

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21845 - L2 Version 1
Chandra X-Ray Center

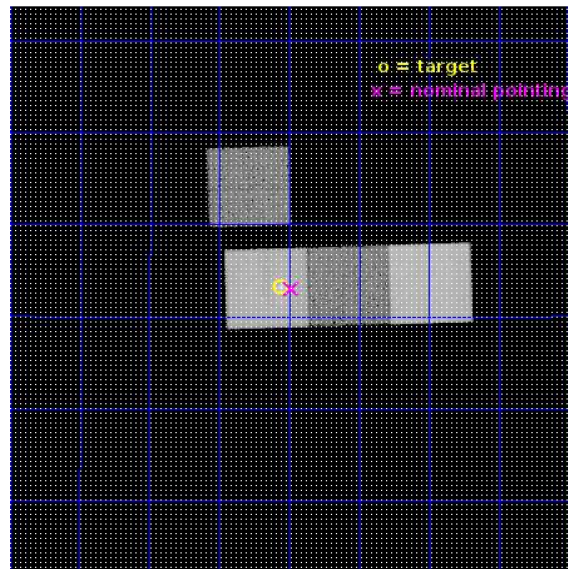
L2 Processing Date : Mar 29 2019

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1 Front

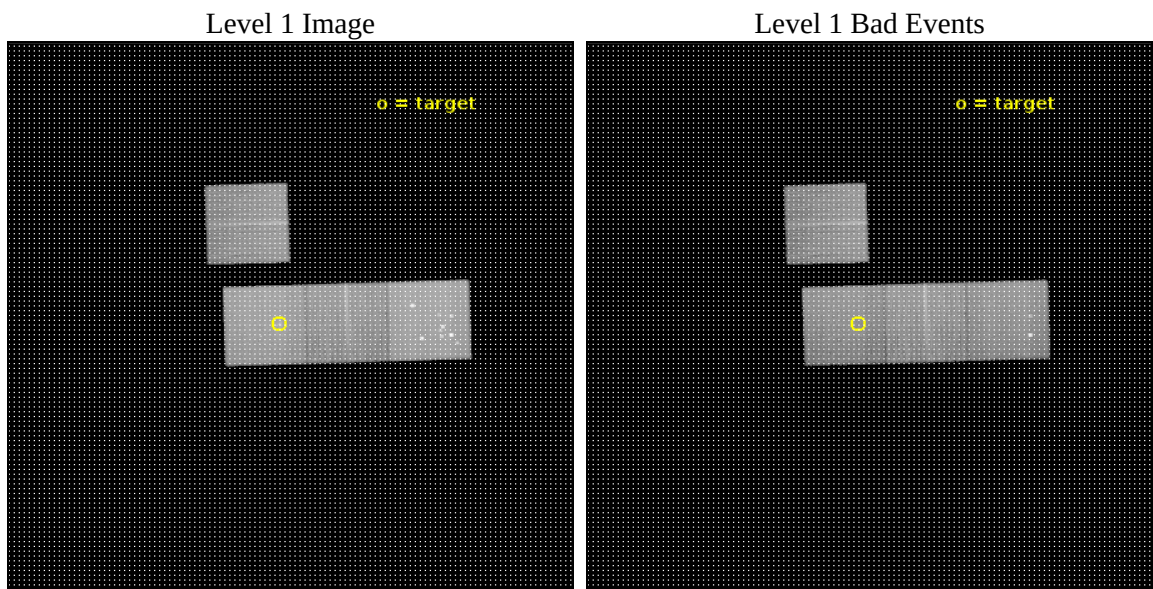
seq_num	801753	Sequence number
obs_id	21845	Observation id
title	Fuelling and self-regulation of AGN feedback at the Bondi radius of M84	Proposal title
observer	Helen Russell	Principal investigator
object	M84	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.265833	Observer's specified target RA [deg]
dec_targ	12.886944	Observer's specified target Dec [deg]
ra_nom	186.24646870381	Nominal RA [deg]
dec_nom	12.883946084634	Nominal Dec [deg]
roll_nom	178.16088515229	Nominal Roll [deg]
revision	1	Processing version of data
ontime	28066.480543733	Sum of GTIs [s]
livetime	27699.771313186	Livetime [s]
ontime3	28066.357423782	Sum of GTIs [s]
ontime5	28066.439503789	Sum of GTIs [s]
ontime6	28066.398463726	Sum of GTIs [s]
ontime7	28066.480543733	Sum of GTIs [s]
l2events	331503	Number of level 2 events



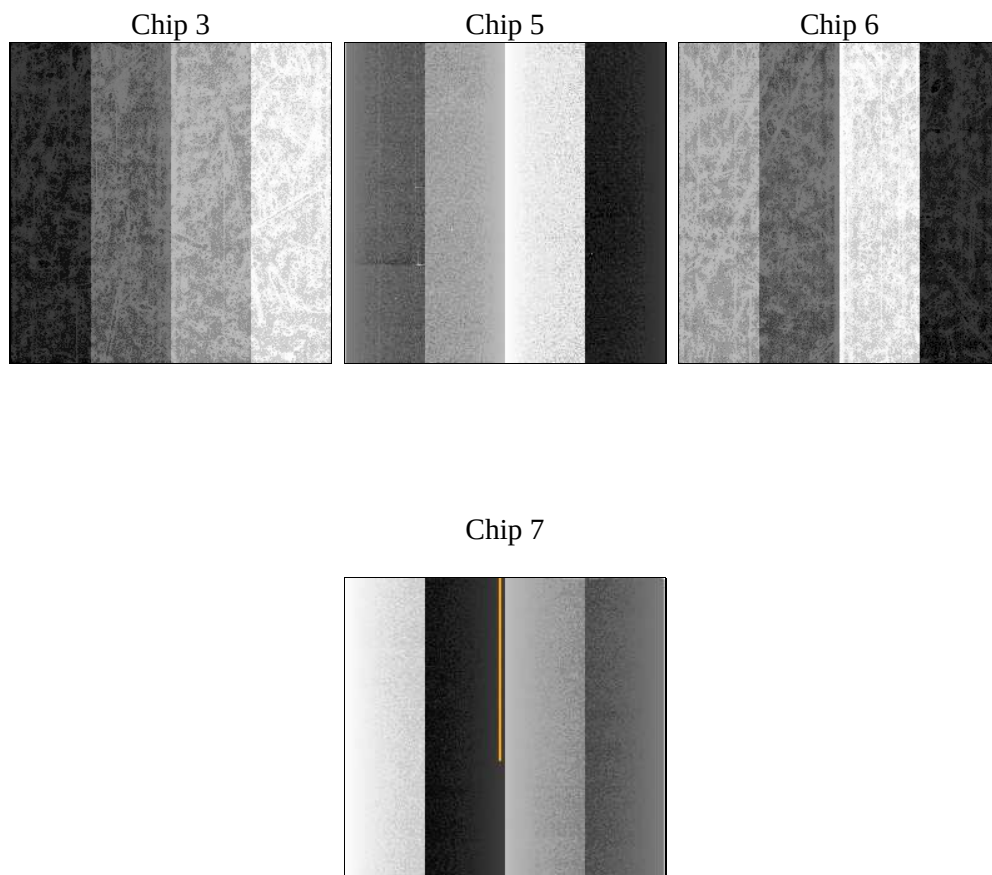
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	28066.480543733	Sum of GTIs [s]
caldsver	4.8.2	 	ontime3	28066.357423782	Sum of GTIs [s]
date	2019-03-29T09:34:24	Date and time of file creation	ontime5	28066.439503789	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	28066.398463726	Sum of GTIs [s]
			ontime7	28066.480543733	Sum of GTIs [s]
			l1events	1085462	Number of level 1 events

