

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12339 - L2 Version 2
Chandra X-Ray Center

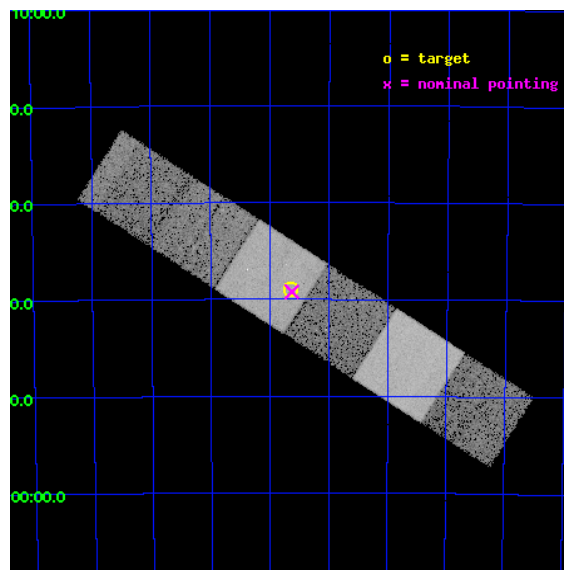
L2 Processing Date : Feb 5 2012

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1 Front

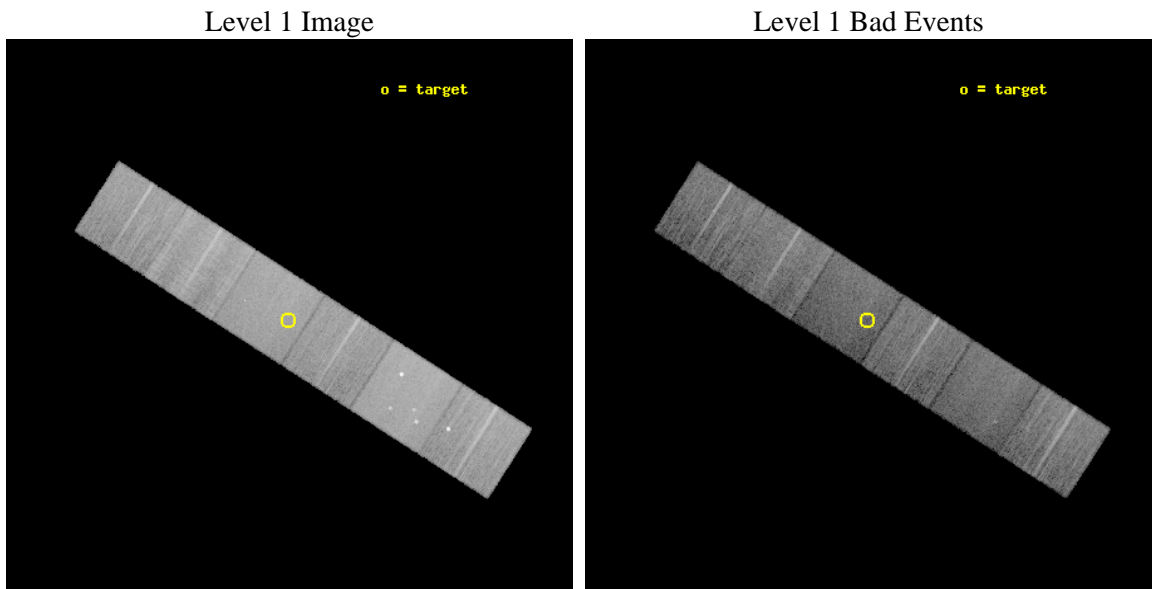
seq_num	200675	Sequence number
obs_id	12339	Observation id
title	Maunder Minimum stars: How frequent are they ?	Proposal title
observer	Prof. Jurgen Schmitt	Principal investigator
object	GI 31.5	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	11.1625	Observer's specified target RA [deg]
dec_targ	-65.649444	Observer's specified target Dec [deg]
ra_nom	11.157419056121	Nominal RA [deg]
dec_nom	-65.653836338496	Nominal Dec [deg]
roll_nom	212.62469966462	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15048.886324823	Sum of GTIs [s]
livetime	14858.328264827	Livetime [s]
ontime4	15048.927364826	Sum of GTIs [s]
ontime5	15048.84528482	Sum of GTIs [s]
ontime6	15048.804244816	Sum of GTIs [s]
ontime7	15048.886324823	Sum of GTIs [s]
ontime8	15048.763204813	Sum of GTIs [s]
ontime9	15048.72216481	Sum of GTIs [s]
l2events	177521	Number of level 2 events



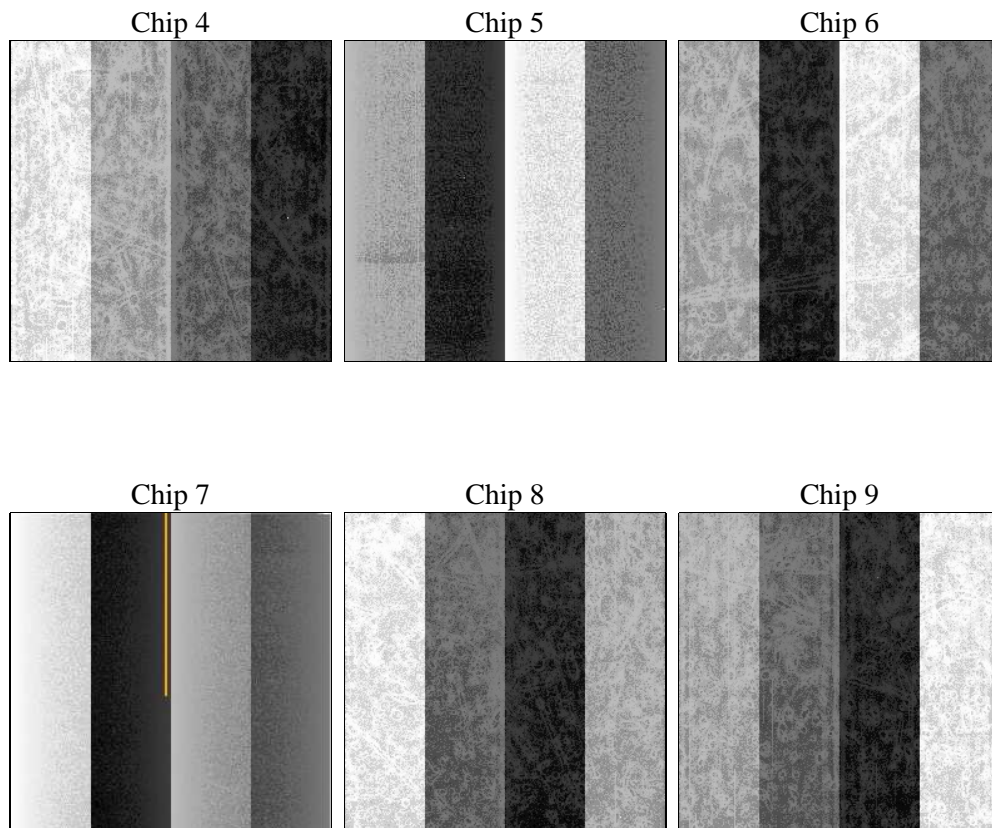
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	15048.886324823	Sum of GTIs [s]
caldbver	4.4.7	 	ontime4	15048.927364826	Sum of GTIs [s]
date	2012-02-05T14:33:28	Date and time of file creation	ontime5	15048.84528482	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15048.804244816	Sum of GTIs [s]
			ontime7	15048.886324823	Sum of GTIs [s]
			ontime8	15048.763204813	Sum of GTIs [s]
			ontime9	15048.72216481	Sum of GTIs [s]
			l1events	773501	Number of level 1 events

