

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18846 - L2 Version 1
Chandra X-Ray Center

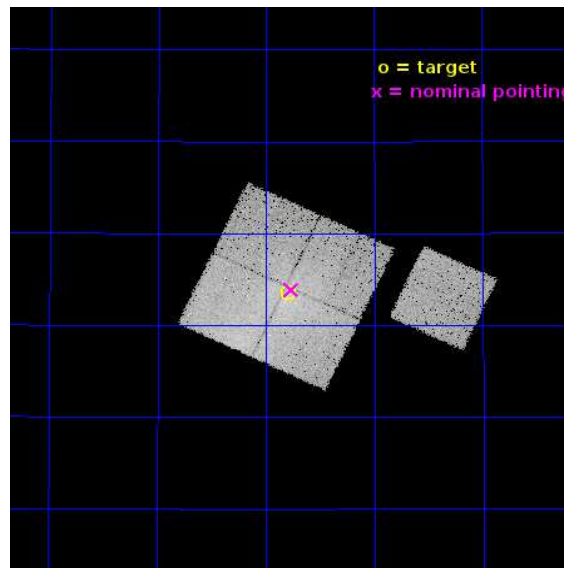
L2 Processing Date : May 12 2016

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1 Front

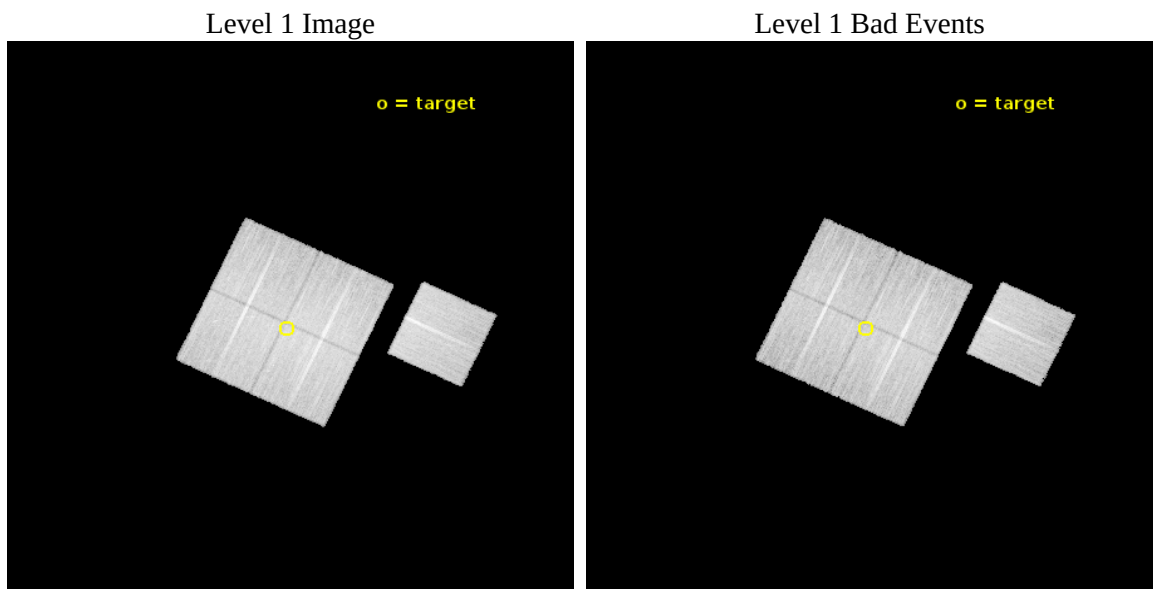
seq_num	703135	Sequence number
obs_id	18846	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - NW Subcluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.698333	Observer's specified target RA [deg]
dec_targ	40.893111	Observer's specified target Dec [deg]
ra_nom	299.69160137525	Nominal RA [deg]
dec_nom	40.898106406808	Nominal Dec [deg]
roll_nom	115.21309378603	Nominal Roll [deg]
revision	1	Processing version of data
ontime	23045.359197021	Sum of GTIs [s]
livetime	22744.254613365	Livetime [s]
ontime0	23048.500177383	Sum of GTIs [s]
ontime1	23042.218266606	Sum of GTIs [s]
ontime2	23048.500177383	Sum of GTIs [s]
ontime3	23045.359197021	Sum of GTIs [s]
ontime6	23045.359187126	Sum of GTIs [s]
l2events	104261	Number of level 2 events



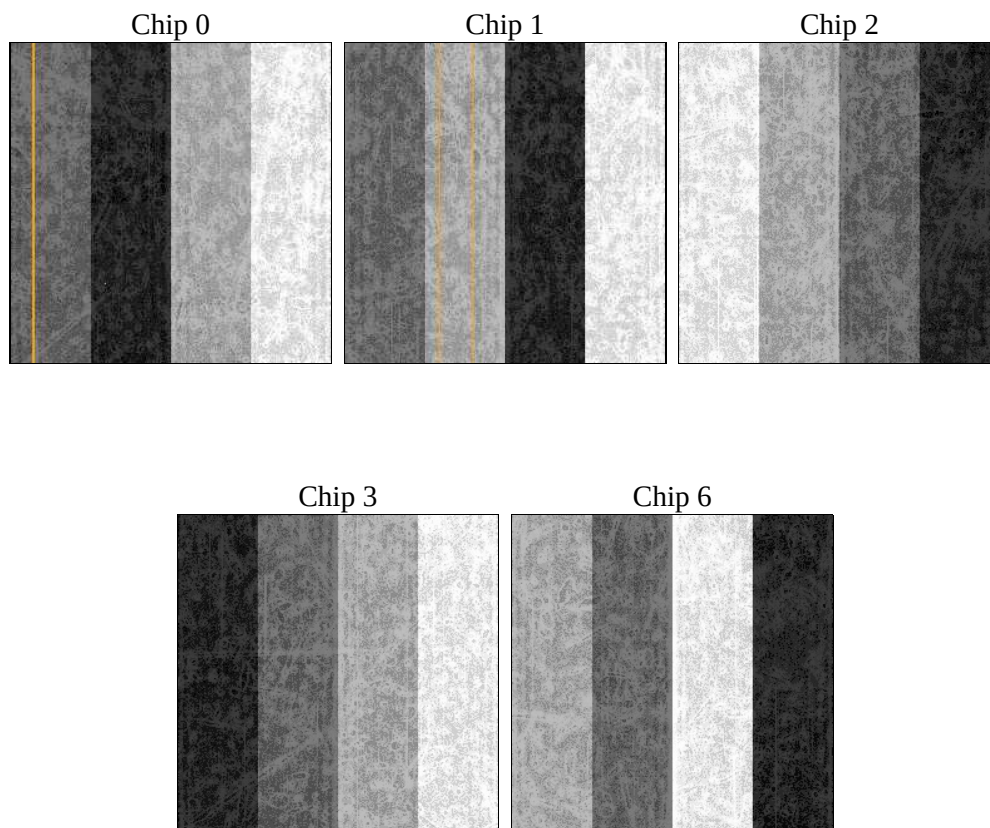
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	23045.359197021	Sum of GTIs [s]
caldsver	4.7.1	 	ontime0	23048.500177383	Sum of GTIs [s]
date	2016-05-12T10:40:58	Date and time of file creation	ontime1	23042.218266606	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	23048.500177383	Sum of GTIs [s]
			ontime3	23045.359197021	Sum of GTIs [s]
			ontime6	23045.359187126	Sum of GTIs [s]
			l1events	760074	Number of level 1 events

