

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8090 - L2 Version 2
Chandra X-Ray Center

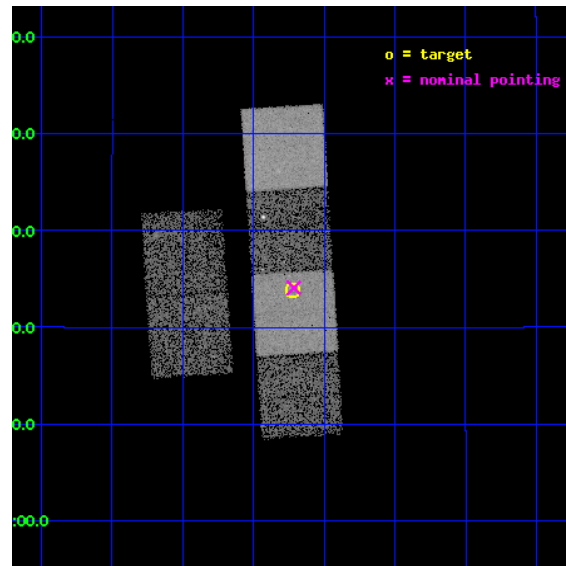
L2 Processing Date : May 10 2012

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1 Front

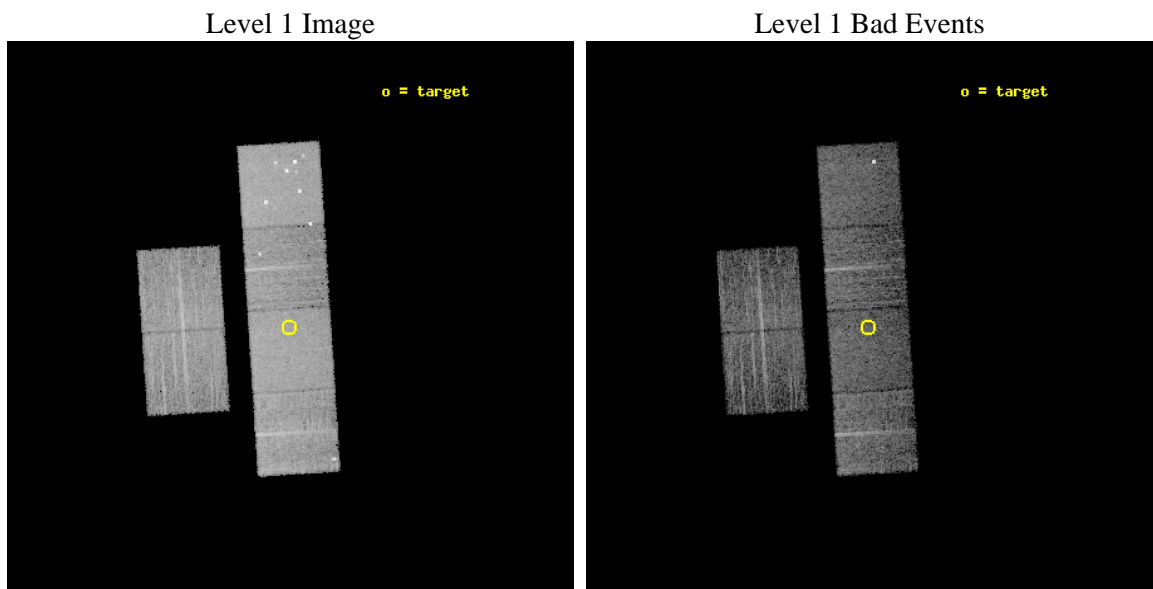
seq_num	900631	Sequence number
obs_id	8090	Observation id
title	The Duty Cycle of Supermassive Black Holes: X-raying Virgo	Proposa
observer	Prof Tommaso Treu	Principal investigator
object	1488	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	188.305833	Observer's specified target RA [deg]
dec_targ	9.397167	Observer's specified target Dec [deg]
ra_nom	188.30348525569	Nominal RA [deg]
dec_nom	9.4013508163023	Nominal Dec [deg]
roll_nom	86.319720550065	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5157.7883186936	Sum of GTIs [s]
livetime	5092.4772973551	Livetime [s]
ontime2	5157.8293586969	Sum of GTIs [s]
ontime3	5151.1831381321	Sum of GTIs [s]
ontime5	5157.7472687364	Sum of GTIs [s]
ontime6	5151.2241880298	Sum of GTIs [s]
ontime7	5157.7883186936	Sum of GTIs [s]
ontime8	5147.901067853	Sum of GTIs [s]
l2events	84300	Number of level 2 events



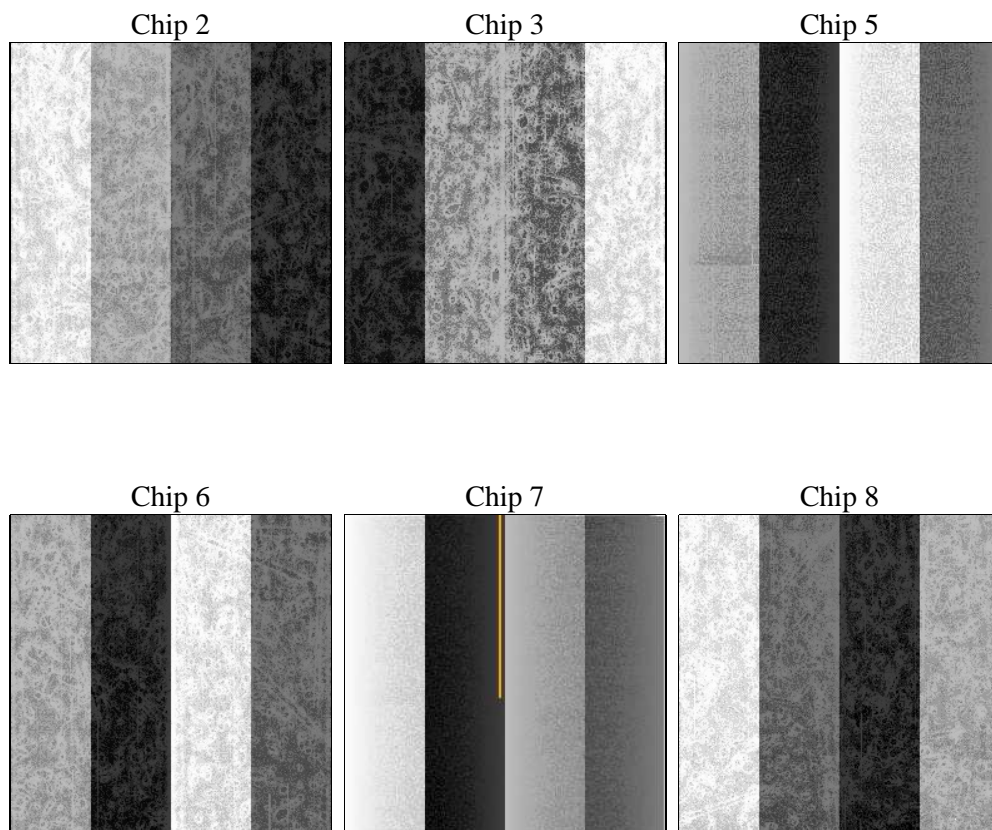
2 OBI

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	5157.7883186936	Sum of GTIs [s]
caldsver	4.4.9	 	ontime2	5157.8293586969	Sum of GTIs [s]
date	2012-05-10T08:33:36	Date and time of file creation	ontime3	5151.1831381321	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	5157.7472687364	Sum of GTIs [s]
			ontime6	5151.2241880298	Sum of GTIs [s]
			ontime7	5157.7883186936	Sum of GTIs [s]
			ontime8	5147.901067853	Sum of GTIs [s]
			l1events	374329	Number of level 1 events

