

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8042 - L2 Version 3
Chandra X-Ray Center

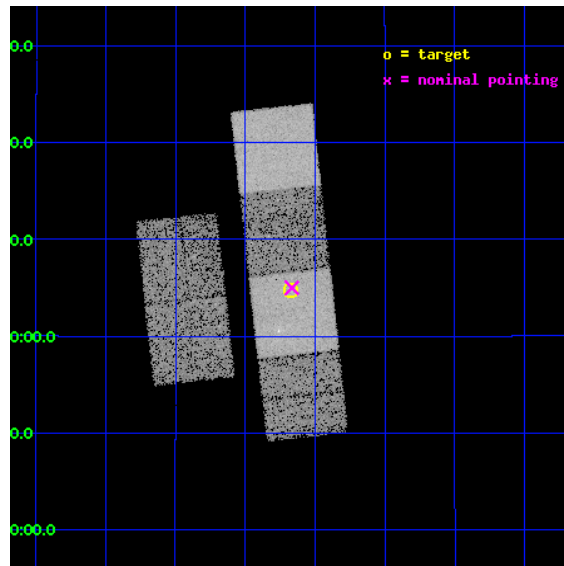
L2 Processing Date : May 10 2012

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1 Front

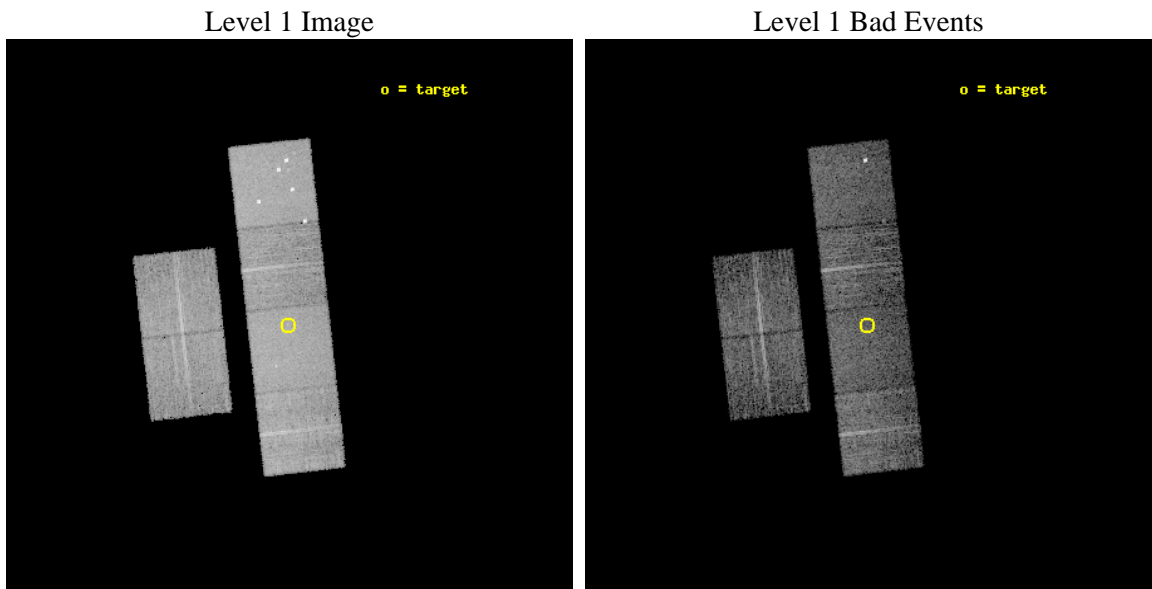
seq_num	900583	Sequence number
obs_id	8042	Observation id
title	The Duty Cycle of Supermassive Black Holes: X-raying Virgo	Proposa
observer	Prof Tommaso Treu	Principal investigator
object	1030	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.91875	Observer's specified target RA [deg]
dec_targ	13.078944	Observer's specified target Dec [deg]
ra_nom	186.91651523061	Nominal RA [deg]
dec_nom	13.083340324056	Nominal Dec [deg]
roll_nom	83.626775652167	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4958.6092389226	Sum of GTIs [s]
livetime	4895.8203430233	Livetime [s]
ontime2	4958.6502789259	Sum of GTIs [s]
ontime3	4958.4861188531	Sum of GTIs [s]
ontime5	4958.5681988597	Sum of GTIs [s]
ontime6	4958.5271588564	Sum of GTIs [s]
ontime7	4958.6092389226	Sum of GTIs [s]
ontime8	4955.2040290236	Sum of GTIs [s]
l2events	100832	Number of level 2 events



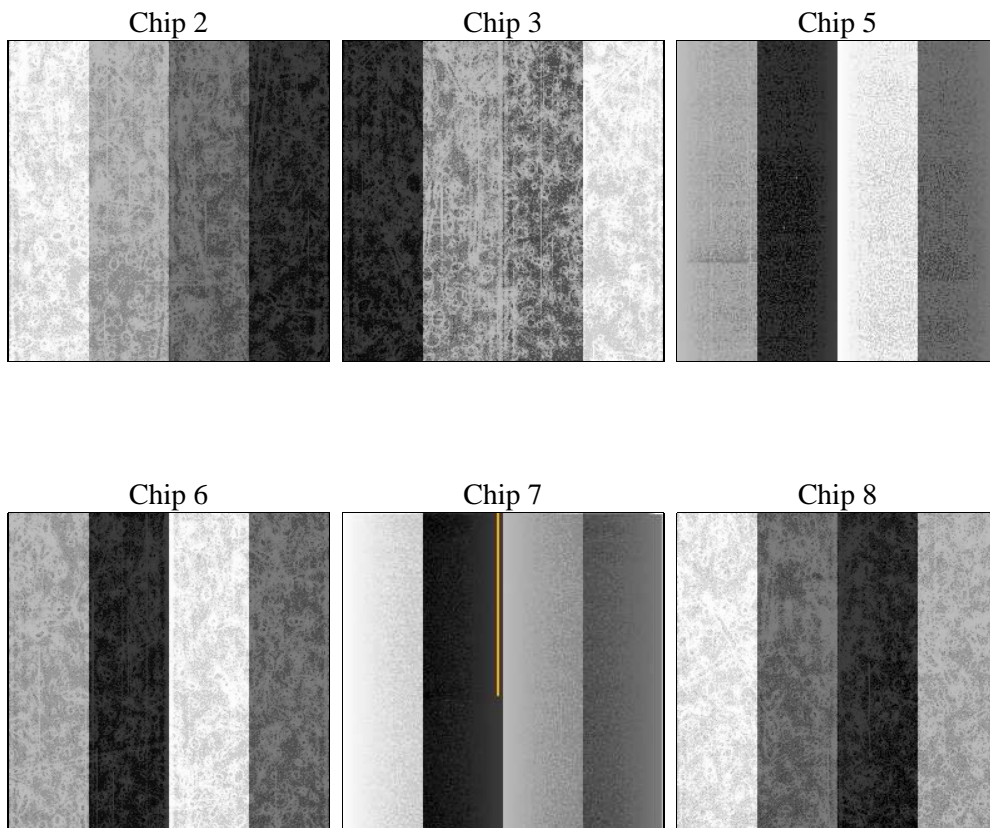
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	4958.6092389226	Sum of GTIs [s]
caldbver	4.4.9	 	ontime2	4958.6502789259	Sum of GTIs [s]
date	2012-05-10T22:59:12	Date and time of file creation	ontime3	4958.4861188531	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	4958.5681988597	Sum of GTIs [s]
			ontime6	4958.5271588564	Sum of GTIs [s]
			ontime7	4958.6092389226	Sum of GTIs [s]
			ontime8	4955.2040290236	Sum of GTIs [s]
			l1events	371955	Number of level 1 events

