

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 90 - L2 Version 4
Chandra X-Ray Center

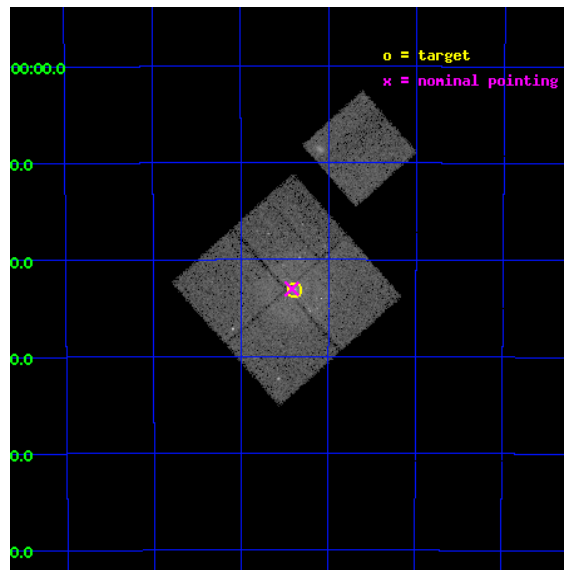
L2 Processing Date : Aug 25 2012

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1 Front

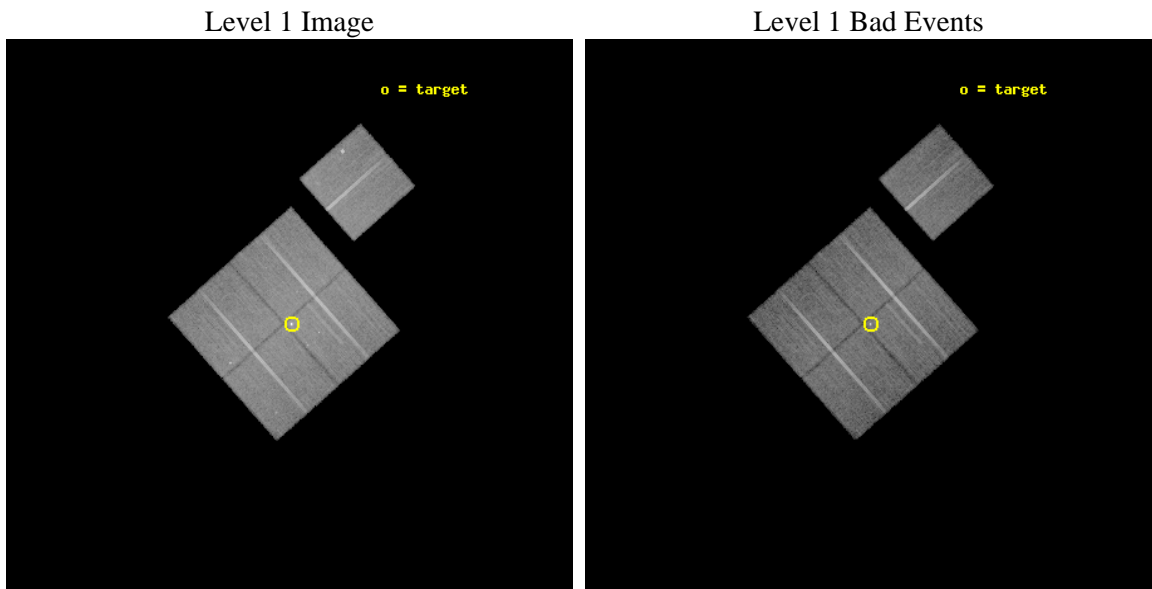
seq_num	400003	Sequence number
obs_id	90	Observation id
title	ECLIPSING BINARY X-RAY HALOS AND INTERSTELLAR GRAIN PROPERTIES	Pro
observer	Professor Gordon Garmire	Principal investigator
object	4U 1538-52	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	235.596667	Observer's specified target RA [deg]
dec_targ	-52.386111	Observer's specified target Dec [deg]
ra_nom	235.60410792396	Nominal RA [deg]
dec_nom	-52.38392820362	Nominal Dec [deg]
roll_nom	48.399513576546	Nominal Roll [deg]
revision	4	Processing version of data
ontime	24047.21158503	Sum of GTIs [s]
livetime	23742.711312448	Livetime [s]
ontime0	24047.088465035	Sum of GTIs [s]
ontime1	24047.129505023	Sum of GTIs [s]
ontime2	24047.170545027	Sum of GTIs [s]
ontime3	24047.21158503	Sum of GTIs [s]
ontime6	24047.047425032	Sum of GTIs [s]
l2events	95311	Number of level 2 events



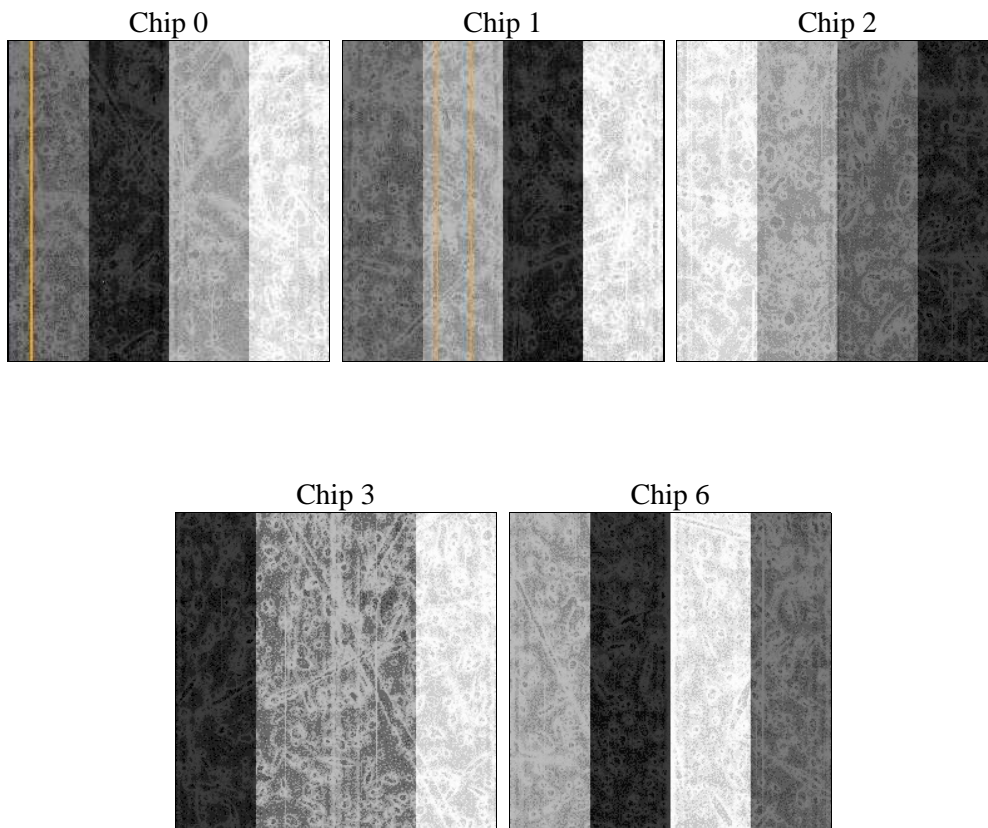
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	24047.21158503	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime0	24047.088465035	Sum of GTIs [s]
date	2012-08-25T15:45:33	Date and time of file creation	ontime1	24047.129505023	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	24047.170545027	Sum of GTIs [s]
			ontime3	24047.21158503	Sum of GTIs [s]
			ontime6	24047.047425032	Sum of GTIs [s]
			l1events	836258	Number of level 1 events

