

V&V Reference Report

L2 ASCDS Version : 10

Observation 15367 - L2 Version 2
Chandra X-Ray Center

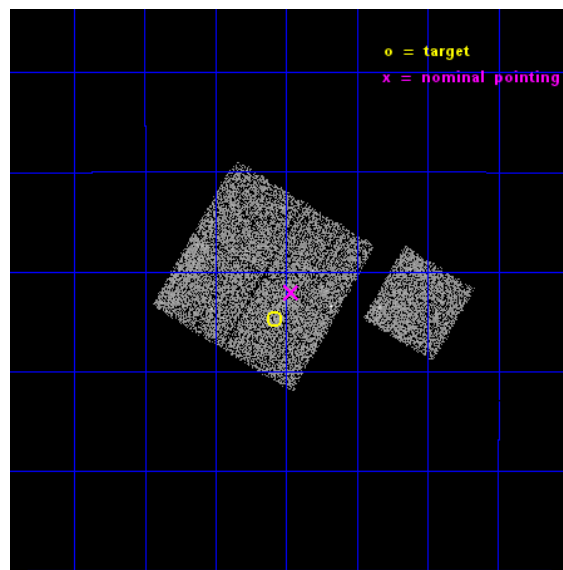
L2 Processing Date : Dec 3 2014

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1 Front

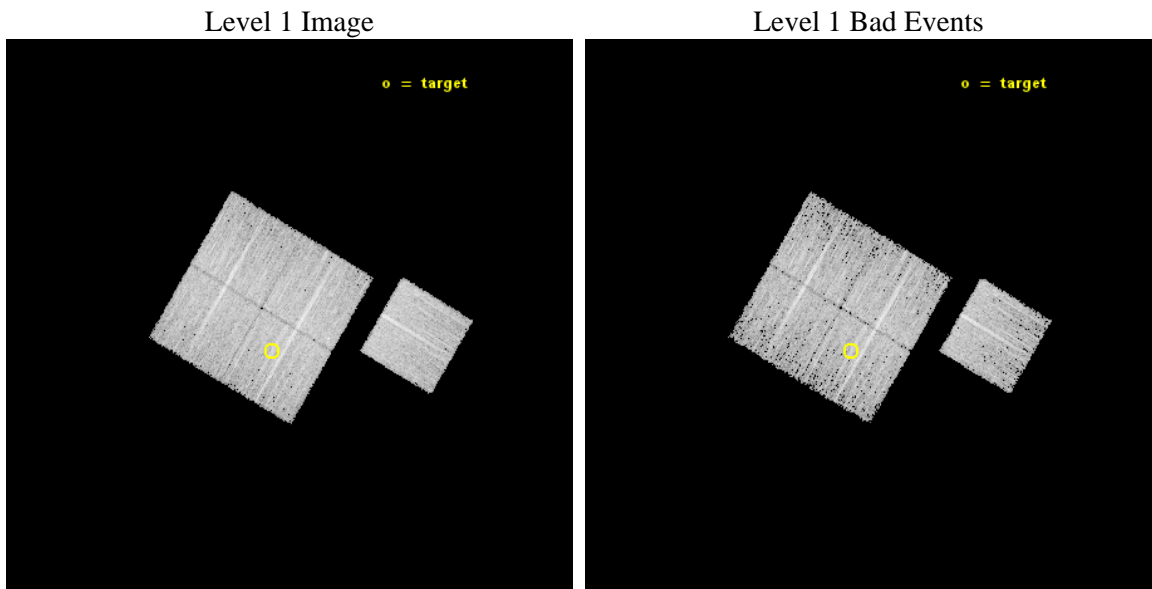
seq_num	801357	Sequence number
obs_id	15367	Observation id
title	A Search for Cool Cores in a Sample of $z = 0.4$ Galaxy Clusters	Pro
observer	Professor Gordon Garmire	Principal investigator
object	GMBCG J021.27091-09.41374	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	21.270833	Observer's specified target RA [deg]
dec_targ	-9.413694	Observer's specified target Dec [deg]
ra_nom	21.240872706136	Nominal RA [deg]
dec_nom	-9.3679606740845	Nominal Dec [deg]
roll_nom	120.55703319469	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10081.200077534	Sum of GTIs [s]
livetime	9949.4817768492	Livetime [s]
ontime0	10081.200077534	Sum of GTIs [s]
ontime1	10081.200077534	Sum of GTIs [s]
ontime2	10081.200077534	Sum of GTIs [s]
ontime3	10081.200077534	Sum of GTIs [s]
ontime6	10081.200077534	Sum of GTIs [s]
l2events	24143	Number of level 2 events



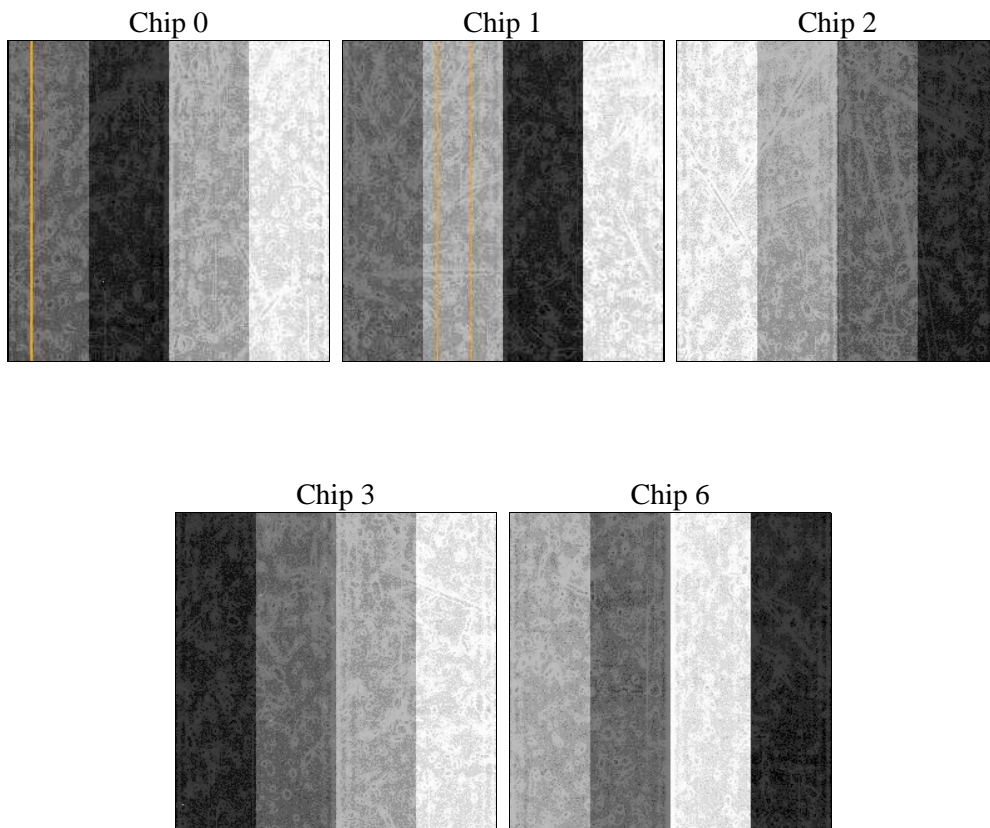
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10081.200077534	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	10081.200077534	Sum of GTIs [s]
date	2014-12-03T16:55:39	Date and time of file creation	ontime1	10081.200077534	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10081.200077534	Sum of GTIs [s]
			ontime3	10081.200077534	Sum of GTIs [s]
			ontime6	10081.200077534	Sum of GTIs [s]
			l1events	224391	Number of level 1 events

