

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8059 - L2 Version 3
Chandra X-Ray Center

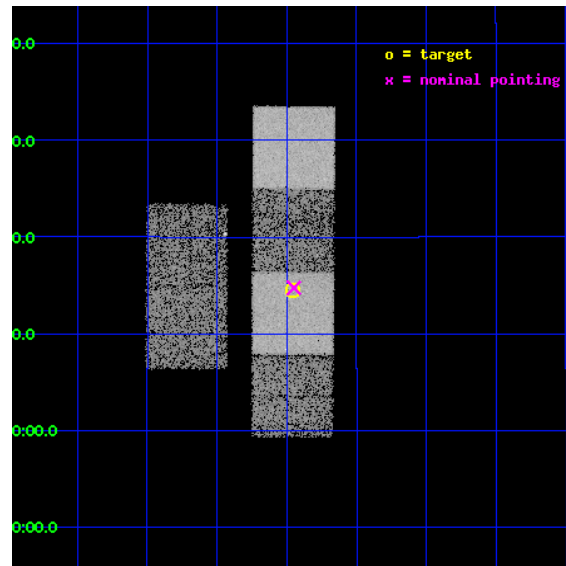
L2 Processing Date : May 10 2012

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1 Front

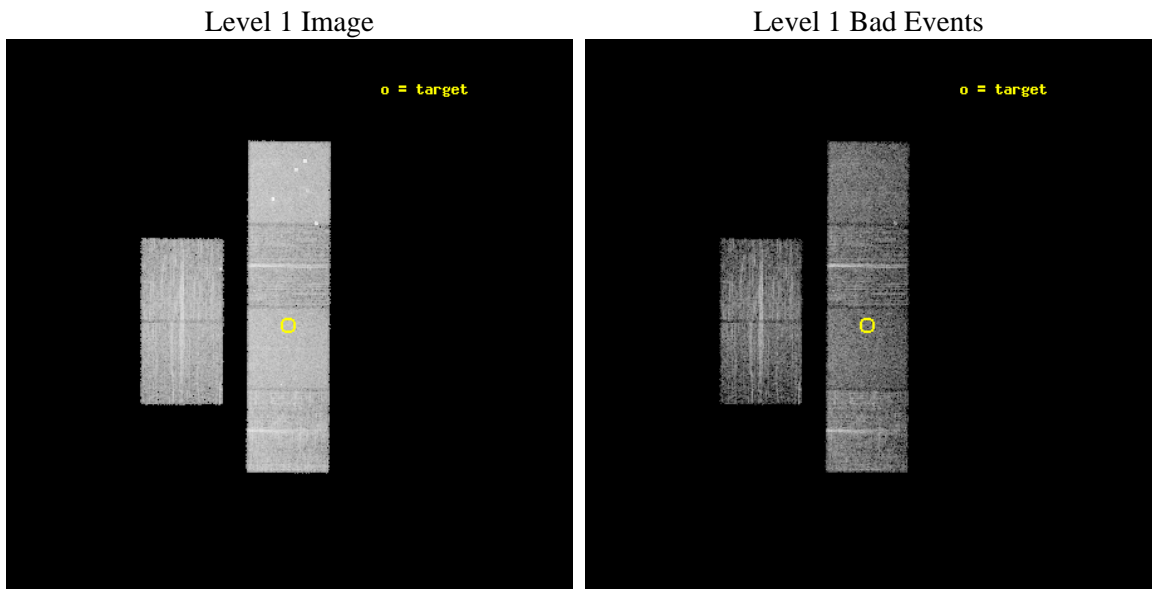
seq_num	900600	Sequence number
obs_id	8059	Observation id
title	The Duty Cycle of Supermassive Black Holes: X-raying Virgo	Proposa
observer	Prof Tommaso Treu	Principal investigator
object	1146	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.24	Observer's specified target RA [deg]
dec_targ	13.241889	Observer's specified target Dec [deg]
ra_nom	187.23734748556	Nominal RA [deg]
dec_nom	13.245880332317	Nominal Dec [deg]
roll_nom	90.30250491644	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5155.199980855	Sum of GTIs [s]
livetime	5089.9217346086	Livetime [s]
ontime2	5155.199980855	Sum of GTIs [s]
ontime3	5155.199980855	Sum of GTIs [s]
ontime5	5155.199980855	Sum of GTIs [s]
ontime6	5155.199980855	Sum of GTIs [s]
ontime7	5155.199980855	Sum of GTIs [s]
ontime8	5151.9589905143	Sum of GTIs [s]
l2events	88173	Number of level 2 events



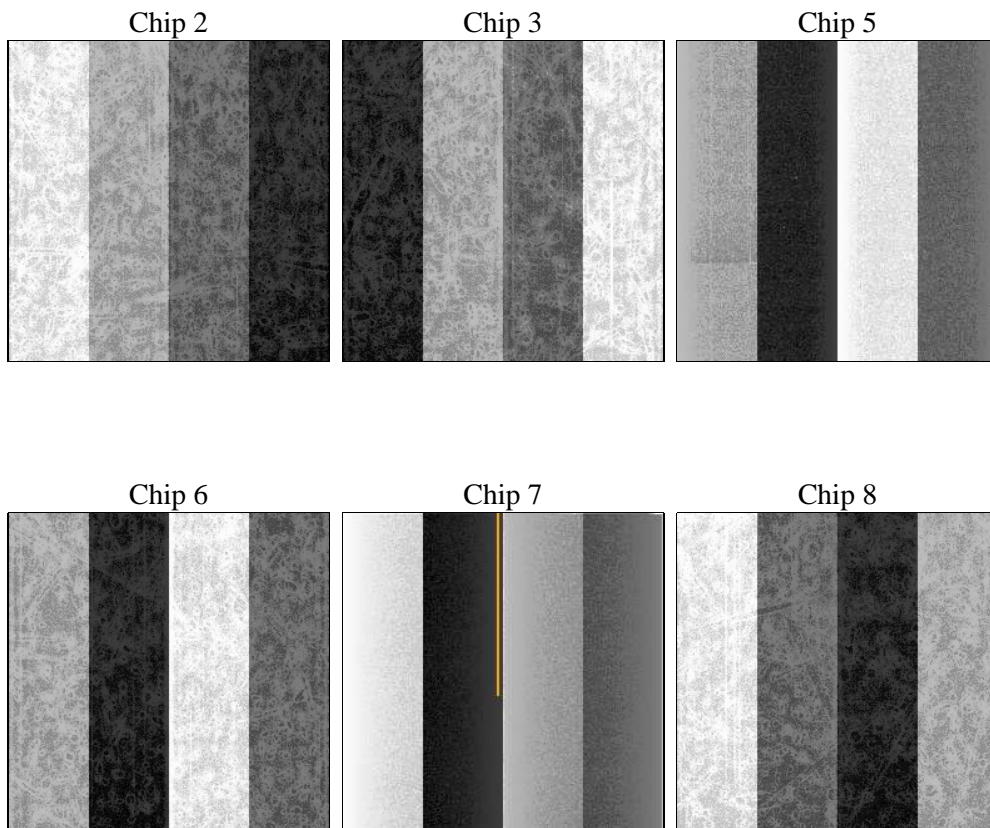
2 OBI

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	5155.199980855	Sum of GTIs [s]
caldsver	4.4.9	 	ontime2	5155.199980855	Sum of GTIs [s]
date	2012-05-10T07:59:08	Date and time of file creation	ontime3	5155.199980855	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5155.199980855	Sum of GTIs [s]
			ontime6	5155.199980855	Sum of GTIs [s]
			ontime7	5155.199980855	Sum of GTIs [s]
			ontime8	5151.9589905143	Sum of GTIs [s]
			l1events	367036	Number of level 1 events

