

V&V Reference Report

L2 ASCDS Version : 10.8.3

Observation 22916 - L2 Version 1
Chandra X-Ray Center

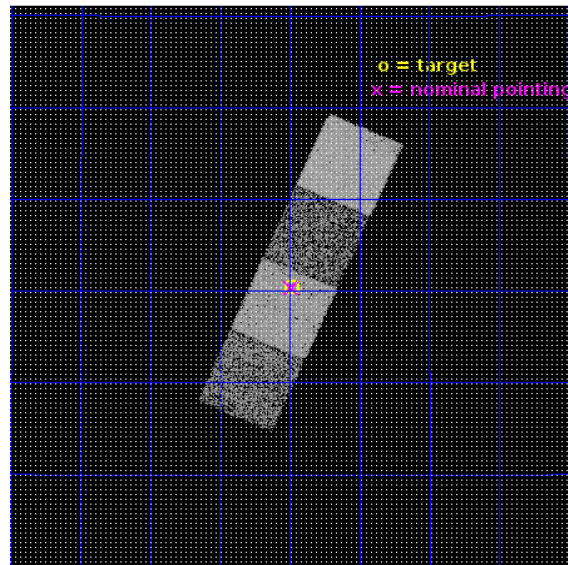
L2 Processing Date : Mar 25 2020

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1 Front

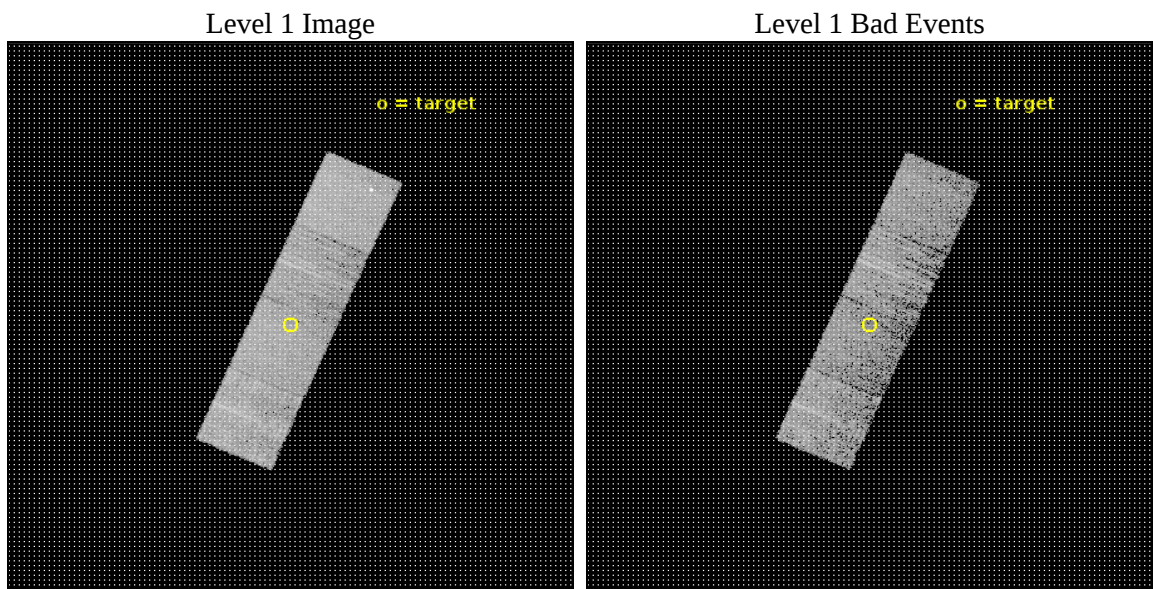
seq_num	704028	Sequence number
obs_id	22916	Observation id
title	Gravitational millilensing as a tool for studying the microarcsec-scale structure in PKS1413+135	Proposal title
observer	Ioannis Liodakis	Principal investigator
object	PKS 1413+135	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	213.995	Observer's specified target RA [deg]
dec_targ	13.339917	Observer's specified target Dec [deg]
ra_nom	213.997015068	Nominal RA [deg]
dec_nom	13.3394047401	Nominal Dec [deg]
roll_nom	113.649611733	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4061.000031352	Sum of GTIs [s]
livetime	4007.9400762777	Livetime [s]
ontime5	4061.000031352	Sum of GTIs [s]
ontime6	4061.000031352	Sum of GTIs [s]
ontime7	4061.000031352	Sum of GTIs [s]
ontime8	4061.000031352	Sum of GTIs [s]
l2events	52123	Number of level 2 events



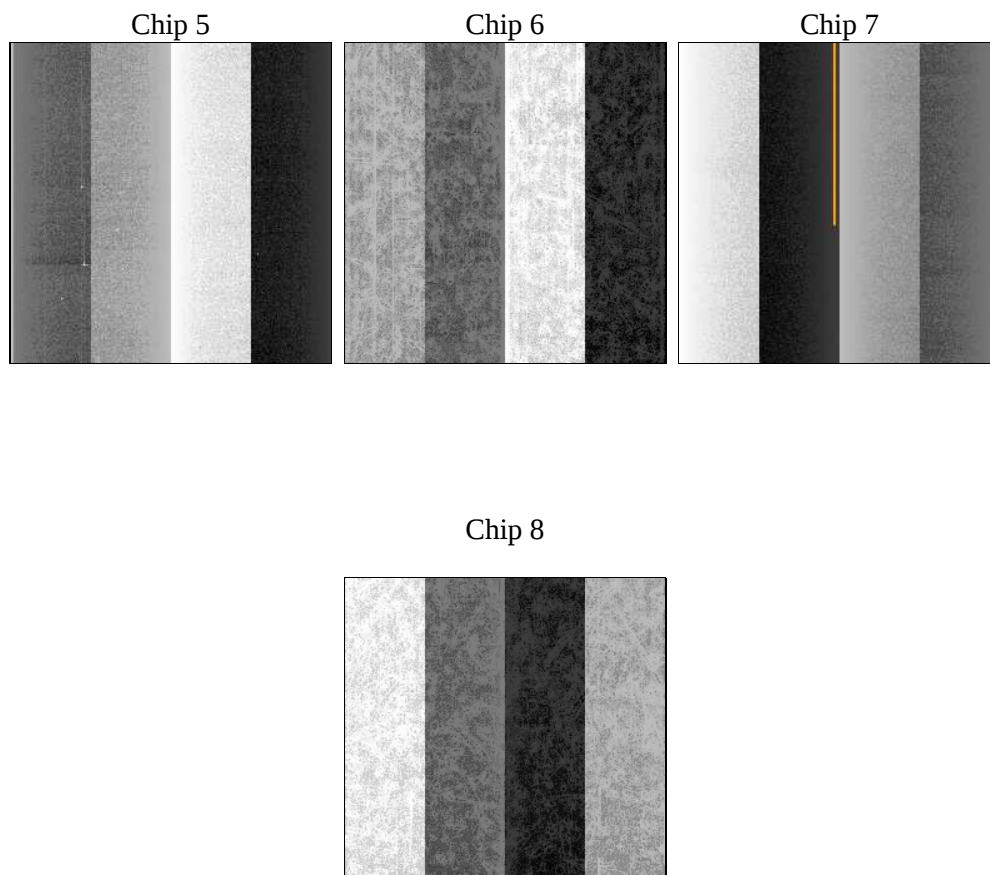
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.3	Processing system revision	ontime	4061.000031352	Sum of GTIs [s]
caldbver	4.9.1	 	ontime5	4061.000031352	Sum of GTIs [s]
date	2020-03-24T19:58:36	Date and time of file creation	ontime6	4061.000031352	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	4061.000031352	Sum of GTIs [s]
			ontime8	4061.000031352	Sum of GTIs [s]
			l1events	177313	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	52705	35870	42434	46304
rejected events	26761	31258	23172	32728
rejected %	50%	87%	54%	70%