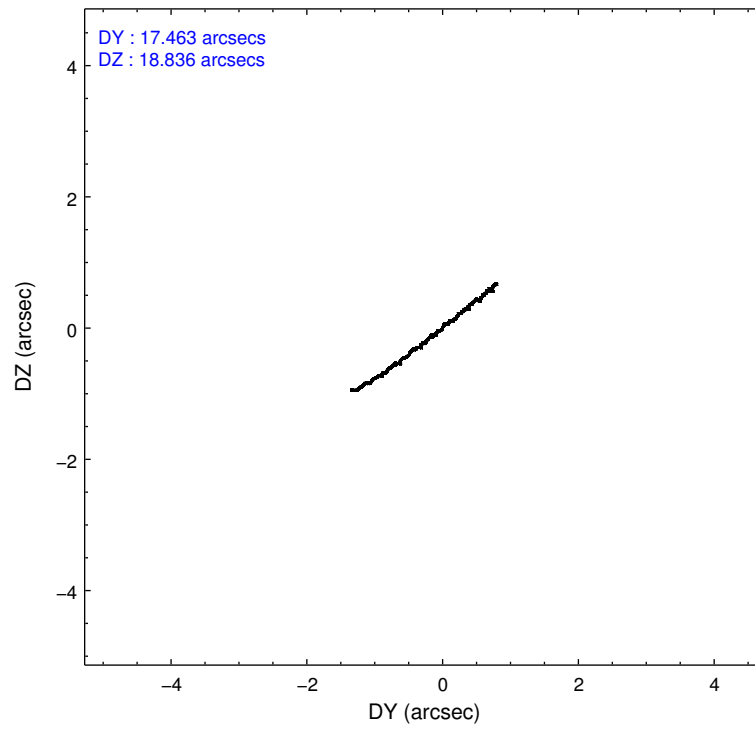
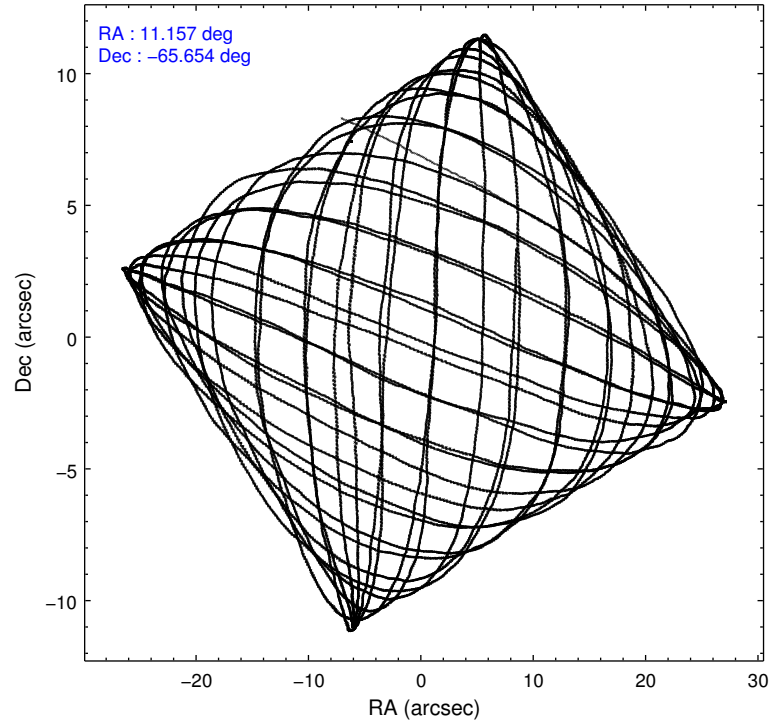
2.1.4 Events

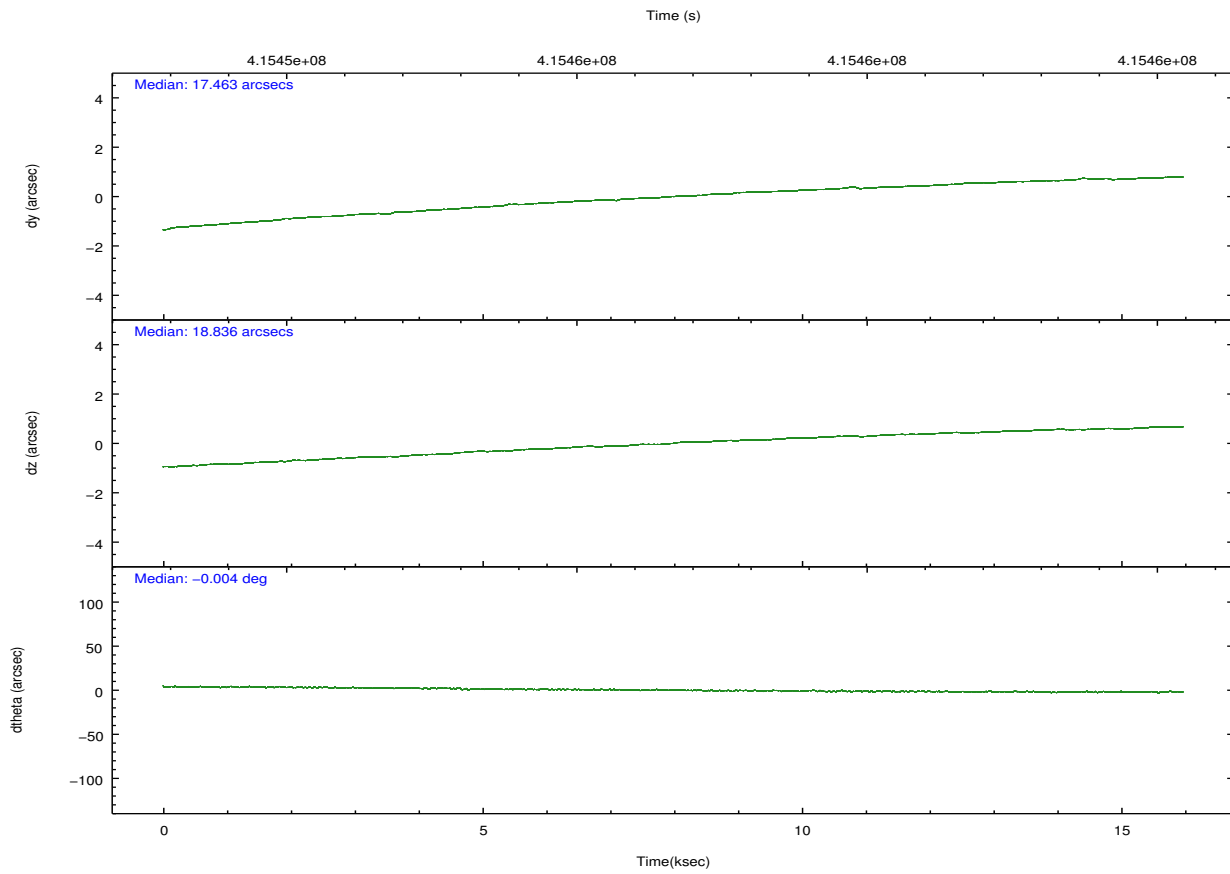
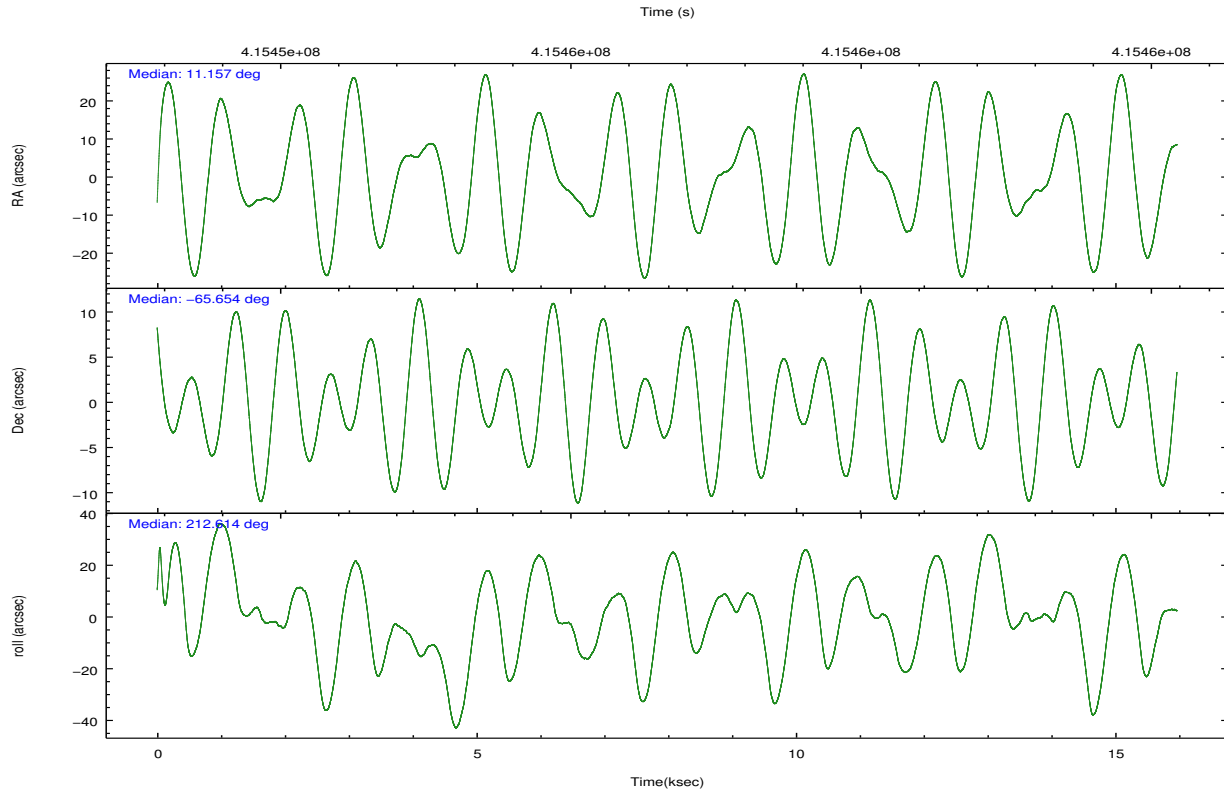
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	125986	164288	105150	131293	141073	105711	grade 0 events	7965	11114	4145	5566	11695	4728
rejected events	110142	81026	93259	72165	103225	92822		6%	6%	3%	4%	8%	4%
rejected %	87%	49%	88%	54%	73%	87%	grade 1 events	114	494	56	188	114	62
								0%	0%	0%	0%	0%	0%
							grade 2 events	3146	24046	2624	12177	8468	2841
								2%	14%	2%	9%	6%	2%
							grade 3 events	1441	3172	1226	5230	4016	1307
								1%	1%	1%	3%	2%	1%
							grade 4 events	1180	3024	1204	5210	3827	1282
								0%	1%	1%	3%	2%	1%
							grade 5 events	4934	12277	4823	13616	6882	5294
								3%	7%	4%	10%	4%	5%
							grade 6 events	2118	41941	2696	30975	9871	2735
								1%	25%	2%	23%	6%	2%
							grade 7 events	105088	68220	88376	58331	96200	87462
								83%	41%	84%	44%	68%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	11.187077	11.15741905612141	CCD I2 on	N	N
[deg] Pointing Dec	-65.629366	-65.65383633849592	CCD I3 on	N	N
[deg] Pointing Roll	212.495061	212.6246996646227	CCD S0 on	O2	Y
[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)	415449626.184000	415448085.45513	CCD S5 on	O1	Y
Observation start date	2011-03-02T10:39:20	2011-03-02T10:14:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	415464626.184000	415465236.78101	On-chip summing requested	N	N
Observation end date	2011-03-02T14:49:20	2011-03-02T15:00:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



