

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12492 - L2 Version 2
Chandra X-Ray Center

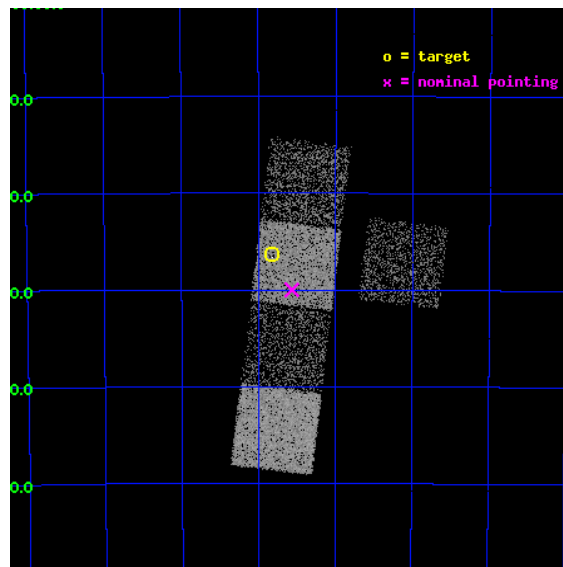
L2 Processing Date : Feb 4 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

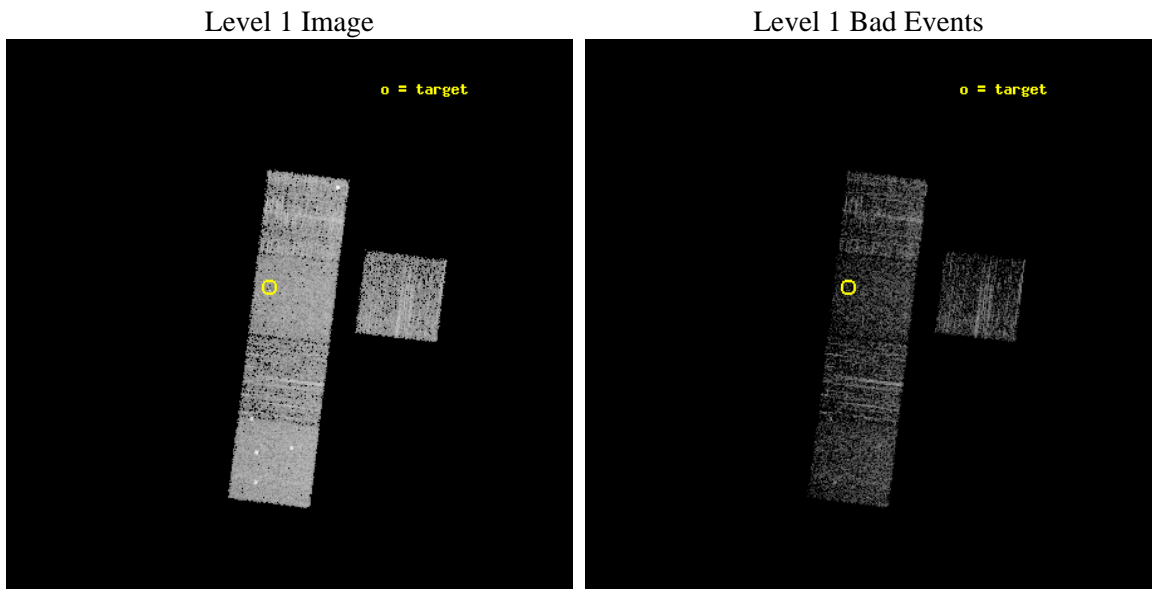
seq_num	401233	Sequence number
obs_id	12492	Observation id
title	The Nearest and Brightest Quiescent Low Mass X-ray Binaries	Propos
observer	Prof. Robert Rutledge	Principal investigator
object	1RXS J044549.6-572618	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	71.456667	Observer's specified target RA [deg]
dec_targ	-57.438333	Observer's specified target Dec [deg]
ra_nom	71.391432599812	Nominal RA [deg]
dec_nom	-57.499919045528	Nominal Dec [deg]
roll_nom	276.95629039818	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2337.4000179768	Sum of GTIs [s]
liveltime	2306.860165973	Livetime [s]
ontime3	2337.3916520476	Sum of GTIs [s]
ontime5	2337.4000179768	Sum of GTIs [s]
ontime6	2337.4000179768	Sum of GTIs [s]
ontime7	2337.4000179768	Sum of GTIs [s]
ontime8	2337.3506120443	Sum of GTIs [s]
l2events	26472	Number of level 2 events



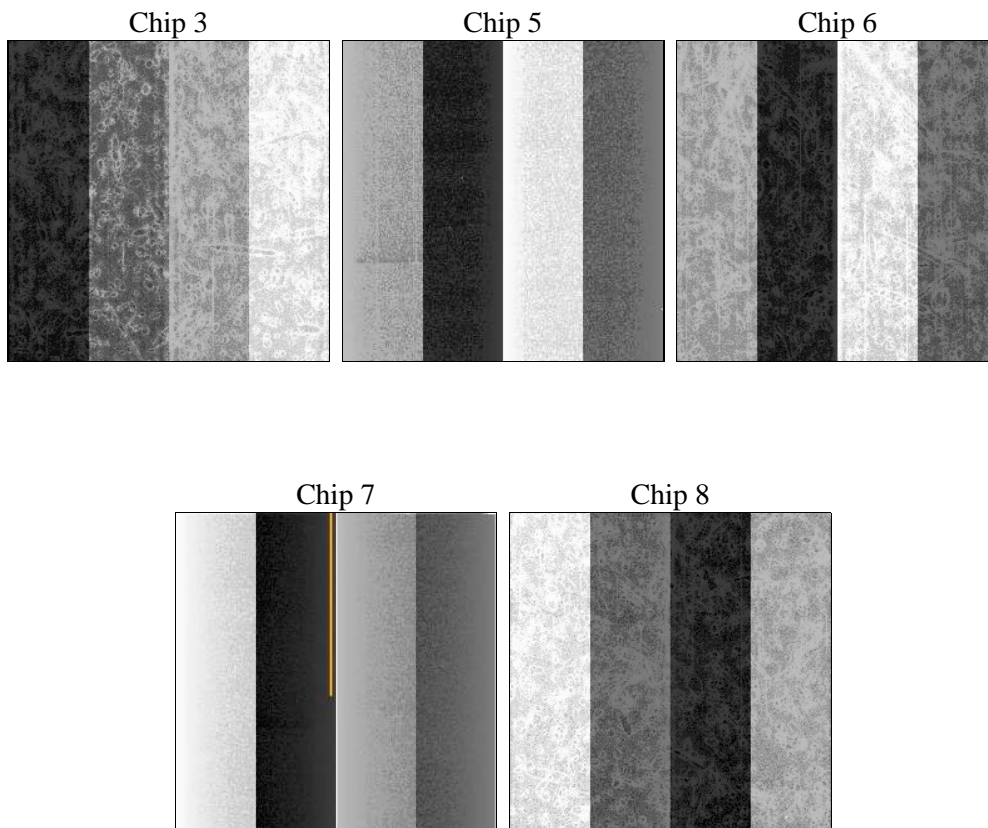
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2300.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	2337.4000179768	Sum of GTIs [s]
caldbver	4.4.7	 	ontime3	2337.3916520476	Sum of GTIs [s]
date	2012-02-04T19:53:06	Date and time of file creation	ontime5	2337.4000179768	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	2337.4000179768	Sum of GTIs [s]
			ontime7	2337.4000179768	Sum of GTIs [s]
			ontime8	2337.3506120443	Sum of GTIs [s]
			l1events	103714	Number of level 1 events

