

V&V Reference Report

L2 ASCDS Version : 10

Observation 14700 - L2 Version 2
Chandra X-Ray Center

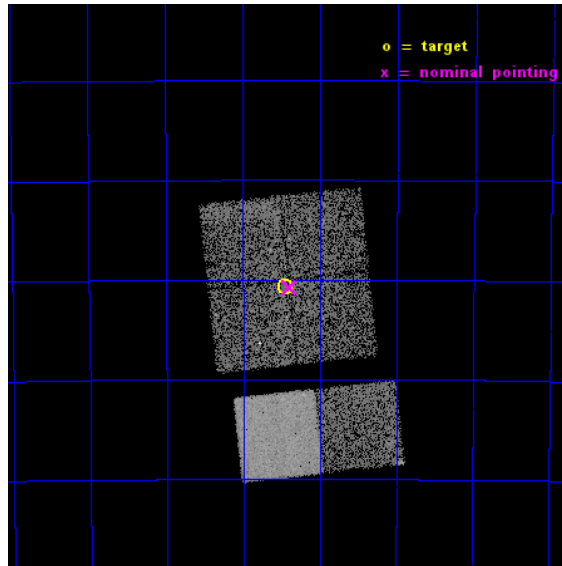
L2 Processing Date : Dec 6 2014

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1 Front

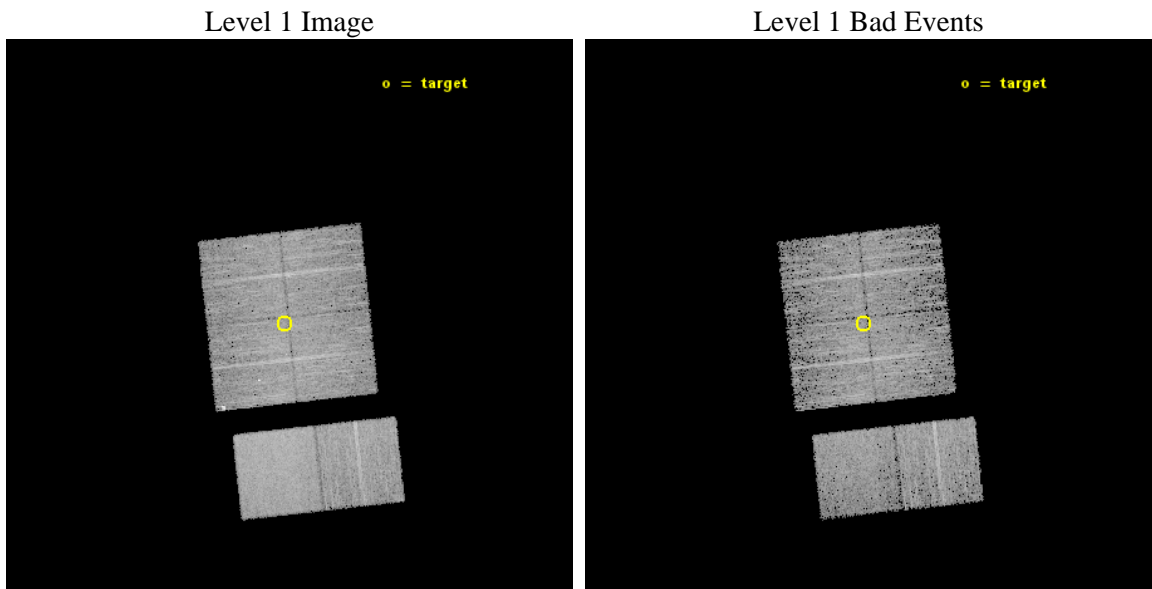
seq_num	501828	Sequence number
obs_id	14700	Observation id
title	Revealing pulsars hidden in the 2nd Fermi Catalogue	Proposal title
observer	Dr. George Pavlov	Principal investigator
object	2FGL J1027.4-5730c	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	156.864167	Observer's specified target RA [deg]
dec_targ	-57.511111	Observer's specified target Dec [deg]
ra_nom	156.84945943935	Nominal RA [deg]
dec_nom	-57.512702024428	Nominal Dec [deg]
roll_nom	173.83290650307	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9971.0132767558	Sum of GTIs [s]
livetime	9844.7543028221	Livetime [s]
ontime0	9970.8901567459	Sum of GTIs [s]
ontime1	9970.9311967492	Sum of GTIs [s]
ontime2	9970.9722367525	Sum of GTIs [s]
ontime3	9971.0132767558	Sum of GTIs [s]
ontime6	9971.0953567624	Sum of GTIs [s]
ontime7	9971.0543167591	Sum of GTIs [s]
l2events	52023	Number of level 2 events



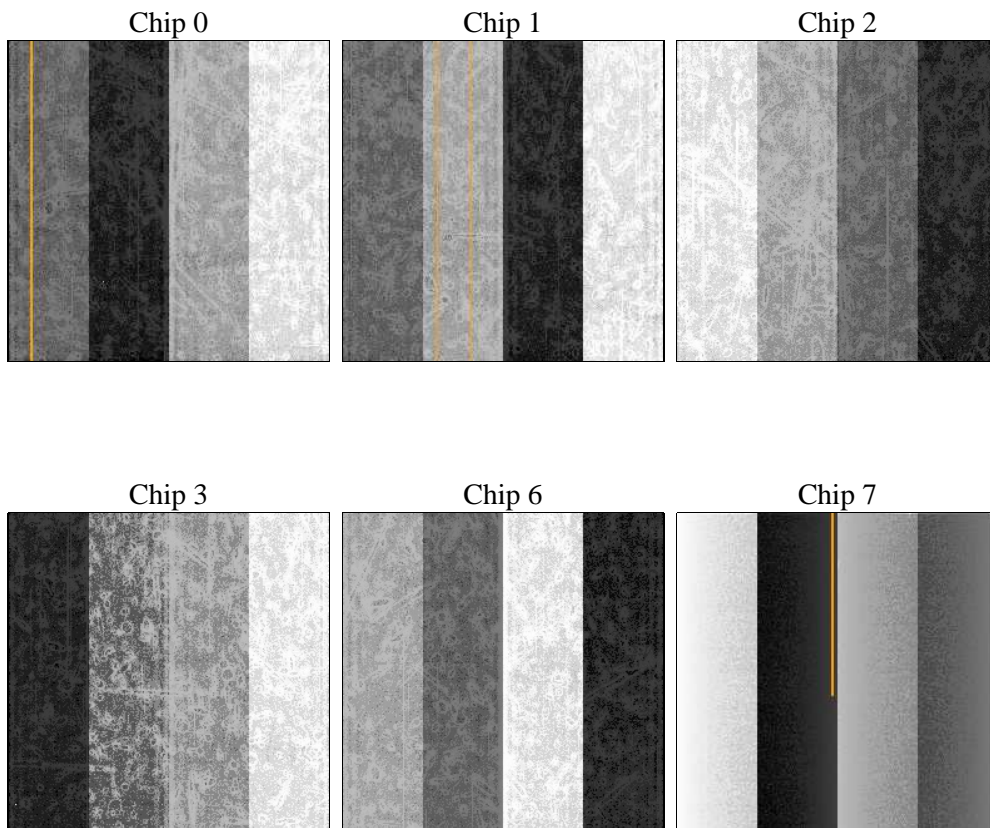
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	9971.0132767558	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	9970.8901567459	Sum of GTIs [s]
date	2014-12-06T10:24:59	Date and time of file creation	ontime1	9970.9311967492	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9970.9722367525	Sum of GTIs [s]
			ontime3	9971.0132767558	Sum of GTIs [s]
			ontime6	9971.0953567624	Sum of GTIs [s]
			ontime7	9971.0543167591	Sum of GTIs [s]
			l1events	279446	Number of level 1 events

