

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21202 - L2 Version 1
Chandra X-Ray Center

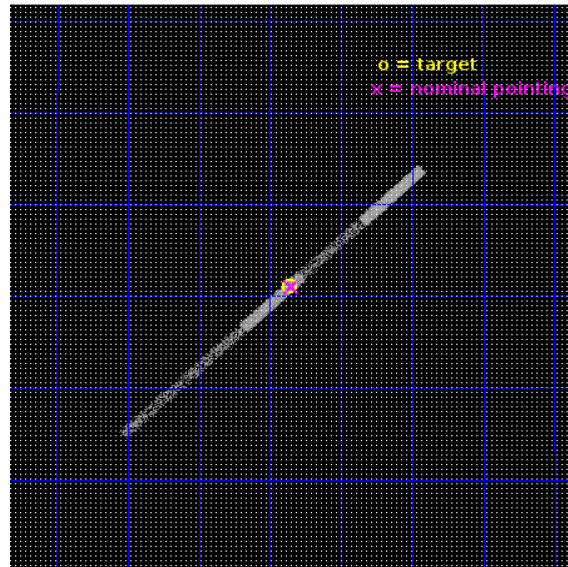
L2 Processing Date : May 16 2019

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1 Front

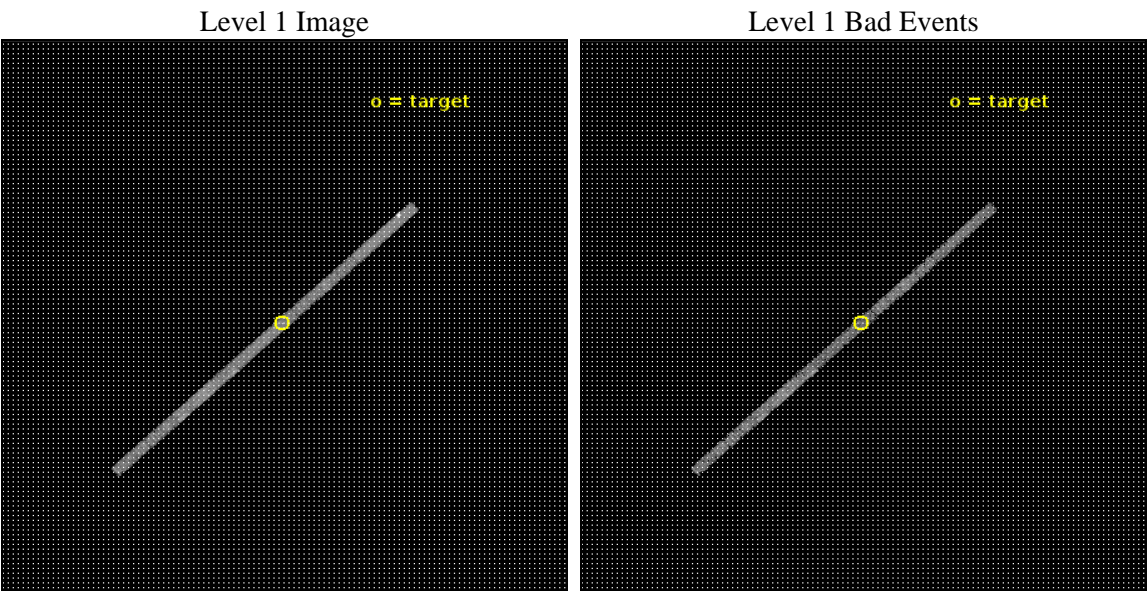
seq_num	402035	Sequence number
obs_id	21202	Observation id
title	Following a black hole X-ray transient through the transition into quiescence	Proposal title
observer	Elena Gallo	Principal investigator
object	MAXI J1820+070	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	275.09125	Observer's specified target RA [deg]
dec_targ	7.185361	Observer's specified target Dec [deg]
ra_nom	275.08747734931	Nominal RA [deg]
dec_nom	7.1839157134762	Nominal Dec [deg]
roll_nom	137.15695810407	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5077.6715054512	Sum of GTIs [s]
livetime	4796.4618020833	Livetime [s]
ontime5	5077.6304655075	Sum of GTIs [s]
ontime6	5077.5894254446	Sum of GTIs [s]
ontime7	5077.6715054512	Sum of GTIs [s]
ontime8	5077.5483855009	Sum of GTIs [s]
ontime9	5077.507345438	Sum of GTIs [s]
l2events	9038	Number of level 2 events



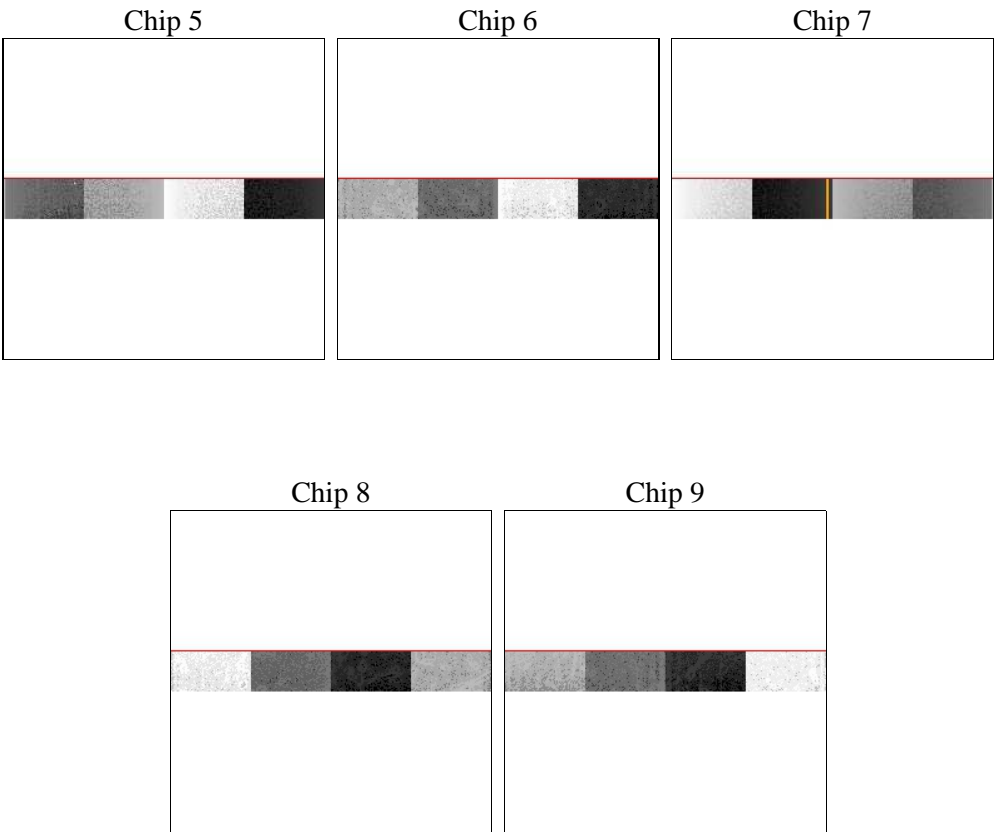
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



Chip 8



Chip 9



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	5077.6715054512	Sum of GTIs [s]
caldsver	4.8.2	 	ontime5	5077.6304655075	Sum of GTIs [s]
date	2019-05-16T06:13:35	Date and time of file creation	ontime6	5077.5894254446	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	5077.6715054512	Sum of GTIs [s]
			ontime8	5077.5483855009	Sum of GTIs [s]
			ontime9	5077.507345438	Sum of GTIs [s]
			l1events	43168	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	15093	6074	7053	9132	5816
rejected events	4269	5400	3639	7080	5160
rejected %	28%	88%	51%	77%	88%