2.1.4 Events

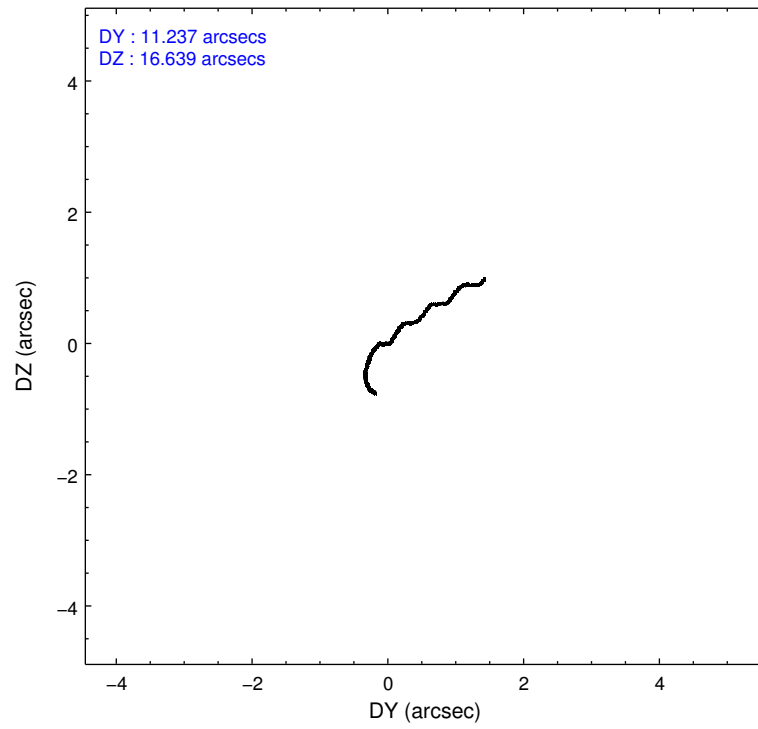
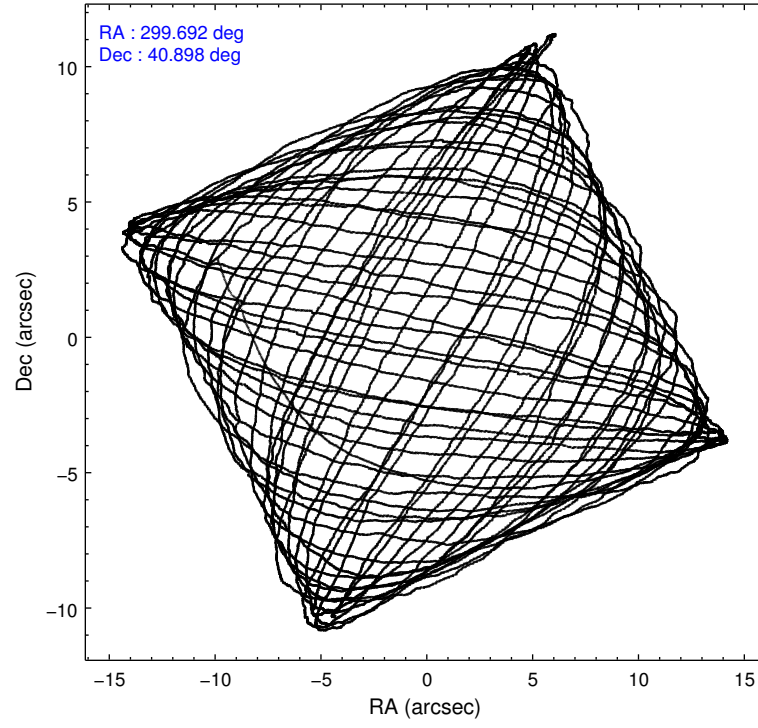
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	138783	154829	155381	161472	149609
rejected events	119229	120980	134438	133587	132852
rejected %	85%	78%	86%	82%	88%

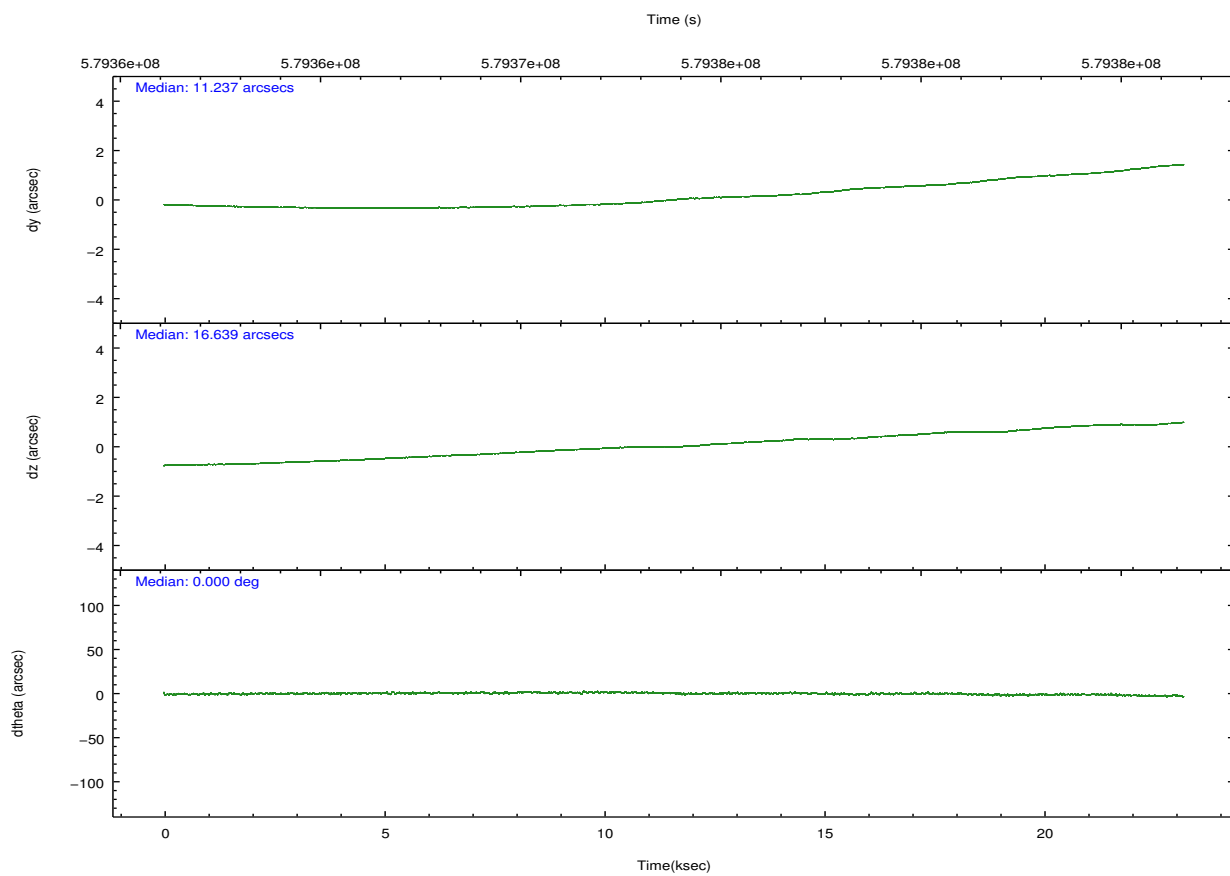
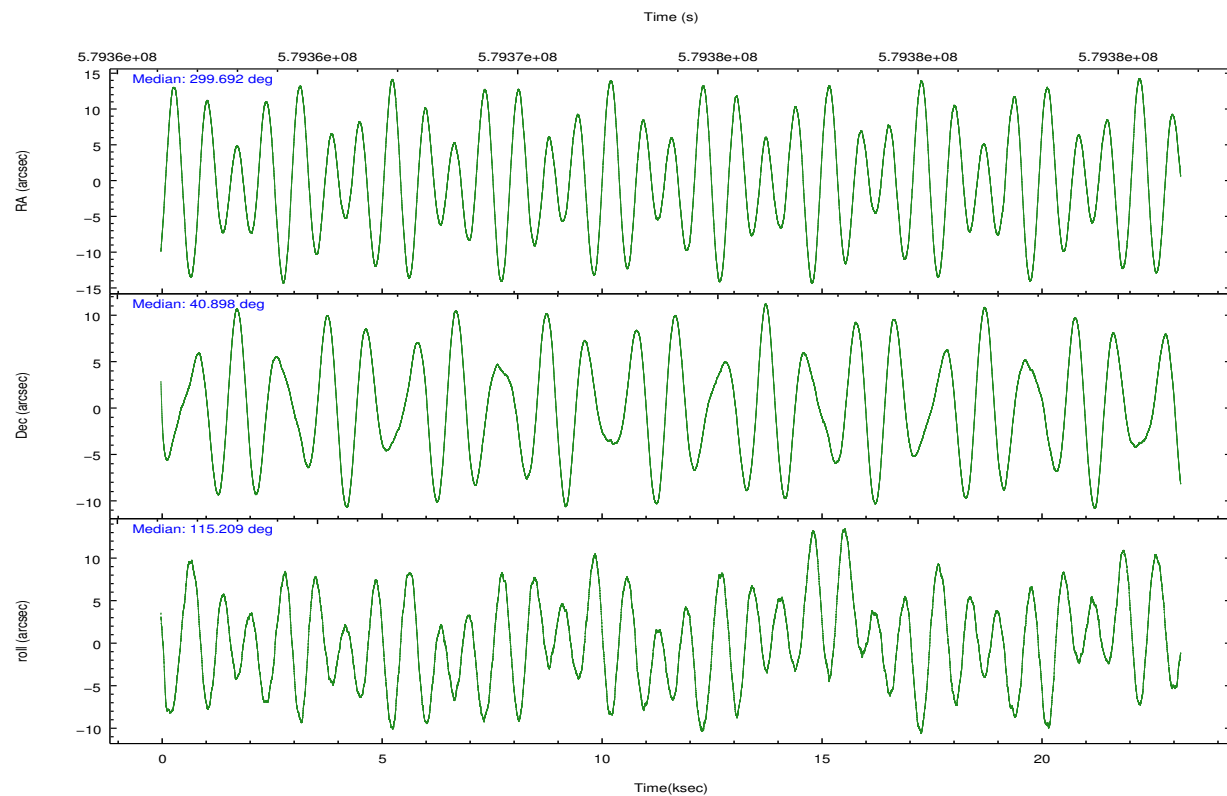
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8267	18047	9962	15201	5689
	5%	11%	6%	9%	3%
grade 1 events	74	106	109	137	68
	0%	0%	0%	0%	0%
grade 2 events	4345	6548	4352	4732	3856
	3%	4%	2%	2%	2%
grade 3 events	1723	2289	1705	2080	1551
	1%	1%	1%	1%	1%
grade 4 events	1625	2268	1709	2068	1607
	1%	1%	1%	1%	1%
grade 5 events	6037	6560	5736	6983	6609
	4%	4%	3%	4%	4%
grade 6 events	3603	4704	3224	3811	4059
	2%	3%	2%	2%	2%
grade 7 events	113109	114307	128584	126460	126170
	81%	73%	82%	78%	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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	299.721634	299.6916013752547	CCD I2 on	Y	Y
[deg] Pointing Dec	40.882447	40.89810640680802	CCD I3 on	Y	Y
[deg] Pointing Roll	114.984750	115.2130937860316	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	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	579362393.184000	579361392.34824	CCD S5 on	N	N
Observation start date	2016-05-11T13:58:45	2016-05-11T13:43:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	579385393.184000	579386251.16216	On-chip summing requested	N	N
Observation end date	2016-05-11T20:22:05	2016-05-11T20:37:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



