

V&V Reference Report

L2 ASCDS Version : 10.0.1

Observation 15377 - L2 Version 3
Chandra X-Ray Center

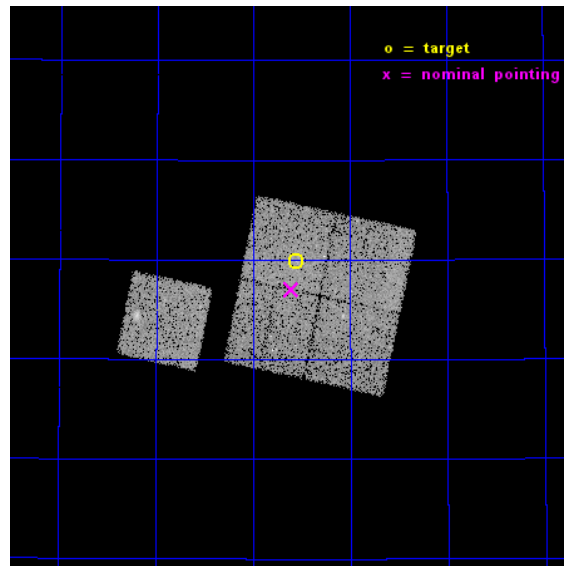
L2 Processing Date : Dec 6 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

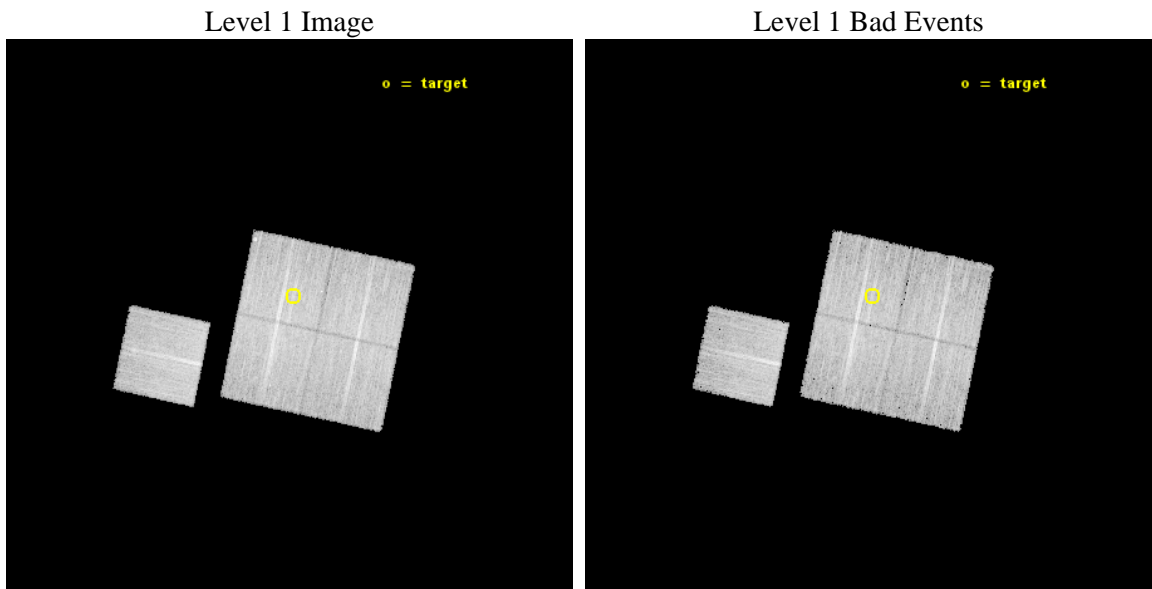
seq_num	801367	Sequence number
obs_id	15377	Observation id
title	Extending a Large Sample of Fossil Groups with Chandra	Proposal ti
observer	Professor Gordon Garmire	Principal investigator
object	SDSS J145833.60+472951.3	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	224.64	Observer's specified target RA [deg]
dec_targ	47.497611	Observer's specified target Dec [deg]
ra_nom	224.65184506357	Nominal RA [deg]
dec_nom	47.450559325695	Nominal Dec [deg]
roll_nom	281.96994279969	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20088.000154495	Sum of GTIs [s]
livetime	19825.535643906	Livetime [s]
ontime0	20084.859174132	Sum of GTIs [s]
ontime1	20088.000154495	Sum of GTIs [s]
ontime2	20088.000154495	Sum of GTIs [s]
ontime3	20088.000154495	Sum of GTIs [s]
ontime6	20088.000154495	Sum of GTIs [s]
l2events	50394	Number of level 2 events



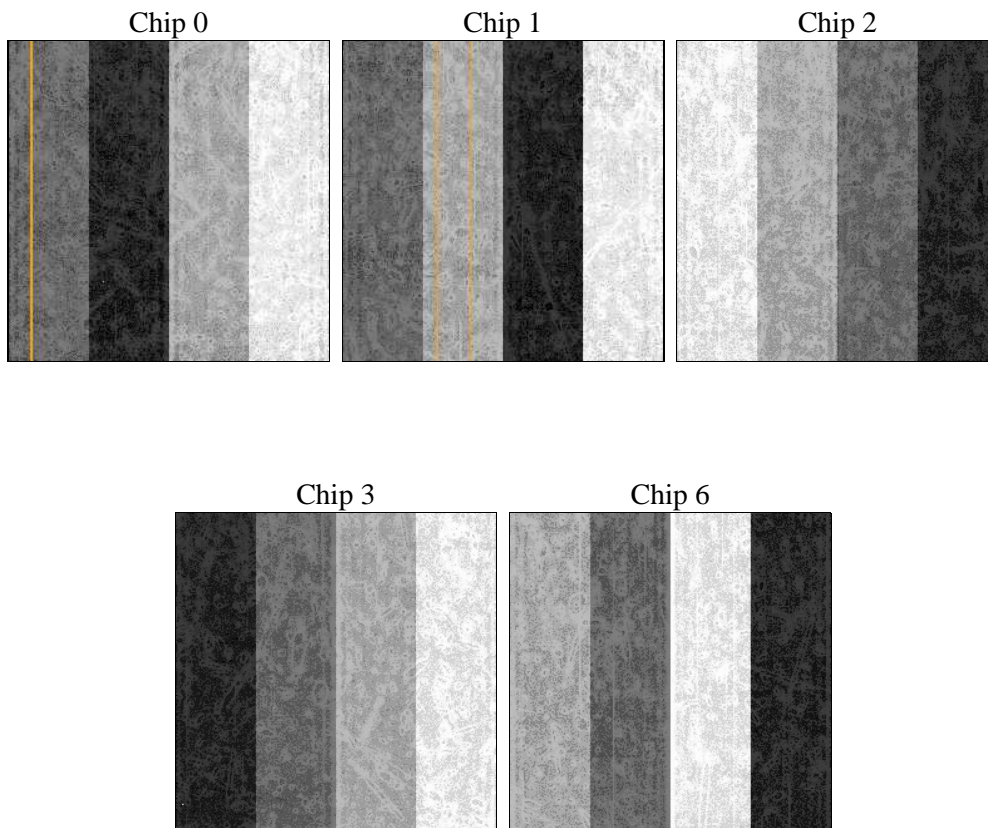
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	20000.694000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	20088.000154495	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	20084.859174132	Sum of GTIs [s]
date	2014-12-06T15:40:54	Date and time of file creation	ontime1	20088.000154495	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	20088.000154495	Sum of GTIs [s]
			ontime3	20088.000154495	Sum of GTIs [s]
			ontime6	20088.000154495	Sum of GTIs [s]
			l1events	453514	Number of level 1 events