2.1.4 Events

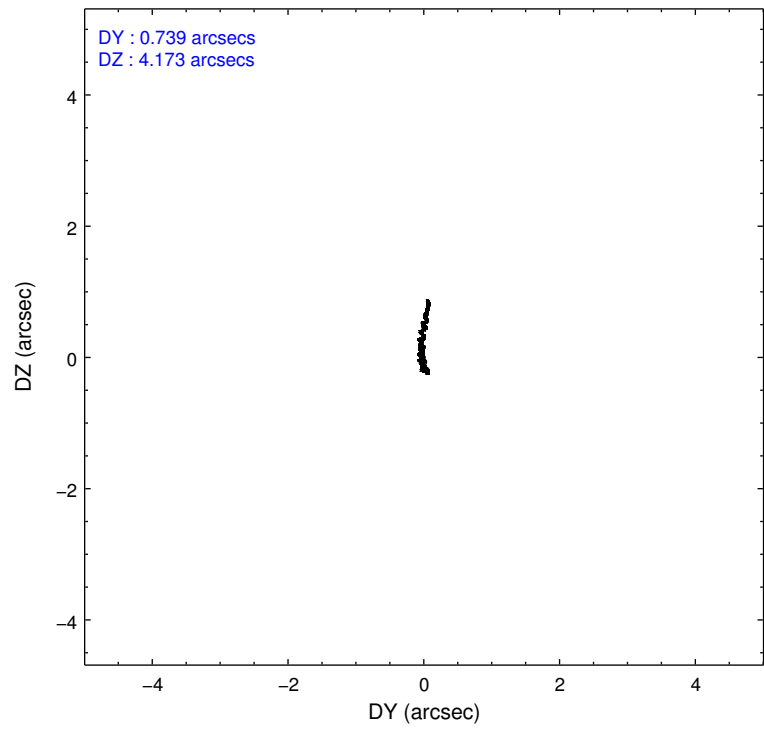
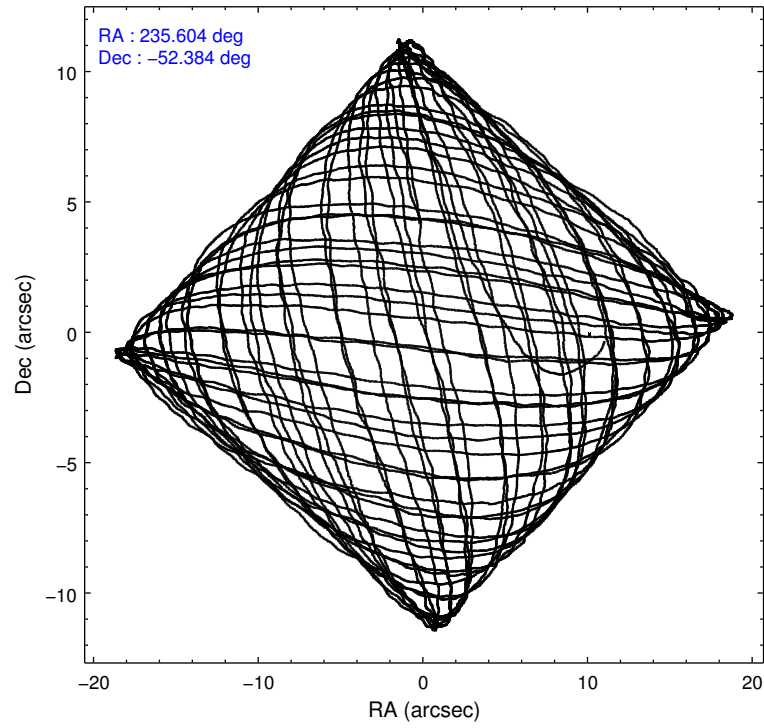
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	156336	154917	174405	180152	170448
rejected events	134829	132439	153667	152811	149915
rejected %	86%	85%	88%	84%	87%

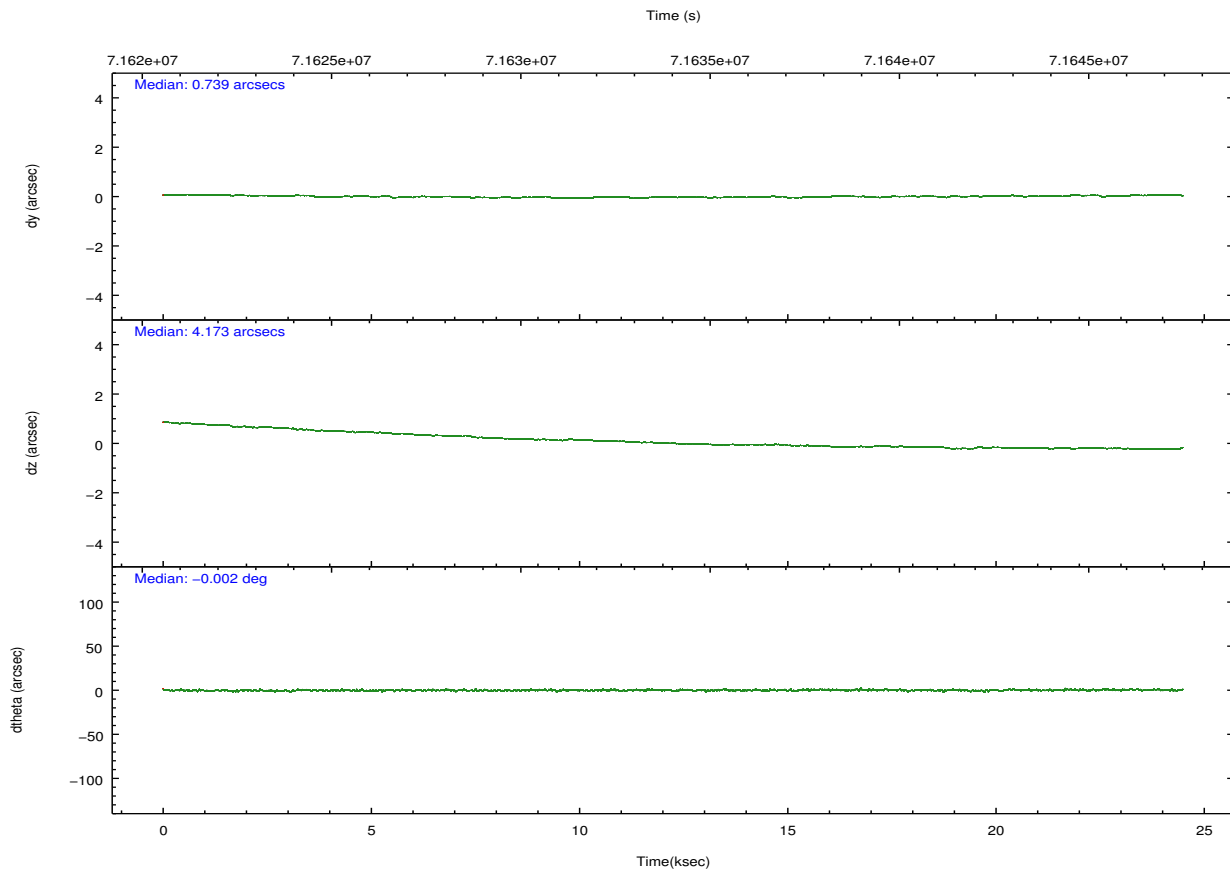
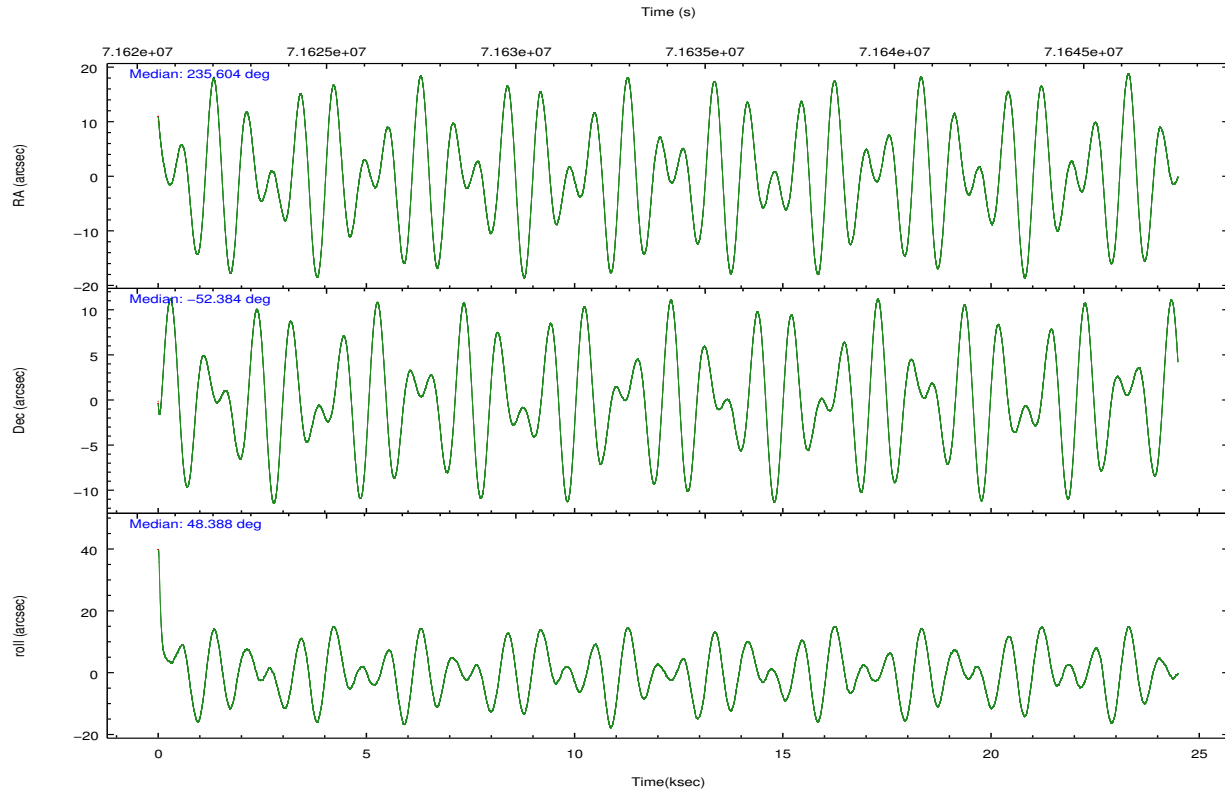
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10341	10620	10047	14161	10127
	6%	6%	5%	7%	5%
grade 1 events	94	88	79	304	96
	0%	0%	0%	0%	0%
grade 2 events	4137	4069	4009	4589	3539
	2%	2%	2%	2%	2%
grade 3 events	2007	2149	1843	2226	1822
	1%	1%	1%	1%	1%
grade 4 events	1861	2122	1816	2177	1696
	1%	1%	1%	1%	0%
grade 5 events	5161	5405	4990	5879	6126
	3%	3%	2%	3%	3%
grade 6 events	3165	3521	3023	4193	3351
	2%	2%	1%	2%	1%
grade 7 events	129570	126943	148598	146623	143691
	82%	81%	85%	81%	84%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	235.594686	235.6041079239601	Subarray requested	NONE	NONE
[deg] Pointing Dec	-52.410968	-52.38392820362015	Alternating exposures requested	N	N
[deg] Pointing Roll	48.183353	48.39951357654638	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
Phase constraints	Y	Y			
[d] Phase period	3.728374	3.728374			
[d] Phase epoch (MJD)	51419.623380	51419.623380			
Phase start	0.900000	0.900000			
Phase end	0.975000	0.975000			
Phase start error	0.003000	0.003000			
Phase end error	0.003000	0.003000			
[s] Observation start time (MET)	71622264.184000	71621176.825966			
Observation start date	2000-04-08T23:03:20	2000-04-08T22:46:16			
[s] Observation end time (MET)	71646264.184000	71647533.67693201			
Observation end date	2000-04-09T05:43:20	2000-04-09T06:05:33			
Read mode	TIMED	TIMED			

