

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16158 - L2 Version 2
Chandra X-Ray Center

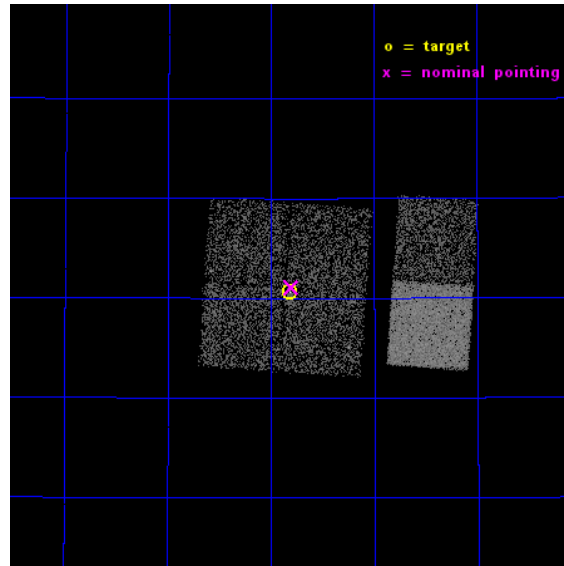
L2 Processing Date : Dec 11 2014

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

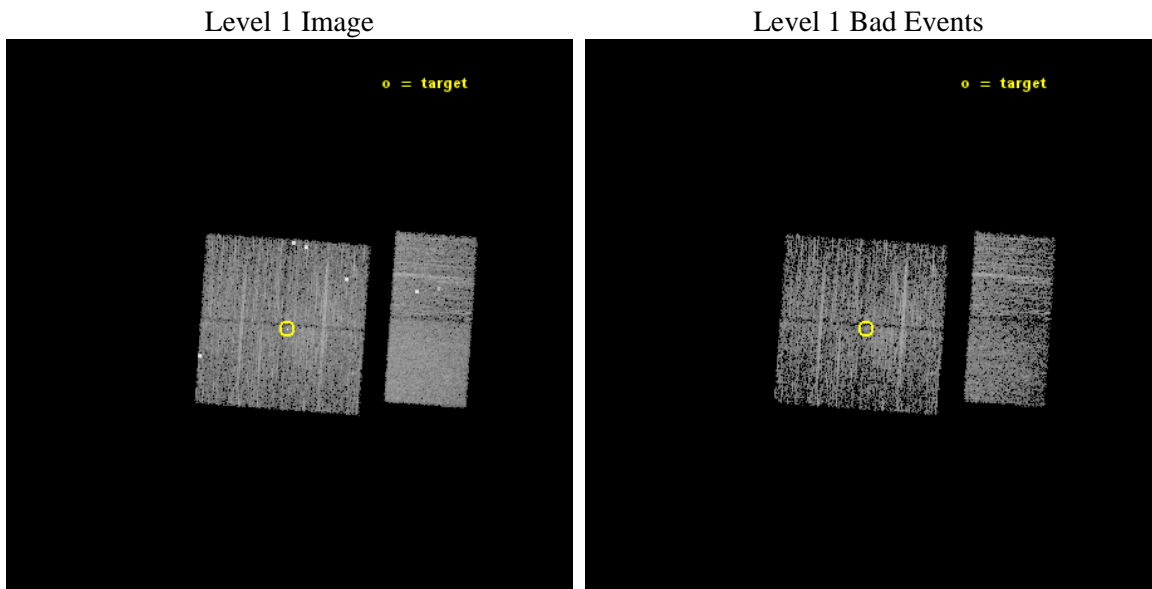
seq_num	901098	Sequence number
obs_id	16158	Observation id
title	The largest complete sample of Local AGN	Proposal title
observer	Prof. Marco Ajello	Principal investigator
object	SWIFT J2021.8+4400	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	305.4545	Observer's specified target RA [deg]
dec_targ	44.010394	Observer's specified target Dec [deg]
ra_nom	305.45047445711	Nominal RA [deg]
dec_nom	44.01797788738	Nominal Dec [deg]
roll_nom	94.015640987574	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4971.294085443	Sum of GTIs [s]
livetime	4908.3445663792	Livetime [s]
ontime0	4971.1709654331	Sum of GTIs [s]
ontime1	4971.2120054364	Sum of GTIs [s]
ontime2	4971.2530454397	Sum of GTIs [s]
ontime3	4971.294085443	Sum of GTIs [s]
ontime6	4971.3761654496	Sum of GTIs [s]
ontime7	4971.3351254463	Sum of GTIs [s]
l2events	27515	Number of level 2 events



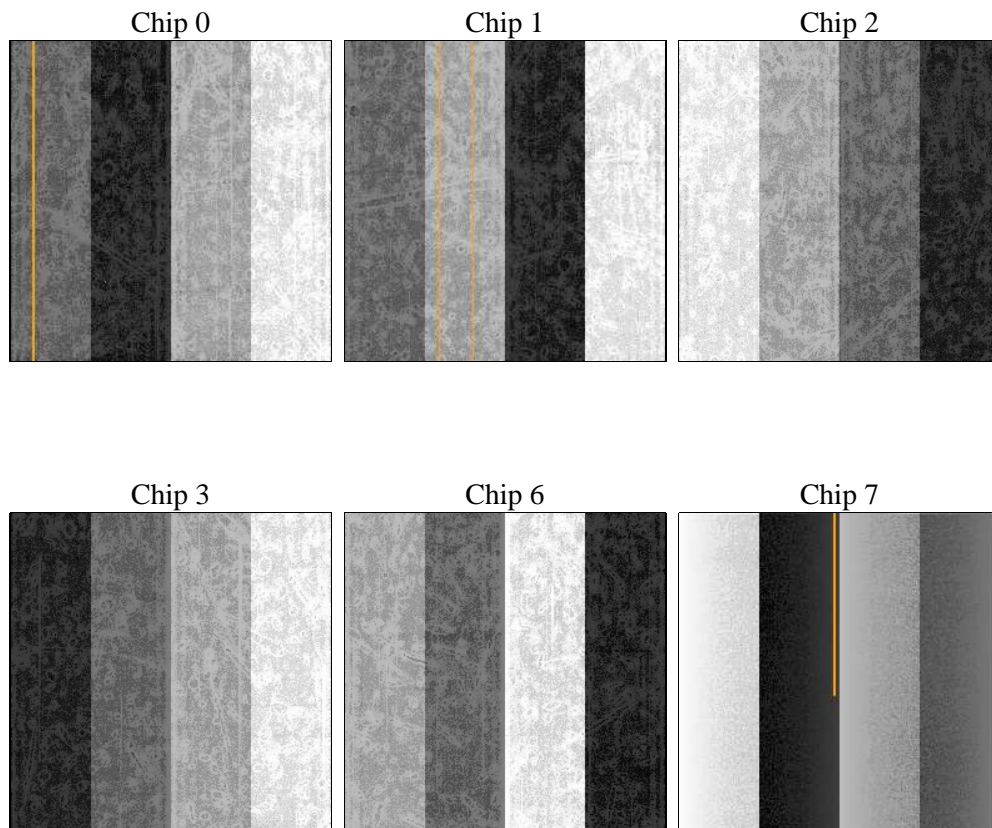
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4971.294085443	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	4971.1709654331	Sum of GTIs [s]
date	2014-12-11T09:41:16	Date and time of file creation	ontime1	4971.2120054364	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4971.2530454397	Sum of GTIs [s]
			ontime3	4971.294085443	Sum of GTIs [s]
			ontime6	4971.3761654496	Sum of GTIs [s]
			ontime7	4971.3351254463	Sum of GTIs [s]
			l1events	156151	Number of level 1 events

