

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 17507 - L2 Version 1
Chandra X-Ray Center

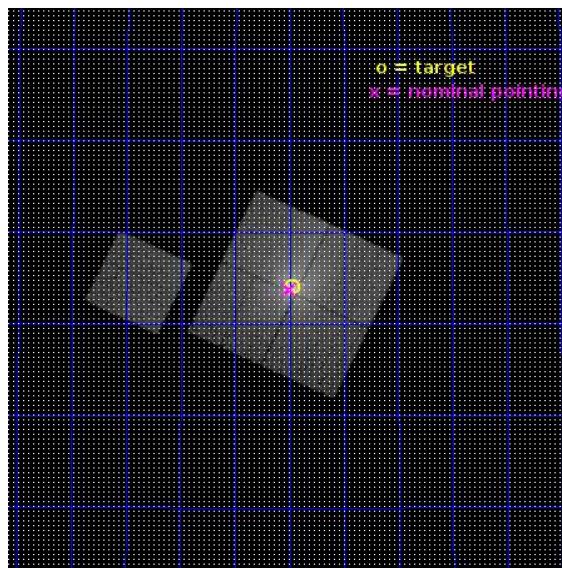
L2 Processing Date : Nov 13 2016

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1 Front

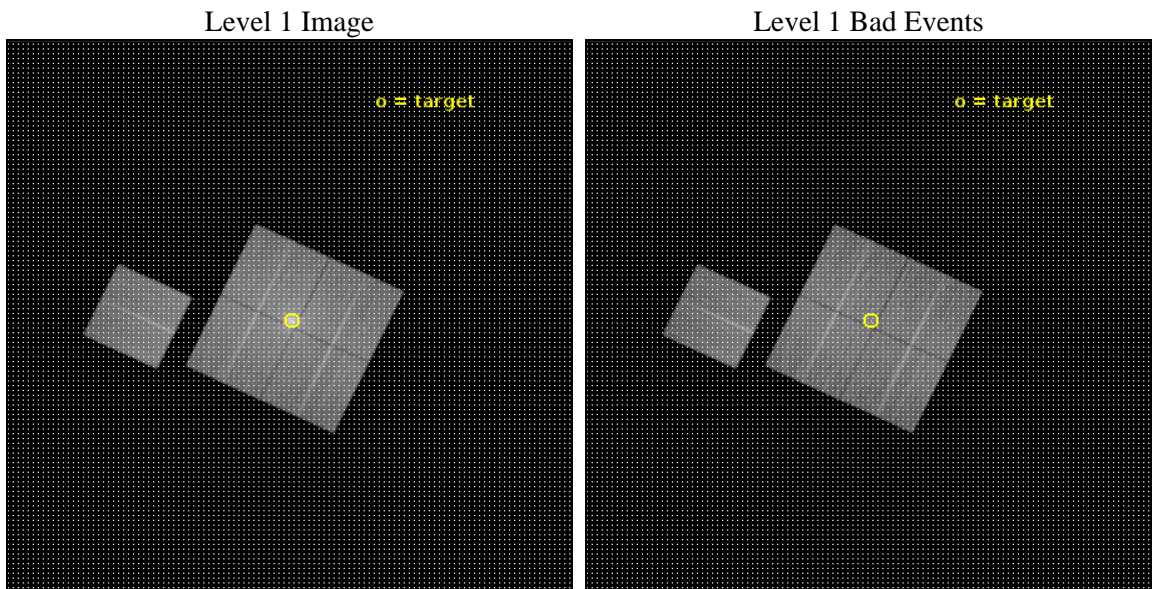
seq_num	703131	Sequence number
obs_id	17507	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - Nucleus	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.867917	Observer's specified target RA [deg]
dec_targ	40.733889	Observer's specified target Dec [deg]
ra_nom	299.87498921616	Nominal RA [deg]
dec_nom	40.729304638024	Nominal Dec [deg]
roll_nom	295.34222173745	Nominal Roll [deg]
revision	1	Processing version of data
ontime	33067.659284234	Sum of GTIs [s]
livetime	32635.605971629	Livetime [s]
ontime0	33067.593539119	Sum of GTIs [s]
ontime1	33067.634578943	Sum of GTIs [s]
ontime2	33067.659264326	Sum of GTIs [s]
ontime3	33067.659284234	Sum of GTIs [s]
ontime6	33070.693469286	Sum of GTIs [s]
l2events	267562	Number of level 2 events



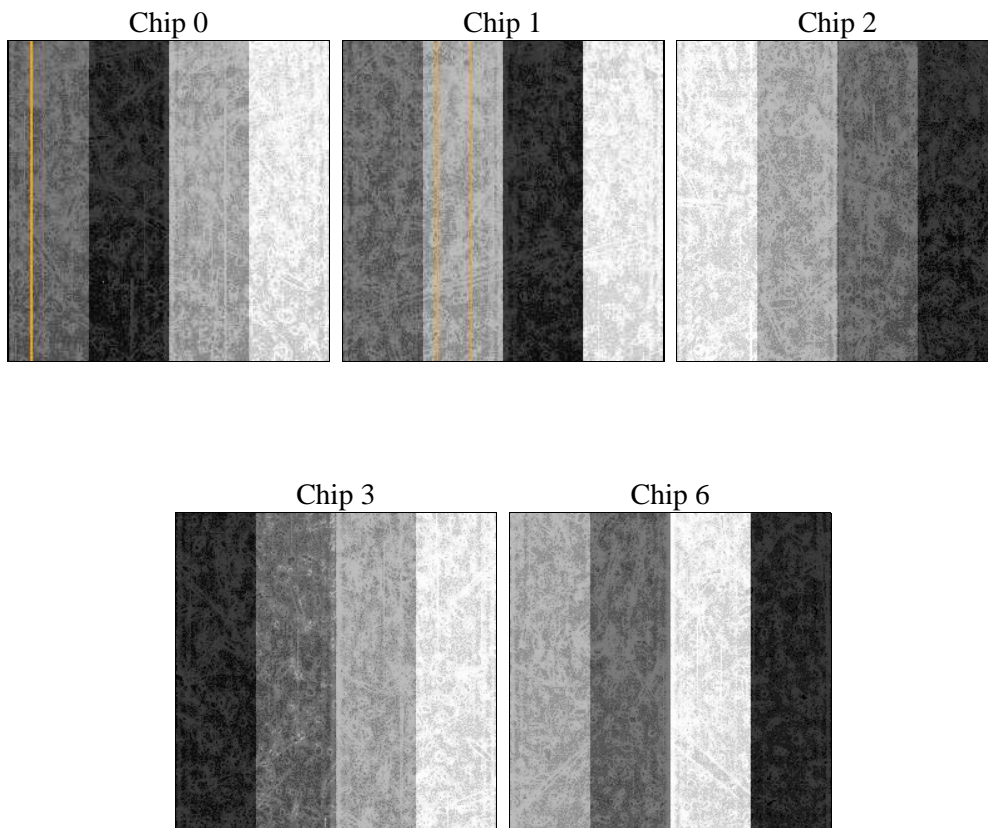
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	33067.659284234	Sum of GTIs [s]
caldbver	4.7.2	 	ontime0	33067.593539119	Sum of GTIs [s]
date	2016-11-13T11:51:07	Date and time of file creation	ontime1	33067.634578943	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	33067.659264326	Sum of GTIs [s]
			ontime3	33067.659284234	Sum of GTIs [s]
			ontime6	33070.693469286	Sum of GTIs [s]
			l1events	1278875	Number of level 1 events