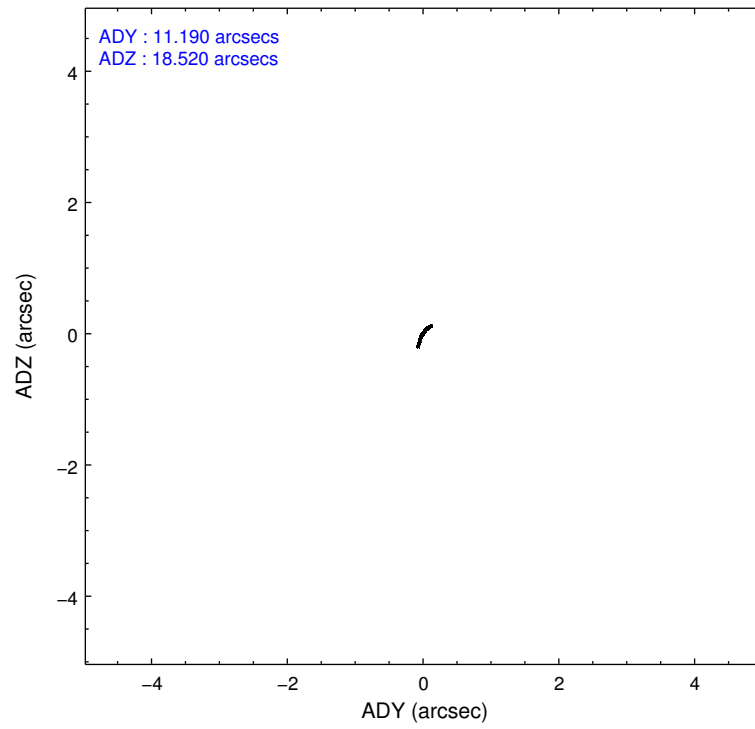
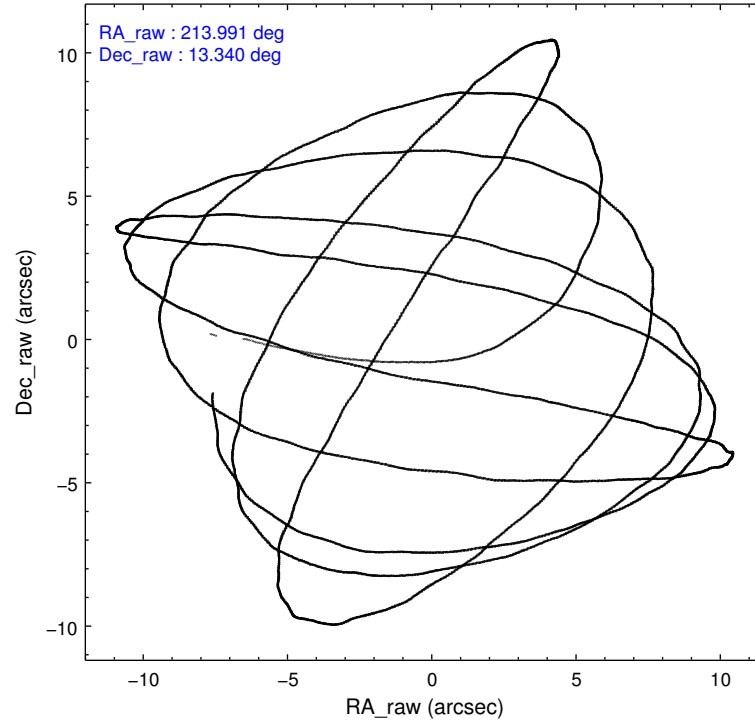
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1975	1609	1726	4401
	3%	4%	4%	9%
grade 1 events	169	14	47	44
	0%	0%	0%	0%
grade 2 events	8139	1162	4072	3186
	15%	3%	9%	6%
grade 3 events	959	366	1433	1250
	1%	1%	3%	2%
grade 4 events	753	380	1442	1151
	1%	1%	3%	2%
grade 5 events	3291	1434	3910	2269
	6%	3%	9%	4%
grade 6 events	14170	1102	10618	3599
	26%	3%	25%	7%
grade 7 events	23249	29803	19186	30404
	44%	83%	45%	65%

