

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12486 - L2 Version 2
Chandra X-Ray Center

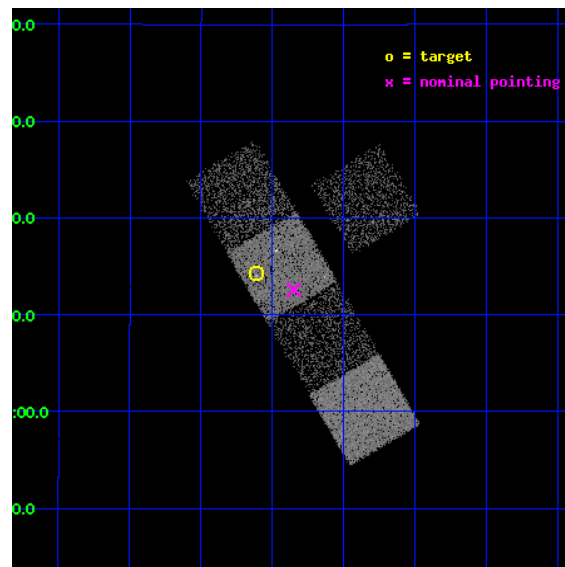
L2 Processing Date : Feb 8 2012

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 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

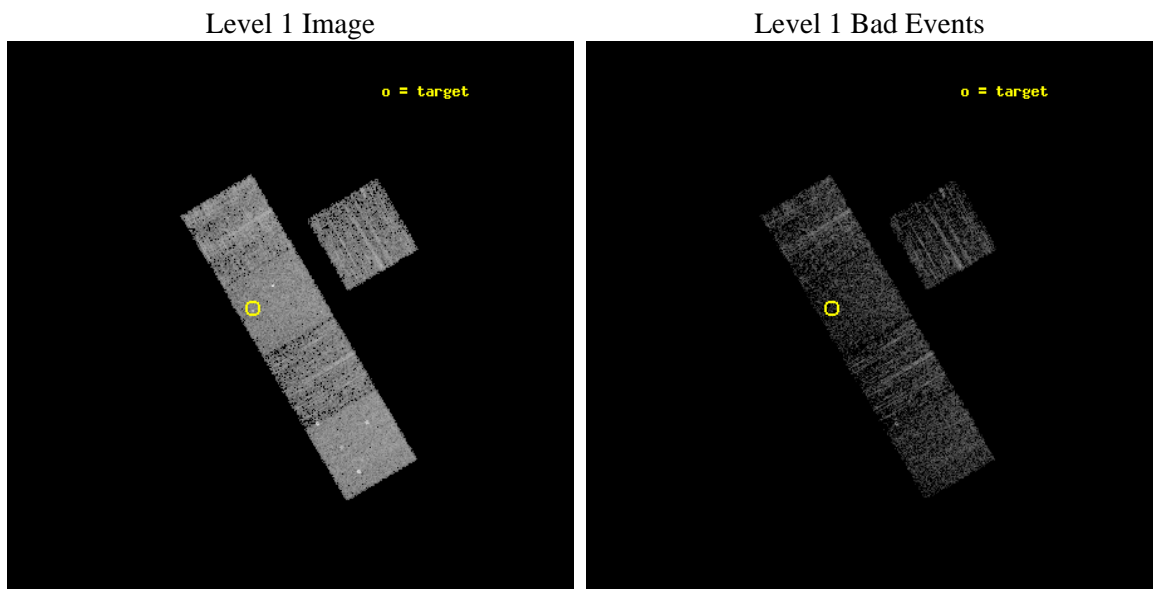
seq_num	401227	Sequence number
obs_id	12486	Observation id
title	The Nearest and Brightest Quiescent Low Mass X-ray Binaries	Propos
observer	Prof. Robert Rutledge	Principal investigator
object	1RXS J115606.7+051414	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	179.027917	Observer's specified target RA [deg]
dec_targ	5.237222	Observer's specified target Dec [deg]
ra_nom	178.96245695853	Nominal RA [deg]
dec_nom	5.2096483085141	Nominal Dec [deg]
roll_nom	239.58339406362	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2743.5000211	Sum of GTIs [s]
livetime	2707.654173589	Livetime [s]
ontime3	2743.5000211	Sum of GTIs [s]
ontime5	2743.5000211	Sum of GTIs [s]
ontime6	2743.5000211	Sum of GTIs [s]
ontime7	2743.5000211	Sum of GTIs [s]
ontime8	2743.5000211	Sum of GTIs [s]
l2events	28973	Number of level 2 events



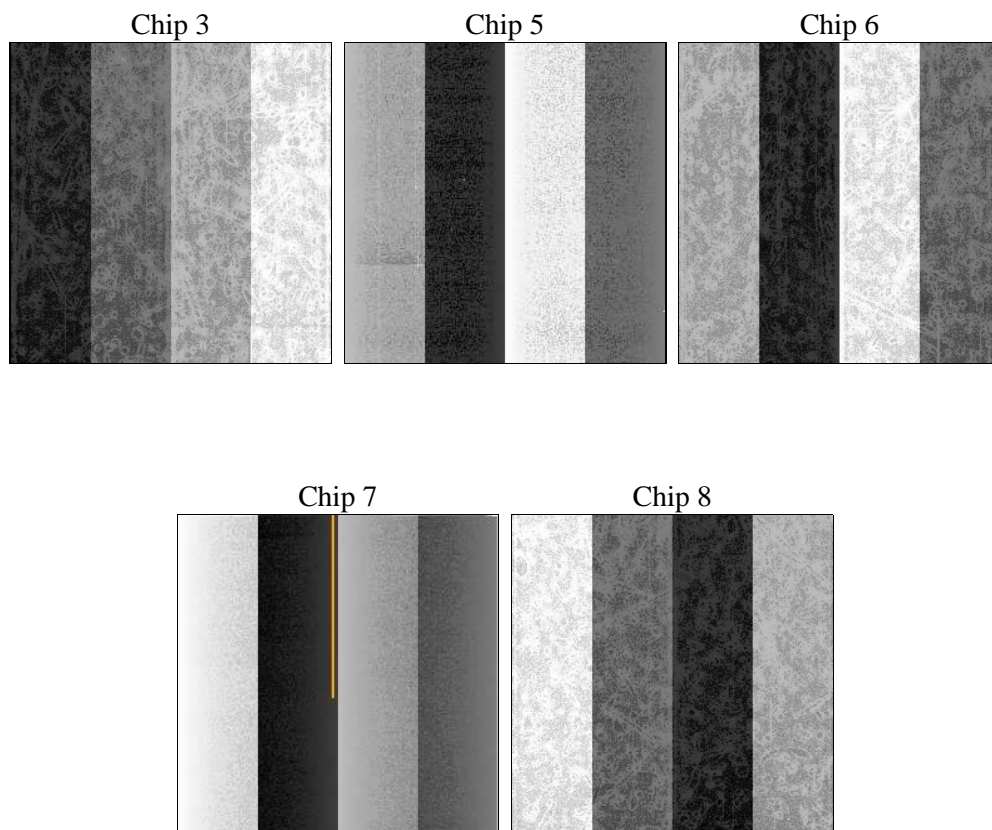
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	2743.5000211	Sum of GTIs [s]
caldsver	4.4.7	 	ontime3	2743.5000211	Sum of GTIs [s]
date	2012-02-08T05:37:22	Date and time of file creation	ontime5	2743.5000211	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	2743.5000211	Sum of GTIs [s]
			ontime7	2743.5000211	Sum of GTIs [s]
			ontime8	2743.5000211	Sum of GTIs [s]
			l1events	109360	Number of level 1 events

