

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2407 - L2 Version 3
Chandra X-Ray Center

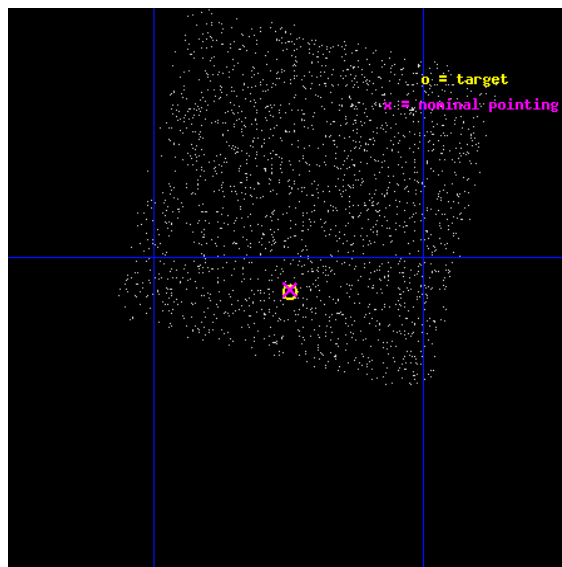
L2 Processing Date : Sep 4 2012

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
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

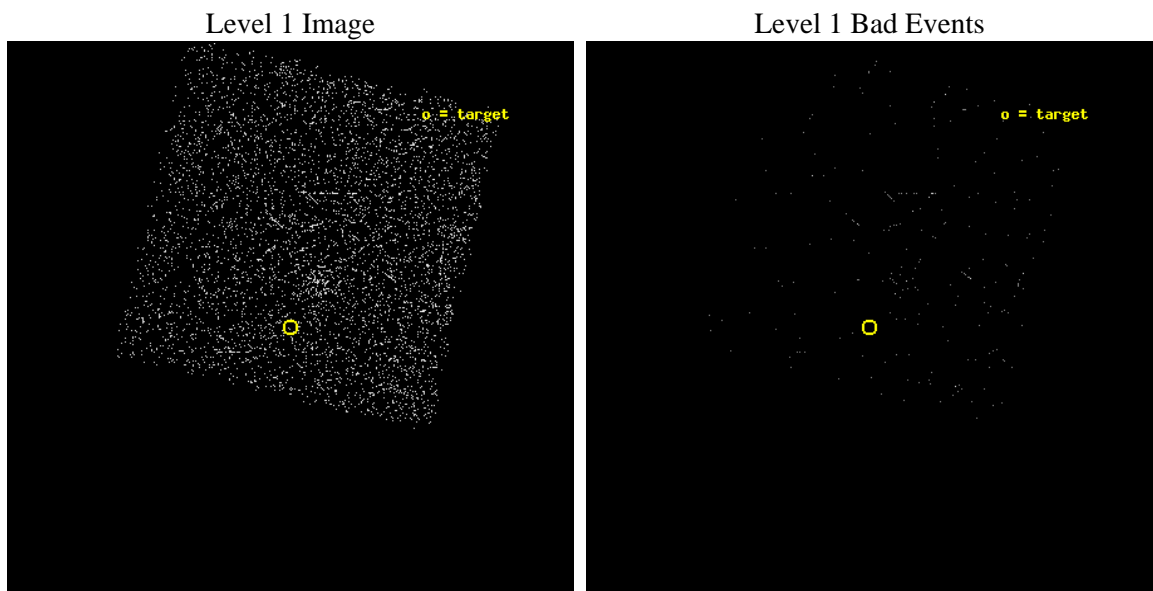
seq_num	190004	Sequence number
obs_id	2407	Observation id
title	ACIS OBSERVATIONS OF JUPITER	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	JUPITER	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	61.686419	Observer's specified target RA [deg]
dec_targ	19.985128	Observer's specified target Dec [deg]
ra_nom	61.686766705682	Nominal RA [deg]
dec_nom	19.985948484155	Nominal Dec [deg]
roll_nom	283.14141720655	Nominal Roll [deg]
revision	3	Processing version of data
ontime	732.0	Sum of GTIs [s]
livetime	722.12137952806	Livetime [s]
ontime7	732.0	Sum of GTIs [s]
l2events	2183	Number of level 2 events



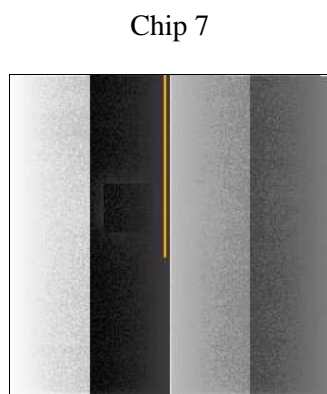
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	100.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	732.0	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime7	732.0	Sum of GTIs [s]
date	2012-09-05T01:18:57	Date and time of file creation	l1events	5578	Number of level 1 events
revision	3	Processing version of data			

2.1.4 Events

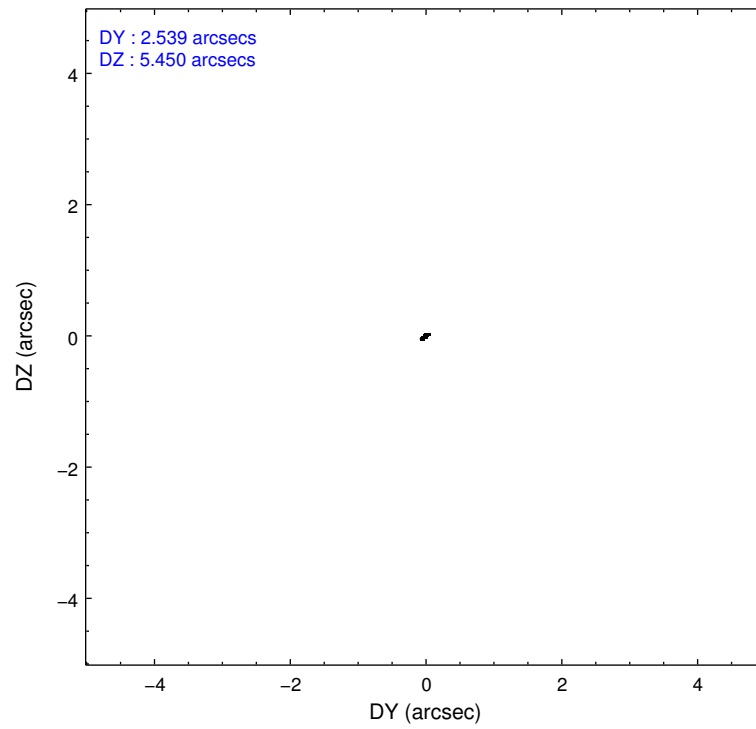
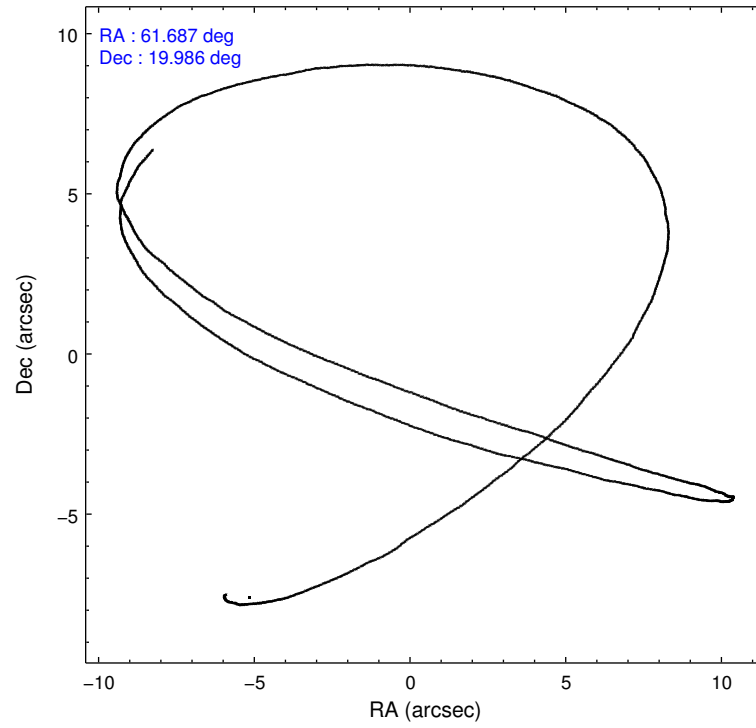
	ccd 7
level 1 events	5578
rejected events	3364
rejected %	60%

