

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20792 - L2 Version 1
Chandra X-Ray Center

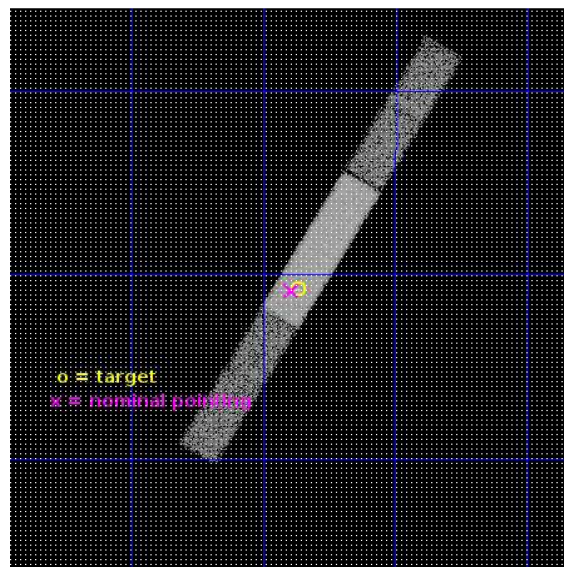
L2 Processing Date : Sep 18 2017

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1 Front

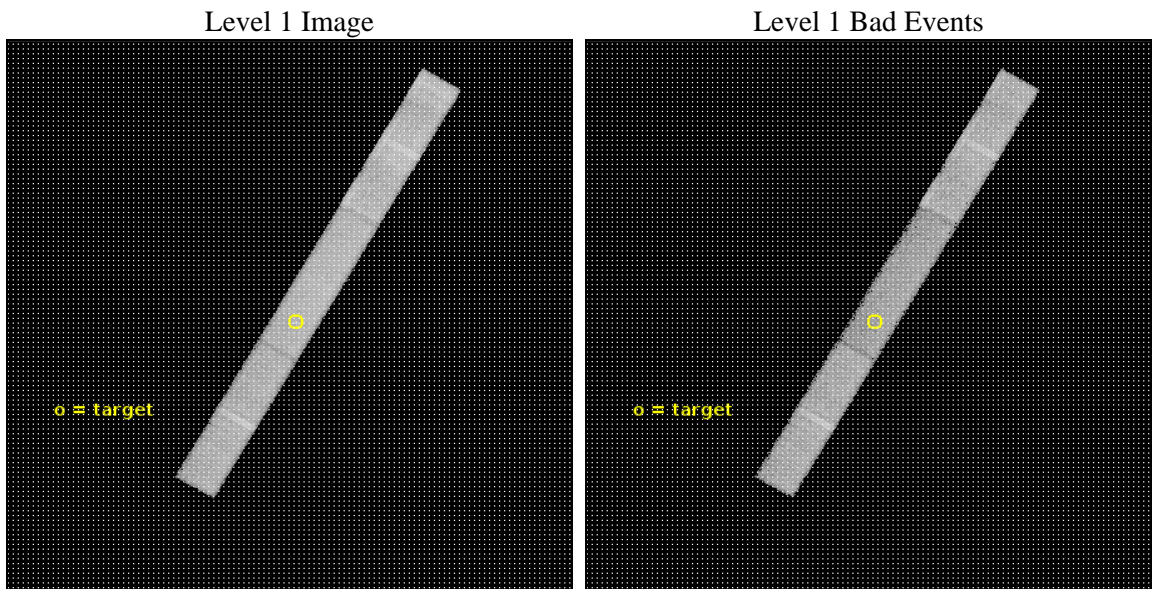
seq_num	401865	Sequence number
obs_id	20792	Observation id
title	Globular cluster neutron stars and the determination of the dense matter equation of state	Proposal title
observer	Sebastien Guillot	Principal investigator
object	M30	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	325.092083	Observer's specified target RA [deg]
dec_targ	-23.179861	Observer's specified target Dec [deg]
ra_nom	325.09861784917	Nominal RA [deg]
dec_nom	-23.181230001403	Nominal Dec [deg]
roll_nom	300.15920607858	Nominal Roll [deg]
revision	1	Processing version of data
ontime	38537.998978972	Sum of GTIs [s]
livetime	36857.305832988	Livetime [s]
ontime6	38537.998978972	Sum of GTIs [s]
ontime7	38537.998978972	Sum of GTIs [s]
ontime8	38535.175858855	Sum of GTIs [s]
l2events	56880	Number of level 2 events



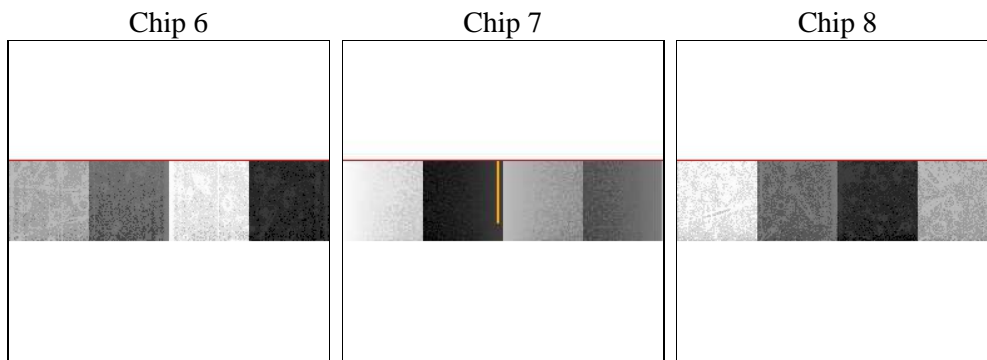
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38453.404000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	38537.998978972	Sum of GTIs [s]
caldsver	4.7.6	 	ontime6	38537.998978972	Sum of GTIs [s]
date	2017-09-18T21:07:52	Date and time of file creation	ontime7	38537.998978972	Sum of GTIs [s]
revision	1	Processing version of data	ontime8	38535.175858855	Sum of GTIs [s]
			l1events	269532	Number of level 1 events

2.1.4 Events

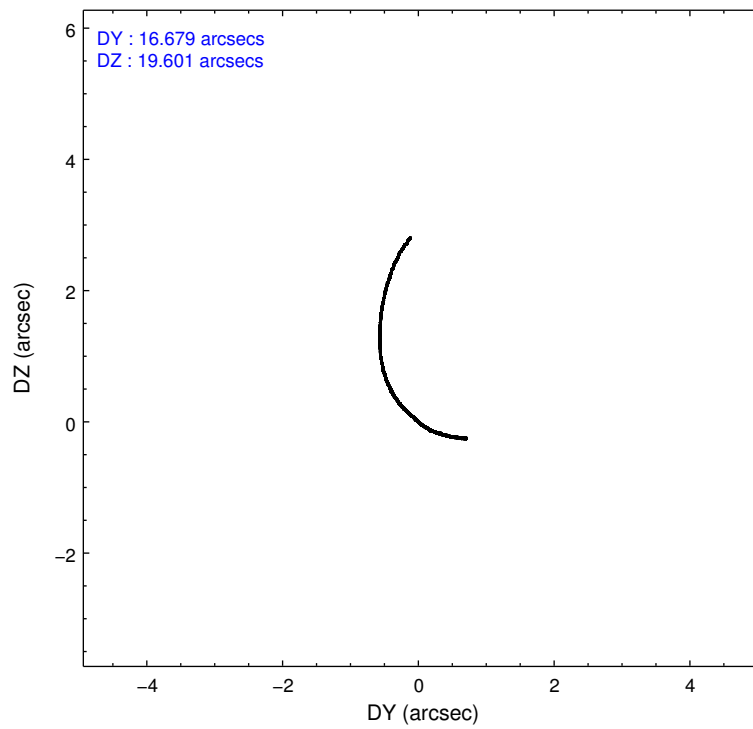
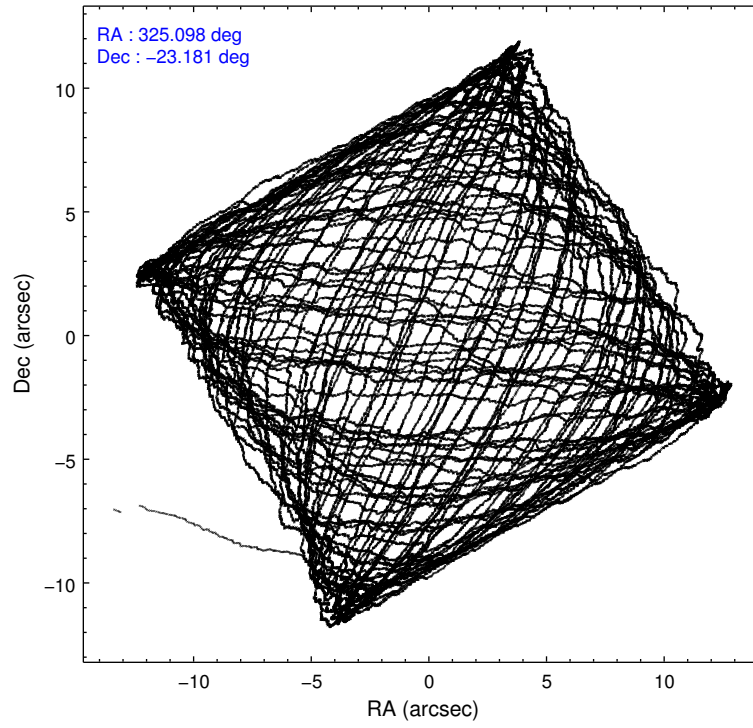
	ccd 6	ccd 7	ccd 8
level 1 events	76433	89642	103457
rejected events	67352	47271	77546
rejected %	88%	52%	74%

