

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8552 - L2 Version 5
Chandra X-Ray Center

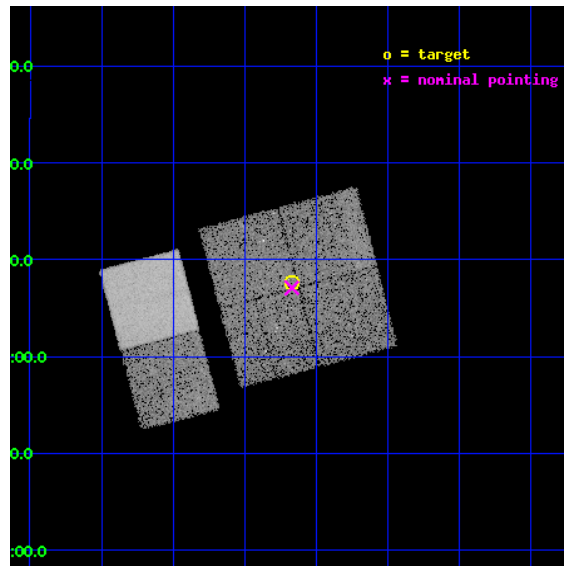
L2 Processing Date : Apr 23 2012

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1 Front

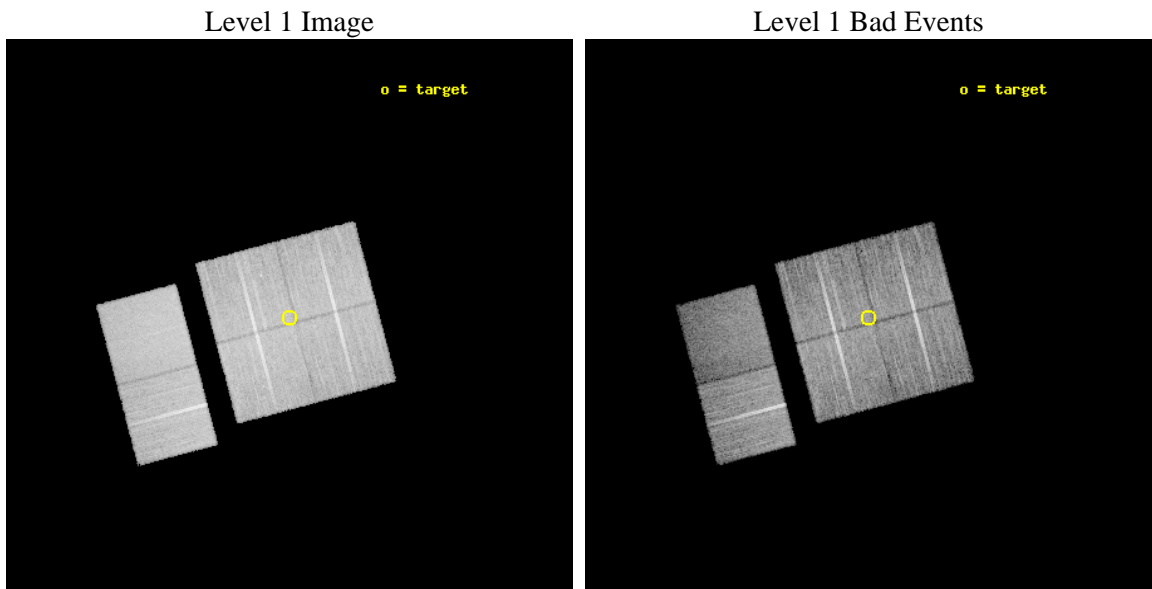
seq_num	900549	Sequence number
obs_id	8552	Observation id
title	THE CHANDRA-COSMOS SURVEY	Proposal title
observer	Dr. Martin Elvis	Principal investigator
object	C-COSMOS3-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.417292	Observer's specified target RA [deg]
dec_targ	2.126269	Observer's specified target Dec [deg]
ra_nom	150.41766478836	Nominal RA [deg]
dec_nom	2.1182259251683	Nominal Dec [deg]
roll_nom	255.20870693871	Nominal Roll [deg]
revision	5	Processing version of data
ontime	15042.044204175	Sum of GTIs [s]
livetime	14851.572783231	Livetime [s]
ontime0	15041.921084166	Sum of GTIs [s]
ontime1	15041.962124169	Sum of GTIs [s]
ontime2	15042.003164172	Sum of GTIs [s]
ontime3	15042.044204175	Sum of GTIs [s]
ontime6	15042.126284182	Sum of GTIs [s]
ontime7	15042.085244179	Sum of GTIs [s]
l2events	107426	Number of level 2 events



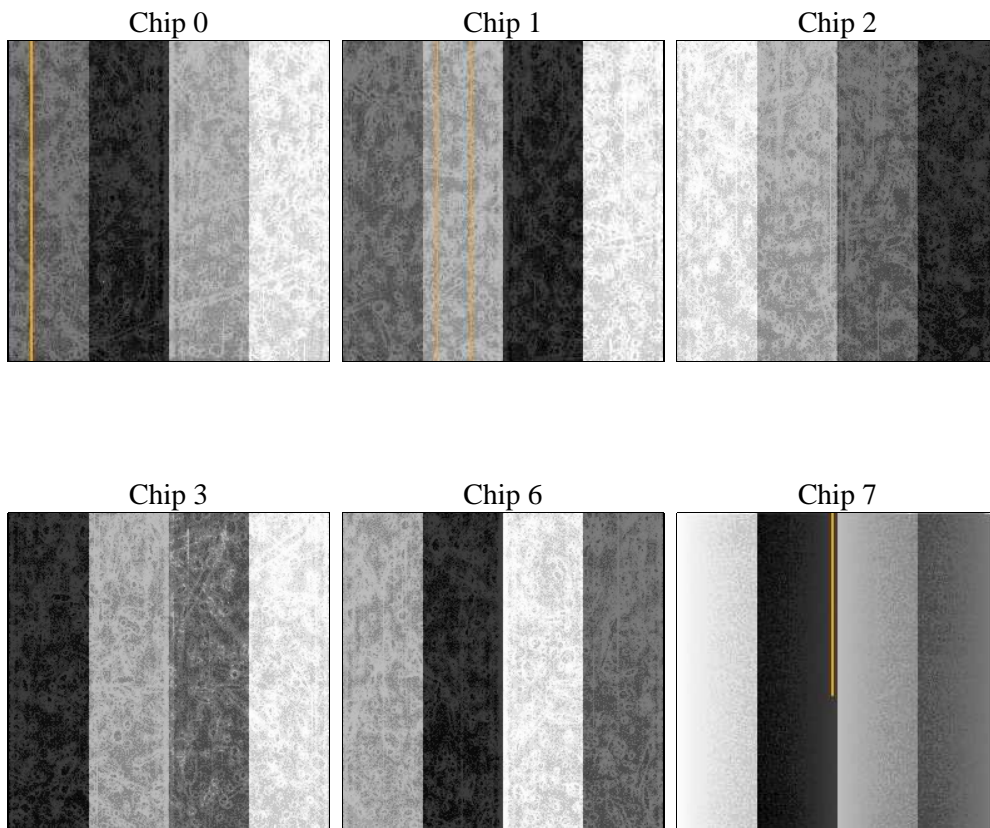
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	15042.044204175	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	15041.921084166	Sum of GTIs [s]
date	2012-04-23T20:43:14	Date and time of file creation	ontime1	15041.962124169	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	15042.003164172	Sum of GTIs [s]
			ontime3	15042.044204175	Sum of GTIs [s]
			ontime6	15042.126284182	Sum of GTIs [s]
			ontime7	15042.085244179	Sum of GTIs [s]
			l1events	722927	Number of level 1 events

