

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15066 - L2 Version 2
Chandra X-Ray Center

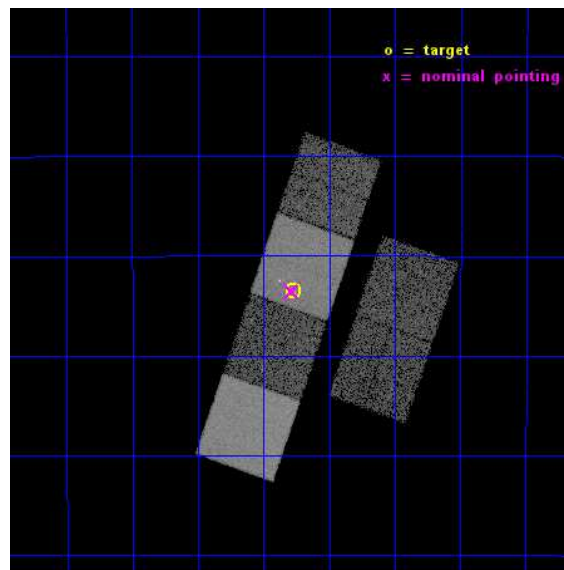
L2 Processing Date : Nov 30 2014

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

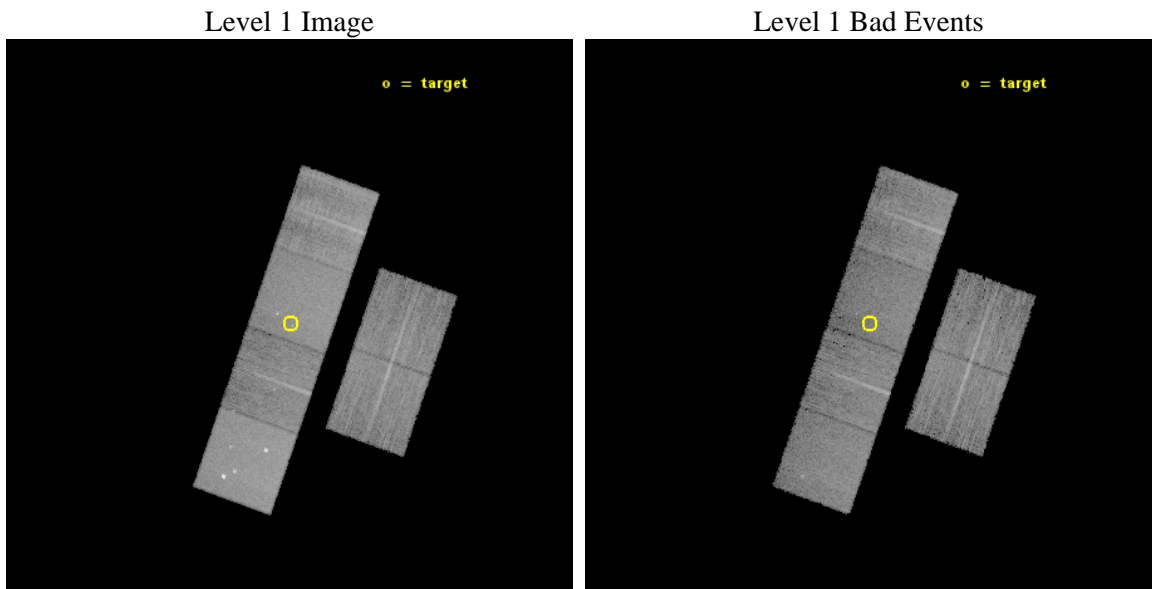
seq_num	702873	Sequence number
obs_id	15066	Observation id
title	C-GOALS: The Chandra-RBGS Survey of a Complete Sample of Major-Merger LIRGs	Proposal title
observer	Professor David Sanders	Principal investigator
object	NGC 0232	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.69375	Observer's specified target RA [deg]
dec_targ	-23.558611	Observer's specified target Dec [deg]
ra_nom	10.696992612919	Nominal RA [deg]
dec_nom	-23.559322158525	Nominal Dec [deg]
roll_nom	289.40855766241	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14966.399944305	Sum of GTIs [s]
livetime	14776.886376526	Livetime [s]
ontime2	14966.399944305	Sum of GTIs [s]
ontime3	14966.399944305	Sum of GTIs [s]
ontime5	14966.399944305	Sum of GTIs [s]
ontime6	14966.399944305	Sum of GTIs [s]
ontime7	14966.399944305	Sum of GTIs [s]
ontime8	14959.917963803	Sum of GTIs [s]
l2events	142903	Number of level 2 events



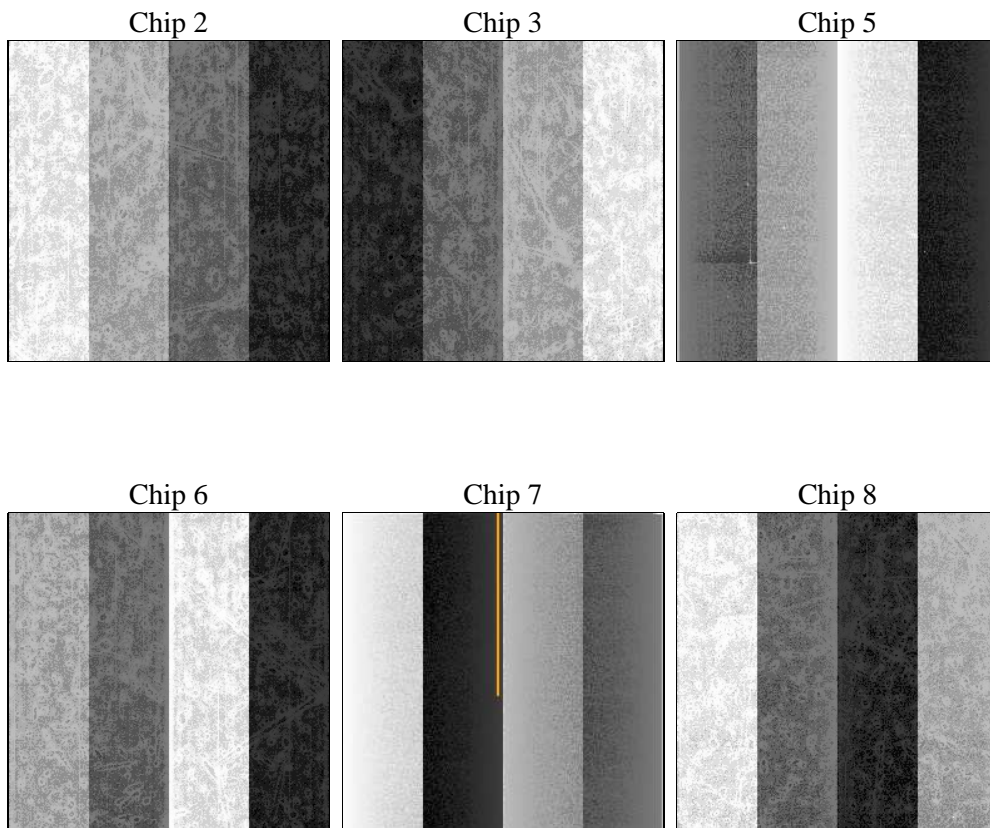
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	14966.399944305	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	14966.399944305	Sum of GTIs [s]
date	2014-11-30T22:14:08	Date and time of file creation	ontime3	14966.399944305	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	14966.399944305	Sum of GTIs [s]
			ontime6	14966.399944305	Sum of GTIs [s]
			ontime7	14966.399944305	Sum of GTIs [s]
			ontime8	14959.917963803	Sum of GTIs [s]
			l1events	597401	Number of level 1 events

