

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1437 - L2 Version 4

Chandra X-Ray Center

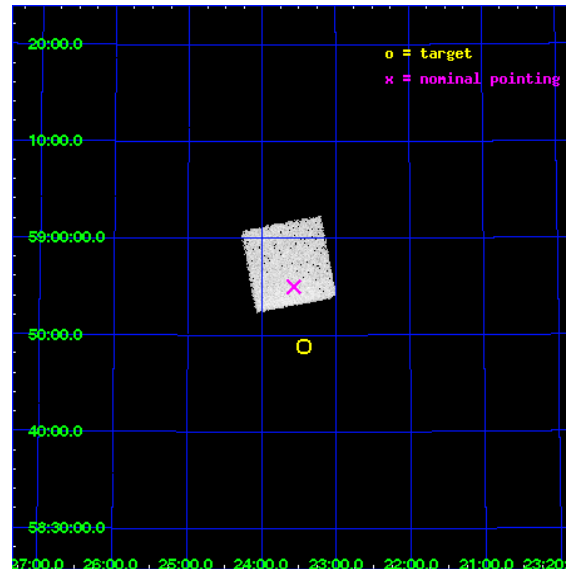
L2 Processing Date : Feb 22 2010

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1 Front

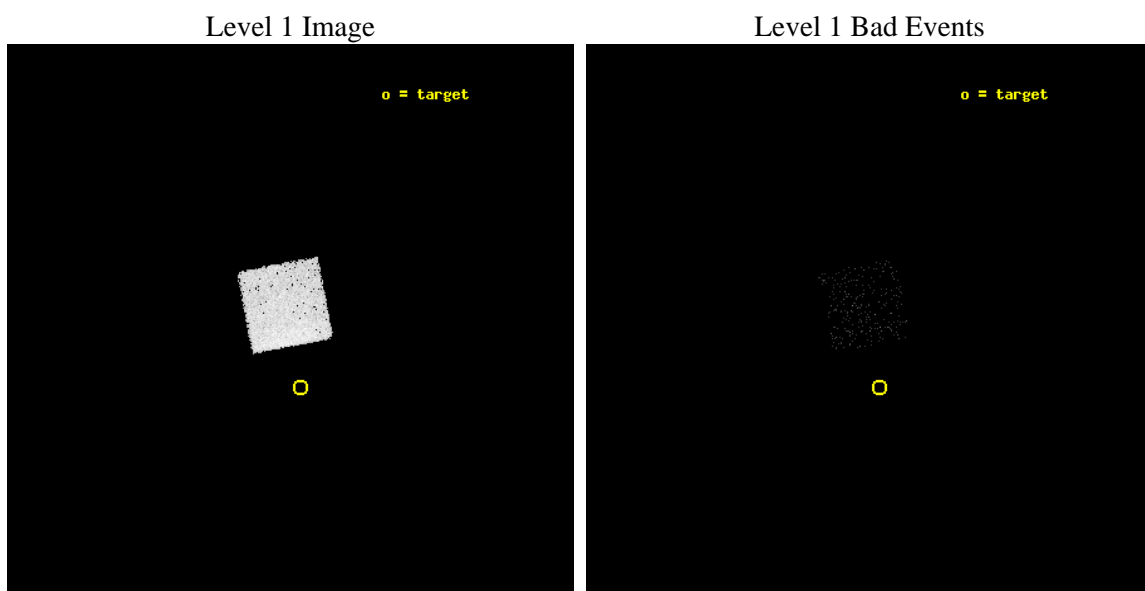
seq_num	580387	Sequence number
obs_id	1437	Observation id
title	ACIS CHIP RESPONSE TO CAS A, JAN. 99	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAS A [Chip S2, T=110, Offsets=6,0,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA
dec_targ	58.814833	Observer's specified target Dec
ra_nom	350.89178515716	Nominal RA
dec_nom	58.916814260596	Nominal Dec
roll_nom	259.14134771856	Nominal Roll
revision	4	Processing version of data
ontime	1755.269929111	Sum of GTIs [s]
livetime	1733.0436443719	Livetime [s]
ontime4	1755.3930491135	Sum of GTIs [s]
ontime5	1755.4340891093	Sum of GTIs [s]
ontime6	1755.269929111	Sum of GTIs [s]
ontime7	1755.4751291126	Sum of GTIs [s]
ontime8	1755.3520091102	Sum of GTIs [s]
ontime9	1755.3109691143	Sum of GTIs [s]
l2events	17793	Number of level 2 events



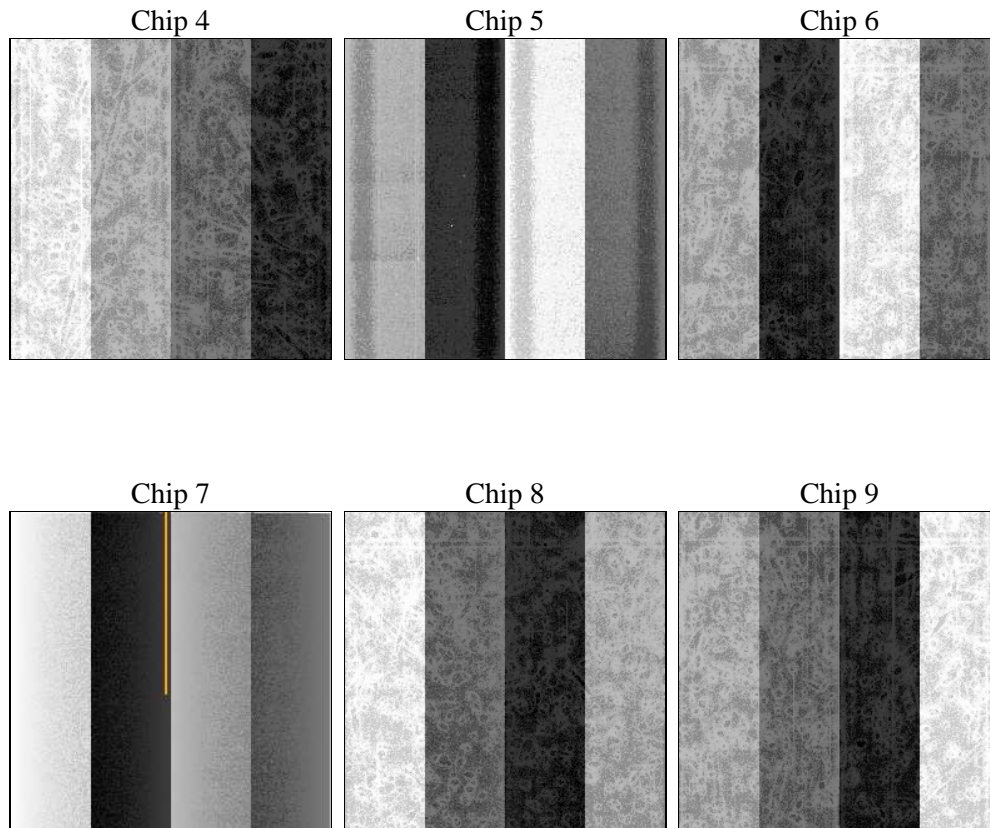
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	Scheduled observation exposure time
ascdsver	8.2.1	ASCDS version number	ontime	1755.4751291126	Sum of GTIs [s]
caldbver	4.1.5	 	ontime4	1755.3930491135	Sum of GTIs [s]
date	2010-02-23T01:18:12	Date and time of file creation	ontime5	1755.4340891093	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	1755.269929111	Sum of GTIs [s]
			ontime7	1755.4751291126	Sum of GTIs [s]
			ontime8	1755.3520091102	Sum of GTIs [s]
			ontime9	1755.3109691143	Sum of GTIs [s]
			l1events	19688	Number of level 1 events

