

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 16078 - L2 Version 2
Chandra X-Ray Center

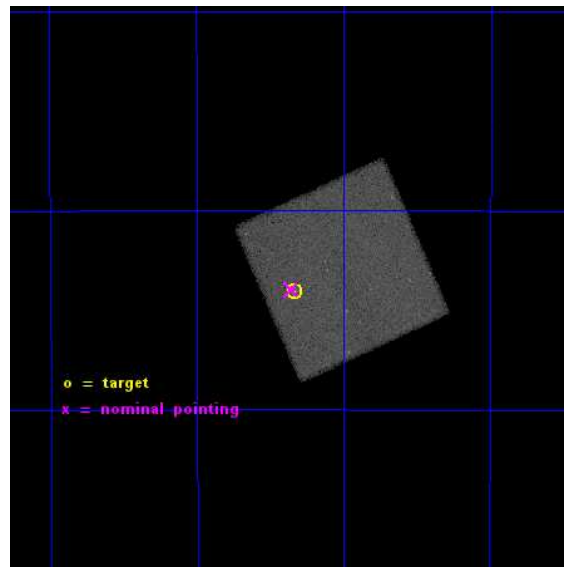
L2 Processing Date : Dec 11 2014

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

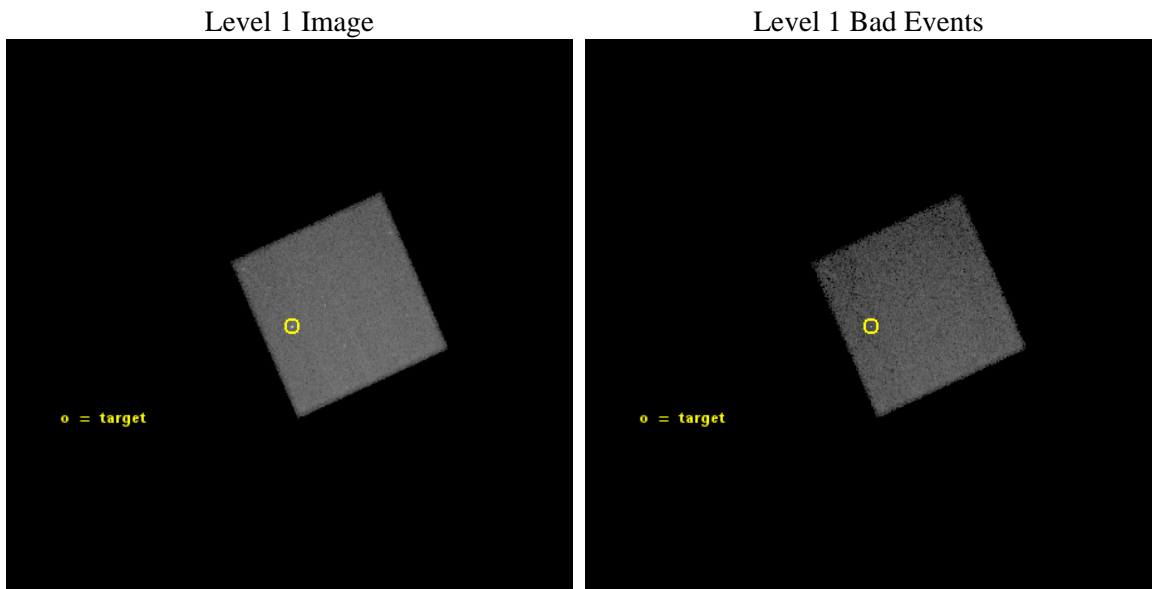
seq_num	702971	Sequence number
obs_id	16078	Observation id
title	Chandra imaging of the bright Compton-thick Seyfert galaxy ESO 138-G1	Proposal title
observer	Dr Enrico Piconcelli	Principal investigator
object	ESO138-G1	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	252.83375	Observer's specified target RA [deg]
dec_targ	-59.2345	Observer's specified target Dec [deg]
ra_nom	252.83871767656	Nominal RA [deg]
dec_nom	-59.232832455775	Nominal Dec [deg]
roll_nom	335.88282190765	Nominal Roll [deg]
revision	2	Processing version of data
ontime	50093.610139132	Sum of GTIs [s]
livetime	49417.577676517	Livetime [s]
ontime7	50093.610139132	Sum of GTIs [s]
l2events	136633	Number of level 2 events



2 OBI

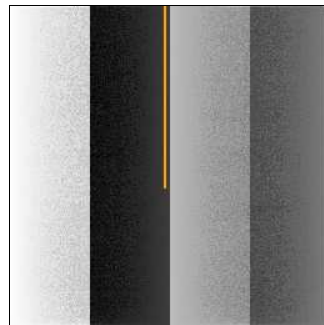
2.1 OBI

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	10.3.1	Processing system revision	ontime	50093.610139132	Sum of GTIs [s]
caldbver	4.6.4	 	ontime7	50093.610139132	Sum of GTIs [s]
date	2014-12-12T03:31:31	Date and time of file creation	l1events	308914	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

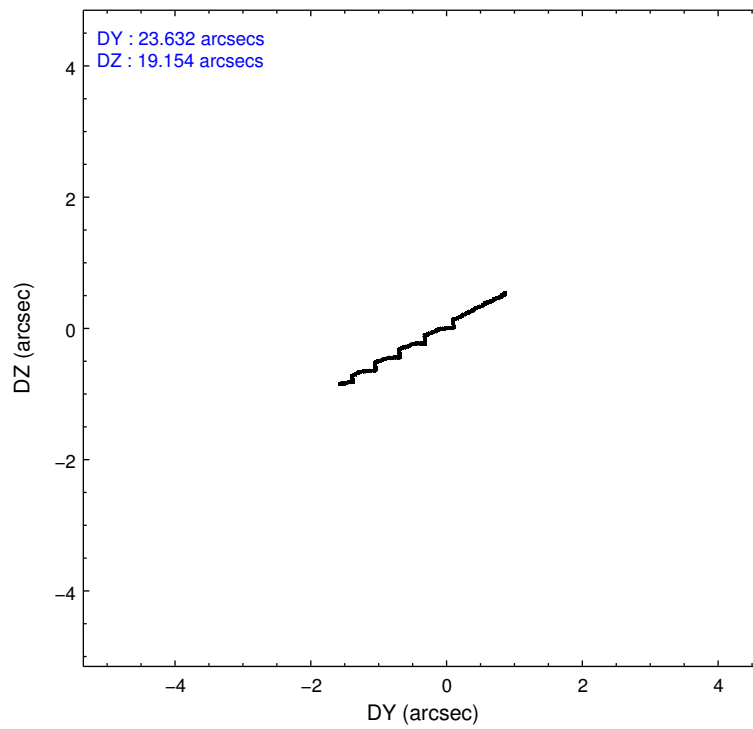
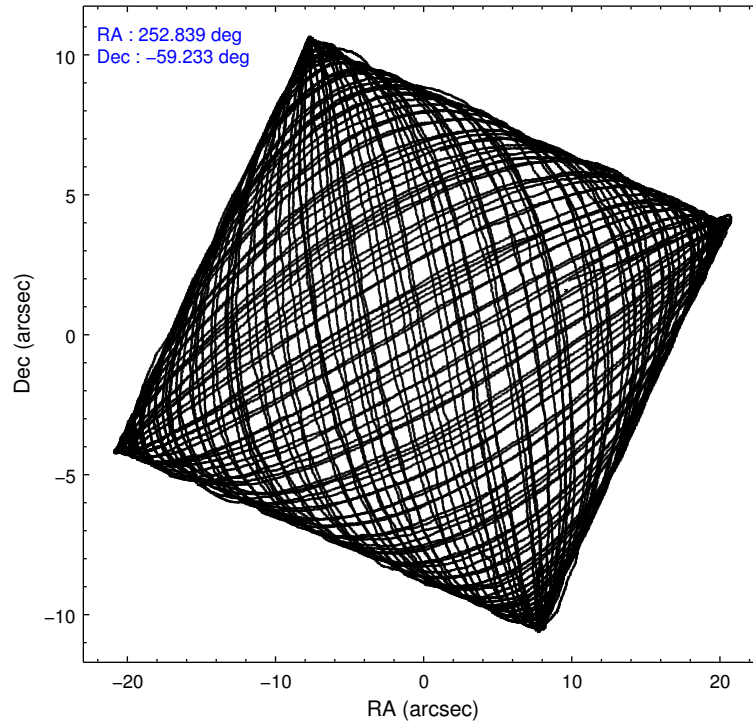
	ccd 7
level 1 events	308914
rejected events	169123
rejected %	54%

