

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14811 - L2 Version 2
Chandra X-Ray Center

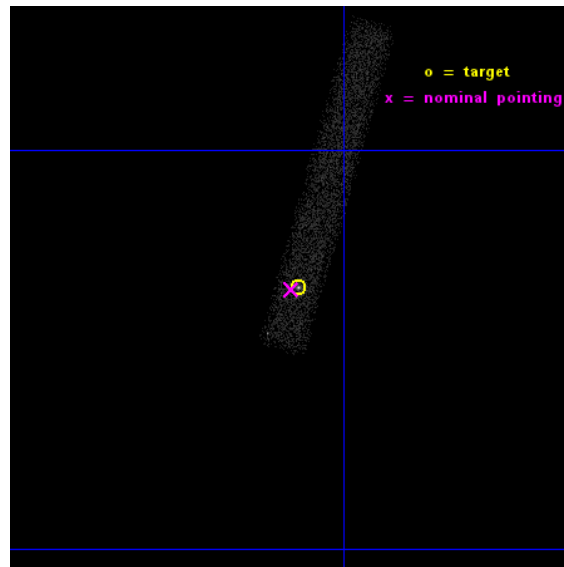
L2 Processing Date : Dec 2 2014

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1 Front

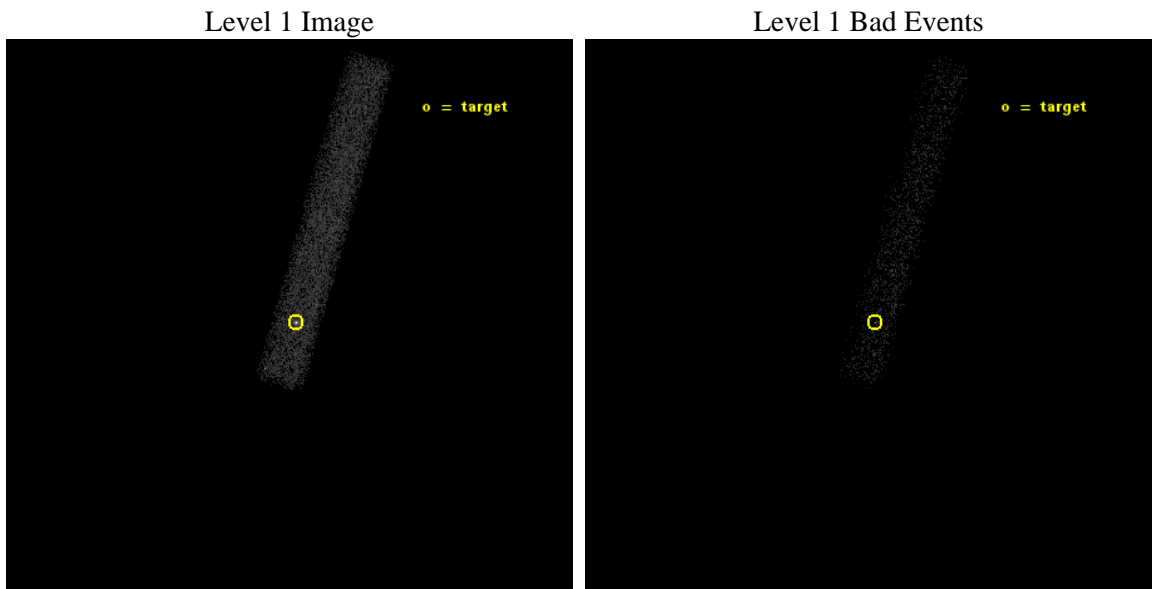
seq_num	501939	Sequence number
obs_id	14811	Observation id
title	Magnetars in Quiescence: a Key to Test the 'Grand Unification' of Neutron Stars	Proposal title
observer	Dr Chi-Yung Ng	Principal investigator
object	SGR 0501+4516	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	75.278167	Observer's specified target RA [deg]
dec_targ	45.276089	Observer's specified target Dec [deg]
ra_nom	75.28228572484	Nominal RA [deg]
dec_nom	45.275270942011	Nominal Dec [deg]
roll_nom	286.41880698128	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15070.79910171	Sum of GTIs [s]
livetime	13668.419283249	Livetime [s]
ontime7	15070.79910171	Sum of GTIs [s]
l2events	11396	Number of level 2 events



2 OBI

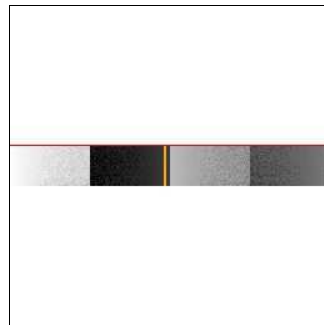
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.636000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	15070.79910171	Sum of GTIs [s]
caldbver	4.6.4	 	ontime7	15070.79910171	Sum of GTIs [s]
date	2014-12-02T12:44:54	Date and time of file creation	l1events	18955	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

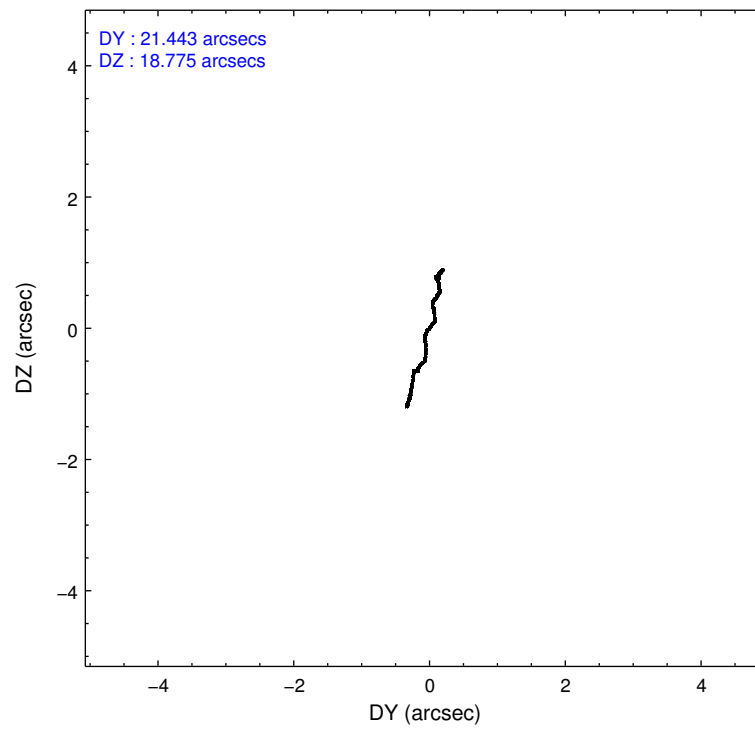
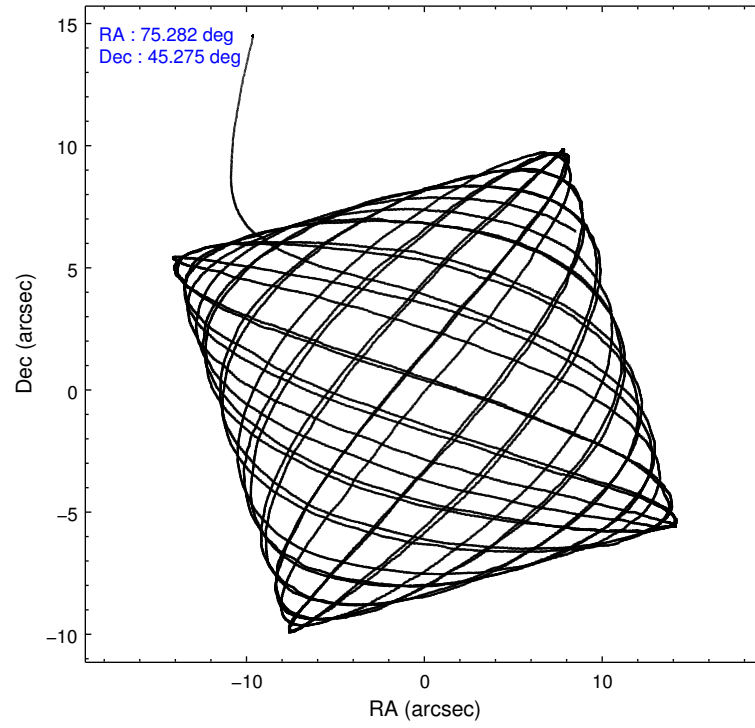
	ccd 7
level 1 events	18955
rejected events	7259
rejected %	38%