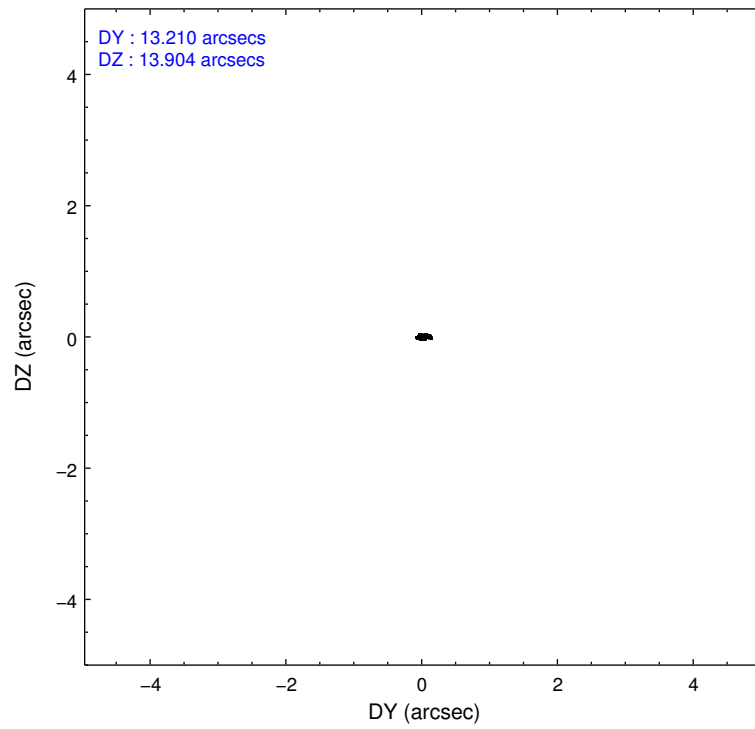
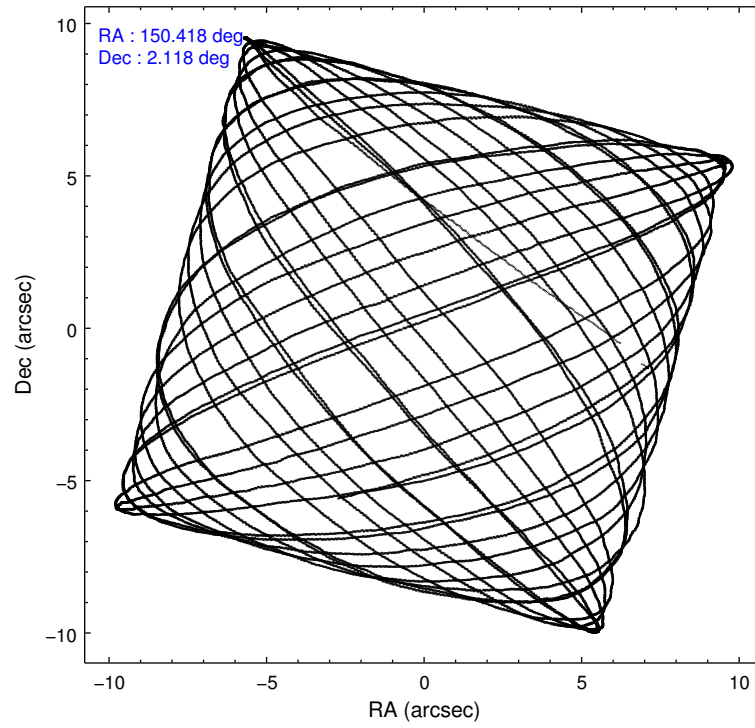
2.1.4 Events