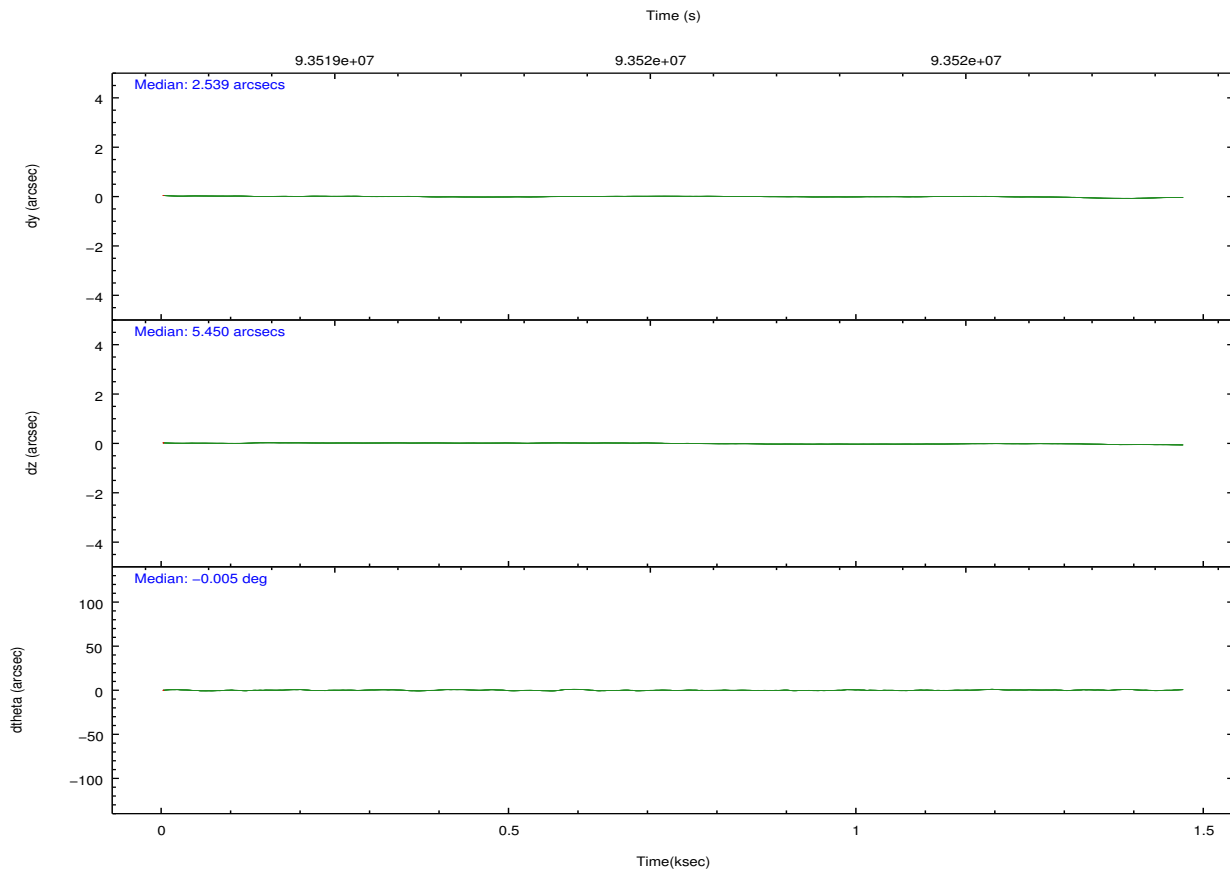
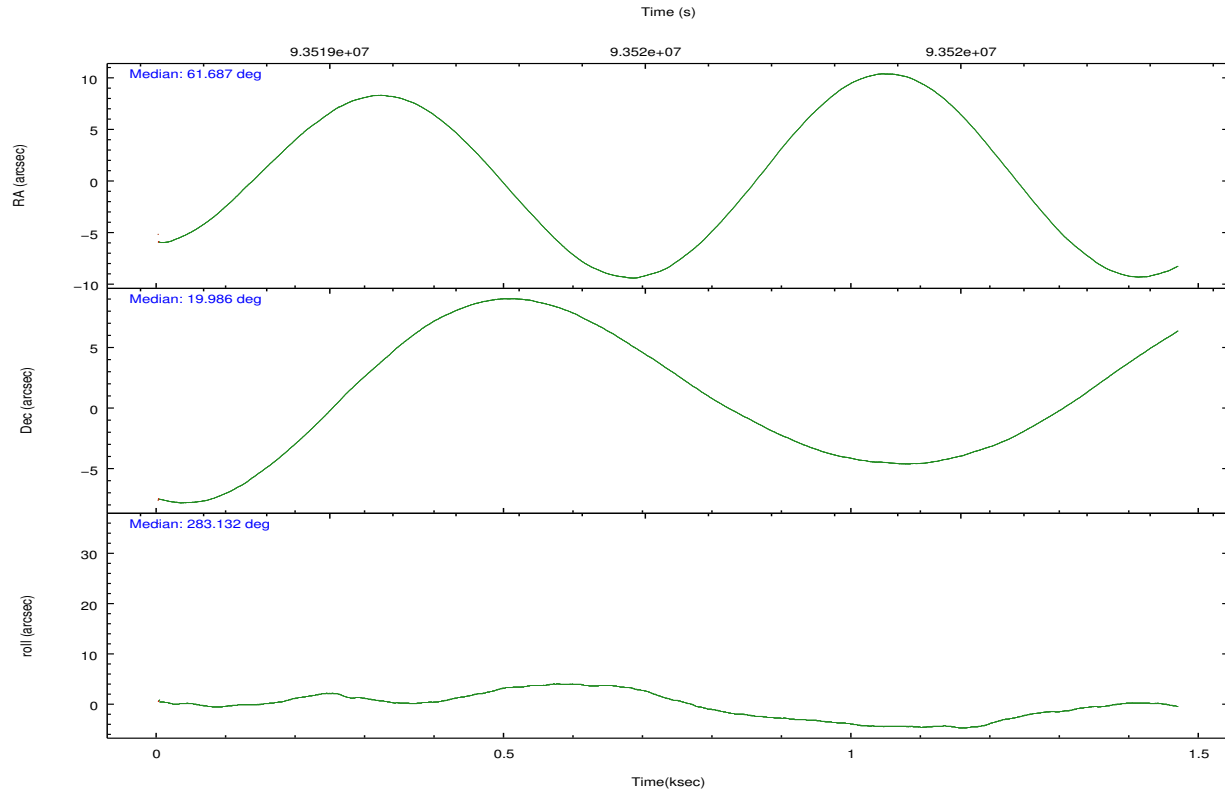
	ccd 7
grade 0 events	178
	3%
grade 1 events	2
	0%
grade 2 events	462
	8%
grade 3 events	177
	3%
grade 4 events	200
	3%
grade 5 events	535
	9%
grade 6 events	1207
	21%
grade 7 events	2817
	50%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	61.666668	61.68676670568248	Subarray requested	NONE	NONE
[deg] Pointing Dec	20.005949	19.98594848415479	Alternating exposures requested	N	N
[deg] Pointing Roll	282.991625	283.1414172065476	[s] Primary exposure time	0.000000	3
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	93520170.184000	93518624.206268			
Observation start date	2000-12-18T09:48:26	2000-12-18T09:23:44			
[s] Observation end time (MET)	93520270.184000	93520467.156339			
Observation end date	2000-12-18T09:50:06	2000-12-18T09:54:27			
Read mode	TIMED	TIMED			

