

V&V Reference Report

L2 ASCDS Version : 10

Observation 15041 - L2 Version 2
Chandra X-Ray Center

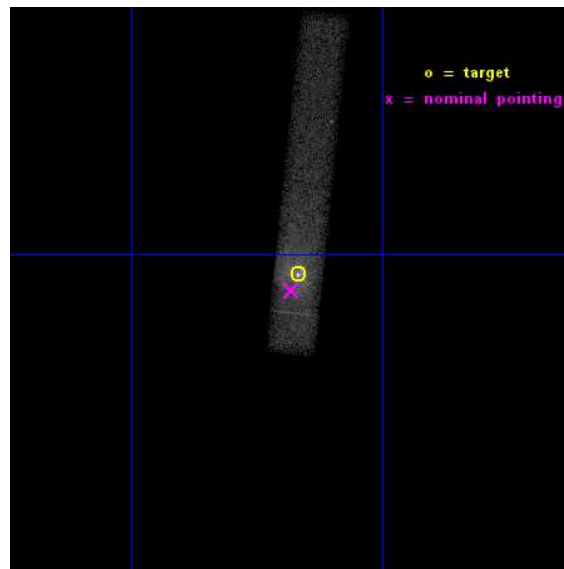
L2 Processing Date : Dec 4 2014

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

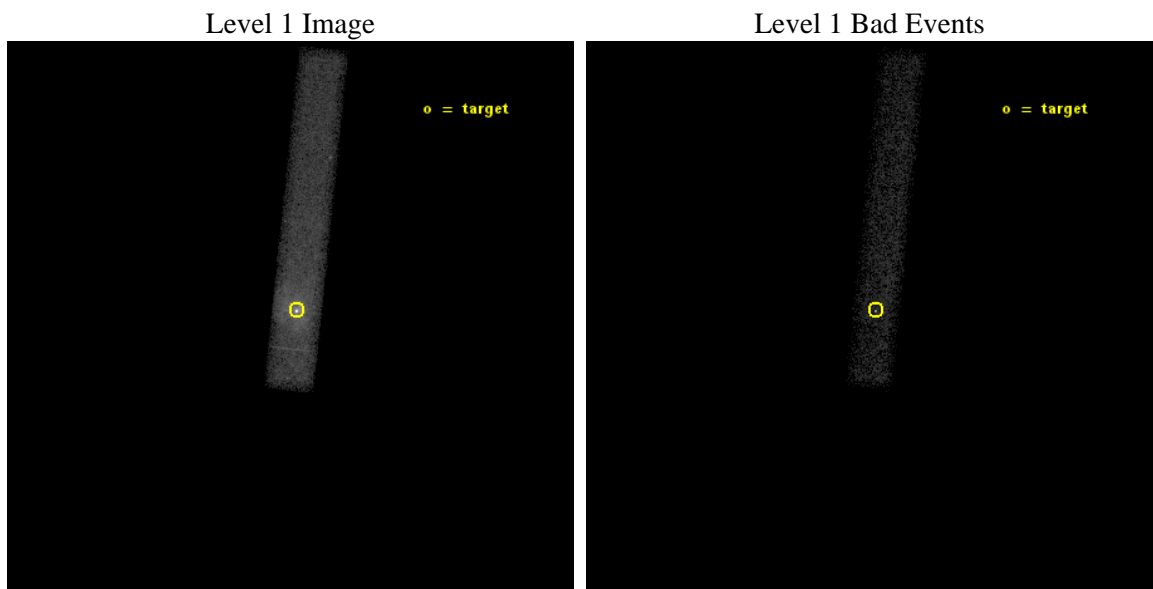
seq_num	702848	Sequence number
obs_id	15041	Observation id
title	Joint Chandra/XMM/EVLA Monitoring of the Gas Cloud G2 as it Encounters Sgr A*	Proposal title
observer	Dr. Daryl Haggard	Principal investigator
object	Sgr A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.00775	Observer's specified target Dec [deg]
ra_nom	266.42046123072	Nominal RA [deg]
dec_nom	-29.014902392525	Nominal Dec [deg]
roll_nom	276.10234079327	Nominal Roll [deg]
revision	2	Processing version of data
ontime	50069.597015619	Sum of GTIs [s]
livetime	45410.481603137	Livetime [s]
ontime7	50069.597015619	Sum of GTIs [s]
l2events	65909	Number of level 2 events



2 OBI

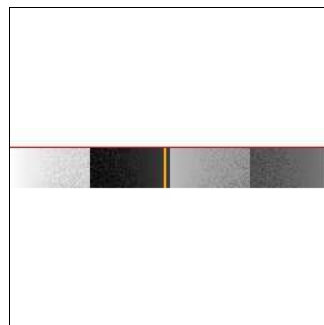
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	50069.597015619	Sum of GTIs [s]
caldbver	4.6.4	 	ontime7	50069.597015619	Sum of GTIs [s]
date	2014-12-04T21:49:28	Date and time of file creation	l1events	90955	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

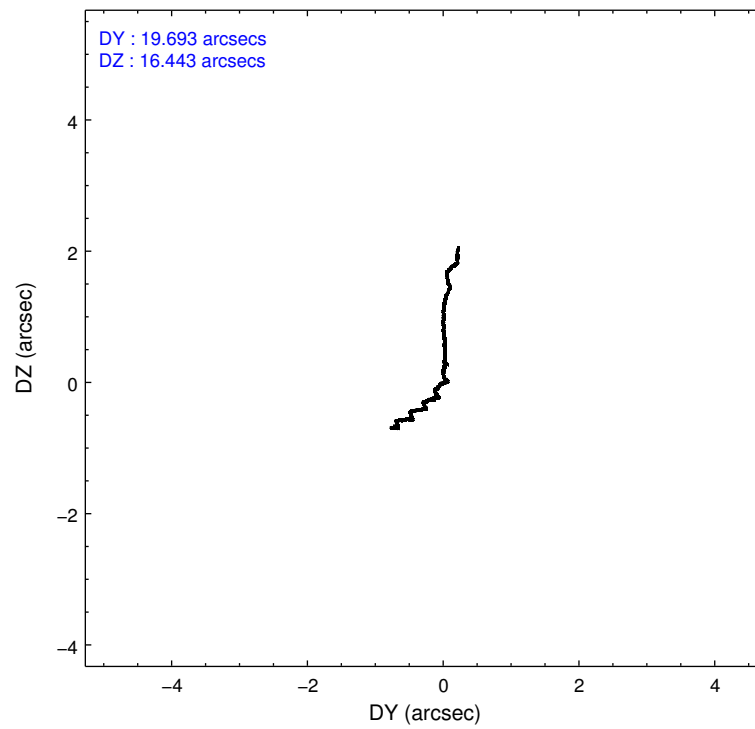
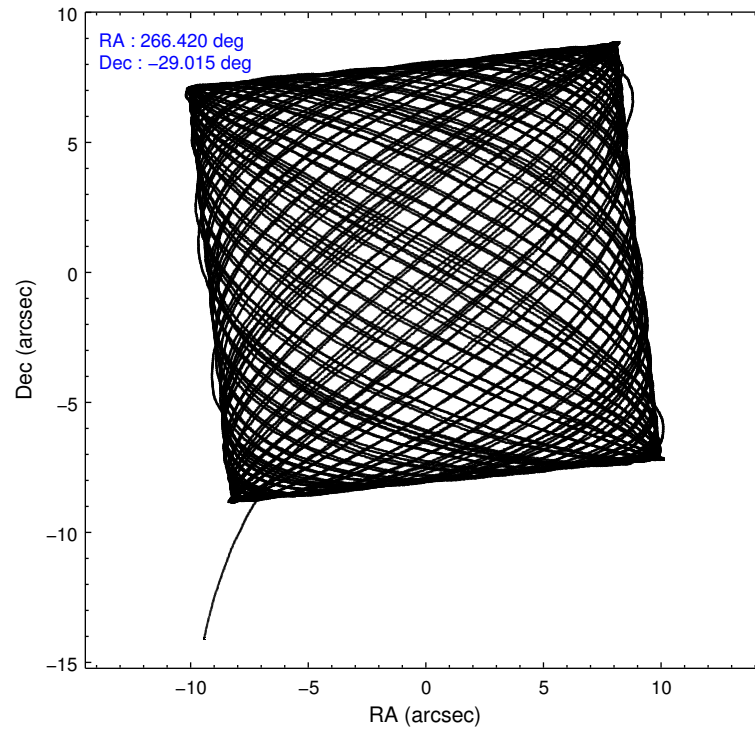
	ccd 7
level 1 events	90955
rejected events	23752
rejected %	26%

