

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15370 - L2 Version 2
Chandra X-Ray Center

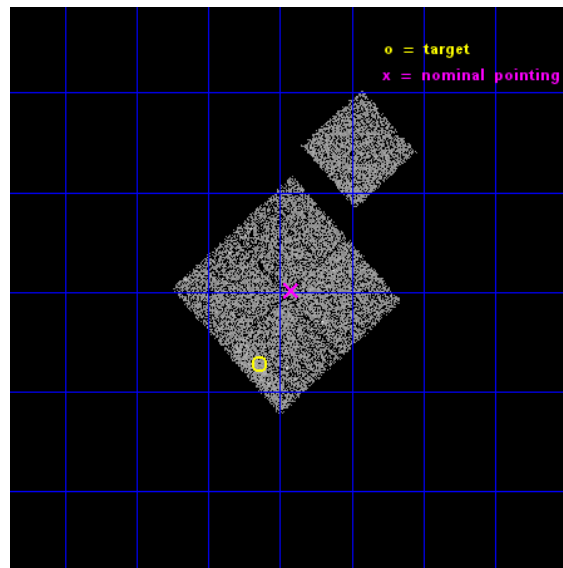
L2 Processing Date : Nov 29 2014

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1 Front

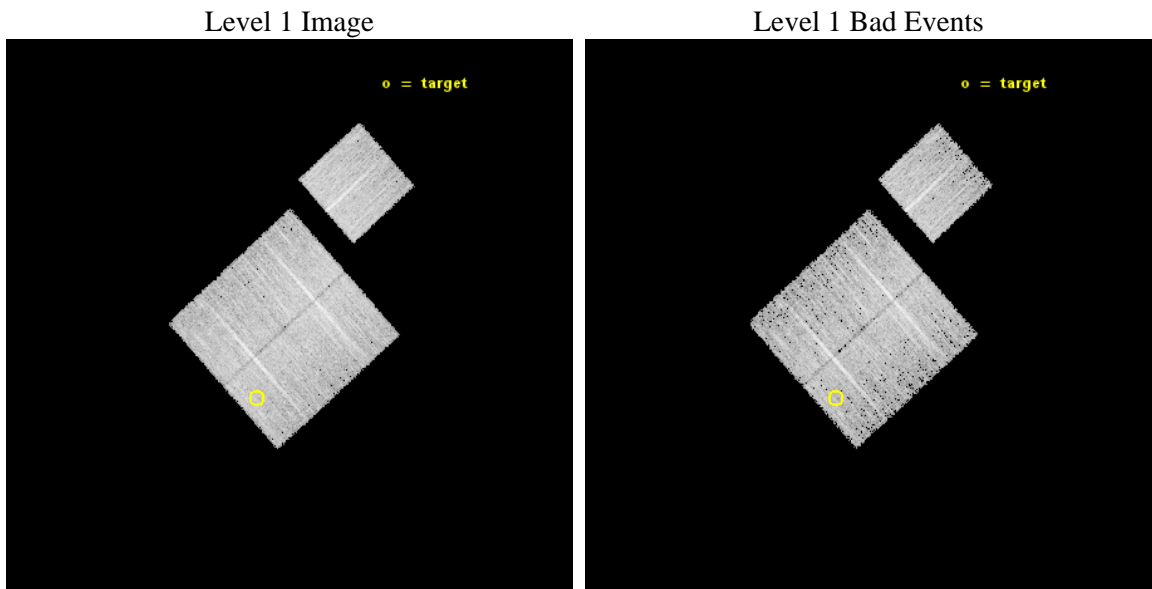
seq_num	801360	Sequence number
obs_id	15370	Observation id
title	A Search for Cool Cores in a Sample of $z = 0.4$ Galaxy Clusters	Pro
observer	Professor Gordon Garmire	Principal investigator
object	GMBCG J052.28503+00.71337	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	52.285	Observer's specified target RA [deg]
dec_targ	0.713361	Observer's specified target Dec [deg]
ra_nom	52.23023301846	Nominal RA [deg]
dec_nom	0.83644606370941	Nominal Dec [deg]
roll_nom	48.009802522005	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9771.2000751495	Sum of GTIs [s]
livetime	9643.5321527149	Livetime [s]
ontime0	9771.2000751495	Sum of GTIs [s]
ontime1	9771.2000751495	Sum of GTIs [s]
ontime2	9771.2000751495	Sum of GTIs [s]
ontime3	9768.0590649247	Sum of GTIs [s]
ontime6	9771.2000751495	Sum of GTIs [s]
l2events	25711	Number of level 2 events



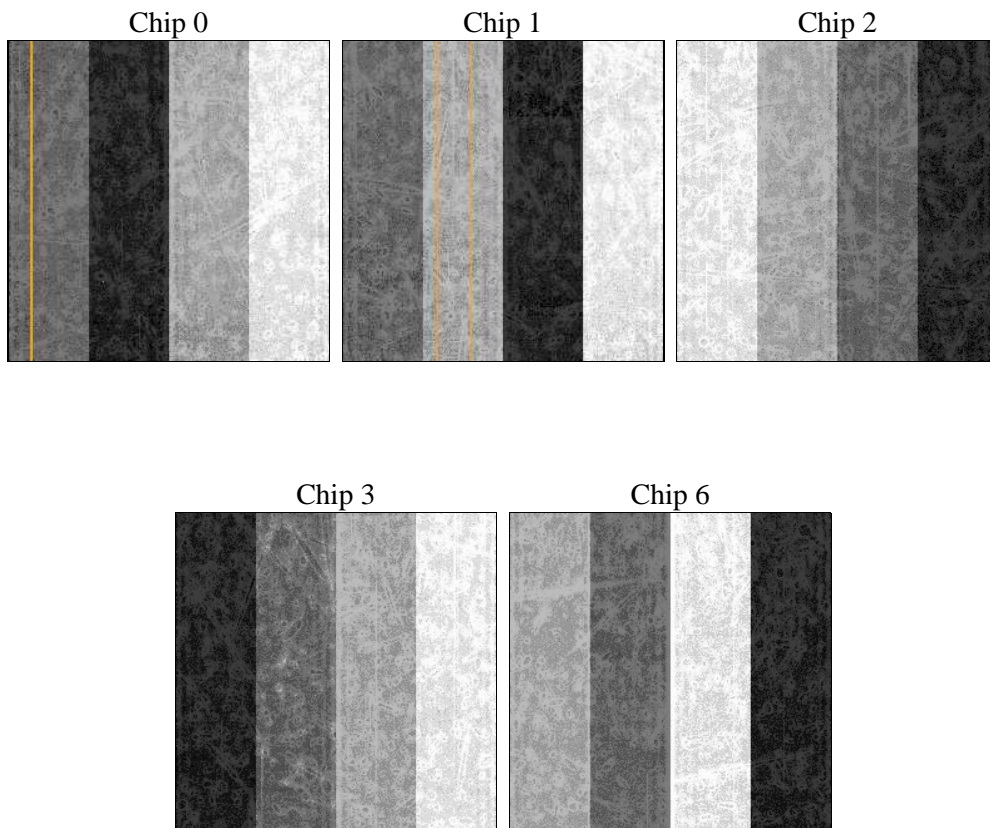
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.269000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	9771.2000751495	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	9771.2000751495	Sum of GTIs [s]
date	2014-11-29T03:50:40	Date and time of file creation	ontime1	9771.2000751495	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9771.2000751495	Sum of GTIs [s]
			ontime3	9768.0590649247	Sum of GTIs [s]
			ontime6	9771.2000751495	Sum of GTIs [s]
			l1events	239524	Number of level 1 events

