

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10803 - L2 Version 3
Chandra X-Ray Center

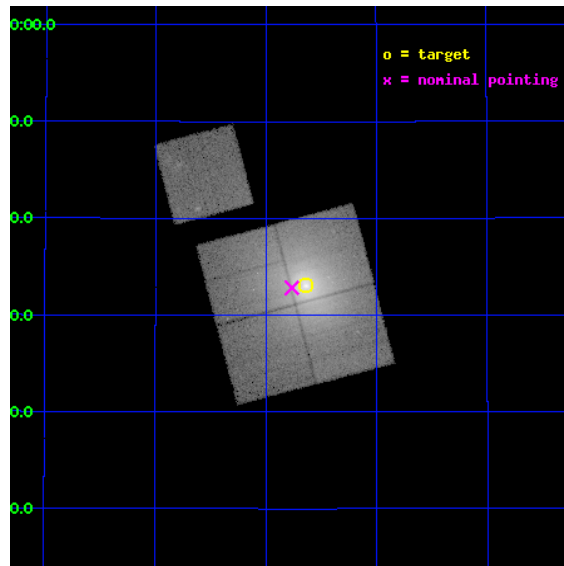
L2 Processing Date : Jun 17 2012

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1 Front

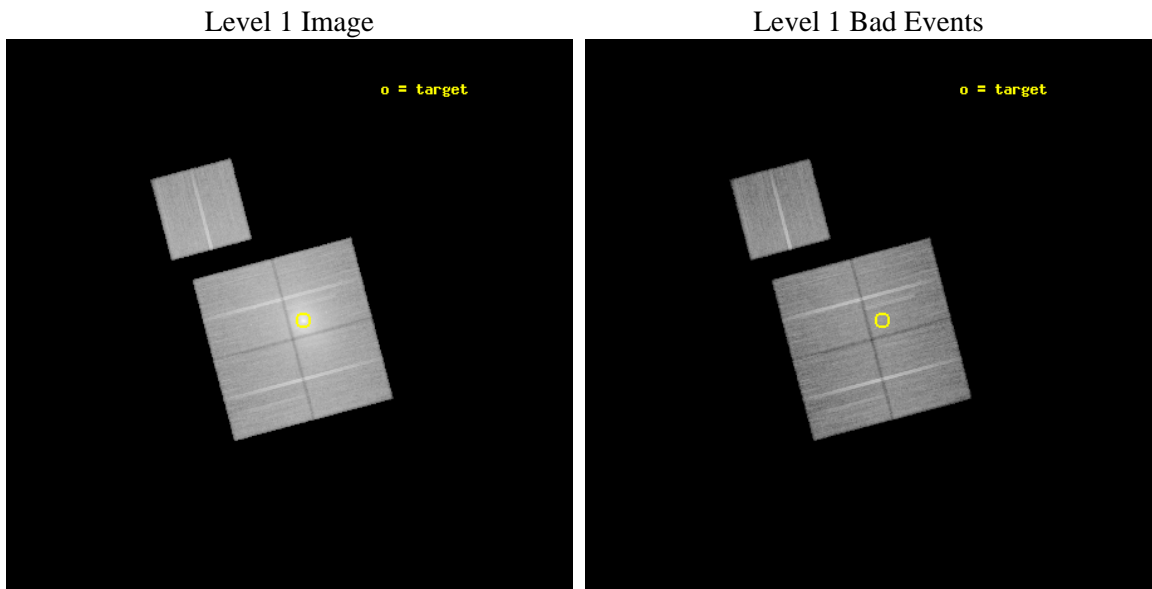
seq_num	800849	Sequence number
obs_id	10803	Observation id
title	Abell 2199: AGN outbursts and merger	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	Abell 2199	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	247.16	Observer's specified target RA [deg]
dec_targ	39.551111	Observer's specified target Dec [deg]
ra_nom	247.19132822348	Nominal RA [deg]
dec_nom	39.547140308624	Nominal Dec [deg]
roll_nom	345.18872892334	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30556.659274697	Sum of GTIs [s]
livetime	30157.414025788	Livetime [s]
ontime0	30556.659244776	Sum of GTIs [s]
ontime1	30553.518374085	Sum of GTIs [s]
ontime2	30553.518274426	Sum of GTIs [s]
ontime3	30556.659274697	Sum of GTIs [s]
ontime6	30556.659274697	Sum of GTIs [s]
l2events	437711	Number of level 2 events



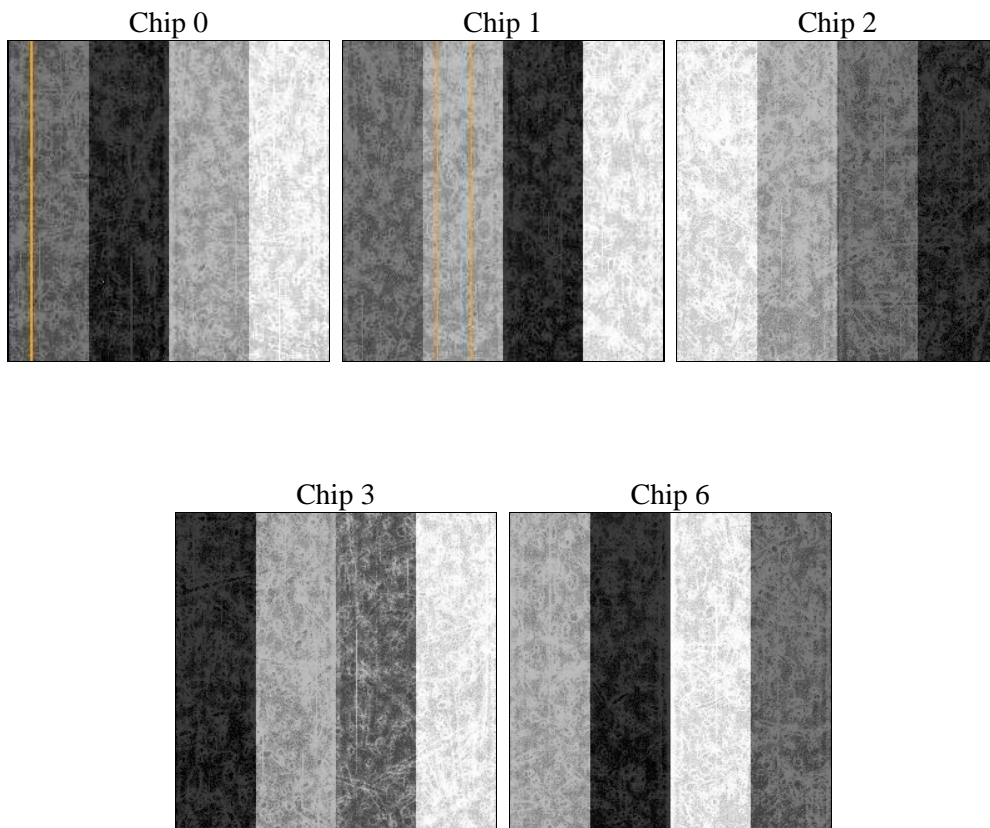
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30410.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	30556.659274697	Sum of GTIs [s]
caldbver	4.4.10	 	ontime0	30556.659244776	Sum of GTIs [s]
date	2012-06-17T14:10:31	Date and time of file creation	ontime1	30553.518374085	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	30553.518274426	Sum of GTIs [s]
			ontime3	30556.659274697	Sum of GTIs [s]
			ontime6	30556.659274697	Sum of GTIs [s]
			l1events	1689924	Number of level 1 events

