

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14650 - L2 Version 2
Chandra X-Ray Center

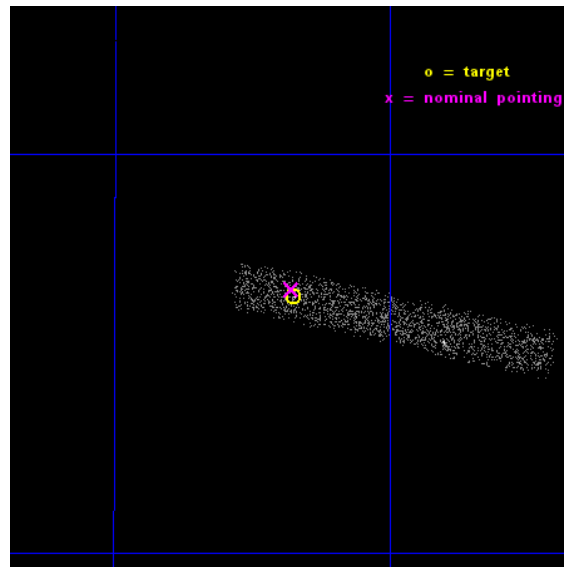
L2 Processing Date : Dec 1 2014

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

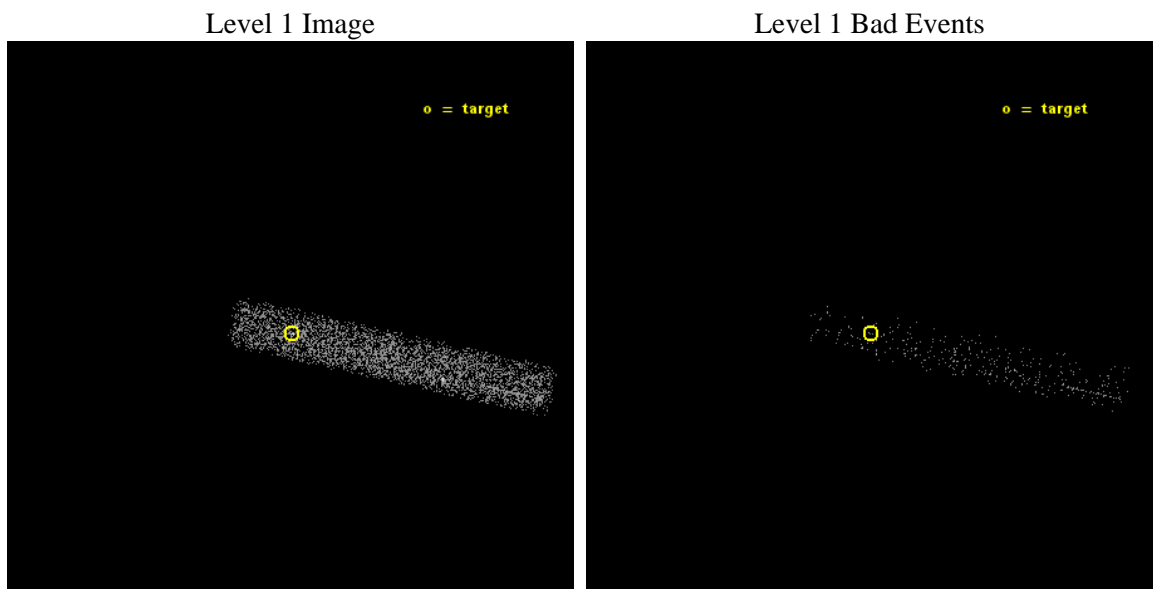
seq_num	401483	Sequence number
obs_id	14650	Observation id
title	A snap-shot survey of Galactic neutron-star Be/X-ray transients in quiescence	Proposal title
observer	Dr. Rudy Wijnands	Principal investigator
object	SAX J2239.3+6116	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	339.837083	Observer's specified target RA [deg]
dec_targ	61.274111	Observer's specified target Dec [deg]
ra_nom	339.83926157268	Nominal RA [deg]
dec_nom	61.27703798033	Nominal Dec [deg]
roll_nom	12.138259804984	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5068.6419659853	Sum of GTIs [s]
livetime	4596.9907182889	Livetime [s]
ontime7	5068.6419659853	Sum of GTIs [s]
l2events	2610	Number of level 2 events



2 OBI

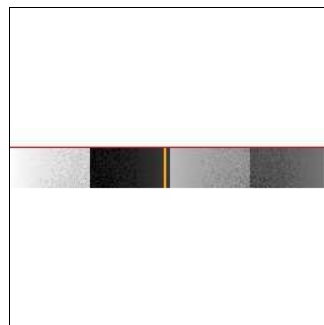
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	5068.6419659853	Sum of GTIs [s]
caldbver	4.6.4	 	ontime7	5068.6419659853	Sum of GTIs [s]
date	2014-12-02T00:42:51	Date and time of file creation	l1events	5388	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

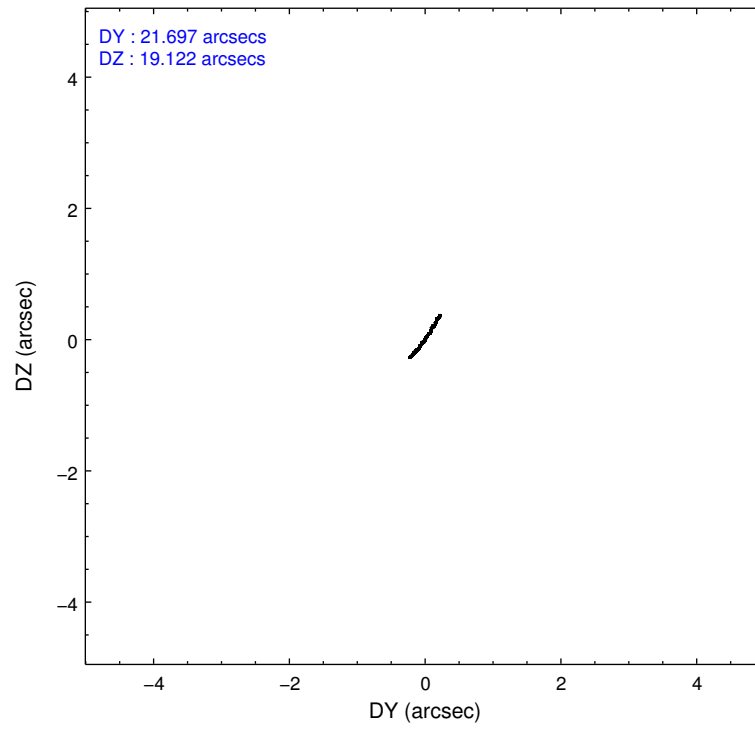
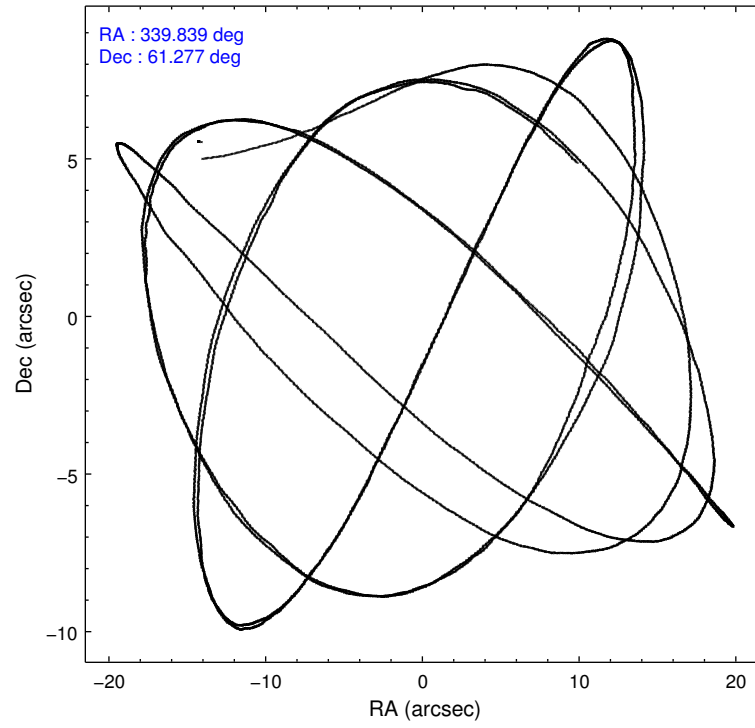
	ccd 7
level 1 events	5388
rejected events	2660
rejected %	49%

