

V&V Reference Report

L2 ASCDS Version : 10

Observation 15123 - L2 Version 2
Chandra X-Ray Center

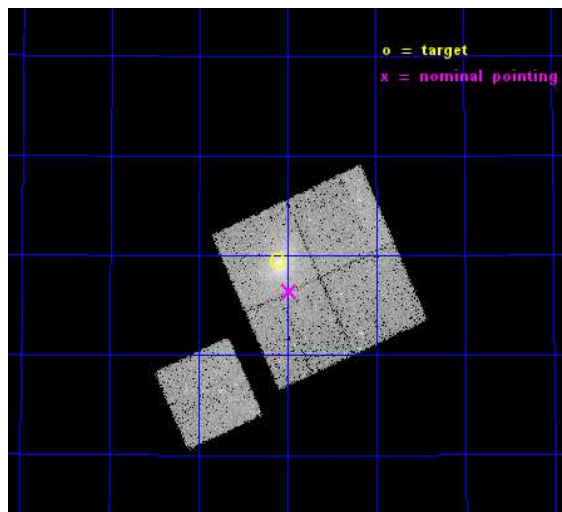
L2 Processing Date : Dec 3 2014

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1 Front

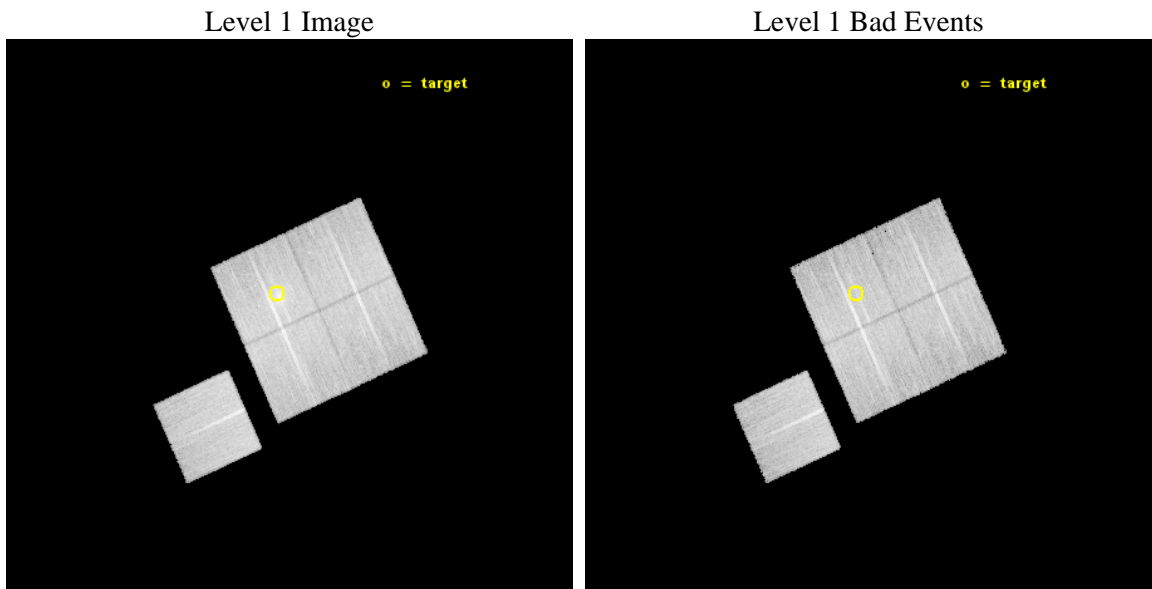
seq_num	801252	Sequence number
obs_id	15123	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G114.33+64.87	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	198.7775	Observer's specified target RA [deg]
dec_targ	51.824222	Observer's specified target Dec [deg]
ra_nom	198.74452966077	Nominal RA [deg]
dec_nom	51.773766215291	Nominal Dec [deg]
roll_nom	245.67489973195	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29716.559258163	Sum of GTIs [s]
livetime	29328.290534442	Livetime [s]
ontime0	29719.700228572	Sum of GTIs [s]
ontime1	29716.559258223	Sum of GTIs [s]
ontime2	29719.700228572	Sum of GTIs [s]
ontime3	29716.559258163	Sum of GTIs [s]
ontime6	29703.995496273	Sum of GTIs [s]
l2events	84524	Number of level 2 events



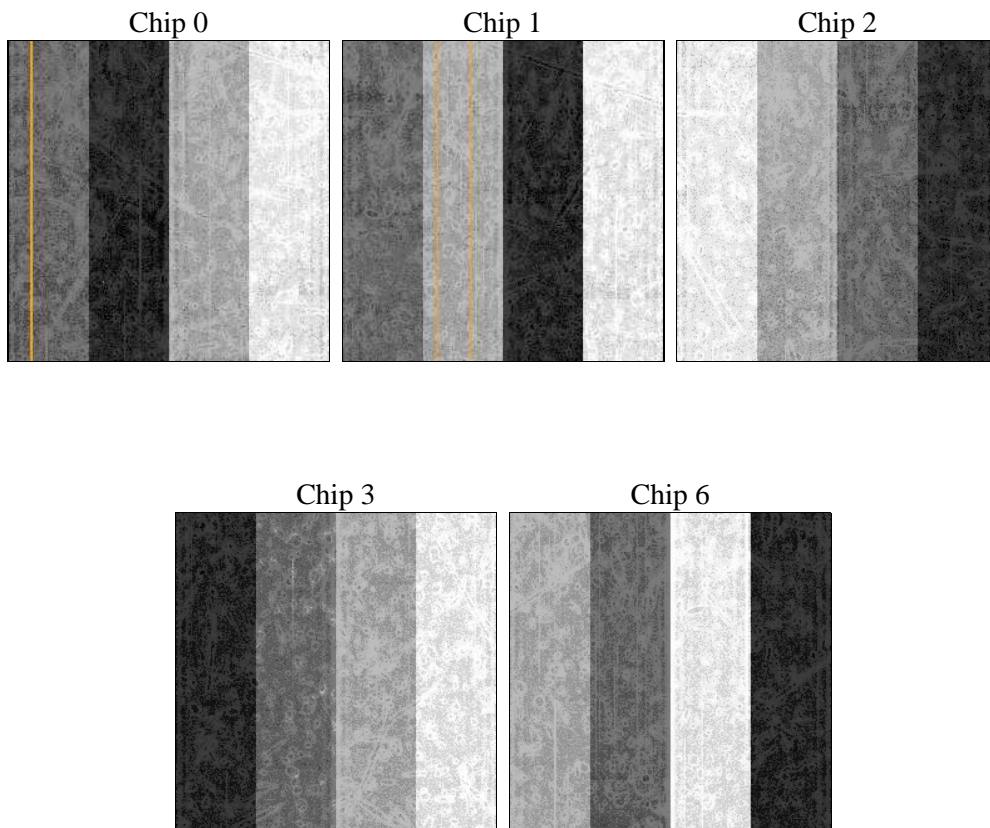
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29949.871000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	29716.559258163	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	29719.700228572	Sum of GTIs [s]
date	2014-12-04T01:06:48	Date and time of file creation	ontime1	29716.559258223	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	29719.700228572	Sum of GTIs [s]
			ontime3	29716.559258163	Sum of GTIs [s]
			ontime6	29703.995496273	Sum of GTIs [s]
			l1events	692804	Number of level 1 events