2.1.4 Events

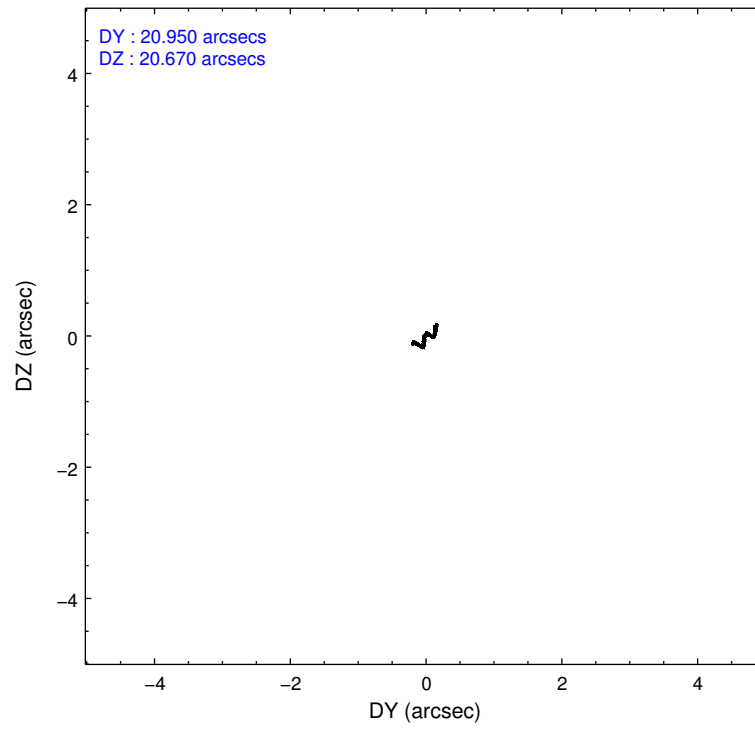
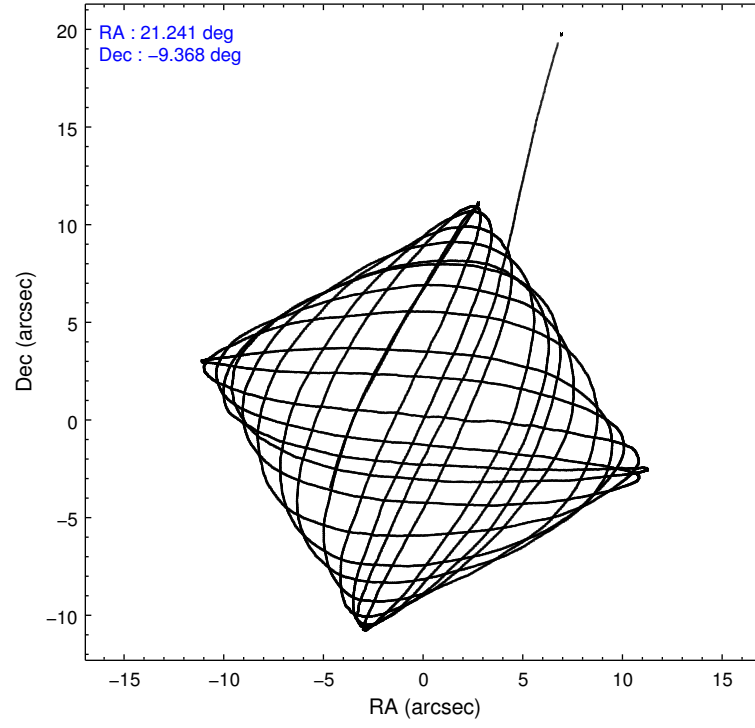
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	43053	42710	47841	43927	46860
rejected events	37454	36553	42282	38558	41132
rejected %	86%	85%	88%	87%	87%