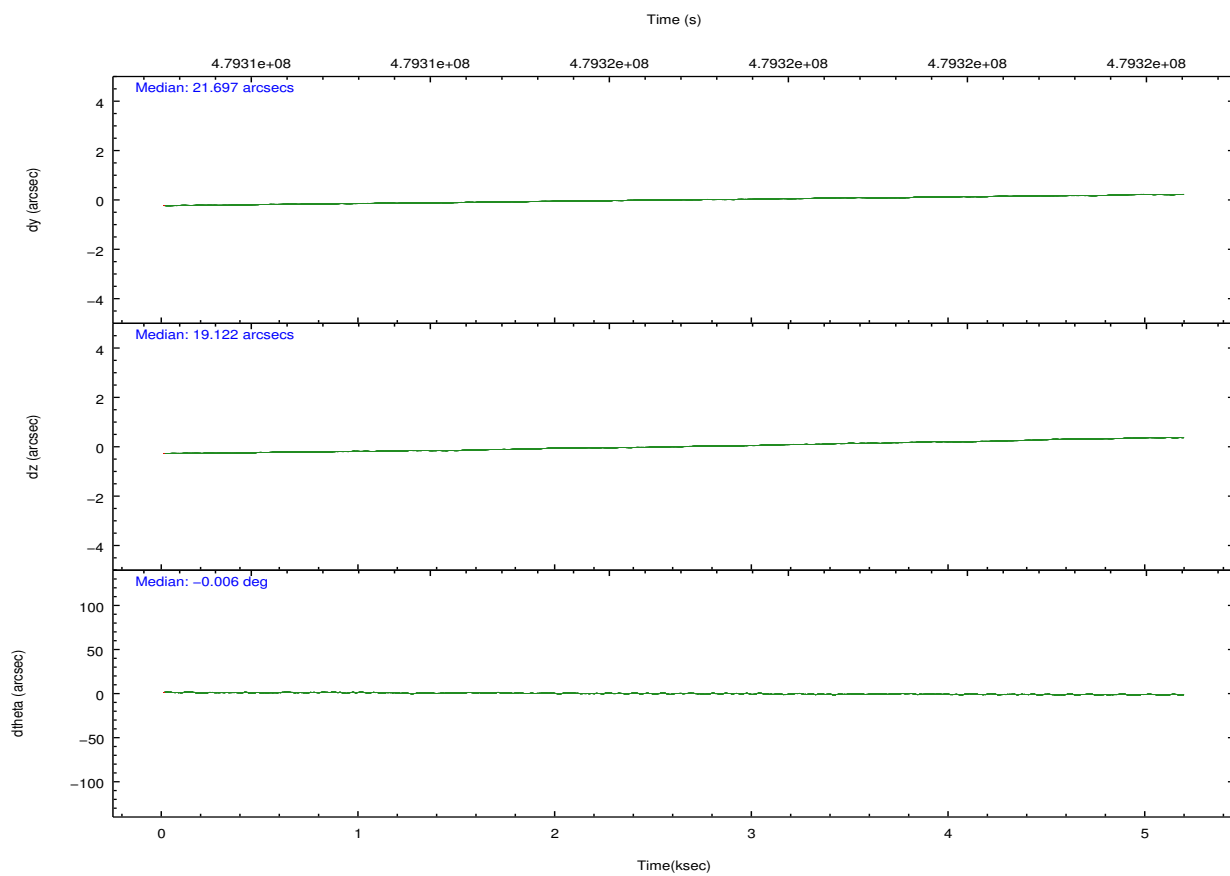
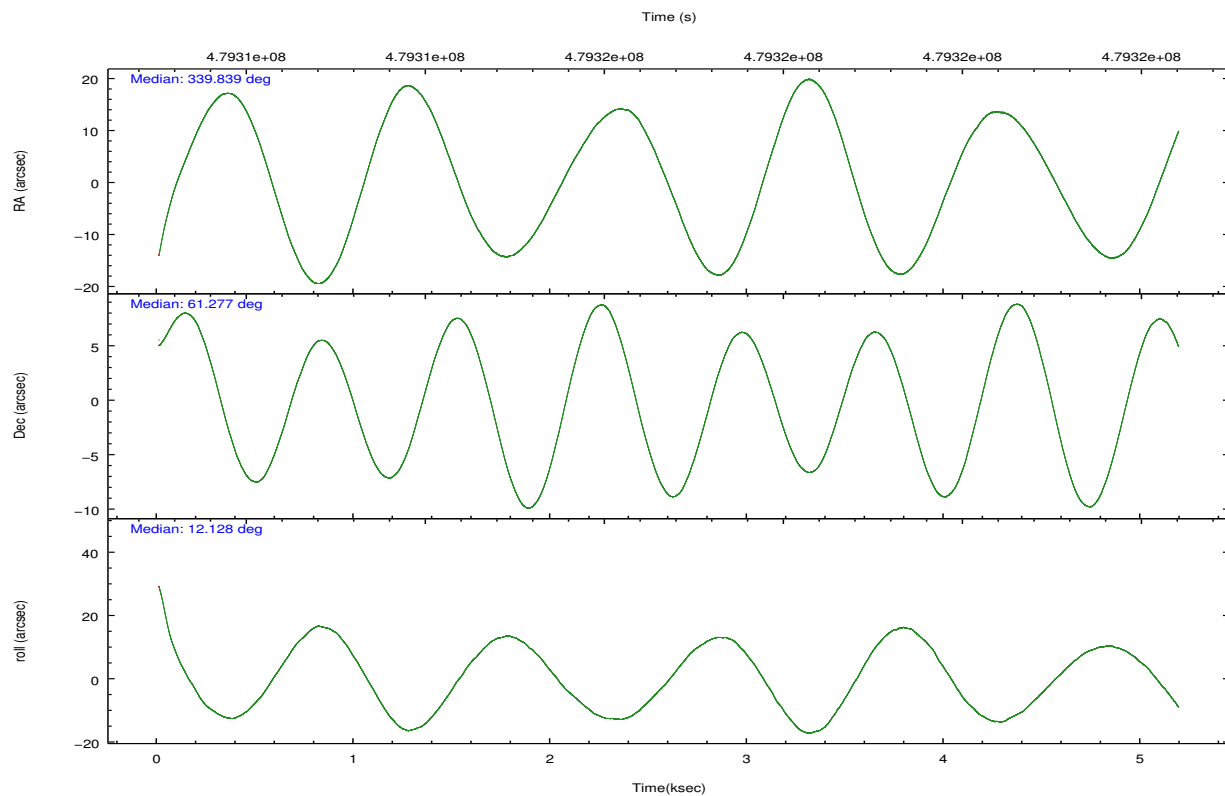
	ccd 7
grade 0 events	312
	5%
grade 1 events	9
	0%
grade 2 events	526
	9%
grade 3 events	380
	7%
grade 4 events	344
	6%
grade 5 events	553
	10%
grade 6 events	1168
	21%
grade 7 events	2096
	38%