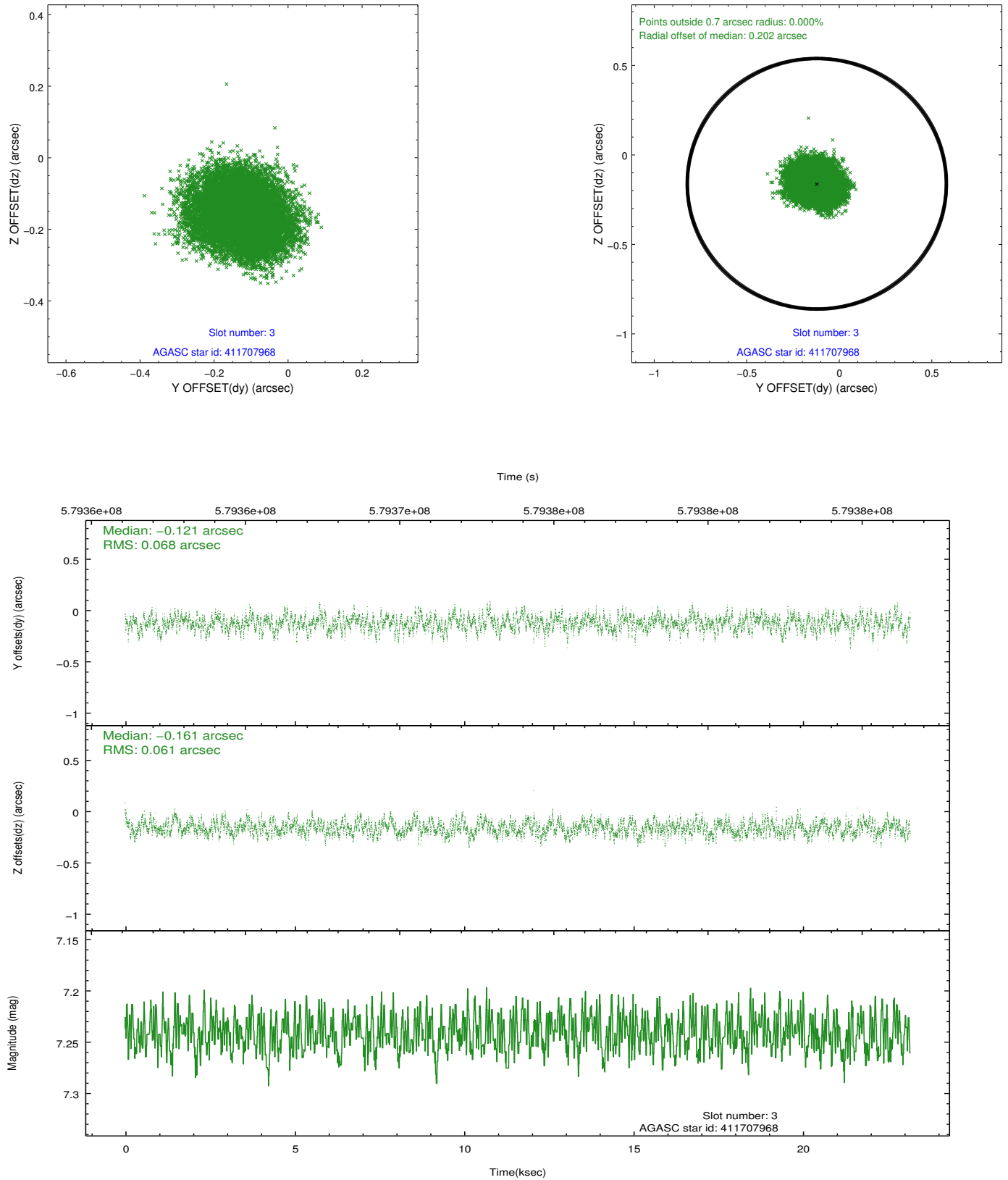


Slot Statistics

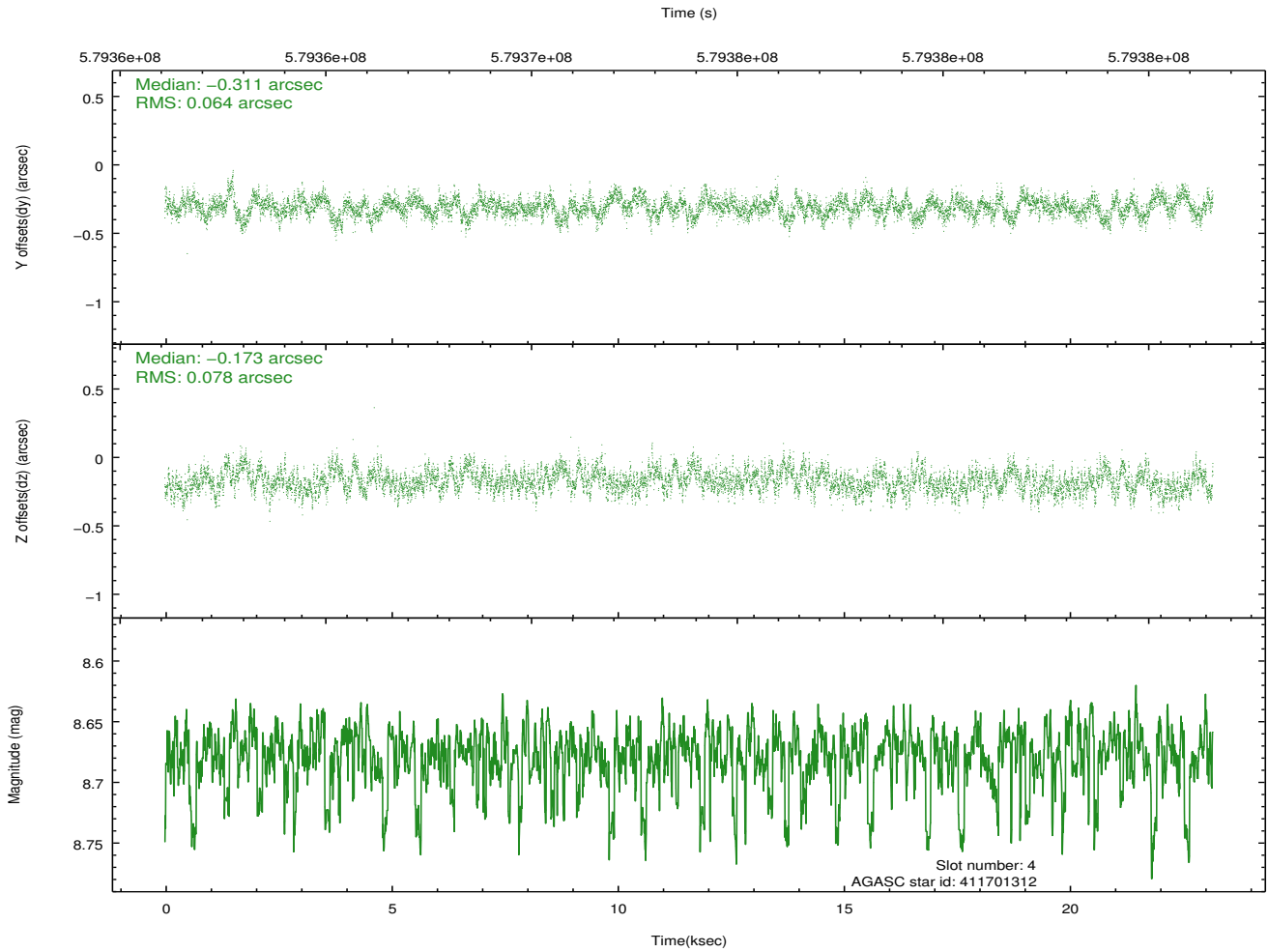
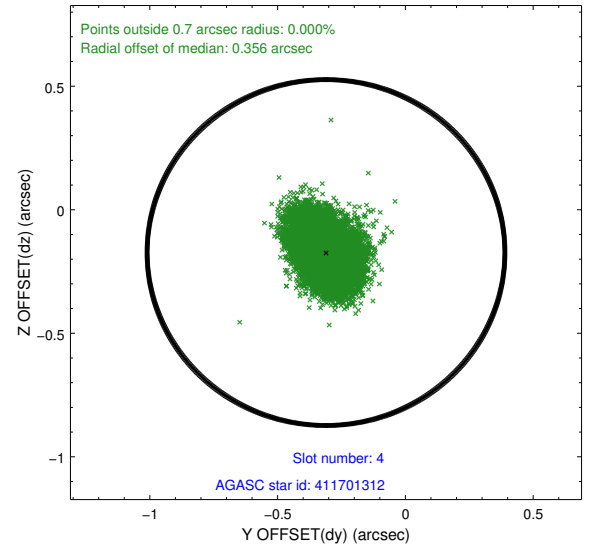
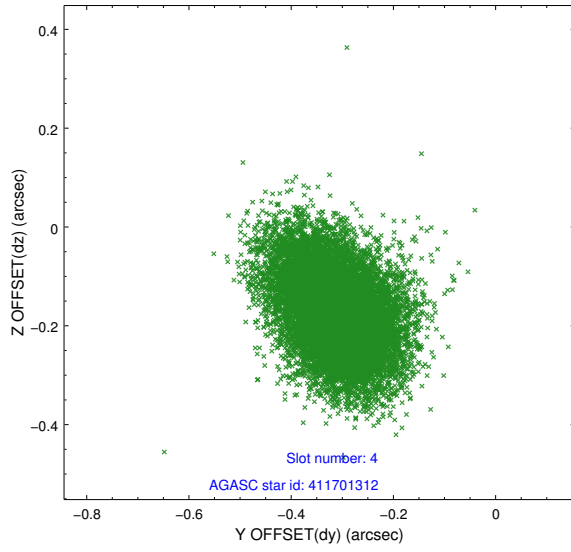
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.15	5655	-0.057	-0.123	0.034	0.063	0.000000	0.000000	-766.14	-846.79
1	FID		ACIS-I-5	7.25	5655	-0.223	0.012	0.011	0.017	0.000000	0.000000	-1820.39	1057.15
2	FID		ACIS-I-6	7.25	5653	0.187	0.176	0.031	0.053	0.000000	0.000000	393.76	1701.89
3	GUIDE	used	411707968	7.24	11309	-0.121	-0.161	0.099	0.155	299.509933	40.926839	389.06	453.89
4	GUIDE	used	411701312	8.68	11305	-0.311	-0.173	0.108	0.177	298.889956	40.820220	763.77	2143.61
5	GUIDE	used	412240520	9.05	11302	-0.097	-0.438	0.102	0.167	298.791827	41.286181	2392.19	1660.40
6	GUIDE	used	413414112	8.76	11236	0.376	0.262	0.083	0.136	300.390444	40.913917	-658.49	-1699.49
7	GUIDE	used	413421624	8.70	11306	0.160	0.506	0.103	0.167	300.399768	40.893051	-737.78	-1691.68

