

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16032 - L2 Version 2
Chandra X-Ray Center

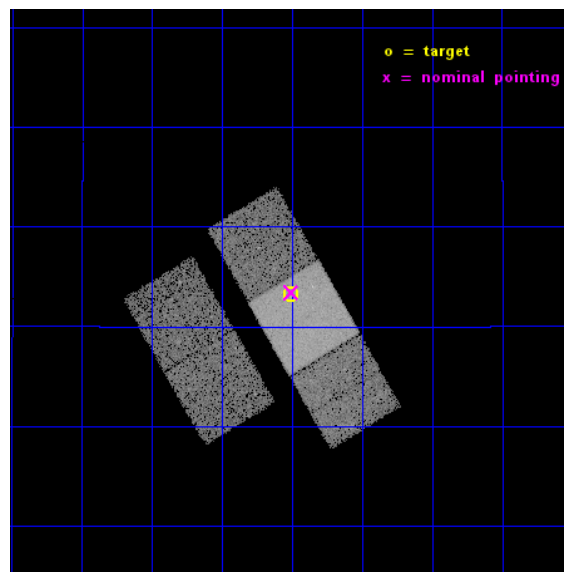
L2 Processing Date : Dec 8 2014

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1 Front

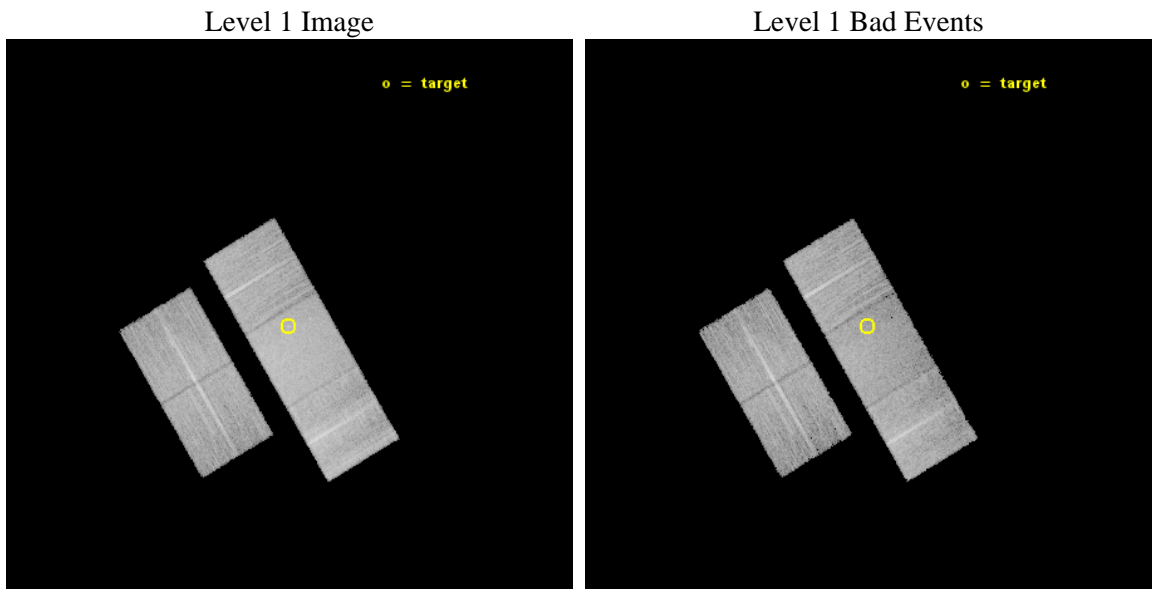
seq_num	601120	Sequence number
obs_id	16032	Observation id
title	TESTING THE UNIVERSALITY OF THE STELLAR IMF USING CHANDRA	Proposal
observer	Bret Lehmer	Principal investigator
object	NGC 4550	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	188.8775	Observer's specified target RA [deg]
dec_targ	12.220944	Observer's specified target Dec [deg]
ra_nom	188.87609323202	Nominal RA [deg]
dec_nom	12.223684947036	Nominal Dec [deg]
roll_nom	59.52083062305	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19067.864544451	Sum of GTIs [s]
livetime	18818.72885662	Livetime [s]
ontime2	19067.700384438	Sum of GTIs [s]
ontime3	19067.782464445	Sum of GTIs [s]
ontime6	19067.823504448	Sum of GTIs [s]
ontime7	19067.864544451	Sum of GTIs [s]
ontime8	19067.741424441	Sum of GTIs [s]
l2events	99459	Number of level 2 events



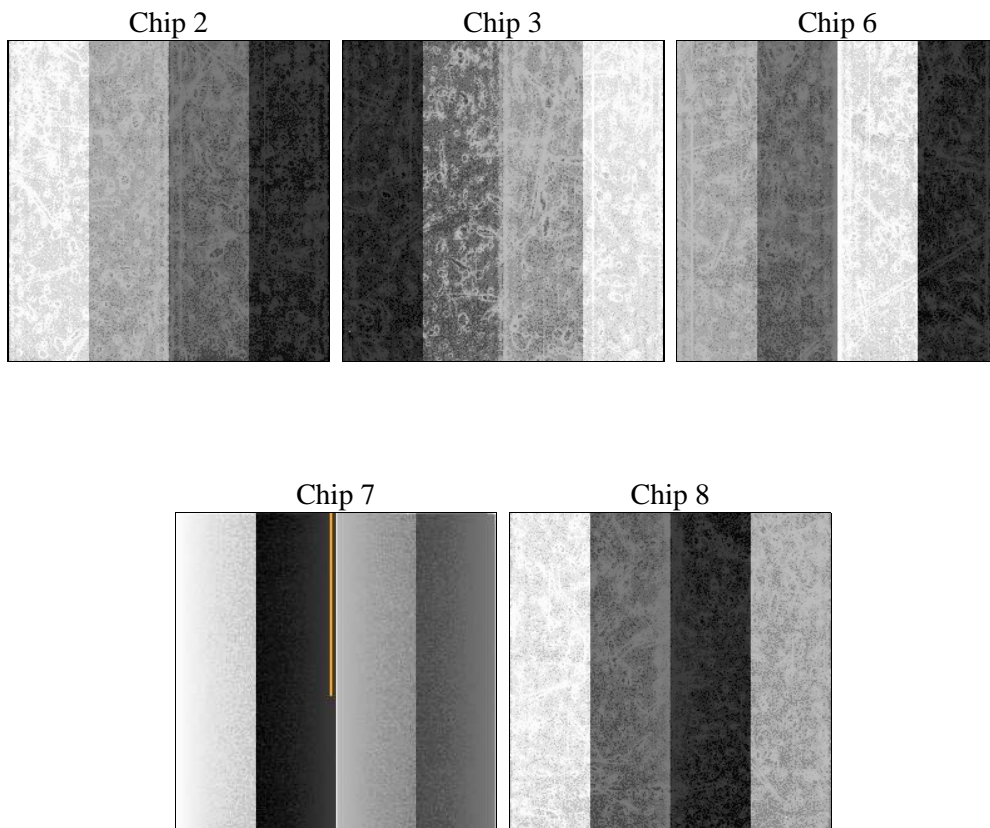
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	19067.864544451	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	19067.700384438	Sum of GTIs [s]
date	2014-12-08T05:18:50	Date and time of file creation	ontime3	19067.782464445	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19067.823504448	Sum of GTIs [s]
			ontime7	19067.864544451	Sum of GTIs [s]
			ontime8	19067.741424441	Sum of GTIs [s]
			l1events	520322	Number of level 1 events

