

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15289 - L2 Version 3
Chandra X-Ray Center

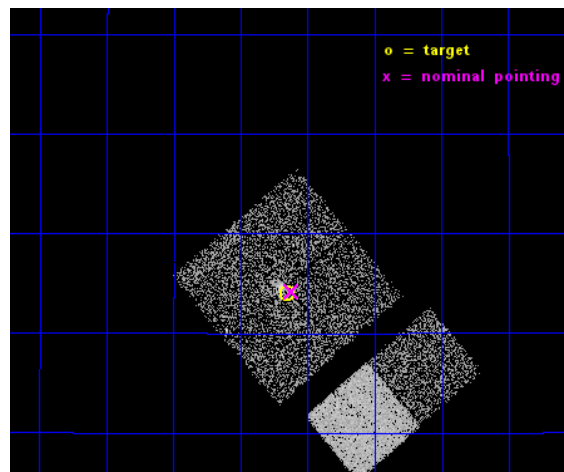
L2 Processing Date : Dec 2 2014

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1 Front

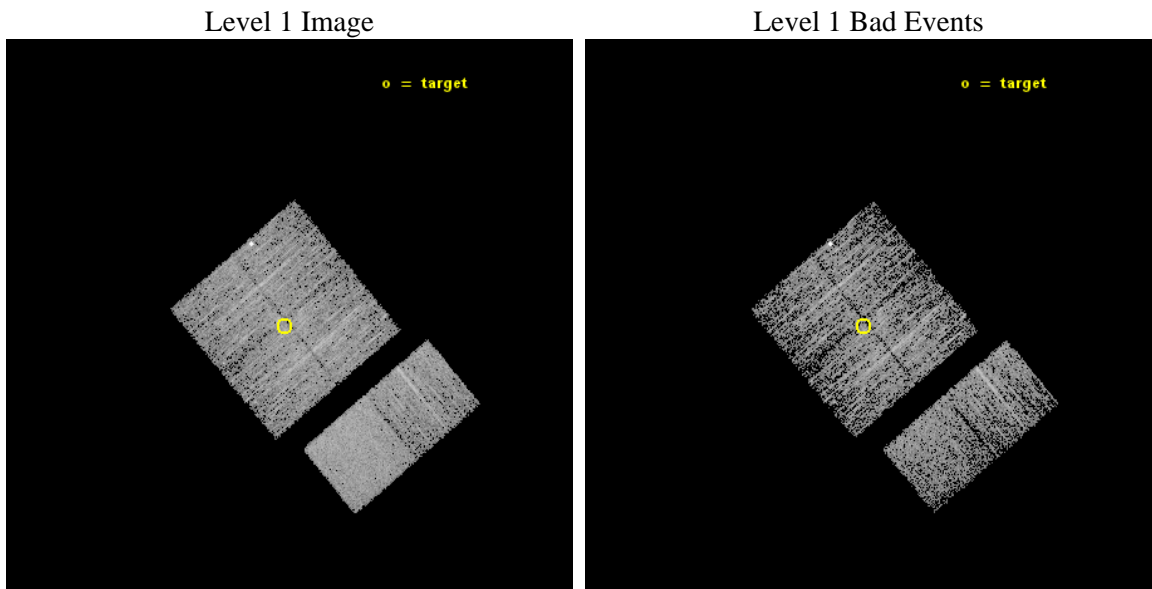
seq_num	801327	Sequence number
obs_id	15289	Observation id
title	Paving the way for eROSITA: with Chandra observations of the CODEX-BOSS clusters	Proposal title
observer	Dr. Peter Predehl	Principal investigator
object	CODEX 40210	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	231.913333	Observer's specified target RA [deg]
dec_targ	20.733639	Observer's specified target Dec [deg]
ra_nom	231.90526087951	Nominal RA [deg]
dec_nom	20.736757368642	Nominal Dec [deg]
roll_nom	139.80426544606	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3971.1999852657	Sum of GTIs [s]
livetime	3920.9142598827	Livetime [s]
ontime0	3971.1999852657	Sum of GTIs [s]
ontime1	3971.1999852657	Sum of GTIs [s]
ontime2	3971.1999852657	Sum of GTIs [s]
ontime3	3971.1999852657	Sum of GTIs [s]
ontime6	3967.9589449167	Sum of GTIs [s]
ontime7	3971.1999852657	Sum of GTIs [s]
l2events	22669	Number of level 2 events



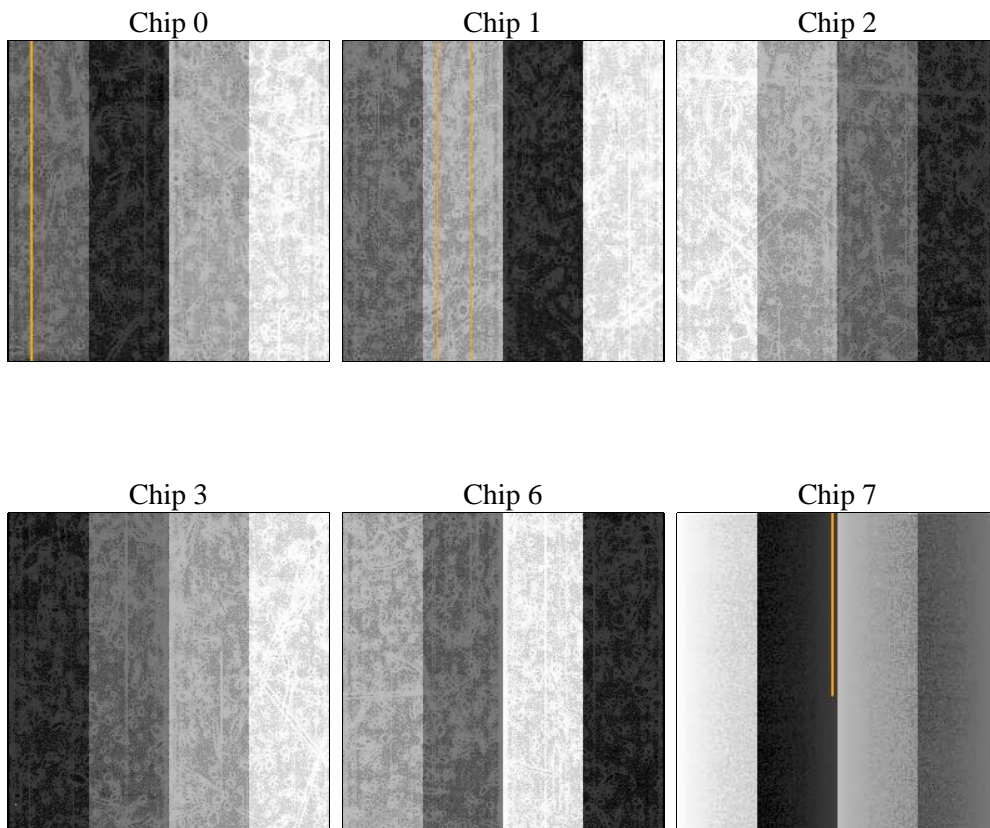
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	3971.1999852657	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	3971.1999852657	Sum of GTIs [s]
date	2014-12-02T18:19:04	Date and time of file creation	ontime1	3971.1999852657	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	3971.1999852657	Sum of GTIs [s]
			ontime3	3971.1999852657	Sum of GTIs [s]
			ontime6	3967.9589449167	Sum of GTIs [s]
			ontime7	3971.1999852657	Sum of GTIs [s]
			l1events	130774	Number of level 1 events

