

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8109 - L2 Version 2
Chandra X-Ray Center

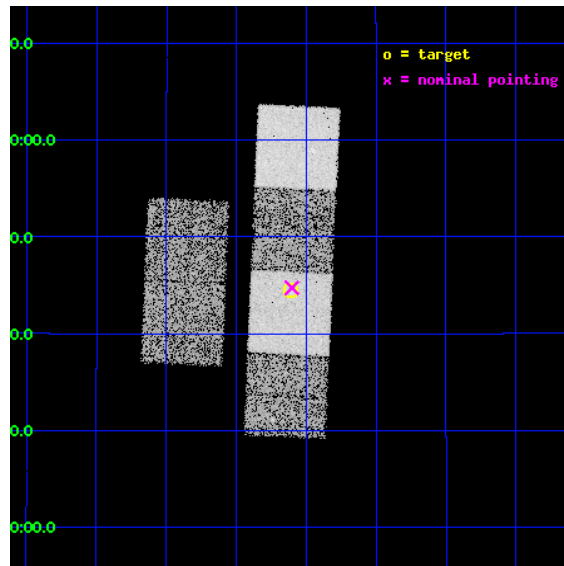
L2 Processing Date : May 10 2012

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1 Front

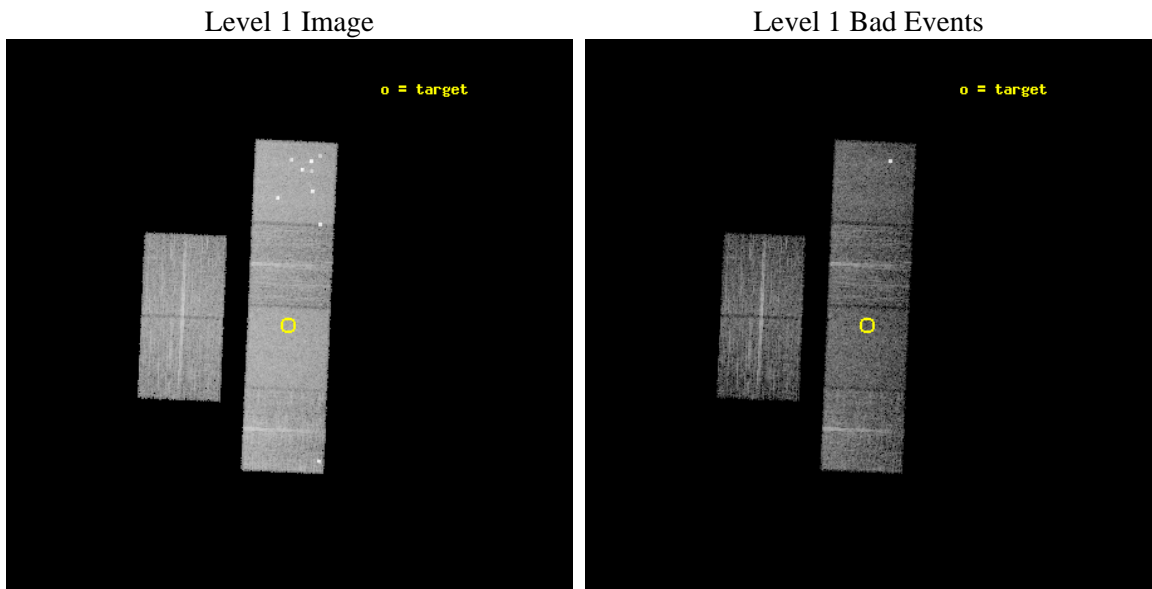
seq_num	900650	Sequence number
obs_id	8109	Observation id
title	The Duty Cycle of Supermassive Black Holes: X-raying Virgo	Proposa
observer	Prof Tommaso Treu	Principal investigator
object	1539	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	188.528333	Observer's specified target RA [deg]
dec_targ	12.741694	Observer's specified target Dec [deg]
ra_nom	188.52554657083	Nominal RA [deg]
dec_nom	12.745638896818	Nominal Dec [deg]
roll_nom	92.49192006333	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5157.8401412964	Sum of GTIs [s]
livetime	5092.5284637488	Livetime [s]
ontime2	5157.8811812997	Sum of GTIs [s]
ontime3	5157.7170212865	Sum of GTIs [s]
ontime5	5157.7991012931	Sum of GTIs [s]
ontime6	5157.7580612898	Sum of GTIs [s]
ontime7	5157.8401412964	Sum of GTIs [s]
ontime8	5154.4349313974	Sum of GTIs [s]
l2events	85436	Number of level 2 events



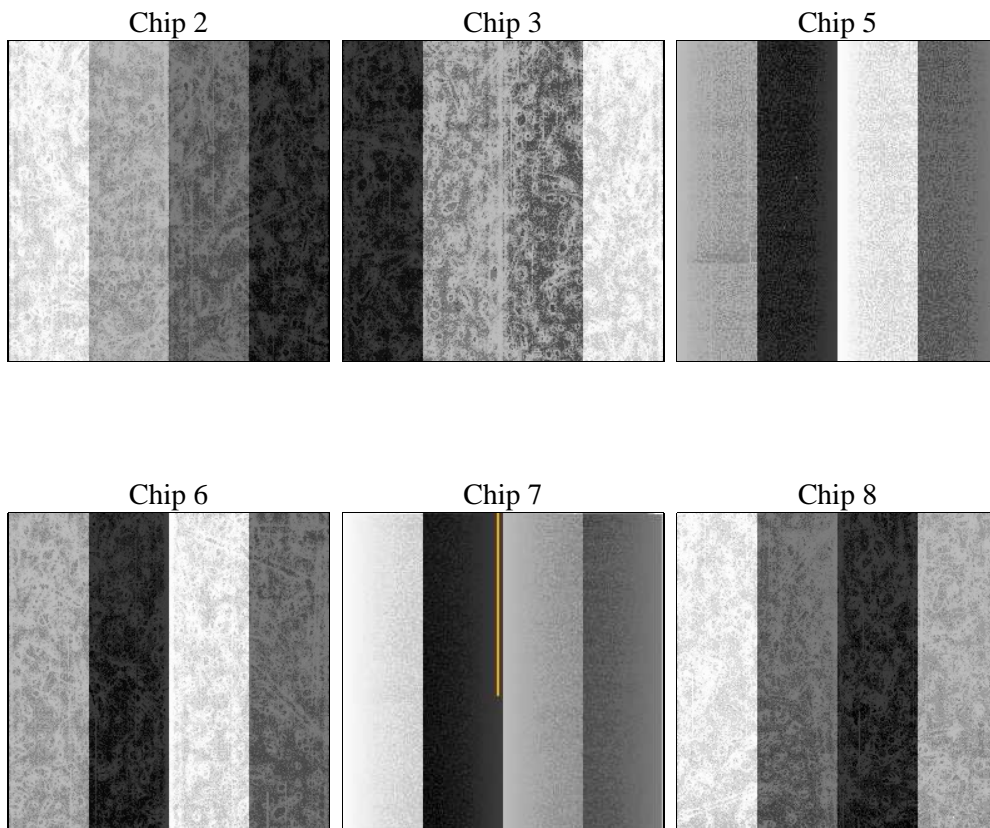
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	5157.8401412964	Sum of GTIs [s]
caldsver	4.4.9	 	ontime2	5157.8811812997	Sum of GTIs [s]
date	2012-05-10T08:31:06	Date and time of file creation	ontime3	5157.7170212865	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	5157.7991012931	Sum of GTIs [s]
			ontime6	5157.7580612898	Sum of GTIs [s]
			ontime7	5157.8401412964	Sum of GTIs [s]
			ontime8	5154.4349313974	Sum of GTIs [s]
			l1events	377412	Number of level 1 events