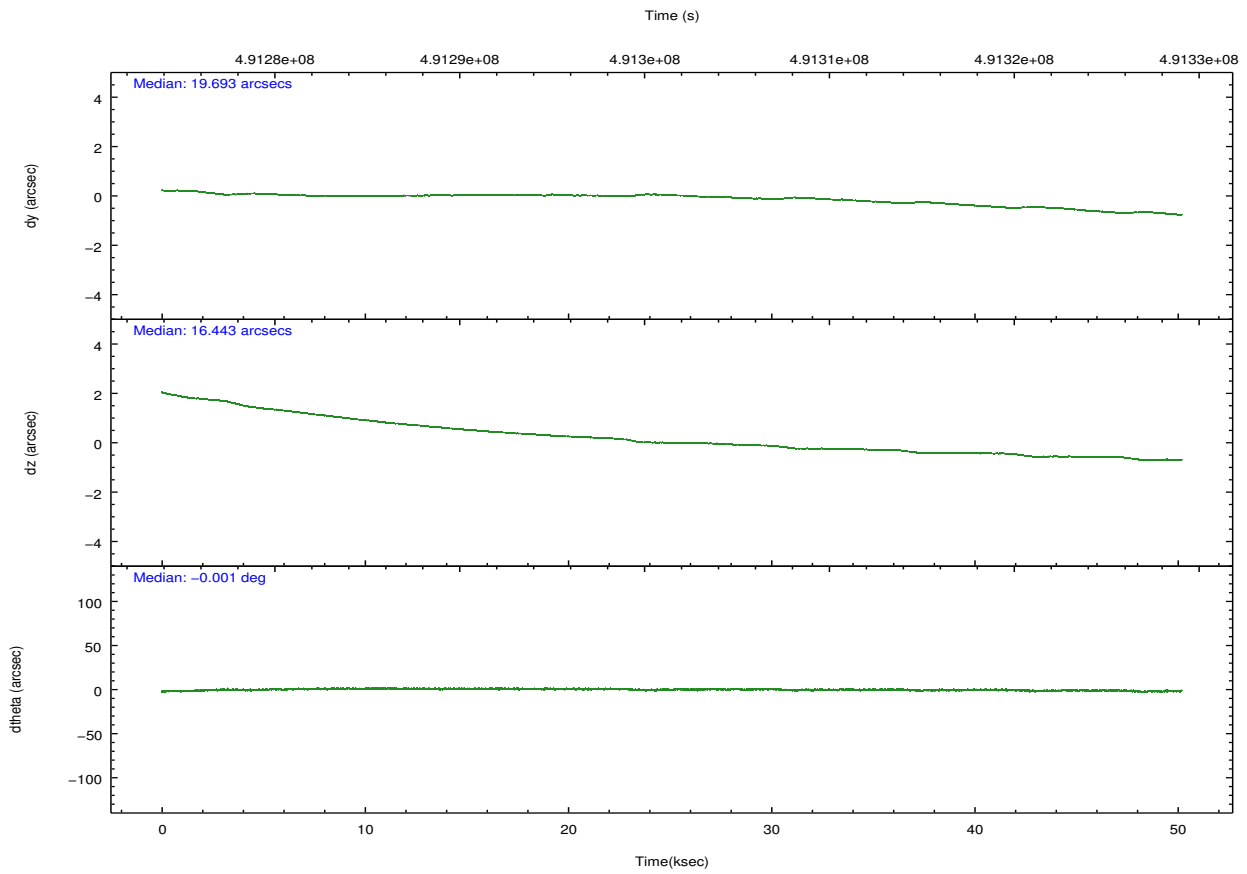
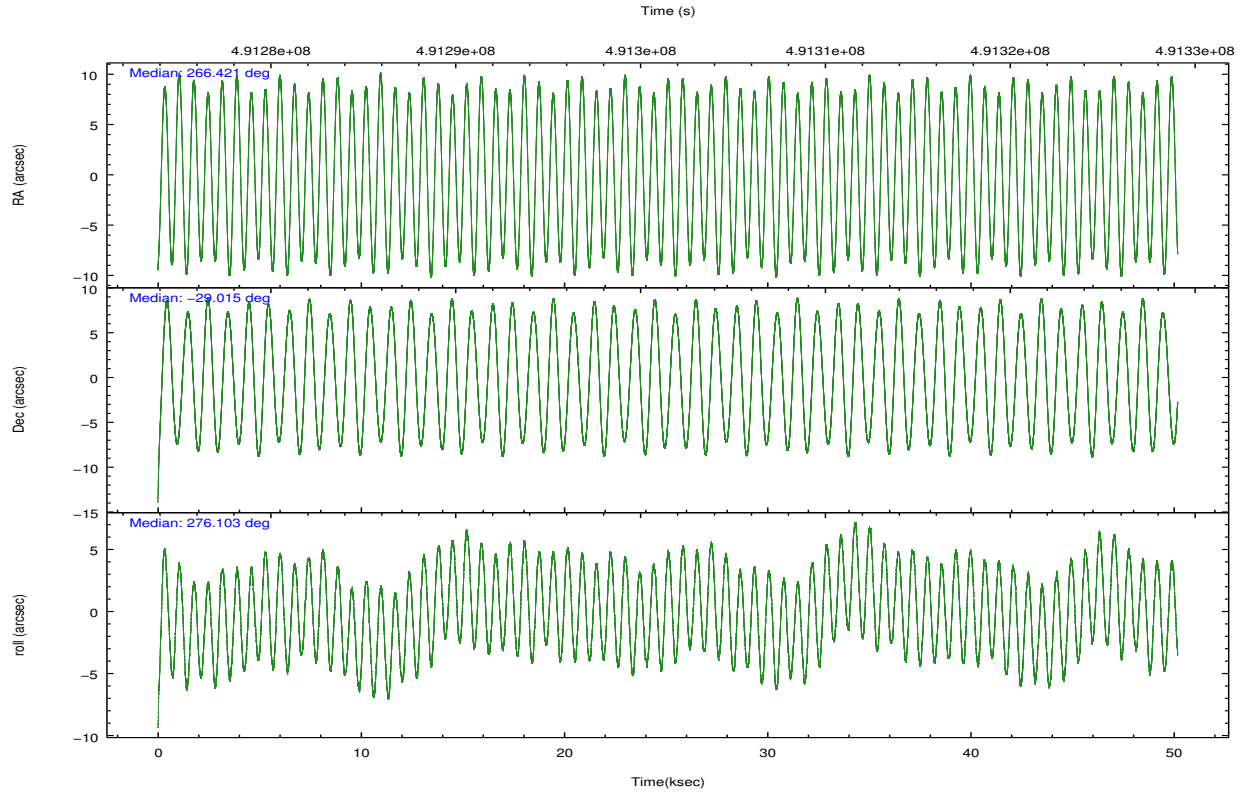
	ccd 7
grade 0 events	11072
	12%
grade 1 events	130
	0%
grade 2 events	15295
	16%
grade 3 events	7696
	8%
grade 4 events	7707
	8%
grade 5 events	5104
	5%
grade 6 events	25433
	27%
grade 7 events	18518
	20%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	266.401697	266.4204612307232	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-28.993022	-29.01490239252496	Subarray start row	449	449
[deg] Pointing Roll	275.936617	276.1023407932711	Subarray row count	128	128
[s] Window start time (MET)	490579267.184000	490579267.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	491961607.184000	491961607.184000	[s] Primary exposure time	0.000000	0.4
[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)	491276555.184000	491275637.81014			
Observation start date	2013-07-27T01:41:28	2013-07-27T01:27:17			
[s] Observation end time (MET)	491326555.184000	491327605.82547			
Observation end date	2013-07-27T15:34:48	2013-07-27T15:53:25			
Read mode	TIMED	TIMED			

