

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12418 - L2 Version 2
Chandra X-Ray Center

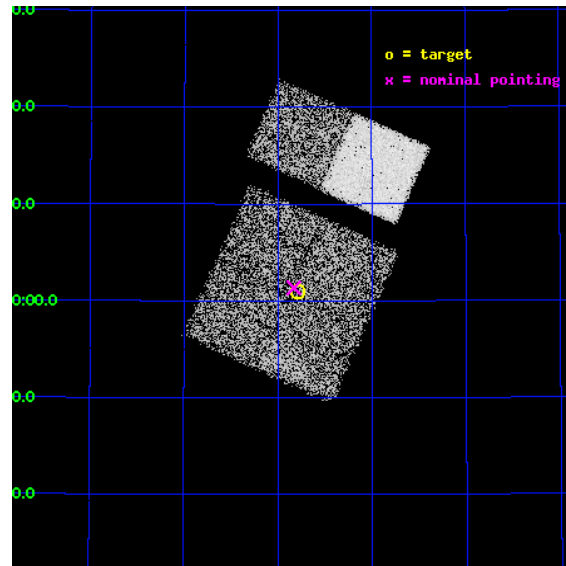
L2 Processing Date : Feb 4 2012

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

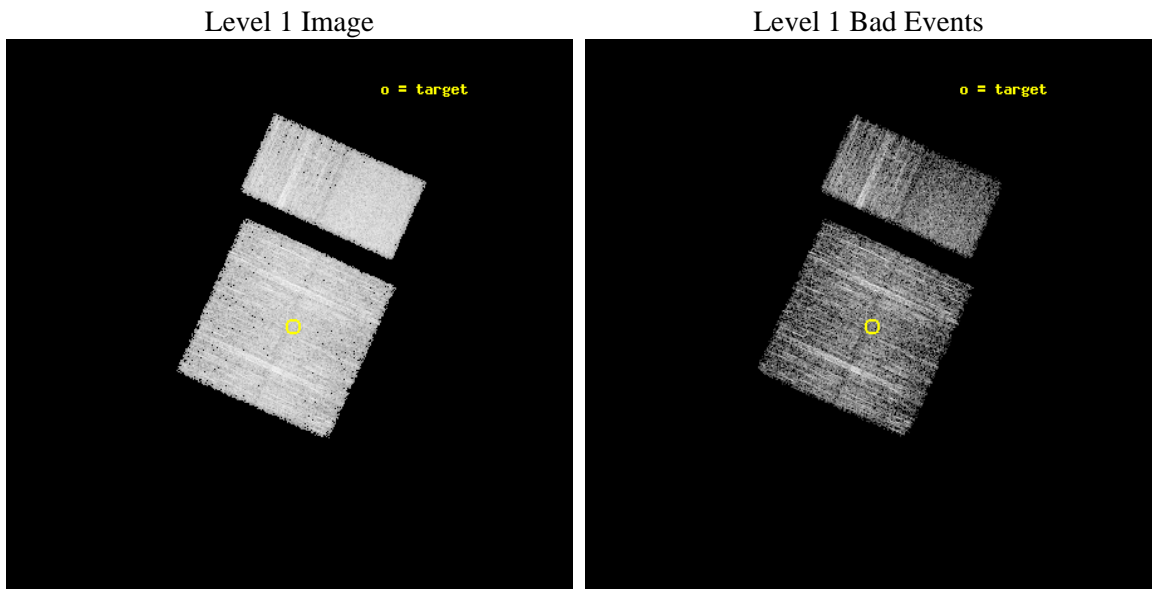
seq_num	401159	Sequence number
obs_id	12418	Observation id
title	The Nature of INTEGRAL Sources in the Galactic Plane	Proposal titl
observer	Dr. John Tomsick	Principal investigator
object	IGR J21188+4901	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	319.699167	Observer's specified target RA [deg]
dec_targ	49.017	Observer's specified target Dec [deg]
ra_nom	319.70784844107	Nominal RA [deg]
dec_nom	49.022431675949	Nominal Dec [deg]
roll_nom	24.22045145335	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5052.7999812365	Sum of GTIs [s]
livetime	4988.8183854432	Livetime [s]
ontime0	5052.7999812365	Sum of GTIs [s]
ontime1	5052.7999812365	Sum of GTIs [s]
ontime2	5052.7999812365	Sum of GTIs [s]
ontime3	5052.7999812365	Sum of GTIs [s]
ontime6	5052.7999812365	Sum of GTIs [s]
ontime7	5052.7999812365	Sum of GTIs [s]
l2events	36358	Number of level 2 events



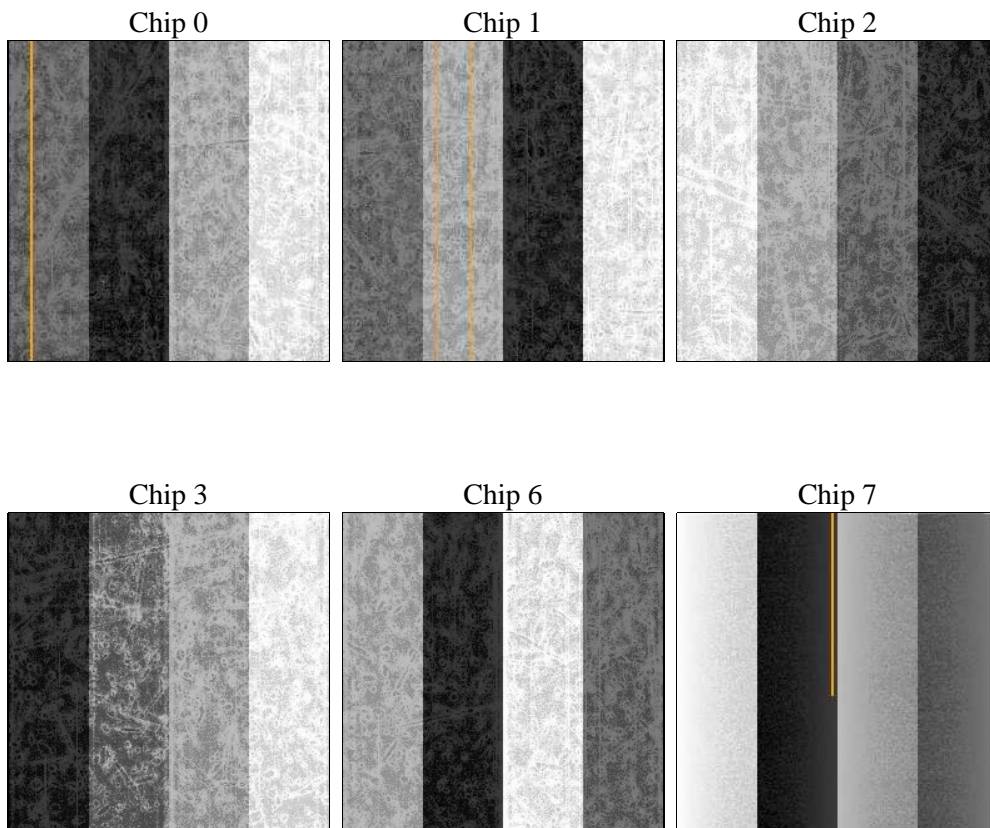
2 OBI

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	8.4.3	Processing system revision	ontime	5052.7999812365	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	5052.7999812365	Sum of GTIs [s]
date	2012-02-04T21:09:52	Date and time of file creation	ontime1	5052.7999812365	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5052.7999812365	Sum of GTIs [s]
			ontime3	5052.7999812365	Sum of GTIs [s]
			ontime6	5052.7999812365	Sum of GTIs [s]
			ontime7	5052.7999812365	Sum of GTIs [s]
			l1events	221284	Number of level 1 events

