

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 576 - L2 Version 4
Chandra X-Ray Center

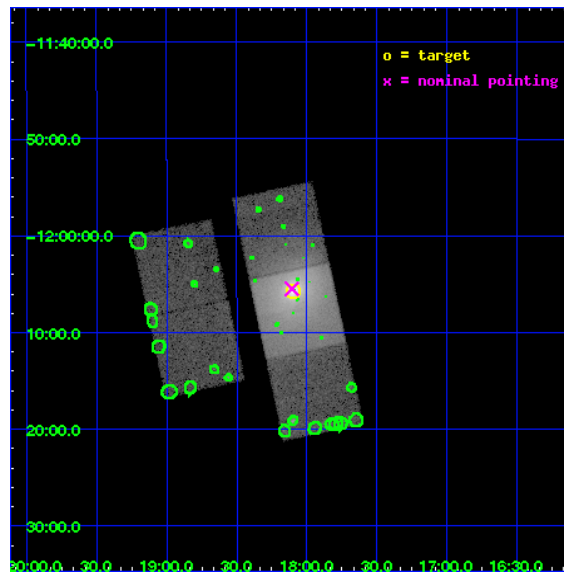
L2 Processing Date : Nov 21 2009

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1 Front

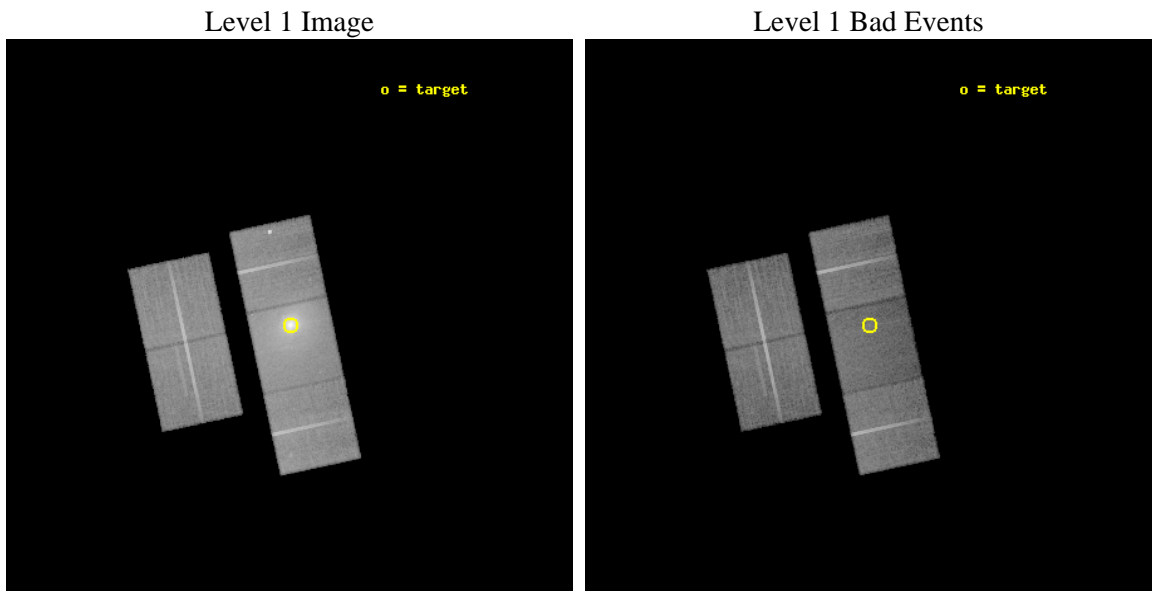
seq_num	890021	Sequence number
obs_id	576	Observation id
title	DEMONSTRATION SPECTRUM OF A COOLING FLOW CLUSTER: HYDRA A	Proposal
observer	Dr. CXC Calibration	Principal investigator
object	HYDRA A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	139.52375	Observer's specified target RA
dec_targ	-12.095833	Observer's specified target Dec
ra_nom	139.52666828758	Nominal RA
dec_nom	-12.091724697482	Nominal Dec
roll_nom	77.920526354913	Nominal Roll
revision	4	Processing version of data
ontime	19774.754846945	Sum of GTIs [s]
livetime	19524.354994146	Livetime [s]
ontime2	19774.713806942	Sum of GTIs [s]
ontime3	19774.631726943	Sum of GTIs [s]
ontime6	19771.431806728	Sum of GTIs [s]
ontime7	19774.754846945	Sum of GTIs [s]
ontime8	19768.108796448	Sum of GTIs [s]
l2events	353375	Number of level 2 events



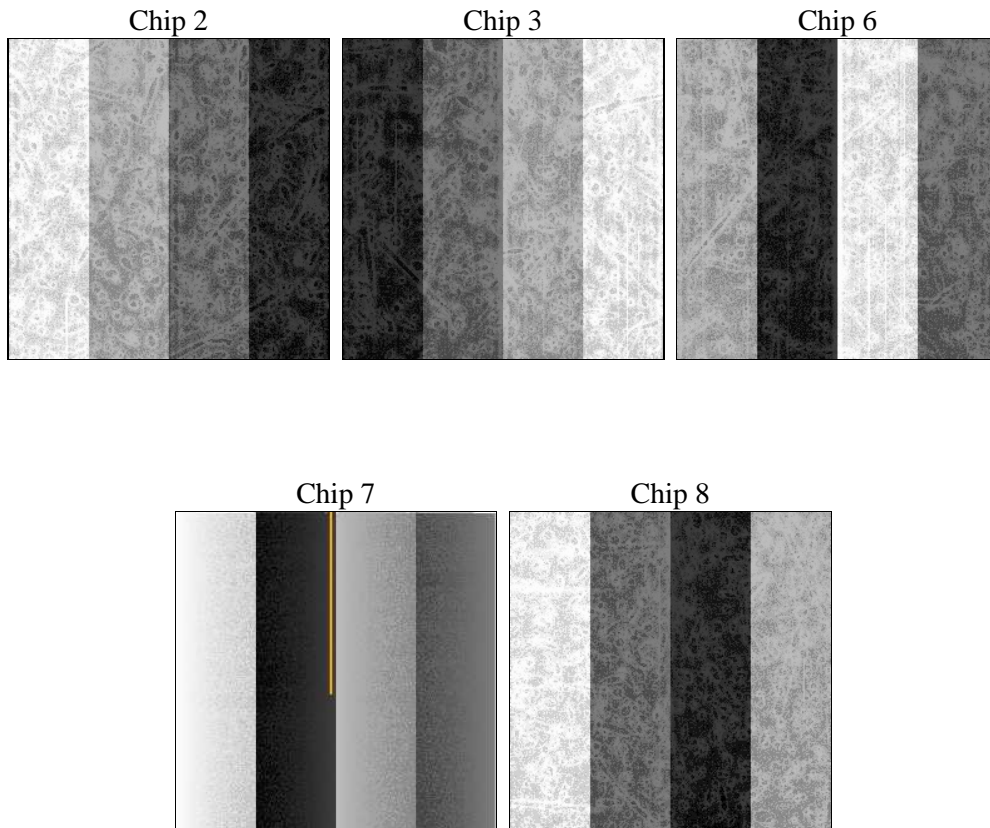
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	20000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	19774.754846945	Sum of GTIs [s]
caldbver	4.1.4	 	ontime2	19774.713806942	Sum of GTIs [s]
date	2009-11-21T10:38:42	Date and time of file creation	ontime3	19774.631726943	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	19771.431806728	Sum of GTIs [s]
			ontime7	19774.754846945	Sum of GTIs [s]
			ontime8	19768.108796448	Sum of GTIs [s]
			l1events	1179015	Number of level 1 events