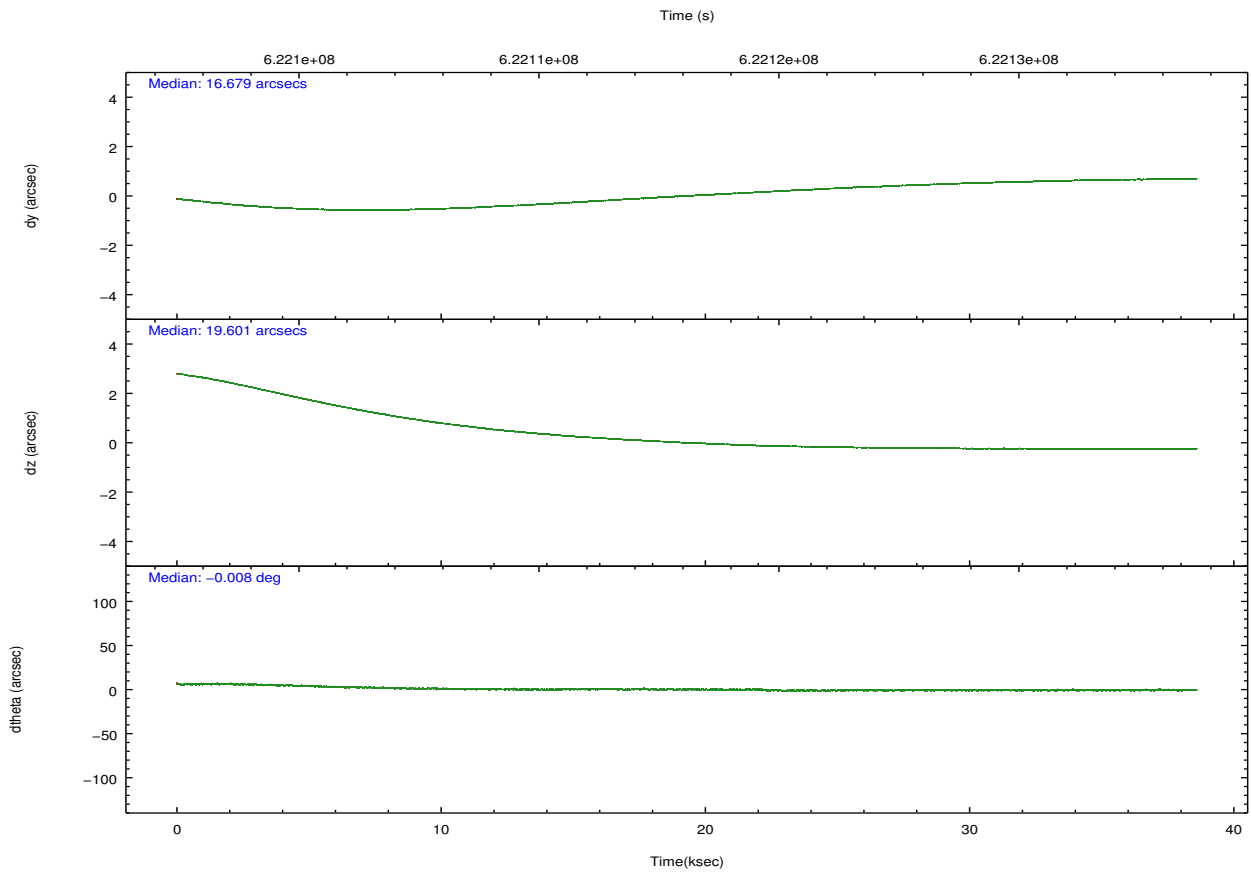
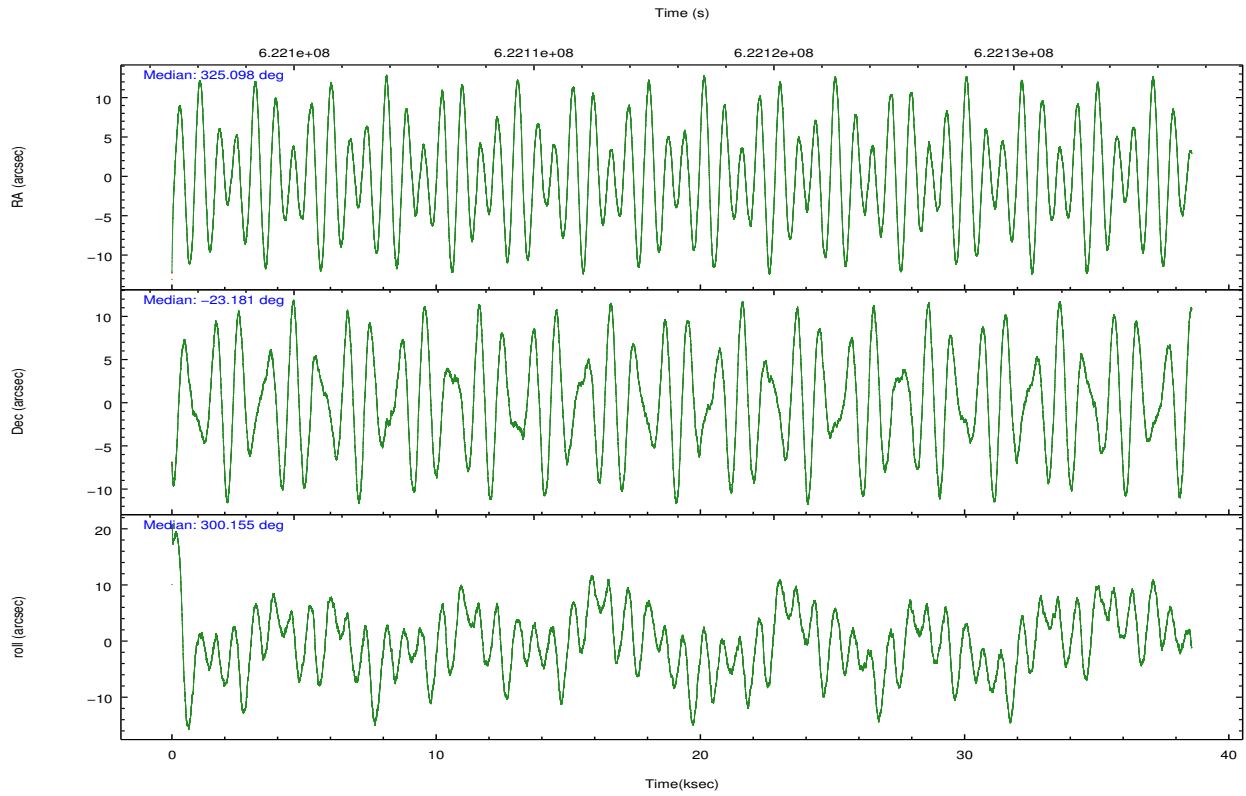
	ccd 6	ccd 7	ccd 8
grade 0 events	2729	4304	6626
	3%	4%	6%
grade 1 events	37	132	57
	0%	0%	0%
grade 2 events	1786	8874	5860
	2%	9%	5%
grade 3 events	1337	4431	2951
	1%	4%	2%
grade 4 events	1334	4545	2736
	1%	5%	2%
grade 5 events	3235	9505	4685
	4%	10%	4%
grade 6 events	1895	20218	7738
	2%	22%	7%
grade 7 events	64080	37633	72804
	83%	41%	70%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	325.072521	325.0986178491698	CCD I2 on	N	N
[deg] Pointing Dec	-23.167888	-23.18123000140341	CCD I3 on	N	N
[deg] Pointing Roll	299.992301	300.1592060785794	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O2	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	O1	Y
[s] Observation start time (MET)	622096998.184000	622095771.69576	CCD S5 on	N	N
Observation start date	2017-09-18T04:42:09	2017-09-18T04:22:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	622135452.184000	622136446.26064	On-chip summing requested	N	N
Observation end date	2017-09-18T15:23:03	2017-09-18T15:40:46	Subarray requested	CUSTOM	1/4
Read mode	TIMED	TIMED	Subarray start row	385	385
			Subarray row count	256	256
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.9

