

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12905 - L2 Version 2
Chandra X-Ray Center

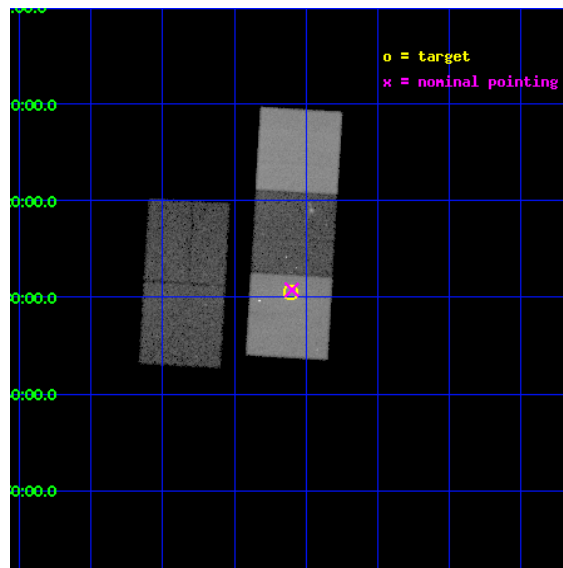
L2 Processing Date : Feb 6 2012

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1 Front

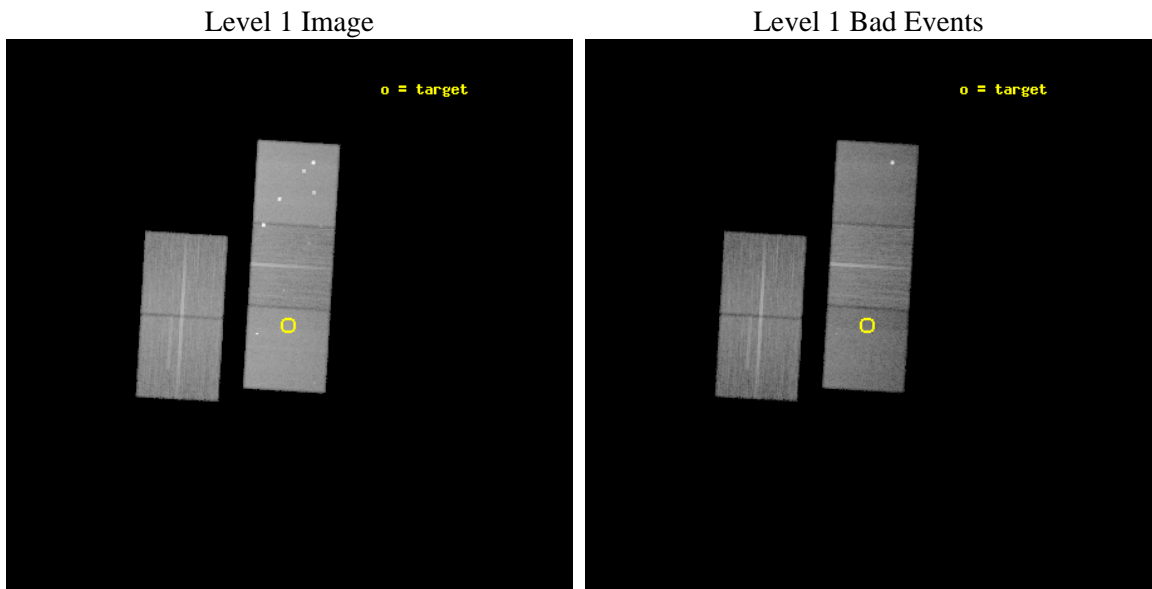
seq_num	801042	Sequence number
obs_id	12905	Observation id
title	Abell 1882: A Proto-cluster at Low Redshift	Proposal title
observer	Professor Christopher Miller	Principal investigator
object	A1882a	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	213.7775	Observer's specified target RA [deg]
dec_targ	-0.491	Observer's specified target Dec [deg]
ra_nom	213.77470539913	Nominal RA [deg]
dec_nom	-0.48702422697584	Nominal Dec [deg]
roll_nom	93.405436513411	Nominal Roll [deg]
revision	2	Processing version of data
ontime	33374.111023307	Sum of GTIs [s]
livetime	32938.053693124	Livetime [s]
ontime2	33373.946863294	Sum of GTIs [s]
ontime3	33367.705852687	Sum of GTIs [s]
ontime5	33374.069983304	Sum of GTIs [s]
ontime6	33370.887922943	Sum of GTIs [s]
ontime7	33374.111023307	Sum of GTIs [s]
l2events	362320	Number of level 2 events



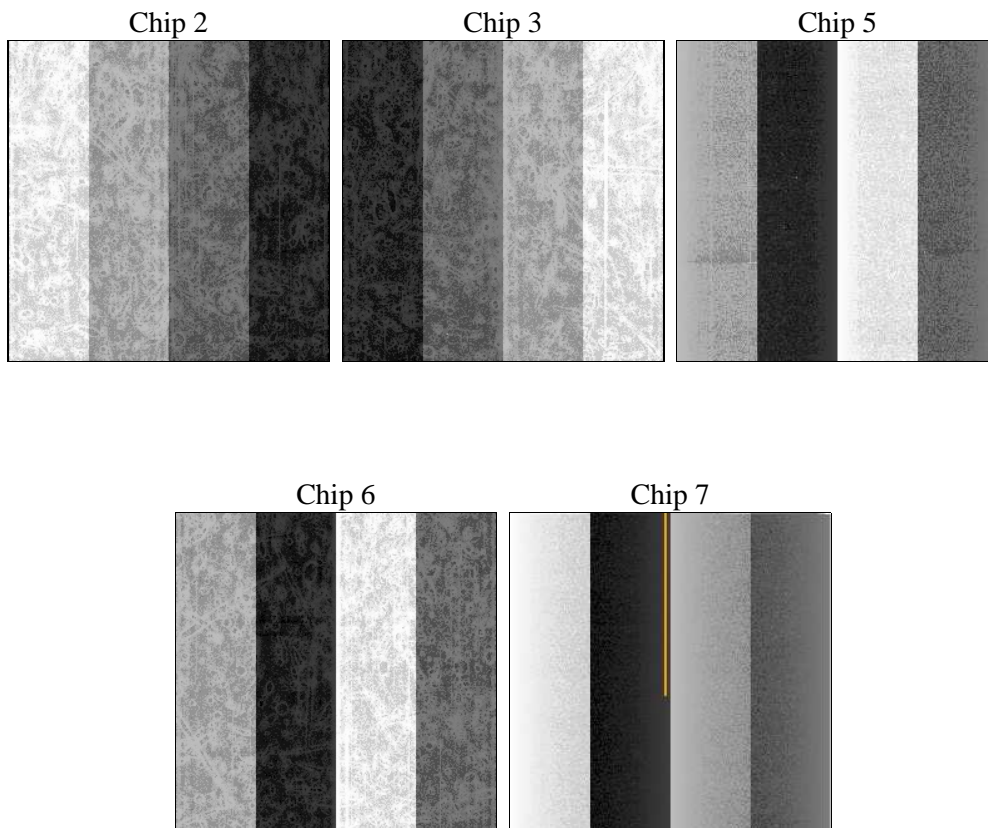
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33333.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	33374.111023307	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	33373.946863294	Sum of GTIs [s]
date	2012-02-06T22:55:19	Date and time of file creation	ontime3	33367.705852687	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	33374.069983304	Sum of GTIs [s]
			ontime6	33370.887922943	Sum of GTIs [s]
			ontime7	33374.111023307	Sum of GTIs [s]
			l1events	1364258	Number of level 1 events