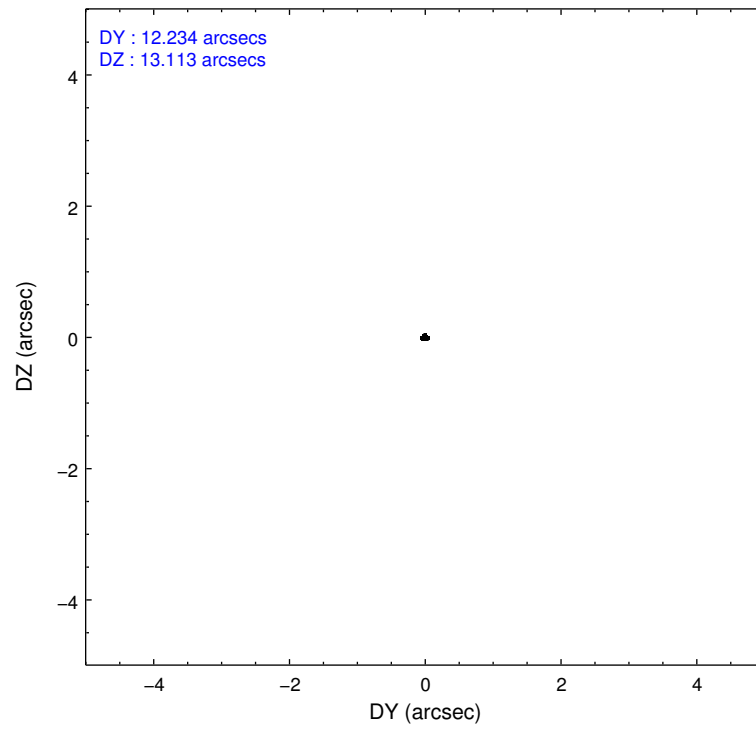
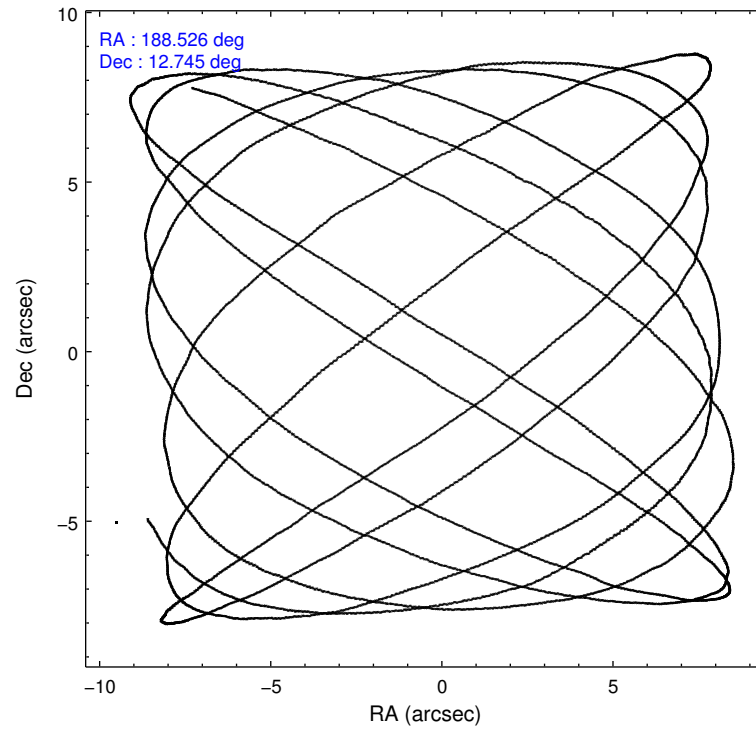
2.1.4 Events

