

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15791 - L2 Version 2
Chandra X-Ray Center

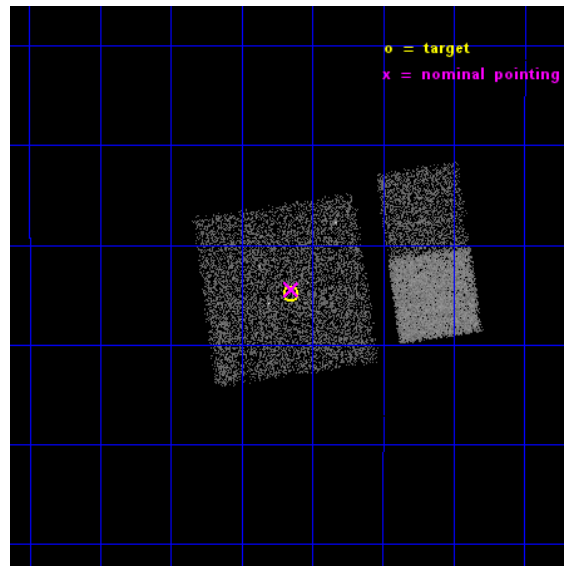
L2 Processing Date : Dec 10 2014

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1 Front

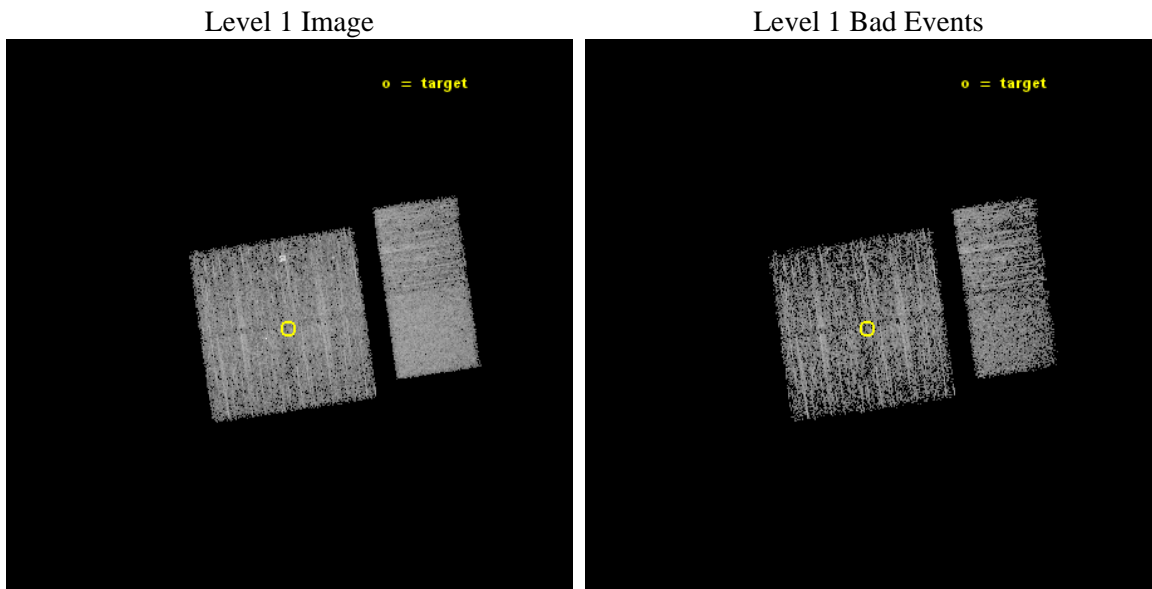
seq_num	401588	Sequence number
obs_id	15791	Observation id
title	The Nature of INTEGRAL Sources in the Galactic Plane	Proposal titl
observer	Dr. John Tomsick	Principal investigator
object	IGR J18381-0924	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	279.537917	Observer's specified target RA [deg]
dec_targ	-9.415	Observer's specified target Dec [deg]
ra_nom	279.53693257063	Nominal RA [deg]
dec_nom	-9.4076050291779	Nominal Dec [deg]
roll_nom	81.645926067362	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4972.6871762276	Sum of GTIs [s]
livetime	4909.7200170094	Livetime [s]
ontime0	4972.5640562177	Sum of GTIs [s]
ontime1	4972.605096221	Sum of GTIs [s]
ontime2	4972.6461362243	Sum of GTIs [s]
ontime3	4972.6871762276	Sum of GTIs [s]
ontime6	4972.7692562342	Sum of GTIs [s]
ontime7	4972.7282162309	Sum of GTIs [s]
l2events	27292	Number of level 2 events



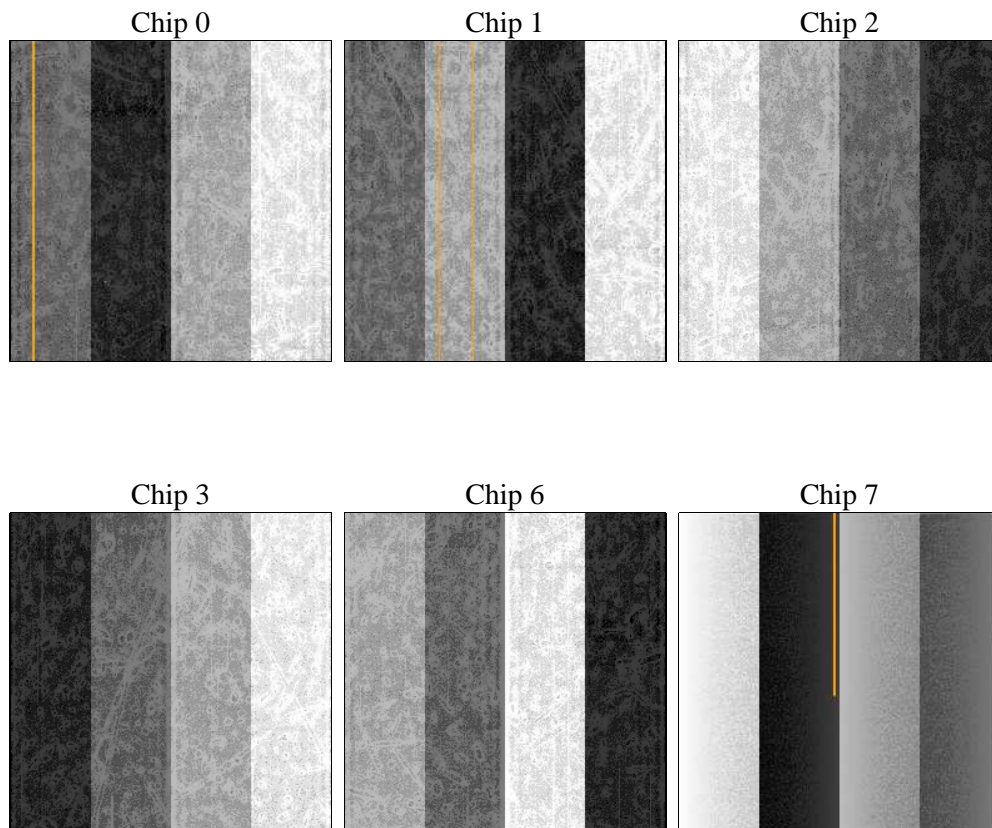
2 OBI

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	4972.6871762276	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	4972.5640562177	Sum of GTIs [s]
date	2014-12-10T10:00:32	Date and time of file creation	ontime1	4972.605096221	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4972.6461362243	Sum of GTIs [s]
			ontime3	4972.6871762276	Sum of GTIs [s]
			ontime6	4972.7692562342	Sum of GTIs [s]
			ontime7	4972.7282162309	Sum of GTIs [s]
			l1events	144082	Number of level 1 events

