

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14651 - L2 Version 2
Chandra X-Ray Center

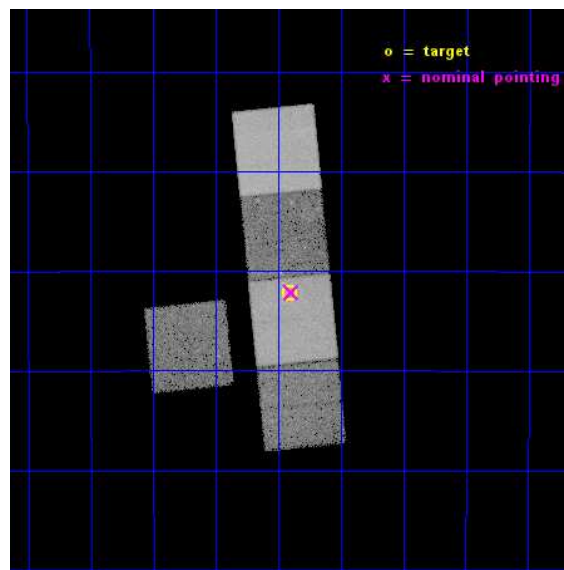
L2 Processing Date : Dec 3 2014

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

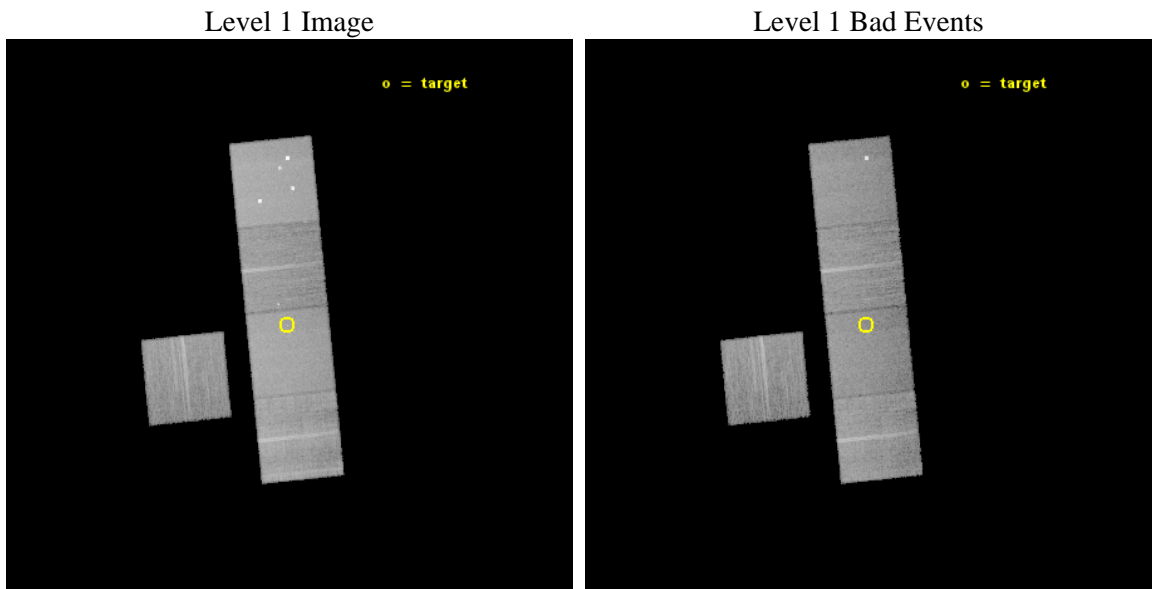
seq_num	401484	Sequence number
obs_id	14651	Observation id
title	Using Chandra to Determine Whether SAX J1750.8-2900 Harbors the Hottest, Most Luminous Known Neutron Star	Proposal title
observer	Alexander Lowell	Principal investigator
object	SAX J1750.8-2900	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.601667	Observer's specified target RA [deg]
dec_targ	-29.037611	Observer's specified target Dec [deg]
ra_nom	267.59893483552	Nominal RA [deg]
dec_nom	-29.035754271738	Nominal Dec [deg]
roll_nom	84.196047001302	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24591.980301023	Sum of GTIs [s]
livetime	24270.667974037	Livetime [s]
ontime3	24591.857181013	Sum of GTIs [s]
ontime5	24591.939261019	Sum of GTIs [s]
ontime6	24588.75718081	Sum of GTIs [s]
ontime7	24591.980301023	Sum of GTIs [s]
ontime8	24591.816141009	Sum of GTIs [s]
l2events	242379	Number of level 2 events



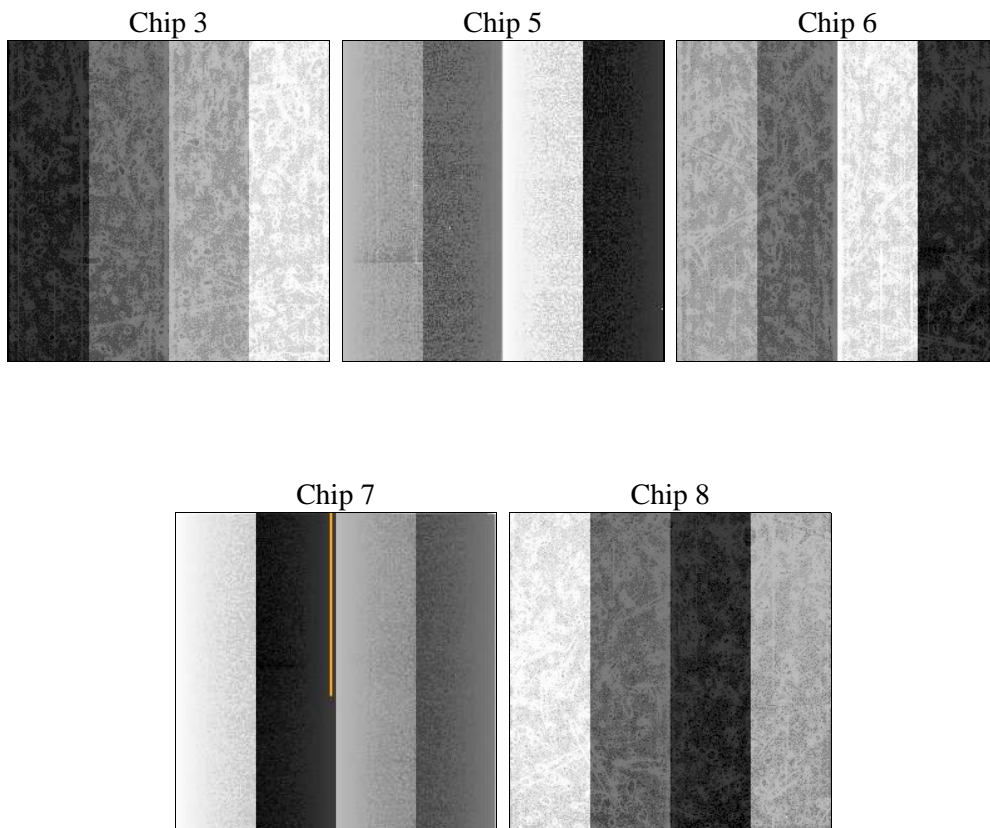
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24529.107000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	24591.980301023	Sum of GTIs [s]
caldbver	4.6.4	 	ontime3	24591.857181013	Sum of GTIs [s]
date	2014-12-03T05:58:54	Date and time of file creation	ontime5	24591.939261019	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	24588.75718081	Sum of GTIs [s]
			ontime7	24591.980301023	Sum of GTIs [s]
			ontime8	24591.816141009	Sum of GTIs [s]
			l1events	882881	Number of level 1 events