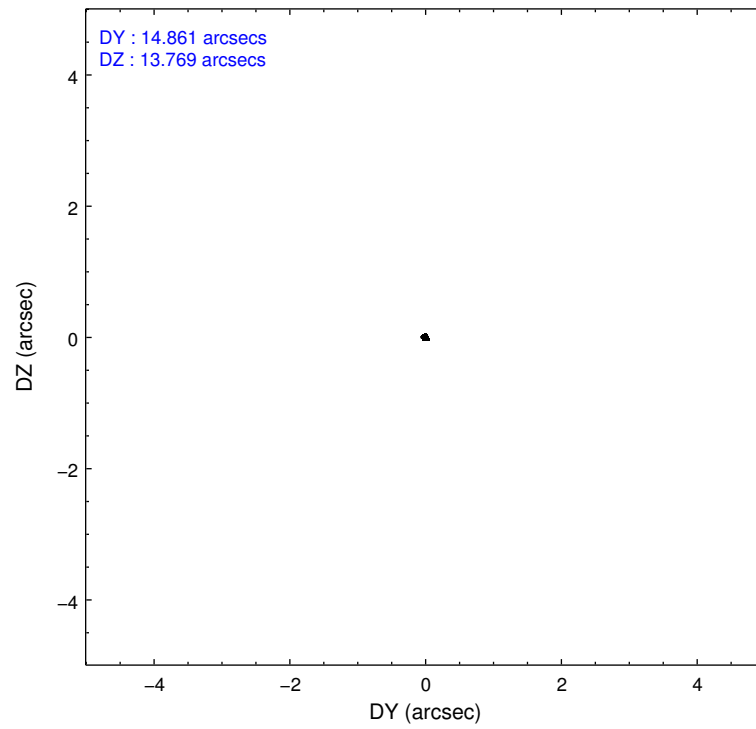
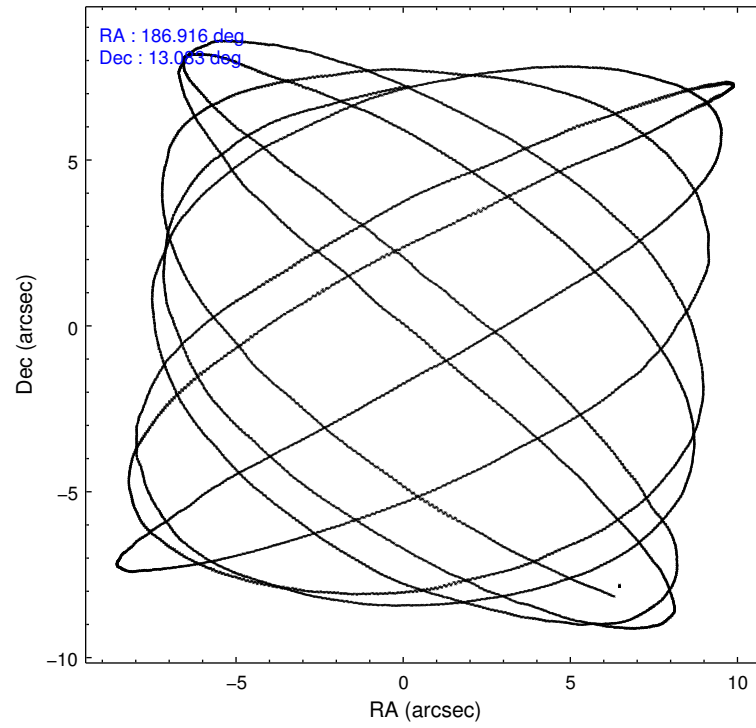
2.1.4 Events