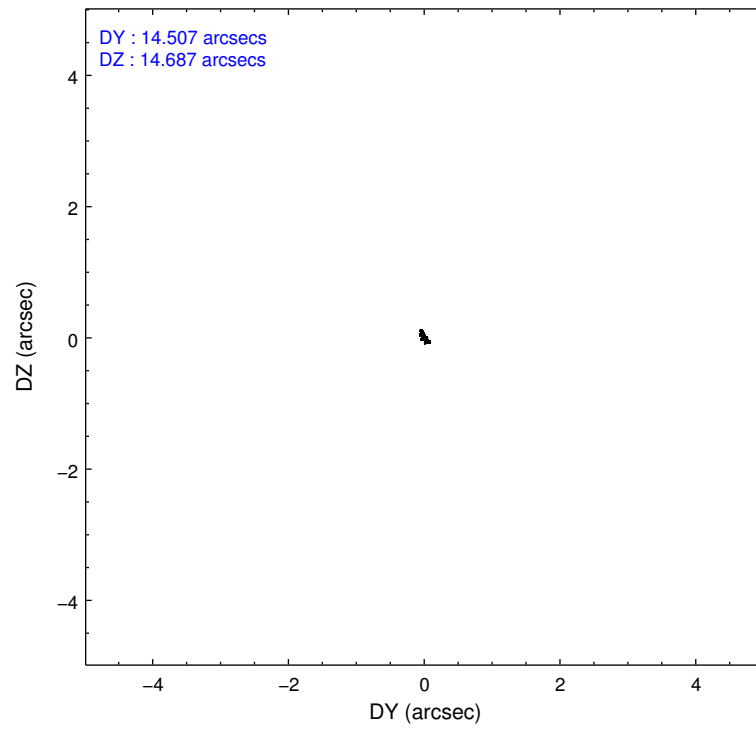
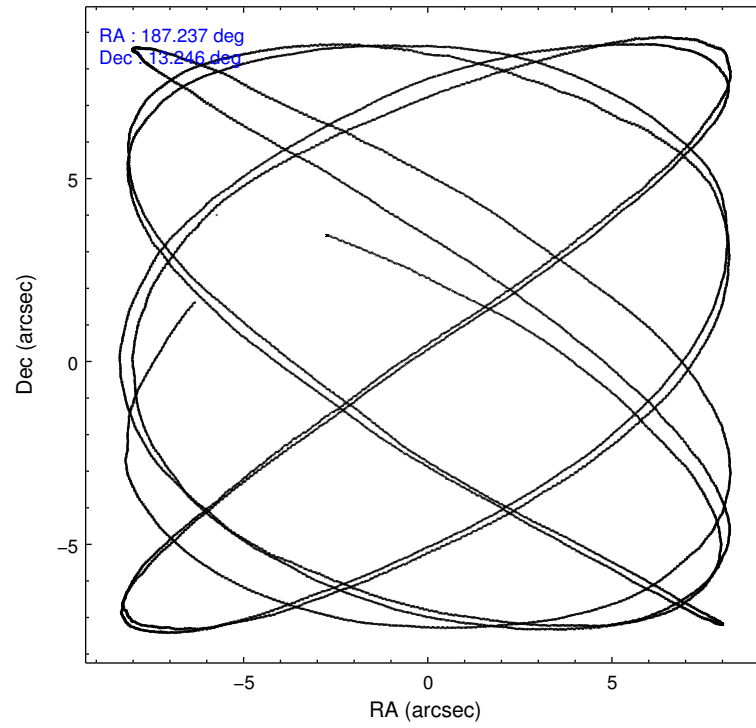
2.1.4 Events