2.1.4 Events

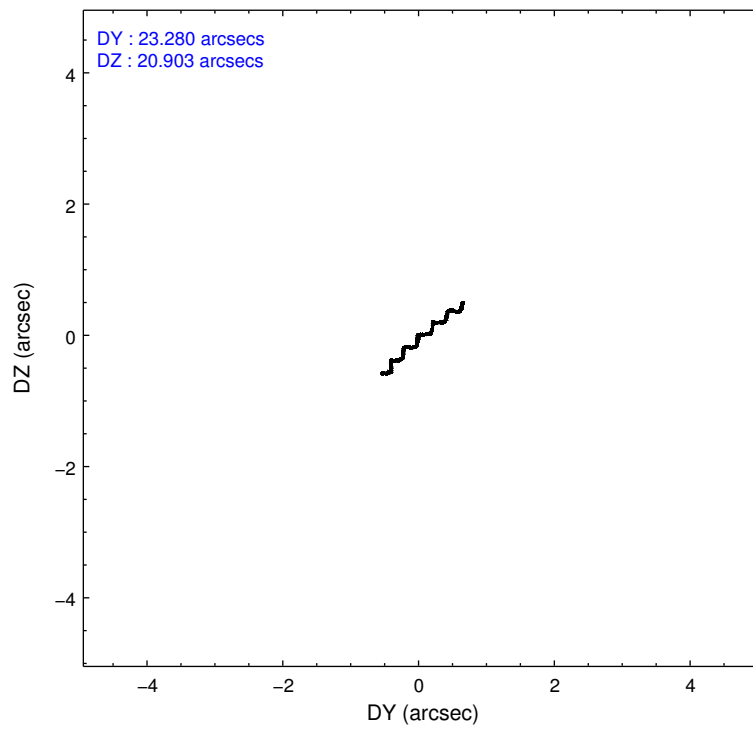
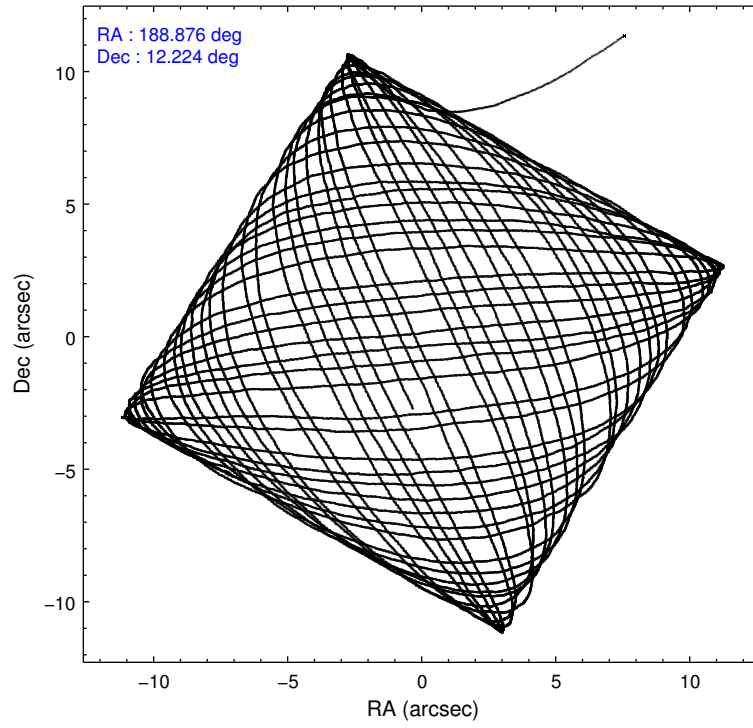
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	88388	84690	95528	128444	123272
rejected events	77188	73867	83134	71527	88549
rejected %	87%	87%	87%	55%	71%

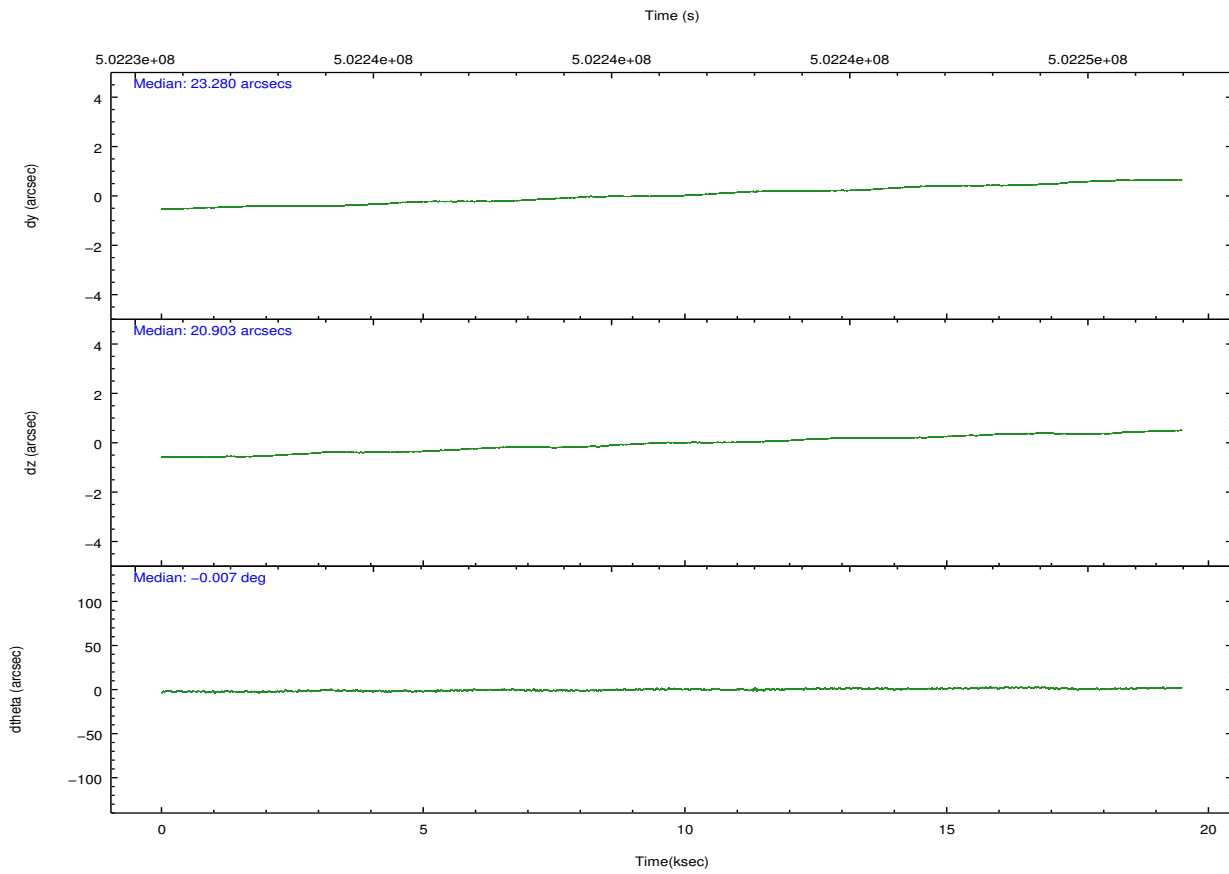
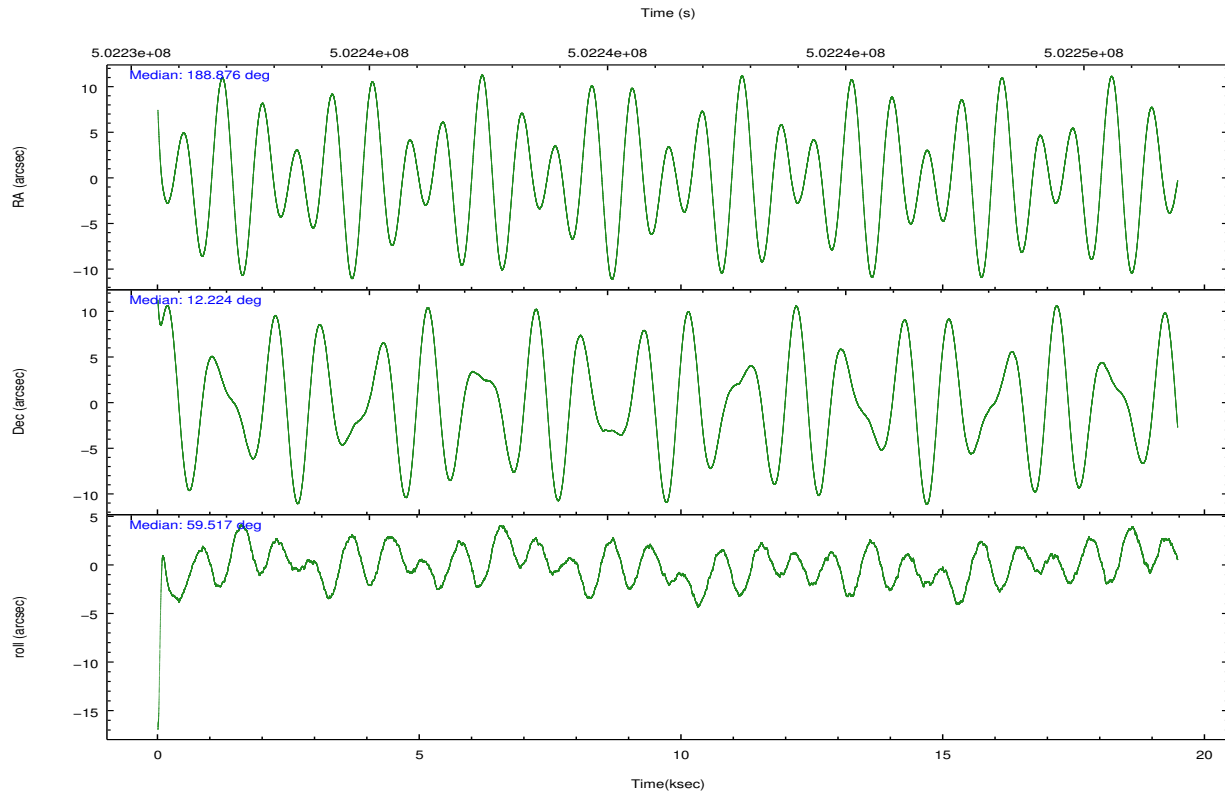
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4373	4115	4820	5591	11173
	4%	4%	5%	4%	9%
grade 1 events	42	53	44	151	84
	0%	0%	0%	0%	0%
grade 2 events	2665	2258	2602	11821	8040
	3%	2%	2%	9%	6%
grade 3 events	1044	1122	1193	4948	3392
	1%	1%	1%	3%	2%
grade 4 events	1106	1152	1138	4835	3279
	1%	1%	1%	3%	2%
grade 5 events	3833	4733	4962	13060	6917
	4%	5%	5%	10%	5%
grade 6 events	2014	2177	2643	29732	8840
	2%	2%	2%	23%	7%
grade 7 events	73311	69080	78126	58306	81547
	82%	81%	81%	45%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	188.876242	188.8760932320201	CCD I2 on	O1	Y
[deg] Pointing Dec	12.196299	12.22368494703626	CCD I3 on	O2	Y
[deg] Pointing Roll	59.364184	59.52083062304959	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	502232008.184000	502230918.87132	CCD S5 on	N	N
Observation start date	2013-11-30T20:52:21	2013-11-30T20:35:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	502251008.184000	502251941.10998	On-chip summing requested	N	N
Observation end date	2013-12-01T02:09:01	2013-12-01T02:25:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