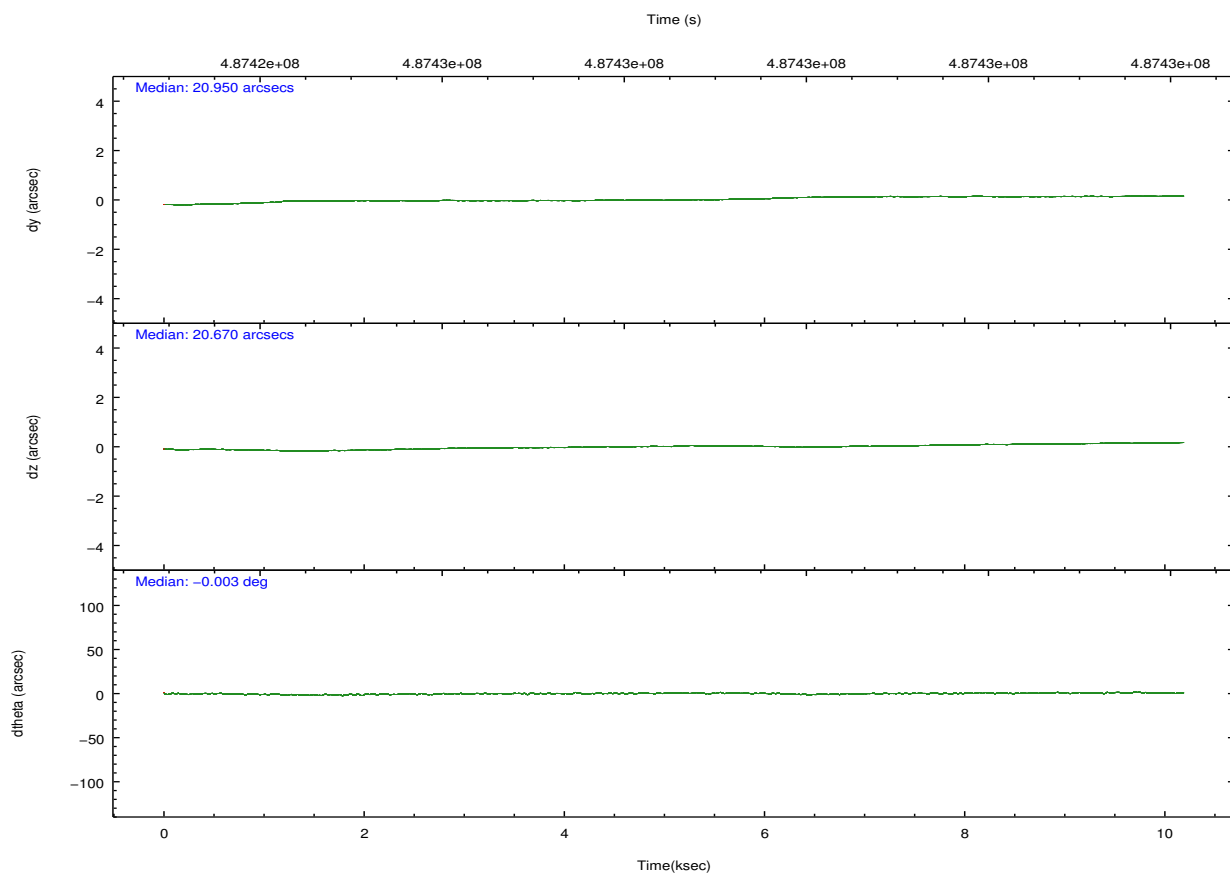
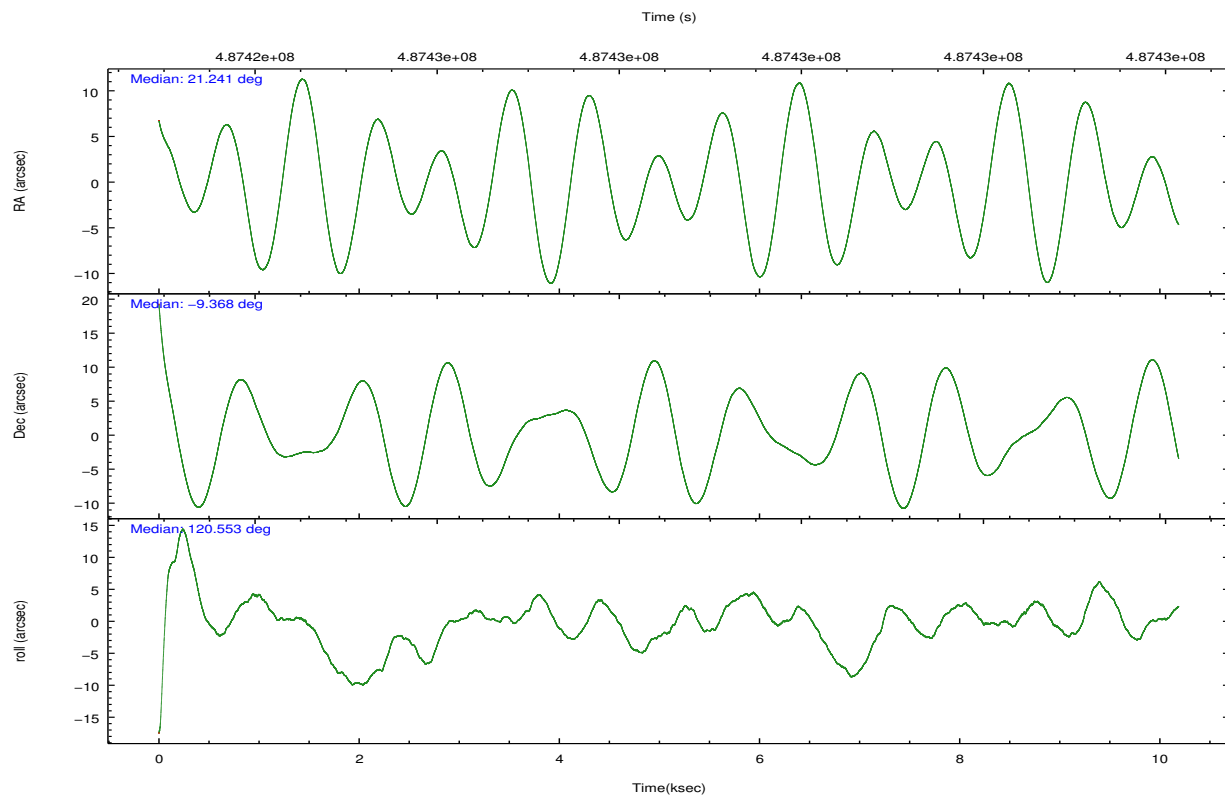
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1917	2165	1985	1925	1923
	4%	5%	4%	4%	4%
grade 1 events	21	14	25	33	16
	0%	0%	0%	0%	0%
grade 2 events	1441	1504	1390	1202	1290
	3%	3%	2%	2%	2%
grade 3 events	573	601	558	576	626
	1%	1%	1%	1%	1%
grade 4 events	540	580	550	571	585
	1%	1%	1%	1%	1%
grade 5 events	2147	2414	2119	2575	2361
	4%	5%	4%	5%	5%
grade 6 events	1129	1311	1082	1095	1305
	2%	3%	2%	2%	2%
grade 7 events	35285	34121	40132	35950	38754
	81%	79%	83%	81%	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	21.265185	21.24087270613596	CCD I2 on	Y	Y
[deg] Pointing Dec	-9.381414	-9.367960674084506	CCD I3 on	Y	Y
[deg] Pointing Roll	120.352345	120.5570331946872	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)	487423644.184000	487422034.27561	CCD S5 on	N	N
Observation start date	2013-06-12T11:26:17	2013-06-12T11:00:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	487433644.184000	487434589.5013	On-chip summing requested	N	N
Observation end date	2013-06-12T14:12:57	2013-06-12T14:29:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



