

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13021 - L2 Version 2
Chandra X-Ray Center

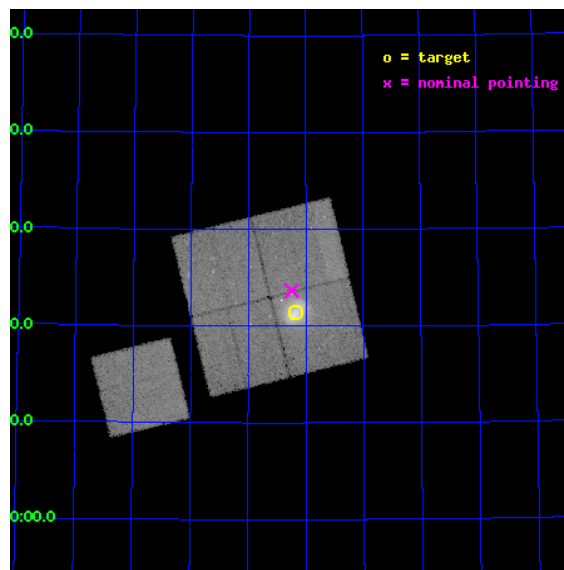
L2 Processing Date : Jul 1 2012

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1 Front

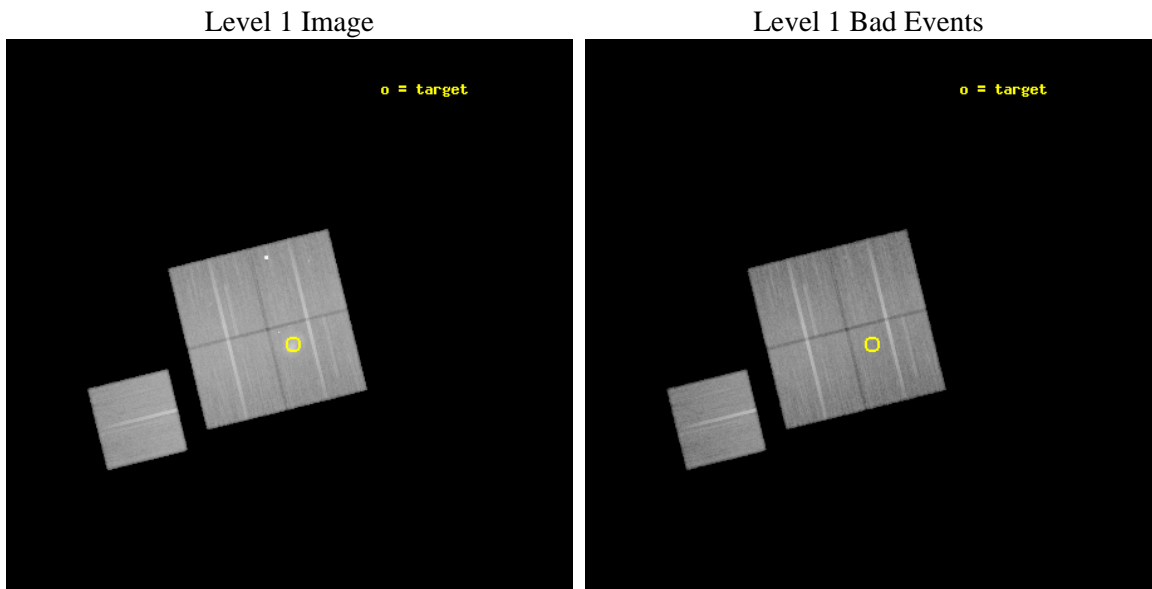
seq_num	801054	Sequence number
obs_id	13021	Observation id
title	Revealing the ICM transport processes with the bow shock, upstream shock and turbulent wake in Abell 2146	Proposal title
observer	Dr Helen Russell	Principal investigator
object	Abell 2146	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	239.04239	Observer's specified target RA [deg]
dec_targ	66.357434	Observer's specified target Dec [deg]
ra_nom	239.06072733804	Nominal RA [deg]
dec_nom	66.394039135556	Nominal Dec [deg]
roll_nom	256.19189689448	Nominal Roll [deg]
revision	2	Processing version of data
ontime	49044.599675775	Sum of GTIs [s]
livetime	48403.795874902	Livetime [s]
ontime0	49044.599675775	Sum of GTIs [s]
ontime1	49041.499735594	Sum of GTIs [s]
ontime2	49041.540825367	Sum of GTIs [s]
ontime3	49051.004796267	Sum of GTIs [s]
ontime6	49041.417665601	Sum of GTIs [s]
l2events	198323	Number of level 2 events



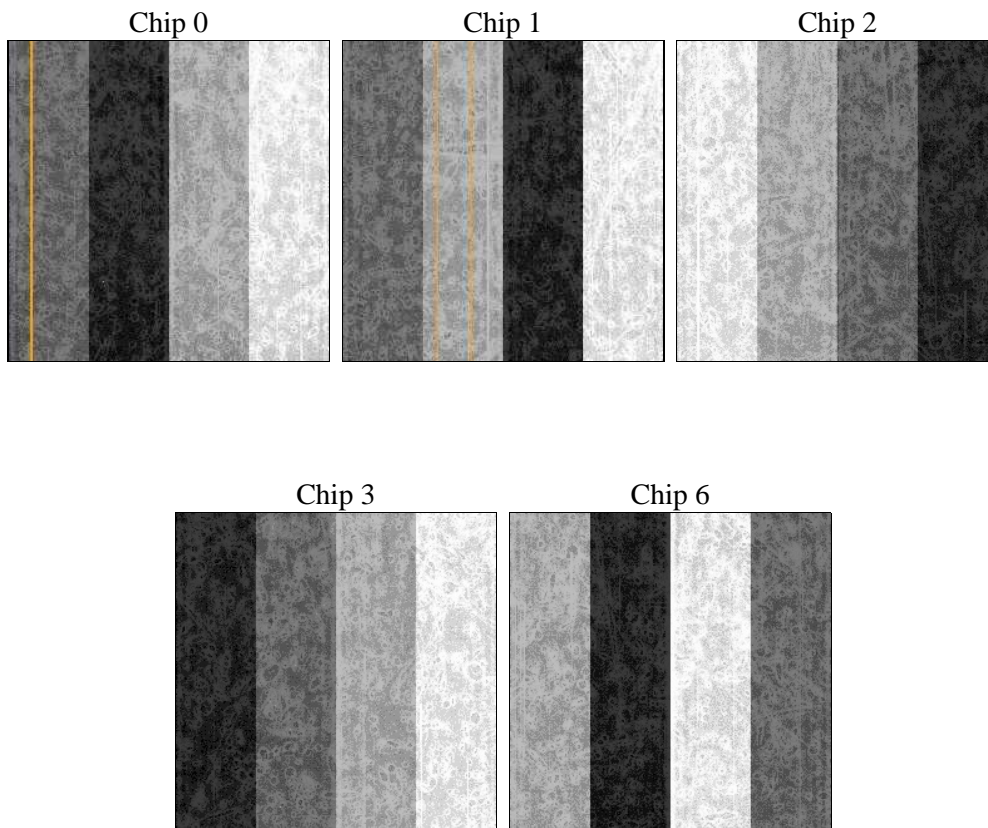
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	49000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	49044.599675775	Sum of GTIs [s]
caldsver	4.5.0	 	ontime0	49044.599675775	Sum of GTIs [s]
date	2012-07-01T18:35:55	Date and time of file creation	ontime1	49041.499735594	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	49041.540825367	Sum of GTIs [s]
			ontime3	49051.004796267	Sum of GTIs [s]
			ontime6	49041.417665601	Sum of GTIs [s]
			l1events	1807588	Number of level 1 events

