

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1439 - L2 Version 4

Chandra X-Ray Center

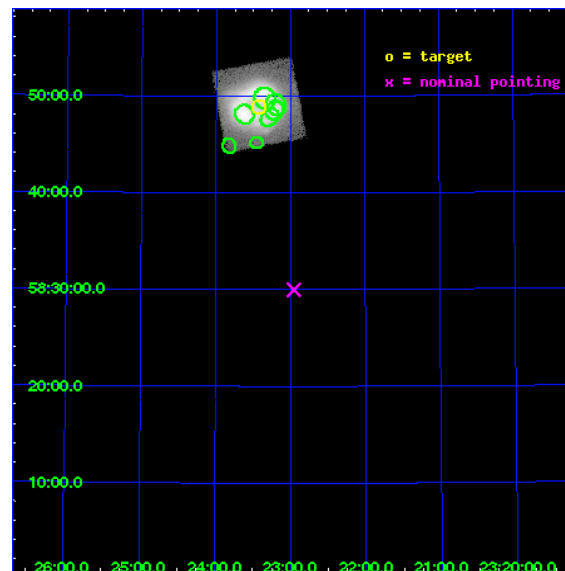
L2 Processing Date : Nov 24 2009

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

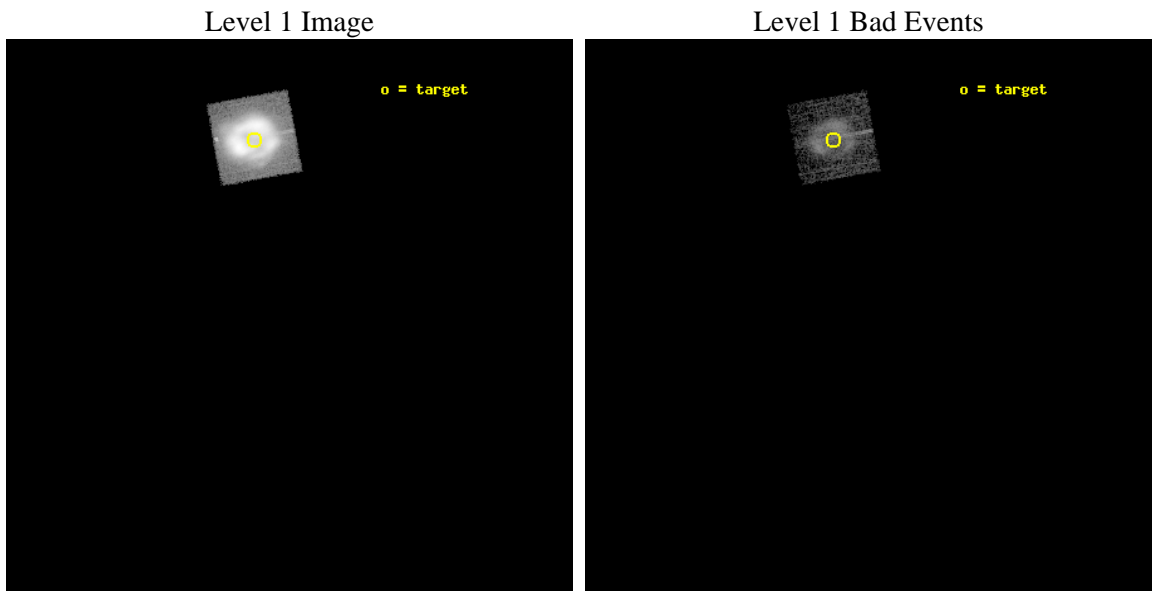
seq_num	580389	Sequence number
obs_id	1439	Observation id
title	ACIS CHIP RESPONSE TO CAS A, JAN. 99	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAS A [Chip S5, T=110, Offsets=-19,0,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA
dec_targ	58.814833	Observer's specified target Dec
ra_nom	350.73846970284	Nominal RA
dec_nom	58.499624480812	Nominal Dec
roll_nom	259.43923531254	Nominal Roll
revision	4	Processing version of data
ontime	2849.9281115383	Sum of GTIs [s]
livetime	2813.8406057693	Livetime [s]
ontime4	2850.0101915374	Sum of GTIs [s]
ontime5	2850.0512315333	Sum of GTIs [s]
ontime6	2849.887071535	Sum of GTIs [s]
ontime7	2850.0922715366	Sum of GTIs [s]
ontime8	2849.9691515341	Sum of GTIs [s]
ontime9	2849.9281115383	Sum of GTIs [s]
l2events	470206	Number of level 2 events



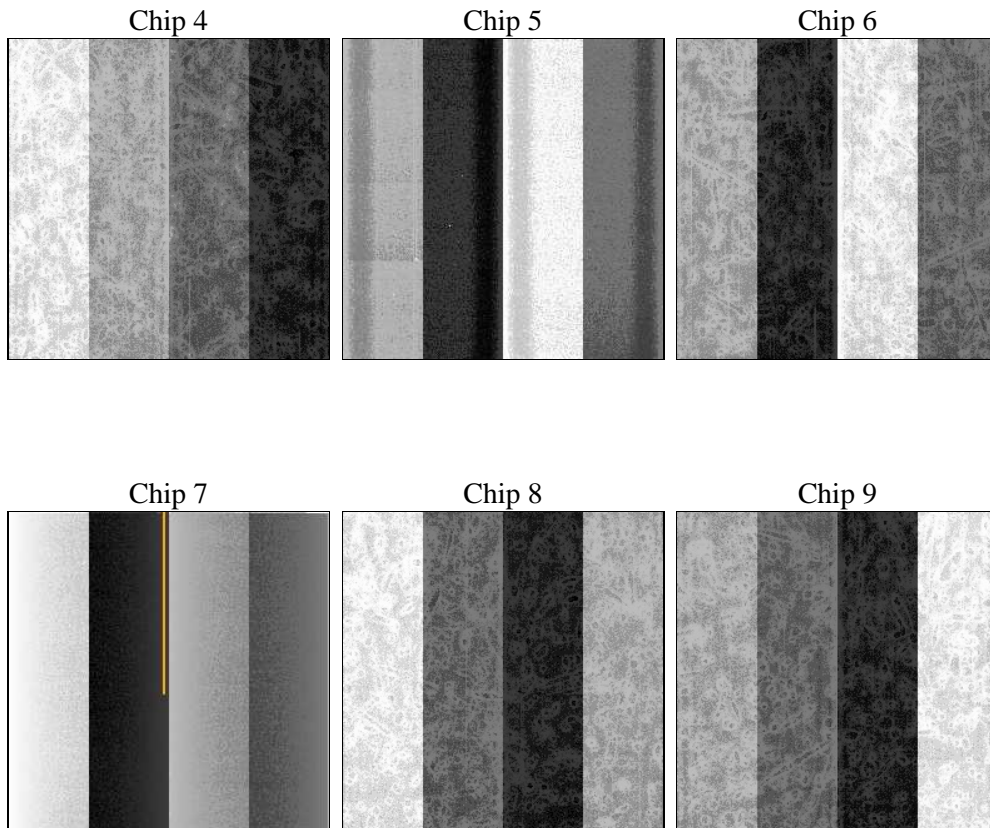
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2500.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	2849.9281115383	Sum of GTIs [s]
caldsver	4.1.4	 	ontime4	2850.0101915374	Sum of GTIs [s]
date	2009-11-24T12:51:35	Date and time of file creation	ontime5	2850.0512315333	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	2849.887071535	Sum of GTIs [s]
			ontime7	2850.0922715366	Sum of GTIs [s]
			ontime8	2849.9691515341	Sum of GTIs [s]
			ontime9	2849.9281115383	Sum of GTIs [s]
			l1events	510323	Number of level 1 events