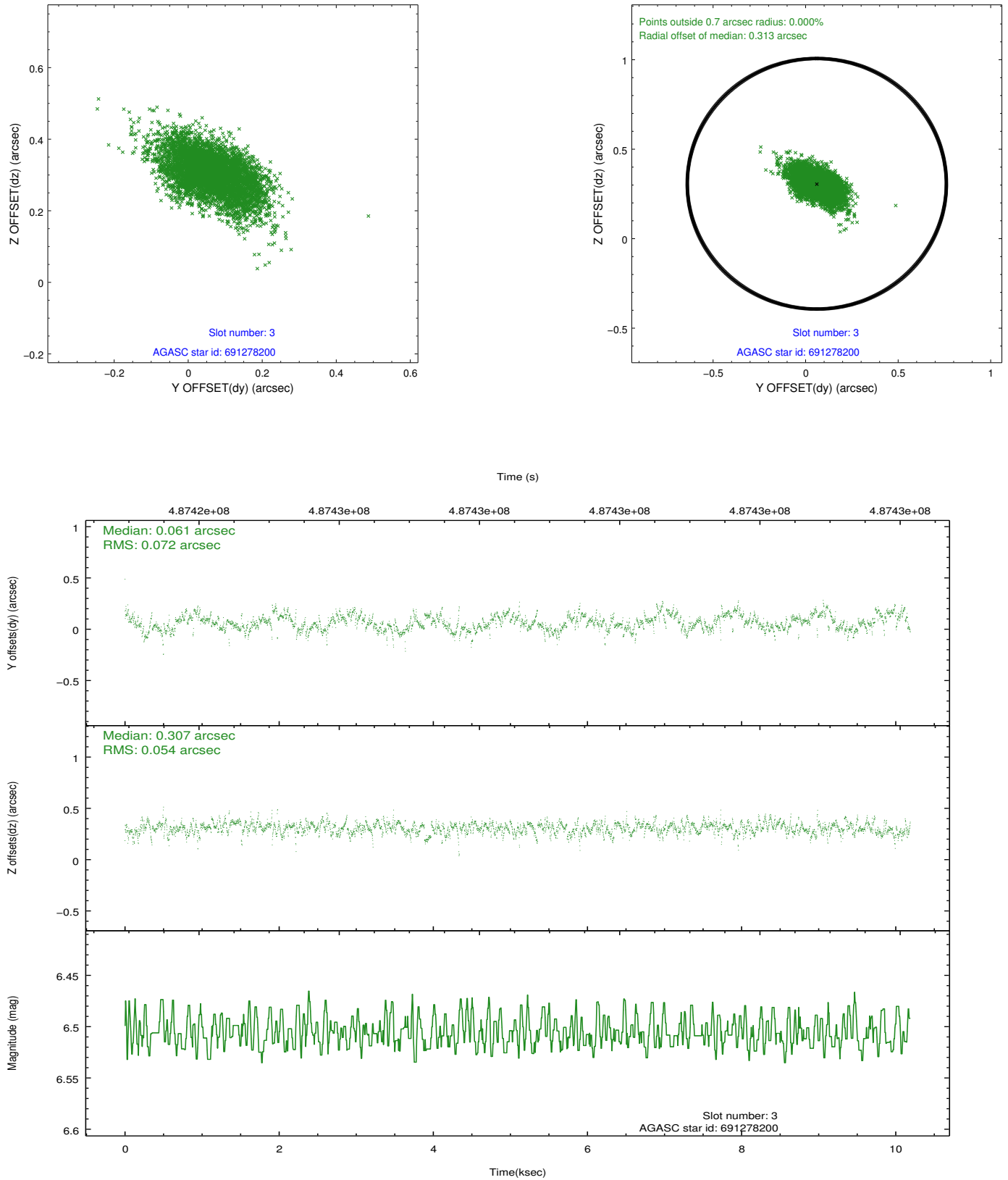


Slot Statistics

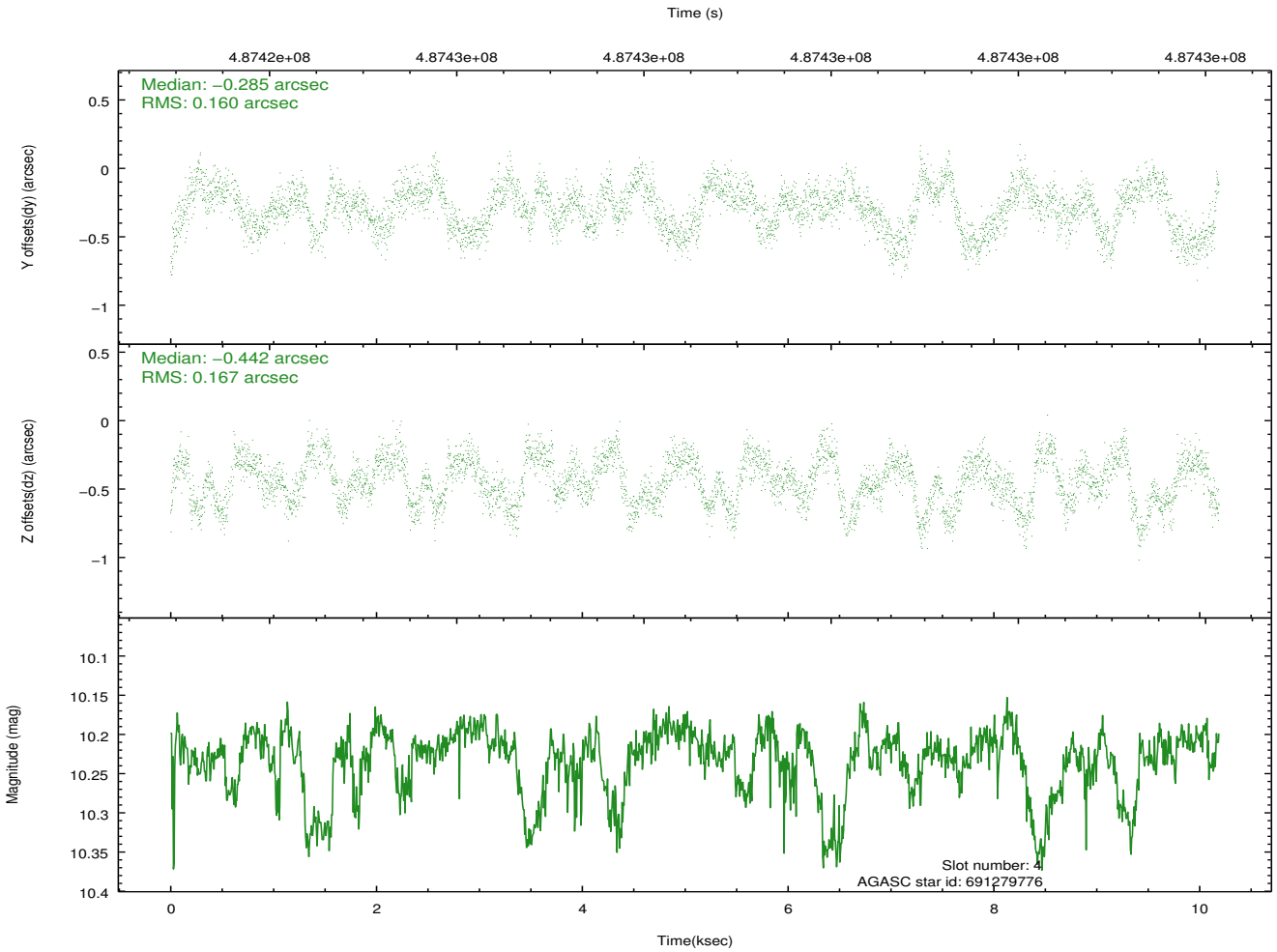
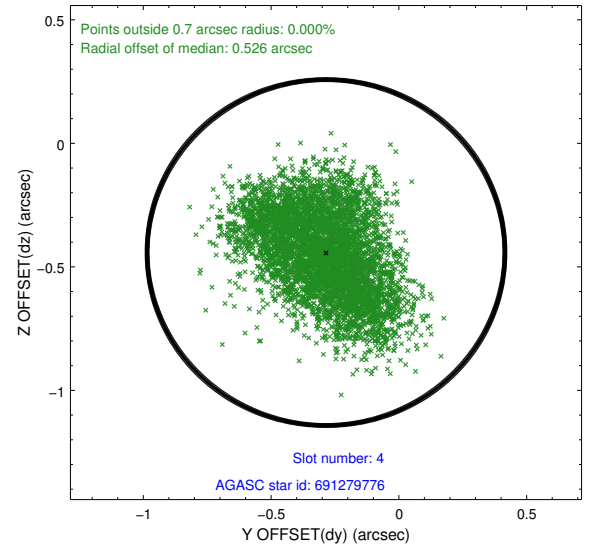
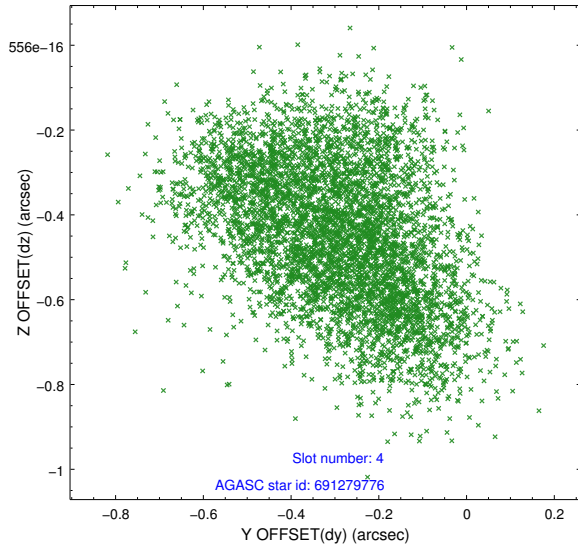
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.06	2486	0.132	-0.099	0.007	0.013	0.000000	0.000000	918.33	-1003.51
1	FID		ACIS-I-5	7.05	2486	-0.293	0.106	0.006	0.011	0.000000	0.000000	-1829.97	893.79
2	FID		ACIS-I-6	7.07	2486	0.069	0.064	0.007	0.011	0.000000	0.000000	383.18	1538.90
3	GUIDE	used	691278200	6.51	4971	0.061	0.307	0.093	0.159	21.479902	-8.504397	2338.11	-2254.44
4	GUIDE	used	691279776	10.23	4868	-0.285	-0.442	0.251	0.385	20.622227	-9.032938	2236.10	1339.17
5	GUIDE	used	691280384	6.48	4971	0.150	0.488	0.096	0.149	21.867903	-9.297148	-821.47	-1999.39
6	GUIDE	used	691281848	9.81	4937	0.013	-0.140	0.159	0.269	20.819978	-9.048639	1832.73	760.79
7	GUIDE	used	691283264	8.70	4969	0.060	-0.215	0.114	0.171	21.014082	-9.812033	-887.69	1551.57

