

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14799 - L2 Version 2
Chandra X-Ray Center

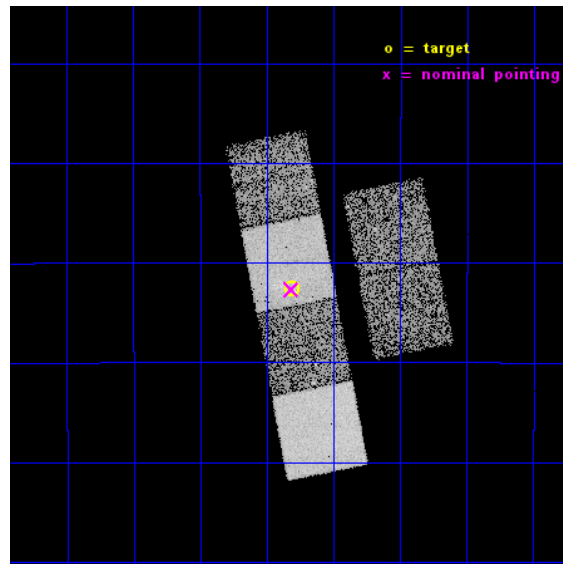
L2 Processing Date : Dec 2 2014

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1 Front

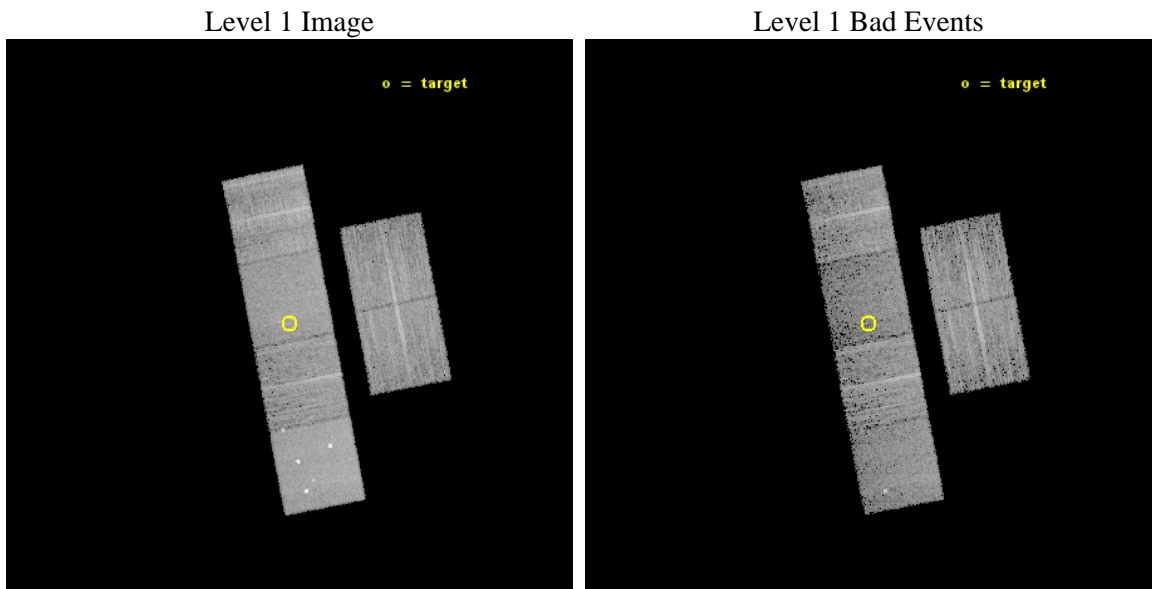
seq_num	501927	Sequence number
obs_id	14799	Observation id
title	Chandra Observations of New X-ray Supernovae	Proposal title
observer	Dr. David Pooley	Principal investigator
object	SN 2013ai	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	94.076458	Observer's specified target RA [deg]
dec_targ	-21.375806	Observer's specified target Dec [deg]
ra_nom	94.078817682522	Nominal RA [deg]
dec_nom	-21.377897432316	Nominal Dec [deg]
roll_nom	258.93334317997	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9964.5779621005	Sum of GTIs [s]
livetime	9838.4004759959	Livetime [s]
ontime2	9964.6190021038	Sum of GTIs [s]
ontime3	9964.4548420906	Sum of GTIs [s]
ontime5	9964.5369220972	Sum of GTIs [s]
ontime6	9964.4958820939	Sum of GTIs [s]
ontime7	9964.5779621005	Sum of GTIs [s]
ontime8	9964.4138020873	Sum of GTIs [s]
l2events	83077	Number of level 2 events



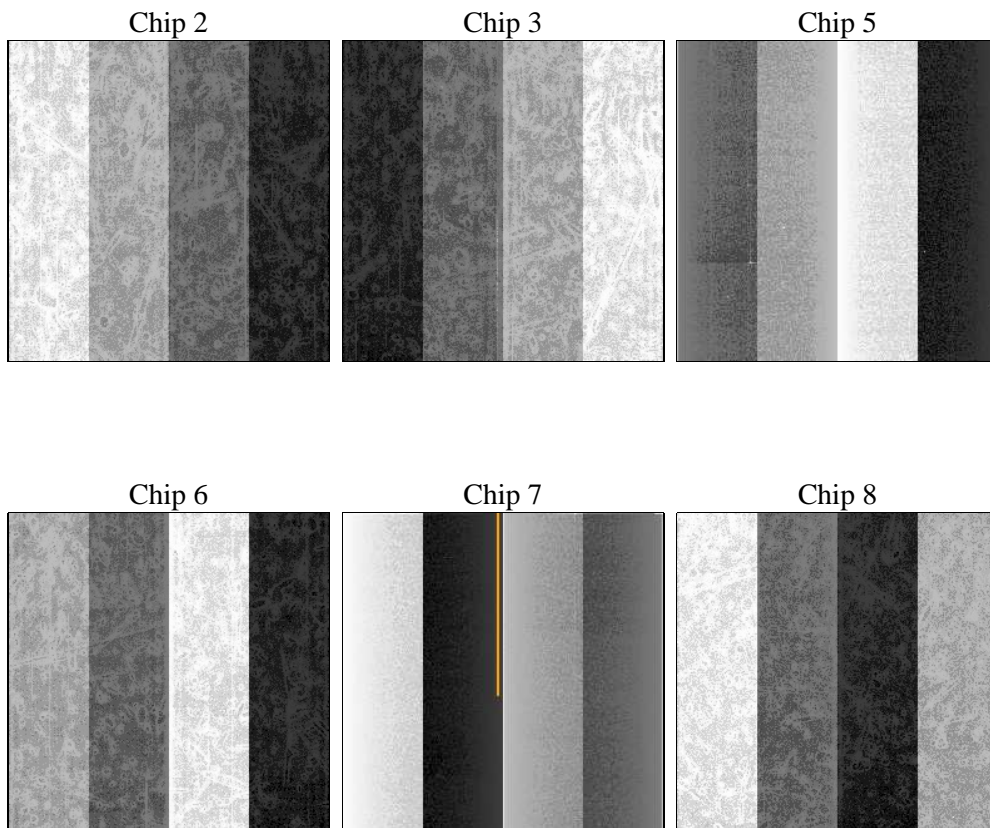
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	9964.5779621005	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	9964.6190021038	Sum of GTIs [s]
date	2014-12-02T16:30:38	Date and time of file creation	ontime3	9964.4548420906	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	9964.5369220972	Sum of GTIs [s]
			ontime6	9964.4958820939	Sum of GTIs [s]
			ontime7	9964.5779621005	Sum of GTIs [s]
			ontime8	9964.4138020873	Sum of GTIs [s]
			l1events	347127	Number of level 1 events

