

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 20034 - L2 Version 1
Chandra X-Ray Center

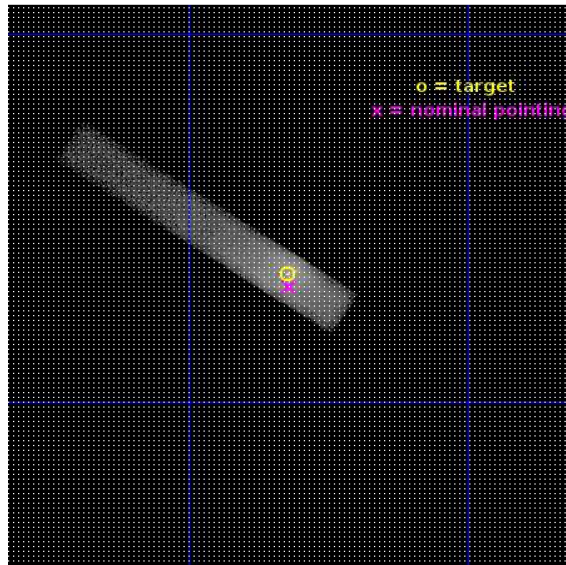
L2 Processing Date : Apr 12 2017

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1 Front

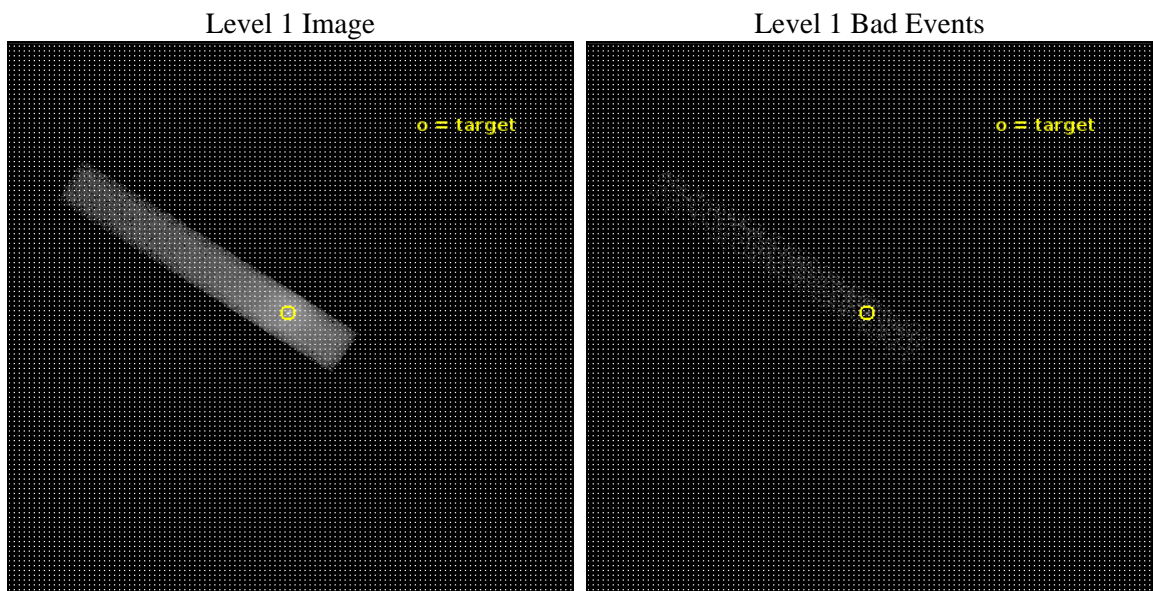
seq_num	703466	Sequence number
obs_id	20034	Observation id
title	M87 with Chandra and the Event Horizon Telescope	Proposal title
observer	Joseph Neilsen	Principal investigator
object	M87	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.705833	Observer's specified target RA [deg]
dec_targ	12.391111	Observer's specified target Dec [deg]
ra_nom	187.7049468796	Nominal RA [deg]
dec_nom	12.385384283051	Nominal Dec [deg]
roll_nom	213.15684983499	Nominal Roll [deg]
revision	1	Processing version of data
ontime	14467.599137545	Sum of GTIs [s]
livetime	13121.348755255	Livetime [s]
ontime7	14467.599137545	Sum of GTIs [s]
l2events	88301	Number of level 2 events



2 OBI

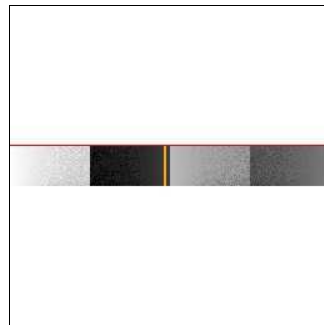
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14399.000000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	14467.599137545	Sum of GTIs [s]
caldsver	4.7.3	 	ontime7	14467.599137545	Sum of GTIs [s]
date	2017-04-12T15:59:12	Date and time of file creation	l1events	99062	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

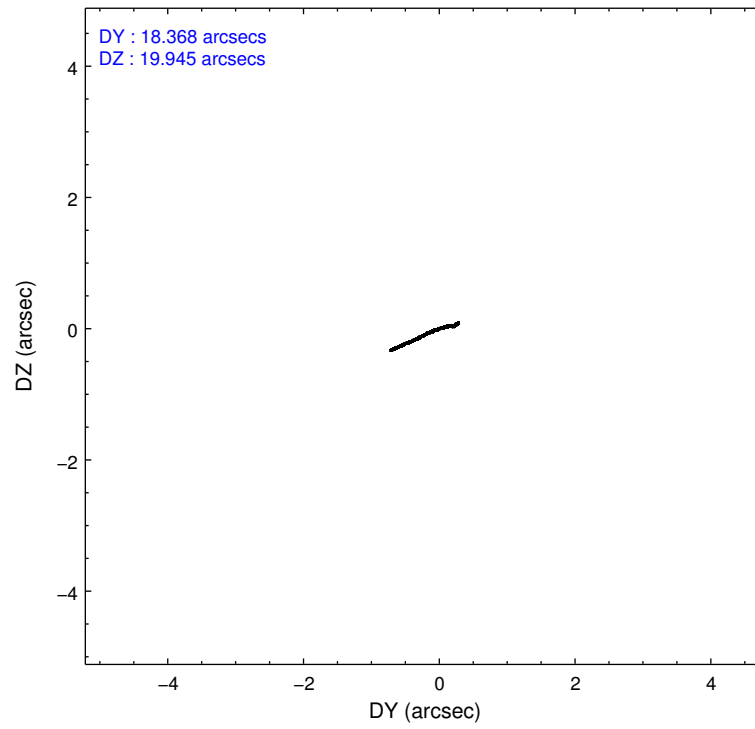
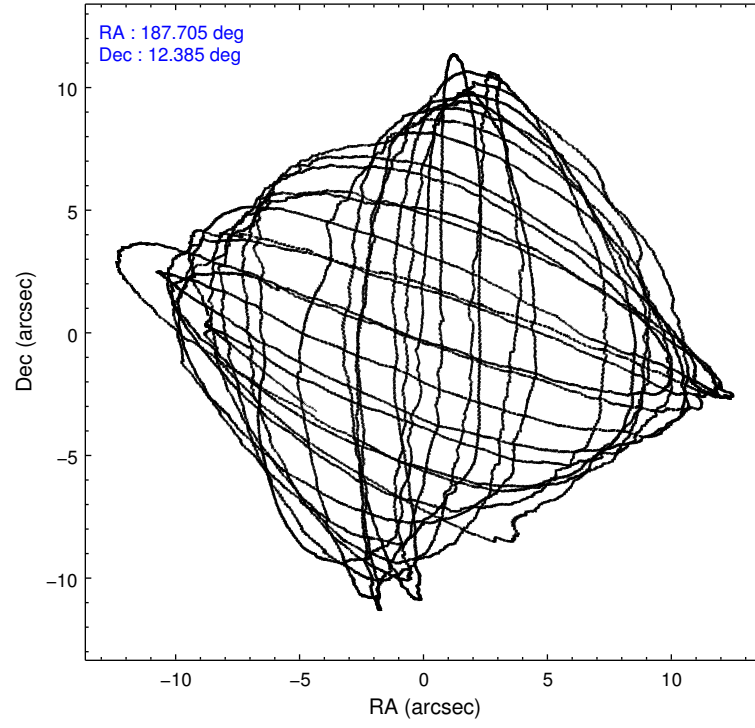
	ccd 7
level 1 events	99062
rejected events	9727
rejected %	9%