2.1.4 Events

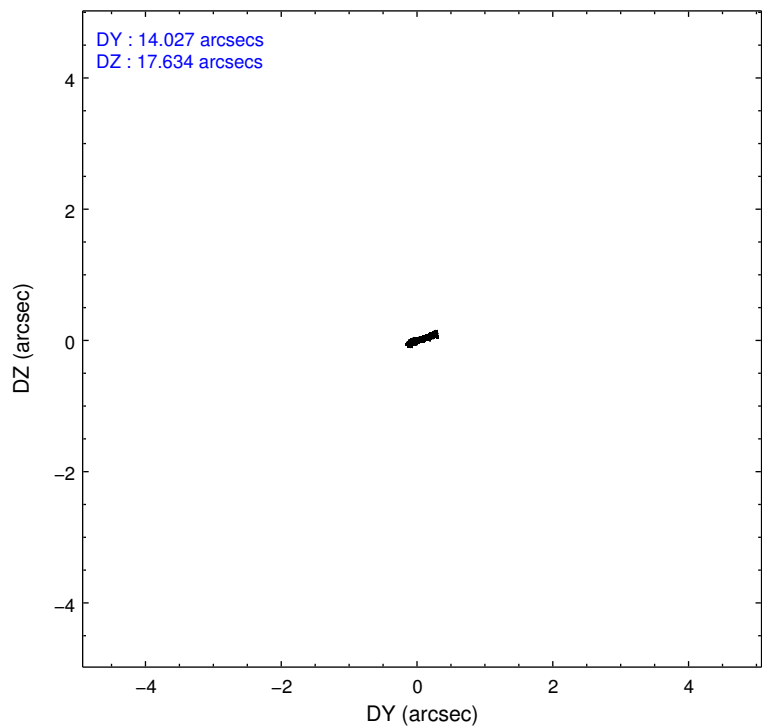
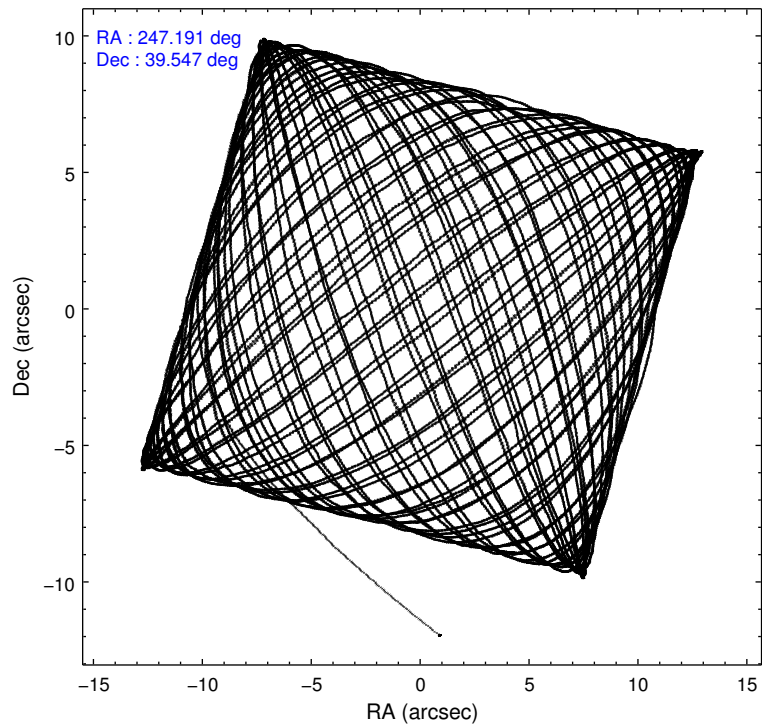
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	275543	324793	341374	470091	278123
rejected events	224997	229482	260752	253617	246088
rejected %	81%	70%	76%	53%	88%

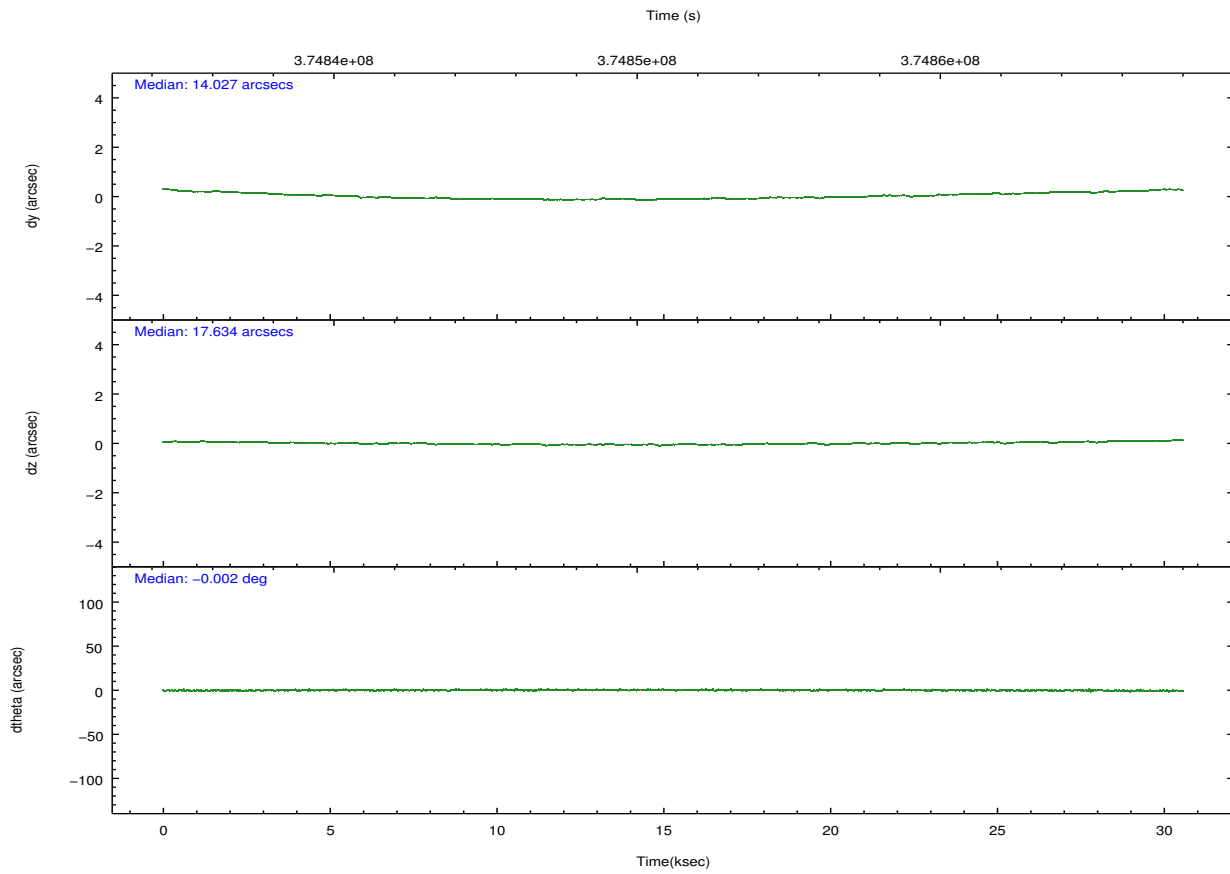
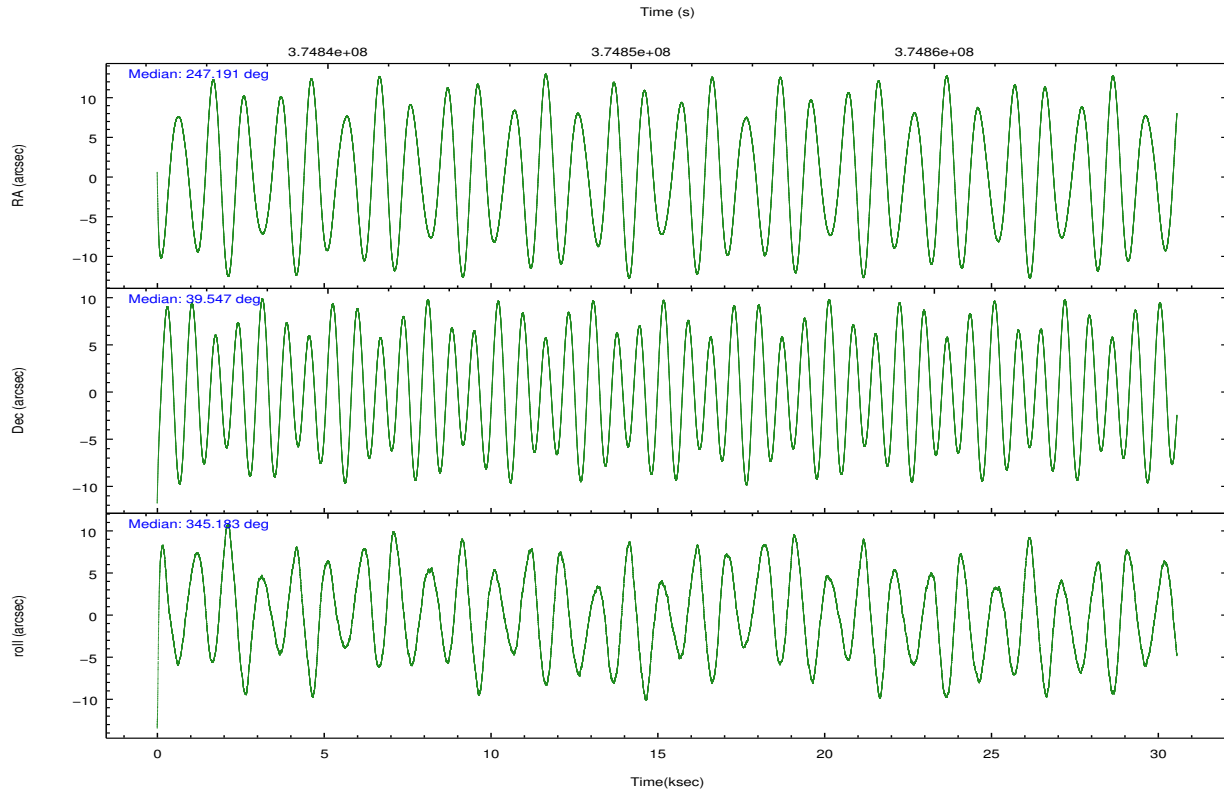
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	28636	63734	54202	167548	13301
	10%	19%	15%	35%	4%
grade 1 events	277	457	498	1347	137
	0%	0%	0%	0%	0%
grade 2 events	9120	14019	11721	24066	6746
	3%	4%	3%	5%	2%
grade 3 events	3646	5145	4467	8389	3102
	1%	1%	1%	1%	1%
grade 4 events	3430	5043	4400	8315	3060
	1%	1%	1%	1%	1%
grade 5 events	10006	11022	9934	12305	11163
	3%	3%	2%	2%	4%
grade 6 events	5975	7837	6297	9367	6009
	2%	2%	1%	1%	2%
grade 7 events	214453	217536	249855	238754	234605
	77%	66%	73%	50%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	247.156984	247.19132822348	CCD I2 on	Y	Y
[deg] Pointing Dec	39.539832	39.54714030862436	CCD I3 on	Y	Y
[deg] Pointing Roll	345.001913	345.1887289233408	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	-230.692463	-230.6909432334316	CCD S3 on	N	N
[mm] SIM translation stage offset	-2.9	-2.901509769498119	CCD S4 on	N	N
[s] Observation start time (MET)	374836052.184000	374834988.59203	CCD S5 on	N	N
Observation start date	2009-11-17T09:06:26	2009-11-17T08:49:48	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	374866462.184000	374866891.20614	On-chip summing requested	N	N
Observation end date	2009-11-17T17:33:16	2009-11-17T17:41:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