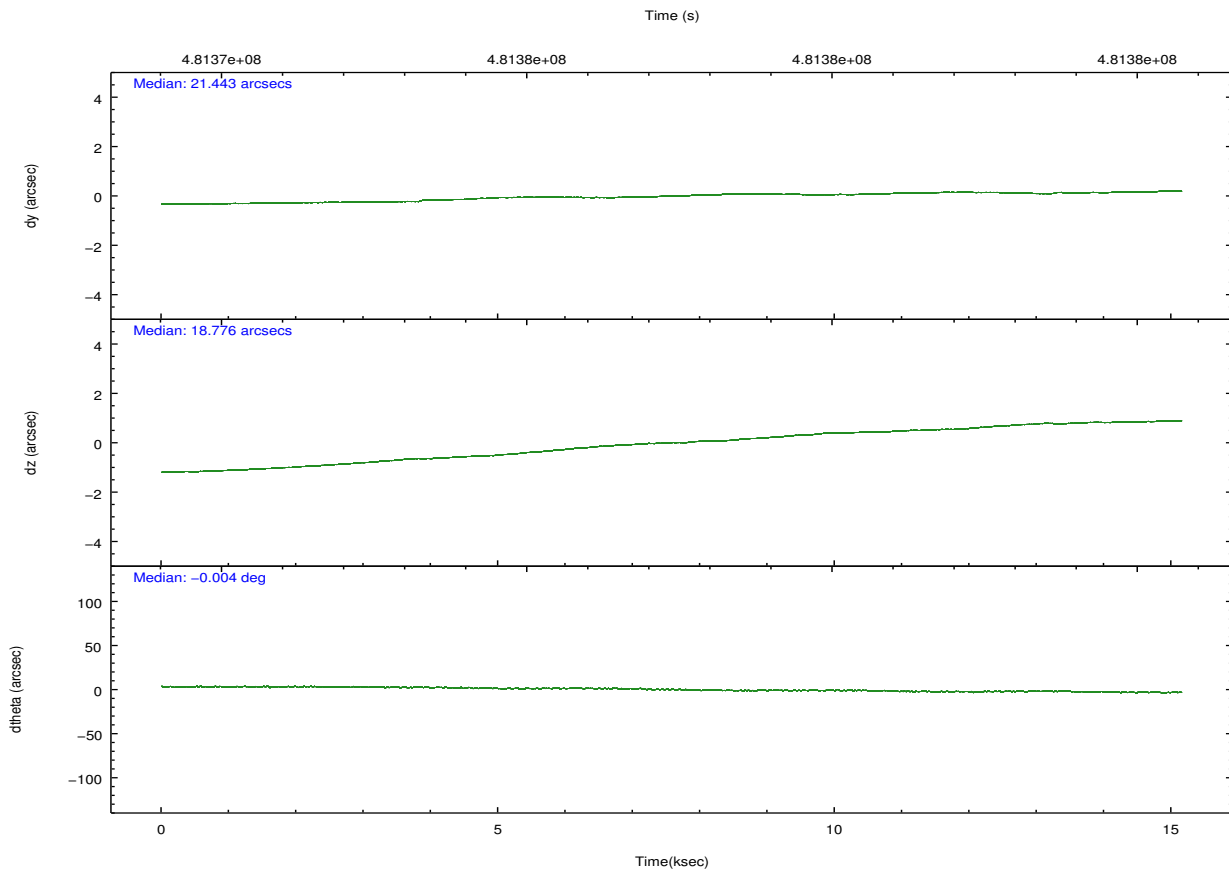
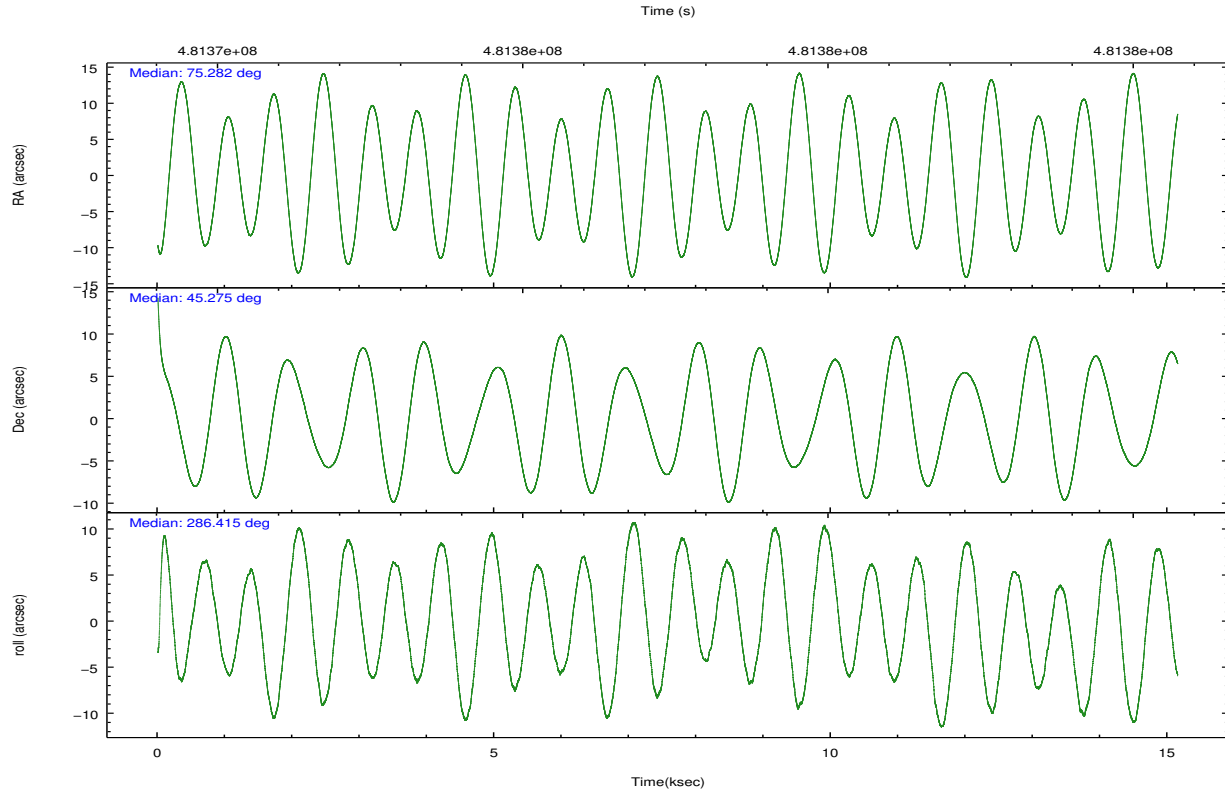
	ccd 7
grade 0 events	1808
	9%
grade 1 events	29
	0%
grade 2 events	2523
	13%
grade 3 events	1537
	8%
grade 4 events	1436
	7%
grade 5 events	1539
	8%
grade 6 events	4392
	23%
grade 7 events	5691
	30%

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	75.253787	75.28228572483981	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	45.293825	45.27527094201128	Subarray start row	449	449
[deg] Pointing Roll	286.282445	286.4188069812834	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	481369953.184000	481368936.93503			
Observation start date	2013-04-03T09:51:26	2013-04-03T09:35:36			
[s] Observation end time (MET)	481384954.184000	481385180.11091			
Observation end date	2013-04-03T14:01:27	2013-04-03T14:06:20			
Read mode	TIMED	TIMED			