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	339.797630	339.8392615726848	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	61.258325	61.27703798033046	Subarray start row	449	449
[deg] Pointing Roll	12.018128	12.13825980498408	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)	479312967.184000	479311858.68628			
Observation start date	2013-03-10T14:28:20	2013-03-10T14:10:58			
[s] Observation end time (MET)	479317967.184000	479318129.63662			
Observation end date	2013-03-10T15:51:40	2013-03-10T15:55:29			
Read mode	TIMED	TIMED			

2.3 Aspect



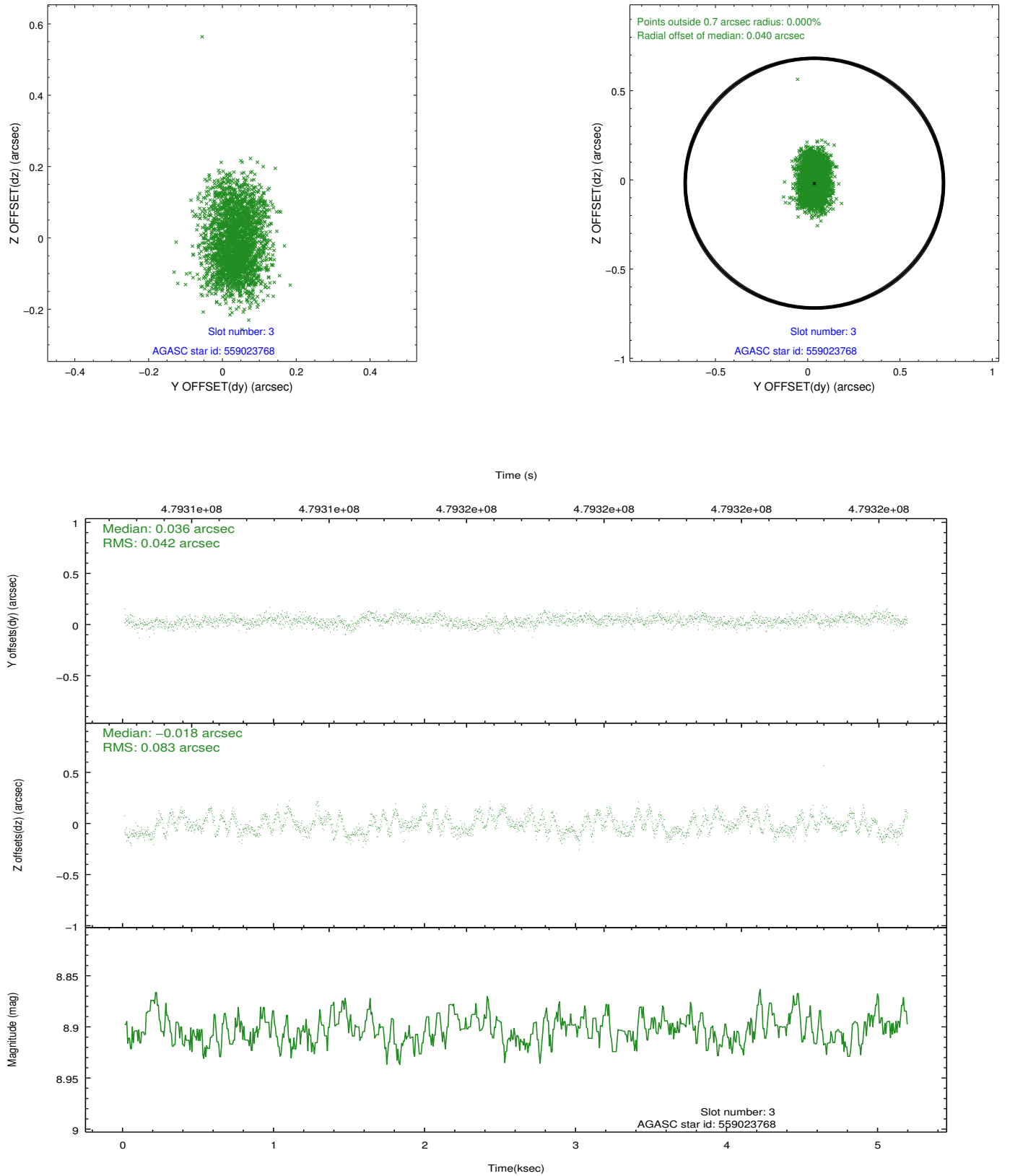


Slot Statistics

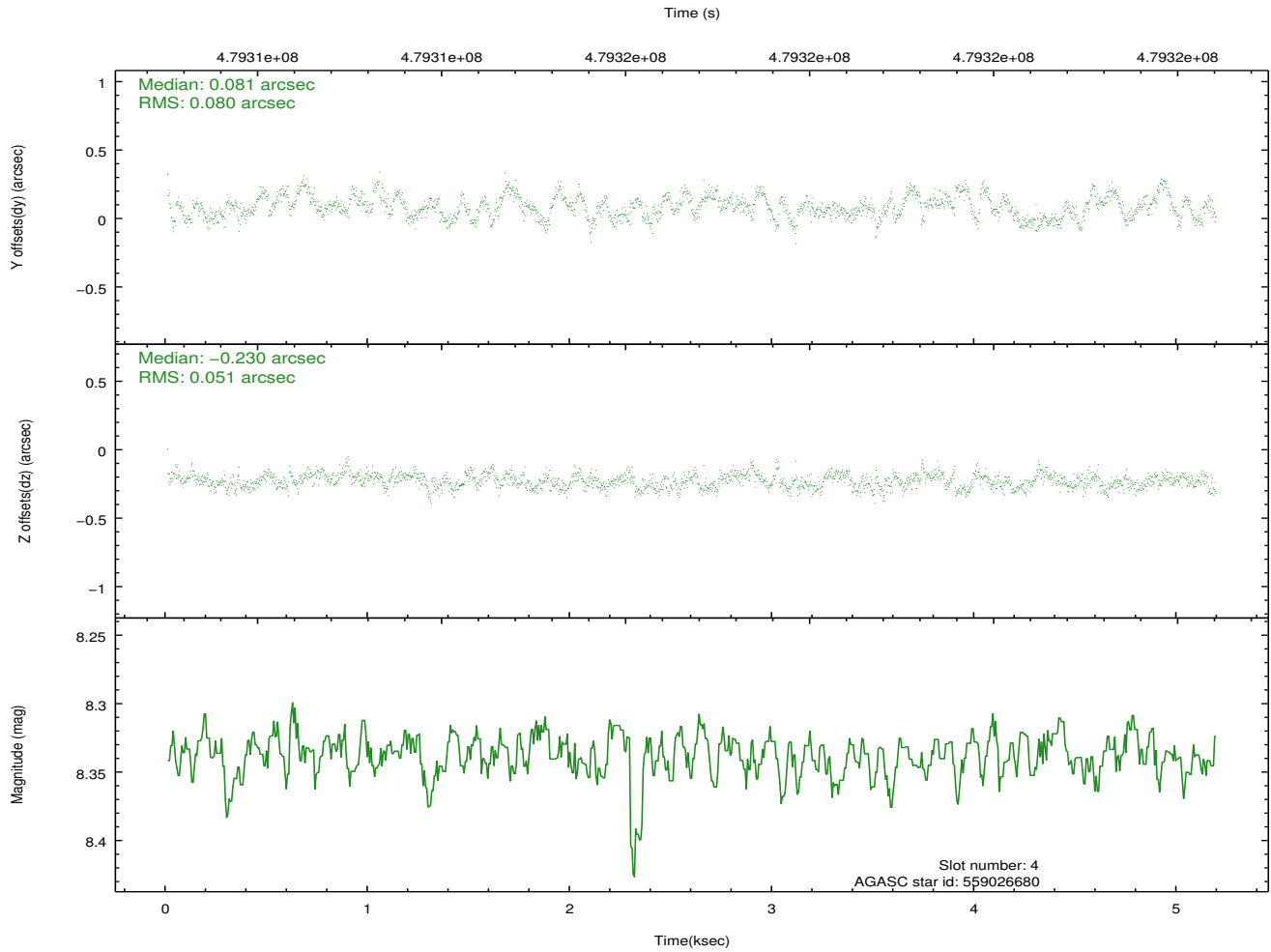
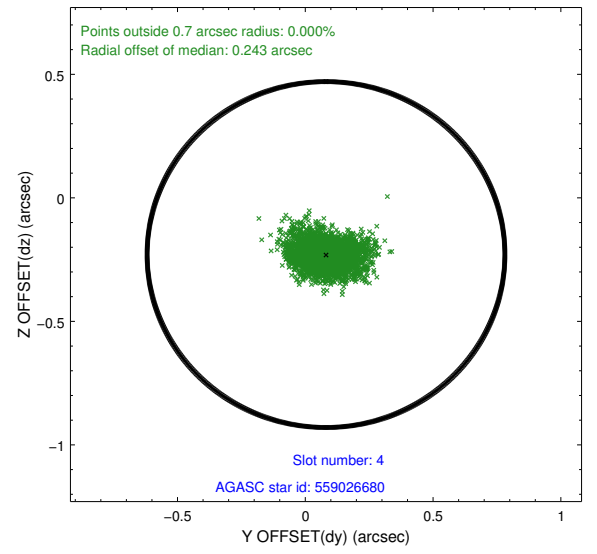
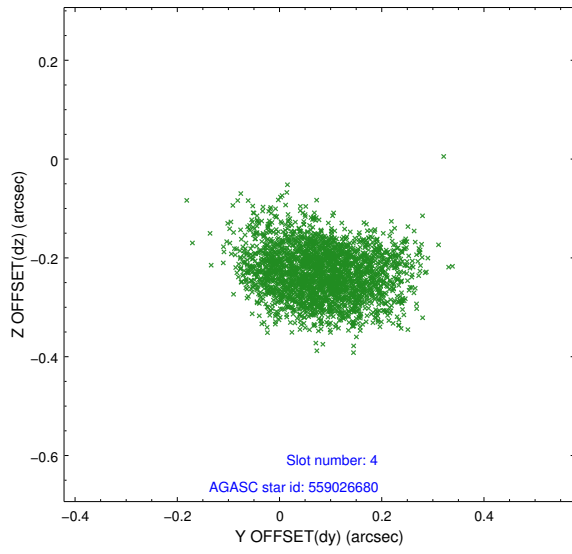
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.04	1265	0.032	0.003	0.008	0.014	0.000000	0.000000	921.24	-1736.25
1	FID		ACIS-S-4	7.05	1265	0.189	-0.013	0.008	0.014	0.000000	0.000000	2139.42	166.70
2	FID		ACIS-S-5	7.08	1265	-0.248	0.023	0.007	0.012	0.000000	0.000000	-1826.45	161.59
3	GUIDE	used	559023768	8.90	2526	0.036	-0.018	0.098	0.163	339.522775	60.623859	-949.93	-2132.23
4	GUIDE	used	559026680	8.34	2528	0.081	-0.230	0.101	0.162	341.213994	60.814635	2105.28	-2054.19
5	GUIDE	used	559026808	8.88	2530	0.034	0.146	0.089	0.142	339.478421	60.572037	-1064.93	-2298.62
6	GUIDE	used	558900672	6.97	2530	-0.217	-0.216	0.090	0.147	338.471449	61.778128	-1814.46	2321.66
7	GUIDE	used	559025992	8.99	2528	0.067	0.307	0.089	0.144	338.732392	60.797709	-2171.53	-1217.18