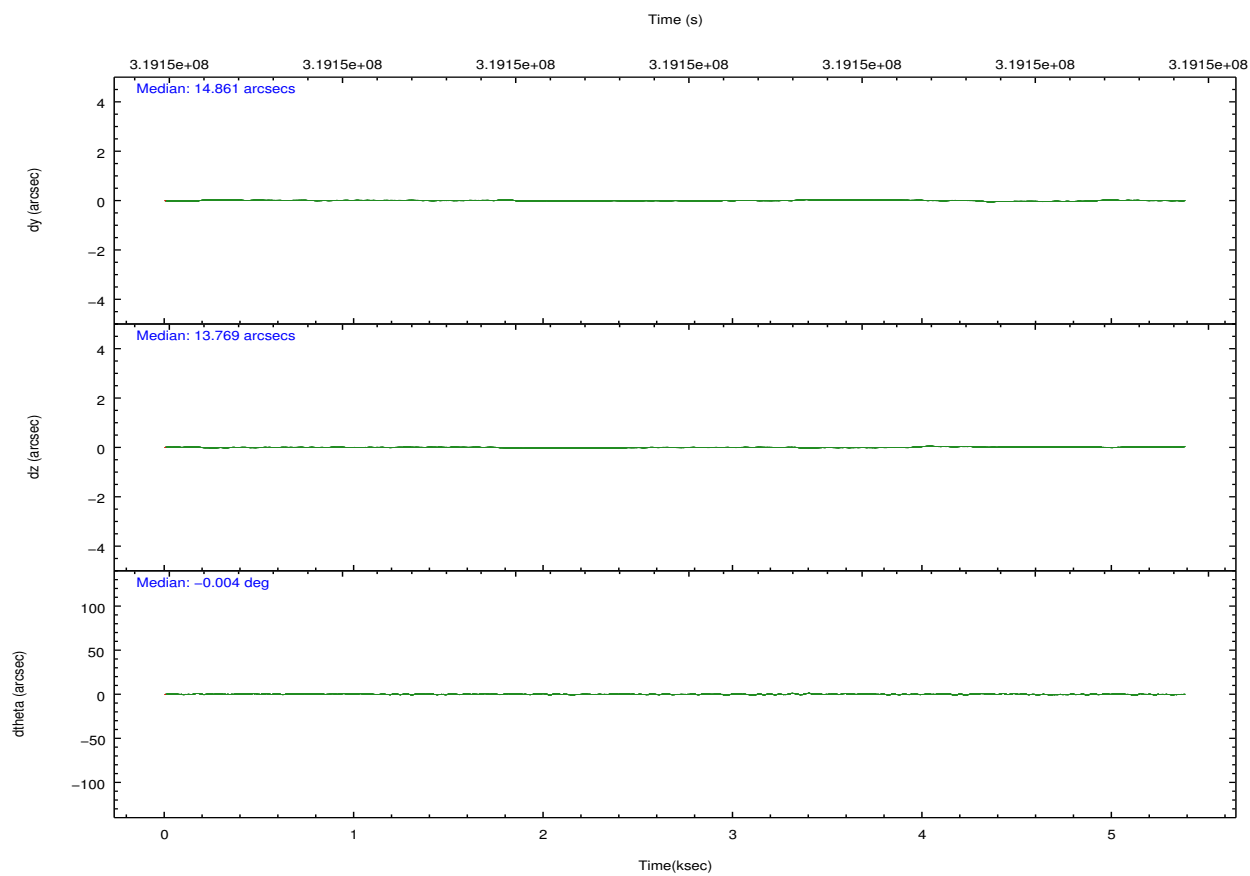
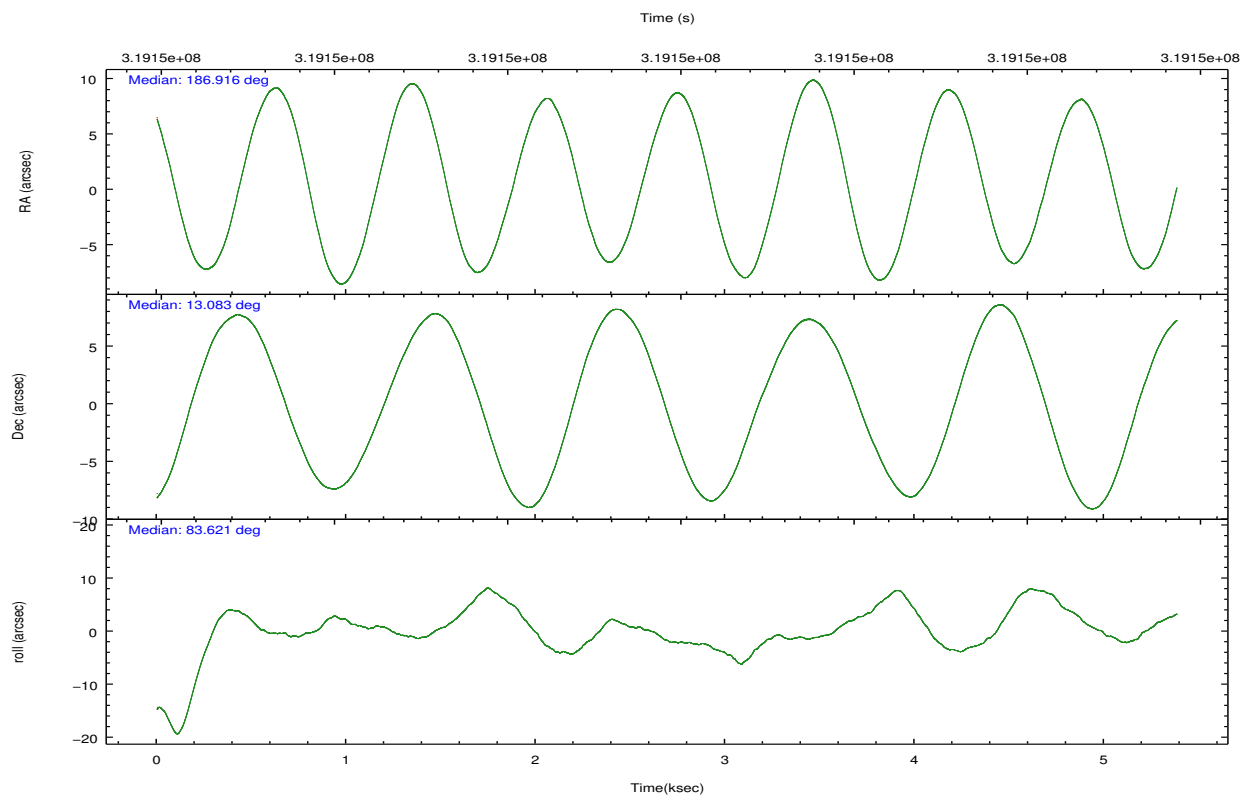
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	51165	48792	82736	51375	71146	66741	grade 0 events	4509	4851	7291	4666	3711	6708
rejected events	42596	39664	40741	41988	38130	49806		8%	9%	8%	9%	5%	10%
rejected %	83%	81%	49%	81%	53%	74%	grade 1 events	53	34	98	40	55	83
								0%	0%	0%	0%	0%	0%
							grade 2 events	1567	1571	11381	1823	6734	3442
								3%	3%	13%	3%	9%	5%
							grade 3 events	616	708	1357	630	2775	1530
								1%	1%	1%	1%	3%	2%
							grade 4 events	615	687	1206	649	2694	1468
								1%	1%	1%	1%	3%	2%
							grade 5 events	1772	2218	4983	2099	5899	2927
								3%	4%	6%	4%	8%	4%
							grade 6 events	1272	1326	20792	1624	17133	3824
								2%	2%	25%	3%	24%	5%
							grade 7 events	40761	37397	35628	39844	32145	46759
								79%	76%	43%	77%	45%	70%

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	186.928216	186.9165152306144	CCD I2 on	O1	Y
[deg] Pointing Dec	13.058431	13.08334032405561	CCD I3 on	O2	Y
[deg] Pointing Roll	83.467507	83.626775652167	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)	319147422.184000	319147030.7531	CCD S5 on	N	N
Observation start date	2008-02-11T20:02:37	2008-02-11T19:57:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	319152622.184000	319152831.74088	On-chip summing requested	N	N
Observation end date	2008-02-11T21:29:17	2008-02-11T21:33:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