2.3 Aspect





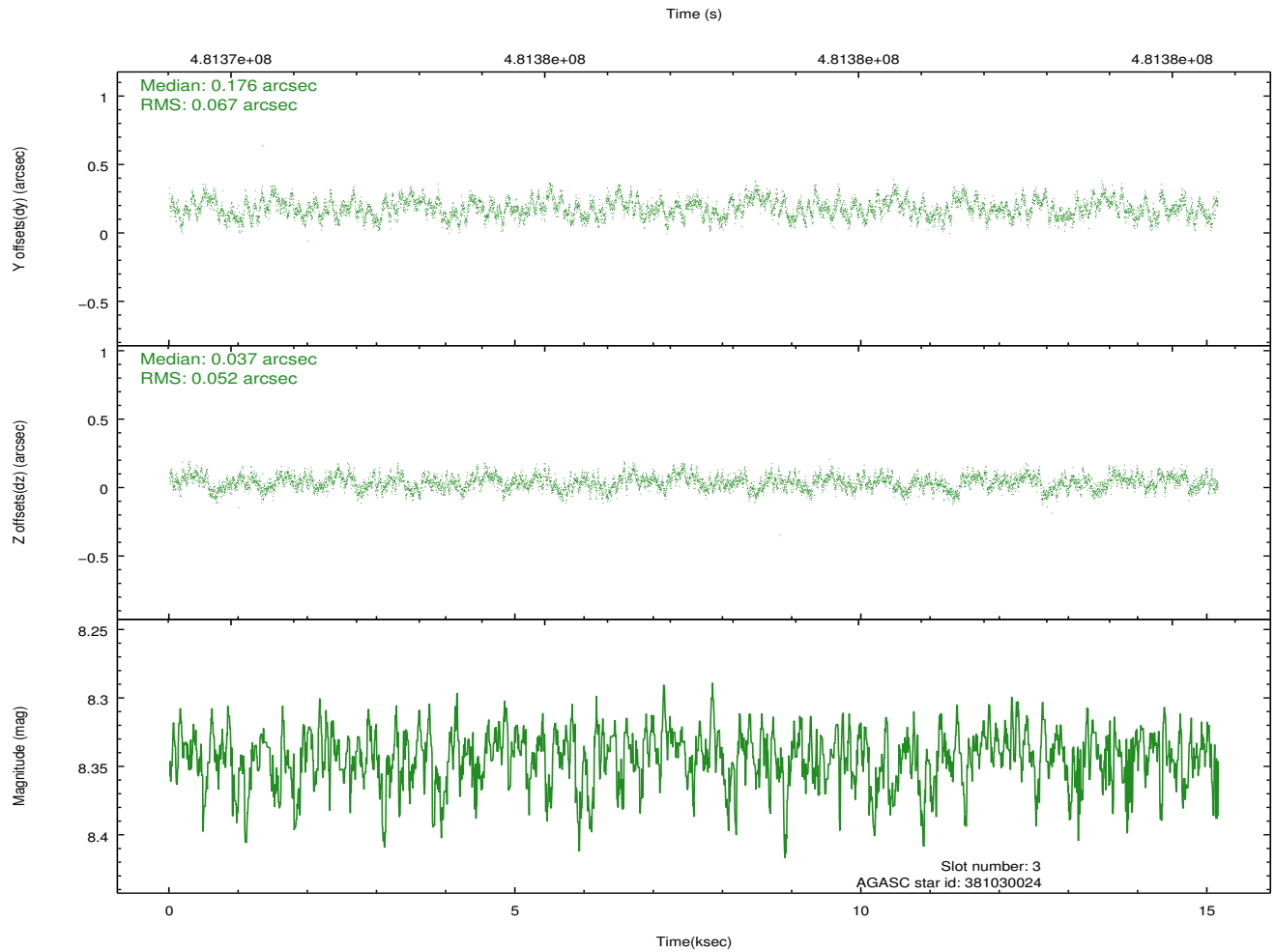
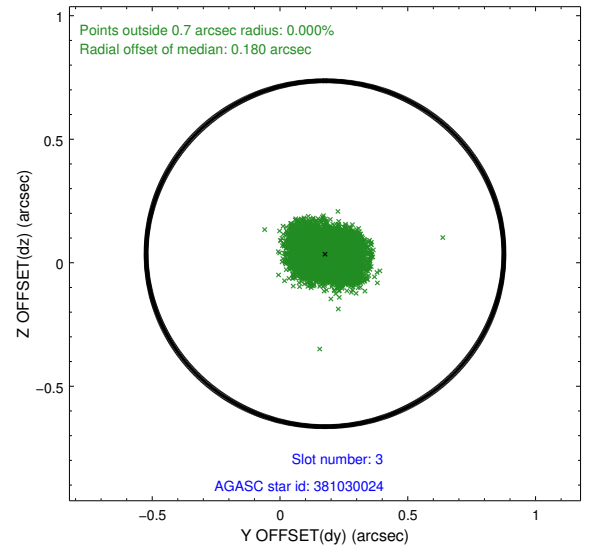
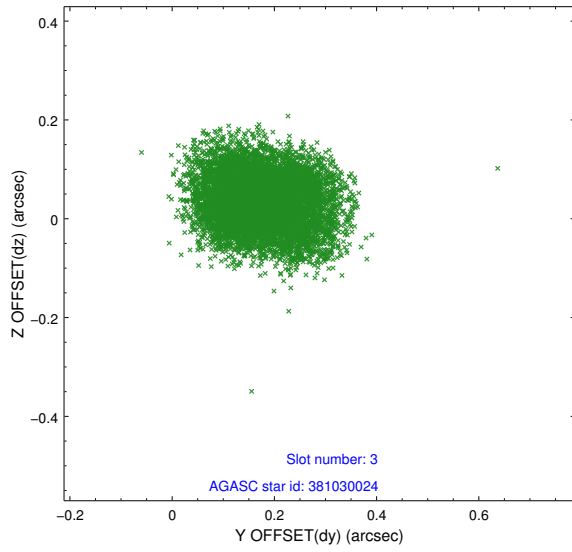
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.00	3695	-0.110	-0.044	0.015	0.025	0.000000	0.000000	-774.67	-1740.22
1	FID		ACIS-S-4	7.09	3695	0.235	0.065	0.007	0.013	0.000000	0.000000	2138.83	168.04
2	FID		ACIS-S-5	7.12	3695	-0.156	-0.011	0.014	0.024	0.000000	0.000000	-1827.16	162.00
3	GUIDE	used	381030024	8.34	7390	0.176	0.037	0.093	0.145	75.061936	44.874027	1313.93	-893.03
4	GUIDE	used	438307160	7.64	7390	-0.193	0.091	0.098	0.151	75.339715	45.888971	-1995.19	807.13
5	GUIDE	used	438308680	8.48	7386	-0.001	-0.117	0.075	0.120	75.553451	45.026038	1138.06	462.24
6	GUIDE	used	438314176	8.41	7318	0.131	-0.064	0.091	0.143	75.326509	45.446275	-474.72	330.27
7	GUIDE	used	438307640	9.21	7381	-0.118	0.056	0.115	0.179	75.288023	45.841930	-1868.81	636.75

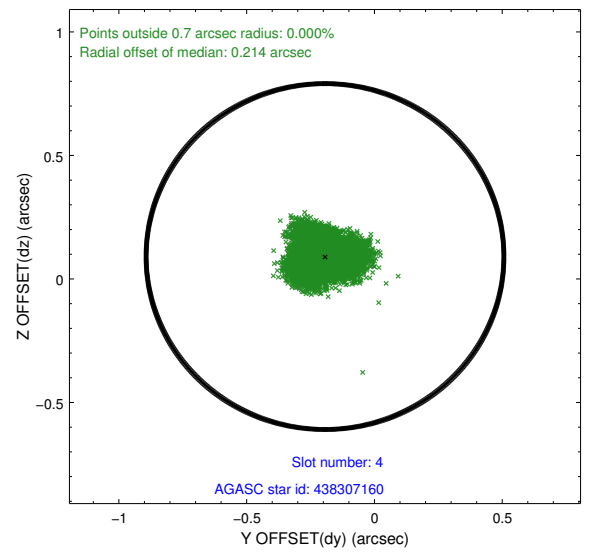
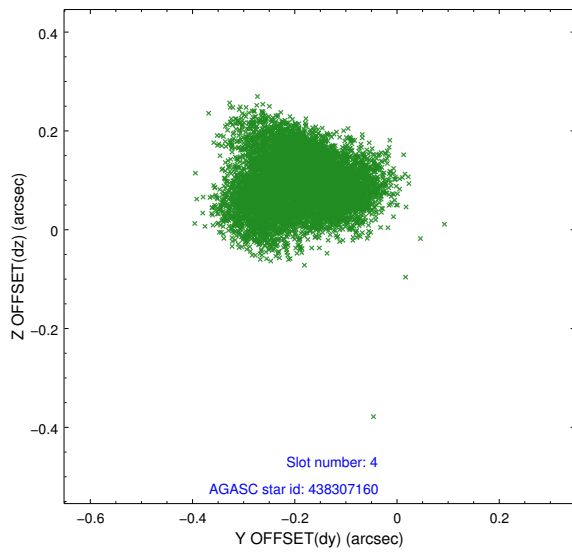
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2.4 Star Slots

