

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 18071 - L2 Version 1
Chandra X-Ray Center

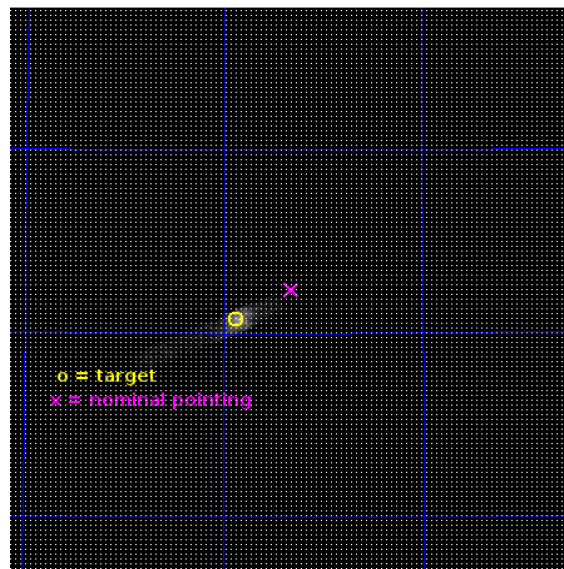
L2 Processing Date : Nov 4 2016

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

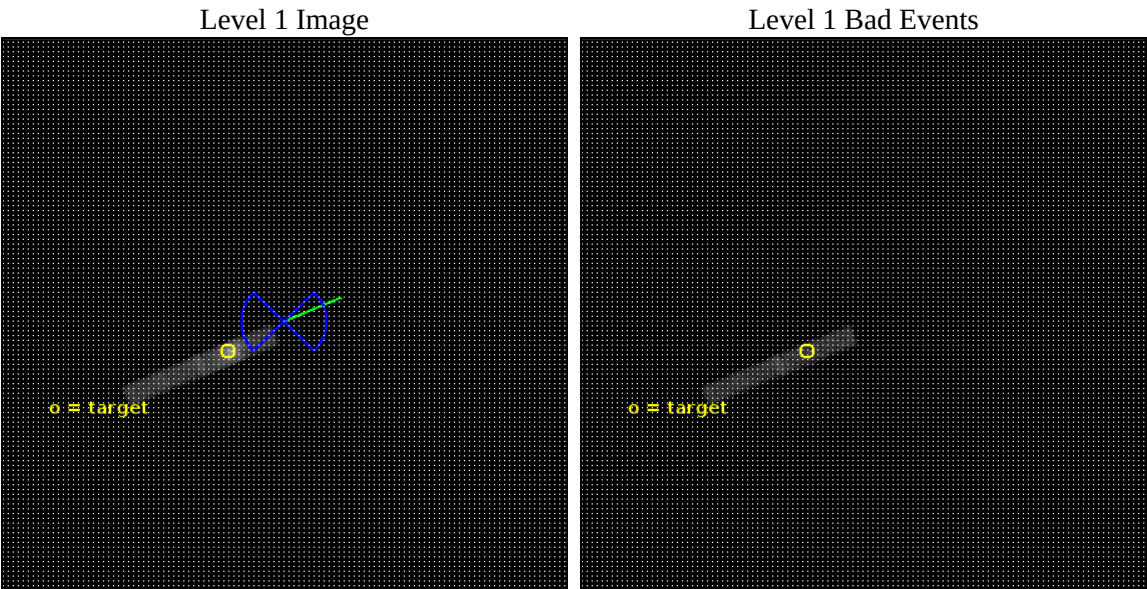
seq_num	601253	Sequence number
obs_id	18071	Observation id
title	Timing and Spectral Studies of the Extreme Binary Population in M82	
observer	Professor Fiona Harrison	Principal investigator
object	M82 offset 2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.969583	Observer's specified target RA [deg]
dec_targ	69.679444	Observer's specified target Dec [deg]
ra_nom	148.82988149467	Nominal RA [deg]
dec_nom	69.706121231211	Nominal Dec [deg]
roll_nom	66.203734847683	Nominal Roll [deg]
revision	1	Processing version of data
ontime	25066.5	Sum of GTIs [s]
livetime	23165.107940263	Livetime [s]
ontime1	25066.5	Sum of GTIs [s]
l2events	66836	Number of level 2 events



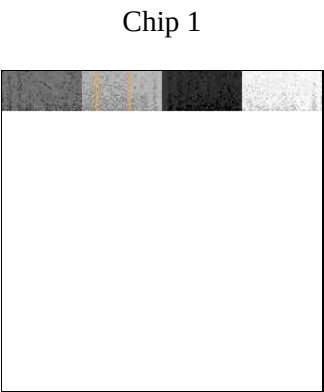
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	25066.5	Sum of GTIs [s]
caldsver	4.7.2	 	ontime1	25066.5	Sum of GTIs [s]
date	2016-11-04T06:42:40	Date and time of file creation	l1events	99375	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

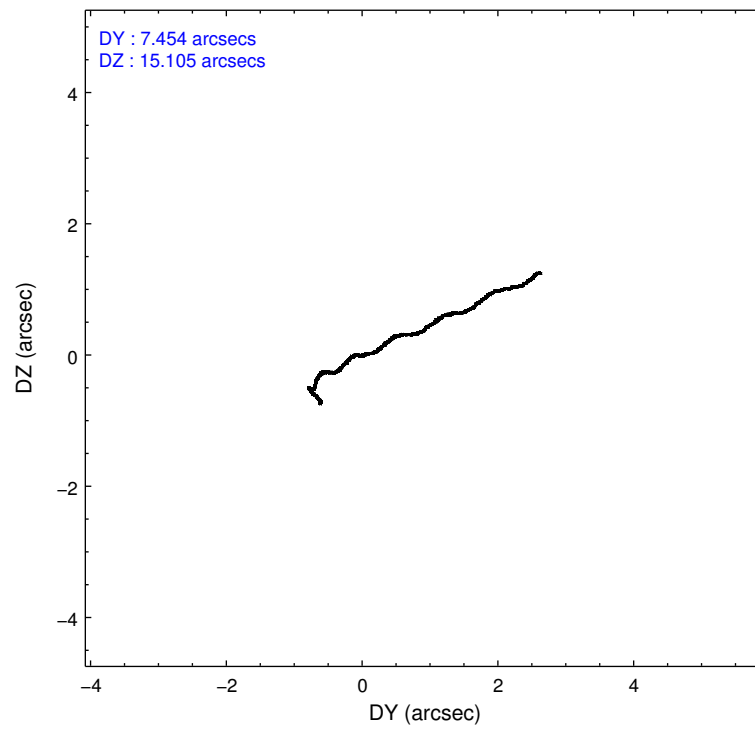
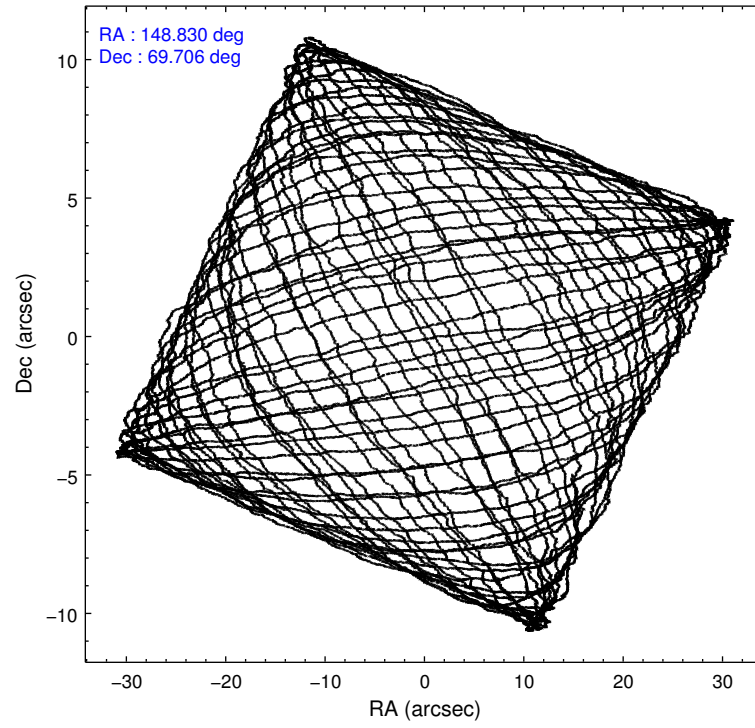
	ccd 1
level 1 events	99375
rejected events	29150
rejected %	29%