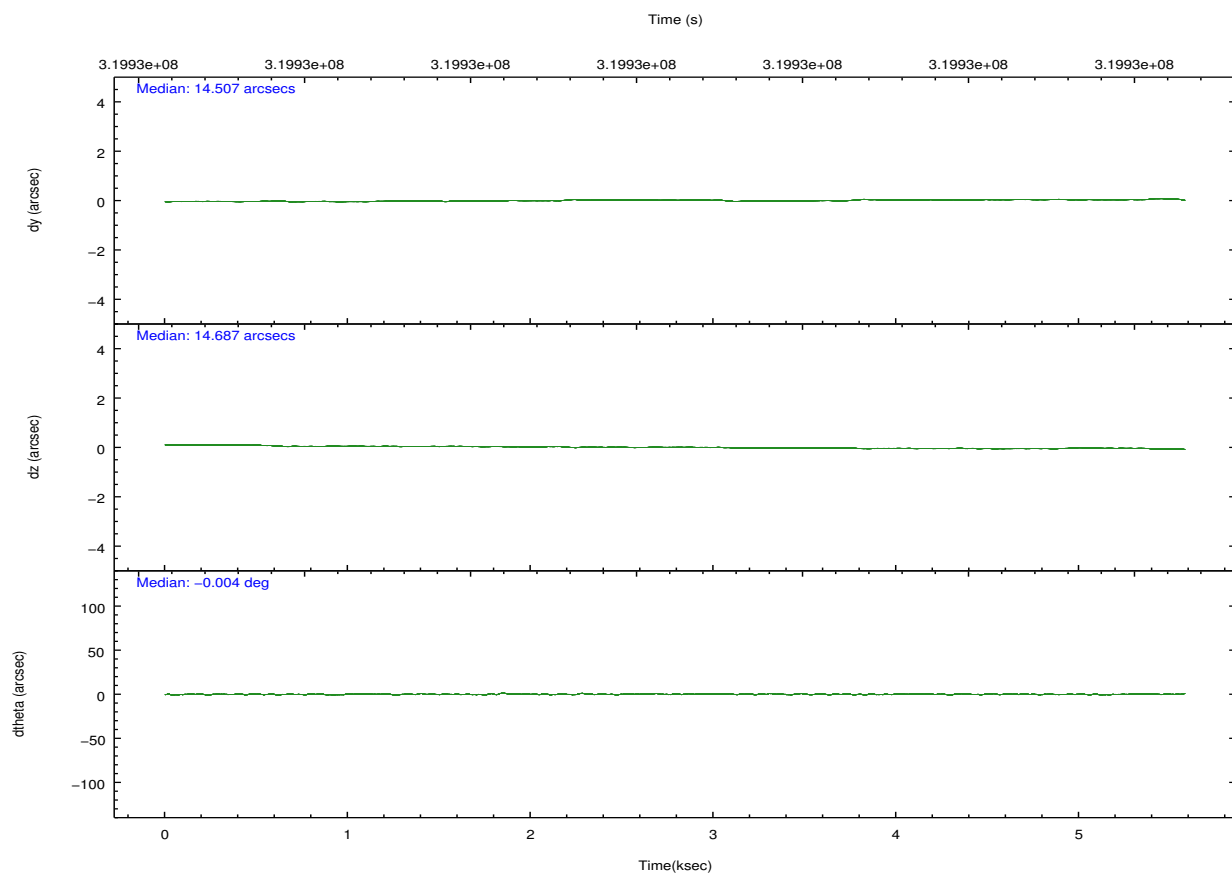
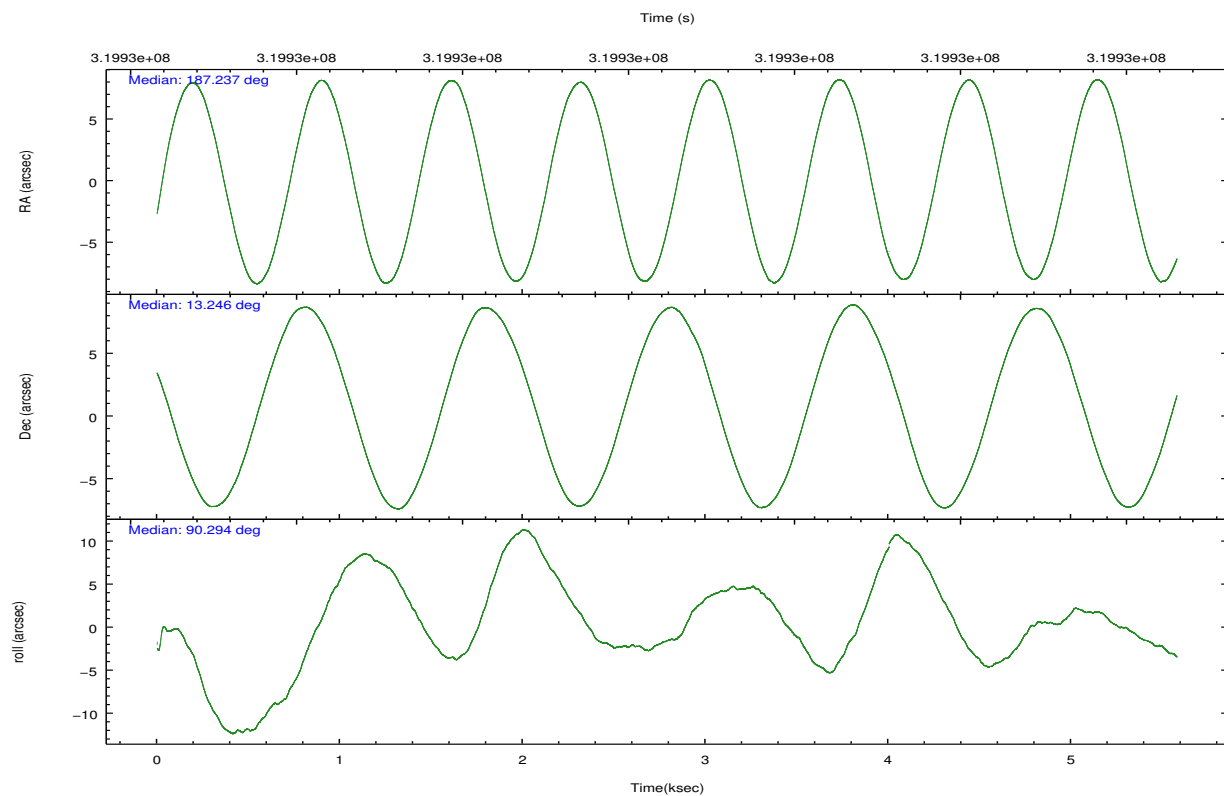
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	53008	47441	77714	51384	70235	67254	grade 0 events	3185	3340	4168	3196	3077	5171
rejected events	46266	40702	40870	44434	39928	52578		6%	7%	5%	6%	4%	7%
rejected %	87%	85%	52%	86%	56%	78%	grade 1 events	36	30	182	39	72	61
								0%	0%	0%	0%	0%	0%
							grade 2 events	1417	1294	11076	1399	6290	3223
								2%	2%	14%	2%	8%	4%
							grade 3 events	553	568	1385	603	2659	1423
								1%	1%	1%	1%	3%	2%
							grade 4 events	535	568	1307	578	2566	1354
								1%	1%	1%	1%	3%	2%
							grade 5 events	2009	2244	5315	2333	6375	2930
								3%	4%	6%	4%	9%	4%
							grade 6 events	1059	974	18918	1175	15728	3509
								1%	2%	24%	2%	22%	5%
							grade 7 events	44214	38423	35363	42061	33468	49583
								83%	80%	45%	81%	47%	73%

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	187.251864	187.2373474855585	CCD I2 on	O1	Y
[deg] Pointing Dec	13.222577	13.24588033231734	CCD I3 on	O2	Y
[deg] Pointing Roll	90.142533	90.30250491643991	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O4	Y
[s] Observation start time (MET)	319928631.184000	319928204.81602	CCD S5 on	N	N
Observation start date	2008-02-20T21:02:46	2008-02-20T20:56:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	319934031.184000	319934350.20382	On-chip summing requested	N	N
Observation end date	2008-02-20T22:32:46	2008-02-20T22:39:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