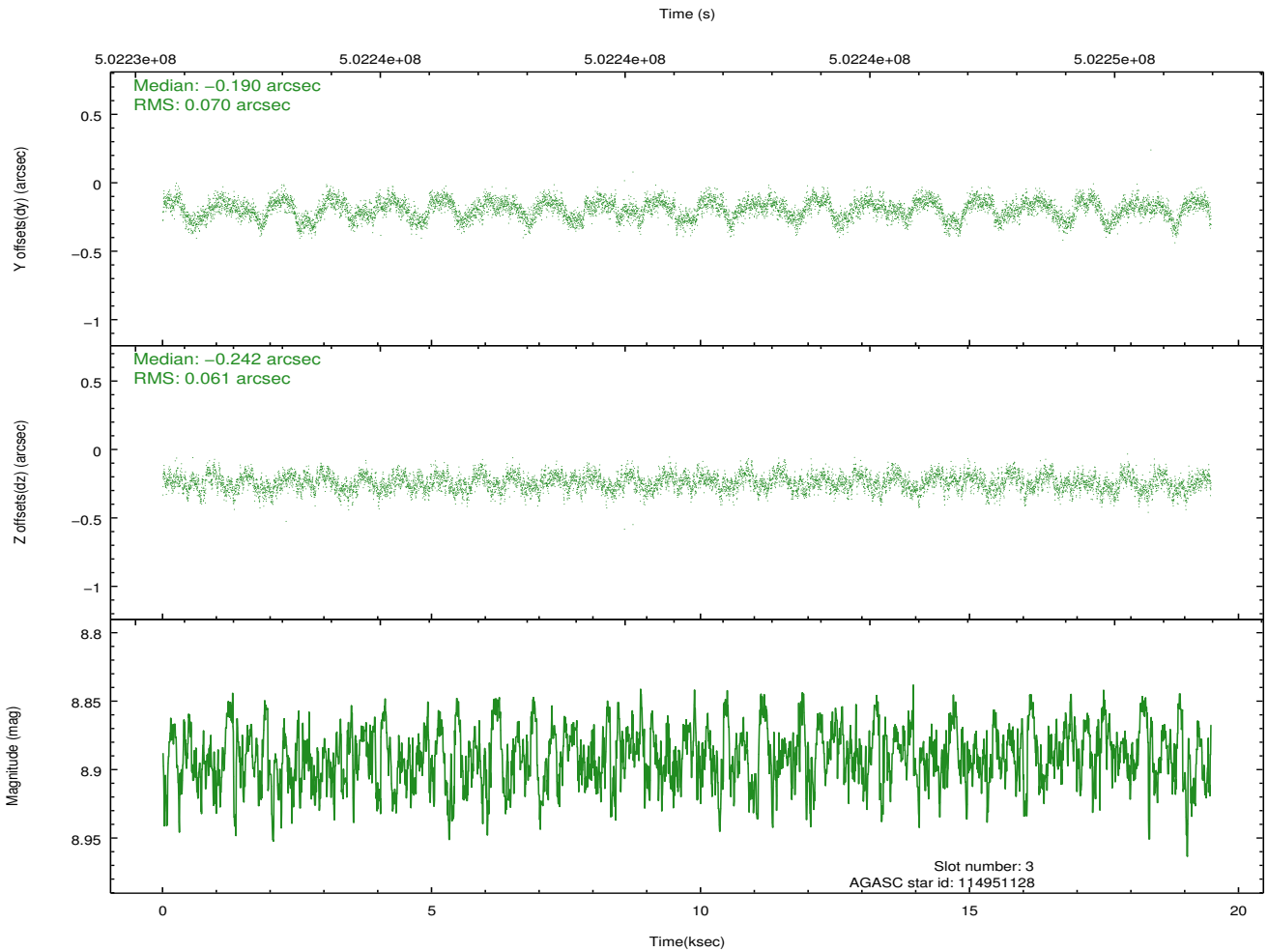
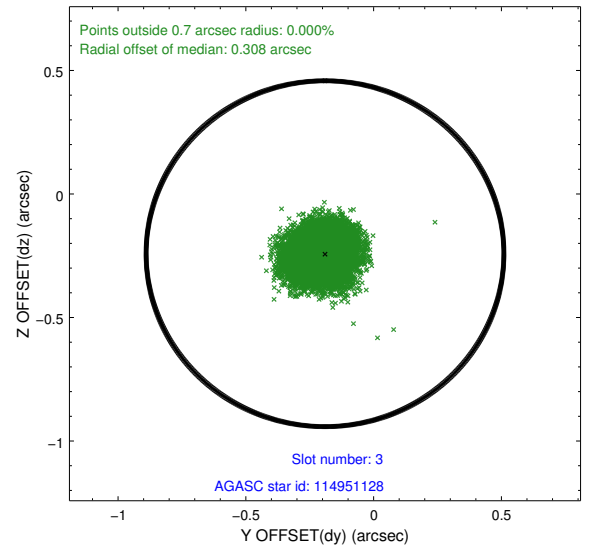
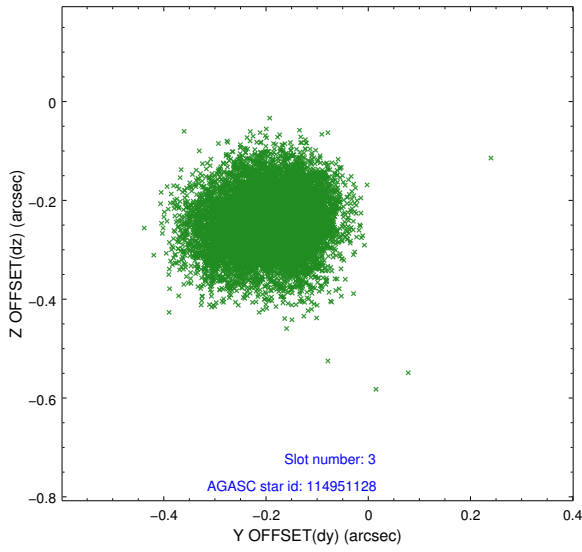