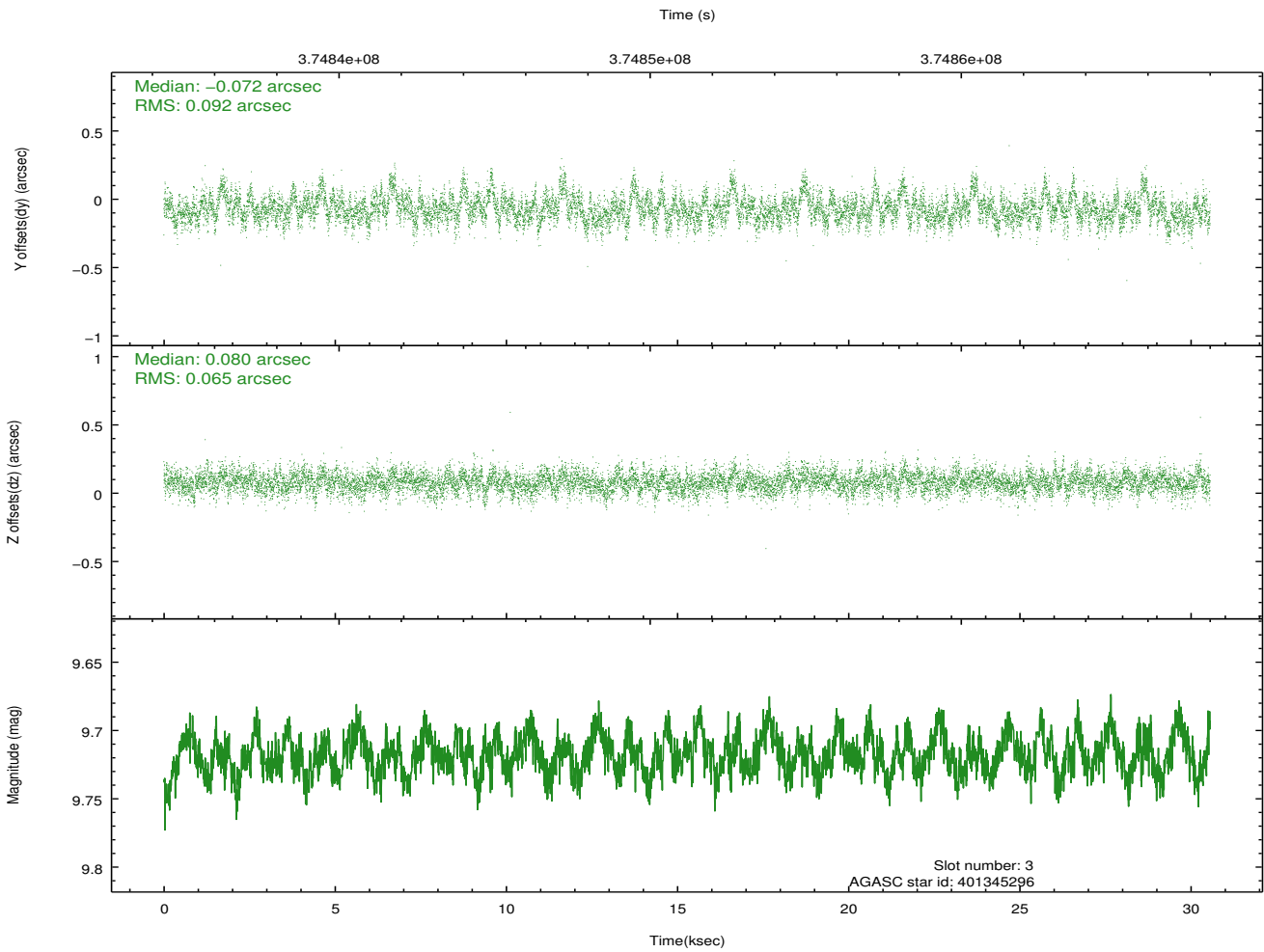
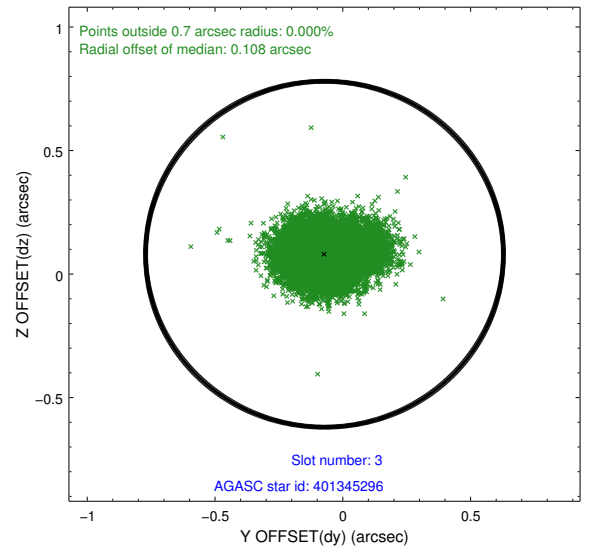
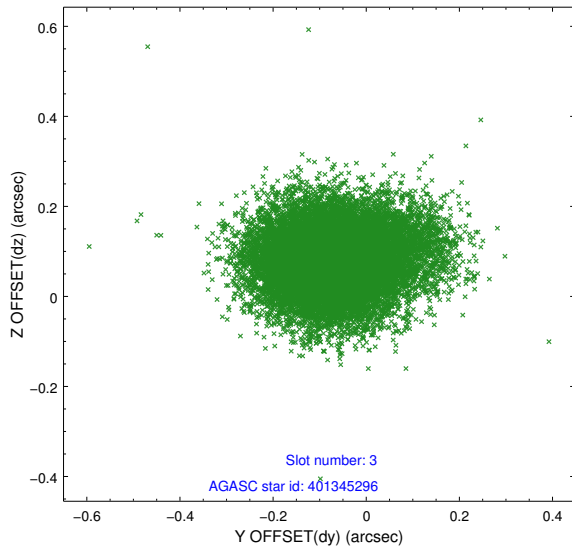


