

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2294 - L2 Version 4
Chandra X-Ray Center

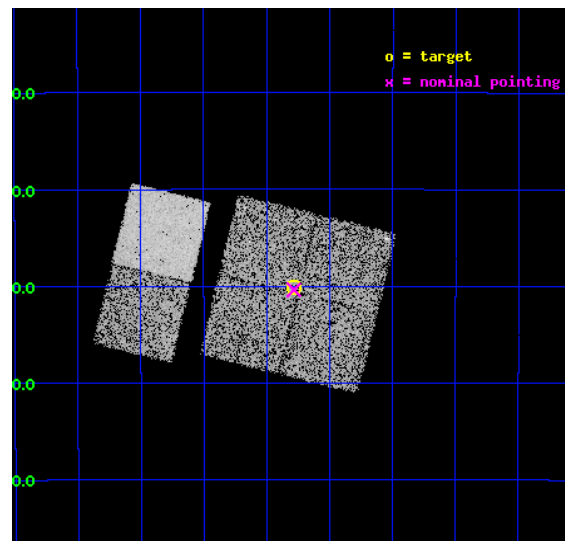
L2 Processing Date : Oct 18 2012

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

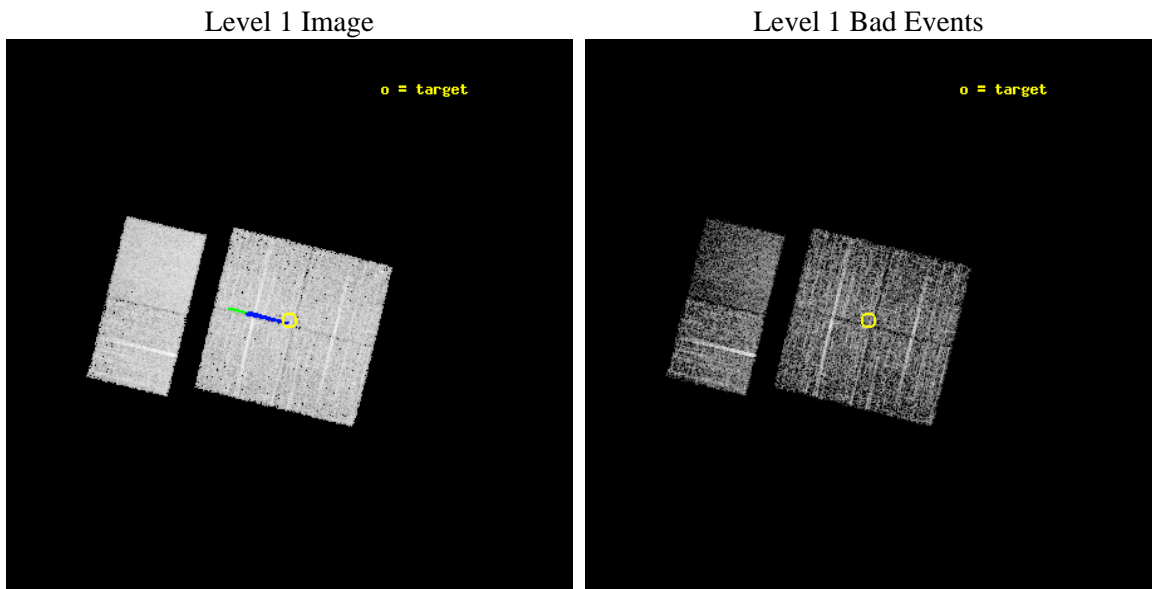
seq_num	900121	Sequence number
obs_id	2294	Observation id
title	CHANDRA SURVEY OF THE GALACTIC RIDGE AROUND THE MILKY WAY CENTER	P
observer	Prof. Q. Daniel Wang	Principal investigator
object	GCS 9	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.4468	Observer's specified target RA [deg]
dec_targ	-28.5017	Observer's specified target Dec [deg]
ra_nom	266.4459699271	Nominal RA [deg]
dec_nom	-28.506338660126	Nominal Dec [deg]
roll_nom	283.80729635843	Nominal Roll [deg]
revision	4	Processing version of data
ontime	11756.759030685	Sum of GTIs [s]
livetime	11607.887868768	Livetime [s]
ontime0	11756.759030685	Sum of GTIs [s]
ontime1	11756.759010762	Sum of GTIs [s]
ontime2	11760.000010937	Sum of GTIs [s]
ontime3	11756.759030685	Sum of GTIs [s]
ontime6	11756.759030685	Sum of GTIs [s]
ontime7	11756.759030685	Sum of GTIs [s]
l2events	50277	Number of level 2 events



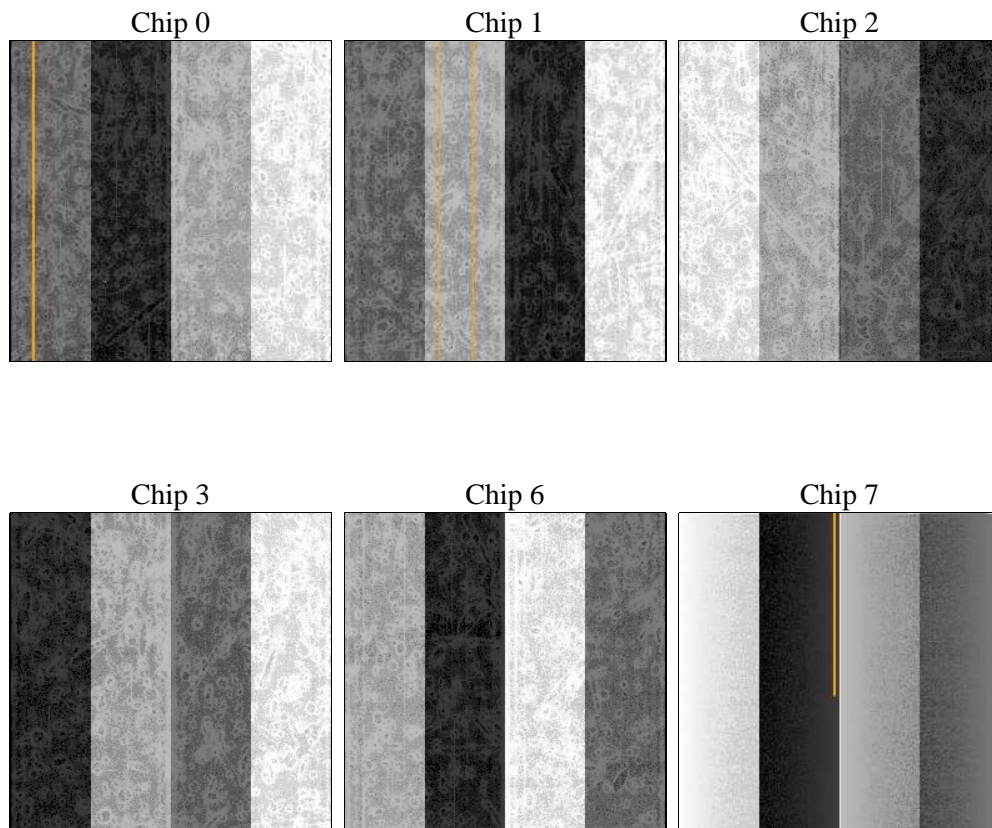
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	11756.759030685	Sum of GTIs [s]
caldsver	4.5.2	 	ontime0	11756.759030685	Sum of GTIs [s]
date	2012-10-18T20:27:40	Date and time of file creation	ontime1	11756.759010762	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	11760.000010937	Sum of GTIs [s]
			ontime3	11756.759030685	Sum of GTIs [s]
			ontime6	11756.759030685	Sum of GTIs [s]
			ontime7	11756.759030685	Sum of GTIs [s]
			l1events	198507	Number of level 1 events