2.1.4 Events

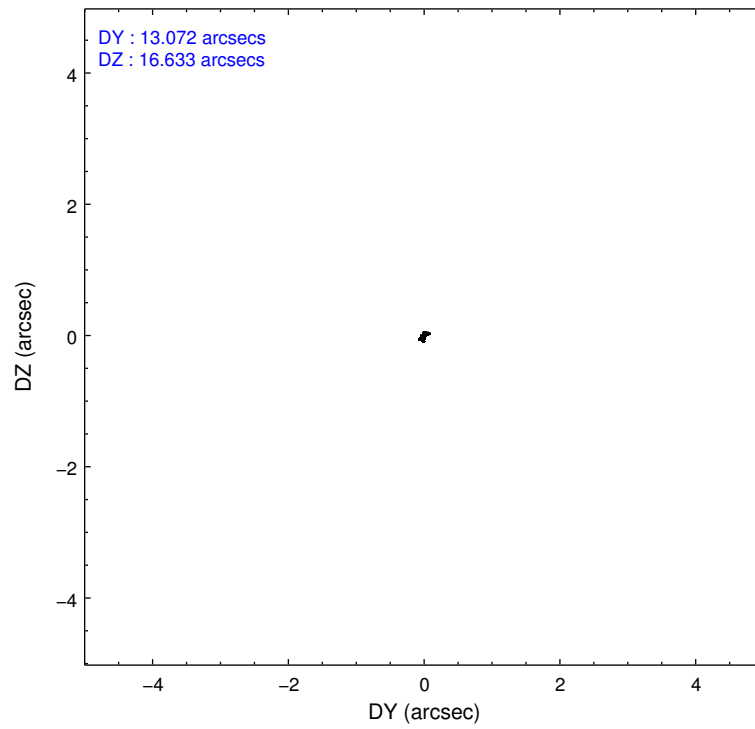
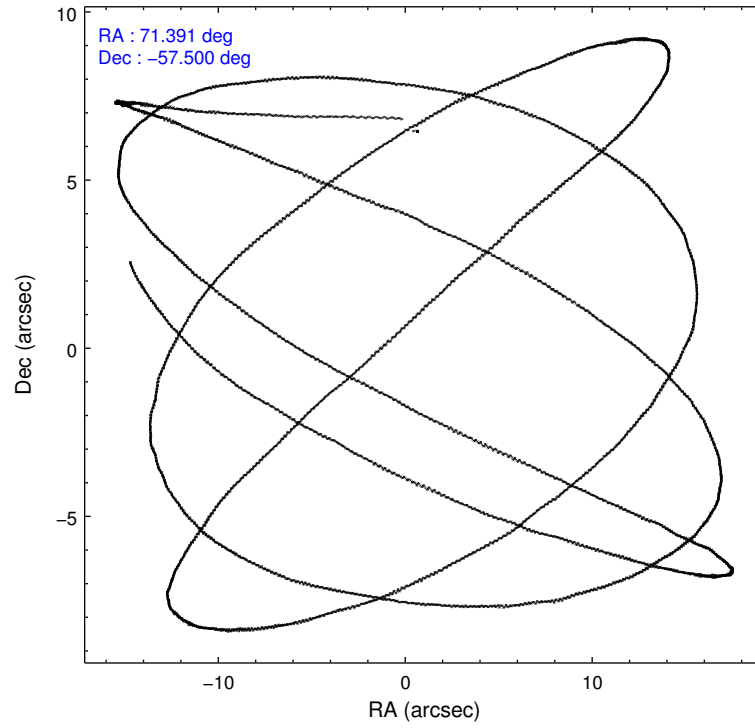
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	15505	27204	16283	21070	23652
rejected events	13792	13425	14442	11658	16440
rejected %	88%	49%	88%	55%	69%

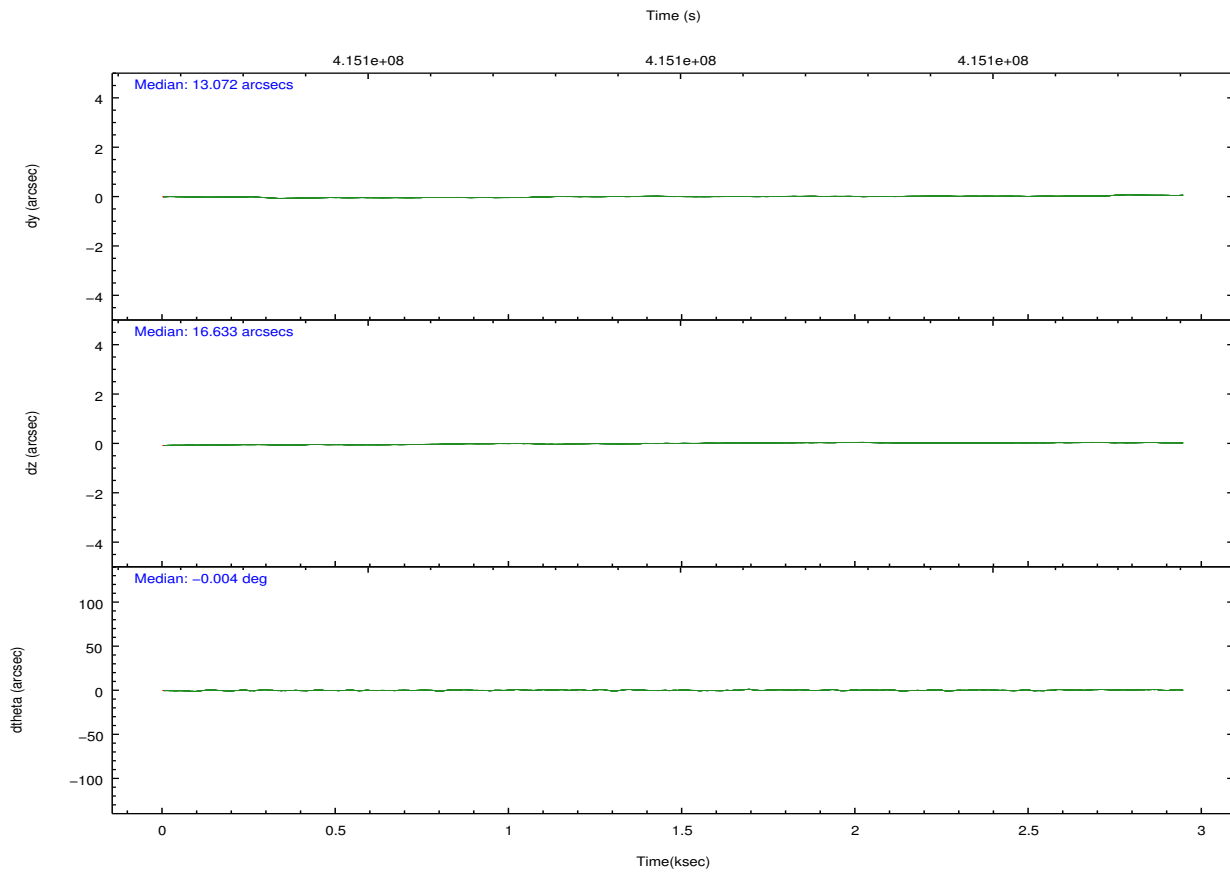
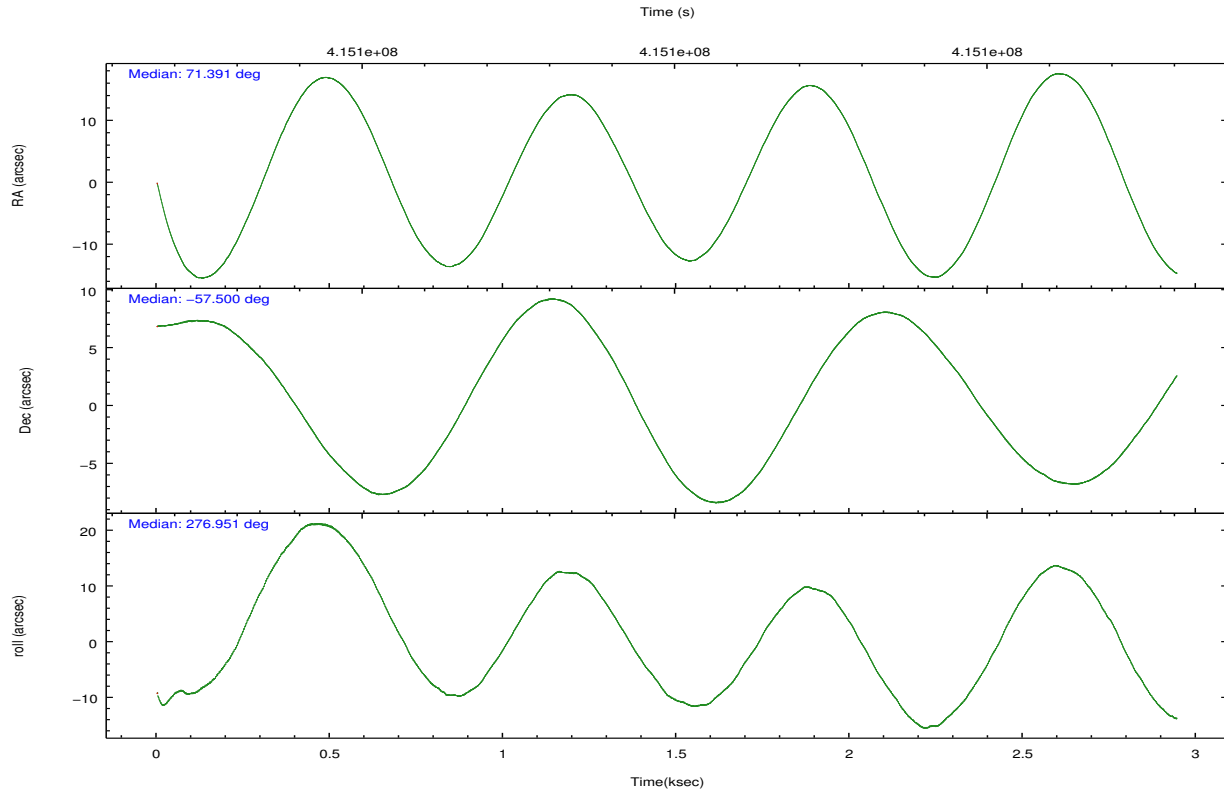
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	604	2020	620	954	2644
	3%	7%	3%	4%	11%
grade 1 events	7	98	8	23	25
	0%	0%	0%	0%	0%
grade 2 events	363	3972	429	1914	1538
	2%	14%	2%	9%	6%
grade 3 events	212	480	186	838	686
	1%	1%	1%	3%	2%
grade 4 events	194	493	227	826	669
	1%	1%	1%	3%	2%
grade 5 events	699	2000	772	2218	1128
	4%	7%	4%	10%	4%
grade 6 events	346	6842	383	4912	1691
	2%	25%	2%	23%	7%
grade 7 events	13080	11299	13658	9385	15271
	84%	41%	83%	44%	64%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	71.360372	71.39143259981179	CCD I2 on	N	N
[deg] Pointing Dec	-57.478253	-57.49991904552775	CCD I3 on	O1	Y
[deg] Pointing Roll	276.773525	276.9562903981821	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	Y	Y
[s] Observation start time (MET)	415102151.184000	415100994.81216	CCD S5 on	N	N
Observation start date	2011-02-26T10:08:05	2011-02-26T09:49:54	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	415104451.184000	415104890.83736	On-chip summing requested	N	N
Observation end date	2011-02-26T10:46:25	2011-02-26T10:54:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



