

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15159 - L2 Version 2
Chandra X-Ray Center

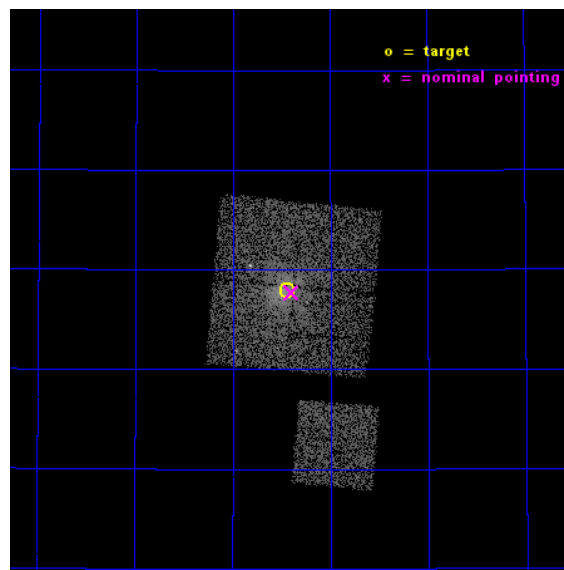
L2 Processing Date : Dec 1 2014

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1 Front

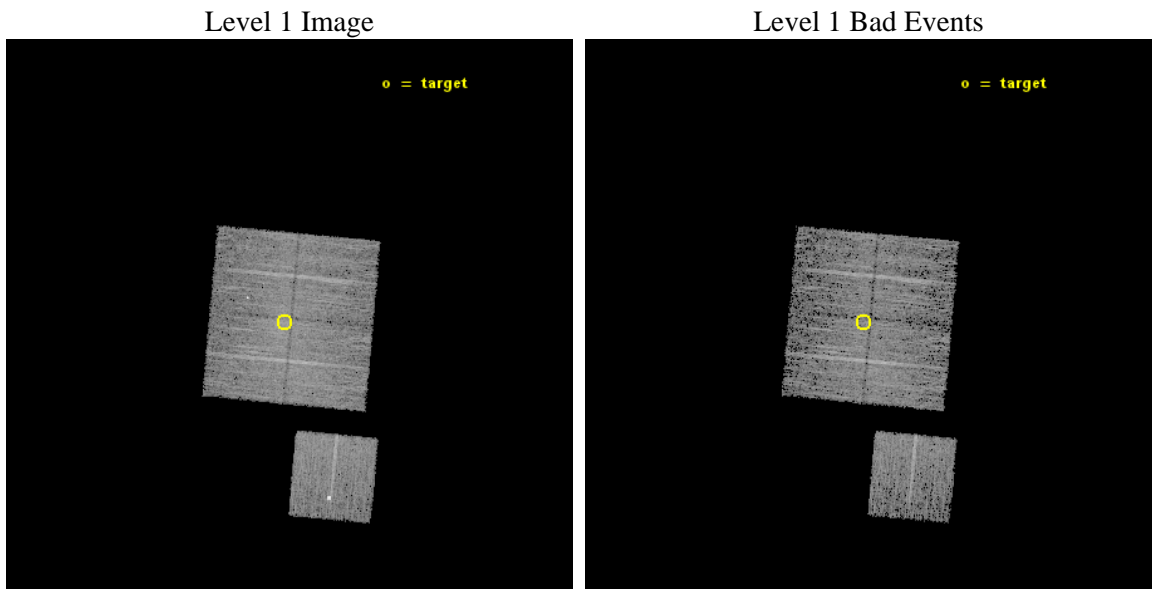
seq_num	801287	Sequence number
obs_id	15159	Observation id
title	COMPLETING eHIFLUGCS: THE ULTIMATE PRECISE AND ACCURATE LOCAL BASELINE	Proposal title
observer	Dr. Thomas Reiprich	Principal investigator
object	A655	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	126.360833	Observer's specified target RA [deg]
dec_targ	47.132	Observer's specified target Dec [deg]
ra_nom	126.34981013677	Nominal RA [deg]
dec_nom	47.128923611525	Nominal Dec [deg]
roll_nom	185.35041875171	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8078.6000621319	Sum of GTIs [s]
livetime	7973.0472049413	Livetime [s]
ontime0	8075.4589918852	Sum of GTIs [s]
ontime1	8078.6000621319	Sum of GTIs [s]
ontime2	8072.3179215789	Sum of GTIs [s]
ontime3	8078.6000621319	Sum of GTIs [s]
ontime6	8075.458991766	Sum of GTIs [s]
l2events	24506	Number of level 2 events



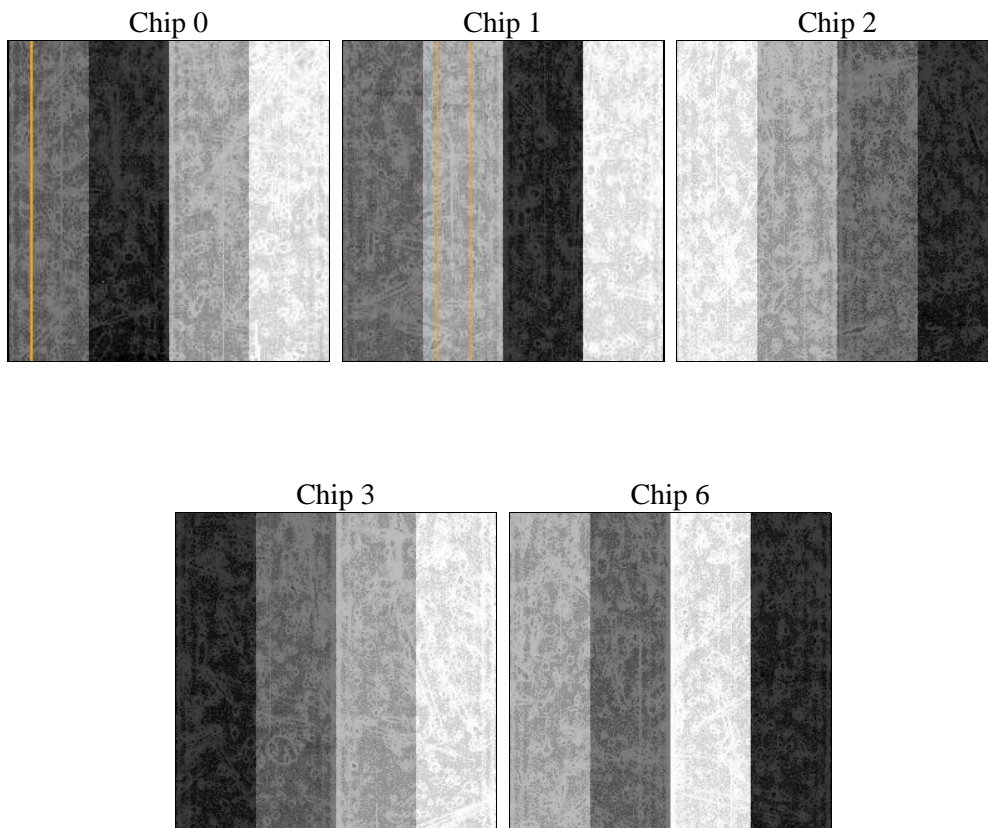
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	8078.6000621319	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	8075.4589918852	Sum of GTIs [s]
date	2014-12-01T06:56:28	Date and time of file creation	ontime1	8078.6000621319	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8072.3179215789	Sum of GTIs [s]
			ontime3	8078.6000621319	Sum of GTIs [s]
			ontime6	8075.458991766	Sum of GTIs [s]
			l1events	210516	Number of level 1 events