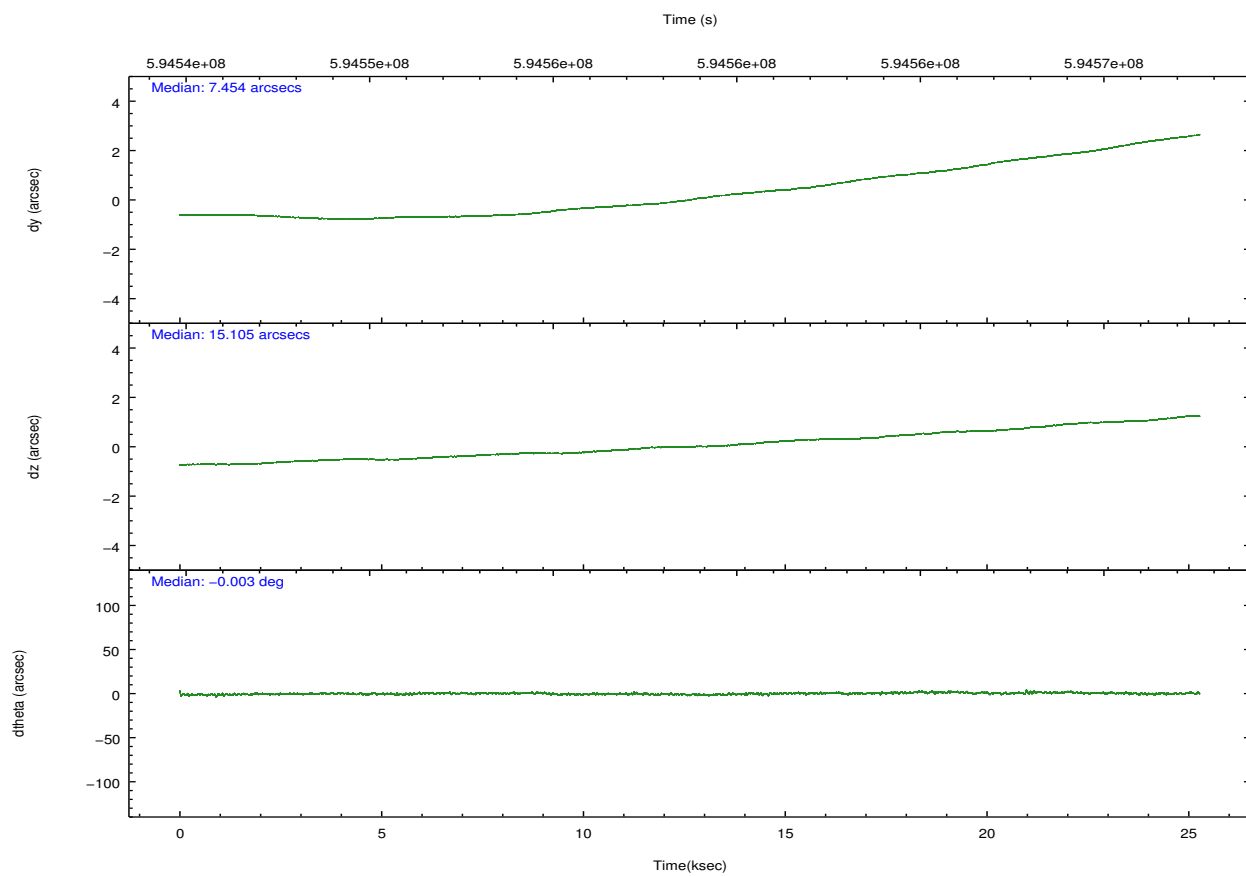
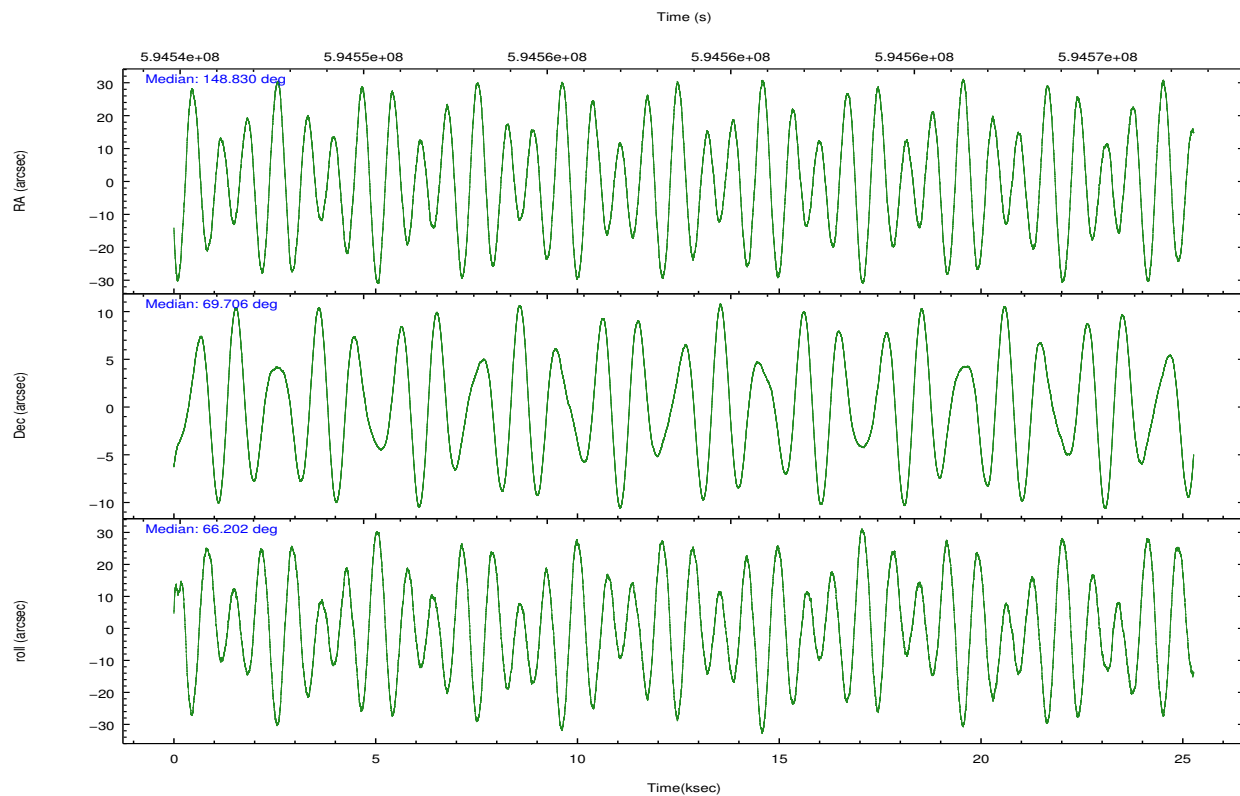
	ccd 1
grade 0 events	49022
	49%
grade 1 events	2273
	2%
grade 2 events	9485
	9%
grade 3 events	3762
	3%
grade 4 events	3656
	3%
grade 5 events	2701
	2%
grade 6 events	4302
	4%
grade 7 events	24174
	24%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-1	ACIS-1	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	148.838771	148.8298814946673	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	69.678700	69.70612123121074	Subarray start row	897	897
[deg] Pointing Roll	65.986707	66.20373484768325	Subarray row count	128	128
[deg] Roll angle	270.000000	270.000000	Alternating exposures requested	N	N
[deg] Roll tolerance	45.000000	45.000000	[s] Primary exposure time	0.000000	0.5
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	594546335.184000	594545273.25796			
Observation start date	2016-11-03T07:44:27	2016-11-03T07:27:53			
[s] Observation end time (MET)	594571335.184000	594572011.4095			
Observation end date	2016-11-03T14:41:07	2016-11-03T14:53:31			
Read mode	TIMED	TIMED			