2.4 Star Slots

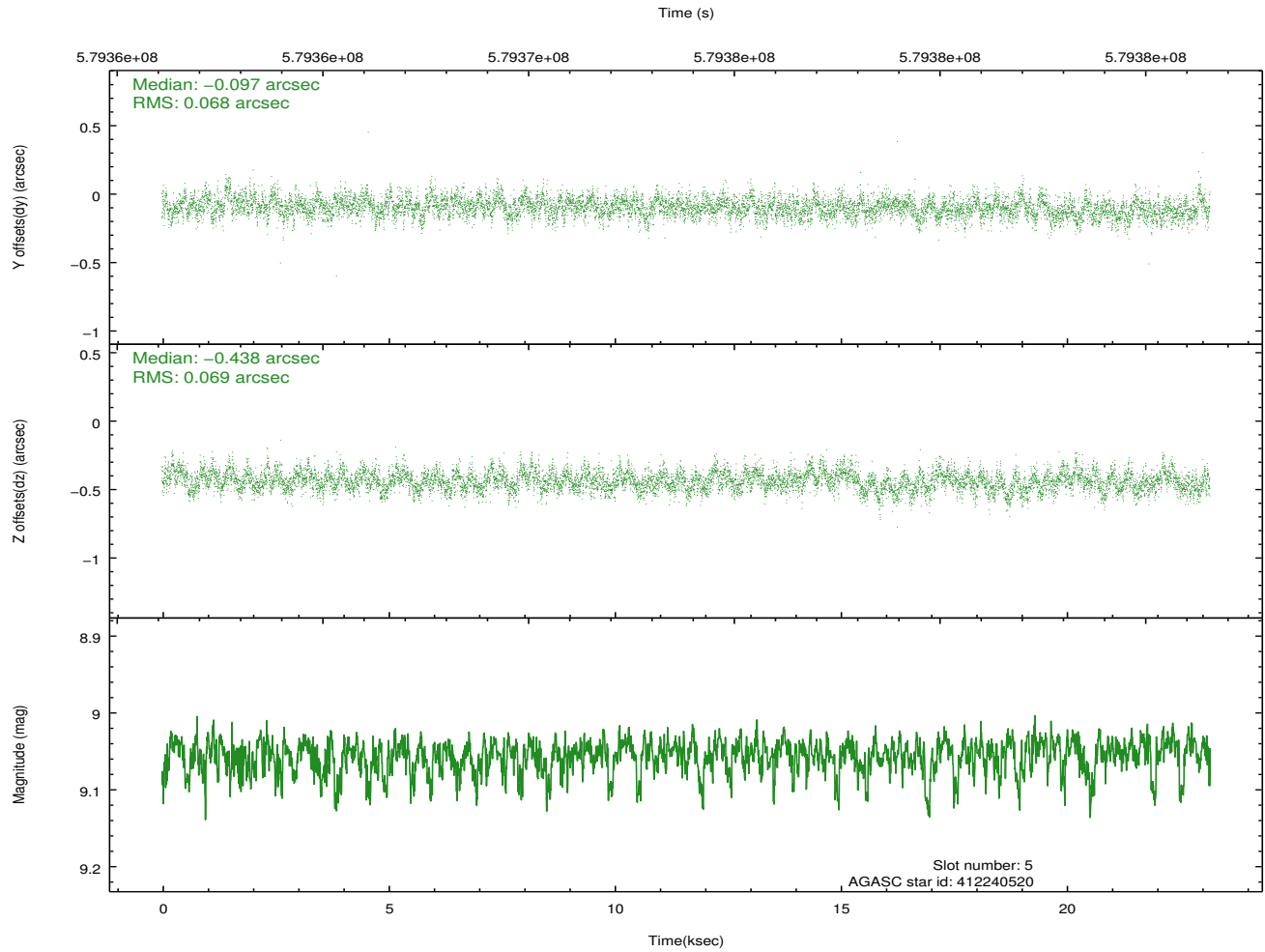
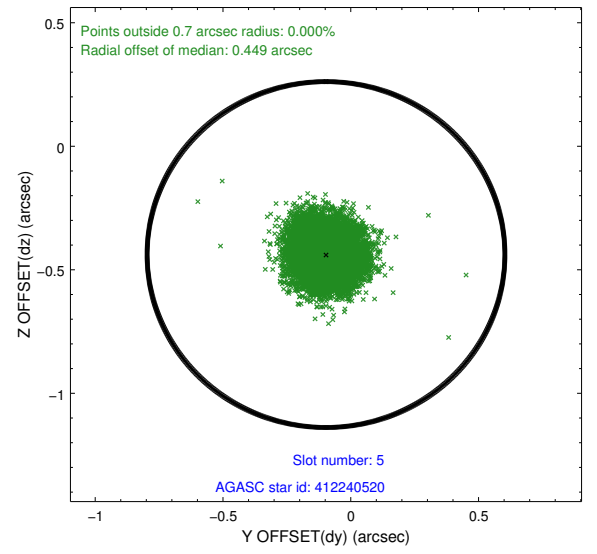
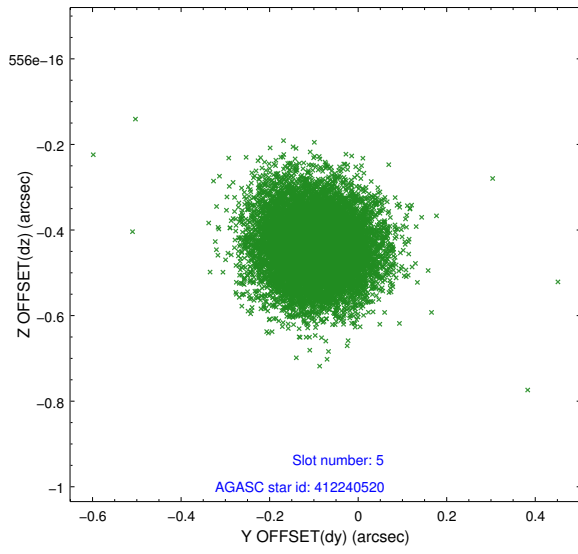
2.4.1 Slot 3