2.1.4 Events

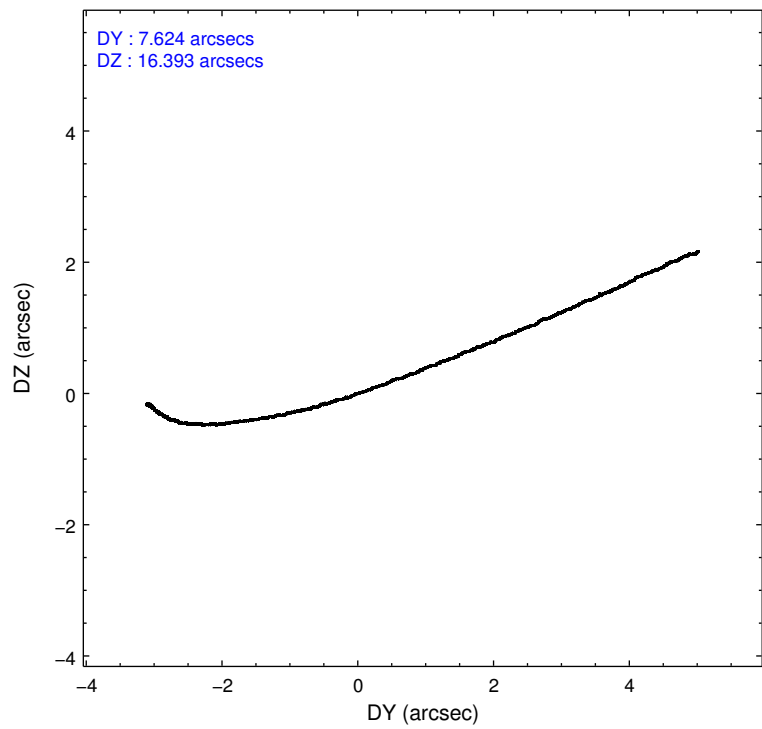
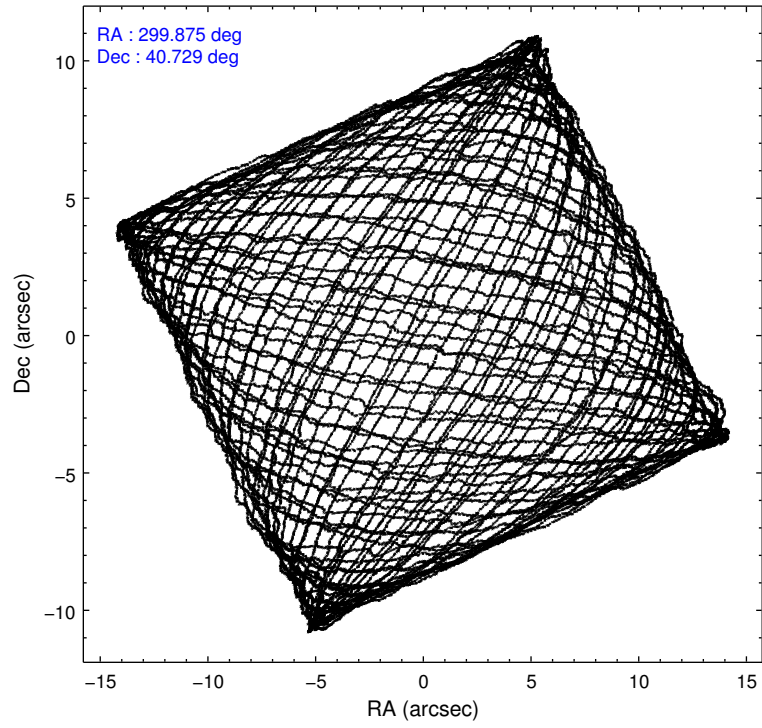
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	222866	248142	257284	321720	228863
rejected events	185020	185142	209093	202767	201971
rejected %	83%	74%	81%	63%	88%

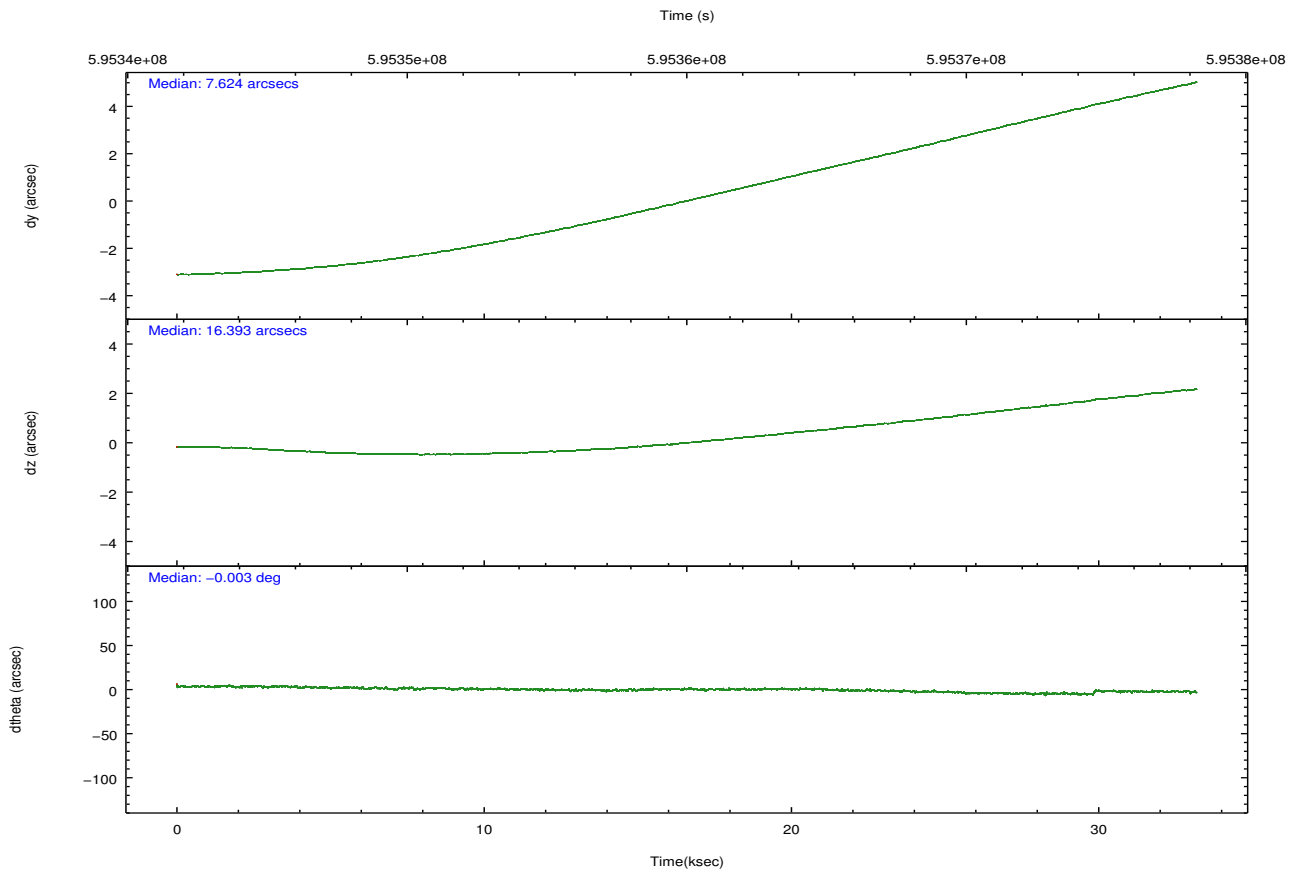
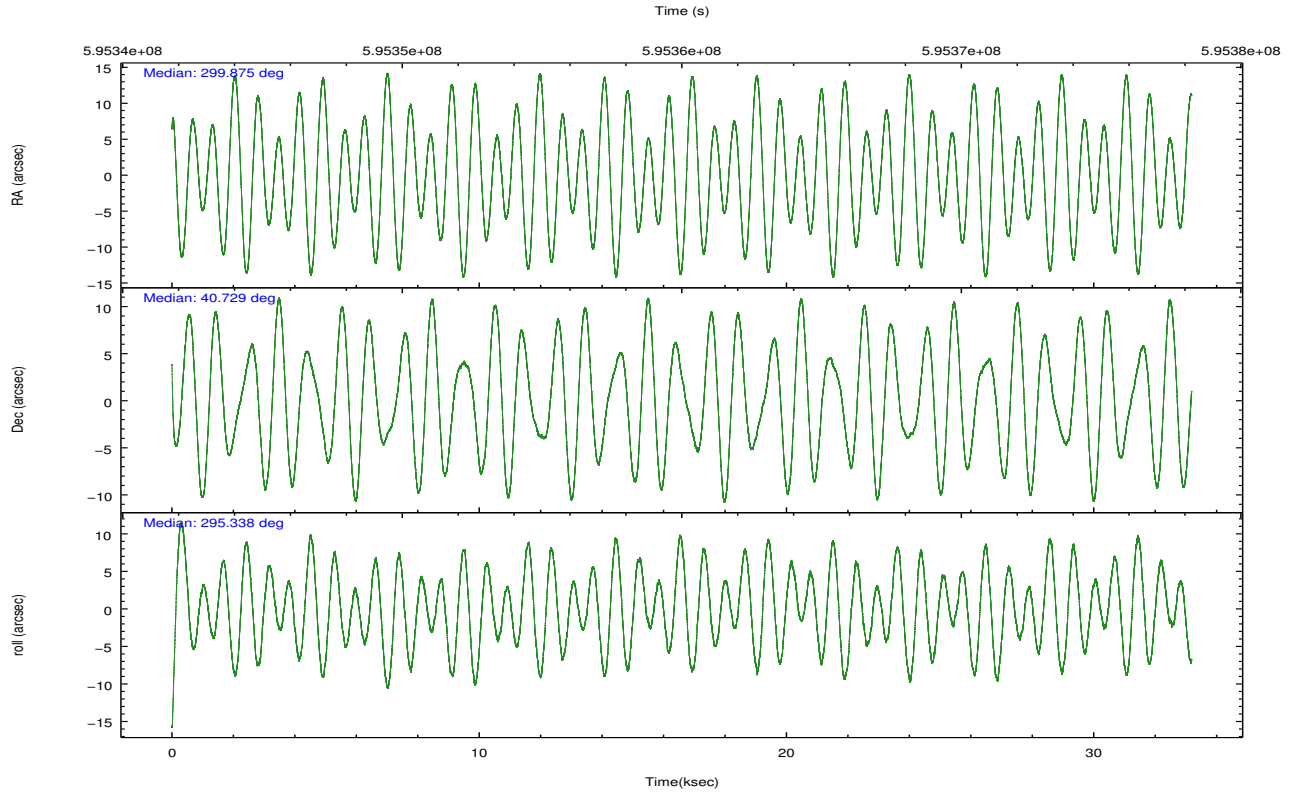
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	18315	36162	27086	81585	9694
	8%	14%	10%	25%	4%
grade 1 events	185	249	243	898	101
	0%	0%	0%	0%	0%
grade 2 events	8054	11519	8884	15838	5994
	3%	4%	3%	4%	2%
grade 3 events	3021	3894	3259	6154	2599
	1%	1%	1%	1%	1%
grade 4 events	2884	3929	3309	6066	2576
	1%	1%	1%	1%	1%
grade 5 events	9379	10559	8774	11807	10707
	4%	4%	3%	3%	4%
grade 6 events	5576	7502	5654	9318	6029
	2%	3%	2%	2%	2%
grade 7 events	175452	174328	200075	190054	191163
	78%	70%	77%	59%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	299.844955	299.8749892161579	CCD I2 on	Y	Y
[deg] Pointing Dec	40.744920	40.72930463802426	CCD I3 on	Y	Y
[deg] Pointing Roll	295.153138	295.3422217374471	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	595343593.184000	595342572.62895	CCD S5 on	N	N
Observation start date	2016-11-12T13:12:05	2016-11-12T12:56:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	595376593.184000	595377369.33096	On-chip summing requested	N	N
Observation end date	2016-11-12T22:22:05	2016-11-12T22:36:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