2.1.4 Events

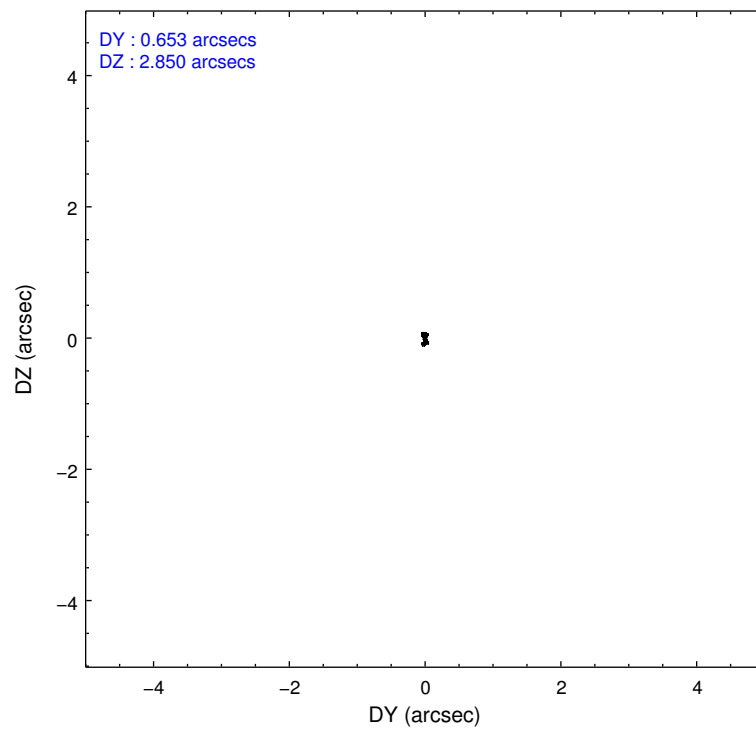
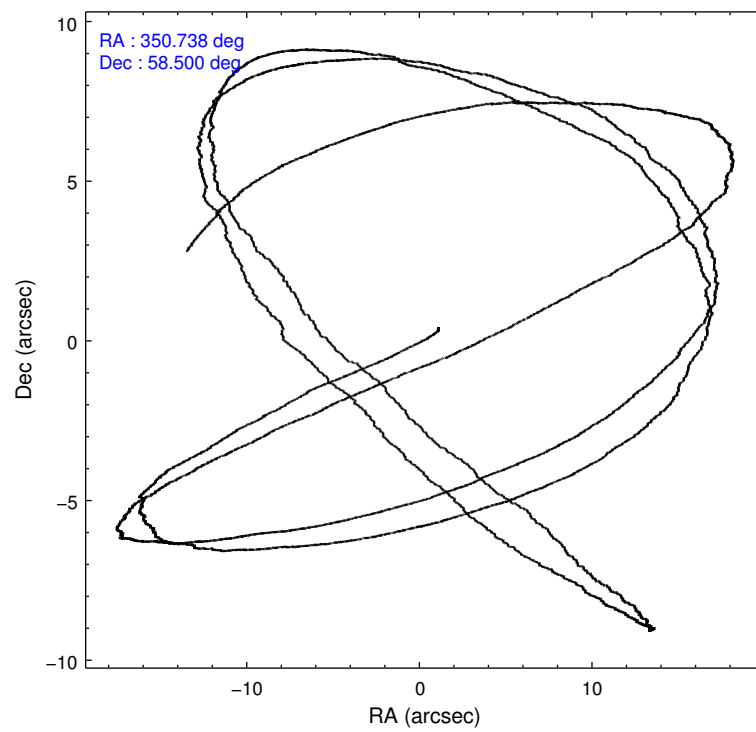
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	0	0	0	0	0	510323
rejected events	0	0	0	0	0	36478
rejected %	0%	0%	0%	0%	0%	7%

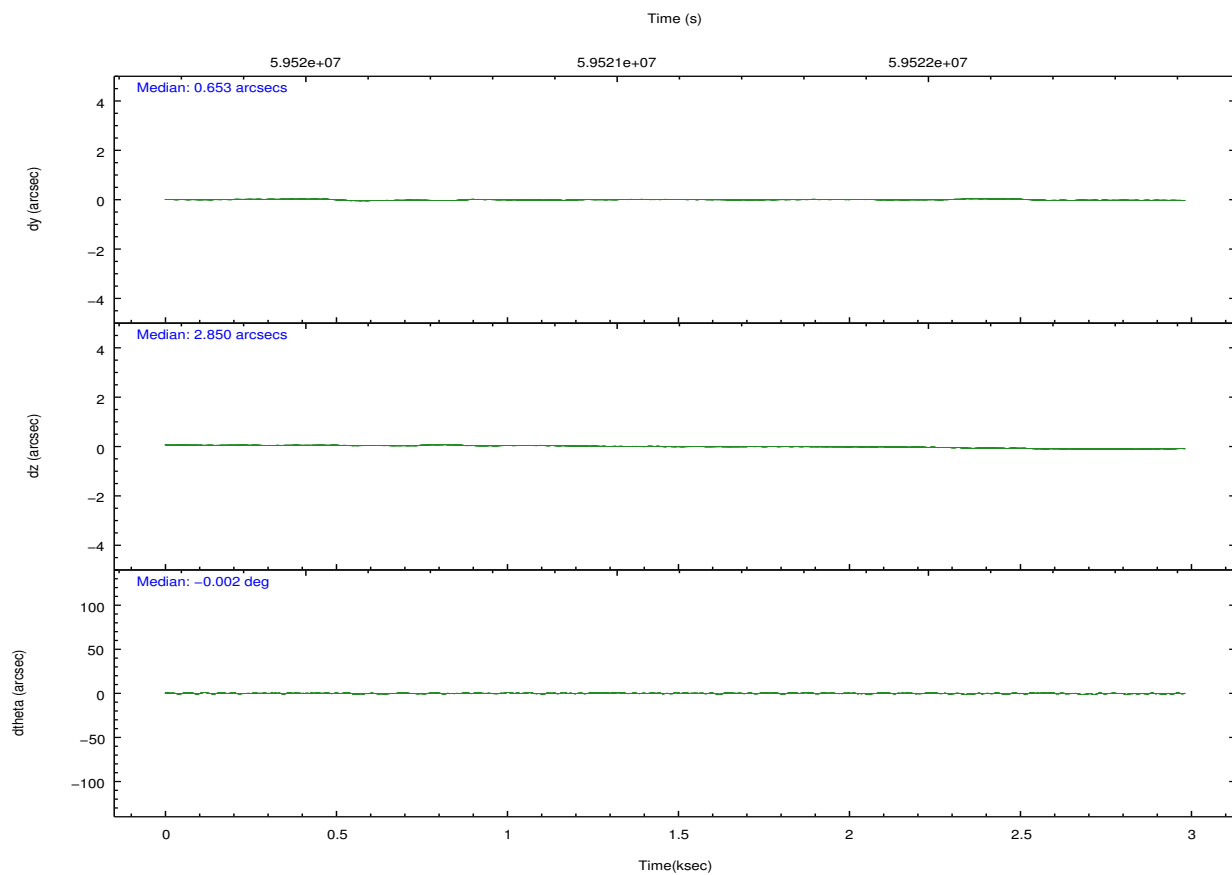
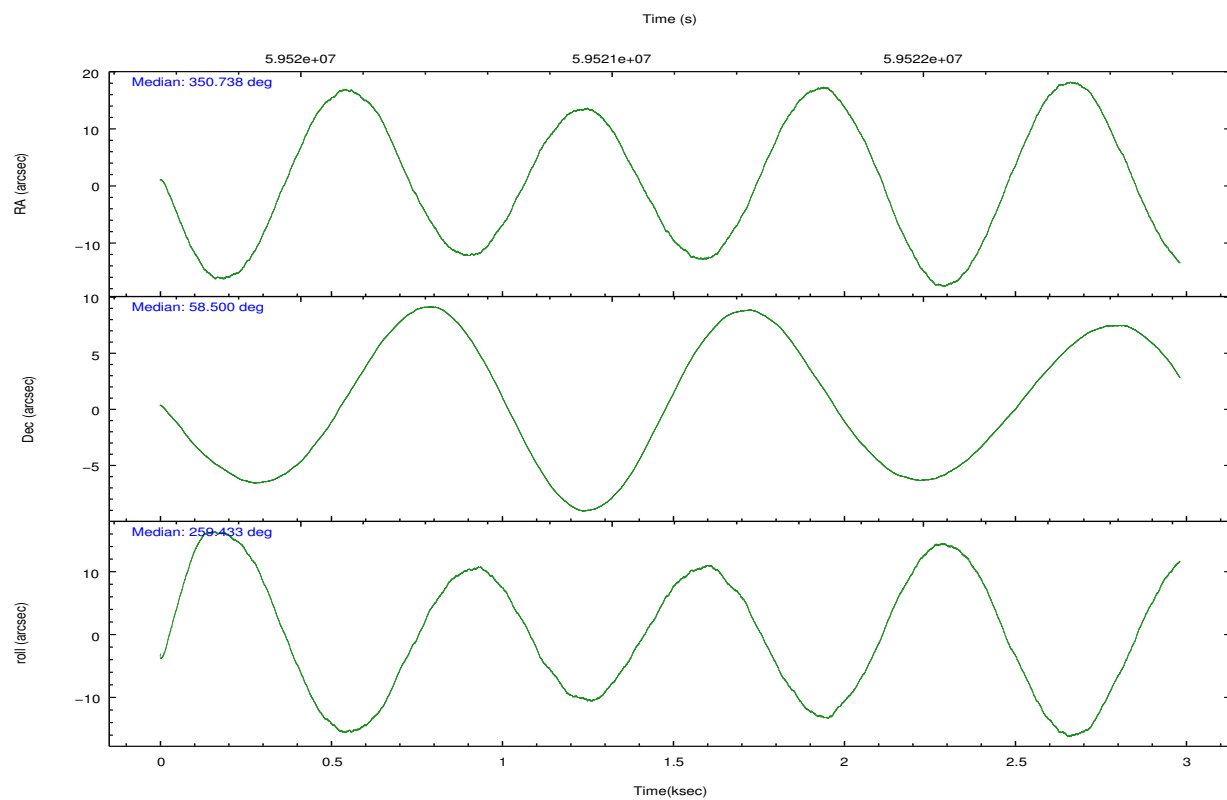
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	0	0	0	0	0	307881
	0%	0%	0%	0%	0%	60%
grade 1 events	0	0	0	0	0	2310
	0%	0%	0%	0%	0%	0%
grade 2 events	0	0	0	0	0	130059
	0%	0%	0%	0%	0%	25%
grade 3 events	0	0	0	0	0	11240
	0%	0%	0%	0%	0%	2%
grade 4 events	0	0	0	0	0	11291
	0%	0%	0%	0%	0%	2%
grade 5 events	0	0	0	0	0	3355
	0%	0%	0%	0%	0%	0%
grade 6 events	0	0	0	0	0	14425
	0%	0%	0%	0%	0%	2%
grade 7 events	0	0	0	0	0	29762
	0%	0%	0%	0%	0%	5%