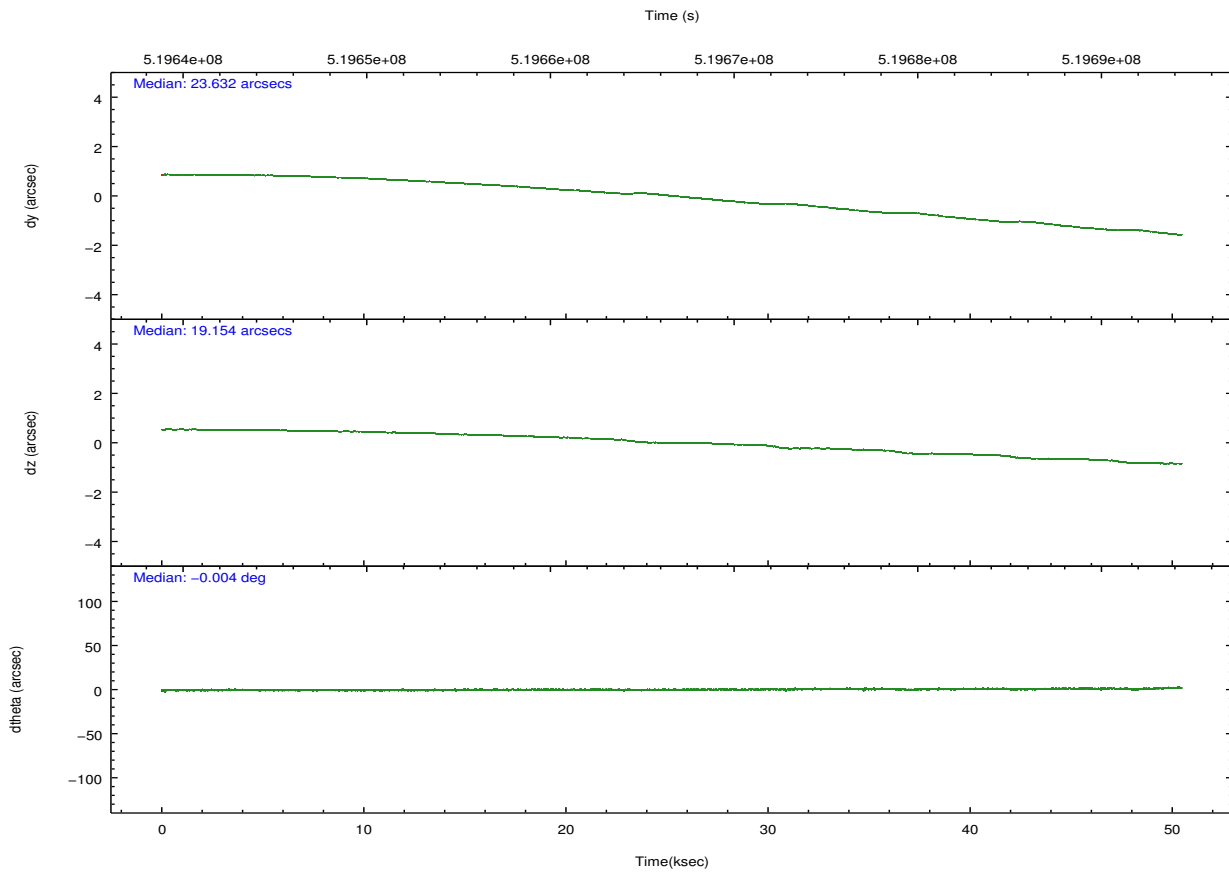
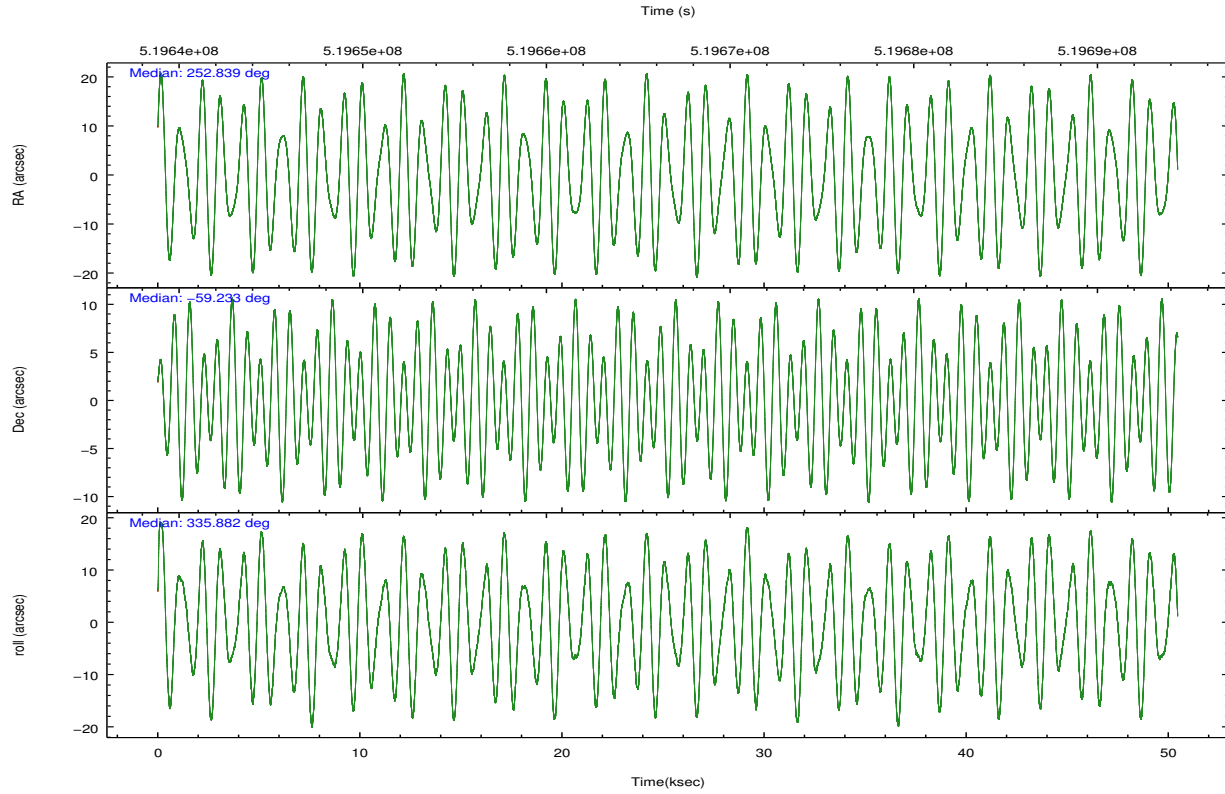
	ccd 7
grade 0 events	14029
	4%
grade 1 events	382
	0%
grade 2 events	29009
	9%
grade 3 events	12209
	3%
grade 4 events	11953
	3%
grade 5 events	31444
	10%
grade 6 events	72602
	23%
grade 7 events	137286
	44%

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	252.785586	252.8387176765571	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.236003	-59.23283245577507	Alternating exposures requested	N	N
[deg] Pointing Roll	335.680546	335.8828219076484	[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)	519641842.184000	519641020.4304			
Observation start date	2014-06-20T08:56:15	2014-06-20T08:43:40			
[s] Observation end time (MET)	519691842.184000	519692466.20825			
Observation end date	2014-06-20T22:49:35	2014-06-20T23:01:06			
Read mode	TIMED	TIMED			