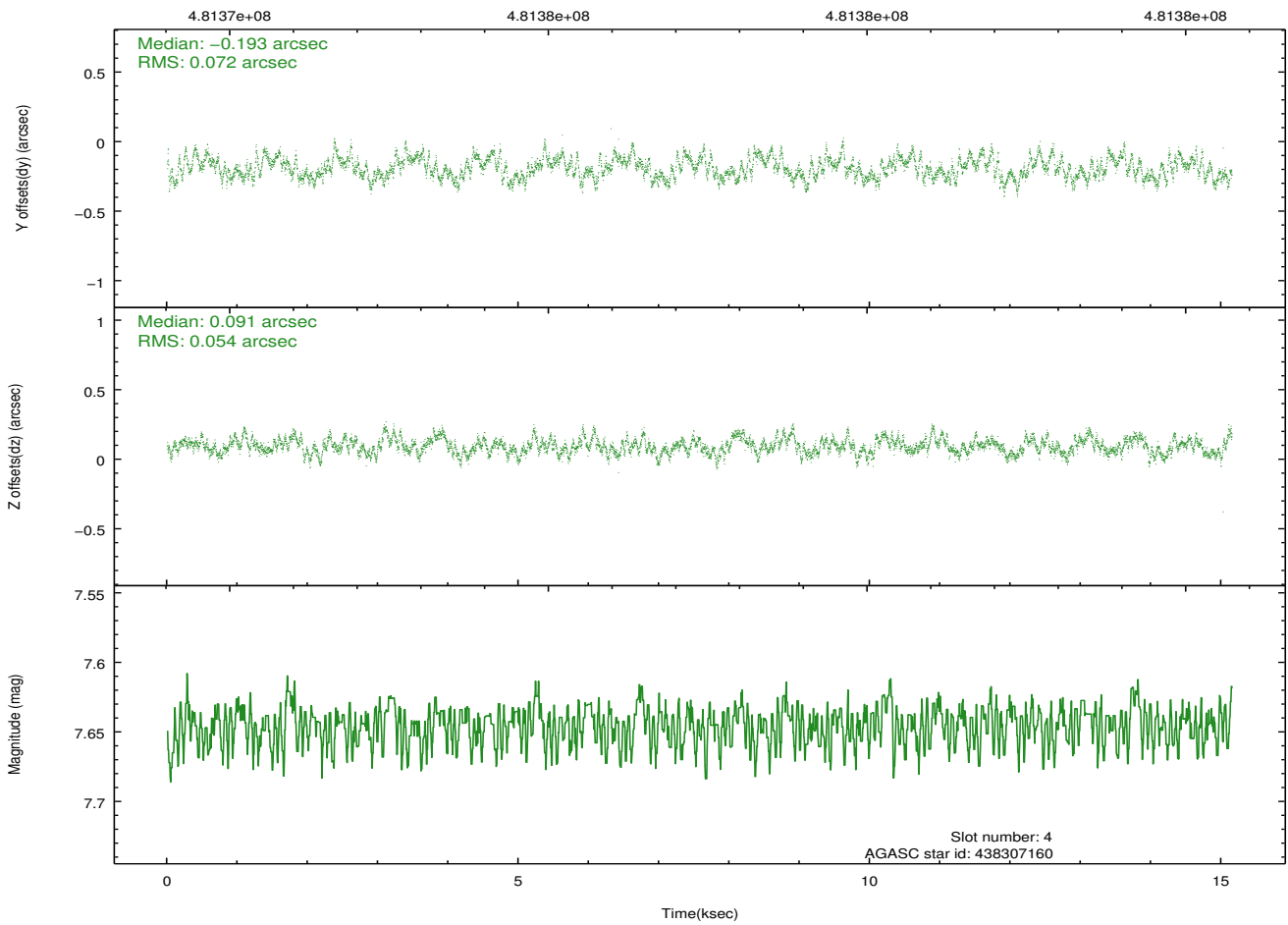
2.4.1 Slot 3



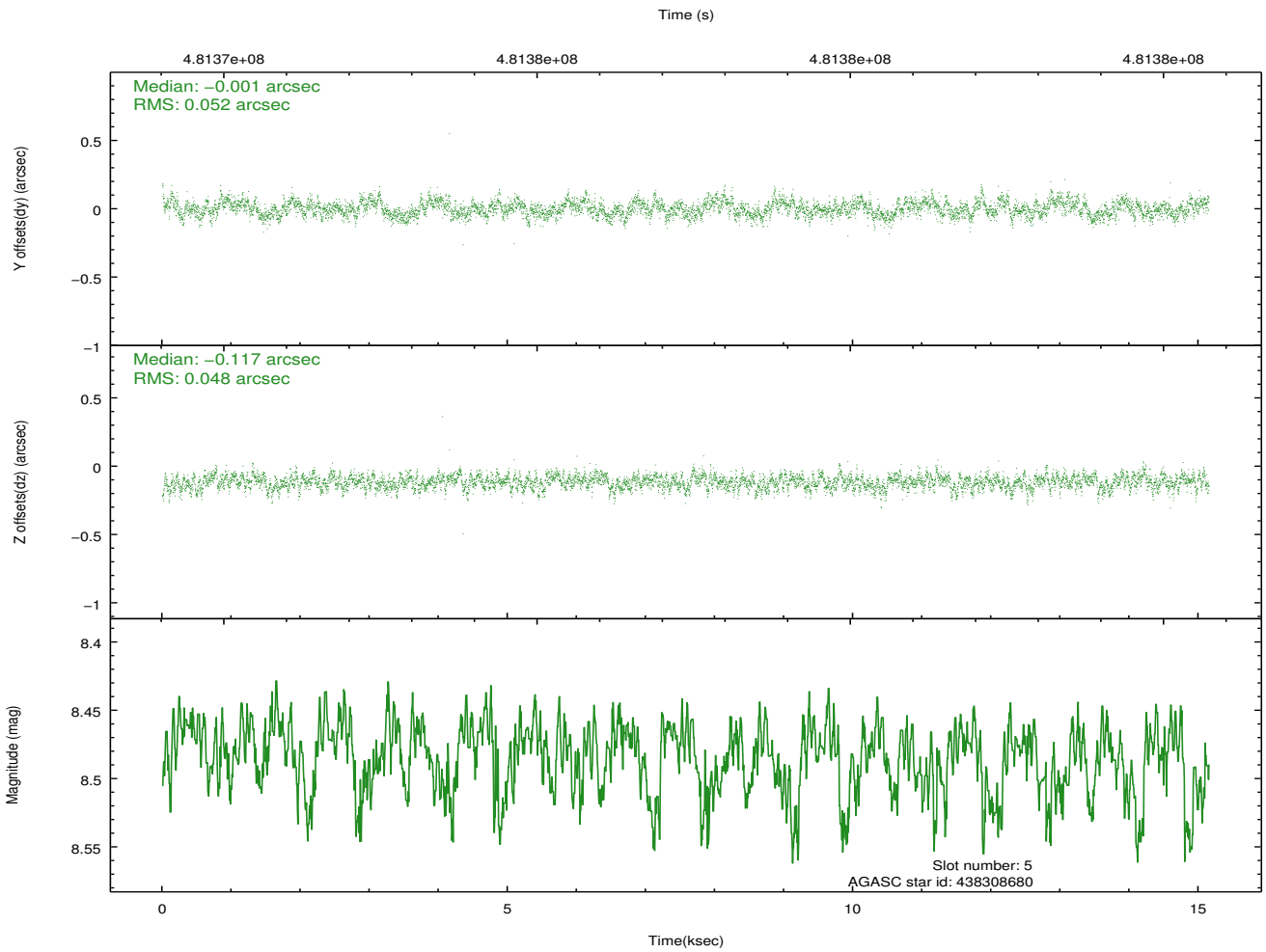
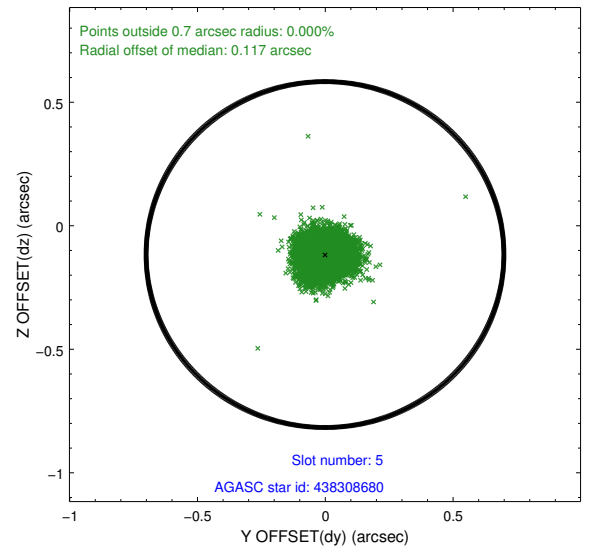
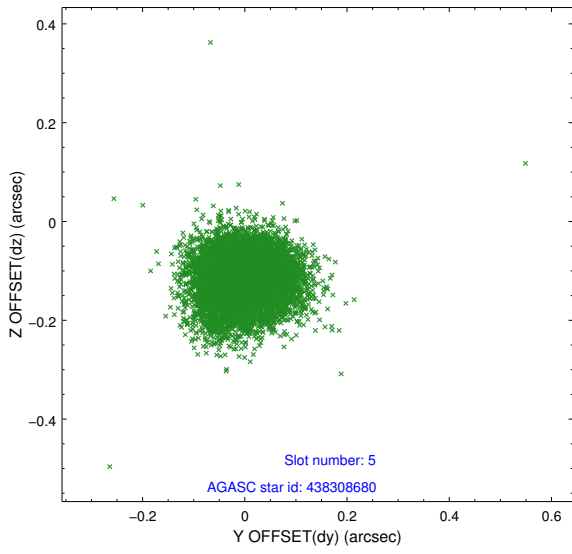
2.4.2 Slot 4



