

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19490 - L2 Version 2
Chandra X-Ray Center

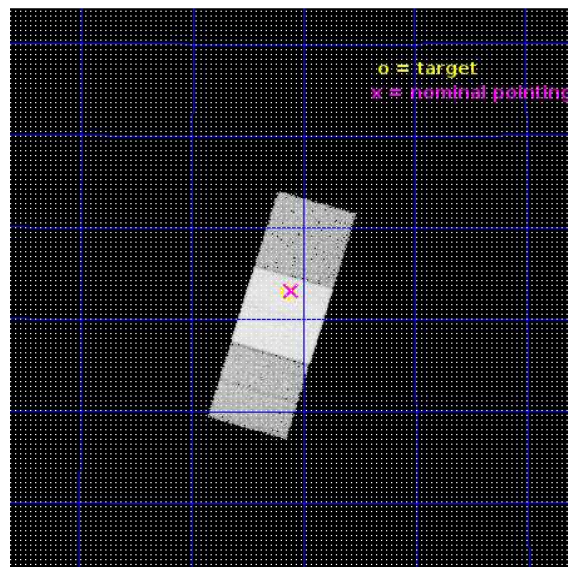
L2 Processing Date : Dec 13 2017

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1 Front

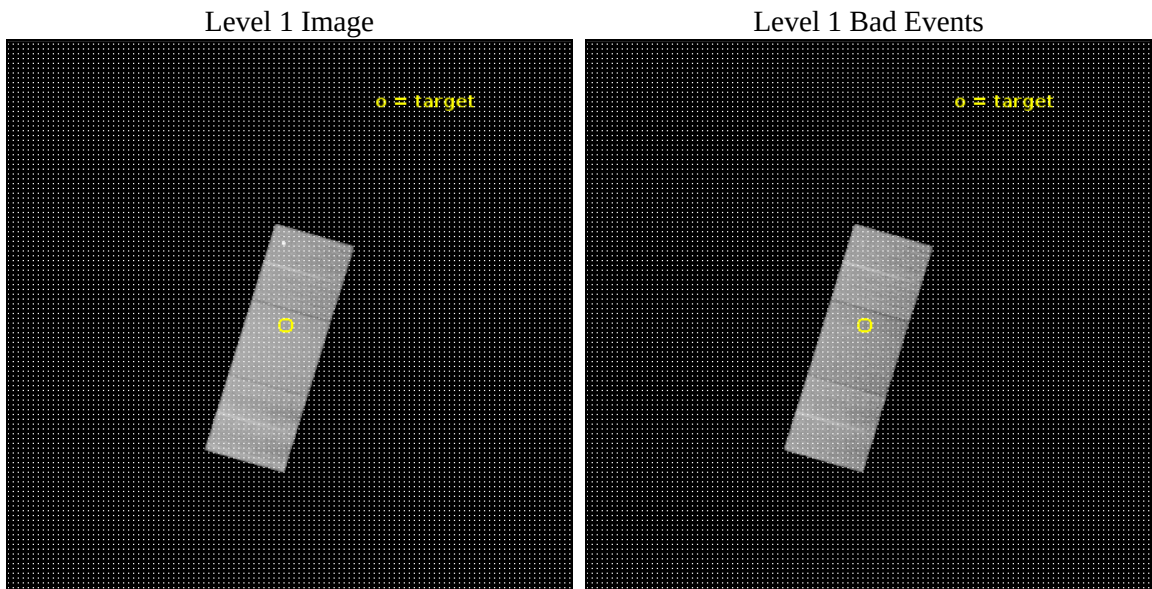
seq_num	703338	Sequence number
obs_id	19490	Observation id
title	The peculiar globular cluster NGC2419: is it an ultra-compact dwarf harboring a black hole?	Proposal title
observer	Peter Jonker	Principal investigator
object	NGC2419	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	114.535417	Observer's specified target RA [deg]
dec_targ	38.881917	Observer's specified target Dec [deg]
ra_nom	114.52721251112	Nominal RA [deg]
dec_nom	38.885539559596	Nominal Dec [deg]
roll_nom	106.63859503368	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27409.127197623	Sum of GTIs [s]
livetime	27051.00677248	Livetime [s]
ontime6	27409.08615768	Sum of GTIs [s]
ontime7	27409.127197623	Sum of GTIs [s]
ontime8	27396.480876207	Sum of GTIs [s]
l2events	149028	Number of level 2 events



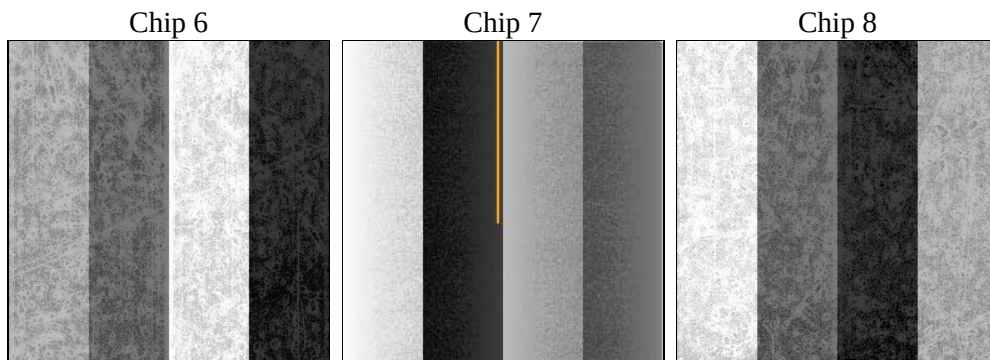
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27300.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	27409.127197623	Sum of GTIs [s]
caldbver	4.7.6	 	ontime6	27409.08615768	Sum of GTIs [s]
date	2017-12-13T22:18:42	Date and time of file creation	ontime7	27409.127197623	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	27396.480876207	Sum of GTIs [s]
			l1events	721349	Number of level 1 events

2.1.4 Events

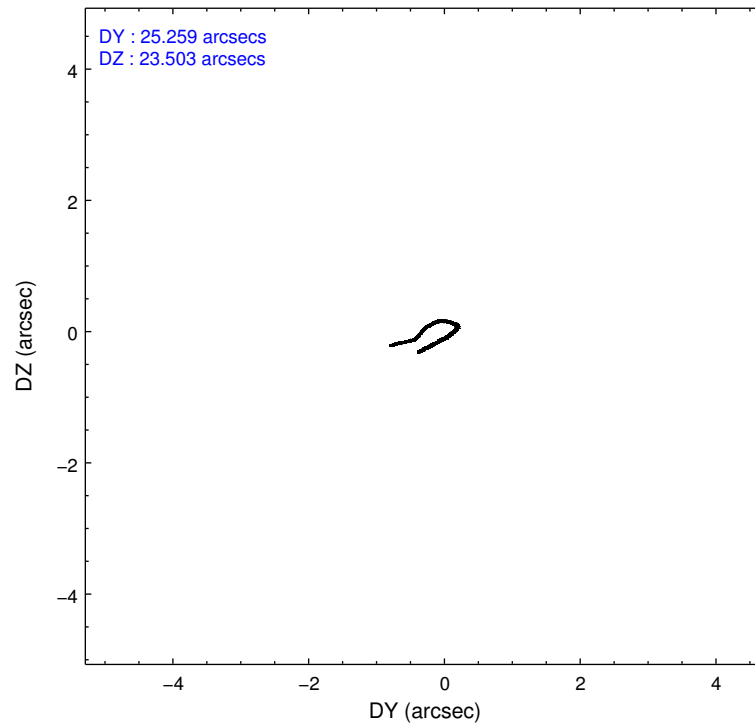
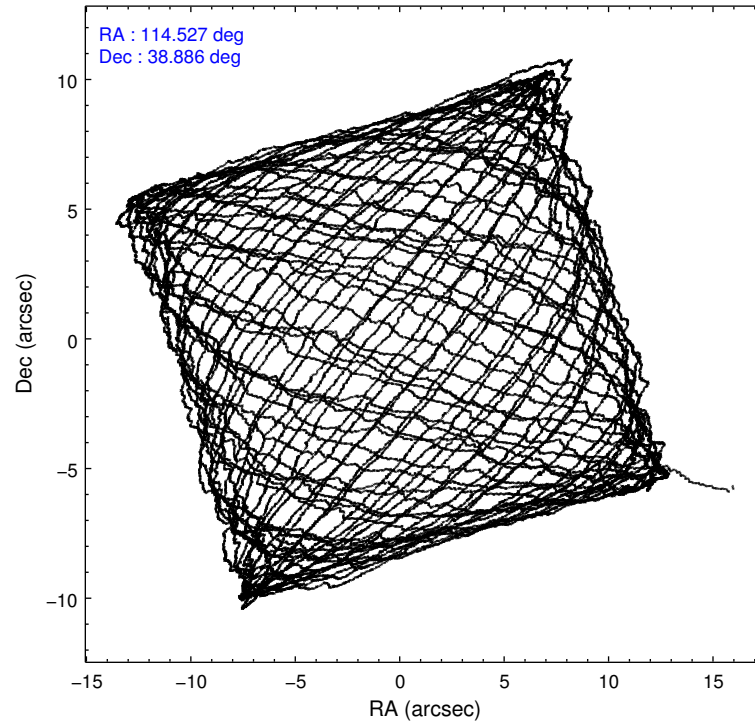
	ccd 6	ccd 7	ccd 8
level 1 events	209614	252087	259648
rejected events	178862	142356	192035
rejected %	85%	56%	73%