2.3 Aspect



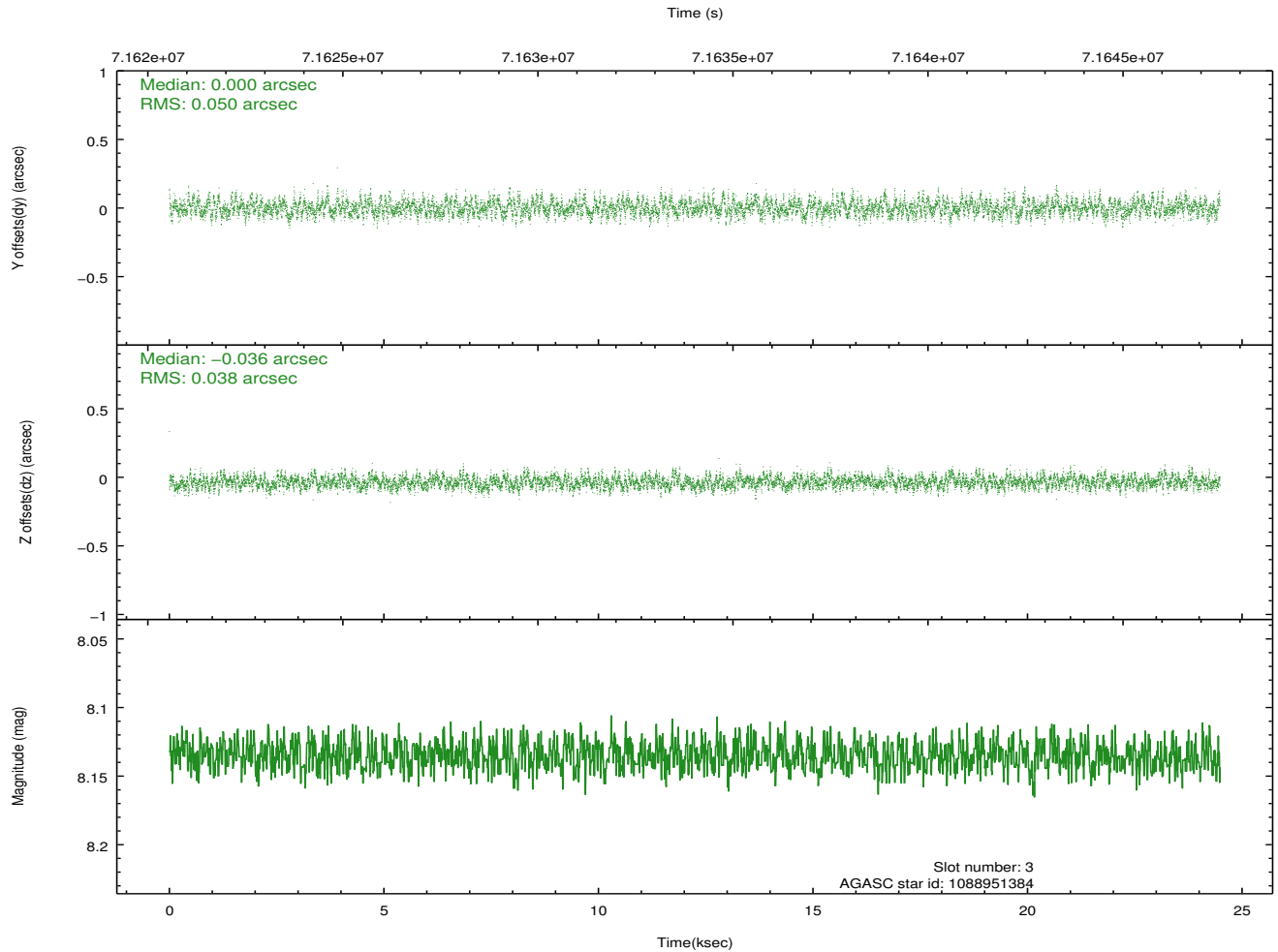
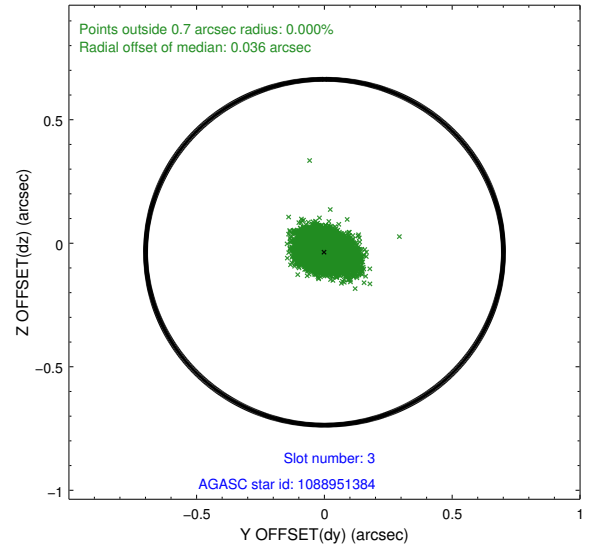
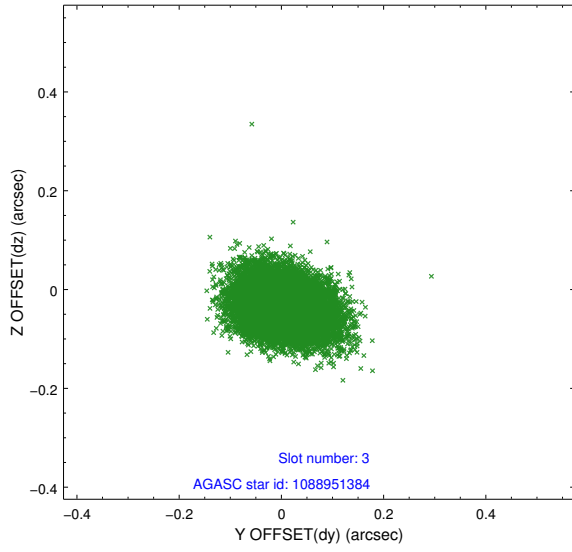


