

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12844 - L2 Version 2
Chandra X-Ray Center

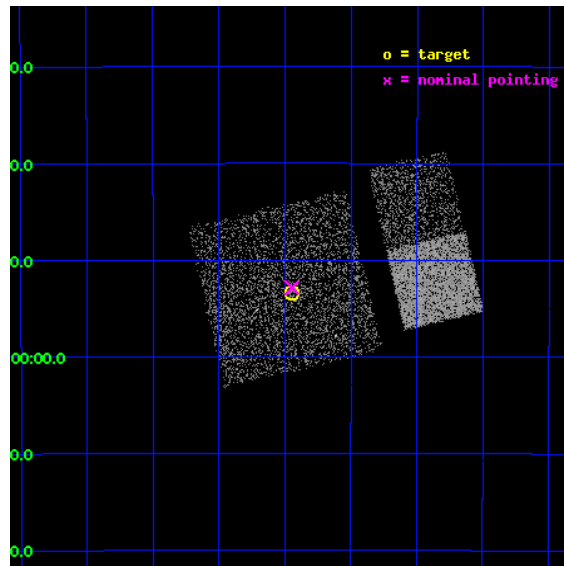
L2 Processing Date : Feb 2 2012

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

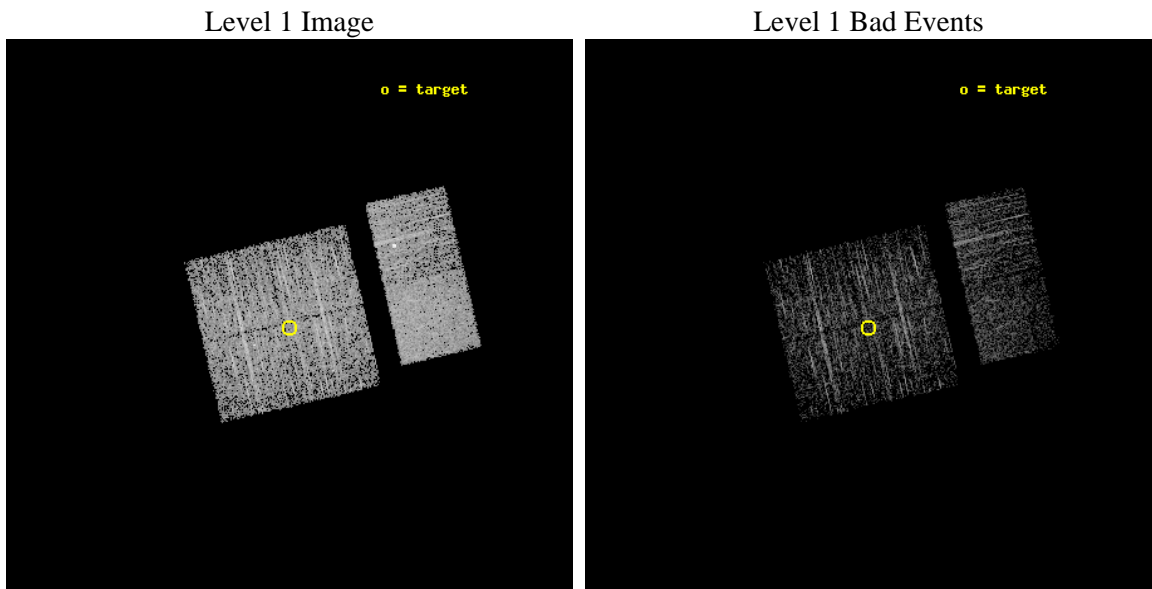
seq_num	702477	Sequence number
obs_id	12844	Observation id
title	Chandra observations of unidentified Fermi sources detected by INTEGRAL	Proposal title
observer	Mr. Claudio Ricci	Principal investigator
object	1FGL J1511.9-2253	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	227.9875	Observer's specified target RA [deg]
dec_targ	-22.889	Observer's specified target Dec [deg]
ra_nom	227.9868476823	Nominal RA [deg]
dec_nom	-22.881070959461	Nominal Dec [deg]
roll_nom	76.967906726752	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2047.9999924302	Sum of GTIs [s]
livetime	2022.0669833685	Livetime [s]
ontime0	2047.9999924302	Sum of GTIs [s]
ontime1	2047.9999924302	Sum of GTIs [s]
ontime2	2047.9999924302	Sum of GTIs [s]
ontime3	2047.9999924302	Sum of GTIs [s]
ontime6	2047.9999924302	Sum of GTIs [s]
ontime7	2047.9999924302	Sum of GTIs [s]
l2events	14906	Number of level 2 events



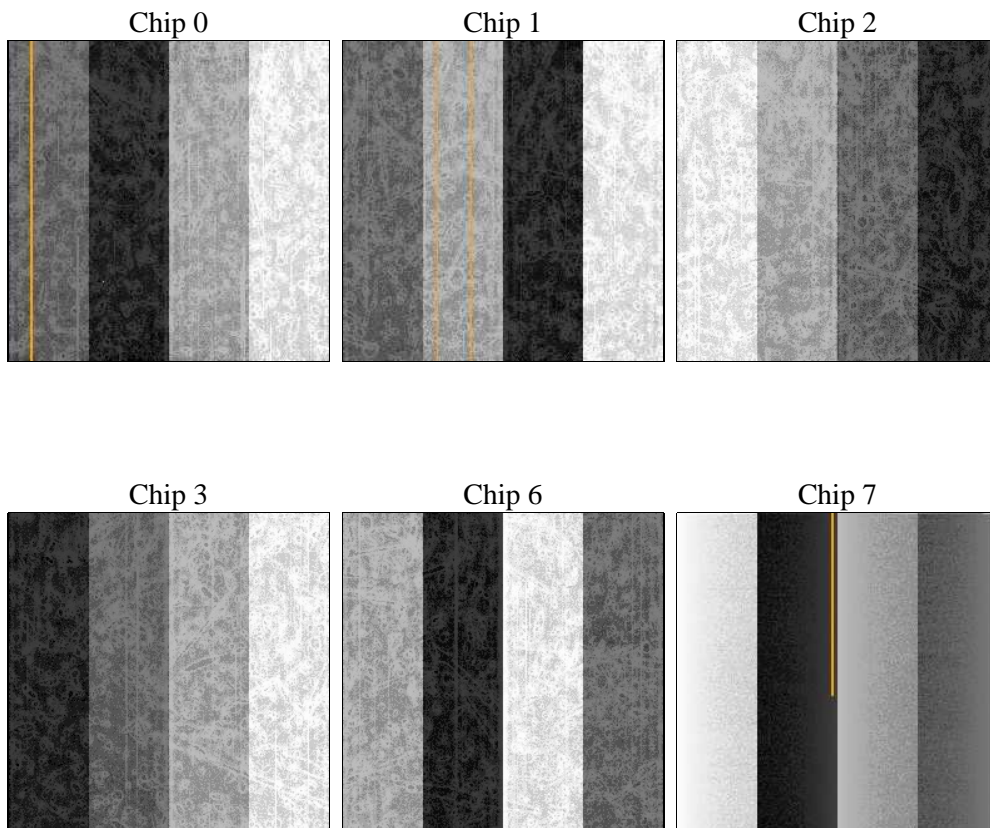
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	2047.9999924302	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	2047.9999924302	Sum of GTIs [s]
date	2012-02-02T04:12:37	Date and time of file creation	ontime1	2047.9999924302	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	2047.9999924302	Sum of GTIs [s]
			ontime3	2047.9999924302	Sum of GTIs [s]
			ontime6	2047.9999924302	Sum of GTIs [s]
			ontime7	2047.9999924302	Sum of GTIs [s]
			l1events	87960	Number of level 1 events