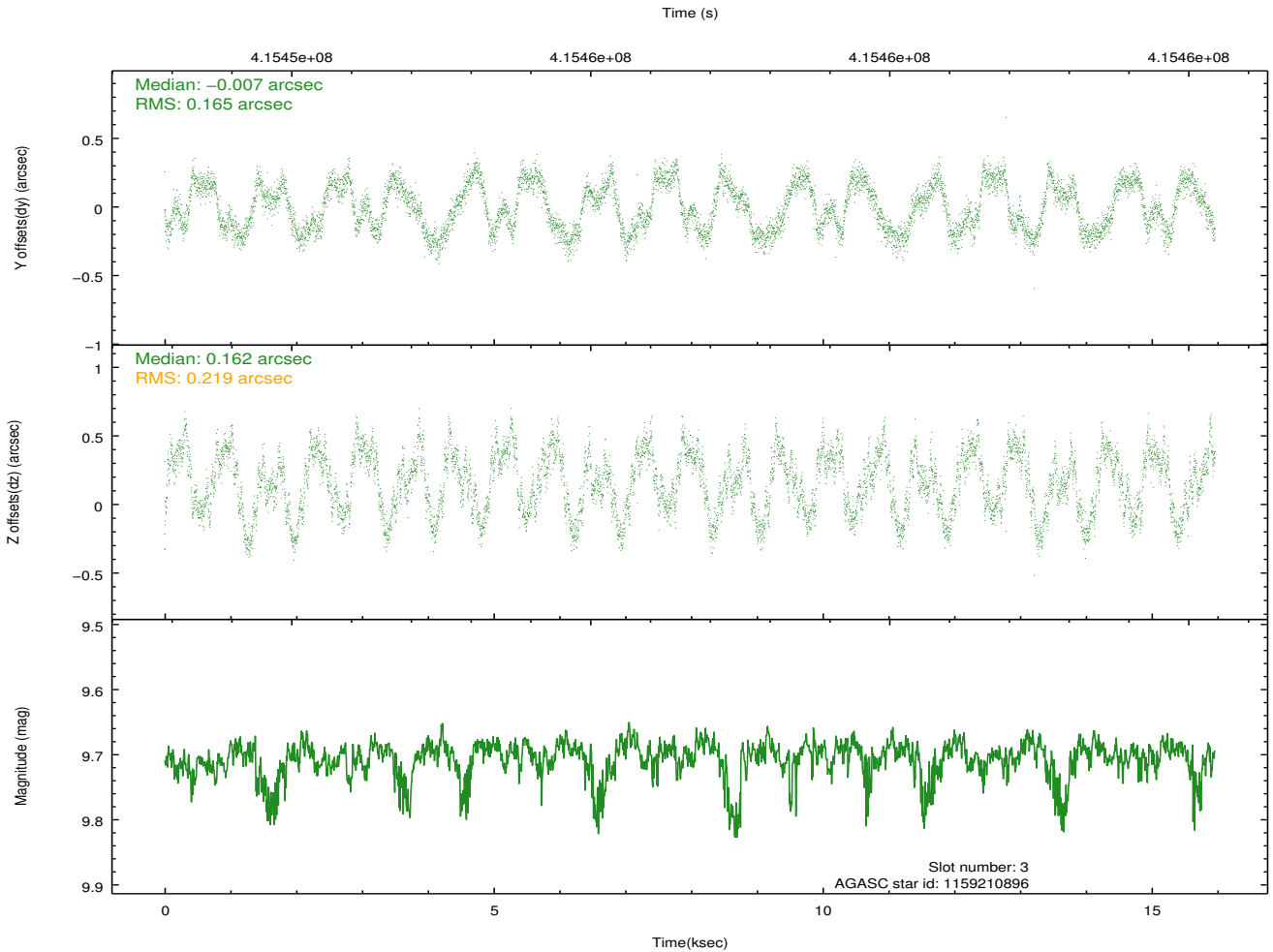
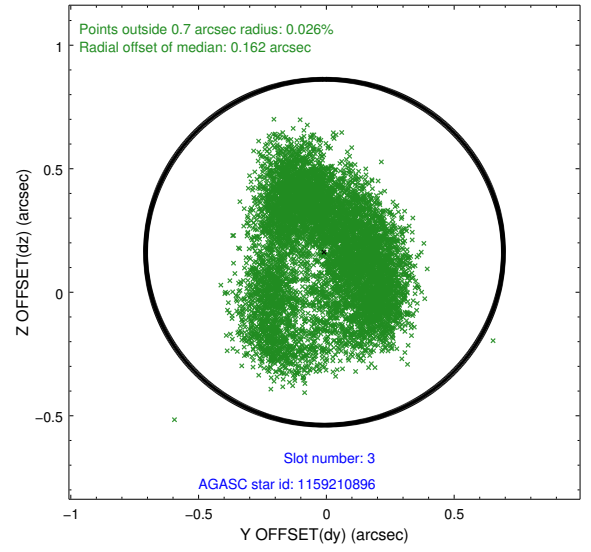
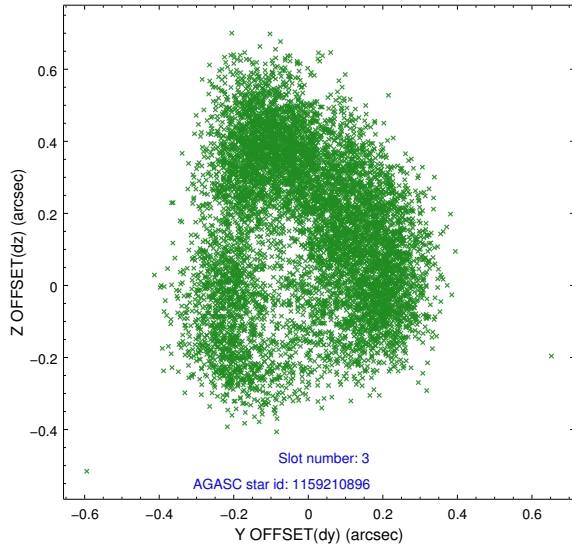


