

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10446 - L2 Version 2
Chandra X-Ray Center

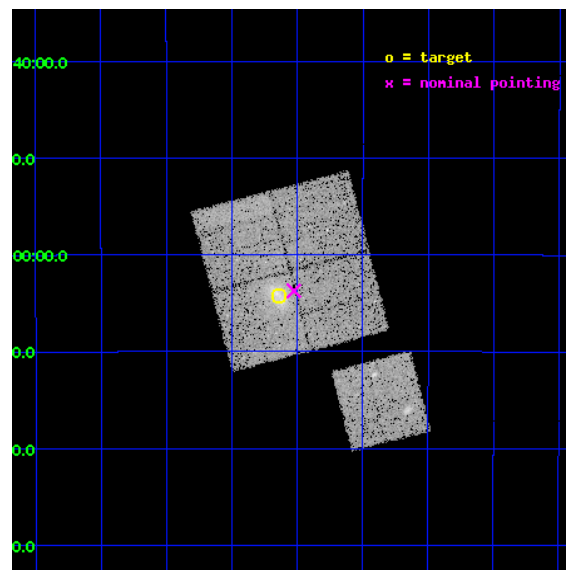
L2 Processing Date : Jun 8 2012

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

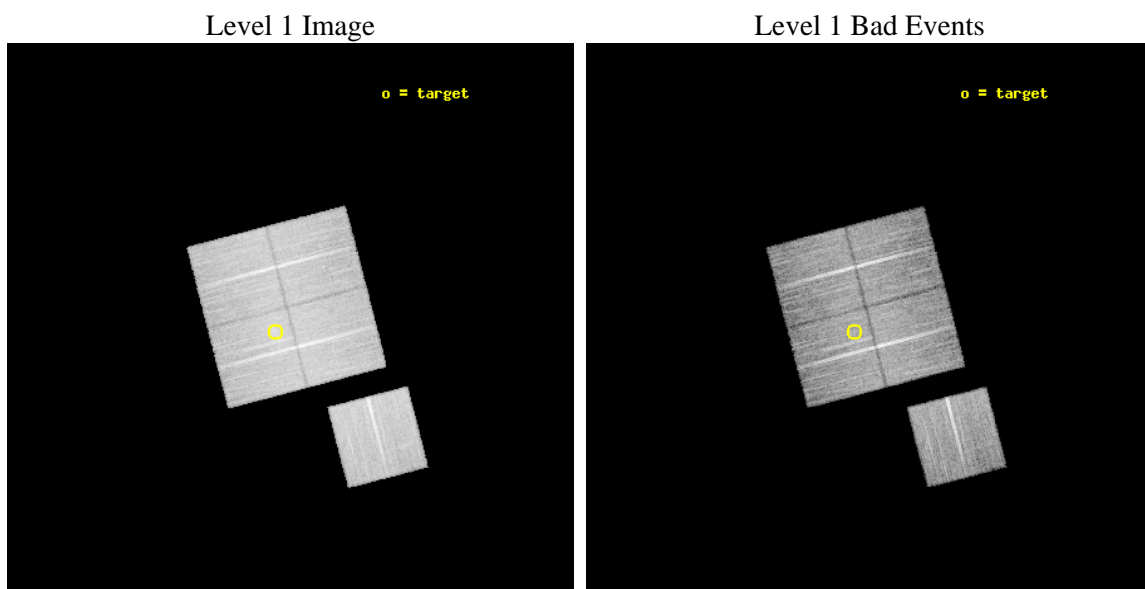
seq_num	800807	Sequence number
obs_id	10446	Observation id
title	The distribution and interactions of luminous and dark matter in strong-lensing clusters at $z>0.3$	Proposal title
observer	Dr. Harald Ebeling	Principal investigator
object	MACSJ0416.1-2403	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	64.035417	Observer's specified target RA [deg]
dec_targ	-24.070833	Observer's specified target Dec [deg]
ra_nom	64.006570301415	Nominal RA [deg]
dec_nom	-24.062089584219	Nominal Dec [deg]
roll_nom	165.42330856977	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16042.050743163	Sum of GTIs [s]
livetime	15832.449540217	Livetime [s]
ontime0	16038.786632895	Sum of GTIs [s]
ontime1	16038.82770282	Sum of GTIs [s]
ontime2	16042.009703159	Sum of GTIs [s]
ontime3	16042.050743163	Sum of GTIs [s]
ontime6	16029.322662055	Sum of GTIs [s]
l2events	64626	Number of level 2 events



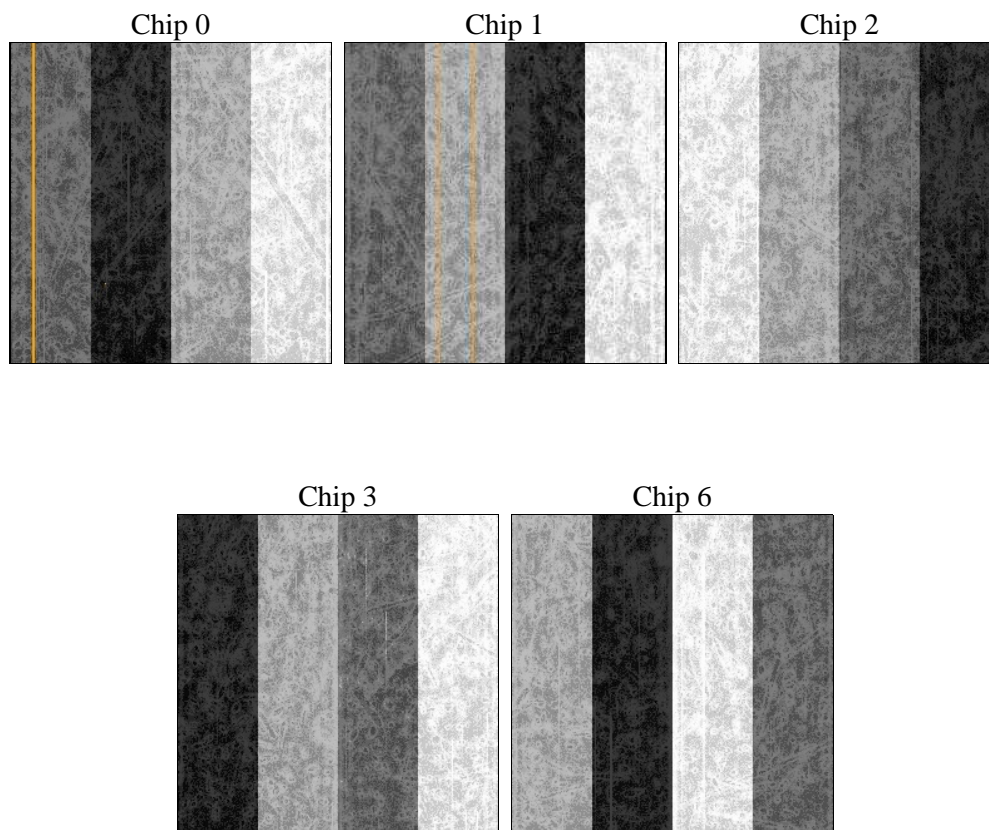
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	16042.050743163	Sum of GTIs [s]
caldbver	4.4.10	 	ontime0	16038.786632895	Sum of GTIs [s]
date	2012-06-08T19:41:53	Date and time of file creation	ontime1	16038.82770282	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	16042.009703159	Sum of GTIs [s]
			ontime3	16042.050743163	Sum of GTIs [s]
			ontime6	16029.322662055	Sum of GTIs [s]
			l1events	697029	Number of level 1 events