2.1.4 Events

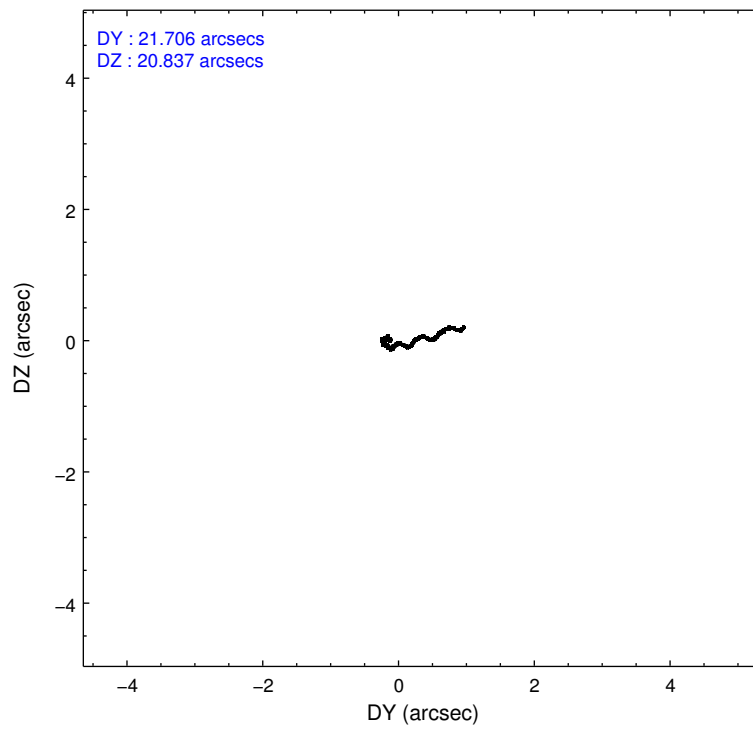
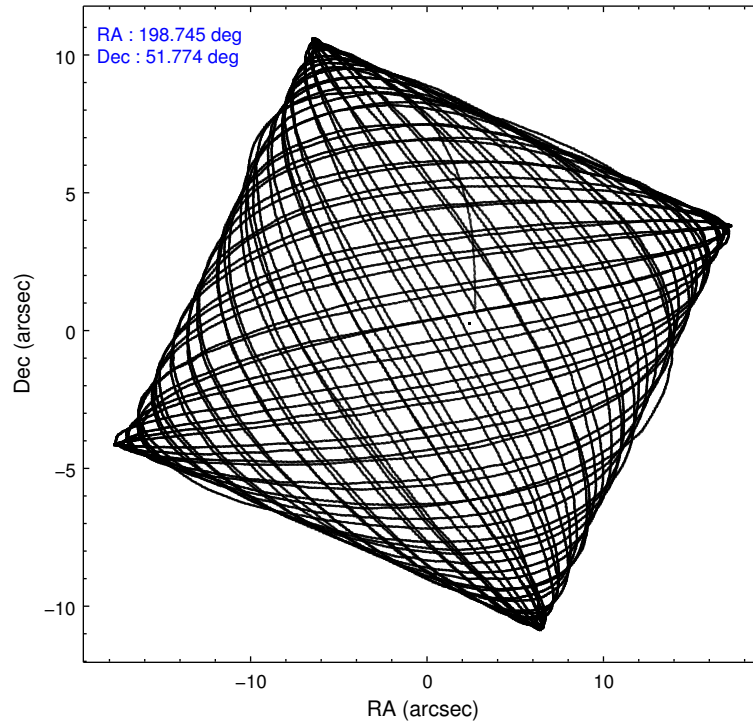
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	128645	130969	141677	150566	140947
rejected events	111792	111777	124428	121860	123598
rejected %	86%	85%	87%	80%	87%

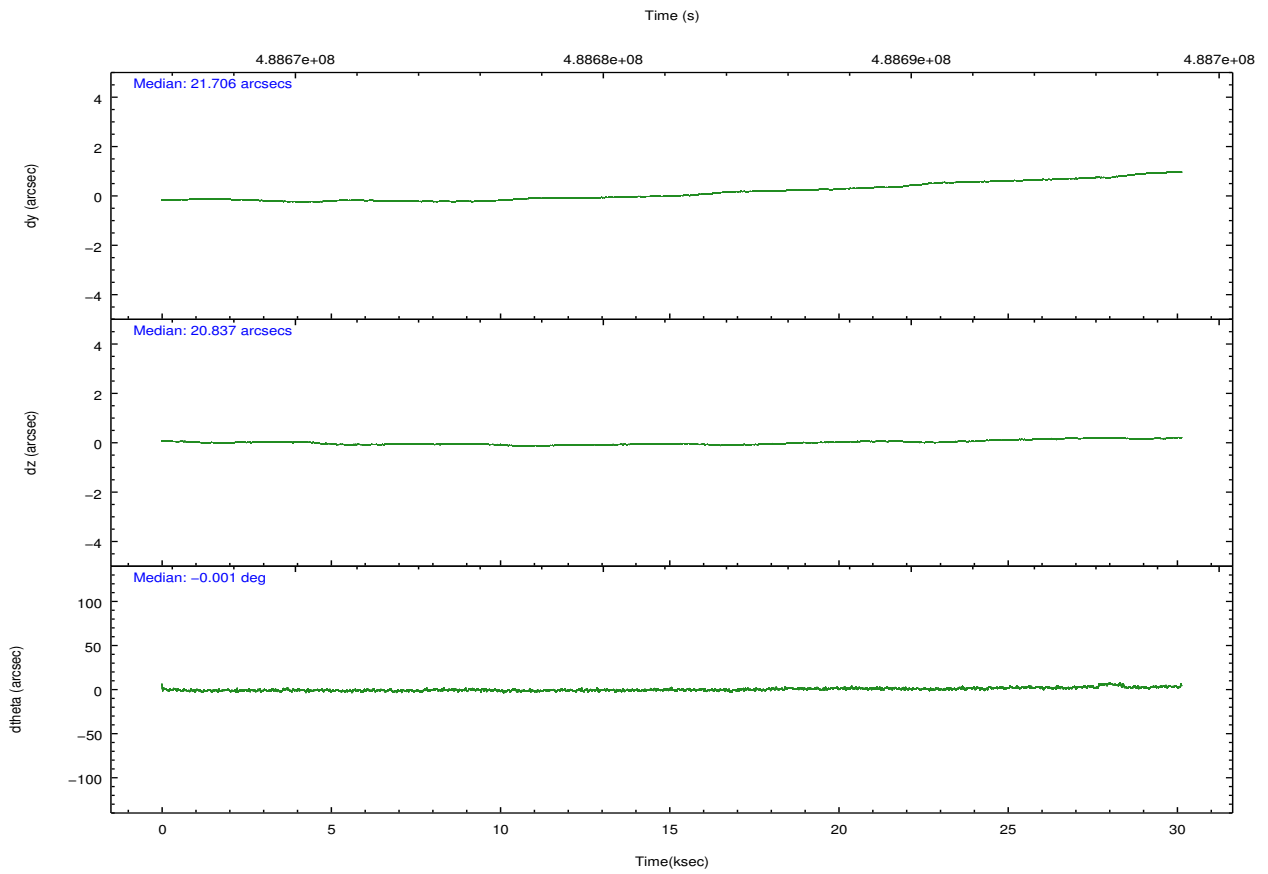
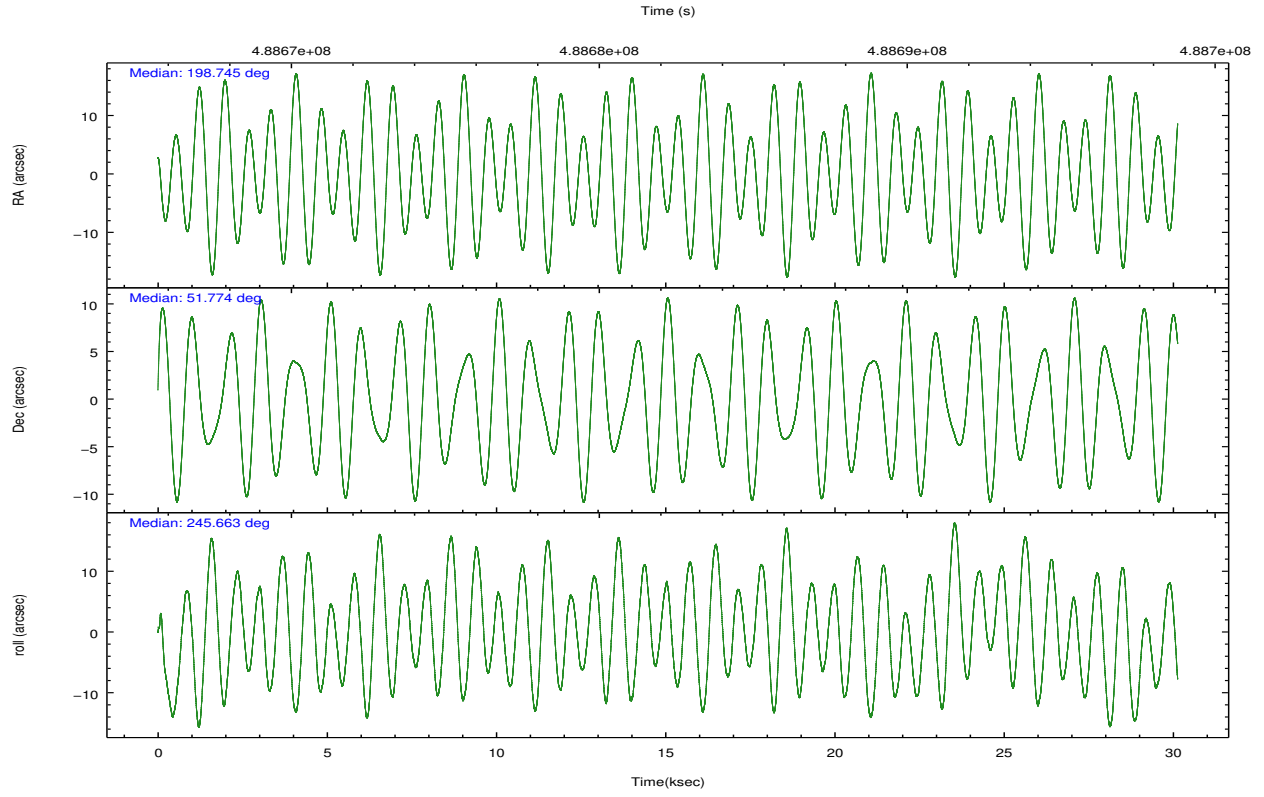
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5878	6728	6571	15956	6071
	4%	5%	4%	10%	4%
grade 1 events	84	68	88	124	60
	0%	0%	0%	0%	0%
grade 2 events	4194	4826	4171	4876	3894
	3%	3%	2%	3%	2%
grade 3 events	1679	1775	1665	2035	1738
	1%	1%	1%	1%	1%
grade 4 events	1687	1771	1644	2115	1765
	1%	1%	1%	1%	1%
grade 5 events	6434	7036	5803	7470	7333
	5%	5%	4%	4%	5%
grade 6 events	3415	4094	3205	3728	3881
	2%	3%	2%	2%	2%
grade 7 events	105274	104671	118530	114262	116205
	81%	79%	83%	75%	82%

