

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8079 - L2 Version 3
Chandra X-Ray Center

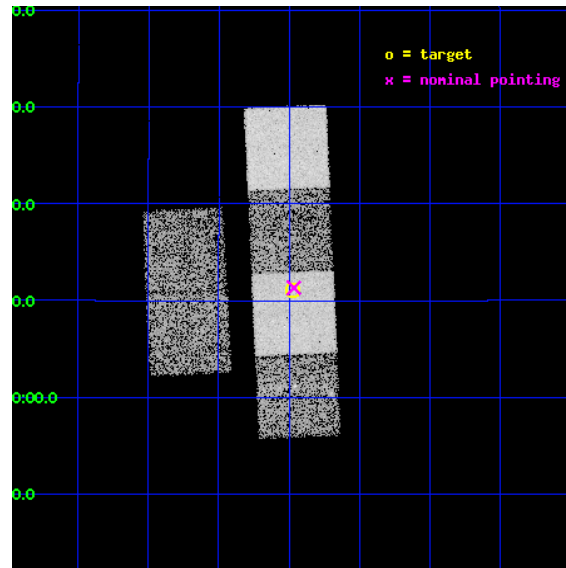
L2 Processing Date : May 21 2012

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1 Front

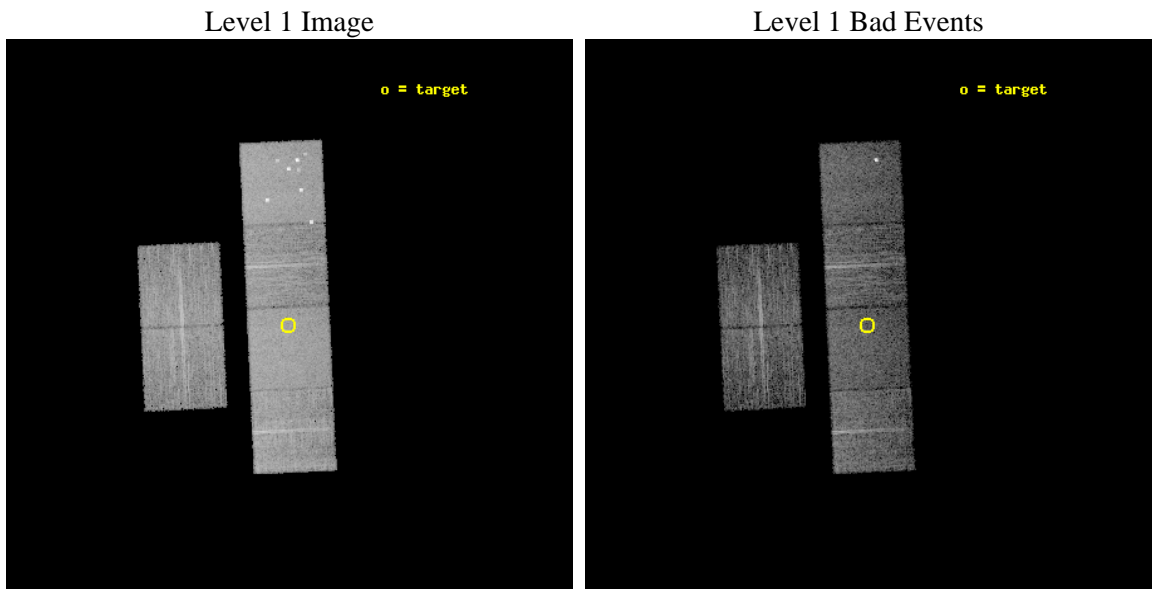
seq_num	900620	Sequence number
obs_id	8079	Observation id
title	The Duty Cycle of Supermassive Black Holes: X-raying Virgo	Proposa
observer	Prof Tommaso Treu	Principal investigator
object	1861	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	190.24375	Observer's specified target RA [deg]
dec_targ	11.184556	Observer's specified target Dec [deg]
ra_nom	190.24128656204	Nominal RA [deg]
dec_nom	11.18872345955	Nominal Dec [deg]
roll_nom	87.404224820081	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5158.3999808431	Sum of GTIs [s]
livetime	5093.0812142701	Livetime [s]
ontime2	5158.3999808431	Sum of GTIs [s]
ontime3	5158.3999808431	Sum of GTIs [s]
ontime5	5158.3999808431	Sum of GTIs [s]
ontime6	5158.3999808431	Sum of GTIs [s]
ontime7	5158.3999808431	Sum of GTIs [s]
ontime8	5155.1589505672	Sum of GTIs [s]
l2events	81701	Number of level 2 events



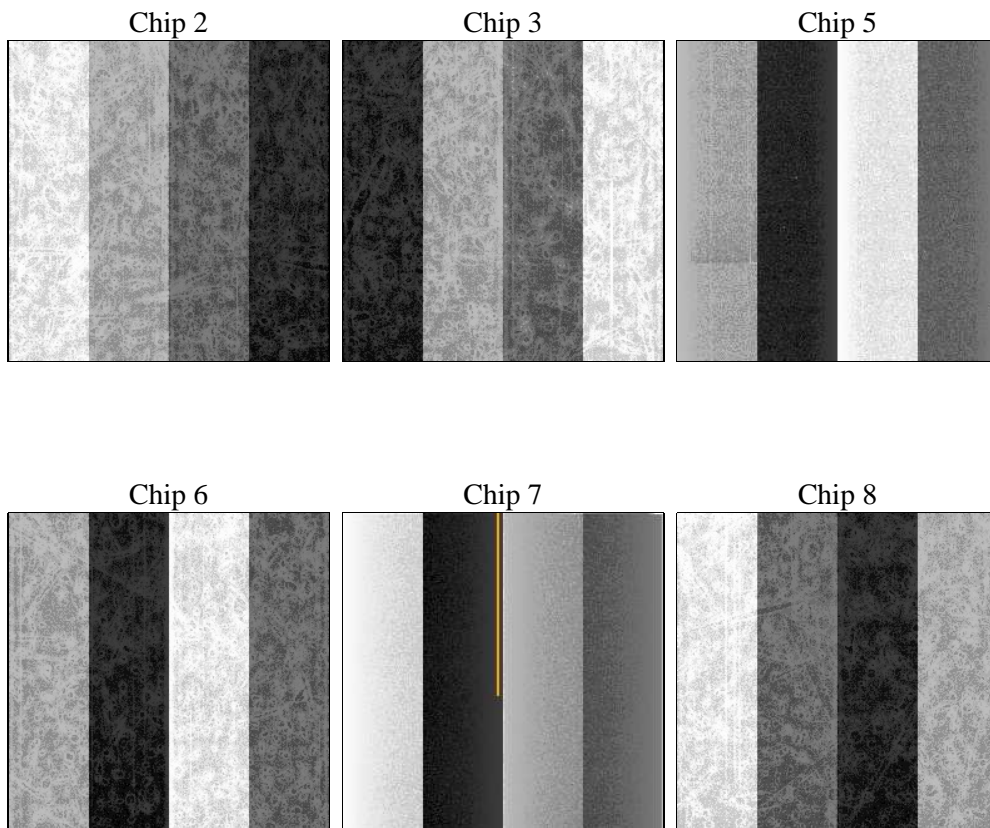
2 OBI

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	5158.3999808431	Sum of GTIs [s]
caldsver	4.4.9	 	ontime2	5158.3999808431	Sum of GTIs [s]
date	2012-05-21T19:26:19	Date and time of file creation	ontime3	5158.3999808431	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5158.3999808431	Sum of GTIs [s]
			ontime6	5158.3999808431	Sum of GTIs [s]
			ontime7	5158.3999808431	Sum of GTIs [s]
			ontime8	5155.1589505672	Sum of GTIs [s]
			l1events	371014	Number of level 1 events

