

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8461 - L2 Version 3
Chandra X-Ray Center

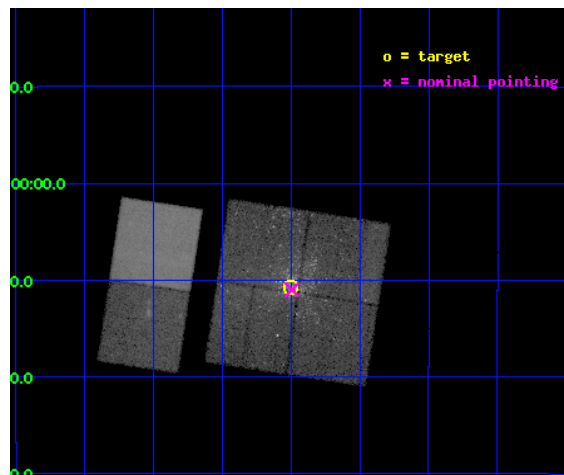
L2 Processing Date : May 3 2012

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1 Front

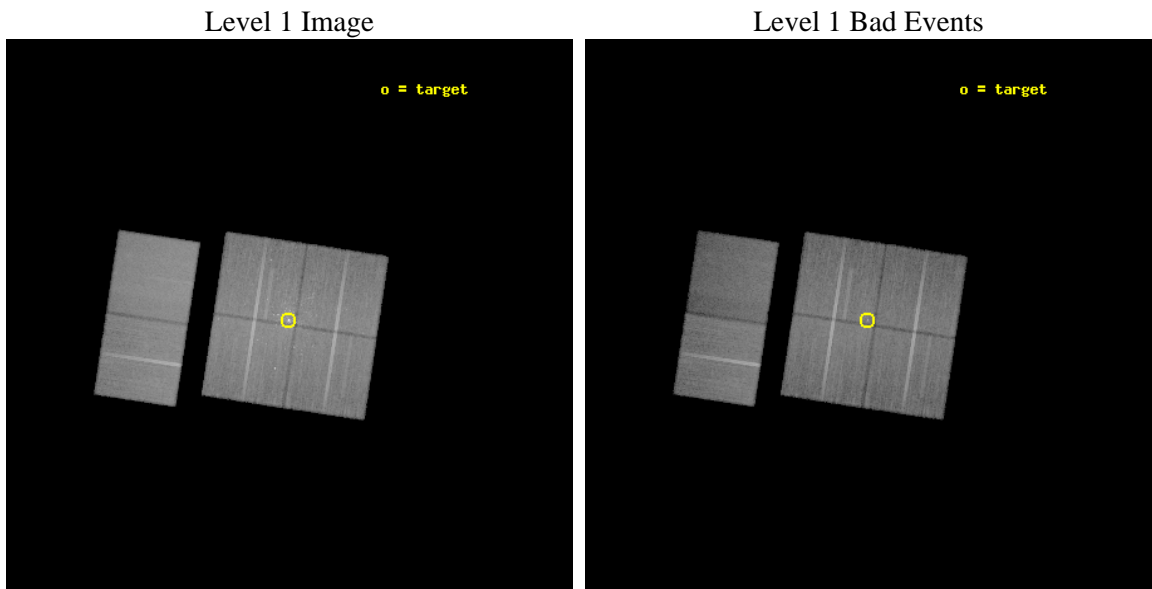
seq_num	200380	Sequence number
obs_id	8461	Observation id
title	A Long Look at M17: Tapping the Treasury of a Nearby Rich Star Forming Region	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	M17	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	275.124583	Observer's specified target RA [deg]
dec_targ	-16.179139	Observer's specified target Dec [deg]
ra_nom	275.123376891	Nominal RA [deg]
dec_nom	-16.183651745923	Nominal Dec [deg]
roll_nom	278.60835322641	Nominal Roll [deg]
revision	3	Processing version of data
ontime	33567.958904743	Sum of GTIs [s]
livetime	33142.901196893	Livetime [s]
ontime0	33571.199874997	Sum of GTIs [s]
ontime1	33567.958914757	Sum of GTIs [s]
ontime2	33571.199874997	Sum of GTIs [s]
ontime3	33567.958904743	Sum of GTIs [s]
ontime6	33571.199874997	Sum of GTIs [s]
ontime7	33571.199874997	Sum of GTIs [s]
l2events	295001	Number of level 2 events



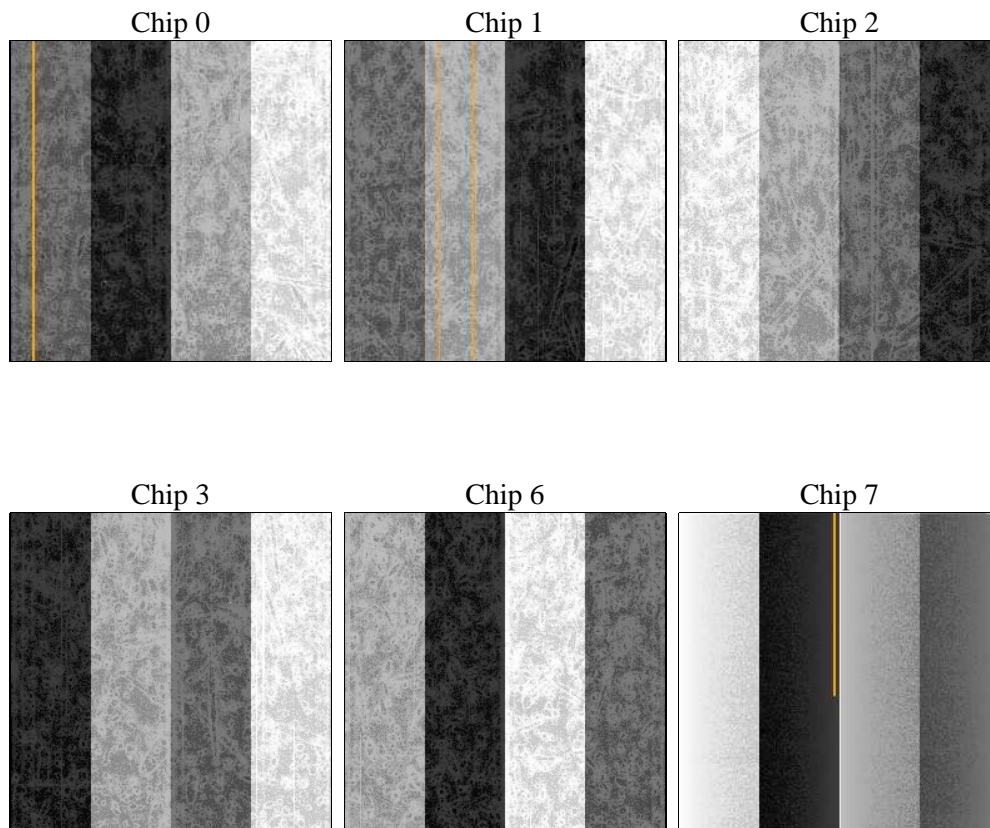
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33450.788000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	33567.958904743	Sum of GTIs [s]
caldbver	4.4.9	 	ontime0	33571.199874997	Sum of GTIs [s]
date	2012-05-03T23:53:28	Date and time of file creation	ontime1	33567.958914757	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	33571.199874997	Sum of GTIs [s]
			ontime3	33567.958904743	Sum of GTIs [s]
			ontime6	33571.199874997	Sum of GTIs [s]
			ontime7	33571.199874997	Sum of GTIs [s]
			l1events	1648812	Number of level 1 events