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	198.739974	198.7445296607701	CCD I2 on	Y	Y
[deg] Pointing Dec	51.801107	51.77376621529088	CCD I3 on	Y	Y
[deg] Pointing Roll	245.469789	245.6748997319498	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	-225.842463	-225.8458576473255	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.746595355604228	CCD S4 on	N	N
[s] Observation start time (MET)	488667345.184000	488666236.74317	CCD S5 on	N	N
Observation start date	2013-06-26T20:54:38	2013-06-26T20:37:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	488697295.184000	488697529.48237	On-chip summing requested	N	N
Observation end date	2013-06-27T05:13:48	2013-06-27T05:18:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



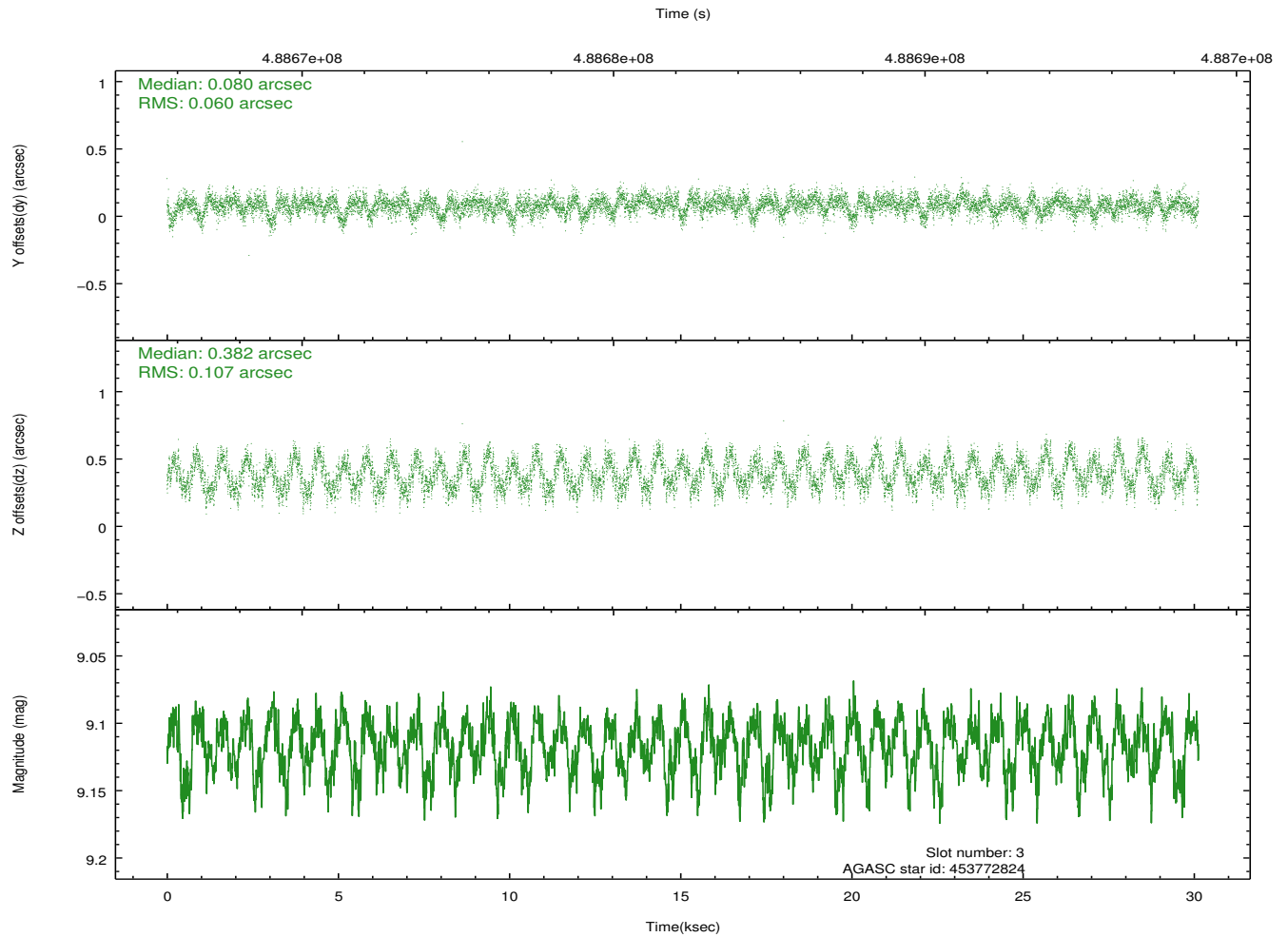
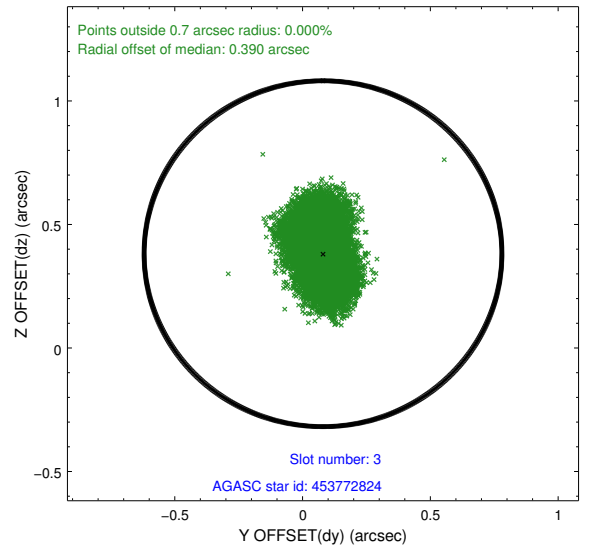
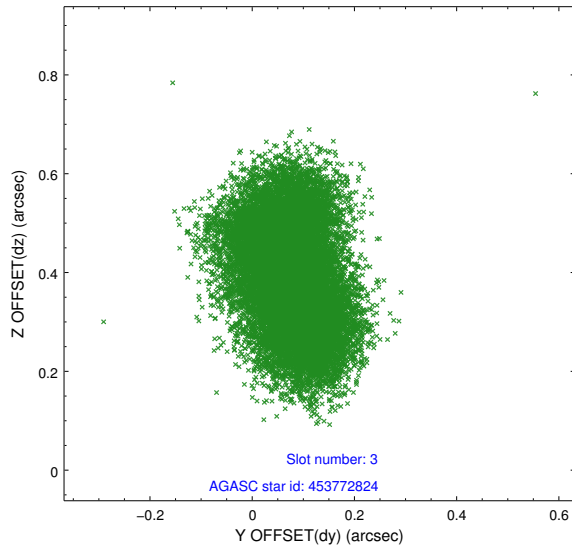