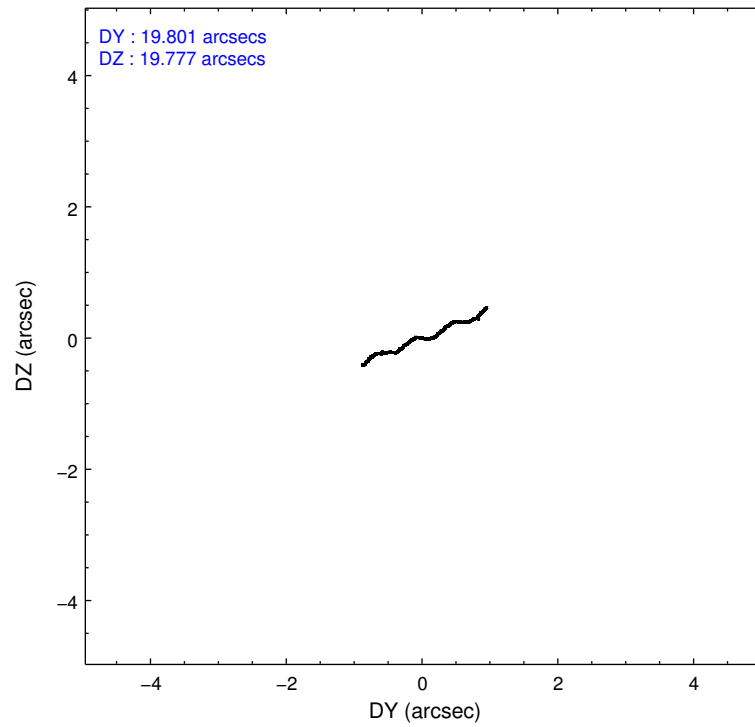
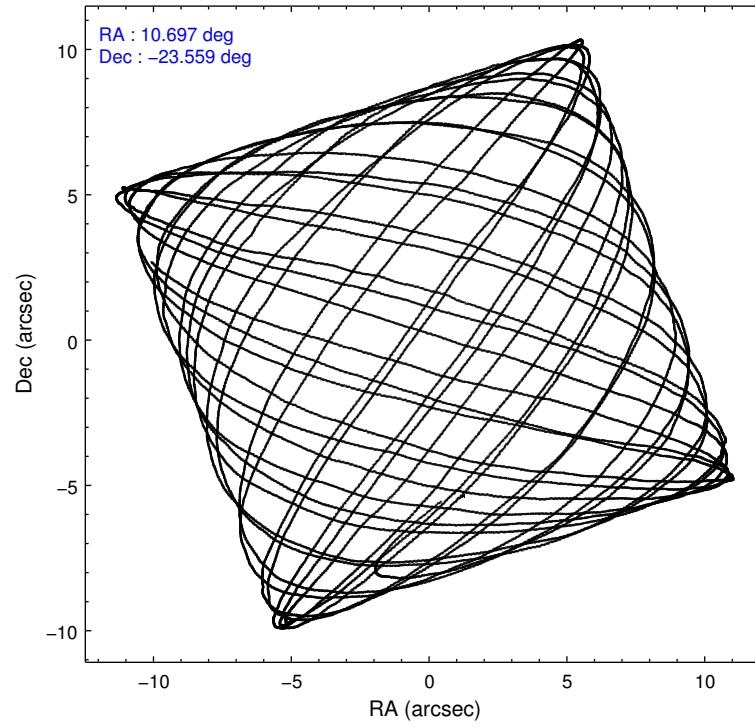
2.1.4 Events

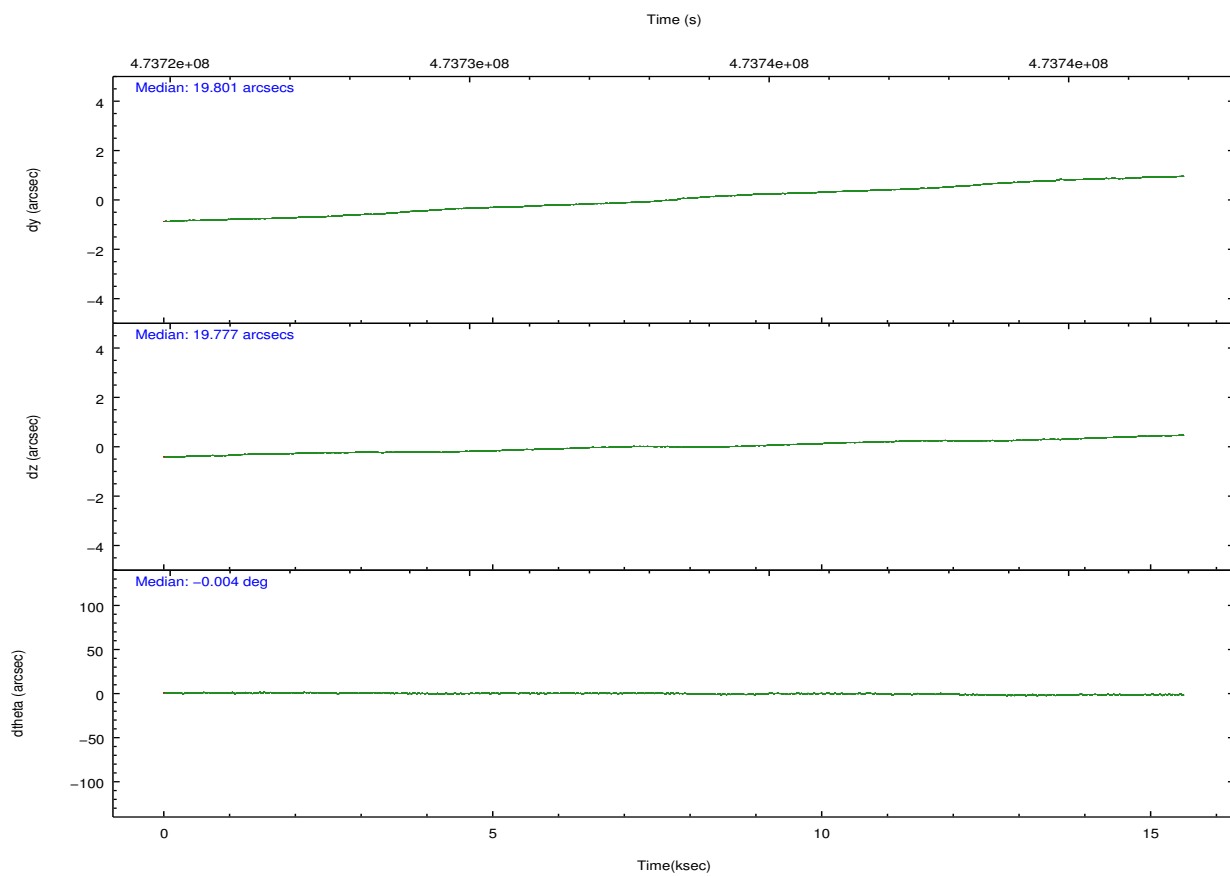
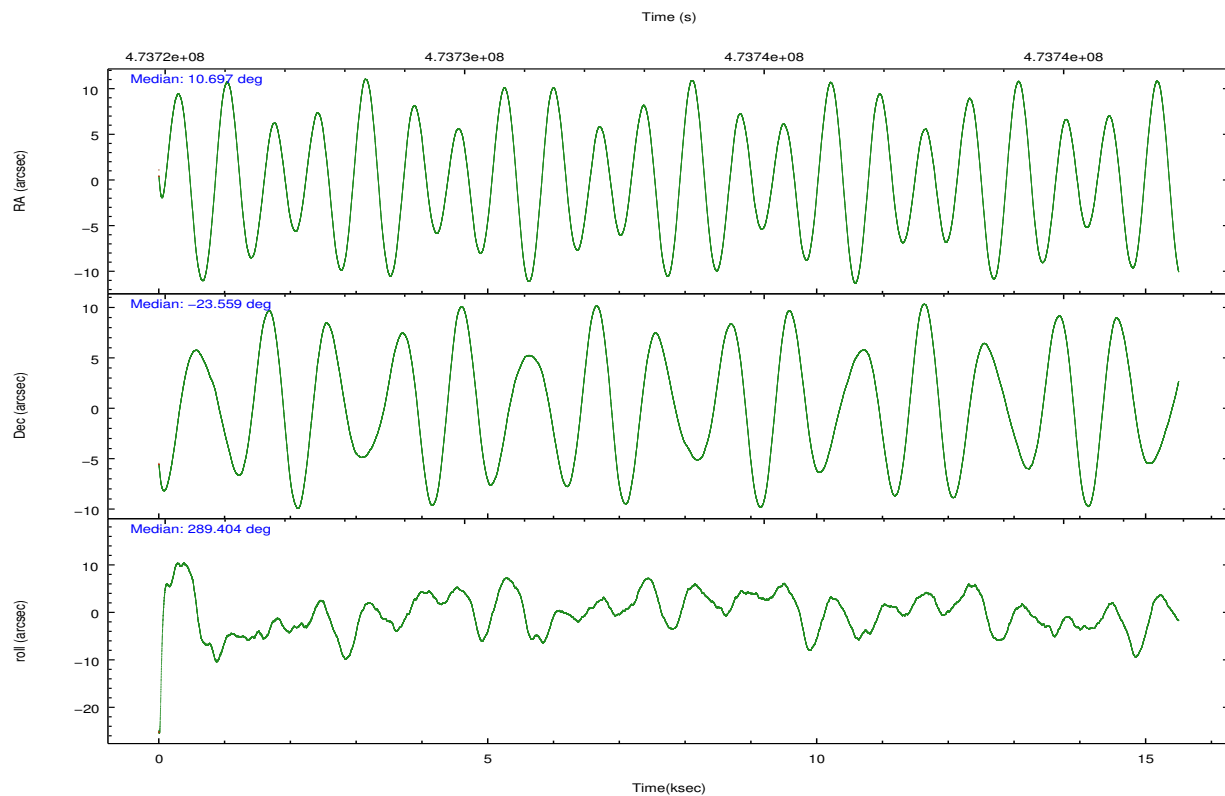
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	83310	77322	138652	79986	109692	108439	grade 0 events	3241	3023	8655	3498	4706	8614
rejected events	74072	68565	68953	69881	60421	79288		3%	3%	6%	4%	4%	7%
rejected %	88%	88%	49%	87%	55%	73%	grade 1 events	31	39	262	35	121	79
								0%	0%	0%	0%	0%	0%
							grade 2 events	2373	1973	22226	2240	9883	6633
								2%	2%	16%	2%	9%	6%
							grade 3 events	879	934	2253	1031	4280	3119
								1%	1%	1%	1%	3%	2%
							grade 4 events	938	982	2117	1007	4268	2995
								1%	1%	1%	1%	3%	2%
							grade 5 events	3601	4137	9979	4188	11150	6062
								4%	5%	7%	5%	10%	5%
							grade 6 events	1812	1847	34481	2330	26156	7792
								2%	2%	24%	2%	23%	7%
							grade 7 events	70435	64387	58679	65657	49128	73145
								84%	83%	42%	82%	44%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	10.674061	10.69699261291876	CCD I2 on	O2	Y
[deg] Pointing Dec	-23.541790	-23.55932215852475	CCD I3 on	Y	Y
[deg] Pointing Roll	289.242806	289.4085576624083	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	473726168.184000	473725051.80952	CCD S5 on	N	N
Observation start date	2013-01-04T22:35:01	2013-01-04T22:17:31	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	473741168.184000	473742177.51044	On-chip summing requested	N	N
Observation end date	2013-01-05T02:45:01	2013-01-05T03:02:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