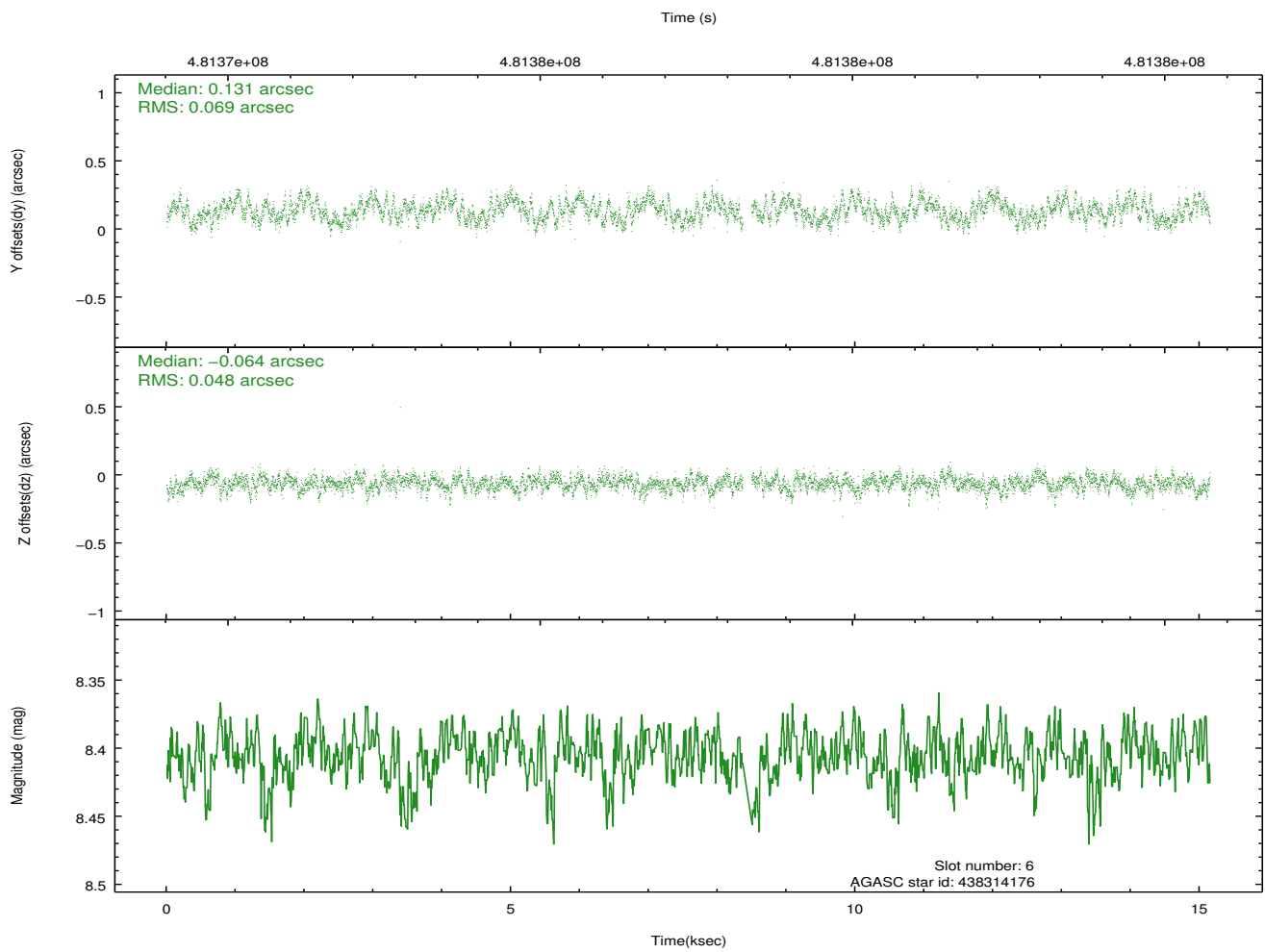
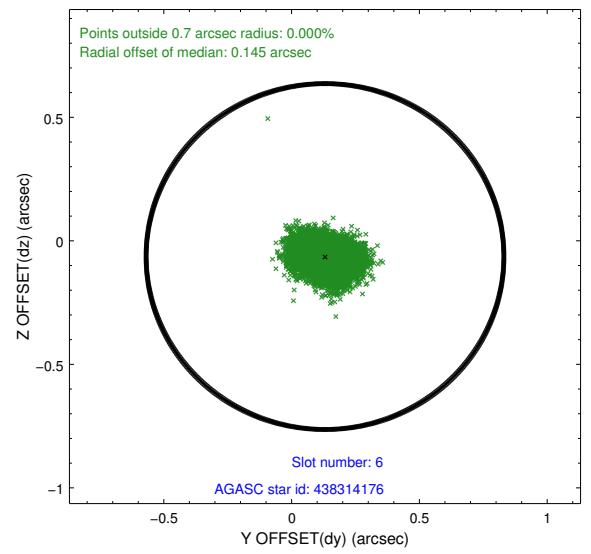
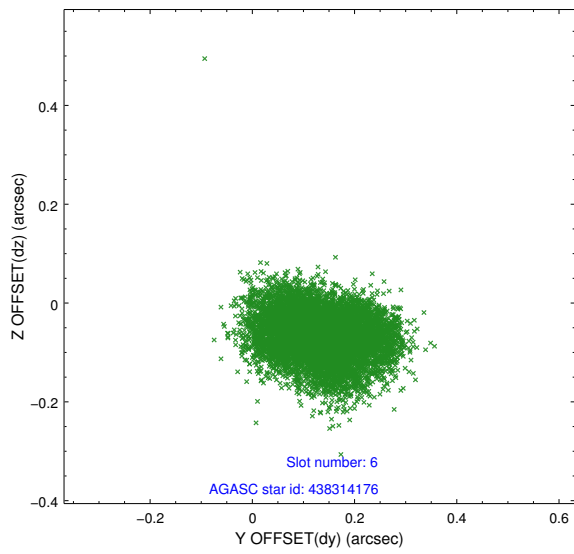
Time (s)