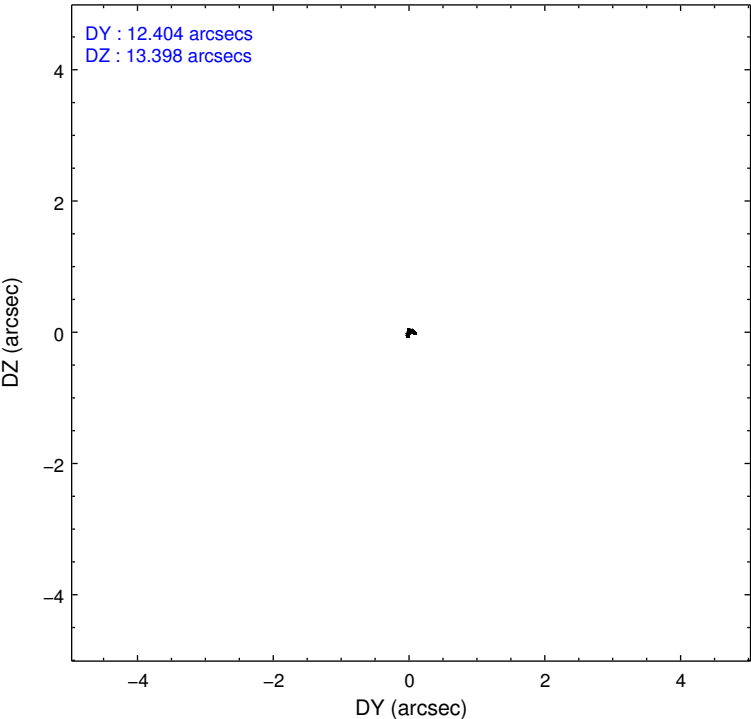
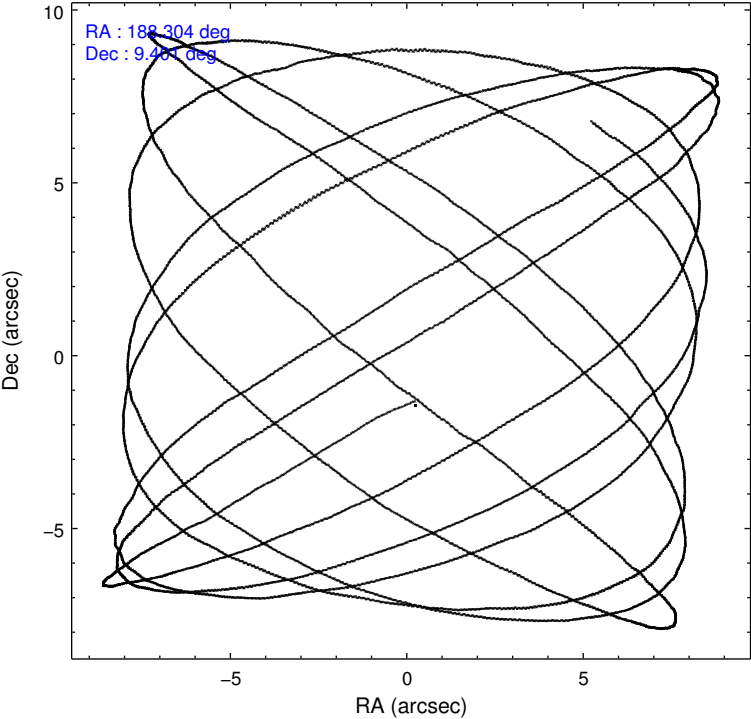
2.1.4 Events