2.3 Aspect





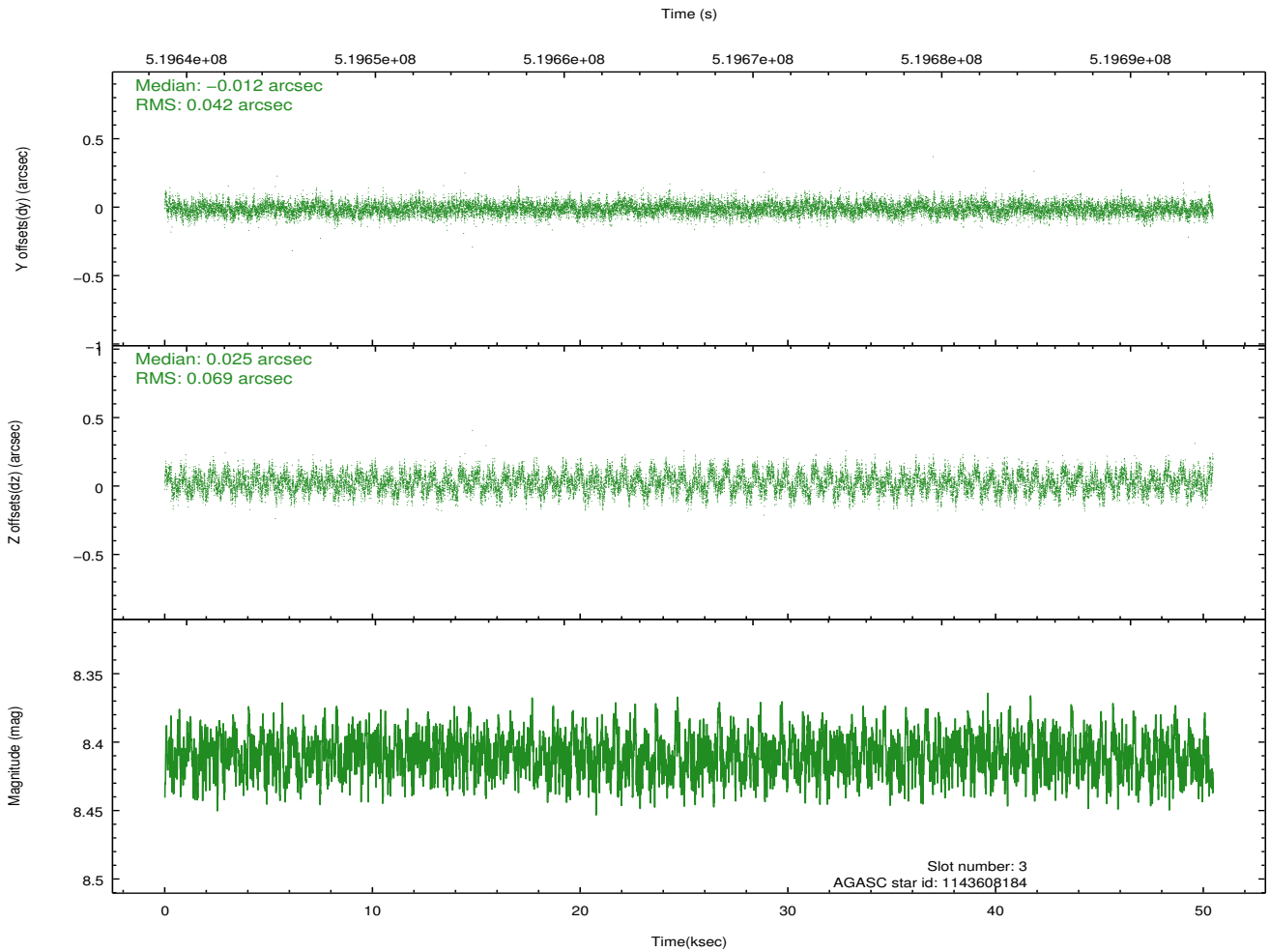
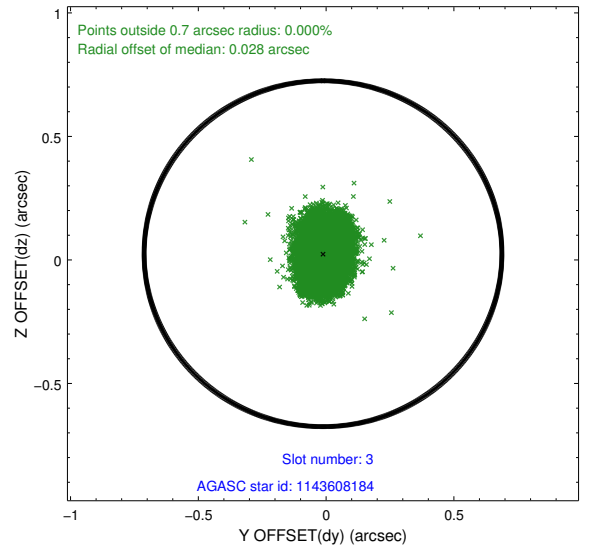
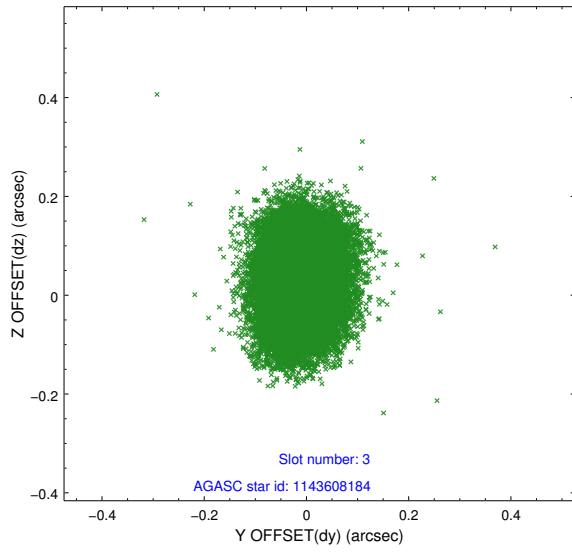
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.99	12308	-0.163	-0.051	0.040	0.051	0.000000	0.000000	-776.88	-1740.66
1	FID		ACIS-S-4	7.08	12308	0.364	0.092	0.034	0.082	0.000000	0.000000	2136.92	167.97
2	FID		ACIS-S-5	7.10	12306	-0.226	-0.033	0.031	0.042	0.000000	0.000000	-1829.80	161.52
3	GUIDE	used	1143608184	8.41	24606	-0.012	0.025	0.085	0.140	252.828637	-59.517337	489.16	-890.36
4	GUIDE	used	1143609320	9.44	24587	0.347	0.298	0.135	0.227	251.246401	-59.447174	-2239.33	-1881.94
5	GUIDE	used	1143617728	8.06	24610	0.024	0.142	0.070	0.114	251.668803	-59.042986	-2163.24	-234.35
6	GUIDE	used	1143619664	8.87	24602	-0.043	-0.301	0.086	0.137	251.840767	-58.980558	-1970.62	104.43
7	GUIDE	used	1145321472	7.61	24608	-0.316	-0.163	0.066	0.107	253.927460	-59.417411	2181.72	249.23