Slot Statistics

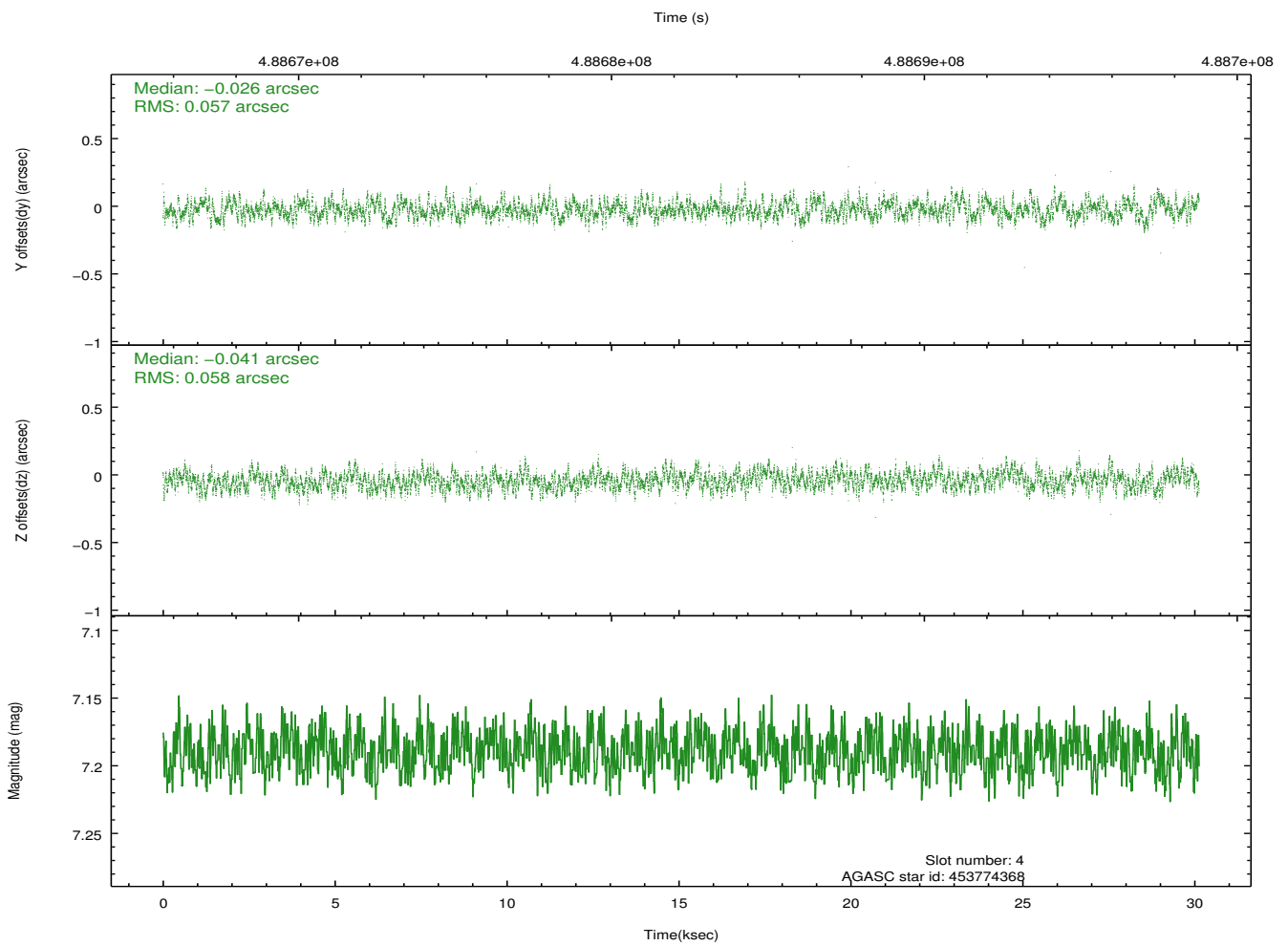
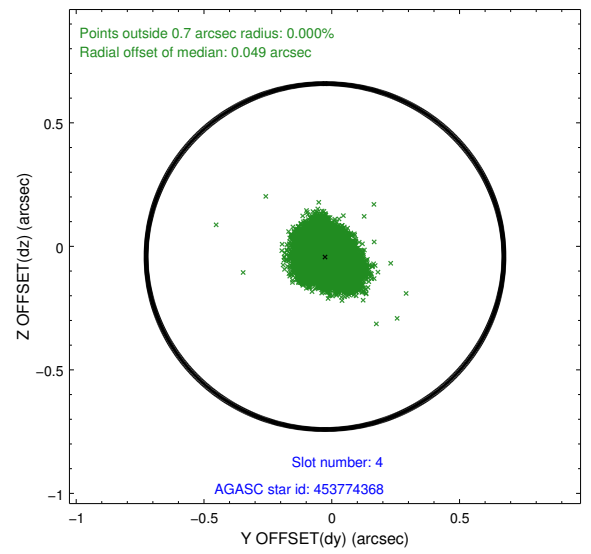
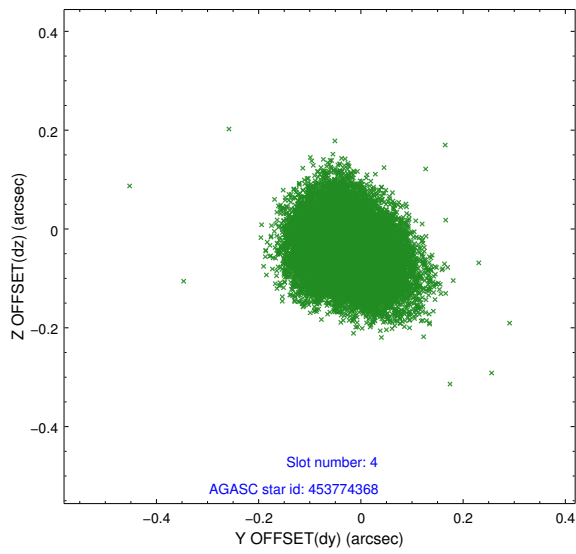
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.06	7350	0.118	-0.120	0.014	0.022	0.000000	0.000000	917.36	-1003.75
1	FID		ACIS-I-2	7.01	7350	-0.298	0.002	0.011	0.016	0.000000	0.000000	-777.51	-1009.07
2	FID		ACIS-I-4	6.96	7348	0.082	0.183	0.014	0.023	0.000000	0.000000	2136.77	897.25
3	GUIDE	used	453772824	9.12	14697	0.080	0.382	0.134	0.206	198.830021	52.277852	-1642.28	-530.36
4	GUIDE	used	453774368	7.19	14700	-0.026	-0.041	0.089	0.136	198.203244	51.899857	168.21	-1234.31
5	GUIDE	used	453782192	9.35	14649	-0.137	-0.147	0.163	0.250	199.534740	51.497959	244.57	2068.00
6	GUIDE	used	453782416	9.37	14686	-0.085	-0.193	0.136	0.230	199.391215	51.406077	680.68	1918.44
7	GUIDE	used	453782960	9.67	14679	0.176	-0.009	0.175	0.284	197.607065	51.627605	1602.76	-2050.87

