

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 15985 - L2 Version 2
Chandra X-Ray Center

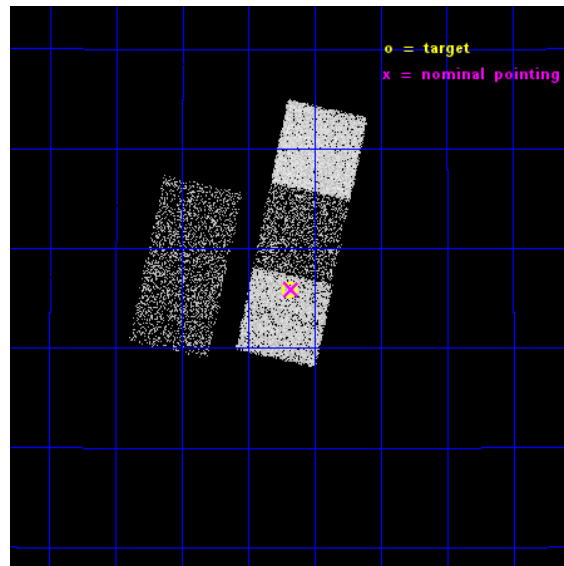
L2 Processing Date : Dec 11 2014

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1 Front

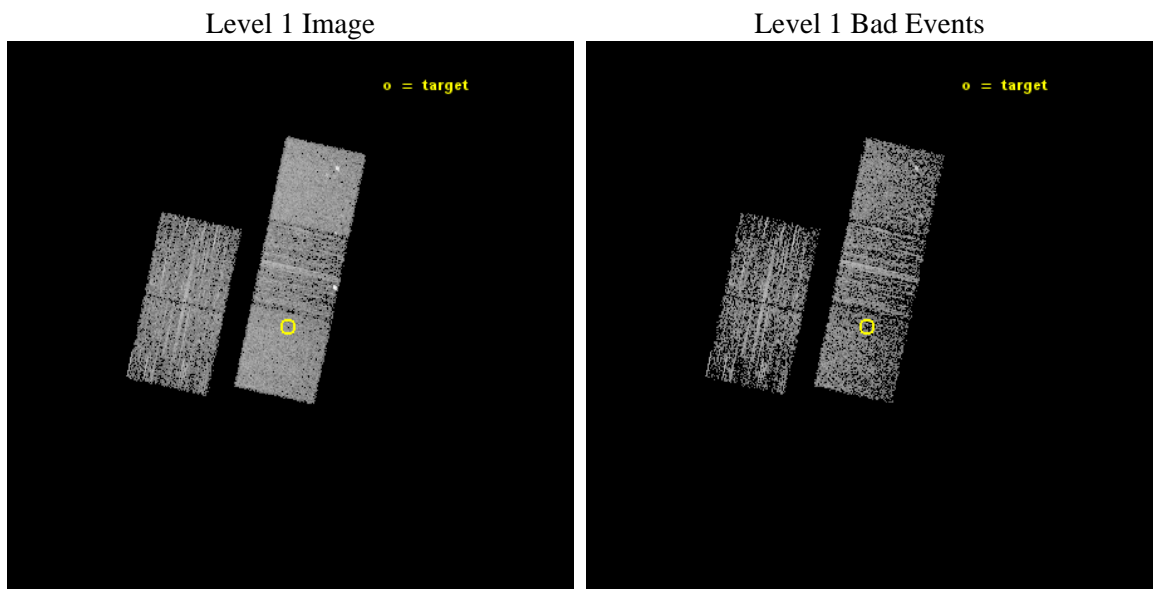
seq_num	502218	Sequence number
obs_id	15985	Observation id
title	Where Have All The Central Compact Objects Gone?	Proposal title
observer	Dr Eric Gotthelf	Principal investigator
object	PSR J2307+2225	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	346.921667	Observer's specified target RA [deg]
dec_targ	22.430583	Observer's specified target Dec [deg]
ra_nom	346.91865176508	Nominal RA [deg]
dec_nom	22.431626115758	Nominal Dec [deg]
roll_nom	102.18857299828	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3272.5087384582	Sum of GTIs [s]
livetime	3229.7510026043	Livetime [s]
ontime2	3272.344578445	Sum of GTIs [s]
ontime3	3272.3856184483	Sum of GTIs [s]
ontime5	3272.4676984549	Sum of GTIs [s]
ontime6	3272.4266584516	Sum of GTIs [s]
ontime7	3272.5087384582	Sum of GTIs [s]
l2events	25969	Number of level 2 events



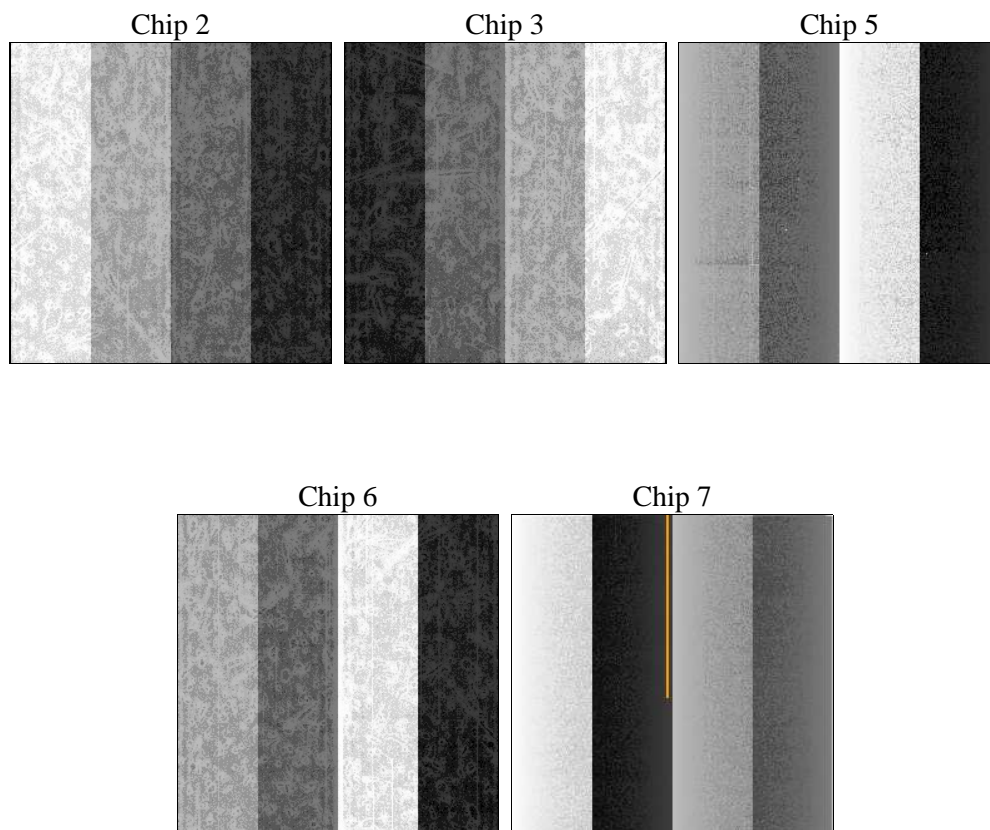
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	3272.5087384582	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	3272.344578445	Sum of GTIs [s]
date	2014-12-11T22:49:44	Date and time of file creation	ontime3	3272.3856184483	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	3272.4676984549	Sum of GTIs [s]
			ontime6	3272.4266584516	Sum of GTIs [s]
			ontime7	3272.5087384582	Sum of GTIs [s]
			l1events	99456	Number of level 1 events