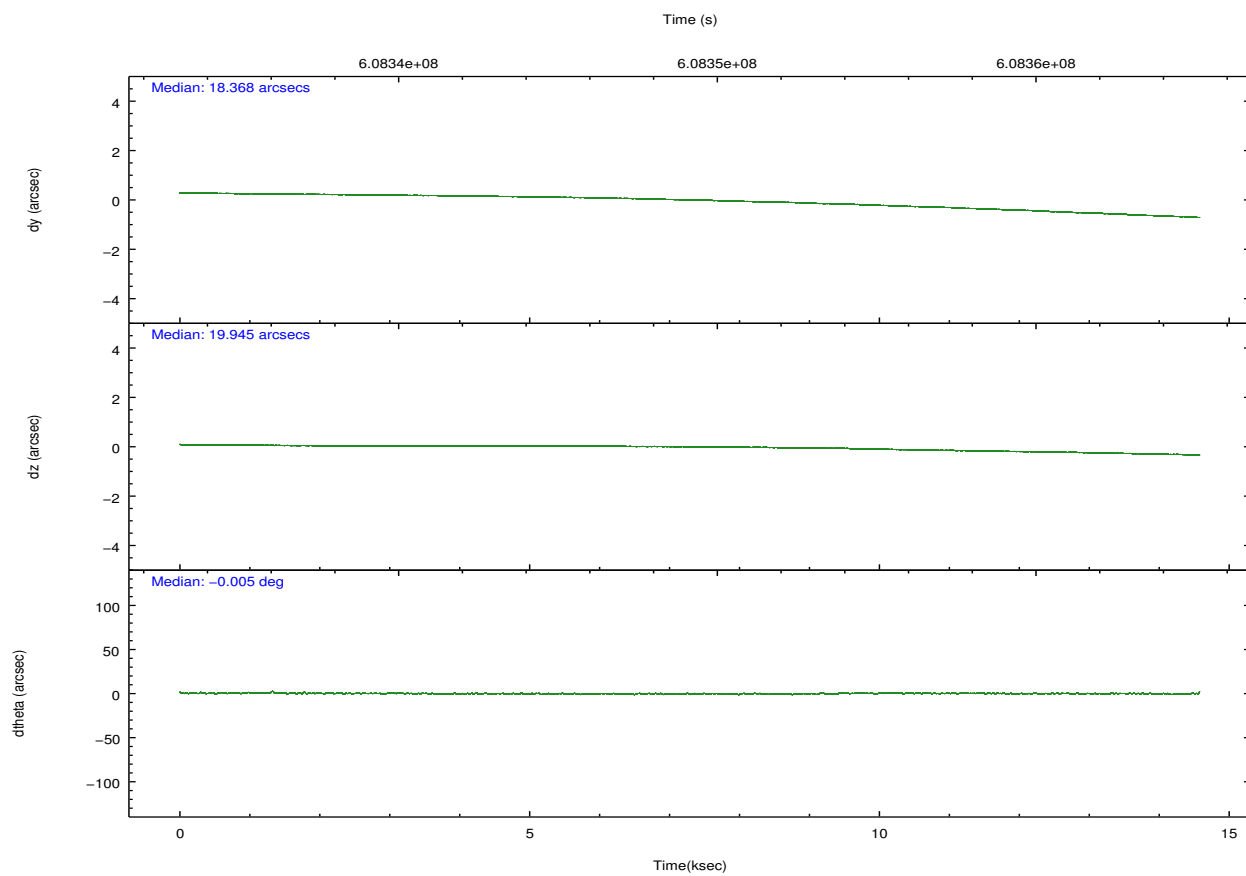
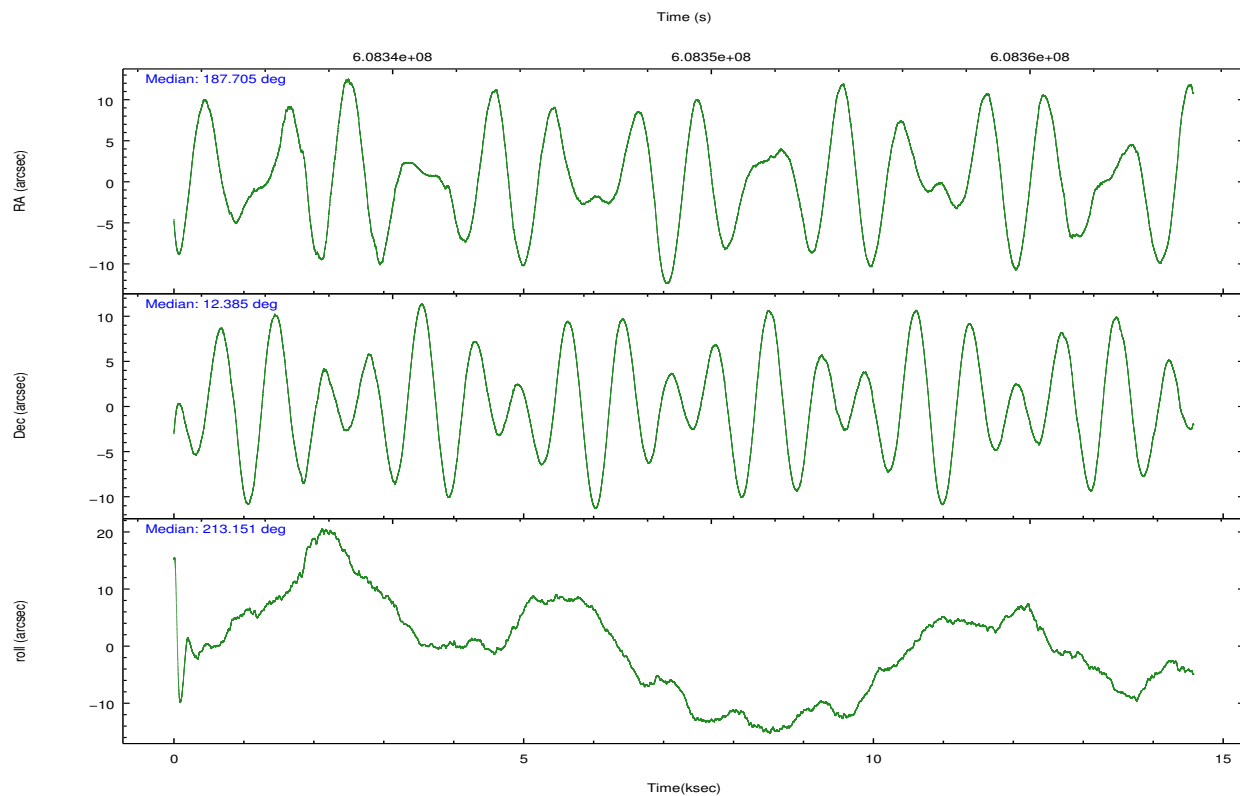
	ccd 7
grade 0 events	24381
	24%
grade 1 events	44
	0%
grade 2 events	23247
	23%
grade 3 events	10558
	10%
grade 4 events	10159
	10%
grade 5 events	2238
	2%
grade 6 events	20993
	21%
grade 7 events	7442
	7%

