

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8066 - L2 Version 3
Chandra X-Ray Center

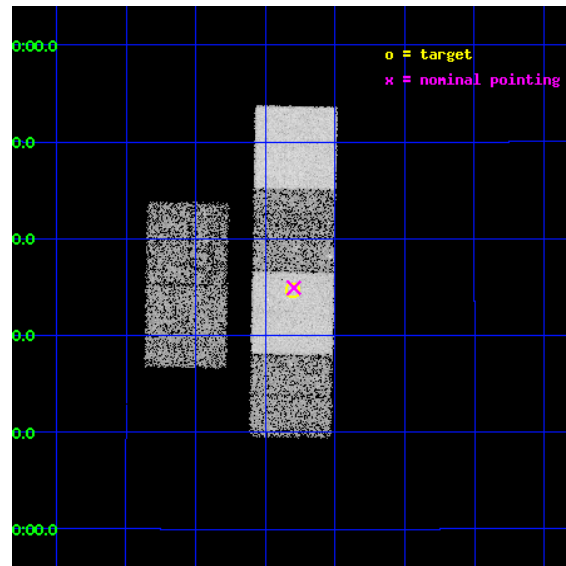
L2 Processing Date : May 10 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

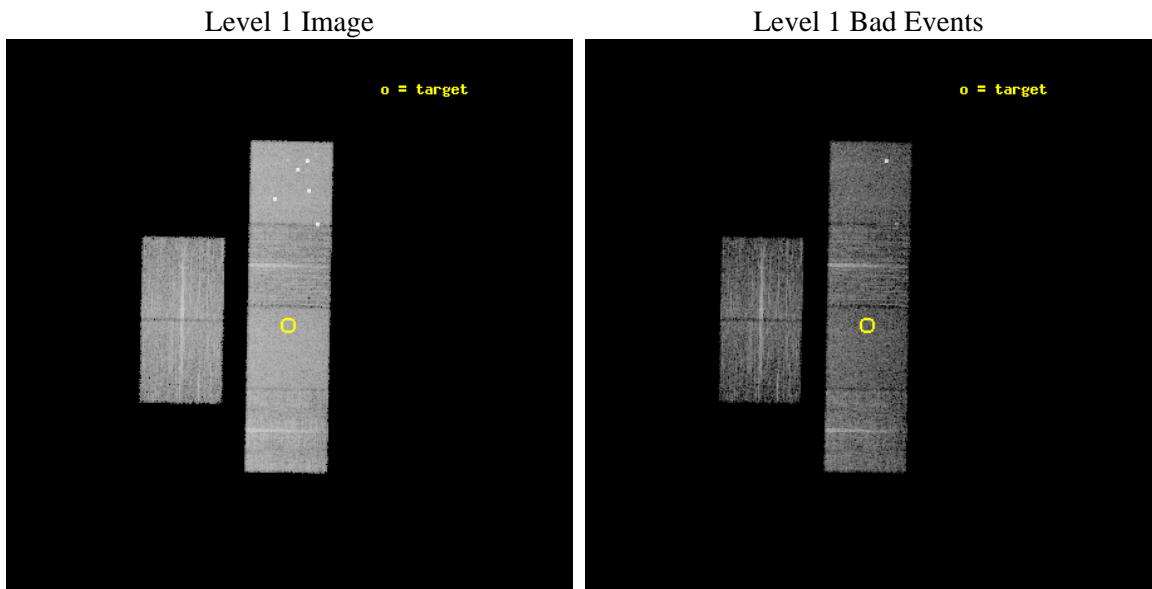
seq_num	900607	Sequence number
obs_id	8066	Observation id
title	The Duty Cycle of Supermassive Black Holes: X-raying Virgo	Proposa
observer	Prof Tommaso Treu	Principal investigator
object	1283	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.576667	Observer's specified target RA [deg]
dec_targ	13.578028	Observer's specified target Dec [deg]
ra_nom	187.573957912	Nominal RA [deg]
dec_nom	13.582201786842	Nominal Dec [deg]
roll_nom	91.035179111948	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5157.5770217776	Sum of GTIs [s]
livetime	5092.2686760078	Livetime [s]
ontime2	5157.6180518866	Sum of GTIs [s]
ontime3	5157.4539017677	Sum of GTIs [s]
ontime5	5157.5359817743	Sum of GTIs [s]
ontime6	5157.494941771	Sum of GTIs [s]
ontime7	5157.5770217776	Sum of GTIs [s]
ontime8	5154.1718119383	Sum of GTIs [s]
l2events	85176	Number of level 2 events