Slot Statistics

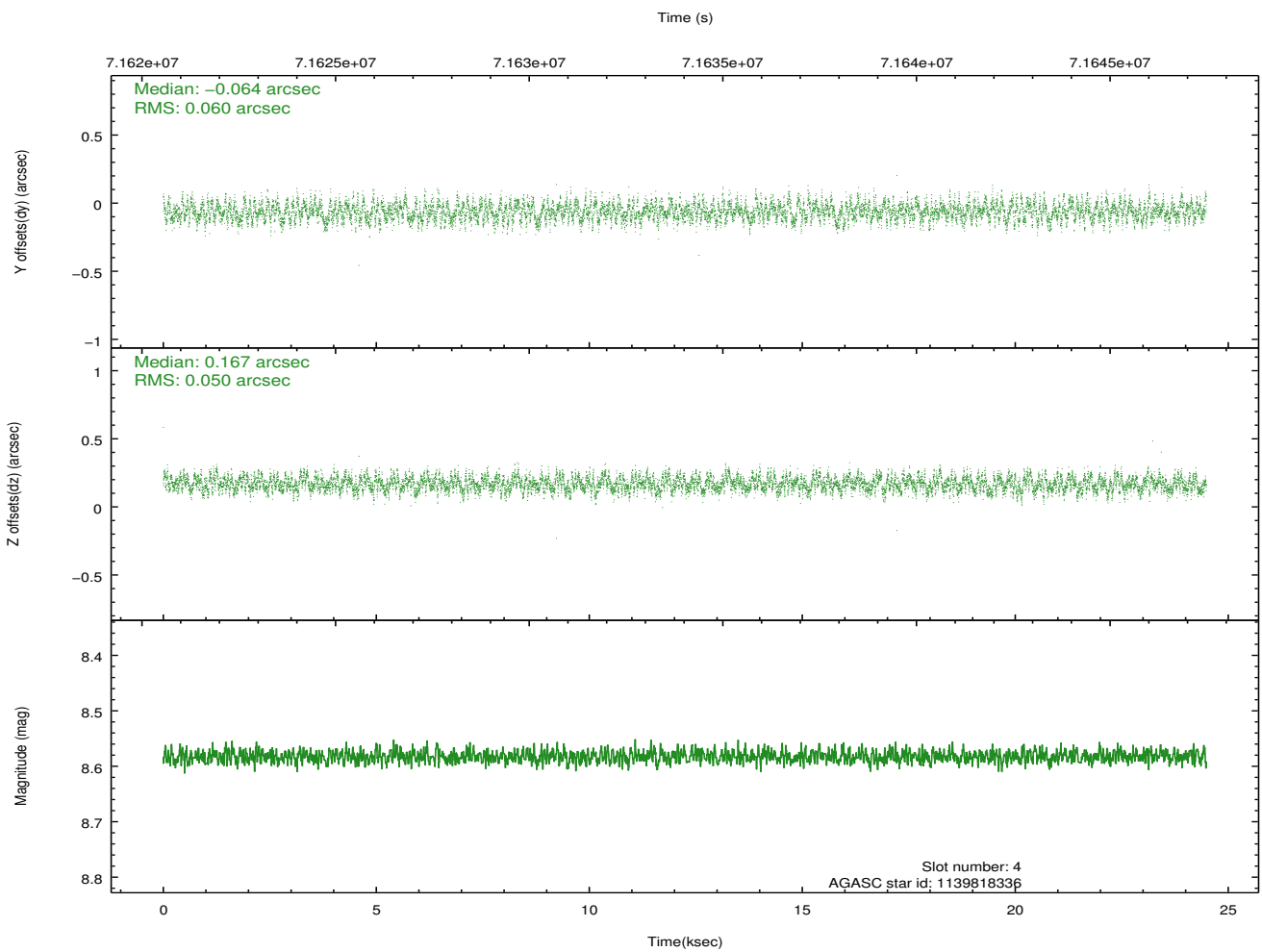
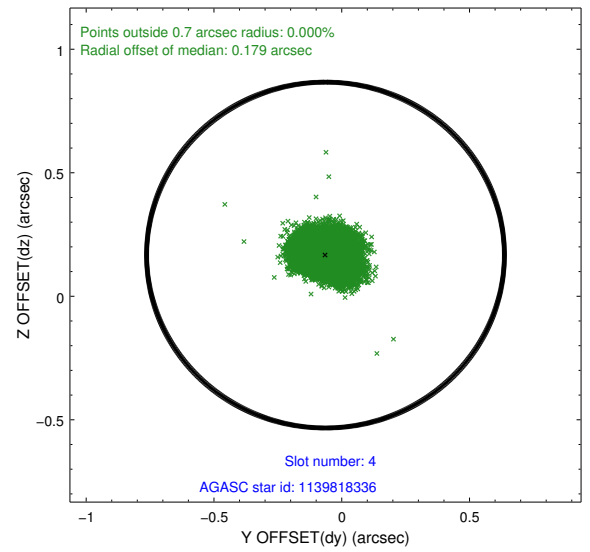
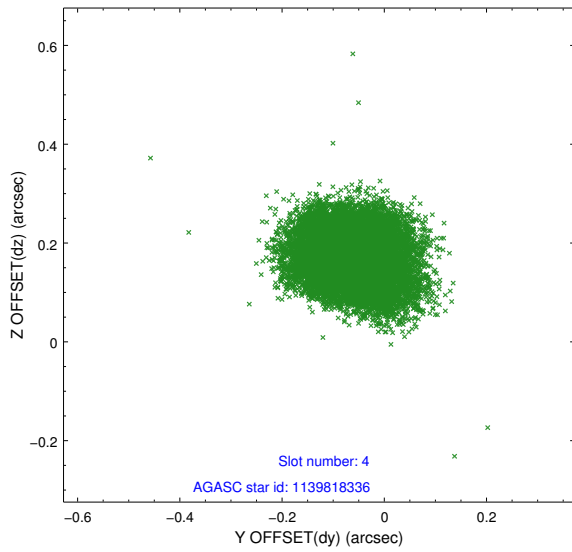
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	5973	-0.030	-0.026	0.010	0.016	0.000000	0.000000	-755.09	-834.00
1	FID	ACIS-I-4	7.19	5972	-0.023	0.033	0.012	0.023	0.000000	0.000000	2158.93	1072.15
2	FID	ACIS-I-5	7.23	5973	-0.046	0.062	0.011	0.019	0.000000	0.000000	-1808.76	1070.19
3	GUIDE	1088951384	8.14	11944	0.000	-0.036	0.066	0.108	235.194960	-52.473439	-753.74	500.91
4	GUIDE	1139818336	8.58	11942	-0.064	0.167	0.084	0.131	236.489707	-52.599156	791.39	-1918.56
5	GUIDE	1090650816	9.29	11939	-0.094	0.159	0.090	0.149	236.936820	-52.444327	1854.36	-2293.37
6	GUIDE	1088951744	9.64	11940	0.210	-0.128	0.115	0.182	234.415992	-52.401979	-1717.55	1935.66
7	GUIDE	1088952304	9.64	11939	-0.051	-0.163	0.116	0.190	234.981812	-51.960089	298.53	2091.12