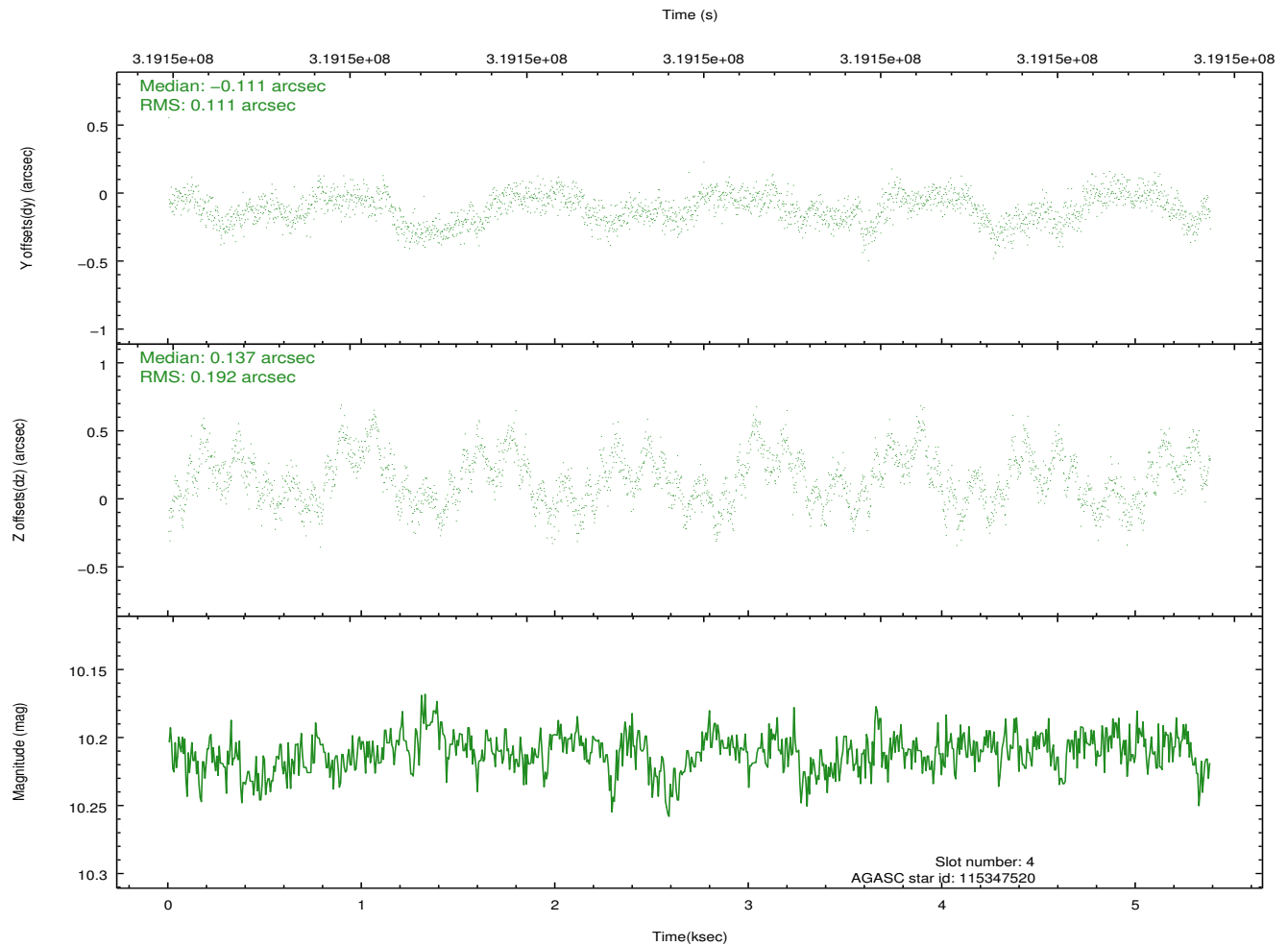
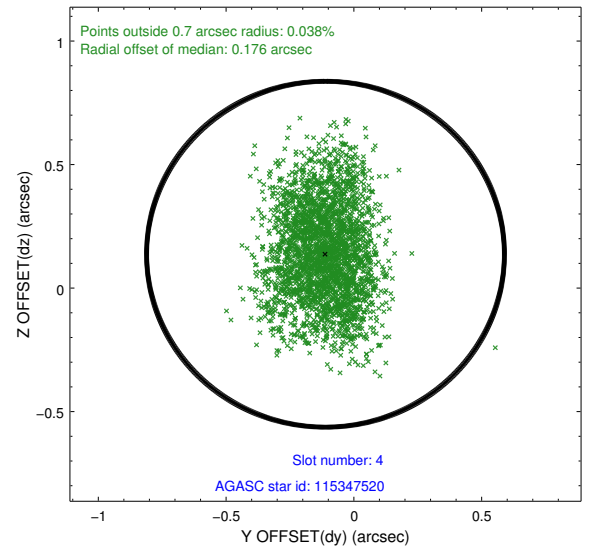
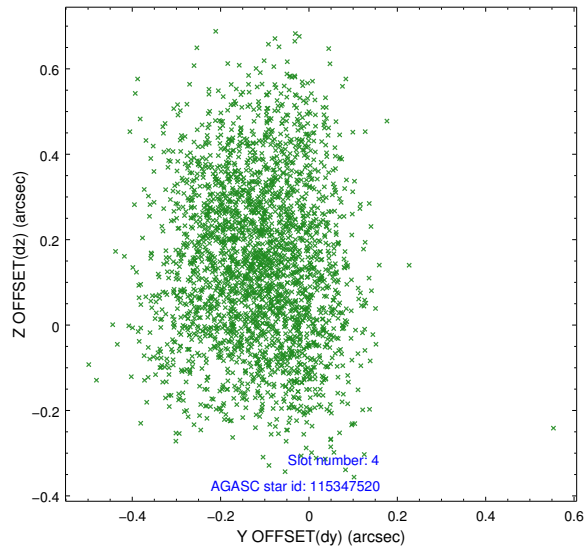


Slot Statistics

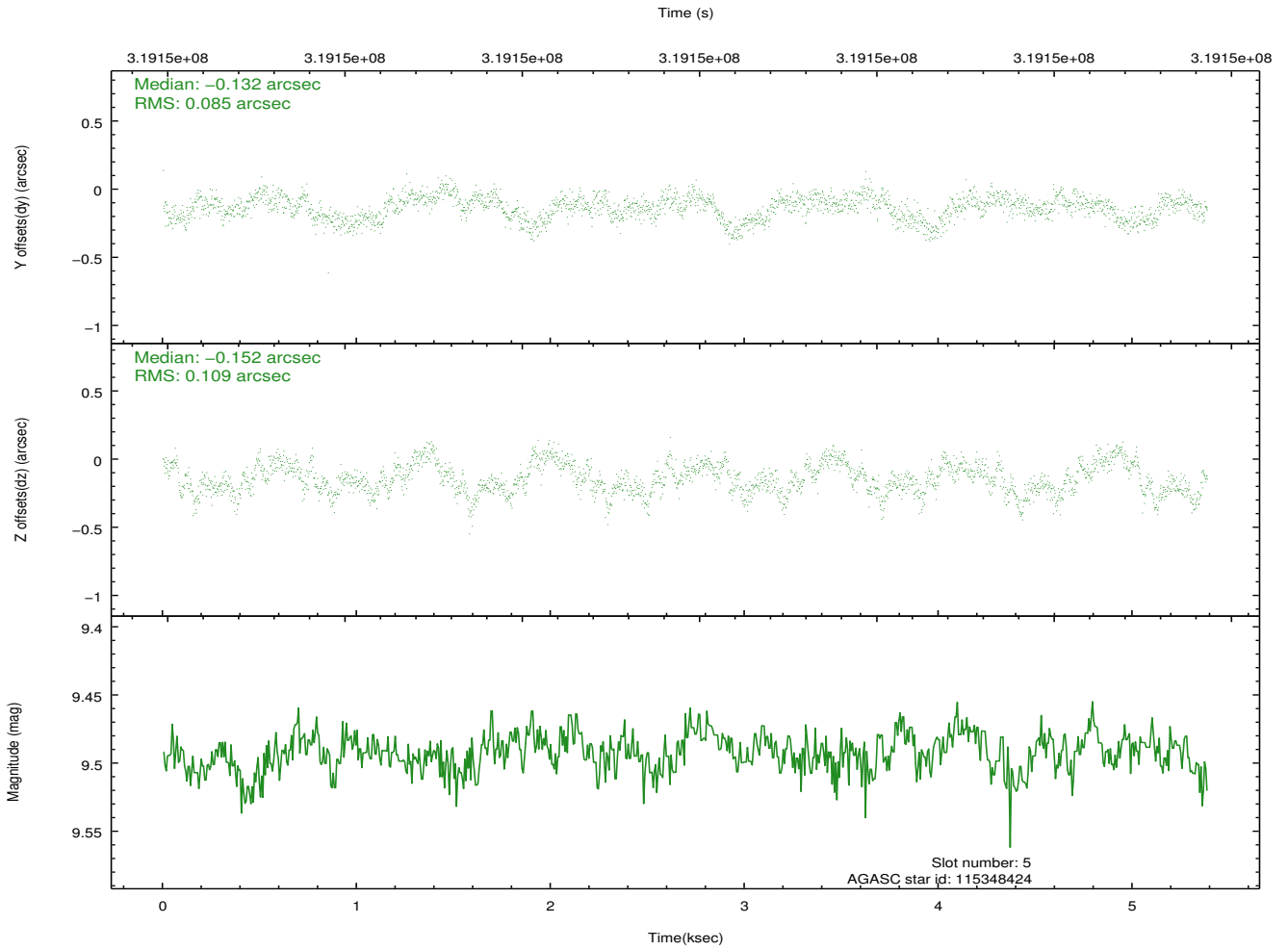
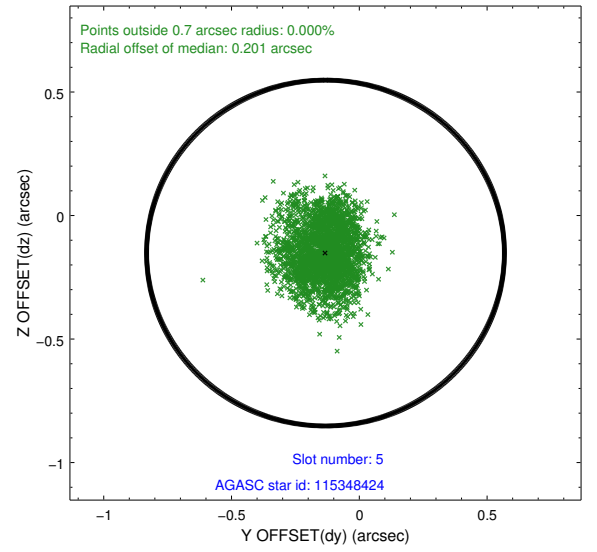
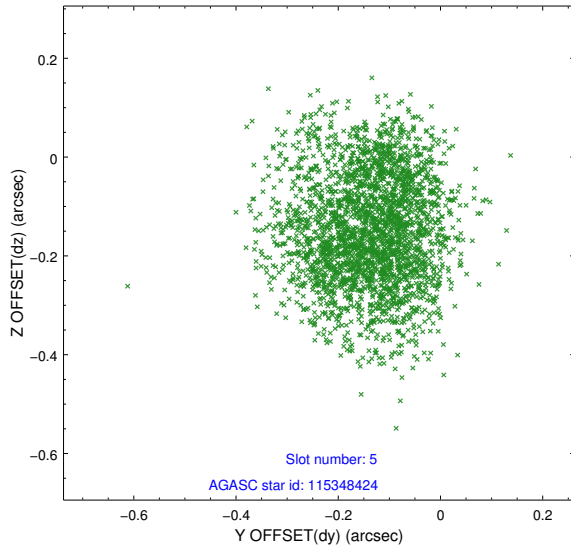
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1314	-0.075	-0.059	0.006	0.010	0.000000	0.000000	-767.91	-1735.12
1	FID	ACIS-S-4	7.19	1314	0.182	0.052	0.005	0.010	0.000000	0.000000	2145.12	172.30
2	FID	ACIS-S-5	7.23	1314	-0.138	0.016	0.006	0.010	0.000000	0.000000	-1819.37	167.23
3	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	115347520	10.21	2626	-0.111	0.137	0.235	0.381	187.517505	12.810279	-649.21	-2156.96
5	GUIDE	115348424	9.49	2622	-0.132	-0.152	0.148	0.234	187.199498	13.087929	214.21	-934.29
6	GUIDE	115348632	10.56	2590	0.464	0.552	0.233	0.397	187.536861	13.233195	871.58	-2047.26
7	GUIDE	115349448	9.74	2622	-0.201	-0.543	0.142	0.225	186.471080	13.770115	2365.59	1878.75

