

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 214 - L2 Version 3

Chandra X-Ray Center

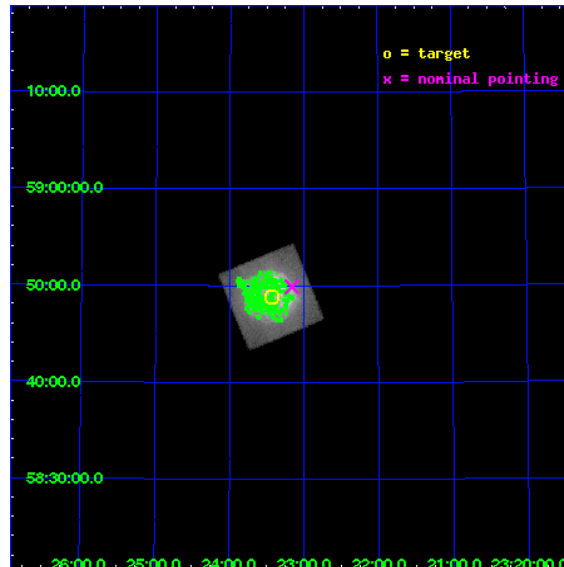
L2 Processing Date : Dec 16 2009

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1 Front

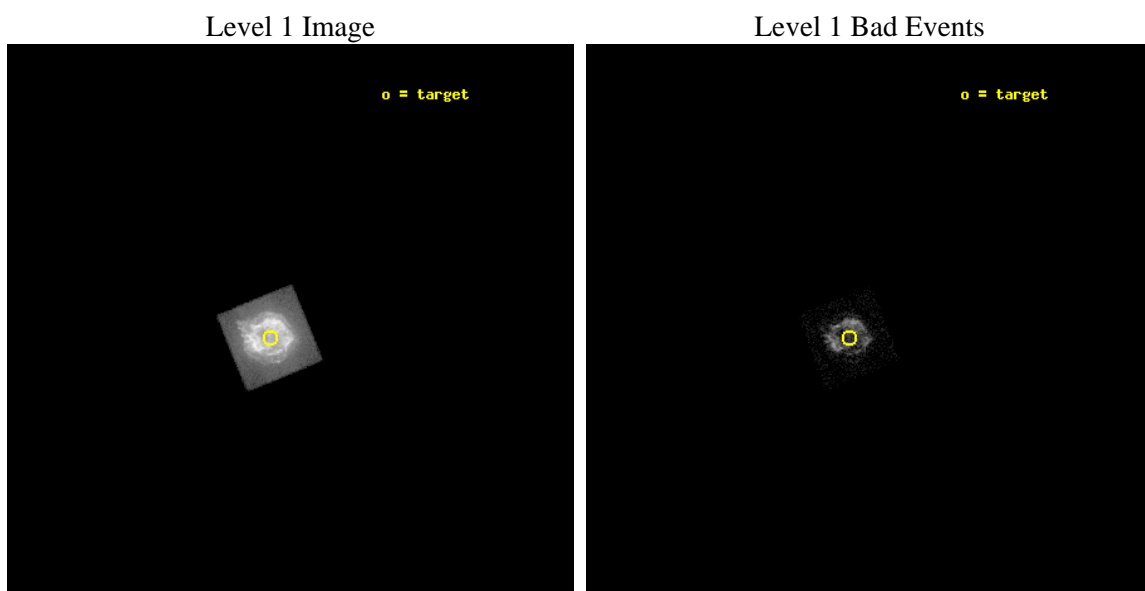
seq_num	590082	Sequence number
obs_id	214	Observation id
title	ACIS CHIP RESPONSE TO CAS A, JAN. 99	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAS A [Chip S3, T=100, Offsets=-2,0,0 First Light]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA
dec_targ	58.814833	Observer's specified target Dec
ra_nom	350.79088856944	Nominal RA
dec_nom	58.831502178088	Nominal Dec
roll_nom	157.72901198836	Nominal Roll
revision	3	Processing version of data
ontime	2803.4905279353	Sum of GTIs [s]
livetime	2767.9910428113	Livetime [s]
ontime4	3347.3975657672	Sum of GTIs [s]
ontime5	5026.2543974817	Sum of GTIs [s]
ontime6	4183.4420800582	Sum of GTIs [s]
ontime7	2803.4905279353	Sum of GTIs [s]
ontime8	4063.6088616401	Sum of GTIs [s]
ontime9	3956.6160346419	Sum of GTIs [s]
l2events	895163	Number of level 2 events



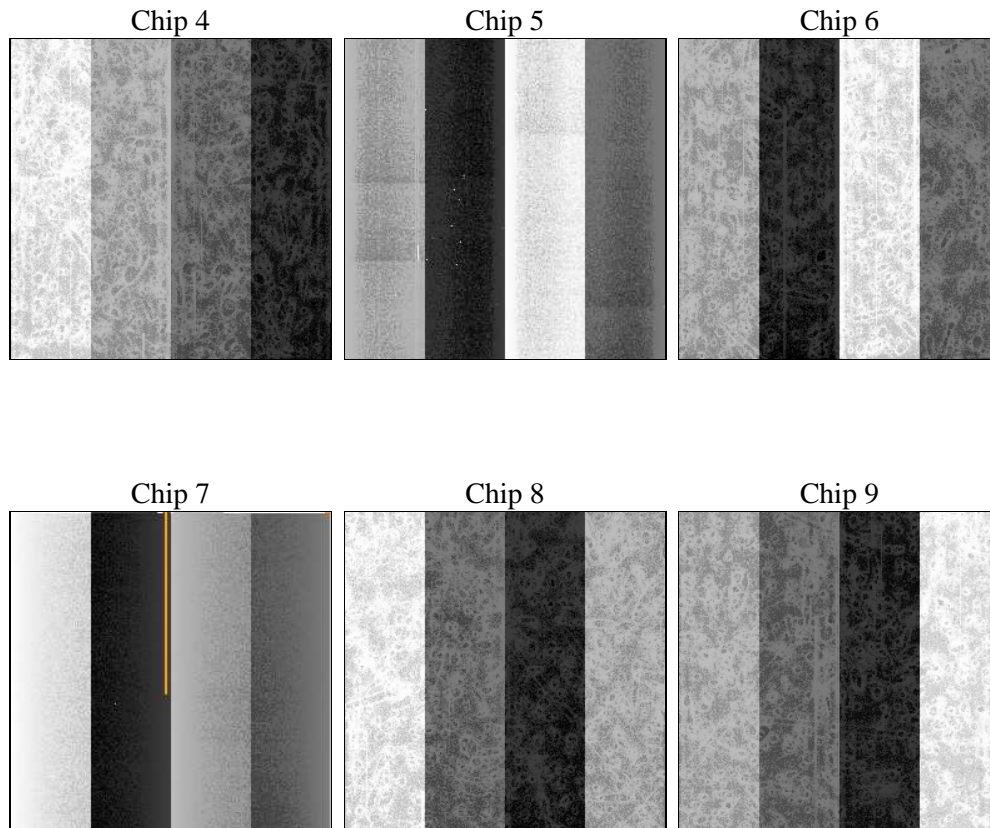
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	2803.4905279353	Sum of GTIs [s]
caldsver	4.1.4	 	ontime4	3347.3975657672	Sum of GTIs [s]
date	2009-12-16T04:25:58	Date and time of file creation	ontime5	5026.2543974817	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	4183.4420800582	Sum of GTIs [s]
			ontime7	2803.4905279353	Sum of GTIs [s]
			ontime8	4063.6088616401	Sum of GTIs [s]
			ontime9	3956.6160346419	Sum of GTIs [s]
			l1events	928596	Number of level 1 events