2.4 Star Slots

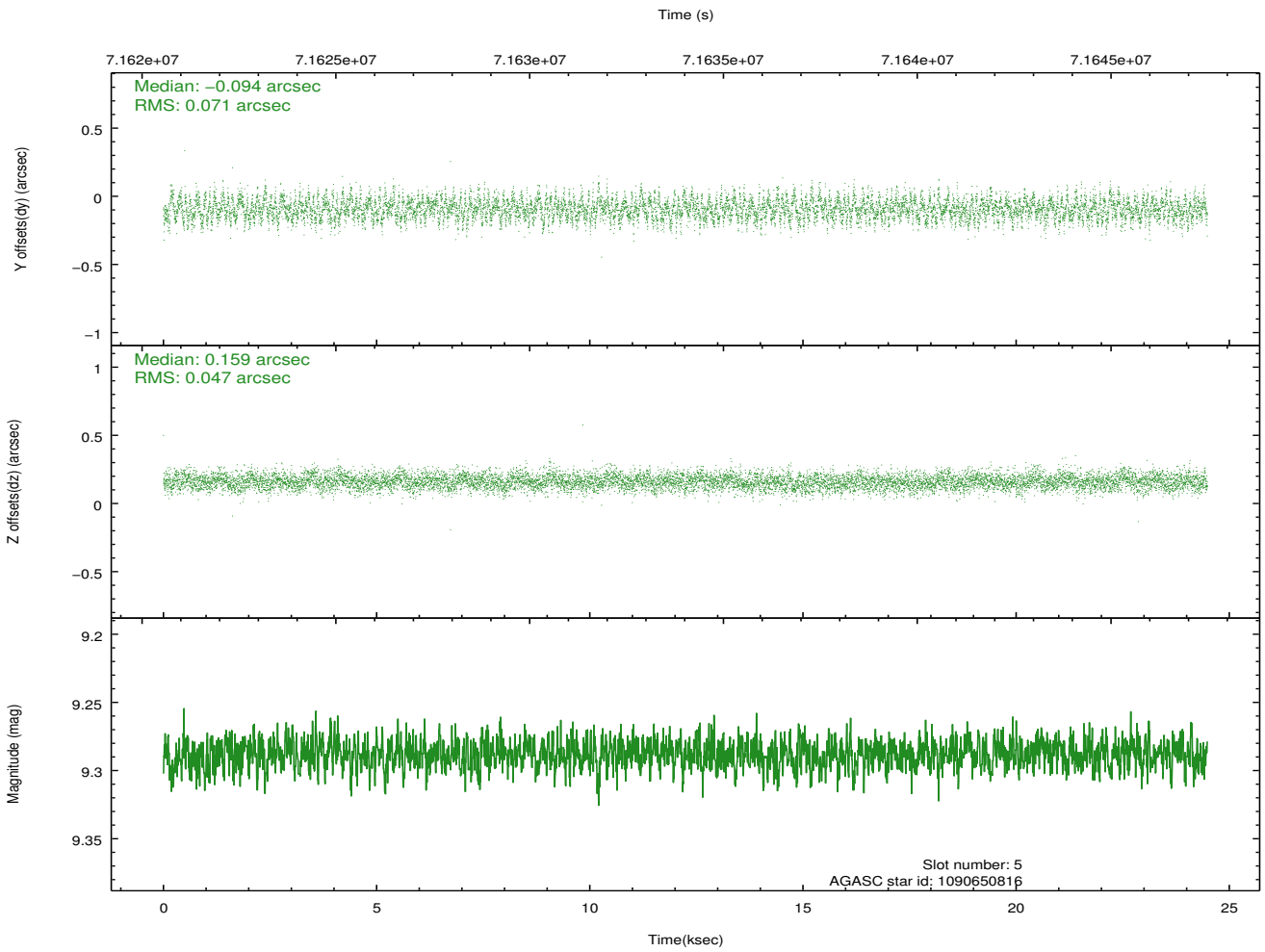
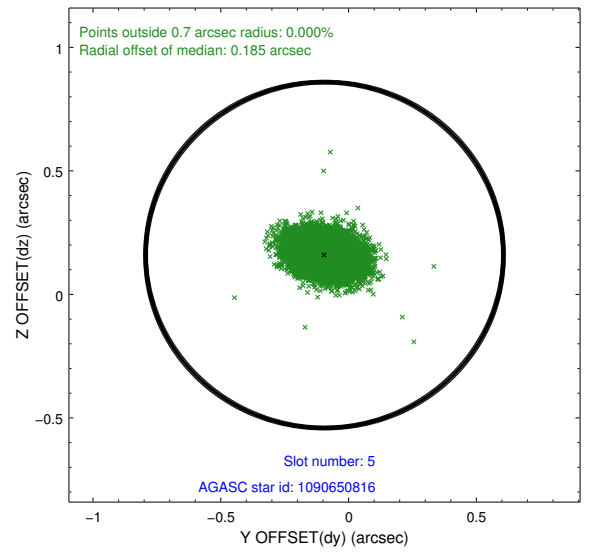
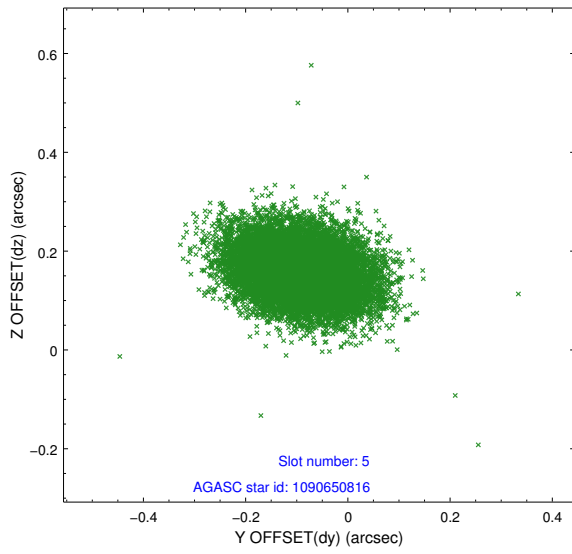
2.4.1 Slot 3