Slot Statistics

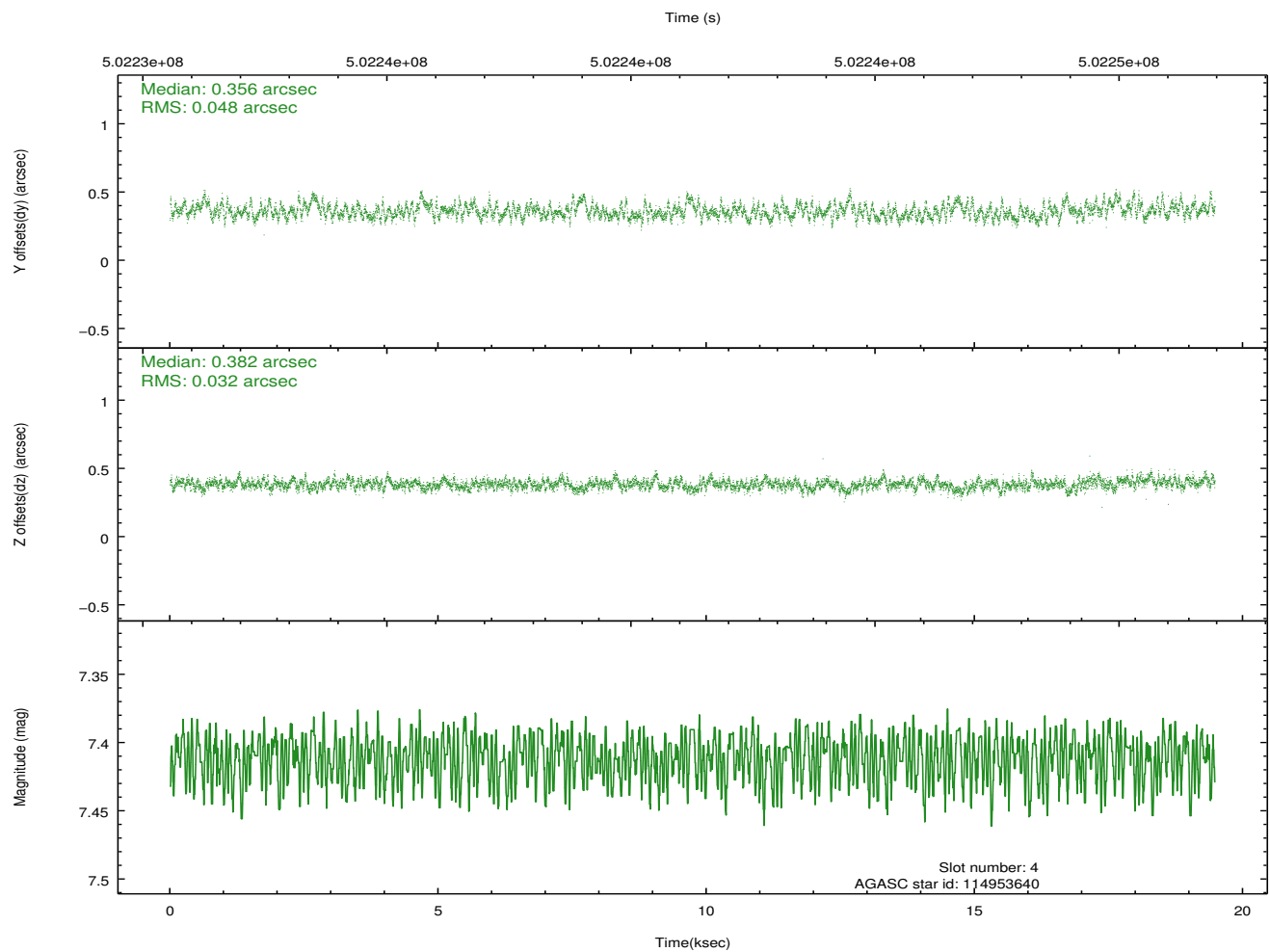
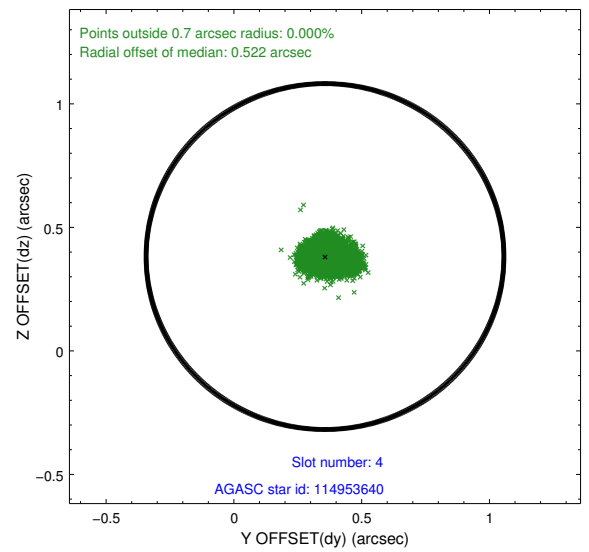
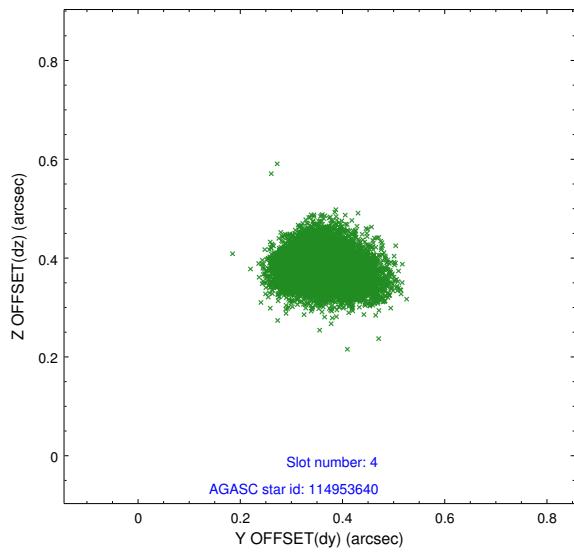
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	6.95	4752	0.164	-0.071	0.010	0.016	0.000000	0.000000	919.72	-1738.07
1	FID		ACIS-S-2	6.87	4752	-0.101	0.048	0.008	0.012	0.000000	0.000000	-776.35	-1742.75
2	FID		ACIS-S-5	6.98	4752	-0.088	0.028	0.010	0.019	0.000000	0.000000	-1829.82	159.32
3	GUIDE	used	114951128	8.89	9501	-0.190	-0.242	0.100	0.156	188.719863	12.459246	533.70	954.48
4	GUIDE	used	114953640	7.41	9503	0.356	0.382	0.061	0.101	188.794711	11.547726	-2154.99	-941.89
5	GUIDE	used	115085264	7.89	9504	0.400	0.107	0.054	0.088	189.302301	11.817775	-405.95	-1985.57
6	GUIDE	used	115349088	9.30	9496	-0.231	-0.473	0.109	0.174	188.777694	12.938966	2123.83	1660.21
7	GUIDE	used	115481912	8.61	9500	-0.339	0.229	0.074	0.123	189.408526	12.669552	2420.36	-738.97

2.4 Star Slots

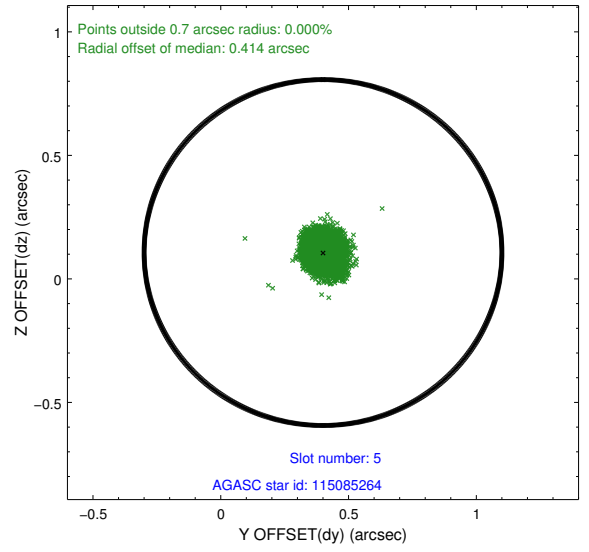
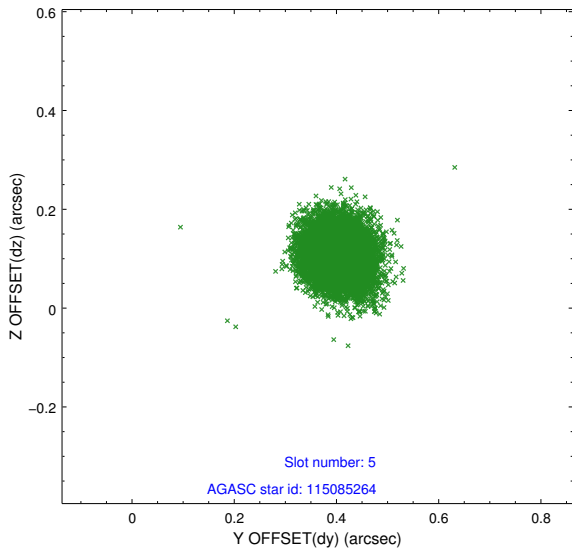
2.4.1 Slot 3