2.1.4 Events

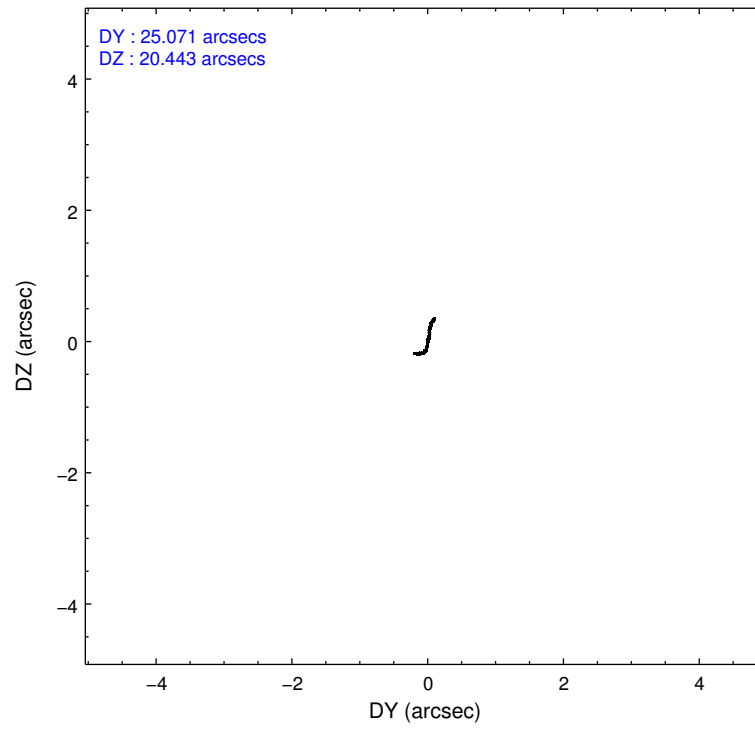
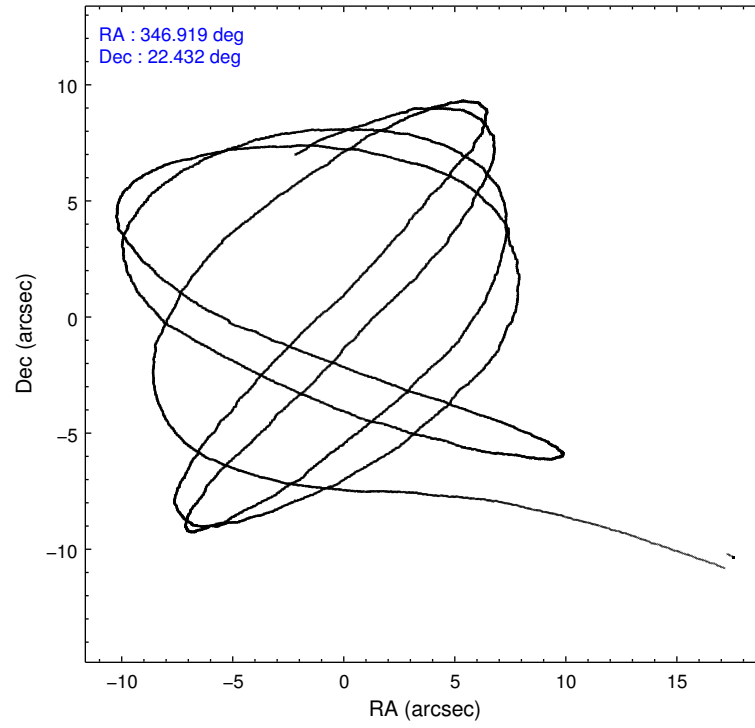
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	16128	14992	27613	18738	21985
rejected events	14359	13310	14597	15391	12657
rejected %	89%	88%	52%	82%	57%

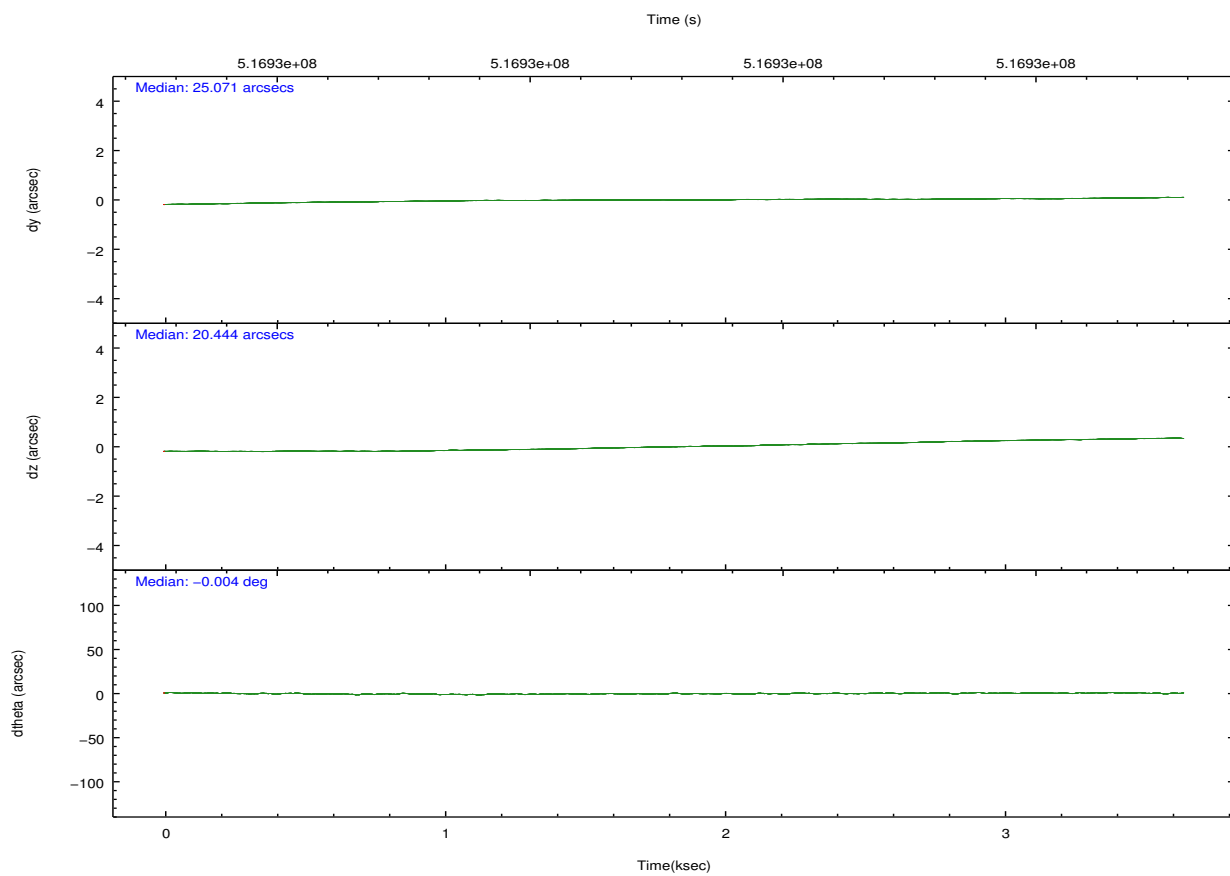
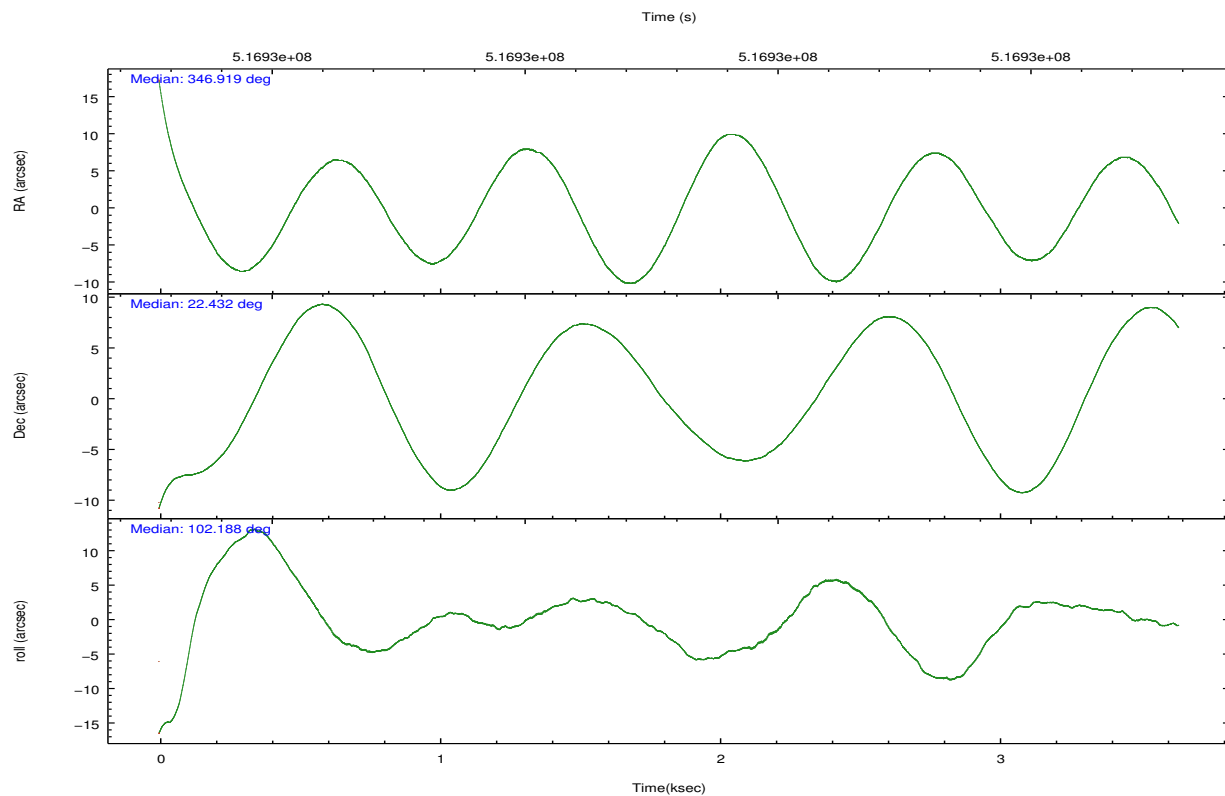
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	646	566	1188	660	779
	4%	3%	4%	3%	3%
grade 1 events	16	12	265	5	30
	0%	0%	0%	0%	0%
grade 2 events	410	371	3923	1822	1946
	2%	2%	14%	9%	8%
grade 3 events	191	196	427	204	724
	1%	1%	1%	1%	3%
grade 4 events	179	181	437	219	766
	1%	1%	1%	1%	3%
grade 5 events	673	853	1959	852	2261
	4%	5%	7%	4%	10%
grade 6 events	344	369	7051	445	5126
	2%	2%	25%	2%	23%
grade 7 events	13669	12444	12363	14531	10353
	84%	83%	44%	77%	47%