2.1.4 Events

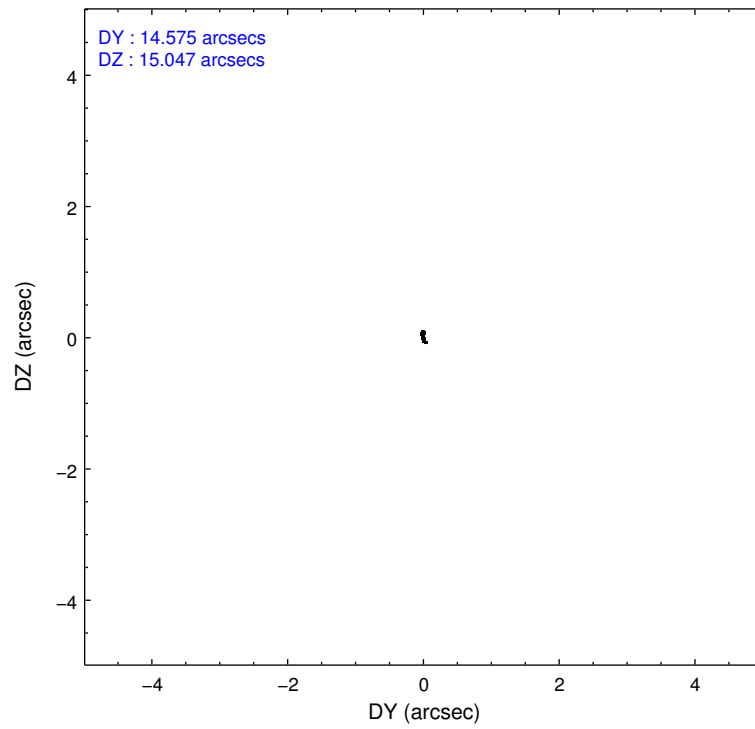
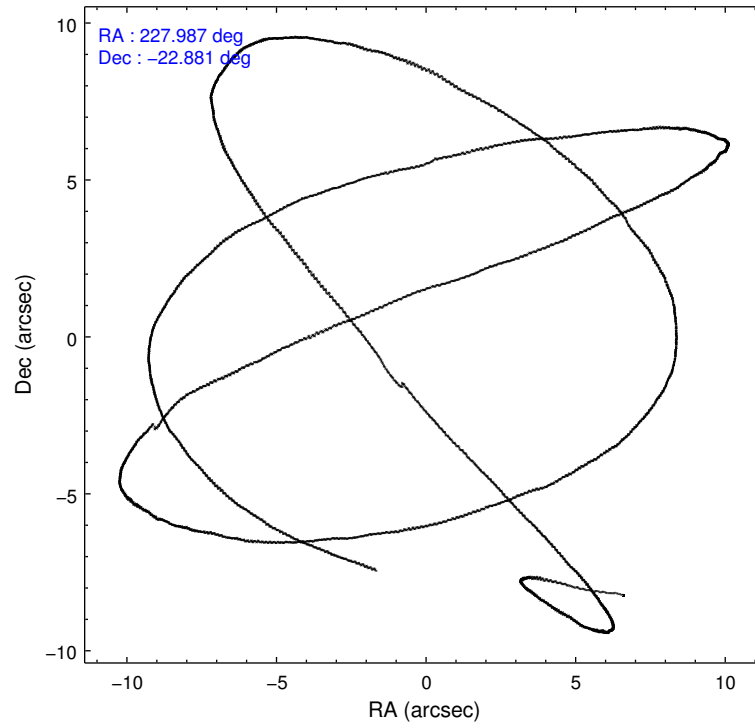
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	13700	12924	14522	13383	15280	18151
rejected events	12102	11003	12874	11870	13016	10109
rejected %	88%	85%	88%	88%	85%	55%

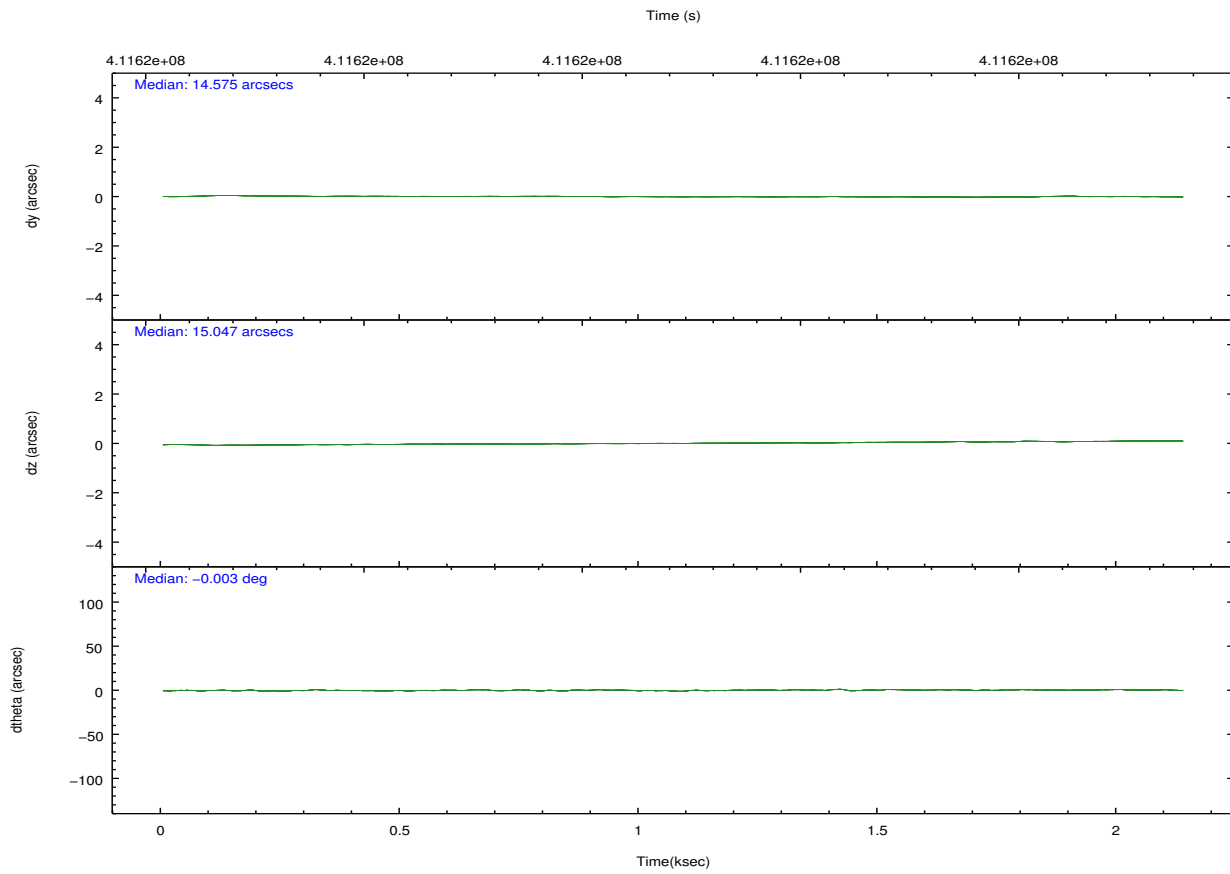
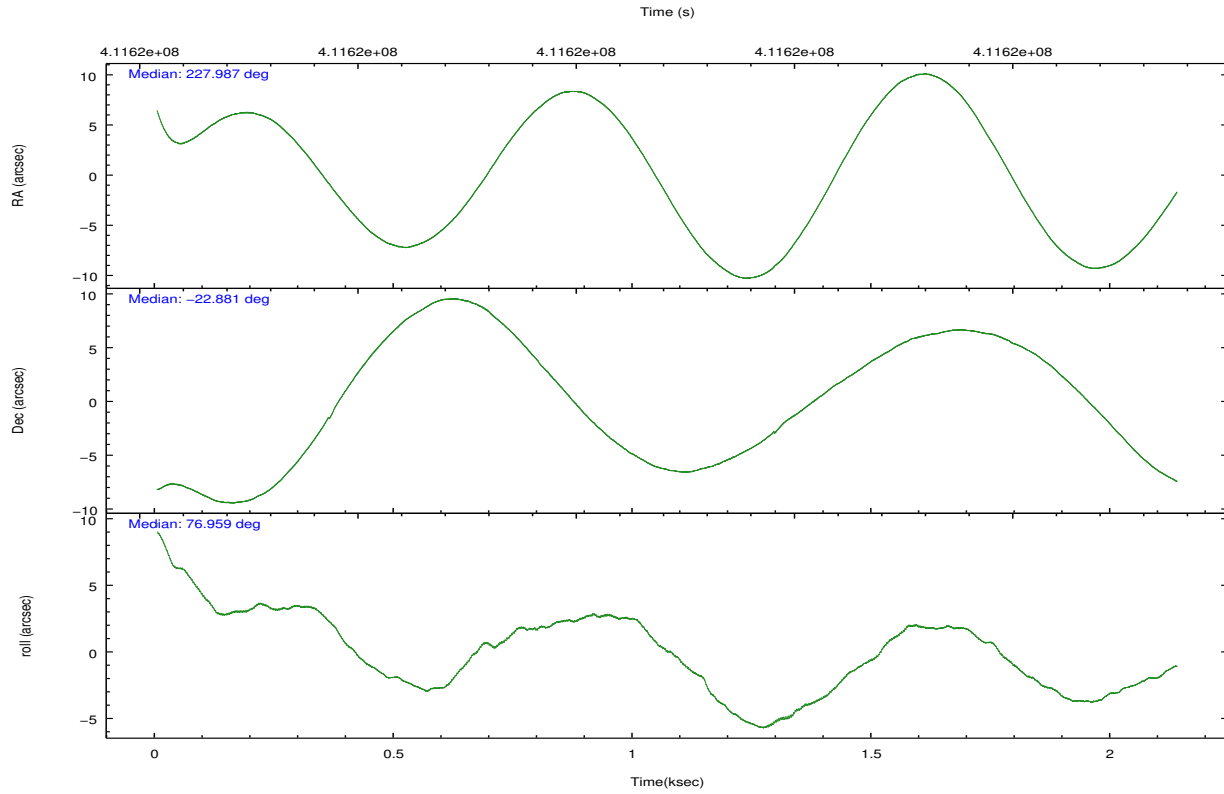
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	545	774	633	591	546	743
	3%	5%	4%	4%	3%	4%
grade 1 events	8	9	12	10	10	24
	0%	0%	0%	0%	0%	0%
grade 2 events	425	399	404	305	998	1619
	3%	3%	2%	2%	6%	8%
grade 3 events	170	201	153	161	171	723
	1%	1%	1%	1%	1%	3%
grade 4 events	156	152	161	150	175	729
	1%	1%	1%	1%	1%	4%
grade 5 events	605	608	533	663	707	1928
	4%	4%	3%	4%	4%	10%
grade 6 events	308	398	301	314	382	4251
	2%	3%	2%	2%	2%	23%
grade 7 events	11483	10383	12325	11189	12291	8134
	83%	80%	84%	83%	80%	44%

