

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 219 - L2 Version 4

Chandra X-Ray Center

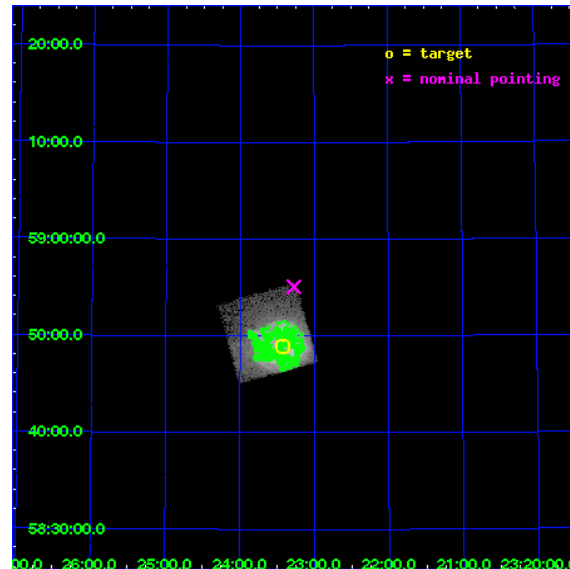
L2 Processing Date : Dec 17 2009

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1 Front

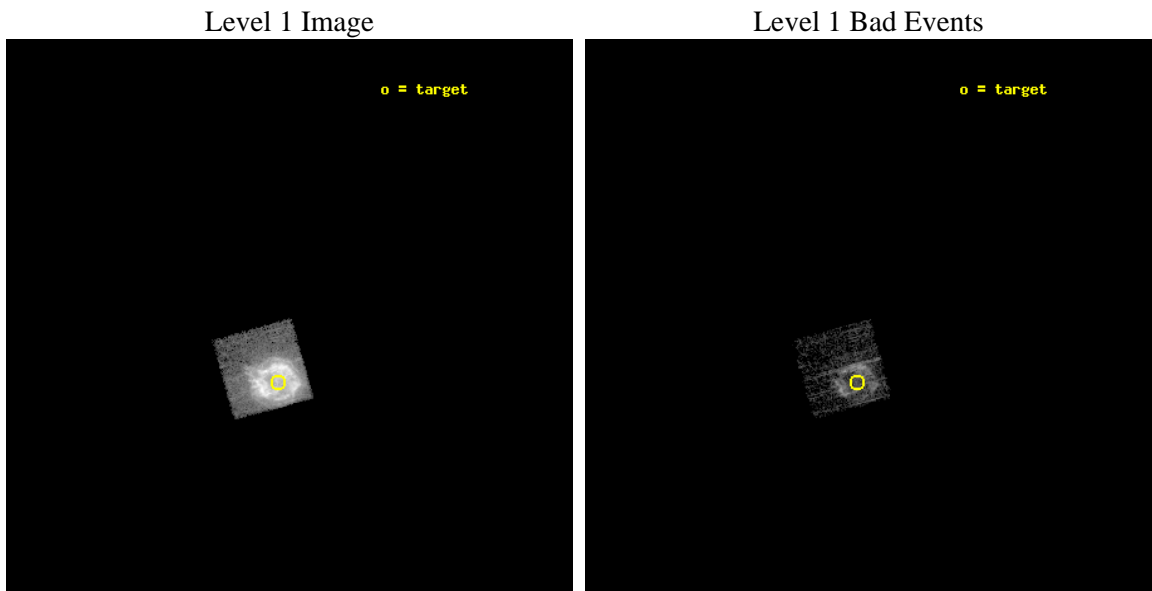
seq_num	590087	Sequence number
obs_id	219	Observation id
title	ACIS CHIP RESPONSE TO CAS A, JAN. 99	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAS A [Chip I3, T=100, Offsets=-2,5,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA
dec_targ	58.814833	Observer's specified target Dec
ra_nom	350.81854195305	Nominal RA
dec_nom	58.917969364438	Nominal Dec
roll_nom	164.64338884805	Nominal Roll
revision	4	Processing version of data
ontime	1399.1727556363	Sum of GTIs [s]
livetime	1381.4555877237	Livetime [s]
ontime0	1759.0422995463	Sum of GTIs [s]
ontime1	1759.0012595505	Sum of GTIs [s]
ontime2	1758.9602195472	Sum of GTIs [s]
ontime3	1399.1727556363	Sum of GTIs [s]
ontime6	1758.878139548	Sum of GTIs [s]
ontime7	1759.0833395496	Sum of GTIs [s]
l2events	307329	Number of level 2 events



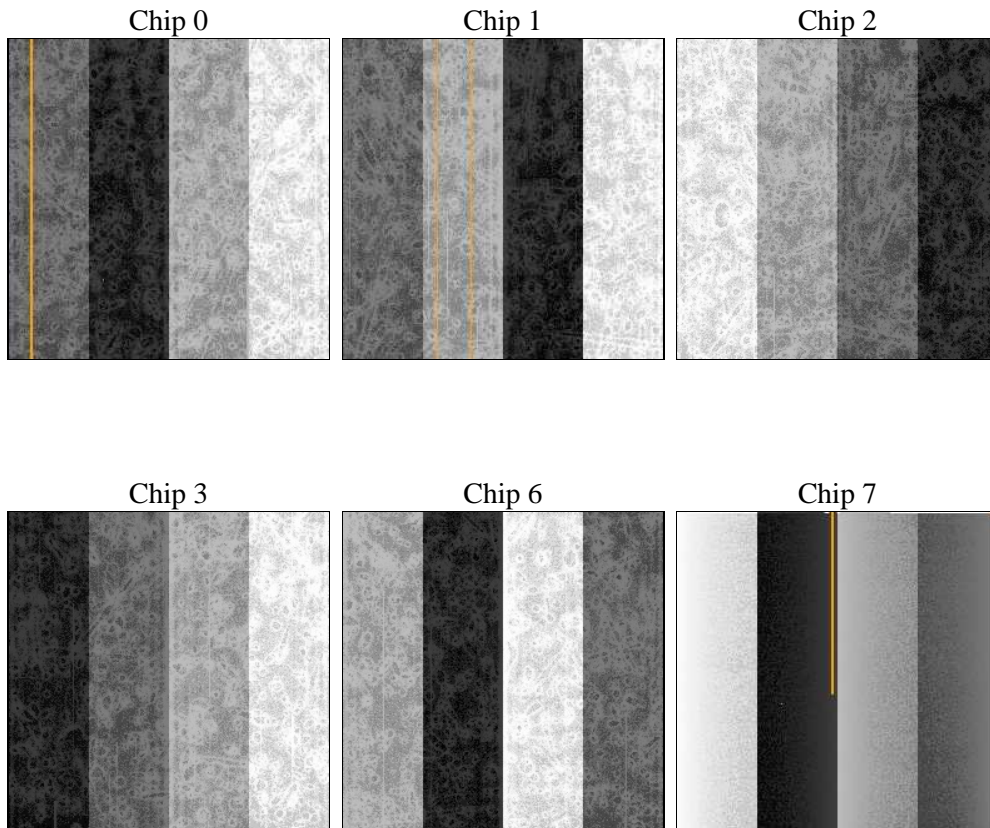
2 OBI

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	8.1.2	ASCDS version number	ontime	1399.1727556363	Sum of GTIs [s]
caldsver	4.1.4	 	ontime0	1759.0422995463	Sum of GTIs [s]
date	2009-12-17T10:09:26	Date and time of file creation	ontime1	1759.0012595505	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	1758.9602195472	Sum of GTIs [s]
			ontime3	1399.1727556363	Sum of GTIs [s]
			ontime6	1758.878139548	Sum of GTIs [s]
			ontime7	1759.0833395496	Sum of GTIs [s]
			l1events	337326	Number of level 1 events