2.1.4 Events

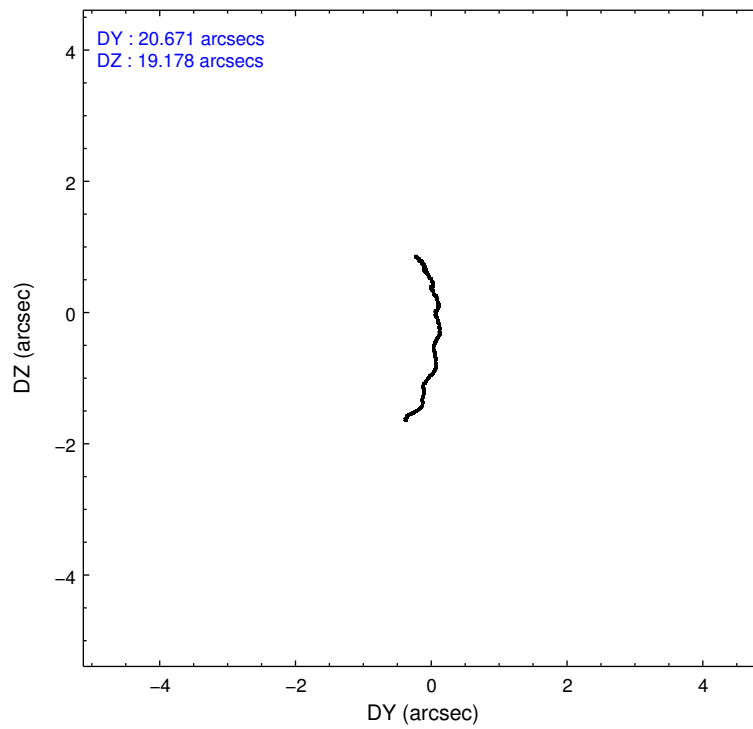
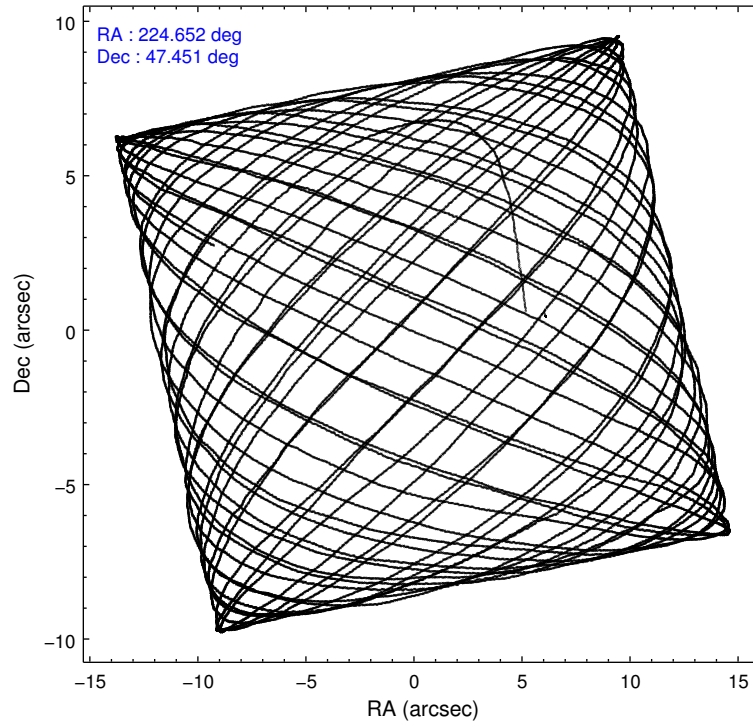
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	84012	90241	91363	94288	93610
rejected events	72670	77518	80124	82184	81437
rejected %	86%	85%	87%	87%	86%

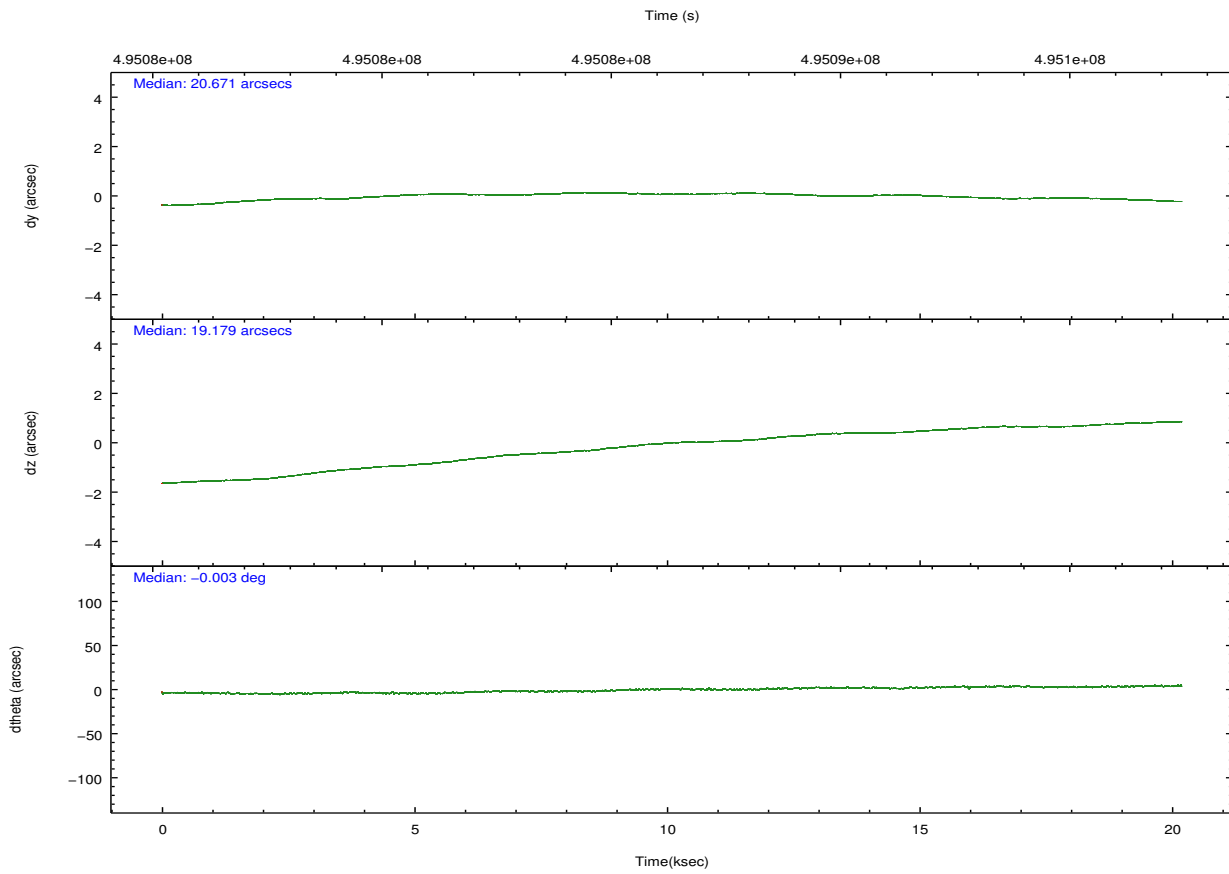
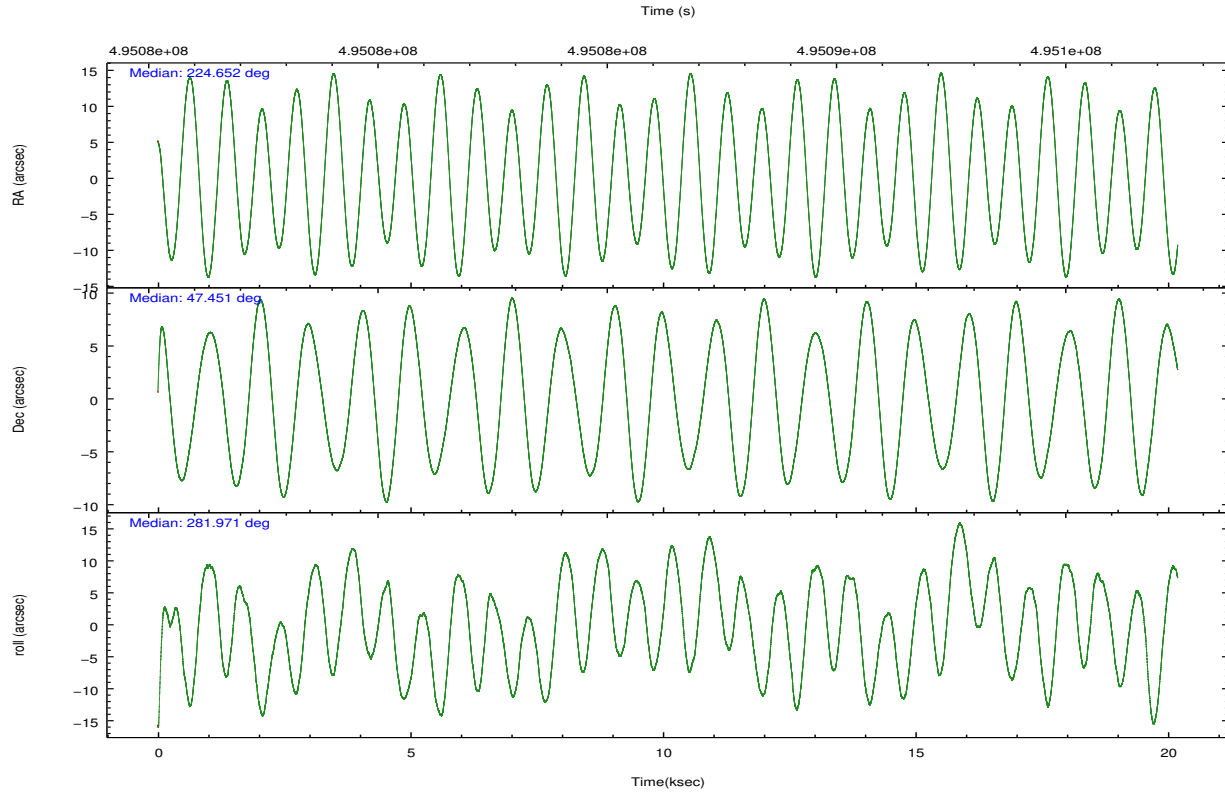
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4010	4522	4270	4931	4424
	4%	5%	4%	5%	4%
grade 1 events	47	60	49	66	51
	0%	0%	0%	0%	0%
grade 2 events	2752	3046	2661	2487	2742
	3%	3%	2%	2%	2%
grade 3 events	1183	1200	1139	1159	1156
	1%	1%	1%	1%	1%
grade 4 events	1085	1244	1126	1189	1213
	1%	1%	1%	1%	1%
grade 5 events	4327	4836	4180	5192	4981
	5%	5%	4%	5%	5%
grade 6 events	2313	2713	2045	2343	2640
	2%	3%	2%	2%	2%
grade 7 events	68295	72620	75893	76921	76403
	81%	80%	83%	81%	81%