2.1.4 Events

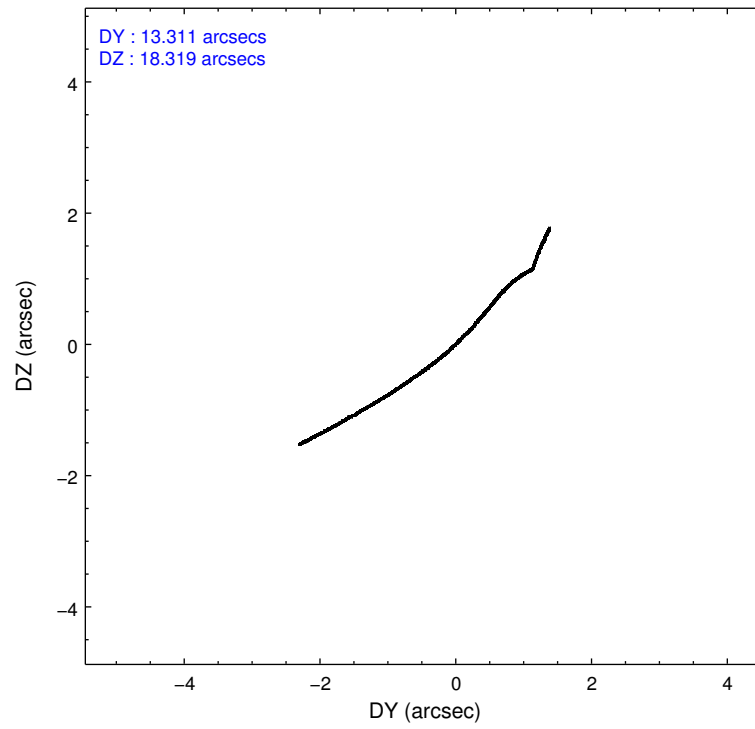
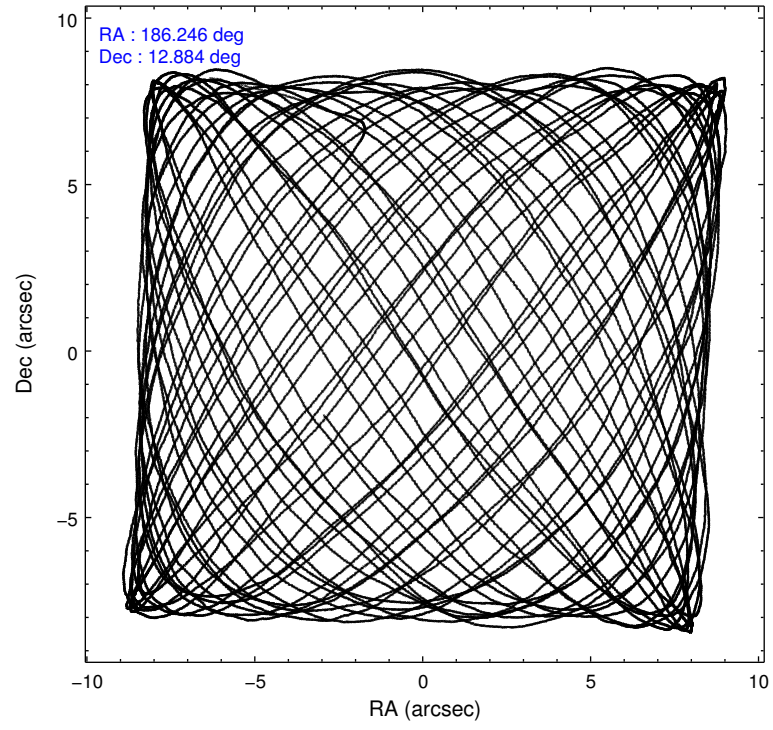
	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	202884	376993	221017	284568
rejected events	177350	184179	194934	154897
rejected %	87%	48%	88%	54%