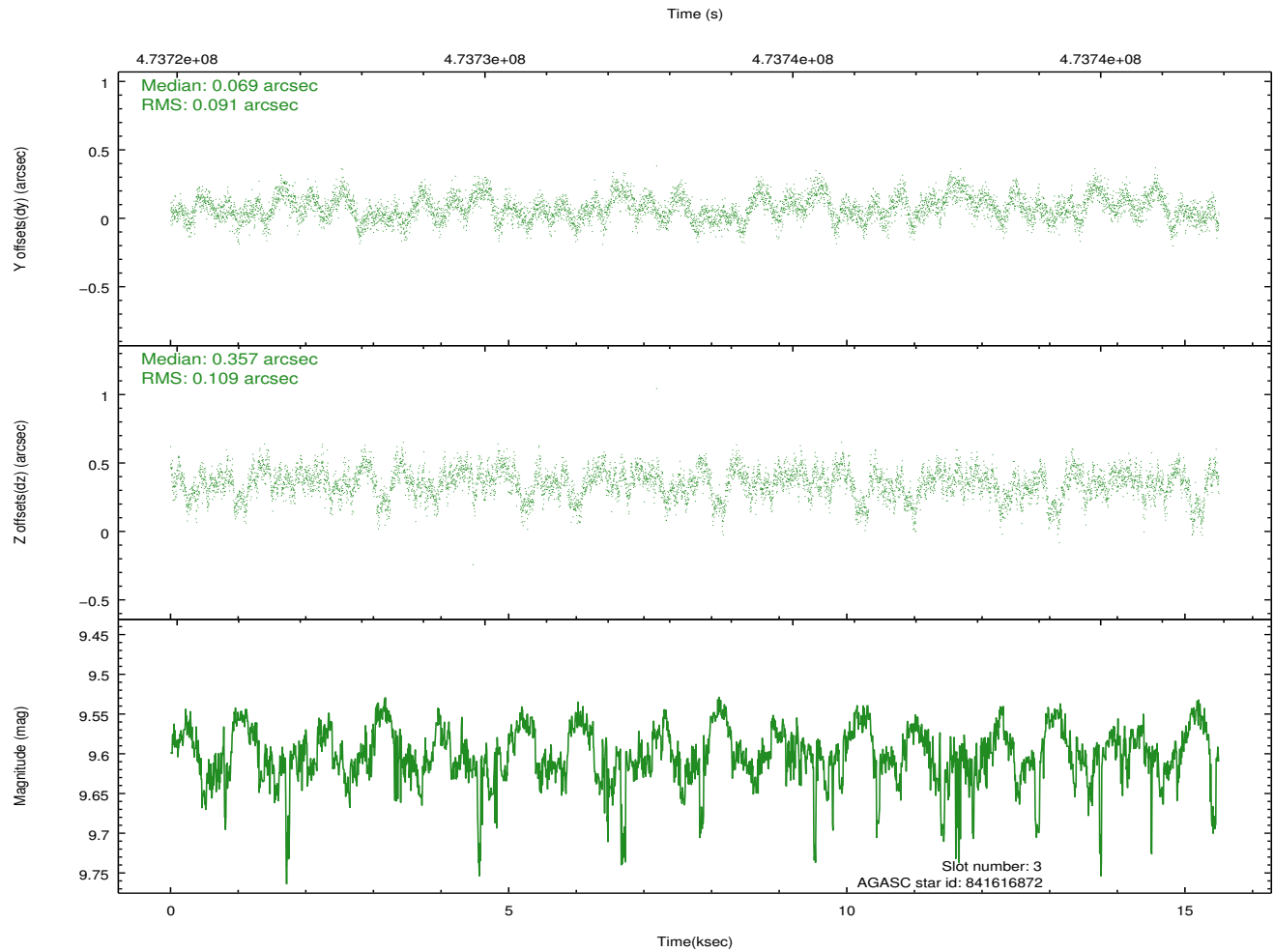
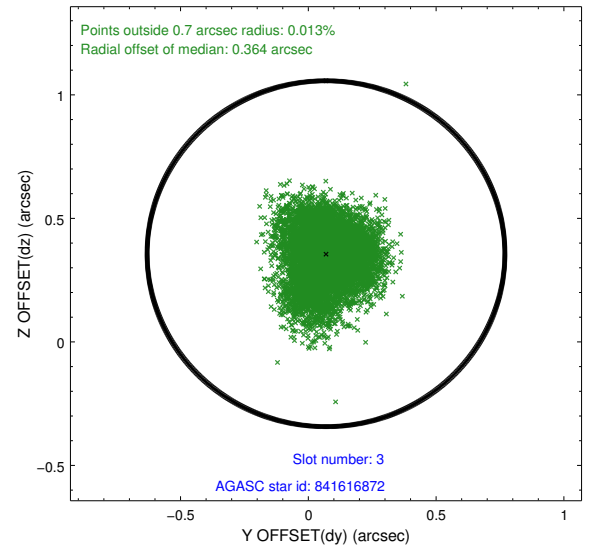
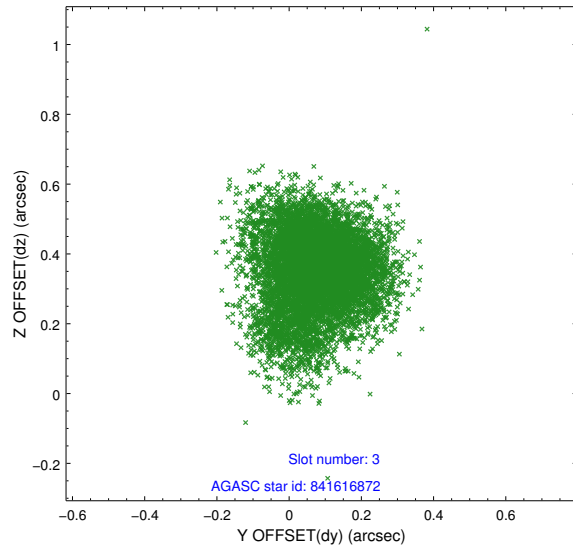