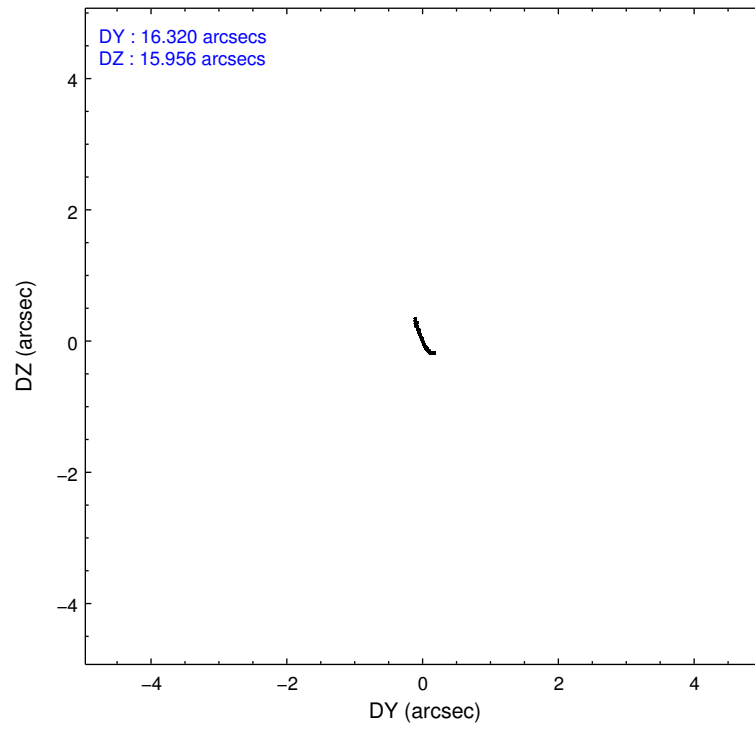
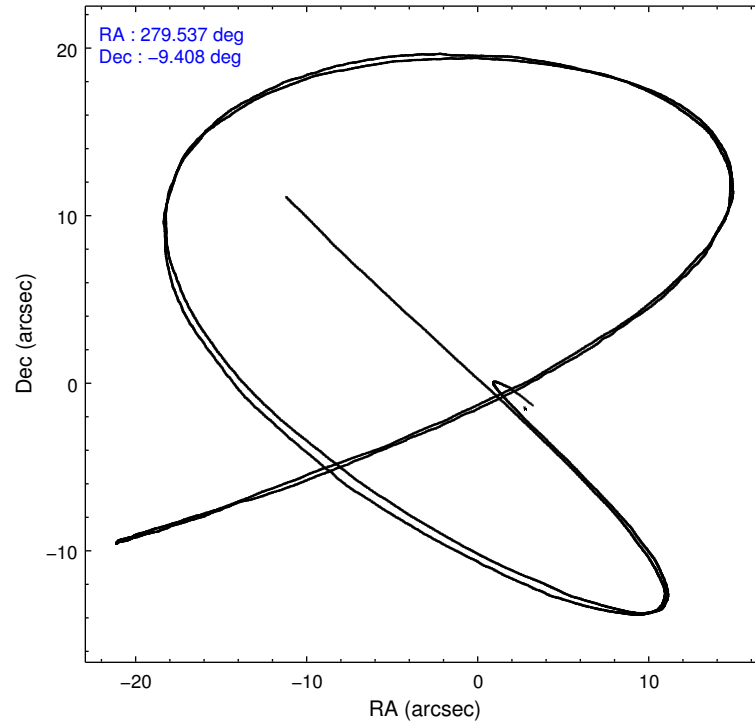
2.1.4 Events