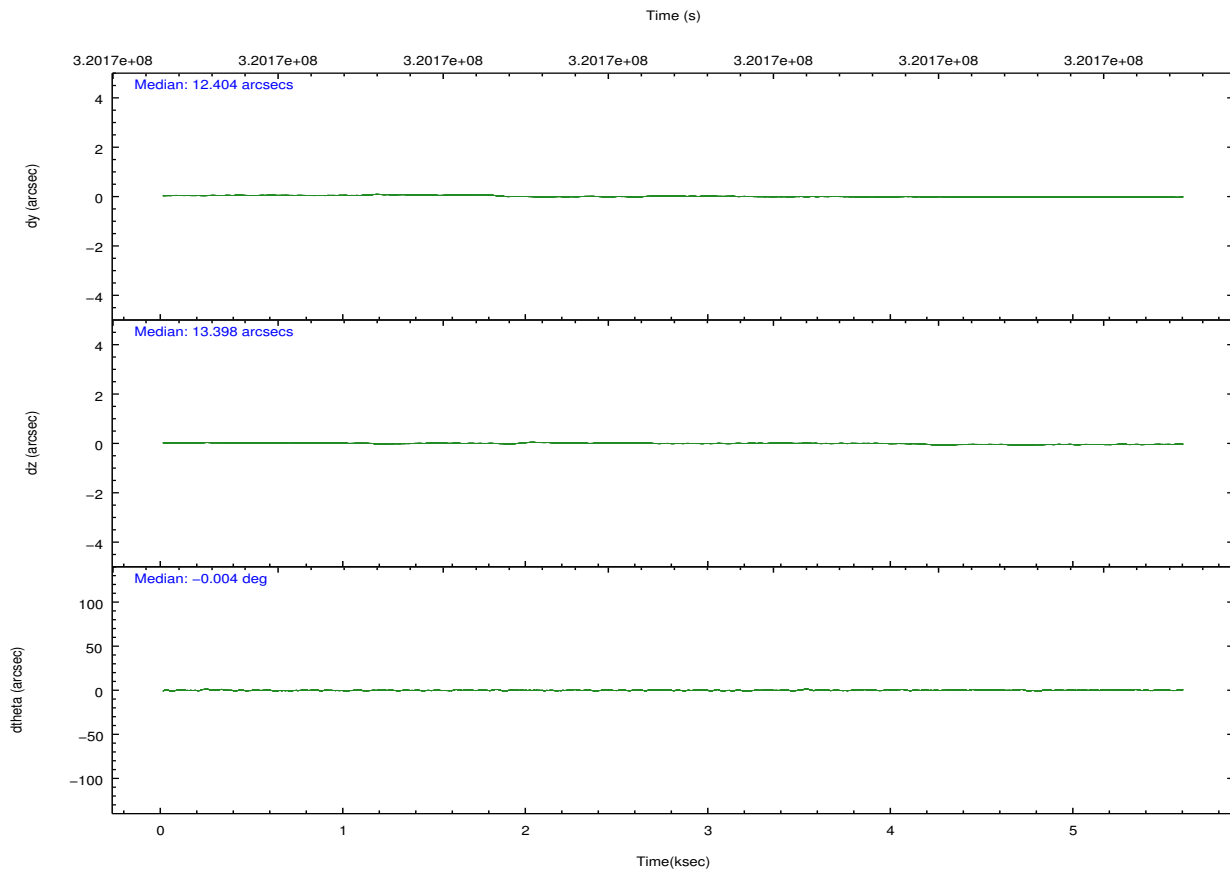
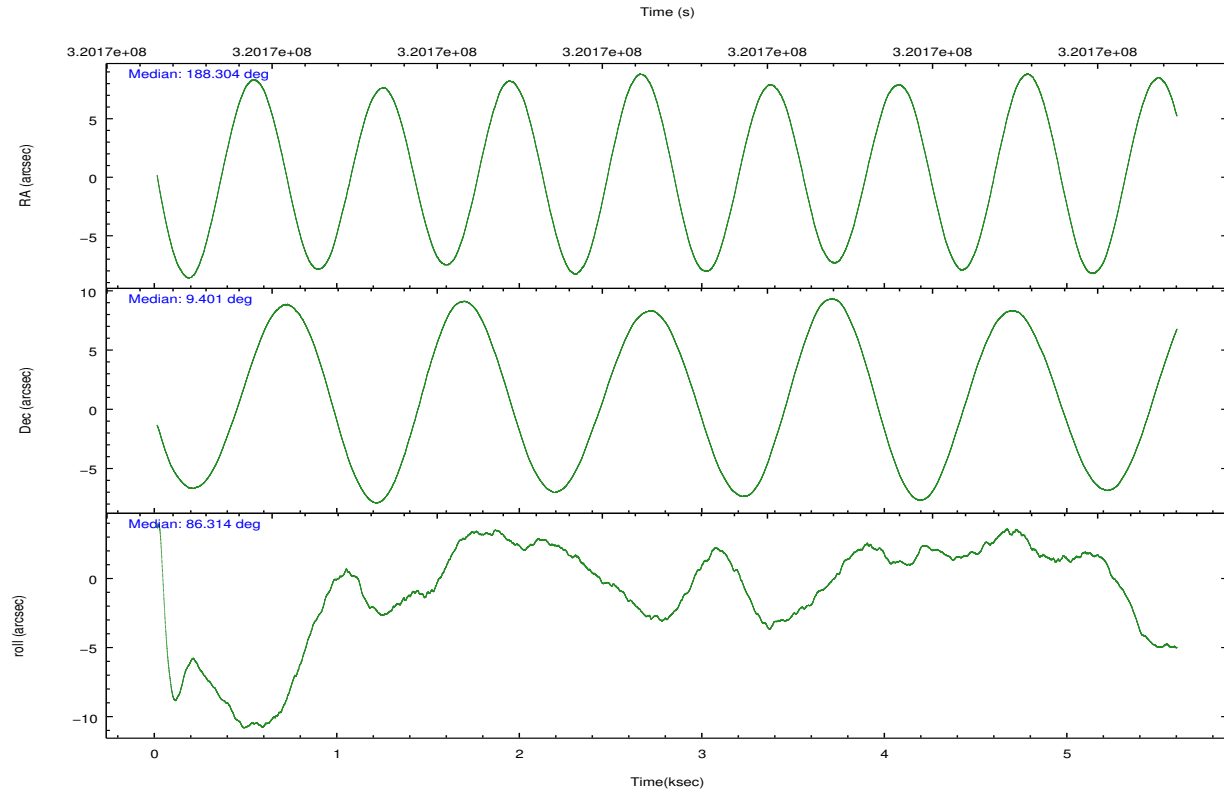
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	52194	49915	86178	51328	69878	64836	grade 0 events	2451	2530	7387	3136	2515	5108
rejected events	46391	44094	43802	44214	40890	50482		4%	5%	8%	6%	3%	7%
rejected %	88%	88%	50%	86%	58%	77%	grade 1 events	31	30	110	36	69	65
								0%	0%	0%	0%	0%	0%
							grade 2 events	1239	1177	11714	1480	5949	3100
								2%	2%	13%	2%	8%	4%
							grade 3 events	553	562	1423	583	2380	1349
								1%	1%	1%	1%	3%	2%
							grade 4 events	557	557	1197	585	2404	1265
								1%	1%	1%	1%	3%	1%
							grade 5 events	1979	2330	5259	2467	6428	3162
								3%	4%	6%	4%	9%	4%
							grade 6 events	1010	1004	20698	1340	15776	3540
								1%	2%	24%	2%	22%	5%
							grade 7 events	44374	41725	38390	41701	34357	47247
								85%	83%	44%	81%	49%	72%

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	188.316154	188.3034852556924	CCD I2 on	O1	Y
[deg] Pointing Dec	9.377108	9.401350816302335	CCD I3 on	O2	Y
[deg] Pointing Roll	86.161009	86.31972055006524	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)	320166795.184000	320166324.62757	CCD S5 on	N	N
Observation start date	2008-02-23T15:12:10	2008-02-23T15:05:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	320172195.184000	320172471.55287	On-chip summing requested	N	N
Observation end date	2008-02-23T16:42:10	2008-02-23T16:47:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



