

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1447 - L2 Version 4

Chandra X-Ray Center

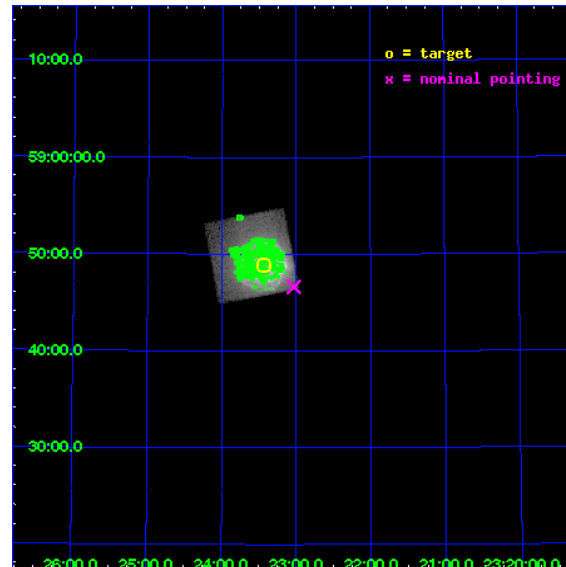
L2 Processing Date : Nov 24 2009

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1 Front

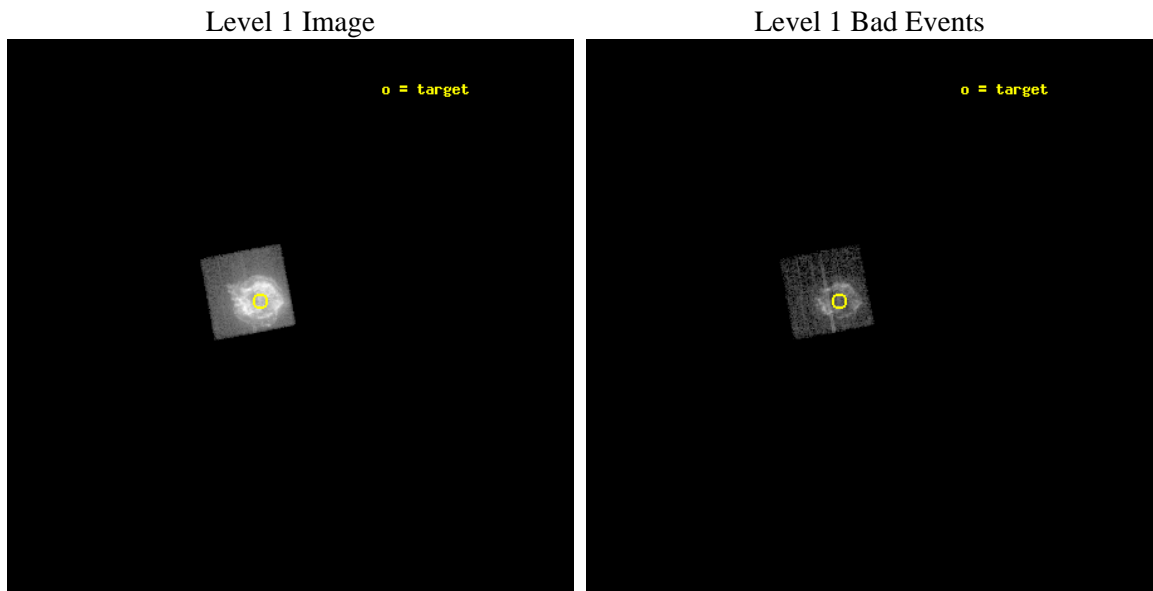
seq_num	580397	Sequence number
obs_id	1447	Observation id
title	ACIS CHIP RESPONSE TO CAS A, JAN. 99	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAS A [Chip I3, T=110, Offsets=-2,2,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA
dec_targ	58.814833	Observer's specified target Dec
ra_nom	350.75790336612	Nominal RA
dec_nom	58.777182403398	Nominal Dec
roll_nom	259.53229514365	Nominal Roll
revision	4	Processing version of data
ontime	3748.5074400604	Sum of GTIs [s]
livetime	3701.0415817741	Livetime [s]
ontime0	5038.5322273821	Sum of GTIs [s]
ontime1	5038.4911873862	Sum of GTIs [s]
ontime2	5038.4501473829	Sum of GTIs [s]
ontime3	3748.5074400604	Sum of GTIs [s]
ontime6	5018.9221165702	Sum of GTIs [s]
ontime7	5038.5732673854	Sum of GTIs [s]
l2events	842750	Number of level 2 events



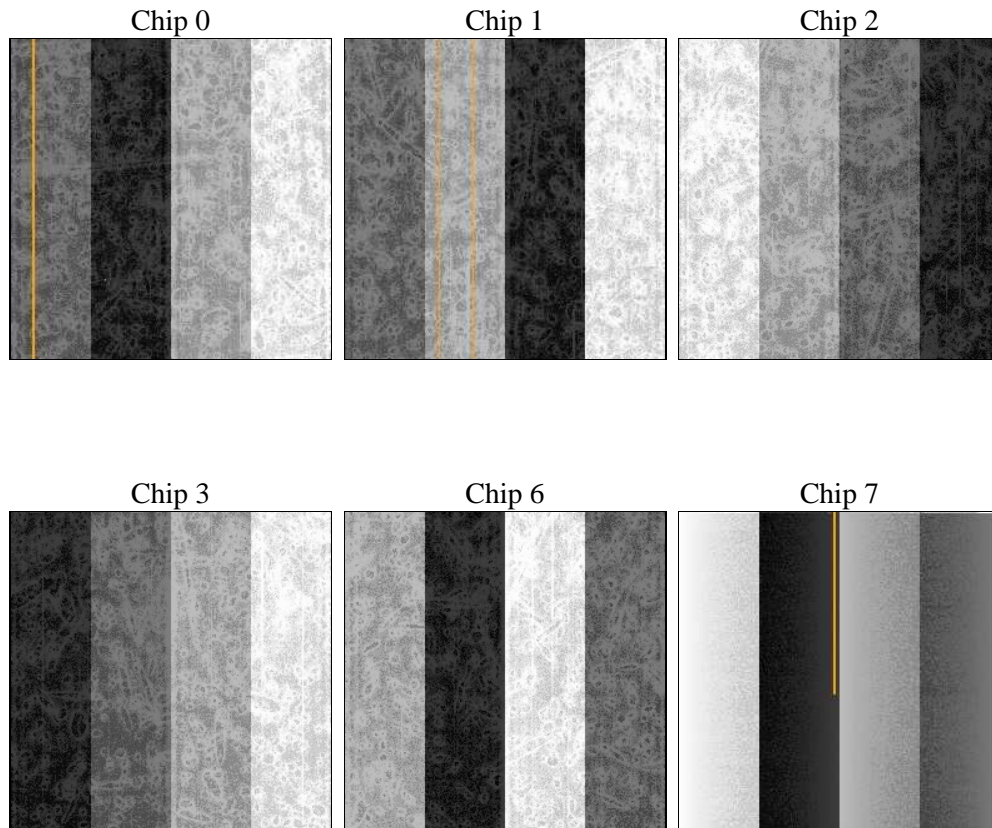
2 OBI

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	8.1.1	ASCDS version number	ontime	3748.5074400604	Sum of GTIs [s]
caldsver	4.1.4	 	ontime0	5038.5322273821	Sum of GTIs [s]
date	2009-11-24T13:06:28	Date and time of file creation	ontime1	5038.4911873862	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	5038.4501473829	Sum of GTIs [s]
			ontime3	3748.5074400604	Sum of GTIs [s]
			ontime6	5018.9221165702	Sum of GTIs [s]
			ontime7	5038.5732673854	Sum of GTIs [s]
			l1events	916185	Number of level 1 events