2.3 Aspect





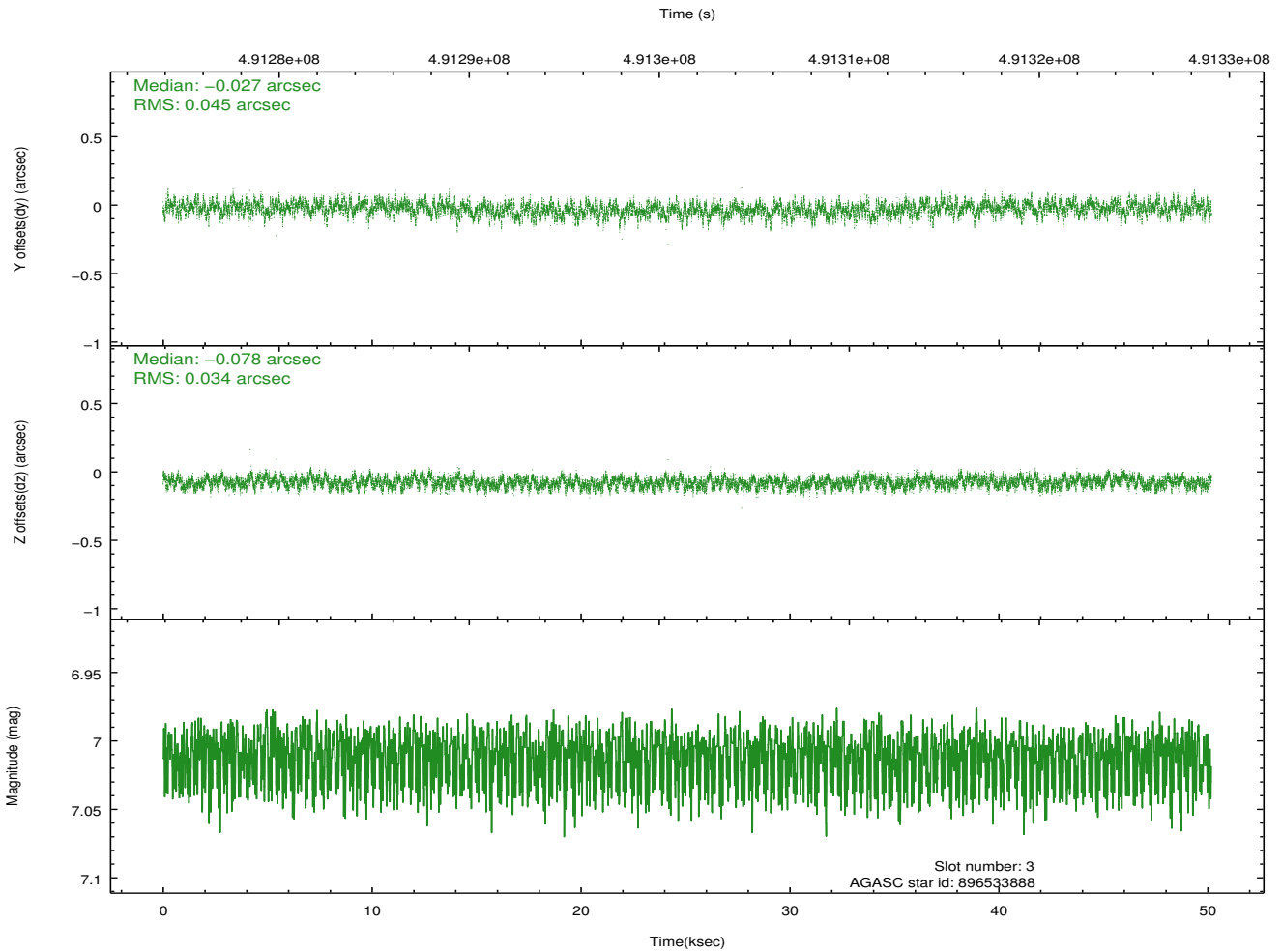
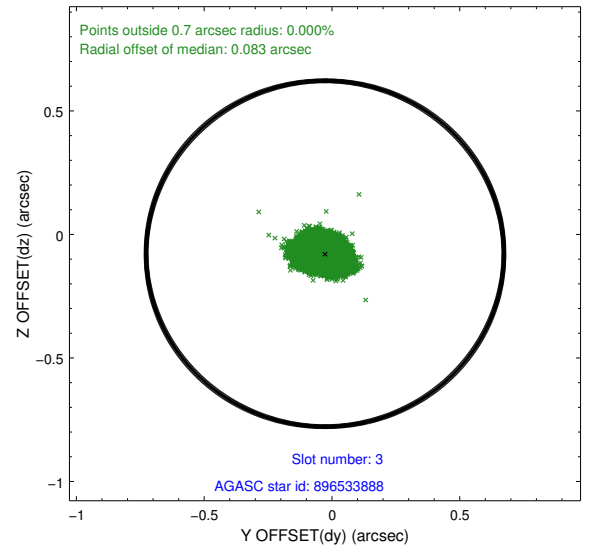
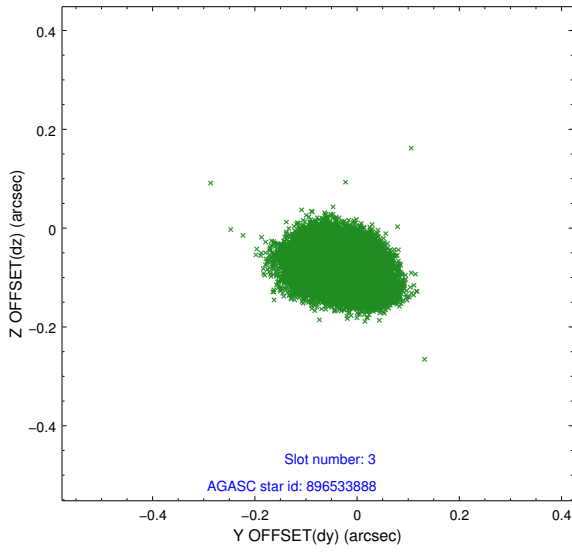
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.96	12240	-0.154	-0.102	0.011	0.019	0.000000	0.000000	-772.88	-1738.16
1	FID		ACIS-S-4	7.05	12239	0.183	0.077	0.008	0.013	0.000000	0.000000	2140.83	170.39
2	FID		ACIS-S-6	7.17	12240	-0.056	0.033	0.010	0.017	0.000000	0.000000	389.29	807.80
3	GUIDE	used	896533888	7.01	24480	-0.027	-0.078	0.060	0.098	266.666434	-29.392757	1518.32	677.00
4	GUIDE	used	896537176	8.03	24477	0.104	-0.032	0.070	0.108	266.498272	-28.678259	-1095.03	420.67
5	GUIDE	used	896541360	7.72	24477	-0.046	-0.054	0.074	0.114	266.684478	-29.453744	1742.56	710.09
6	GUIDE	used	896404568	7.86	24476	0.141	0.300	0.063	0.099	265.687293	-28.431080	-2239.00	-2040.66
7	GUIDE	used	896538840	8.91	24463	-0.172	-0.135	0.088	0.146	266.920426	-28.466925	-1709.28	1828.44