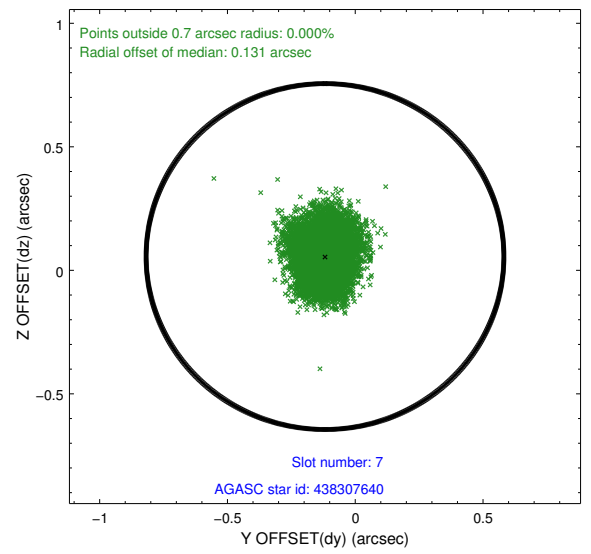
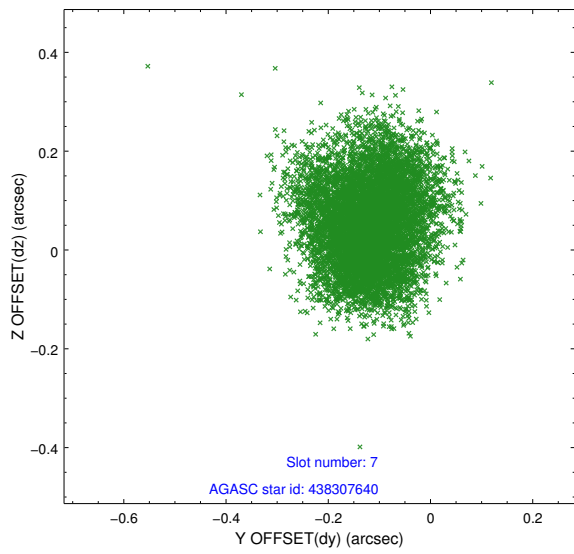
2.4.3 Slot 5