Slot Statistics

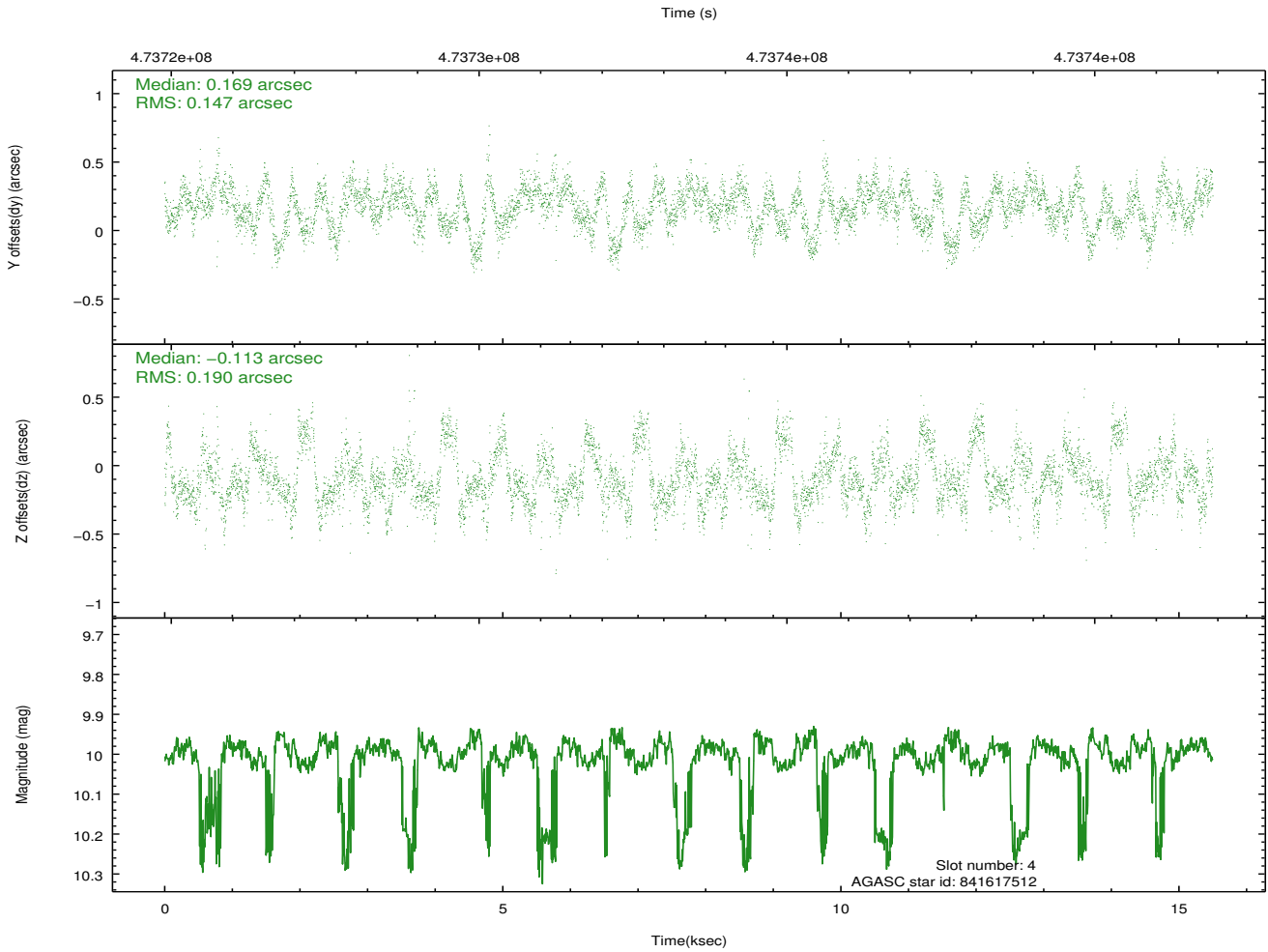
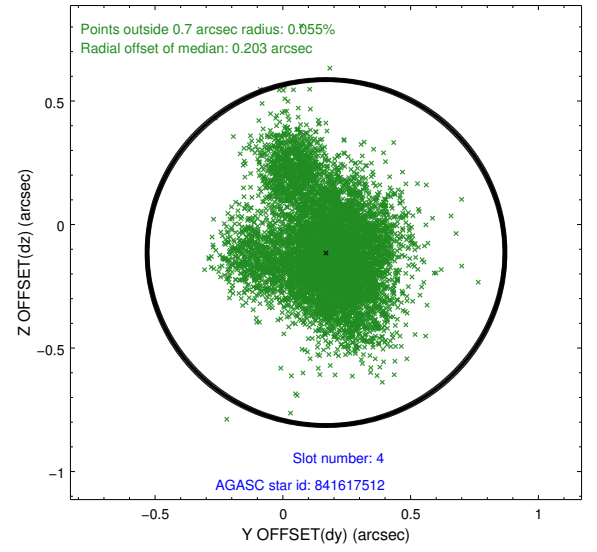
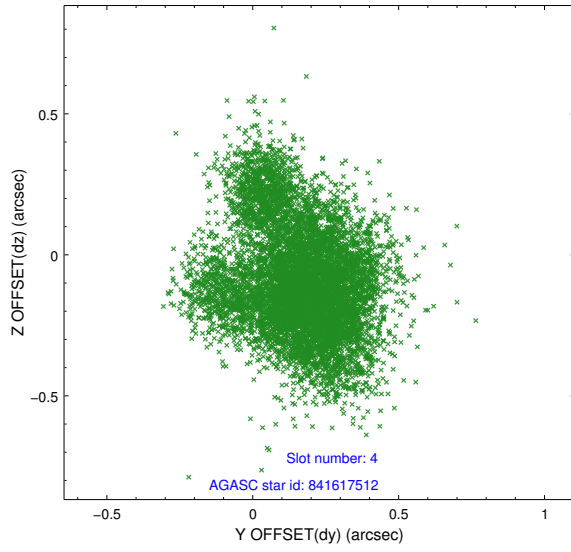
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	3781	-0.125	-0.012	0.012	0.019	0.000000	0.000000	-773.06	-1741.25
1	FID		ACIS-S-4	7.02	3781	0.247	0.063	0.014	0.031	0.000000	0.000000	2140.46	166.99
2	FID		ACIS-S-5	7.05	3780	-0.153	-0.043	0.023	0.034	0.000000	0.000000	-1825.55	160.91
3	GUIDE	used	841616872	9.60	7513	0.069	0.357	0.151	0.244	11.069569	-23.065072	-1186.76	1802.43
4	GUIDE	used	841617512	10.00	7310	0.169	-0.113	0.254	0.416	10.277536	-23.526020	-482.83	-1217.55
5	GUIDE	used	841622408	9.21	7533	-0.034	-0.008	0.115	0.181	10.595192	-23.284109	-961.37	59.59
6	GUIDE	used	841627368	9.79	7546	-0.014	-0.053	0.224	0.355	10.653590	-23.794868	838.06	-363.61
7	GUIDE	used	841615648	8.36	7556	-0.190	-0.185	0.099	0.150	11.397828	-23.450425	482.96	2363.11