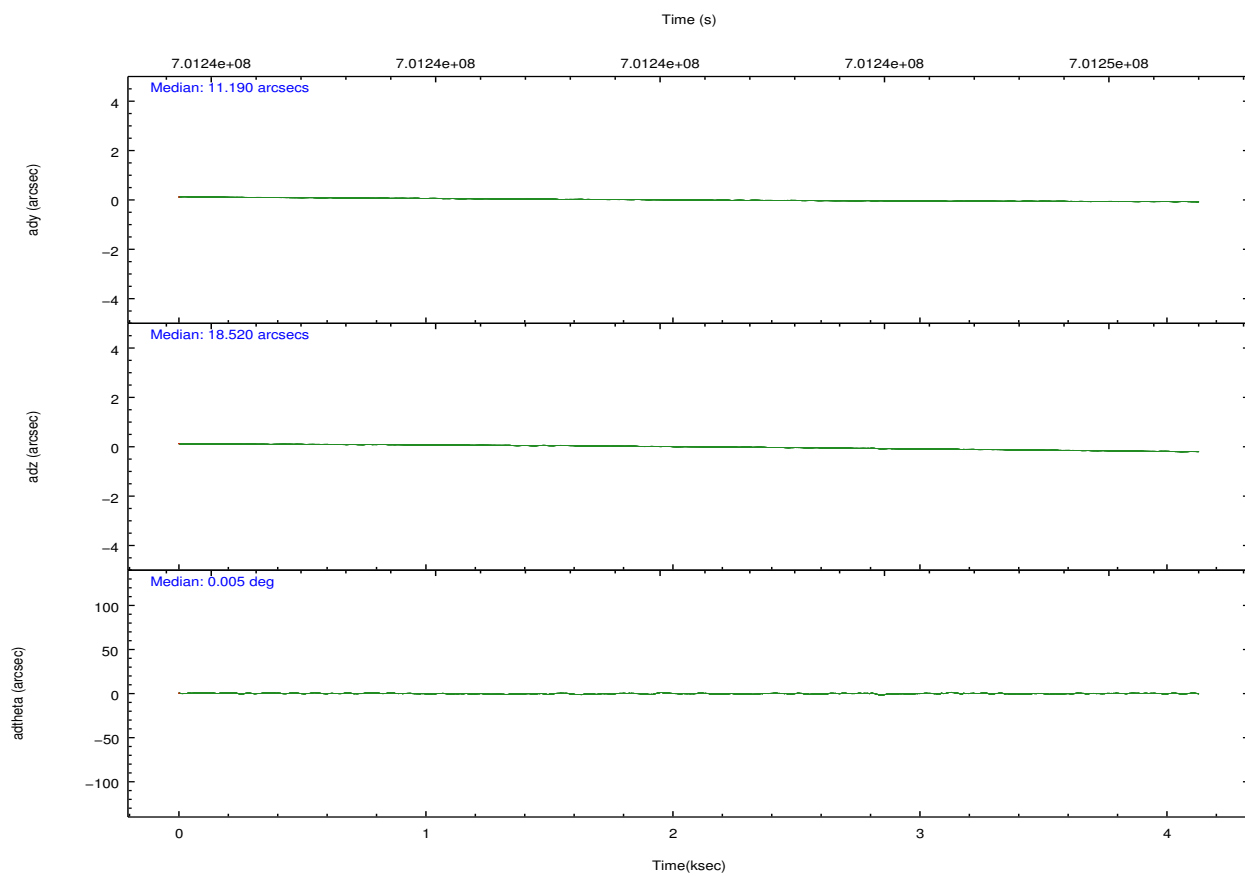
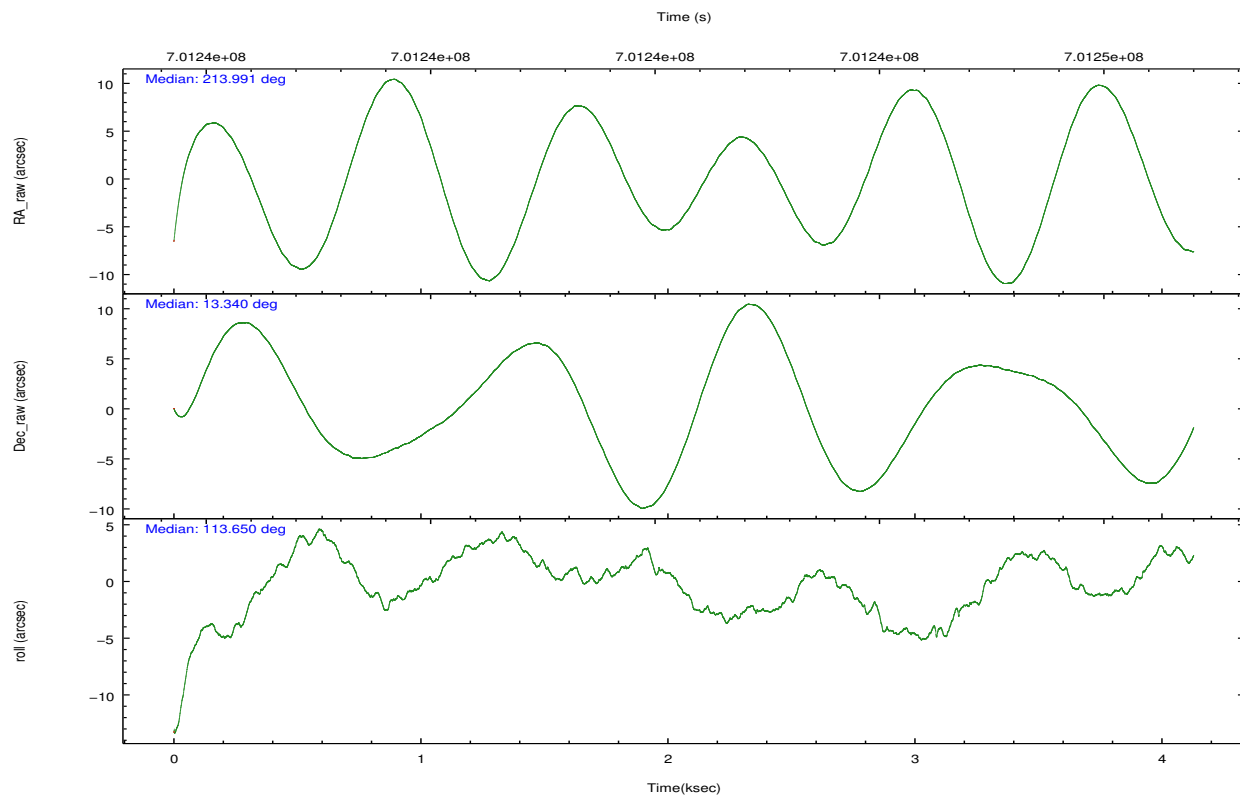
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	214.013604	213.997015068
[deg] Pointing Dec	13.324317	13.3394047401
[deg] Pointing Roll	113.495711	113.649611733
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	701242196.184000	701241059.2428401
Observation start date	2020-03-22T05:28:47	2020-03-22T05:10:59
[s] Observation end time (MET)	701246196.184000	701247288.68071
Observation end date	2020-03-22T06:35:27	2020-03-22T06:54:48
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	Y	Y
CCD S2 on	O2	Y
CCD S3 on	Y	Y
CCD S4 on	O1	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