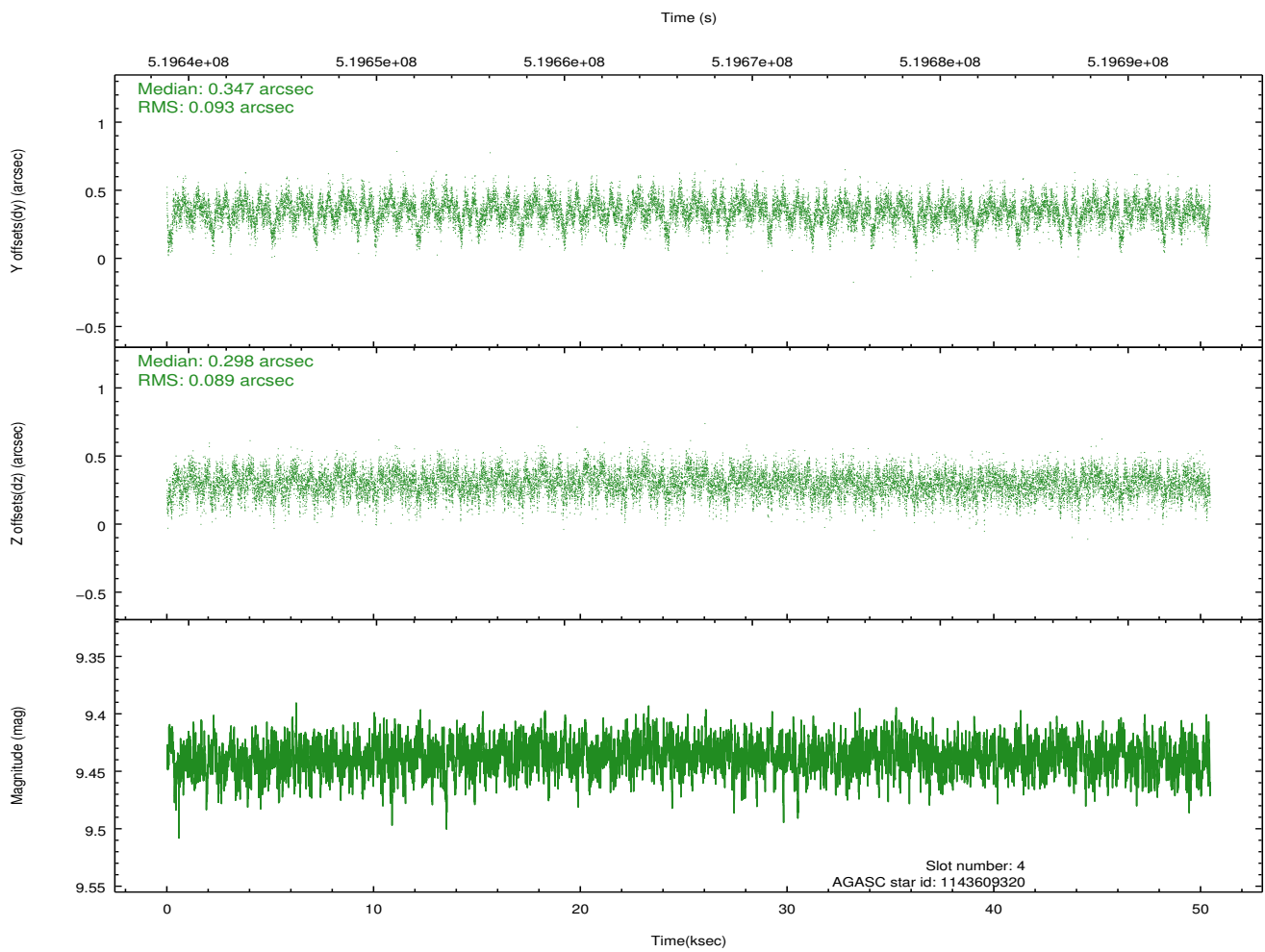
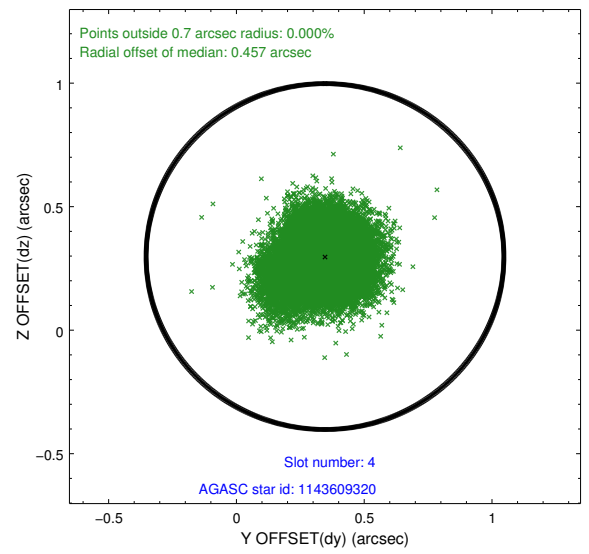
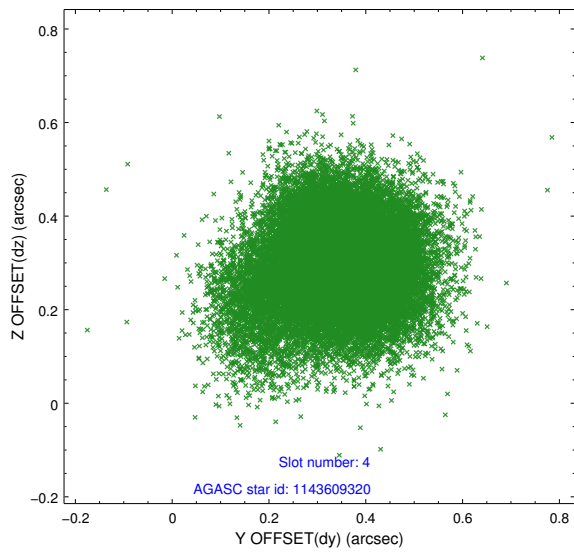
∞

