

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15968 - L2 Version 2
Chandra X-Ray Center

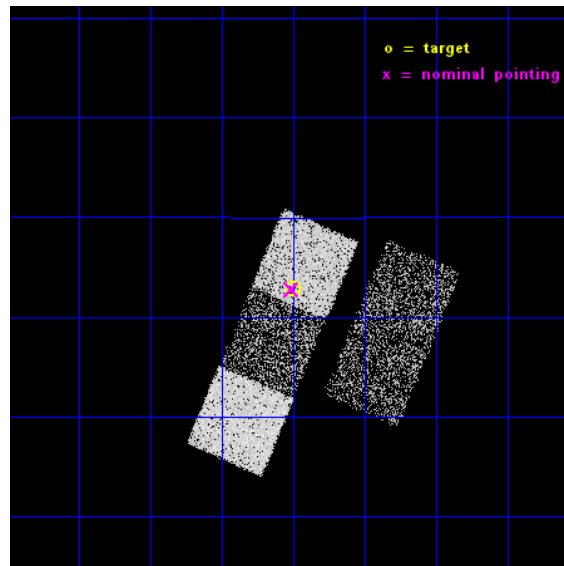
L2 Processing Date : Dec 8 2014

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1 Front

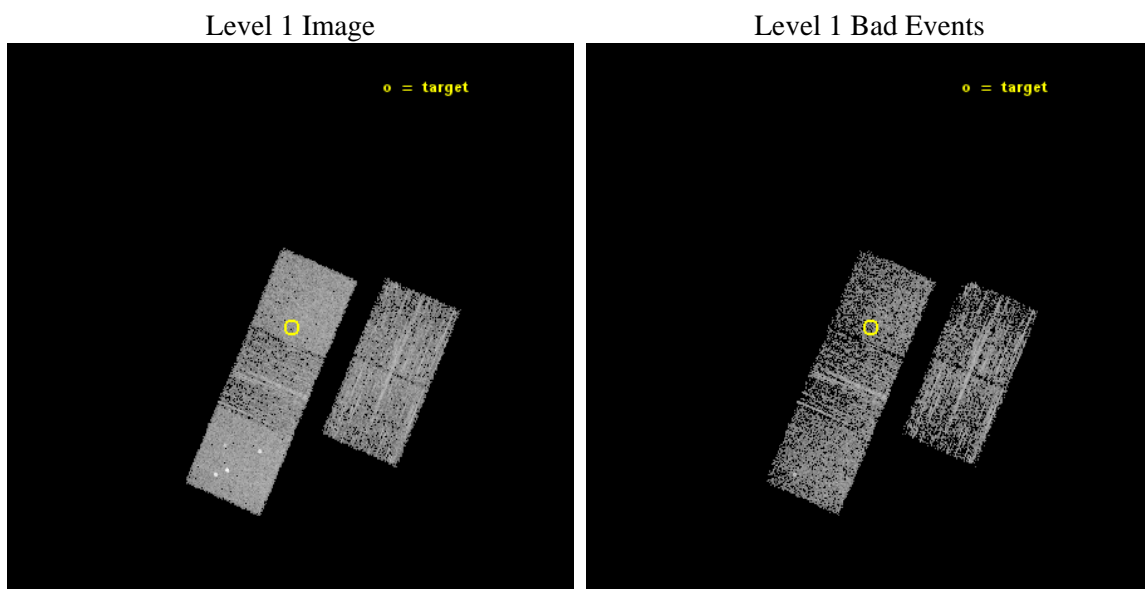
seq_num	502201	Sequence number
obs_id	15968	Observation id
title	Where Have All The Central Compact Objects Gone?	Proposal title
observer	Dr. Eric Gotthelf	Principal investigator
object	PSR J0051+0423	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	12.875417	Observer's specified target RA [deg]
dec_targ	4.380278	Observer's specified target Dec [deg]
ra_nom	12.878480038356	Nominal RA [deg]
dec_nom	4.3797495914511	Nominal Dec [deg]
roll_nom	293.25117480471	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3570.1260675192	Sum of GTIs [s]
livetime	3523.4797421585	Livetime [s]
ontime2	3569.961907506	Sum of GTIs [s]
ontime3	3570.0029475093	Sum of GTIs [s]
ontime5	3570.0850275159	Sum of GTIs [s]
ontime6	3570.0439875126	Sum of GTIs [s]
ontime7	3570.1260675192	Sum of GTIs [s]
l2events	28065	Number of level 2 events



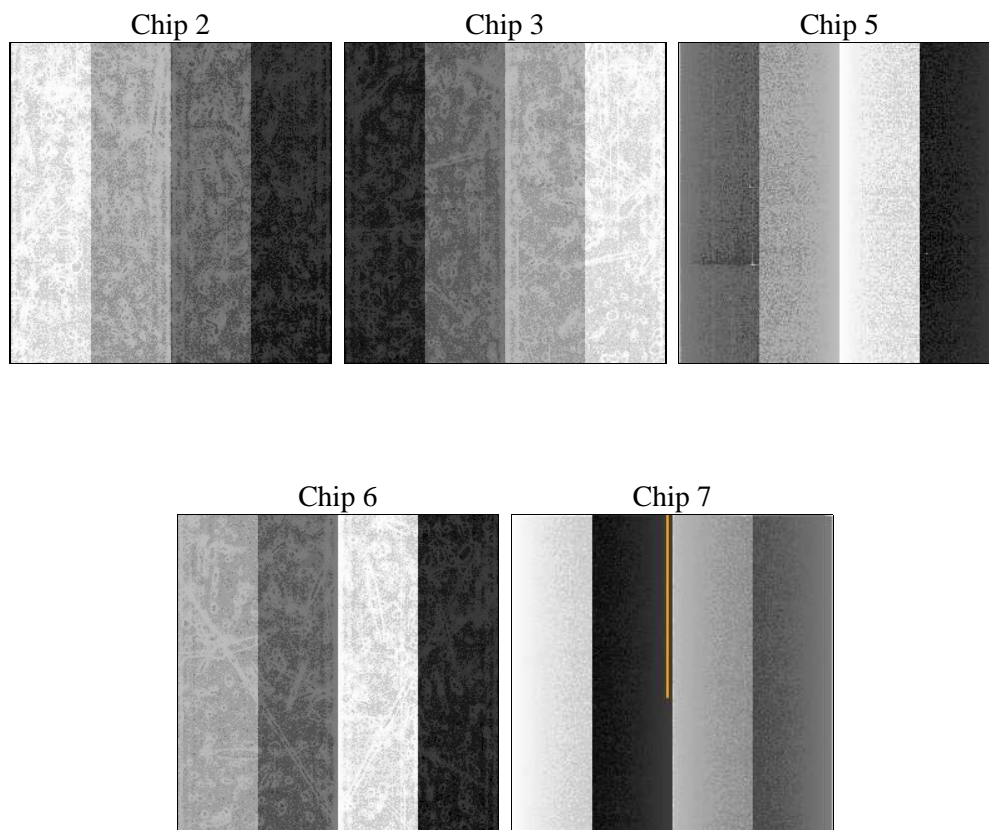
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	3570.1260675192	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	3569.961907506	Sum of GTIs [s]
date	2014-12-08T12:19:08	Date and time of file creation	ontime3	3570.0029475093	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	3570.0850275159	Sum of GTIs [s]
			ontime6	3570.0439875126	Sum of GTIs [s]
			ontime7	3570.1260675192	Sum of GTIs [s]
			l1events	104368	Number of level 1 events