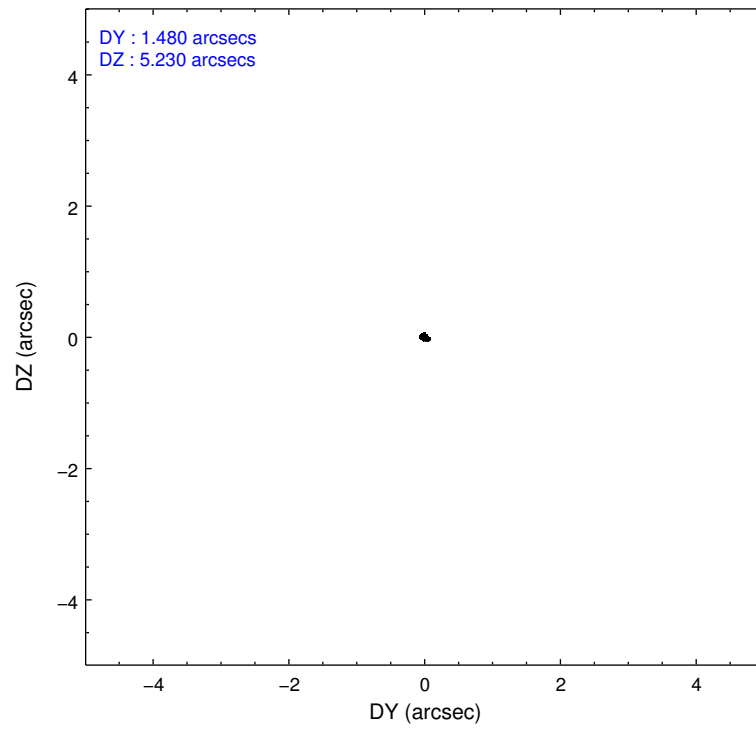
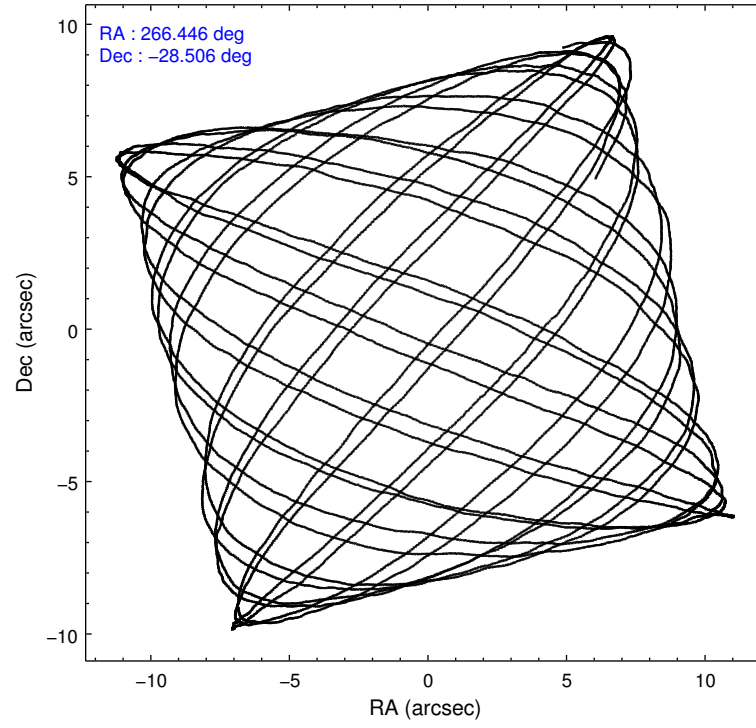
2.1.4 Events