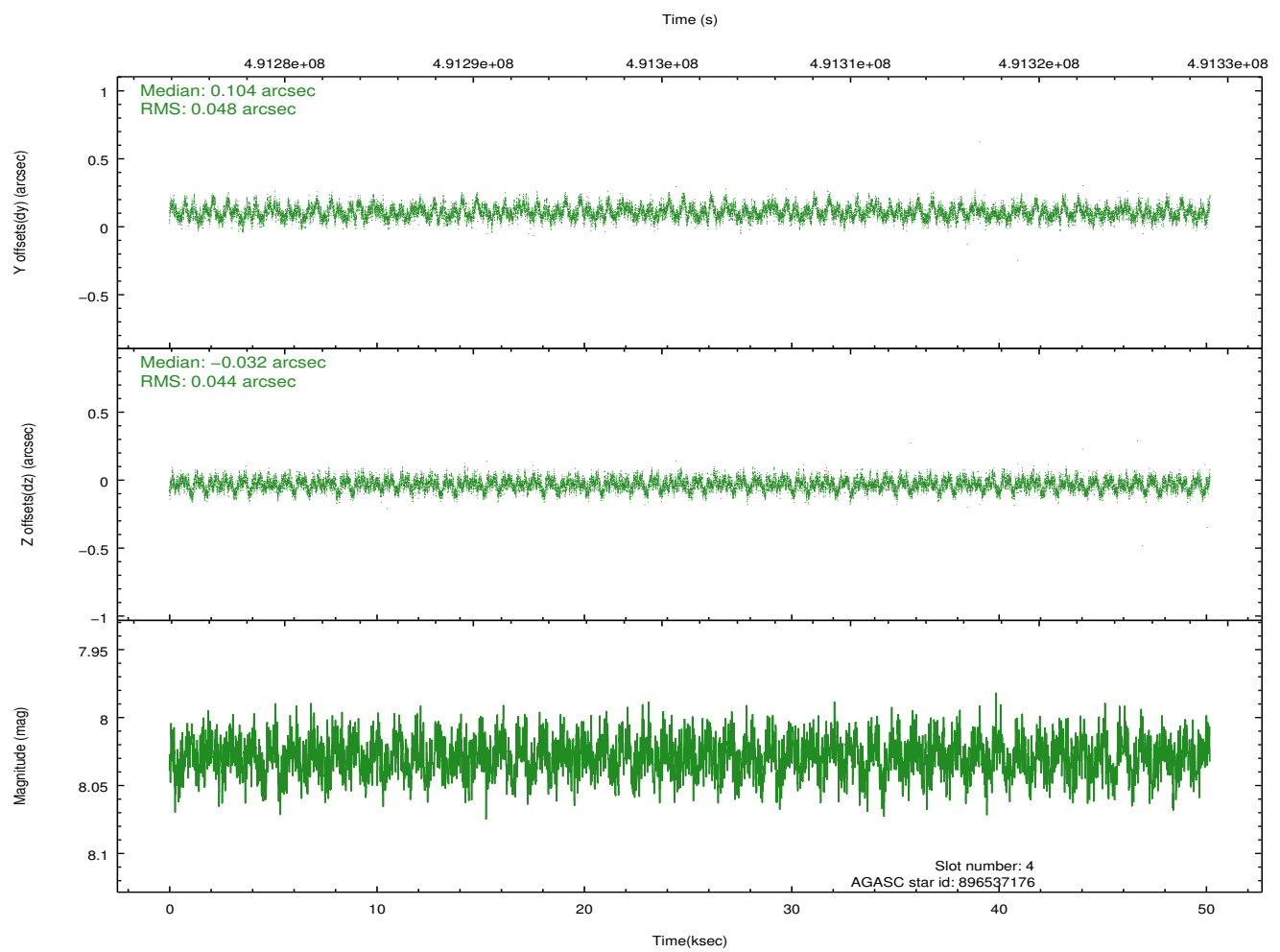
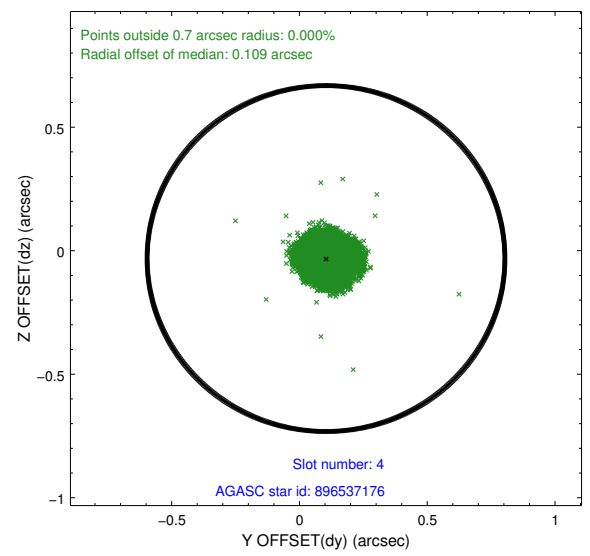
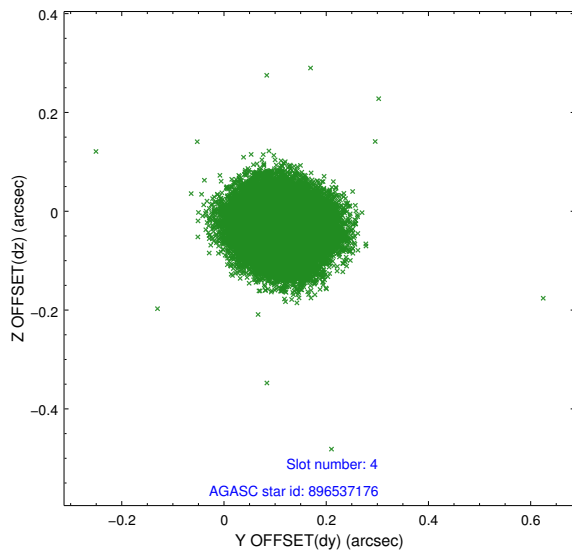
∞

