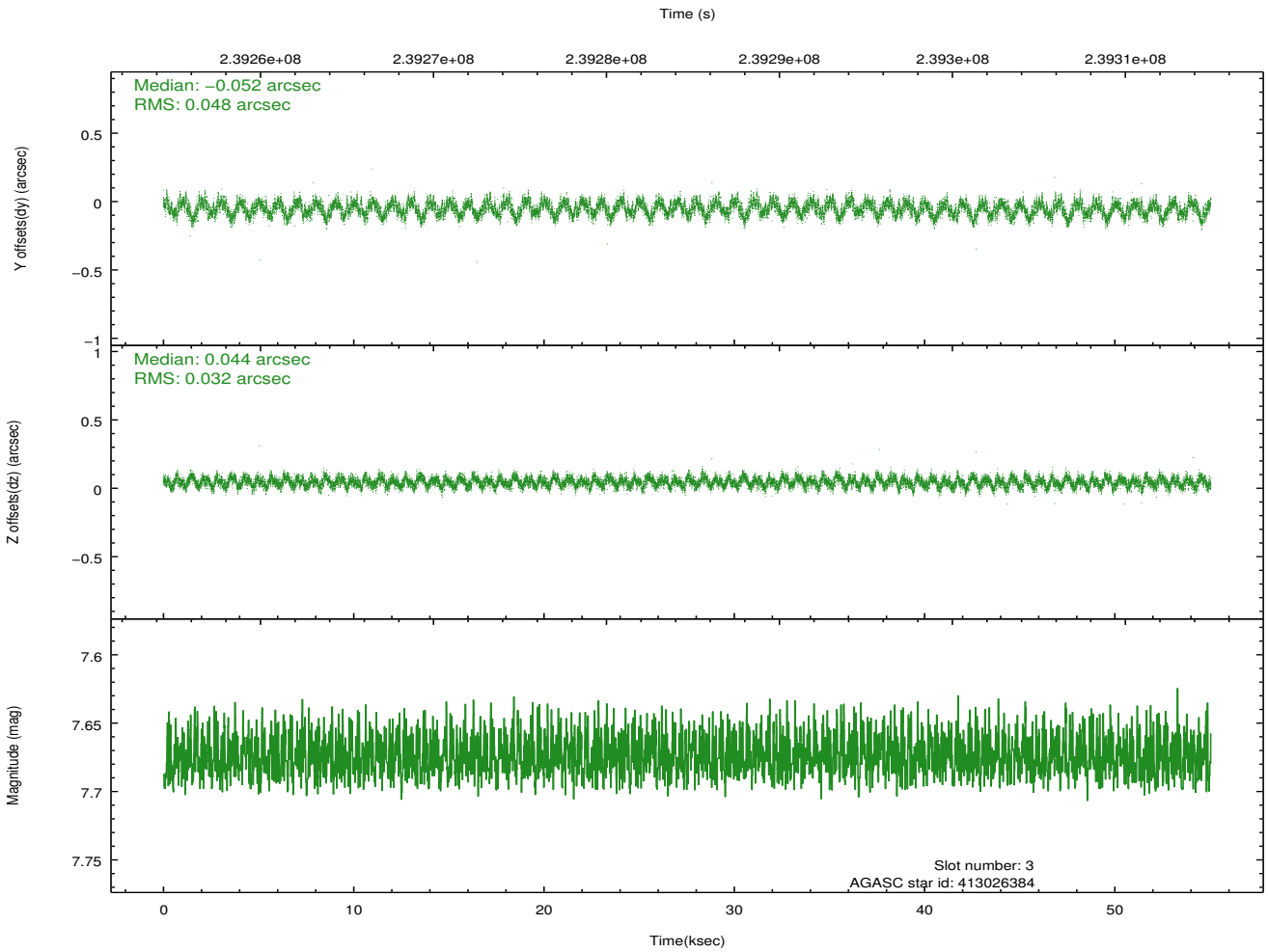
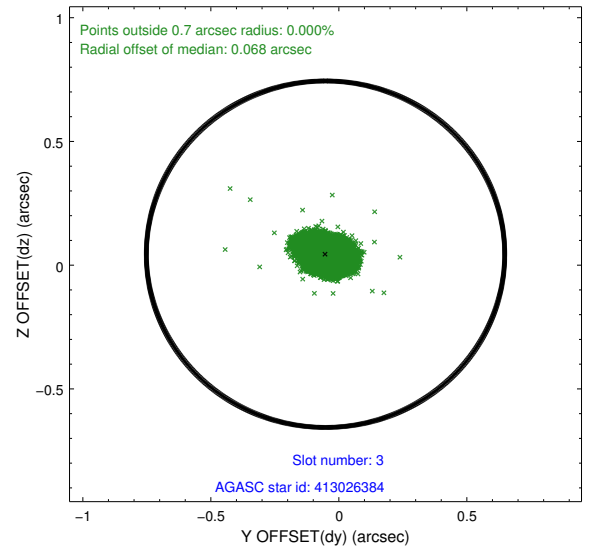
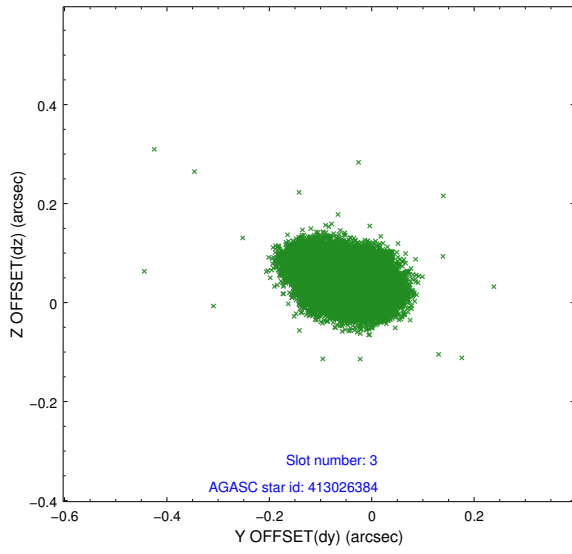
Slot Statistics

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	13425	-0.059	-0.033	0.014	0.023	0.000000	0.000000	-759.82	-1731.23
1	FID	ACIS-S-4	7.21	13428	0.109	0.038	0.010	0.021	0.000000	0.000000	2153.59	177.42
