

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 910 - L2 Version 4
Chandra X-Ray Center

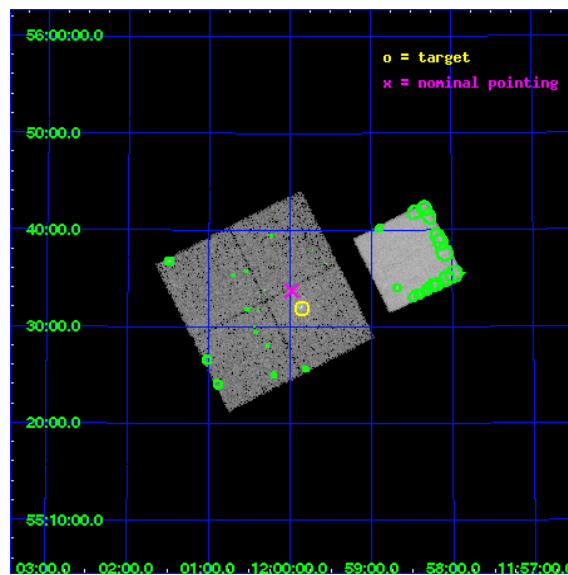
L2 Processing Date : Nov 25 2009

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
3	Point Sources	17
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

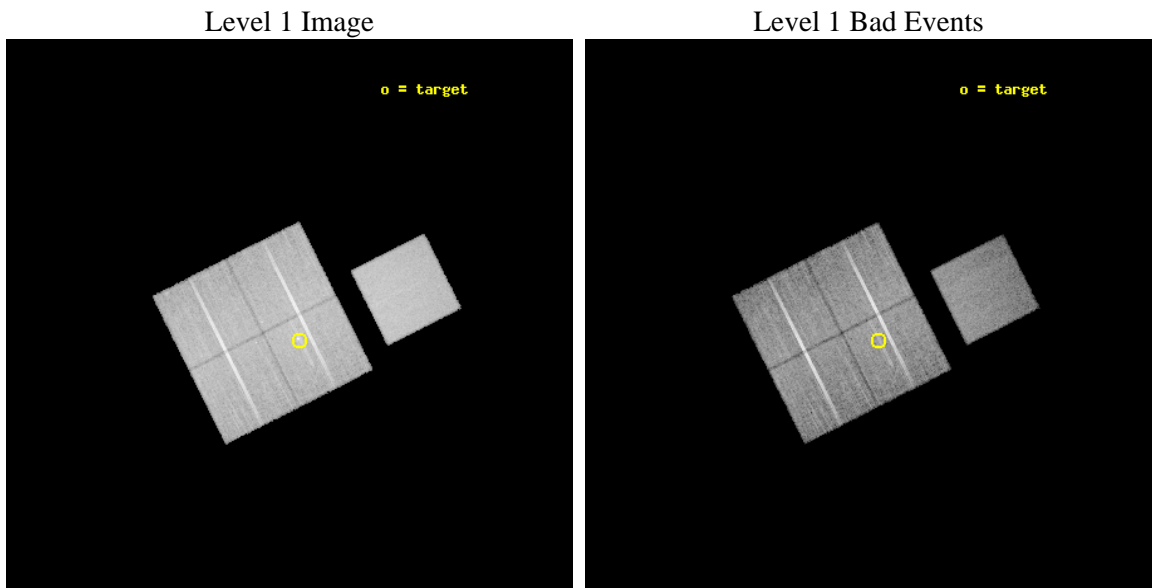
seq_num	800086	Sequence number
obs_id	910	Observation id
title	STUDY OF A NEW CLASS OF MASS CONCENTRATIONS IN THE UNIVERSE	Propos
observer	Dr Alexey Vikhlinin	Principal investigator
object	RX J1159+5531	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	179.963333	Observer's specified target RA
dec_targ	55.532222	Observer's specified target Dec
ra_nom	179.99433992863	Nominal RA
dec_nom	55.562352477474	Nominal Dec
roll_nom	63.303022519199	Nominal Roll
revision	4	Processing version of data
ontime	19166.834944636	Sum of GTIs [s]
livetime	18924.132939684	Livetime [s]
ontime0	19166.958064631	Sum of GTIs [s]
ontime1	19163.676064417	Sum of GTIs [s]
ontime2	19157.153074056	Sum of GTIs [s]
ontime3	19166.834944636	Sum of GTIs [s]
ontime7	19166.999104634	Sum of GTIs [s]
l2events	134716	Number of level 2 events



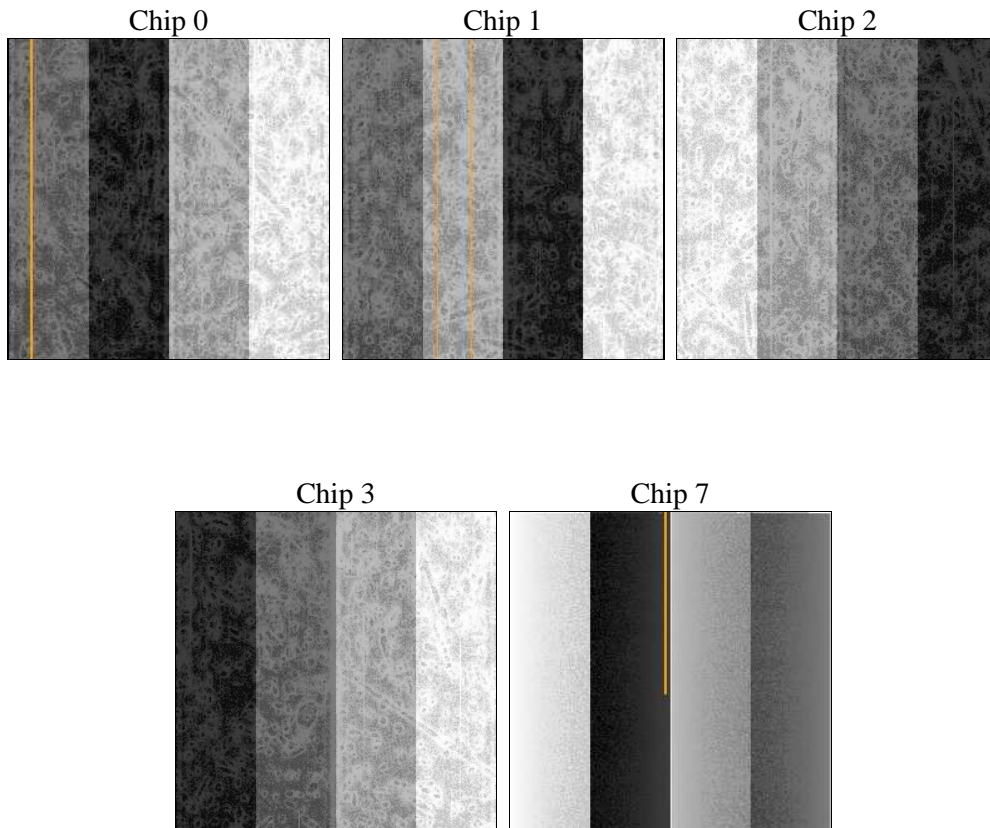
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	19166.834944636	Sum of GTIs [s]
caldbver	4.1.4	 	ontime0	19166.958064631	Sum of GTIs [s]
date	2009-11-25T11:34:21	Date and time of file creation	ontime1	19163.676064417	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	19157.153074056	Sum of GTIs [s]
			ontime3	19166.834944636	Sum of GTIs [s]
			ontime7	19166.999104634	Sum of GTIs [s]
			l1events	825061	Number of level 1 events