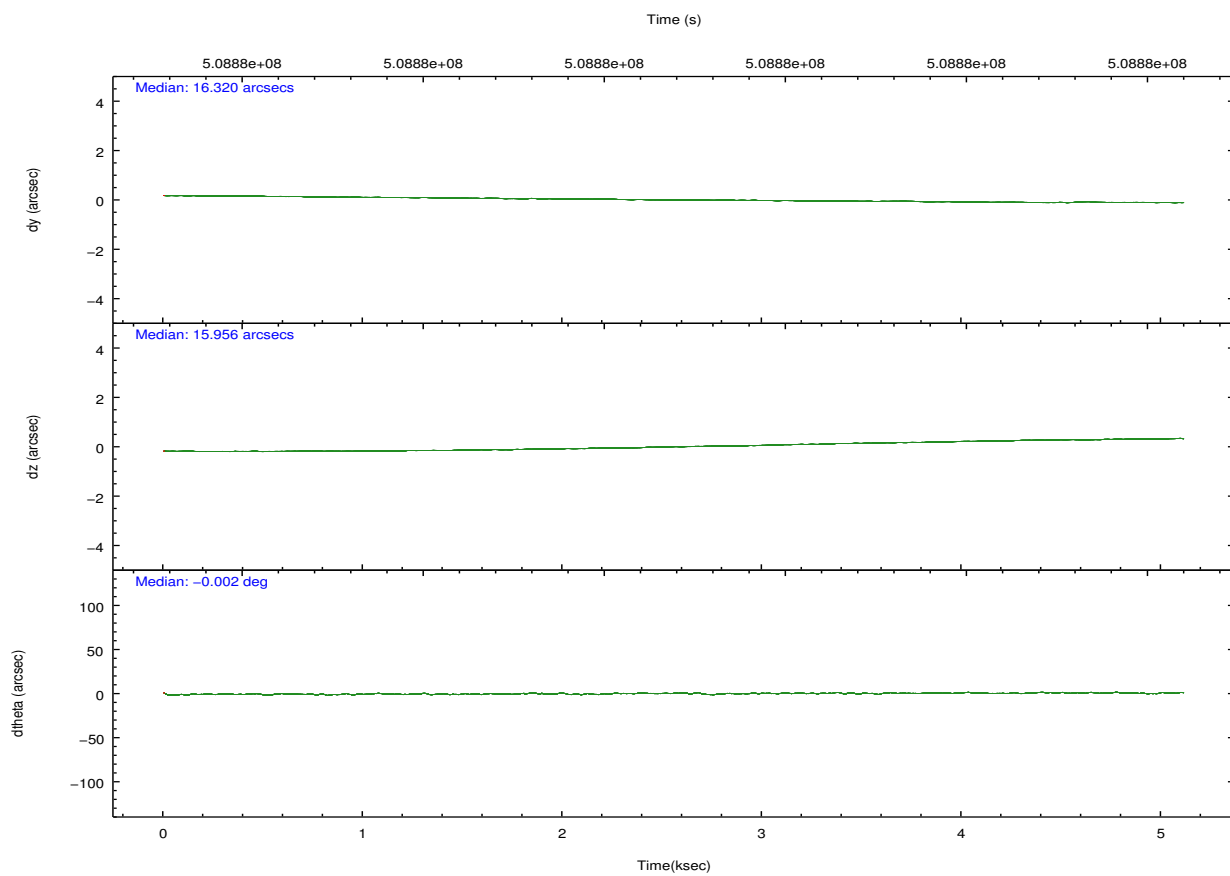
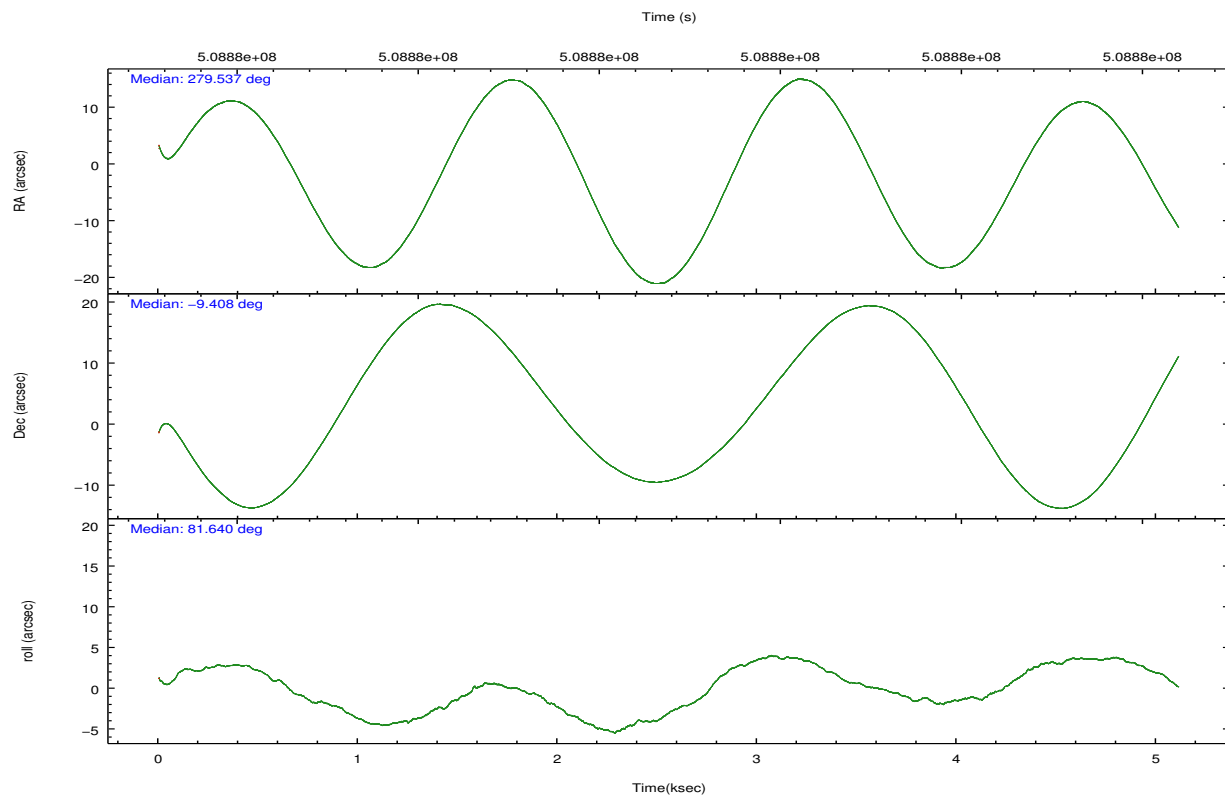
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	19970	21969	23812	21639	24772	31920	grade 0 events	1214	1555	2806	1115	1285	1267
rejected events	16906	18292	19215	18849	21598	17770		6%	7%	11%	5%	5%	3%
rejected %	84%	83%	80%	87%	87%	55%	grade 1 events	16	18	19	16	11	41
								0%	0%	0%	0%	0%	0%
							grade 2 events	760	815	695	569	693	2982
								3%	3%	2%	2%	2%	9%
							grade 3 events	280	297	267	271	301	1178
								1%	1%	1%	1%	1%	3%
							grade 4 events	259	310	315	265	267	1186
								1%	1%	1%	1%	1%	3%
							grade 5 events	1091	1073	968	1251	1219	3164
								5%	4%	4%	5%	4%	9%
							grade 6 events	555	707	521	575	631	7561
								2%	3%	2%	2%	2%	23%
							grade 7 events	15795	17194	18221	17577	20365	14541
								79%	78%	76%	81%	82%	45%

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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	279.547033	279.5369325706292	CCD I2 on	Y	Y
[deg] Pointing Dec	-9.432528	-9.407605029177853	CCD I3 on	Y	Y
[deg] Pointing Roll	81.438908	81.64592606736213	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)	508877940.184000	508876615.38649	CCD S5 on	N	N
Observation start date	2014-02-15T18:57:53	2014-02-15T18:36:55	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	508882940.184000	508883913.38689	On-chip summing requested	N	N
Observation end date	2014-02-15T20:21:13	2014-02-15T20:38:33	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