2.1.4 Events

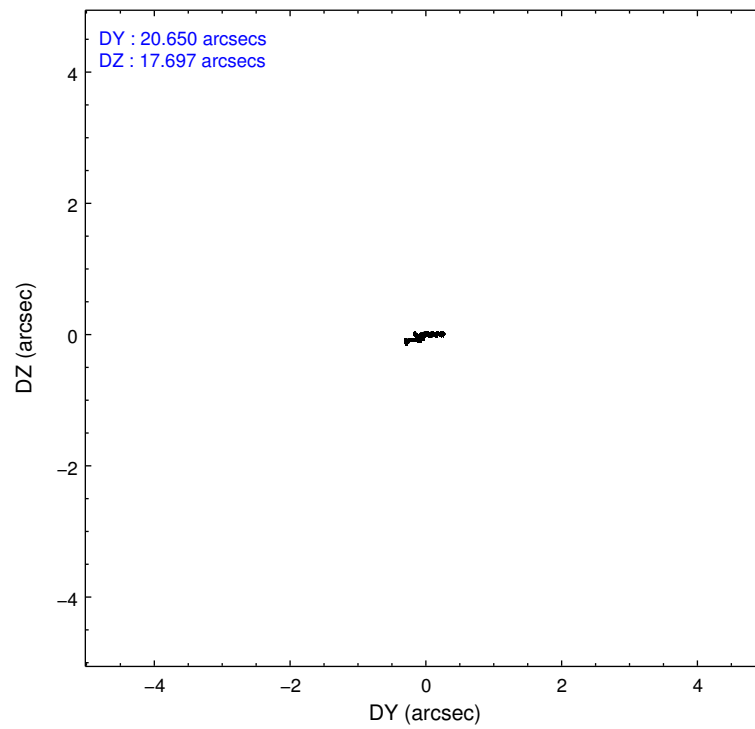
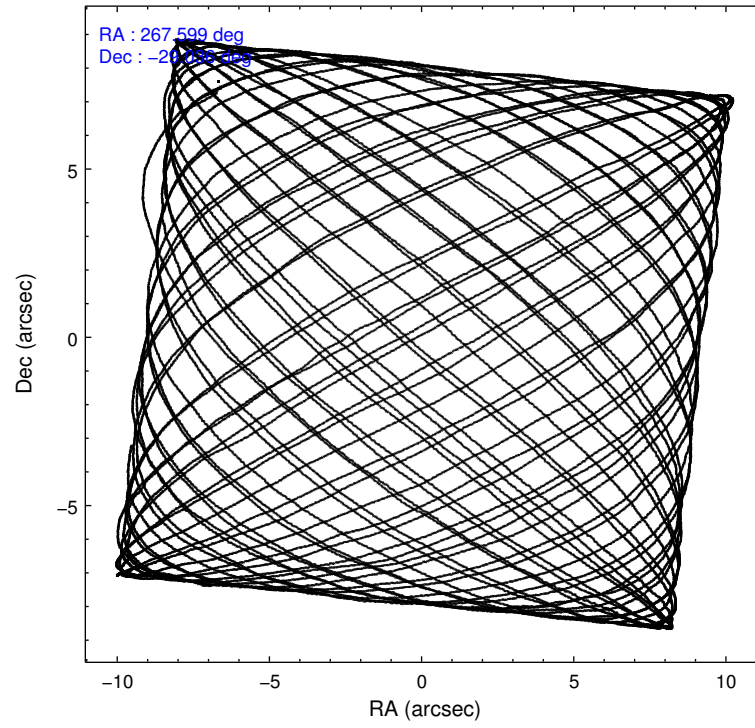
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	134072	241119	138119	188315	181256
rejected events	115750	119059	117327	103304	130648
rejected %	86%	49%	84%	54%	72%

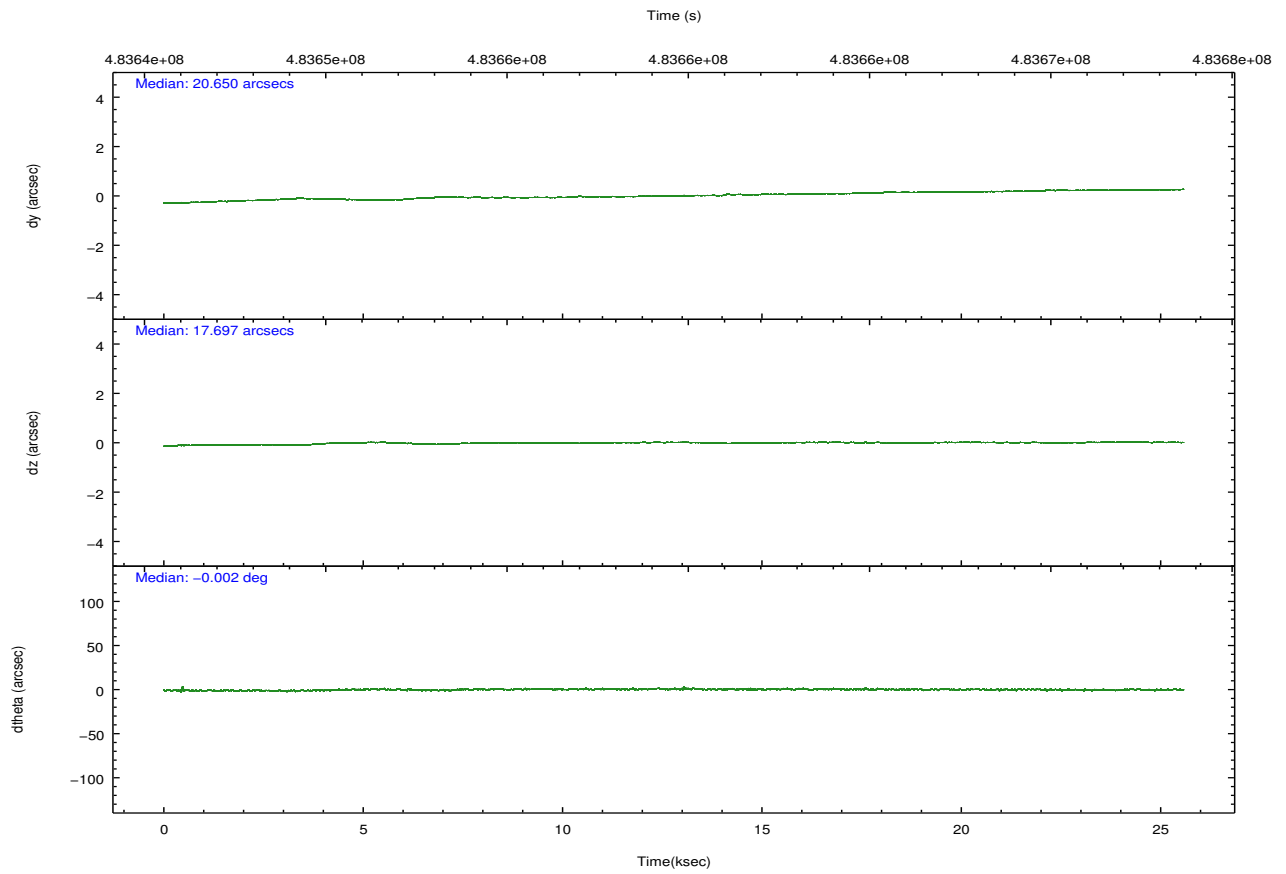
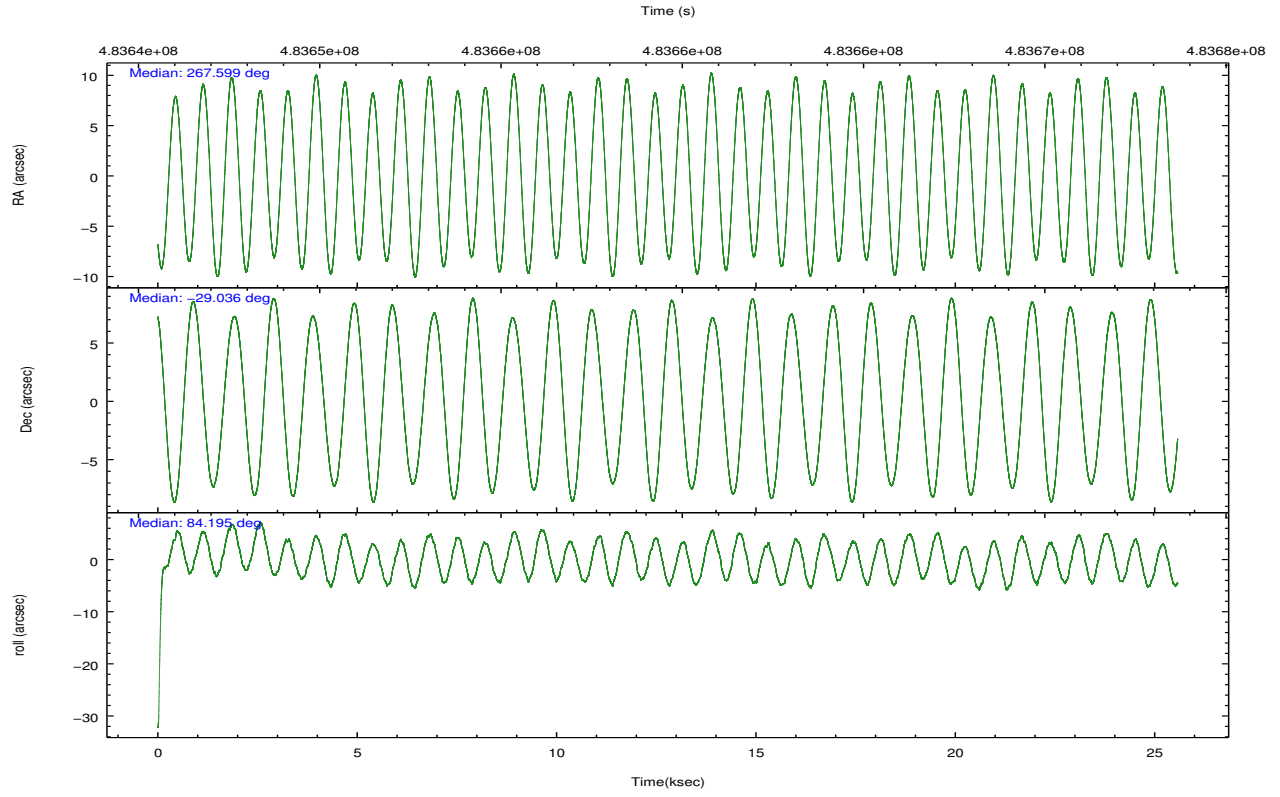
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	8043	19556	9016	8477	16712
	5%	8%	6%	4%	9%
grade 1 events	88	372	87	225	156
	0%	0%	0%	0%	0%
grade 2 events	3723	36890	4180	17782	11696
	2%	15%	3%	9%	6%
grade 3 events	1678	3773	1767	7365	4908
	1%	1%	1%	3%	2%
grade 4 events	1710	3703	1817	7282	4745
	1%	1%	1%	3%	2%
grade 5 events	7061	17023	7098	18782	9978
	5%	7%	5%	9%	5%
grade 6 events	3176	58173	4019	44127	12605
	2%	24%	2%	23%	6%
grade 7 events	108593	101629	110135	84275	120456
	80%	42%	79%	44%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	267.612158	267.5989348355203	CCD I2 on	N	N
[deg] Pointing Dec	-29.060517	-29.03575427173838	CCD I3 on	O1	Y
[deg] Pointing Roll	84.045838	84.19604700130193	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	483647863.184000	483646490.64589	CCD S5 on	N	N
Observation start date	2013-04-29T18:36:36	2013-04-29T18:14:50	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	483672392.184000	483672617.89727	On-chip summing requested	N	N
Observation end date	2013-04-30T01:25:25	2013-04-30T01:30:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



