

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15321 - L2 Version 2
Chandra X-Ray Center

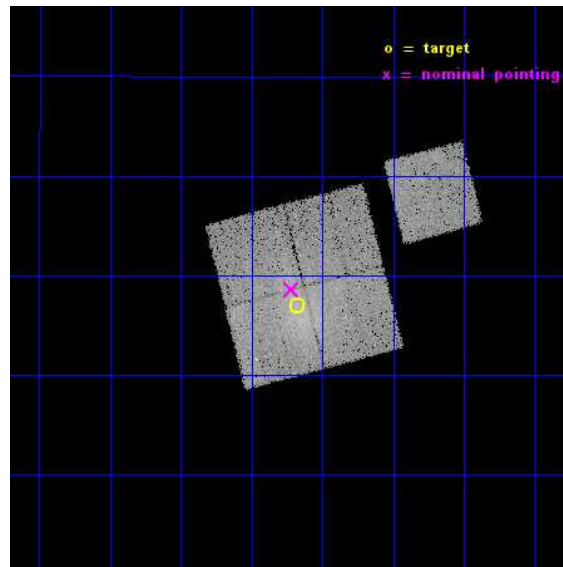
L2 Processing Date : Dec 7 2014

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1 Front

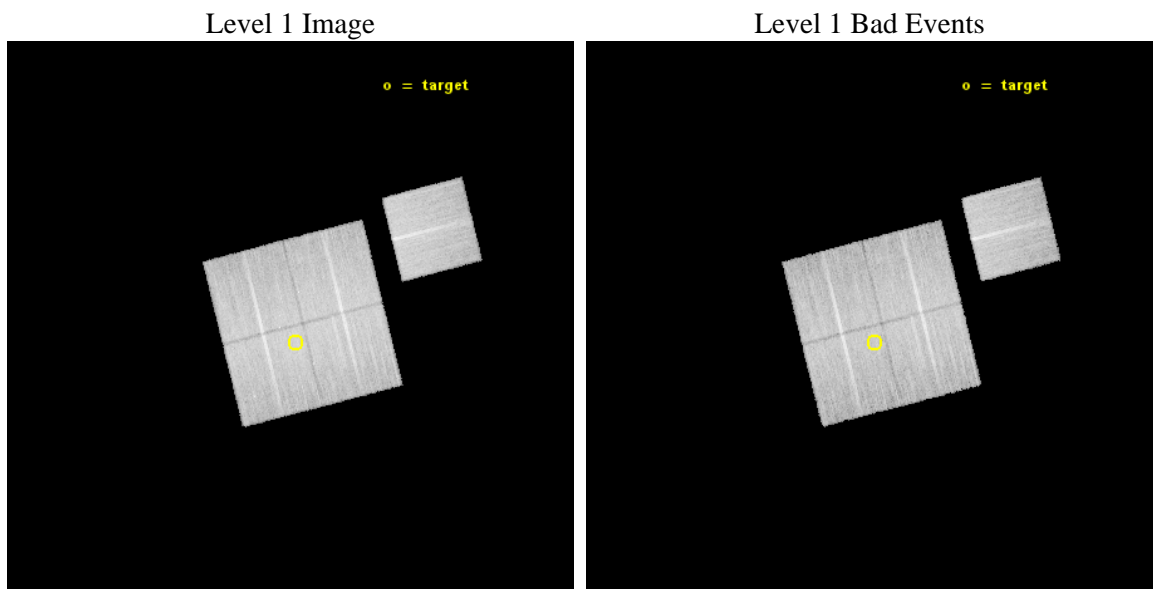
seq_num	801354	Sequence number
obs_id	15321	Observation id
title	Radio Relics (Type A)	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	A523	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	74.795833	Observer's specified target RA [deg]
dec_targ	8.782389	Observer's specified target Dec [deg]
ra_nom	74.804949296798	Nominal RA [deg]
dec_nom	8.8104064804882	Nominal Dec [deg]
roll_nom	75.774093379905	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30081.703359902	Sum of GTIs [s]
livetime	29688.663759677	Livetime [s]
ontime0	30078.521309495	Sum of GTIs [s]
ontime1	30081.703359902	Sum of GTIs [s]
ontime2	30081.744399905	Sum of GTIs [s]
ontime3	30078.64438951	Sum of GTIs [s]
ontime6	30078.480259538	Sum of GTIs [s]
l2events	89176	Number of level 2 events



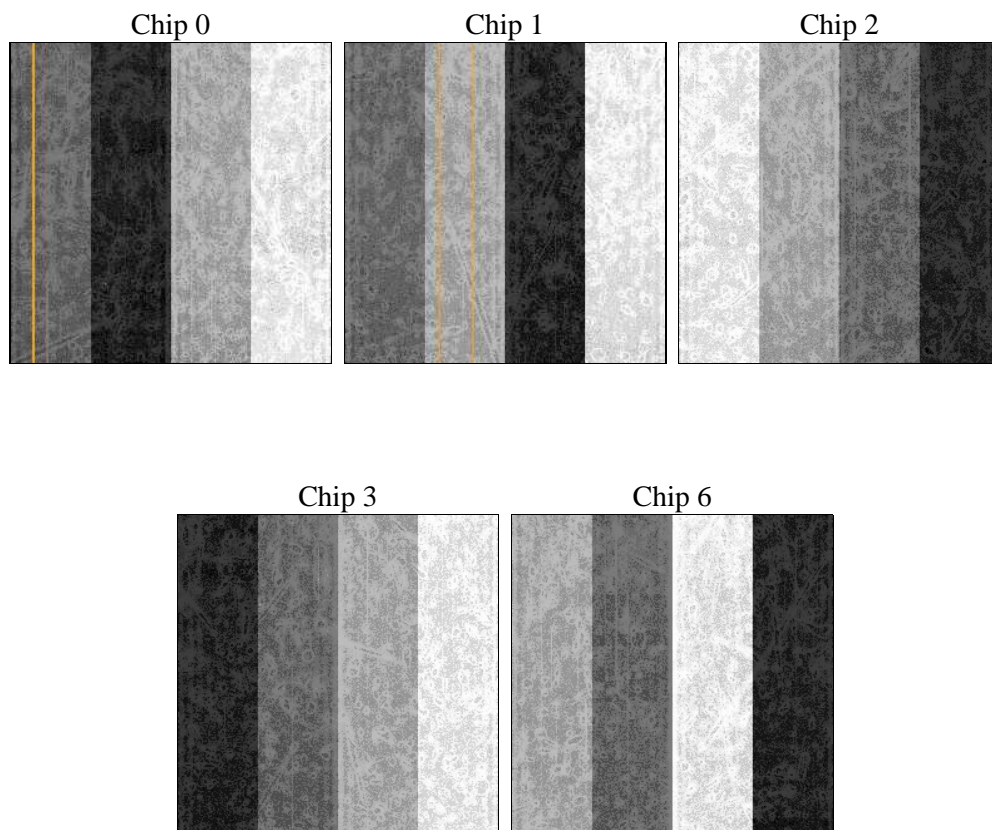
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	30081.703359902	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	30078.521309495	Sum of GTIs [s]
date	2014-12-07T19:37:56	Date and time of file creation	ontime1	30081.703359902	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30081.744399905	Sum of GTIs [s]
			ontime3	30078.64438951	Sum of GTIs [s]
			ontime6	30078.480259538	Sum of GTIs [s]
			l1events	719388	Number of level 1 events