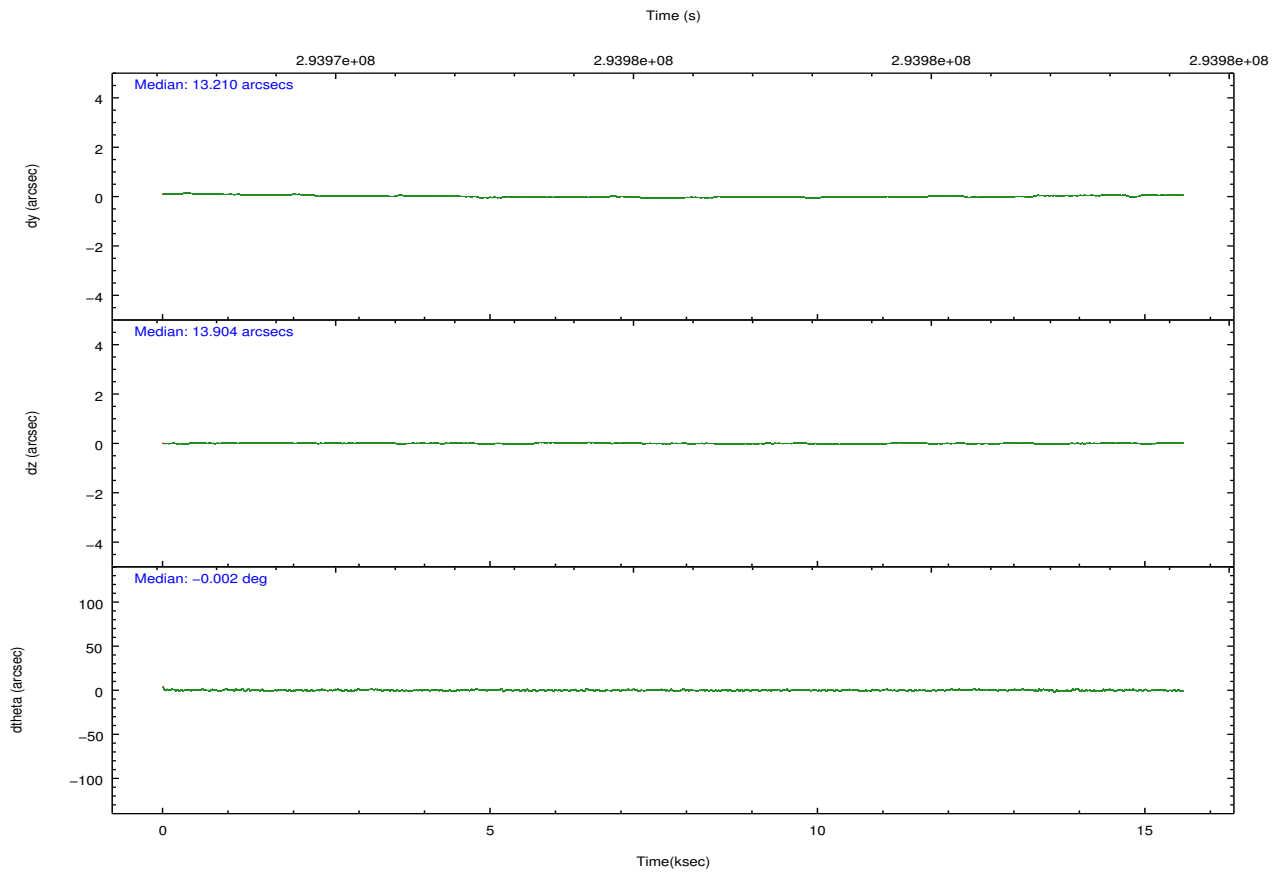
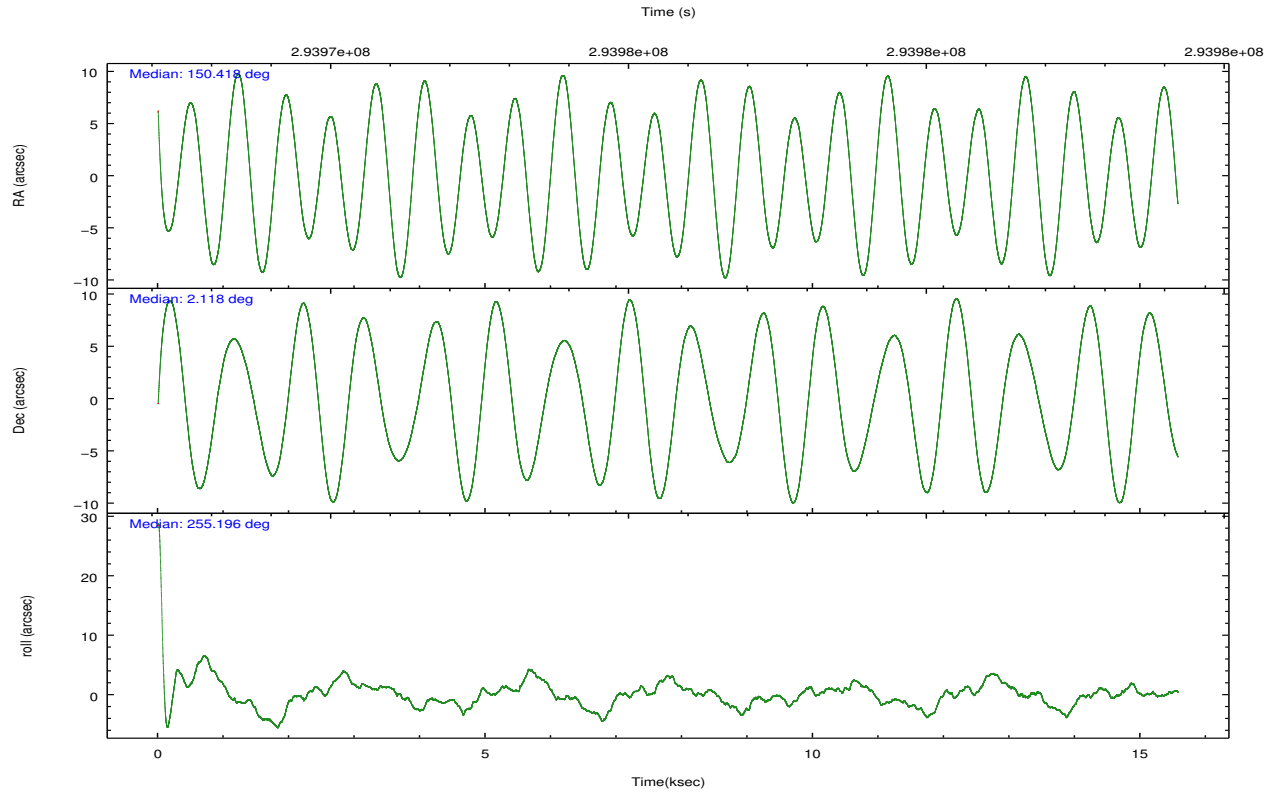
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	107870	114015	126589	119056	123681	131716	grade 0 events	3992	4673	4329	4127	4144	5572
rejected events	96474	101099	114965	107511	111439	72074		3%	4%	3%	3%	3%	4%
rejected %	89%	88%	90%	90%	90%	54%	grade 1 events	61	48	59	61	59	174
								0%	0%	0%	0%	0%	0%
							grade 2 events	2833	2926	2716	2504	2685	11979
								2%	2%	2%	2%	2%	9%
							grade 3 events	1253	1420	1281	1295	1416	5500
								1%	1%	1%	1%	1%	4%
							grade 4 events	1202	1346	1208	1313	1308	5491
								1%	1%	0%	1%	1%	4%
							grade 5 events	3954	4466	3733	4786	4746	13821
								3%	3%	2%	4%	3%	10%
							grade 6 events	2125	2562	2095	2310	2695	31125
								1%	2%	1%	1%	2%	23%
							grade 7 events	92450	96574	111168	102660	106628	58054
								85%	84%	87%	86%	86%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	150.410320	150.4176647883596	CCD I2 on	Y	Y
[deg] Pointing Dec	2.144694	2.118225925168308	CCD I3 on	Y	Y
[deg] Pointing Roll	255.000261	255.208706938713	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	293968454.184000	293967255.71648	CCD S5 on	N	N
Observation start date	2007-04-26T09:53:09	2007-04-26T09:34:15	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	293983454.184000	293985170.66734	On-chip summing requested	N	N
Observation end date	2007-04-26T14:03:09	2007-04-26T14:32:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