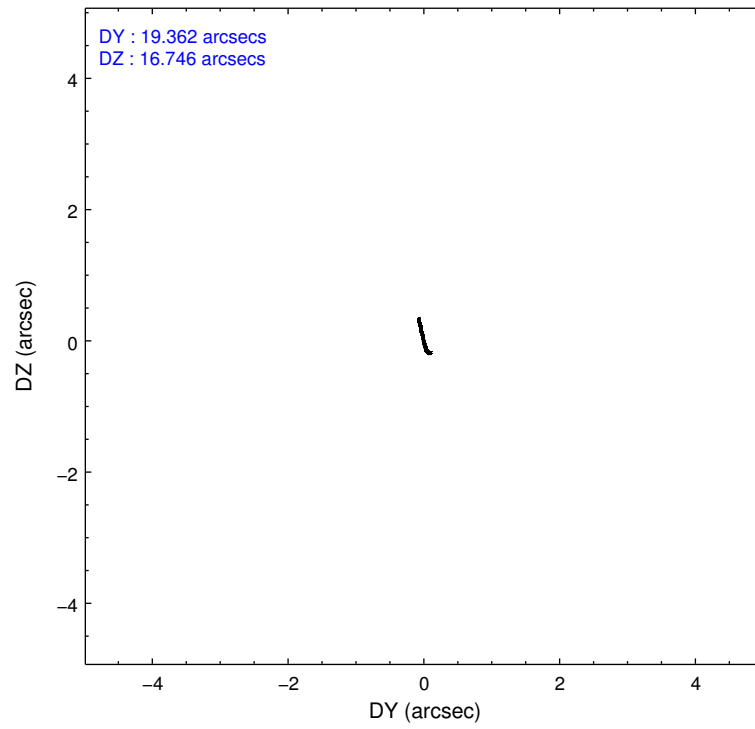
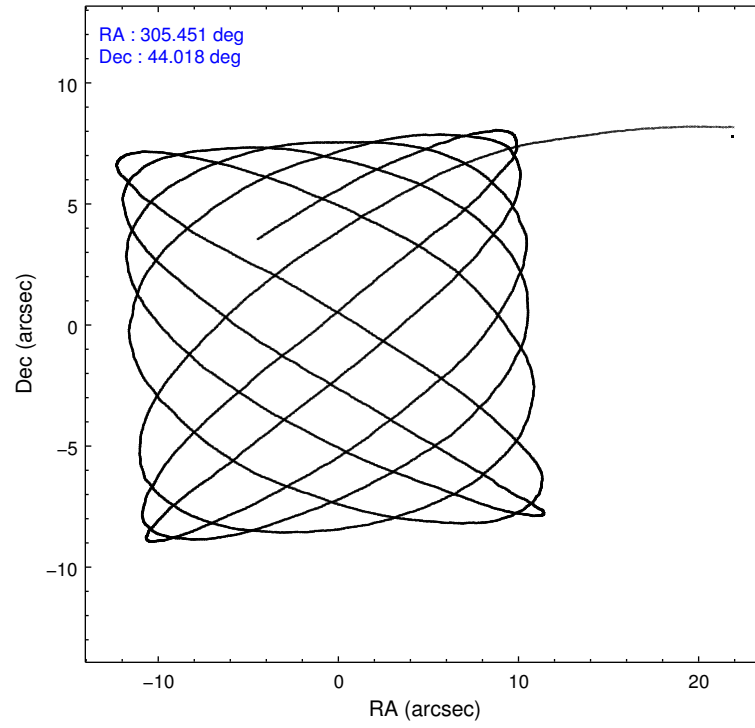
2.1.4 Events