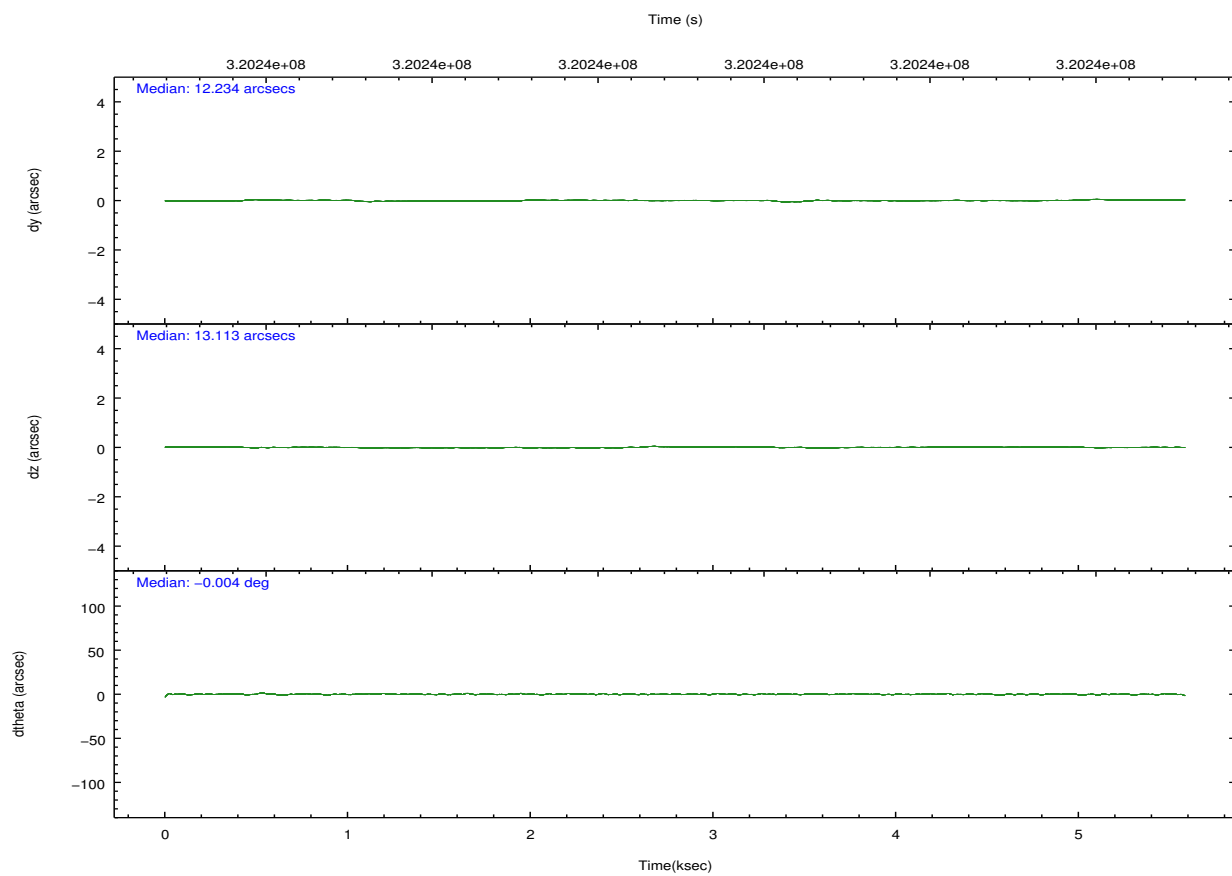
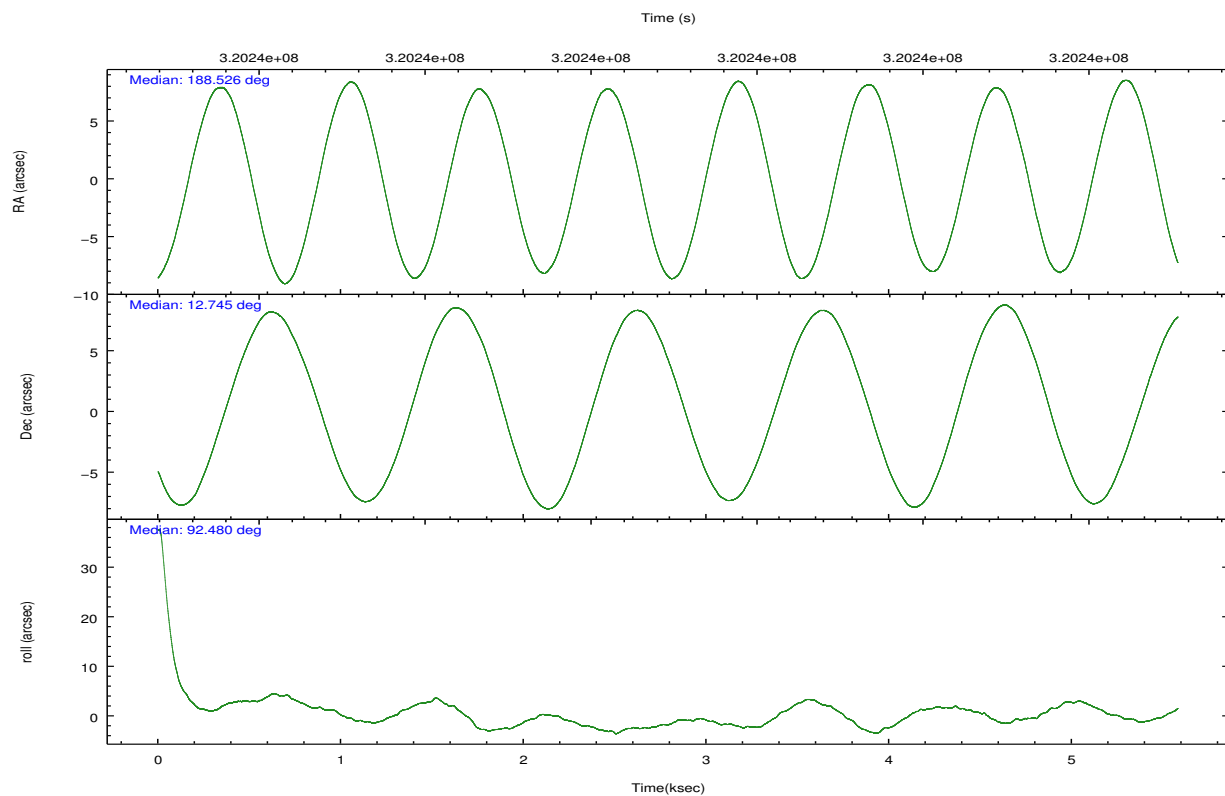
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	51680	49173	86618	51134	70343	68464	grade 0 events	2663	2808	7976	2792	2756	6321
rejected events	45542	43011	43280	44470	41077	52356		5%	5%	9%	5%	3%	9%
rejected %	88%	87%	49%	86%	58%	76%	grade 1 events	30	34	115	22	69	64
								0%	0%	0%	0%	0%	0%
							grade 2 events	1226	1142	11959	1453	5964	3258
								2%	2%	13%	2%	8%	4%
							grade 3 events	559	602	1447	605	2479	1418
								1%	1%	1%	1%	3%	2%
							grade 4 events	598	585	1257	551	2357	1305
								1%	1%	1%	1%	3%	1%
							grade 5 events	1990	2276	5178	2253	6444	3079
								3%	4%	5%	4%	9%	4%
							grade 6 events	1100	1034	20756	1272	15738	3817
								2%	2%	23%	2%	22%	5%
							grade 7 events	43514	40692	37930	42186	34536	49202
								84%	82%	43%	82%	49%	71%

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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	188.540923	188.5255465708298	CCD I2 on	O1	Y
[deg] Pointing Dec	12.722850	12.74563889681773	CCD I3 on	O2	Y
[deg] Pointing Roll	92.331893	92.49192006332976	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O4	Y
[s] Observation start time (MET)	320239863.184000	320239370.74362	CCD S5 on	N	N
Observation start date	2008-02-24T11:29:58	2008-02-24T11:22:50	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	320245263.184000	320245411.06891	On-chip summing requested	N	N
Observation end date	2008-02-24T12:59:58	2008-02-24T13:03:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