2.1.4 Events

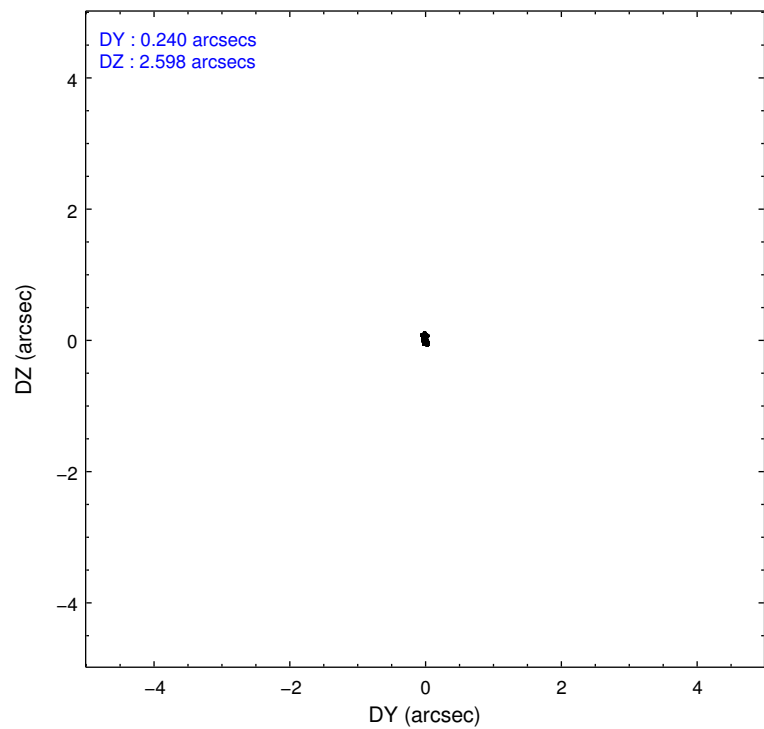
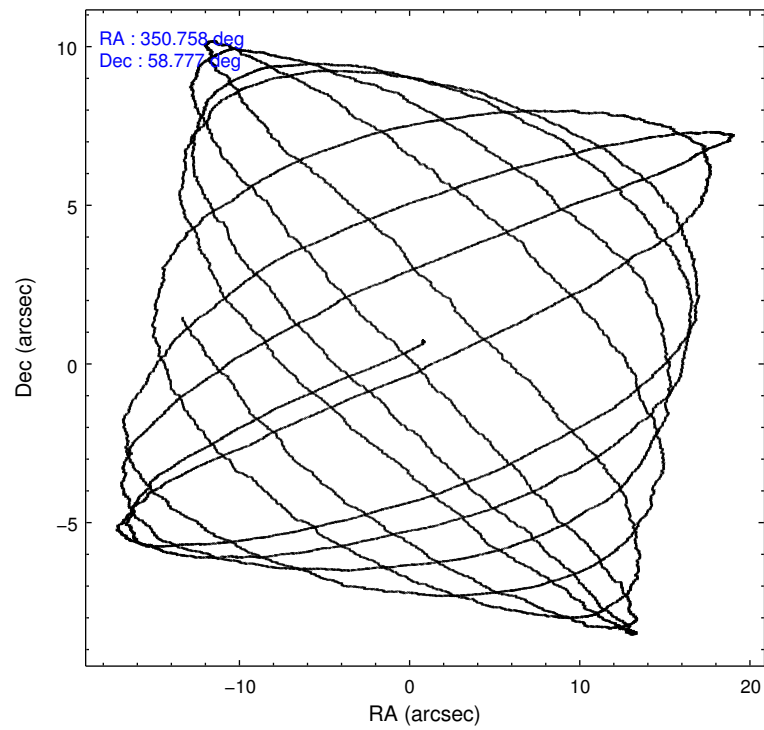
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	0	0	0	916185	0	0
rejected events	0	0	0	66702	0	0
rejected %	0%	0%	0%	7%	0%	0%