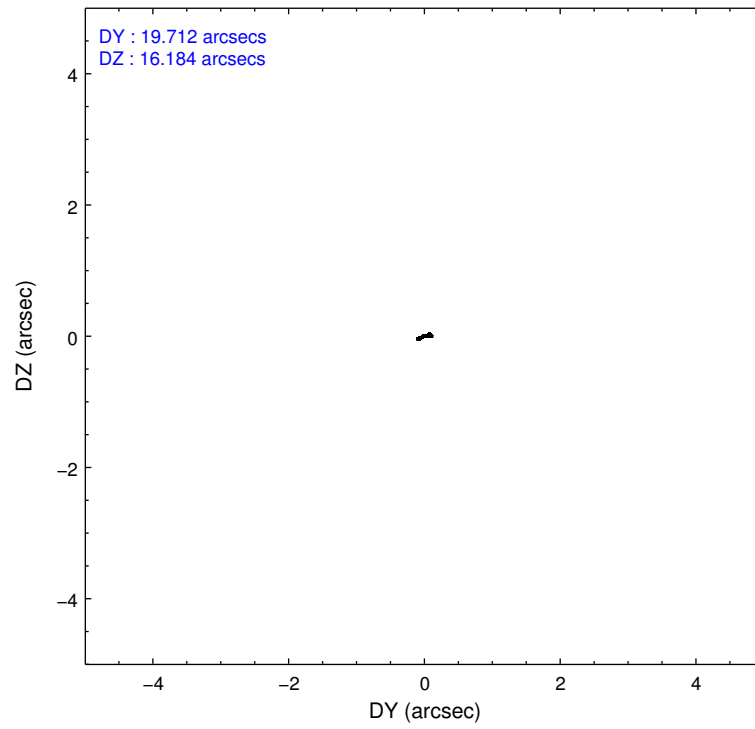
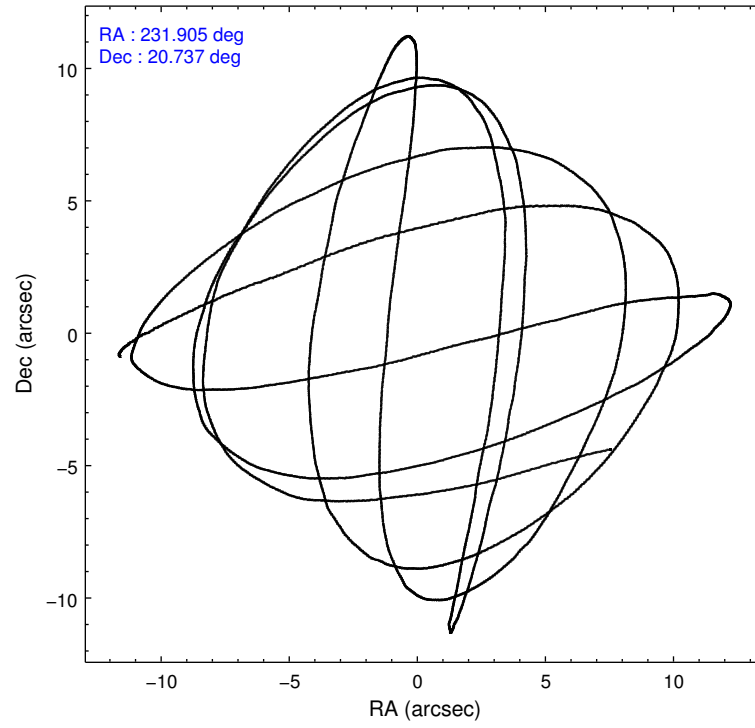
2.1.4 Events

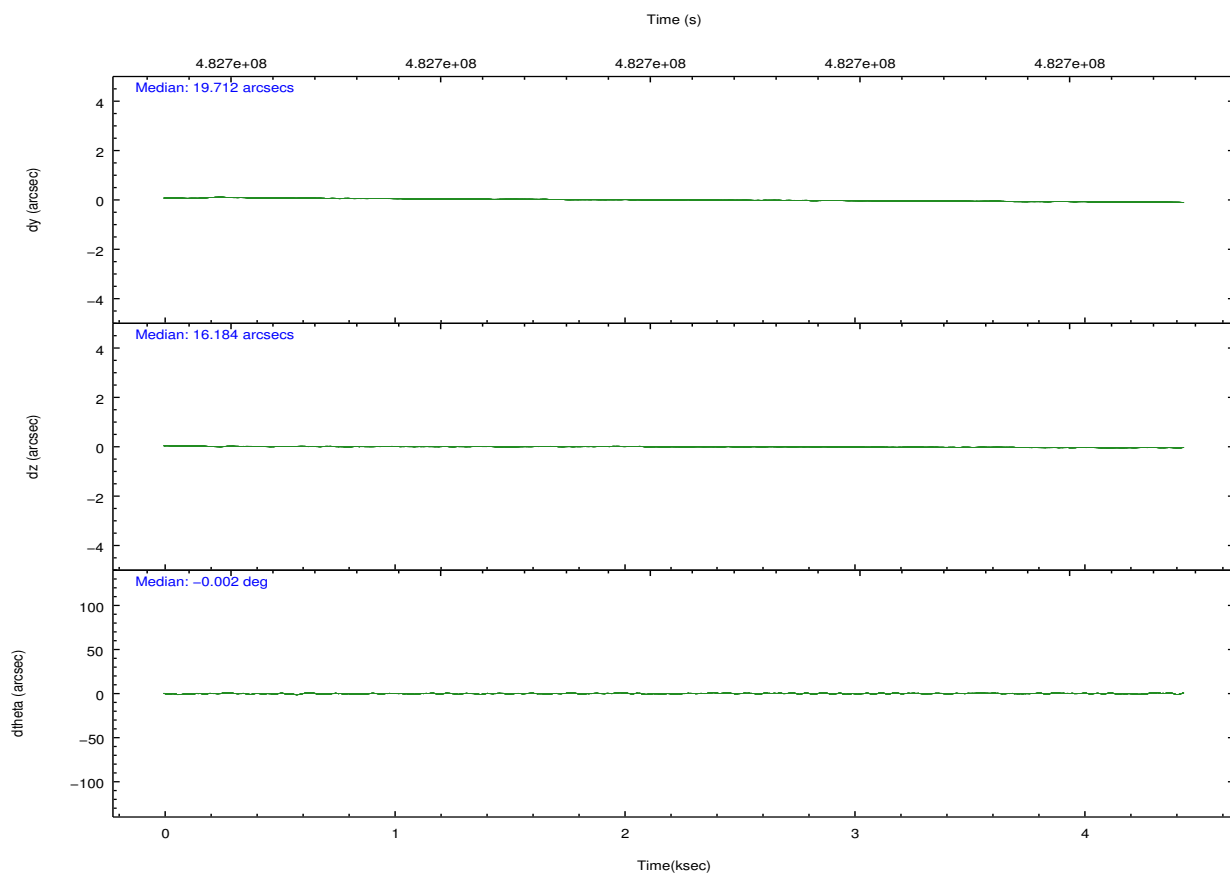
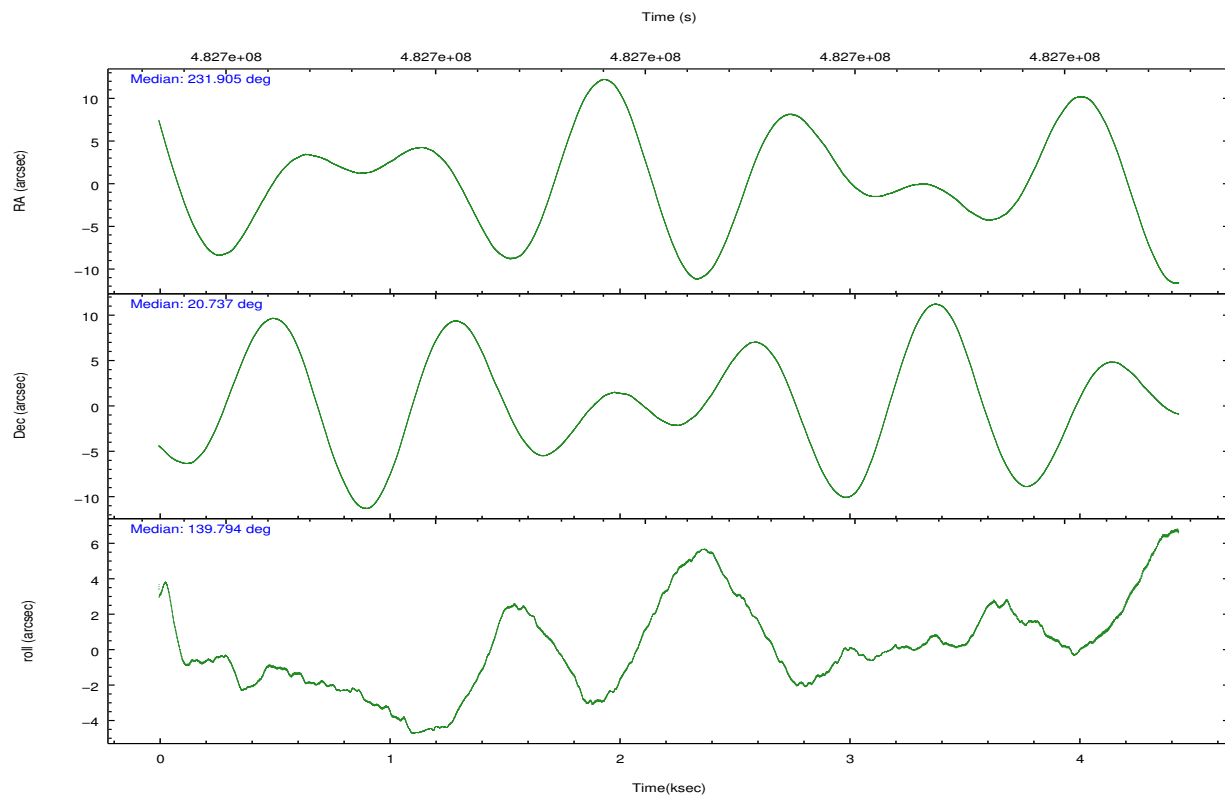
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	20399	19694	21685	20396	20617	27983	grade 0 events	945	1184	907	860	827	1065
rejected events	17911	16692	19264	18020	18158	15893		4%	6%	4%	4%	4%	3%
rejected %	87%	84%	88%	88%	88%	56%	grade 1 events	1178	7	4	11	12	32
								5%	0%	0%	0%	0%	0%
							grade 2 events	597	713	584	523	600	2468
								2%	3%	2%	2%	2%	8%
							grade 3 events	265	246	237	248	245	1034
								1%	1%	1%	1%	1%	3%
							grade 4 events	248	270	225	240	237	1045
								1%	1%	1%	1%	1%	3%
							grade 5 events	936	1040	891	1094	1110	2918
								4%	5%	4%	5%	5%	10%
							grade 6 events	435	593	472	509	552	6499
								2%	3%	2%	2%	2%	23%
							grade 7 events	15795	15641	18365	16911	17034	12922
								77%	79%	84%	82%	82%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	231.934327	231.905260879513	CCD I2 on	Y	Y
[deg] Pointing Dec	20.732020	20.73675736864245	CCD I3 on	Y	Y
[deg] Pointing Roll	139.585278	139.8042654460621	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5899487761303	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.002504226799430853	CCD S4 on	N	N
[s] Observation start time (MET)	482700333.184000	482699244.53203	CCD S5 on	N	N
Observation start date	2013-04-18T19:24:26	2013-04-18T19:07:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	482704333.184000	482705601.58238	On-chip summing requested	N	N
Observation end date	2013-04-18T20:31:06	2013-04-18T20:53:21	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