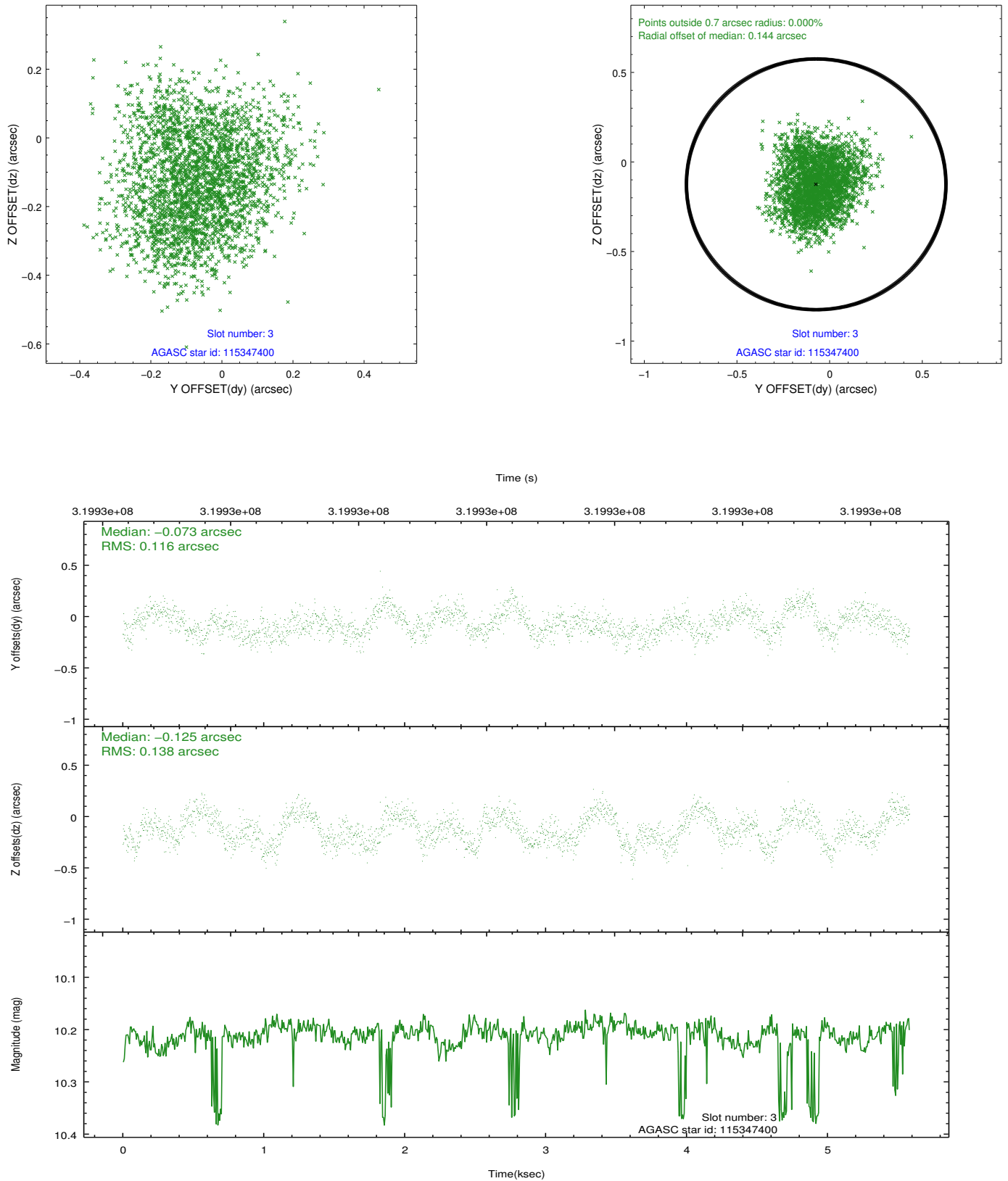


Slot Statistics

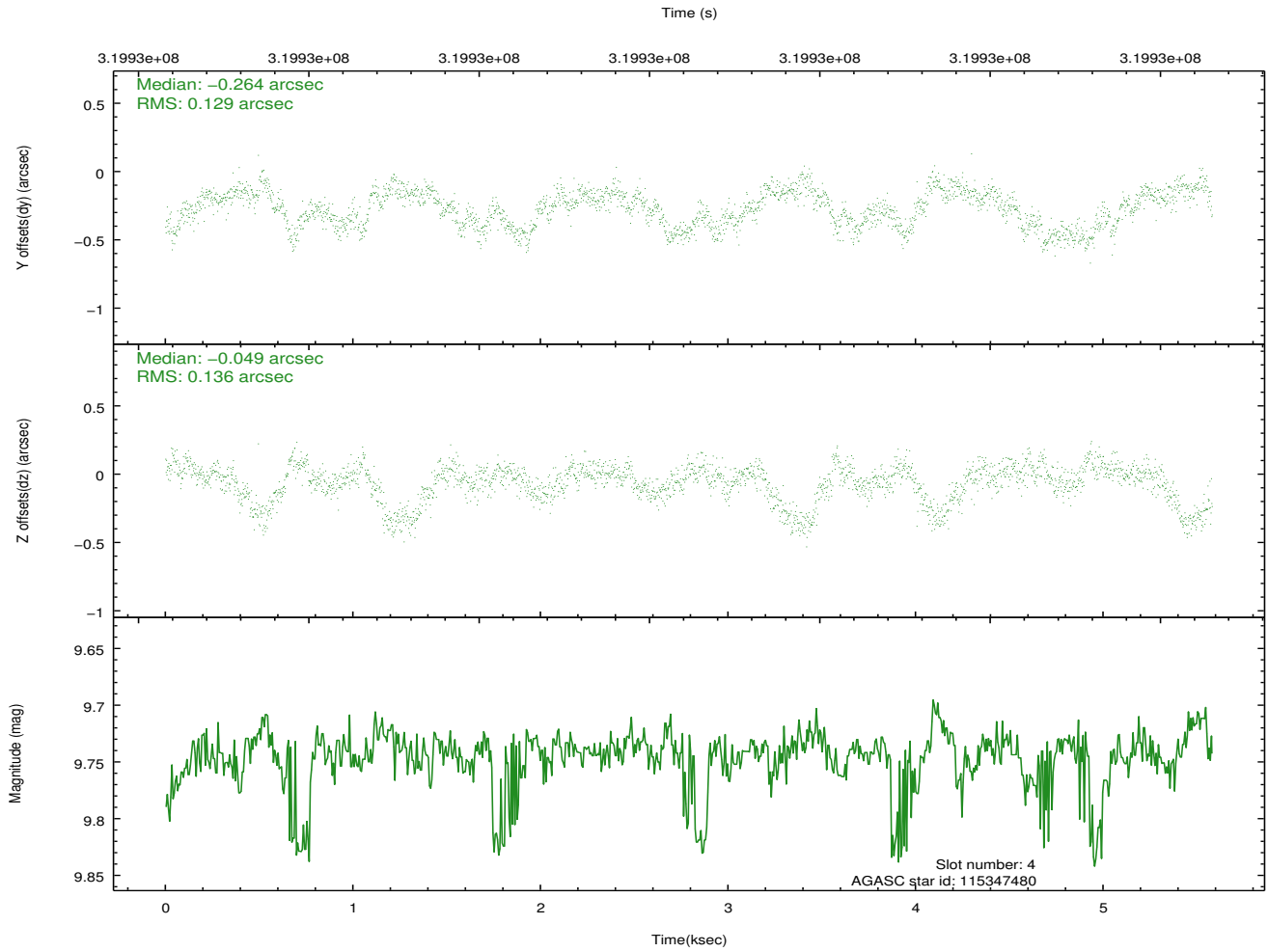
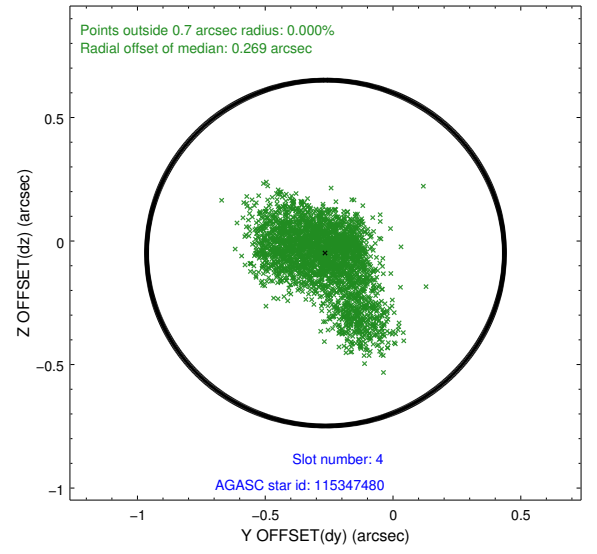
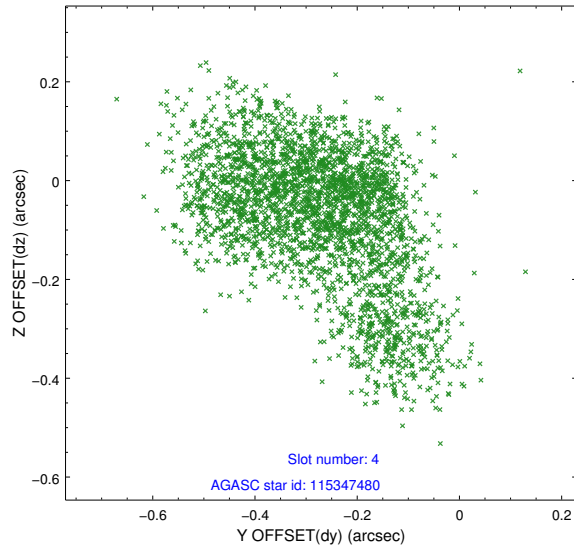
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1361	-0.090	-0.045	0.007	0.010	0.000000	0.000000	-767.54	-1736.06
1	FID	ACIS-S-4	7.19	1361	0.211	0.055	0.006	0.012	0.000000	0.000000	2145.53	171.42
2	FID	ACIS-S-5	7.22	1361	-0.153	-0.002	0.007	0.012	0.000000	0.000000	-1819.08	166.24
3	GUIDE	115347400	10.21	2708	-0.073	-0.125	0.197	0.297	186.994146	13.445598	805.86	900.96
4	GUIDE	115347480	9.74	2719	-0.264	-0.049	0.193	0.340	186.668576	13.310410	324.08	2043.20
5	GUIDE	115347520	10.17	2716	0.031	0.310	0.338	0.478	187.517505	12.810279	-1485.09	-927.88
6	GUIDE	115348424	9.50	2722	0.179	-0.012	0.150	0.222	187.199498	13.087929	-484.19	184.61
7	GUIDE	115349744	10.33	2717	0.136	-0.043	0.157	0.256	186.878186	12.752529	-1687.63	1316.26