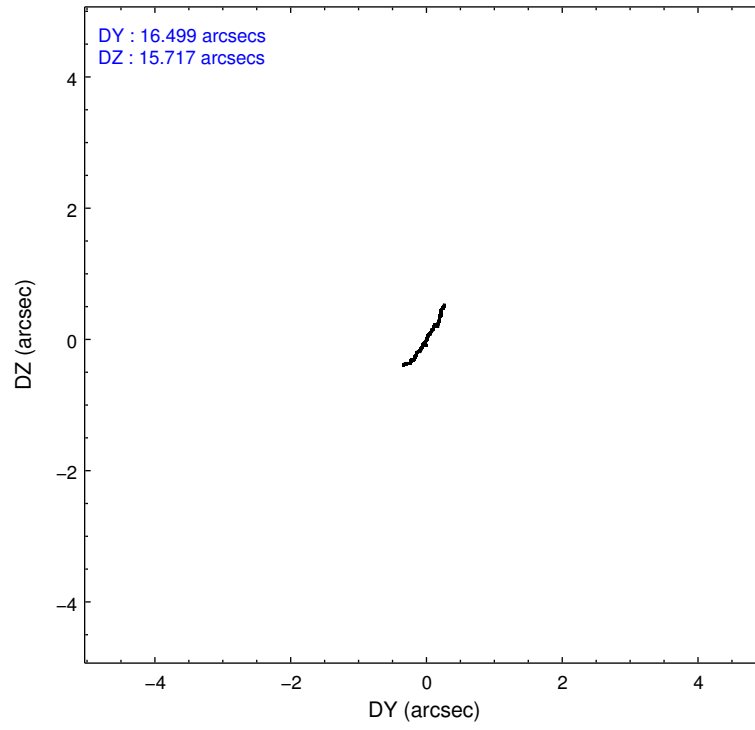
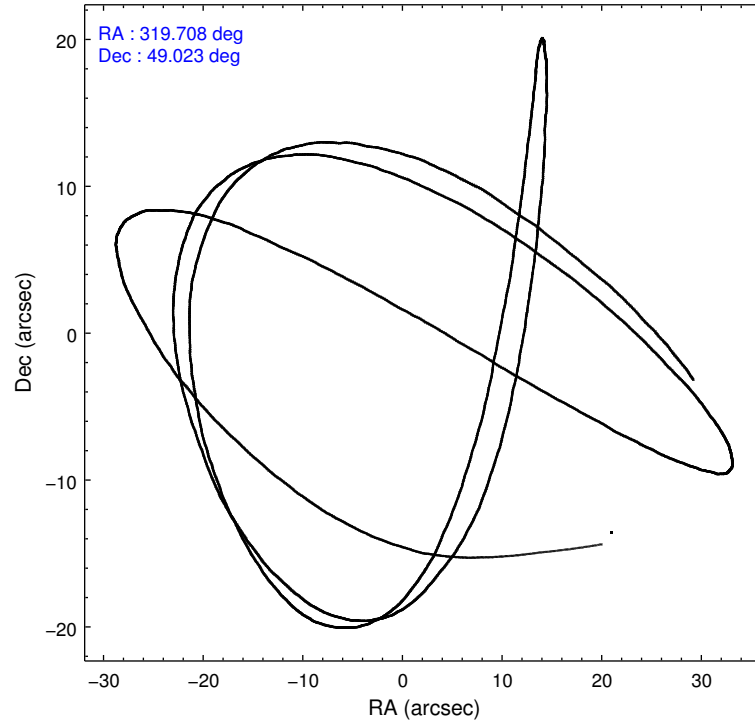
2.1.4 Events