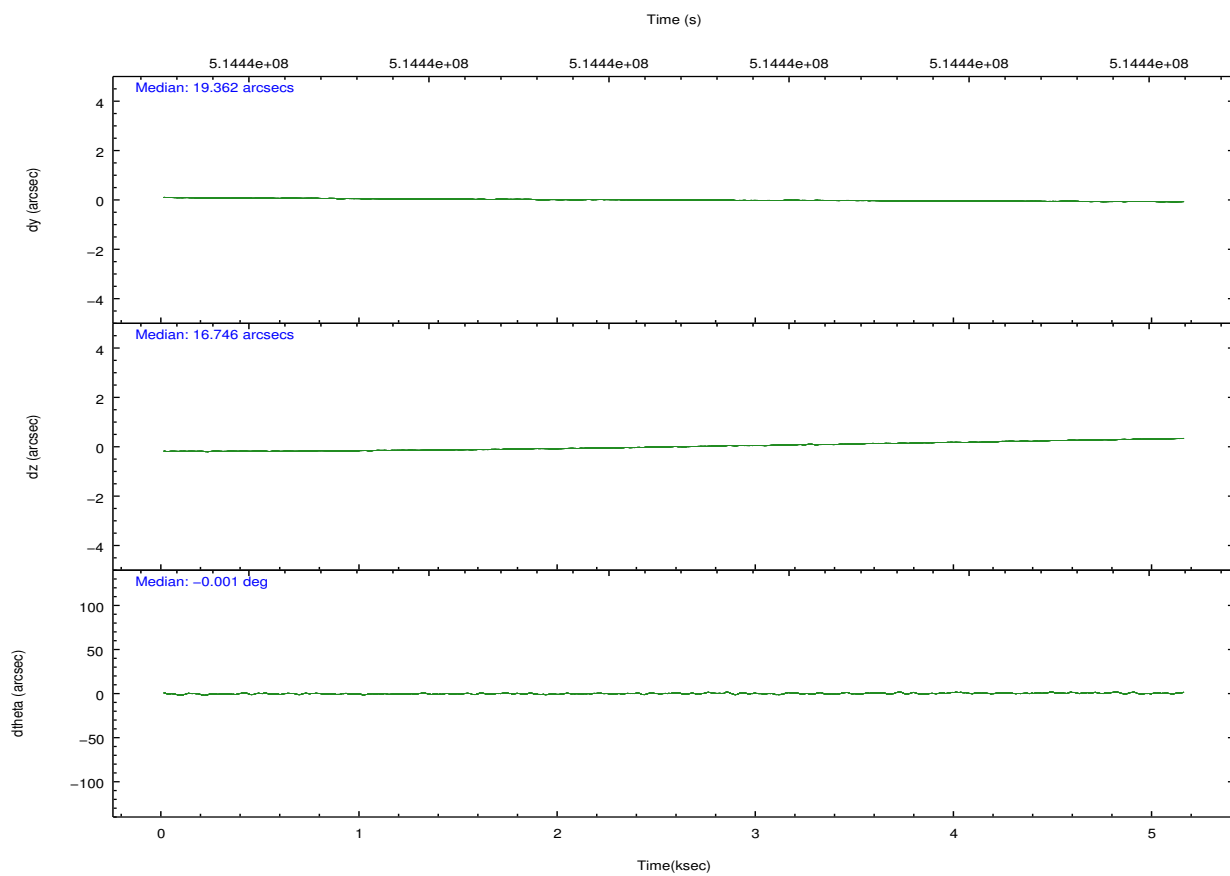
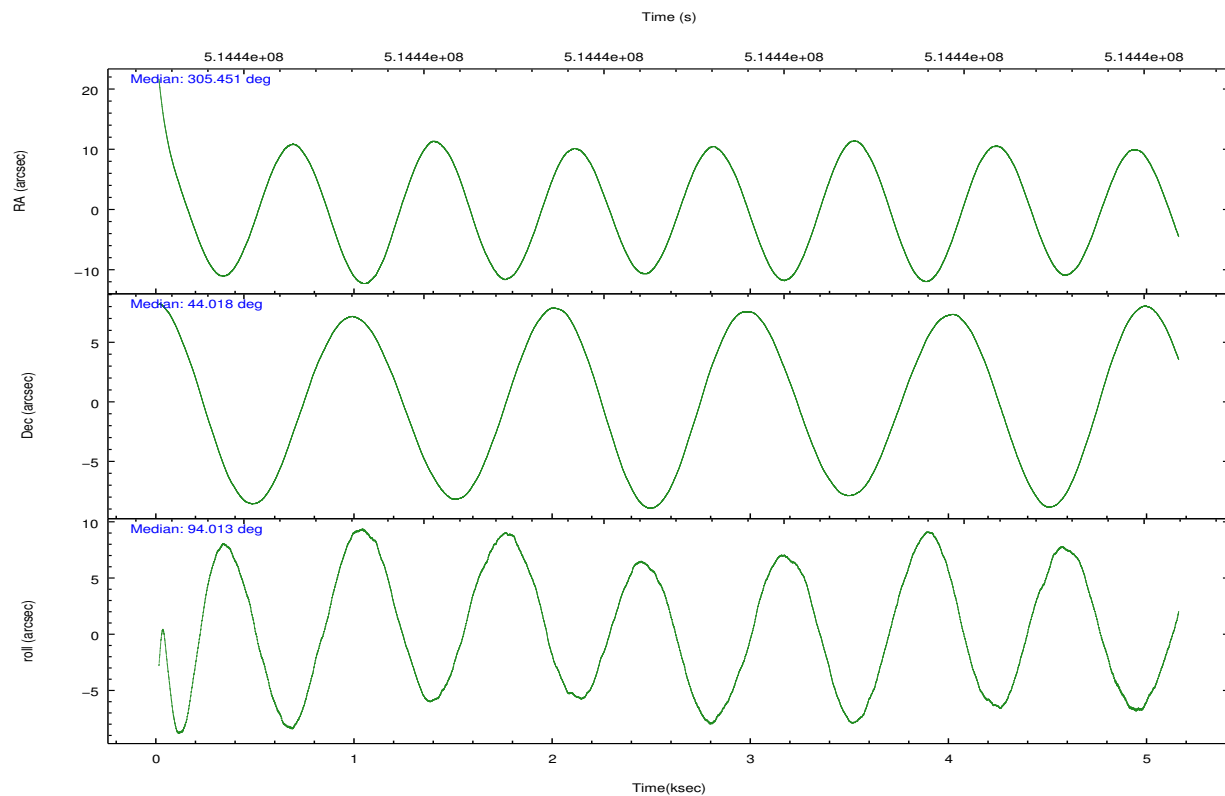
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	22100	23007	29374	22985	26236	32449	grade 0 events	1278	2802	4379	1580	2997	1377
rejected events	18984	18172	21623	19560	21195	18227		5%	12%	14%	6%	11%	4%
rejected %	85%	78%	73%	85%	80%	56%	grade 1 events	13	10	23	19	24	41
								0%	0%	0%	0%	0%	0%
							grade 2 events	725	757	2264	684	774	3069
								3%	3%	7%	2%	2%	9%
							grade 3 events	303	297	260	292	273	1186
								1%	1%	0%	1%	1%	3%
							grade 4 events	269	283	326	285	299	1145
								1%	1%	1%	1%	1%	3%
							grade 5 events	1010	1122	944	1204	1227	3153
								4%	4%	3%	5%	4%	9%
							grade 6 events	543	700	532	584	702	7460
								2%	3%	1%	2%	2%	22%
							grade 7 events	17959	17036	20646	18337	19940	15018
								81%	74%	70%	79%	76%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	305.471923	305.4504744571111	CCD I2 on	Y	Y
[deg] Pointing Dec	43.995192	44.01797788738038	CCD I3 on	Y	Y
[deg] Pointing Roll	93.792019	94.01564098757441	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5899487761303	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.002504226799430853	CCD S4 on	N	N
[s] Observation start time (MET)	514438947.184000	514437830.58046	CCD S5 on	N	N
Observation start date	2014-04-21T03:41:20	2014-04-21T03:23:50	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	514443947.184000	514444973.80585	On-chip summing requested	N	N
Observation end date	2014-04-21T05:04:40	2014-04-21T05:22:53	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