2.1.4 Events

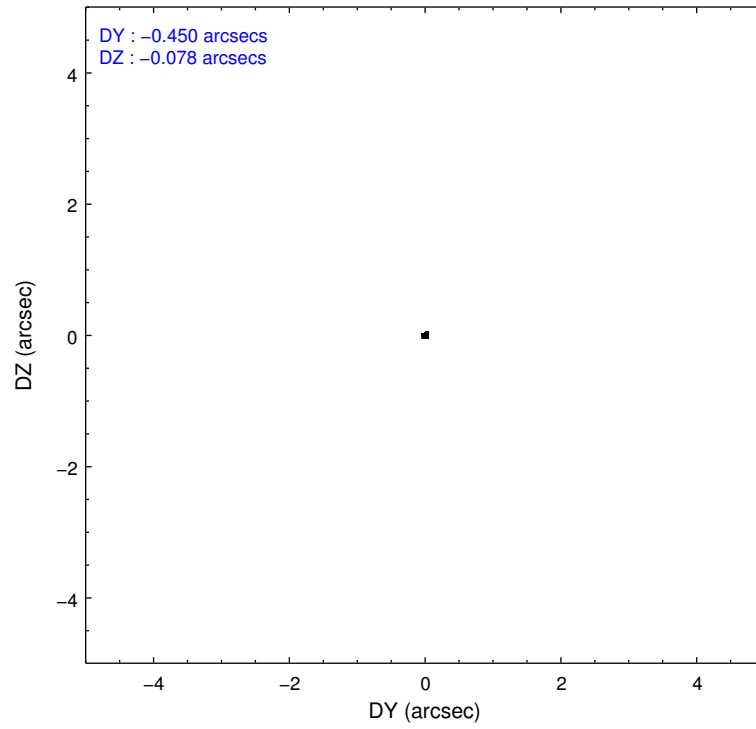
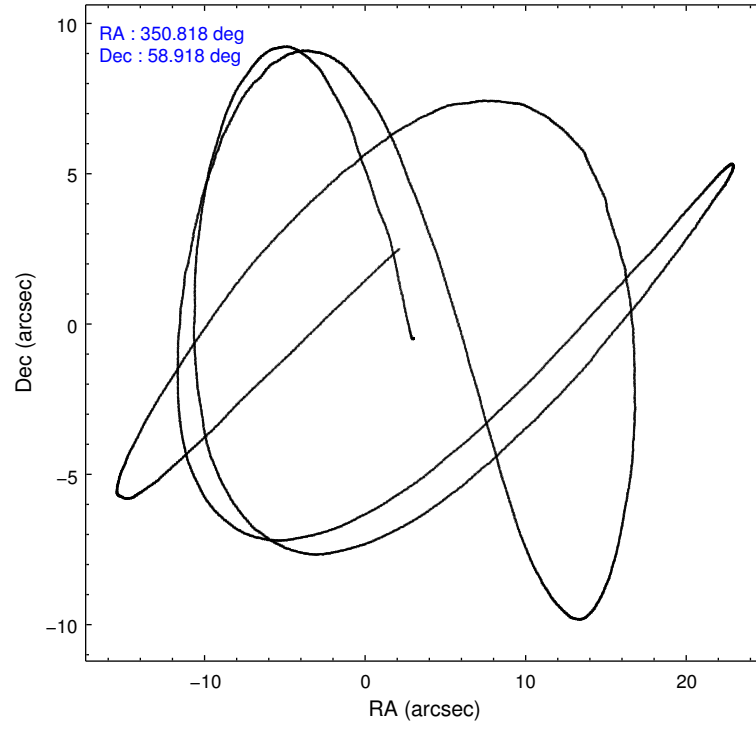
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	0	0	0	337326	0	0
rejected events	0	0	0	27607	0	0
rejected %	0%	0%	0%	8%	0%	0%

