

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1433 - L2 Version 4
Chandra X-Ray Center

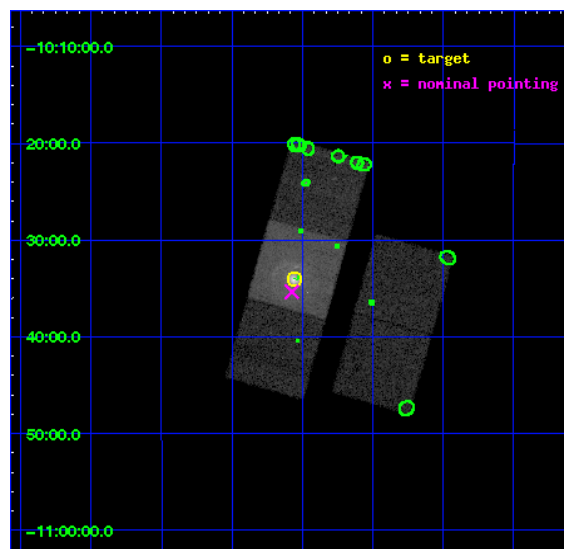
L2 Processing Date : Nov 24 2009

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1 Front

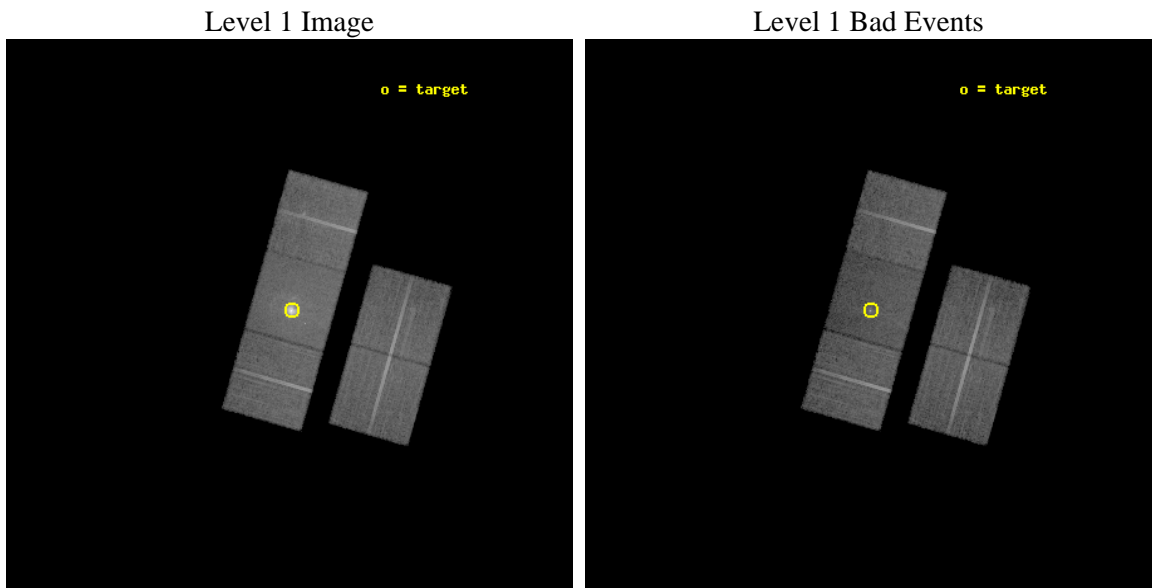
seq_num	580383	Sequence number
obs_id	1433	Observation id
title	ACIS CHIP RESPONSE TO A CONTINUUM SOURCE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip S3, T=110, Offsets=-1,0,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA
dec_targ	-10.568528	Observer's specified target Dec
ra_nom	278.39353079353	Nominal RA
dec_nom	-10.589528953519	Nominal Dec
roll_nom	285.80283791485	Nominal Roll
revision	4	Processing version of data
ontime	15161.559093833	Sum of GTIs [s]
livetime	14969.574303392	Livetime [s]
ontime2	15164.800014123	Sum of GTIs [s]
ontime3	15164.800014123	Sum of GTIs [s]
ontime6	15164.800014123	Sum of GTIs [s]
ontime7	15161.559093833	Sum of GTIs [s]
ontime8	15161.559053905	Sum of GTIs [s]
l2events	162556	Number of level 2 events



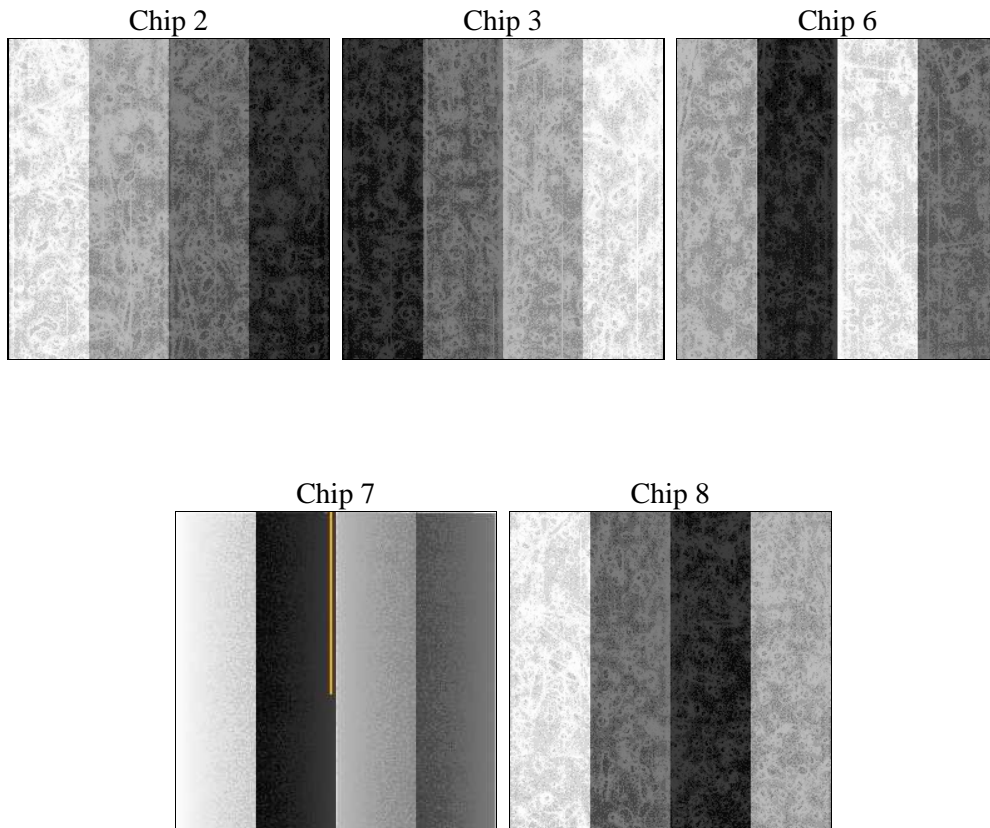
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	15161.559093833	Sum of GTIs [s]
caldbver	4.1.4	 	ontime2	15164.800014123	Sum of GTIs [s]
date	2009-11-24T11:37:14	Date and time of file creation	ontime3	15164.800014123	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	15164.800014123	Sum of GTIs [s]
			ontime7	15161.559093833	Sum of GTIs [s]
			ontime8	15161.559053905	Sum of GTIs [s]
			l1events	754499	Number of level 1 events