2.1.4 Events

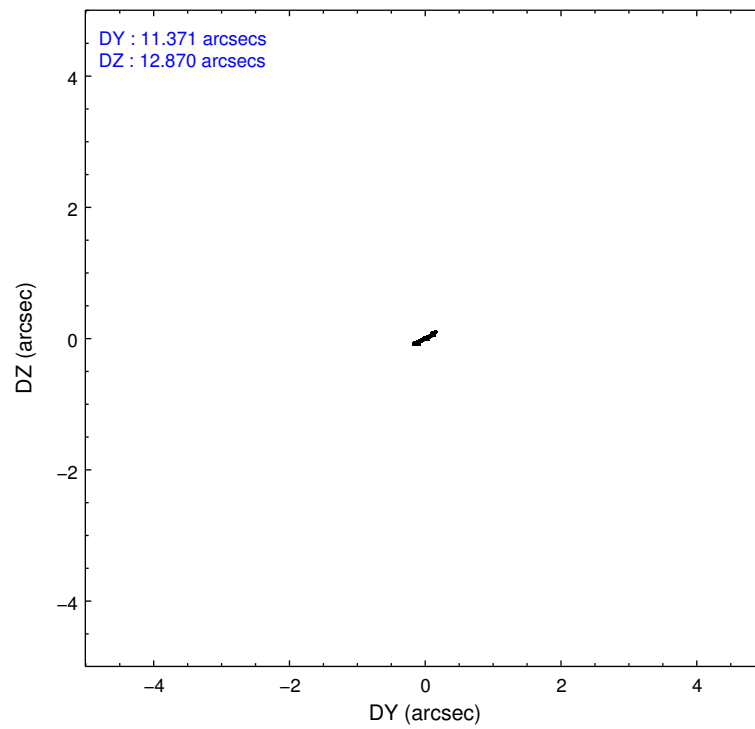
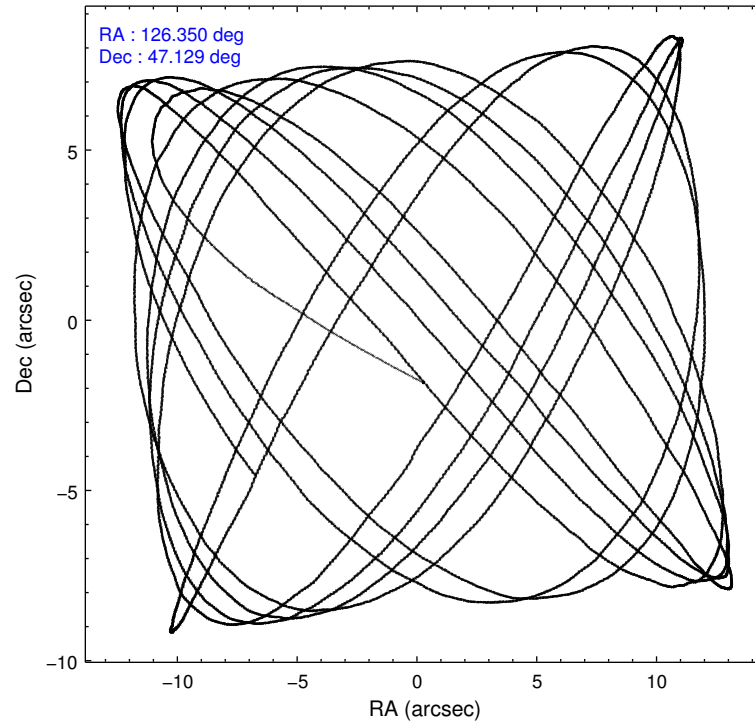
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	39515	38896	45259	43297	43549
rejected events	34343	32161	40239	36570	36369
rejected %	86%	82%	88%	84%	83%

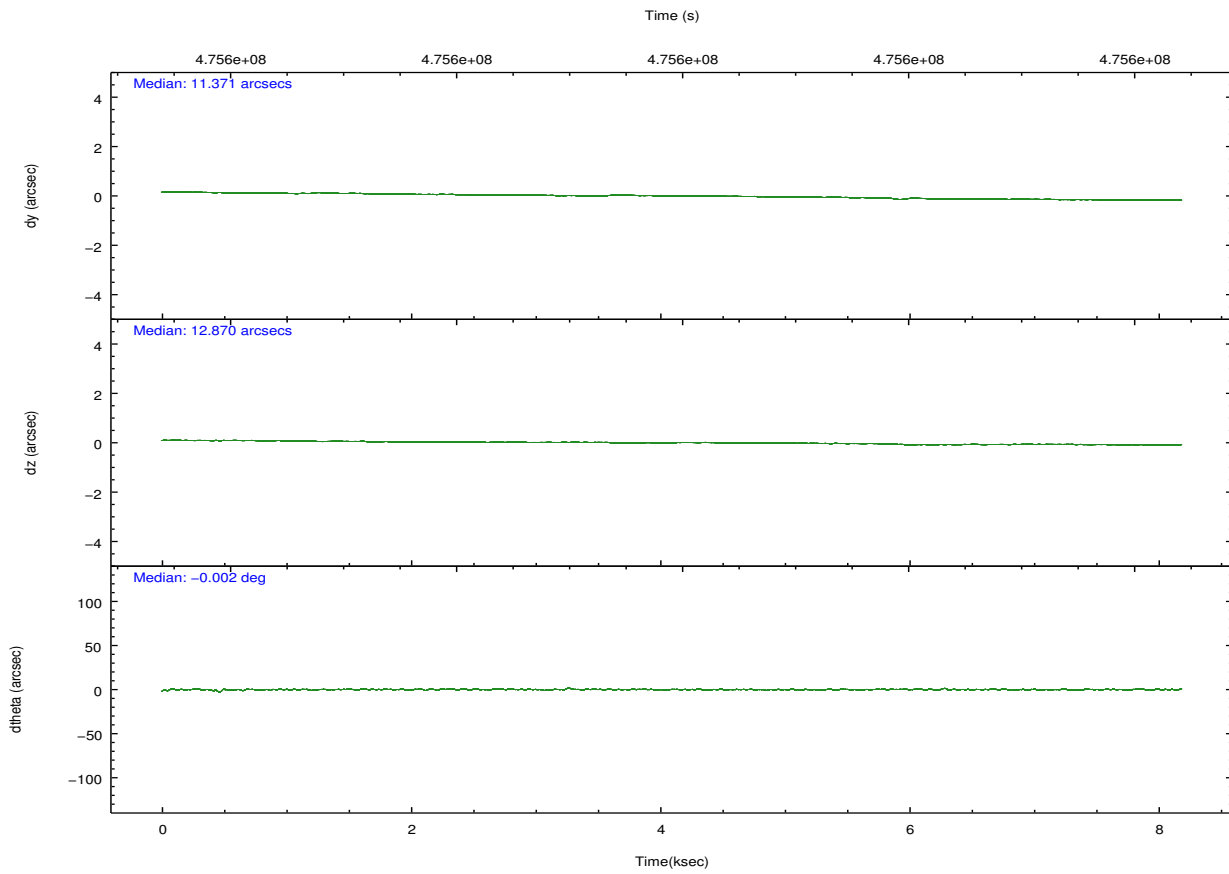
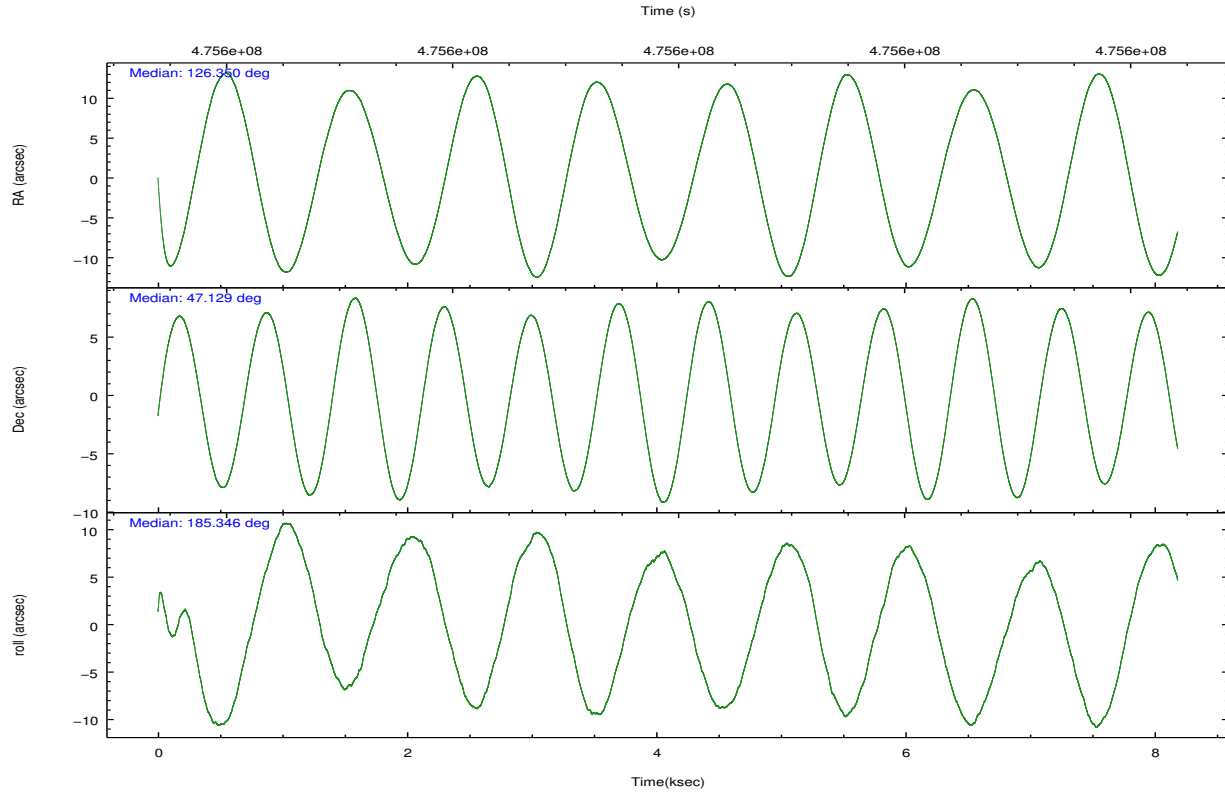
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2180	3108	2196	3515	1583
	5%	7%	4%	8%	3%
grade 1 events	29	25	27	35	17
	0%	0%	0%	0%	0%
grade 2 events	1123	1398	1072	1184	3551
	2%	3%	2%	2%	8%
grade 3 events	462	573	447	551	473
	1%	1%	0%	1%	1%
grade 4 events	499	526	481	533	462
	1%	1%	1%	1%	1%
grade 5 events	1635	1660	1540	1881	1796
	4%	4%	3%	4%	4%
grade 6 events	910	1139	833	945	1117
	2%	2%	1%	2%	2%
grade 7 events	32677	30467	38663	34653	34550
	82%	78%	85%	80%	79%