2.1.4 Events

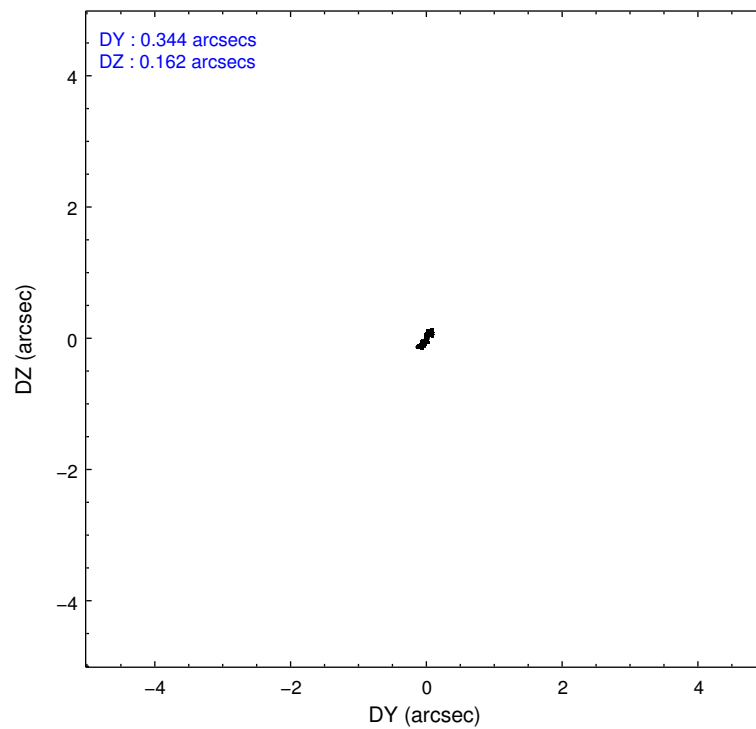
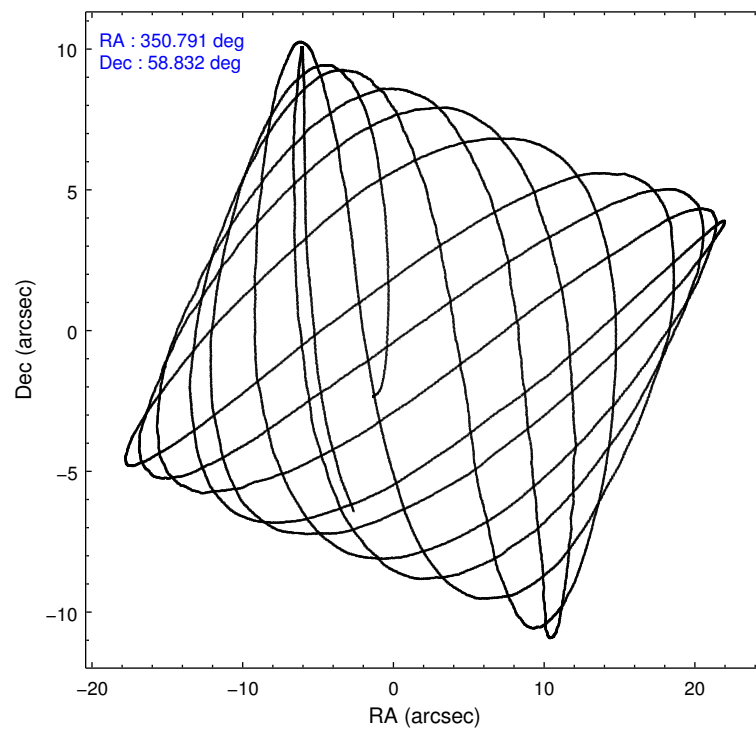
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	0	0	0	928596	0	0
rejected events	0	0	0	23899	0	0
rejected %	0%	0%	0%	2%	0%	0%