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	224.624560	224.651845063568	CCD I2 on	Y	Y
[deg] Pointing Dec	47.470923	47.45055932569541	CCD I3 on	Y	Y
[deg] Pointing Roll	281.781382	281.9699427996856	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	-226.992463	-226.9898711095352	CCD S3 on	N	N
[mm] SIM translation stage offset	-6.6	-6.602581893394444	CCD S4 on	N	N
[s] Observation start time (MET)	495076402.184000	495075284.82978	CCD S5 on	N	N
Observation start date	2013-09-09T01:12:15	2013-09-09T00:54:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	495096402.184000	495096637.63095	On-chip summing requested	N	N
Observation end date	2013-09-09T06:45:35	2013-09-09T06:50:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





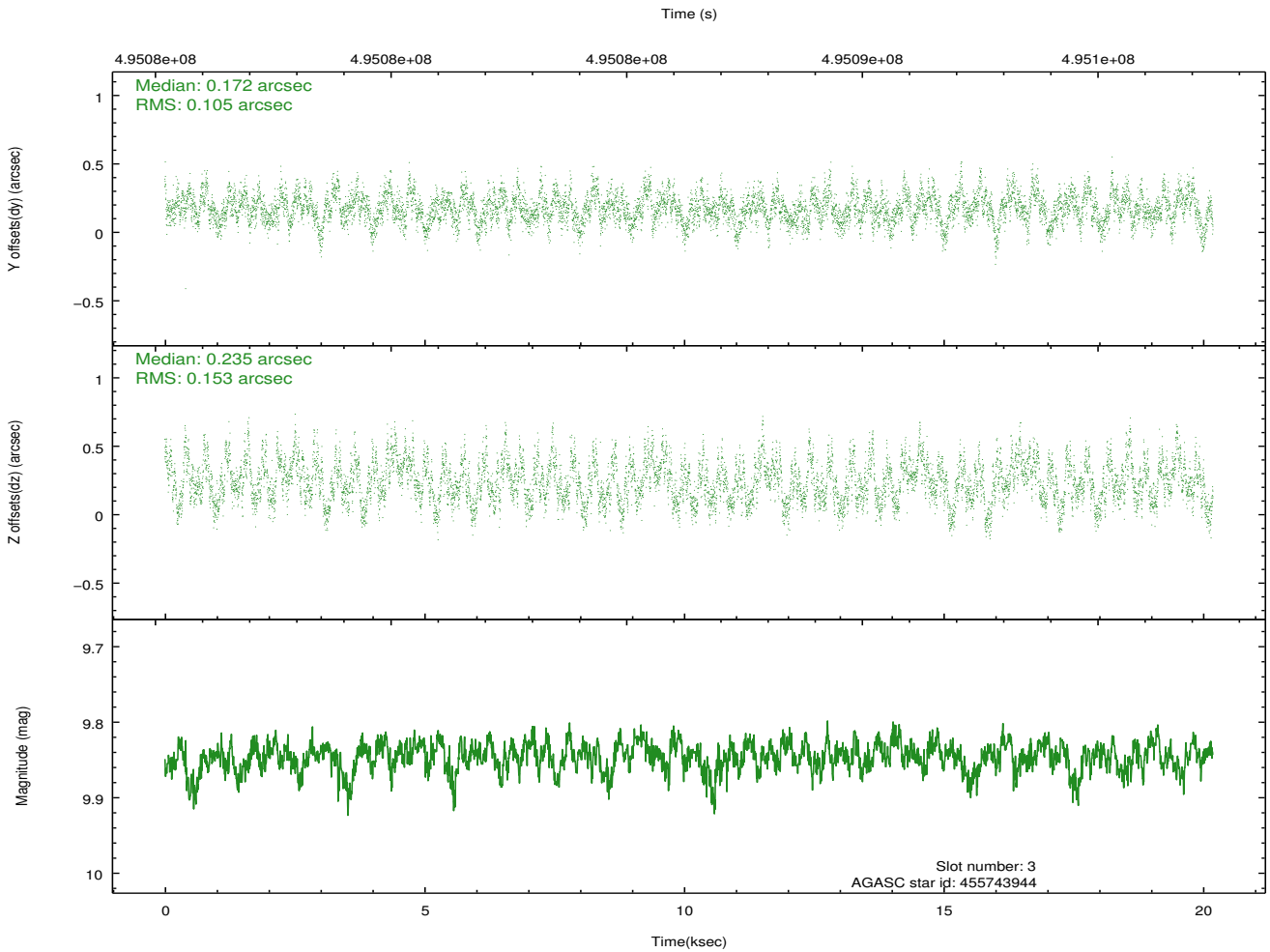
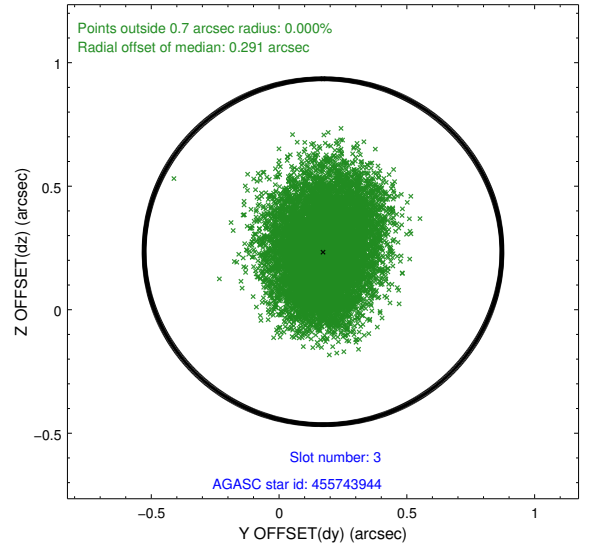
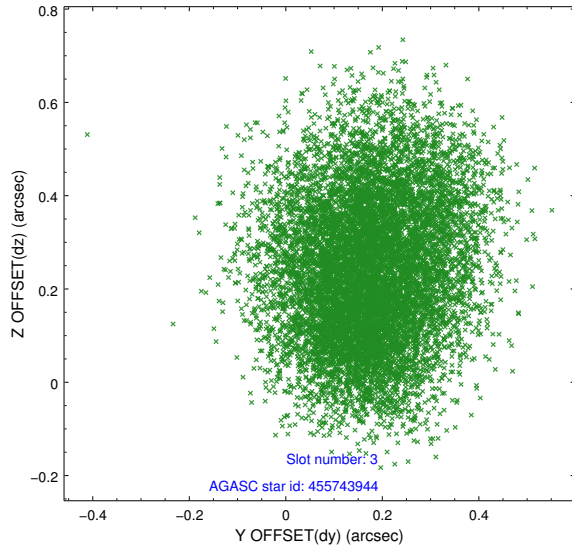
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	4925	0.152	-0.130	0.035	0.073	0.000000	0.000000	918.72	-978.30
1	FID		ACIS-I-5	7.06	4924	-0.339	0.106	0.022	0.029	0.000000	0.000000	-1829.82	919.22
2	FID		ACIS-I-6	7.09	4925	0.097	0.088	0.018	0.045	0.000000	0.000000	383.95	1563.97
3	GUIDE	used	455743944	9.85	9842	0.172	0.235	0.200	0.316	223.655683	47.937963	-2136.99	-1940.53
4	GUIDE	used	455747544	8.32	9847	-0.093	-0.152	0.094	0.143	224.528187	48.028859	-2013.37	181.07
5	GUIDE	used	456271648	9.71	9815	-0.025	-0.199	0.134	0.205	225.468638	46.931082	2315.27	1637.09
6	GUIDE	used	456665064	9.15	9826	-0.361	-0.367	0.123	0.226	225.474071	47.940204	-1246.40	2353.08
7	GUIDE	used	455747352	9.51	9818	0.304	0.463	0.127	0.207	224.330497	48.092372	-2335.84	-234.25