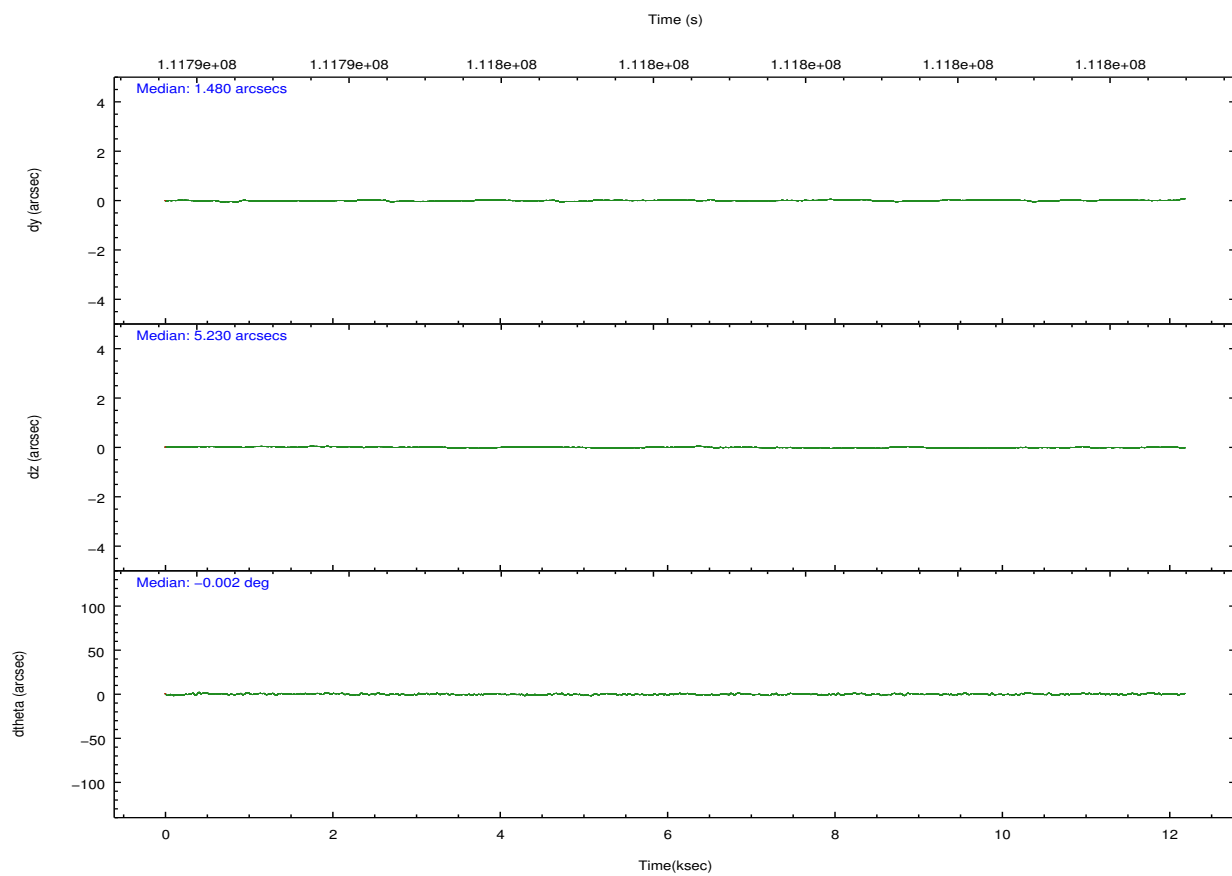
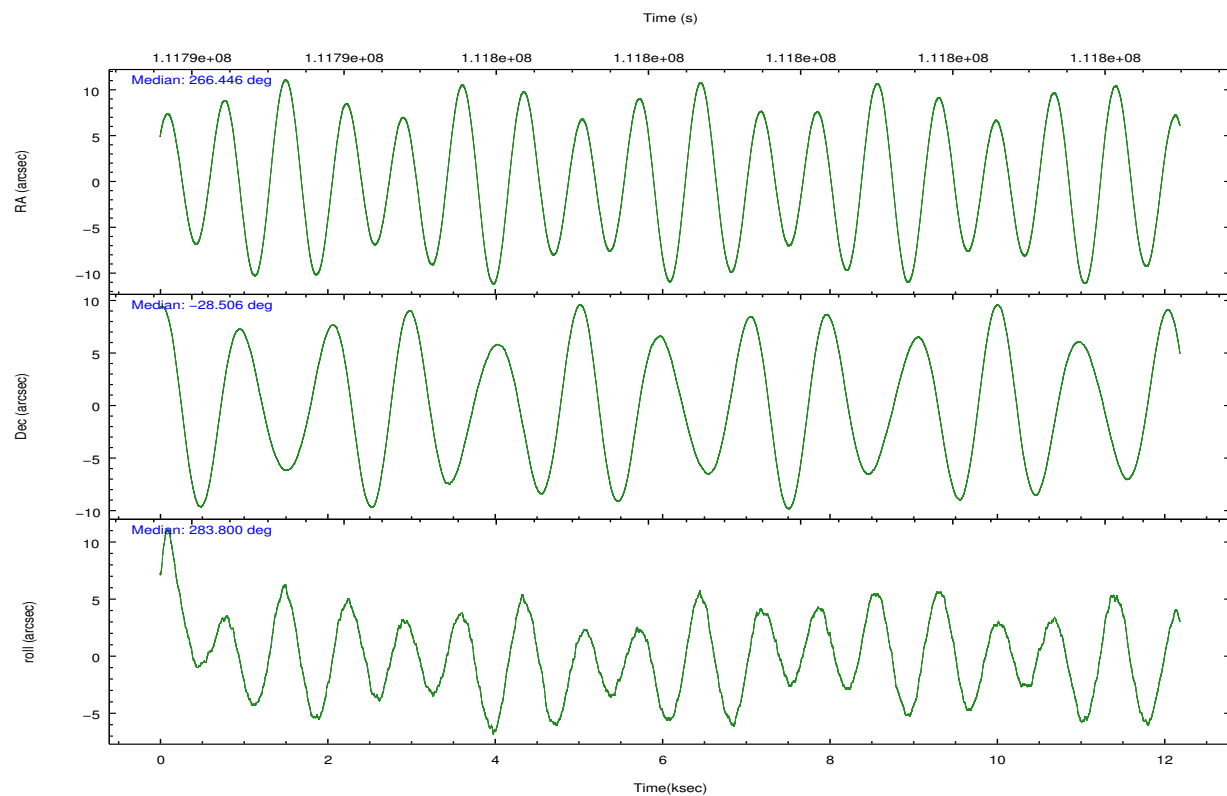
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	30076	29700	31953	33199	34132	39447	grade 0 events	3424	3271	3460	3305	3045	2049
rejected events	23455	23130	25531	26628	27645	18568		11%	11%	10%	9%	8%	5%
rejected %	77%	77%	79%	80%	80%	47%	grade 1 events	27	31	27	29	27	31
								0%	0%	0%	0%	0%	0%
							grade 2 events	1196	1254	1131	1244	1230	4240
								3%	4%	3%	3%	3%	10%
							grade 3 events	567	569	512	547	527	1907
								1%	1%	1%	1%	1%	4%
							grade 4 events	497	503	452	504	553	1941
								1%	1%	1%	1%	1%	4%
							grade 5 events	1146	1383	1082	1357	1475	4349
								3%	4%	3%	4%	4%	11%
							grade 6 events	938	974	870	972	1132	10742
								3%	3%	2%	2%	3%	27%
							grade 7 events	22281	21715	24419	25241	26143	14188
								74%	73%	76%	76%	76%	35%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	266.424309	266.4459699271039	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.486593	-28.50633866012556	Alternating exposures requested	N	N
[deg] Pointing Roll	283.588278	283.8072963584257	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	283.600000	283.600000			
[deg] Roll tolerance	2.000000	2.000000			
Roll constraint allows 180D rotation	N	N			
[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			
[s] Observation start time (MET)	111792374.184000	111791998.45122			
Observation start date	2001-07-17T21:25:10	2001-07-17T21:19:58			
[s] Observation end time (MET)	111804374.184000	111804508.57671			
Observation end date	2001-07-18T00:45:10	2001-07-18T00:48:28			
Read mode	TIMED	TIMED			