2.1.4 Events

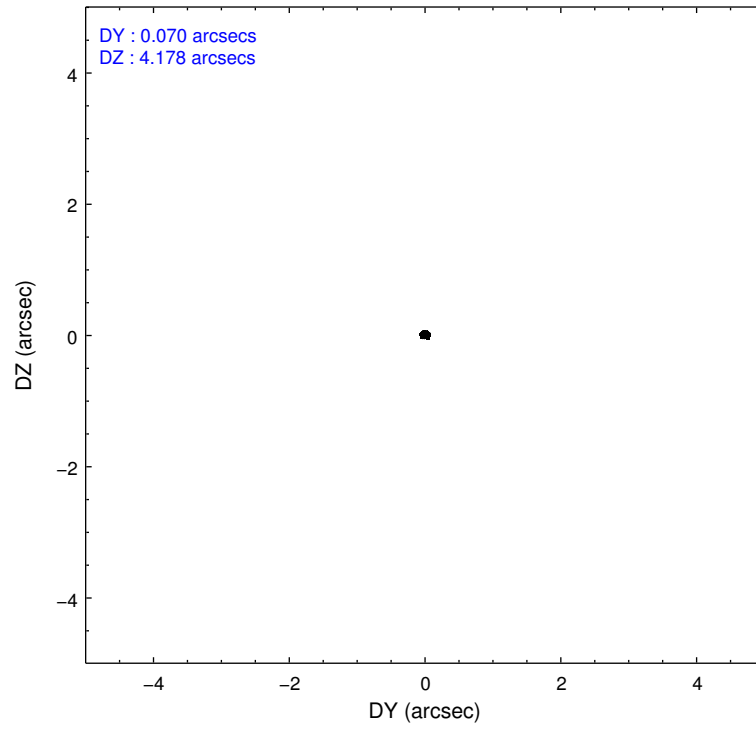
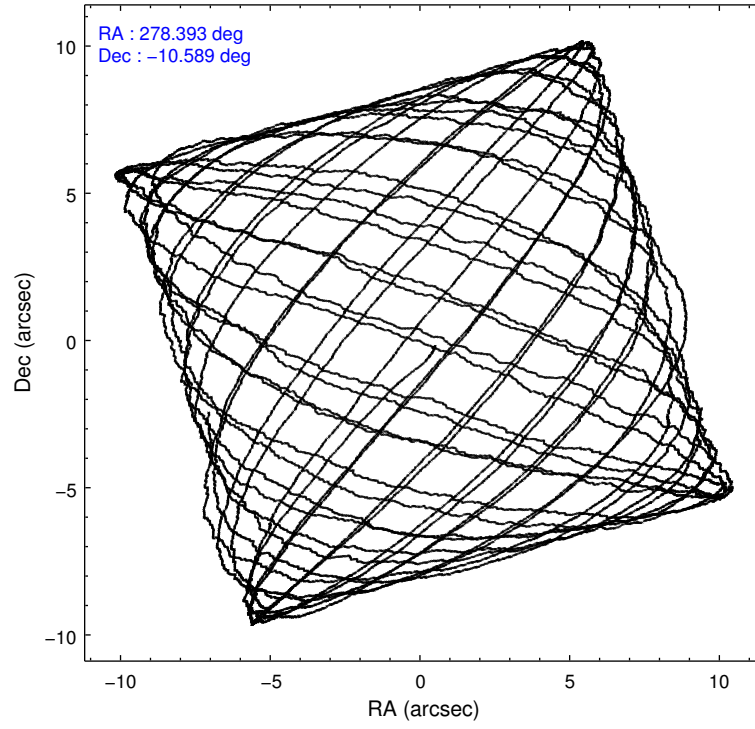
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	134455	130678	135297	197298	156771
rejected events	121795	117537	121386	86646	128279
rejected %	90%	89%	89%	43%	81%

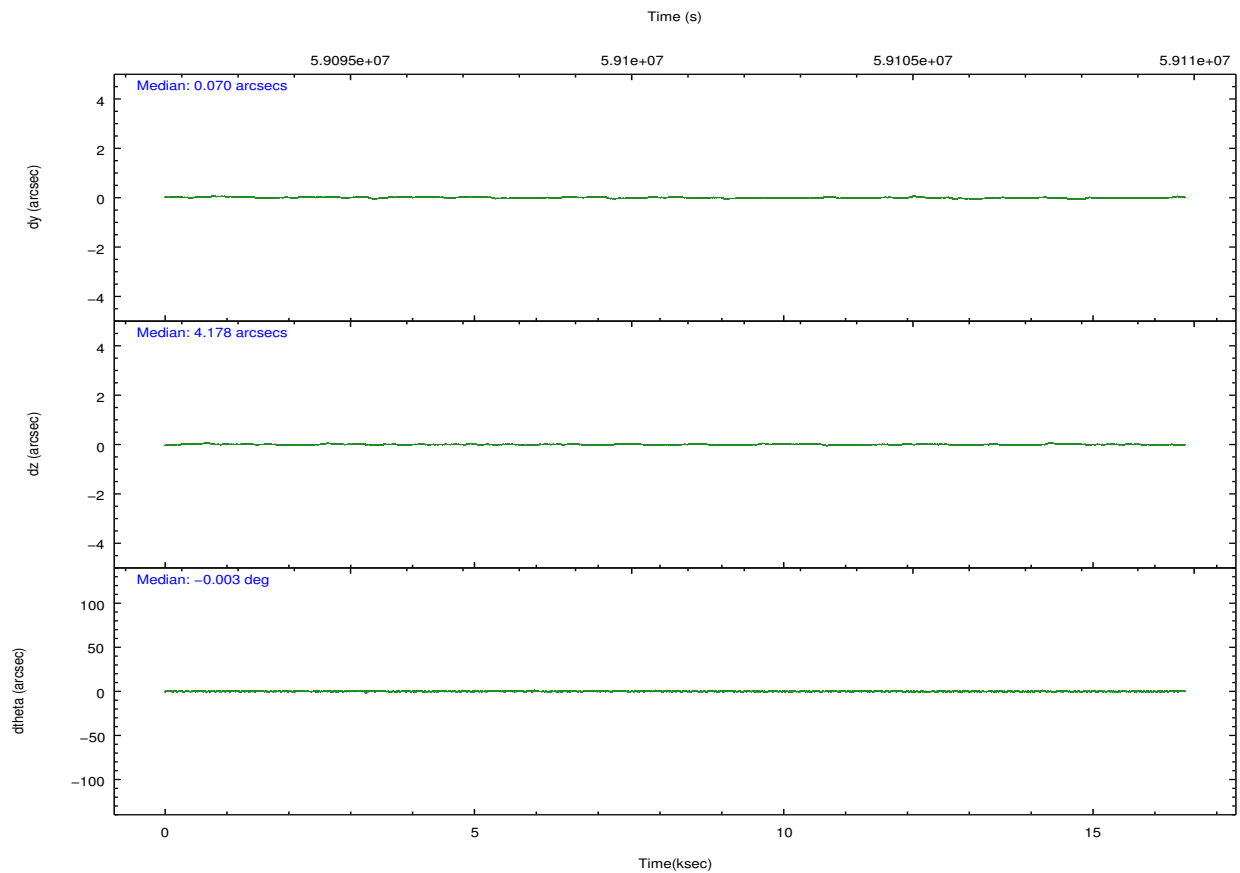
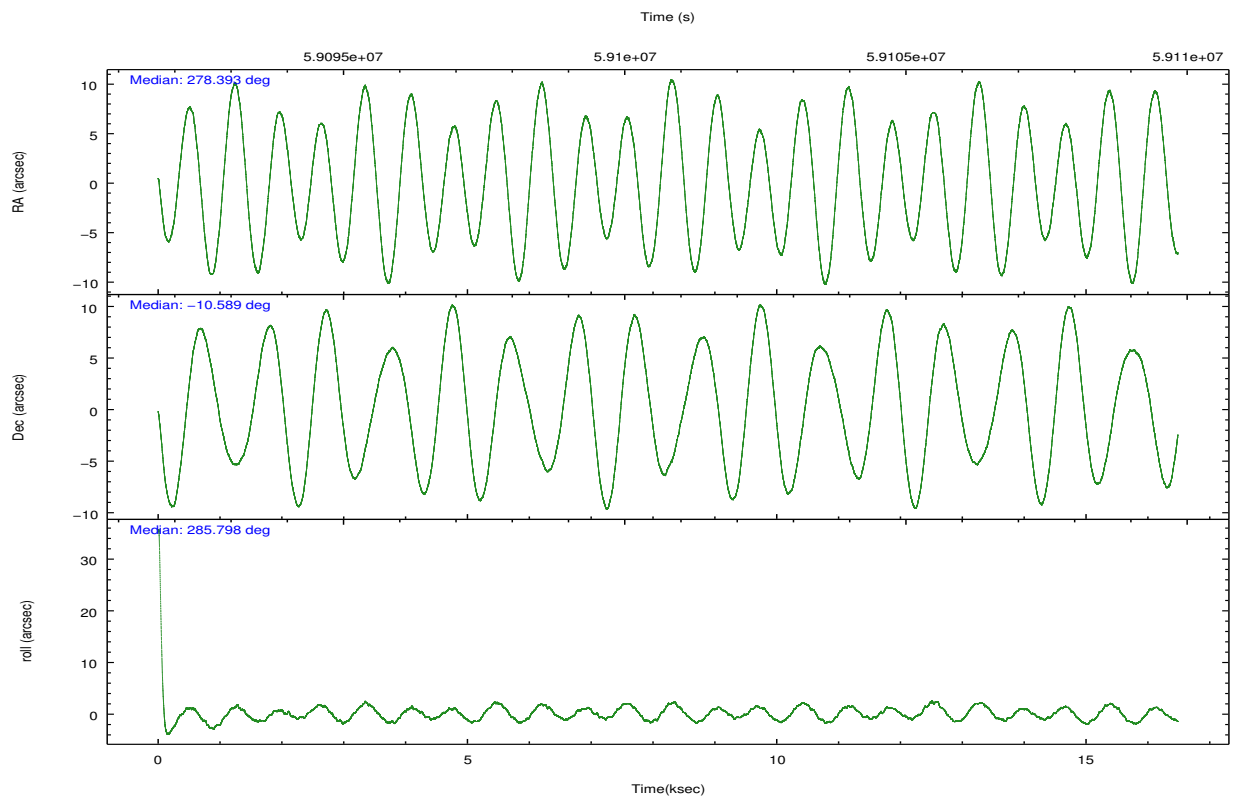
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3195	3083	3177	14793	7410
	2%	2%	2%	7%	4%
grade 1 events	23	17	29	145	49
	0%	0%	0%	0%	0%
grade 2 events	4790	5168	5435	26356	8878
	3%	3%	4%	13%	5%
grade 3 events	828	870	868	9689	2159
	0%	0%	0%	4%	1%
grade 4 events	797	776	811	8533	2095
	0%	0%	0%	4%	1%
grade 5 events	2267	2479	2651	8908	3546
	1%	1%	1%	4%	2%
grade 6 events	3056	3248	3632	51322	7952
	2%	2%	2%	26%	5%
grade 7 events	119499	115037	118694	77552	124682
	88%	88%	87%	39%	79%