2.1.4 Events

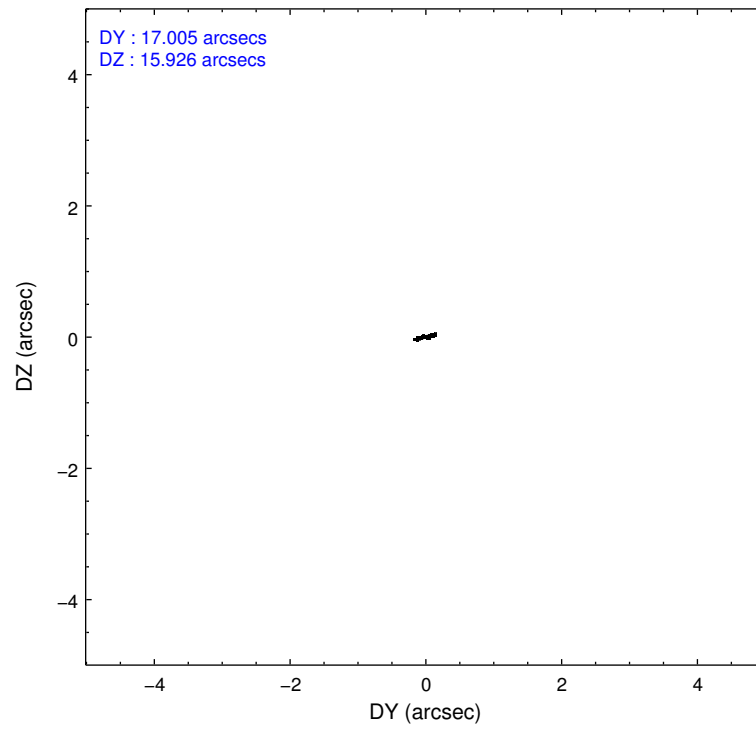
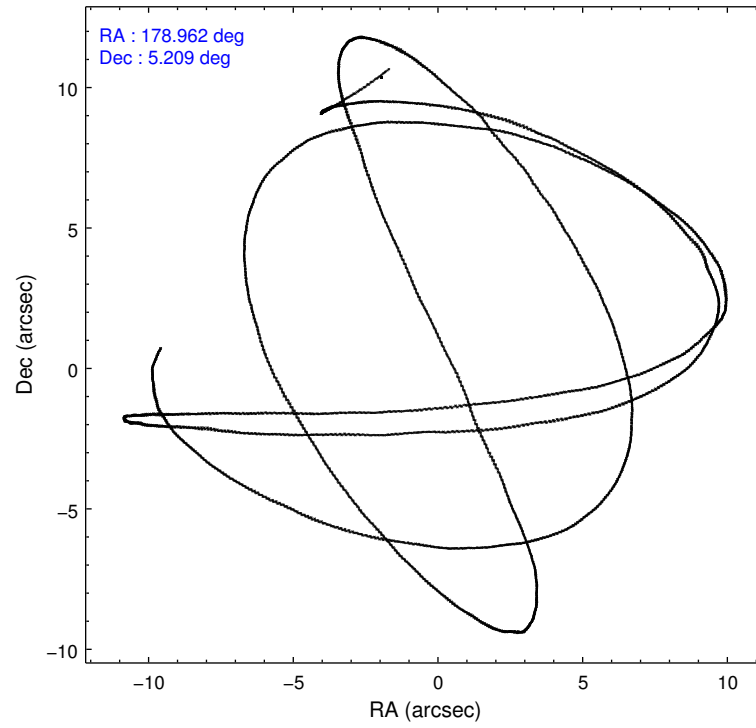
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	16442	28974	16957	23327	23660
rejected events	14578	14301	14989	12535	17283
rejected %	88%	49%	88%	53%	73%