2.1.4 Events

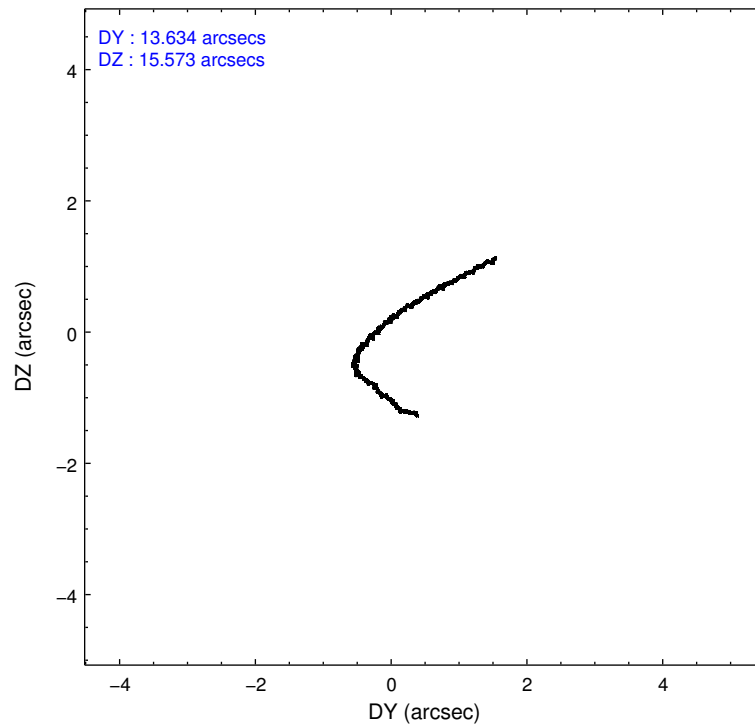
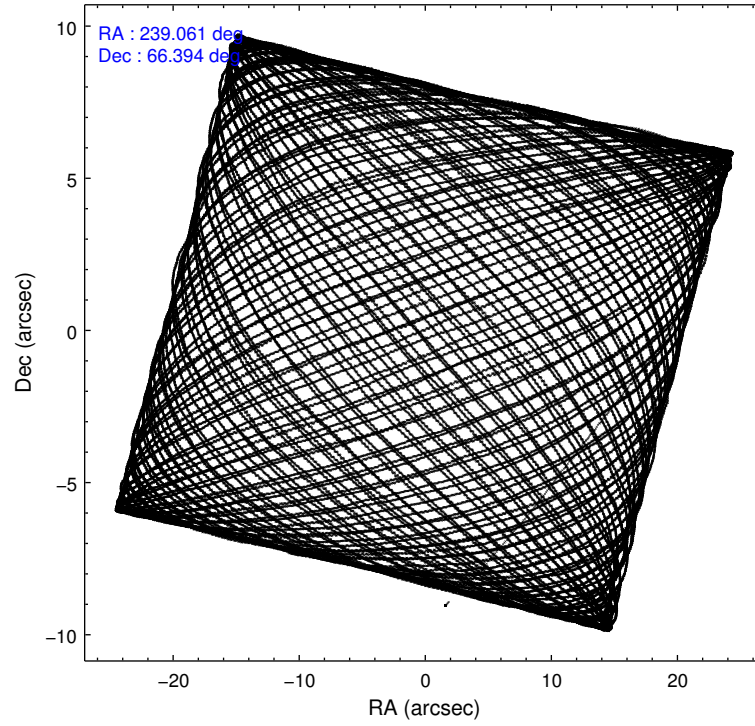
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	365402	356983	370507	352270	362426
rejected events	294233	297388	331368	315125	322309
rejected %	80%	83%	89%	89%	88%

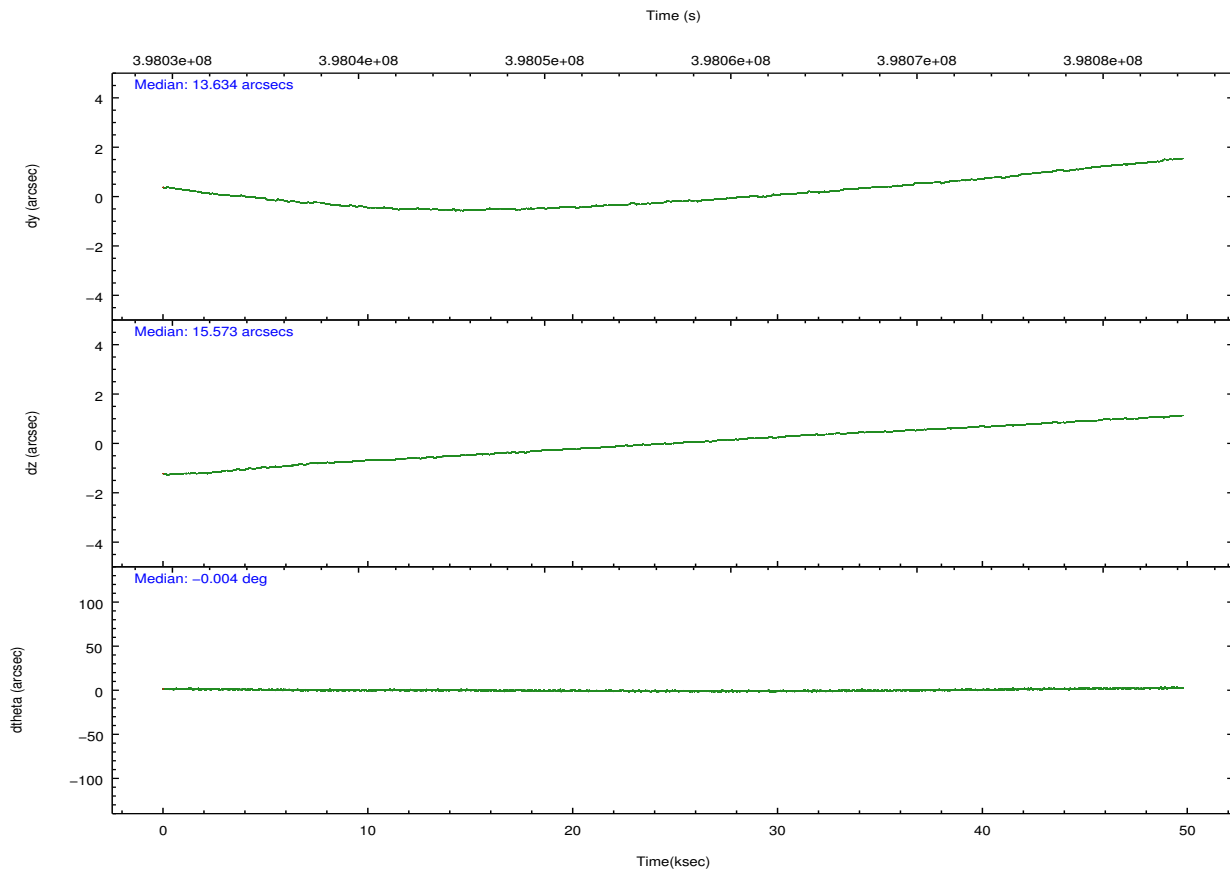
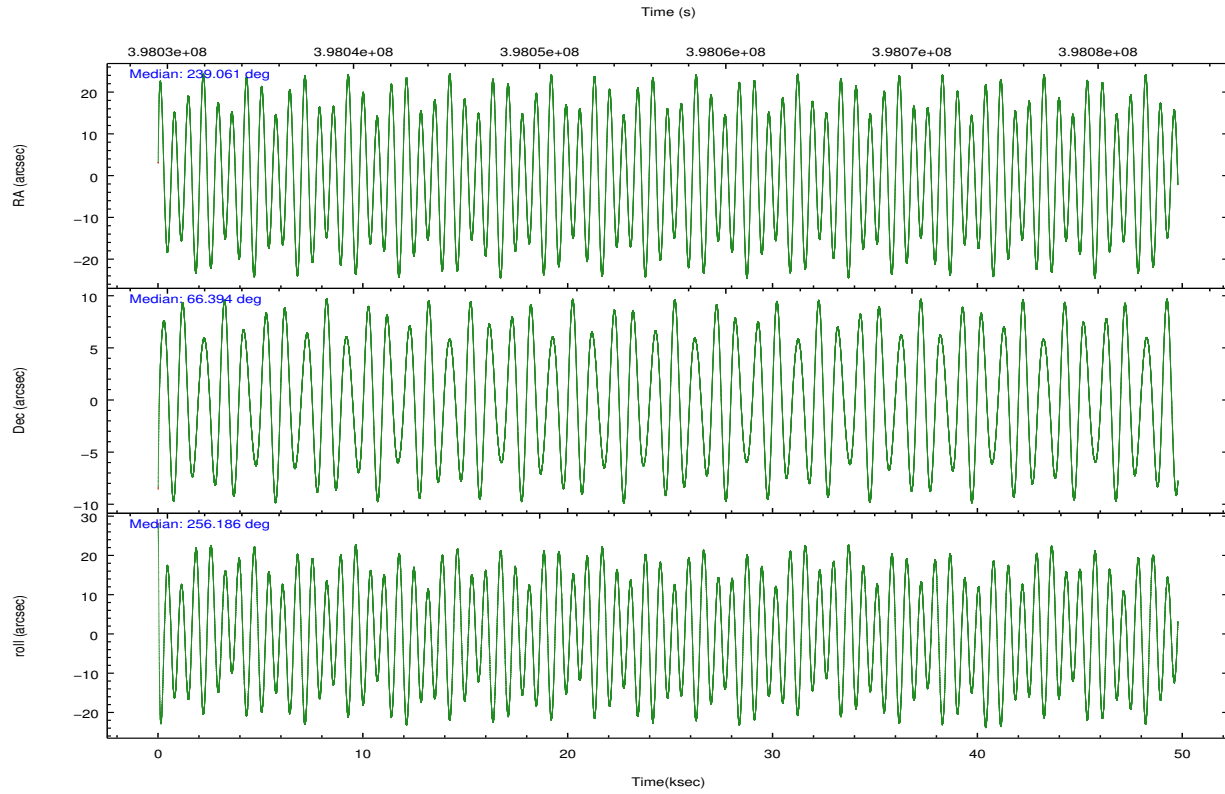
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	39474	31057	13871	12940	13838
	10%	8%	3%	3%	3%
grade 1 events	340	242	229	194	184
	0%	0%	0%	0%	0%
grade 2 events	12937	10462	9728	8372	8980
	3%	2%	2%	2%	2%
grade 3 events	5247	4474	4027	3987	4216
	1%	1%	1%	1%	1%
grade 4 events	4857	4476	4023	4031	4249
	1%	1%	1%	1%	1%
grade 5 events	14984	15748	14040	16523	15903
	4%	4%	3%	4%	4%
grade 6 events	8666	9129	7494	7817	8841
	2%	2%	2%	2%	2%
grade 7 events	278897	281395	317095	298406	306215
	76%	78%	85%	84%	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	239.041279	239.0607273380403	CCD I2 on	Y	Y
[deg] Pointing Dec	66.420424	66.39403913555627	CCD I3 on	Y	Y
[deg] Pointing Roll	256.001028	256.1918968944805	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	-242.592463	-242.5987405016197	CCD S3 on	N	N
[mm] SIM translation stage offset	9	9.006287498690028	CCD S4 on	N	N
[s] Observation start time (MET)	398032790.184000	398031046.7578	CCD S5 on	N	N
Observation start date	2010-08-12T20:38:44	2010-08-12T20:10:46	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	398081790.184000	398082626.29794	On-chip summing requested	N	N
Observation end date	2010-08-13T10:15:24	2010-08-13T10:30:26	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