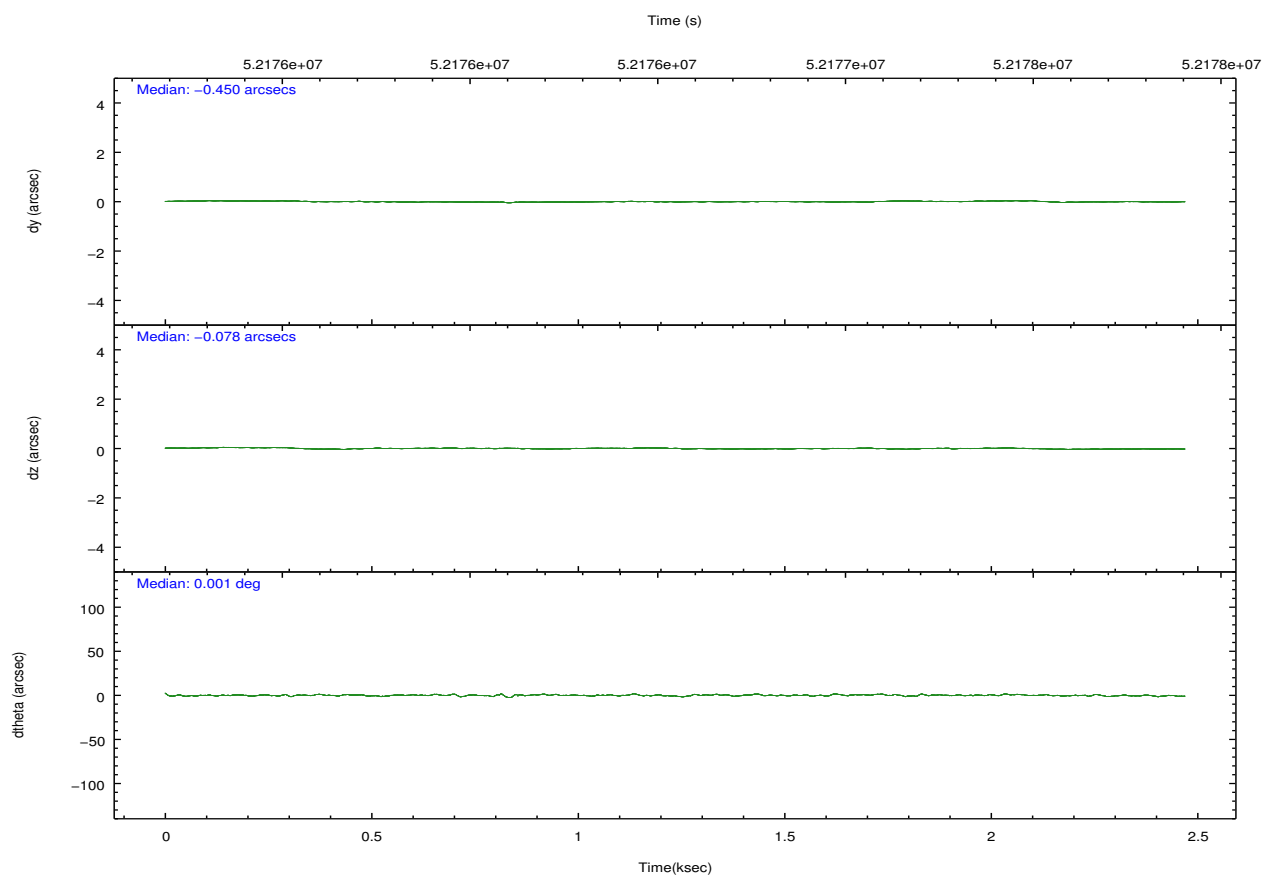
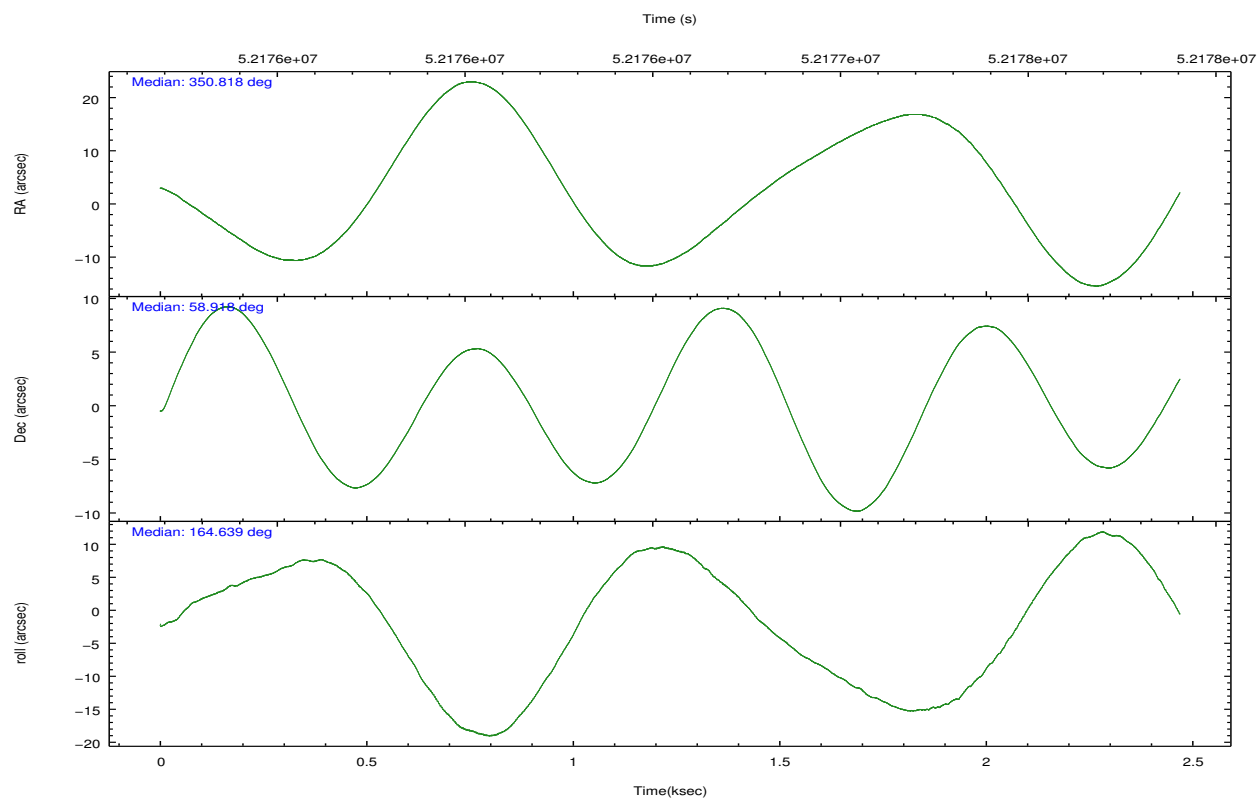
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	0	0	0	243424	0	0
	0%	0%	0%	72%	0%	0%
grade 1 events	0	0	0	4007	0	0
	0%	0%	0%	1%	0%	0%
grade 2 events	0	0	0	37817	0	0
	0%	0%	0%	11%	0%	0%
grade 3 events	0	0	0	10432	0	0
	0%	0%	0%	3%	0%	0%
grade 4 events	0	0	0	10600	0	0
	0%	0%	0%	3%	0%	0%
grade 5 events	0	0	0	2650	0	0
	0%	0%	0%	0%	0%	0%
grade 6 events	0	0	0	8164	0	0
	0%	0%	0%	2%	0%	0%
grade 7 events	0	0	0	20232	0	0
	0%	0%	0%	5%	0%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-3	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	Y
Observation mode	POINTING	POINTING	CCD I1 on	N	Y
Pointing RA	350.871731	350.8185419530454	CCD I2 on	N	Y
Pointing Dec	58.924221	58.91796936443752	CCD I3 on	Y	Y
Pointing Roll	164.389156	164.6433888480499	CCD S0 on	N	N
Window start time	49852864.184000	49852864.184000	CCD S1 on	N	N
Window stop time	55036864.184000	55036864.184000	CCD S2 on	N	Y
SIM focus pos (mm)	-0.782348	-0.7809083437167272	CCD S3 on	N	Y
SIM defocus (mm)	0	0.001439871863259334	CCD S4 on	N	N
SIM translation stage pos (mm)	-233.592463	-233.5874344608287	CCD S5 on	N	N
SIM translation stage offset (mm)	0	-0.005018542100998502	Number of optional ACIS chips dropped	0	0
Observation start time	52175781.184000	52175115.399531	On-chip summing requested	N	N
Observation start date	1999-08-27T21:15:17	1999-08-27T21:05:15	Subarray requested	NONE	NONE
Observation end time	52177781.184000	52178823.849665	Alternating exposures requested	N	N
Observation end date	1999-08-27T21:48:37	1999-08-27T22:07:03	Primary exposure time	0.000000	3.2
Read mode	TIMED	TIMED			