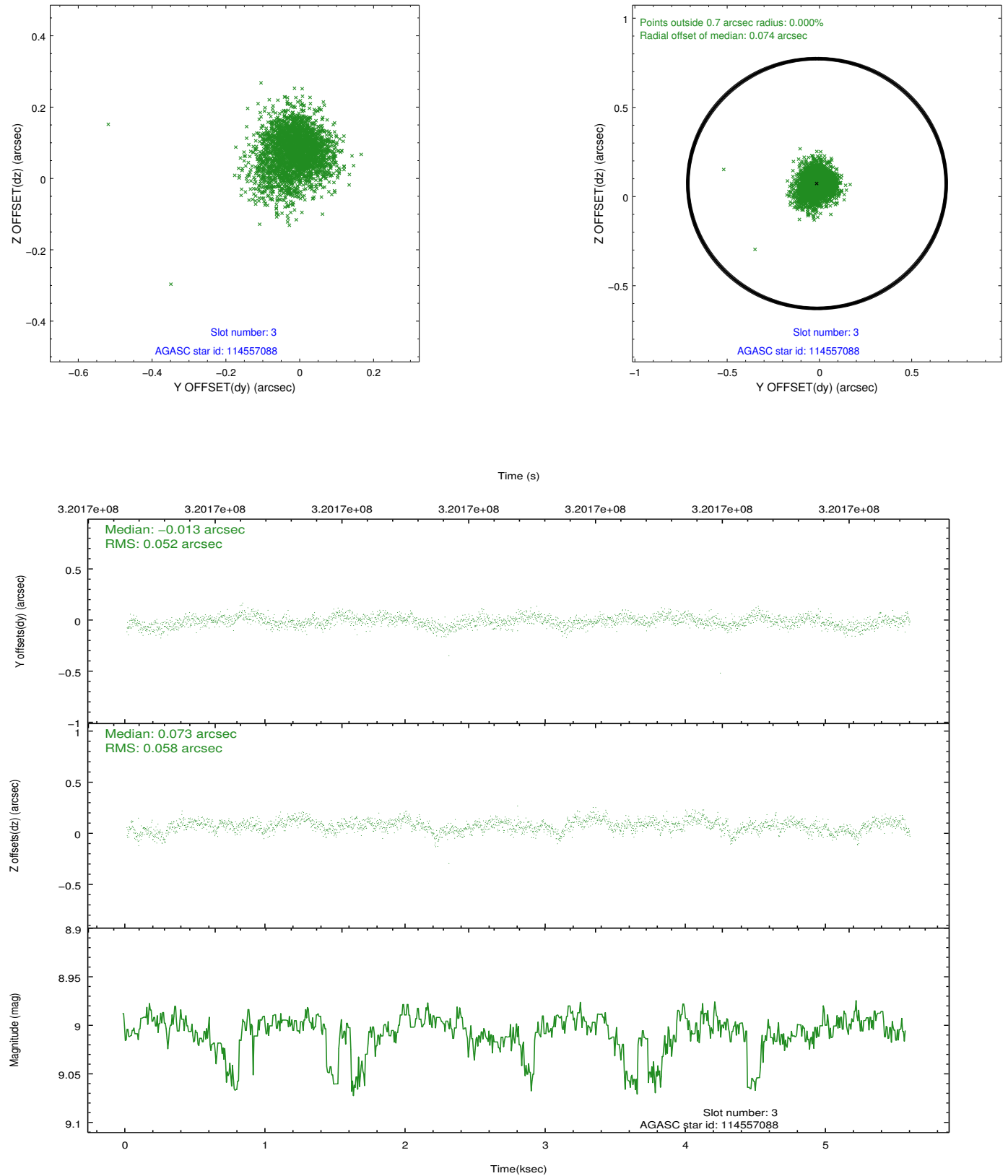


Slot Statistics

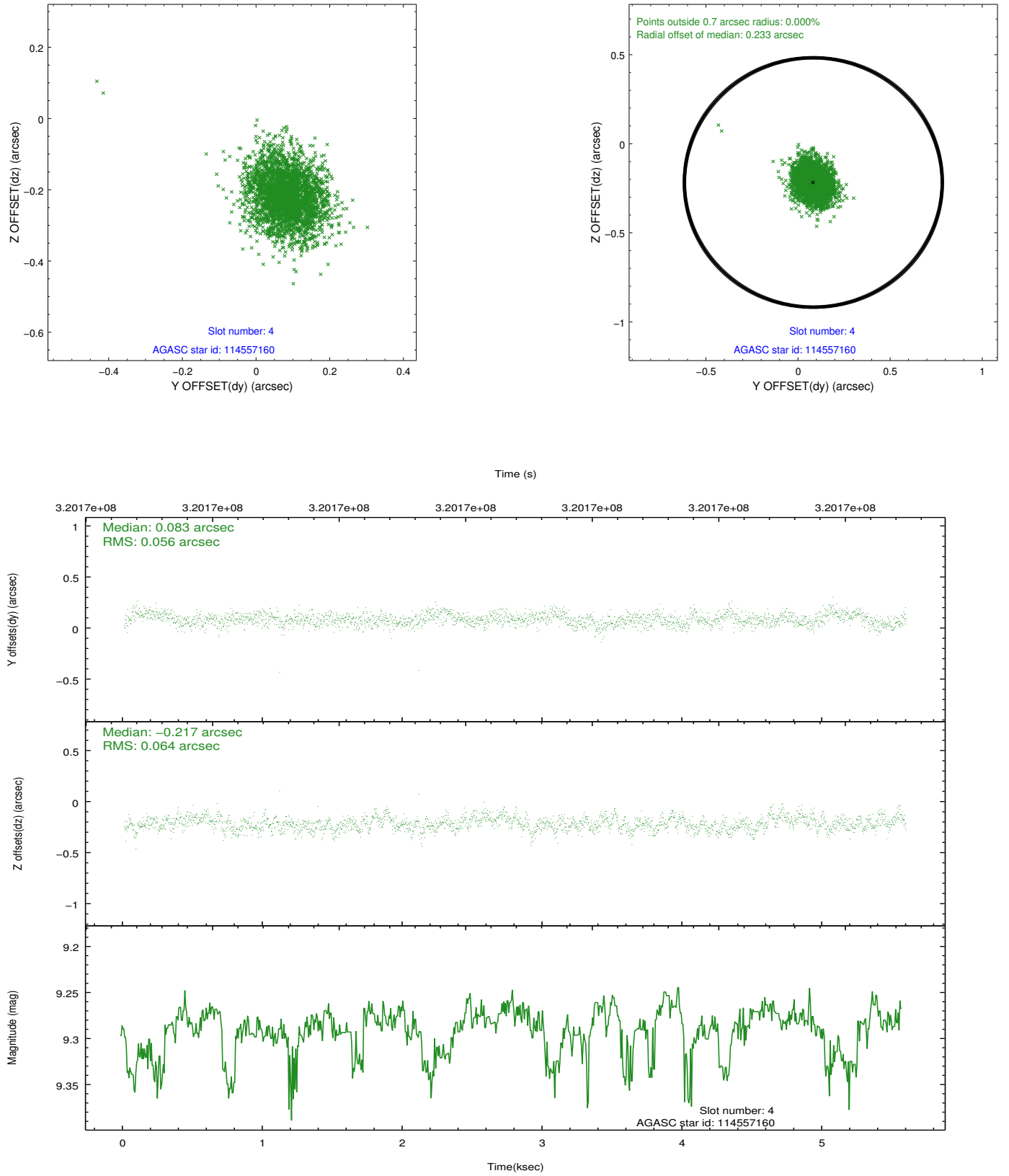
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1362	-0.025	-0.053	0.006	0.010	0.000000	0.000000	-765.34	-1734.78
1	FID	ACIS-S-4	7.20	1361	0.128	0.026	0.005	0.010	0.000000	0.000000	2147.60	172.67
2	FID	ACIS-S-5	7.23	1361	-0.134	0.035	0.006	0.010	0.000000	0.000000	-1816.91	167.57
3	GUIDE	114557088	9.01	2721	-0.013	0.073	0.081	0.136	188.466353	9.531660	591.79	-494.58
4	GUIDE	114557160	9.29	2720	0.083	-0.217	0.088	0.145	188.190957	9.093563	-1047.09	375.90
5	GUIDE	114557512	9.51	2722	-0.125	0.046	0.099	0.157	188.882545	9.657451	1143.62	-1937.35
6	GUIDE	114562464	9.42	2724	0.153	0.046	0.106	0.166	188.394515	8.917620	-1630.39	-389.73
7	GUIDE	114562576	8.91	2724	-0.096	0.051	0.075	0.120	188.579291	9.672237	1123.09	-860.36