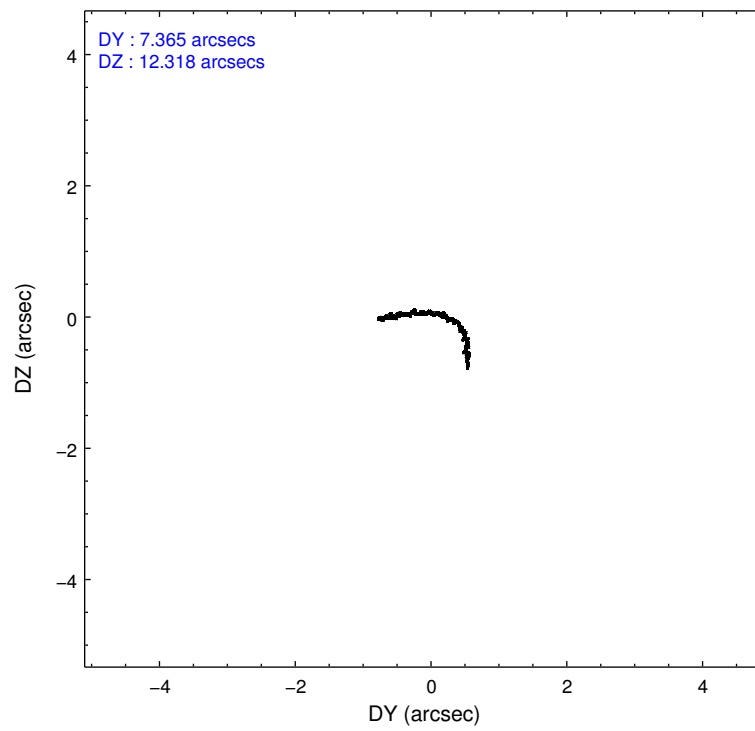
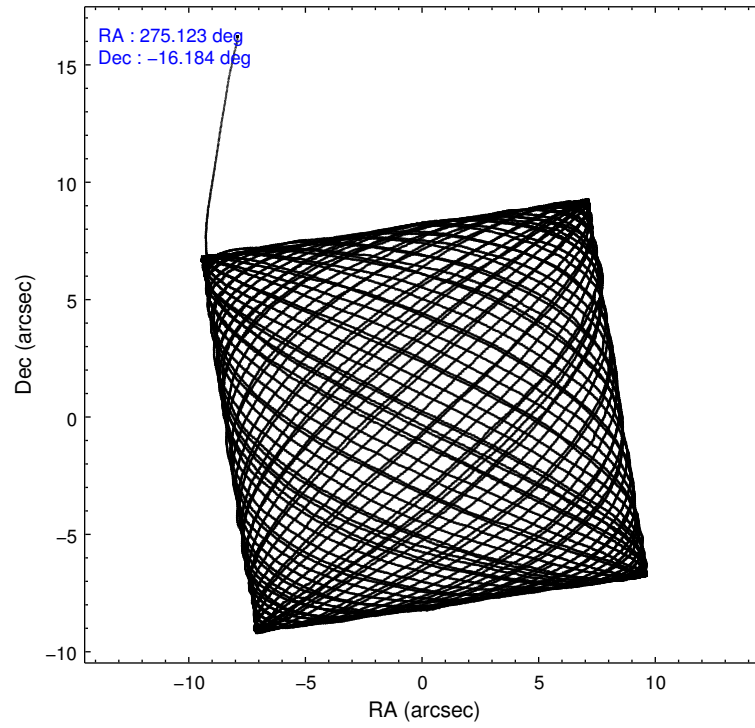
2.1.4 Events

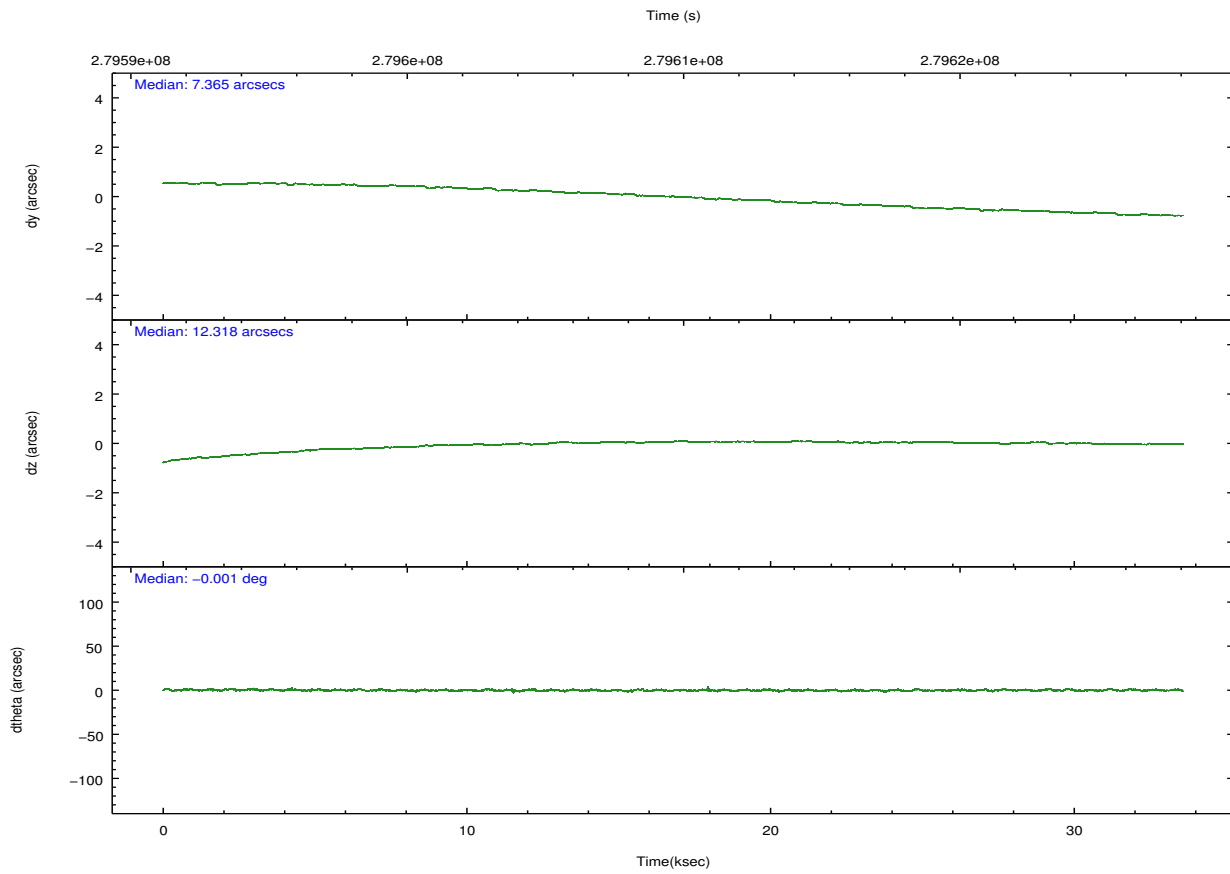
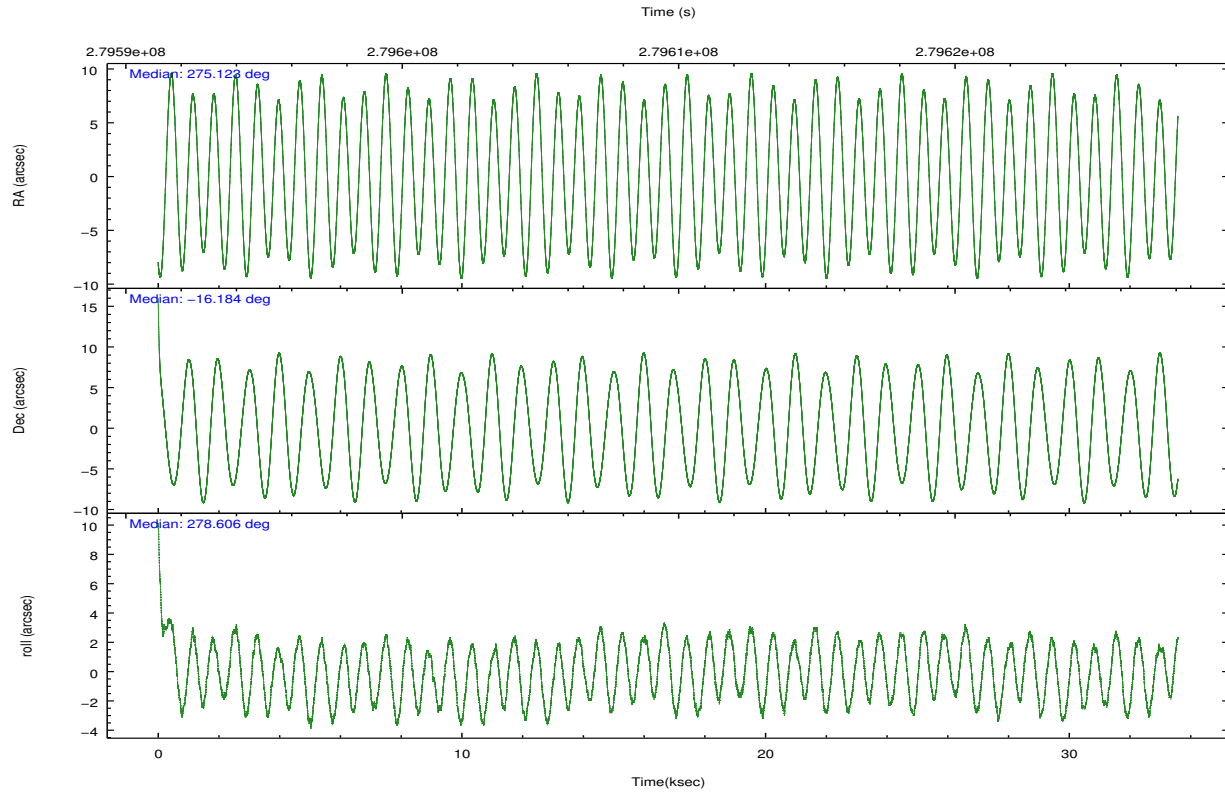
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	251286	250346	285352	278621	280620	302587	grade 0 events	12750	17161	18549	27782	16637	16474
rejected events	222010	214176	250613	231538	246140	161697		5%	6%	6%	9%	5%	5%
rejected %	88%	85%	87%	83%	87%	53%	grade 1 events	163	165	298	543	170	363
								0%	0%	0%	0%	0%	0%
							grade 2 events	6706	7358	6921	8010	6695	30104
								2%	2%	2%	2%	2%	9%
							grade 3 events	3100	3364	2977	3700	3220	13739
								1%	1%	1%	1%	1%	4%
							grade 4 events	2897	3434	3116	3701	3127	13500
								1%	1%	1%	1%	1%	4%
							grade 5 events	8550	9705	8198	10464	10660	30259
								3%	3%	2%	3%	3%	10%
							grade 6 events	5004	6072	4874	5672	6048	72616
								1%	2%	1%	2%	2%	23%
							grade 7 events	212116	203087	240419	218749	234063	125532
								84%	81%	84%	78%	83%	41%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	275.105505	275.1233768909995	Subarray requested	NONE	NONE
[deg] Pointing Dec	-16.162308	-16.18365174592289	Alternating exposures requested	N	N
[deg] Pointing Roll	278.394691	278.6083532264078	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	279592958.184000	279591231.82179			
Observation start date	2006-11-11T00:41:33	2006-11-11T00:13:51			
[s] Observation end time (MET)	279626409.184000	279626646.08596			
Observation end date	2006-11-11T09:59:04	2006-11-11T10:04:06			
Read mode	TIMED	TIMED			