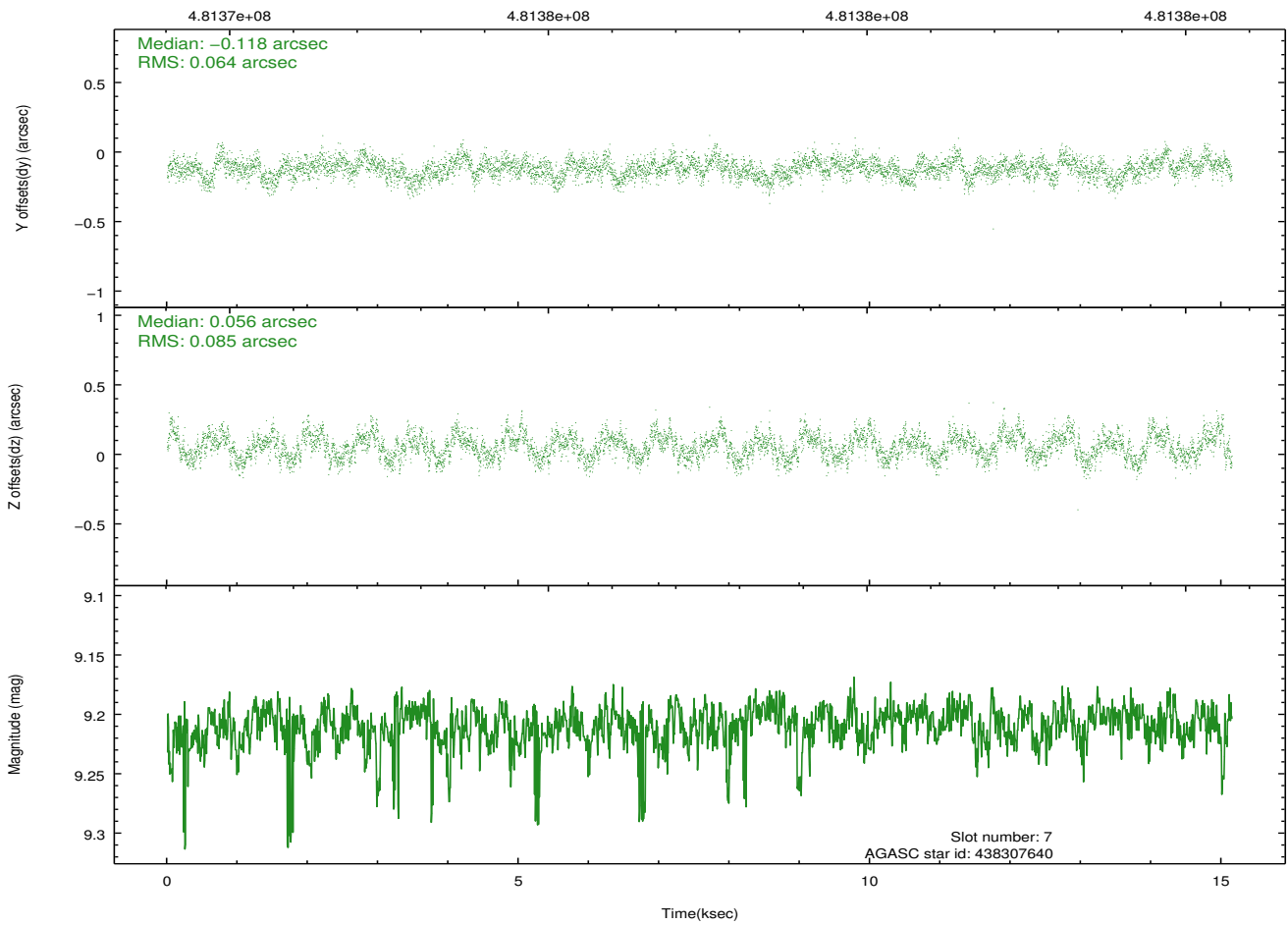
2.4.4 Slot 6



2.4.5 Slot 7

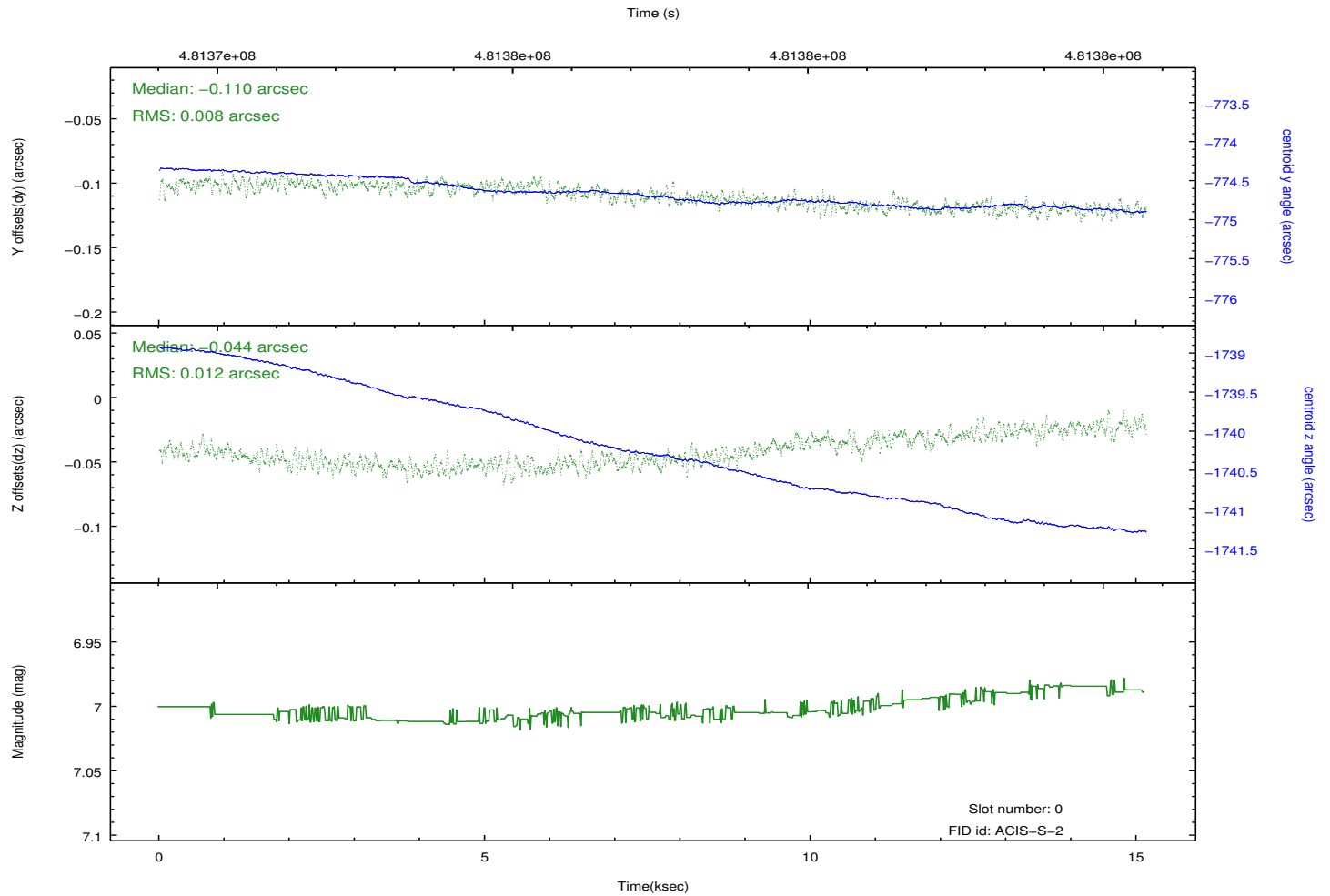
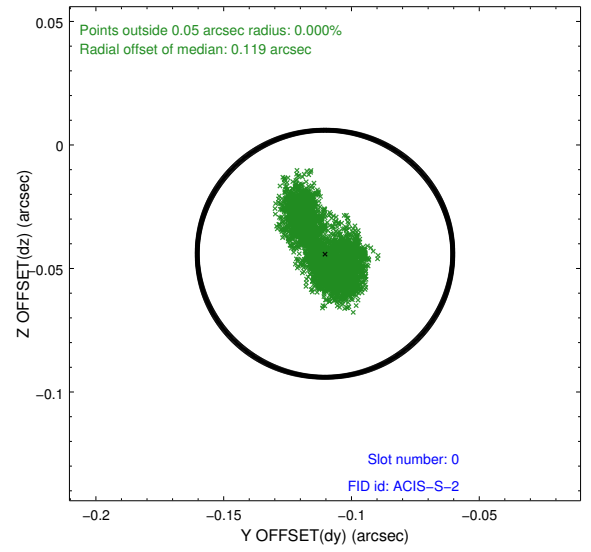
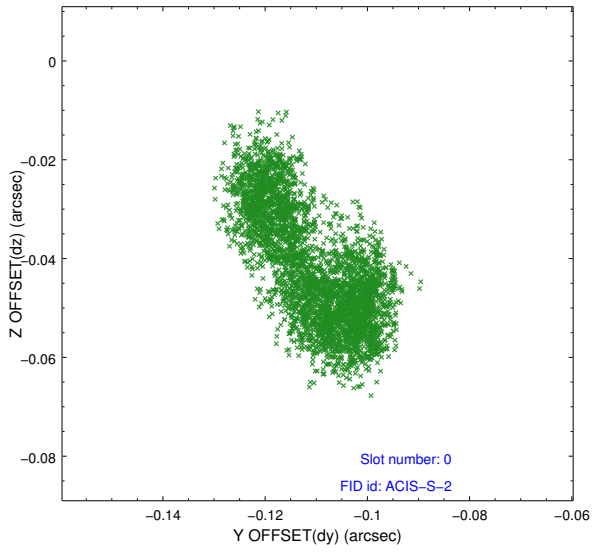


Time (s)

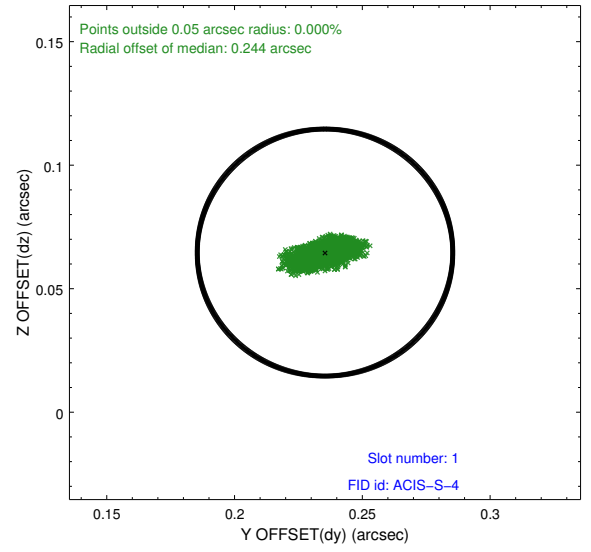
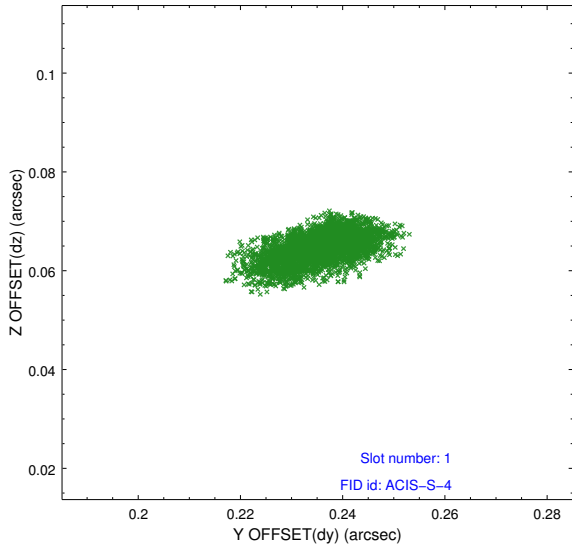