2.3 Aspect



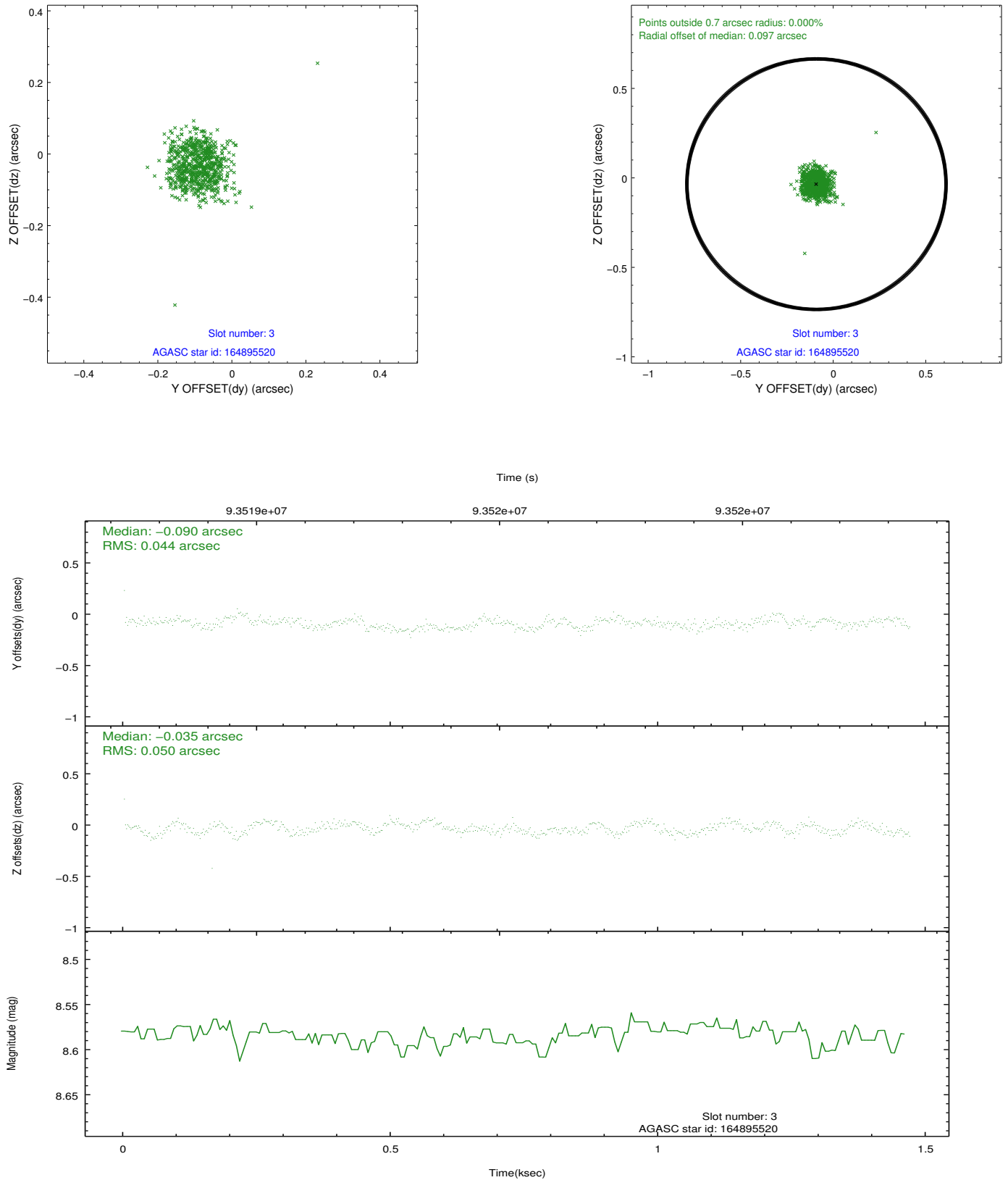


Slot Statistics

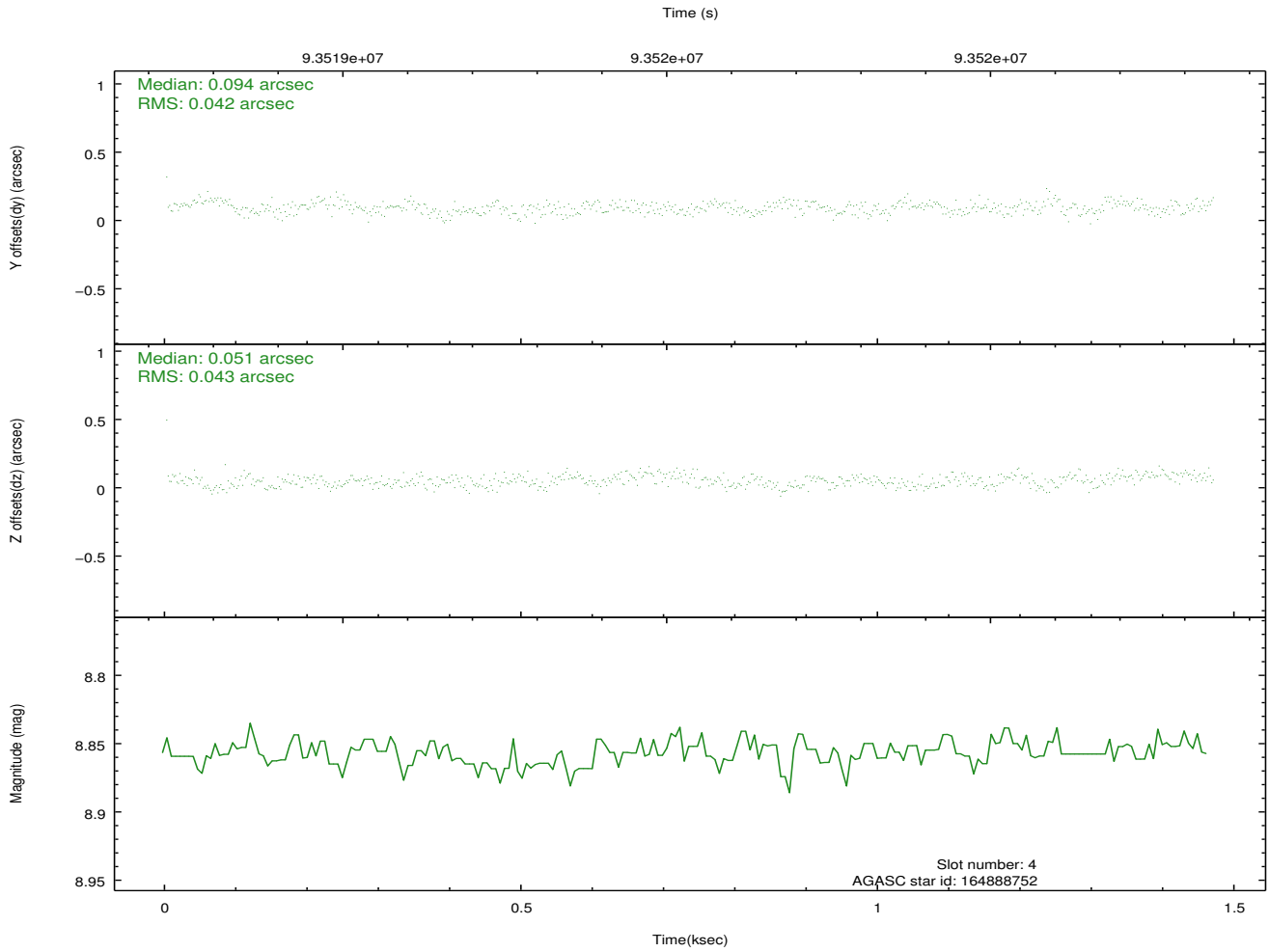
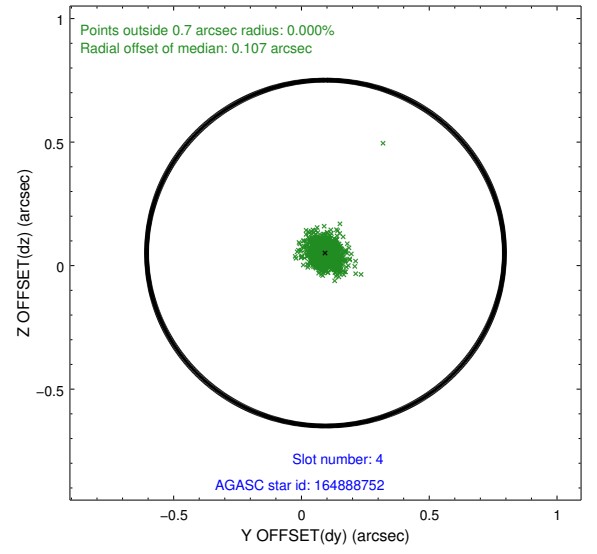
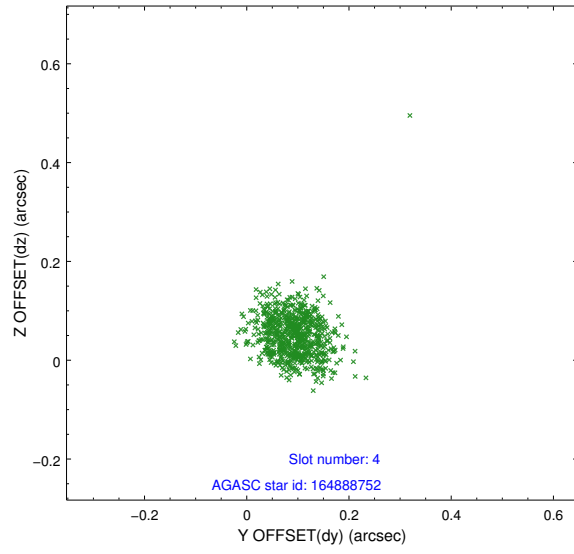
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	359	-0.041	-0.003	0.005	0.010	0.000000	0.000000	-755.17	-1726.59
1	FID	ACIS-S-4	7.20	359	0.004	0.021	0.005	0.009	0.000000	0.000000	2156.08	177.33
2	FID	ACIS-S-5	7.24	359	0.006	-0.009	0.006	0.011	0.000000	0.000000	-1802.20	176.02
3	GUIDE	164895520	8.58	717	-0.090	-0.035	0.068	0.107	61.309800	20.139312	-741.16	-1067.59
4	GUIDE	164888752	8.86	717	0.094	0.051	0.061	0.099	61.568386	19.874602	383.96	-432.23
5	GUIDE	164890352	9.06	714	0.002	-0.039	0.105	0.166	61.028629	19.972872	-373.45	-2130.43
6	GUIDE	165022968	9.62	705	-0.003	0.006	0.112	0.175	62.230781	20.386000	-910.23	2159.69
7	GUIDE	165021720	9.56	716	-0.002	0.012	0.089	0.158	62.234537	20.170723	-152.43	2006.55