2.1.4 Events

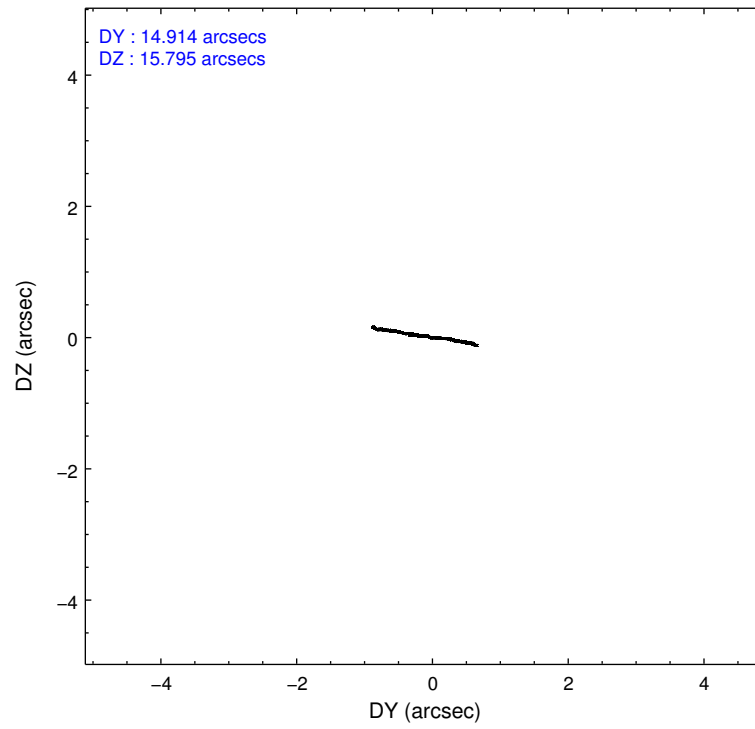
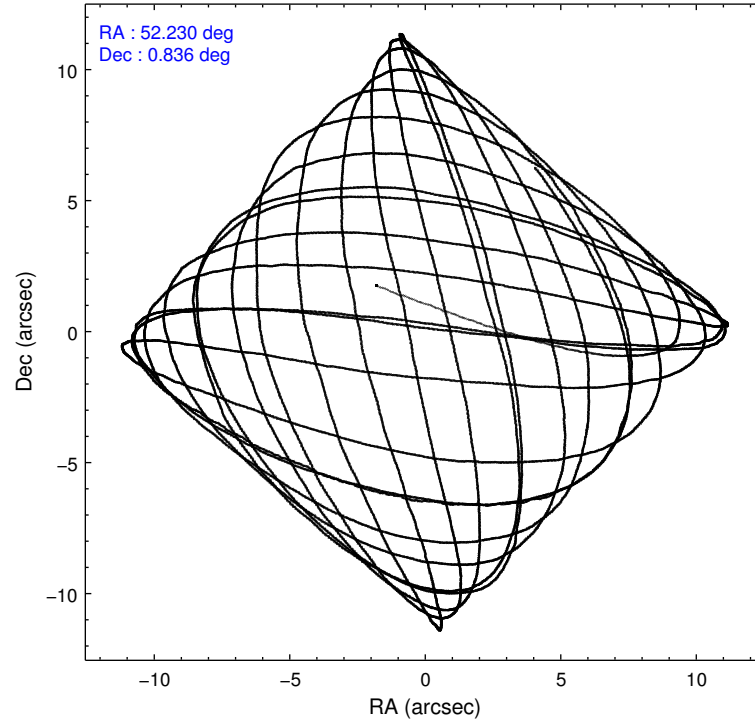
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	44578	44929	50102	49023	50892
rejected events	38566	38299	44363	43290	44876
rejected %	86%	85%	88%	88%	88%

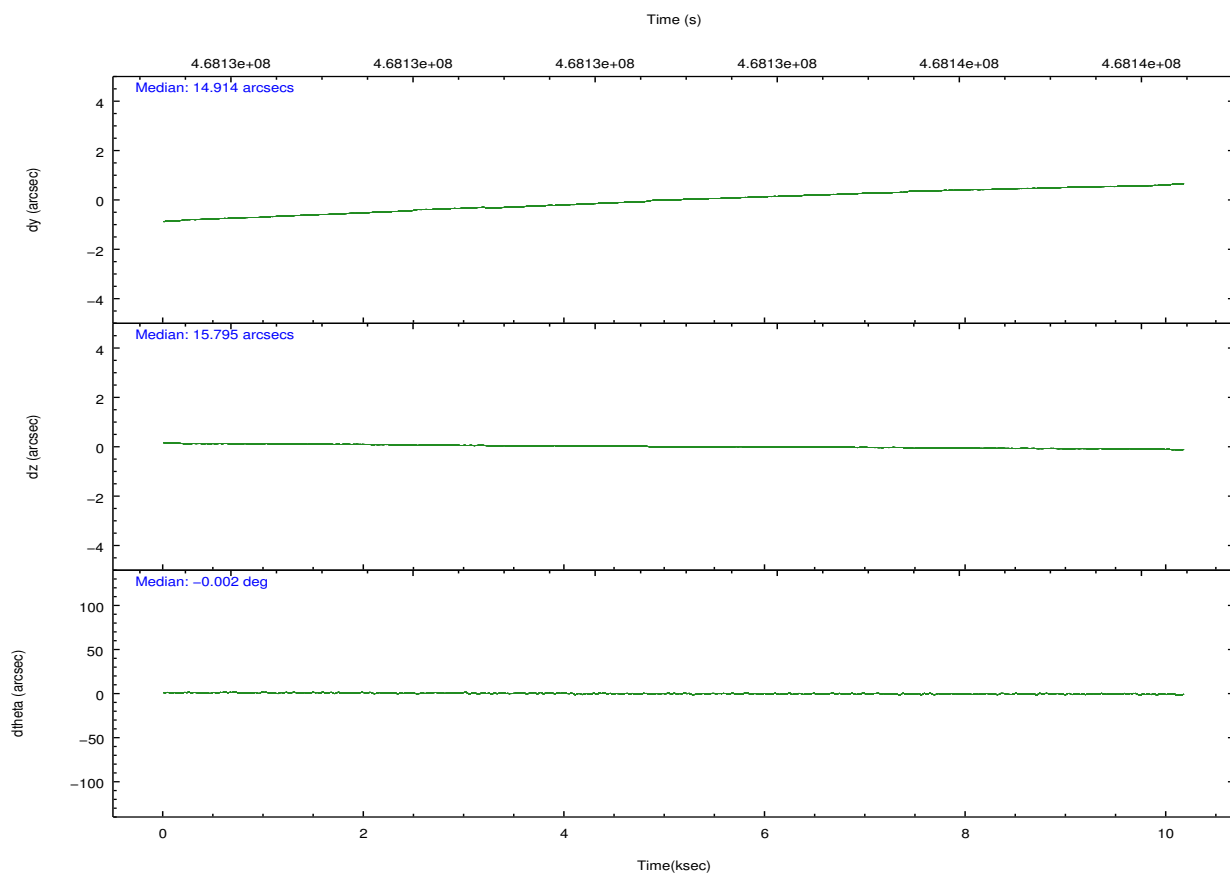
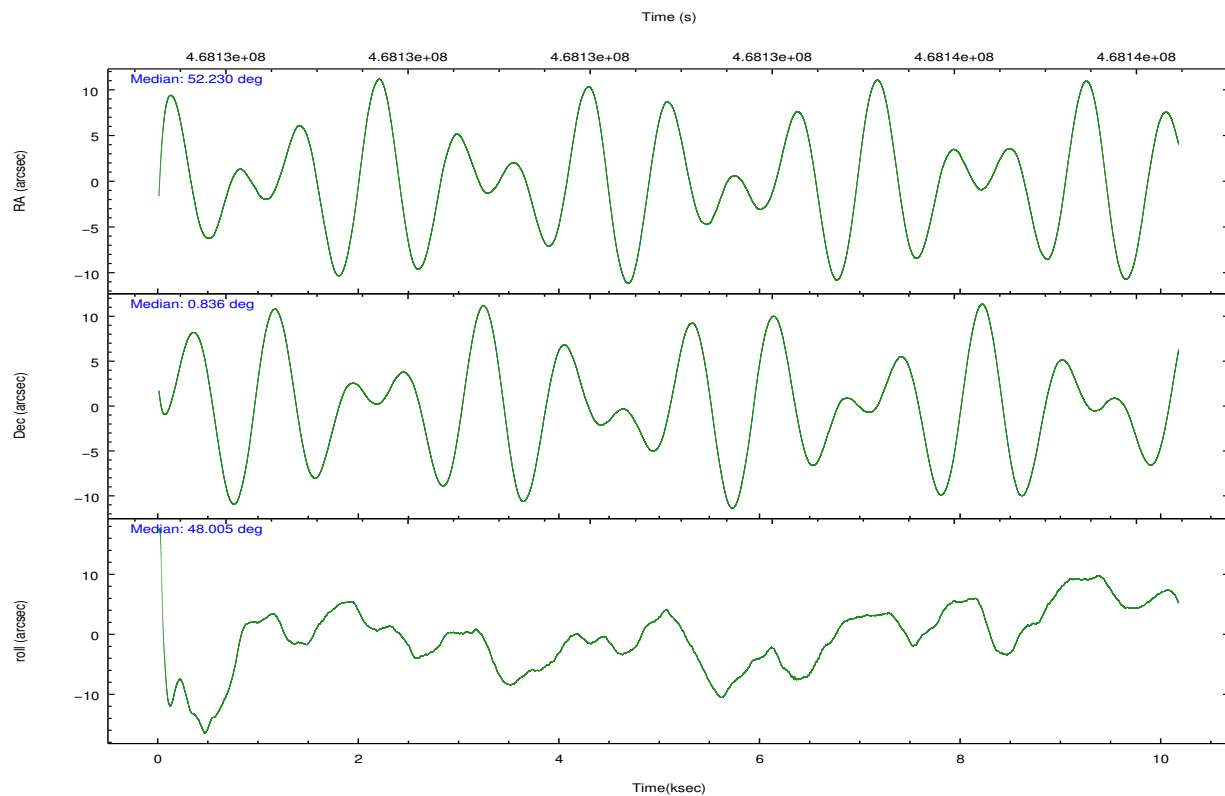
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2114	2432	1968	1978	2047
	4%	5%	3%	4%	4%
grade 1 events	33	29	33	28	15
	0%	0%	0%	0%	0%
grade 2 events	1444	1583	1403	1256	1357
	3%	3%	2%	2%	2%
grade 3 events	640	605	603	588	593
	1%	1%	1%	1%	1%
grade 4 events	590	624	627	597	623
	1%	1%	1%	1%	1%
grade 5 events	2400	2501	2244	2645	2533
	5%	5%	4%	5%	4%
grade 6 events	1230	1393	1143	1322	1400
	2%	3%	2%	2%	2%
grade 7 events	36127	35762	42081	40609	42324
	81%	79%	83%	82%	83%