2.1.4 Events

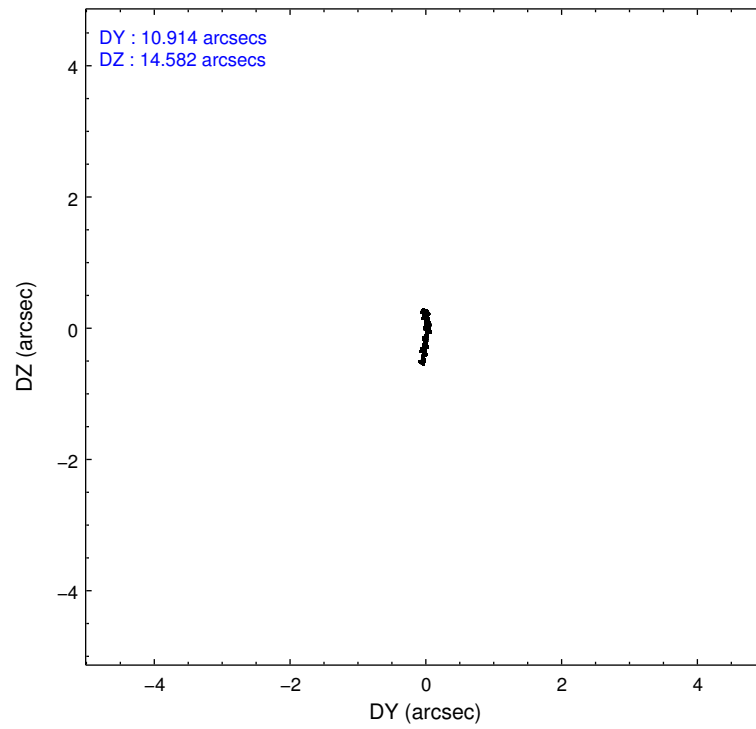
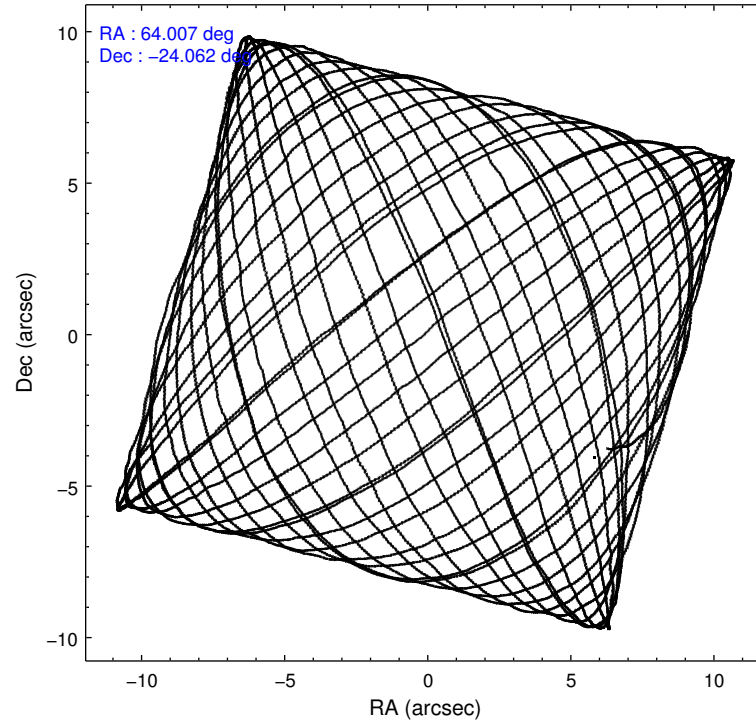
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	129463	132832	146970	143046	144718
rejected events	115072	116666	132850	125901	129605
rejected %	88%	87%	90%	88%	89%