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	278.373505	278.3935307935284	Subarray requested	NONE	NONE
Pointing Dec	-10.570192	-10.58952895351947	Alternating exposures requested	N	N
Pointing Roll	285.642542	285.8028379148524	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	-190.145094680475			
SIM translation stage offset (mm)	0	0.01257209746719923			
Observation start time	59093014.184000	59092341.991383			
Observation start date	1999-11-15T22:42:30	1999-11-15T22:32:21			
Observation end time	59109014.184000	59109147.891991			
Observation end date	1999-11-16T03:09:10	1999-11-16T03:12:27			
Read mode	TIMED	TIMED			

2.3 Aspect



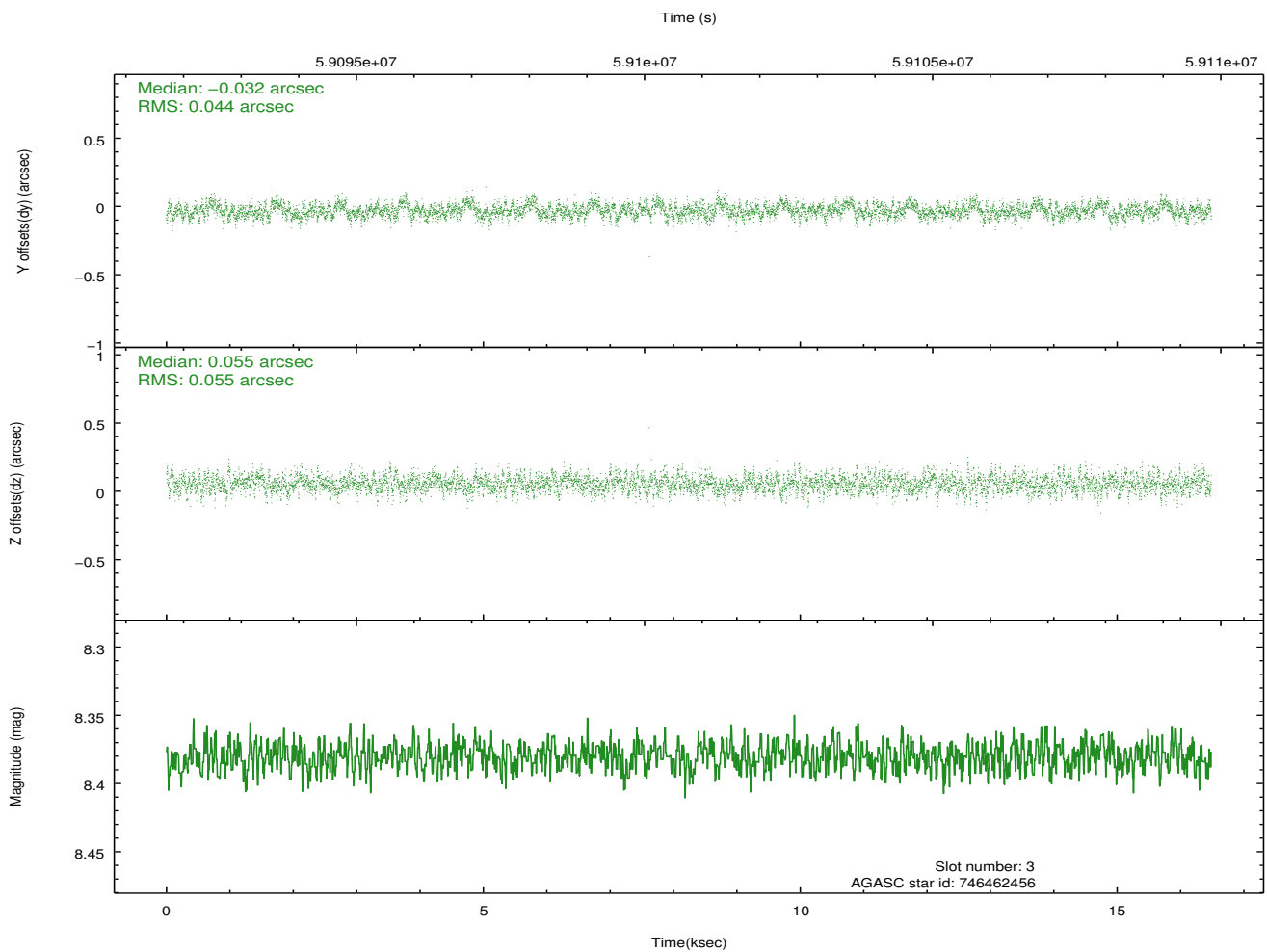
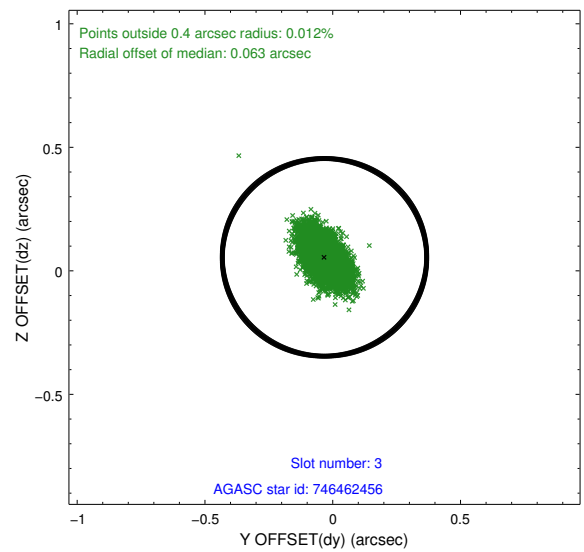
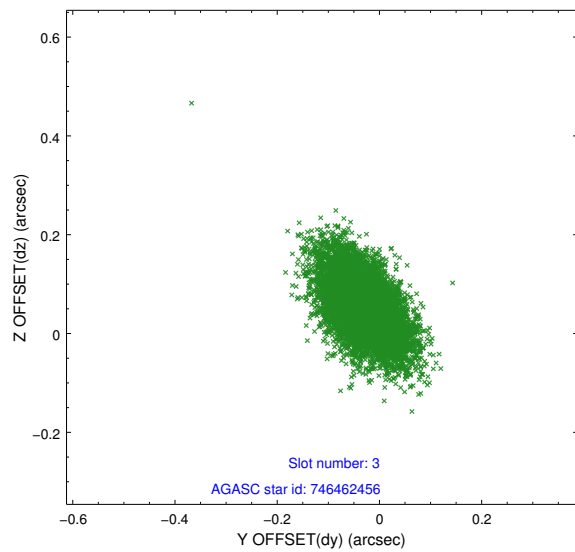