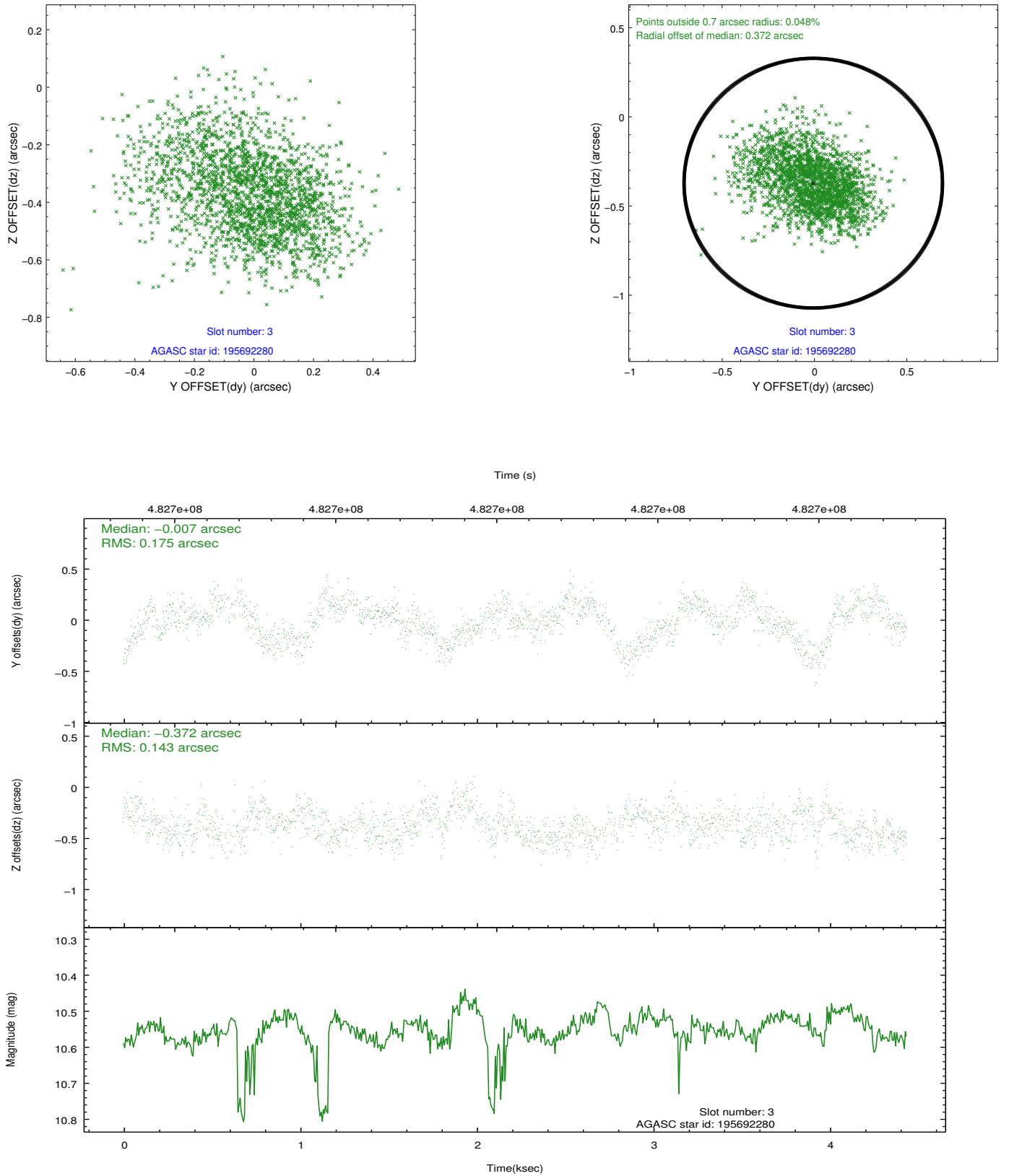


Slot Statistics

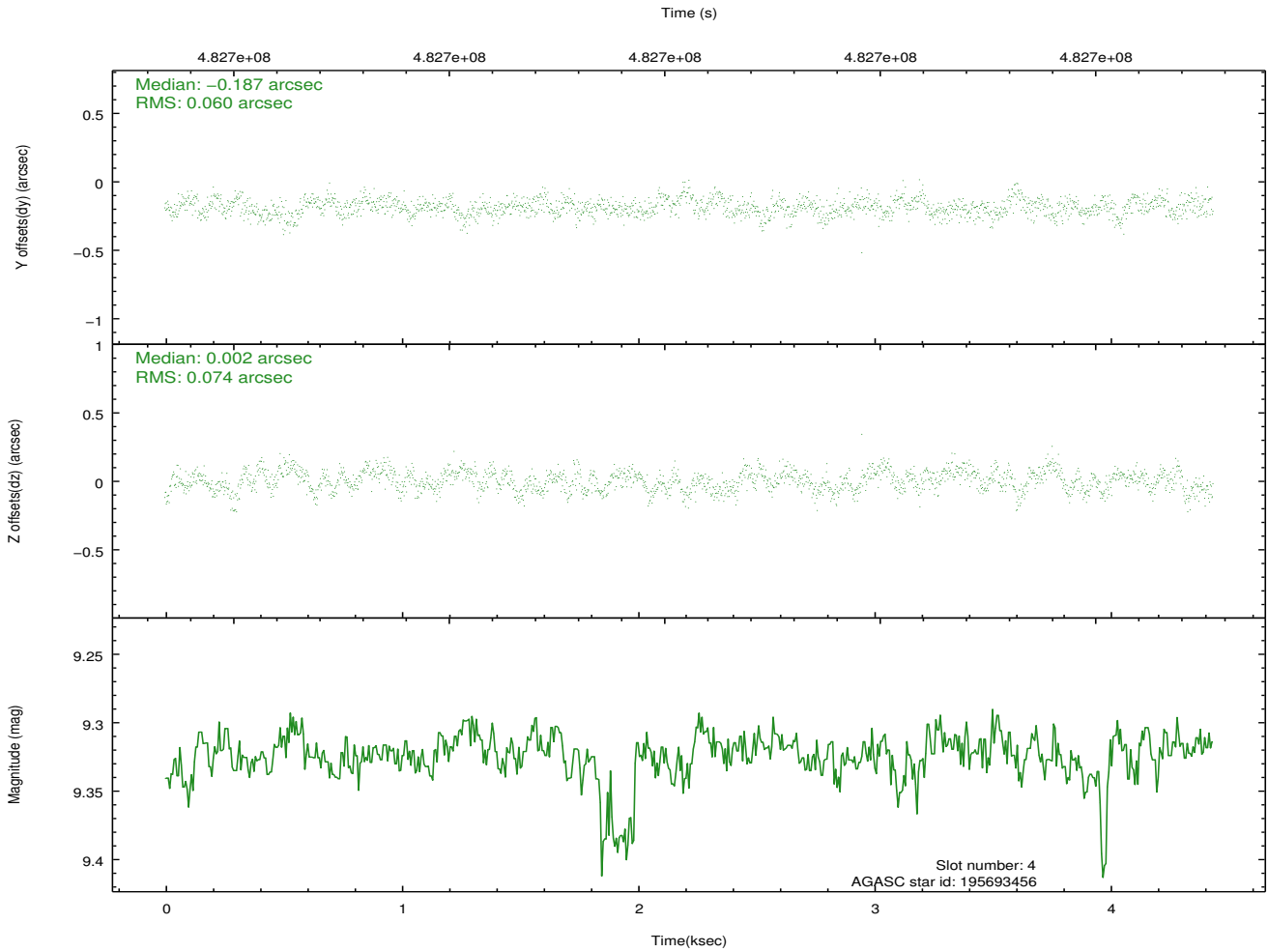
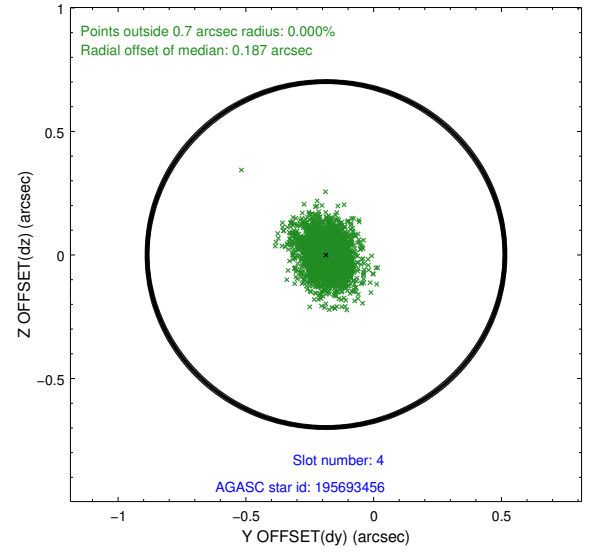
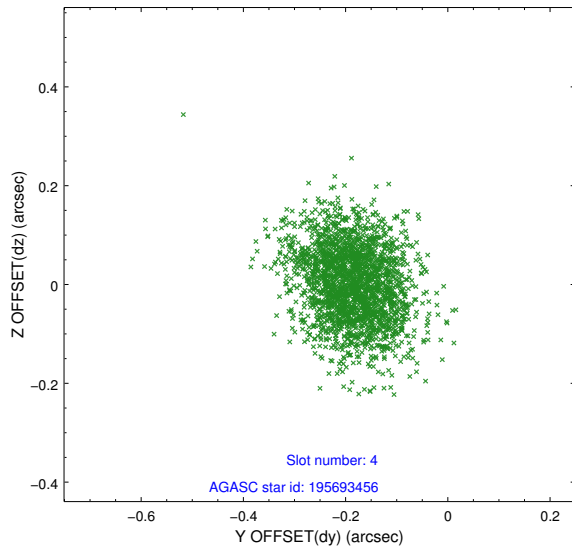
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.12	1082	0.081	-0.055	0.006	0.011	0.000000	0.000000	919.70	-839.81
1	FID		ACIS-I-5	7.11	1082	-0.300	0.054	0.006	0.010	0.000000	0.000000	-1828.03	1057.09
2	FID		ACIS-I-6	7.12	1082	0.128	0.071	0.006	0.010	0.000000	0.000000	383.77	1703.19
3	GUIDE	used	195692280	10.55	2081	-0.007	-0.372	0.239	0.399	231.182204	20.475322	1335.61	2343.48
4	GUIDE	used	195693456	9.32	2164	-0.187	0.002	0.101	0.163	231.101065	20.611834	1862.01	2145.53
5	GUIDE	used	195701688	9.27	2158	0.102	-0.115	0.143	0.221	231.766093	20.056164	-1143.32	2221.66
6	GUIDE	used	196608232	9.66	2149	0.155	0.204	0.253	0.362	232.174277	20.867459	-298.09	-893.98
7	GUIDE	used	196608936	9.09	2161	-0.040	0.269	0.135	0.228	232.174825	21.177333	425.51	-1744.23