2.3 Aspect



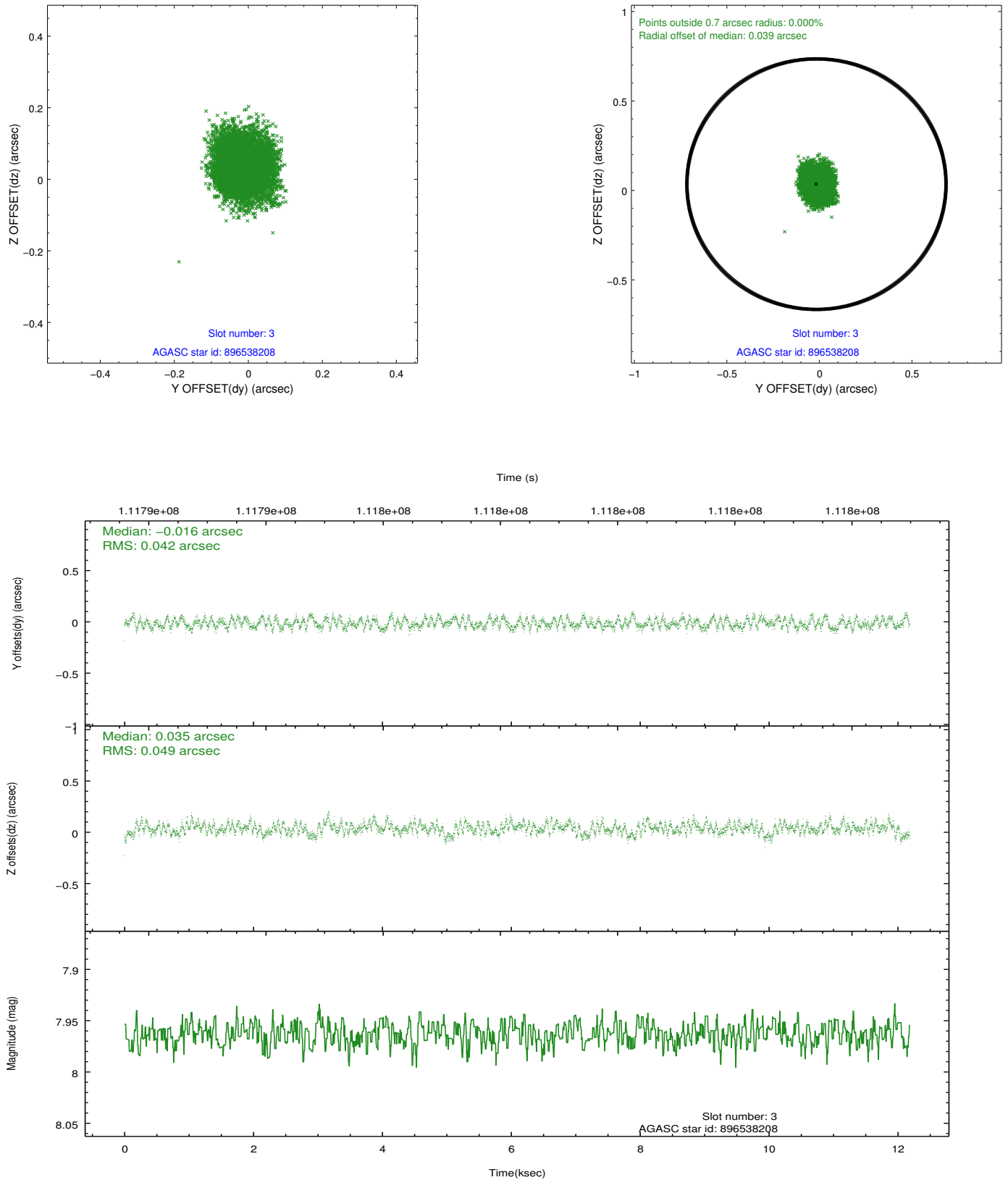


Slot Statistics

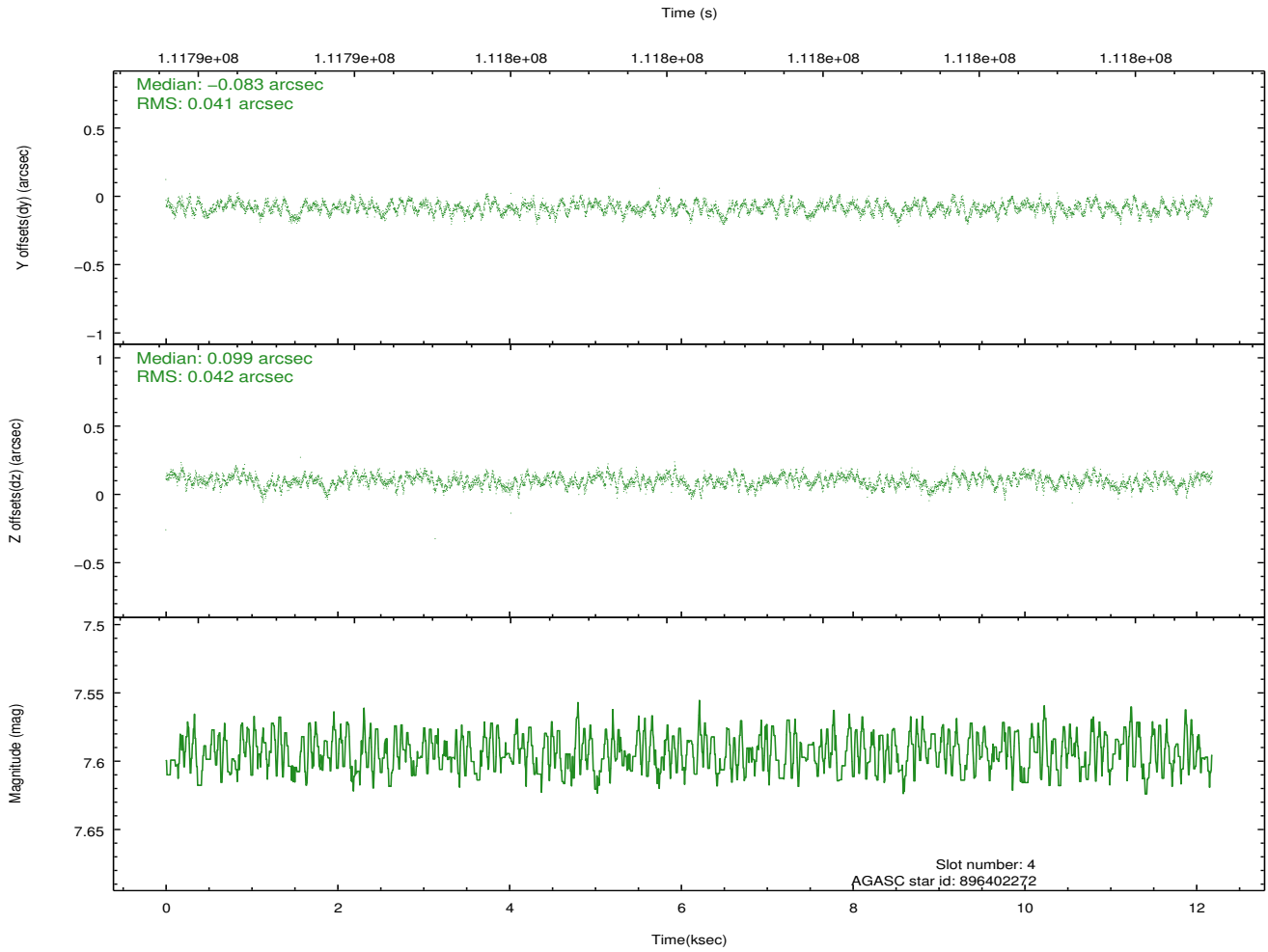
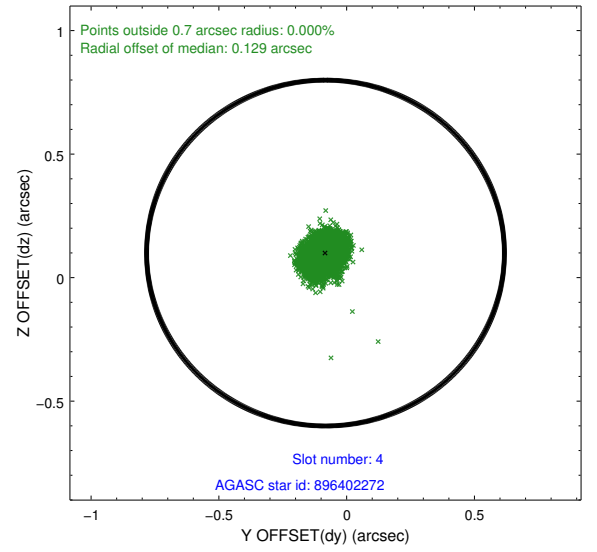
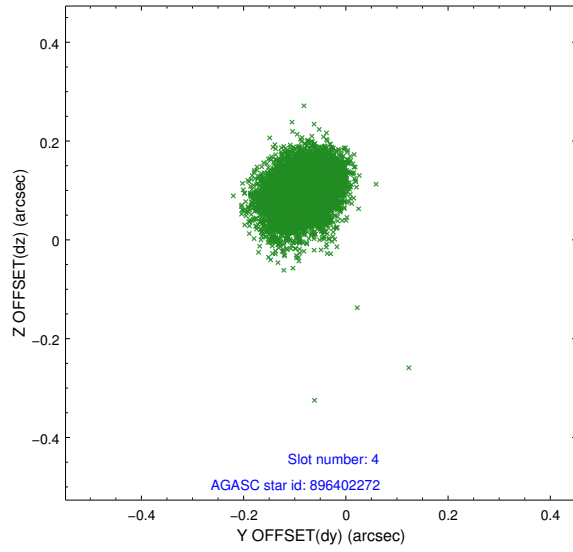
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-3	7.45	2973	-0.015	0.179	0.008	0.014	0.000000	0.000000	55.76	-961.63
1	FID	ACIS-I-4	7.19	2970	-0.038	-0.061	0.007	0.012	0.000000	0.000000	2158.29	1070.93
2	FID	ACIS-I-5	7.23	2968	-0.046	-0.049	0.007	0.013	0.000000	0.000000	-1809.17	1069.29
3	GUIDE	896538208	7.96	5941	-0.016	0.035	0.069	0.108	267.176969	-28.671626	1212.86	2153.25
4	GUIDE	896402272	7.59	5945	-0.083	0.099	0.064	0.099	265.637294	-28.313189	-1184.66	-2278.94
5	GUIDE	896537176	8.01	5944	0.063	-0.128	0.051	0.082	266.498272	-28.678259	725.34	65.03
6	GUIDE	896011040	7.71	5944	-0.035	-0.056	0.051	0.083	267.058469	-28.014759	-1172.81	2357.24
7	GUIDE	896538920	8.92	5940	0.072	0.058	0.081	0.128	266.278728	-29.143592	2191.58	-999.48