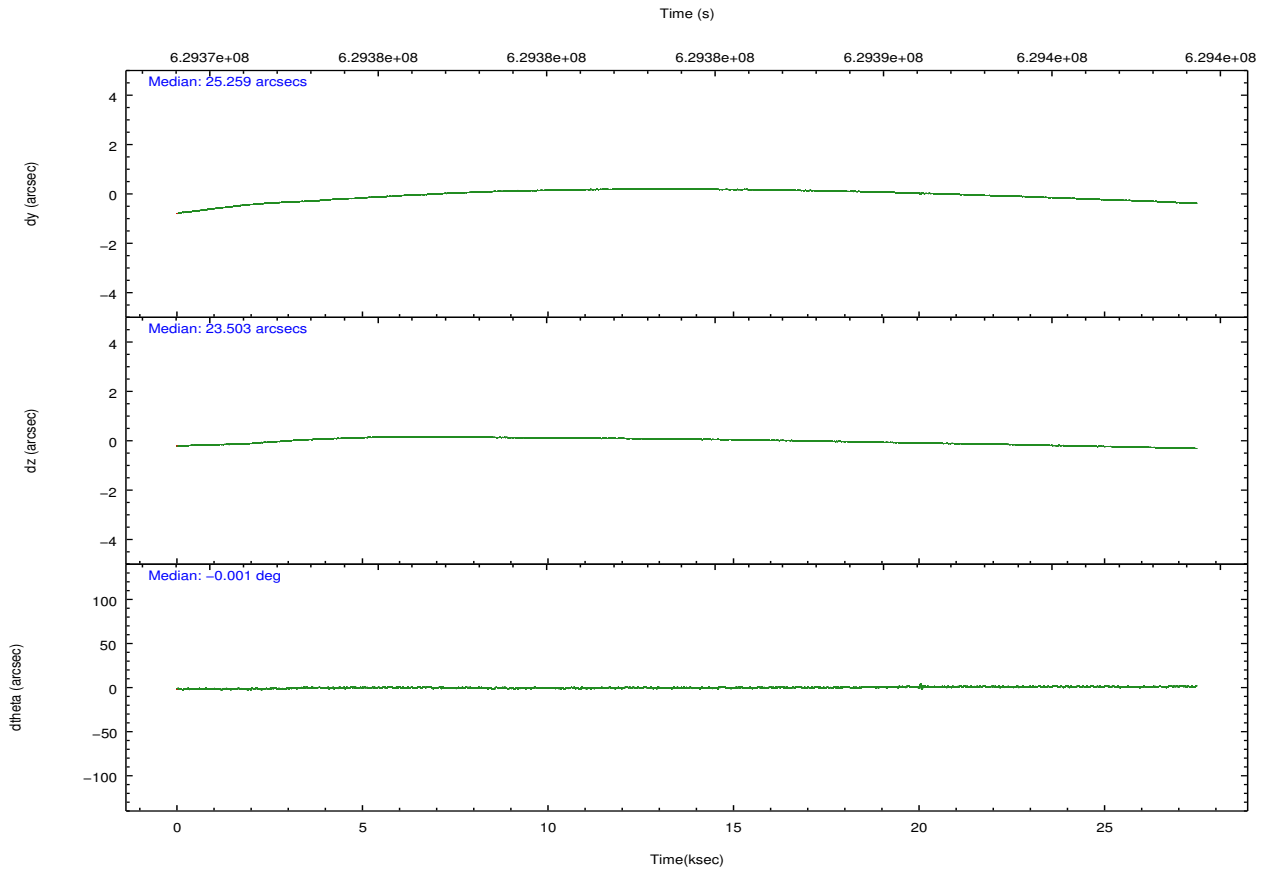
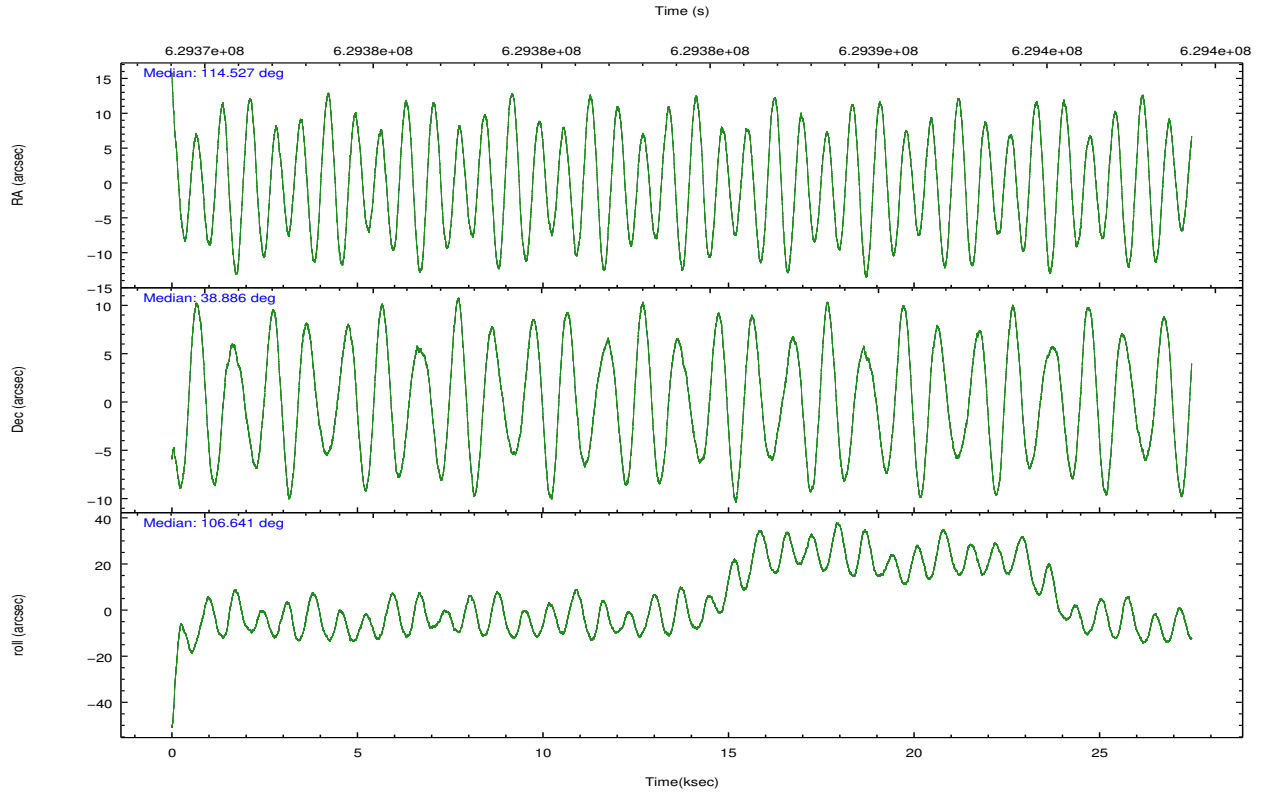
	ccd 6	ccd 7	ccd 8
grade 0 events	15604	9252	18710
	7%	3%	7%
grade 1 events	158	357	203
	0%	0%	0%
grade 2 events	5216	23169	16598
	2%	9%	6%
grade 3 events	2181	8704	7098
	1%	3%	2%
grade 4 events	2304	8627	6550
	1%	3%	2%
grade 5 events	9468	25348	13879
	4%	10%	5%
grade 6 events	5456	59995	18665
	2%	23%	7%
grade 7 events	169227	116635	177945
	80%	46%	68%