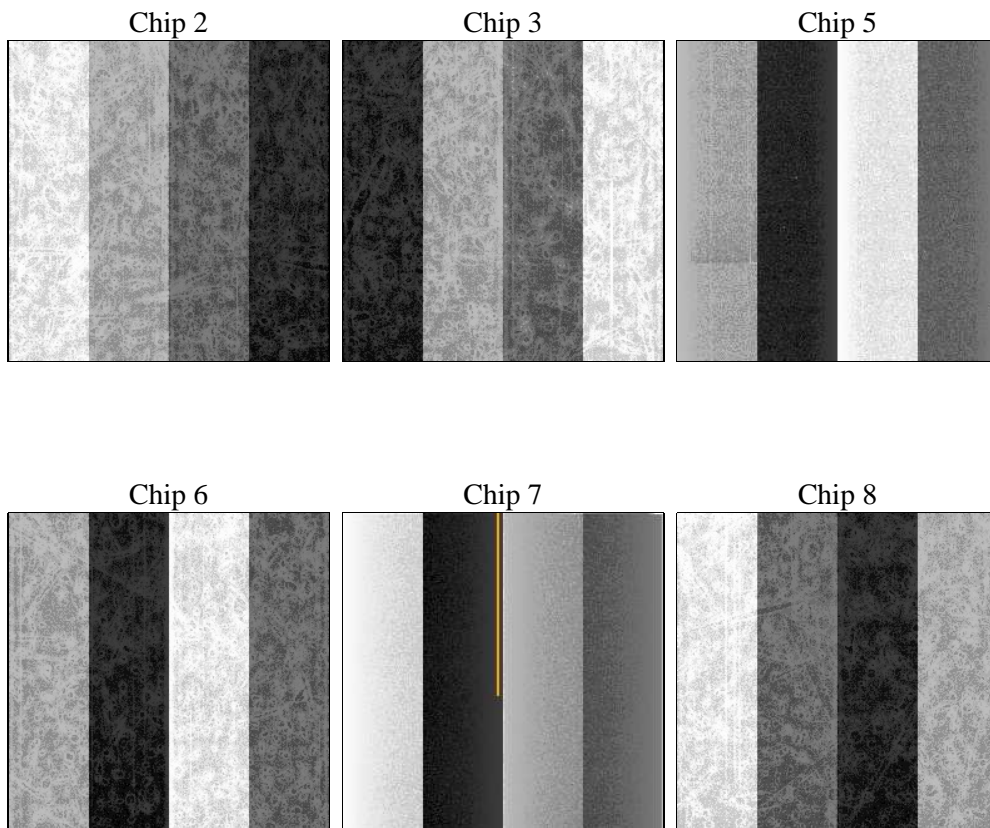
2 OBI

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	5157.5770217776	Sum of GTIs [s]
caldsver	4.4.9	 	ontime2	5157.6180518866	Sum of GTIs [s]
date	2012-05-10T22:59:23	Date and time of file creation	ontime3	5157.4539017677	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5157.5359817743	Sum of GTIs [s]
			ontime6	5157.494941771	Sum of GTIs [s]
			ontime7	5157.5770217776	Sum of GTIs [s]
			ontime8	5154.1718119383	Sum of GTIs [s]
			l1events	372822	Number of level 1 events

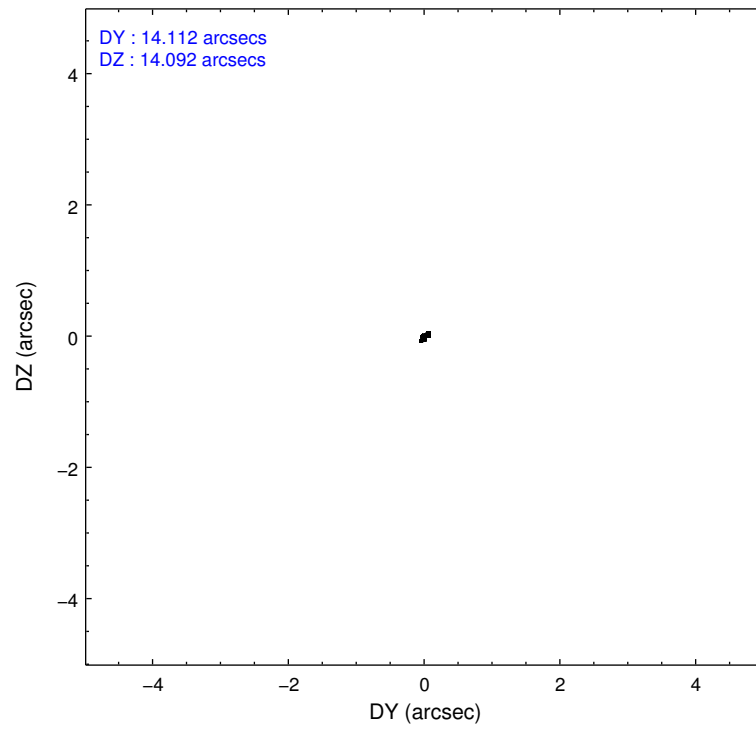
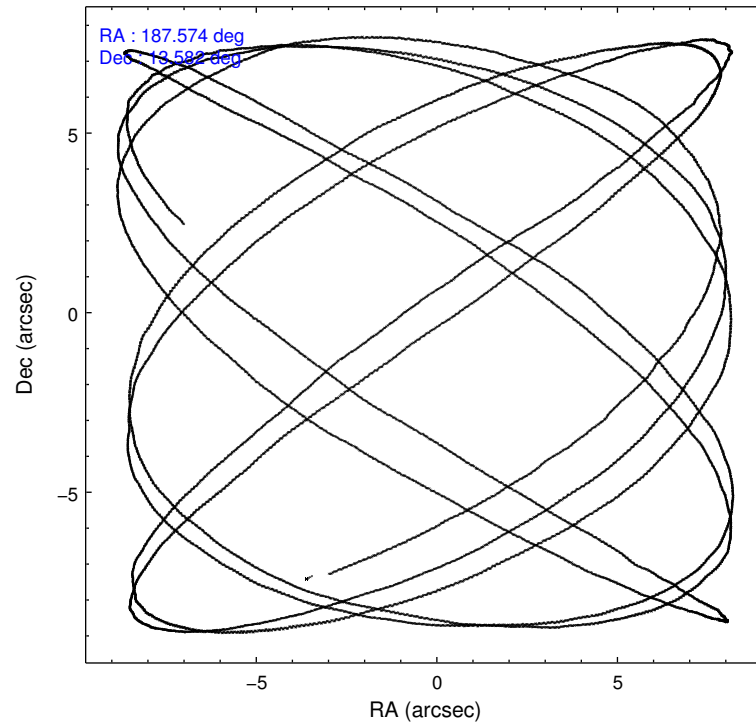
2.1.4 Events