2.3 Aspect





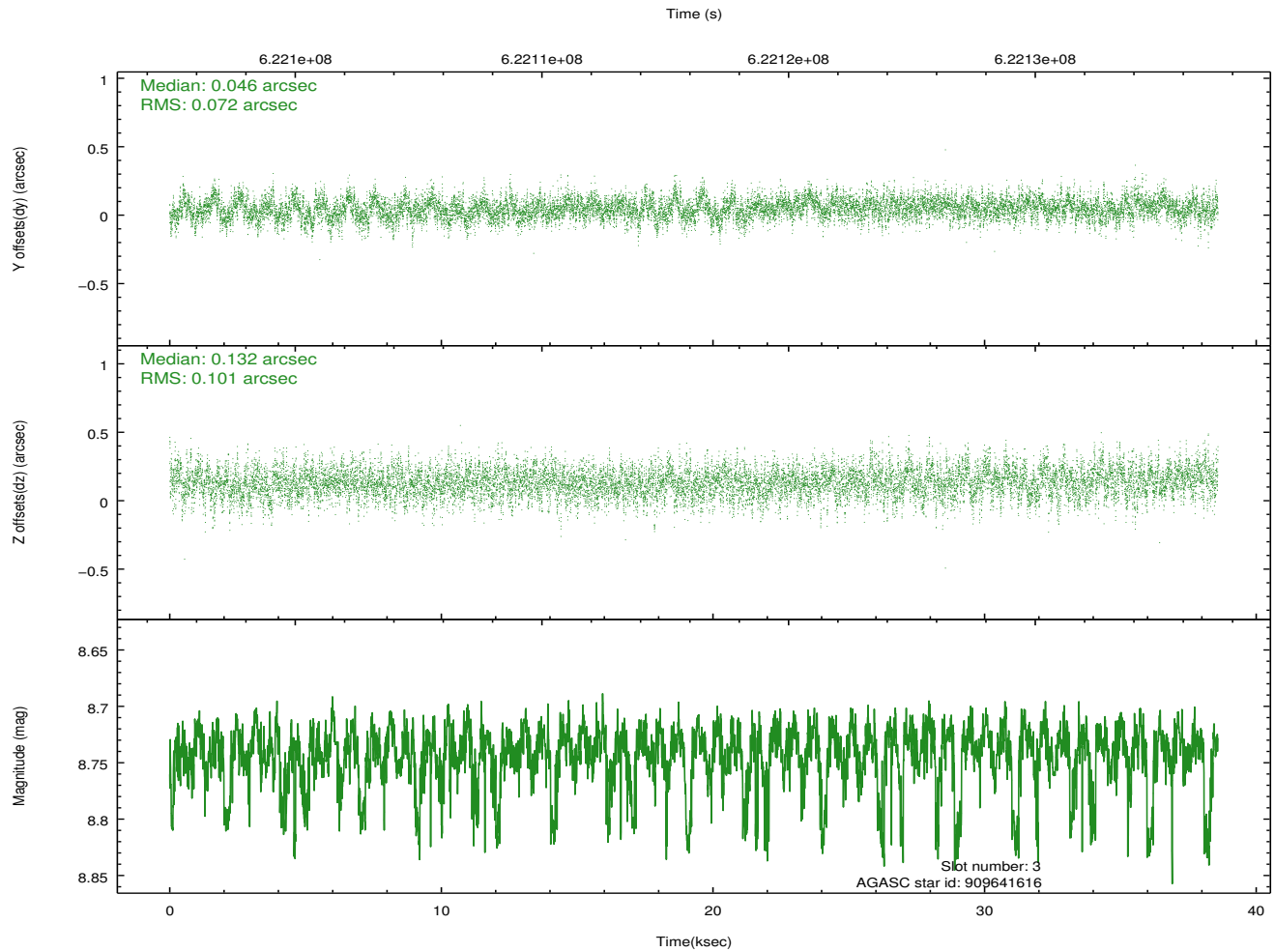
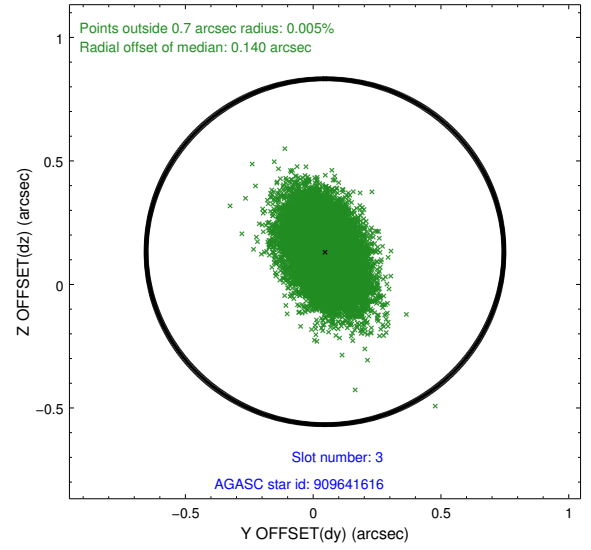
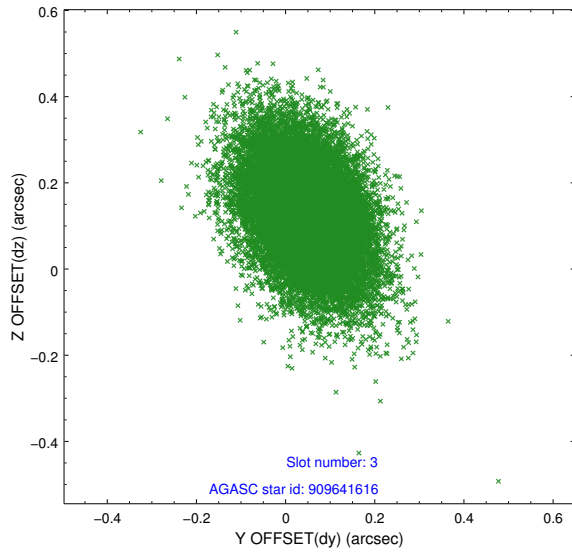
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.09	9412	0.028	-0.049	0.023	0.038	0.000000	0.000000	926.40	-1737.20
1	FID		ACIS-S-4	7.11	9413	0.361	0.021	0.025	0.044	0.000000	0.000000	2144.07	167.06
2	FID		ACIS-S-5	7.11	9409	-0.413	0.036	0.037	0.048	0.000000	0.000000	-1822.96	160.53
3	GUIDE	used	909641616	8.74	18811	0.046	0.132	0.128	0.222	324.489766	-23.068367	-1270.62	-1495.15
4	GUIDE	used	909643176	7.20	18822	-0.314	-0.374	0.136	0.237	325.747031	-23.170469	1128.48	1926.12
5	GUIDE	used	909646560	9.43	18796	-0.196	-0.157	0.180	0.298	325.225689	-23.808093	2248.99	-714.96
6	GUIDE	used	909647192	8.97	18809	0.332	0.376	0.163	0.274	324.987552	-23.199068	-42.25	-299.06
7	GUIDE	used	909513480	9.67	18797	0.141	0.020	0.199	0.342	324.347426	-23.375320	-547.20	-2449.28