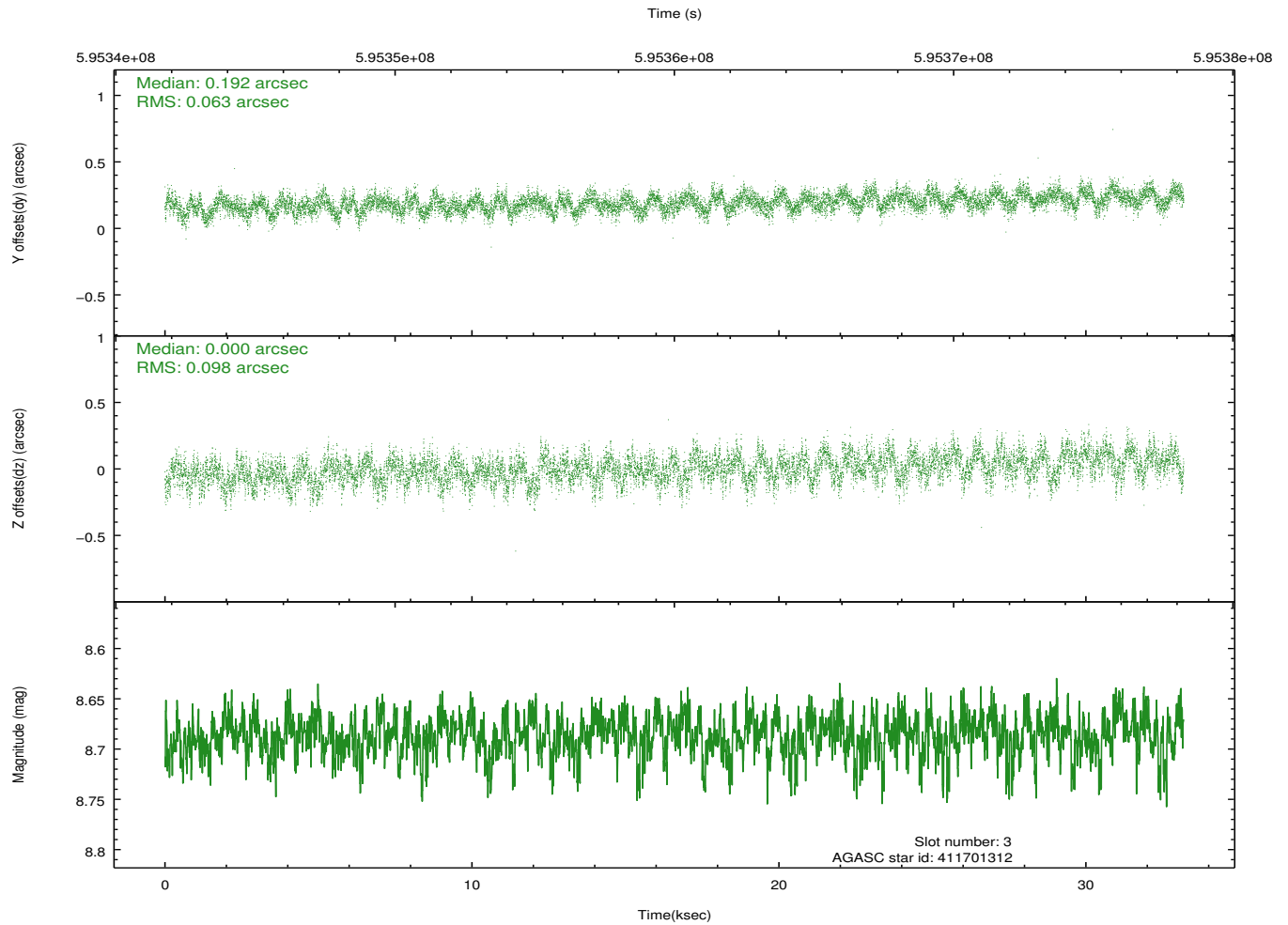
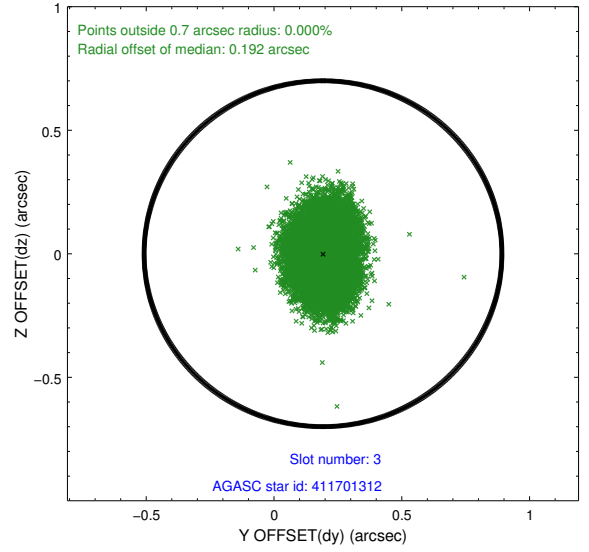
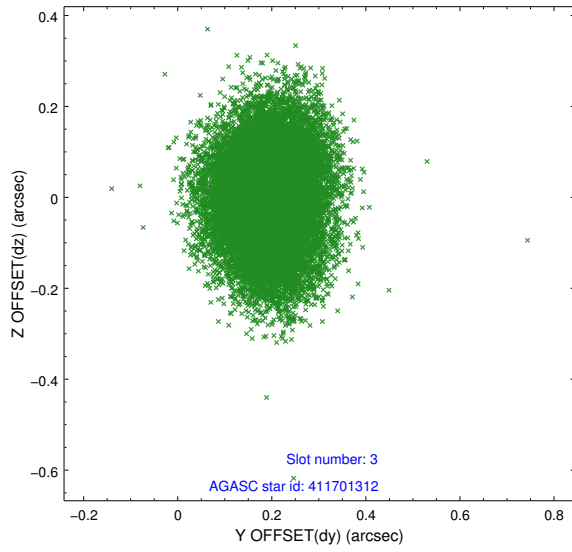
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.09	8095	0.017	-0.094	0.034	0.113	0.000000	0.000000	931.79	-840.47
1	FID		ACIS-I-4	7.04	8095	0.239	0.078	0.068	0.096	0.000000	0.000000	2152.03	1059.50
2	FID		ACIS-I-5	7.07	8095	-0.342	0.088	0.037	0.074	0.000000	0.000000	-1816.55	1057.31
3	GUIDE	used	411701312	8.69	16179	0.192	0.000	0.123	0.204	298.889956	40.820220	-1363.50	-2233.50
4	GUIDE	used	411707968	7.24	16188	-0.112	0.135	0.102	0.162	299.509933	40.926839	-981.71	-545.42
5	GUIDE	used	412240768	8.26	16184	0.038	0.092	0.082	0.141	299.999696	41.280279	-1566.76	1198.38
6	GUIDE	used	413405352	8.33	16176	-0.075	-0.076	0.099	0.166	300.290830	41.091941	-619.29	1627.46
7	GUIDE	used	413421016	8.67	16181	-0.044	-0.150	0.100	0.162	300.612426	40.446254	1858.88	1450.21