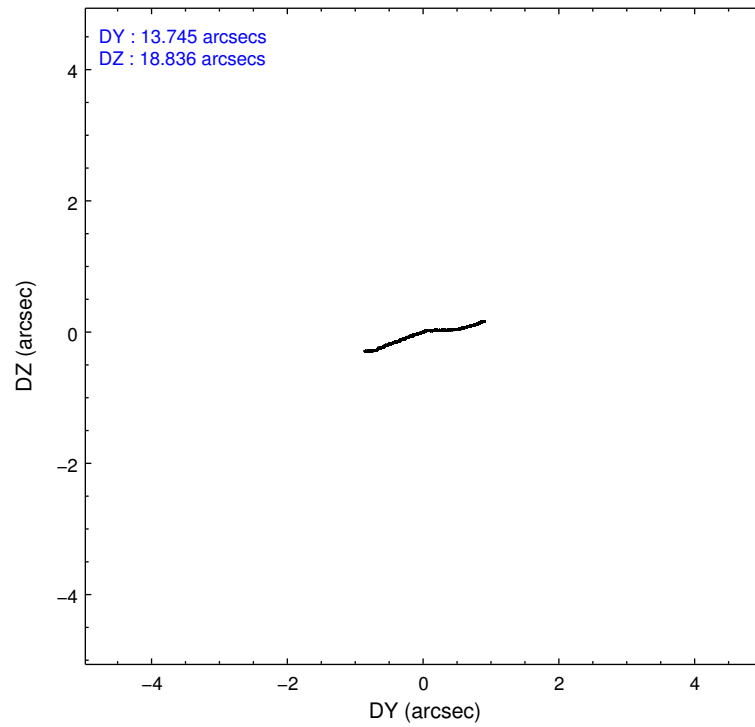
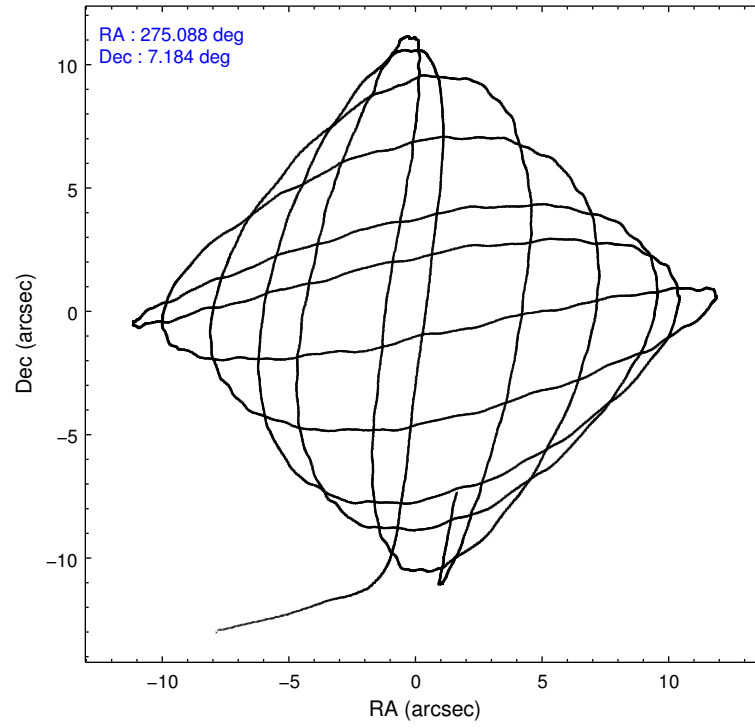
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	4899	172	371	542	185
	32%	2%	5%	5%	3%
grade 1 events	24	2	4	2	1
	0%	0%	0%	0%	0%
grade 2 events	3290	122	733	410	119
	21%	2%	10%	4%	2%
grade 3 events	228	121	374	255	106
	1%	1%	5%	2%	1%
grade 4 events	424	112	387	217	98
	2%	1%	5%	2%	1%
grade 5 events	739	260	710	350	269
	4%	4%	10%	3%	4%
grade 6 events	1985	147	1550	628	148
	13%	2%	21%	6%	2%
grade 7 events	3504	5138	2924	6728	4890
	23%	84%	41%	73%	84%

