

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19545 - L2 Version 1
Chandra X-Ray Center

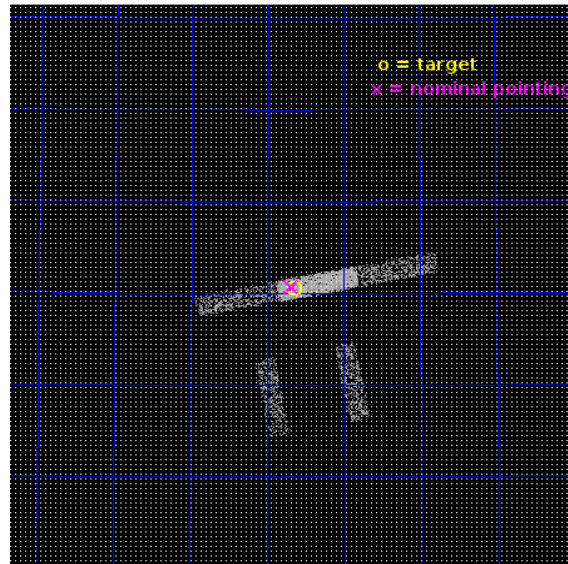
L2 Processing Date : Aug 31 2017

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1 Front

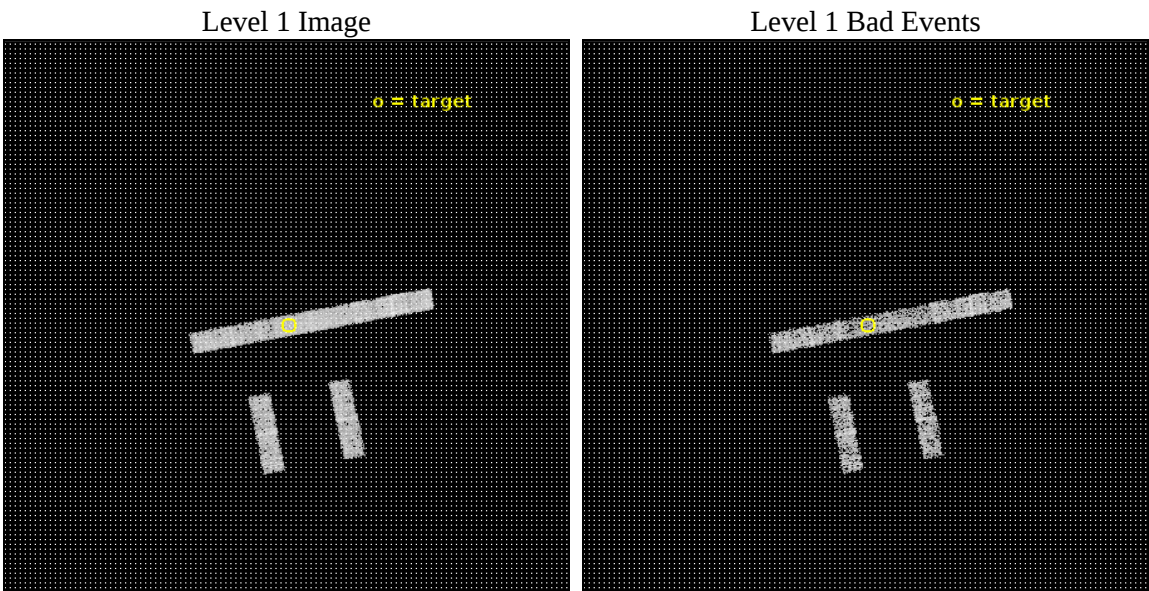
seq_num	703393	Sequence number
obs_id	19545	Observation id
title	Investigating X-ray Bias in Low-L, Low-z Quasars	Proposal title
observer	Gordon Richards	Principal investigator
object	SDSSJ111138.66+575030.0	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	167.91125	Observer's specified target RA [deg]
dec_targ	57.841694	Observer's specified target Dec [deg]
ra_nom	167.92146697471	Nominal RA [deg]
dec_nom	57.845250009778	Nominal Dec [deg]
roll_nom	348.9880173179	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3104.9233756065	Sum of GTIs [s]
livetime	2982.5207250505	Livetime [s]
ontime2	3104.7592155933	Sum of GTIs [s]
ontime3	3104.8412955999	Sum of GTIs [s]
ontime6	3104.8823356628	Sum of GTIs [s]
ontime7	3104.9233756065	Sum of GTIs [s]
ontime8	3104.8002556562	Sum of GTIs [s]
l2events	5765	Number of level 2 events



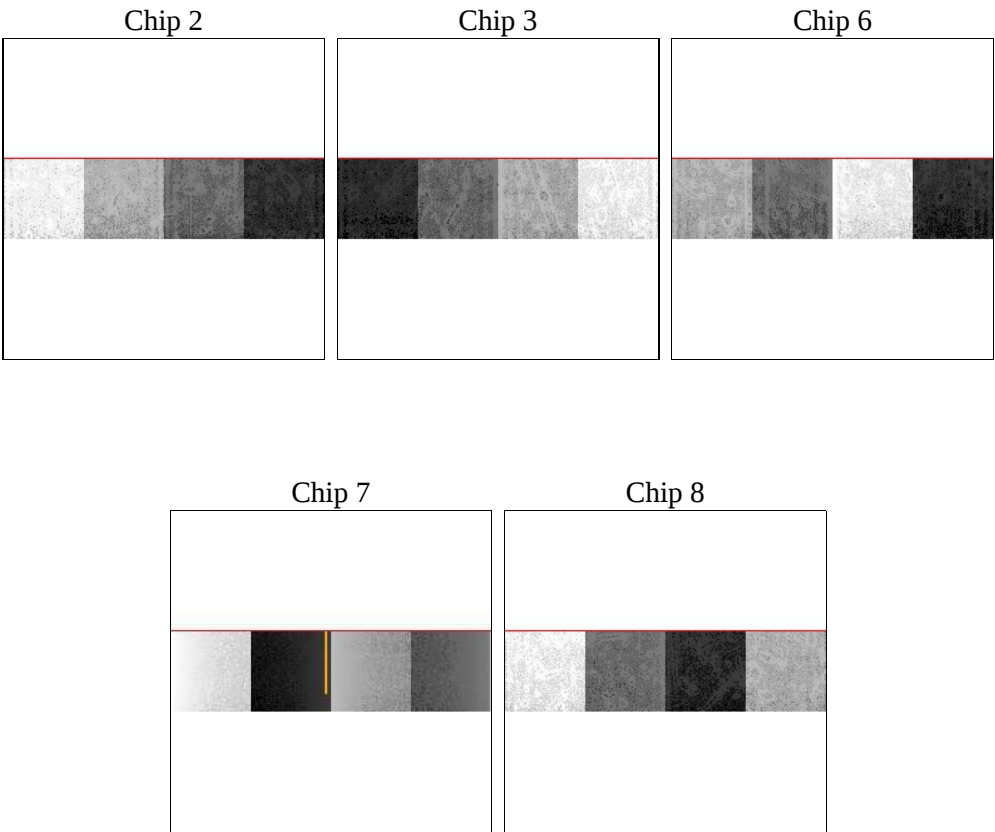
2 OBI

2.1 OBI

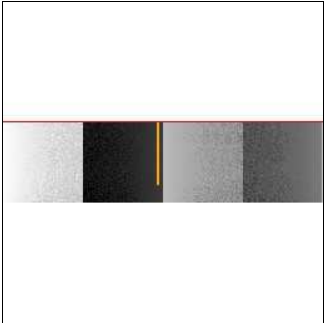
2.1.1 Images



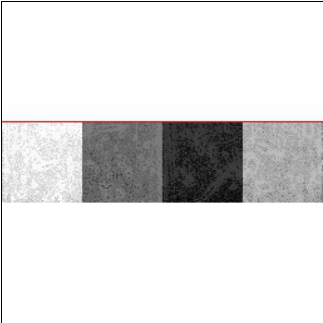
2.1.2 Bias



Chip 7



Chip 8



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3032.367000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	3104.9233756065	Sum of GTIs [s]
caldbver	4.7.6	 	ontime2	3104.7592155933	Sum of GTIs [s]
date	2017-08-31T16:53:52	Date and time of file creation	ontime3	3104.8412955999	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	3104.8823356628	Sum of GTIs [s]
			ontime7	3104.9233756065	Sum of GTIs [s]
			ontime8	3104.8002556562	Sum of GTIs [s]
			l1events	34619	Number of level 1 events