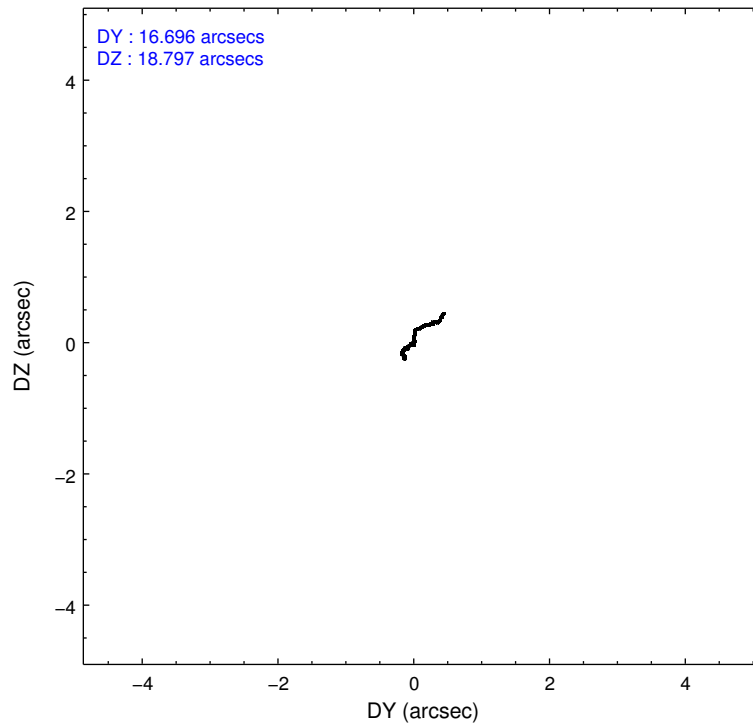
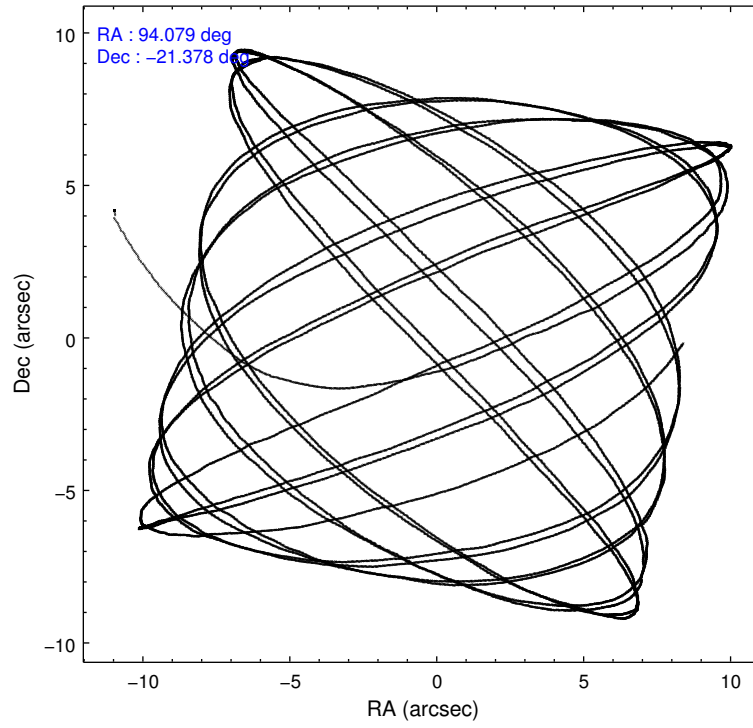
2.1.4 Events

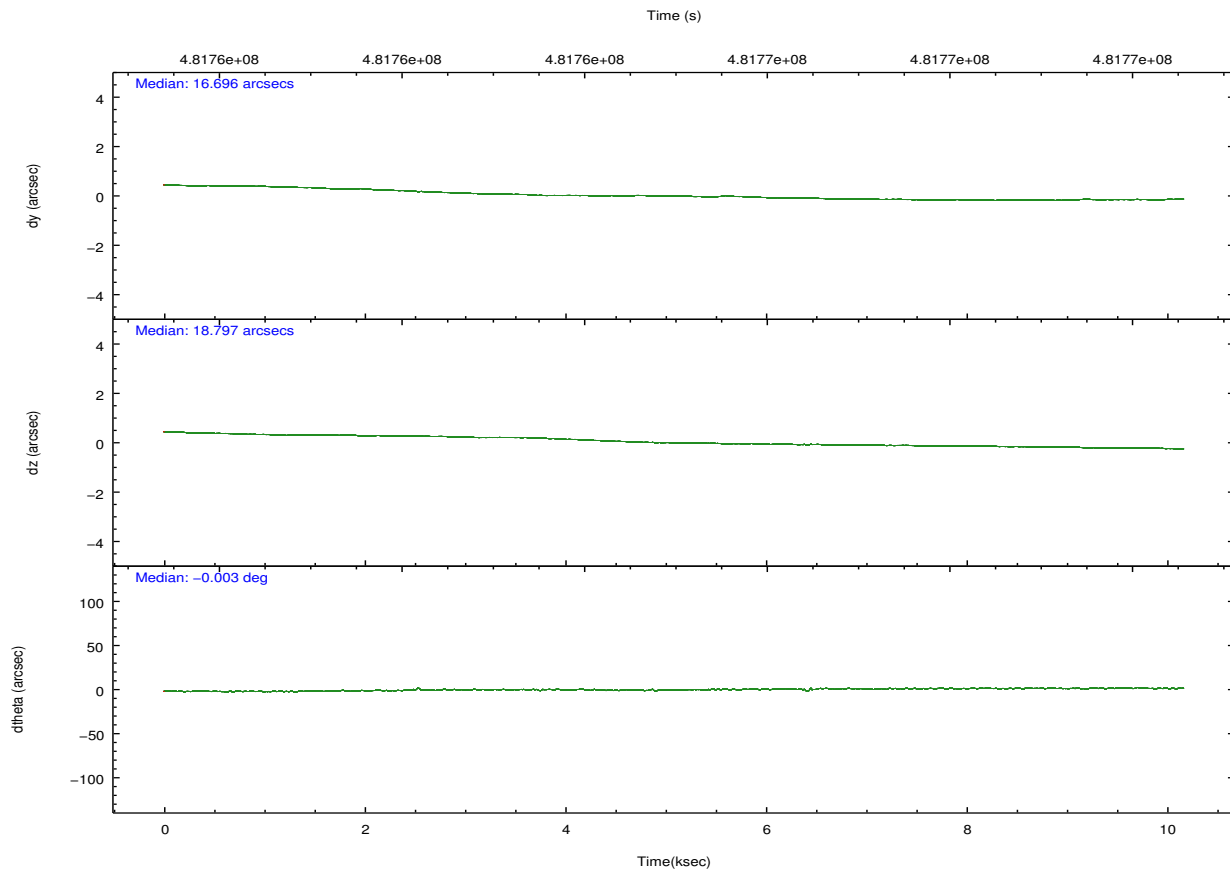
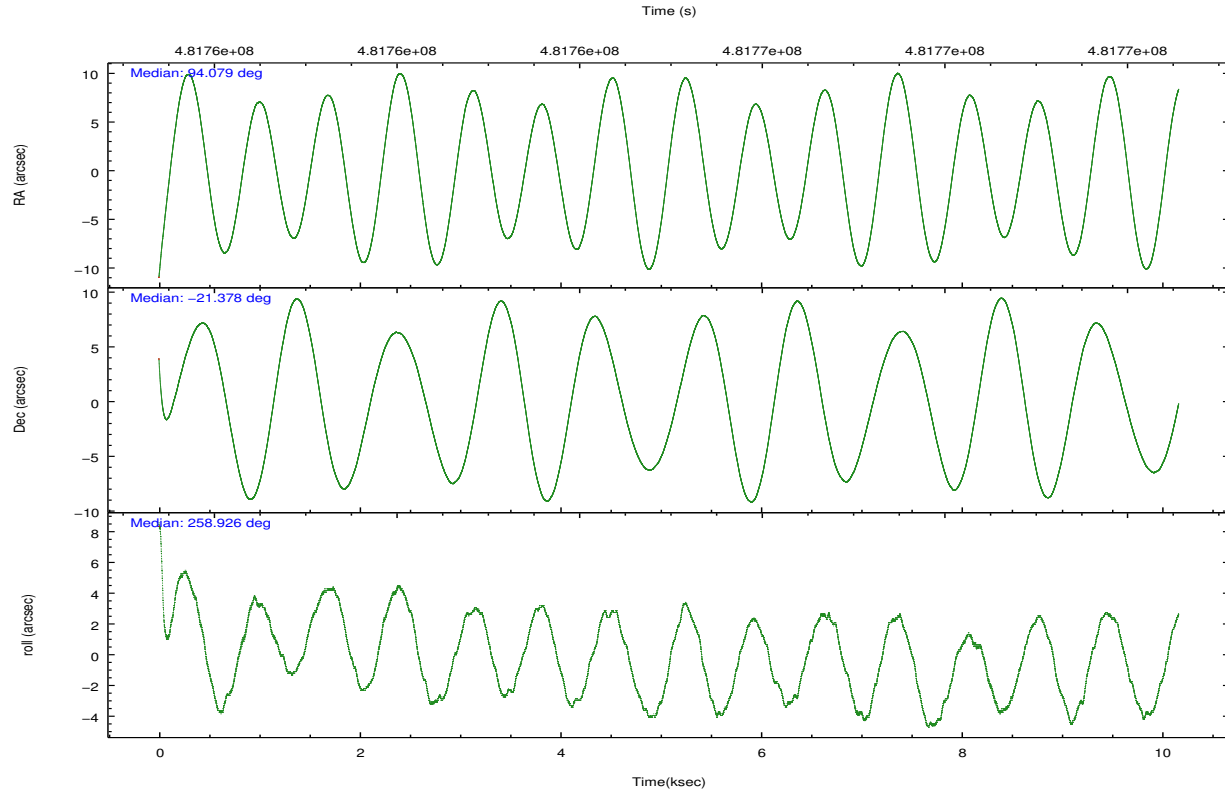
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	50576	48979	78508	49209	57519	62336	grade 0 events	2211	1939	6594	2117	2788	4781
rejected events	44778	43661	36265	43218	29807	45034		4%	3%	8%	4%	4%	7%
rejected %	88%	89%	46%	87%	51%	72%	grade 1 events	27	23	189	29	91	47
								0%	0%	0%	0%	0%	0%
							grade 2 events	1479	1165	13140	1380	6009	4222
								2%	2%	16%	2%	10%	6%
							grade 3 events	539	561	1488	649	2502	1827
								1%	1%	1%	1%	4%	2%
							grade 4 events	543	561	1375	601	2475	1718
								1%	1%	1%	1%	4%	2%
							grade 5 events	1758	2218	5734	2161	6200	3239
								3%	4%	7%	4%	10%	5%
							grade 6 events	1028	1094	19657	1248	13950	4759
								2%	2%	25%	2%	24%	7%
							grade 7 events	42991	41418	30331	41024	23504	41743
								85%	84%	38%	83%	40%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	94.068905	94.07881768252211	CCD I2 on	O1	Y
[deg] Pointing Dec	-21.352150	-21.37789743231573	CCD I3 on	O2	Y
[deg] Pointing Roll	258.773093	258.9333431799741	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O5	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O4	Y
[s] Observation start time (MET)	481760062.184000	481758623.50613	CCD S5 on	N	N
Observation start date	2013-04-07T22:13:15	2013-04-07T21:50:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	481770062.184000	481771259.19431	On-chip summing requested	N	N
Observation end date	2013-04-08T00:59:55	2013-04-08T01:20:59	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