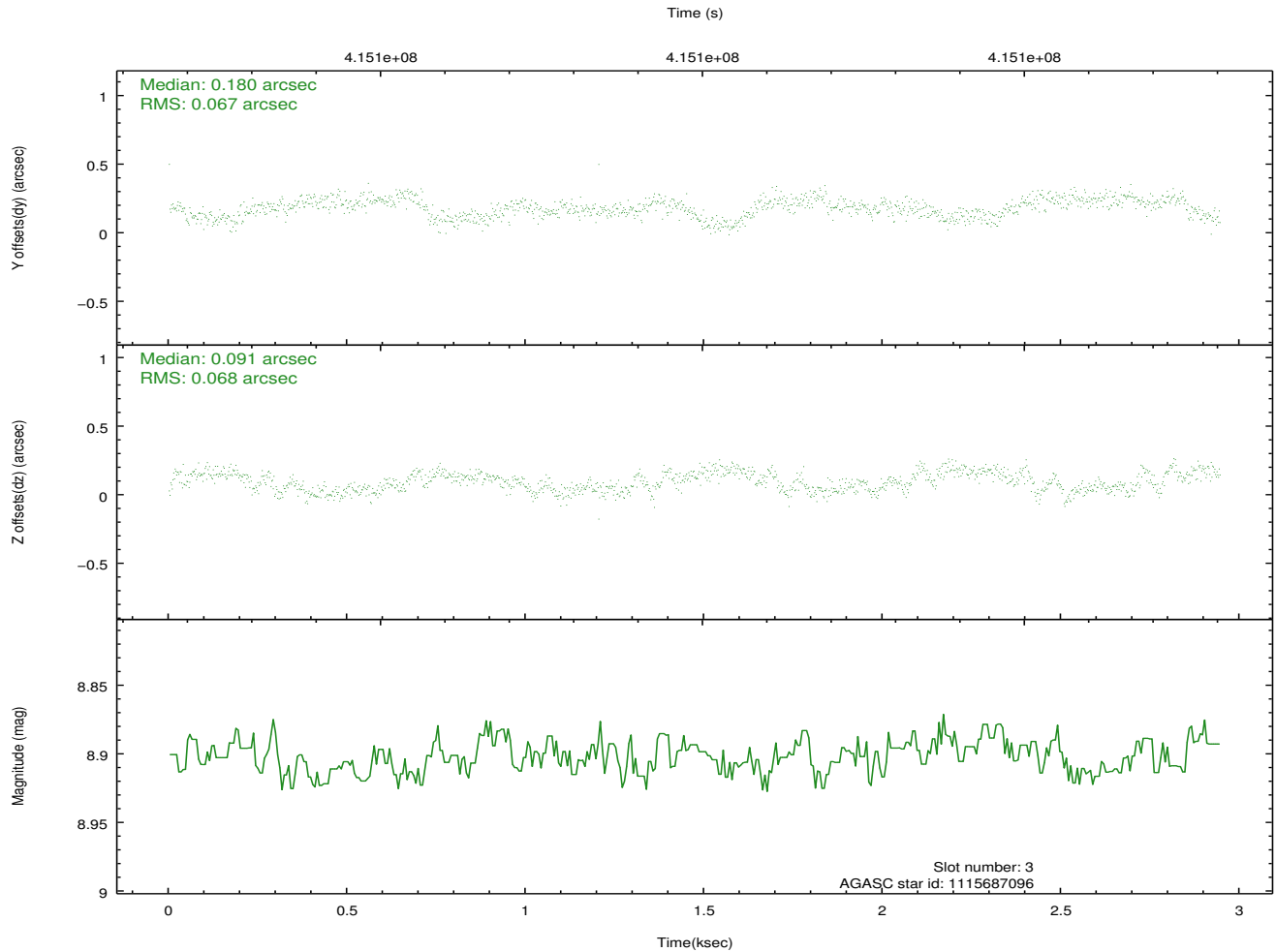
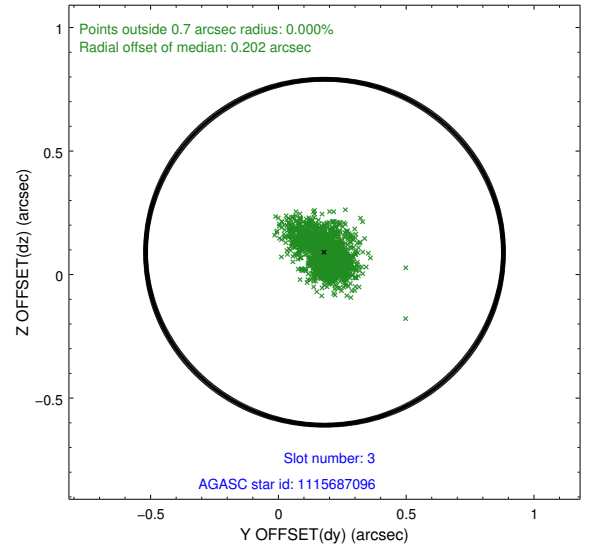
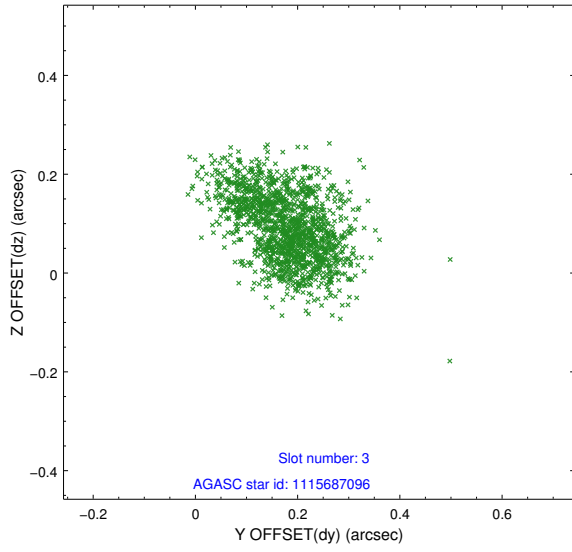