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	227.995672	227.9868476822984	CCD I2 on	Y	Y
[deg] Pointing Dec	-22.907208	-22.88107095946118	CCD I3 on	Y	Y
[deg] Pointing Roll	76.762653	76.96790672675196	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	411615276.184000	411614106.06924	CCD S5 on	N	N
Observation start date	2011-01-17T01:33:30	2011-01-17T01:15:06	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	411617276.184000	411618298.31946	On-chip summing requested	N	N
Observation end date	2011-01-17T02:06:50	2011-01-17T02:24:58	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



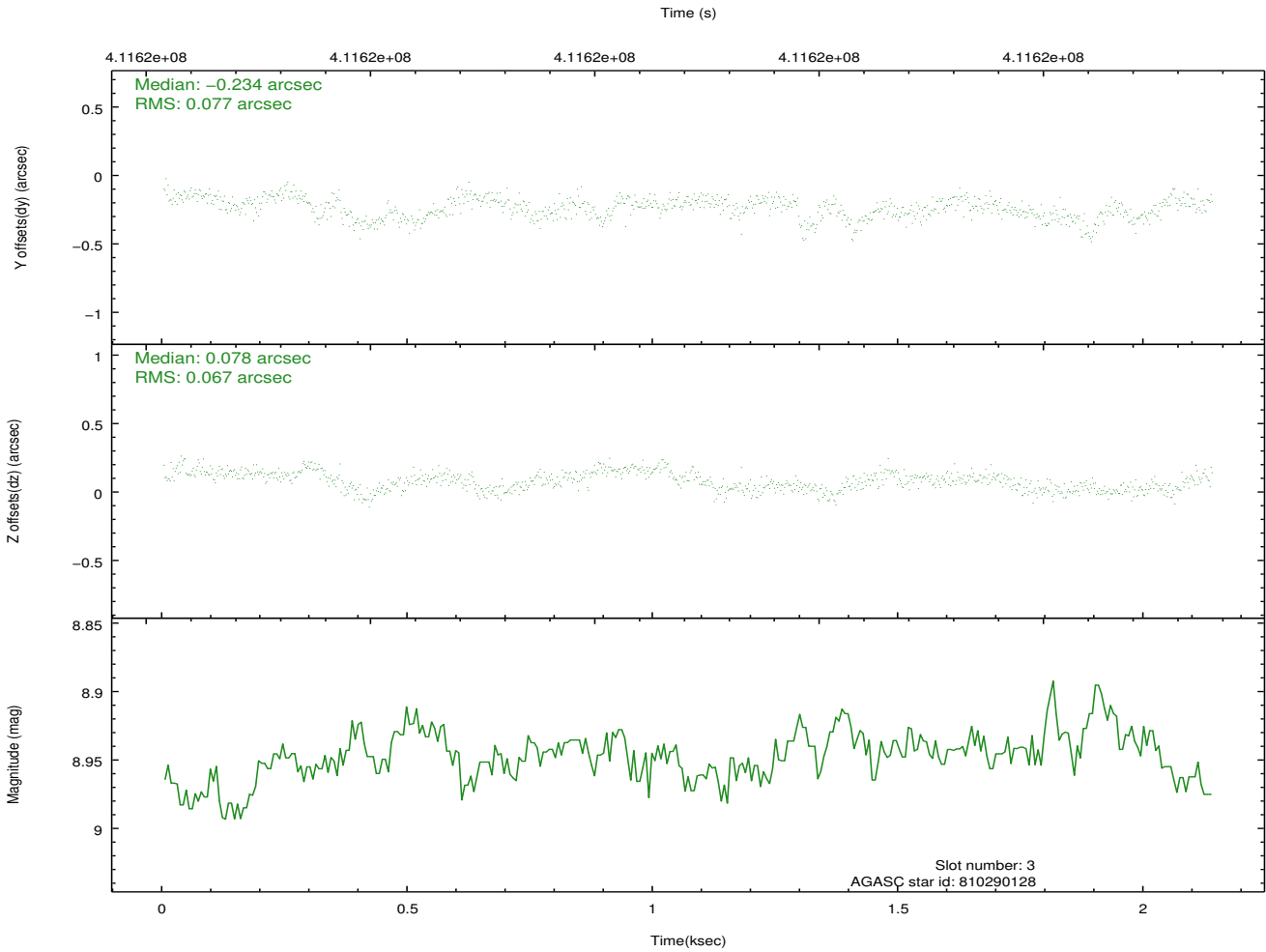
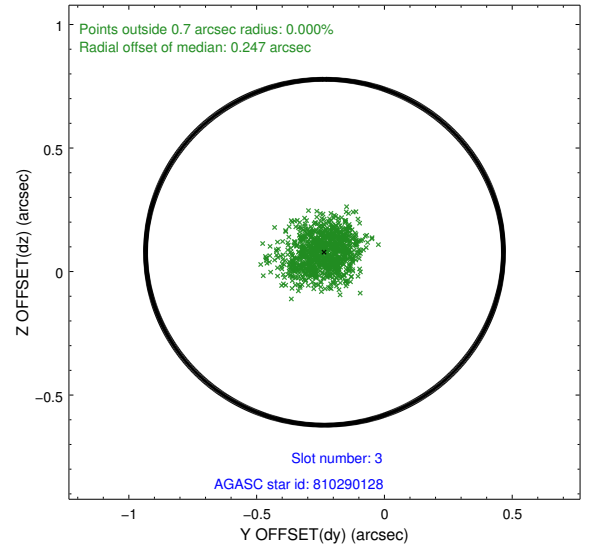
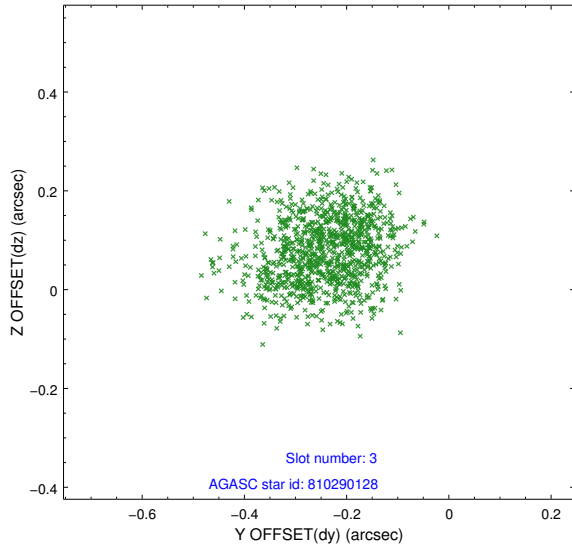