2.4 Star Slots

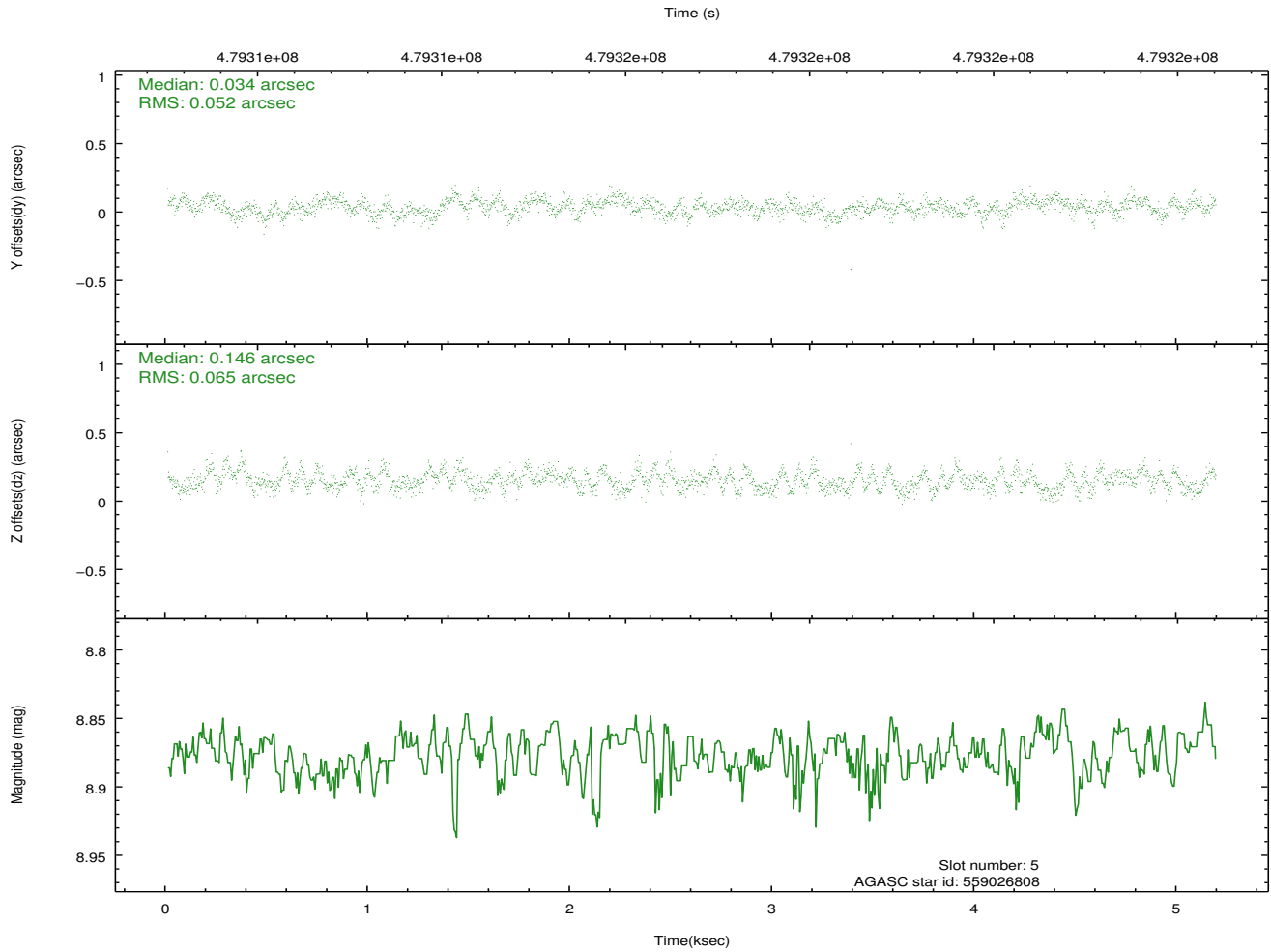
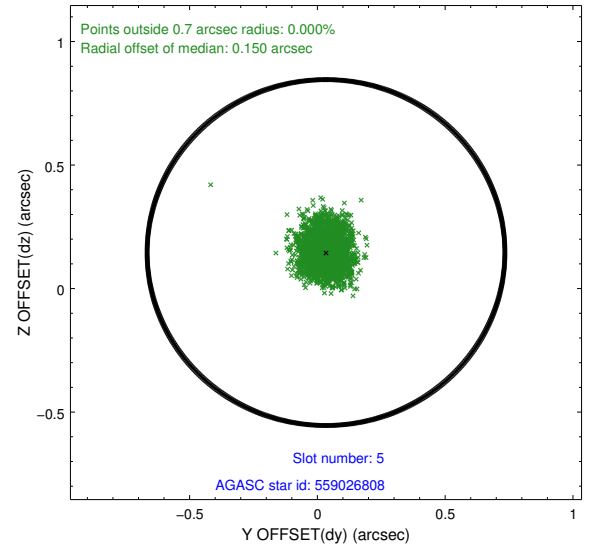
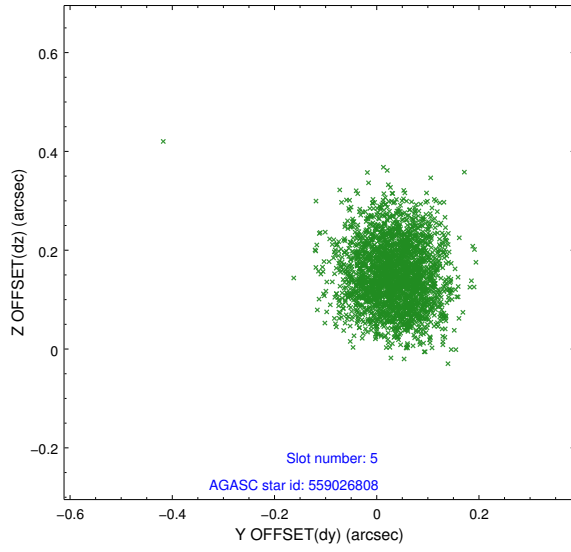