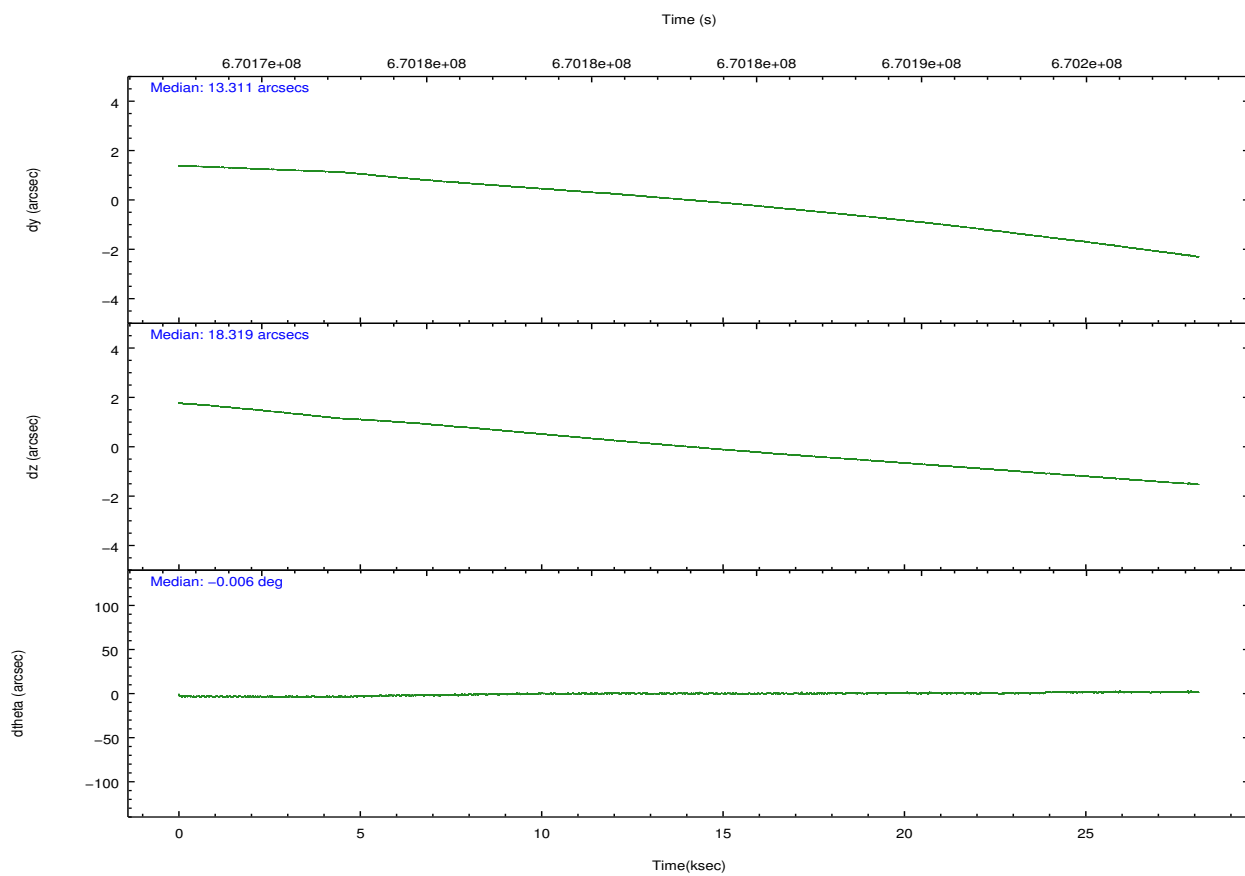
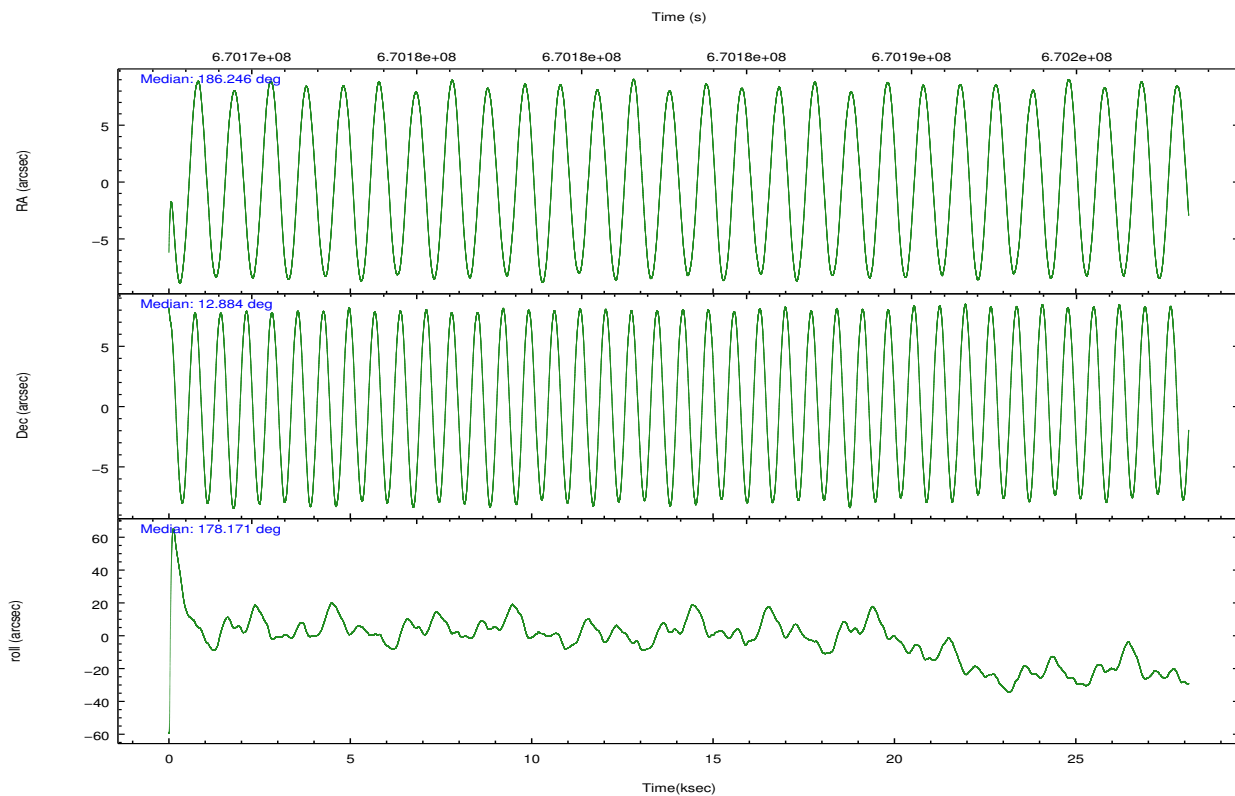
	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	10682	34348	9459	12826
	5%	9%	4%	4%
grade 1 events	130	746	105	392
	0%	0%	0%	0%
grade 2 events	5076	57474	5914	28613
	2%	15%	2%	10%
grade 3 events	2439	5792	2470	10630
	1%	1%	1%	3%
grade 4 events	2565	4983	2392	10639
	1%	1%	1%	3%
grade 5 events	9977	24205	9839	27745
	4%	6%	4%	9%
grade 6 events	4780	90265	5856	66989
	2%	23%	2%	23%
grade 7 events	167235	159180	184982	126734
	82%	42%	83%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3567	ACIS-3567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	186.271117	186.2464687038128	CCD I2 on	O1	N
[deg] Pointing Dec	12.897231	12.88394608463405	CCD I3 on	Y	Y
[deg] Pointing Roll	177.998817	178.1608851522915	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	N
[s] Observation start time (MET)	670168985.184000	670167639.12159	CCD S5 on	N	N
Observation start date	2019-03-28T14:01:56	2019-03-28T13:40:39	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	670196985.184000	670197385.64836	On-chip summing requested	N	N
Observation end date	2019-03-28T21:48:36	2019-03-28T21:56:25	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