2.1.4 Events

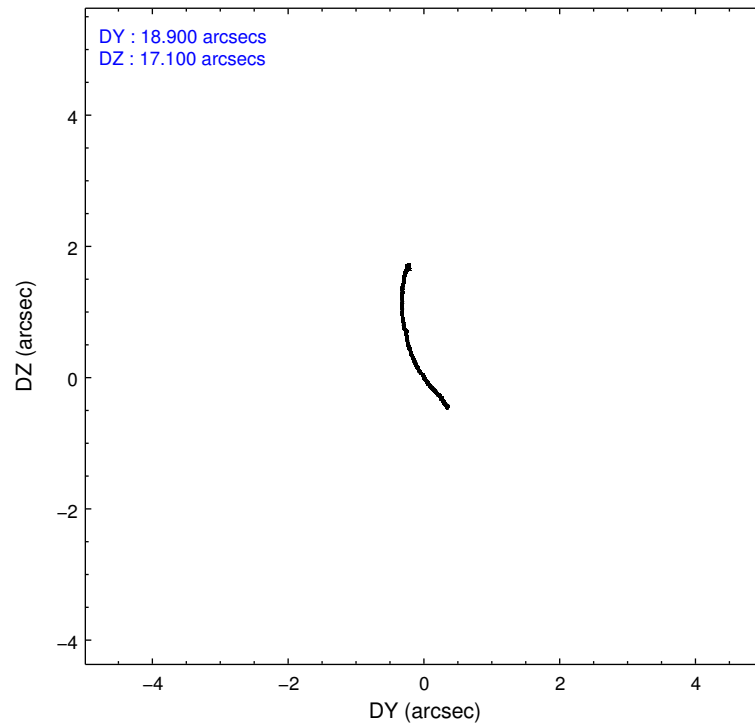
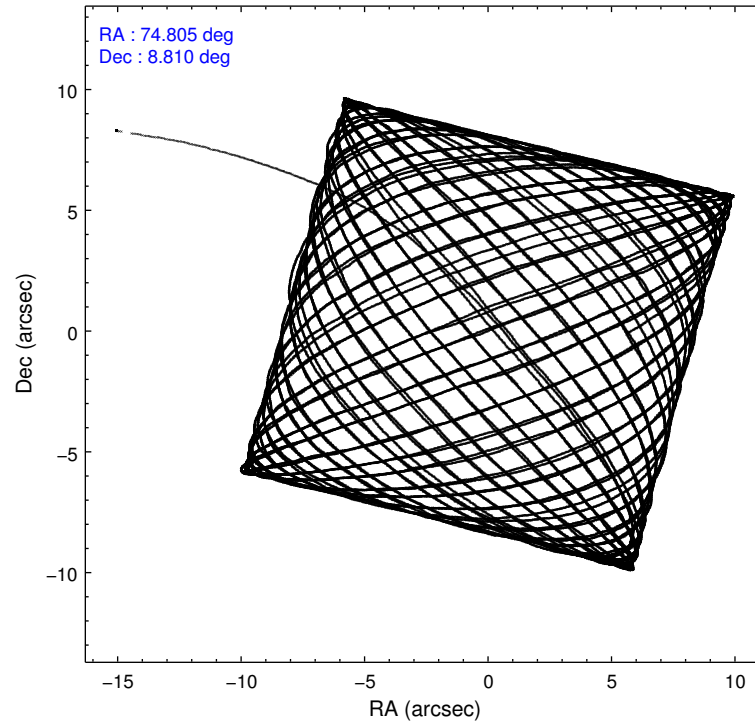
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	136269	143327	144508	149880	145404
rejected events	116604	115515	126486	129295	127798
rejected %	85%	80%	87%	86%	87%

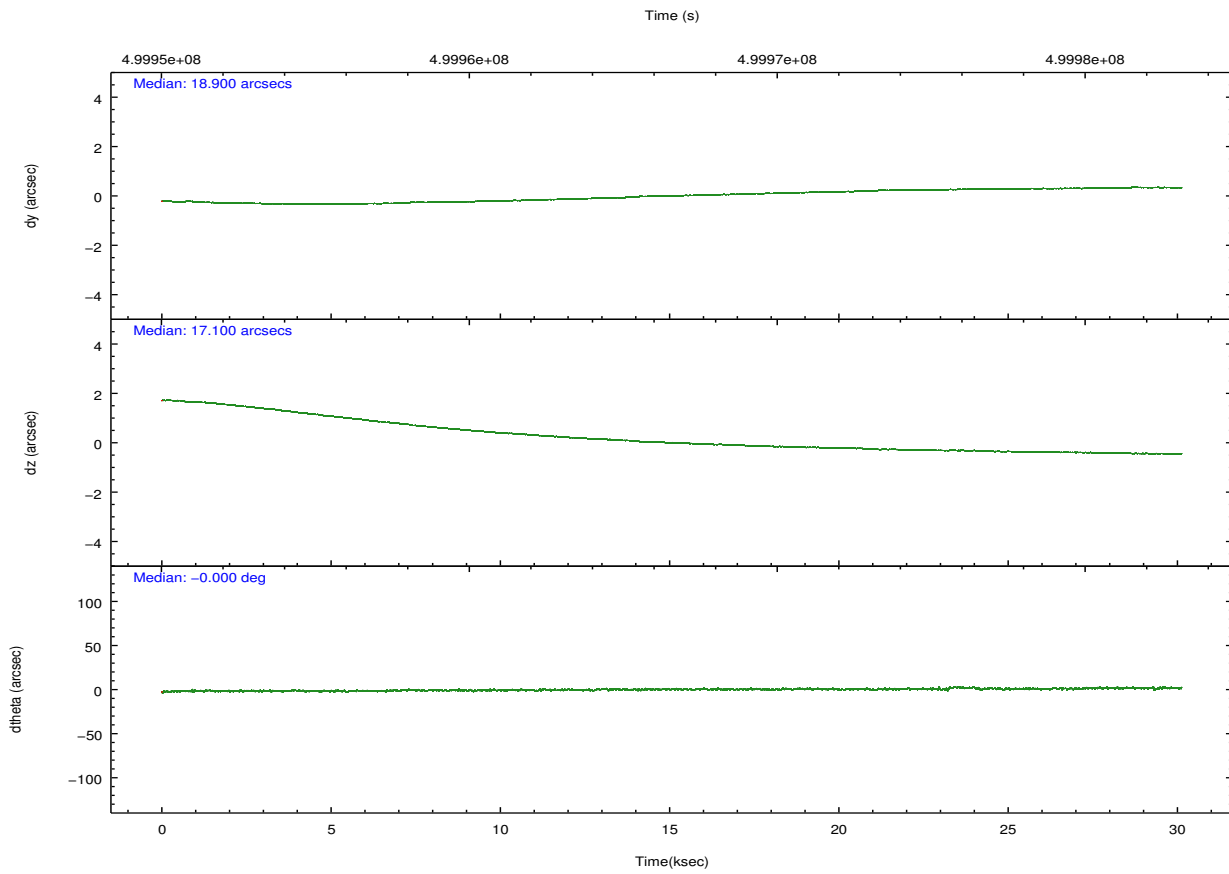
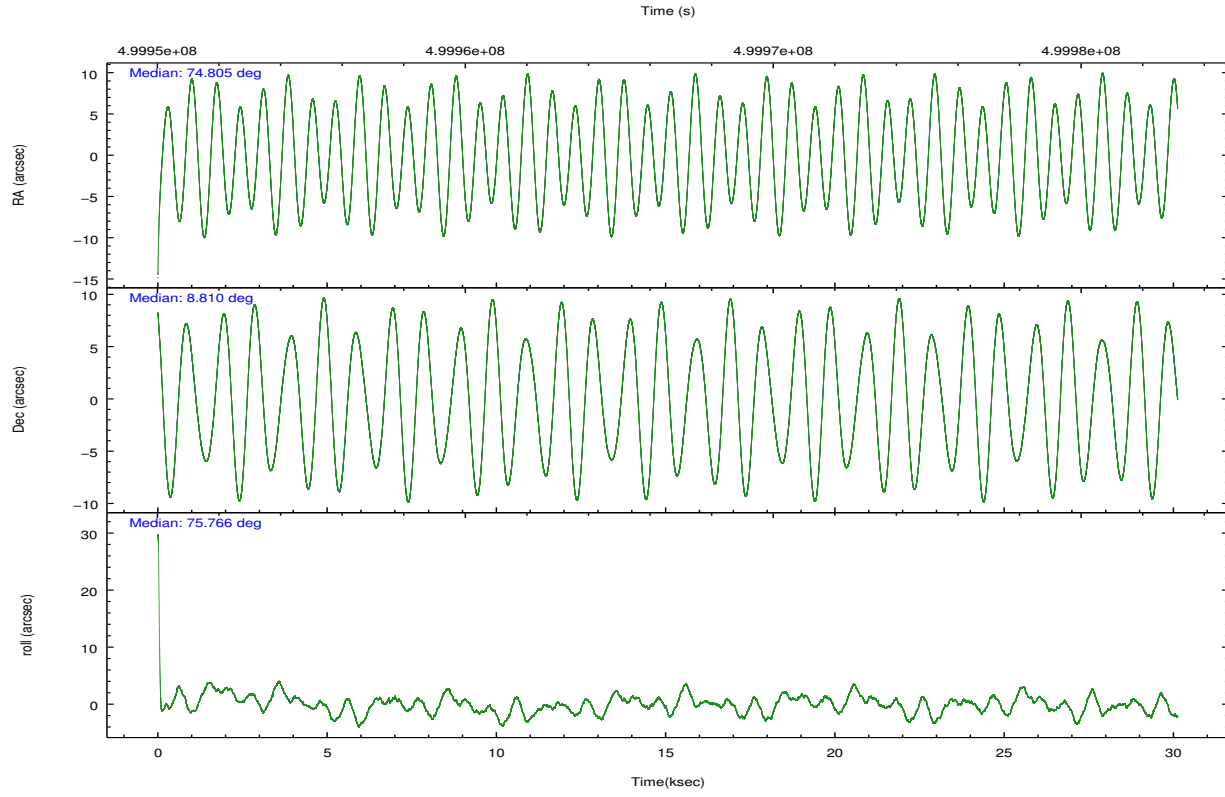
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	7663	13452	6924	9011	6027
	5%	9%	4%	6%	4%
grade 1 events	80	88	87	97	77
	0%	0%	0%	0%	0%
grade 2 events	4698	5534	4323	4167	3927
	3%	3%	2%	2%	2%
grade 3 events	1936	2207	1739	1944	1821
	1%	1%	1%	1%	1%
grade 4 events	1771	2132	1674	1834	1772
	1%	1%	1%	1%	1%
grade 5 events	7145	7508	6534	7998	7832
	5%	5%	4%	5%	5%
grade 6 events	3604	4499	3370	3632	4062
	2%	3%	2%	2%	2%
grade 7 events	109372	107907	119857	121197	119886
	80%	75%	82%	80%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	74.812621	74.8049492967984	CCD I2 on	Y	Y
[deg] Pointing Dec	8.783974	8.81040648048819	CCD I3 on	Y	Y
[deg] Pointing Roll	75.564226	75.77409337990461	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	O1	Y
[mm] SIM translation stage pos	-239.592463	-239.5815621397477	CCD S3 on	N	N
[mm] SIM translation stage offset	6	5.98910913681803	CCD S4 on	N	N
[s] Observation start time (MET)	499951646.184000	499950454.67138	CCD S5 on	N	N
Observation start date	2013-11-04T11:26:19	2013-11-04T11:07:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	499981646.184000	499982127.17312	On-chip summing requested	N	N
Observation end date	2013-11-04T19:46:19	2013-11-04T19:55:27	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