2.3 Aspect



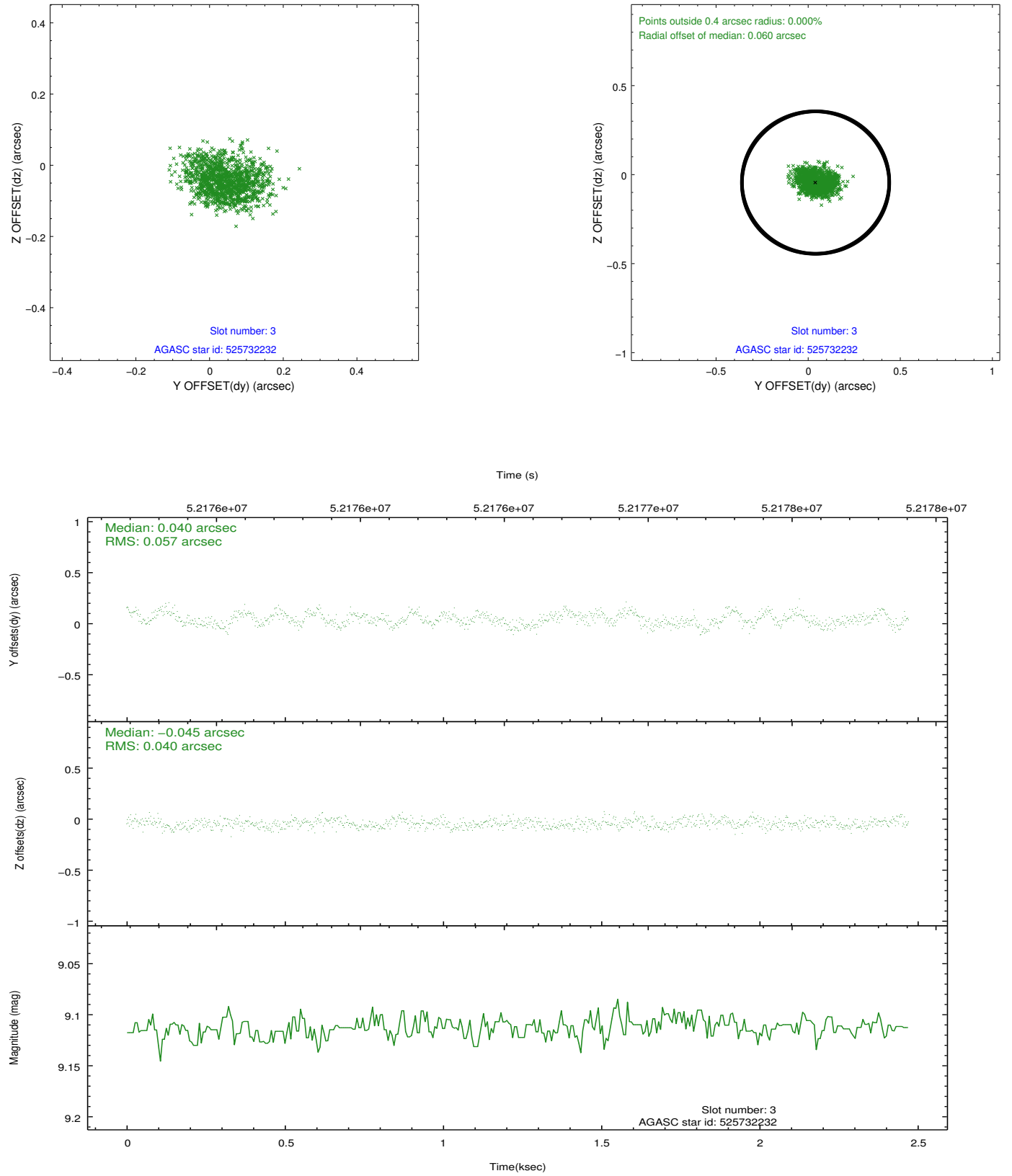


Slot Statistics

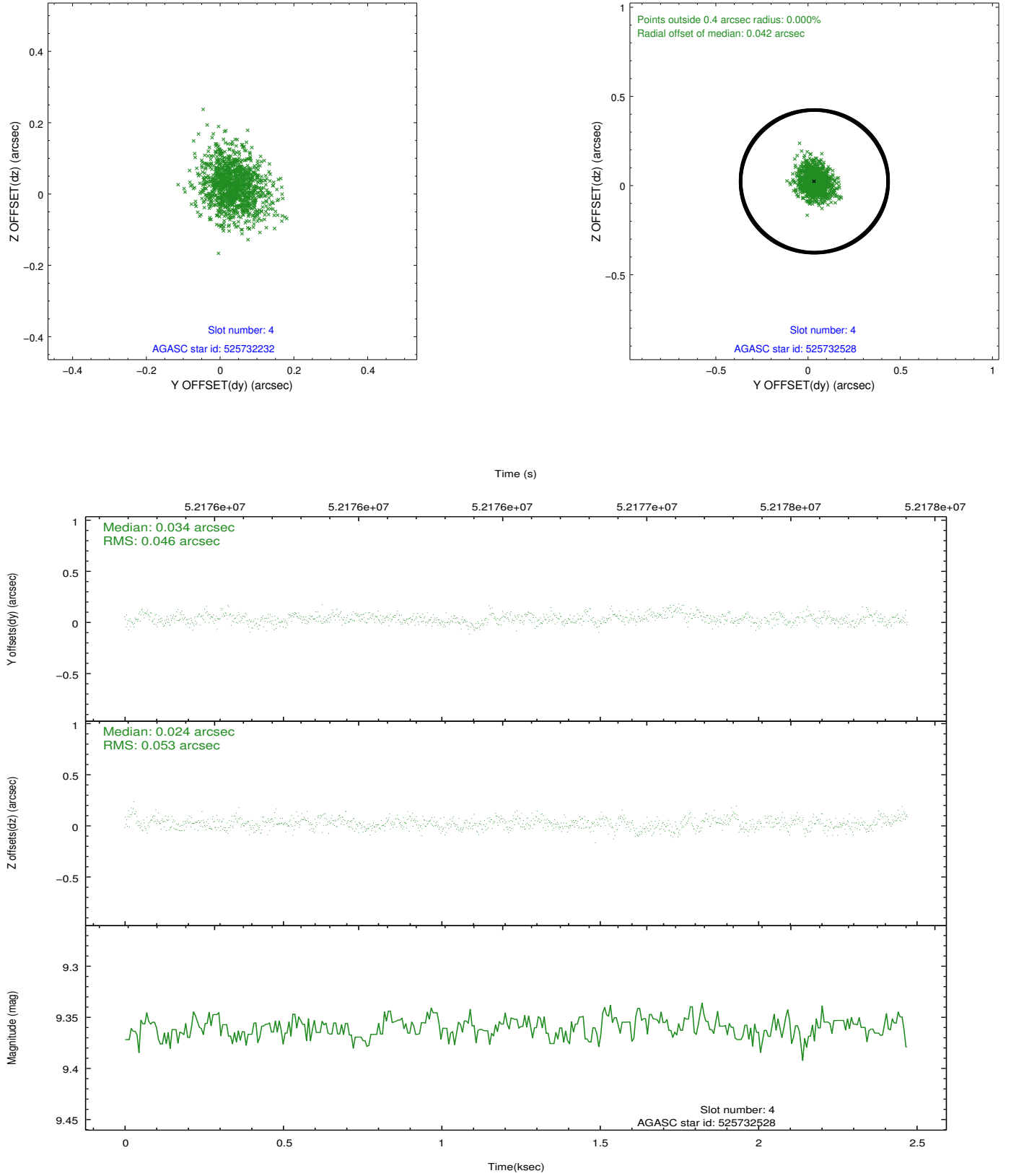
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	1206	-0.030	0.057	0.010	0.018	0.000000	0.000000	-753.91	-829.39
1	FID	ACIS-I-4	7.24	1206	0.136	0.011	0.008	0.014	0.000000	0.000000	2159.86	1075.97
2	FID	ACIS-I-5	7.23	1206	-0.207	0.001	0.009	0.015	0.000000	0.000000	-1806.22	1075.43
3	GUIDE	525732232	9.11	1206	0.040	-0.045	0.075	0.120	351.669550	58.757012	-1594.82	170.57
4	GUIDE	525732528	9.36	1201	0.034	0.024	0.072	0.122	351.607241	59.298932	-938.74	-1669.66
5	GUIDE	525606576	9.45	1205	-0.108	-0.001	0.101	0.162	349.543555	58.678895	2161.12	1494.96
6	GUIDE	525734296	9.50	1204	0.147	-0.029	0.096	0.155	351.276372	58.418153	-1223.23	1548.67
7	GUIDE	525601208	9.22	1205	-0.123	0.049	0.097	0.153	349.910779	59.483724	2235.67	-1477.48