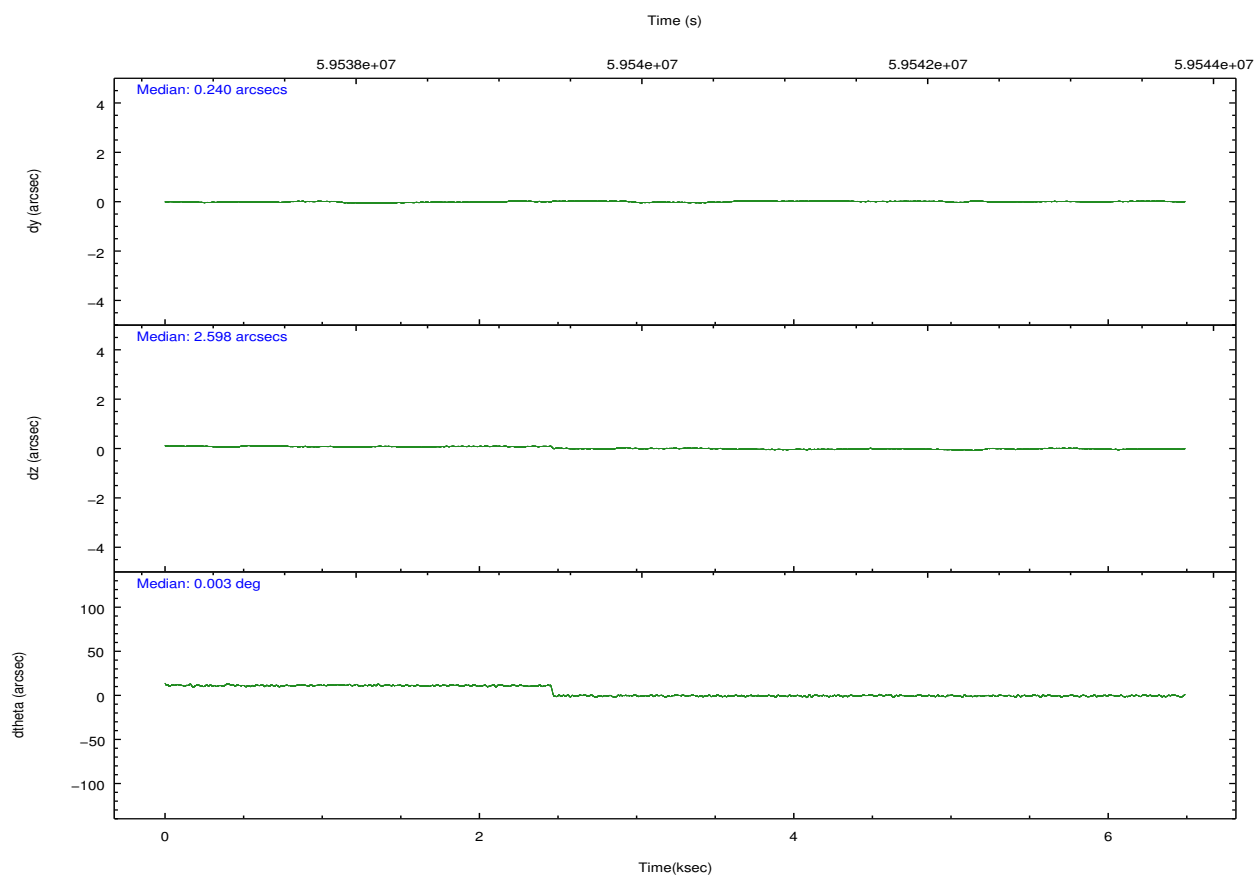
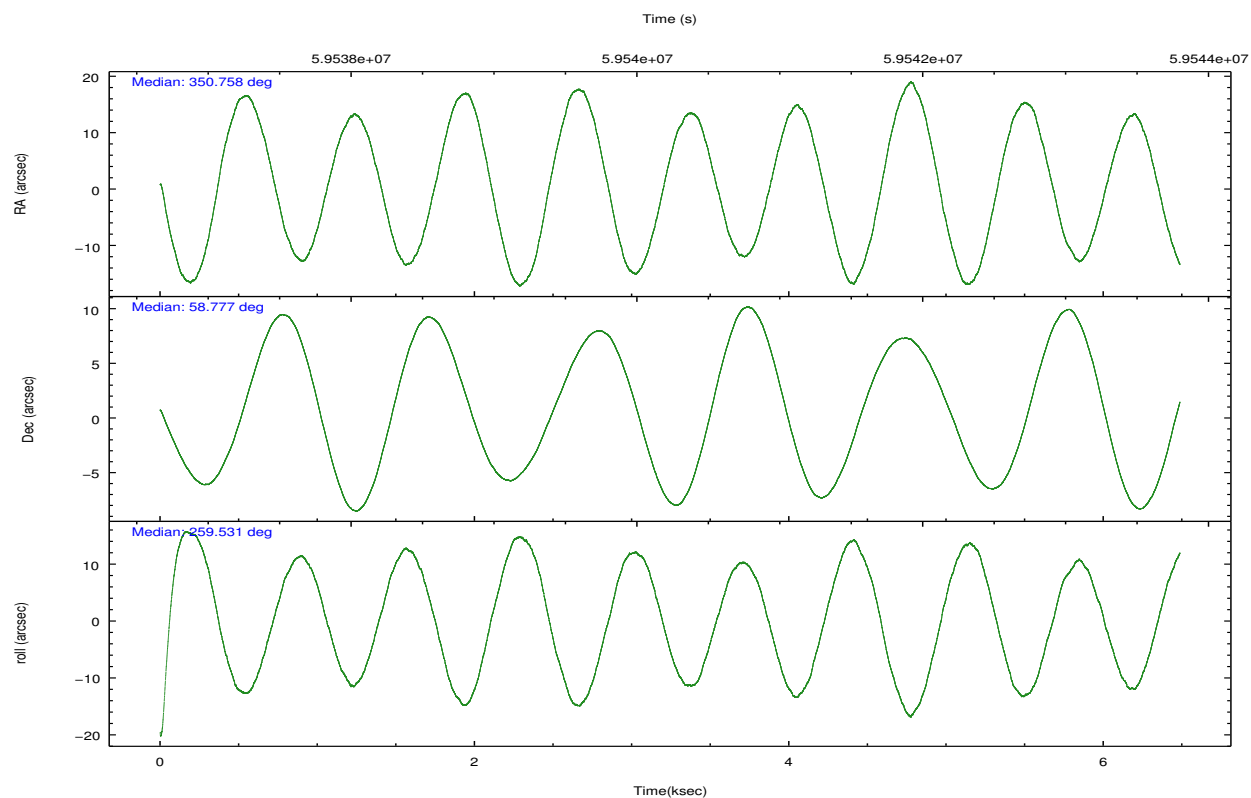
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	0	0	0	502107	0	0
	0%	0%	0%	54%	0%	0%
grade 1 events	0	0	0	7492	0	0
	0%	0%	0%	0%	0%	0%
grade 2 events	0	0	0	280234	0	0
	0%	0%	0%	30%	0%	0%
grade 3 events	0	0	0	18942	0	0
	0%	0%	0%	2%	0%	0%
grade 4 events	0	0	0	19224	0	0
	0%	0%	0%	2%	0%	0%
grade 5 events	0	0	0	9207	0	0
	0%	0%	0%	1%	0%	0%
grade 6 events	0	0	0	29692	0	0
	0%	0%	0%	3%	0%	0%
grade 7 events	0	0	0	49287	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-012367	ACIS-012367	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	350.740707	350.7579033661242	Subarray requested	NONE	NONE
Pointing Dec	58.803539	58.77718240339791	Alternating exposures requested	N	N
Pointing Roll	259.338312	259.5322951436457	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	59537477.184000	59536811.219944			
Observation start date	1999-11-21T02:10:13	1999-11-21T02:00:11			
Observation end time	59543477.184000	59544228.120212			
Observation end date	1999-11-21T03:50:13	1999-11-21T04:03:48			
Read mode	TIMED	TIMED			