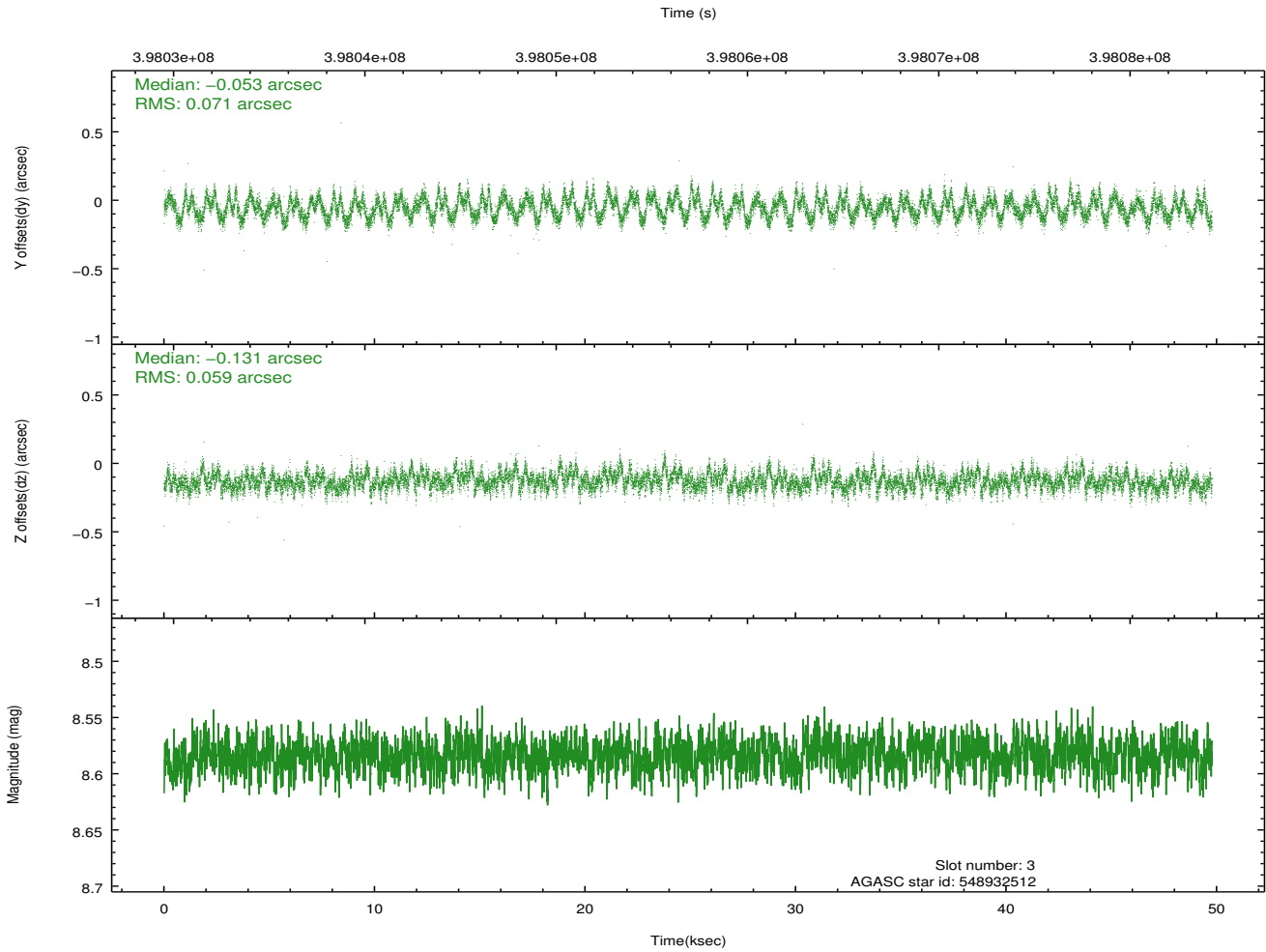
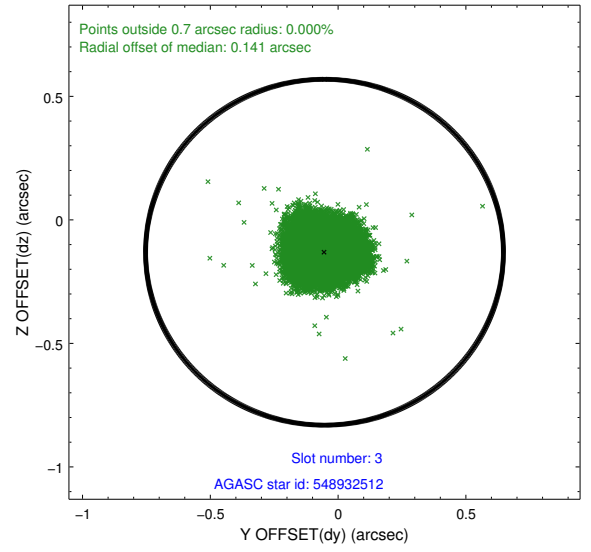
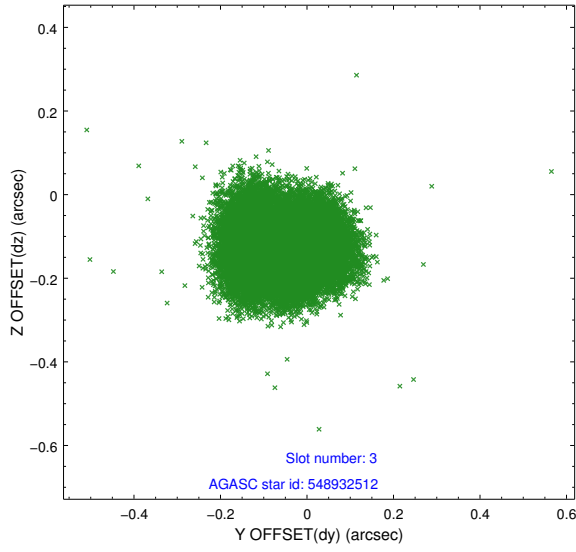
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.07	12141	-0.016	0.078	0.016	0.028	0.000000	0.000000	925.89	-653.94
1	FID	ACIS-I-5	7.02	12141	-0.121	0.030	0.016	0.027	0.000000	0.000000	-1822.41	1243.40
2	FID	ACIS-I-6	7.00	12142	0.046	-0.038	0.014	0.030	0.000000	0.000000	391.41	1887.91
3	GUIDE	548932512	8.58	24260	-0.053	-0.131	0.100	0.154	239.727627	66.054972	1028.52	1290.22
4	GUIDE	548933960	8.47	24268	0.030	-0.080	0.085	0.139	237.671184	66.428675	428.59	-1925.71
5	GUIDE	548937184	9.89	24173	0.196	0.176	0.154	0.260	238.771821	66.565432	-413.42	-500.51
6	GUIDE	548939872	10.32	24068	-0.088	0.178	0.259	0.392	238.964867	66.978384	-1922.81	-590.08
7	GUIDE	549849072	9.18	24243	-0.091	-0.122	0.283	0.391	240.420863	66.802816	-1829.86	1559.72