2.4 Star Slots

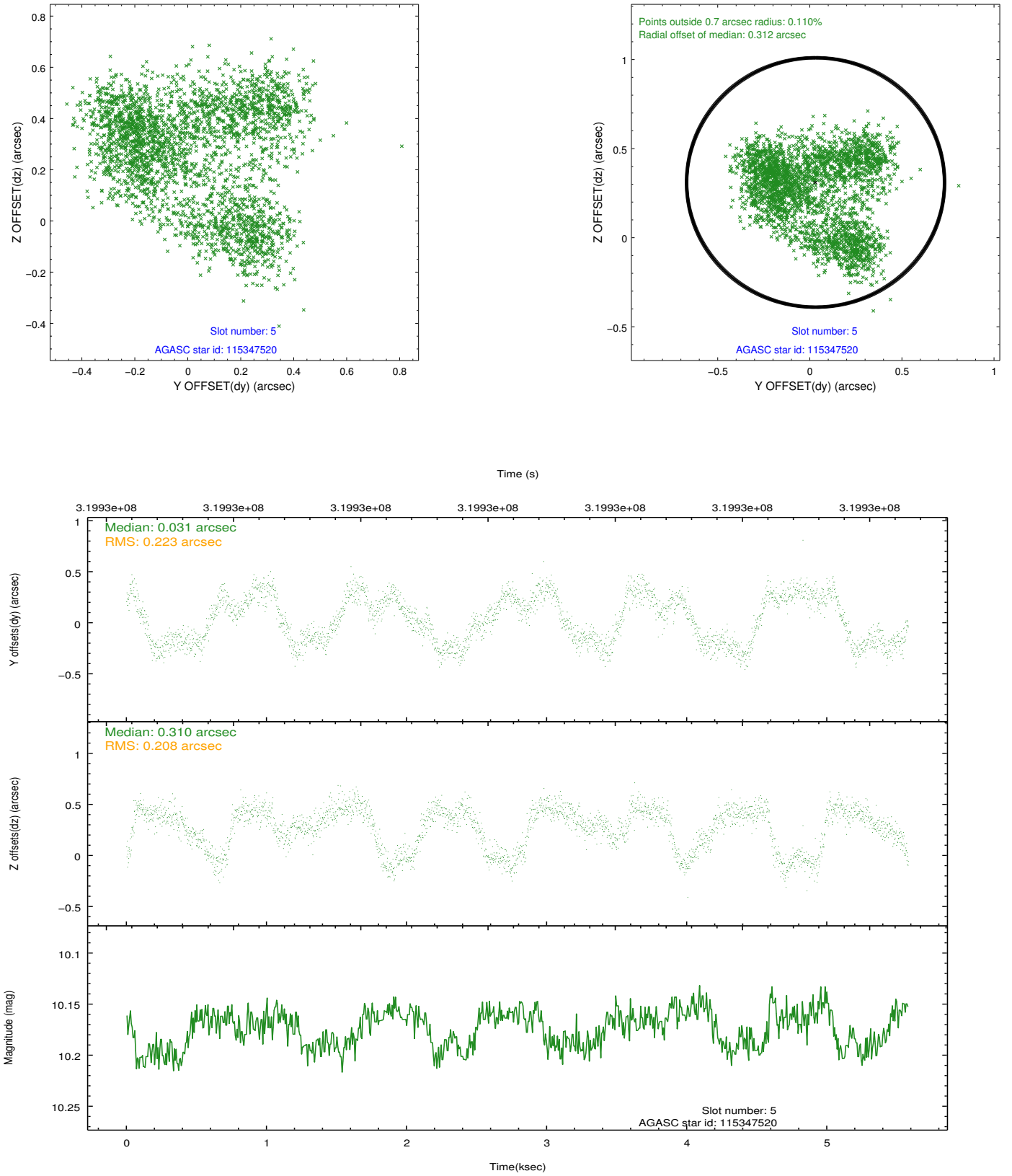
2.4.1 Slot 3



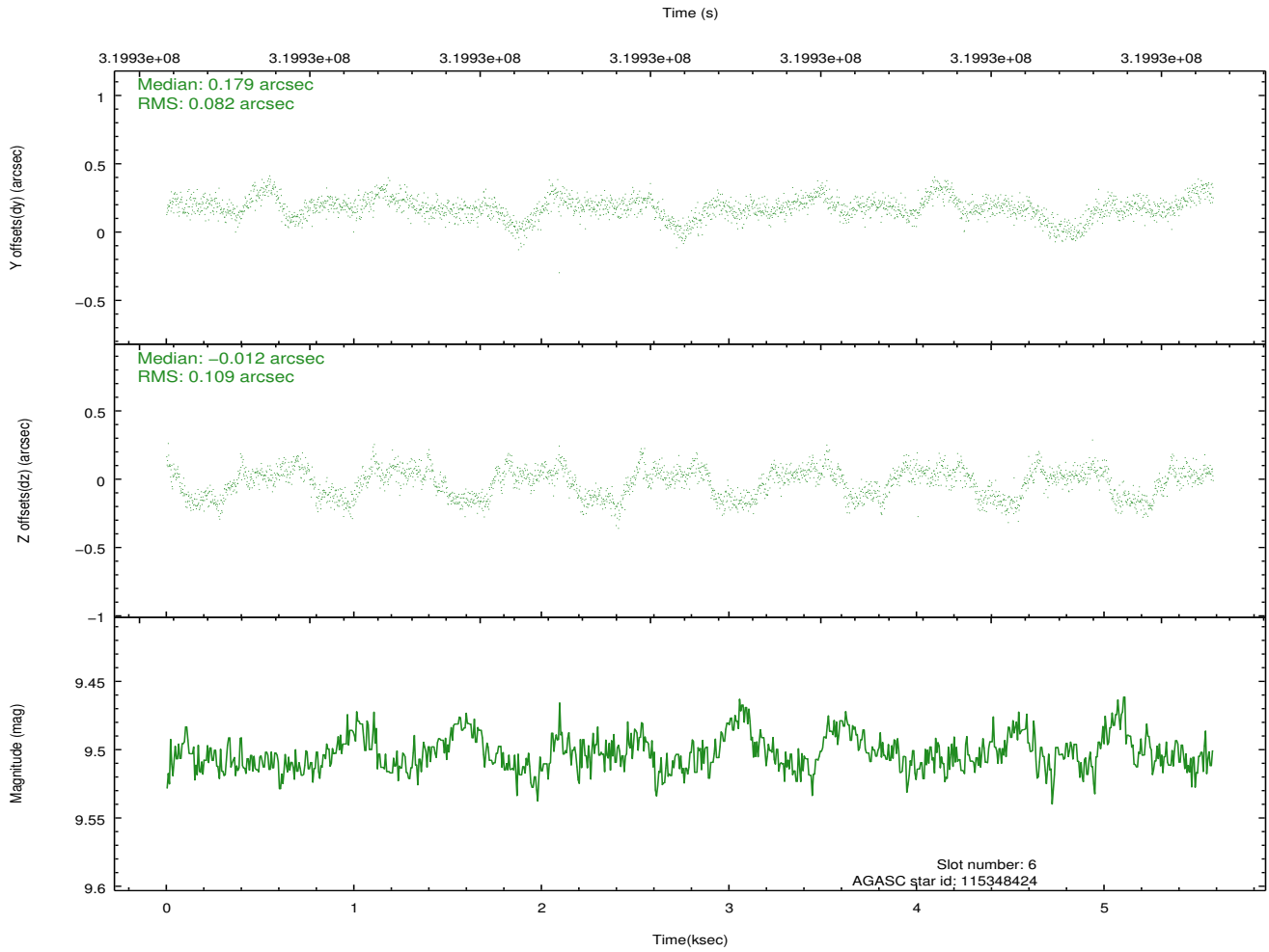
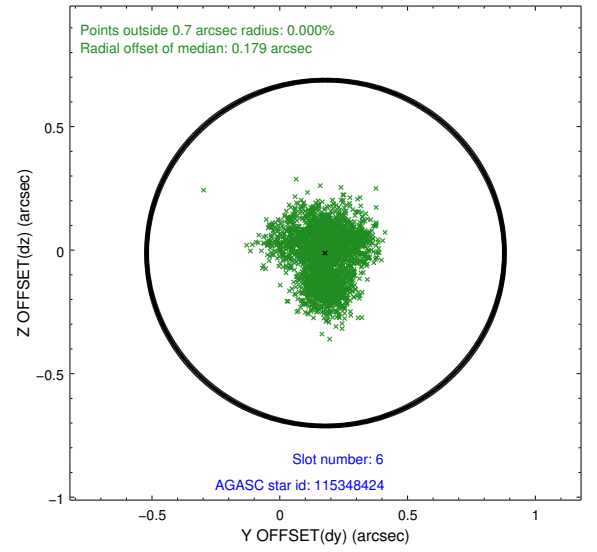