2.4.1 Slot 3



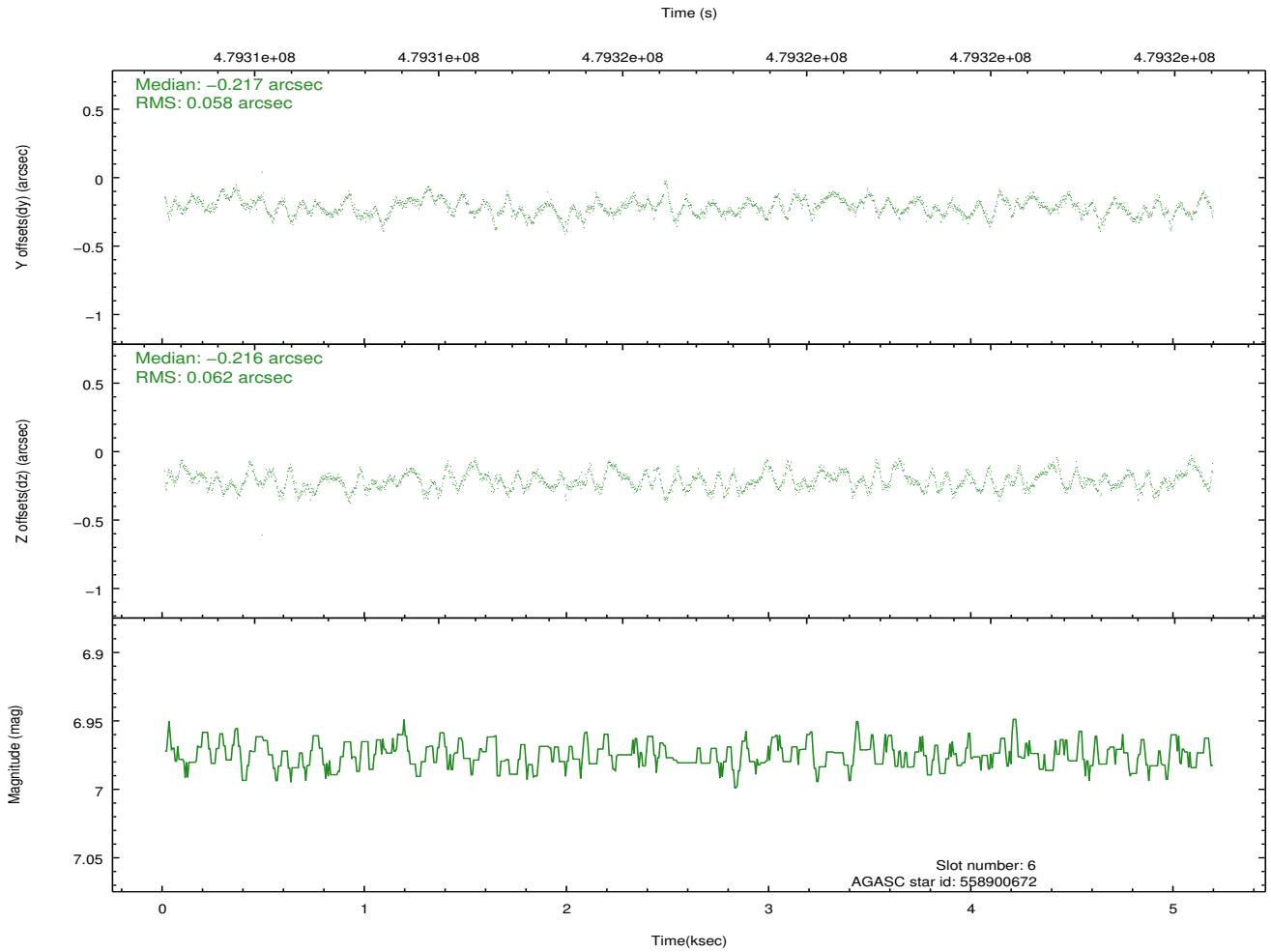
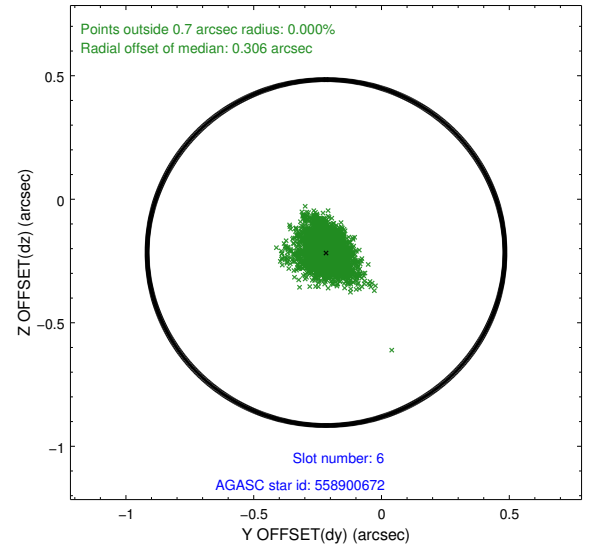
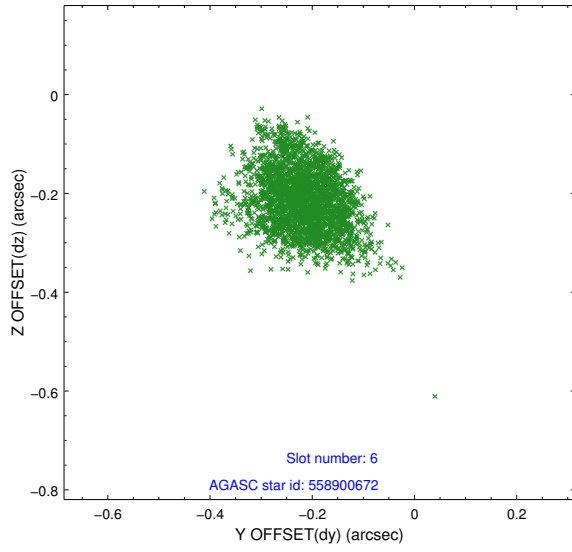
2.4.2 Slot 4