2.1.4 Events

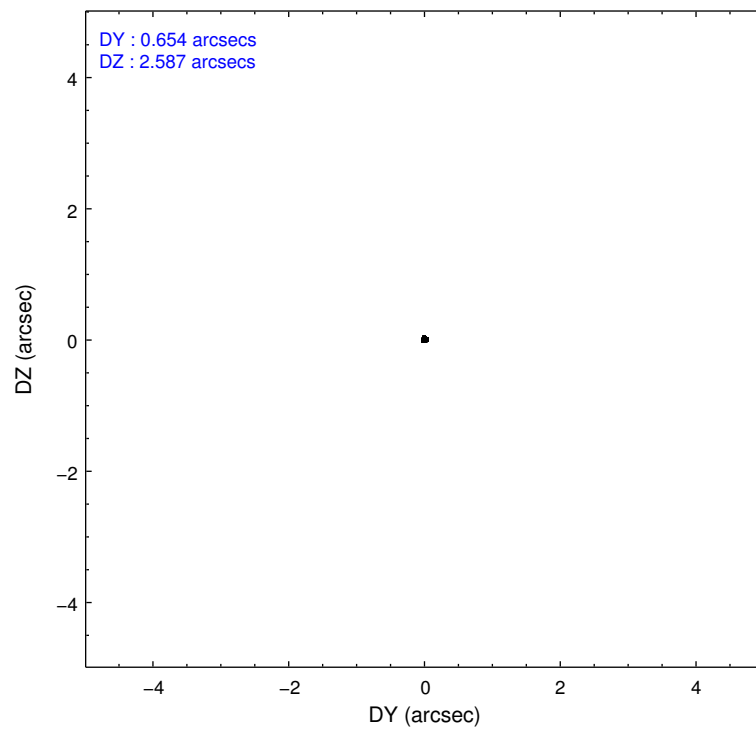
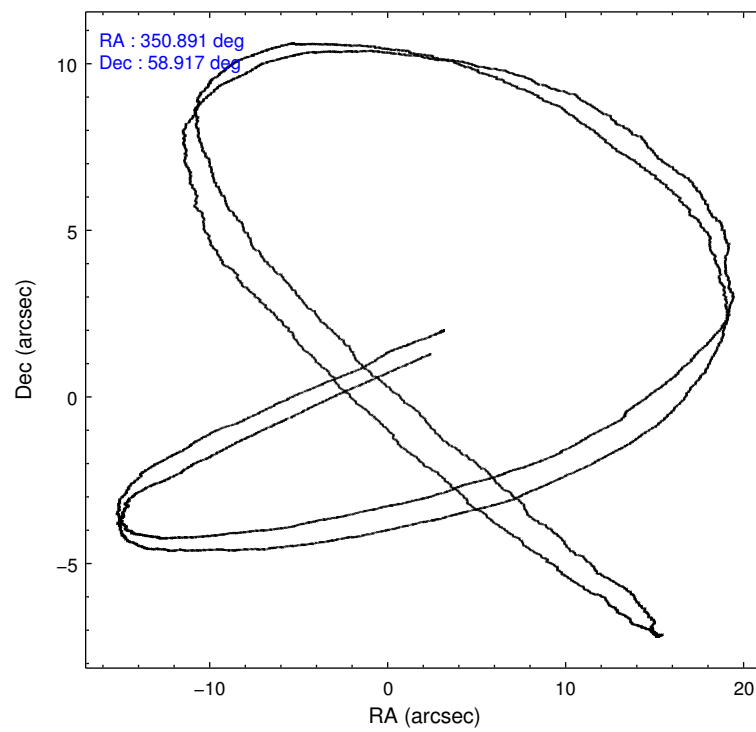
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	0	0	0	19688	0	0
rejected events	0	0	0	1607	0	0
rejected %	0%	0%	0%	8%	0%	0%