2.4 Star Slots

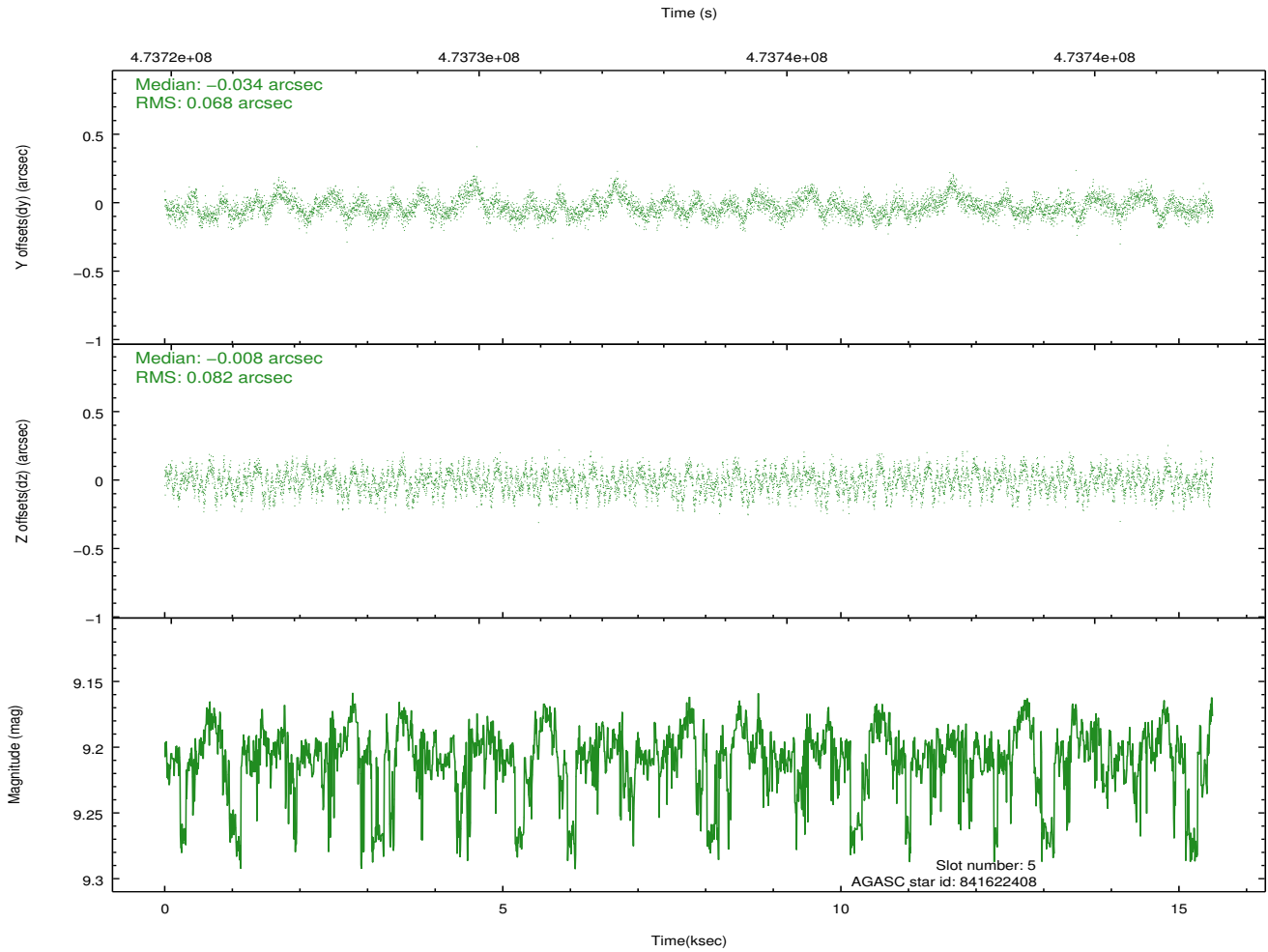
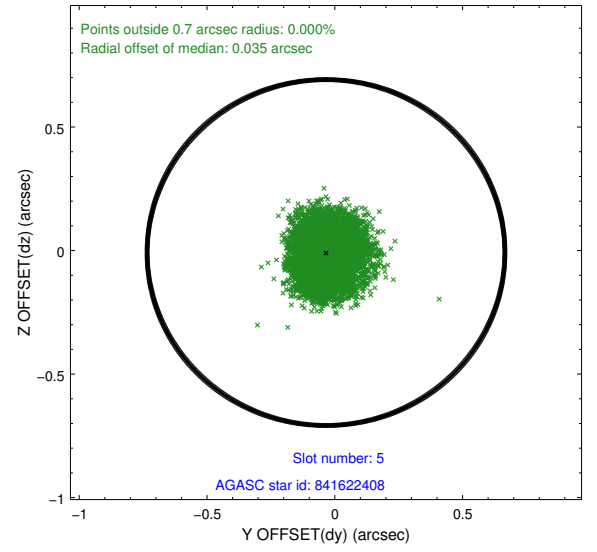
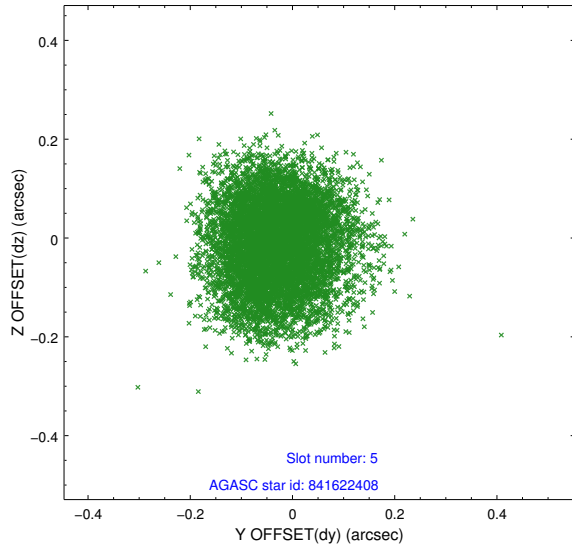
2.4.1 Slot 3