2.4 Star Slots

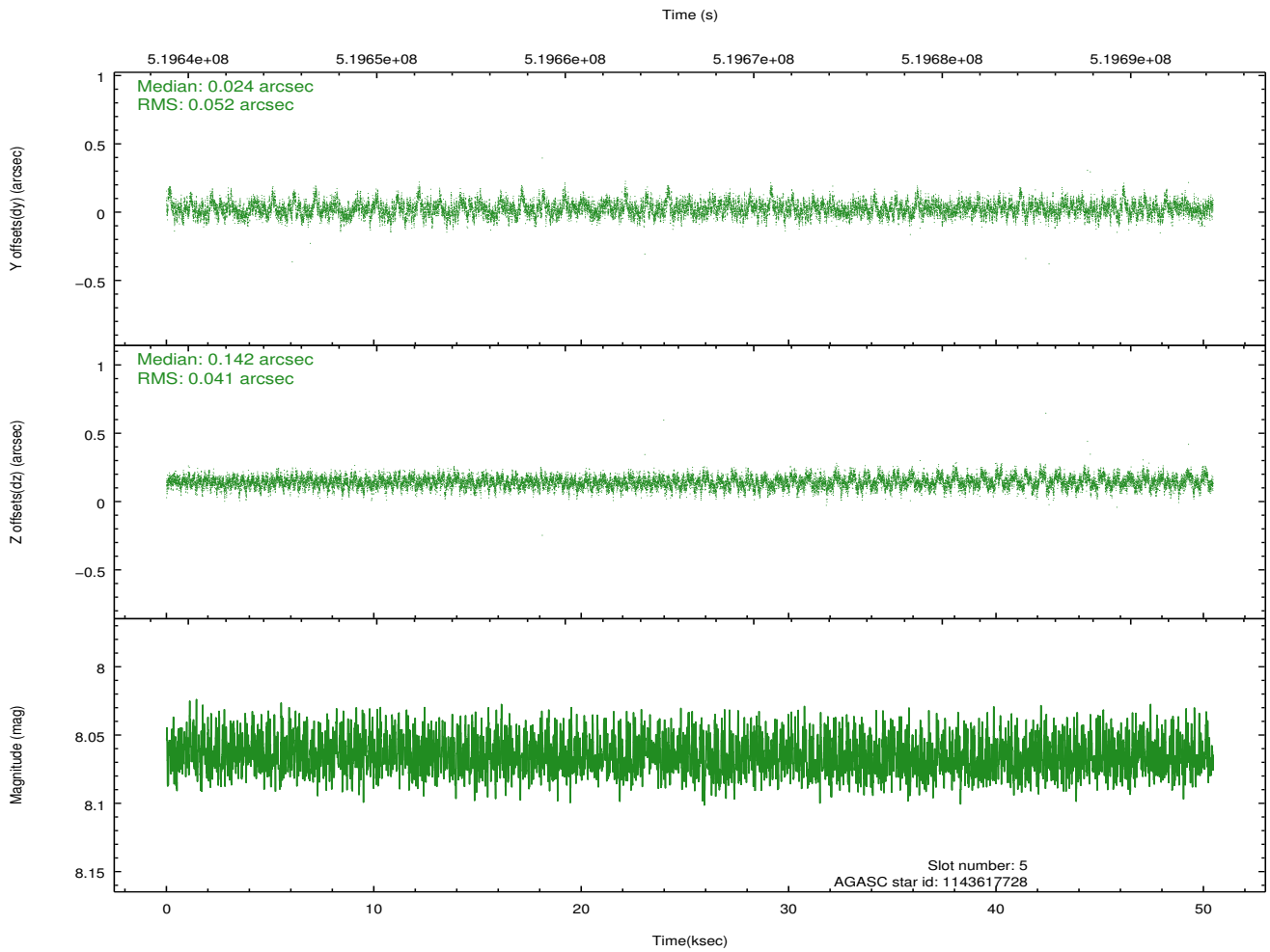
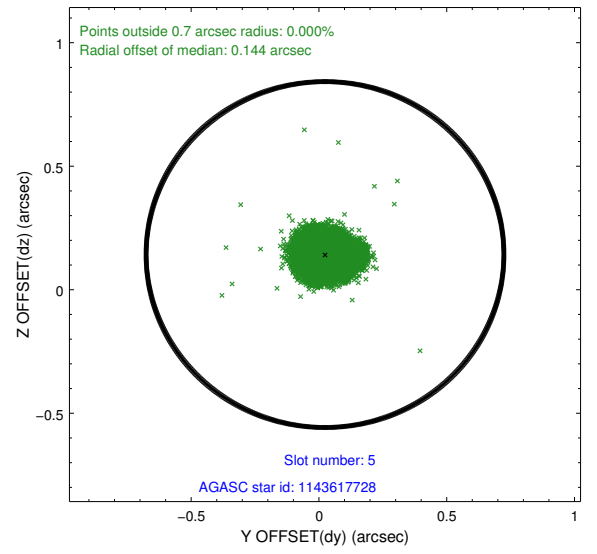
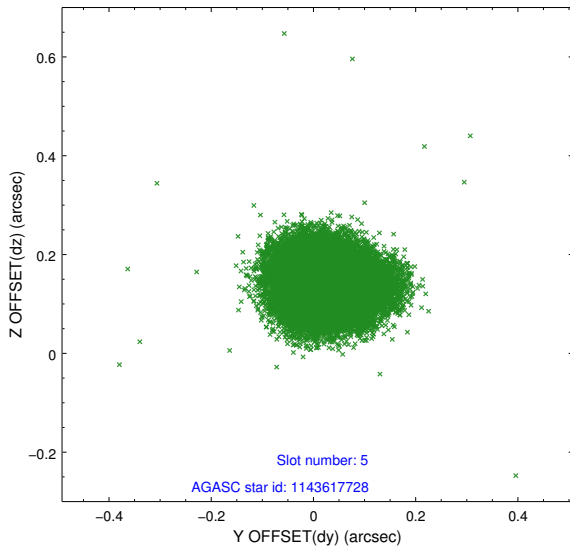
2.4.1 Slot 3



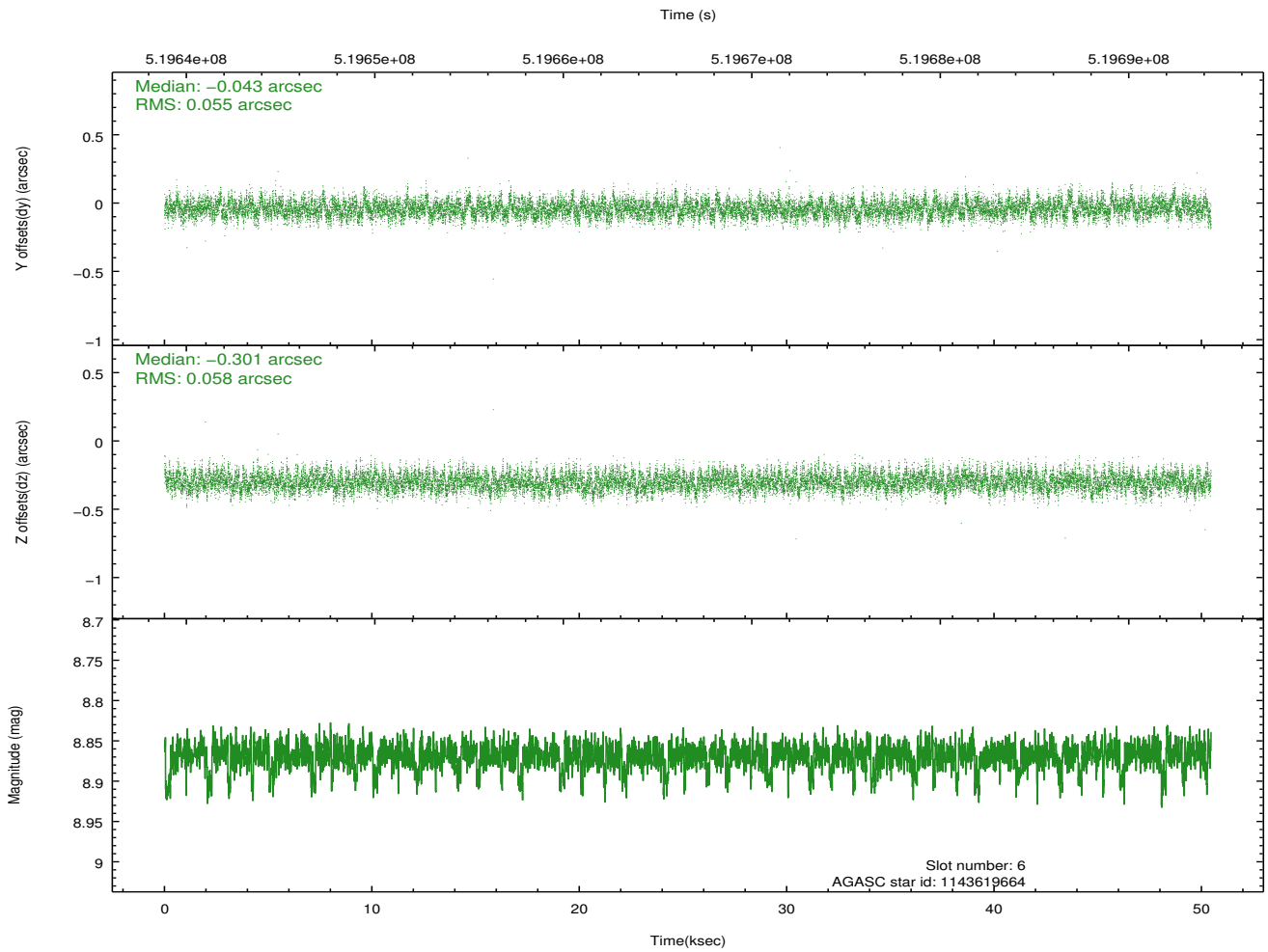
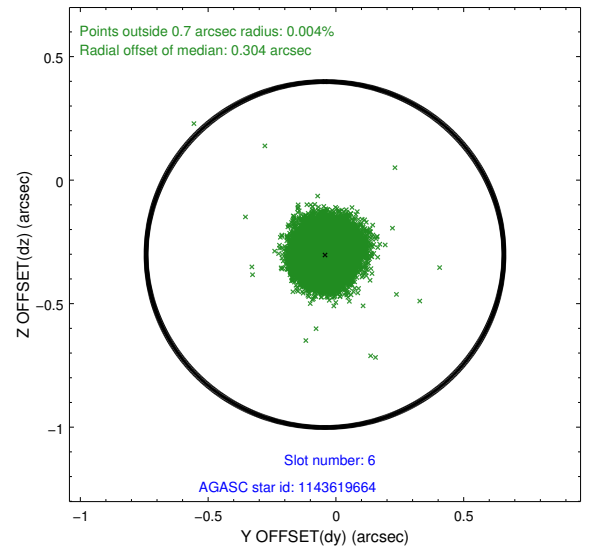
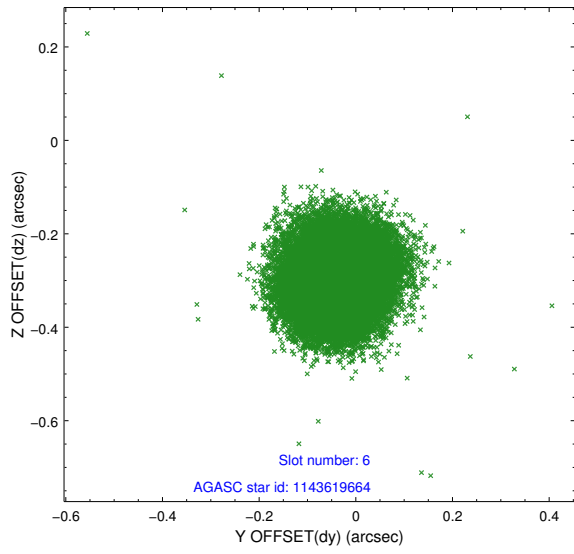
2.4.2 Slot 4