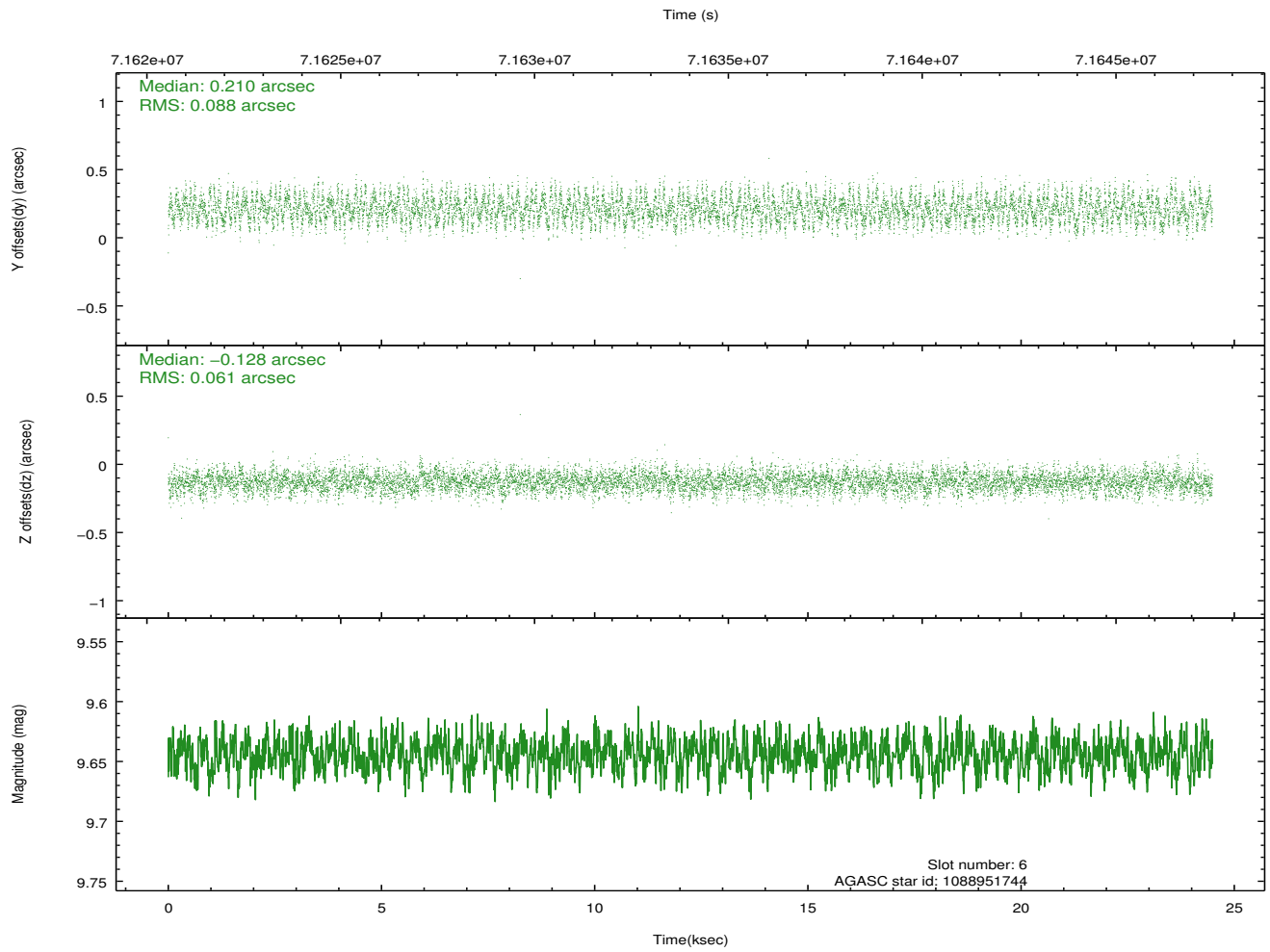
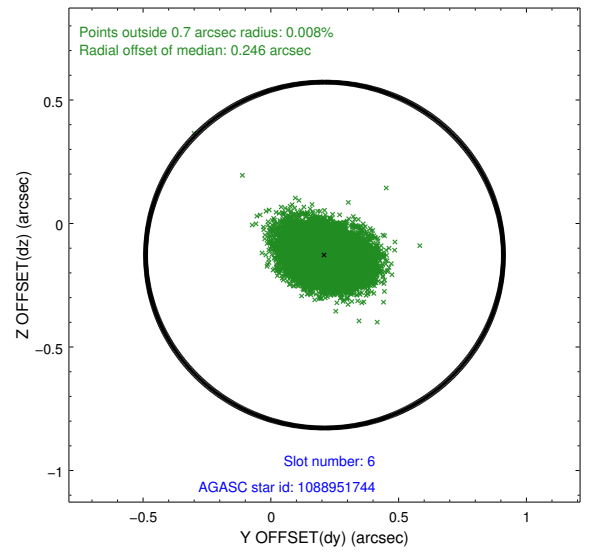
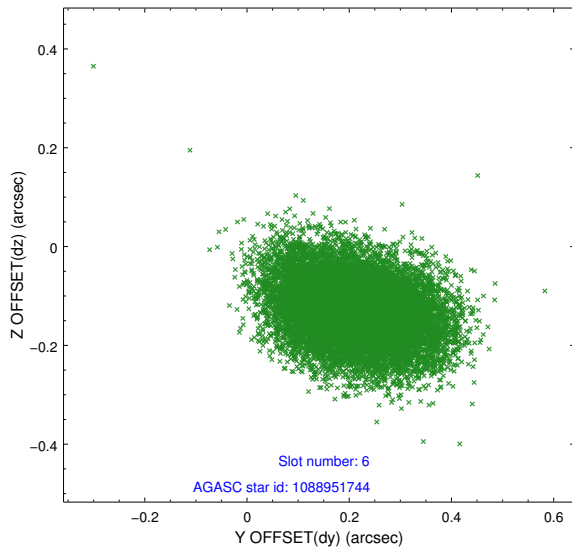
2.4.2 Slot 4



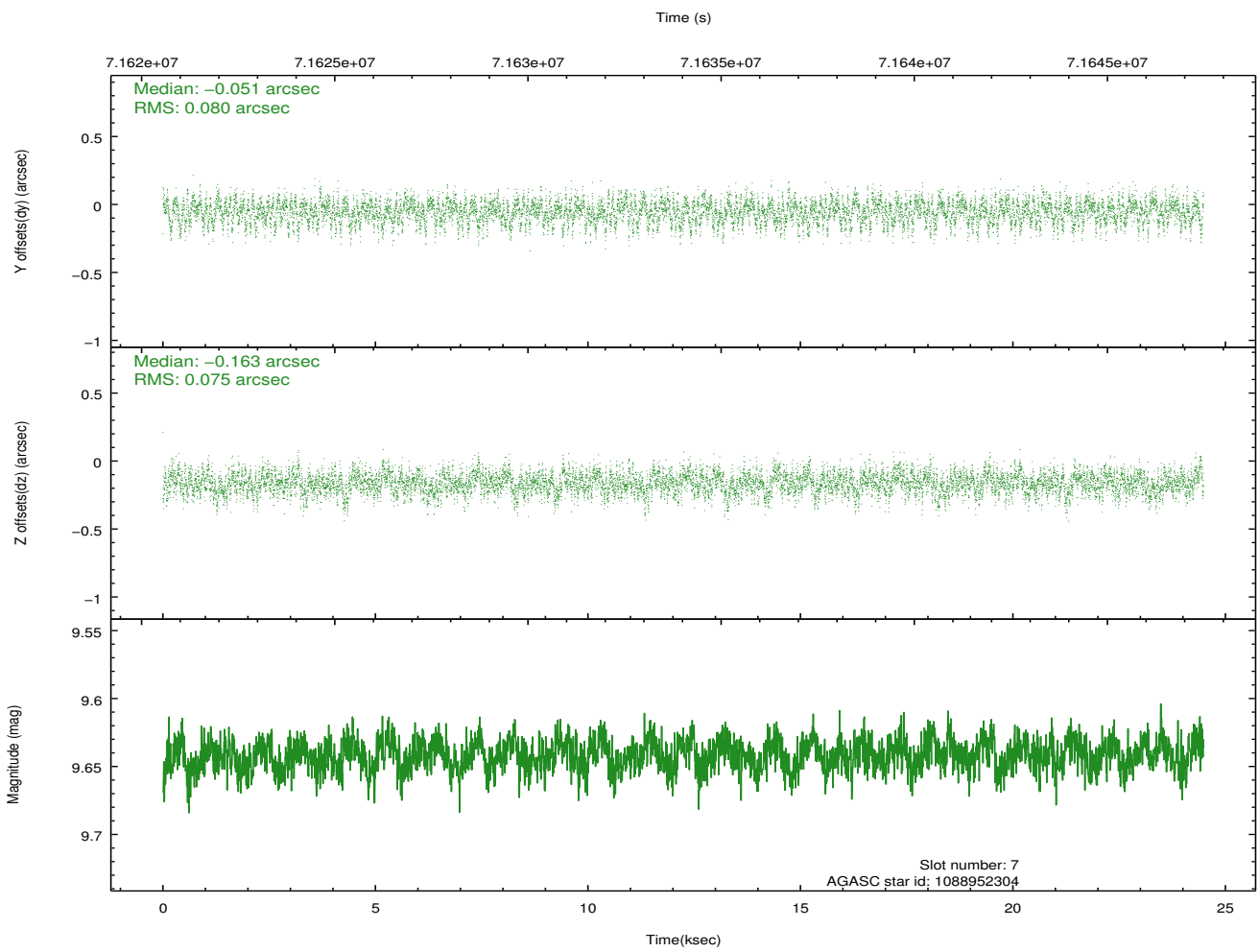
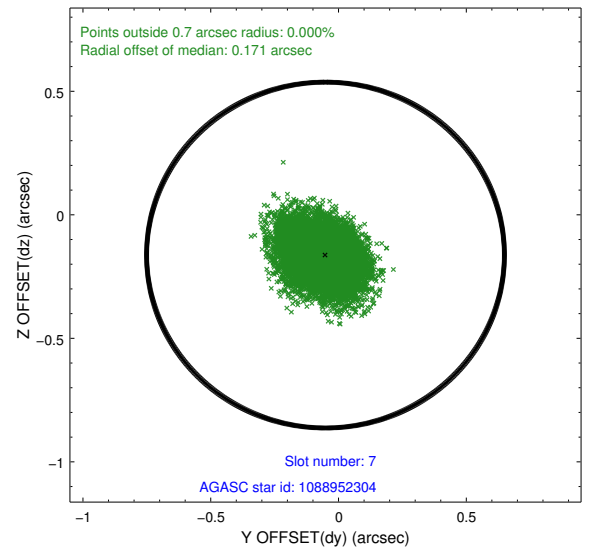
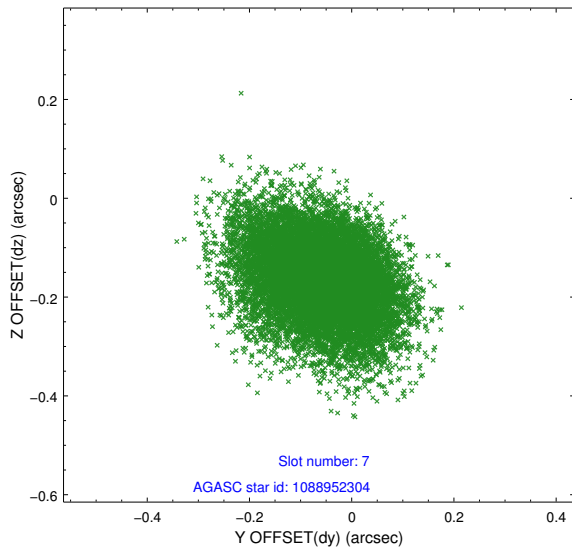
2.4.3 Slot 5