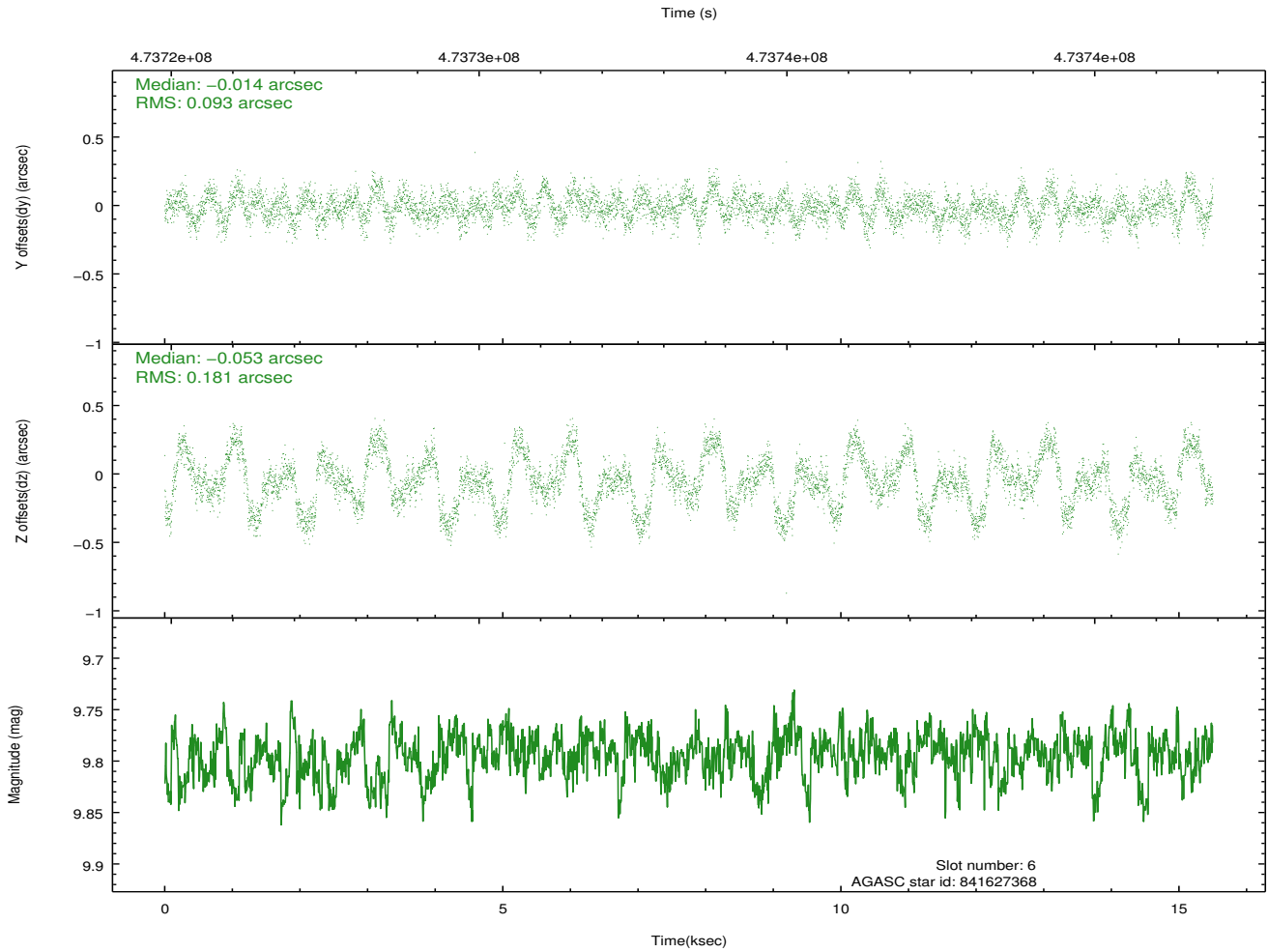
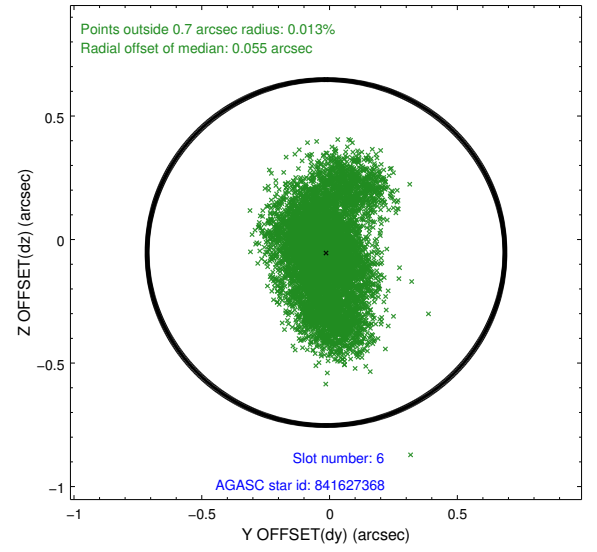
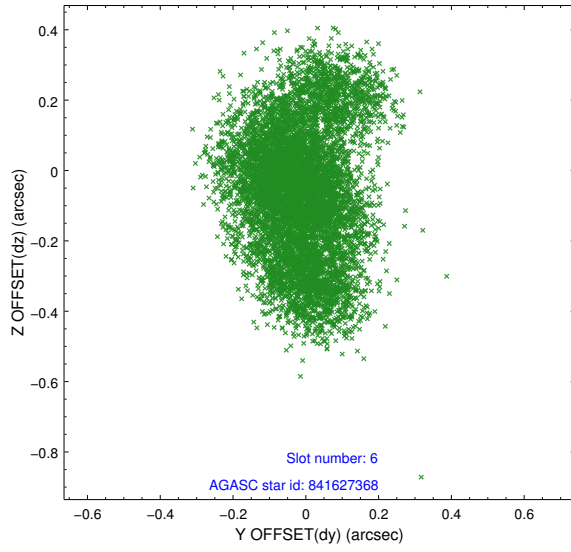
2.4.2 Slot 4