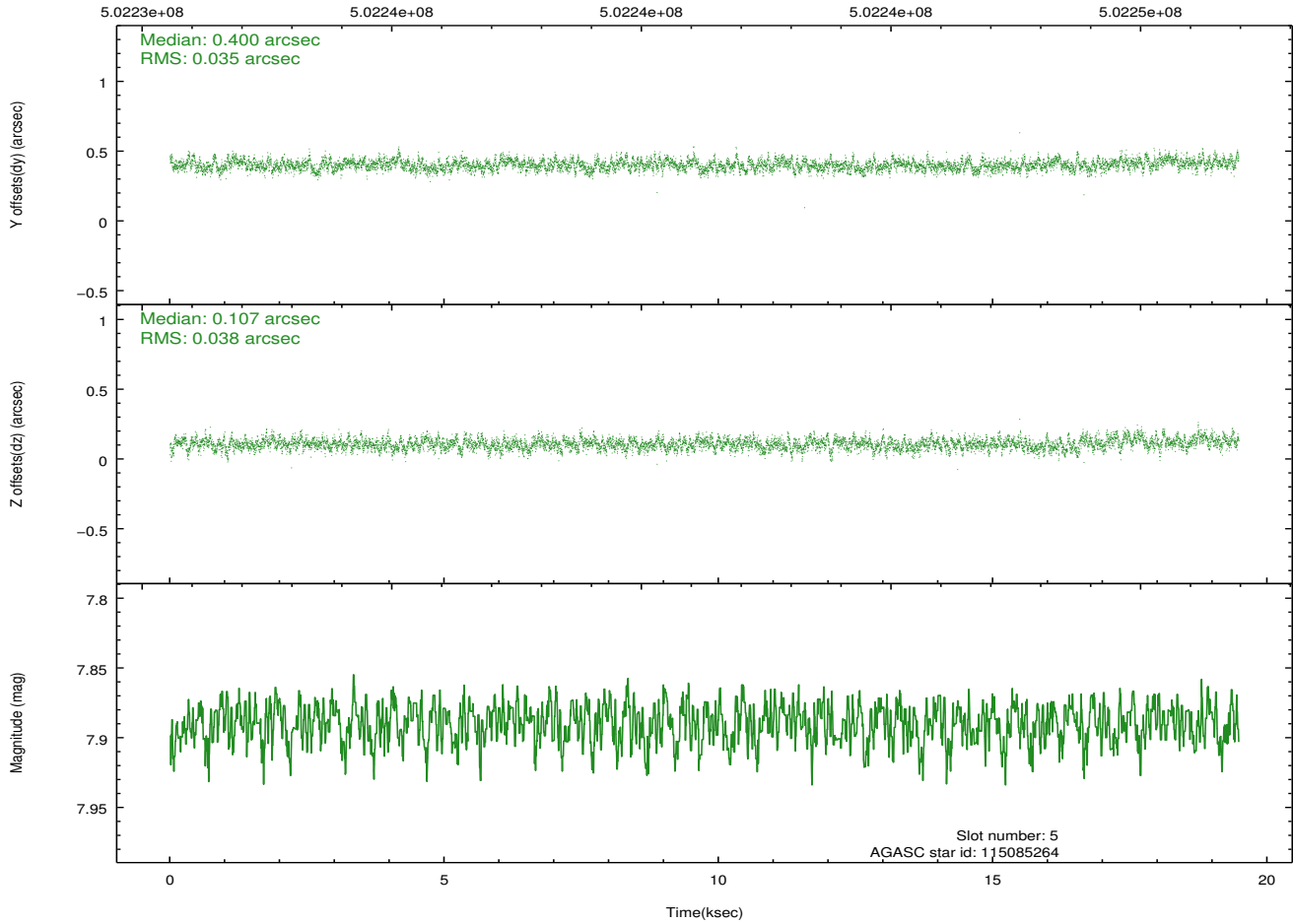
2.4.2 Slot 4



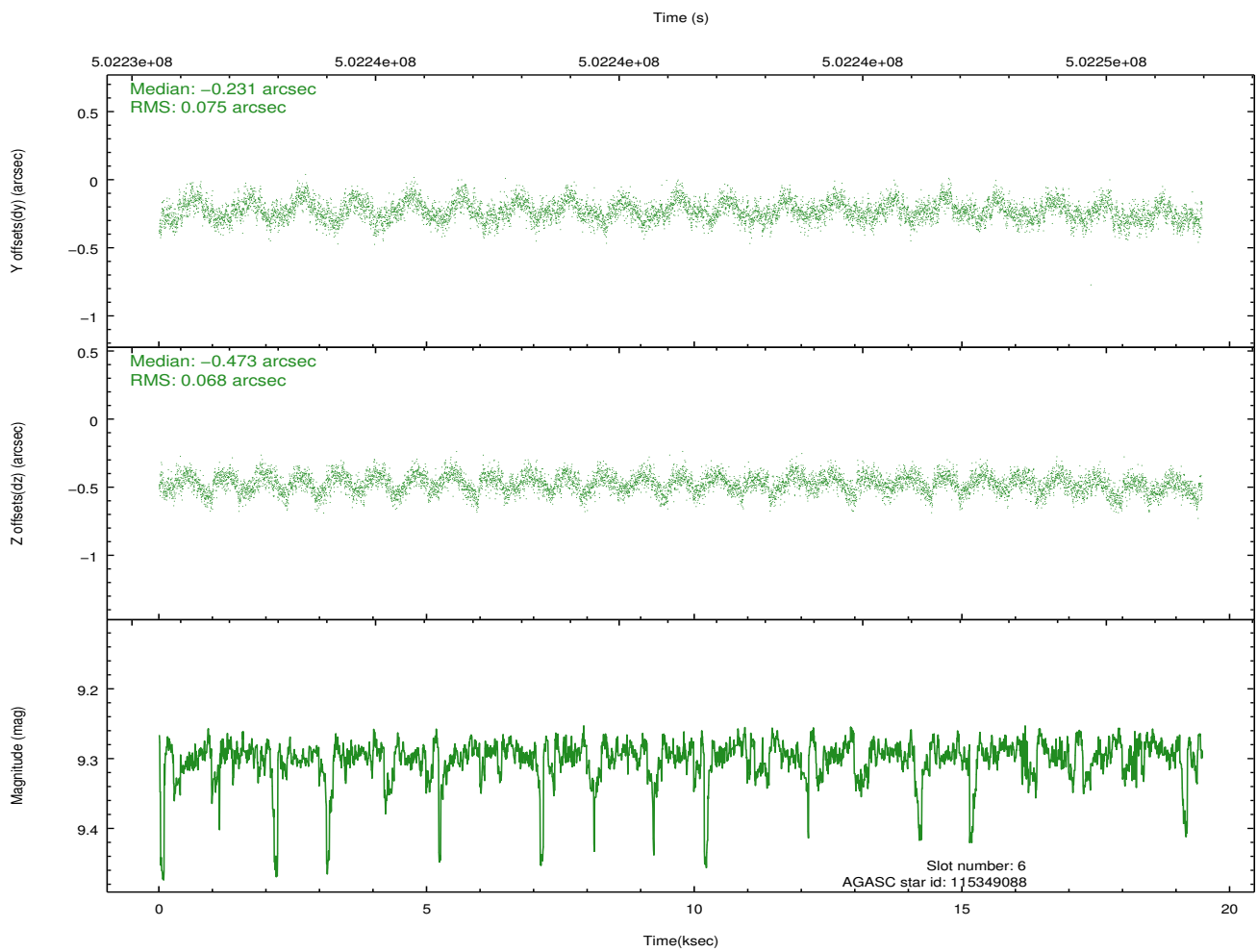
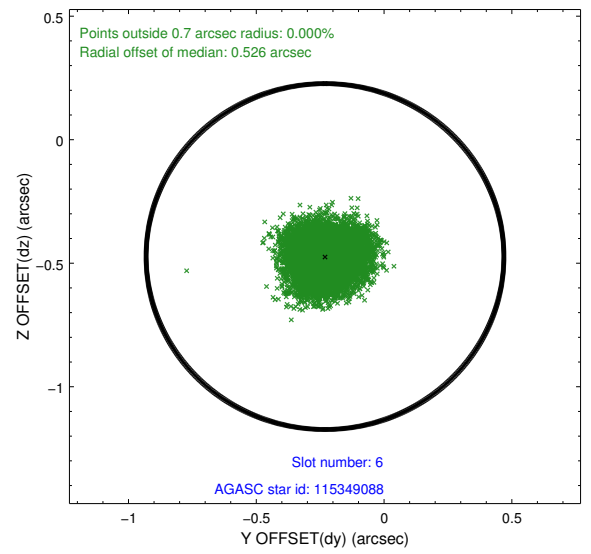
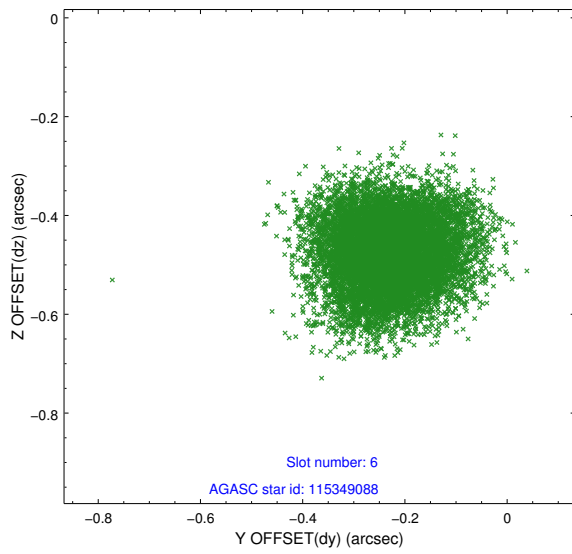
2.4.3 Slot 5