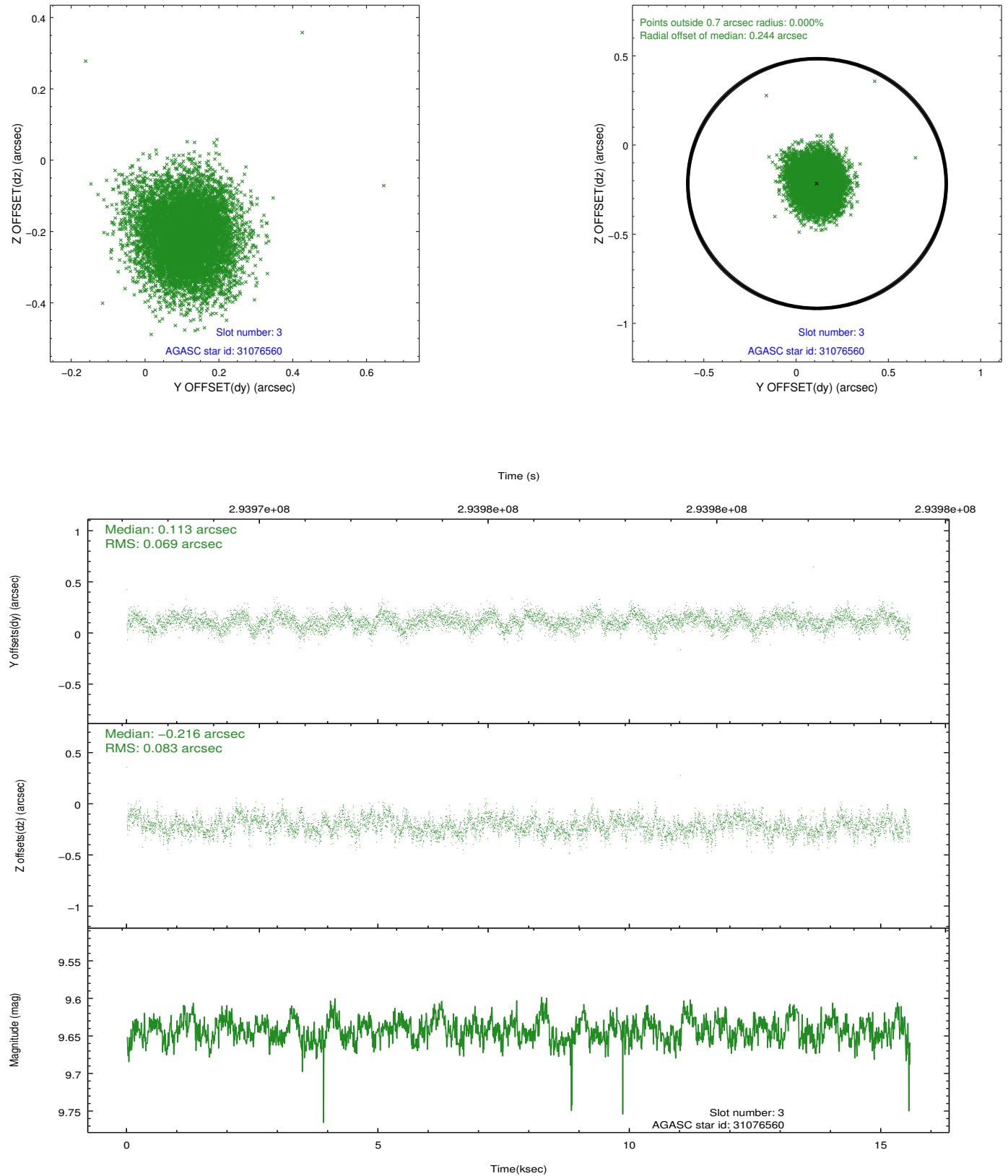


Slot Statistics

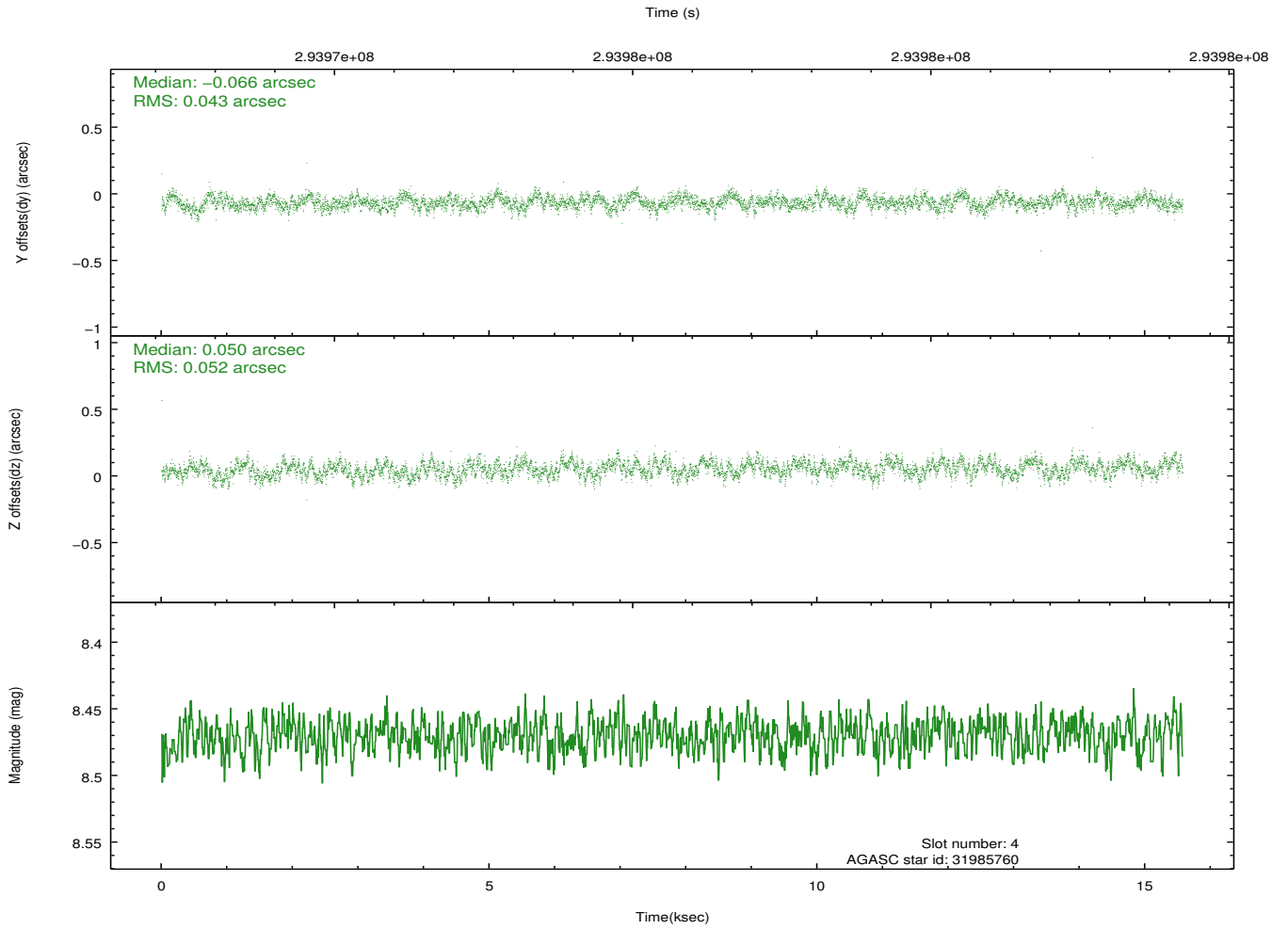
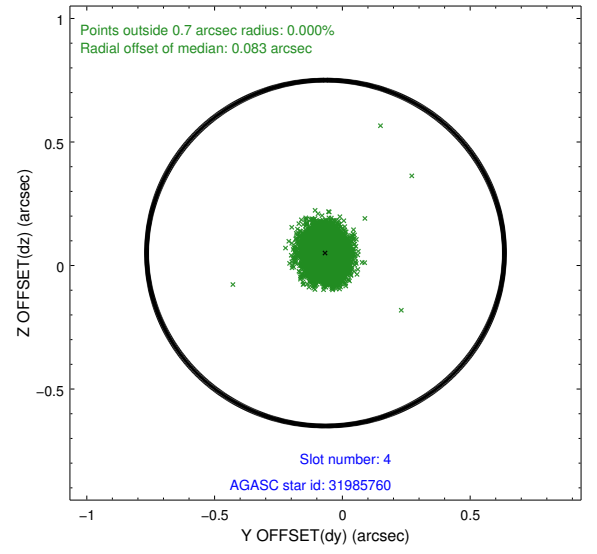
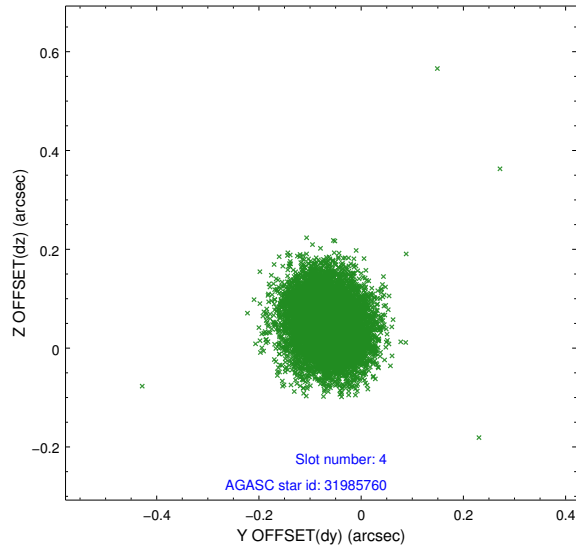
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	3799	-0.020	0.014	0.012	0.021	0.000000	0.000000	926.27	-837.46
1	FID	ACIS-I-4	7.17	3799	0.221	0.023	0.013	0.021	0.000000	0.000000	2146.71	1062.20
2	FID	ACIS-I-5	7.22	3799	-0.301	0.033	0.013	0.025	0.000000	0.000000	-1821.64	1060.41
3	GUIDE	31076560	9.64	7594	0.113	-0.216	0.115	0.184	149.884782	2.009277	961.14	-1699.83
4	GUIDE	31985760	8.47	7592	-0.066	0.050	0.072	0.114	150.924581	2.094394	-303.93	1833.75
5	GUIDE	31986152	9.00	7591	0.137	0.223	0.112	0.176	150.840314	2.057585	-97.36	1575.76
6	GUIDE	32374896	9.22	7571	-0.150	-0.098	0.105	0.166	150.682269	2.512794	-1532.96	601.86
7	GUIDE	32375384	10.00	7586	-0.032	0.034	0.143	0.256	150.238117	2.622063	-1499.30	-1043.28