2.3 Aspect



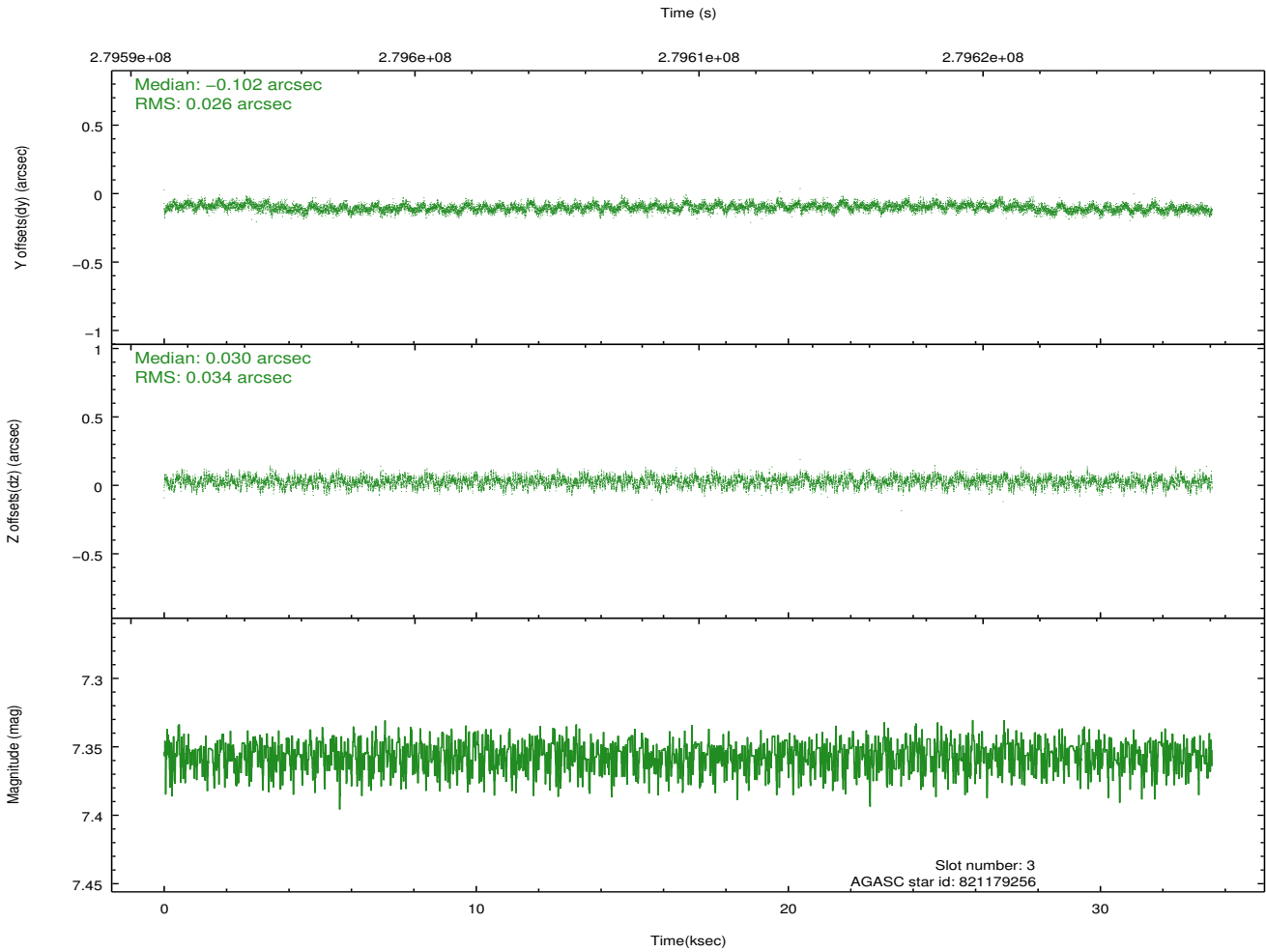
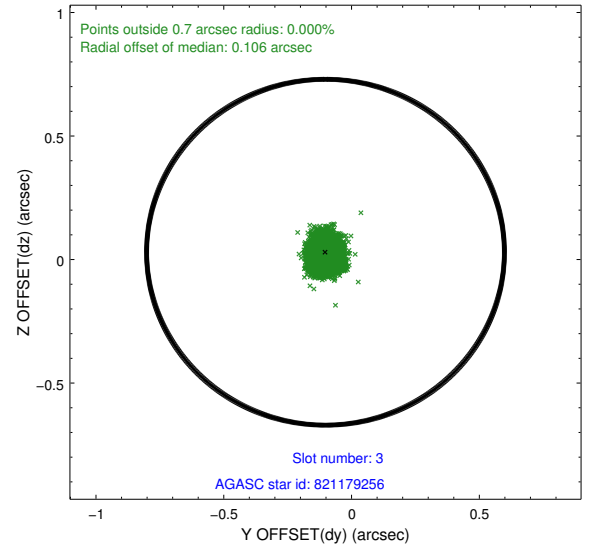
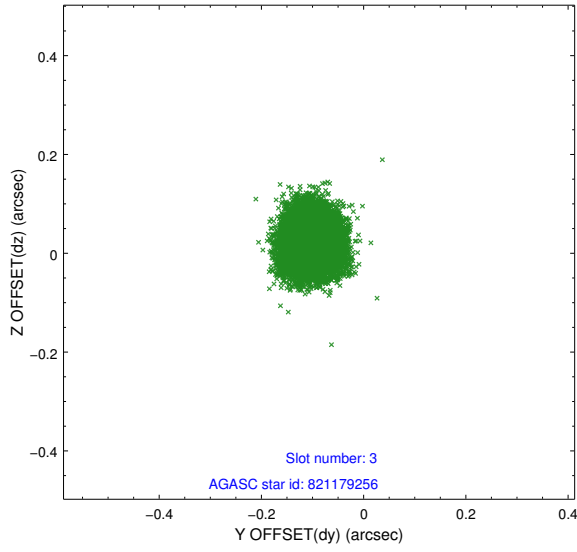