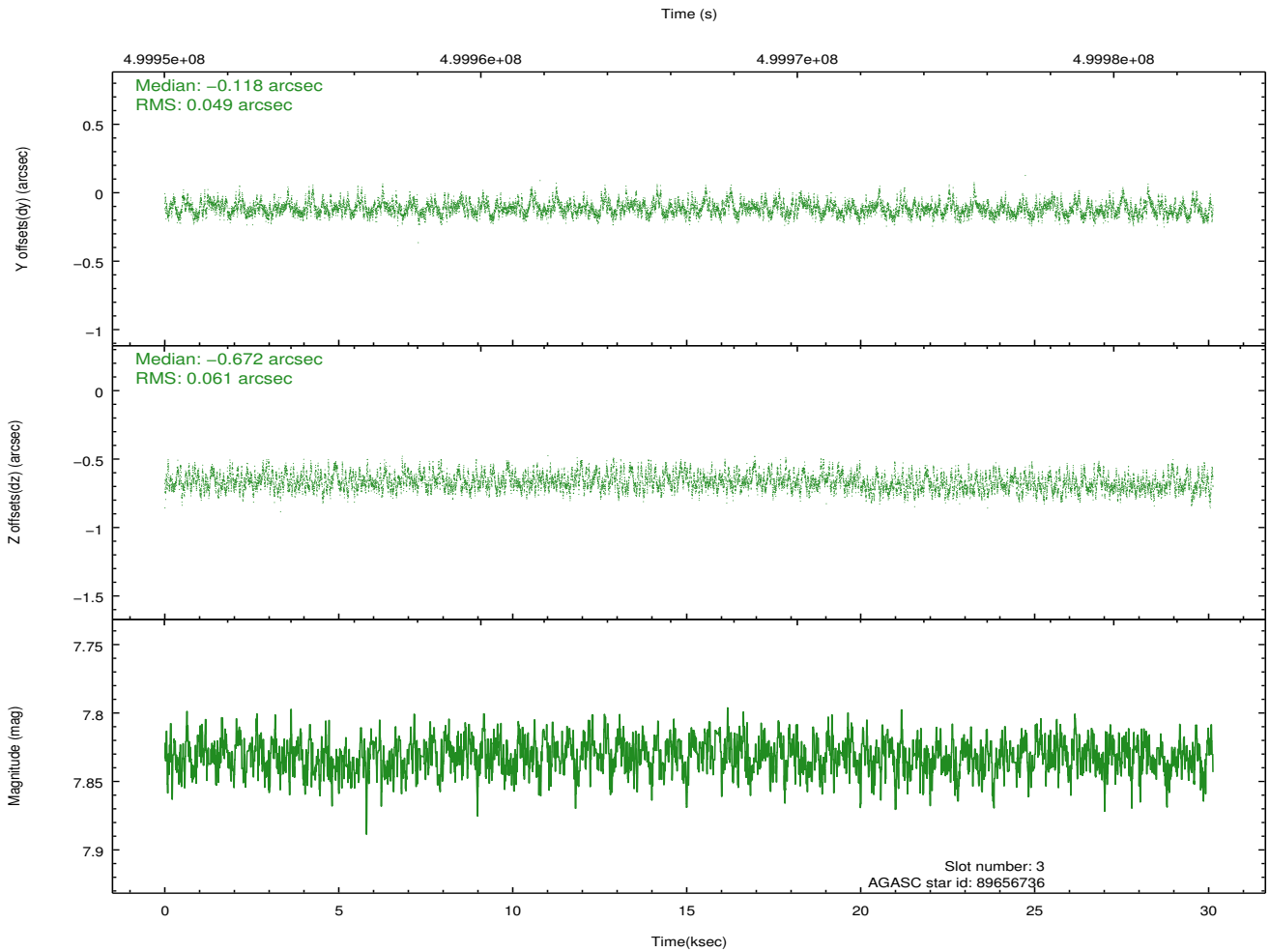
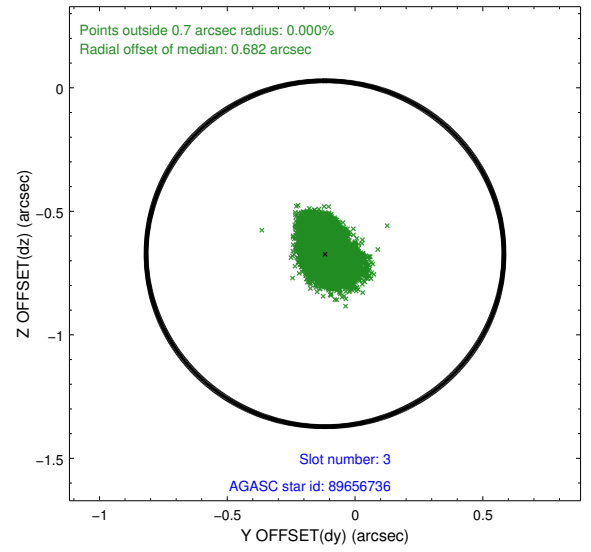
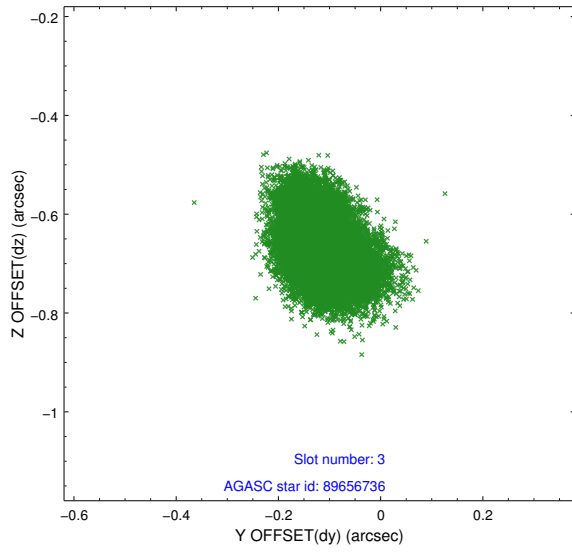