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	346.938752	346.9186517650816	CCD I2 on	O2	Y
[deg] Pointing Dec	22.411624	22.43162611575842	CCD I3 on	O3	Y
[deg] Pointing Roll	102.024286	102.1885729982848	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	516927881.184000	516926770.56786	CCD S5 on	N	N
Observation start date	2014-05-19T23:03:34	2014-05-19T22:46:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	516931381.184000	516932351.69317	On-chip summing requested	N	N
Observation end date	2014-05-20T00:01:54	2014-05-20T00:19:11	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



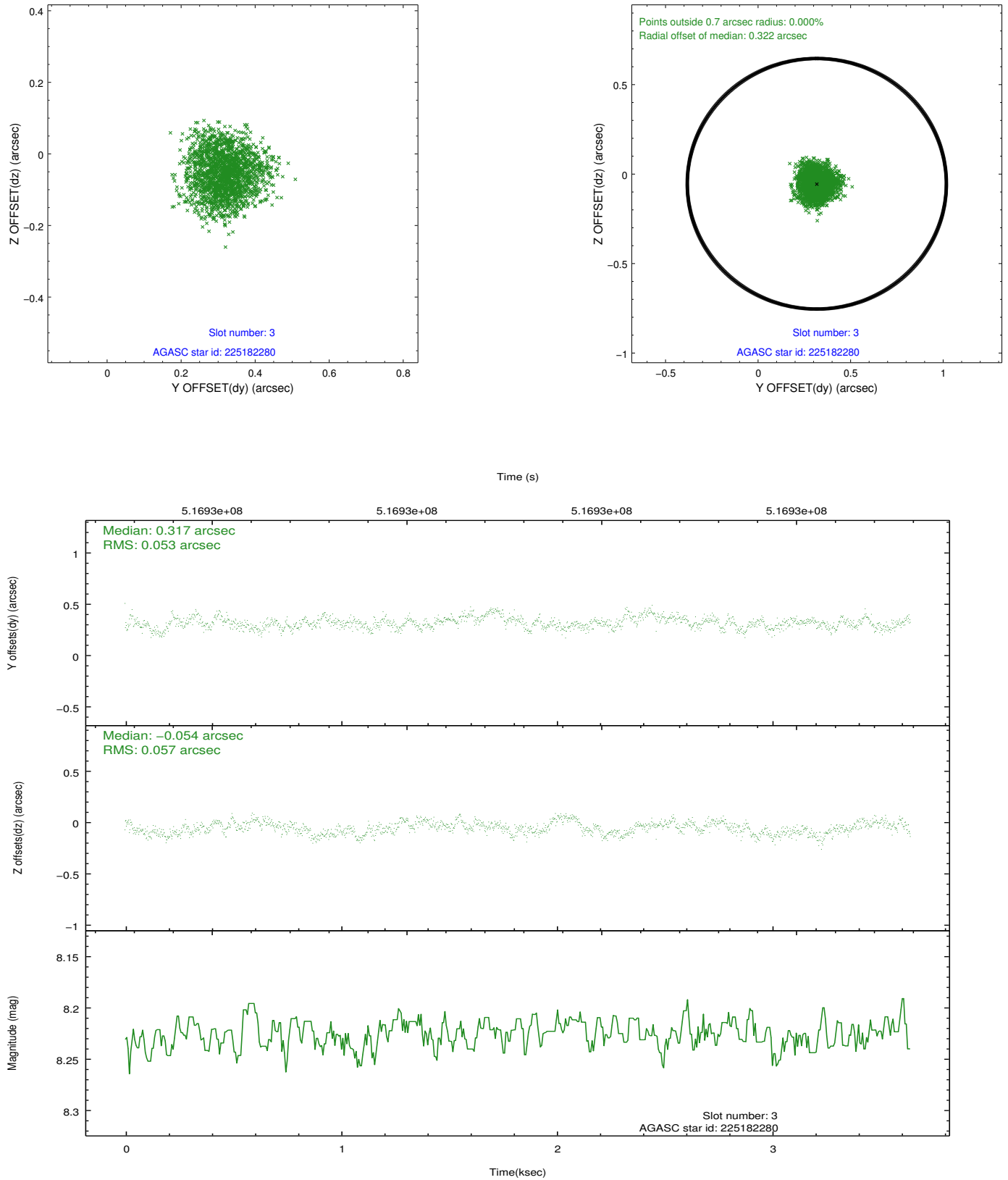


Slot Statistics

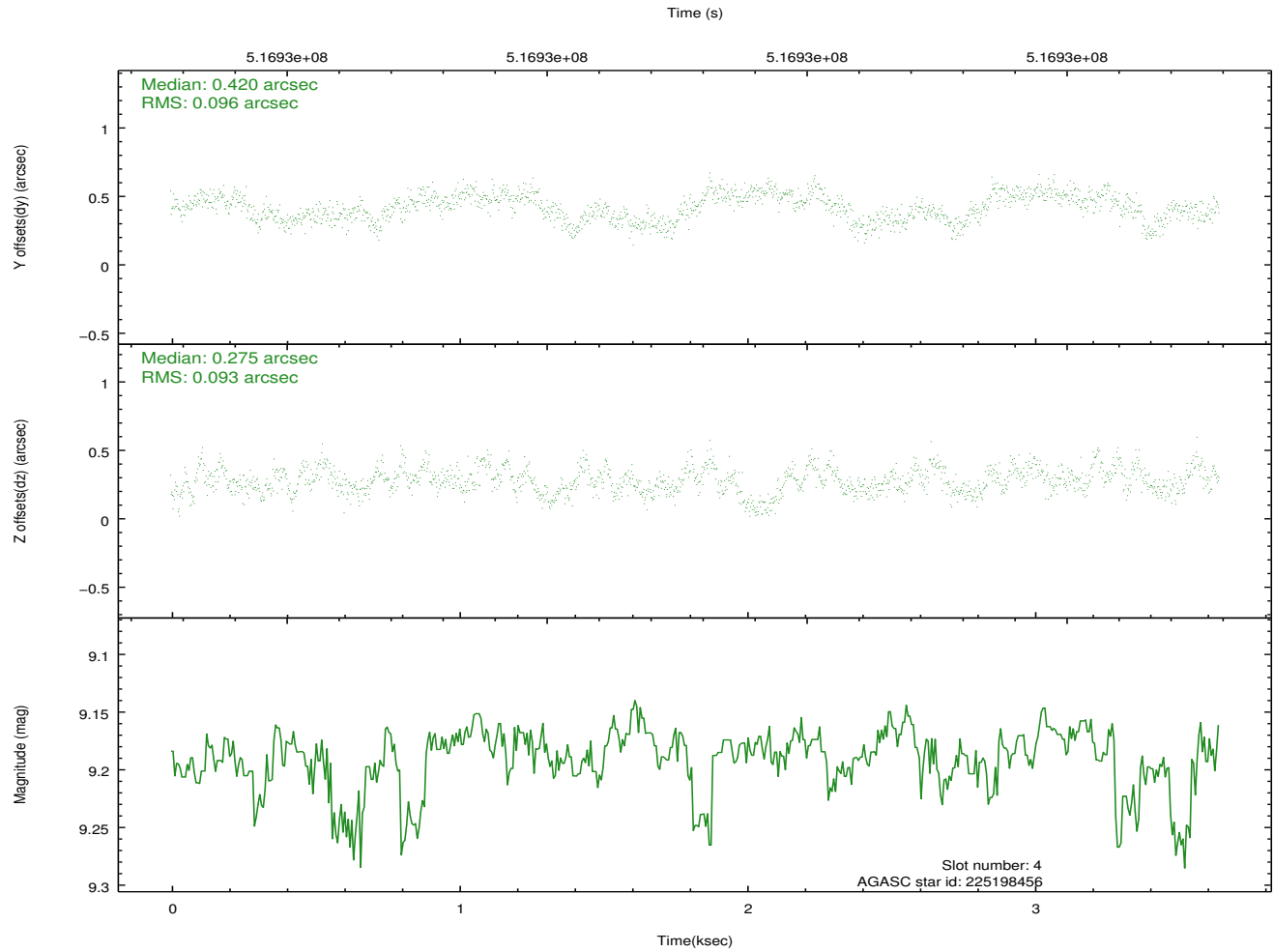
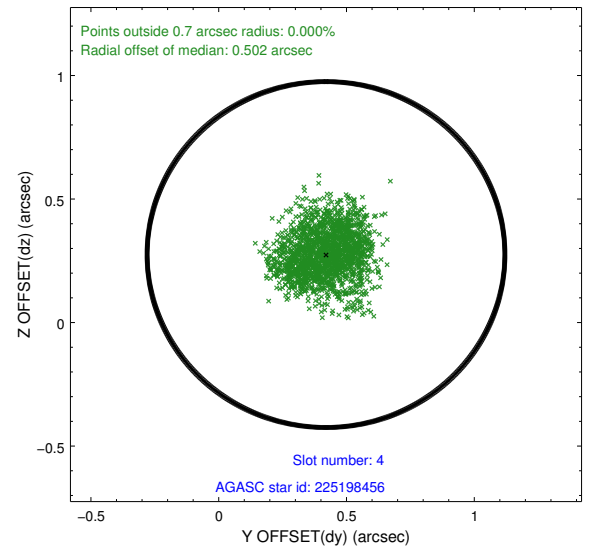
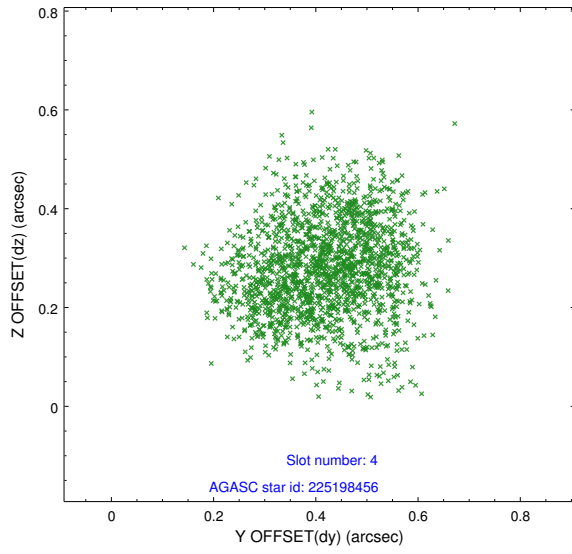
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	889	-0.211	-0.019	0.007	0.013	0.000000	0.000000	-778.50	-1741.96
1	FID		ACIS-S-4	7.14	889	0.402	0.107	0.008	0.016	0.000000	0.000000	2134.58	164.86
2	FID		ACIS-S-5	7.16	889	-0.222	-0.079	0.008	0.015	0.000000	0.000000	-1829.16	160.29
3	GUIDE	used	225182280	8.22	1778	0.317	-0.054	0.086	0.132	346.669771	21.818613	-1899.28	1323.91
4	GUIDE	used	225198456	9.19	1776	0.420	0.275	0.146	0.226	347.467334	22.491118	-83.92	-1778.38
5	GUIDE	used	292949312	8.89	1778	-0.137	0.052	0.089	0.142	346.925989	23.062788	2301.89	-447.91
6	GUIDE	used	292955656	7.64	1778	-0.330	0.152	0.117	0.178	347.075452	23.030138	2084.93	-906.41
7	GUIDE	used	292955912	8.99	1776	-0.279	-0.425	0.084	0.142	346.442898	22.870229	1961.35	1263.36