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	52.224596	52.23023301845956	CCD I2 on	Y	Y
[deg] Pointing Dec	0.809514	0.8364460637094087	CCD I3 on	Y	Y
[deg] Pointing Roll	47.801147	48.00980252200523	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)	468127955.184000	468126906.38332	CCD S5 on	N	N
Observation start date	2012-11-01T03:31:28	2012-11-01T03:15:06	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	468137955.184000	468138192.65893	On-chip summing requested	N	N
Observation end date	2012-11-01T06:18:08	2012-11-01T06:23:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



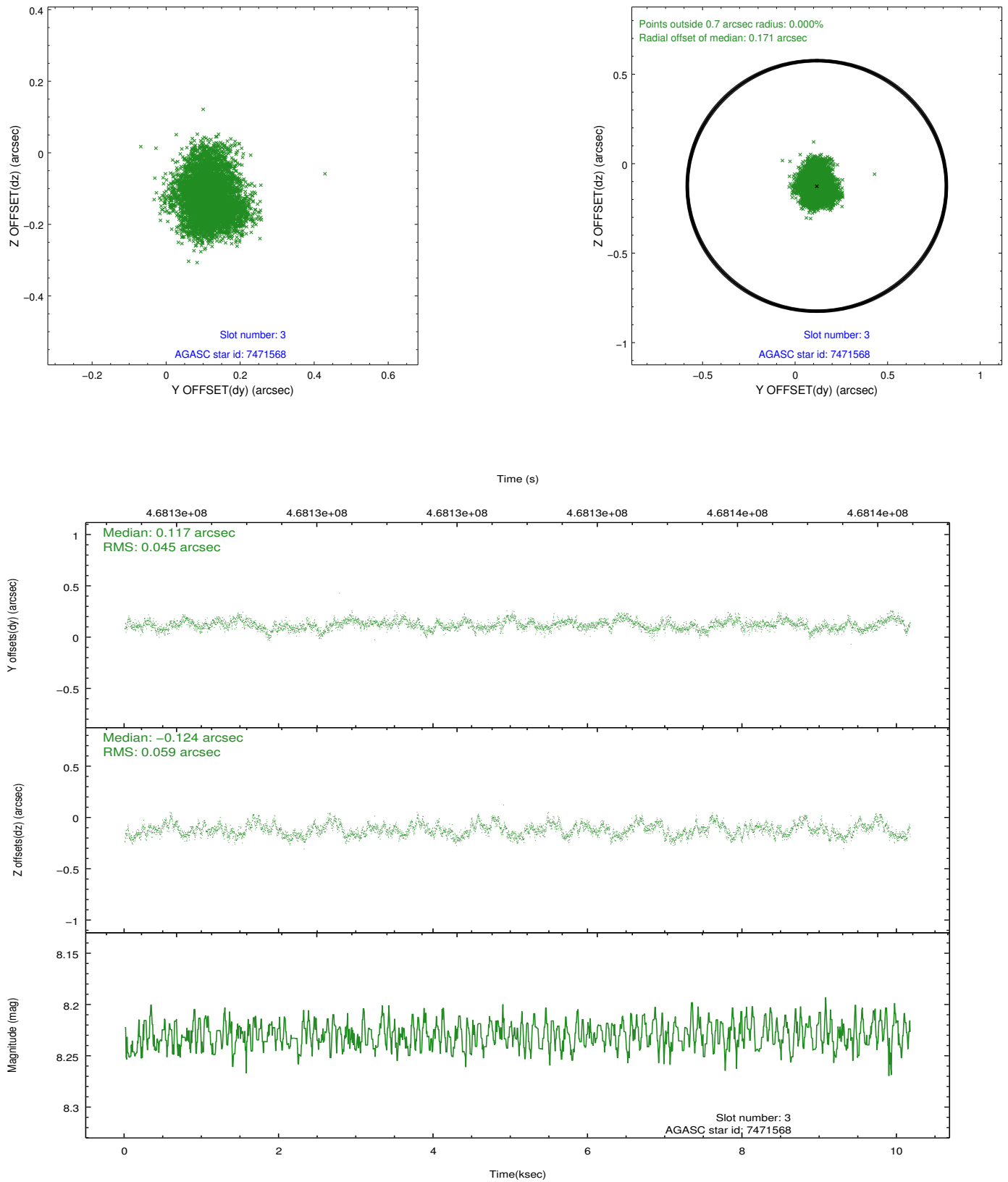


Slot Statistics

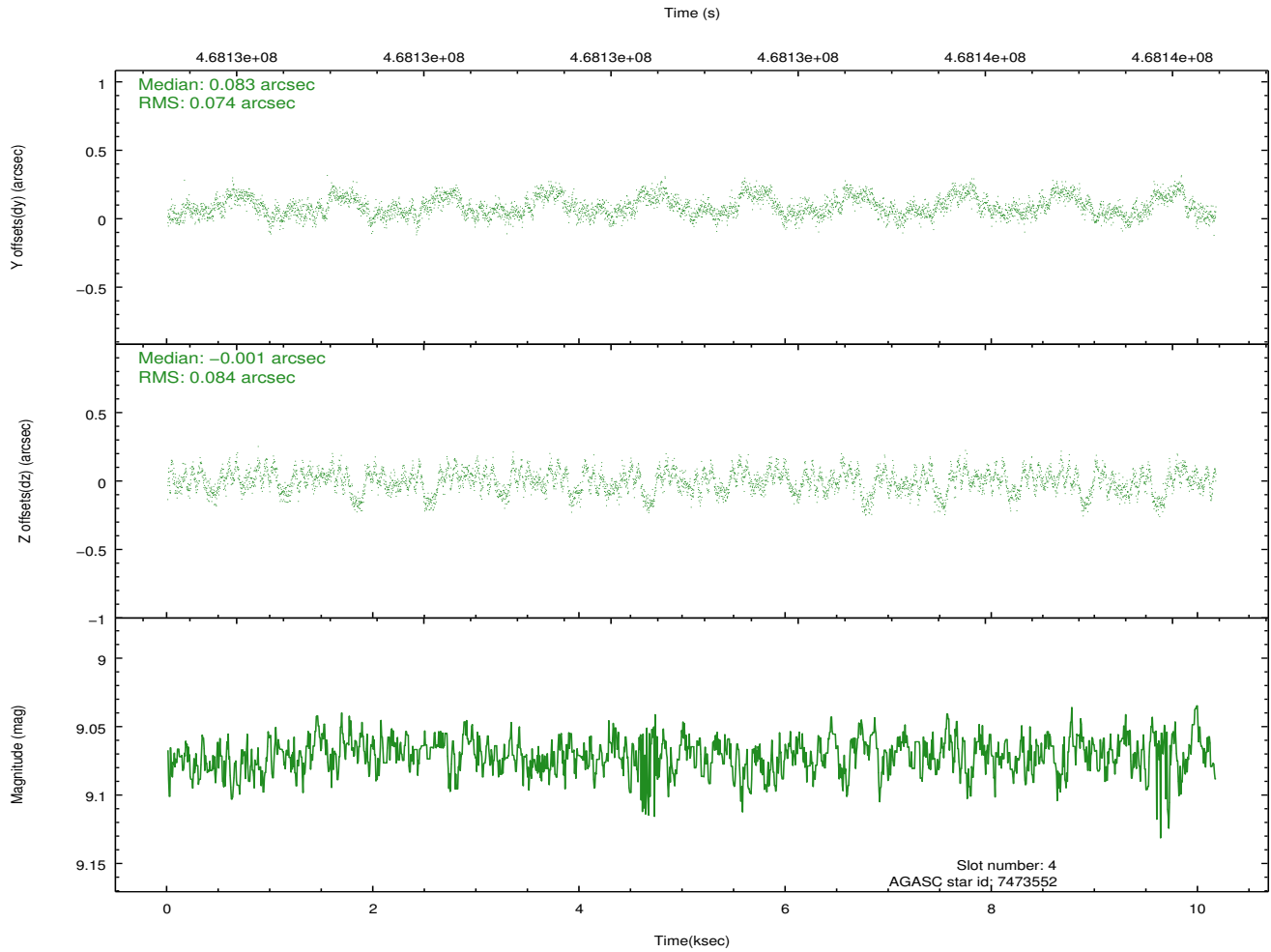
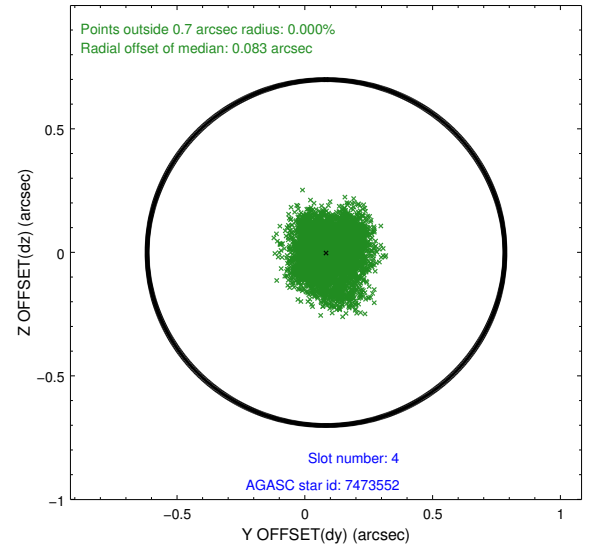
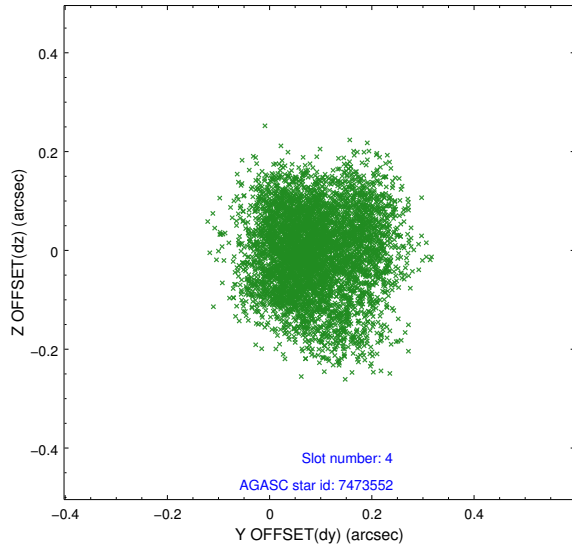
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	2480	0.044	-0.019	0.018	0.027	0.000000	0.000000	924.64	-839.45
1	FID		ACIS-I-5	7.06	2480	-0.209	0.049	0.011	0.018	0.000000	0.000000	-1823.43	1057.85
2	FID		ACIS-I-6	7.06	2480	0.072	0.043	0.009	0.014	0.000000	0.000000	389.65	1702.93
3	GUIDE	used	7471568	8.23	4958	0.117	-0.124	0.081	0.125	52.489372	0.552202	-45.35	-1328.18
4	GUIDE	used	7473552	9.07	4959	0.083	-0.001	0.121	0.188	52.309358	0.416190	-842.03	-1176.92
5	GUIDE	used	8389448	9.43	4938	-0.042	0.009	0.127	0.207	52.557838	1.074423	1512.16	-247.92
6	GUIDE	used	8393376	9.55	4941	-0.109	0.086	0.140	0.212	52.551870	0.722467	559.73	-1082.81
7	GUIDE	used	617222144	9.91	4924	-0.073	0.042	0.242	0.360	52.215015	-0.000259	-2182.24	-1932.78