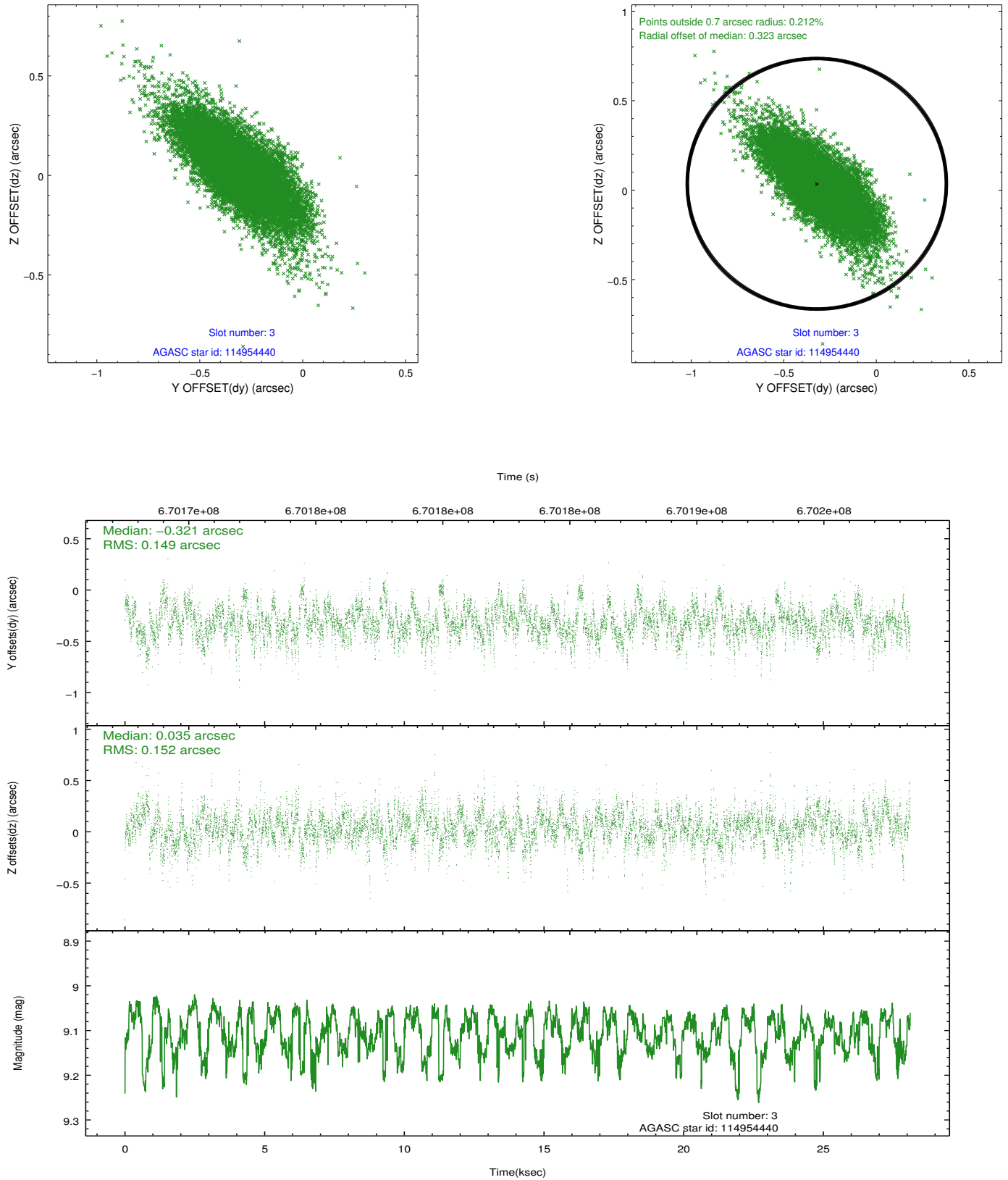


Slot Statistics

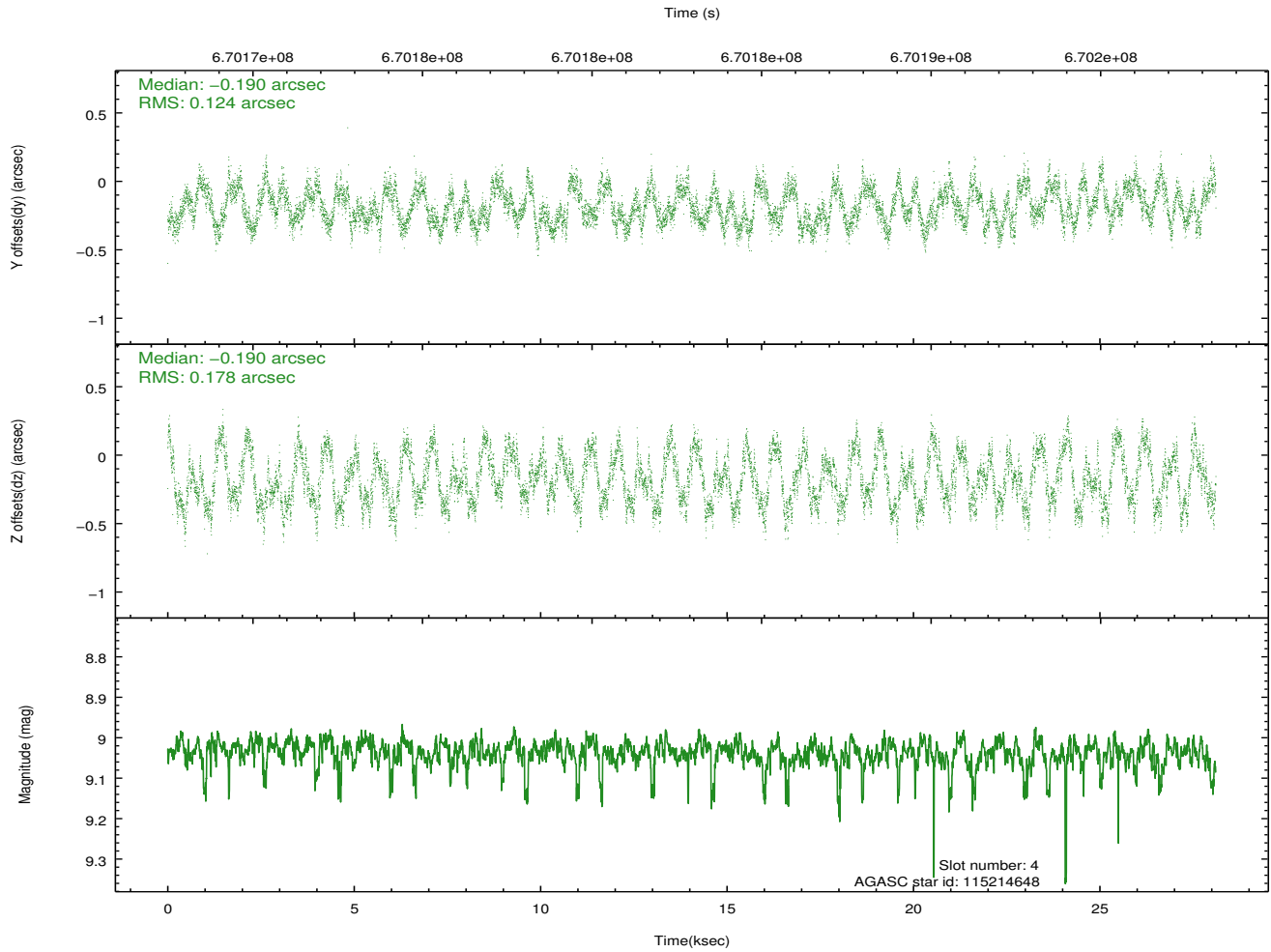
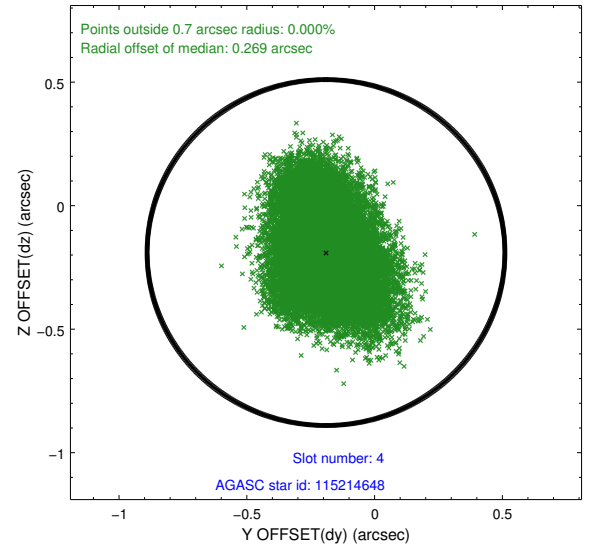
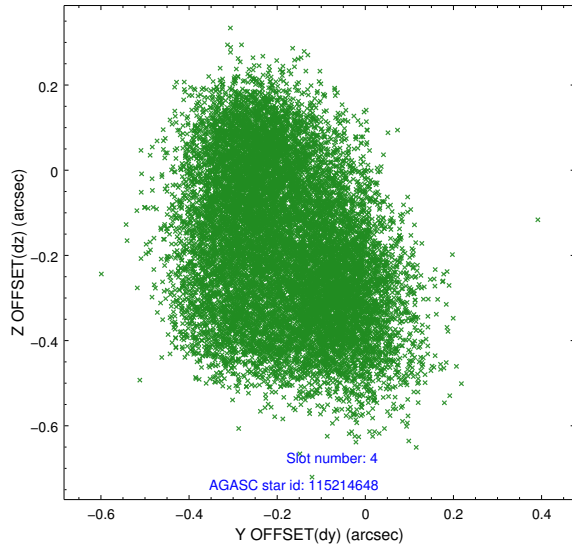
	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	m
	FID		ACIS-S-2	6.93	6857	1.000	-0.262	-0.169	0.036	0.081	0.000000	0.000000	-766.30	-17
	FID		ACIS-S-4	7.06	6857	1.000	0.719	0.173	0.072	0.084	0.000000	0.000000	2147.87	1
	FID		ACIS-S-5	7.03	6857	1.000	-0.488	0.000	0.038	0.077	0.000000	0.000000	-1819.30	1
	GUIDE	used	114954440	9.11	13688	1.000	-0.321	0.035	0.208	0.405	186.915066	12.219118	-2351.58	23
	GUIDE	used	115214648	9.04	13684	1.000	-0.190	-0.190	0.238	0.349	185.771147	12.685188	1729.16	8
	GUIDE	used	115214872	10.01	13651	1.000	-0.112	-0.447	0.355	0.545	185.840719	12.668185	1482.38	8
	BAD	unused	115215984	0.00	0	-nan	0.000	0.000	34.840	48.980	186.134733	12.875031	471.63	1
	GUIDE	used	115347480	9.33	13697	1.000	0.593	0.607	0.182	0.300	186.668576	13.310410	-1338.91	-15