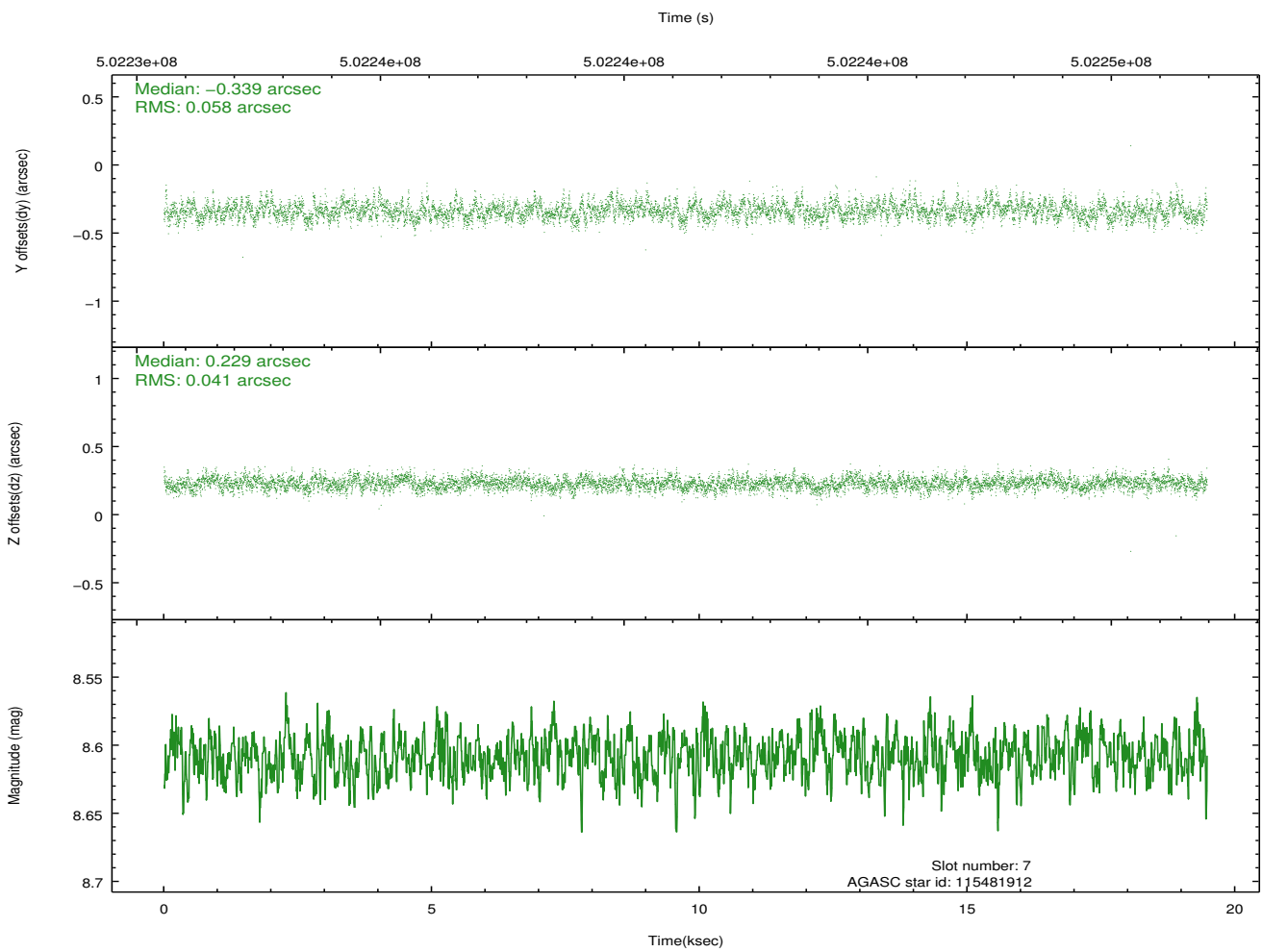
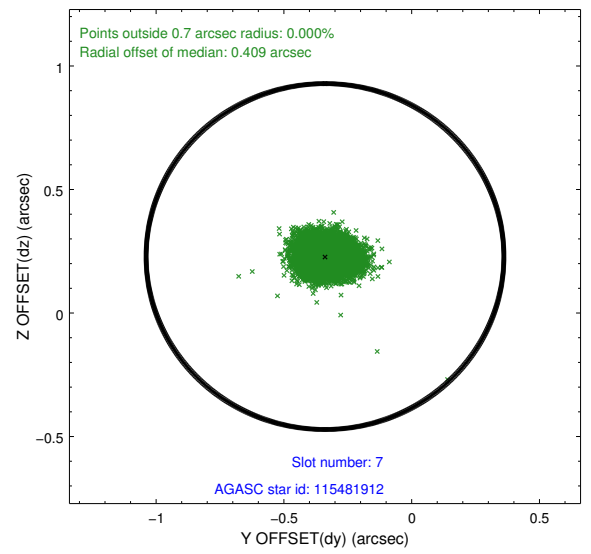
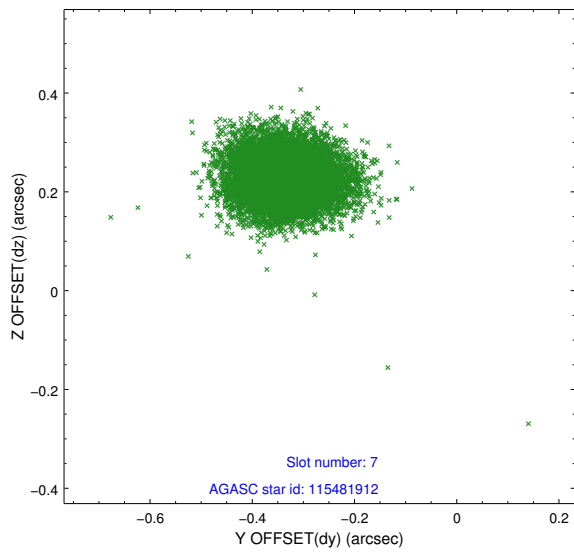
Time (s)