Slot Statistics

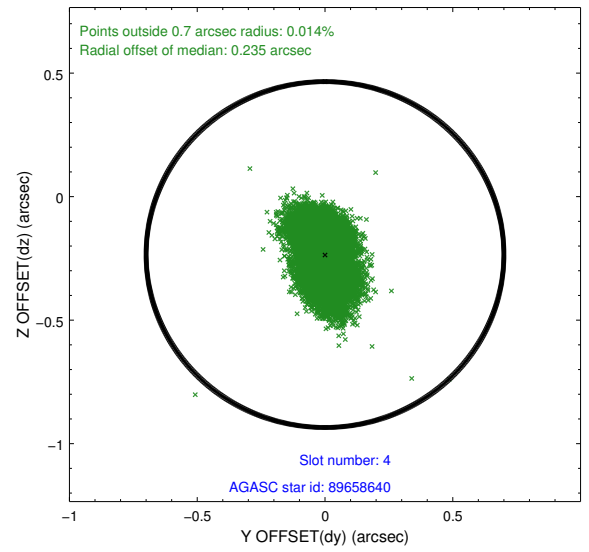
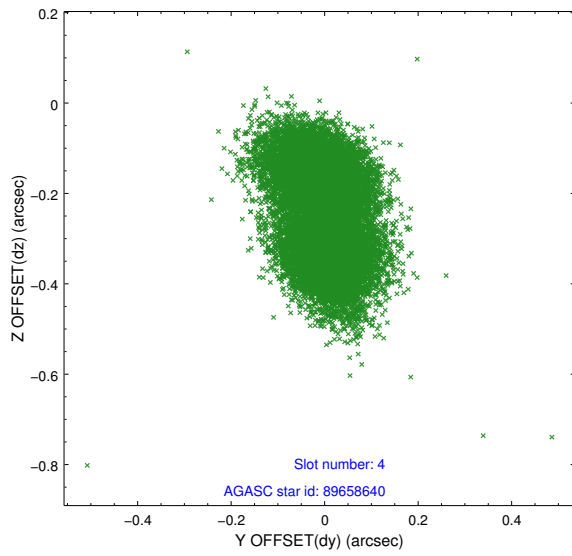
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.01	7347	-0.090	-0.010	0.017	0.029	0.000000	0.000000	-773.41	-725.02
1	FID		ACIS-I-4	7.08	7347	0.312	0.058	0.012	0.023	0.000000	0.000000	2141.11	1181.13
2	FID		ACIS-I-5	7.07	7347	-0.323	0.021	0.011	0.017	0.000000	0.000000	-1827.62	1179.93
3	GUIDE	used	89656736	7.83	14691	-0.118	-0.672	0.084	0.135	74.182513	8.822410	-423.22	2205.25
4	GUIDE	used	89658640	8.92	14691	-0.000	-0.235	0.127	0.196	74.176467	8.381635	-1965.83	1833.48
5	GUIDE	used	89791688	8.75	14682	-0.360	0.196	0.104	0.166	75.523080	8.928117	1134.85	-2316.23
6	GUIDE	used	89791992	9.41	14681	0.338	0.296	0.156	0.256	75.348339	8.461202	-647.52	-2136.44
7	GUIDE	used	89791824	8.60	14686	0.137	0.420	0.063	0.103	74.752349	8.130471	-2331.51	-378.31

2.4 Star Slots

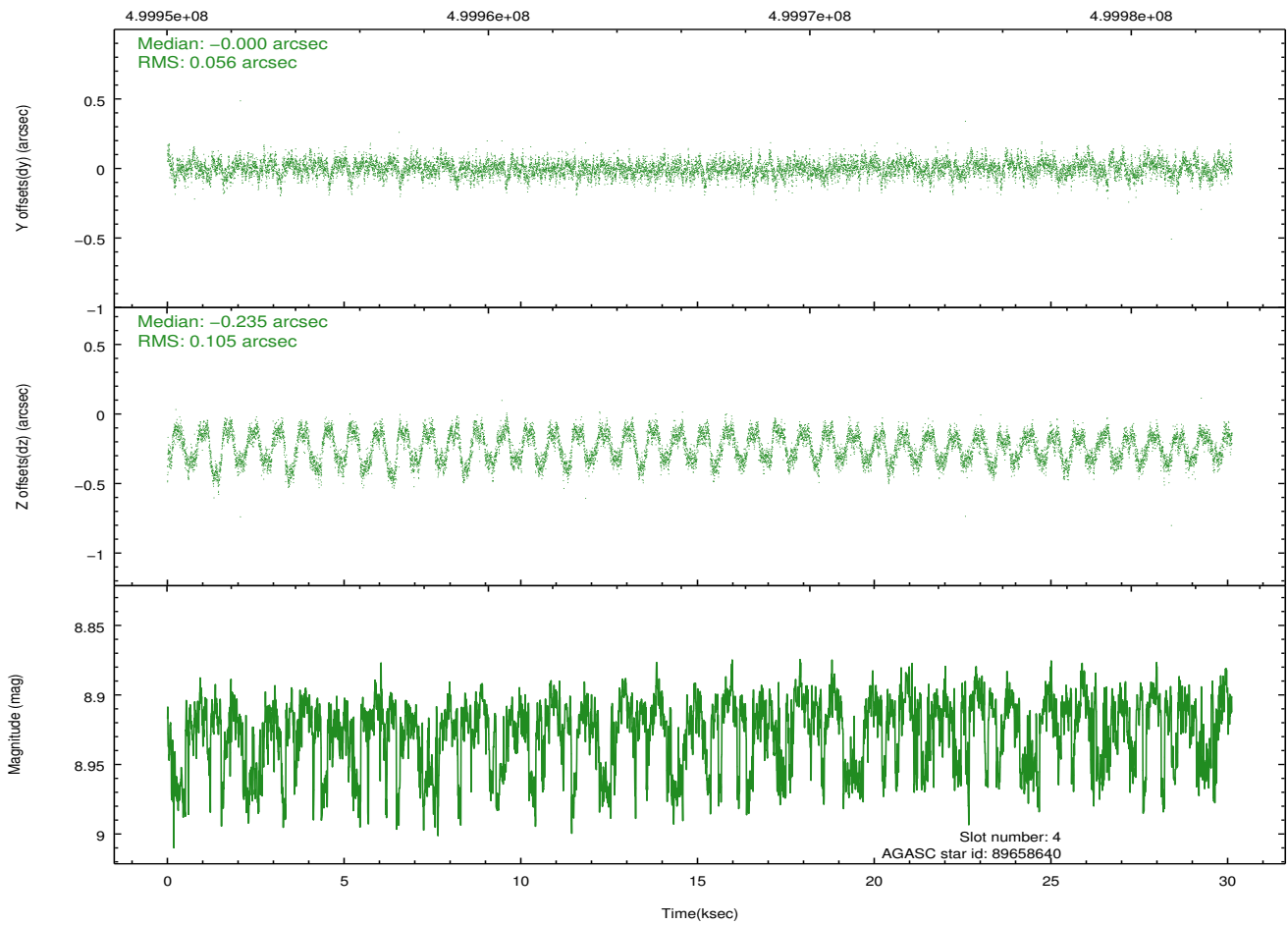
2.4.1 Slot 3



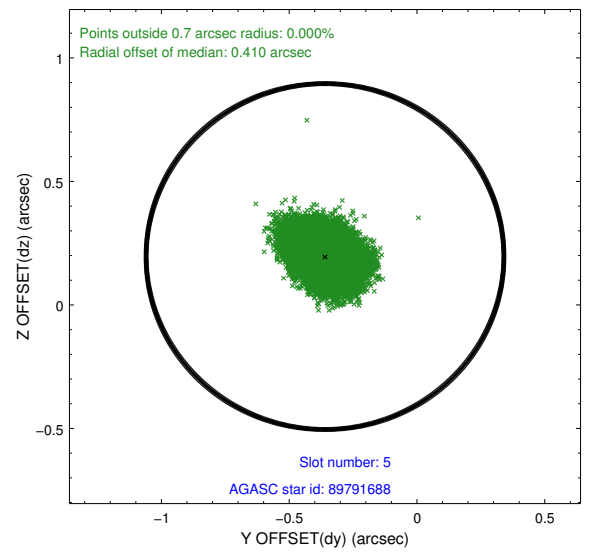
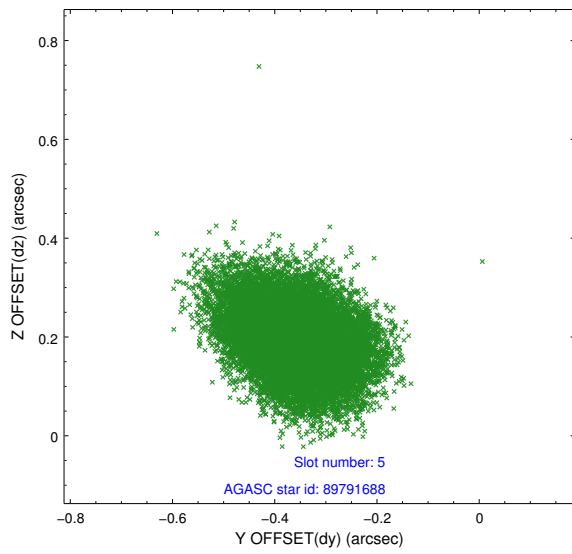
2.4.2 Slot 4