2.4 Star Slots

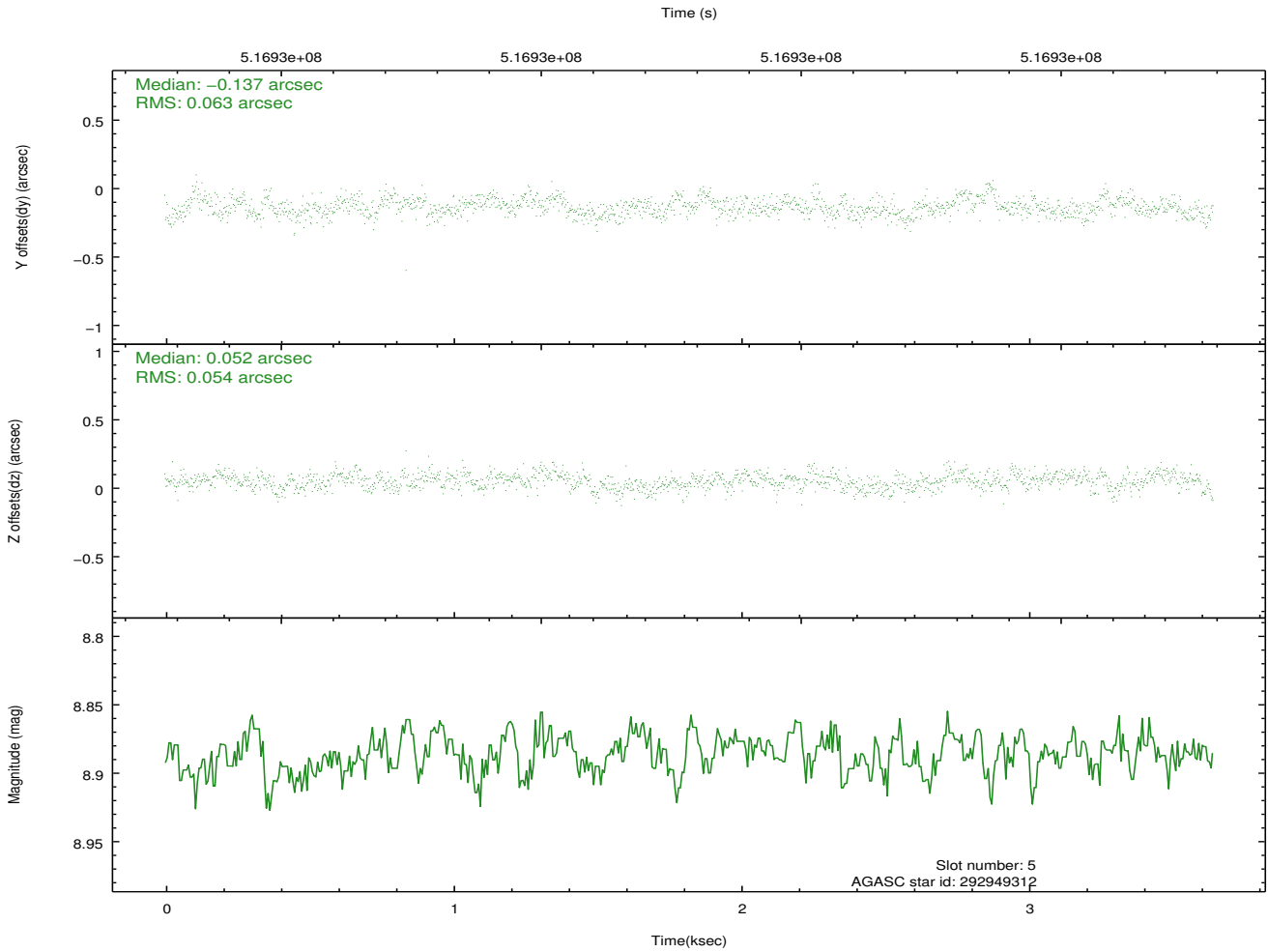
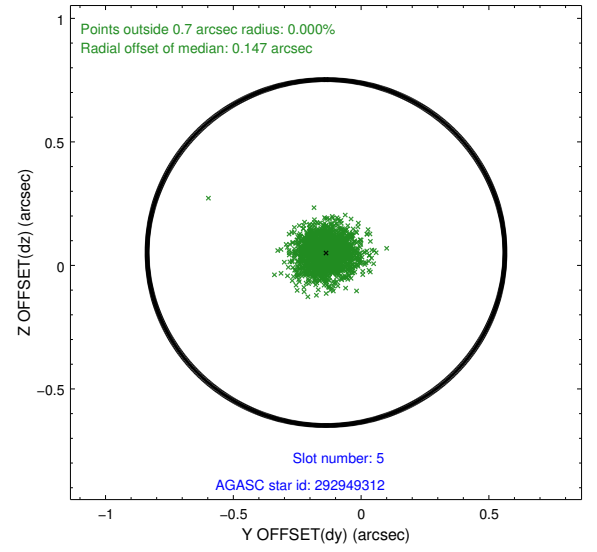
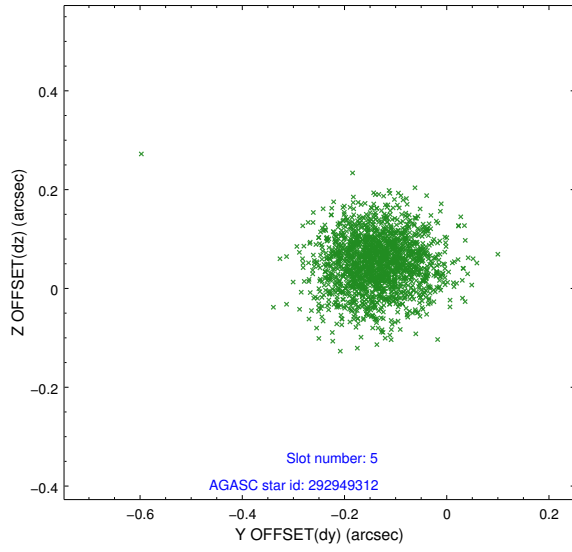
2.4.1 Slot 3