2.1.4 Events

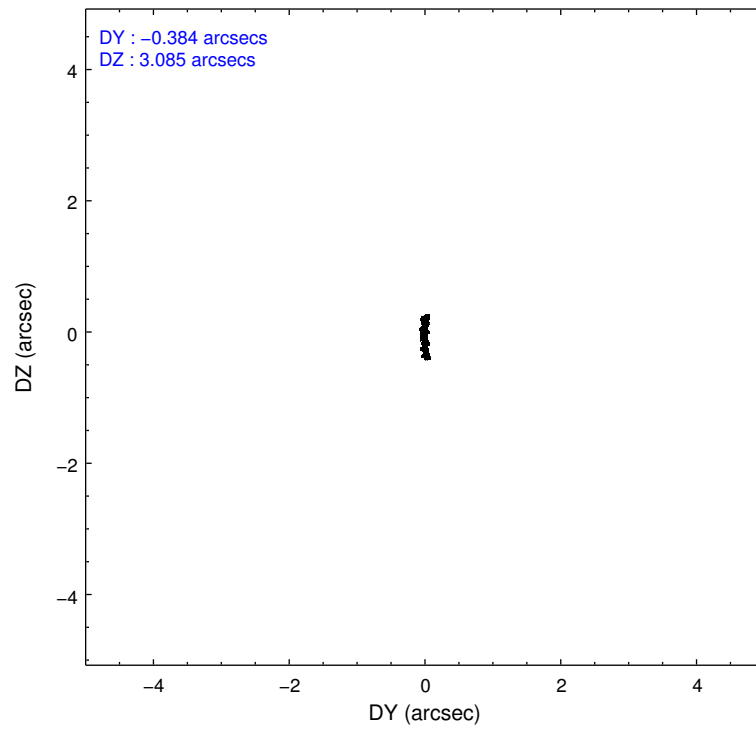
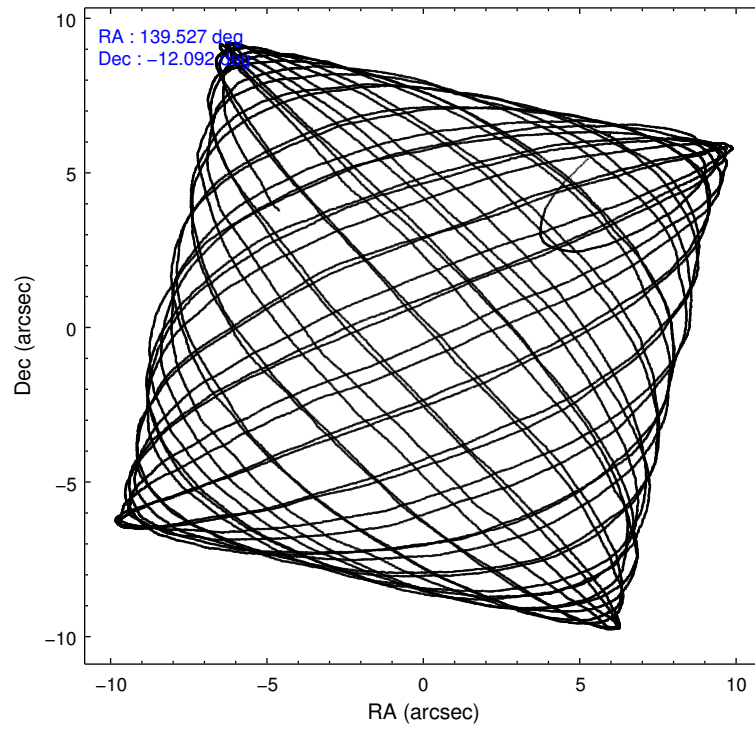
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	189506	180074	202524	392955	213956
rejected events	172617	162301	166119	117631	177390
rejected %	91%	90%	82%	29%	82%

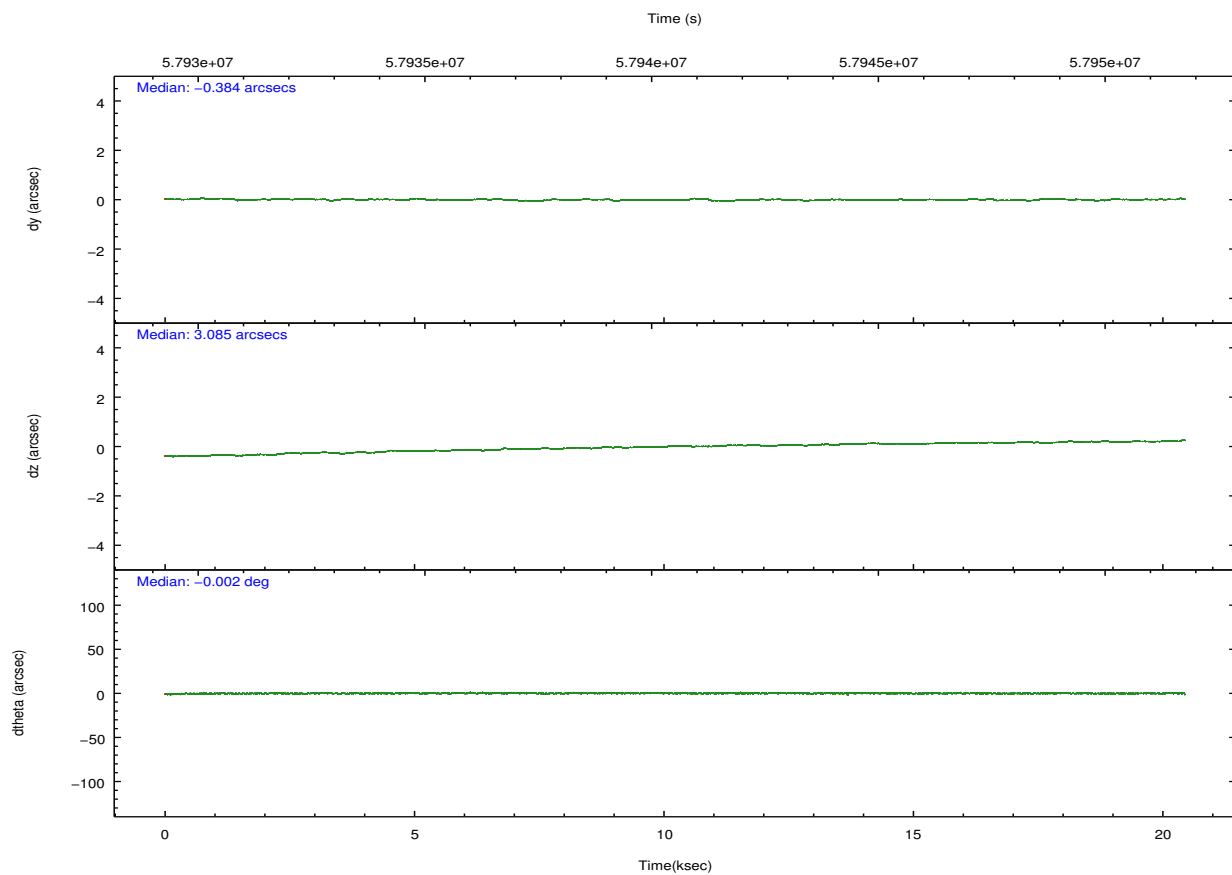
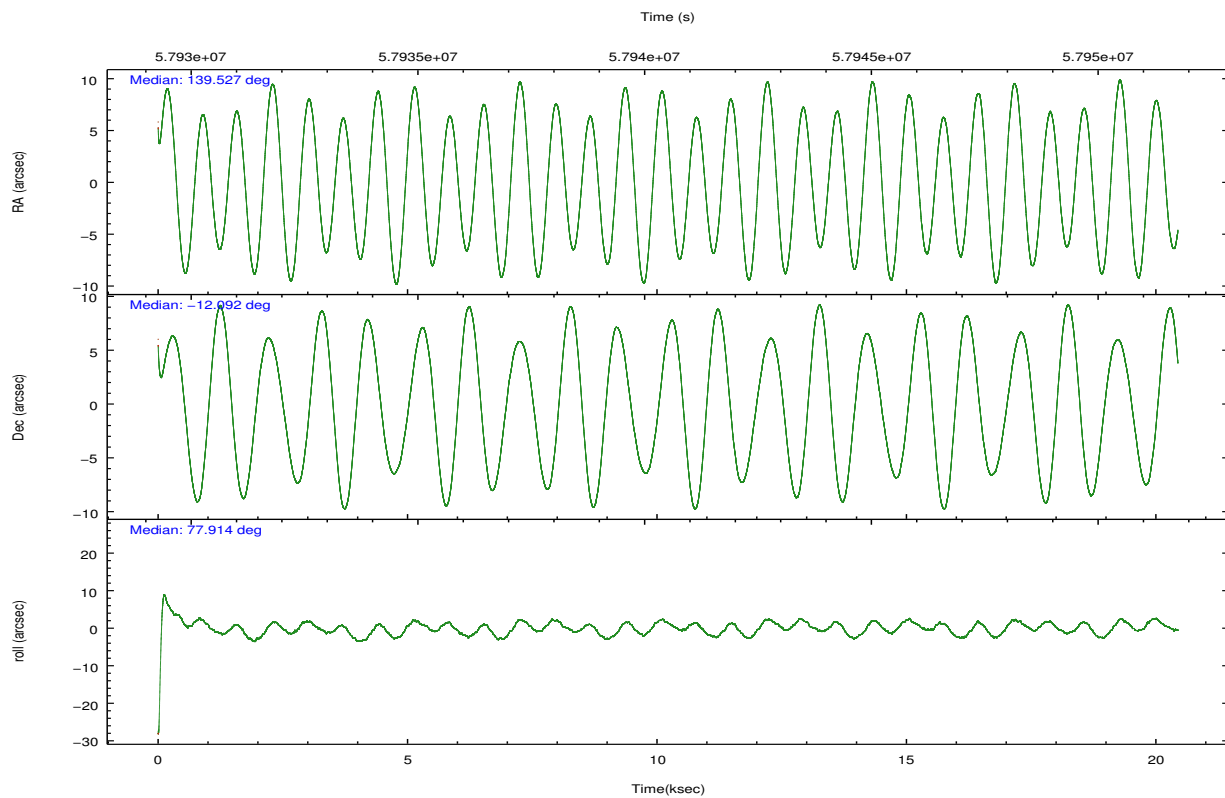
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4143	4678	13341	65572	10072
	2%	2%	6%	16%	4%
grade 1 events	30	39	59	169	71
	0%	0%	0%	0%	0%
grade 2 events	6489	6871	15169	69624	11335
	3%	3%	7%	17%	5%
grade 3 events	1146	1139	1353	28368	2682
	0%	0%	0%	7%	1%
grade 4 events	1075	1066	1382	26968	2634
	0%	0%	0%	6%	1%
grade 5 events	3086	3372	3797	13010	5009
	1%	1%	1%	3%	2%
grade 6 events	4044	4029	5173	84890	9856
	2%	2%	2%	21%	4%
grade 7 events	169493	158880	162250	104354	172297
	89%	88%	80%	26%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	139.535228	139.5266682875799	Subarray requested	NONE	NONE
Pointing Dec	-12.118047	-12.09172469748169	Alternating exposures requested	N	N
Pointing Roll	77.765715	77.92052635491322	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	57930739.184000	57929514.29939			
Observation start date	1999-11-02T11:51:15	1999-11-02T11:31:54			
Observation end time	57950739.184000	57951167.425172			
Observation end date	1999-11-02T17:24:35	1999-11-02T17:32:47			
Read mode	TIMED	TIMED			