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	187.717296	187.7049468795966	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.410048	12.38538428305061	Subarray start row	449	449
[deg] Pointing Roll	212.997543	213.1568498349916	Subarray row count	128	128
[s] Window start time (MET)	608342469.184000	608342469.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	608356869.184000	608356869.184000	[s] Primary exposure time	0.000000	0.4
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	608342469.184000	608341687.44417			
Observation start date	2017-04-12T00:00:00	2017-04-11T23:48:07			
[s] Observation end time (MET)	608356868.184000	608358288.85763			
Observation end date	2017-04-12T03:59:59	2017-04-12T04:24:48			
Read mode	TIMED	TIMED			

2.3 Aspect



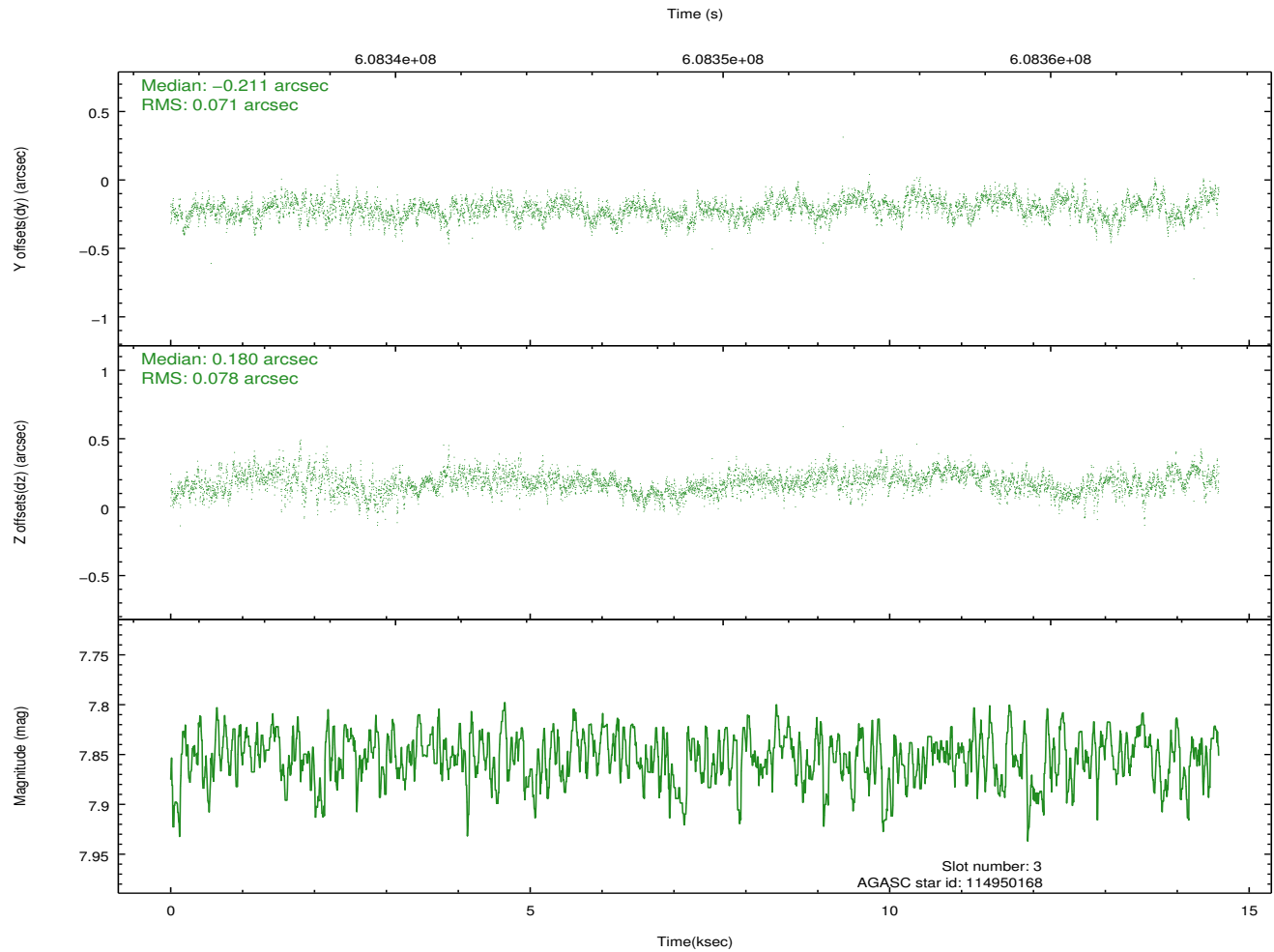
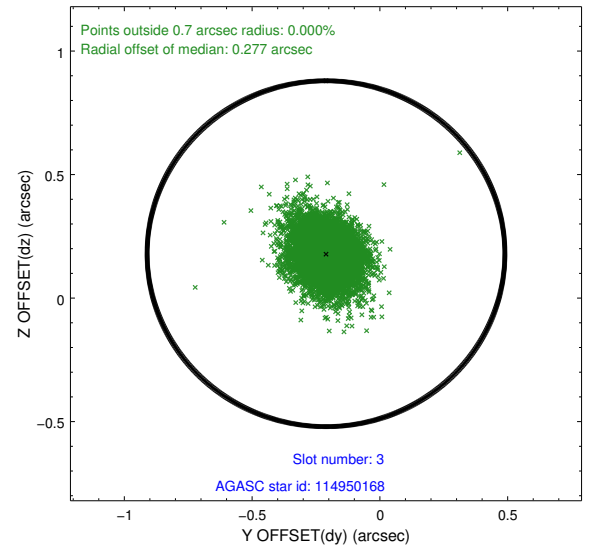
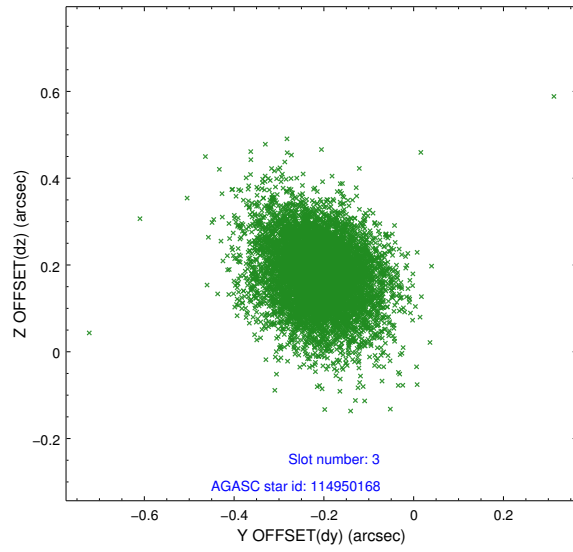