Slot Statistics

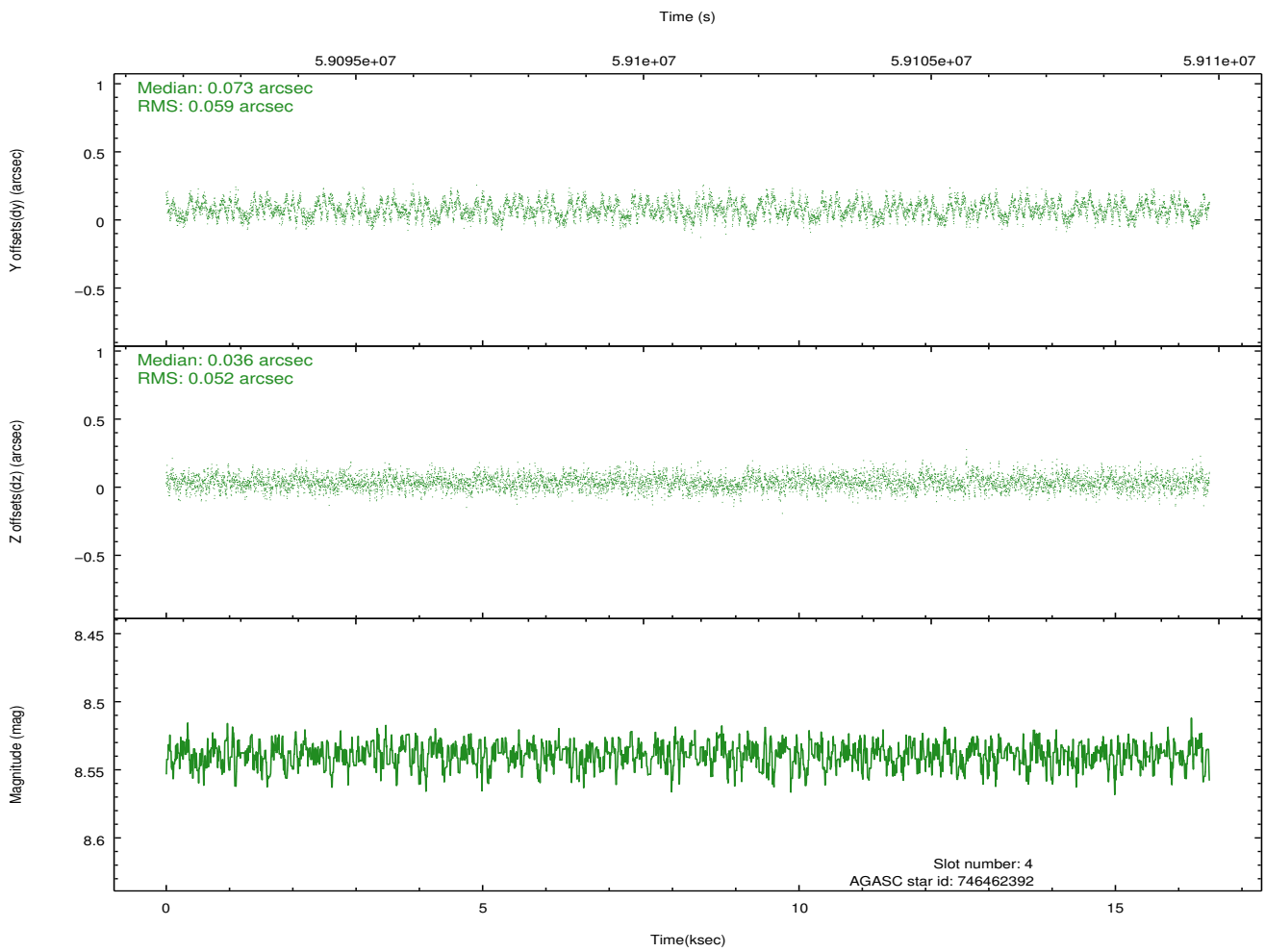
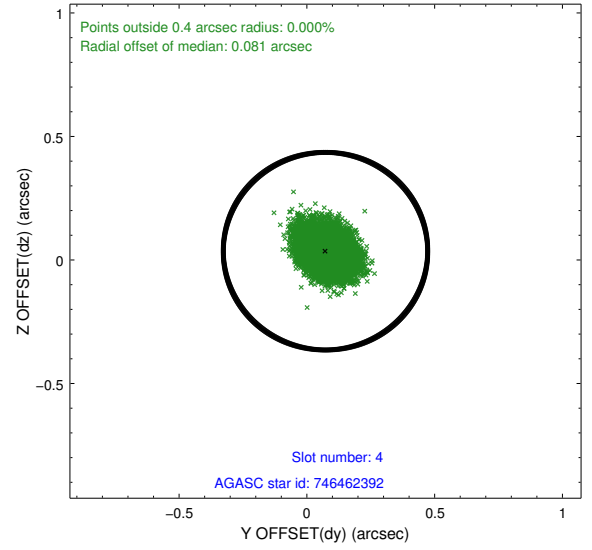
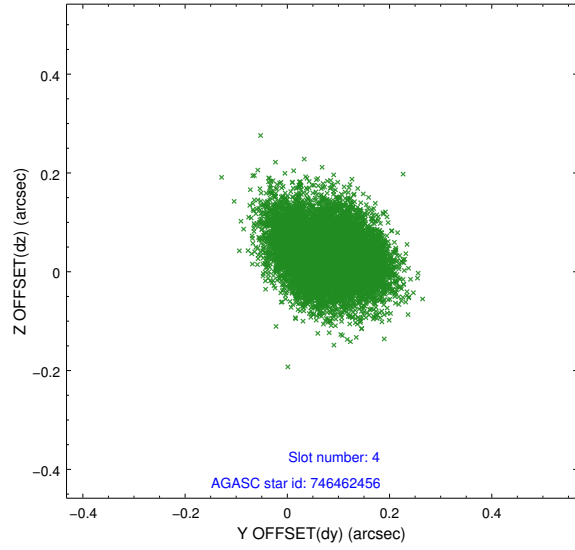
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	8042	-0.002	-0.016	0.006	0.011	0.000000	0.000000	-752.68	-1725.16
1	FID	ACIS-S-4	7.21	8042	0.039	0.005	0.005	0.010	0.000000	0.000000	2160.66	183.22
2	FID	ACIS-S-5	7.24	8042	-0.069	0.019	0.006	0.011	0.000000	0.000000	-1805.47	177.07
3	GUIDE	746462456	8.38	8041	-0.032	0.055	0.073	0.127	278.652171	-10.530173	127.92	989.12
4	GUIDE	746462392	8.54	8040	0.073	0.036	0.085	0.133	279.038421	-10.890715	1747.75	1952.62
5	GUIDE	746460272	8.92	8038	-0.102	-0.029	0.096	0.153	278.847488	-10.152127	-994.85	2023.60
6	GUIDE	746460328	9.82	8032	-0.079	0.091	0.137	0.216	278.603974	-9.898096	-2109.21	1440.17
7	GUIDE	746995400	9.51	8035	0.130	-0.150	0.118	0.191	278.078957	-11.289885	2215.51	-1699.39