2.4 Star Slots

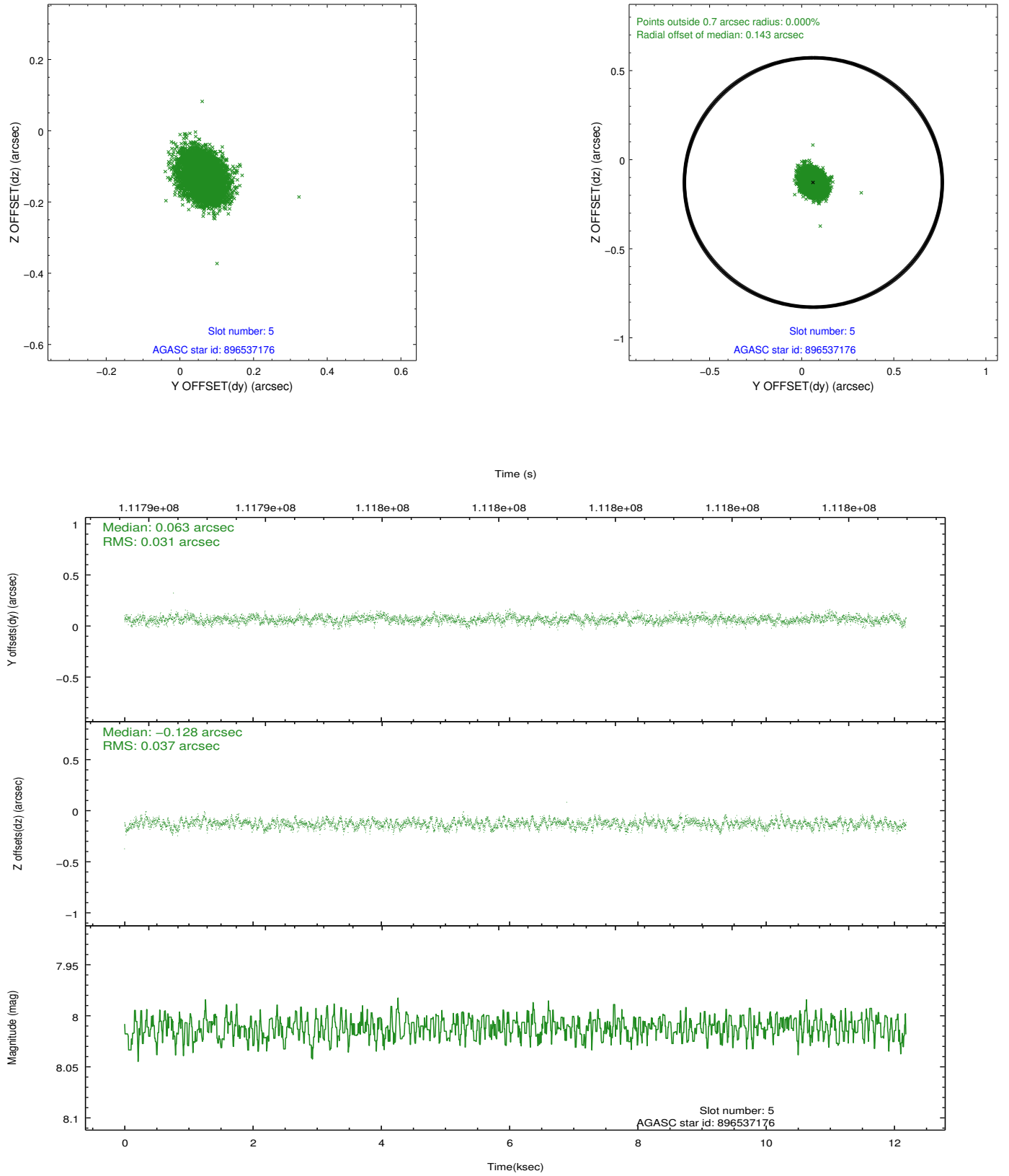
2.4.1 Slot 3



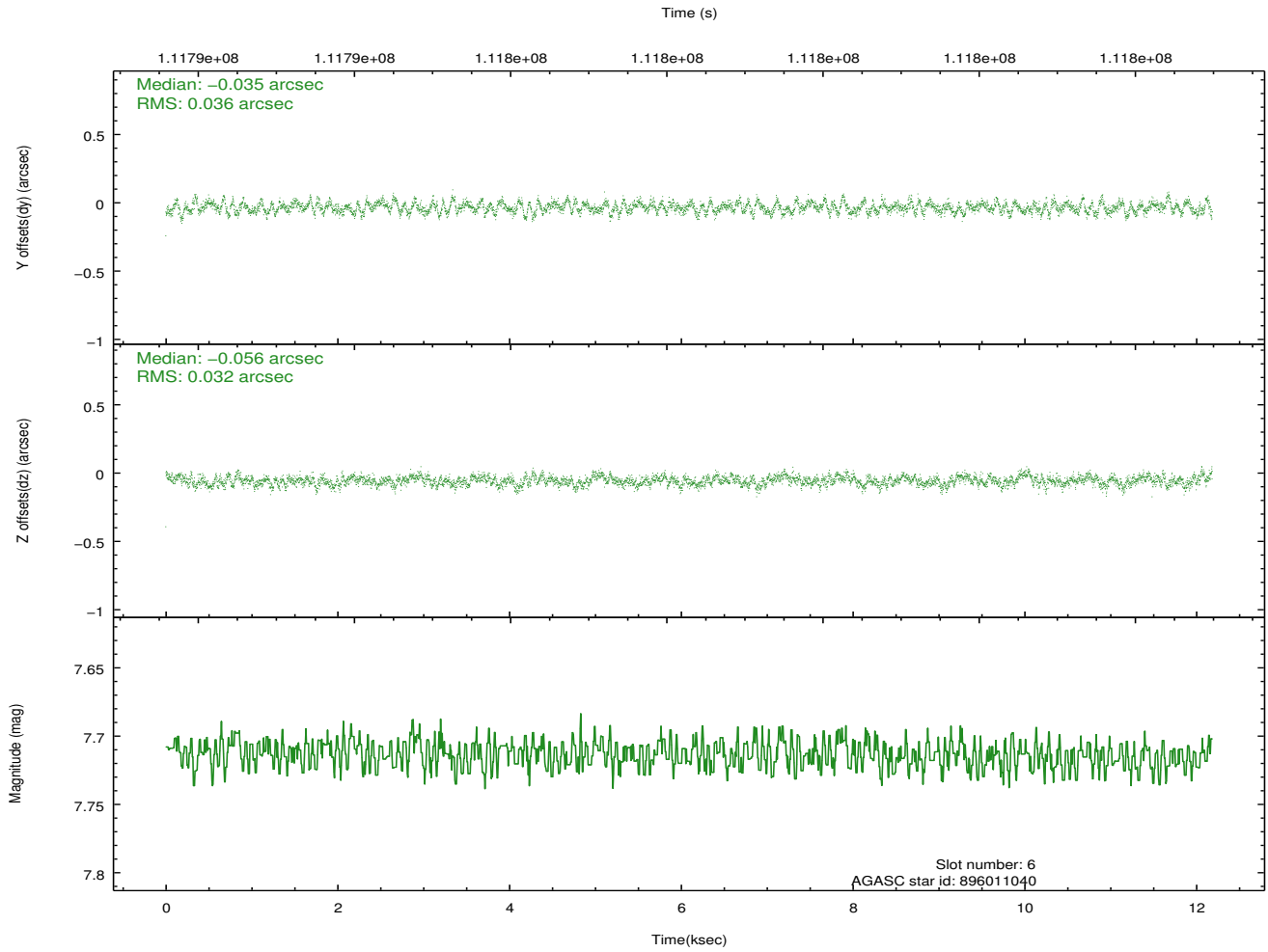
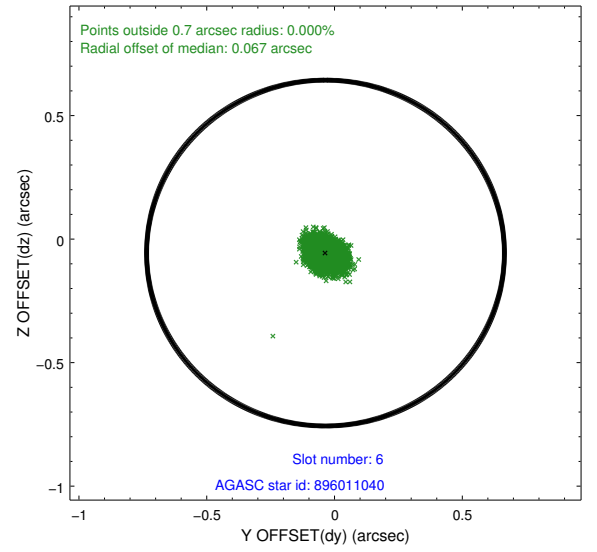