2.3 Aspect



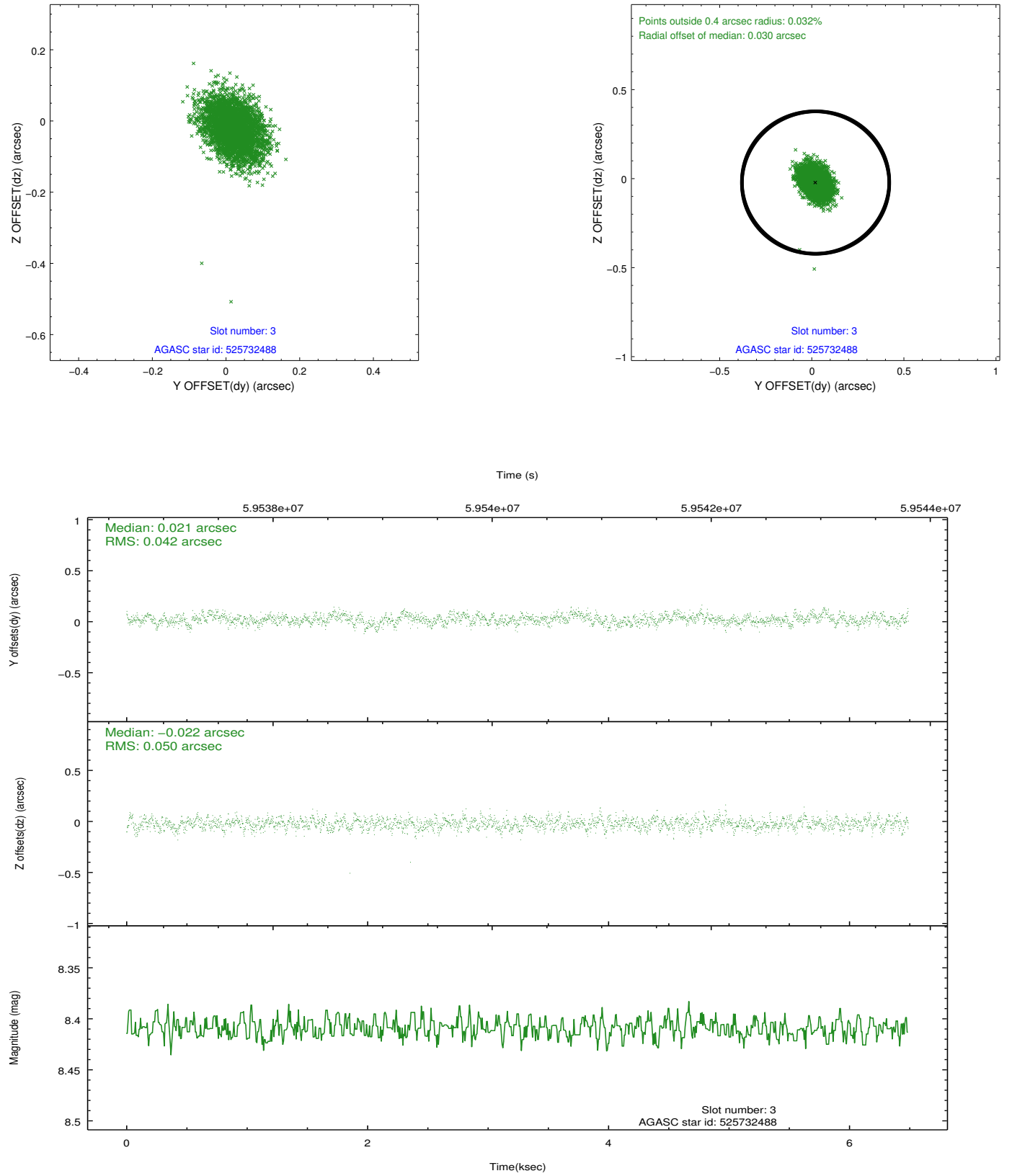


Slot Statistics

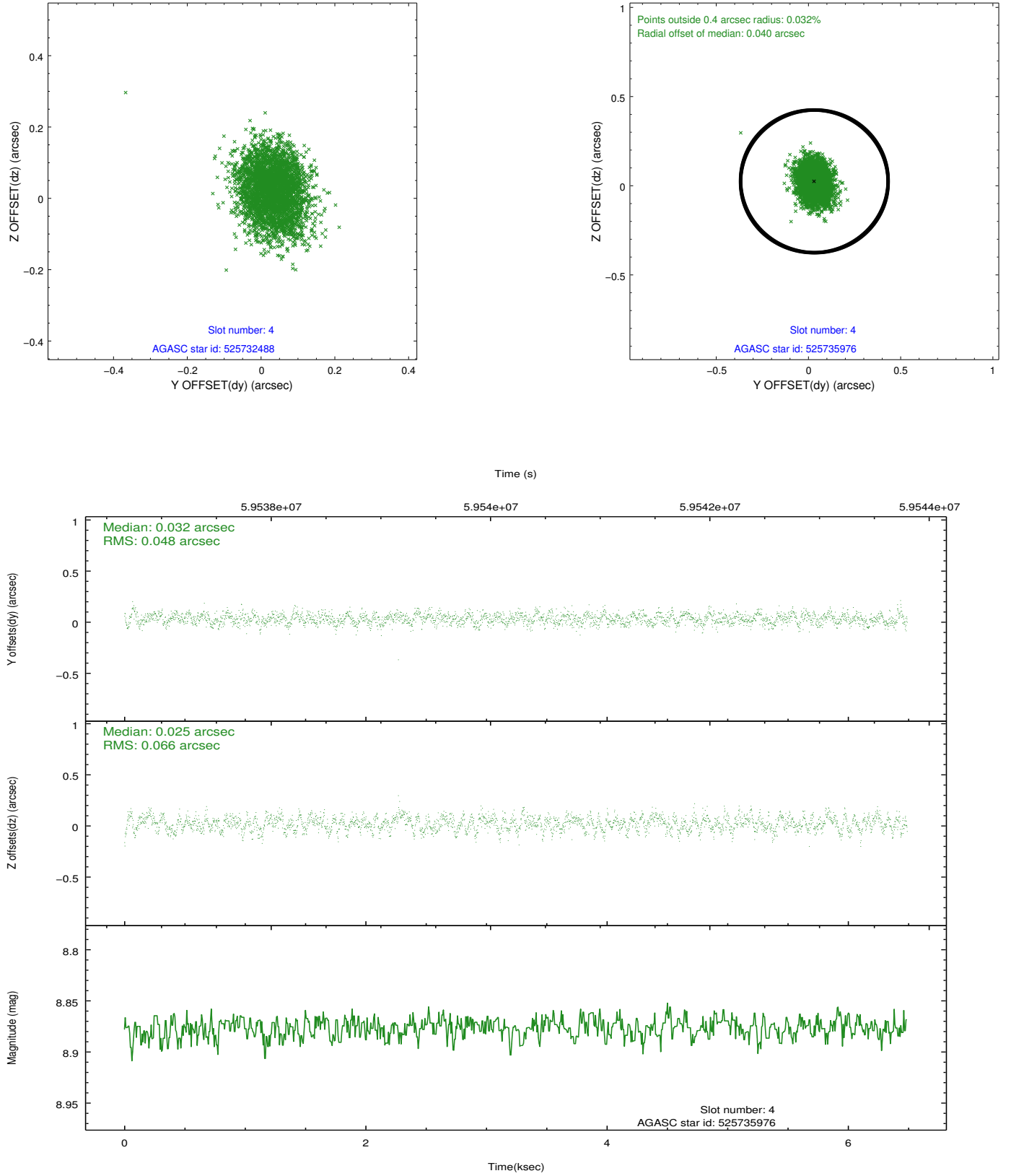
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.19	3166	-0.027	0.052	0.058	0.071	0.000000	0.000000	-754.64	-832.11
1	FID	ACIS-I-4	7.22	3166	0.077	0.012	0.032	0.038	0.000000	0.000000	2159.54	1073.51
2	FID	ACIS-I-5	7.23	3166	-0.148	0.003	0.049	0.061	0.000000	0.000000	-1807.94	1072.20
3	GUIDE	525732488	8.41	3164	0.021	-0.022	0.068	0.112	350.087090	58.516915	1235.91	-1017.30
4	GUIDE	525735976	8.88	3164	0.032	0.025	0.088	0.142	350.142956	58.277622	2065.80	-762.33
5	GUIDE	525609504	9.07	3164	-0.057	0.005	0.087	0.144	349.896632	58.356658	1867.08	-1270.52
6	GUIDE	525732528	9.37	3163	0.031	0.041	0.109	0.173	351.607241	59.298932	-2056.54	1233.47
7	GUIDE	525737208	9.36	3164	-0.021	-0.049	0.092	0.153	351.154109	59.407897	-2280.90	342.18