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	114.553161	114.5272125111233	CCD I2 on	N	N
[deg] Pointing Dec	38.866991	38.88553955959586	CCD I3 on	N	N
[deg] Pointing Roll	106.465690	106.6385950336757	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)	629370601.184000	629369685.13478	CCD S5 on	N	N
Observation start date	2017-12-11T09:08:52	2017-12-11T08:54:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	629397901.184000	629399003.724	On-chip summing requested	N	N
Observation end date	2017-12-11T16:43:52	2017-12-11T17:03:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



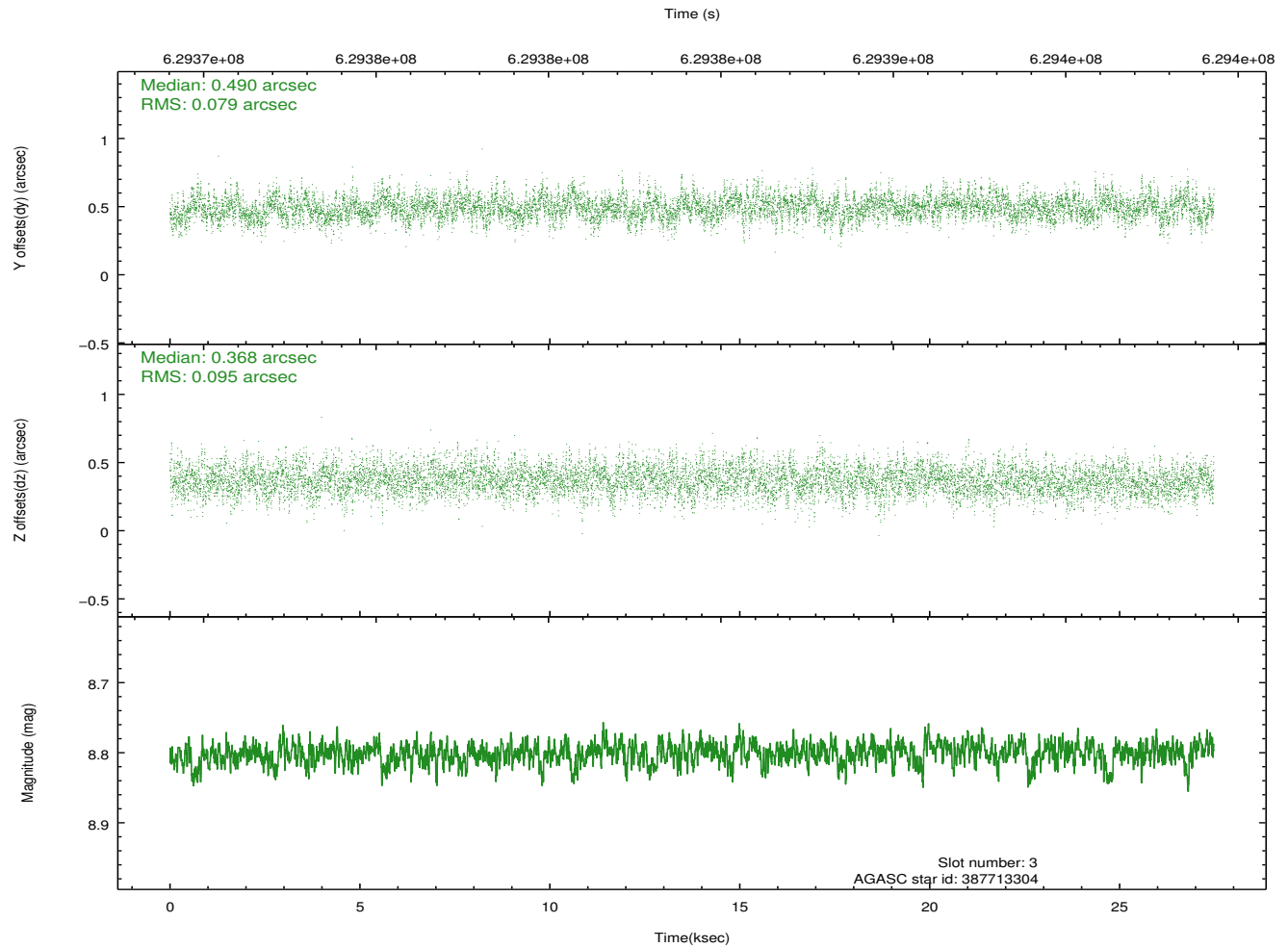
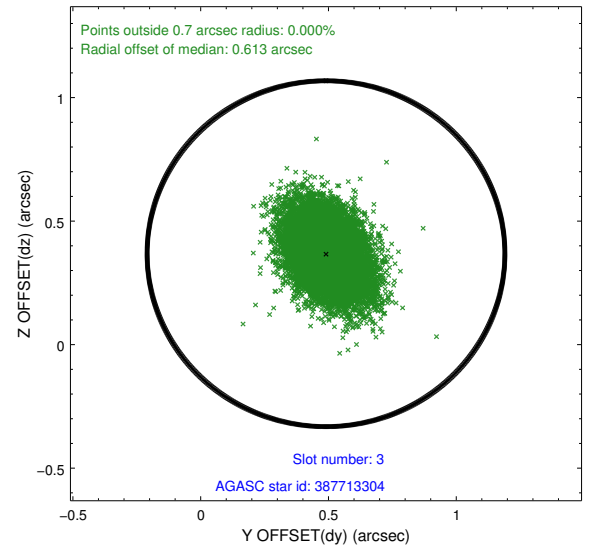
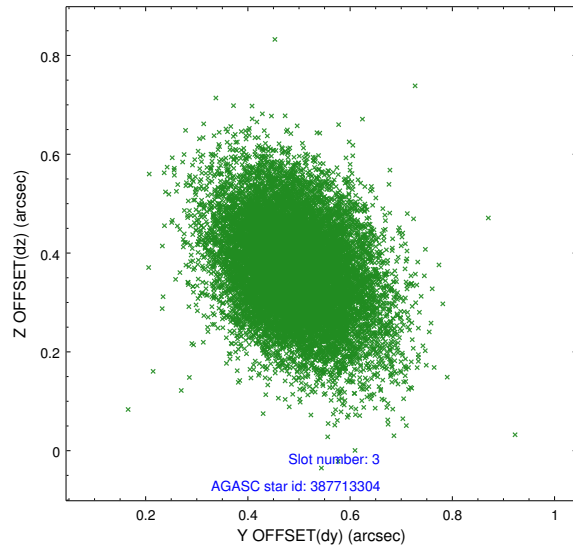