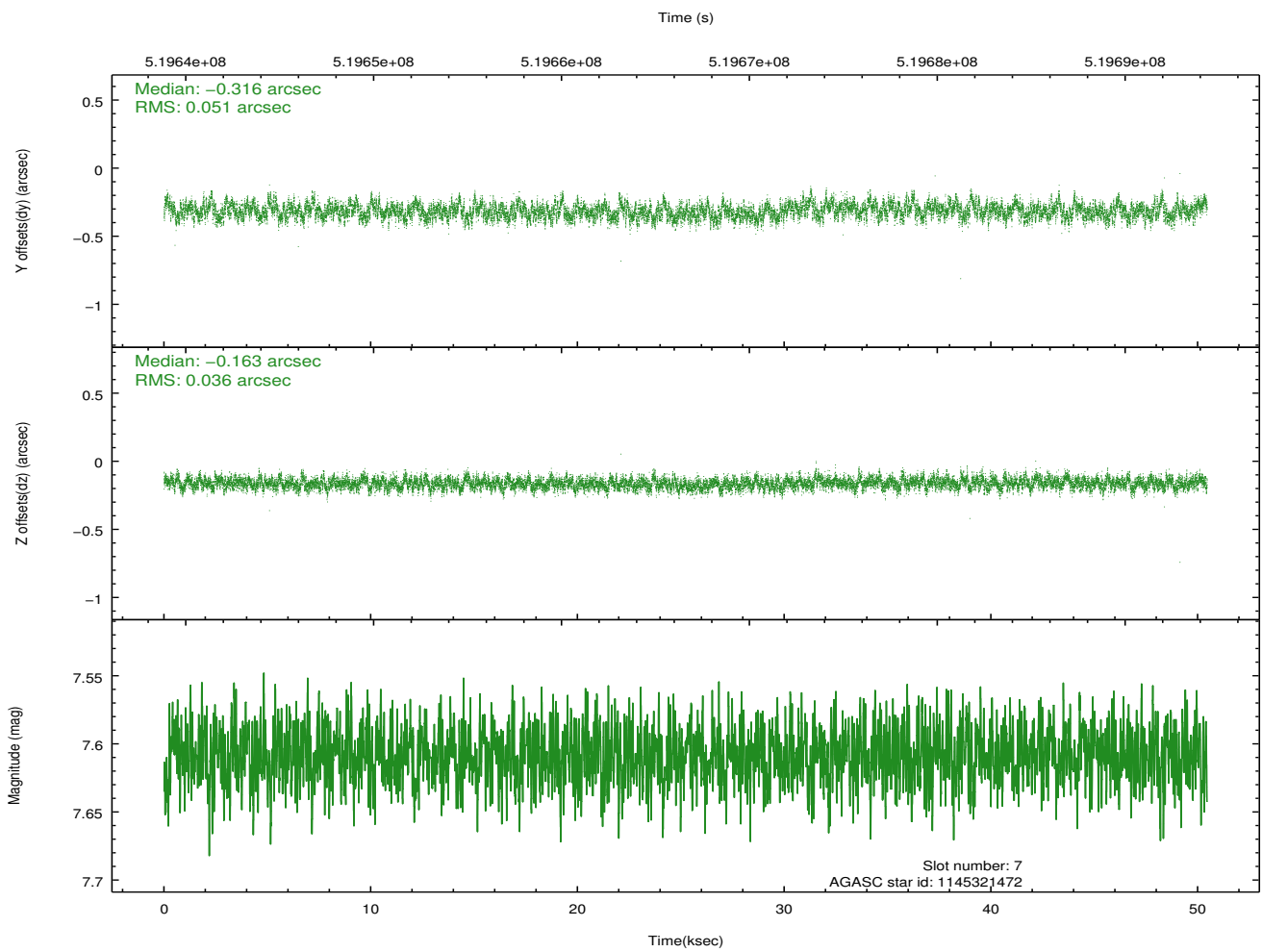
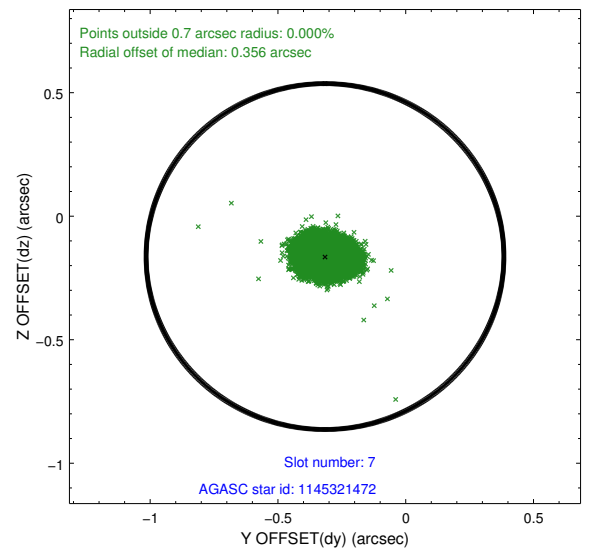
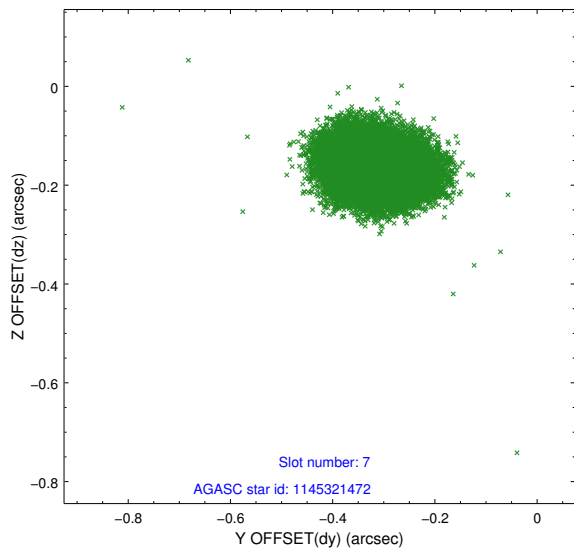
2.4.3 Slot 5