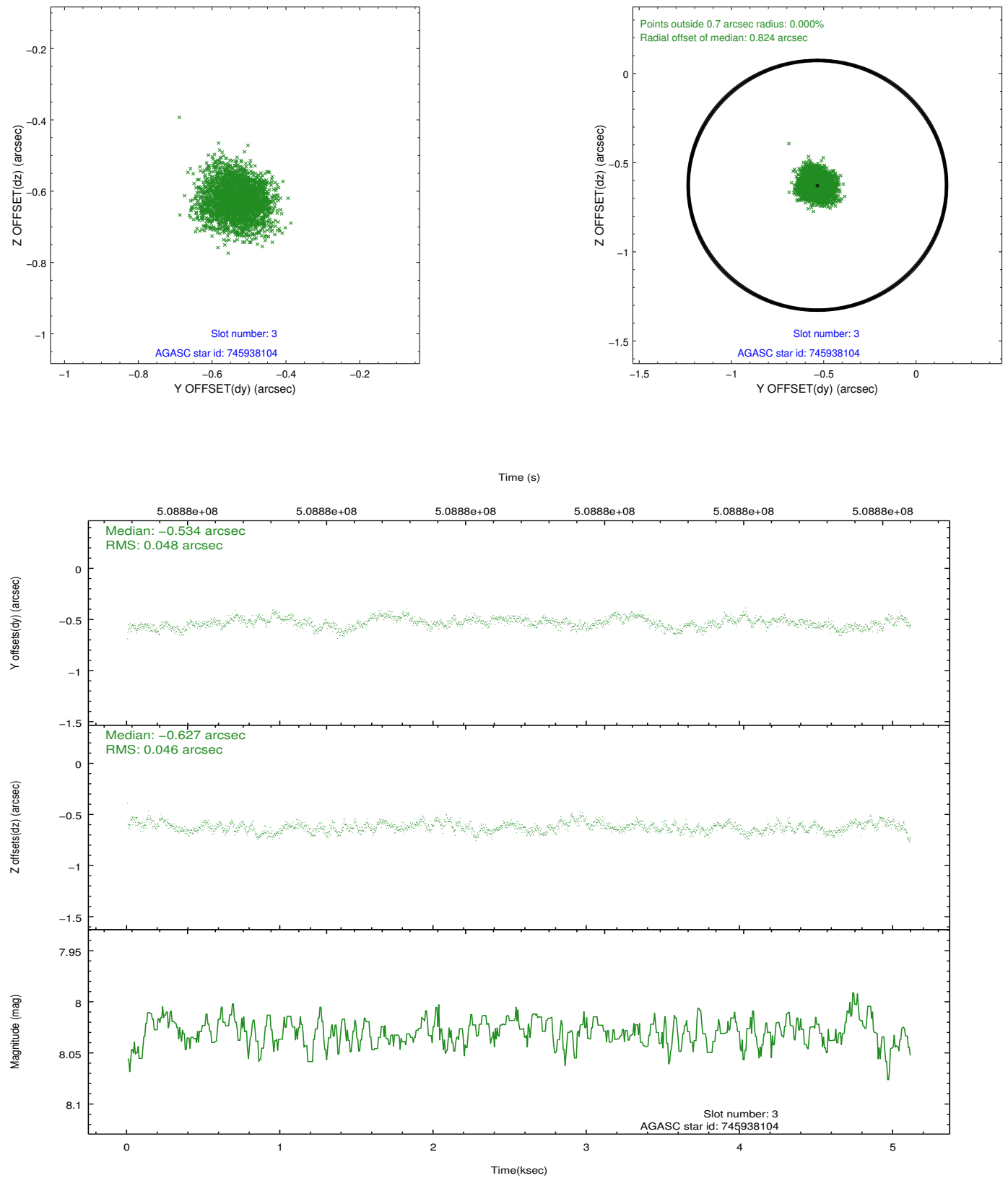


Slot Statistics

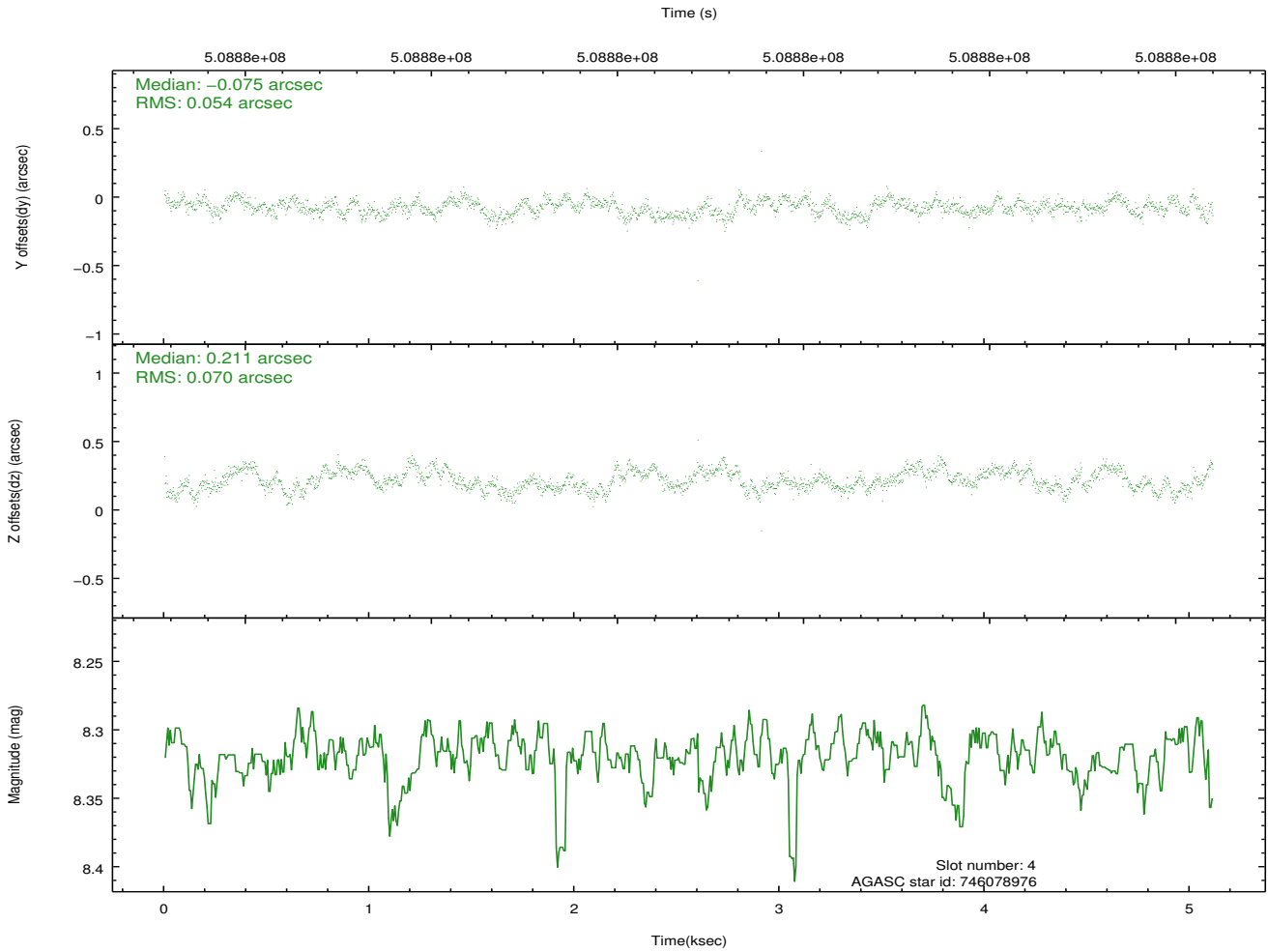
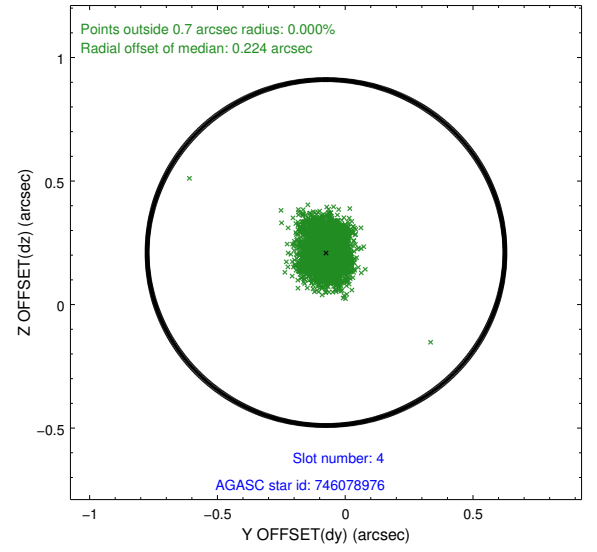
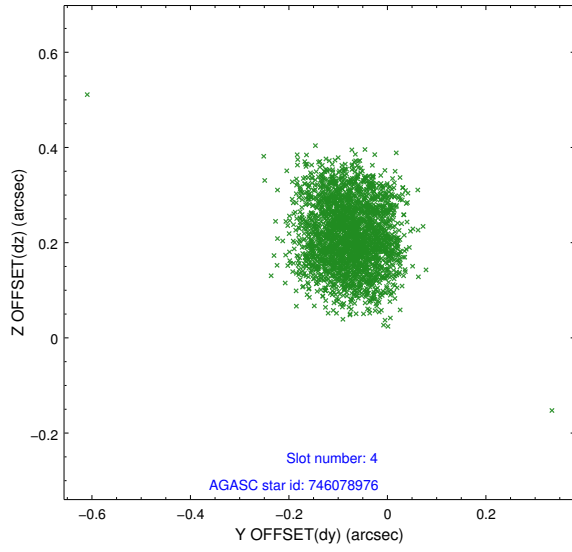
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	1247	0.061	-0.051	0.008	0.014	0.000000	0.000000	923.15	-839.65
1	FID		ACIS-I-5	7.12	1247	-0.245	0.049	0.007	0.011	0.000000	0.000000	-1824.61	1057.35
2	FID		ACIS-I-6	7.12	1247	0.093	0.072	0.008	0.013	0.000000	0.000000	387.44	1703.21
3	GUIDE	used	745938104	8.03	2493	-0.534	-0.627	0.073	0.114	279.090231	-8.877678	1733.88	1904.95
4	GUIDE	used	746078976	8.32	2494	-0.075	0.211	0.095	0.145	280.089597	-9.140332	1328.87	-1748.03
5	GUIDE	used	746462296	8.37	2493	0.255	-0.116	0.066	0.106	279.480808	-9.811039	-1379.42	29.97
6	GUIDE	used	746588168	7.68	2494	0.341	0.354	0.053	0.089	279.626554	-10.004642	-1992.63	-583.77
7	GUIDE	used	746065272	8.78	2490	0.014	0.173	0.073	0.120	279.953130	-9.085952	1449.01	-1240.27