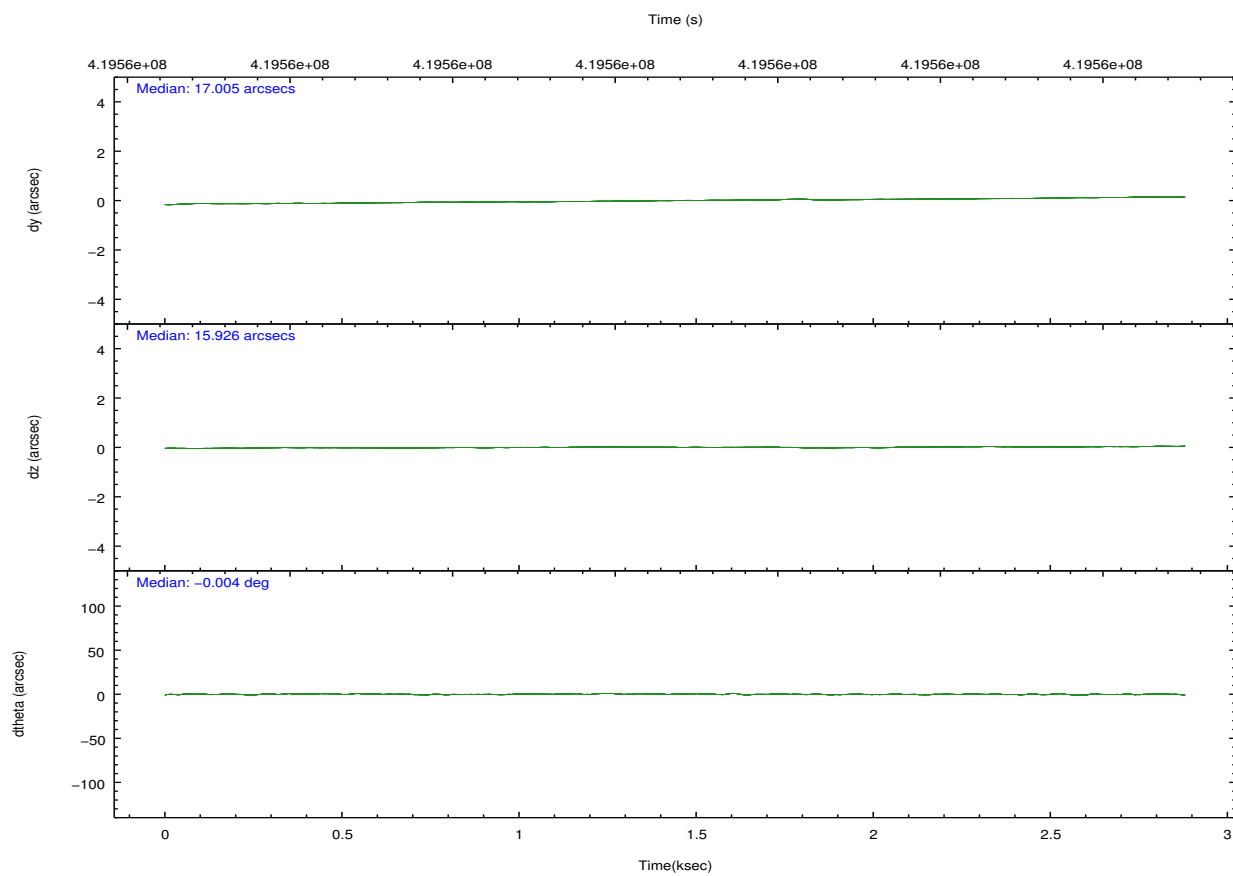
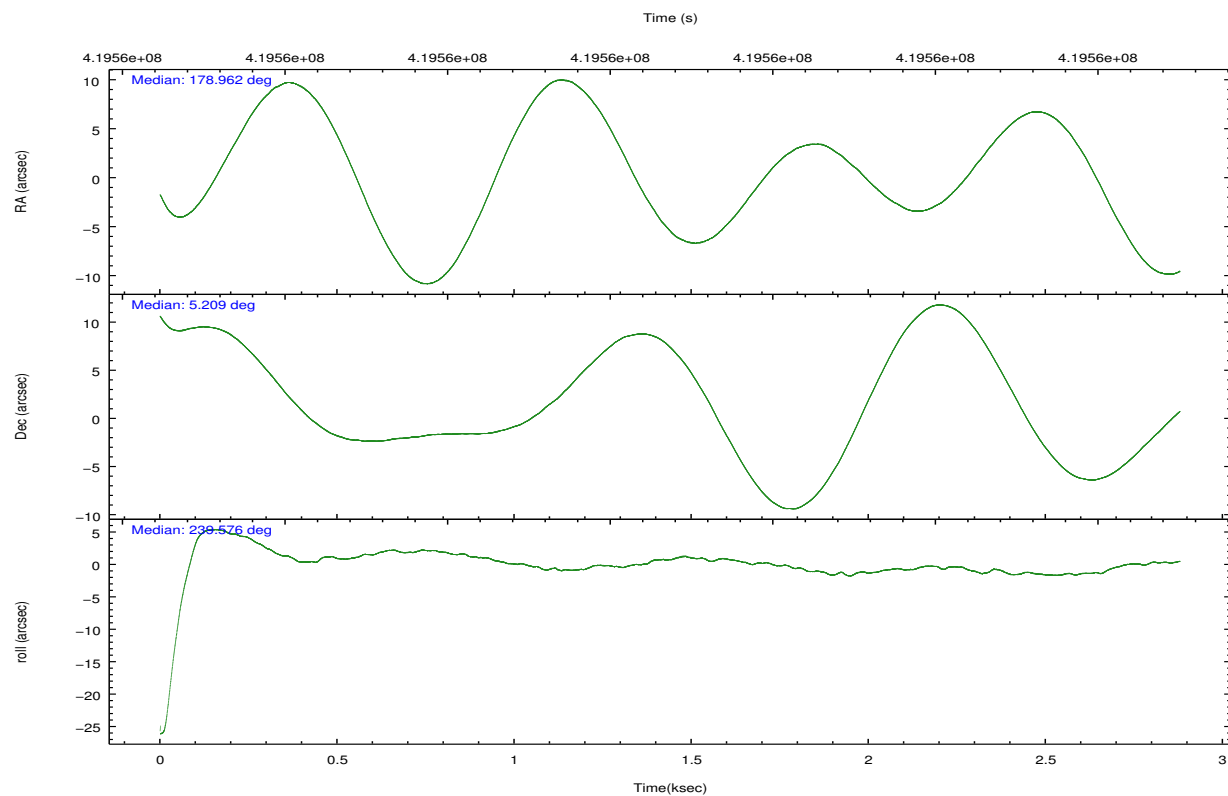
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	628	1903	695	1203	1799
	3%	6%	4%	5%	7%
grade 1 events	9	115	13	38	15
	0%	0%	0%	0%	0%
grade 2 events	430	4432	433	2226	1560
	2%	15%	2%	9%	6%
grade 3 events	200	571	194	965	643
	1%	1%	1%	4%	2%
grade 4 events	198	528	218	950	595
	1%	1%	1%	4%	2%
grade 5 events	884	2173	852	2412	1258
	5%	7%	5%	10%	5%
grade 6 events	409	7252	429	5460	1787
	2%	25%	2%	23%	7%
grade 7 events	13684	12000	14123	10073	16003
	83%	41%	83%	43%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	178.962244	178.9624569585252	CCD I2 on	N	N
[deg] Pointing Dec	5.236948	5.209648308514109	CCD I3 on	O1	Y
[deg] Pointing Roll	239.426912	239.5833940636186	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	419559924.184000	419558880.96818	CCD S5 on	N	N
Observation start date	2011-04-19T00:24:18	2011-04-19T00:08:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	419562624.184000	419563407.88092	On-chip summing requested	N	N
Observation end date	2011-04-19T01:09:18	2011-04-19T01:23:27	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