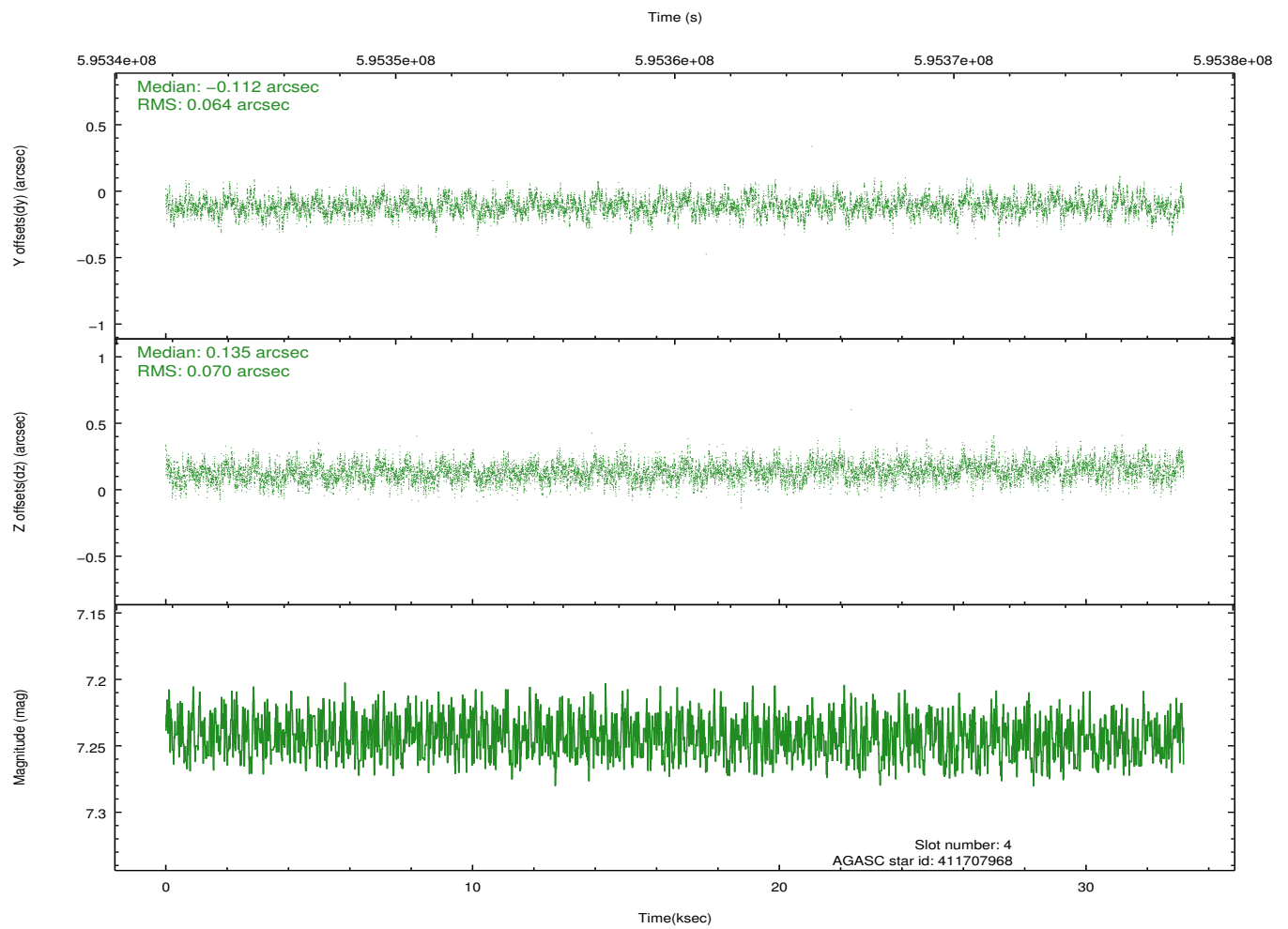
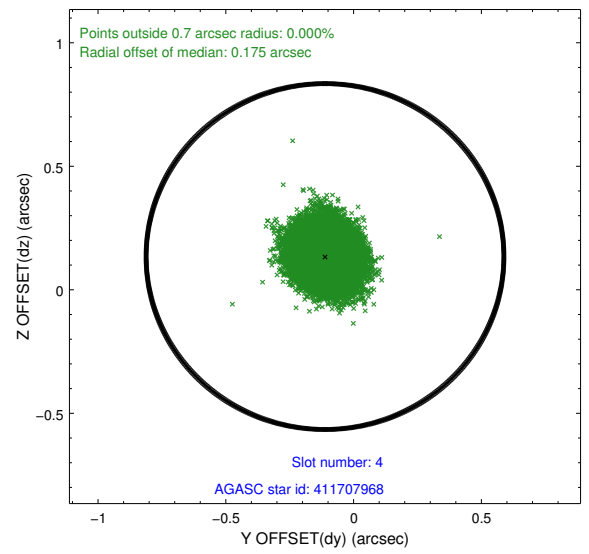
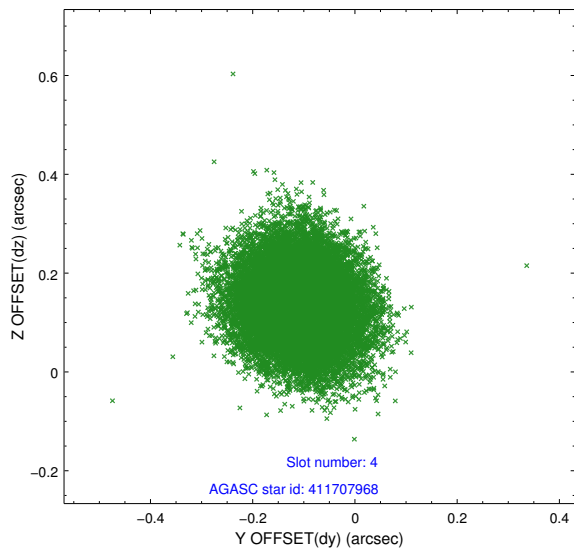
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2.4 Star Slots