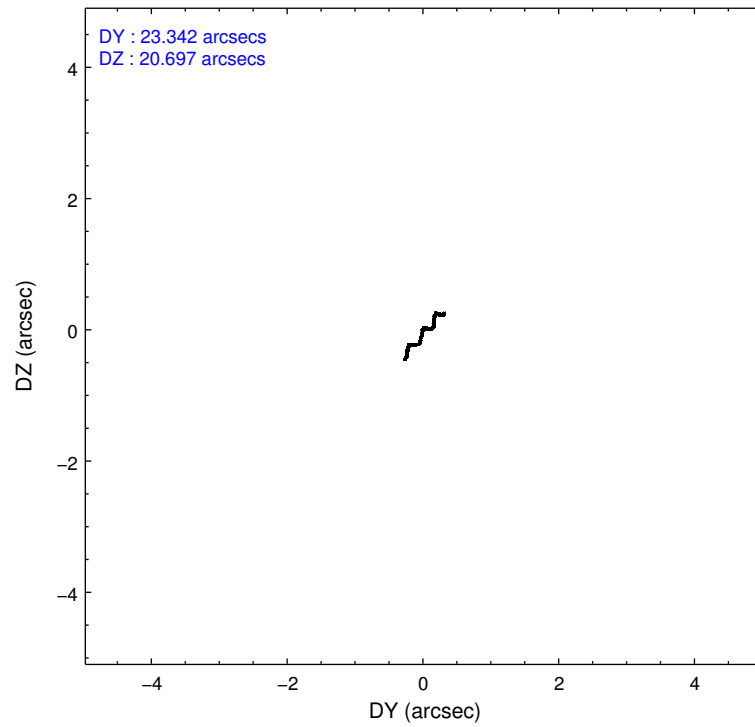
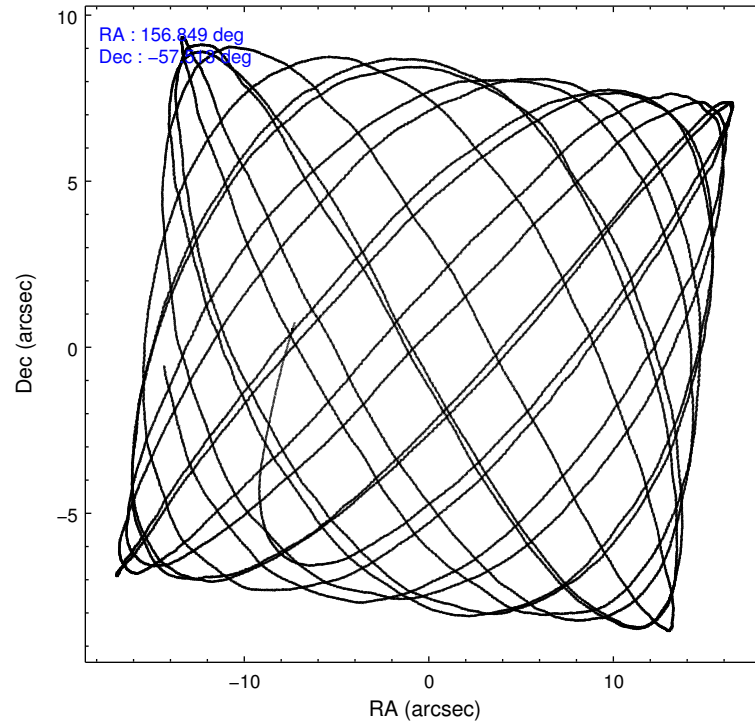
2.1.4 Events

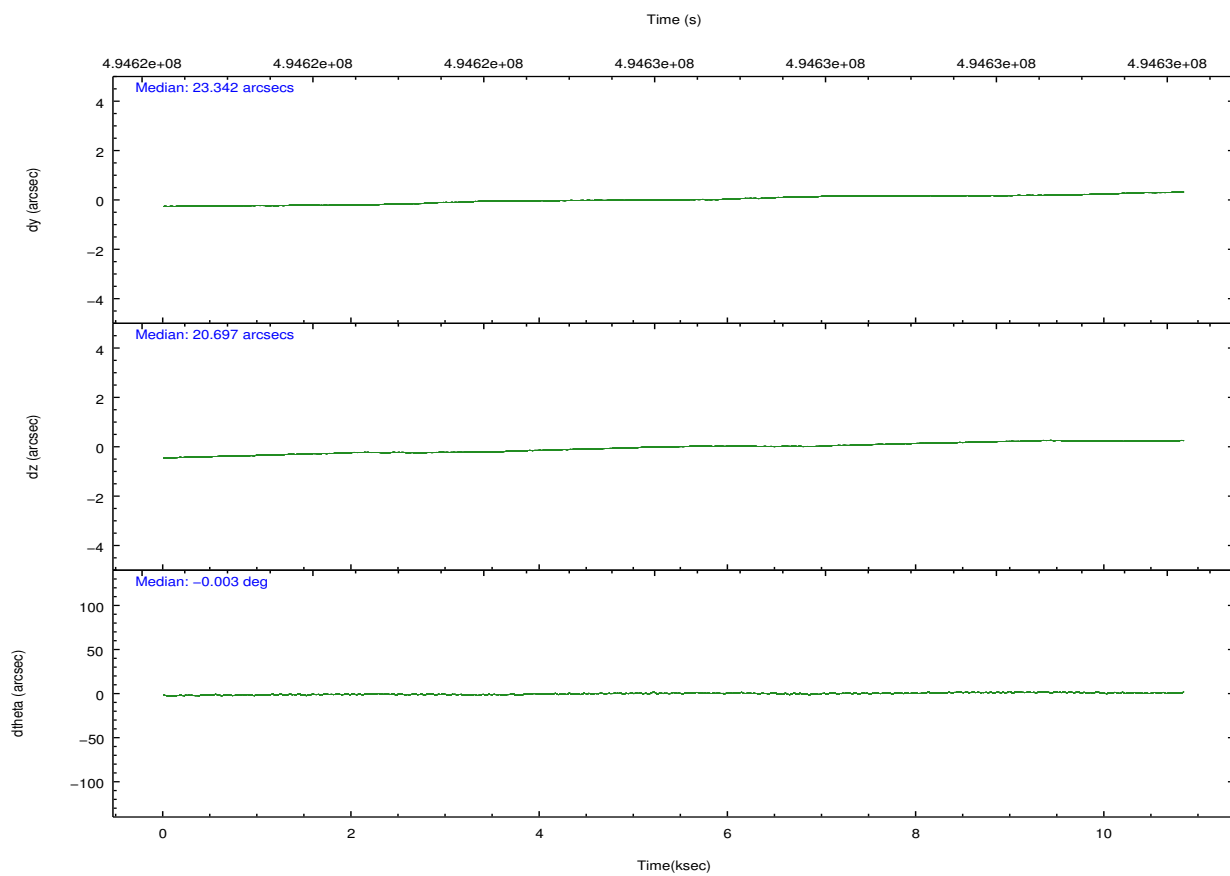
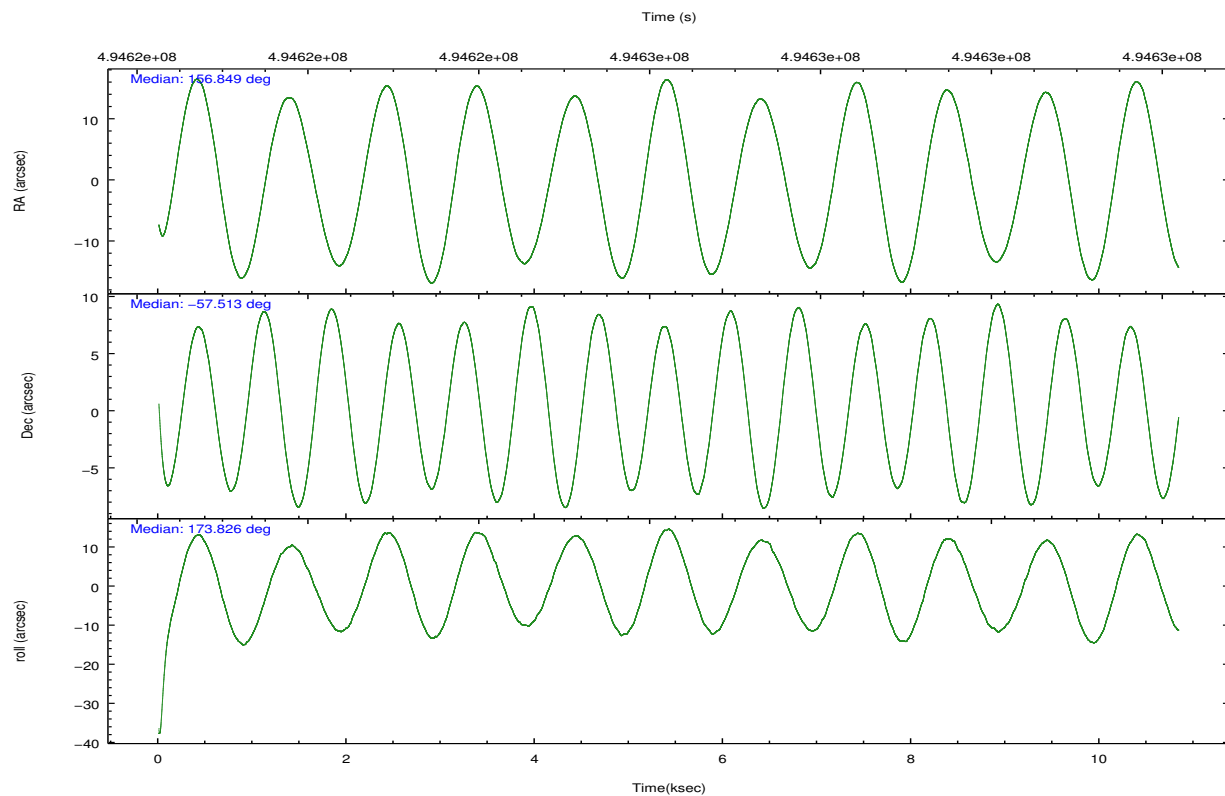
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	39530	39796	43886	46138	47351	62745	grade 0 events	2066	2297	2203	3329	2422	2577
rejected events	33930	33536	38249	39366	41135	35332		5%	5%	5%	7%	5%	4%
rejected %	85%	84%	87%	85%	86%	56%	grade 1 events	18	19	19	32	26	79
								0%	0%	0%	0%	0%	0%
							grade 2 events	1423	1483	1302	1254	1364	5555
								3%	3%	2%	2%	2%	8%
							grade 3 events	501	567	533	550	556	2286
								1%	1%	1%	1%	1%	3%
							grade 4 events	506	597	533	547	534	2409
								1%	1%	1%	1%	1%	3%
							grade 5 events	2121	2291	1971	2452	2374	6417
								5%	5%	4%	5%	5%	10%
							grade 6 events	1107	1317	1067	1094	1342	14593
								2%	3%	2%	2%	2%	23%
							grade 7 events	31788	31225	36258	36880	38733	28829
								80%	78%	82%	79%	81%	45%