2.3 Aspect



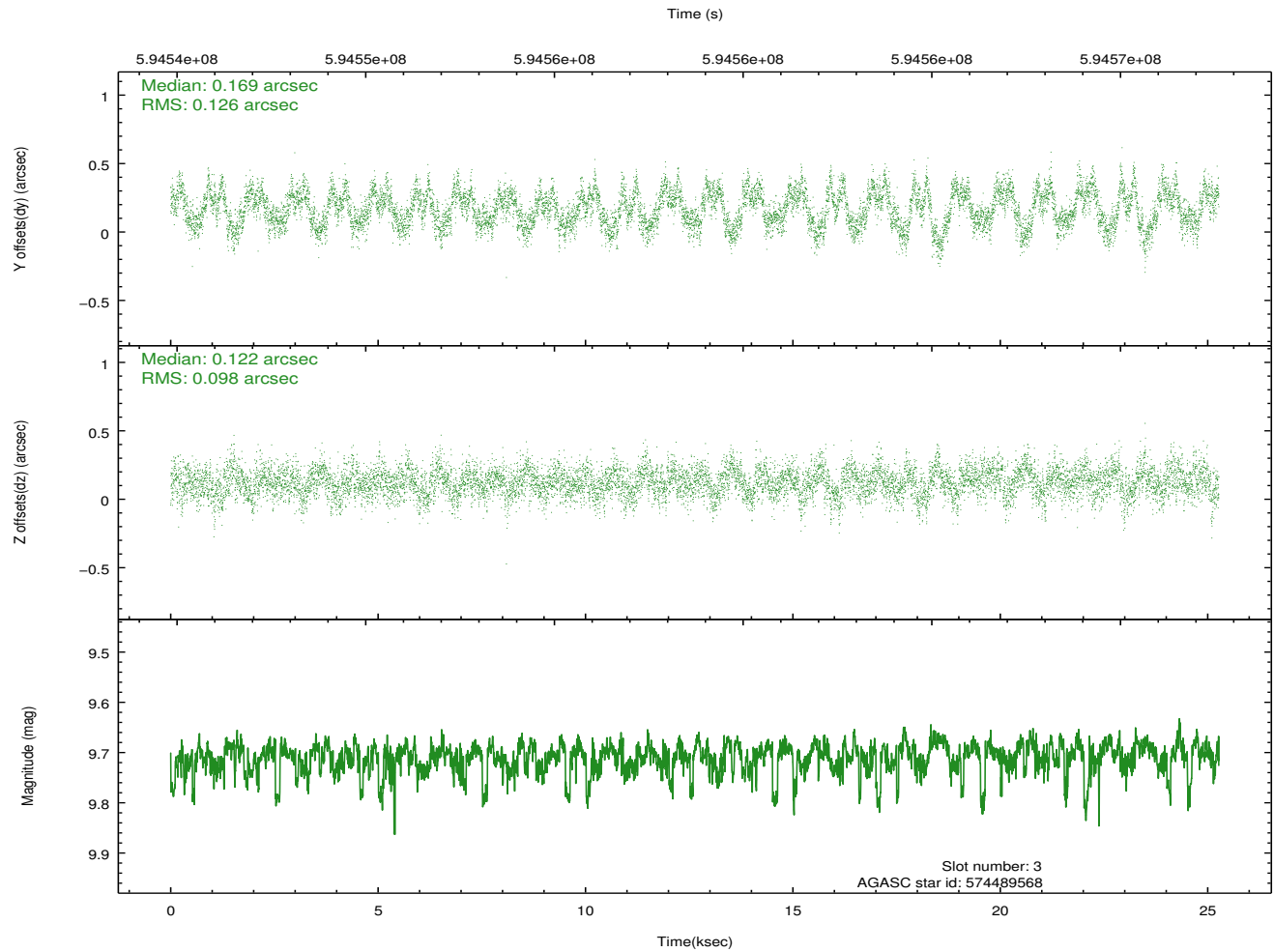
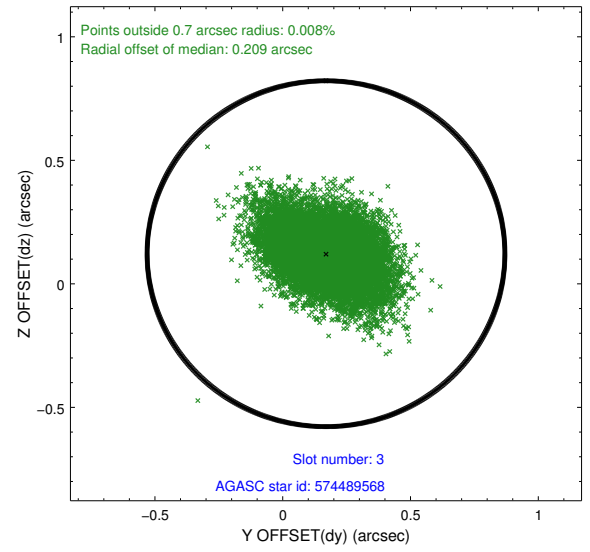
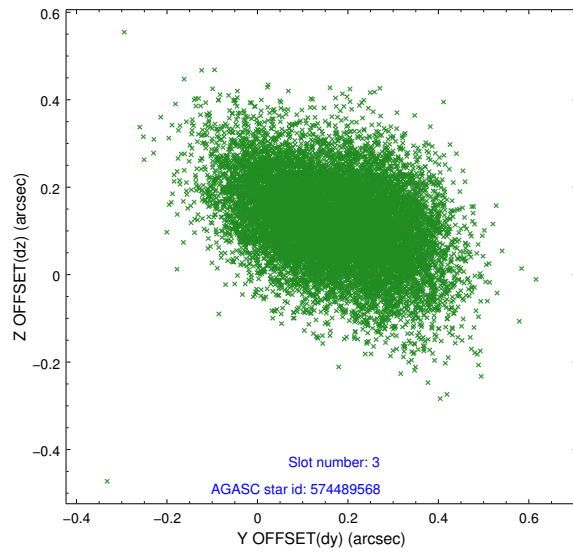