Slot Statistics

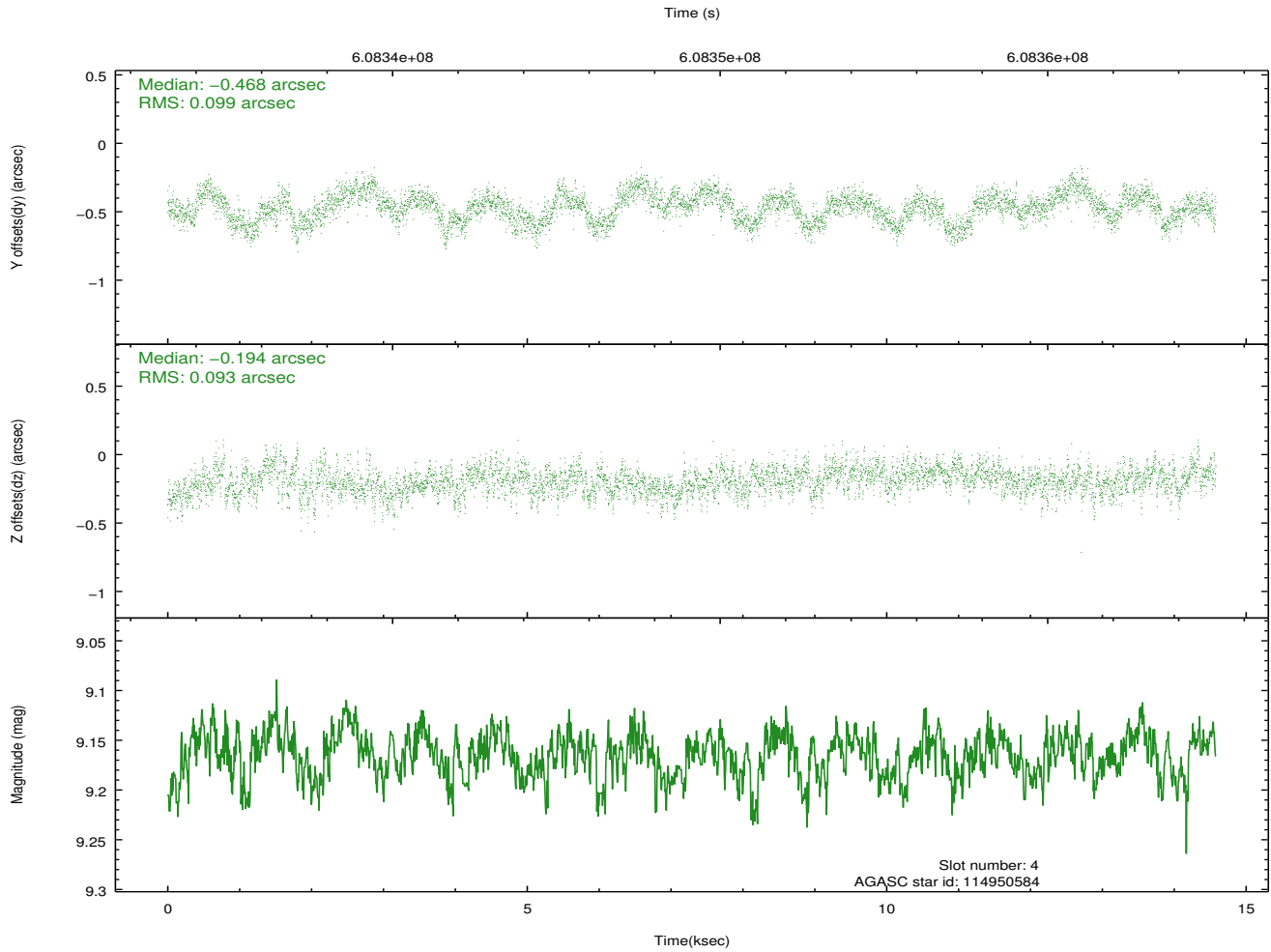
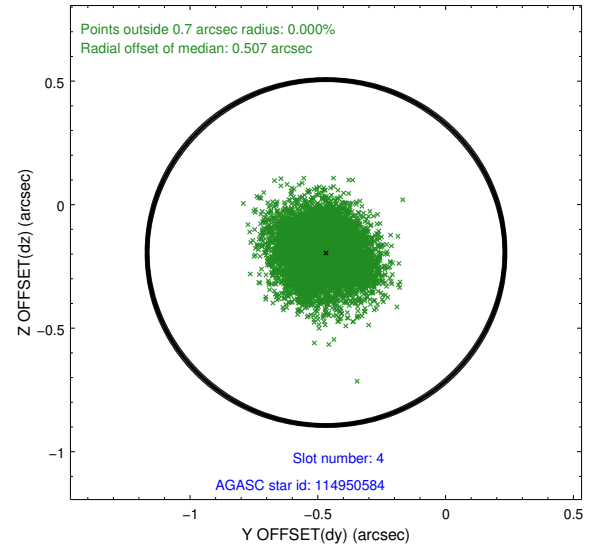
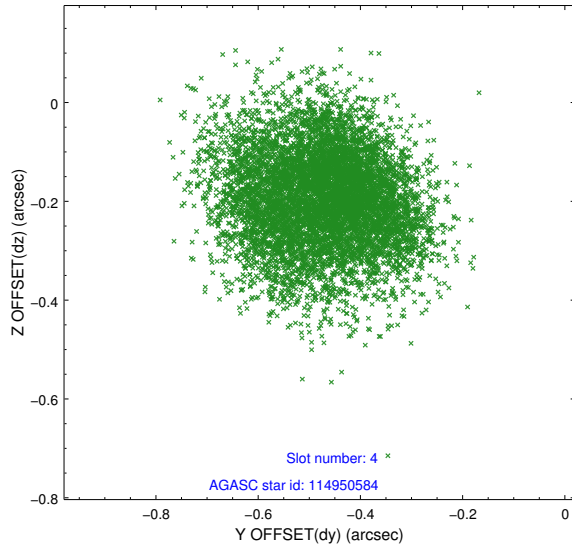
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.08	3556	-0.244	-0.135	0.013	0.023	0.000000	0.000000	-771.55	-1741.50
1	FID		ACIS-S-4	7.19	3556	0.568	0.154	0.012	0.024	0.000000	0.000000	2142.35	167.00
2	FID		ACIS-S-5	7.18	3556	-0.357	-0.009	0.009	0.014	0.000000	0.000000	-1824.15	160.79
3	GUIDE	used	114950168	7.85	7112	-0.211	0.180	0.111	0.186	187.143398	12.117441	2267.07	-217.73
4	GUIDE	used	114950584	9.16	7105	-0.468	-0.194	0.147	0.231	187.487323	11.827248	1822.81	1317.82
5	GUIDE	used	114952792	9.44	7111	-0.073	0.110	0.201	0.312	187.070263	12.344747	2037.45	-1044.13
6	GUIDE	used	114952824	8.56	7107	0.120	0.412	0.126	0.215	187.703904	12.486727	-109.33	-257.18
7	GUIDE	used	114955056	8.32	7109	0.632	-0.507	0.129	0.210	187.914001	12.127854	-26.41	1228.16