2.1.4 Events

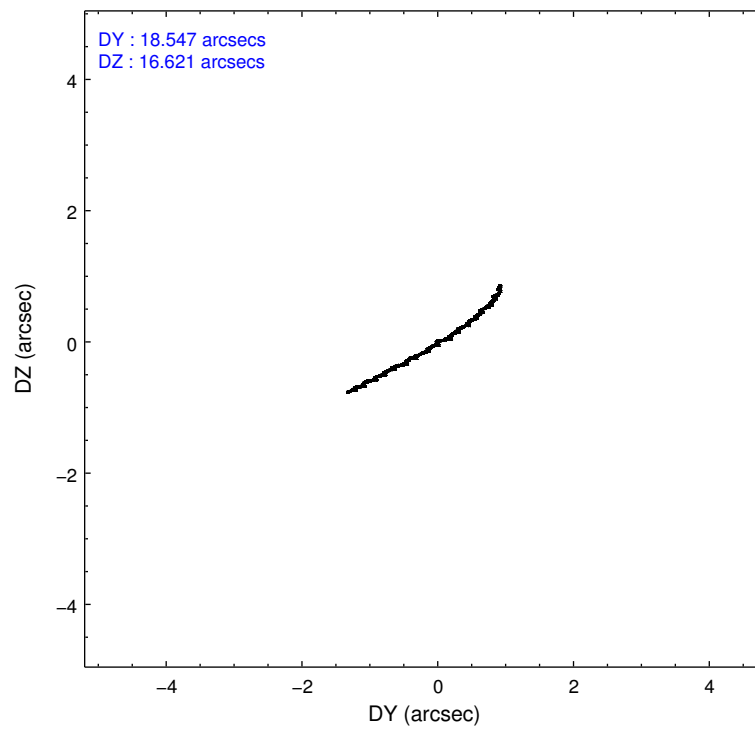
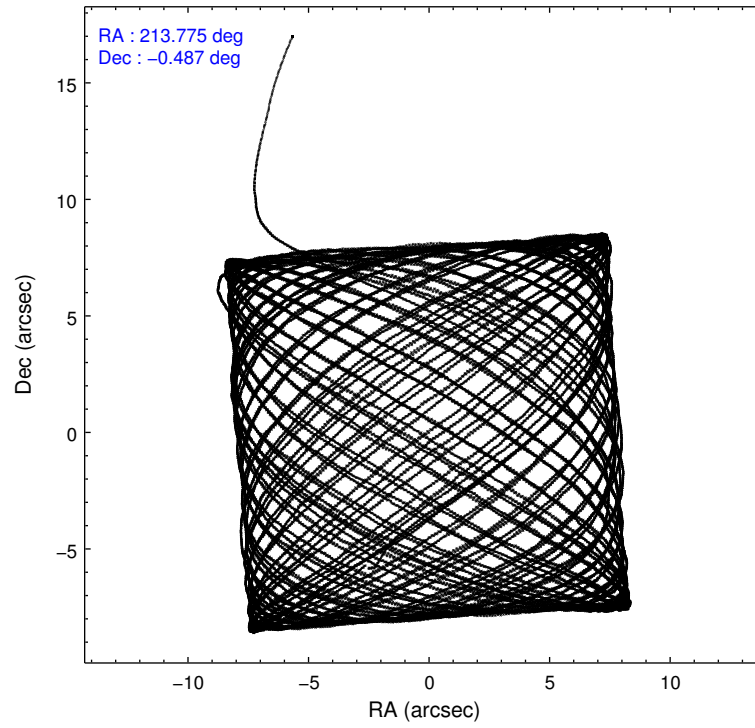
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	226068	222440	374834	243799	297117
rejected events	201639	198801	185770	205137	160546
rejected %	89%	89%	49%	84%	54%

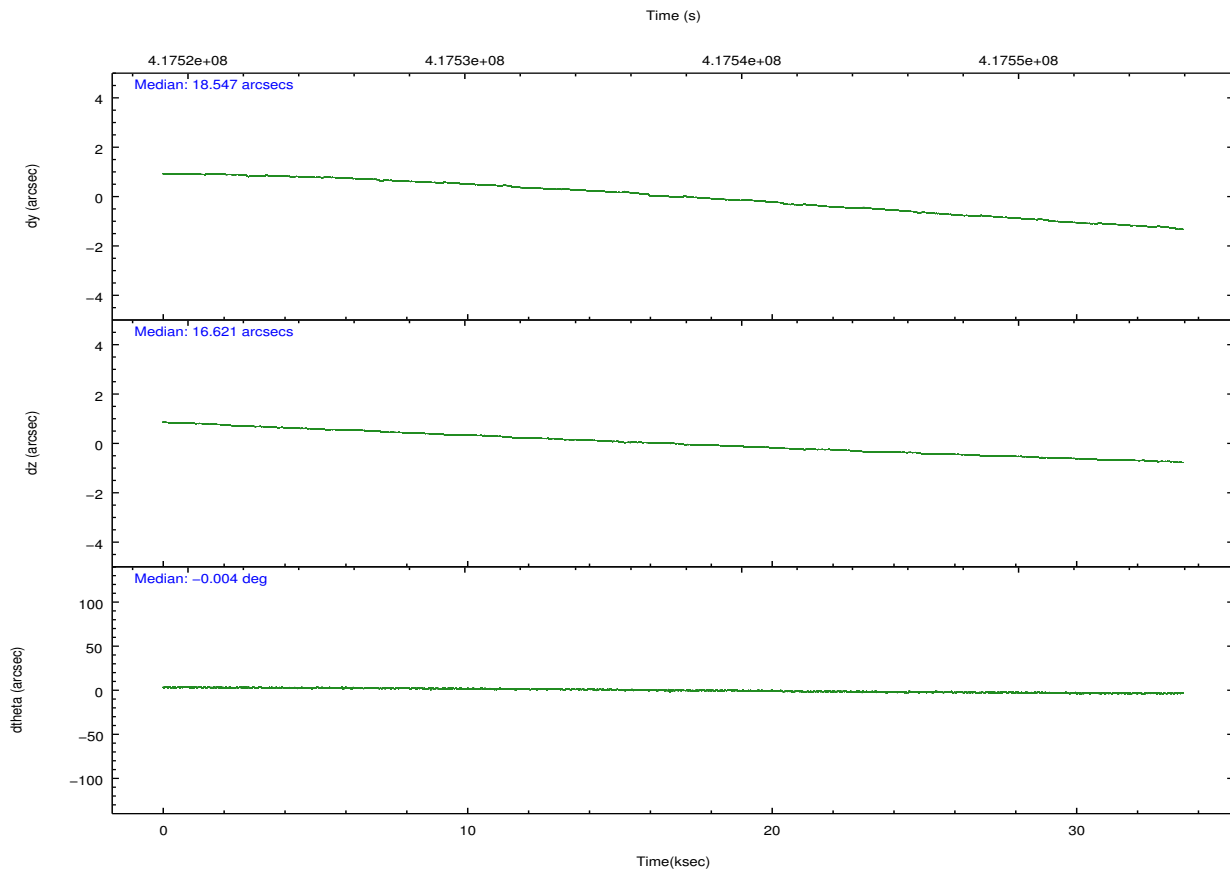
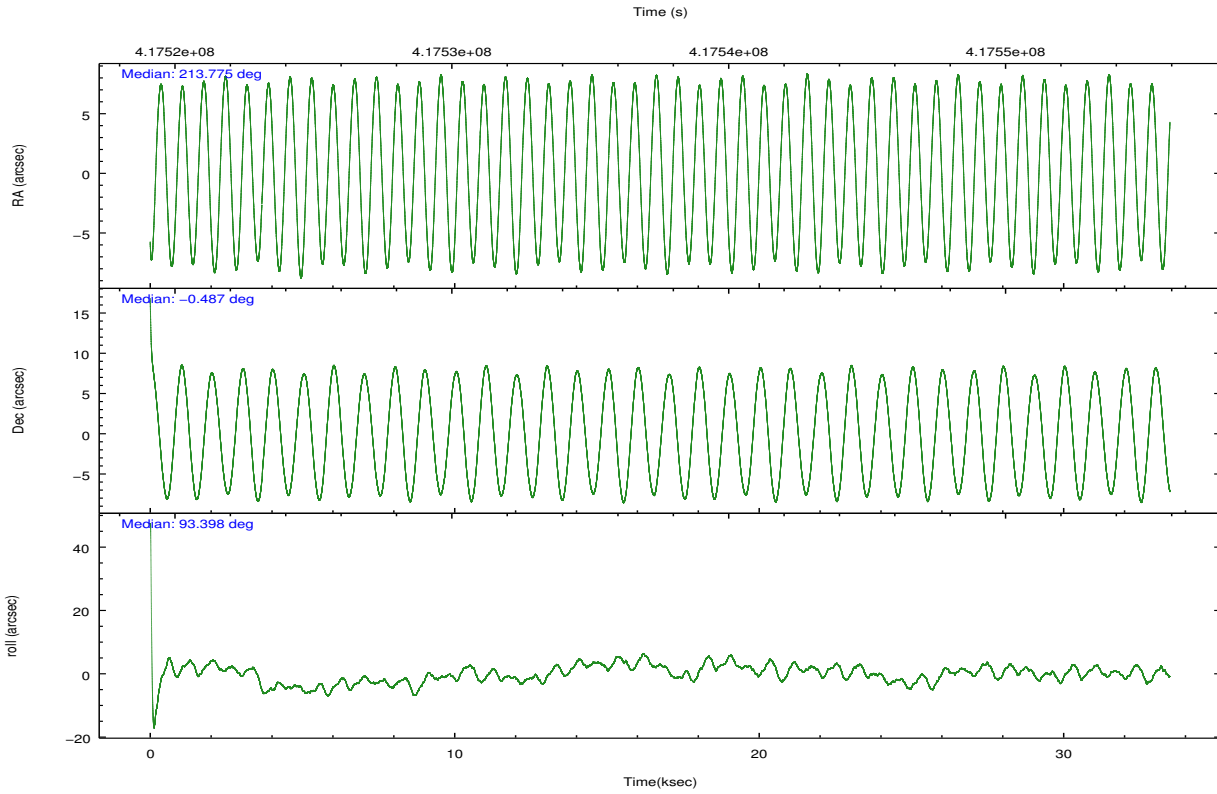
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	8643	8260	28396	10913	14534
	3%	3%	7%	4%	4%
grade 1 events	128	119	625	118	397
	0%	0%	0%	0%	0%
grade 2 events	5934	5363	56035	16250	28142
	2%	2%	14%	6%	9%
grade 3 events	2604	2586	6495	2844	12225
	1%	1%	1%	1%	4%
grade 4 events	2497	2562	6268	2780	12274
	1%	1%	1%	1%	4%
grade 5 events	8910	10680	28153	10705	29636
	3%	4%	7%	4%	9%
grade 6 events	4754	4873	91907	5887	69420
	2%	2%	24%	2%	23%
grade 7 events	192598	187997	156955	194302	130489
	85%	84%	41%	79%	43%