2.4 Star Slots

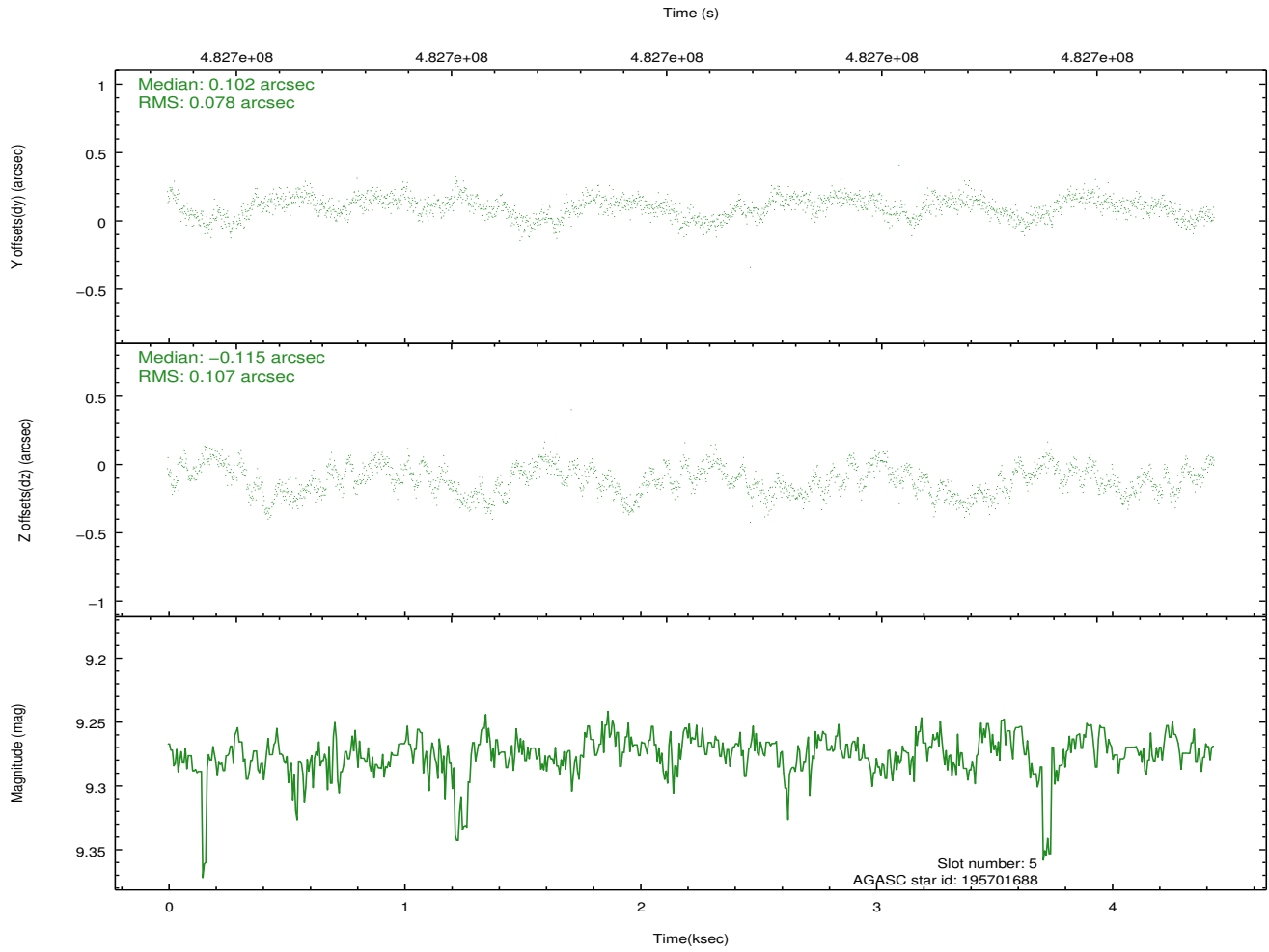
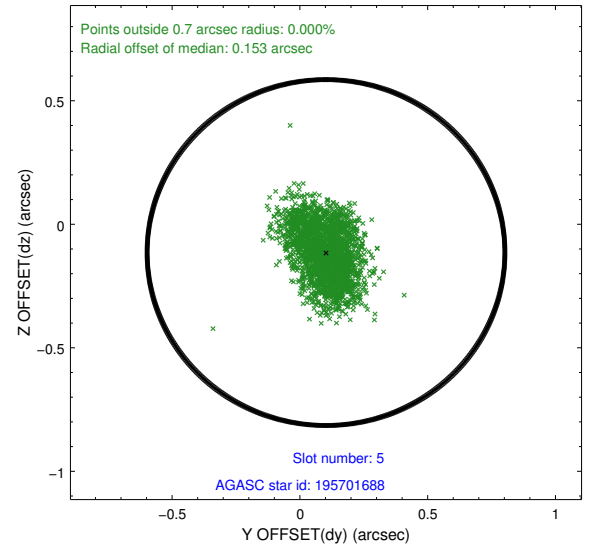
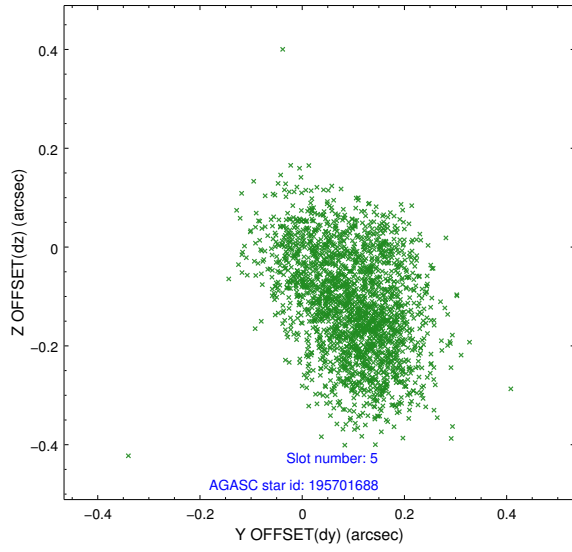
2.4.1 Slot 3