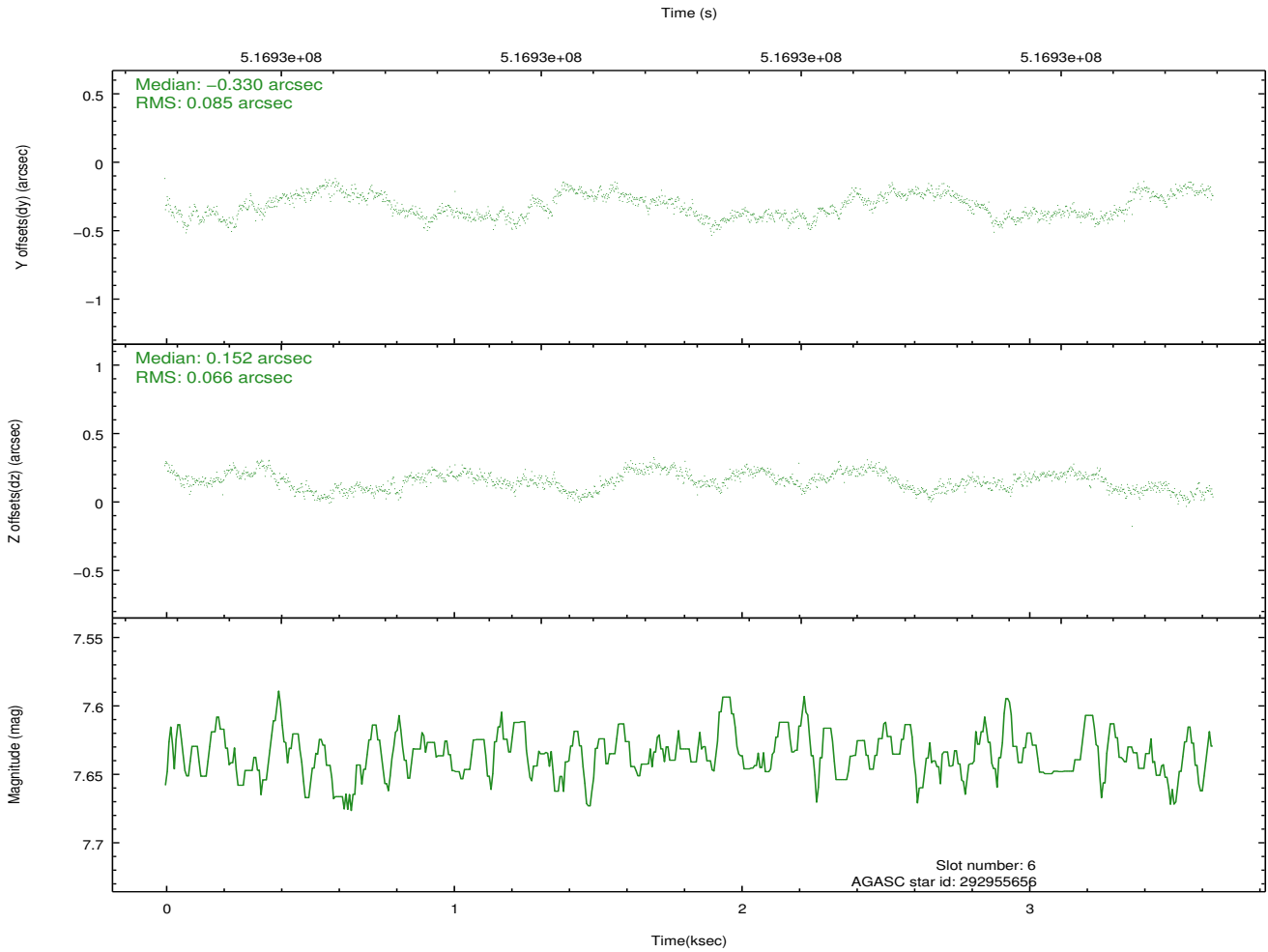
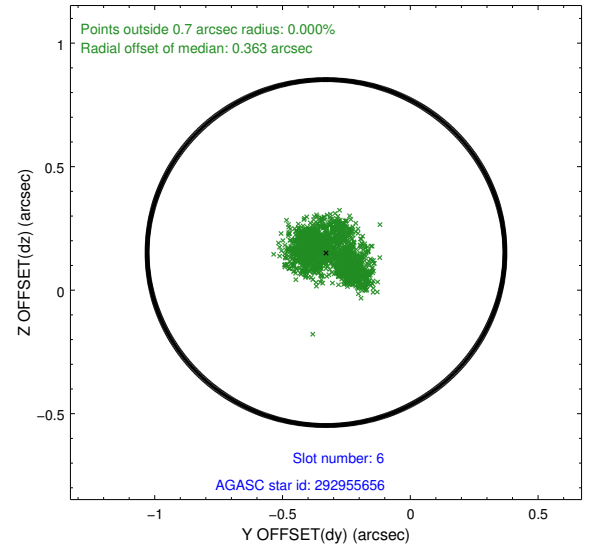
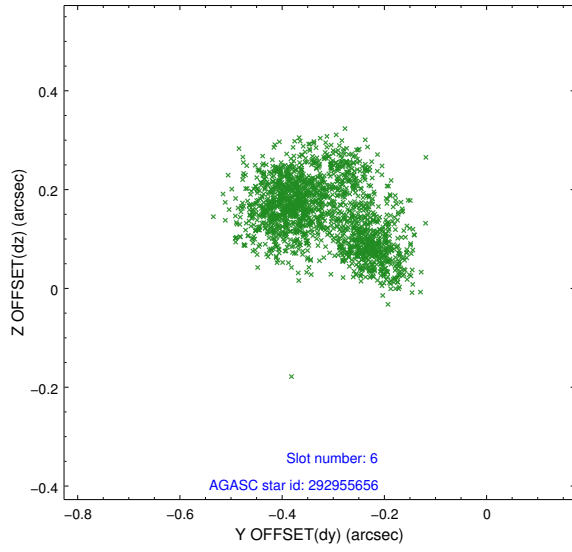
2.4.2 Slot 4