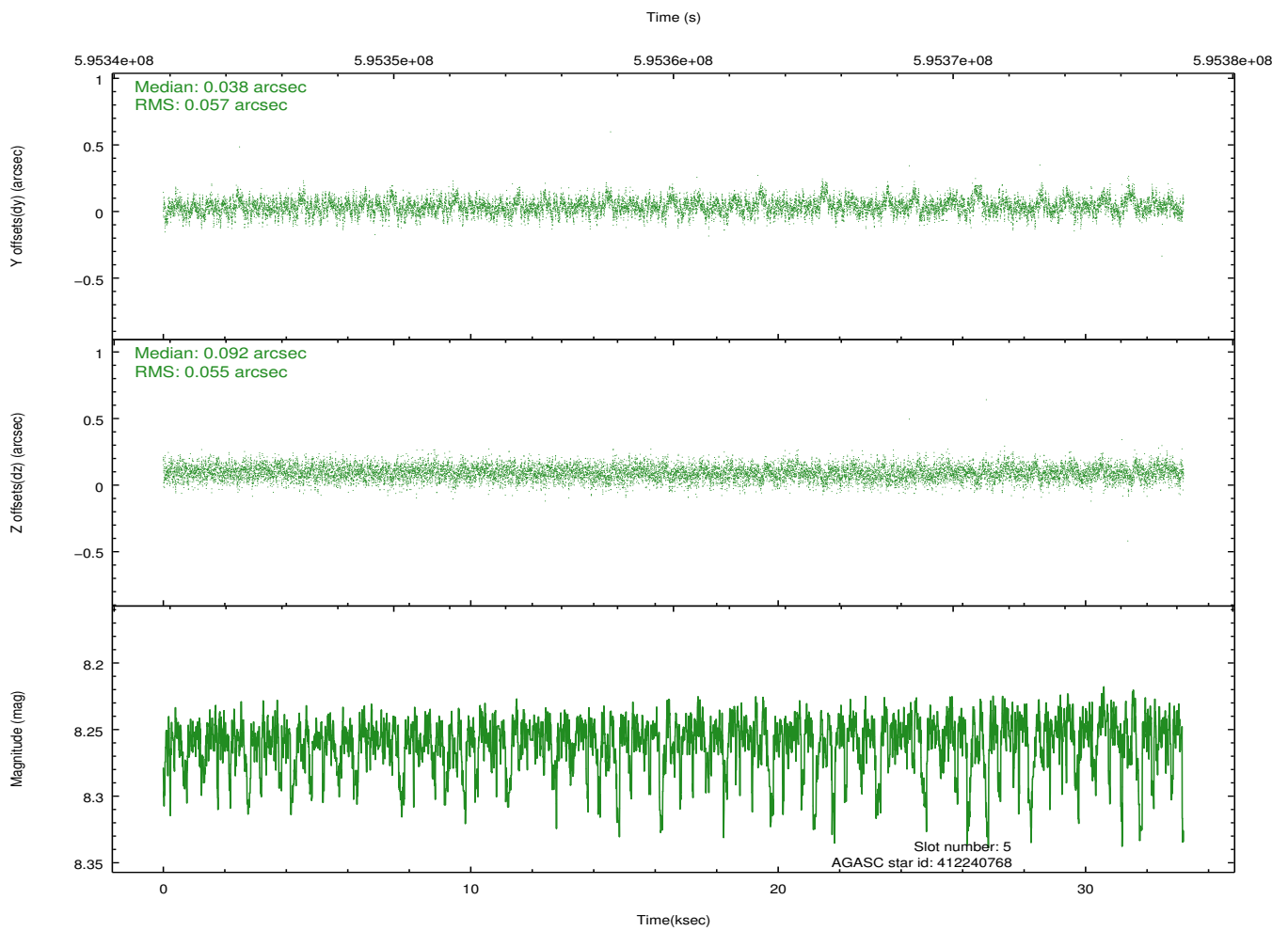
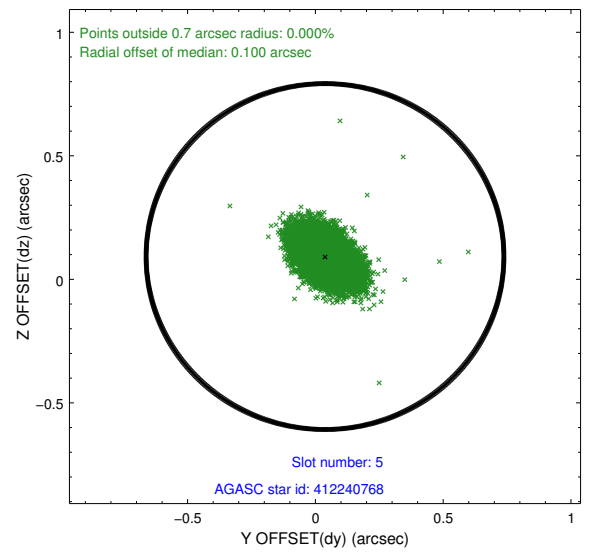
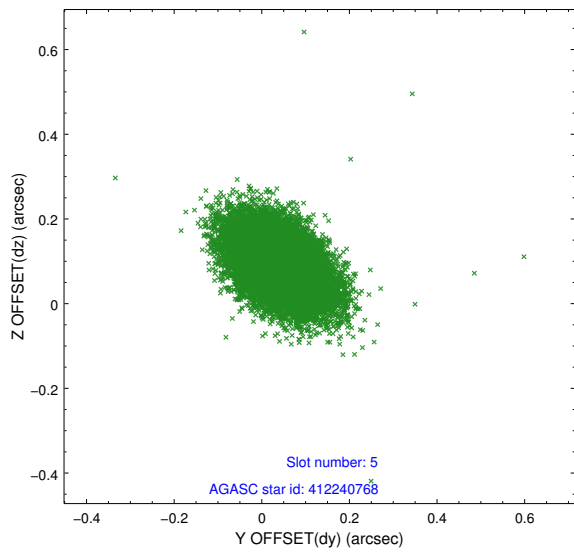
2.4.1 Slot 3



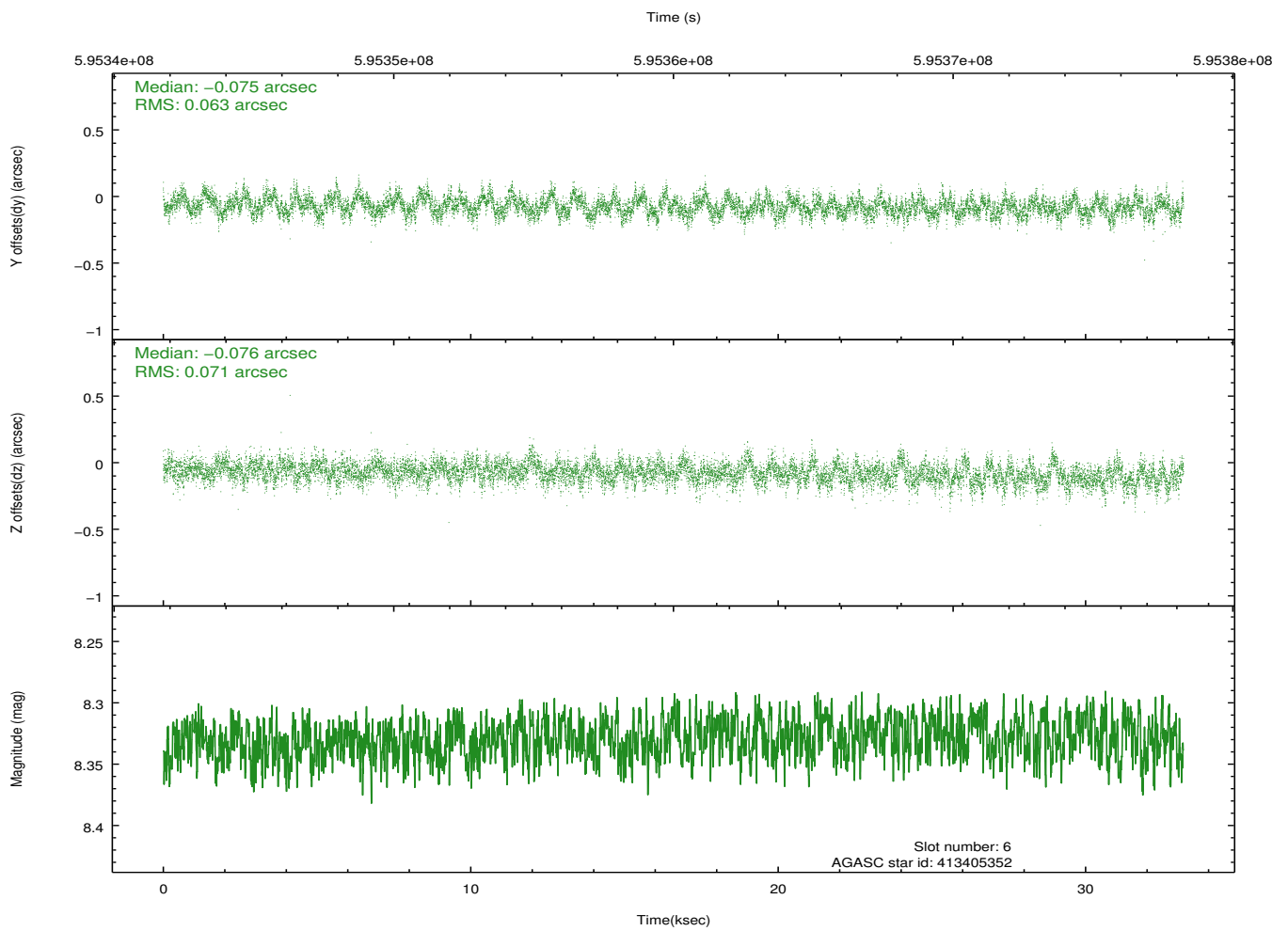
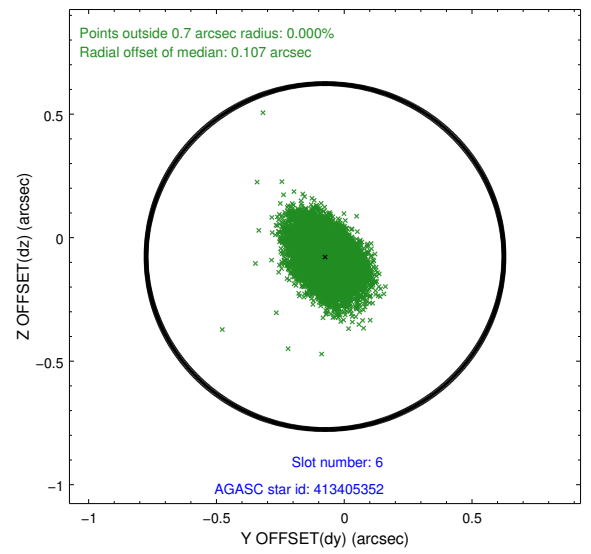
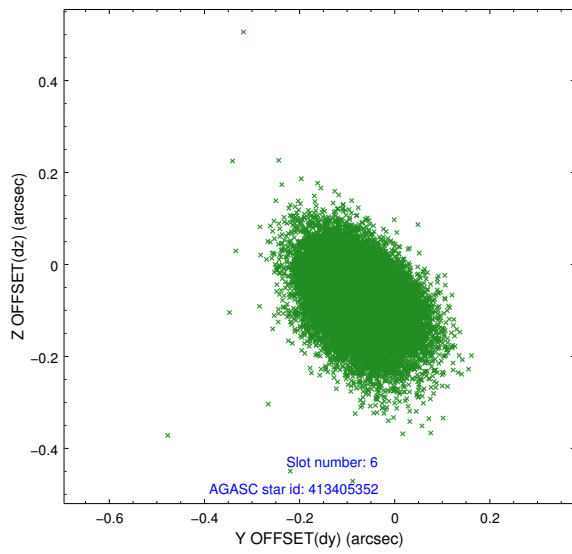
2.4.2 Slot 4