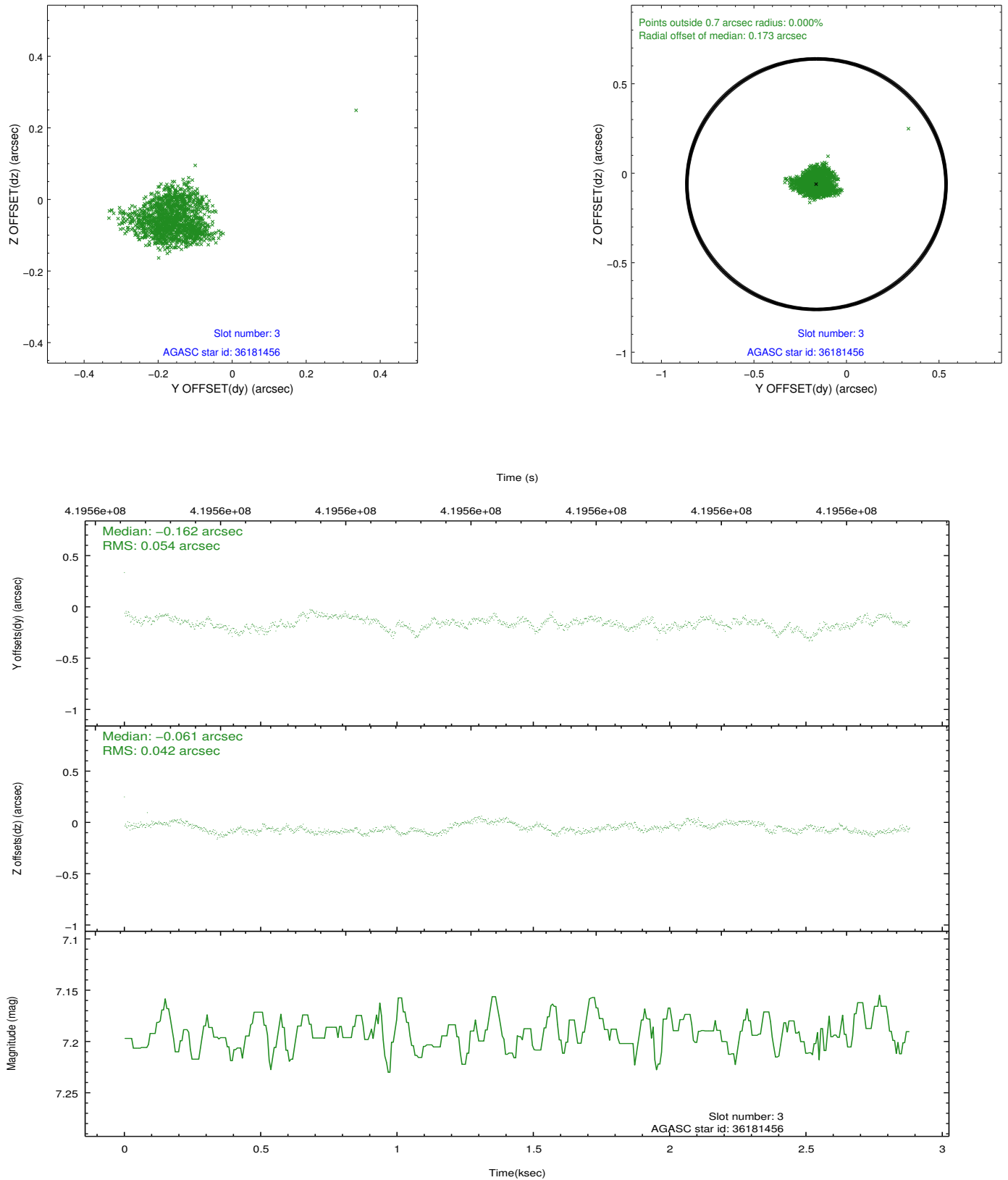


Slot Statistics

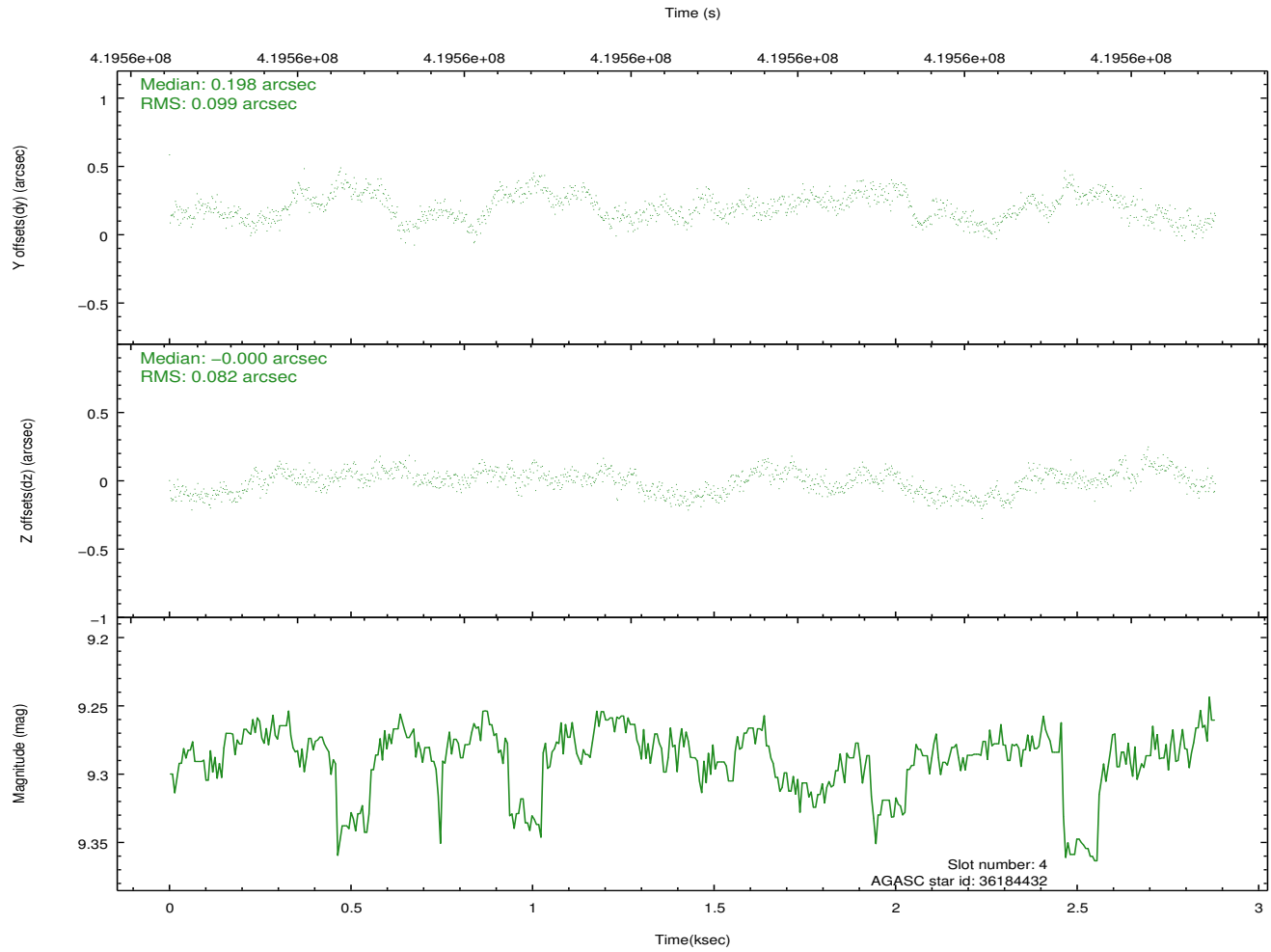
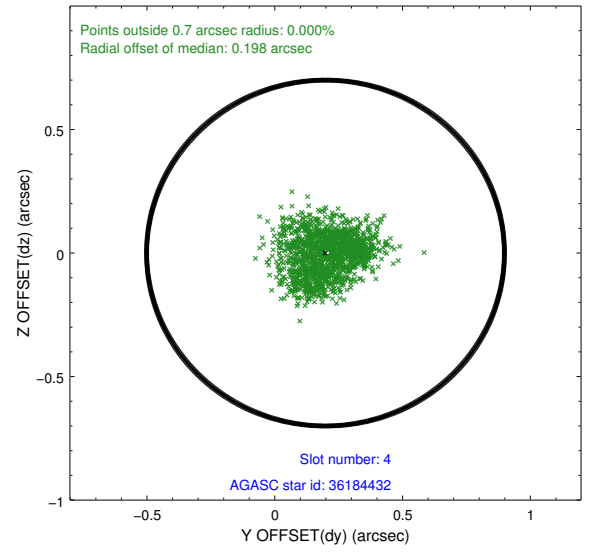
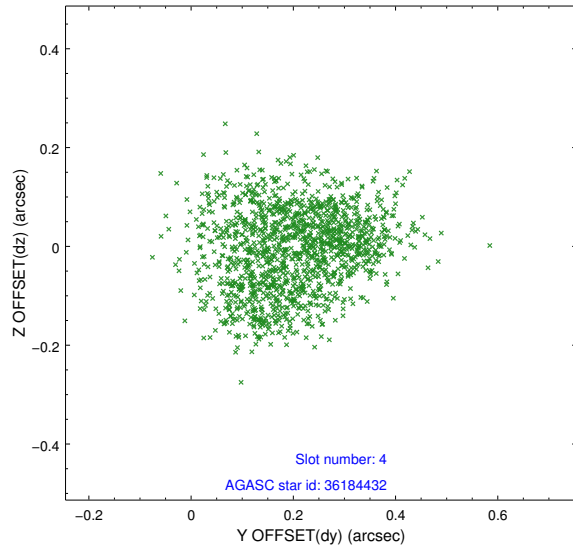
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.92	703	-0.084	-0.013	0.008	0.012	0.000000	0.000000	-770.09	-1737.35
1	FID	ACIS-S-4	7.01	703	0.189	0.044	0.009	0.015	0.000000	0.000000	2142.42	168.90
2	FID	ACIS-S-5	7.04	703	-0.135	-0.022	0.008	0.014	0.000000	0.000000	-1820.15	165.01
3	GUIDE	36181456	7.19	1406	-0.162	-0.061	0.074	0.111	178.519412	4.879162	1916.82	-712.42
4	GUIDE	36184432	9.29	1393	0.198	-0.000	0.141	0.208	178.541594	4.994927	1519.46	-856.16
5	GUIDE	36569504	9.15	1405	0.145	-0.332	0.121	0.197	178.867459	5.819898	-1632.14	-1360.80
6	GUIDE	36569856	9.36	1406	-0.135	0.301	0.105	0.165	178.709887	5.795613	-1271.77	-1800.84
7	GUIDE	36573496	7.50	1404	-0.043	0.093	0.077	0.120	179.201353	5.344831	-770.51	539.14