2.4 Star Slots

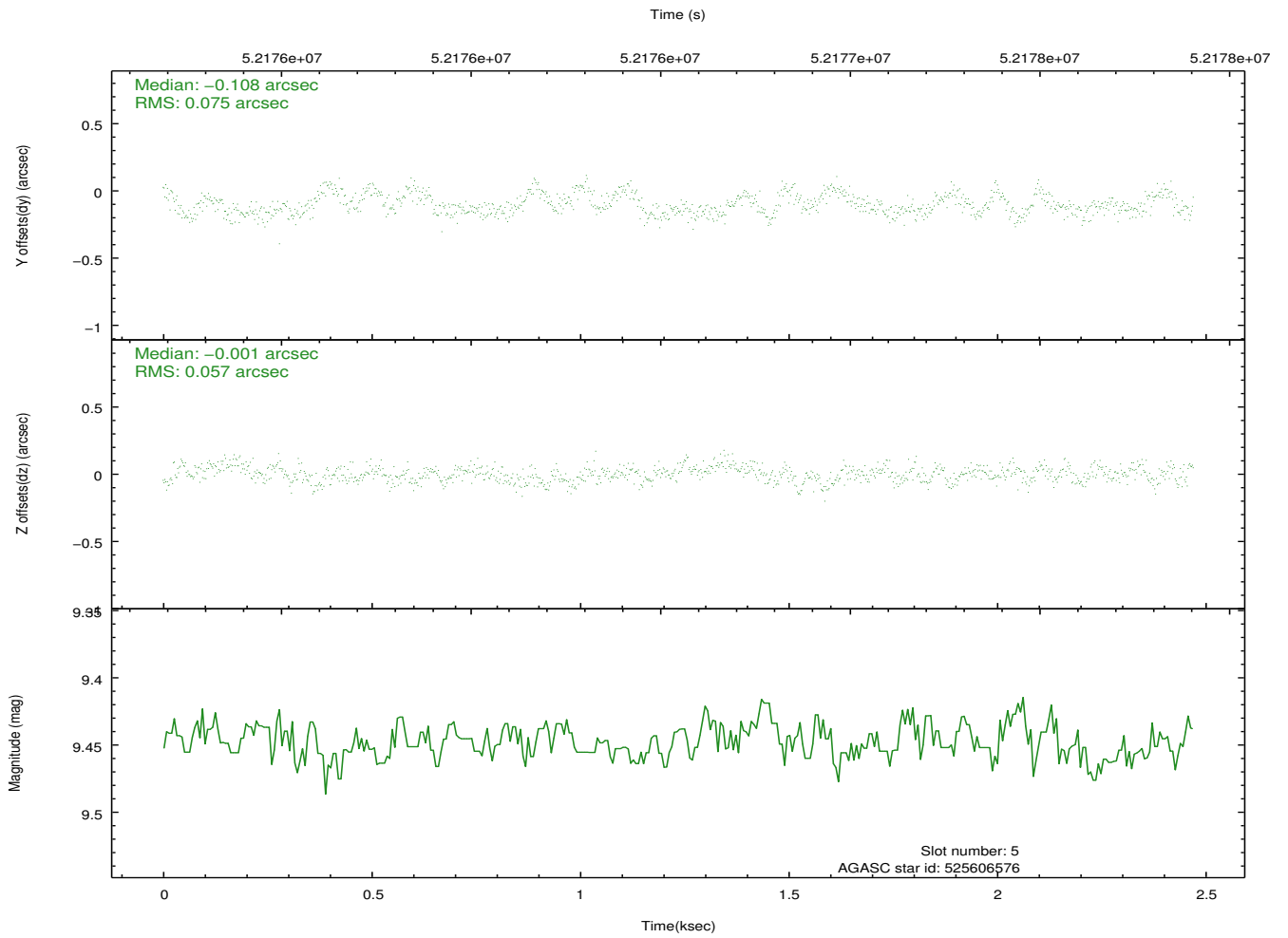
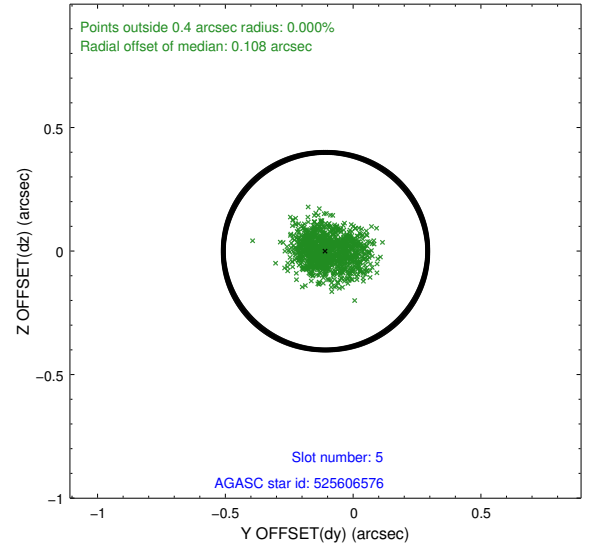
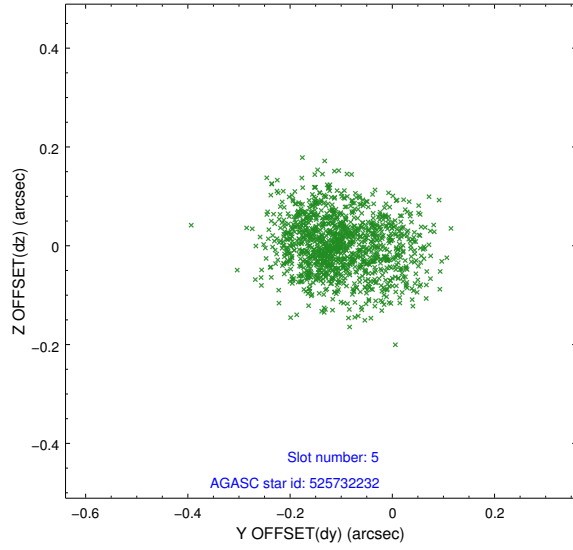
2.4.1 Slot 3