Slot Statistics

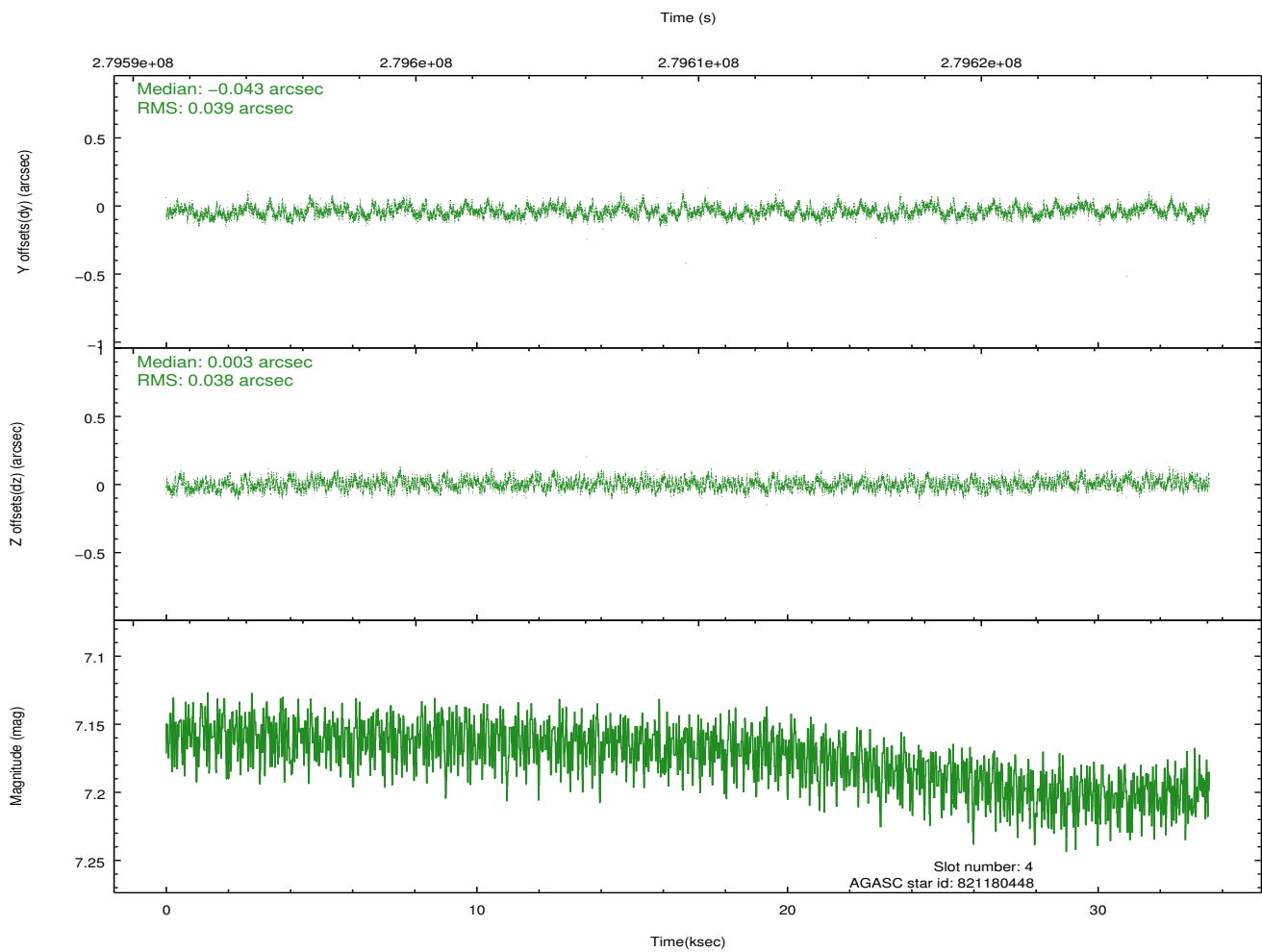
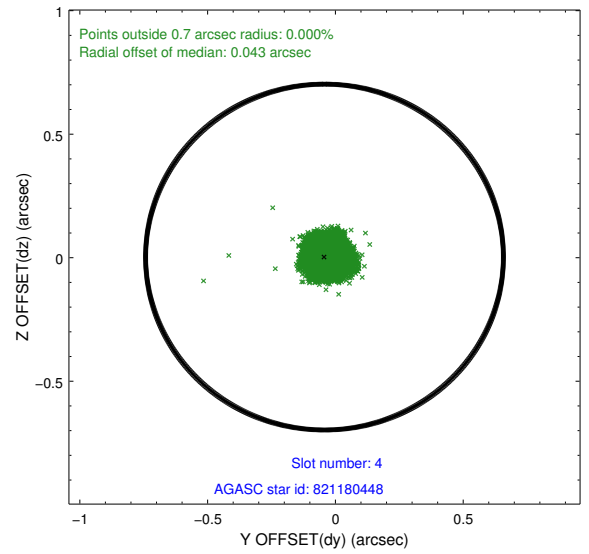
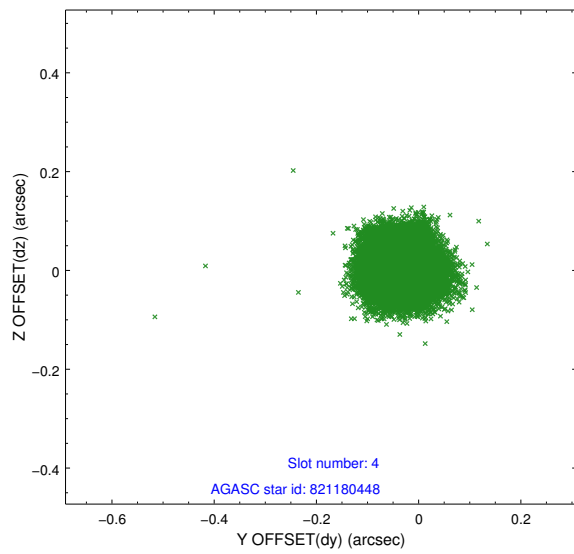
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	8191	0.053	-0.034	0.014	0.024	0.000000	0.000000	932.38	-835.82
1	FID	ACIS-I-5	7.23	8191	-0.172	0.065	0.017	0.029	0.000000	0.000000	-1815.89	1061.79
2	FID	ACIS-I-6	7.24	8189	0.028	0.038	0.013	0.022	0.000000	0.000000	397.89	1706.28
3	GUIDE	821179256	7.36	16380	-0.102	0.030	0.046	0.074	274.840900	-15.612800	-2090.13	-618.79
4	GUIDE	821180448	7.17	16379	-0.043	0.003	0.059	0.092	275.453560	-16.324585	754.64	1104.35
5	GUIDE	821168248	8.91	16373	-0.157	-0.139	0.083	0.134	274.322211	-15.621827	-2316.07	-2403.41
6	GUIDE	821181816	8.43	16381	0.147	-0.029	0.061	0.097	274.847938	-16.750455	1966.00	-1187.54
7	GUIDE	821183768	9.24	16362	0.155	0.138	0.079	0.128	275.638665	-16.595886	1815.67	1591.87