2.1.4 Events

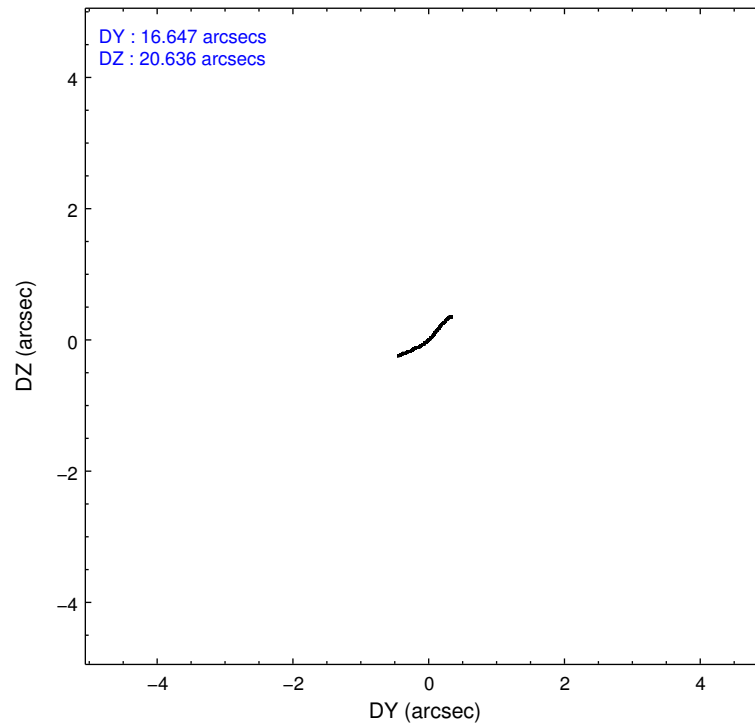
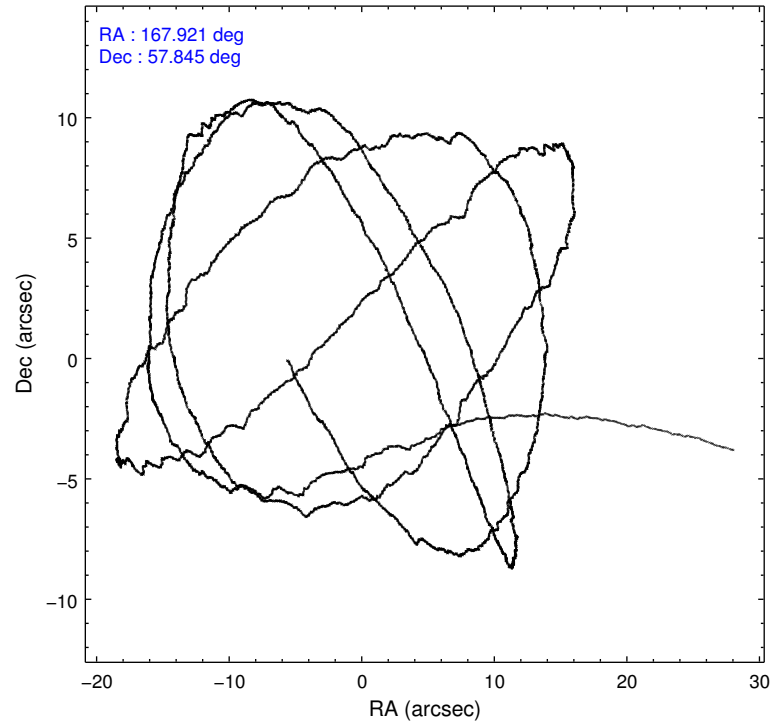
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	6030	5594	6529	7369	9097
rejected events	5396	4897	5803	3870	6812
rejected %	89%	87%	88%	52%	74%