Slot Statistics

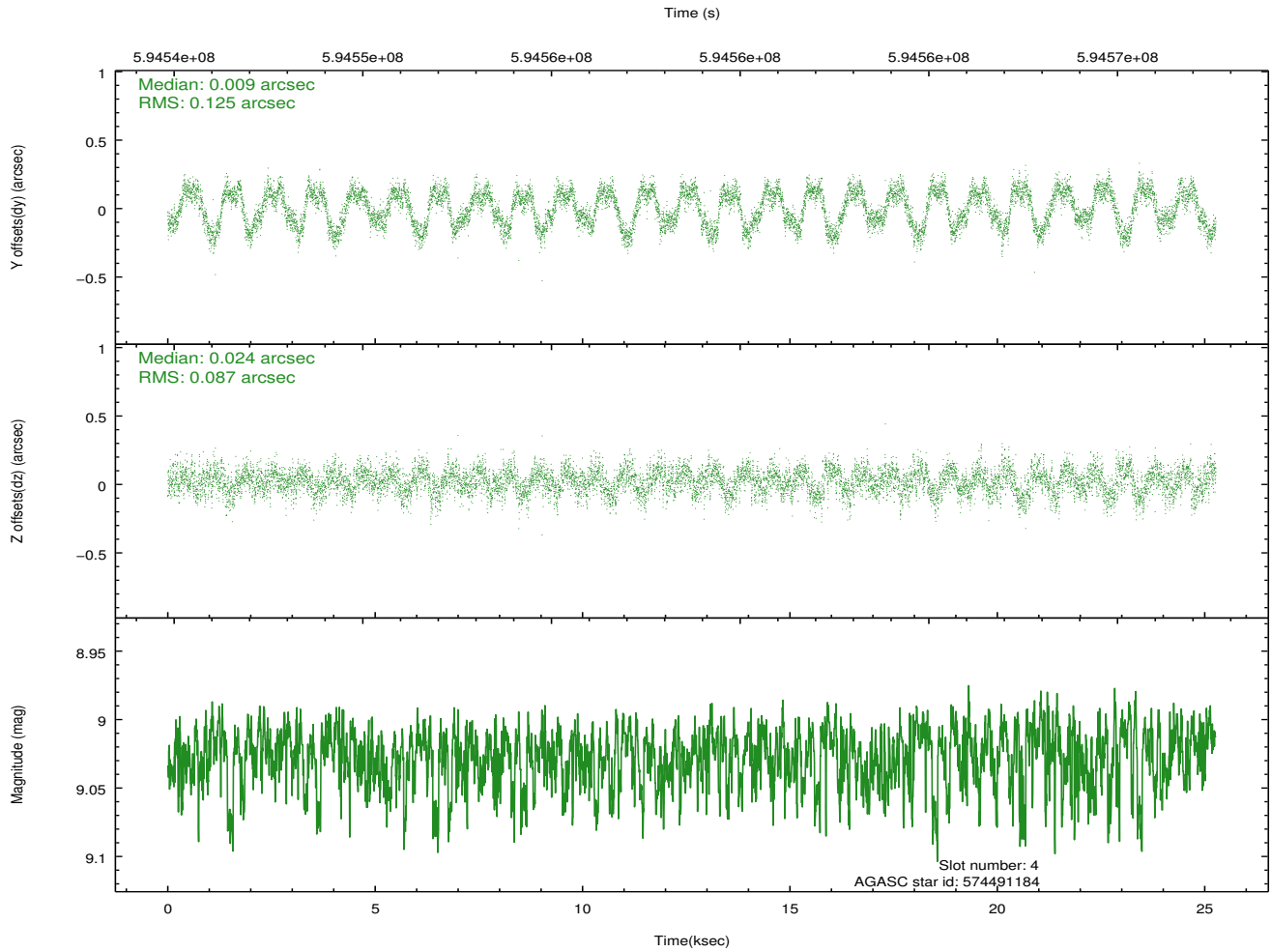
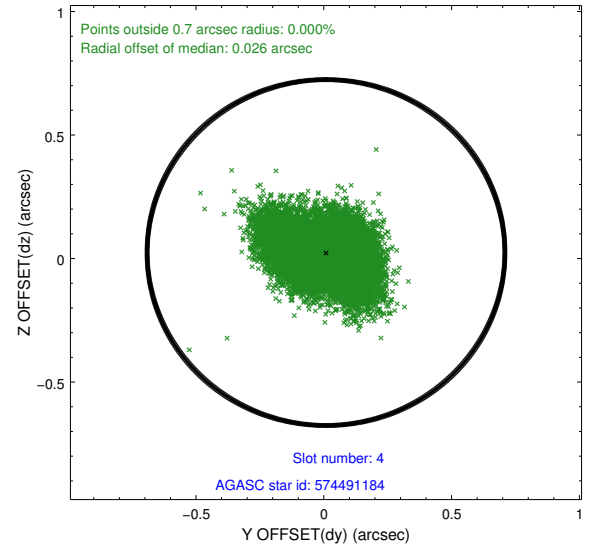
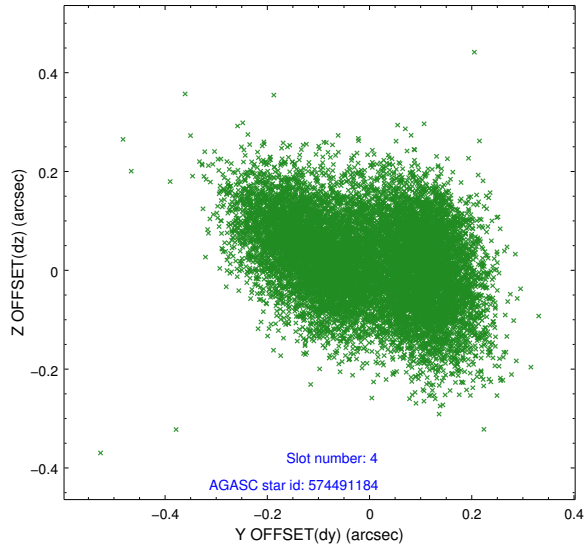
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.04	6162	-0.135	-0.102	0.032	0.063	0.000000	0.000000	-762.46	-845.28
1	FID		ACIS-I-4	7.08	6163	0.306	0.101	0.054	0.069	0.000000	0.000000	2151.99	1061.08
2	FID		ACIS-I-5	7.11	6164	-0.272	0.064	0.016	0.027	0.000000	0.000000	-1816.29	1058.96
3	GUIDE	used	574489568	9.71	12308	0.169	0.122	0.170	0.276	147.223974	69.438157	-1596.95	1523.59
4	GUIDE	used	574491184	9.03	12313	0.009	0.024	0.164	0.252	148.582453	69.768699	166.68	423.84
5	GUIDE	used	574491872	9.24	12321	0.137	-0.177	0.130	0.215	147.207613	69.765453	-521.41	1991.36
6	GUIDE	used	574885216	8.46	12323	-0.281	-0.053	0.089	0.152	147.834547	70.411352	1924.96	2184.84
7	GUIDE	used	574886496	8.48	12313	-0.027	0.087	0.111	0.178	148.945563	70.041136	1245.84	411.79