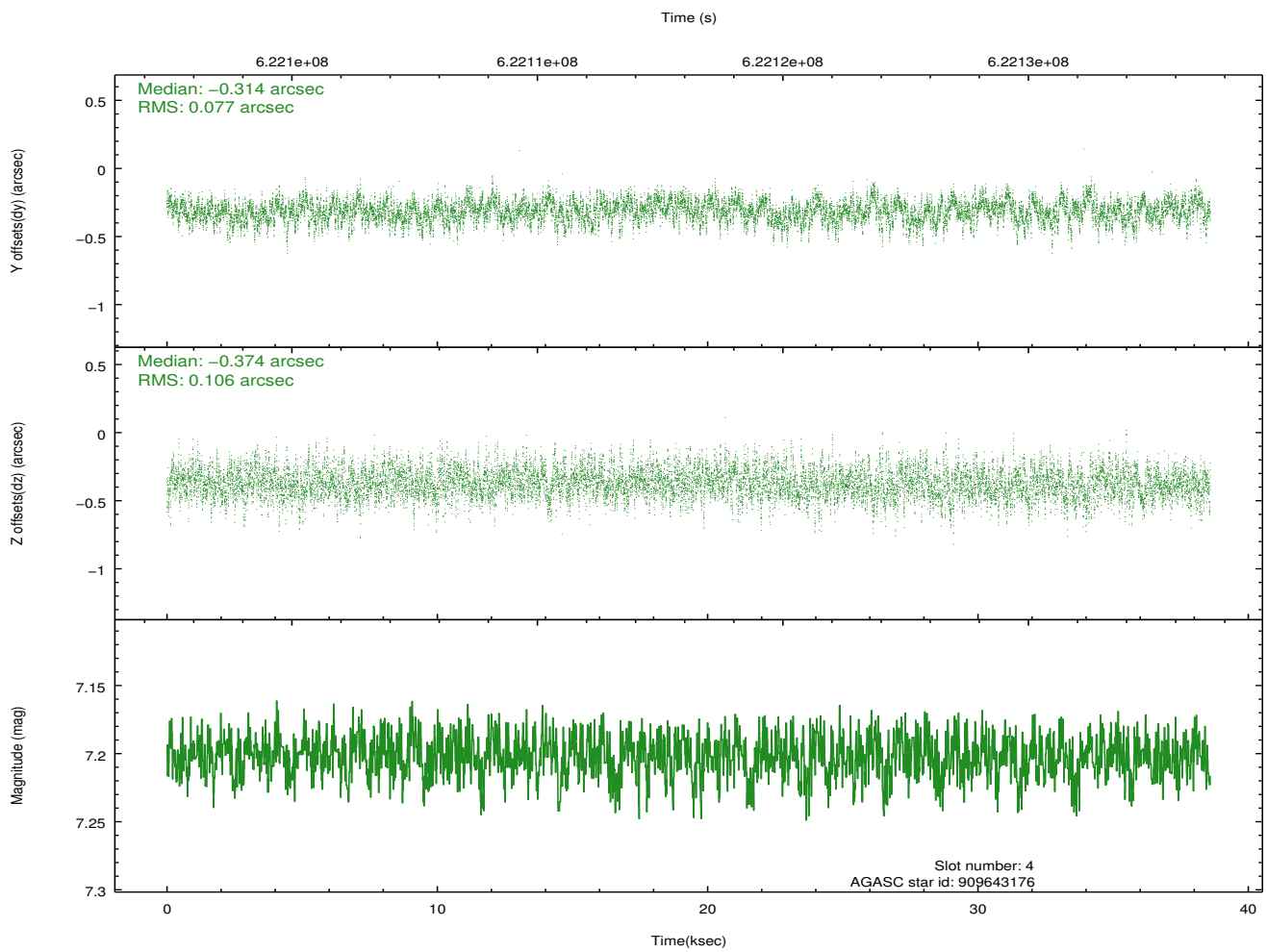
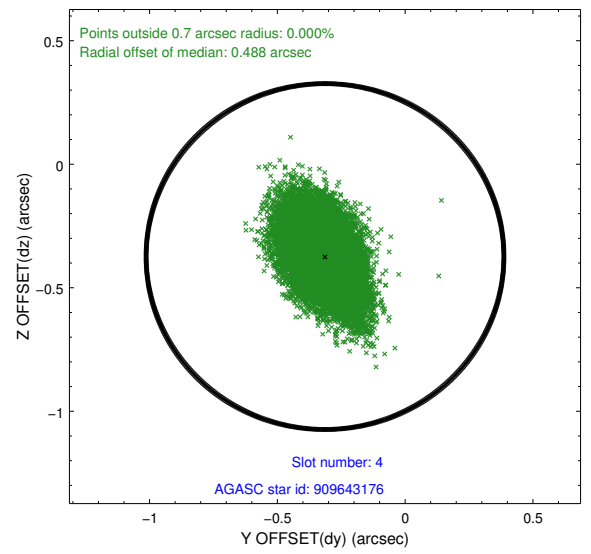
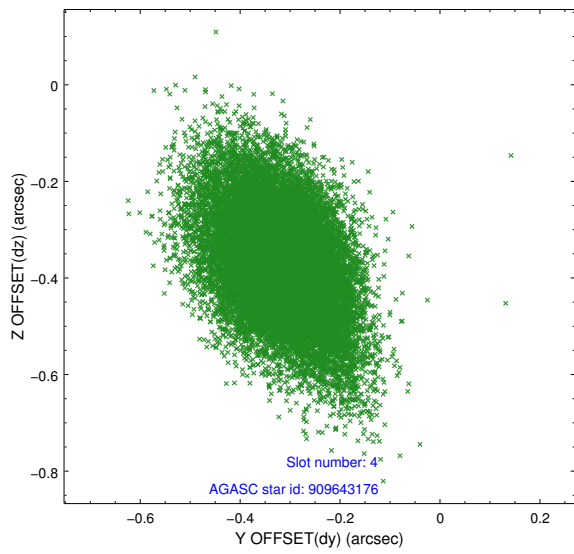
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2.4 Star Slots