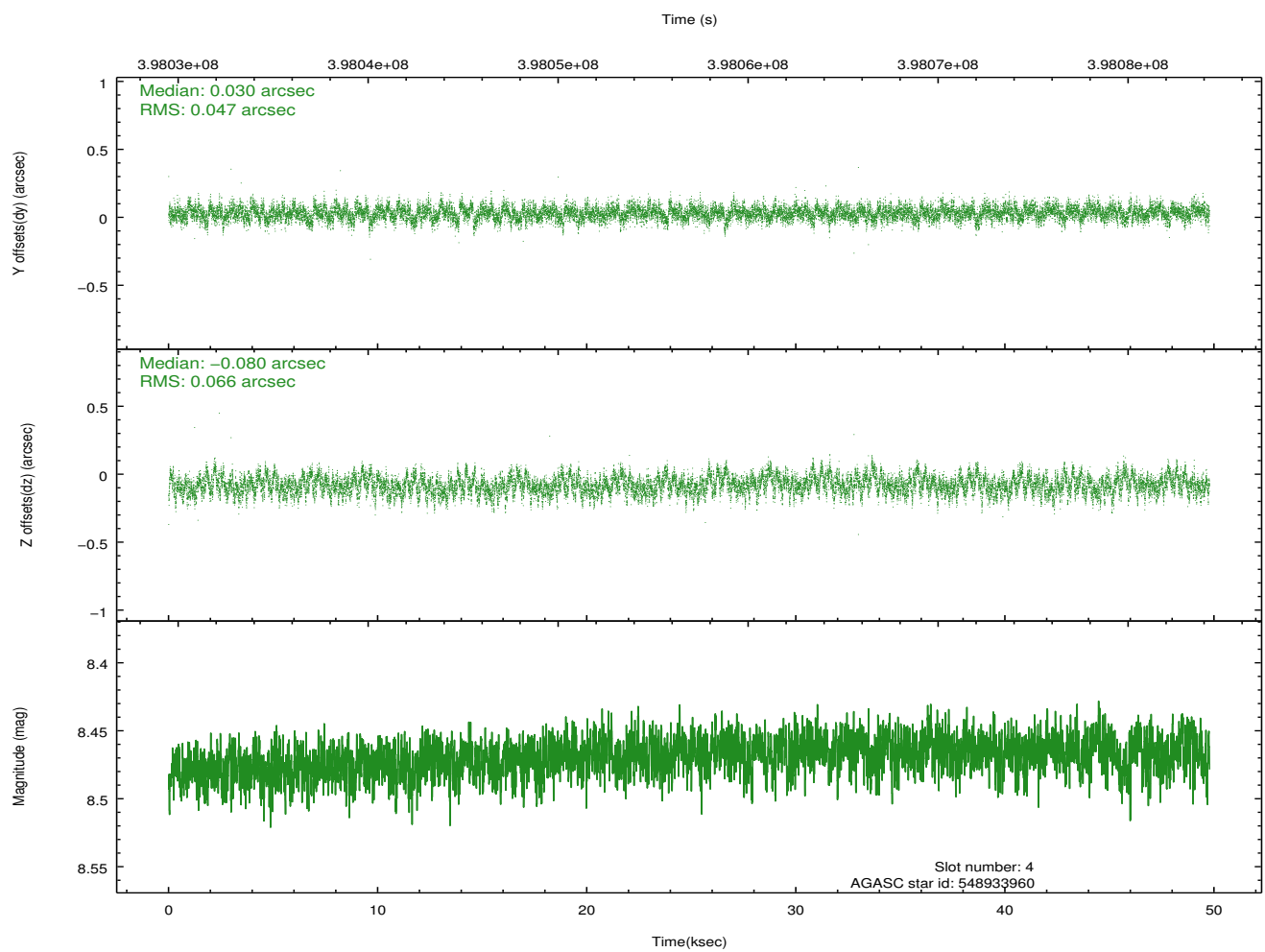
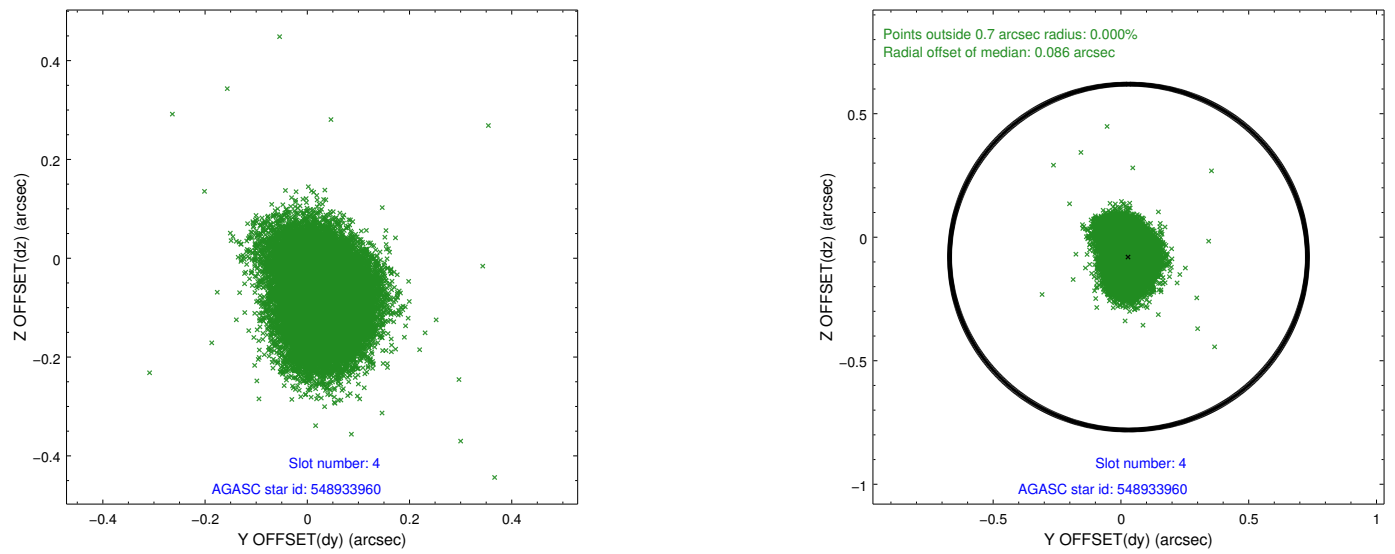
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2.4 Star Slots