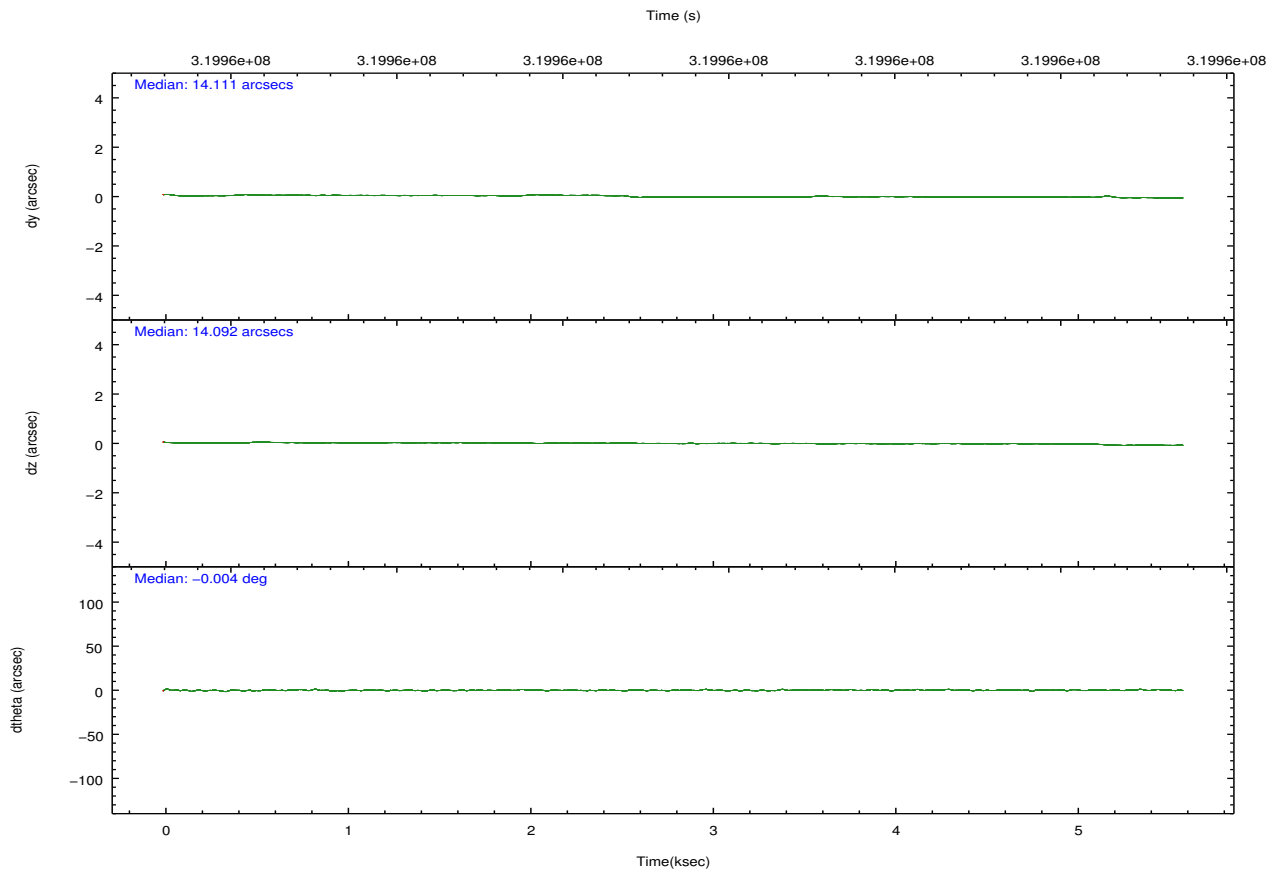
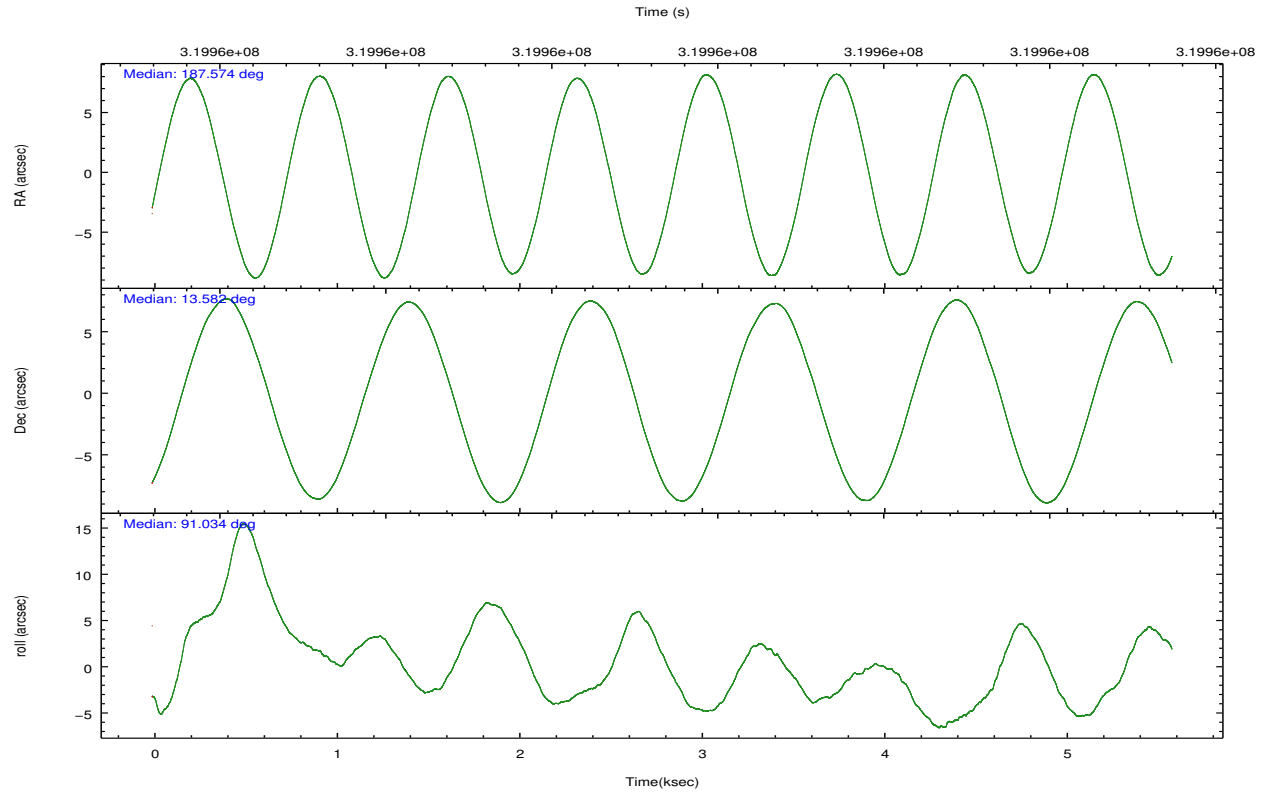
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	51453	48641	83756	51726	70043	67203	grade 0 events	2690	2919	6918	2962	2702	5115
rejected events	45463	42293	42984	44992	40750	51908		5%	6%	8%	5%	3%	7%
rejected %	88%	86%	51%	86%	58%	77%	grade 1 events	37	24	119	33	62	40
								0%	0%	0%	0%	0%	0%
							grade 2 events	1274	1194	11176	1404	6156	3284
								2%	2%	13%	2%	8%	4%
							grade 3 events	520	575	1244	567	2446	1587
								1%	1%	1%	1%	3%	2%
							grade 4 events	544	591	1138	596	2428	1467
								1%	1%	1%	1%	3%	2%
							grade 5 events	2002	2198	5480	2352	6335	3139
								3%	4%	6%	4%	9%	4%
							grade 6 events	969	1073	20347	1216	15603	3878
								1%	2%	24%	2%	22%	5%
							grade 7 events	43417	40067	37334	42596	34311	48693
								84%	82%	44%	82%	48%	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	187.588800	187.573957912	CCD I2 on	O1	Y
[deg] Pointing Dec	13.558880	13.5822017868418	CCD I3 on	O2	Y
[deg] Pointing Roll	90.875072	91.03517911194785	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)	319959054.184000	319958599.65499	CCD S5 on	N	N
Observation start date	2008-02-21T05:29:49	2008-02-21T05:23:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	319964454.184000	319964701.99279	On-chip summing requested	N	N
Observation end date	2008-02-21T06:59:49	2008-02-21T07:05:01	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