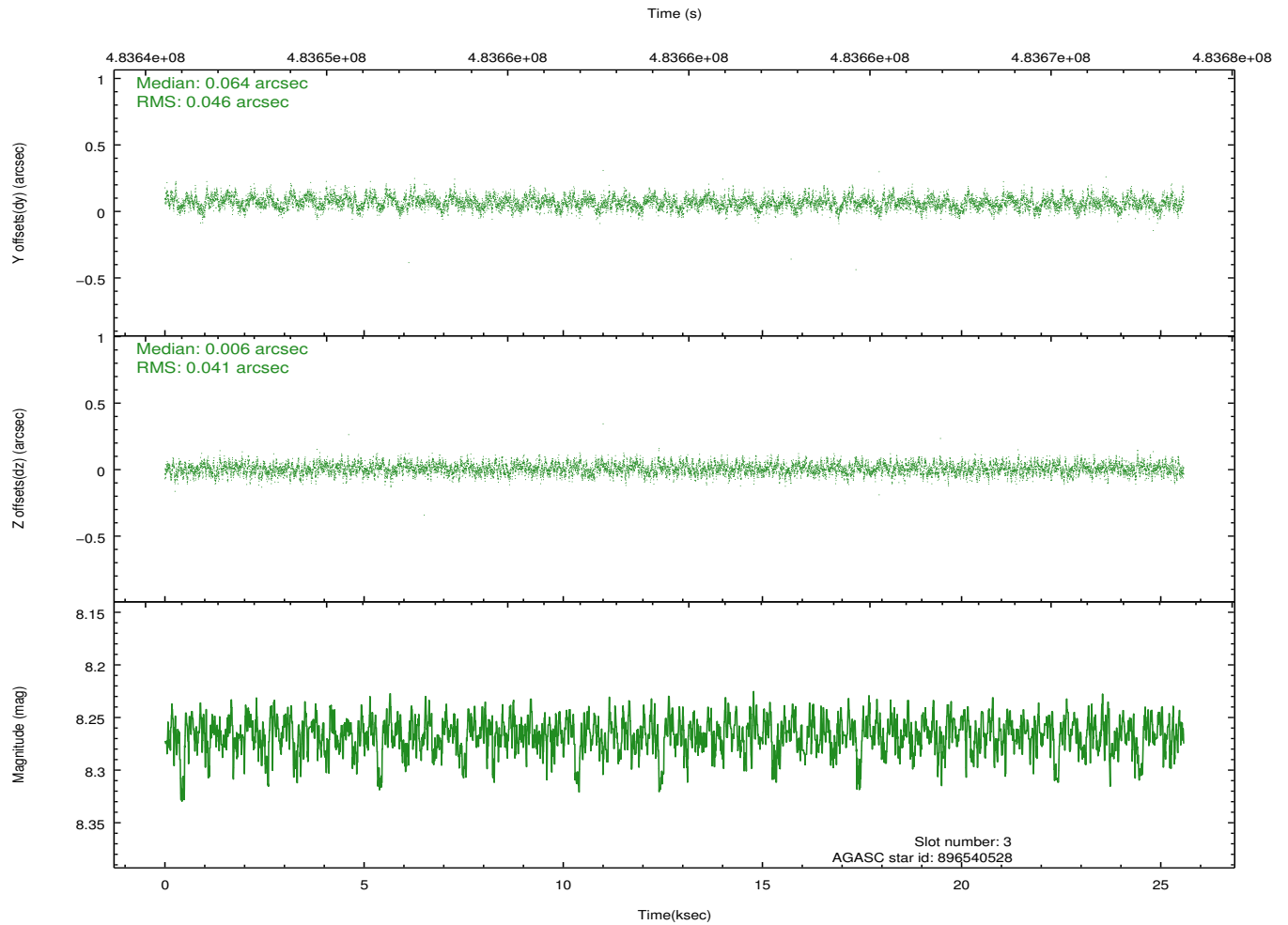
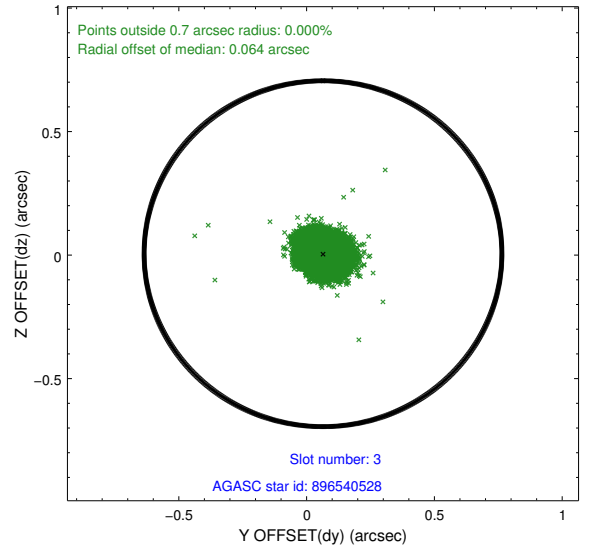
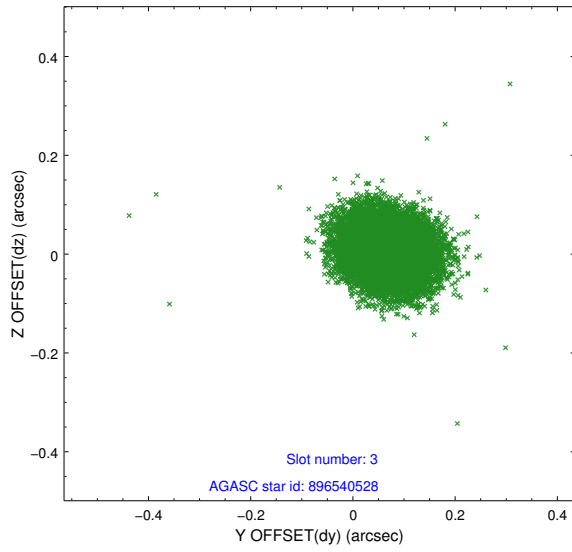