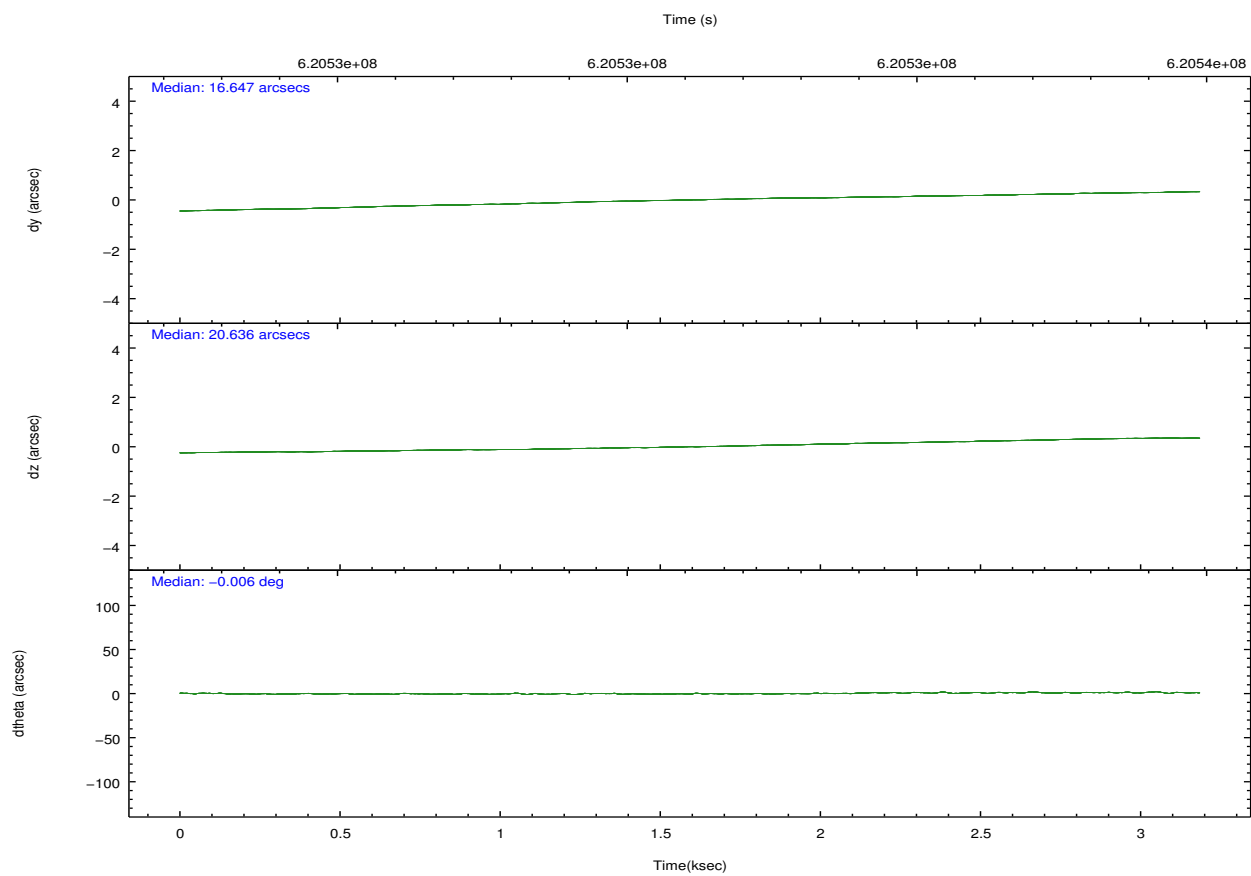
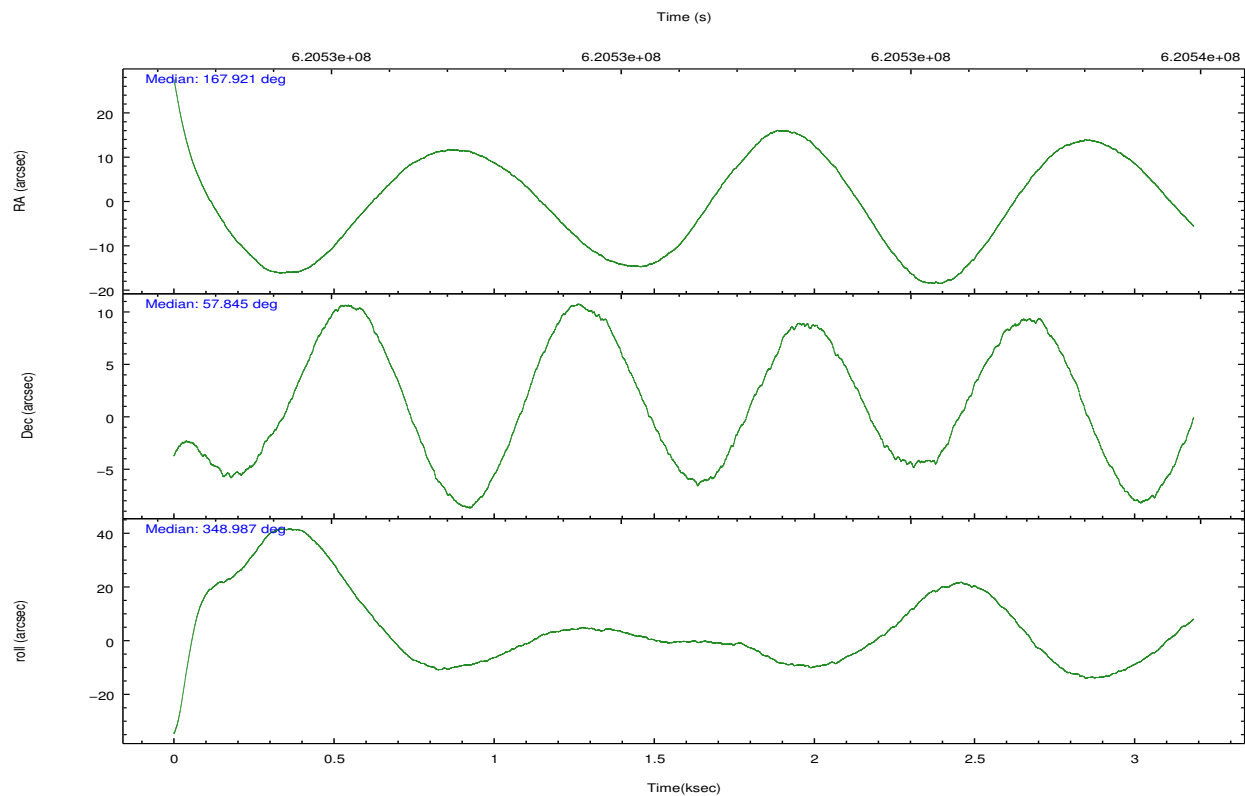
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	193	244	206	361	604
	3%	4%	3%	4%	6%
grade 1 events	0	3	0	11	9
	0%	0%	0%	0%	0%
grade 2 events	154	138	153	771	553
	2%	2%	2%	10%	6%
grade 3 events	85	91	111	358	242
	1%	1%	1%	4%	2%
grade 4 events	90	99	91	344	213
	1%	1%	1%	4%	2%
grade 5 events	199	288	297	757	373
	3%	5%	4%	10%	4%
grade 6 events	112	125	165	1665	673
	1%	2%	2%	22%	7%
grade 7 events	5197	4606	5506	3102	6430
	86%	82%	84%	42%	70%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	167.872866	167.9214669747128	CCD I2 on	O1	Y
[deg] Pointing Dec	57.836135	57.84525000977848	CCD I3 on	Y	Y
[deg] Pointing Roll	348.872704	348.988017317901	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	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	Y	Y
[s] Observation start time (MET)	620531767.184000	620530259.89176	CCD S5 on	N	N
Observation start date	2017-08-31T01:54:58	2017-08-31T01:30:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	620534799.184000	620535852.80459	On-chip summing requested	N	N
Observation end date	2017-08-31T02:45:30	2017-08-31T03:04:12	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	1