2.3 Aspect



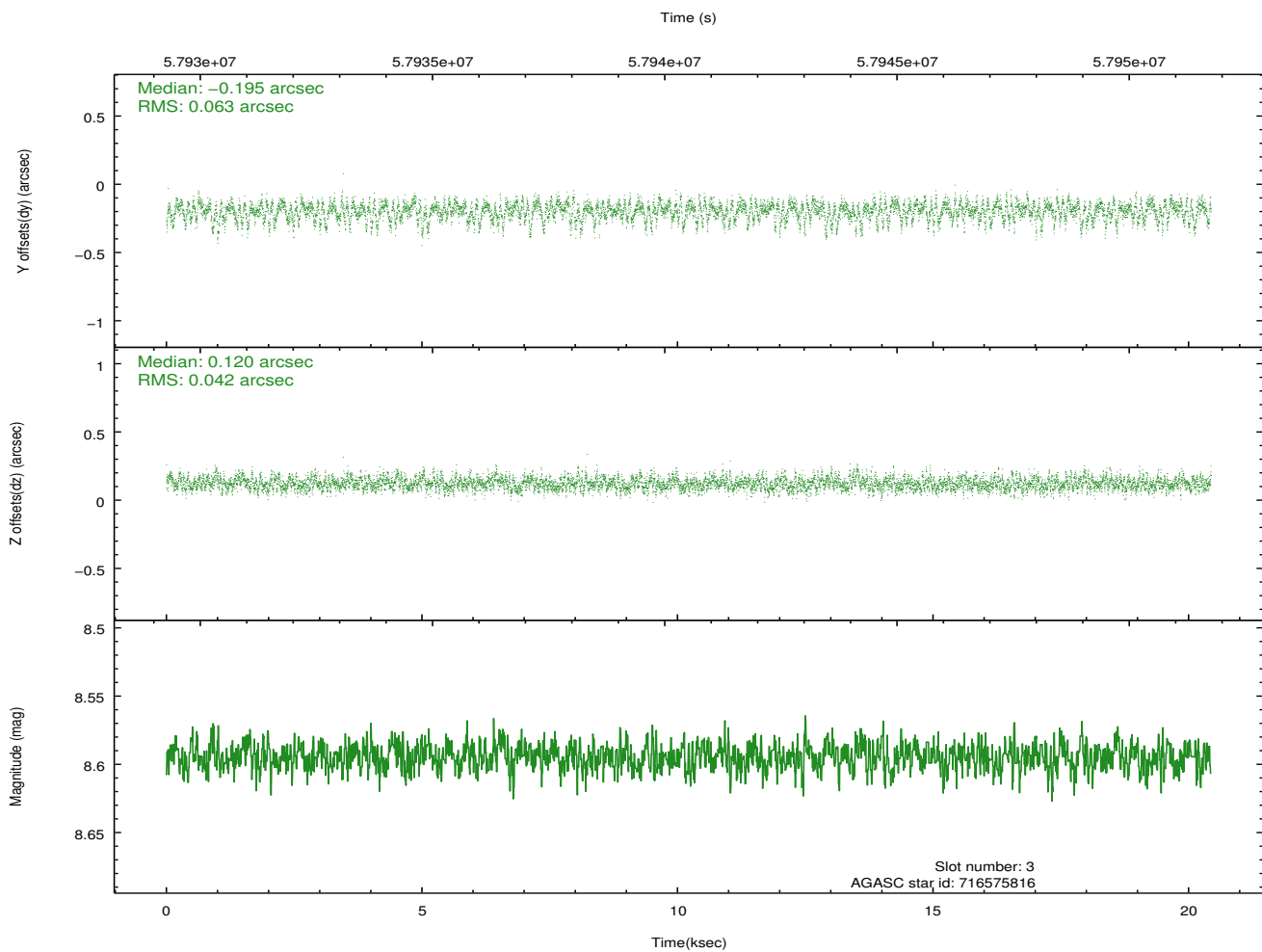
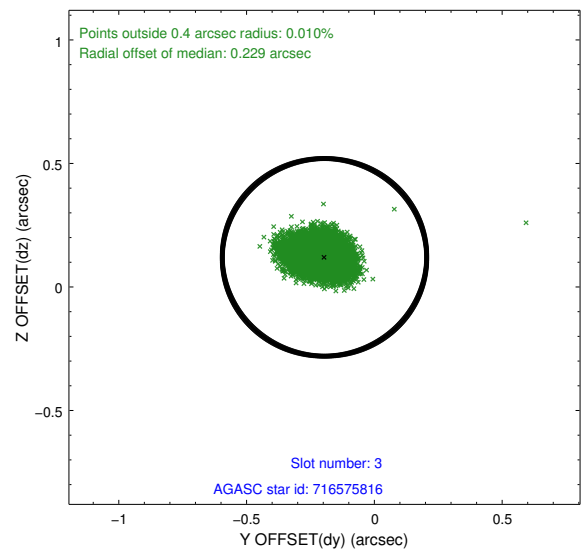
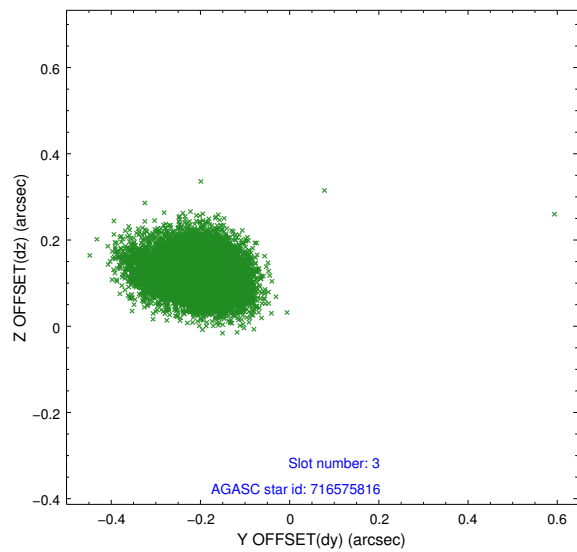