2.4 Star Slots

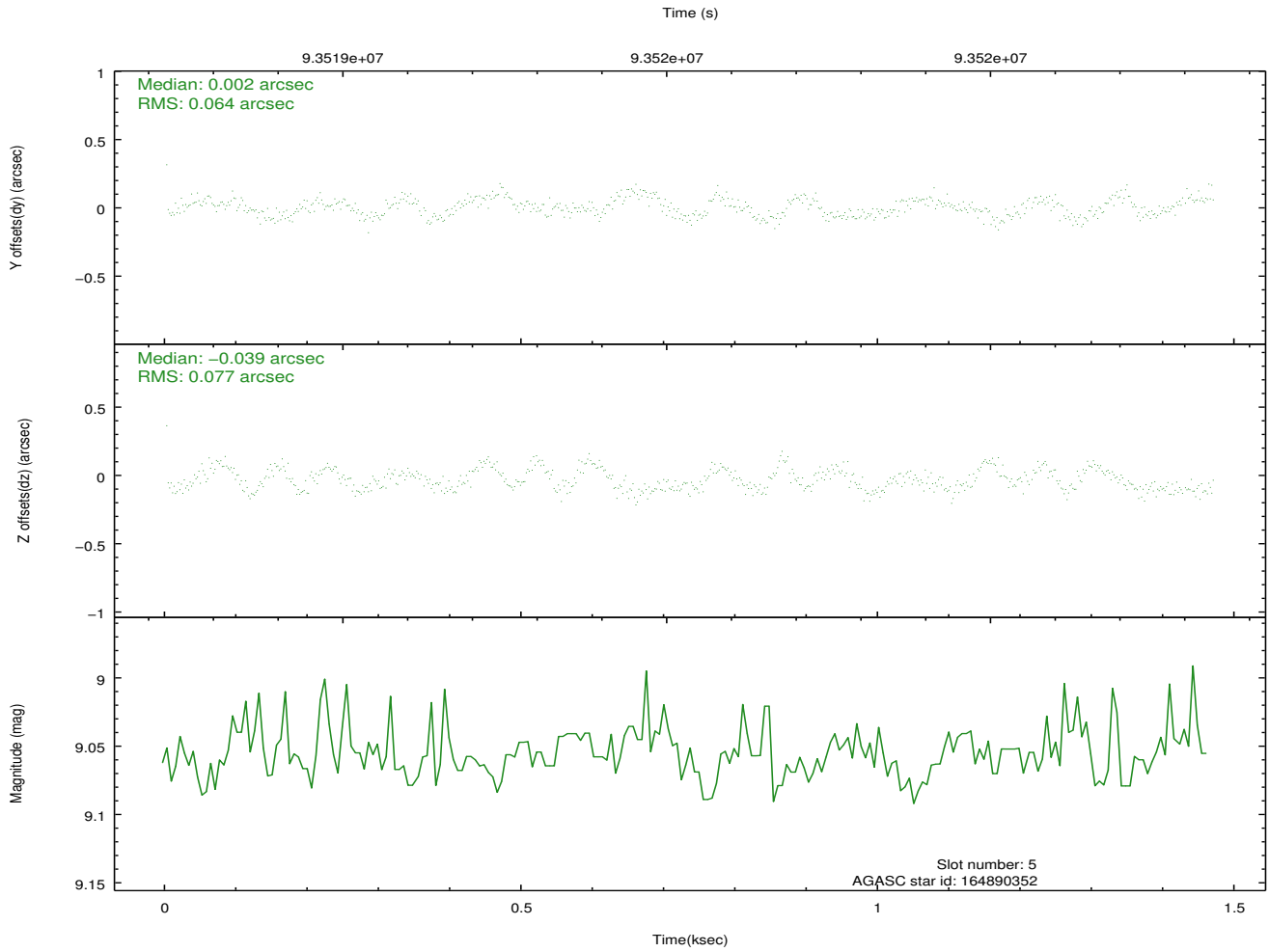
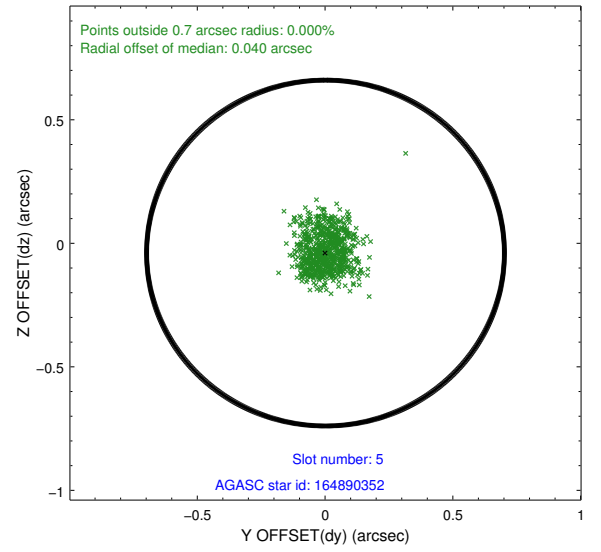
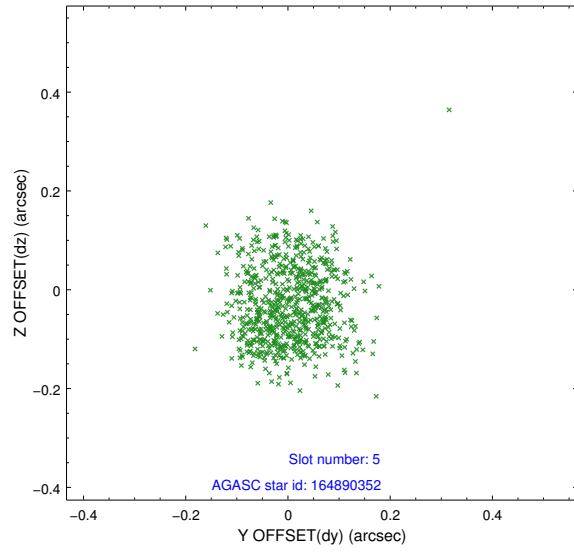
2.4.1 Slot 3