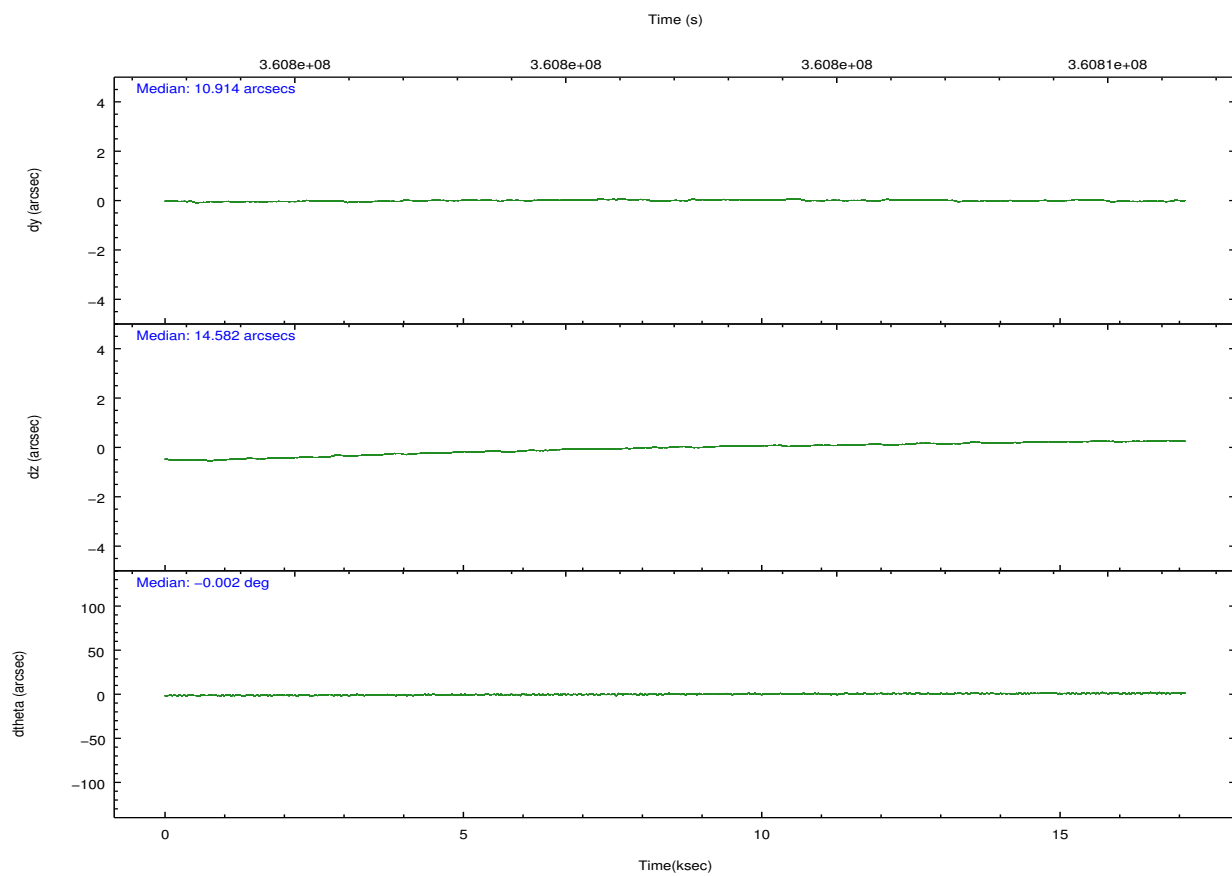
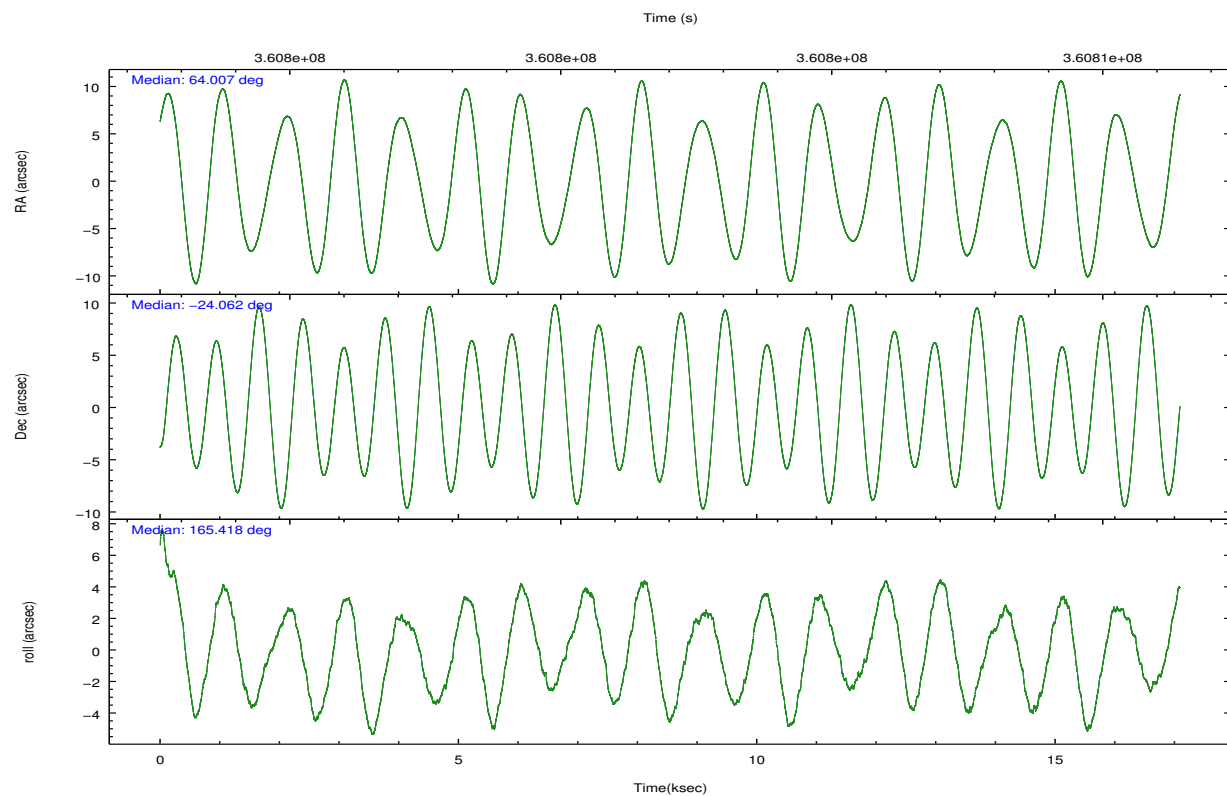
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5053	5773	5147	7762	5606
	3%	4%	3%	5%	3%
grade 1 events	77	66	85	119	78
	0%	0%	0%	0%	0%
grade 2 events	3485	3803	3462	3355	3253
	2%	2%	2%	2%	2%
grade 3 events	1615	1717	1441	1604	1551
	1%	1%	0%	1%	1%
grade 4 events	1482	1640	1496	1564	1564
	1%	1%	1%	1%	1%
grade 5 events	5004	5623	4759	5819	5556
	3%	4%	3%	4%	3%
grade 6 events	2758	3243	2579	2861	3144
	2%	2%	1%	2%	2%
grade 7 events	109989	110967	128001	119962	123966
	84%	83%	87%	83%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	64.035555	64.00657030141463	Subarray requested	NONE	NONE
[deg] Pointing Dec	-24.054660	-24.06208958421949	Alternating exposures requested	N	N
[deg] Pointing Roll	165.226442	165.4233085697668	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-229.442463	-229.4438428438578			
[mm] SIM translation stage offset	-4.15	-4.148610159071865			
[s] Observation start time (MET)	360794564.184000	360792683.15019			
Observation start date	2009-06-07T20:41:38	2009-06-07T20:11:23			
[s] Observation end time (MET)	360810564.184000	360811306.37612			
Observation end date	2009-06-08T01:08:18	2009-06-08T01:21:46			
Read mode	TIMED	TIMED			