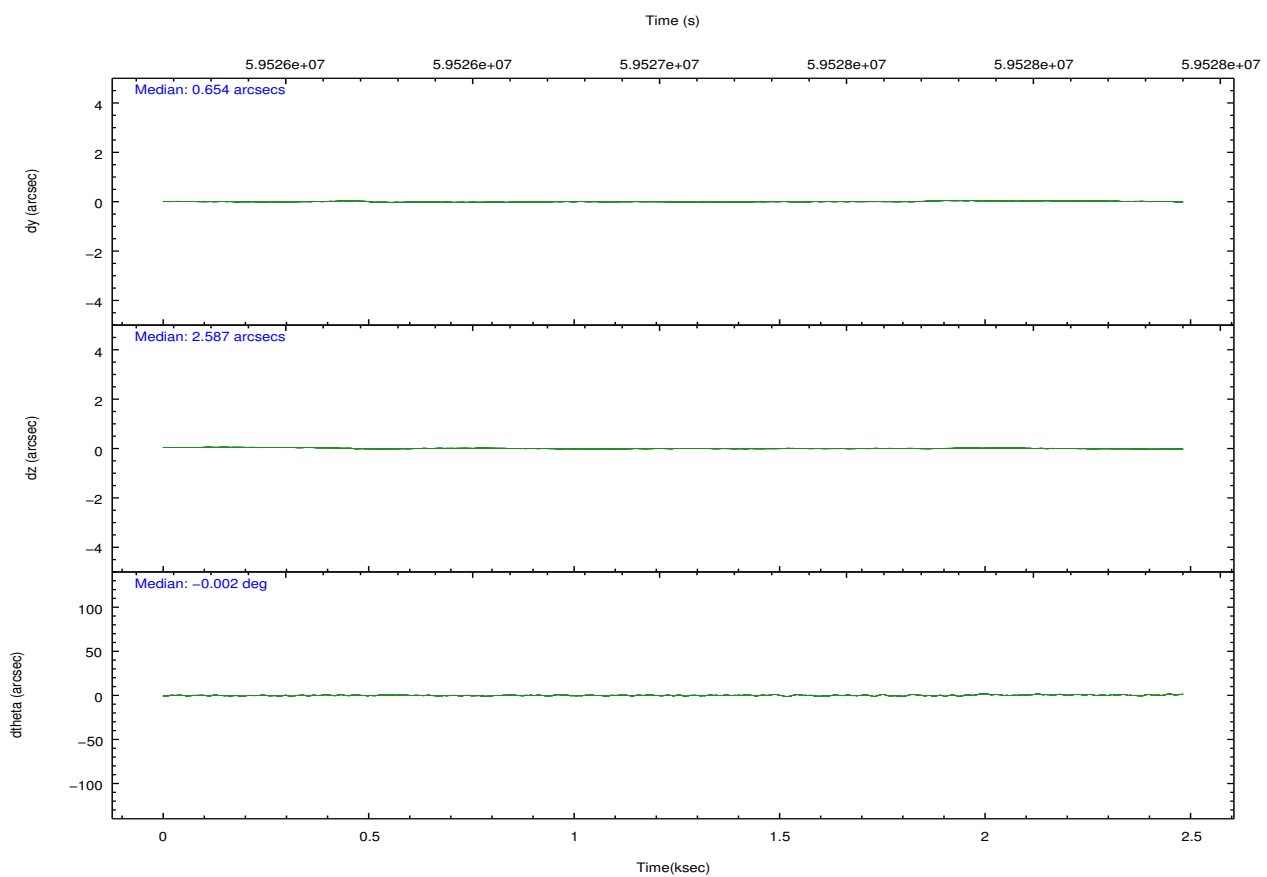
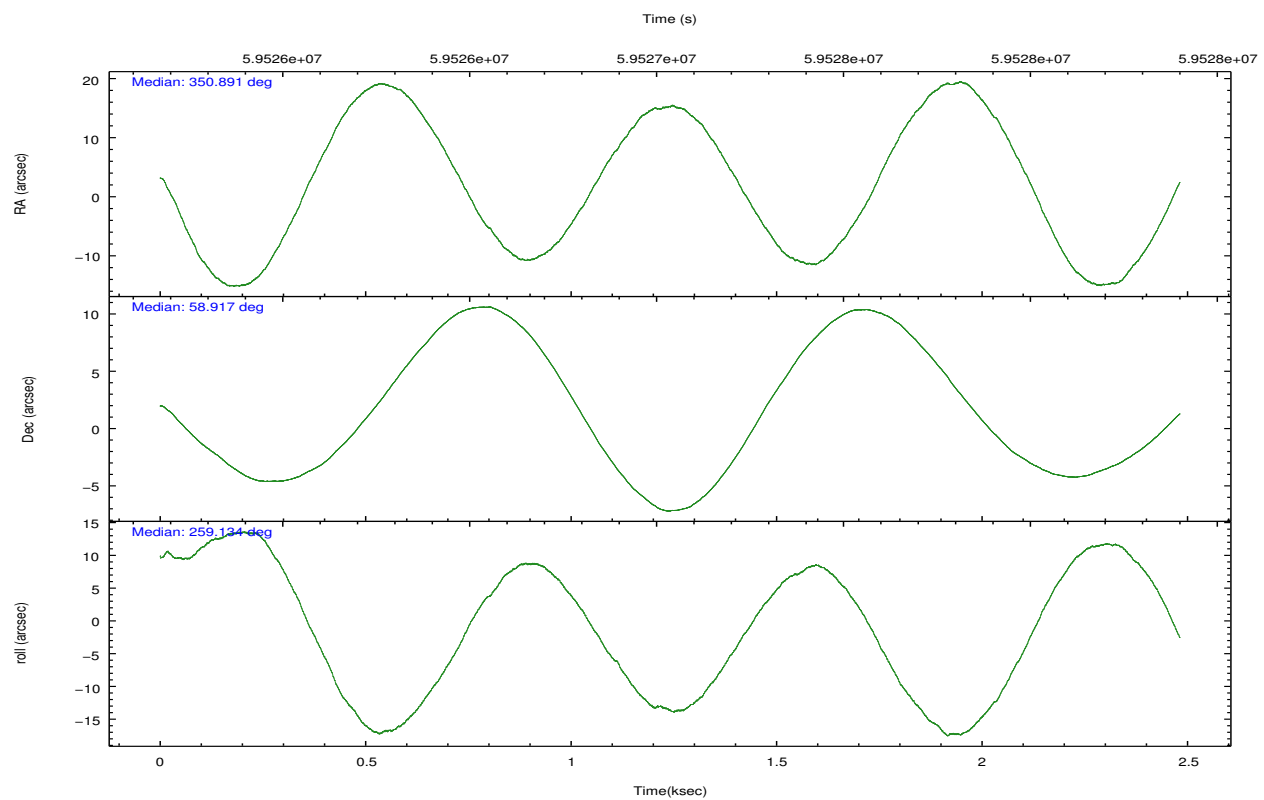
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	0	0	0	1871	0	0
	0%	0%	0%	9%	0%	0%
grade 1 events	0	0	0	13	0	0
	0%	0%	0%	0%	0%	0%
grade 2 events	0	0	0	3460	0	0
	0%	0%	0%	17%	0%	0%
grade 3 events	0	0	0	1213	0	0
	0%	0%	0%	6%	0%	0%
grade 4 events	0	0	0	1109	0	0
	0%	0%	0%	5%	0%	0%
grade 5 events	0	0	0	1561	0	0
	0%	0%	0%	7%	0%	0%
grade 6 events	0	0	0	10461	0	0
	0%	0%	0%	53%	0%	0%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	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	350.874847	350.8917851571628	Subarray requested	NONE	NONE
Pointing Dec	58.943147	58.91681426059594	Alternating exposures requested	N	N
Pointing Roll	258.999207	259.1413477185588	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	59526277.184000	59525612.069539			
Observation start date	1999-11-20T23:03:33	1999-11-20T22:53:32			
Observation end time	59528277.184000	59528411.344641			
Observation end date	1999-11-20T23:36:53	1999-11-20T23:40:11			
Read mode	TIMED	TIMED			