2.4.4 Slot 6

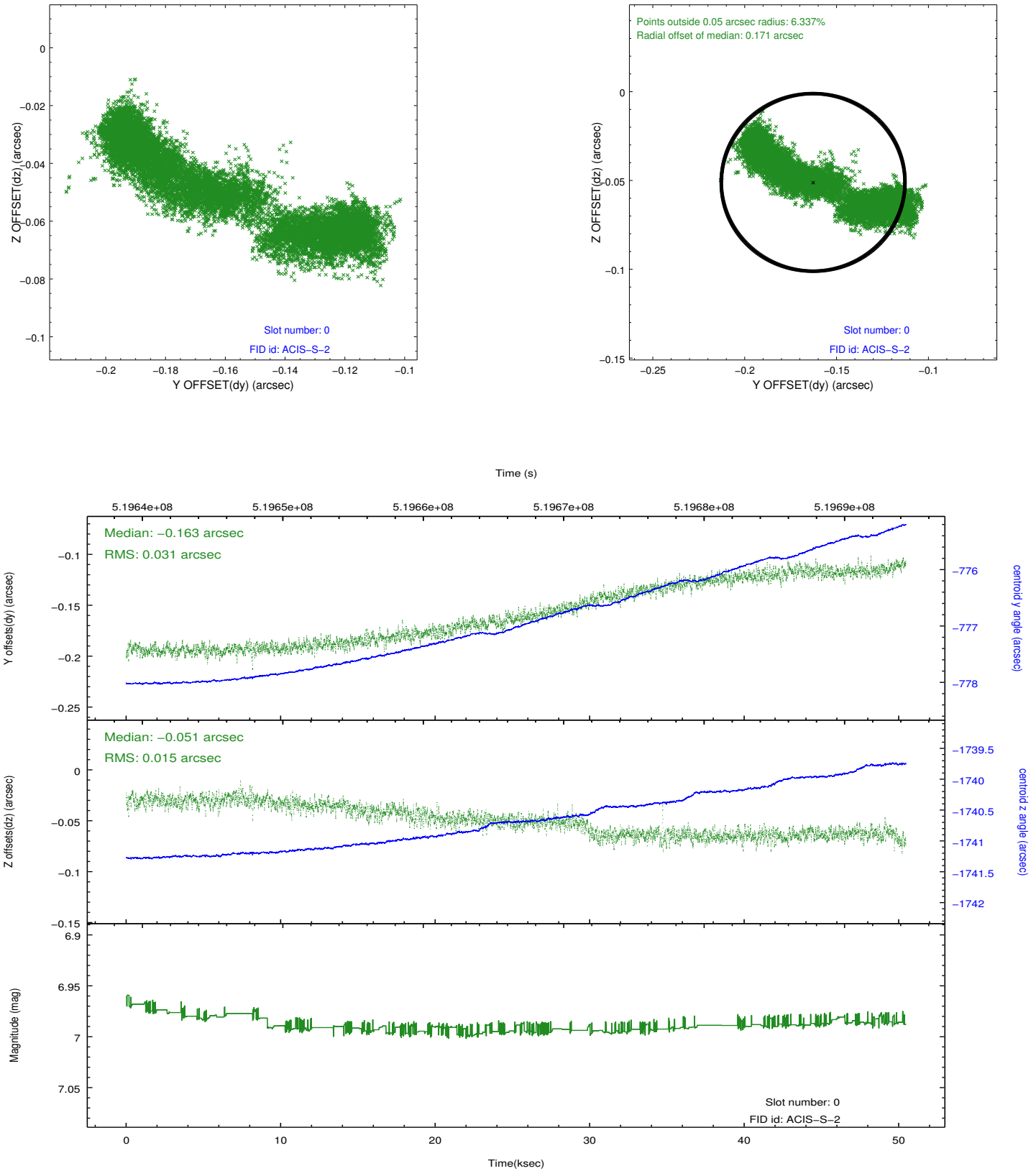


2.4.5 Slot 7

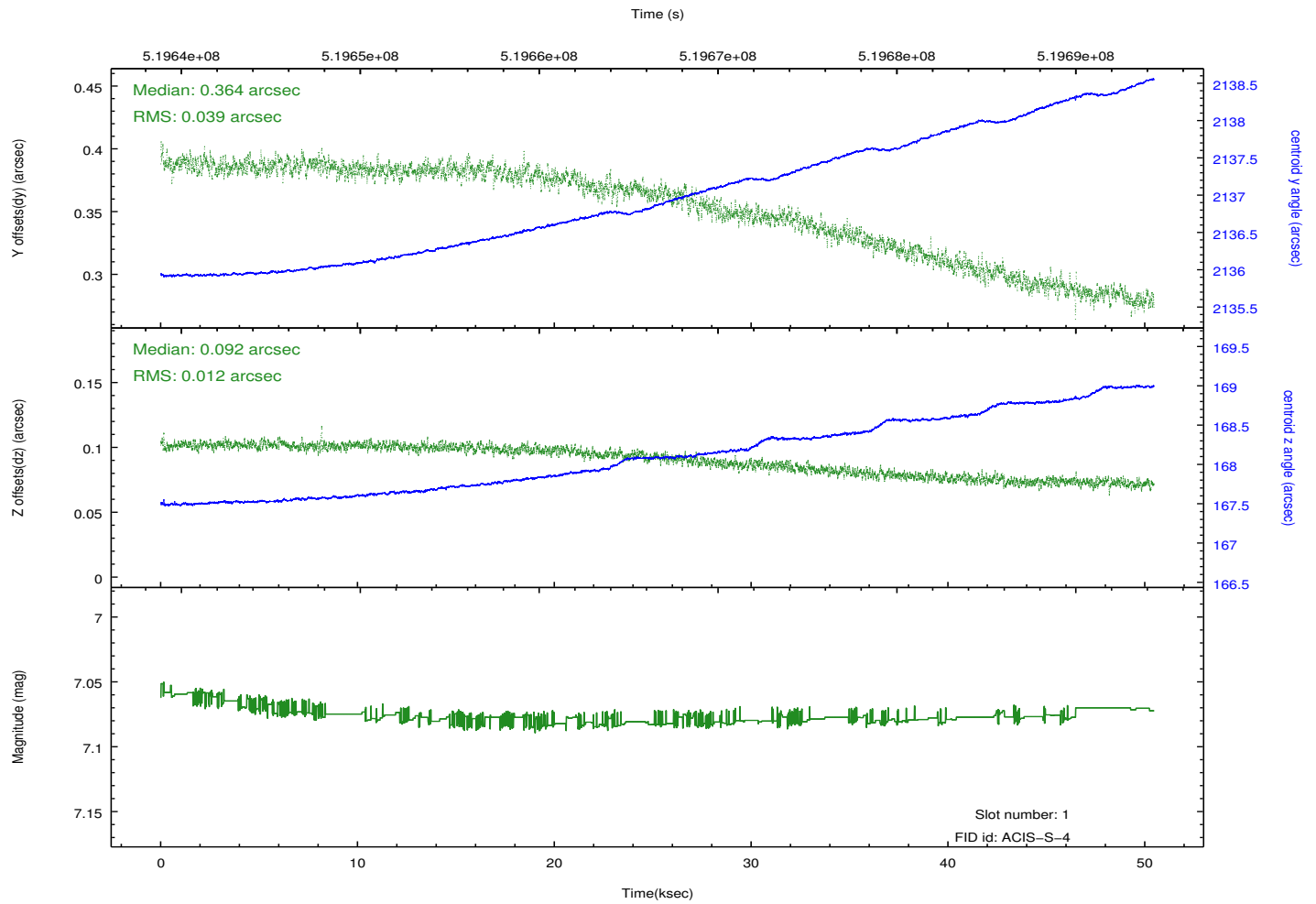
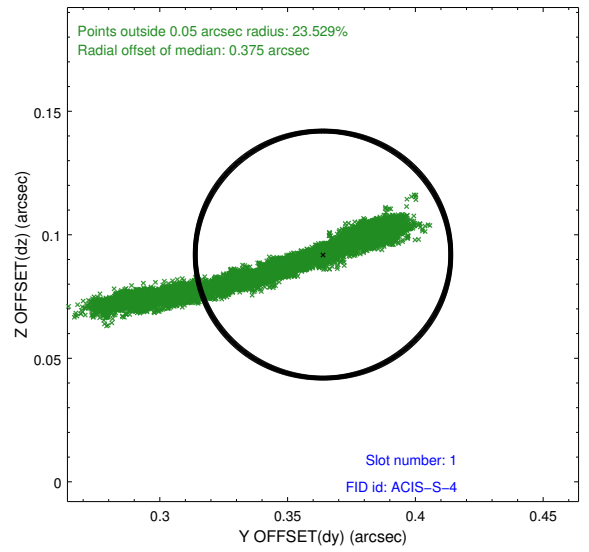
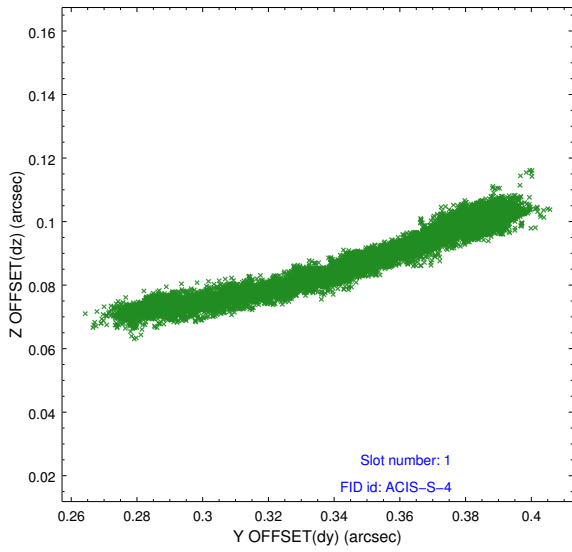