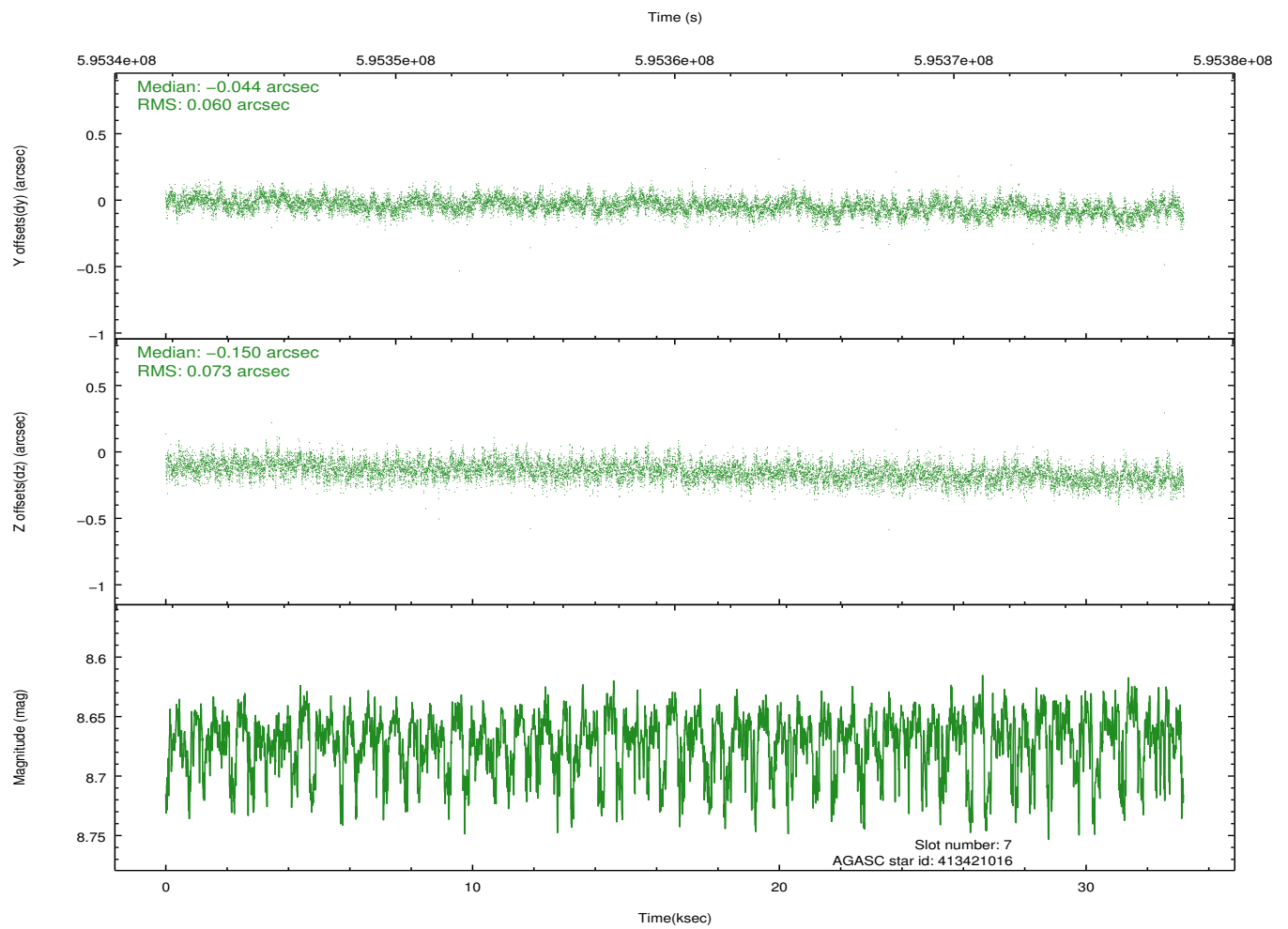
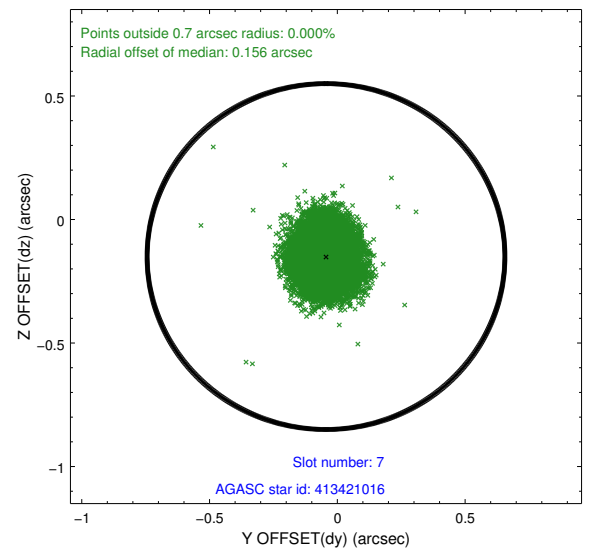
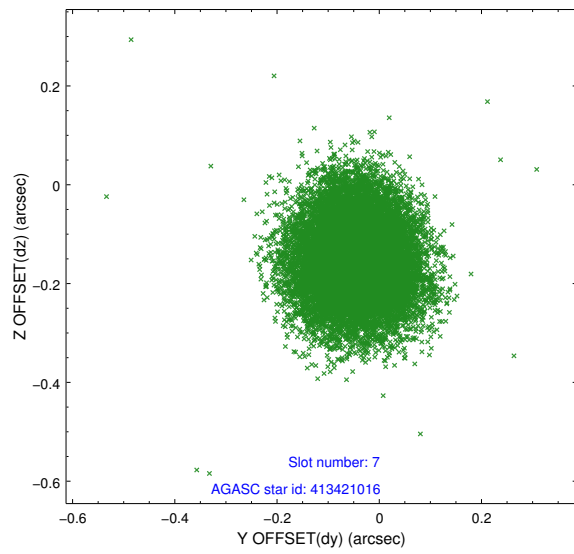
2.4.3 Slot 5