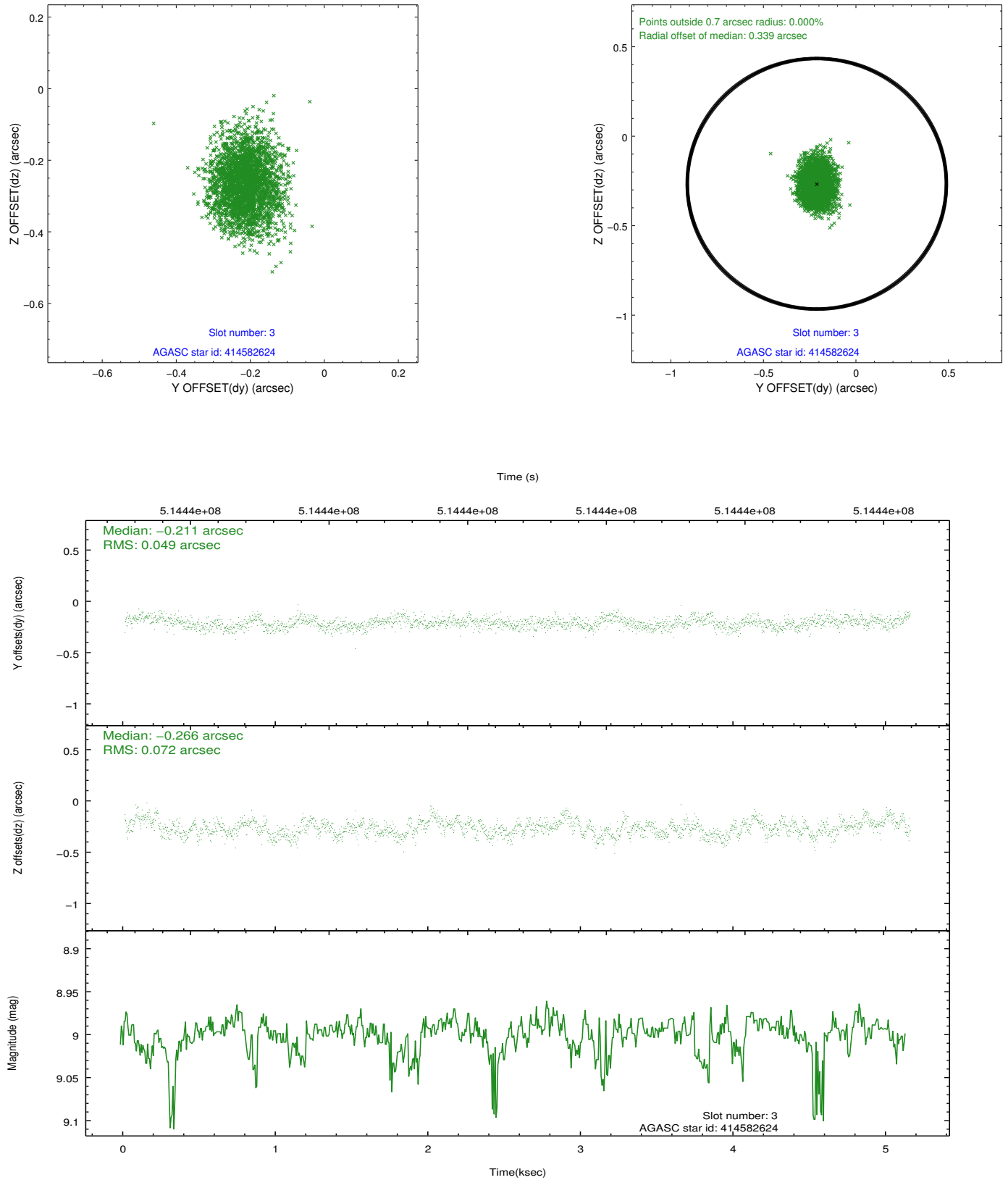


Slot Statistics

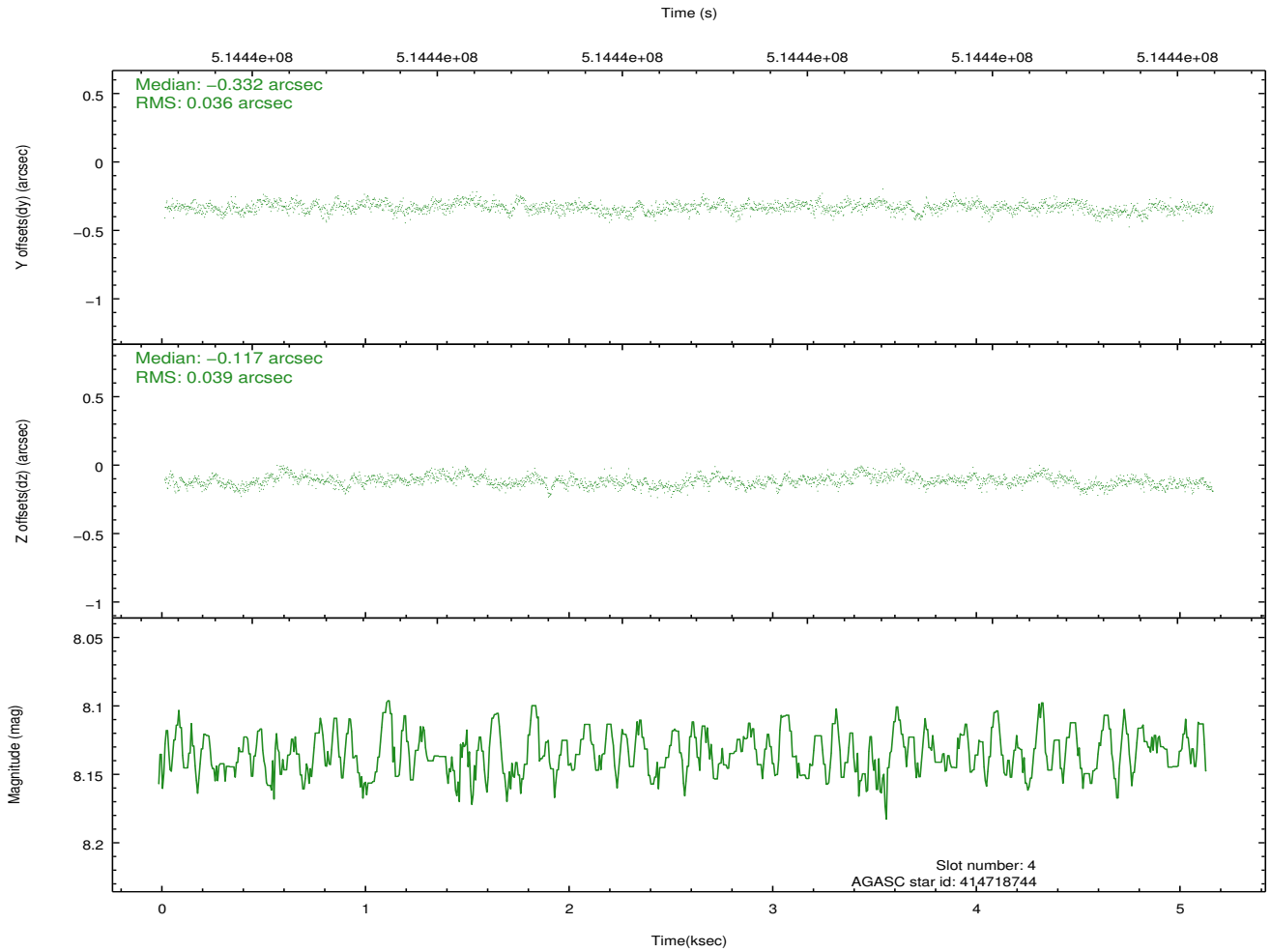
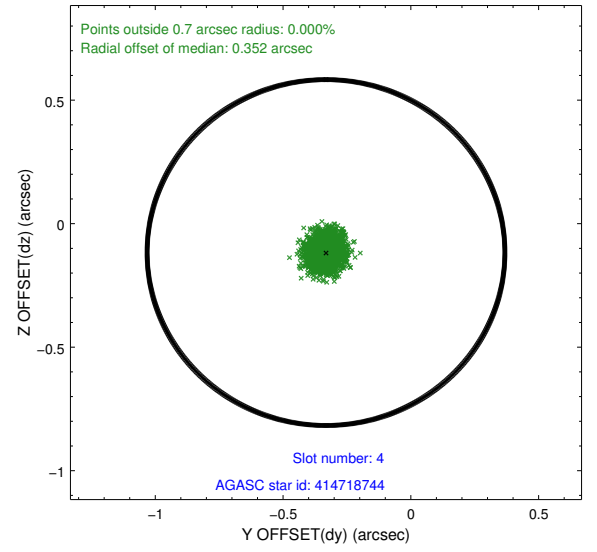
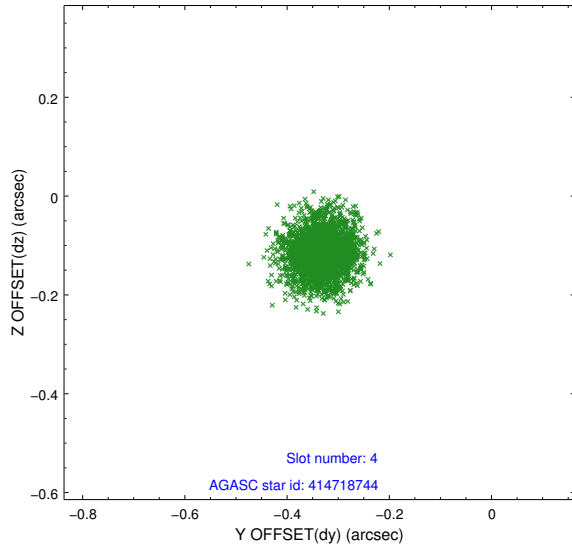
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.06	1256	0.001	-0.112	0.010	0.016	0.000000	0.000000	-774.22	-846.81
1	FID		ACIS-I-5	7.15	1256	-0.248	0.071	0.008	0.013	0.000000	0.000000	-1829.06	1056.64
2	FID		ACIS-I-6	7.16	1256	0.153	0.109	0.008	0.013	0.000000	0.000000	384.42	1702.48
3	GUIDE	used	414582624	9.00	2511	-0.211	-0.266	0.092	0.150	304.643467	43.733615	-786.78	2211.88
4	GUIDE	used	414718744	8.14	2512	-0.332	-0.117	0.056	0.091	305.210228	44.542005	2009.12	540.69
5	GUIDE	used	414723776	9.27	2508	0.395	0.357	0.164	0.248	305.795174	43.432480	-2074.46	-708.54
6	GUIDE	used	414724728	8.97	2511	0.251	0.028	0.106	0.167	305.252472	43.377115	-2182.20	720.11
7	GUIDE	used	414725232	6.92	2511	-0.109	-0.014	0.090	0.146	305.116565	43.854522	-443.45	954.44