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	213.790081	213.7747053991319	CCD I2 on	O1	Y
[deg] Pointing Dec	-0.509646	-0.4870242269758419	CCD I3 on	Y	Y
[deg] Pointing Roll	93.248916	93.40543651341056	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	417520925.184000	417519836.06245	CCD S5 on	N	N
Observation start date	2011-03-26T10:00:59	2011-03-26T09:43:56	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	417554258.184000	417554392.40174	On-chip summing requested	N	N
Observation end date	2011-03-26T19:16:32	2011-03-26T19:19:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



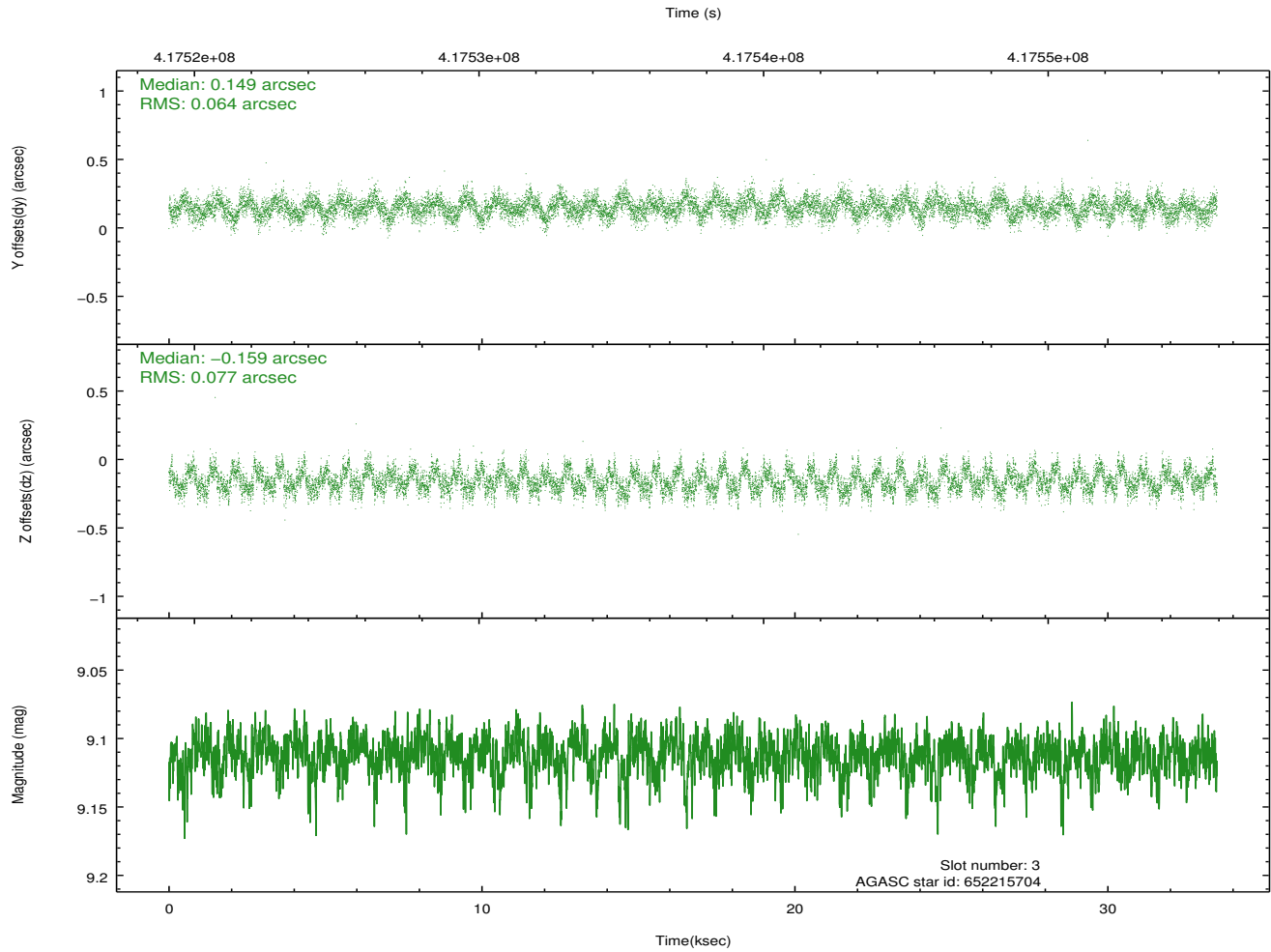
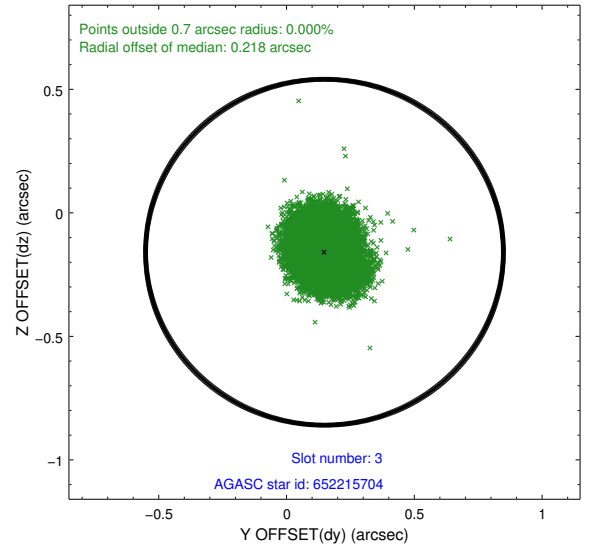
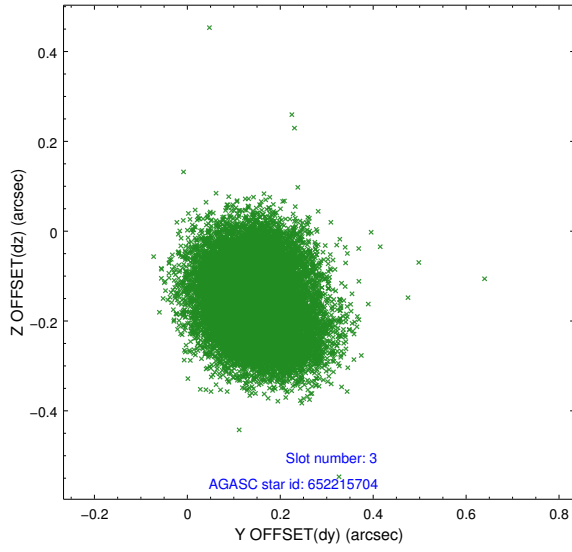