2.4 Star Slots

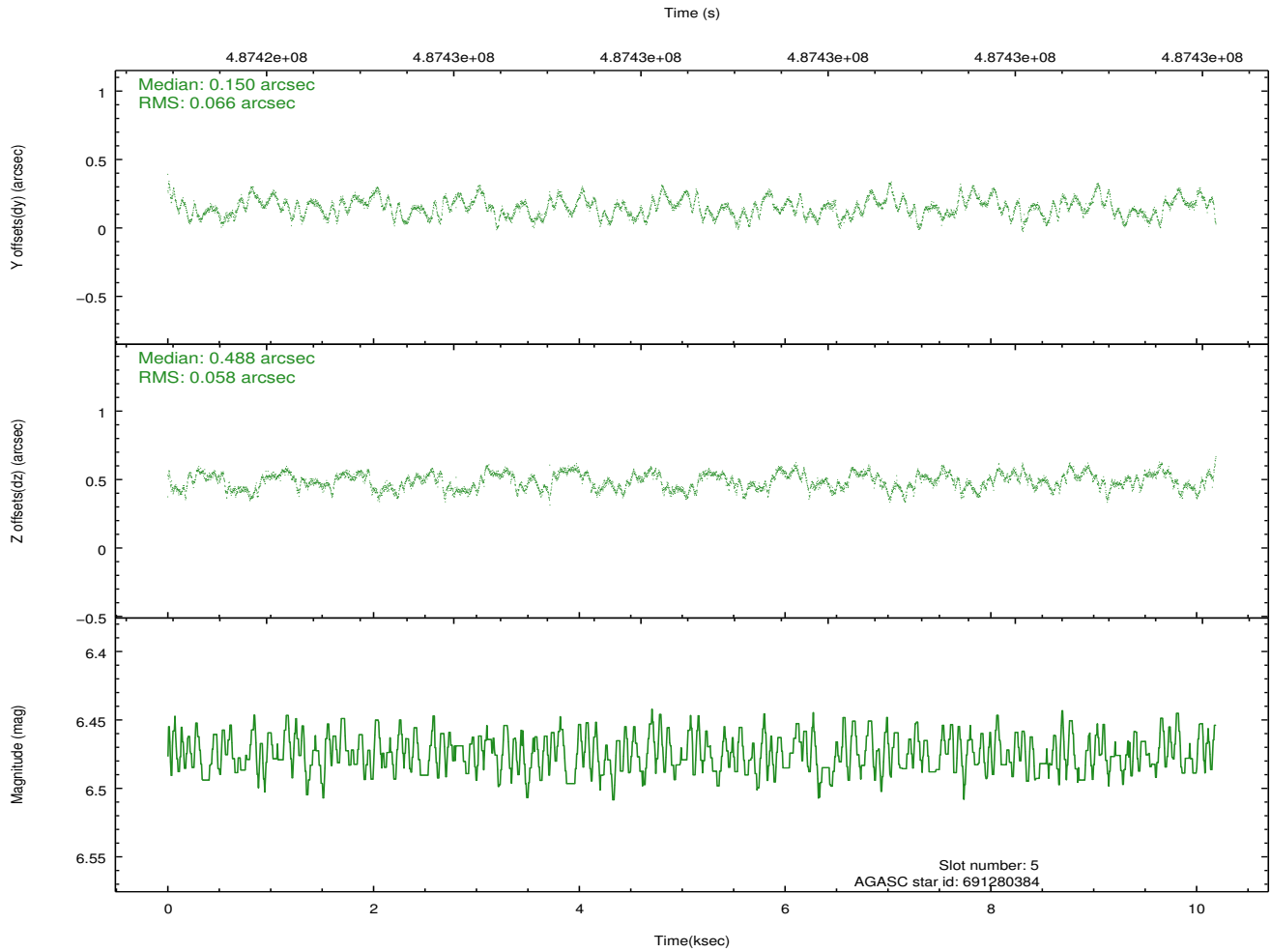
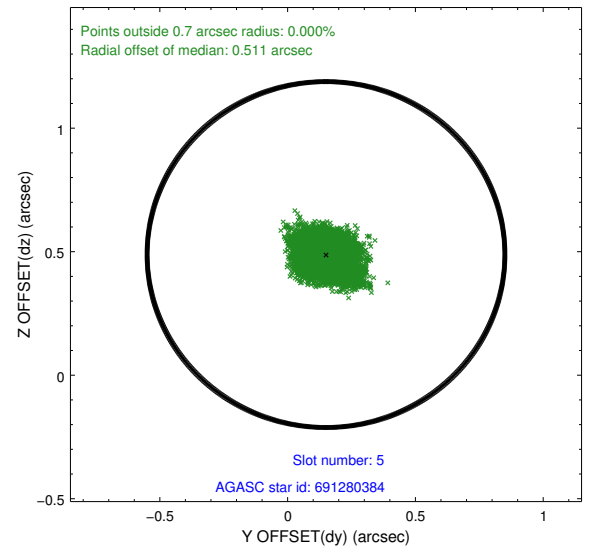
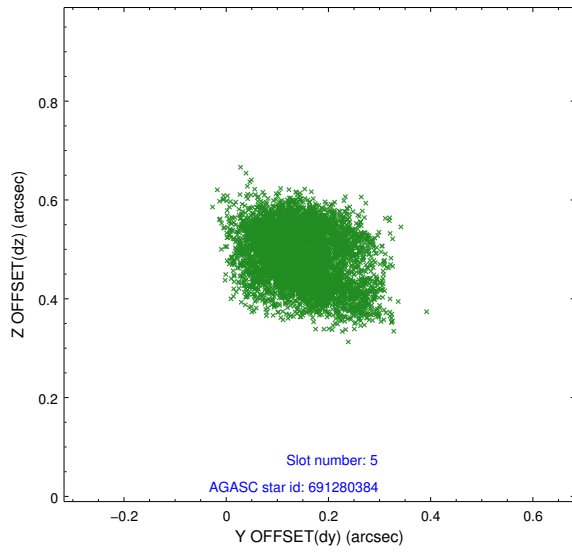
2.4.1 Slot 3