2.1.4 Events

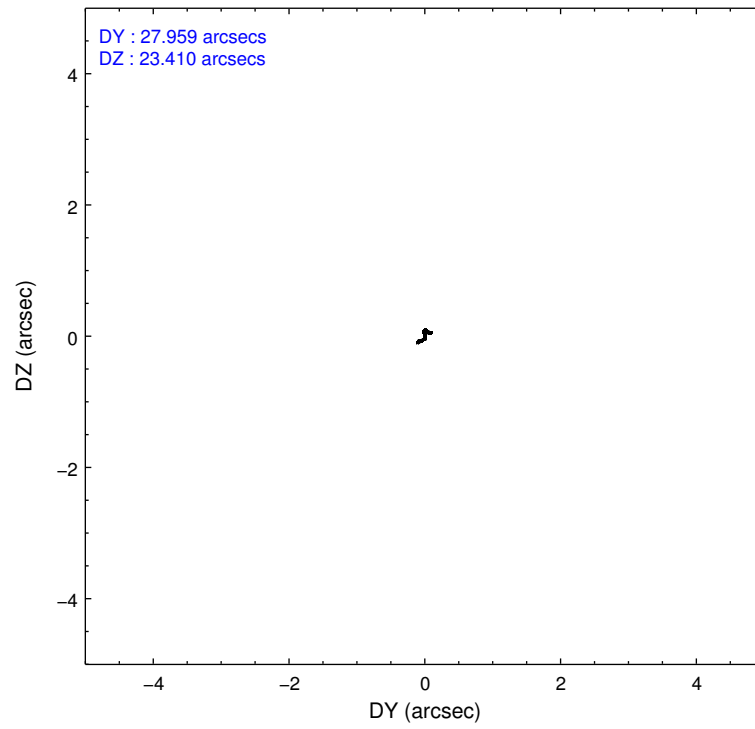
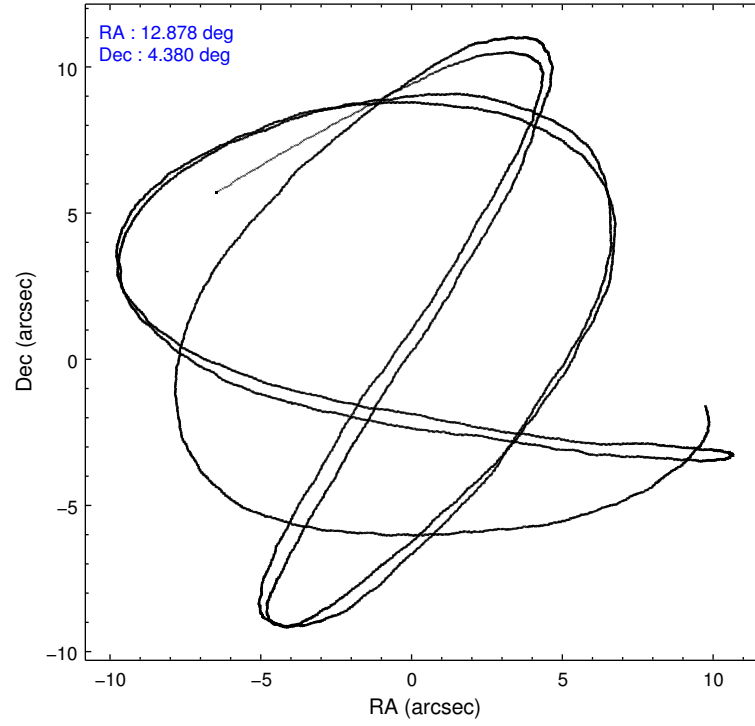
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	17511	16468	30239	16892	23258
rejected events	15467	14577	14847	14719	13086
rejected %	88%	88%	49%	87%	56%

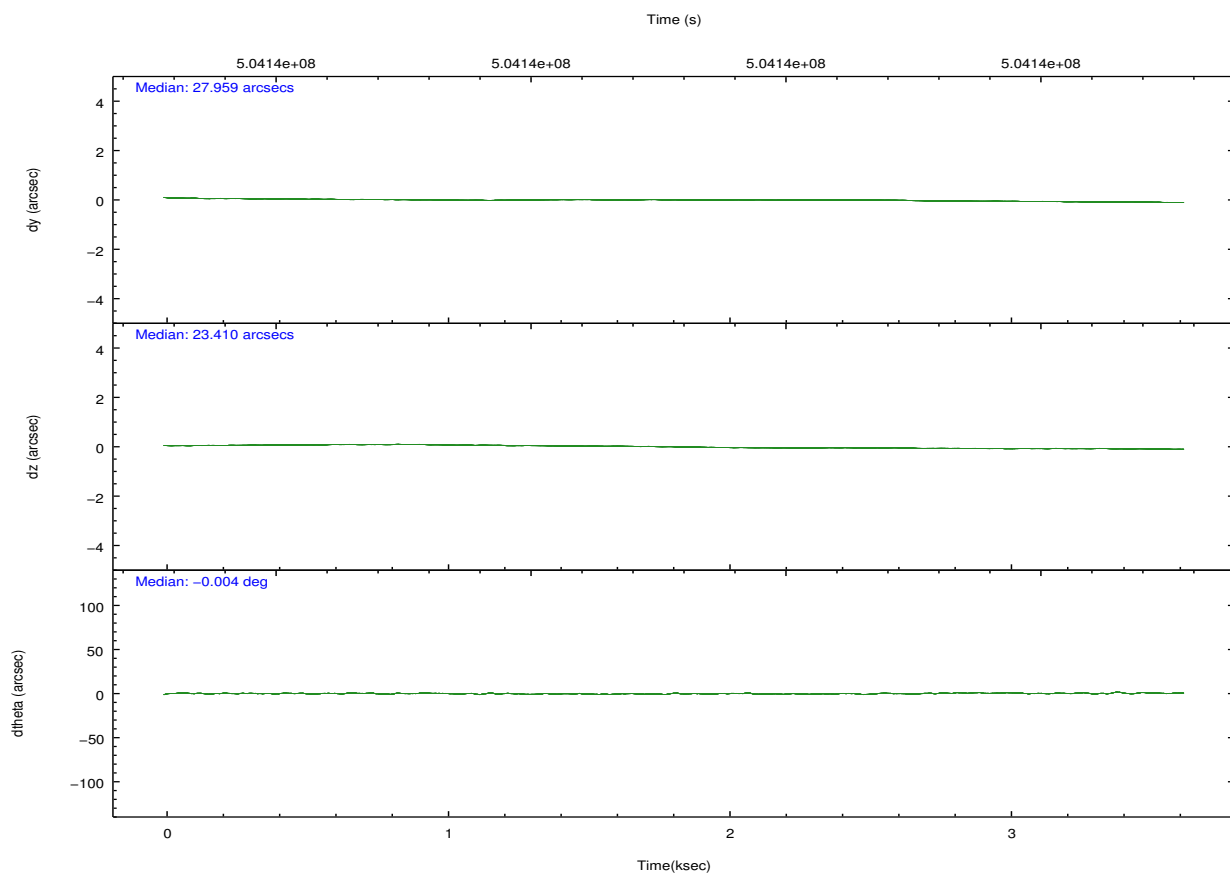
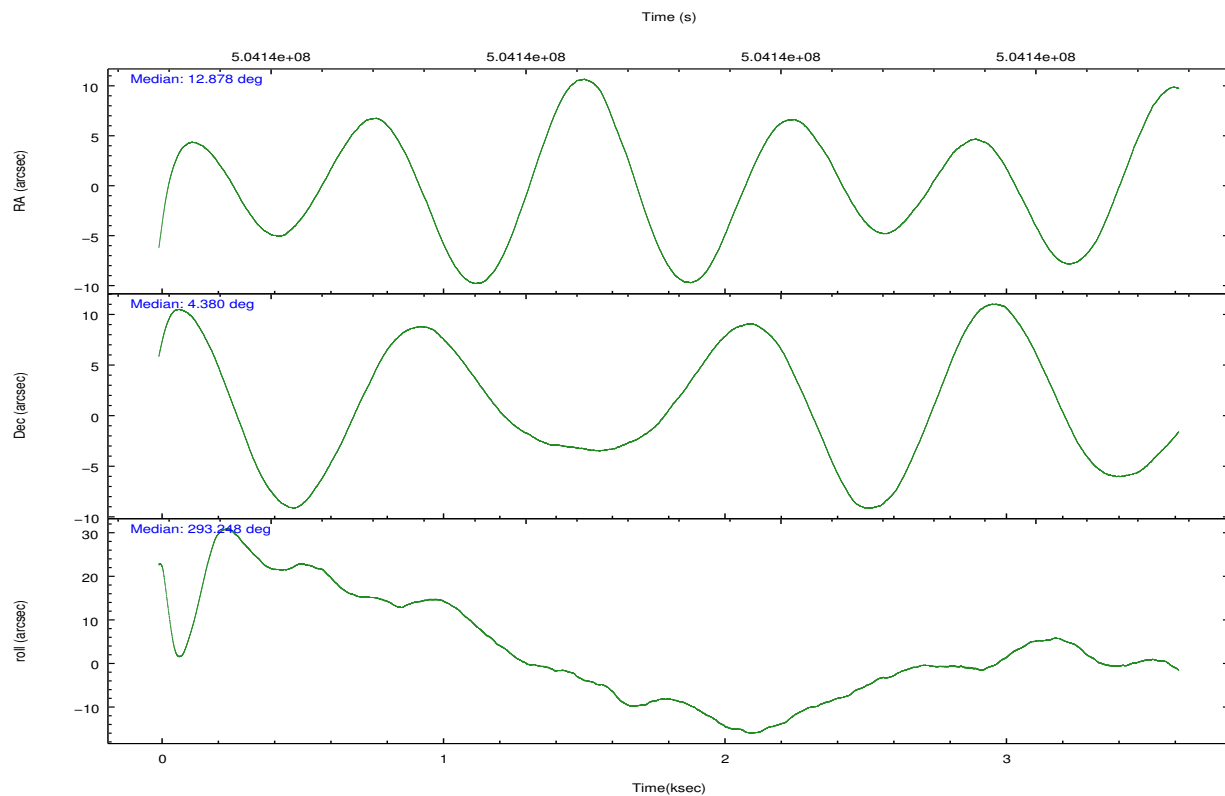
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	742	641	2753	717	883
	4%	3%	9%	4%	3%
grade 1 events	10	12	35	6	21
	0%	0%	0%	0%	0%
grade 2 events	497	422	4400	502	2104
	2%	2%	14%	2%	9%
grade 3 events	187	212	461	210	910
	1%	1%	1%	1%	3%
grade 4 events	224	199	435	236	775
	1%	1%	1%	1%	3%
grade 5 events	717	860	2144	941	2415
	4%	5%	7%	5%	10%
grade 6 events	394	417	7359	508	5506
	2%	2%	24%	3%	23%
grade 7 events	14740	13705	12652	13772	10644
	84%	83%	41%	81%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	12.856221	12.87848003835592	CCD I2 on	O2	Y
[deg] Pointing Dec	4.395849	4.379749591451137	CCD I3 on	O3	Y
[deg] Pointing Roll	293.096161	293.2511748047132	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	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	504134864.184000	504133404.05068	CCD S5 on	N	N
Observation start date	2013-12-22T21:26:37	2013-12-22T21:03:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	504138364.184000	504139081.526	On-chip summing requested	N	N
Observation end date	2013-12-22T22:24:57	2013-12-22T22:38:01	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