2.4 Star Slots

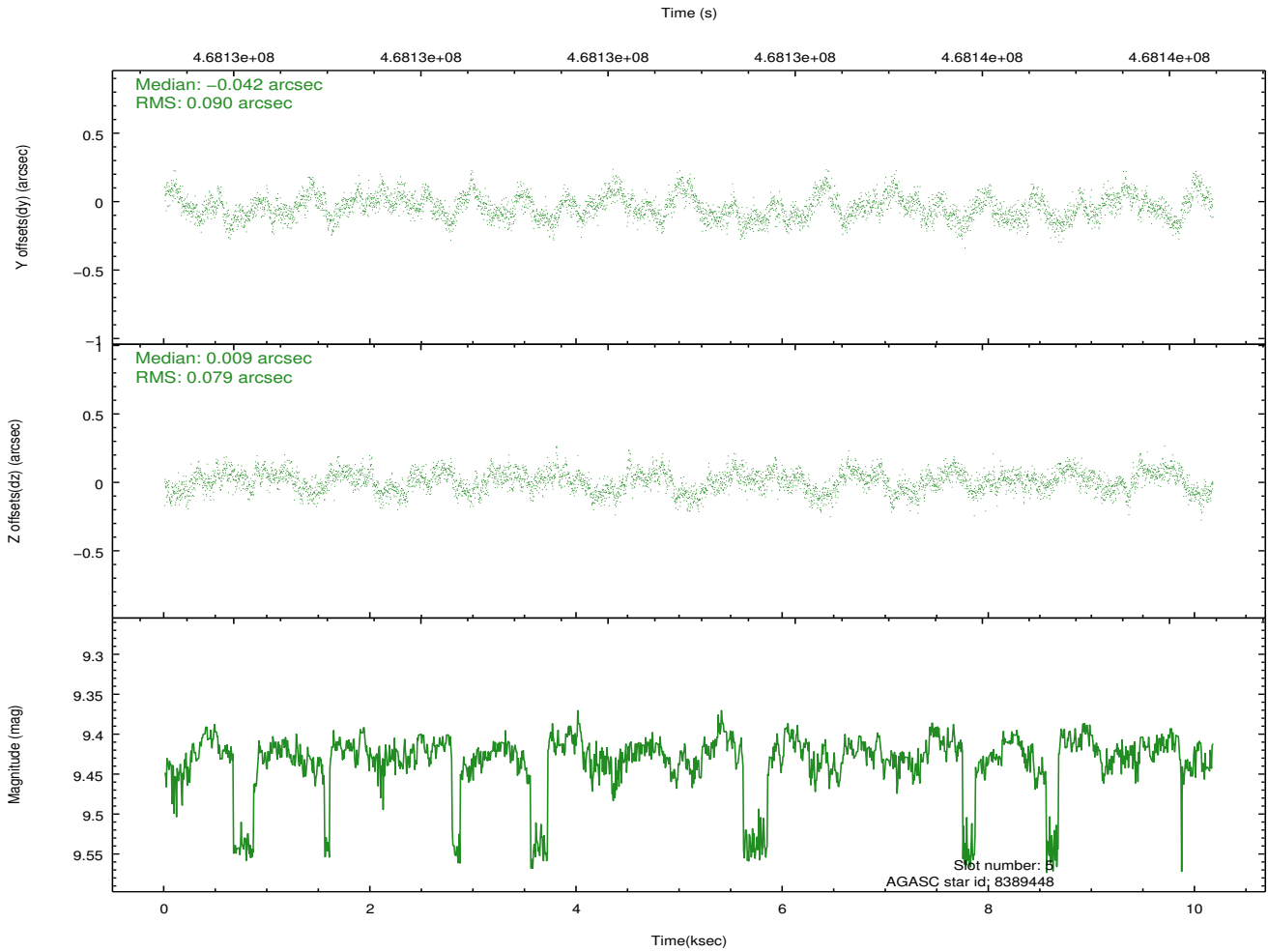
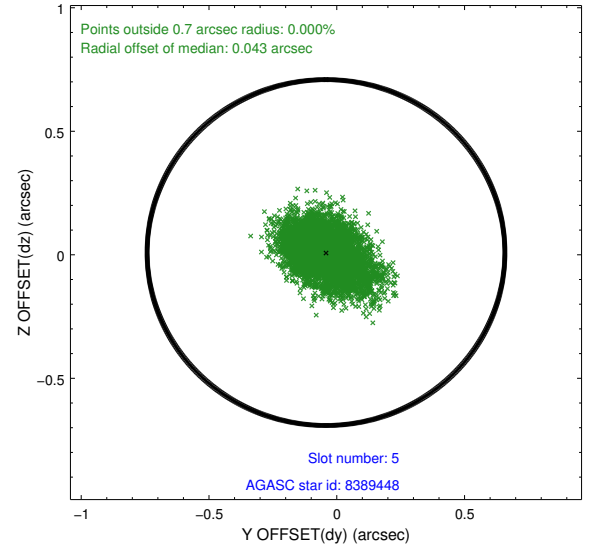
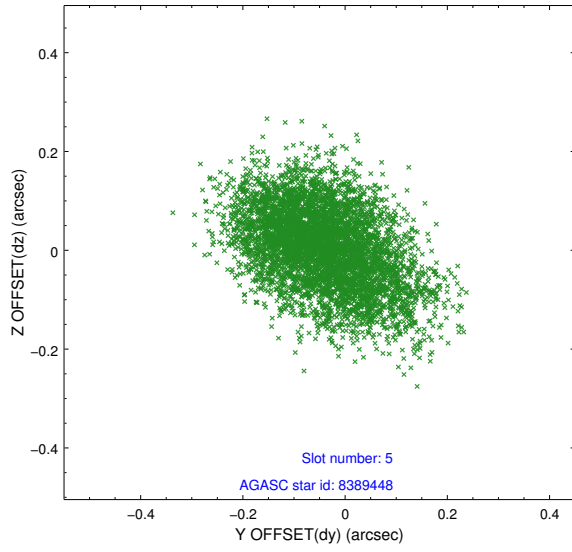
2.4.1 Slot 3