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	126.382753	126.3498101367659	CCD I2 on	Y	Y
[deg] Pointing Dec	47.144889	47.12892361152459	CCD I3 on	Y	Y
[deg] Pointing Roll	185.117567	185.3504187517109	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)	475595989.184000	475594845.12292	CCD S5 on	N	N
Observation start date	2013-01-26T13:58:42	2013-01-26T13:40:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	475603989.184000	475604849.12346	On-chip summing requested	N	N
Observation end date	2013-01-26T16:12:02	2013-01-26T16:27:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





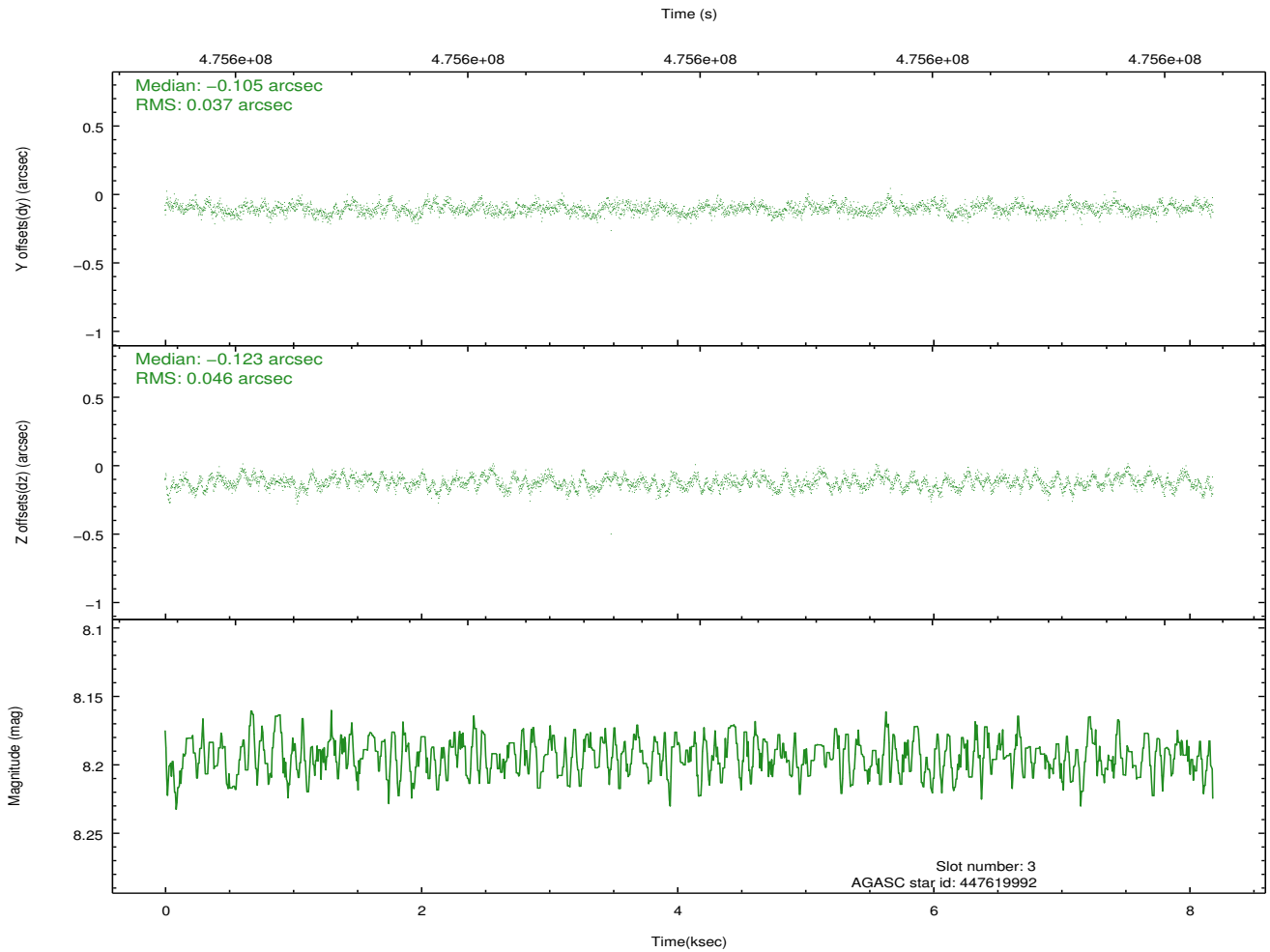
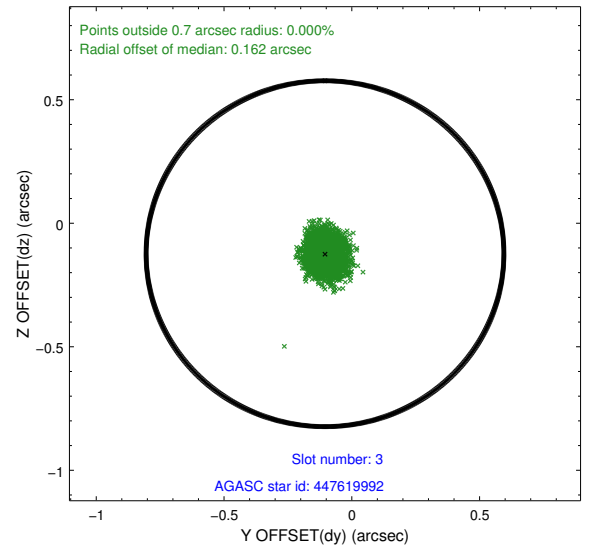
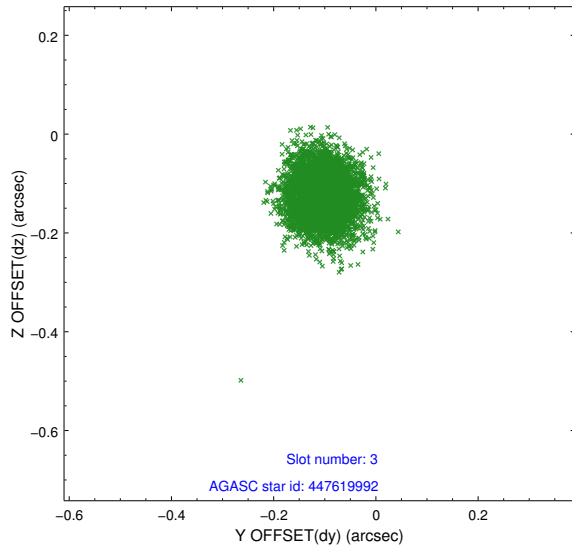
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	1997	0.061	-0.043	0.007	0.013	0.000000	0.000000	928.26	-836.45
1	FID		ACIS-I-5	7.23	1997	-0.224	0.057	0.006	0.011	0.000000	0.000000	-1819.75	1060.79
2	FID		ACIS-I-6	7.22	1997	0.071	0.056	0.008	0.013	0.000000	0.000000	393.08	1706.07
3	GUIDE	used	447619992	8.19	3992	-0.105	-0.123	0.064	0.099	125.819208	46.999599	1424.70	393.61
4	GUIDE	used	447628280	8.39	3994	0.048	-0.114	0.084	0.139	126.408314	47.033933	-26.18	404.33
5	GUIDE	used	447628920	8.08	3994	-0.068	0.006	0.076	0.121	127.037359	47.302182	-1642.54	-427.07
6	GUIDE	used	448010800	8.36	3994	0.066	0.171	0.084	0.128	126.253629	47.741582	120.31	-2166.75
7	GUIDE	used	448023792	8.70	3971	0.063	0.059	0.088	0.142	127.075491	47.862026	-1897.02	-2429.69