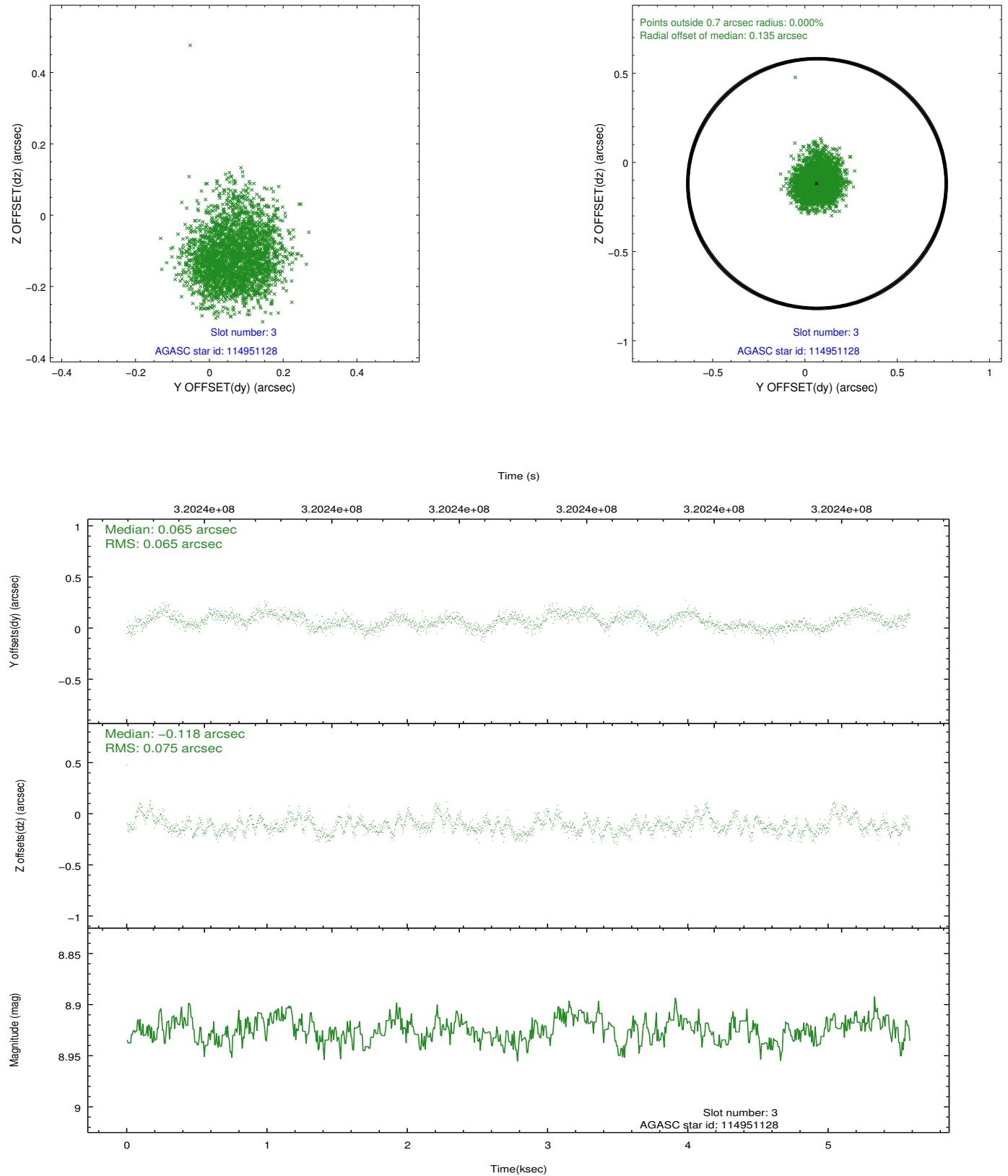


Slot Statistics

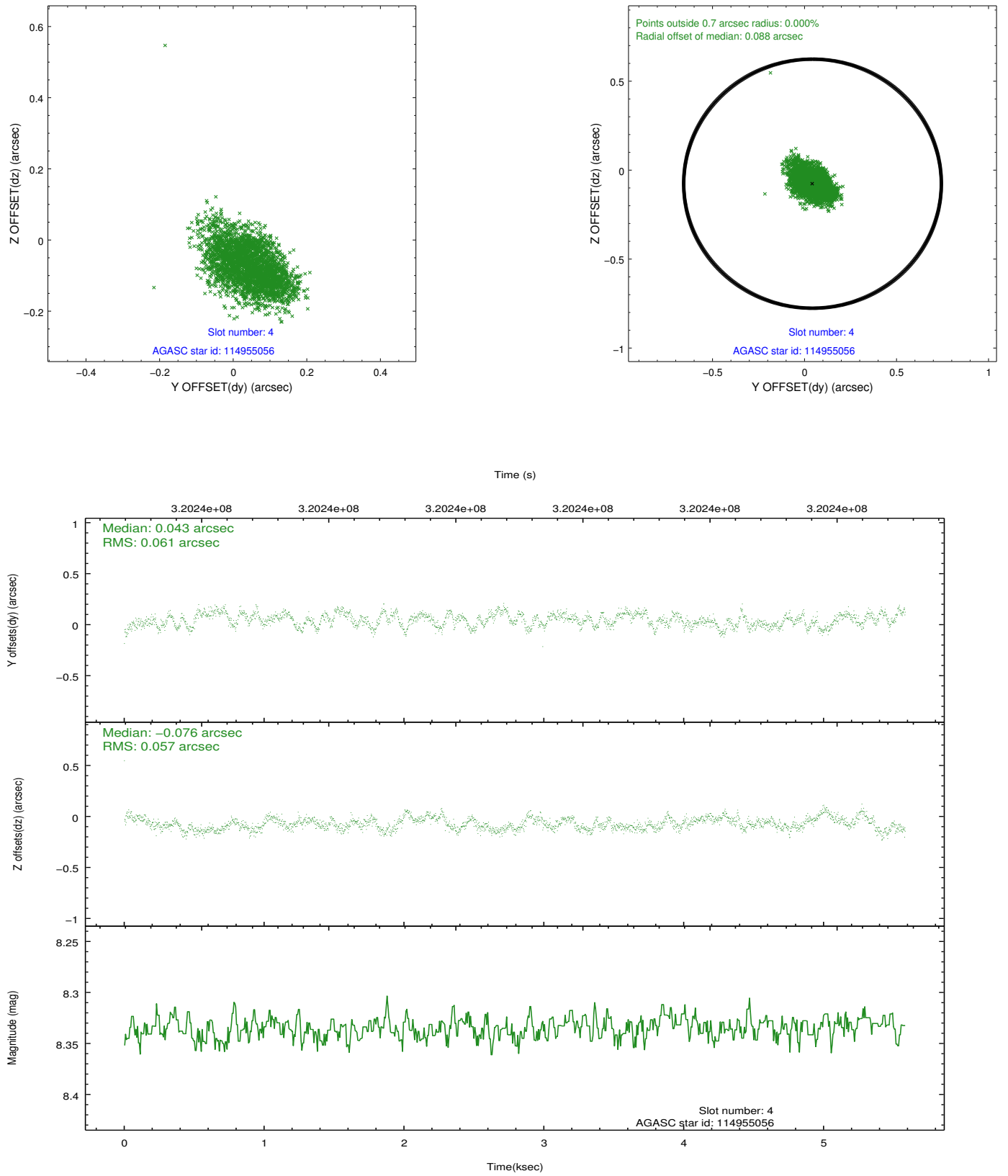
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1362	-0.022	-0.050	0.006	0.011	0.000000	0.000000	-765.15	-1734.49
1	FID	ACIS-S-4	7.20	1362	0.115	0.024	0.005	0.010	0.000000	0.000000	2147.78	172.95
2	FID	ACIS-S-5	7.24	1362	-0.124	0.035	0.006	0.011	0.000000	0.000000	-1816.71	167.86
3	GUIDE	114951128	8.93	2723	0.065	-0.118	0.104	0.166	188.719863	12.459246	-973.35	-589.84
4	GUIDE	114955056	8.34	2722	0.043	-0.076	0.087	0.142	187.914001	12.127854	-2048.01	2291.69
5	GUIDE	115349088	9.27	2721	0.026	-0.160	0.124	0.192	188.777694	12.938966	744.12	-859.93
6	GUIDE	115479928	10.31	2704	-0.133	0.290	0.177	0.296	189.104885	12.840265	345.19	-1994.59
7	GUIDE	115481616	10.32	2709	-0.008	0.067	0.171	0.269	189.073098	13.025191	1014.47	-1909.65