2.4.4 Slot 6

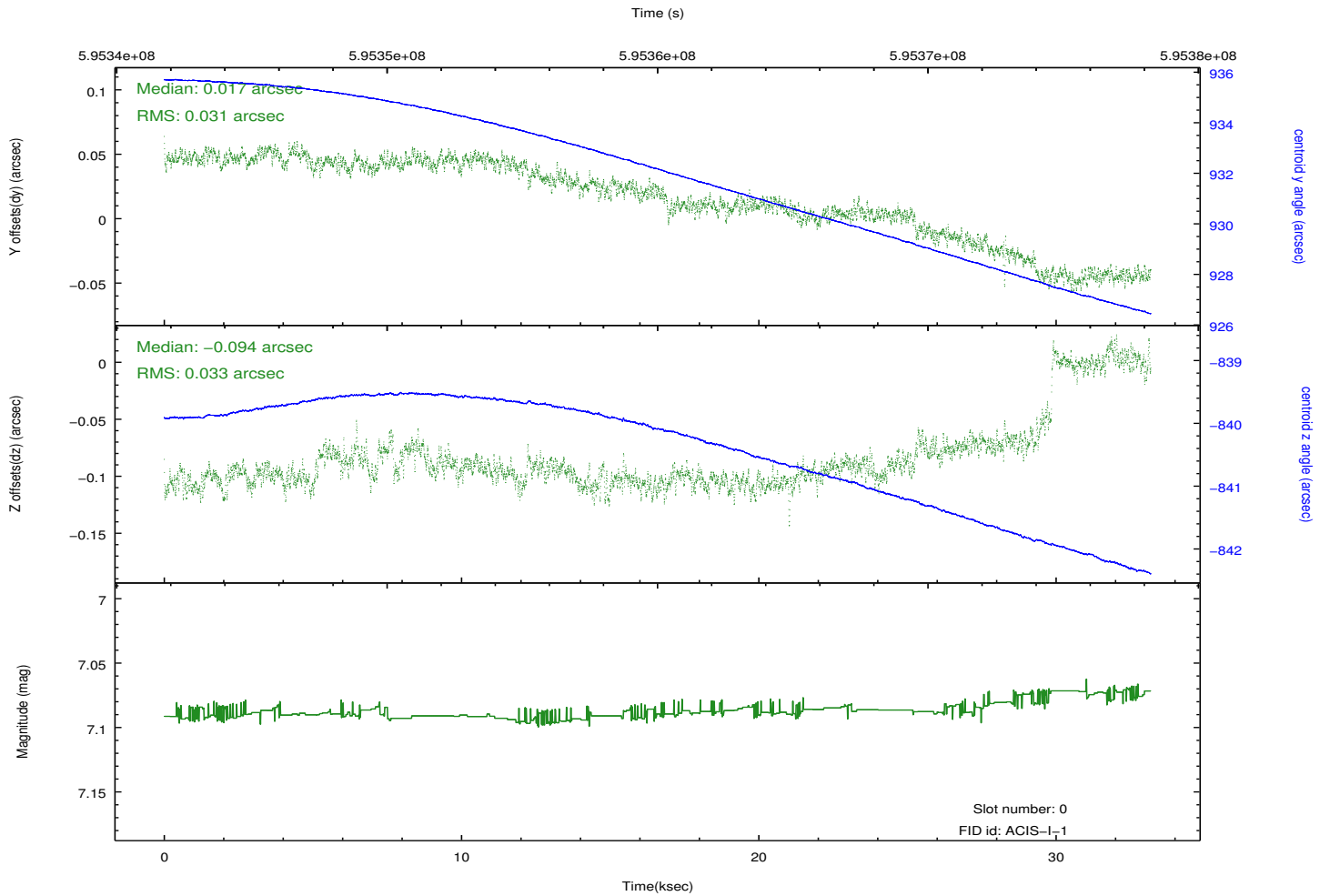
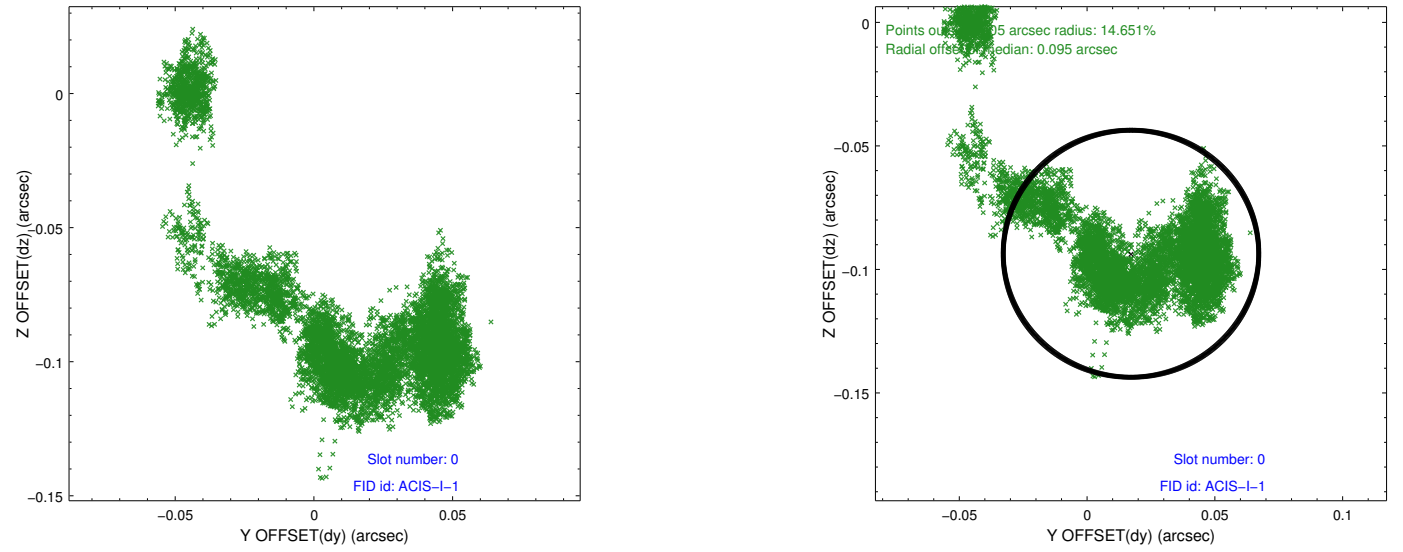


2.4.5 Slot 7

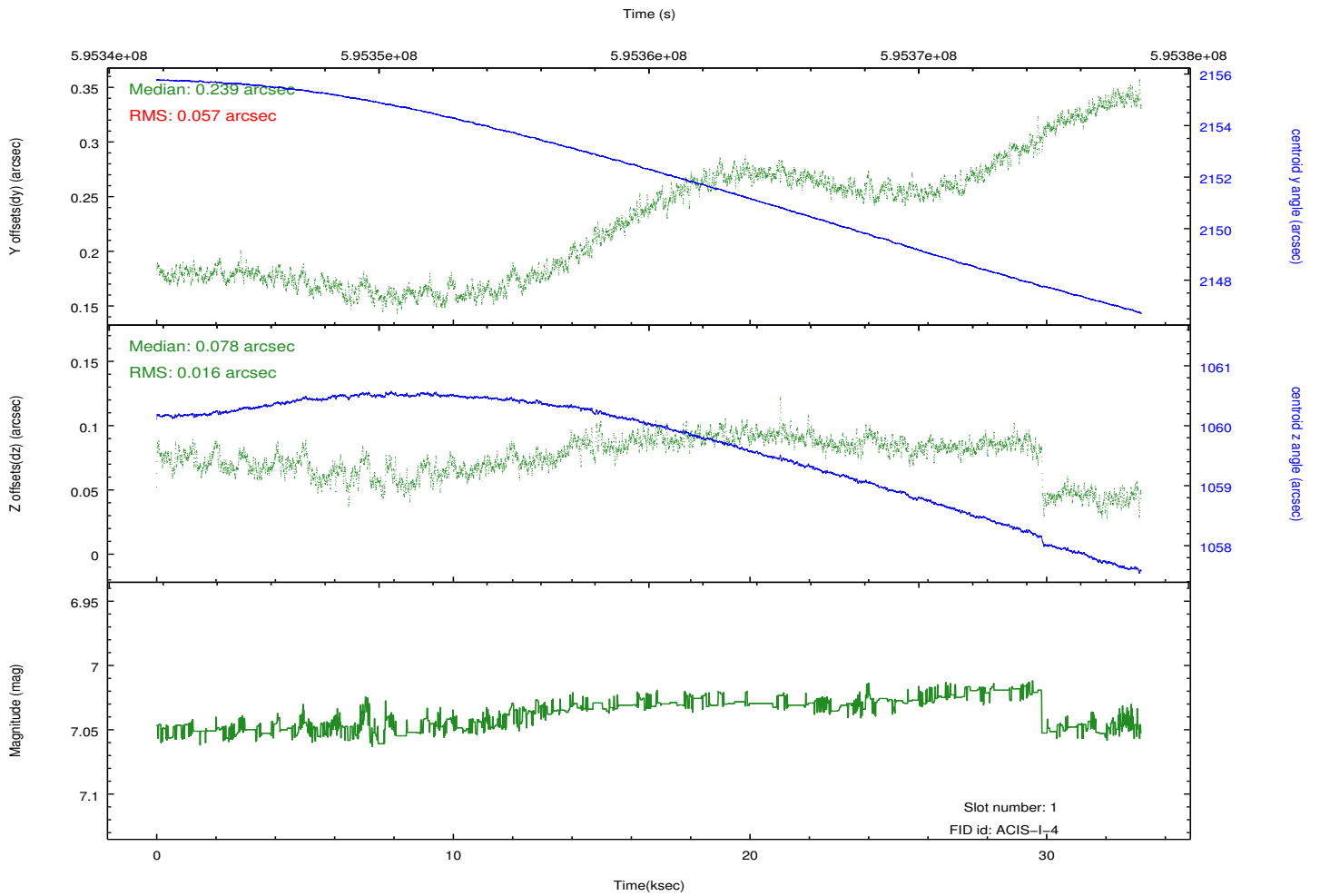
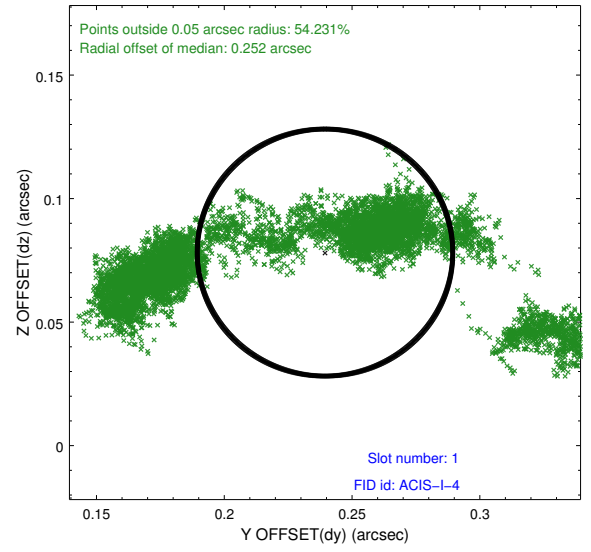
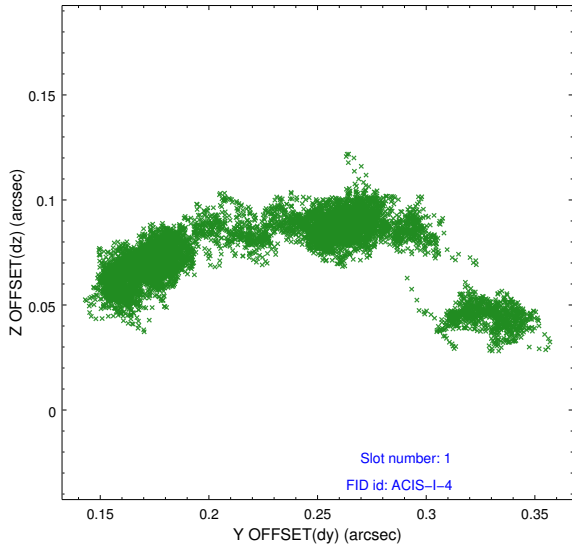