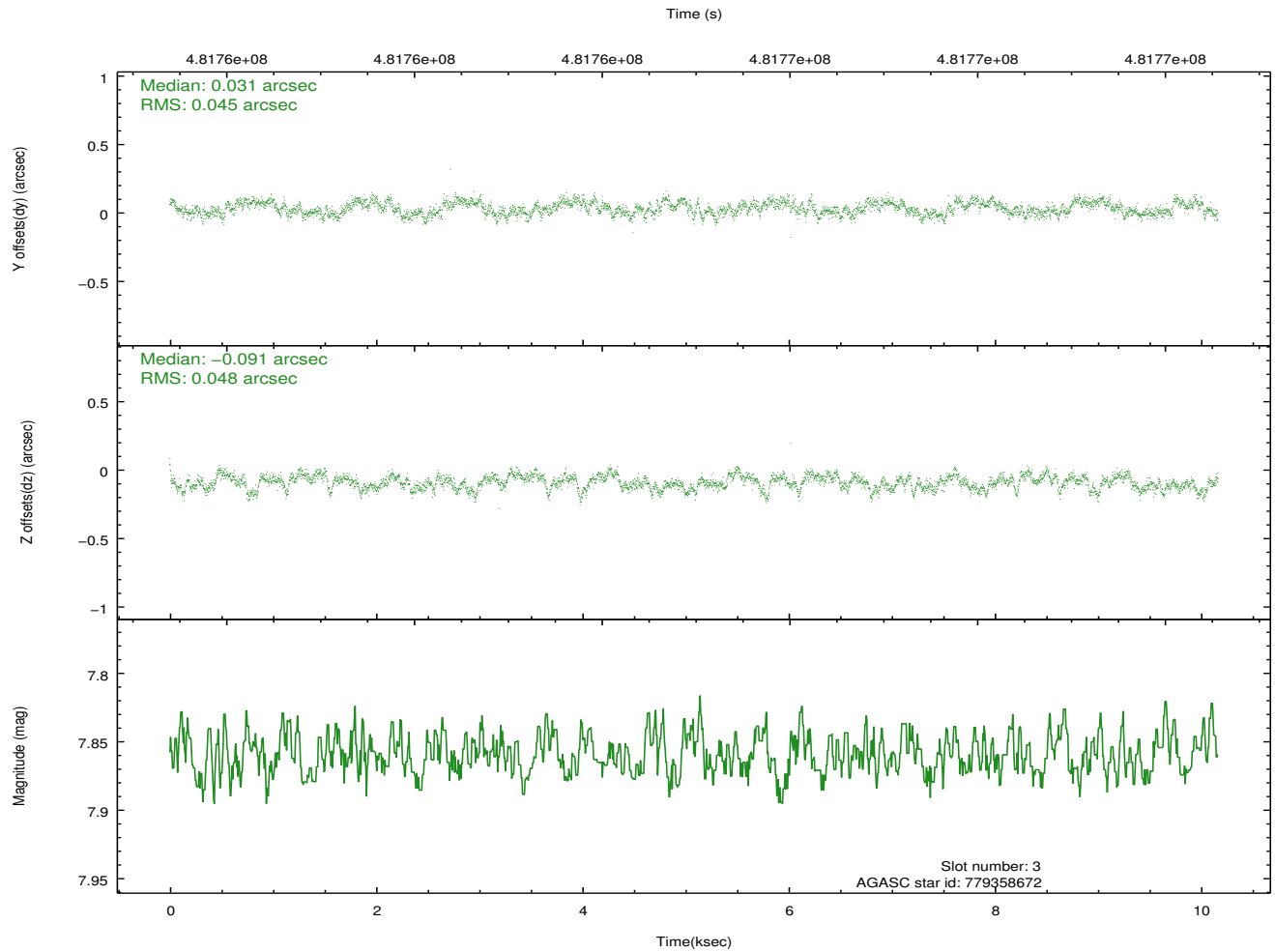
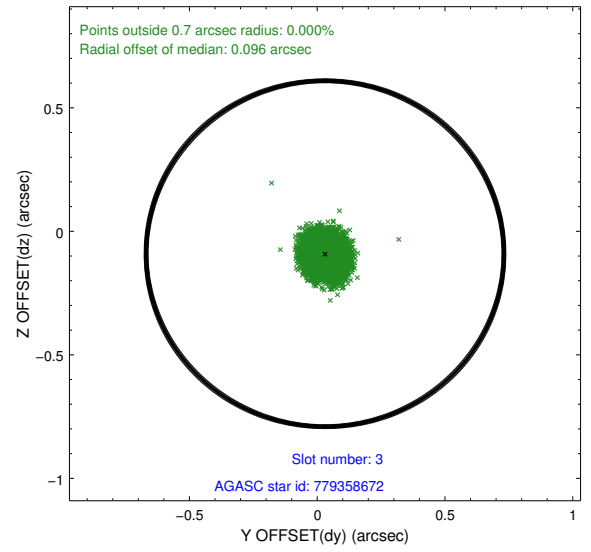
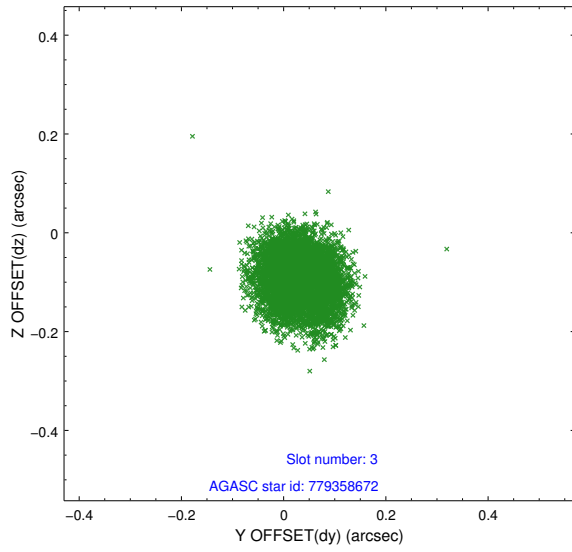
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	2480	-0.086	-0.020	0.009	0.014	0.000000	0.000000	-769.86	-1740.35
1	FID		ACIS-S-4	7.02	2479	0.170	0.047	0.007	0.012	0.000000	0.000000	2143.46	167.63
2	FID		ACIS-S-5	7.05	2480	-0.115	-0.018	0.008	0.013	0.000000	0.000000	-1822.04	161.87
3	GUIDE	used	779358672	7.86	4960	0.031	-0.091	0.072	0.108	94.260885	-21.171994	-761.05	506.15
4	GUIDE	used	779372064	8.55	4958	0.104	-0.157	0.068	0.110	94.417701	-21.758407	1209.27	1429.80
5	GUIDE	used	779373744	6.33	4960	-0.225	0.035	0.088	0.148	94.745730	-20.925611	-1944.55	1934.82
6	GUIDE	used	779236336	8.49	4958	0.038	0.051	0.076	0.123	93.367583	-21.267018	162.81	-2365.59
7	GUIDE	used	779239872	9.21	4953	0.043	0.163	0.114	0.179	93.445776	-20.763160	-1666.80	-2469.69