Slot Statistics

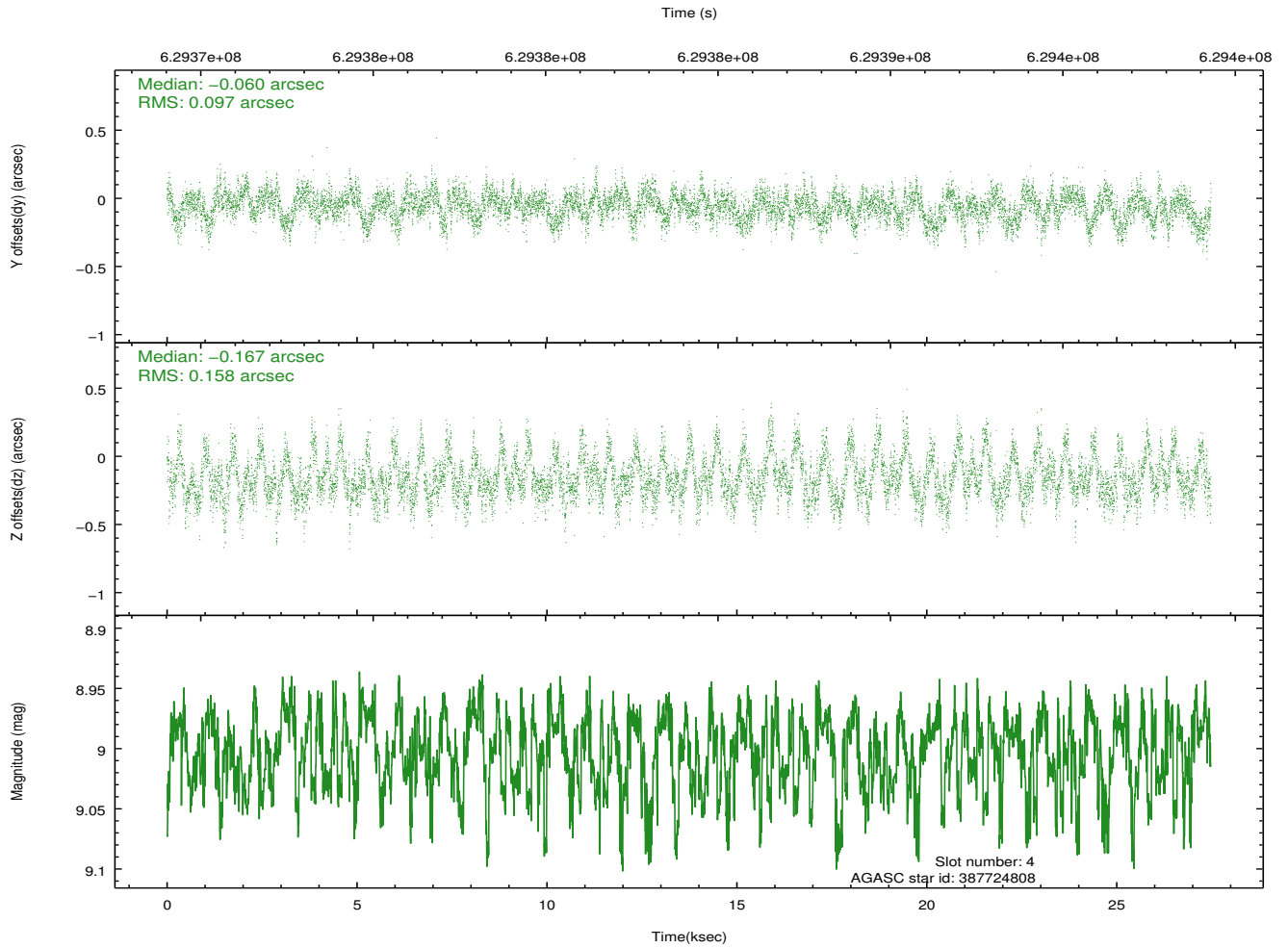
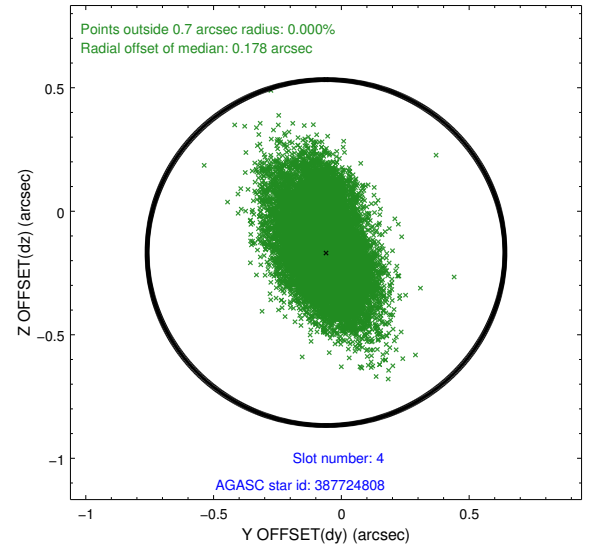
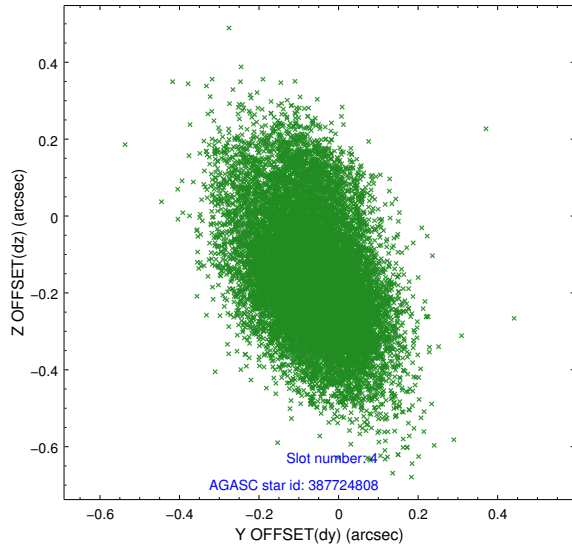
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.14	6703	0.028	0.046	0.010	0.019	0.000000	0.000000	917.49	-1740.73
1	FID		ACIS-S-2	7.04	6703	-0.442	-0.281	0.010	0.023	0.000000	0.000000	-778.83	-1745.59
2	FID		ACIS-S-4	7.15	6703	0.388	0.243	0.010	0.021	0.000000	0.000000	2135.18	163.44
3	GUIDE	used	387713304	8.80	13389	0.490	0.368	0.129	0.219	114.854129	38.795070	-486.16	-736.13
4	GUIDE	used	387724808	9.00	13390	-0.060	-0.167	0.191	0.334	114.178337	38.188370	-2040.03	1708.89
5	GUIDE	used	387727880	8.40	13392	0.431	0.156	0.135	0.222	114.692394	38.330570	-1964.01	170.85
6	GUIDE	used	388237912	8.88	13385	-0.681	0.191	0.166	0.281	114.579354	39.521013	2236.62	-737.10
7	GUIDE	used	387715000	8.81	13331	-0.177	-0.562	0.184	0.284	113.726977	38.946553	940.09	2133.43