2.1.4 Events

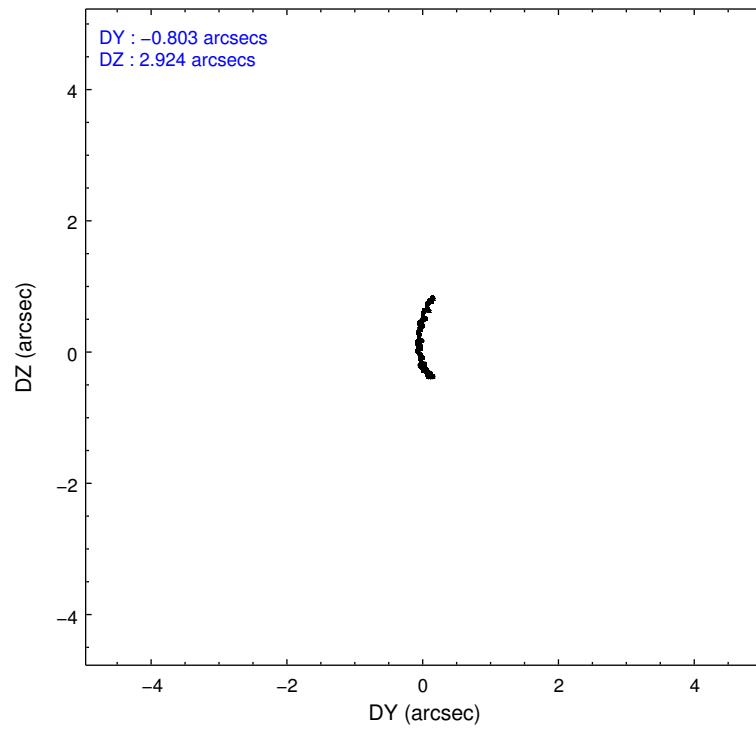
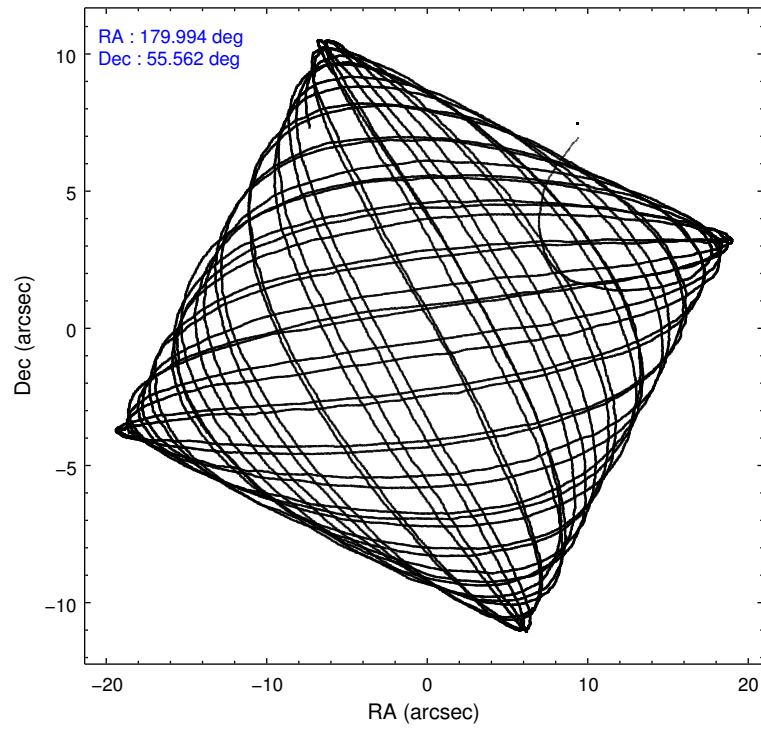
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	157050	153345	164198	163687	186781
rejected events	140679	136452	149109	145222	110257
rejected %	89%	88%	90%	88%	59%

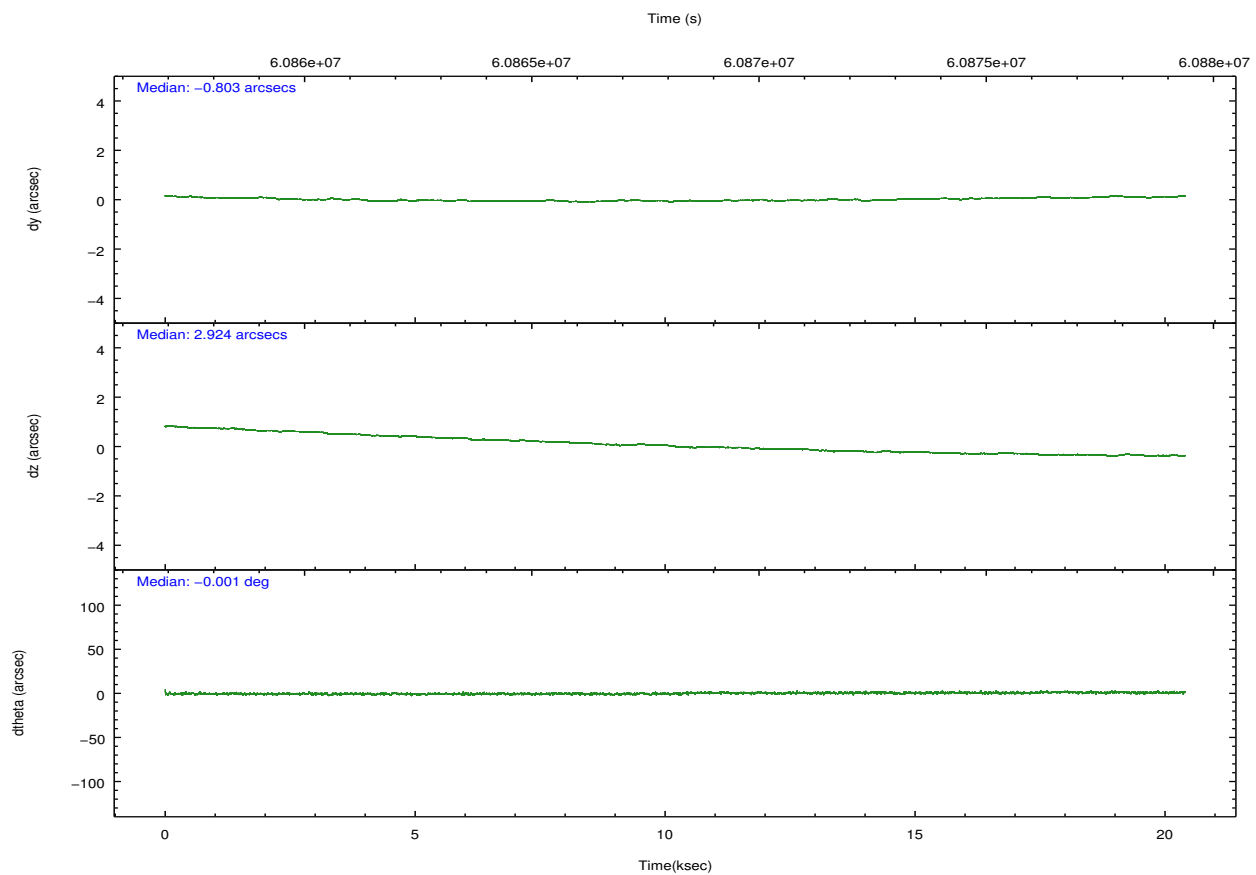
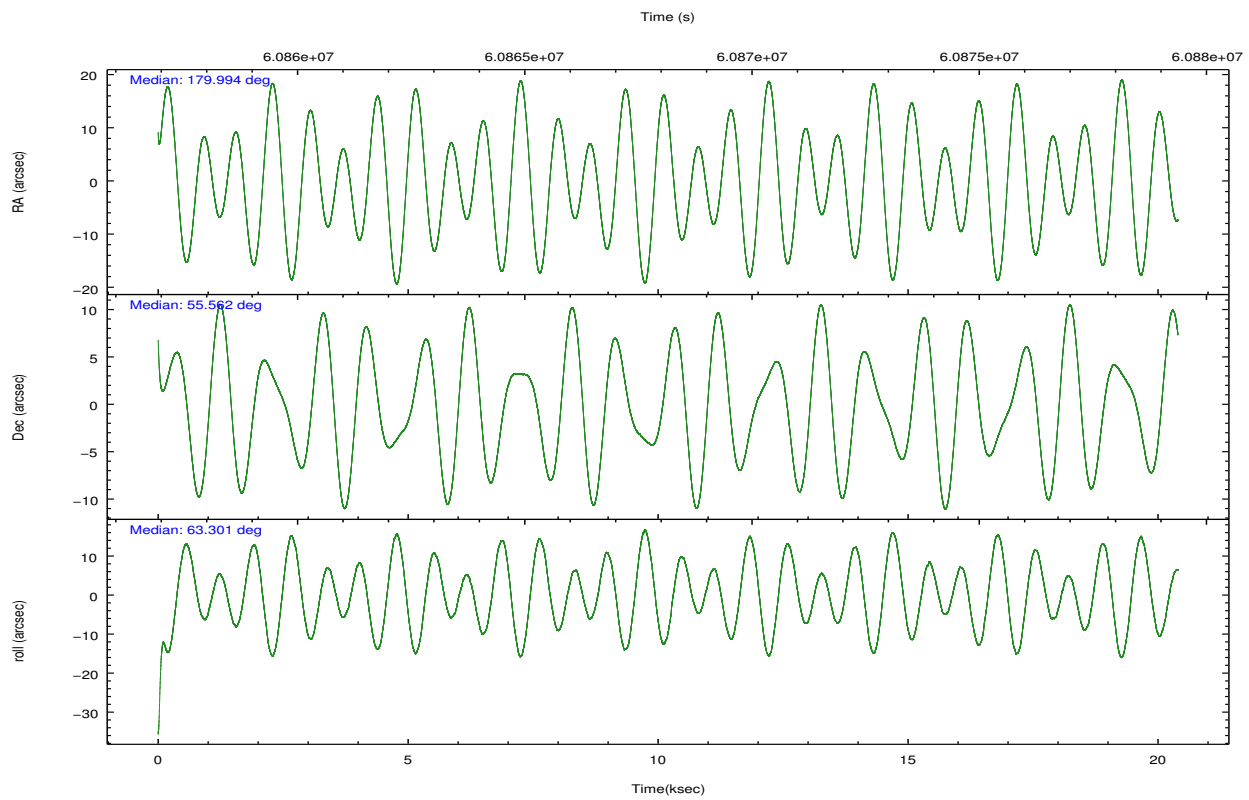
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	4044	3866	3557	5355	5223
	2%	2%	2%	3%	2%
grade 1 events	36	39	37	33	99
	0%	0%	0%	0%	0%
grade 2 events	6164	6235	5806	7097	15879
	3%	4%	3%	4%	8%
grade 3 events	1257	1319	984	1083	4609
	0%	0%	0%	0%	2%
grade 4 events	1170	1278	1037	991	4184
	0%	0%	0%	0%	2%
grade 5 events	3267	3440	2854	3090	10634
	2%	2%	1%	1%	5%
grade 6 events	3740	4197	3707	3943	46641
	2%	2%	2%	2%	24%
grade 7 events	137372	132971	146216	142095	99512
	87%	86%	89%	86%	53%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01237	ACIS-01237	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
Pointing RA	179.996553	179.9943399286309	Subarray requested	NONE	NONE
Pointing Dec	55.534645	55.56235247747389	Alternating exposures requested	N	N
Pointing Roll	63.092530	63.30302251919905	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-226.276723	-226.2682626179875			
SIM translation stage offset (mm)	-7.31574	-7.32419038494217			
Observation start time	60858350.184000	60857099.930174			
Observation start date	1999-12-06T09:04:46	1999-12-06T08:44:59			
Observation end time	60878350.184000	60878707.955956			
Observation end date	1999-12-06T14:38:06	1999-12-06T14:45:07			
Read mode	TIMED	TIMED			