2.4.4 Slot 6

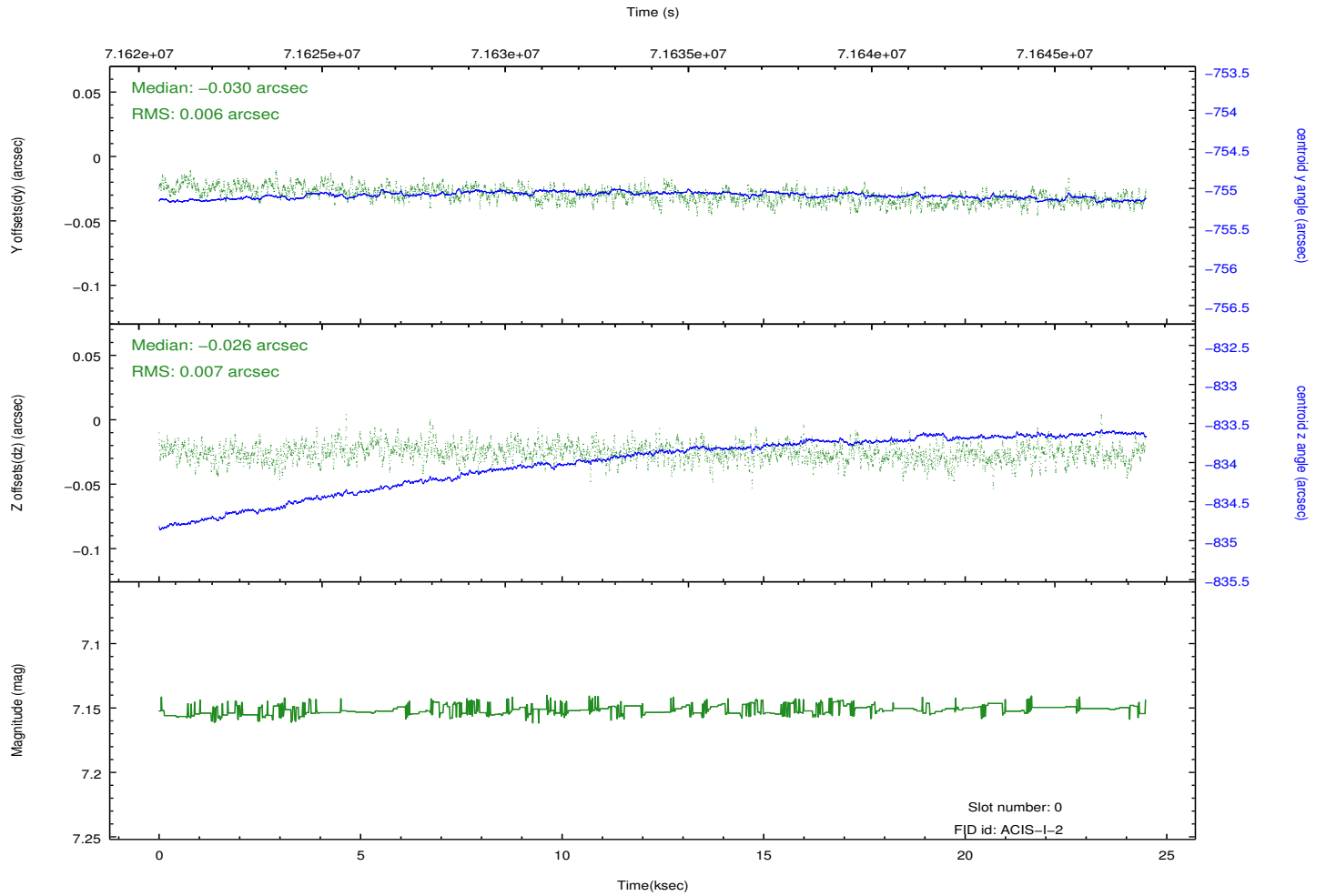
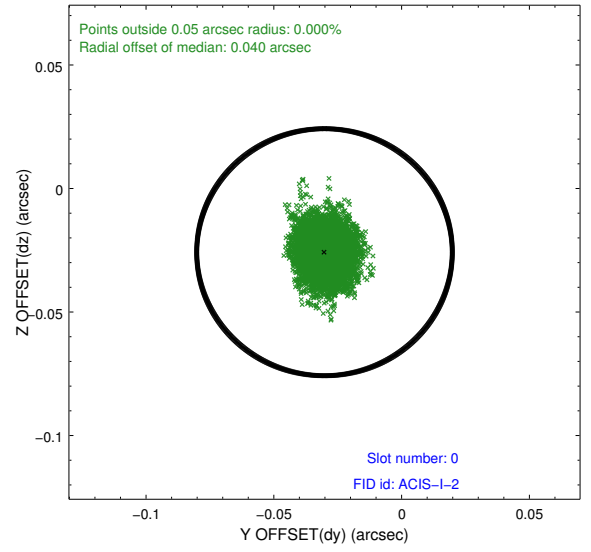
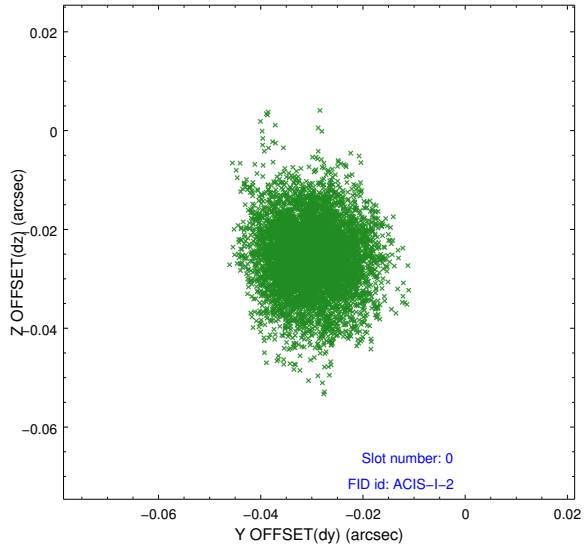