2.4 Star Slots

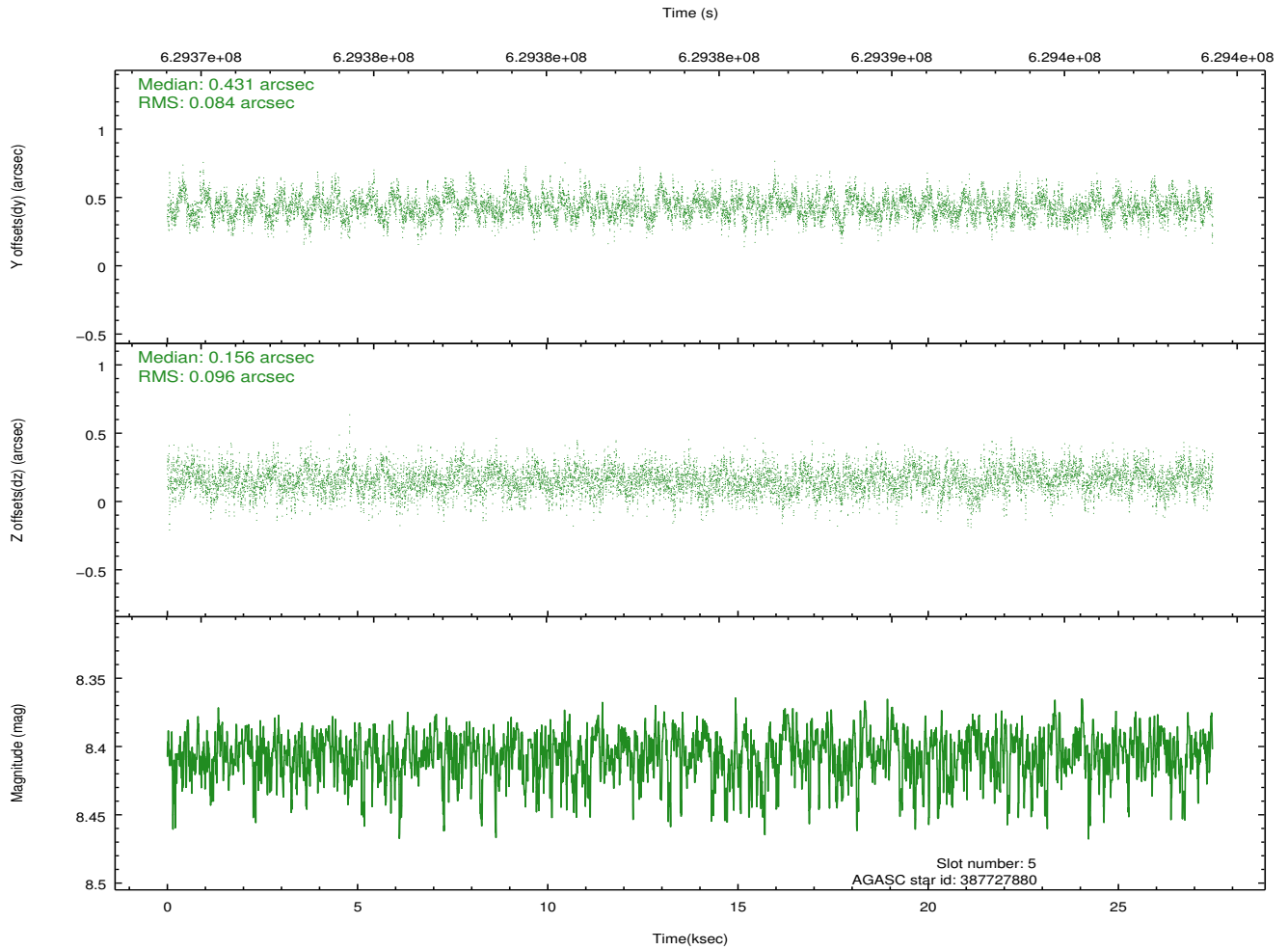
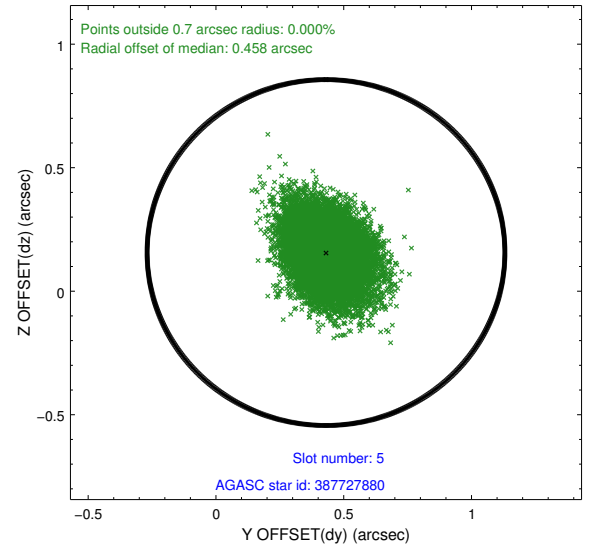
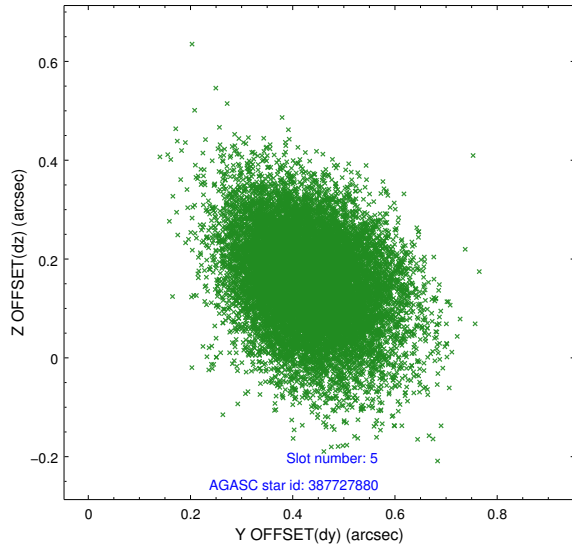
2.4.1 Slot 3