2.3 Aspect



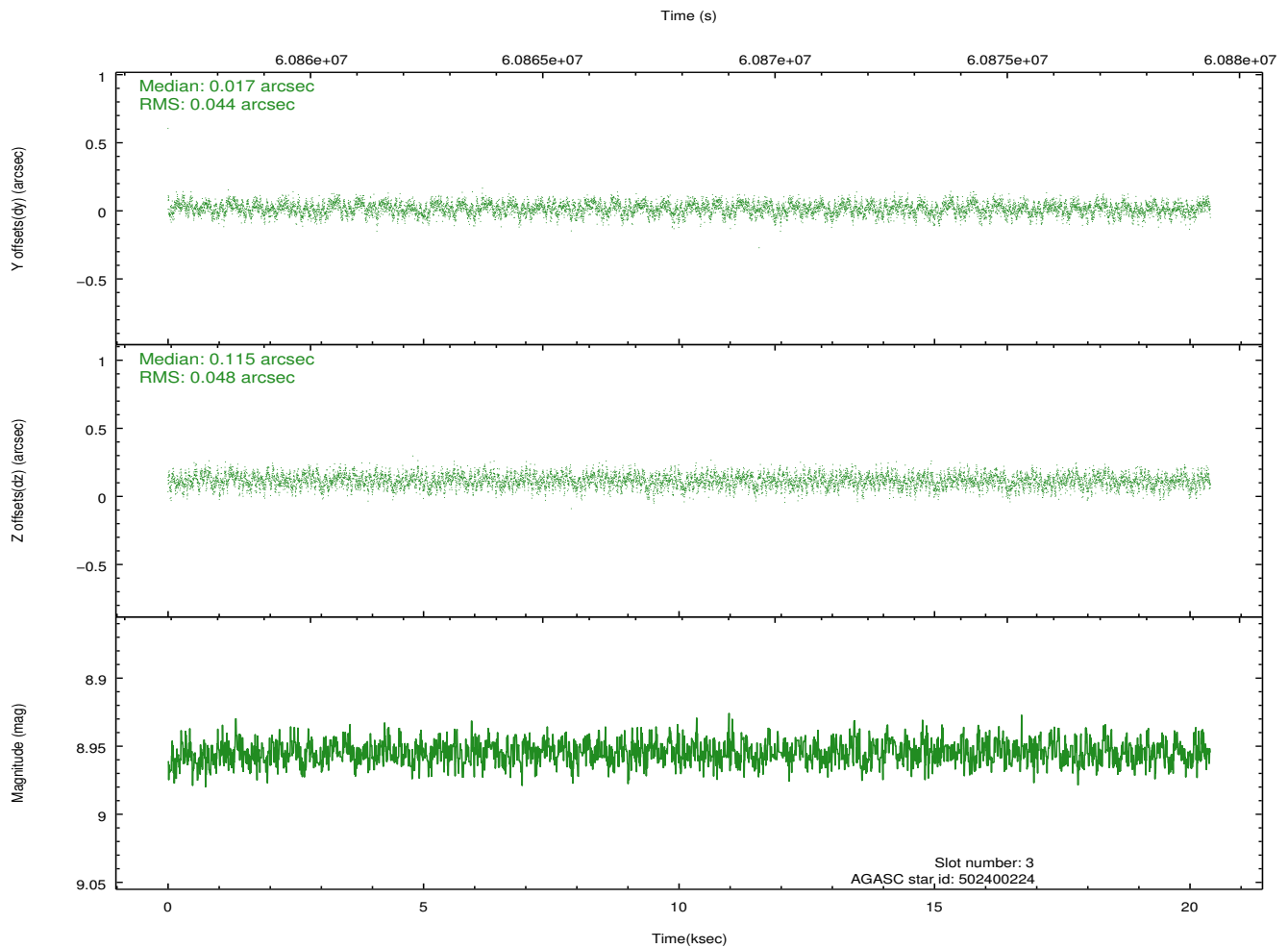
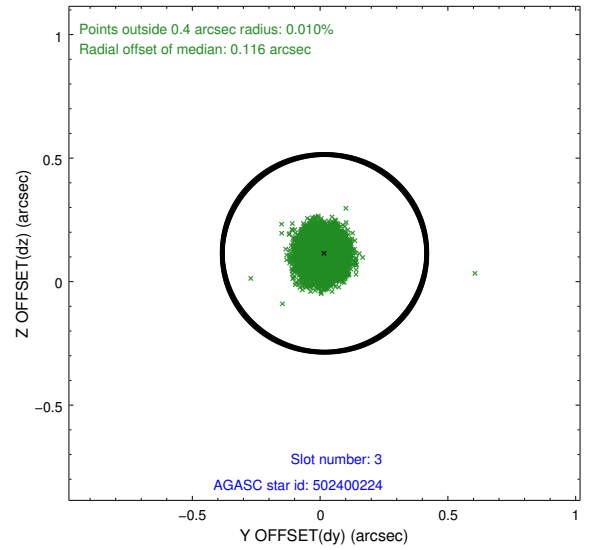
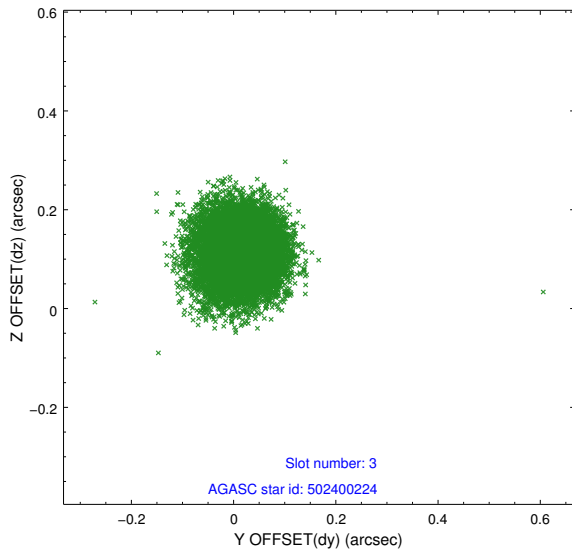