2.4 Star Slots

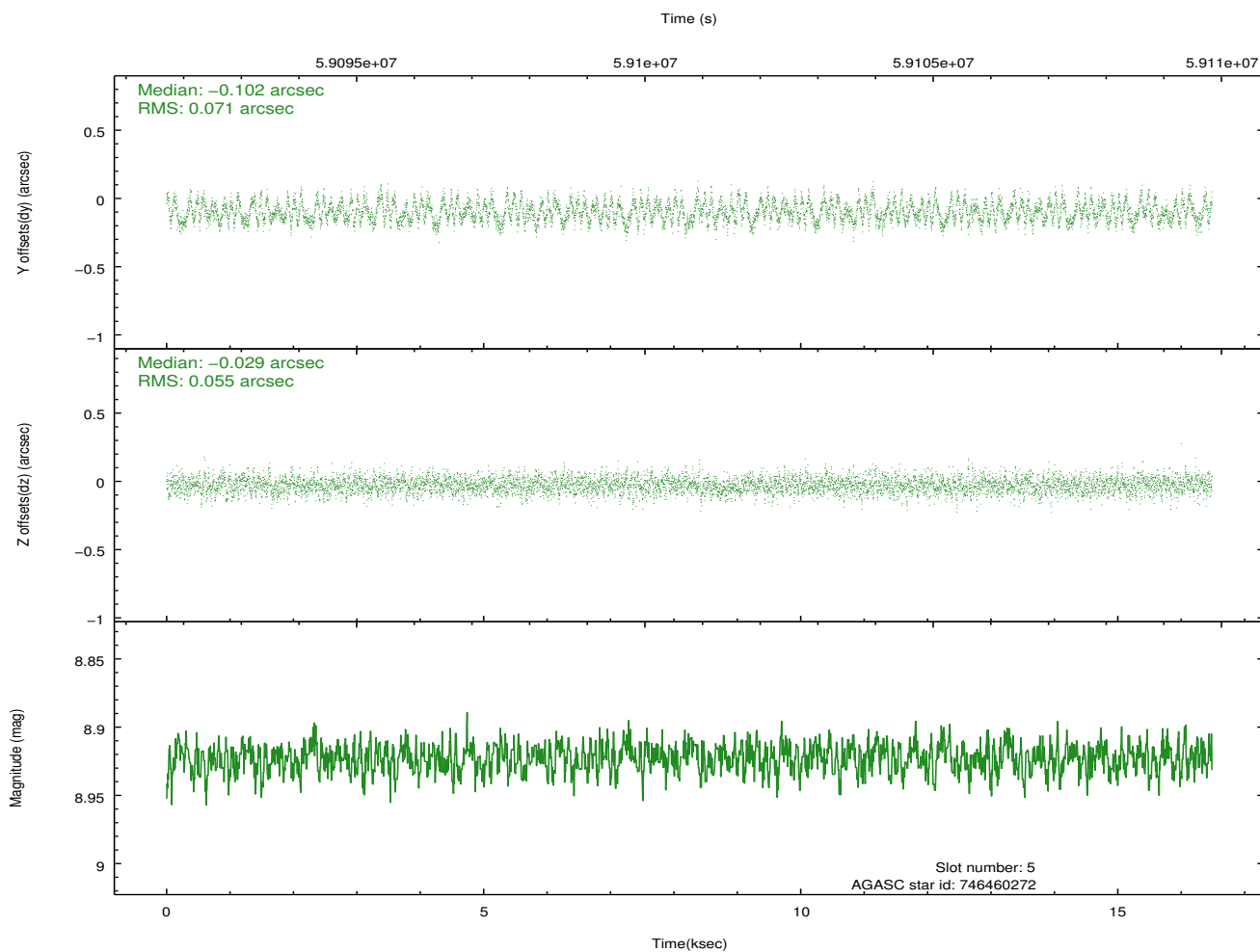
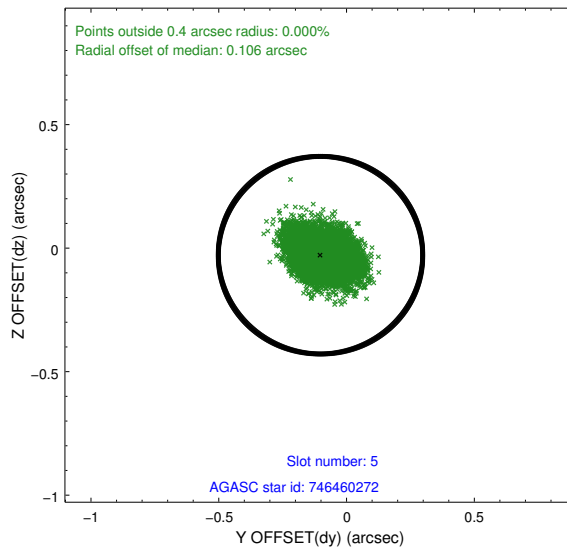
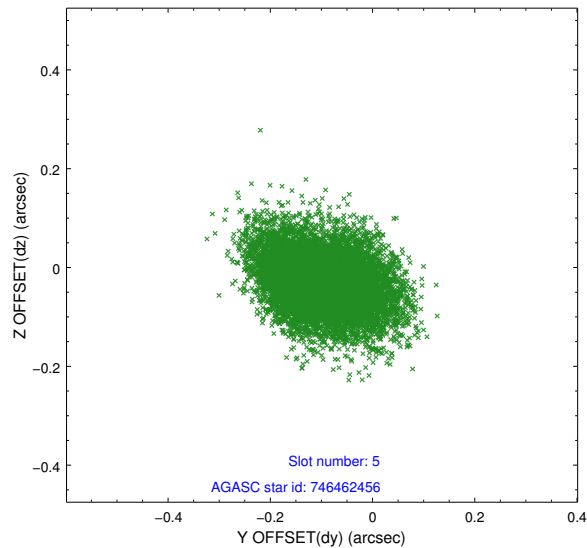
2.4.1 Slot 3



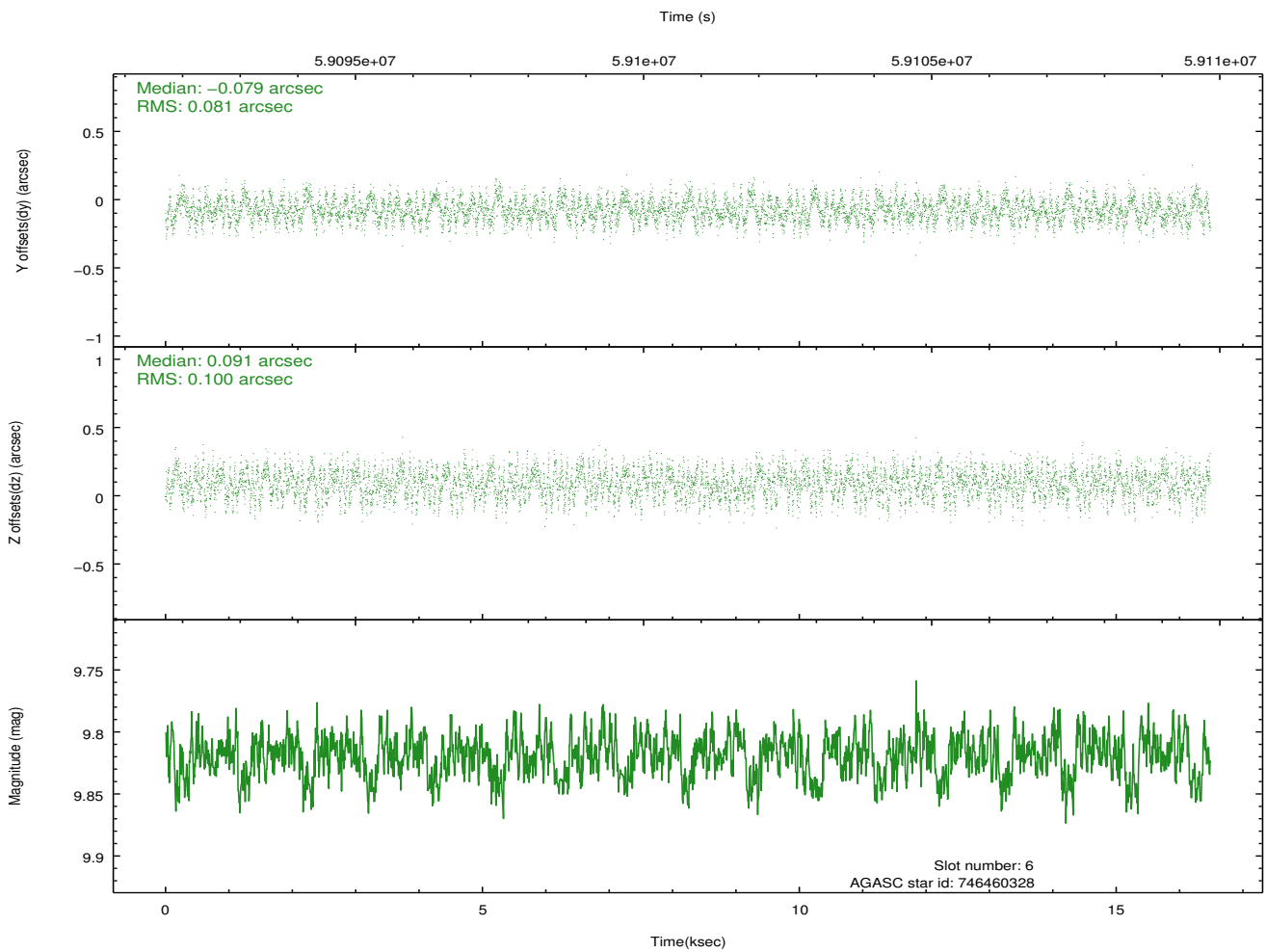
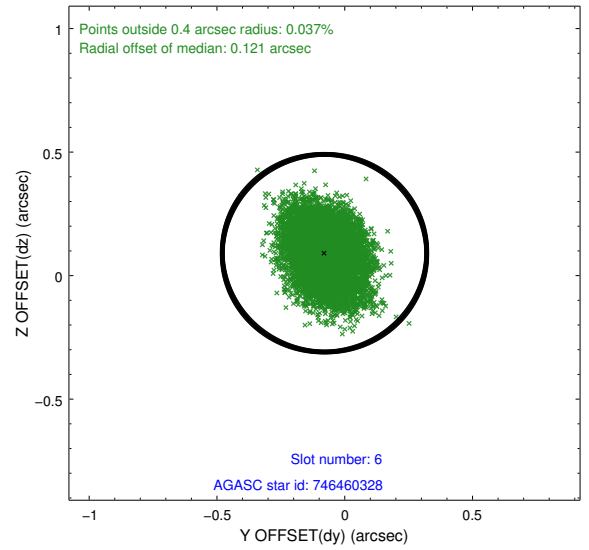
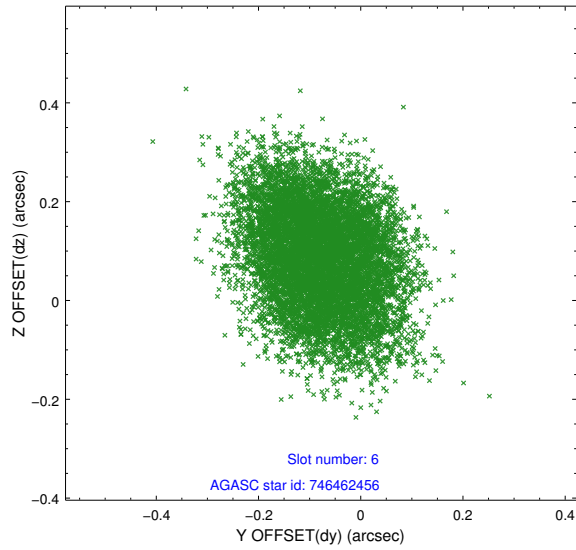
2.4.2 Slot 4