Slot Statistics

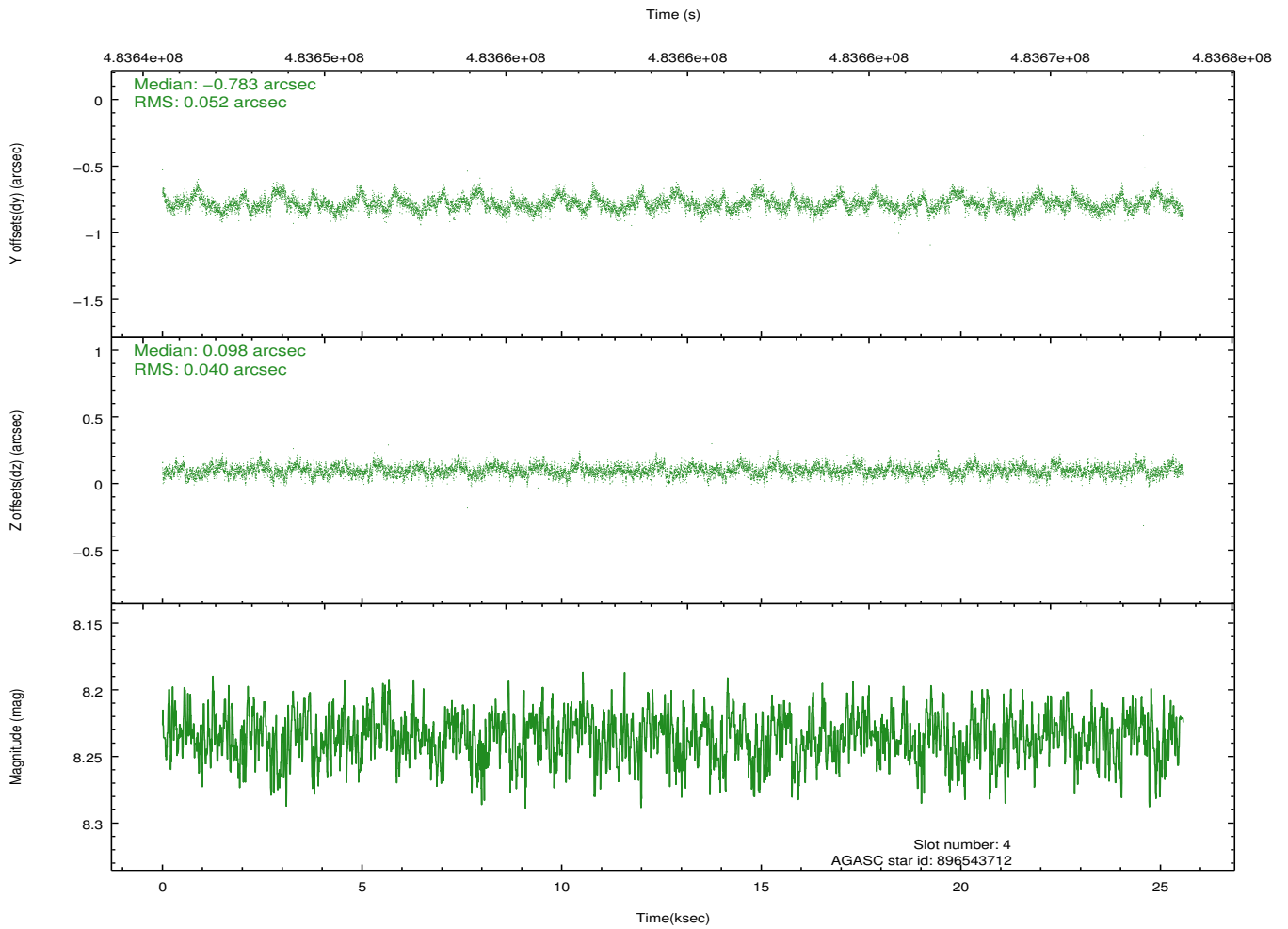
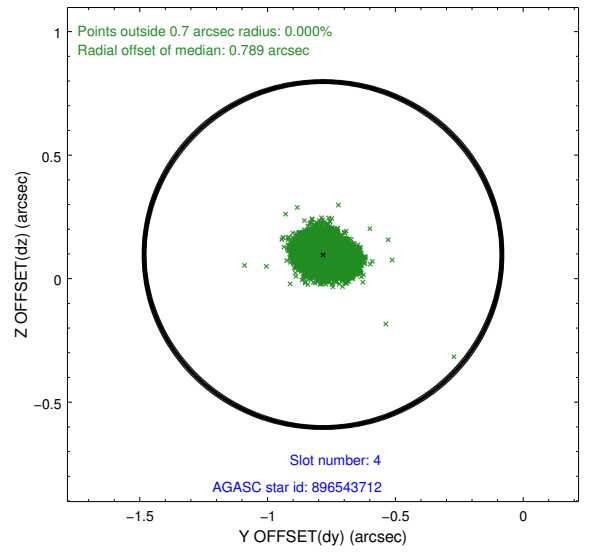
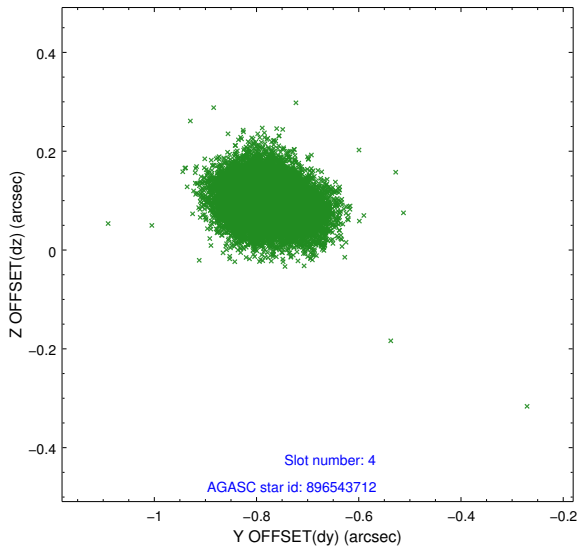
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.95	6238	-0.017	-0.046	0.009	0.015	0.000000	0.000000	-773.86	-1739.16
1	FID		ACIS-S-5	7.08	6238	-0.098	-0.006	0.010	0.016	0.000000	0.000000	-1827.05	162.77
2	FID		ACIS-S-6	7.18	6238	0.090	0.060	0.008	0.016	0.000000	0.000000	387.81	806.80
3	GUIDE	used	896540528	8.27	12468	0.064	0.006	0.065	0.105	267.368305	-29.314773	-990.63	665.84
4	GUIDE	used	896543712	8.24	12470	-0.783	0.098	0.069	0.113	267.764551	-28.659720	1483.89	-328.84
5	GUIDE	used	898243552	8.75	12470	0.394	0.348	0.084	0.134	267.970066	-28.622317	1685.21	-960.97
6	GUIDE	used	896539920	8.83	12465	0.264	-0.181	0.075	0.131	266.848347	-29.638887	-2326.26	2160.23
7	GUIDE	used	896538840	8.89	12461	0.060	-0.273	0.087	0.137	266.920426	-28.466925	1890.74	2398.13