Slot Statistics

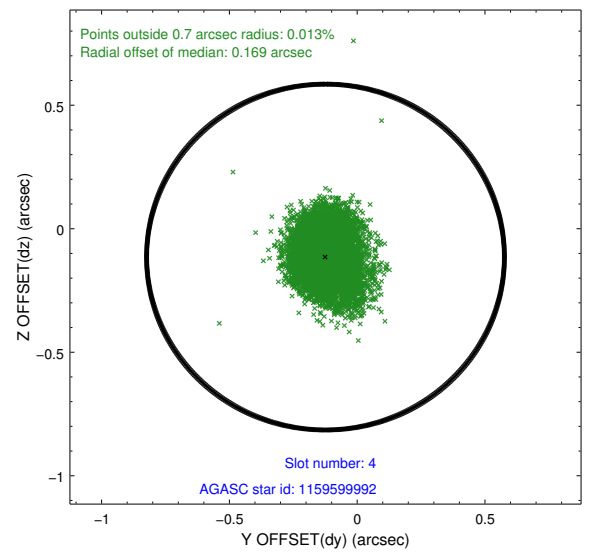
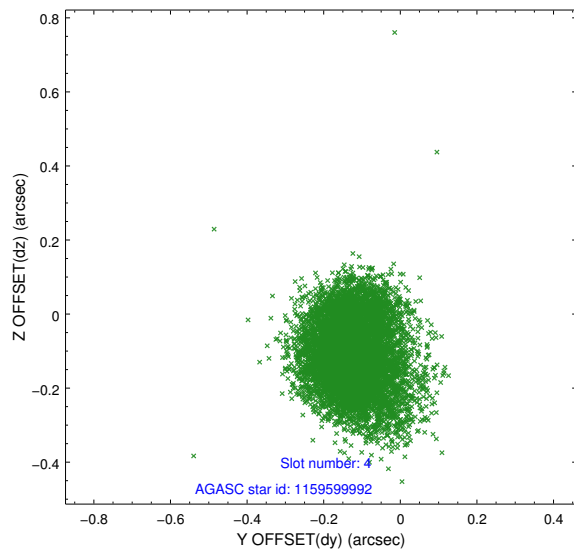
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	3894	-0.075	-0.034	0.013	0.019	0.000000	0.000000	-770.51	-1740.30
1	FID	ACIS-S-4	6.97	3893	0.180	0.046	0.022	0.038	0.000000	0.000000	2142.92	167.95
2	FID	ACIS-S-5	7.00	3894	-0.139	-0.003	0.016	0.024	0.000000	0.000000	-1823.05	161.93
3	GUIDE	1159210896	9.70	7776	-0.007	0.162	0.297	0.435	10.681796	-64.979103	-606.45	-2384.75
4	GUIDE	1159599992	9.13	7718	-0.124	-0.115	0.121	0.196	10.209311	-65.857450	1661.37	-71.12
5	GUIDE	1159600672	9.61	7737	-0.055	-0.194	0.145	0.249	10.624582	-65.384382	240.22	-1193.87
6	GUIDE	1159601024	9.86	7782	0.291	0.085	0.155	0.238	10.652201	-65.209198	-128.95	-1706.37
7	GUIDE	1159603160	9.72	7775	-0.110	0.083	0.190	0.298	11.128969	-65.442438	-288.01	-614.08