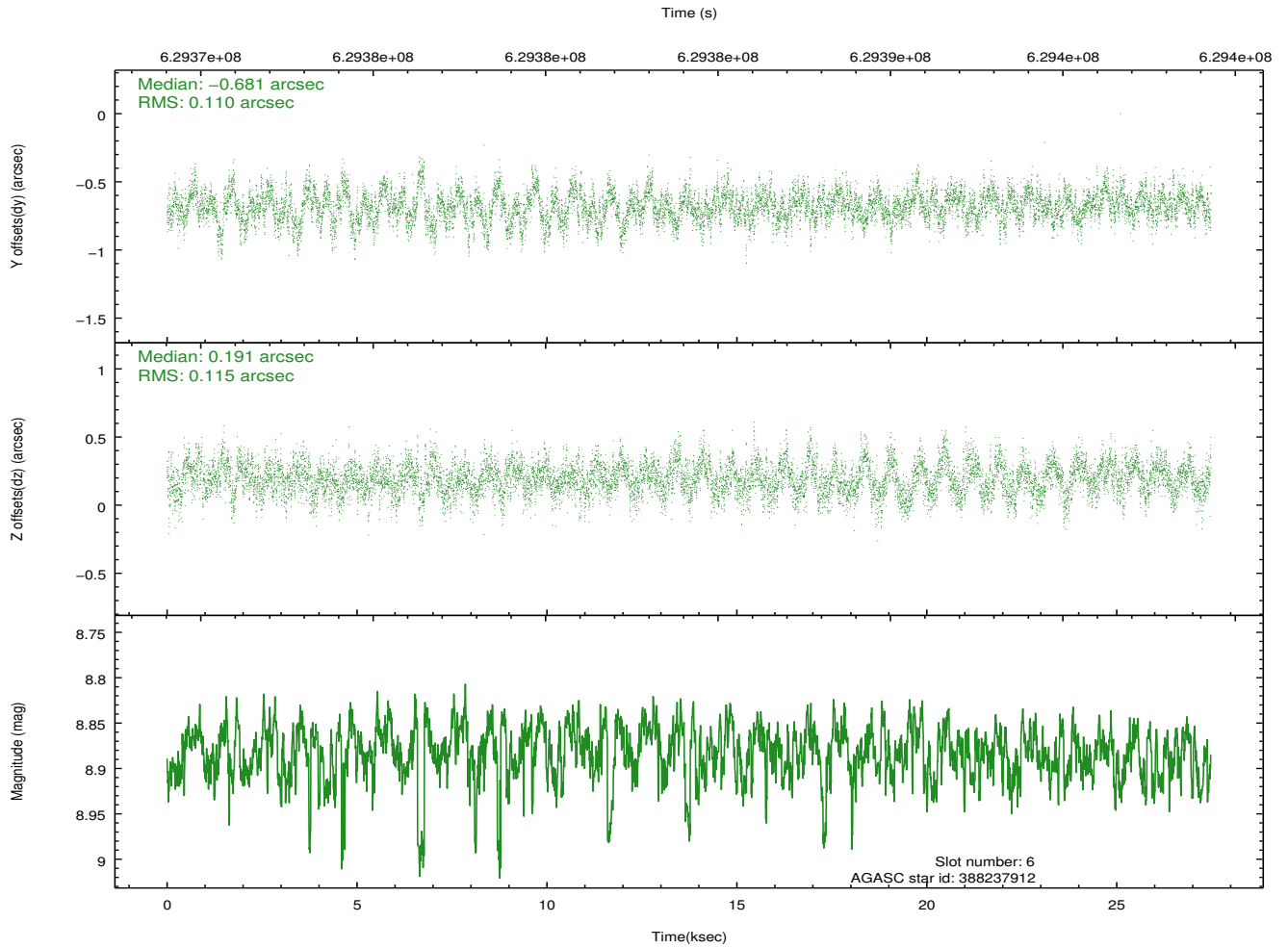
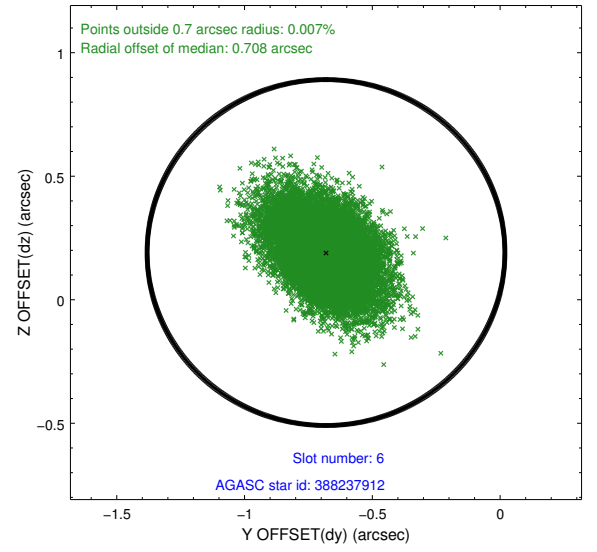
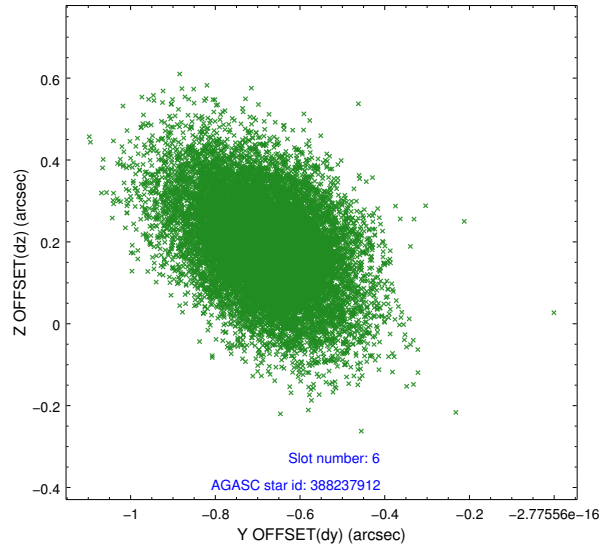
2.4.2 Slot 4



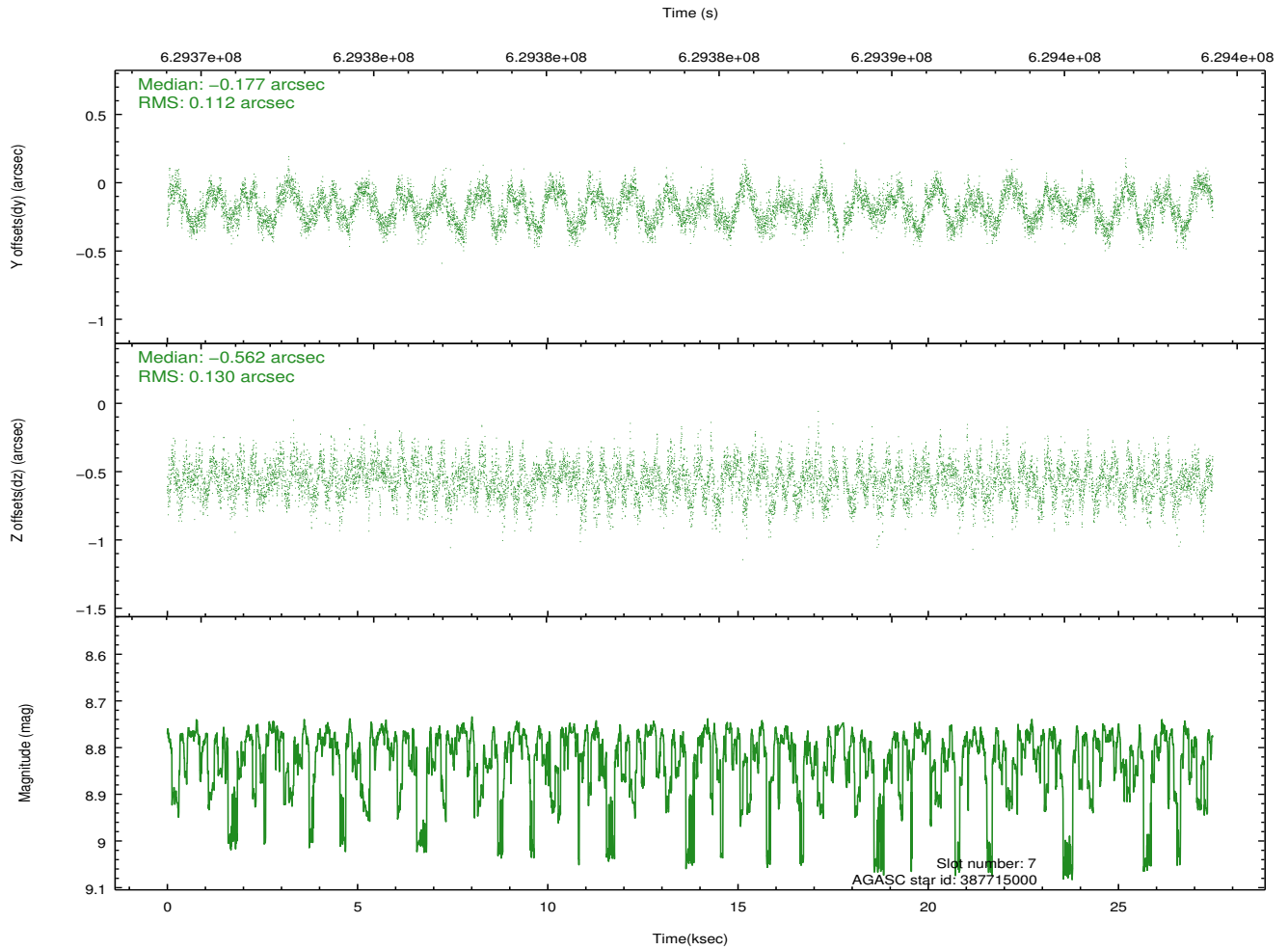
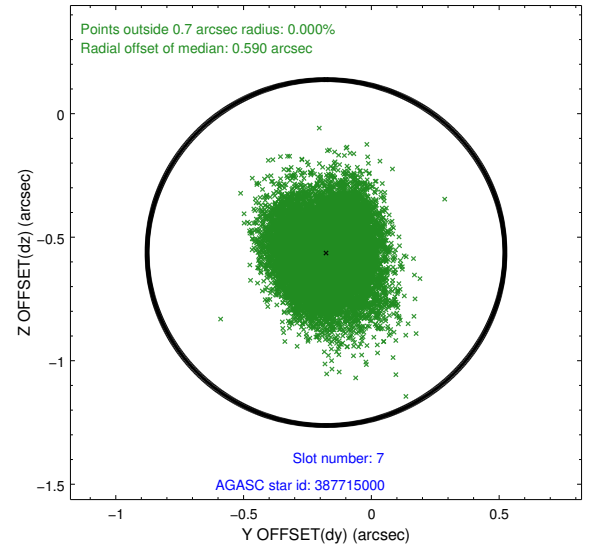
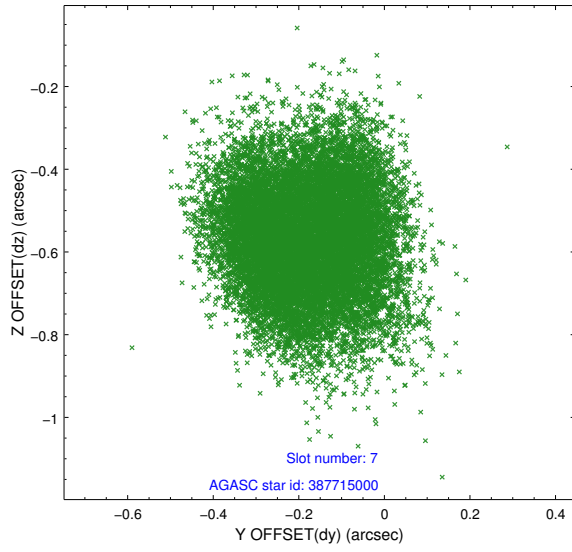
2.4.3 Slot 5