2.4 Star Slots

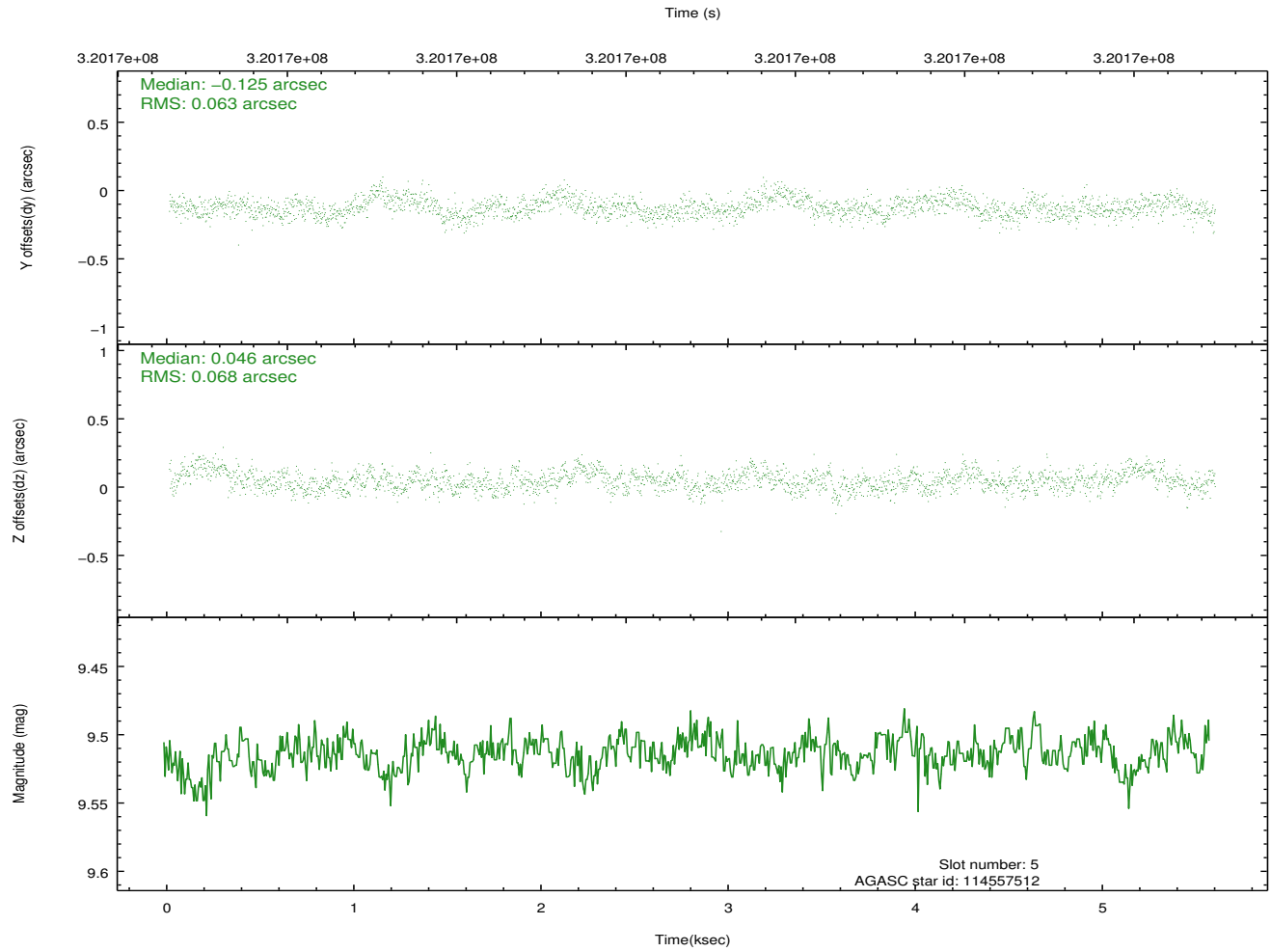
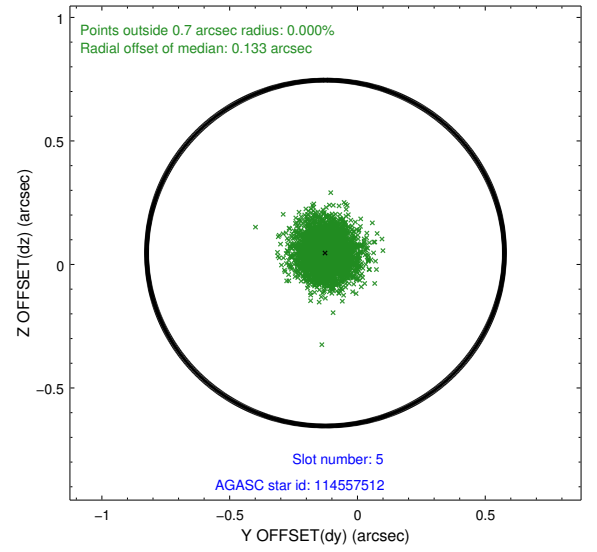
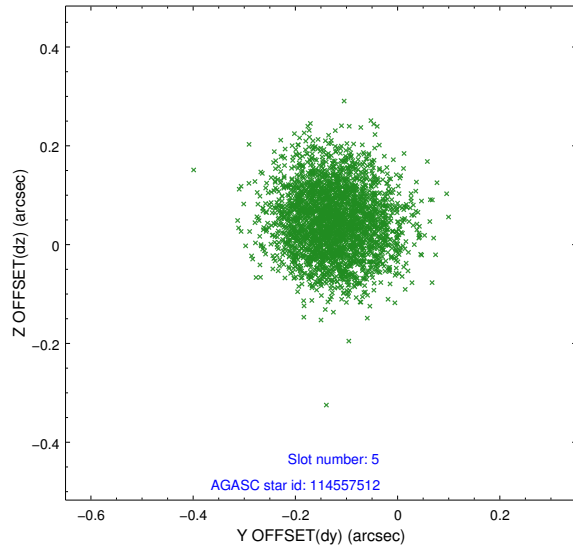
2.4.1 Slot 3