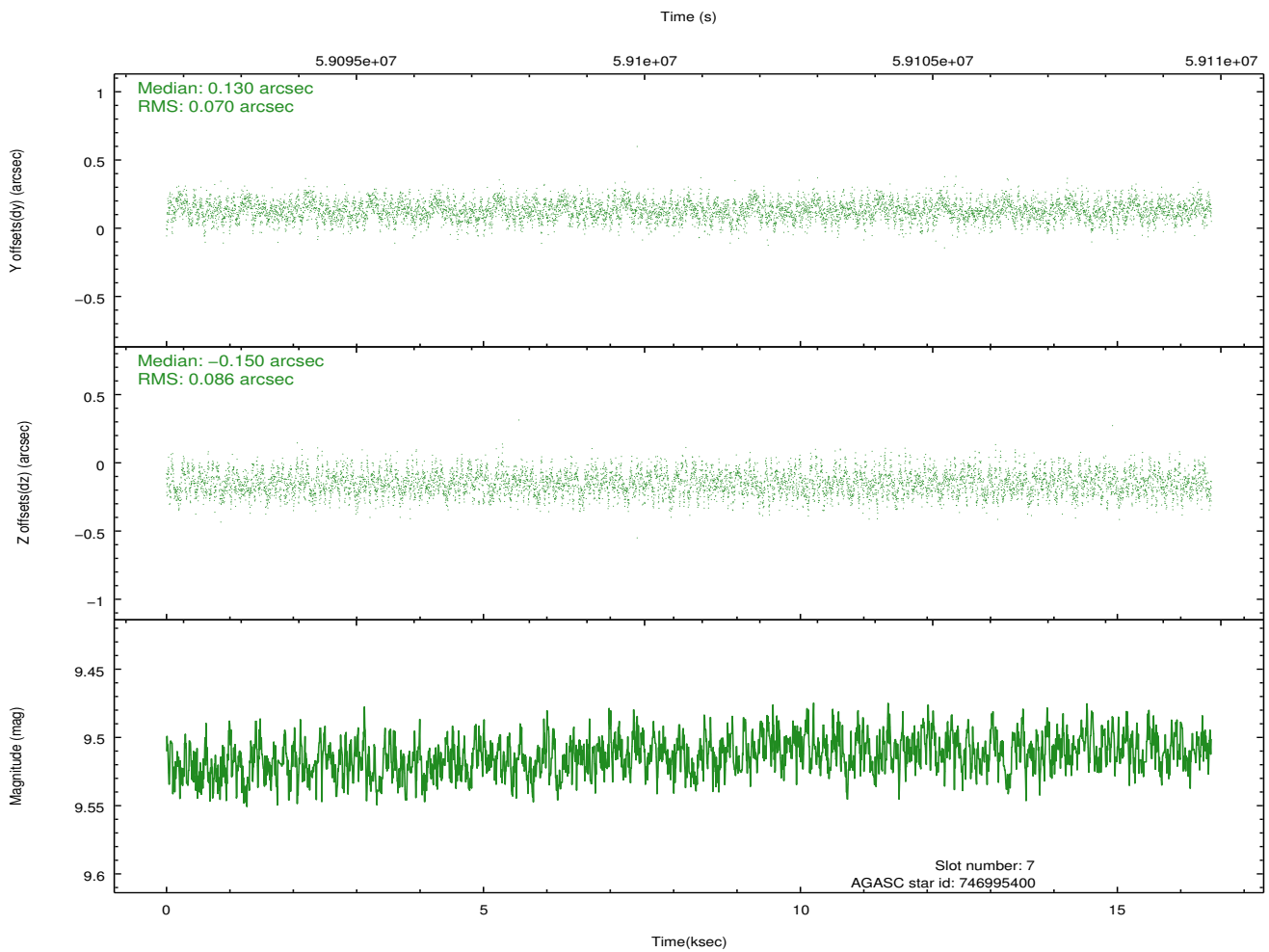
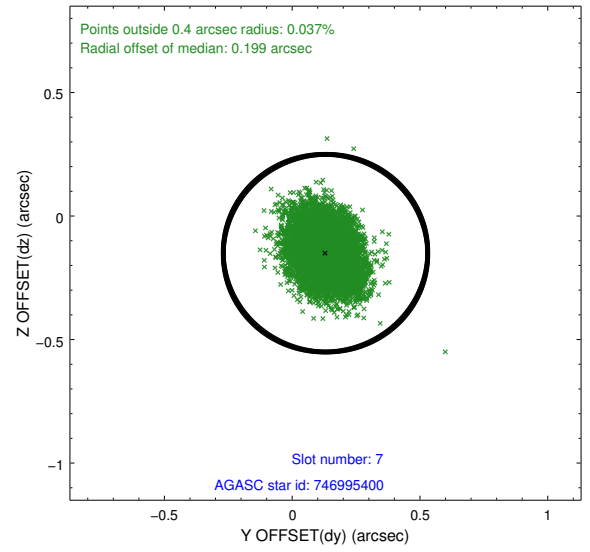
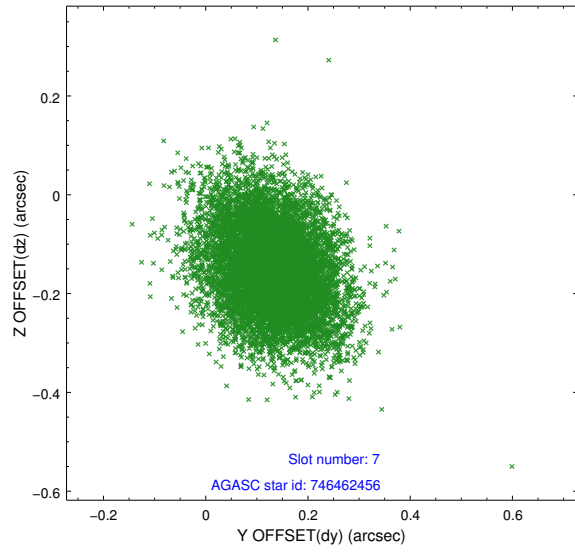
2.4.3 Slot 5