2.3 Aspect



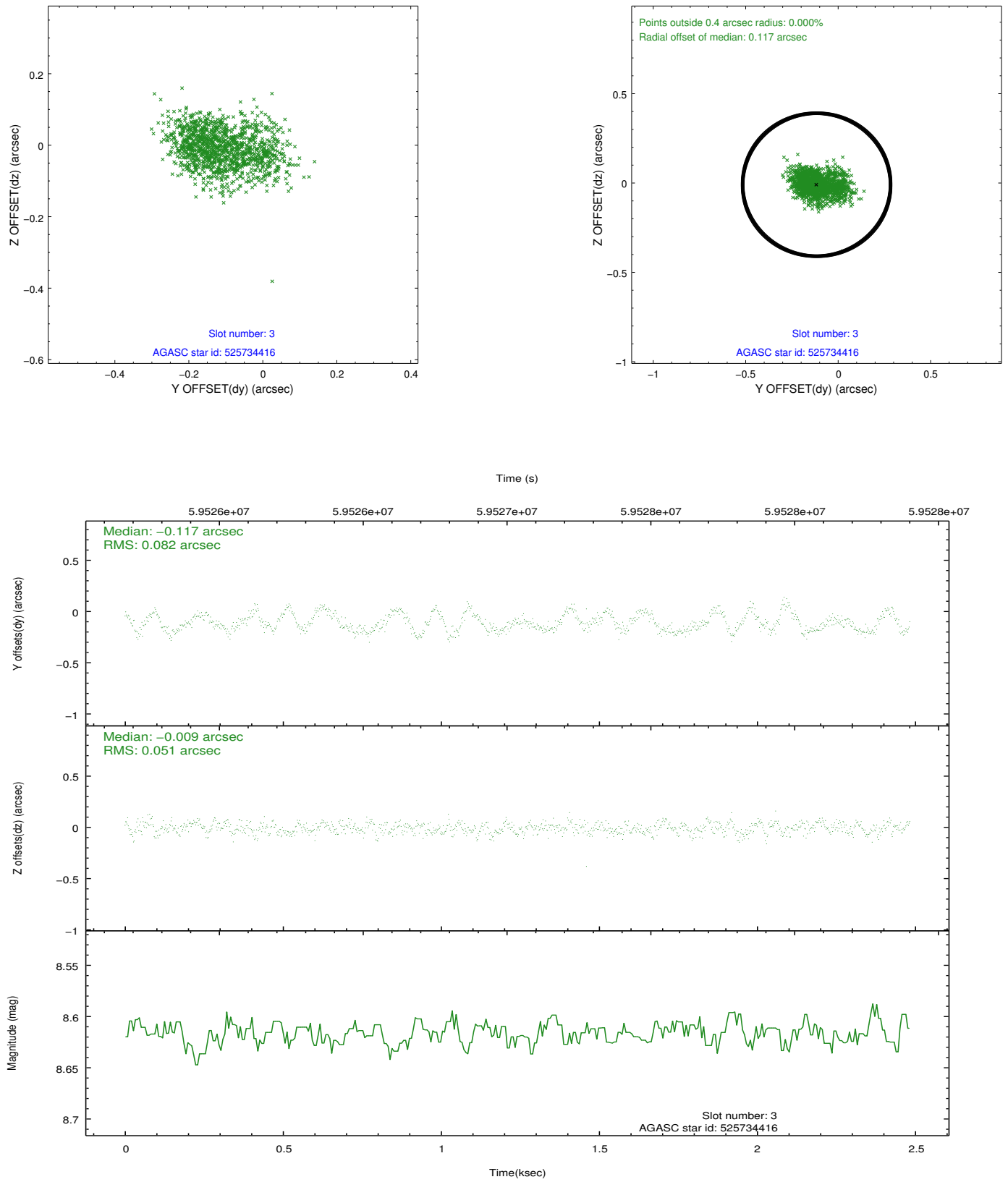


Slot Statistics

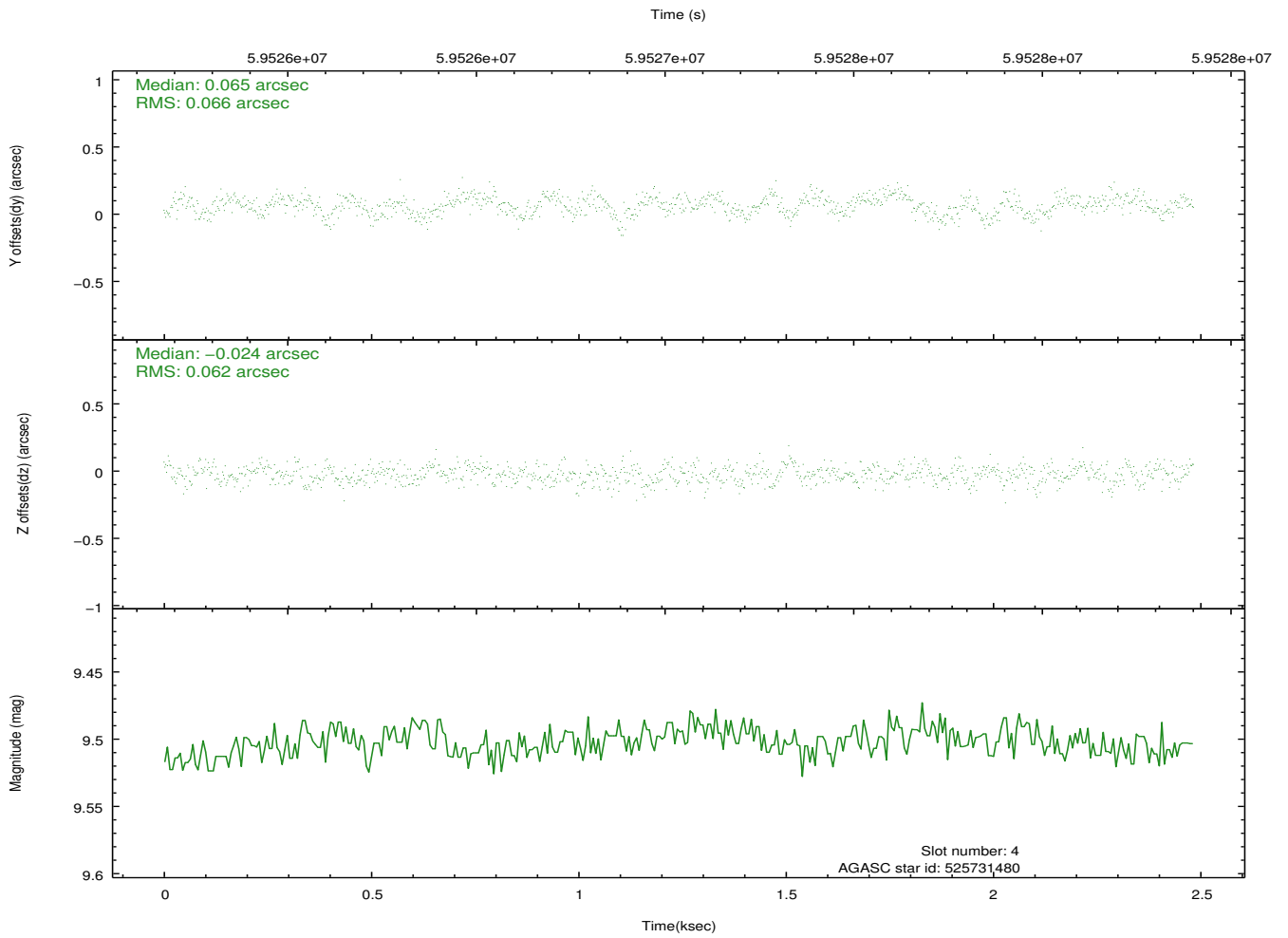
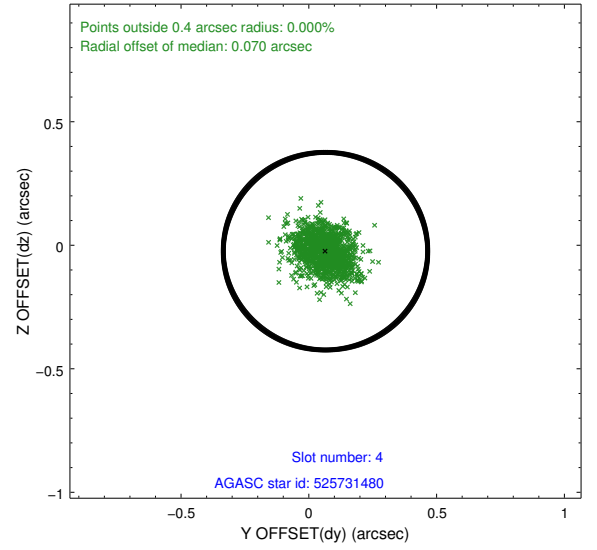
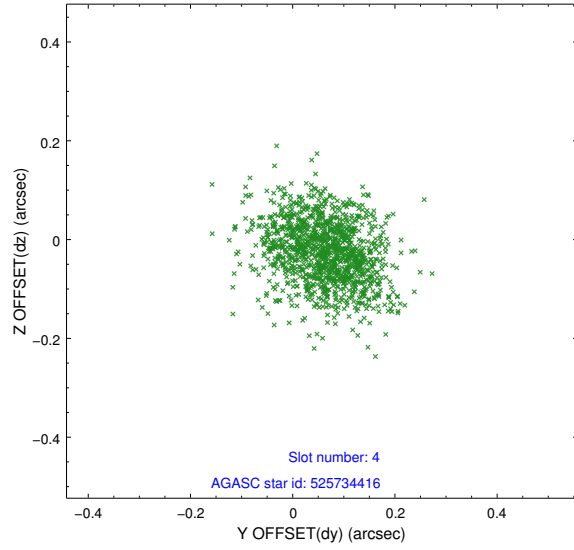
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	1212	-0.005	-0.013	0.006	0.011	0.000000	0.000000	-753.30	-1723.62
1	FID	ACIS-S-4	7.22	1211	0.006	-0.016	0.006	0.011	0.000000	0.000000	2159.50	183.50
2	FID	ACIS-S-6	7.36	1212	-0.029	0.037	0.008	0.013	0.000000	0.000000	410.33	822.40
3	GUIDE	525734416	8.62	1211	-0.117	-0.009	0.102	0.165	352.356007	59.408714	-2193.43	2338.66
4	GUIDE	525731480	9.50	1212	0.065	-0.024	0.096	0.158	351.647209	58.687294	617.91	1595.51
5	GUIDE	525606576	9.44	1211	0.044	0.001	0.109	0.178	349.543555	58.678895	1385.43	-2266.29
6	GUIDE	525734296	9.50	1211	0.110	0.041	0.098	0.163	351.276372	58.418153	1709.32	1102.63
7	GUIDE	525601208	9.21	1210	-0.112	-0.008	0.083	0.136	349.910779	59.483724	-1585.37	-2102.16

