

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 6152 - L2 Version 5
Chandra X-Ray Center

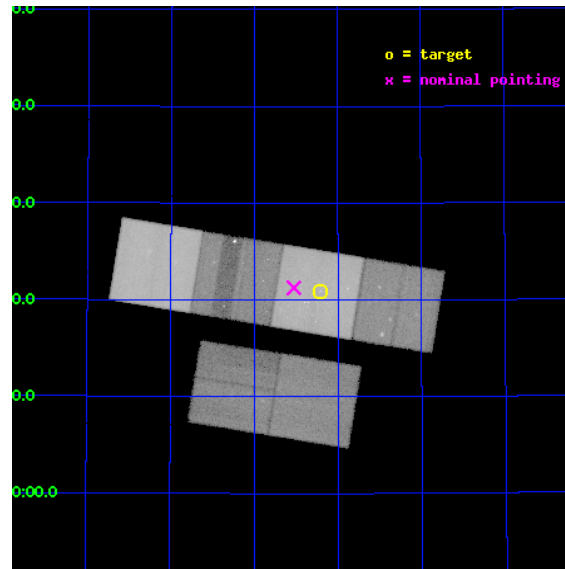
L2 Processing Date : Feb 15 2013

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1 Front

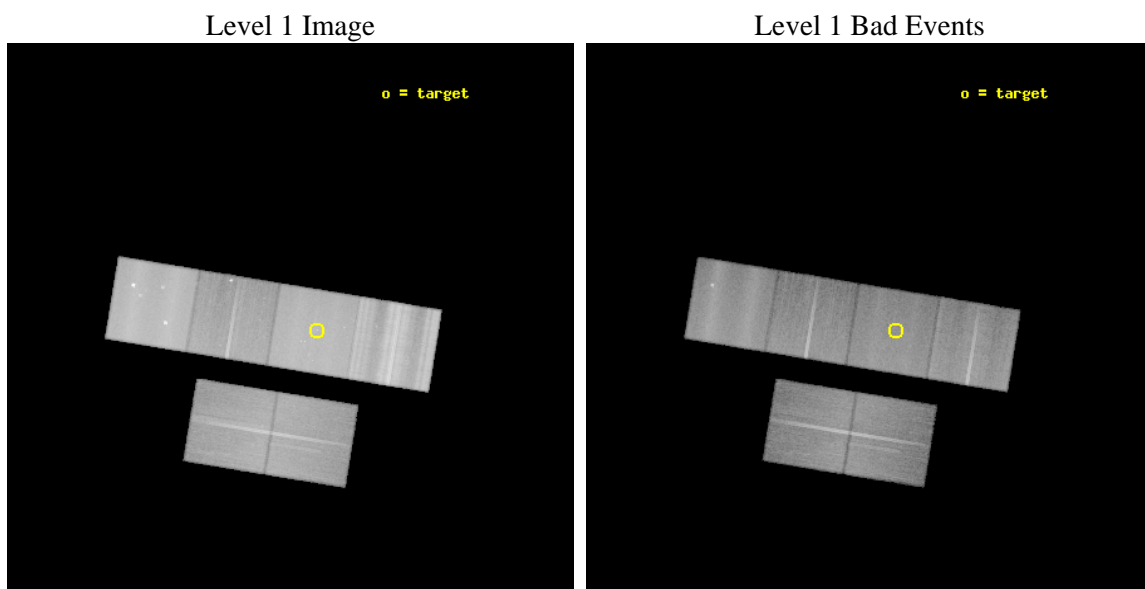
seq_num	600391	Sequence number
obs_id	6152	Observation id
title	An Ultra-Deep Study of M101	Proposal title
observer	Dr. K.D. Kuntz	Principal investigator
object	M101	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.80375	Observer's specified target RA [deg]
dec_targ	54.348778	Observer's specified target Dec [deg]
ra_nom	210.88164212936	Nominal RA [deg]
dec_nom	54.35441227415	Nominal Dec [deg]
roll_nom	9.2933303173304	Nominal Roll [deg]
revision	5	Processing version of data
ontime	44656.110625267	Sum of GTIs [s]
livetime	44090.648063848	Livetime [s]
ontime2	33792.775225312	Sum of GTIs [s]
ontime3	34619.395559013	Sum of GTIs [s]
ontime5	44202.374021322	Sum of GTIs [s]
ontime6	34304.975213319	Sum of GTIs [s]
ontime7	44656.110625267	Sum of GTIs [s]
ontime8	35163.922311962	Sum of GTIs [s]
l2events	868472	Number of level 2 events