2.5 FID Slots

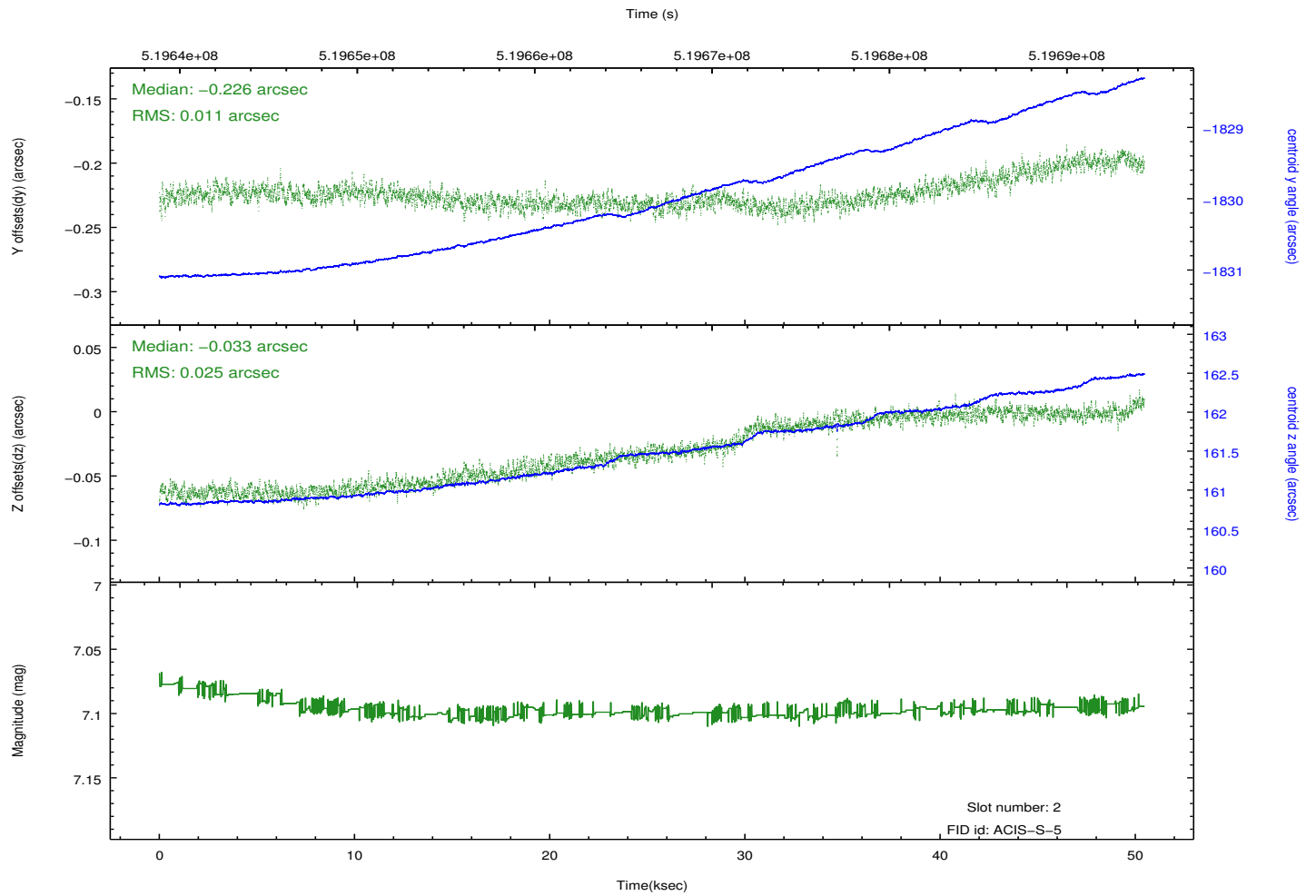
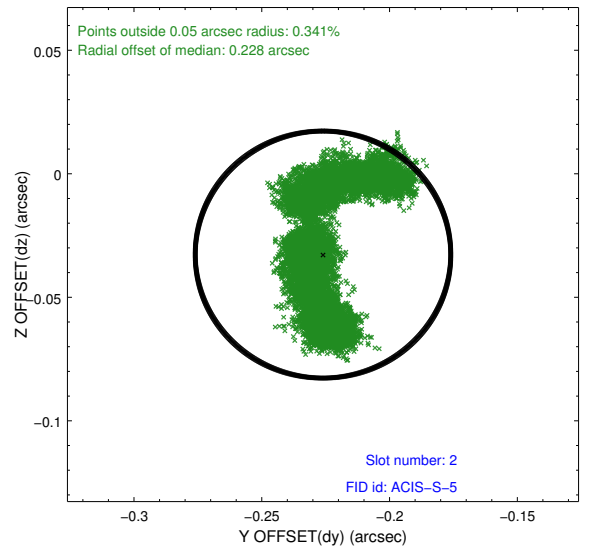
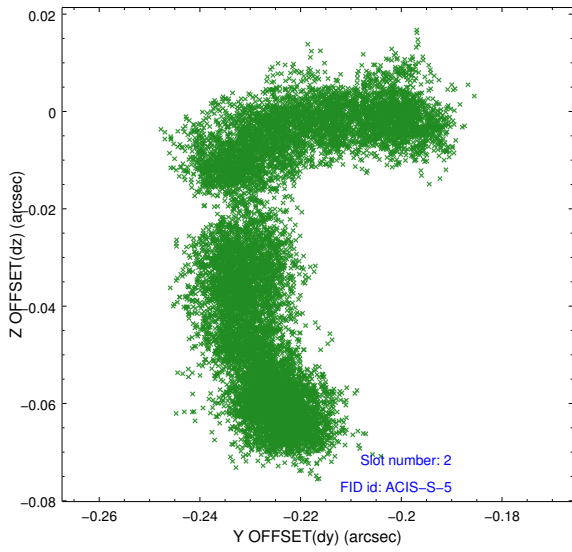
2.5.1 Slot 0



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)	2014.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.093610139132

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.