2.4 Star Slots

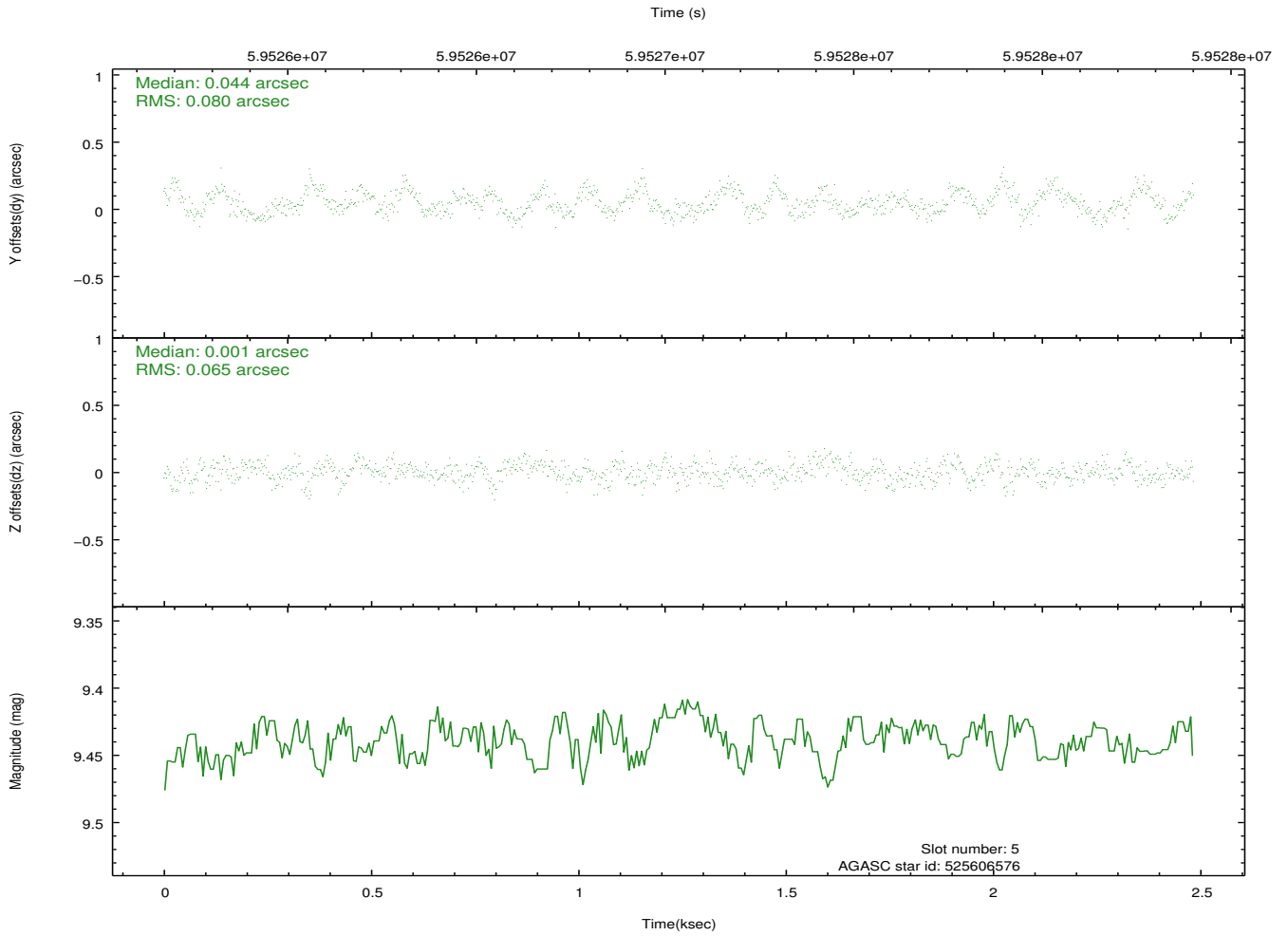
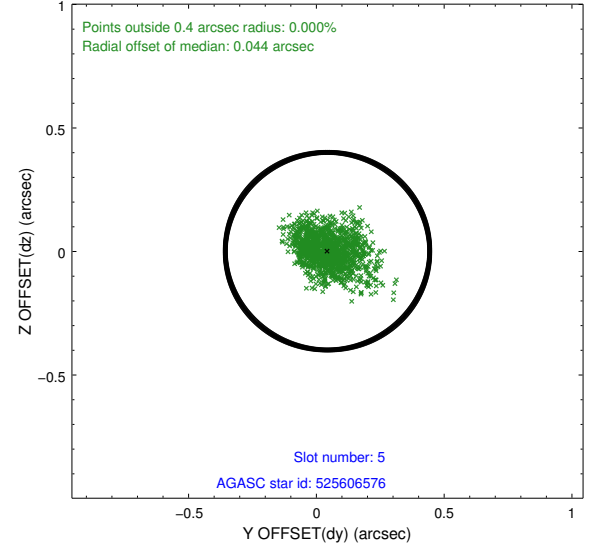
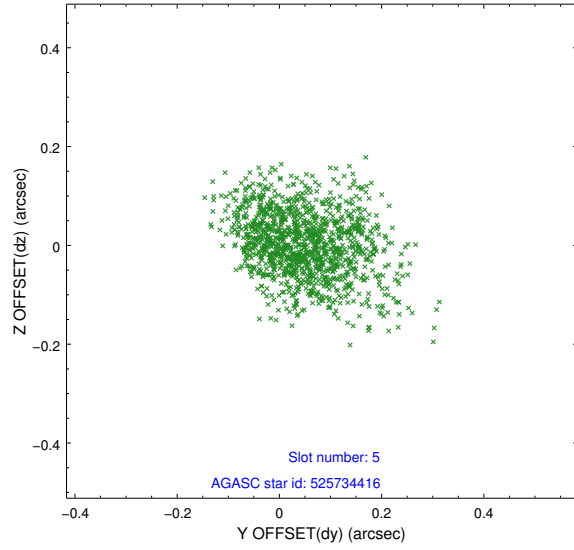
2.4.1 Slot 3