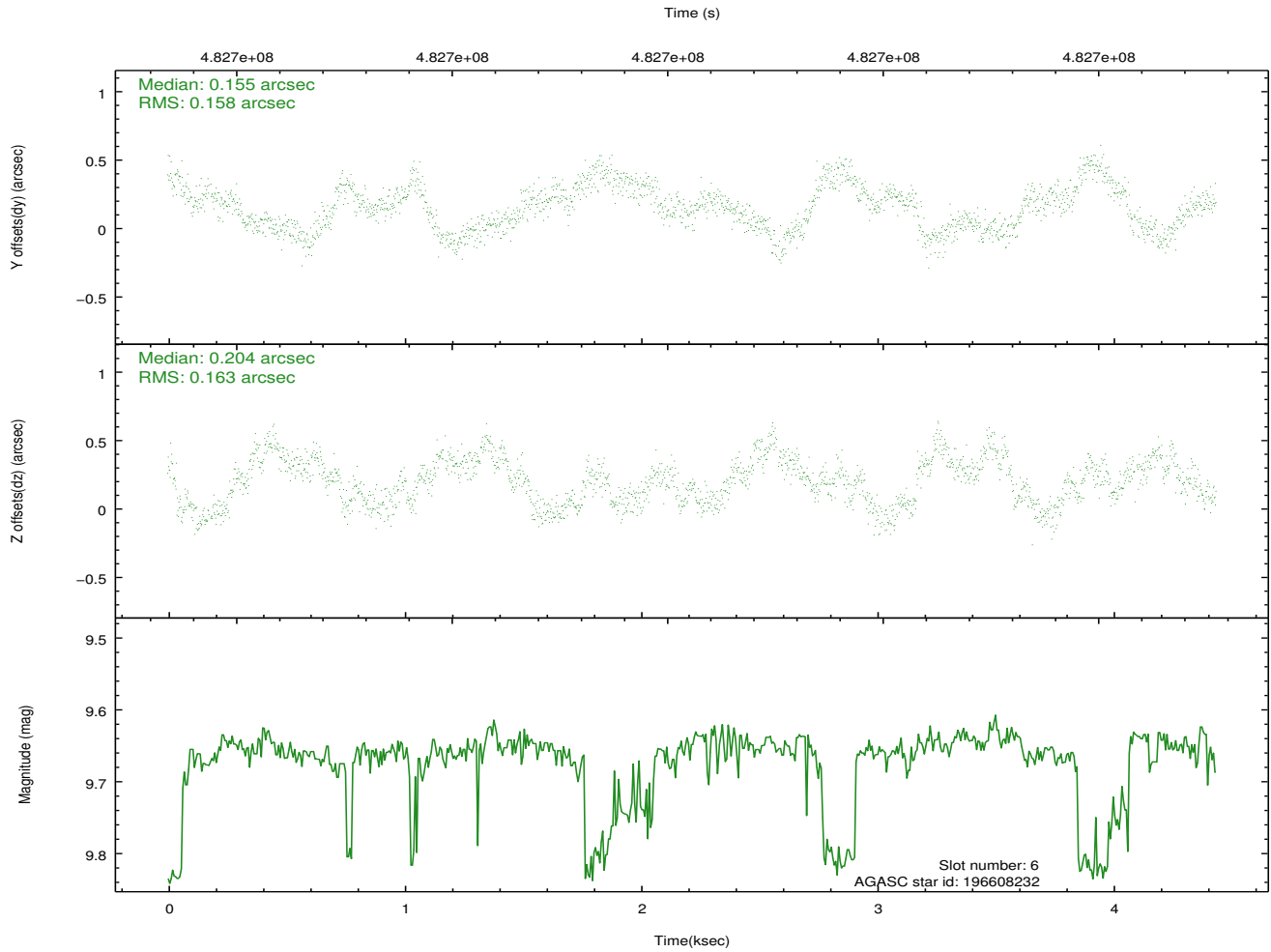
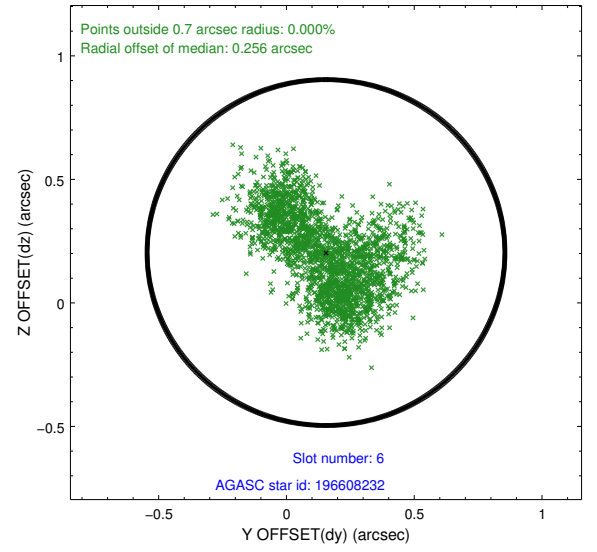
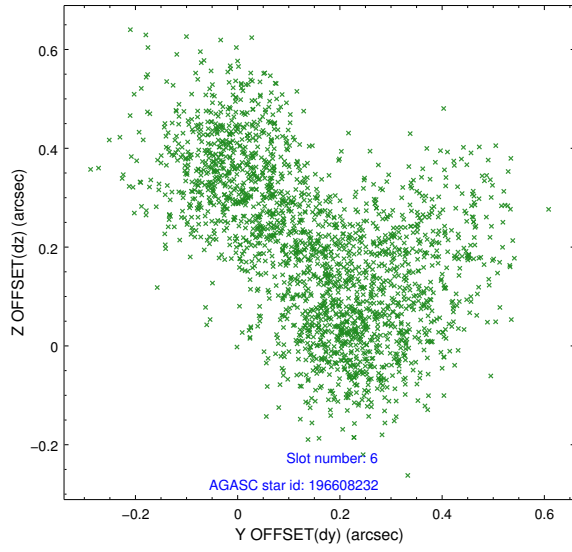
2.4.2 Slot 4