Slot Statistics

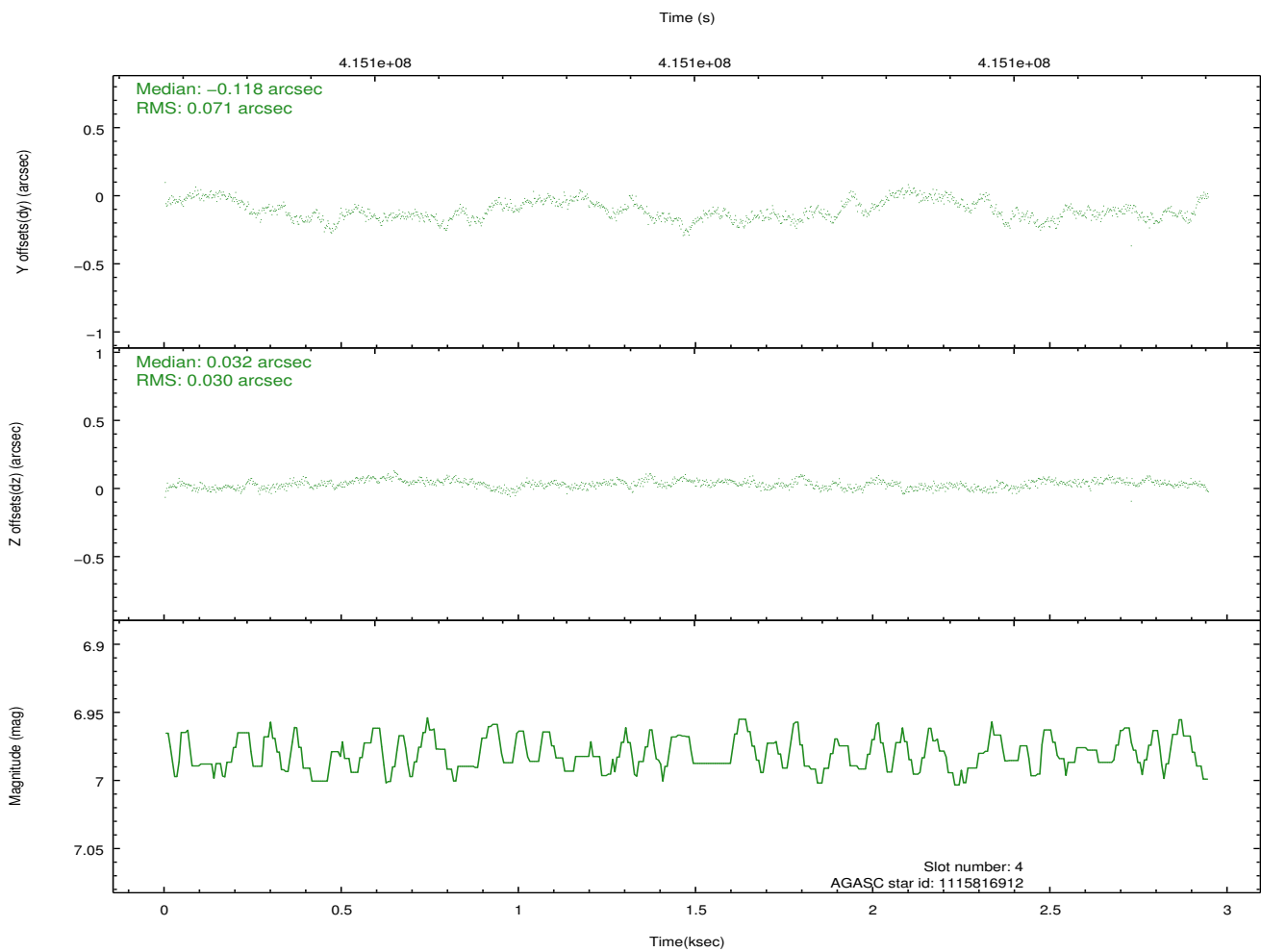
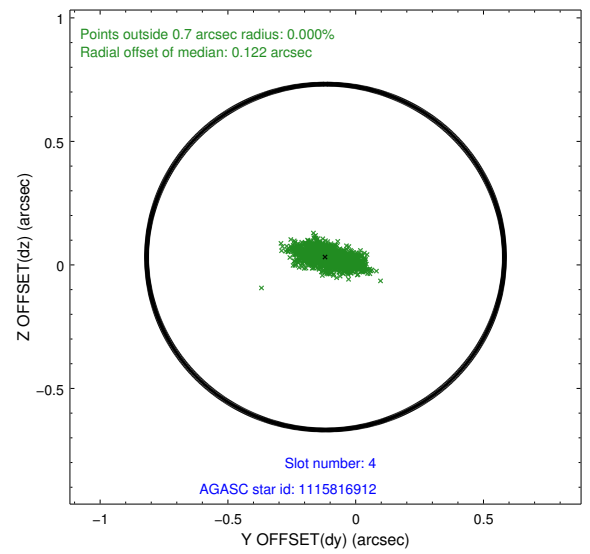
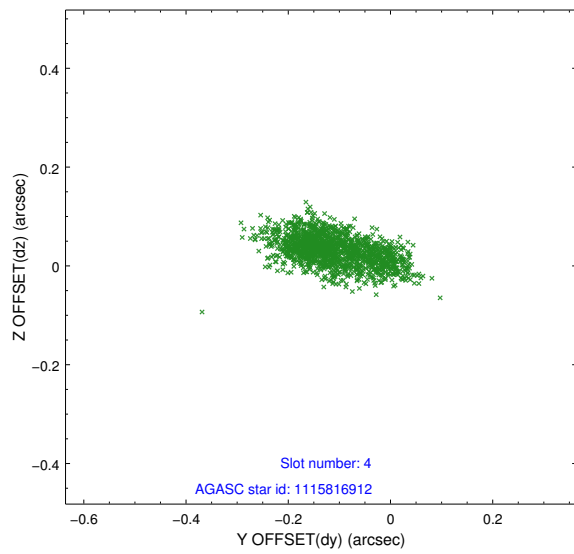
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	719	-0.022	-0.014	0.009	0.016	0.000000	0.000000	-766.01	-1738.01
1	FID	ACIS-S-4	6.99	719	0.137	0.015	0.010	0.018	0.000000	0.000000	2146.44	168.24
2	FID	ACIS-S-5	7.02	719	-0.145	0.007	0.009	0.018	0.000000	0.000000	-1816.18	164.38
3	GUIDE	1115687096	8.90	1436	0.180	0.091	0.102	0.162	70.846818	-57.092589	-1493.12	-833.71
4	GUIDE	1115816912	6.98	1437	-0.118	0.032	0.080	0.139	72.048038	-56.817283	-2197.49	1625.16
5	GUIDE	1115818408	8.83	1437	0.001	-0.079	0.102	0.162	72.332654	-57.100617	-1114.20	2047.92
6	GUIDE	1116209408	9.68	1437	-0.108	0.012	0.103	0.168	71.132876	-57.576712	300.23	-475.97
7	GUIDE	1116210520	9.48	1433	0.042	-0.056	0.135	0.239	71.862089	-58.077153	2257.39	693.92