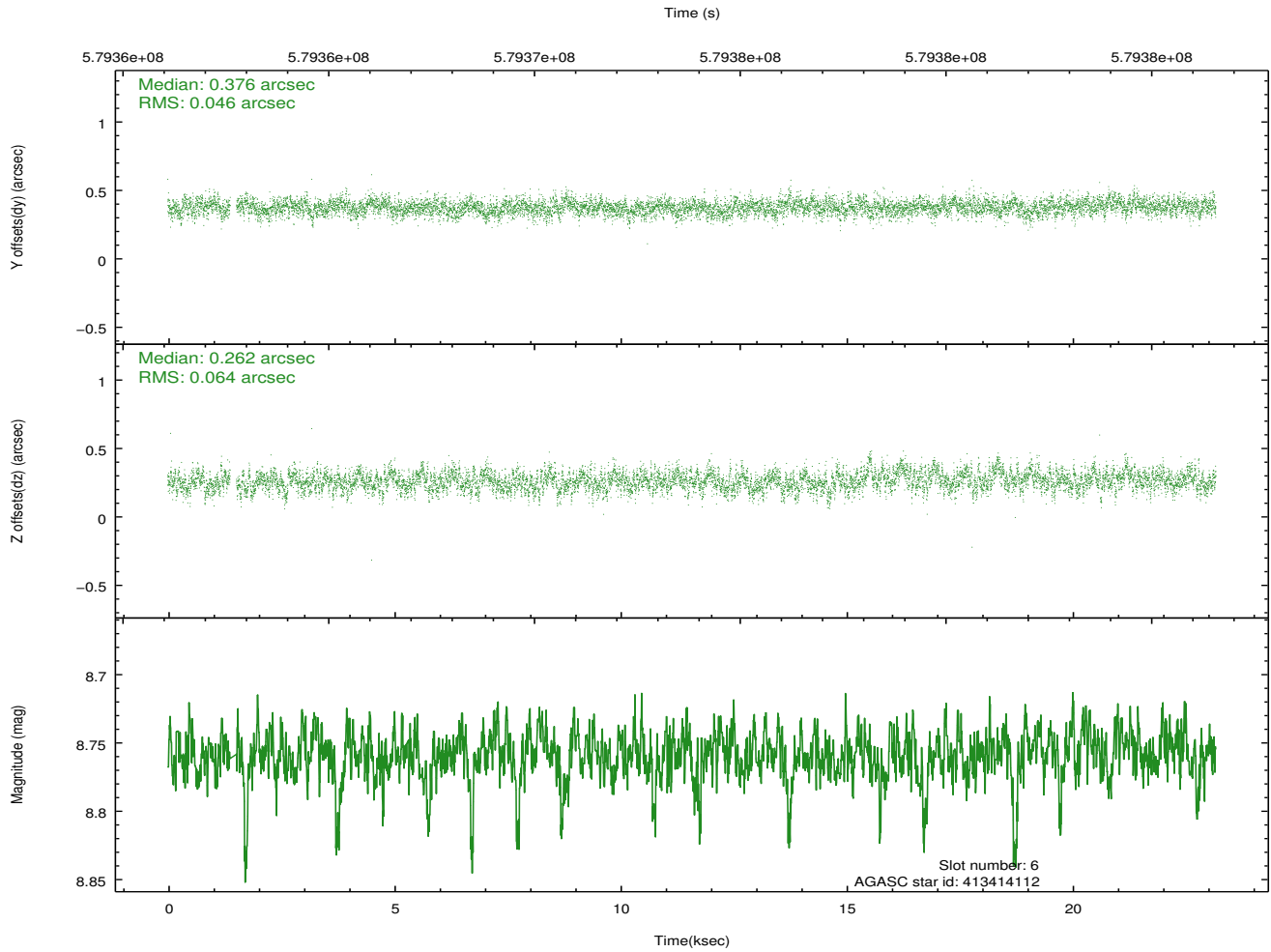
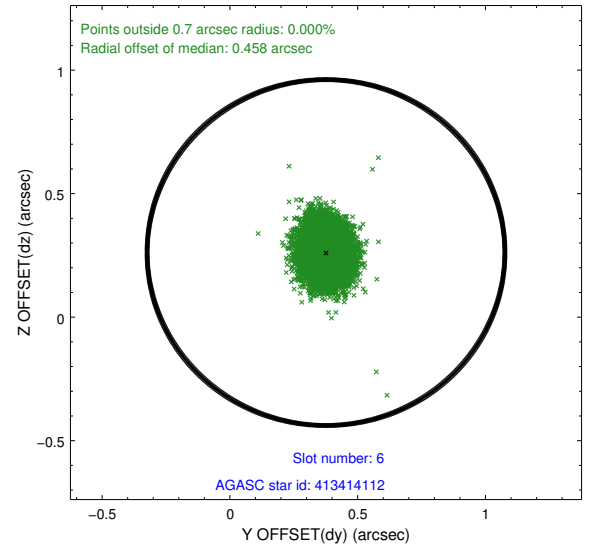
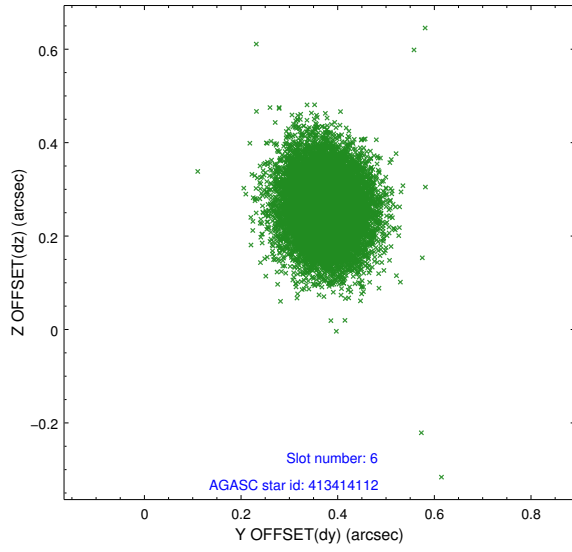
2.4.2 Slot 4