2.4.4 Slot 6

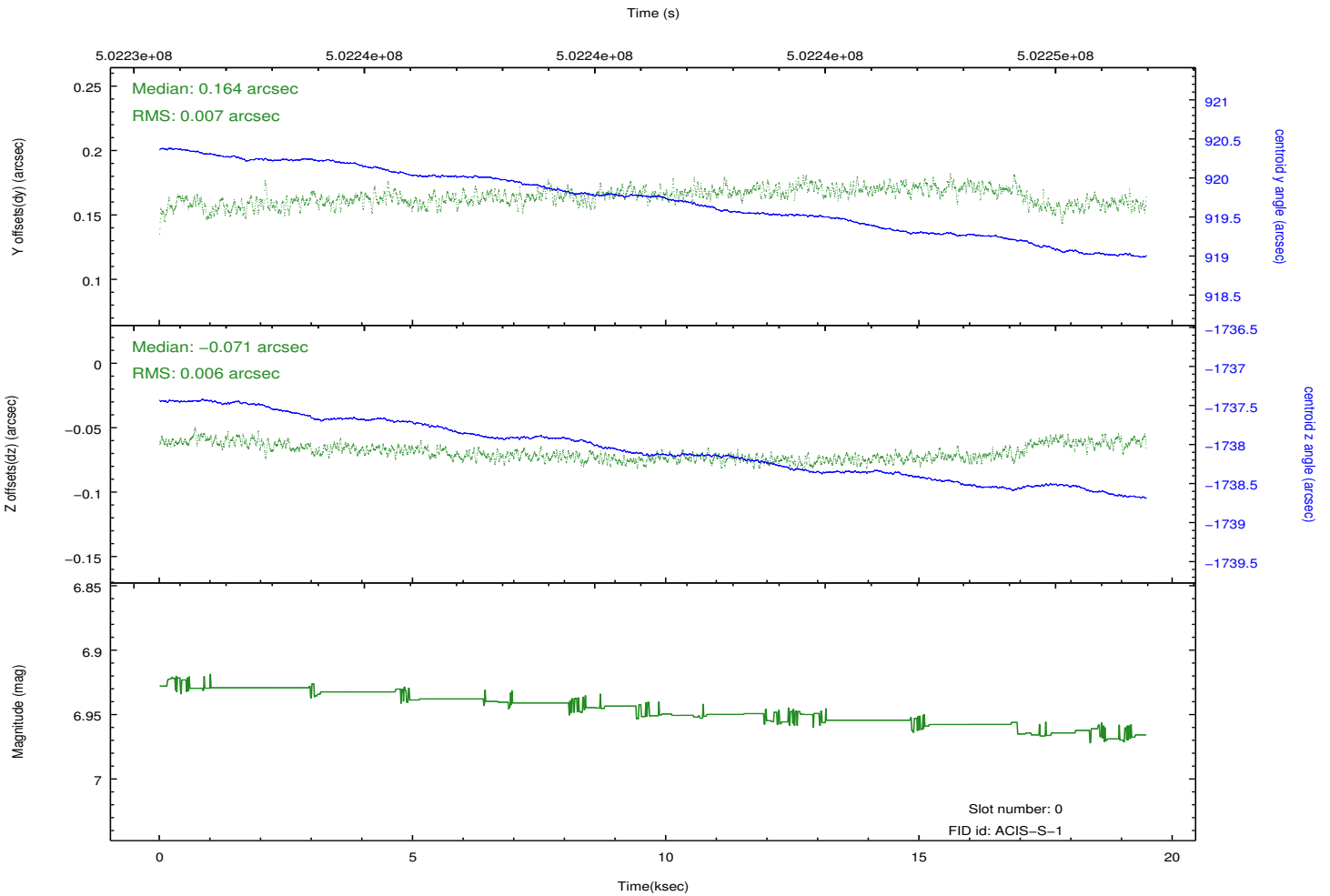
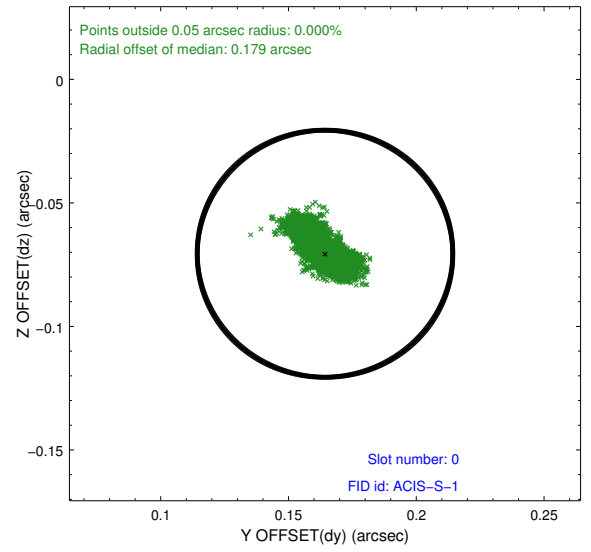
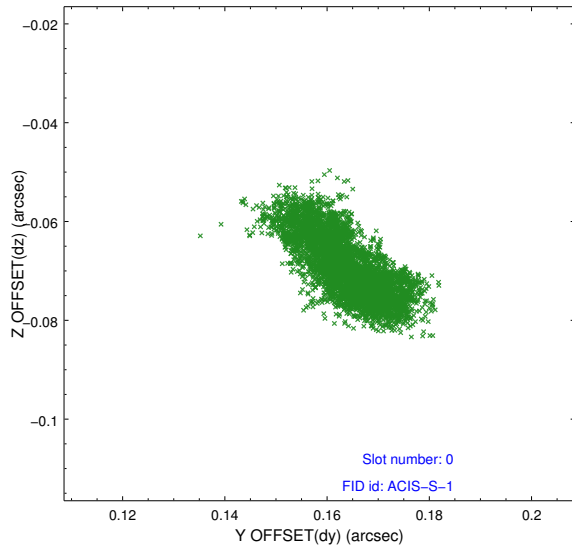


2.4.5 Slot 7

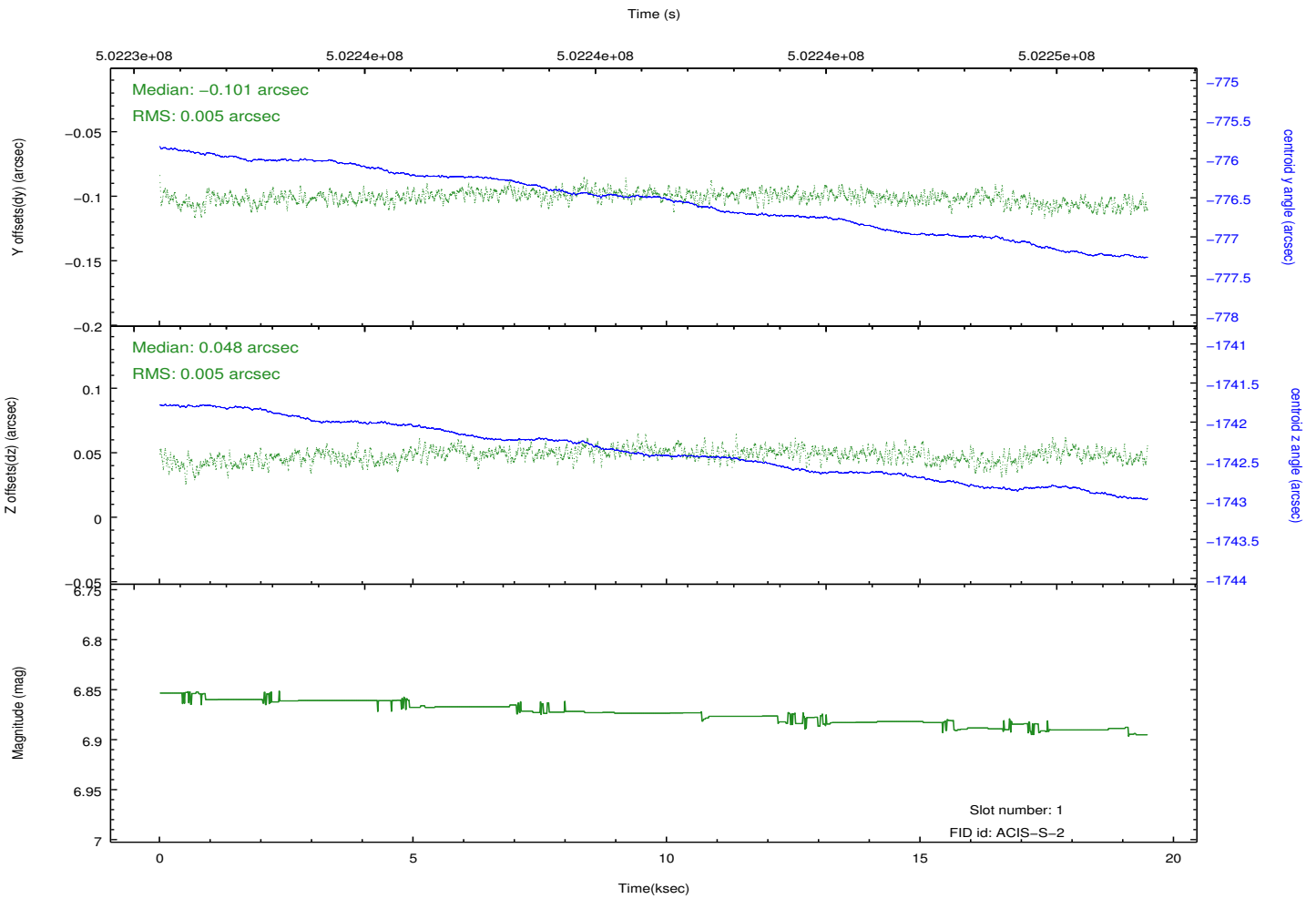
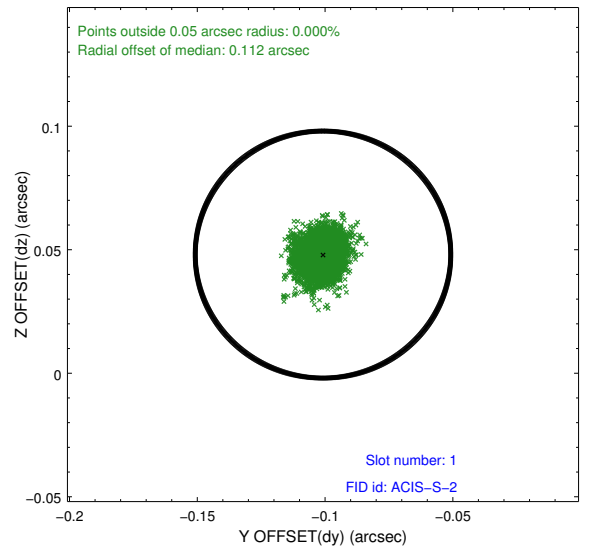
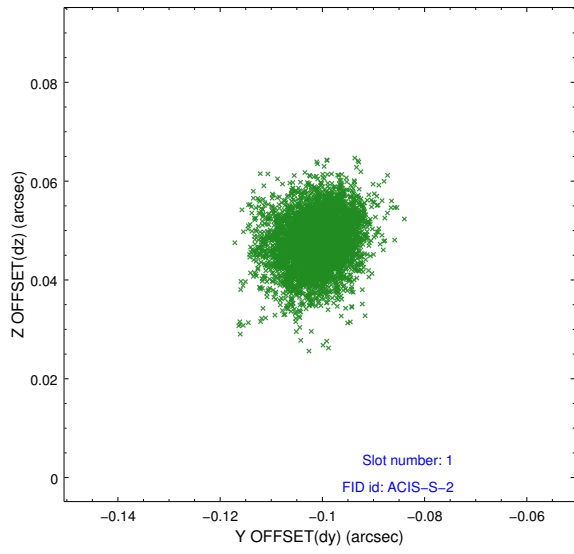