2.4 Star Slots

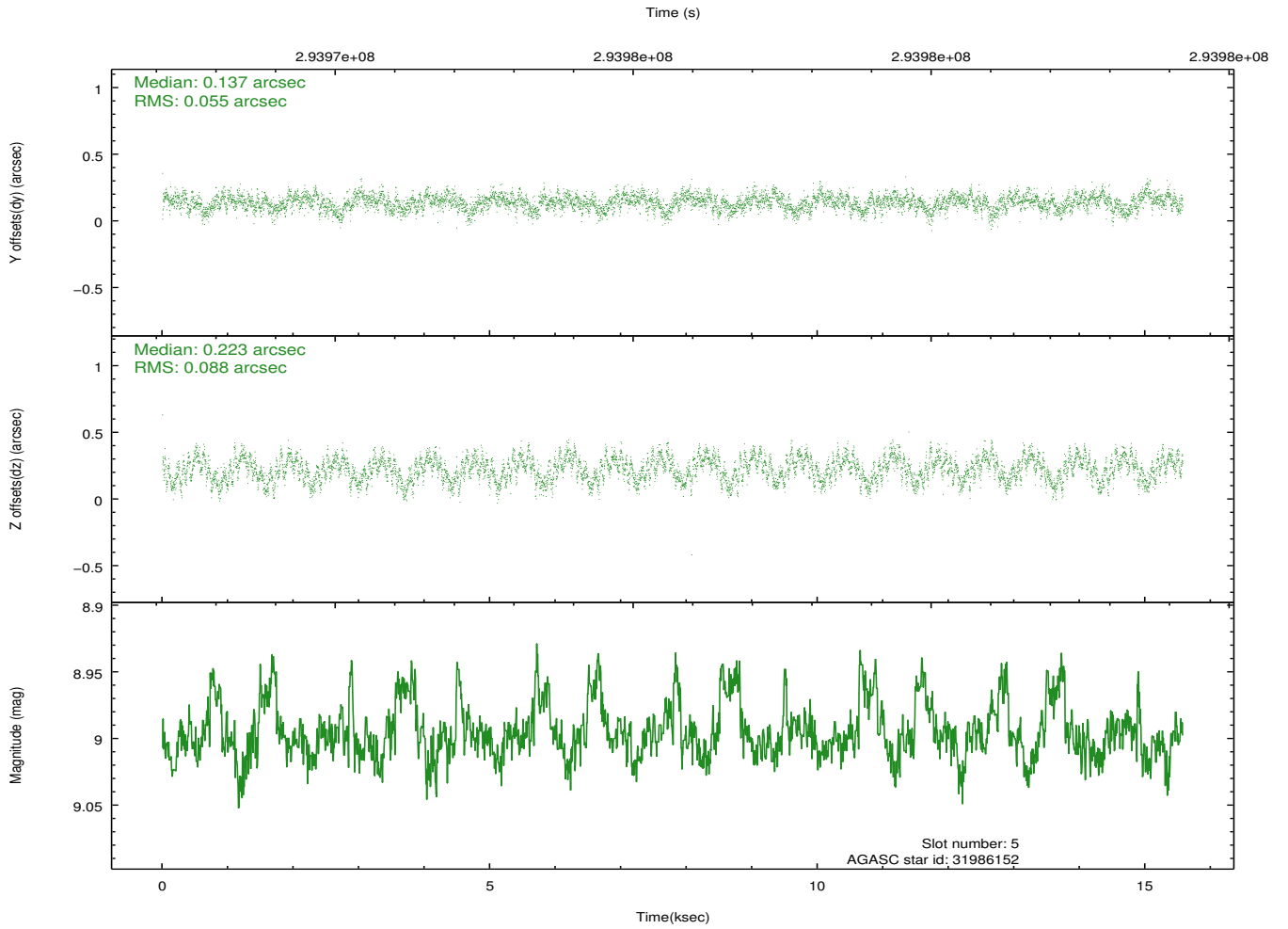
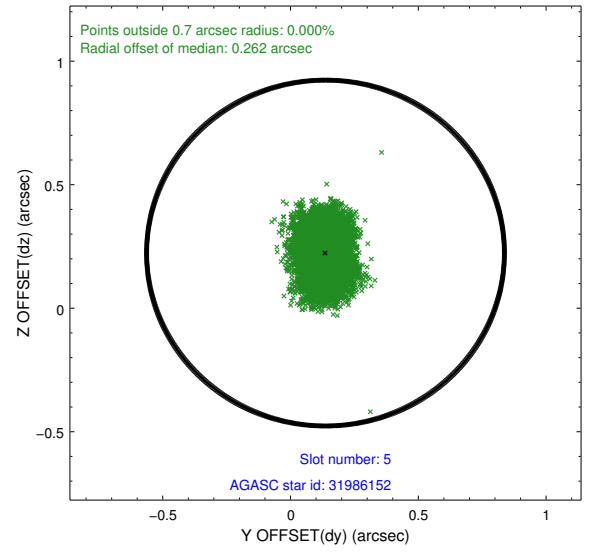
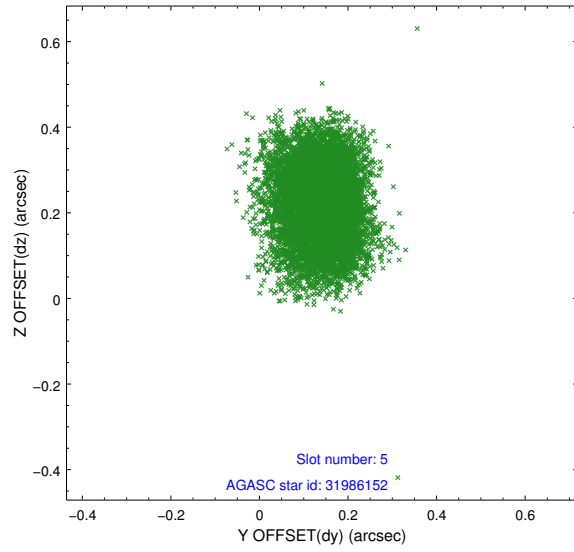
2.4.1 Slot 3