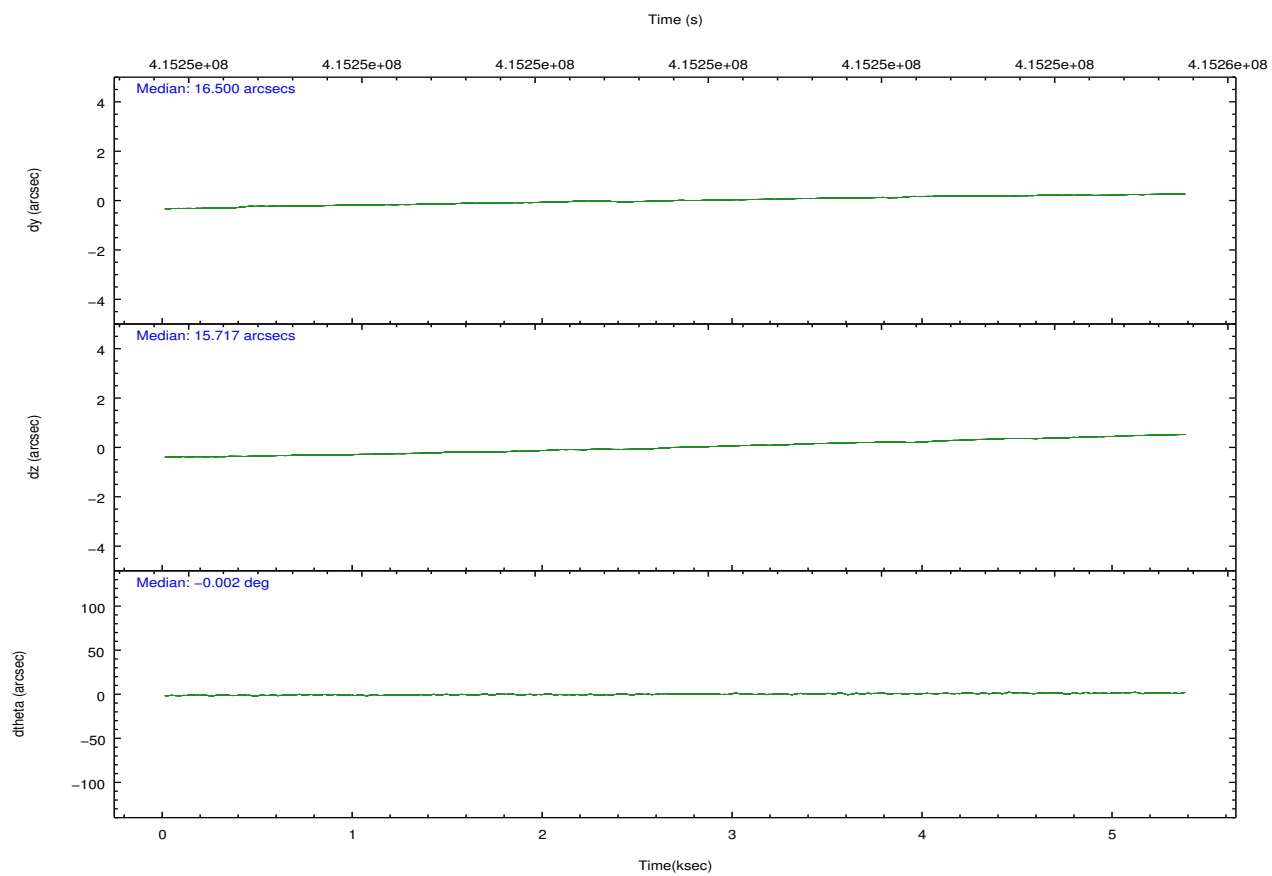
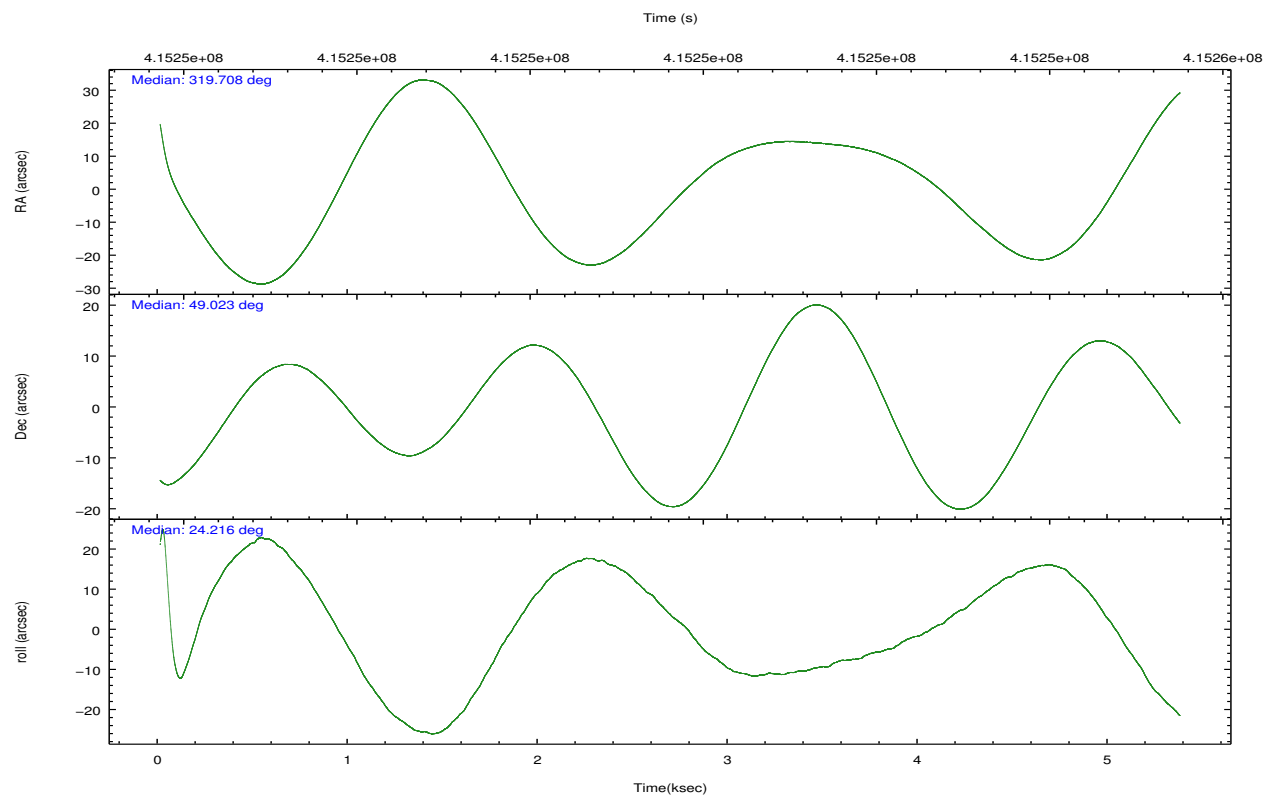
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	32782	35494	36646	34936	37197	44229	grade 0 events	1369	1557	1364	1303	1436	1778
rejected events	28711	31013	32781	31219	33111	24185		4%	4%	3%	3%	3%	4%
rejected %	87%	87%	89%	89%	89%	54%	grade 1 events	20	17	21	29	19	54
								0%	0%	0%	0%	0%	0%
							grade 2 events	1009	1116	938	868	901	4164
								3%	3%	2%	2%	2%	9%
							grade 3 events	434	456	407	384	420	1699
								1%	1%	1%	1%	1%	3%
							grade 4 events	406	461	408	402	425	1781
								1%	1%	1%	1%	1%	4%
							grade 5 events	1576	1533	1435	1767	1792	4767
								4%	4%	3%	5%	4%	10%
							grade 6 events	858	897	754	764	908	10648
								2%	2%	2%	2%	2%	24%
							grade 7 events	27110	29457	31319	29419	31296	19338
								82%	82%	85%	84%	84%	43%

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	319.684020	319.7078484410733	CCD I2 on	Y	Y
[deg] Pointing Dec	48.999984	49.02243167594901	CCD I3 on	Y	Y
[deg] Pointing Roll	24.029623	24.22045145334982	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	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	415249504.184000	415248389.81979	CCD S5 on	N	N
Observation start date	2011-02-28T03:03:58	2011-02-28T02:46:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	415254504.184000	415255287.04514	On-chip summing requested	N	N
Observation end date	2011-02-28T04:27:18	2011-02-28T04:41:27	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