Slot Statistics

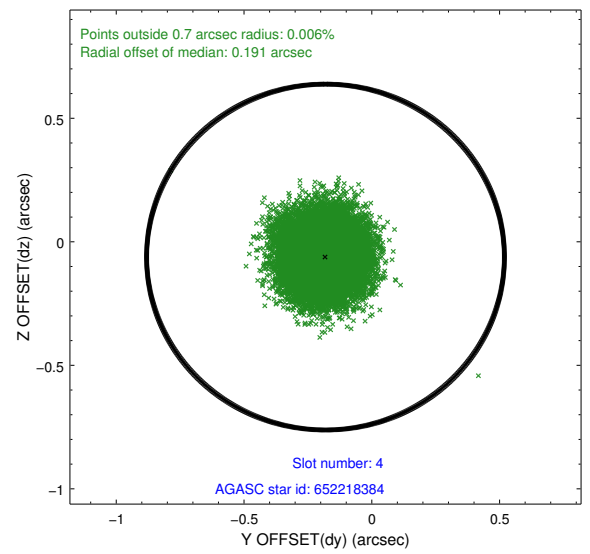
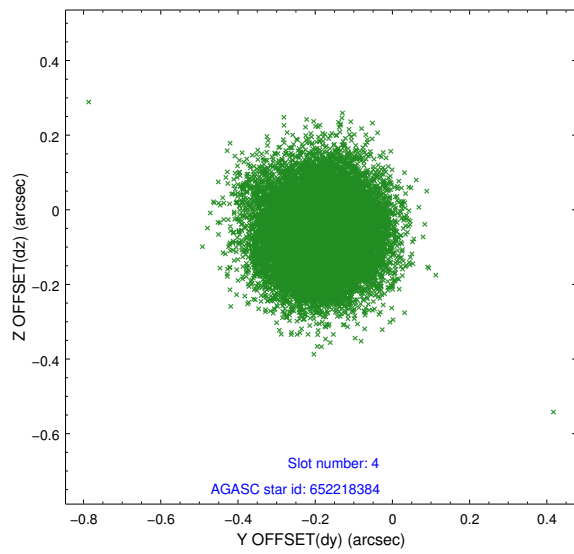
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	8169	-0.088	-0.024	0.014	0.024	0.000000	0.000000	-771.67	-1738.02
1	FID	ACIS-S-4	7.01	8168	0.233	0.050	0.015	0.031	0.000000	0.000000	2141.91	170.46
2	FID	ACIS-S-5	7.04	8169	-0.177	-0.016	0.019	0.039	0.000000	0.000000	-1824.52	164.16
3	GUIDE	652215704	9.11	16318	0.149	-0.159	0.109	0.171	213.594661	-0.601169	-288.45	720.94
4	GUIDE	652218384	9.66	16245	-0.181	-0.062	0.130	0.206	214.051812	-0.360037	484.74	-971.14
5	GUIDE	652219312	9.92	16299	-0.007	0.142	0.148	0.232	214.017381	-0.315458	652.21	-856.38
6	GUIDE	652223856	9.13	16325	-0.051	0.030	0.123	0.195	214.256332	-0.079315	1450.71	-1763.96
7	GUIDE	652223976	10.34	16110	0.098	0.043	0.257	0.400	214.287184	-0.125851	1278.56	-1864.86