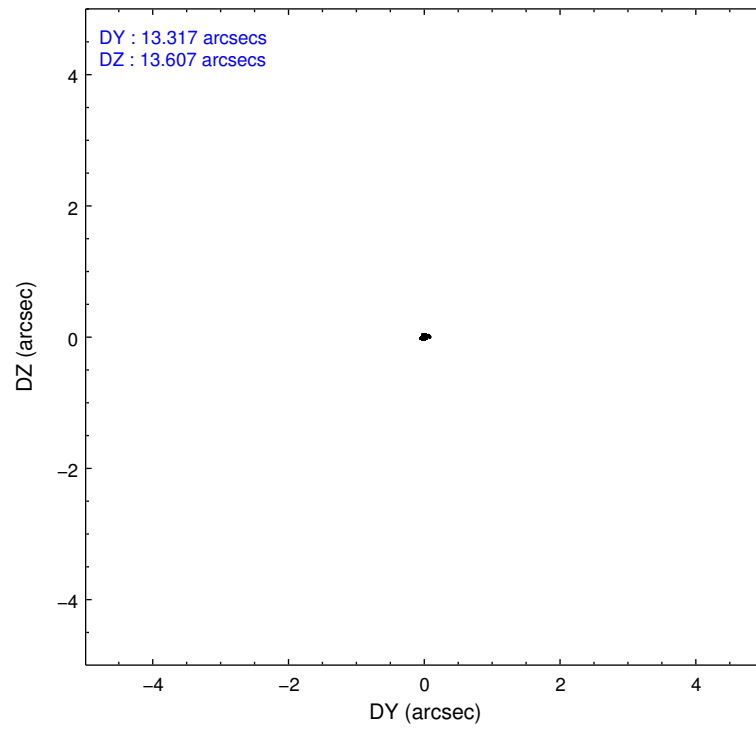
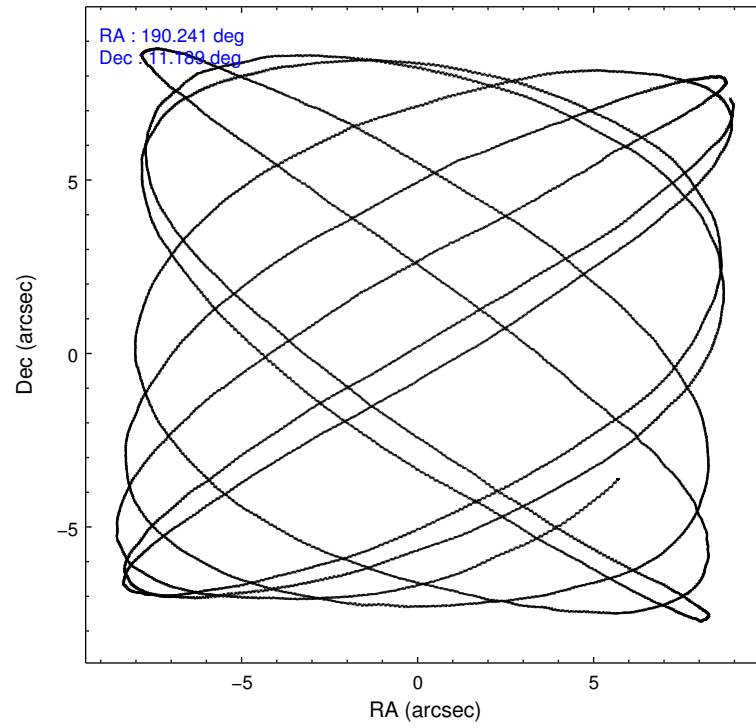
2.1.4 Events