2	FID	ACIS-S-5	7.23	13427	-0.080	0.003	0.009	0.017	0.000000	0.000000	-1812.77	170.93
3	GUIDE	413026384	7.67	26850	-0.052	0.044	0.062	0.099	304.954926	38.342718	1963.92	1150.43
4	GUIDE	413026576	8.09	26852	-0.121	-0.048	0.052	0.086	304.821636	38.430556	2298.81	790.77
5	GUIDE	413139272	8.01	26856	0.068	0.028	0.067	0.106	305.281414	39.031576	757.90	-1202.56
6	GUIDE	413143528	8.45	26852	0.107	0.162	0.054	0.086	306.110080	38.816395	-1460.89	-171.00
7	GUIDE	413149952	8.16	26850	-0.003	-0.182	0.064	0.101	305.648206	38.129365	106.96	2142.53

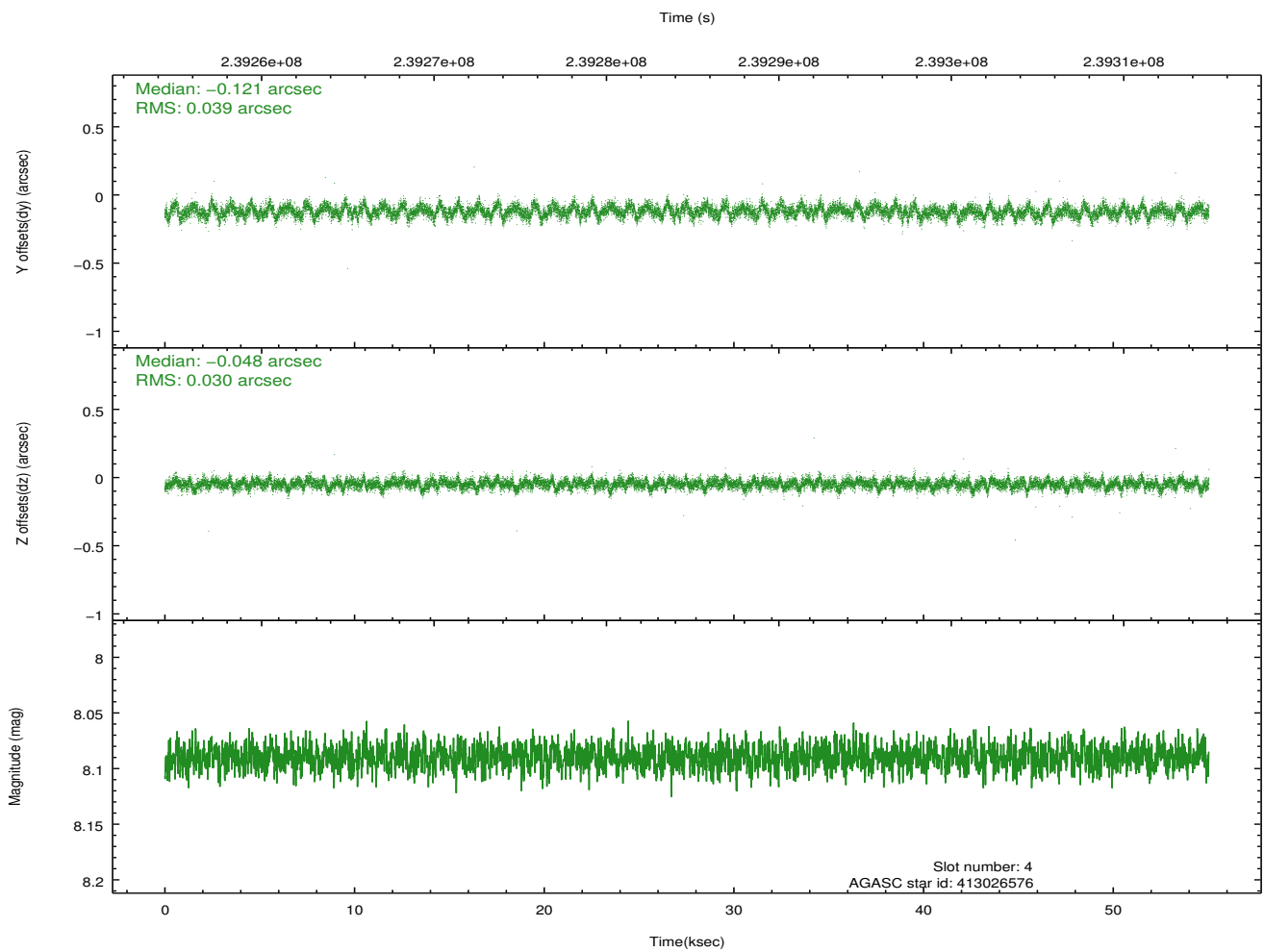
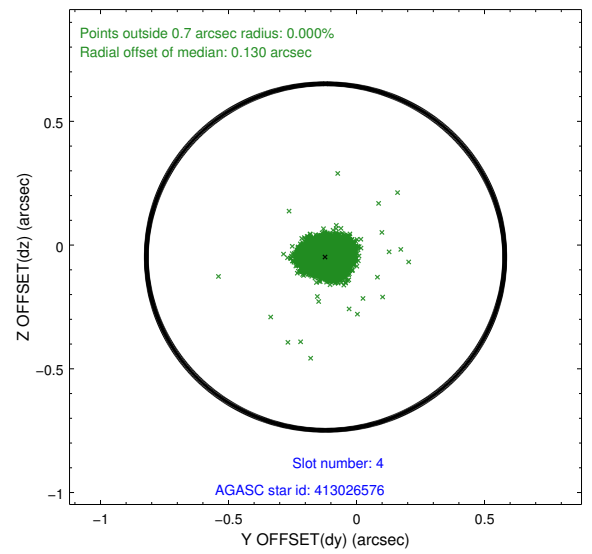
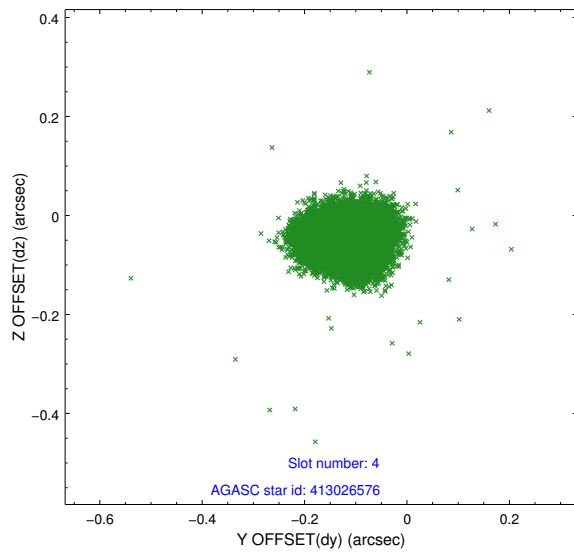