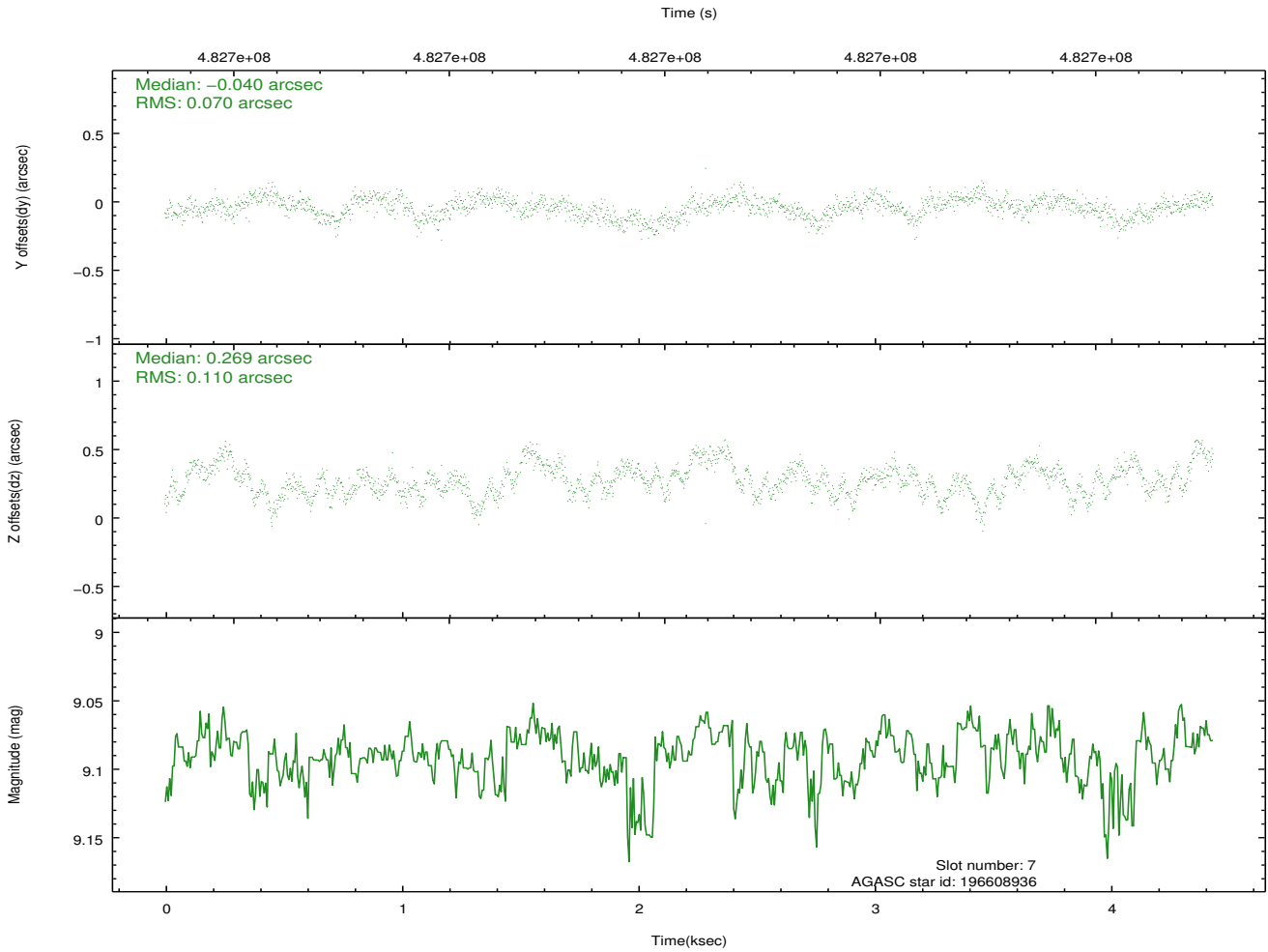
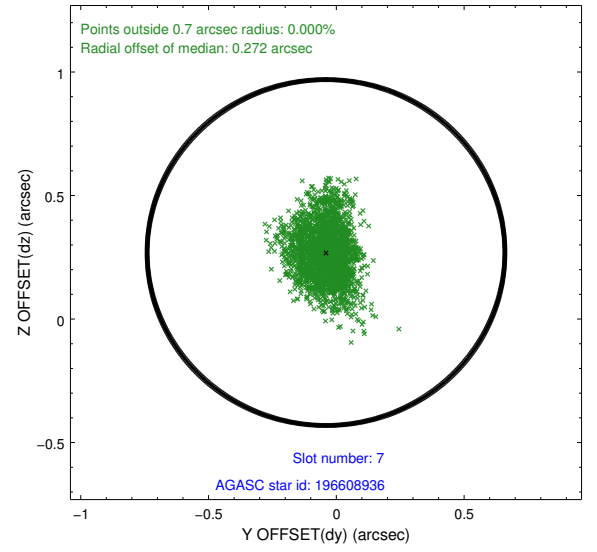
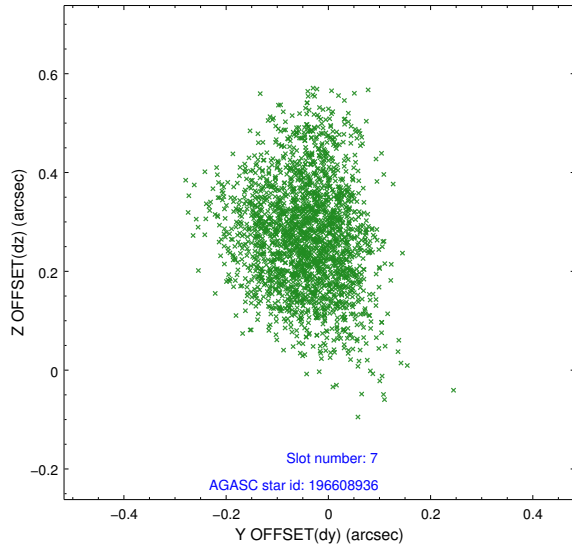
2.4.3 Slot 5