2.4 Star Slots

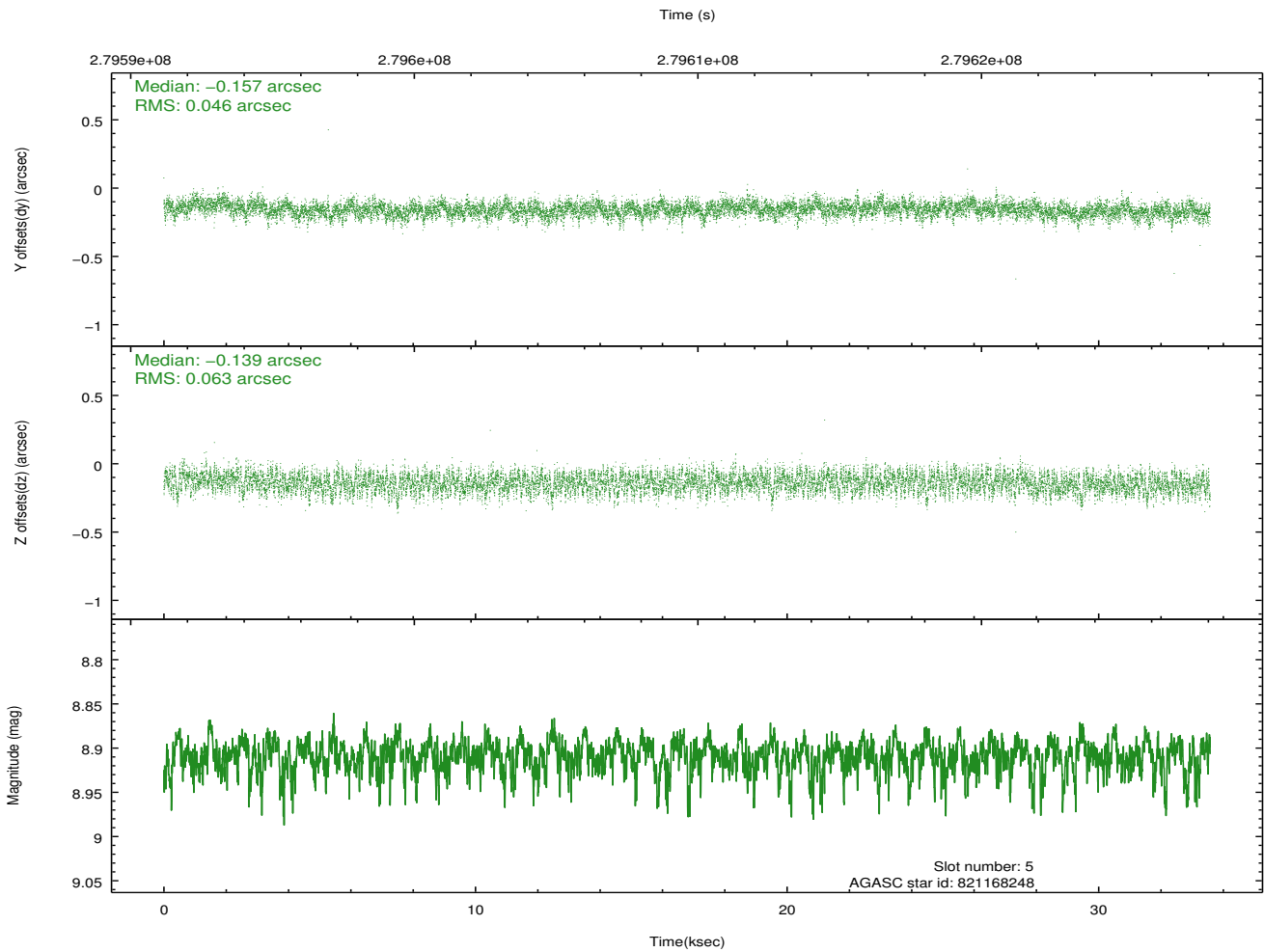
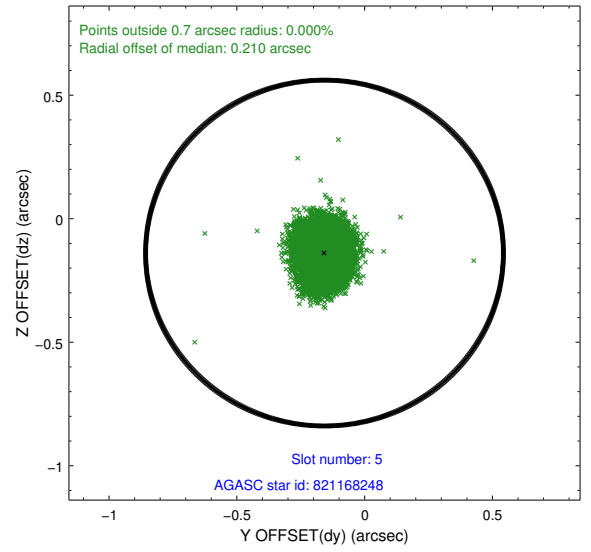
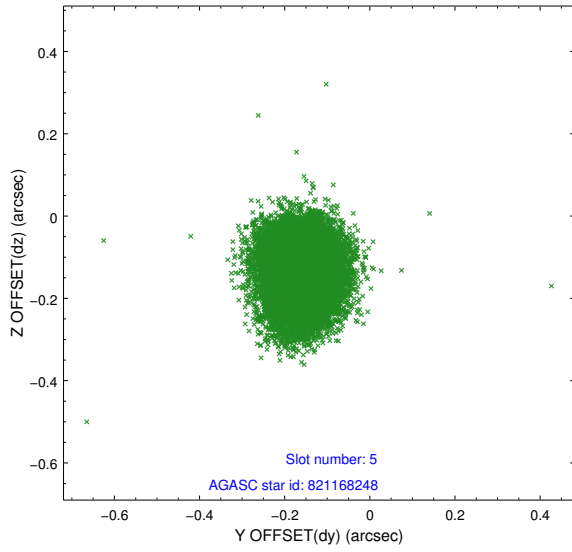
2.4.1 Slot 3



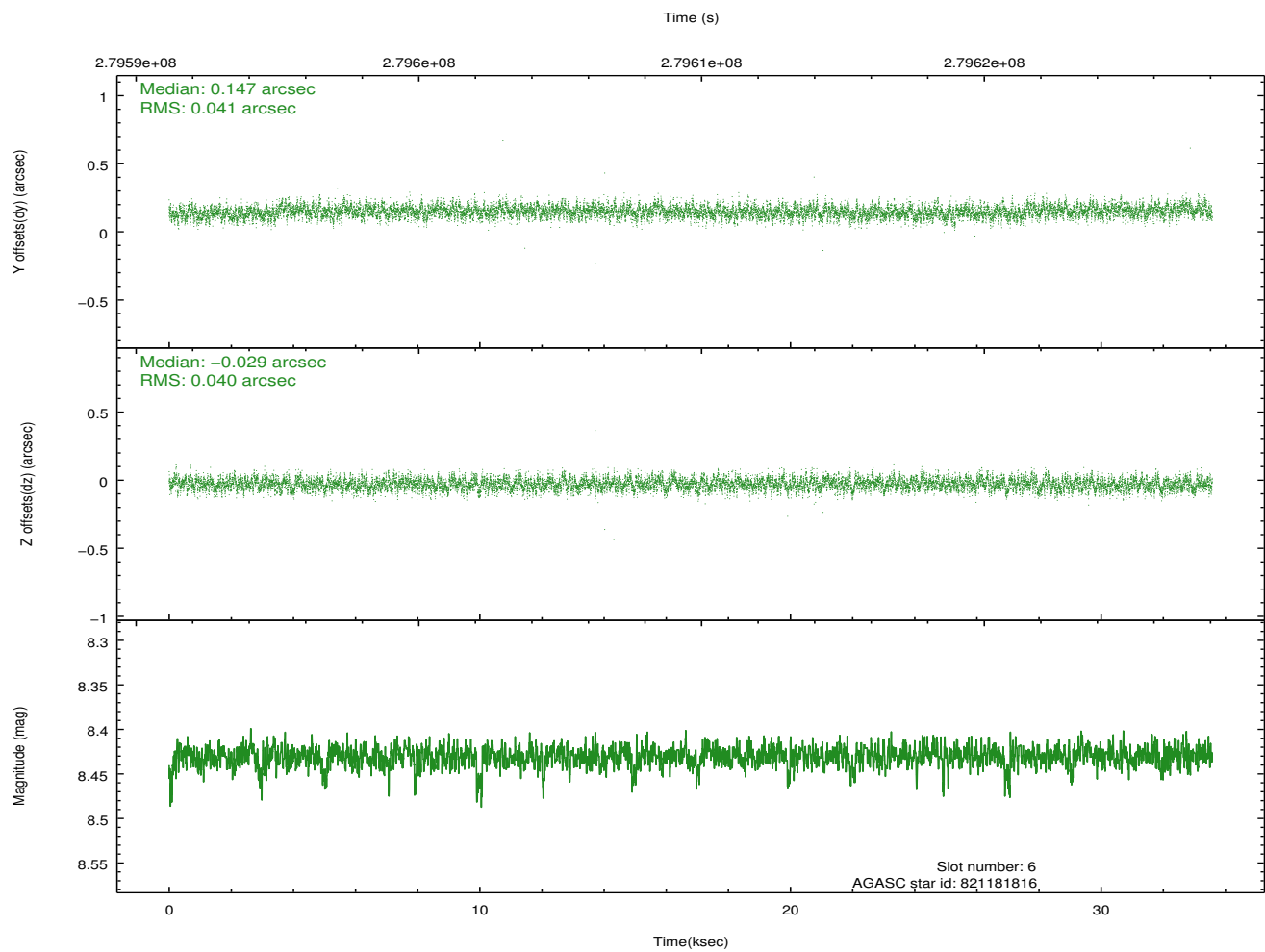
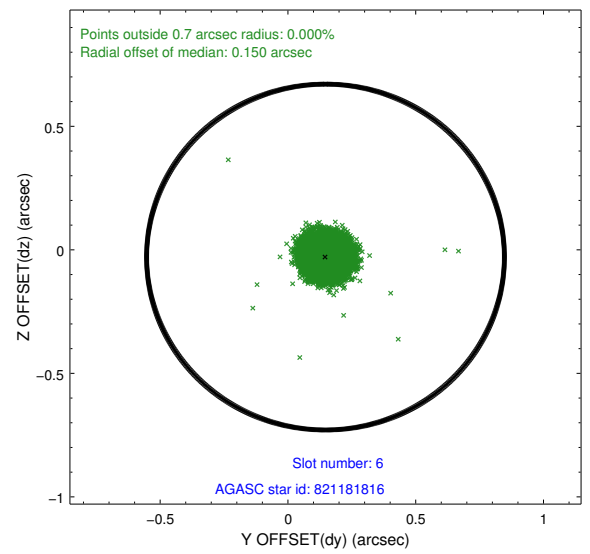
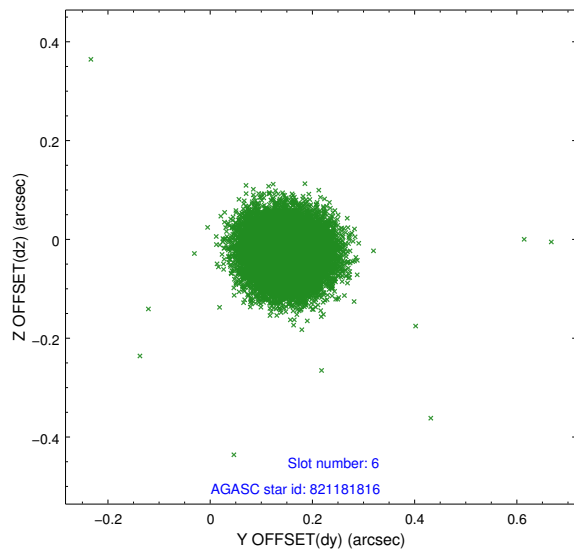
2.4.2 Slot 4