Slot Statistics

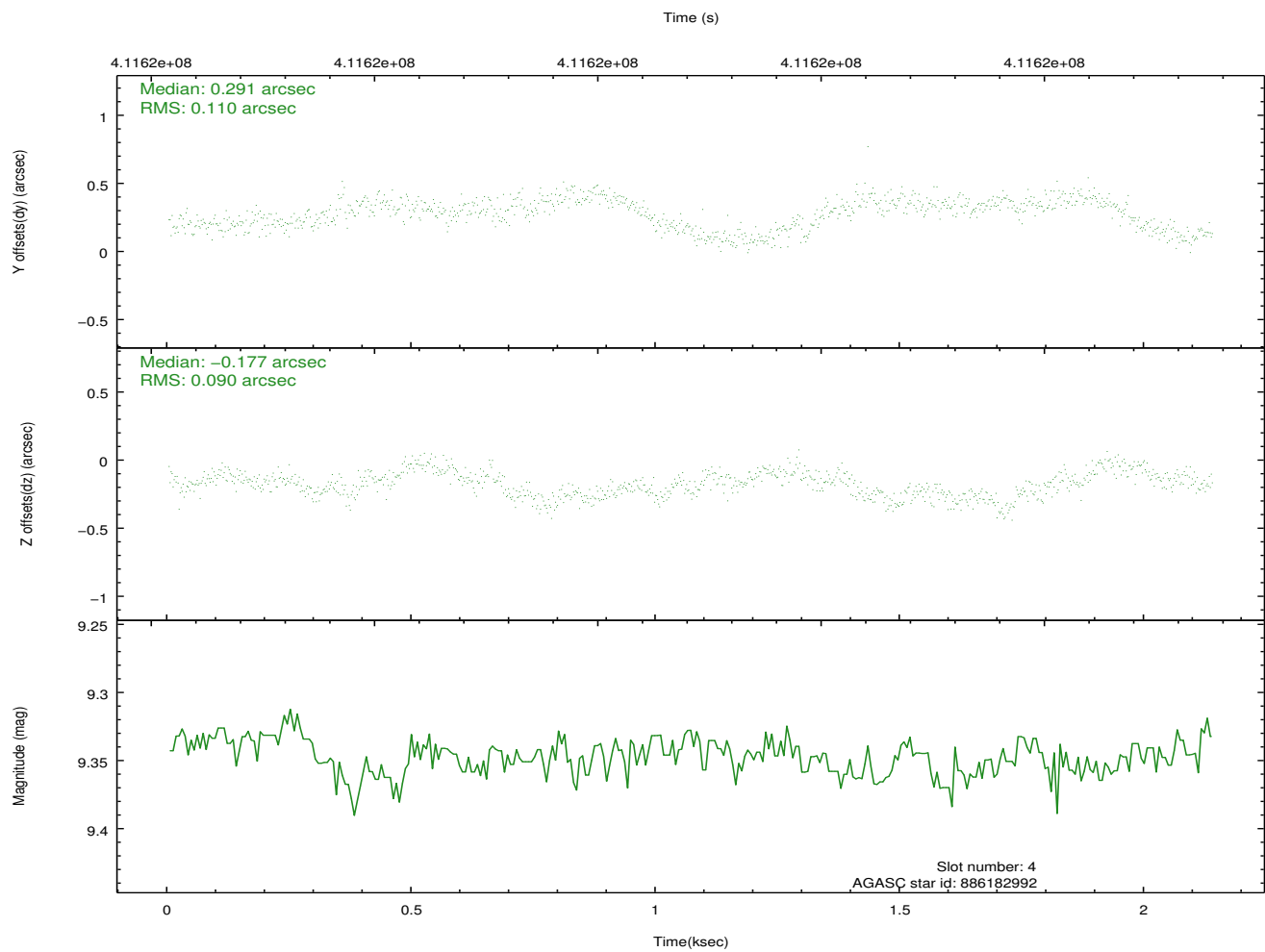
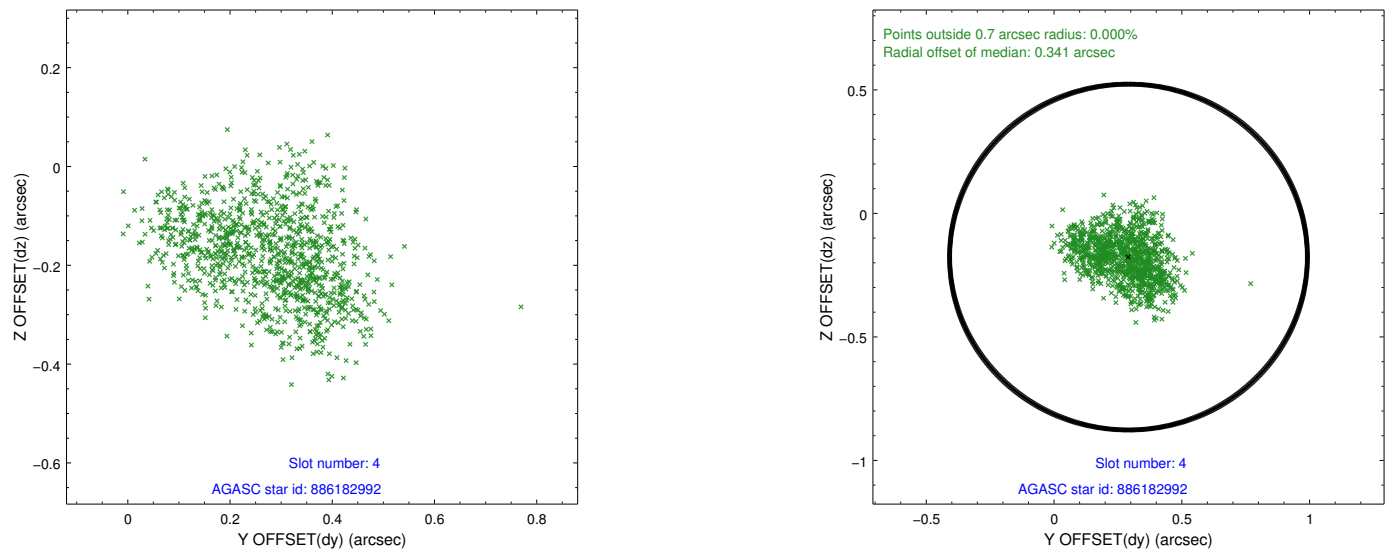
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.10	521	0.059	-0.039	0.006	0.011	0.000000	0.000000	924.96	-838.68
1	FID	ACIS-I-5	7.10	521	-0.254	0.047	0.005	0.009	0.000000	0.000000	-1821.79	1057.33
2	FID	ACIS-I-6	7.10	521	0.105	0.063	0.006	0.011	0.000000	0.000000	387.20	1705.34
3	GUIDE	810290128	8.95	1042	-0.234	0.078	0.107	0.173	228.590659	-22.470013	1982.03	-1566.38
4	GUIDE	886182992	9.35	1042	0.291	-0.177	0.158	0.233	227.809601	-23.423133	-1946.40	171.14
5	GUIDE	886310984	10.00	1036	-0.129	0.142	0.196	0.296	228.694508	-22.501582	1946.82	-1928.04
6	GUIDE	886322056	8.73	1043	0.079	0.382	0.095	0.146	228.442150	-23.540855	-1882.66	-1958.59
7	GUIDE	886181264	6.92	1042	0.005	-0.419	0.066	0.115	227.220615	-23.066147	-1152.98	2364.30