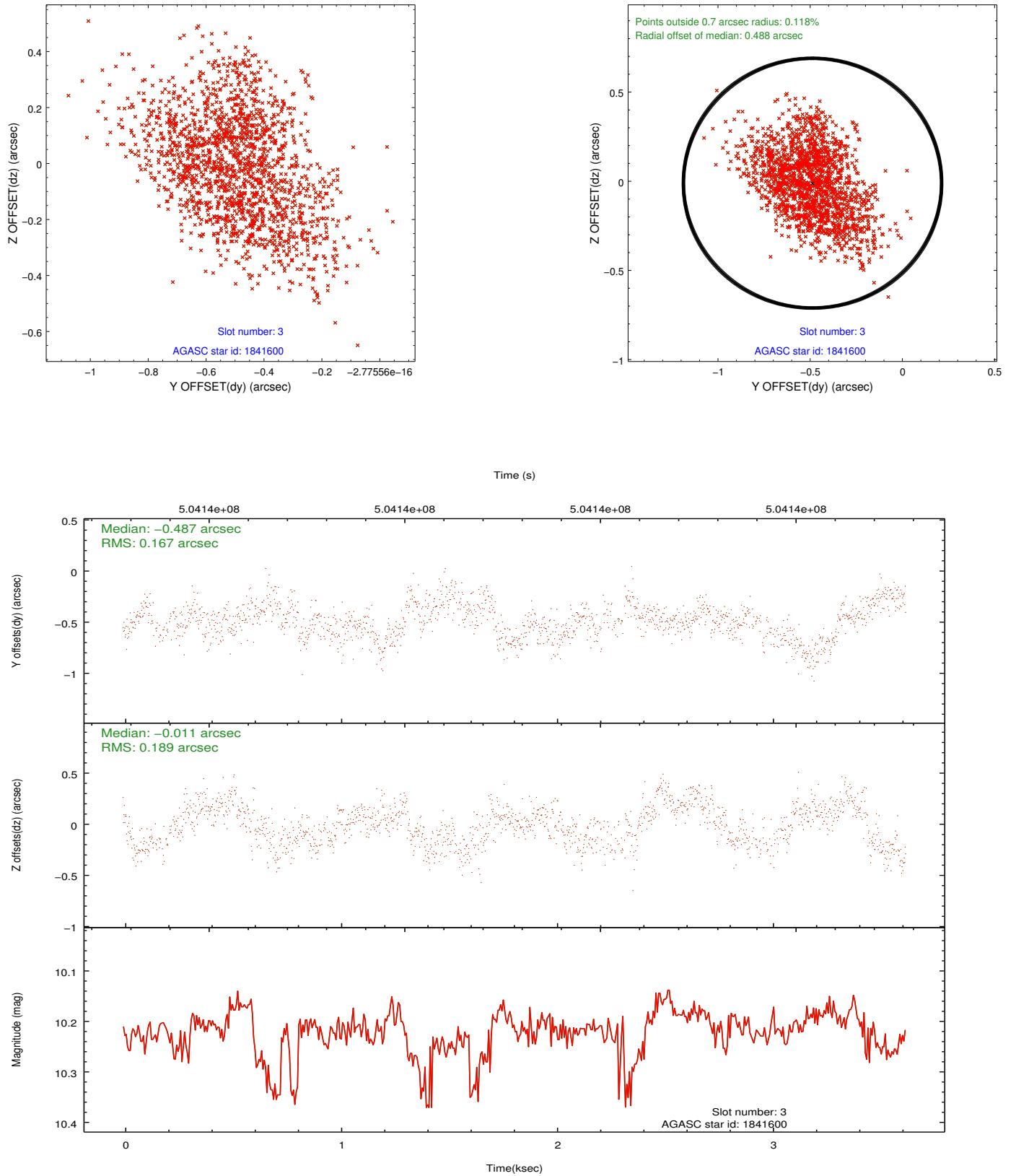


Slot Statistics

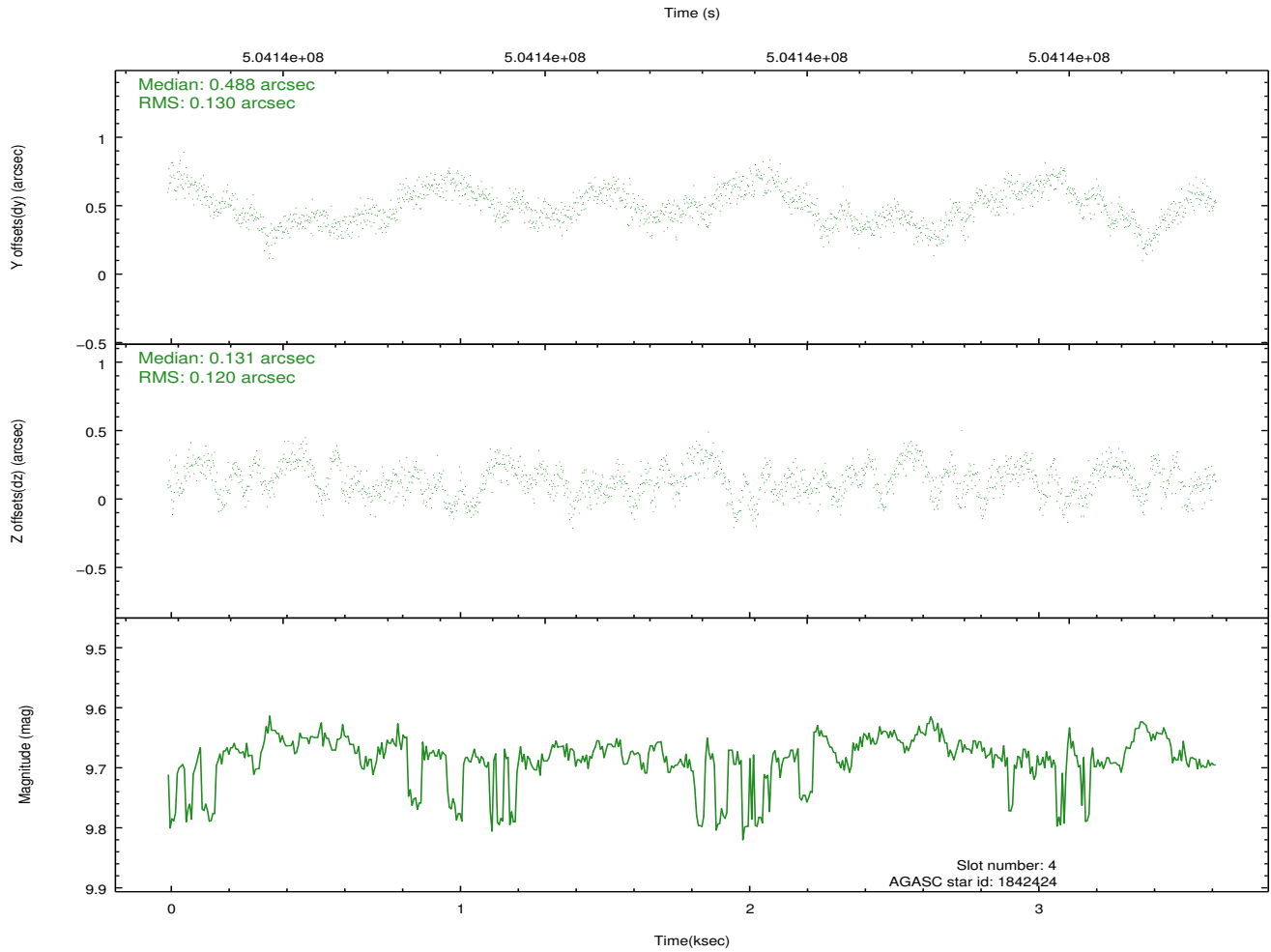
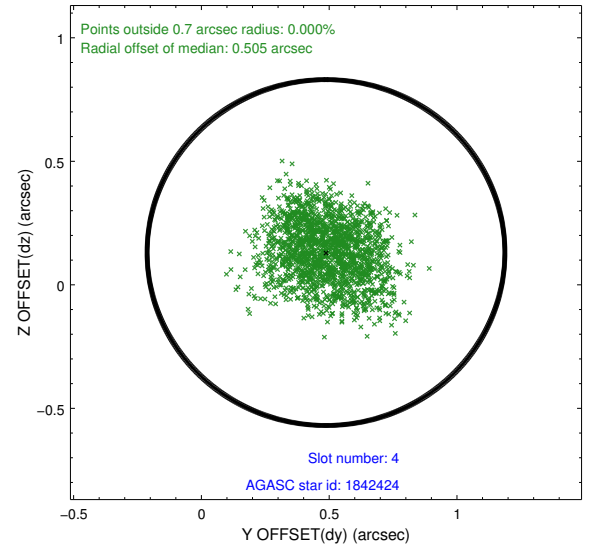
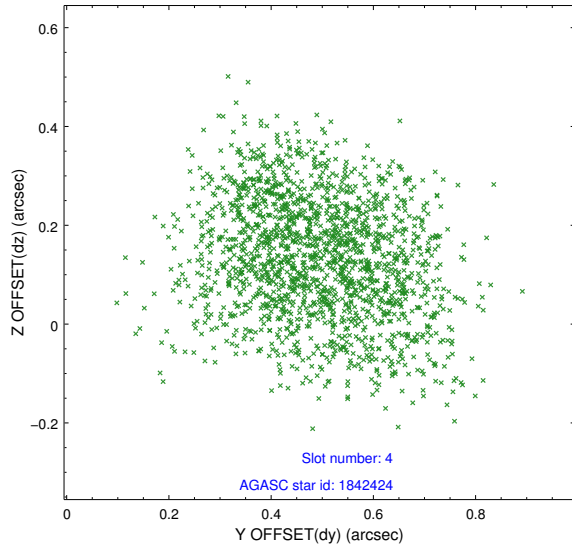
lot	status	used	id	mag	n_pts	med_dy	med_dz	drl	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.02	884	-0.179	-0.060	0.007	0.012	0.000000	0.000000	-781.45	-1745.07
1	FID		ACIS-S-4	7.11	884	0.398	0.103	0.006	0.011	0.000000	0.000000	2131.59	161.76
2	FID		ACIS-S-5	7.14	885	-0.250	-0.034	0.007	0.011	0.000000	0.000000	-1832.15	157.27
3	BAD	used	1841600	10.22	1689	-0.487	-0.011	0.269	0.432	12.475558	3.659730	1901.25	-2297.71
4	GUIDE	used	1842424	9.68	1767	0.488	0.131	0.193	0.292	12.437817	4.283494	-214.66	-1539.92
5	GUIDE	used	1971680	9.39	1768	0.088	0.200	0.177	0.276	12.905506	4.022431	1306.22	-365.33
6	GUIDE	used	1972776	9.83	1768	-0.185	-0.172	0.168	0.275	13.311577	4.754503	-546.33	2009.28
7	GUIDE	used	1972488	9.06	1767	0.087	-0.132	0.176	0.254	13.210173	3.817503	2414.01	352.67