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2.4 Star Slots

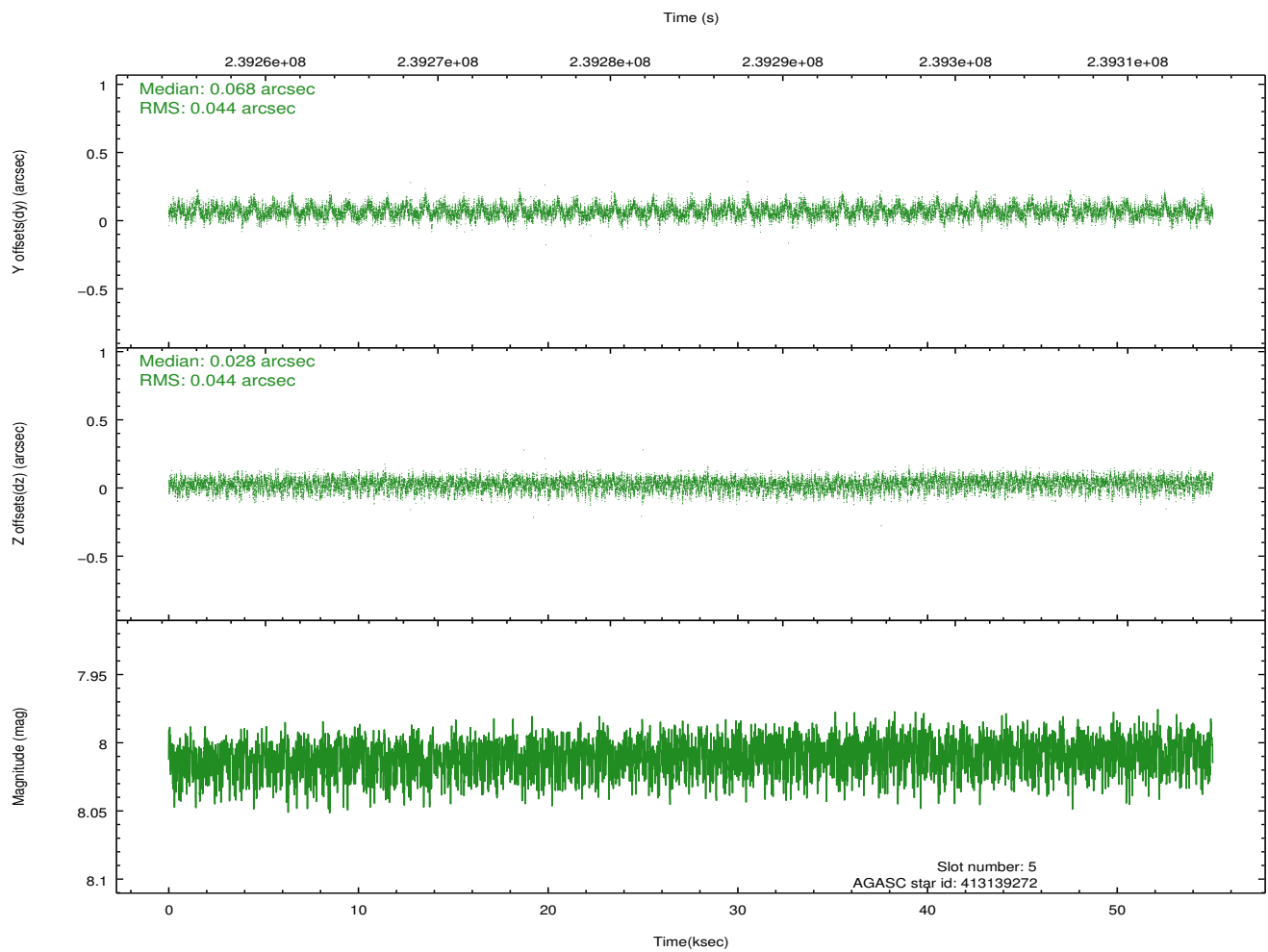
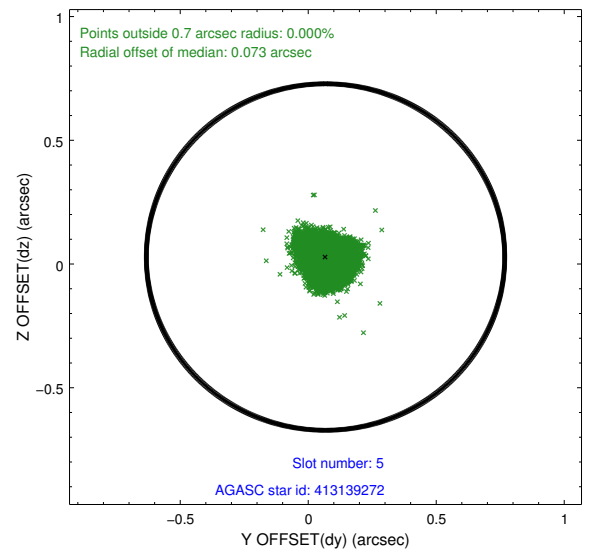
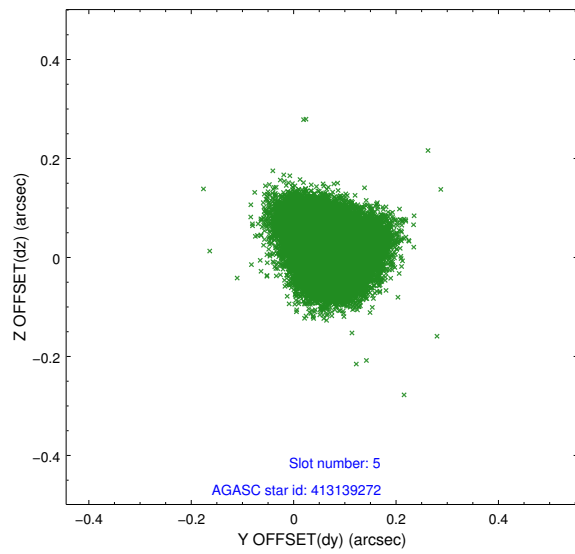
2.4.1 Slot 3



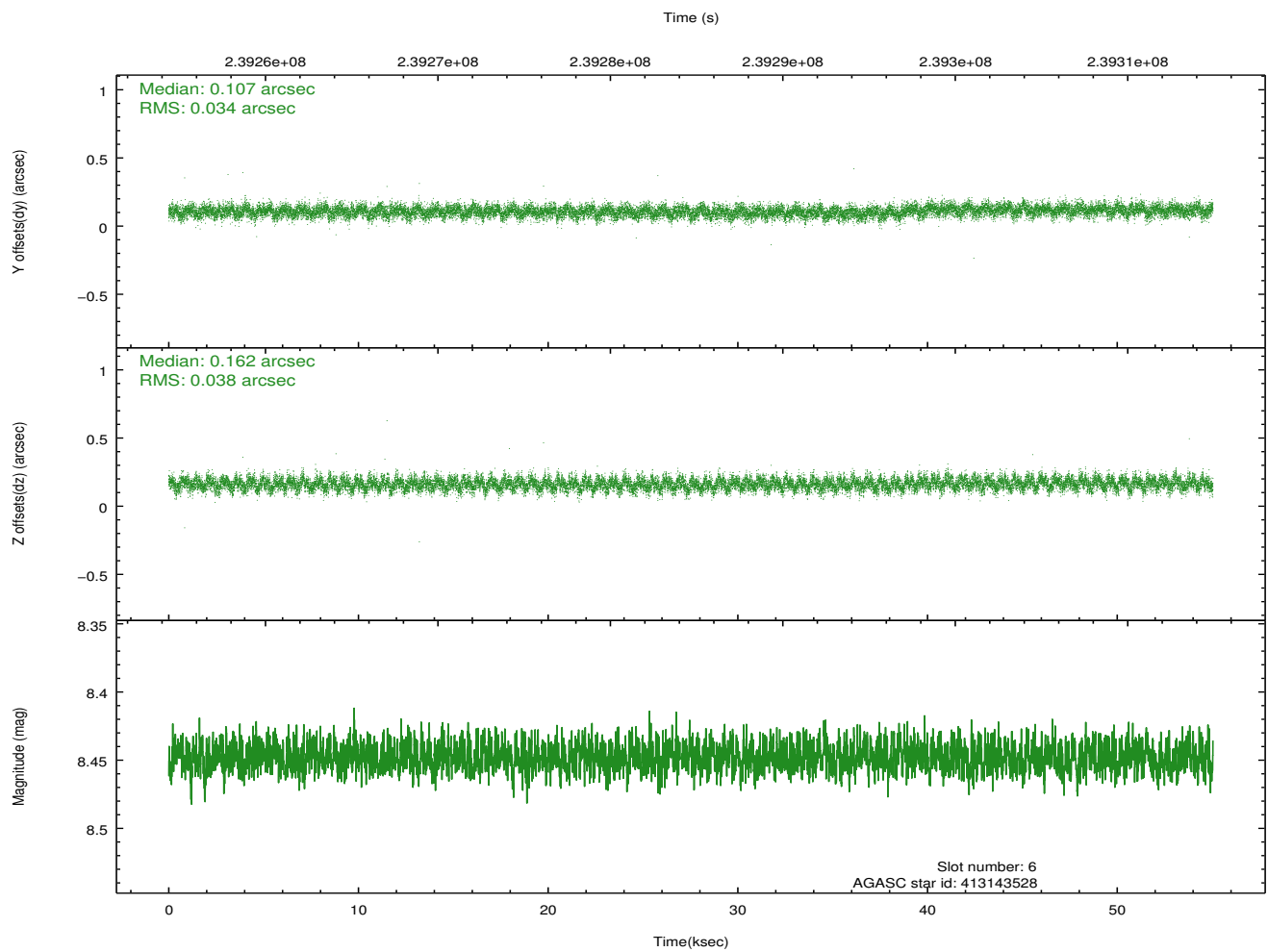
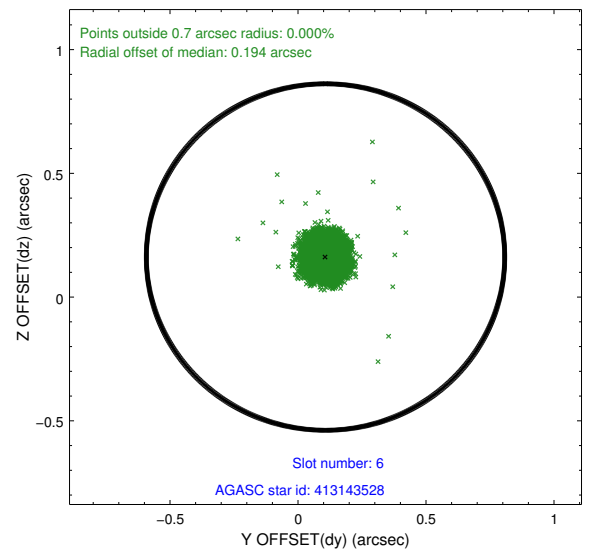
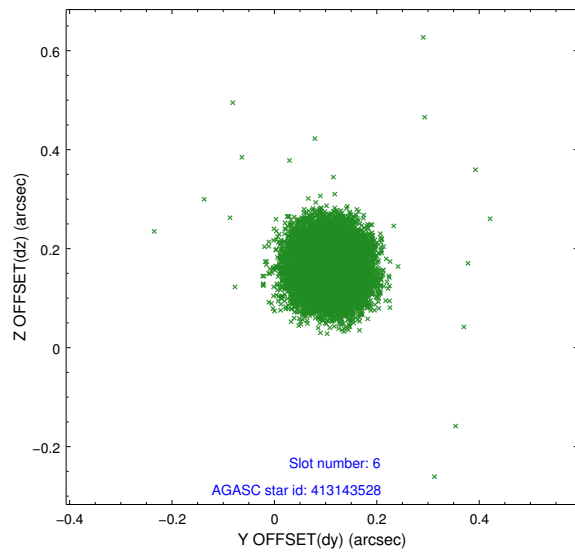
2.4.2 Slot 4