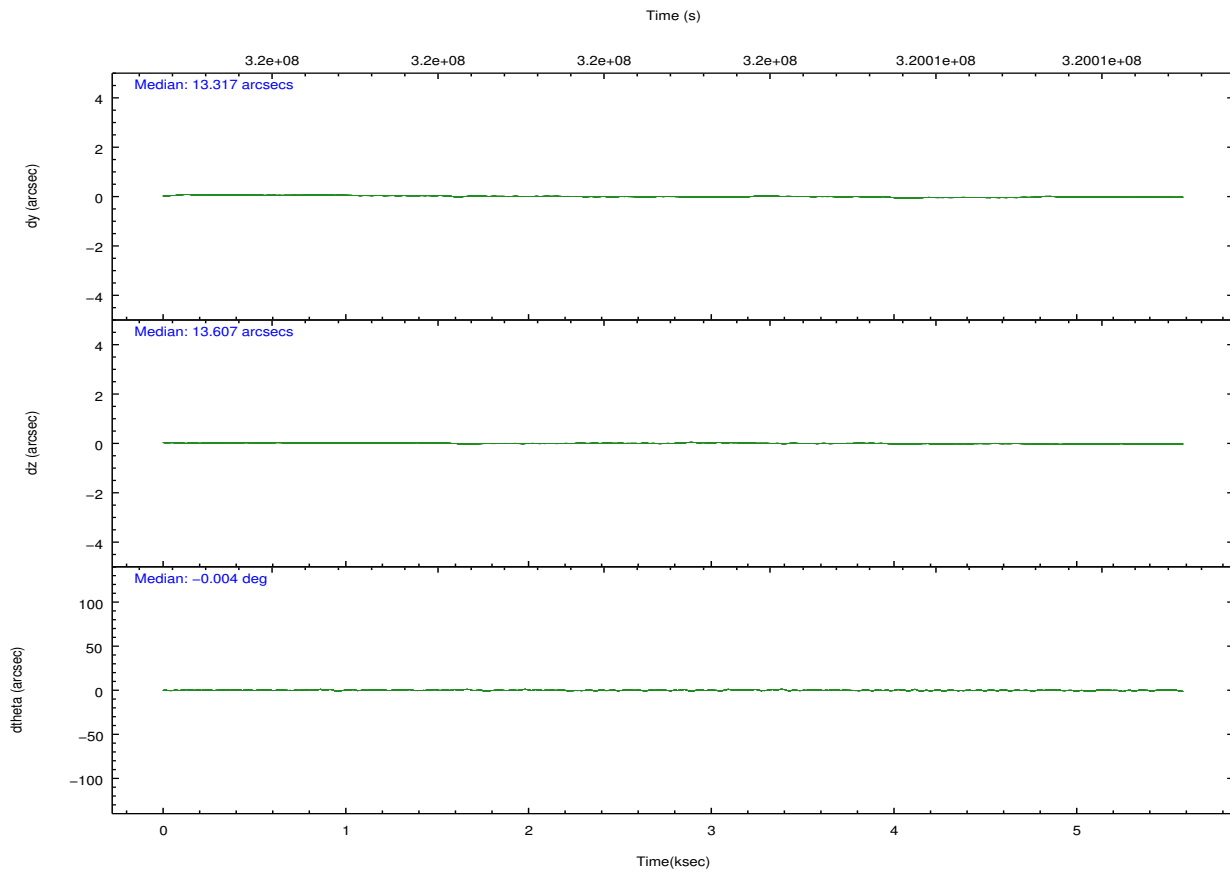
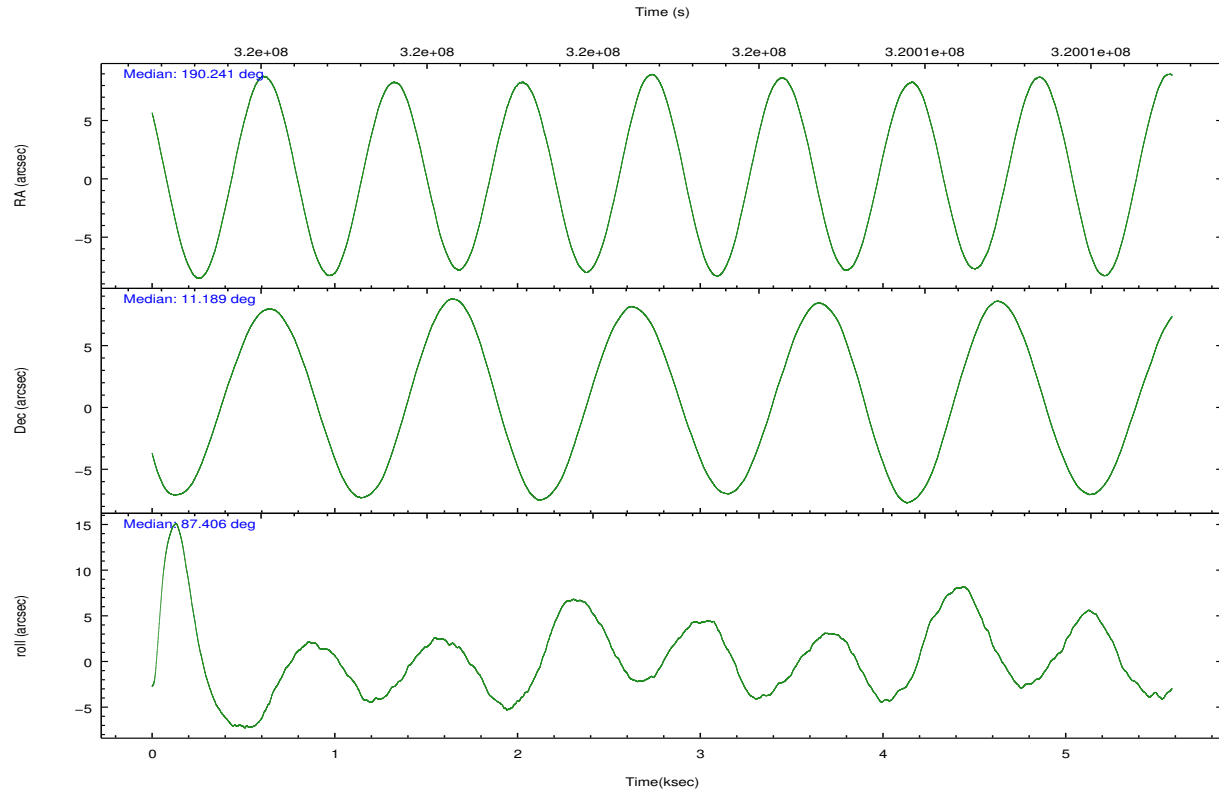
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	50416	48920	83881	51675	69706	66416	grade 0 events	2448	2479	7110	2295	2461	4679
rejected events	44651	43162	43185	45659	41141	52341		4%	5%	8%	4%	3%	7%
rejected %	88%	88%	51%	88%	59%	78%	grade 1 events	35	36	118	23	63	59
								0%	0%	0%	0%	0%	0%
							grade 2 events	1278	1129	10880	1416	5830	3120
								2%	2%	12%	2%	8%	4%
							grade 3 events	537	588	1283	551	2418	1488
								1%	1%	1%	1%	3%	2%
							grade 4 events	521	537	1109	520	2251	1371
								1%	1%	1%	1%	3%	2%
							grade 5 events	1908	2330	5119	2366	6462	3140
								3%	4%	6%	4%	9%	4%
							grade 6 events	988	1029	20338	1241	15623	3440
								1%	2%	24%	2%	22%	5%
							grade 7 events	42701	40792	37924	43263	34598	49119
								84%	83%	45%	83%	49%	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	190.254512	190.2412865620393	CCD I2 on	O1	Y
[deg] Pointing Dec	11.164696	11.18872345955048	CCD I3 on	O2	Y
[deg] Pointing Roll	87.245027	87.40422482008061	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)	320001813.184000	320001362.65707	CCD S5 on	N	N
Observation start date	2008-02-21T17:22:28	2008-02-21T17:16:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	320007213.184000	320007612.08237	On-chip summing requested	N	N
Observation end date	2008-02-21T18:52:28	2008-02-21T19:00:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