2.4 Star Slots

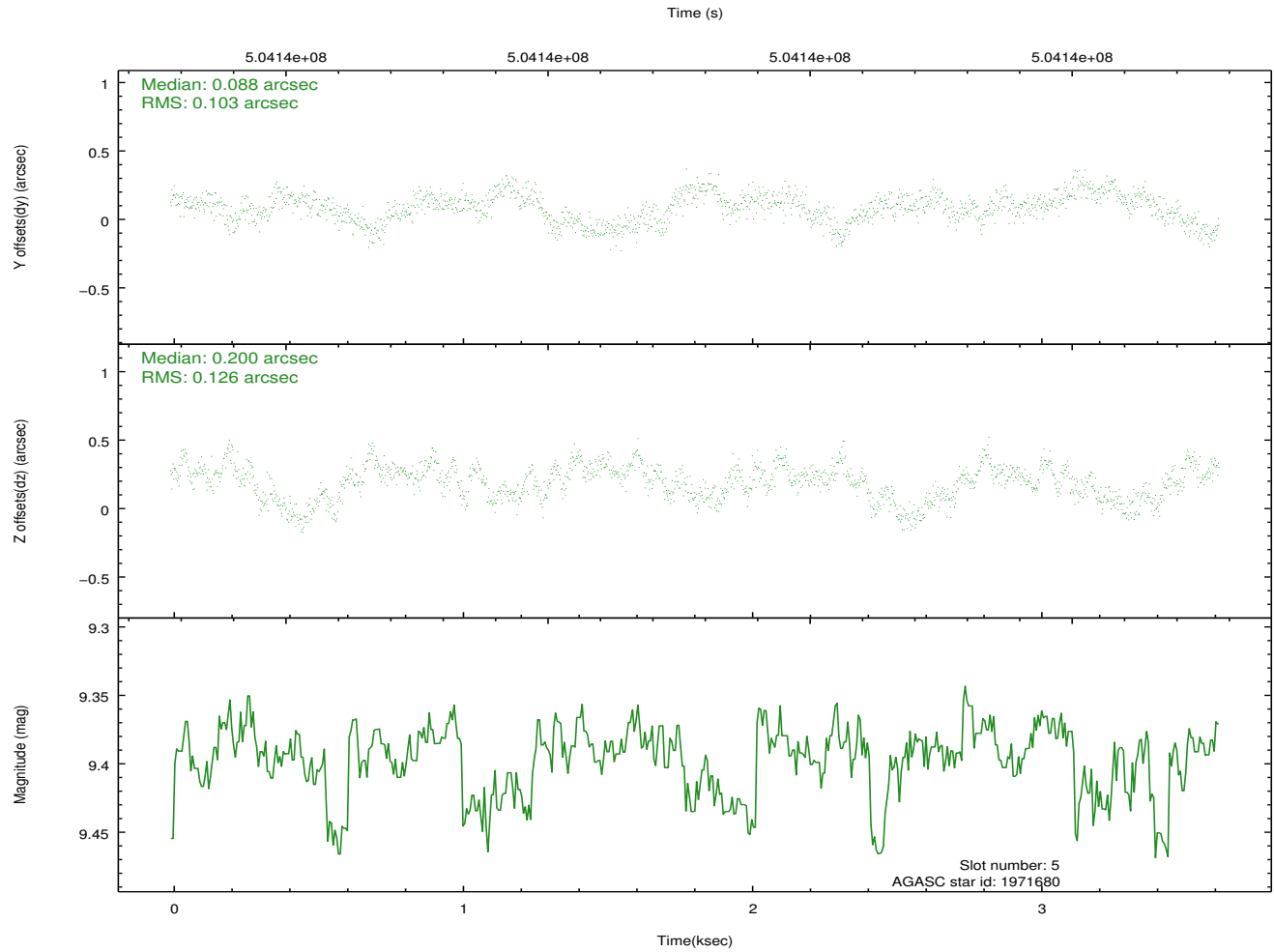
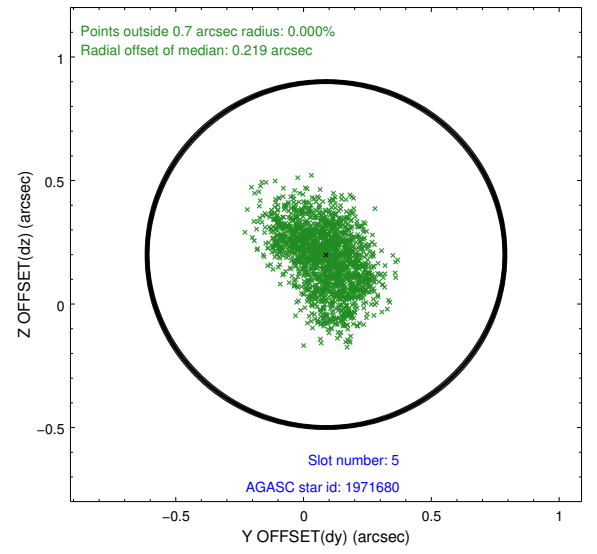
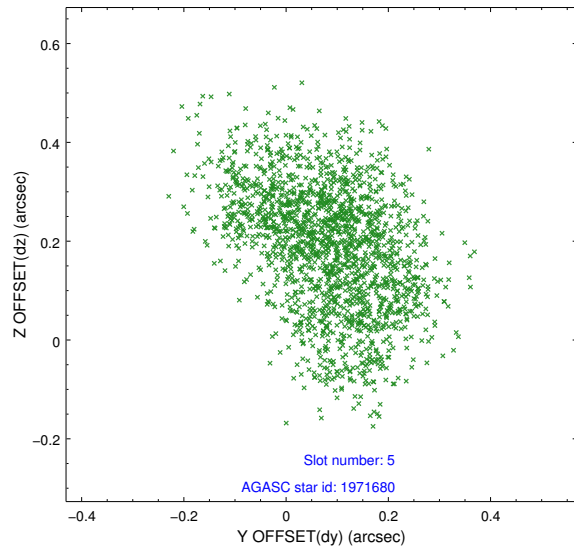