2.4 Star Slots

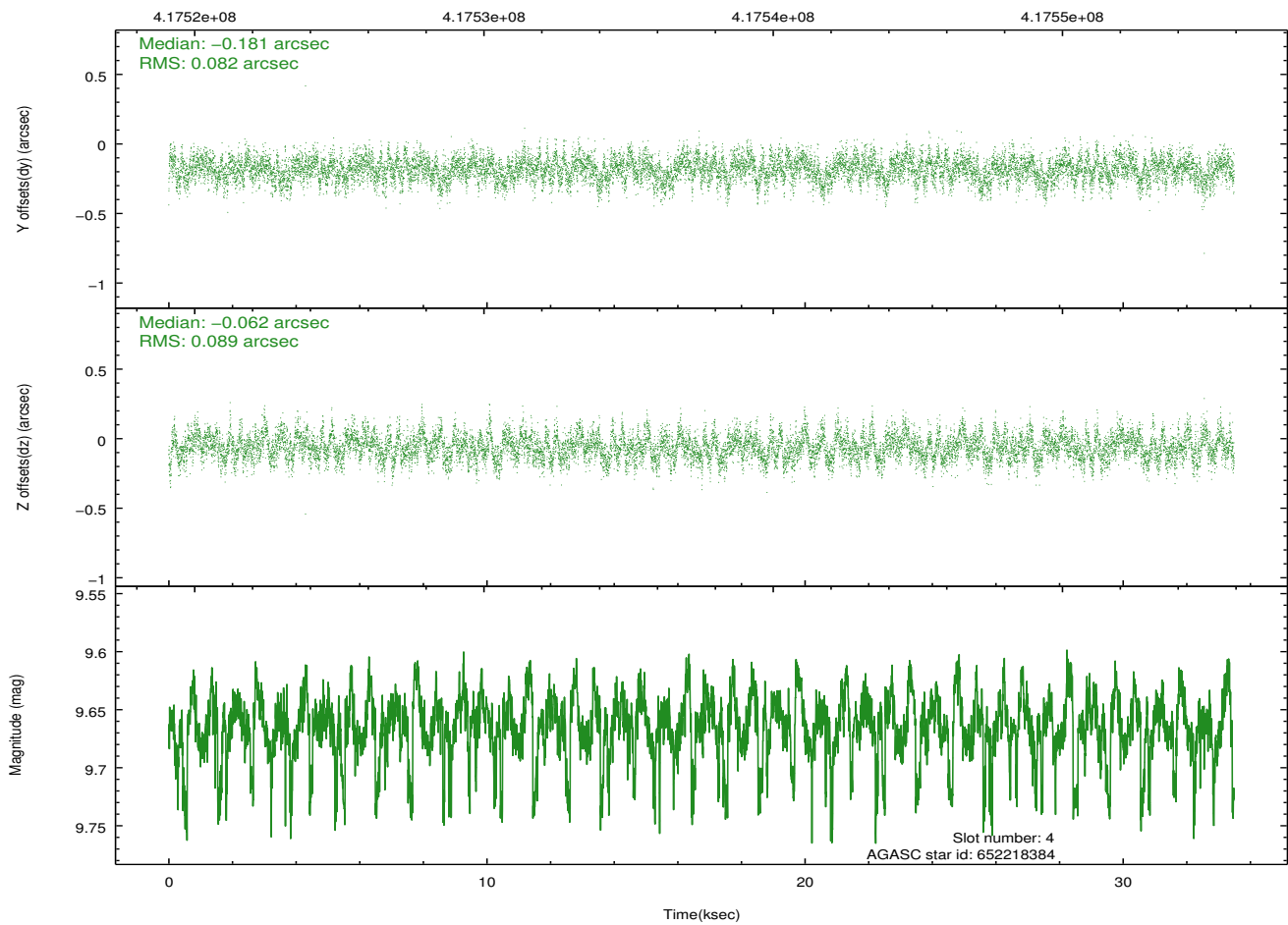
2.4.1 Slot 3



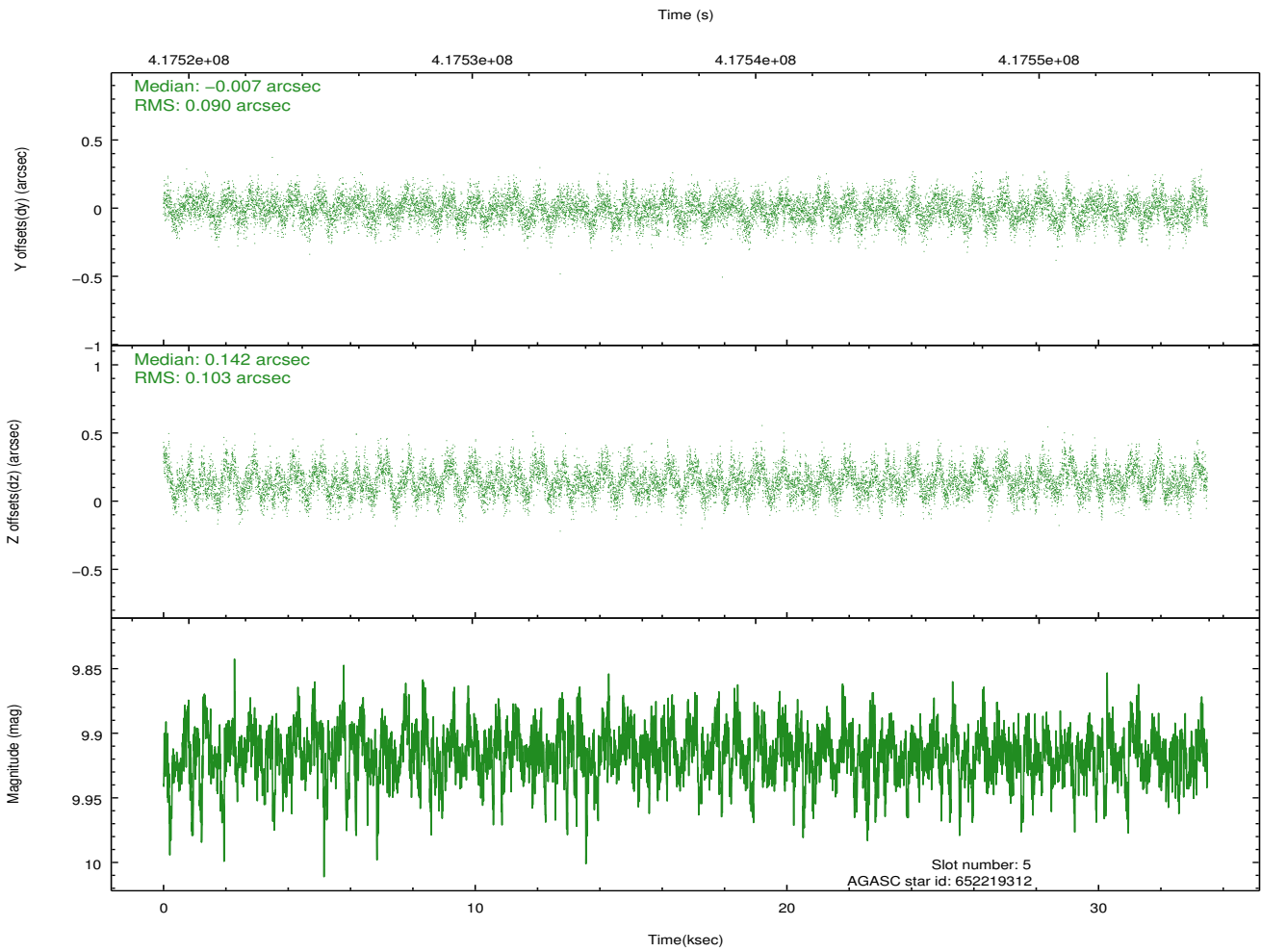
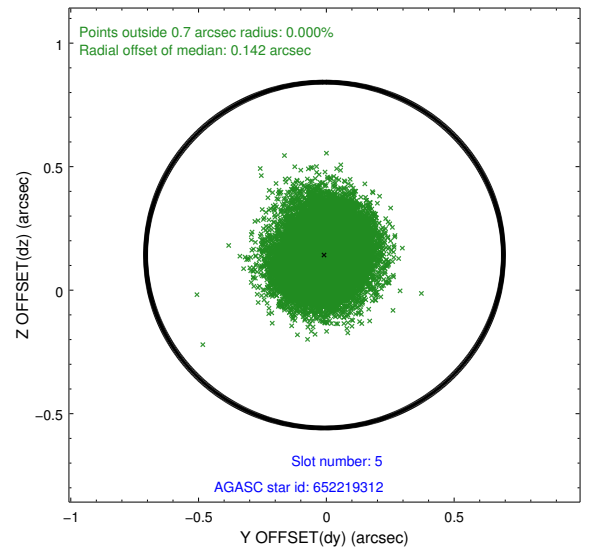
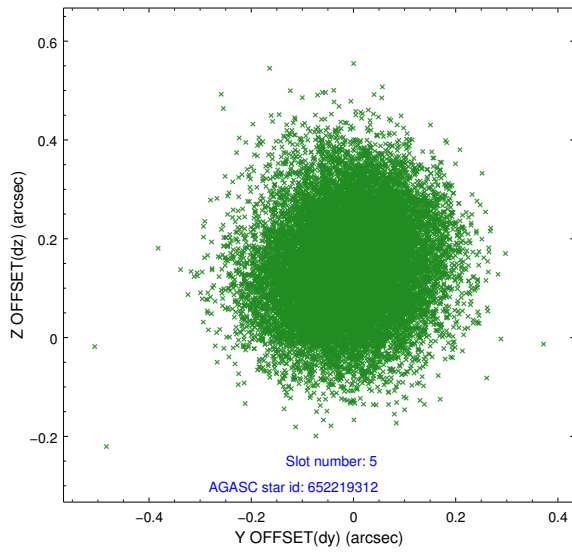
2.4.2 Slot 4



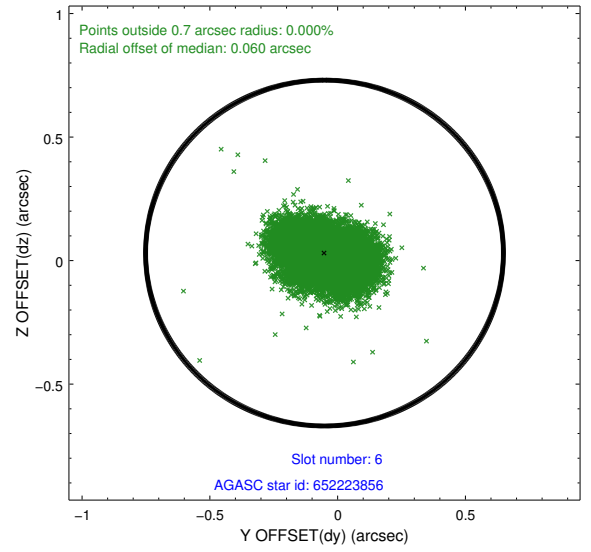
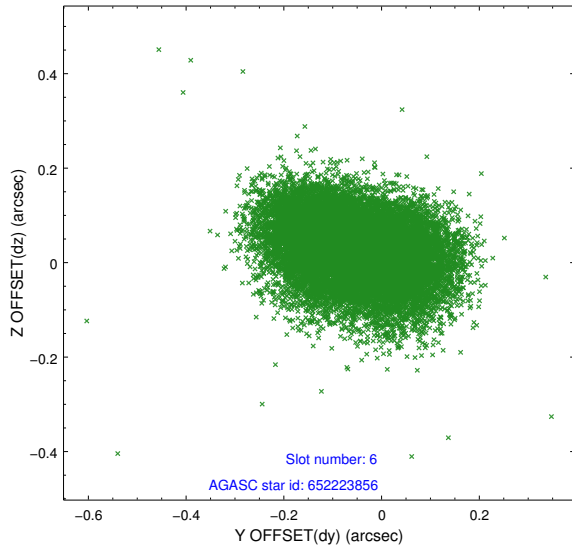
Time (s)