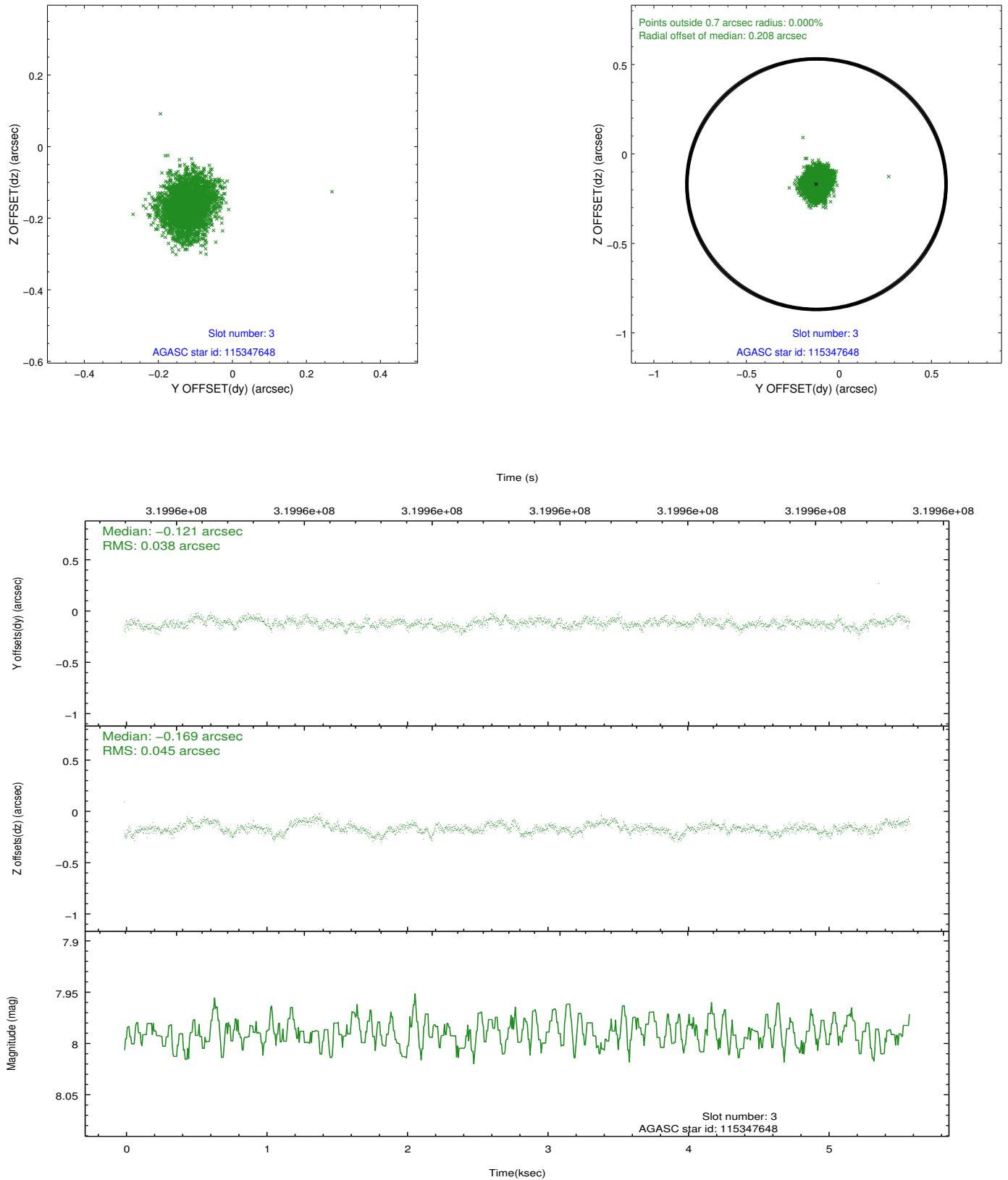


Slot Statistics

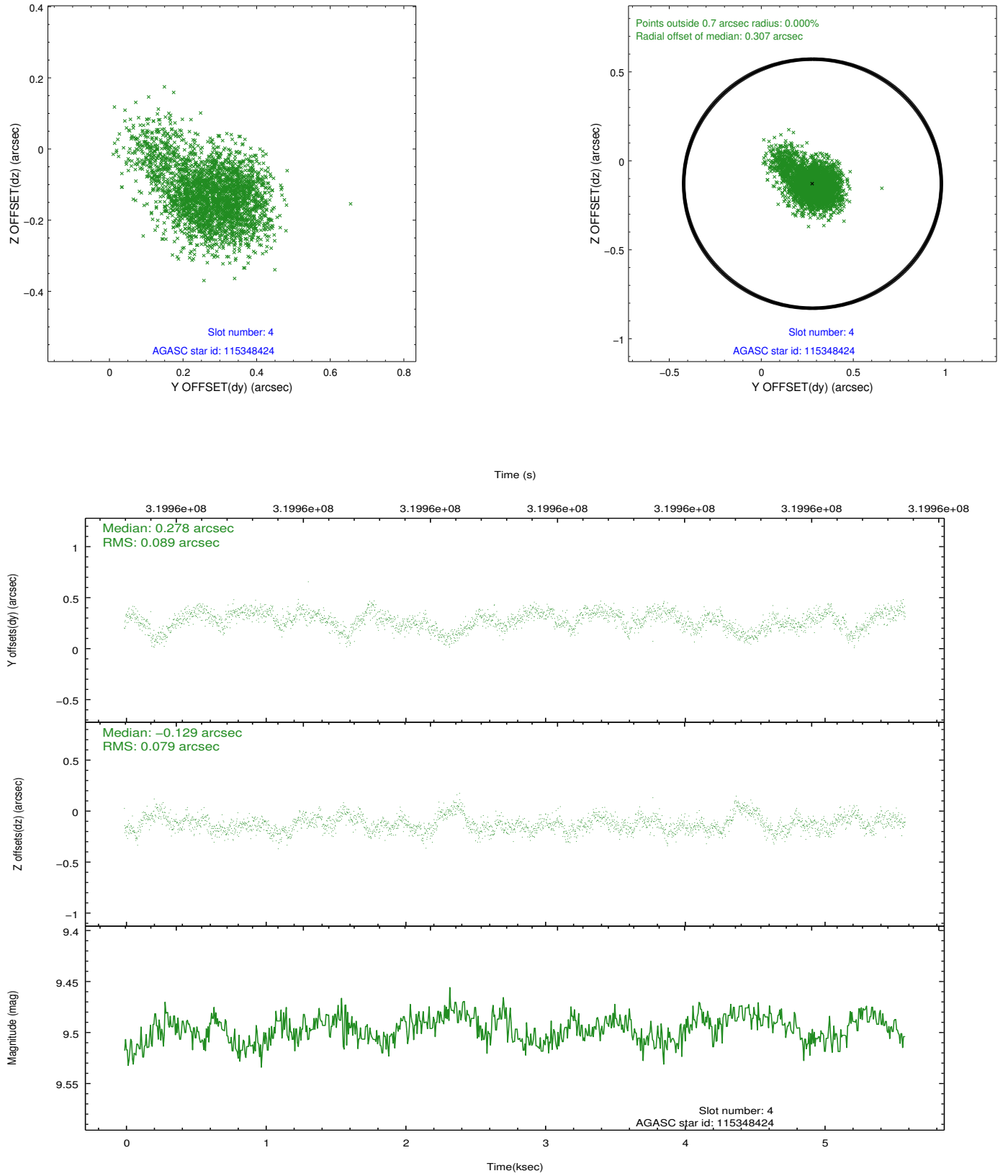
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1364	-0.069	-0.061	0.007	0.011	0.000000	0.000000	-767.14	-1735.46
1	FID	ACIS-S-4	7.19	1364	0.201	0.050	0.006	0.011	0.000000	0.000000	2145.92	172.03
2	FID	ACIS-S-5	7.22	1364	-0.164	0.020	0.007	0.011	0.000000	0.000000	-1818.70	166.89
3	GUIDE	115347648	7.99	2727	-0.121	-0.169	0.062	0.100	187.273687	13.950334	1426.08	1079.44
4	GUIDE	115348424	9.50	2723	0.278	-0.129	0.122	0.217	187.199498	13.087929	-1673.20	1391.27
5	GUIDE	115348568	10.18	2703	-0.004	0.356	0.222	0.349	188.076087	13.658173	332.10	-1708.80
6	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	115350296	9.10	2724	-0.156	-0.067	0.092	0.149	187.140806	13.950701	1435.27	1543.05