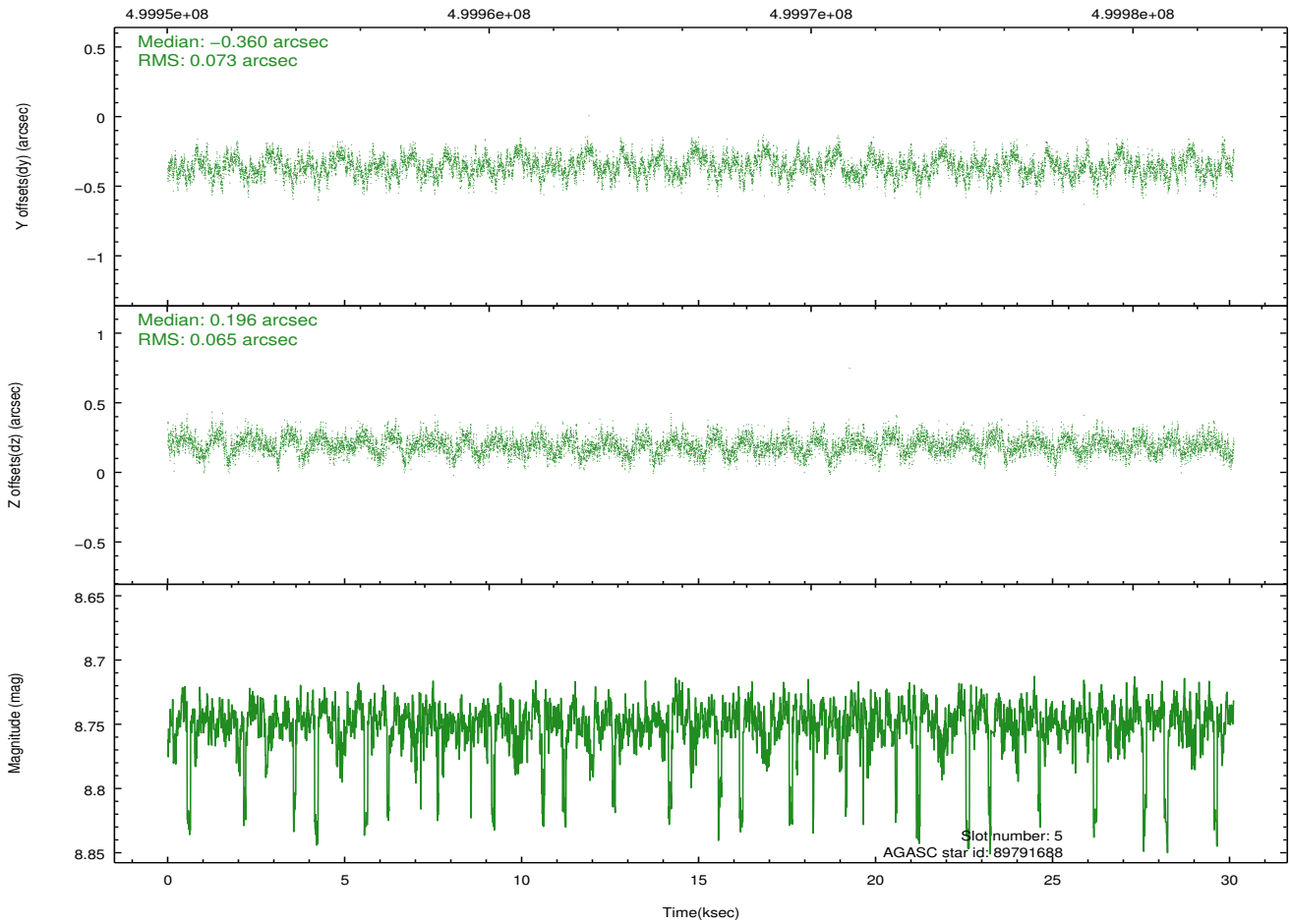
Time (s)



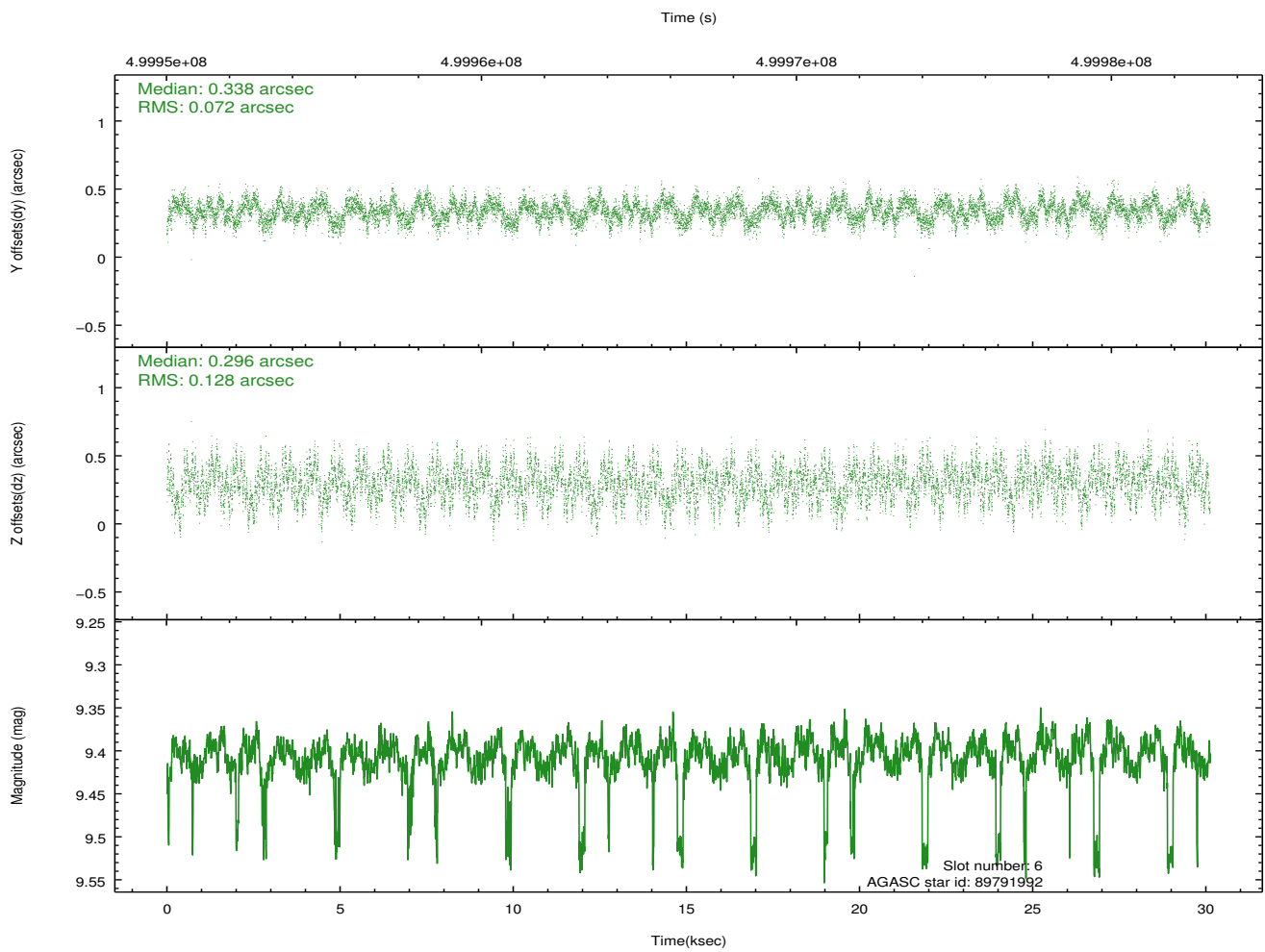
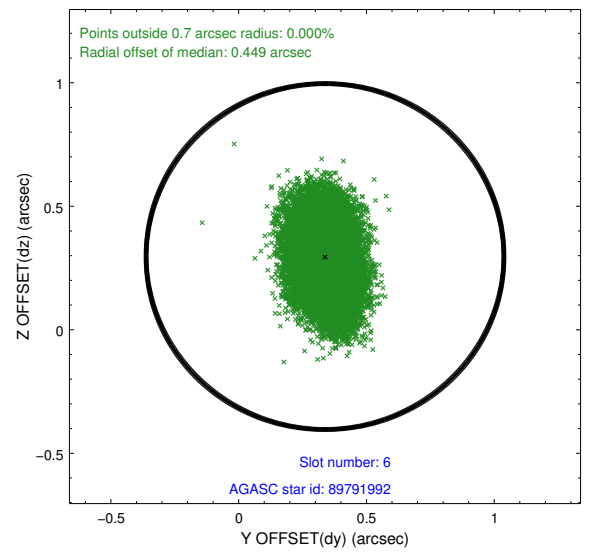
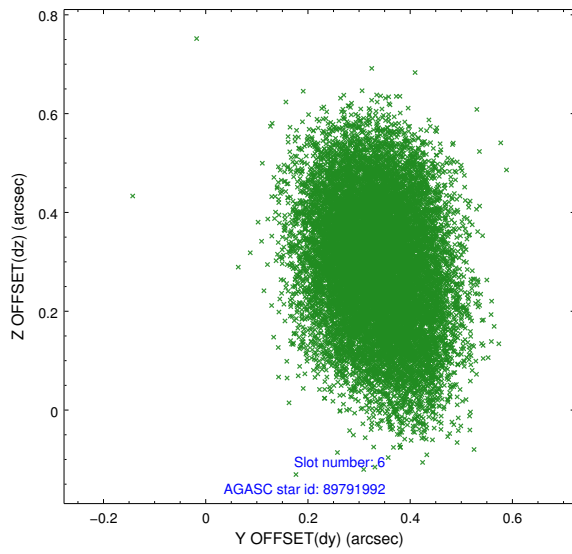
2.4.3 Slot 5