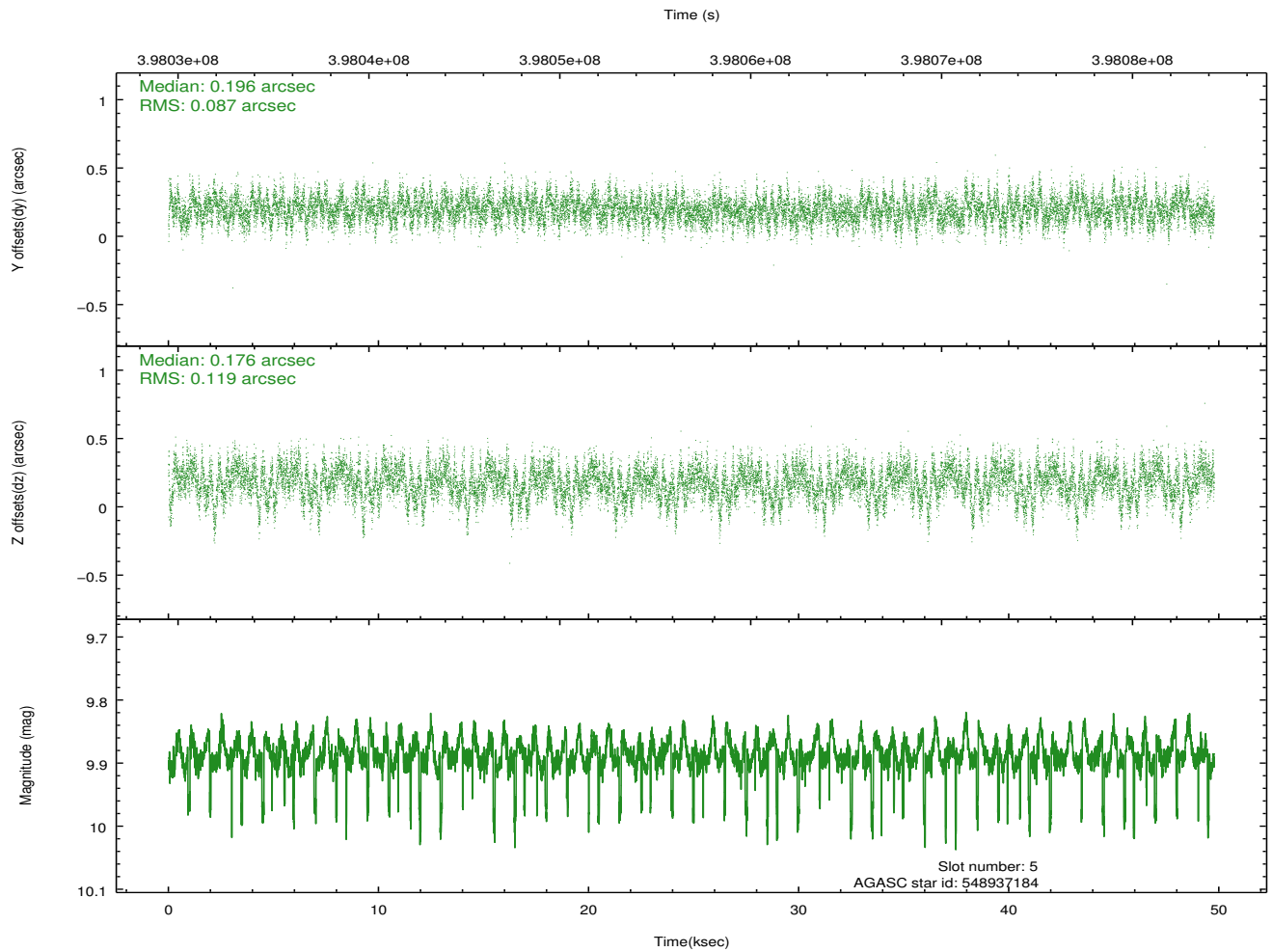
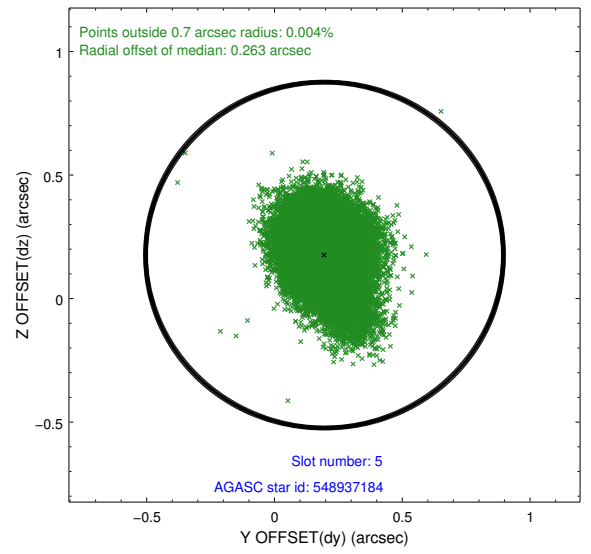
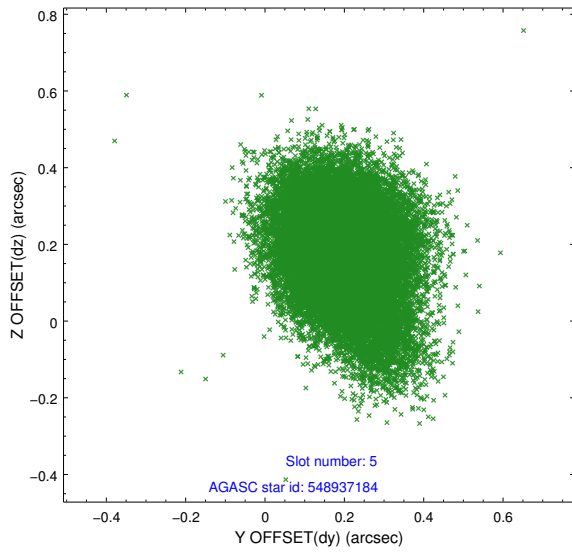
2.4.1 Slot 3



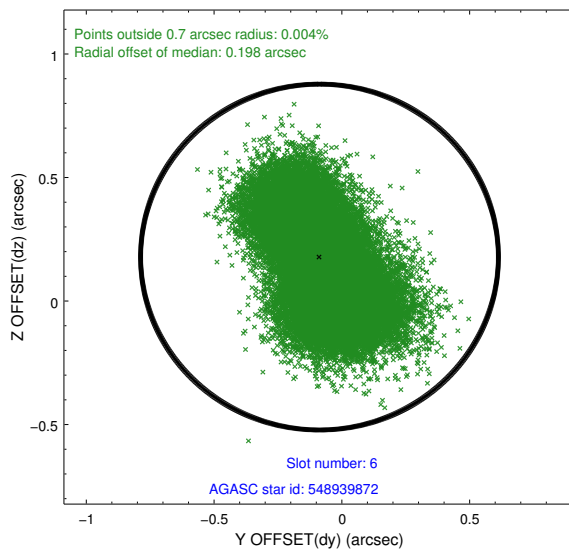
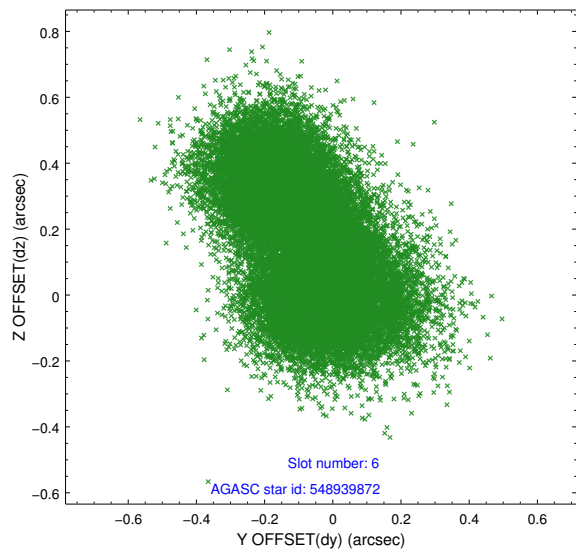
2.4.2 Slot 4