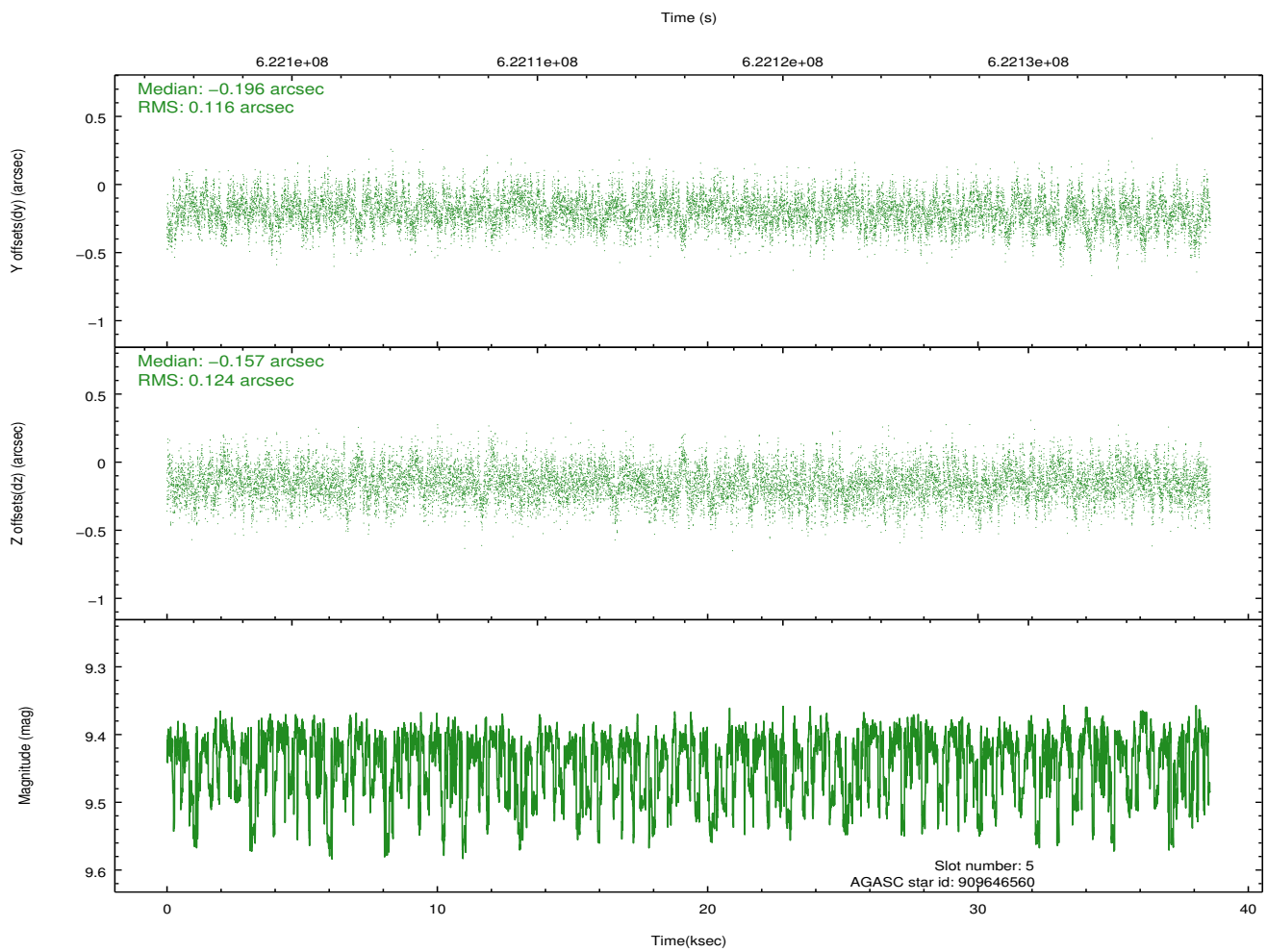
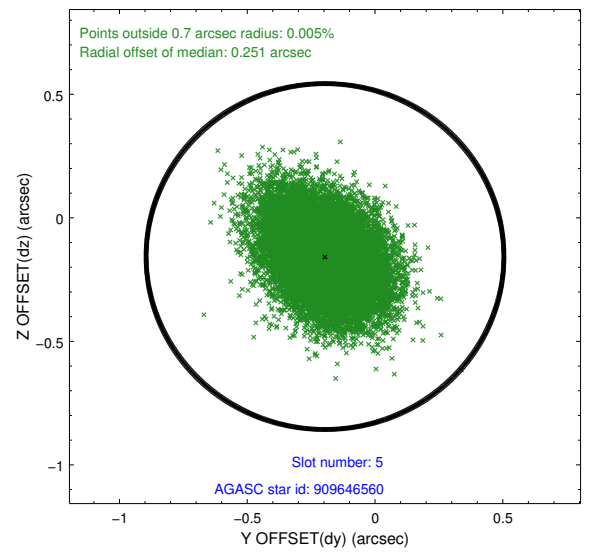
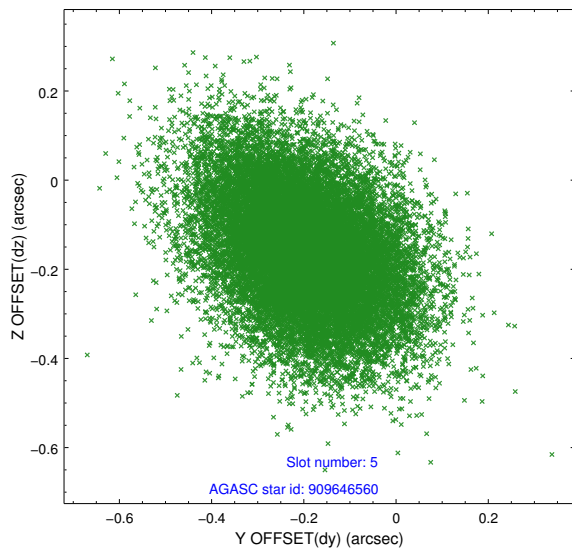
2.4.1 Slot 3



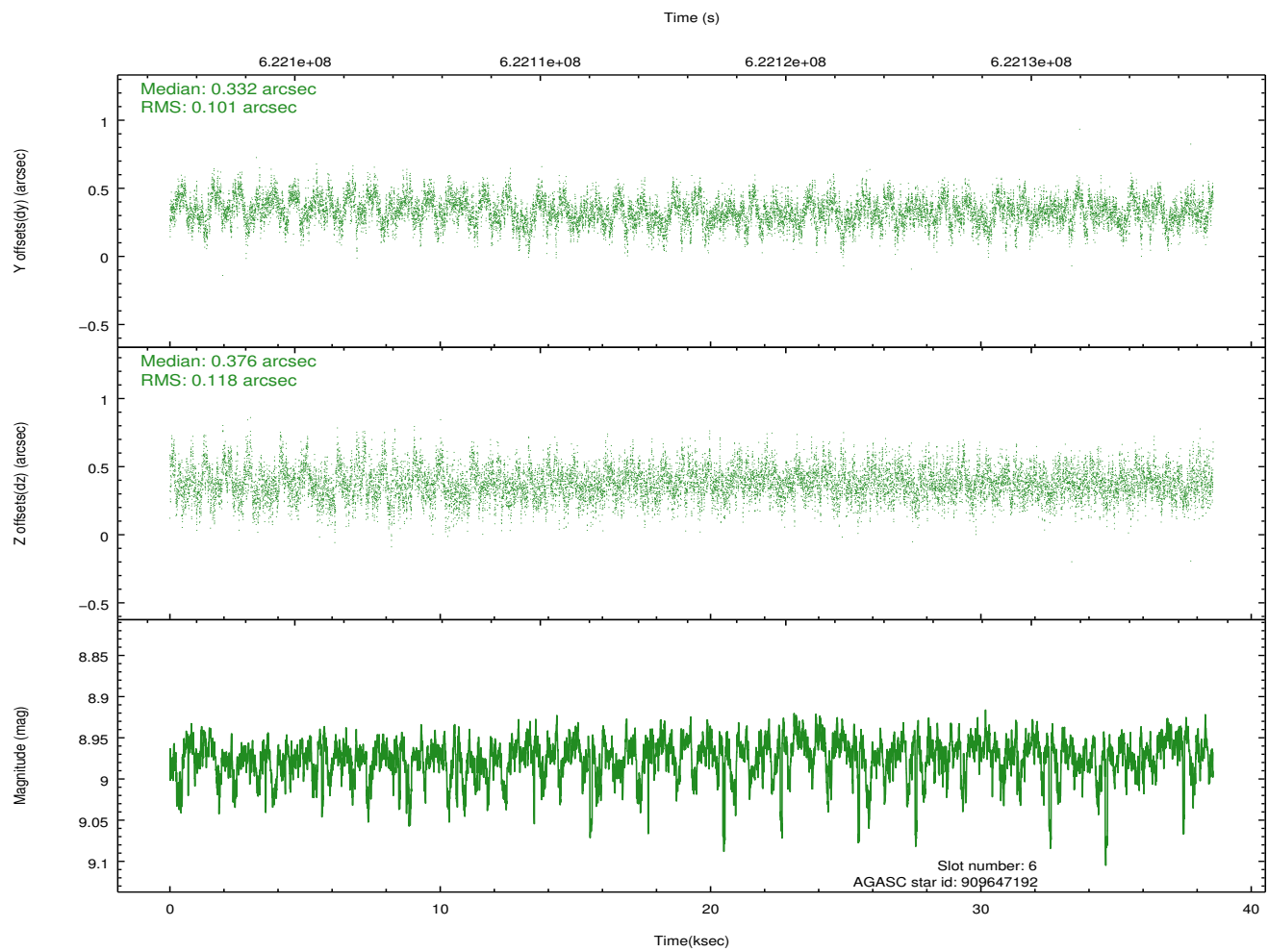
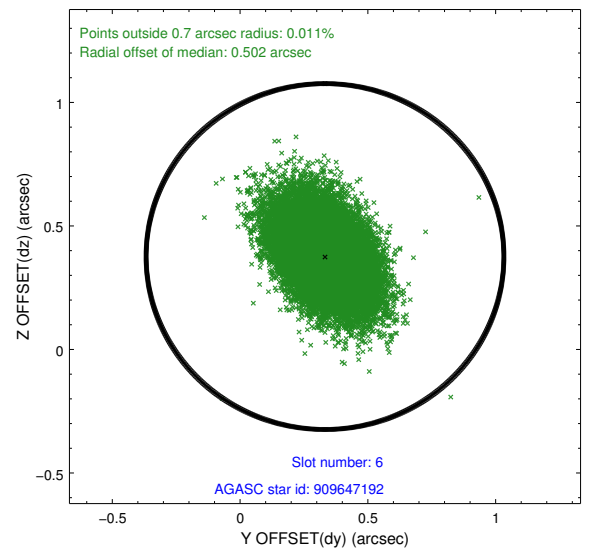
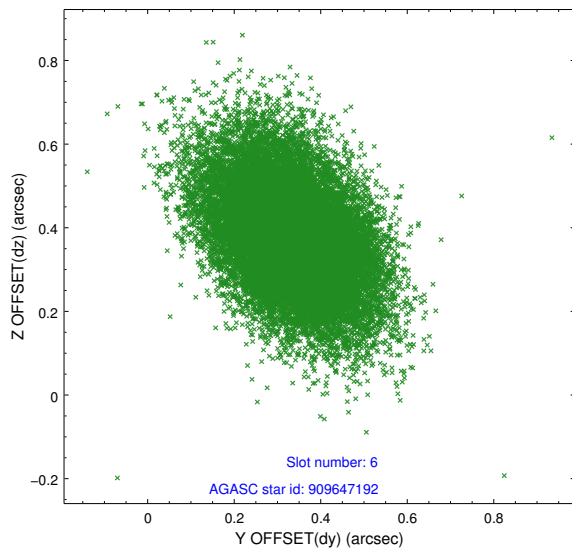
2.4.2 Slot 4