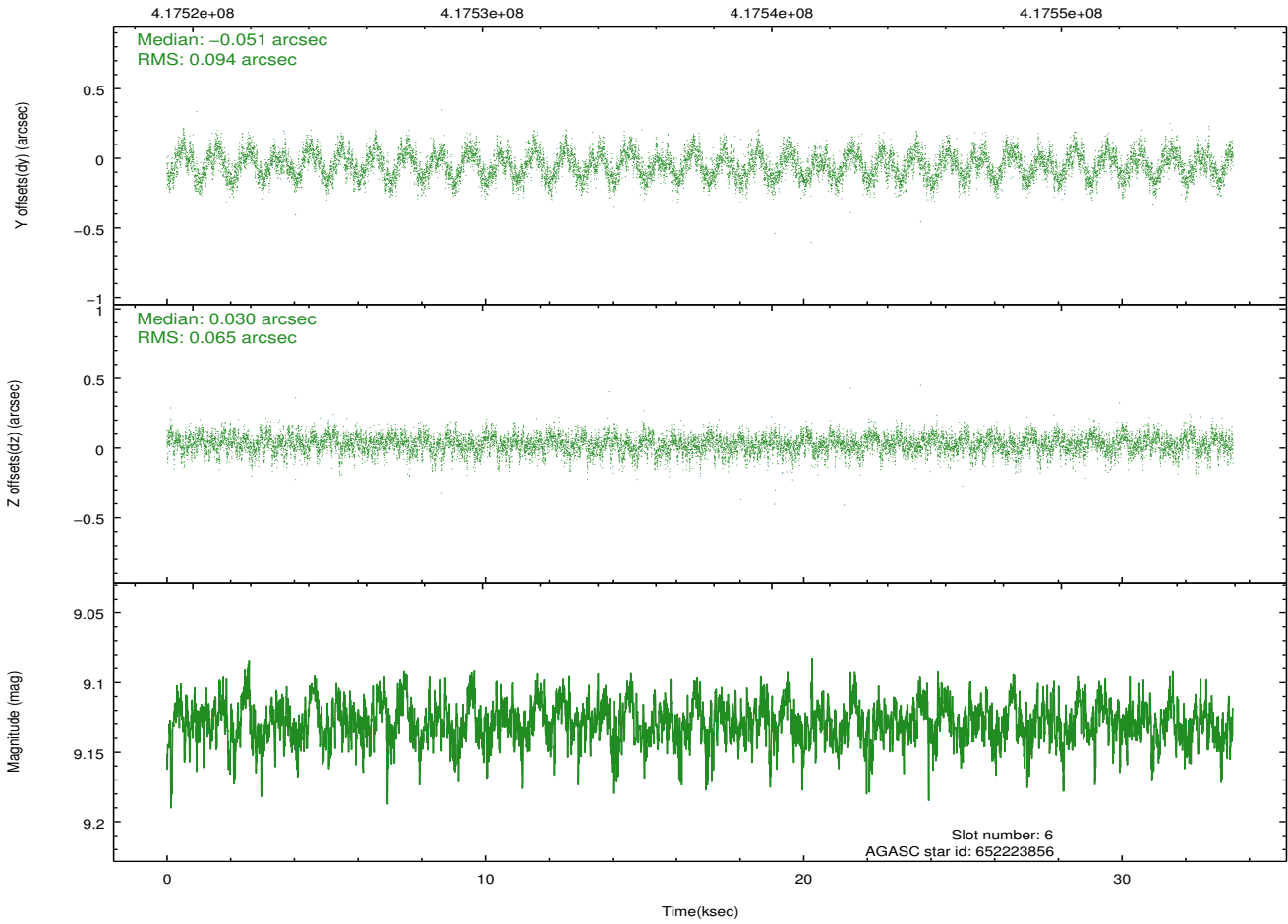
2.4.3 Slot 5



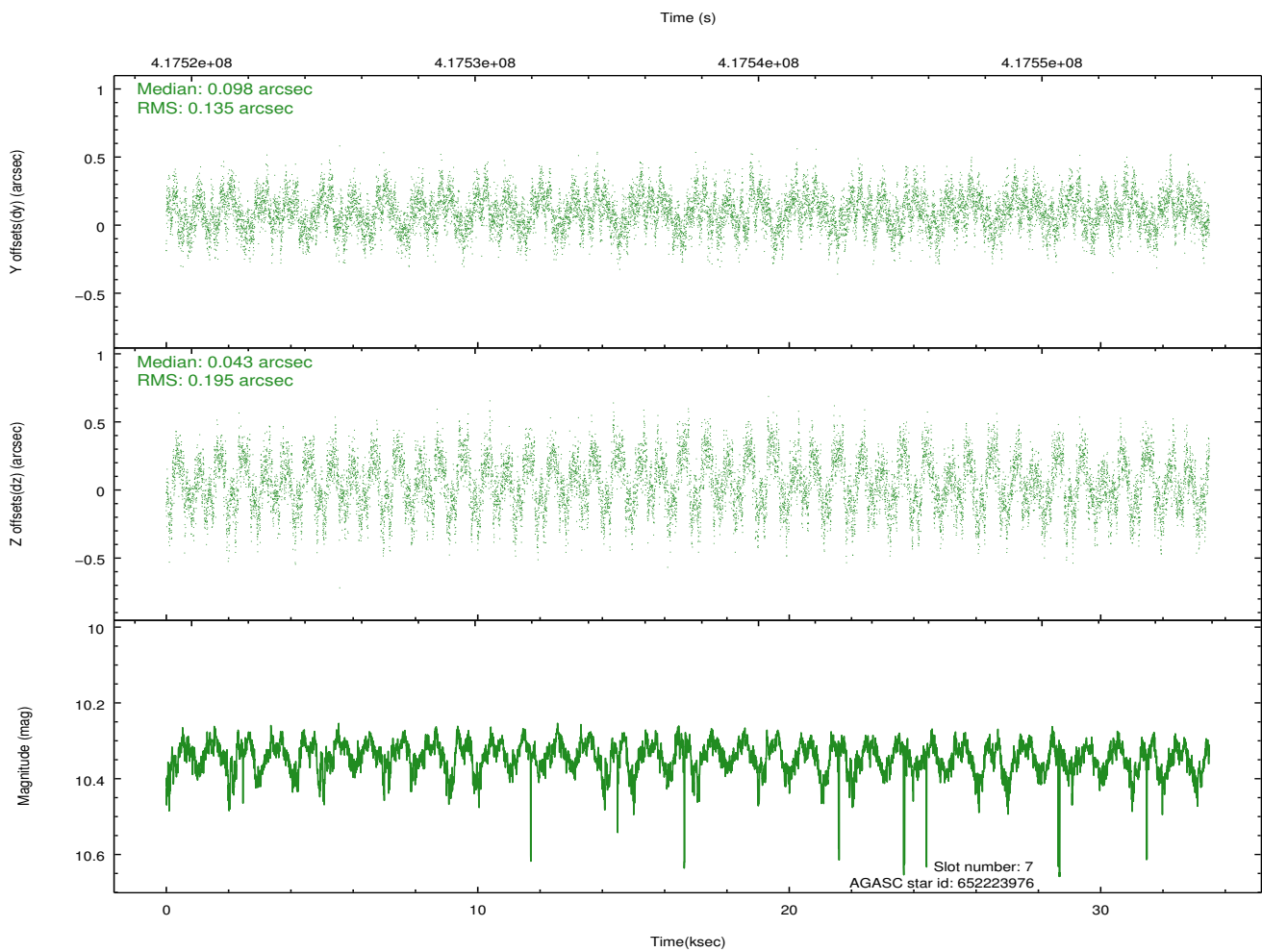
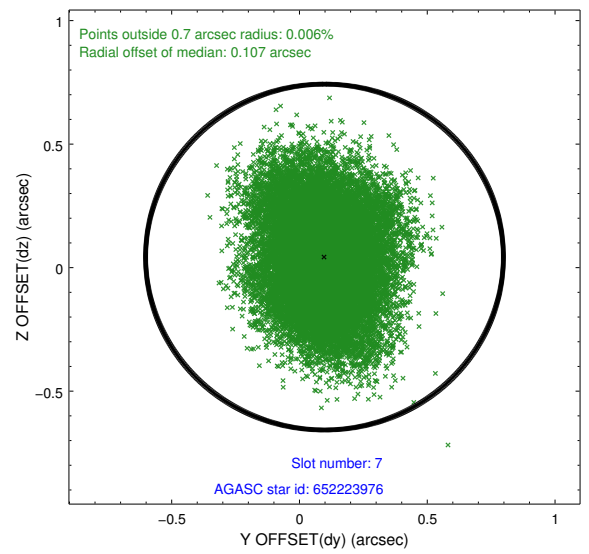
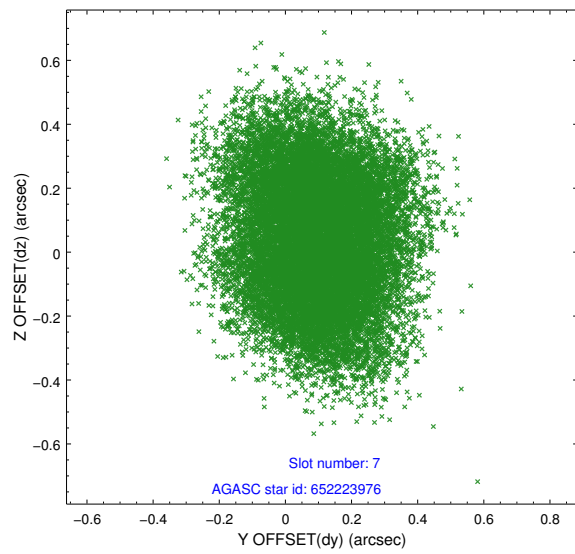
2.4.4 Slot 6