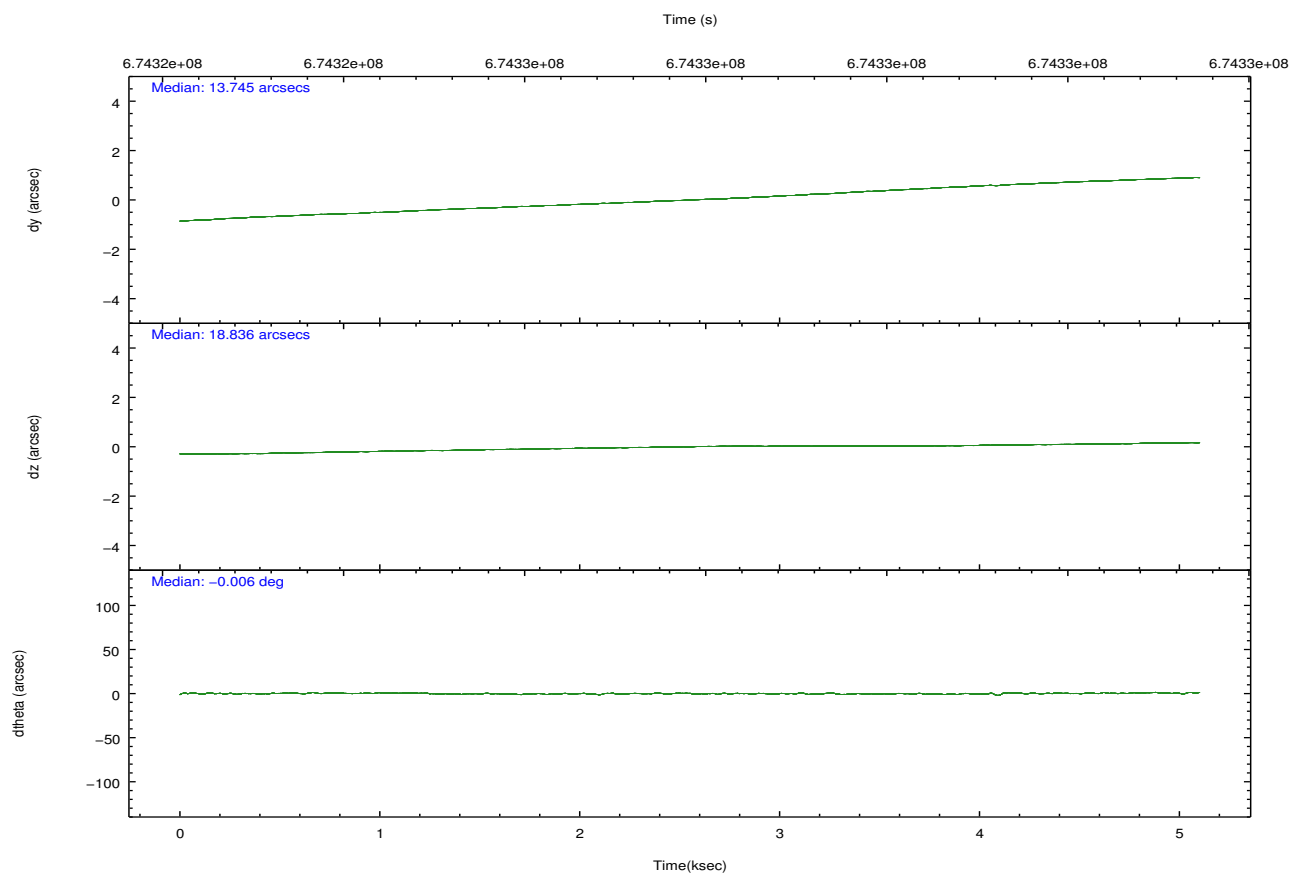
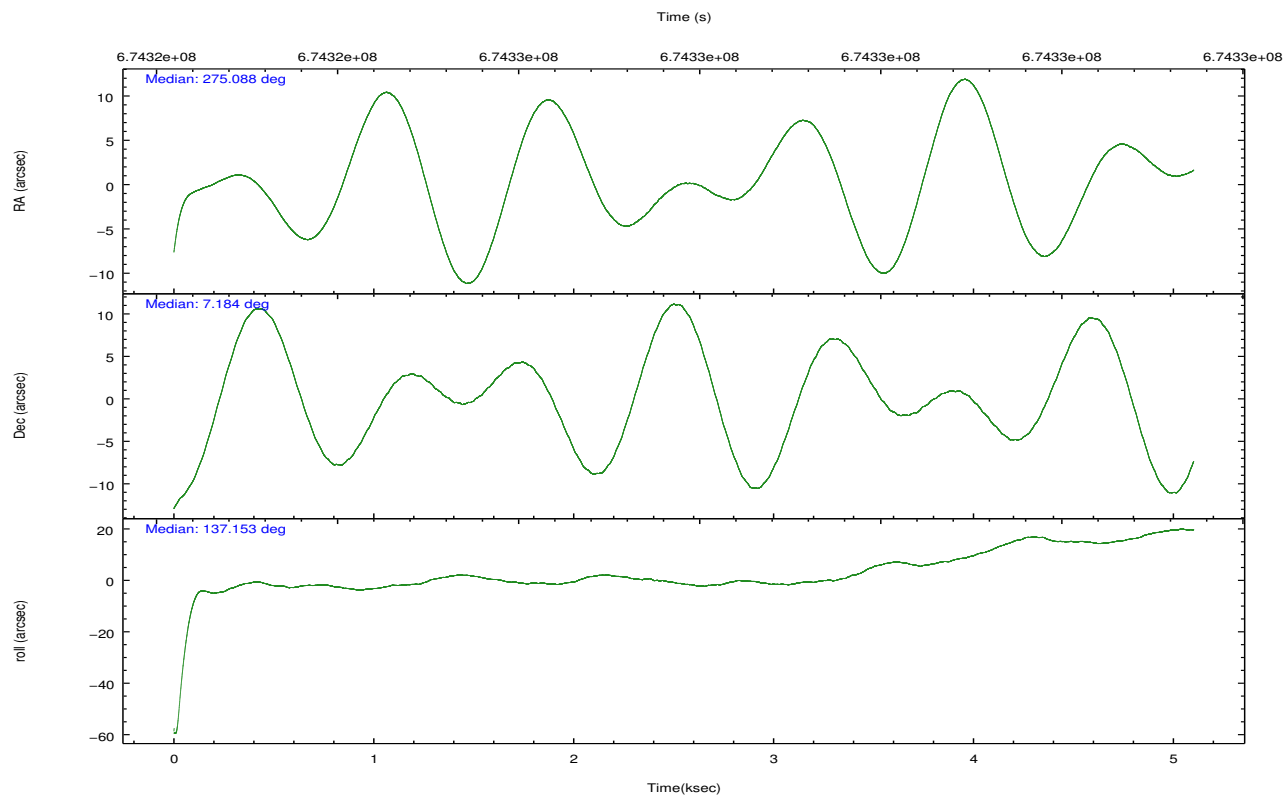
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-56789	ACIS-56789
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	275.114565	275.0874773493092
[deg] Pointing Dec	7.178263	7.183915713476161
[deg] Pointing Roll	136.997085	137.1569581040682
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	674324442.184000	674323420.3829499
Observation start date	2019-05-15T16:19:33	2019-05-15T16:03:40
[s] Observation end time (MET)	674329442.184000	674330555.92088
Observation end date	2019-05-15T17:42:53	2019-05-15T18:02:35
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
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	O2	Y
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	O1	Y
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/8
Subarray start row	449	449
Subarray row count	128	128
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.7