Slot Statistics

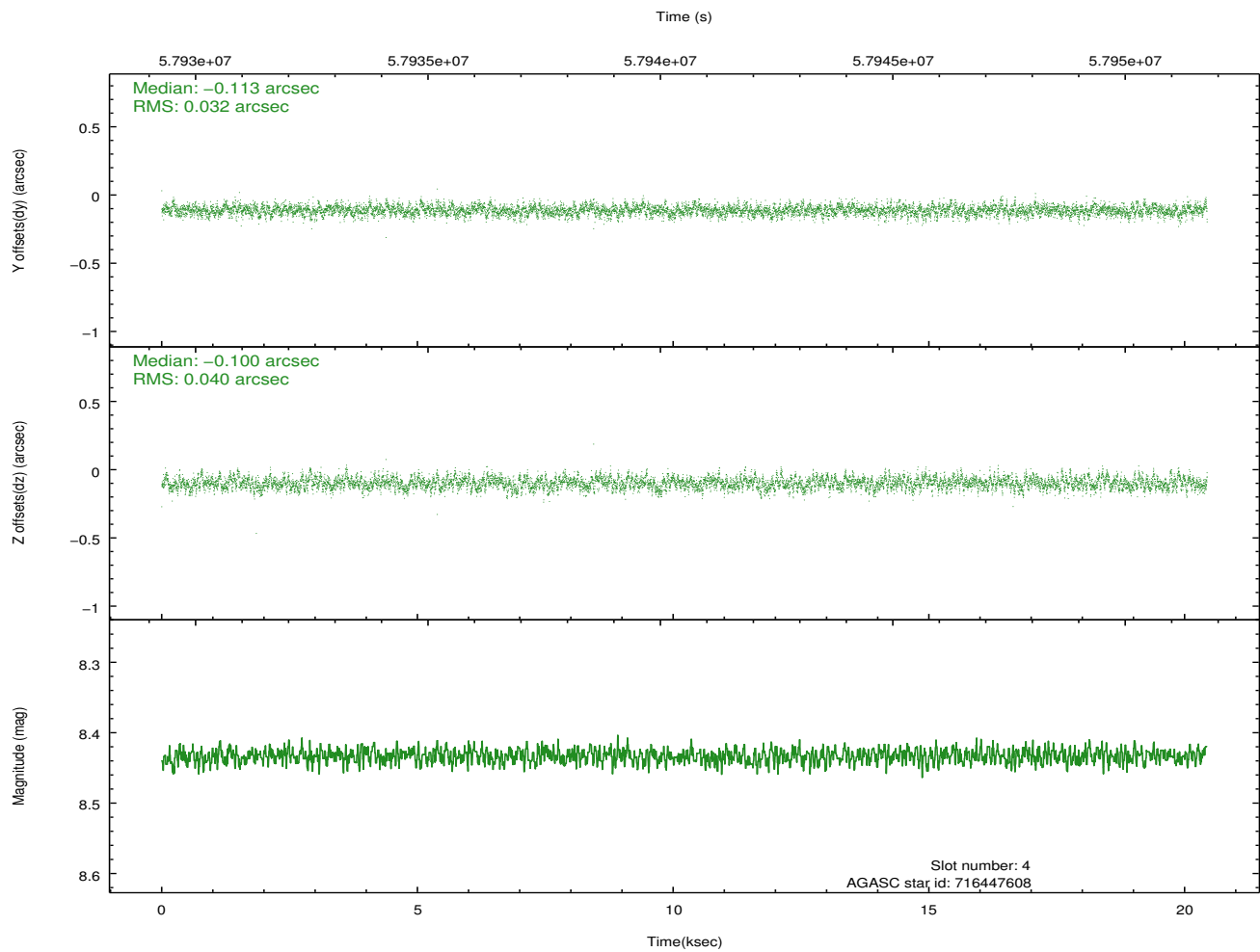
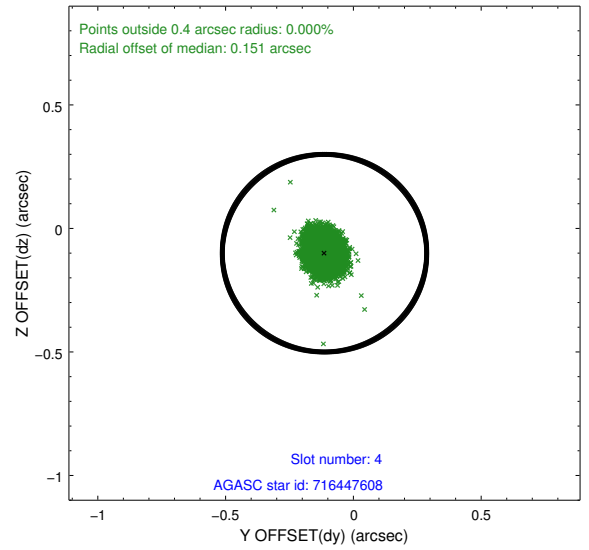
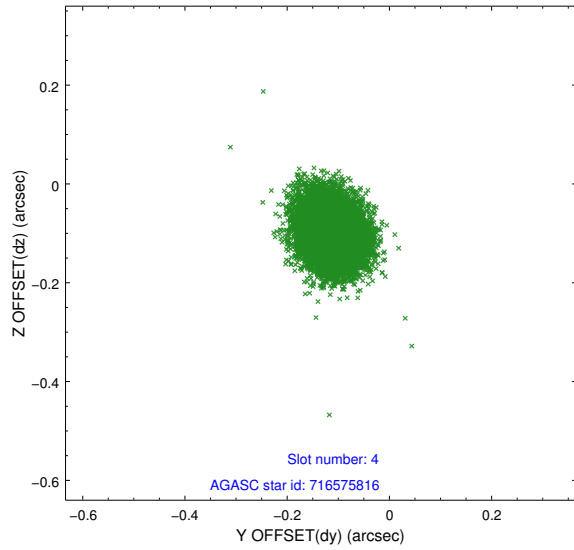
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	9972	0.017	-0.005	0.007	0.012	0.000000	0.000000	-752.21	-1724.08
1	FID	ACIS-S-4	7.21	9970	0.040	-0.007	0.006	0.010	0.000000	0.000000	2161.15	184.28
2	FID	ACIS-S-5	7.24	9970	-0.088	0.020	0.007	0.012	0.000000	0.000000	-1805.07	178.14
3	GUIDE	716575816	8.59	9963	-0.195	0.120	0.079	0.136	140.229272	-11.600909	2335.54	-1997.78
4	GUIDE	716447608	8.43	9966	-0.113	-0.100	0.054	0.089	139.107687	-11.923612	364.06	1619.56
5	GUIDE	716452568	9.30	9962	0.018	0.013	0.087	0.144	139.317316	-12.008019	224.48	833.95
6	GUIDE	716454552	9.03	9970	0.201	-0.271	0.068	0.110	139.524204	-12.319370	-715.95	-115.98
7	GUIDE	716448288	9.84	9969	0.098	0.237	0.089	0.144	139.709968	-12.540955	-1357.50	-922.74