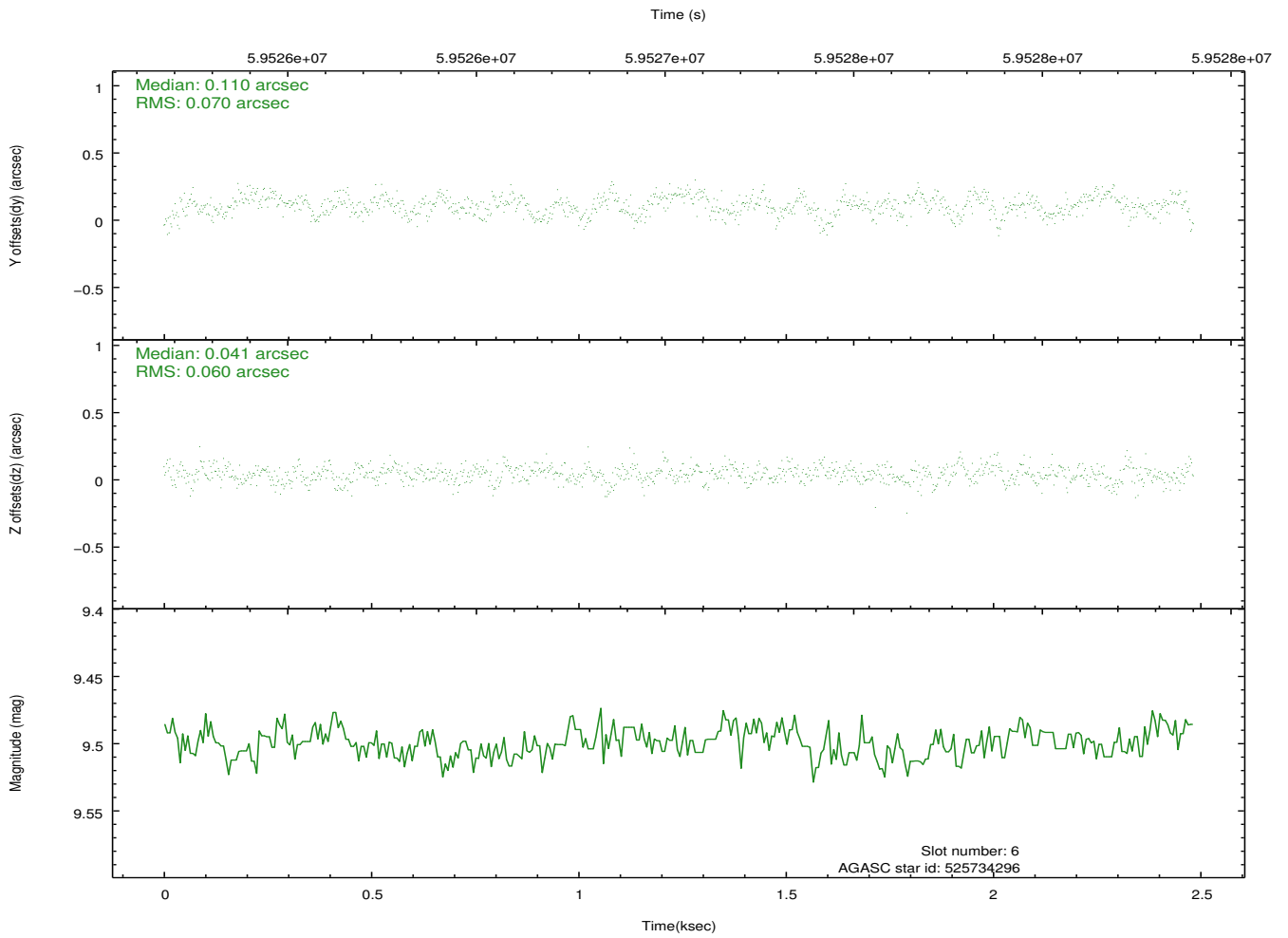
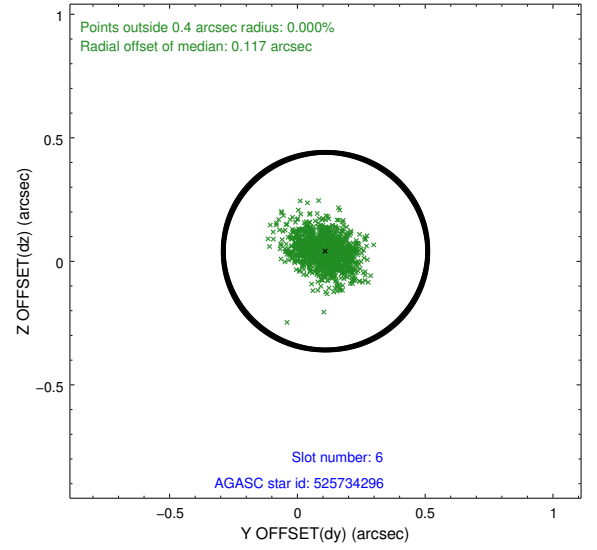
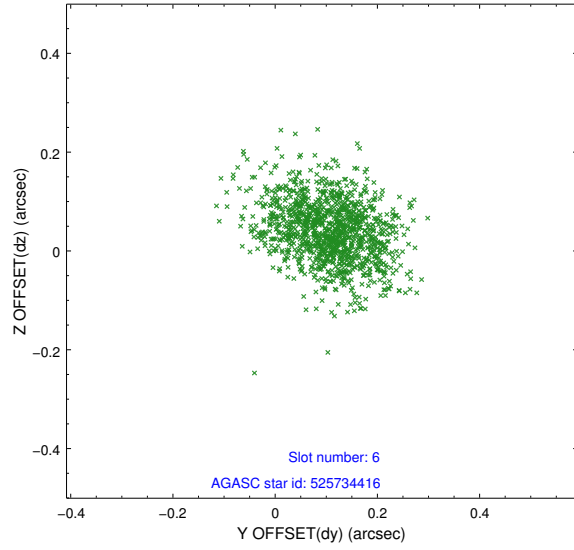
2.4.2 Slot 4