2.3 Aspect



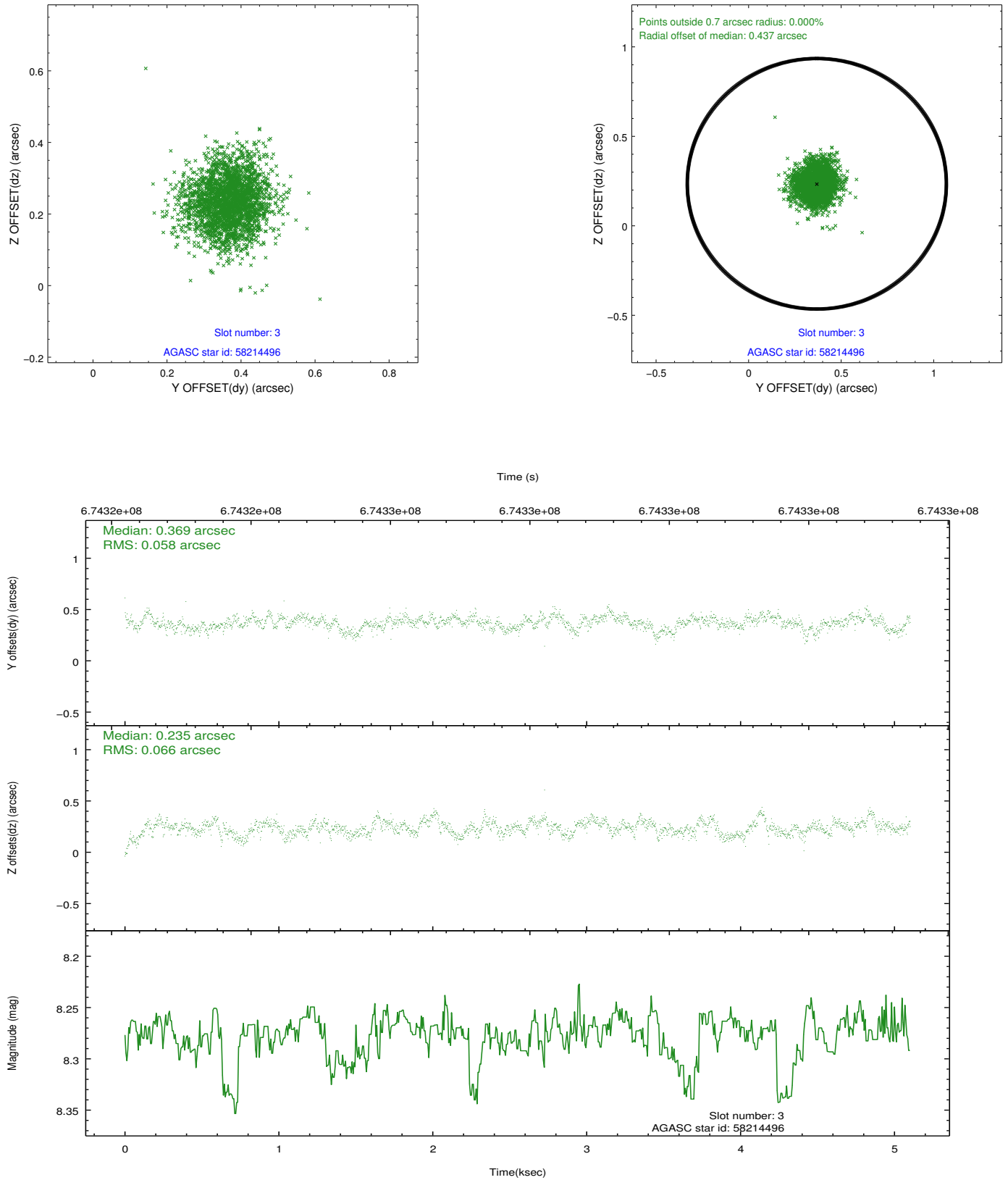


Slot Statistics

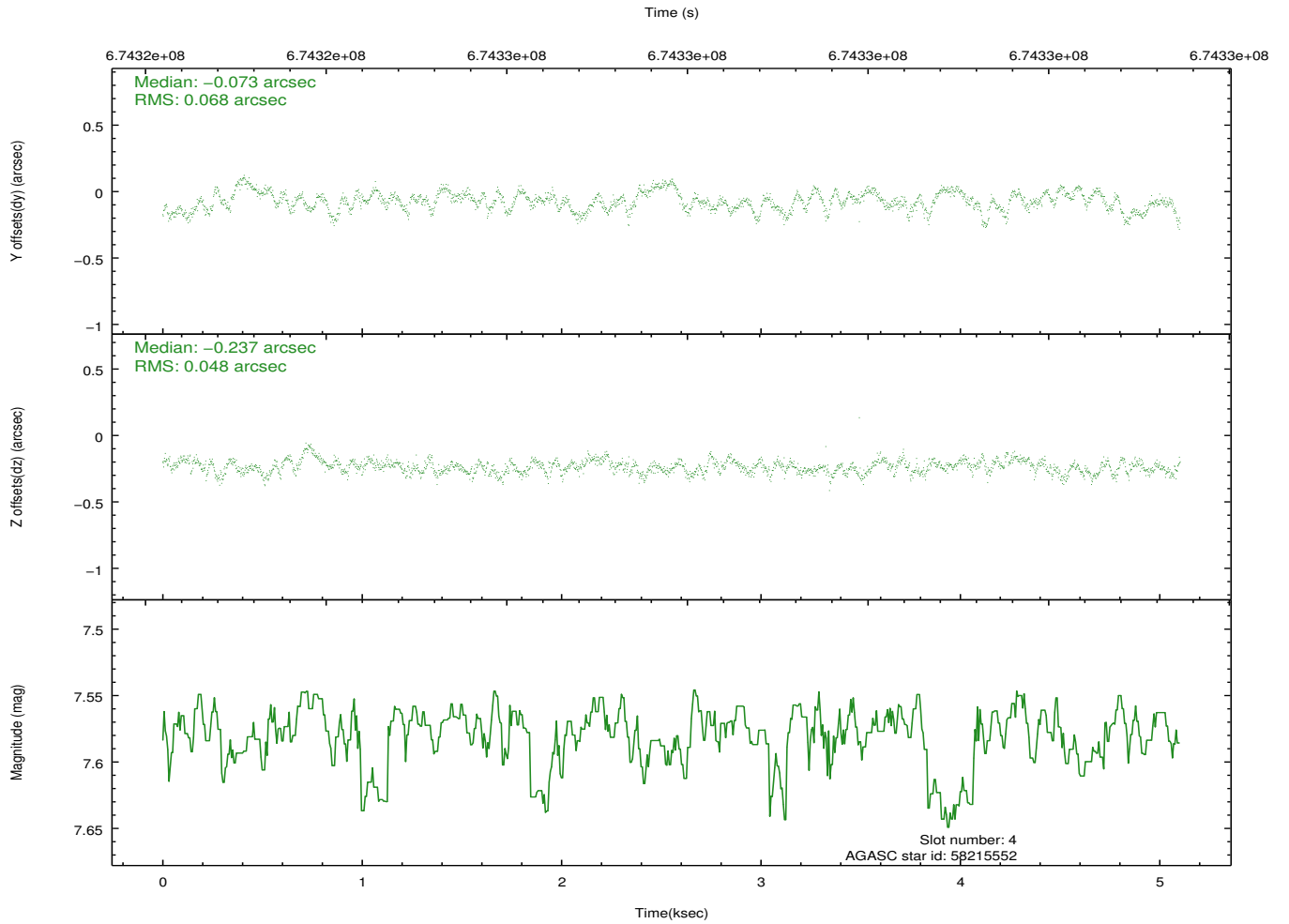
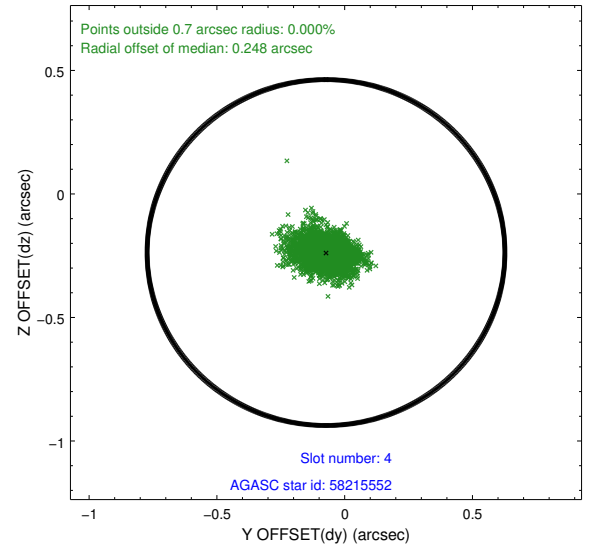
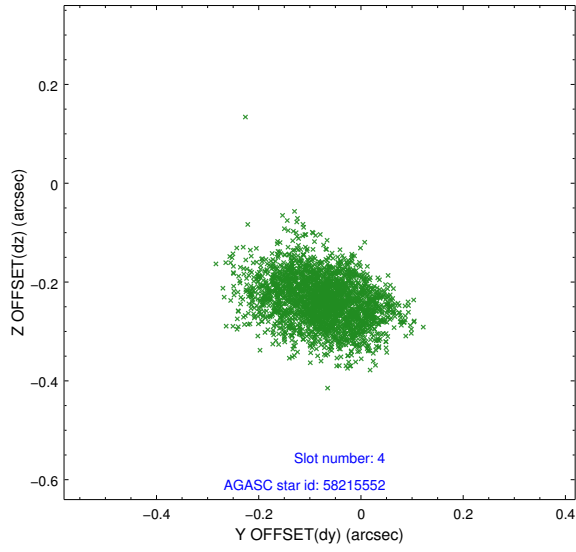
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.97	1245	1.000	-0.269	-0.197	0.027	0.037	0.000000	0.000000	-766.92	-1740
1	FID		ACIS-S-4	7.09	1245	1.000	0.753	0.181	0.030	0.054	0.000000	0.000000	2146.76	167
2	FID		ACIS-S-5	7.06	1245	1.000	-0.512	0.024	0.013	0.021	0.000000	0.000000	-1818.55	162
3	GUIDE	used	58214496	8.28	2490	1.000	0.369	0.235	0.093	0.151	275.424971	7.408800	-243.17	-1362
4	GUIDE	used	58215552	7.58	2489	1.000	-0.073	-0.237	0.090	0.143	275.048740	7.069088	-95.77	447
5	GUIDE	used	58338368	6.73	2490	1.000	0.139	0.496	0.099	0.145	275.704454	7.206741	-1469.26	-1512
6	GUIDE	used	132401928	7.34	2490	1.000	0.226	0.365	0.095	0.147	275.575114	7.548927	-290.44	-2095
7	GUIDE	used	58208648	8.05	2489	1.000	-0.655	-0.855	0.096	0.161	274.402649	7.152383	1797.30	1799