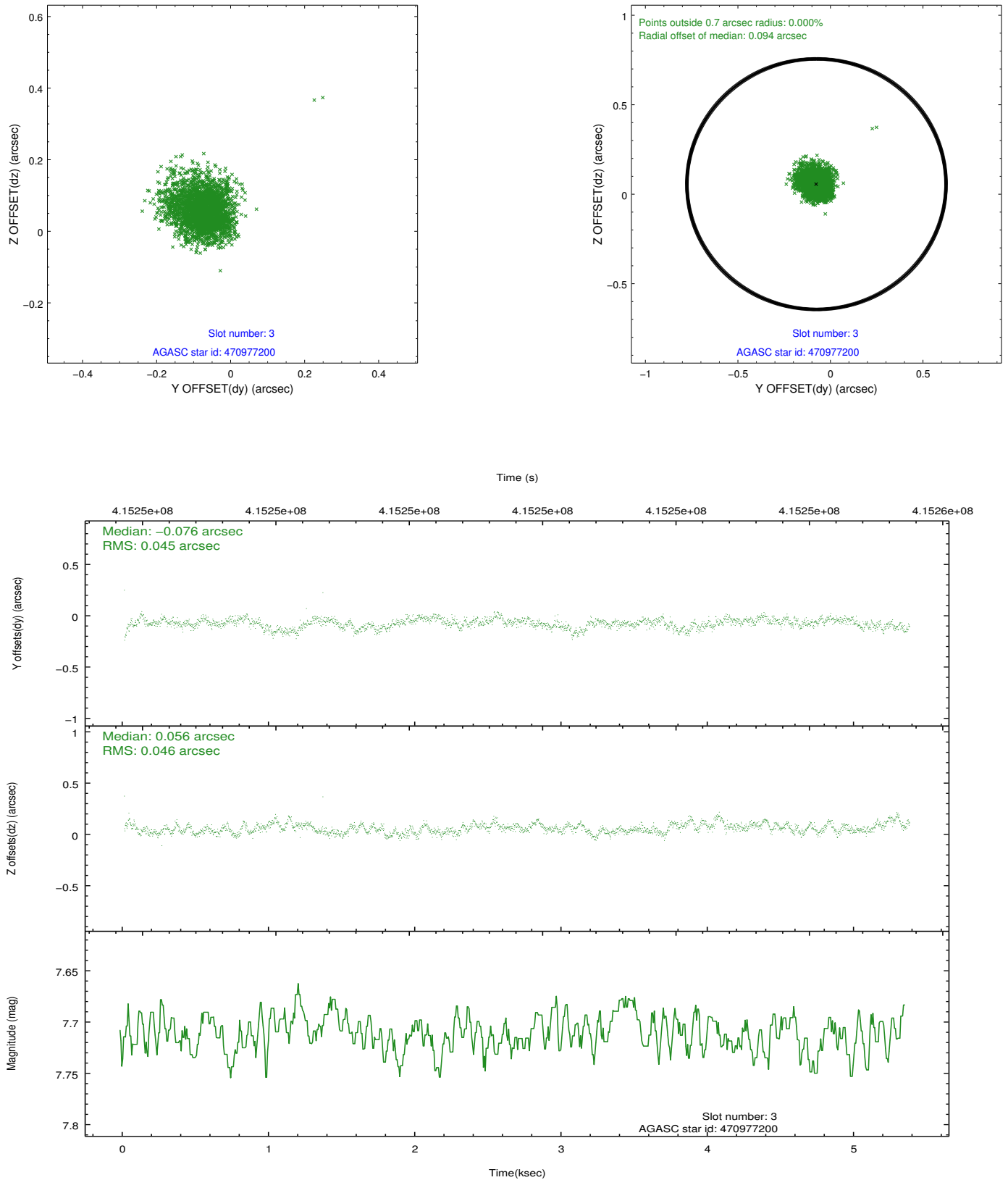


Slot Statistics

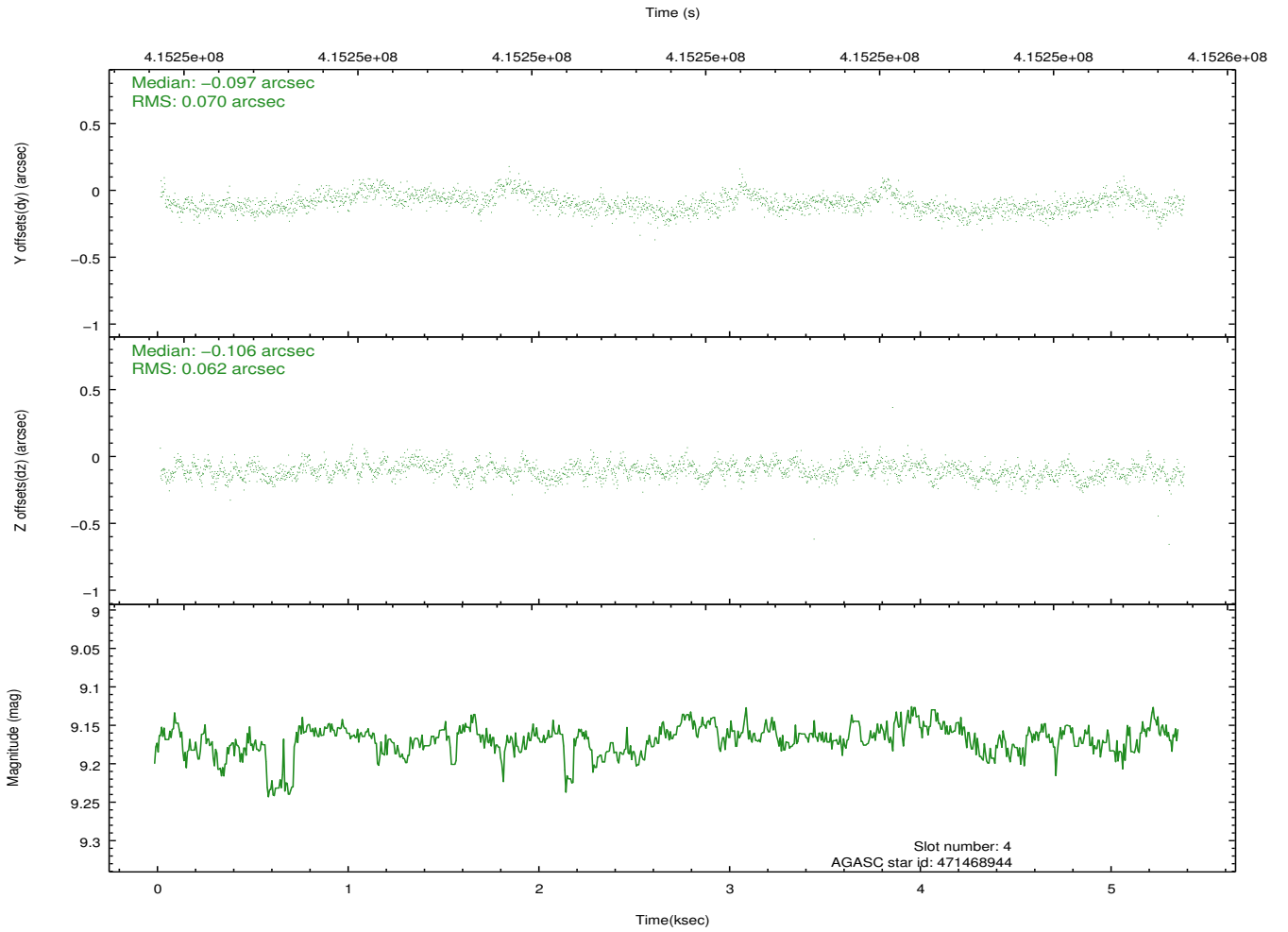
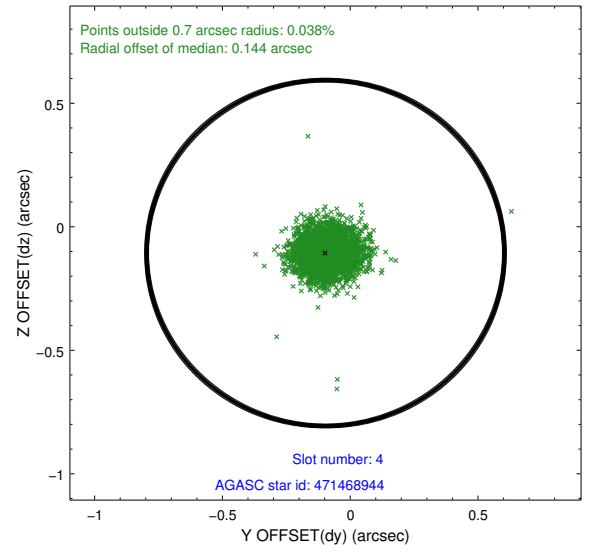
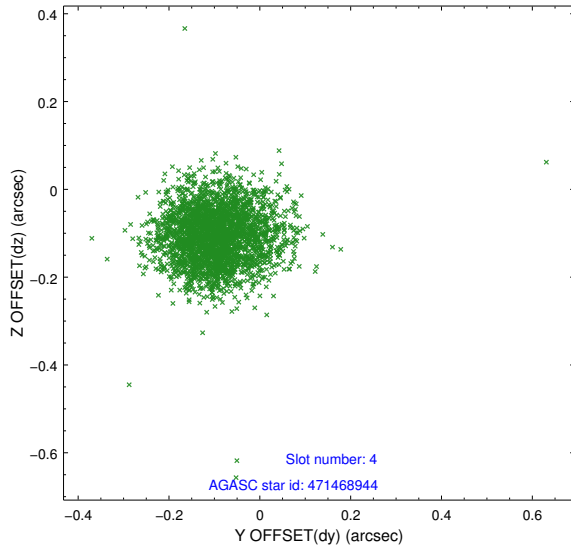
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.03	1310	0.054	-0.047	0.011	0.017	0.000000	0.000000	922.98	-839.39
1	FID	ACIS-I-5	7.03	1310	-0.231	0.046	0.008	0.013	0.000000	0.000000	-1824.80	1057.61
2	FID	ACIS-I-6	7.04	1310	0.086	0.071	0.008	0.013	0.000000	0.000000	387.32	1703.42
3	GUIDE	470977200	7.71	2620	-0.076	0.056	0.067	0.112	319.991642	48.634733	135.01	-1498.22
4	GUIDE	471468944	9.17	2613	-0.097	-0.106	0.097	0.154	320.096681	49.537984	1671.50	1377.59
5	GUIDE	471470776	8.05	2619	0.110	-0.066	0.079	0.126	318.988258	49.102154	-1342.89	1010.26
6	GUIDE	471477848	9.00	2618	0.152	-0.055	0.090	0.152	319.068413	49.282313	-903.24	1521.95
7	GUIDE	471606408	9.36	2615	-0.088	0.170	0.117	0.188	320.651628	49.145849	2301.80	-434.73