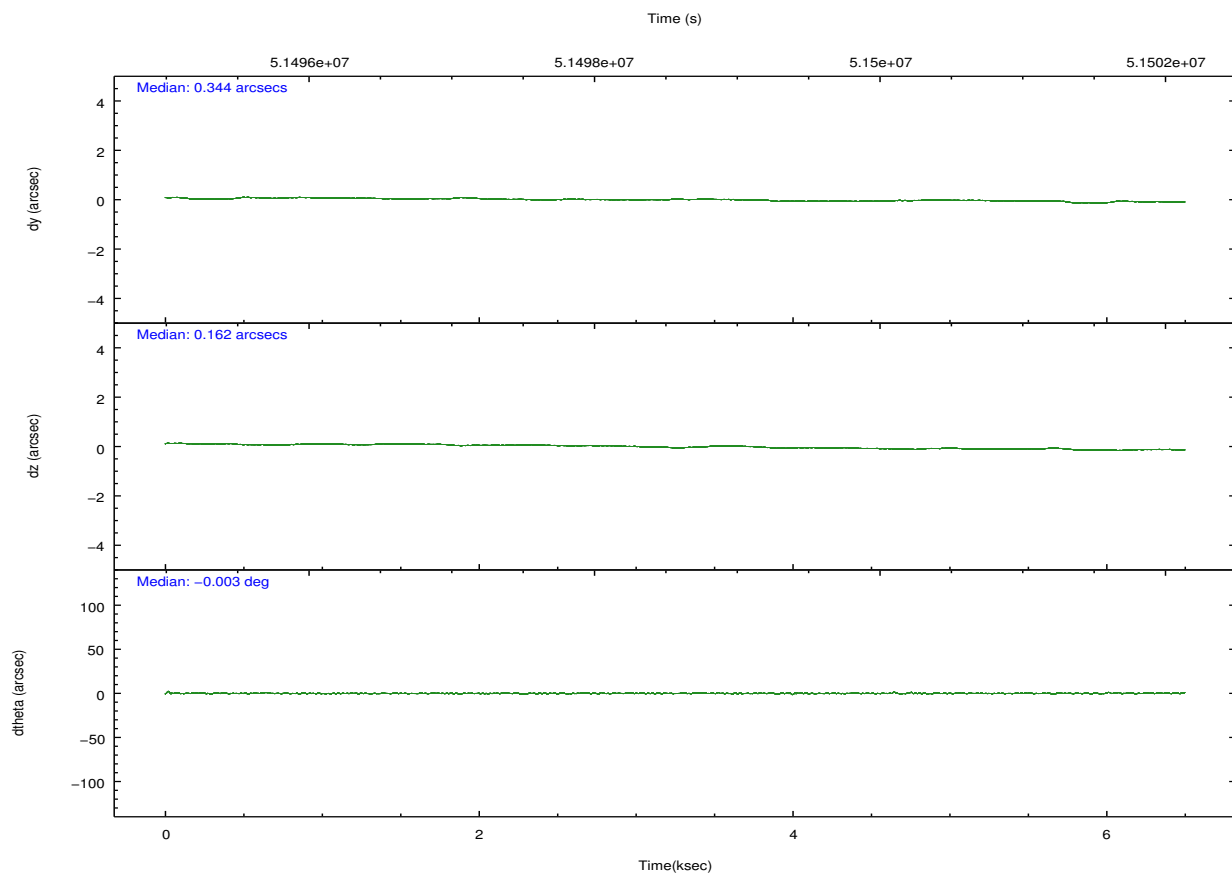
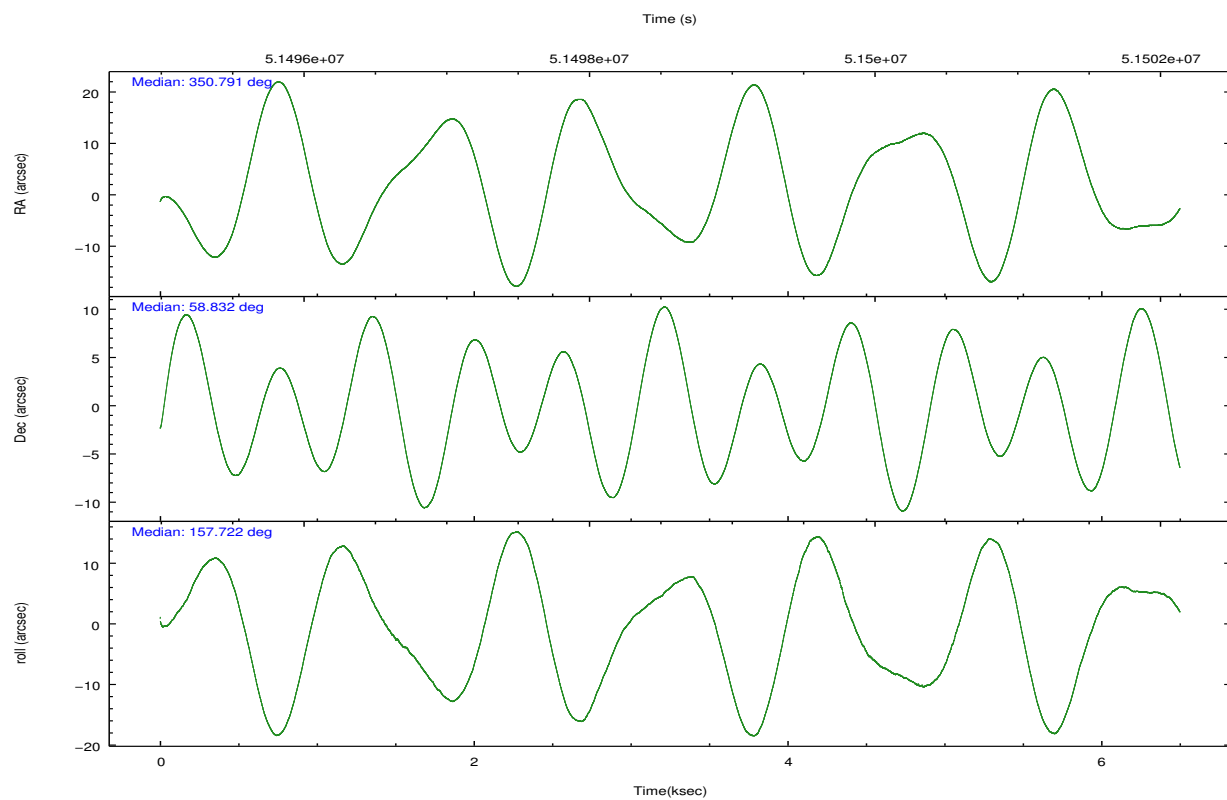
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	0	0	0	198161	0	0
	0%	0%	0%	21%	0%	0%
grade 1 events	0	0	0	4055	0	0
	0%	0%	0%	0%	0%	0%
grade 2 events	0	0	0	217220	0	0
	0%	0%	0%	23%	0%	0%
grade 3 events	0	0	0	121734	0	0
	0%	0%	0%	13%	0%	0%
grade 4 events	0	0	0	112482	0	0
	0%	0%	0%	12%	0%	0%
grade 5 events	0	0	0	18757	0	0
	0%	0%	0%	2%	0%	0%
grade 6 events	0	0	0	256187	0	0
	0%	0%	0%	27%	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-7	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
Pointing RA	350.844078	350.790888569442	CCD I2 on	N	N
Pointing Dec	58.834653	58.8315021780877	CCD I3 on	N	N
Pointing Roll	157.526861	157.7290119883612	CCD S0 on	N	Y
Window start time	49852864.184000	49852864.184000	CCD S1 on	N	Y
Window stop time	55036864.184000	55036864.184000	CCD S2 on	N	Y
SIM focus pos (mm)	-0.550862	-0.7362356599963374	CCD S3 on	Y	Y
SIM defocus (mm)	0.133405	-0.0519681986964412	CCD S4 on	N	Y
SIM translation stage pos (mm)	-190.132523	-190.1199515274594	CCD S5 on	N	Y
SIM translation stage offset (mm)	0	-0.012571055548392	Number of optional ACIS chips dropped	0	0
Observation start time	51495813.184000	51494864.900055	On-chip summing requested	N	N
Observation start date	1999-08-20T00:22:29	1999-08-20T00:07:44	Subarray requested	NONE	NONE
Observation end time	51501813.184000	51503198.662855	Alternating exposures requested	N	N
Observation end date	1999-08-20T02:02:29	1999-08-20T02:26:38	Primary exposure time	0.000000	3.2
Read mode	TIMED	TIMED			