2.4 Star Slots

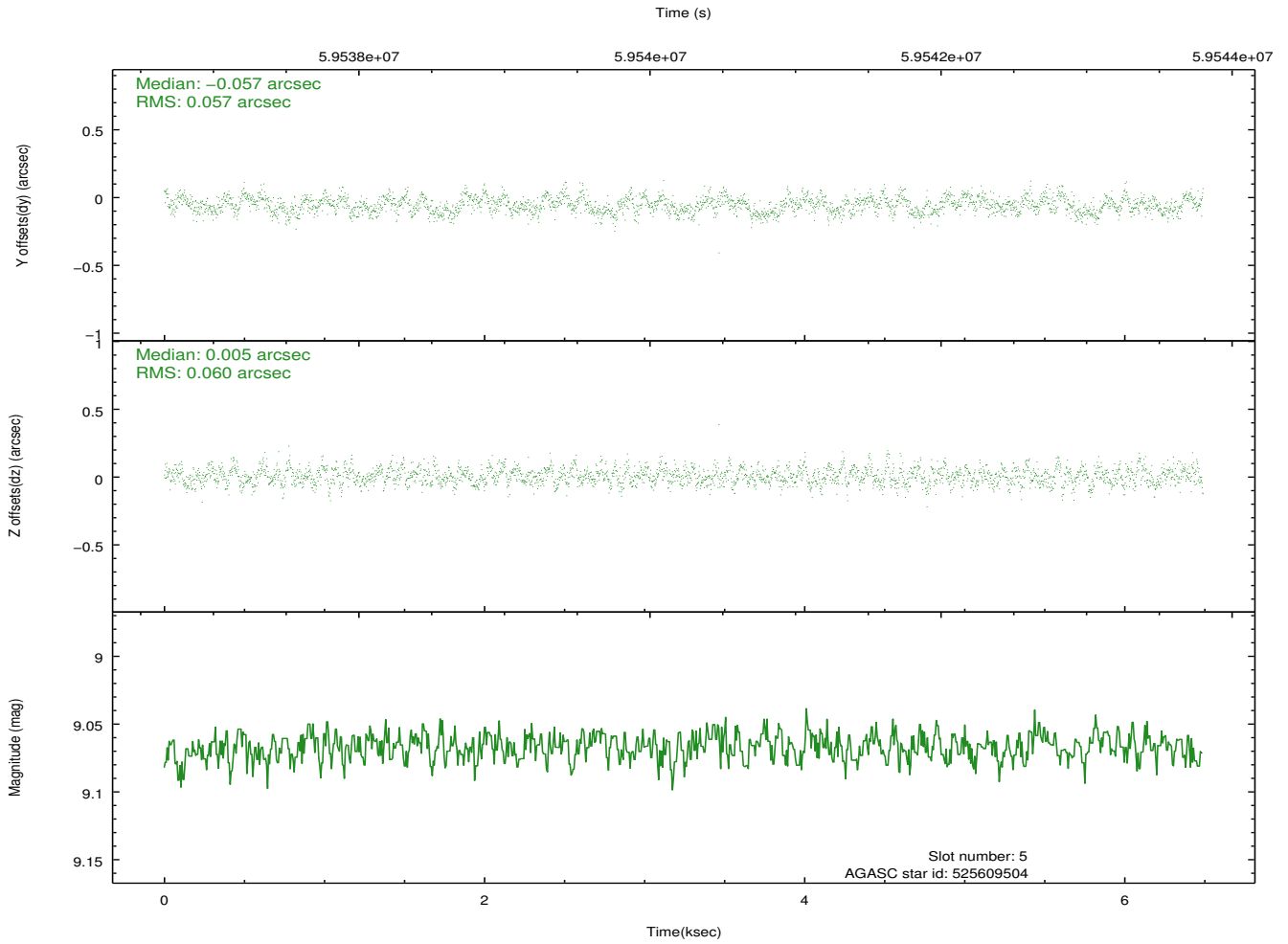
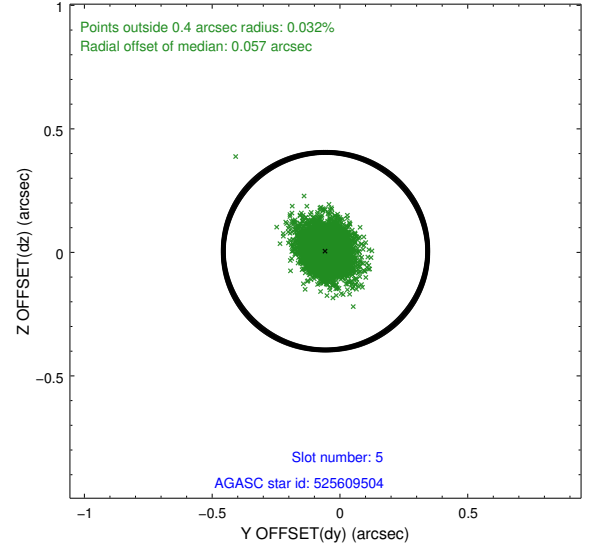
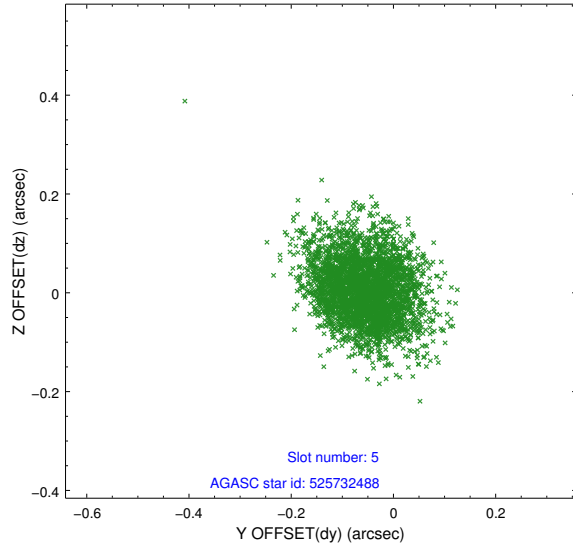
2.4.1 Slot 3