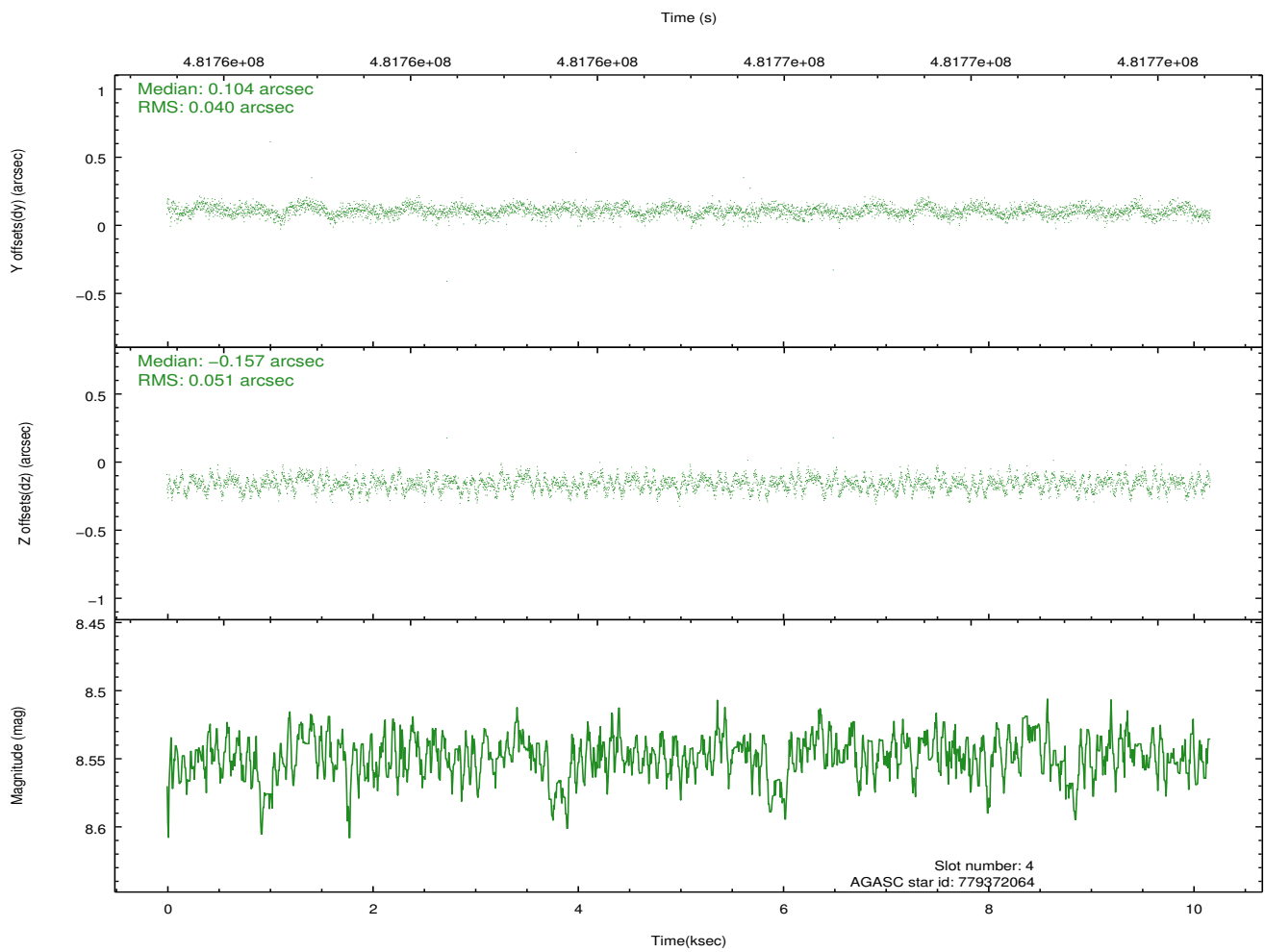
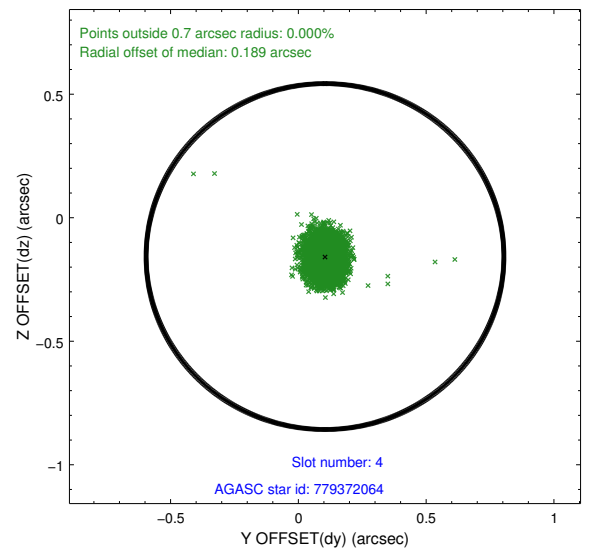
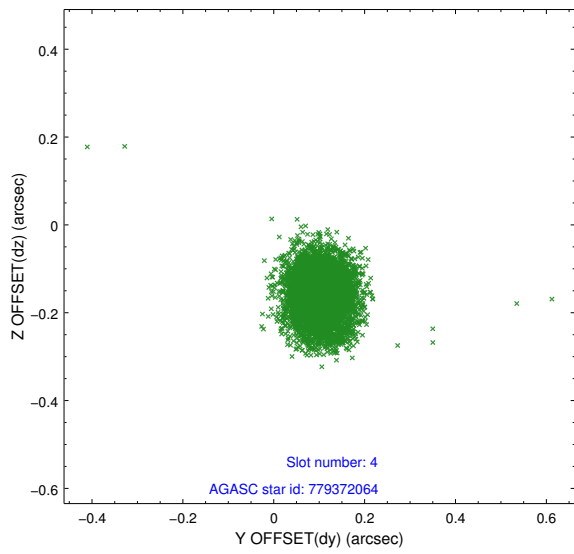
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2.4 Star Slots