2.3 Aspect



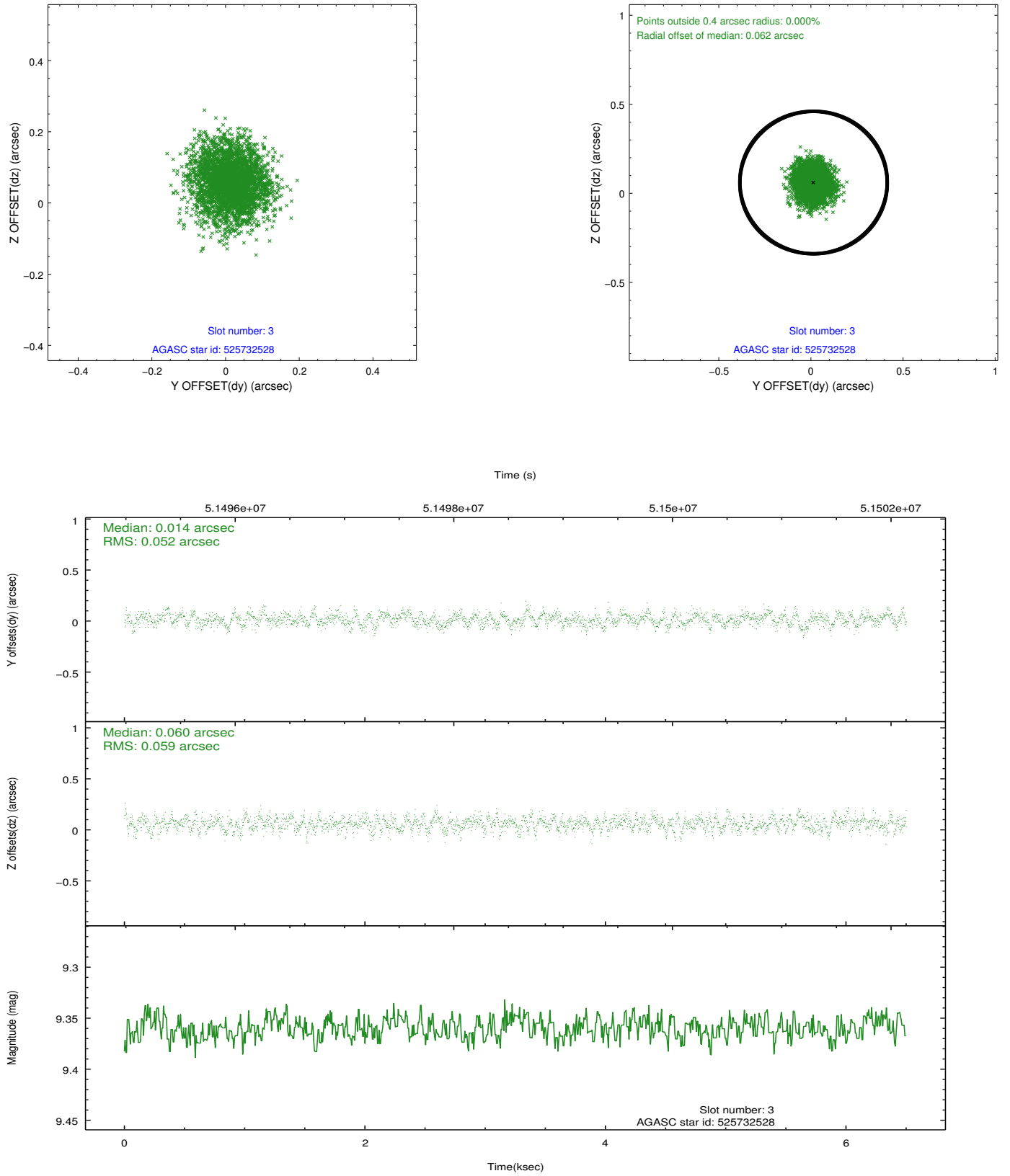


Slot Statistics

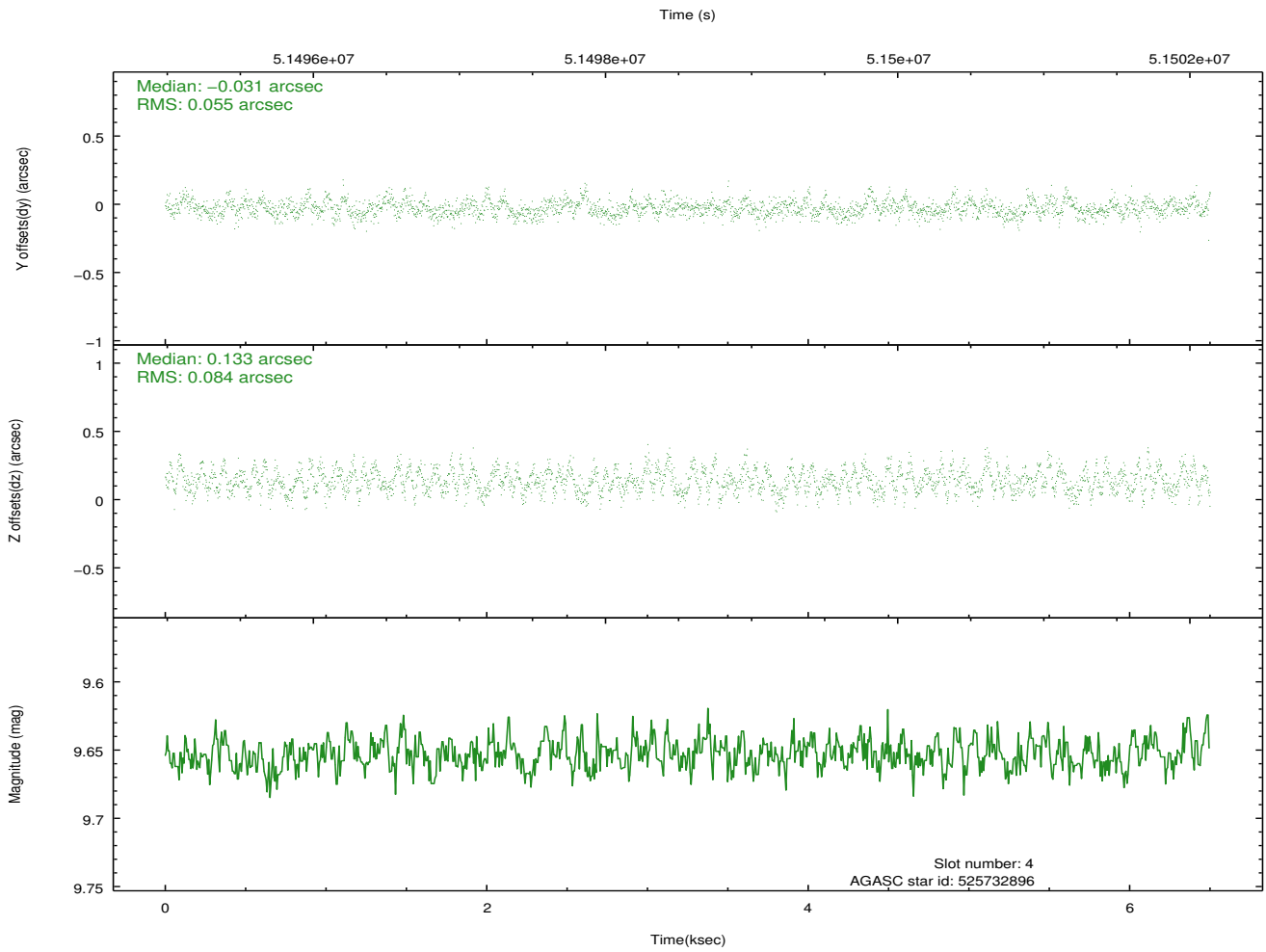
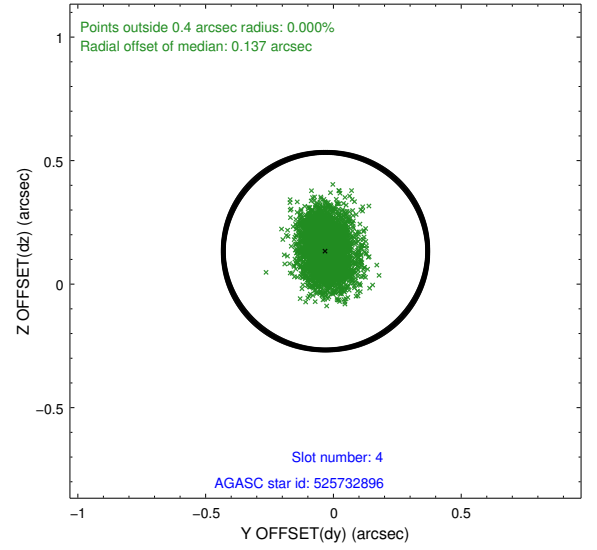
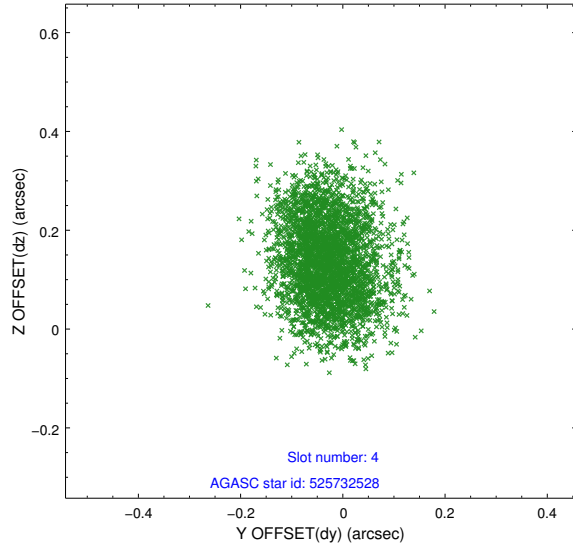
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	3172	-0.025	-0.004	0.007	0.011	0.000000	0.000000	-752.96	-1721.53
1	FID	ACIS-S-4	7.22	3172	0.106	0.013	0.006	0.011	0.000000	0.000000	2160.30	186.52
2	FID	ACIS-S-5	7.25	3172	-0.112	-0.000	0.007	0.011	0.000000	0.000000	-1805.37	180.69
3	GUIDE	525732528	9.36	3171	0.014	0.060	0.085	0.135	351.607241	59.298932	-654.23	-2087.42
4	GUIDE	525732896	9.65	3172	-0.031	0.133	0.108	0.172	351.456486	59.410070	-243.16	-2347.69
5	GUIDE	525610728	9.96	3168	-0.025	0.062	0.147	0.226	349.709414	59.172903	2406.12	-341.25
6	GUIDE	525731640	9.90	3167	0.036	-0.256	0.103	0.168	350.518982	58.216636	-280.03	2290.42
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