Slot Statistics

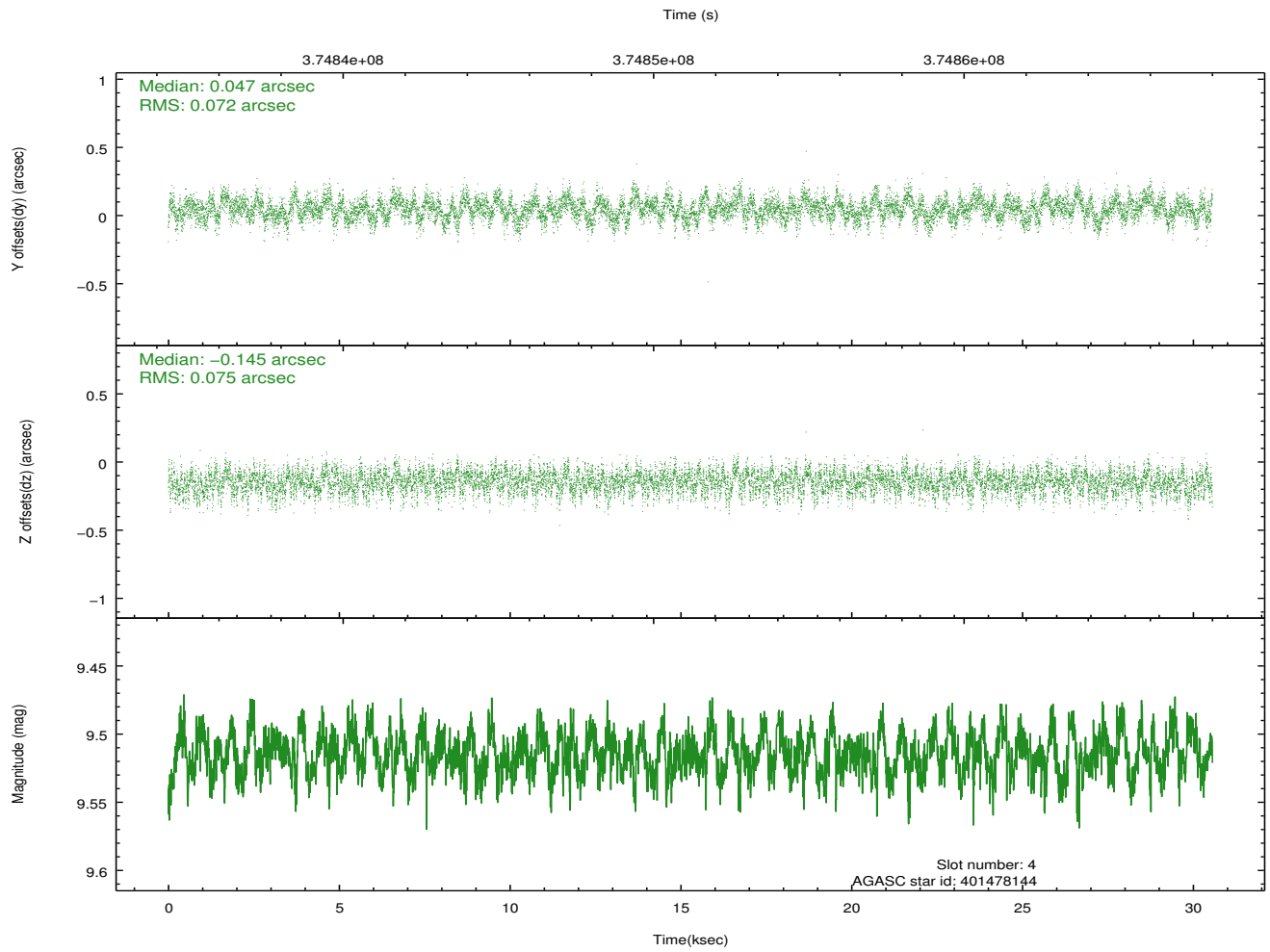
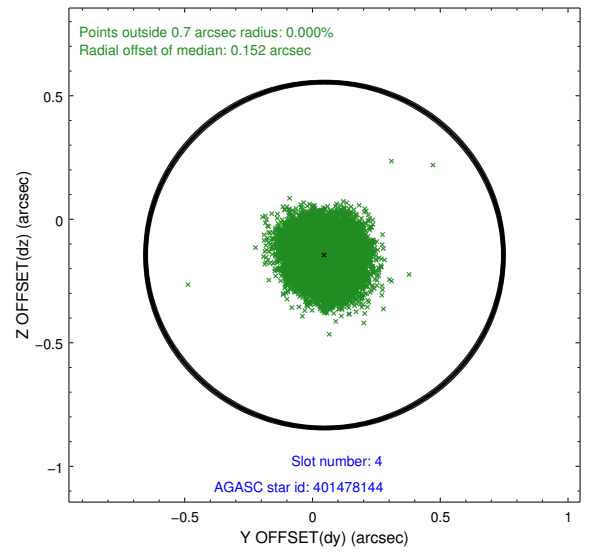
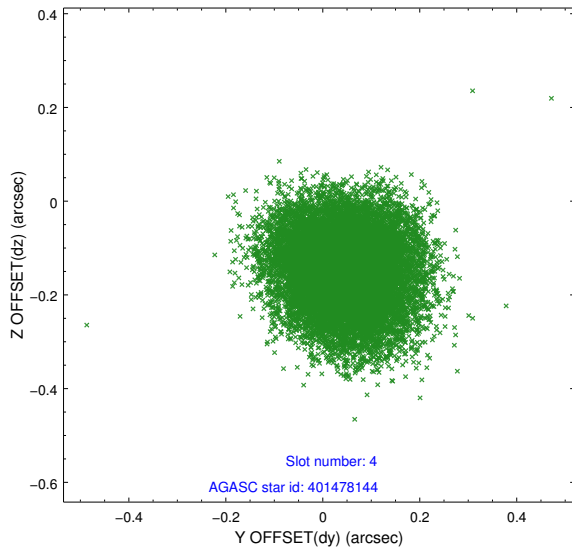
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.01	7454	0.080	-0.006	0.007	0.014	0.000000	0.000000	925.45	-900.82
1	FID	ACIS-I-5	6.99	7455	-0.229	0.086	0.006	0.012	0.000000	0.000000	-1822.92	996.73
2	FID	ACIS-I-6	7.01	7454	0.057	-0.009	0.007	0.012	0.000000	0.000000	390.90	1641.21
3	GUIDE	401345296	9.72	14880	-0.072	0.080	0.118	0.200	246.414533	39.580805	-2029.71	-382.35
4	GUIDE	401478144	9.51	14888	0.047	-0.145	0.111	0.178	247.248621	39.077700	678.47	-1540.51
5	GUIDE	401479168	9.81	14821	-0.016	0.031	0.173	0.272	248.051525	39.792234	2151.92	1531.05
6	GUIDE	401481984	8.70	14898	0.015	-0.038	0.075	0.118	247.136950	39.776672	-273.78	809.52
7	GUIDE	401483160	9.70	14886	0.027	0.074	0.142	0.223	247.172429	38.956724	585.65	-2016.33