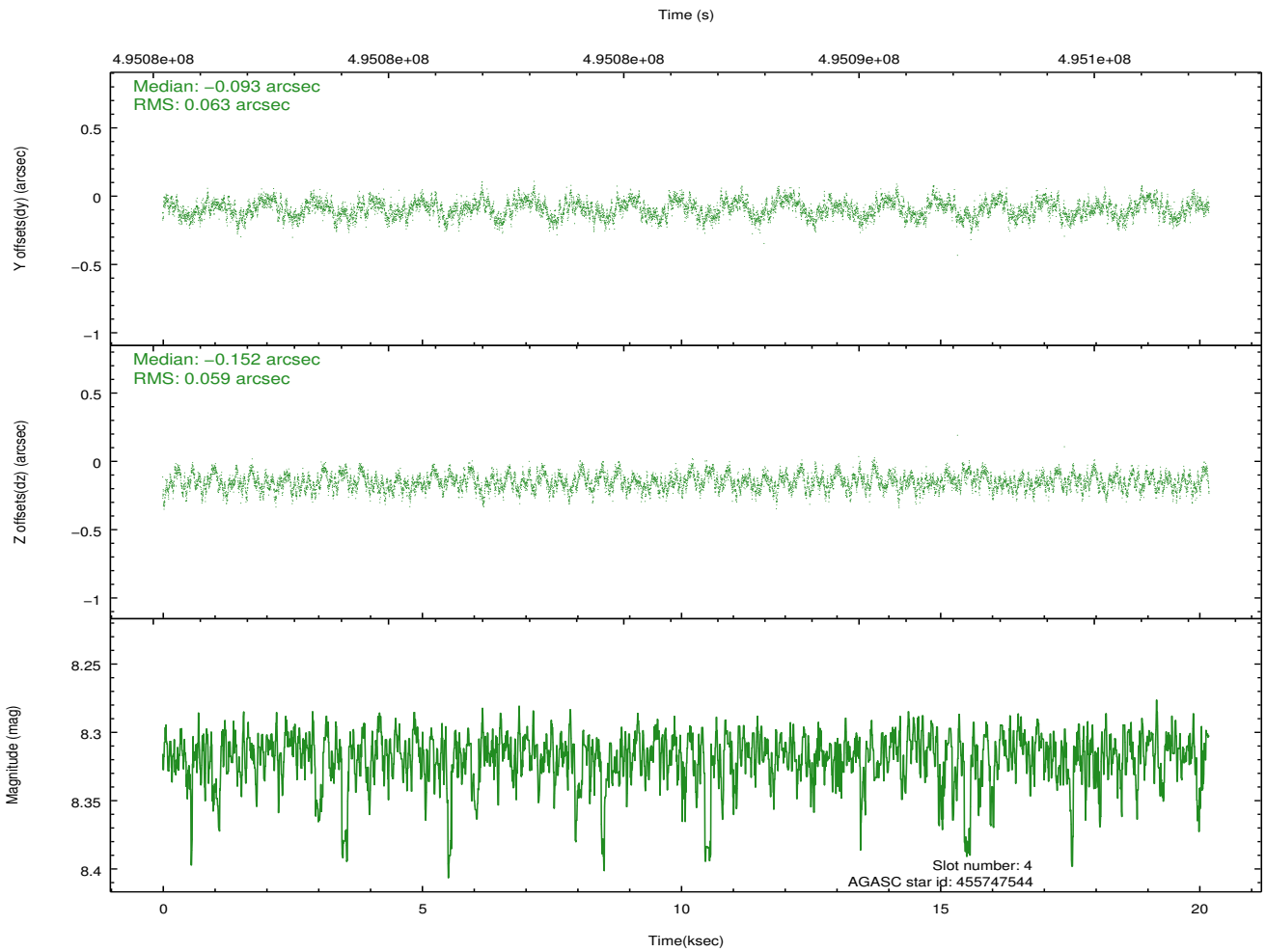
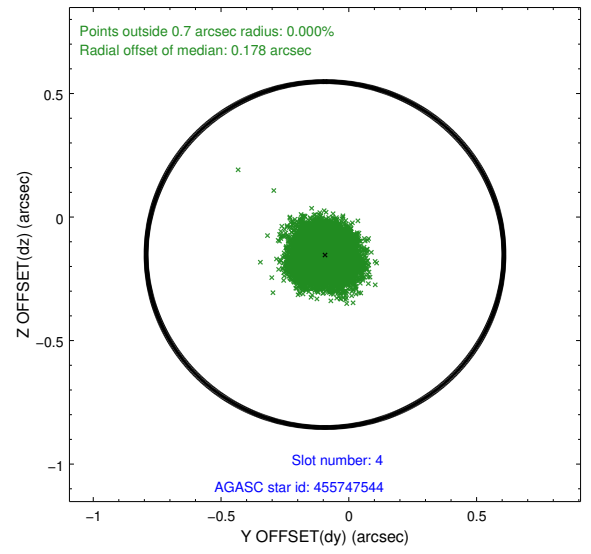
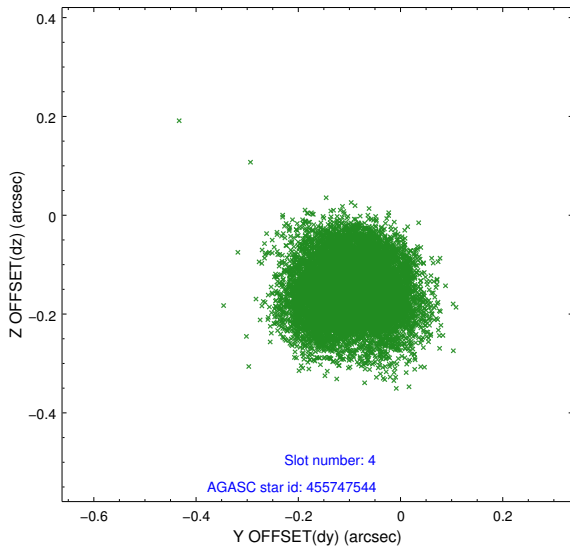
∞