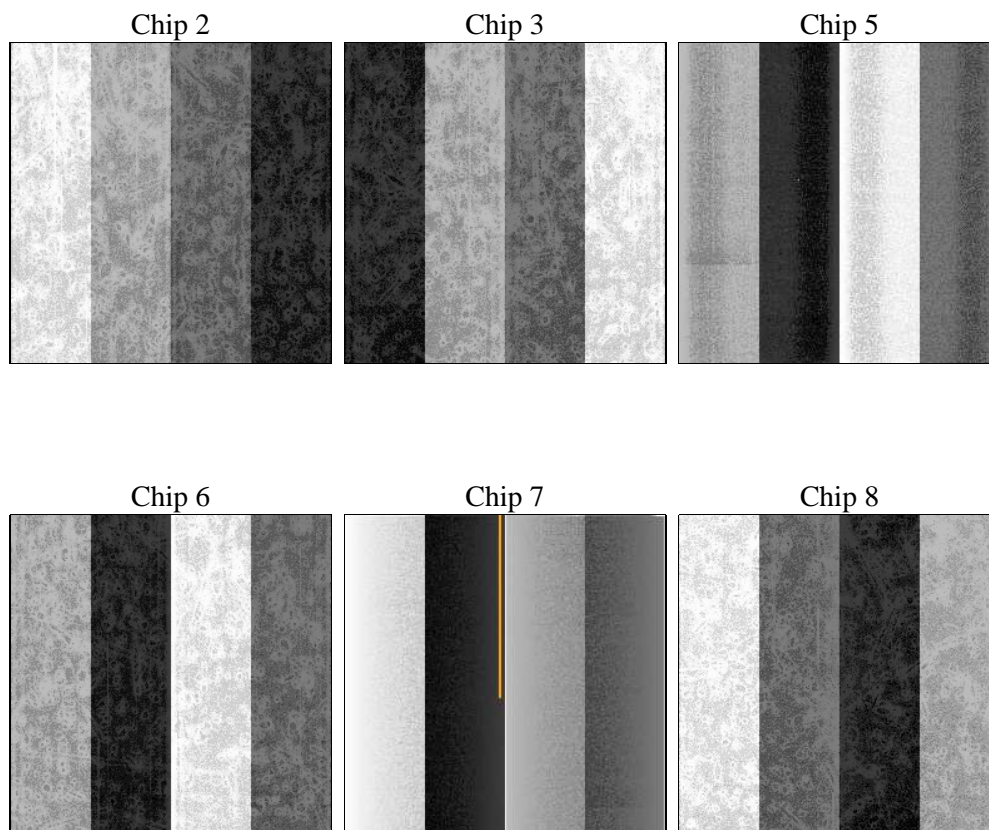
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	51800.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	44656.110625267	Sum of GTIs [s]
caldsver	4.5.5	 	ontime2	33792.775225312	Sum of GTIs [s]
date	2013-02-15T10:37:34	Date and time of file creation	ontime3	34619.395559013	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	44202.374021322	Sum of GTIs [s]
			ontime6	34304.975213319	Sum of GTIs [s]
			ontime7	44656.110625267	Sum of GTIs [s]
			ontime8	35163.922311962	Sum of GTIs [s]
			l1events	3063013	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	363019	350625	674287	365042	579626	730414	grade 0 events	33626	30228	36780	33788	30130	152027
rejected events	289644	275425	346107	285950	291189	331567		9%	8%	5%	9%	5%	20%
rejected %	79%	78%	51%	78%	50%	45%	grade 1 events	361	270	1723	277	898	1416
								0%	0%	0%	0%	0%	0%
							grade 2 events	18199	23159	103096	24359	61988	54986
								5%	6%	15%	6%	10%	7%
							grade 3 events	3350	3612	19167	3709	24731	68549
								0%	1%	2%	1%	4%	9%
							grade 4 events	4784	3872	18856	3727	24978	60778
								1%	1%	2%	1%	4%	8%
							grade 5 events	10620	11668	44607	12258	48300	19590
								2%	3%	6%	3%	8%	2%
							grade 6 events	13416	14564	150292	13702	146625	63489
								3%	4%	22%	3%	25%	8%
							grade 7 events	278663	263252	299766	273222	241976	309579
								76%	75%	44%	74%	41%	42%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	210.845857	210.8816421293566
[deg] Pointing Dec	54.336878	54.35441227414978
[deg] Pointing Roll	9.165783	9.293330317330398
[mm] SIM focus pos	-0.6828225247311905	-0.6828225247311905
[mm] SIM defocus	0.001444942264670179	0.001444942264670179
[mm] SIM translation stage pos	-190.1400660498719	-190.1400660498719
[mm] SIM translation stage offset	0.007542945904702947	0.007542945904702947
[s] Observation start time (MET)	216198234.184000	216198234.184
Observation start date	2004-11-07T07:02:50	2004-11-07T07:03:54
[s] Observation end time (MET)	216244546.000000	216244546
Observation end date	2004-11-07T19:55:46	2004-11-07T19:55:46
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	OVERRIDE	OVERRIDE
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	3.2	3.2