2.3 Aspect



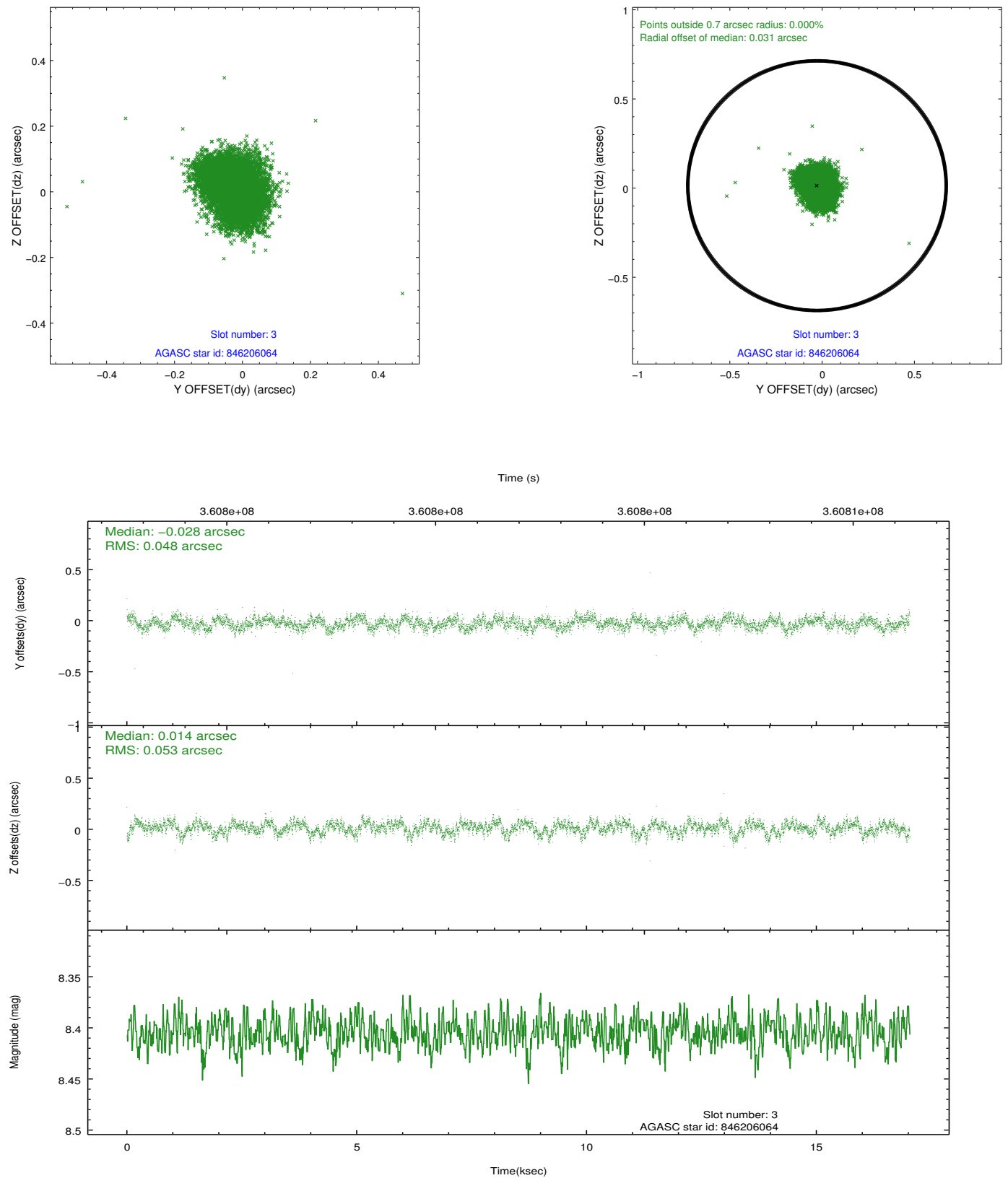


Slot Statistics

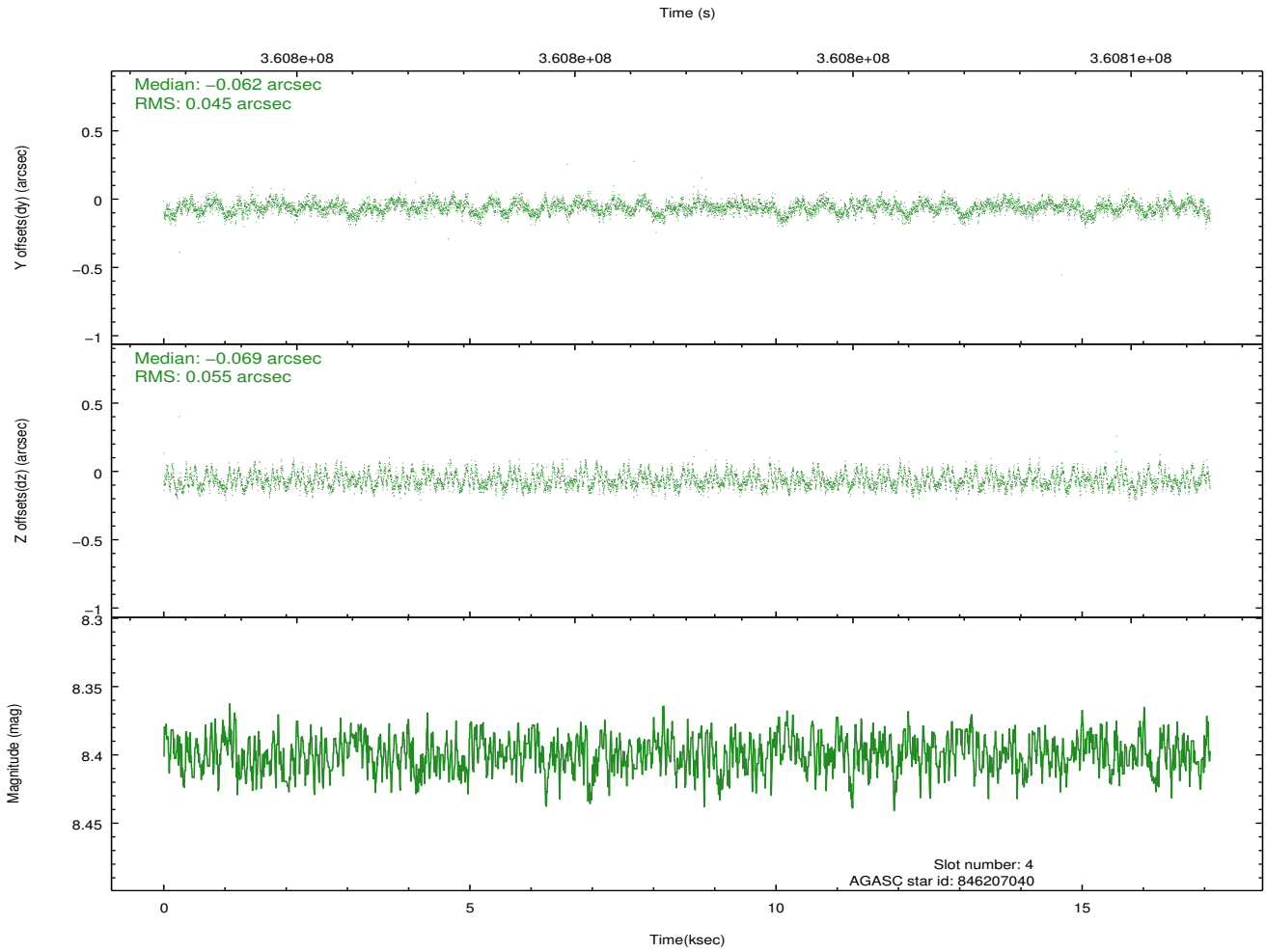
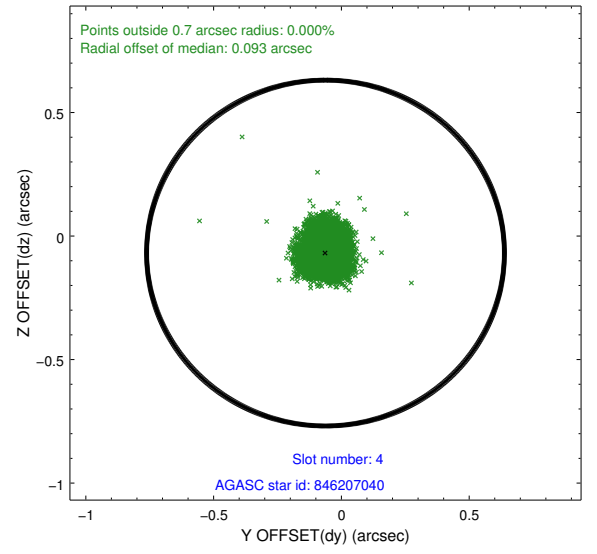
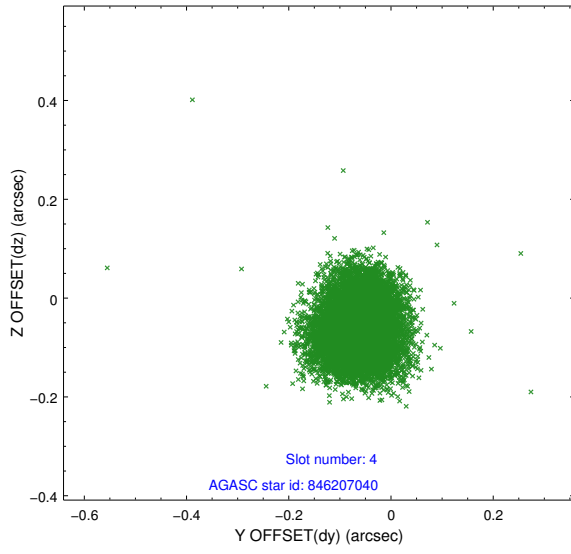
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	6.97	4169	0.073	-0.018	0.011	0.020	0.000000	0.000000	928.66	-923.24
1	FID	ACIS-I-5	6.96	4168	-0.224	0.077	0.008	0.012	0.000000	0.000000	-1819.62	974.18
2	FID	ACIS-I-6	6.97	4169	0.060	0.011	0.010	0.017	0.000000	0.000000	393.91	1618.91
3	GUIDE	846206064	8.40	8306	-0.028	0.014	0.075	0.122	63.549477	-24.205184	1404.40	933.84
4	GUIDE	846207040	8.40	8331	-0.062	-0.069	0.076	0.119	63.992065	-24.505797	-276.56	1606.20
5	GUIDE	846209096	7.97	8337	0.013	0.108	0.062	0.097	64.121972	-23.533882	202.63	-1885.09
6	GUIDE	846209288	9.23	8325	-0.010	-0.164	0.081	0.132	63.894480	-24.058916	443.90	133.00
7	GUIDE	846357784	8.55	8331	0.089	0.112	0.063	0.104	64.526937	-24.060086	-1567.50	-391.12