2.4 Star Slots

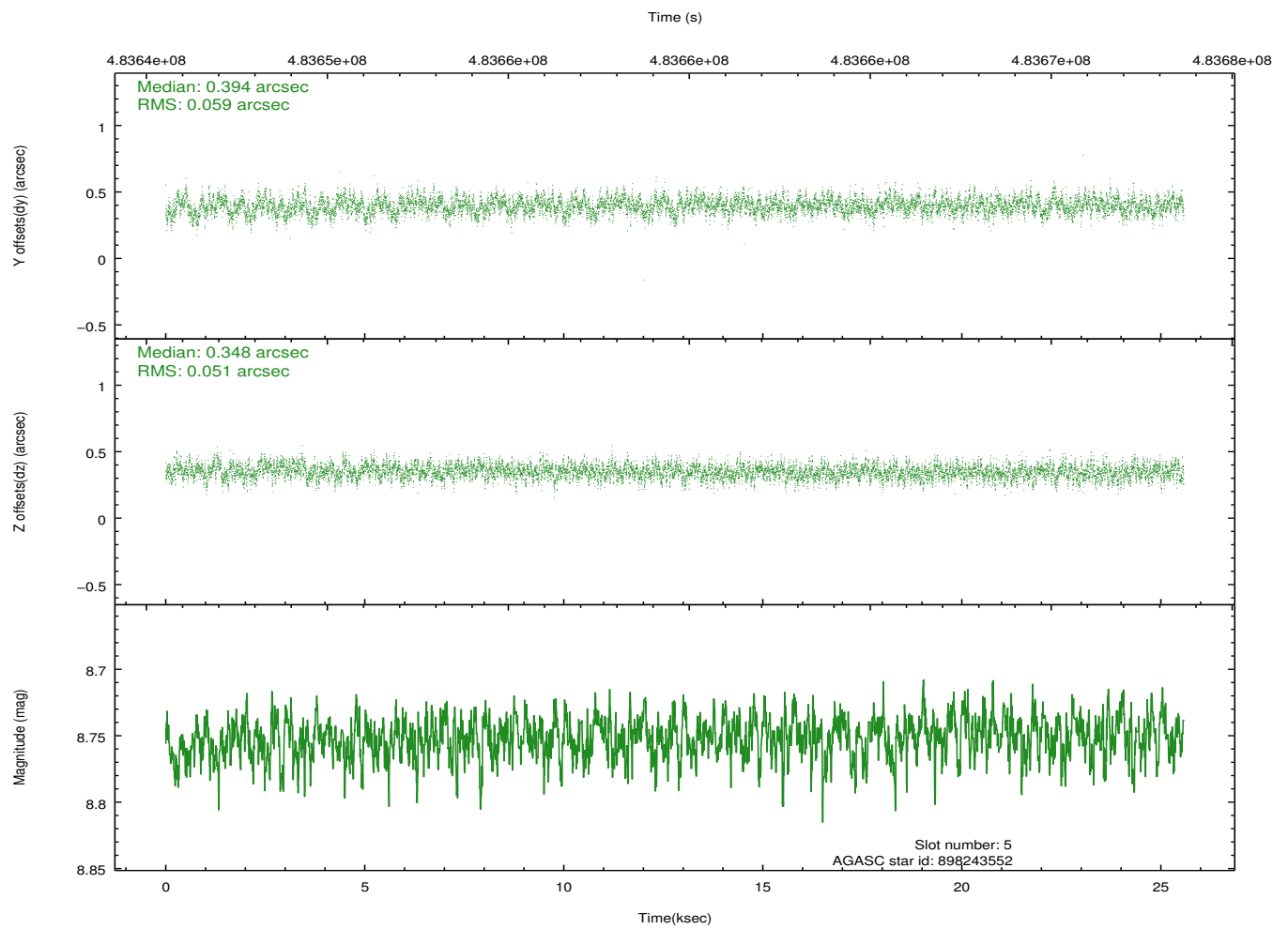
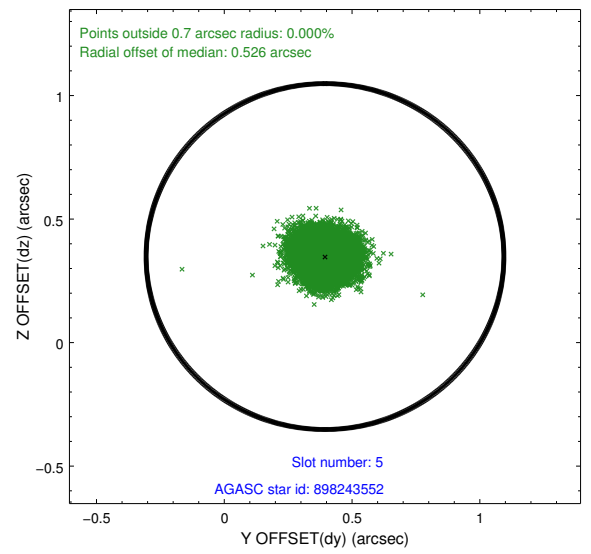
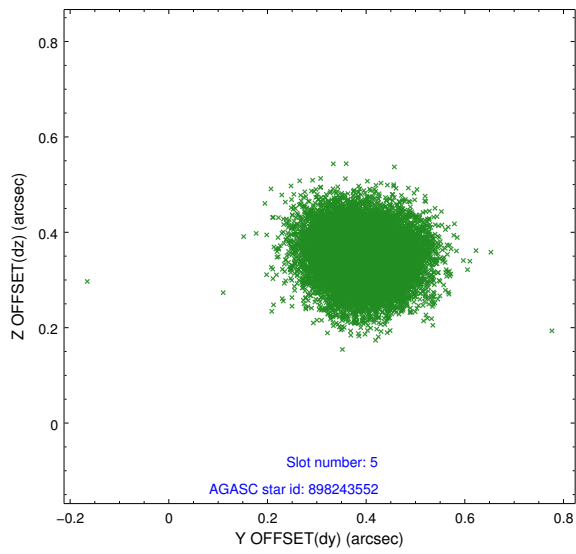
2.4.1 Slot 3



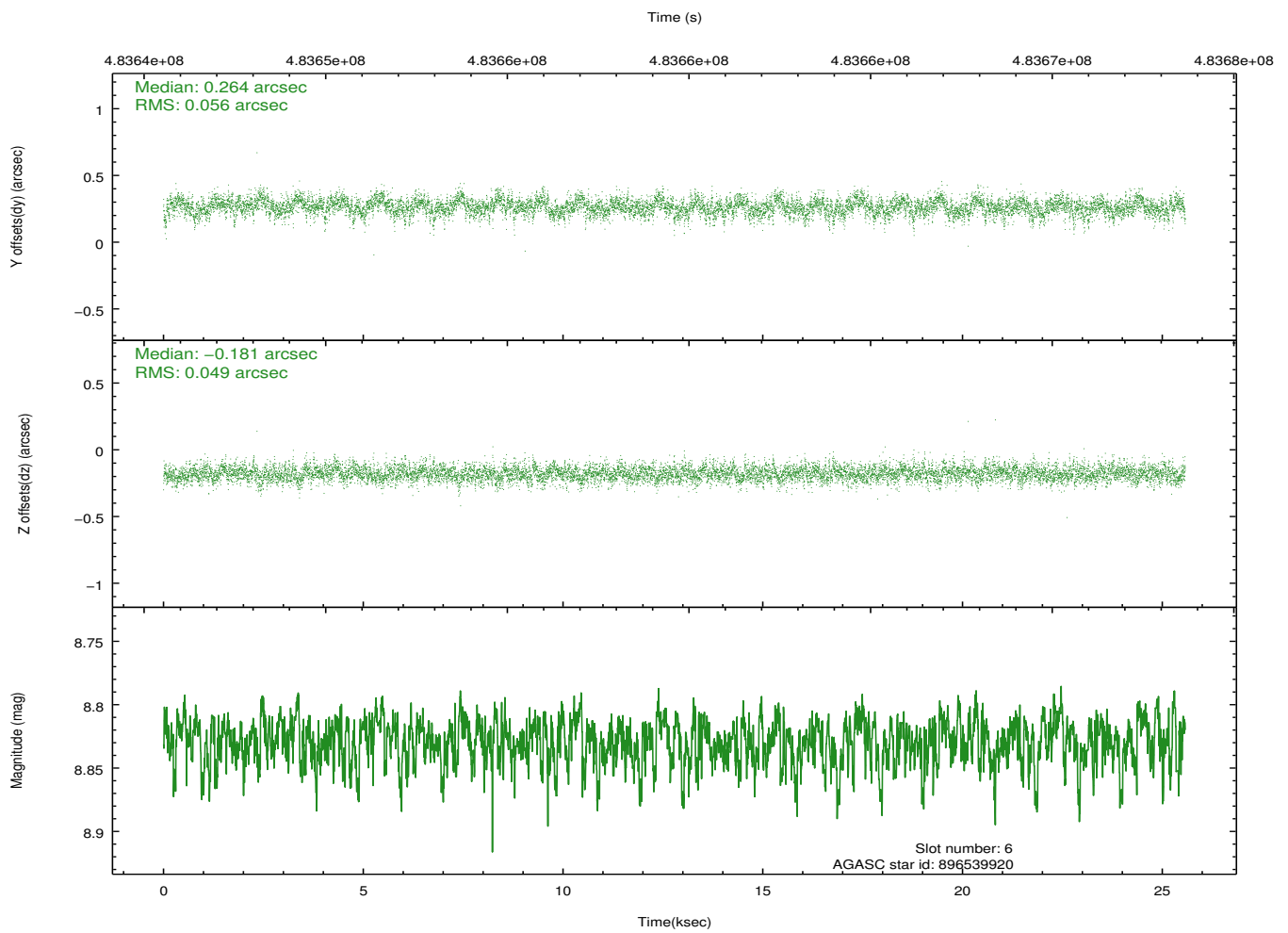
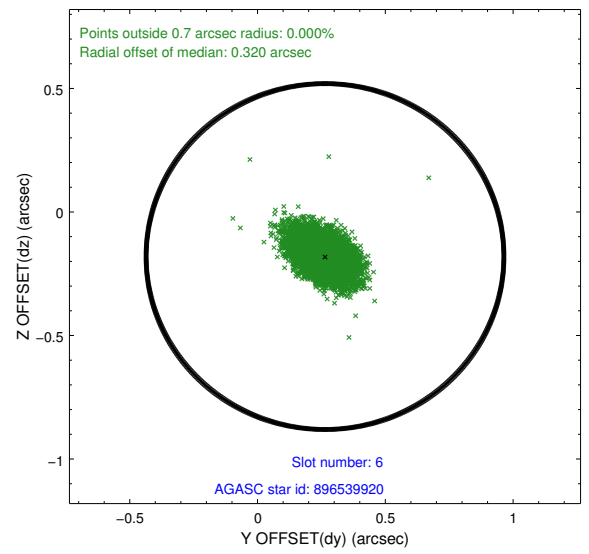
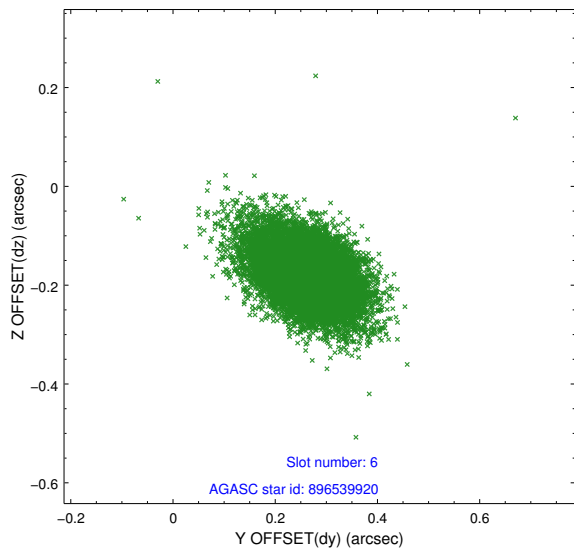
2.4.2 Slot 4