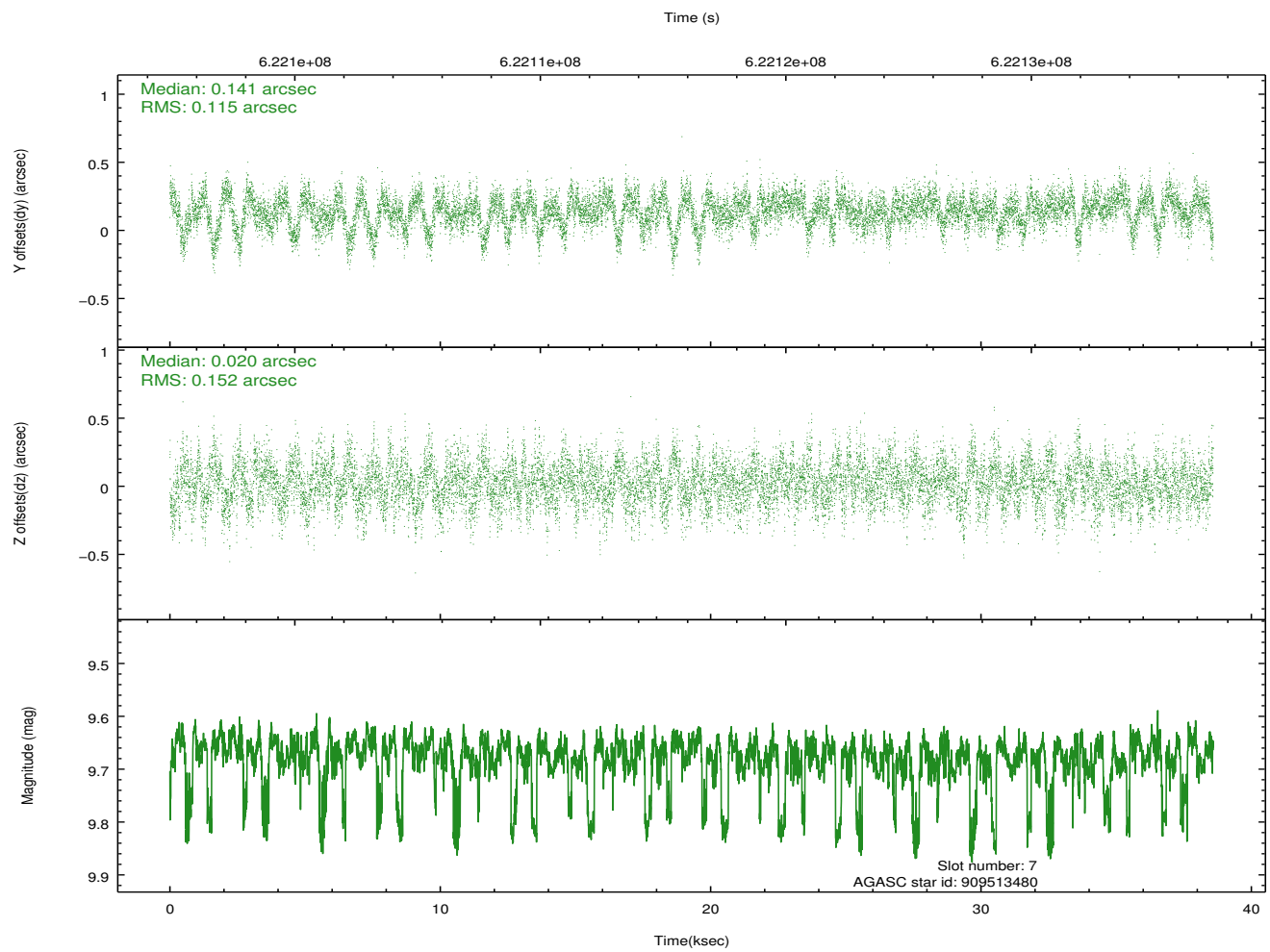
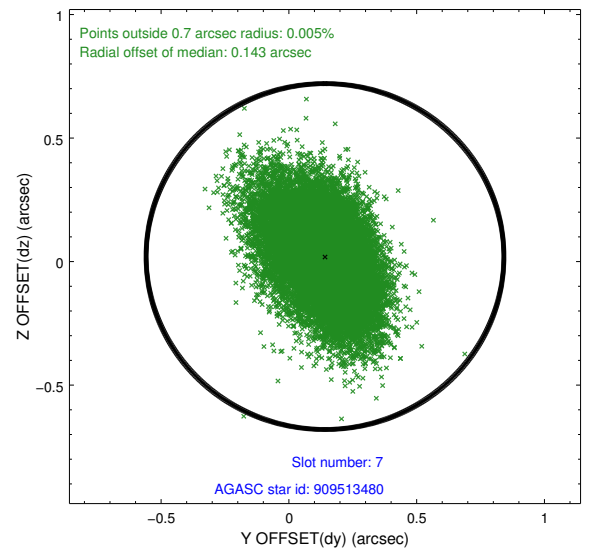
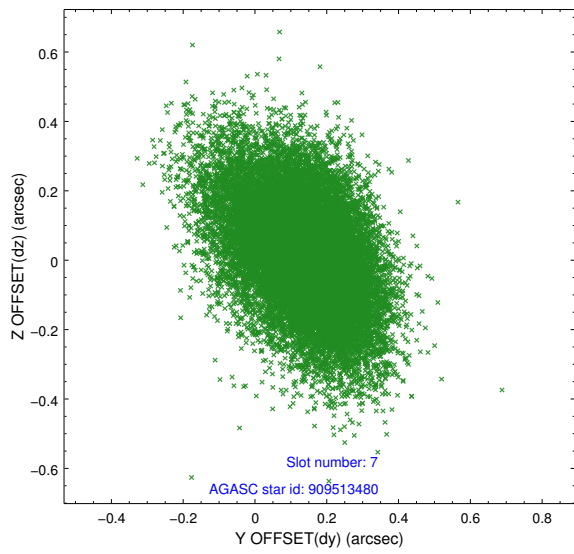
2.4.3 Slot 5