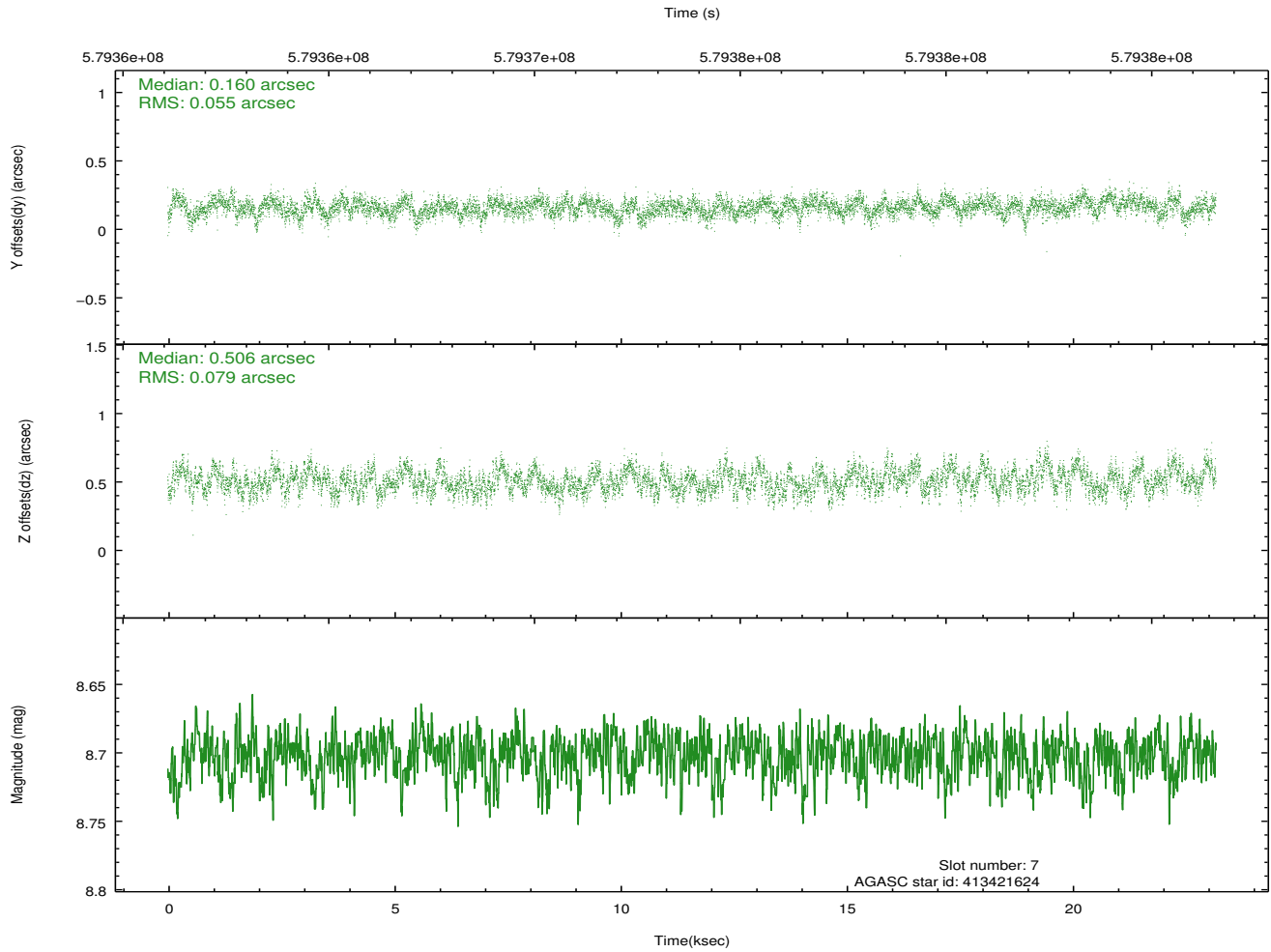
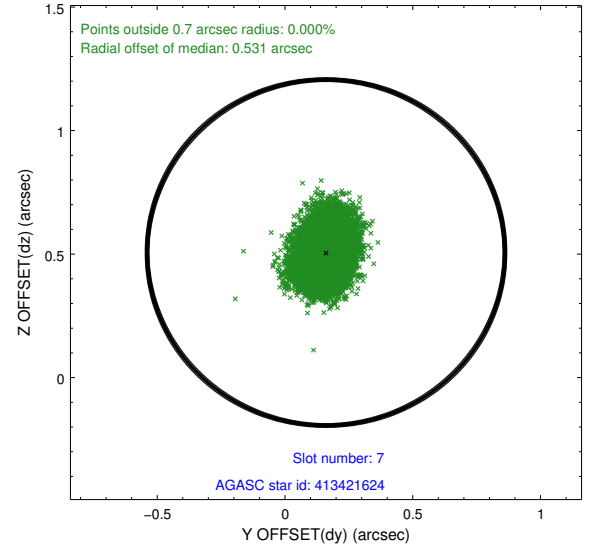
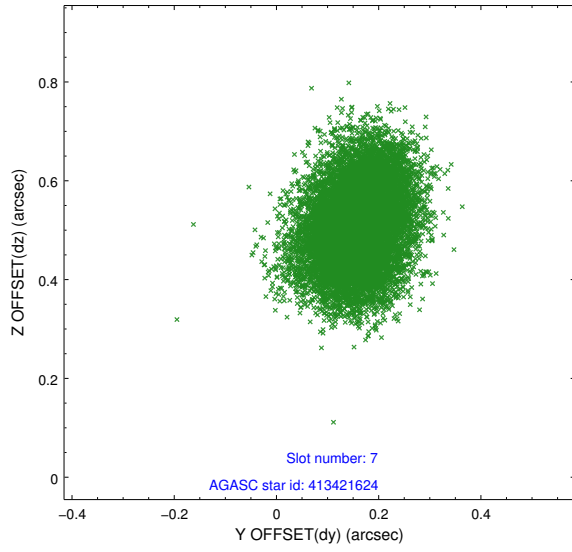
2.4.3 Slot 5