2.3 Aspect



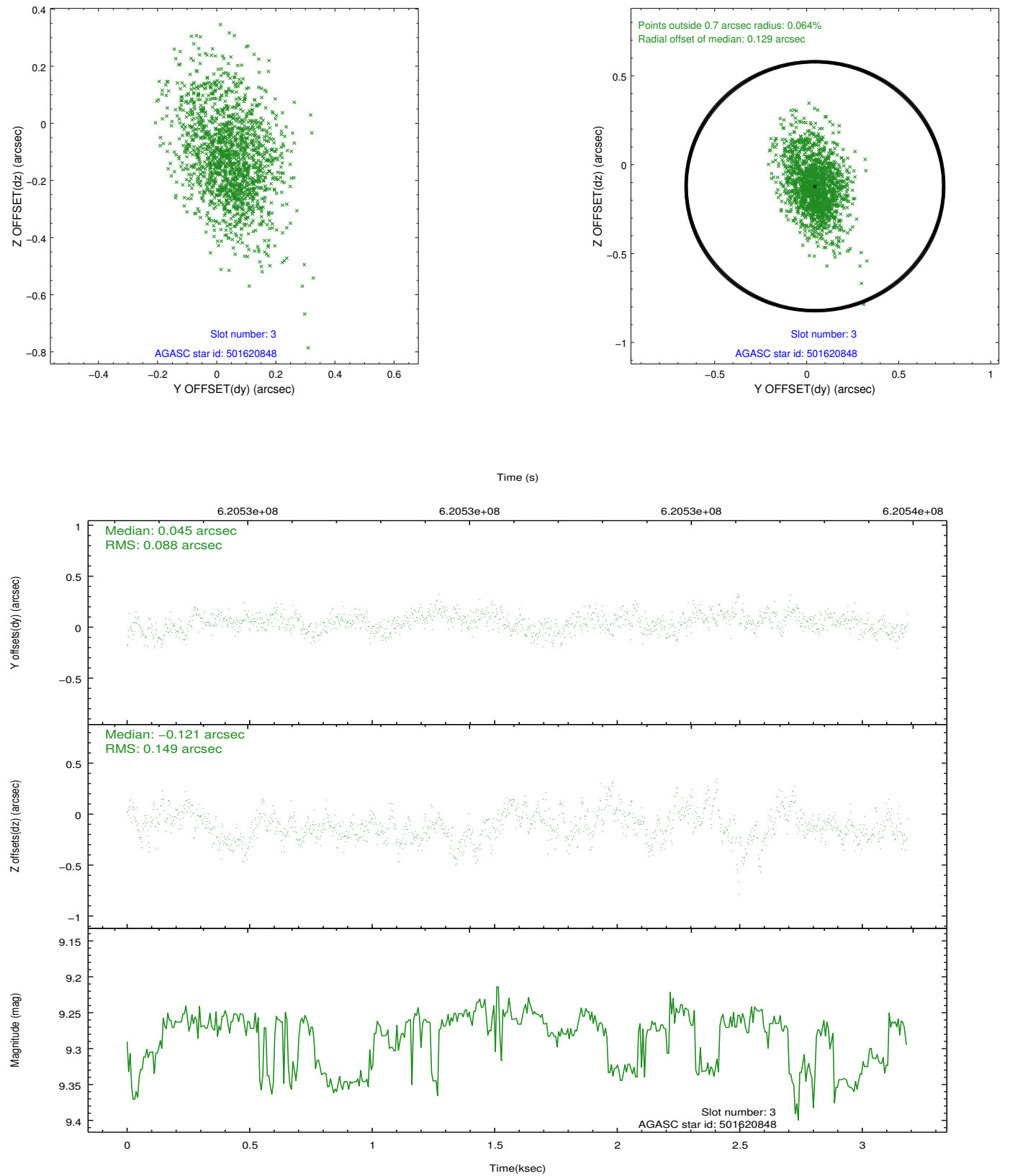


Slot Statistics

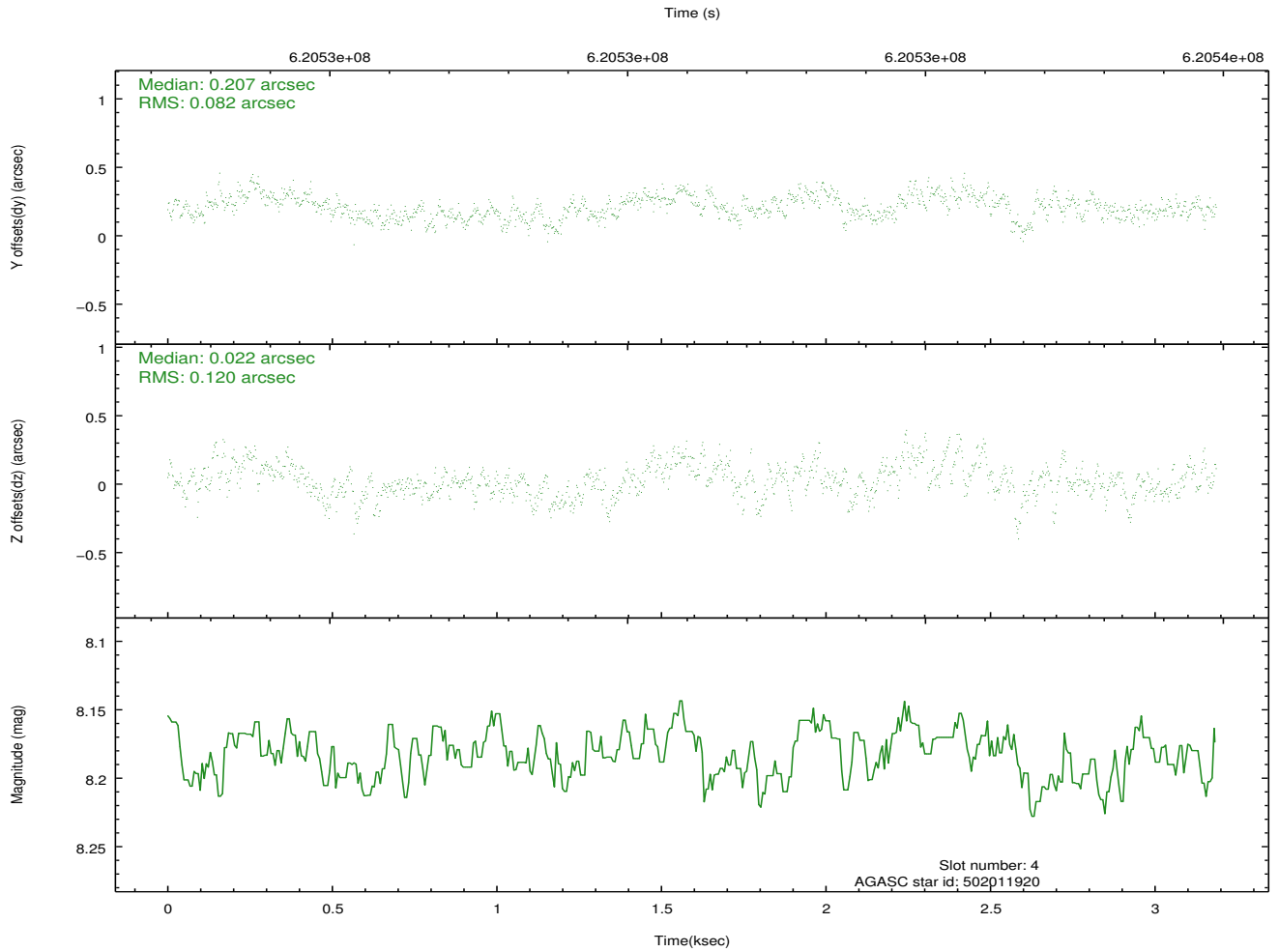
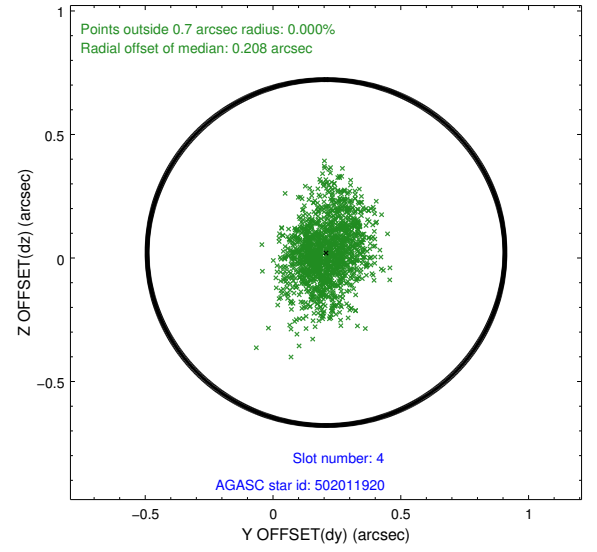
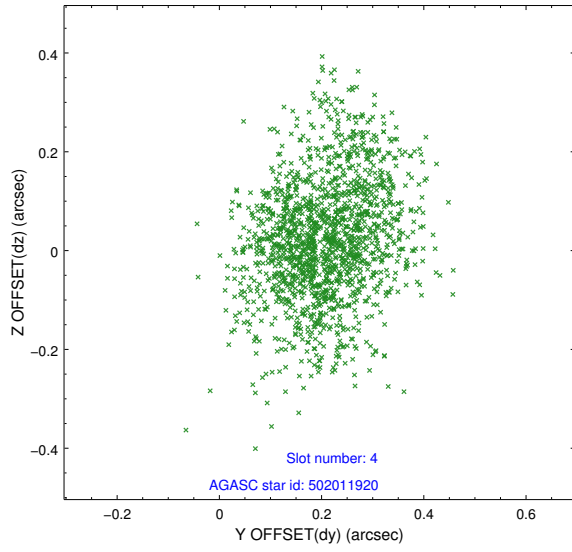
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.89	777	-0.204	-0.060	0.011	0.019	0.000000	0.000000	-769.79	-1742.28
1	FID		ACIS-S-4	7.01	777	0.449	0.114	0.006	0.012	0.000000	0.000000	2143.17	164.38
2	FID		ACIS-S-5	6.99	777	-0.276	-0.046	0.010	0.018	0.000000	0.000000	-1820.20	160.05
3	GUIDE	used	501620848	9.27	1552	0.045	-0.121	0.173	0.316	167.963691	57.281851	558.75	-1923.07
4	GUIDE	used	502011920	8.18	1555	0.207	0.022	0.151	0.258	167.284488	57.617887	-961.21	-985.71
5	GUIDE	used	502012392	9.95	1550	0.227	0.320	0.244	0.405	166.659270	57.527925	-2092.09	-1521.23
6	GUIDE	used	502141352	7.80	1555	-0.639	-0.422	0.126	0.232	168.898541	58.214901	1640.42	1726.71
7	GUIDE	used	502010960	9.61	1554	0.160	0.209	0.289	0.435	166.594172	57.667026	-2301.19	-1047.67