2.4.4 Slot 6

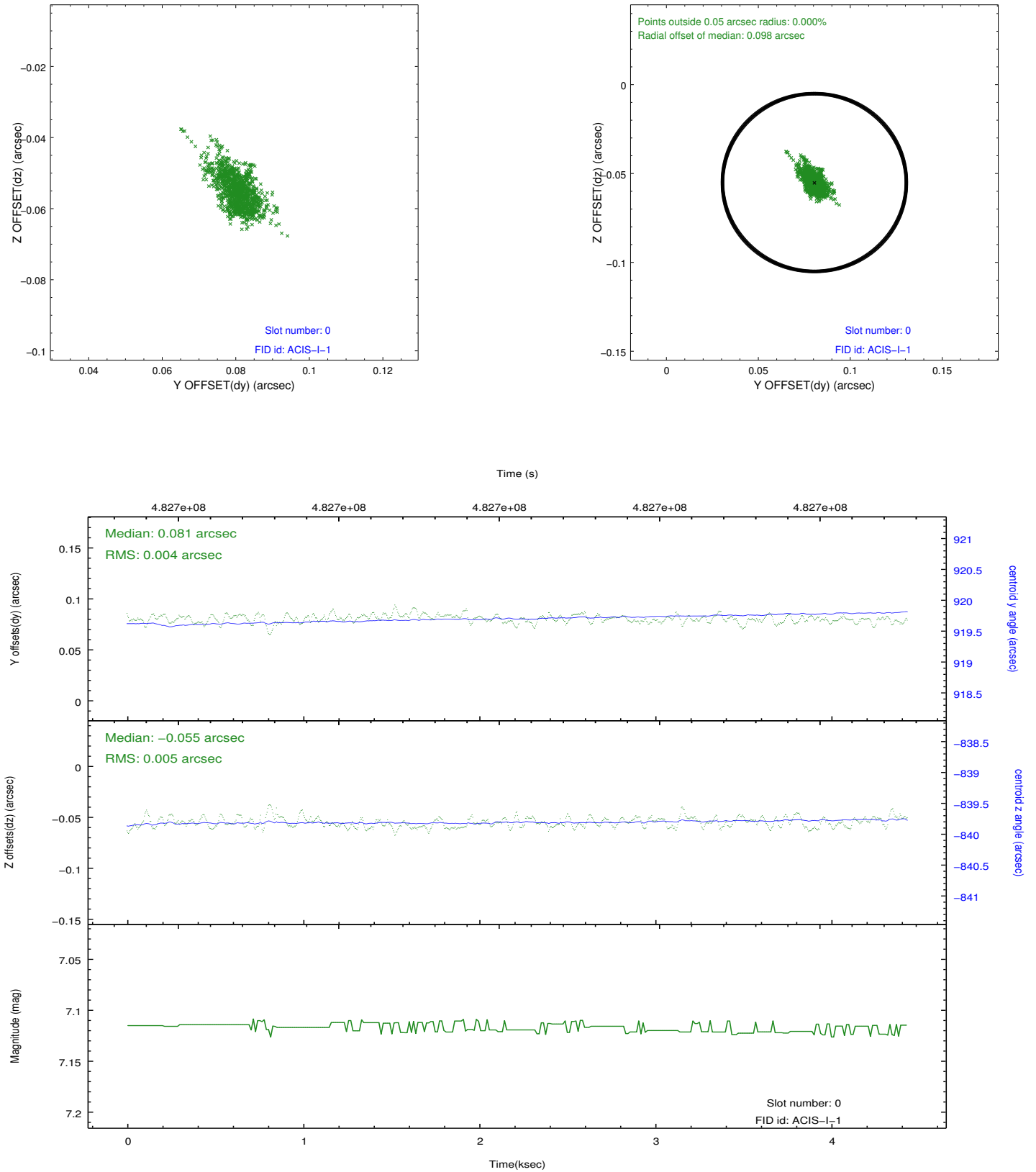


2.4.5 Slot 7

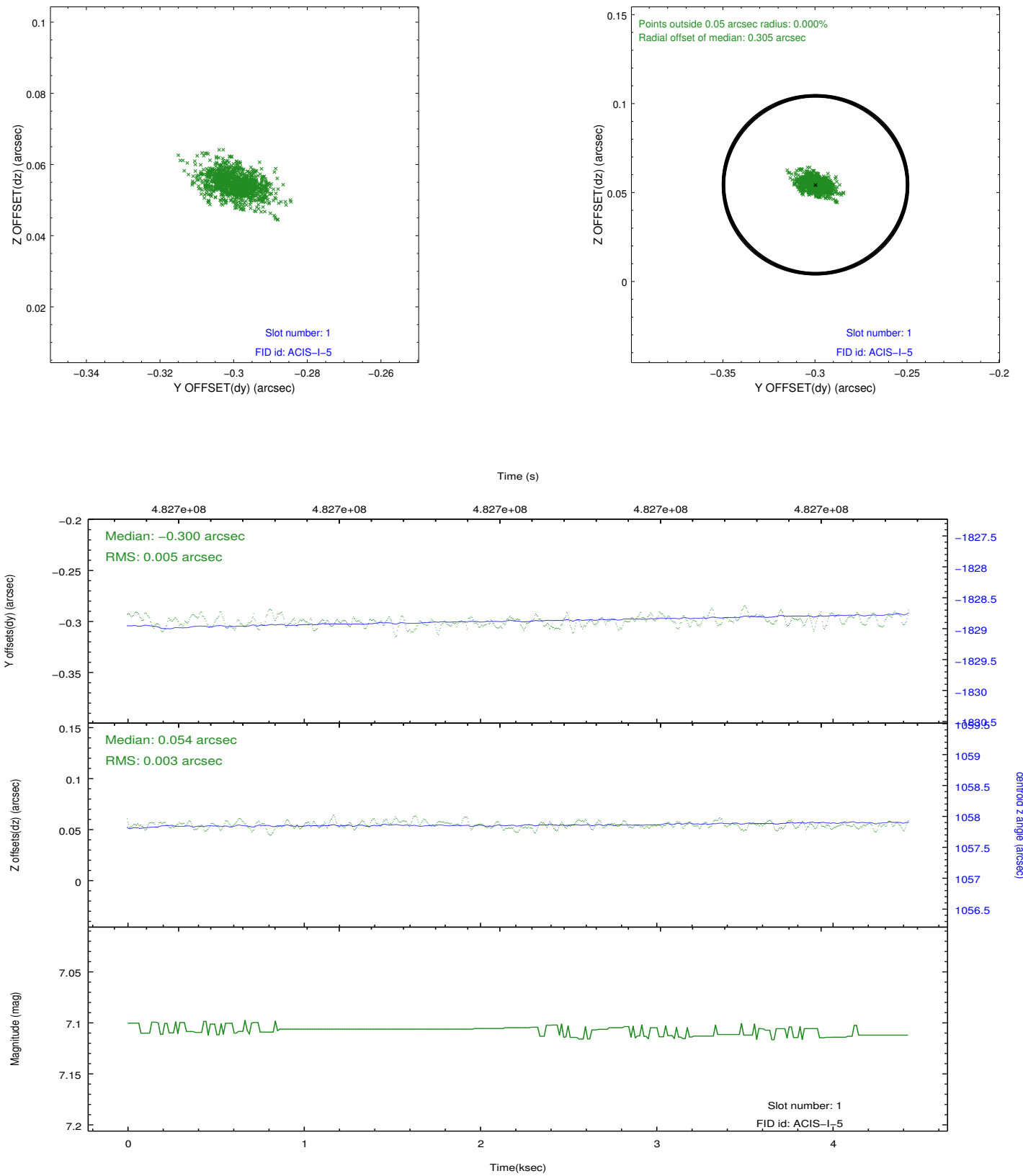


2.5 FID Slots

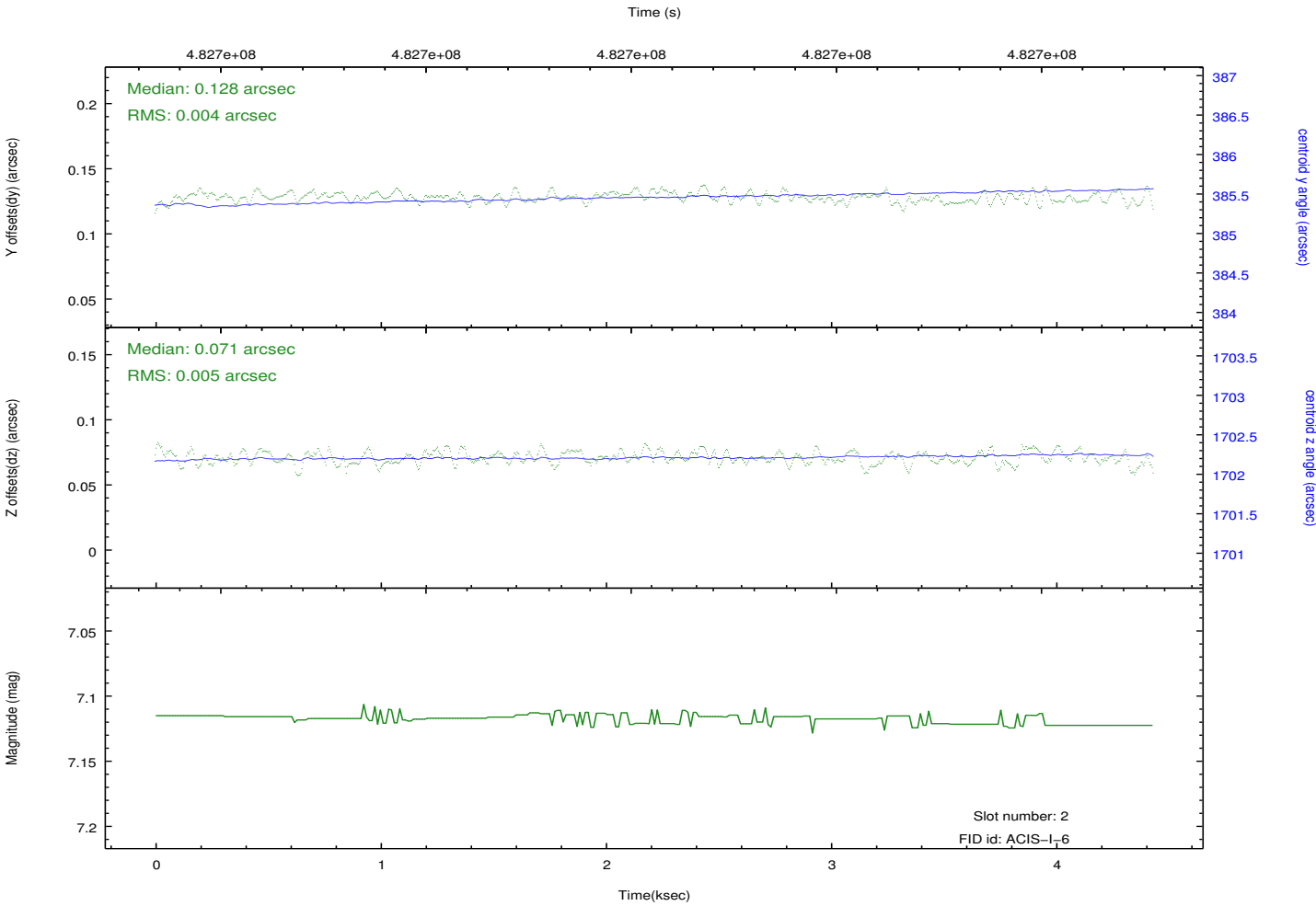