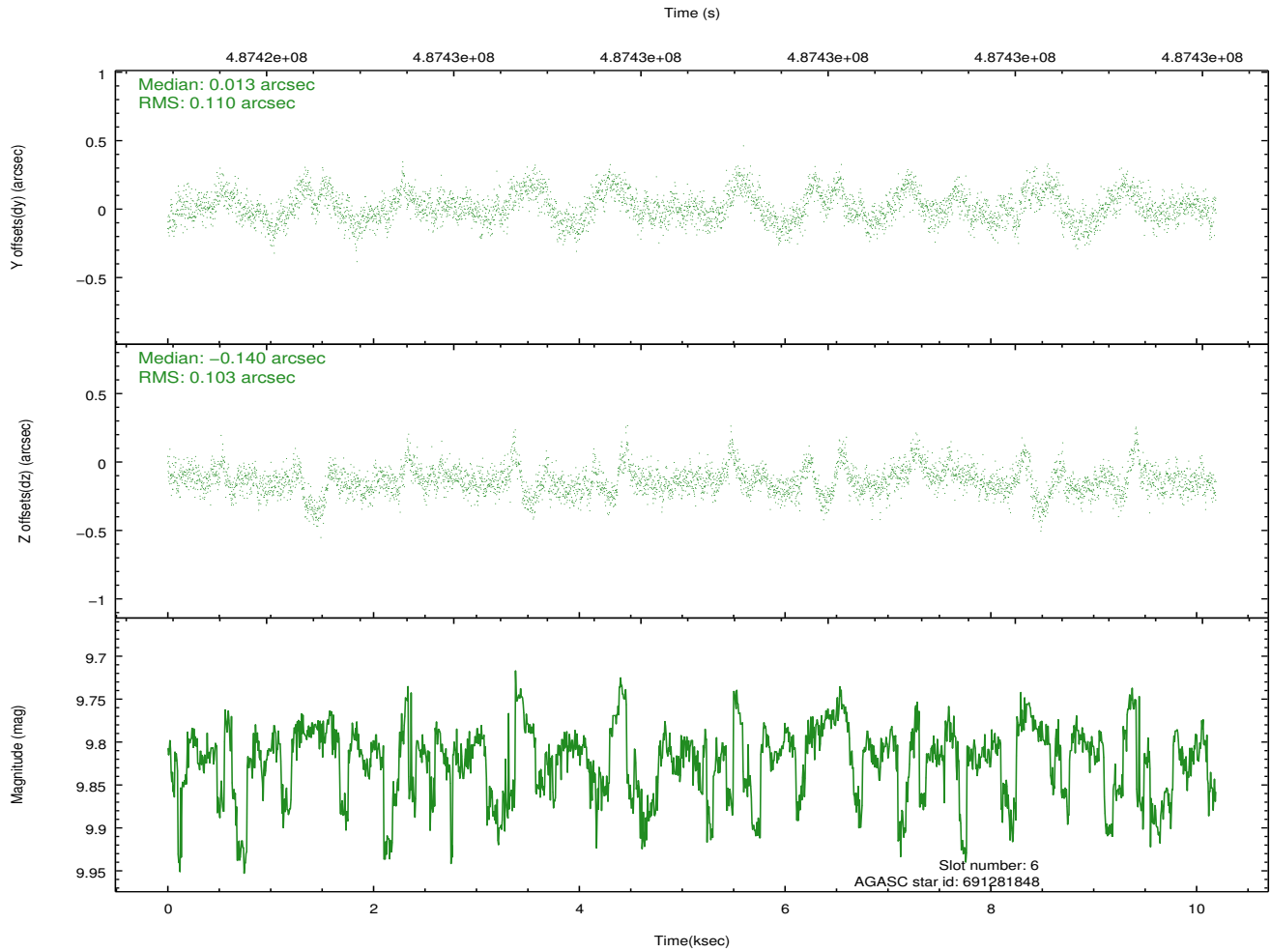
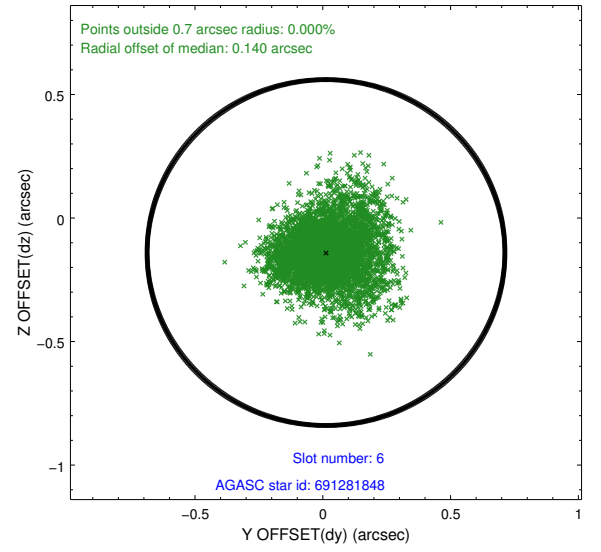
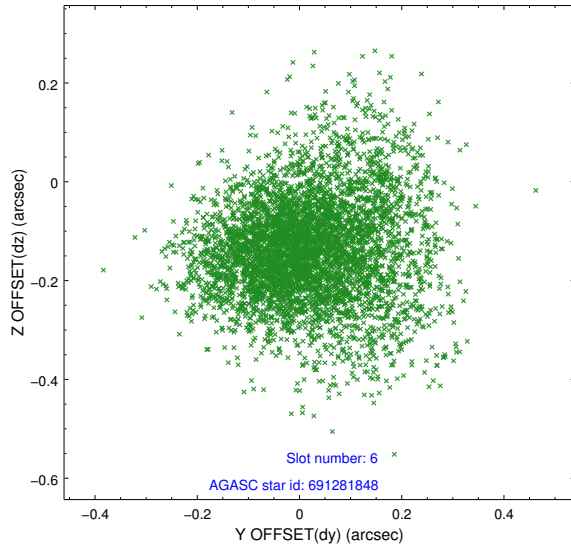
2.4.2 Slot 4