2.4 Star Slots

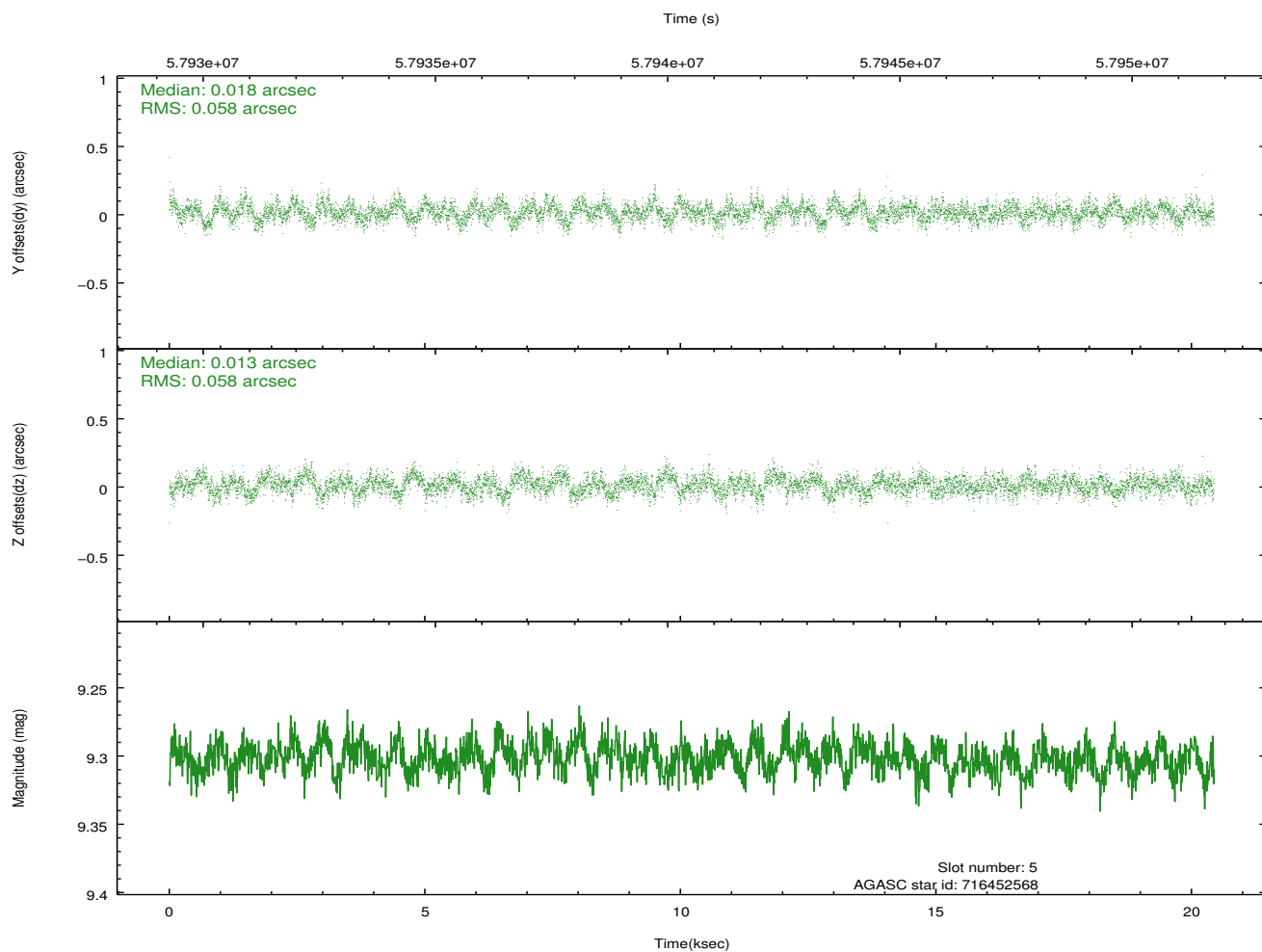
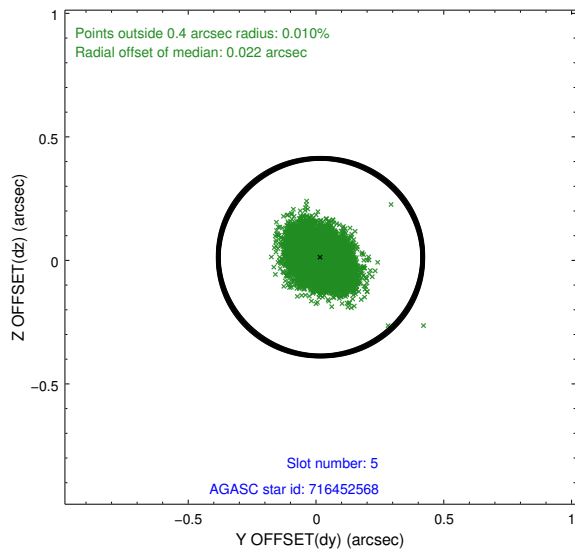
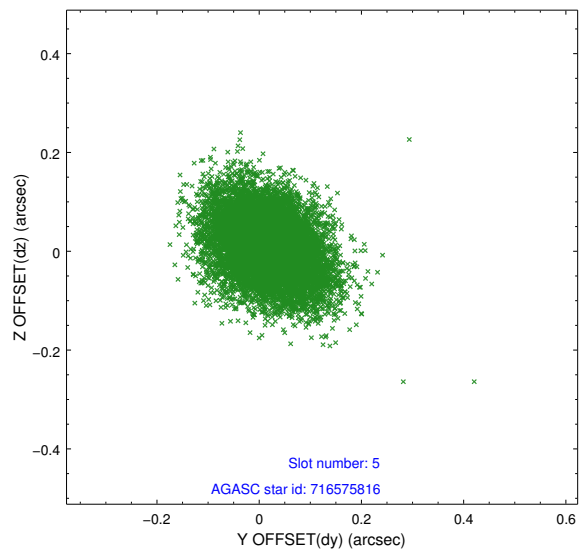
2.4.1 Slot 3



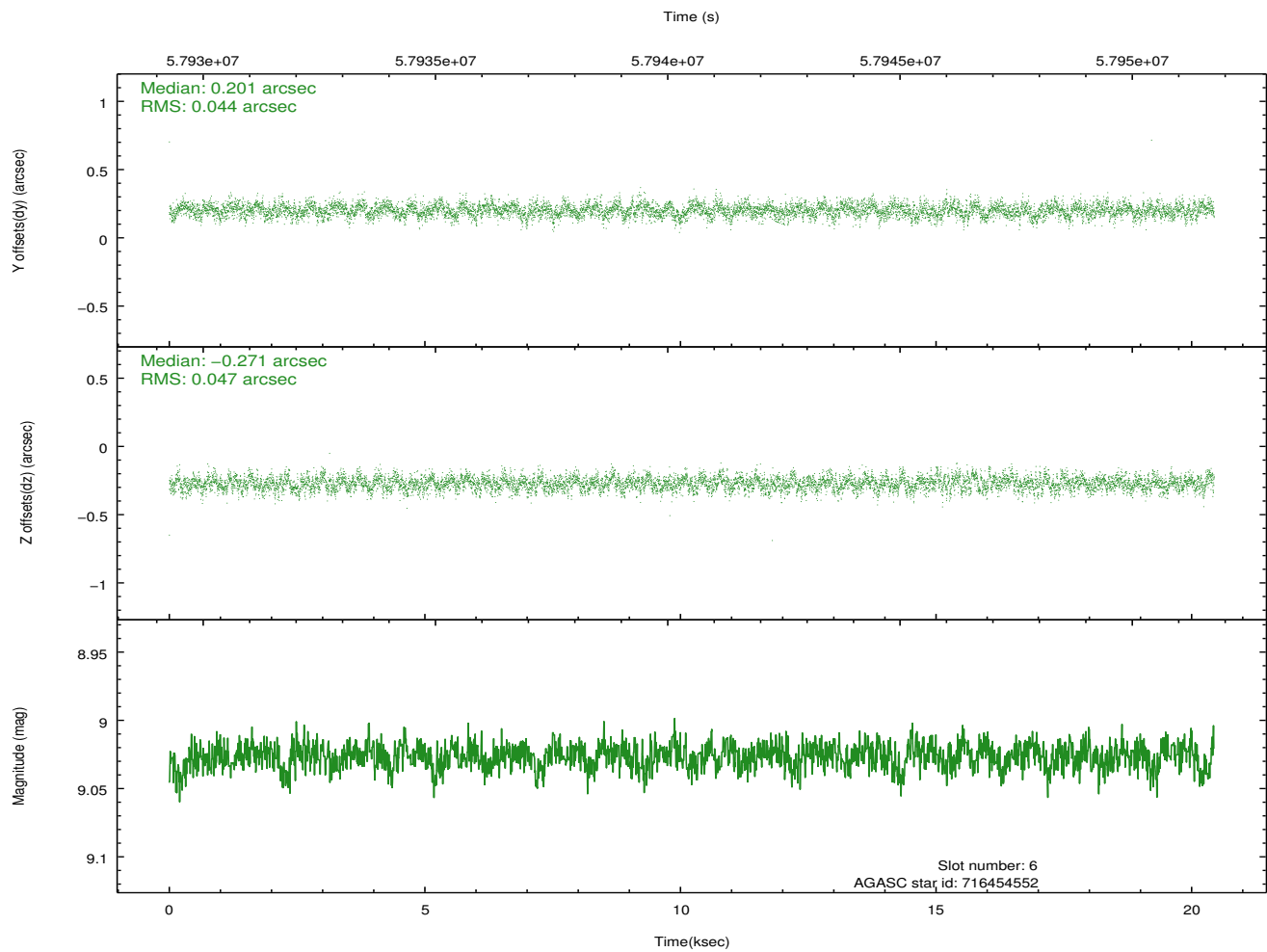
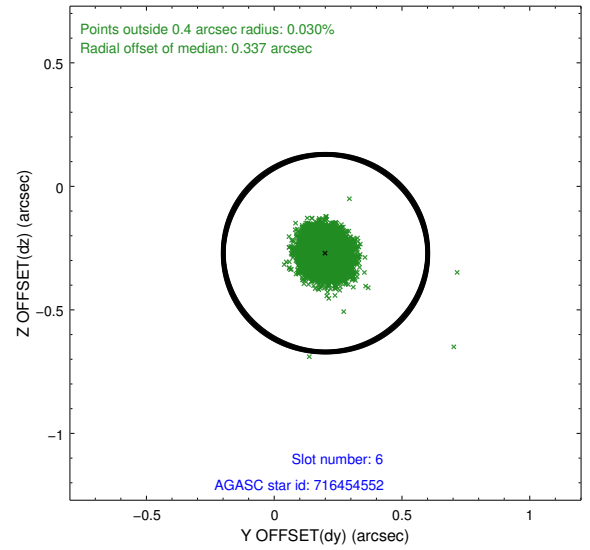
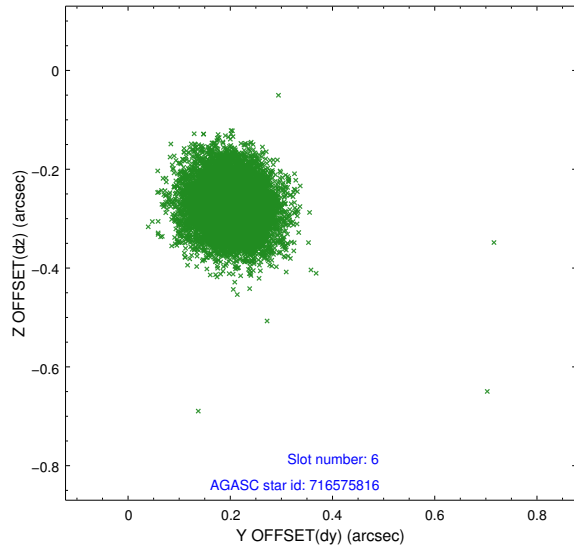
2.4.2 Slot 4