2.4.4 Slot 6

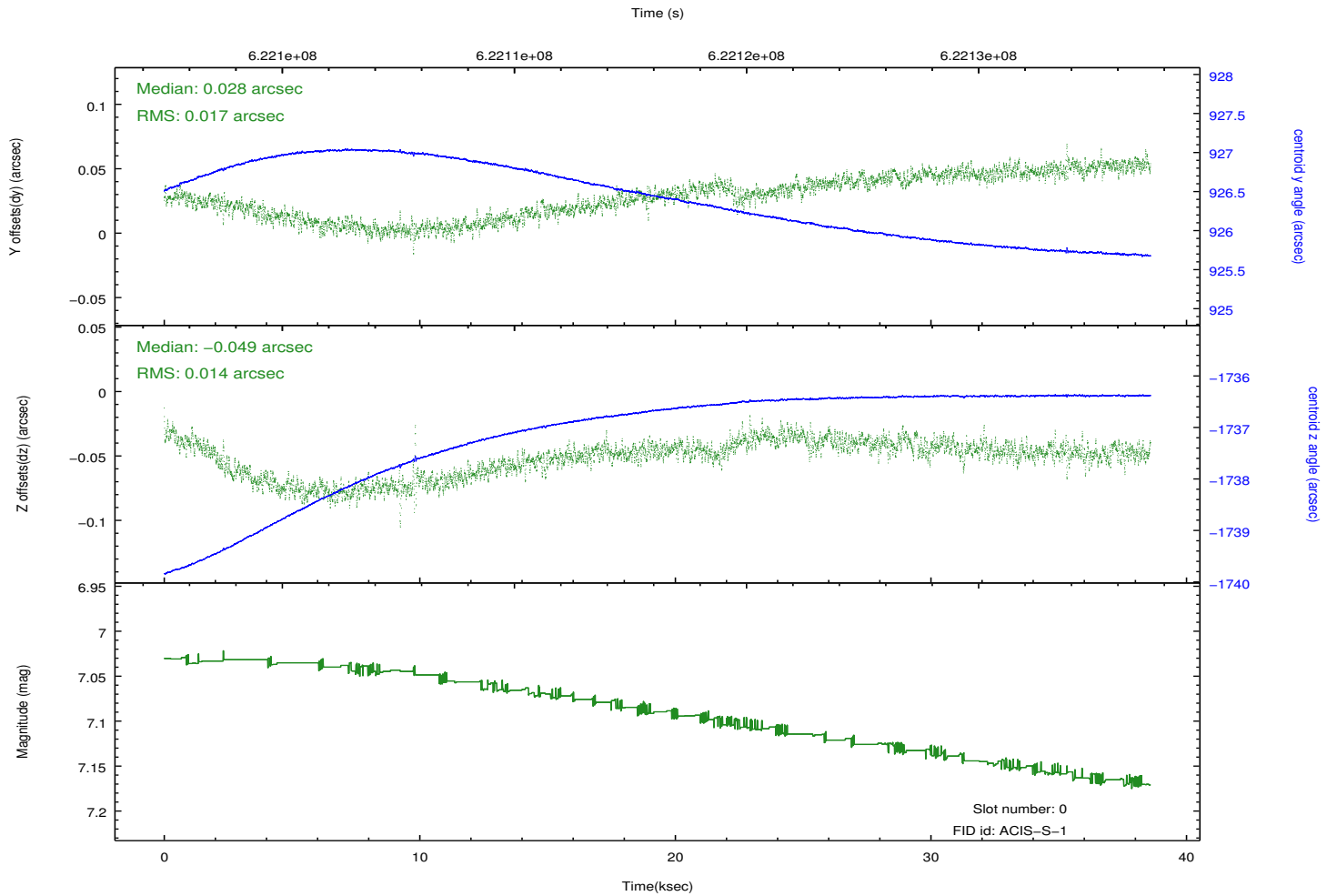
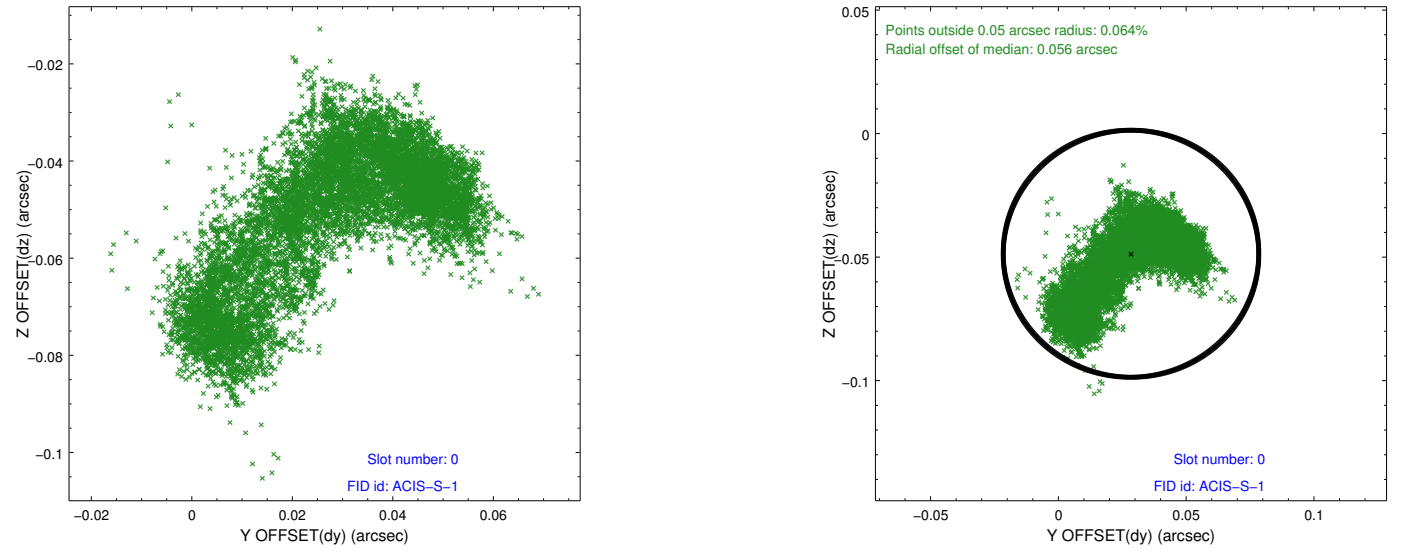


2.4.5 Slot 7

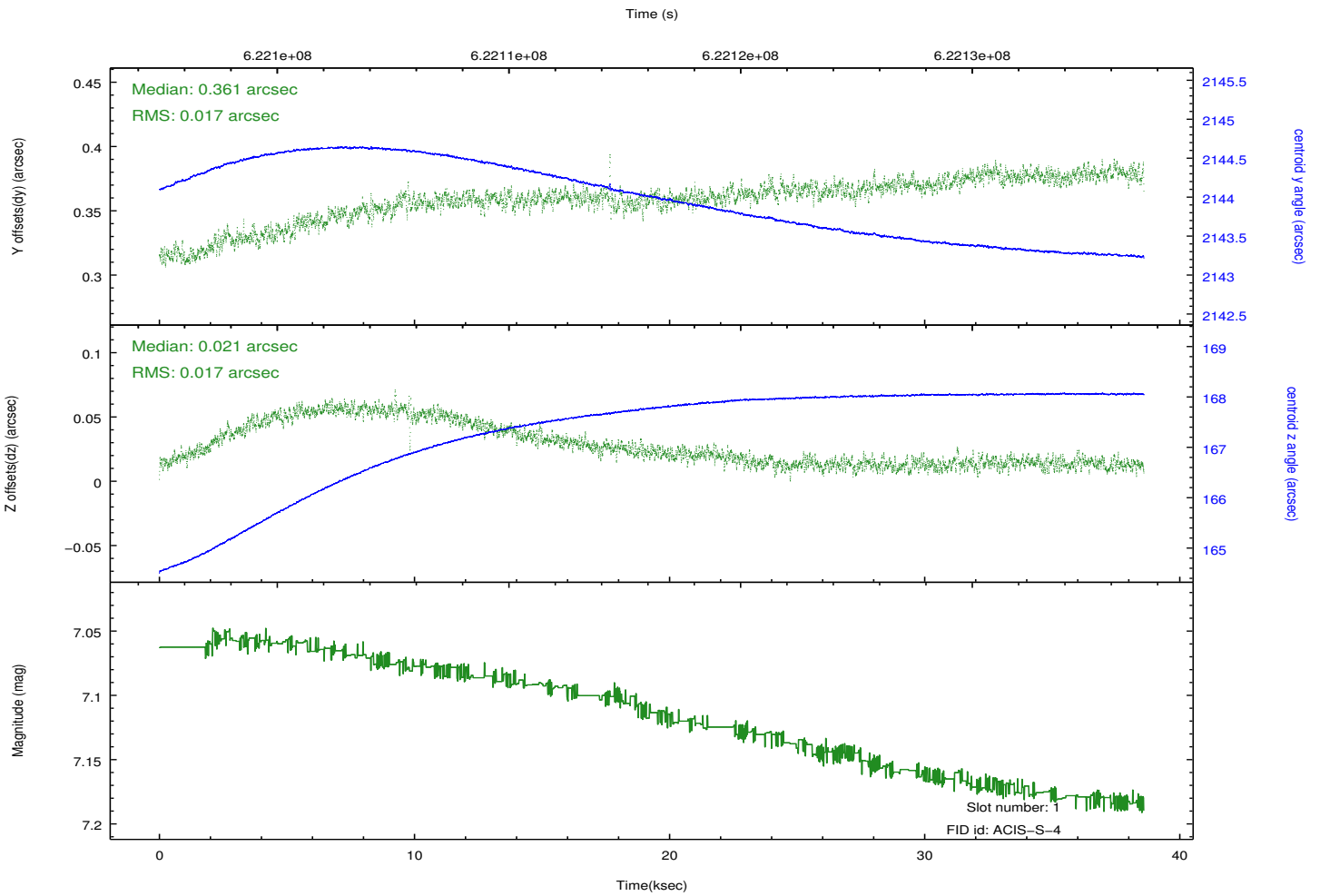
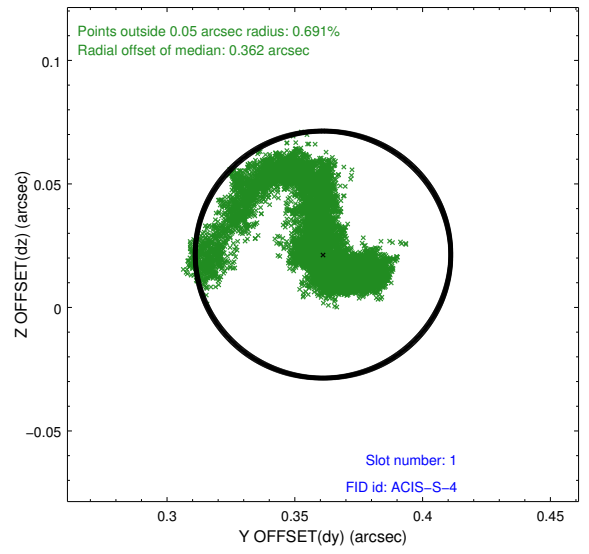
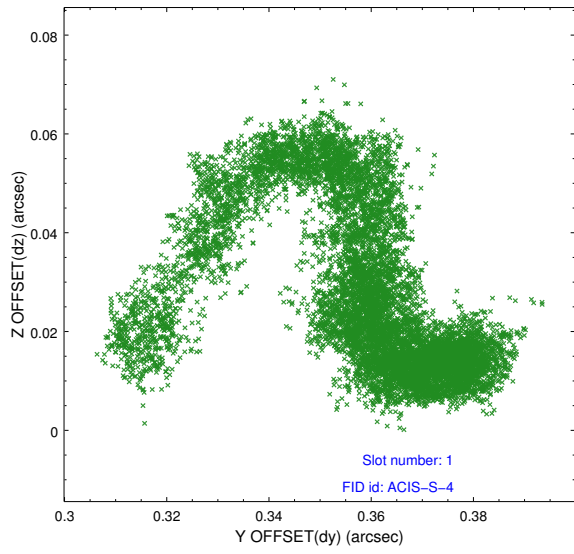