2.4 Star Slots

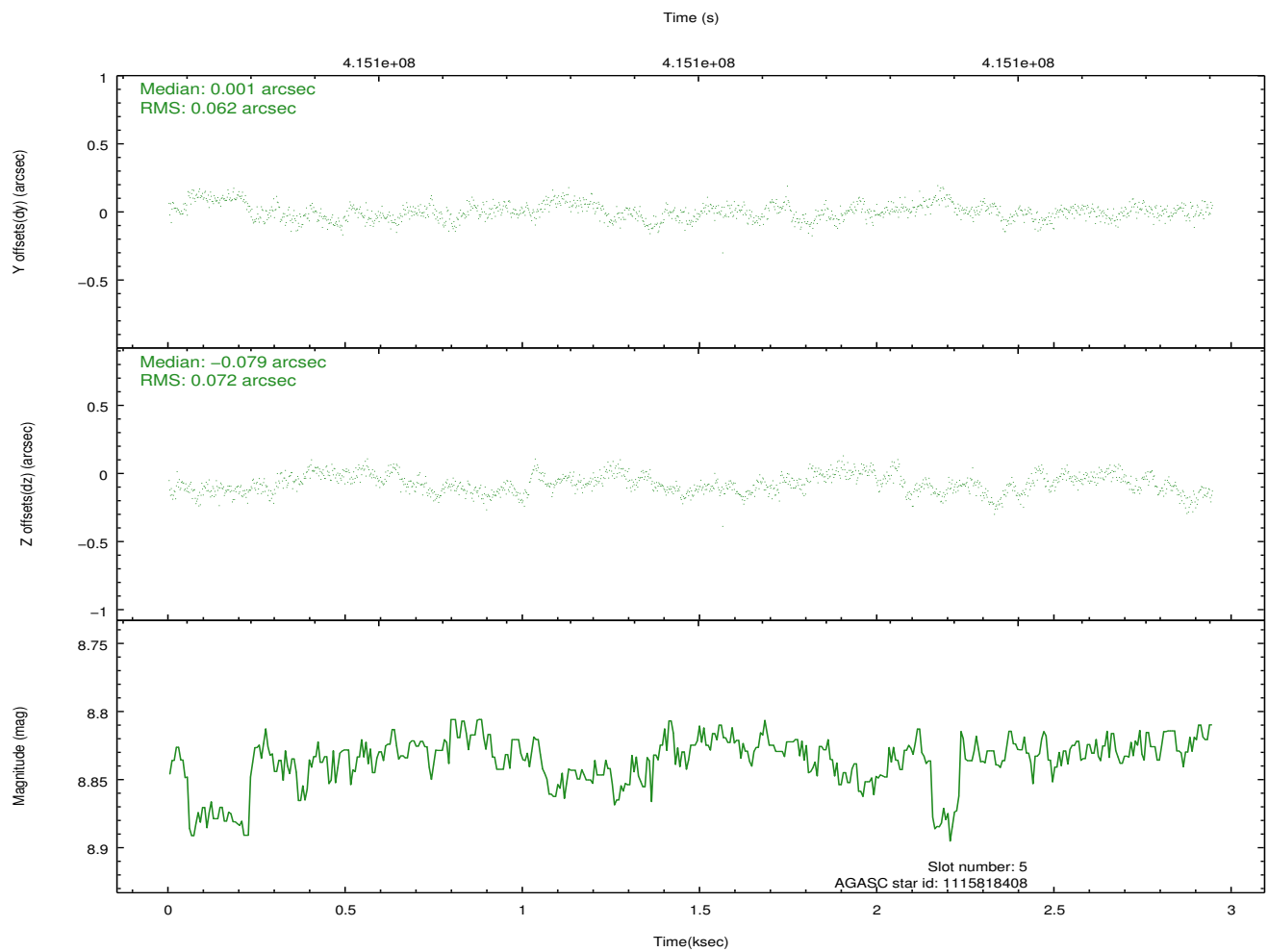
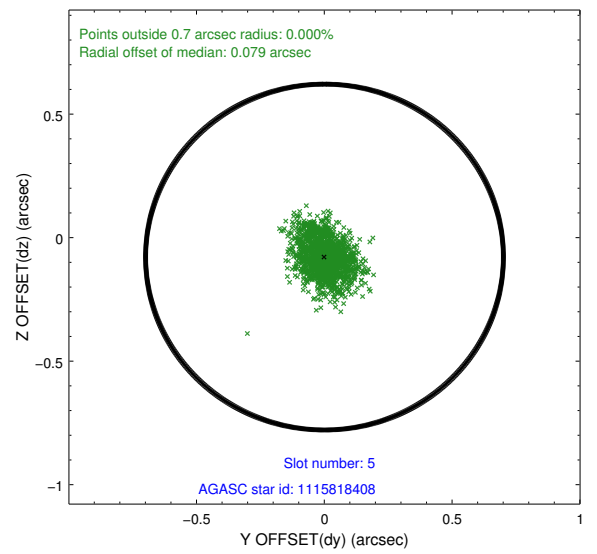
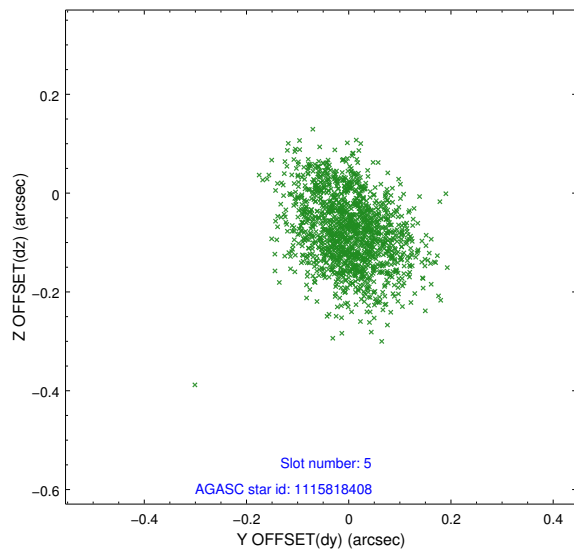
2.4.1 Slot 3



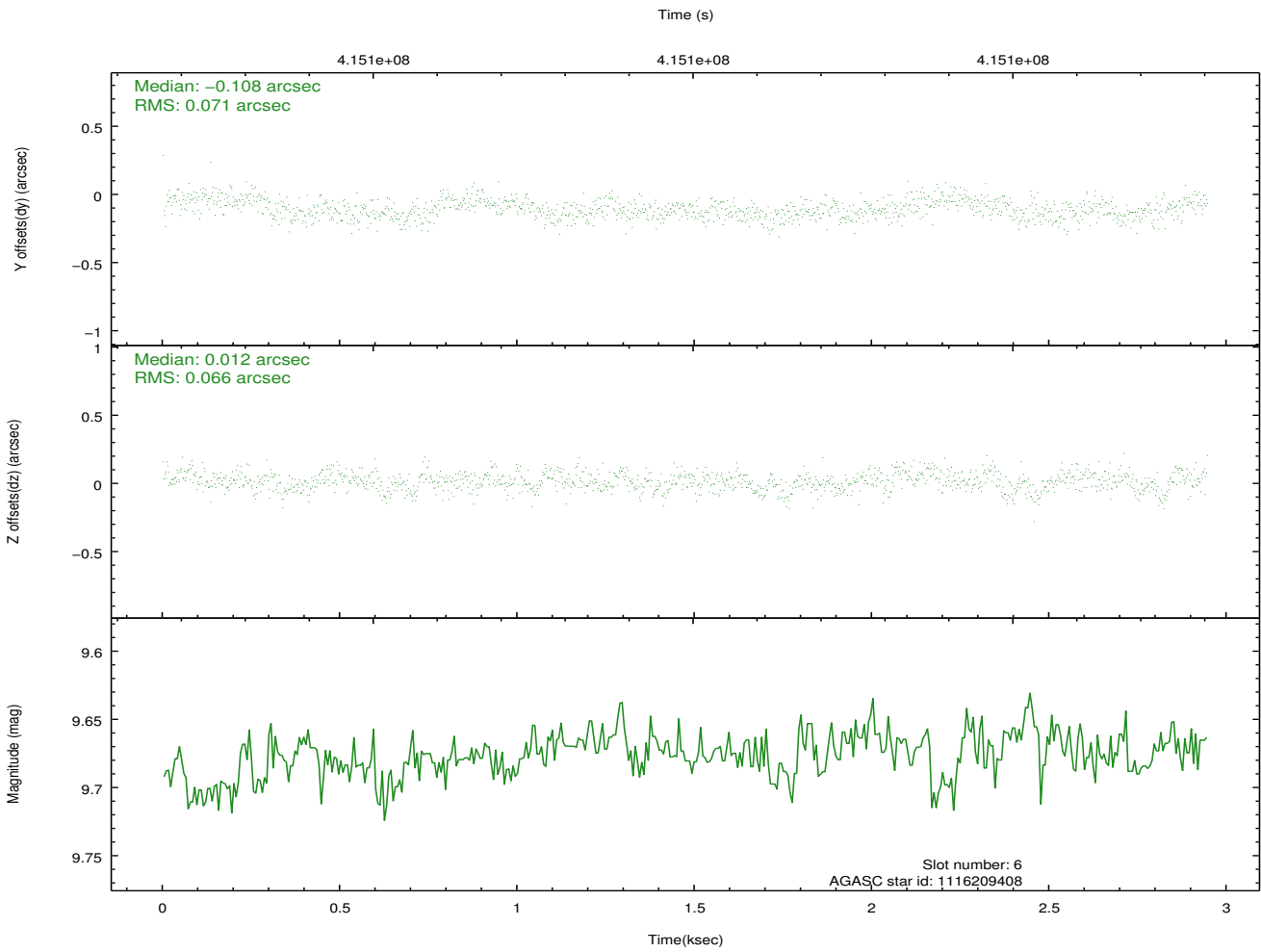
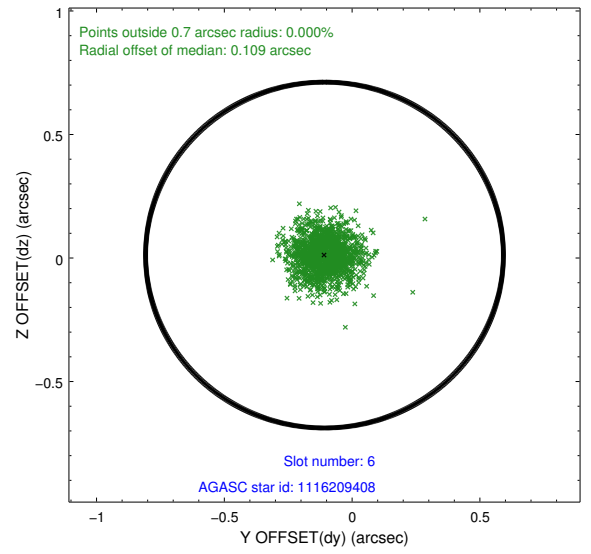
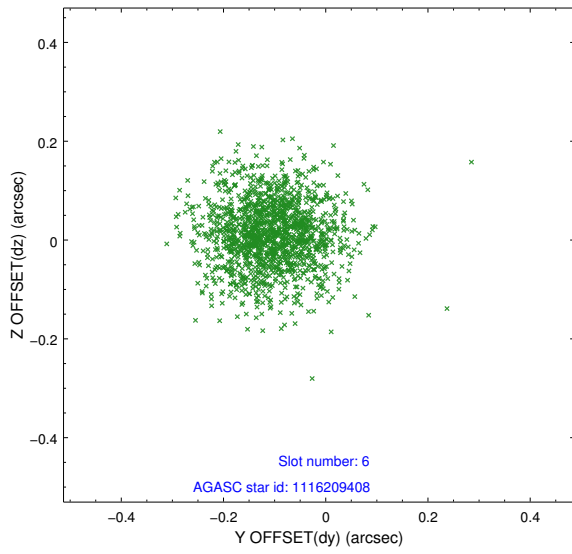
2.4.2 Slot 4