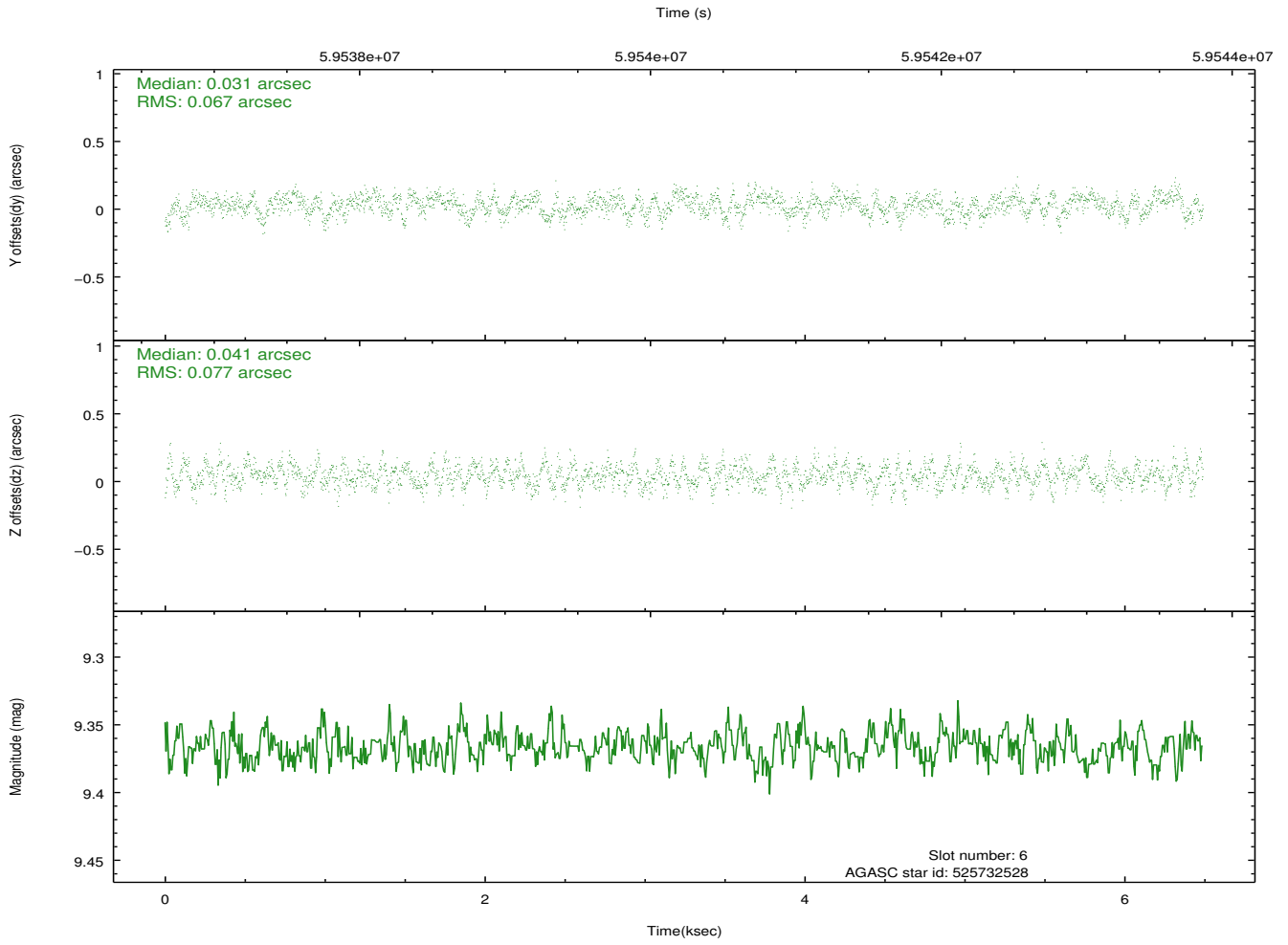
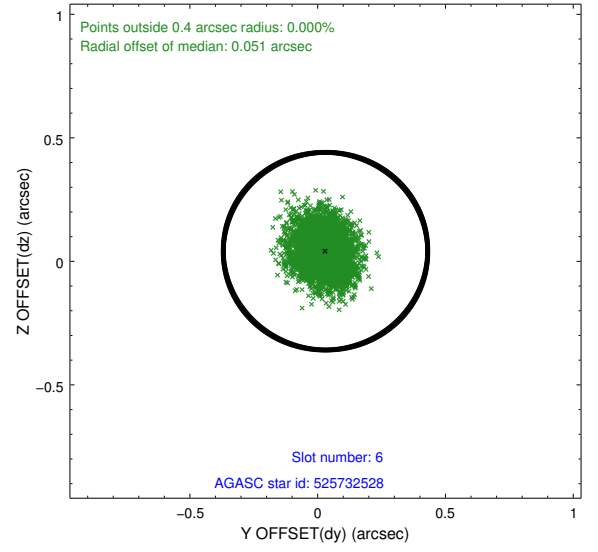
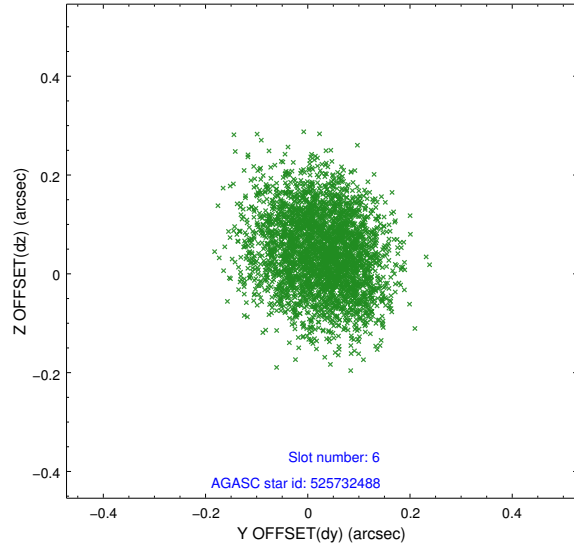
2.4.2 Slot 4