2.4 Star Slots

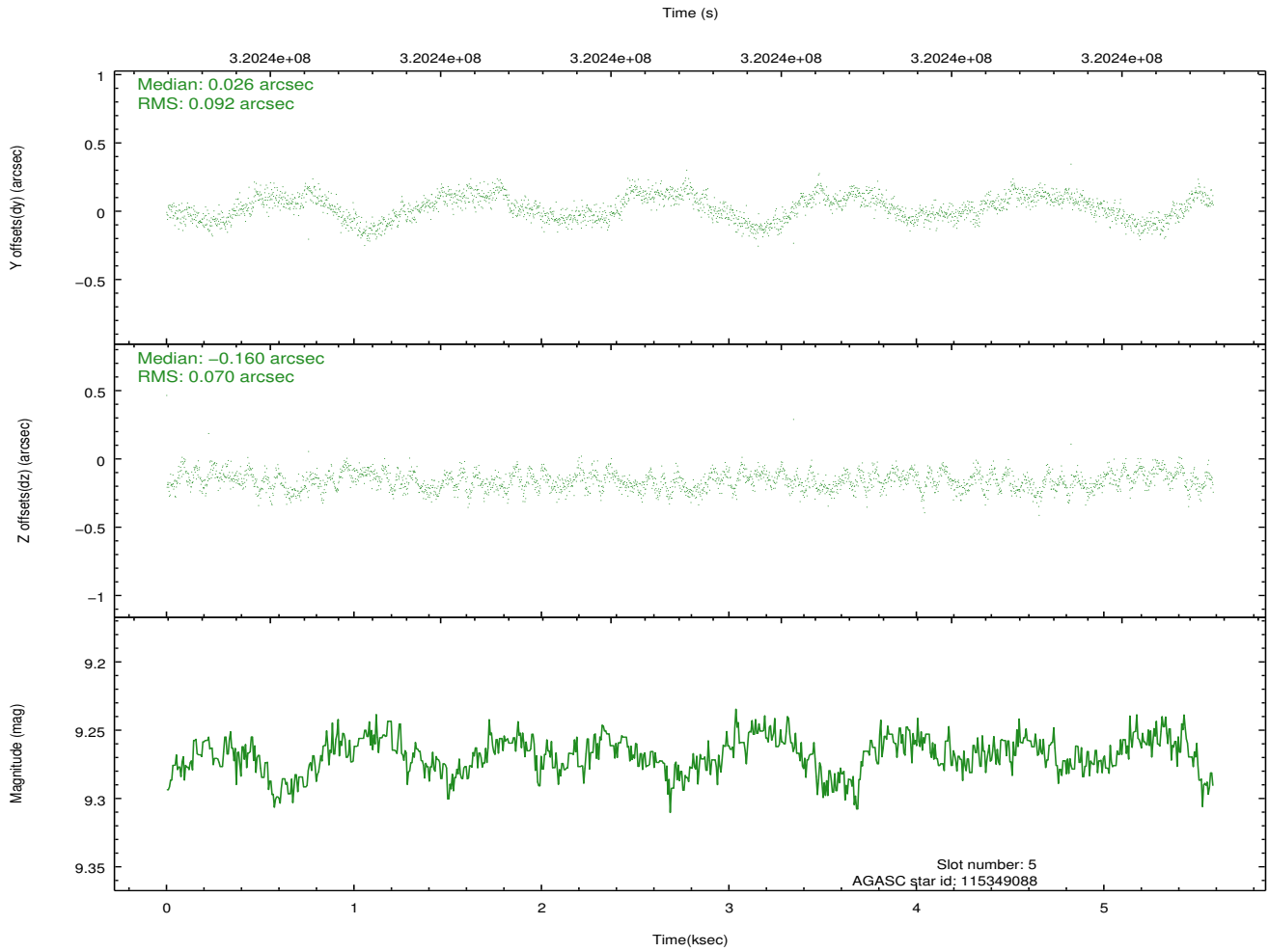
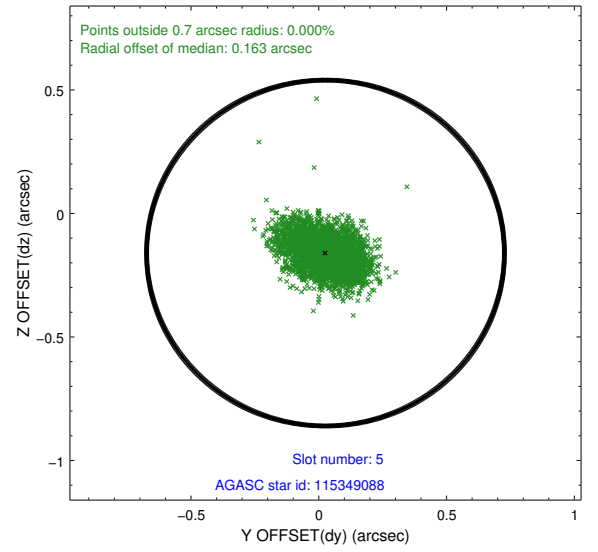
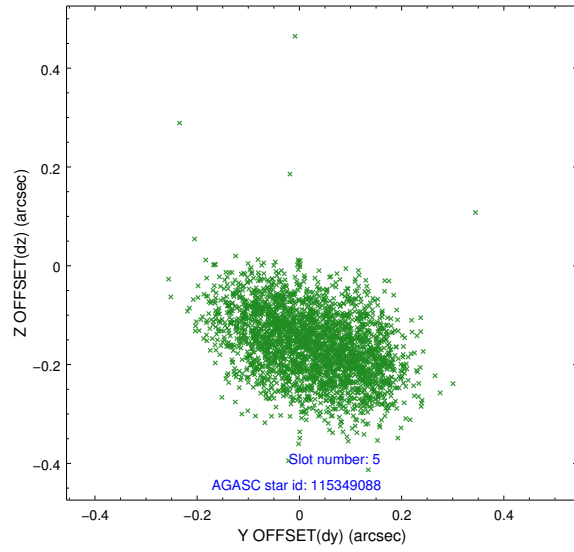
2.4.1 Slot 3