2.4.4 Slot 6

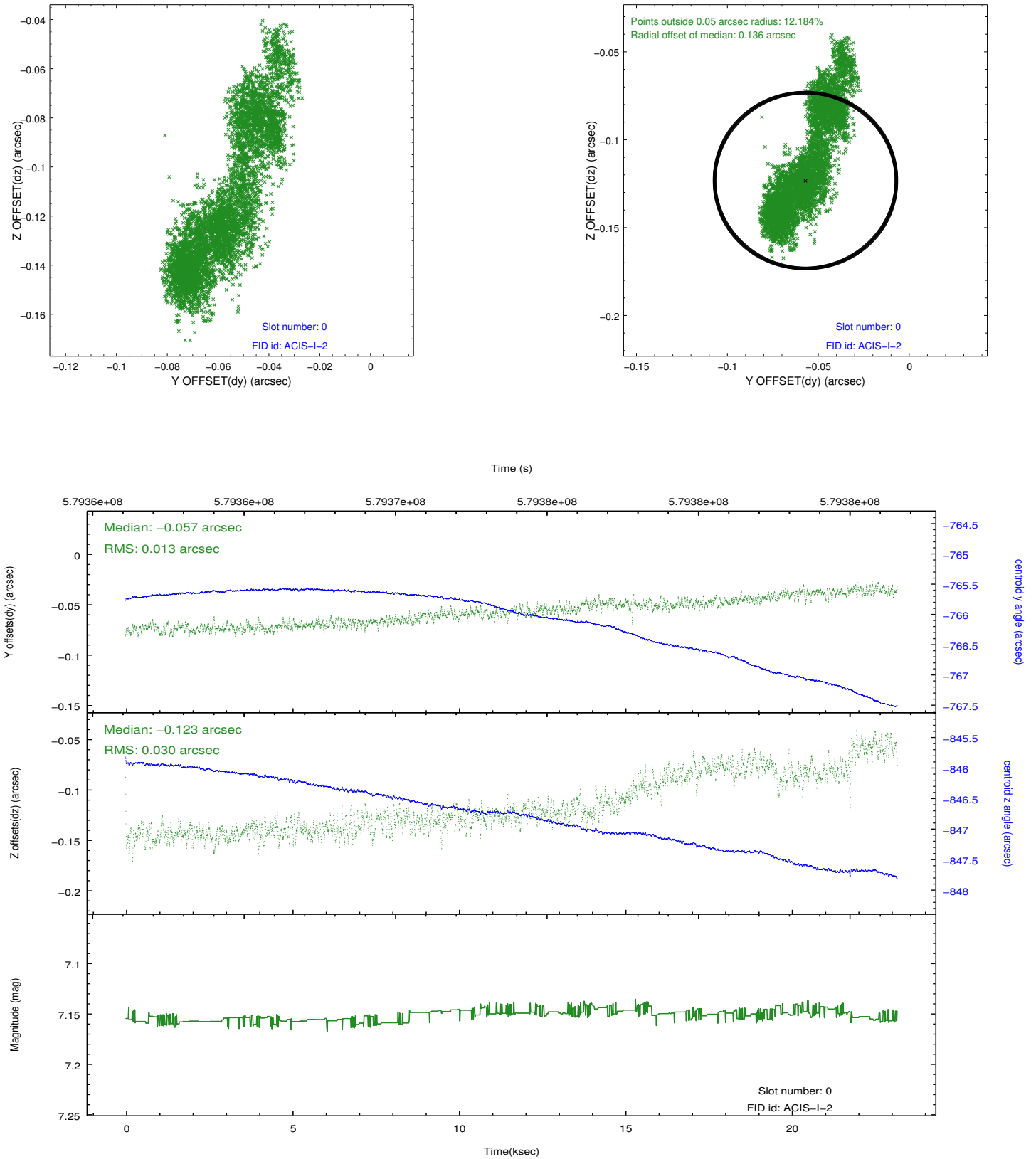


2.4.5 Slot 7

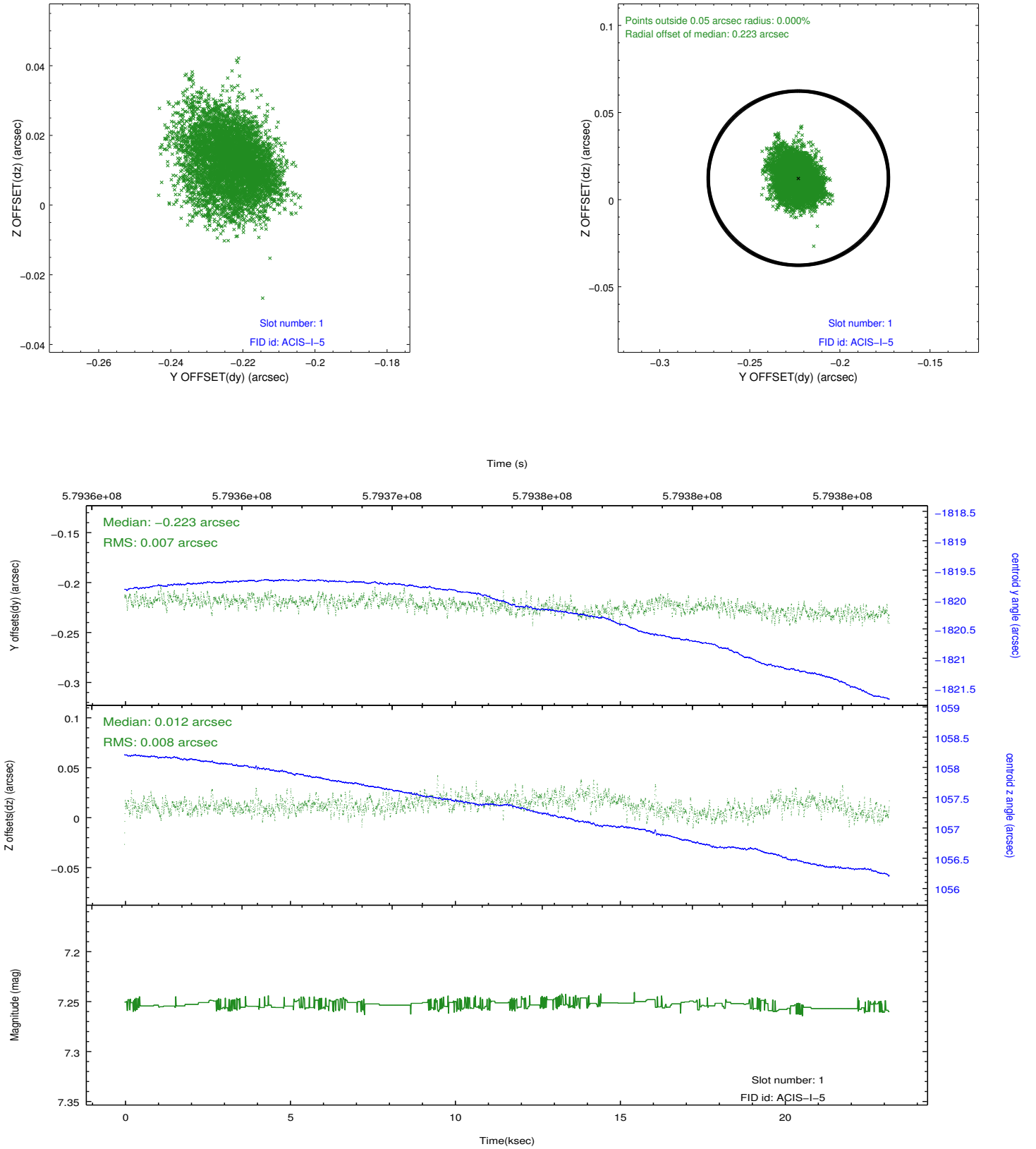


2.5 FID Slots

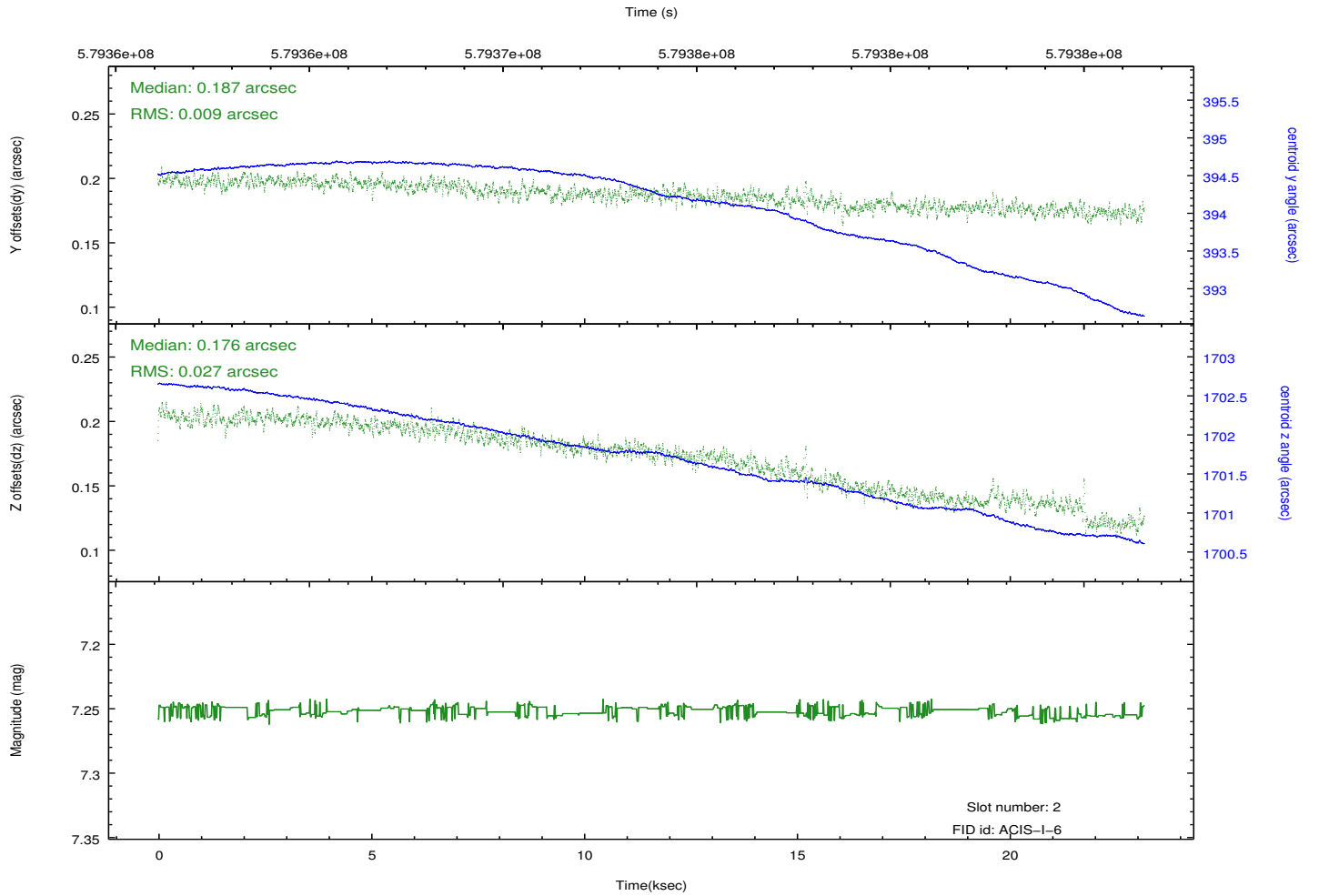
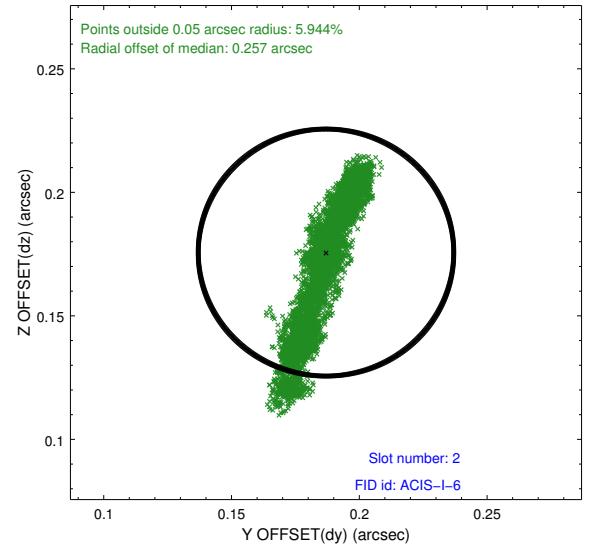
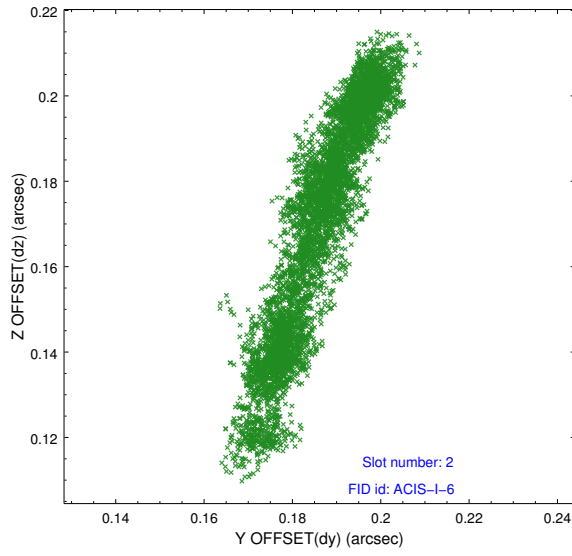
2.5.1 Slot 0



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)	2016.05.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.045359197021

A.2 Comments