2.4 Star Slots

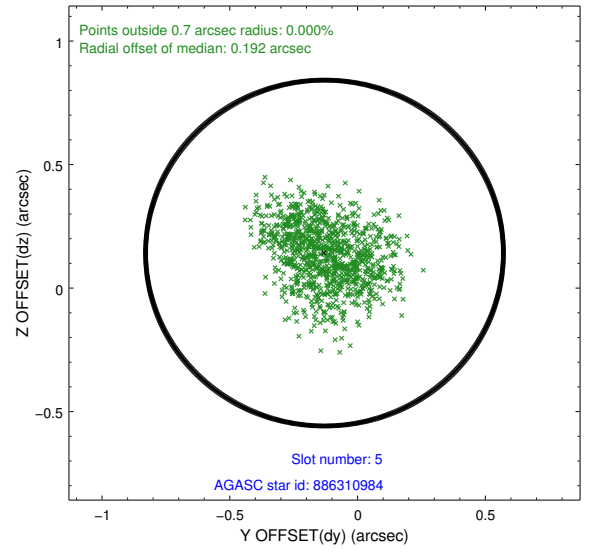
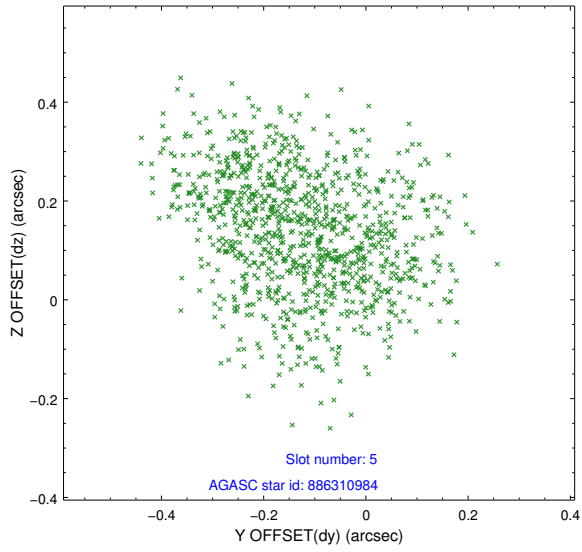
2.4.1 Slot 3