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	350.721132	350.7384697028373	Subarray requested	NONE	NONE
Pointing Dec	58.525664	58.49962448081195	Alternating exposures requested	N	N
Pointing Roll	259.297389	259.4392353125425	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	59520177.184000	59519511.269319			
Observation start date	1999-11-20T21:21:53	1999-11-20T21:11:51			
Observation end time	59522677.184000	59522811.769438			
Observation end date	1999-11-20T22:03:33	1999-11-20T22:06:51			
Read mode	TIMED	TIMED			

2.3 Aspect



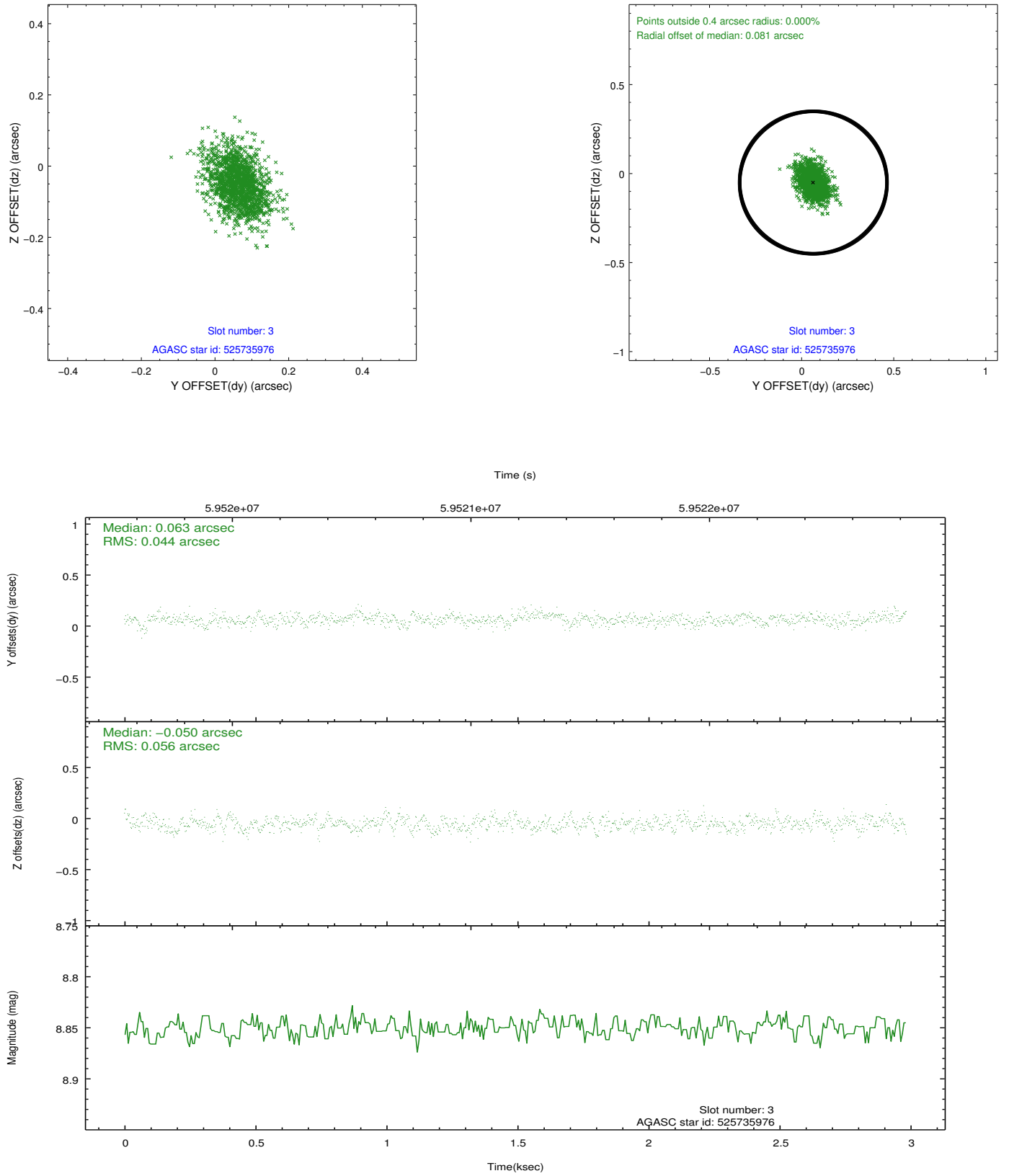


Slot Statistics

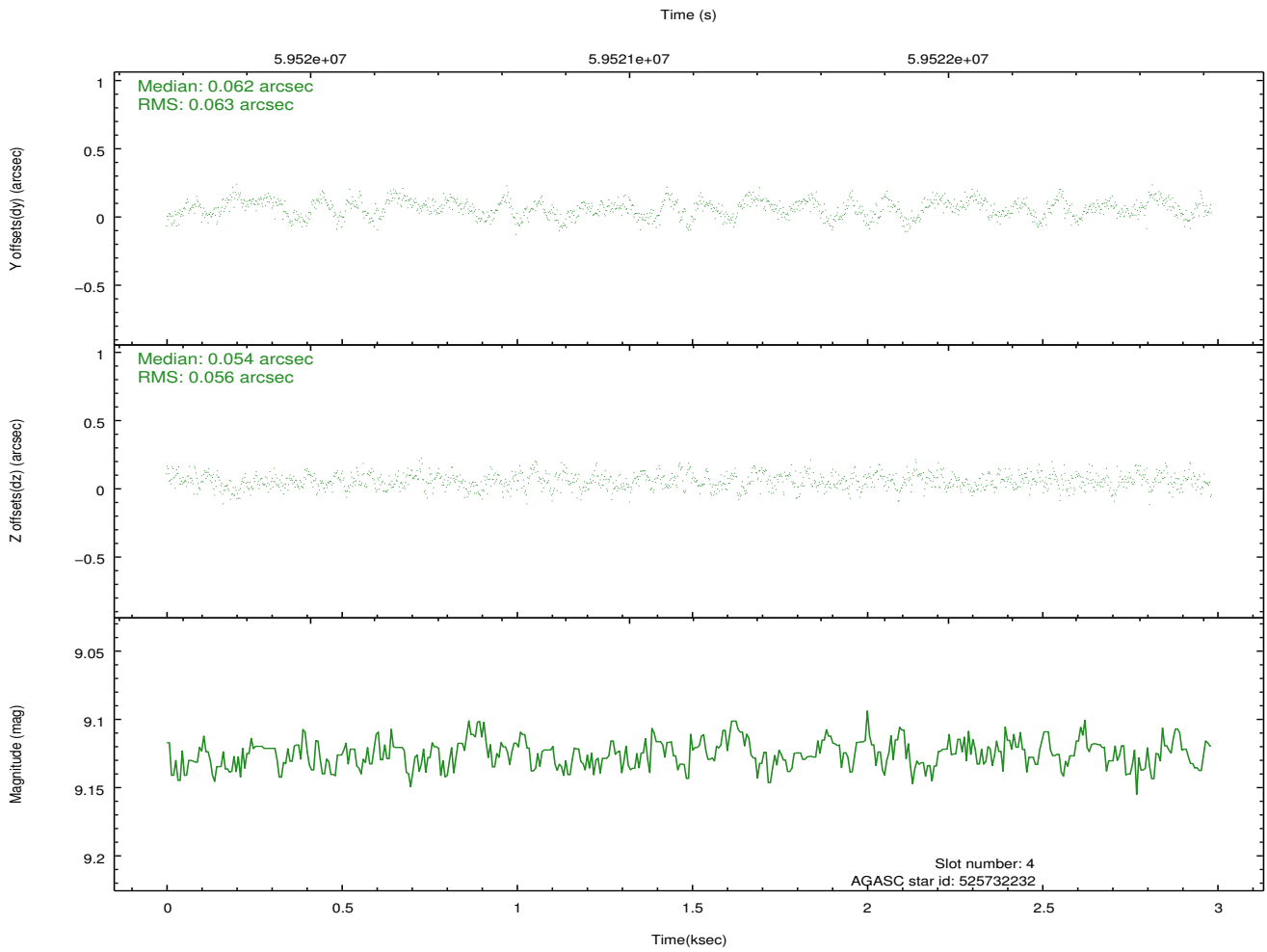
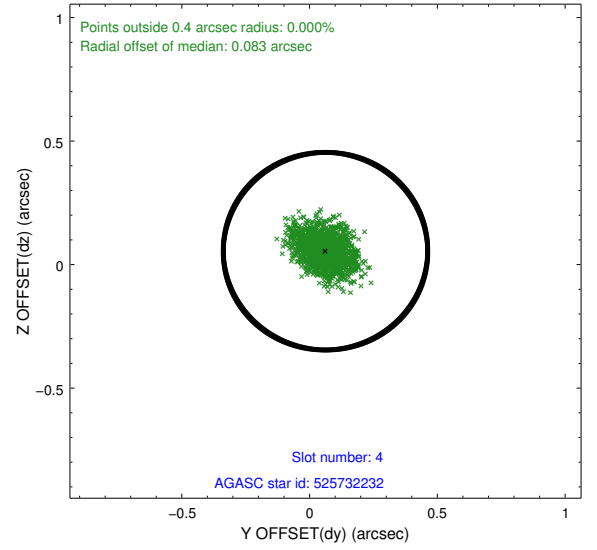
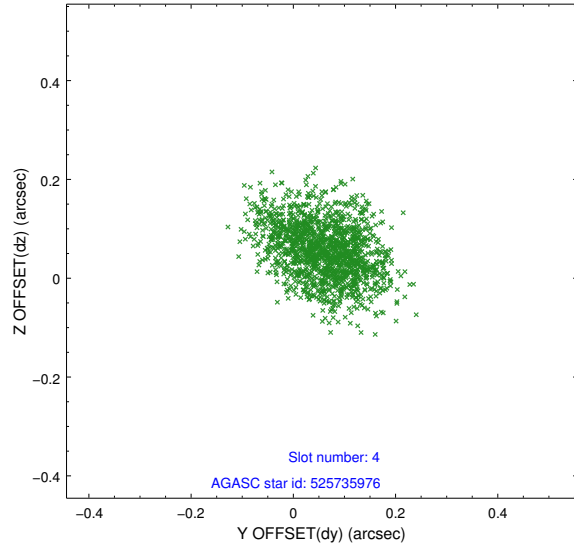
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.35	1456	0.018	-0.050	0.007	0.013	0.000000	0.000000	59.92	-1853.01
1	FID	ACIS-S-4	7.22	1456	0.008	0.016	0.007	0.012	0.000000	0.000000	2160.17	183.42
2	FID	ACIS-S-5	7.24	1456	-0.054	0.044	0.007	0.013	0.000000	0.000000	-1804.84	178.47
3	GUIDE	525735976	8.85	1455	0.063	-0.050	0.075	0.126	350.142956	58.277622	1076.95	-909.98
4	GUIDE	525732232	9.13	1456	0.062	0.054	0.092	0.144	351.669550	58.757012	-1158.21	1582.70
5	GUIDE	525208520	9.12	1456	-0.124	0.012	0.093	0.146	351.127126	57.854305	2227.78	1214.34
6	GUIDE	525606576	9.44	1454	-0.024	0.022	0.099	0.169	349.543555	58.678895	-149.29	-2270.11
7	GUIDE	525739944	9.71	1453	0.025	-0.033	0.096	0.161	351.115137	58.944976	-1620.66	436.83