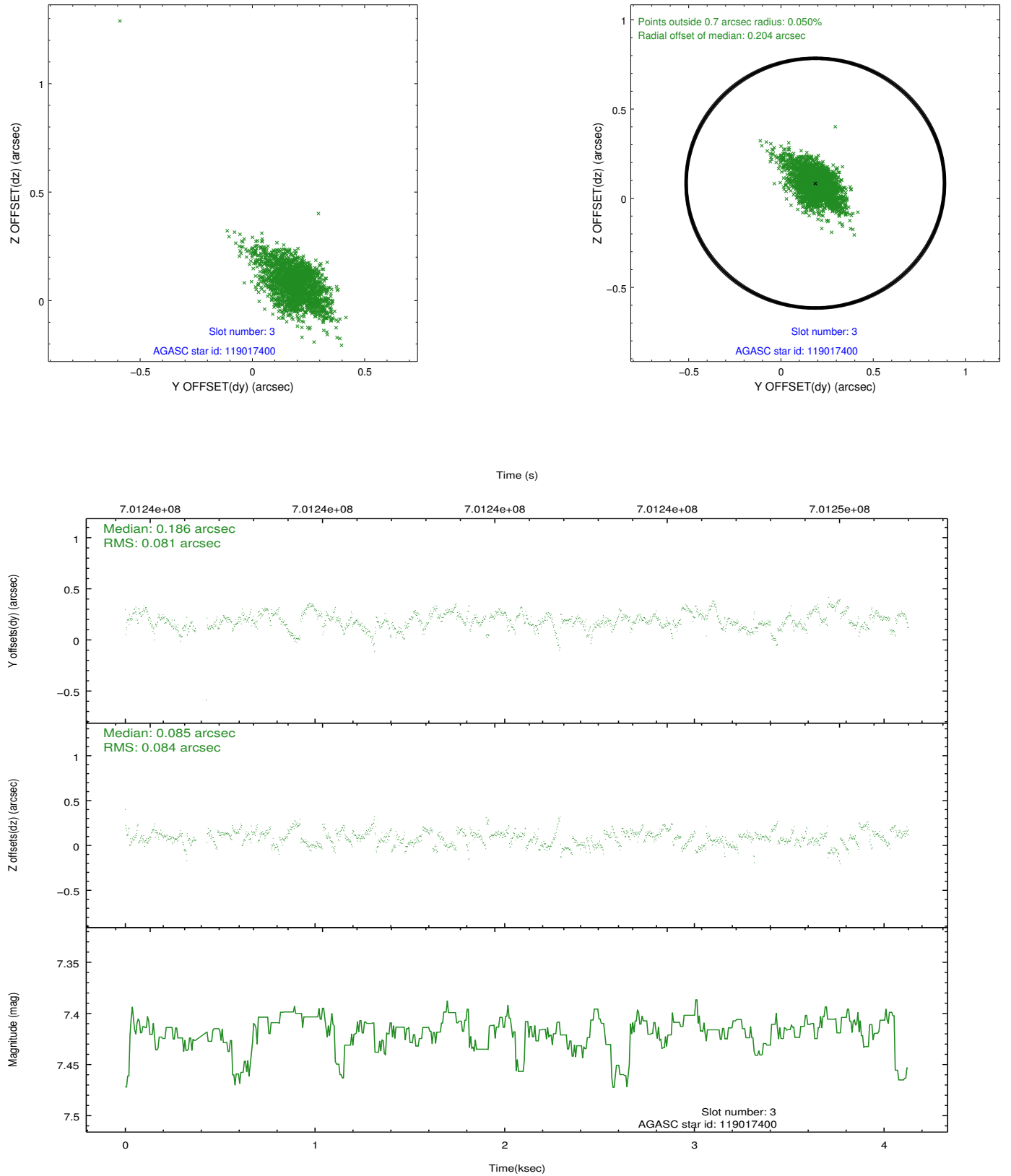


Slot Statistics

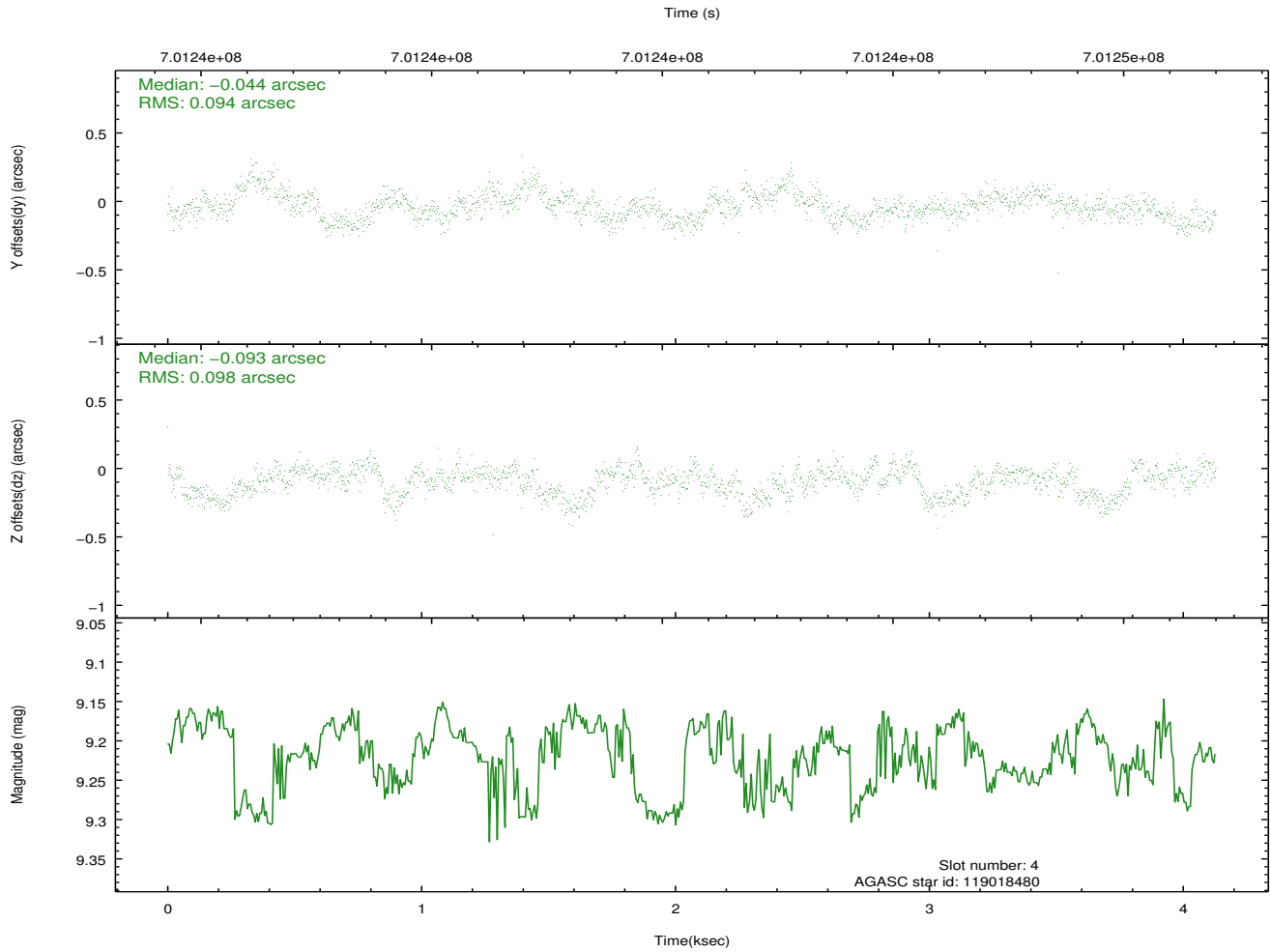
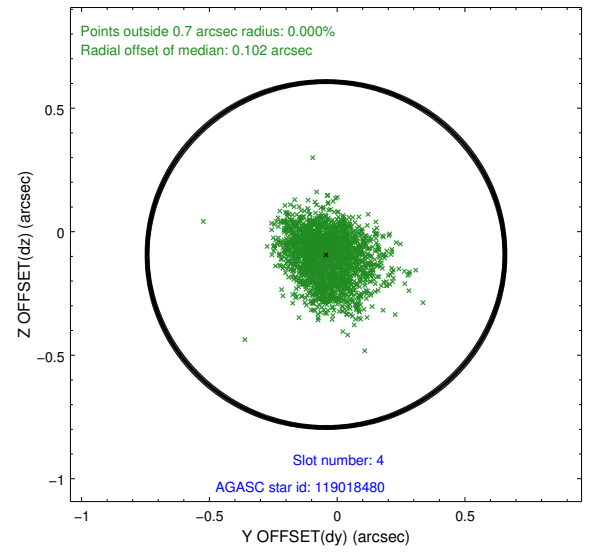
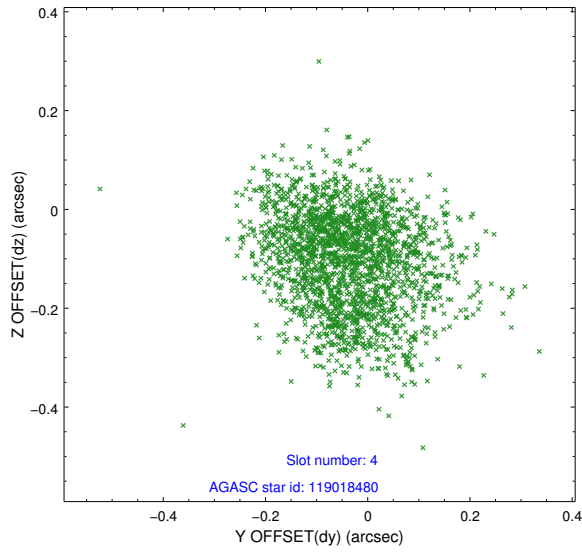
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.02	1008	1.000	0.176	-0.102	0.007	0.013	0.000000	0.000000	-764.17	-1739
1	FID		ACIS-S-4	7.16	1008	1.000	0.130	-0.057	0.007	0.014	0.000000	0.000000	2148.67	166
2	FID		ACIS-S-5	7.13	1008	1.000	-0.338	0.168	0.007	0.013	0.000000	0.000000	-1815.29	162
3	GUIDE	used	119017400	7.42	1988	1.000	0.186	0.085	0.114	0.203	214.458443	13.903952	1295.81	-2257
4	GUIDE	used	119018480	9.22	2012	1.000	-0.044	-0.093	0.144	0.233	213.620759	13.541196	1266.33	948
5	GUIDE	used	119019616	8.88	2012	1.000	-0.076	-0.144	0.121	0.203	213.477237	13.654924	1841.09	1246
6	GUIDE	used	119020736	8.64	2012	1.000	-0.111	-0.034	0.091	0.156	213.541794	13.318952	643.56	1523
7	GUIDE	used	119021632	7.94	2014	1.000	0.037	0.197	0.068	0.115	213.945008	12.750388	-1798.39	1045