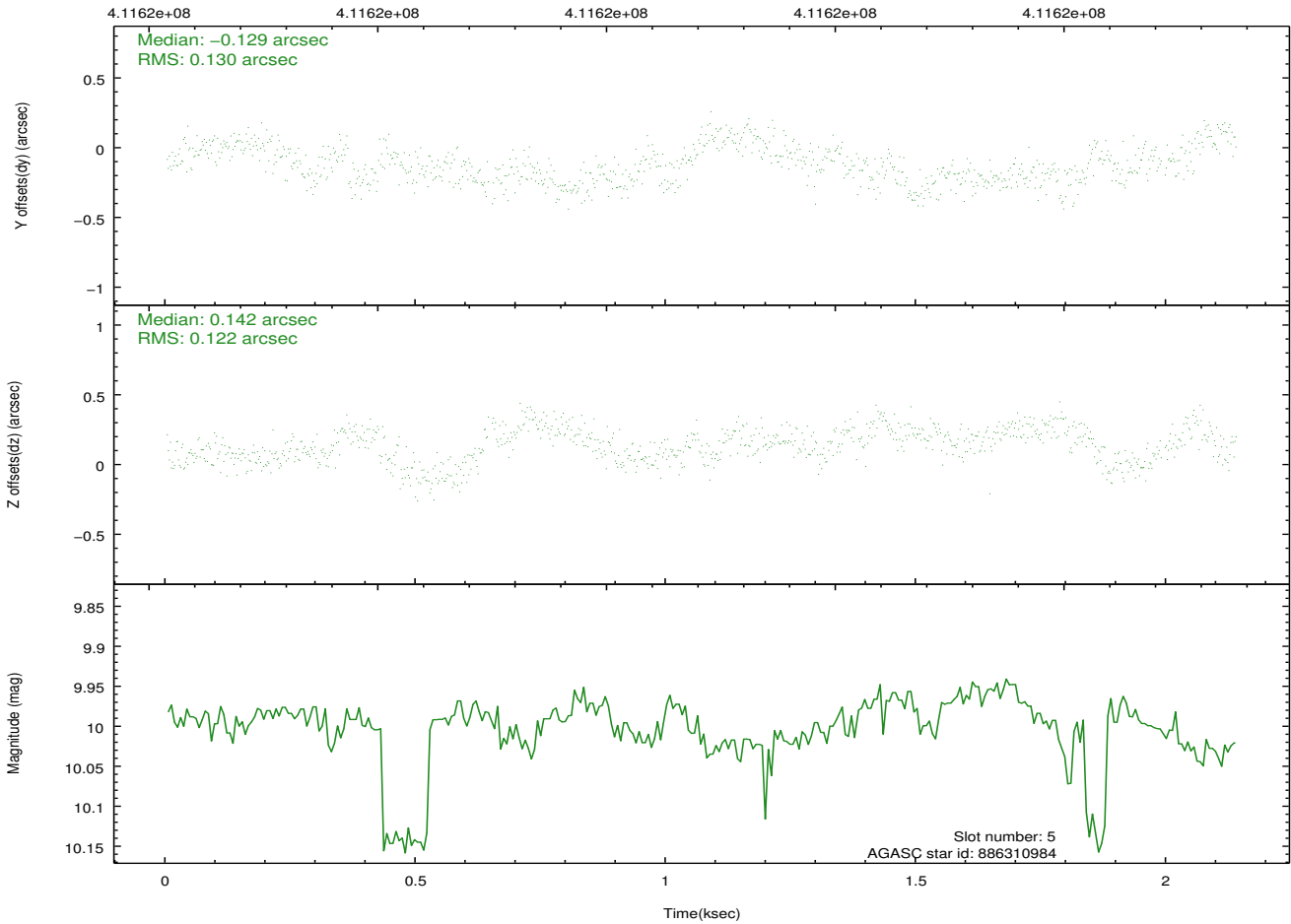
2.4.2 Slot 4



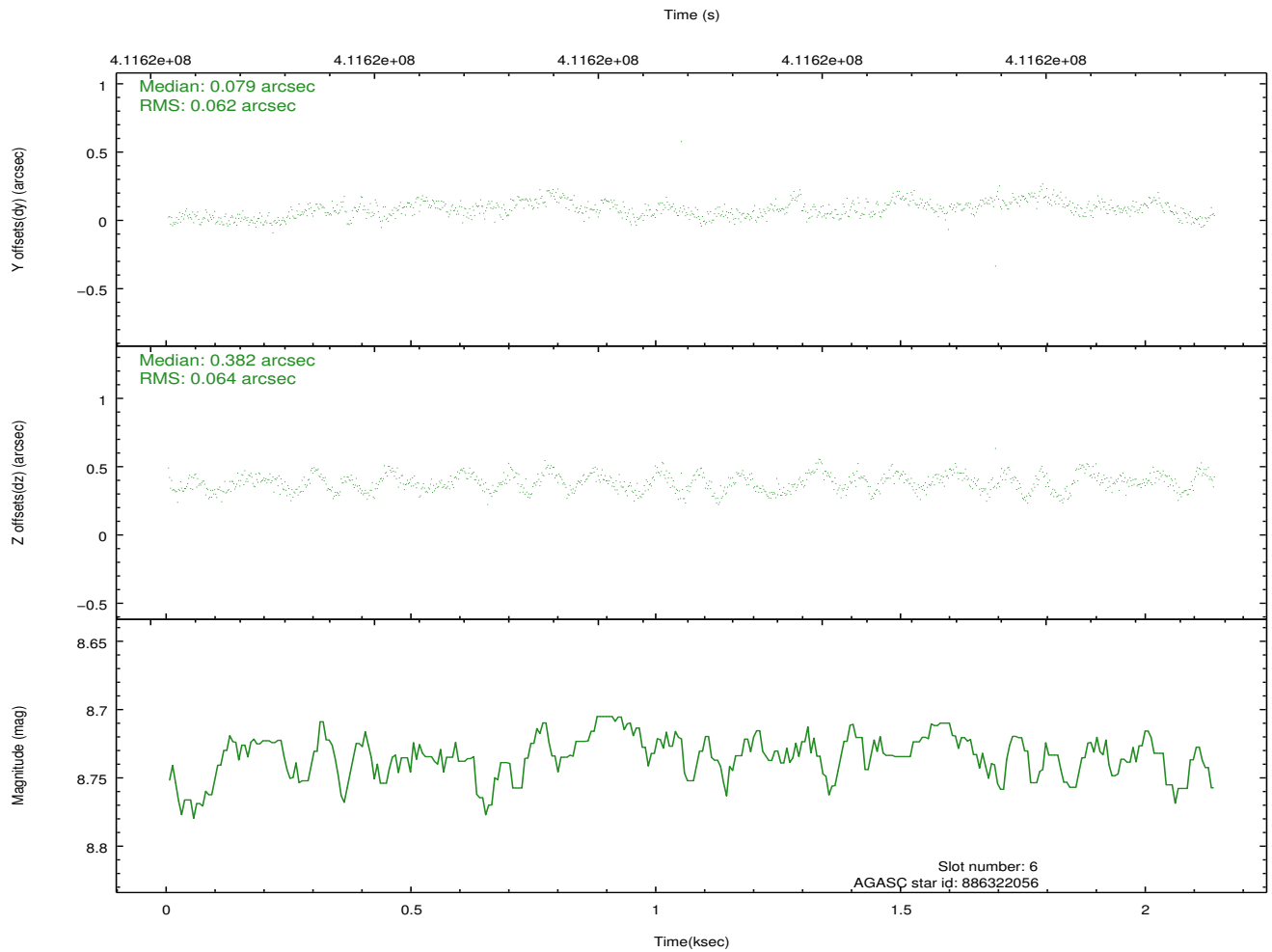
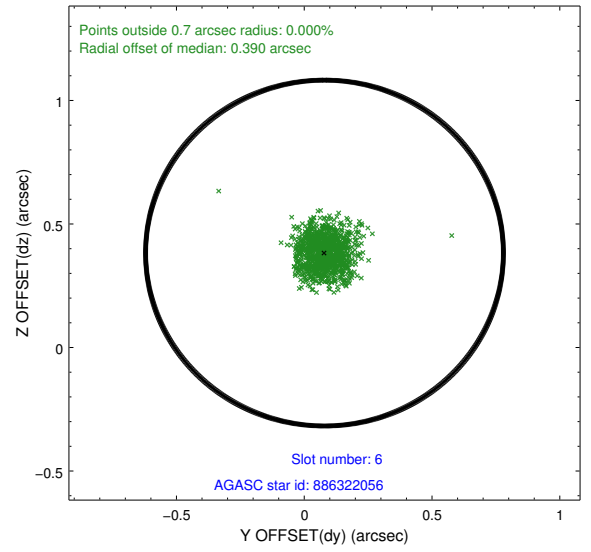
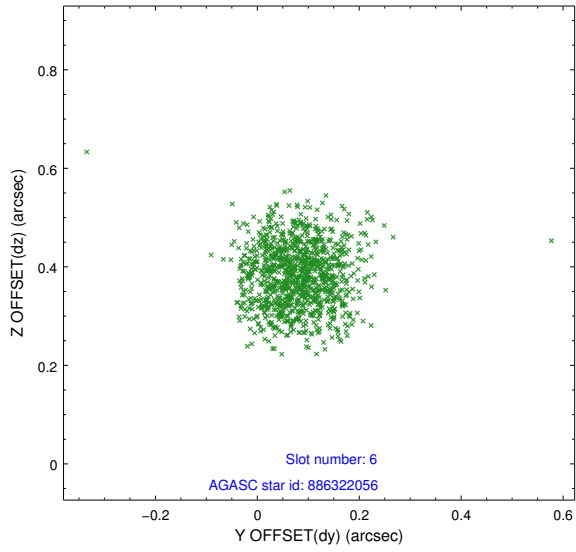
2.4.3 Slot 5



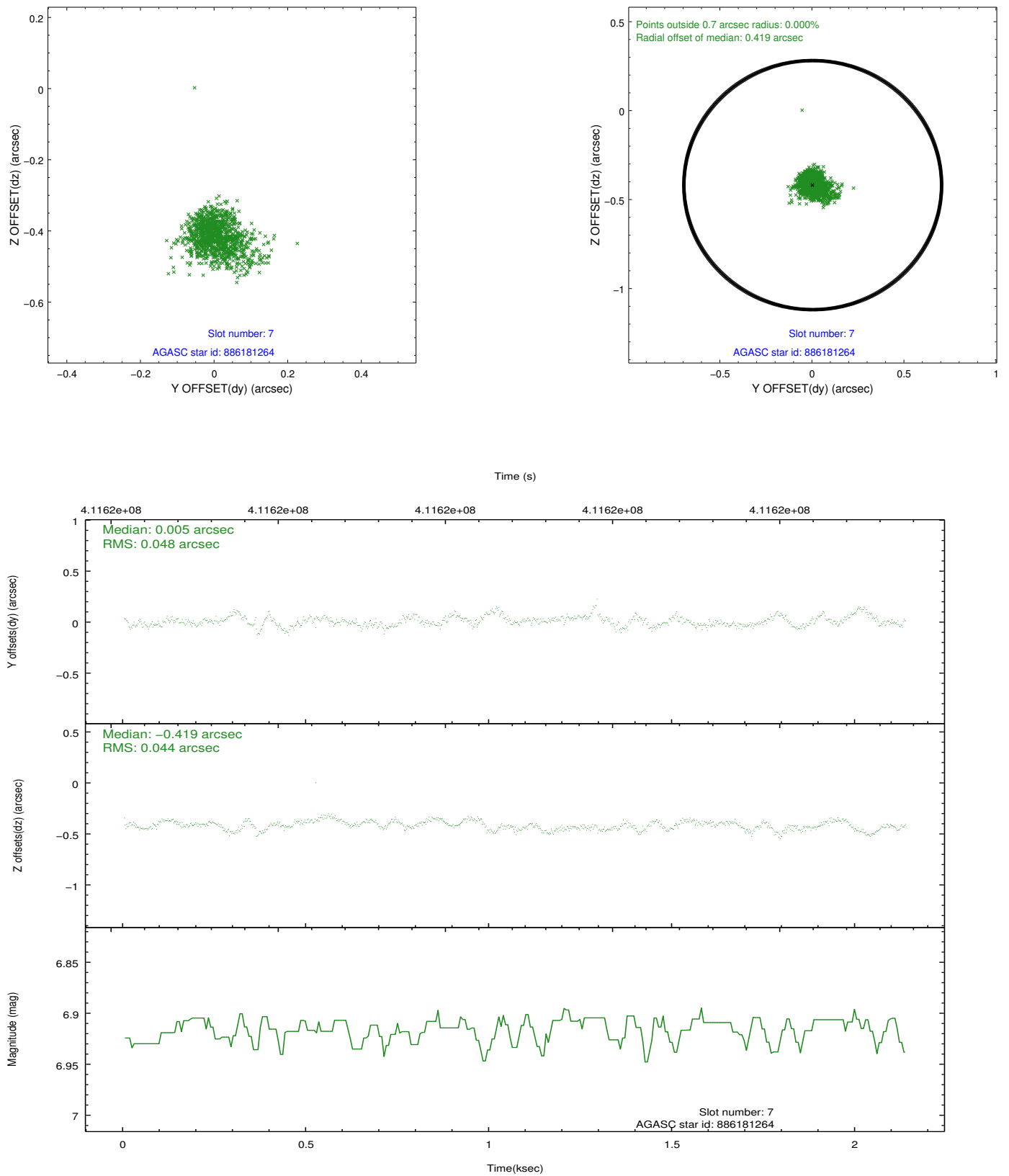
Time (s)