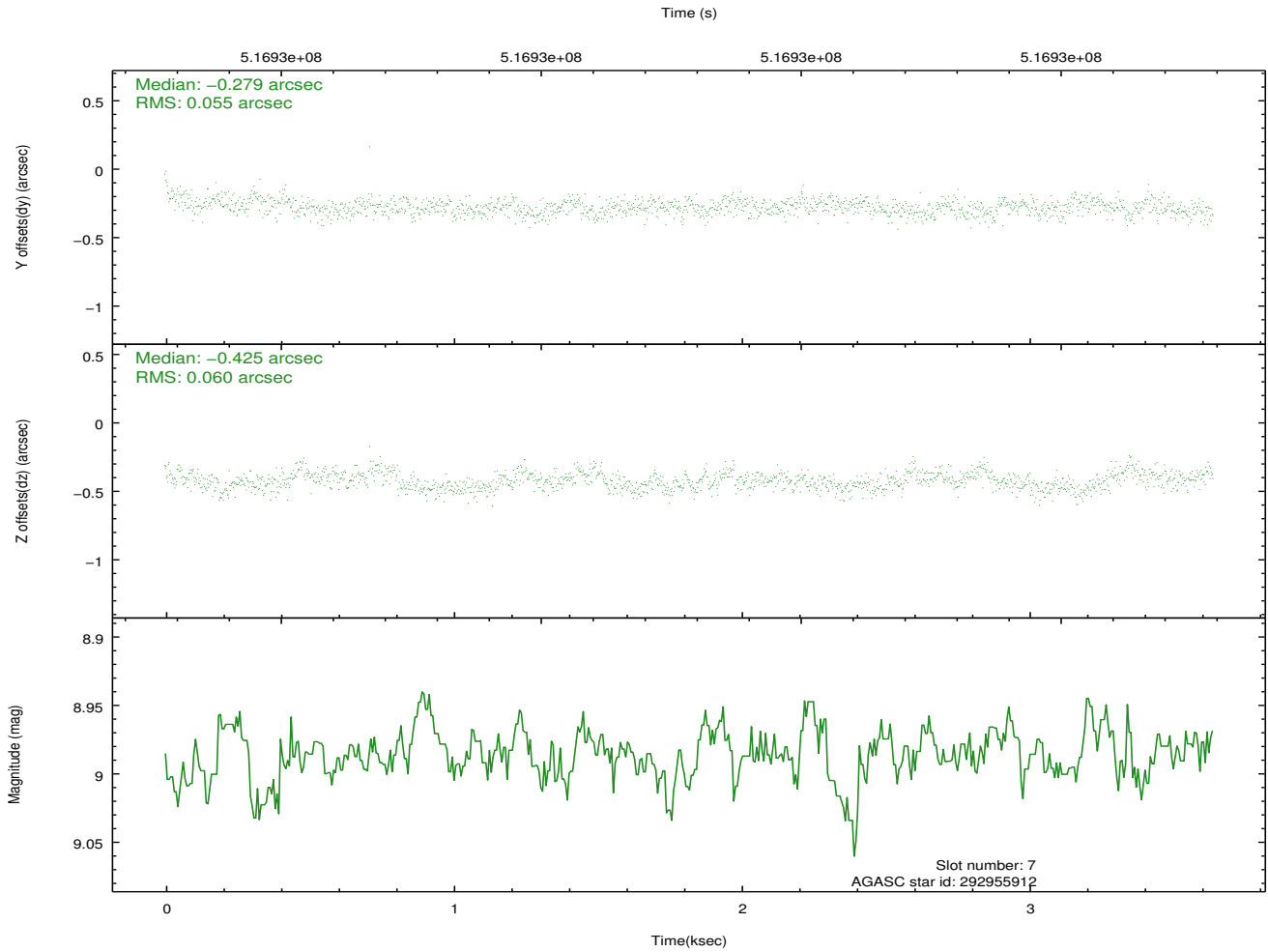
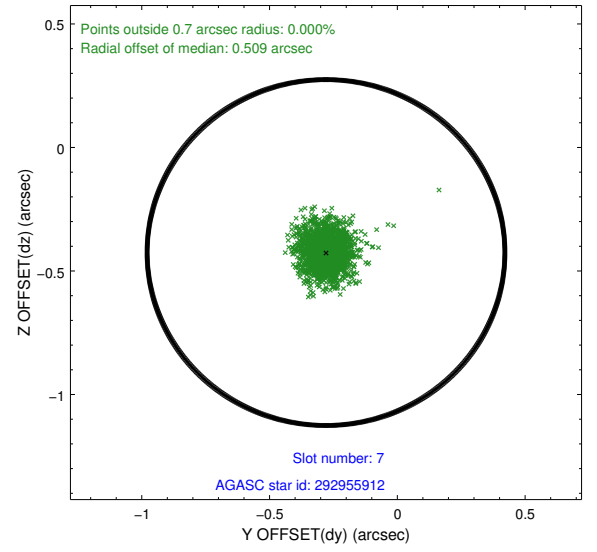
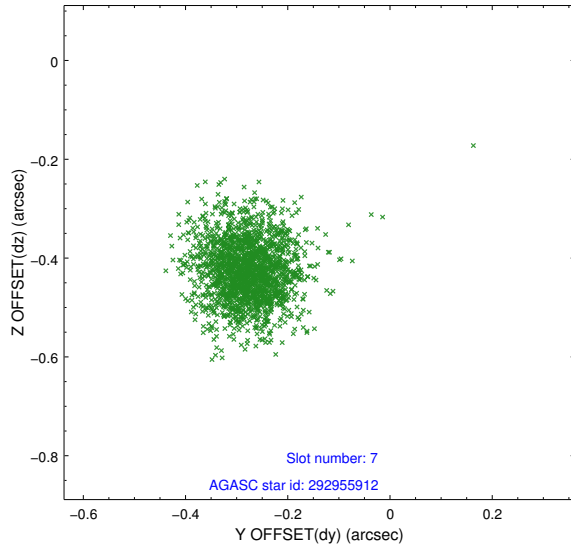
2.4.3 Slot 5