2.5 FID Slots

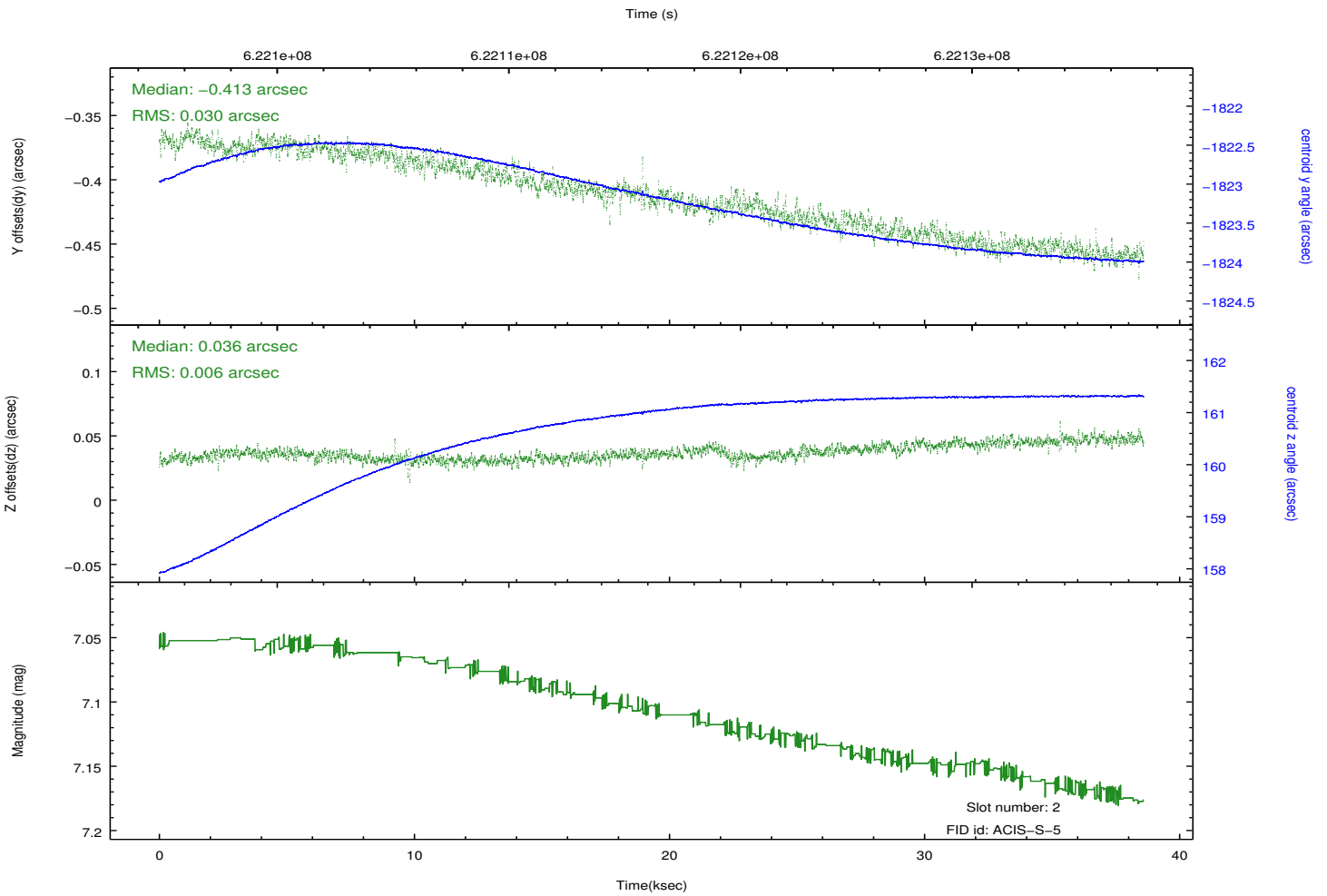
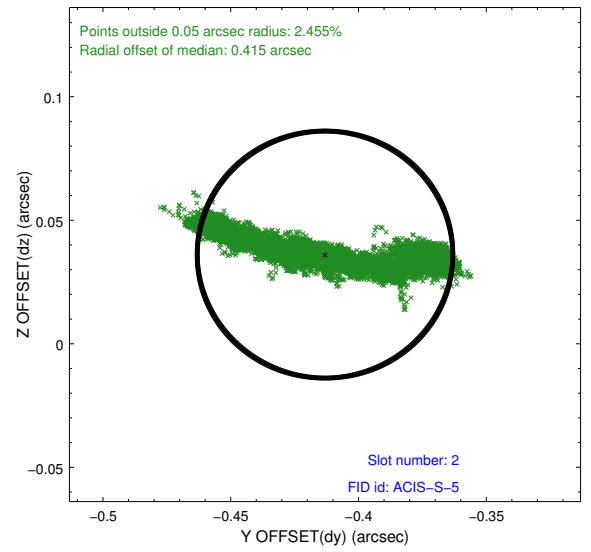
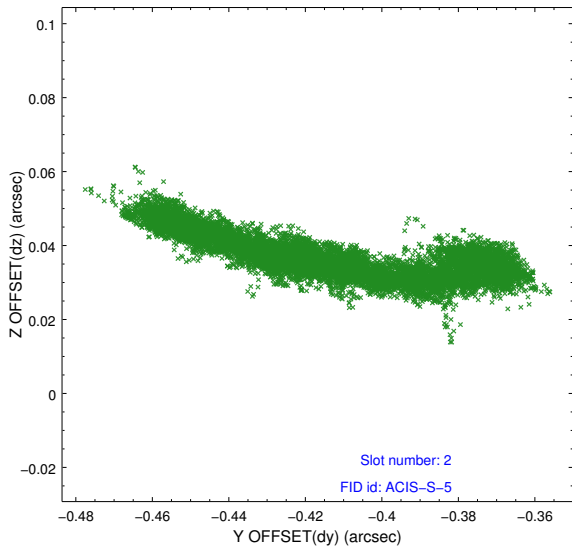
2.5.1 Slot 0



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)	2017.09.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.537998978972

A.2 Comments