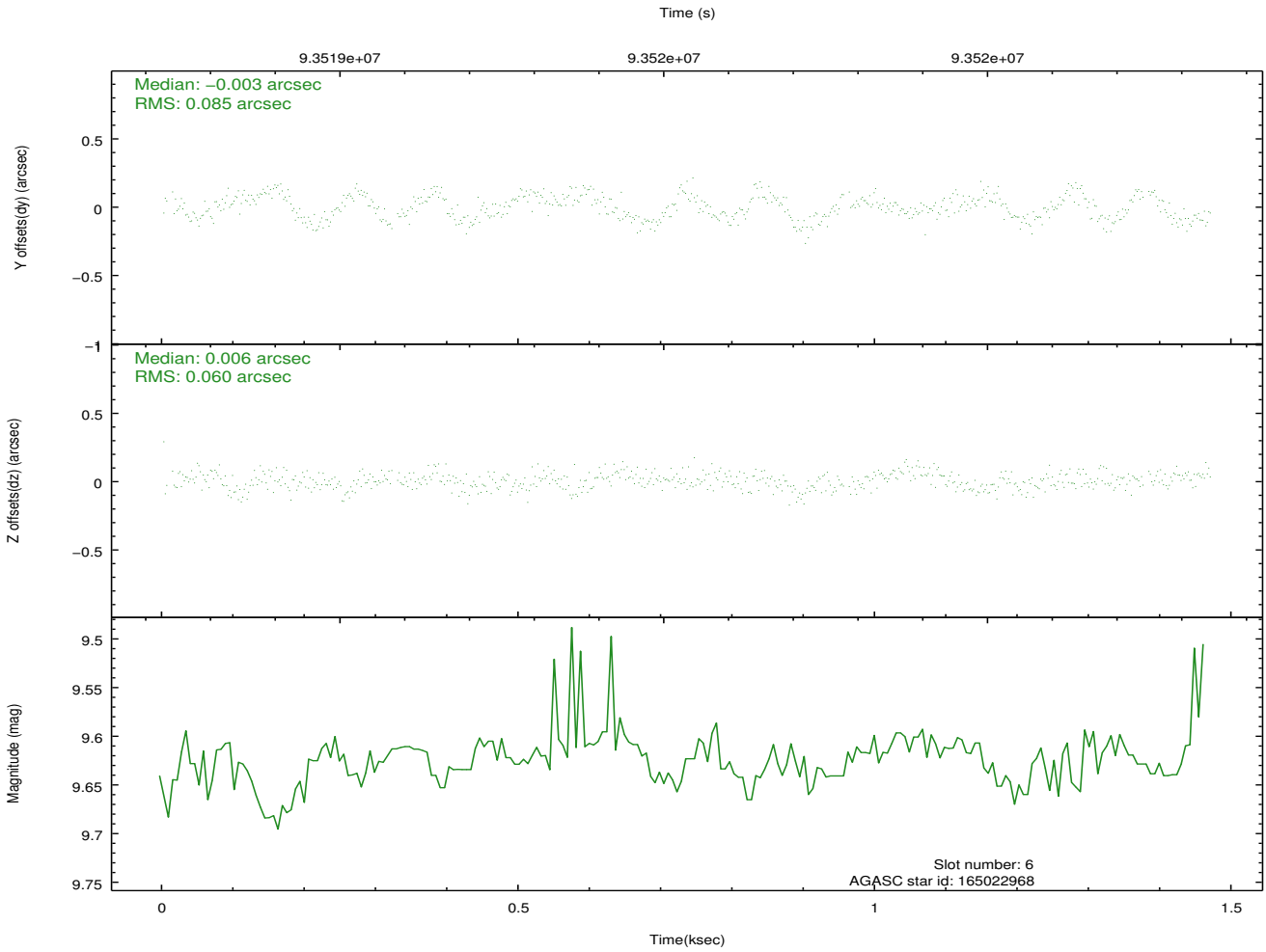
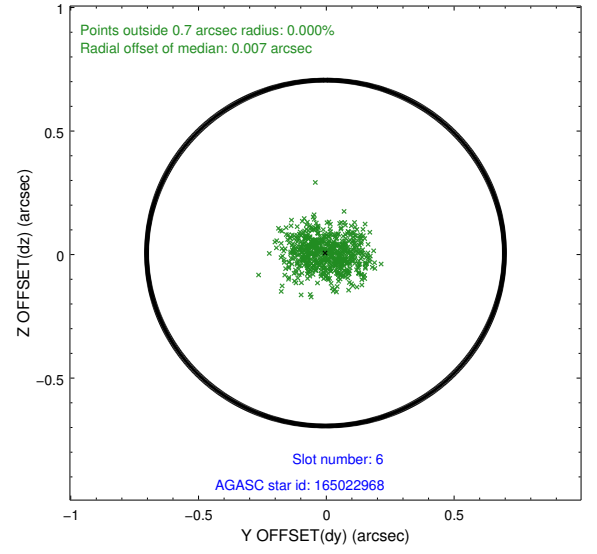
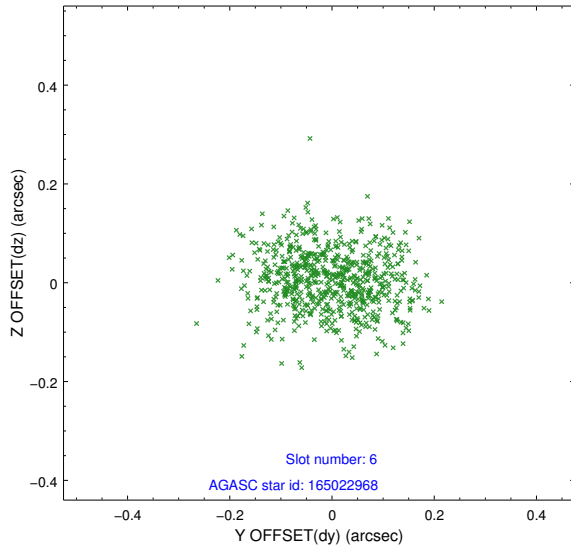
2.4.2 Slot 4