2.4 Star Slots

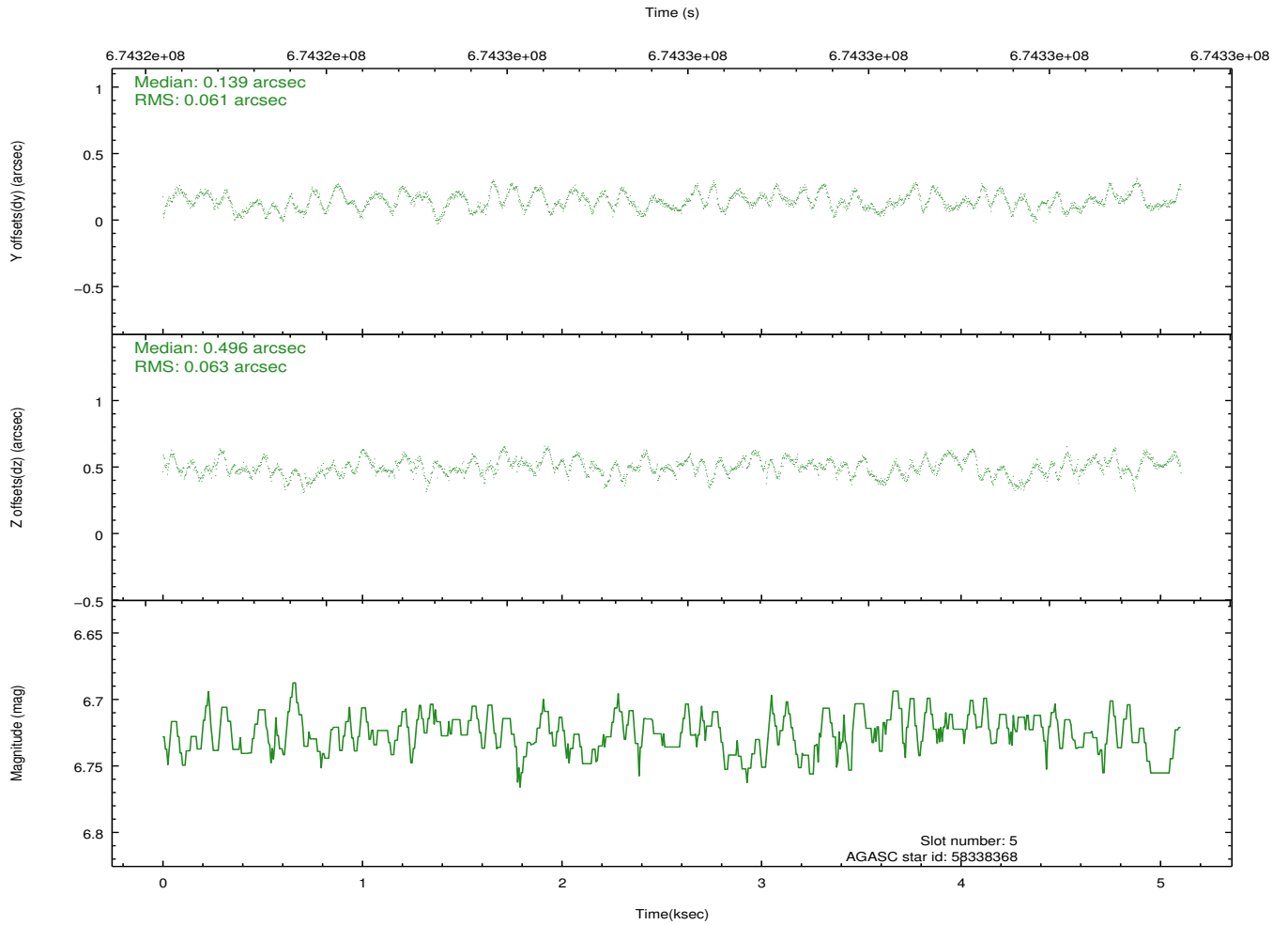
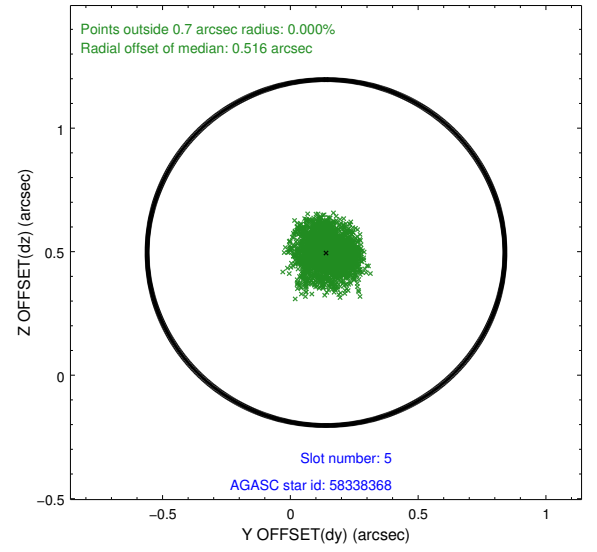
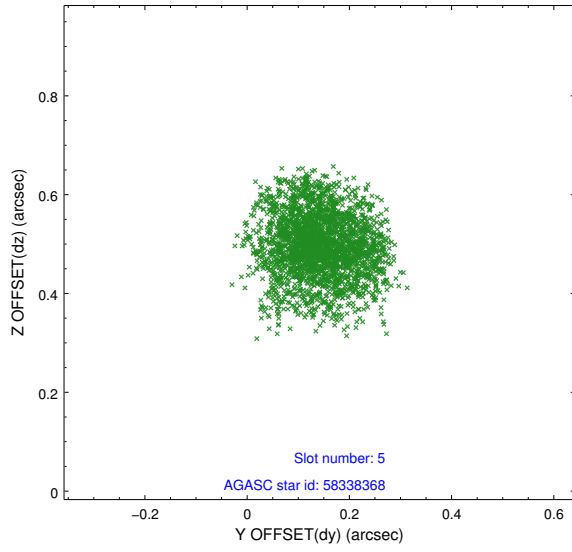
2.4.1 Slot 3