Time (s)

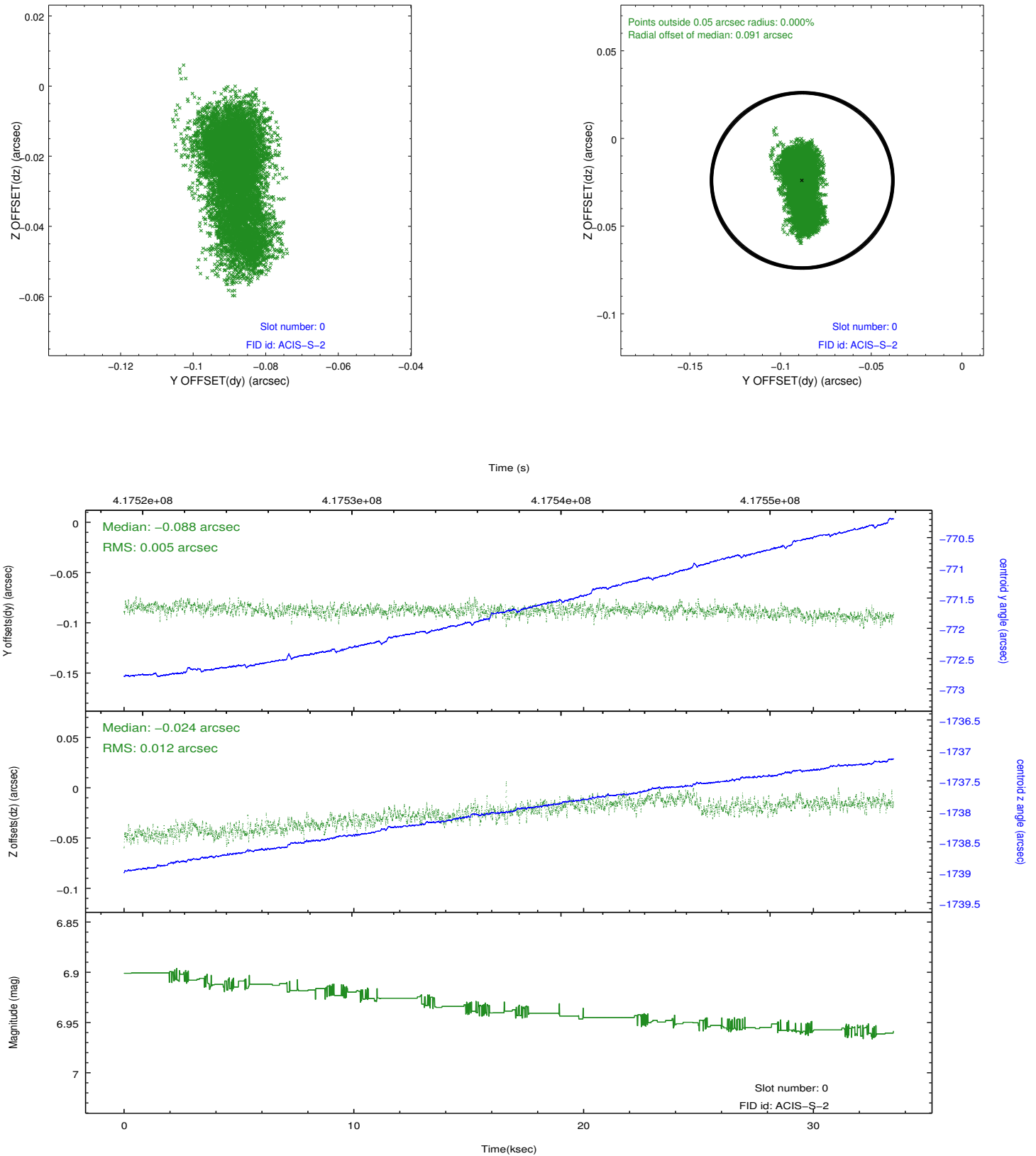


2.4.5 Slot 7

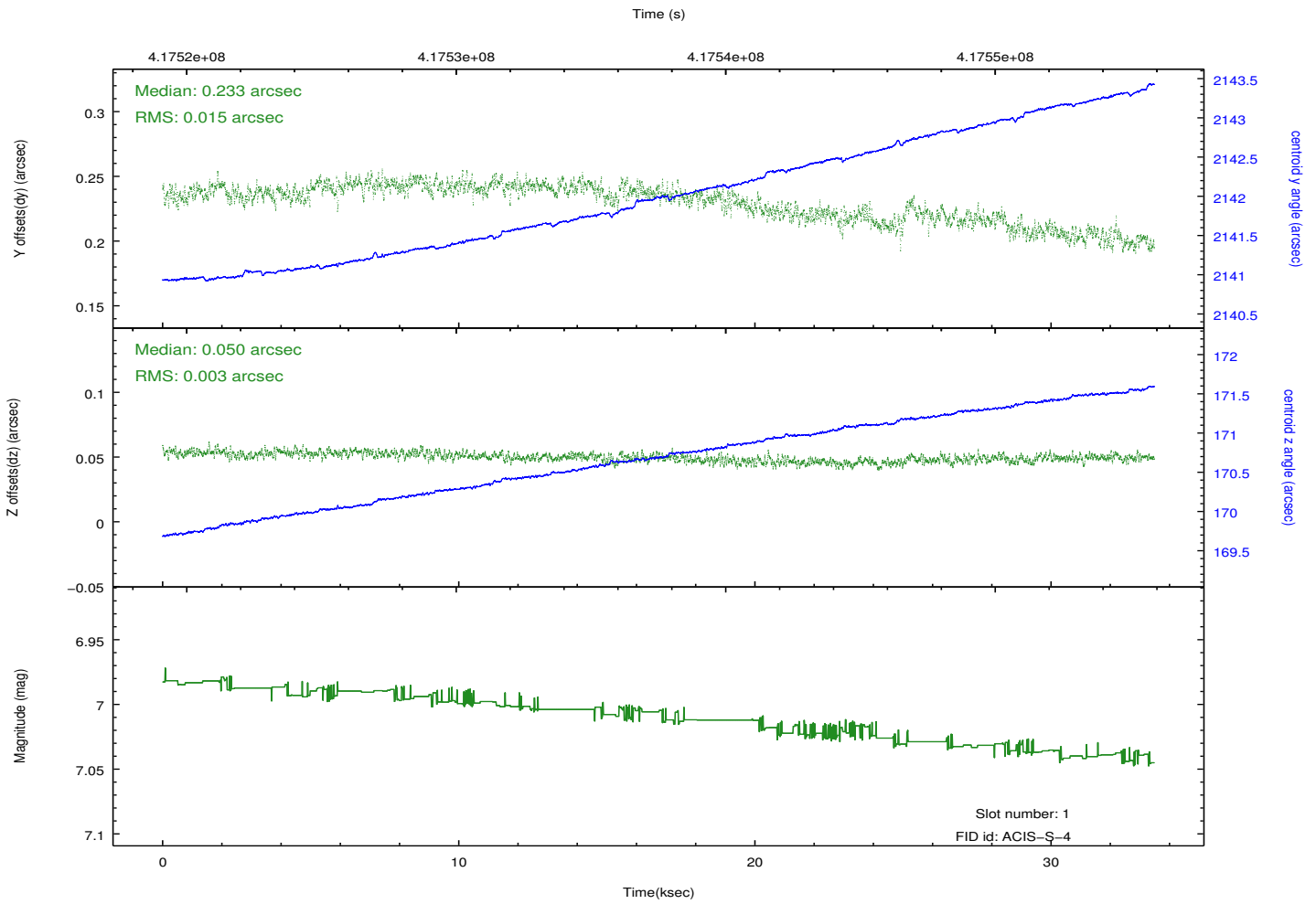
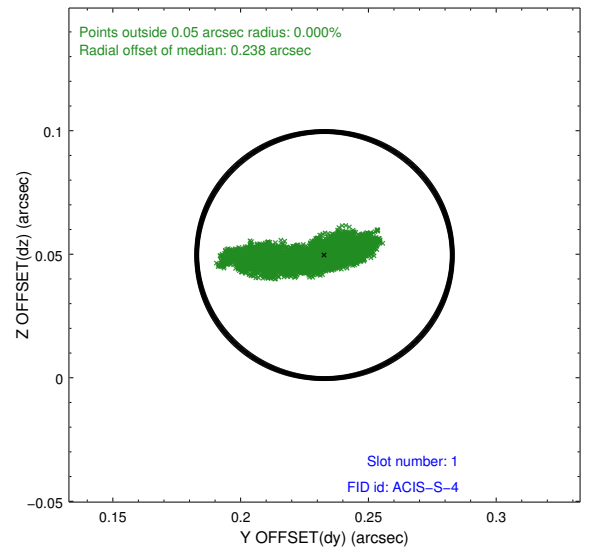
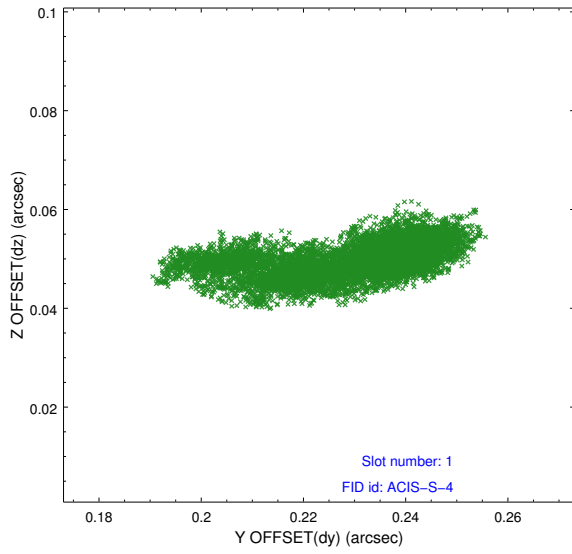