2.4 Star Slots

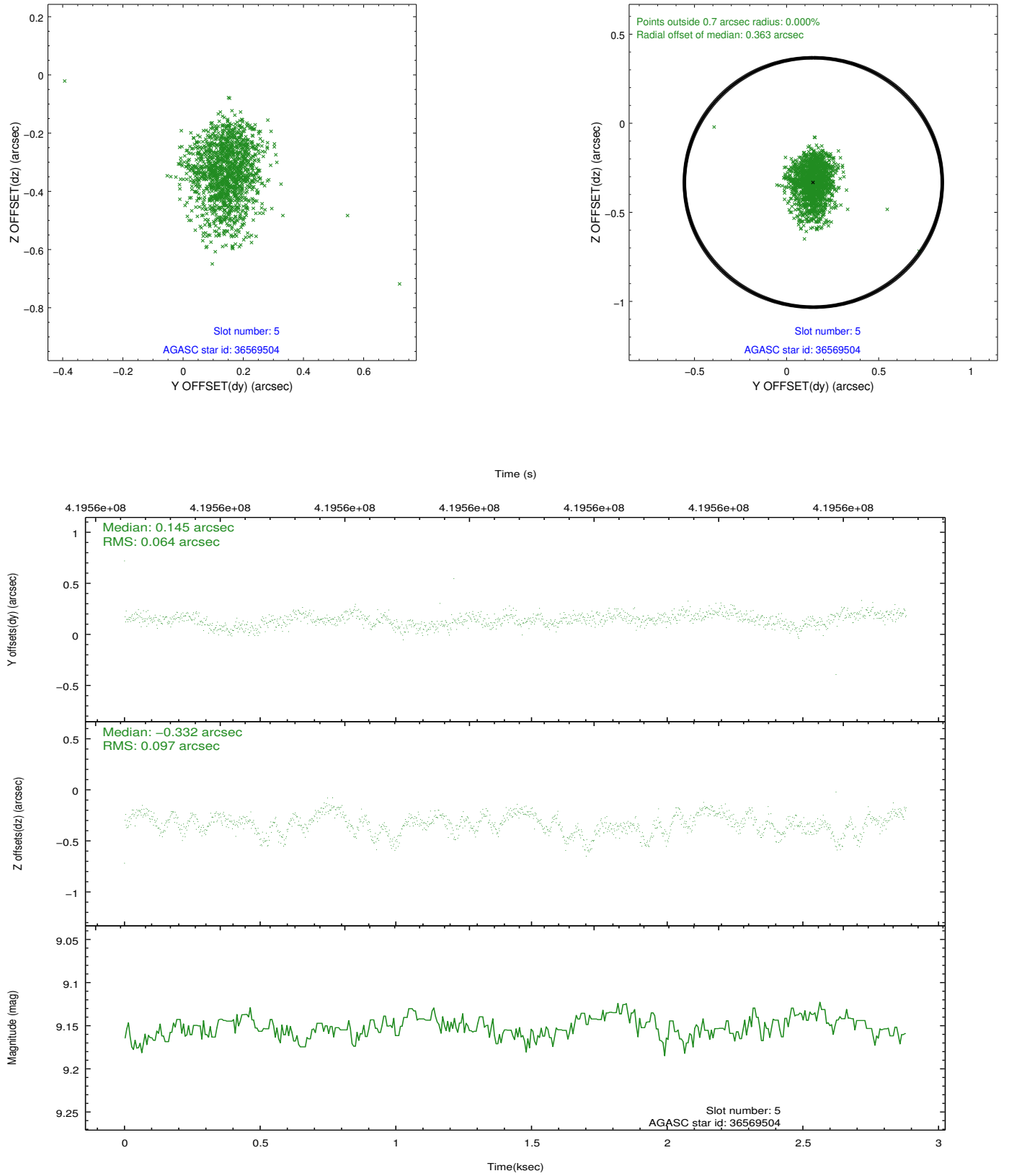
2.4.1 Slot 3



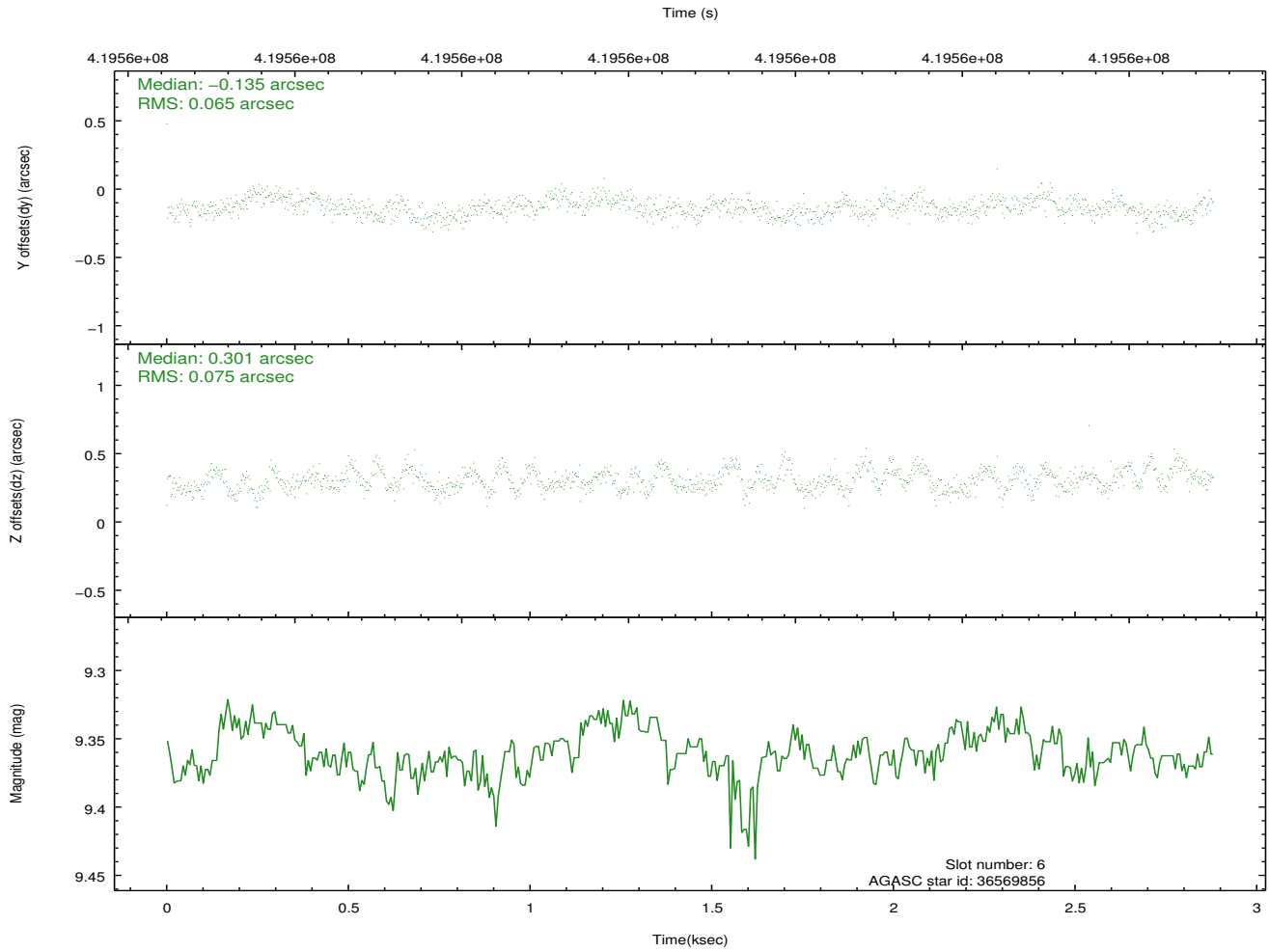
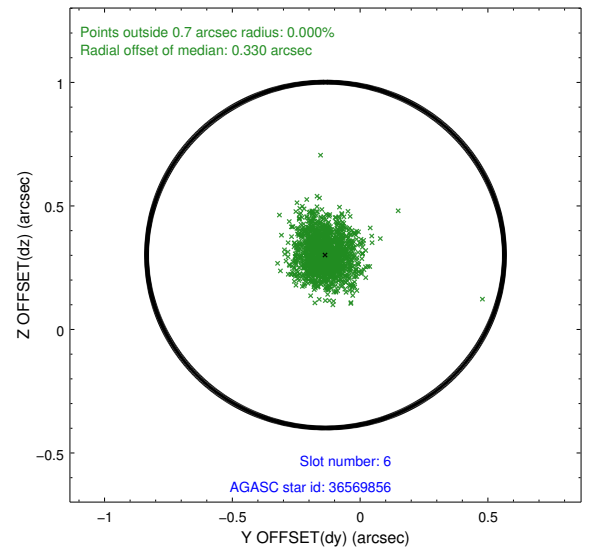