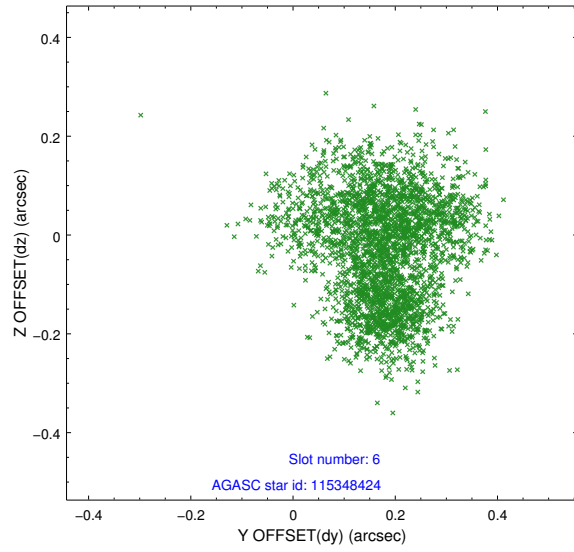
2.4.2 Slot 4



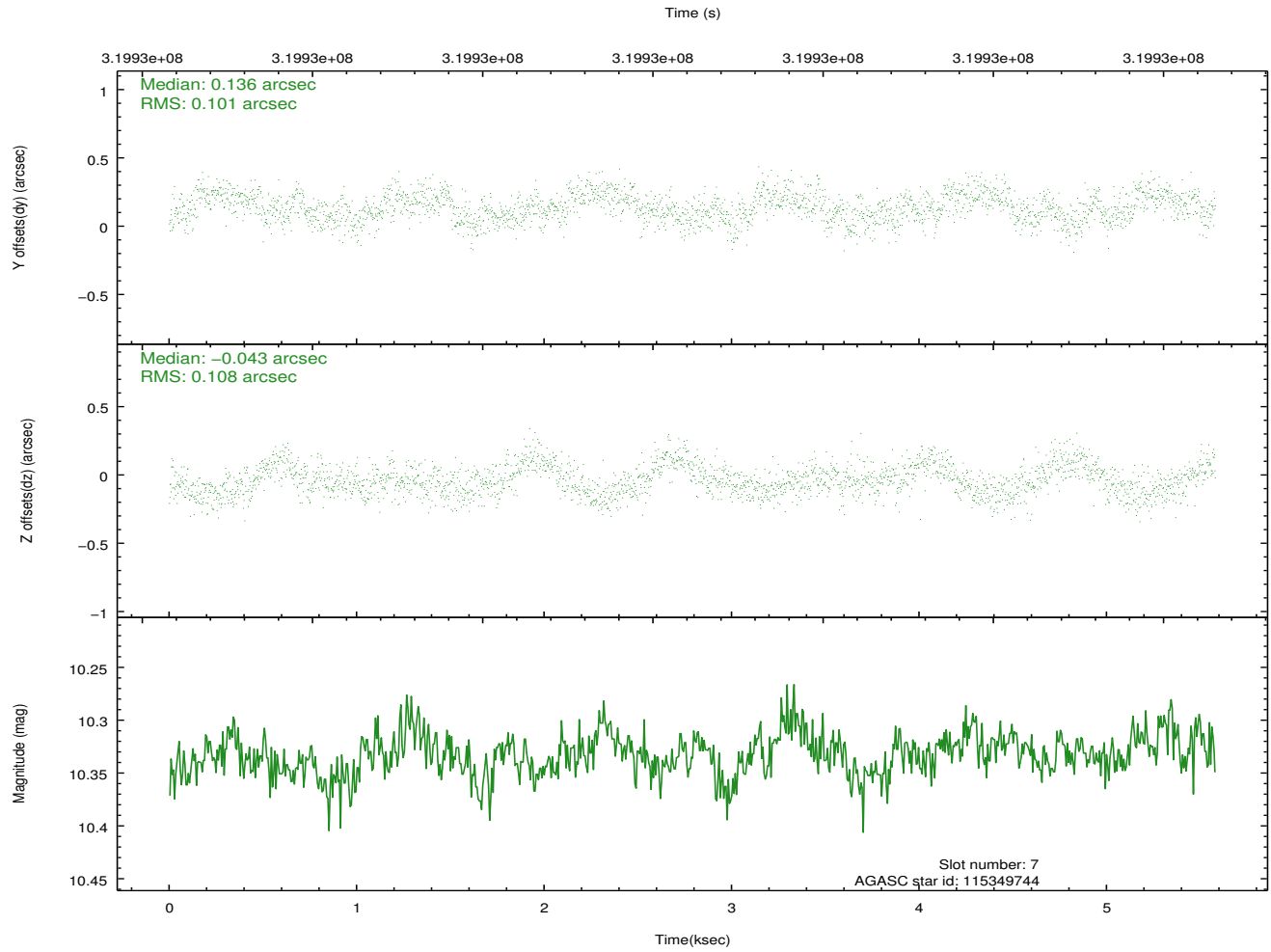
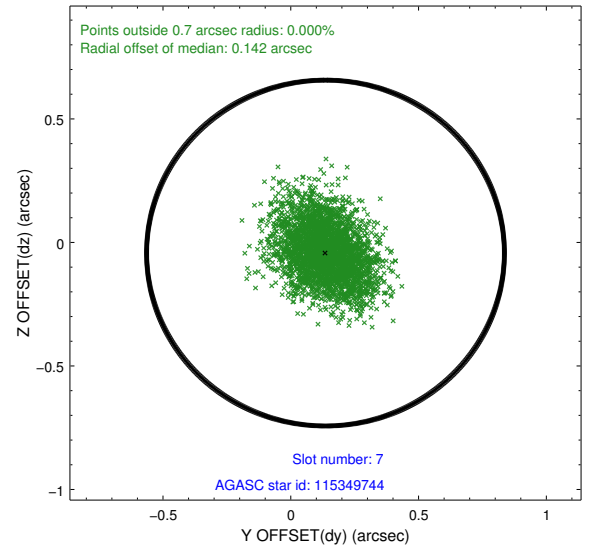
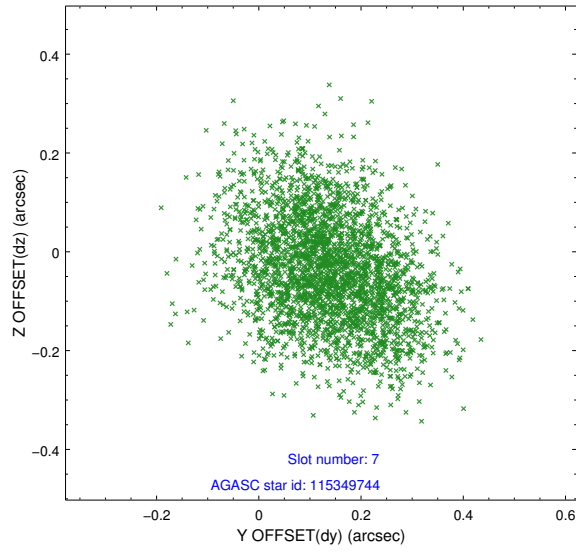
2.4.3 Slot 5