2.4 Star Slots

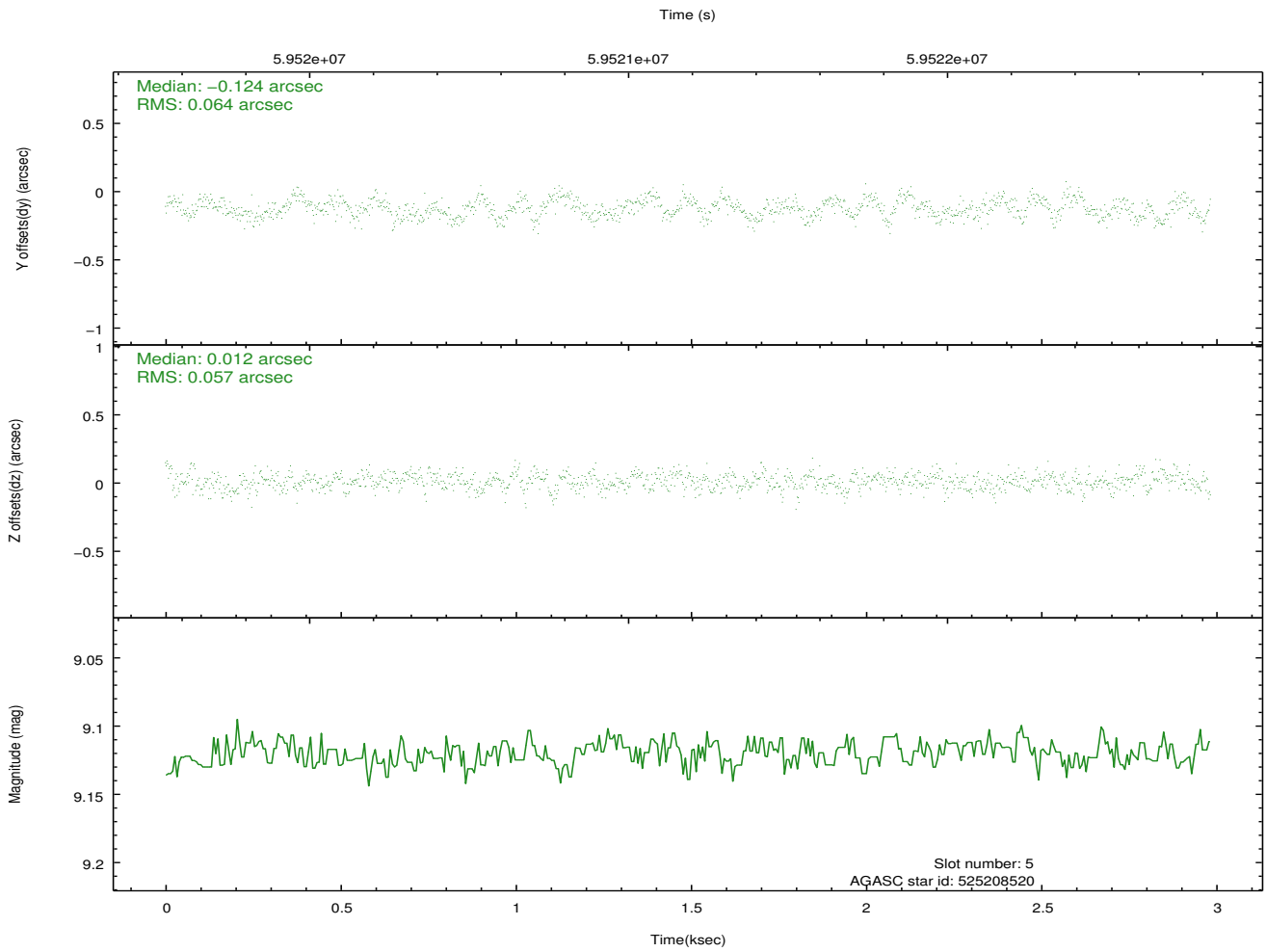
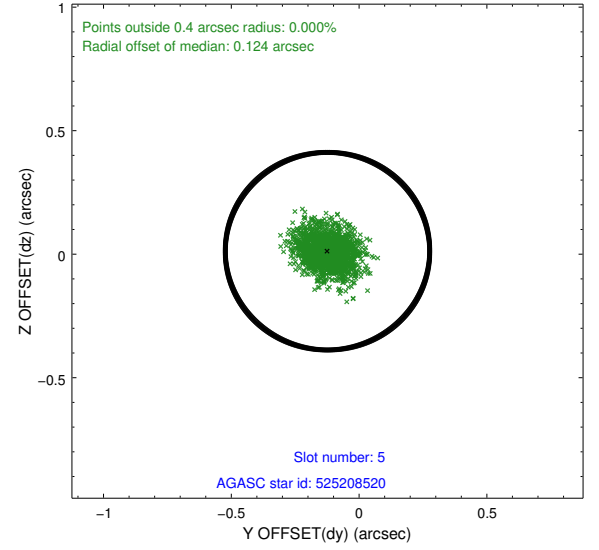
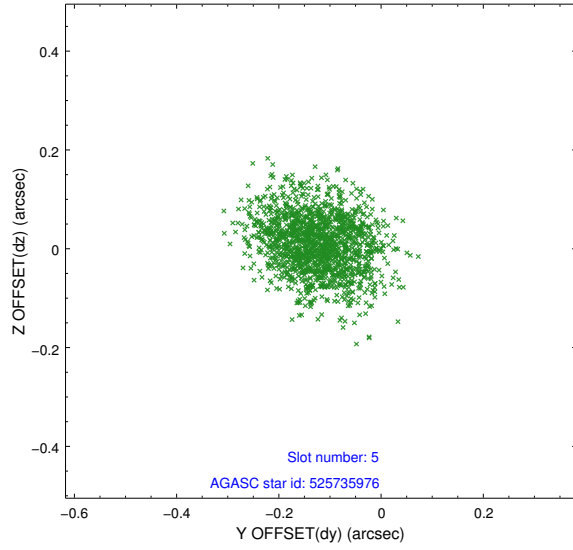
2.4.1 Slot 3