2.4.1 Slot 3



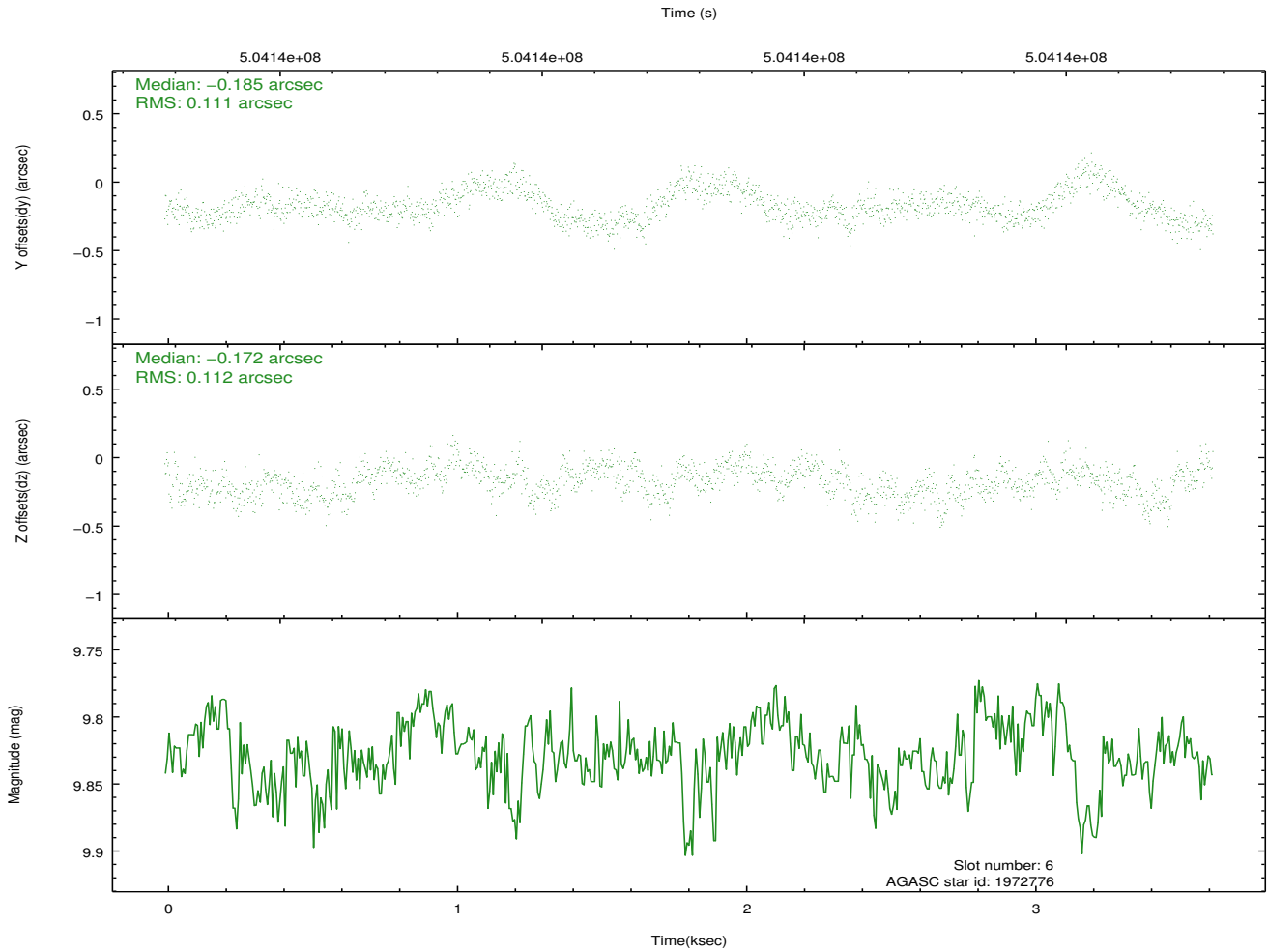
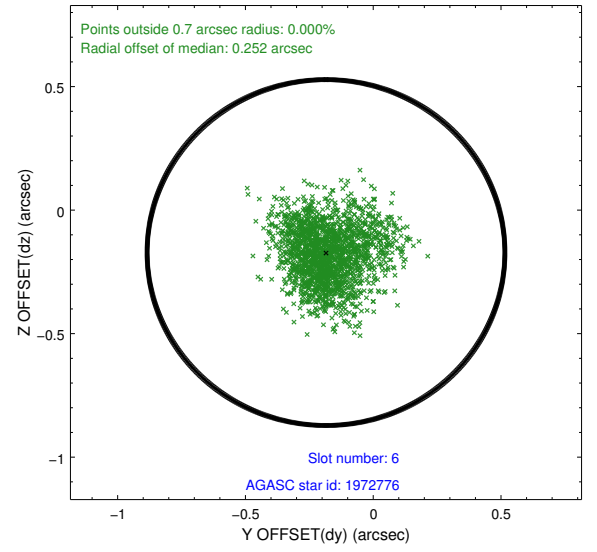
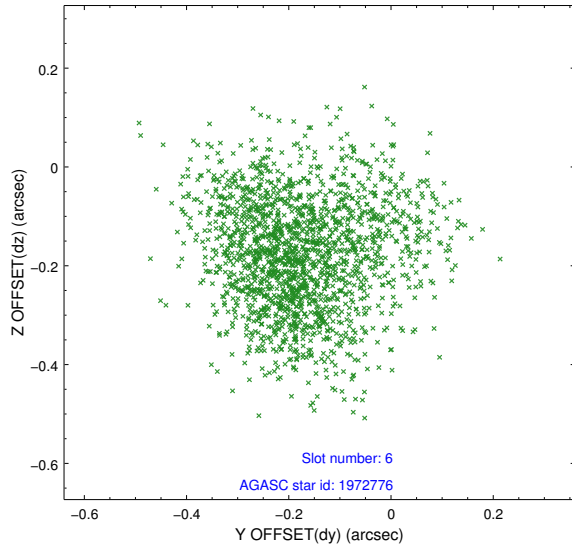
2.4.2 Slot 4