2.4 Star Slots

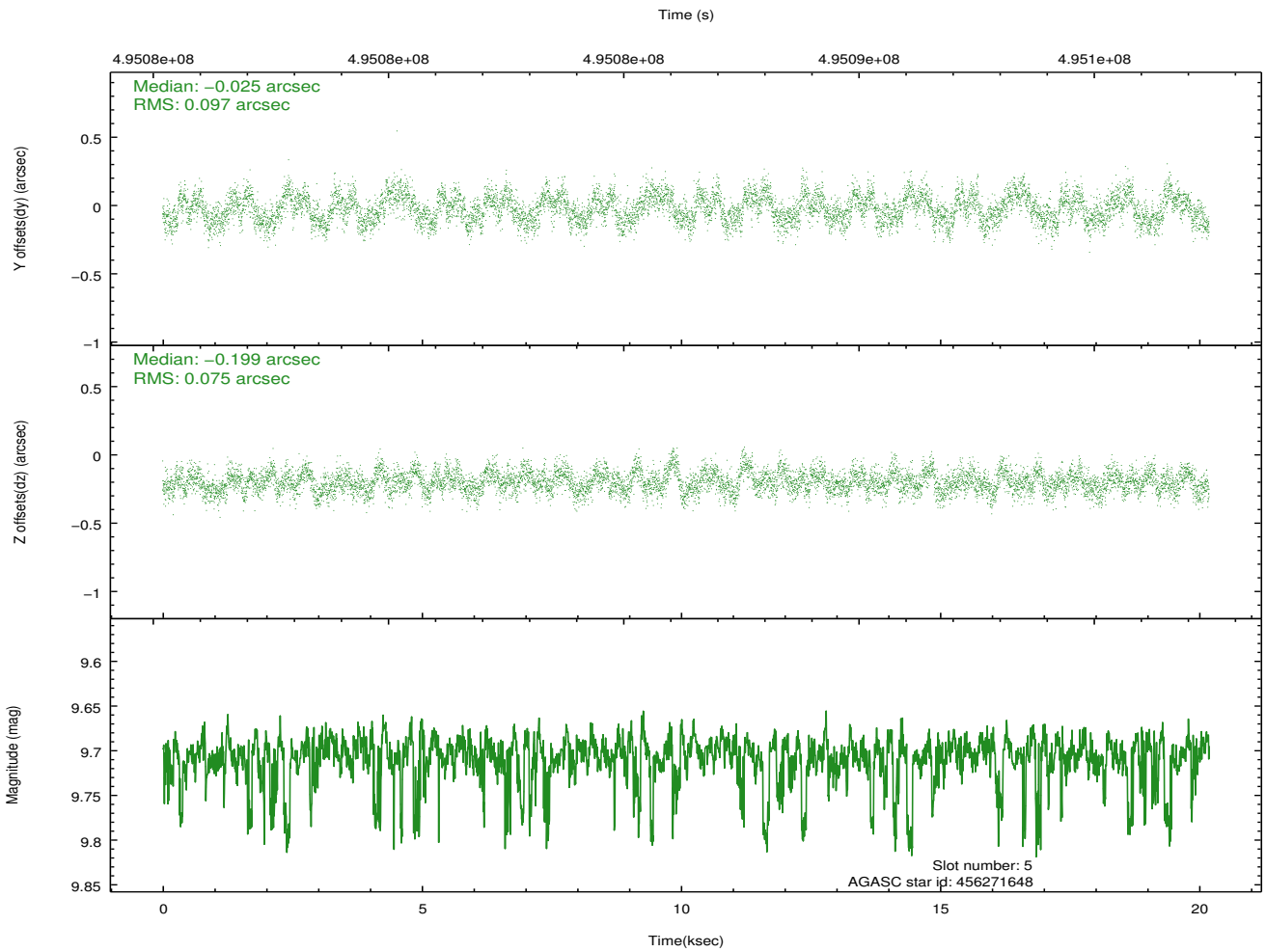
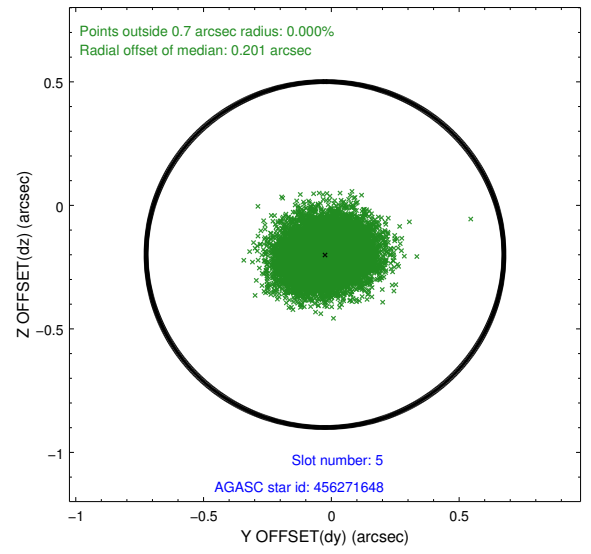
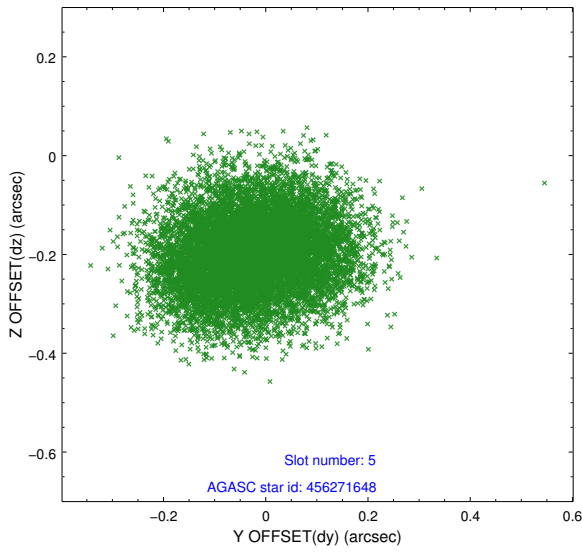
2.4.1 Slot 3



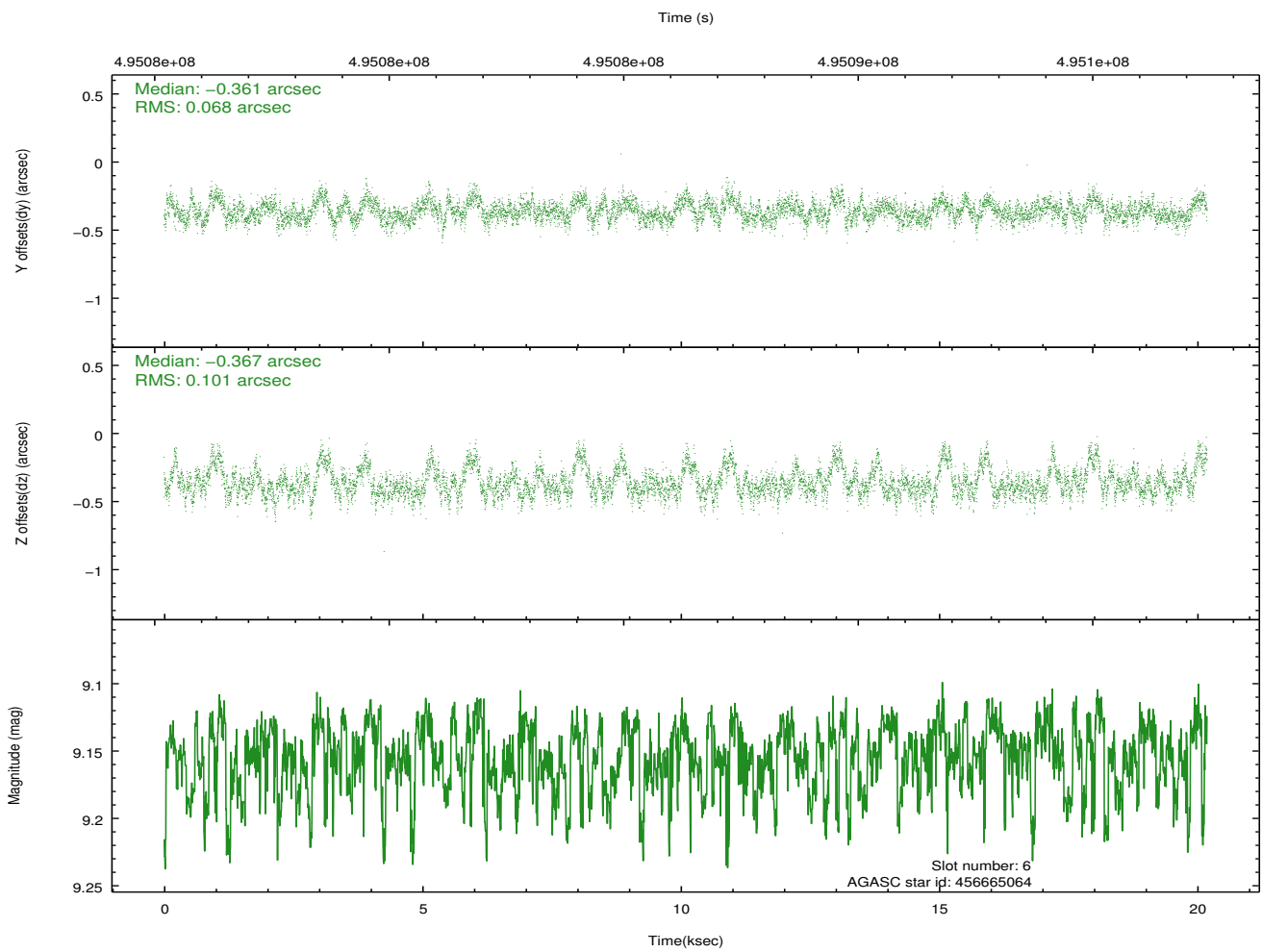
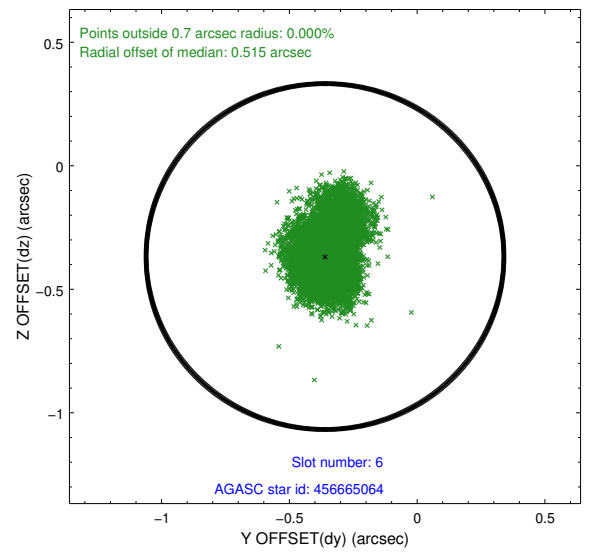
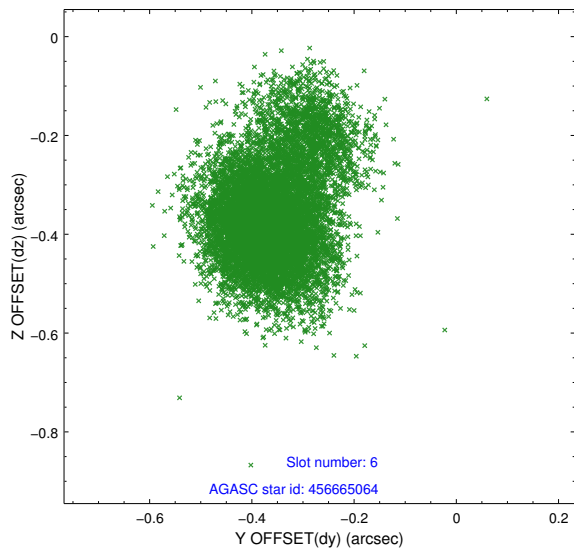
2.4.2 Slot 4