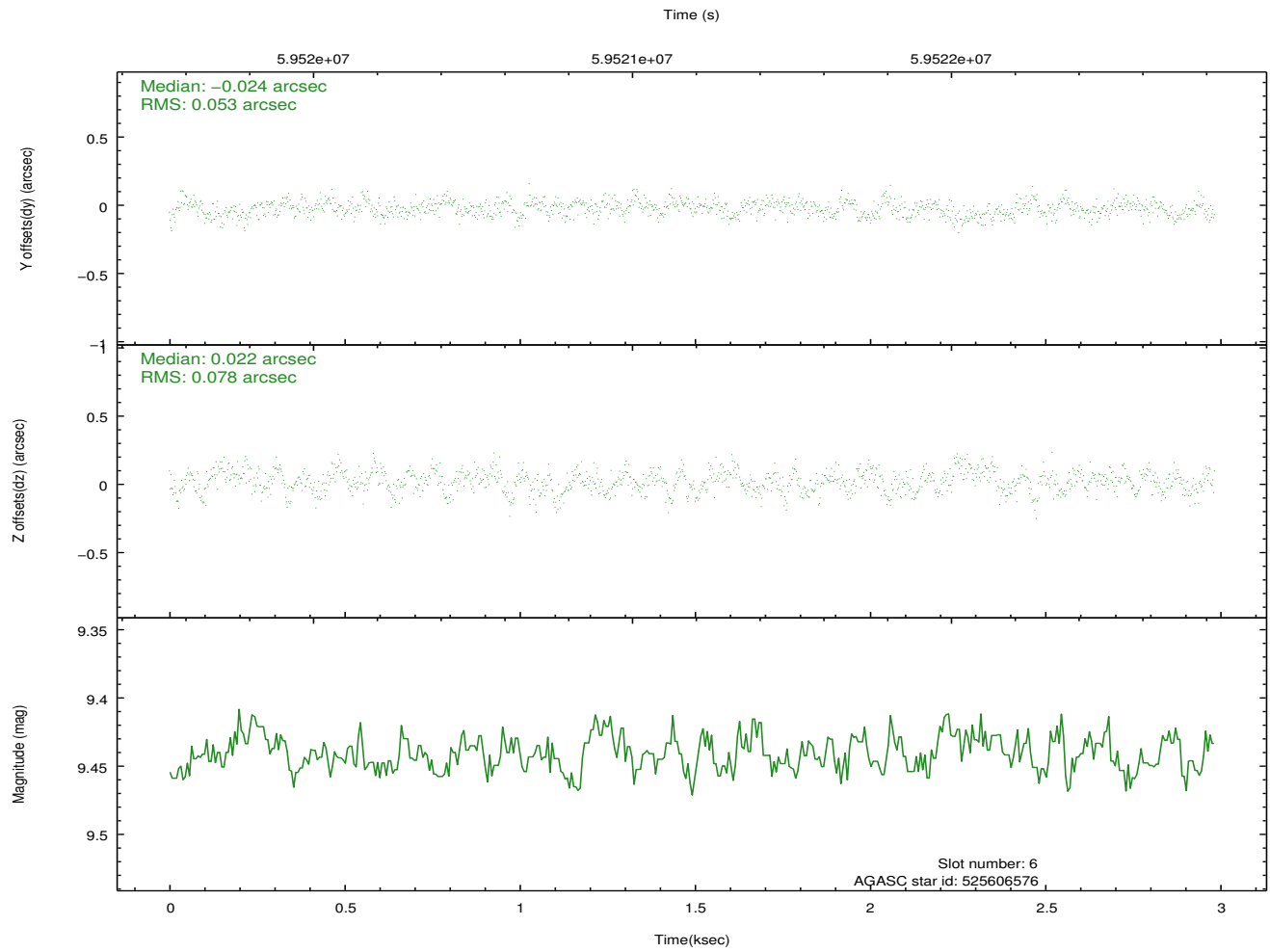
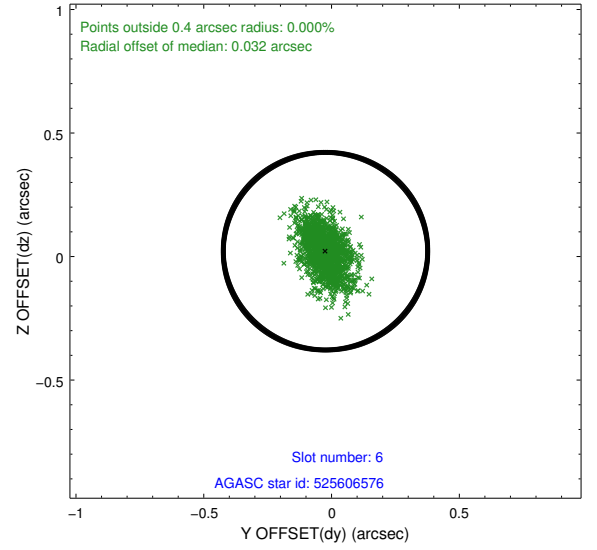
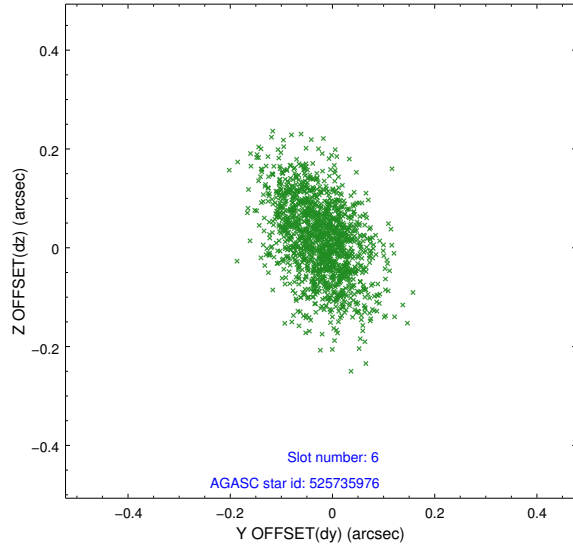
2.4.2 Slot 4