2.4 Star Slots

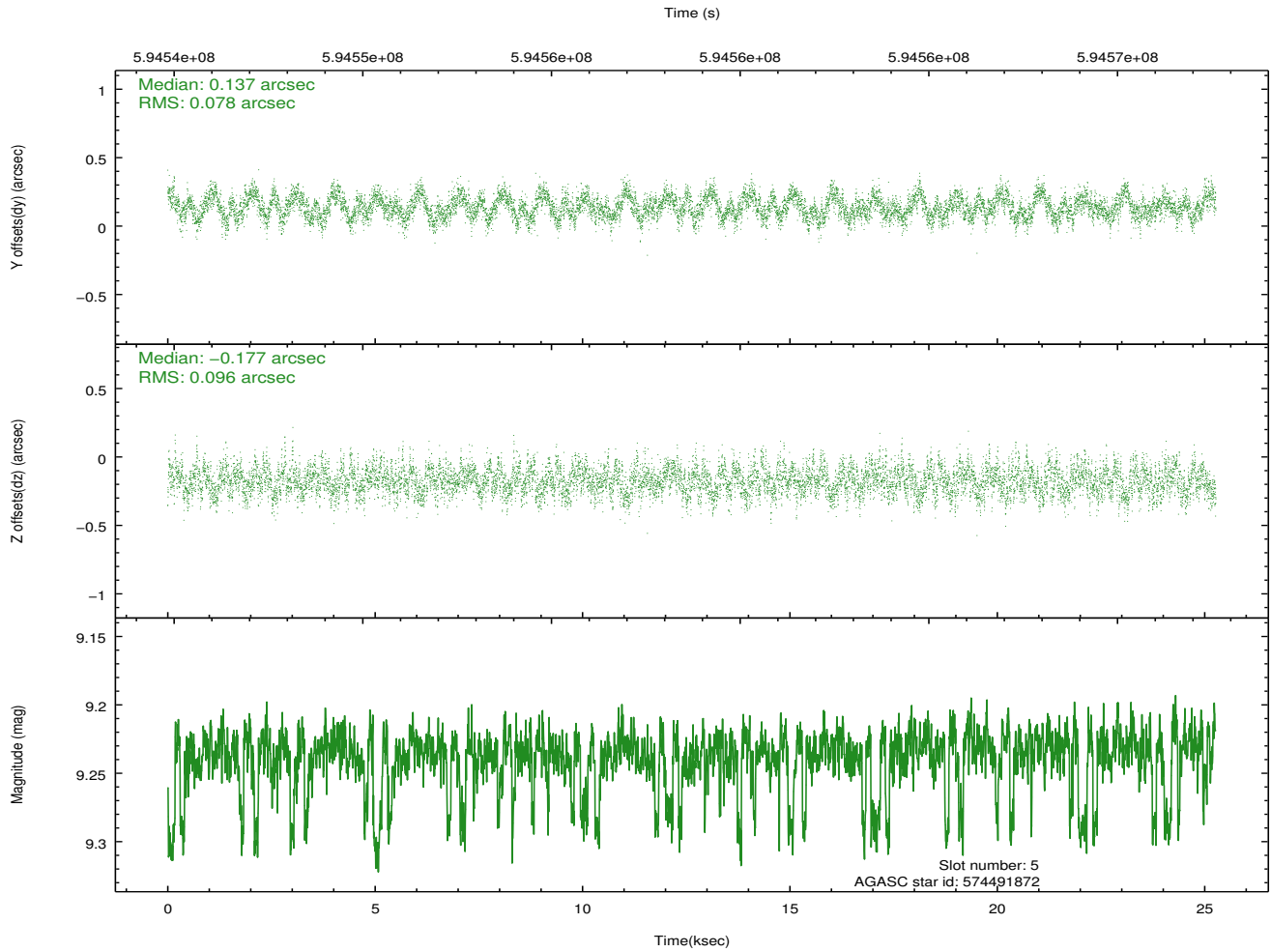
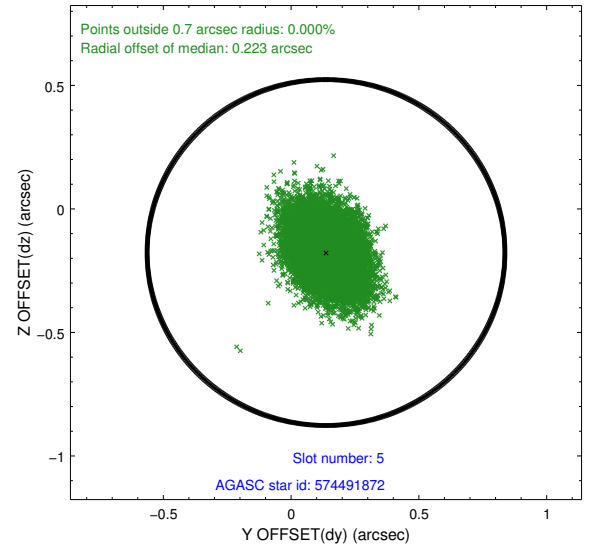
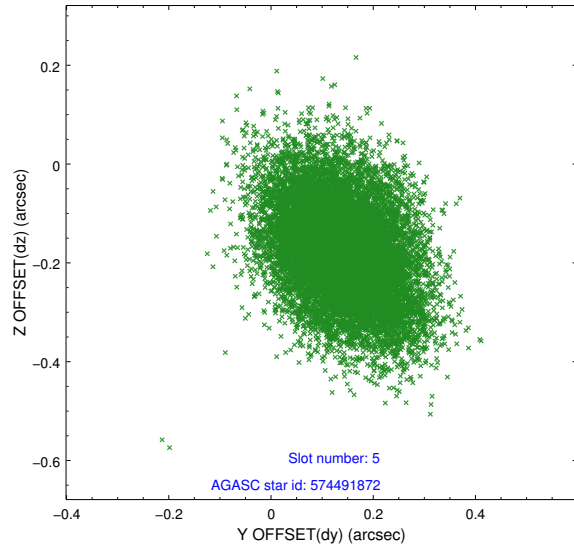
2.4.1 Slot 3