2.4.4 Slot 6

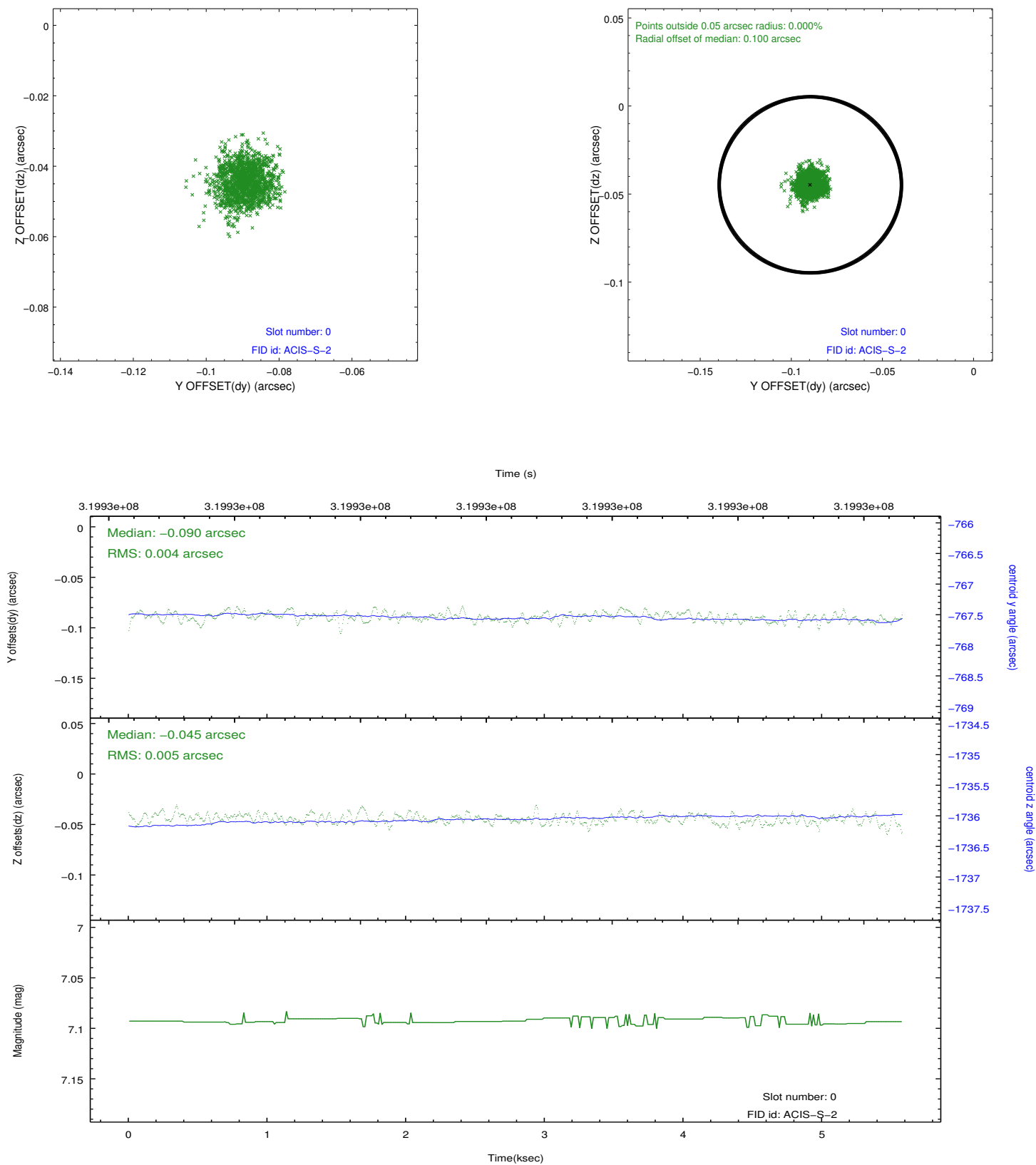


2.4.5 Slot 7

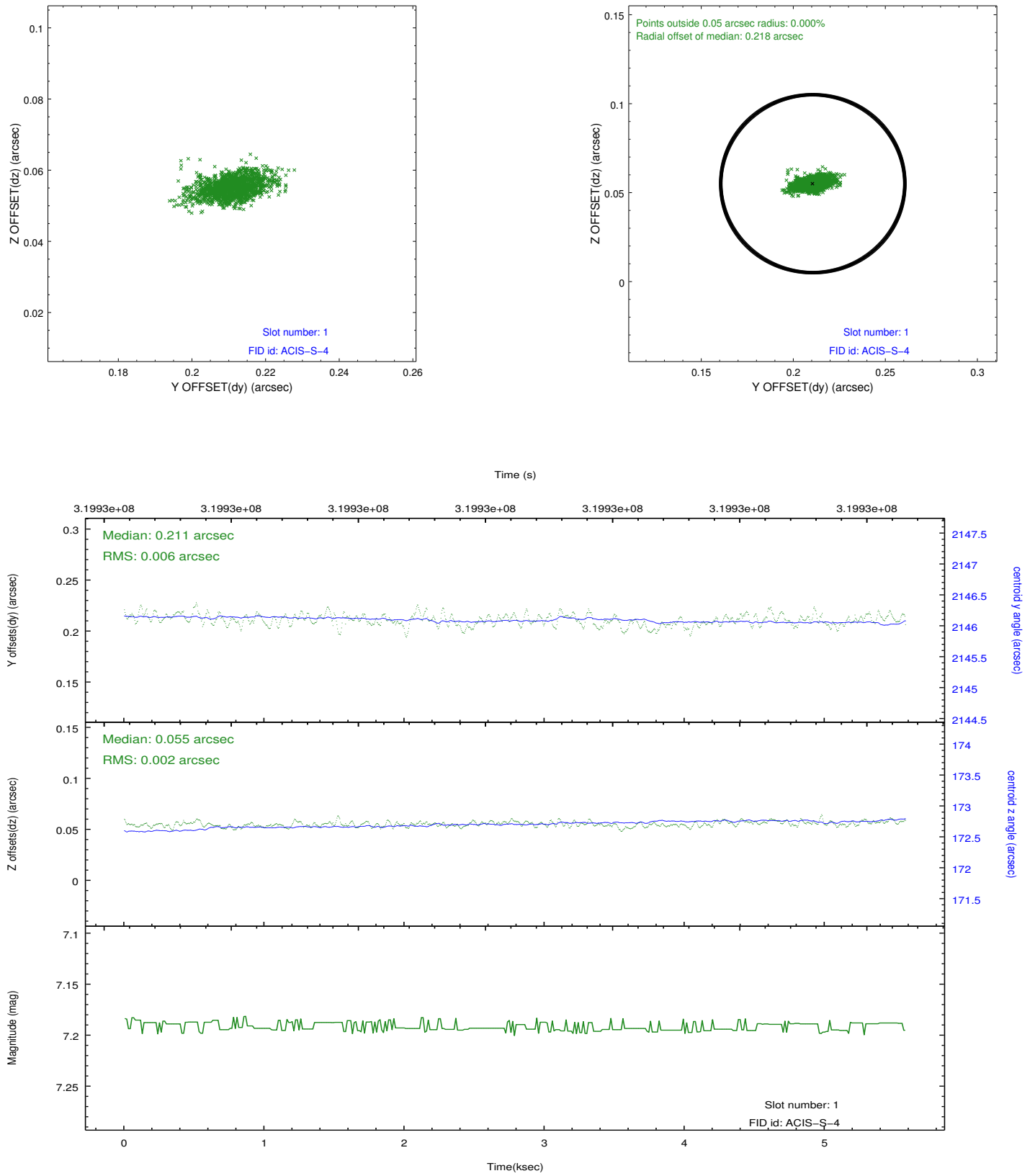


2.5 FID Slots