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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	156.896131	156.8494594393522	CCD I2 on	Y	Y
[deg] Pointing Dec	-57.501458	-57.51270202442835	CCD I3 on	Y	Y
[deg] Pointing Roll	173.663624	173.8329065030707	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)	494621649.184000	494620361.10497	CCD S5 on	N	N
Observation start date	2013-09-03T18:53:02	2013-09-03T18:32:41	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	494631649.184000	494632949.13066	On-chip summing requested	N	N
Observation end date	2013-09-03T21:39:42	2013-09-03T22:02:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



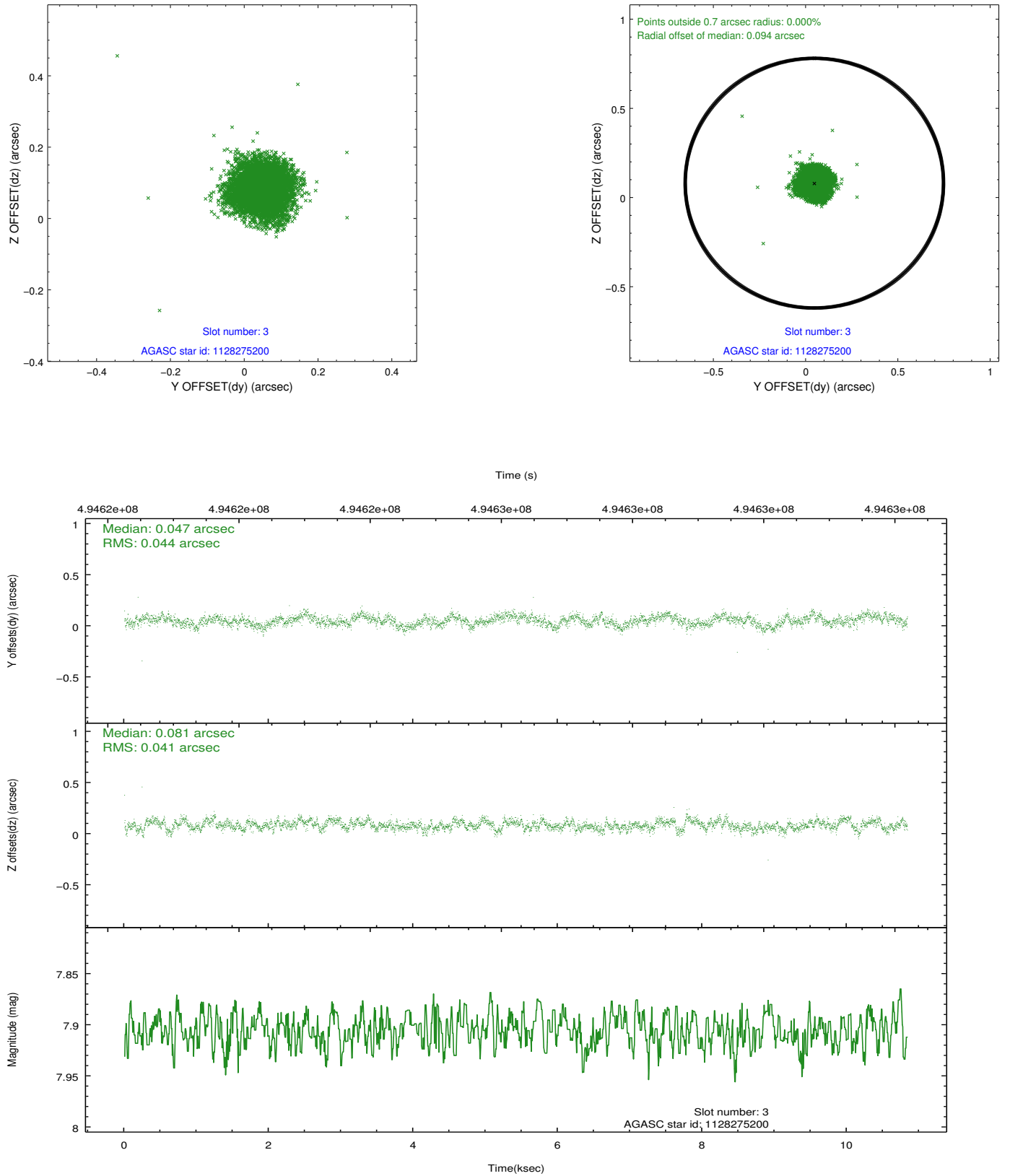


Slot Statistics

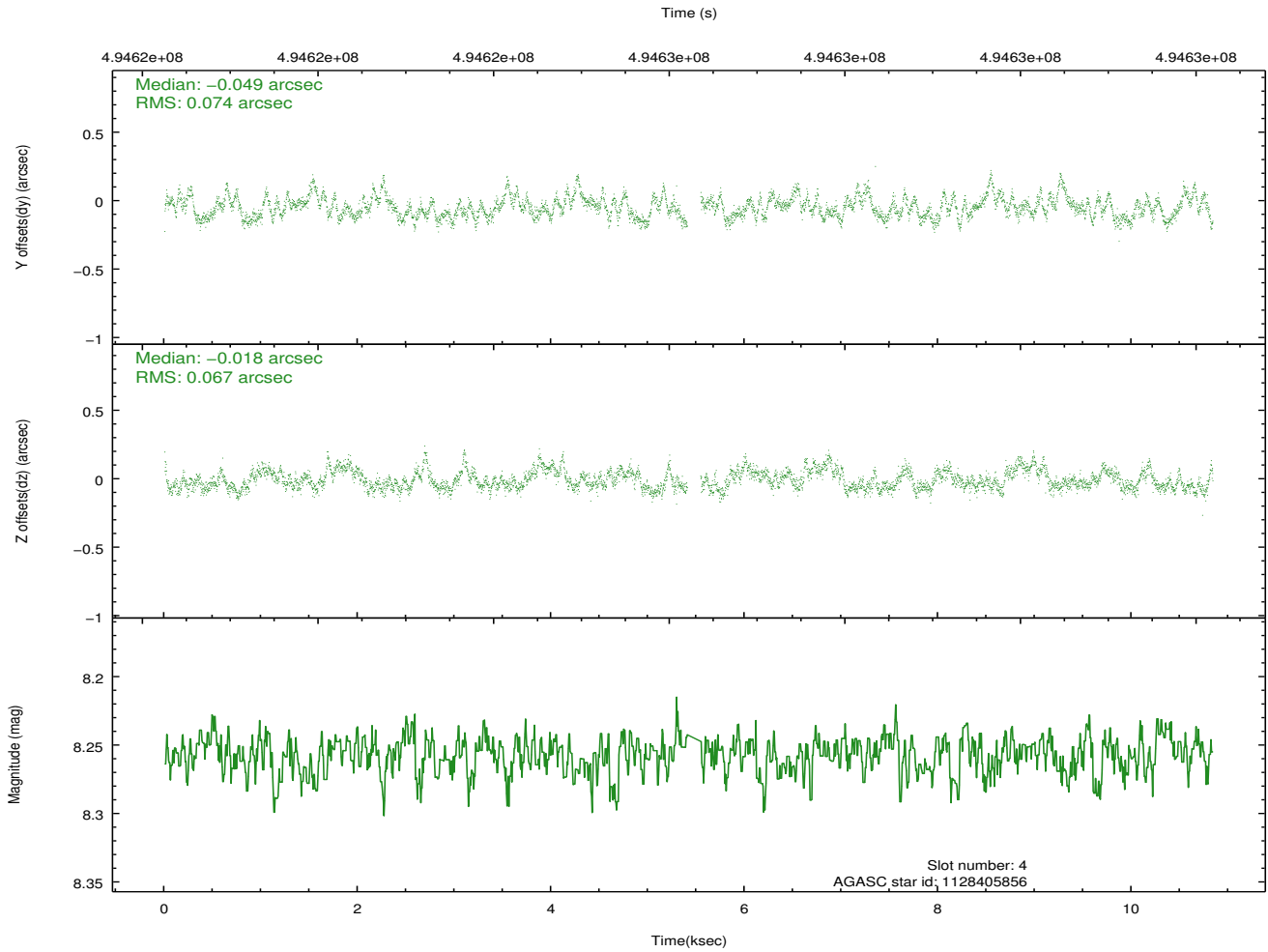
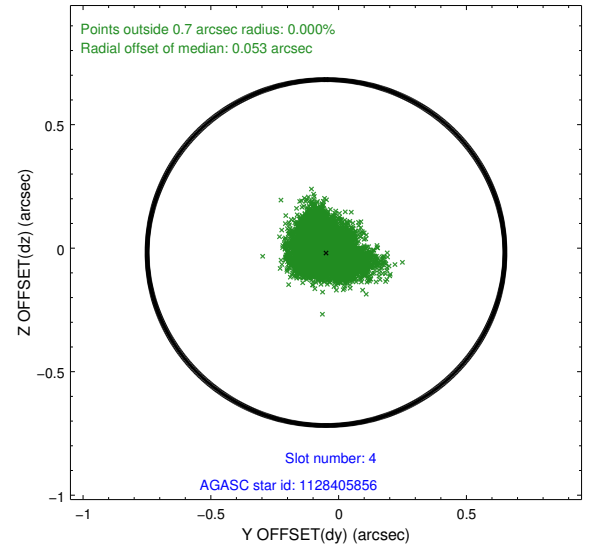
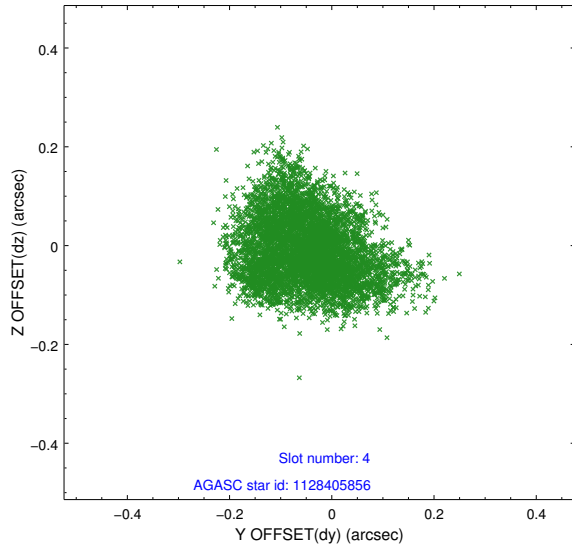
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.03	2643	0.071	-0.038	0.012	0.021	0.000000	0.000000	915.96	-844.41
1	FID		ACIS-I-5	7.03	2643	-0.294	0.049	0.009	0.014	0.000000	0.000000	-1832.29	1052.86
2	FID		ACIS-I-6	7.03	2643	0.132	0.060	0.008	0.012	0.000000	0.000000	380.98	1697.97
3	GUIDE	used	1128275200	7.91	5287	0.047	0.081	0.065	0.100	155.999863	-57.081962	1908.70	-1295.49
4	GUIDE	used	1128405856	8.26	5220	-0.049	-0.018	0.108	0.169	157.227043	-58.055525	-846.42	1914.21
5	GUIDE	used	1128406664	7.17	5287	-0.132	-0.223	0.089	0.140	156.731916	-57.607041	272.81	413.49
6	GUIDE	used	1128418824	7.07	5286	0.025	0.191	0.092	0.146	157.593380	-57.077392	-1187.56	-1660.63
7	GUIDE	used	1128404312	8.44	5280	0.113	-0.032	0.089	0.149	157.786033	-58.049259	-1903.84	1783.66