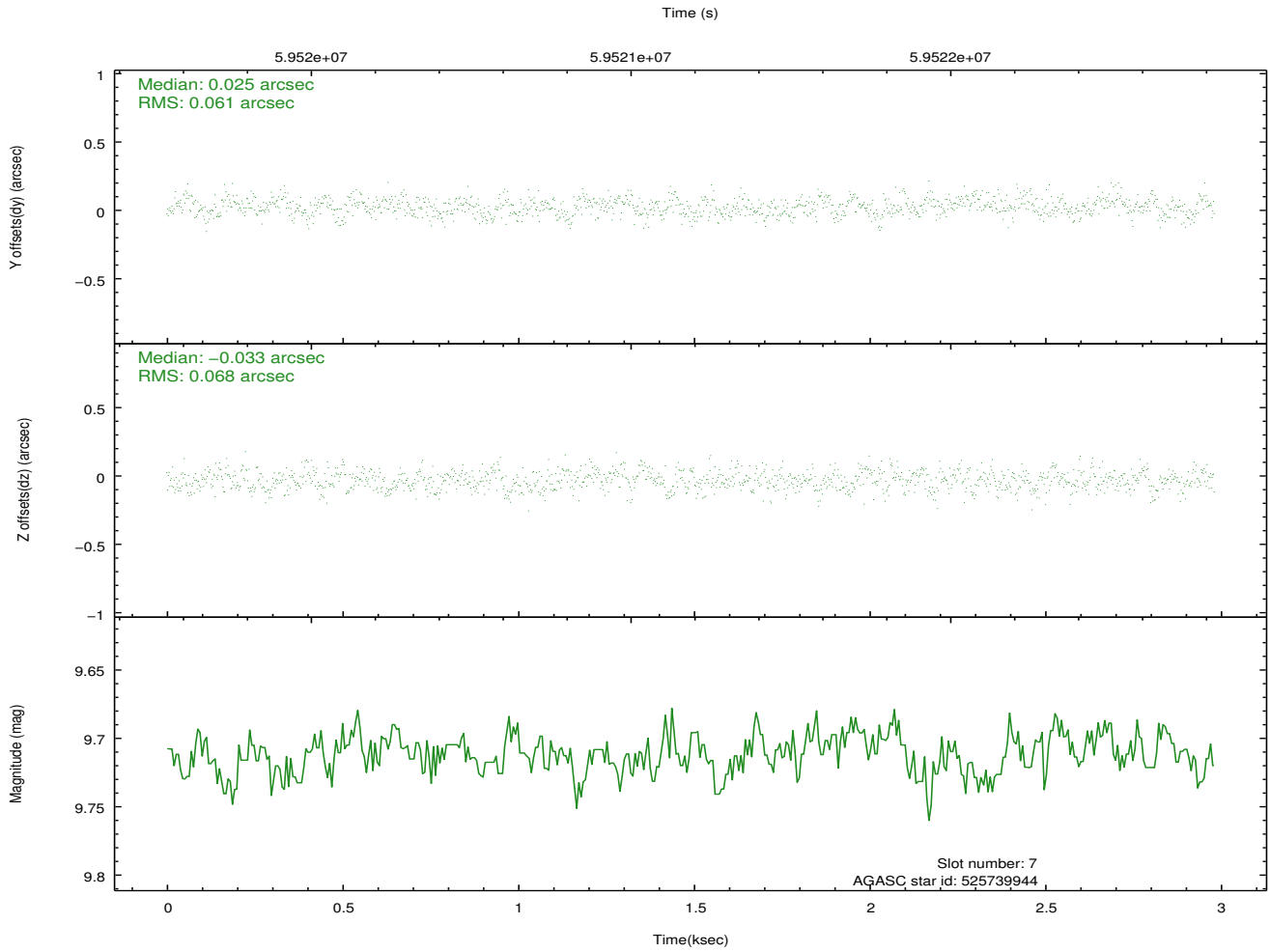
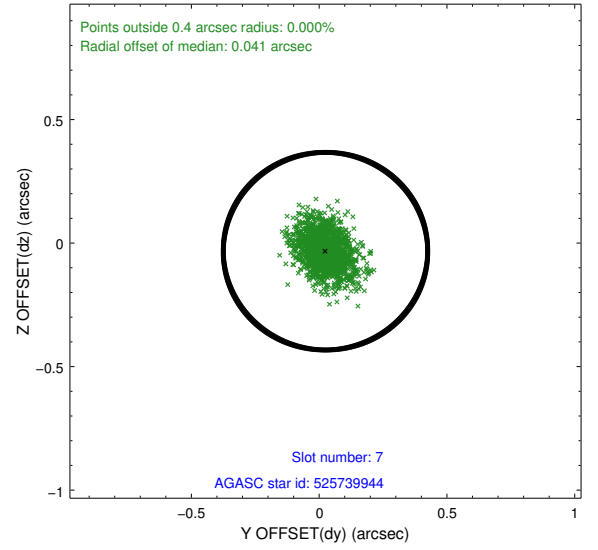
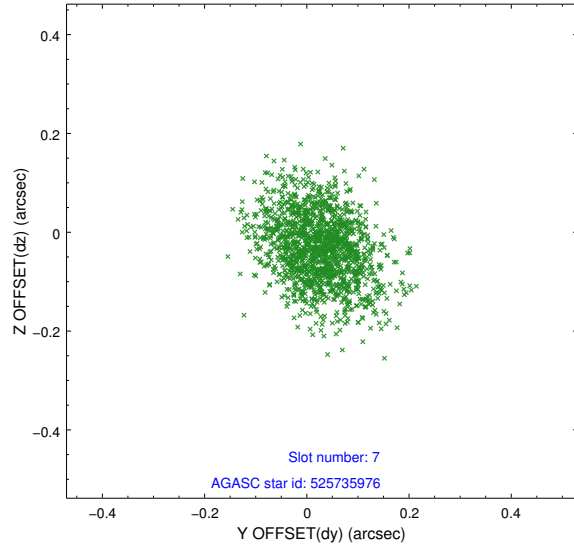
2.4.3 Slot 5