2.4 Star Slots

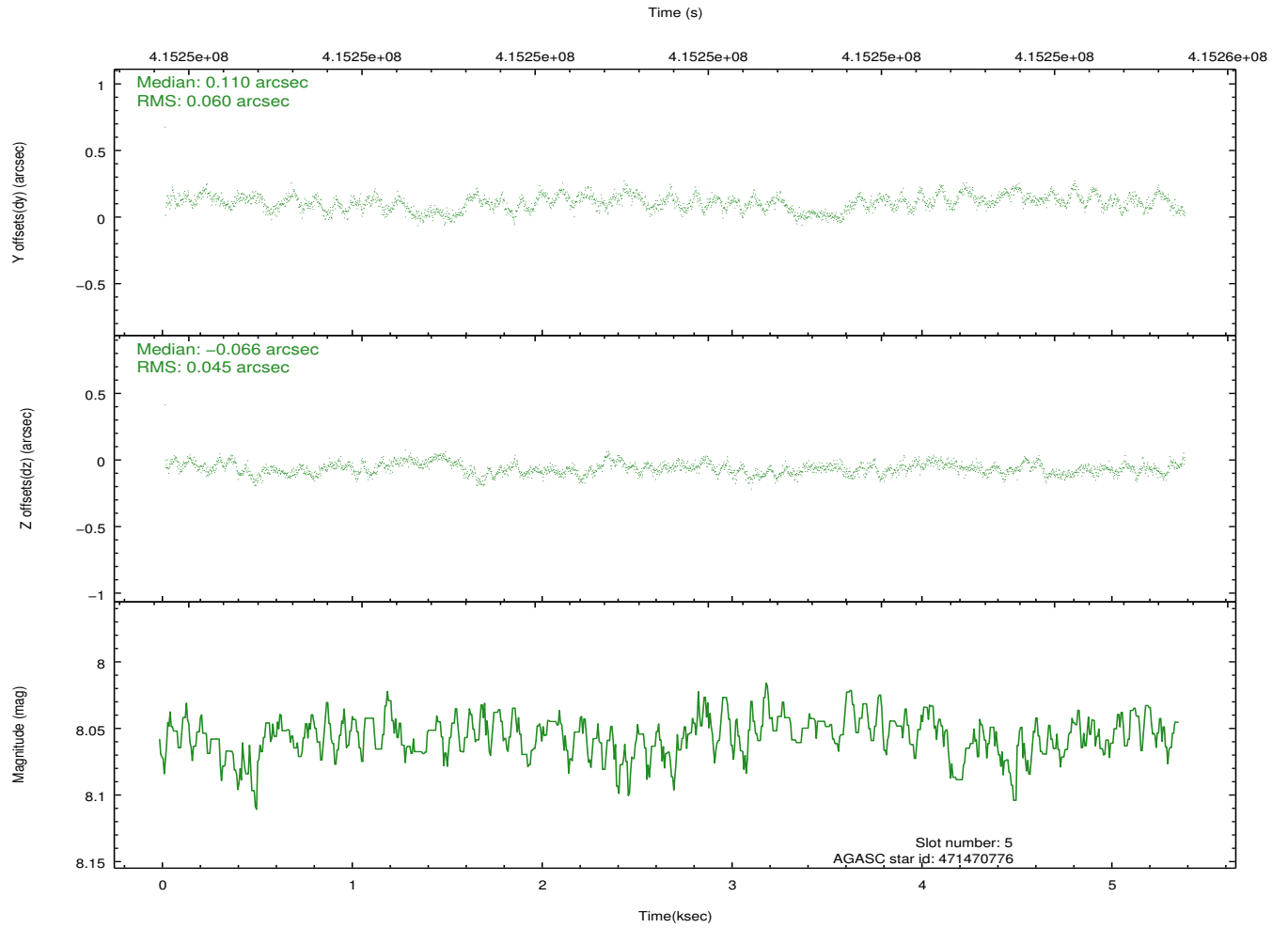
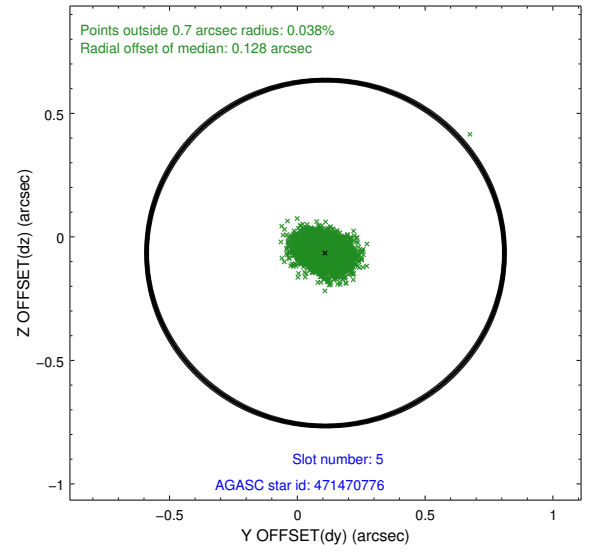
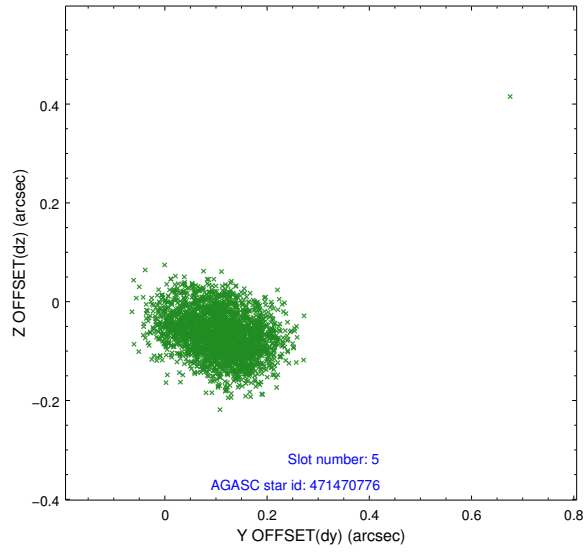
2.4.1 Slot 3