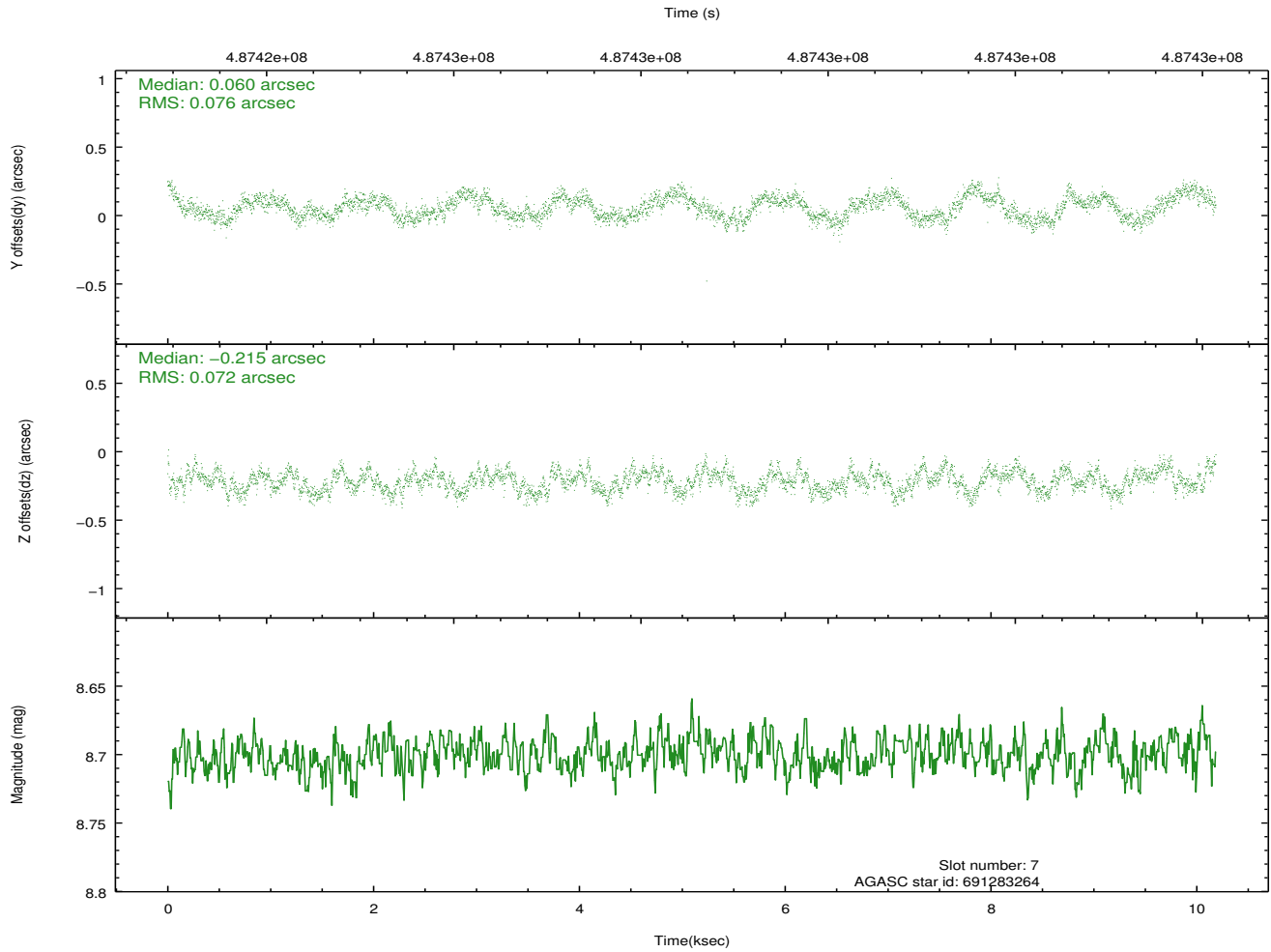
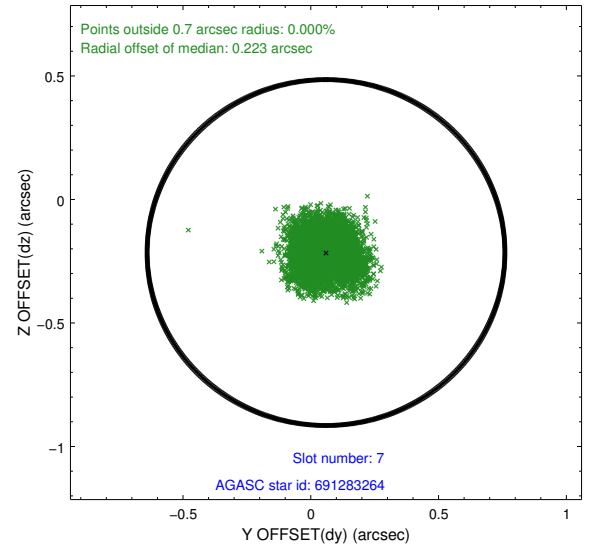
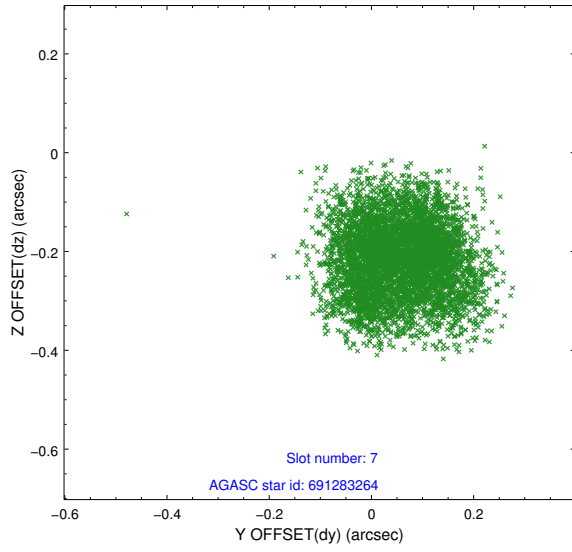
2.4.3 Slot 5