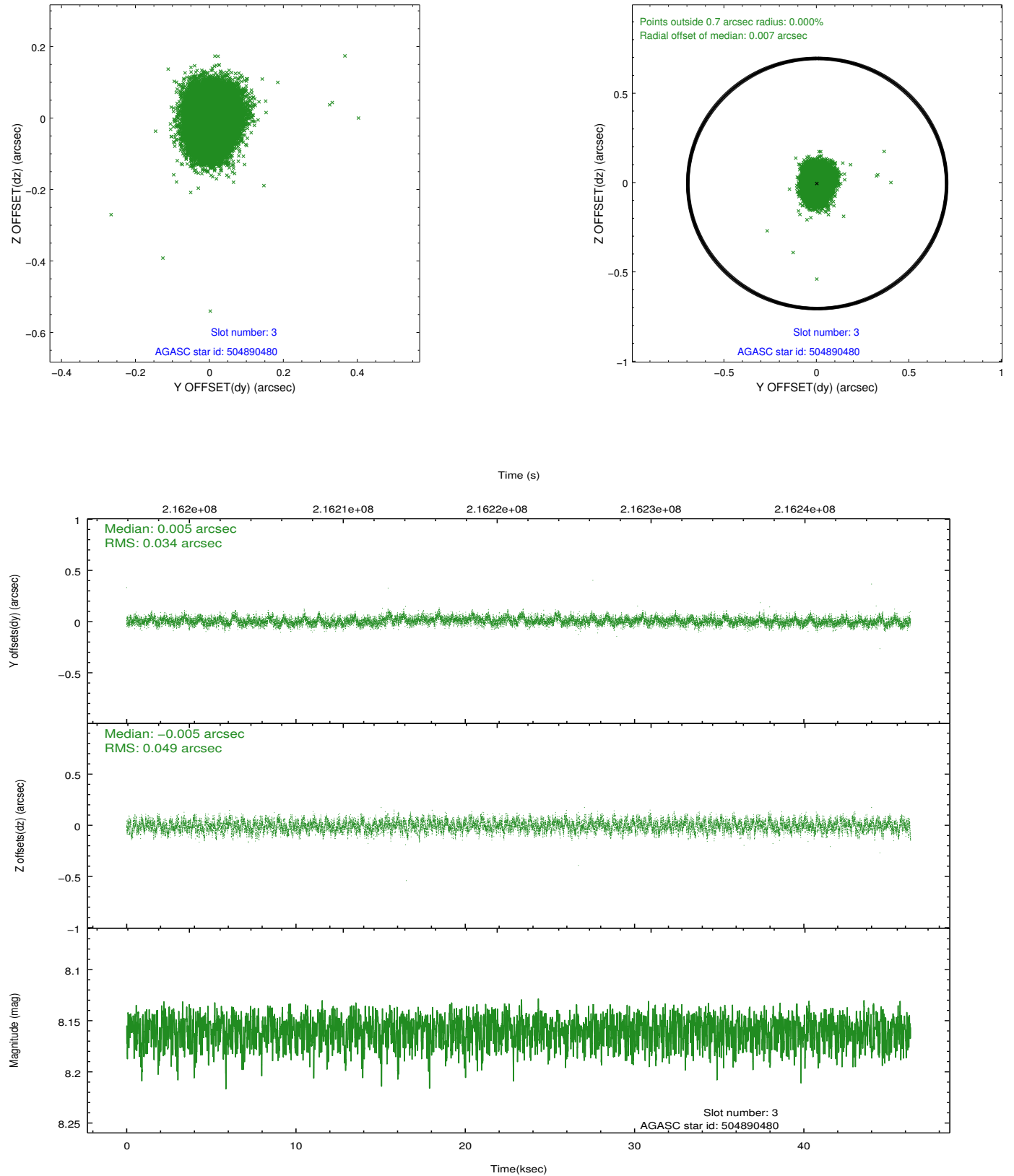
2.3 Aspect

Slot Statistics

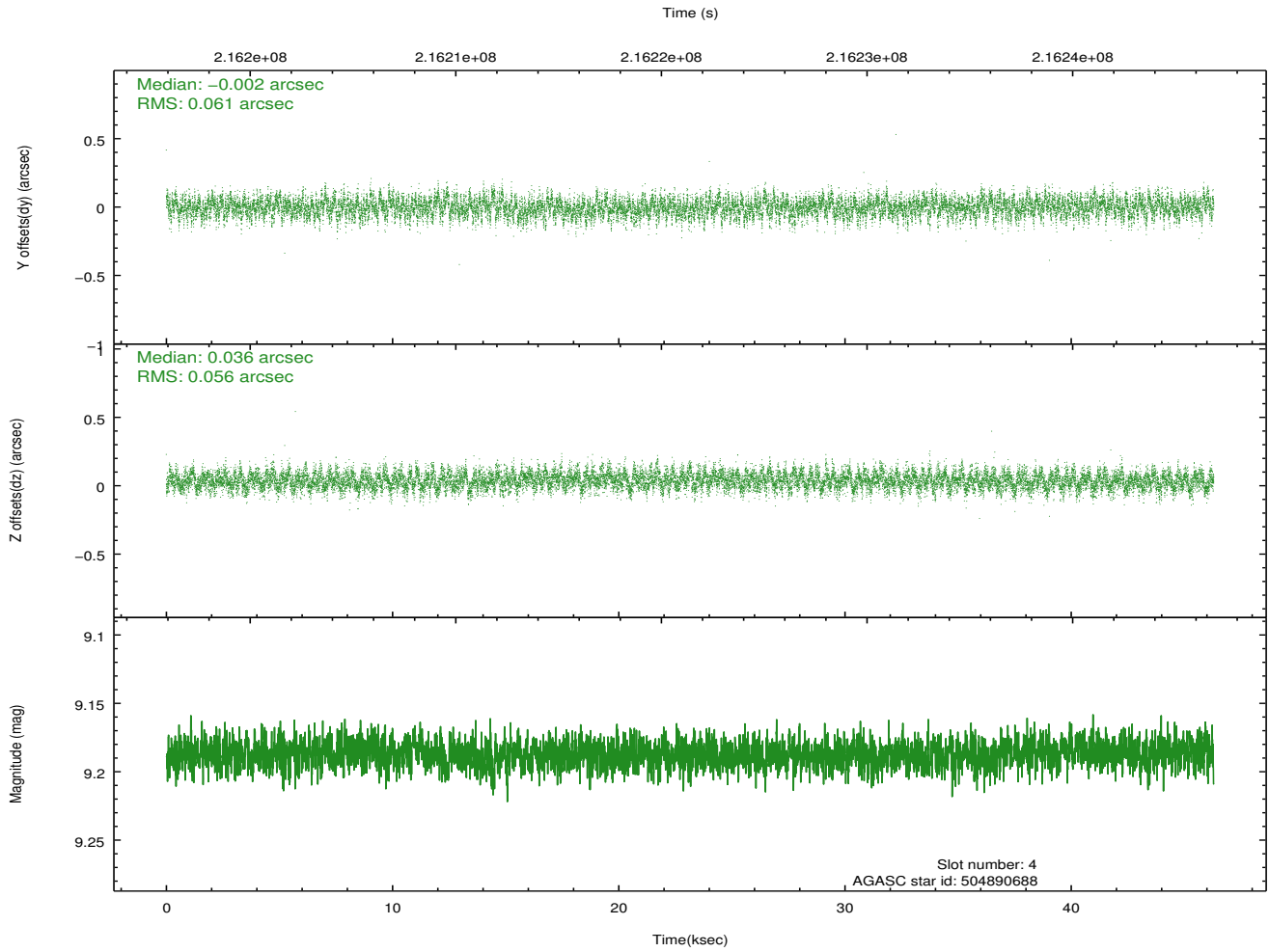
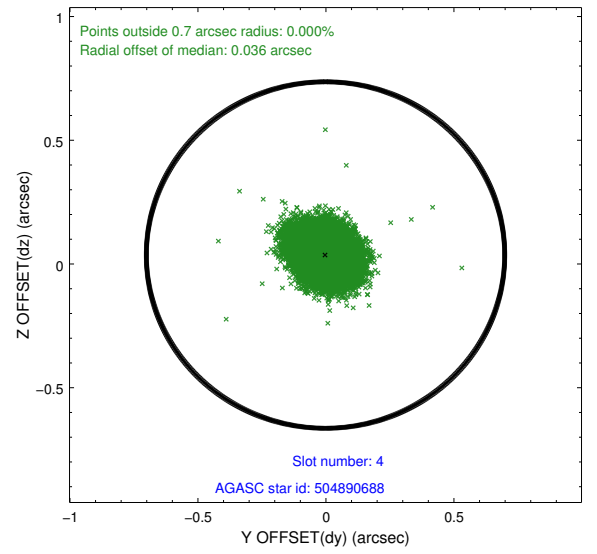
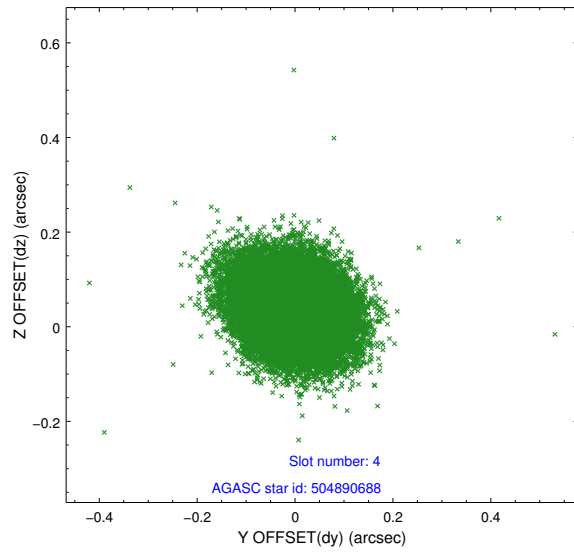
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	11296	-0.070	-0.025	0.013	0.029	0.000000	0.000000	-758.11	-1731.54
1	FID	ACIS-S-4	7.20	11296	0.106	0.041	0.018	0.033	0.000000	0.000000	2155.32	177.06
2	FID	ACIS-S-5	7.23	11293	-0.067	-0.006	0.021	0.043	0.000000	0.000000	-1811.00	170.62
3	GUIDE	504890480	8.16	22588	0.005	-0.005	0.063	0.101	210.132463	53.768436	-1823.36	-1771.28
4	GUIDE	504890688	9.19	22577	-0.002	0.036	0.088	0.141	211.697686	53.837149	1502.34	-2053.45
5	GUIDE	504891480	8.07	22584	-0.063	-0.053	0.071	0.115	210.708012	54.666096	-94.34	1216.18
6	GUIDE	504894408	9.28	22575	-0.031	-0.021	0.092	0.149	211.942794	54.047749	2126.28	-1378.50
7	GUIDE	504894856	8.98	22580	0.092	0.048	0.073	0.118	209.819510	54.132689	-2251.18	-365.34