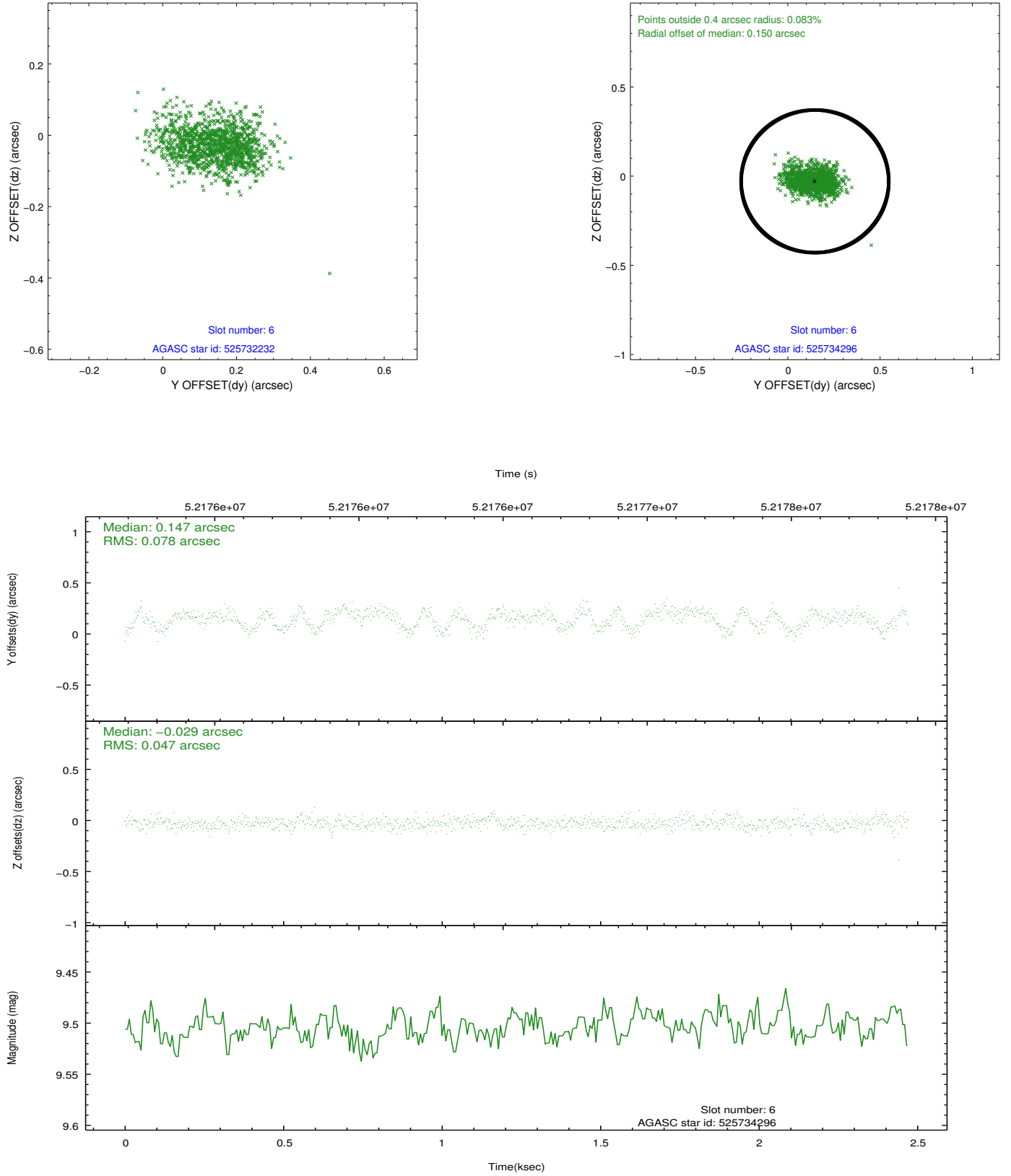
2.4.2 Slot 4



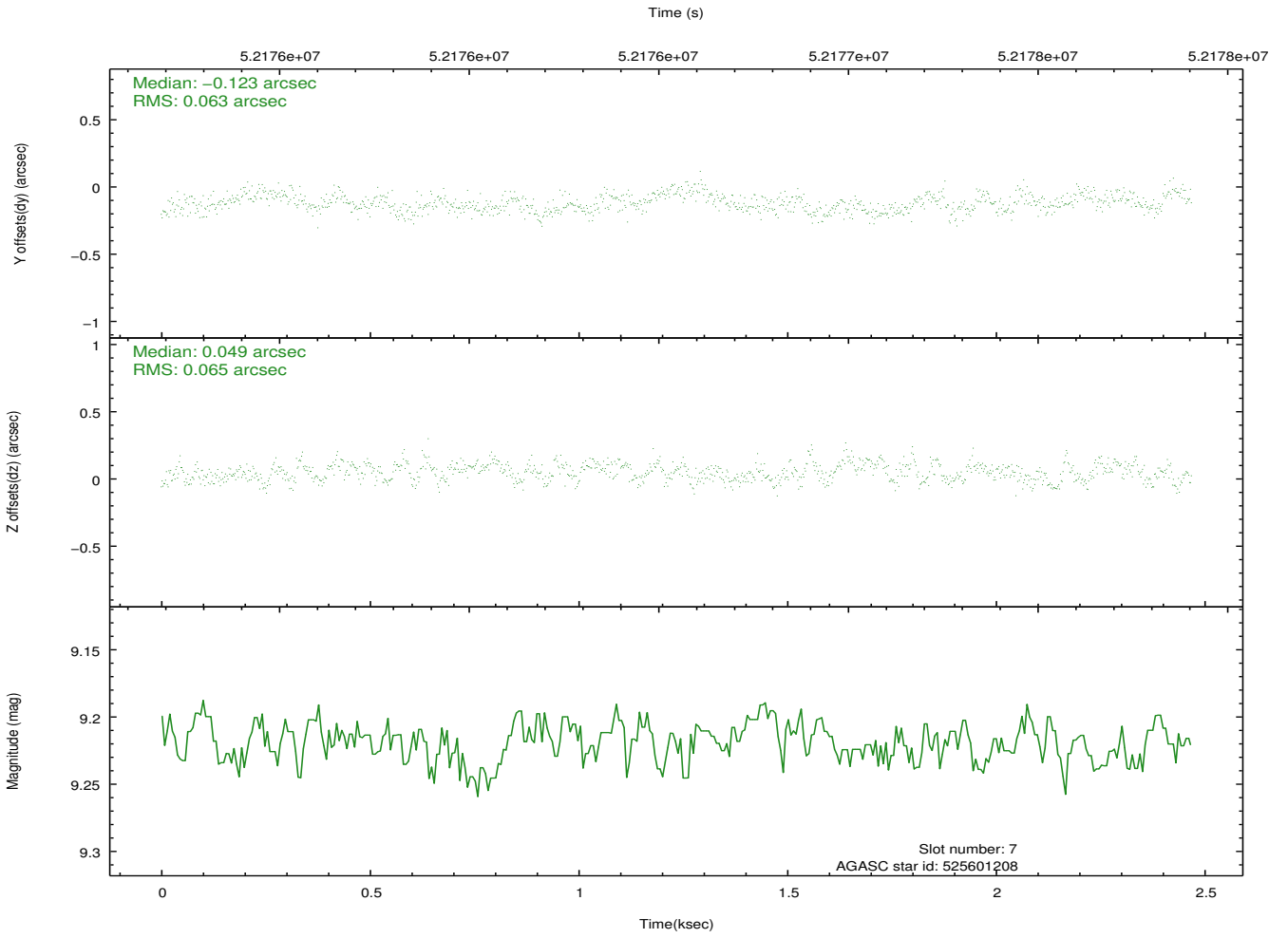
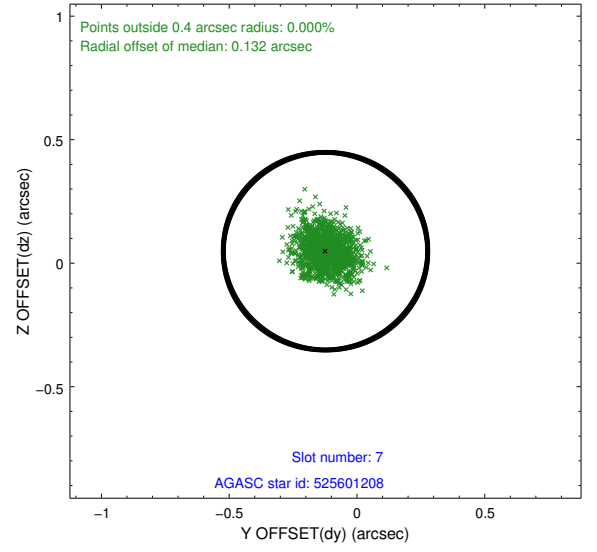
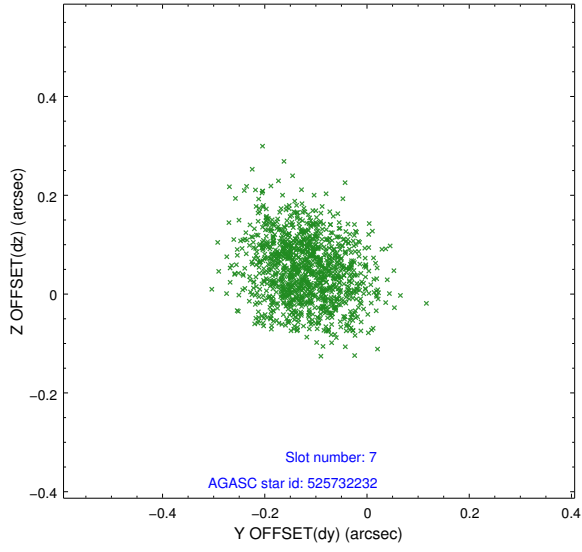
2.4.3 Slot 5