2.4 Star Slots

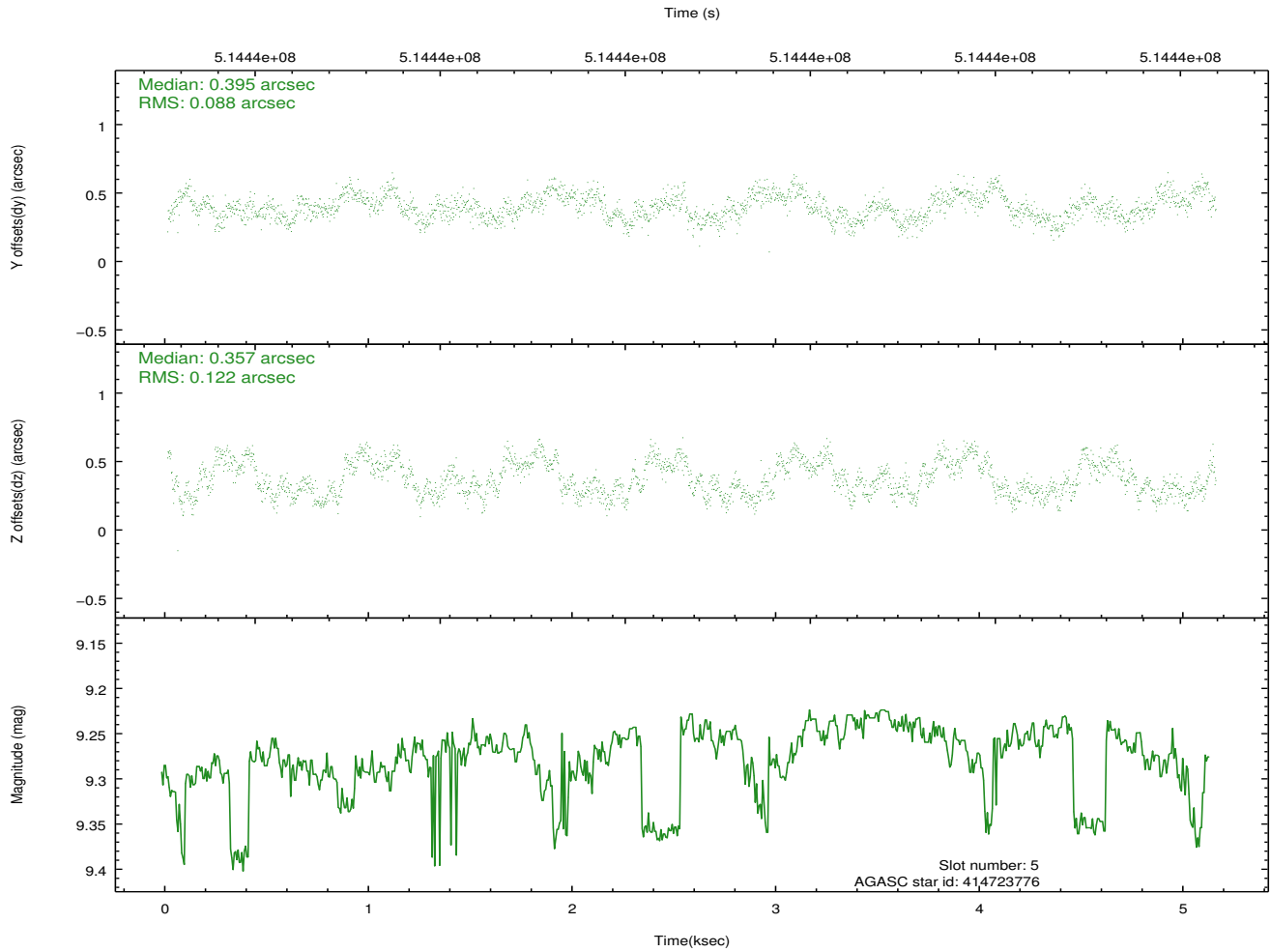
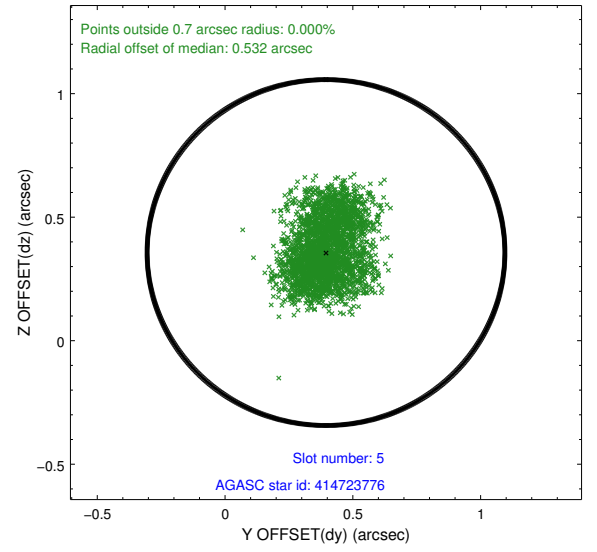
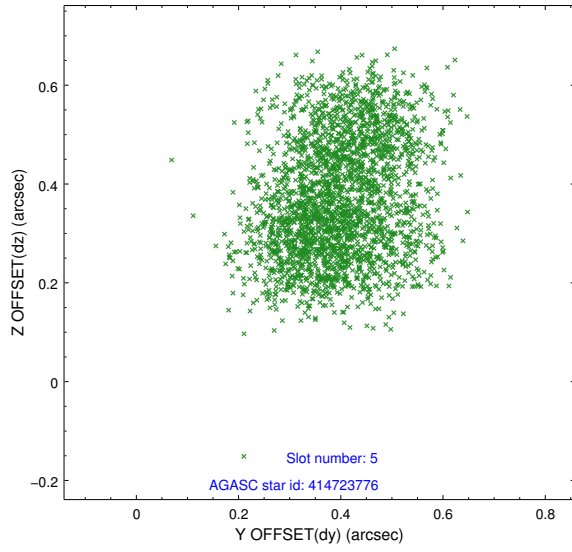
2.4.1 Slot 3