2.4.4 Slot 6

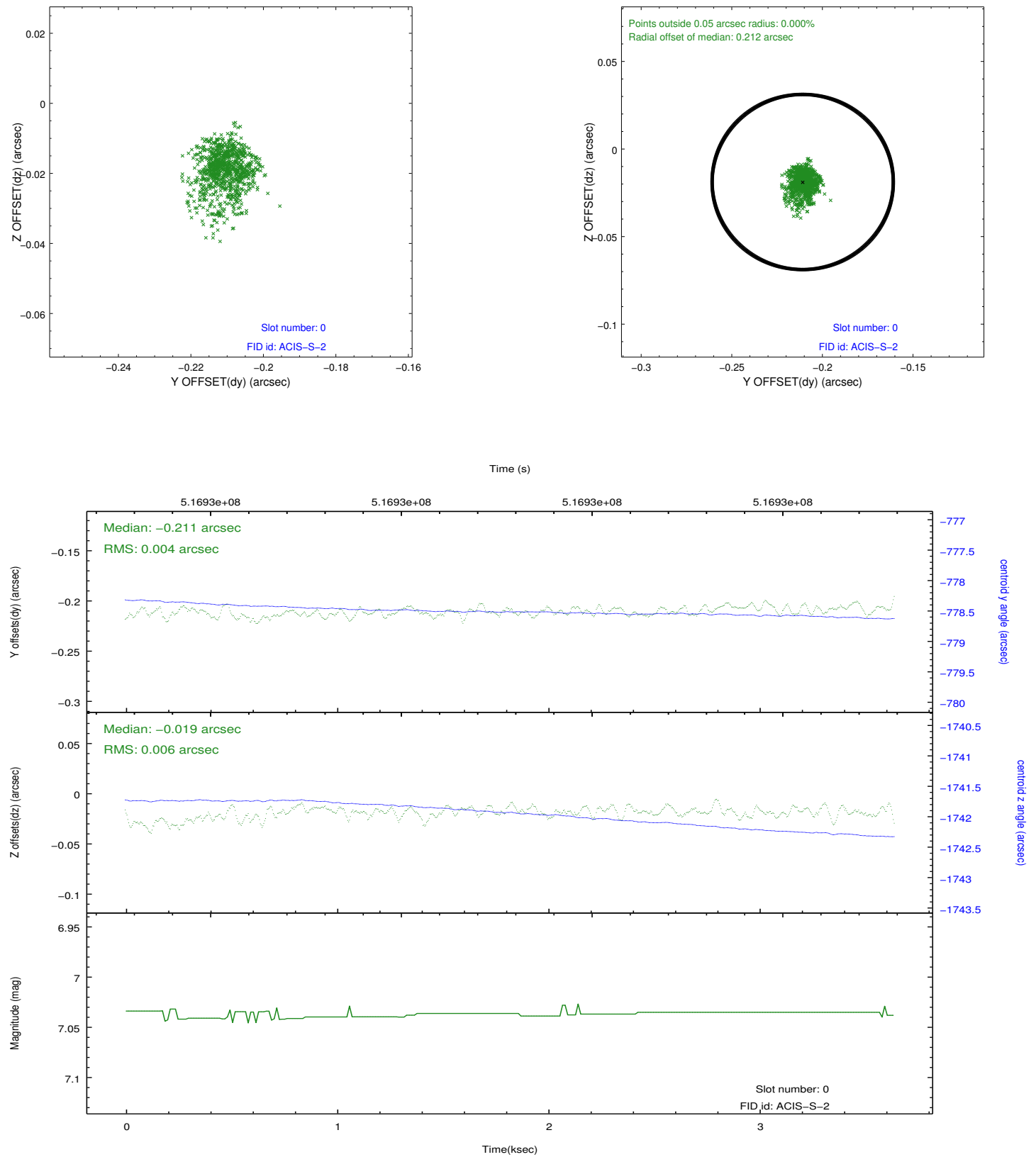


2.4.5 Slot 7

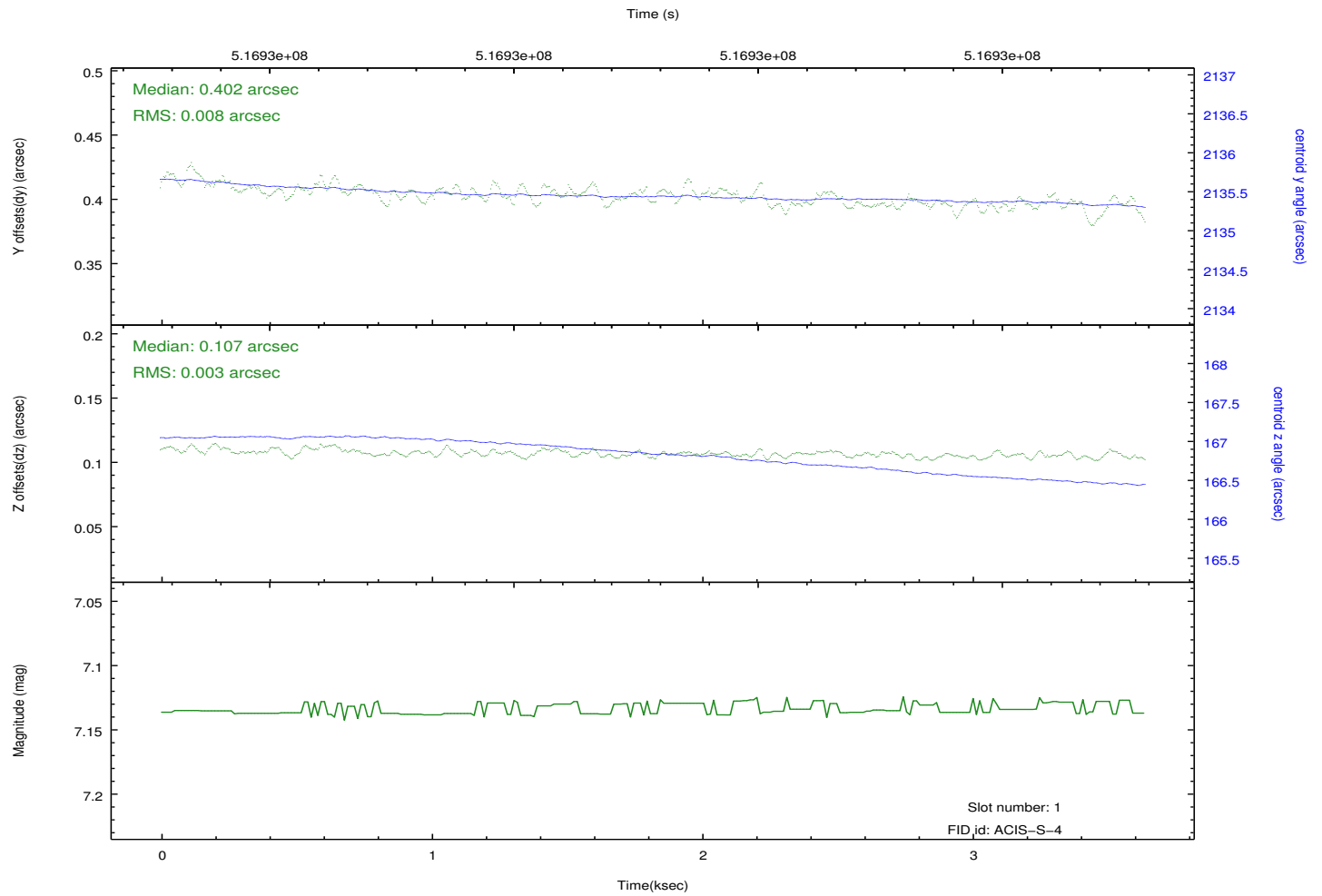
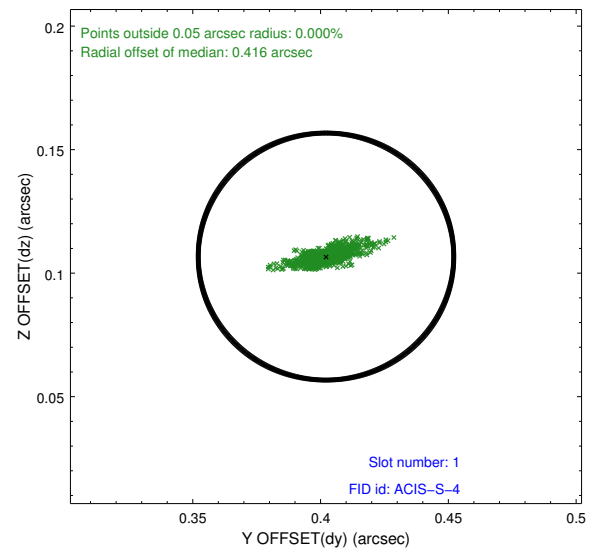
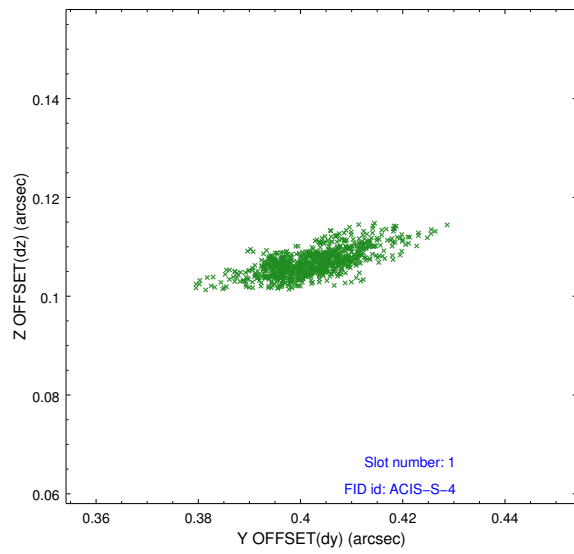