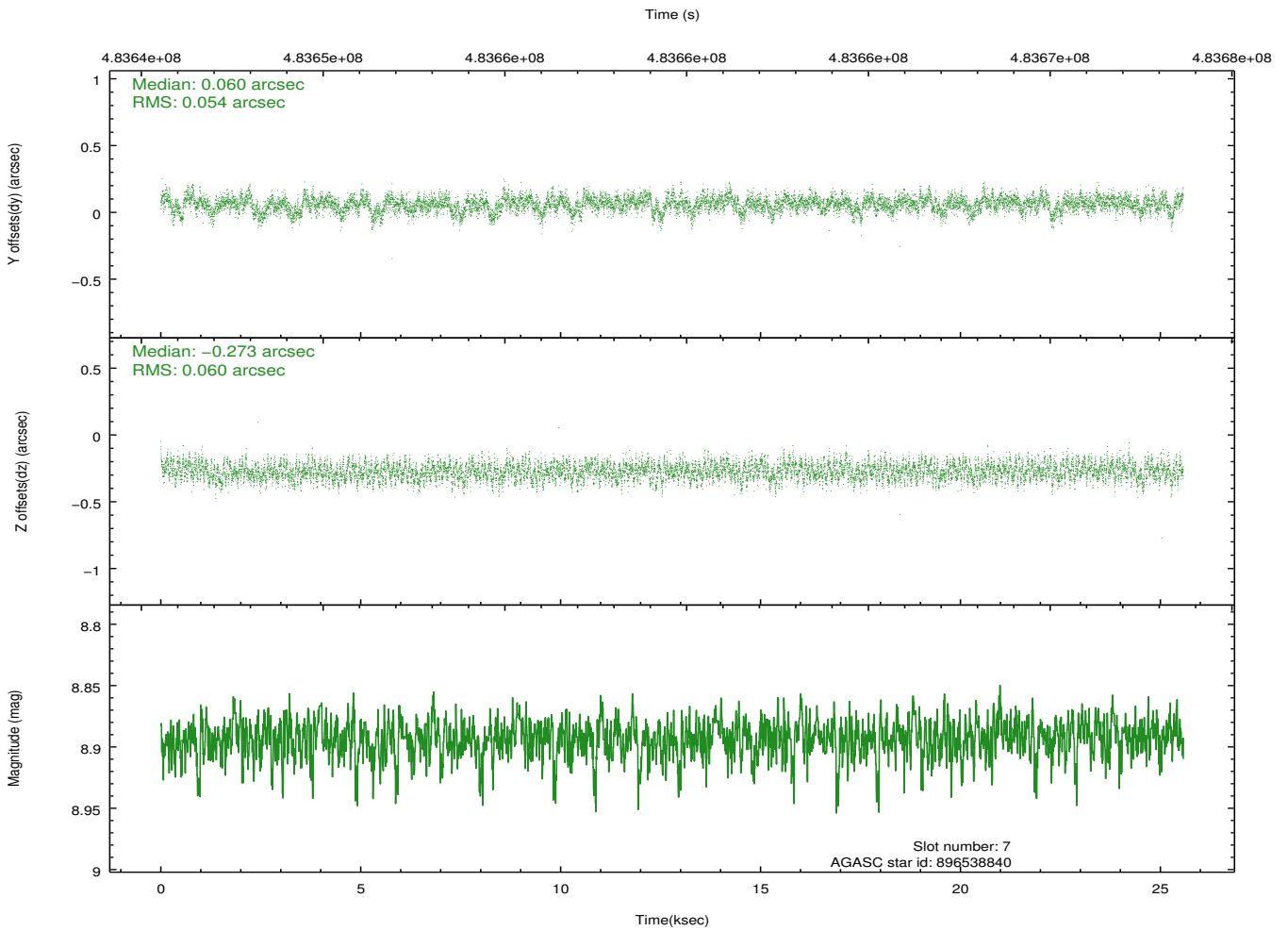
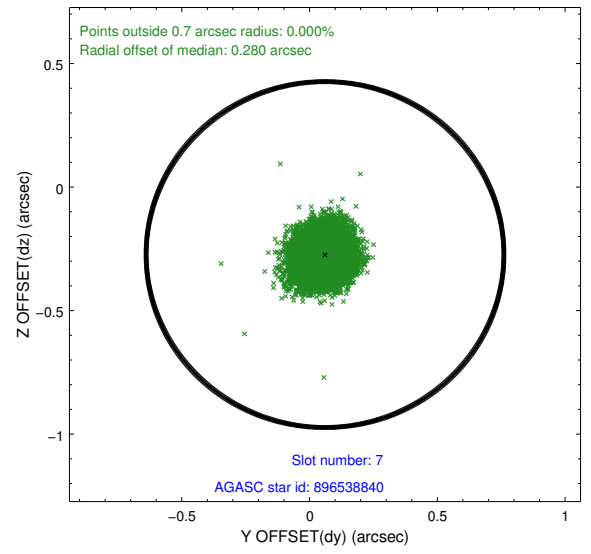
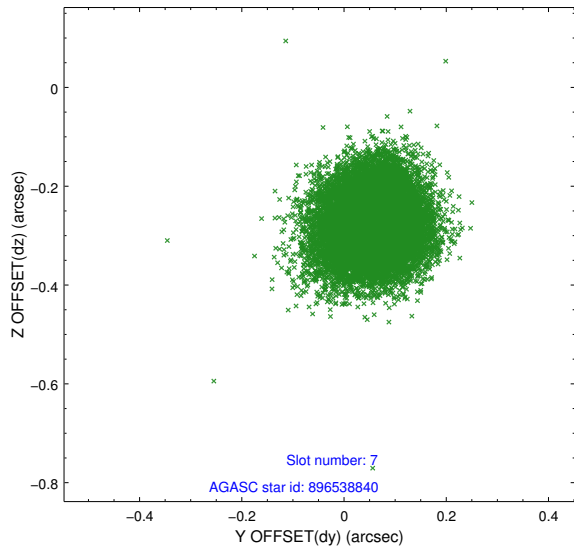
2.4.3 Slot 5