2.4.4 Slot 6

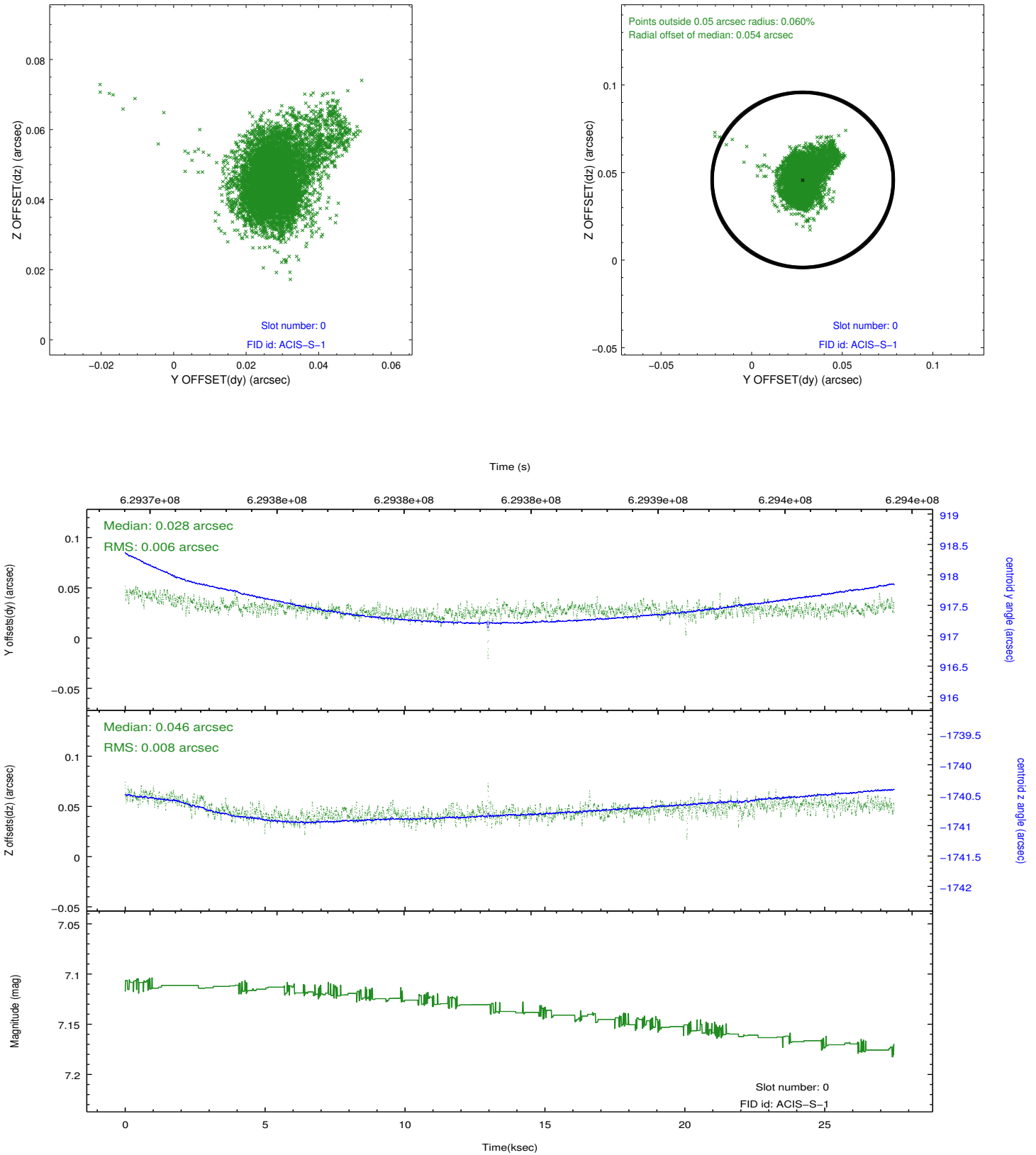


2.4.5 Slot 7

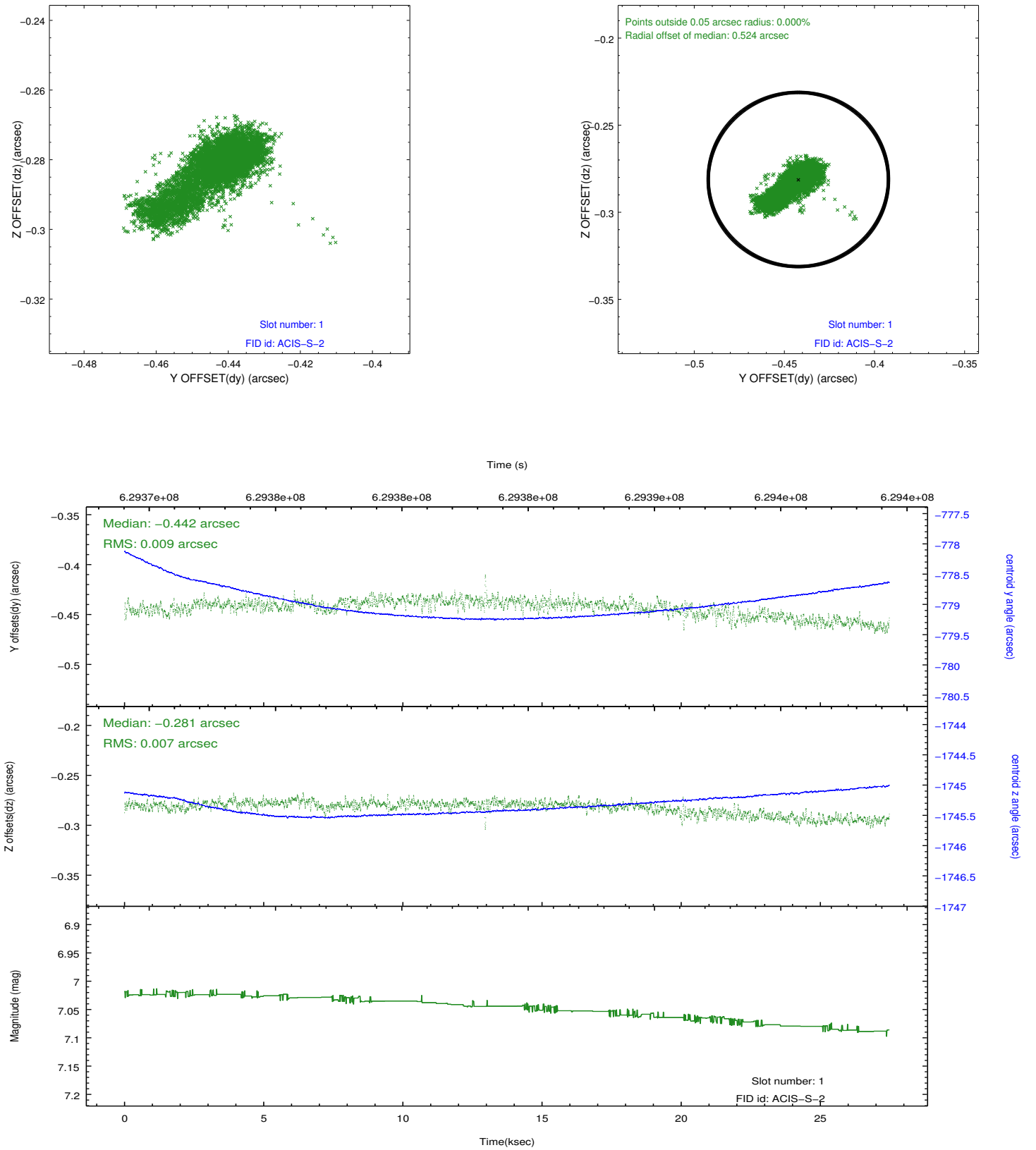


2.5 FID Slots

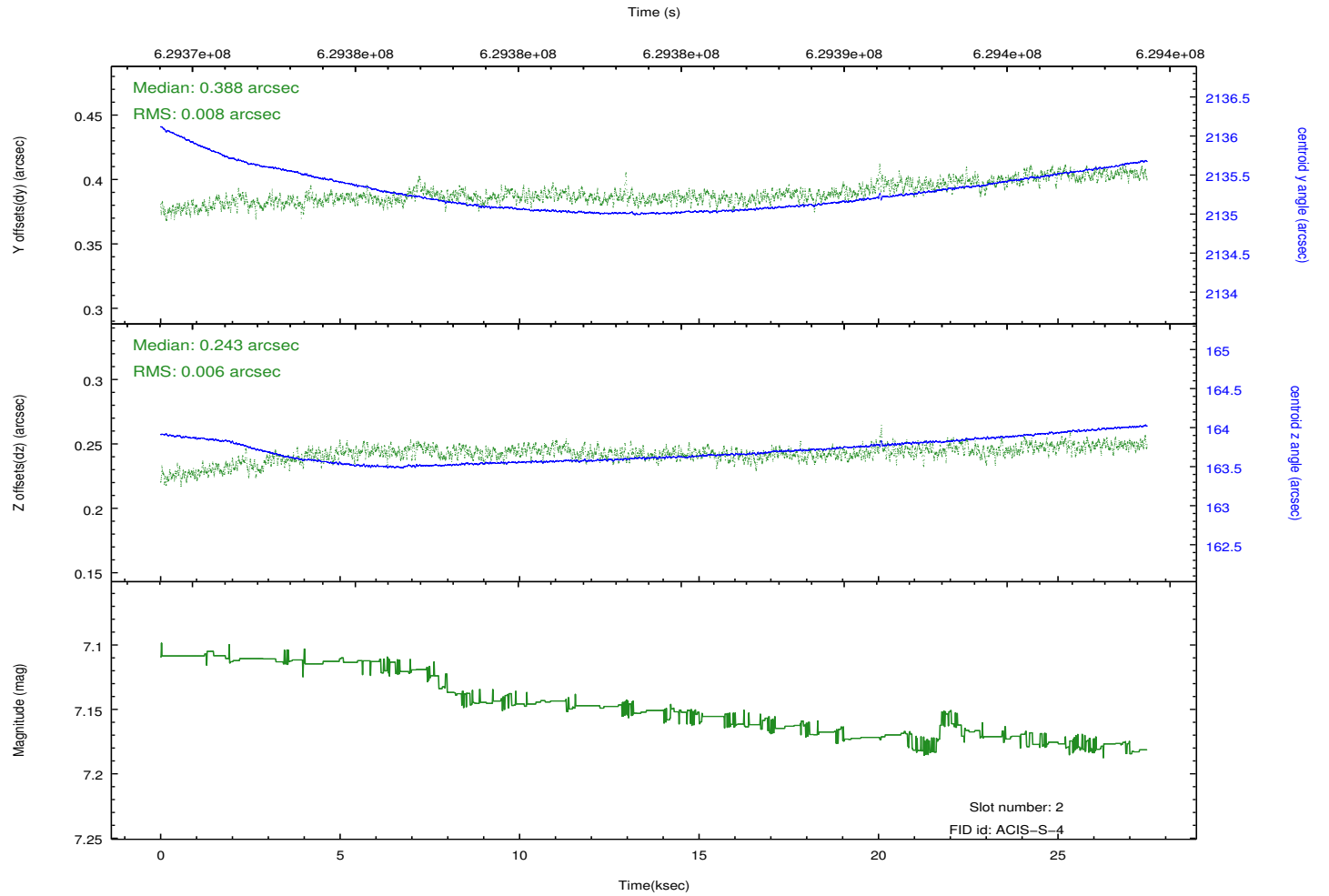
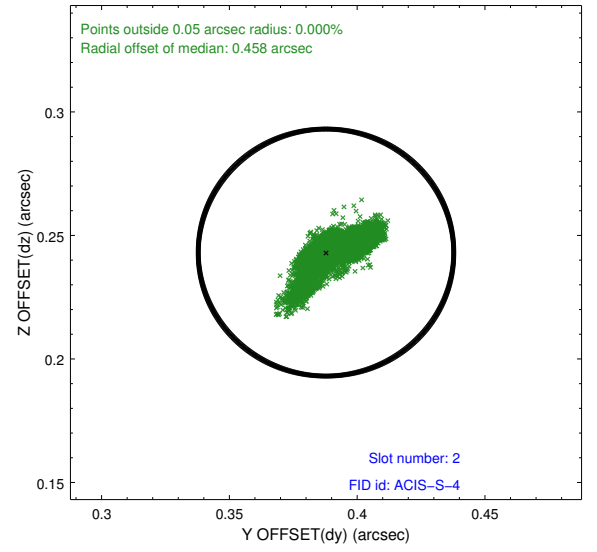
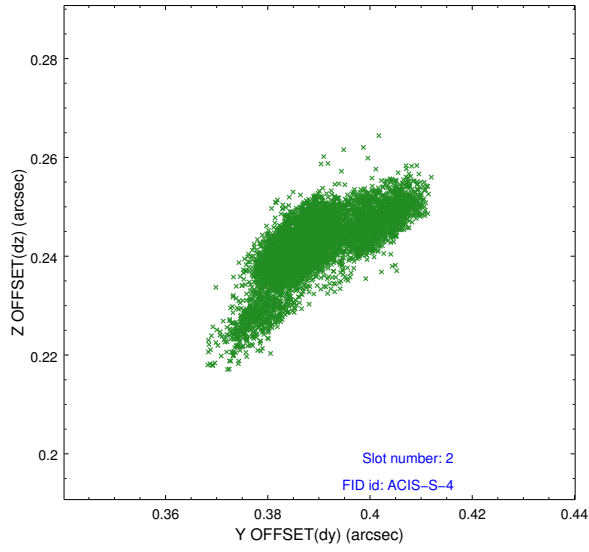
2.5.1 Slot 0



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)	2017.12.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.409127197623

A.2 Comments

Joint proposal with NRAO.

Observation coordinated with VLA.

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (114.41178,38.95584), (114.41451,38.94878), (114.43350,38.95323), (114.43833,38.96205).