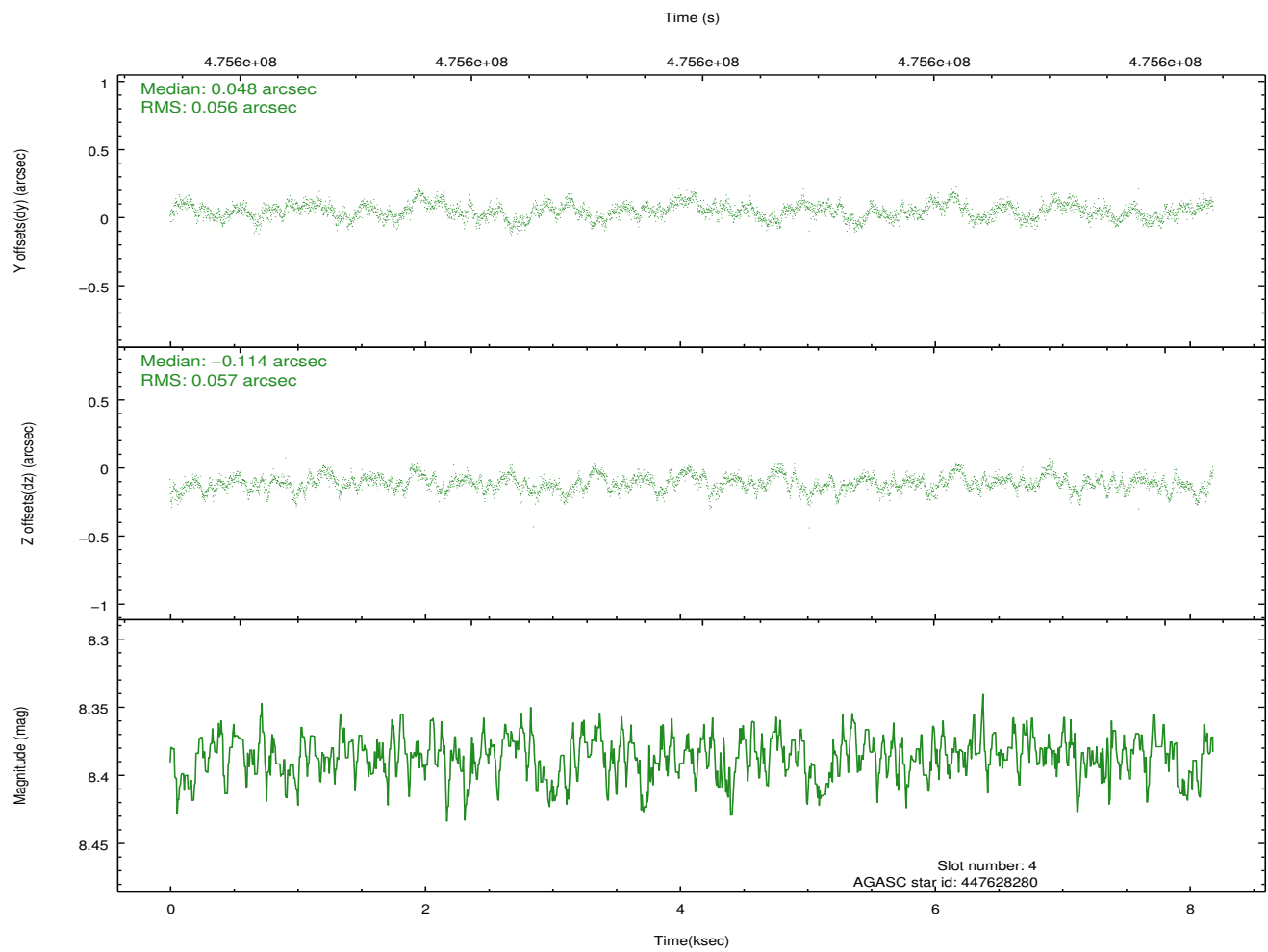
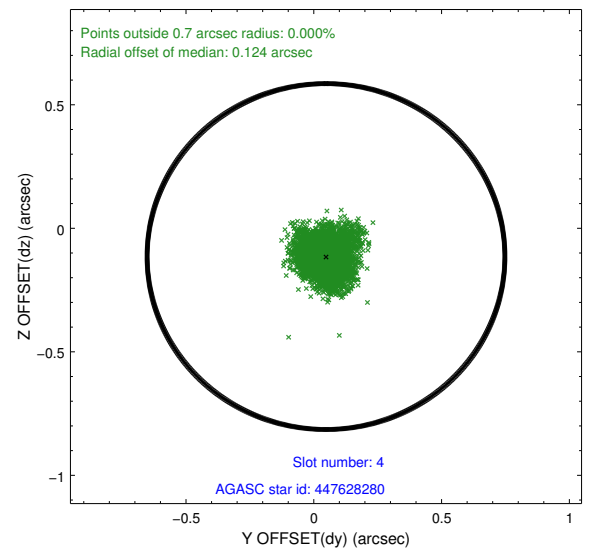
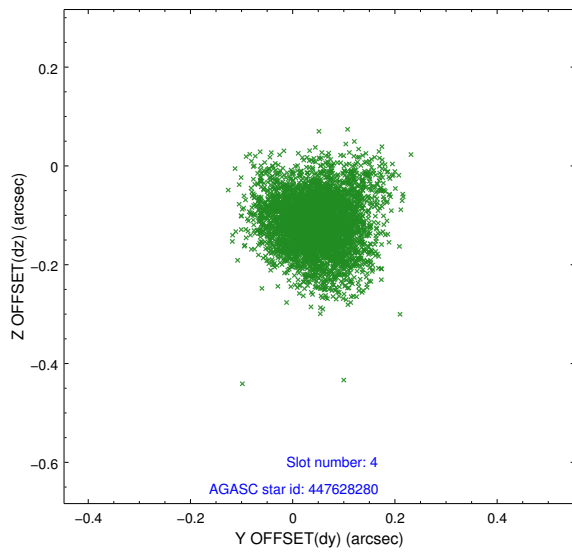
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2.4 Star Slots