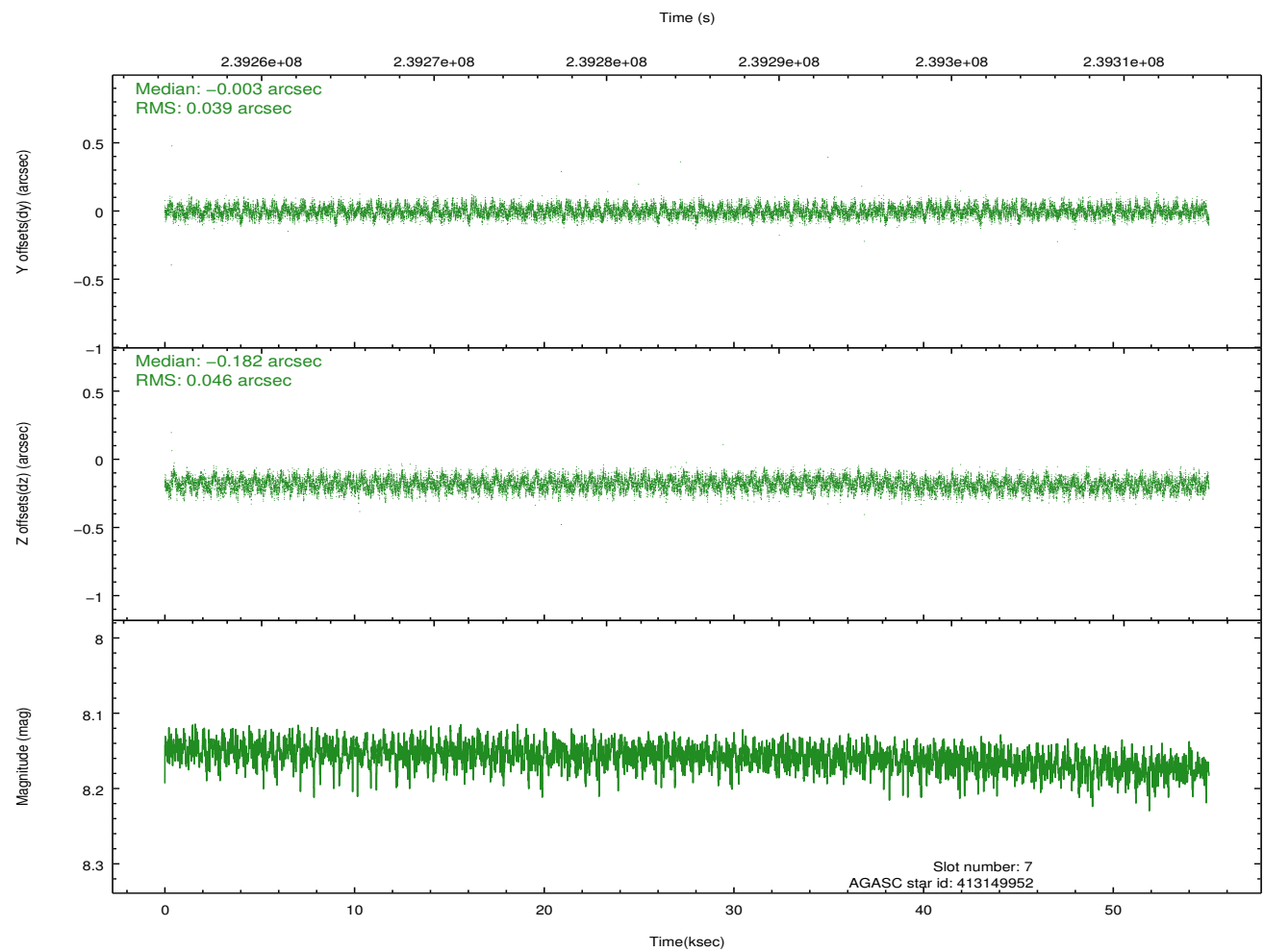
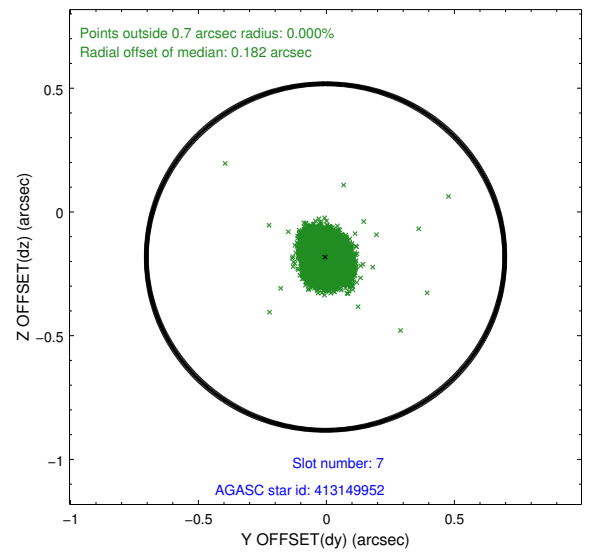
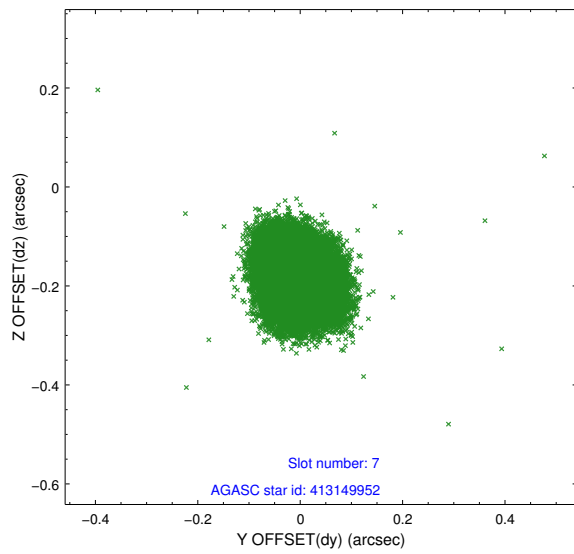
2.4.3 Slot 5



2.4.4 Slot 6

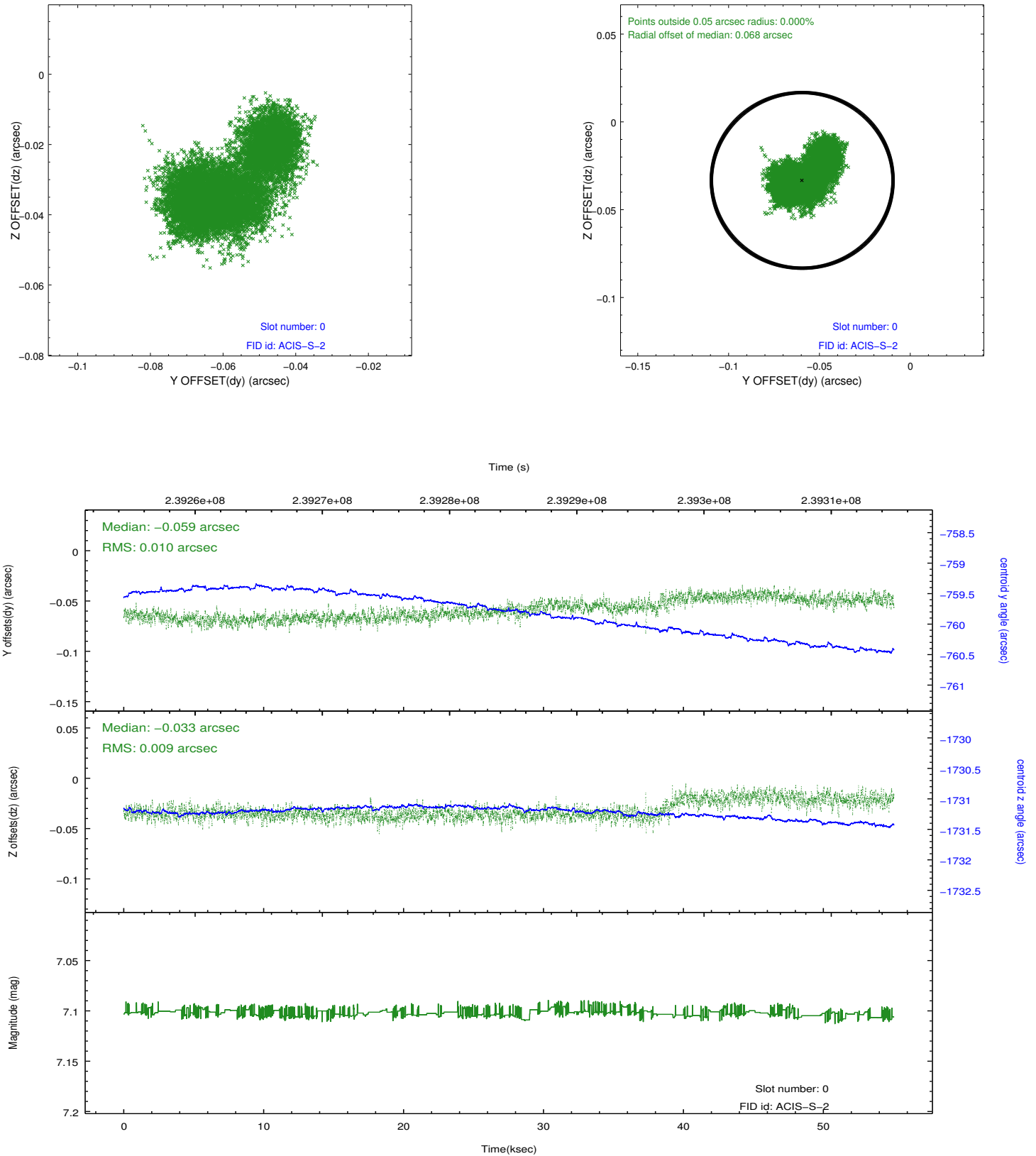


2.4.5 Slot 7

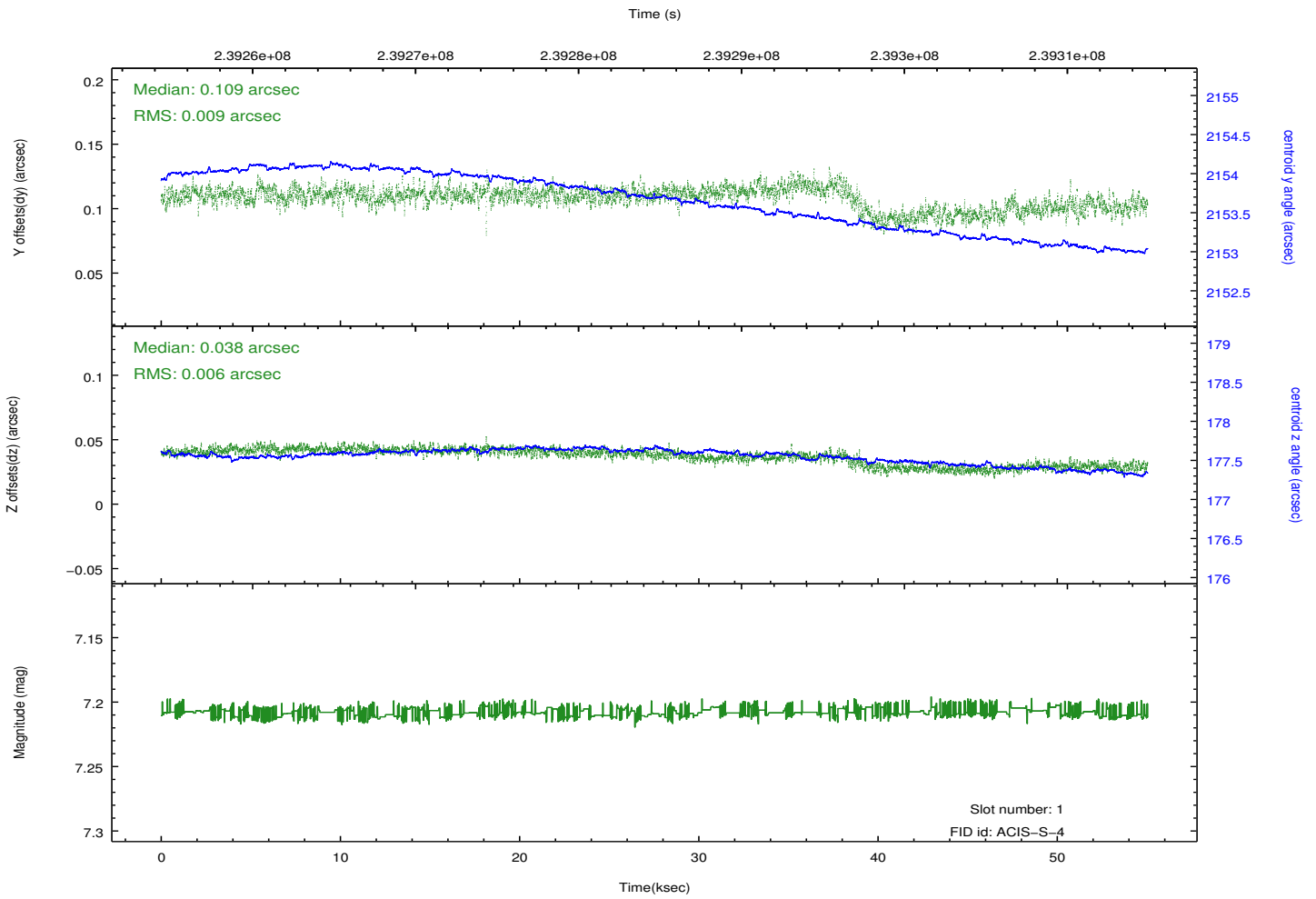
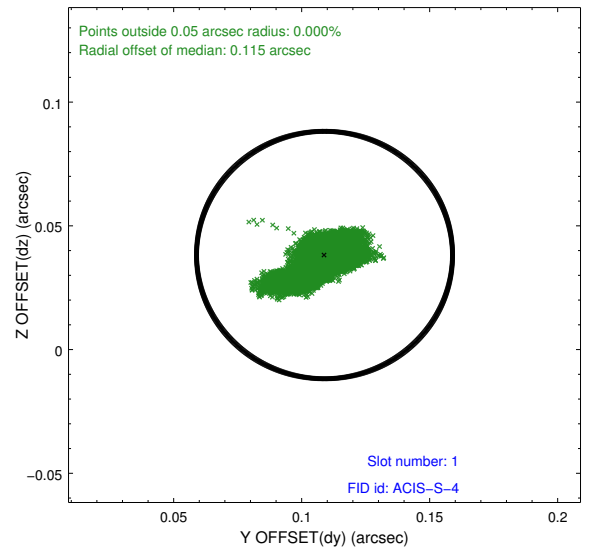
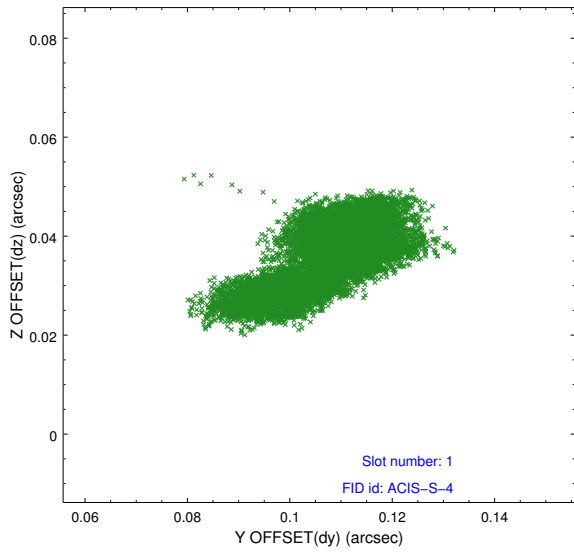


2.5 FID Slots