2.4.4 Slot 6

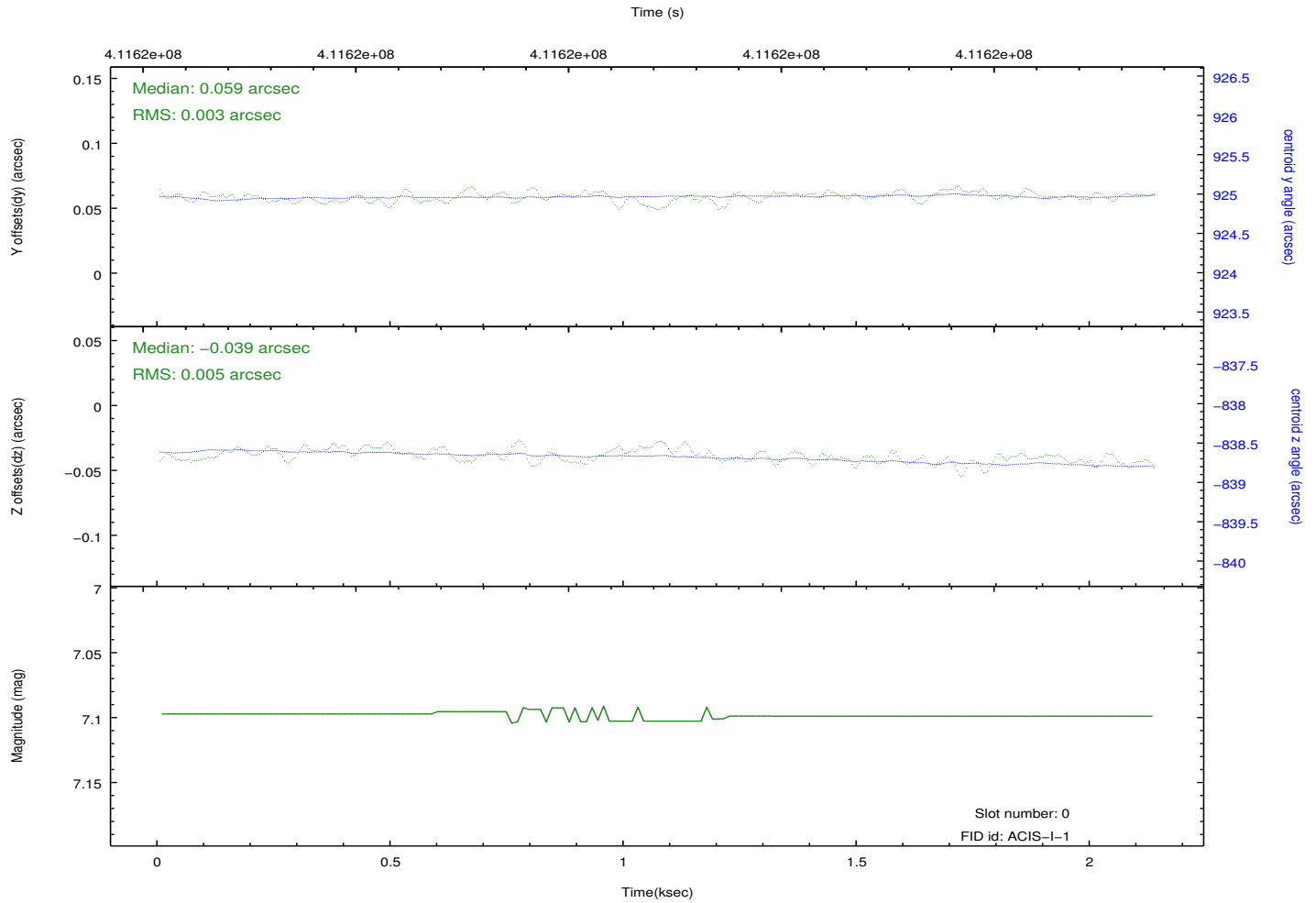
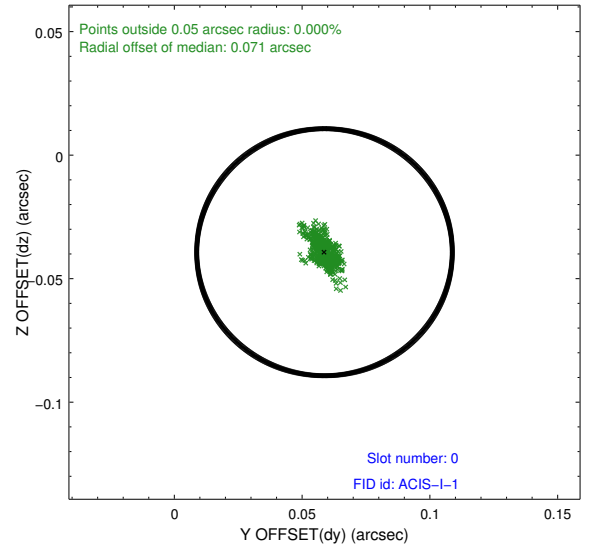
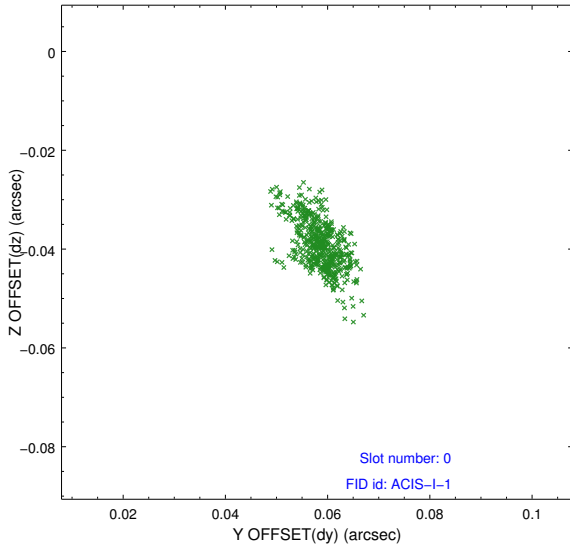


2.4.5 Slot 7

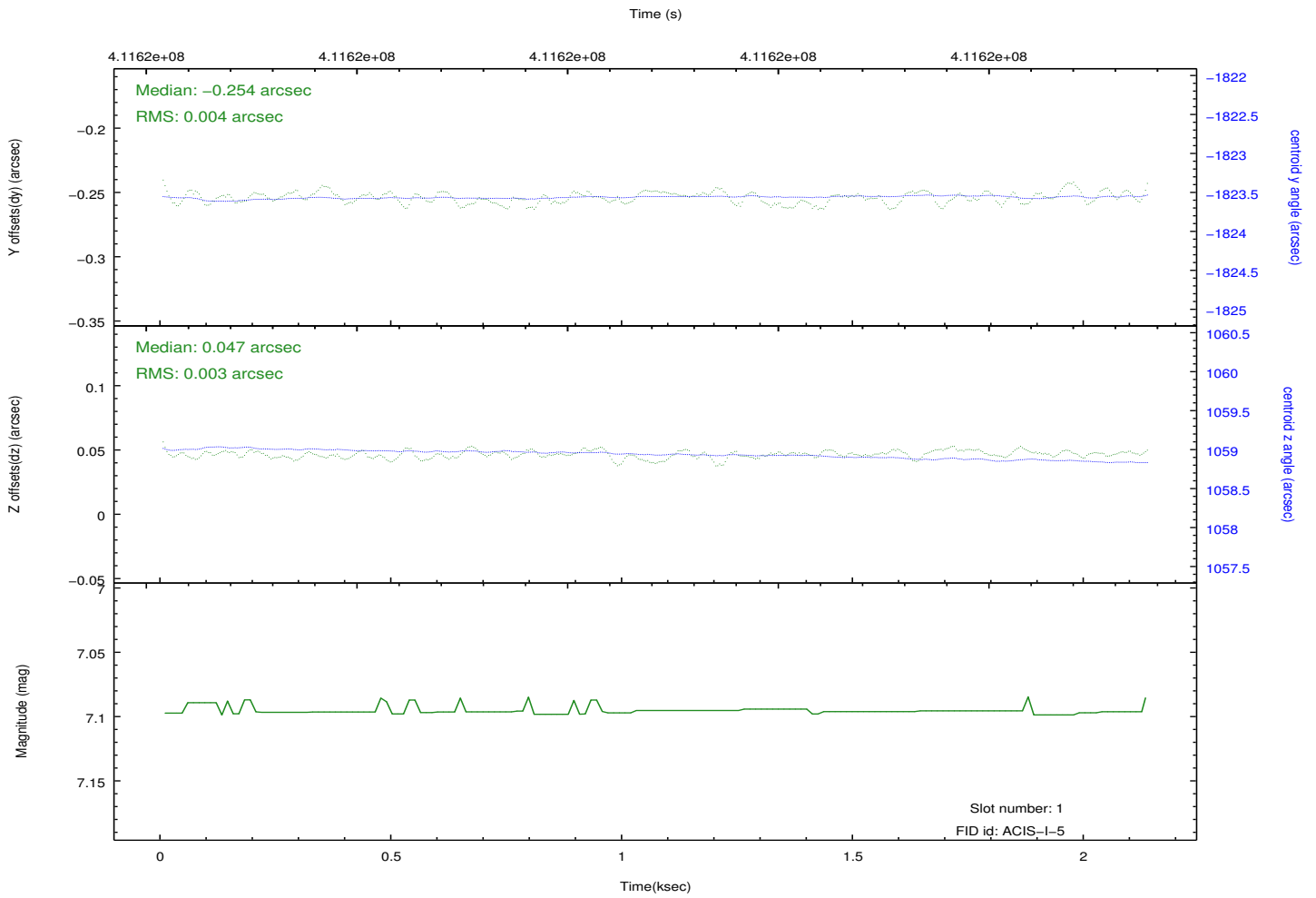
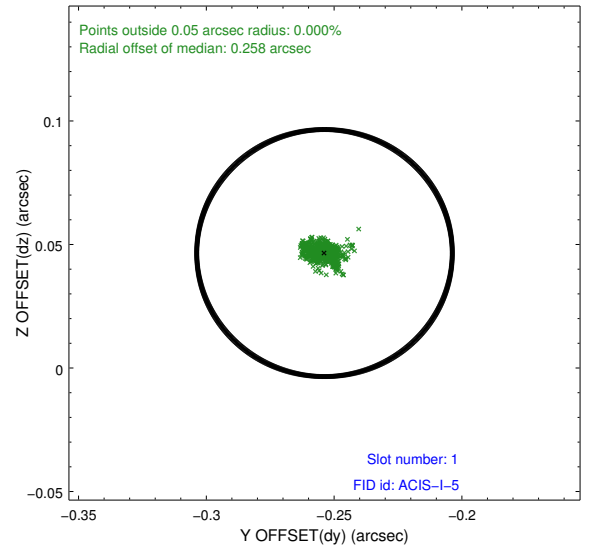
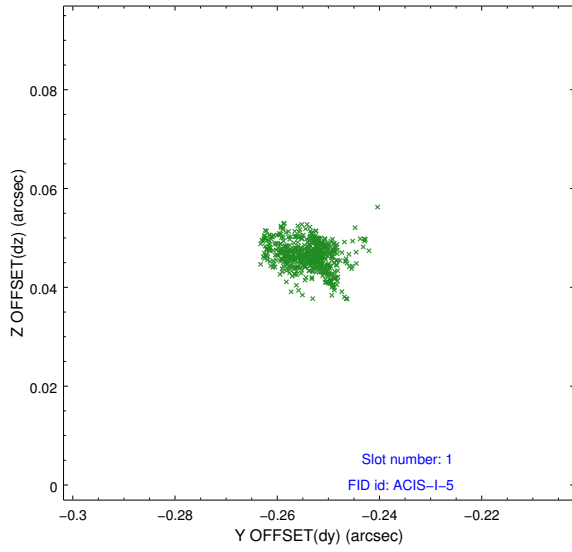