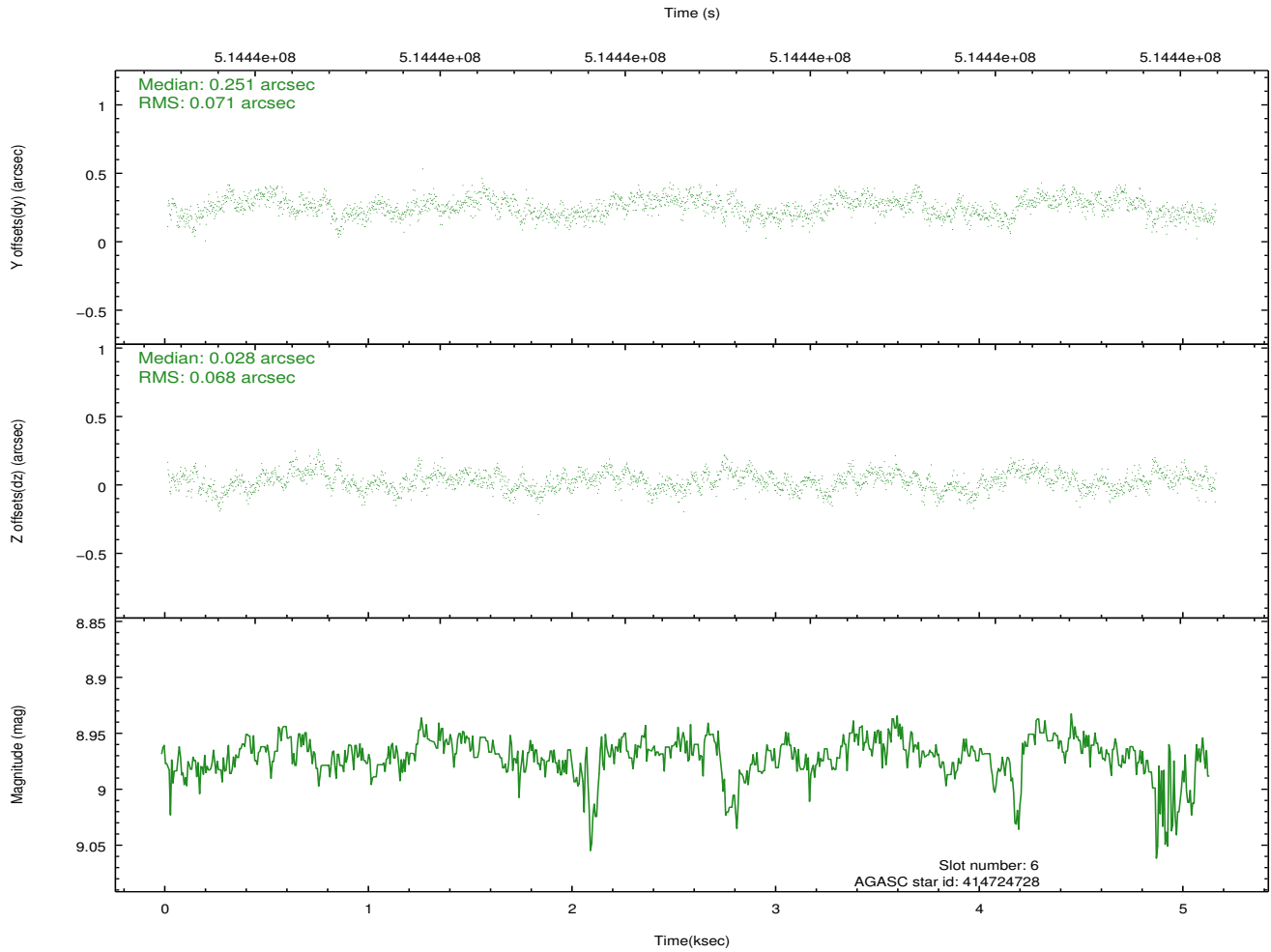
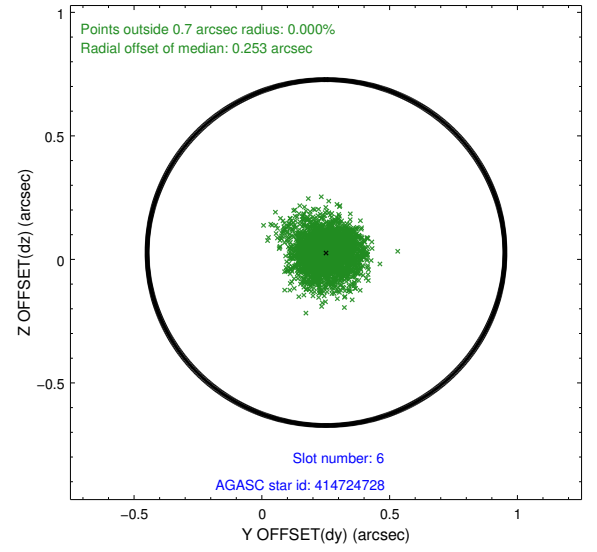
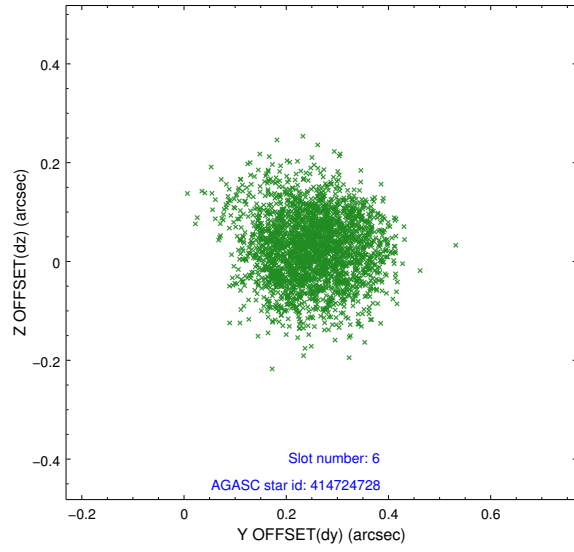
2.4.2 Slot 4