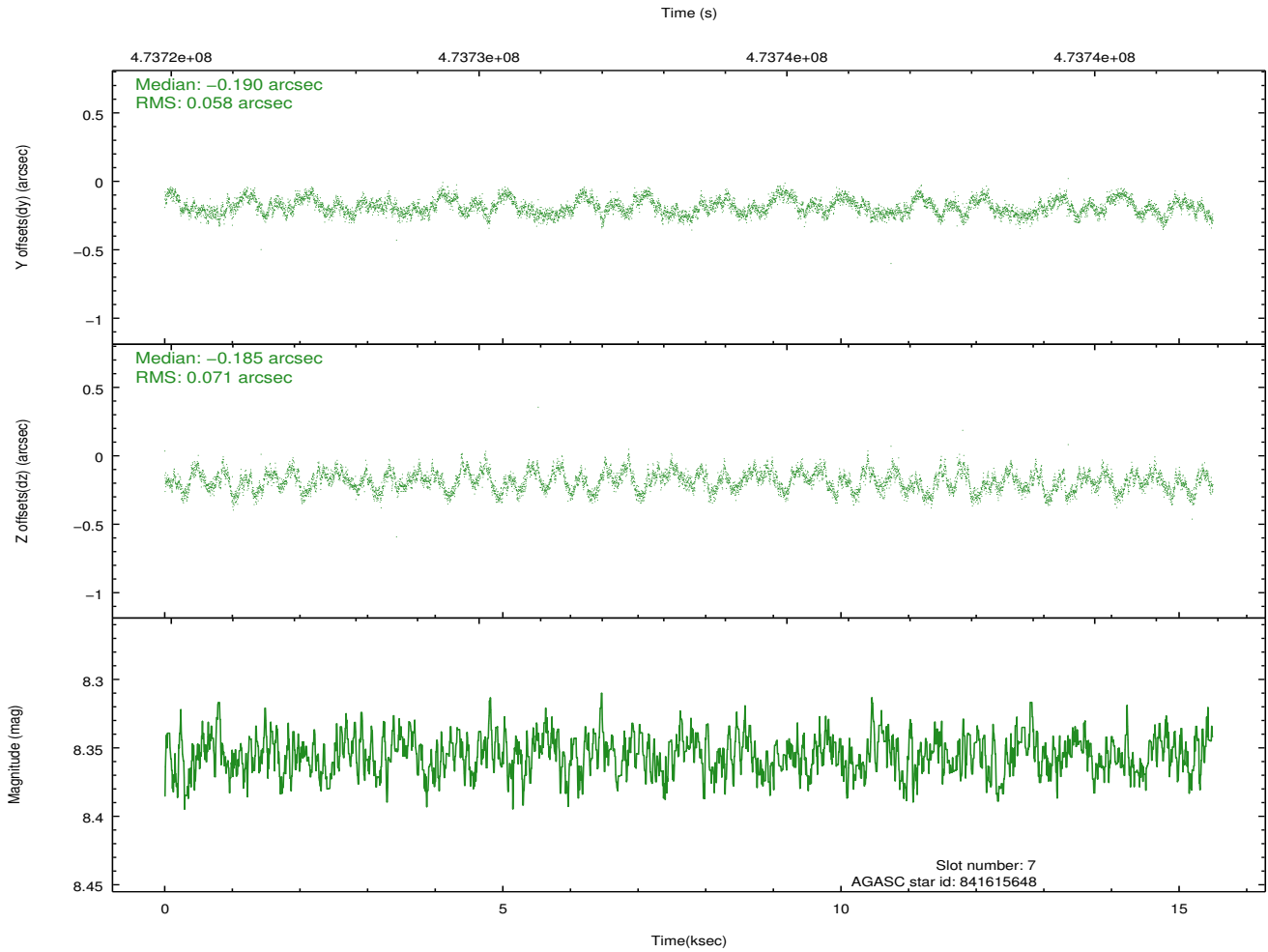
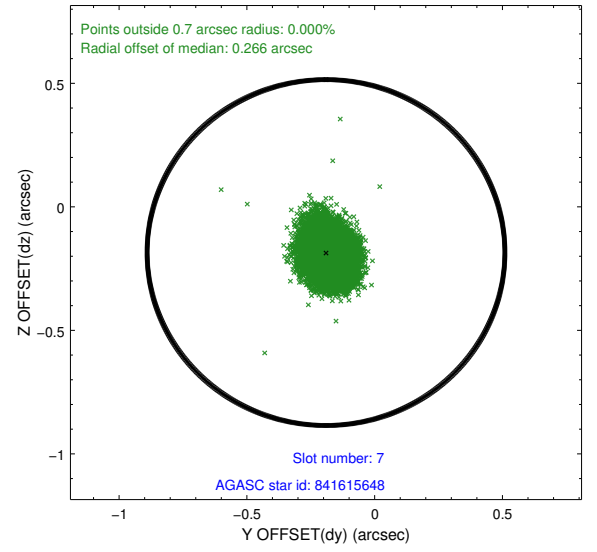
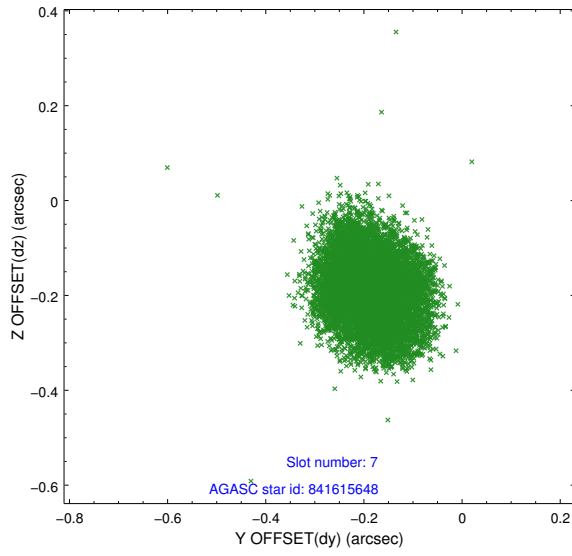
2.4.3 Slot 5