2.5 FID Slots

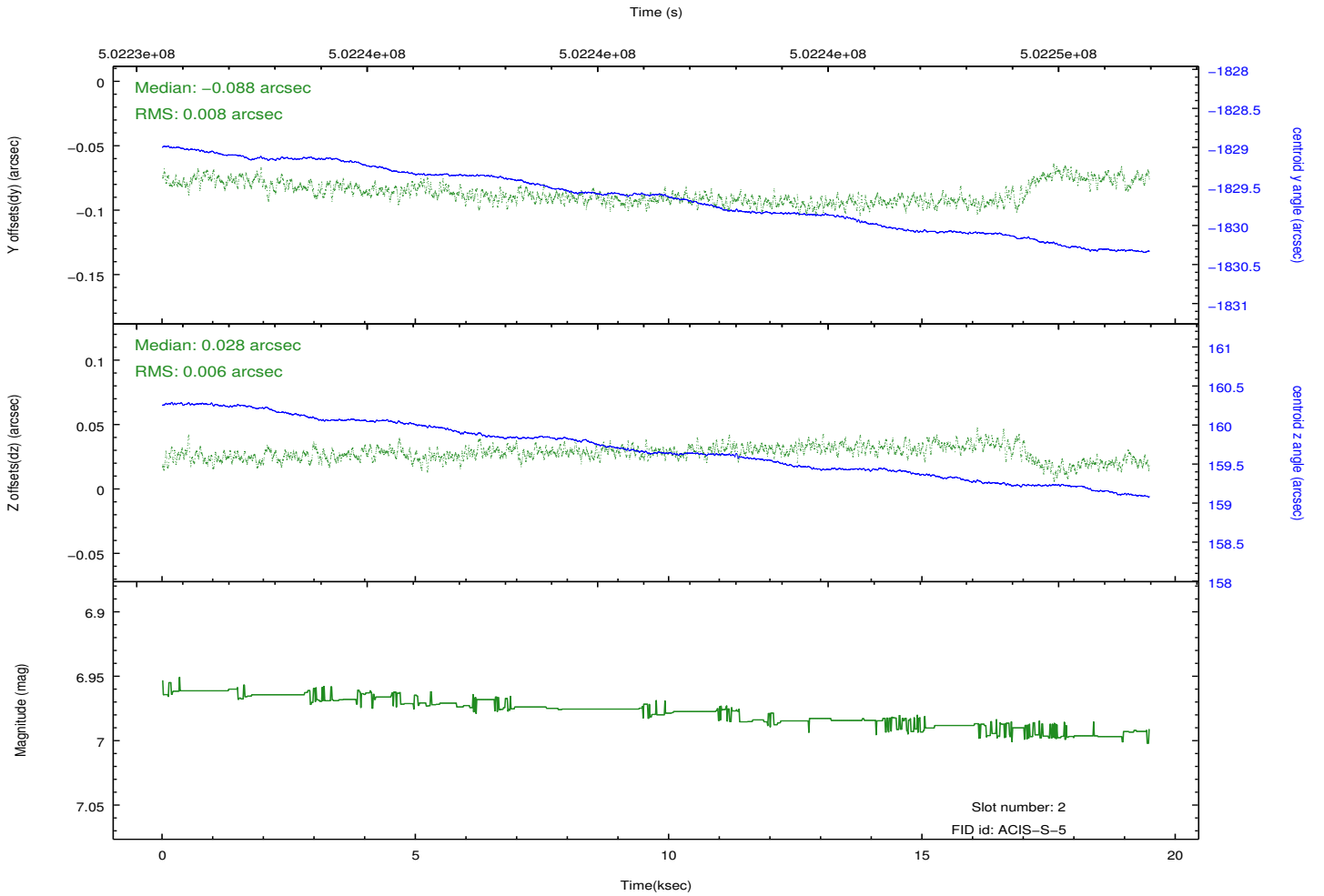
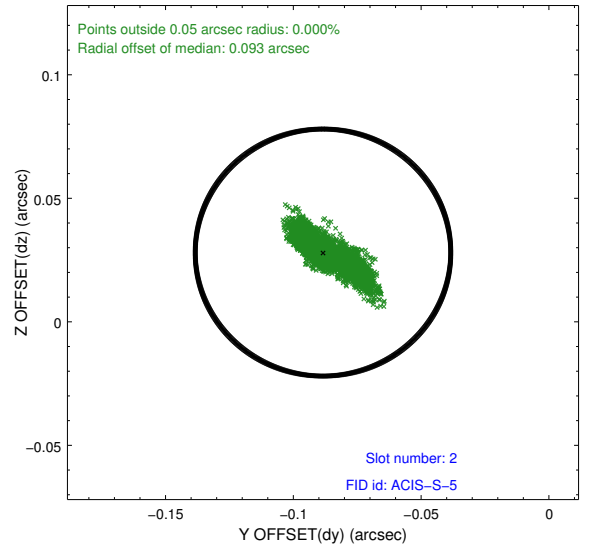
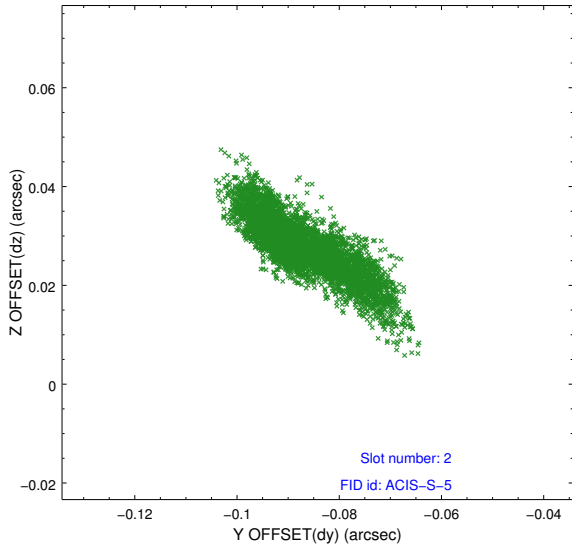
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.067864544451

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.