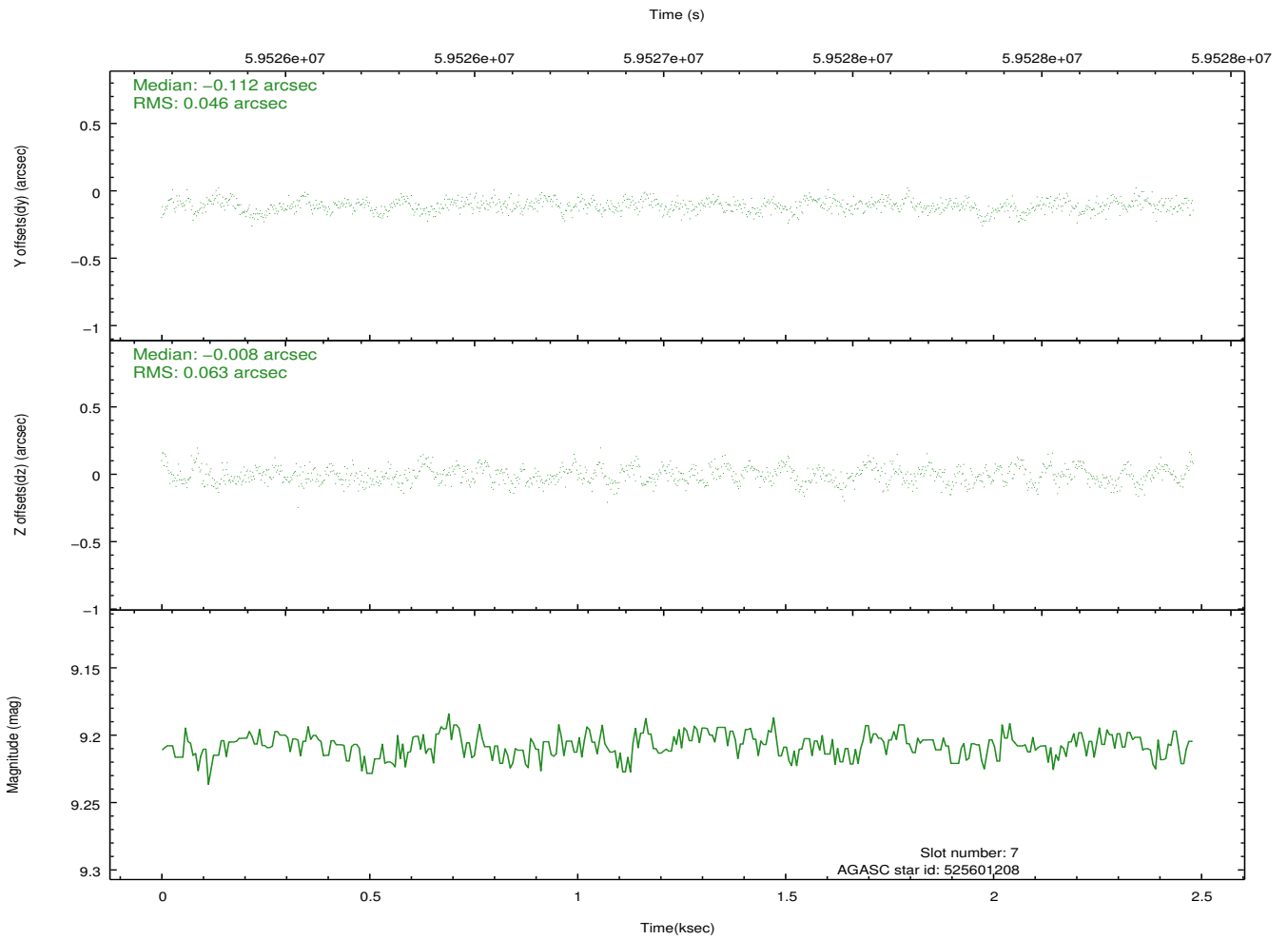
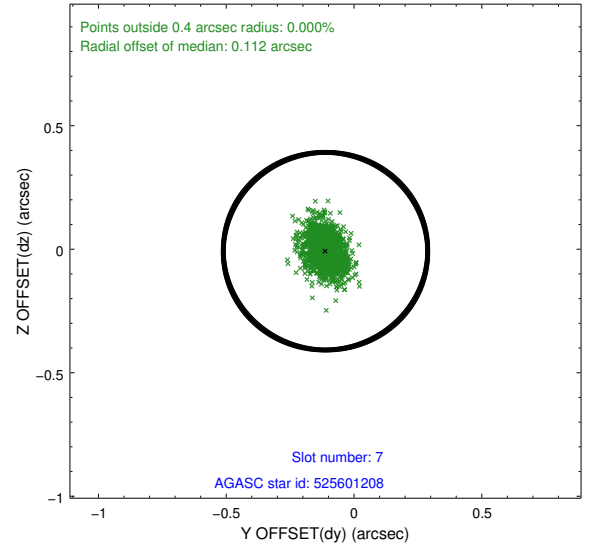
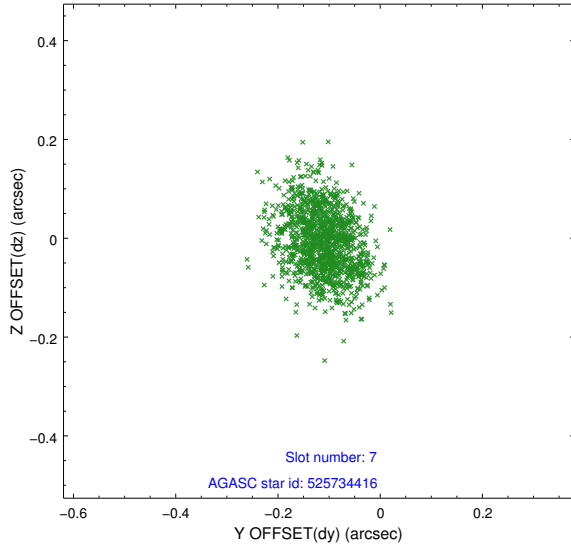
2.4.3 Slot 5