Slot Statistics

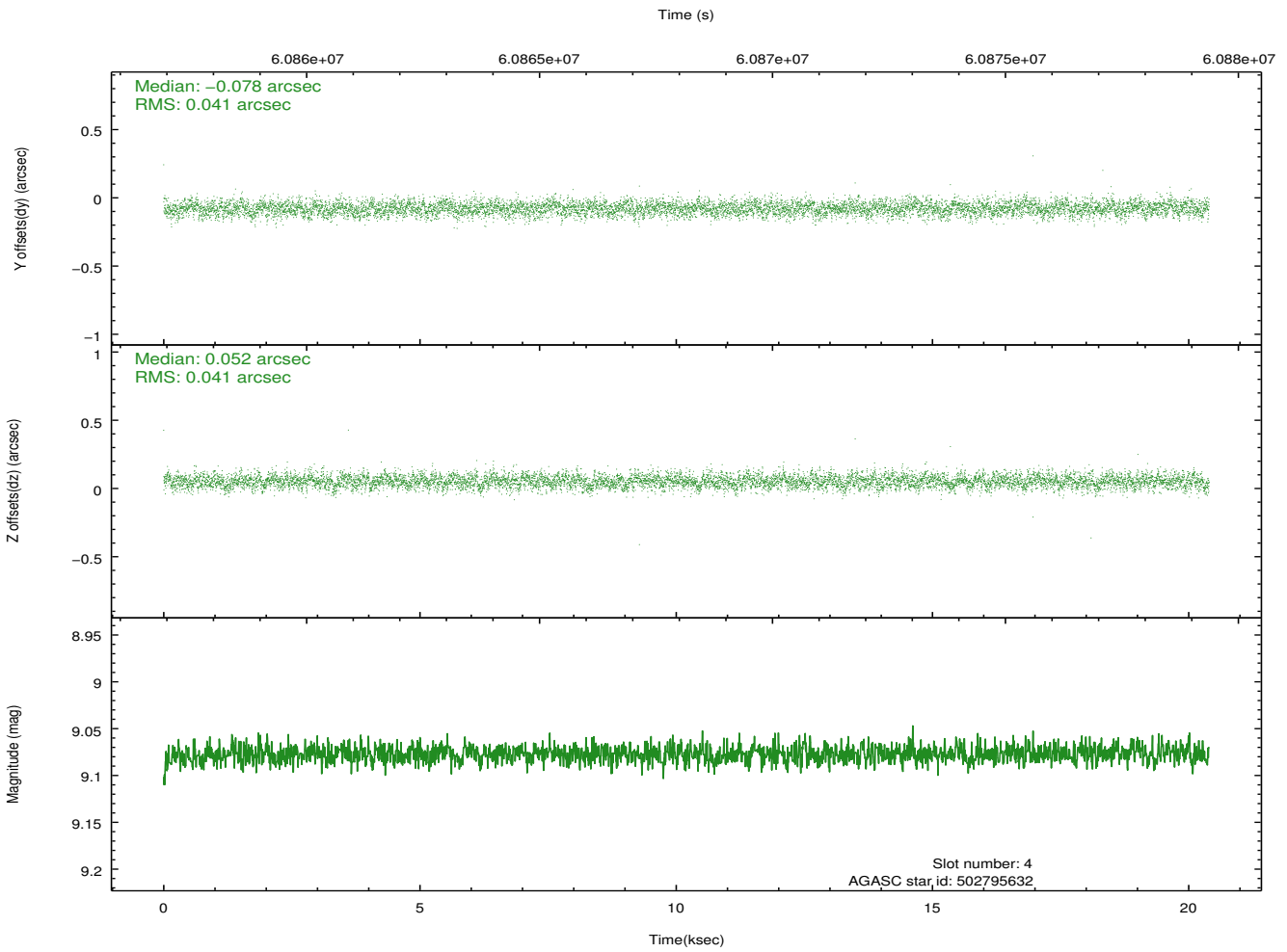
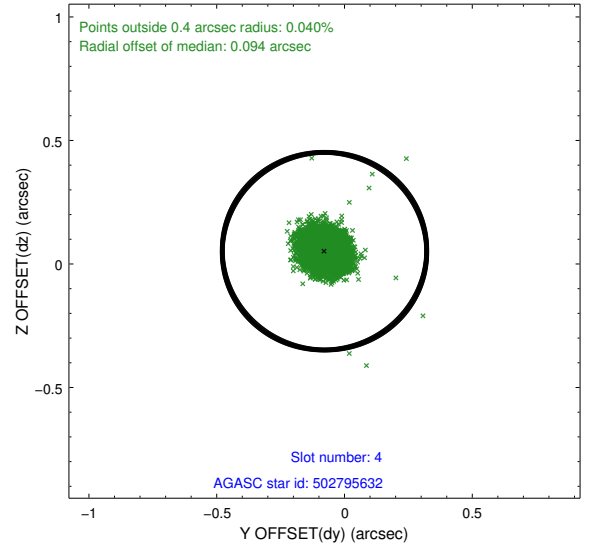
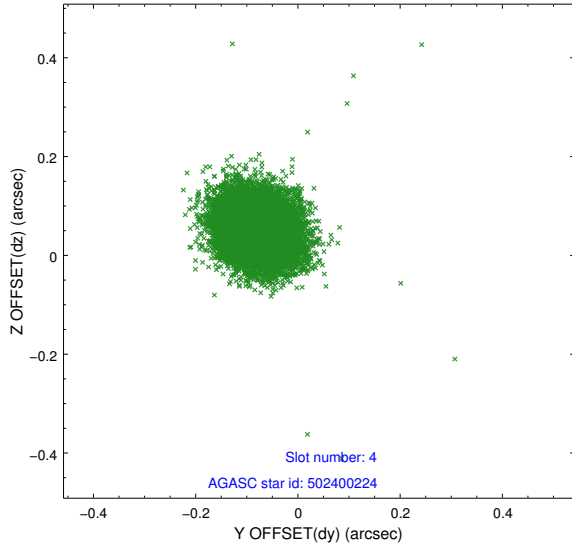
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	9952	-0.076	0.037	0.014	0.022	0.000000	0.000000	-754.09	-981.99
1	FID	ACIS-I-4	7.21	9951	0.052	0.038	0.022	0.030	0.000000	0.000000	2160.08	924.07
2	FID	ACIS-I-5	7.23	9949	-0.075	-0.007	0.020	0.030	0.000000	0.000000	-1807.49	921.02
3	GUIDE	502400224	8.96	9945	0.017	0.115	0.070	0.111	180.457538	54.870956	-1694.77	-1931.25
4	GUIDE	502795632	9.08	9943	-0.078	0.052	0.061	0.099	180.454171	55.827001	1360.62	-347.45
5	GUIDE	502796080	9.41	9945	-0.076	-0.168	0.077	0.125	179.994772	55.735066	642.65	329.70
6	GUIDE	502792376	9.88	9945	0.149	0.074	0.085	0.141	180.437493	55.132253	-877.45	-1463.29
7	GUIDE	502793960	9.57	9945	-0.010	-0.073	0.082	0.132	179.393376	55.531414	-561.07	1092.93