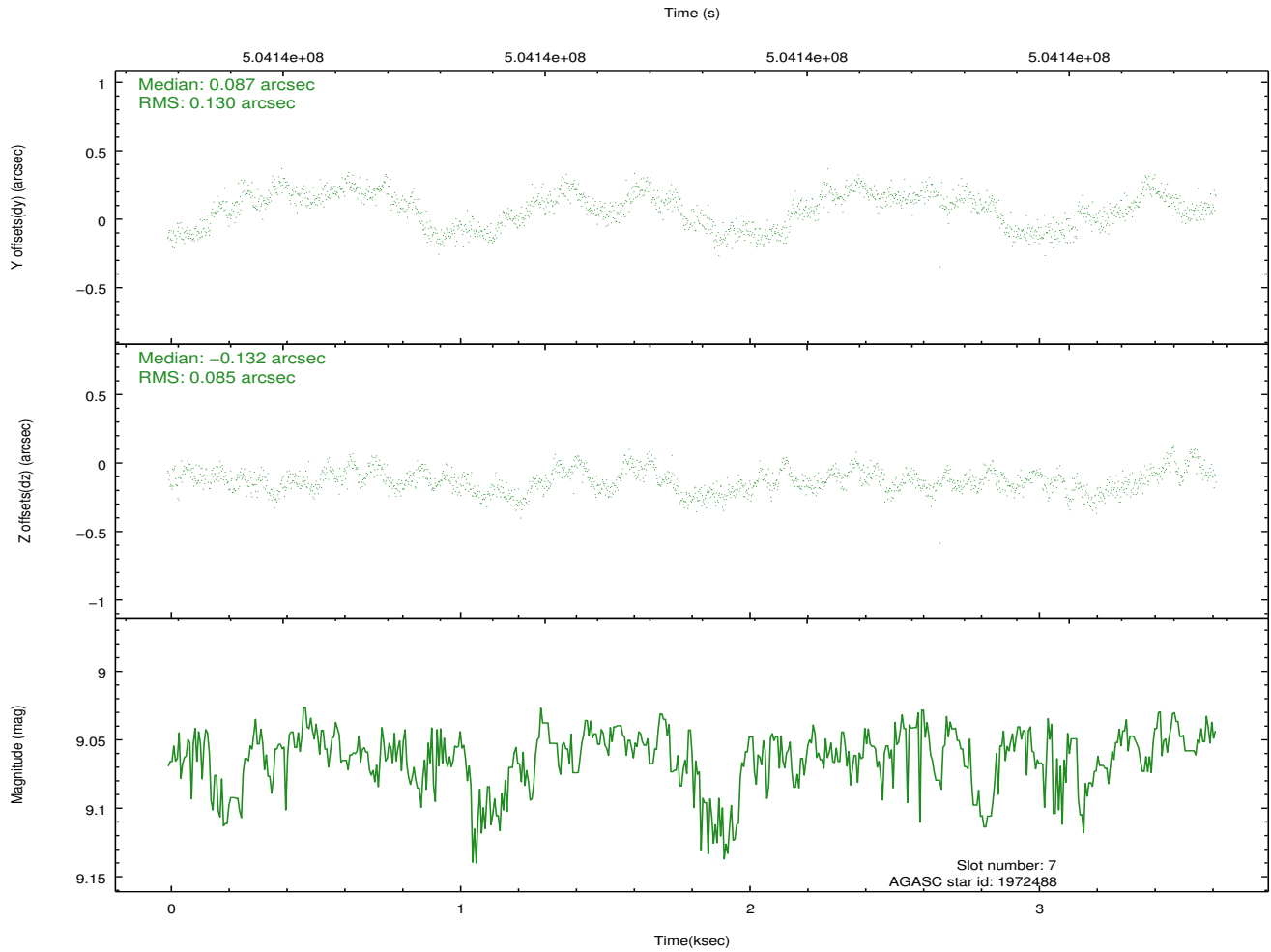
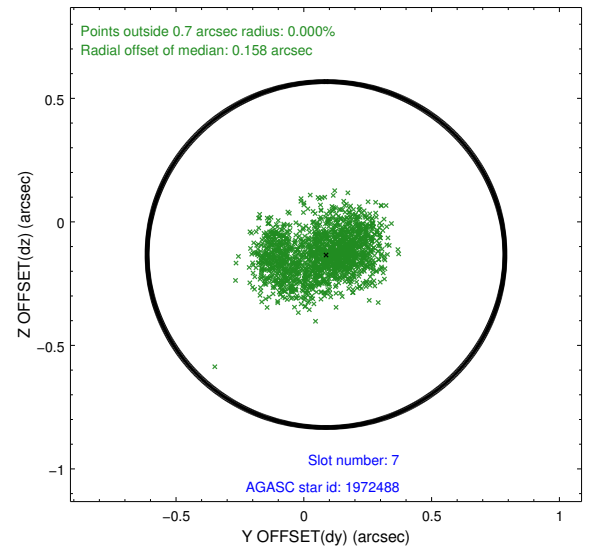
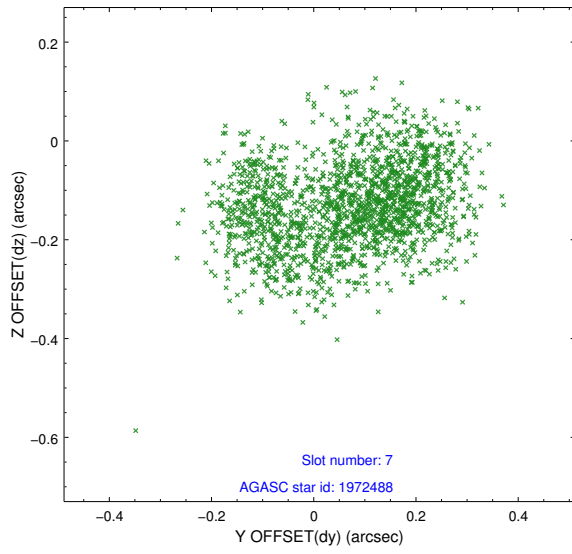
2.4.3 Slot 5