2.4 Star Slots

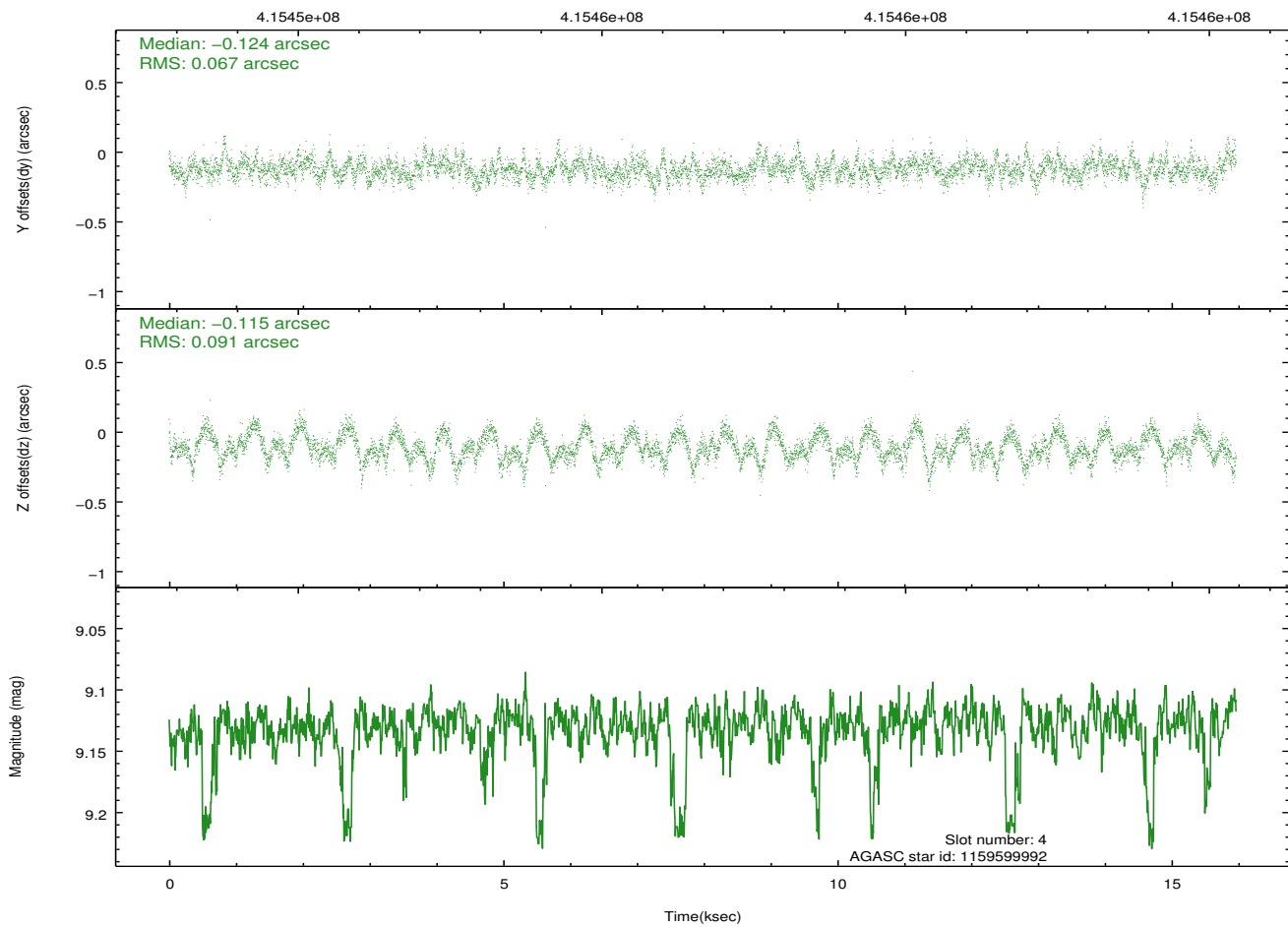
2.4.1 Slot 3



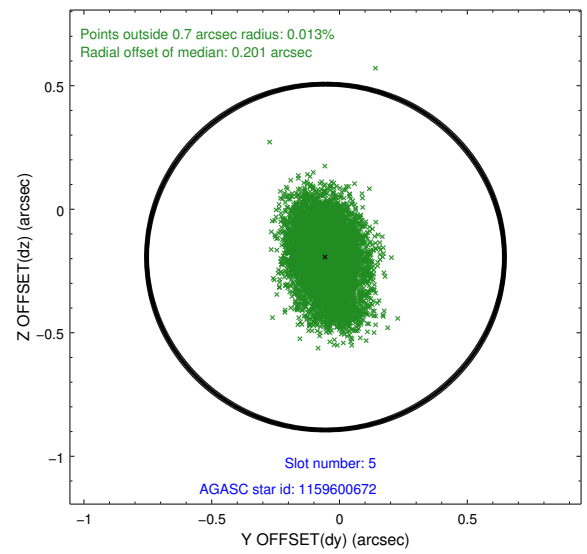
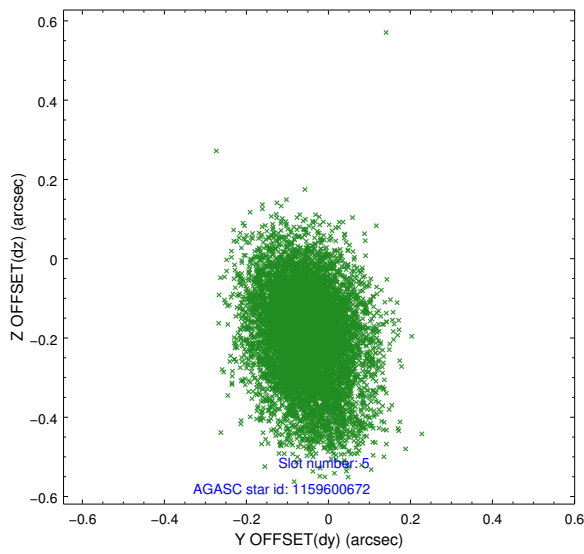
2.4.2 Slot 4



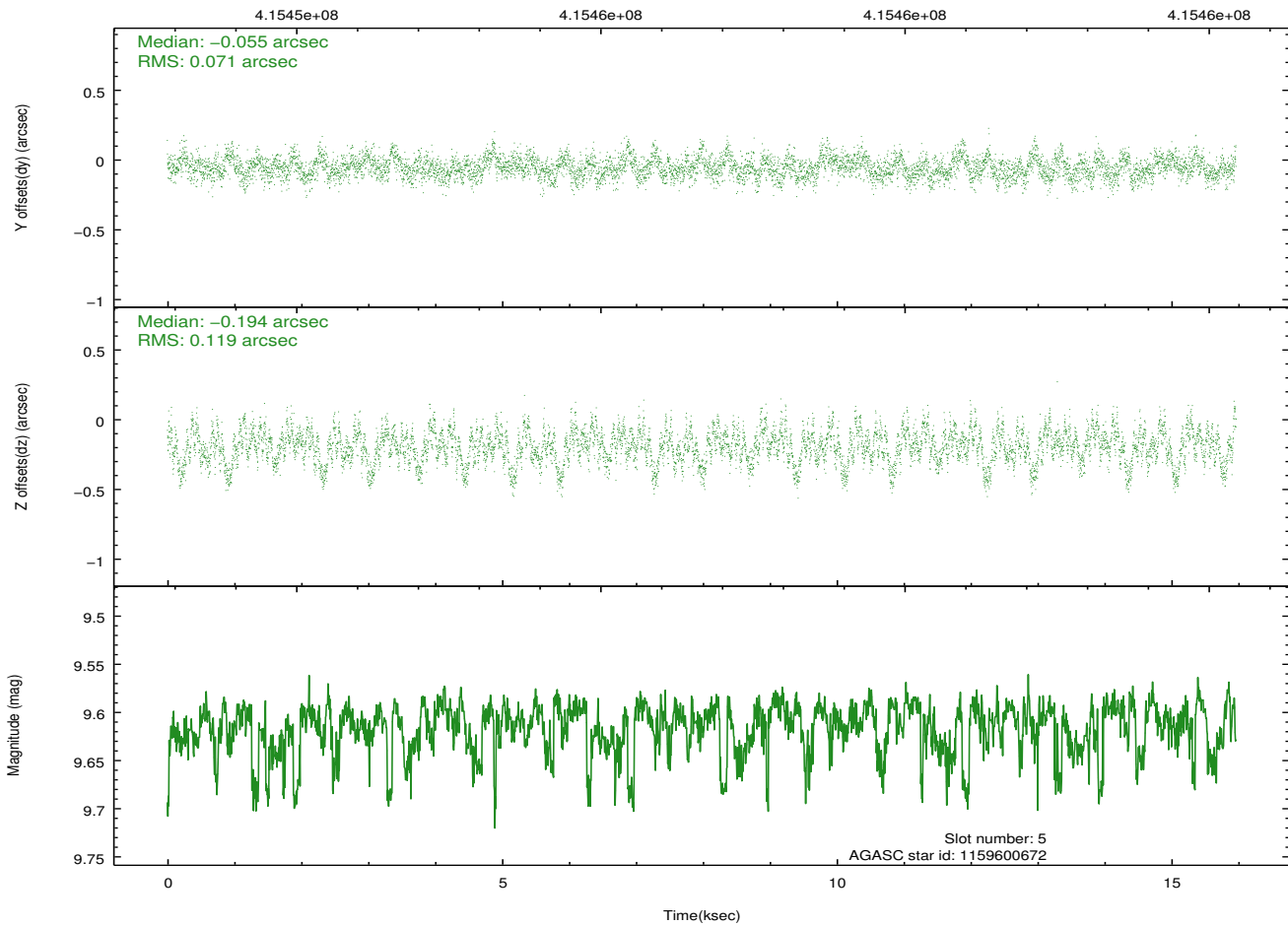
Time (s)