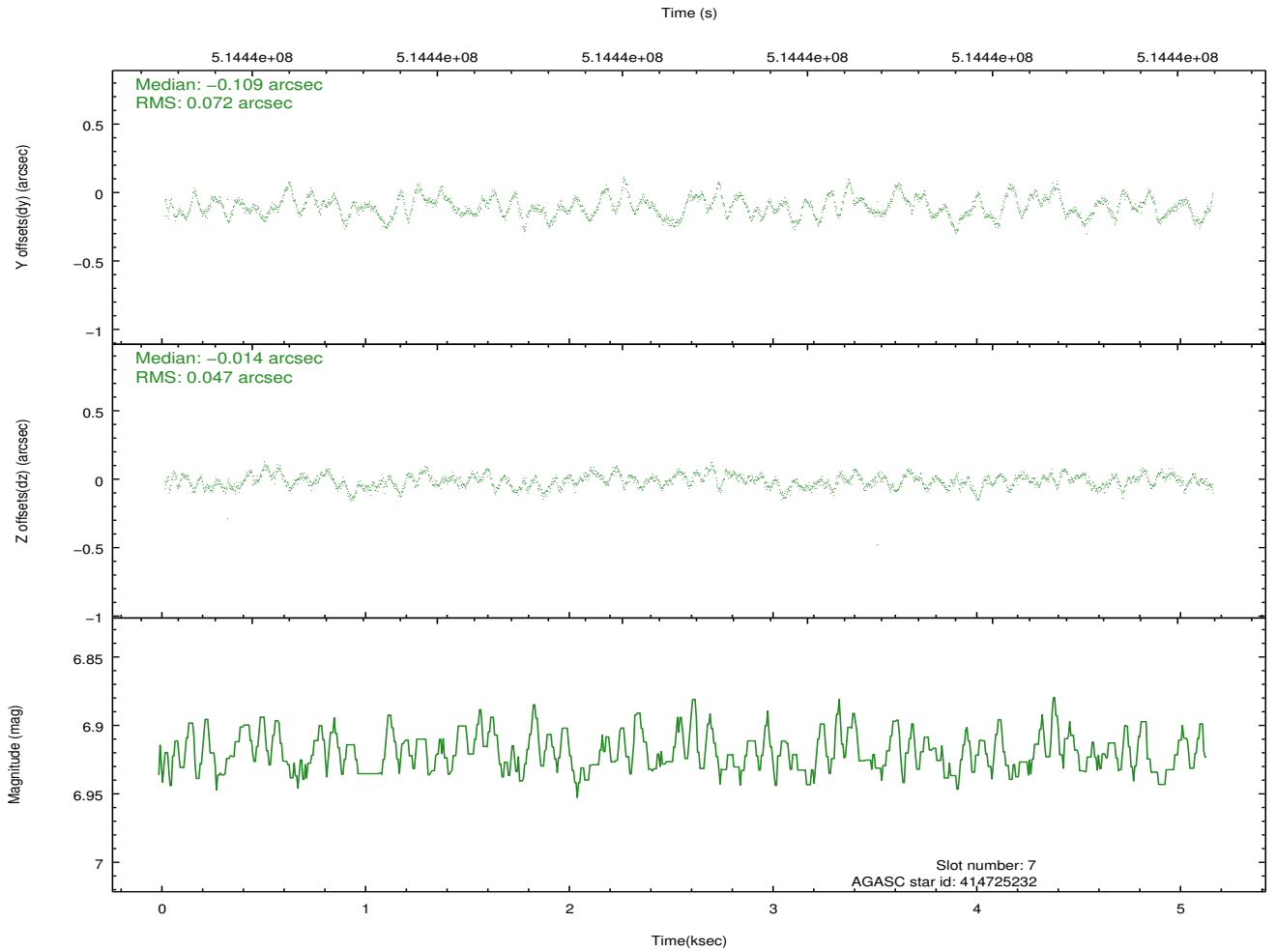
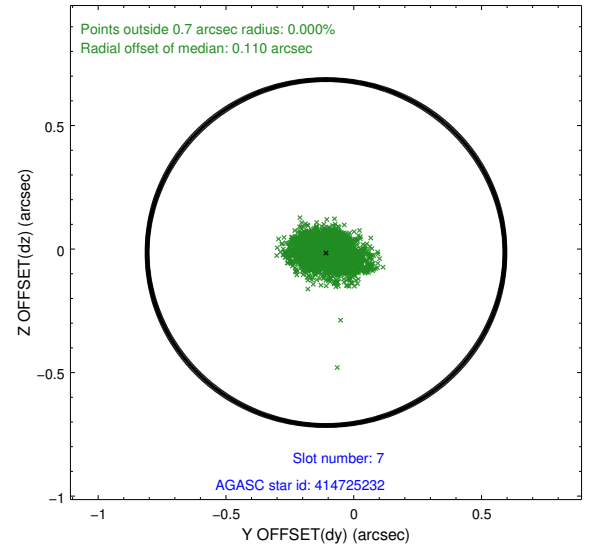
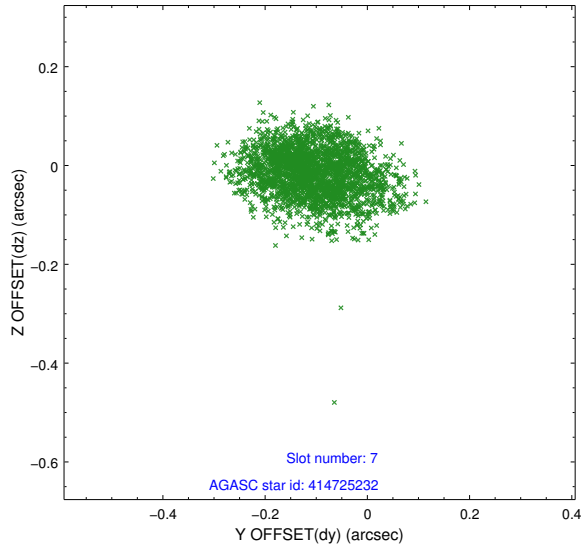
2.4.3 Slot 5