2.4 Star Slots

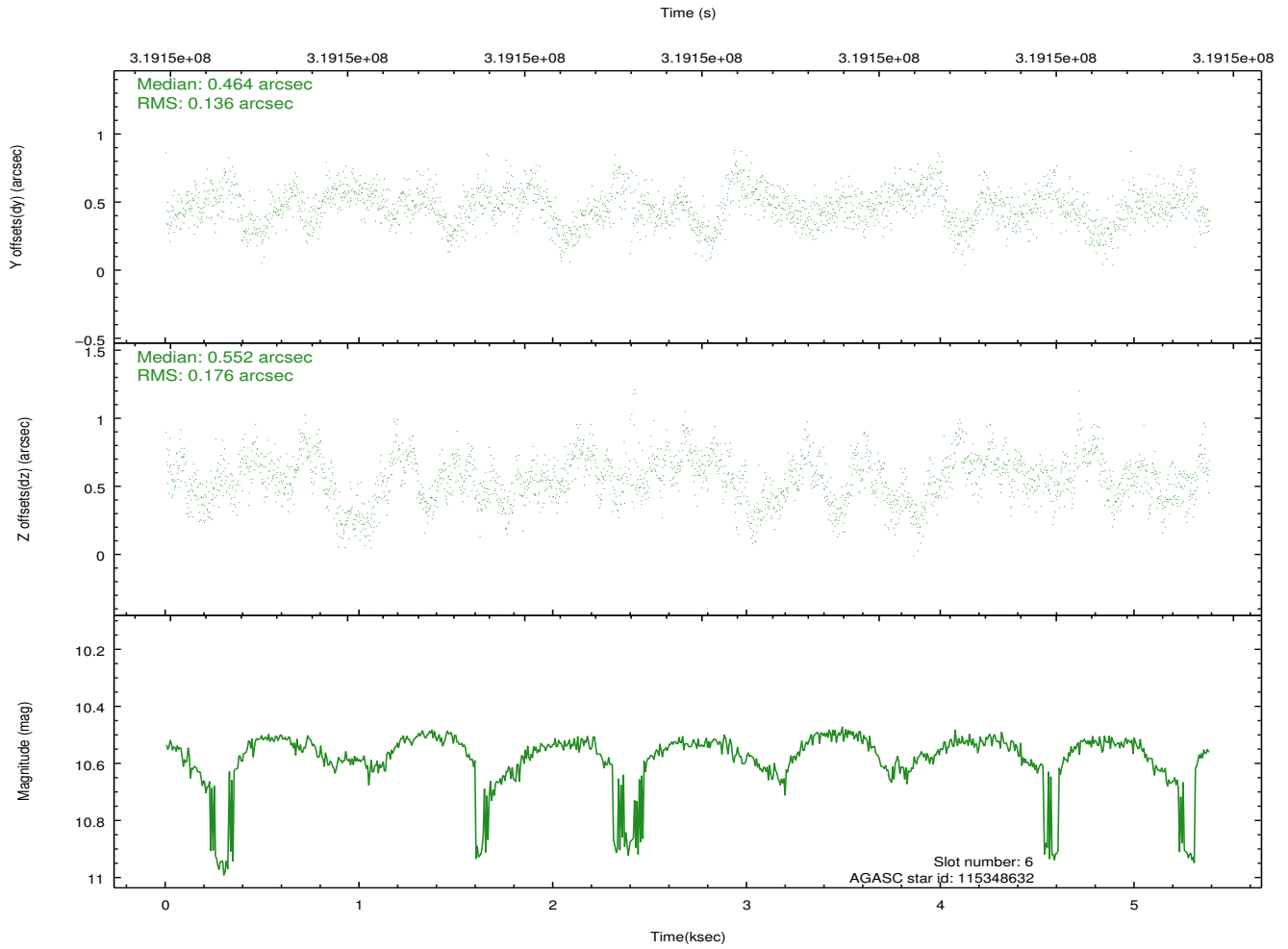
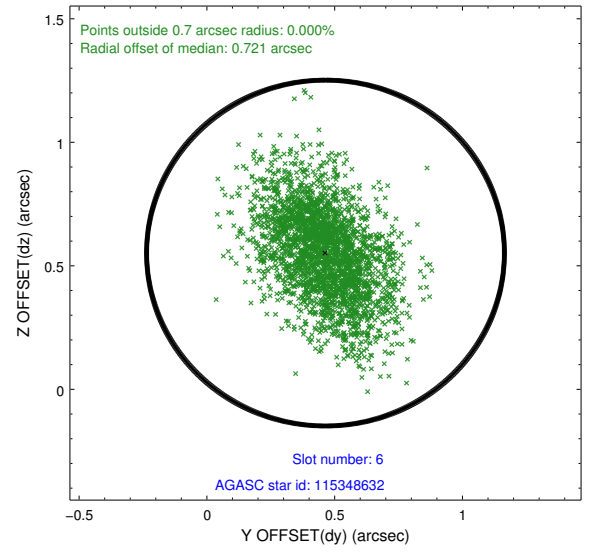
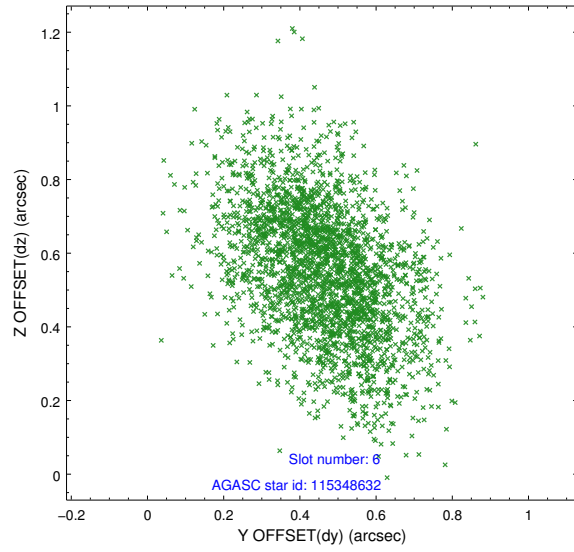
2.4.1 Slot 4