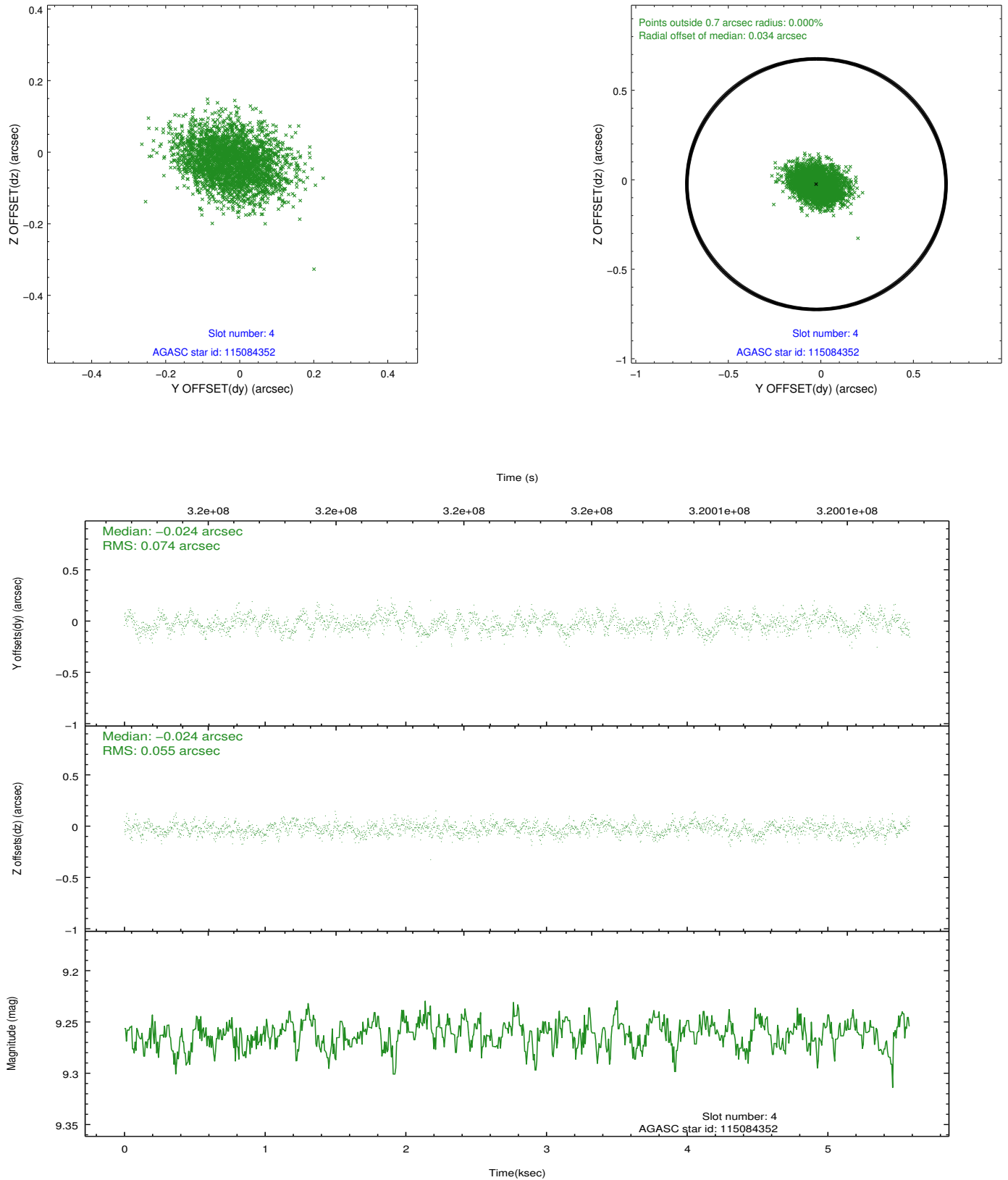


Slot Statistics

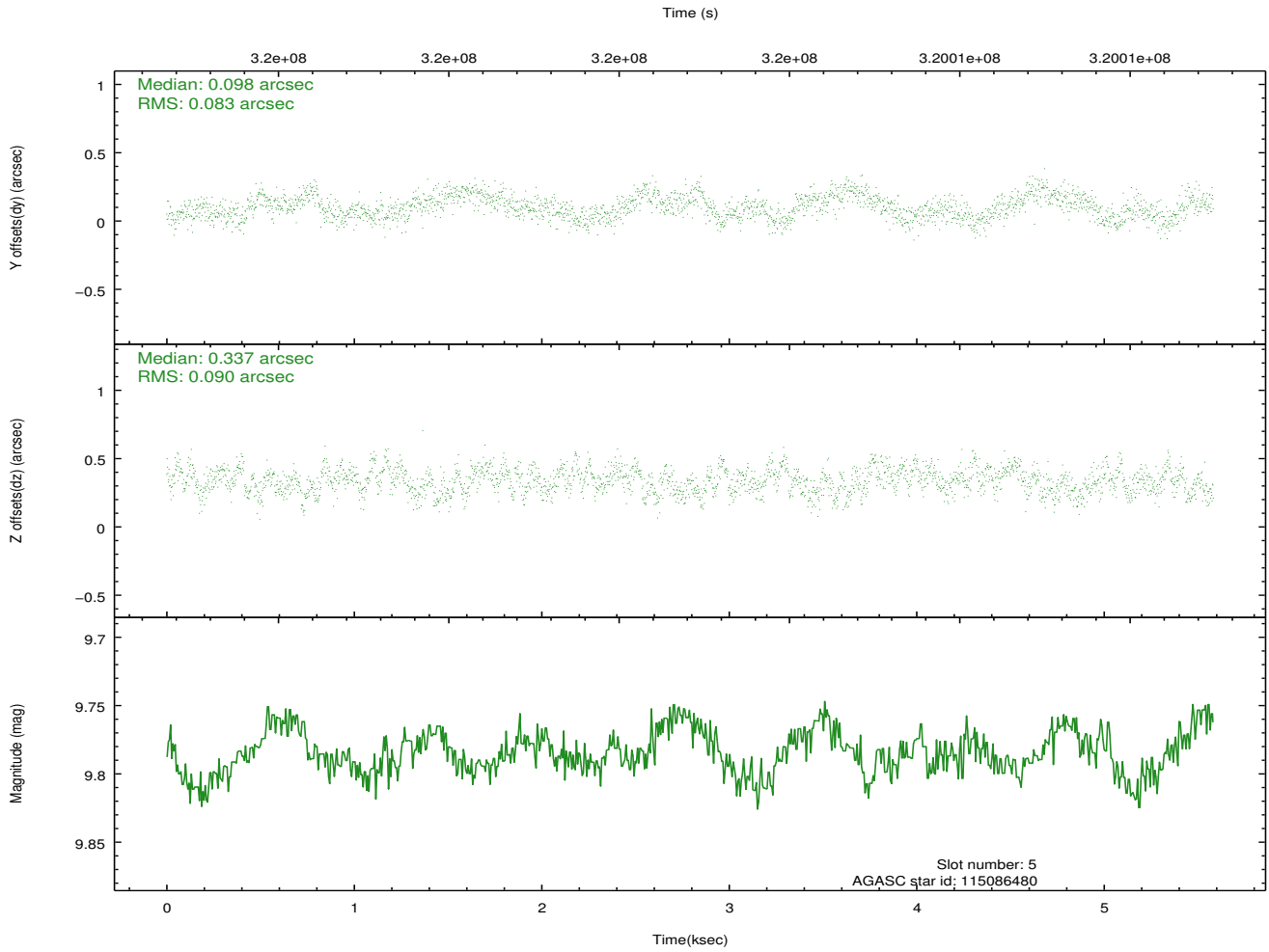
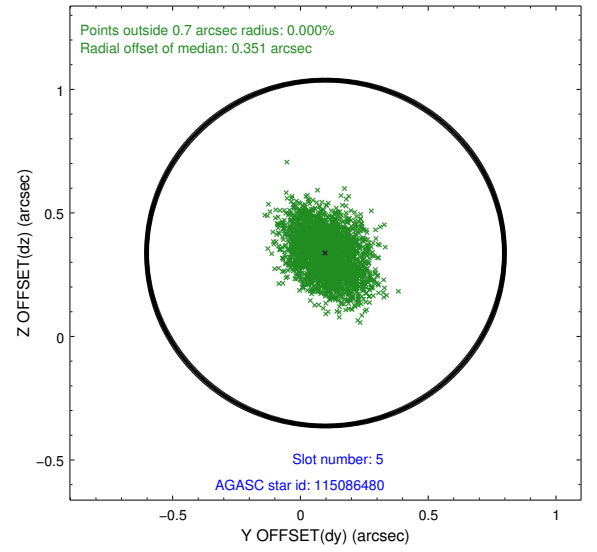
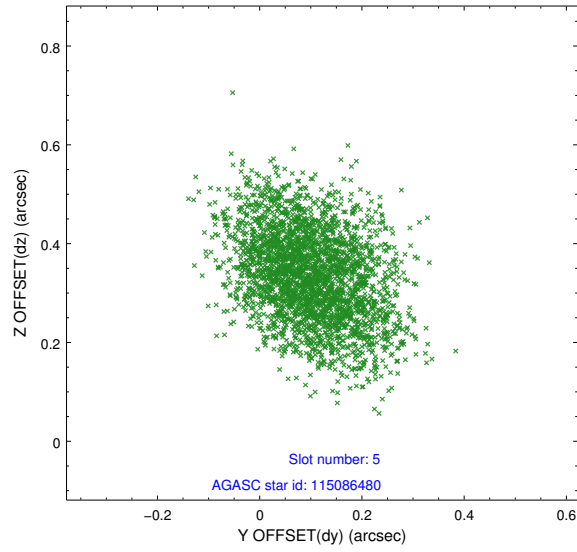
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1362	-0.088	-0.054	0.007	0.013	0.000000	0.000000	-766.34	-1734.95
1	FID	ACIS-S-4	7.20	1362	0.104	0.042	0.006	0.012	0.000000	0.000000	2146.65	172.50
2	FID	ACIS-S-6	7.33	1362	-0.044	0.019	0.007	0.011	0.000000	0.000000	397.07	811.11
3	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	115084352	9.26	2719	-0.024	-0.024	0.098	0.159	190.760225	11.783180	2310.86	-1672.87
5	GUIDE	115086480	9.79	2722	0.098	0.337	0.130	0.210	190.542253	10.883394	-960.51	-1064.88
6	GUIDE	115087784	8.87	2722	0.024	-0.344	0.084	0.133	190.162527	10.931081	-855.19	284.29
7	GUIDE	115089400	9.88	2719	-0.108	0.034	0.118	0.194	190.425194	11.760272	2170.55	-498.53