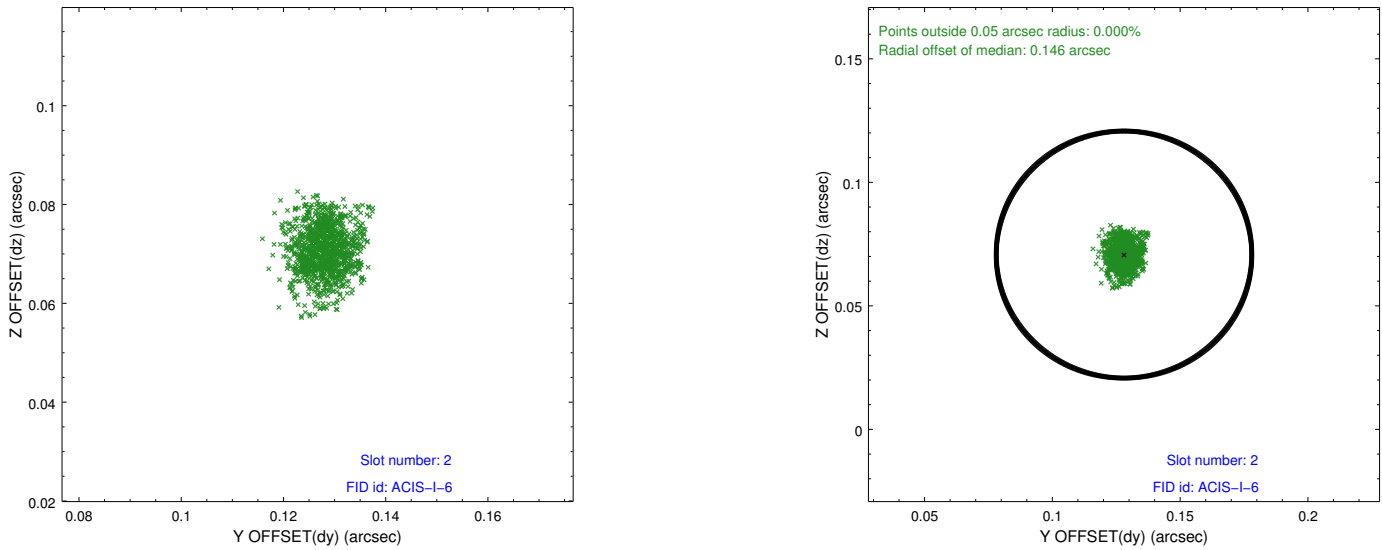
2.5.1 Slot 0



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	3.9711999852657

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.