2.4 Star Slots

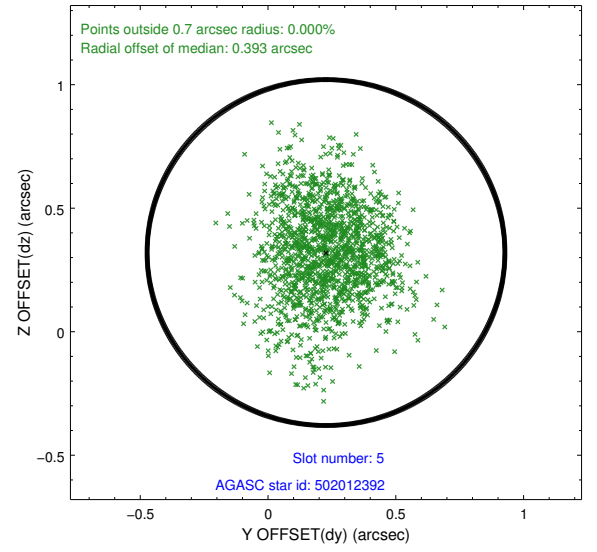
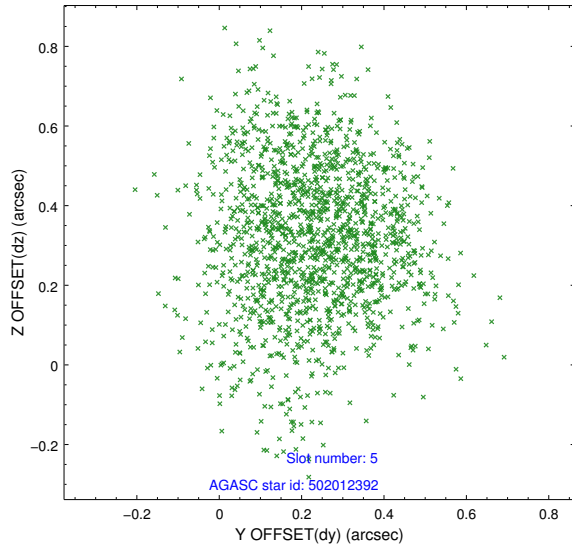
2.4.1 Slot 3