2.4 Star Slots

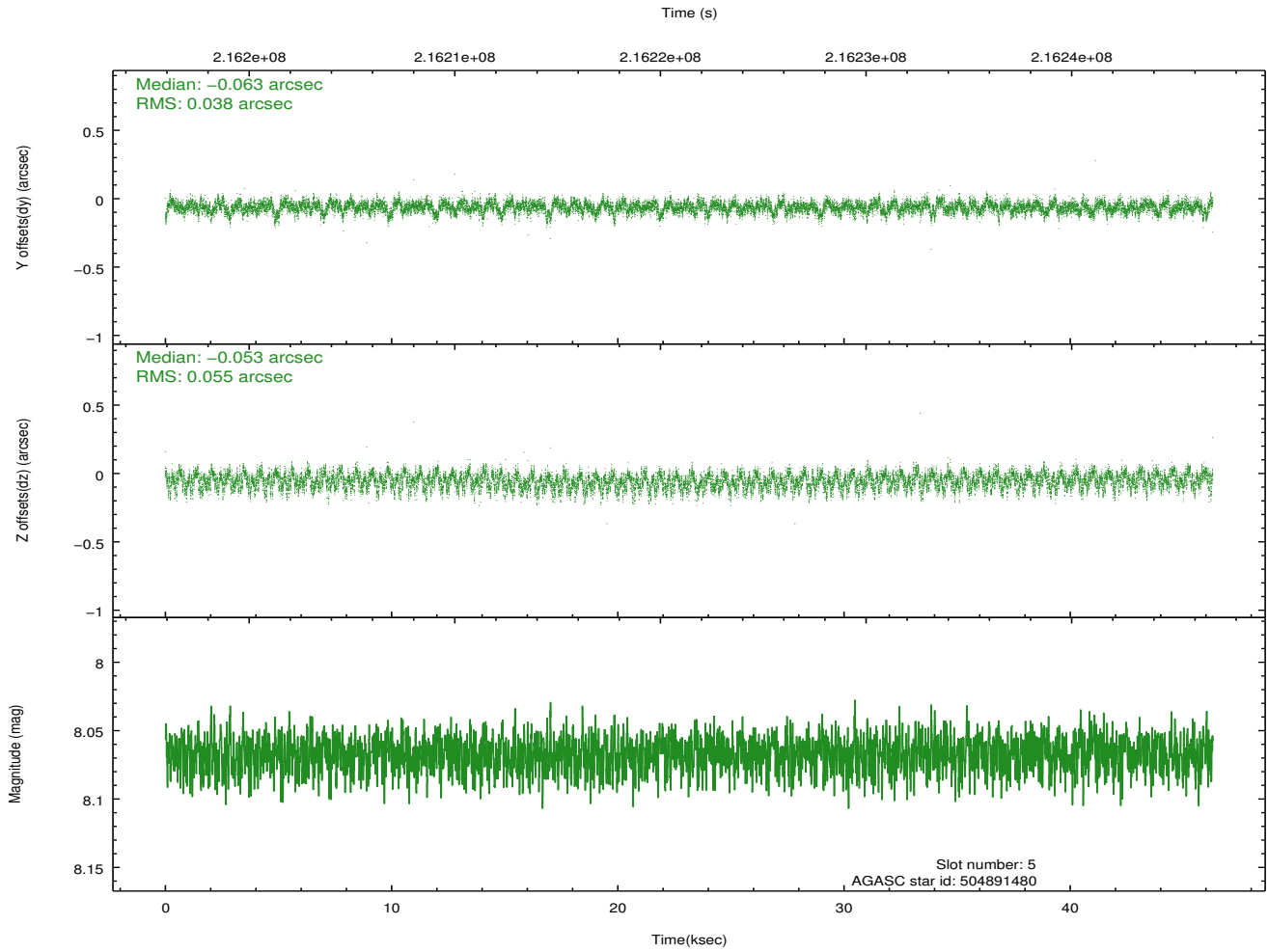
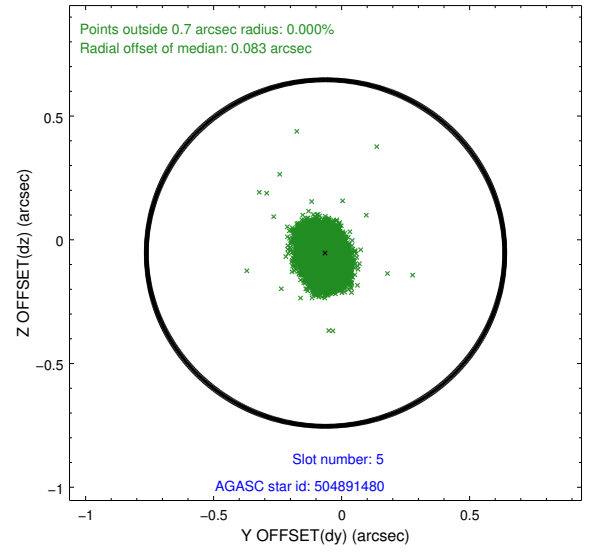
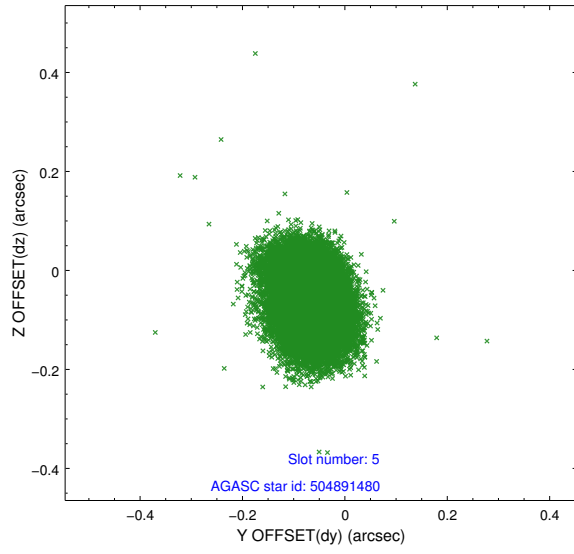
2.4.1 Slot 3