2.5 FID Slots

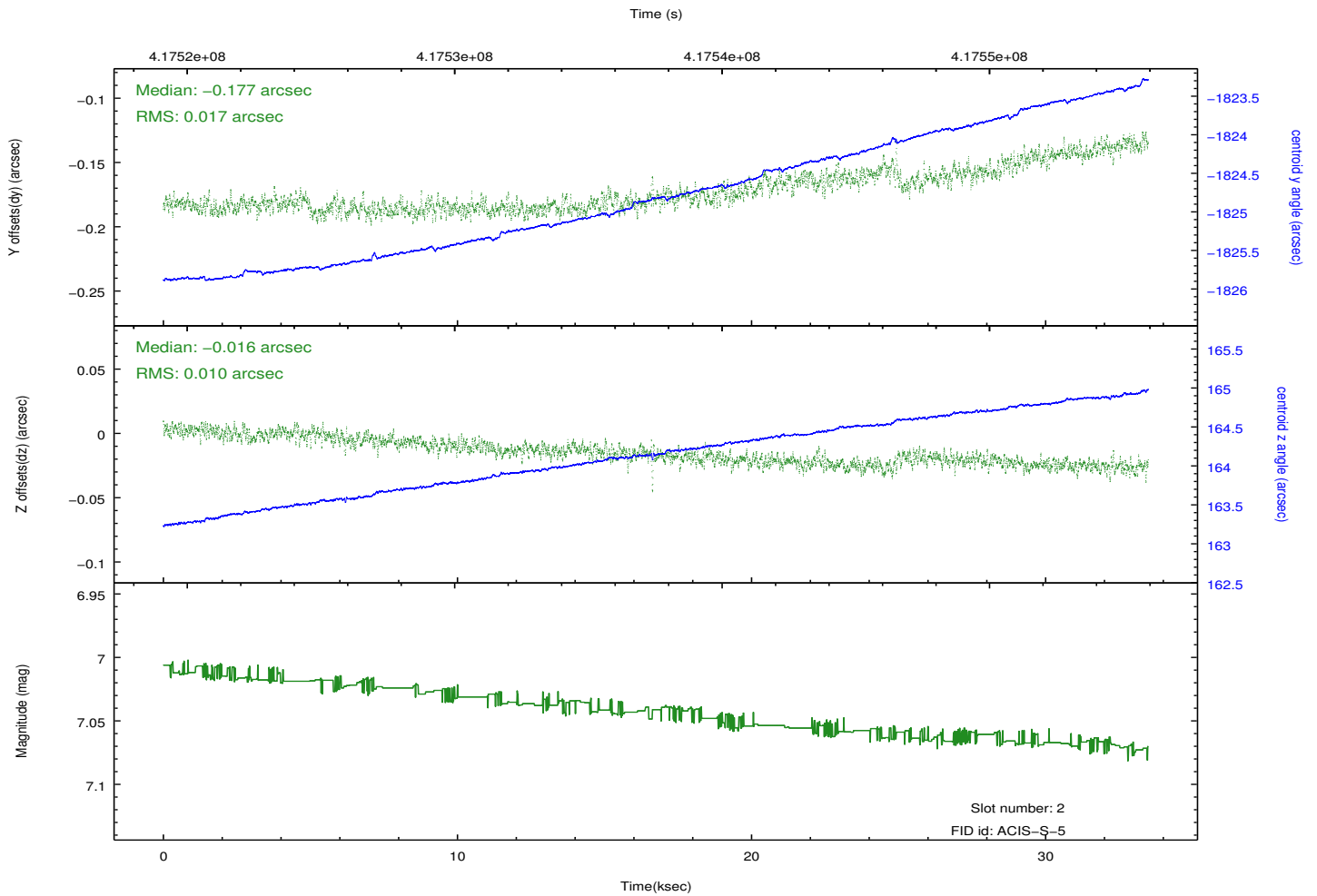
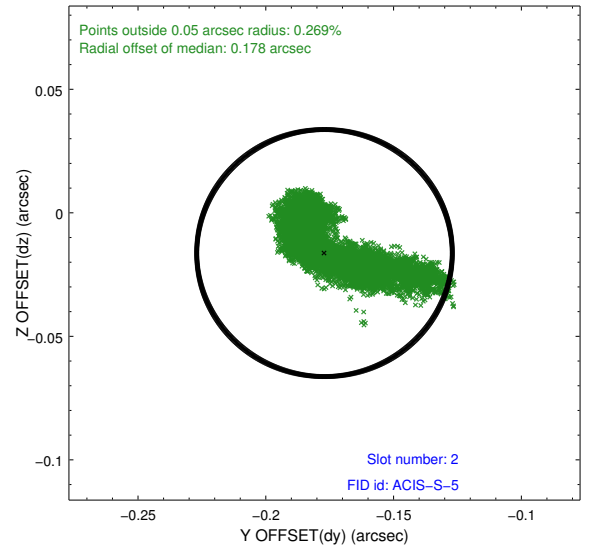
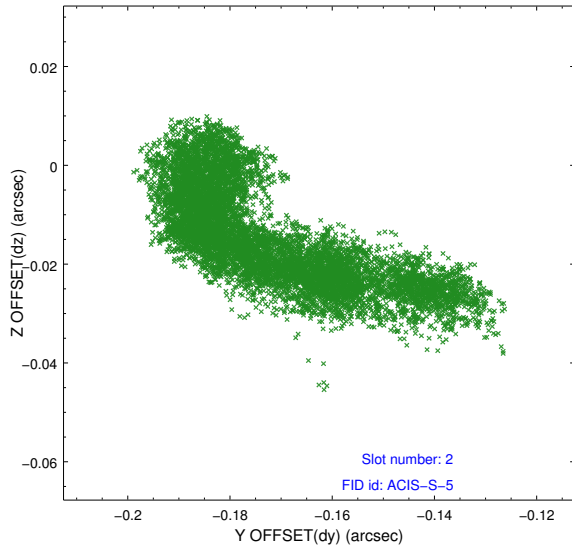
2.5.1 Slot 0



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)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.374111019433

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSEr algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.