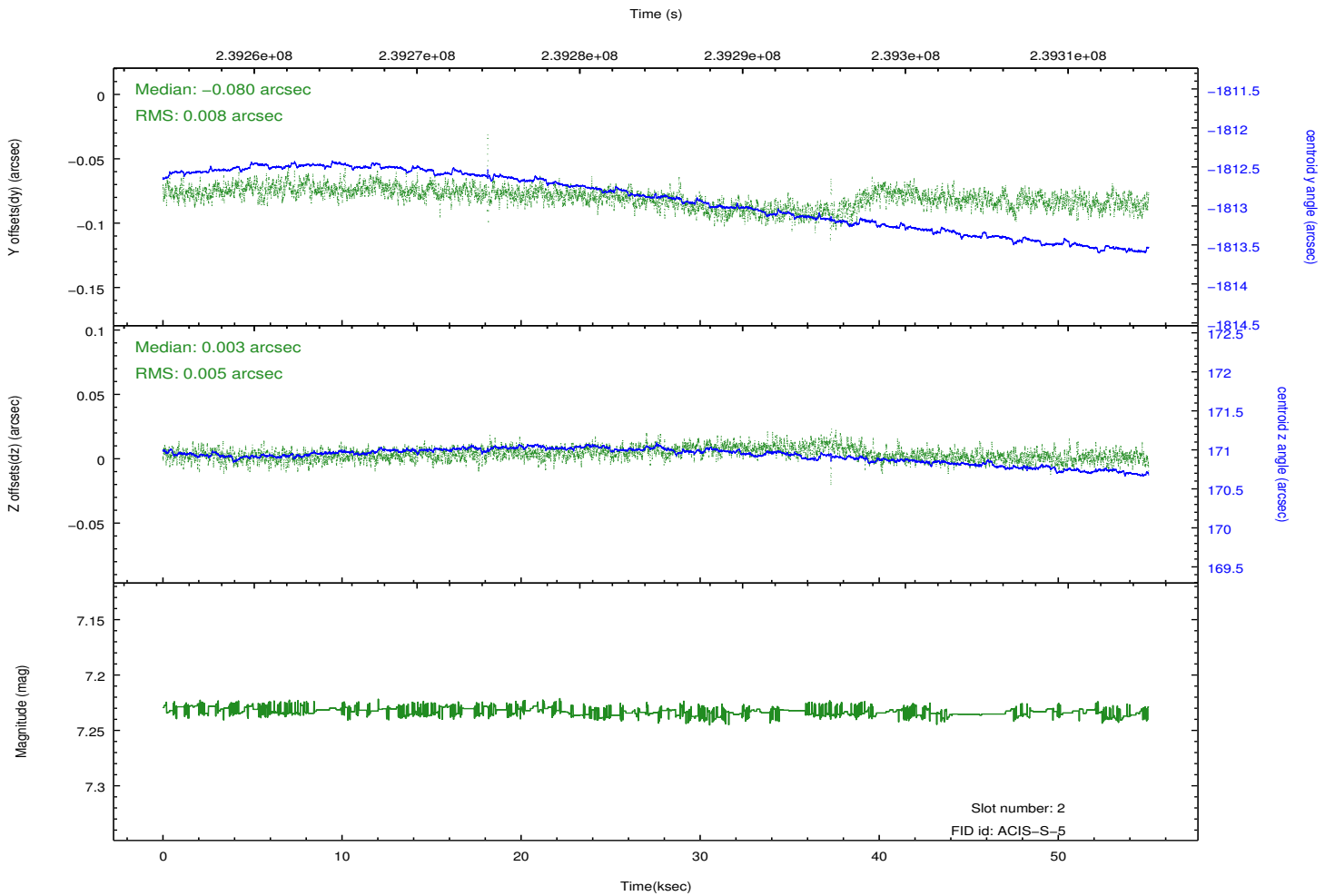
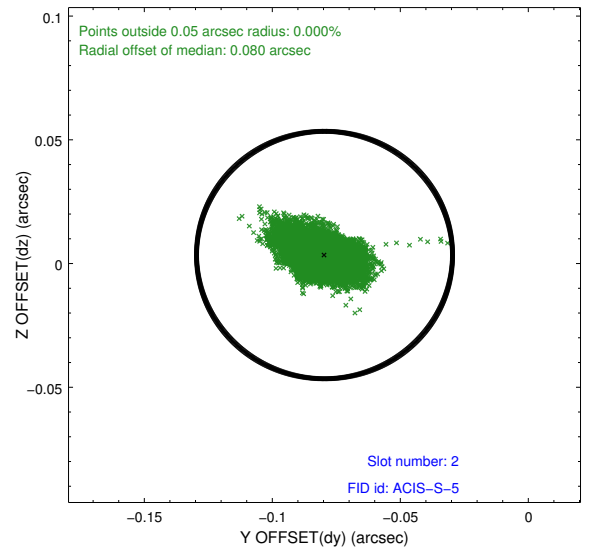
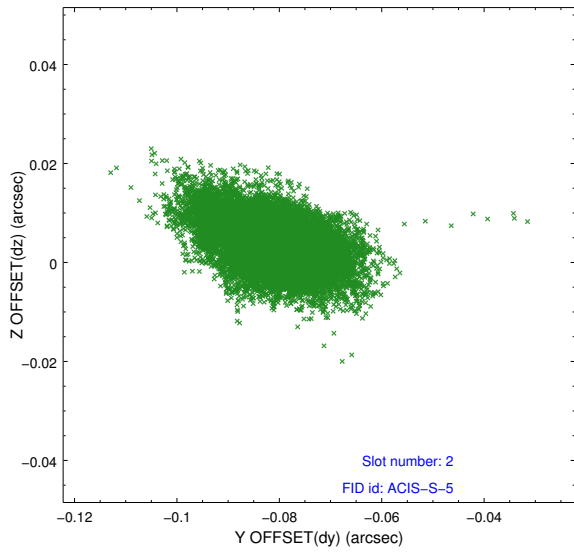
2.5.1 Slot 0



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)	2013.01.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	54.42523

A.2 Comments

This observation was taken during a high radiation environment. Chip S4 of this observation has a very high background due to the radiation. In this case the events due to radiation on chip S4 were not completely removed in the Level 2 processing. I note spikes in the count rates at about 31 ksec and 35 ksec into the observation. The outer portion of the supernova remnant directly east of the pulsar falls on S4. The science goals of this proposal do not include analysis of the supernova shell or outer shocks, so the radiation issues do not affect the science quality of the data. While the front illuminated chips have several intervals of non-Good-Time, the back illuminated chips, including the target, have nearly complete Good Time coverage.