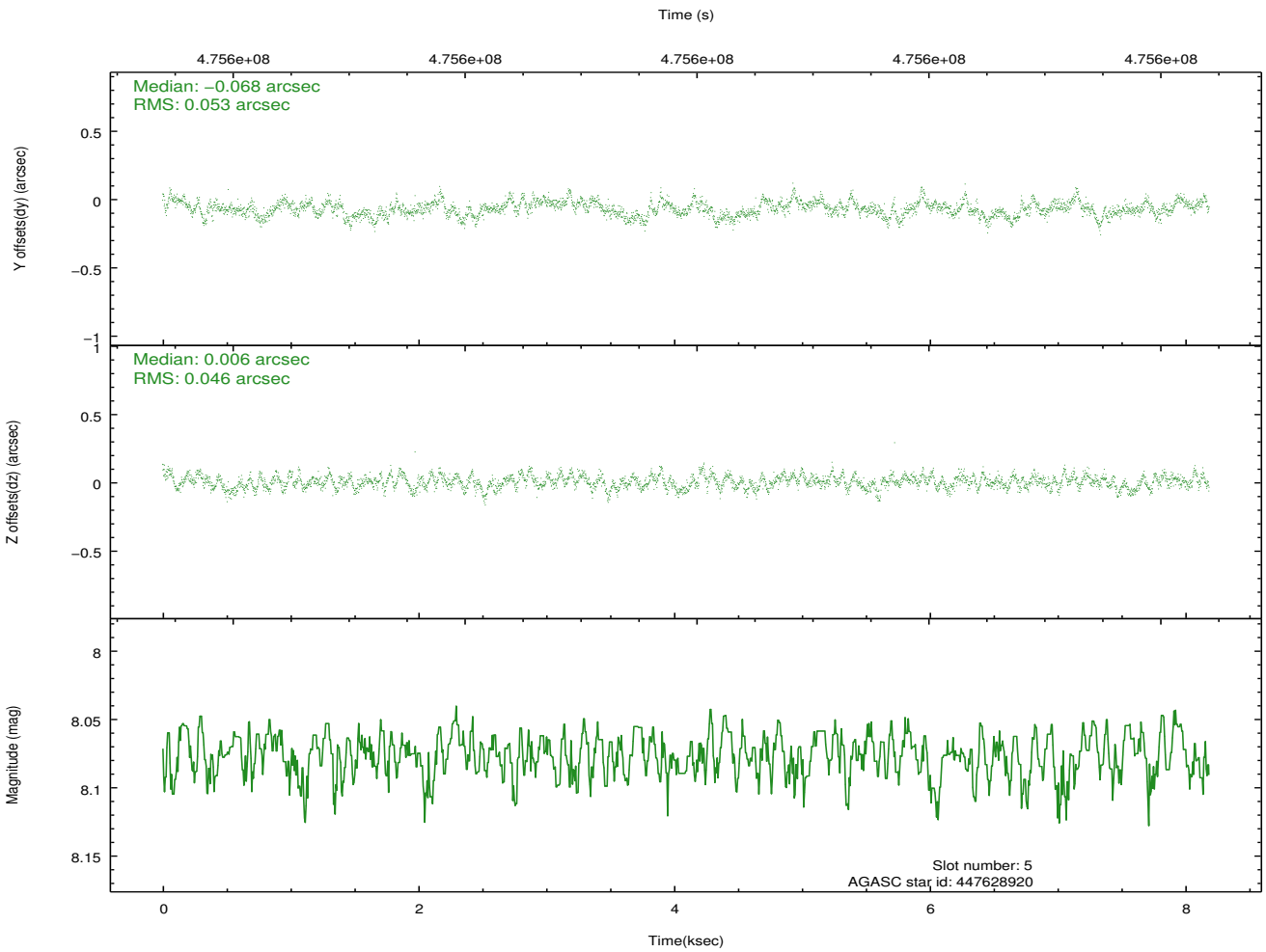
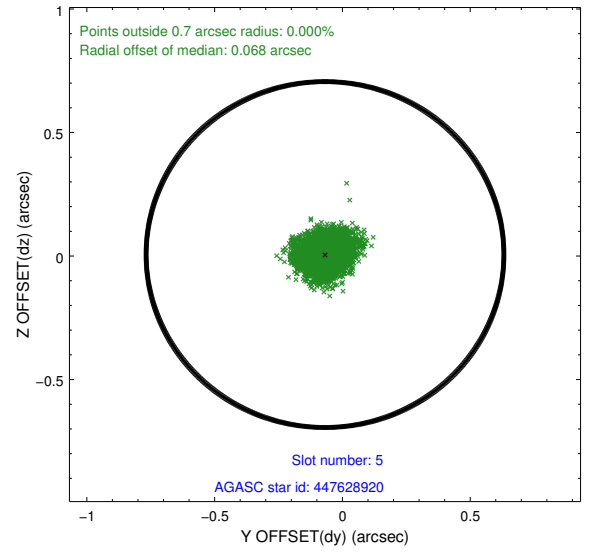
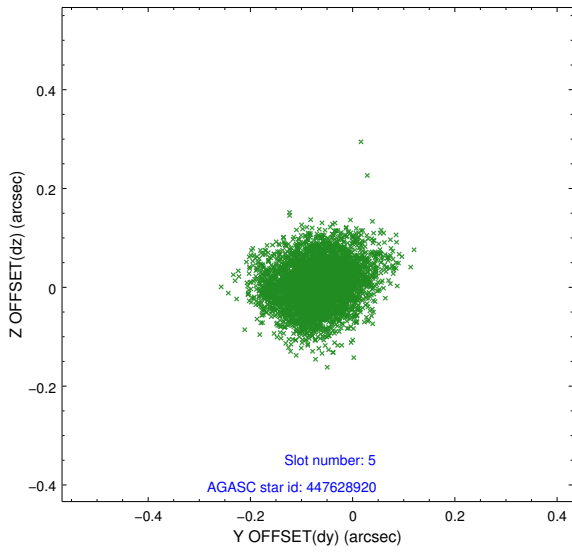
2.4.1 Slot 3



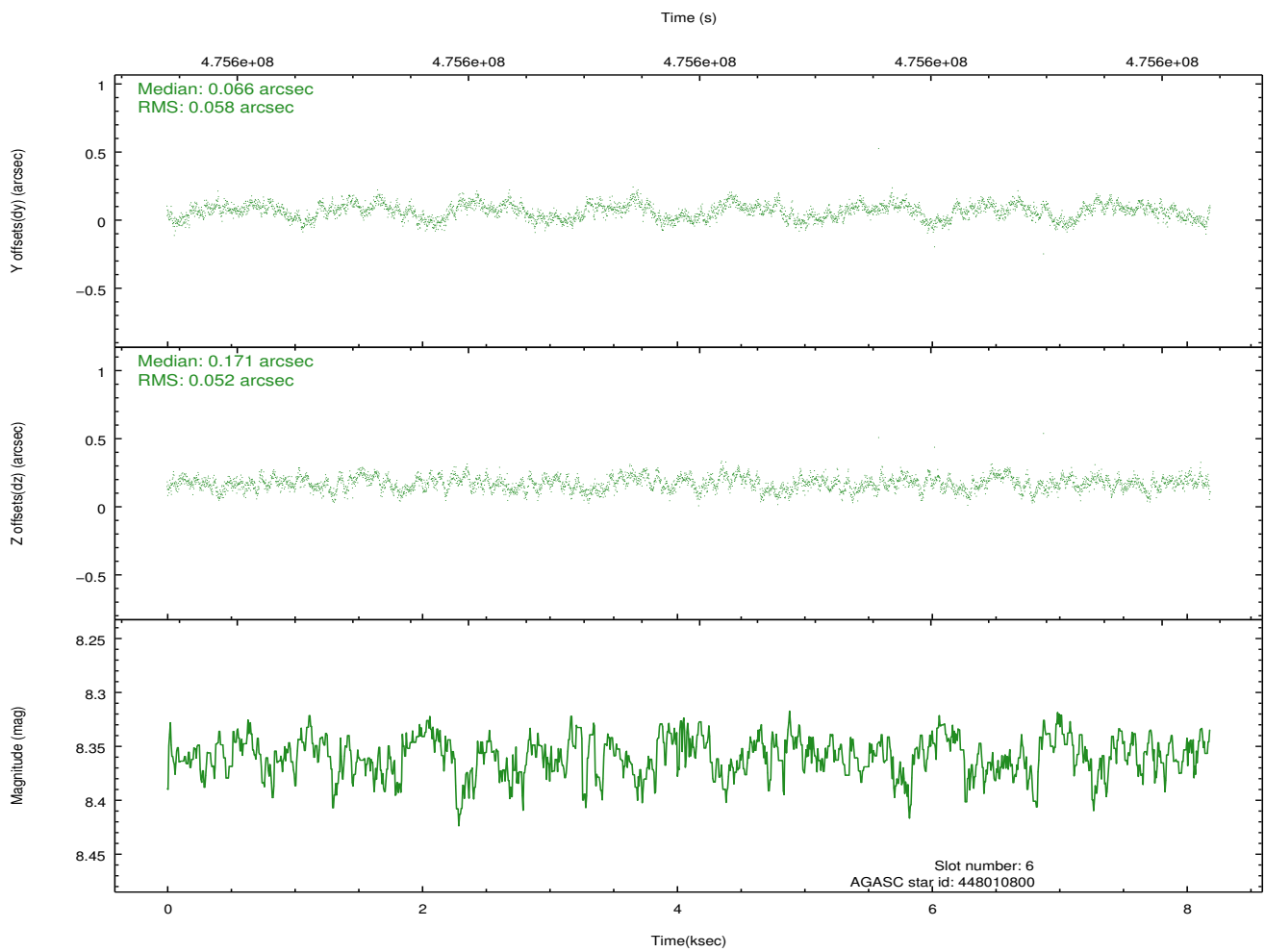
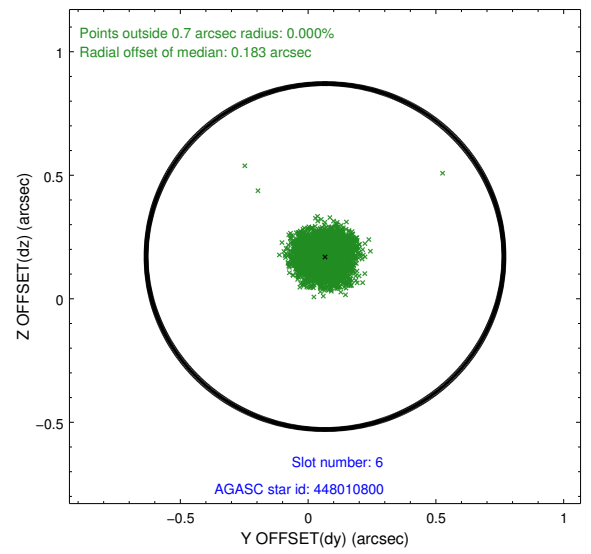
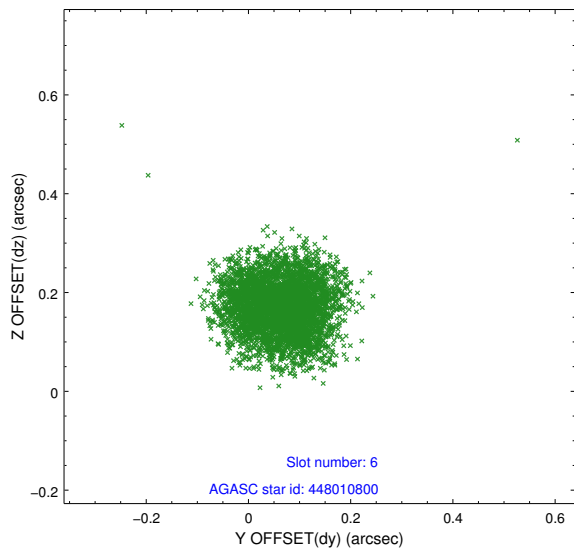
2.4.2 Slot 4