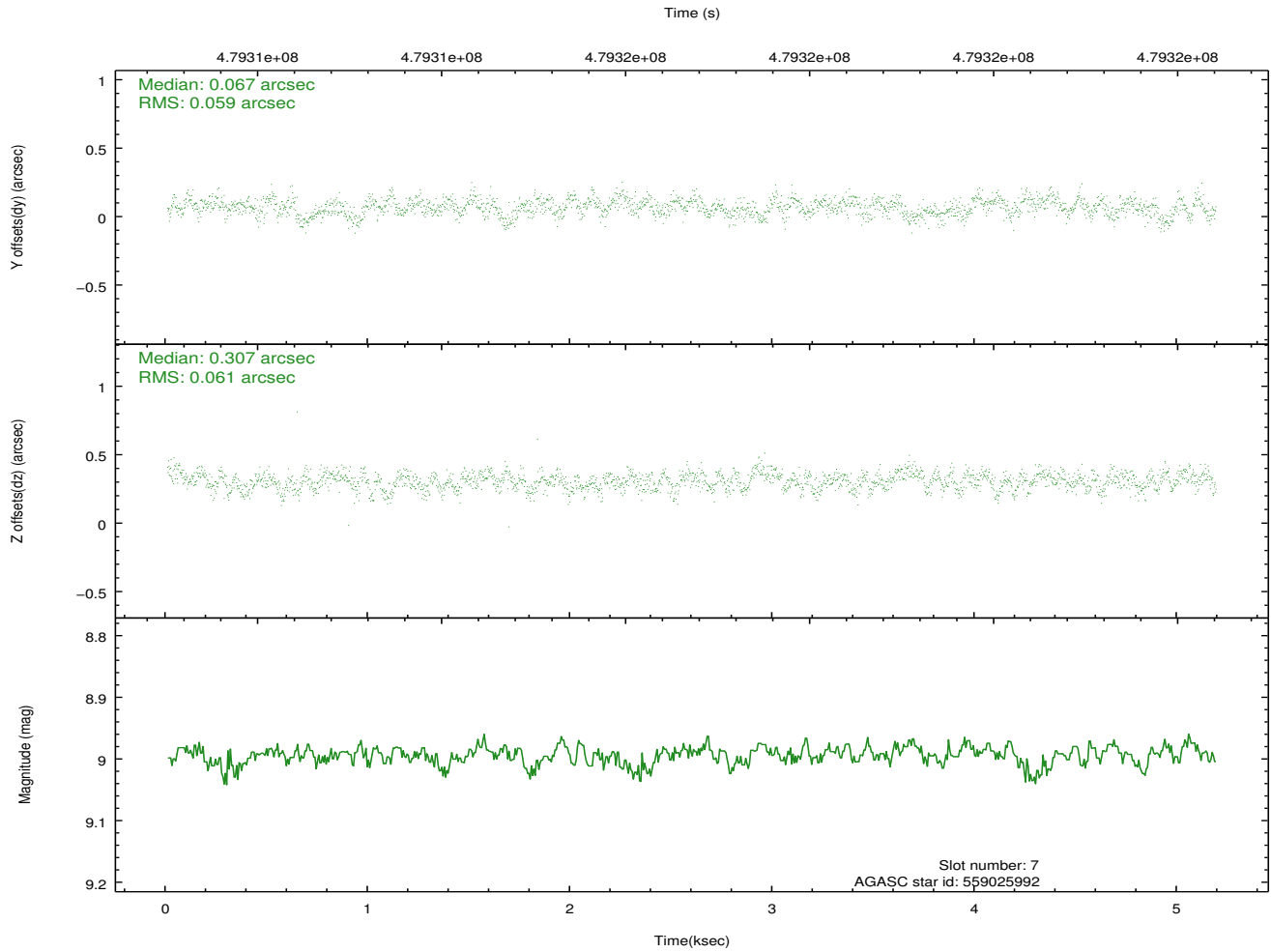
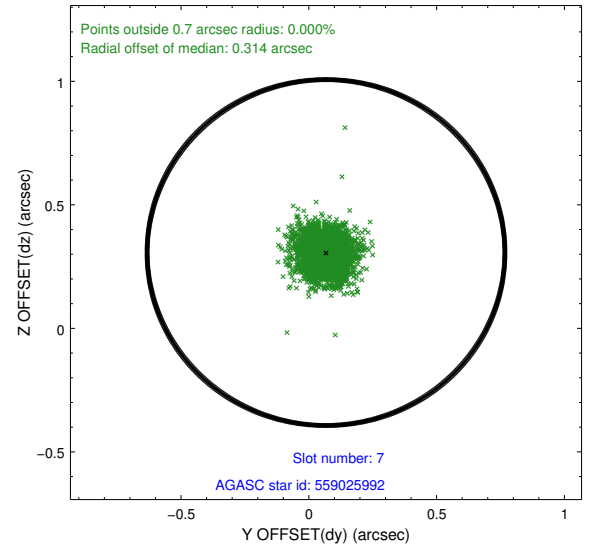
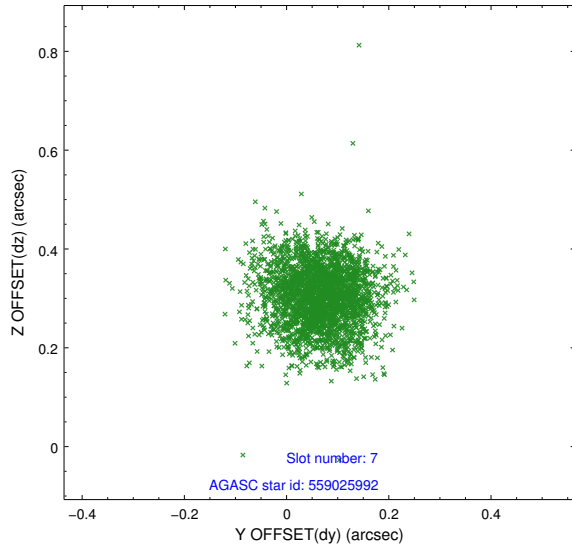
2.4.3 Slot 5