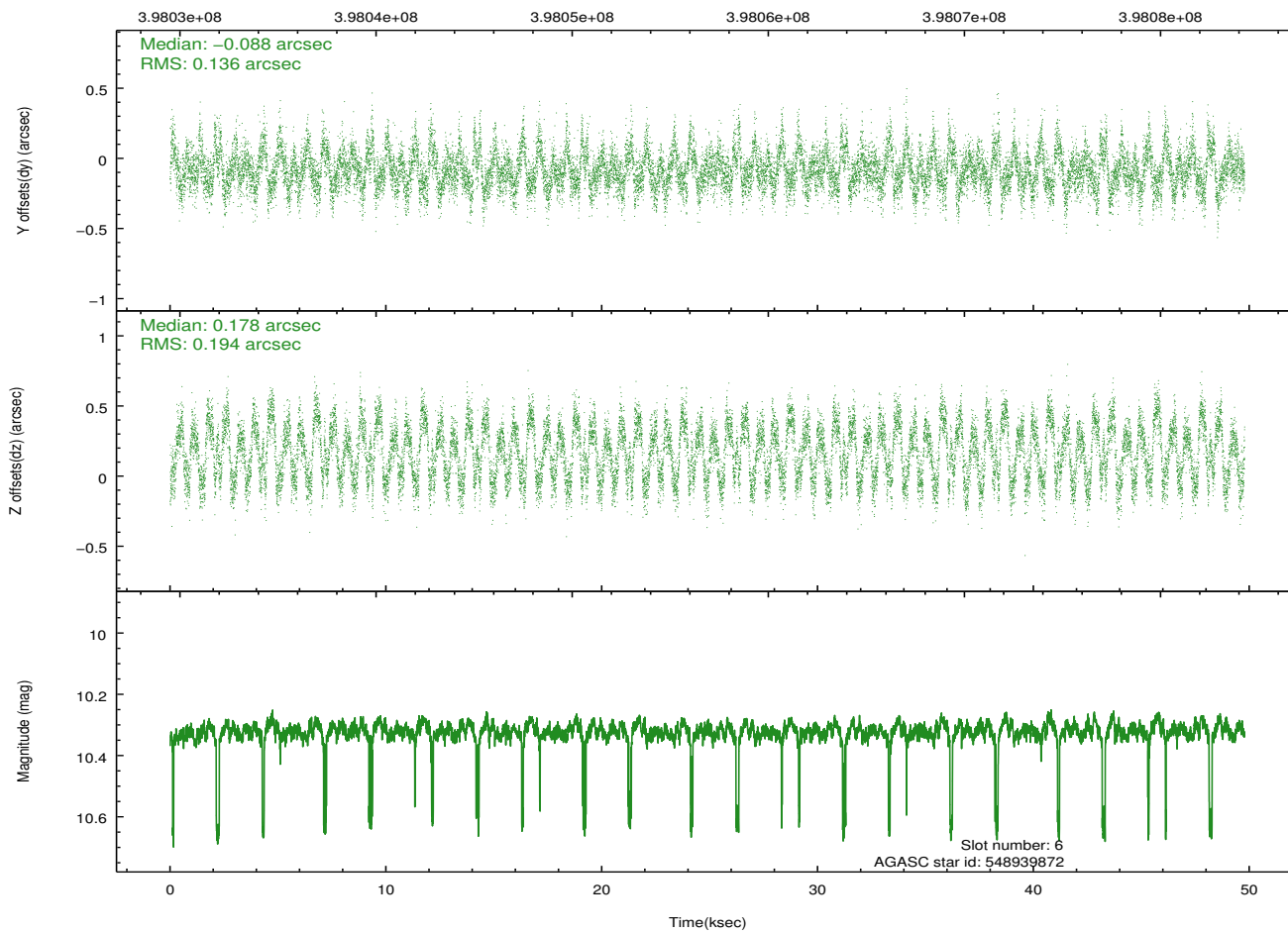
2.4.3 Slot 5



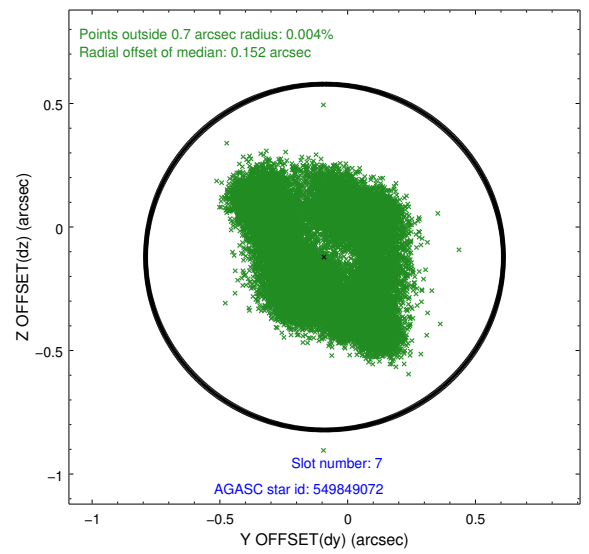
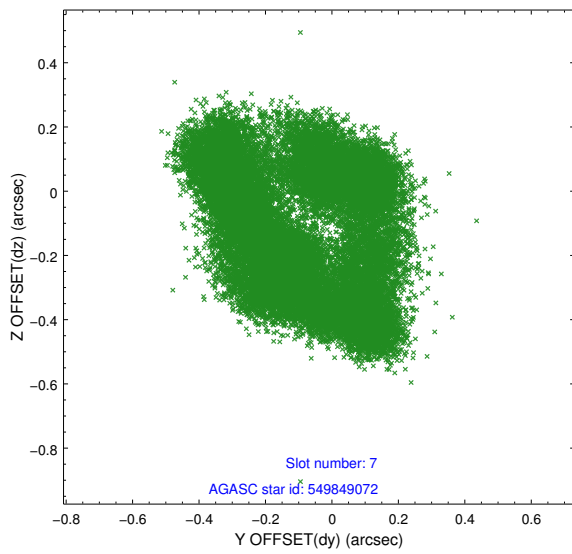
2.4.4 Slot 6



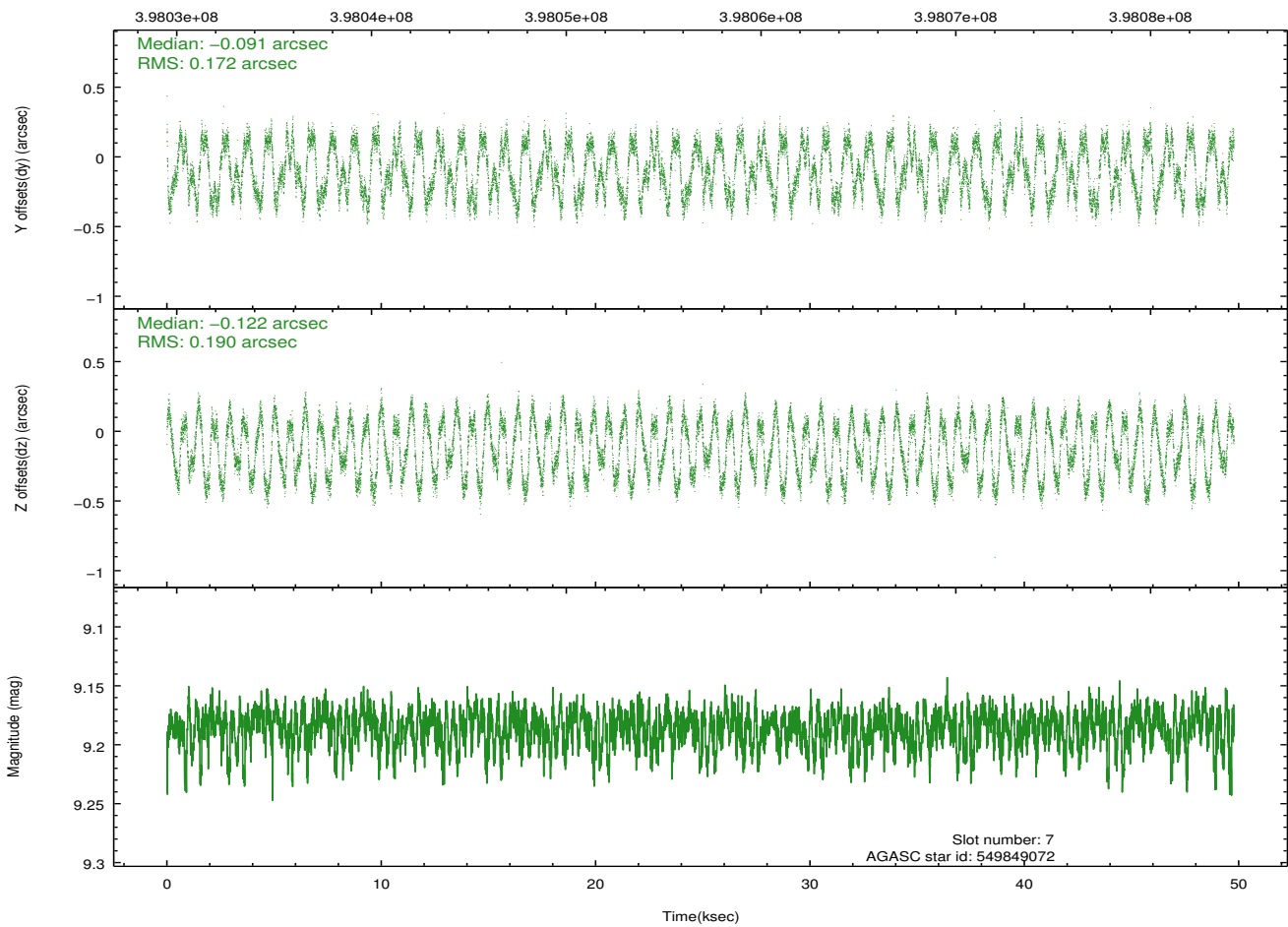
Time (s)