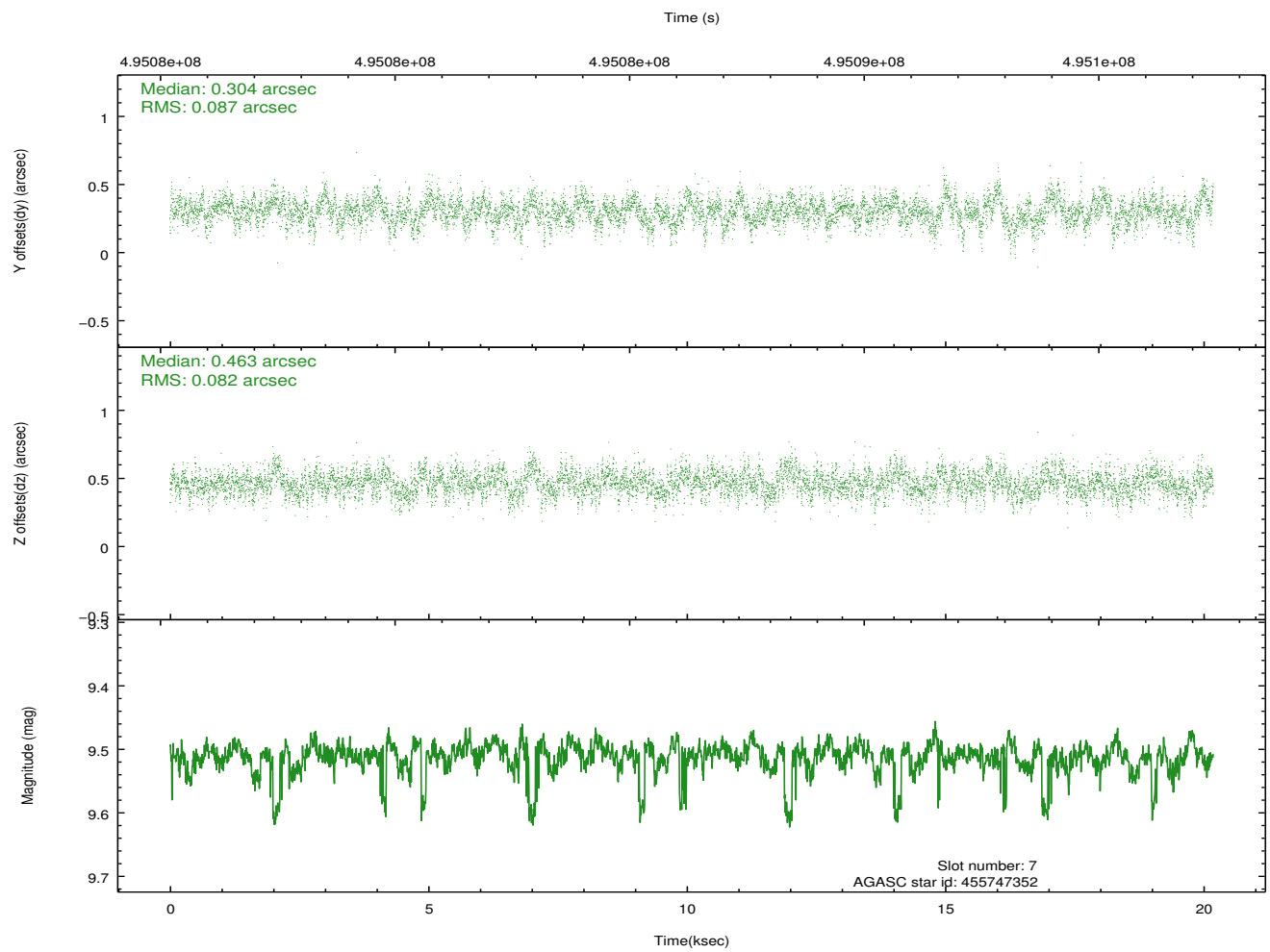
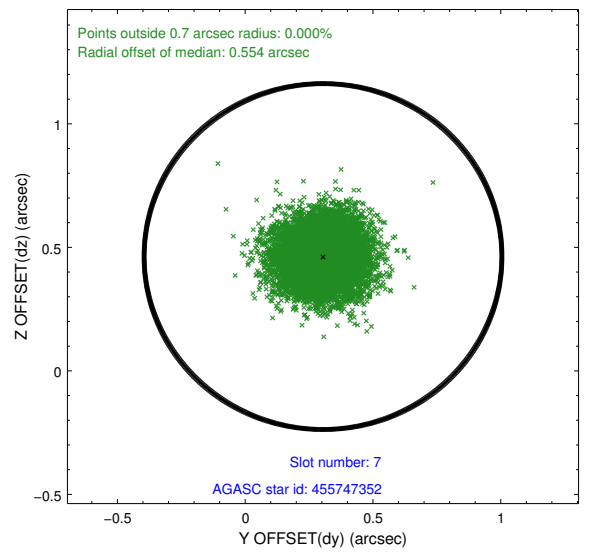
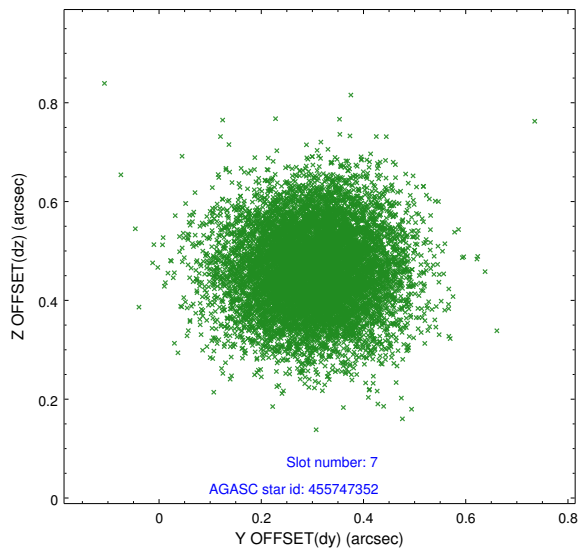
2.4.3 Slot 5