2.4.4 Slot 6

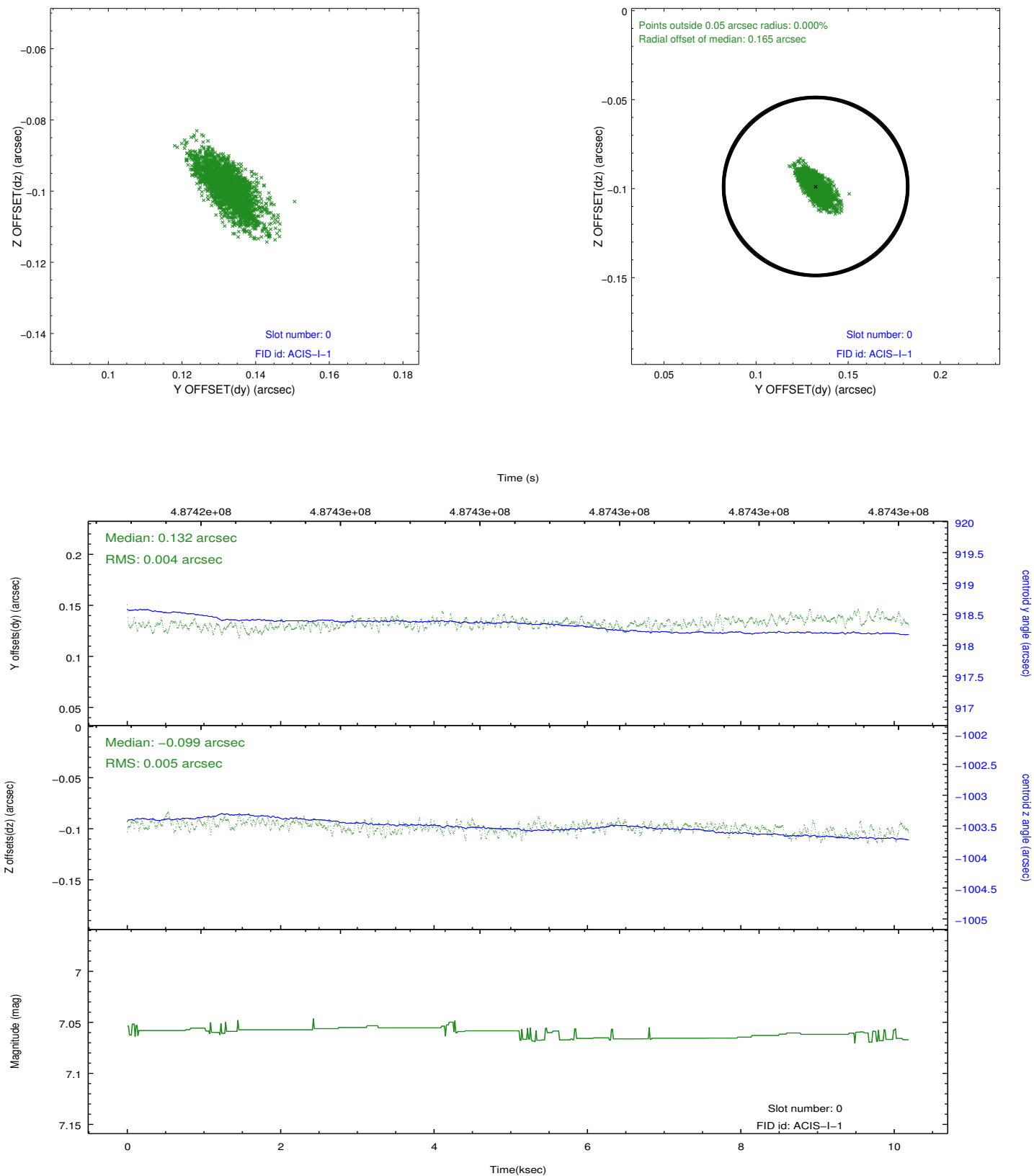


2.4.5 Slot 7

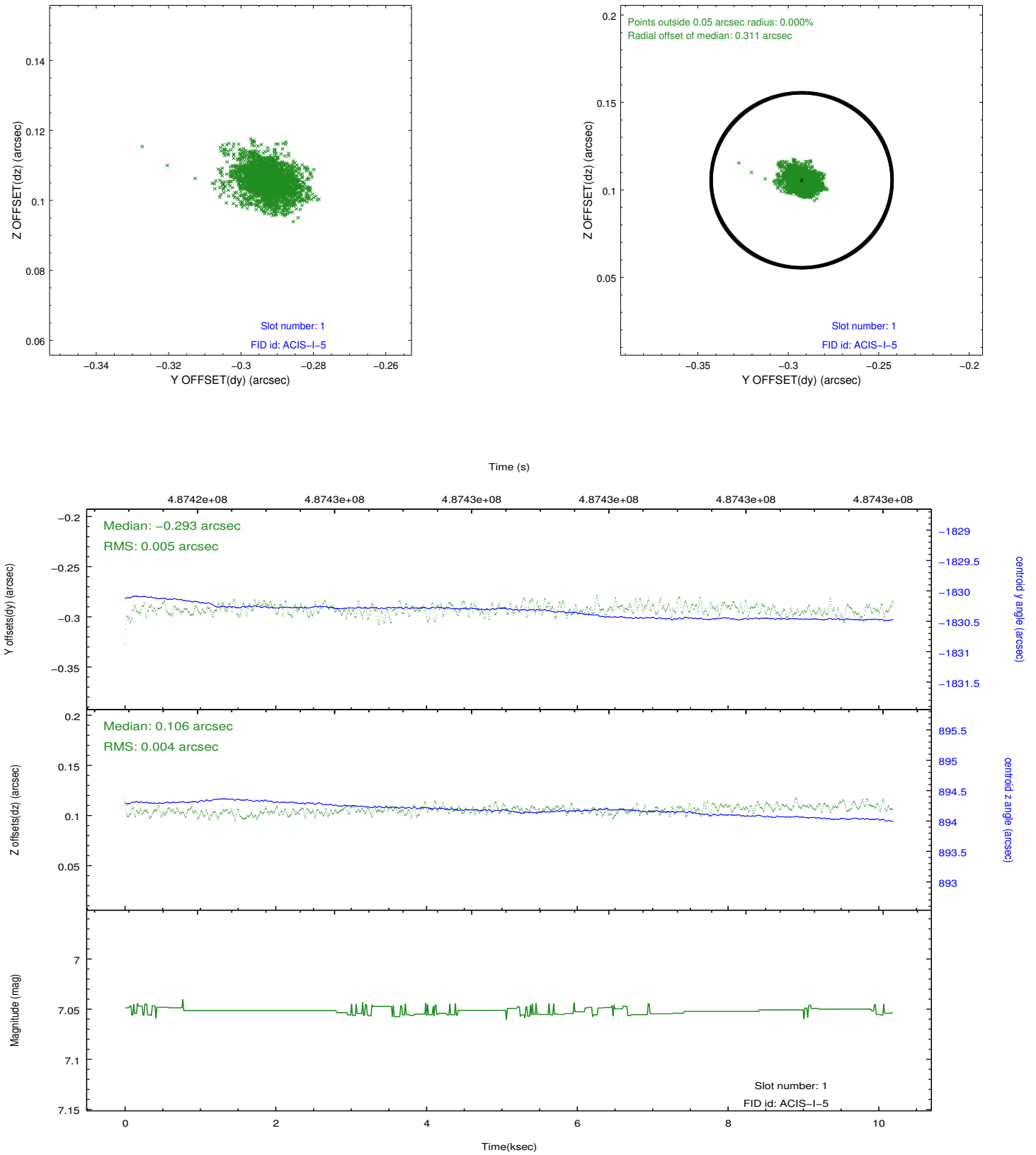


2.5 FID Slots

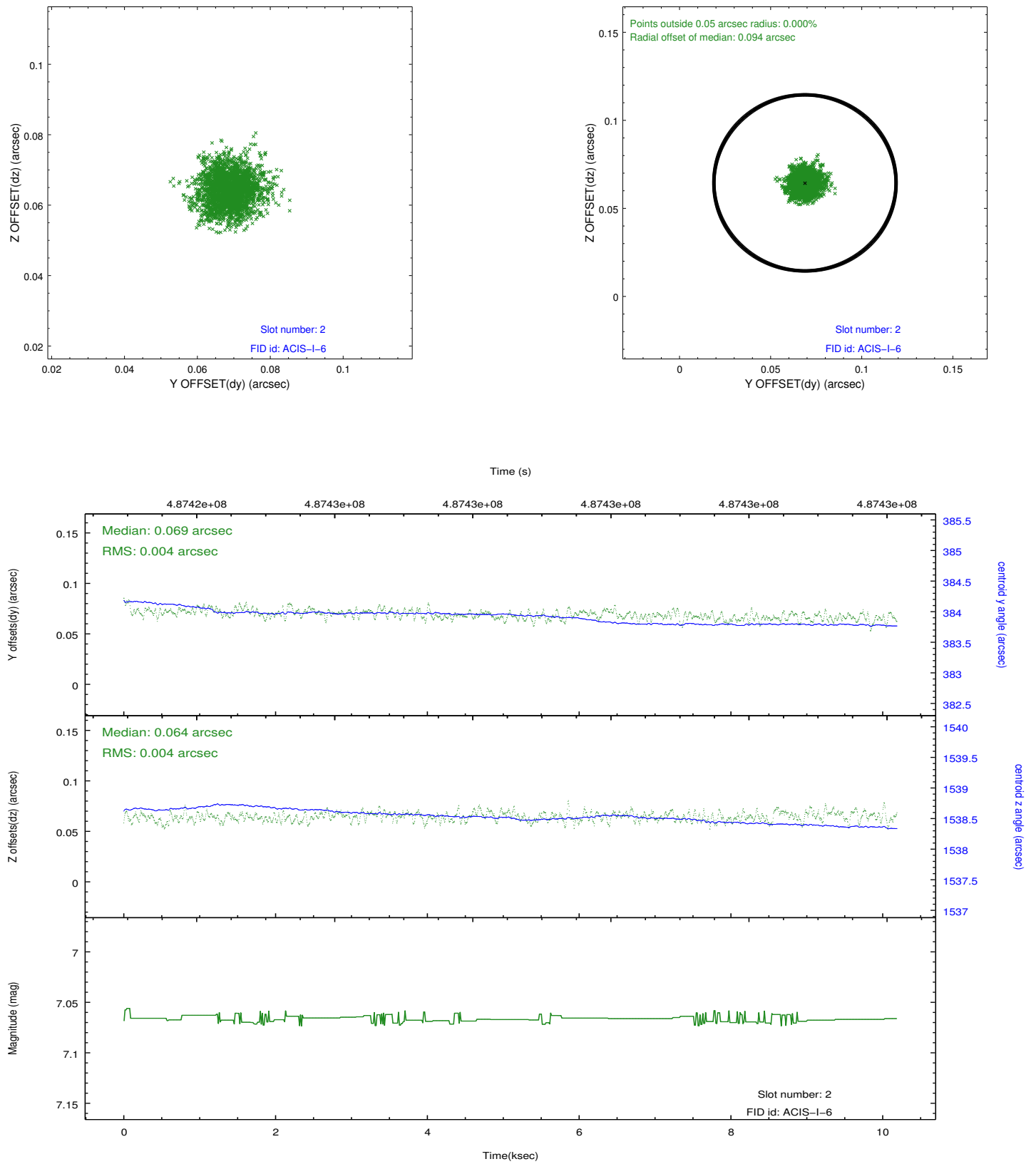
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.081200077534

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.