2.4.4 Slot 6

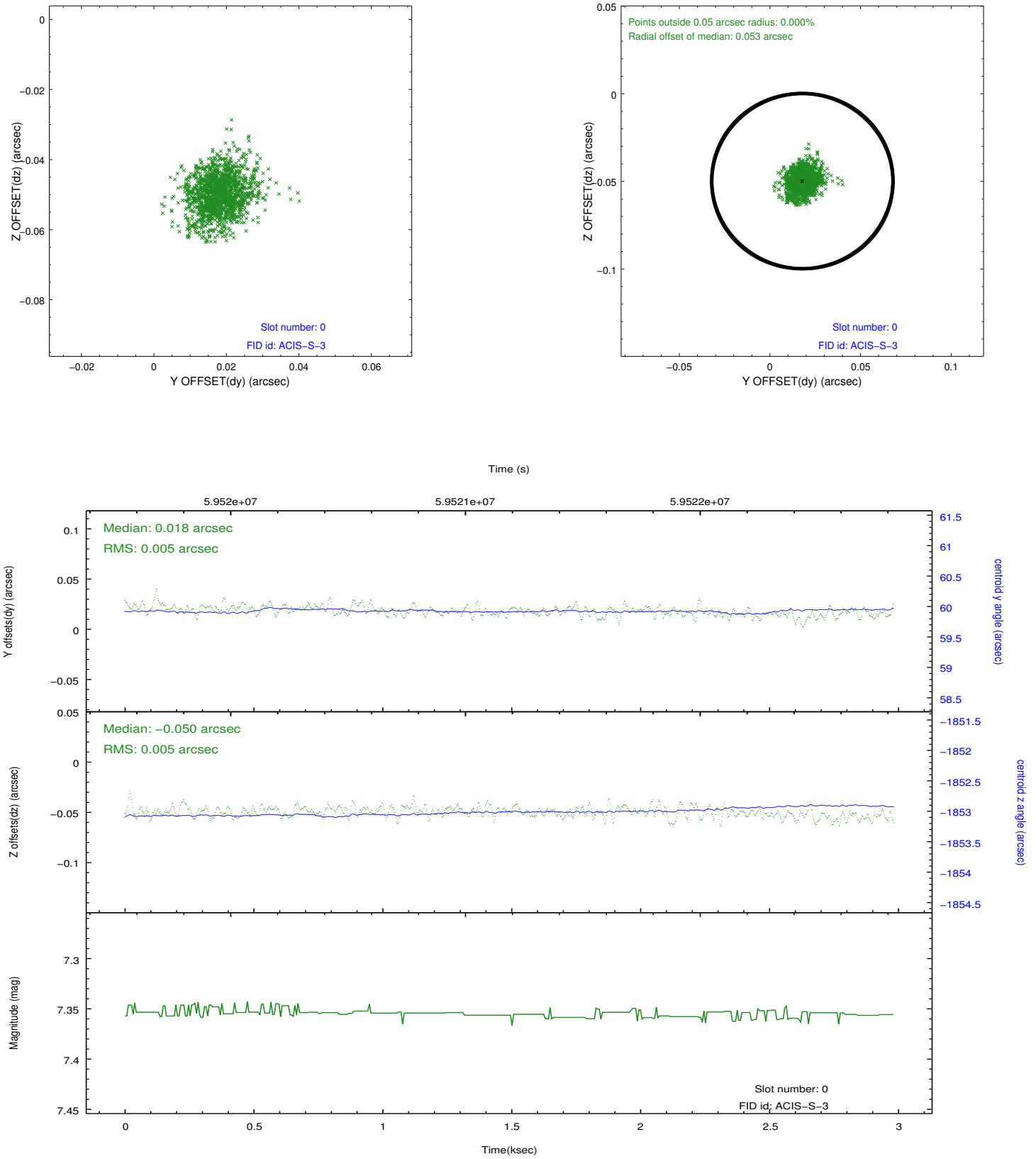


2.4.5 Slot 7

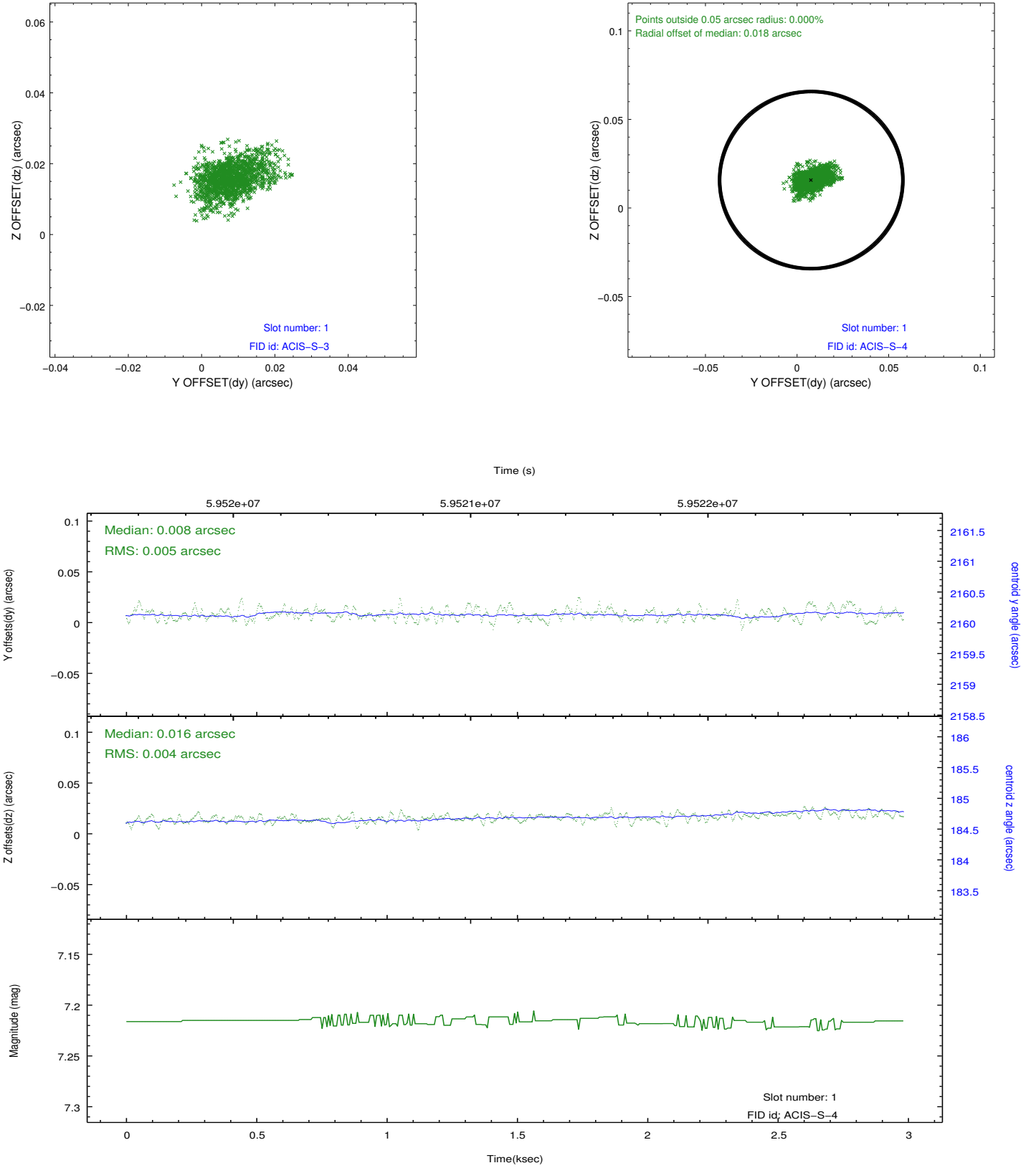


2.5 FID Slots

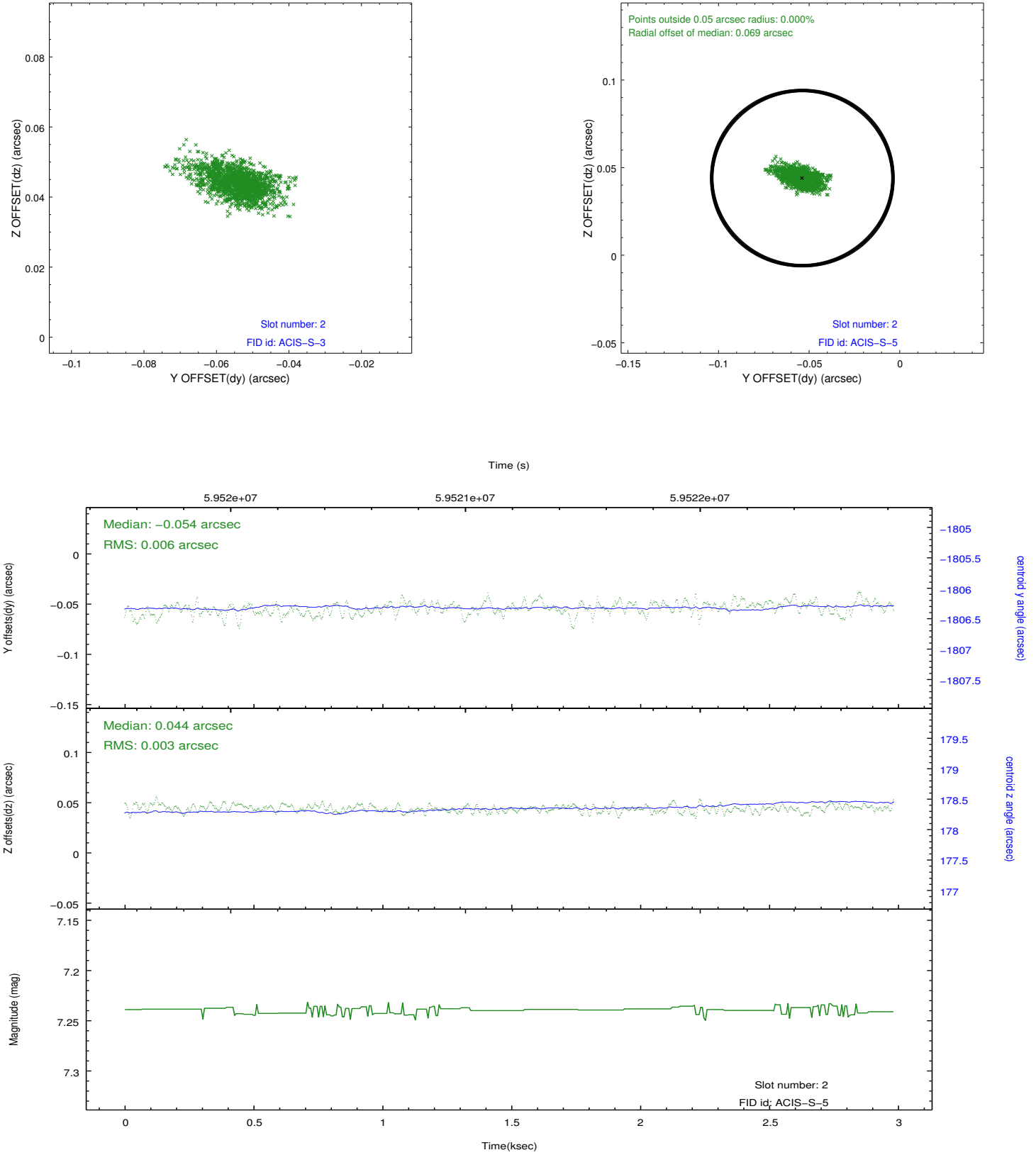
2.5.1 Slot 0



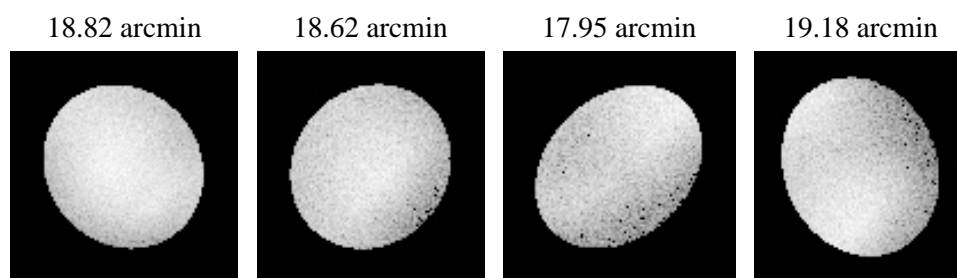
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.851

A.2 Comments

ACIS response to Cas A on chip S5. Only S5 chip was read out.

===

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.