2.4.4 Slot 6

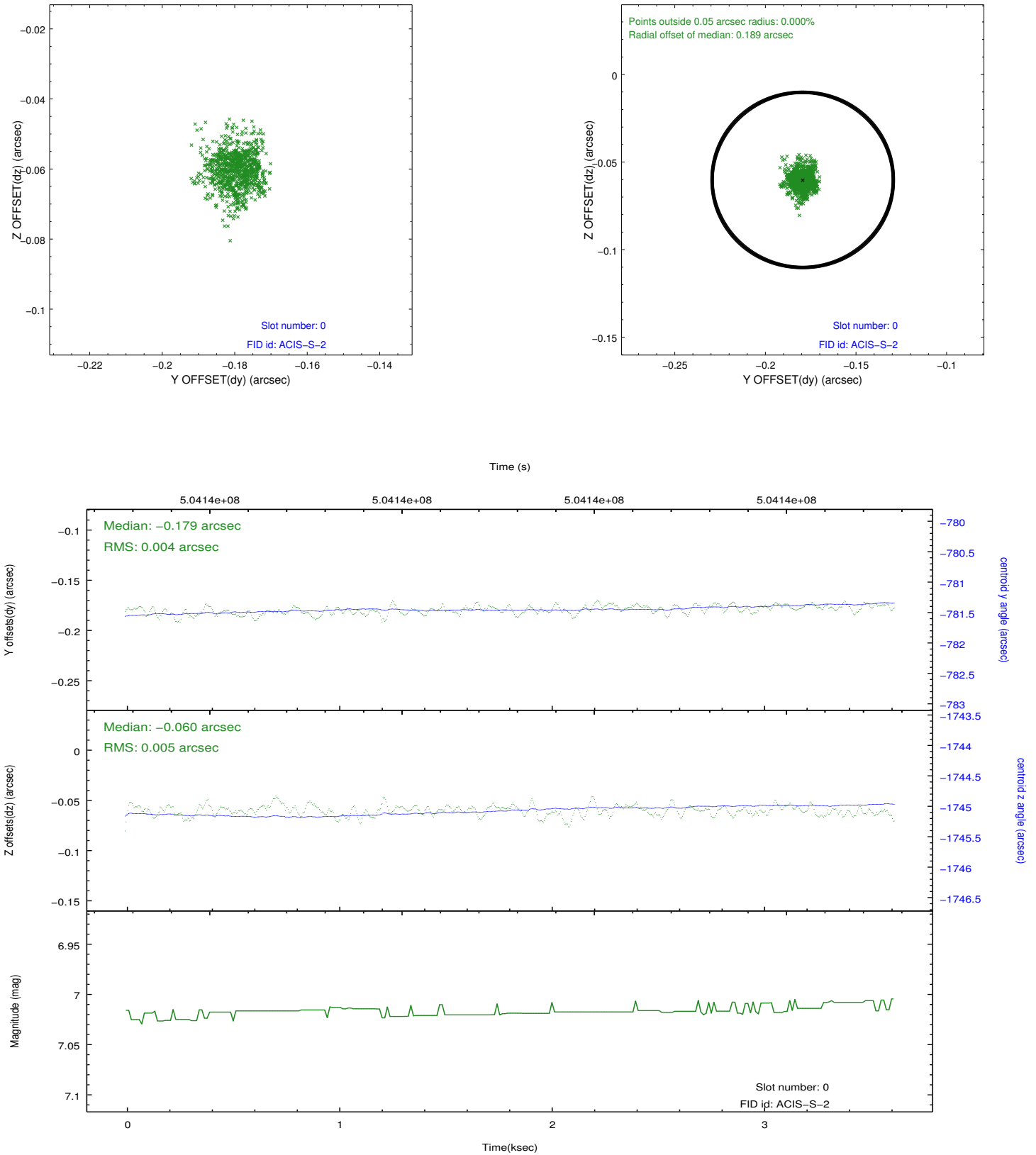


2.4.5 Slot 7

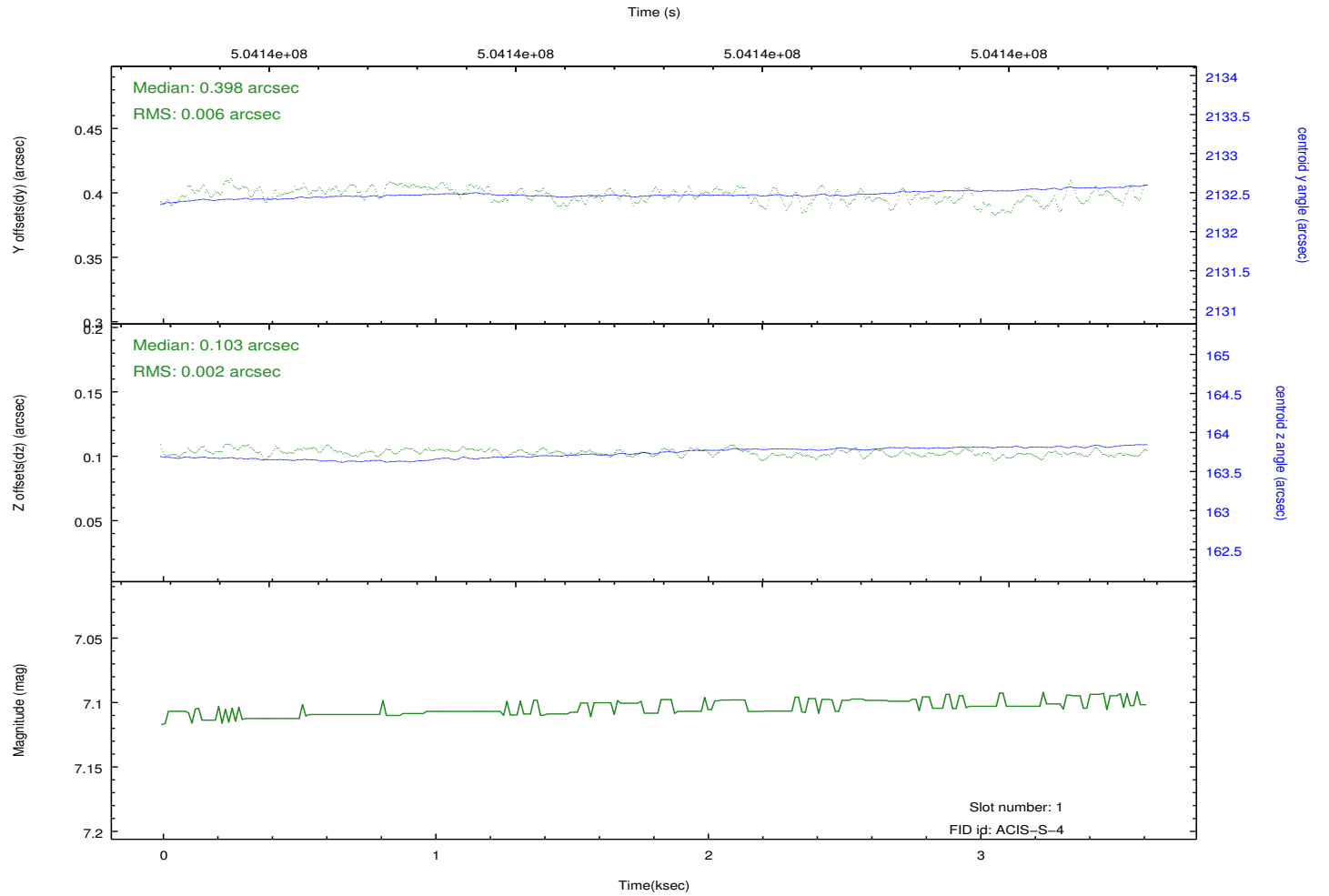
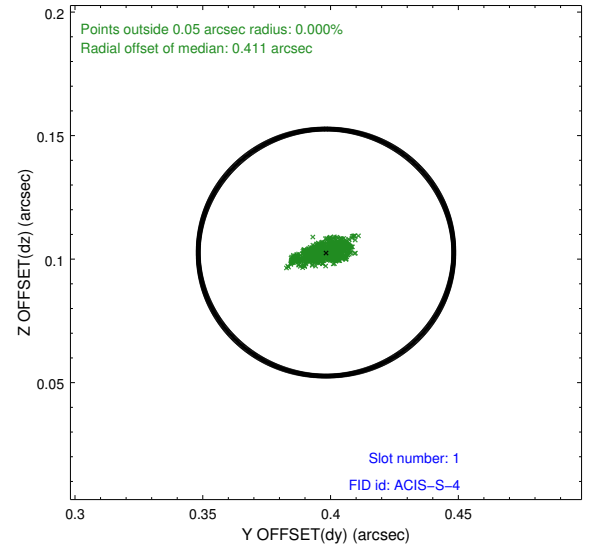
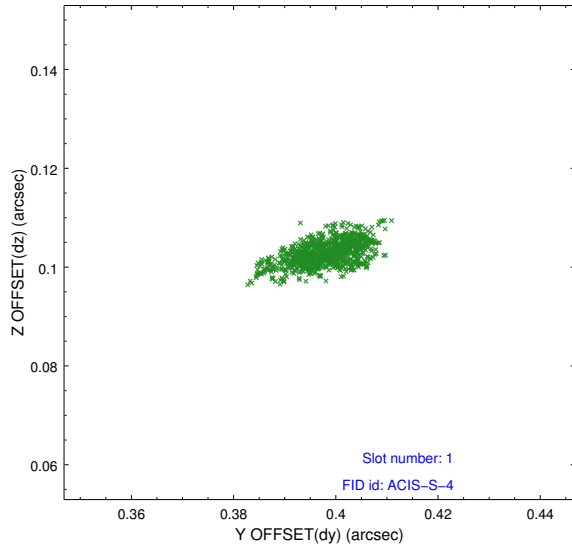