2.4 Star Slots

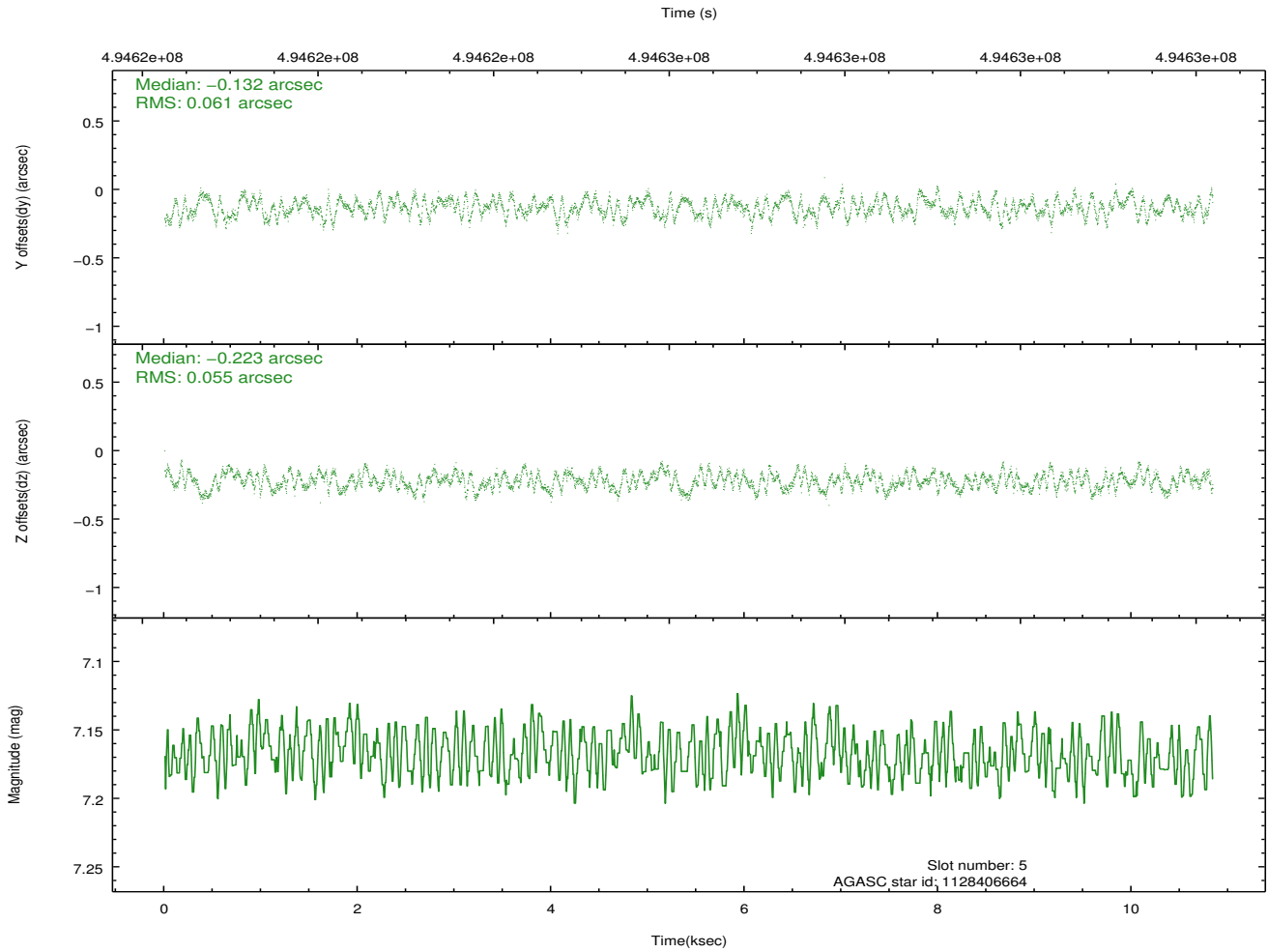
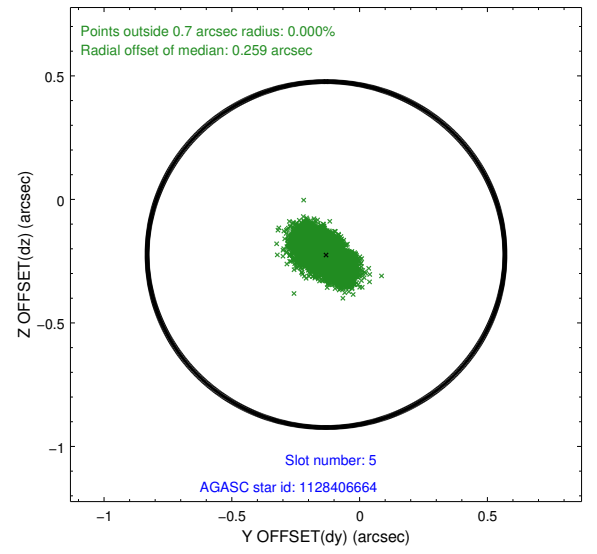
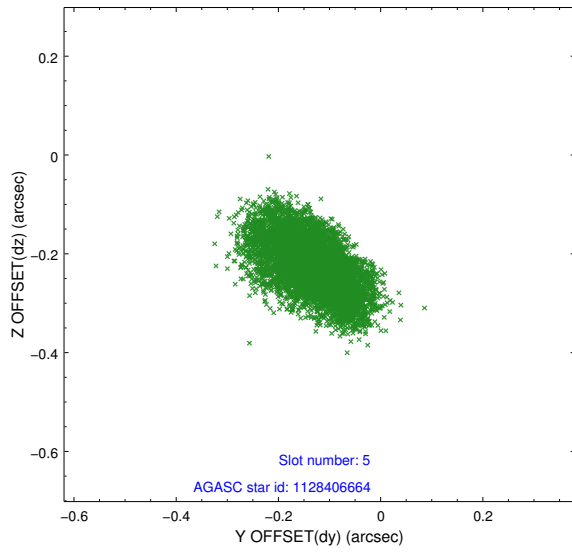
2.4.1 Slot 3