2.4.4 Slot 6

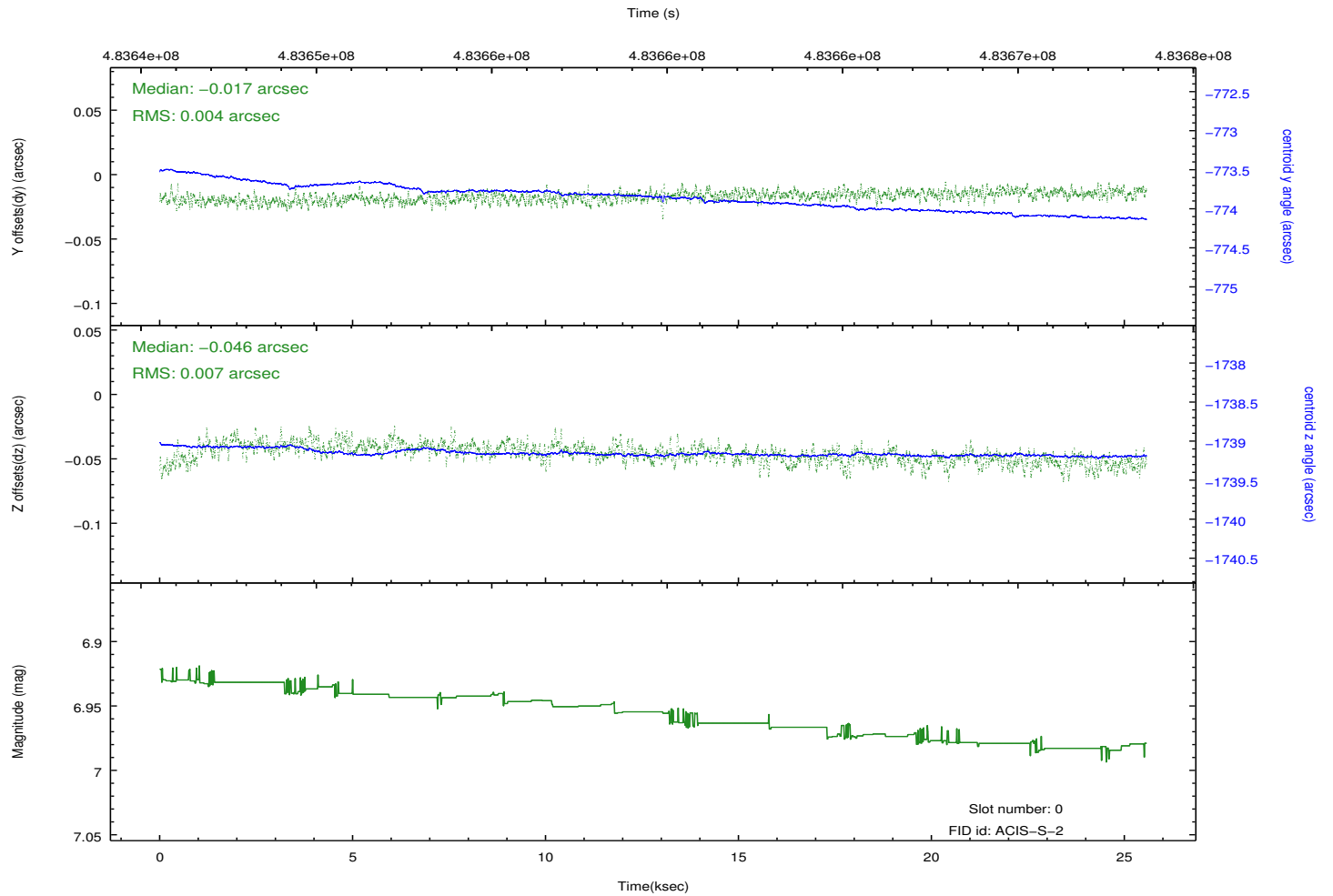
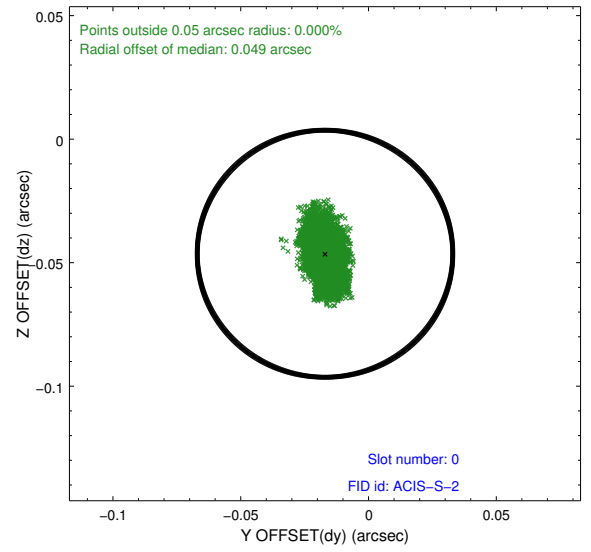
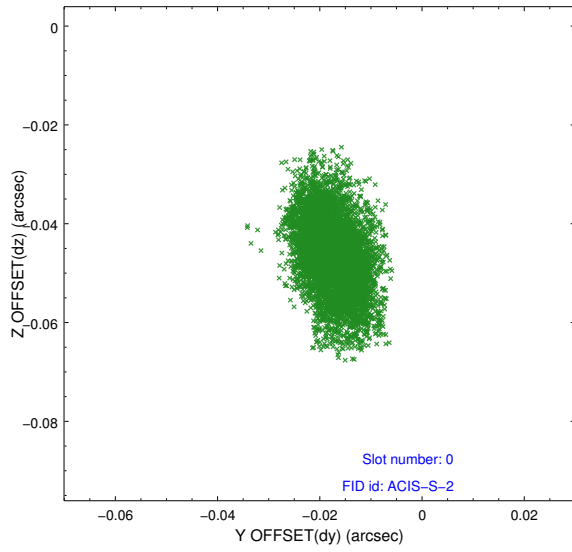


2.4.5 Slot 7

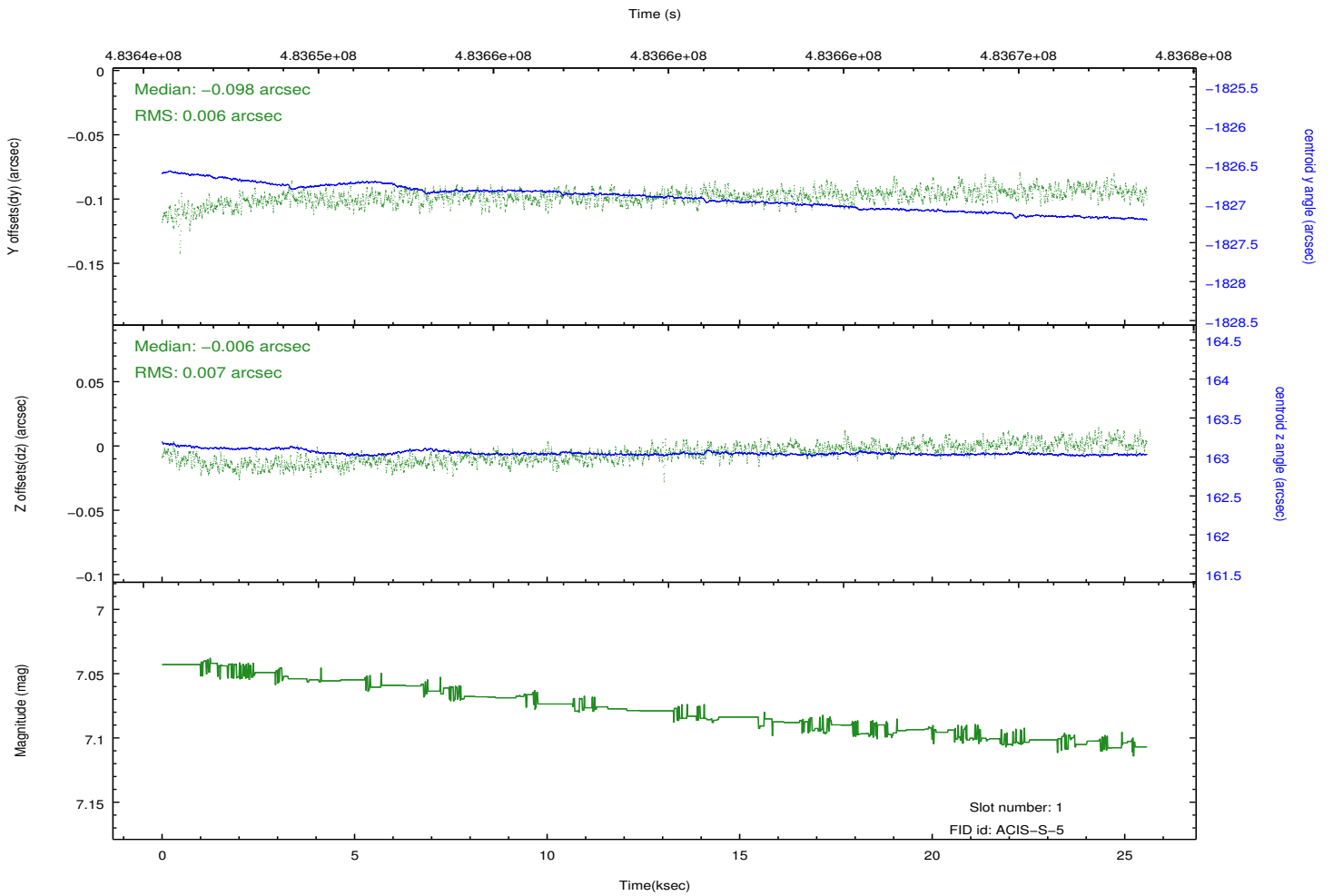
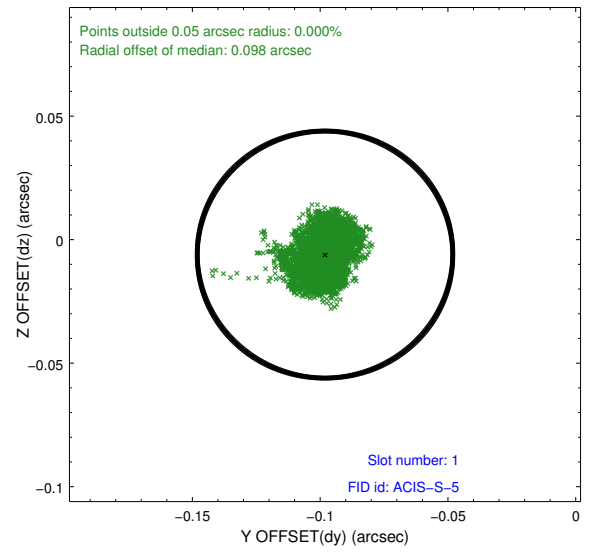
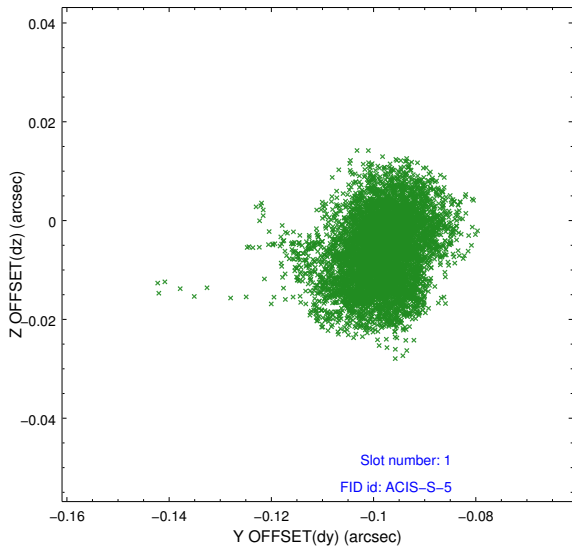