2.4 Star Slots

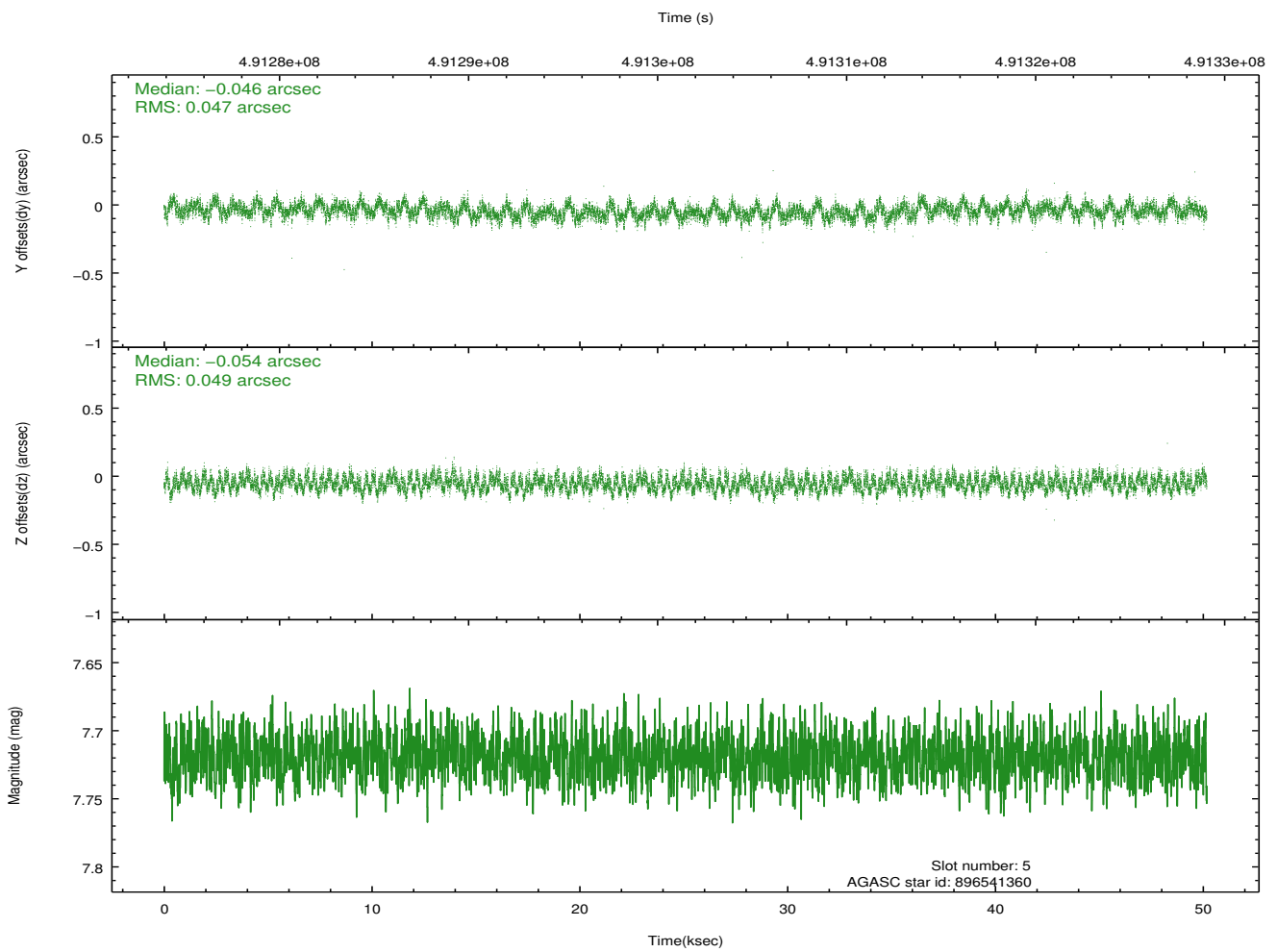
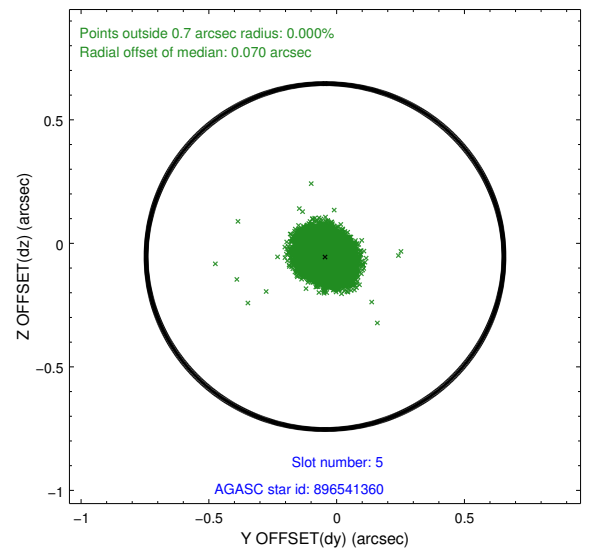
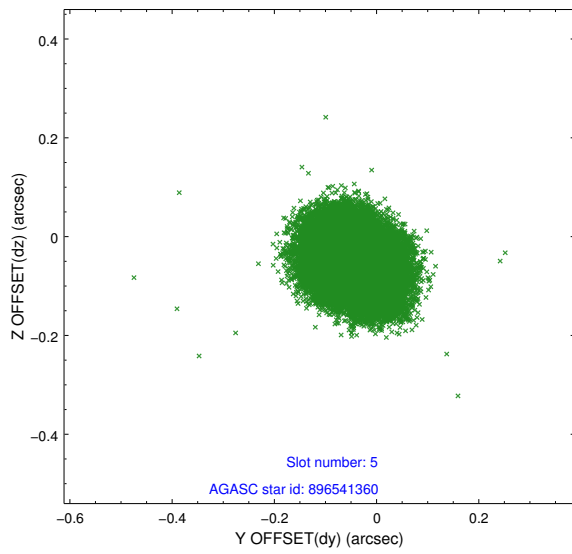
2.4.1 Slot 3



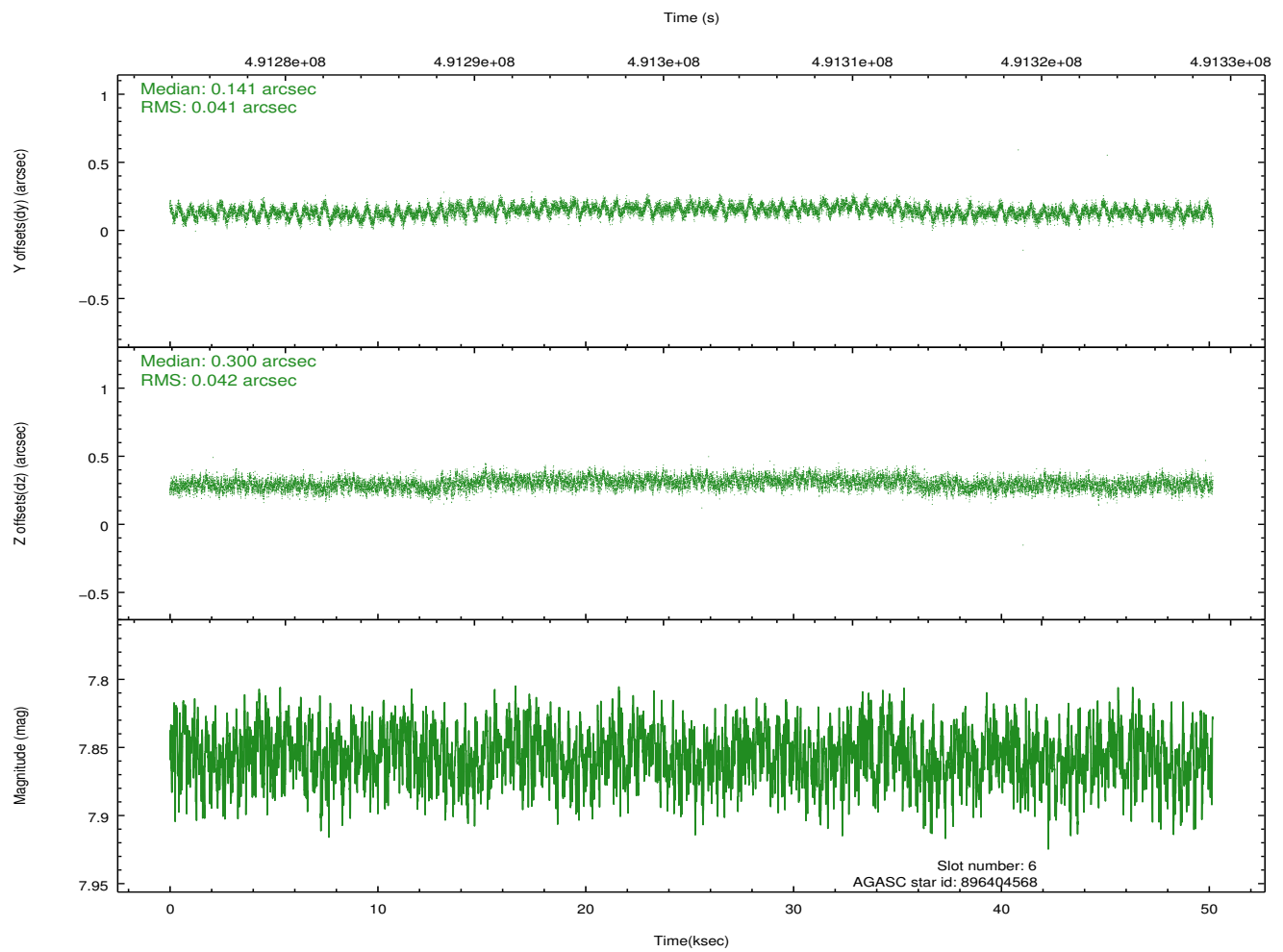
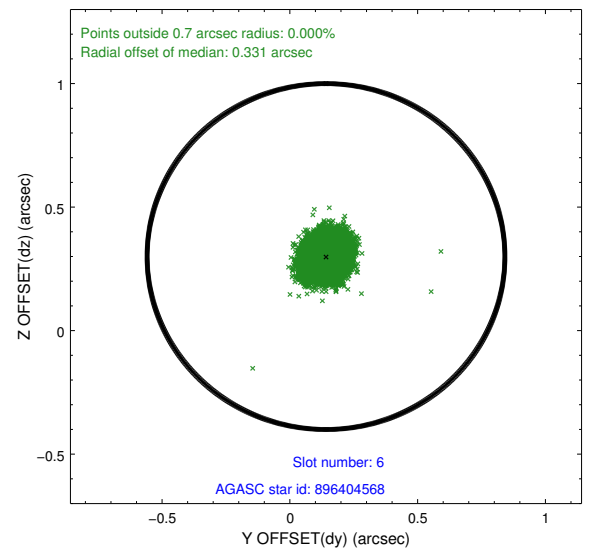
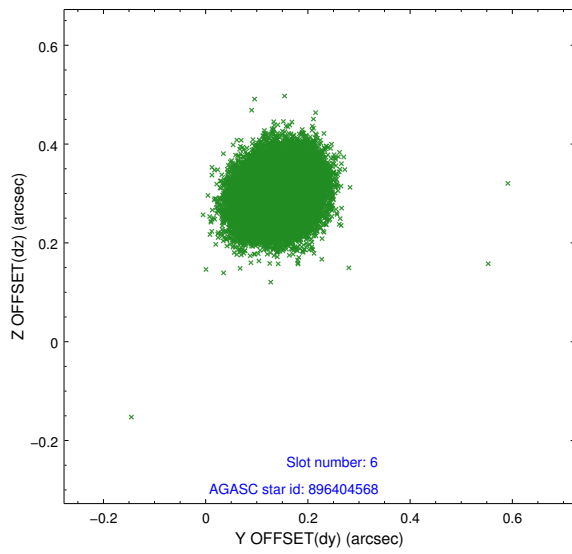
2.4.2 Slot 4