2.4 Star Slots

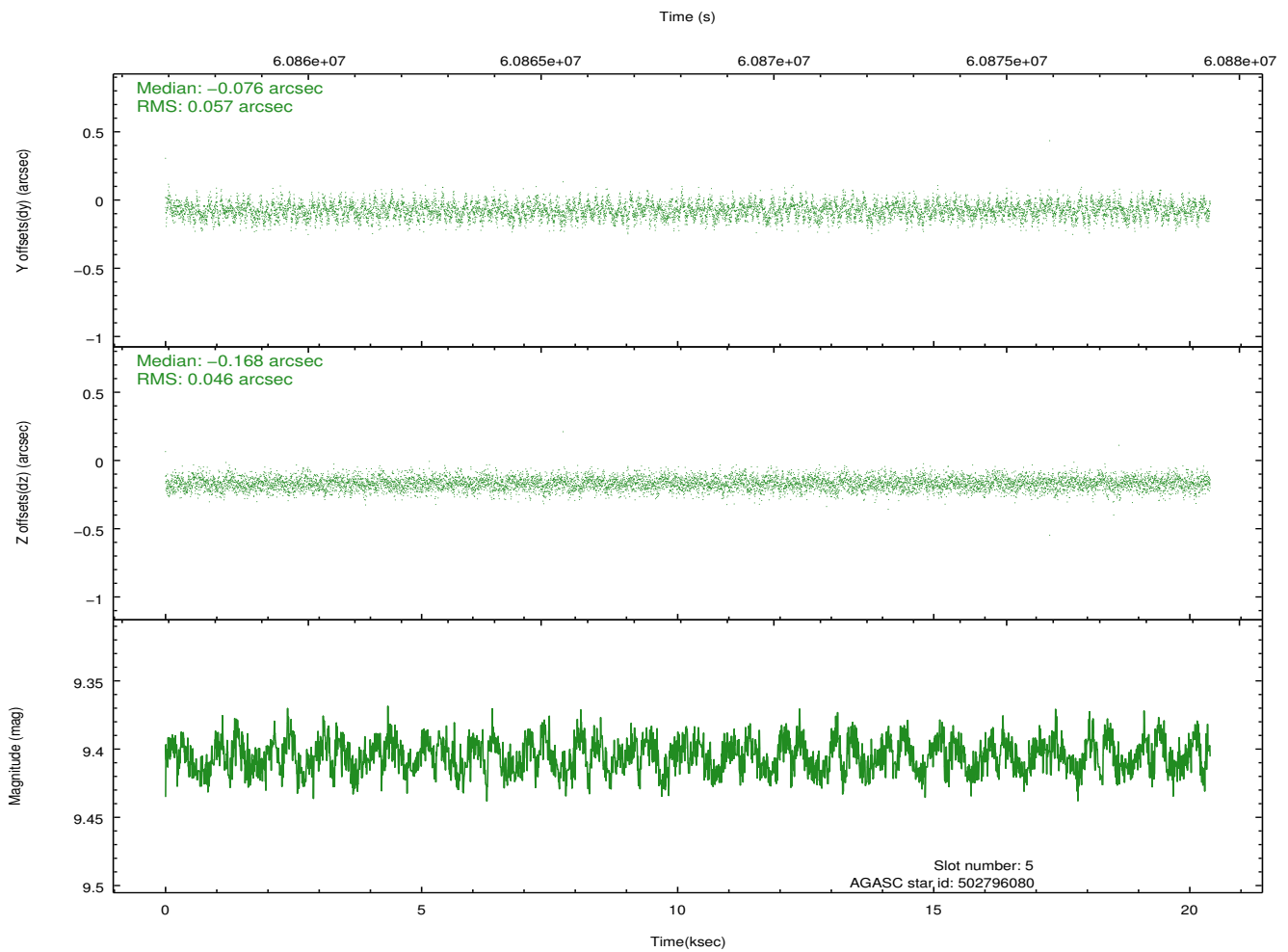
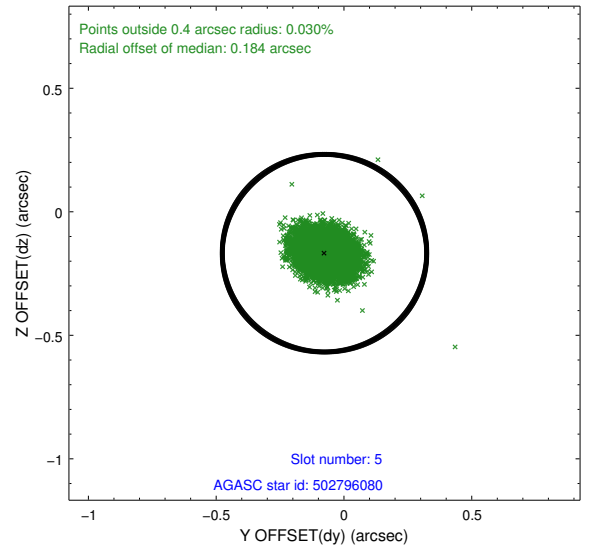
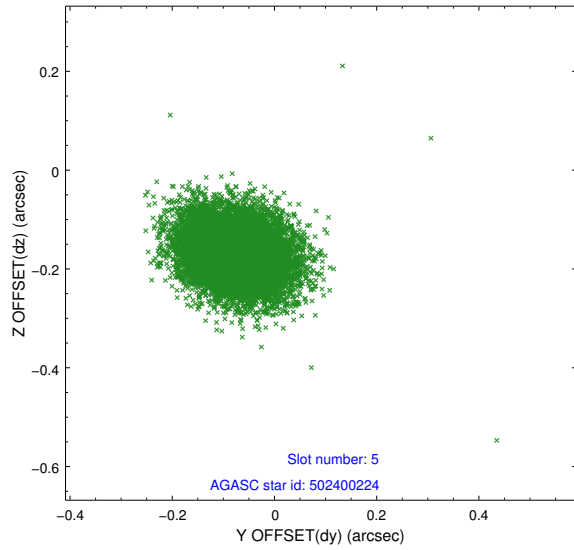
2.4.1 Slot 3



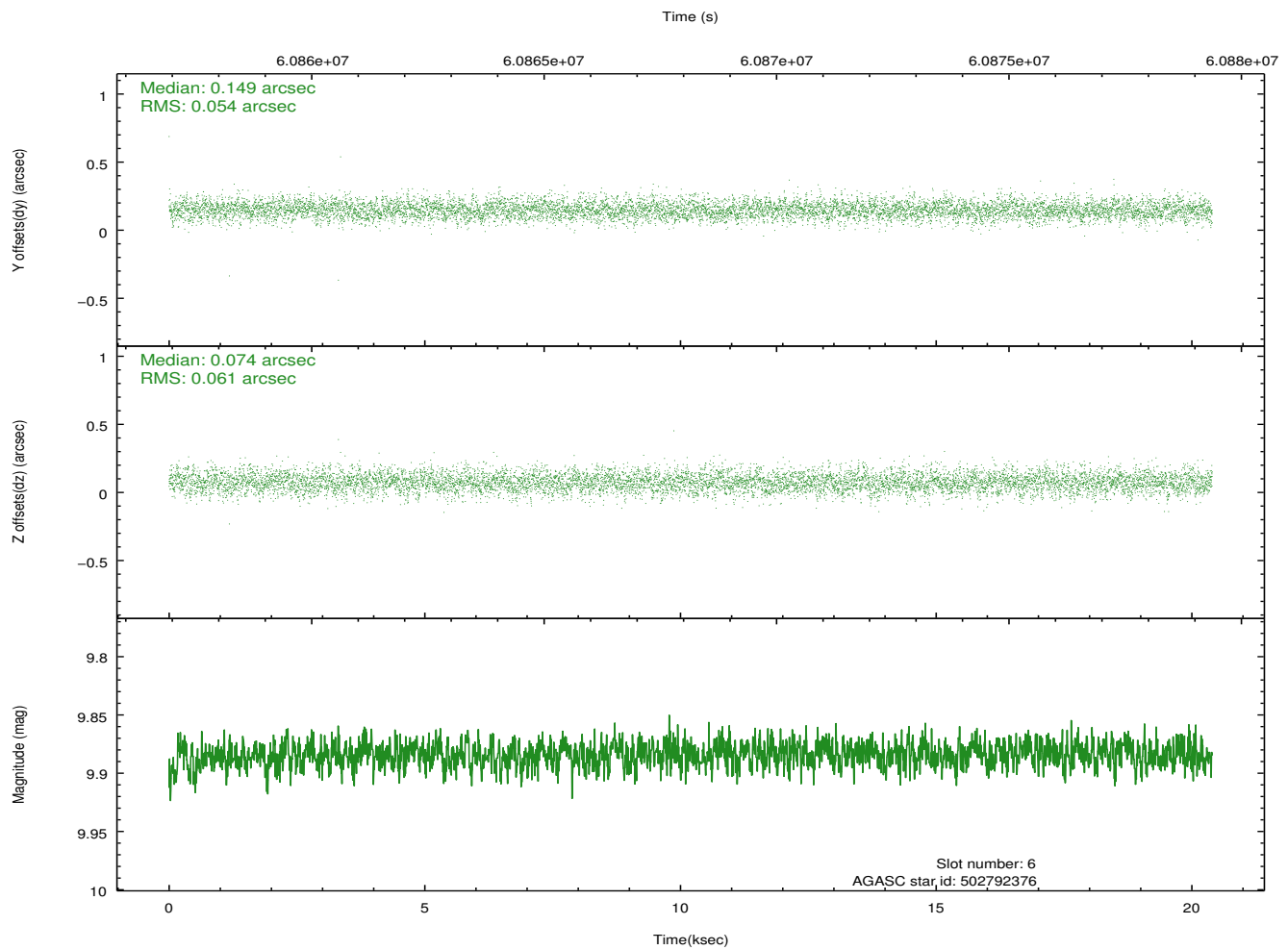
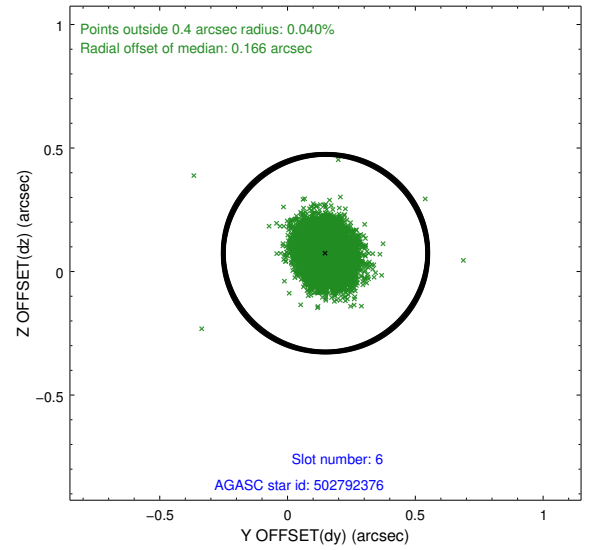
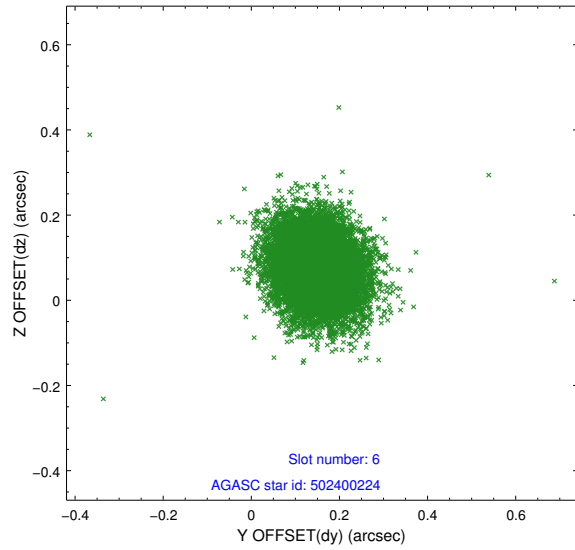
2.4.2 Slot 4