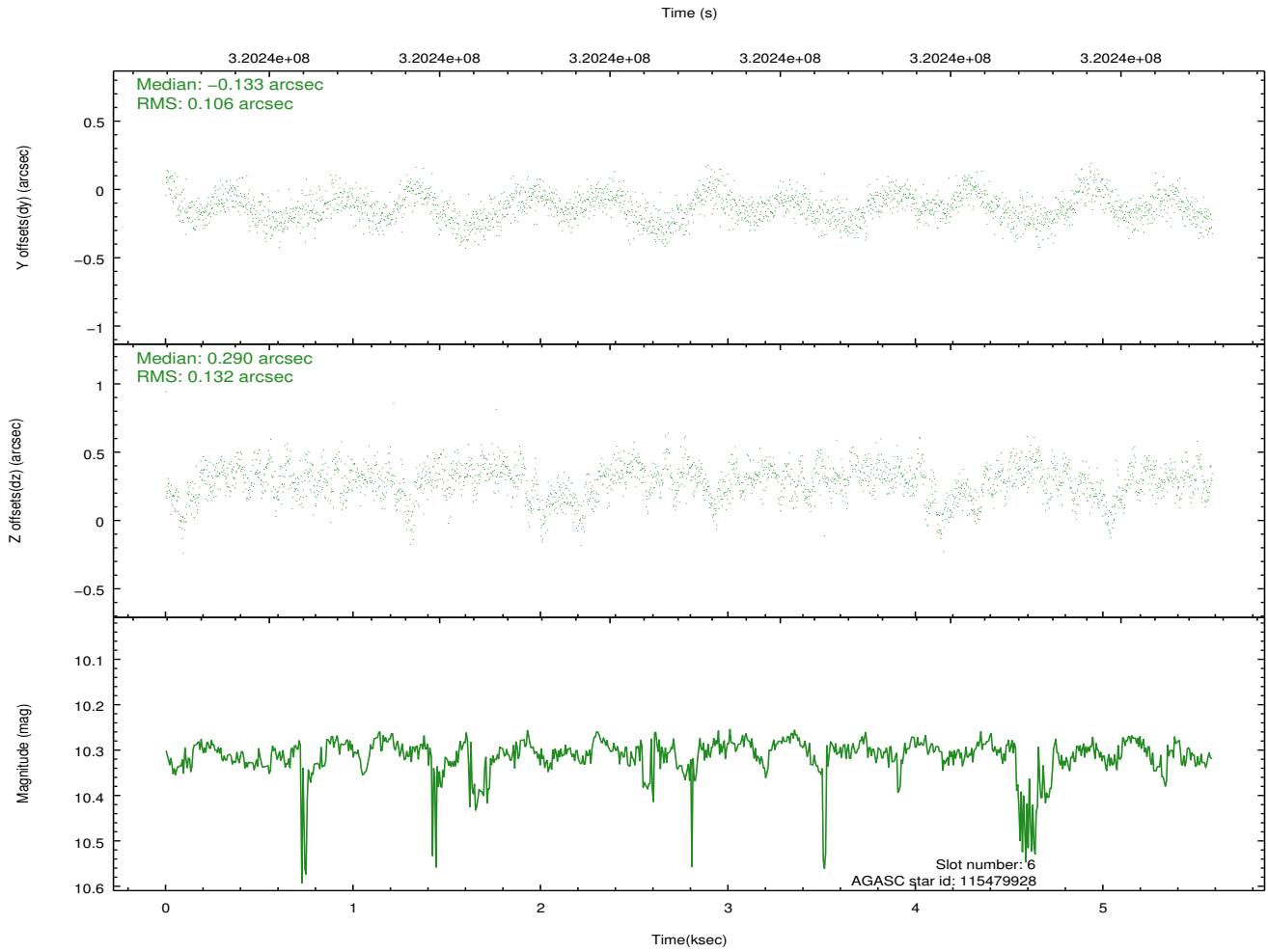
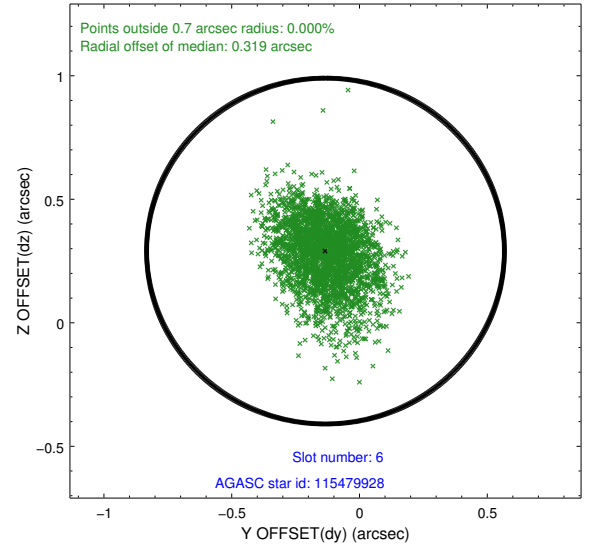
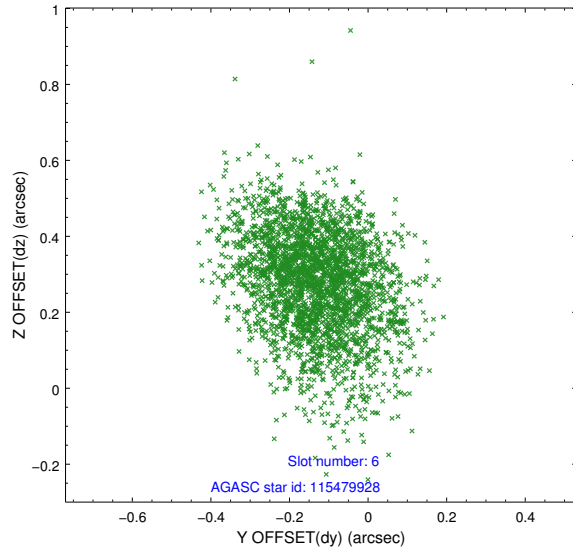
2.4.2 Slot 4