2.4 Star Slots

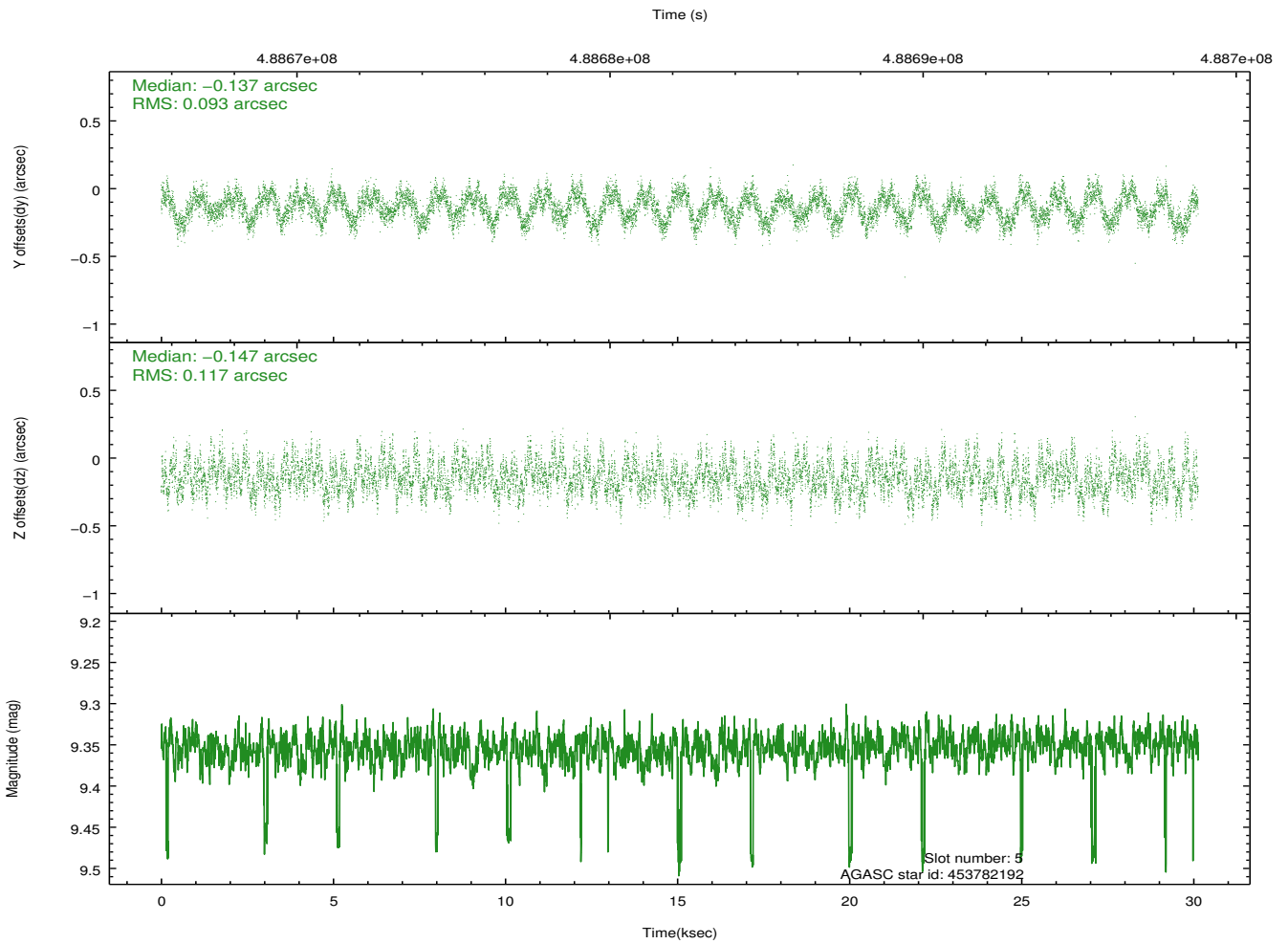
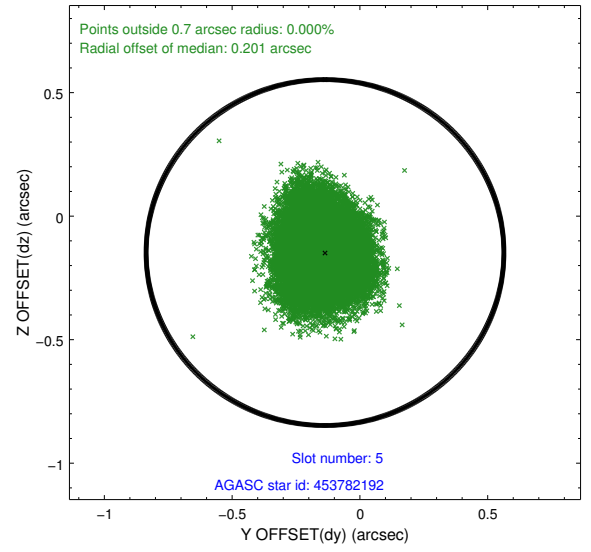
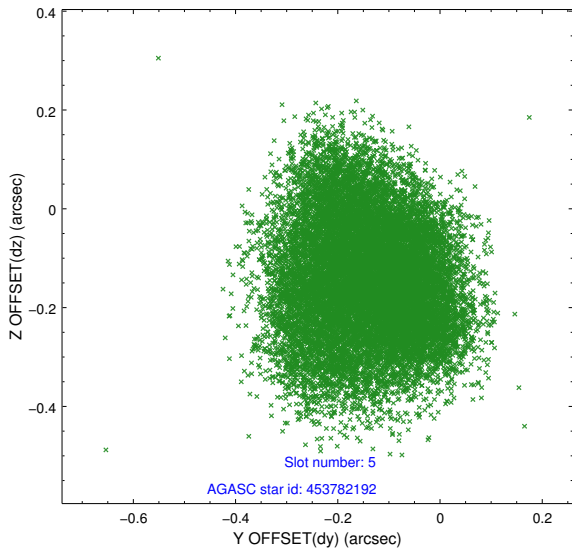
2.4.1 Slot 3



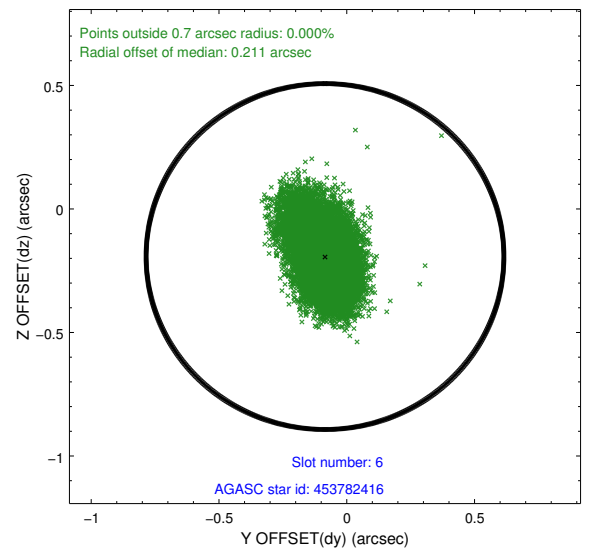
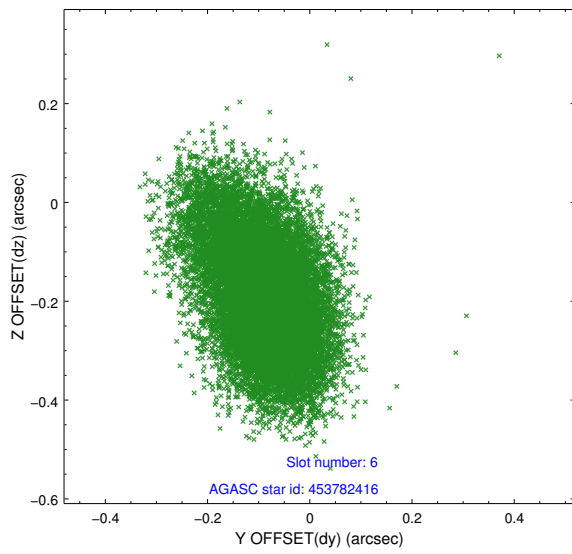
2.4.2 Slot 4