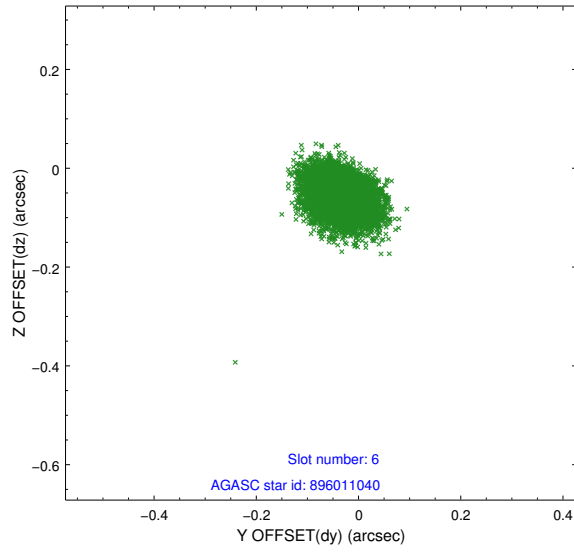
2.4.2 Slot 4



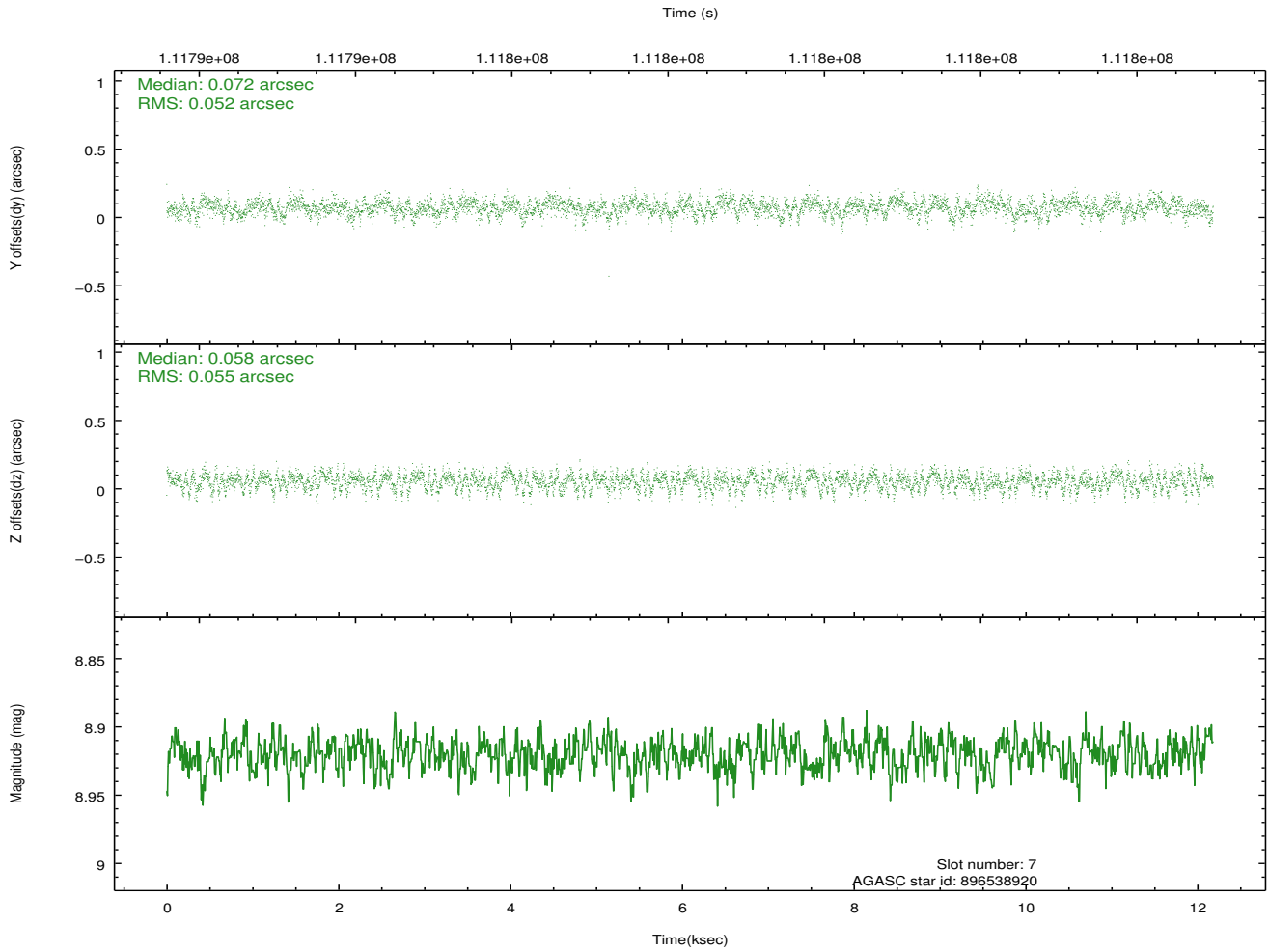
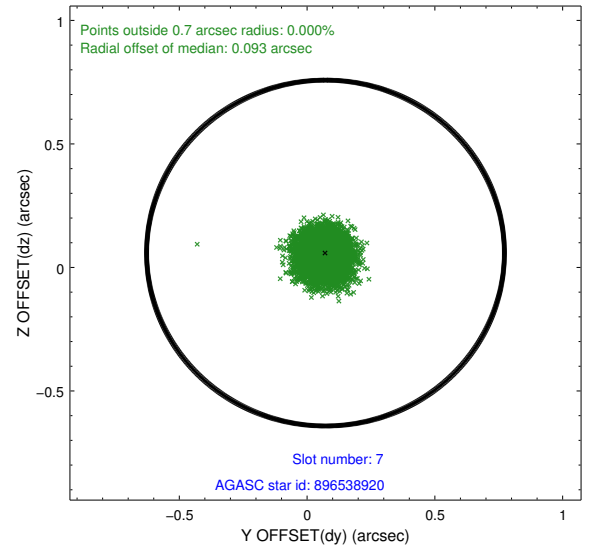
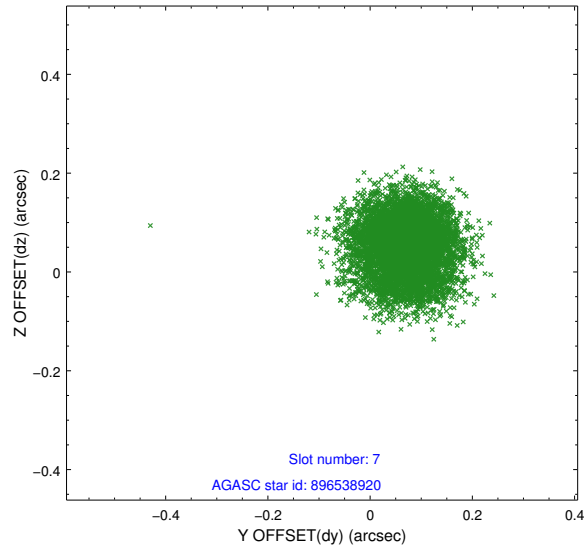
2.4.3 Slot 5