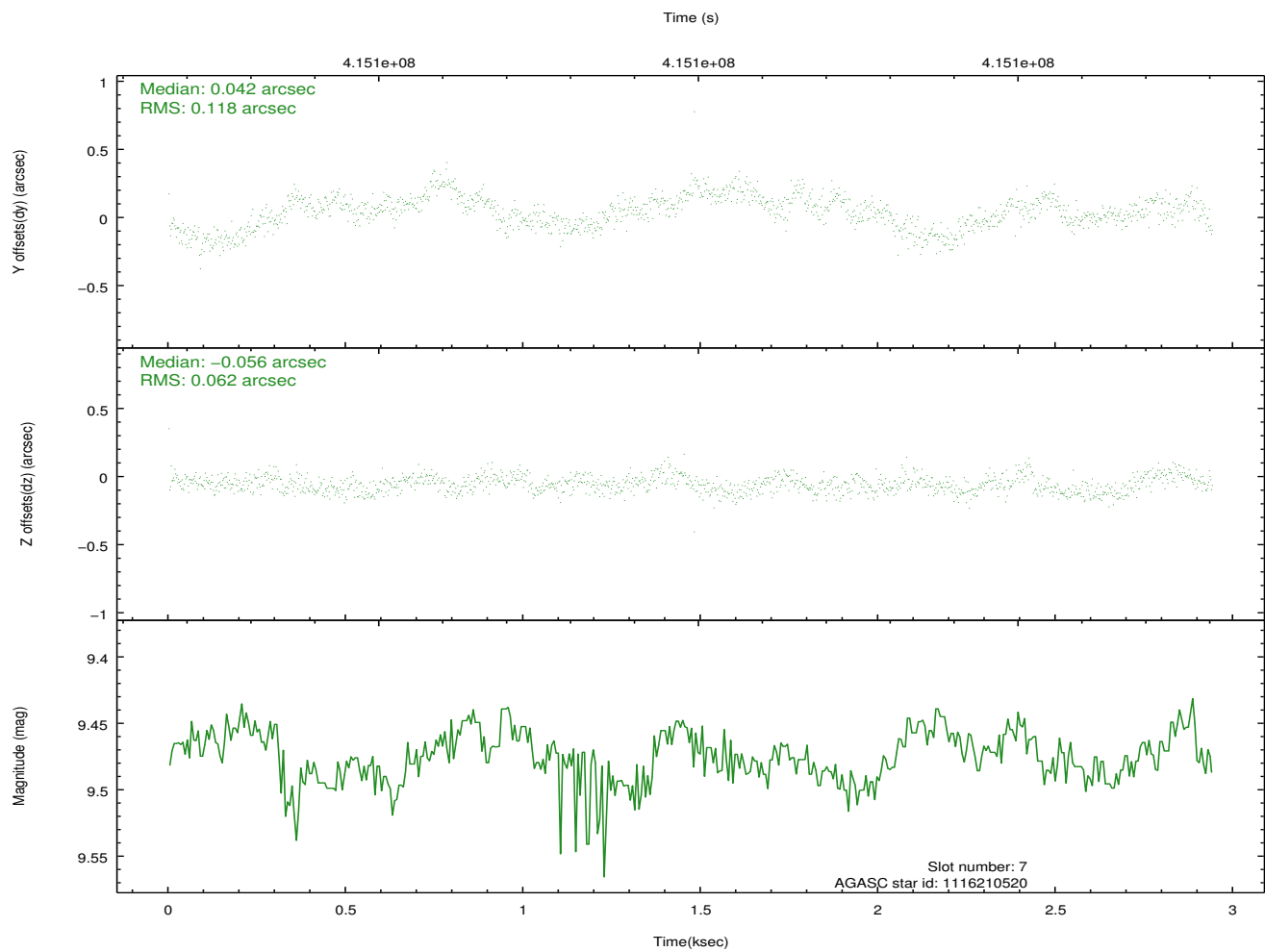
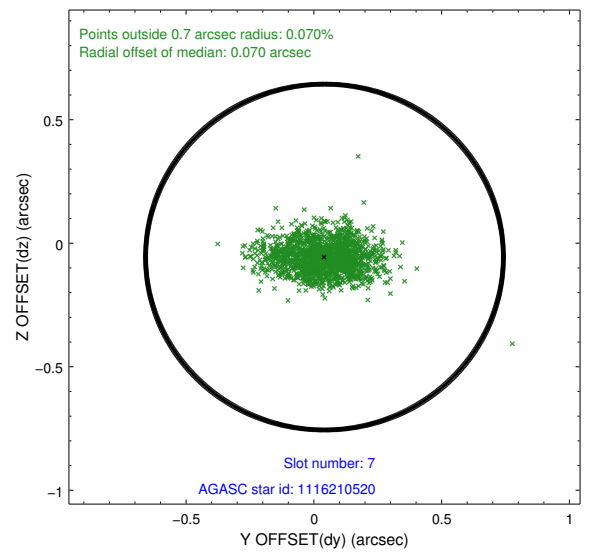
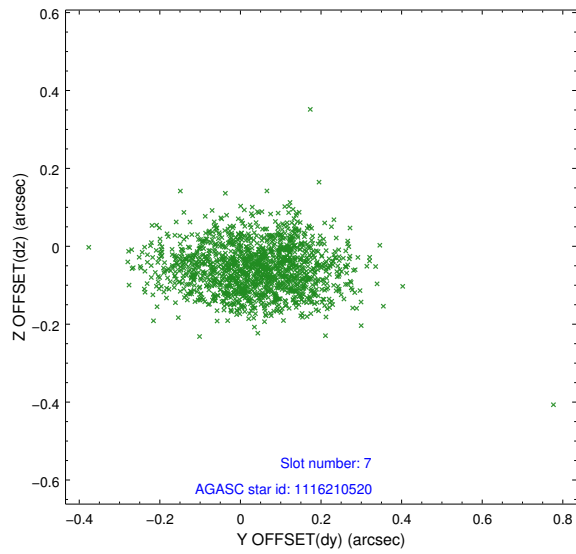
2.4.3 Slot 5