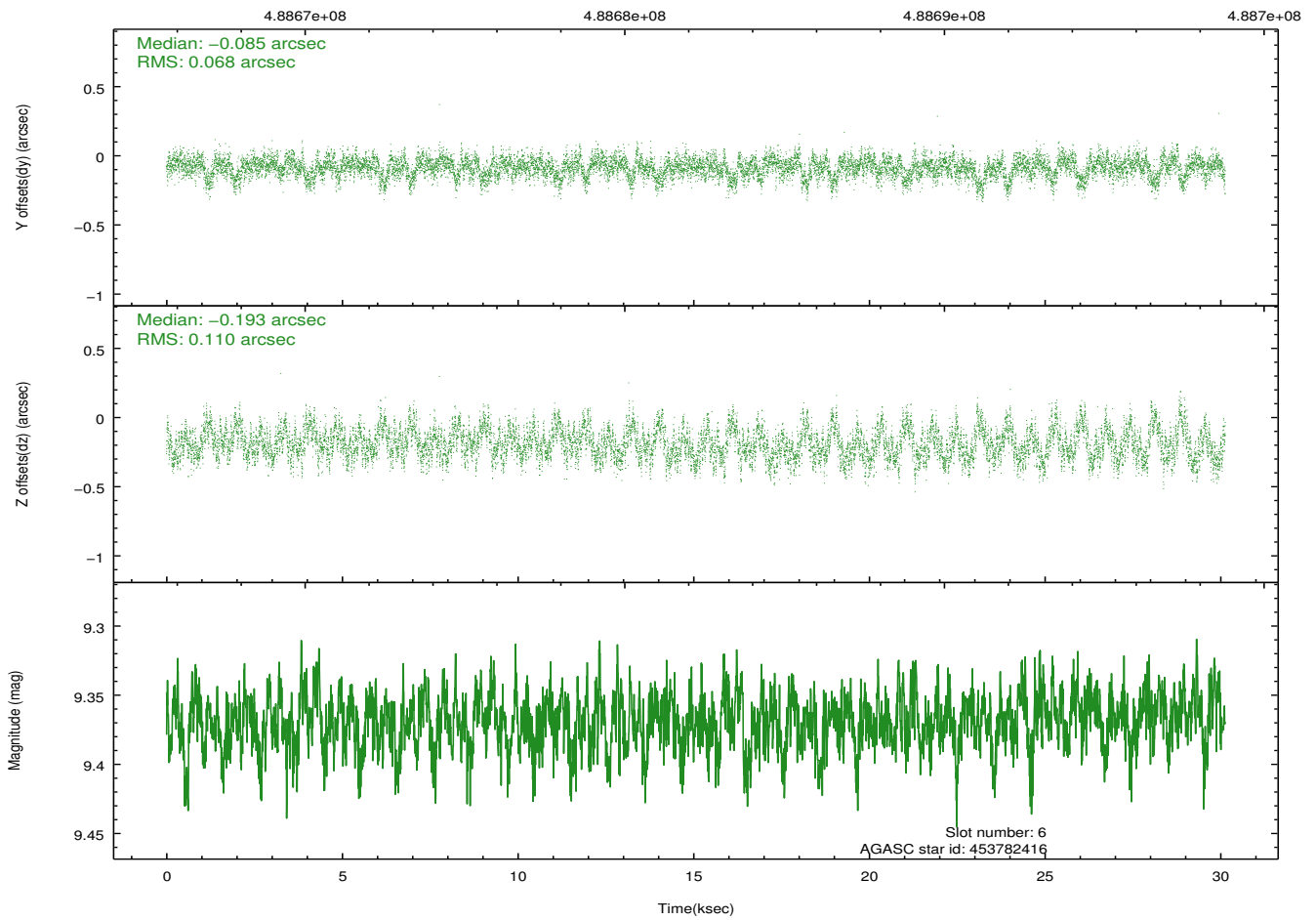
2.4.3 Slot 5



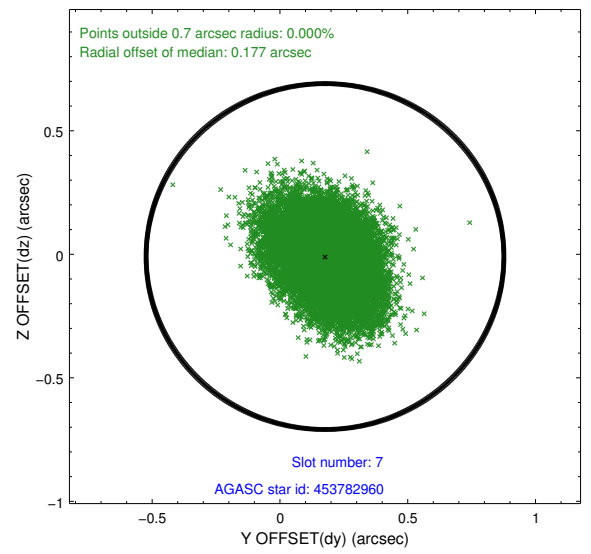
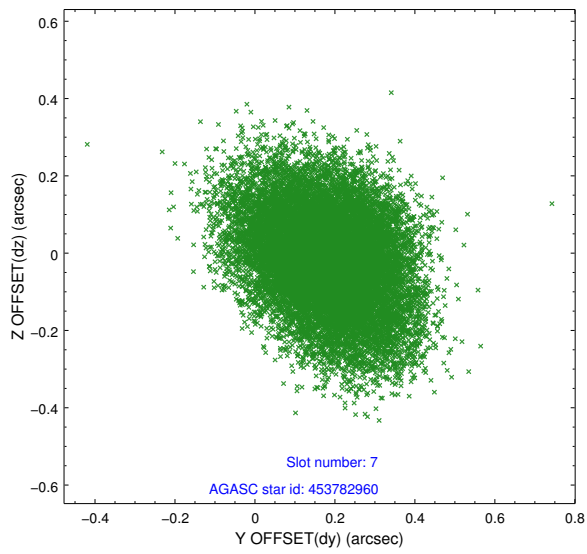
2.4.4 Slot 6



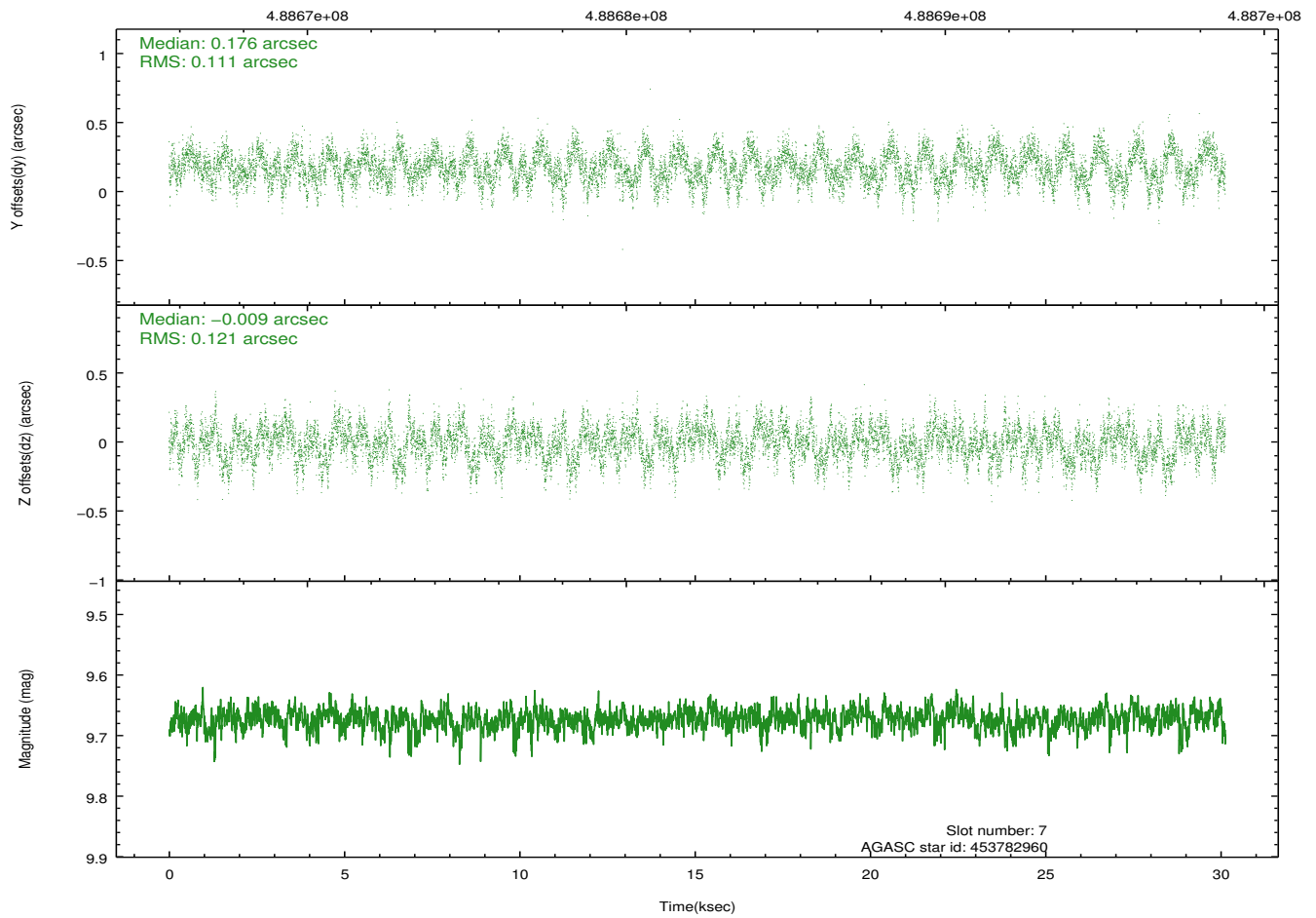
Time (s)