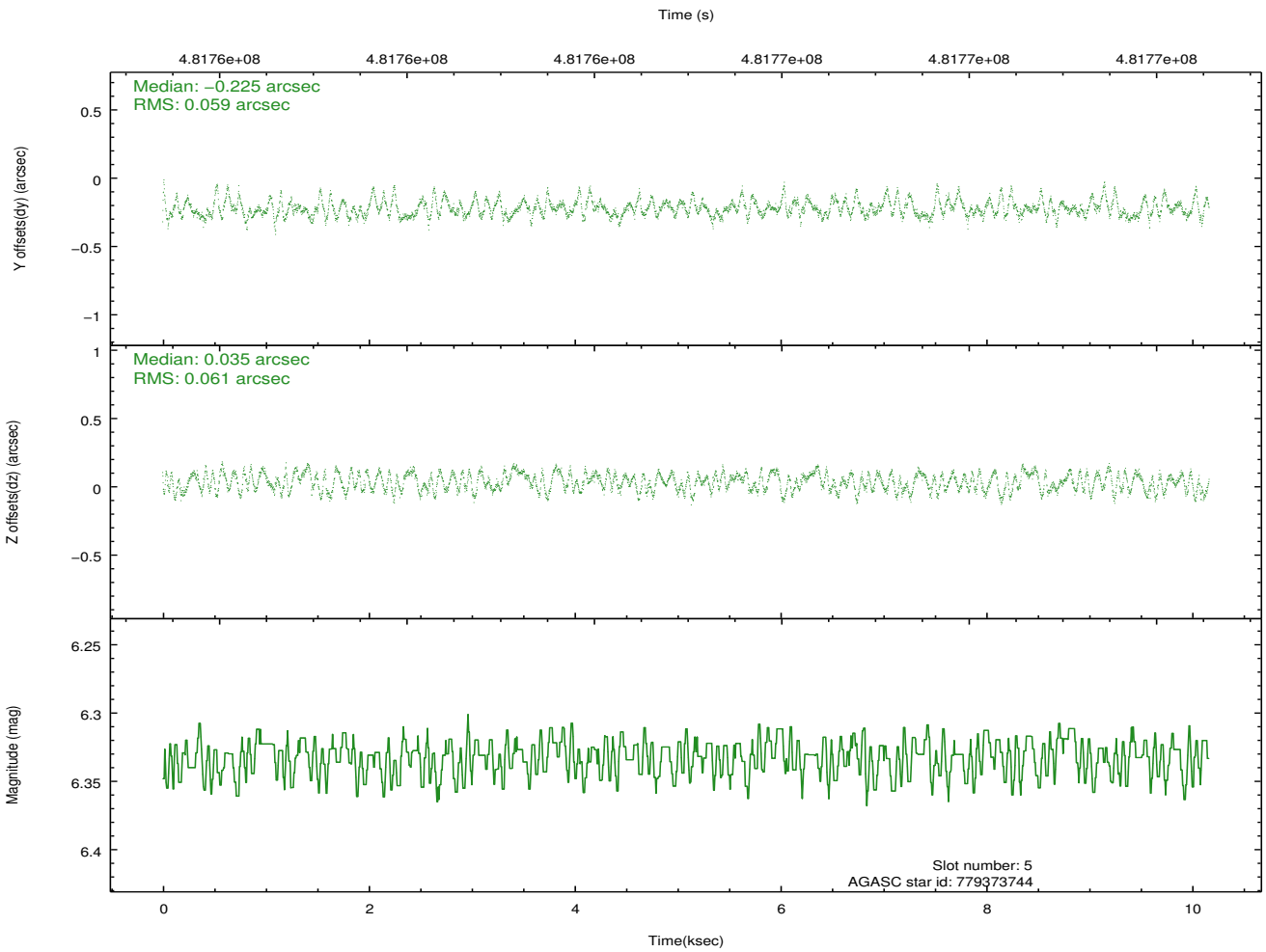
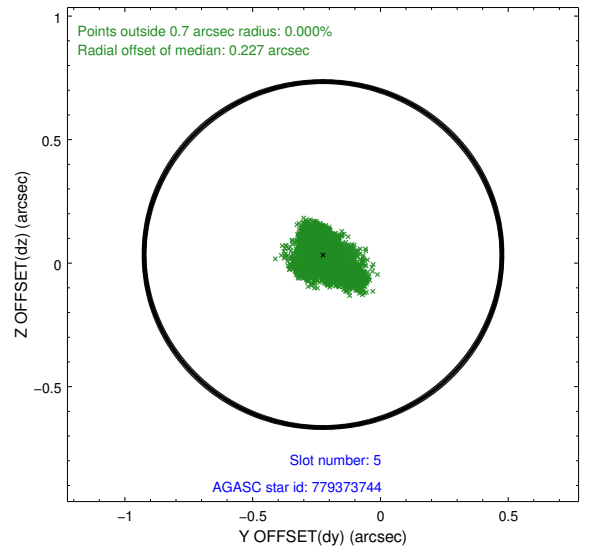
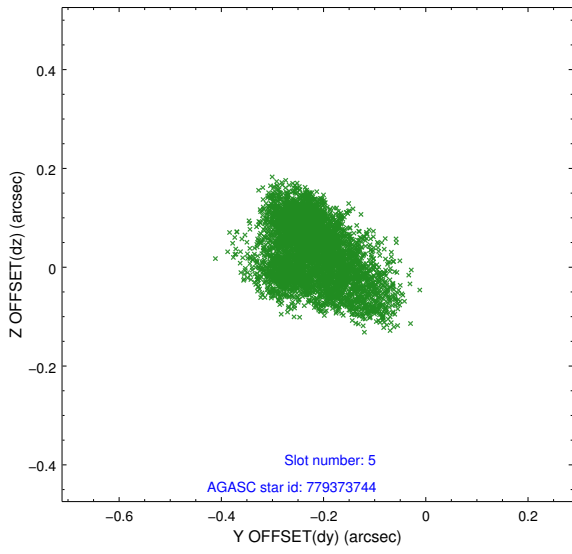
2.4.1 Slot 3