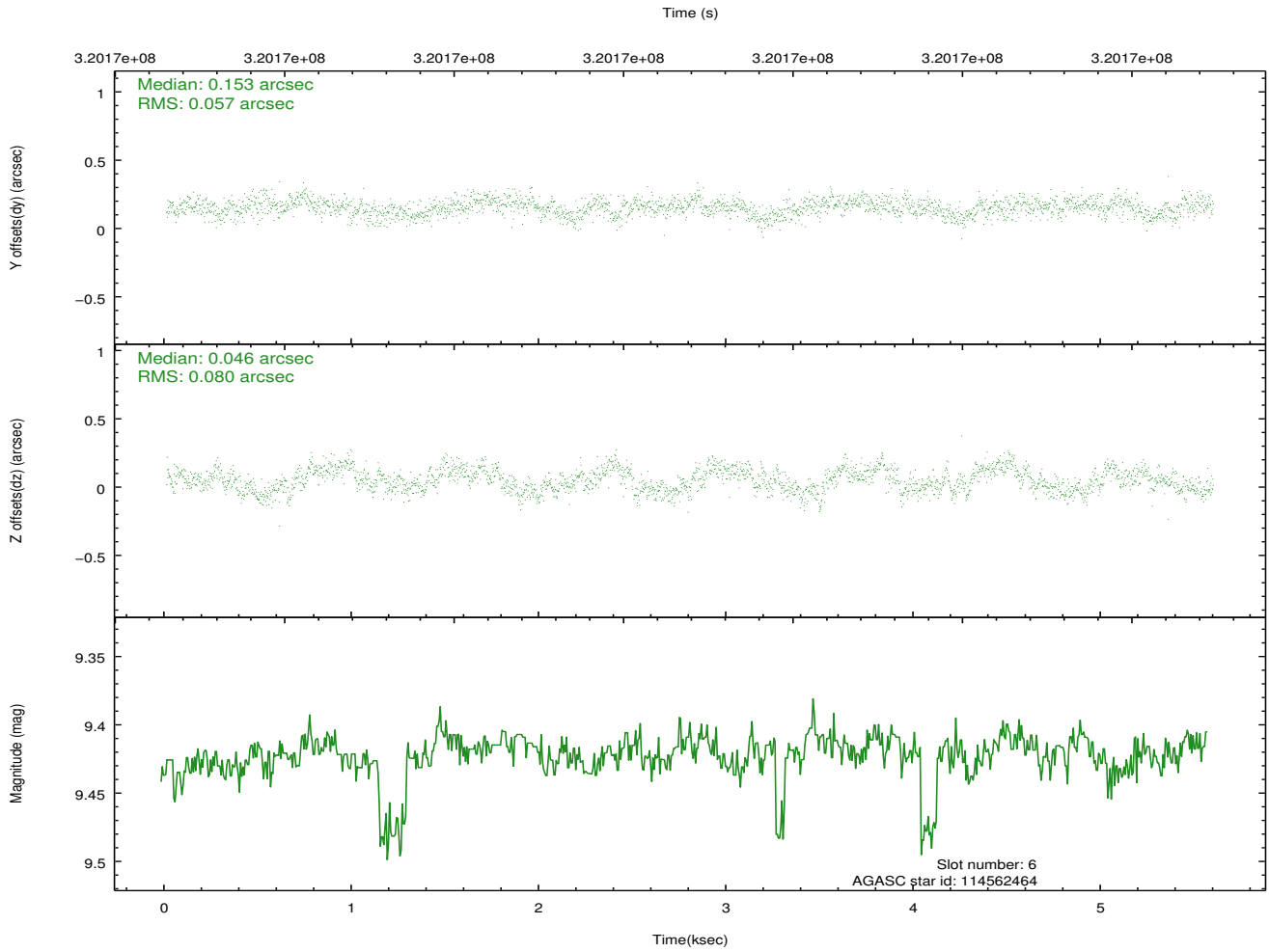
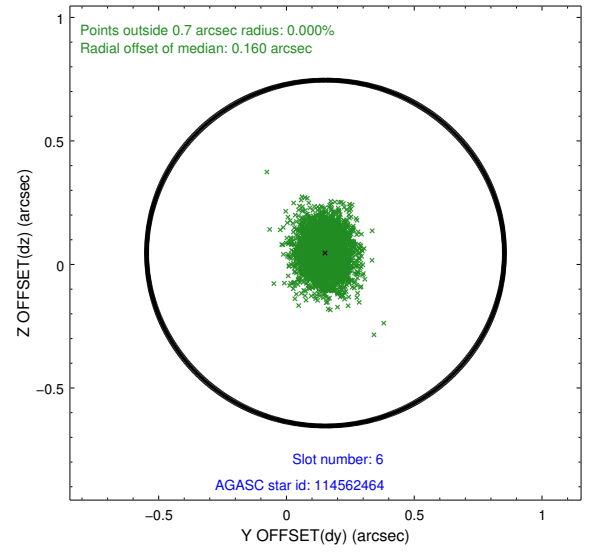
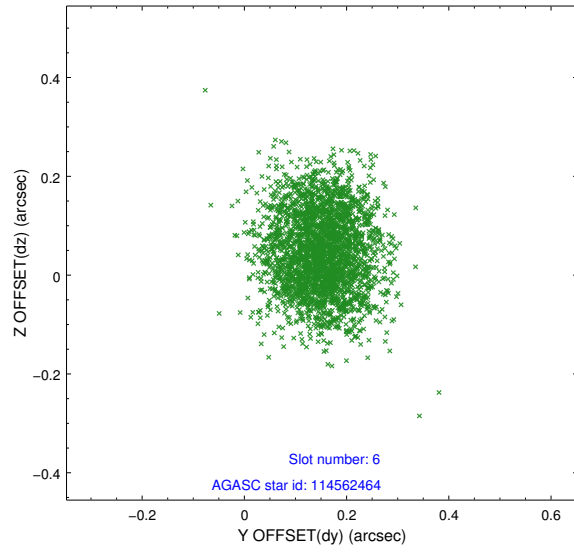
2.4.2 Slot 4