2.5 FID Slots

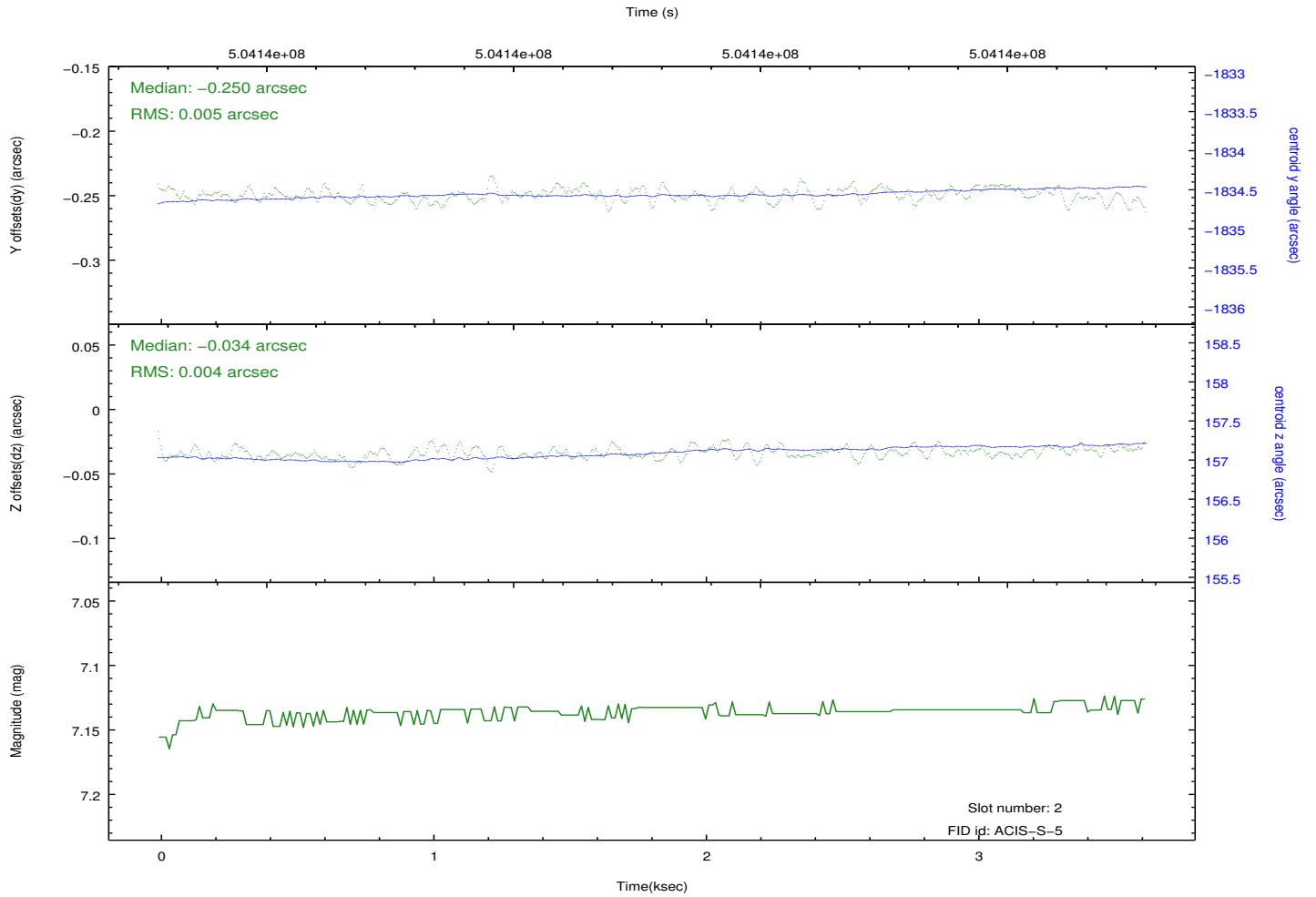
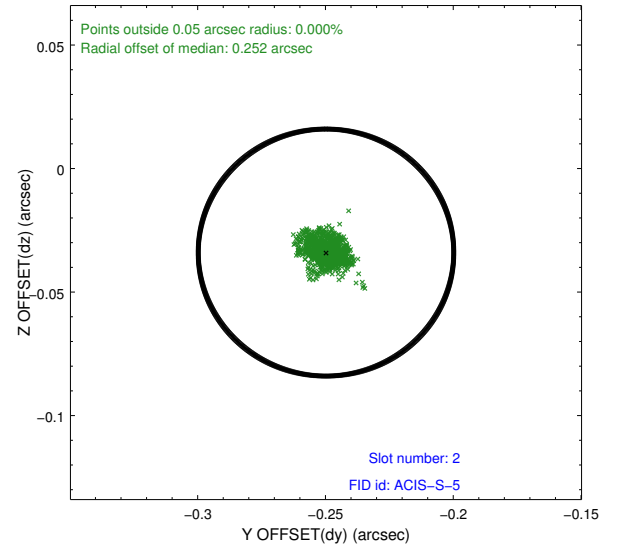
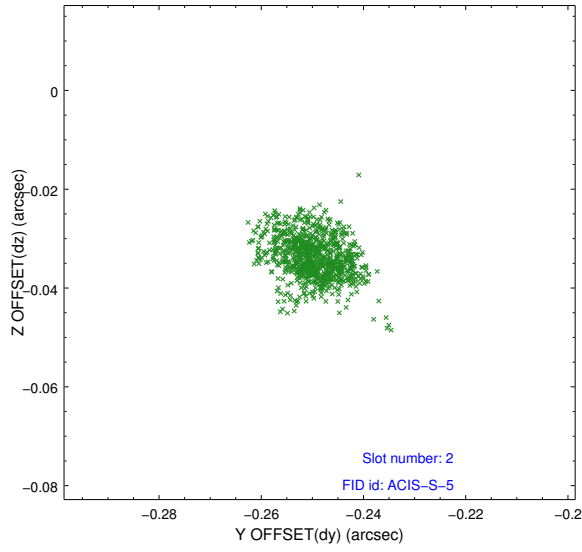
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.5701260675192

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.