2.4 Star Slots

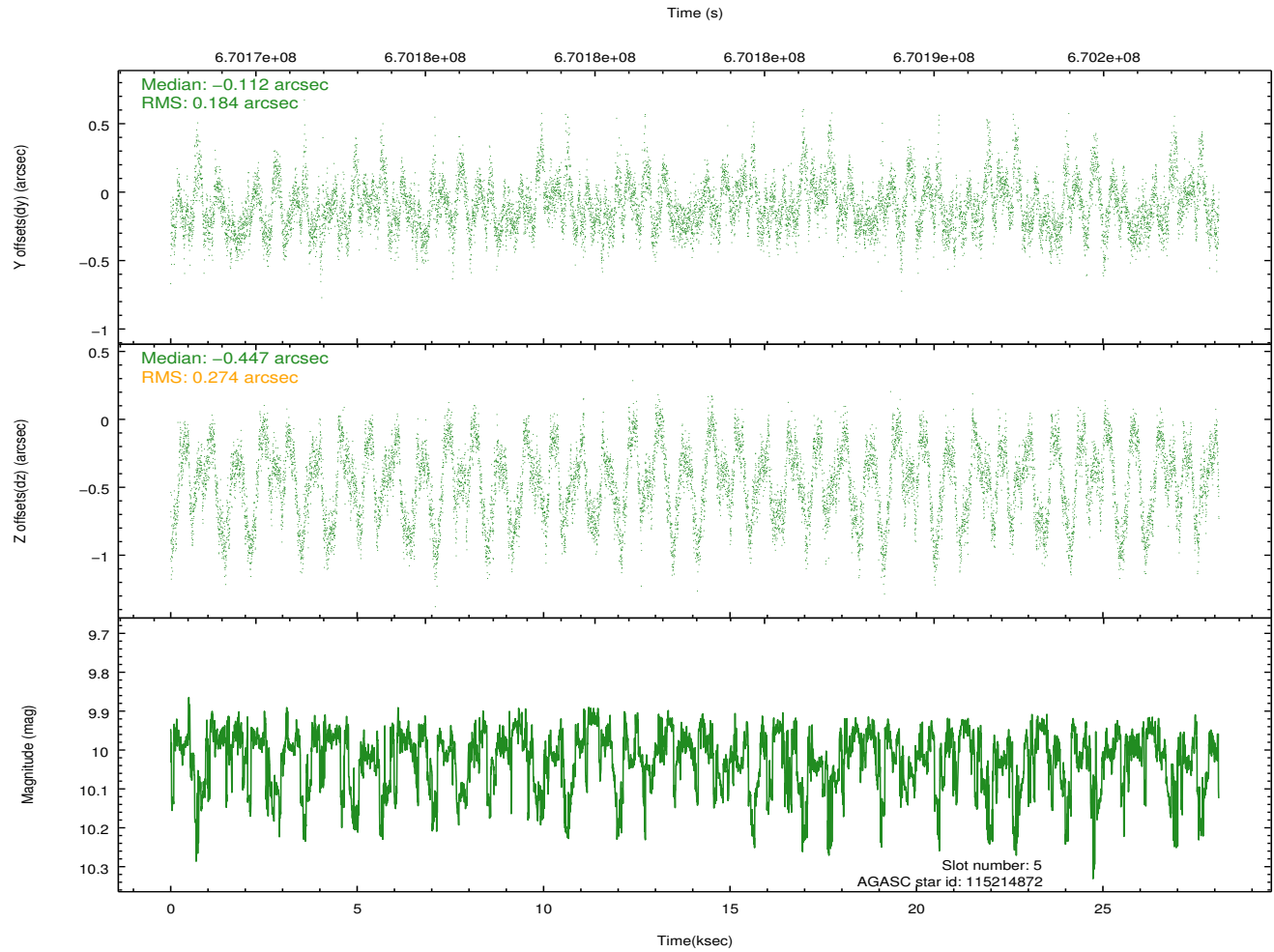
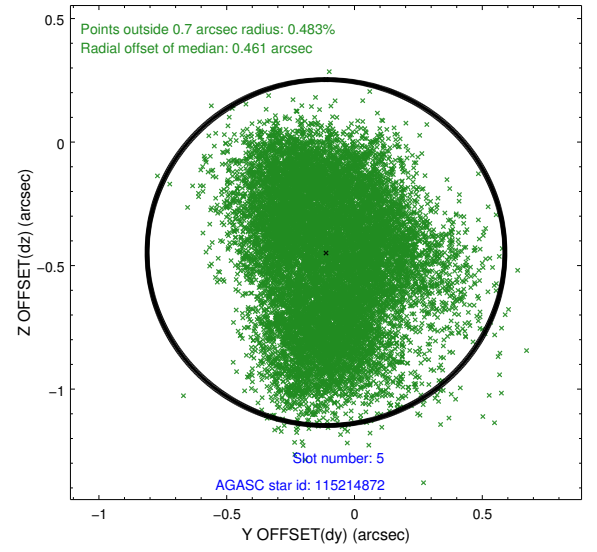
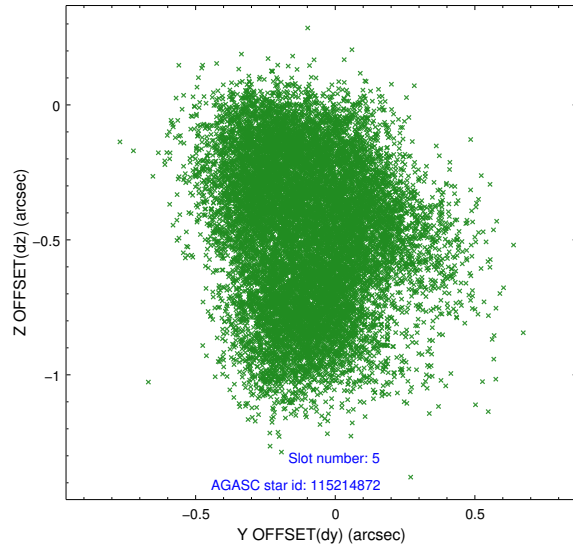
2.4.1 Slot 3