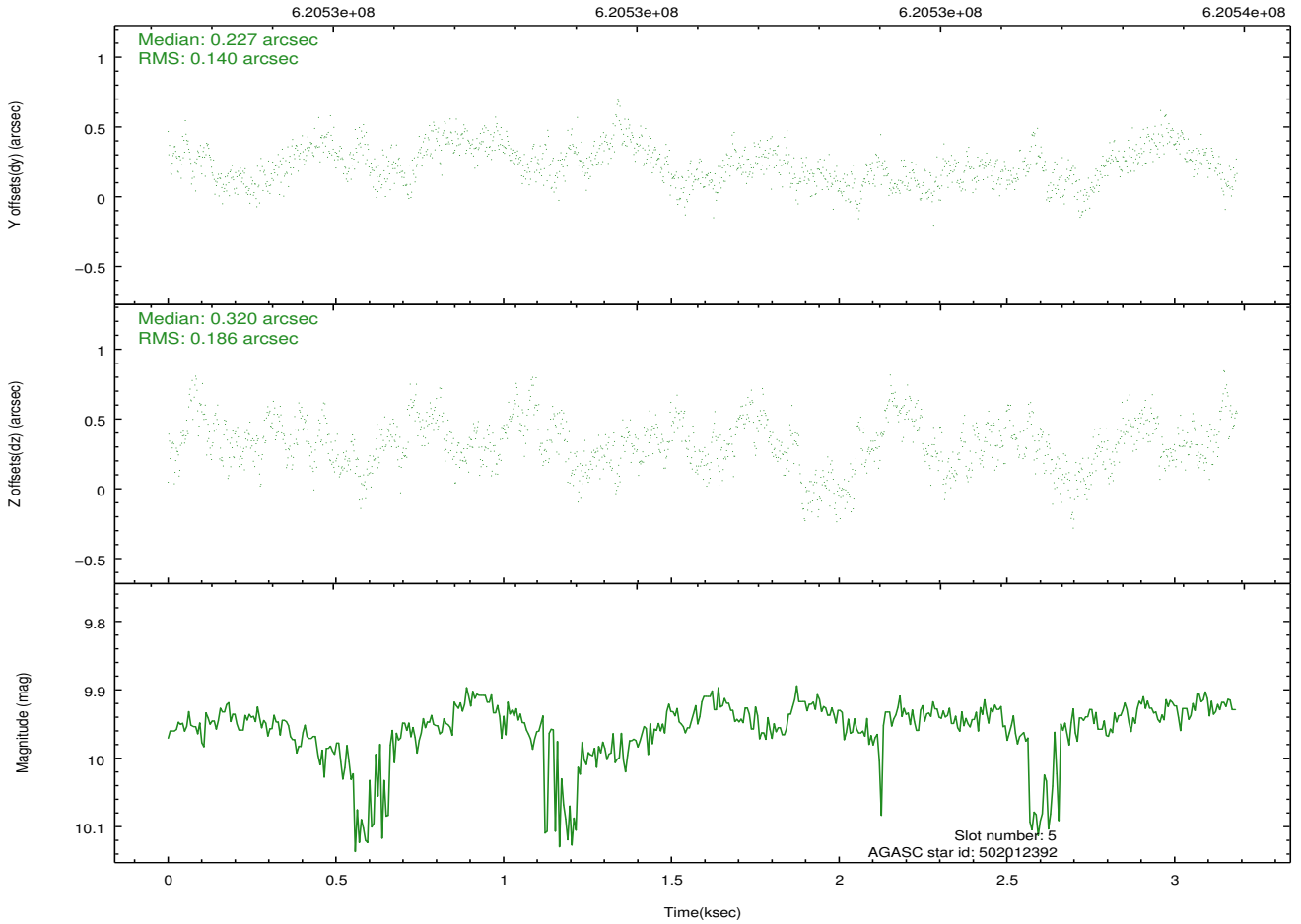
2.4.2 Slot 4



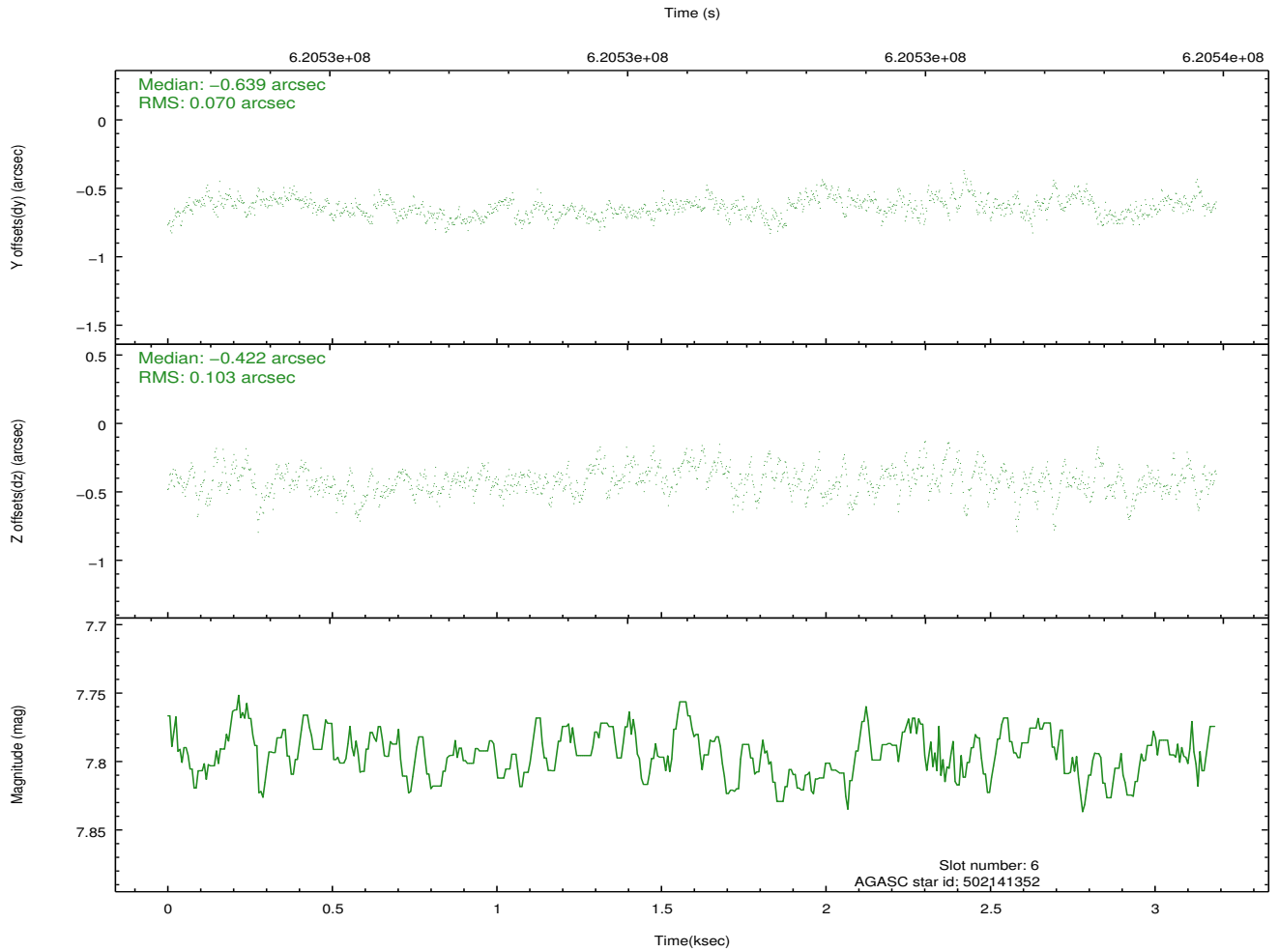
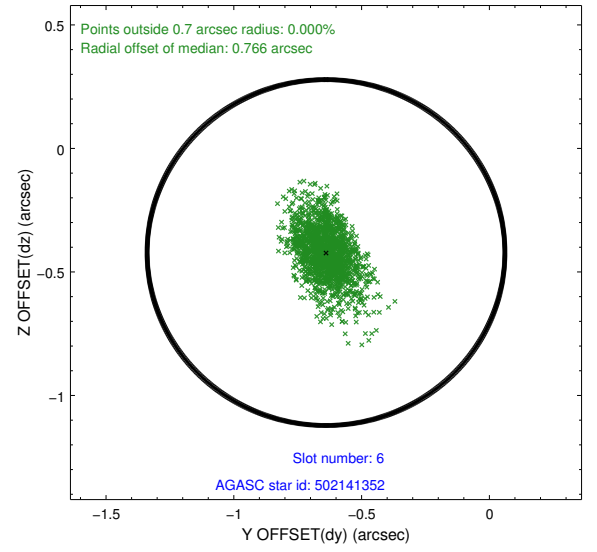
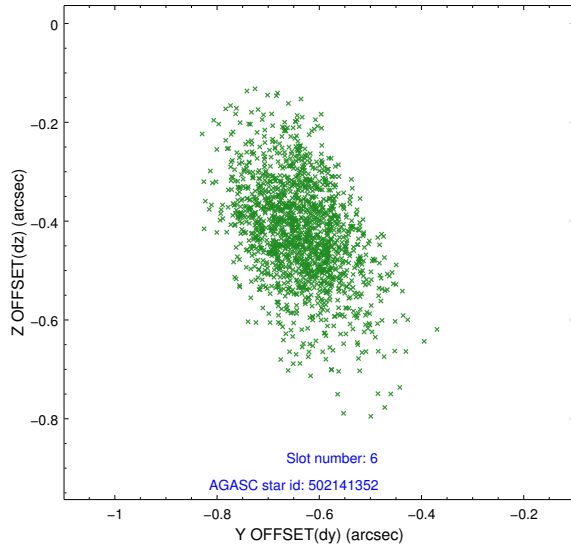