2.4 Star Slots

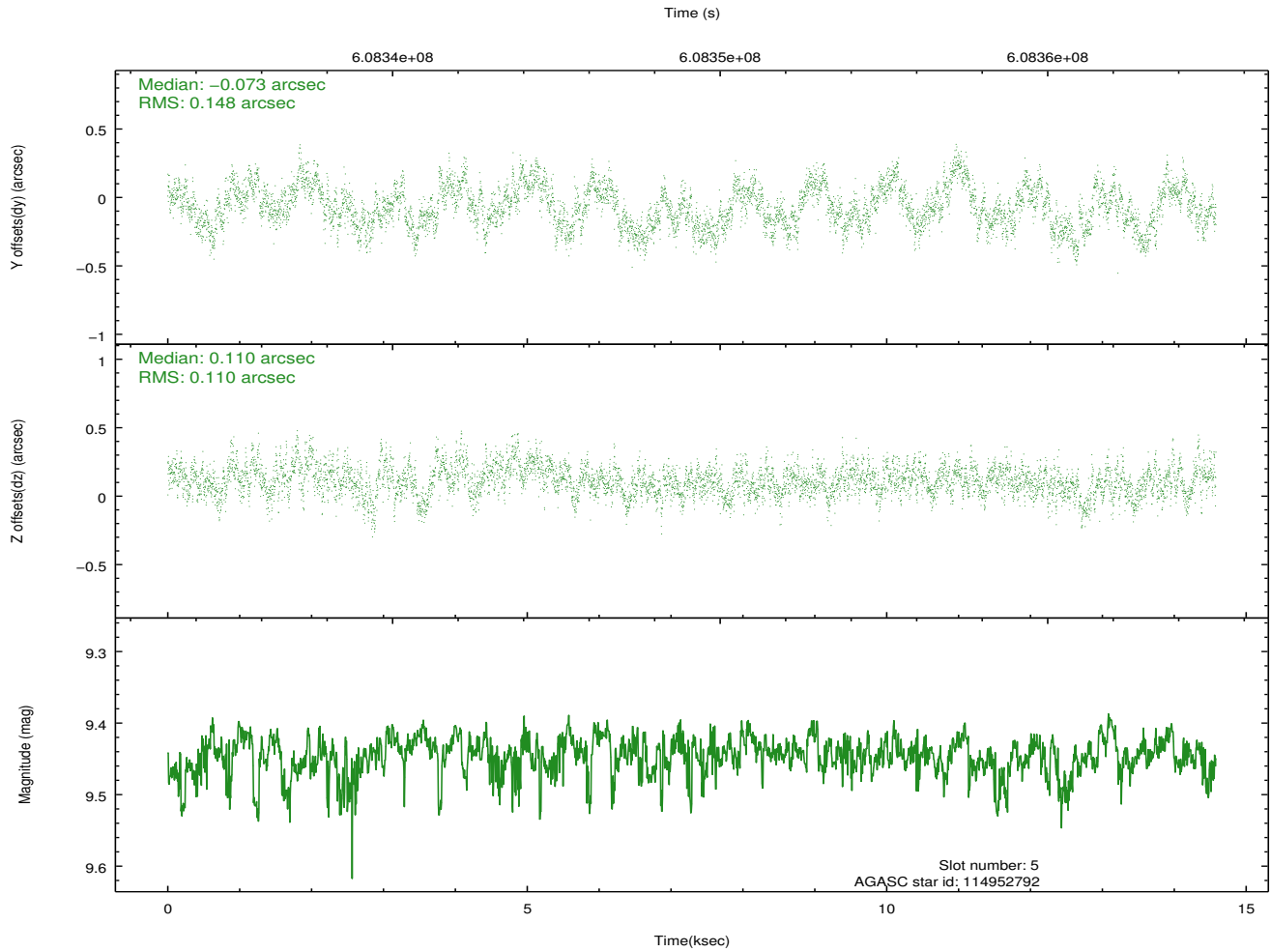
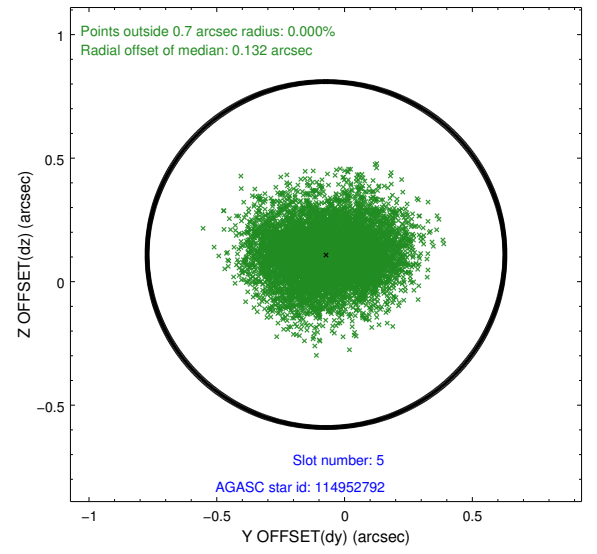
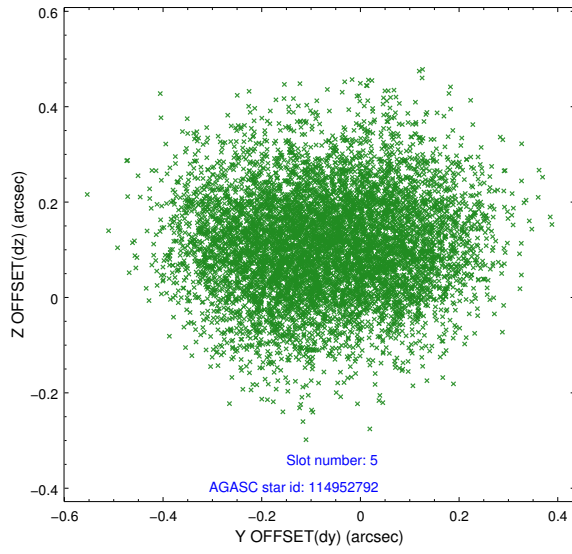
2.4.1 Slot 3