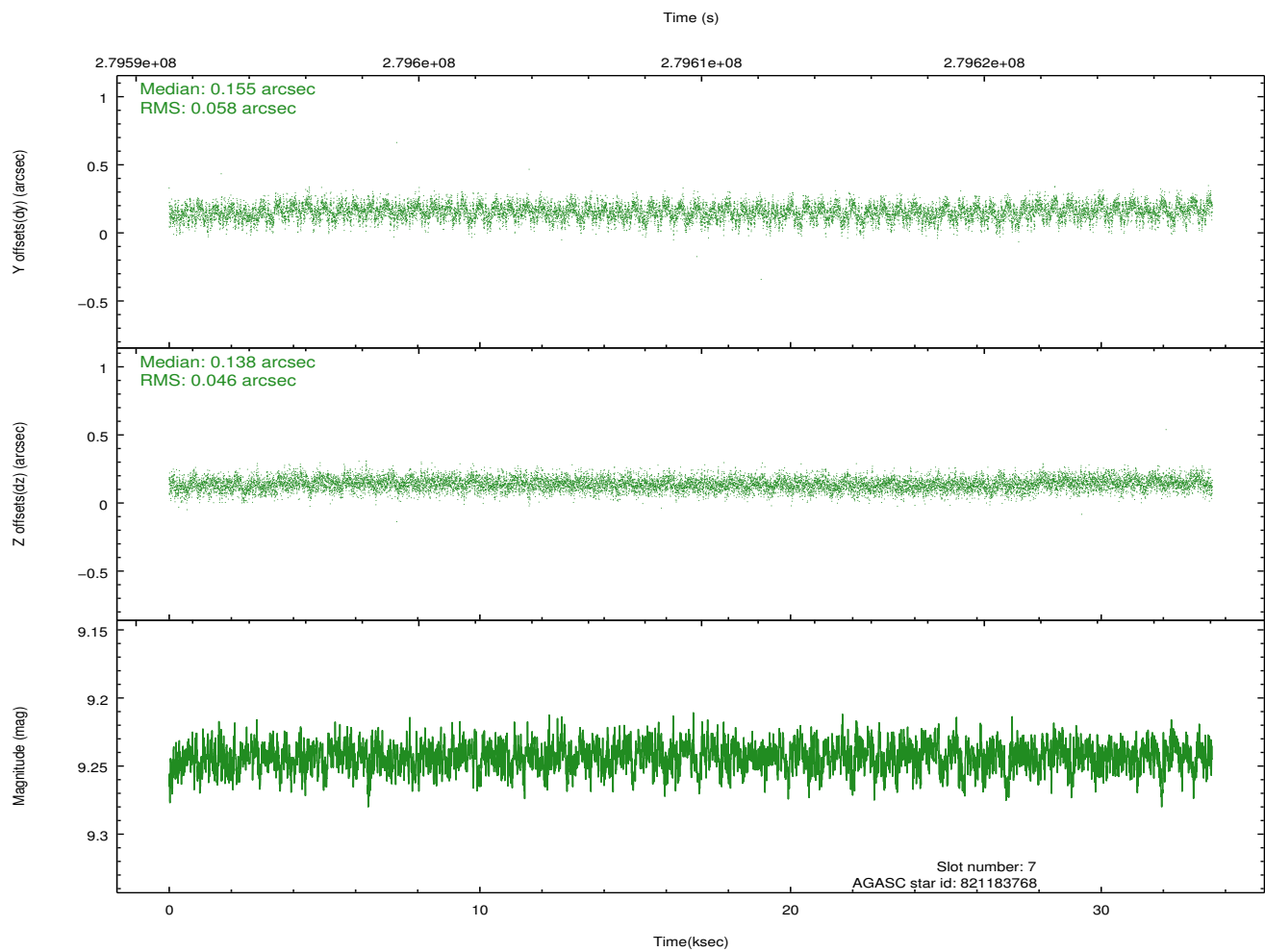
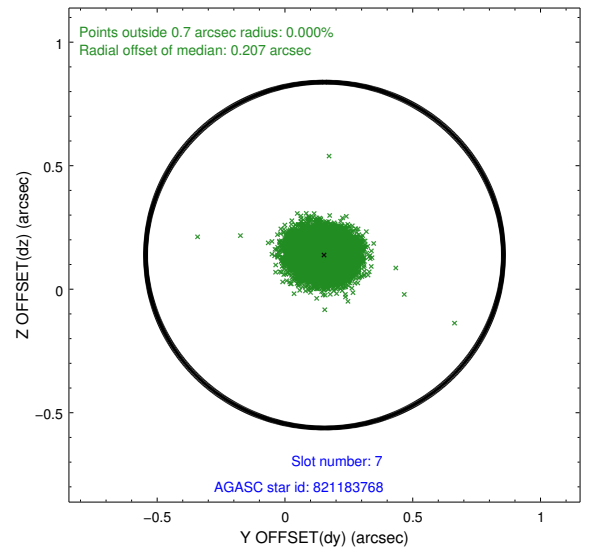
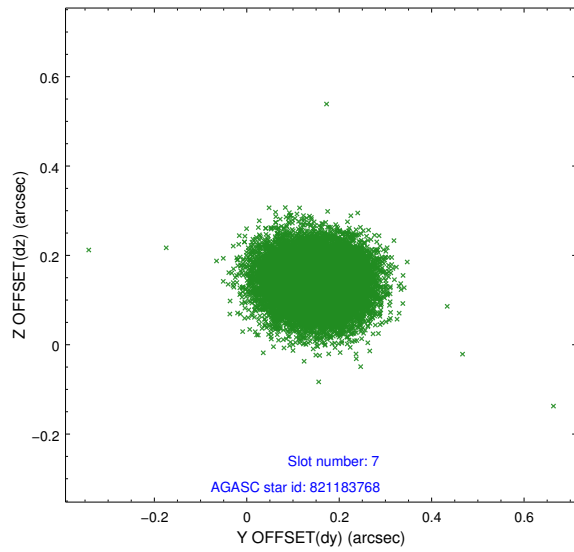
2.4.3 Slot 5