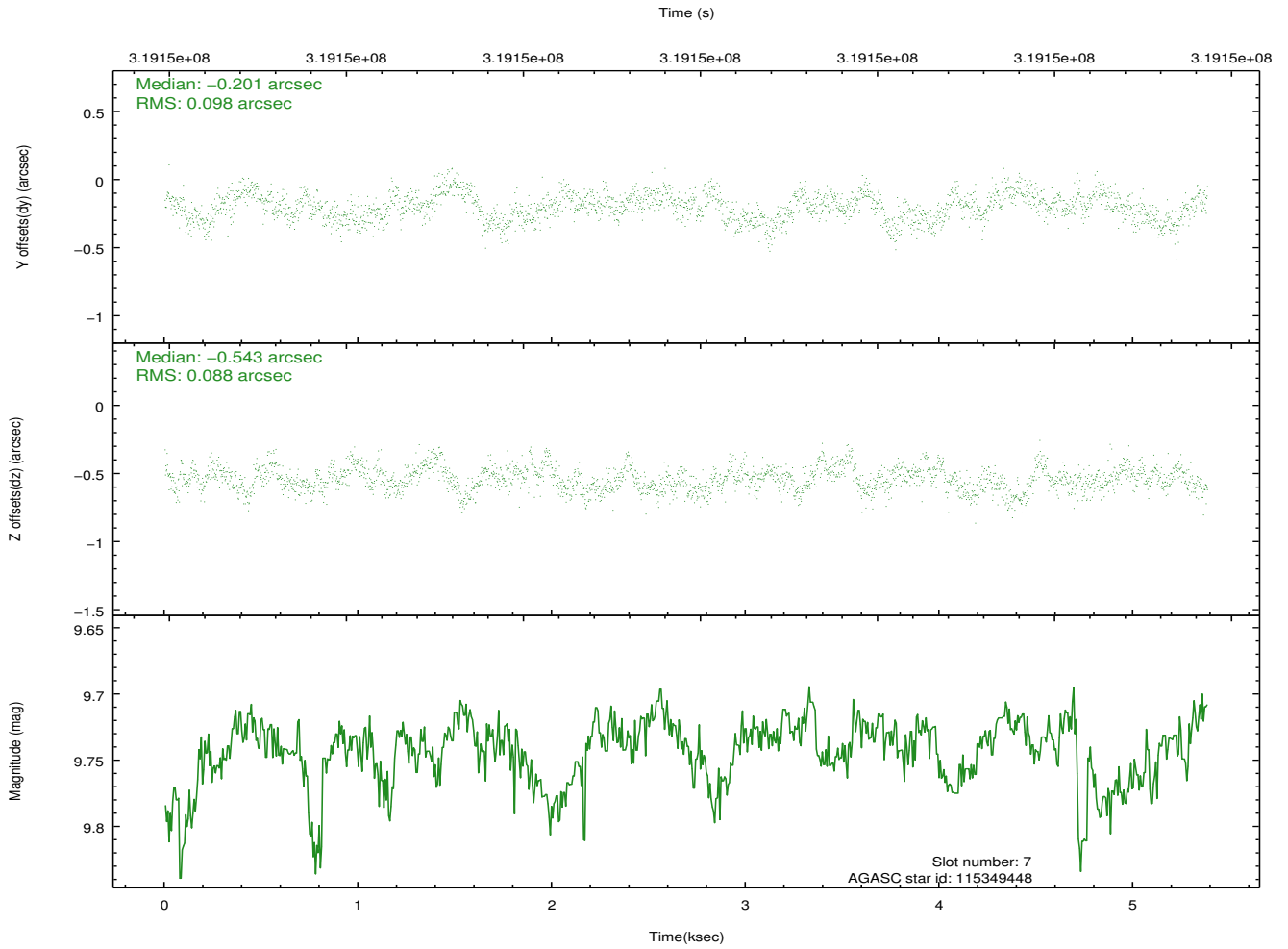
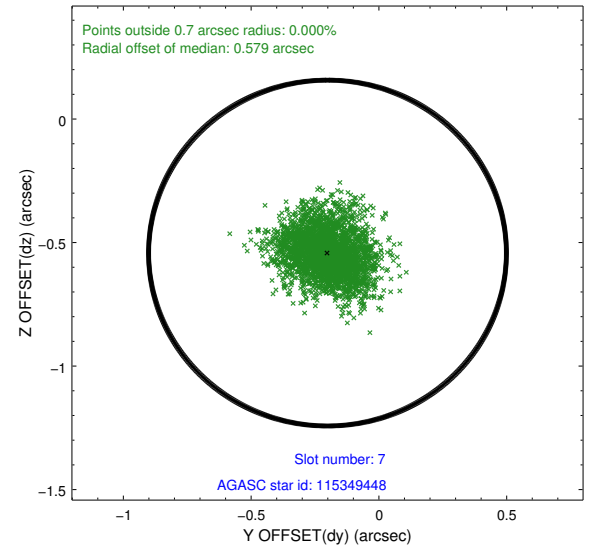
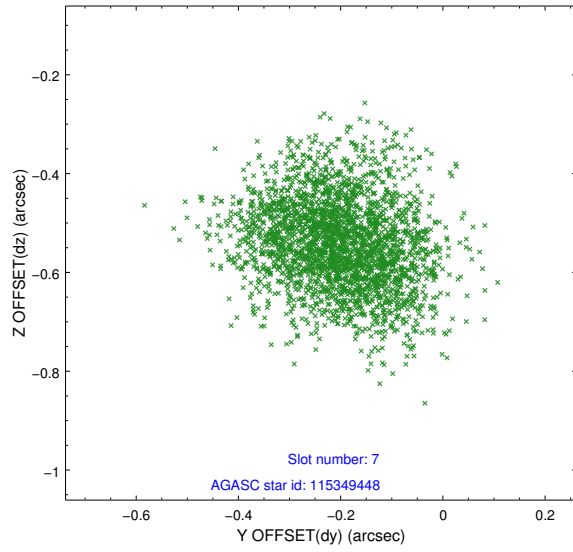
2.4.2 Slot 5