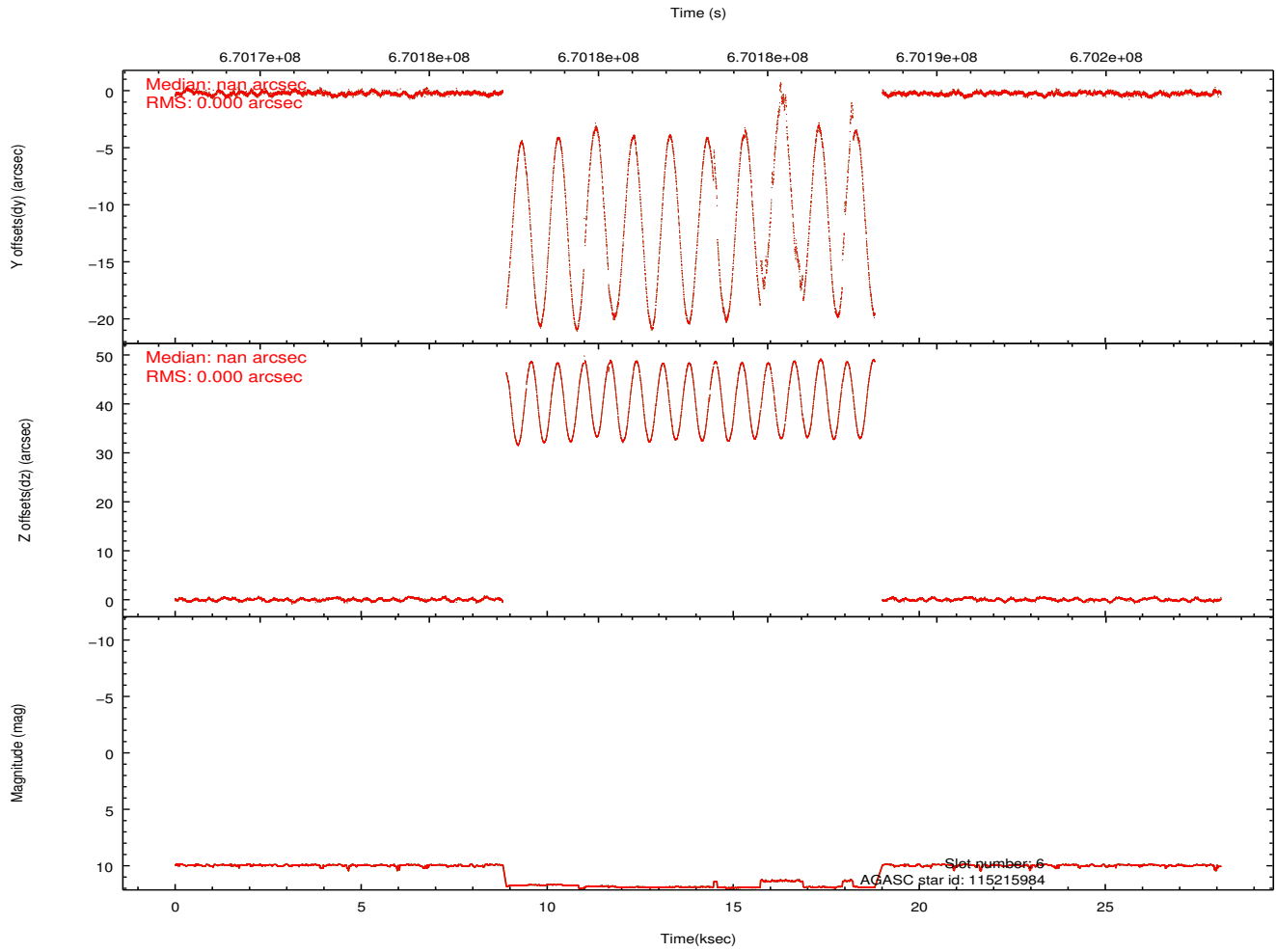
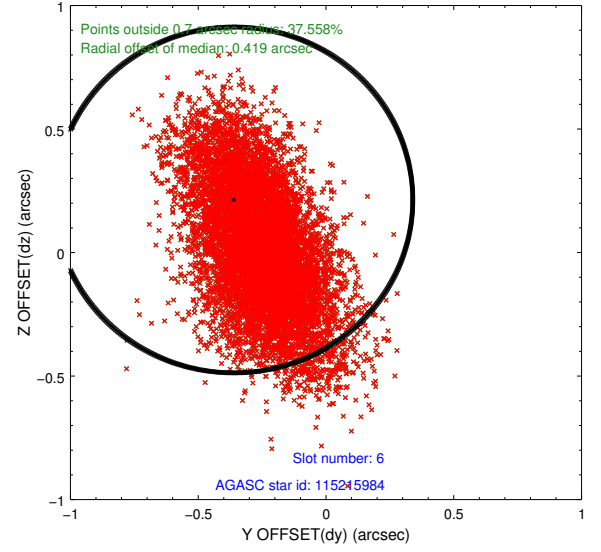
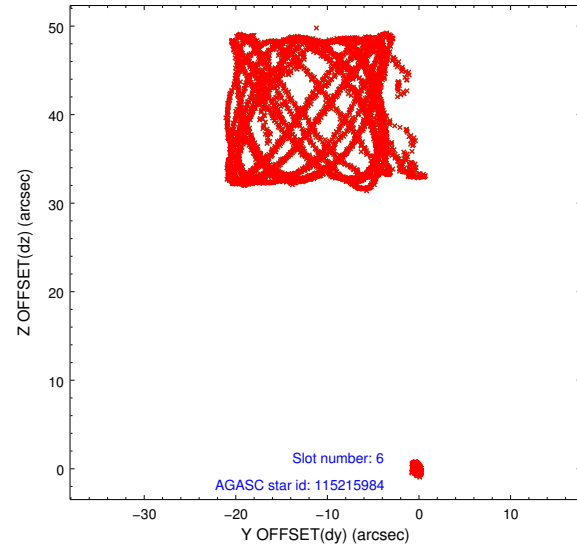
2.4.2 Slot 4