2.4 Star Slots

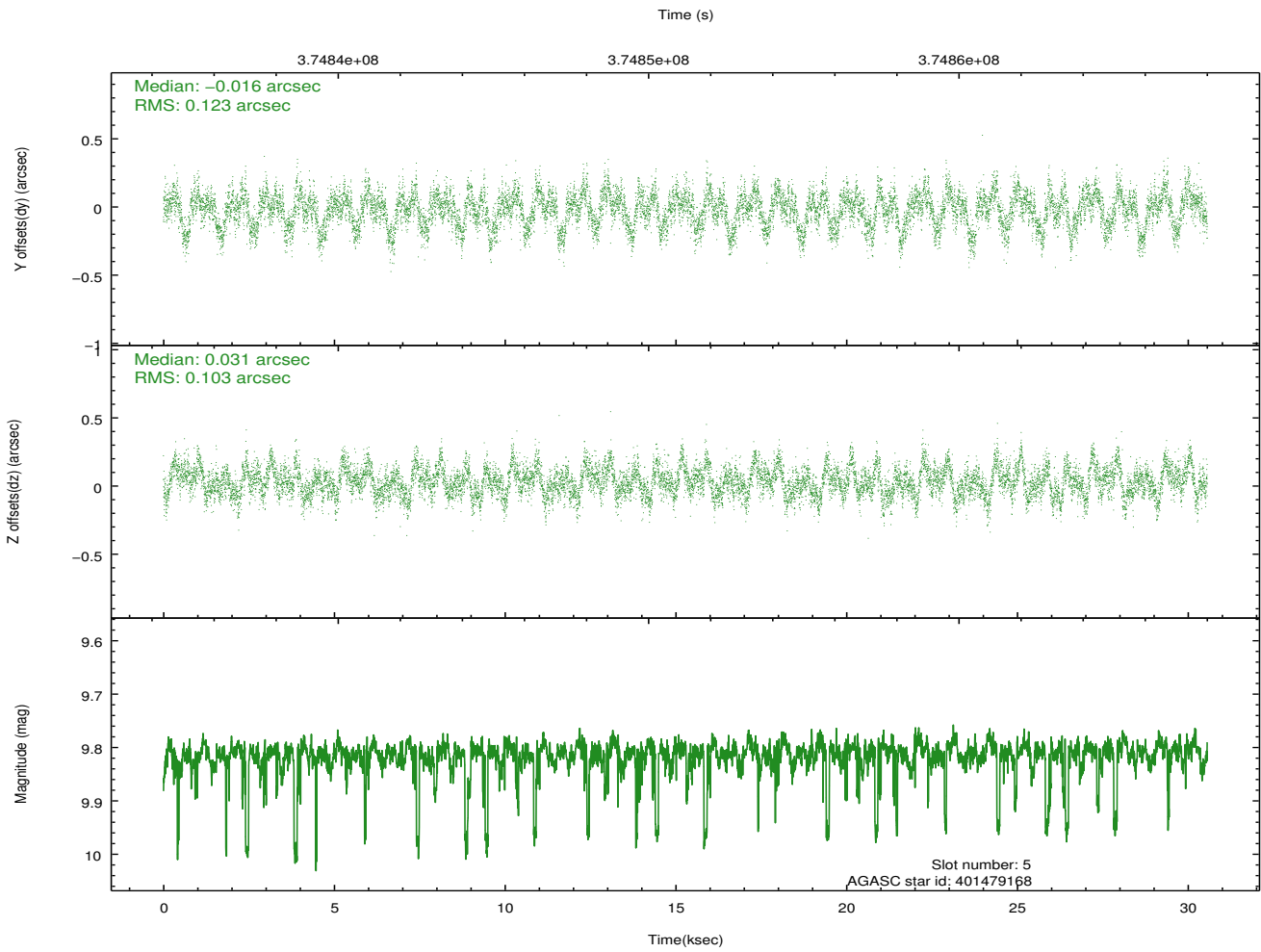
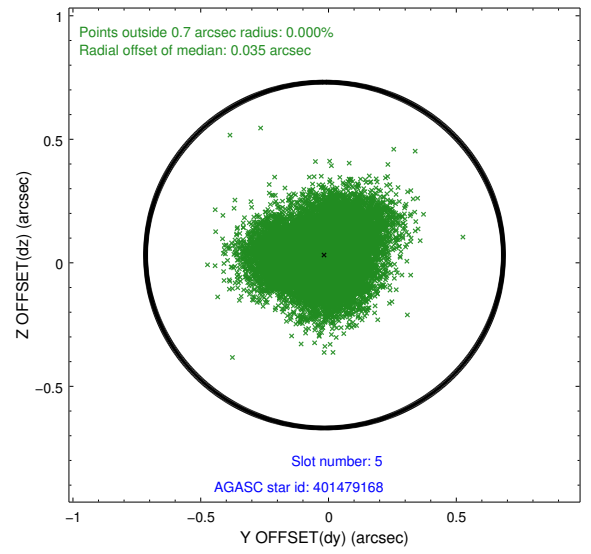
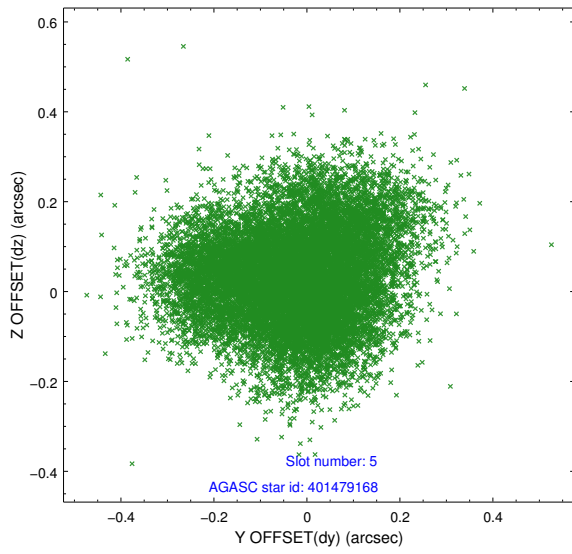
2.4.1 Slot 3



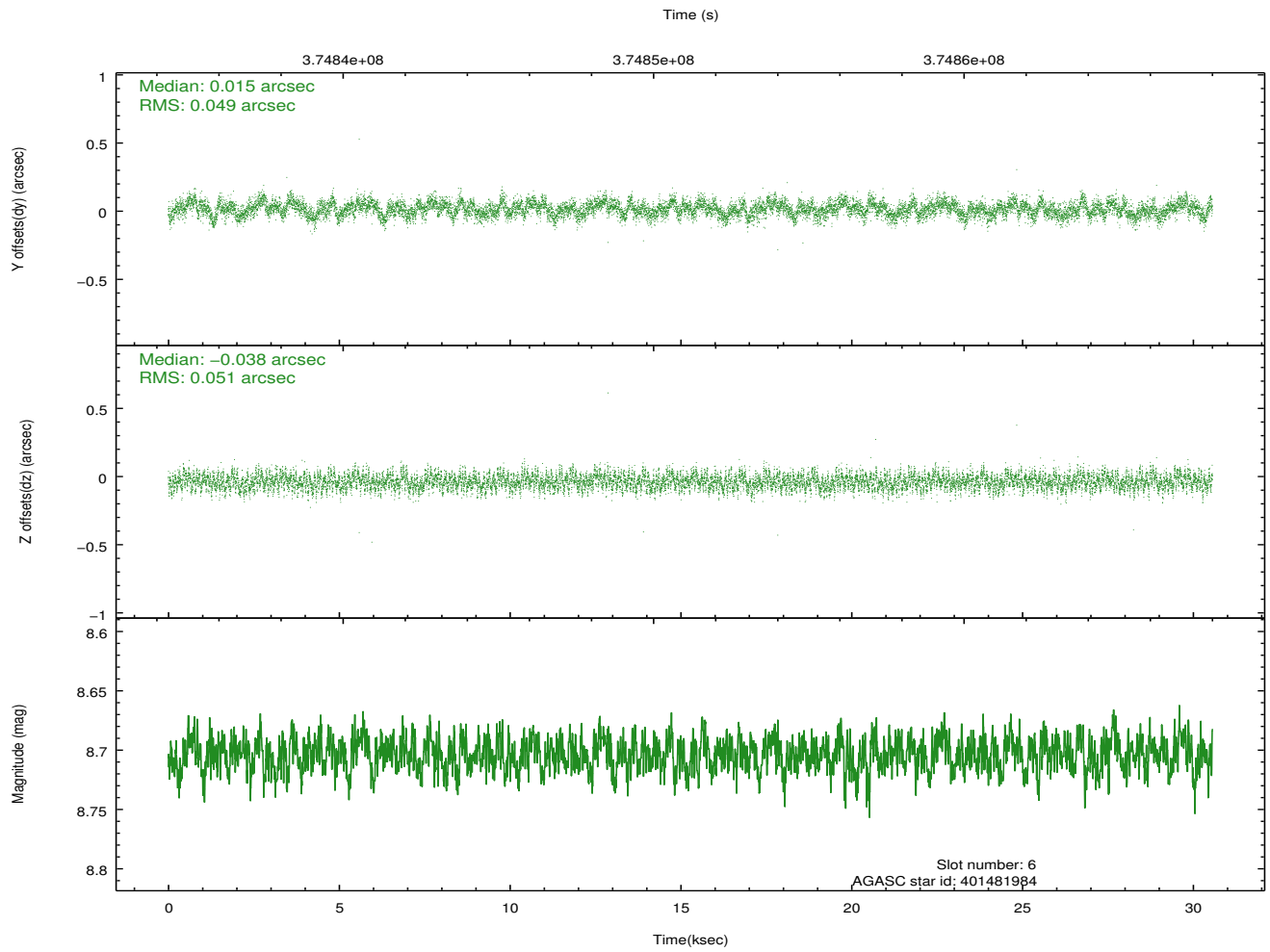
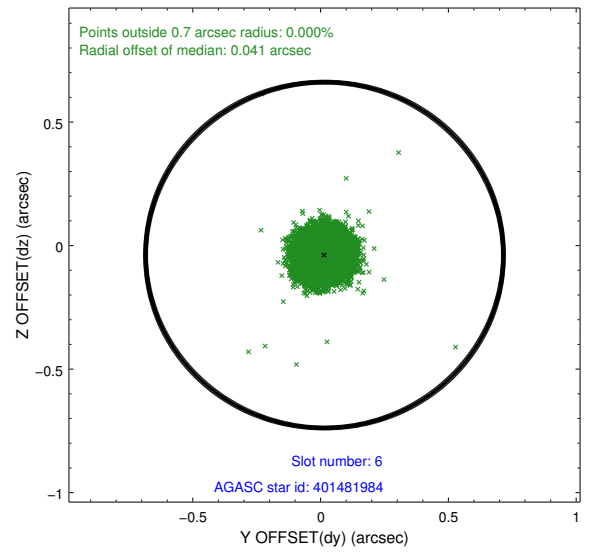
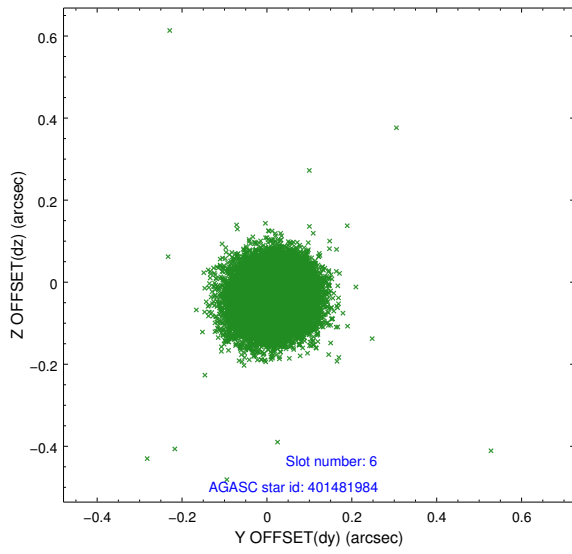
2.4.2 Slot 4