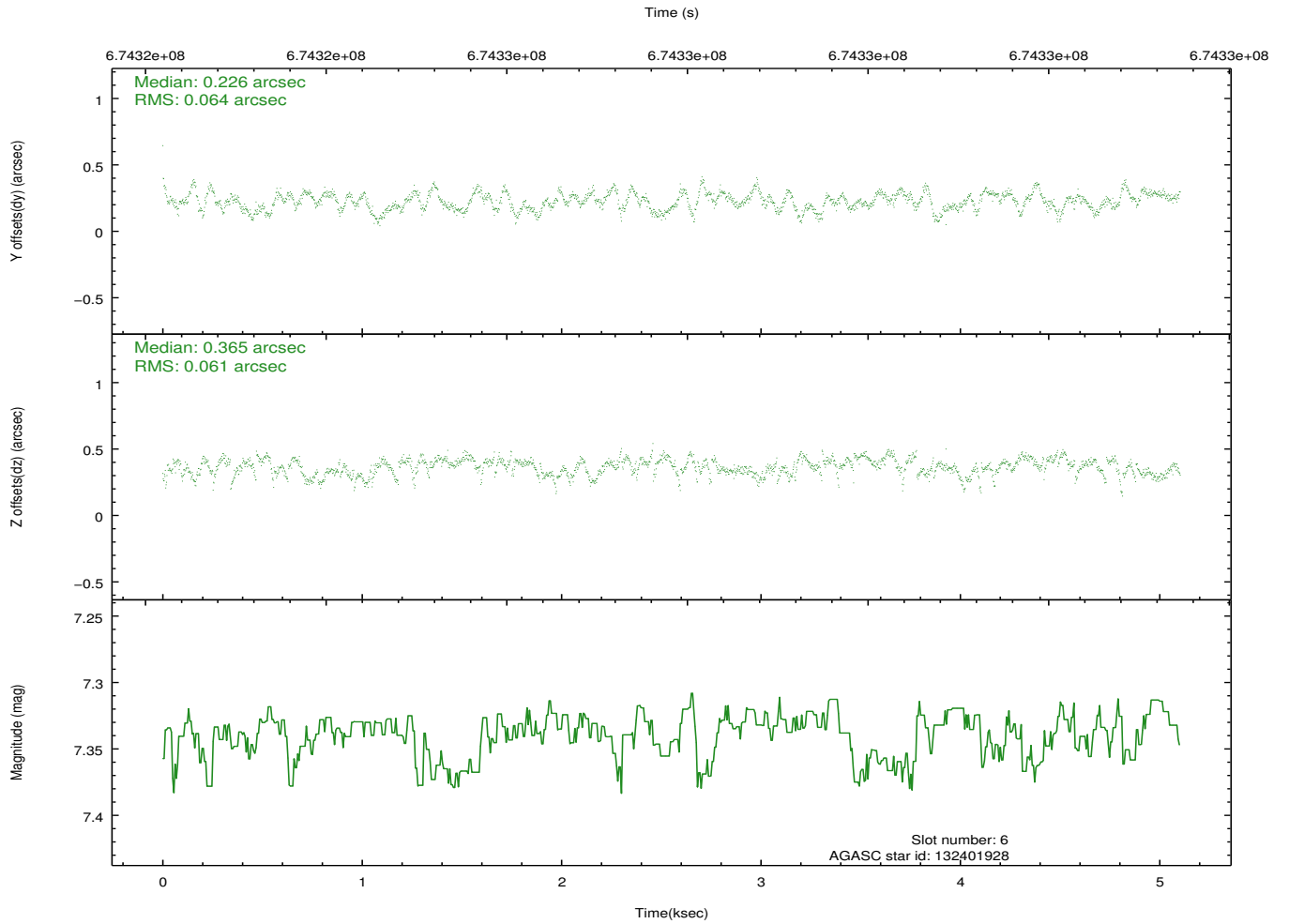
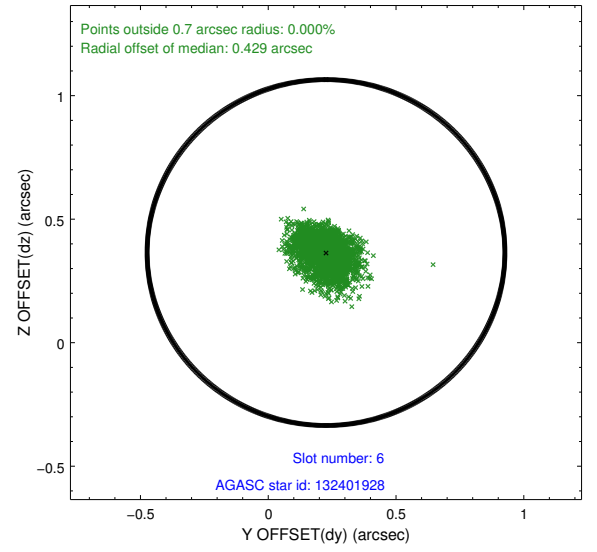
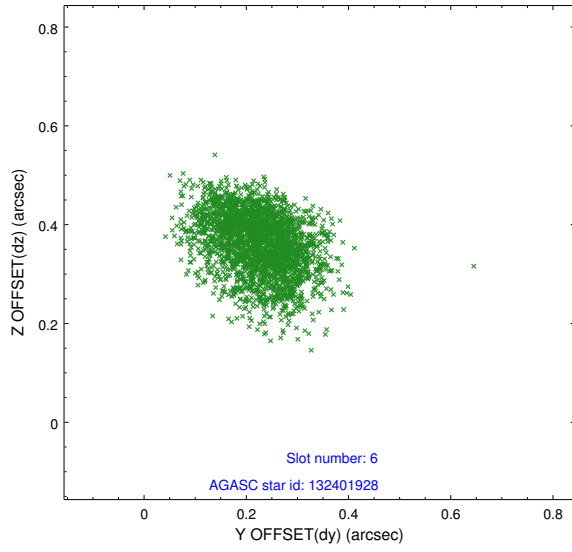
2.4.2 Slot 4



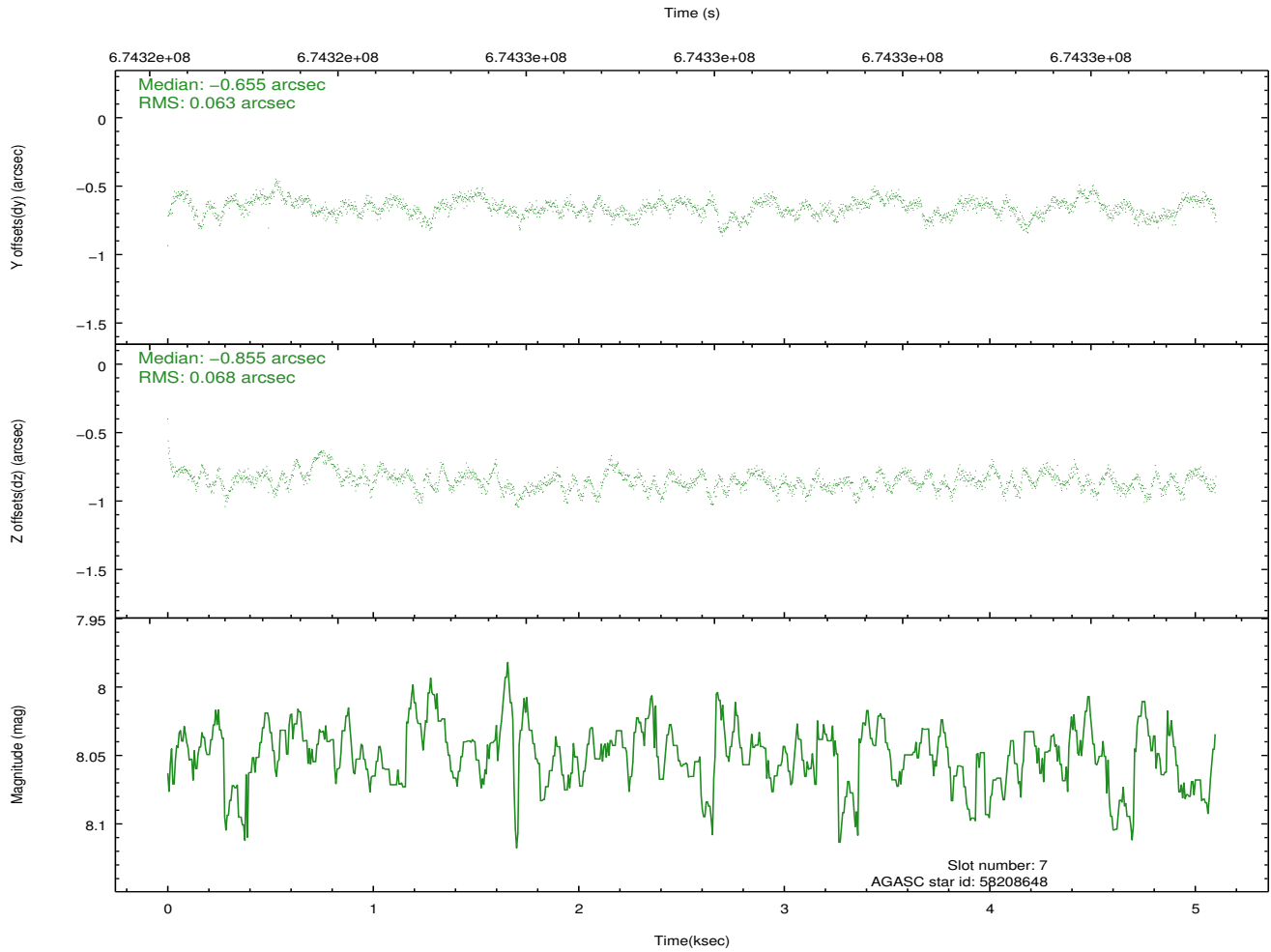
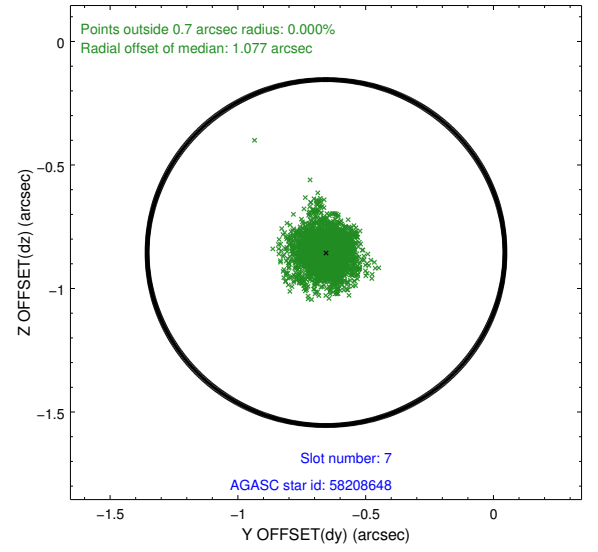
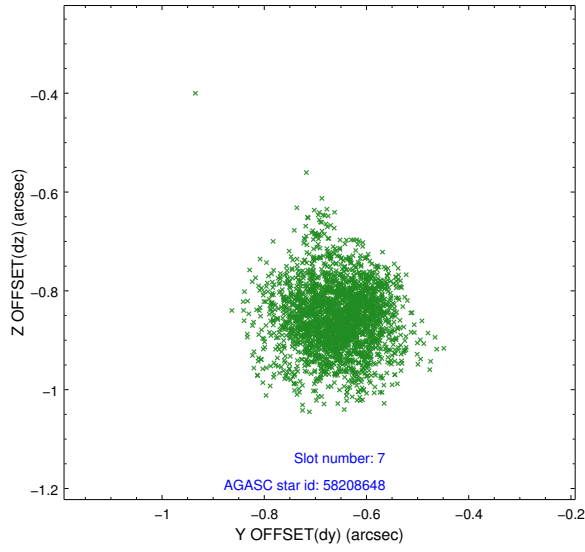
2.4.3 Slot 5