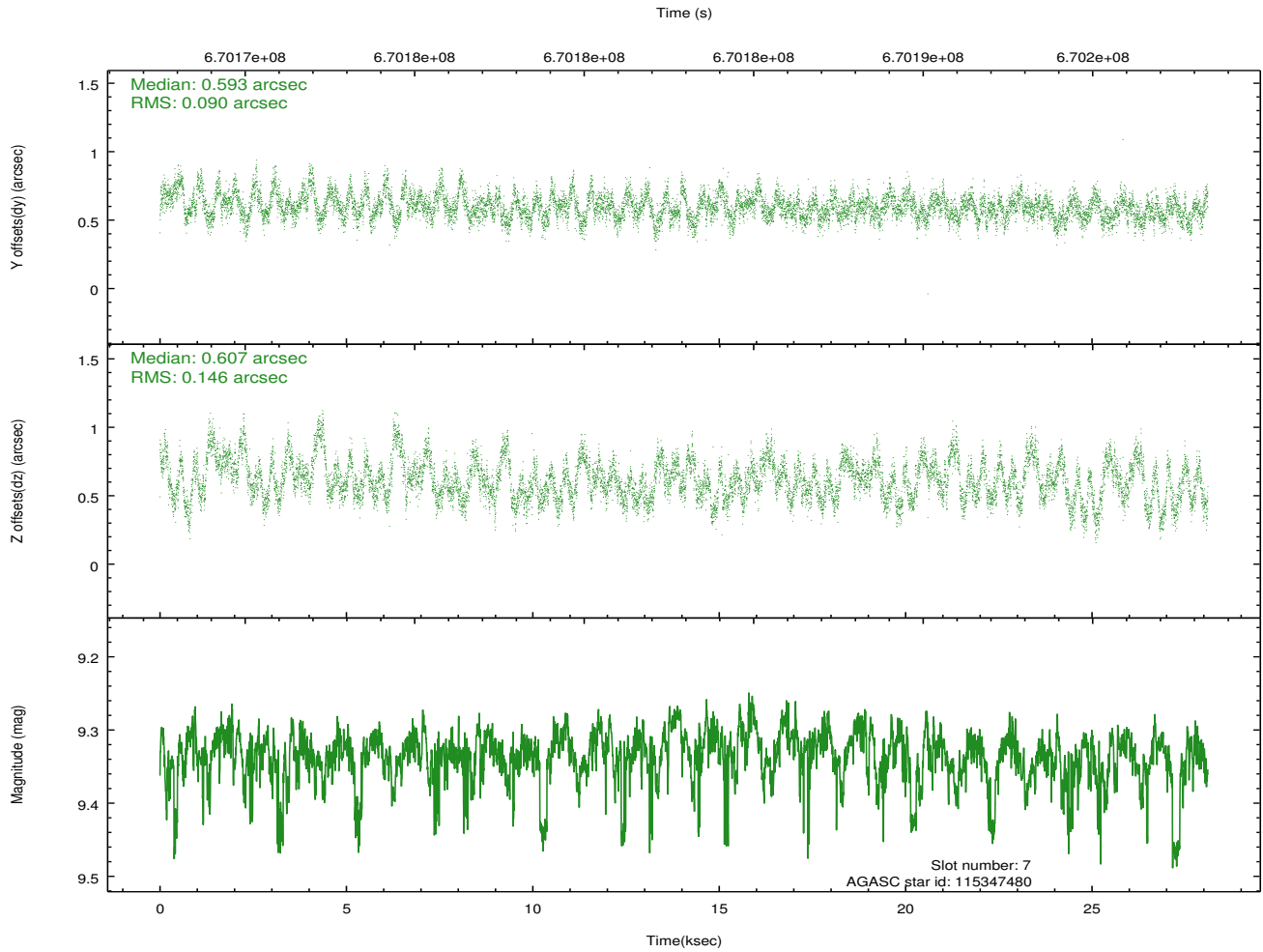
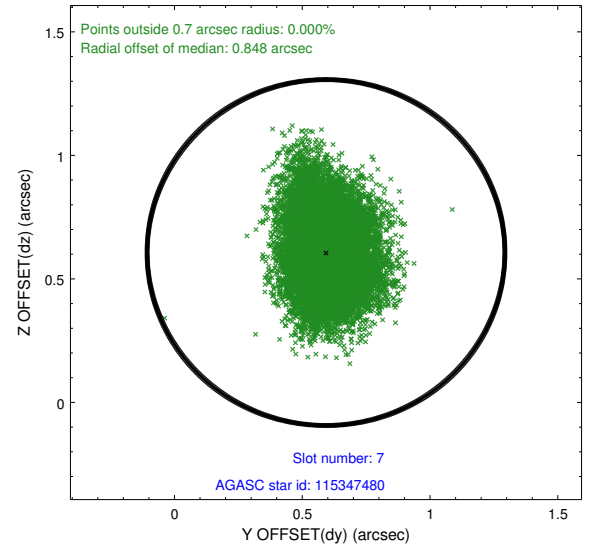
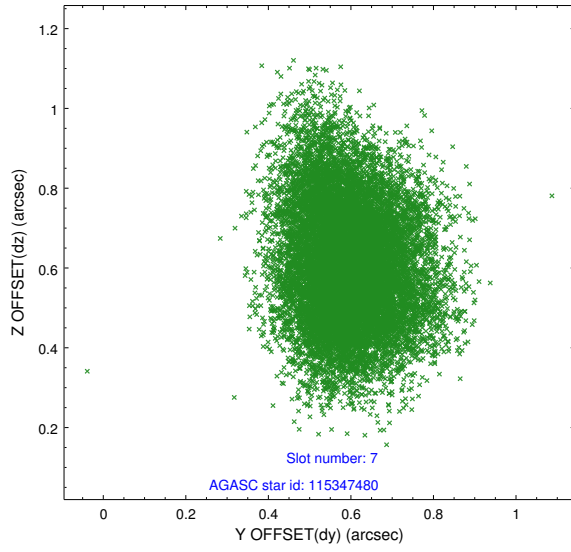
2.4.3 Slot 5