2.4.4 Slot 6

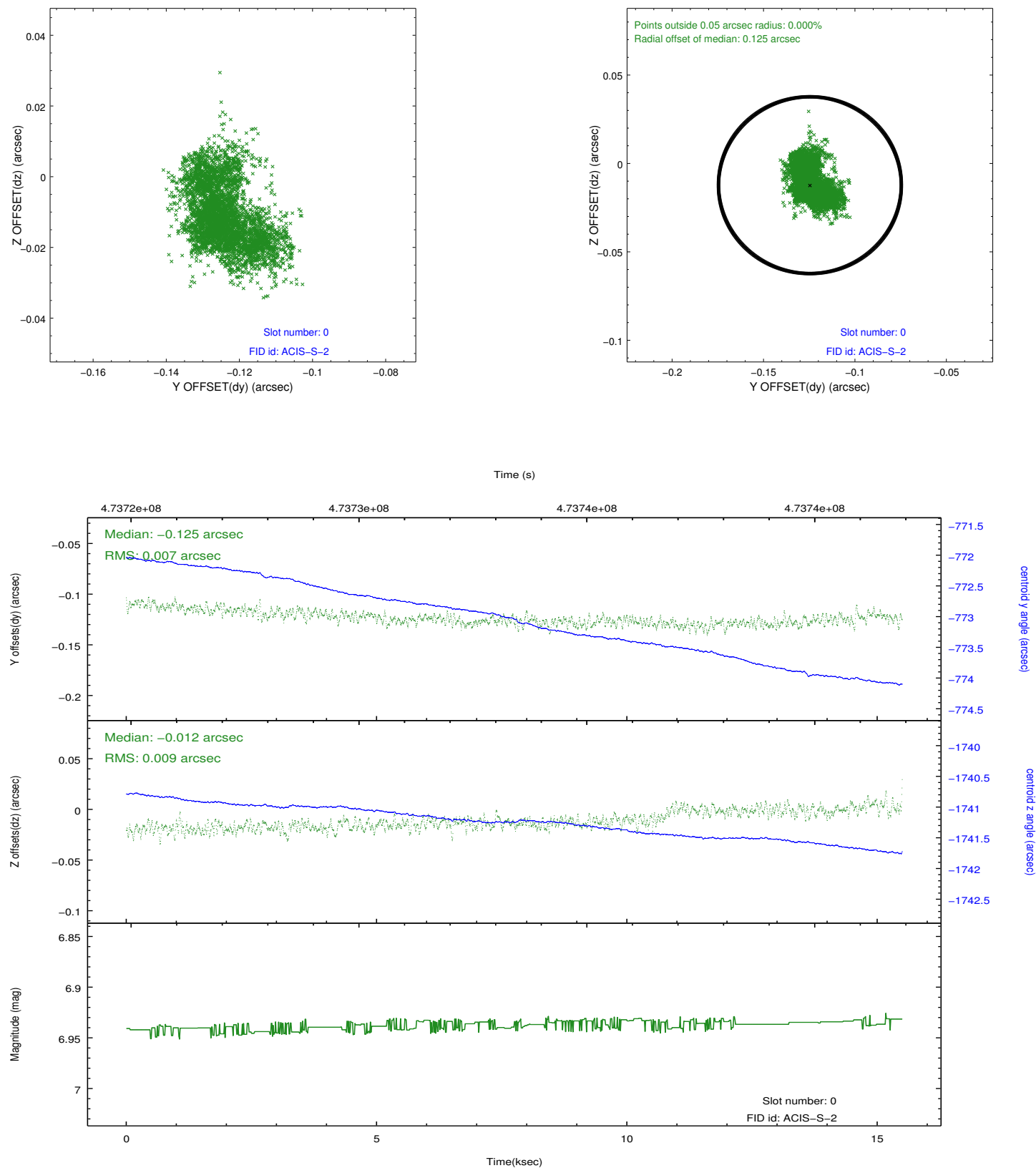


2.4.5 Slot 7

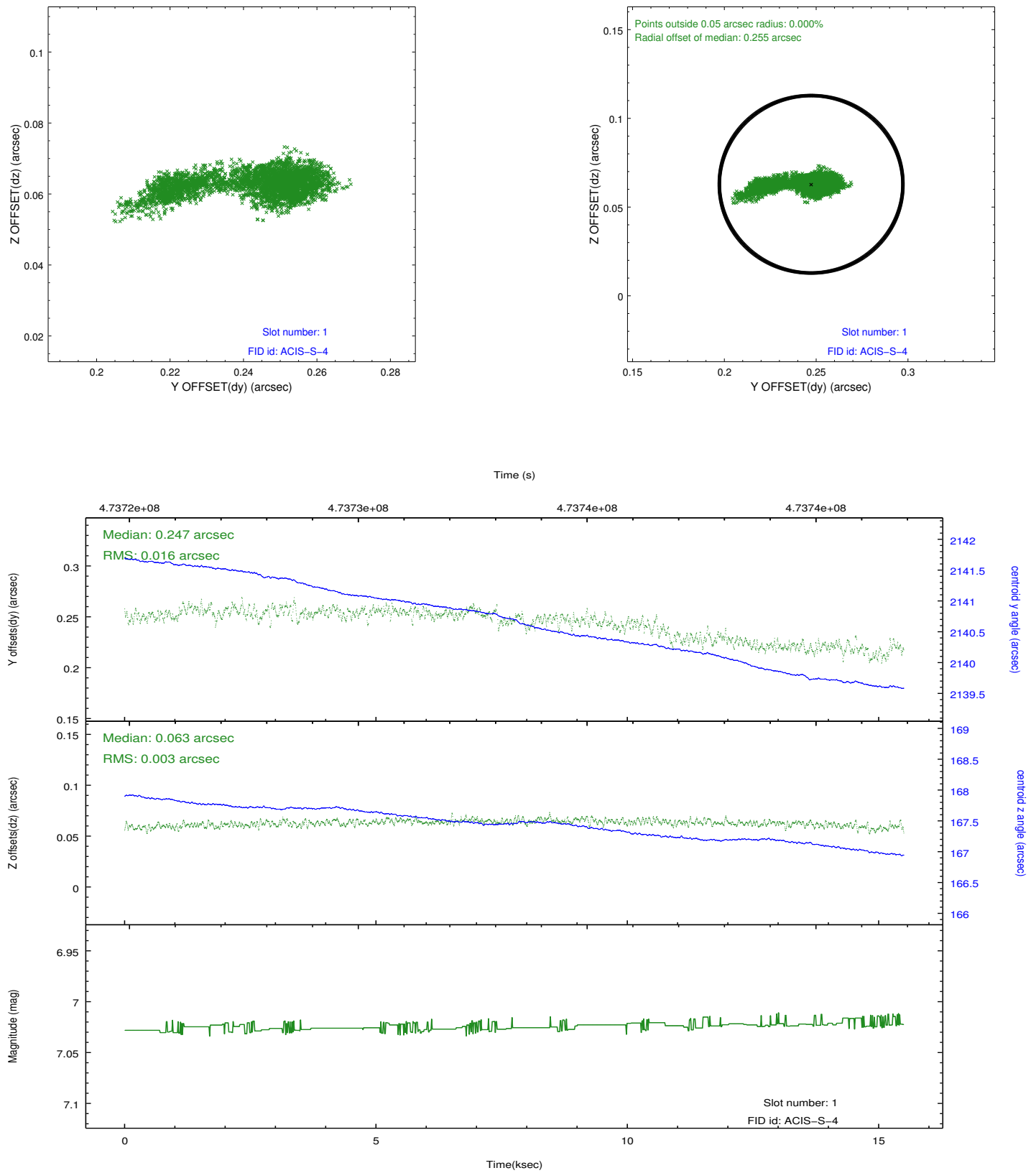


2.5 FID Slots

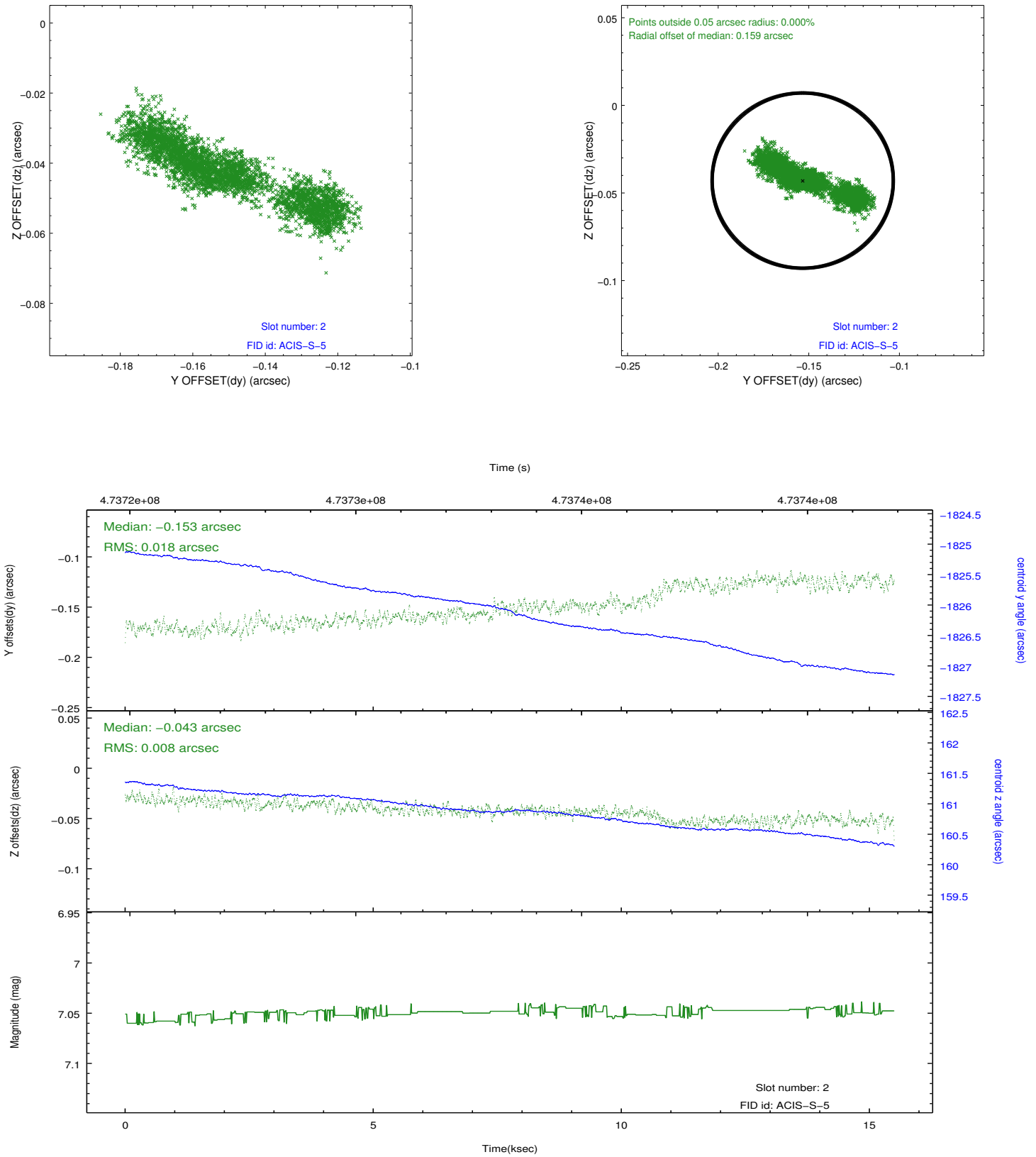
2.5.1 Slot 0



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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.966399944305

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.