2.4 Star Slots

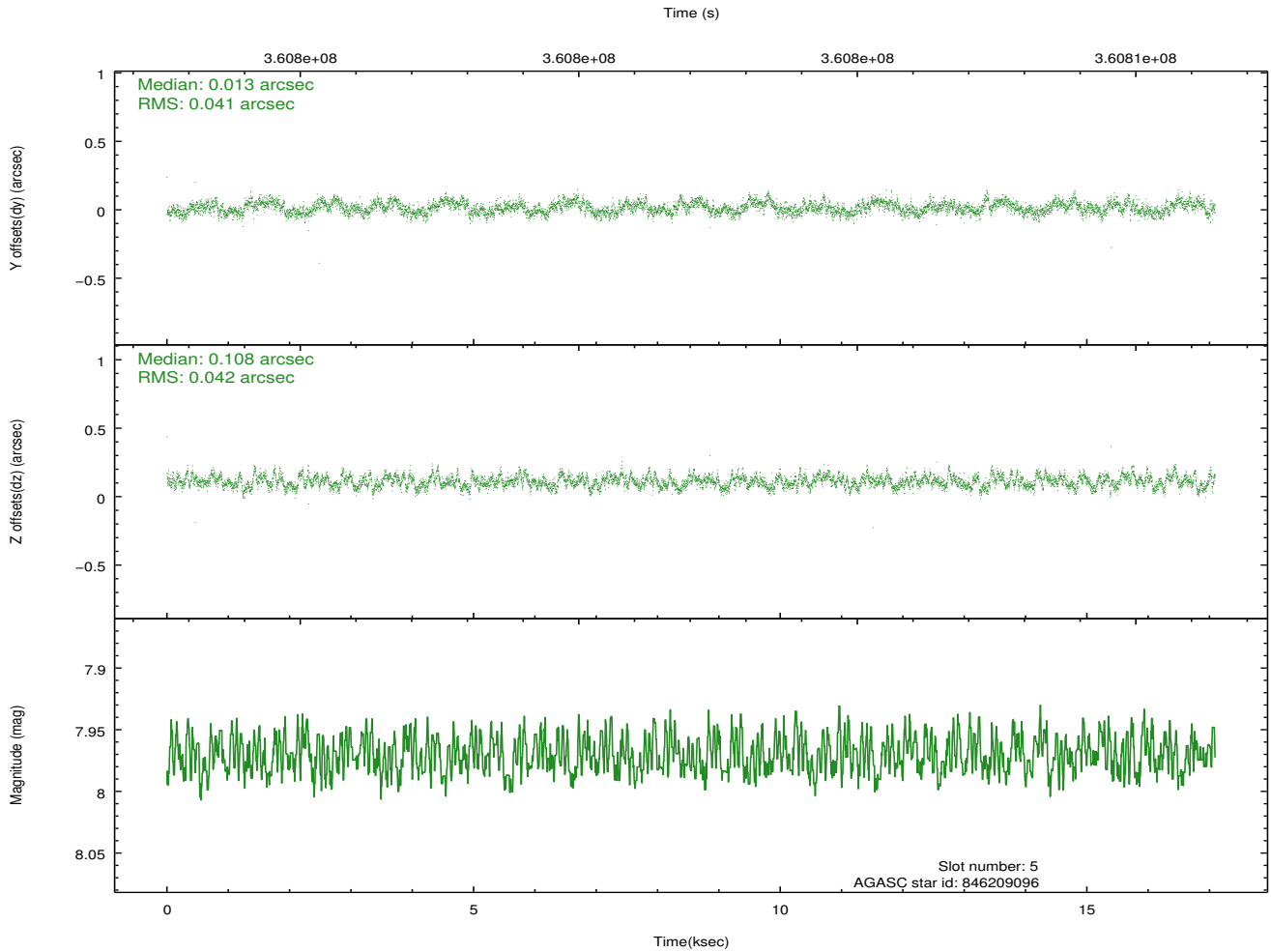
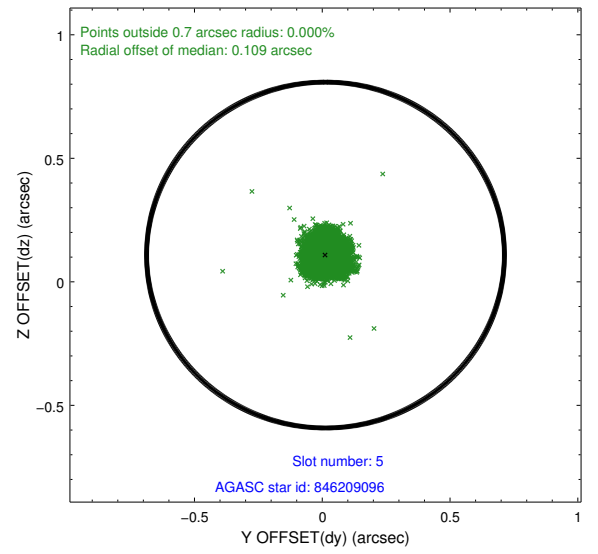
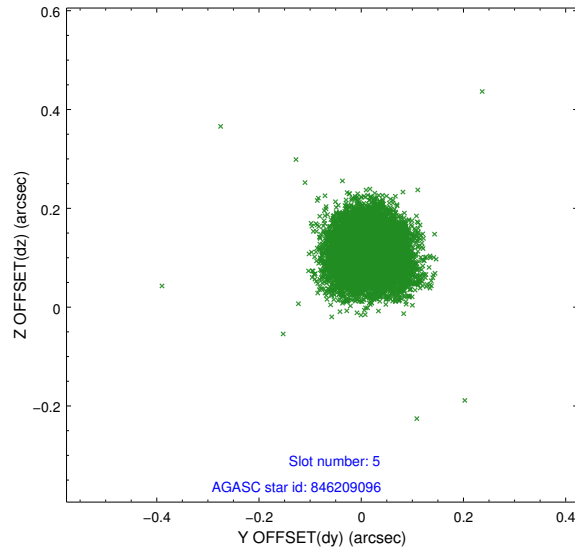
2.4.1 Slot 3