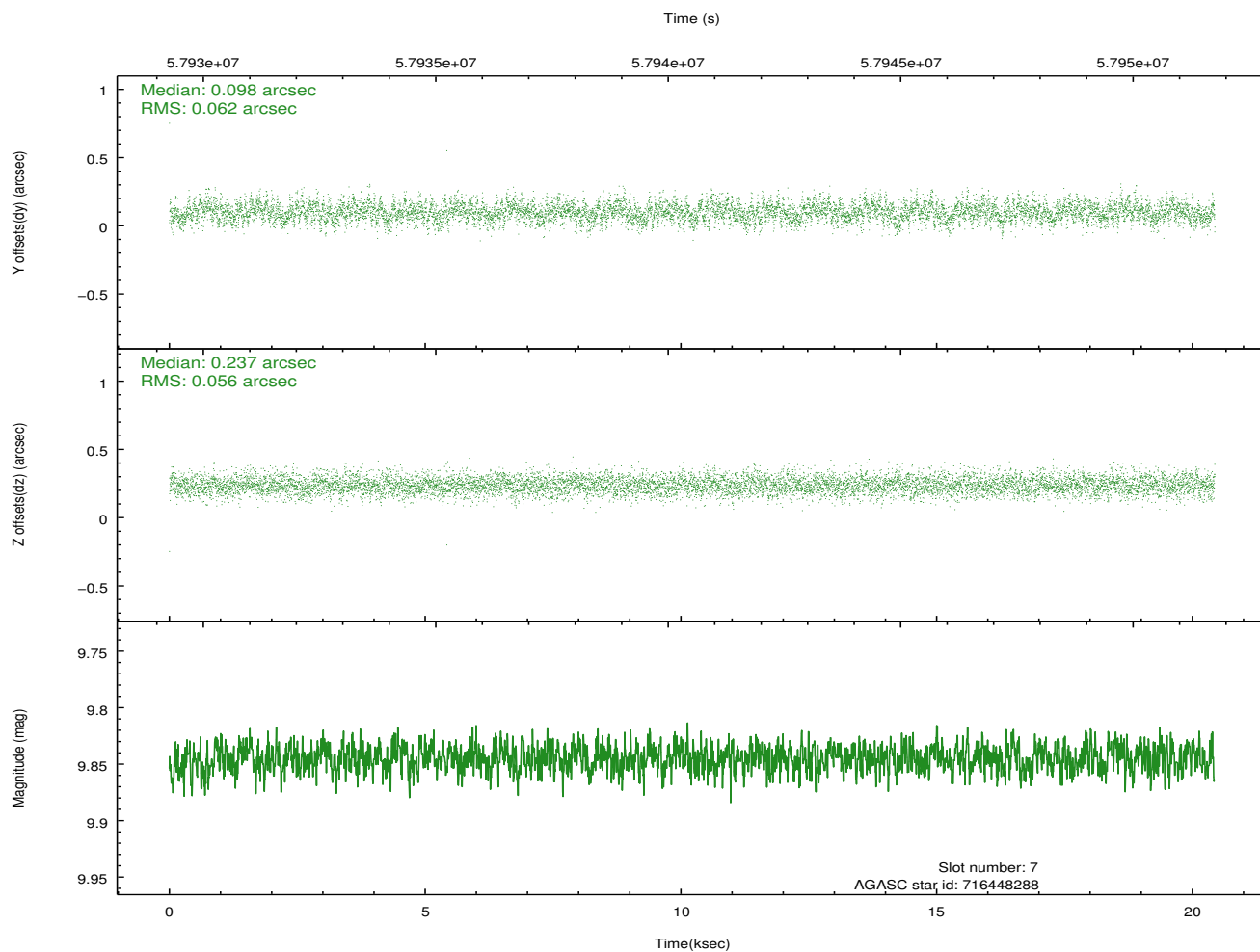
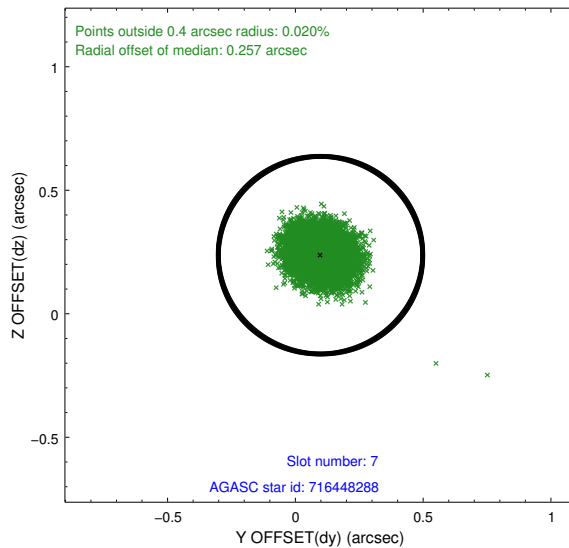
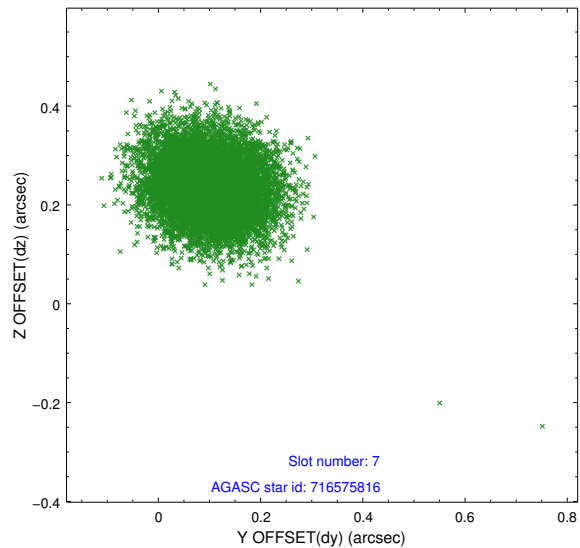
2.4.3 Slot 5