2.4.5 Slot 7

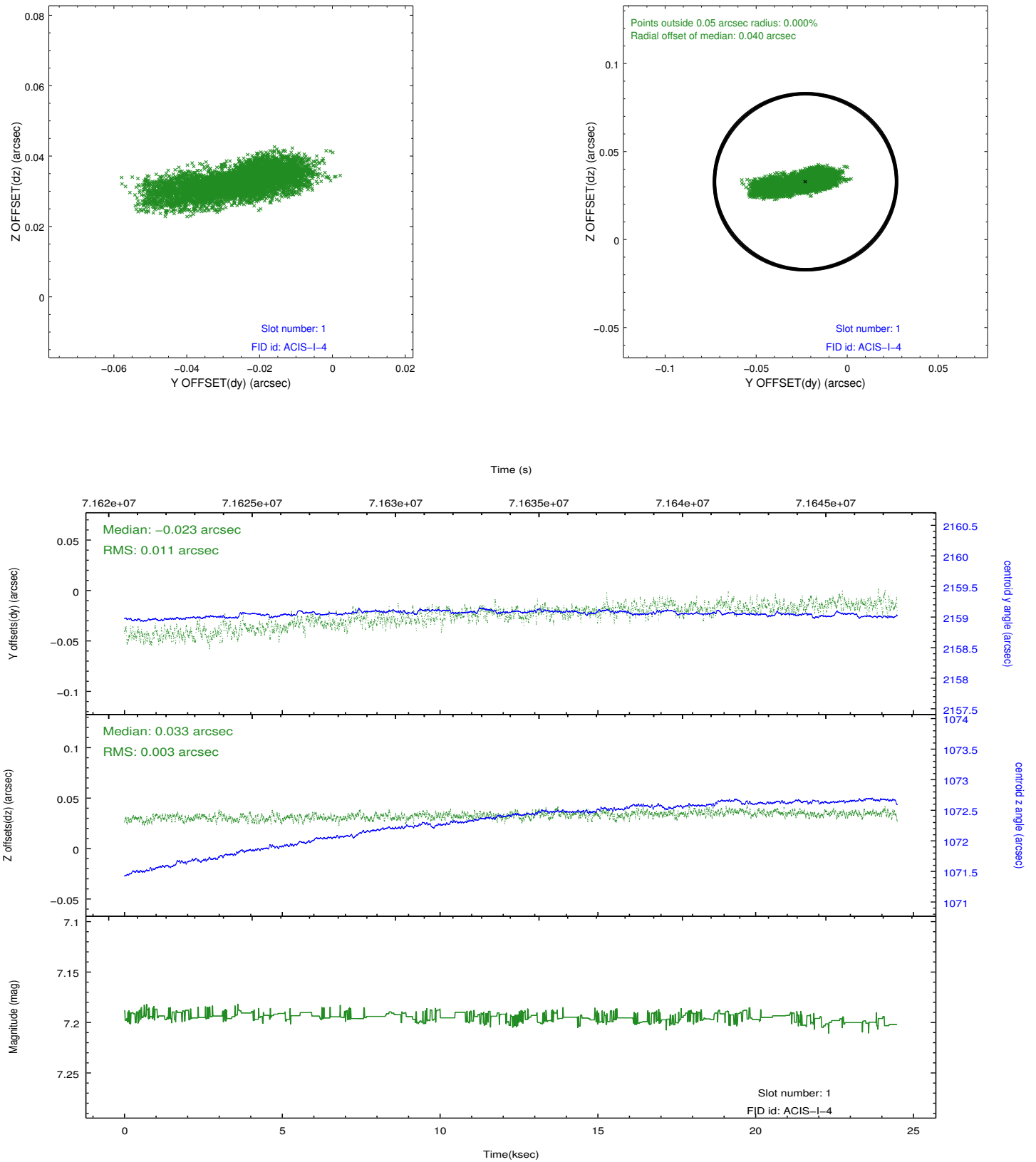


2.5 FID Slots

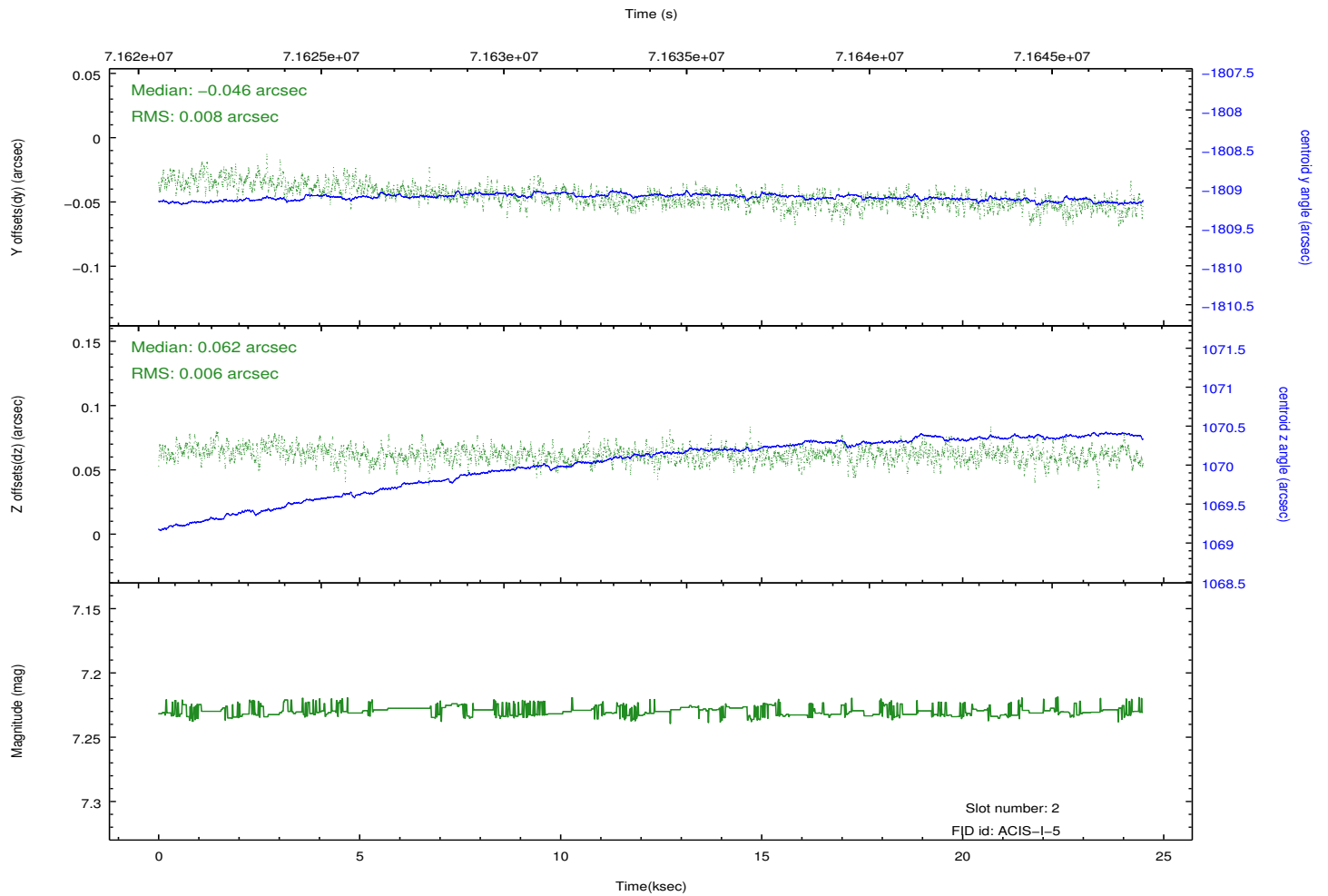
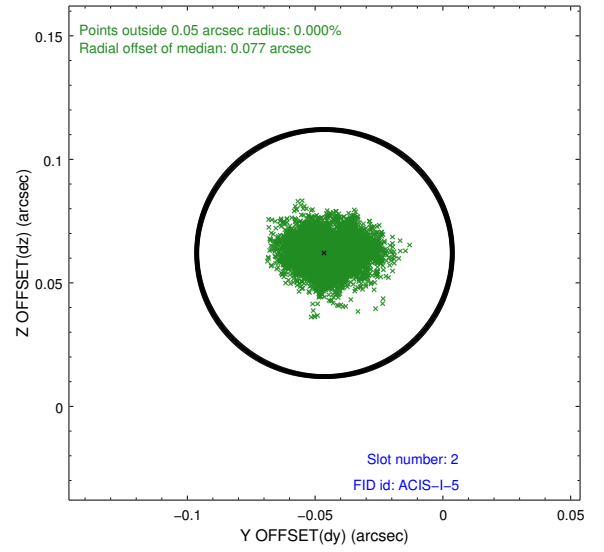
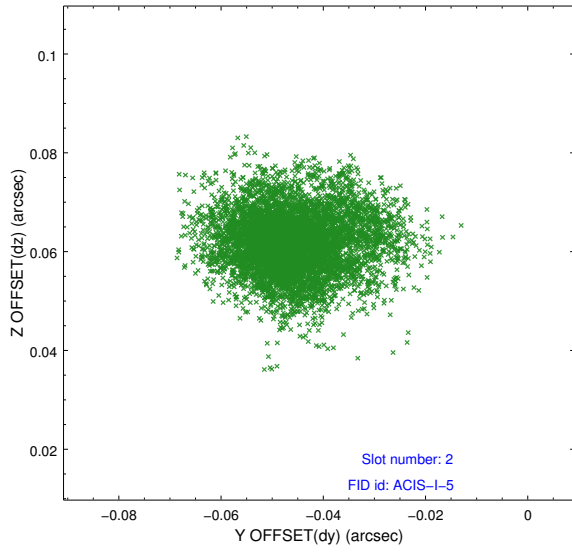
2.5.1 Slot 0



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)	2012.08.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.048

A.2 Comments

Phase constraint OK