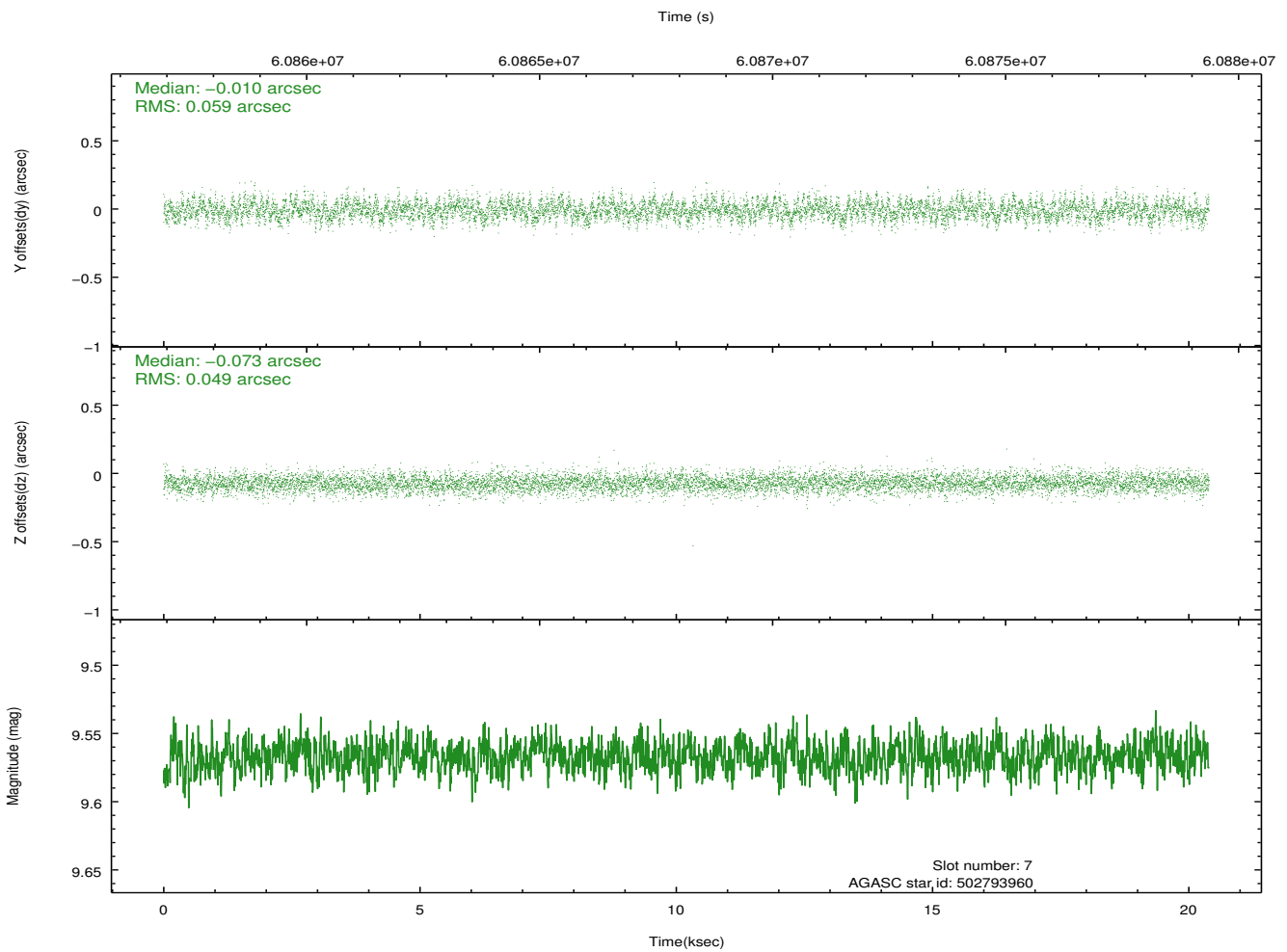
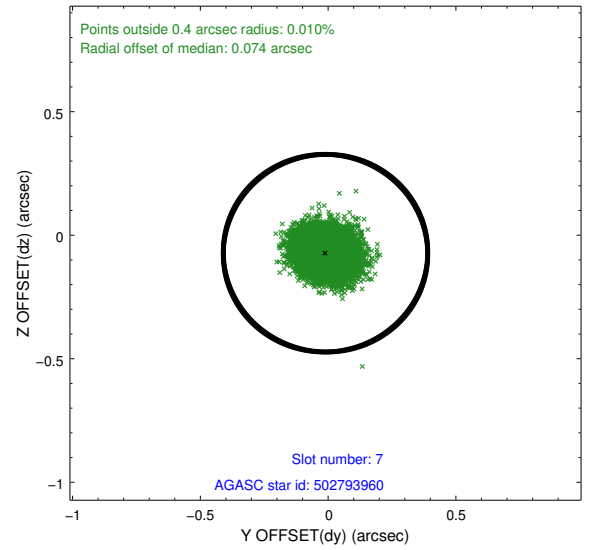
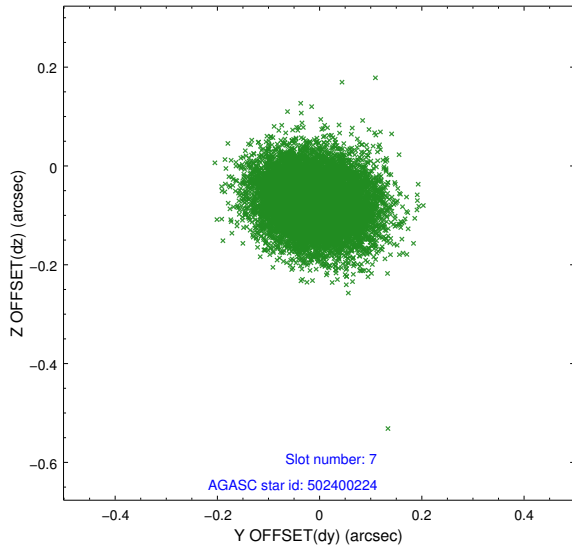
2.4.3 Slot 5