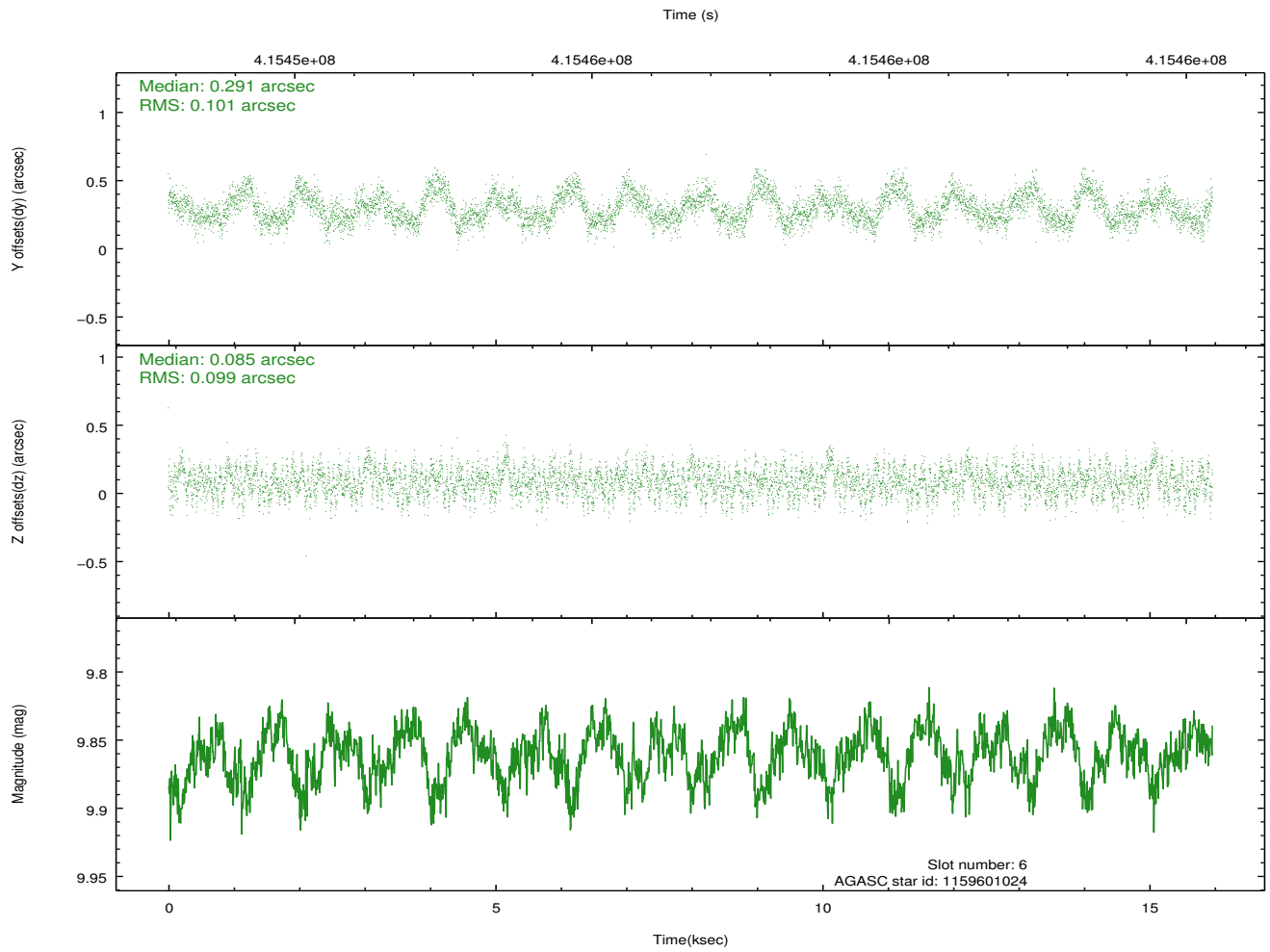
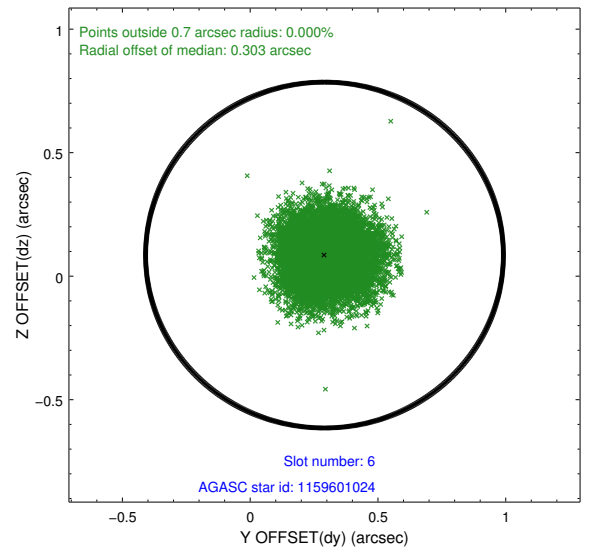
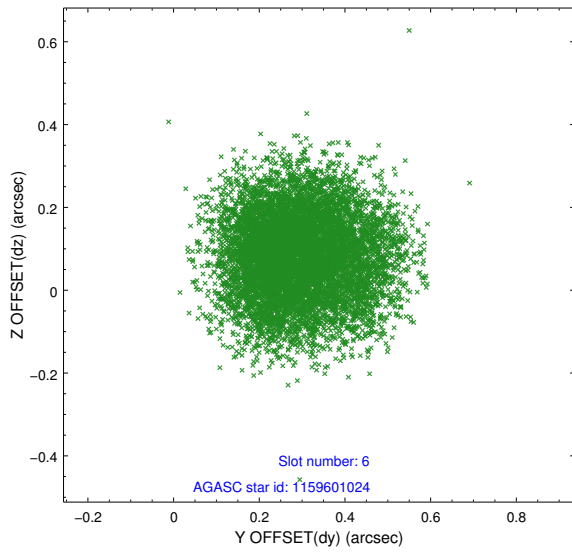
2.4.3 Slot 5



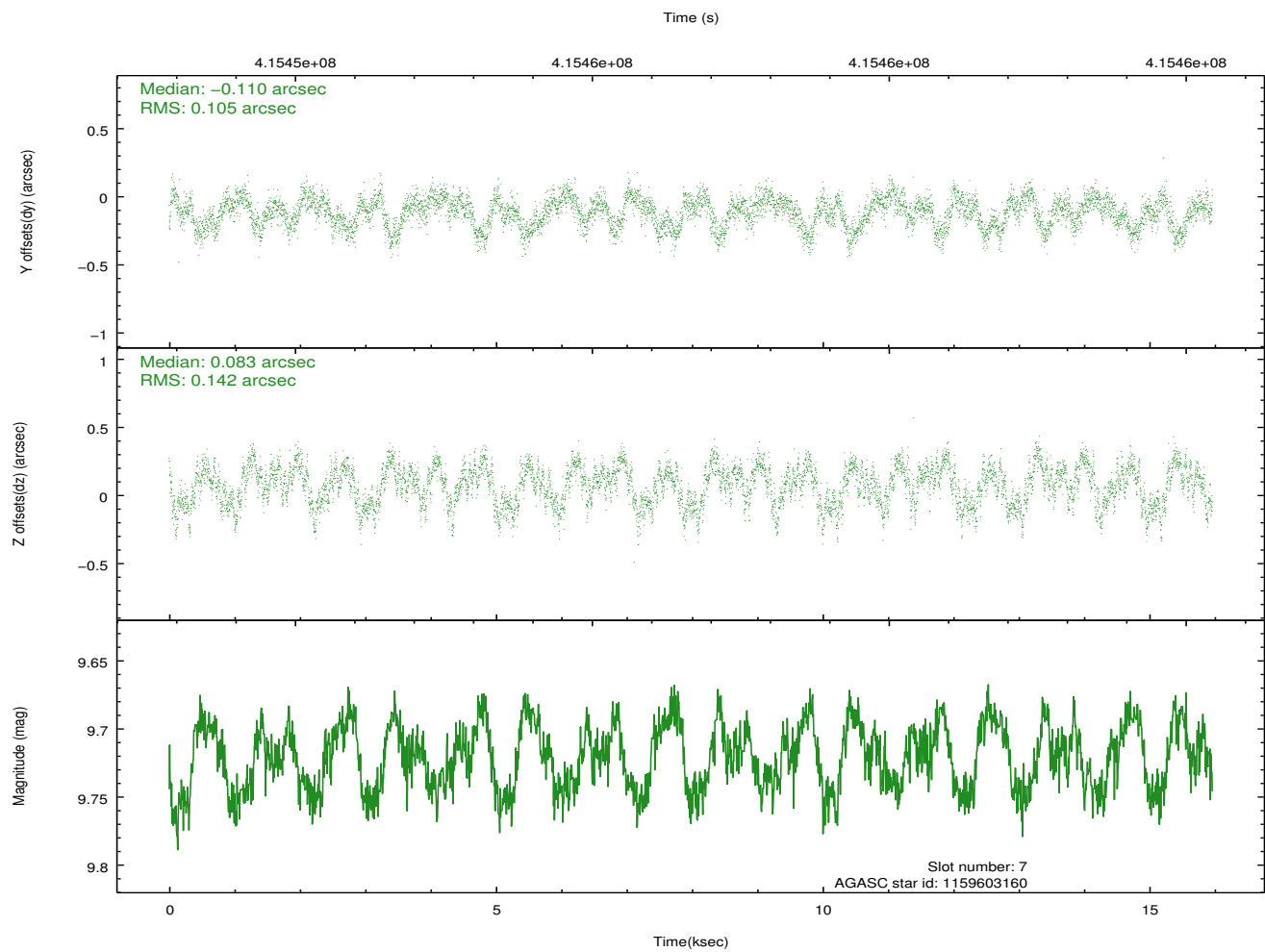
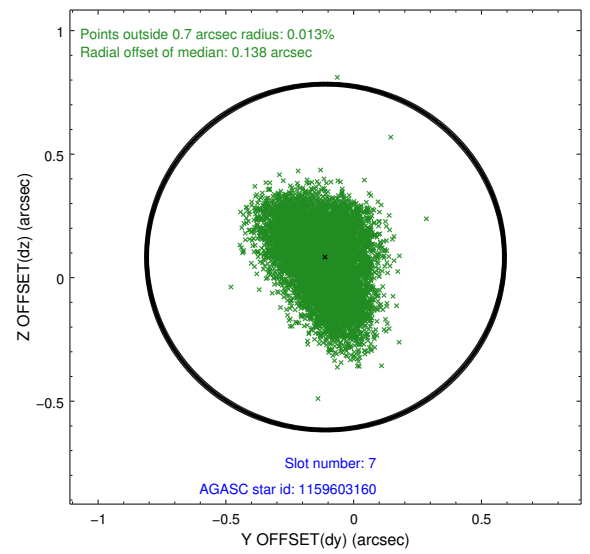
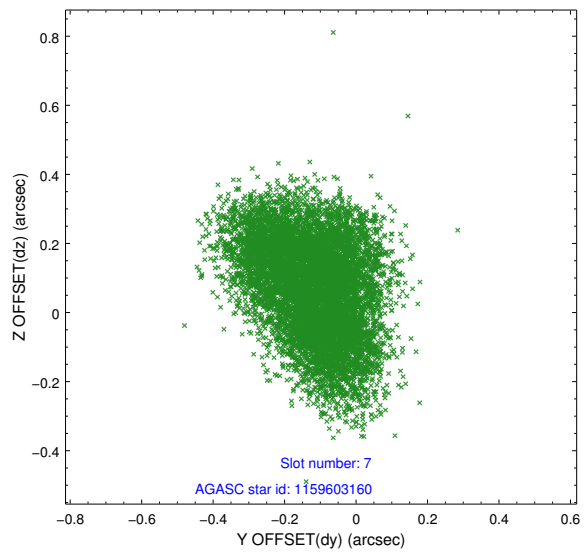
Time (s)