2.4.4 Slot 6

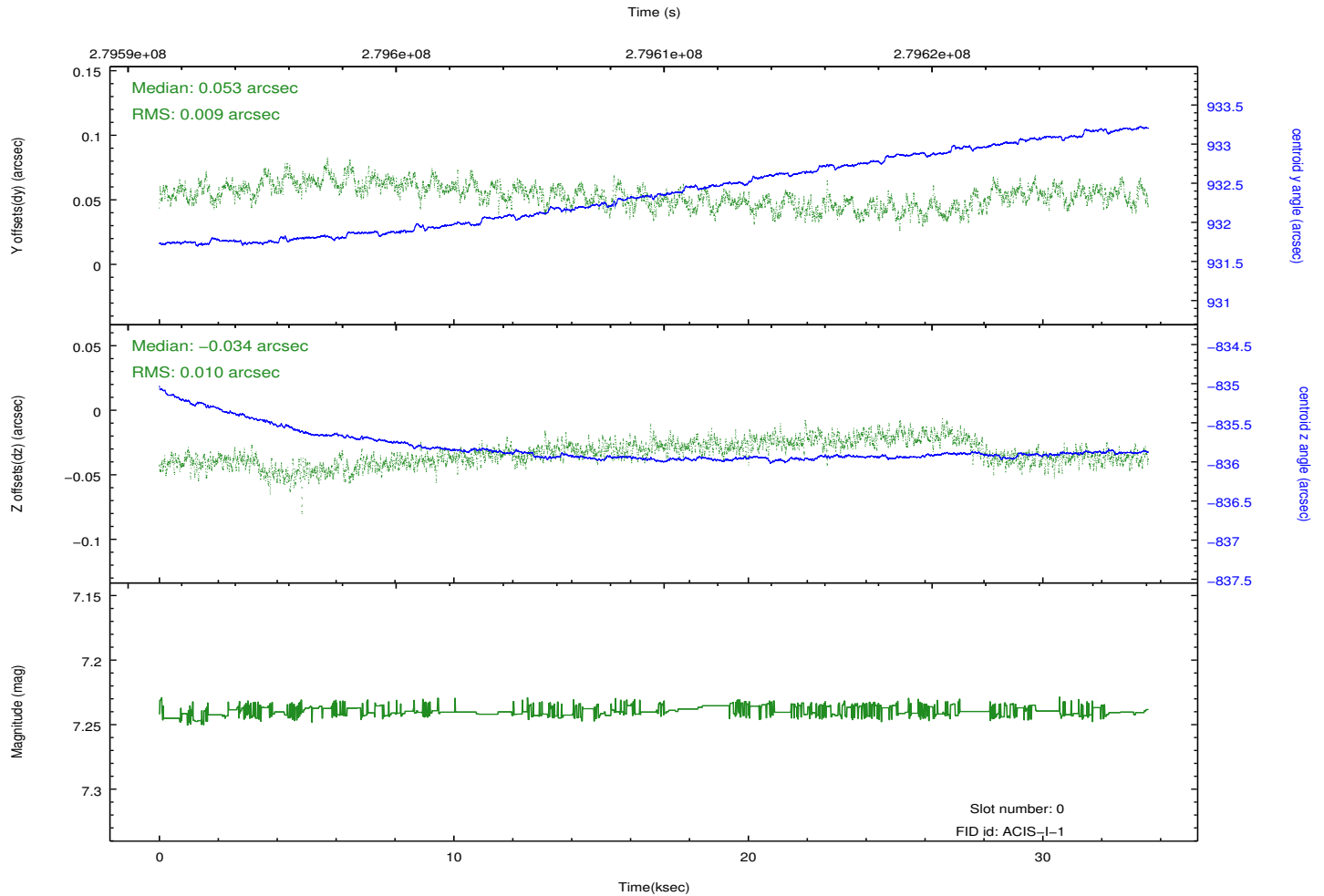
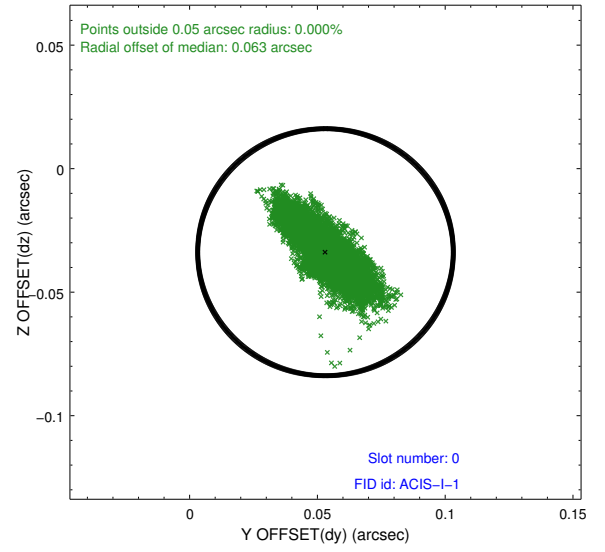
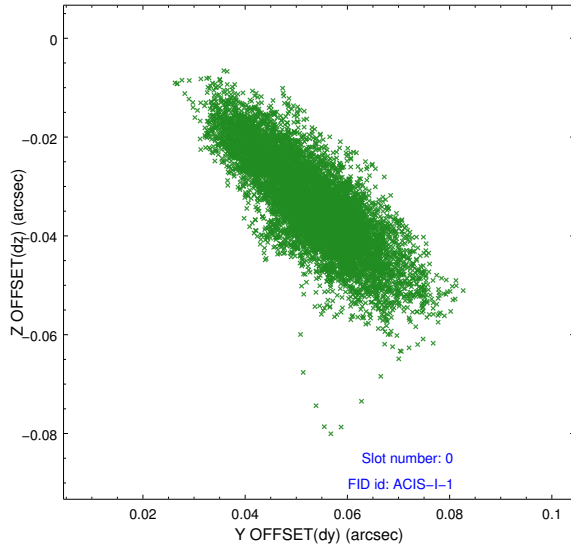