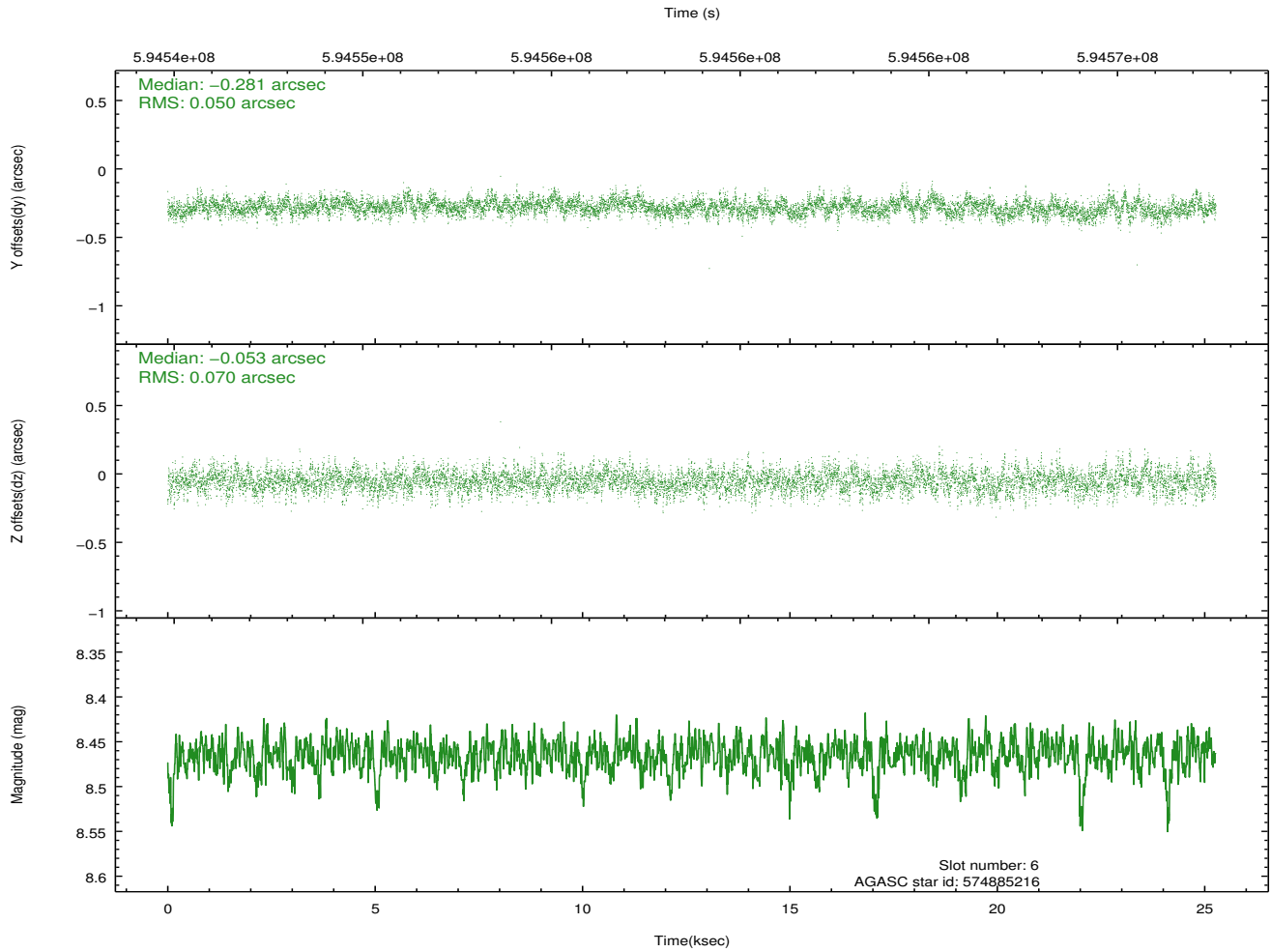
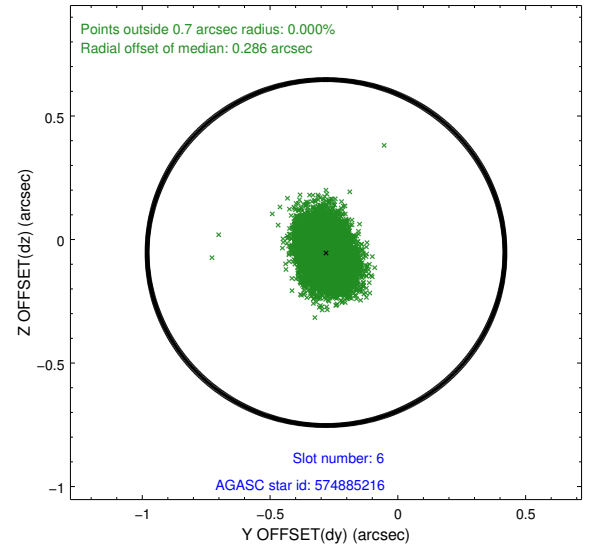
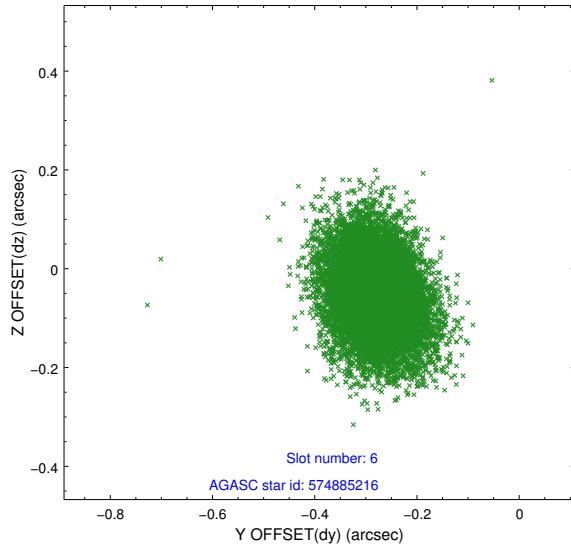
2.4.2 Slot 4



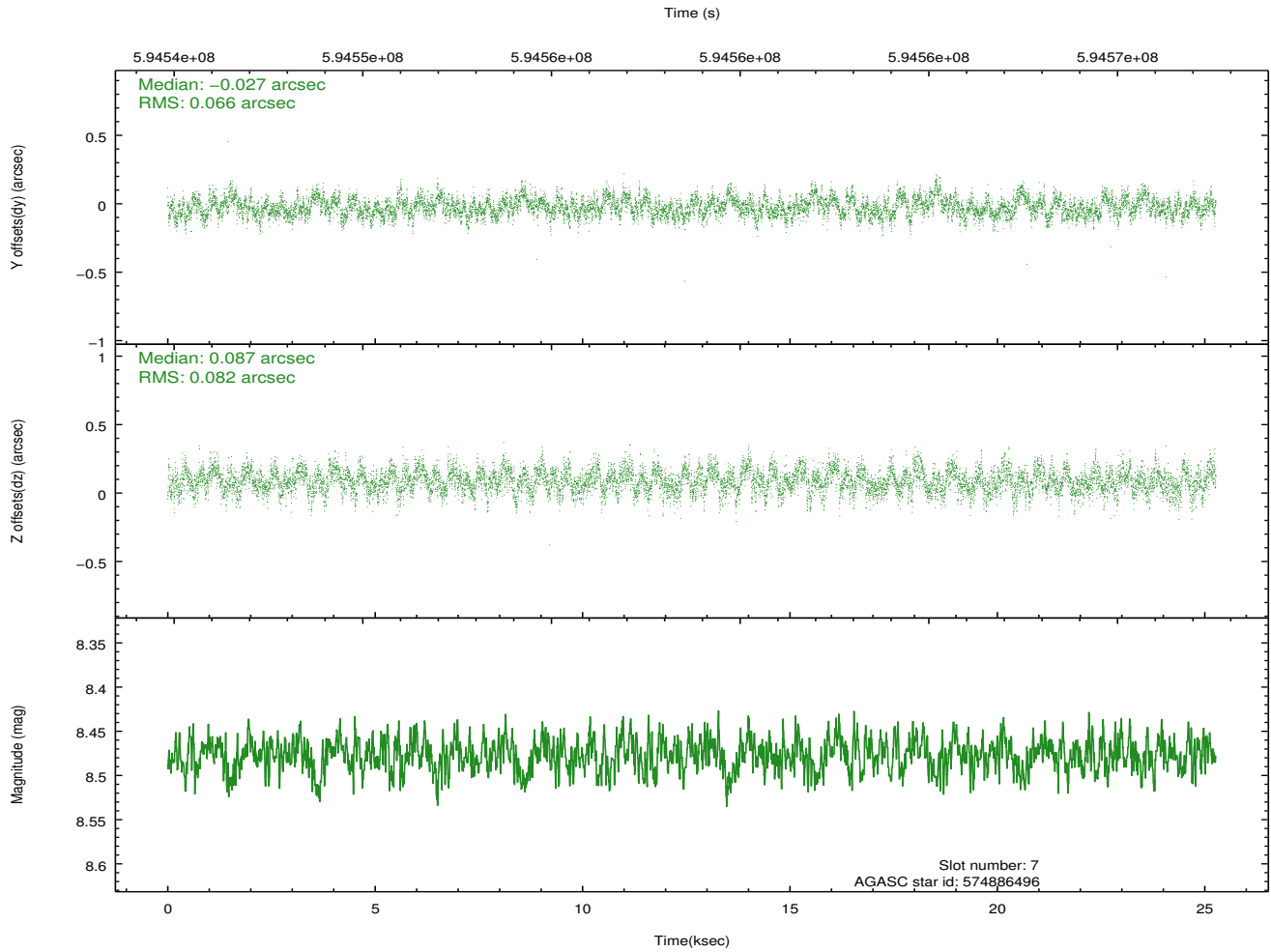
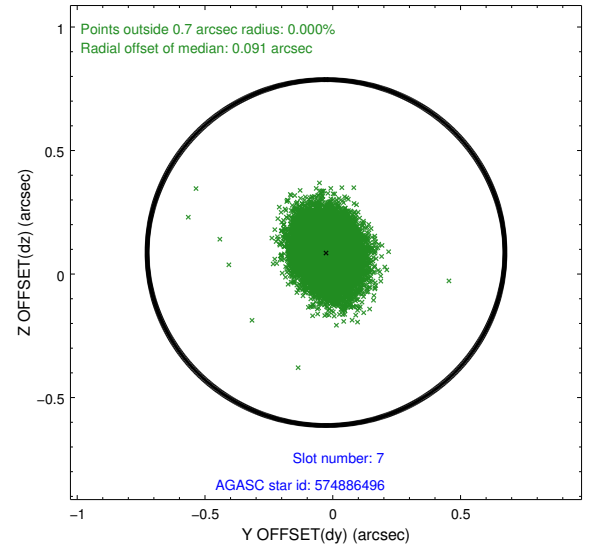
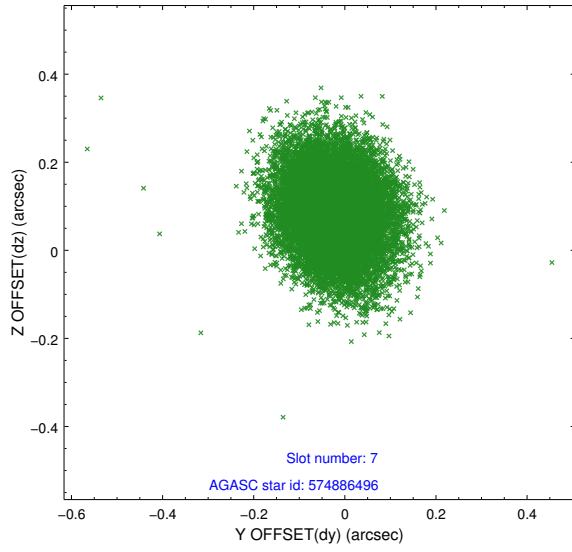
2.4.3 Slot 5