2.4.4 Slot 6

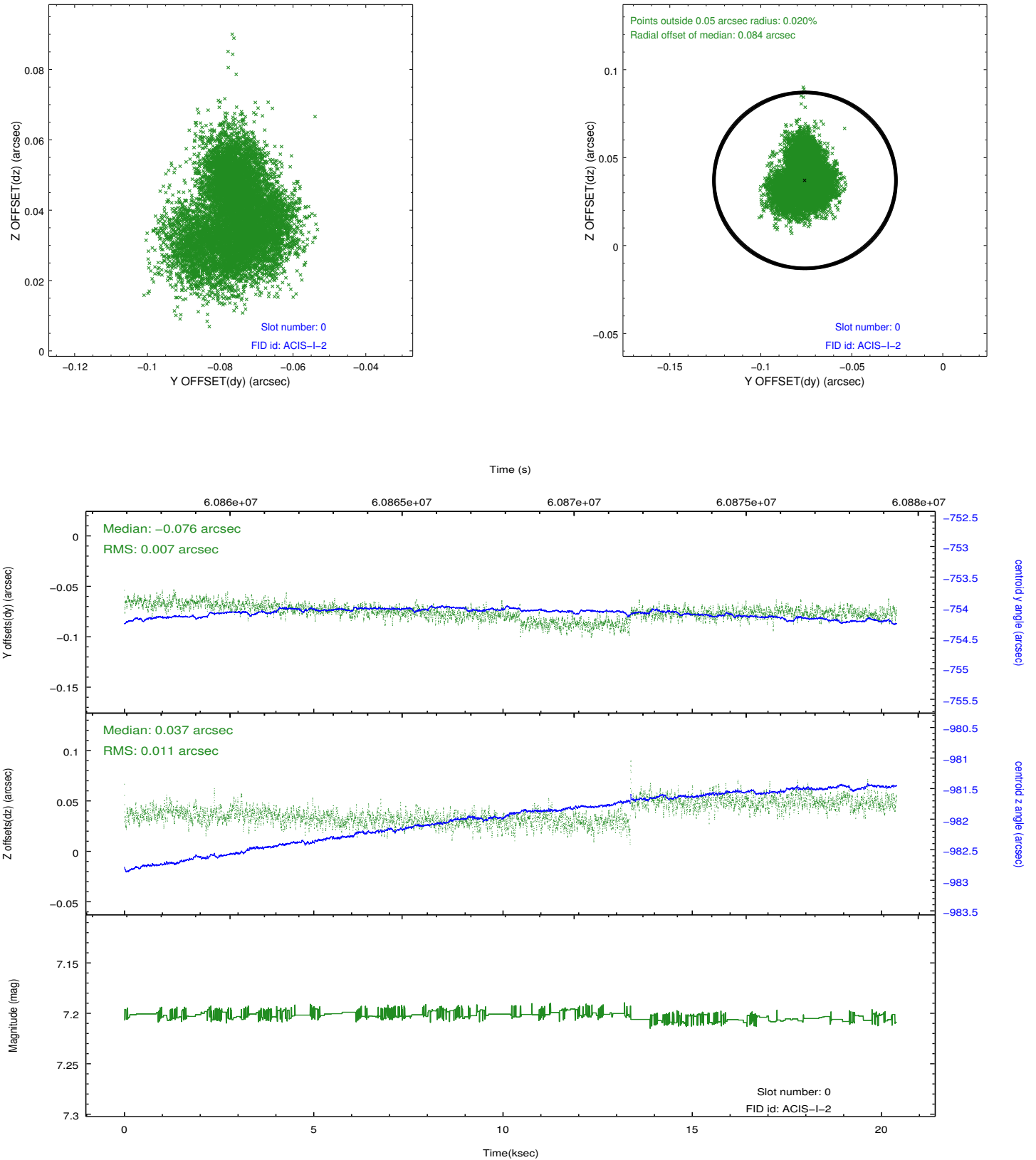


2.4.5 Slot 7

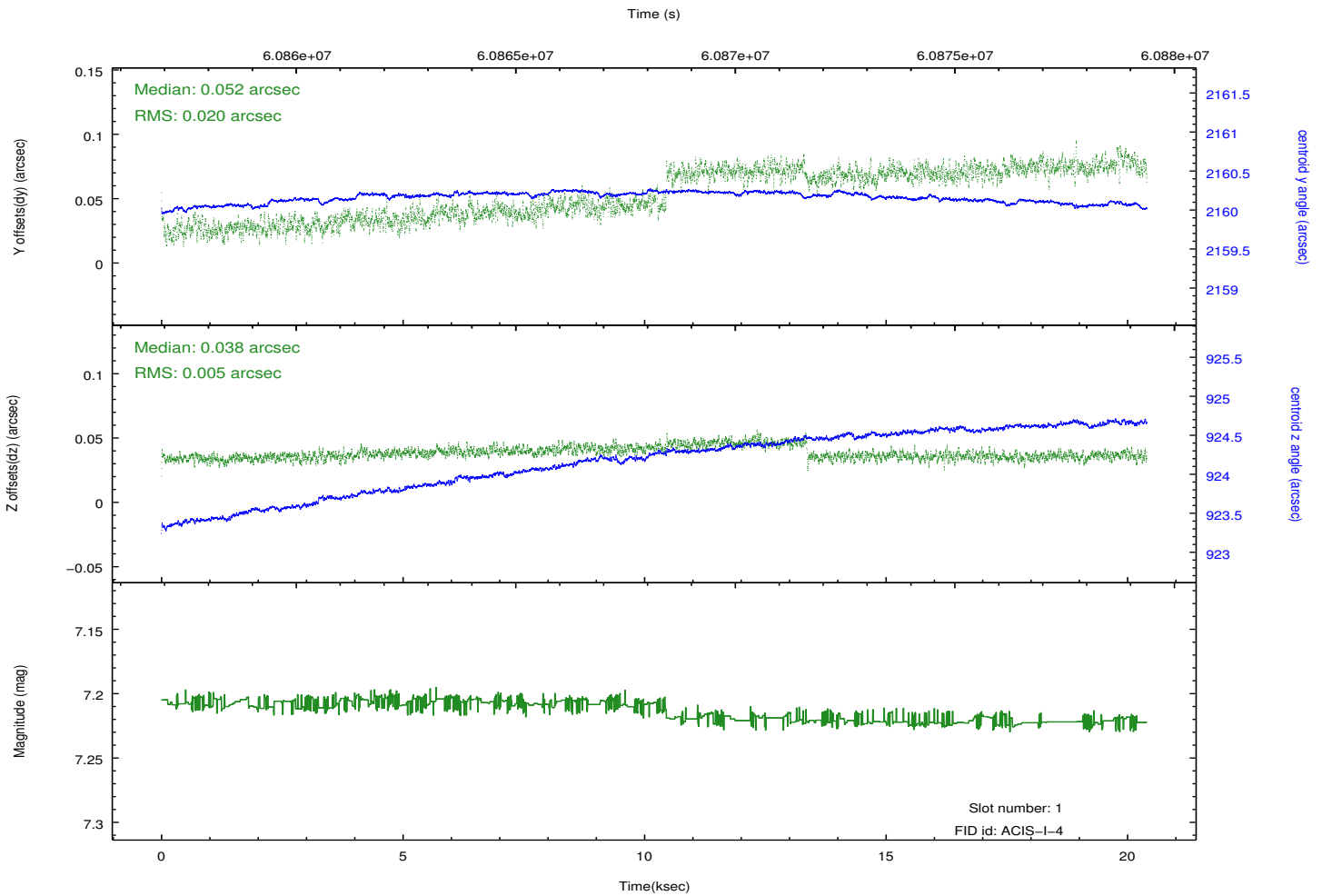
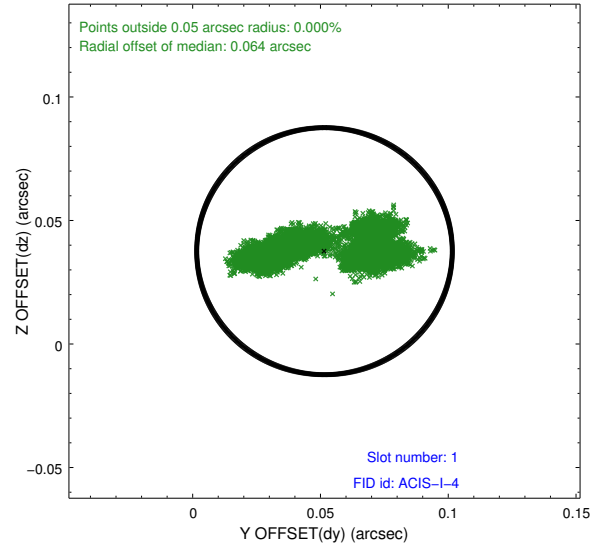
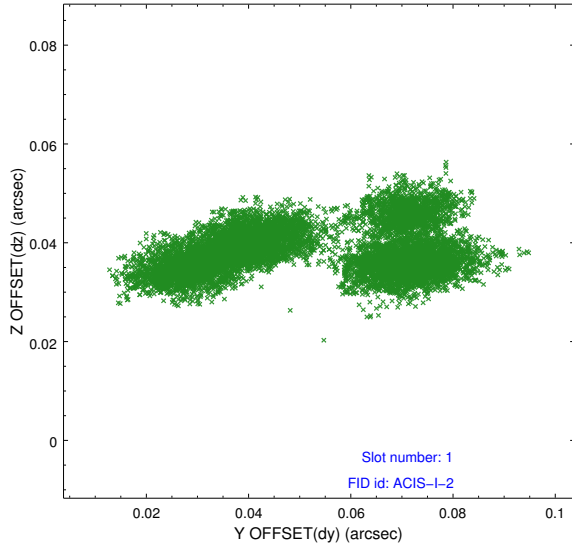