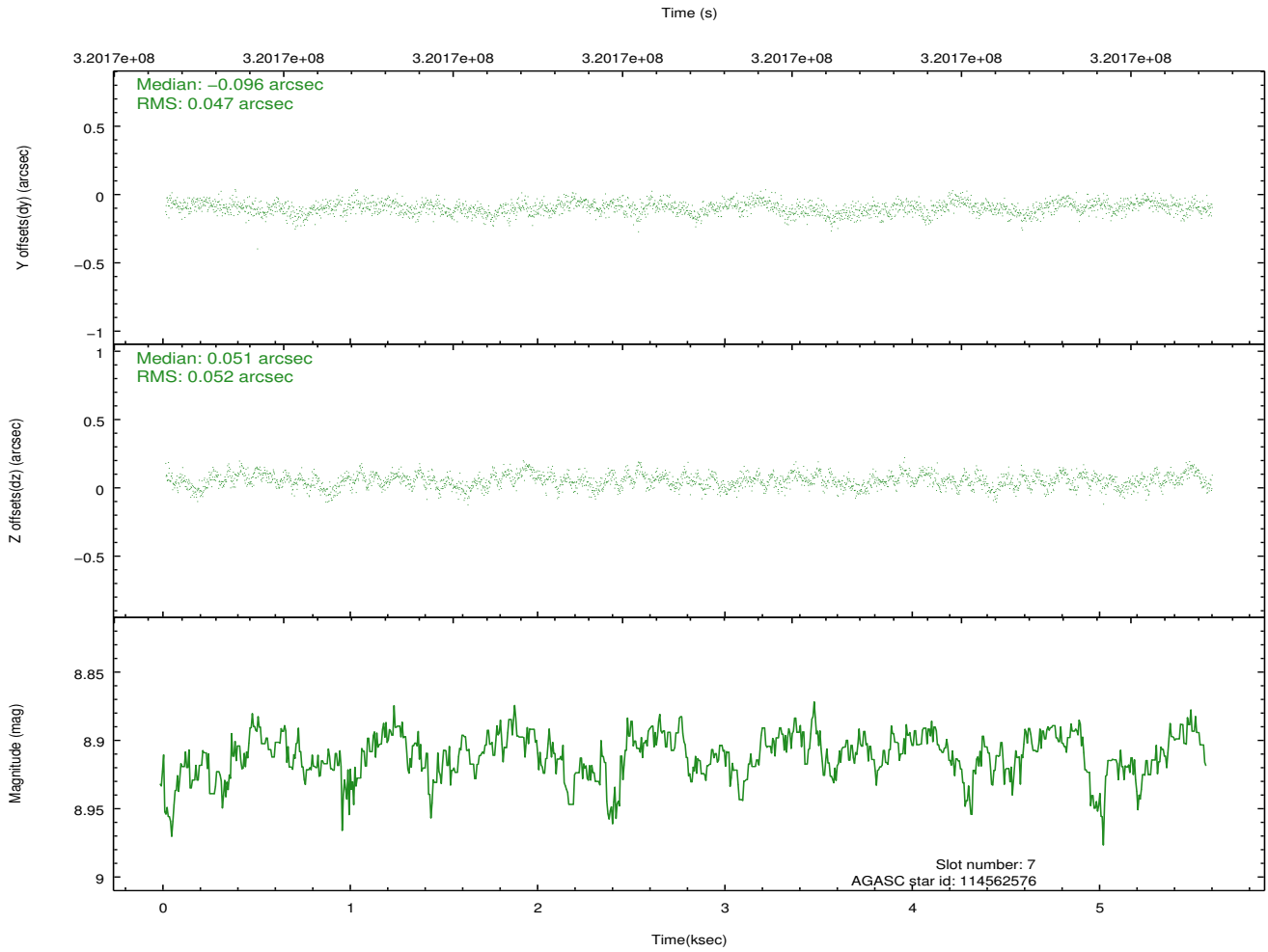
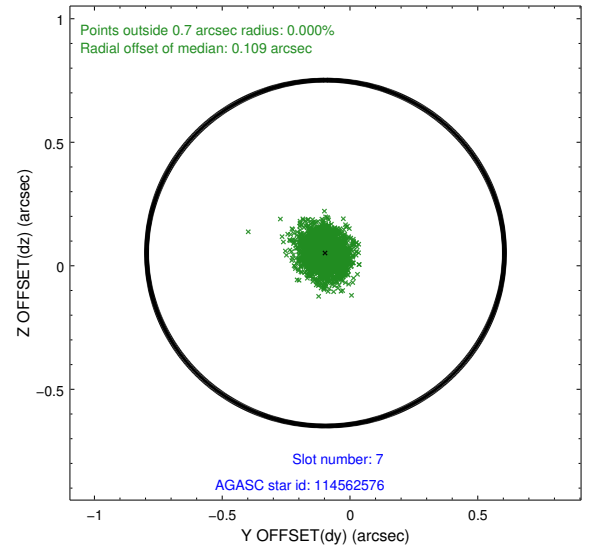
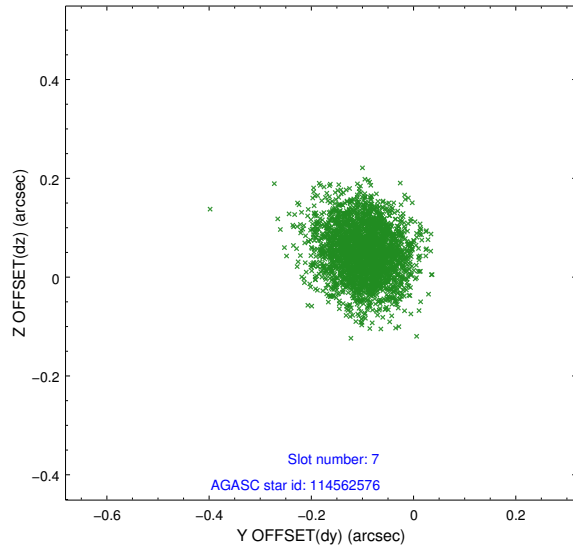
2.4.3 Slot 5