2.4.5 Slot 7

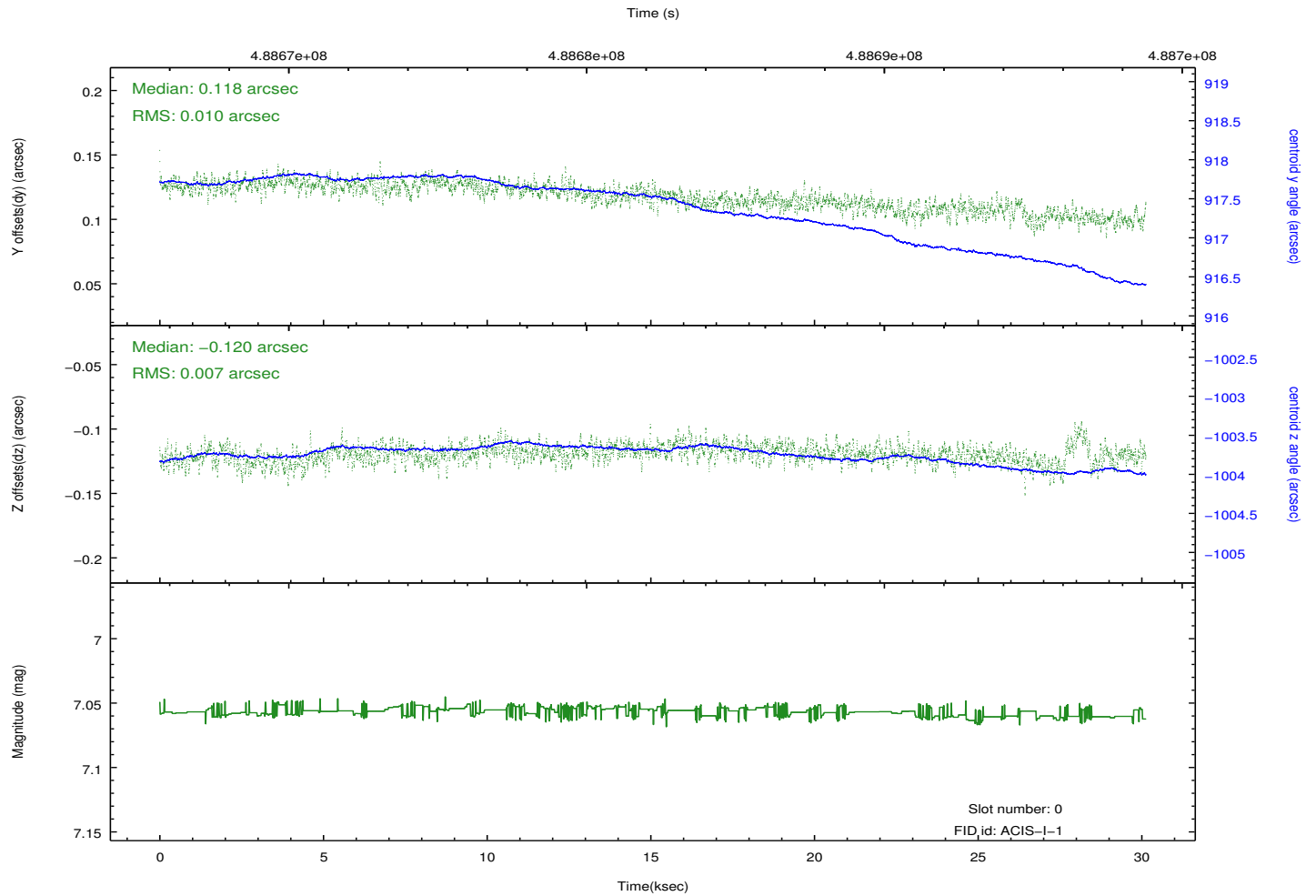
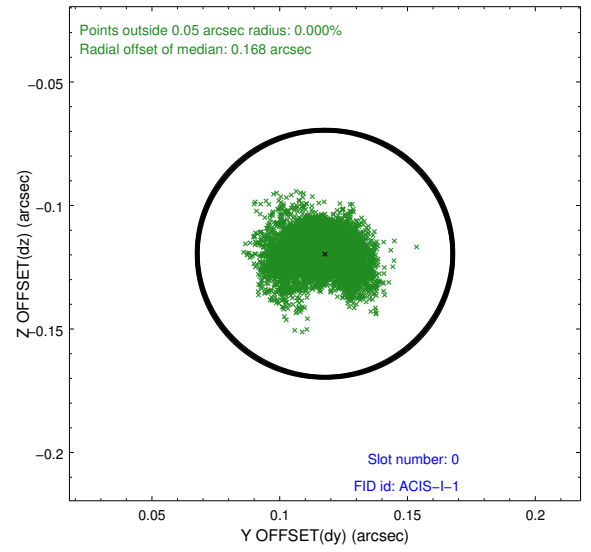
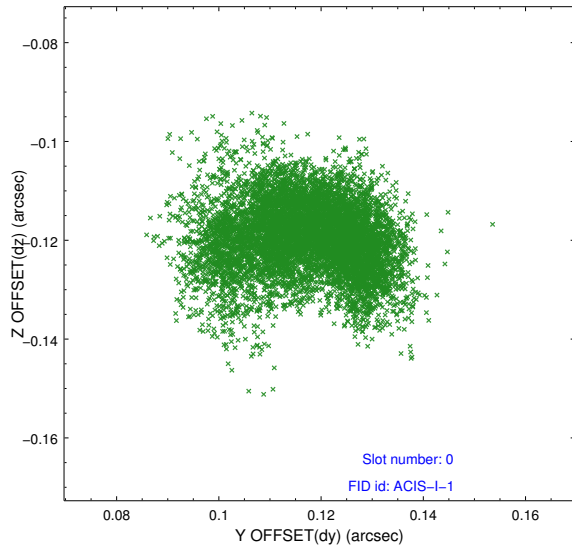


Time (s)

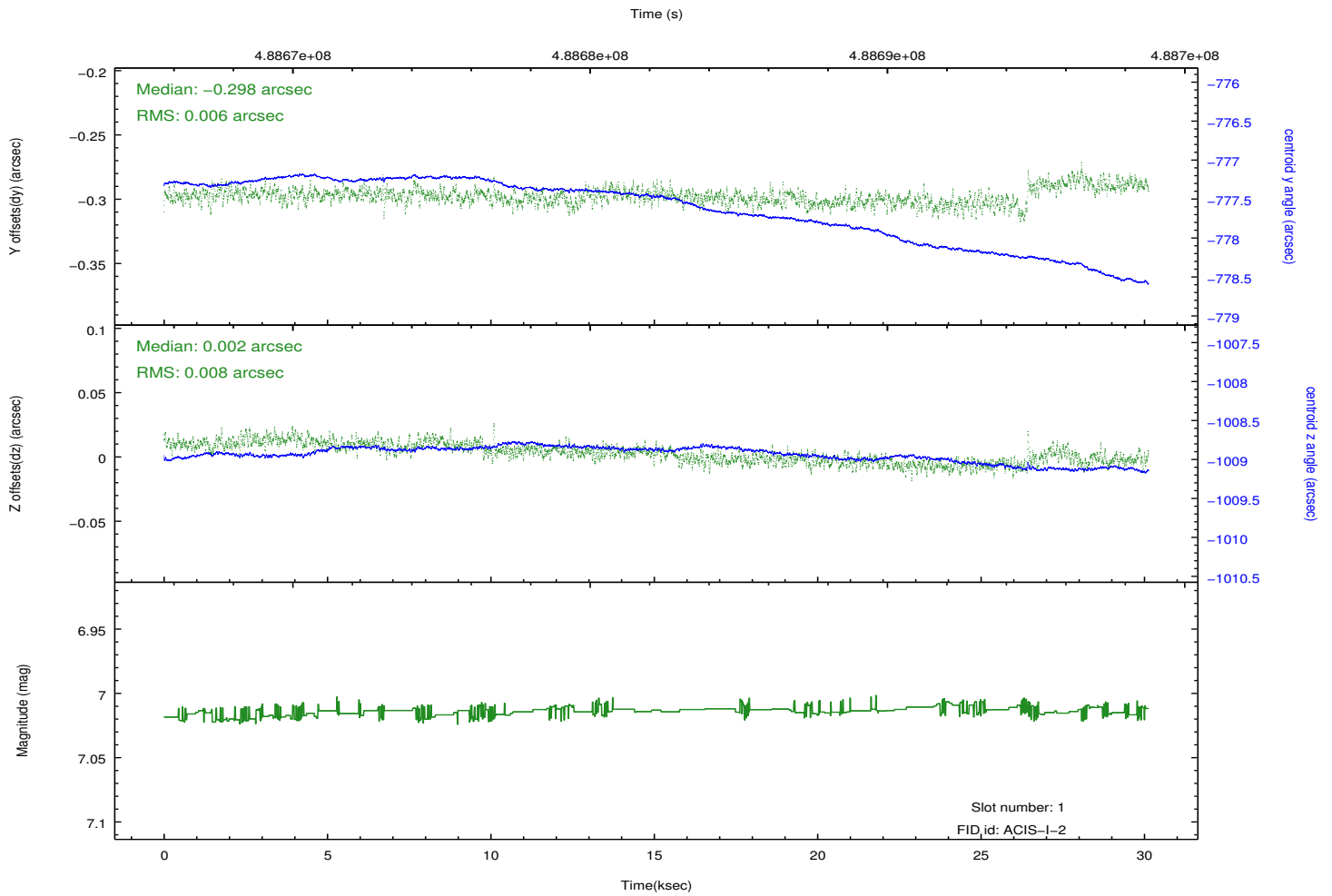
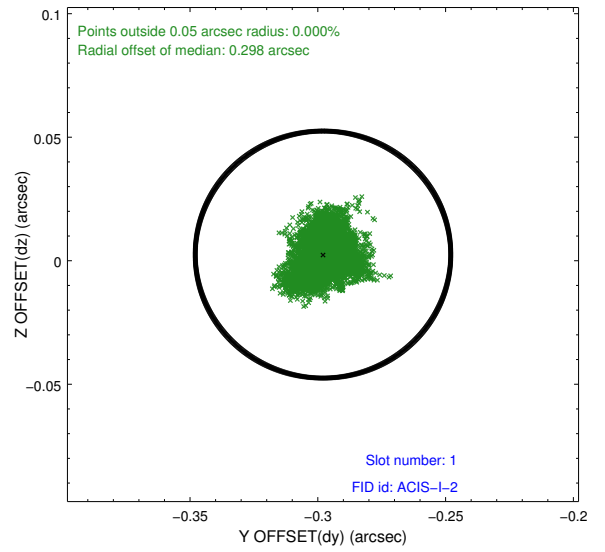
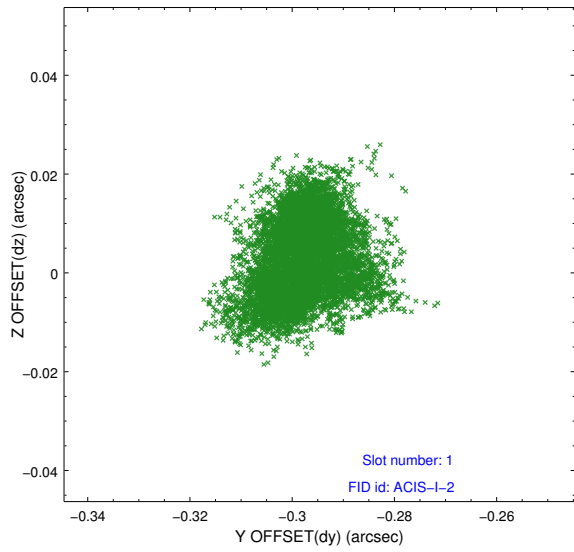