2.4.4 Slot 6

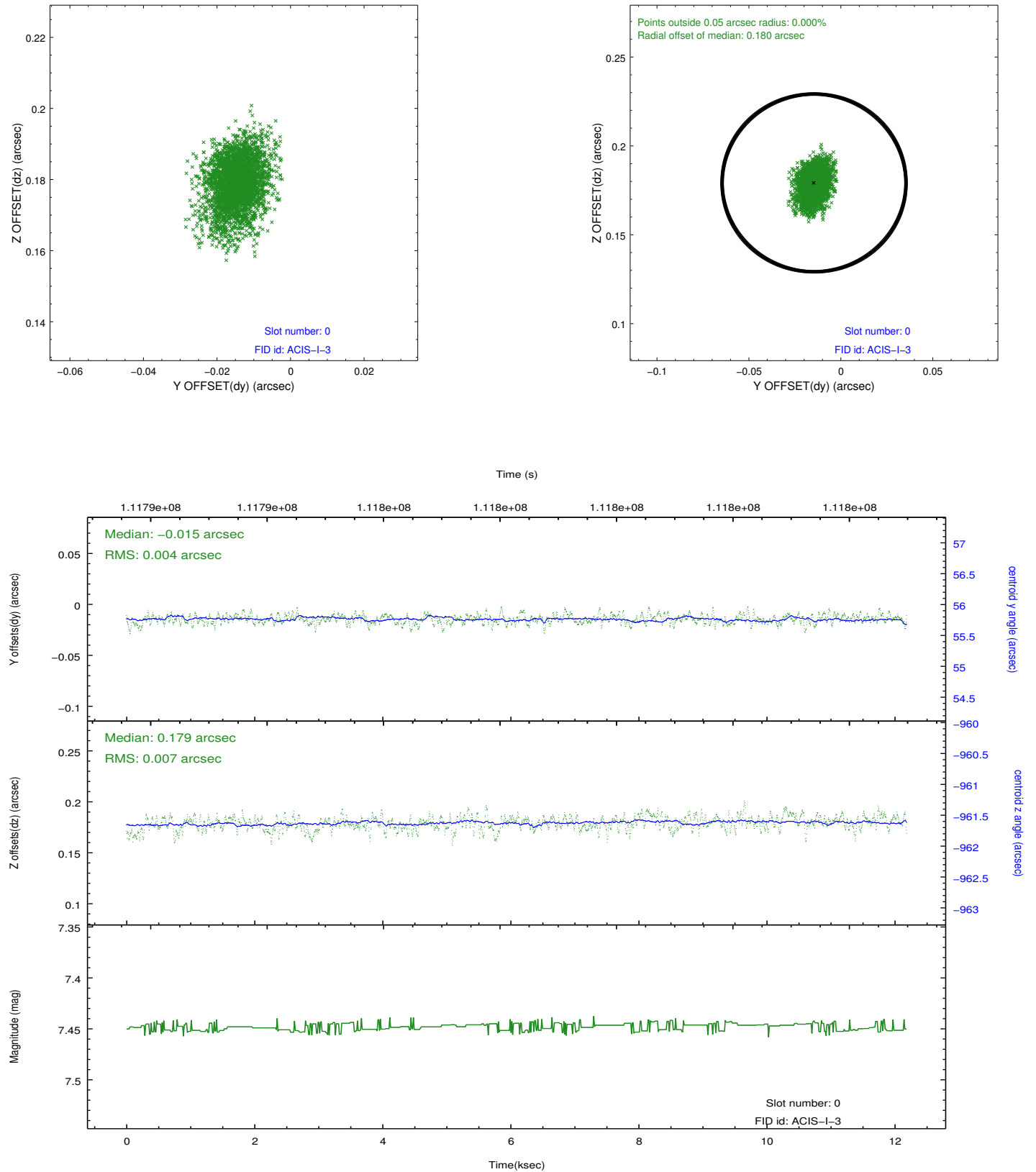


2.4.5 Slot 7

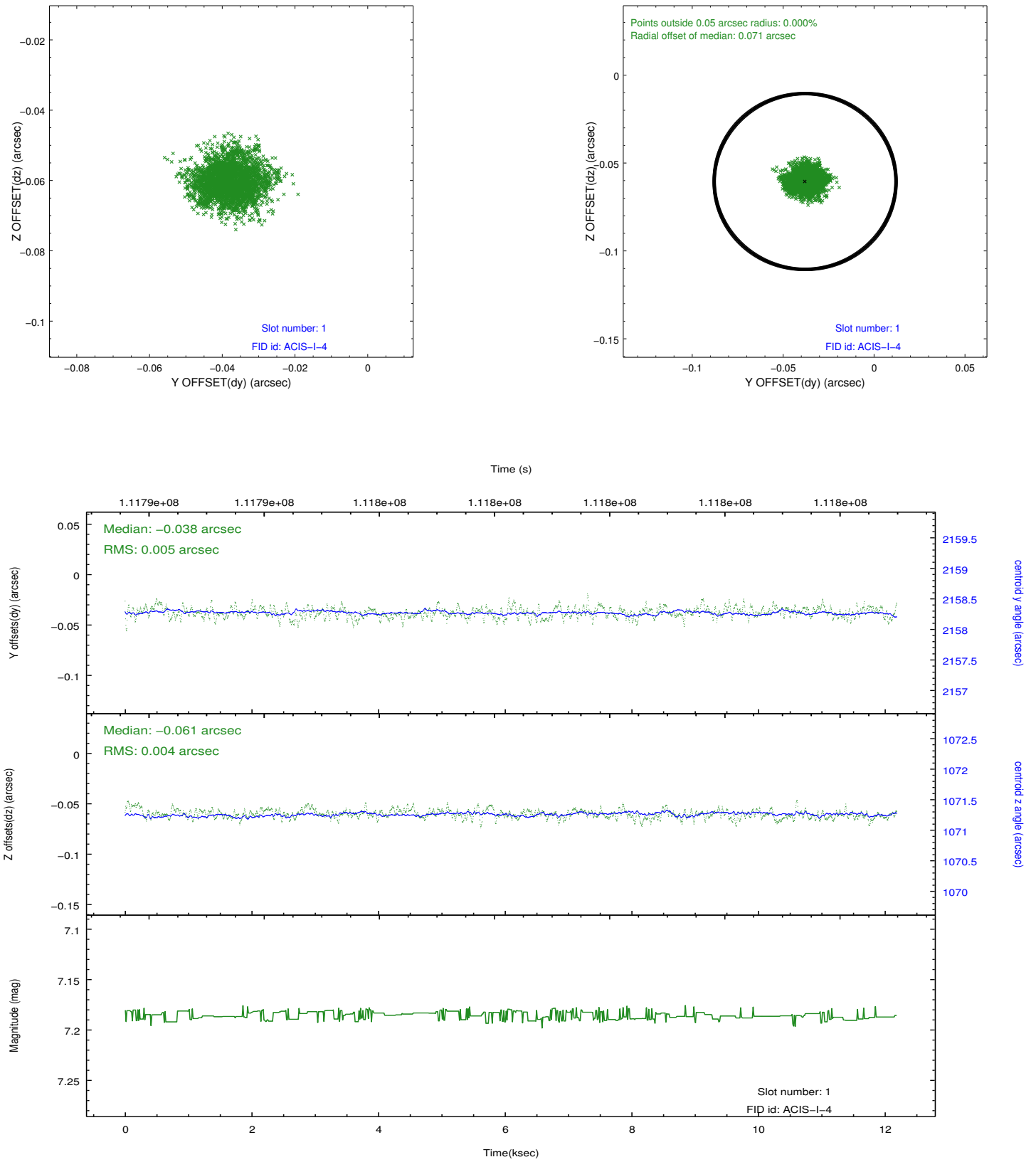


2.5 FID Slots

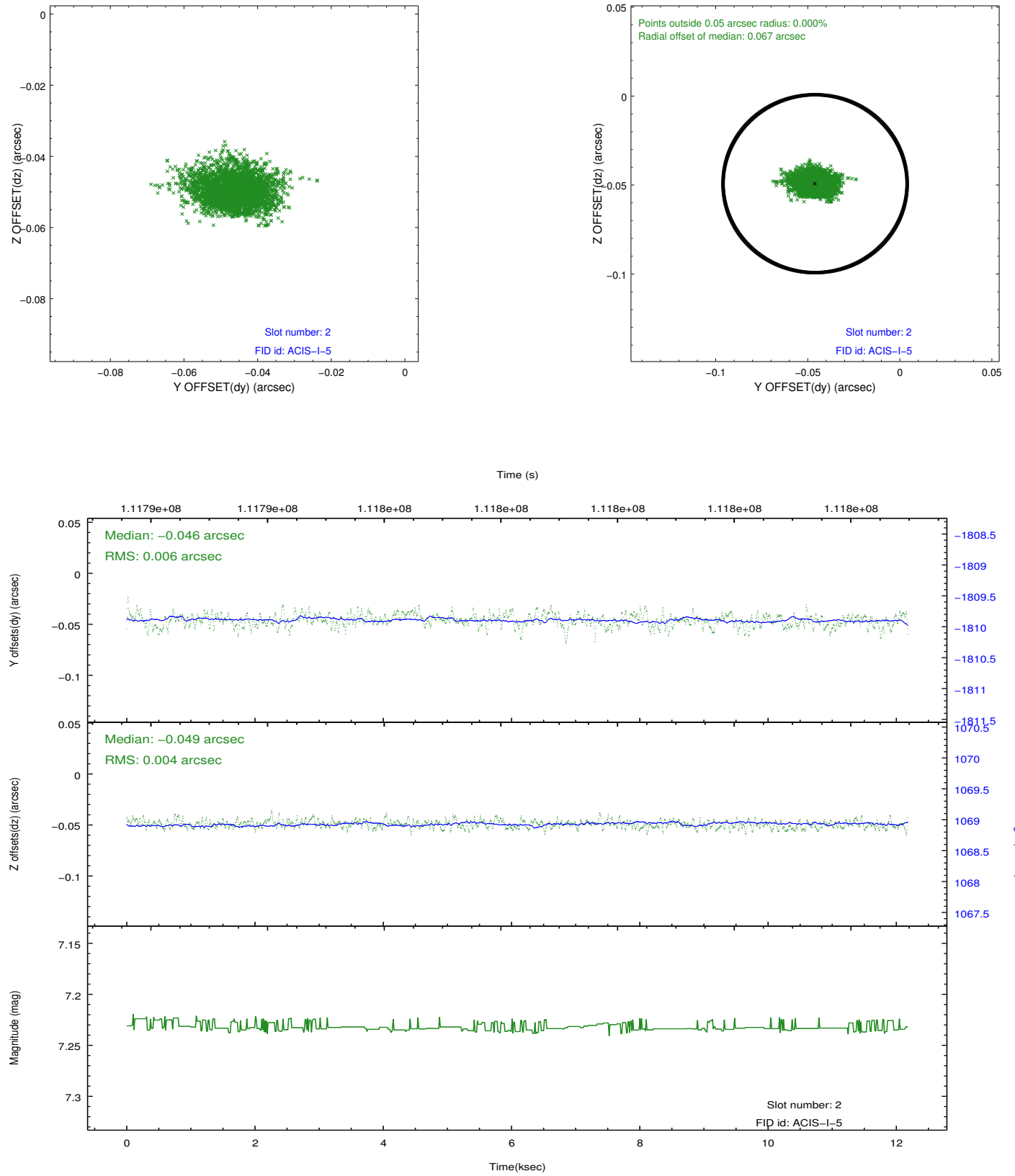
2.5.1 Slot 0



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)	2012.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.759

A.2 Comments

Roll constraint met.

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A spatial region of the original bias map for CCD = 1 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 1 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:

(266.33586,-28.39025),(266.33165,-28.39117),(266.33604,-28.40693),(266.34025,-28.40601)