2.5 FID Slots

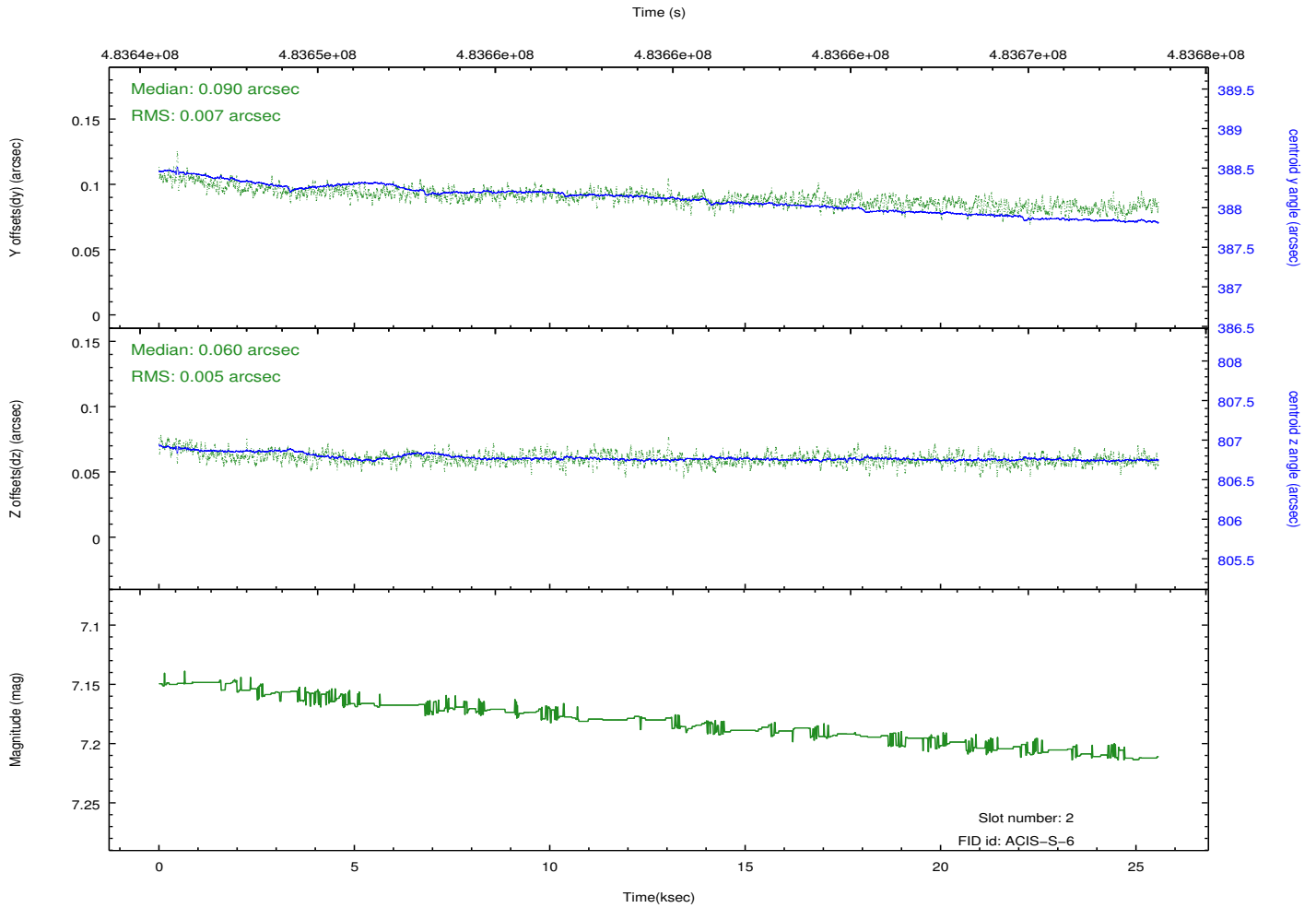
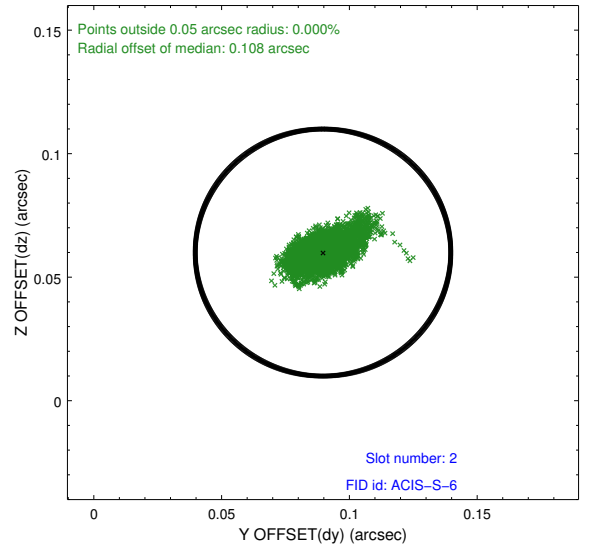
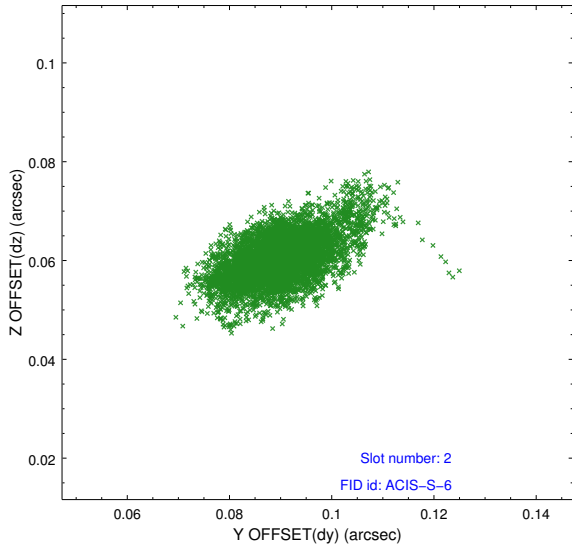
2.5.1 Slot 0



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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.591980301023

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.