2.4.4 Slot 6

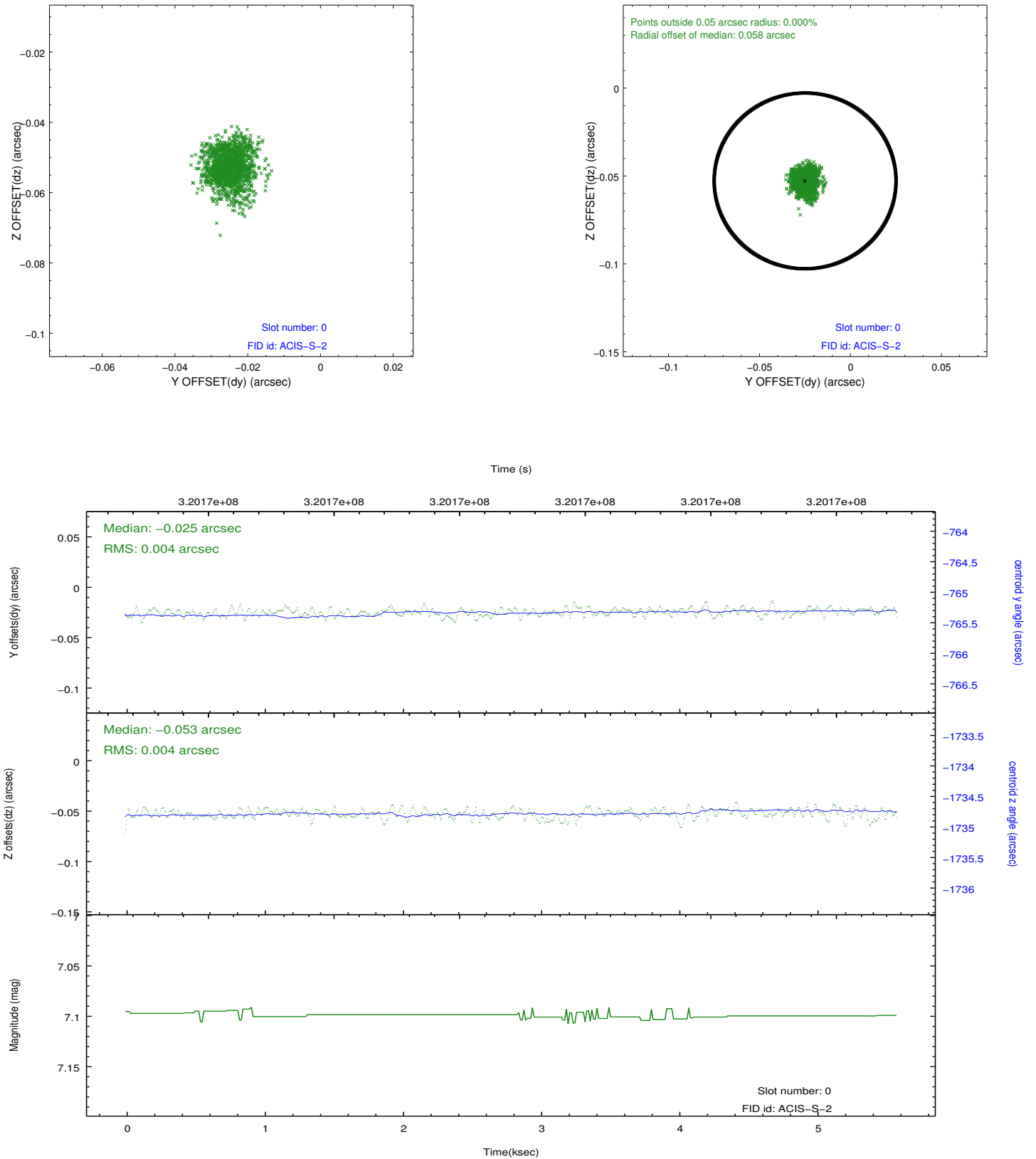


2.4.5 Slot 7

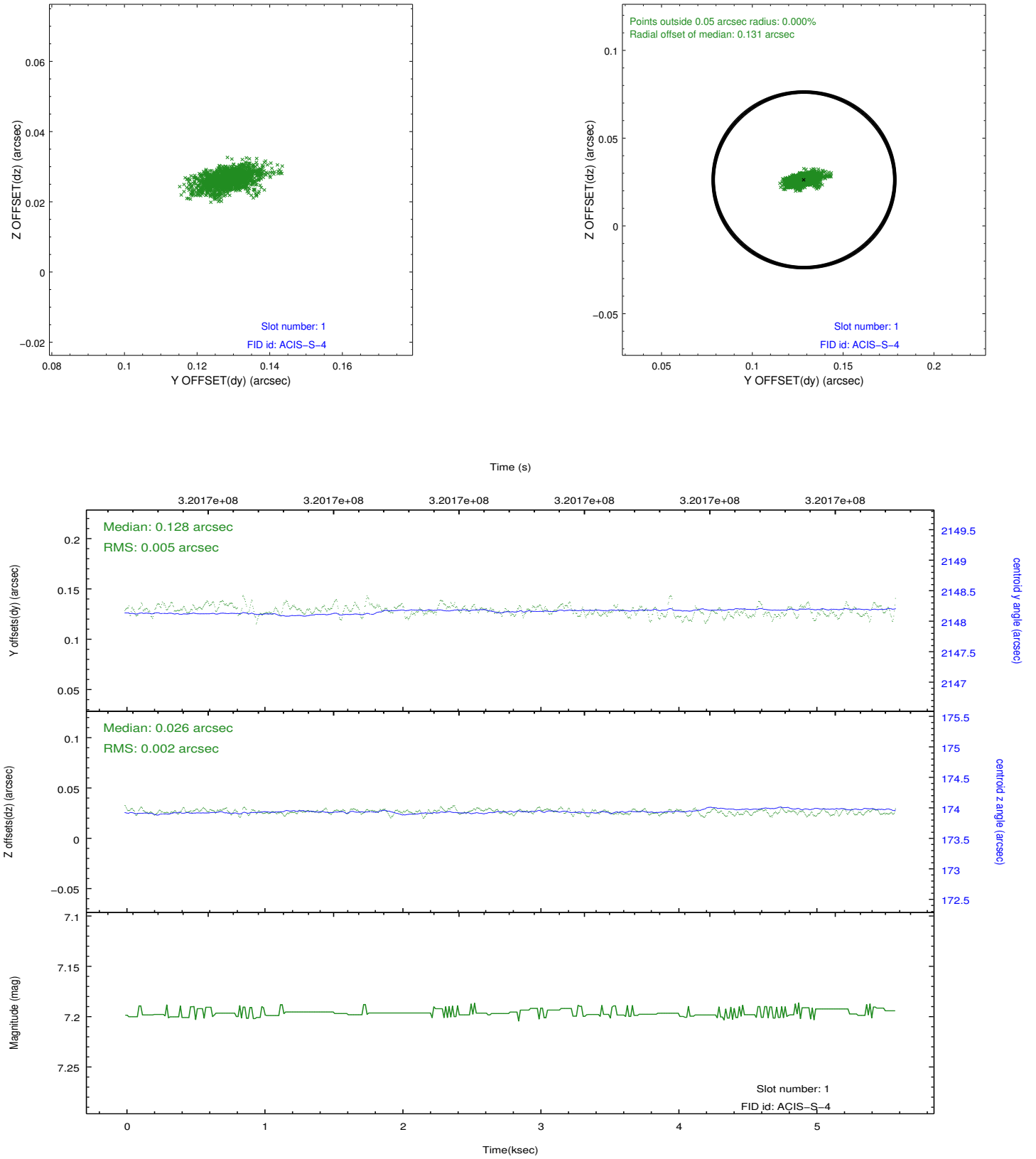


2.5 FID Slots

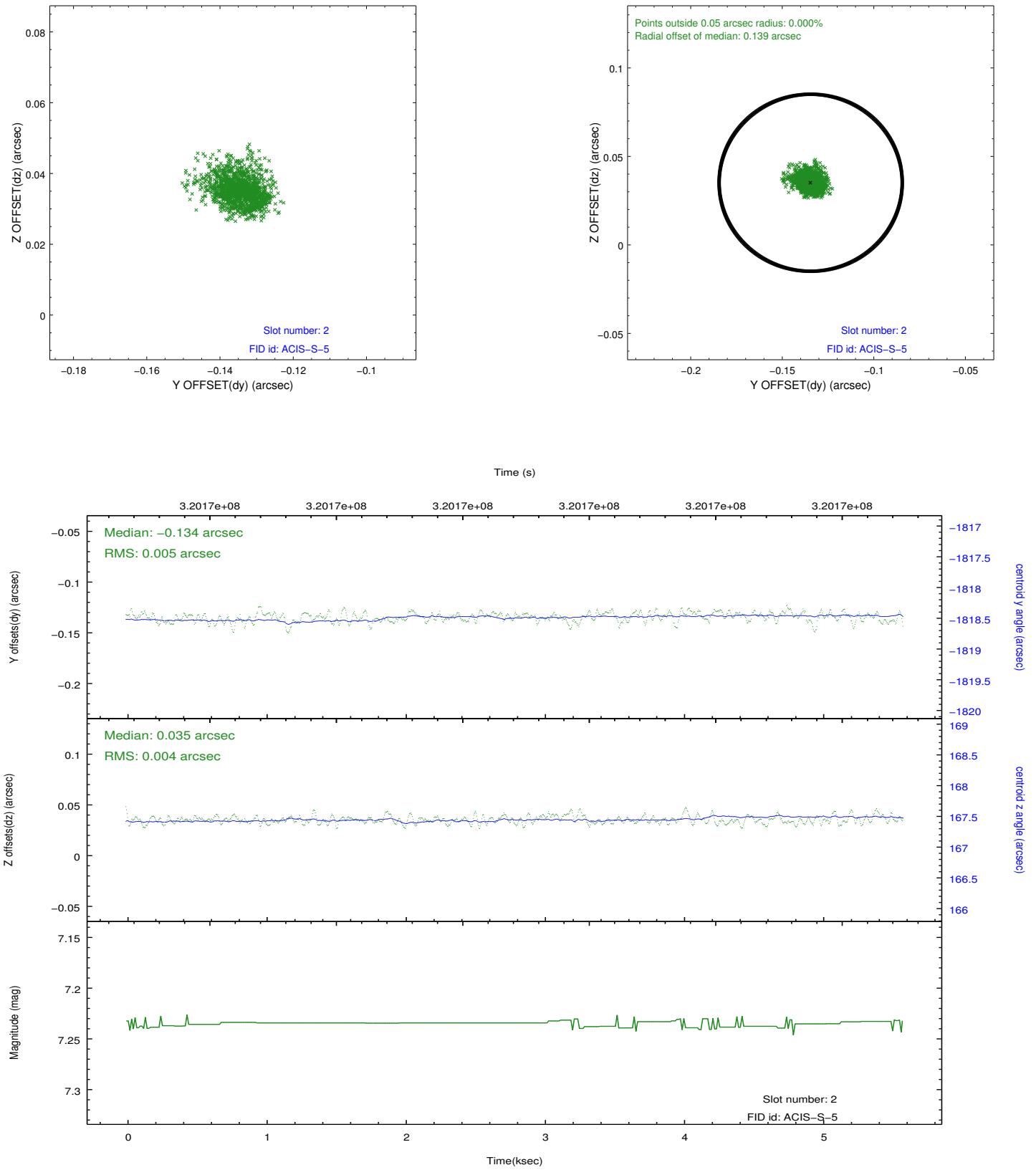
2.5.1 Slot 0



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