2.5 FID Slots

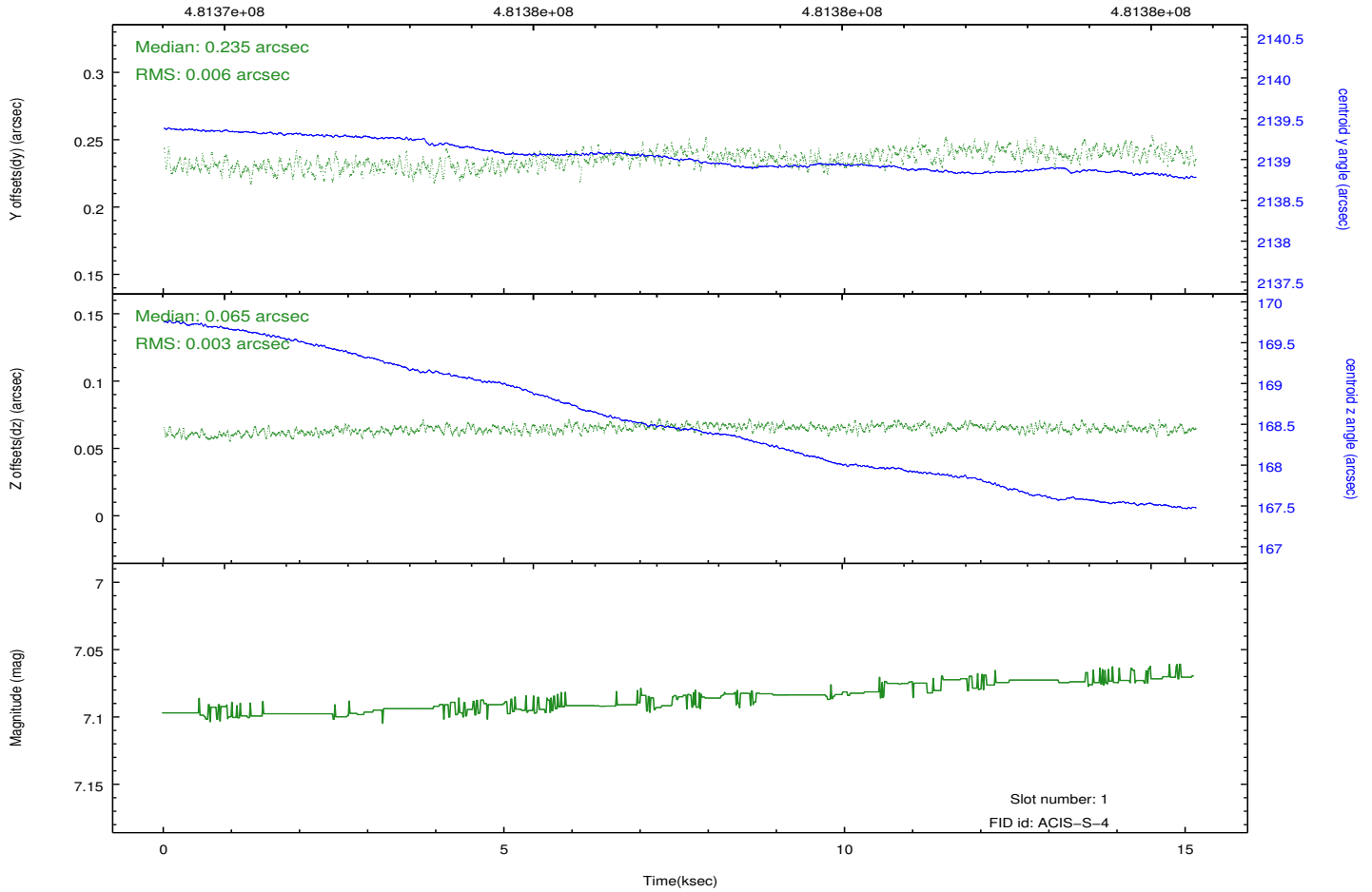
2.5.1 Slot 0



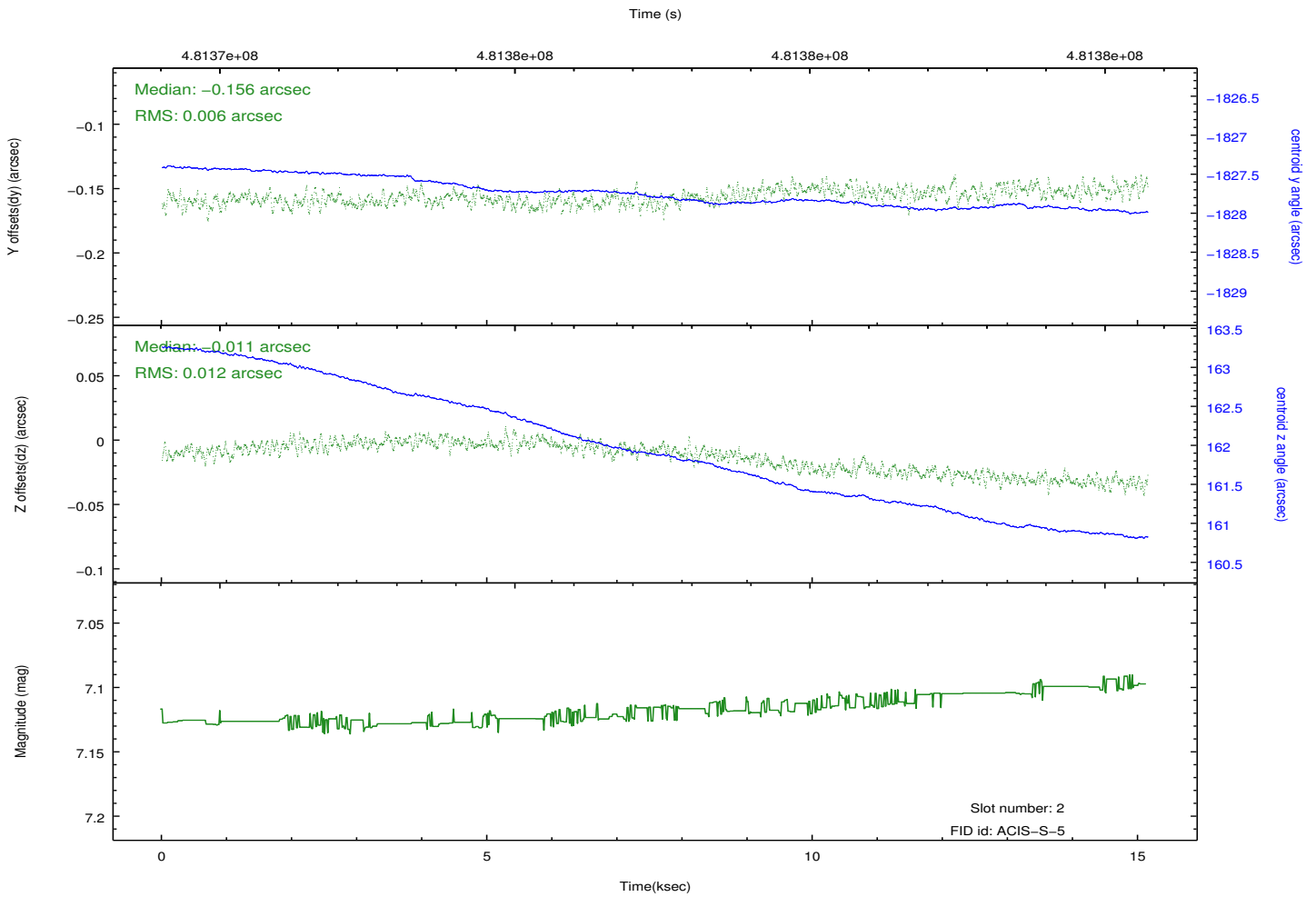
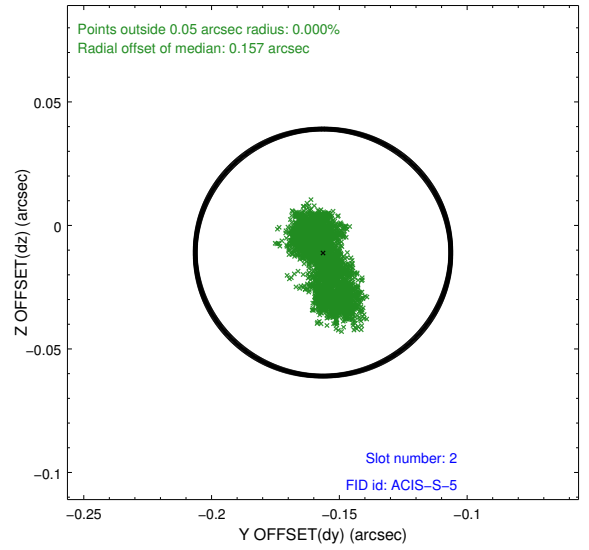
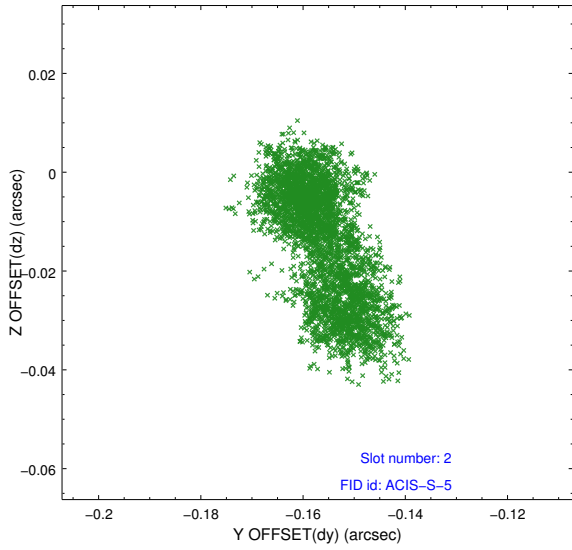
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.07079910171

A.2 Comments

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.