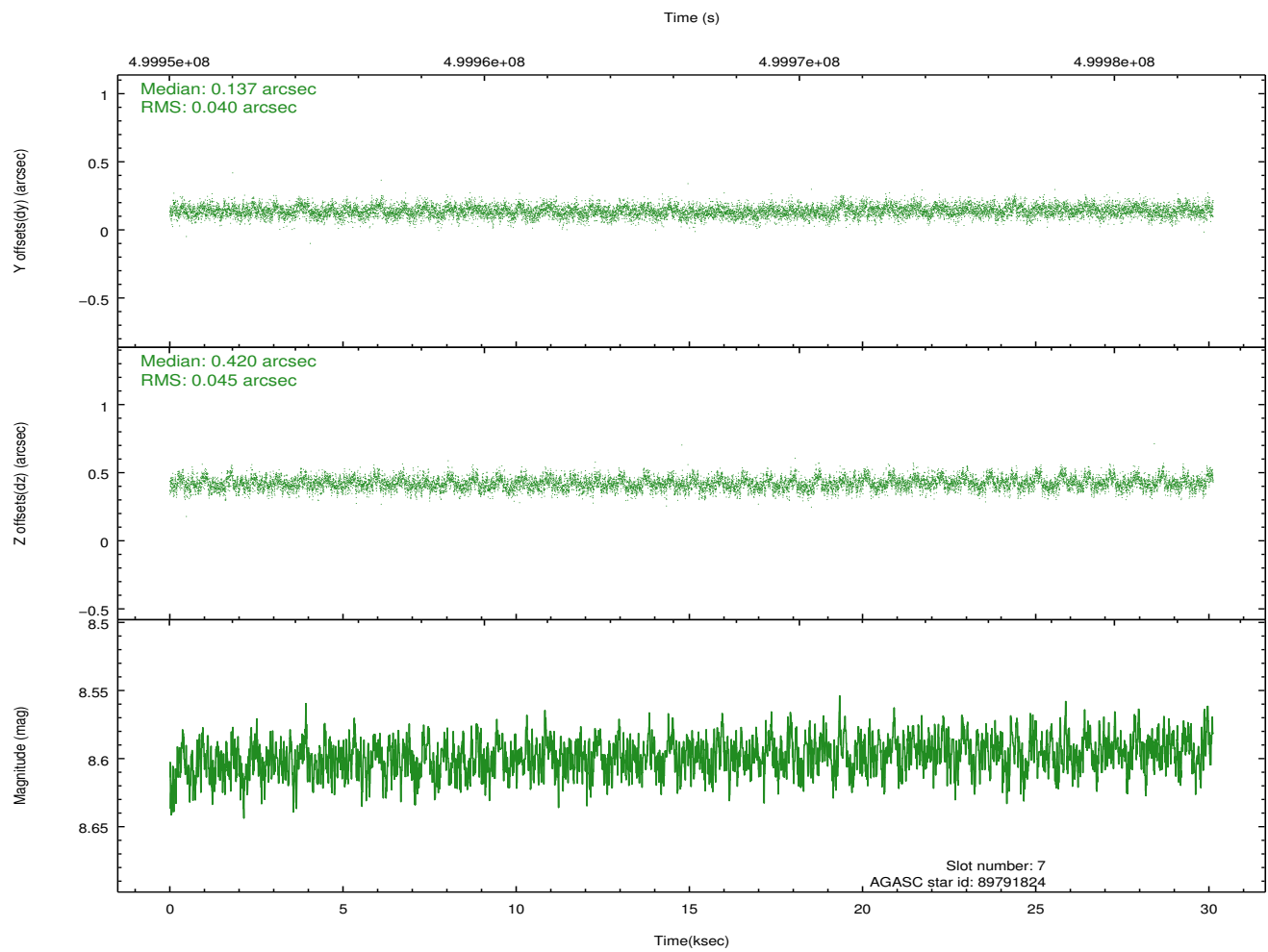
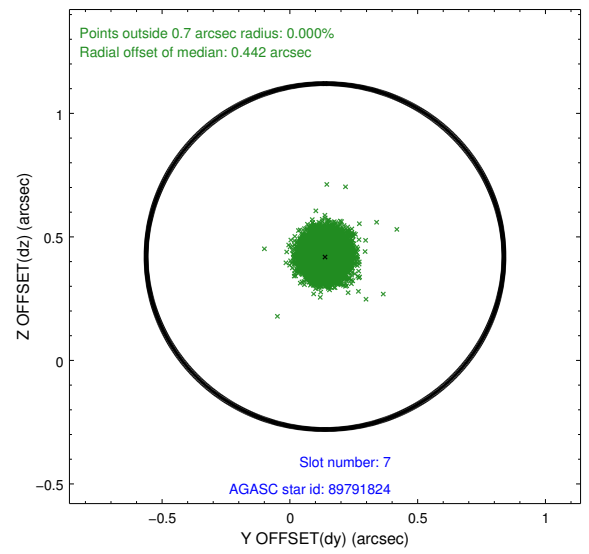
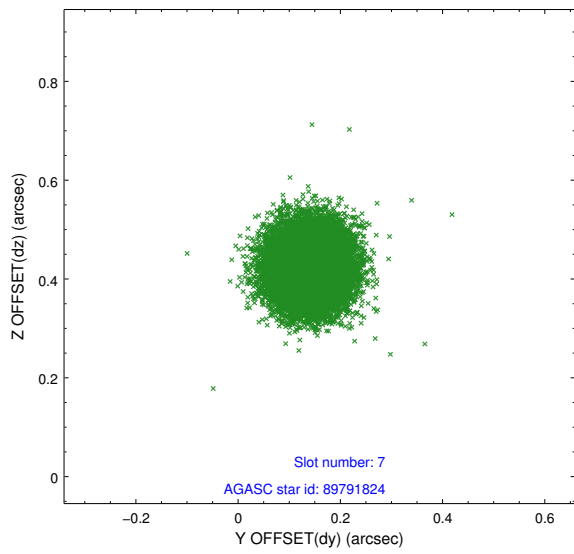
Time (s)