2.4 Star Slots

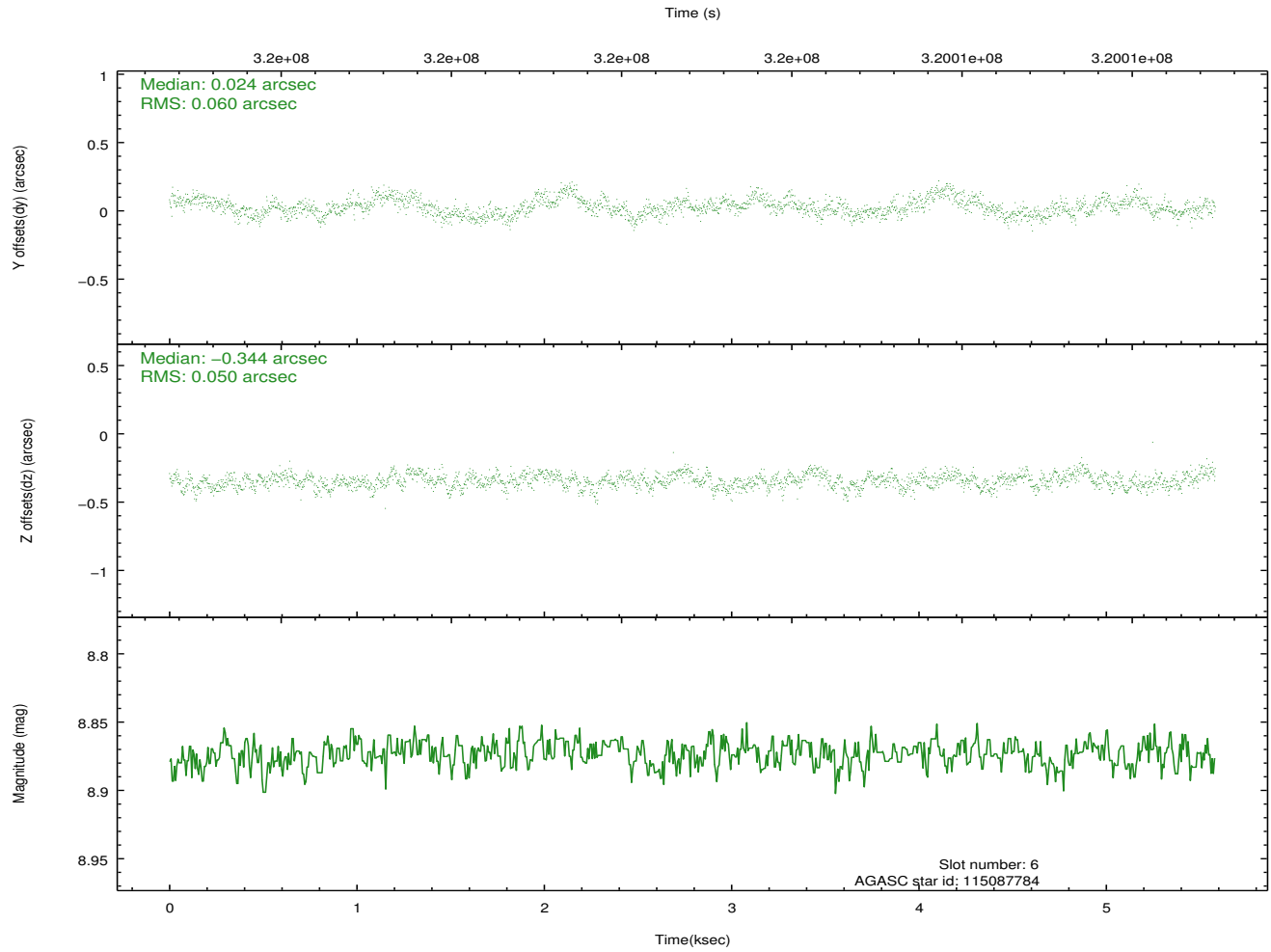
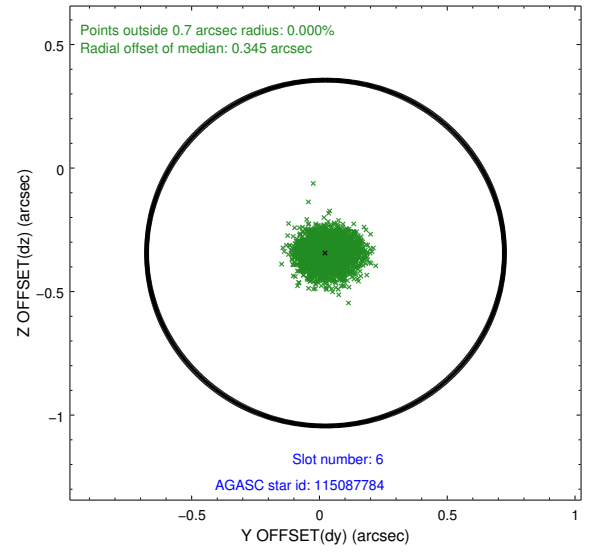
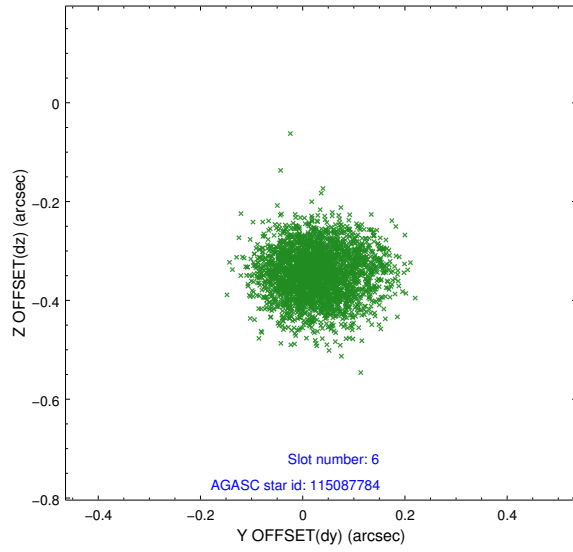
2.4.1 Slot 4