2.4.4 Slot 6

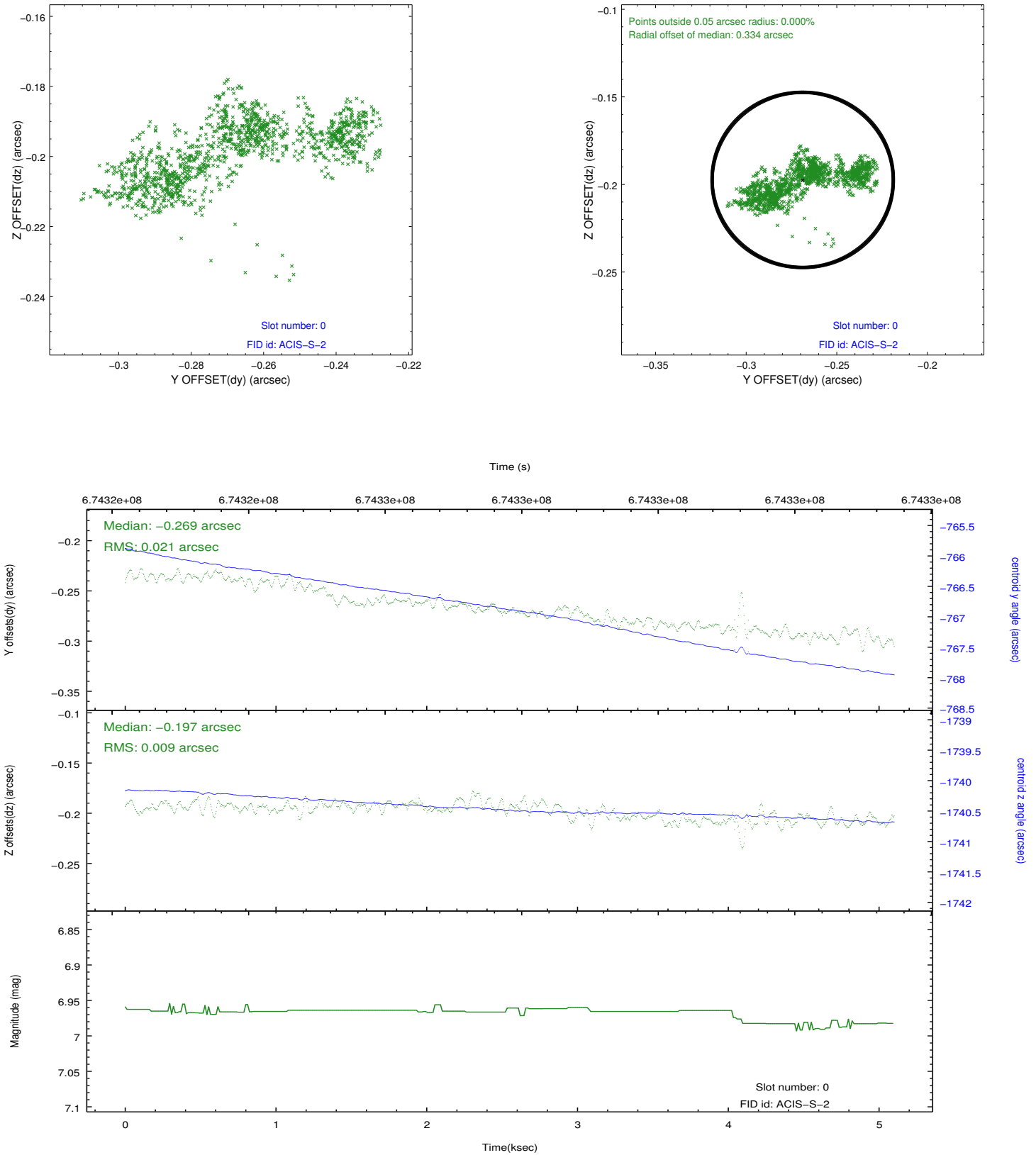


2.4.5 Slot 7

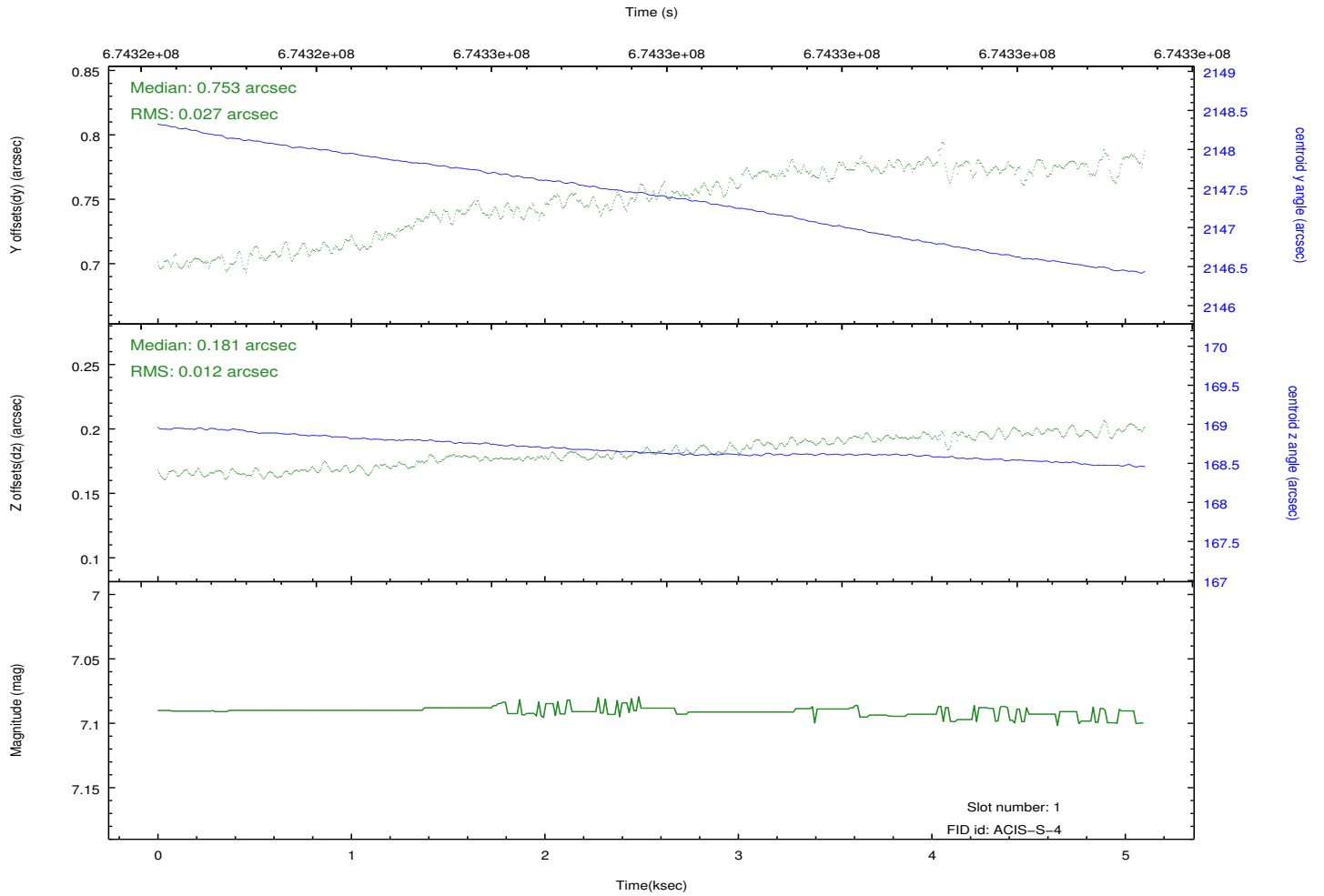
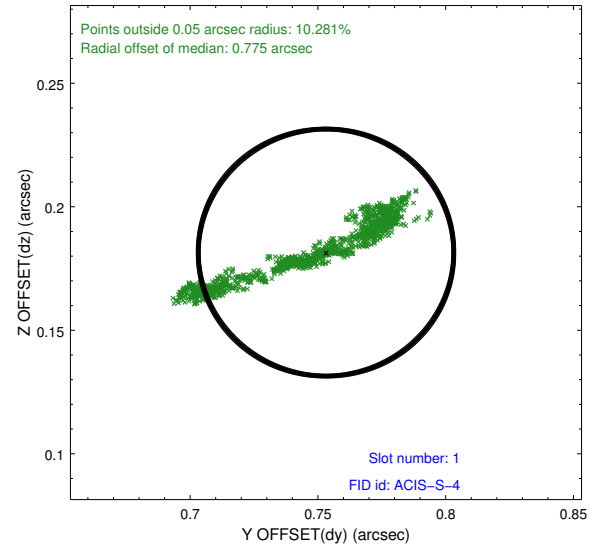
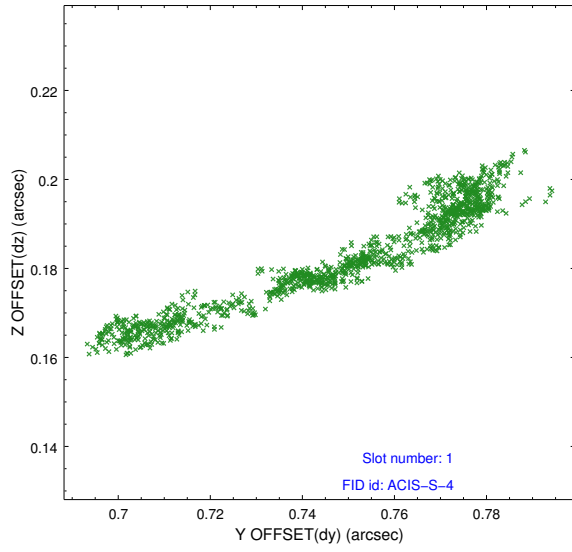