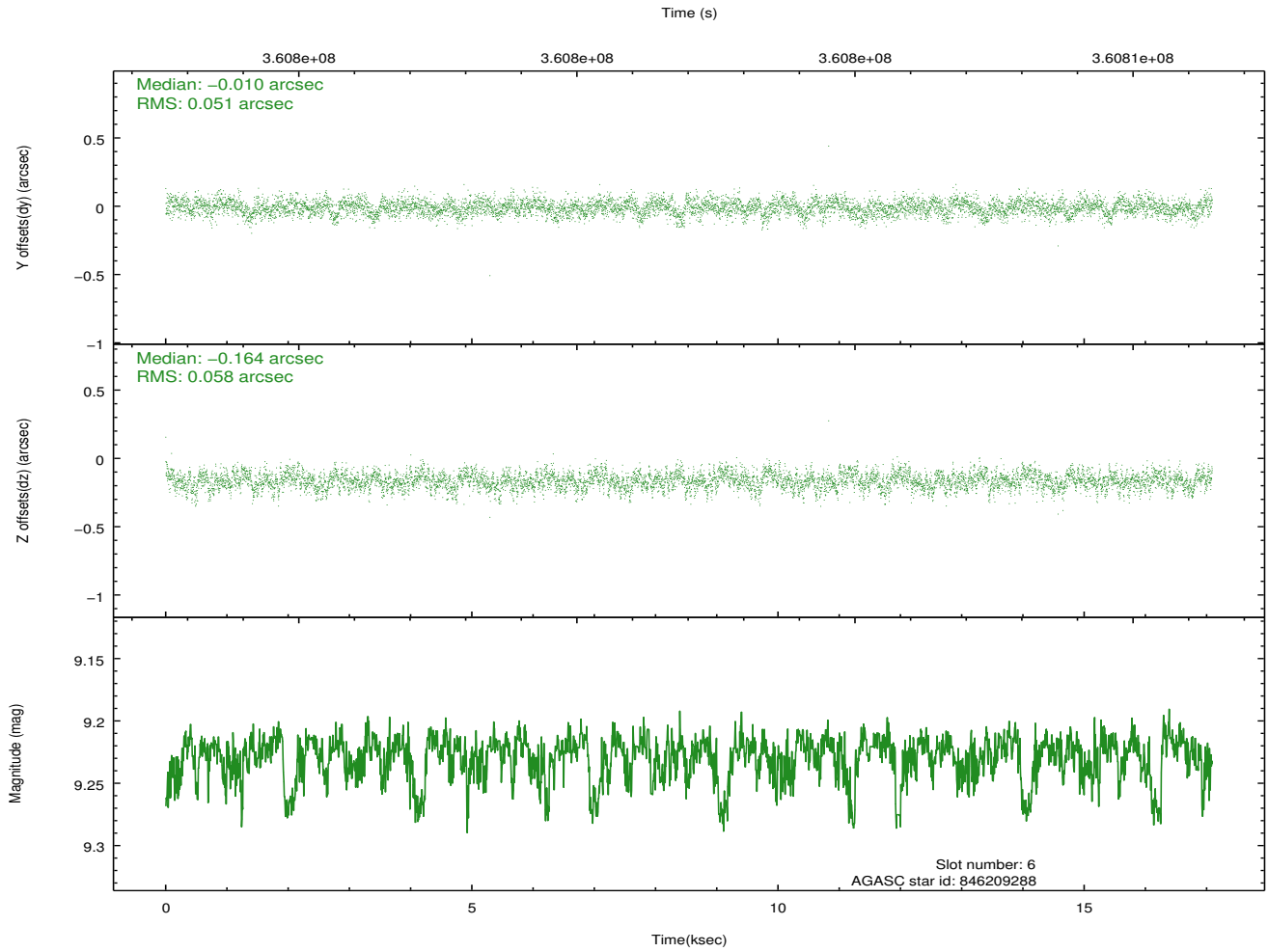
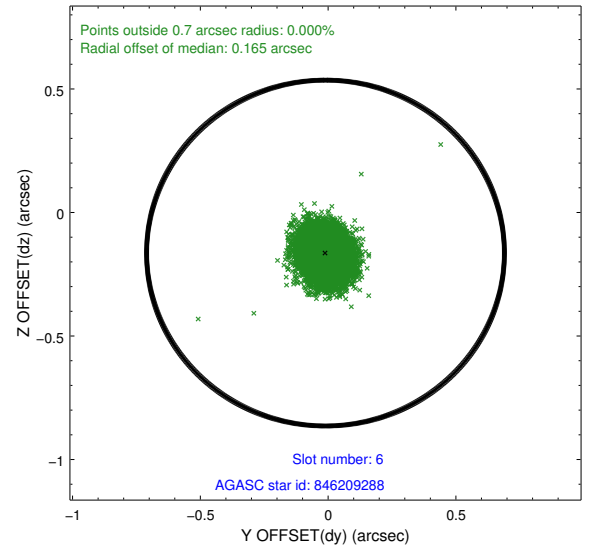
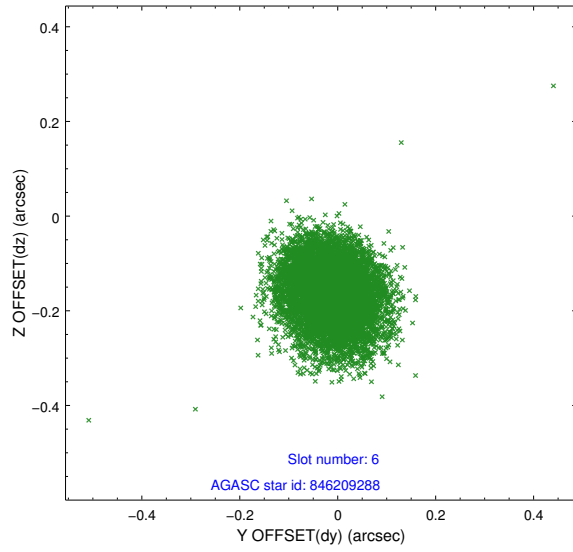
2.4.2 Slot 4