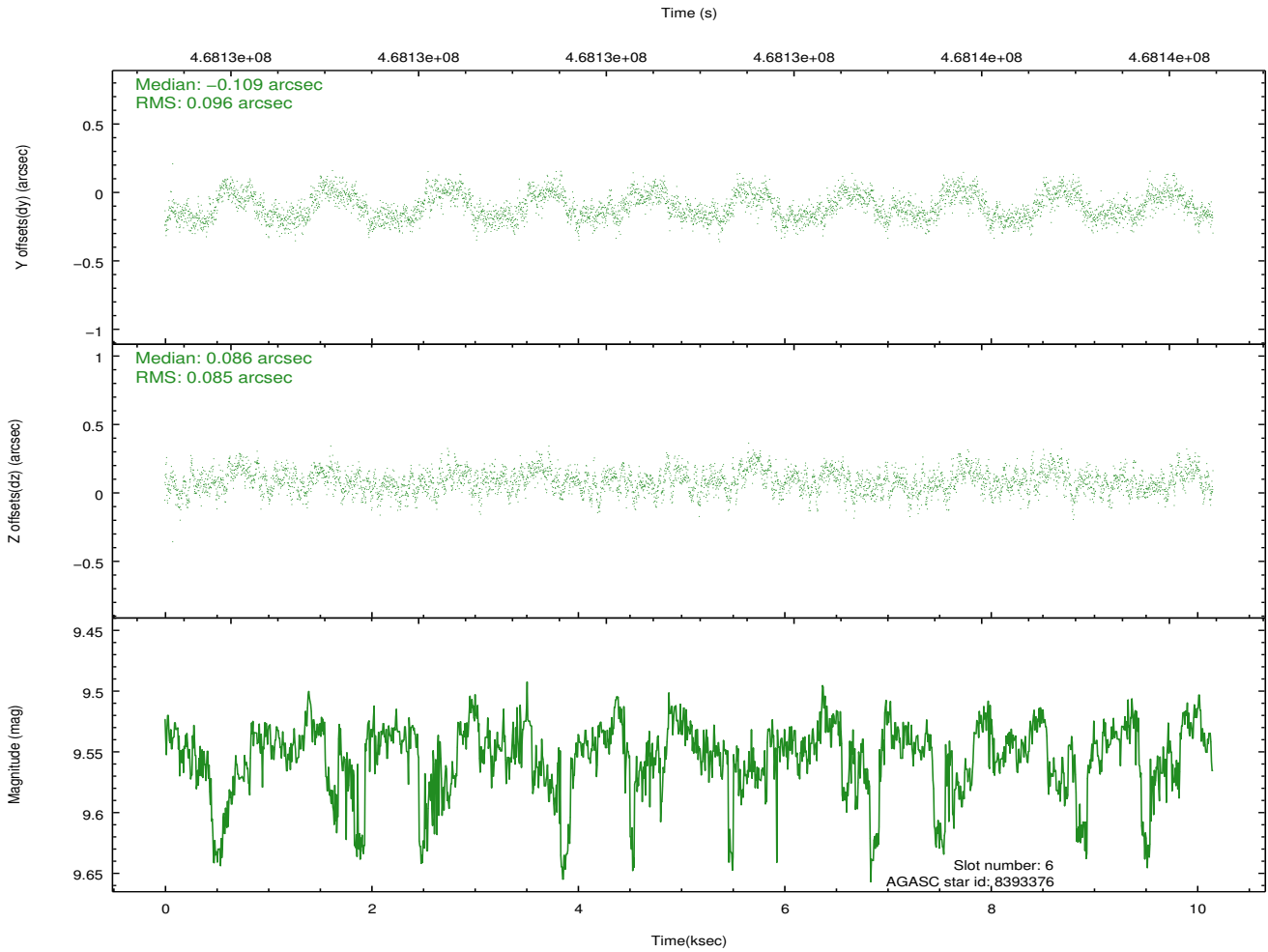
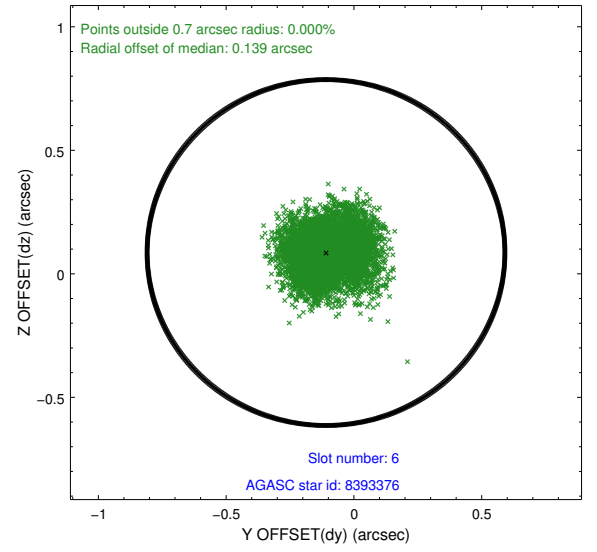
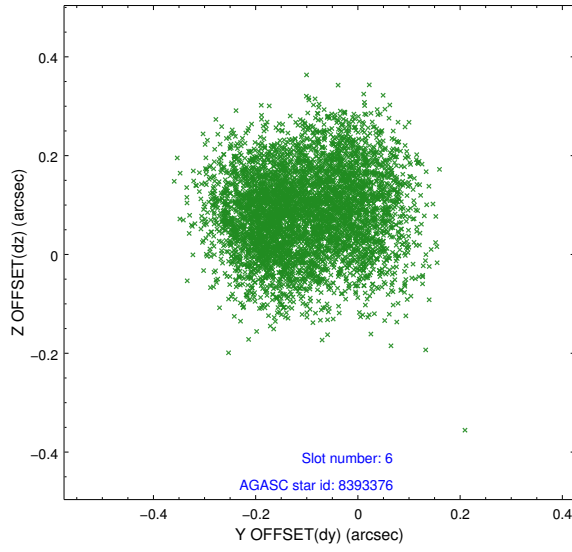
2.4.2 Slot 4