2.4 Star Slots

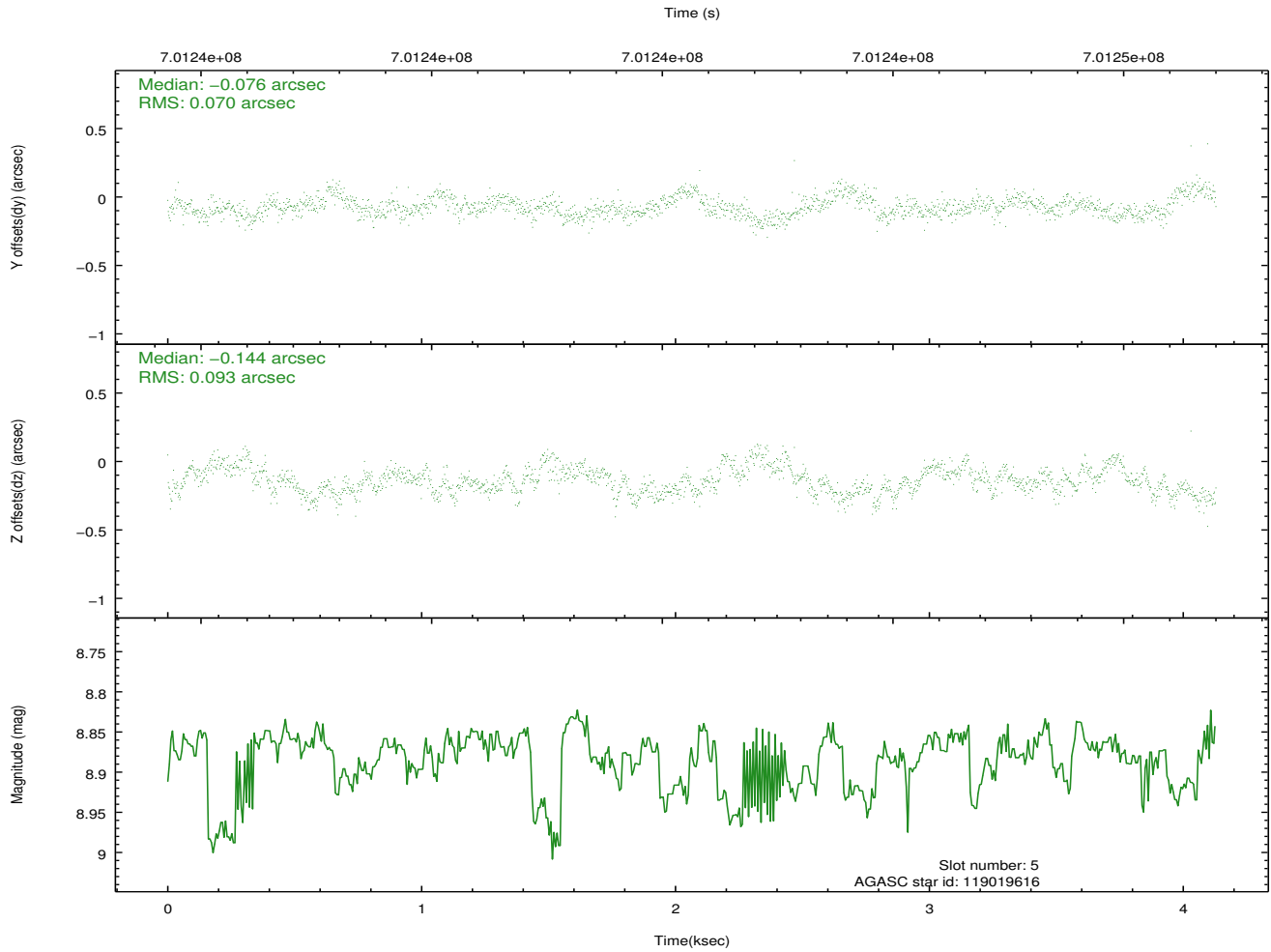
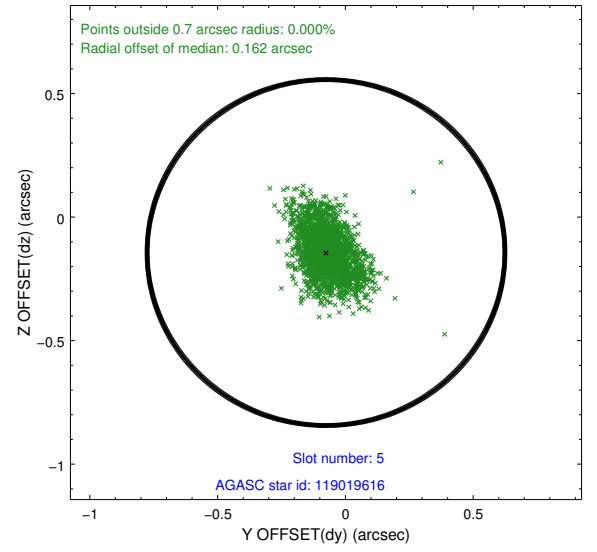
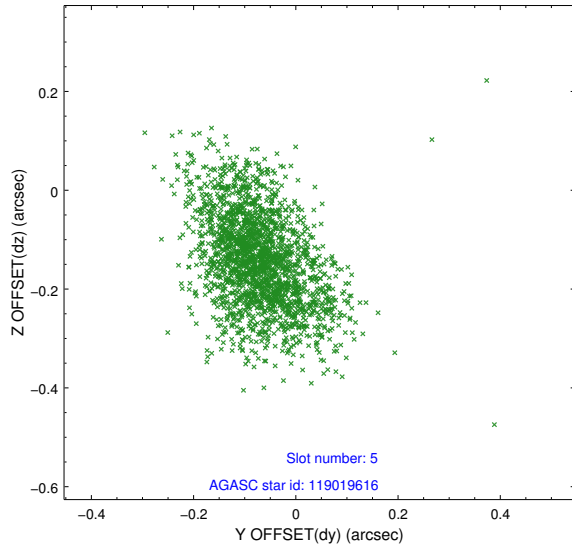
2.4.1 Slot 3