2.4.3 Slot 5



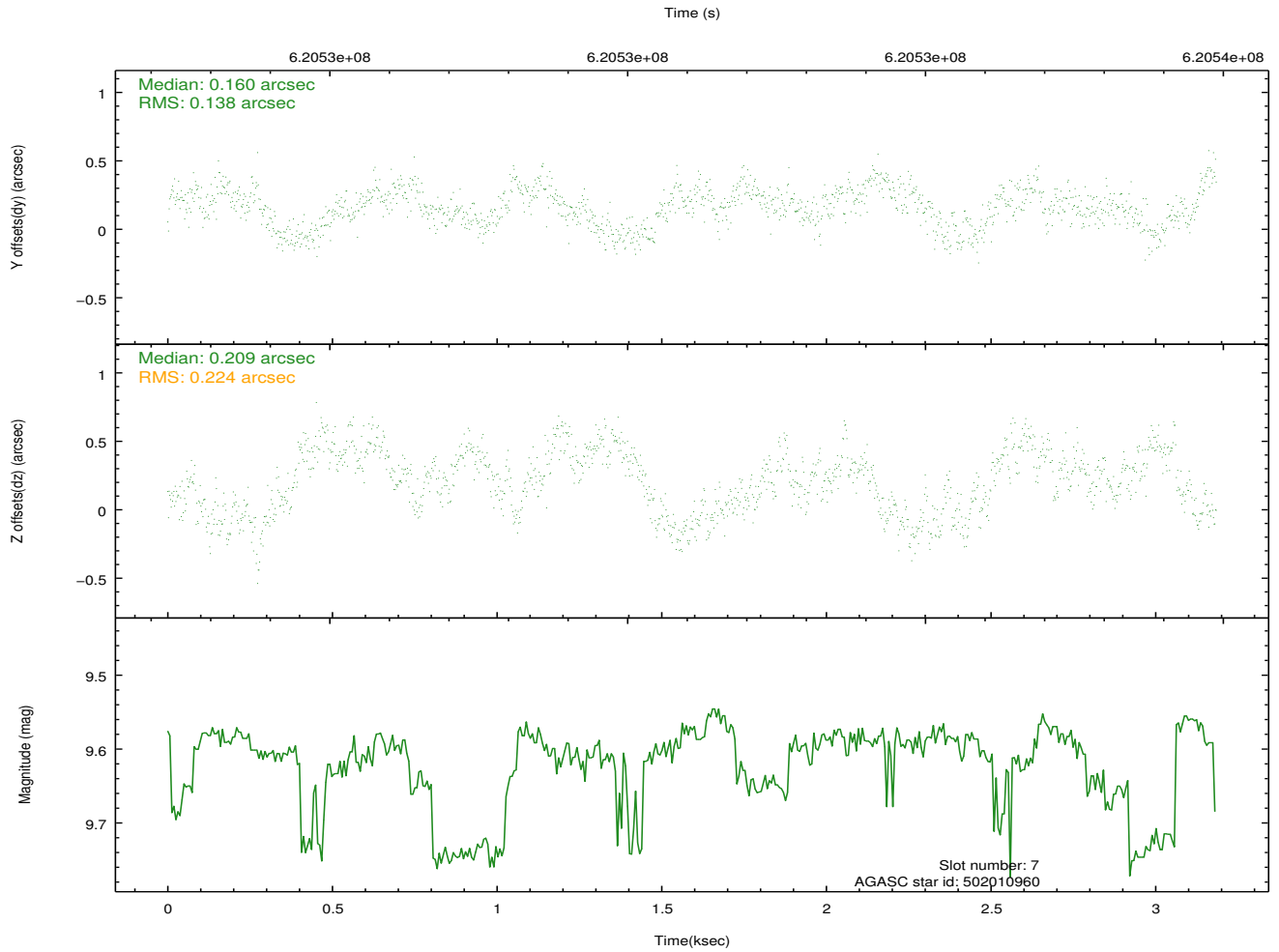
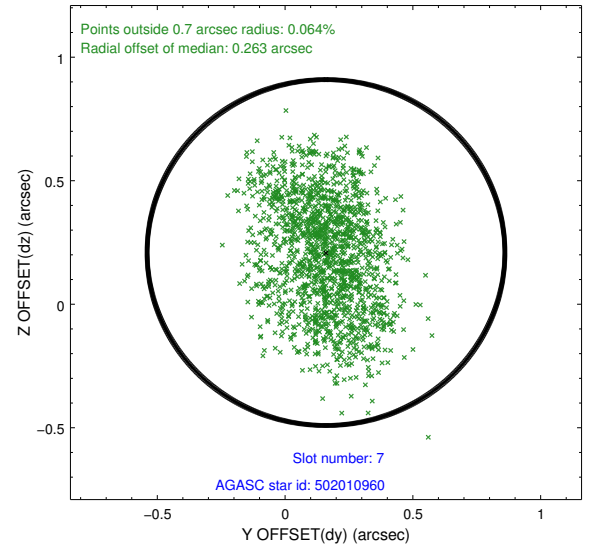
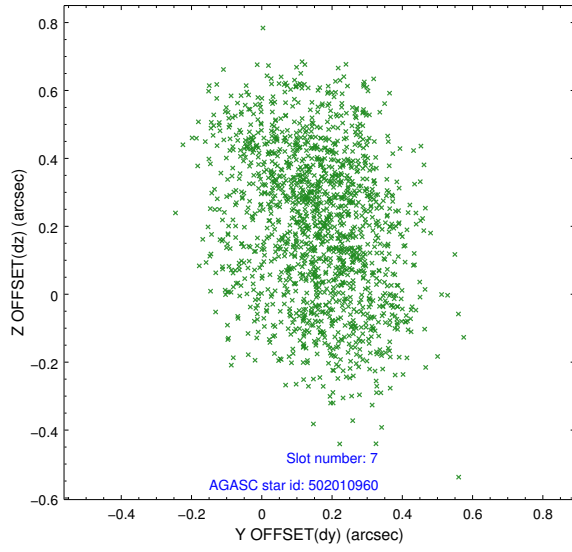
Time (s)