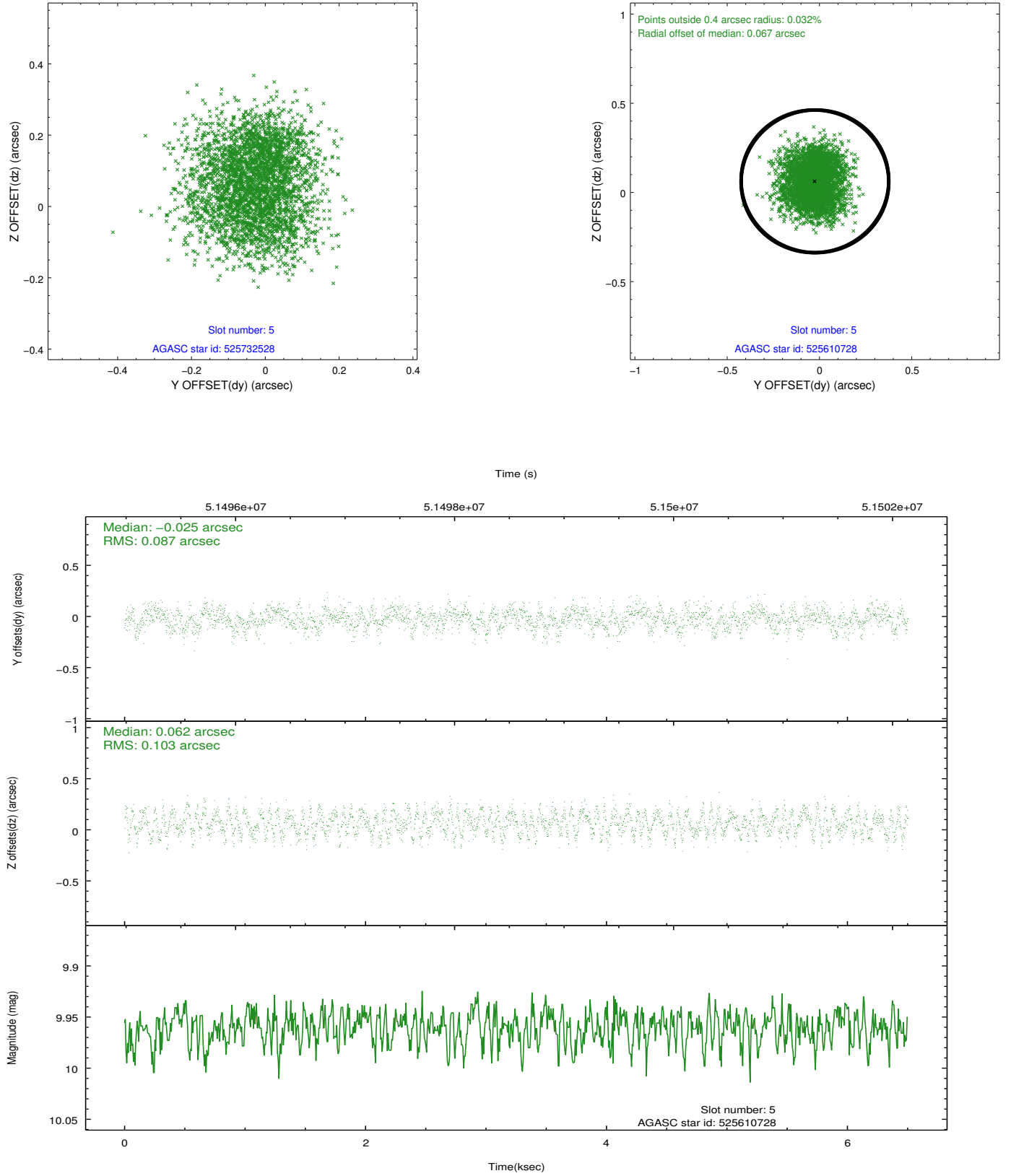
2.4.1 Slot 3



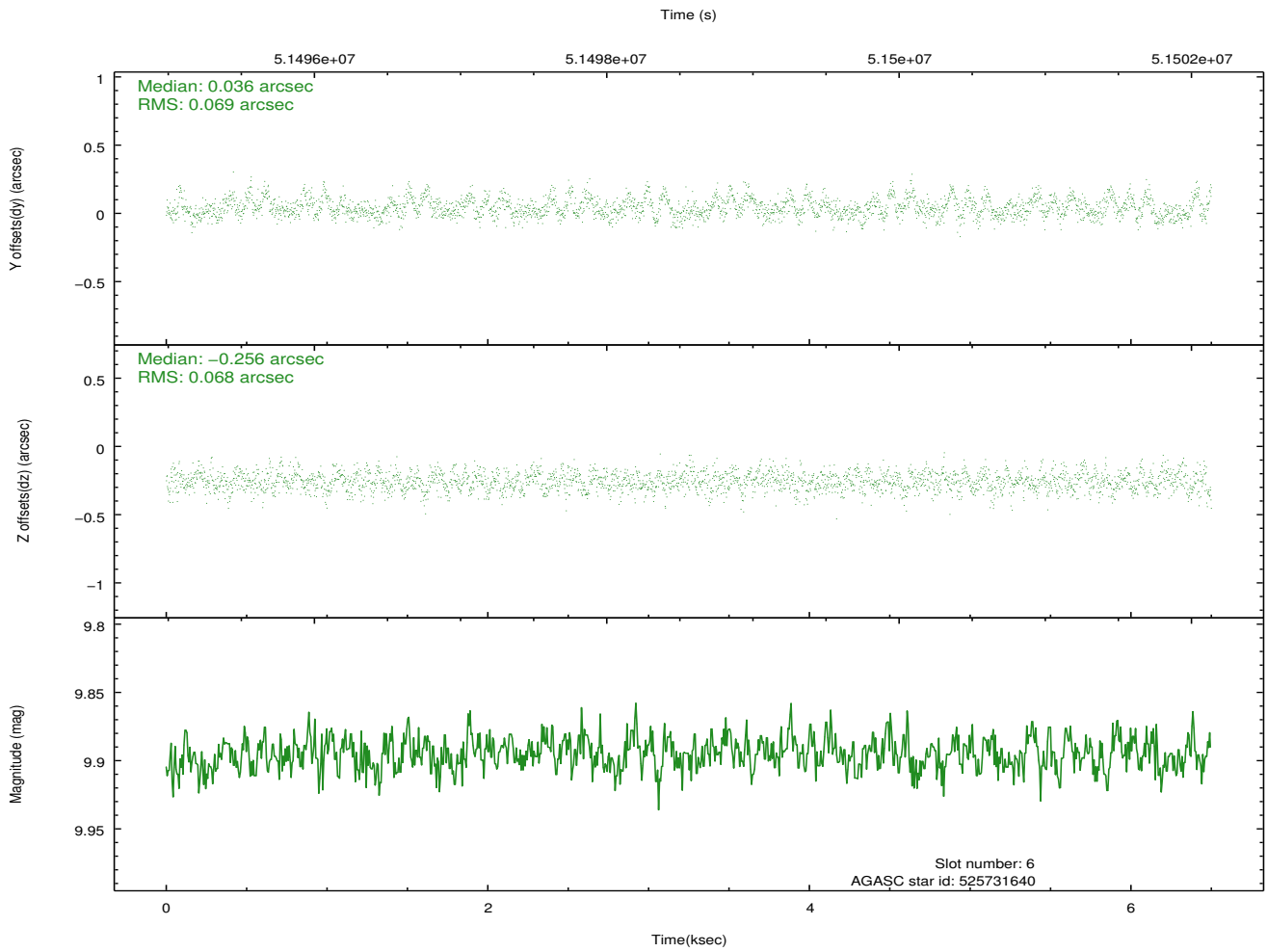
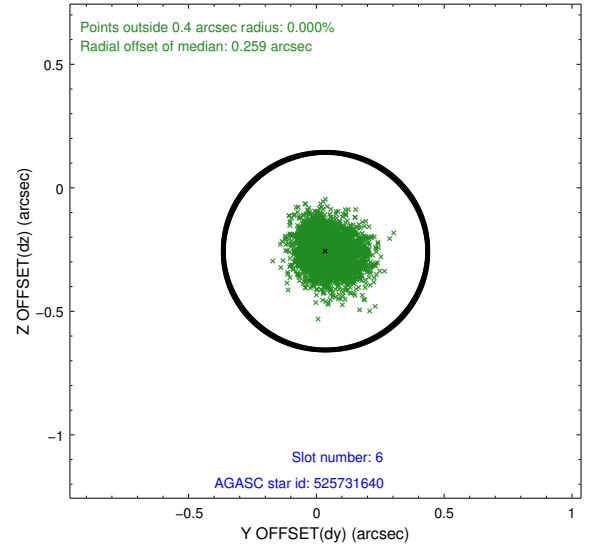
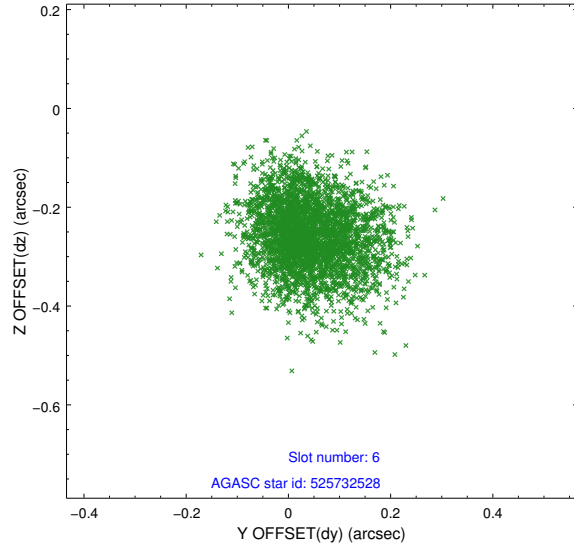
2.4.2 Slot 4