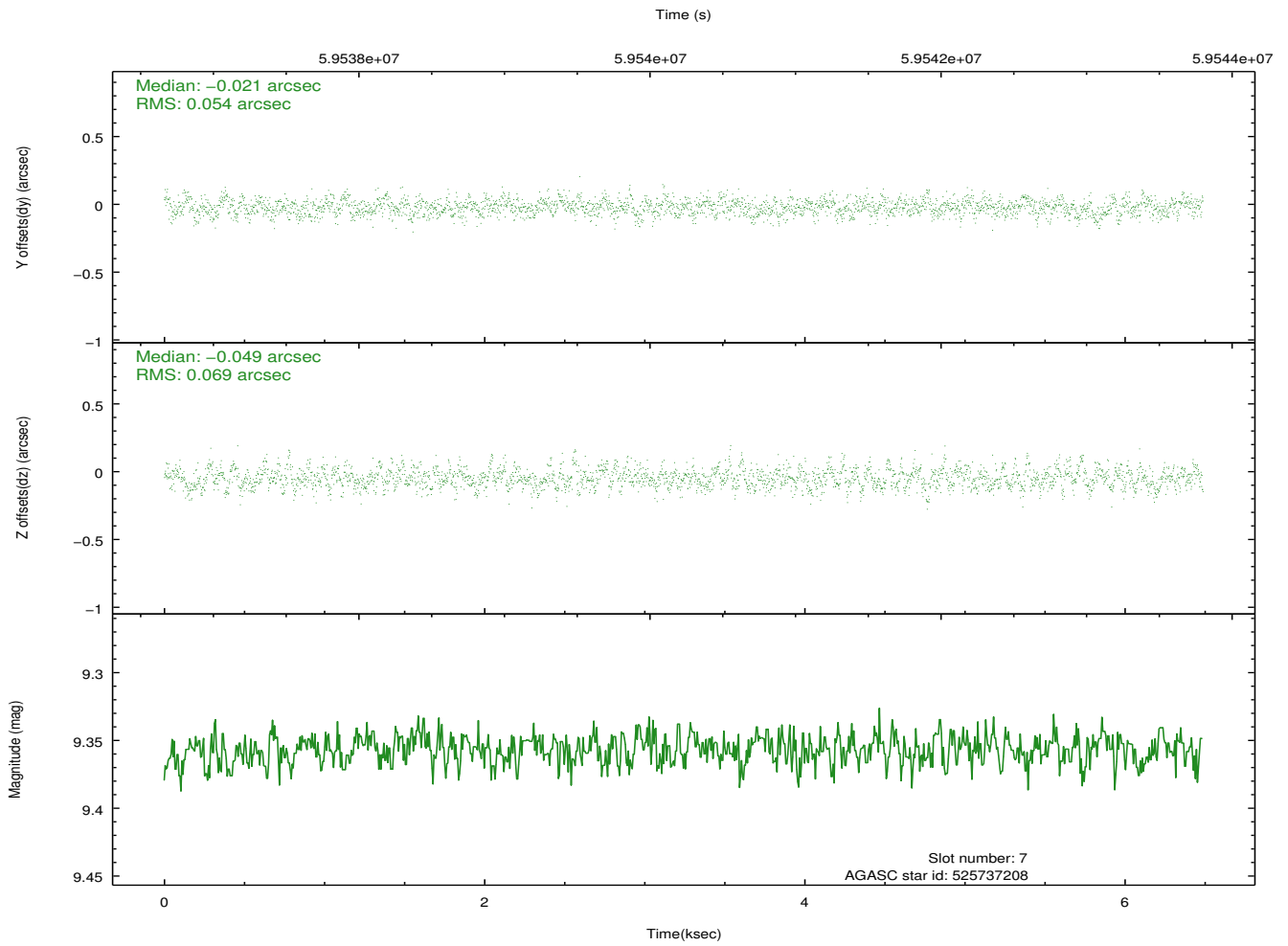
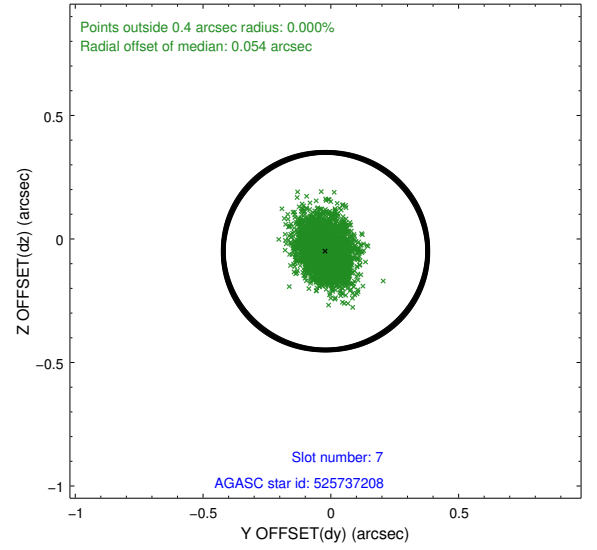
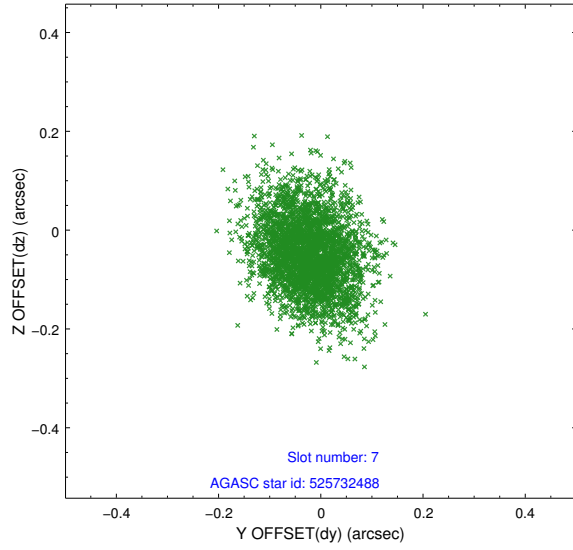
2.4.3 Slot 5