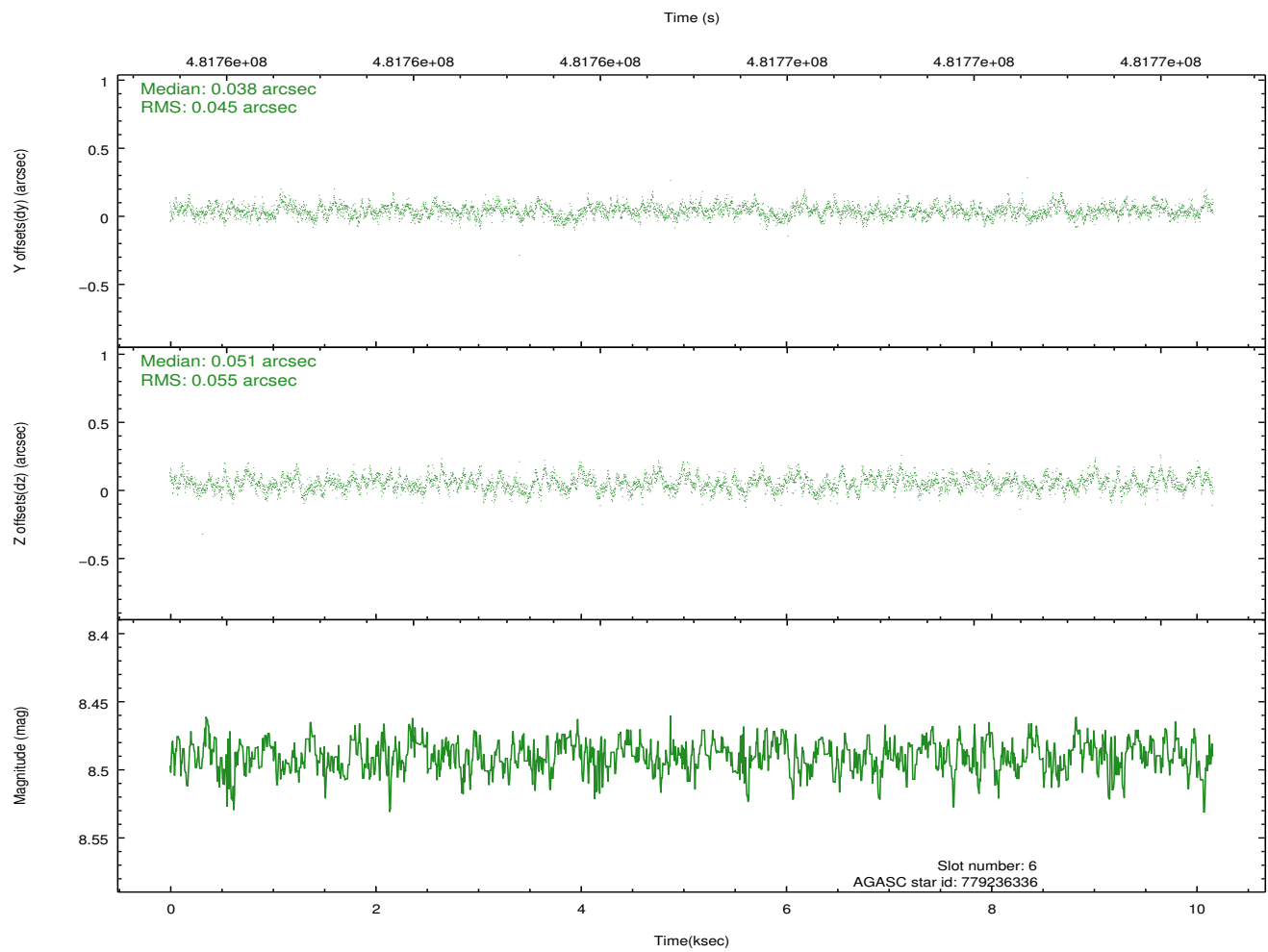
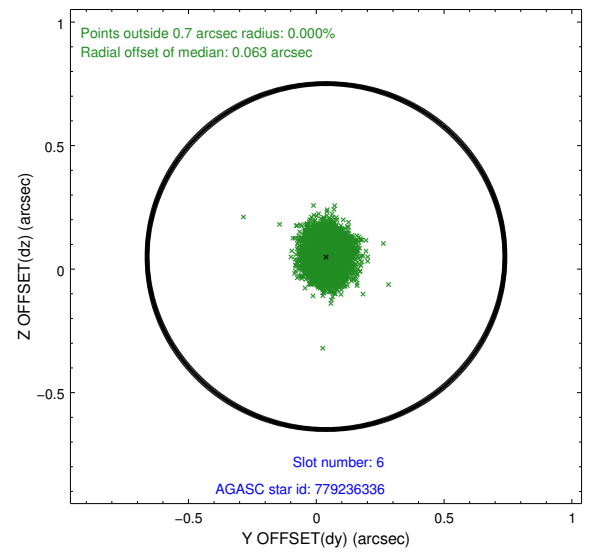
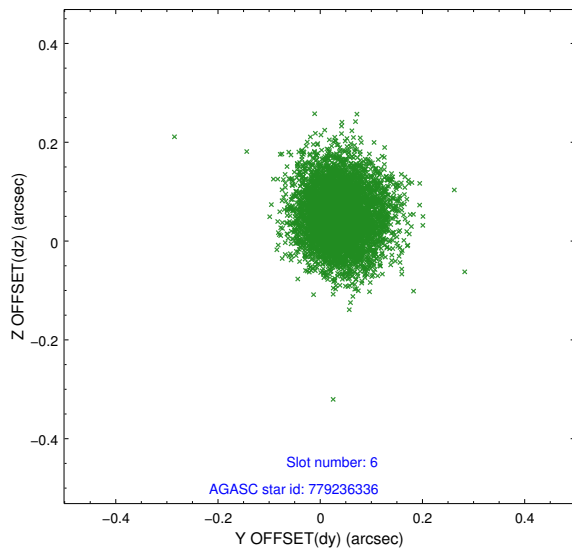
2.4.2 Slot 4



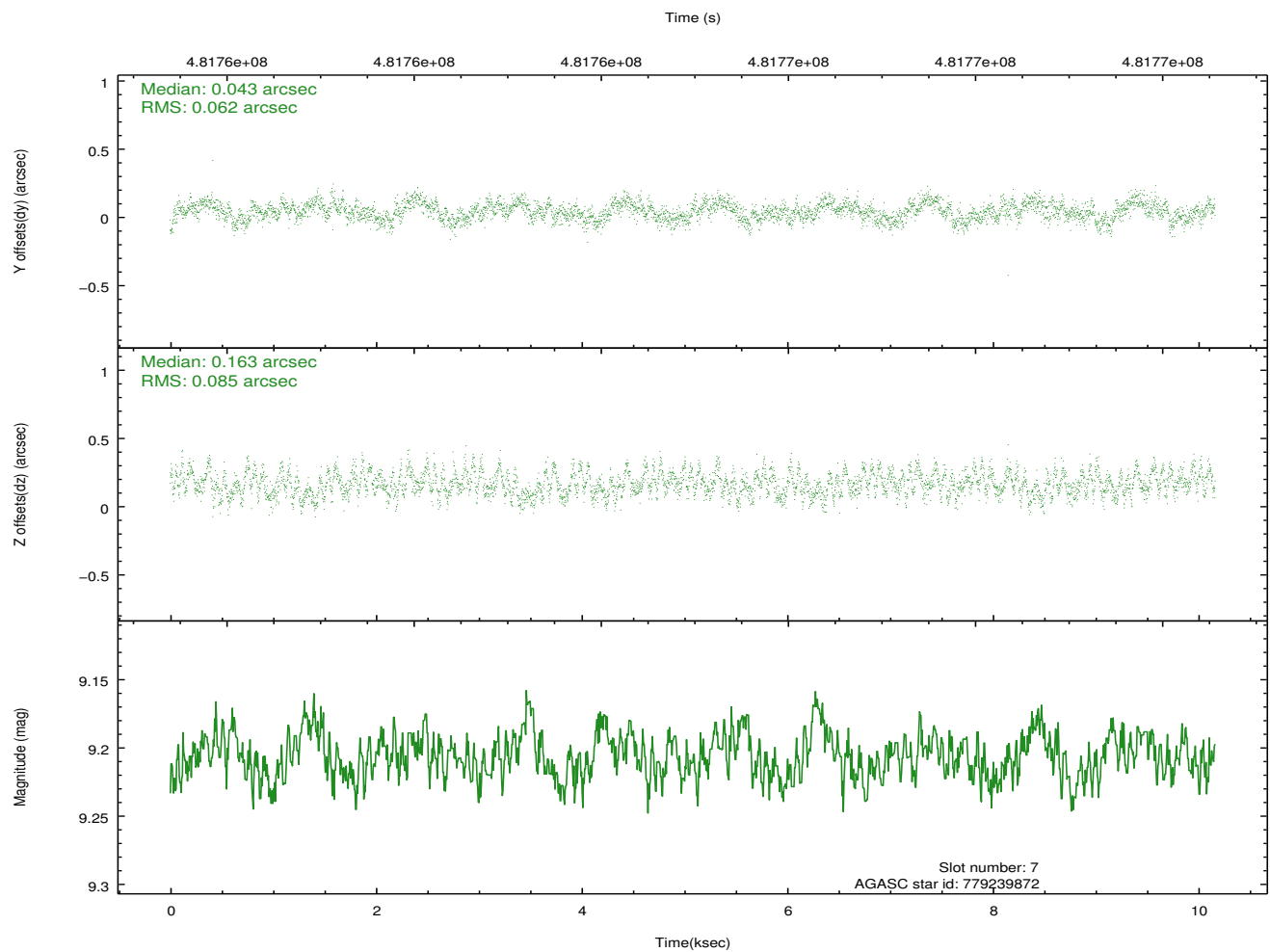
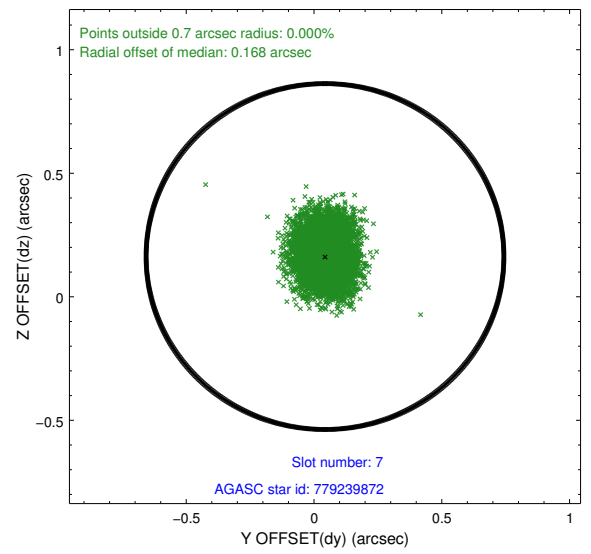
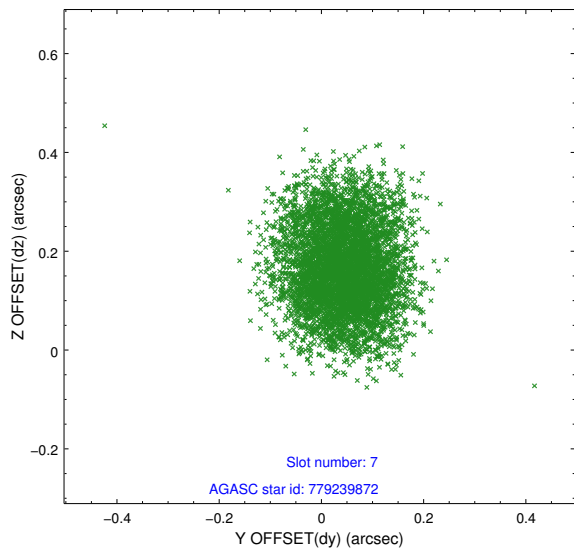
2.4.3 Slot 5