2.4.4 Slot 6

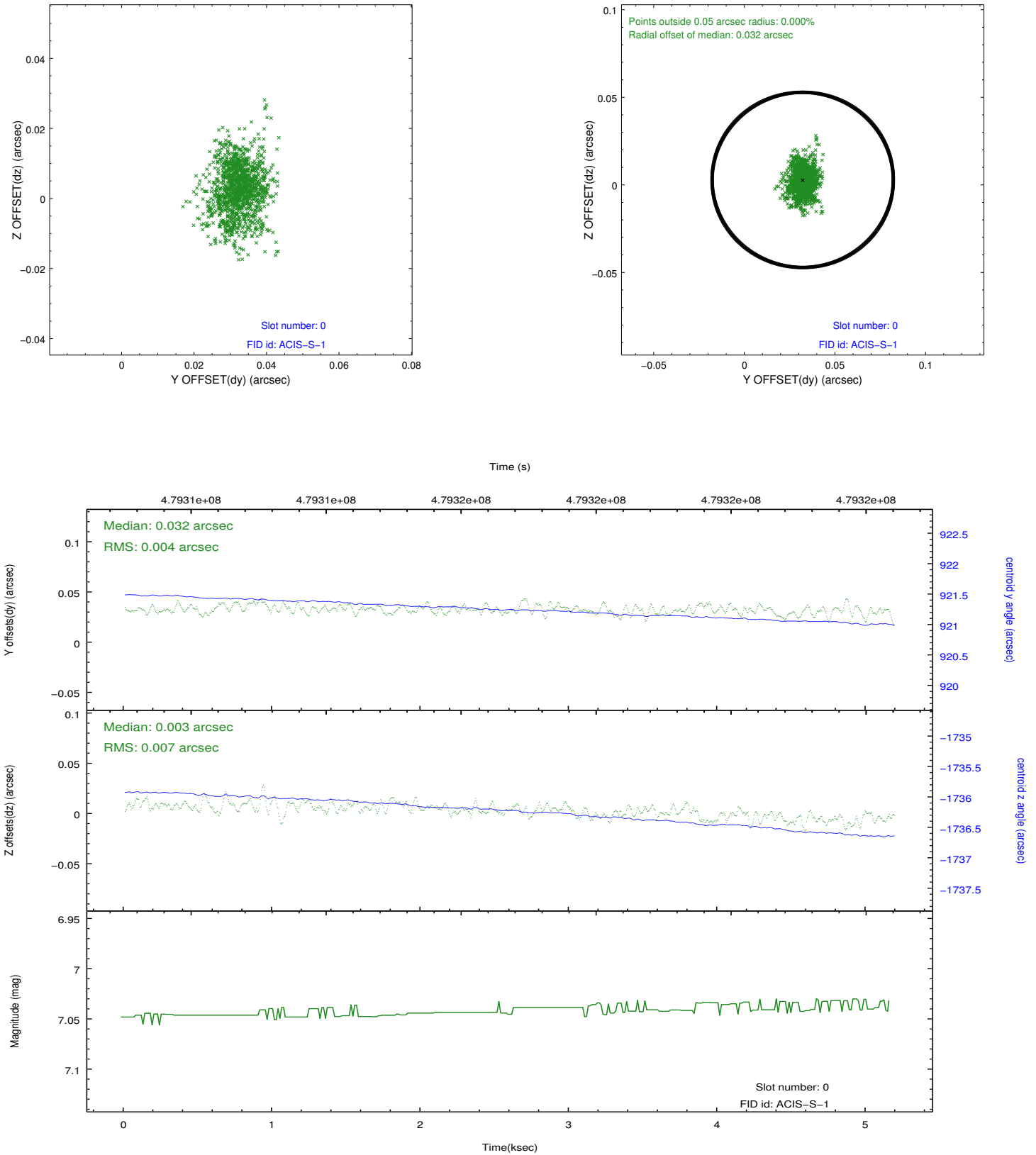


2.4.5 Slot 7

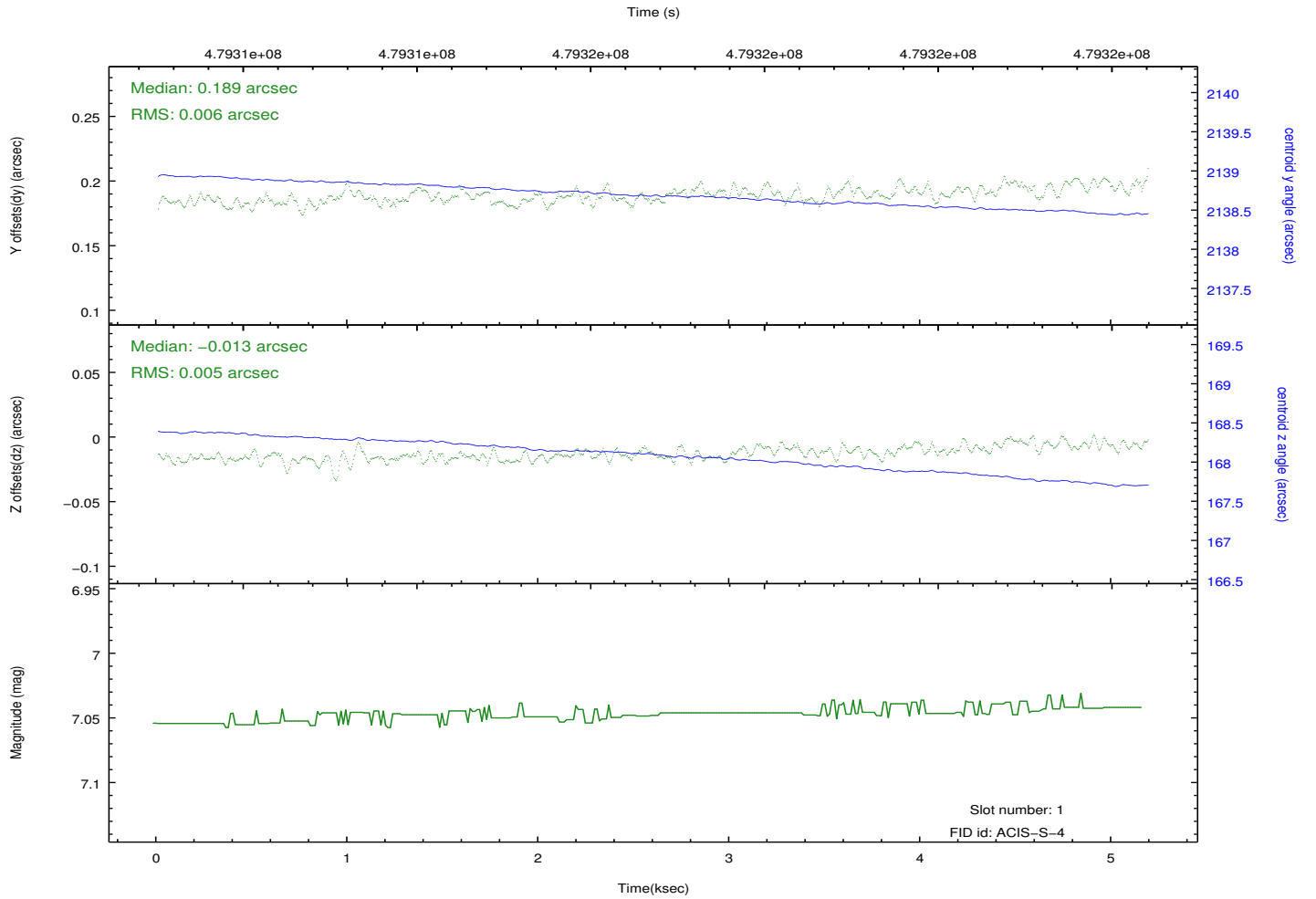
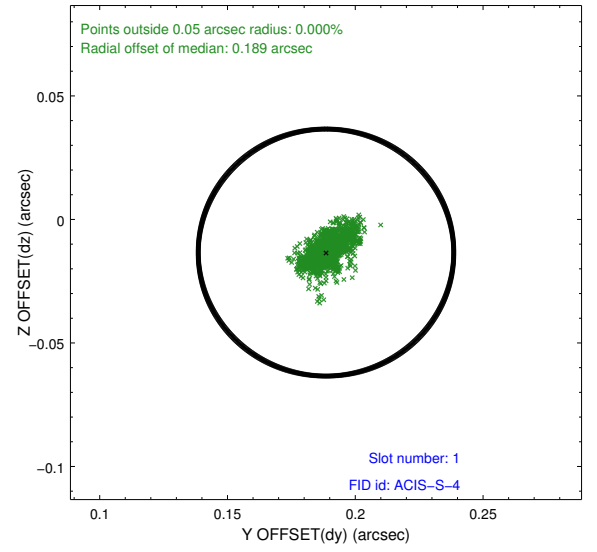
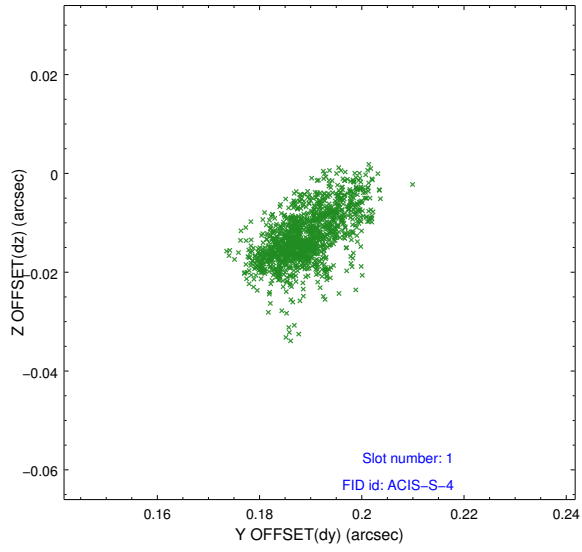