2.4.3 Slot 6

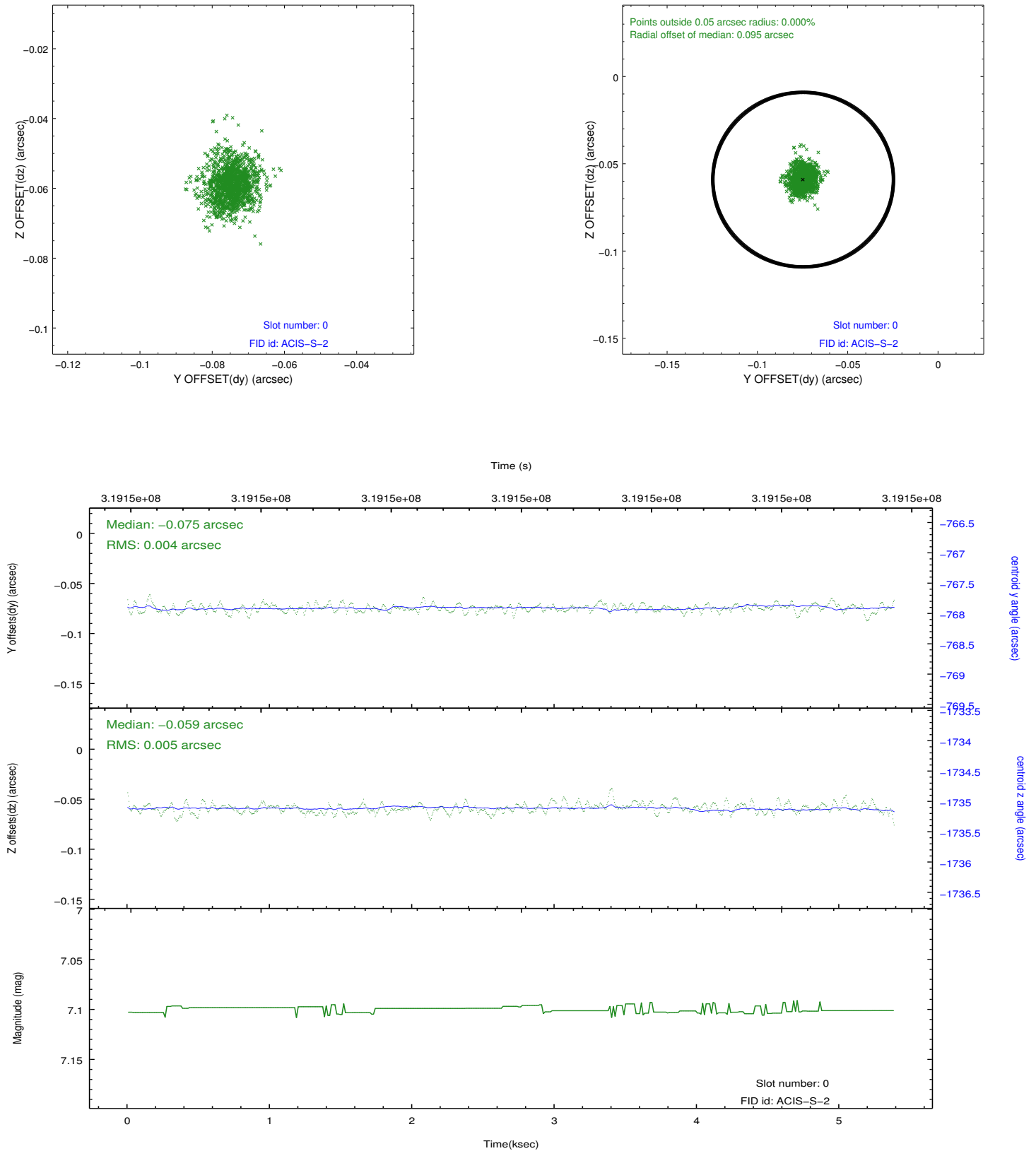


2.4.4 Slot 7

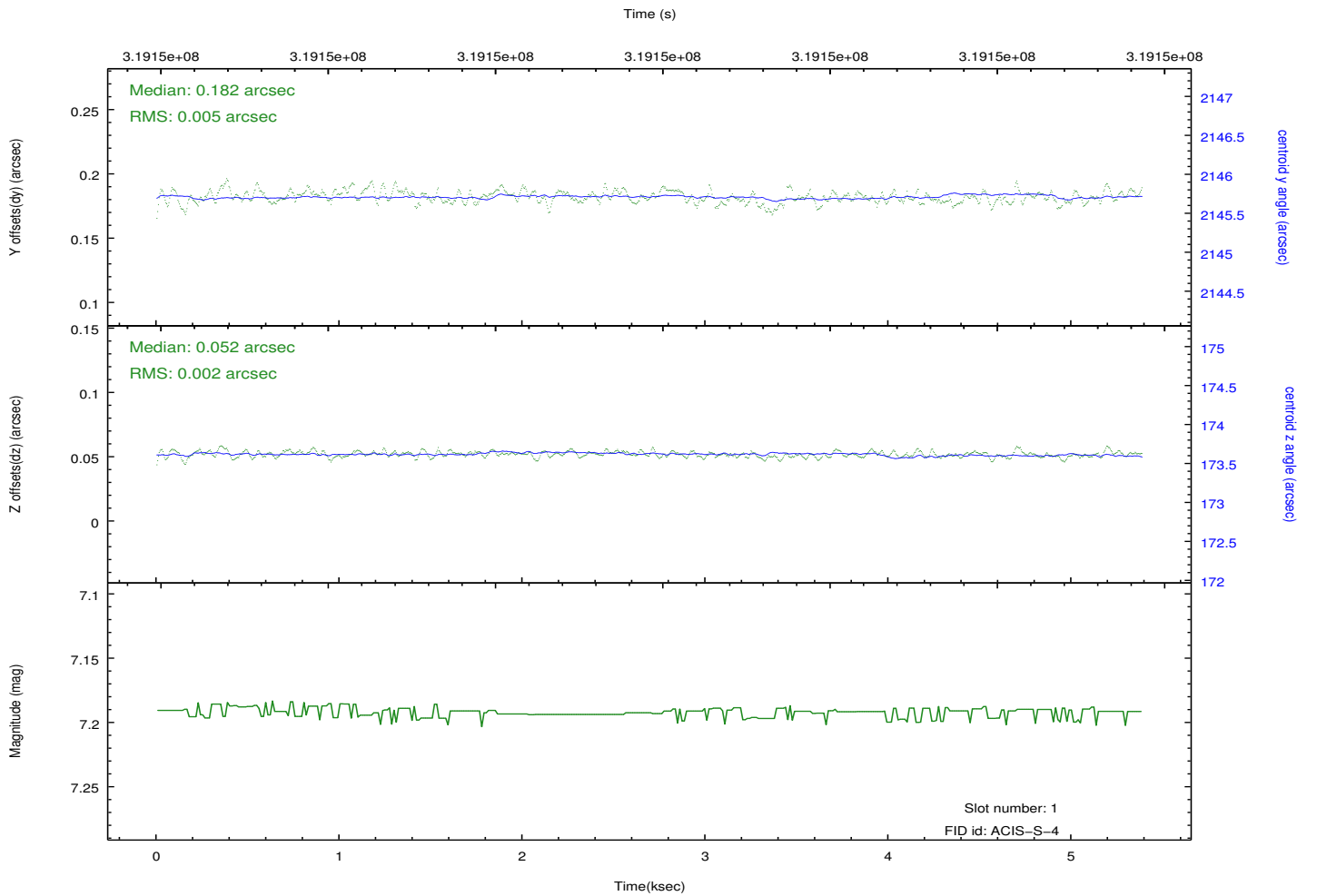
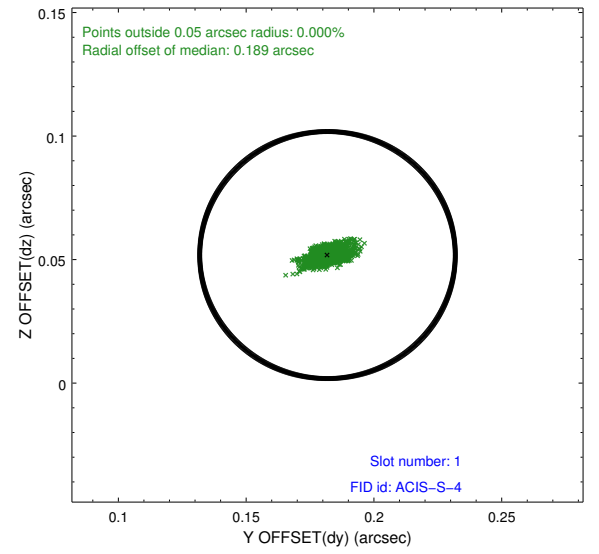
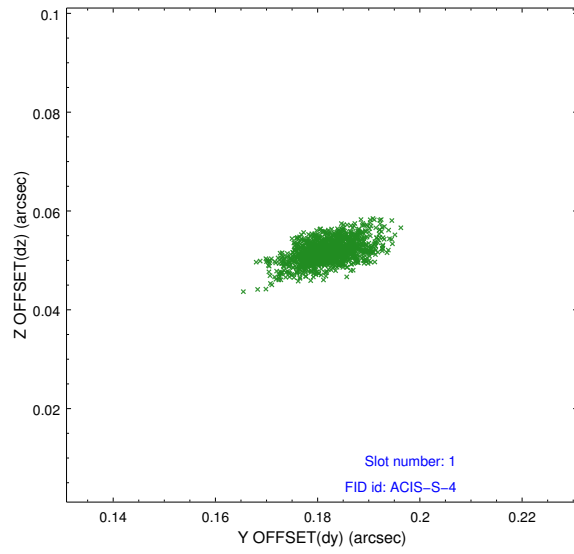


2.5 FID Slots

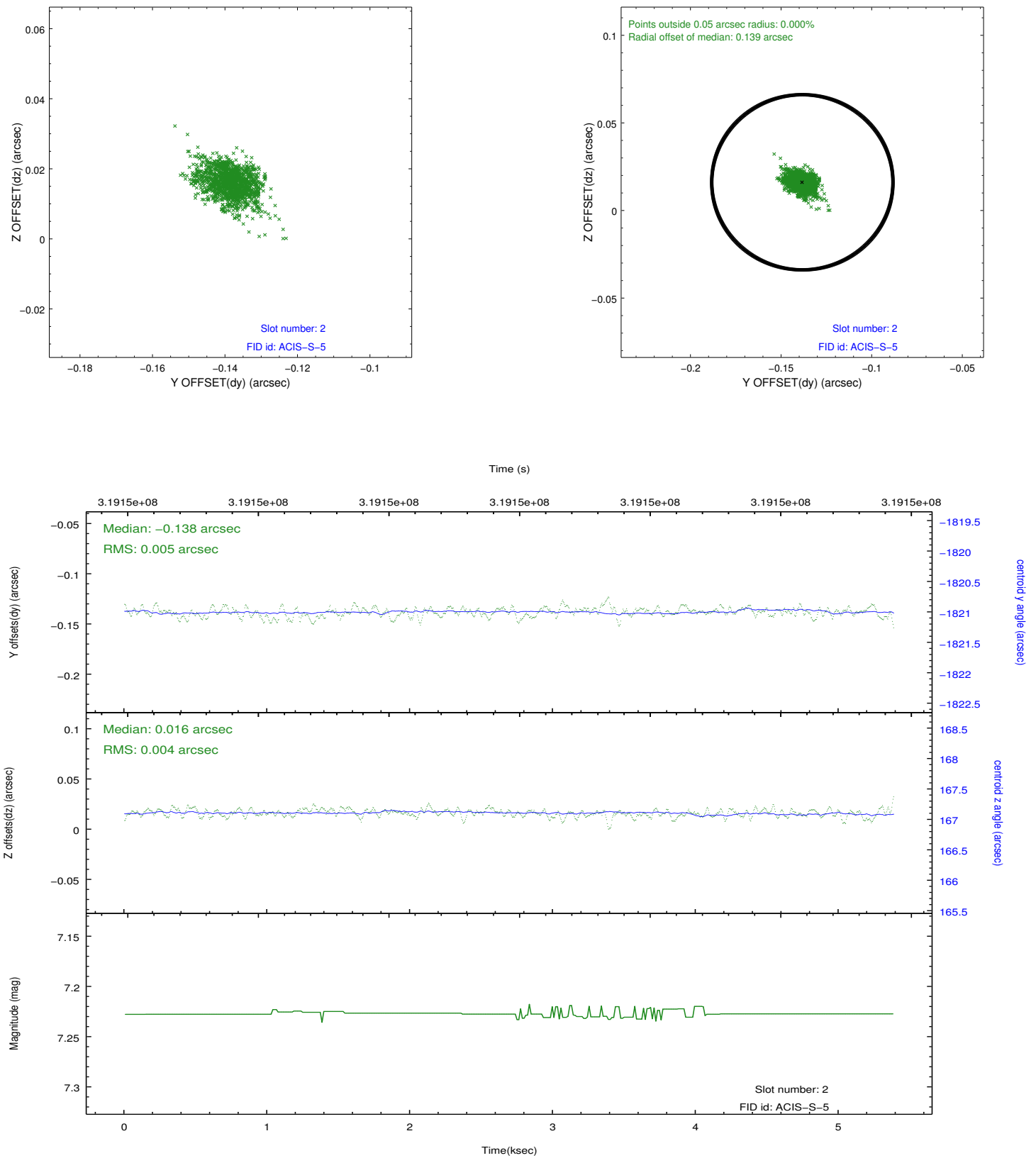
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	4.95999998

A.2 Comments

Joint proposal: Spitzer

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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.