2.5 FID Slots

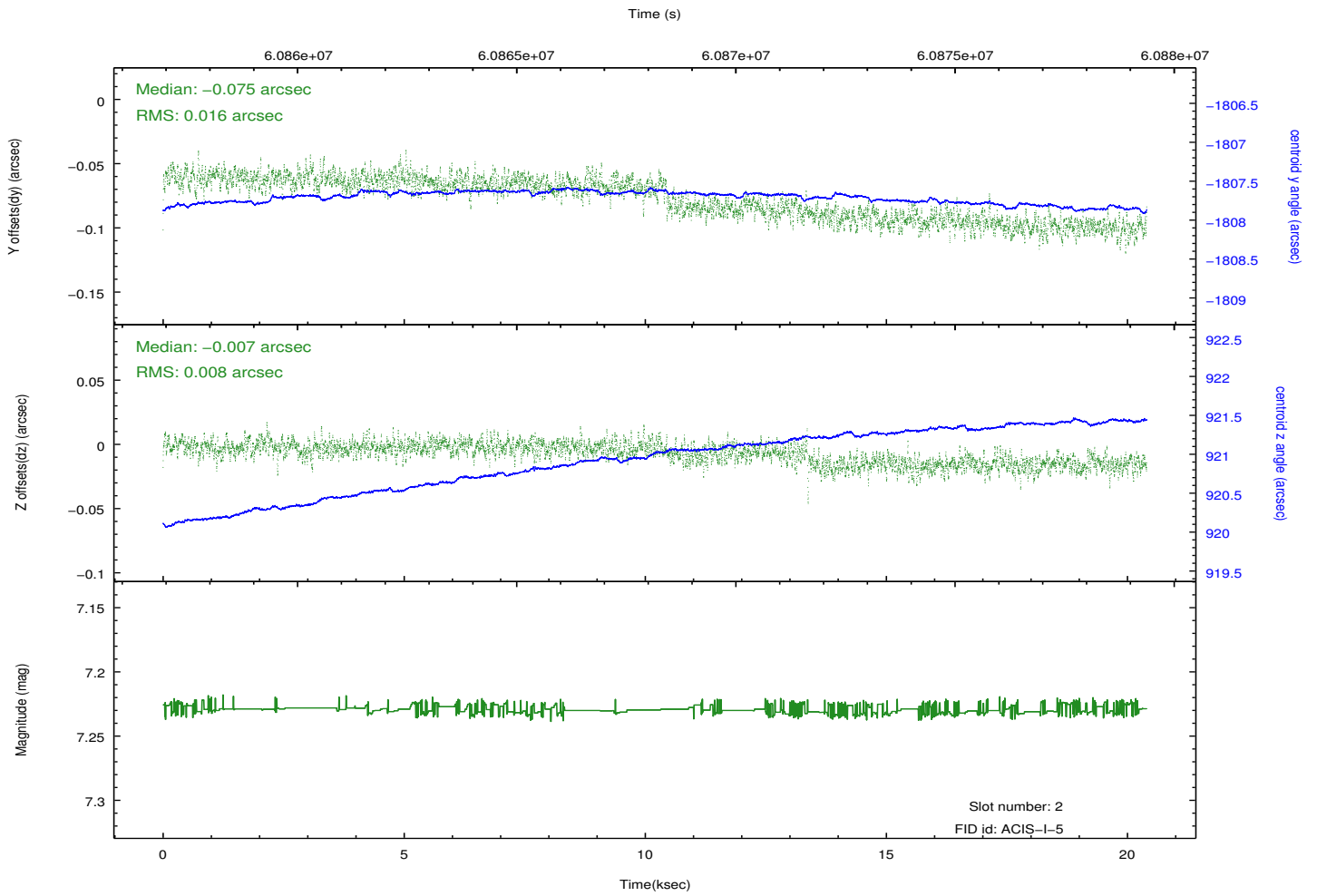
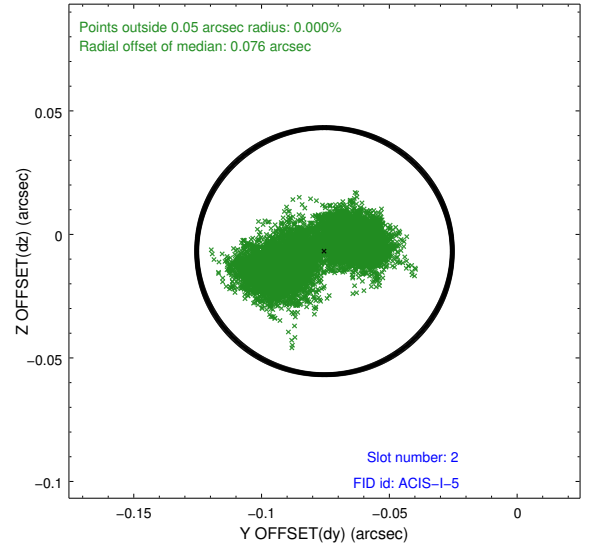
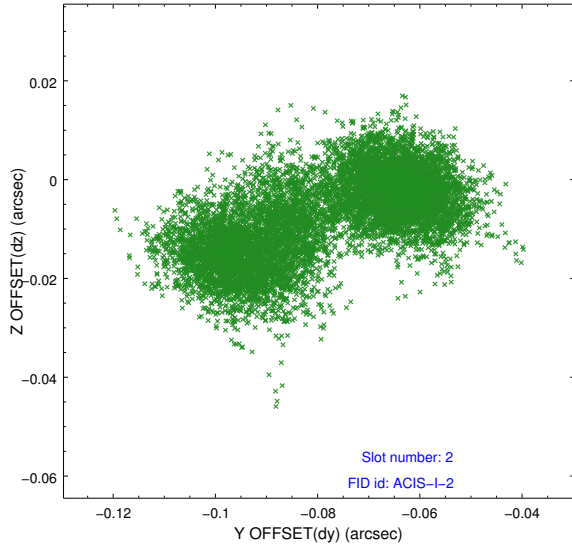
2.5.1 Slot 0



2.5.2 Slot 1

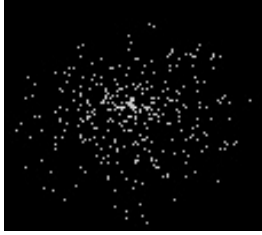


2.5.3 Slot 2

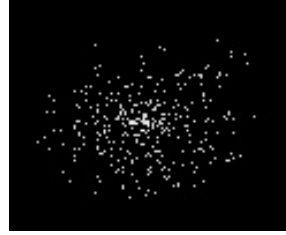


3 Point Sources

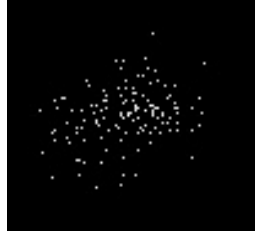
13.15 arcmin



13.16 arcmin



2.87 arcmin



16.28 arcmin



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.168

A.2 Comments

The focal plane temperature is approximately -110 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.