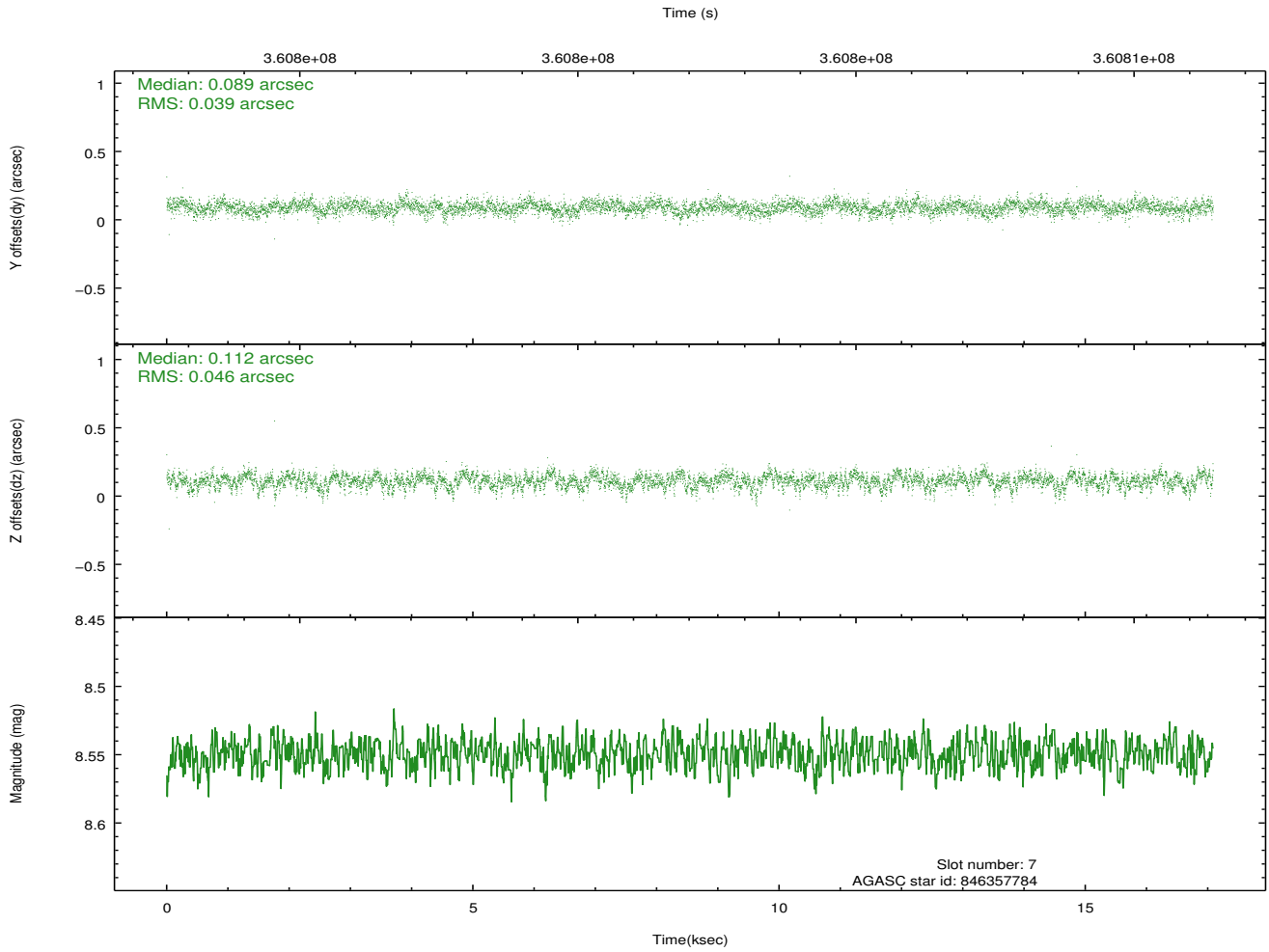
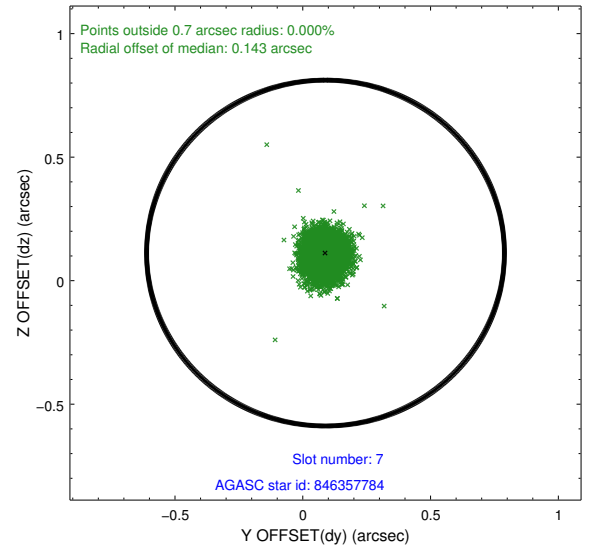
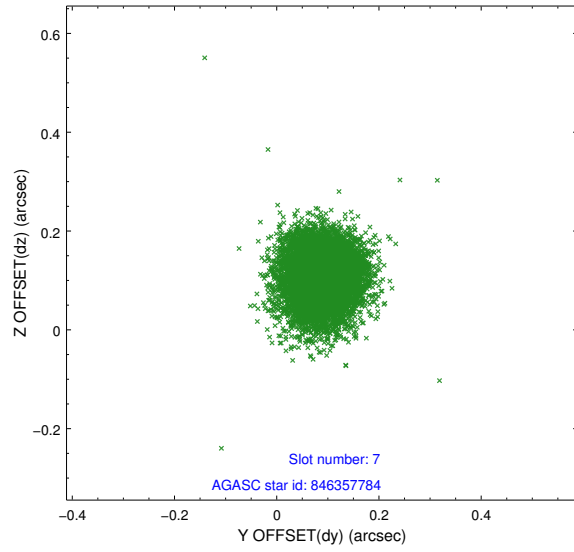
2.4.3 Slot 5