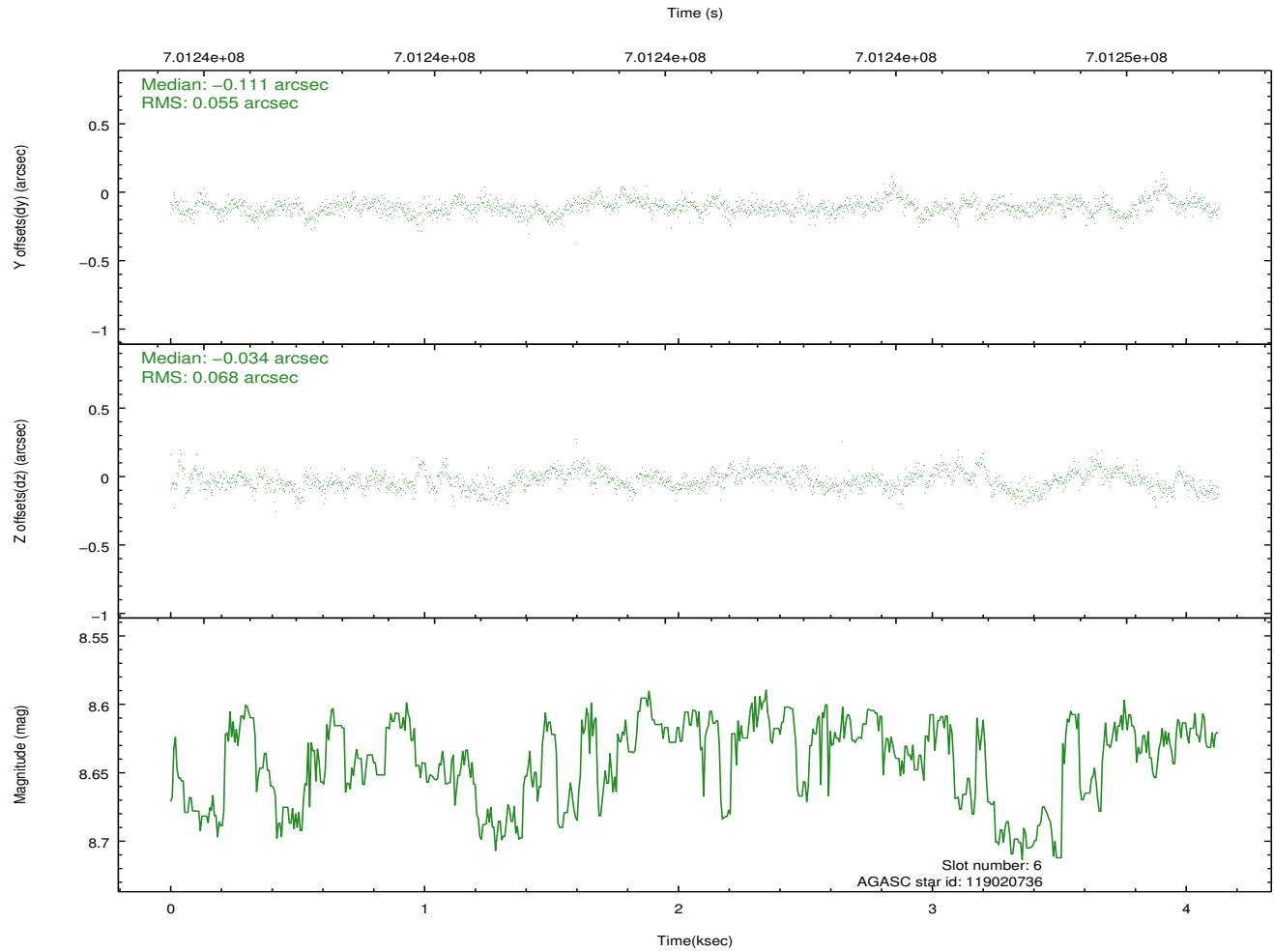
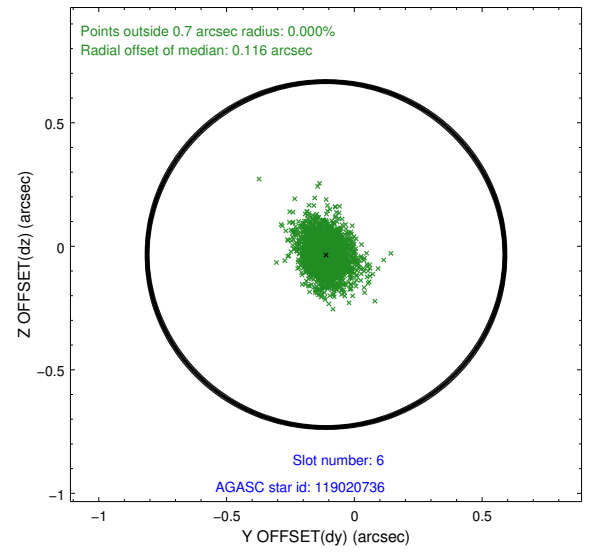
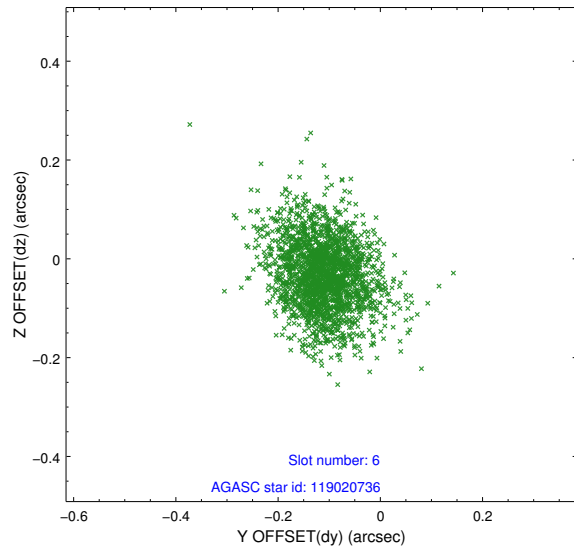
2.4.2 Slot 4



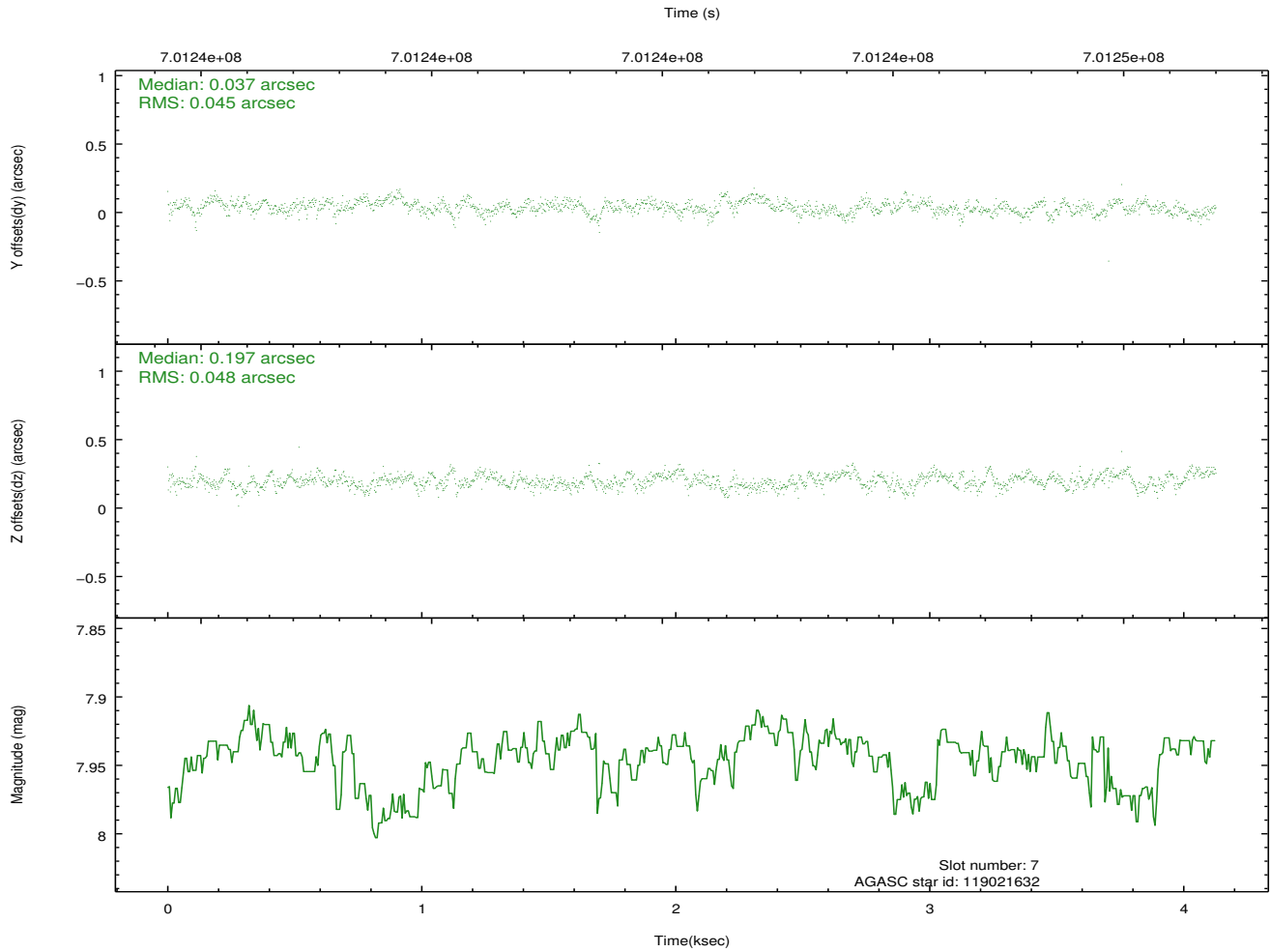
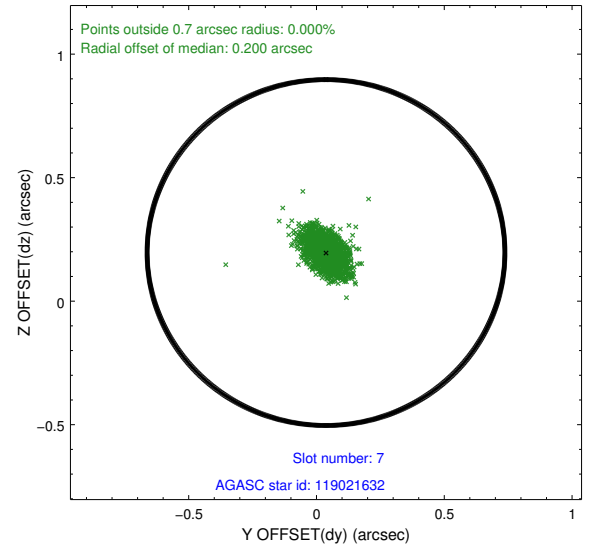
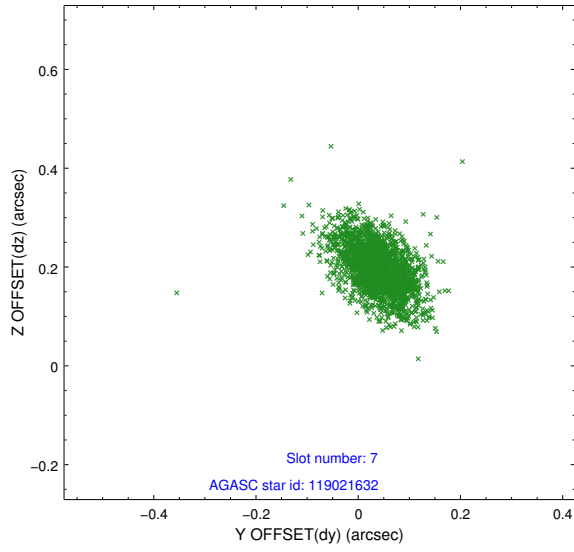
2.4.3 Slot 5