2.5 FID Slots

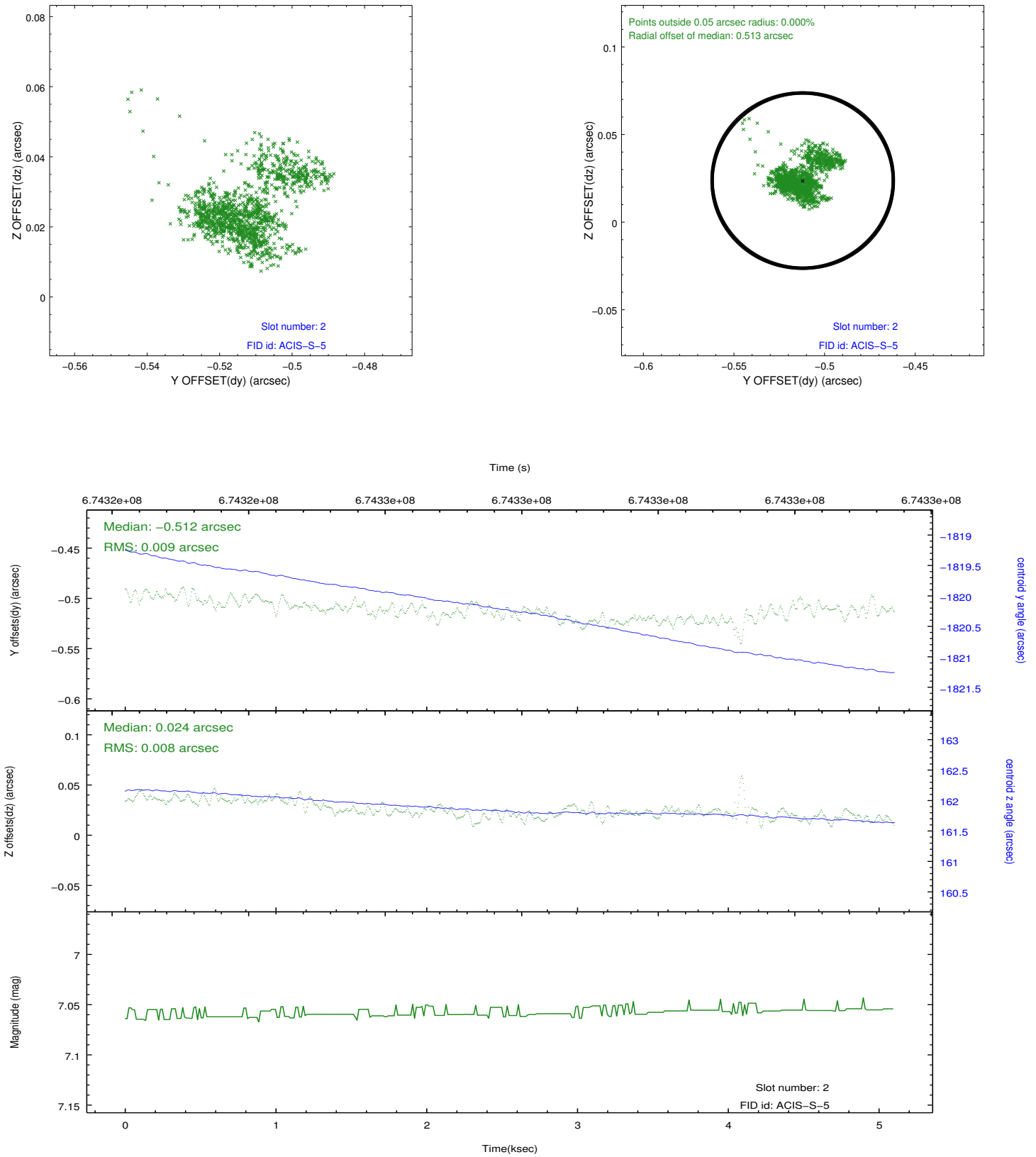
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2019.05.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0776715054512

A.2 Comments