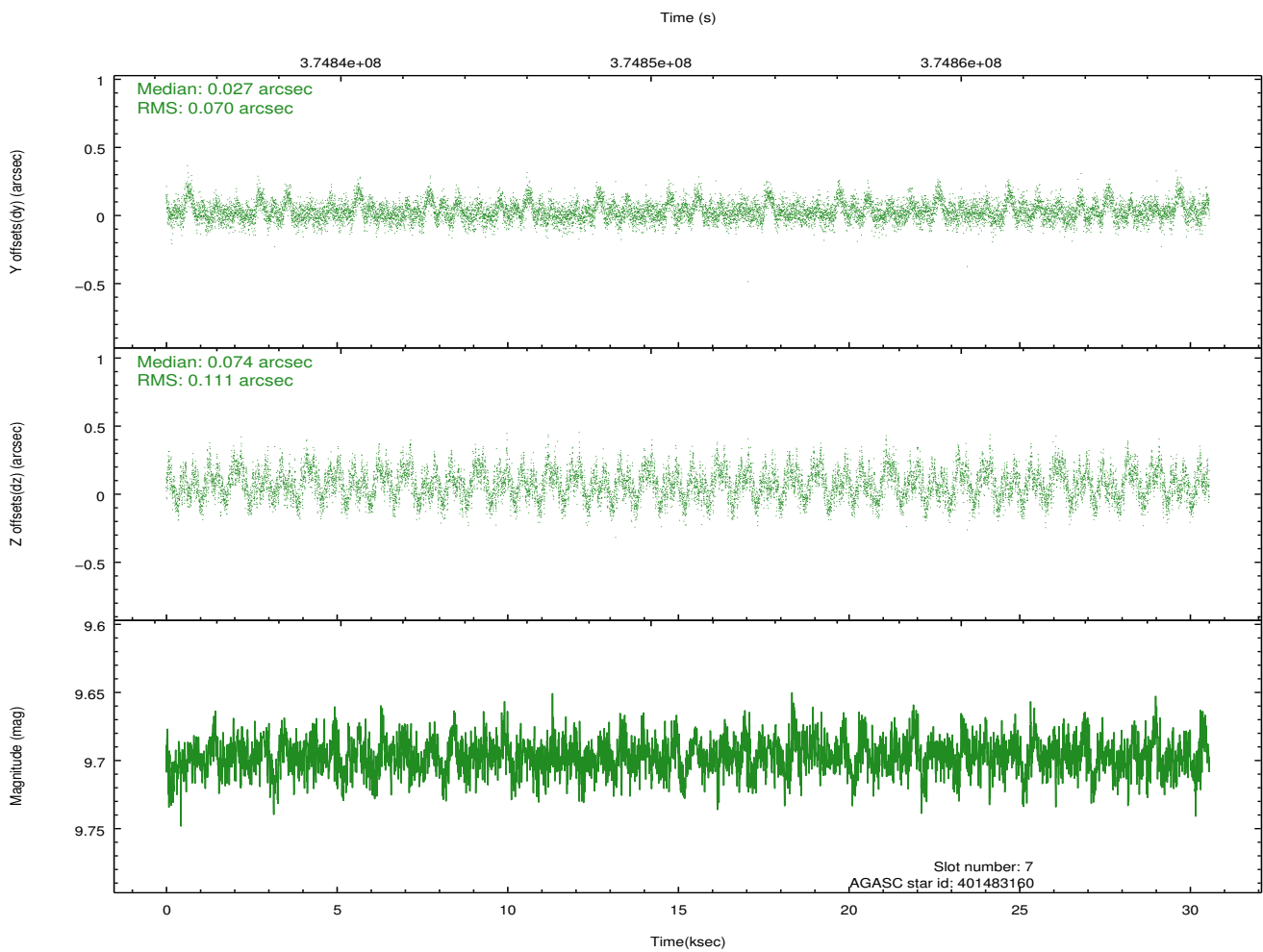
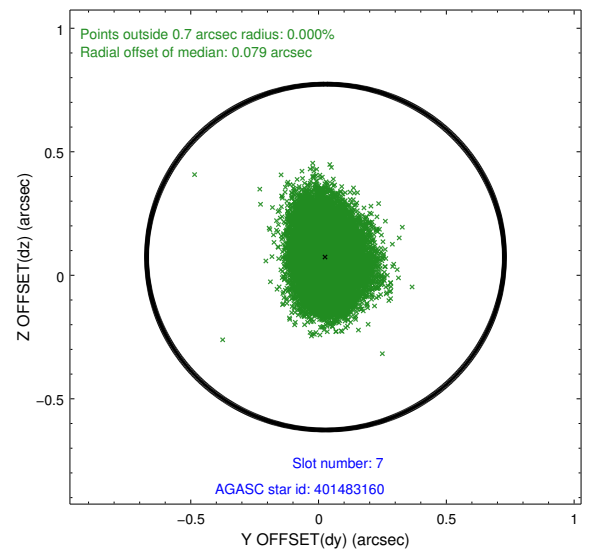
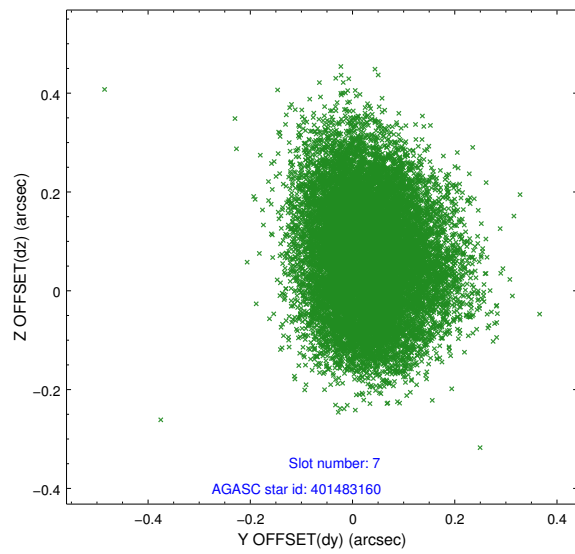
2.4.3 Slot 5