2.4.4 Slot 6

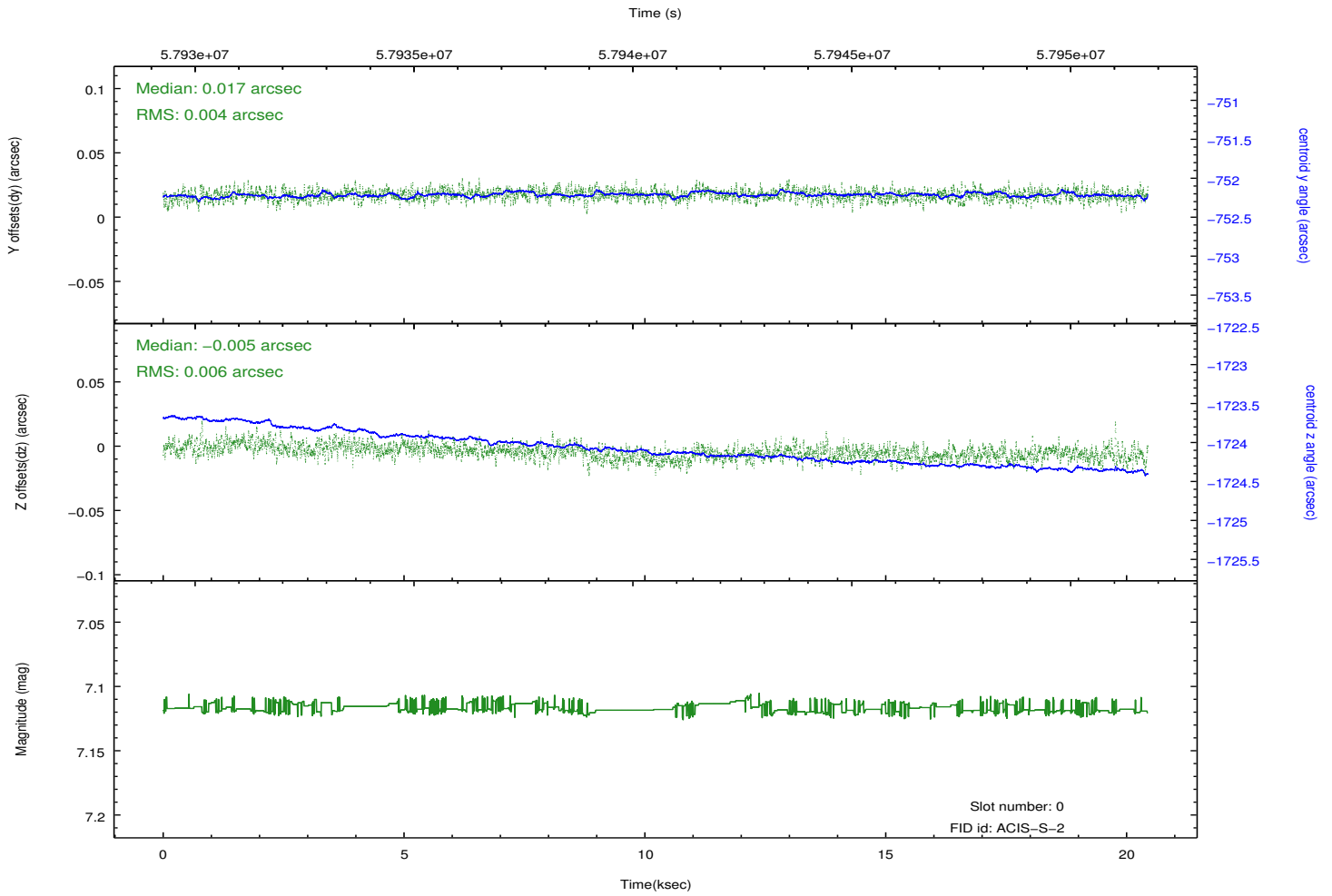
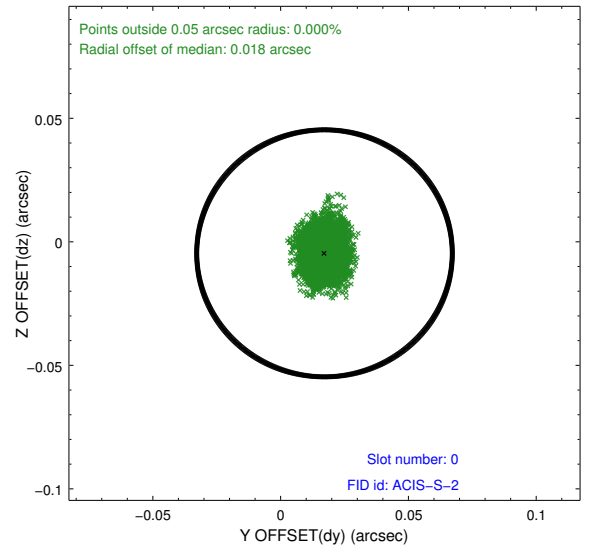
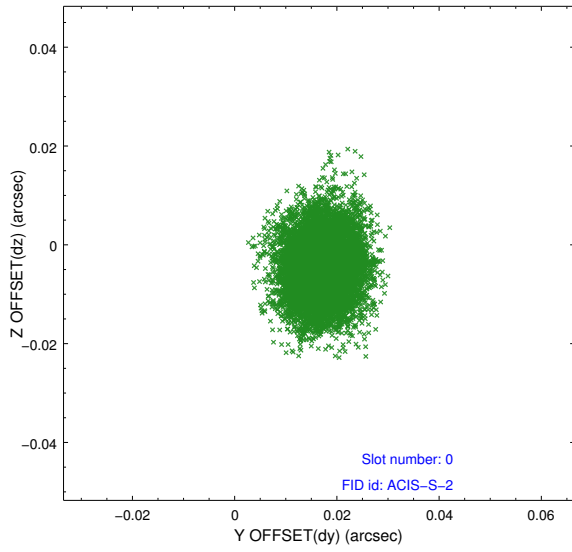


2.4.5 Slot 7

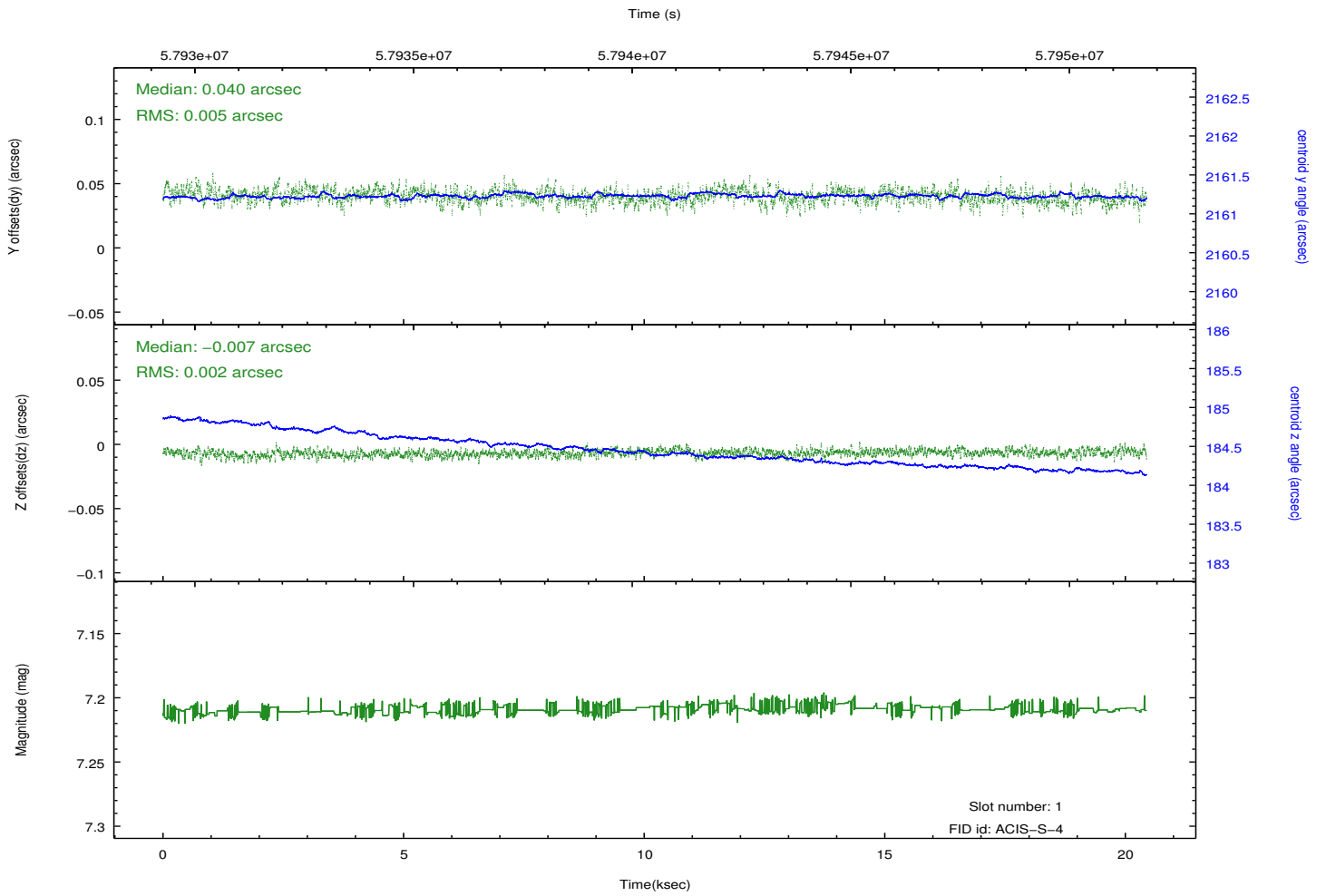
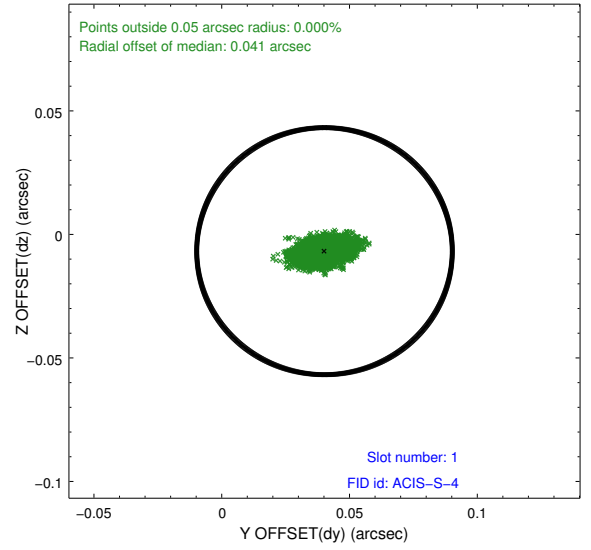
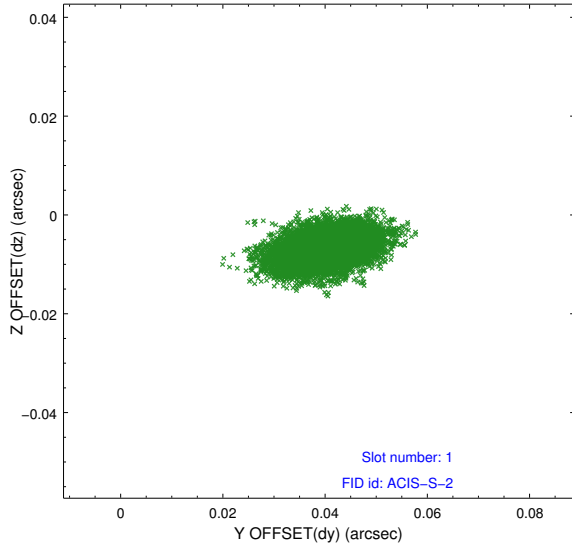