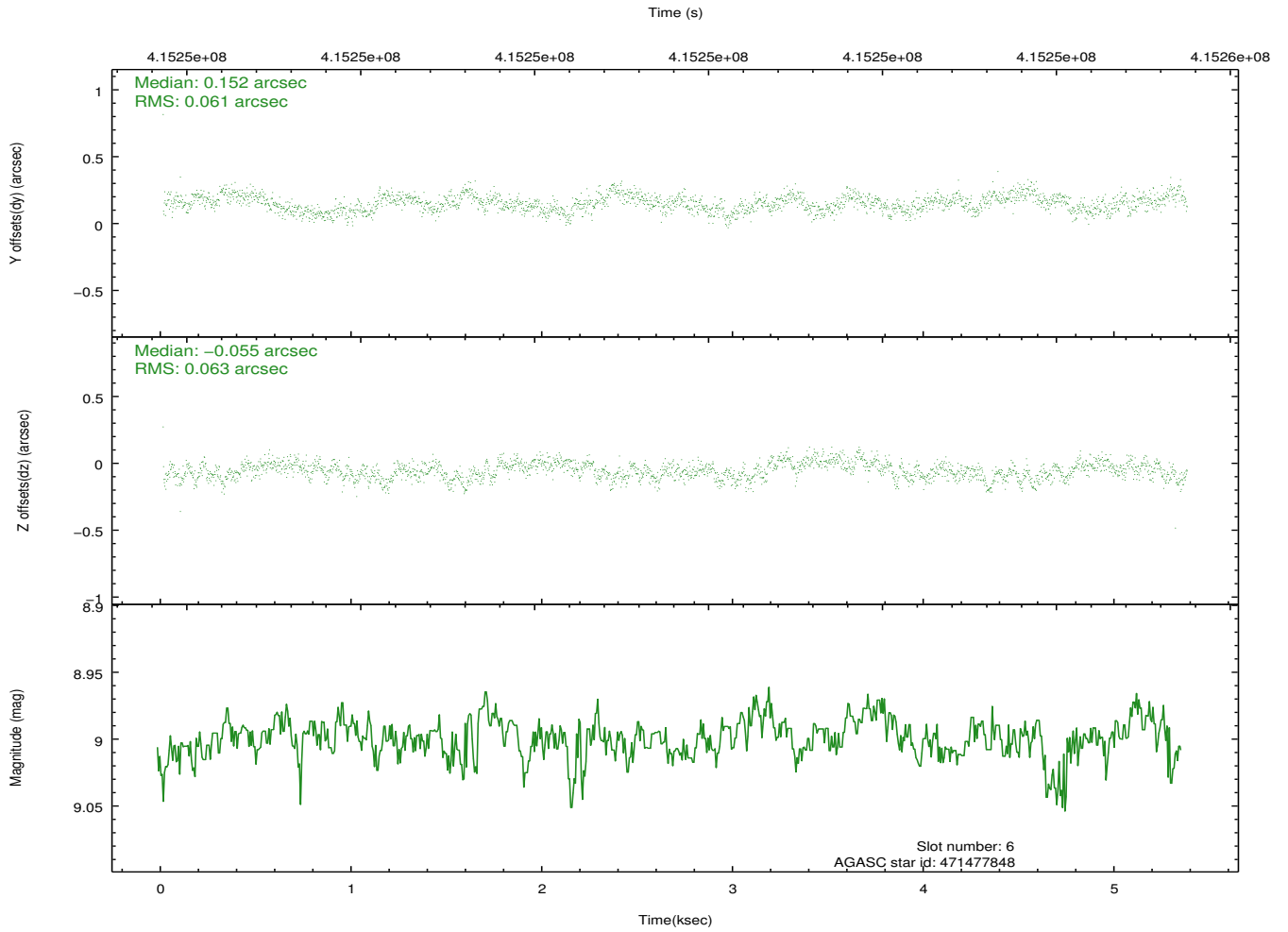
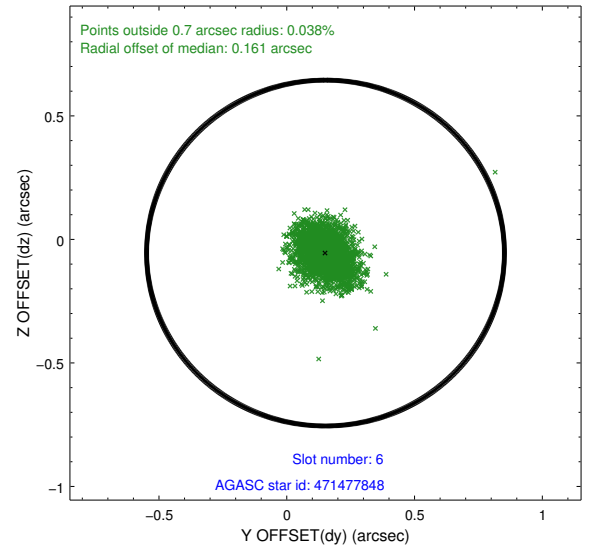
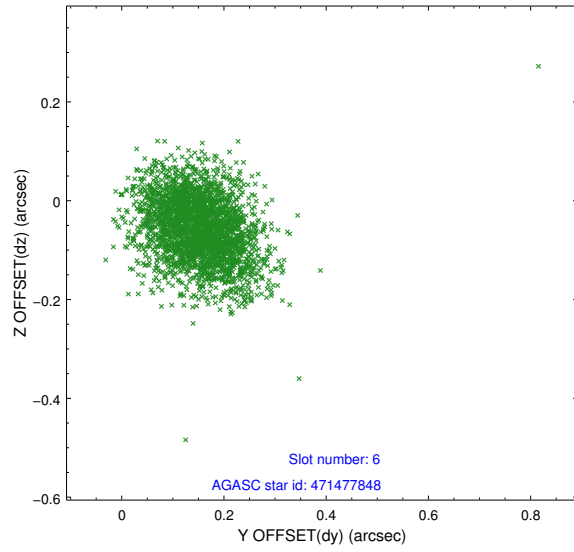
2.4.2 Slot 4