2.4.4 Slot 6

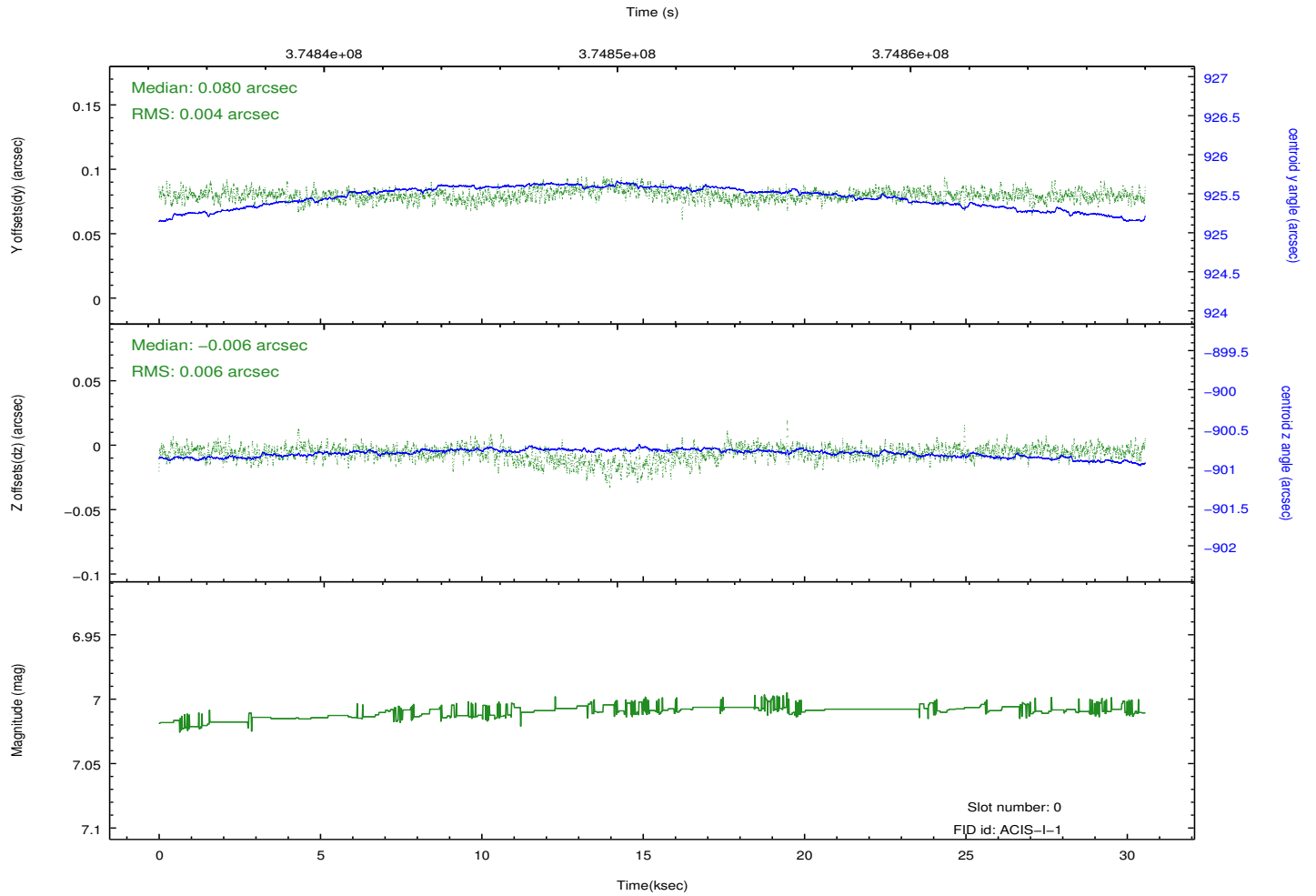
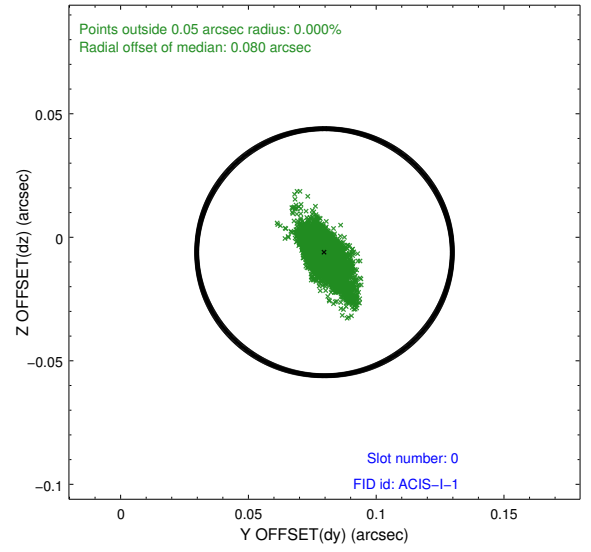
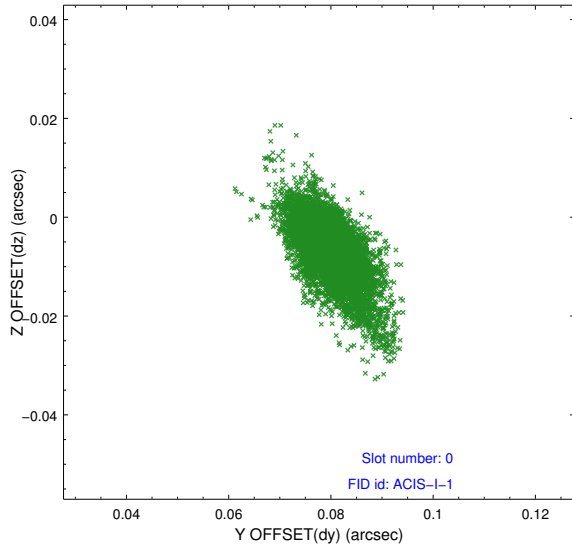


2.4.5 Slot 7

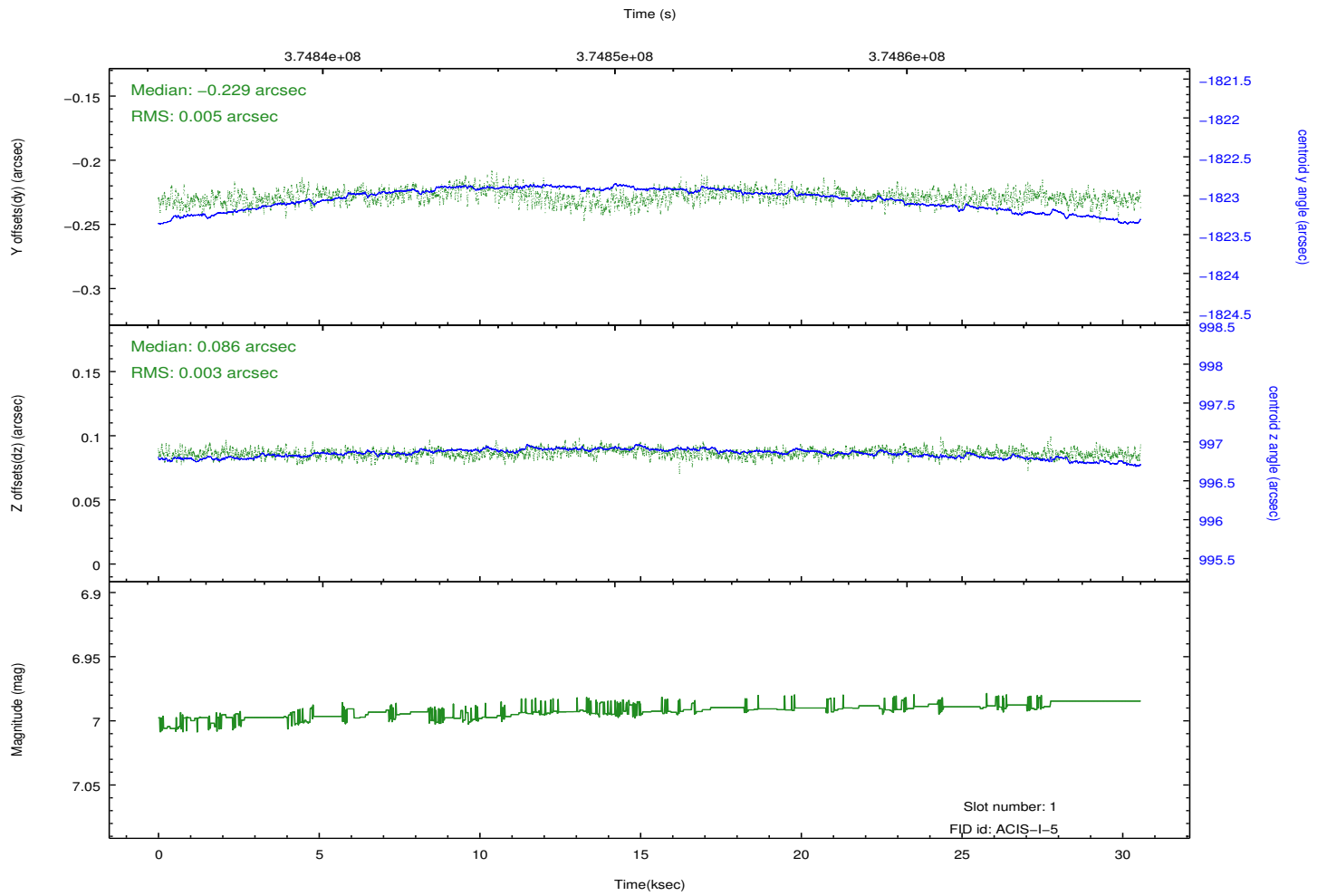
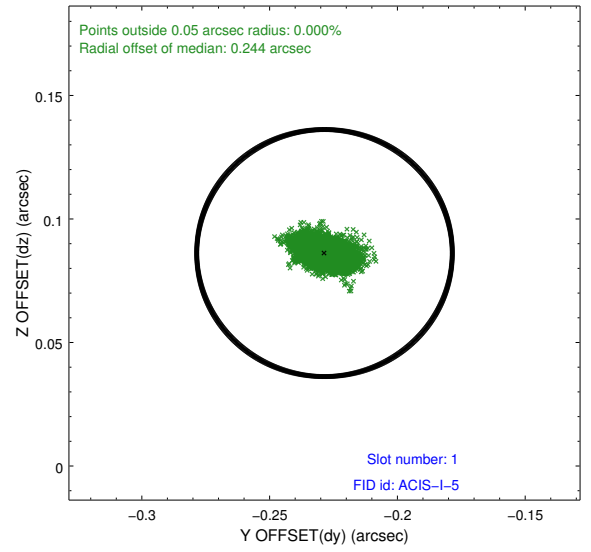
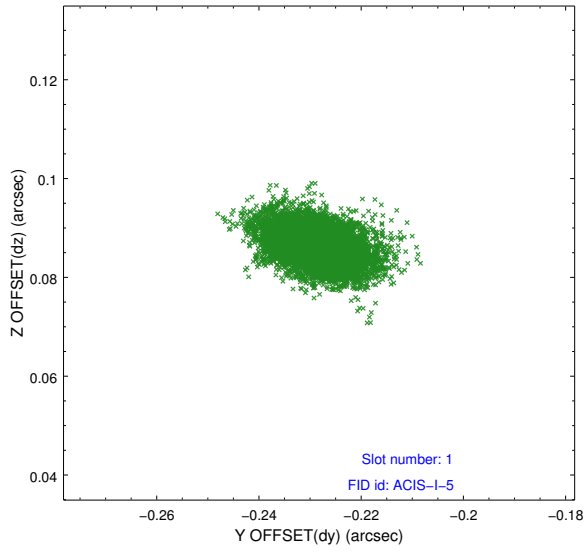