2.4.5 Slot 7

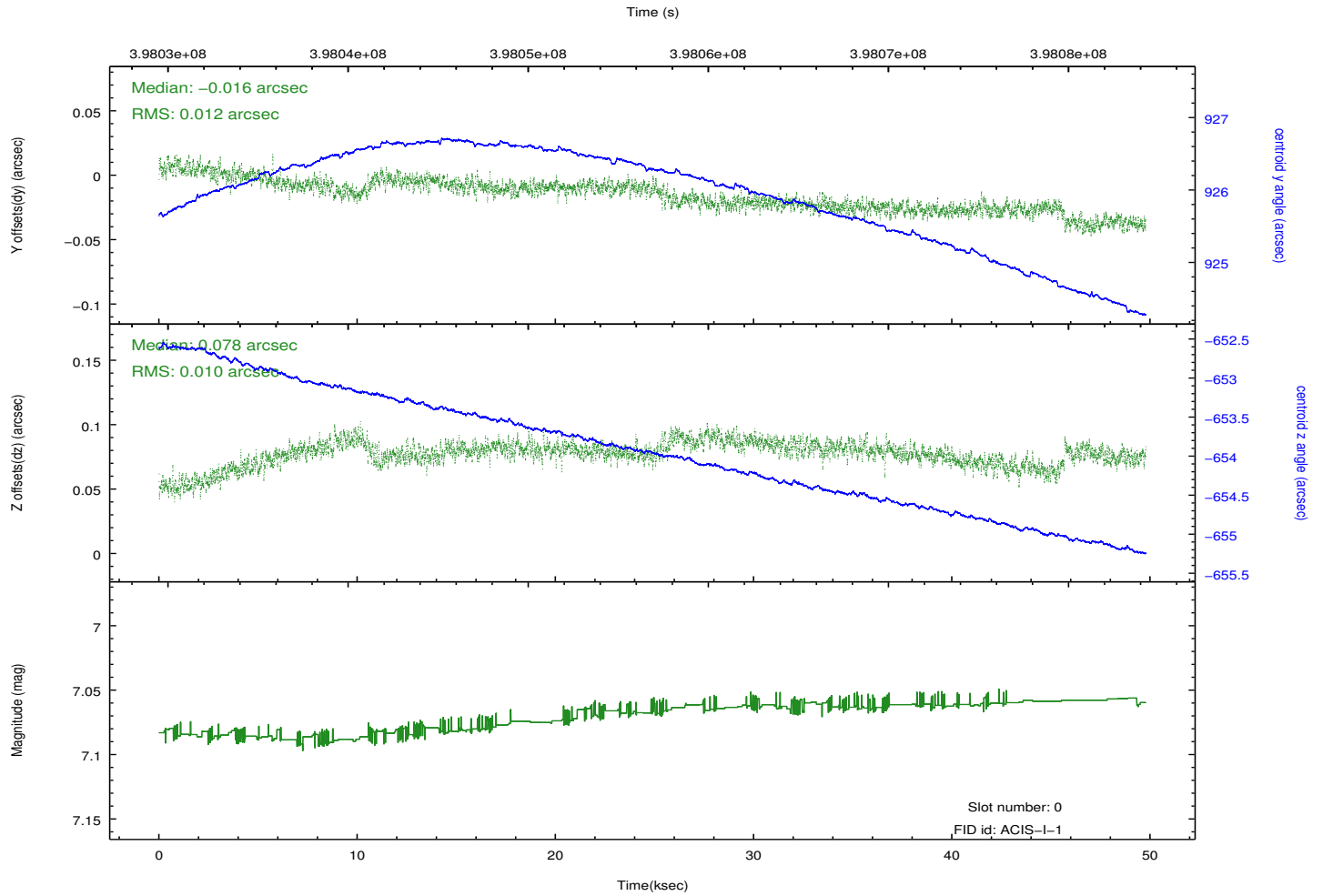
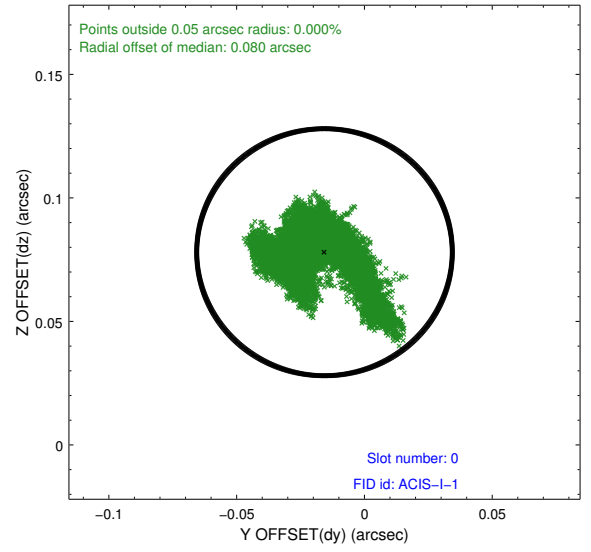
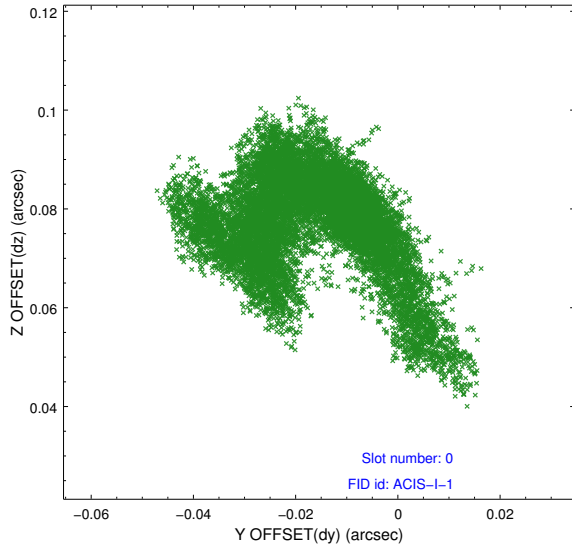


Time (s)

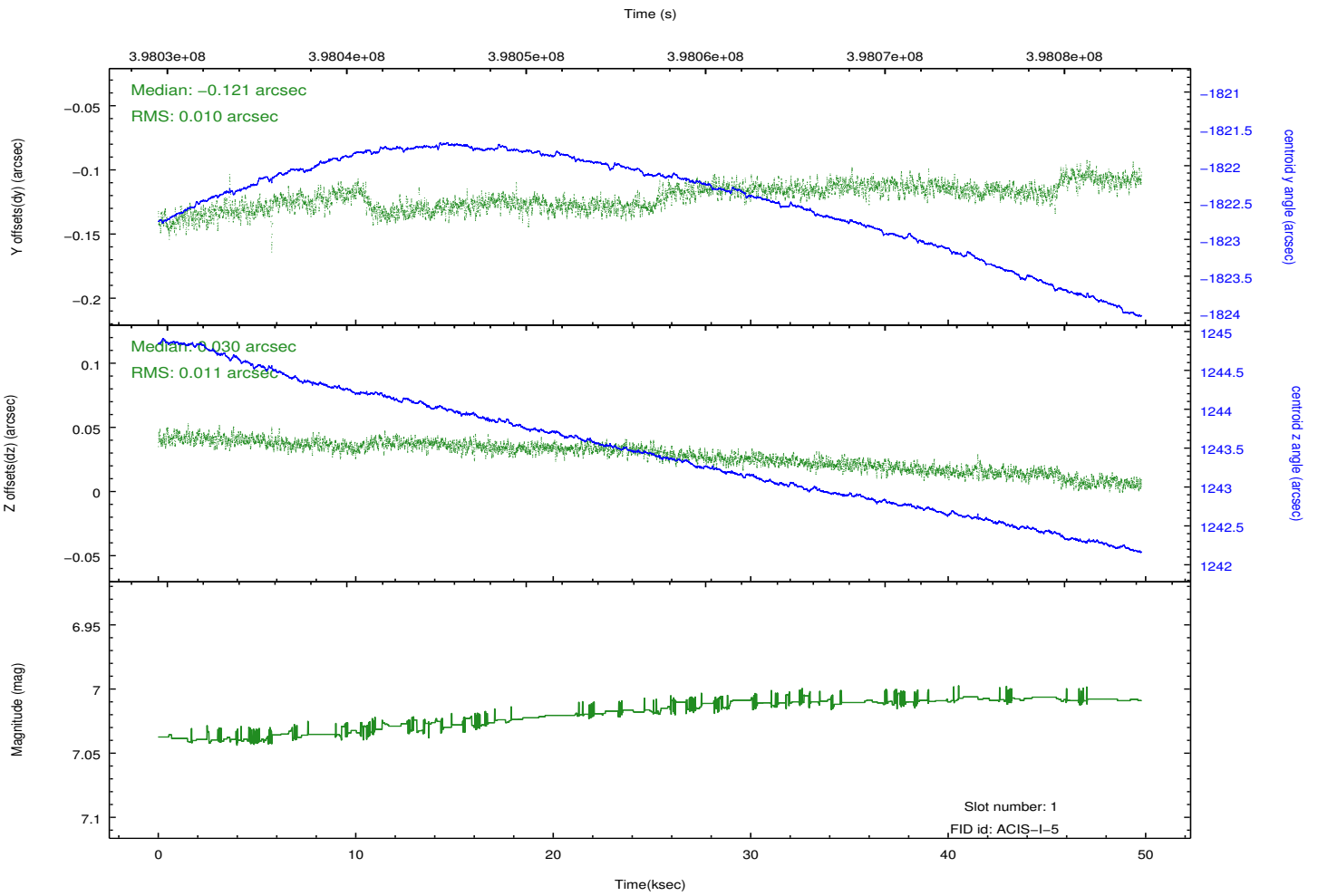
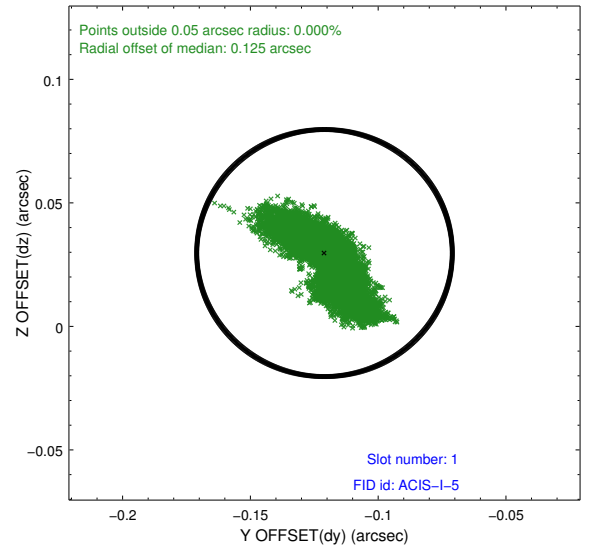
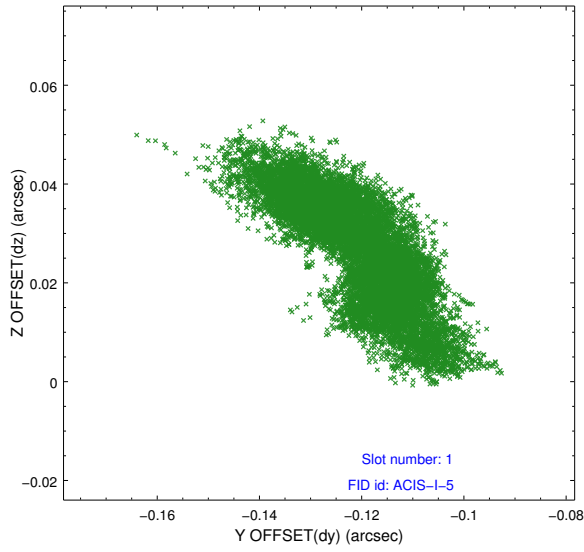