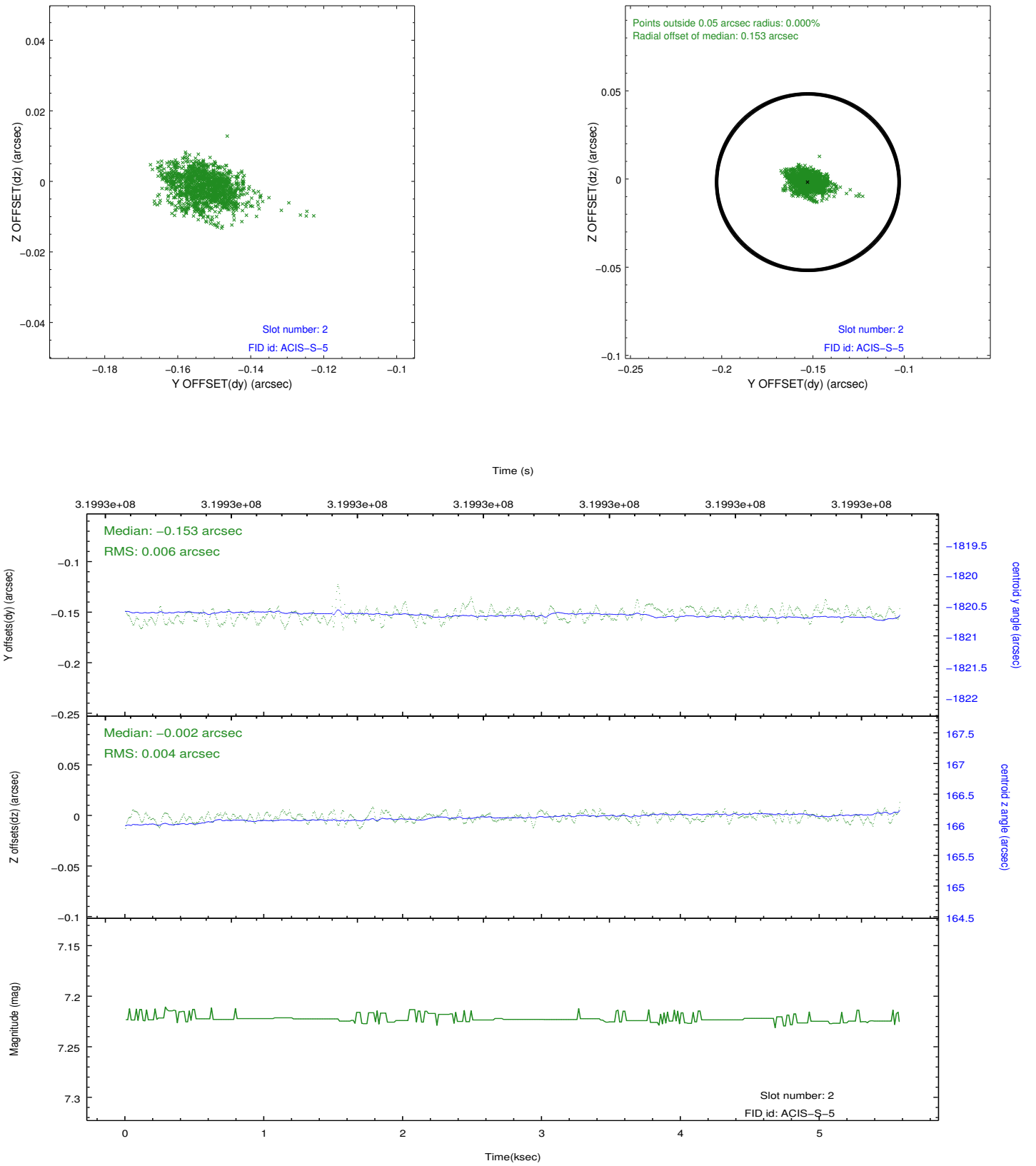
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.15519998

A.2 Comments