2.5 FID Slots

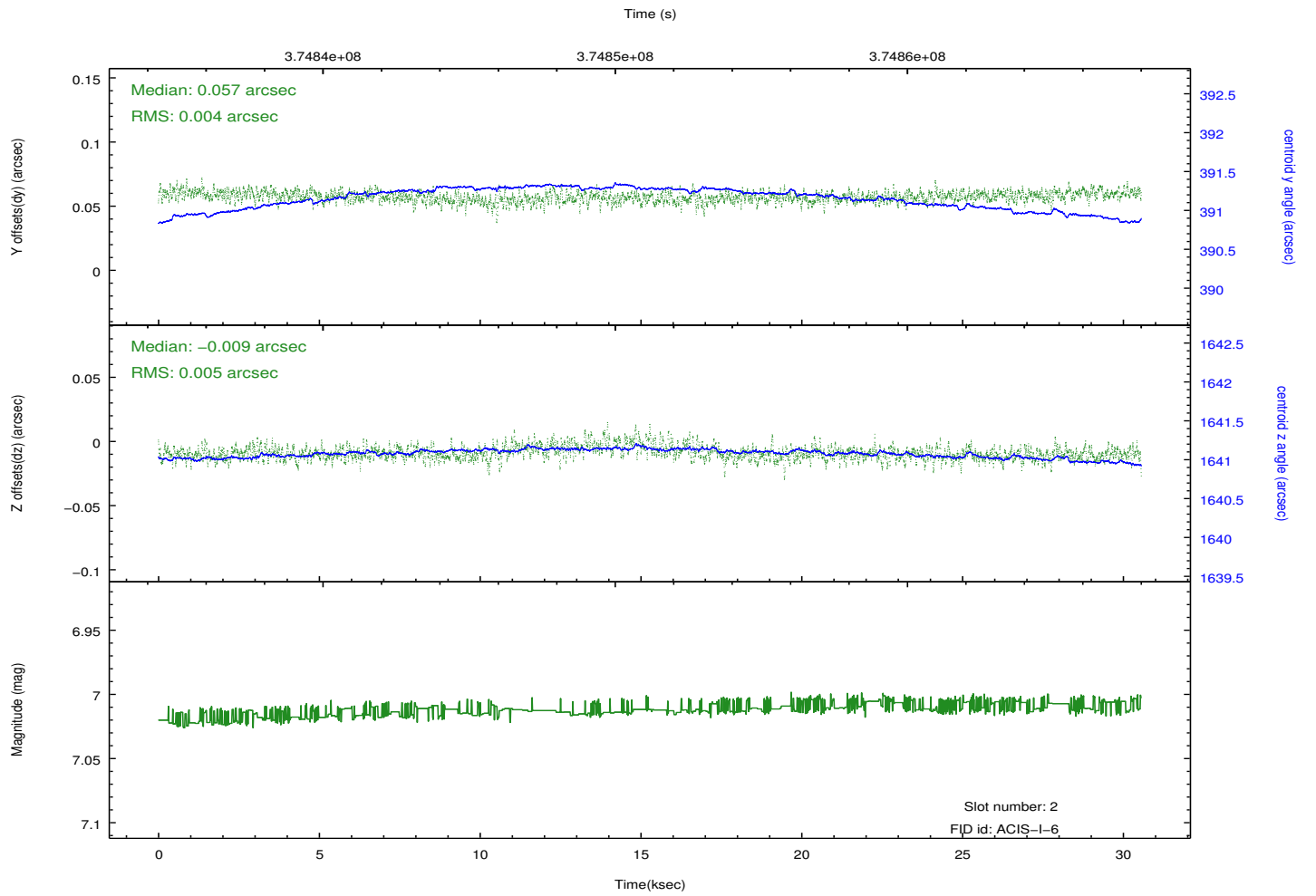
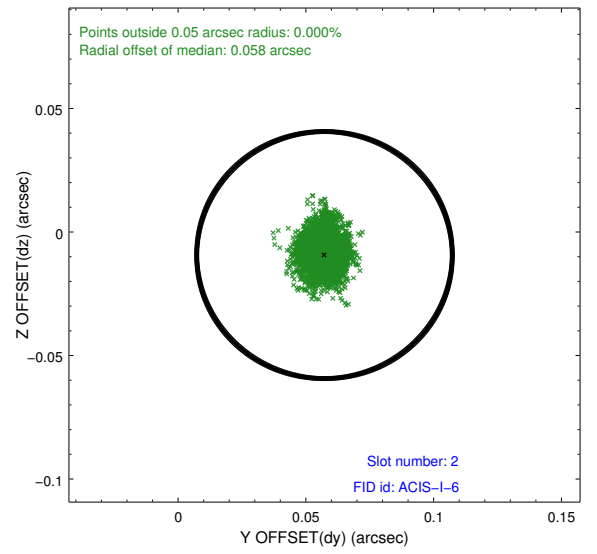
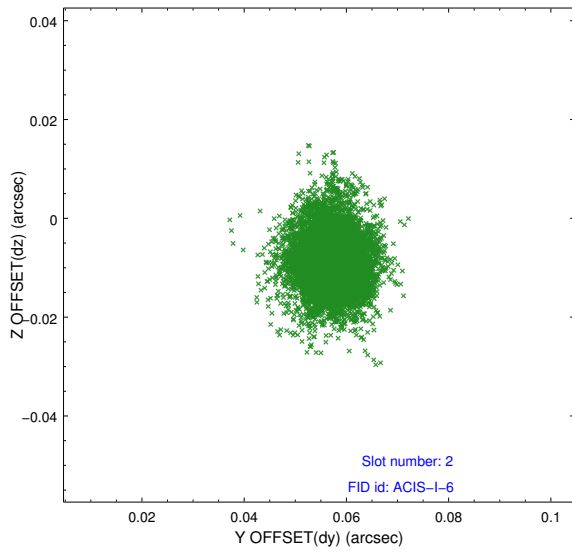
2.5.1 Slot 0



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)	2012.06.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.556659274697

A.2 Comments

Roll preference met.

=====

A spatial region of the original bias map for CCD = 2 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 = 2 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 (sky coords):
(247.28349,39.55288), (247.28574,39.55947), (247.25156,39.56646), (247.25786,39.55812)