2.4.4 Slot 6

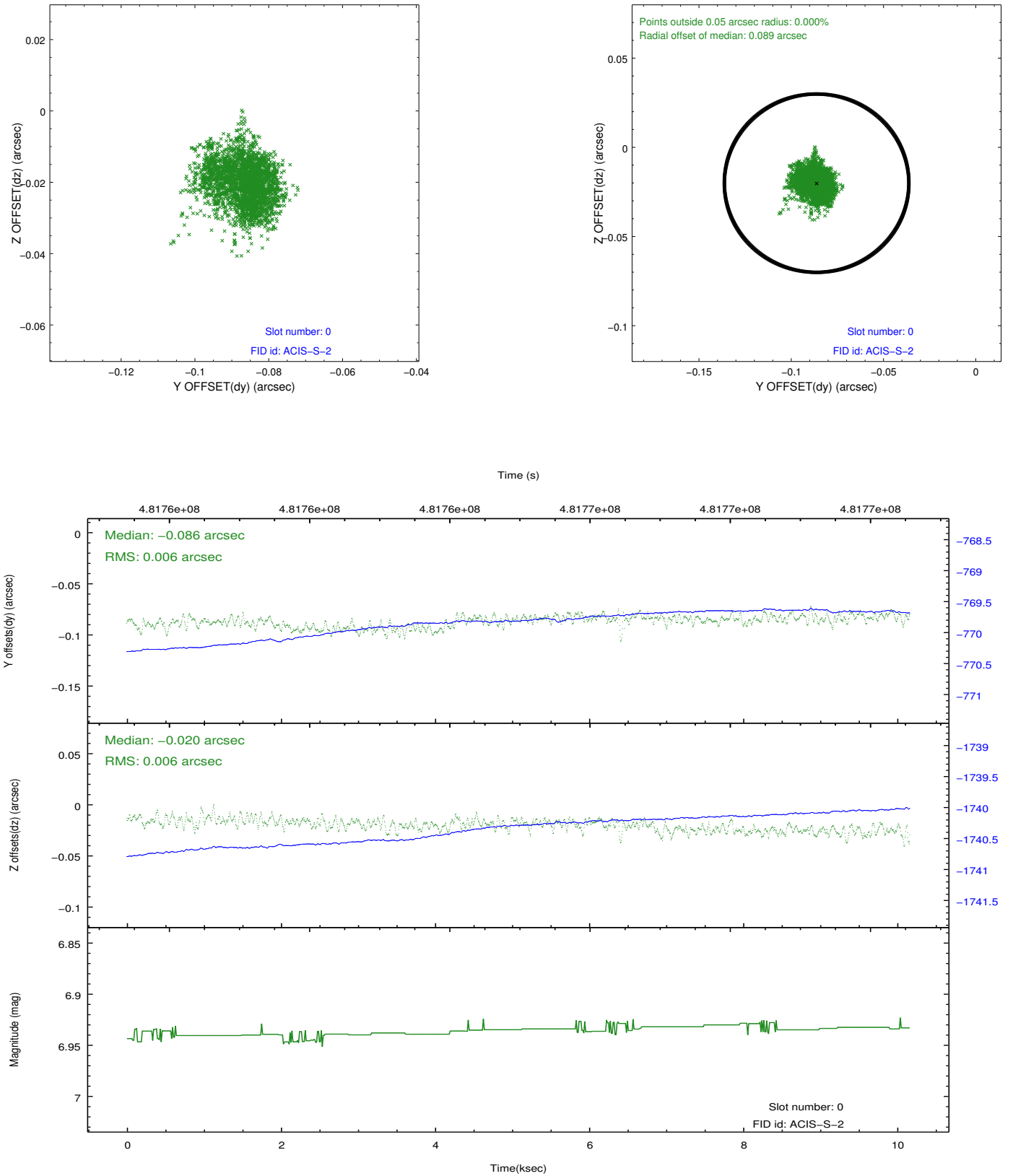


2.4.5 Slot 7

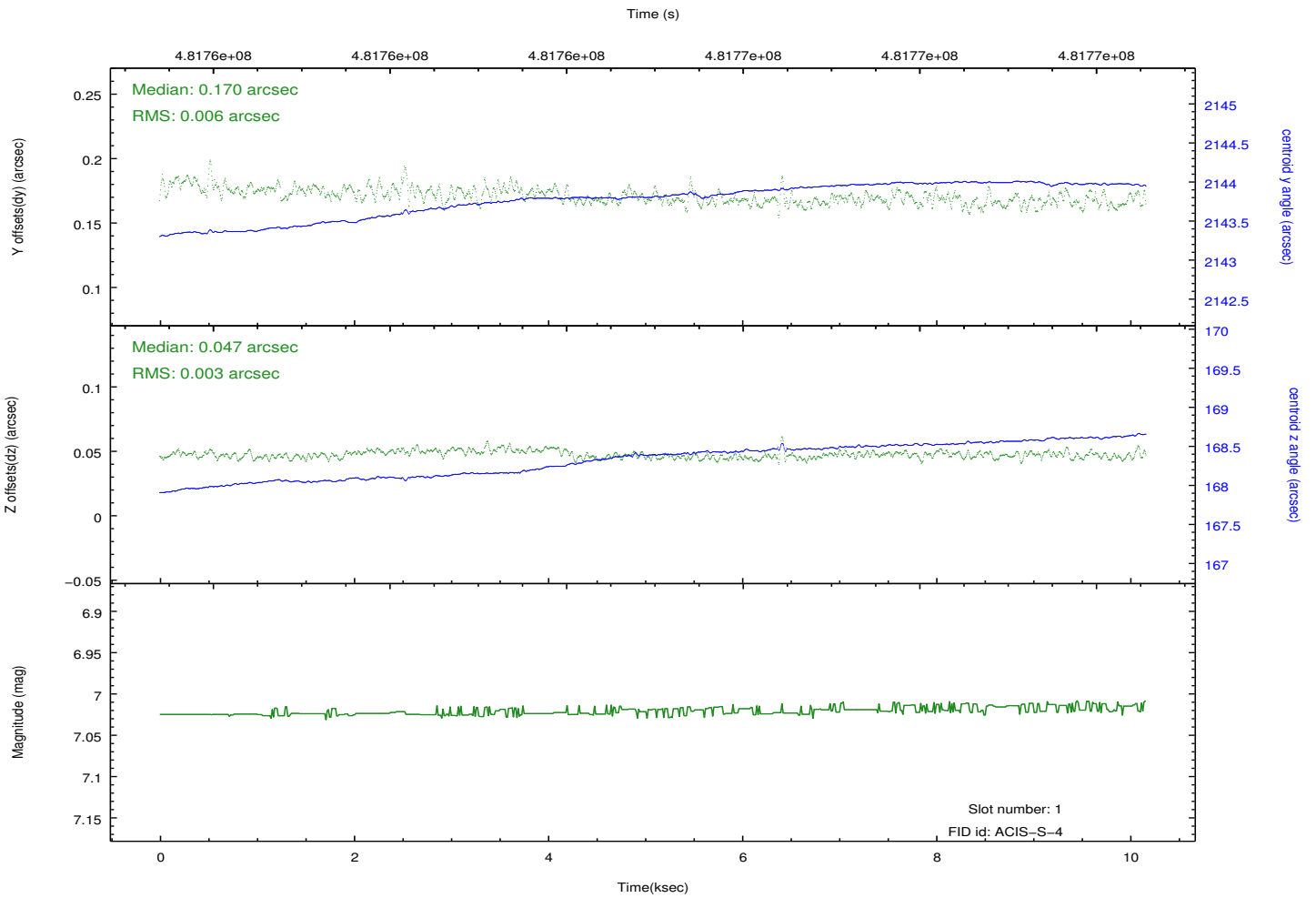
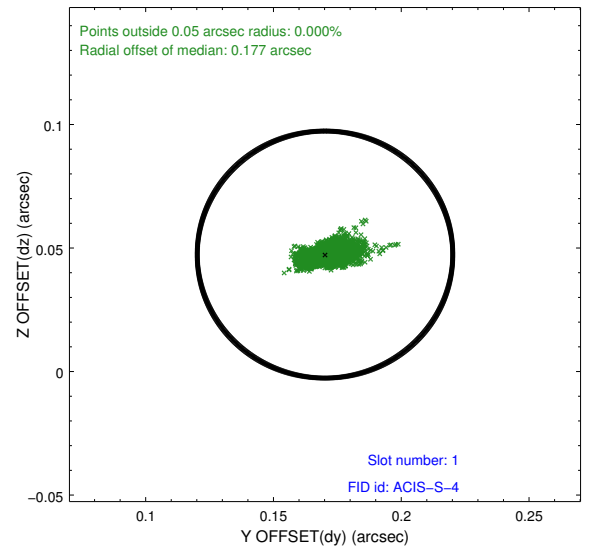
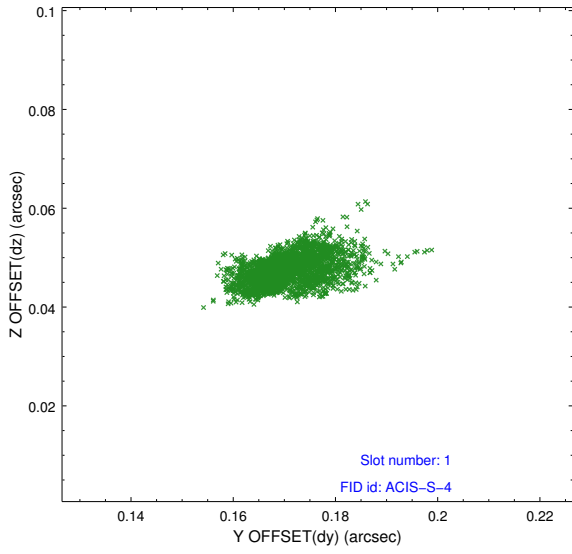