2.5 FID Slots

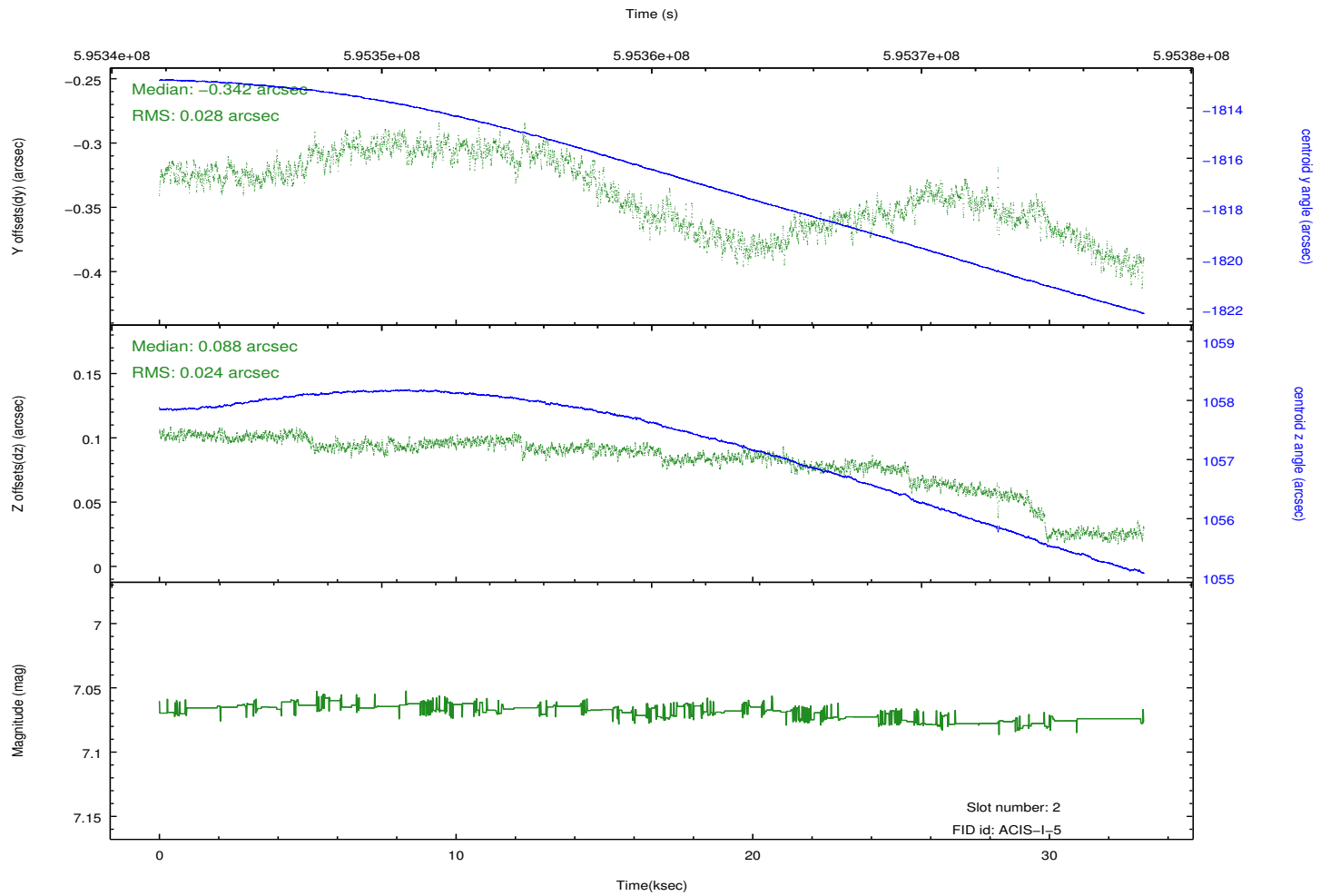
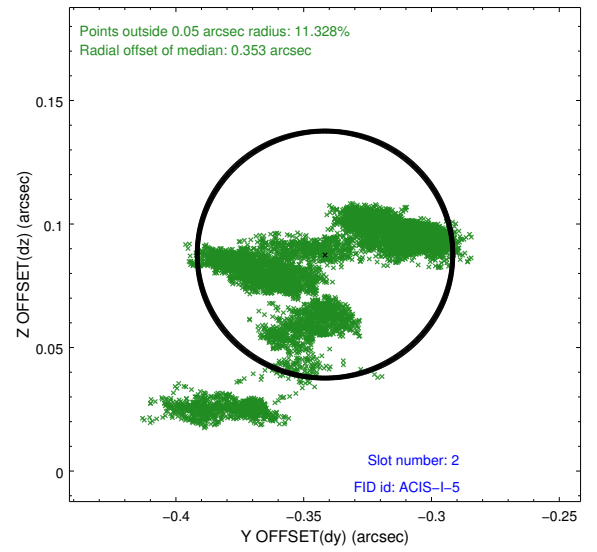
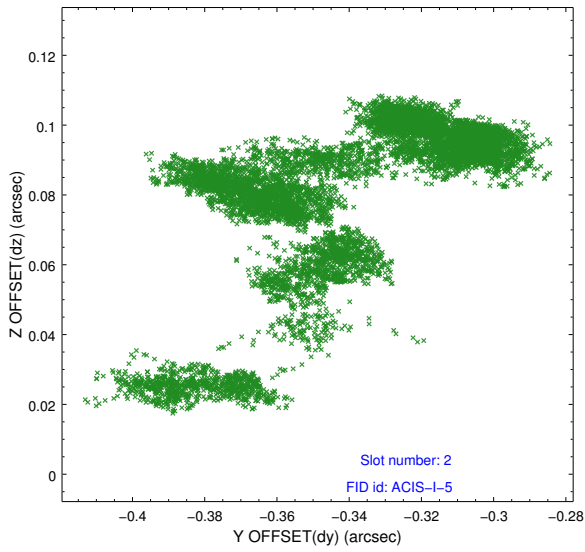
2.5.1 Slot 0



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)	2016.11.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.067659284234

A.2 Comments