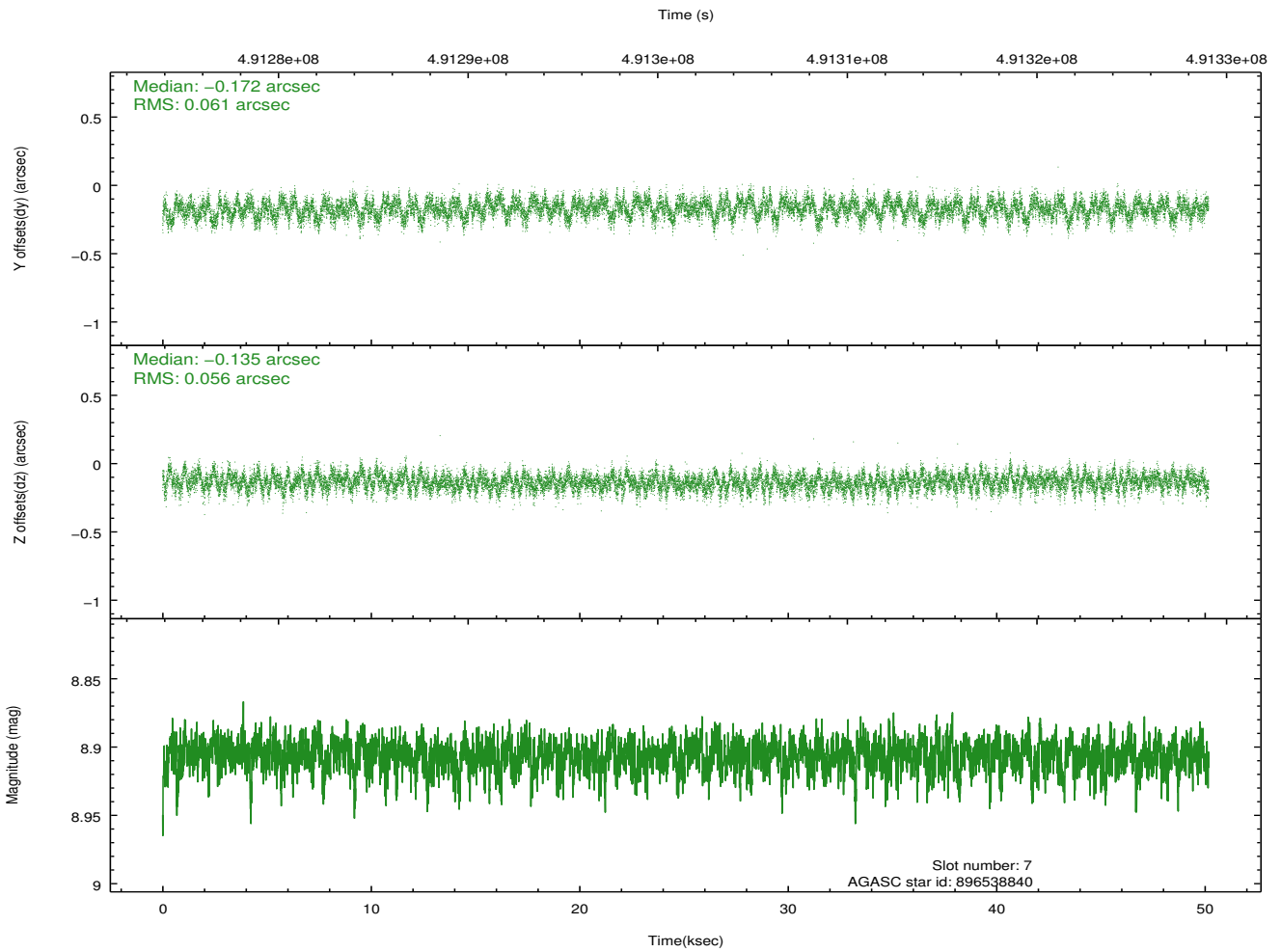
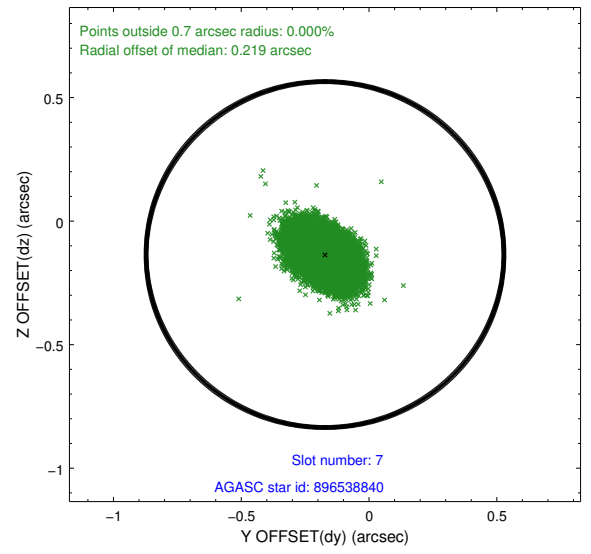
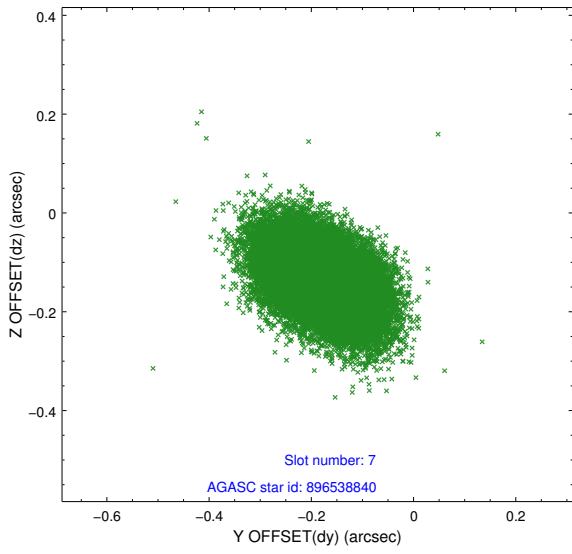
2.4.3 Slot 5