2.4.4 Slot 6

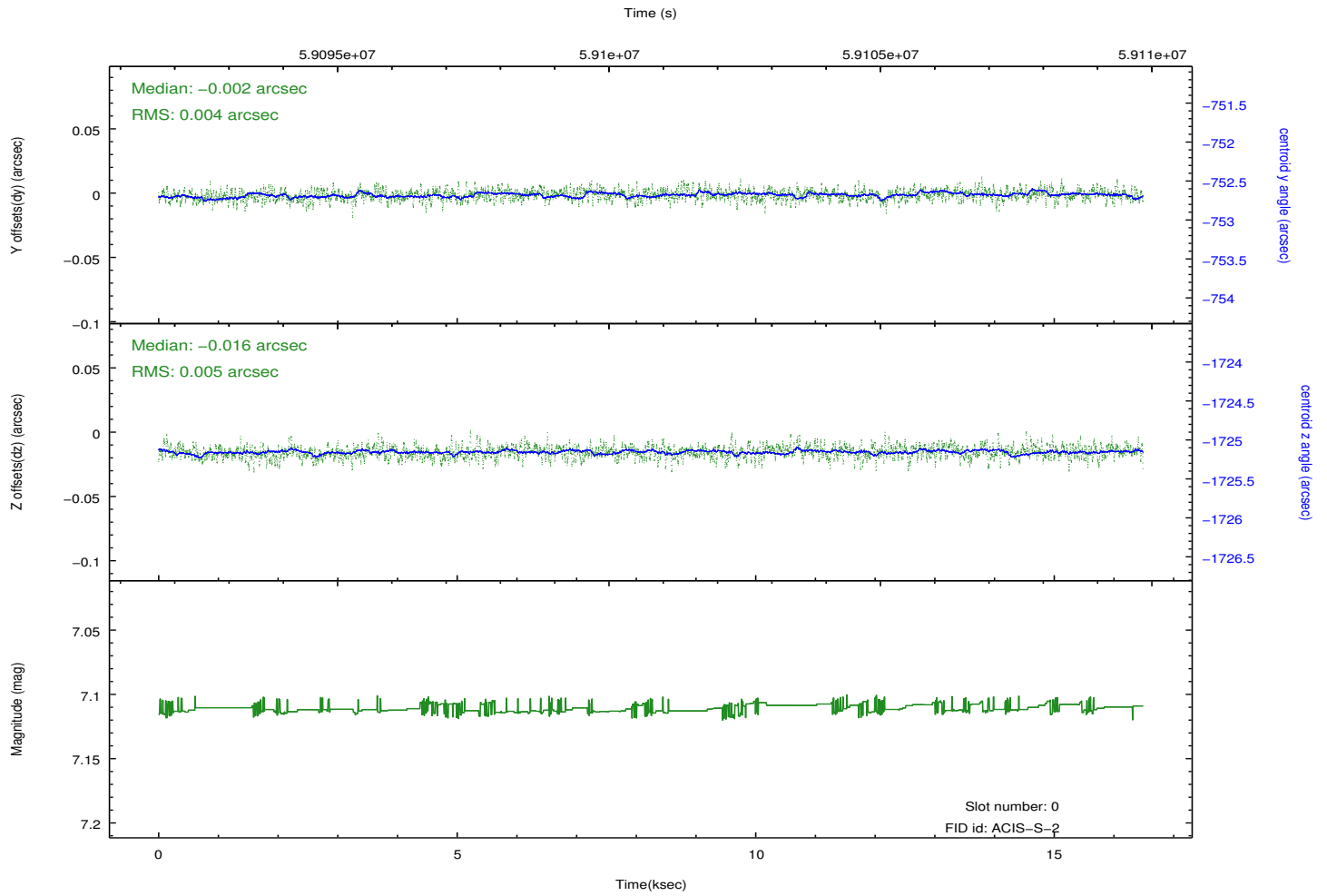
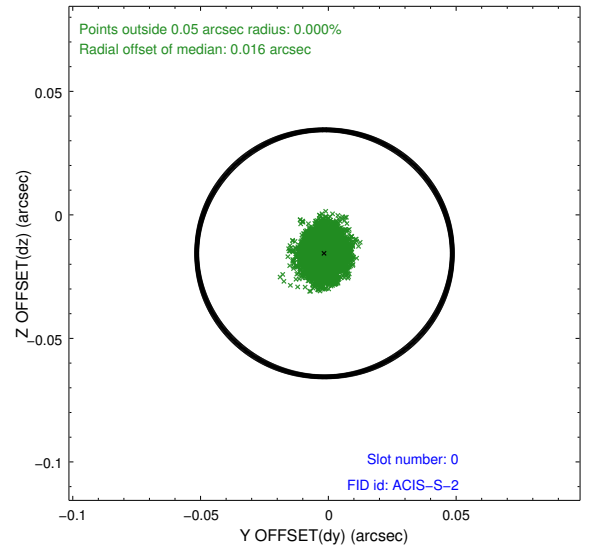
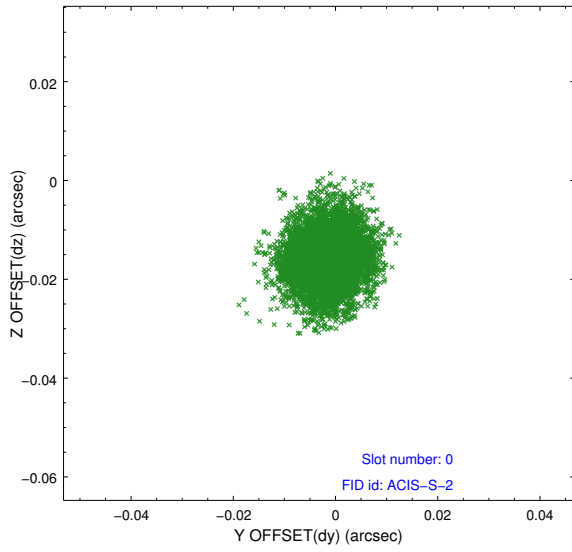