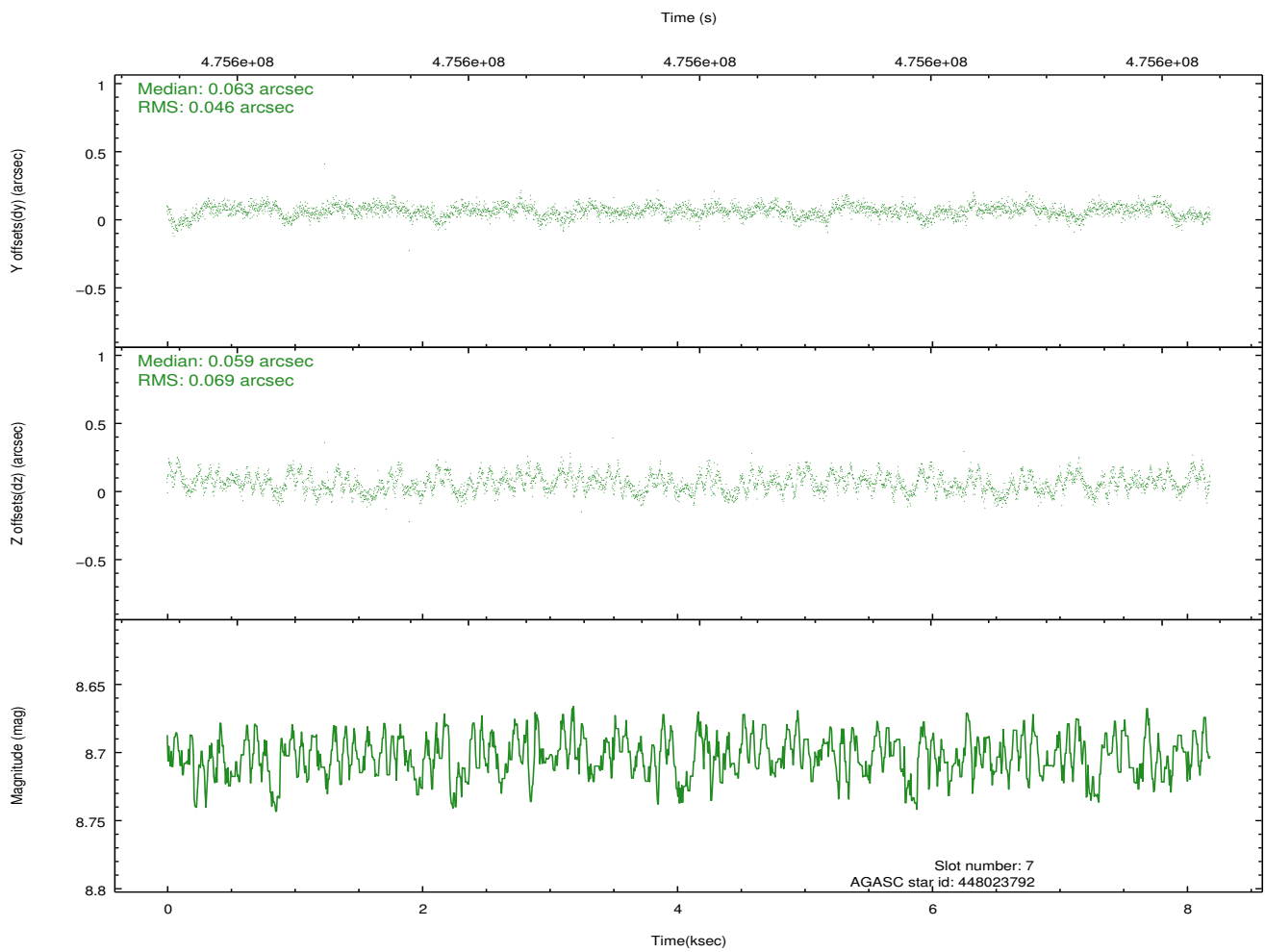
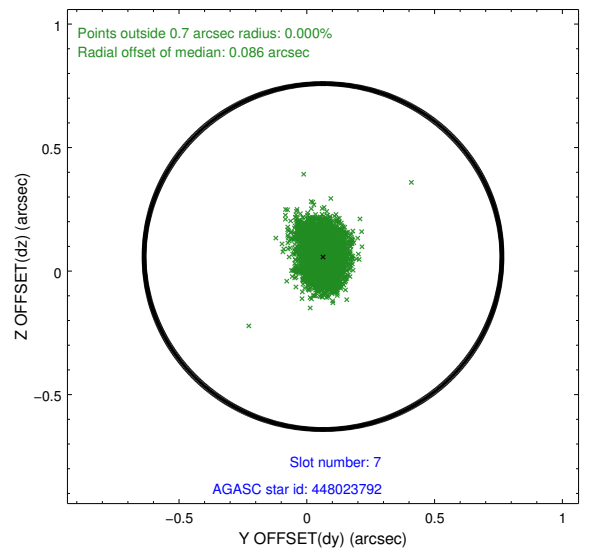
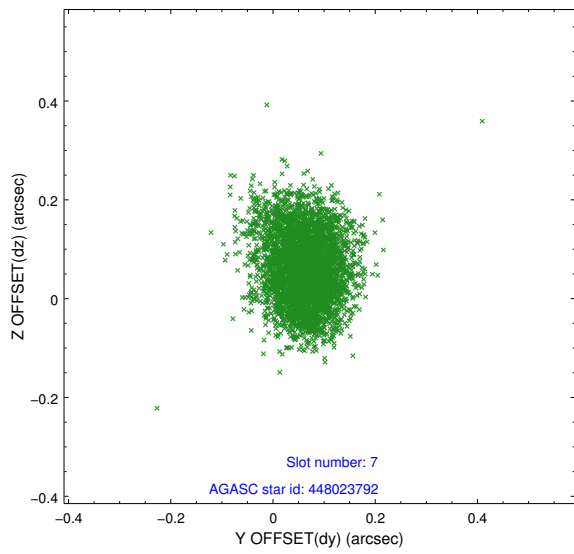
2.4.3 Slot 5