2.4.4 Slot 6

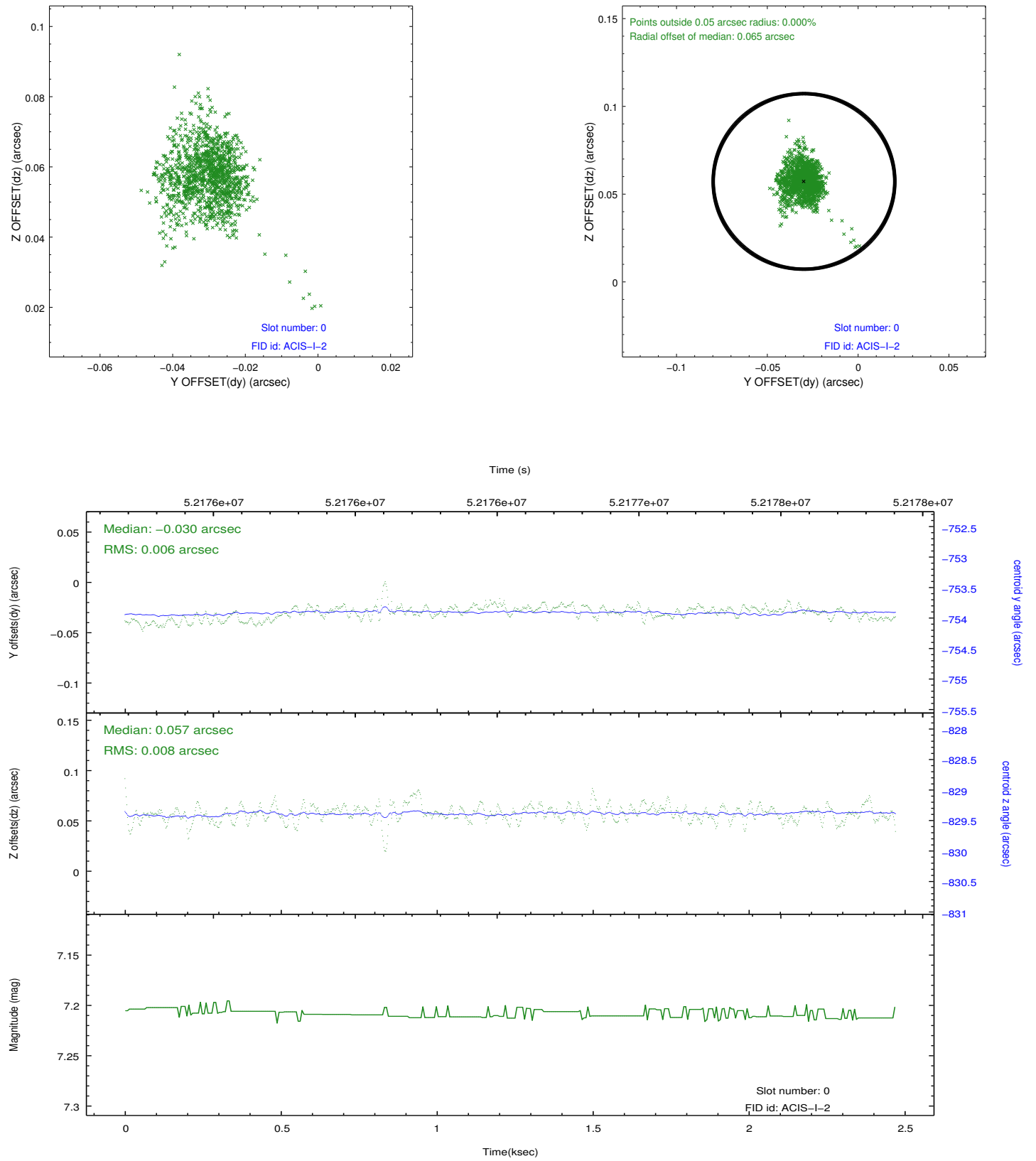


2.4.5 Slot 7

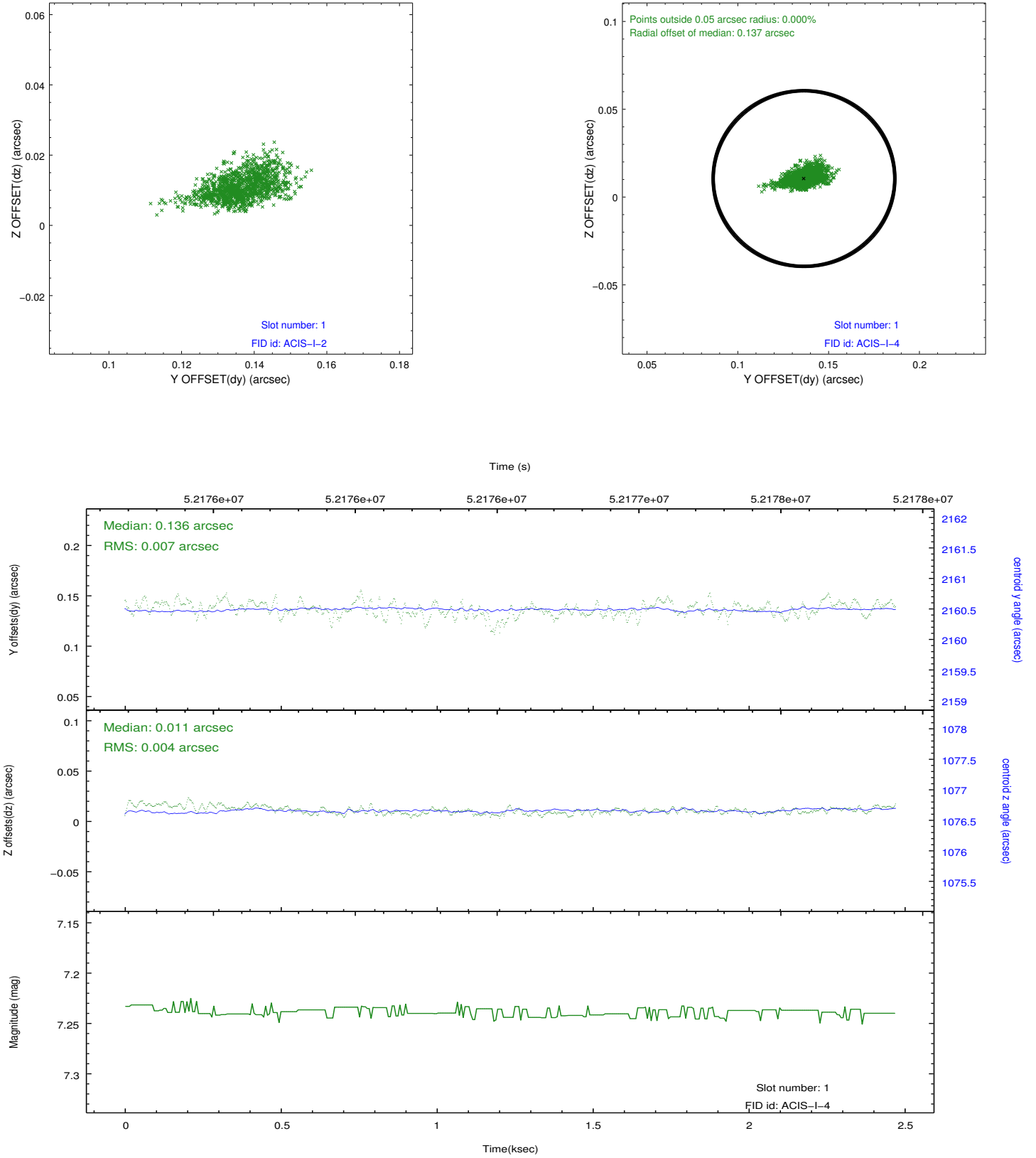


2.5 FID Slots

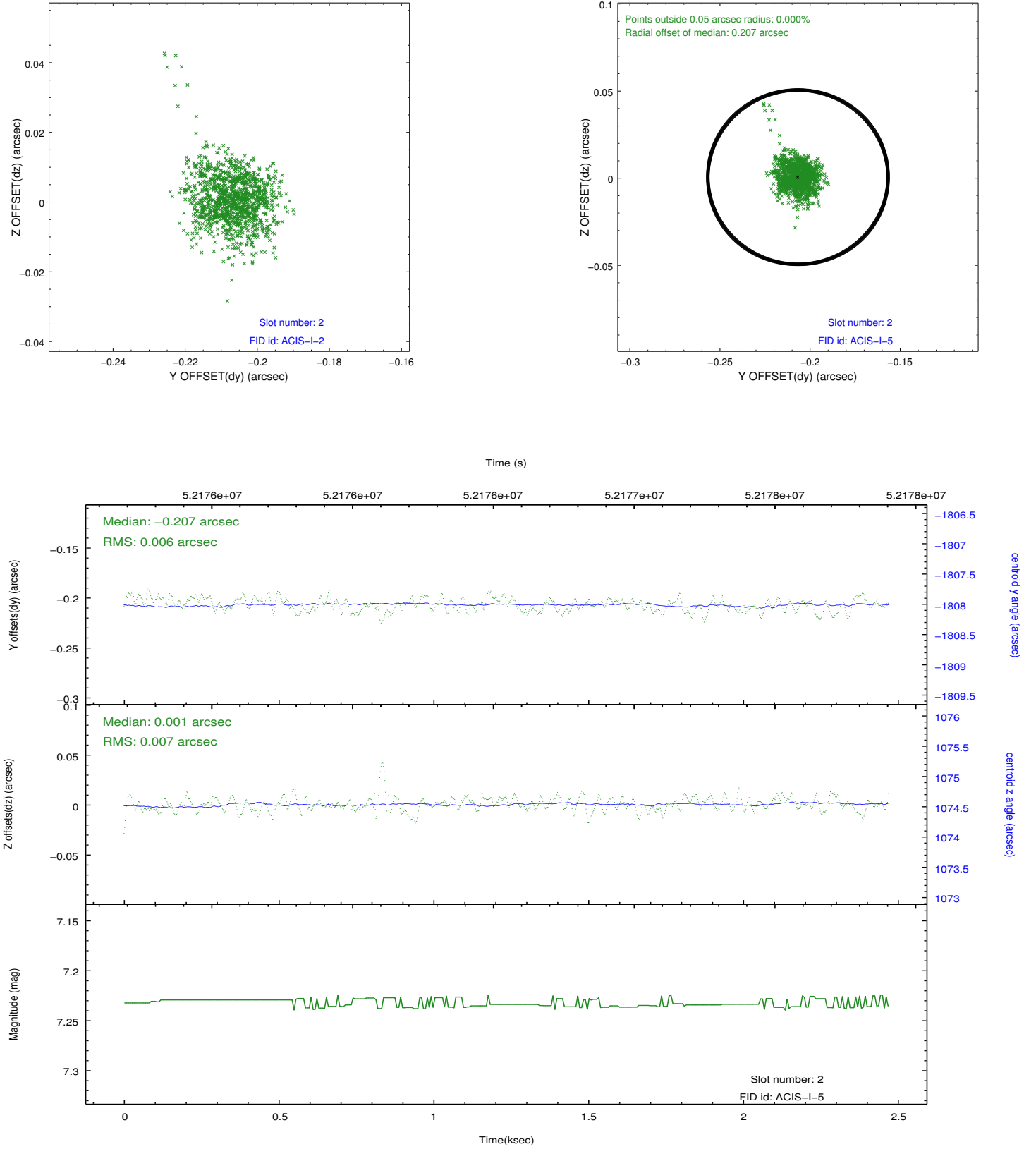
2.5.1 Slot 0



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)	2010.04.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.404

A.2 Comments

Off-axis ACIS effective area measurement using Cas A on chip I3. Only events from chip I3 were telemetered.

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Charge time for this ObsId remains at original value of 1.404 ksec, although with the current processing the charge time would have been 1.399 ksec.

===

Pileup throughout most of the observations.

===

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.