2.4 Star Slots

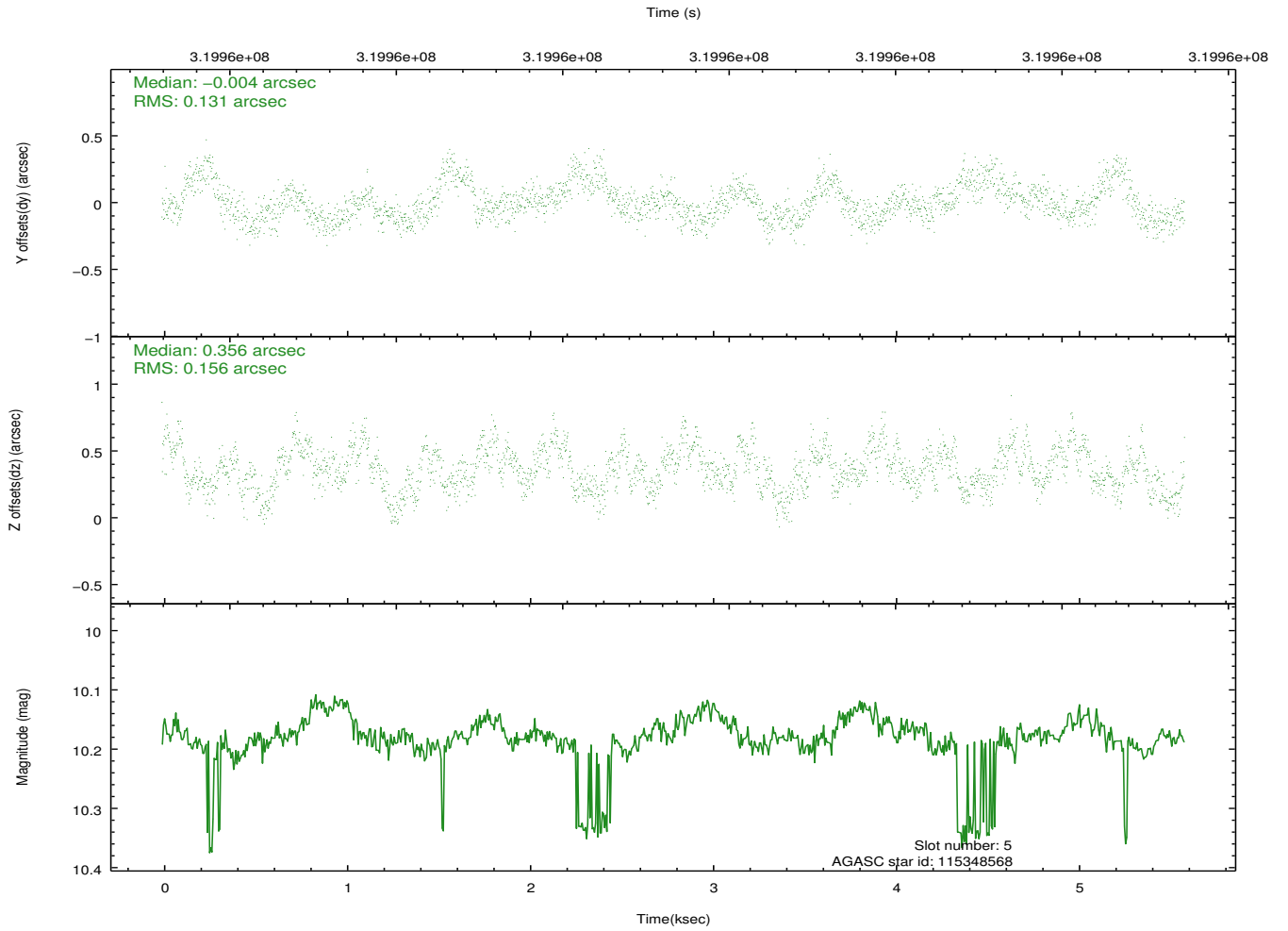
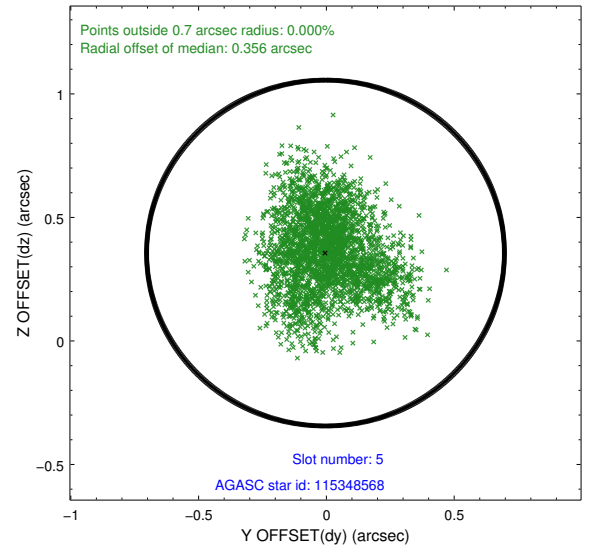
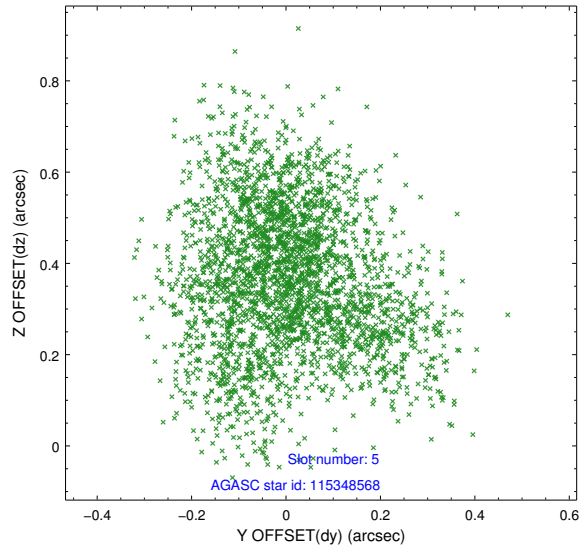
2.4.1 Slot 3