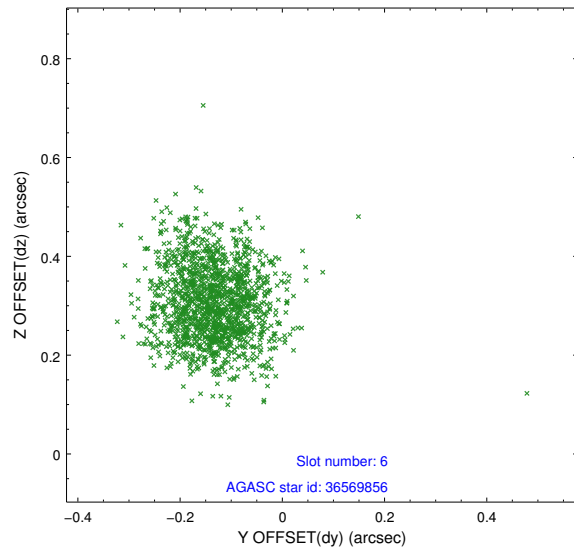
2.4.2 Slot 4



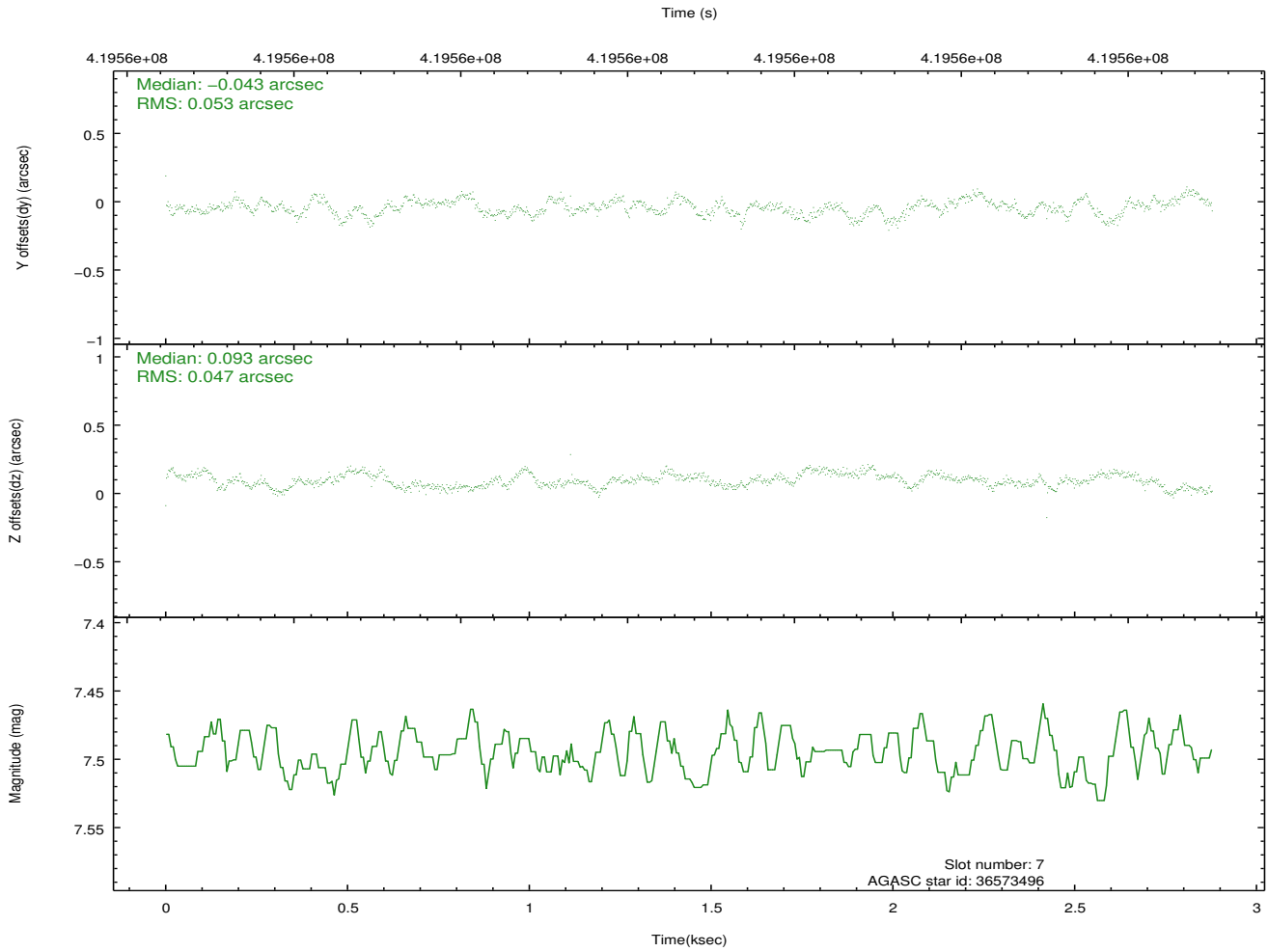
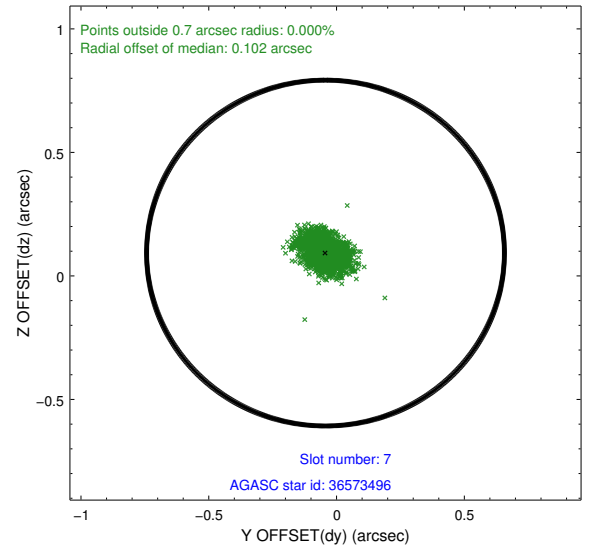
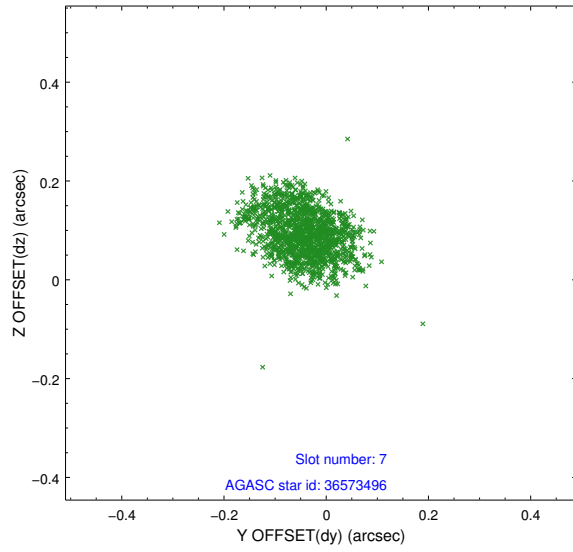
2.4.3 Slot 5