2.5 FID Slots

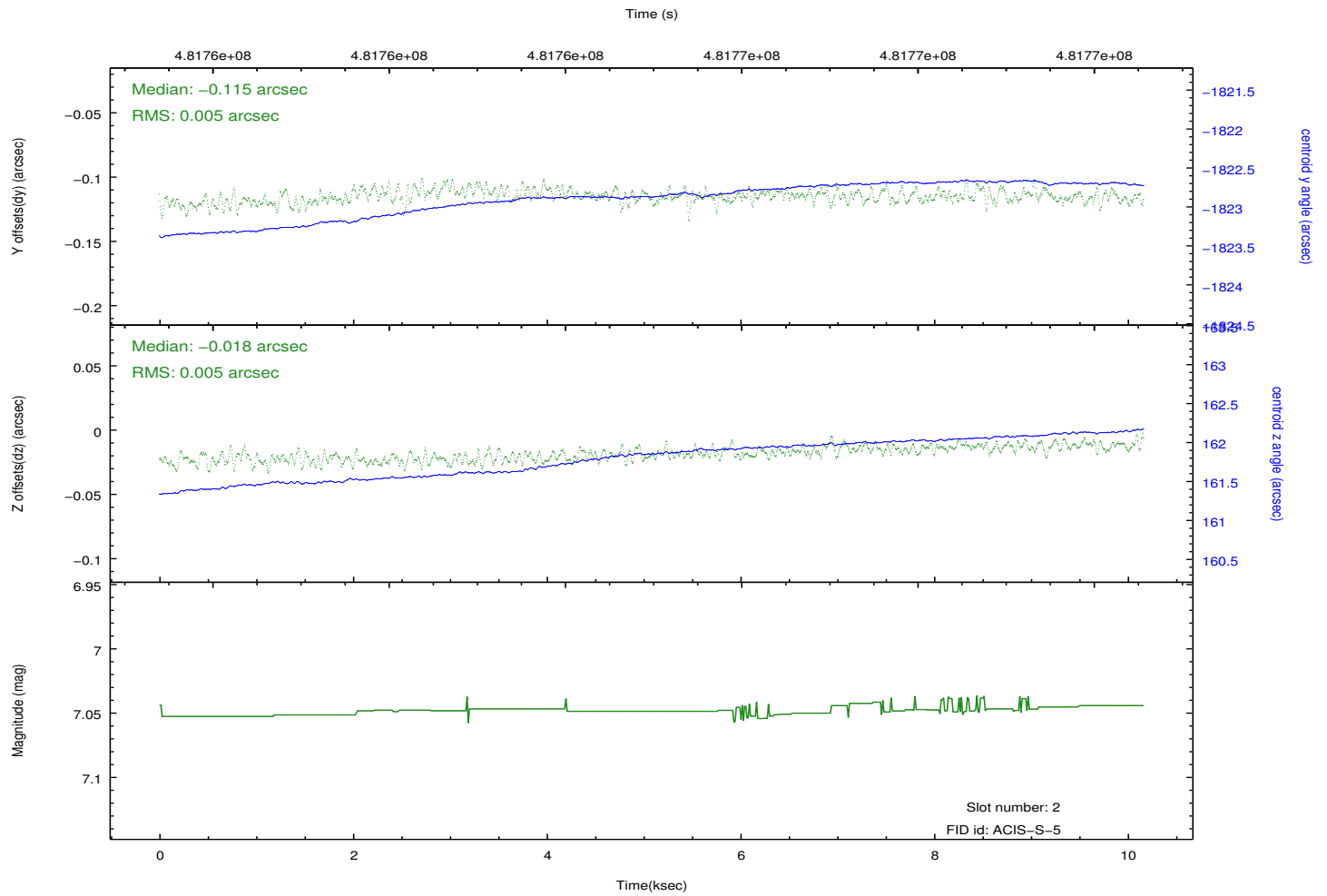
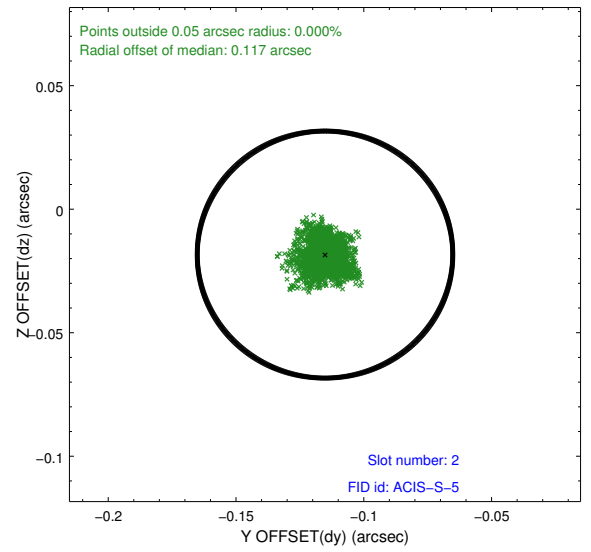
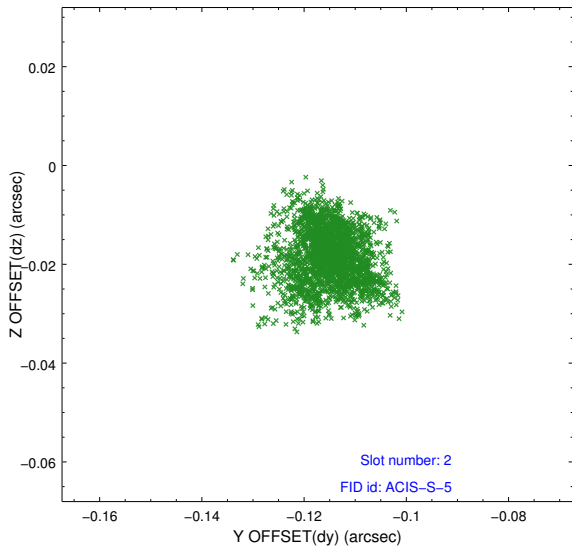
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9645779621005

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.