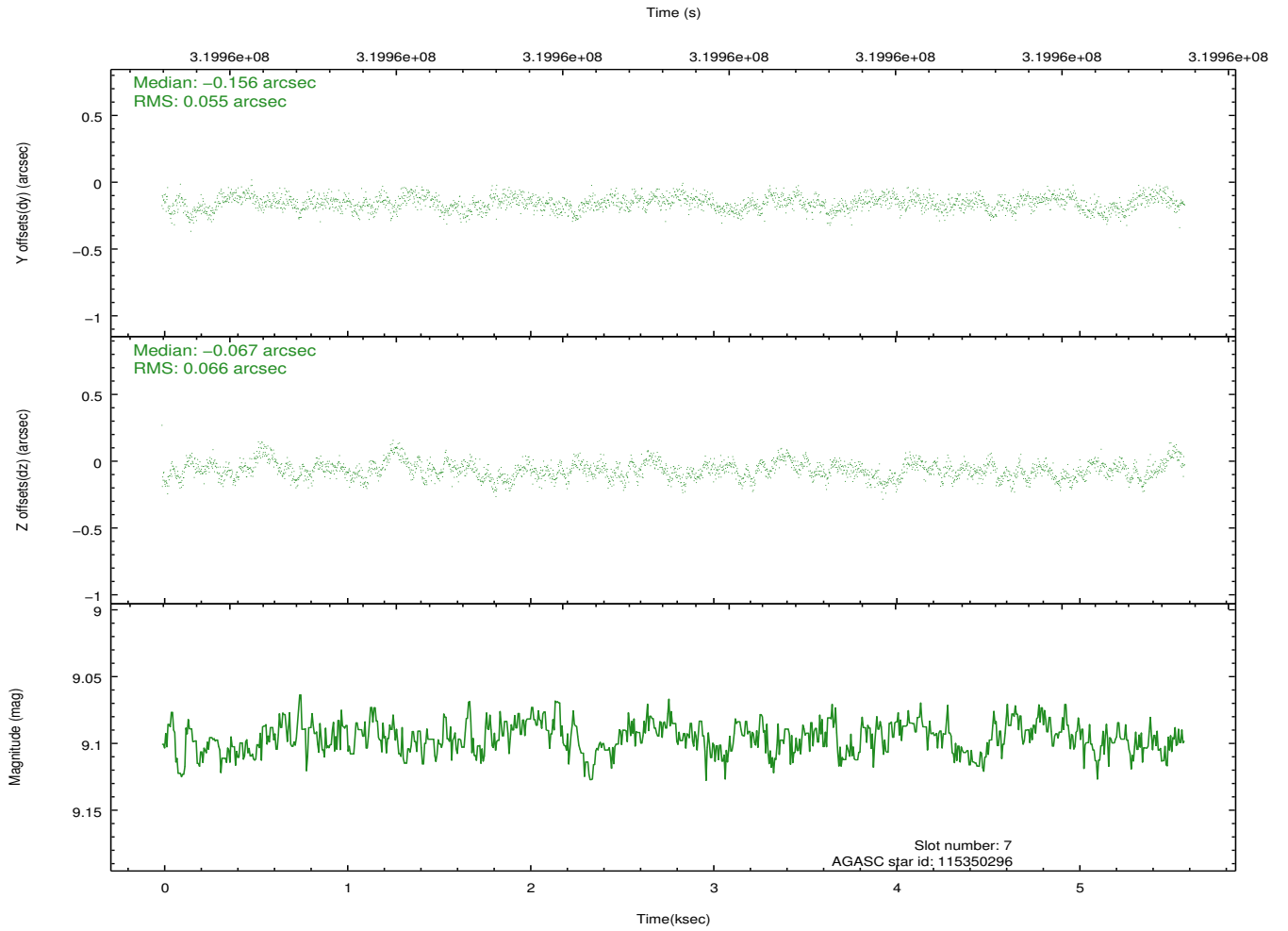
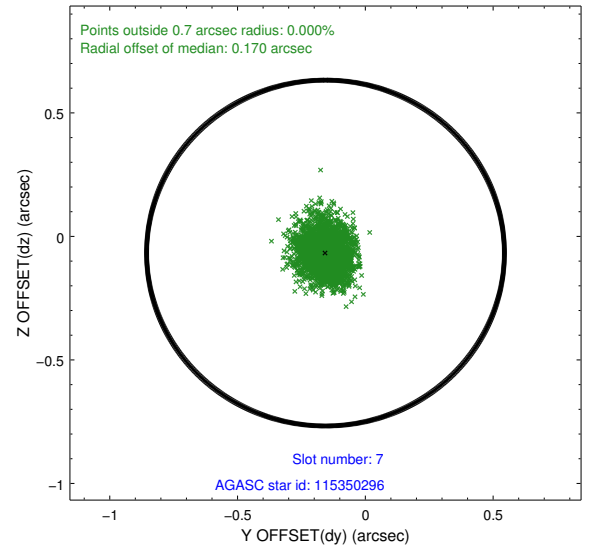
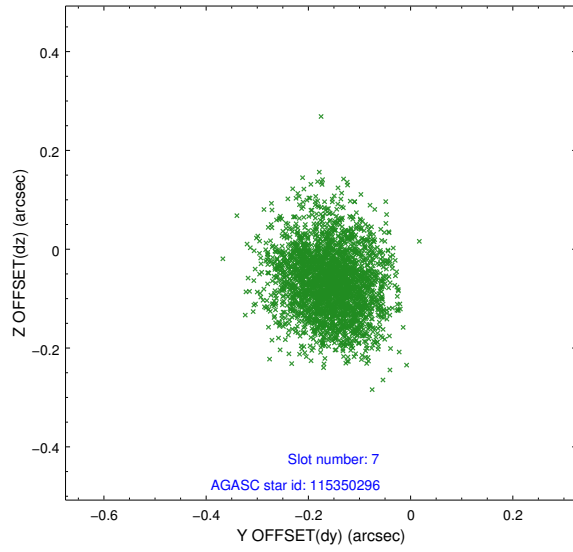
2.4.2 Slot 4