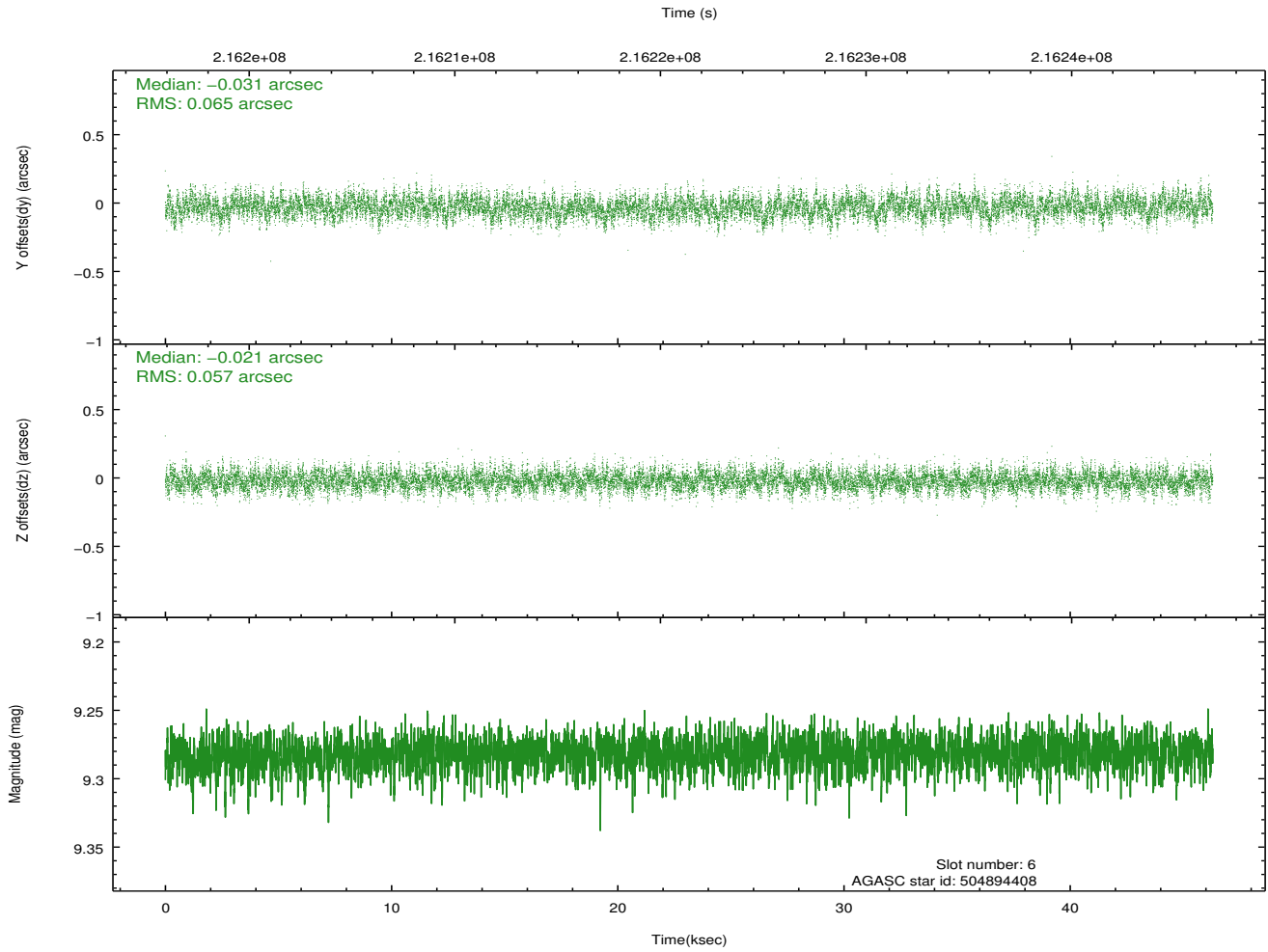
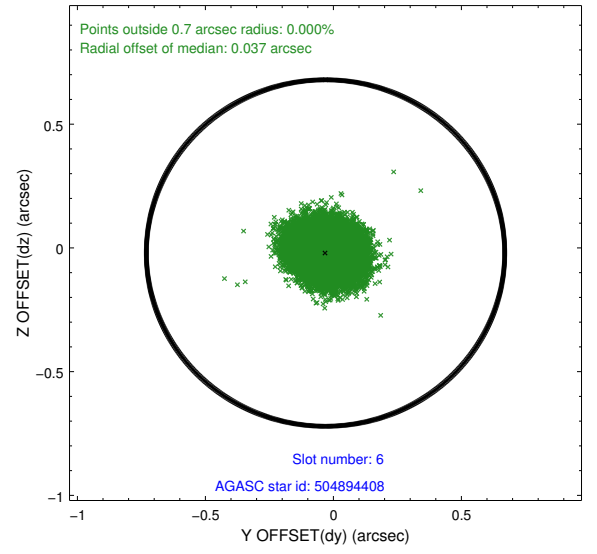
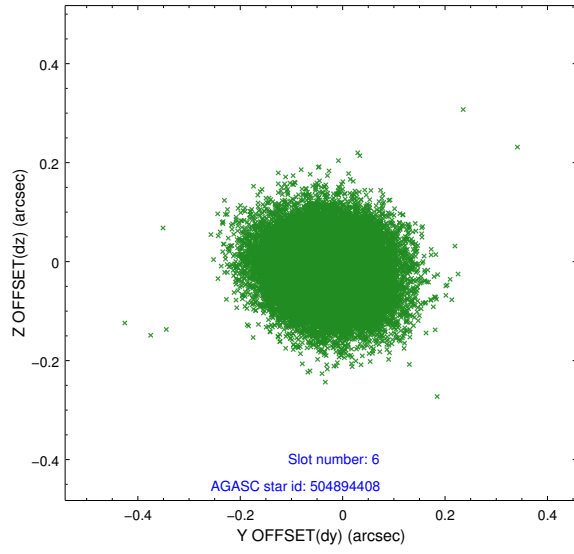
2.4.2 Slot 4