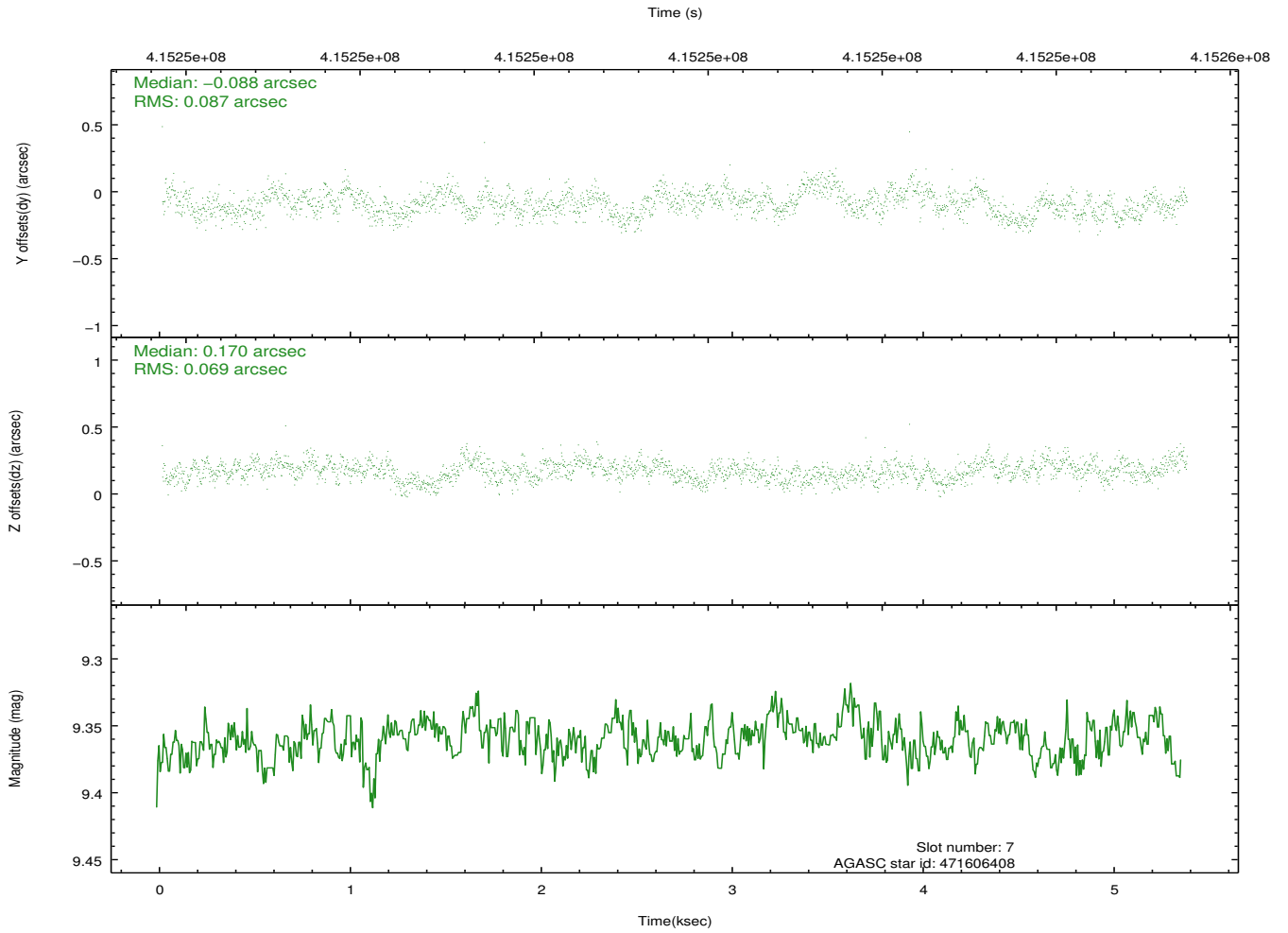
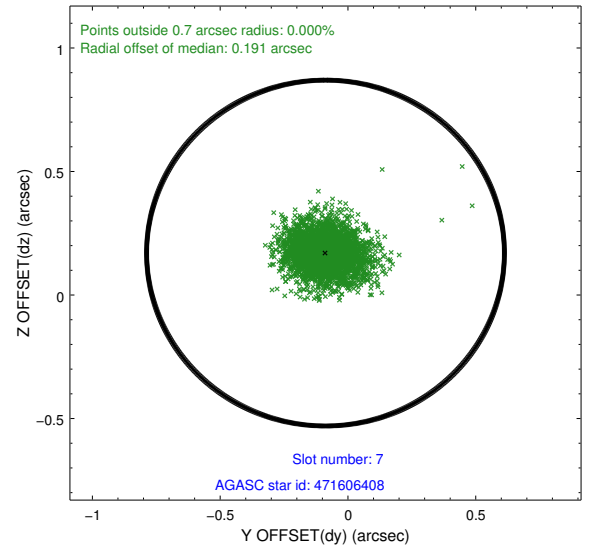
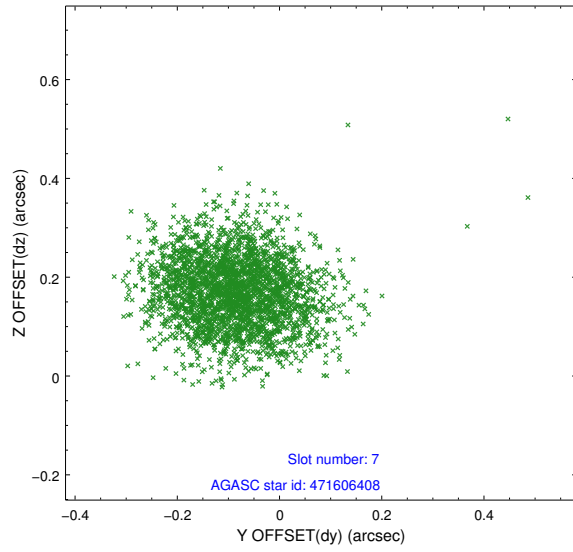
2.4.3 Slot 5