2.4.3 Slot 5

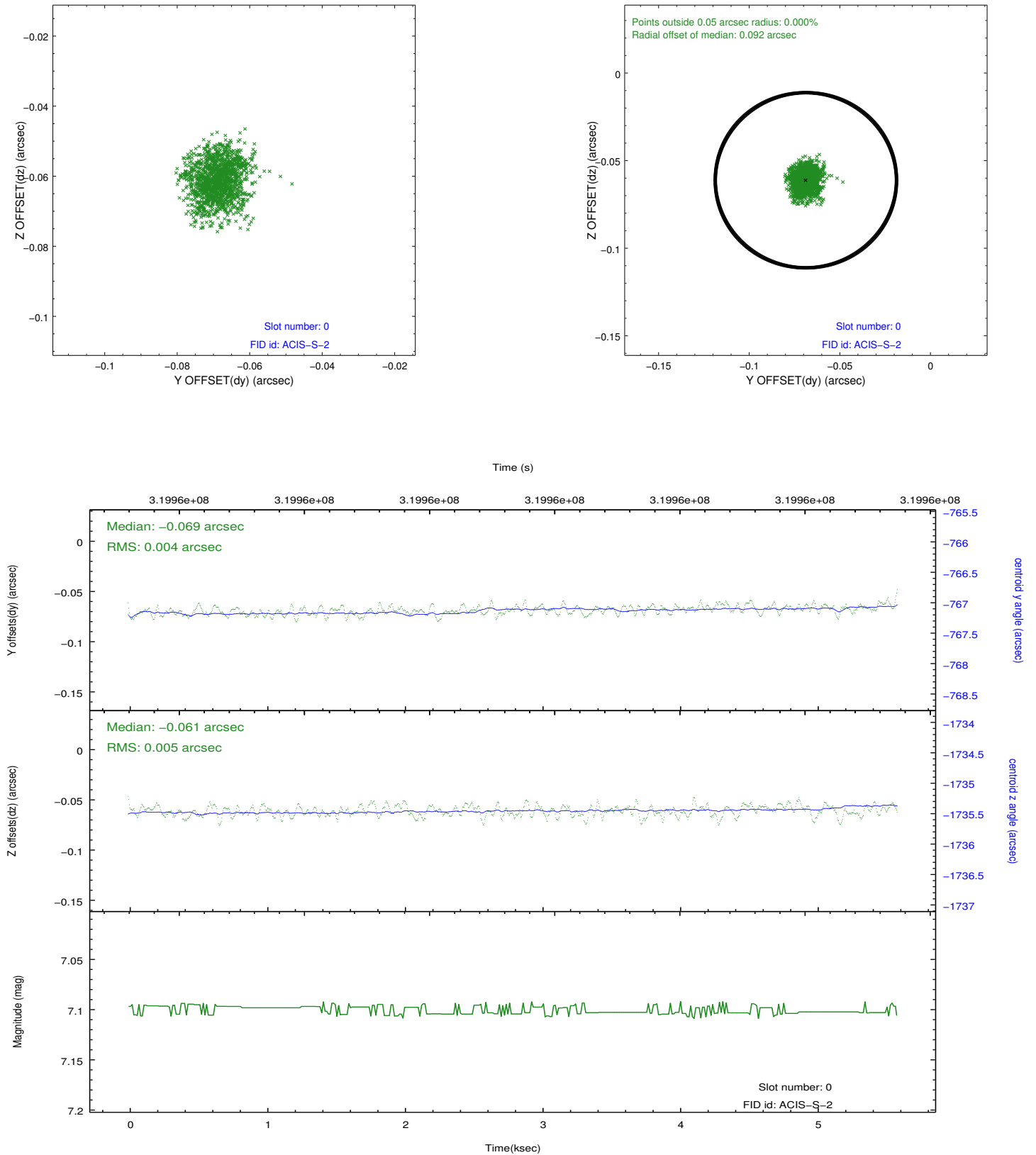


2.4.4 Slot 7

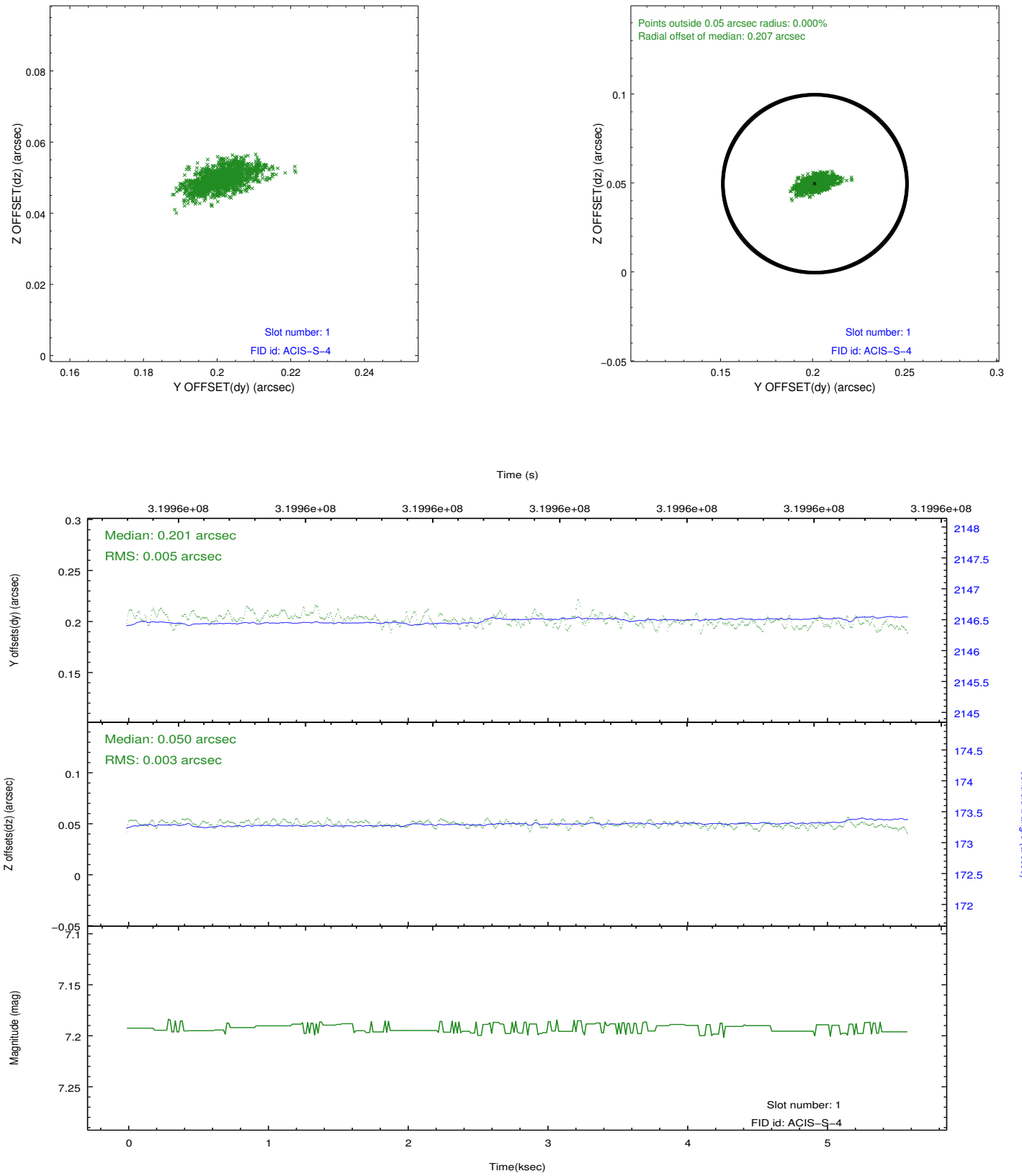


2.5 FID Slots

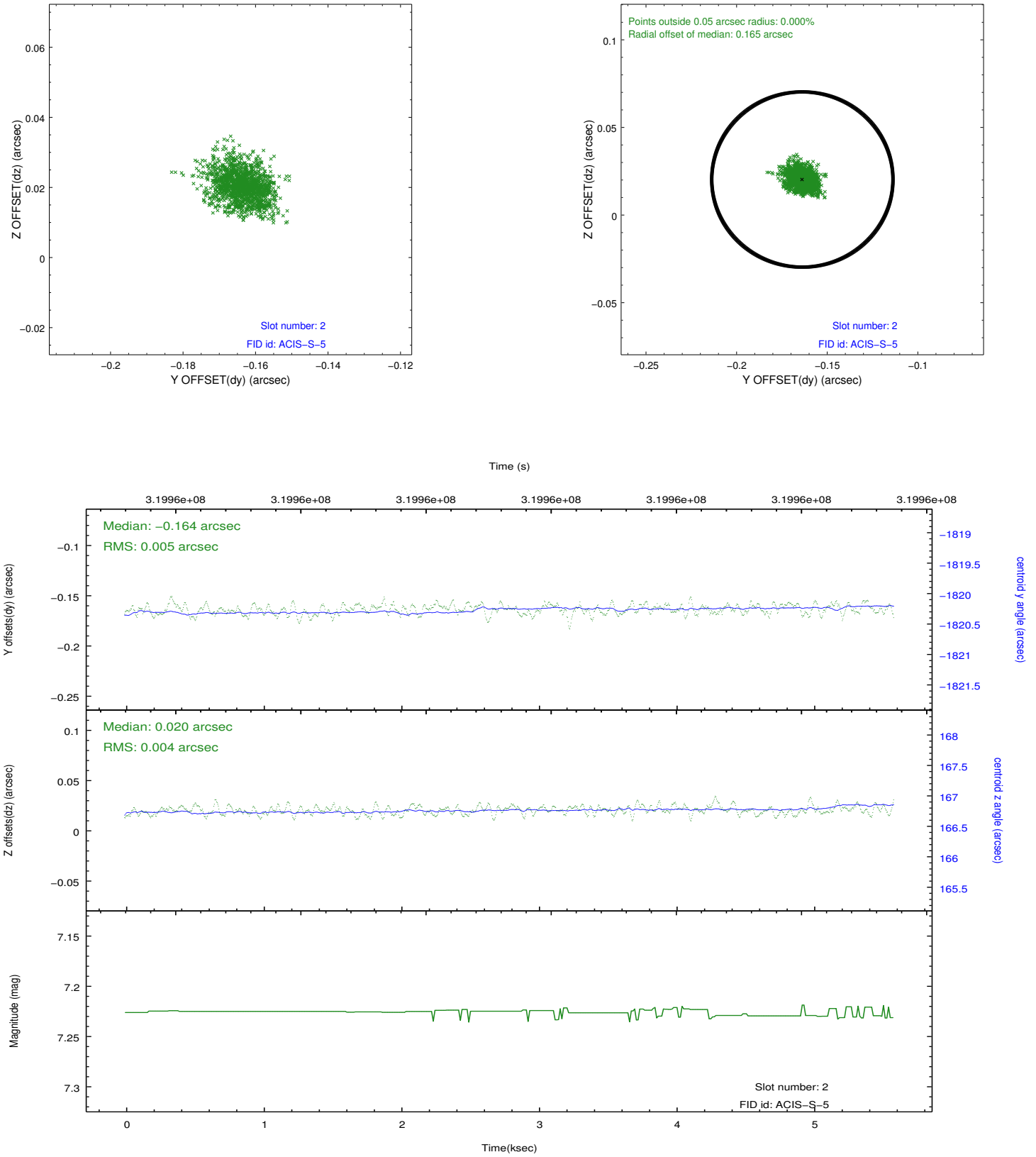
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.15839998

A.2 Comments

Joint Proposal: Spitzer

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The guide star in slot 6 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.