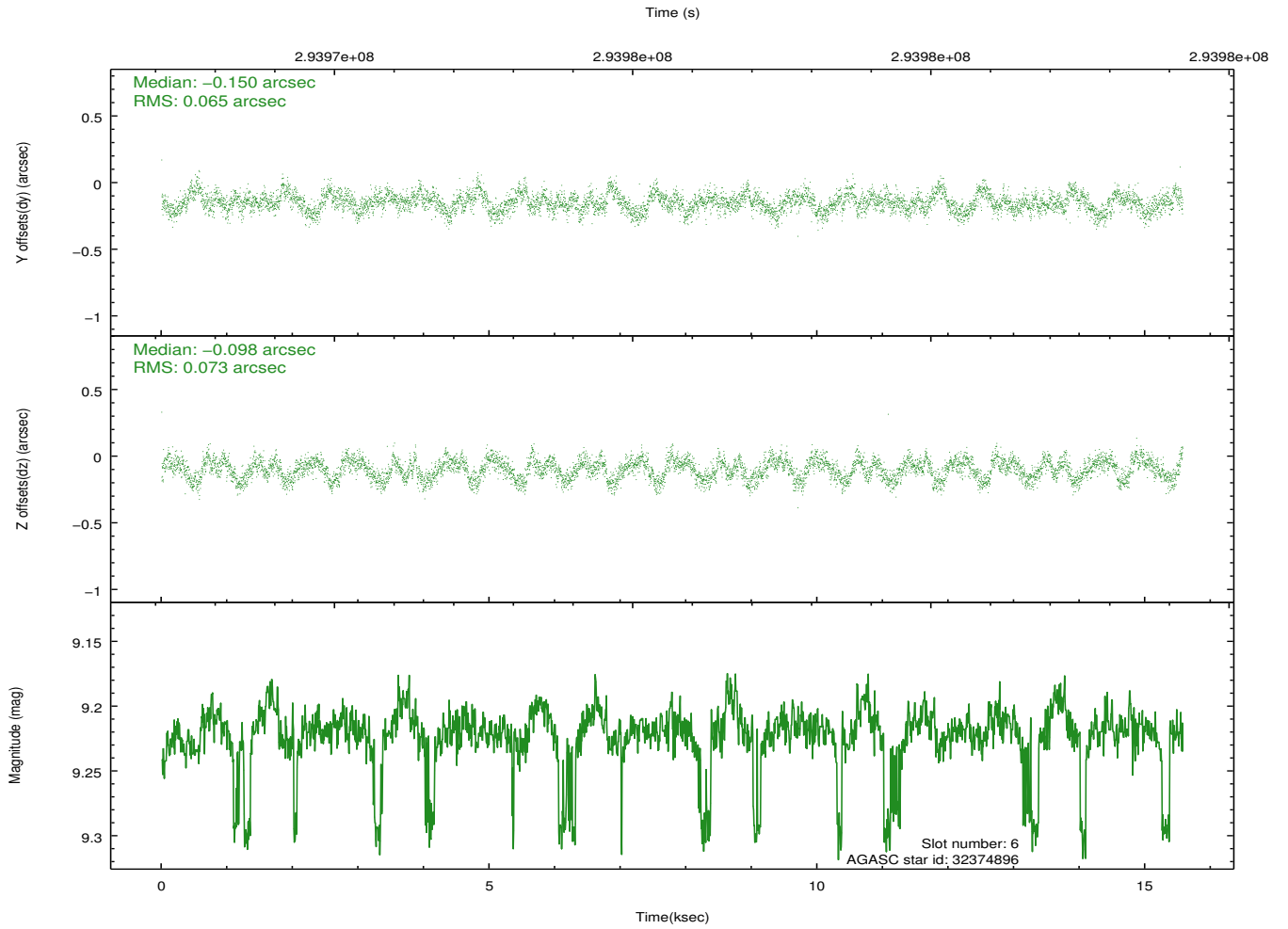
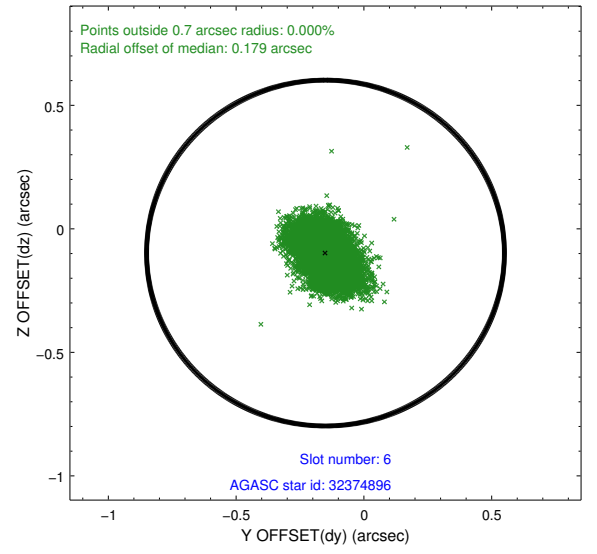
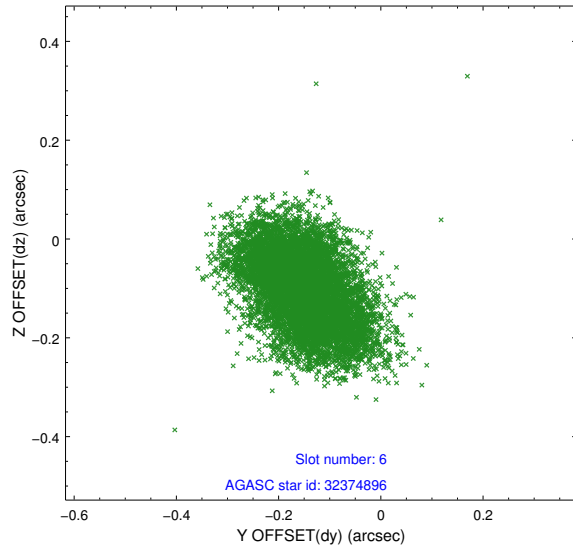
2.4.2 Slot 4