2.4.4 Slot 6

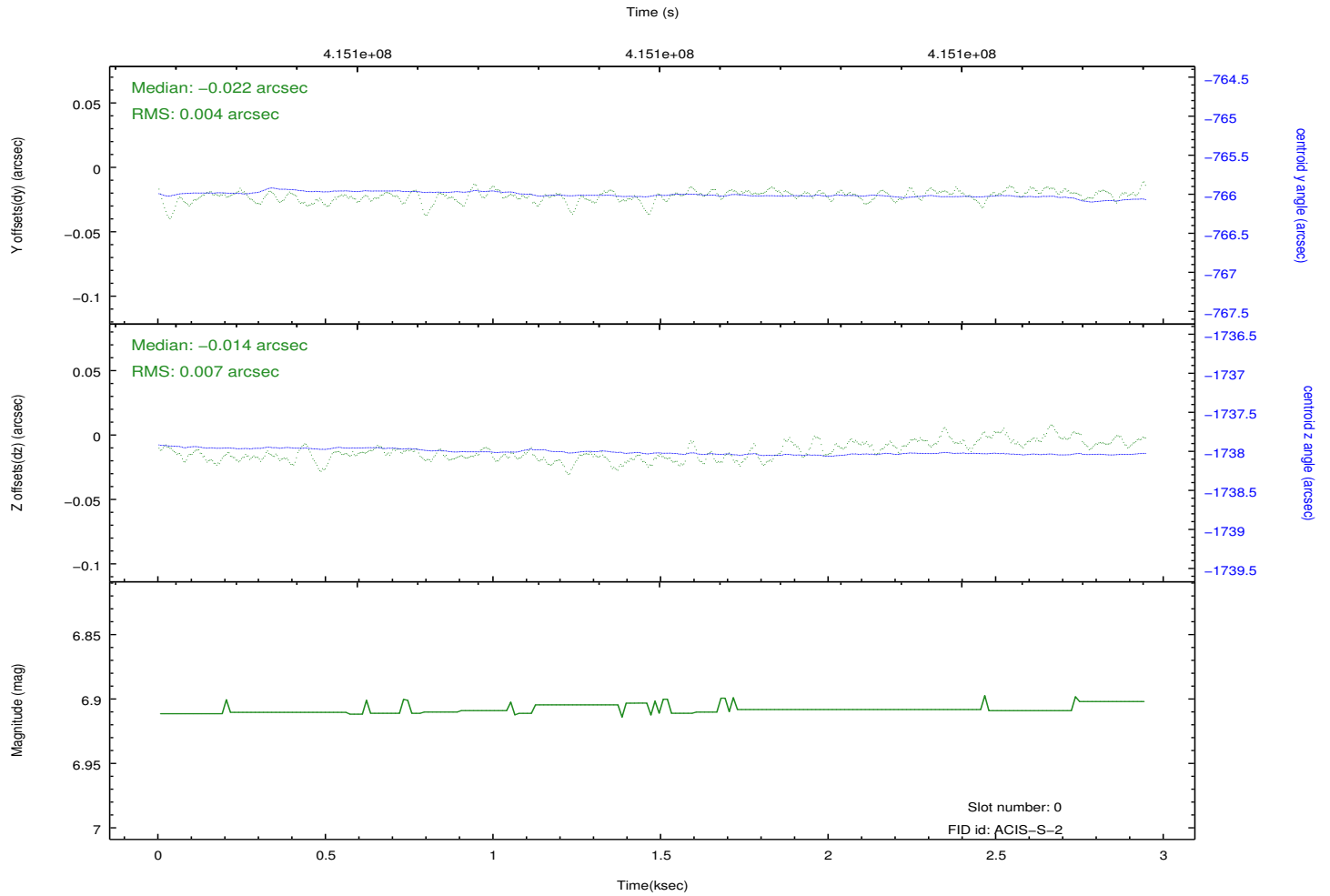
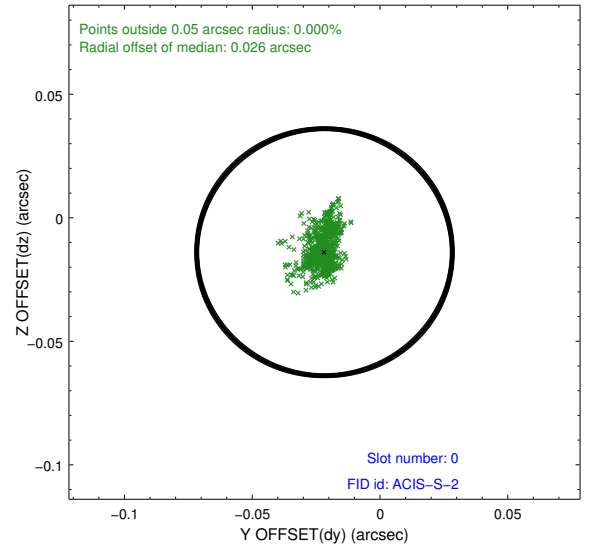
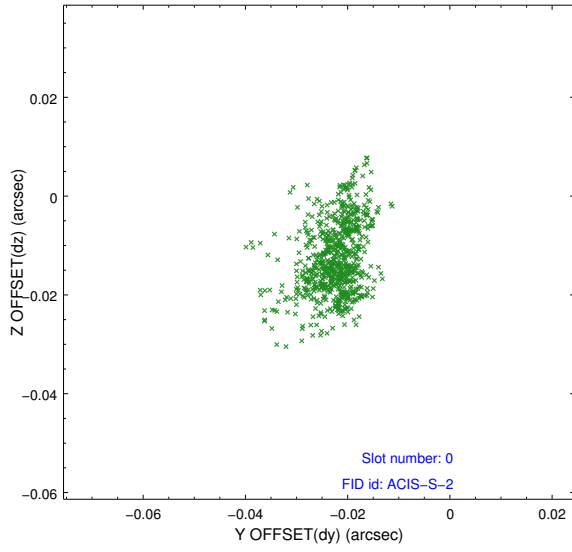


2.4.5 Slot 7

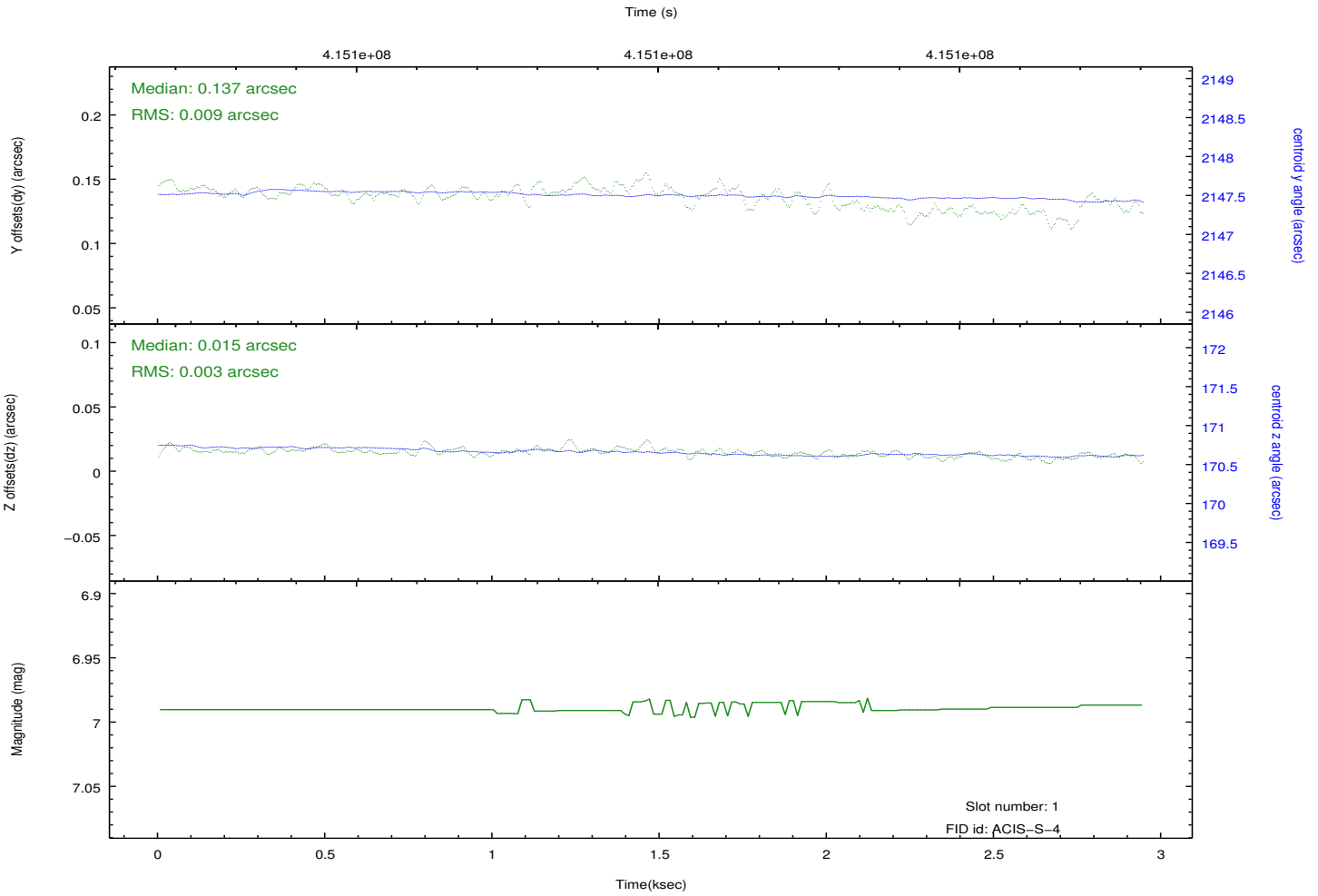
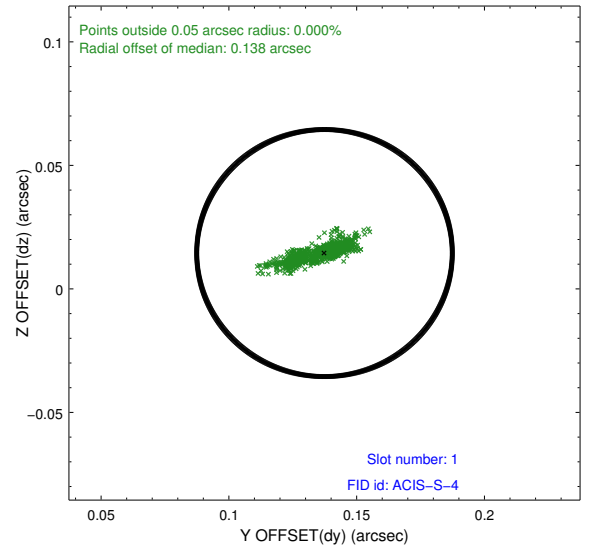
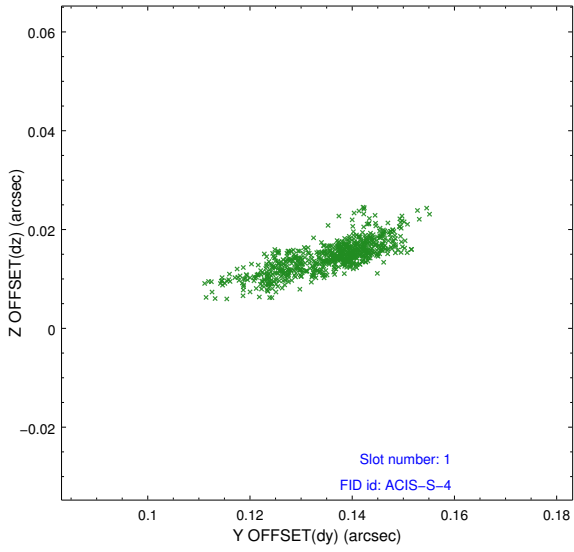