2.4.4 Slot 6

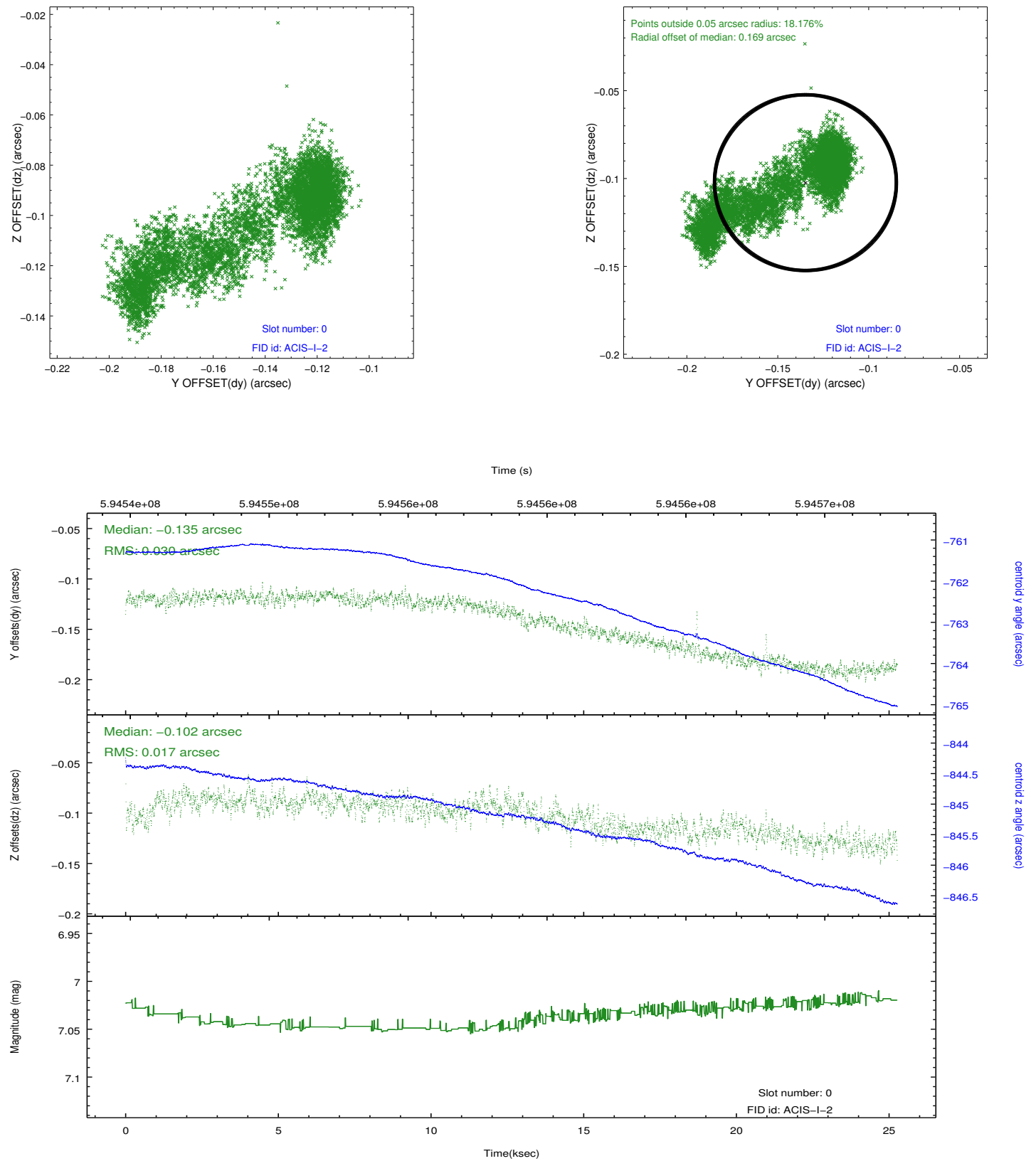


2.4.5 Slot 7

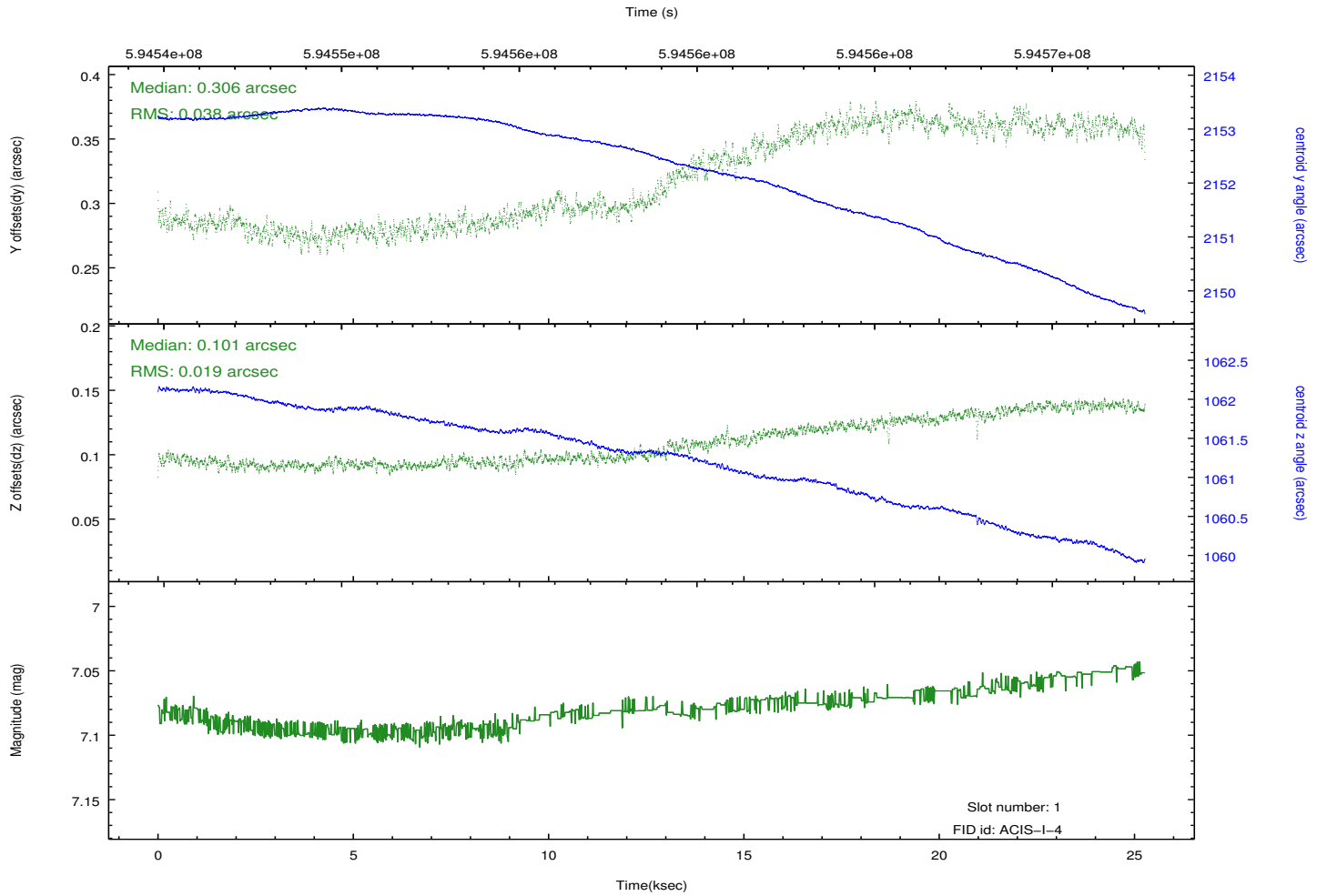
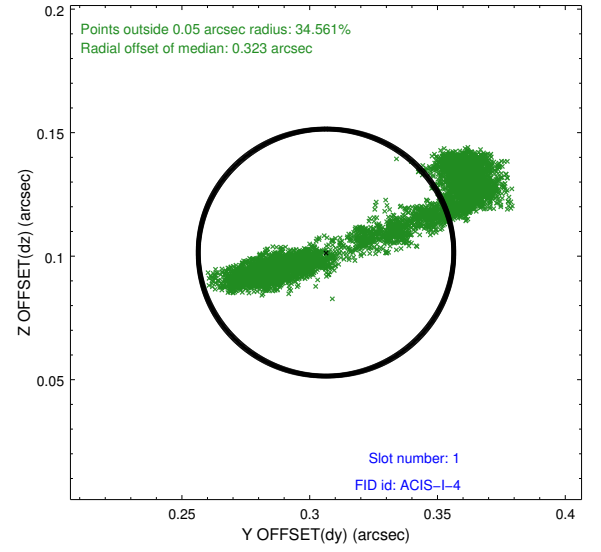
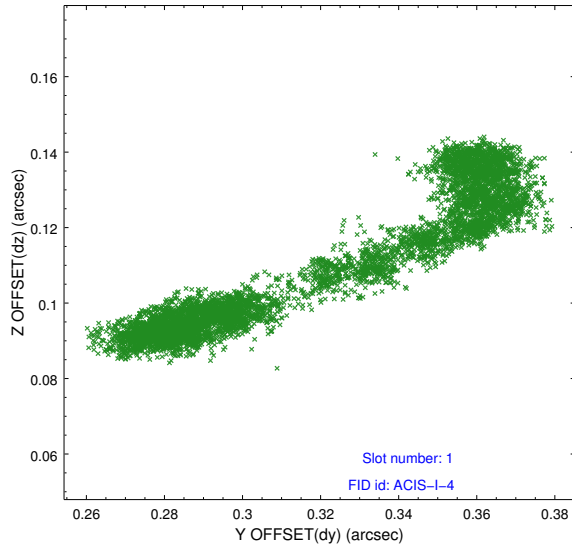


2.5 FID Slots