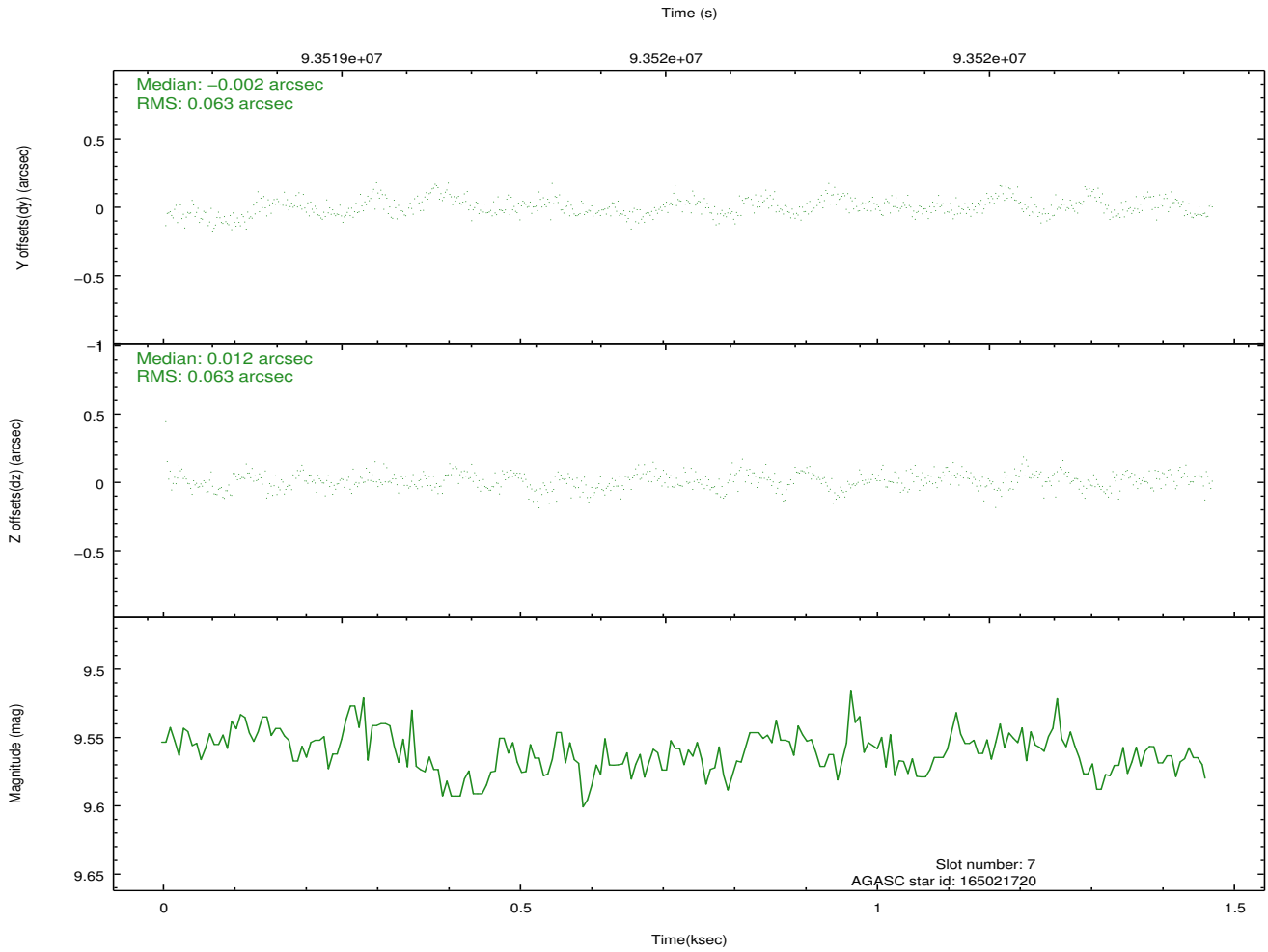
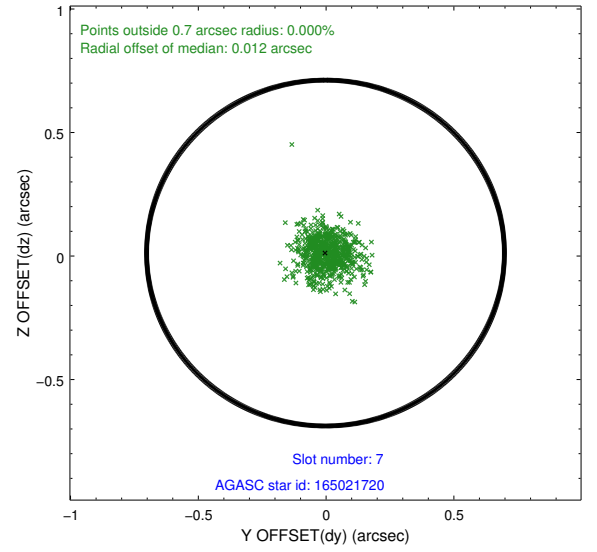
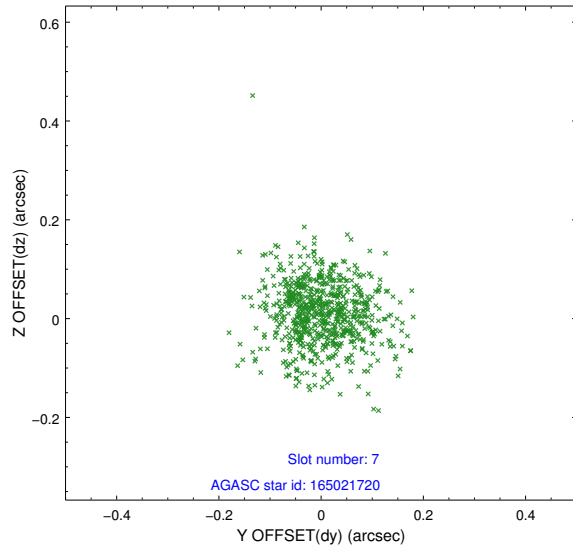
2.4.3 Slot 5