2.4.4 Slot 6

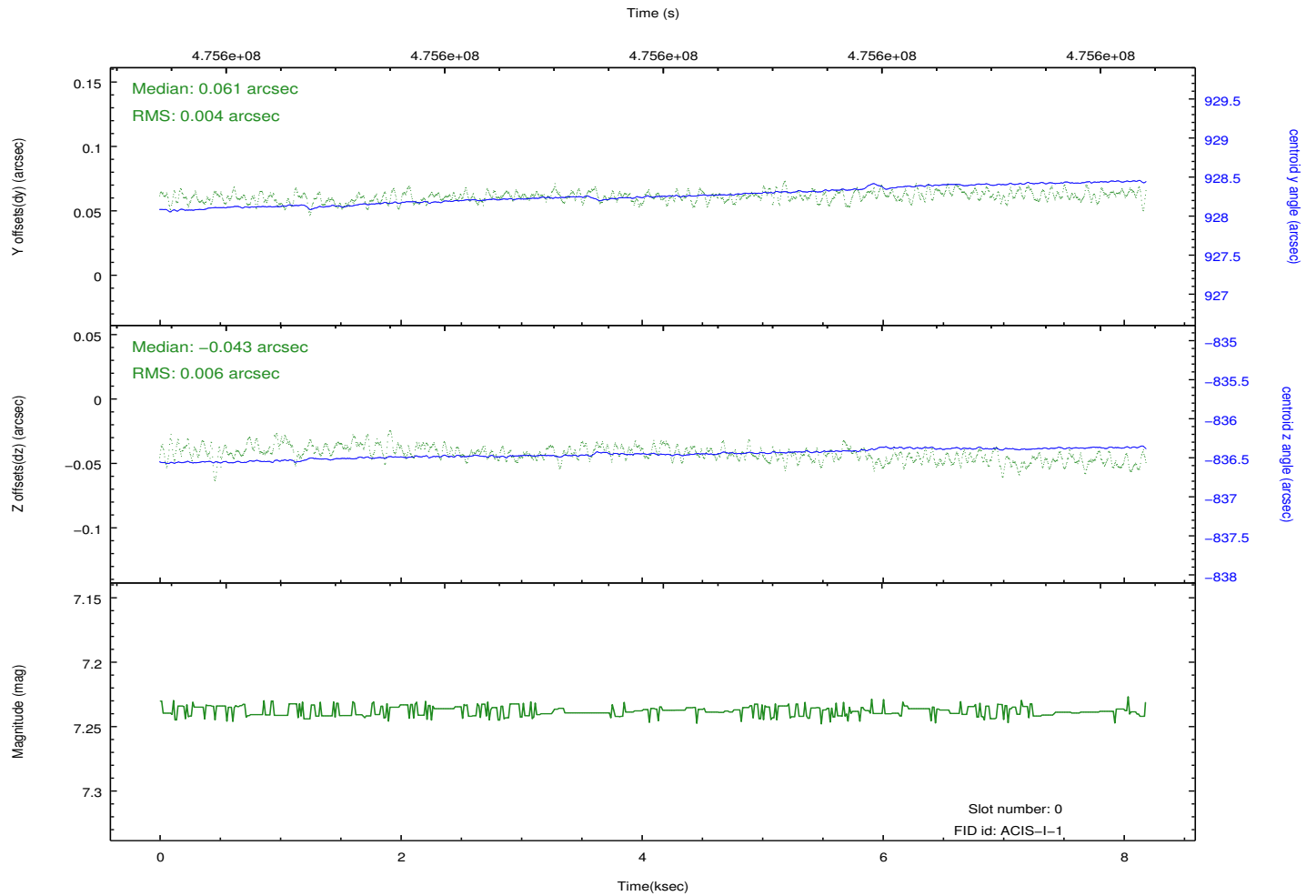
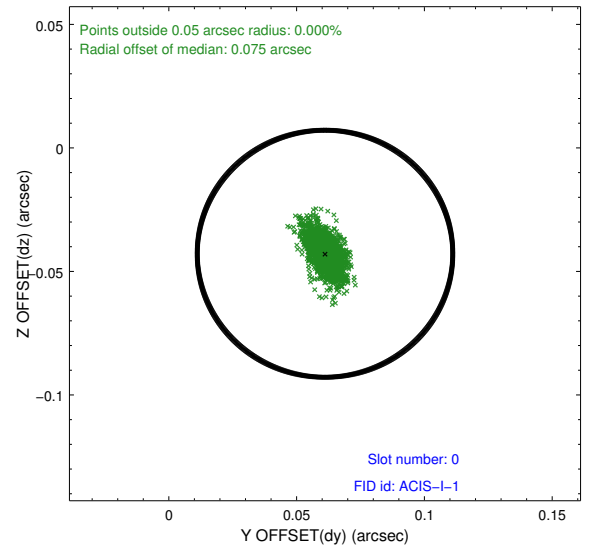
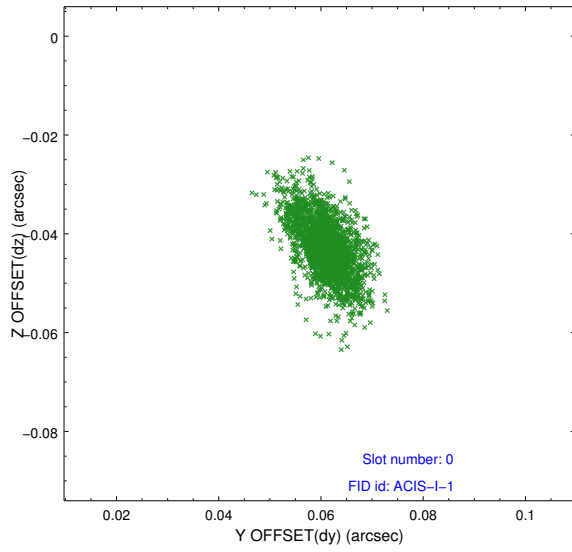


2.4.5 Slot 7

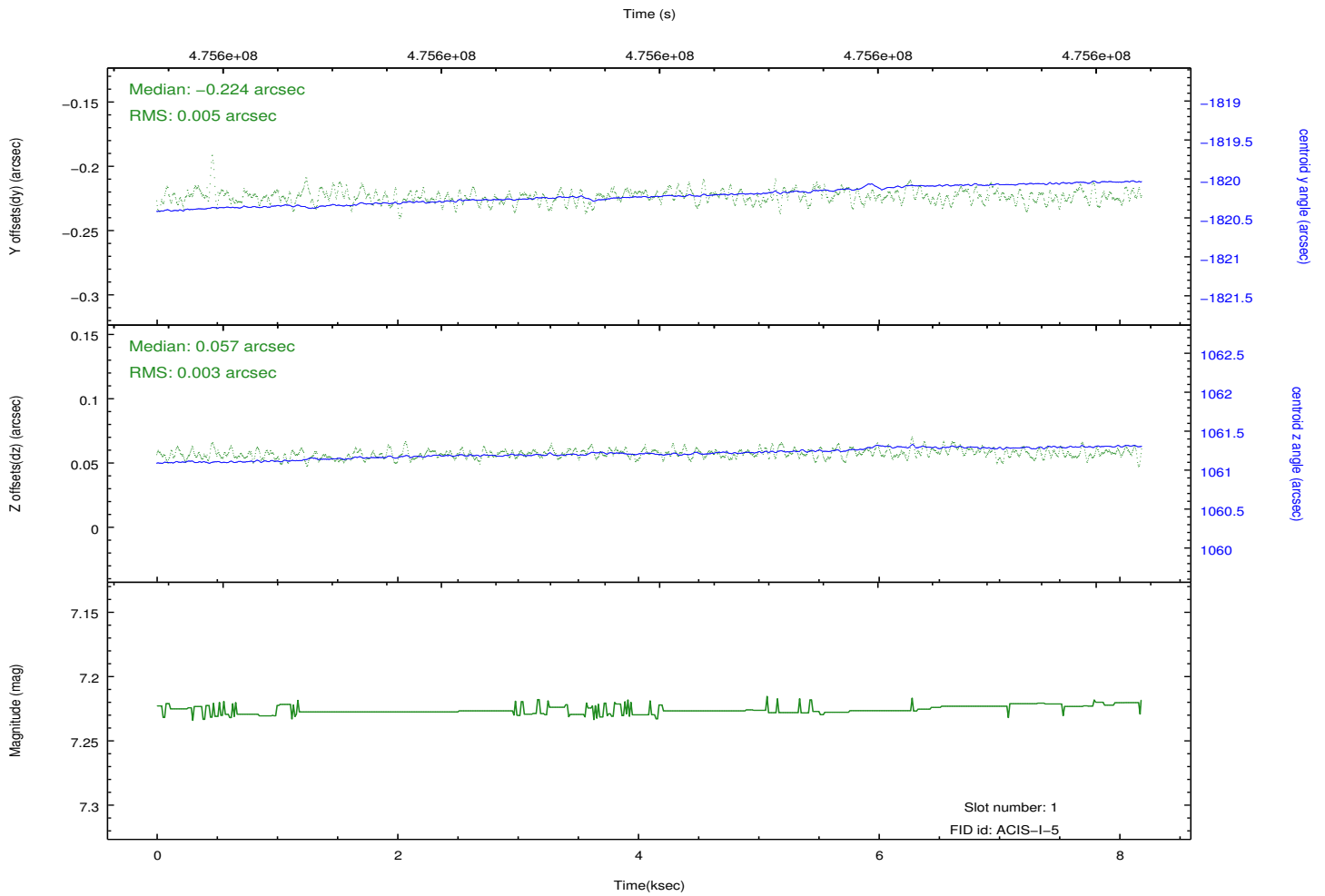
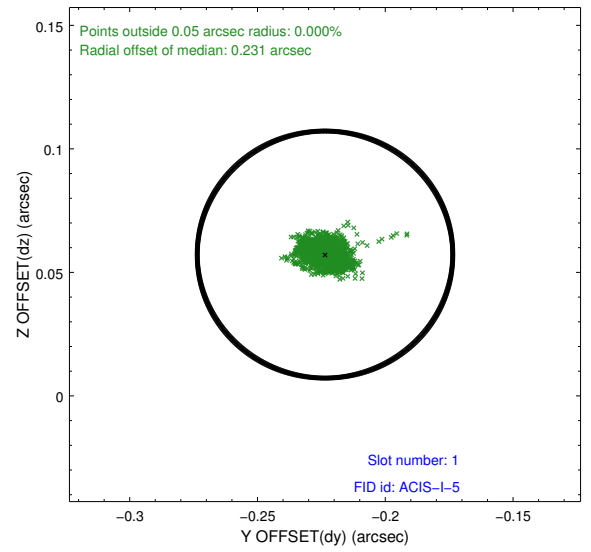
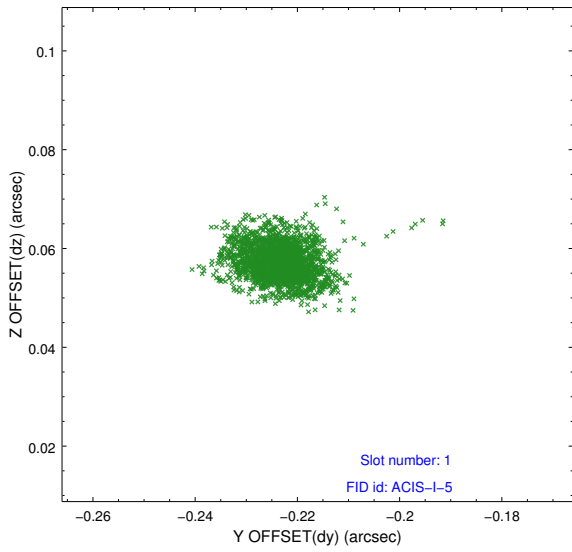