2.4.4 Slot 6

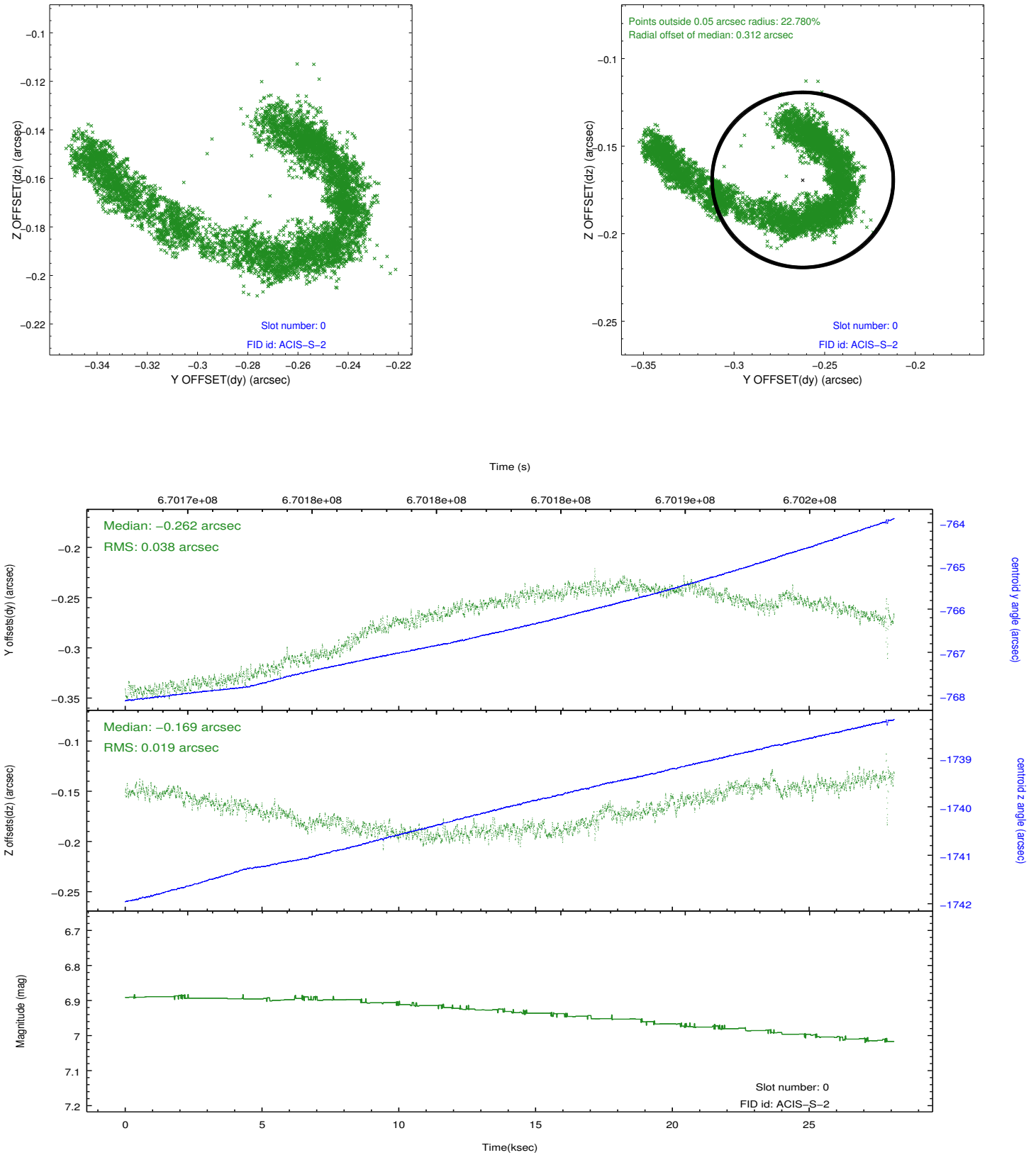


2.4.5 Slot 7

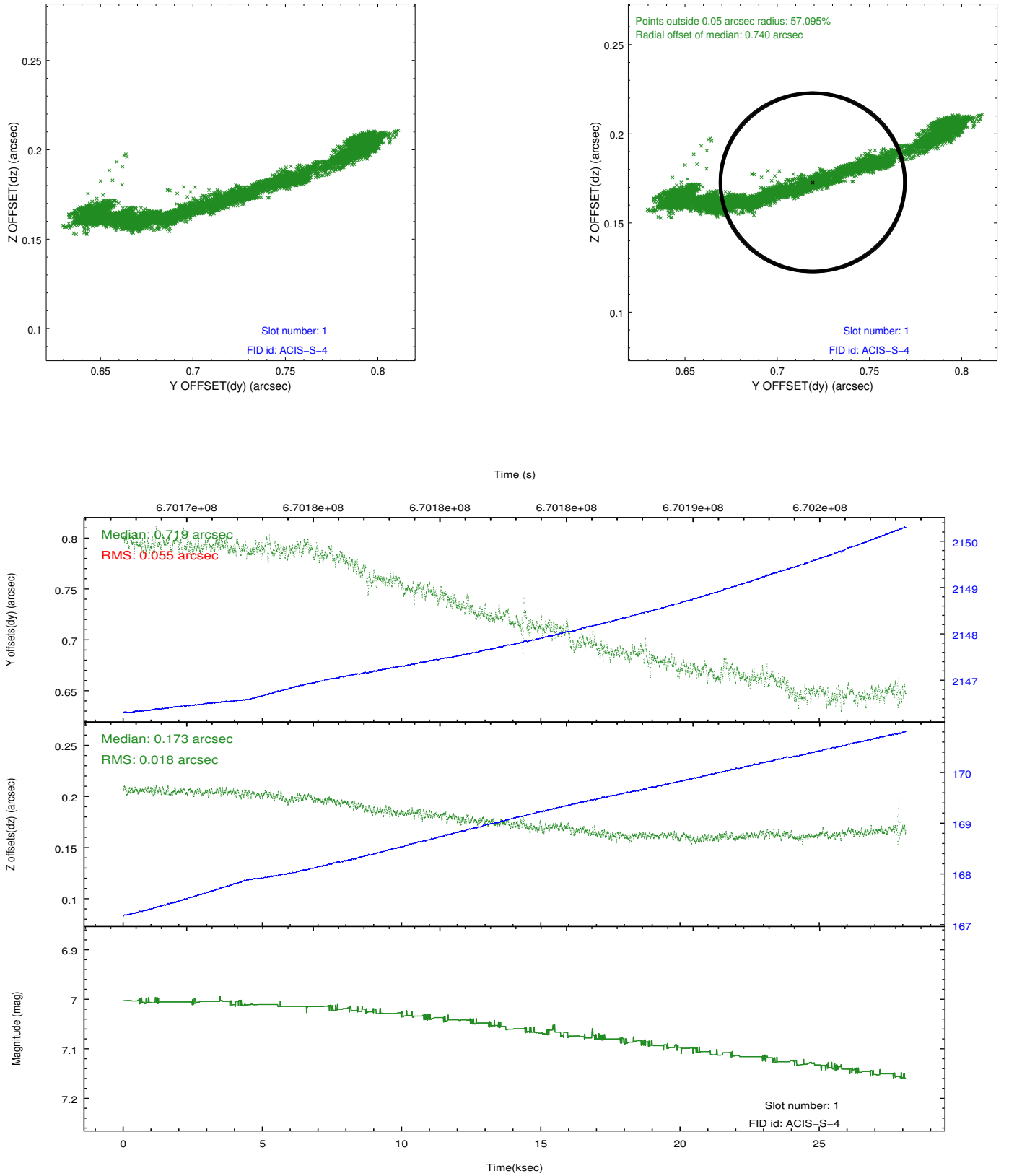


2.5 FID Slots

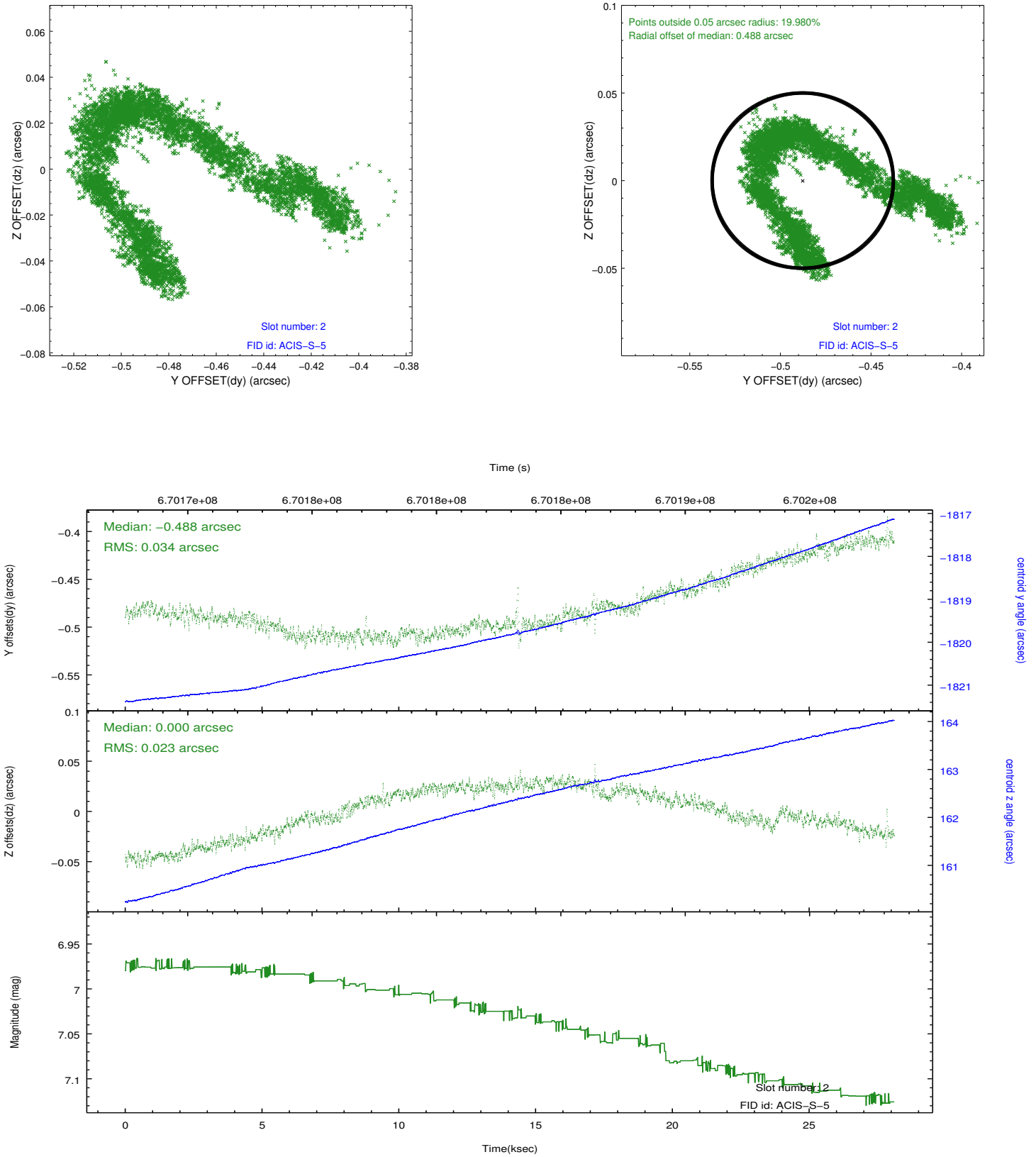
2.5.1 Slot 0



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)	2019.03.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.066480543733

A.2 Comments

Optional chips I2 and S4 not included.

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The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.