2.4.4 Slot 6

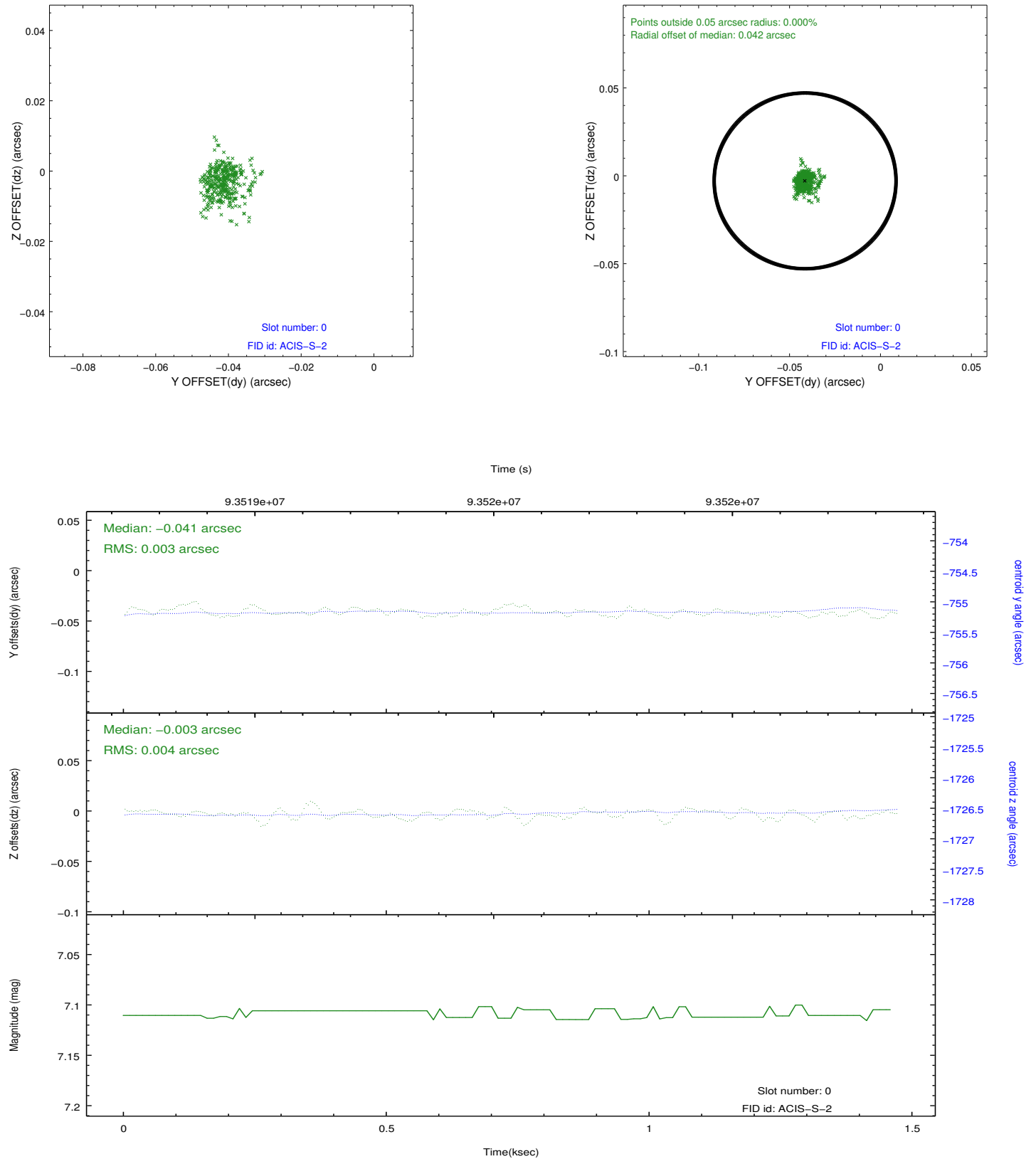


2.4.5 Slot 7

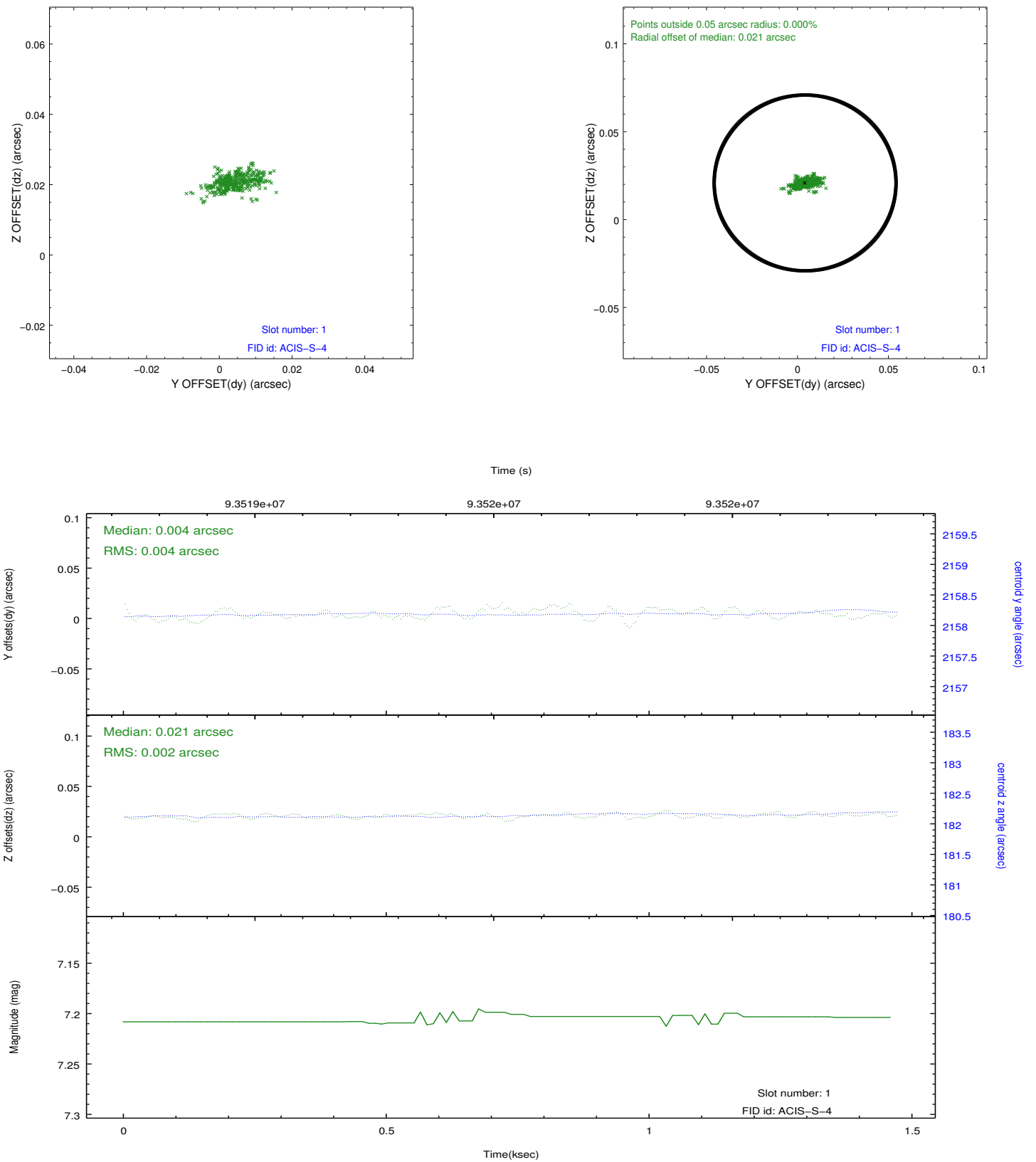


2.5 FID Slots

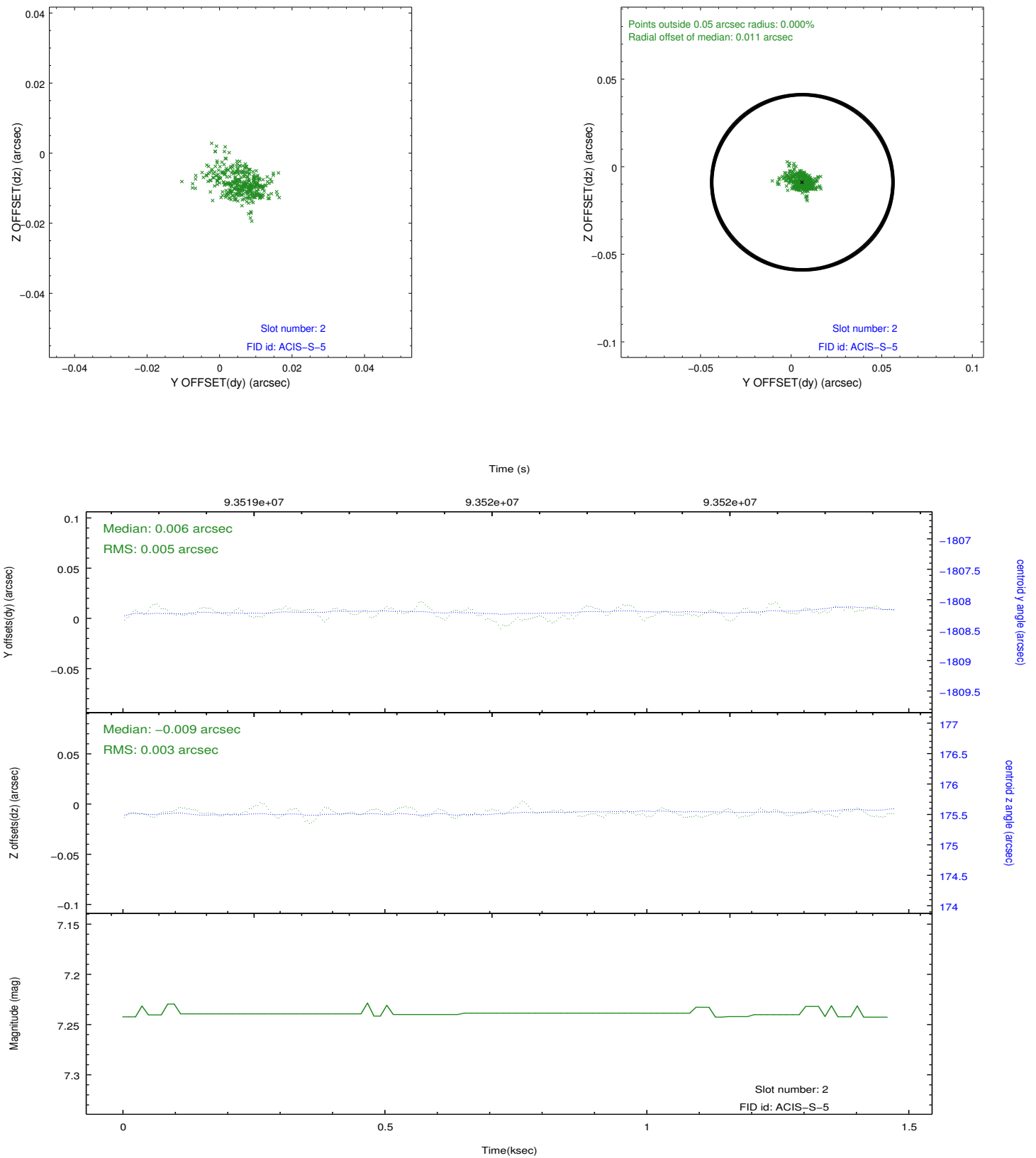
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.09.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	0.735

A.2 Comments

The CCD bias map included a ghost image of Jupiter. In order to remove this artifact, a square containing the ghost image was removed from the bias map and replaced with the value 4096. The bias map was then reconstructed using scaled data from the comparable bias map from obs2398 to fill in the gap. The replaced data were bounded by the sky coords:

(61.68407,19.99721),(61.67871,20.01874),(61.65622,20.01379),(61.66159,19.99226)

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Jupiter is very faint in this observation: many events associated with the primary source are grade seven and therefore removed from the L2 image.