2.4.4 Slot 6

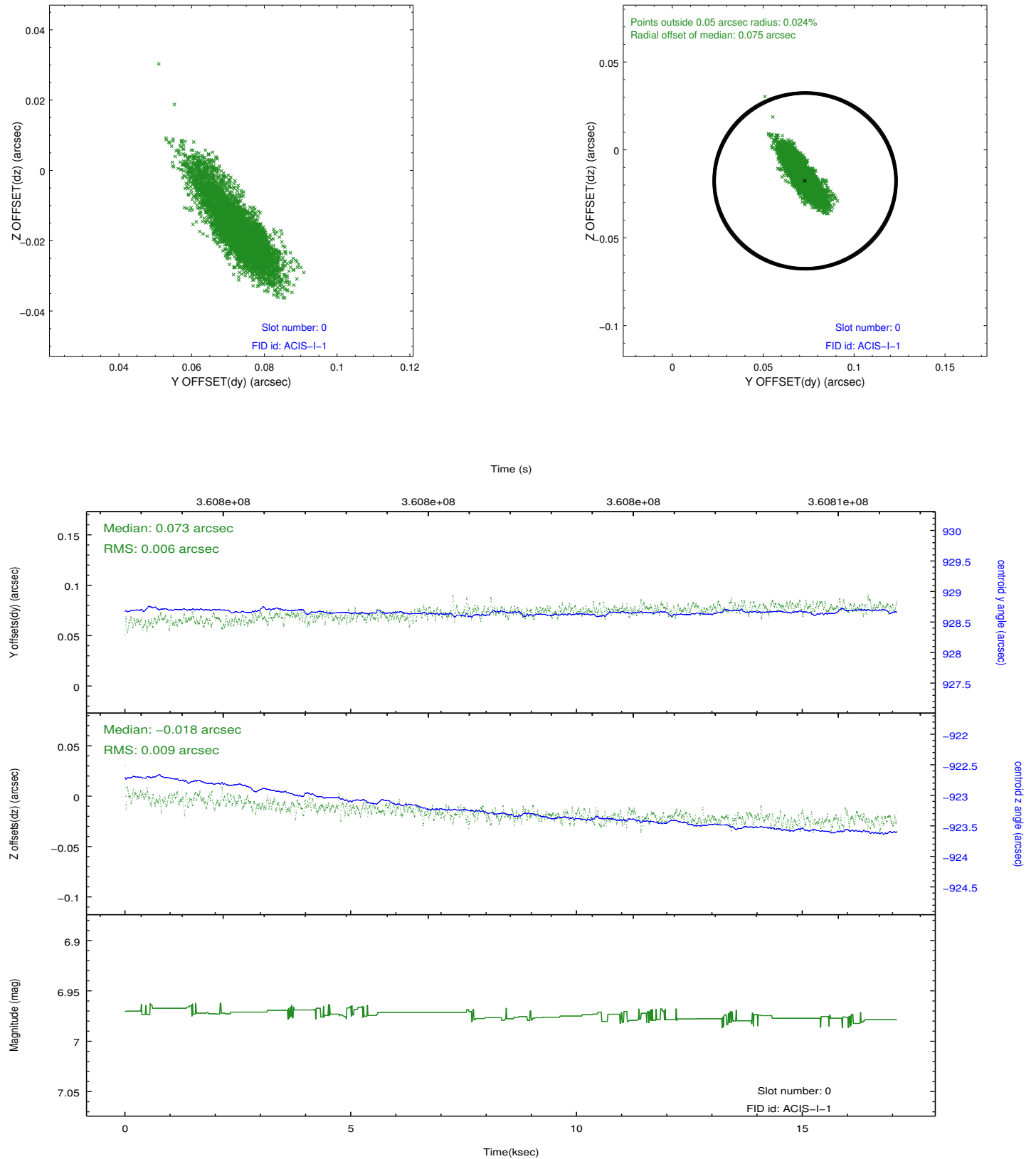


2.4.5 Slot 7

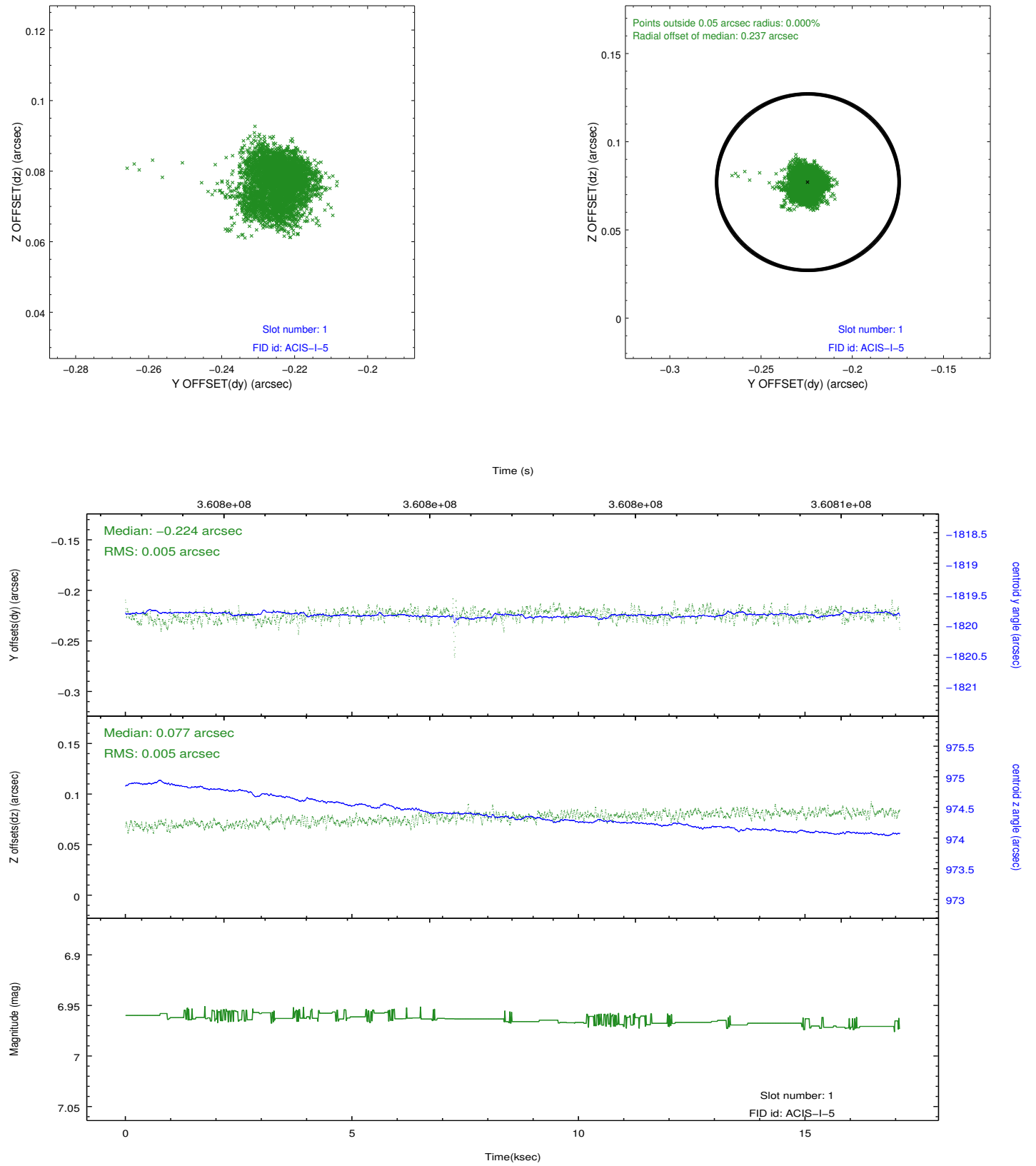


2.5 FID Slots

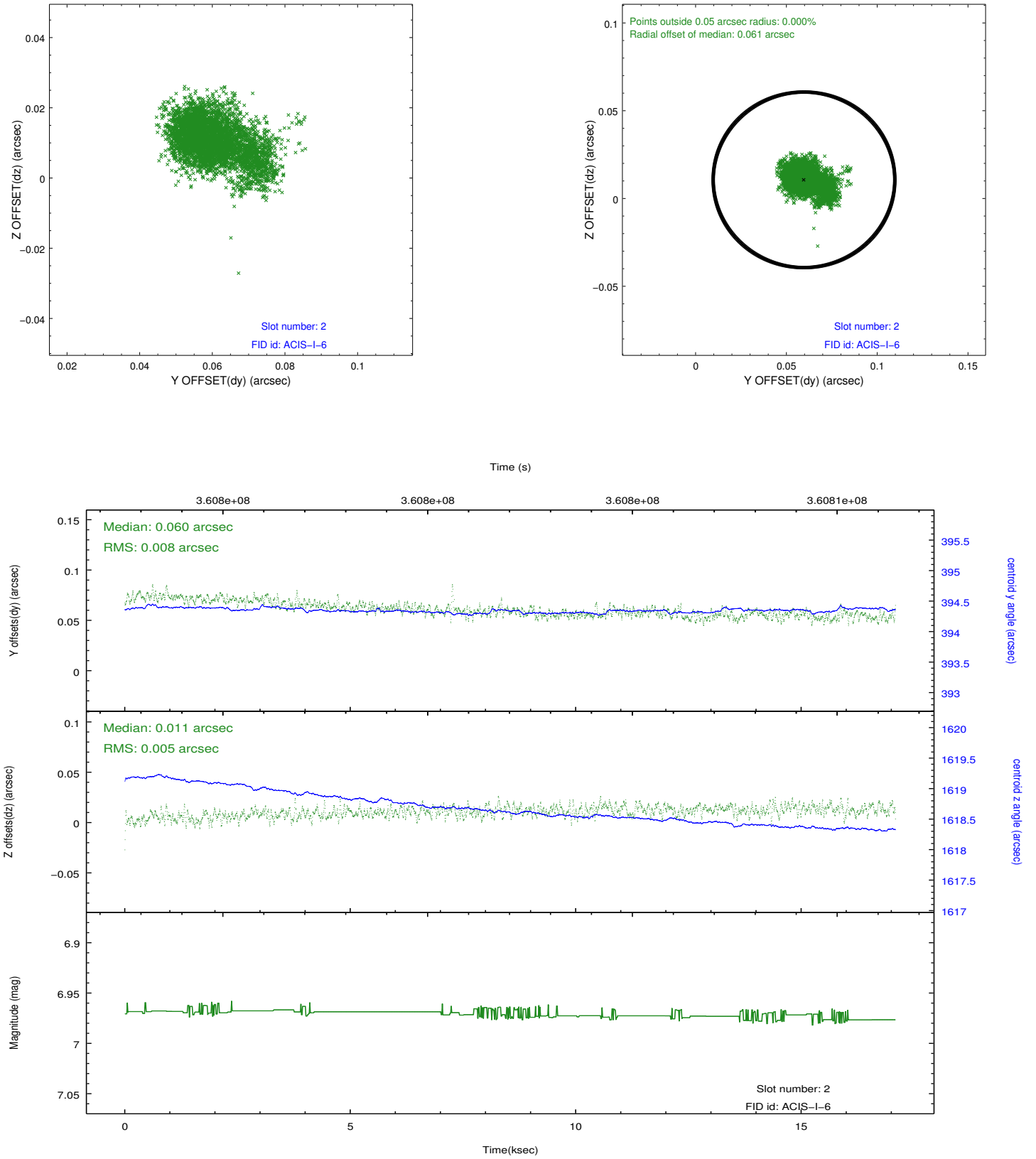
2.5.1 Slot 0



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)	2012.06.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.0425001

A.2 Comments