2.4 Star Slots

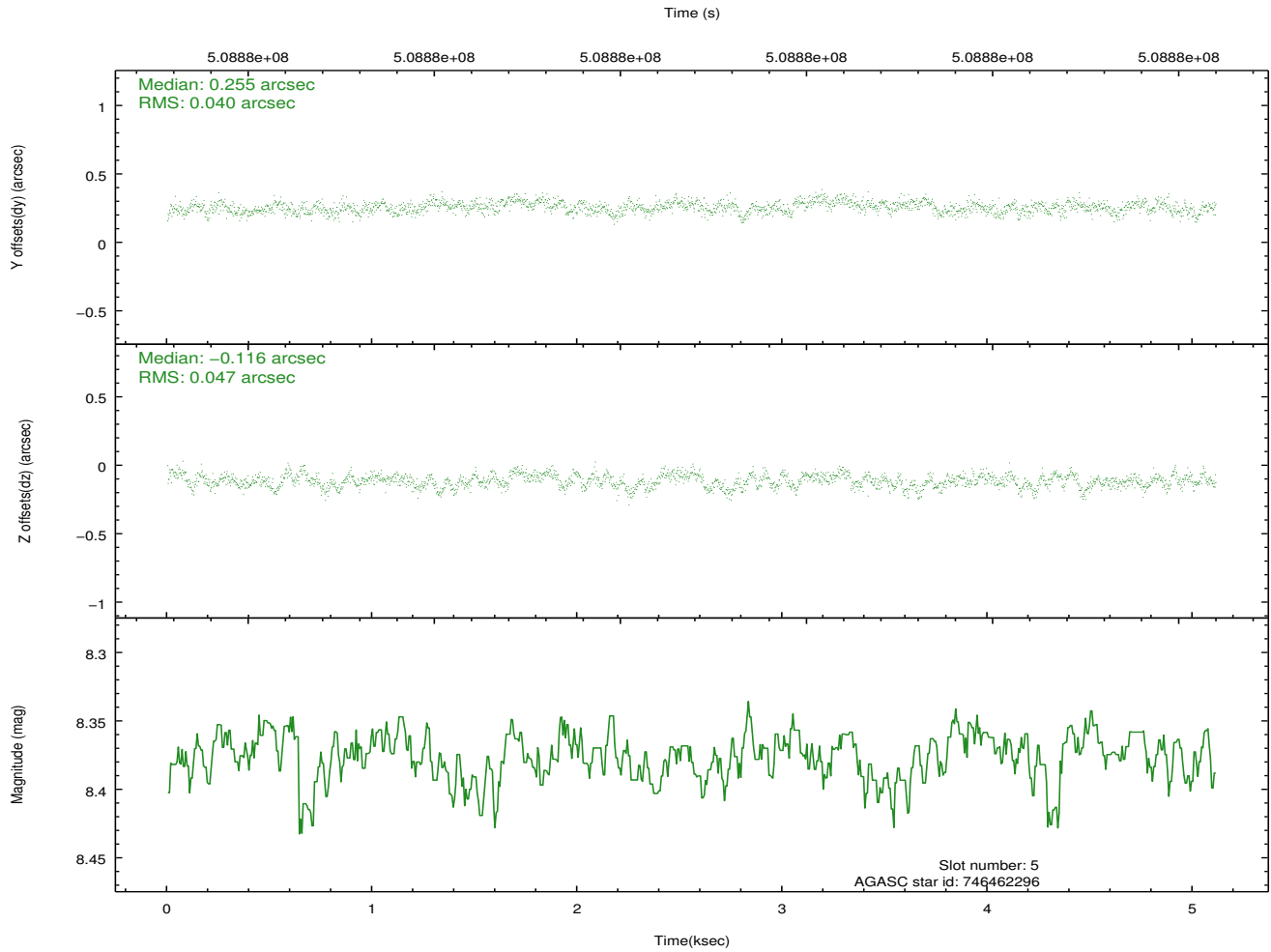
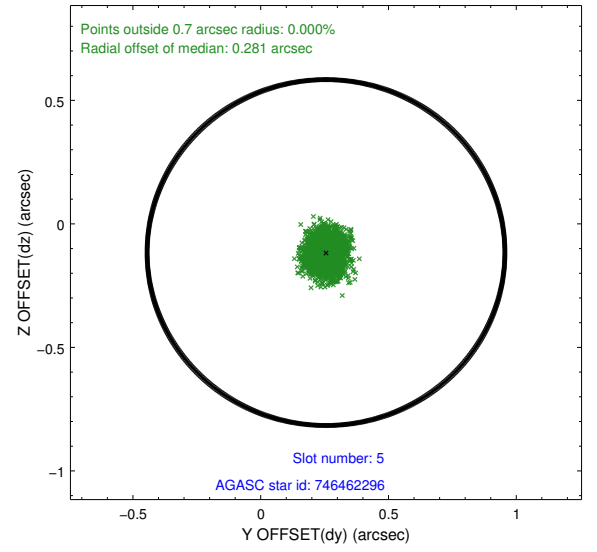
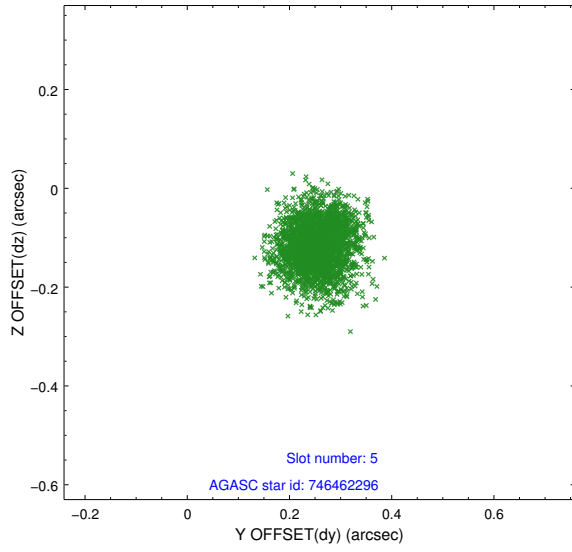
2.4.1 Slot 3