2.5 FID Slots

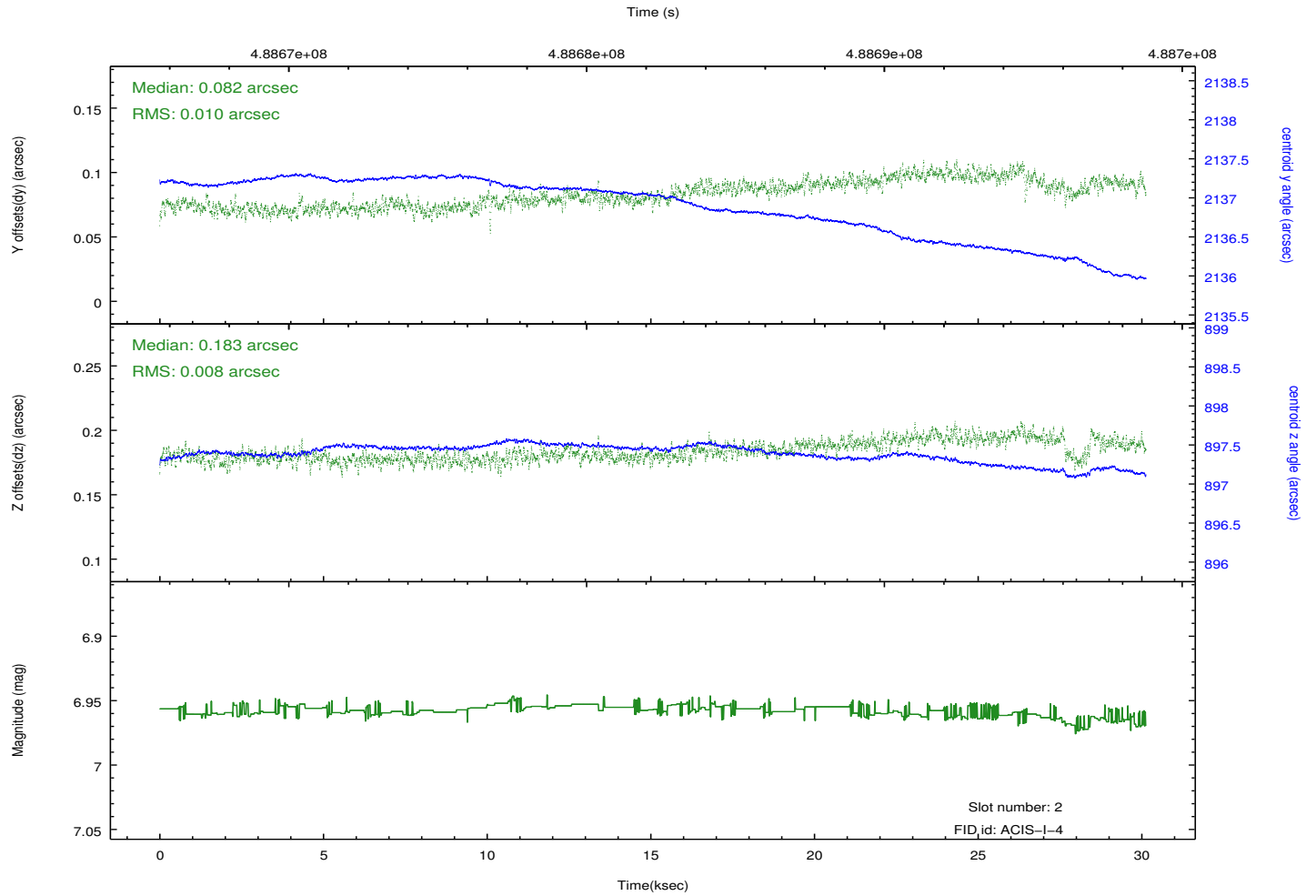
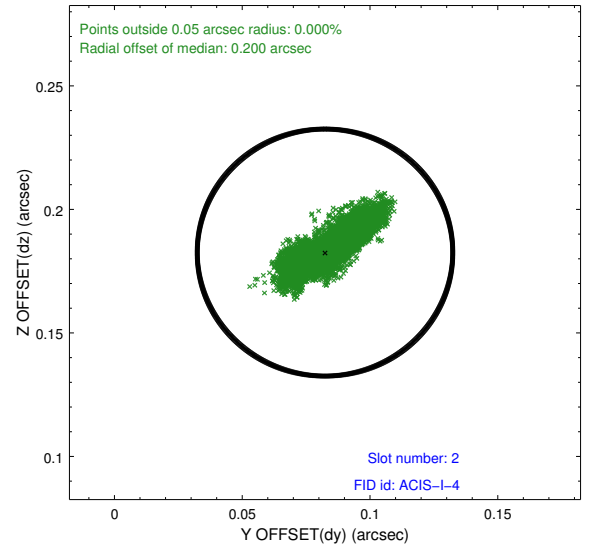
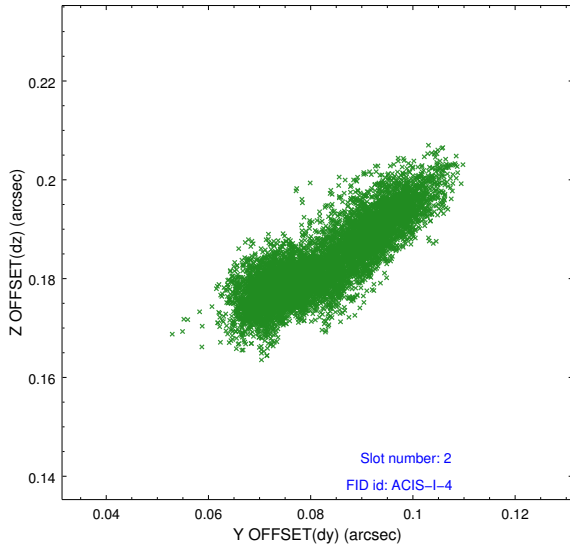
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.716559258163

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.