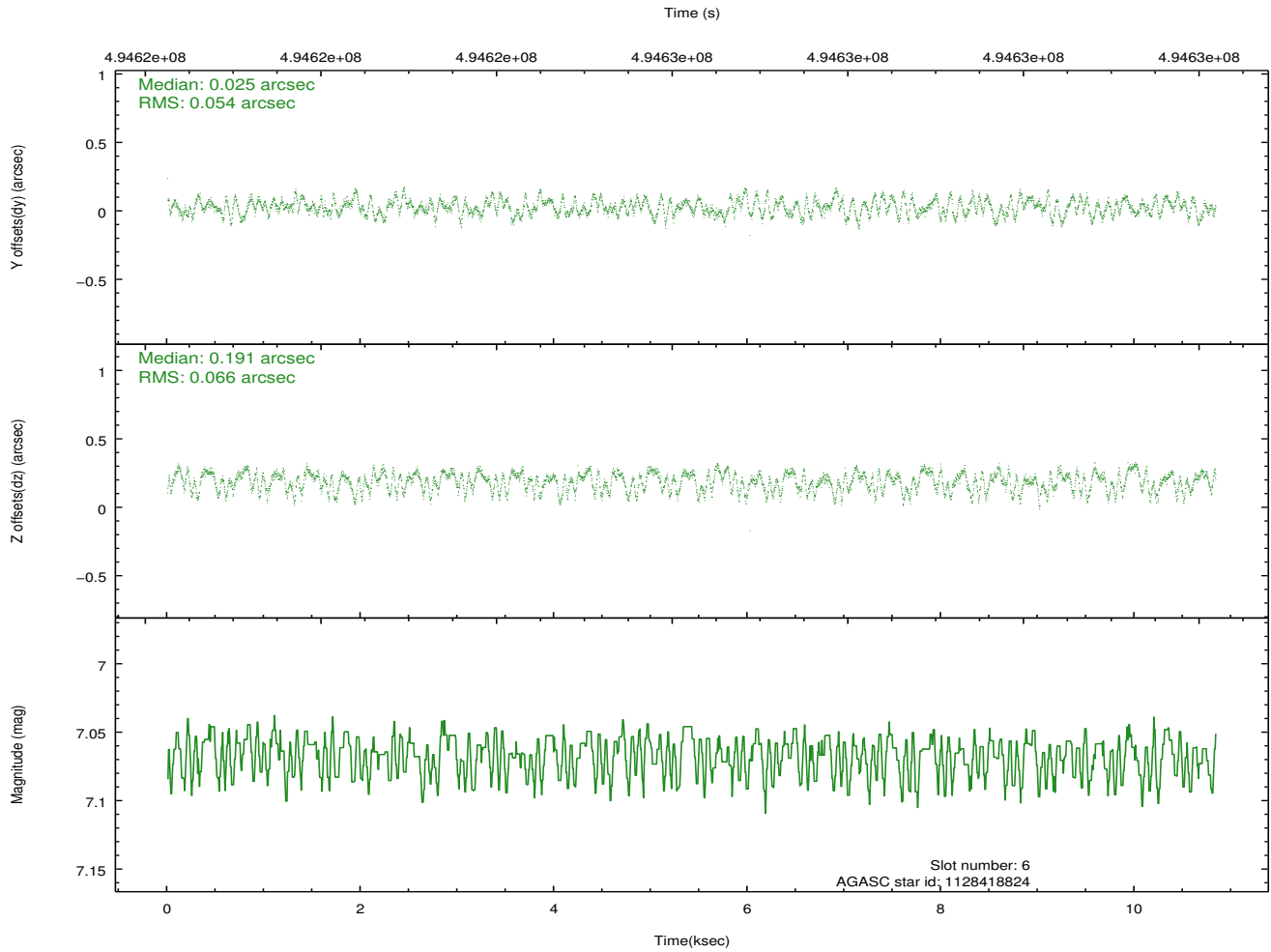
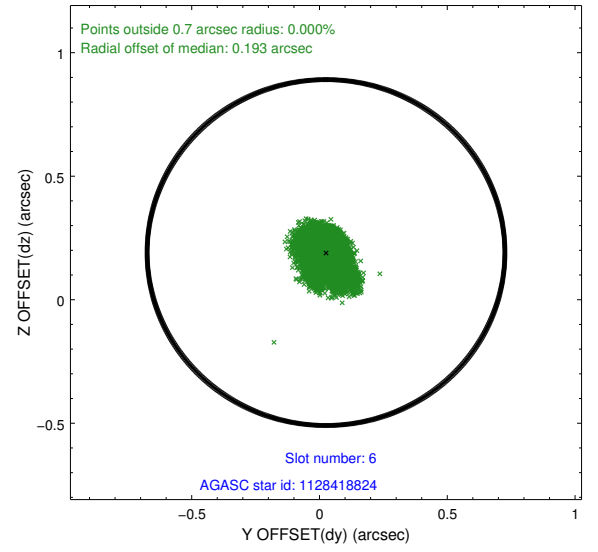
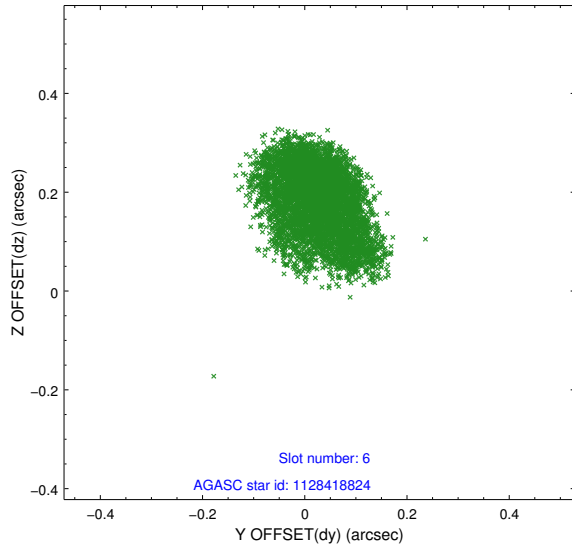
2.4.2 Slot 4