2.4.4 Slot 6

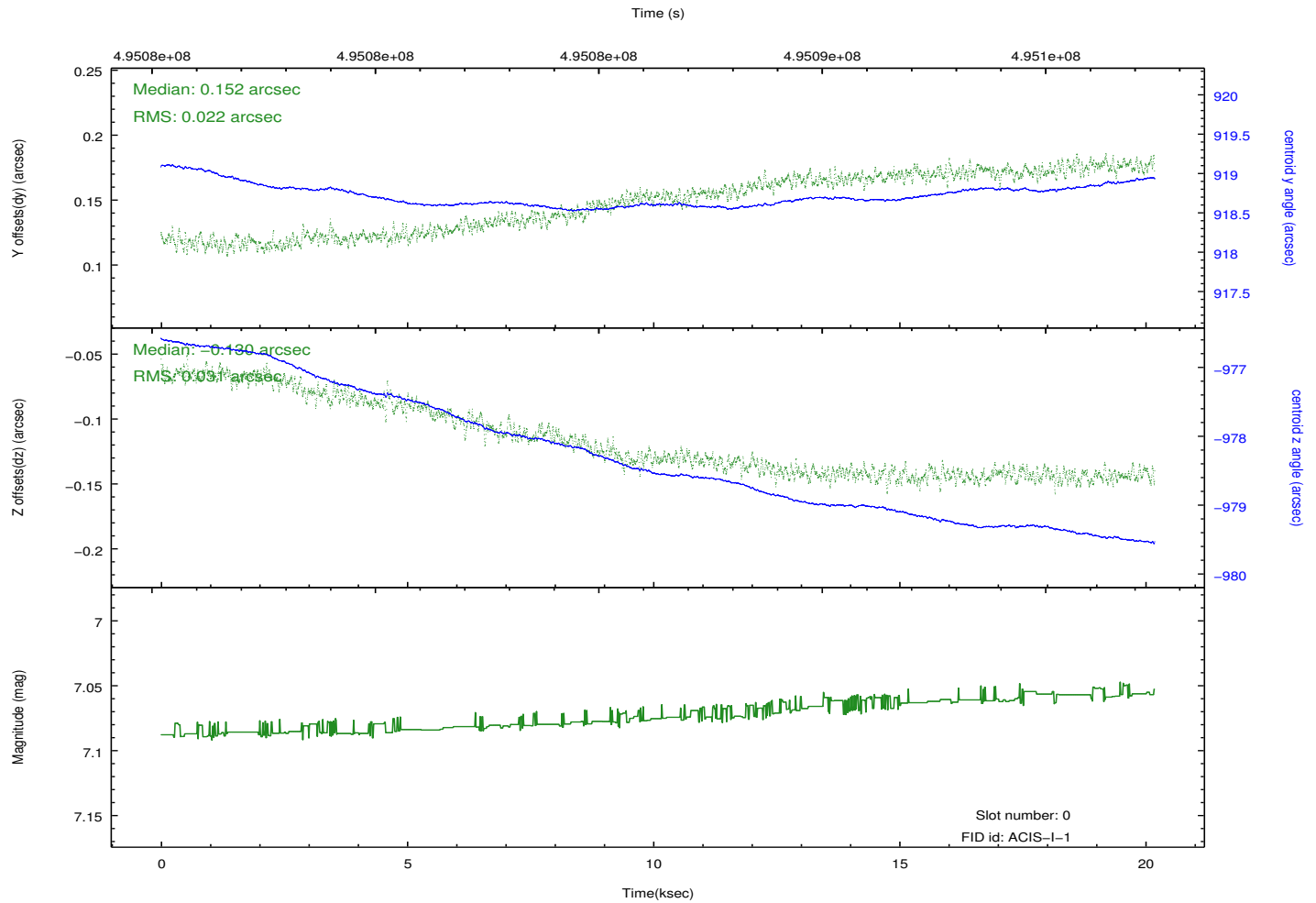
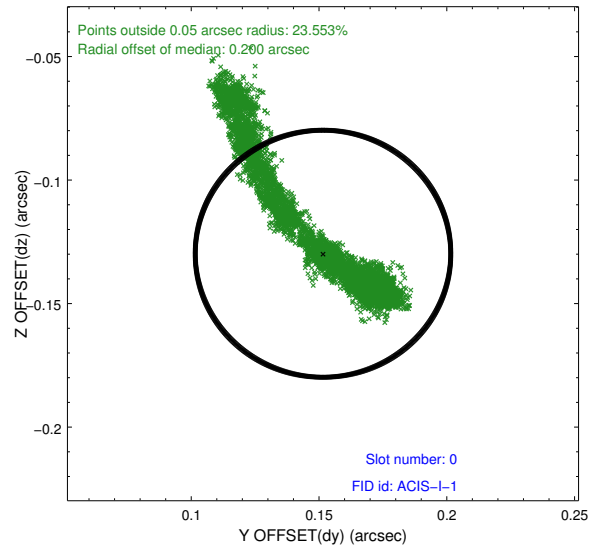
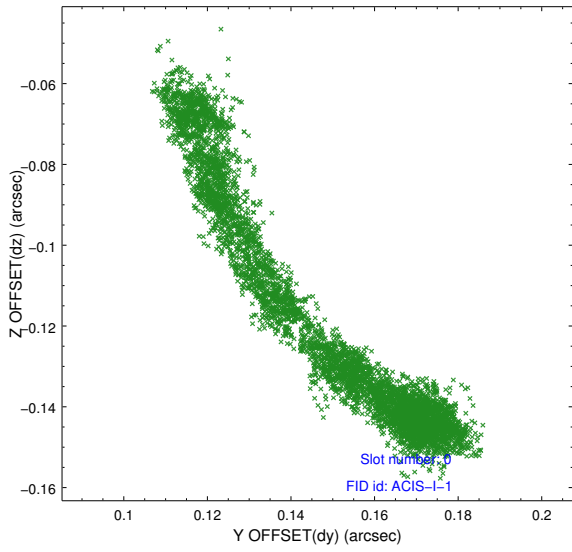


2.4.5 Slot 7

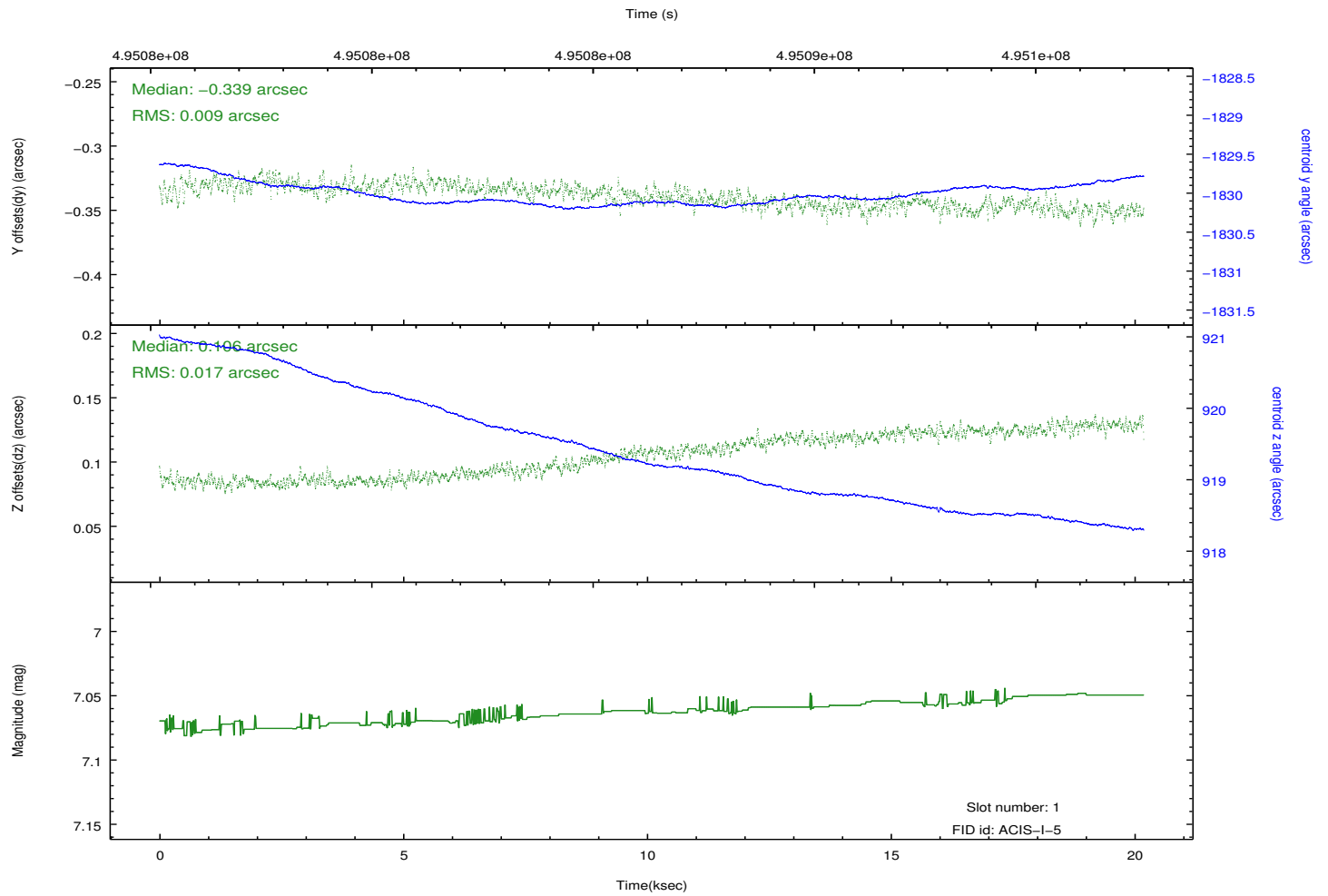
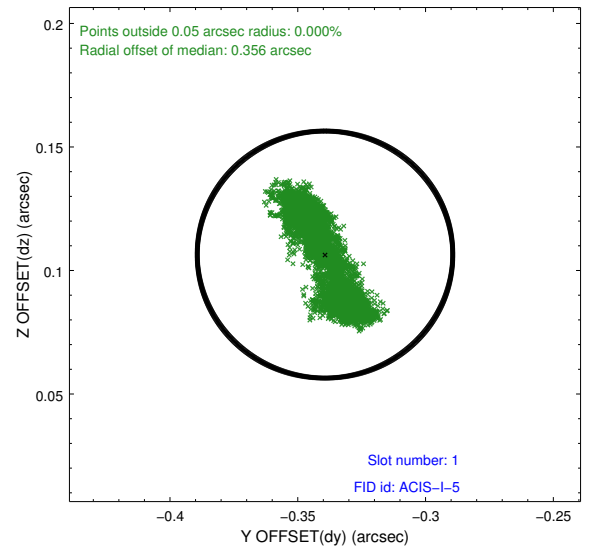
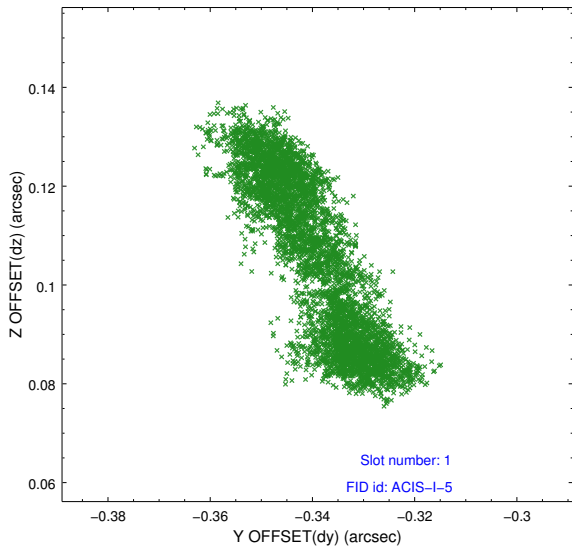