2.4.4 Slot 6

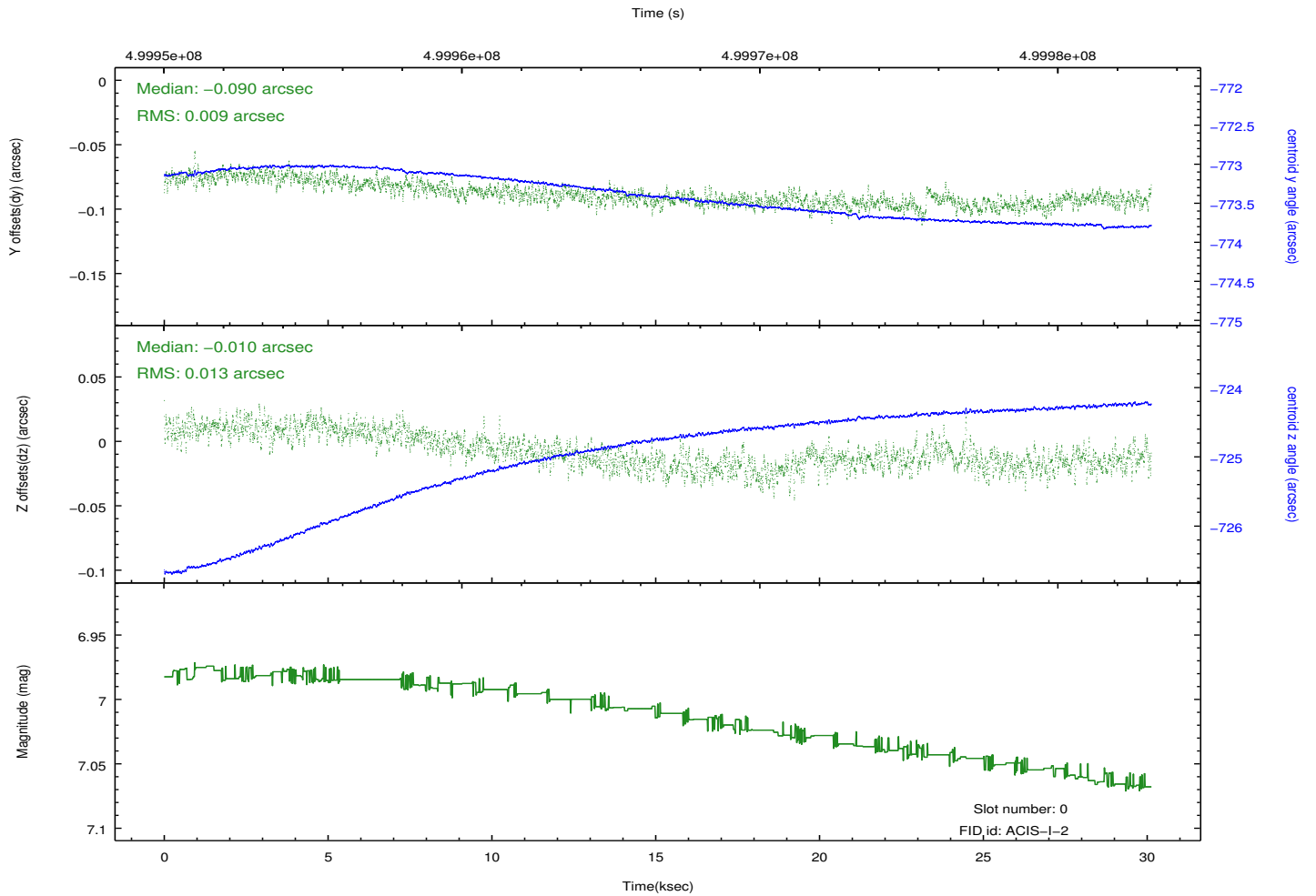
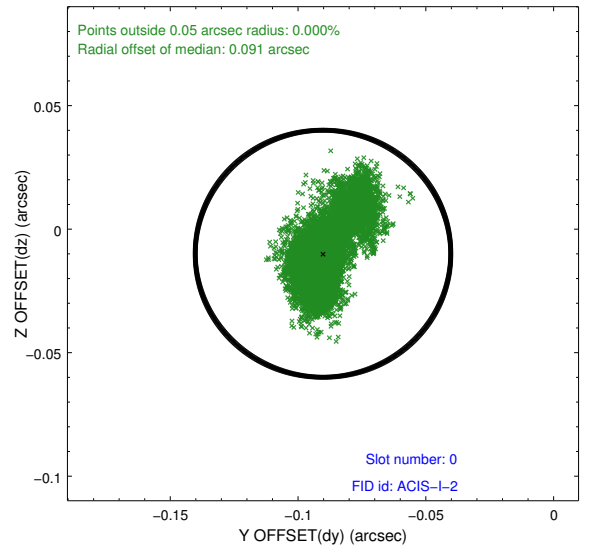
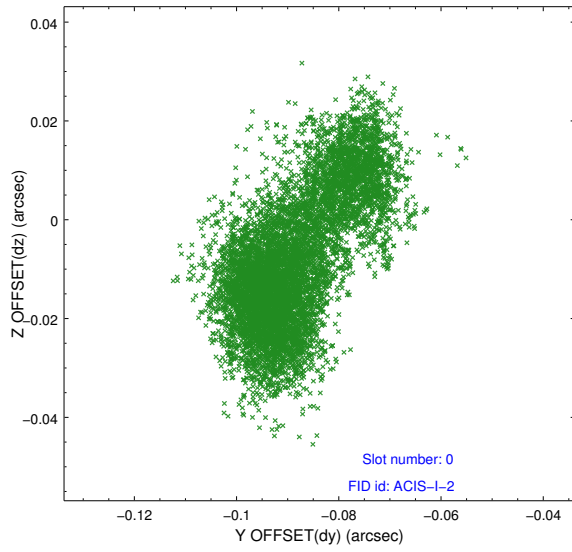


2.4.5 Slot 7

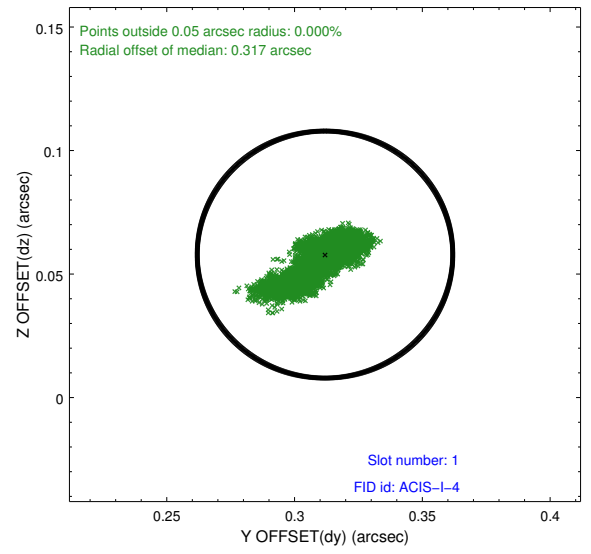
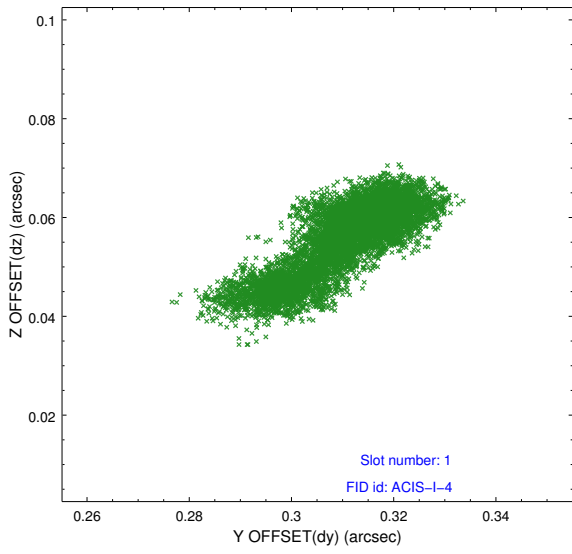