2.5 FID Slots

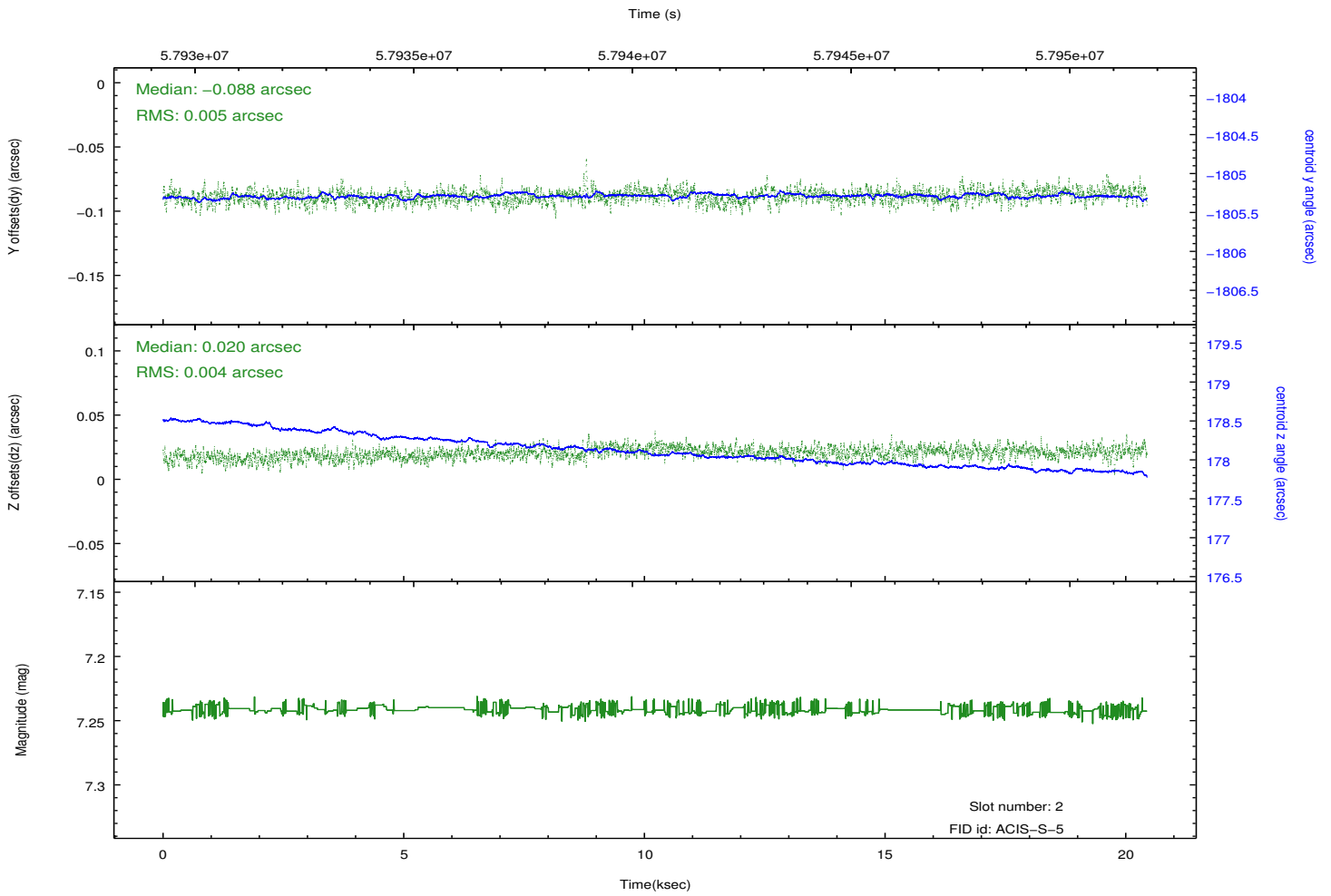
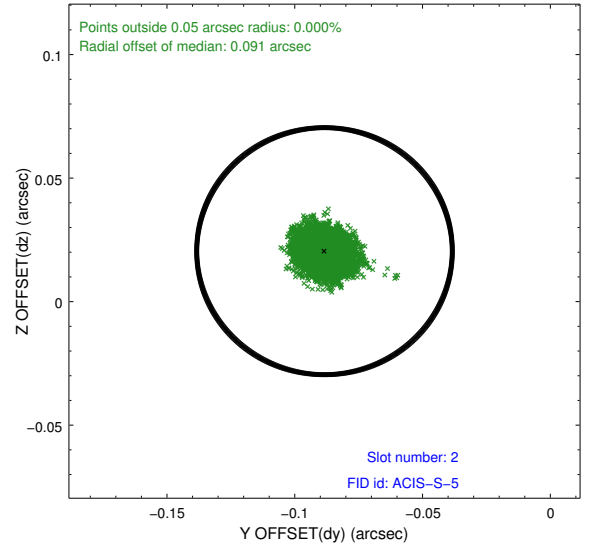
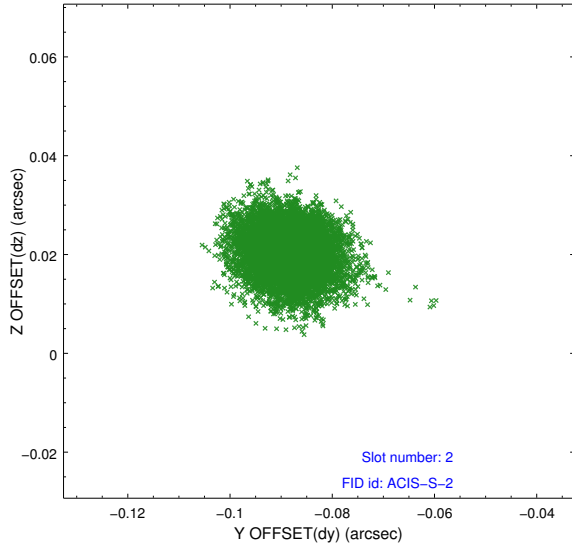
2.5.1 Slot 0



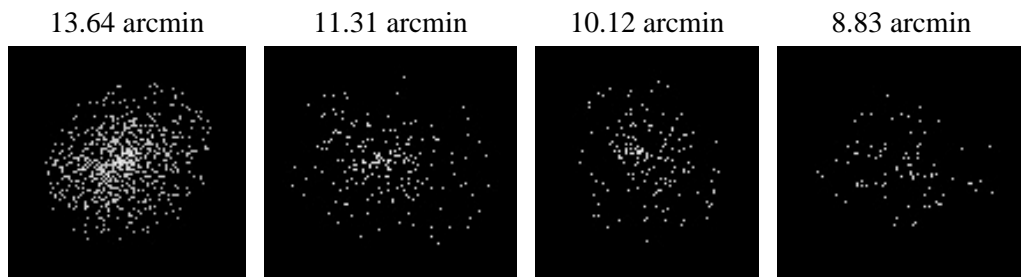
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.05.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.776

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.