2.4.4 Slot 6

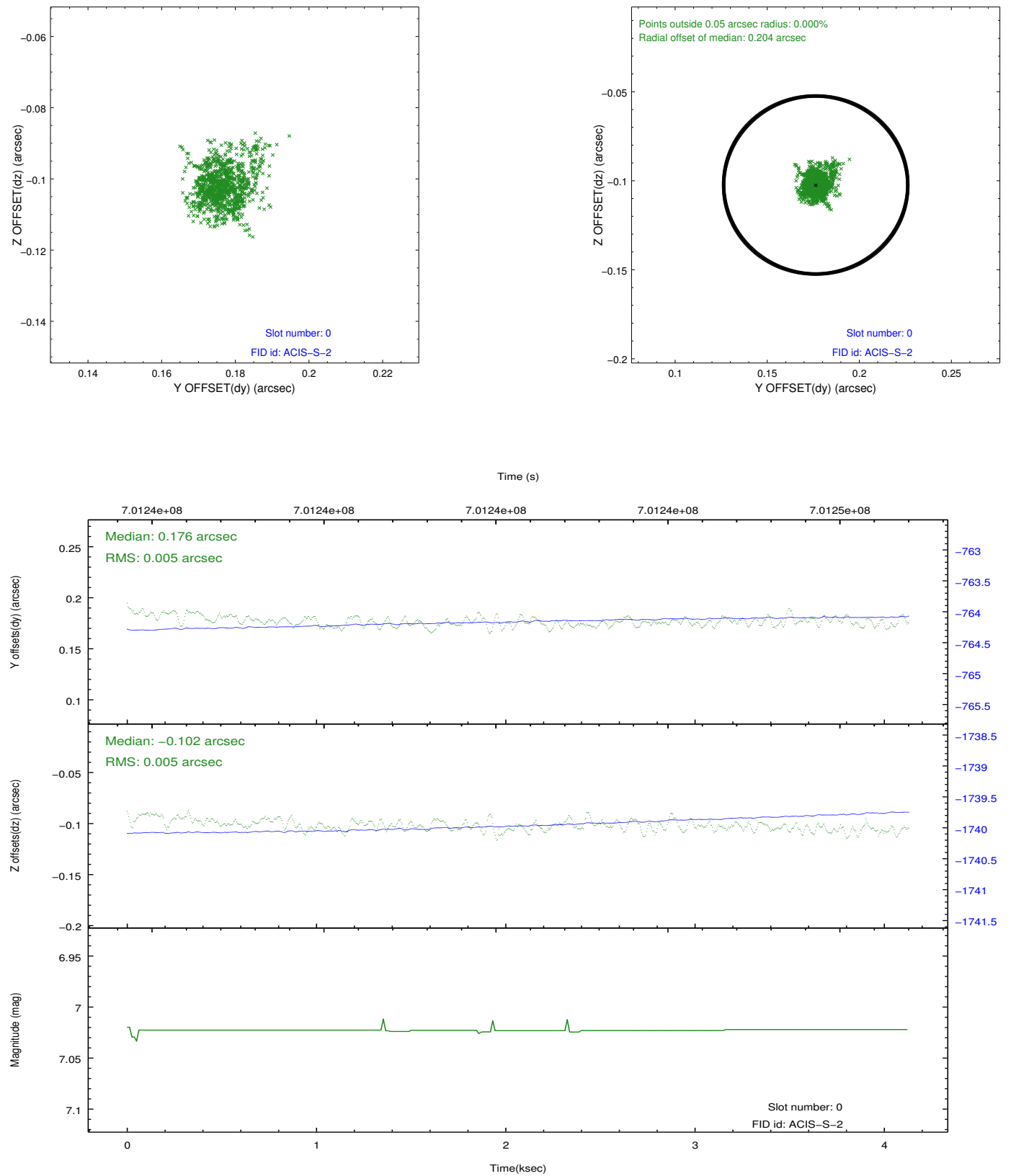


2.4.5 Slot 7

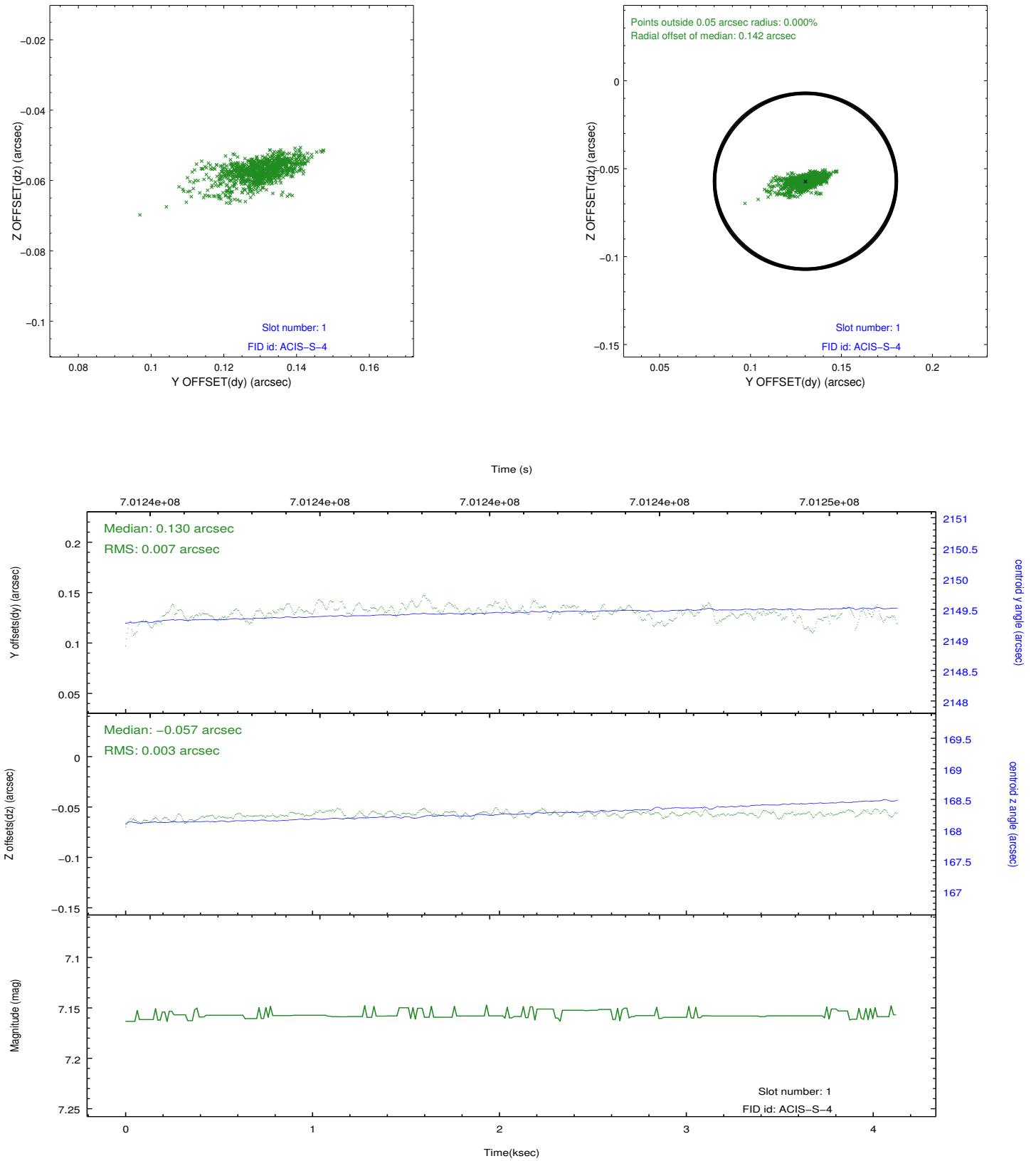


2.5 FID Slots

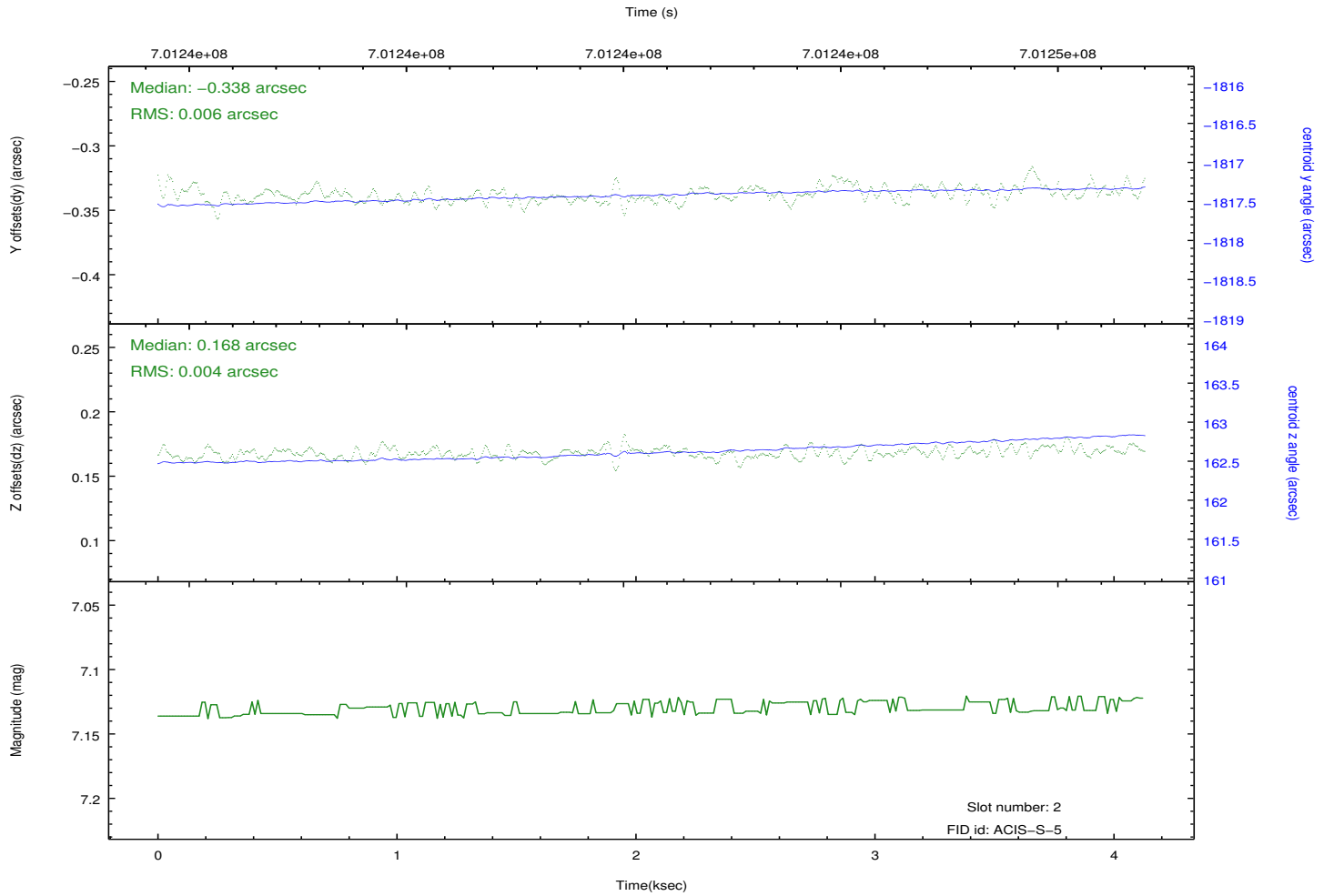
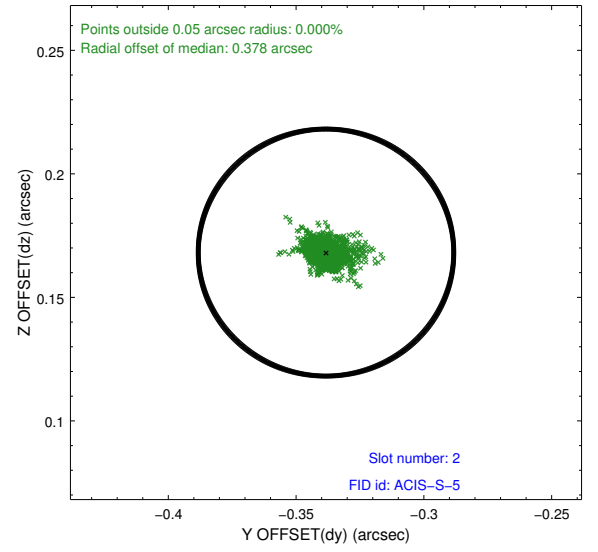
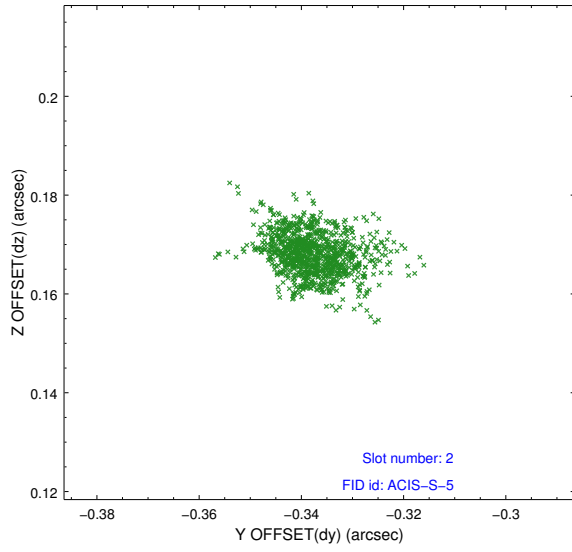
2.5.1 Slot 0



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)	2020.03.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.061000031352

A.2 Comments