2.5 FID Slots

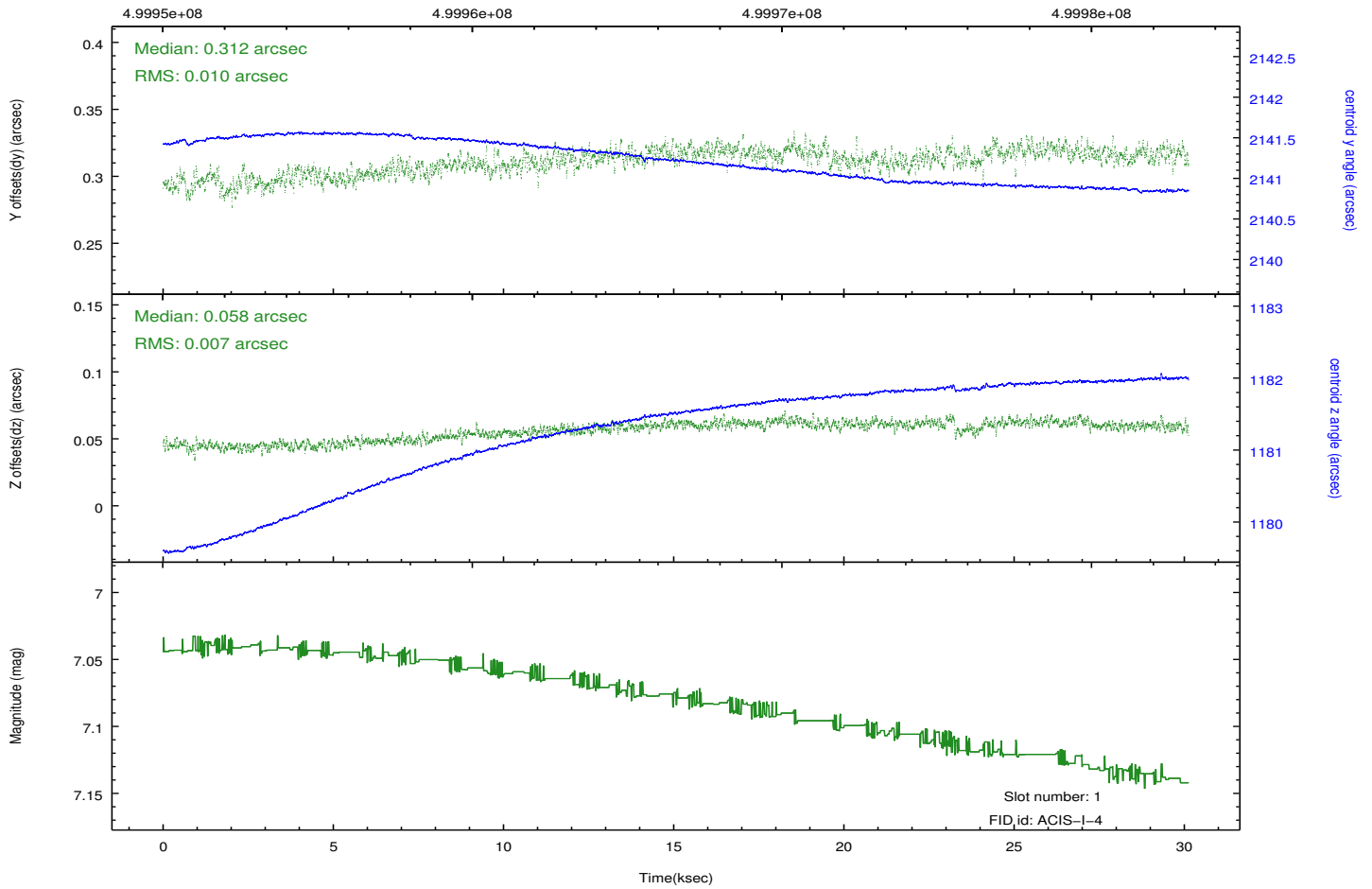
2.5.1 Slot 0



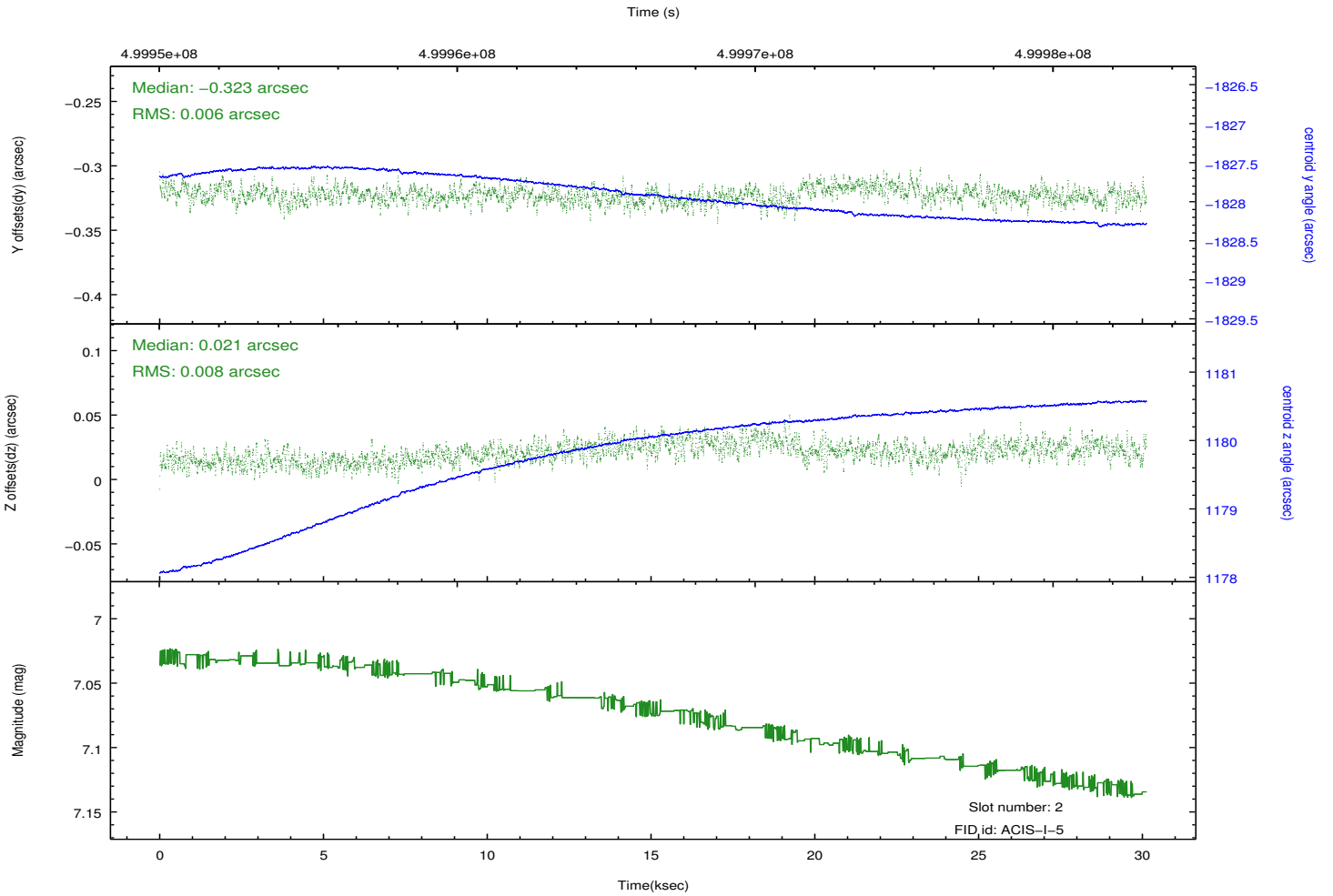
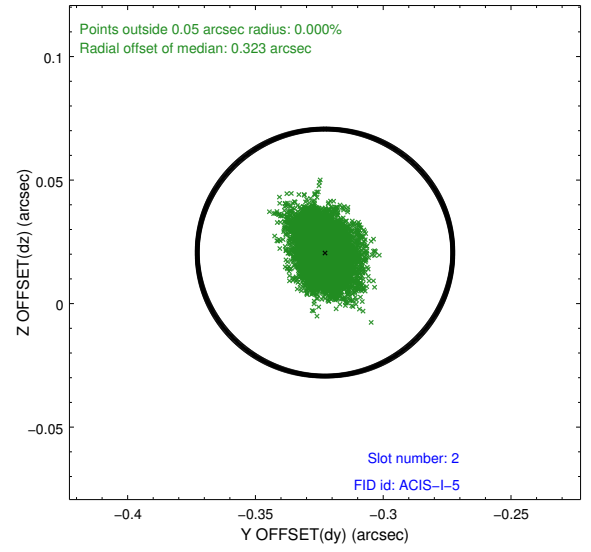
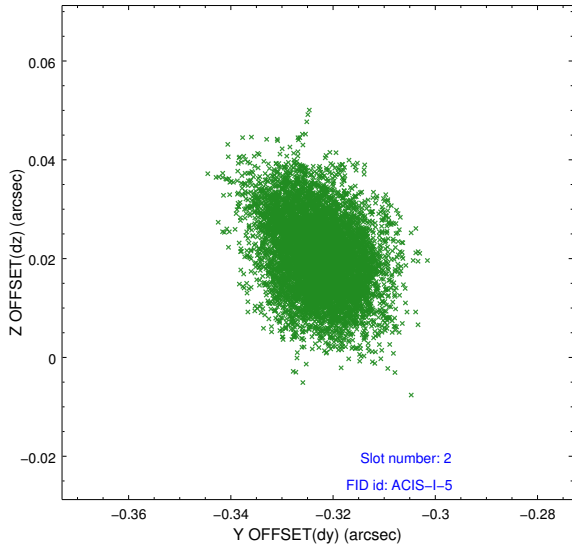
2.5.2 Slot 1



Time (s)



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	30.081703359902

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.