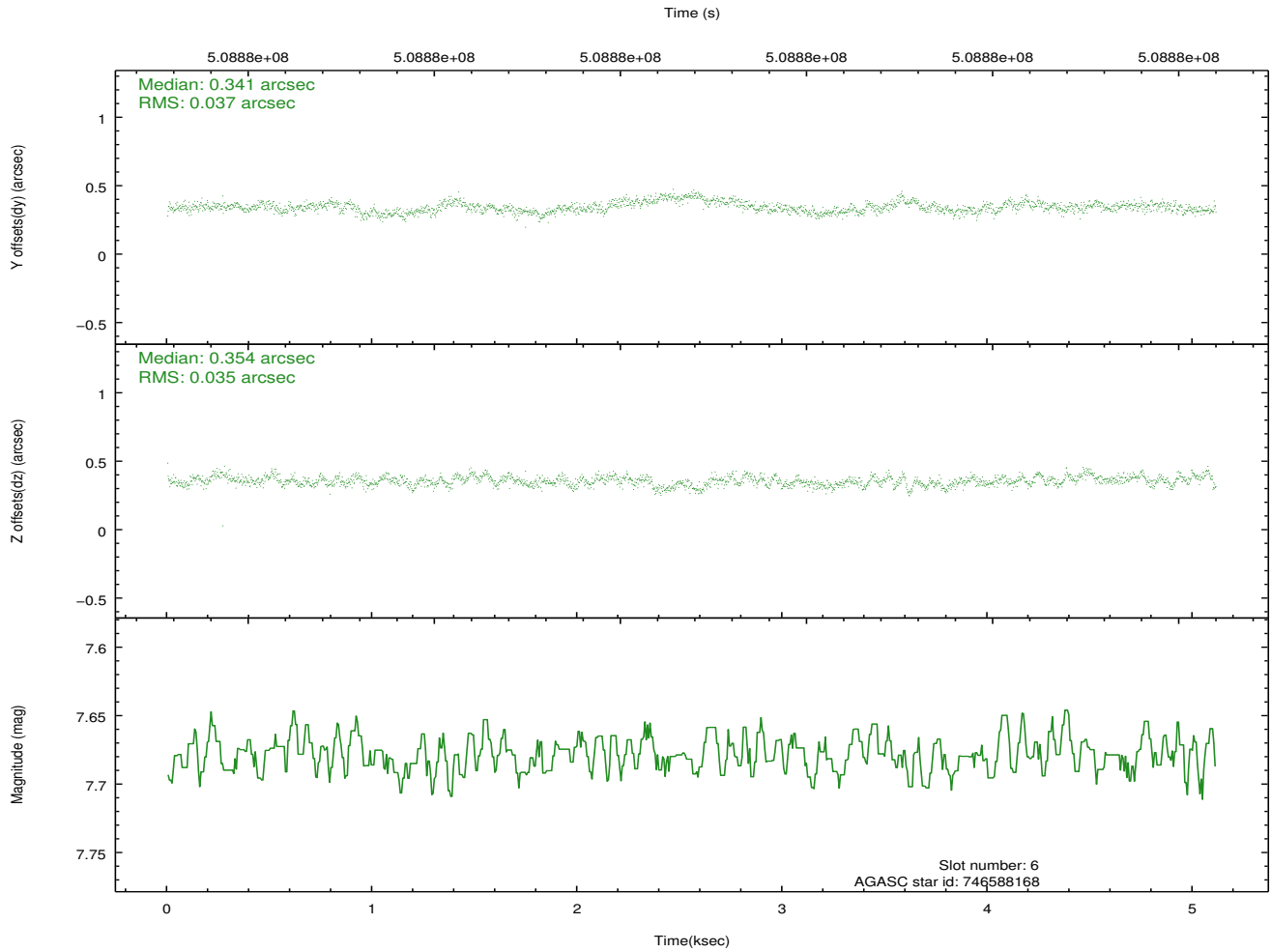
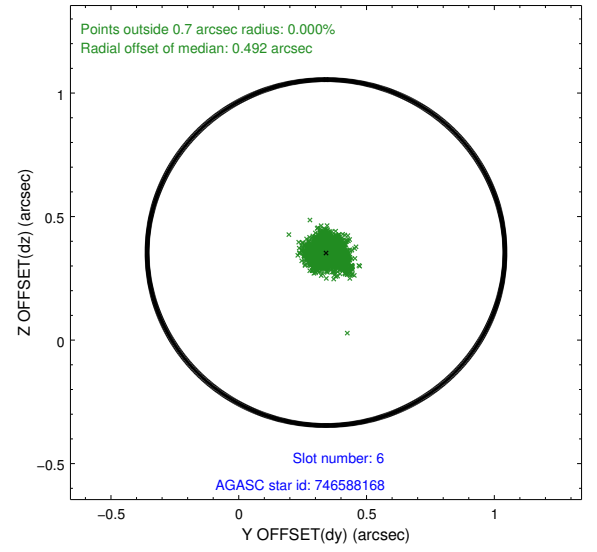
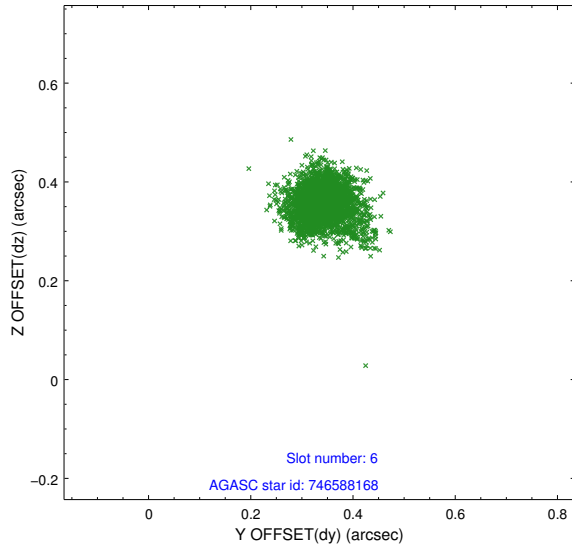
2.4.2 Slot 4