2.4.4 Slot 6

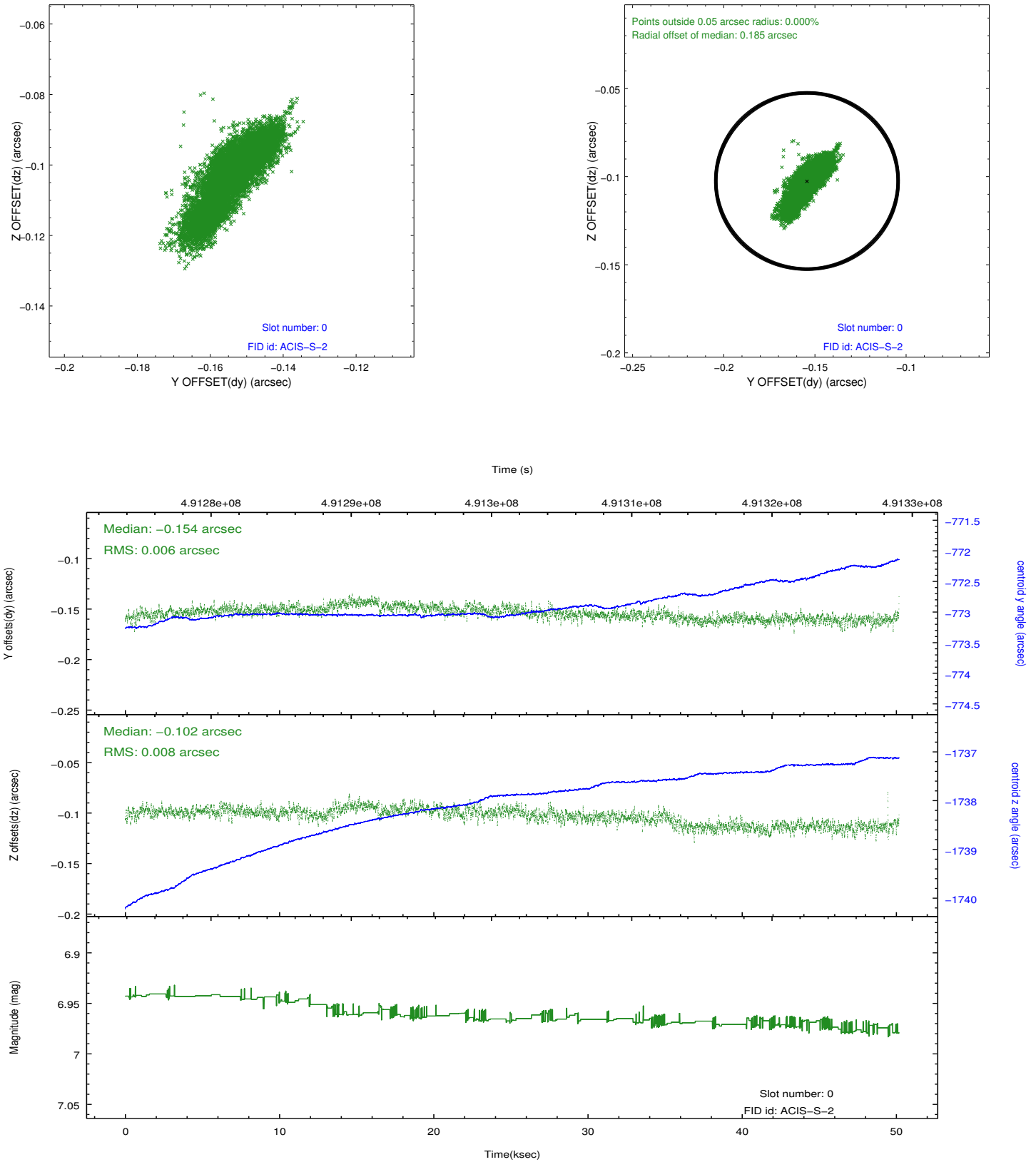


2.4.5 Slot 7

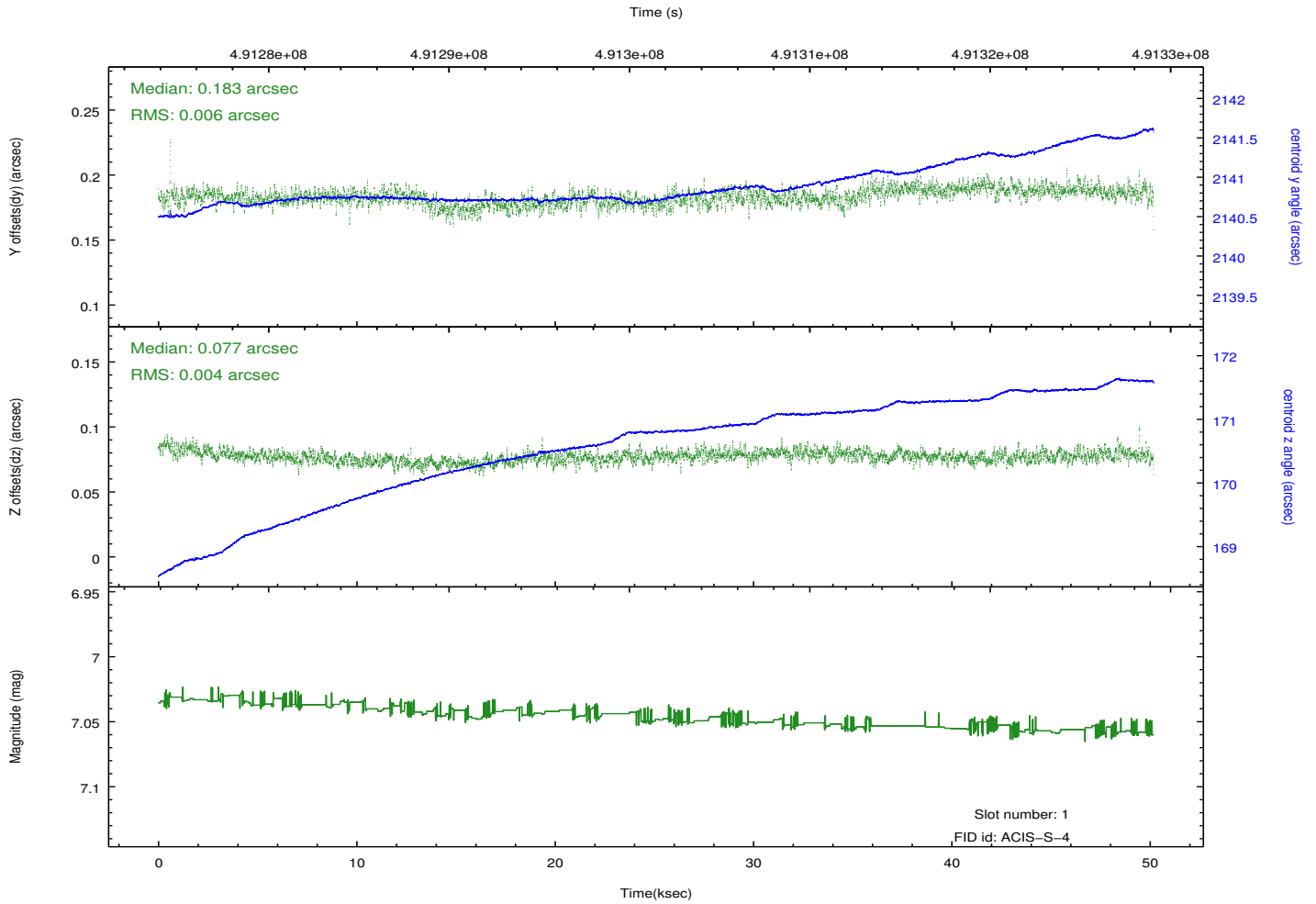
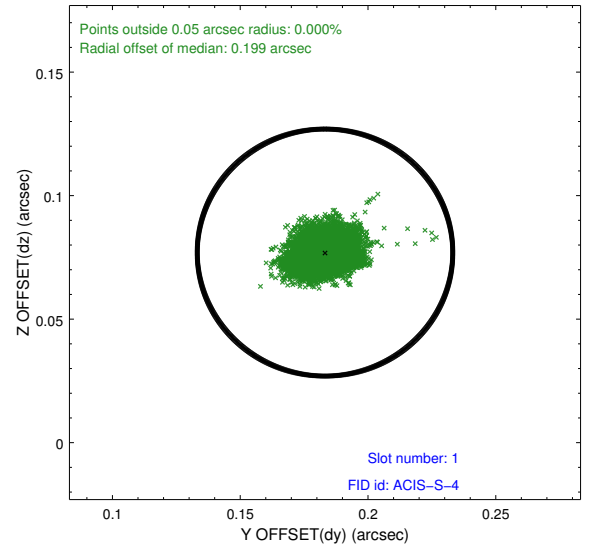
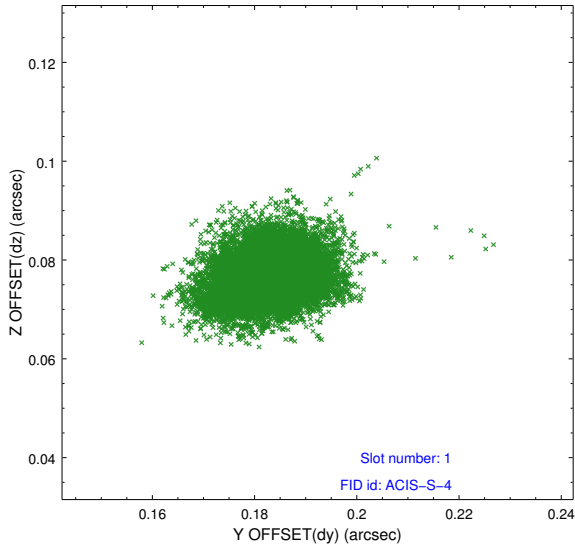