2.5 FID Slots

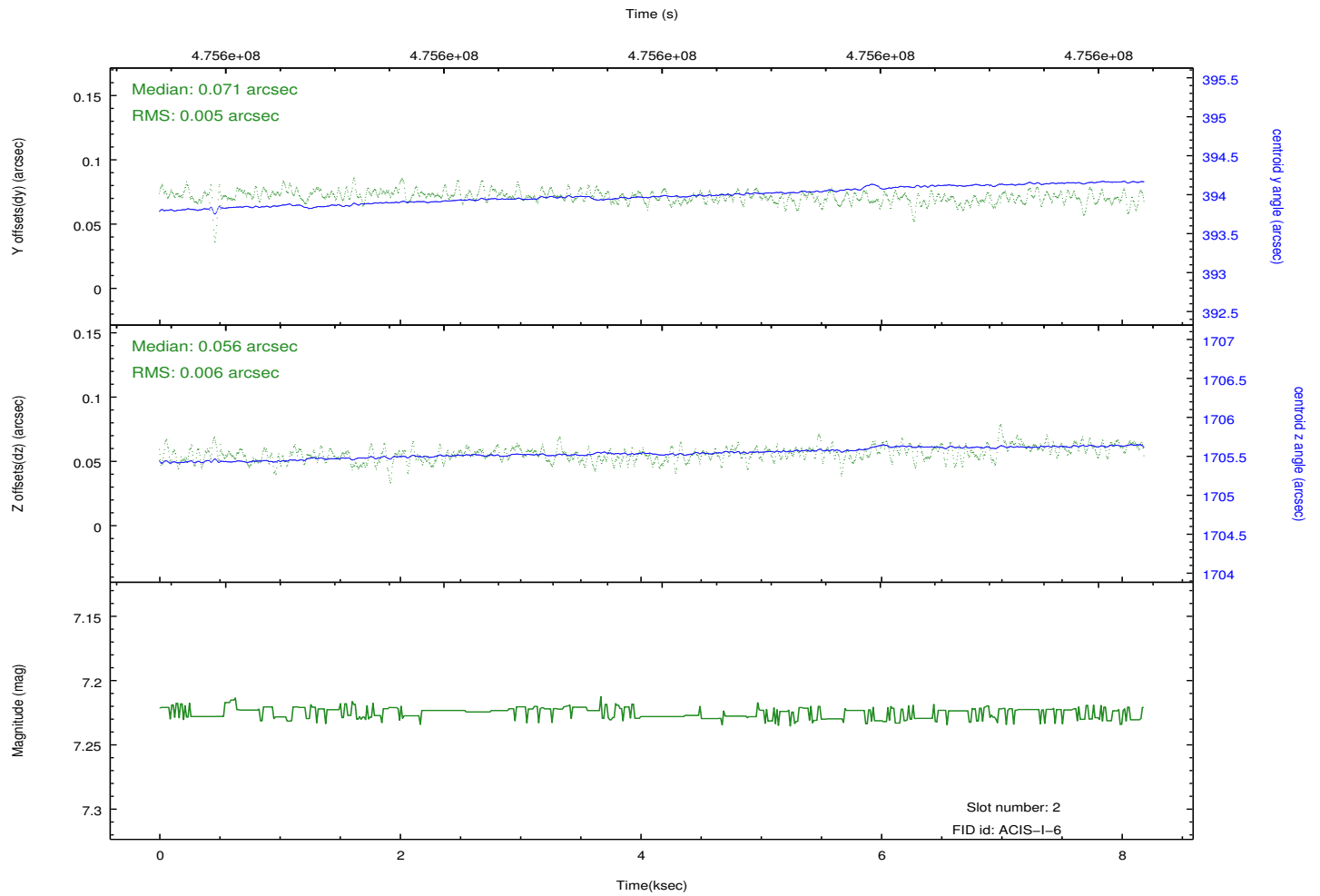
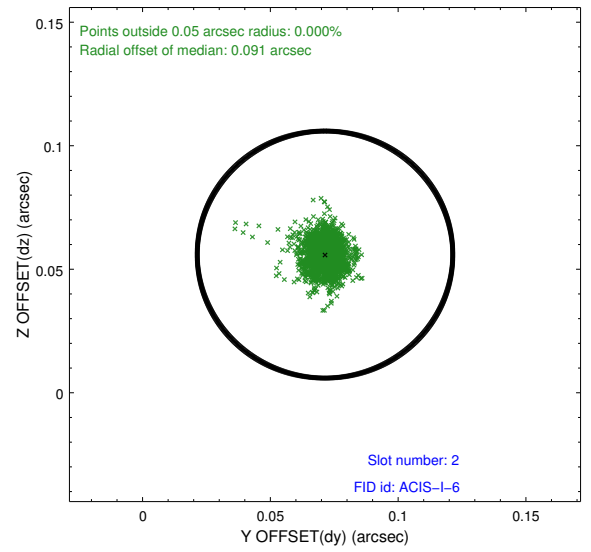
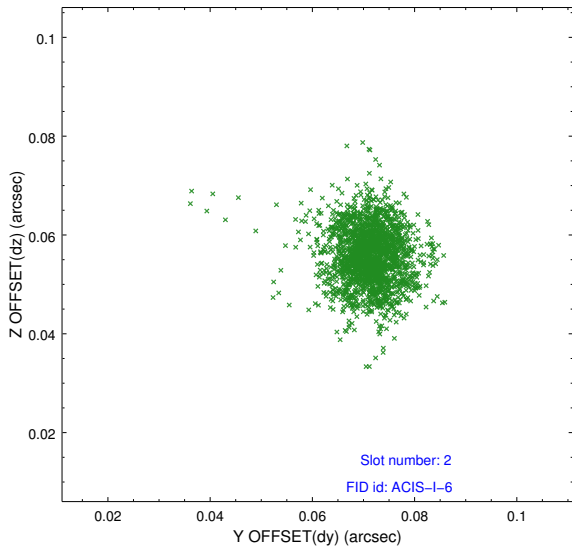
2.5.1 Slot 0



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)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.0786000621319

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.