2.4.4 Slot 6

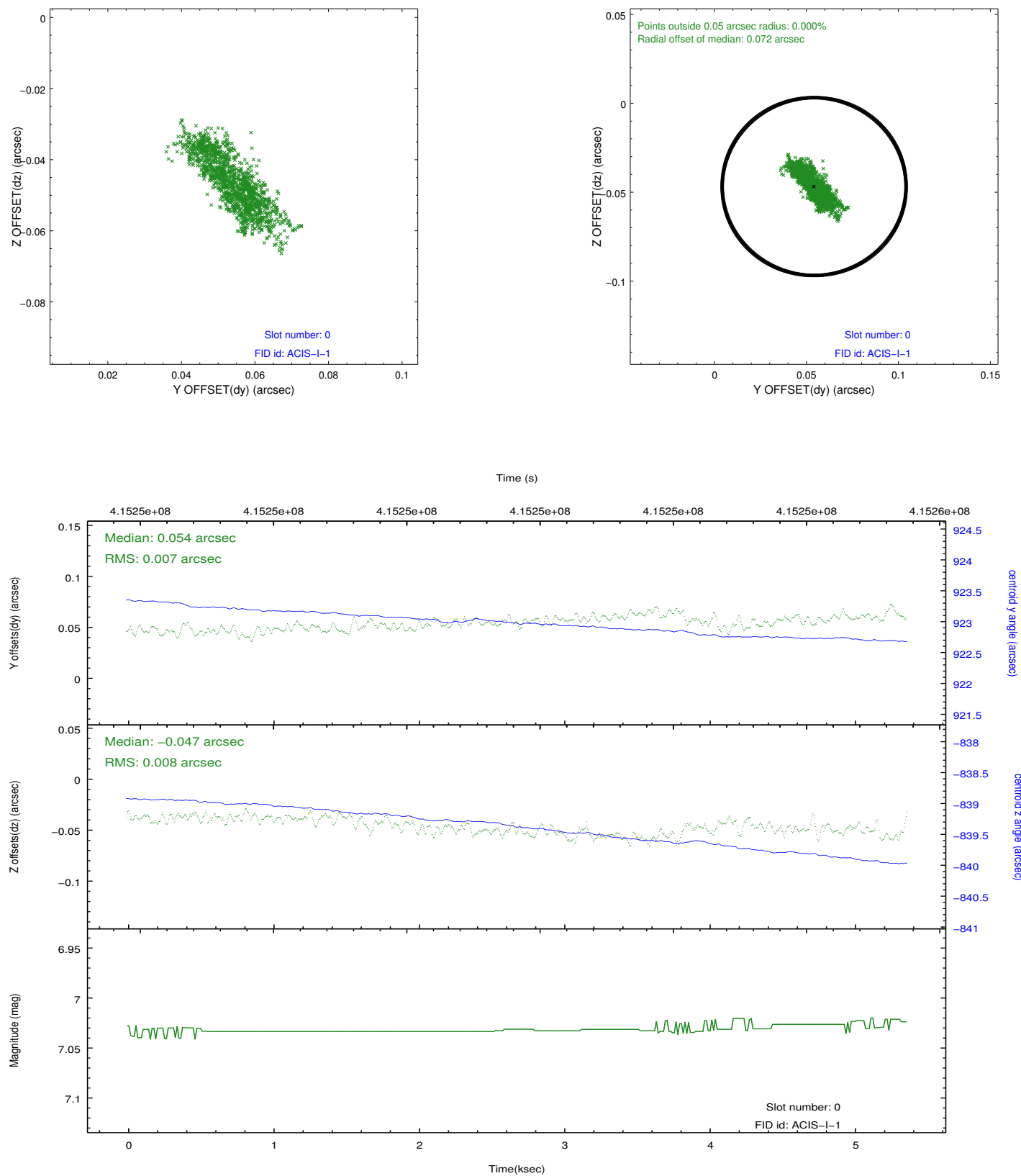


2.4.5 Slot 7

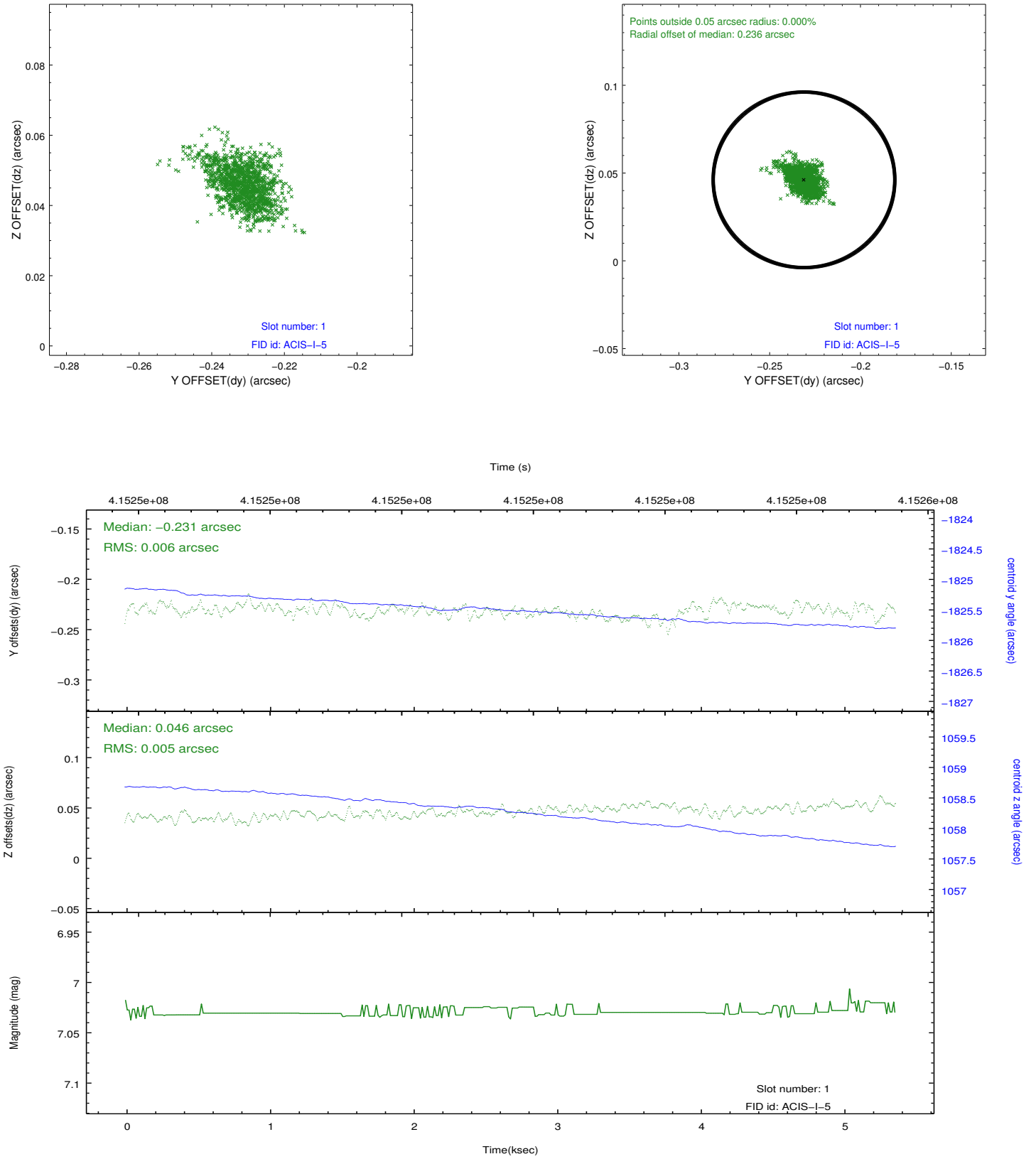


2.5 FID Slots

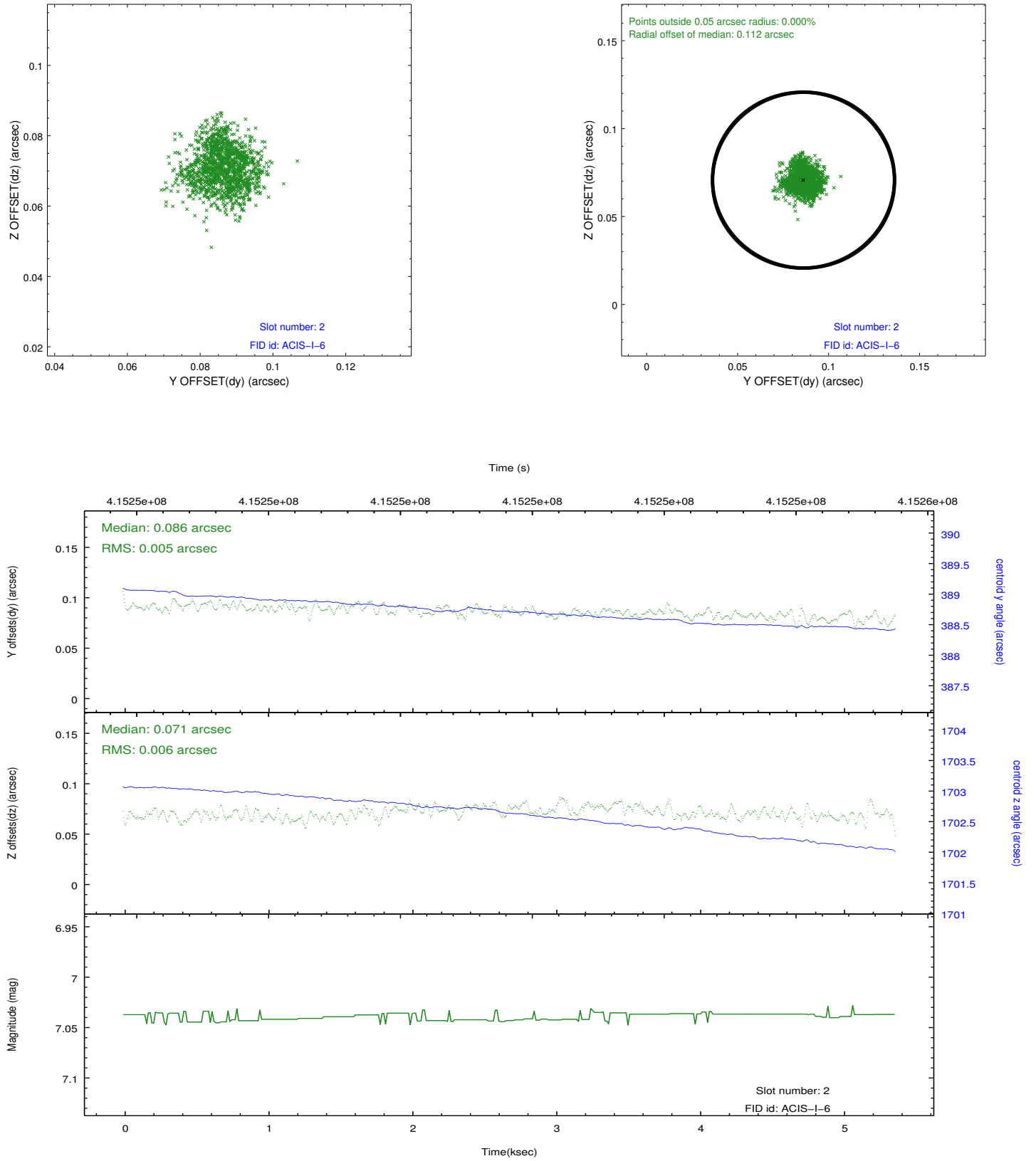
2.5.1 Slot 0



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)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0527999812365

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.