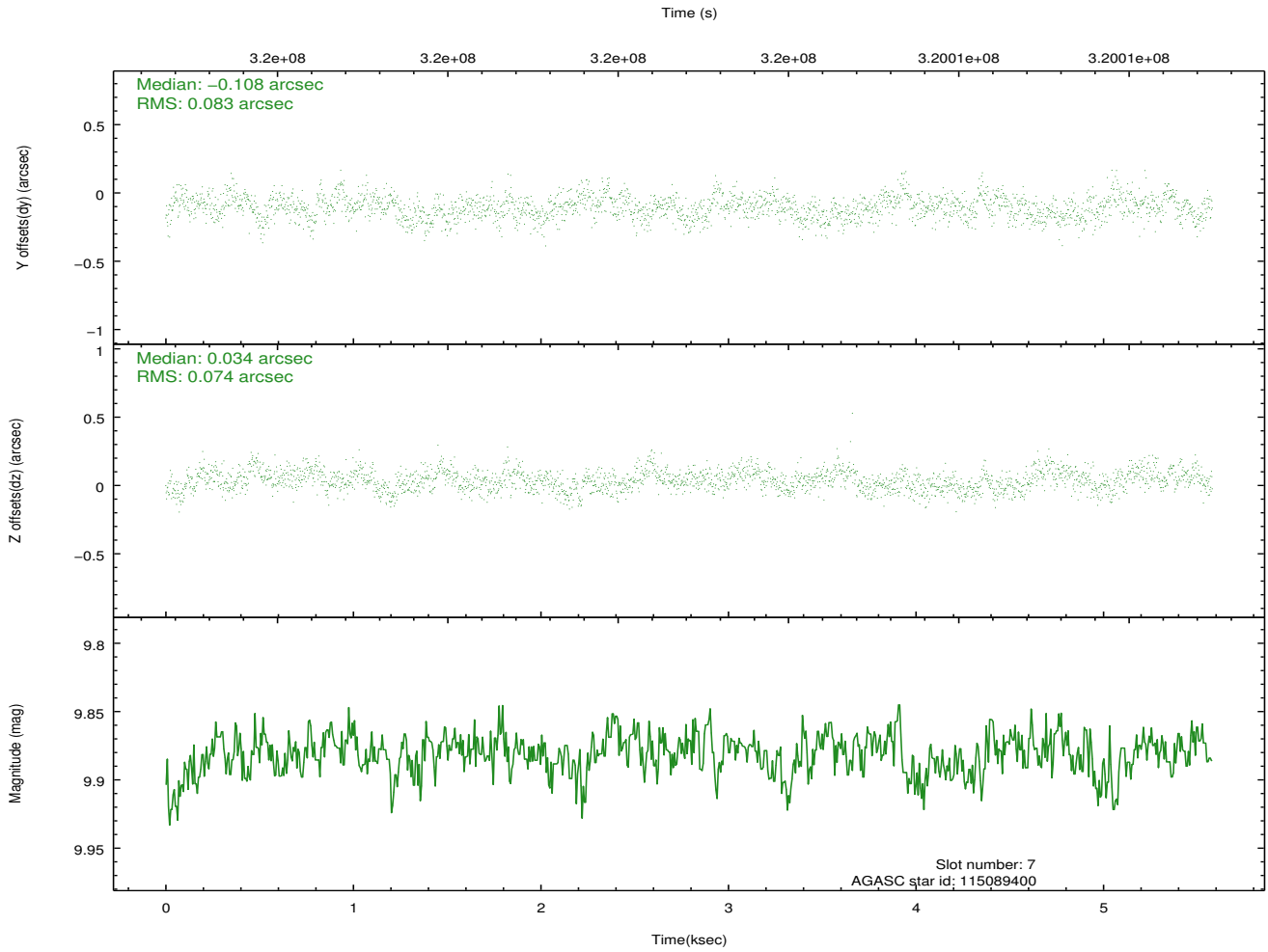
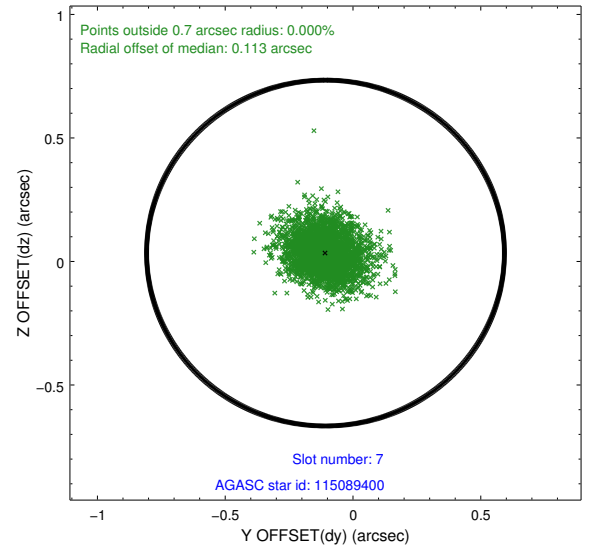
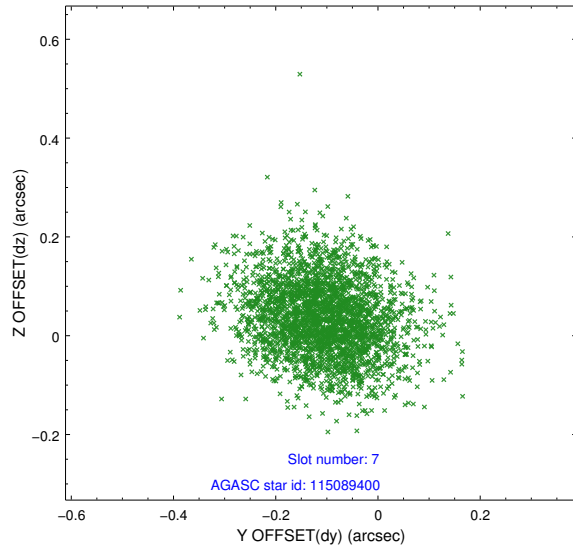
2.4.2 Slot 5