2.5 FID Slots

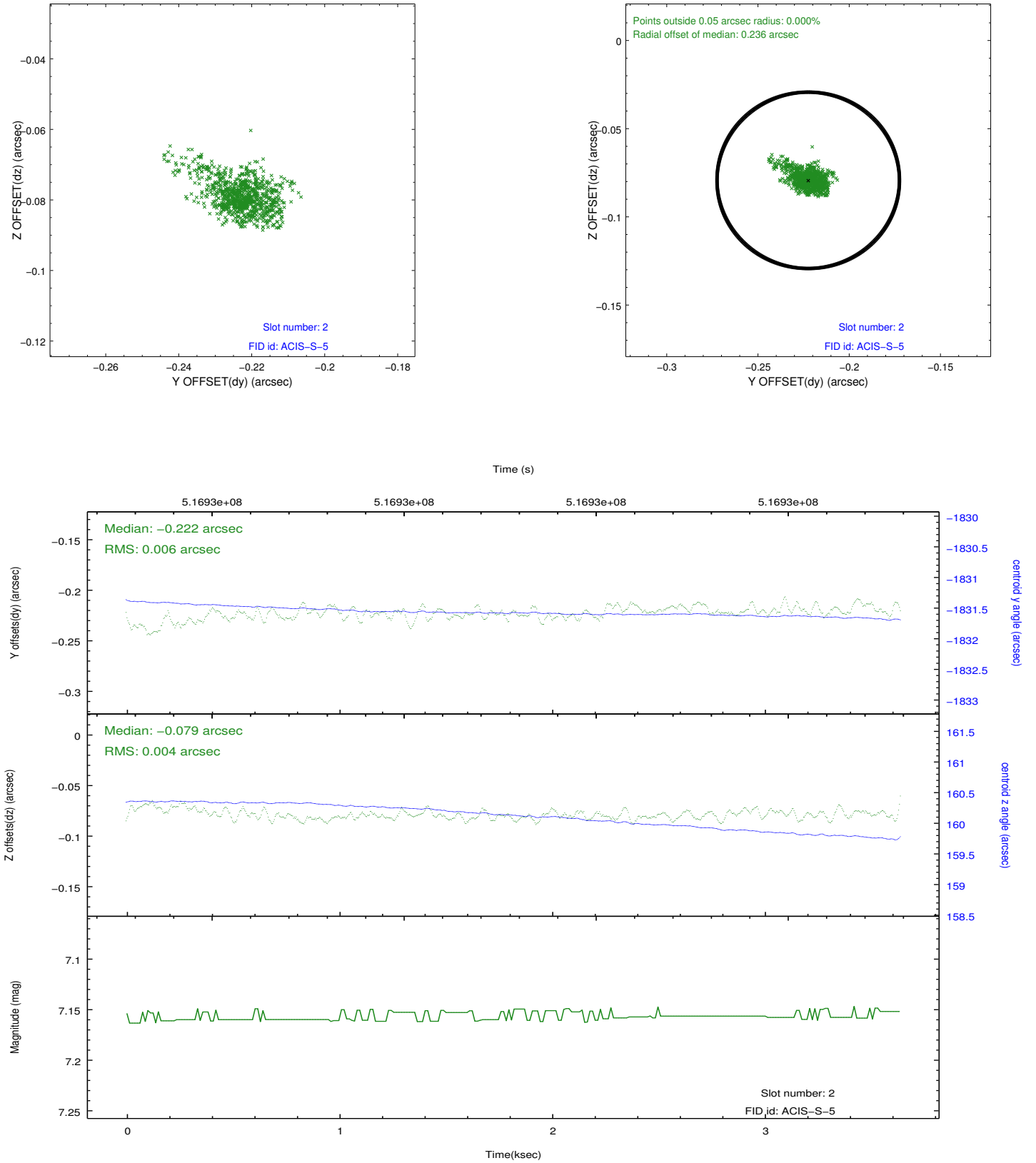
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.2725087384582

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.