2.5 FID Slots

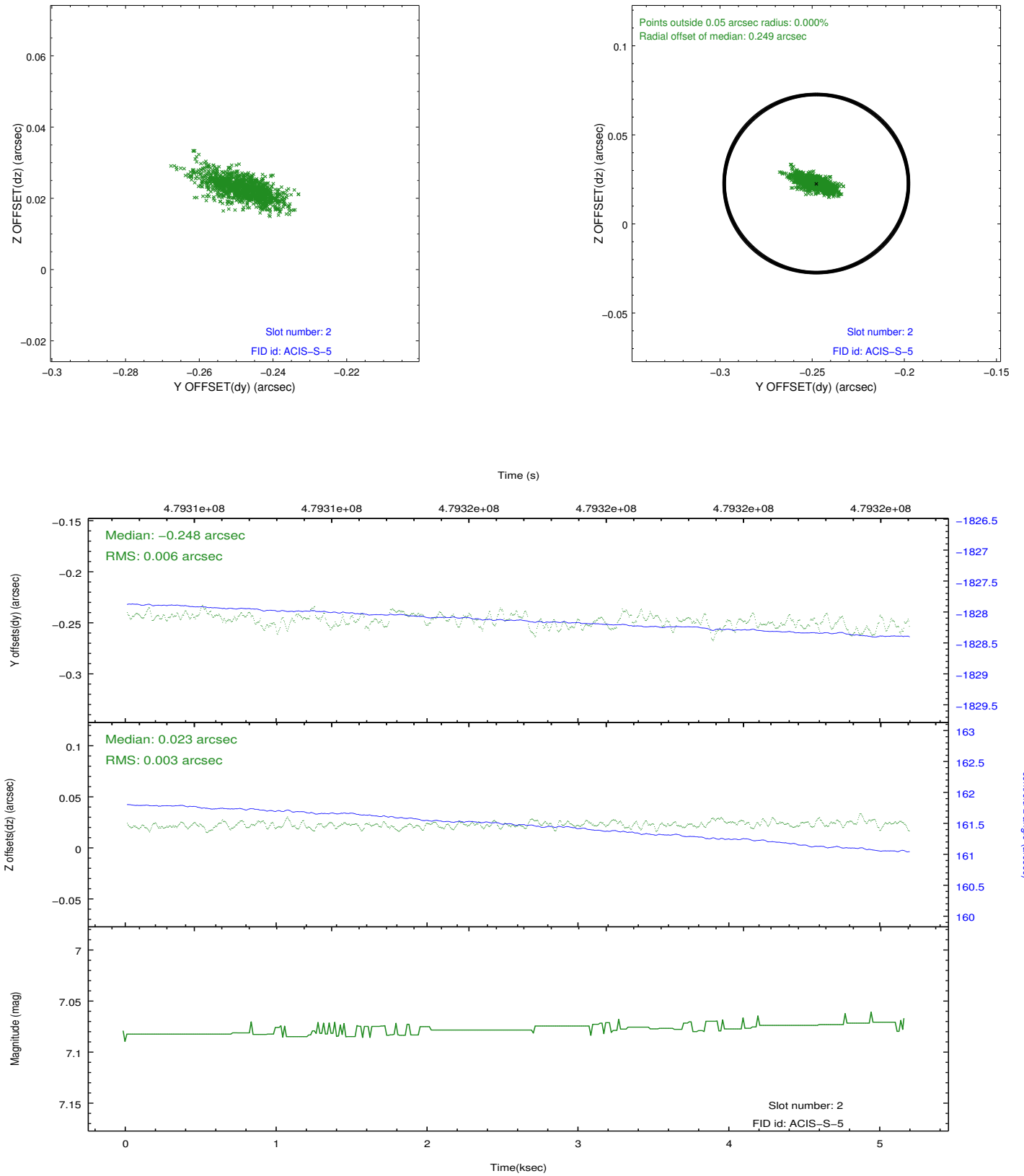
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0686419659853

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.