2.4.3 Slot 5

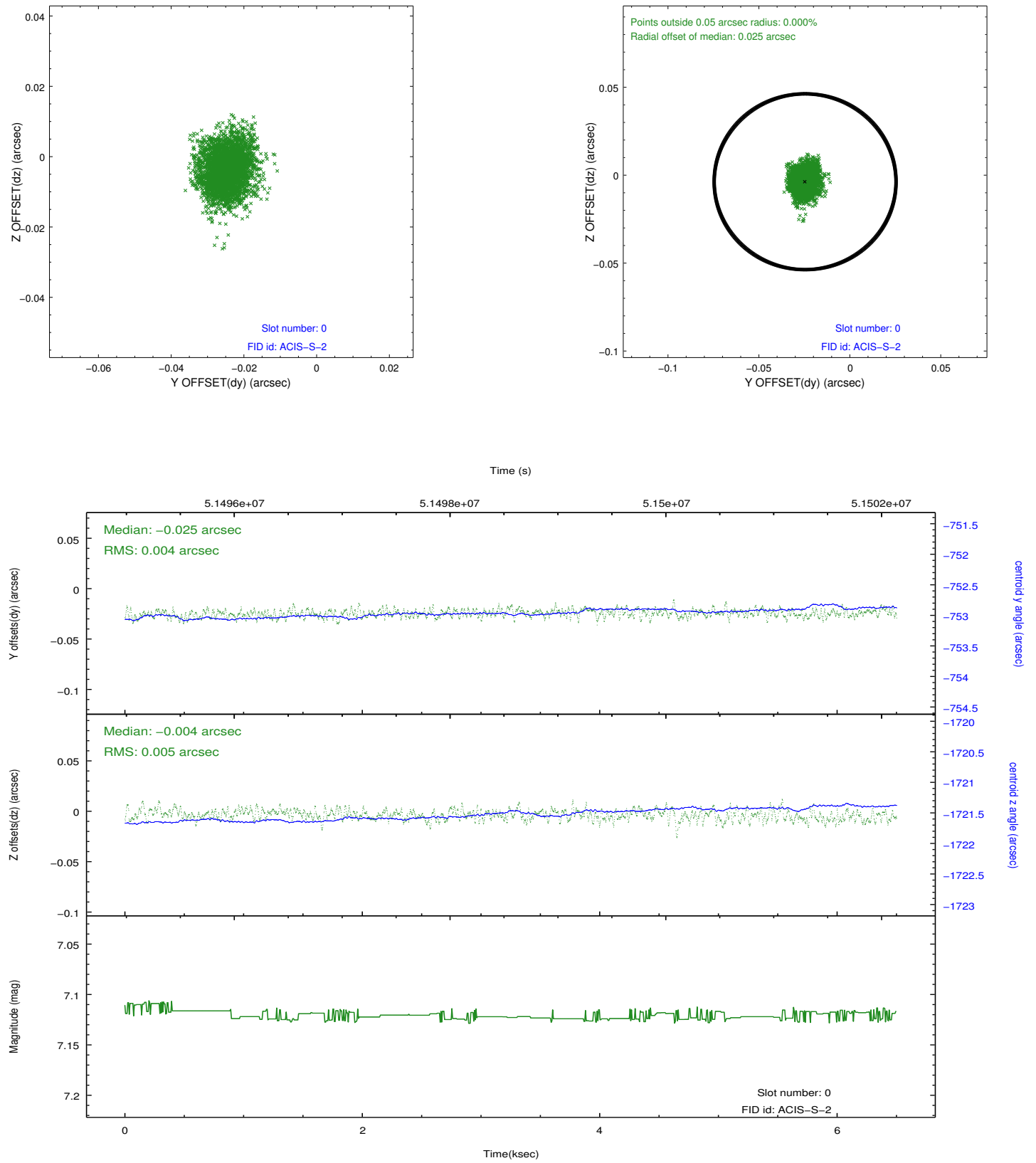


2.4.4 Slot 6

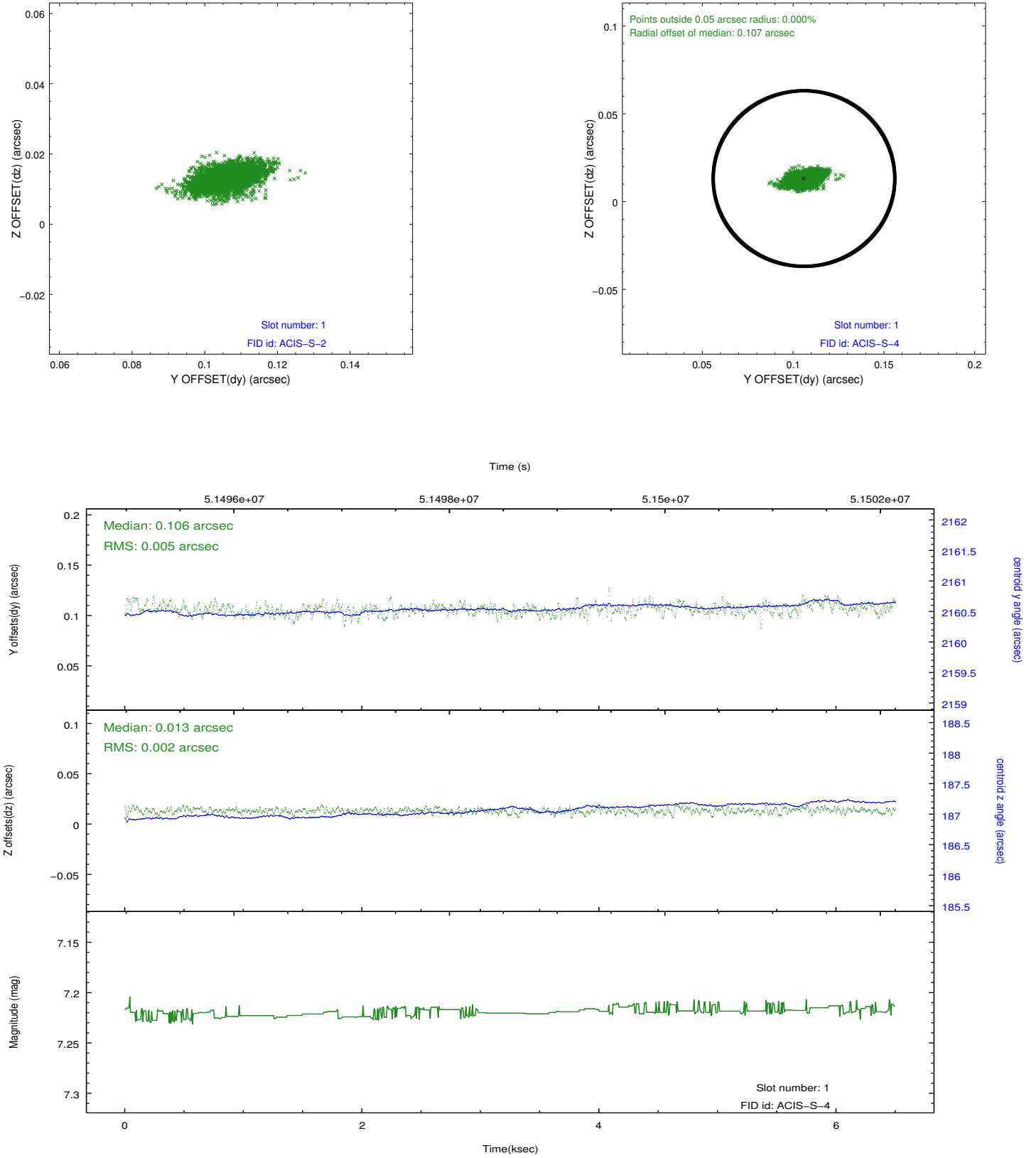


2.5 FID Slots

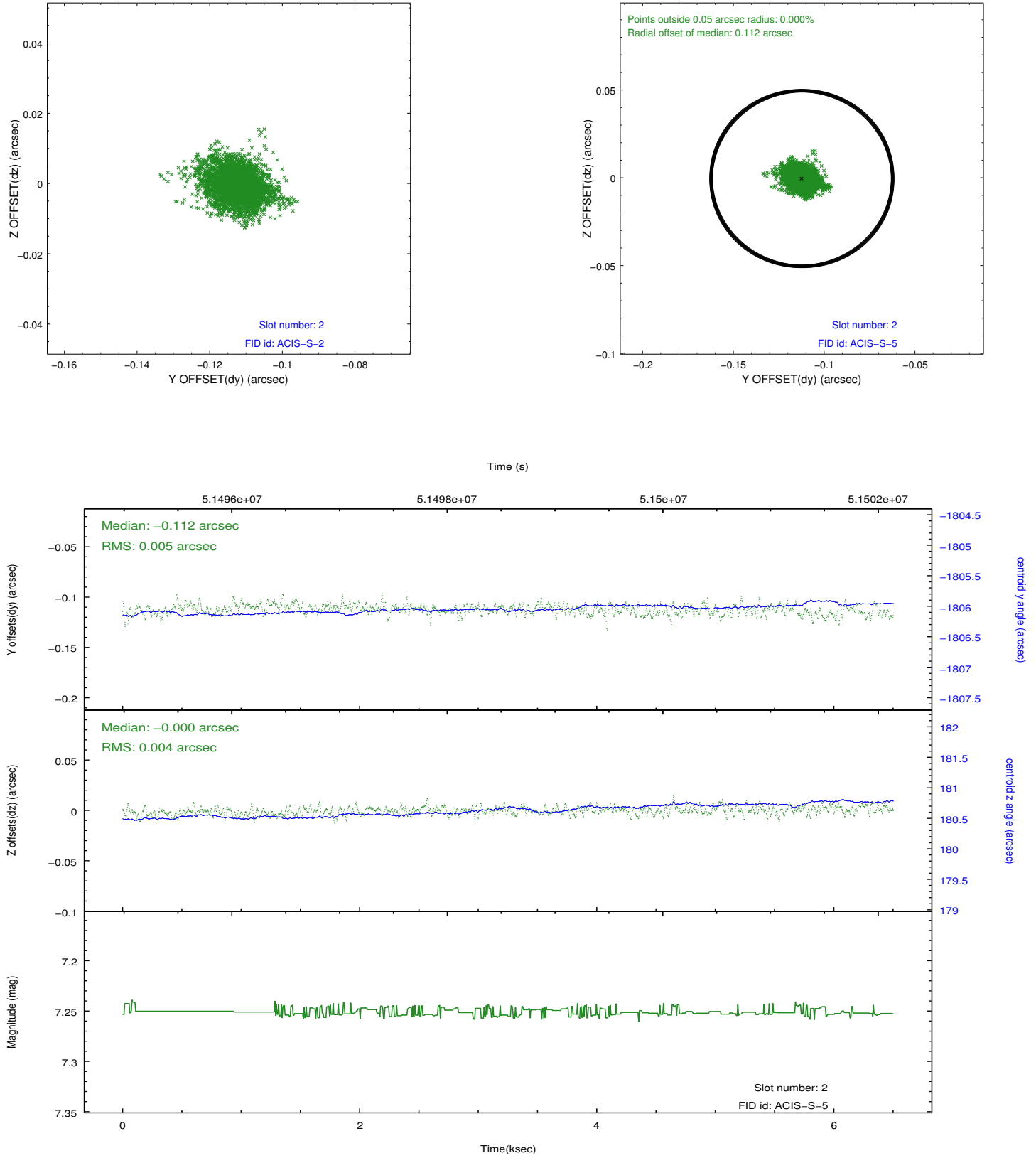
2.5.1 Slot 0



2.5.2 Slot 1

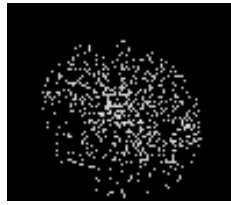


2.5.3 Slot 2



3 Point Sources

5.05 arcmin



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.04.01
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	2.804

A.2 Comments

Chandra FIRST LIGHT. ACIS effective area measurement using Cas A on chip S3. Only chip S3 contains data.

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Slot 7 was not utilized in this observation.

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Pileup throughout this observation.

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The focal plane temperature is approximately -100 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.