2.5 FID Slots

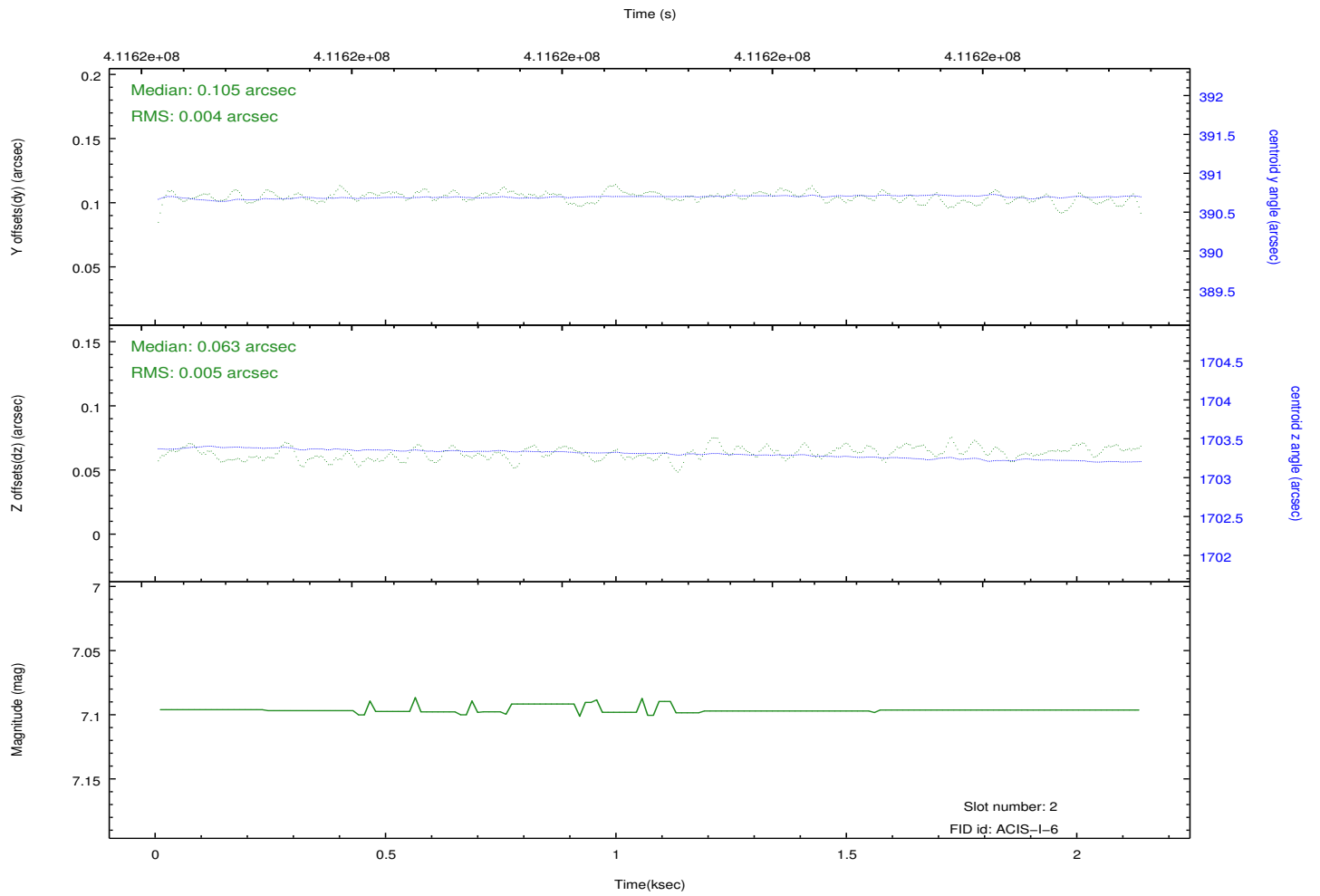
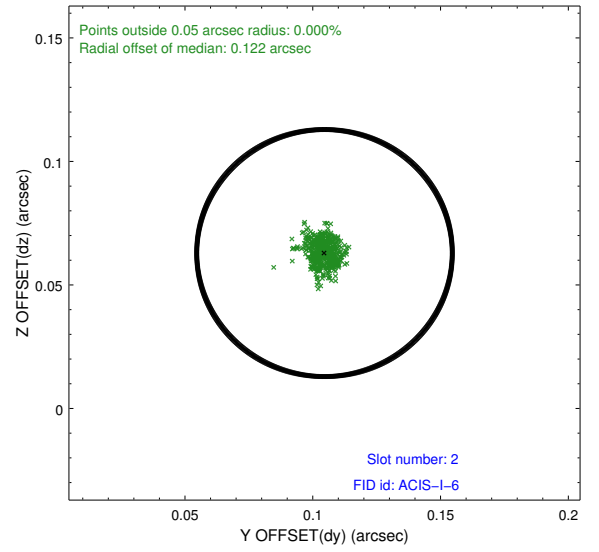
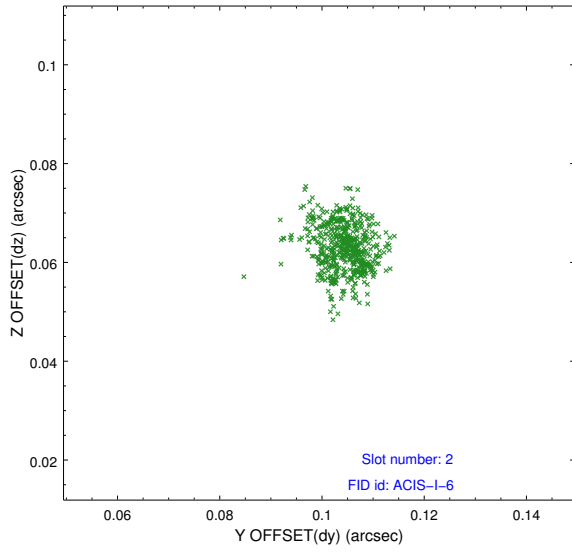
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0479999924302

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.