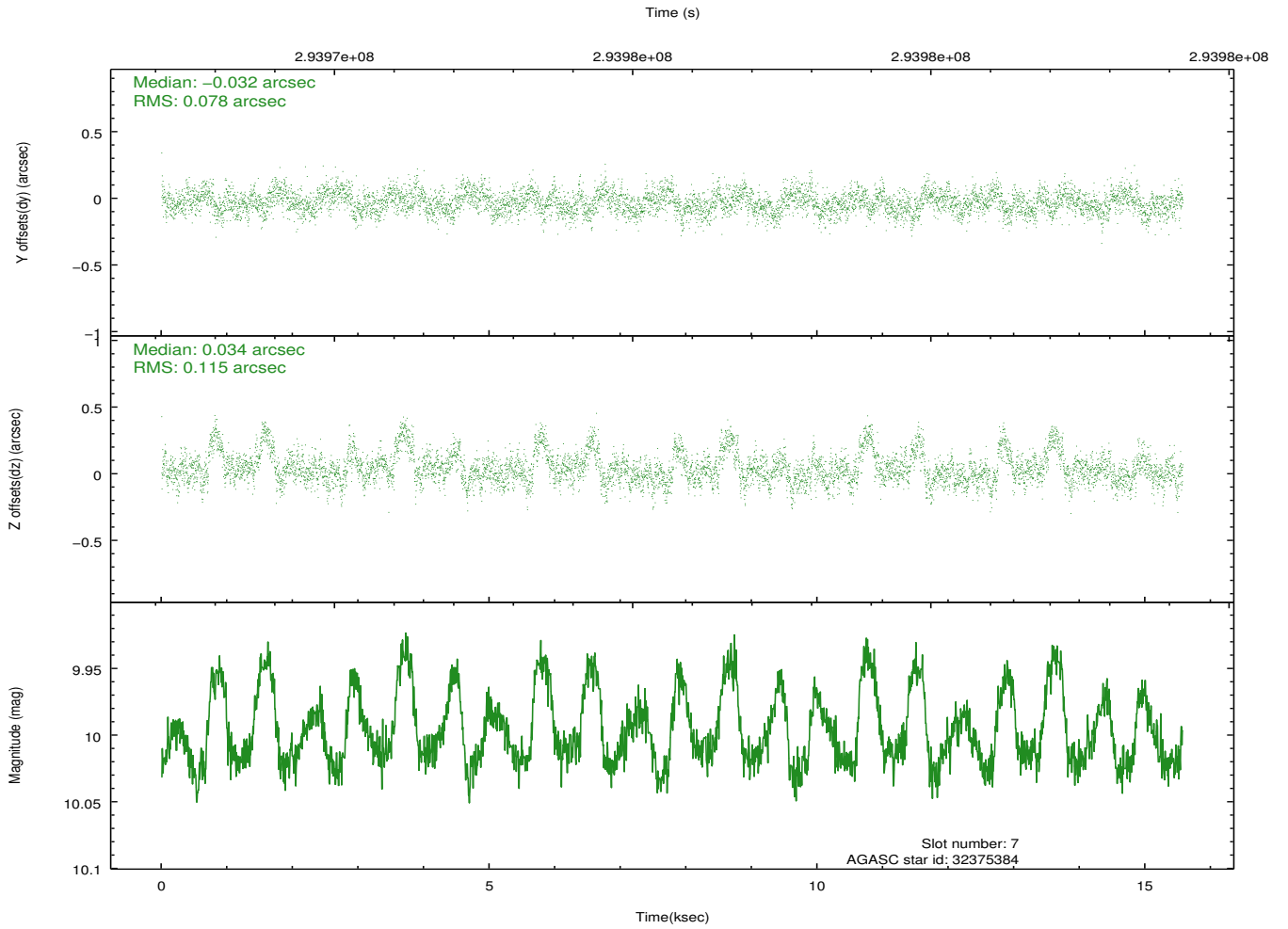
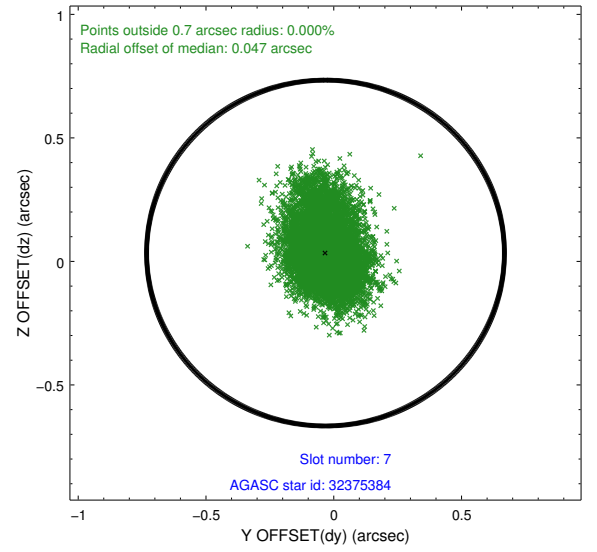
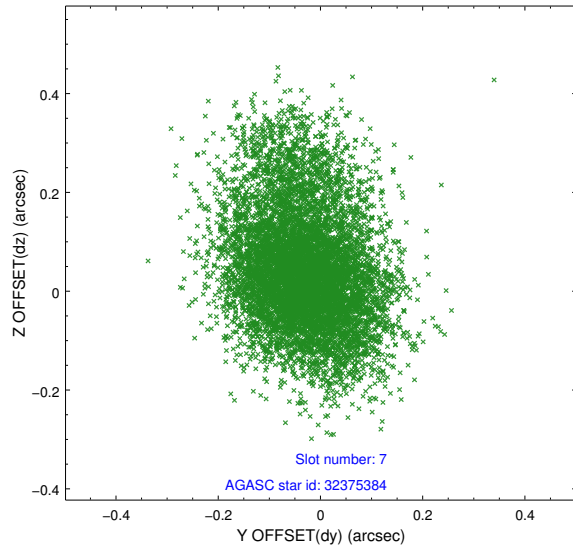
2.4.3 Slot 5