2.4.5 Slot 7

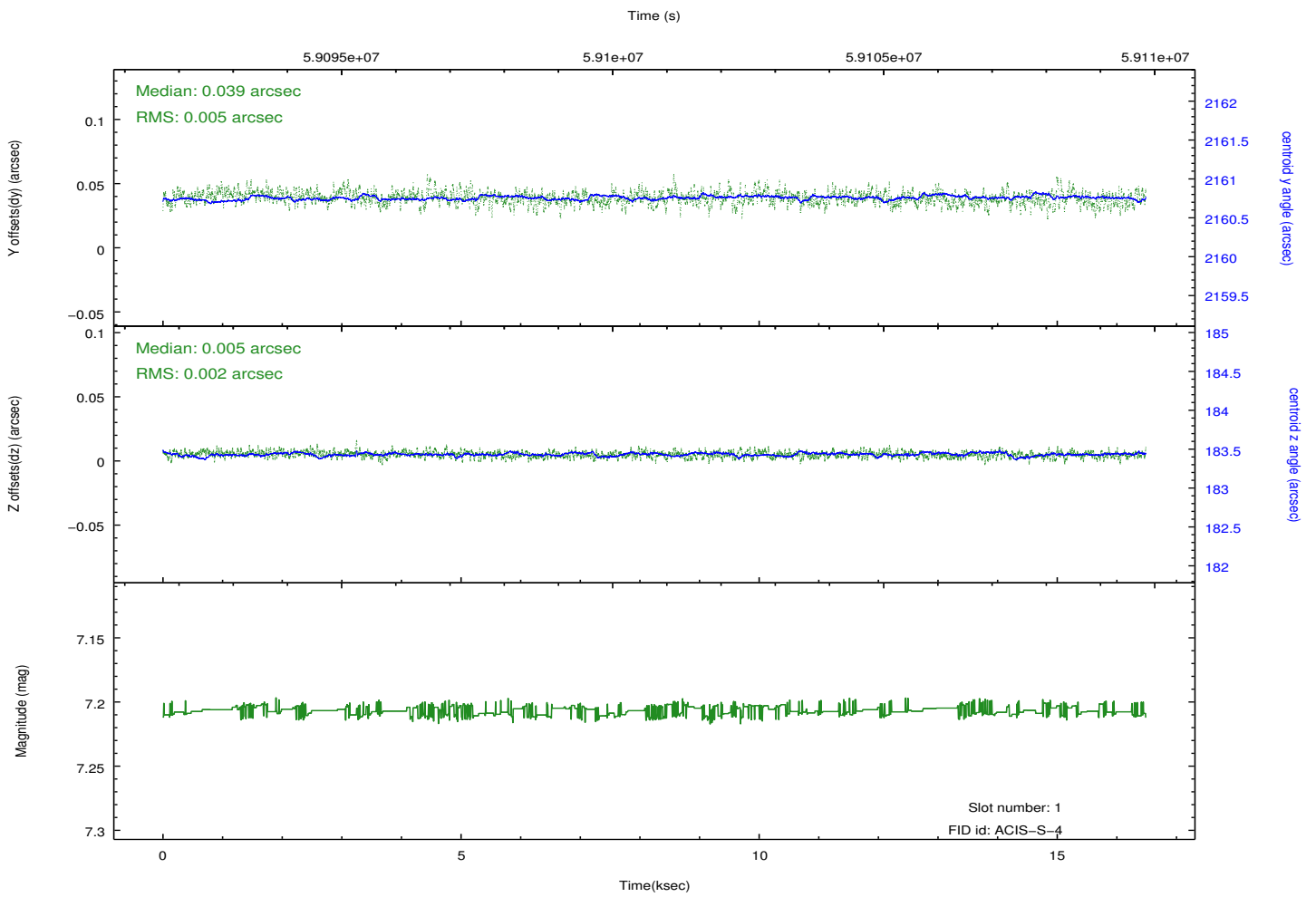
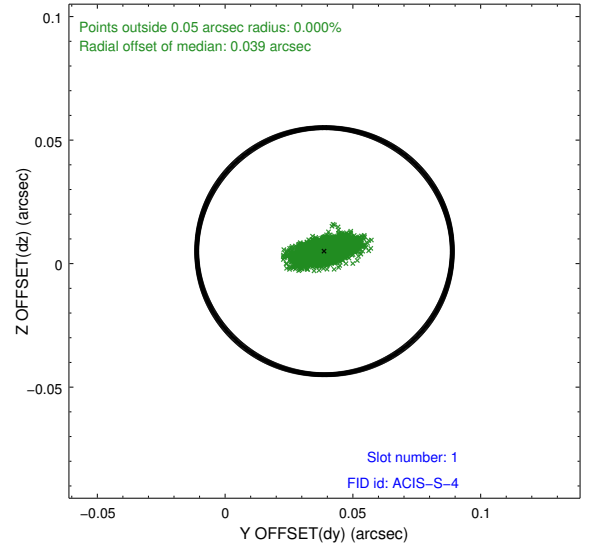
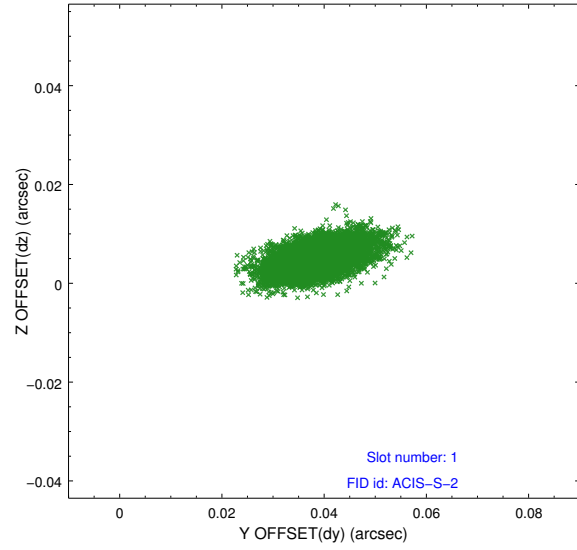


2.5 FID Slots

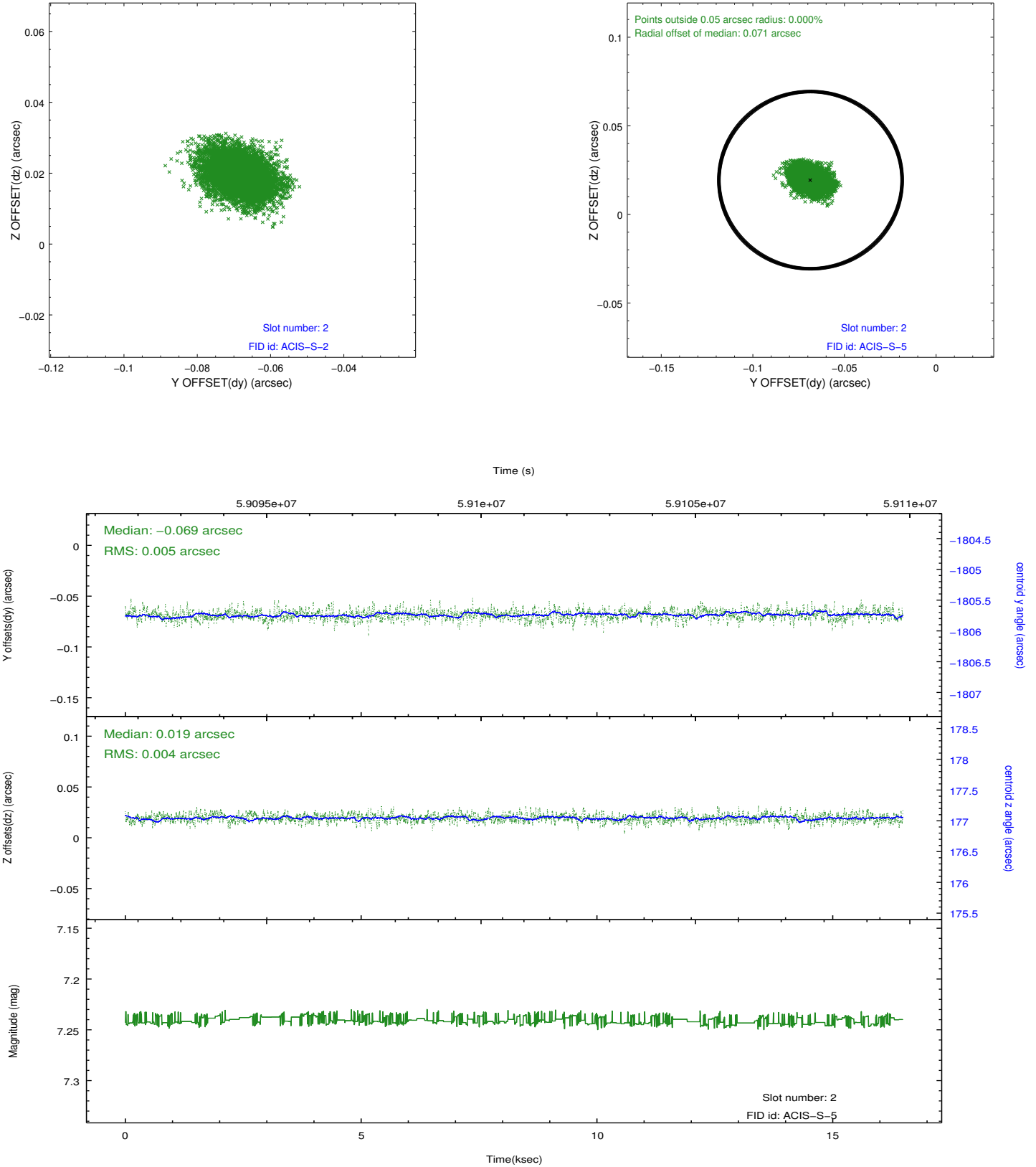
2.5.1 Slot 0



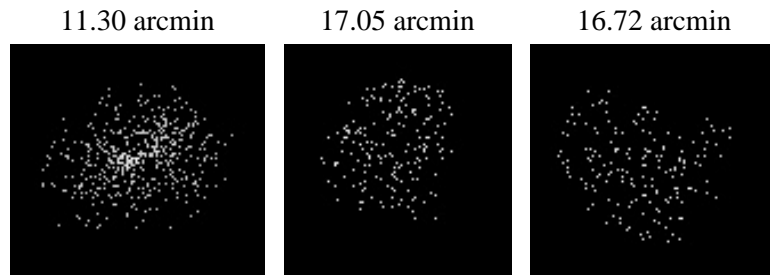
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.164

A.2 Comments

Off-axis effective area measurement on chip S3.

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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.