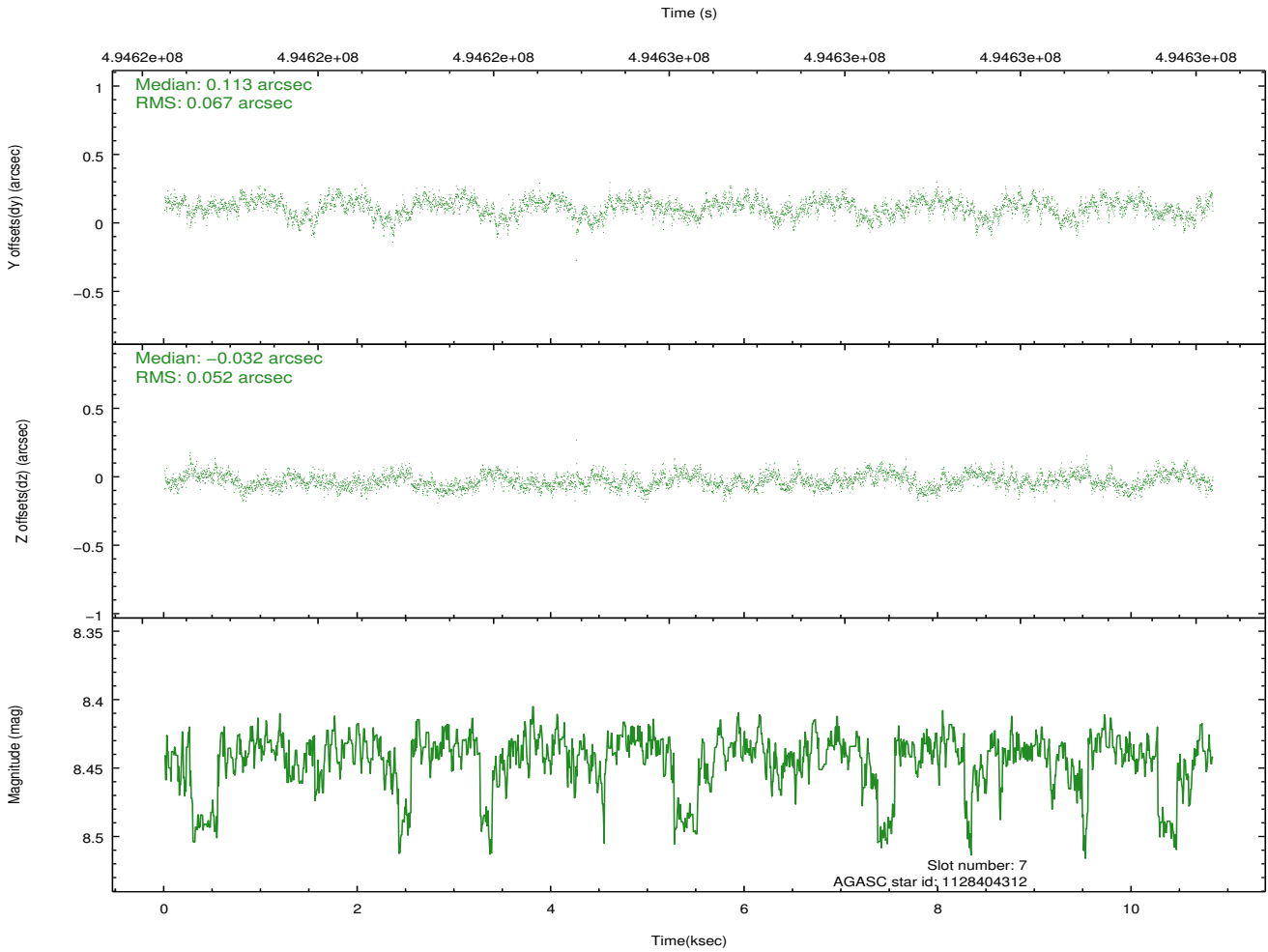
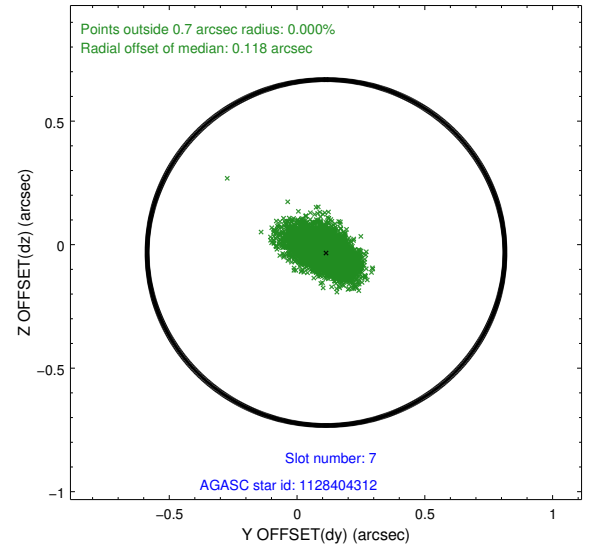
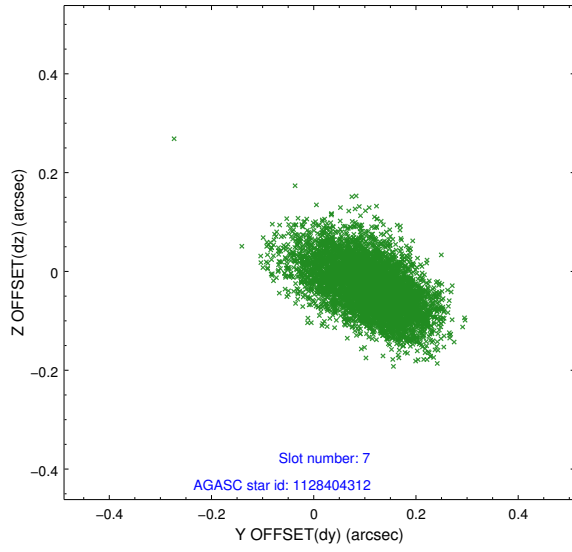
2.4.3 Slot 5