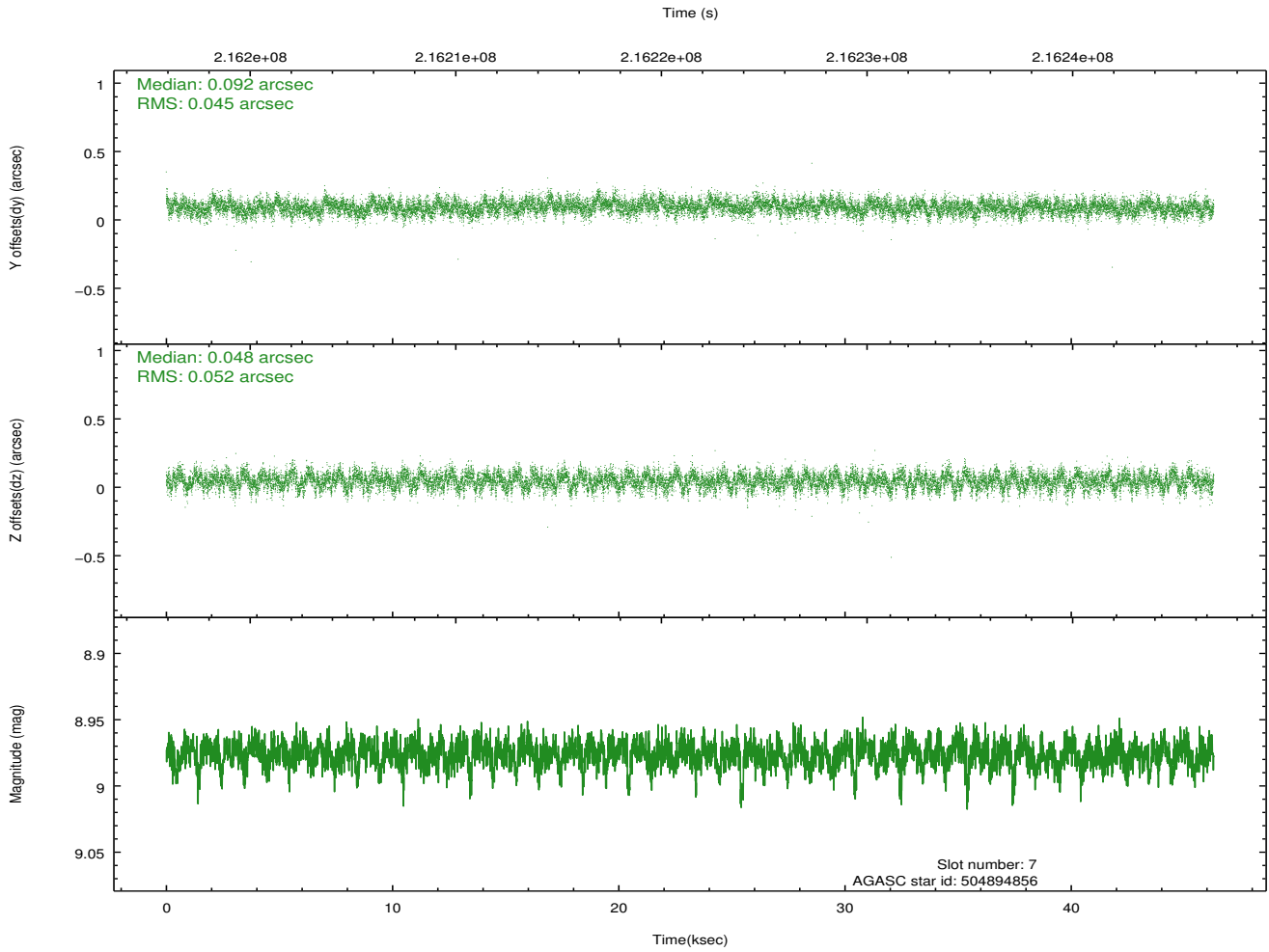
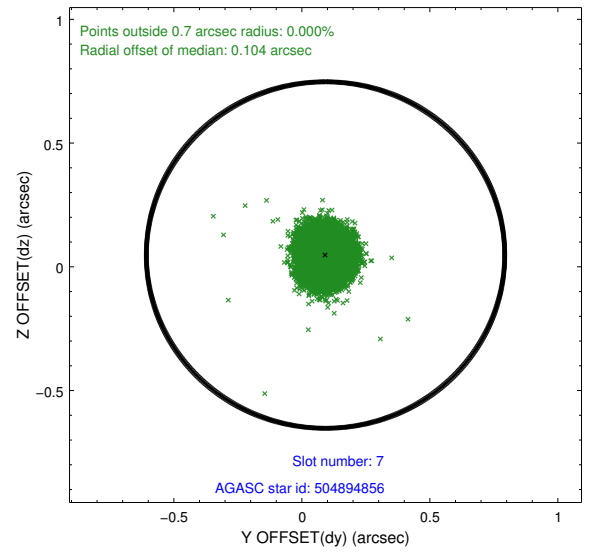
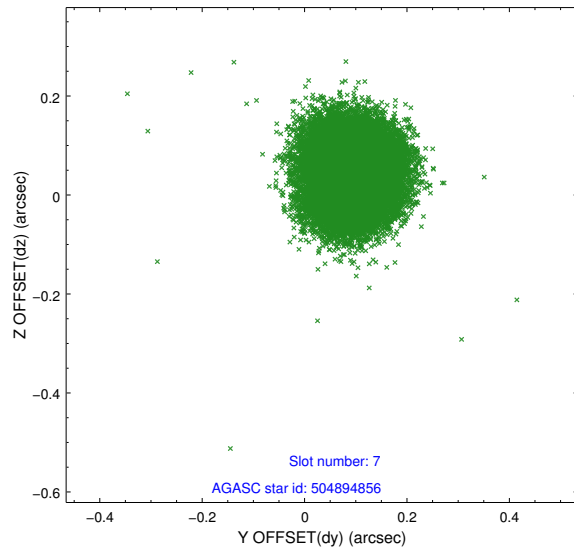
2.4.3 Slot 5