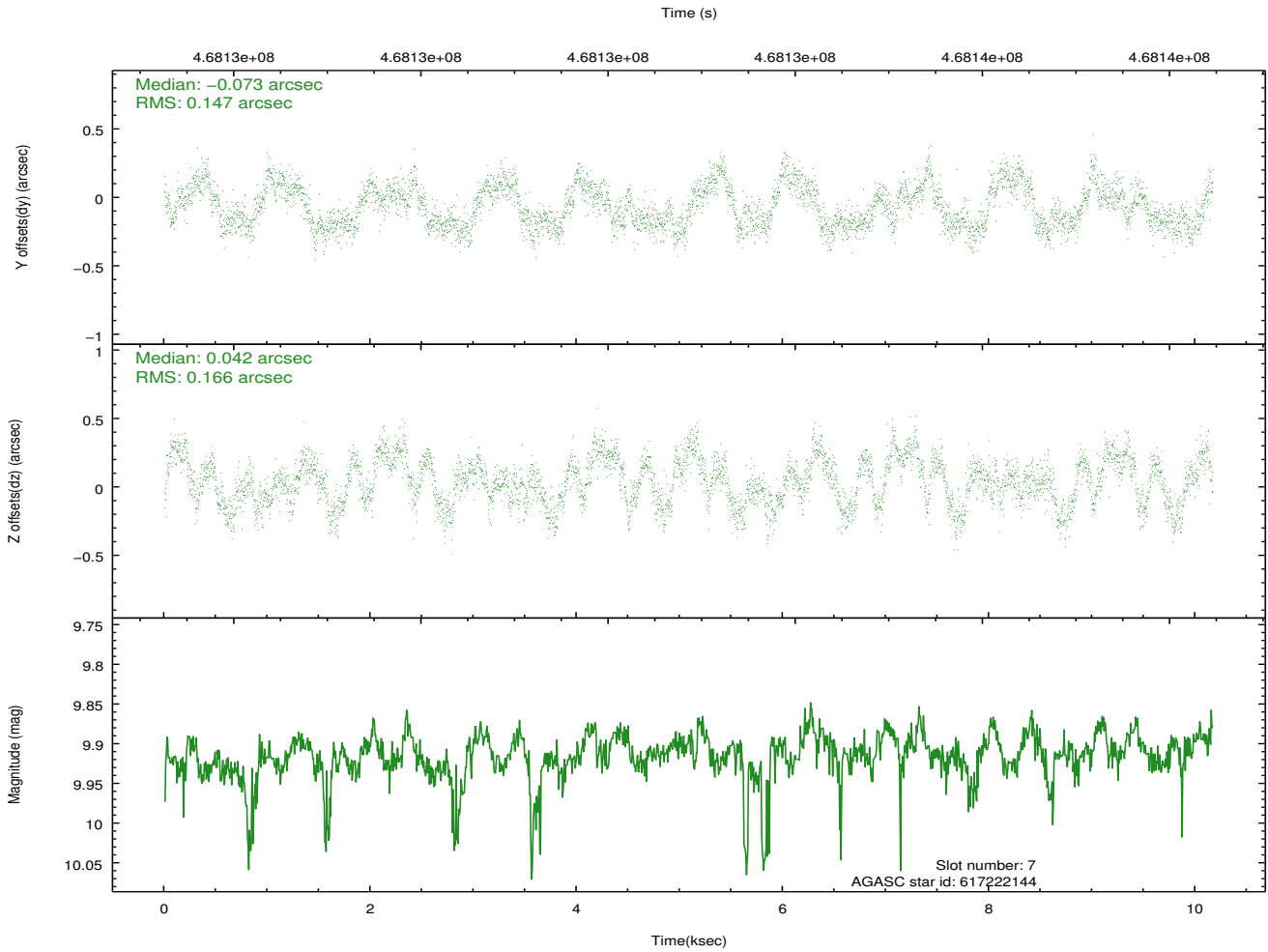
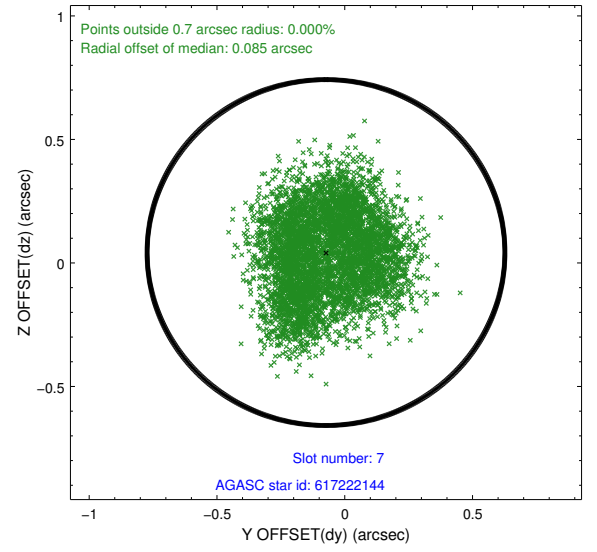
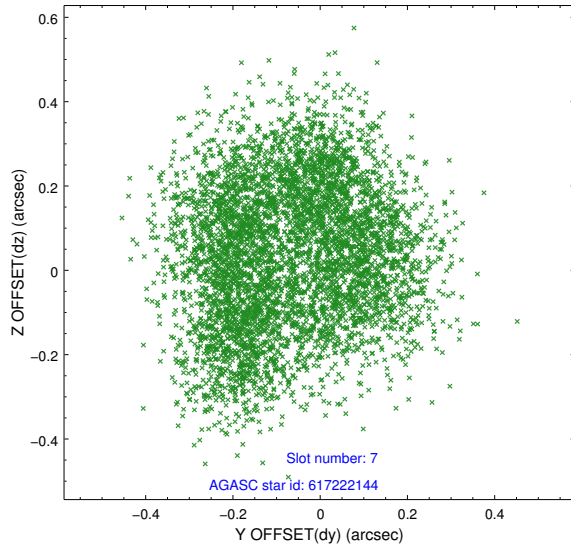
2.4.3 Slot 5