2.4.4 Slot 6

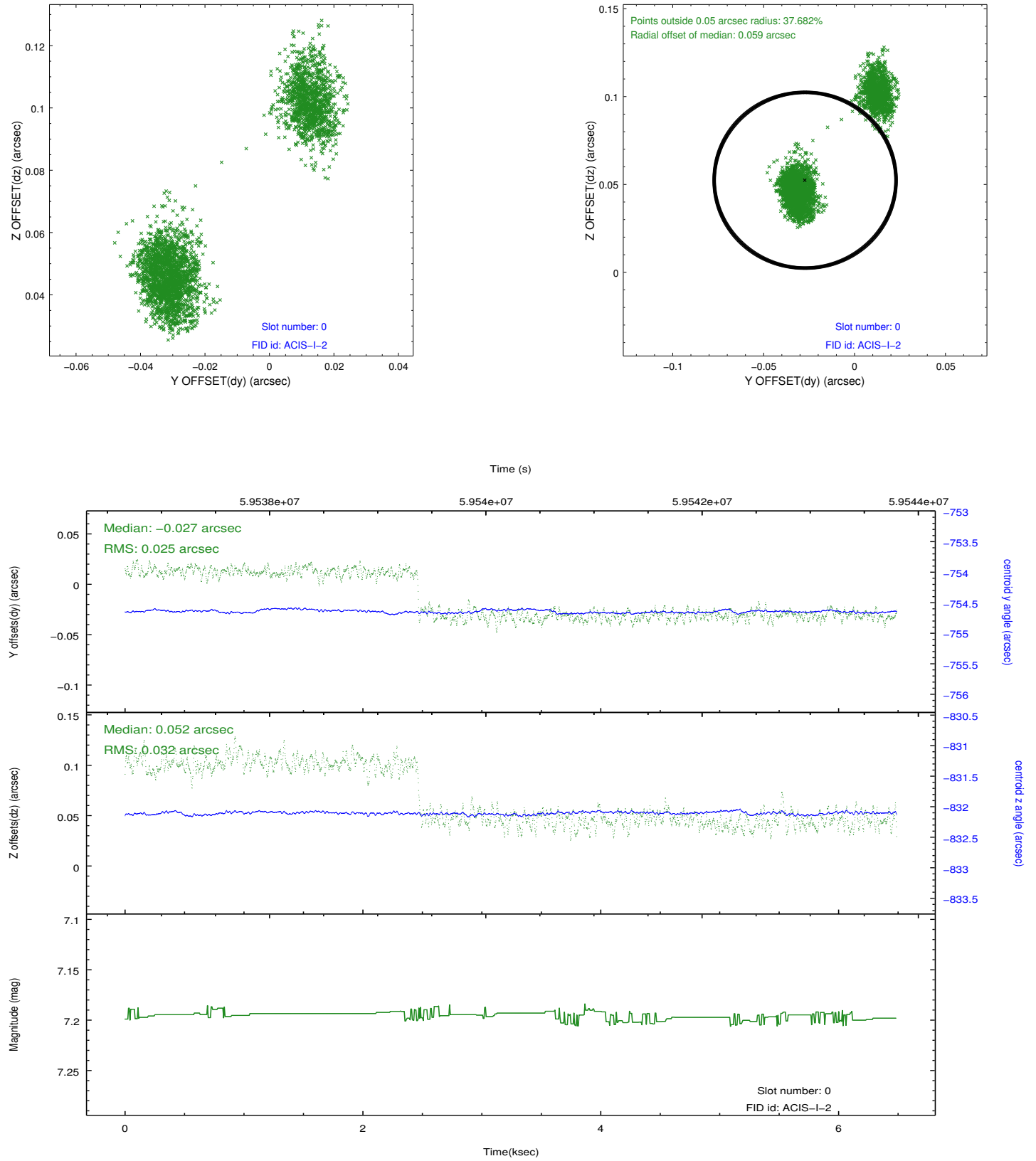


2.4.5 Slot 7

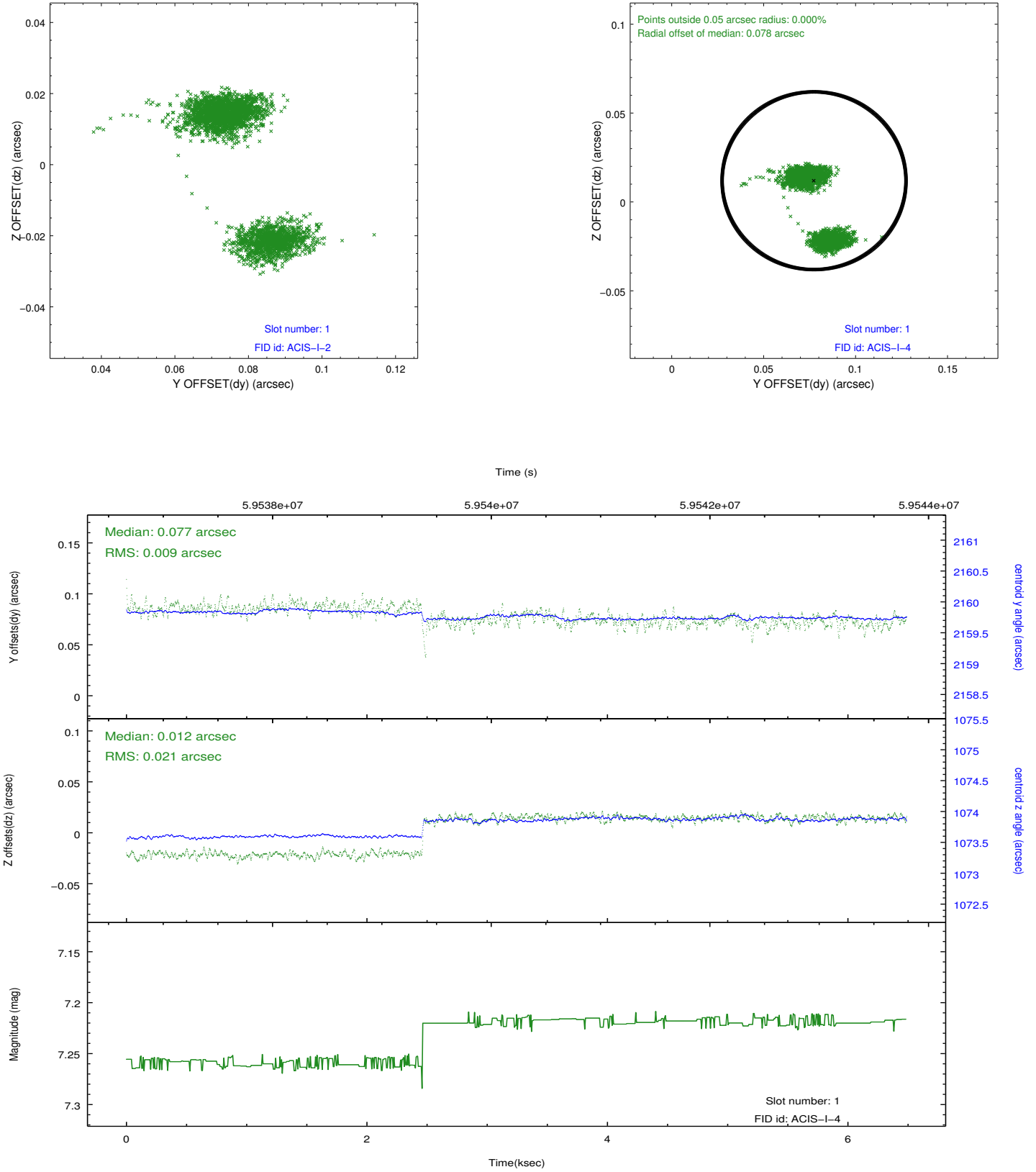


2.5 FID Slots

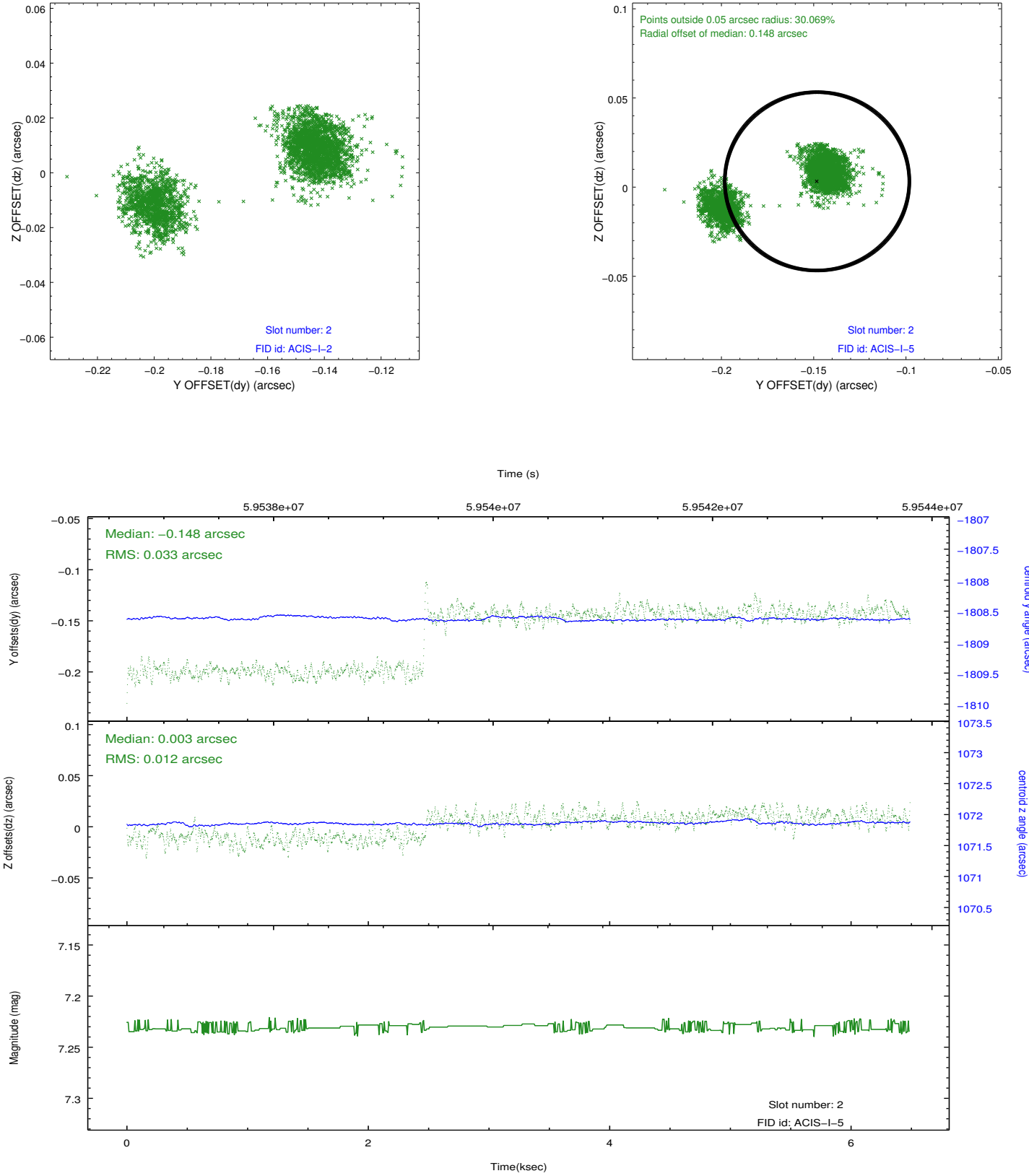
2.5.1 Slot 0



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	3.766

A.2 Comments

Off-axis ACIS response to Cas A on chip I3. Only I3 chip was read down.

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Charge time for this ObsId remains at previous value of 3.766 ksec, although with the current processing the charge time would have been 3.748 ksec.

===

Pileup throughout most of the observation.

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Discontinuity in SIM dtheta value about 2.5 ksec into the observation. Fid light positions are offset after this discontinuity,

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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.