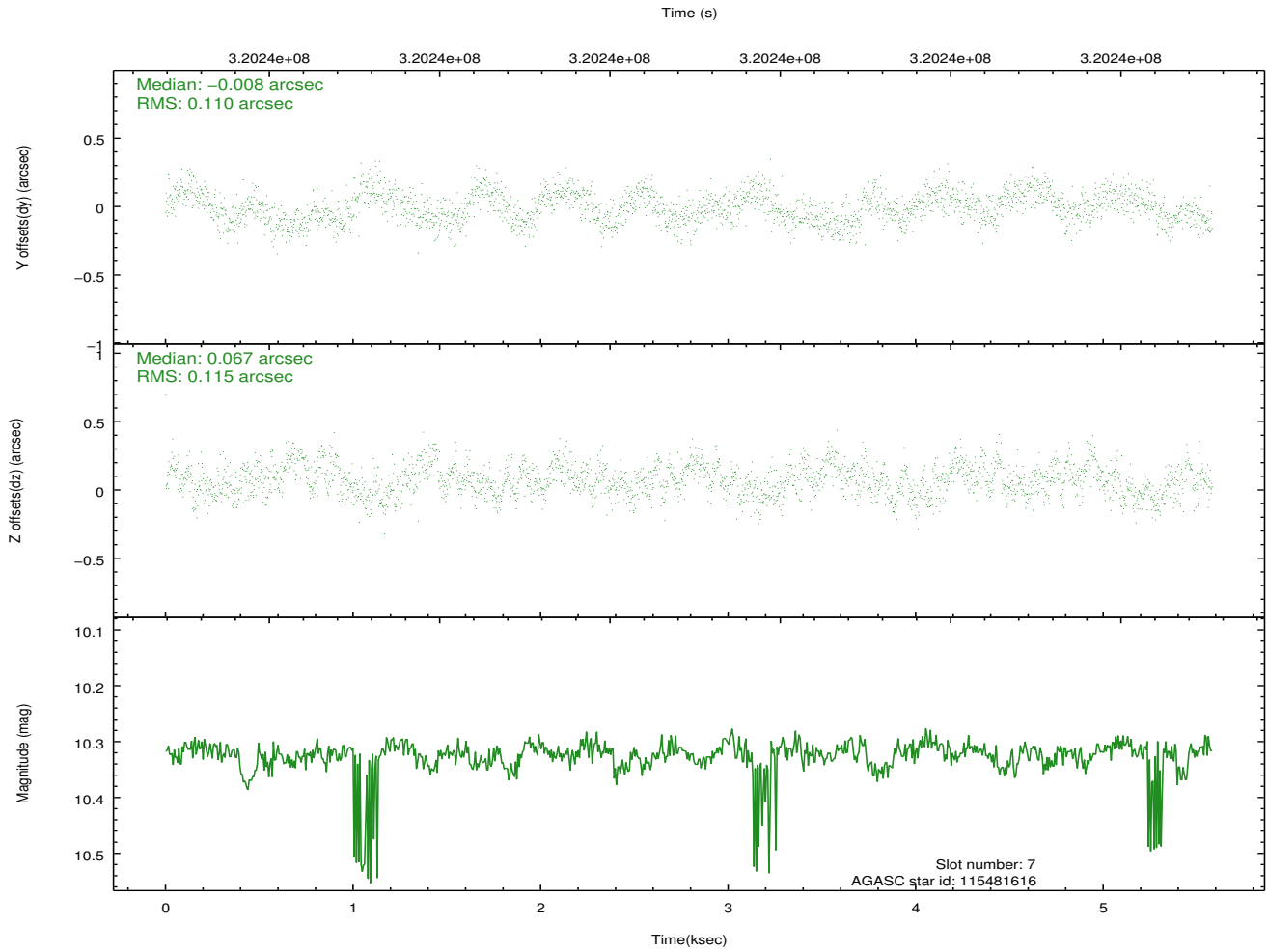
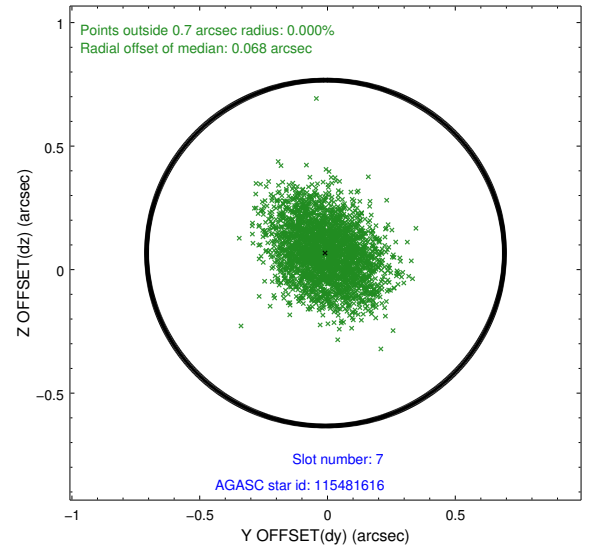
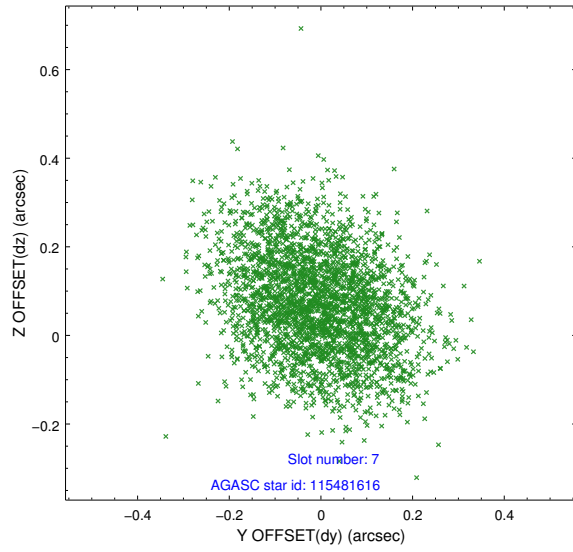
2.4.3 Slot 5