2.4.4 Slot 6

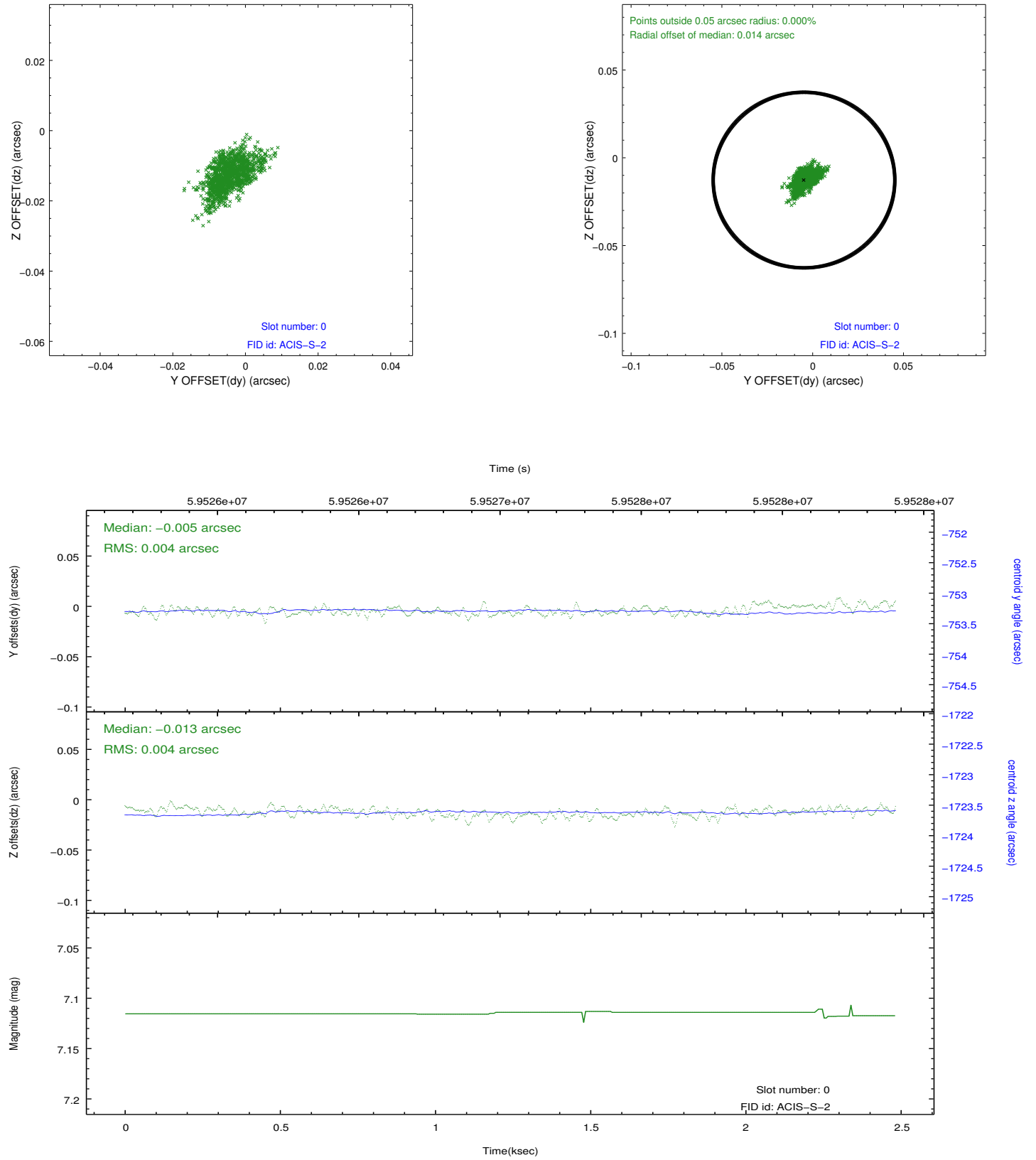


2.4.5 Slot 7

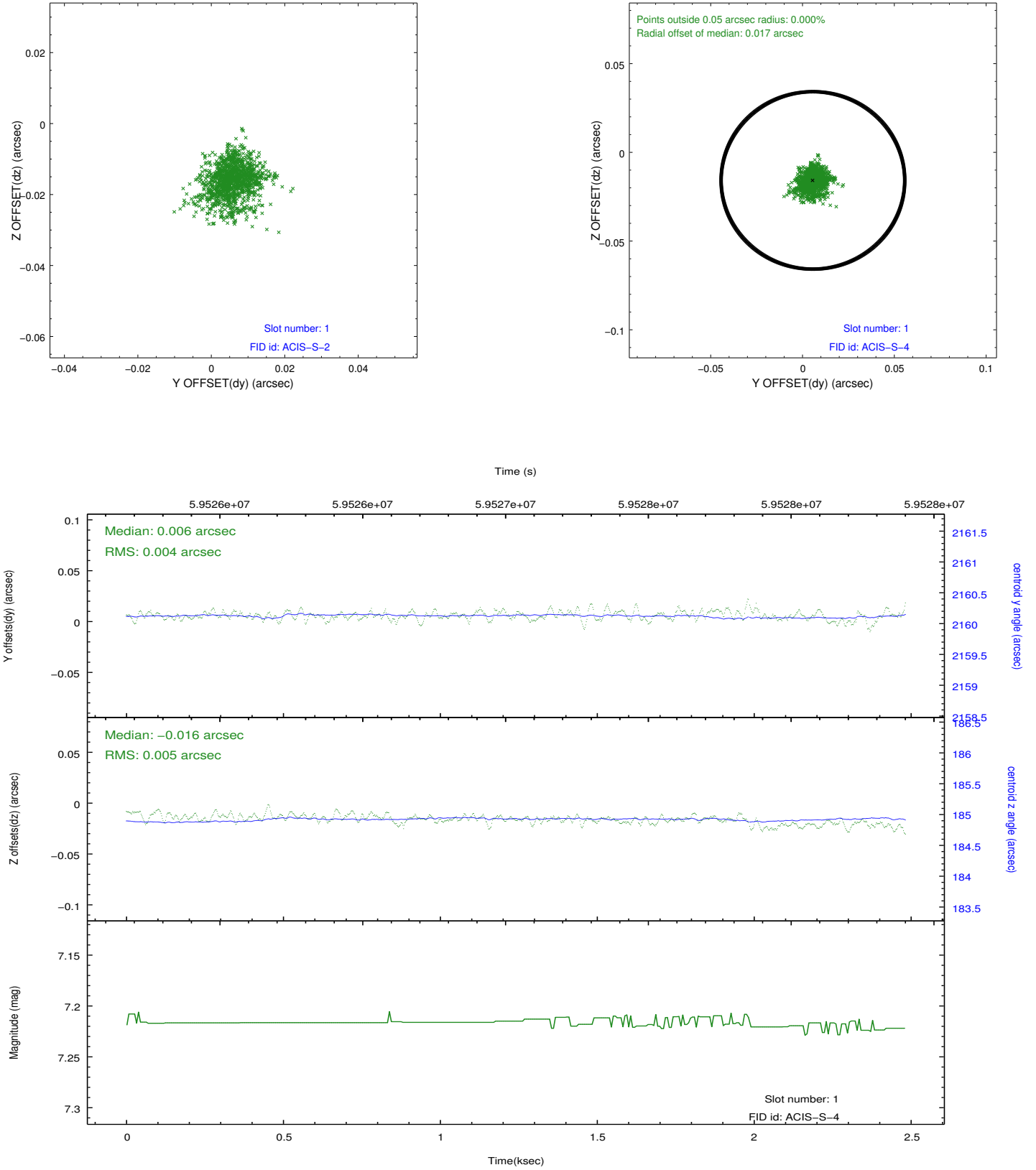


2.5 FID Slots

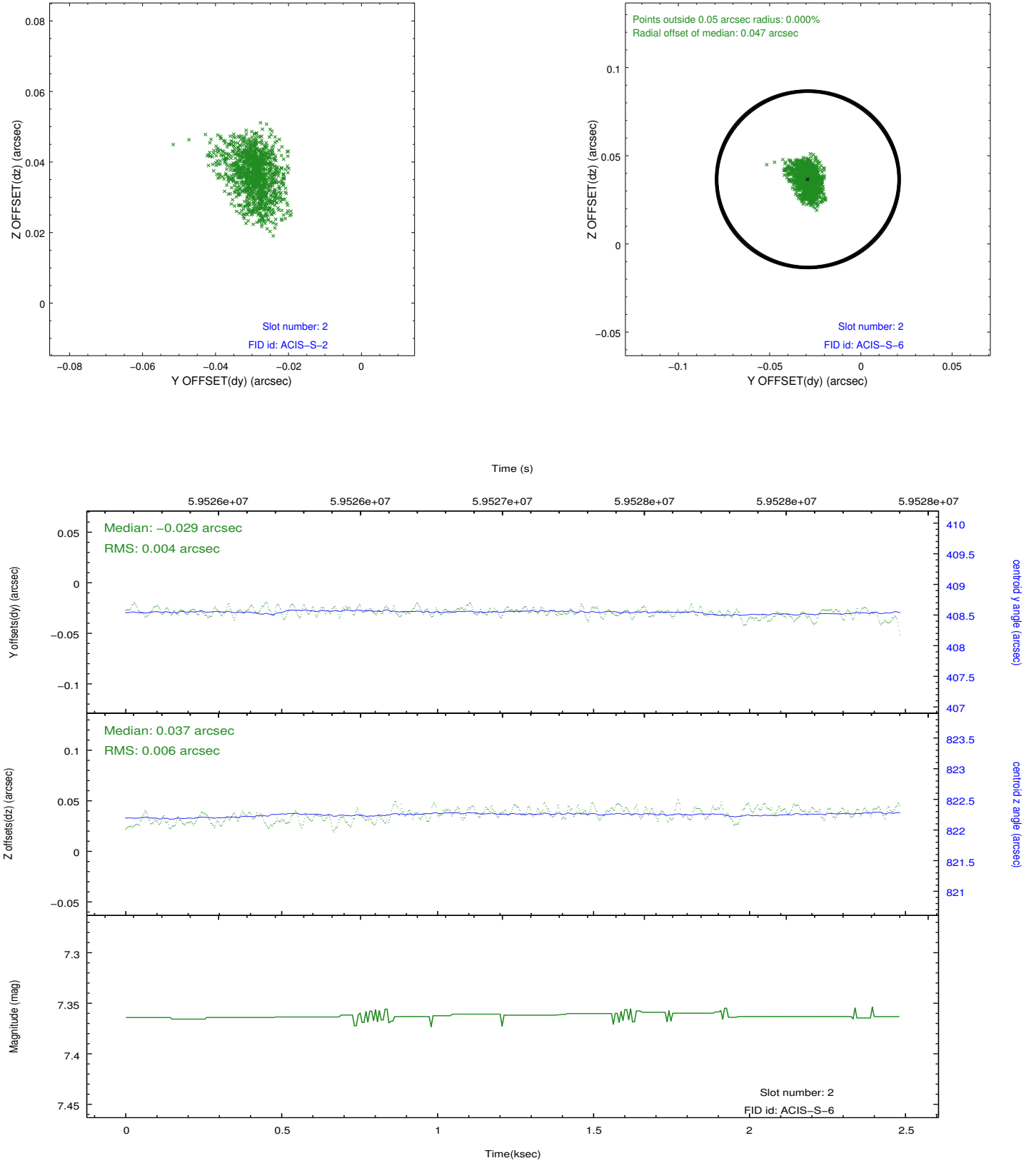
2.5.1 Slot 0



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)	2010.02.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.756

A.2 Comments

Due to an error in the designation of the SI mode, only events on chip S3 were collected for this observation. The target, Cas A, had been placed on S2. The processing produces an event list for the chip S3, but does not include any events for Cas A, which was projected onto S2. Since the error is in the commanding of the ACIS instrument, the Cas A events cannot be recovered.

All of the chips were clocked out by ACIS, so all of the chips have a non-zero ontime. With the use of windowing, all events were blocked from telemetry except those on 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.