2.4.4 Slot 6

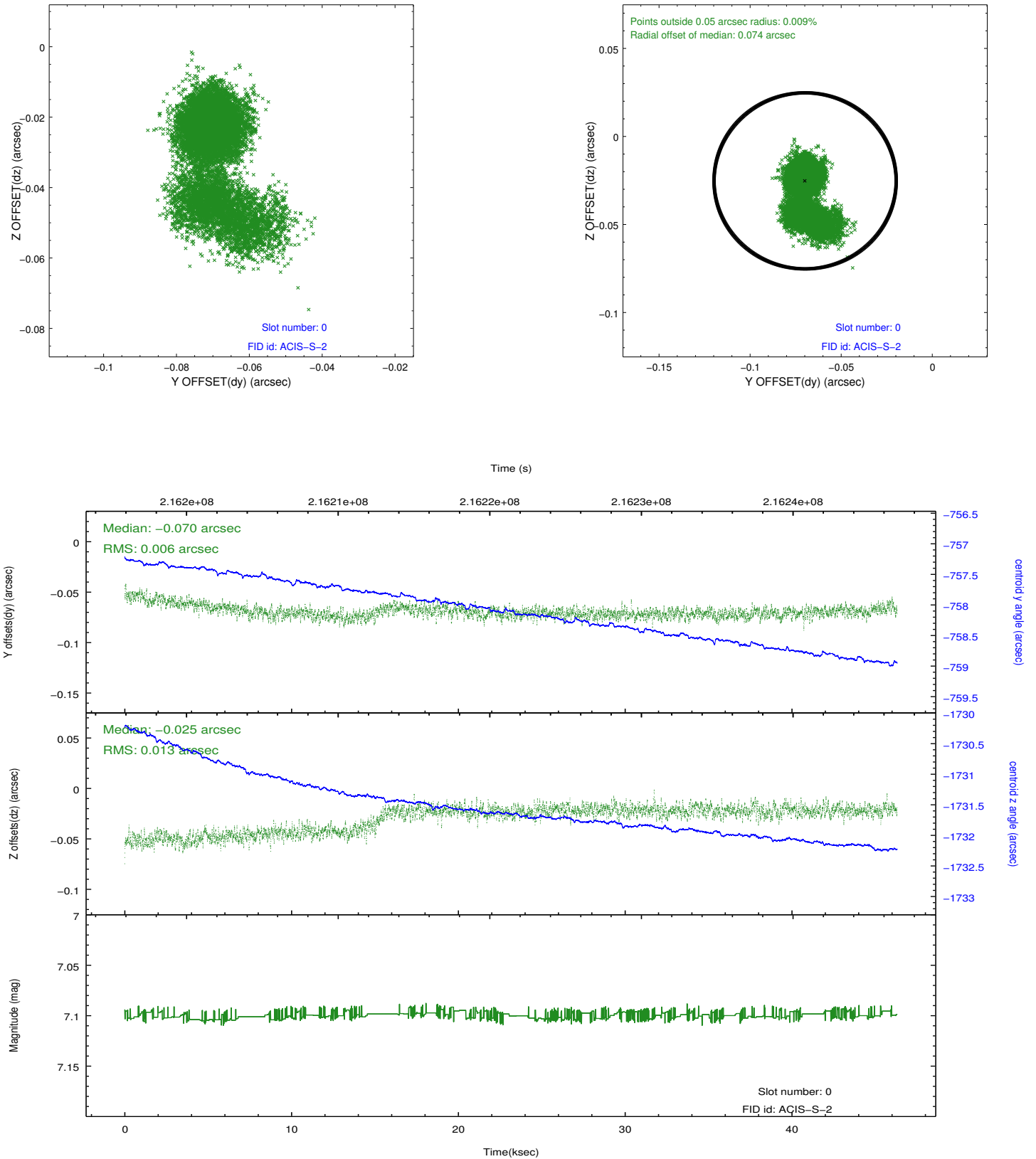


2.4.5 Slot 7

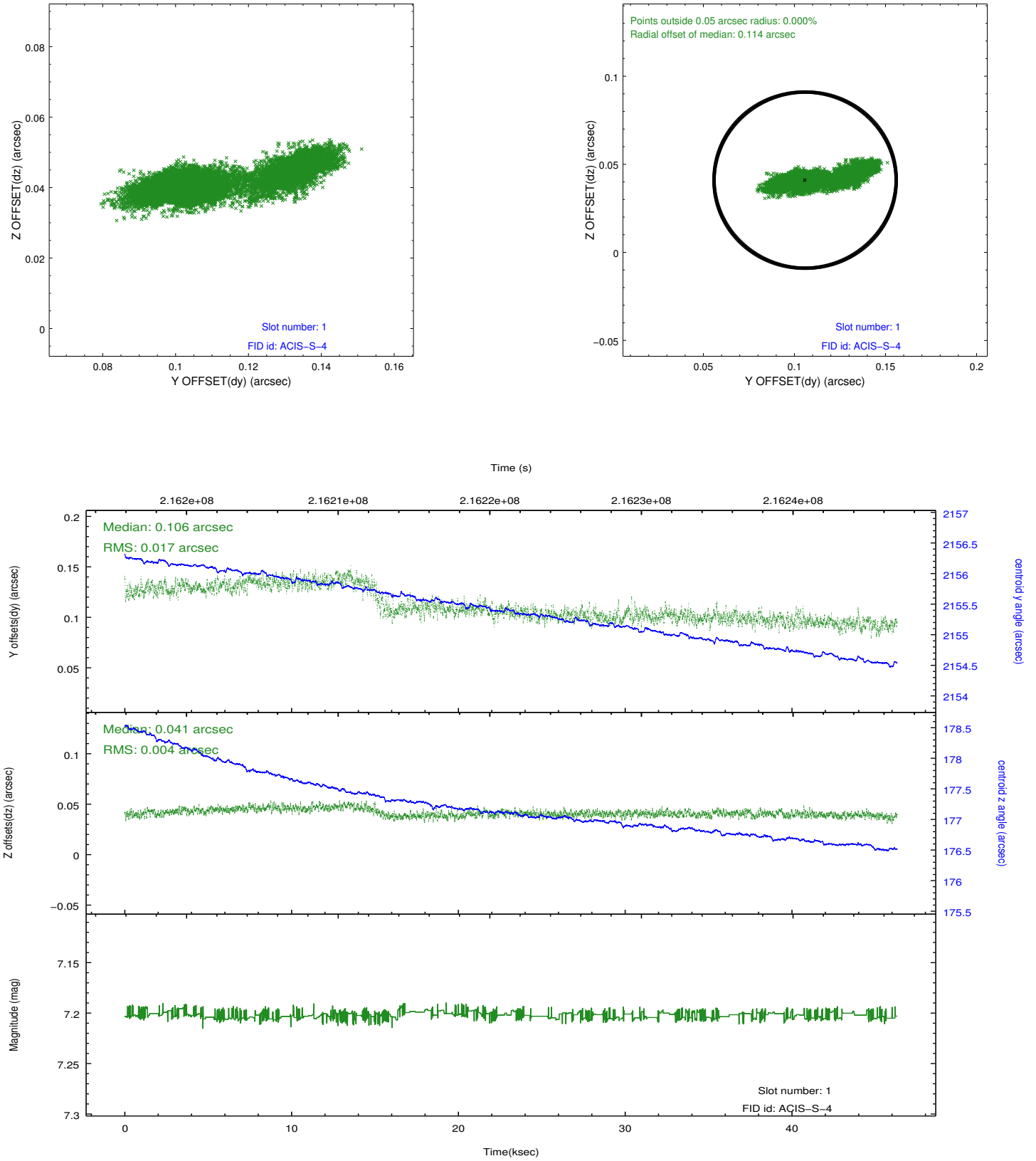


2.5 FID Slots

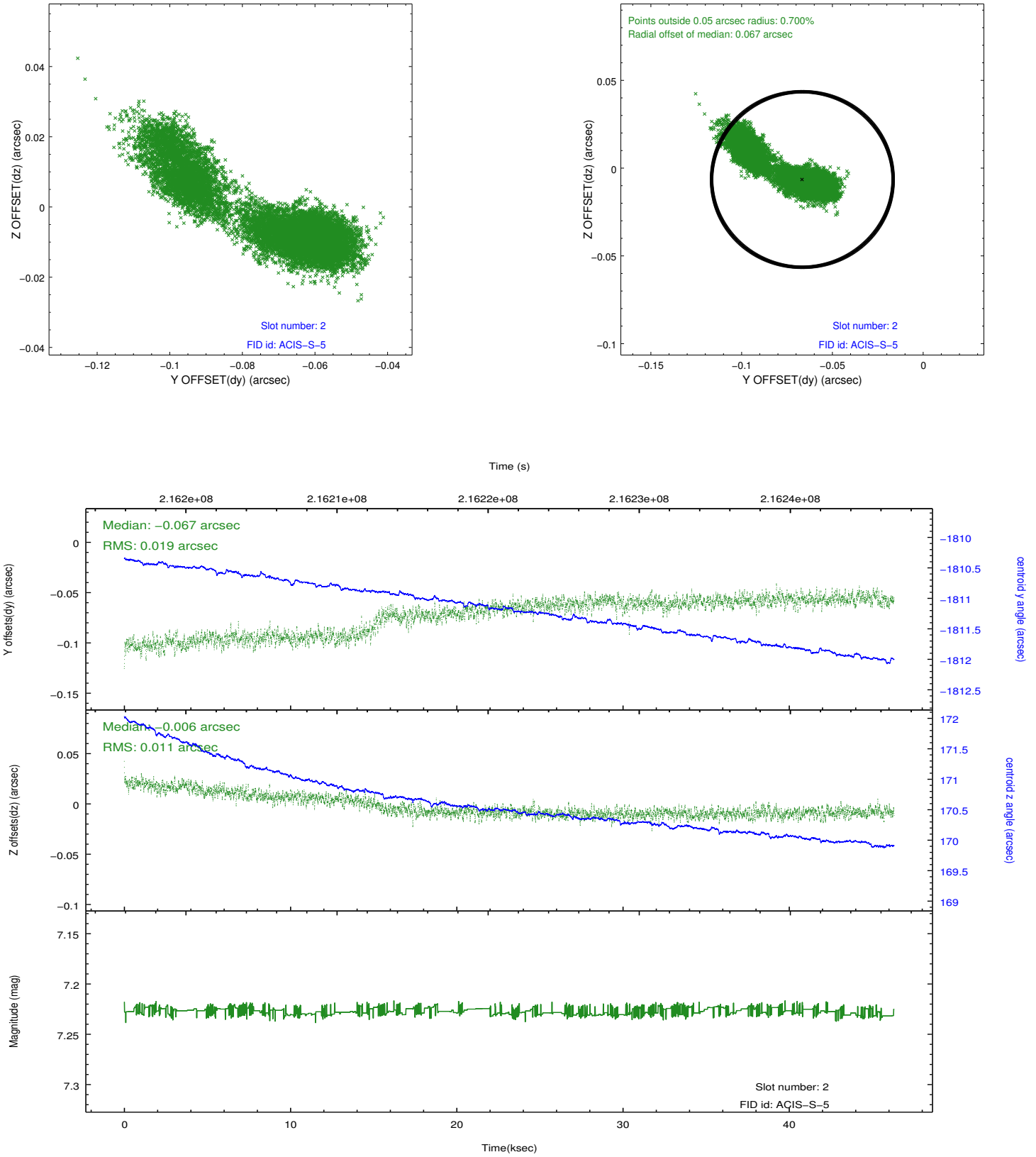
2.5.1 Slot 0



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)	2013.02.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.656

A.2 Comments

This observation was interrupted by safing of the science instruments onboard Chandra due to high solar radiation environment. The observation was interrupted at 2004:312:19:54:46. Due to a high radiation environment, the instruments were safed and the observation terminated early. This observation has been reprocessed so that the aspect solution correctly handles the instrument safing and maneuver activities at the end of the observation.