2.4.4 Slot 6

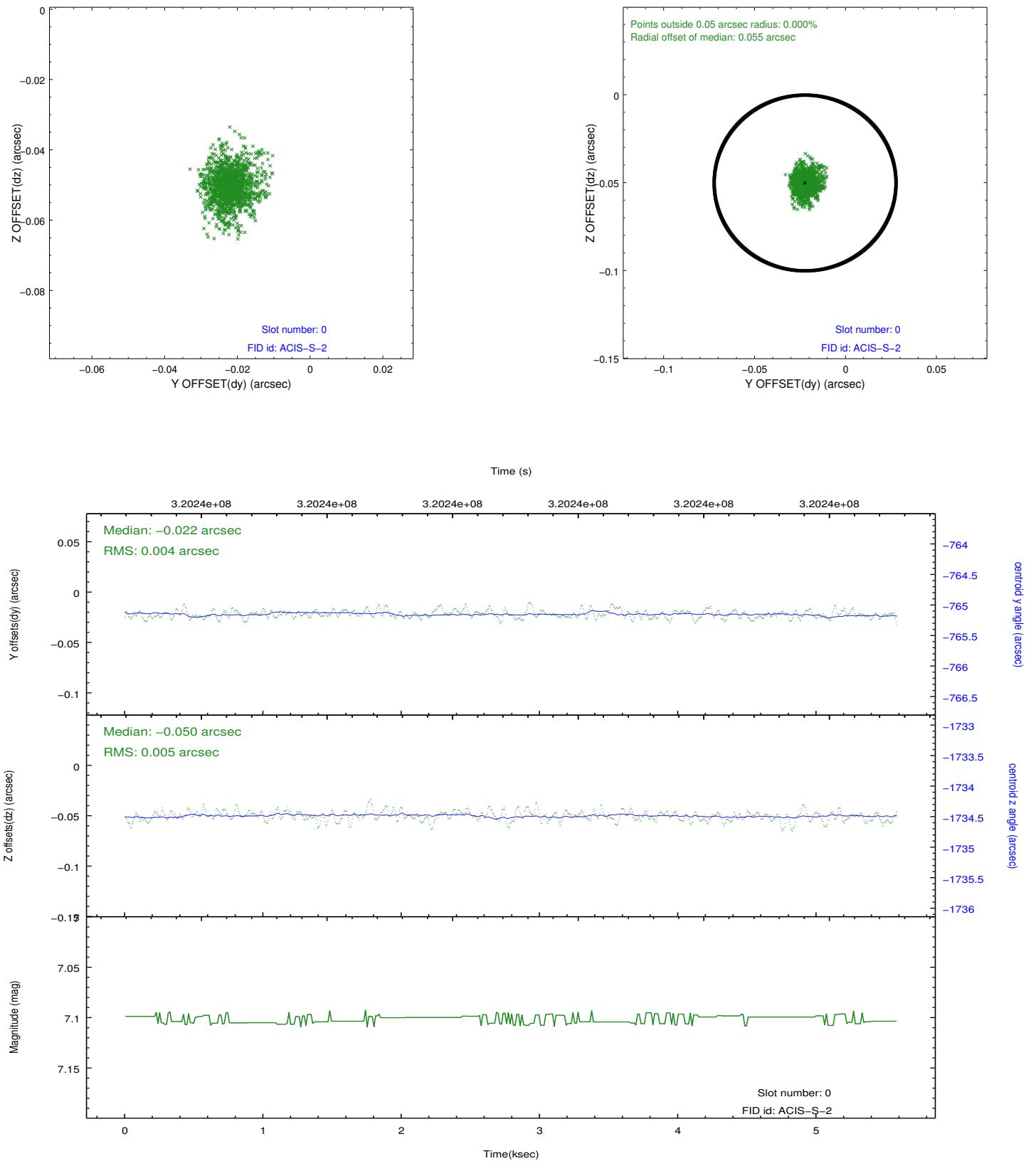


2.4.5 Slot 7

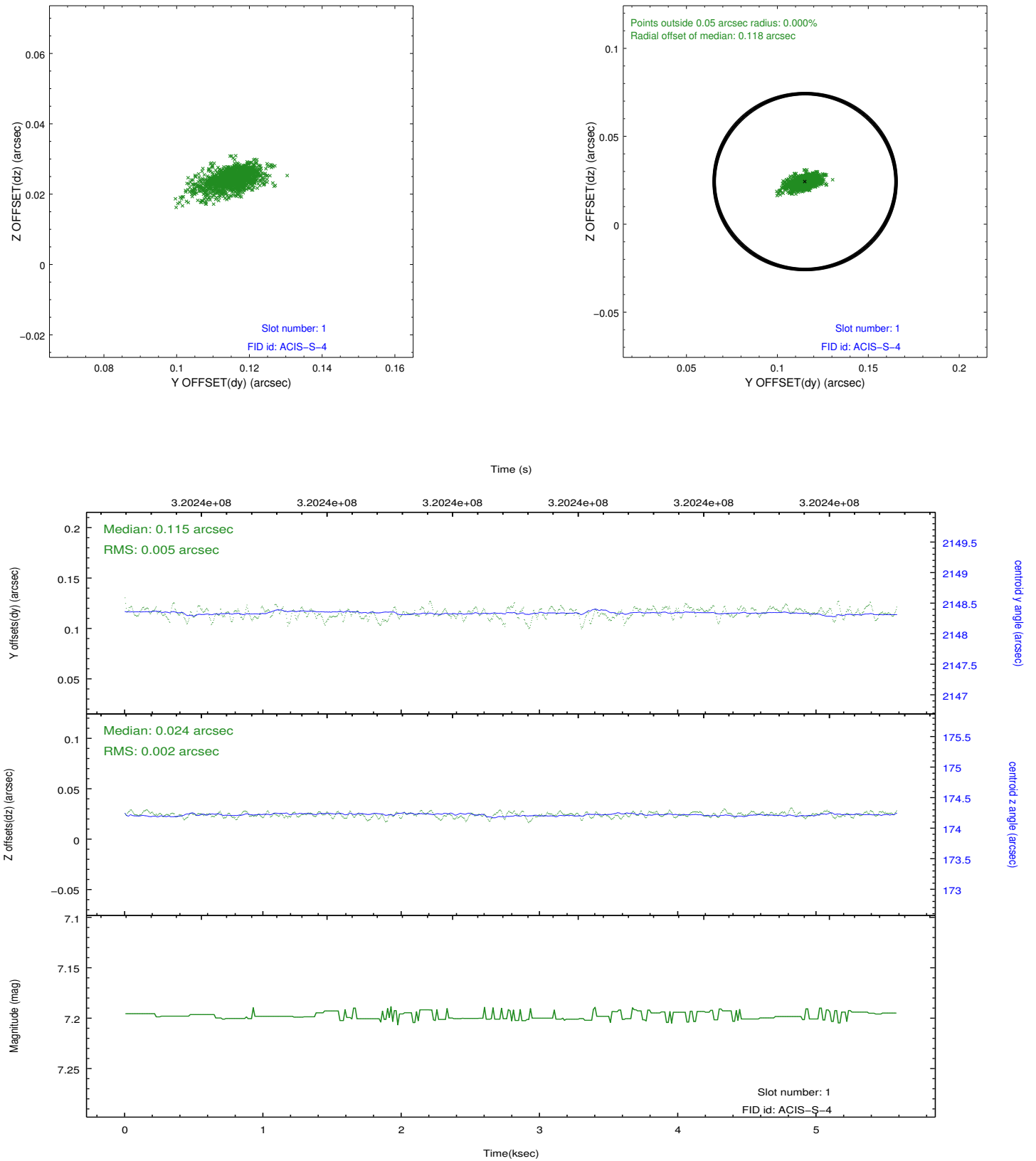


2.5 FID Slots

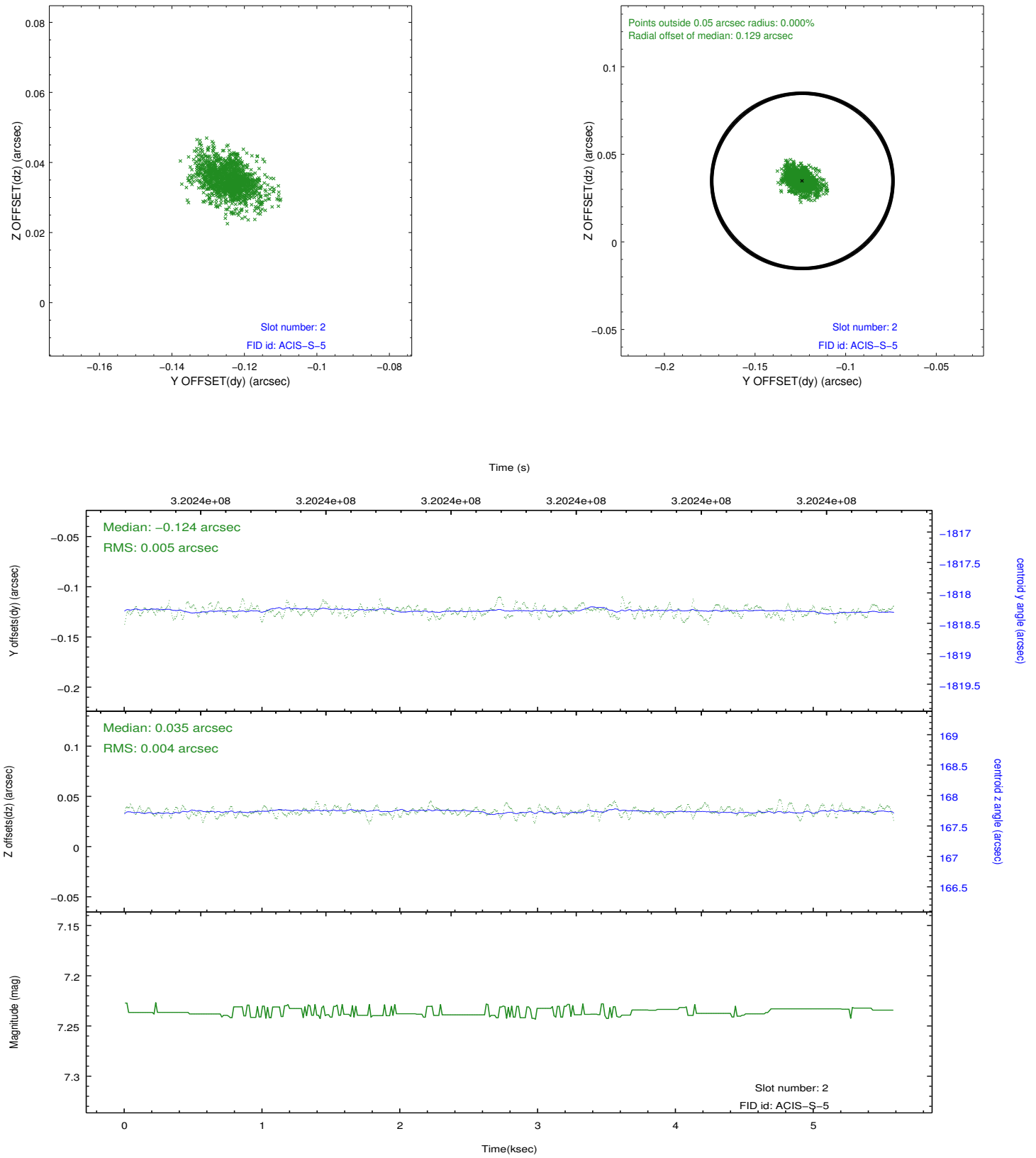
2.5.1 Slot 0



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)	2012.05.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.15839998

A.2 Comments

Joint Proposal: Spitzer