2.4.4 Slot 6

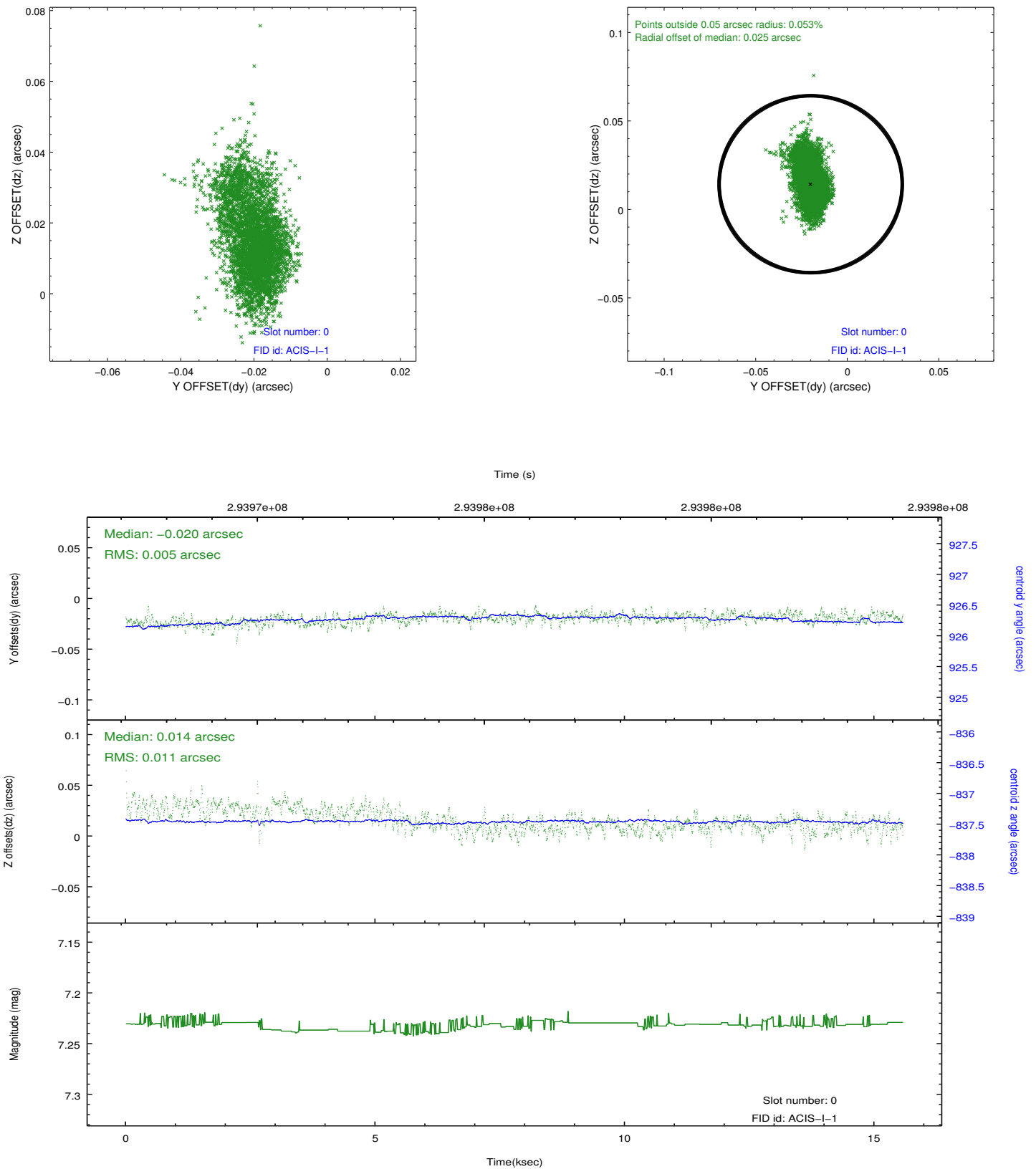


2.4.5 Slot 7

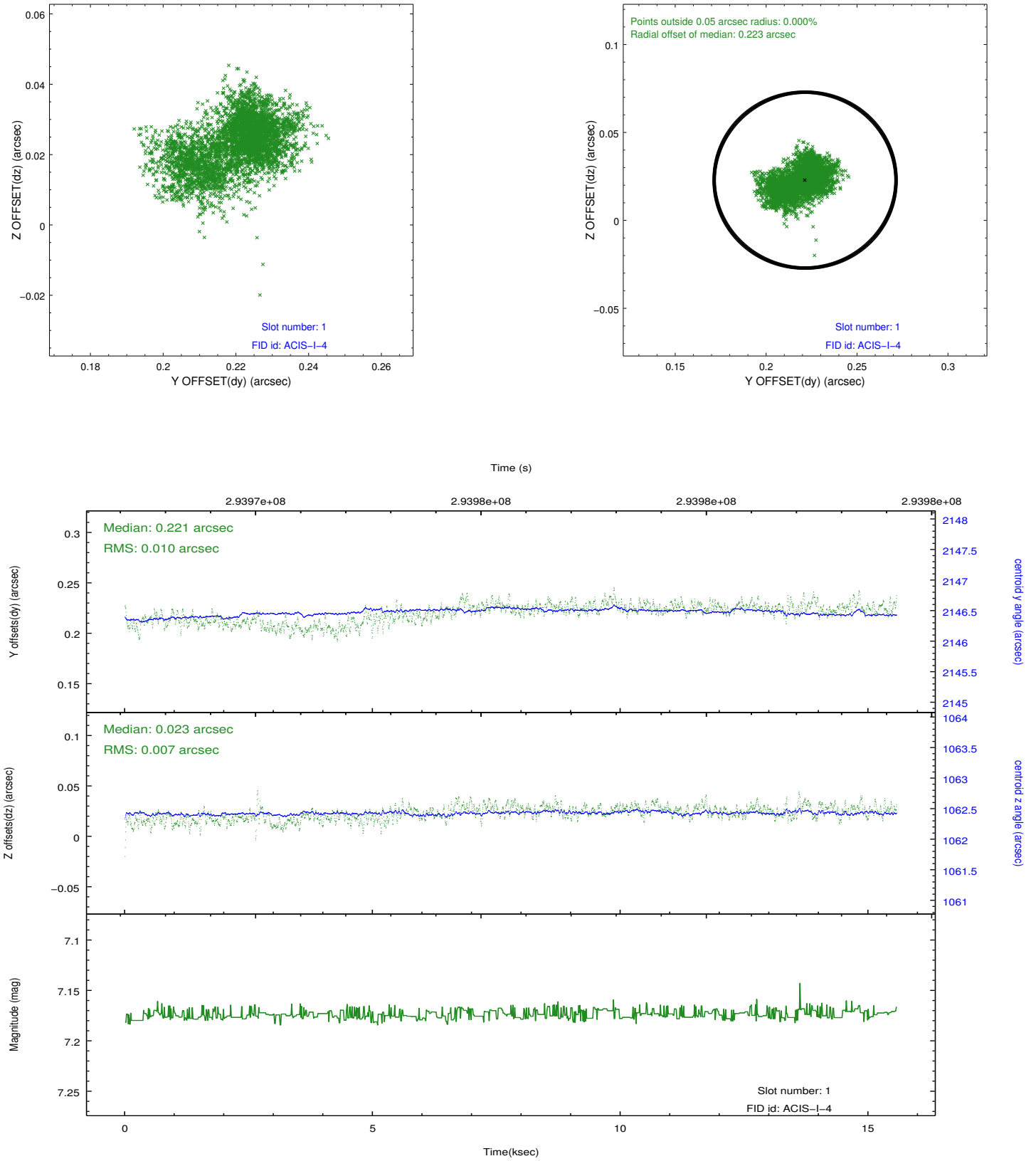


2.5 FID Slots

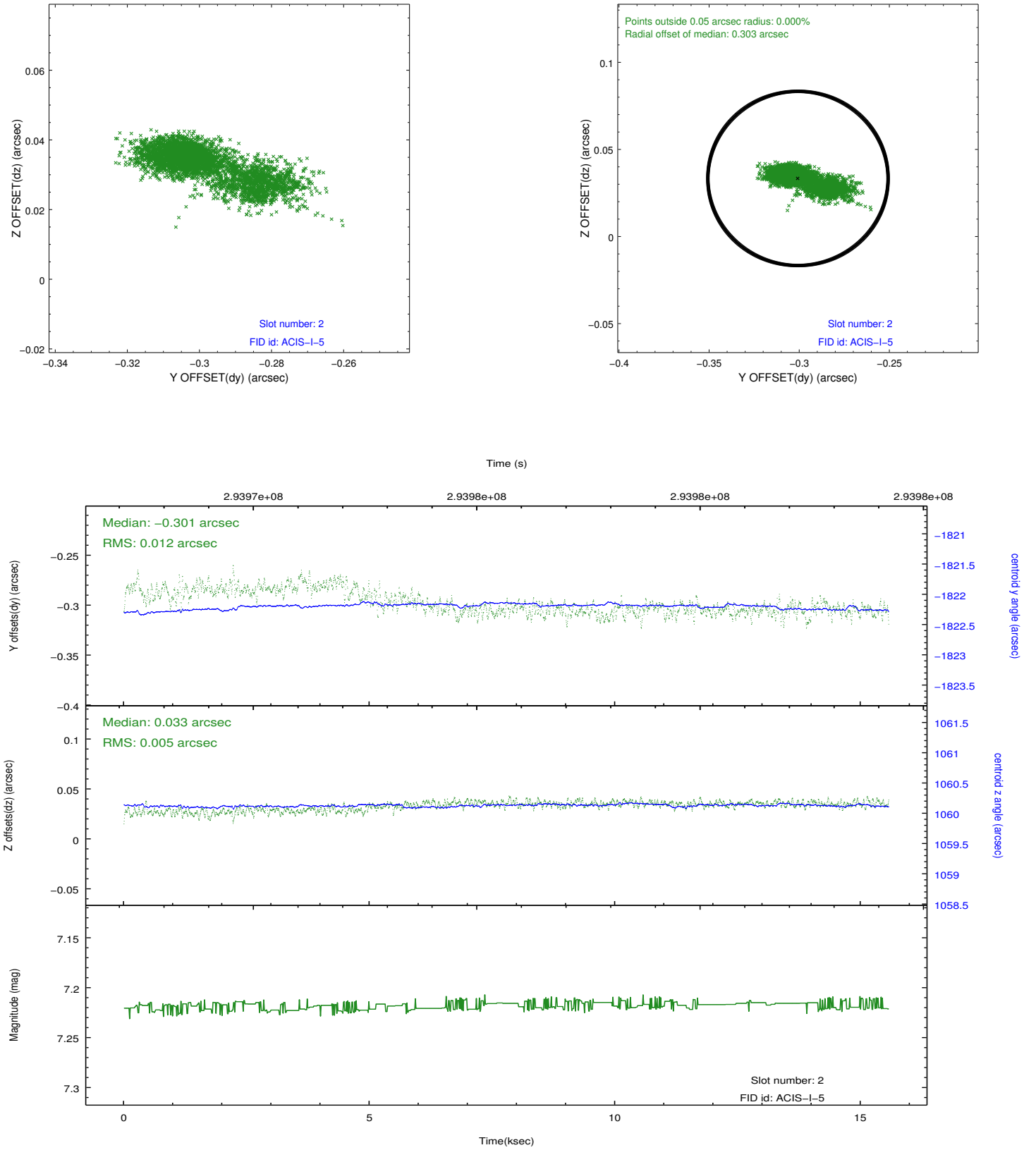
2.5.1 Slot 0



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)	2012.04.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.0431999

A.2 Comments

Preferred roll constraint met.

=====

A spatial region of the original bias map for CCD = 1 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 1 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(150.29443,2.20394),(150.28941,2.20525),(150.27758,2.16043),(150.28322,2.16149)