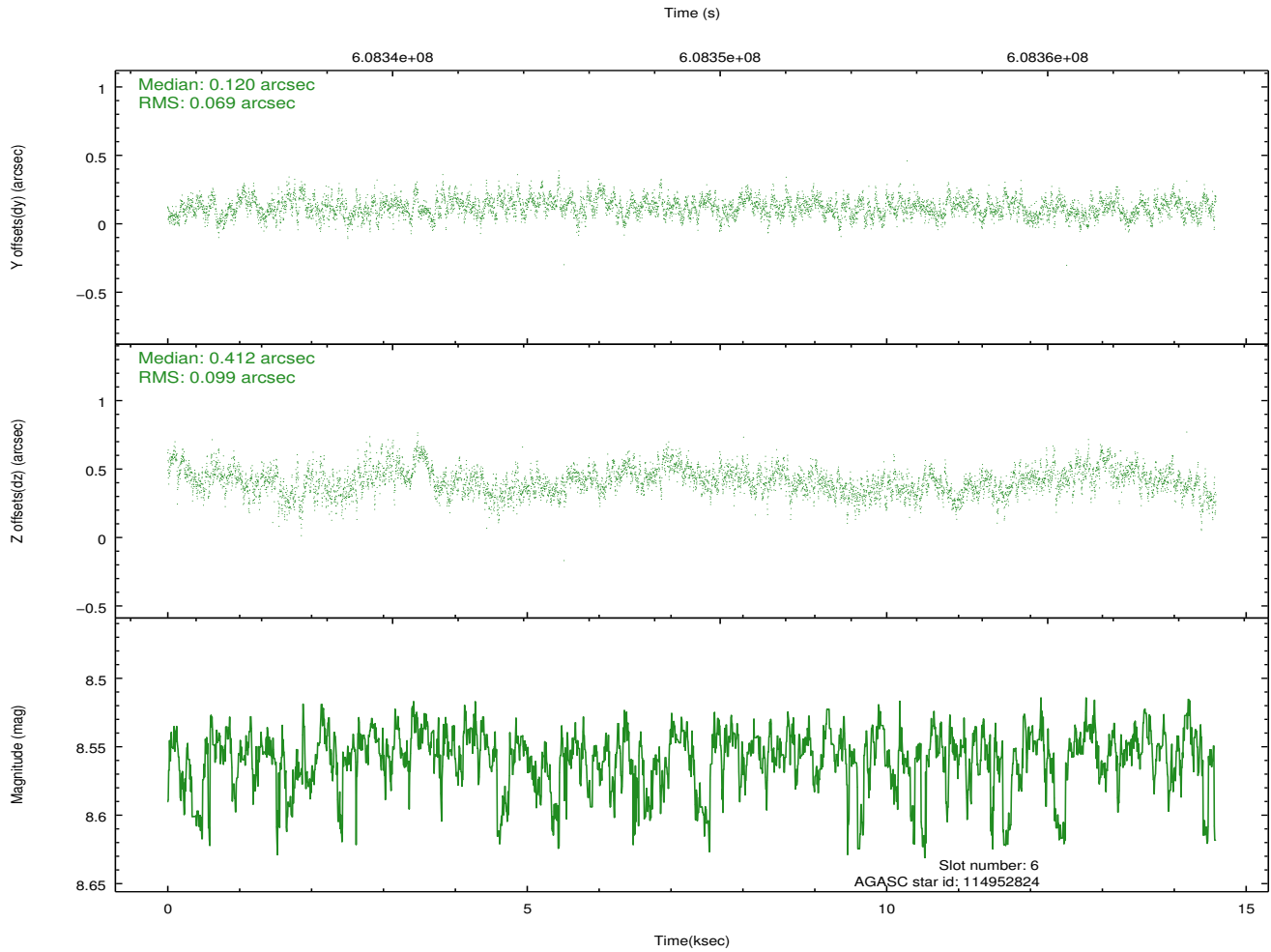
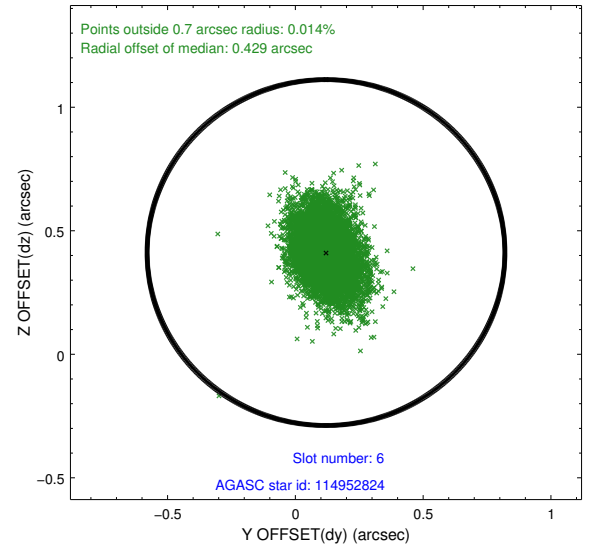
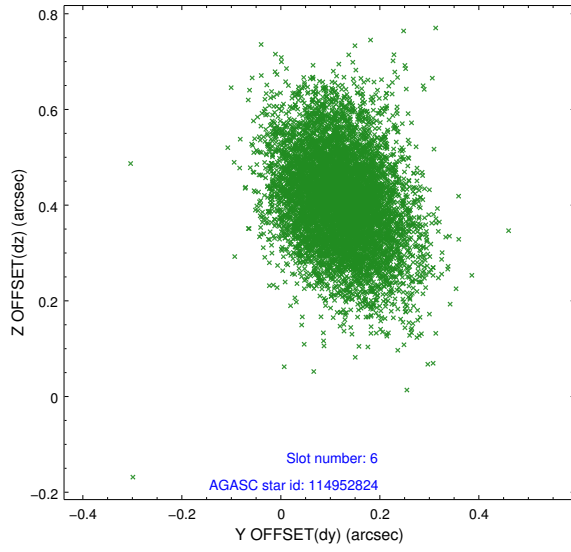
2.4.2 Slot 4



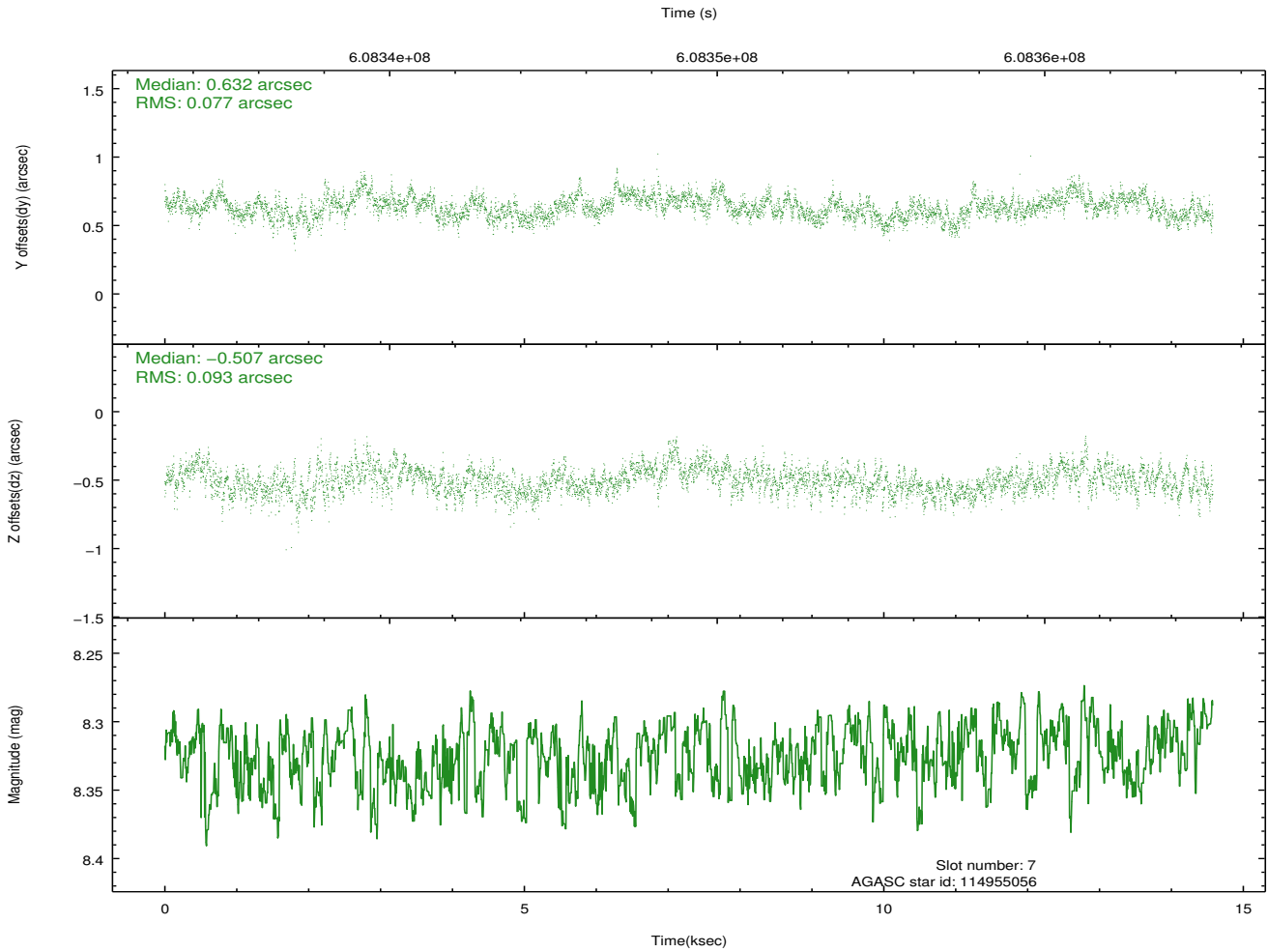
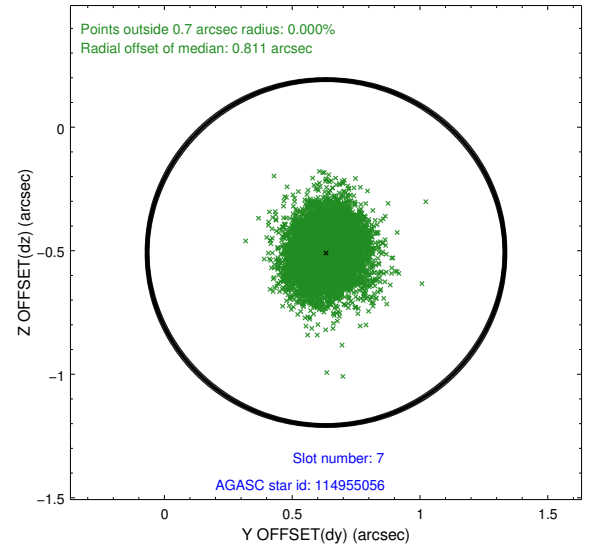
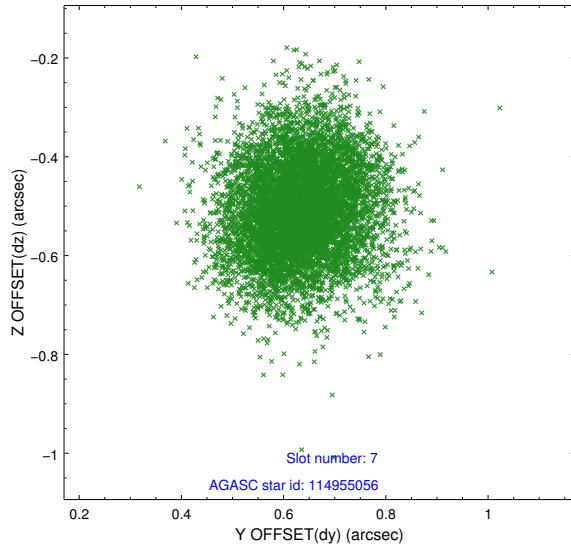
2.4.3 Slot 5