2.4.4 Slot 6

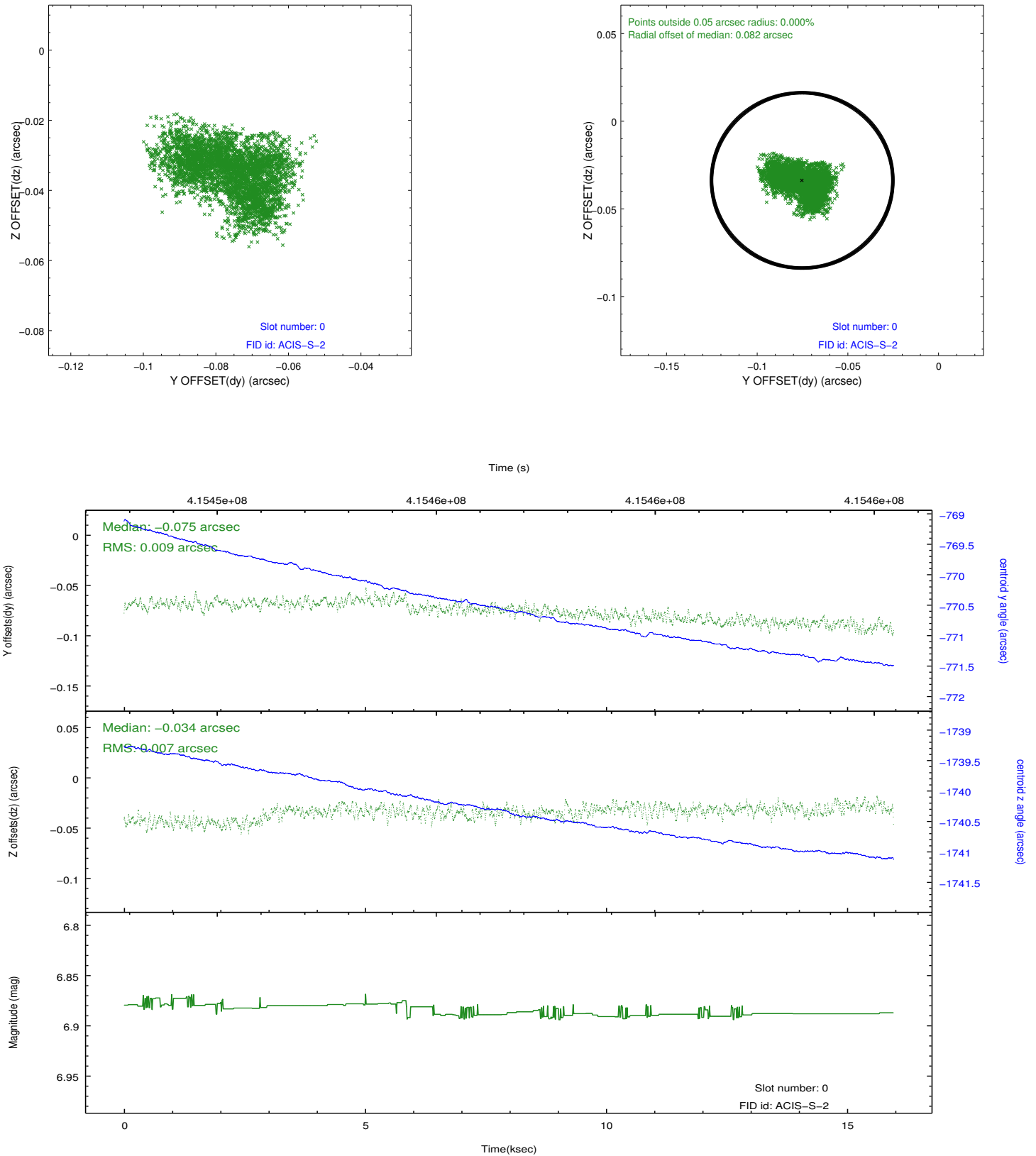


2.4.5 Slot 7

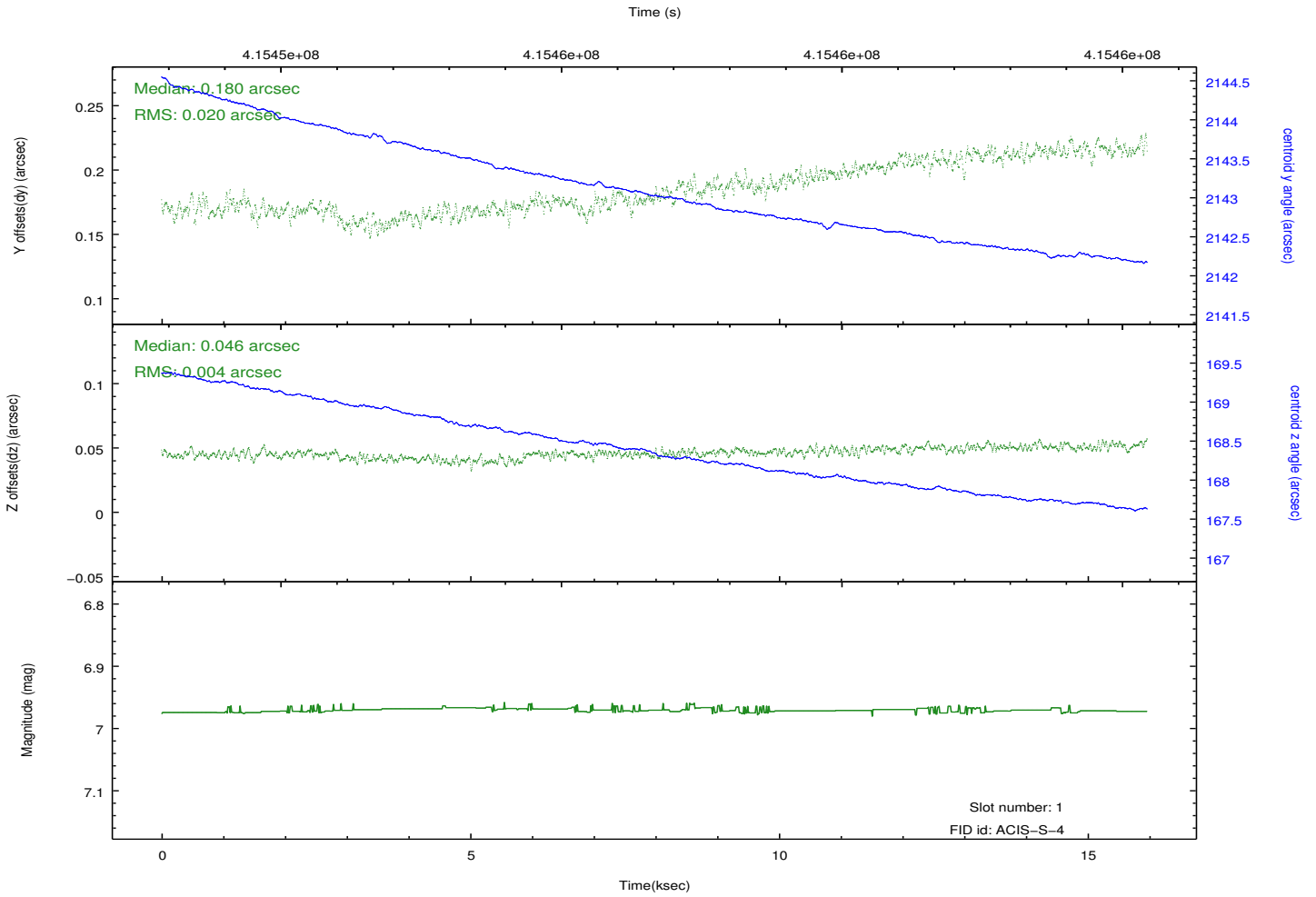
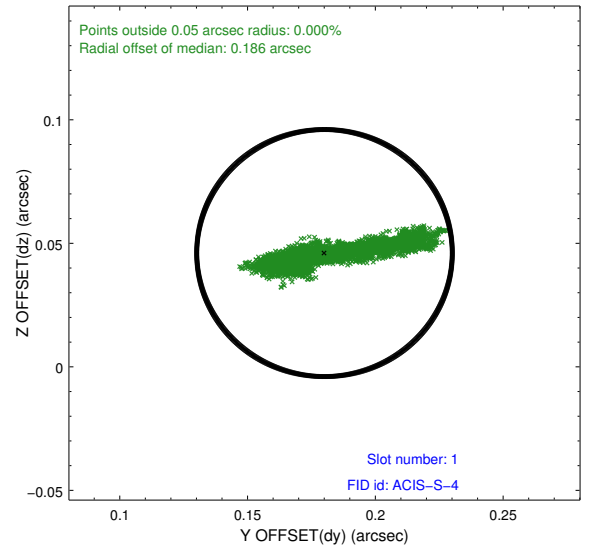
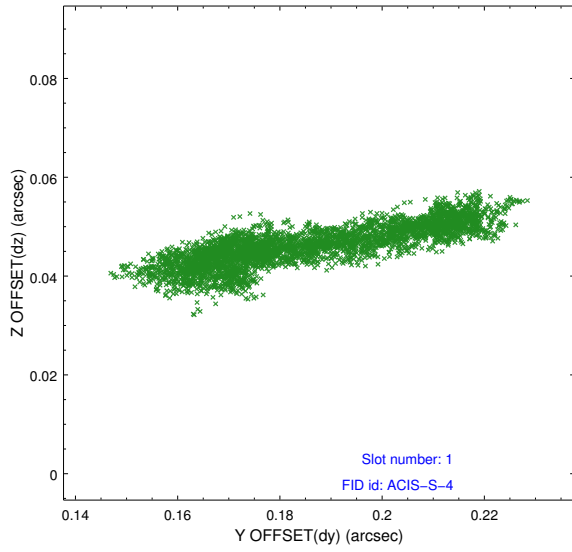