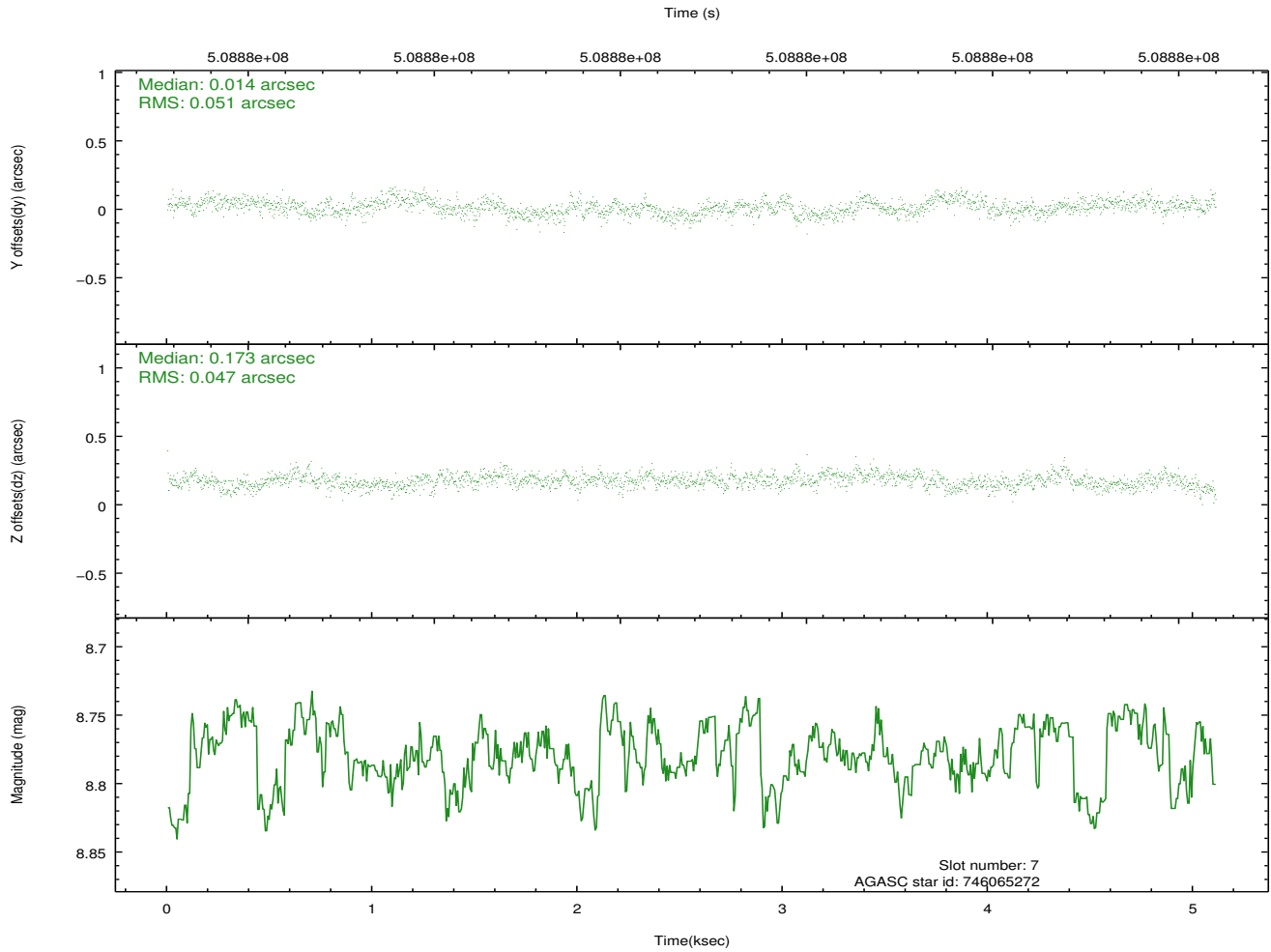
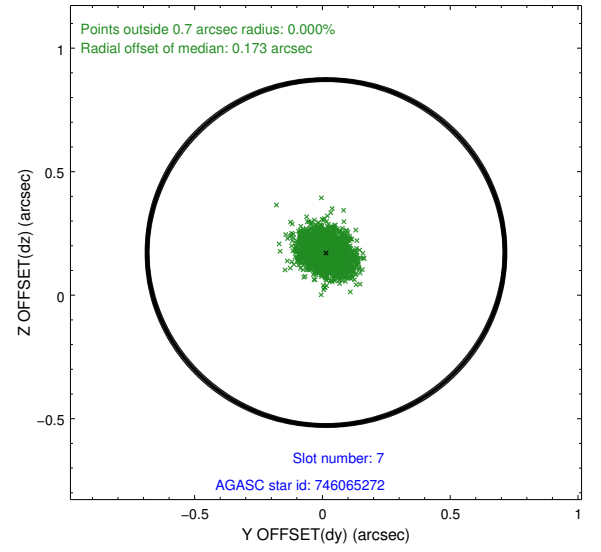
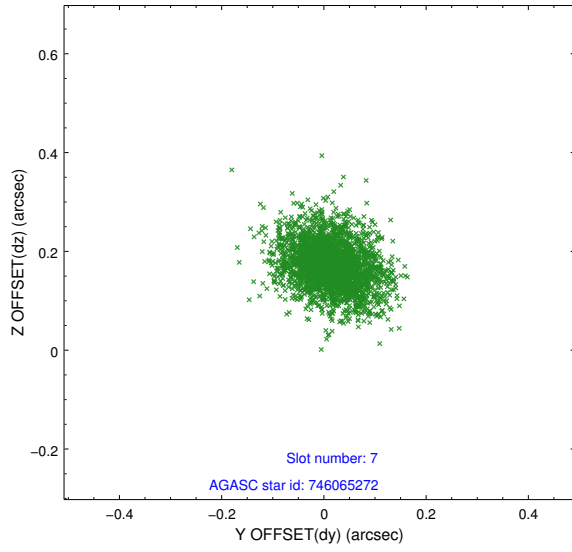
2.4.3 Slot 5