2.5 FID Slots

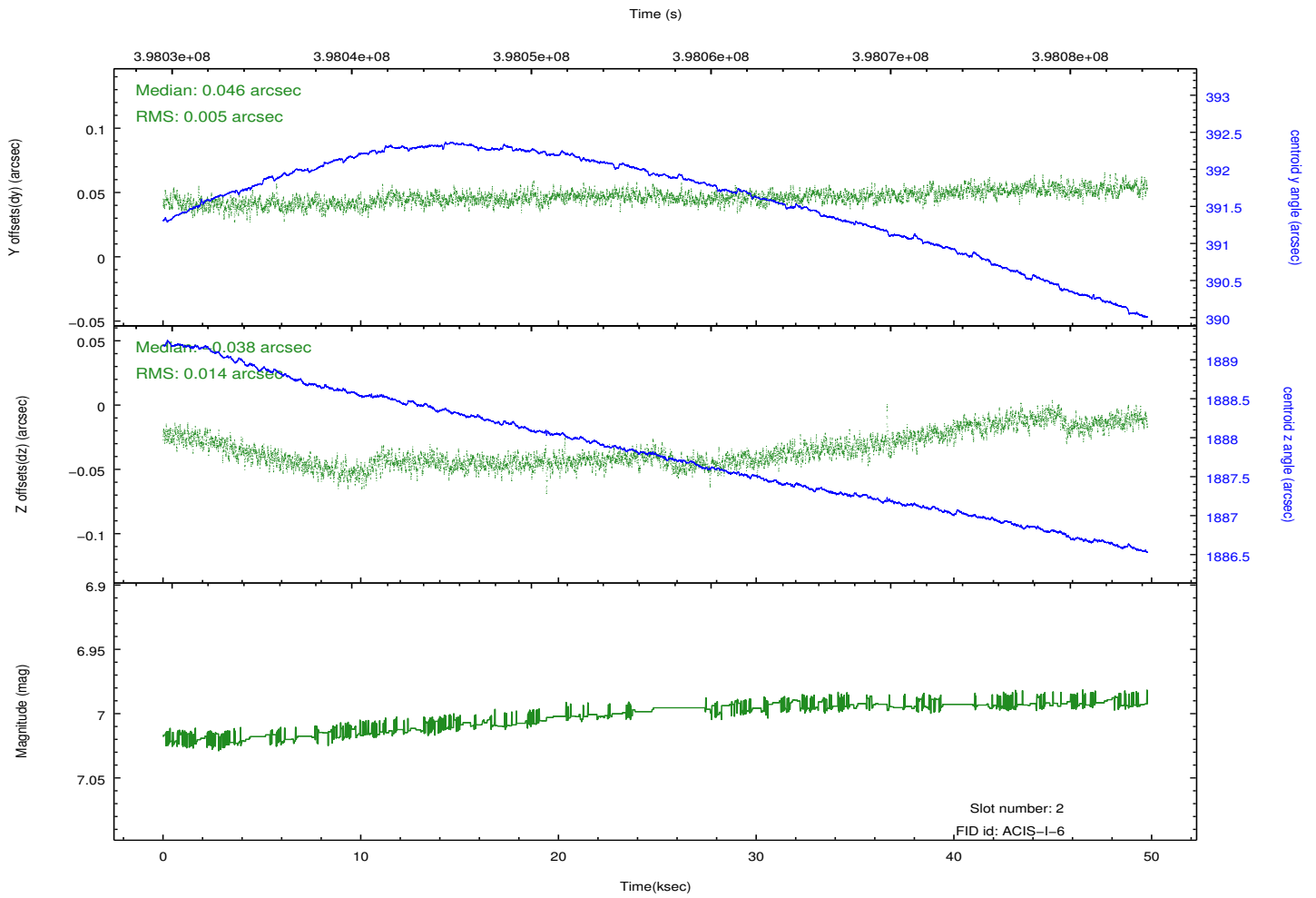
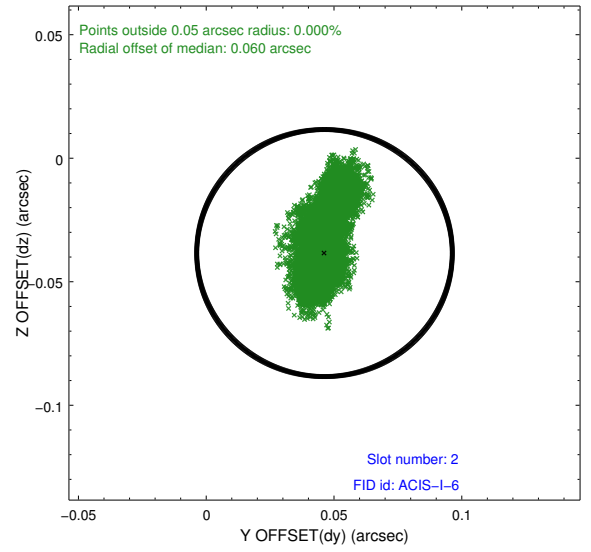
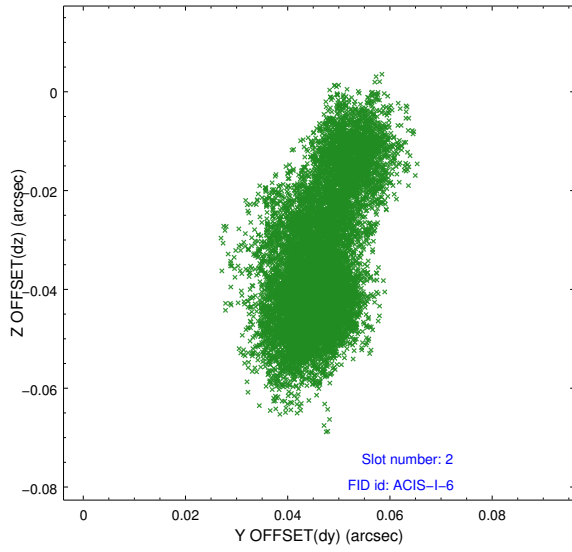
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.07.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.044599668801

A.2 Comments