2.4.4 Slot 6

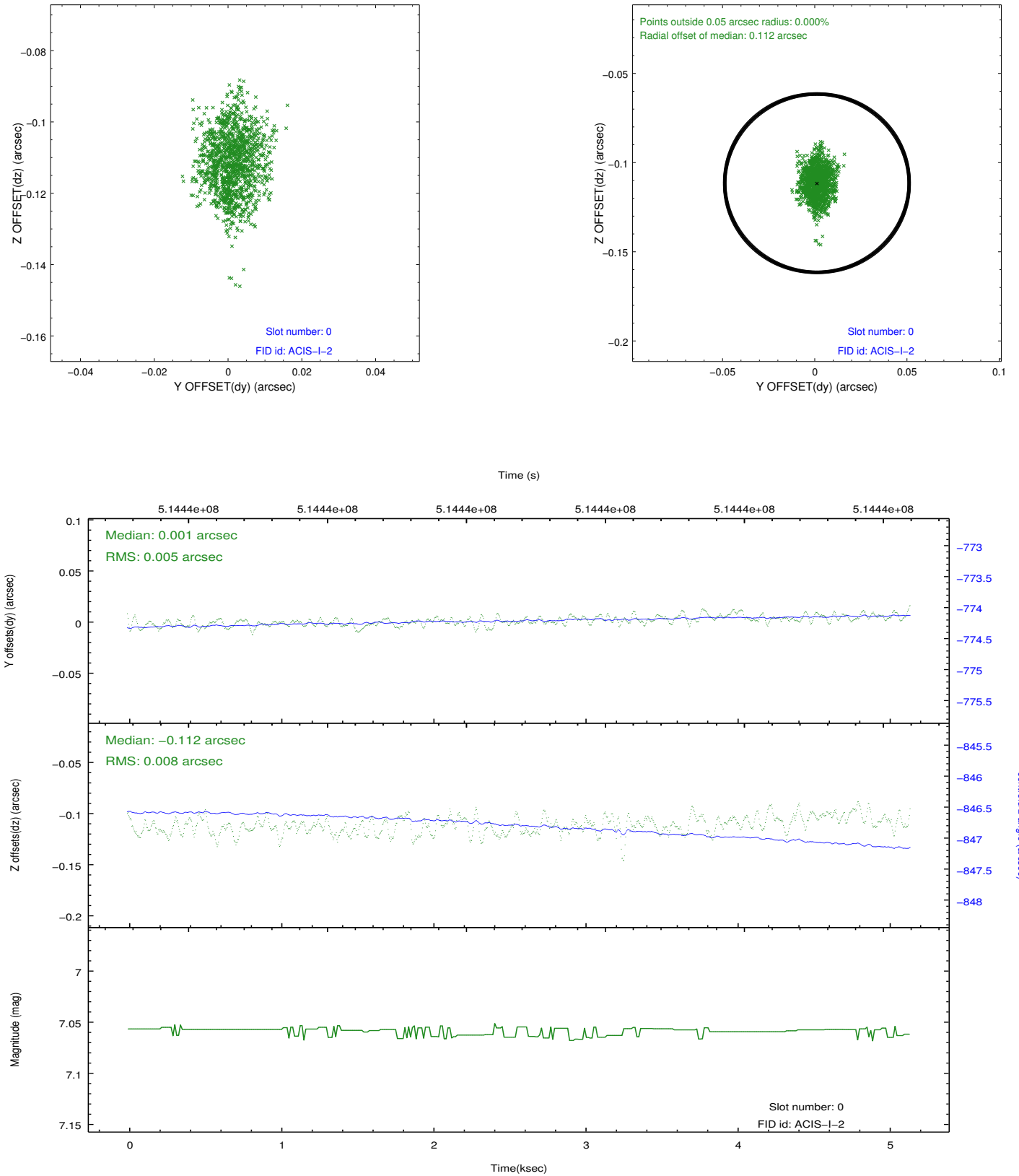


2.4.5 Slot 7

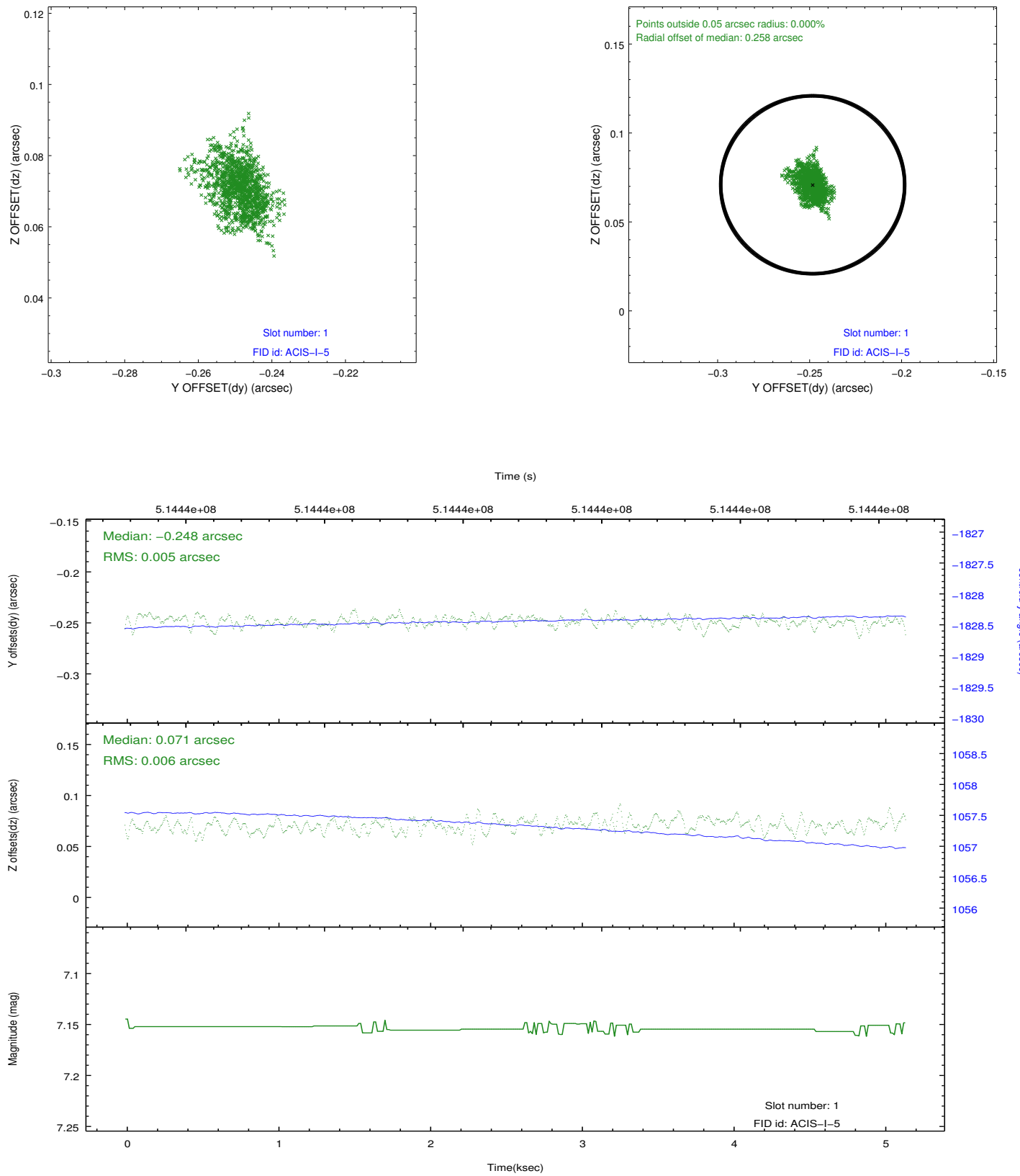


2.5 FID Slots

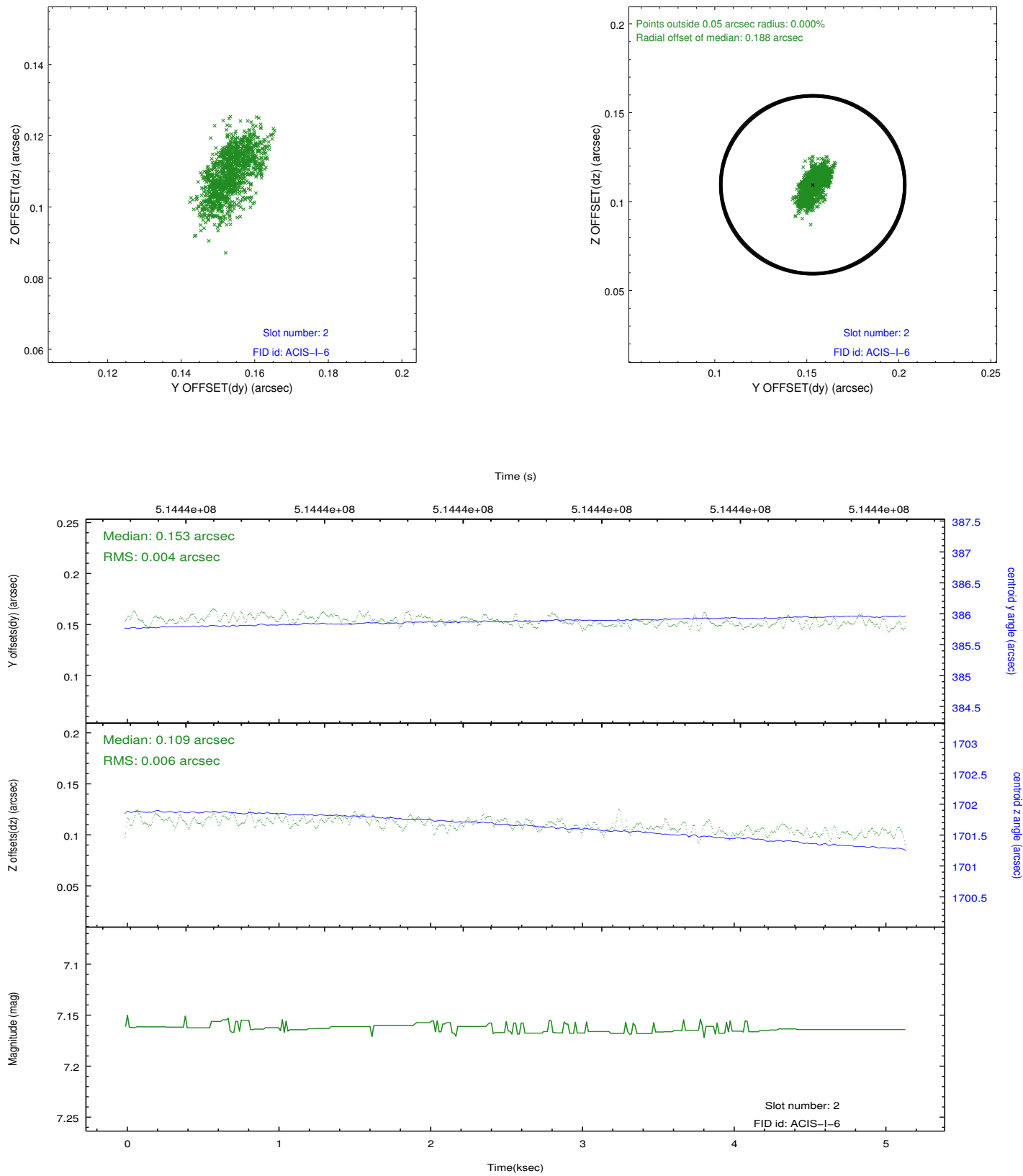
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.971294085443

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.