2.4.4 Slot 6

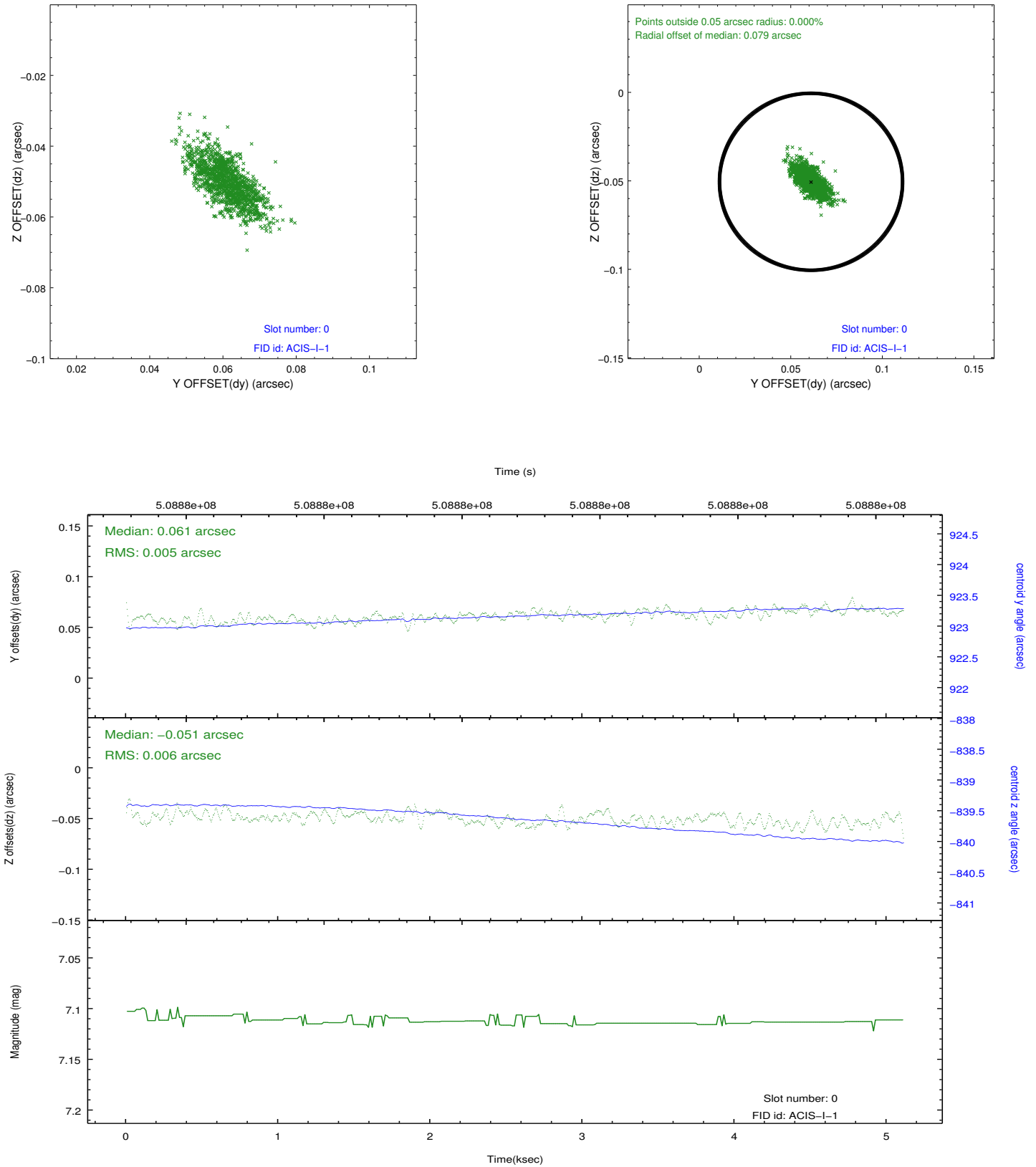


2.4.5 Slot 7

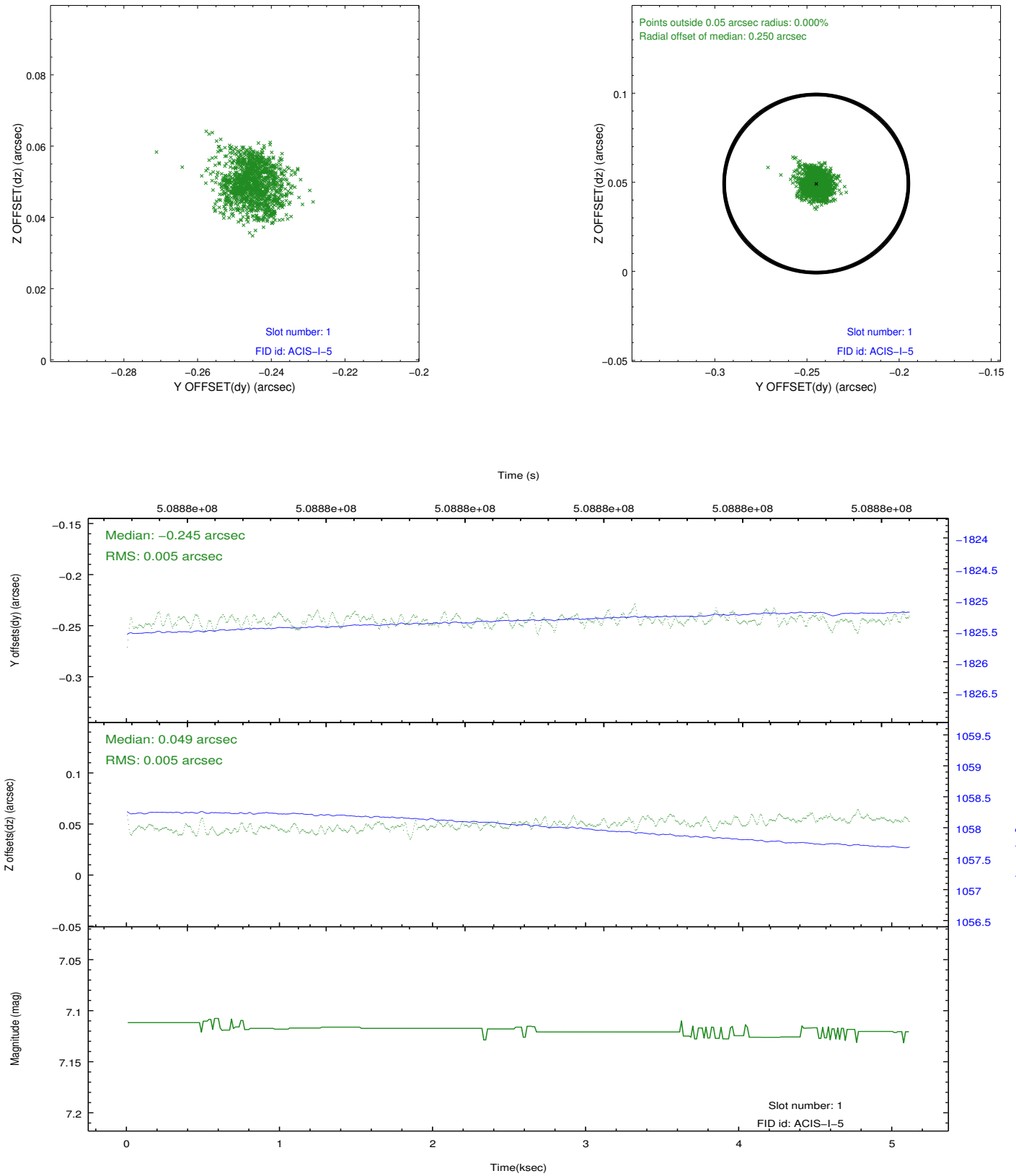


2.5 FID Slots

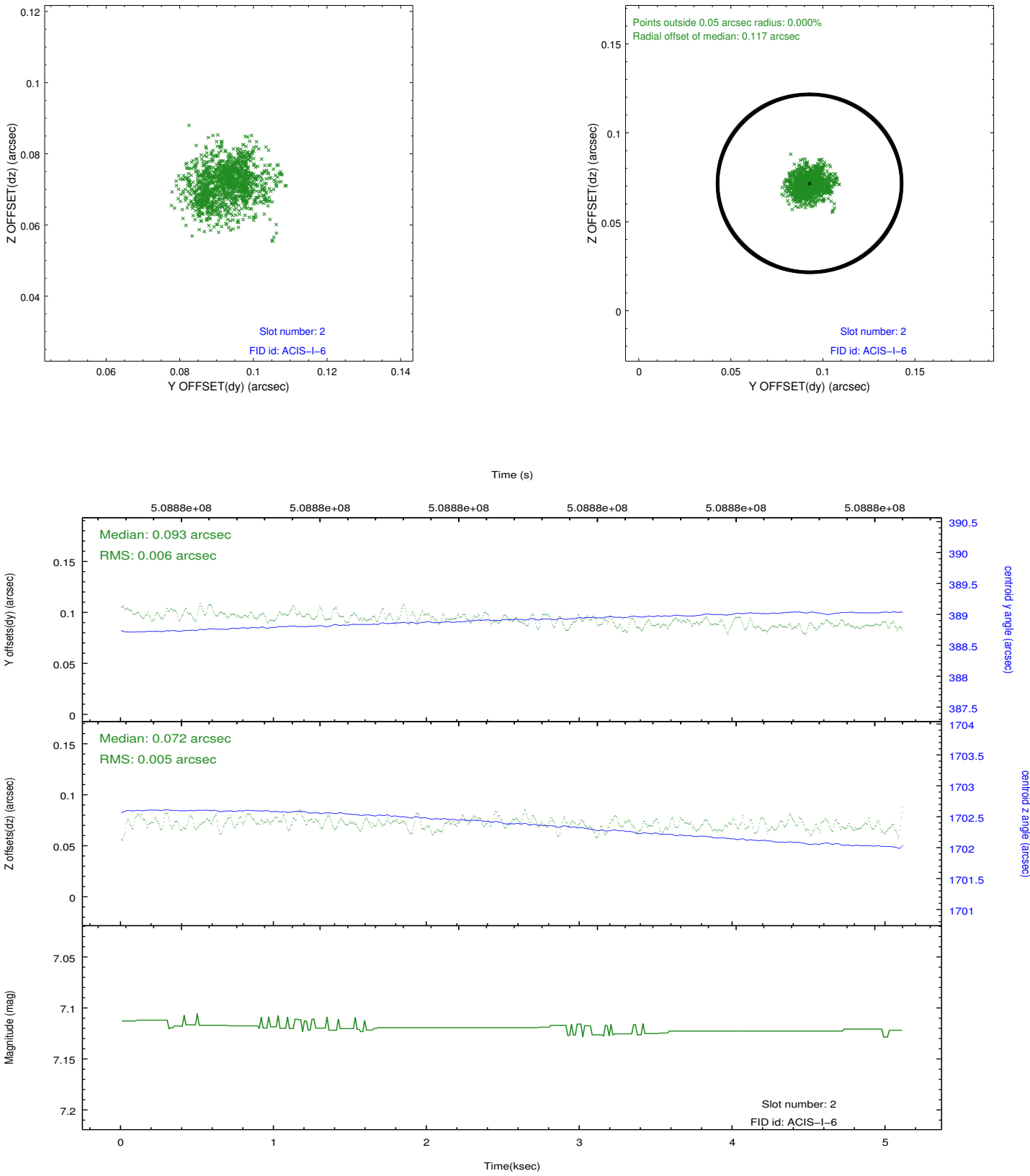
2.5.1 Slot 0



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)	2014.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9726871762276

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.