2.5 FID Slots

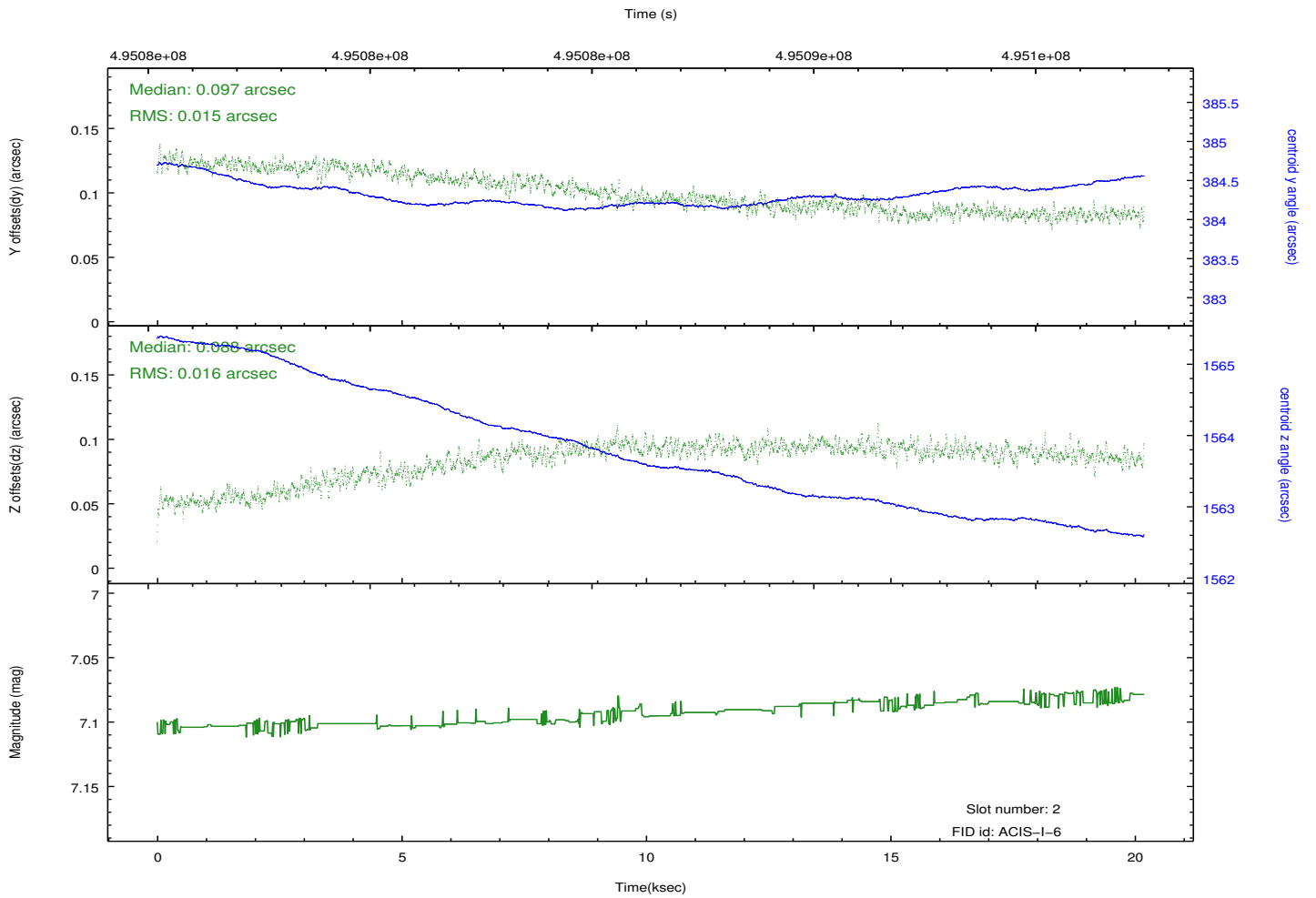
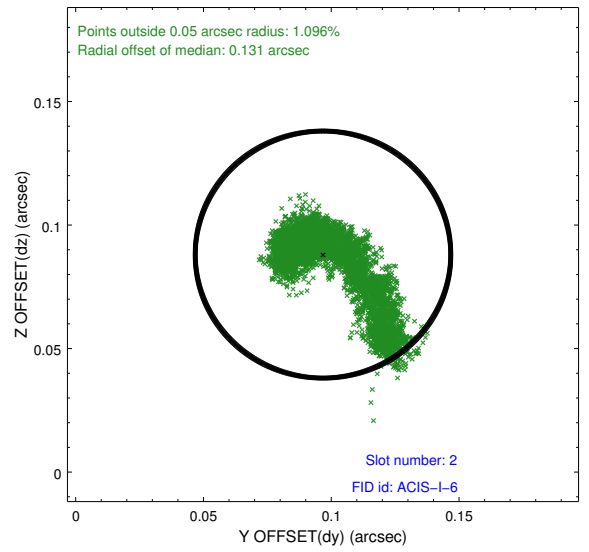
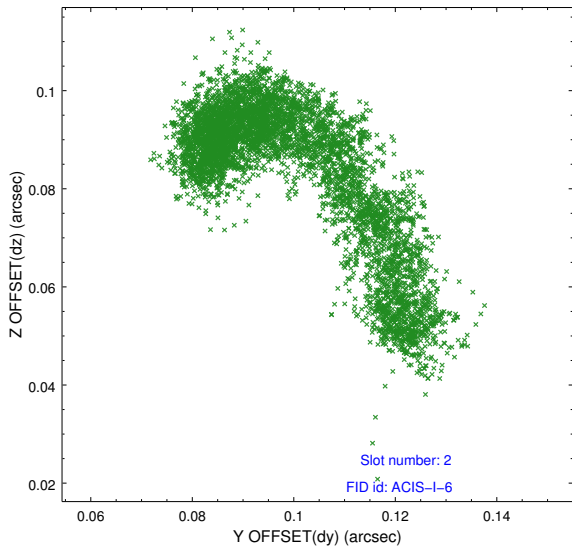
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.088000154495

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.