2.4.4 Slot 6

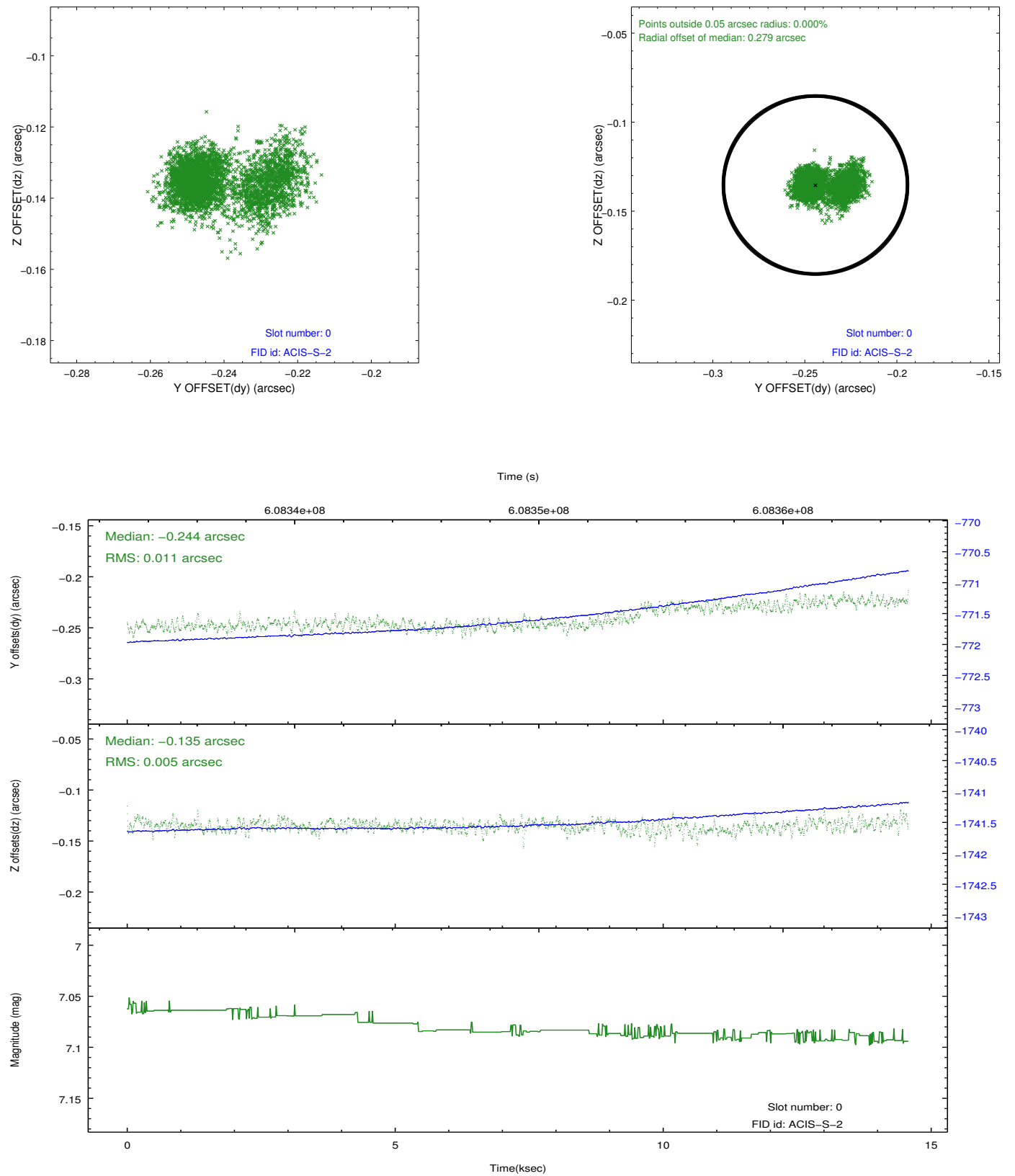


2.4.5 Slot 7

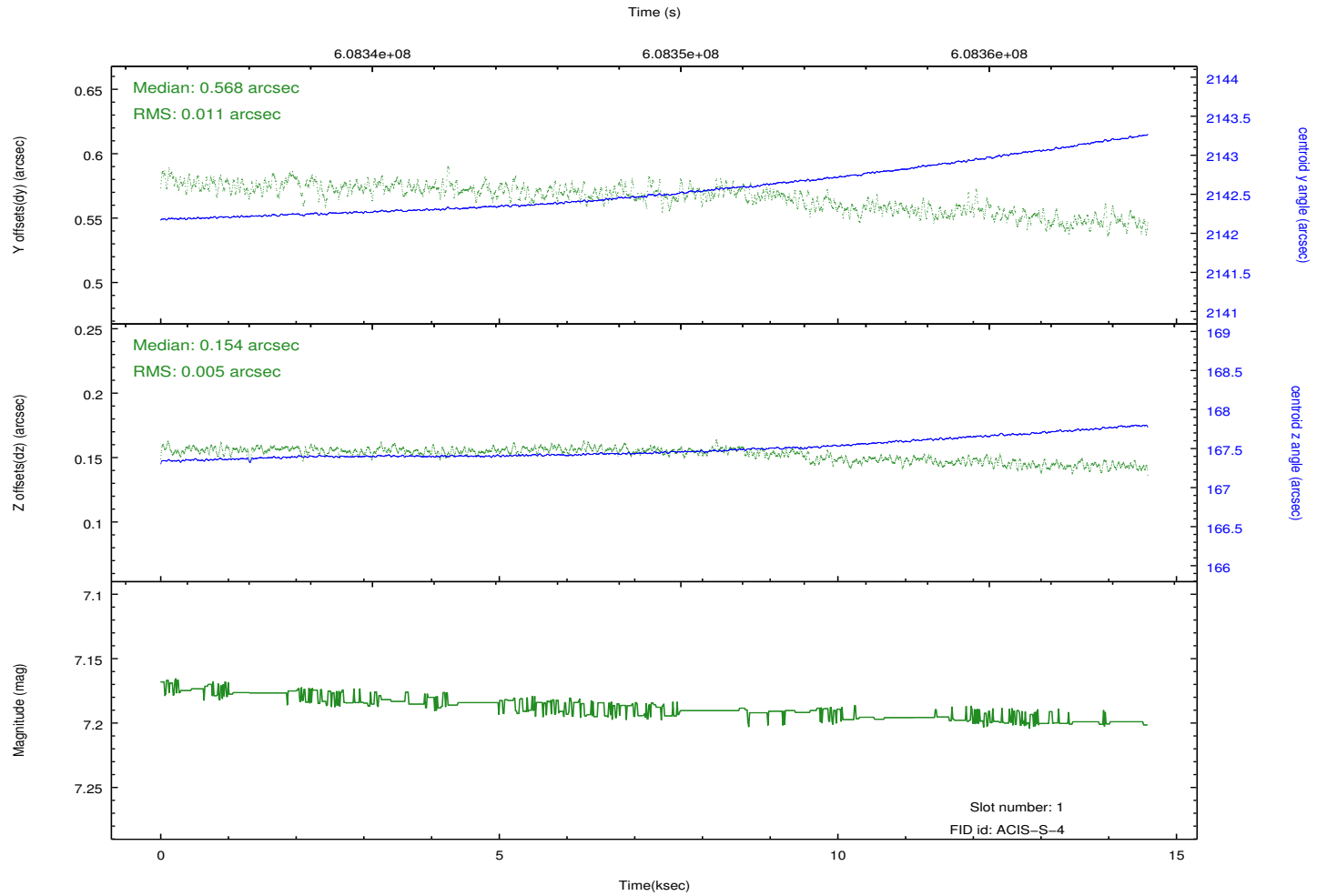
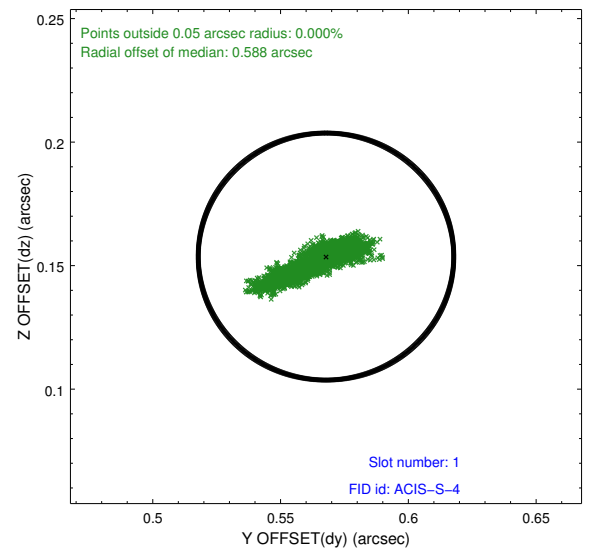
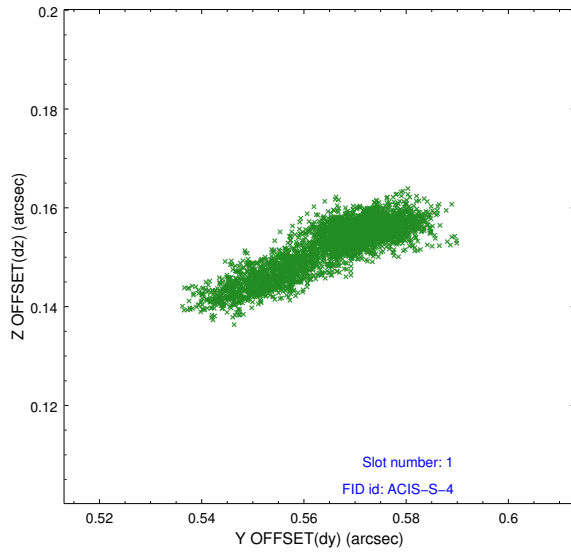


2.5 FID Slots

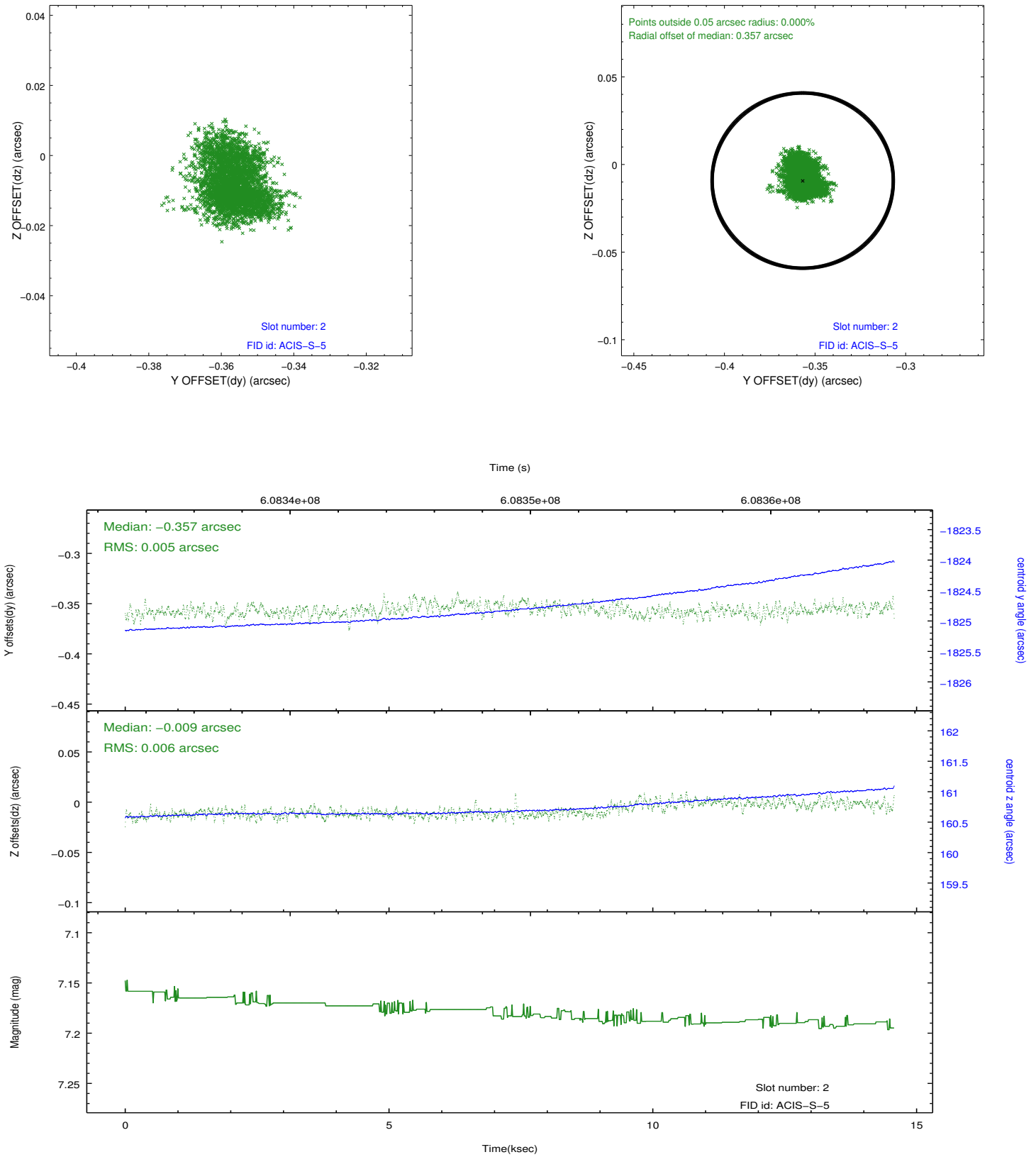
2.5.1 Slot 0



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)	2017.04.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.467599137545

A.2 Comments

Observation coordinated with EventHorizonTelescope, NuSTAR.
Window preference met.