2.4.3 Slot 6

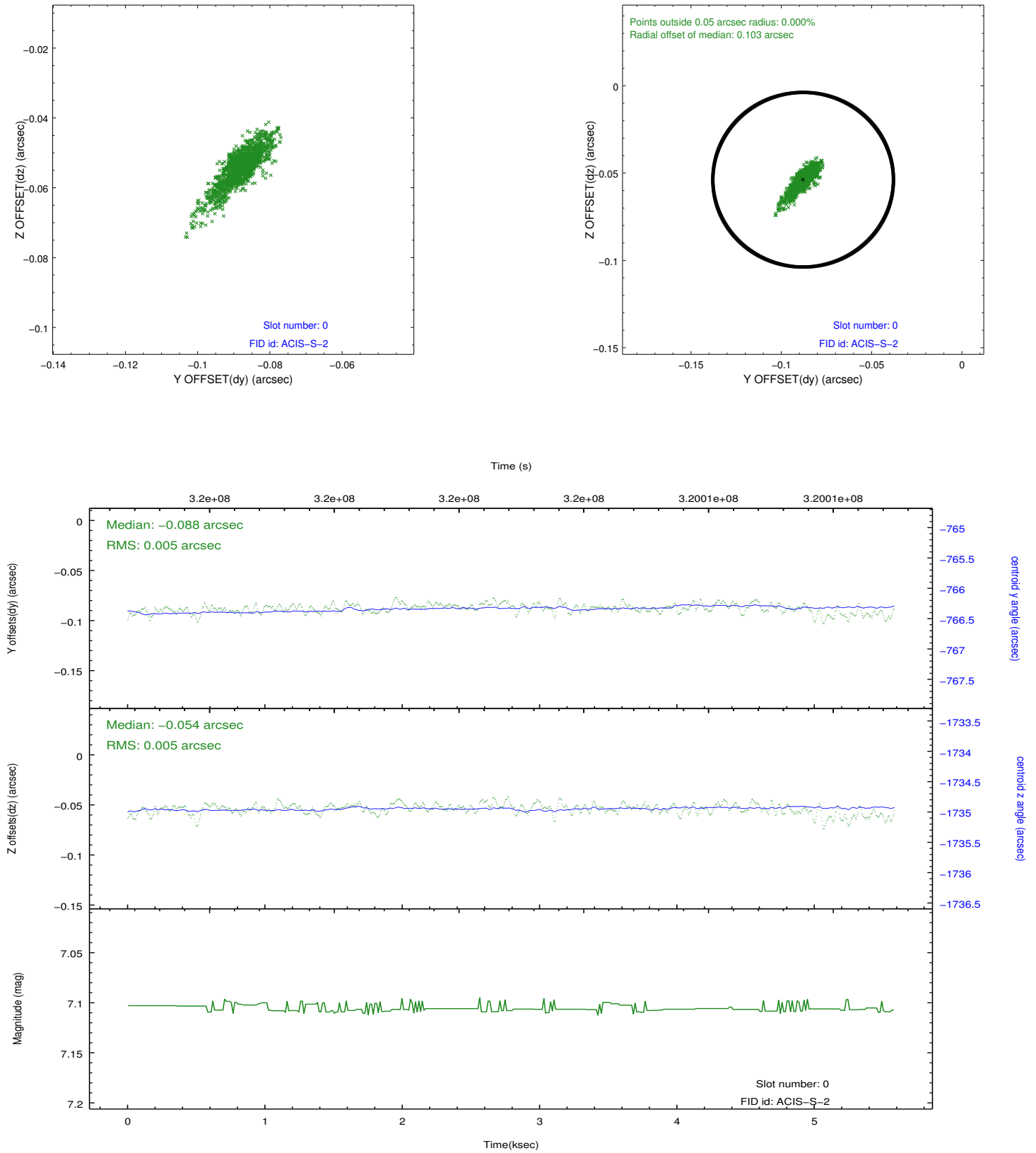


2.4.4 Slot 7

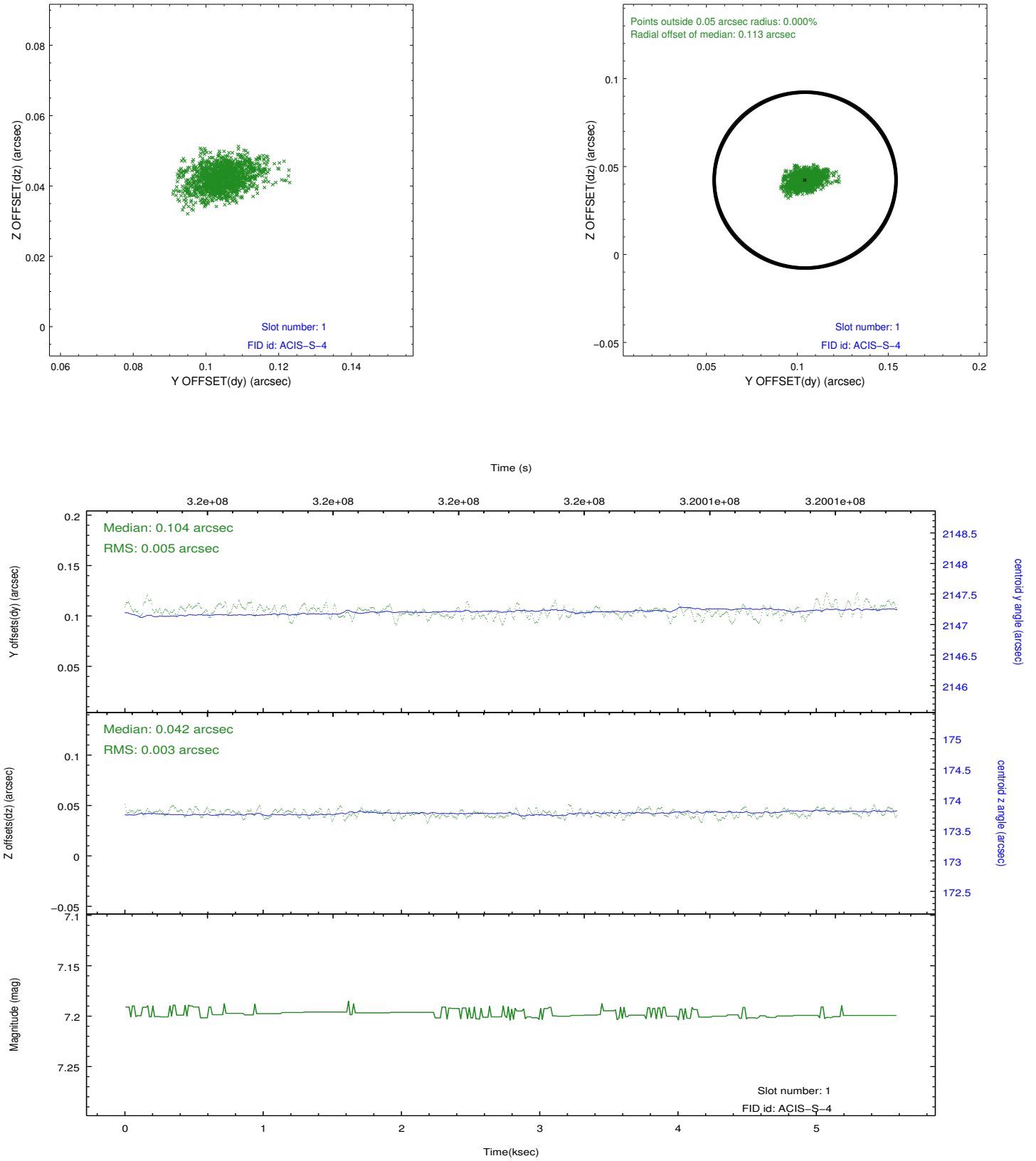


2.5 FID Slots

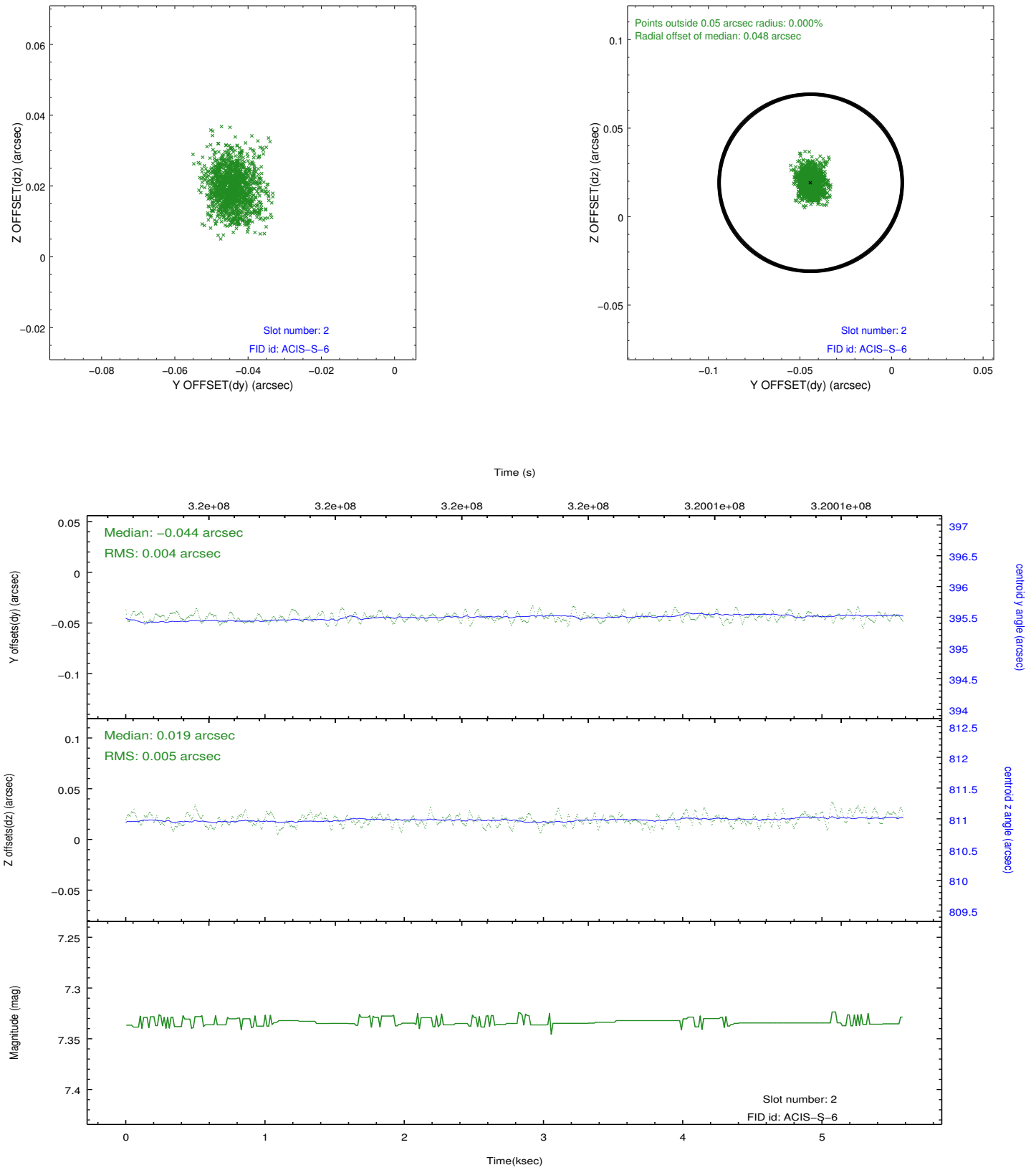
2.5.1 Slot 0



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)	2012.05.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.158

A.2 Comments

Joint proposal with Spitzer. The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.