2.5 FID Slots

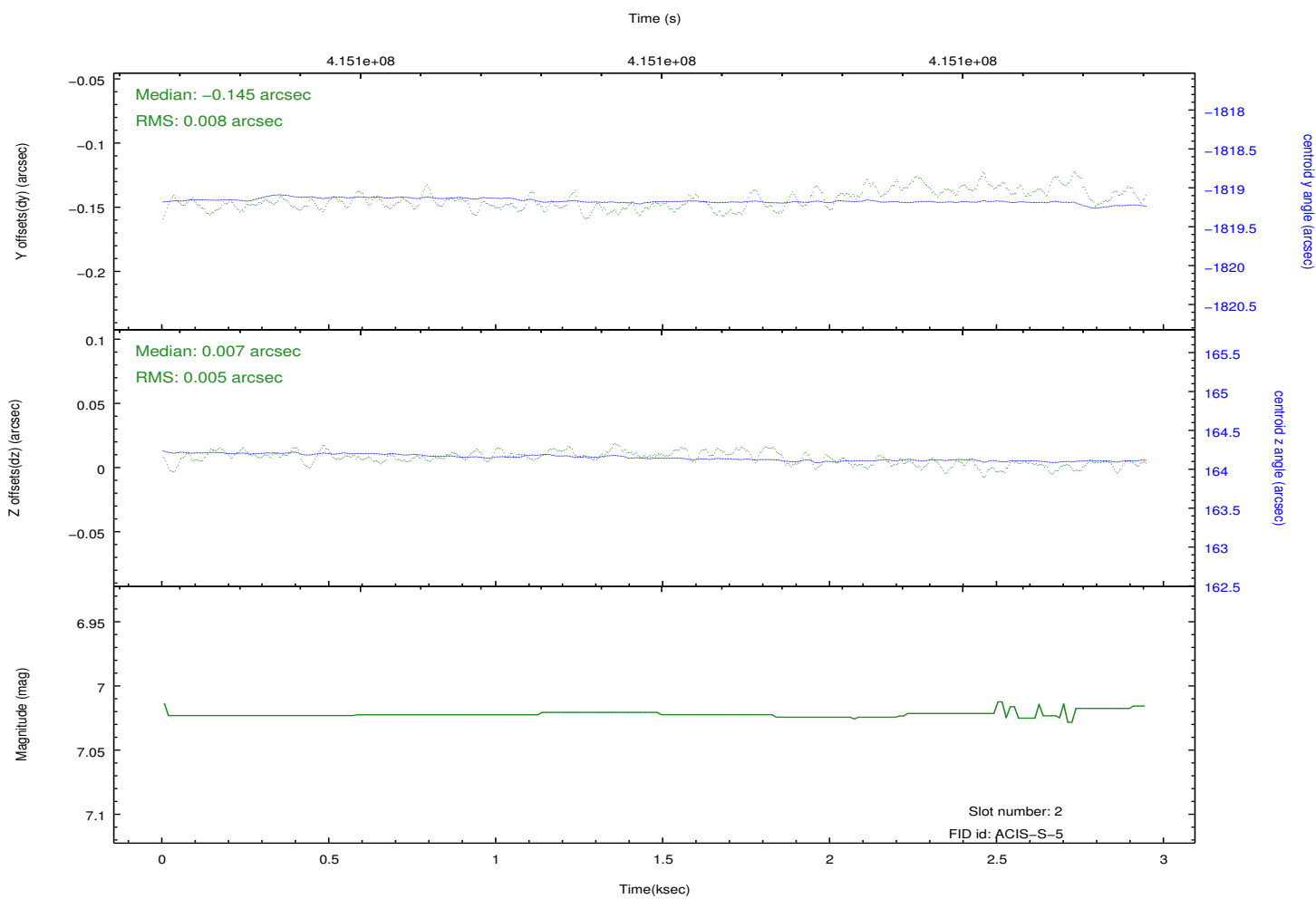
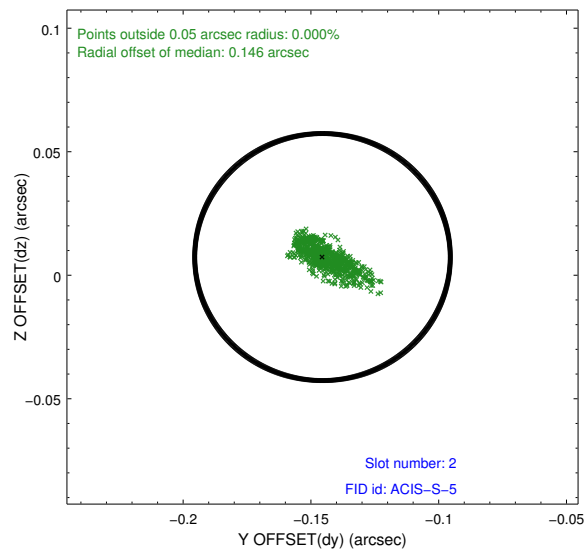
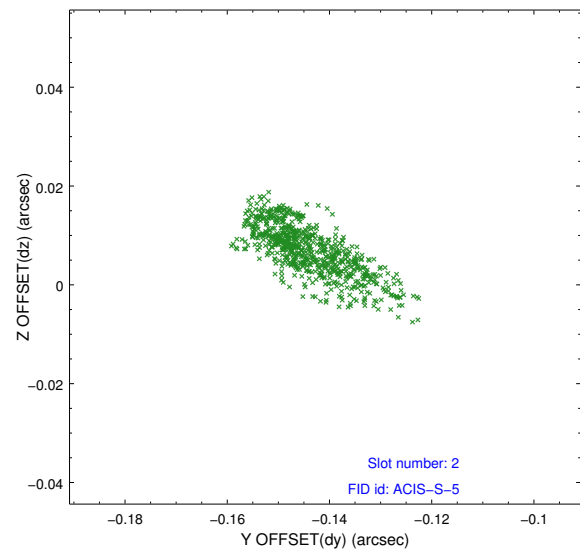
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.3374000179768

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.