2.4.4 Slot 6

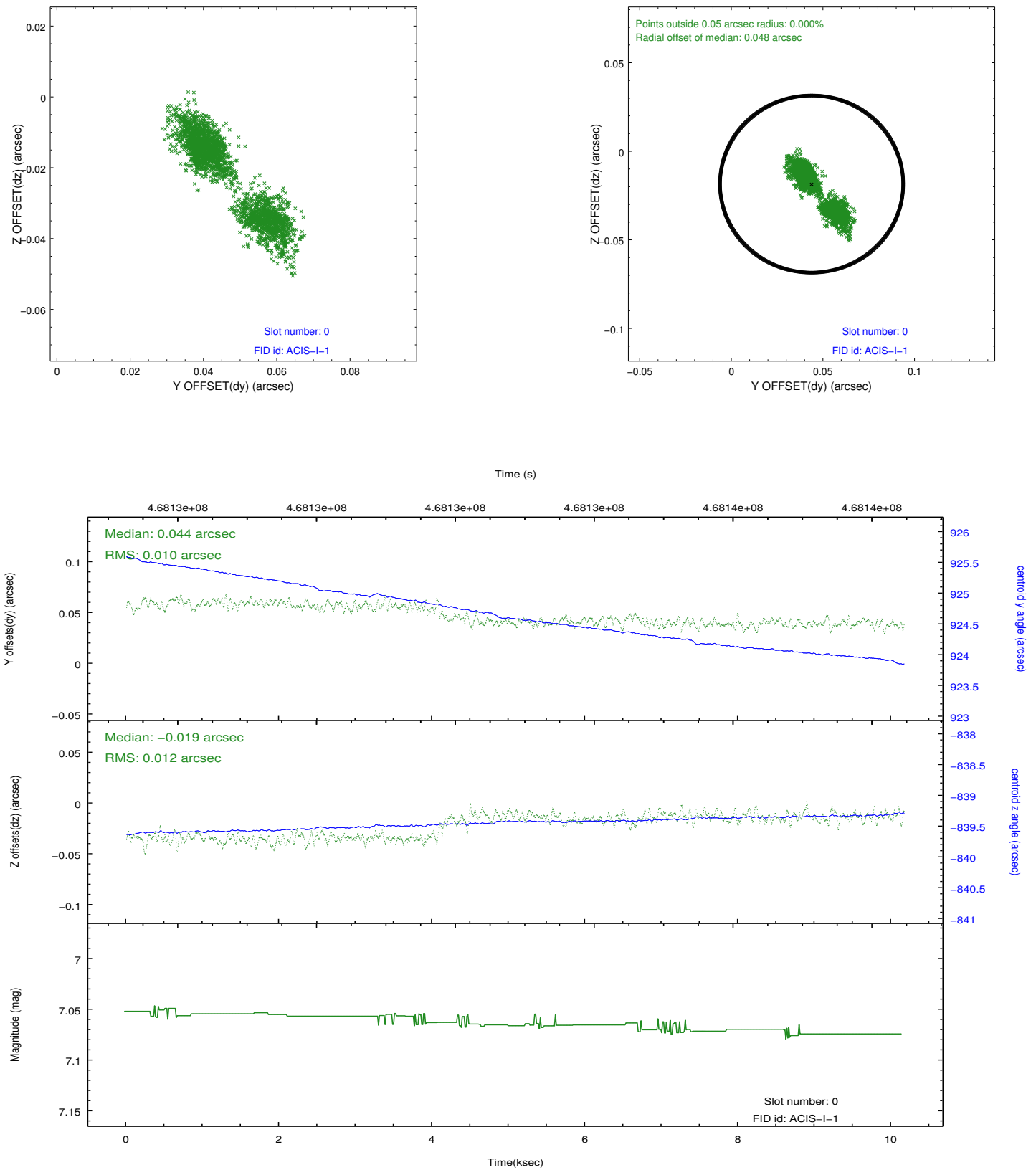


2.4.5 Slot 7

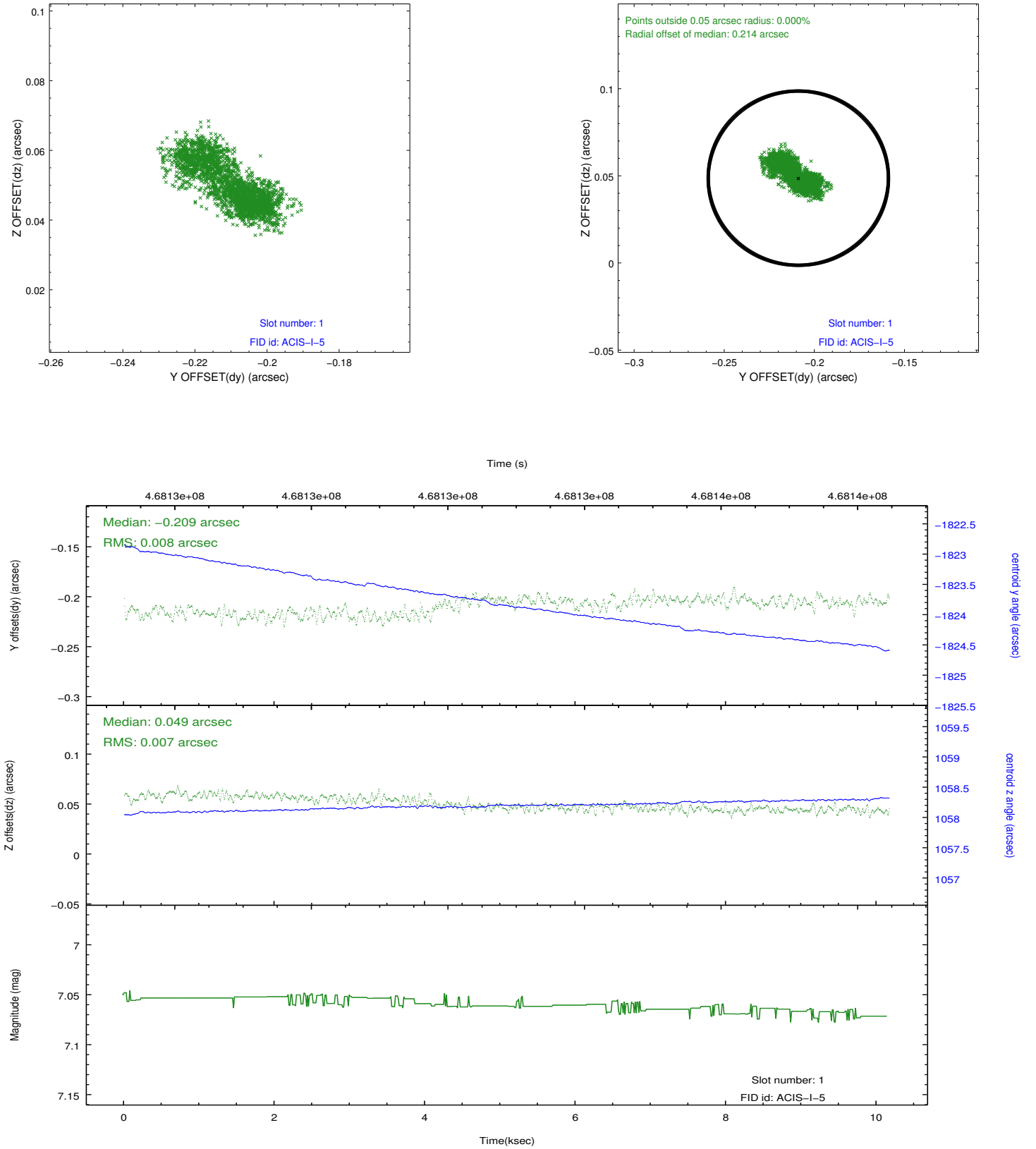


2.5 FID Slots

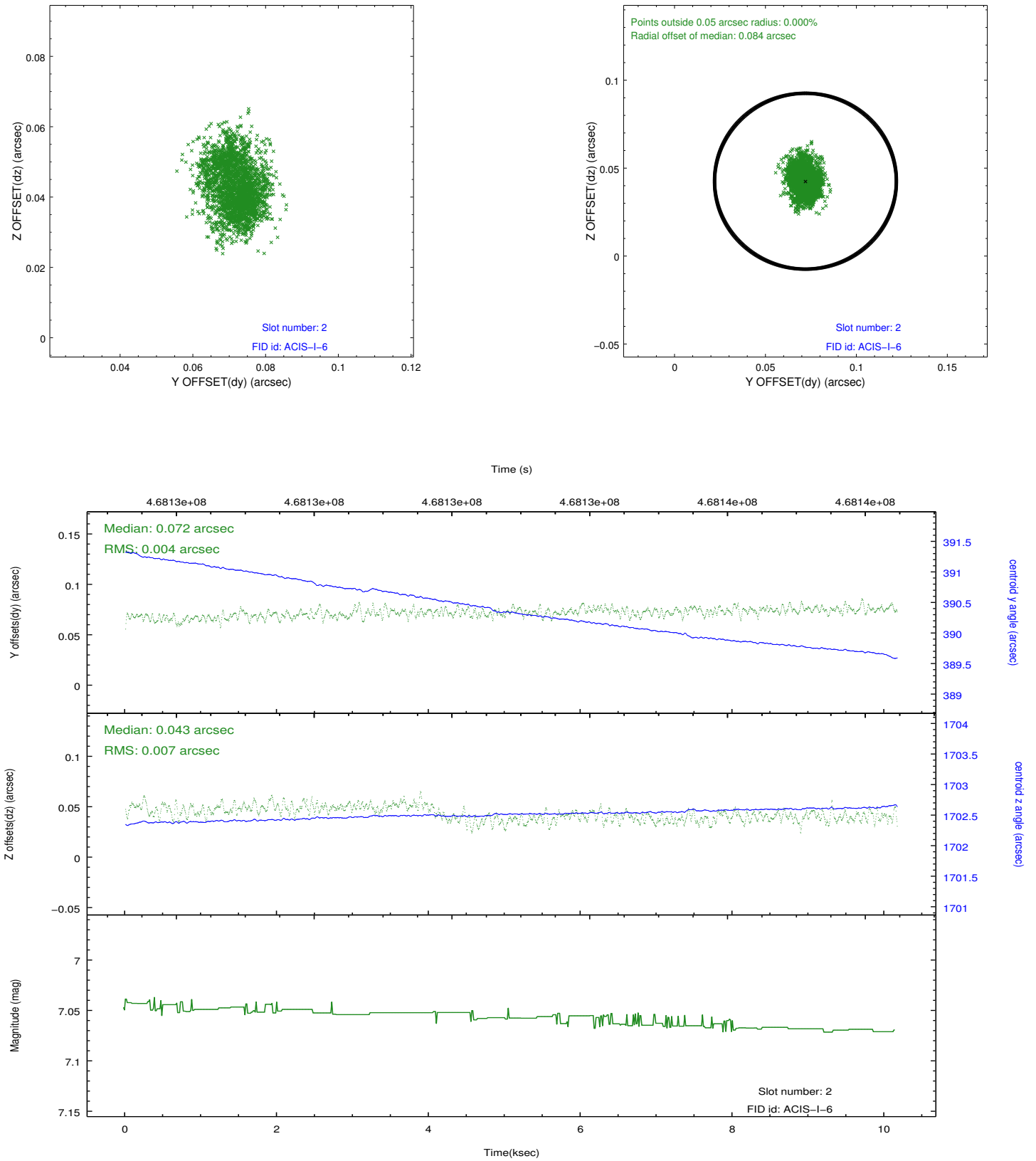
2.5.1 Slot 0



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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.7712000751495

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.