2.5 FID Slots

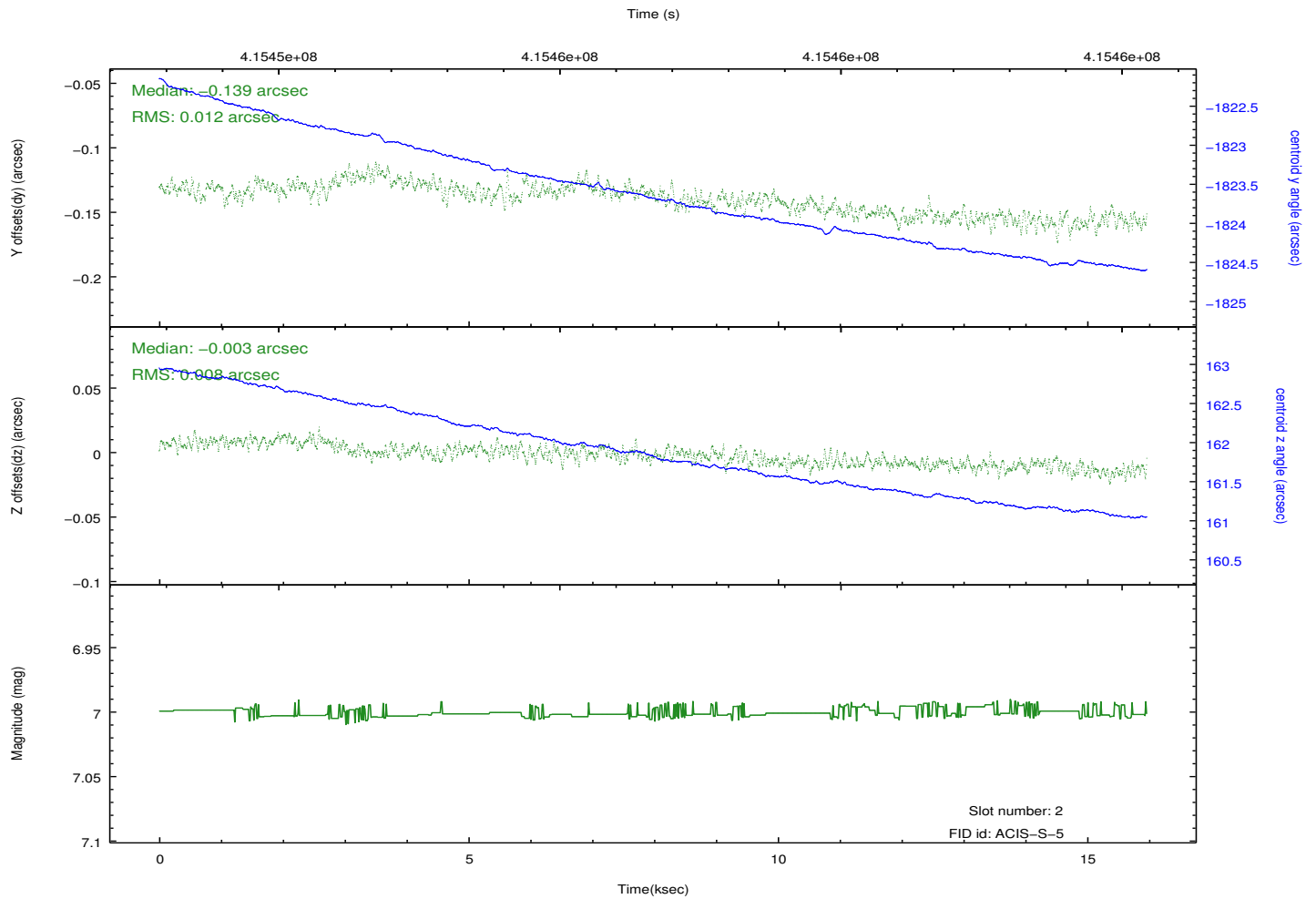
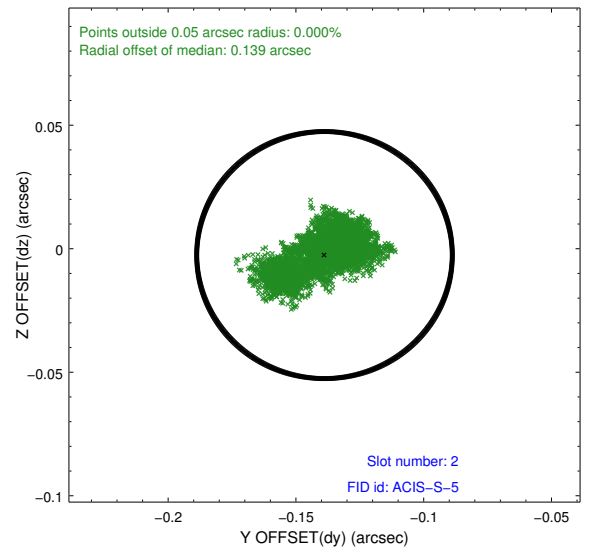
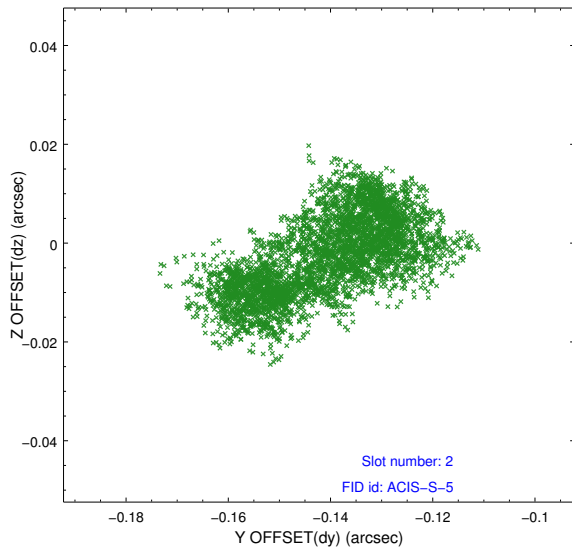
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.048886321962

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.