2.4.5 Slot 7

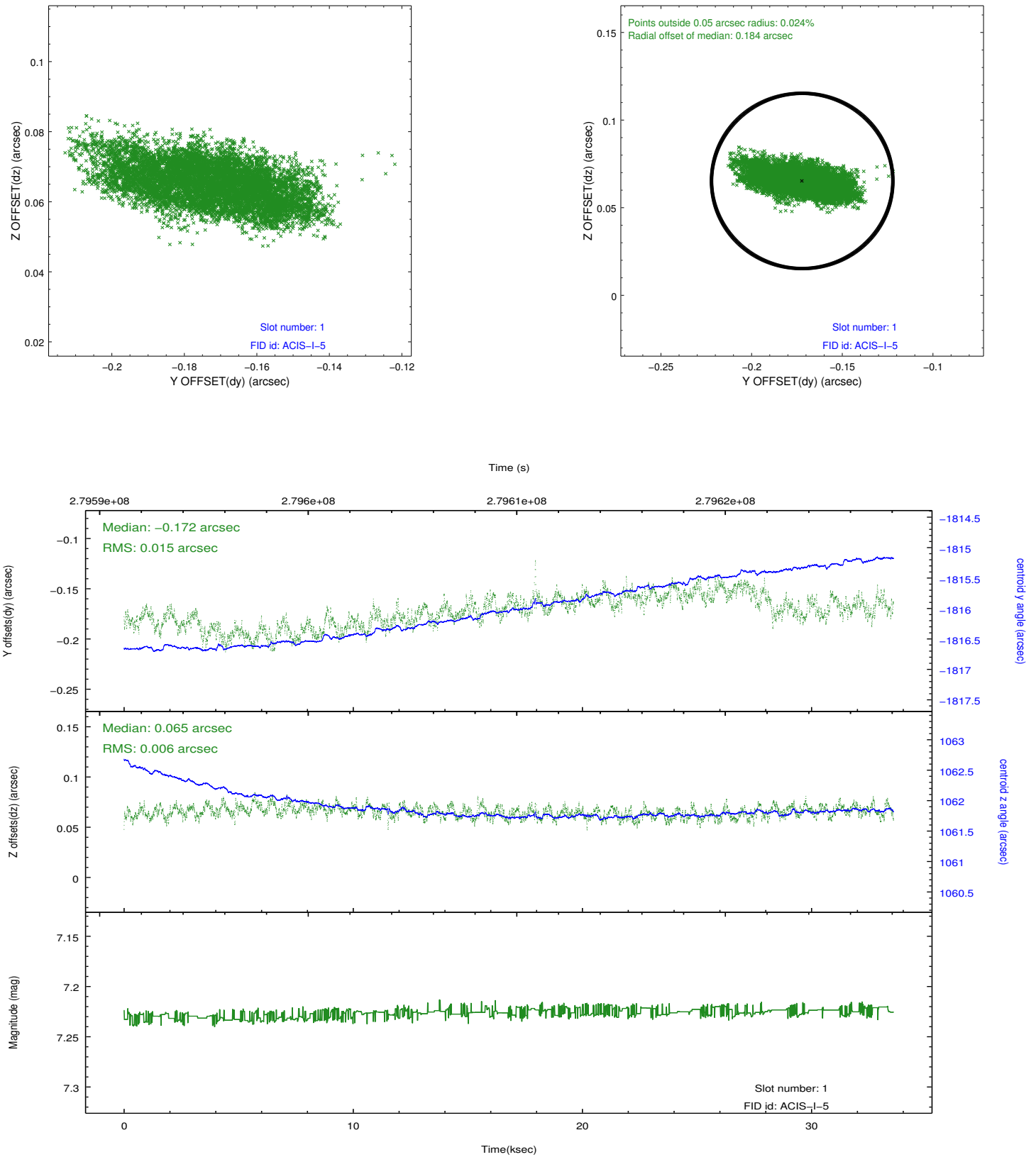


2.5 FID Slots

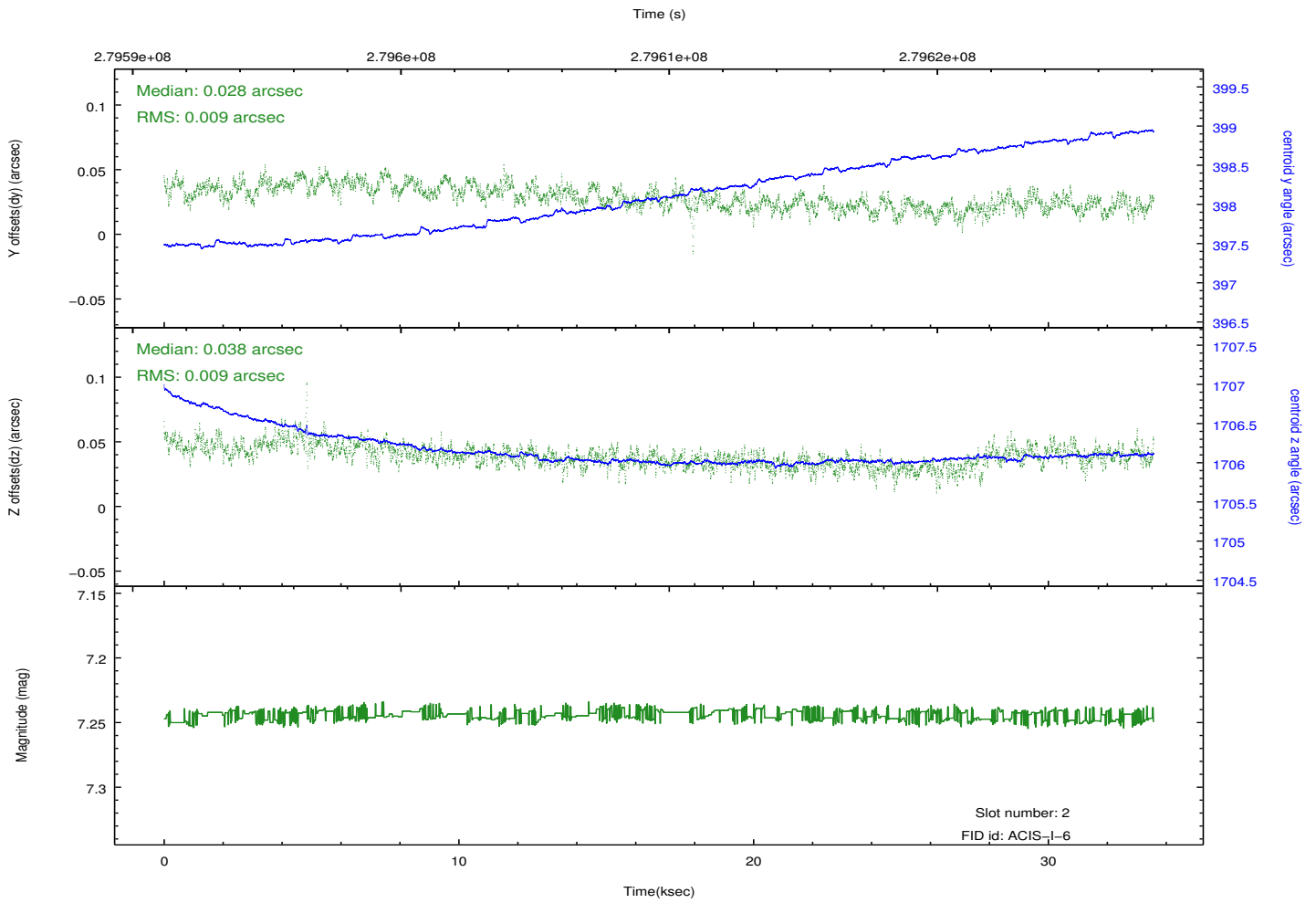
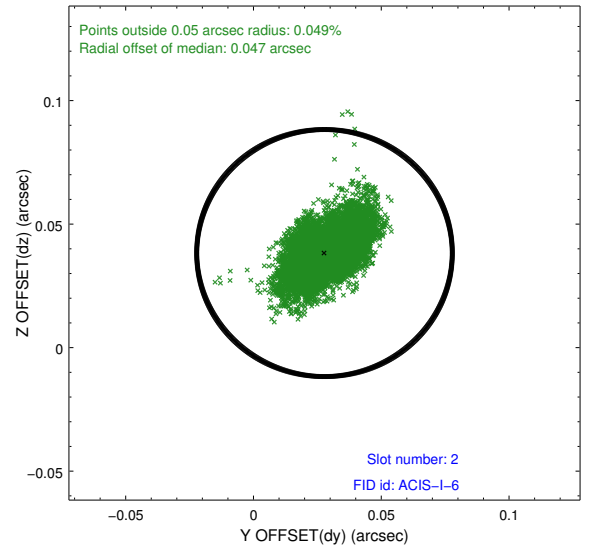
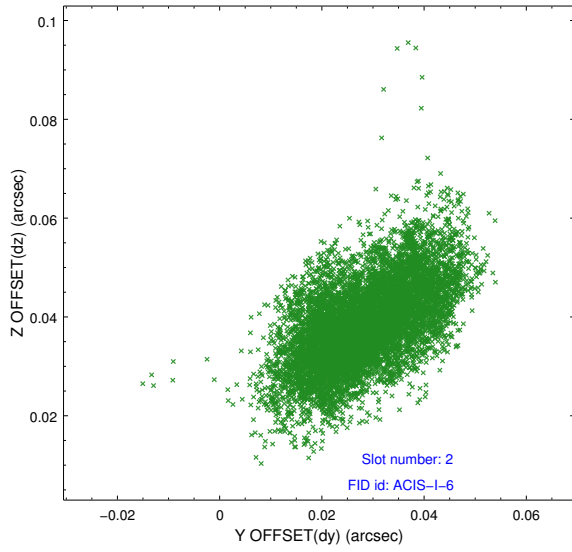
2.5.1 Slot 0



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)	2012.05.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.5679589

A.2 Comments

A spatial region of the original bias map for CCD = 0 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 = 0 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:
(275.08791, -16.33497), (275.09283, -16.33427), (275.07198, -16.20190), (275.06707, -16.20260)