2.5 FID Slots

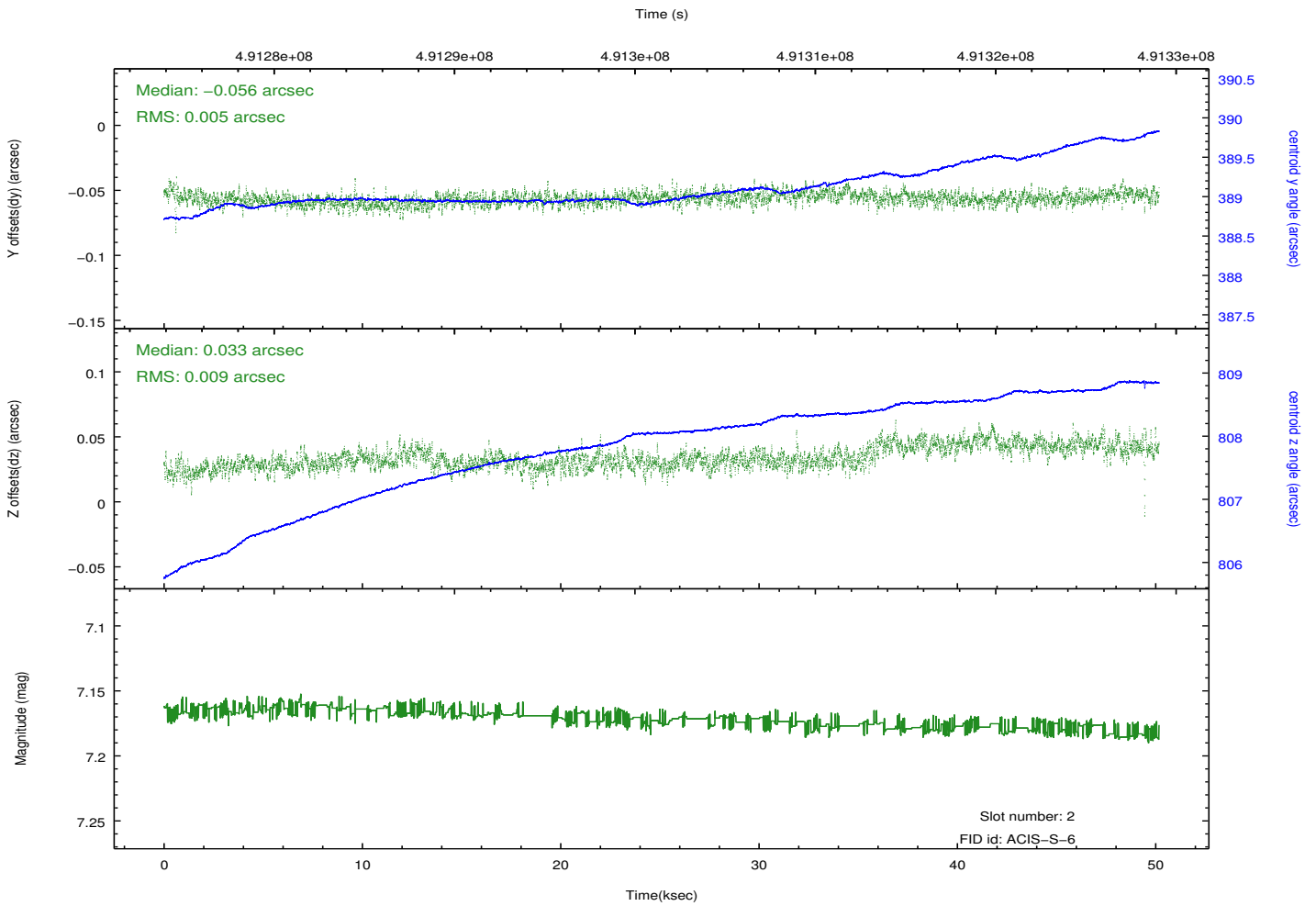
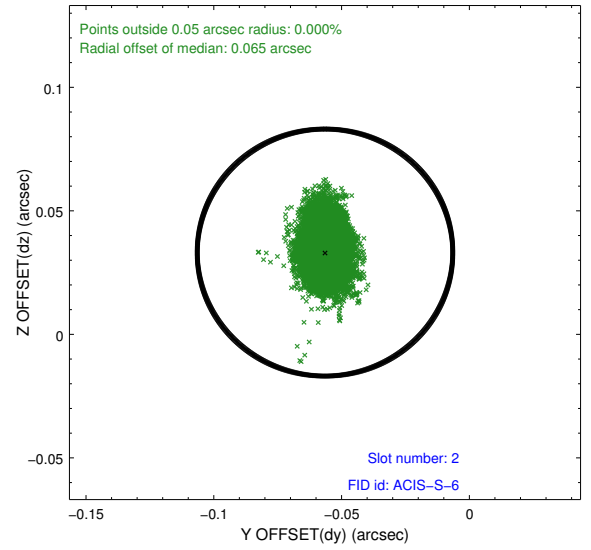
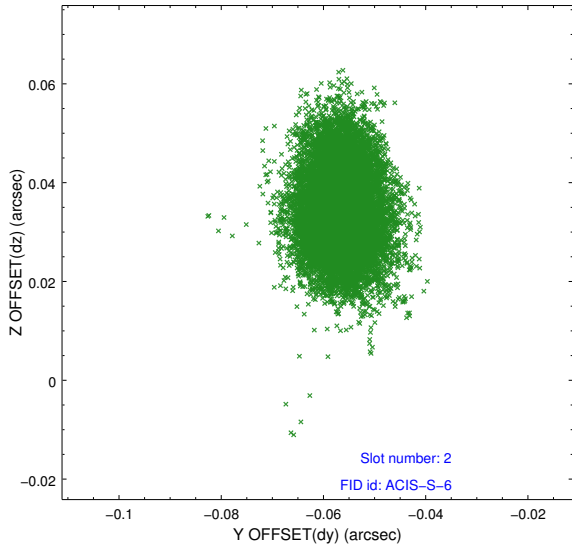
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.069597015619

A.2 Comments

Joint proposal with XMM and NRAO.

=====

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.