2.4.4 Slot 6

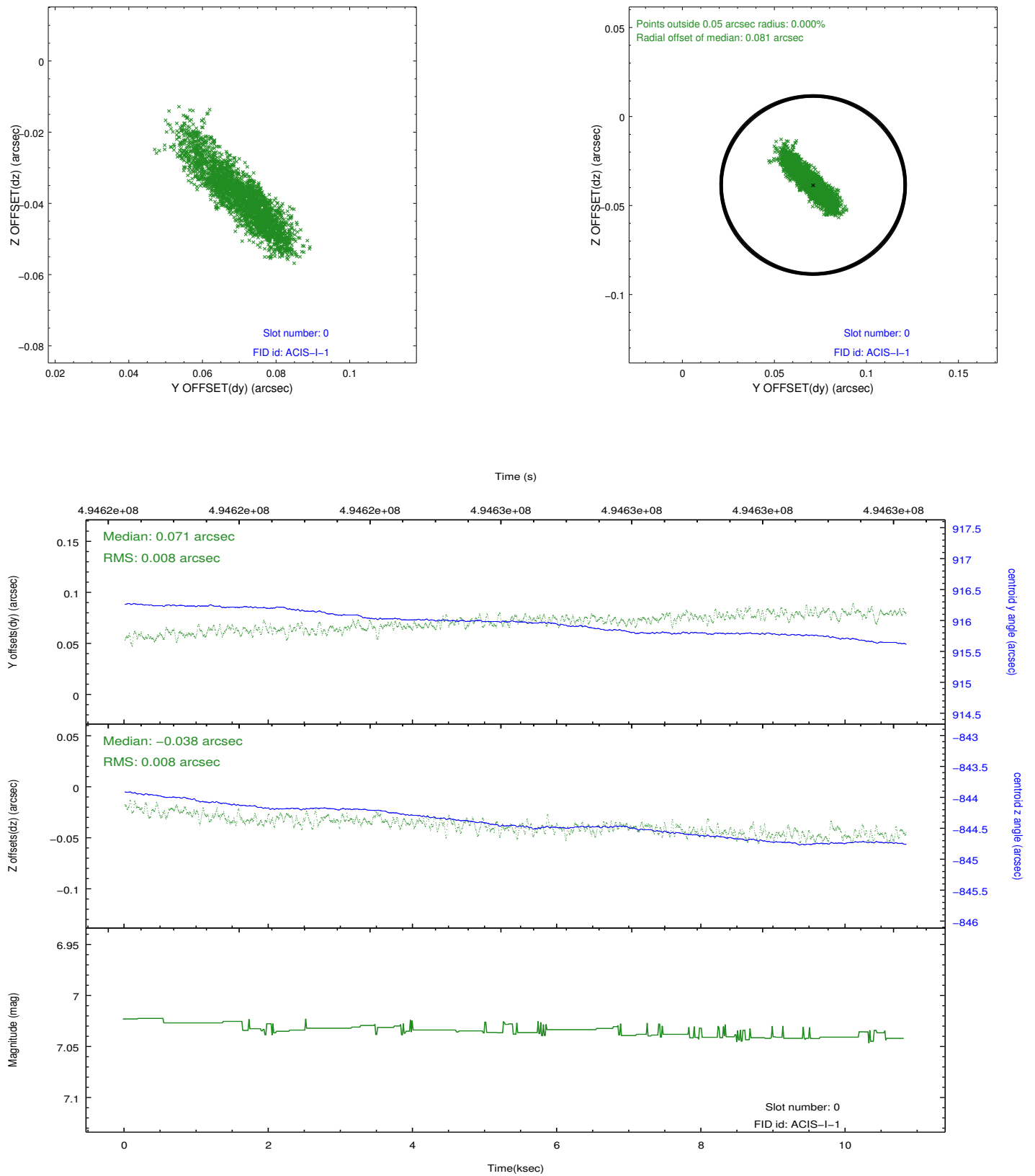


2.4.5 Slot 7

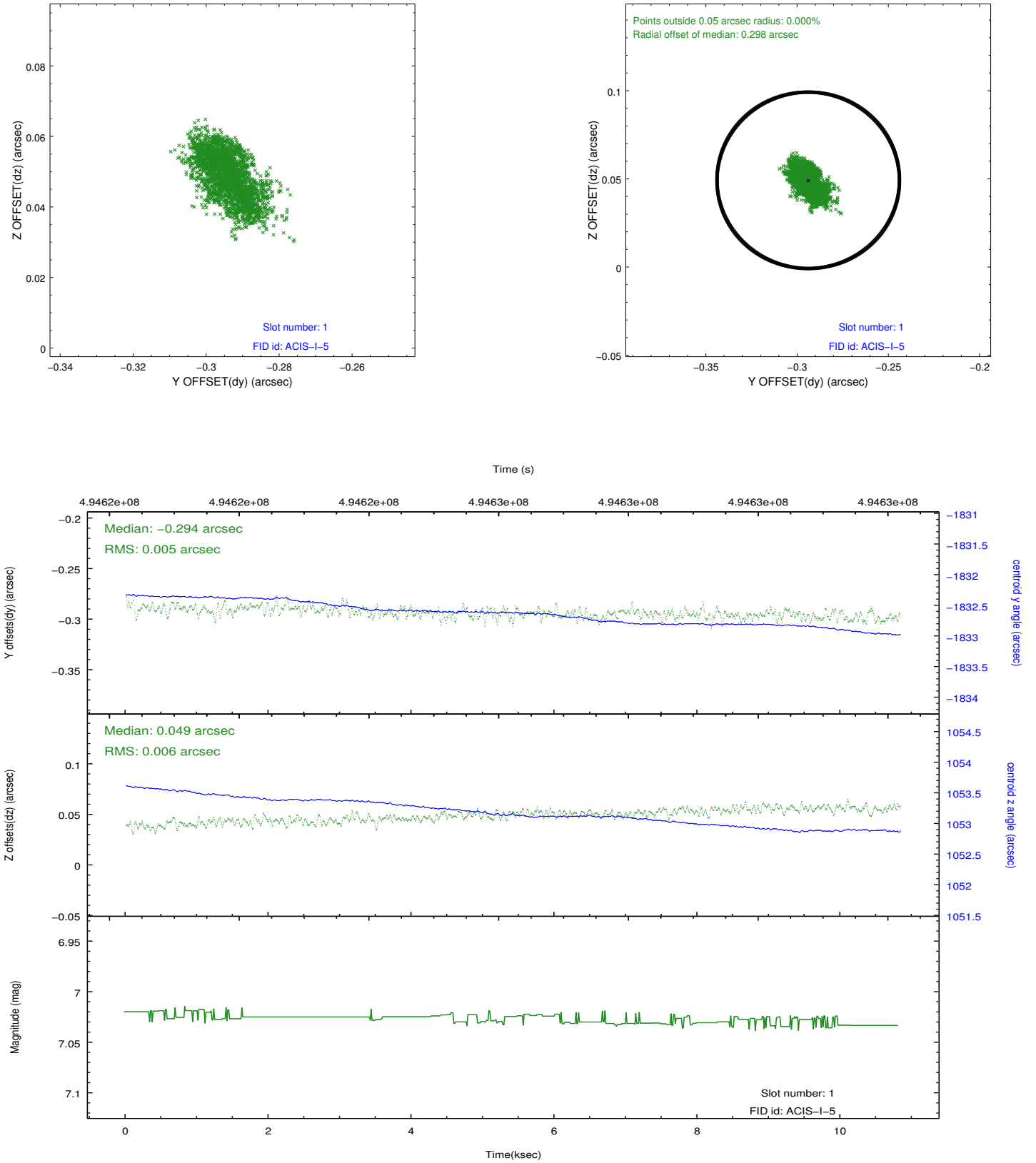


2.5 FID Slots

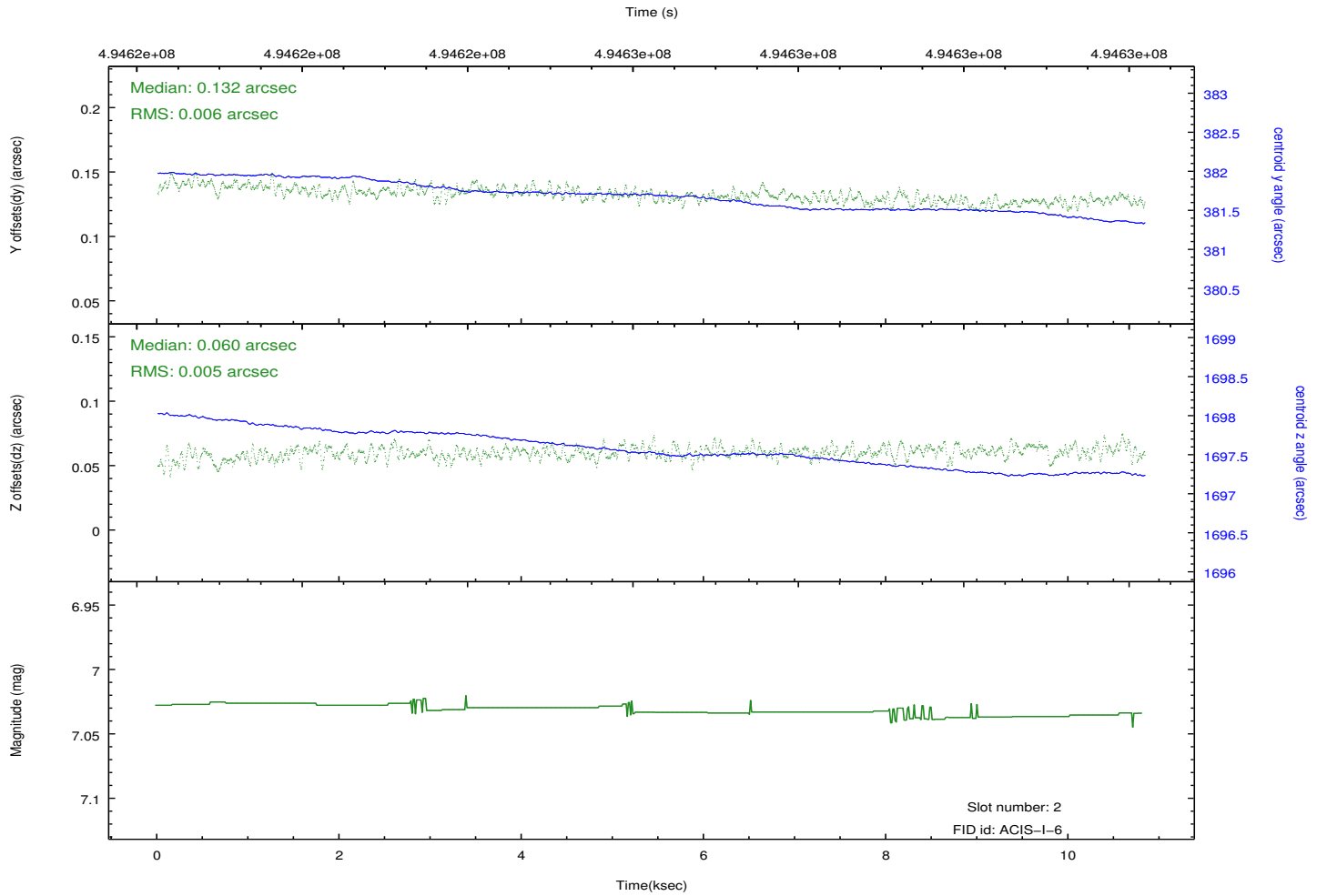