2.4.4 Slot 6

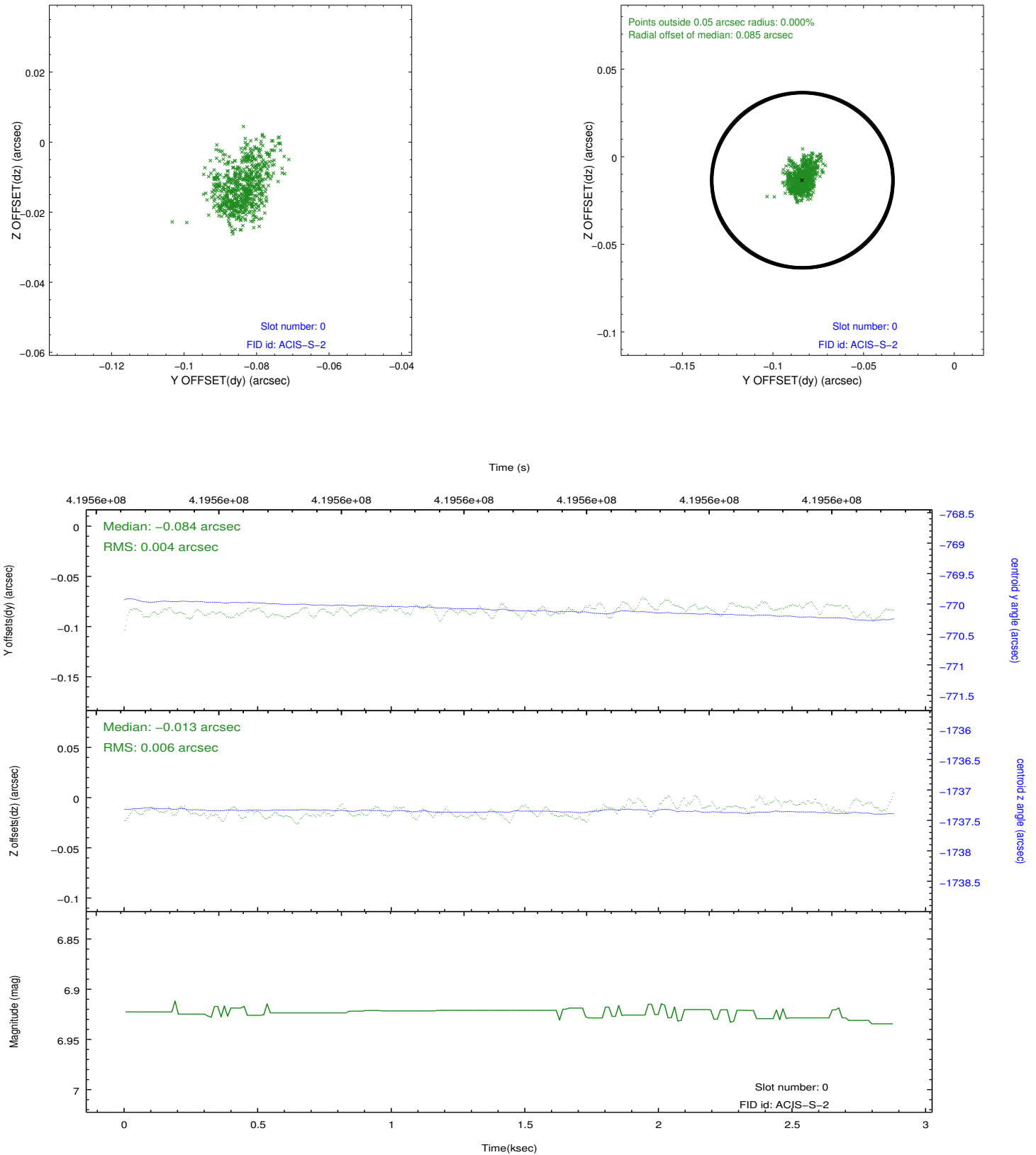


2.4.5 Slot 7

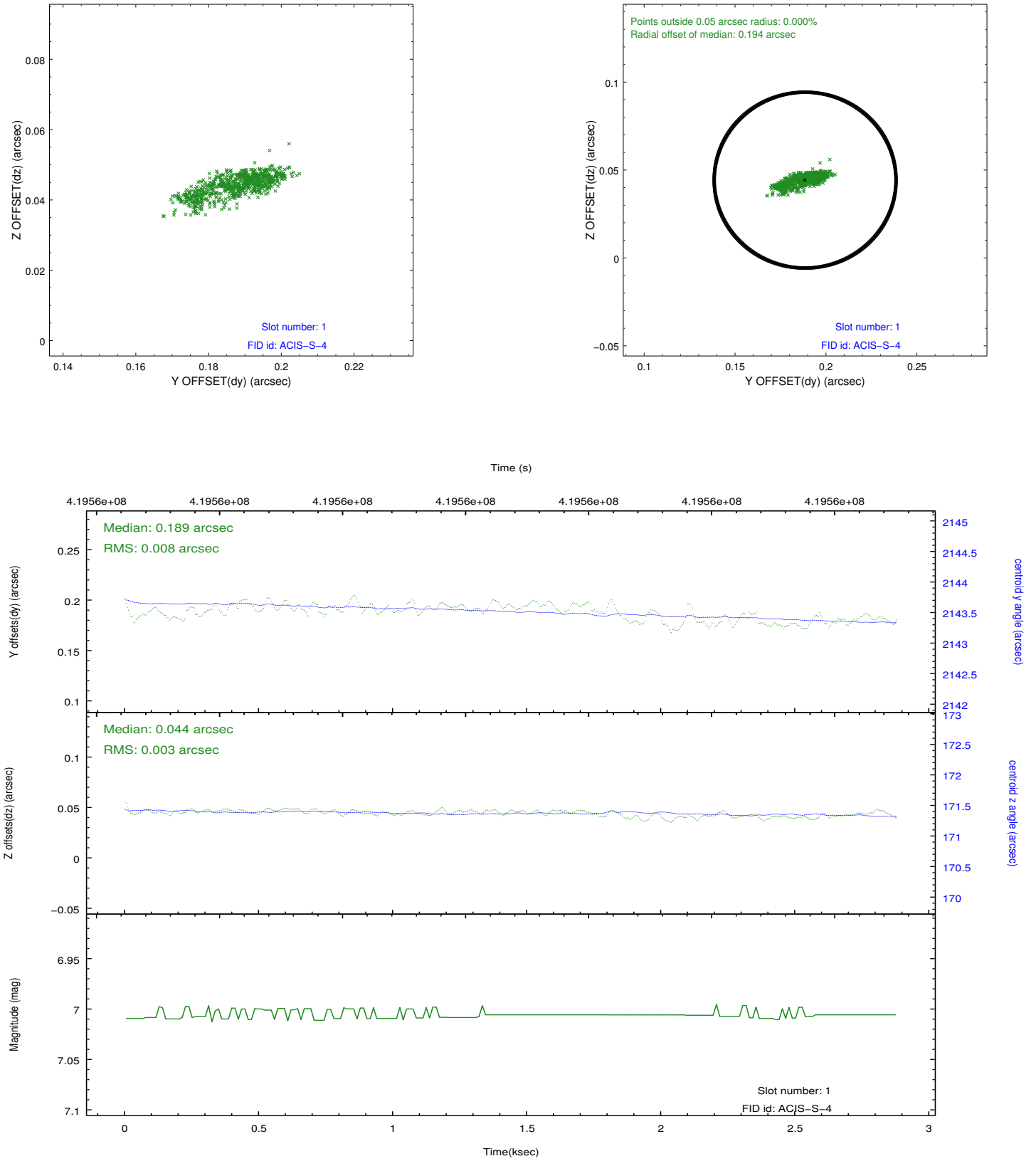


2.5 FID Slots

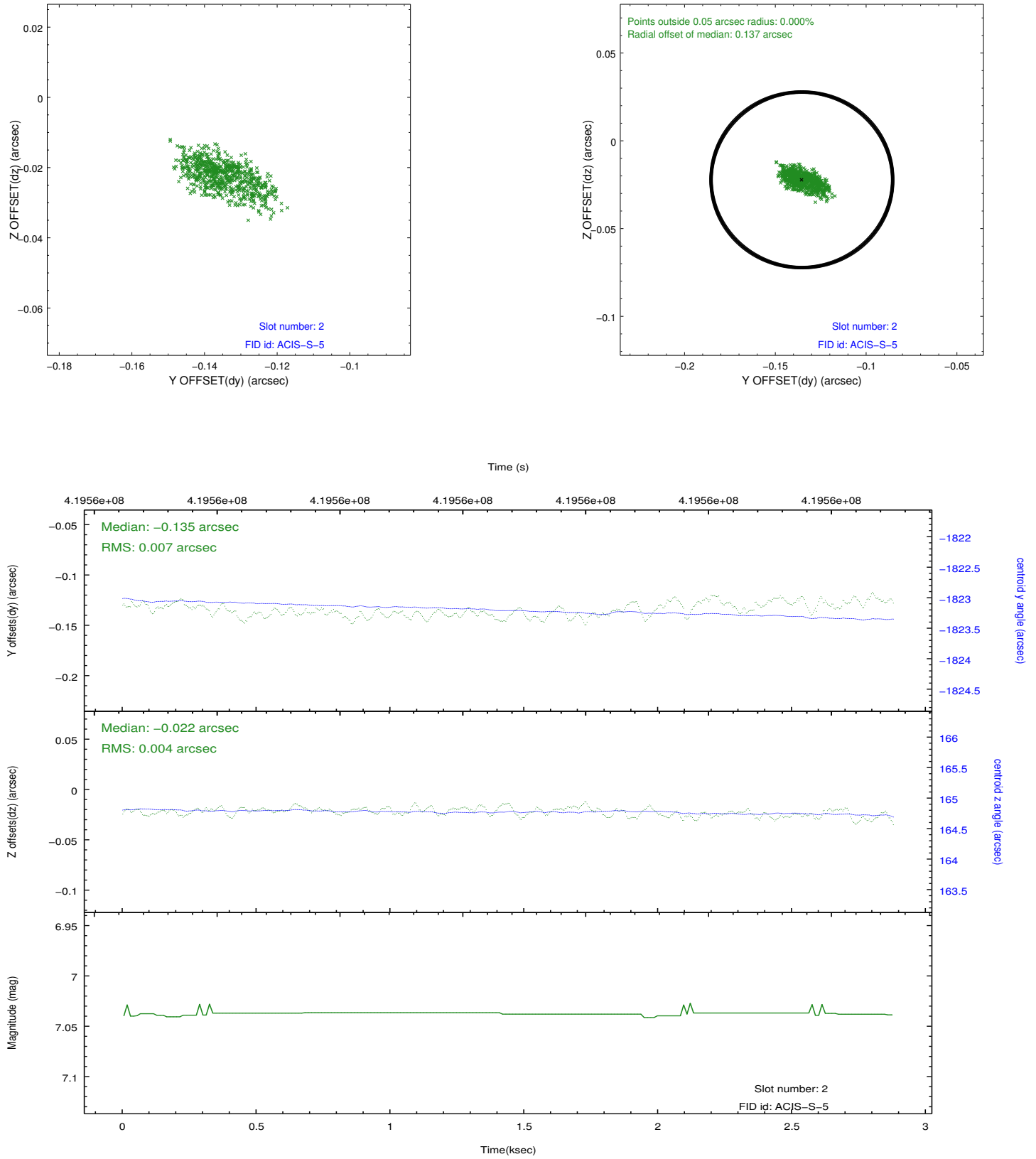
2.5.1 Slot 0



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)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.7435000211

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.