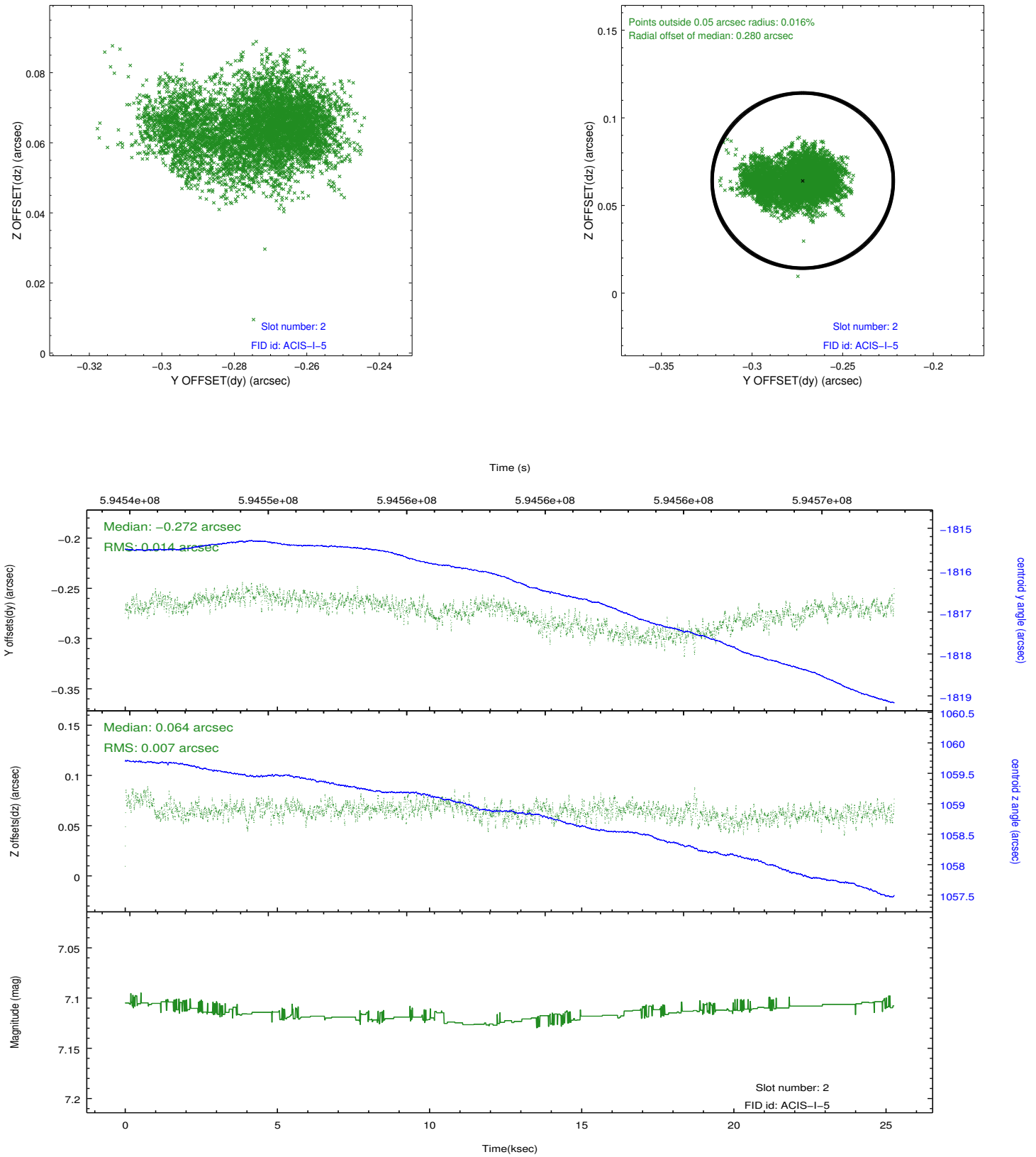
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.11.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.0665

A.2 Comments

Roll angle constraint met.