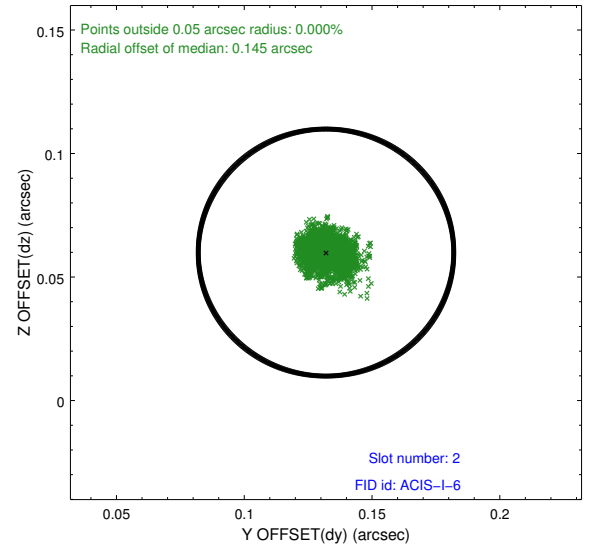
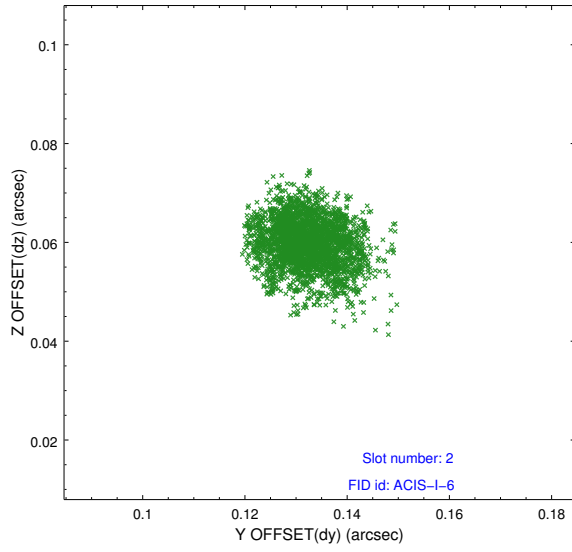
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9710132767558

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.