2.4.4 Slot 6

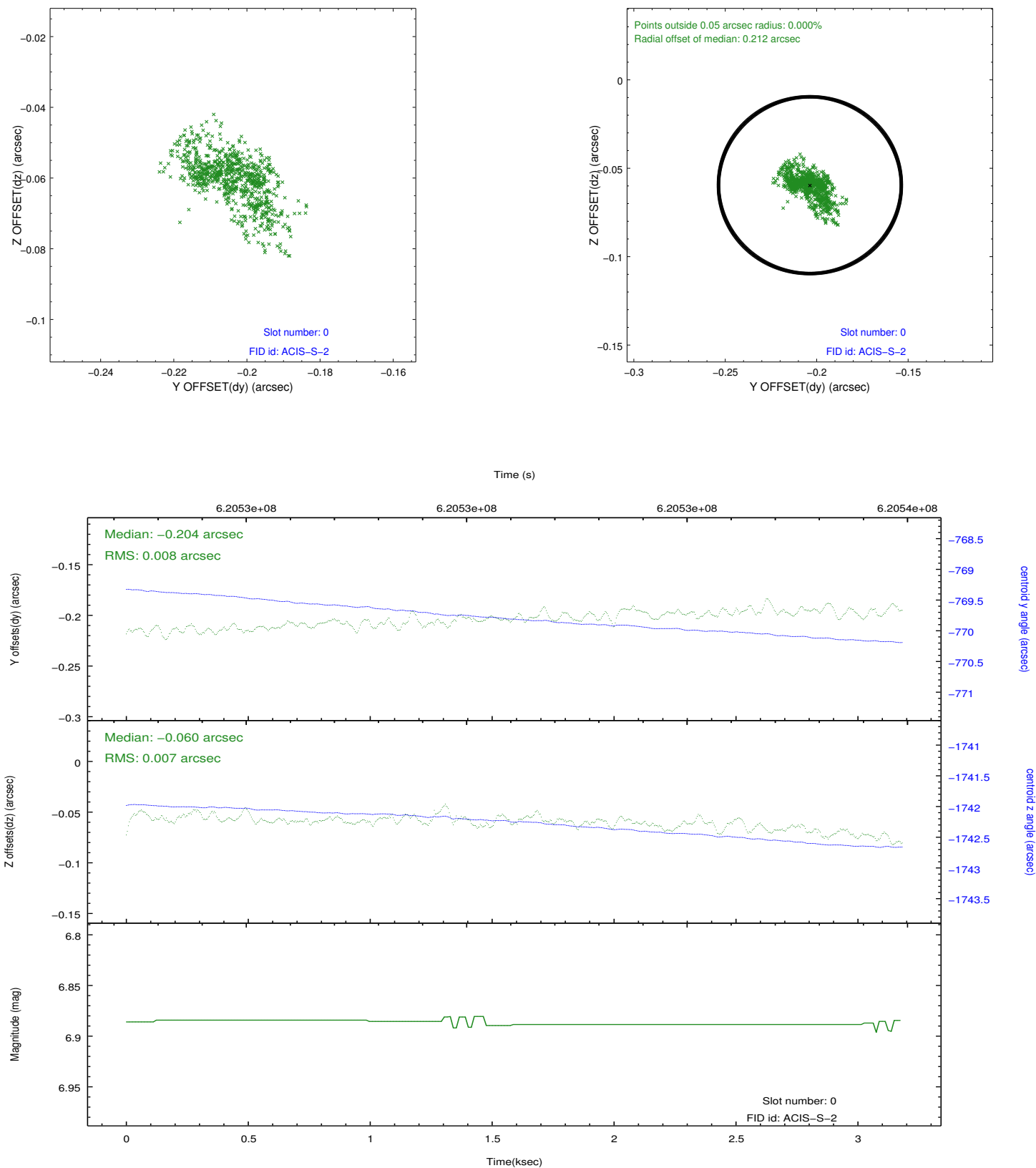


2.4.5 Slot 7

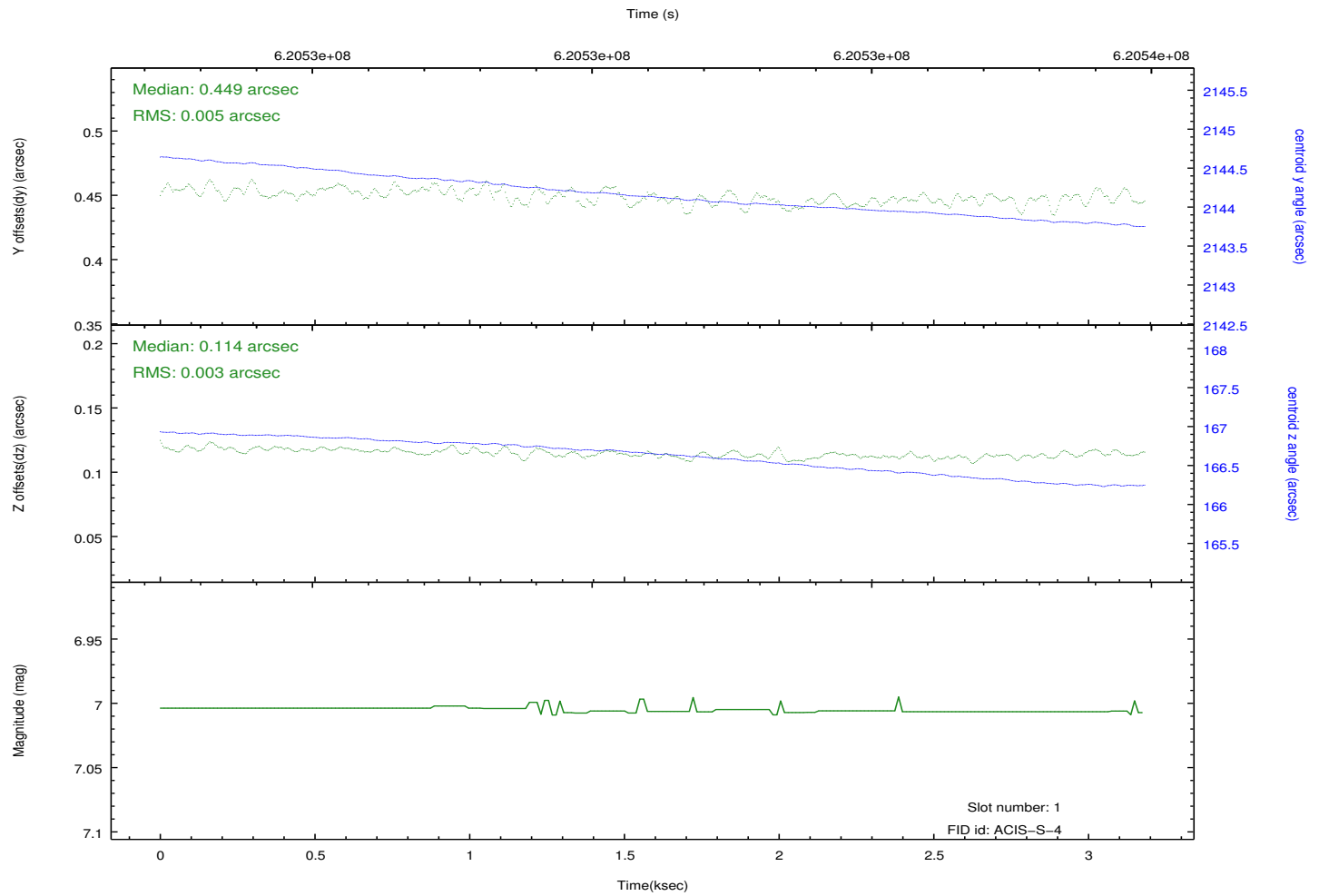
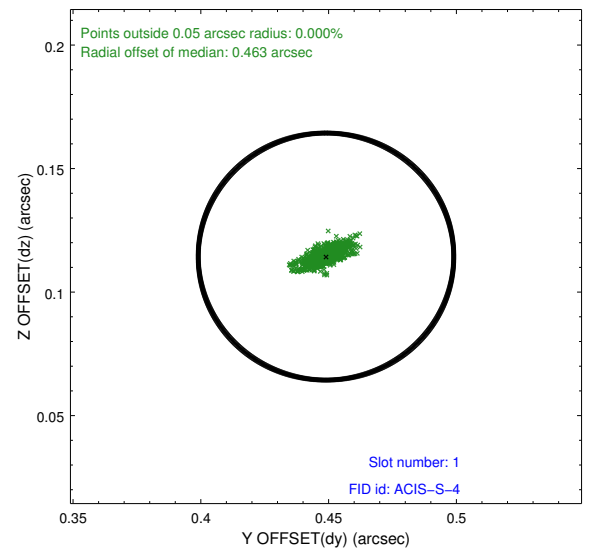
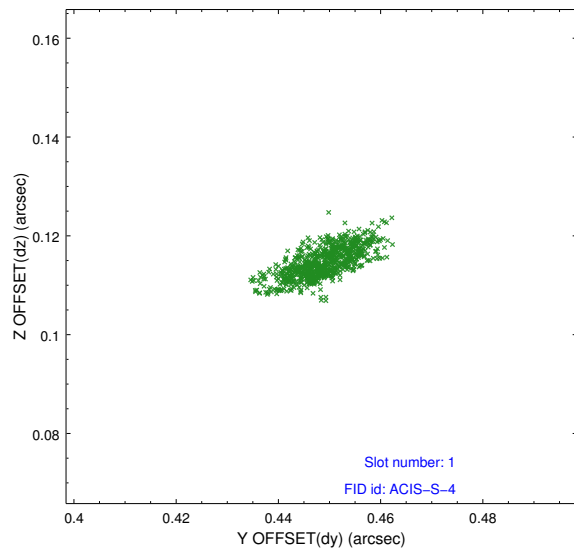


2.5 FID Slots

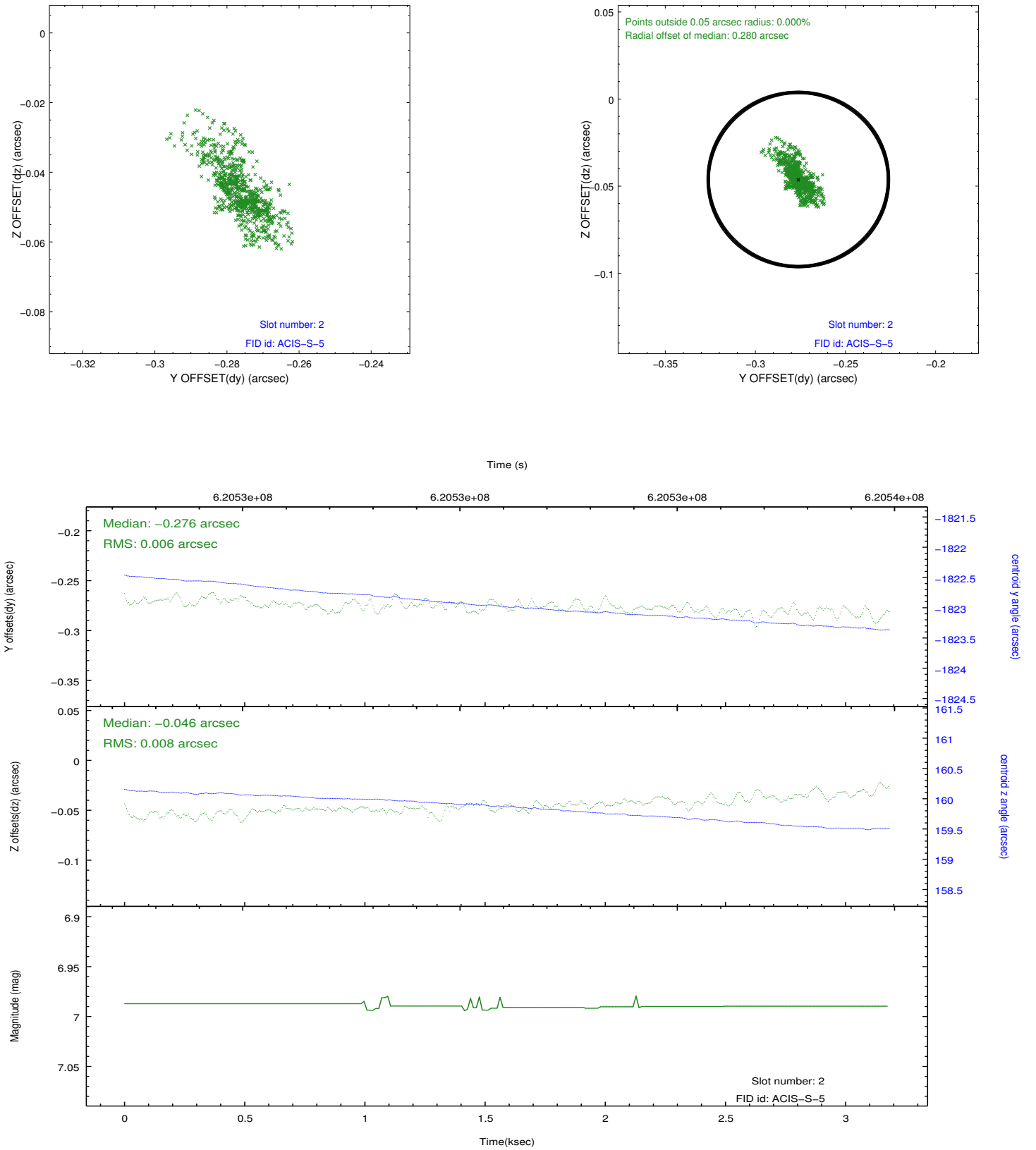
2.5.1 Slot 0



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)	2017.08.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.1049233756065

A.2 Comments