

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19996 - L2 Version 1
Chandra X-Ray Center

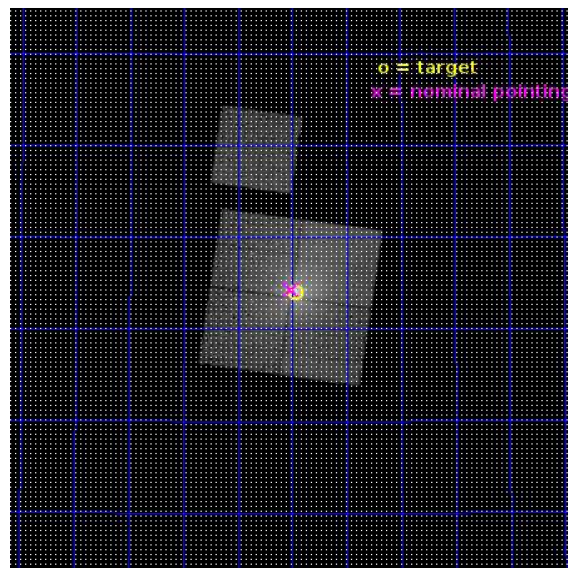
L2 Processing Date : Jan 31 2017

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1 Front

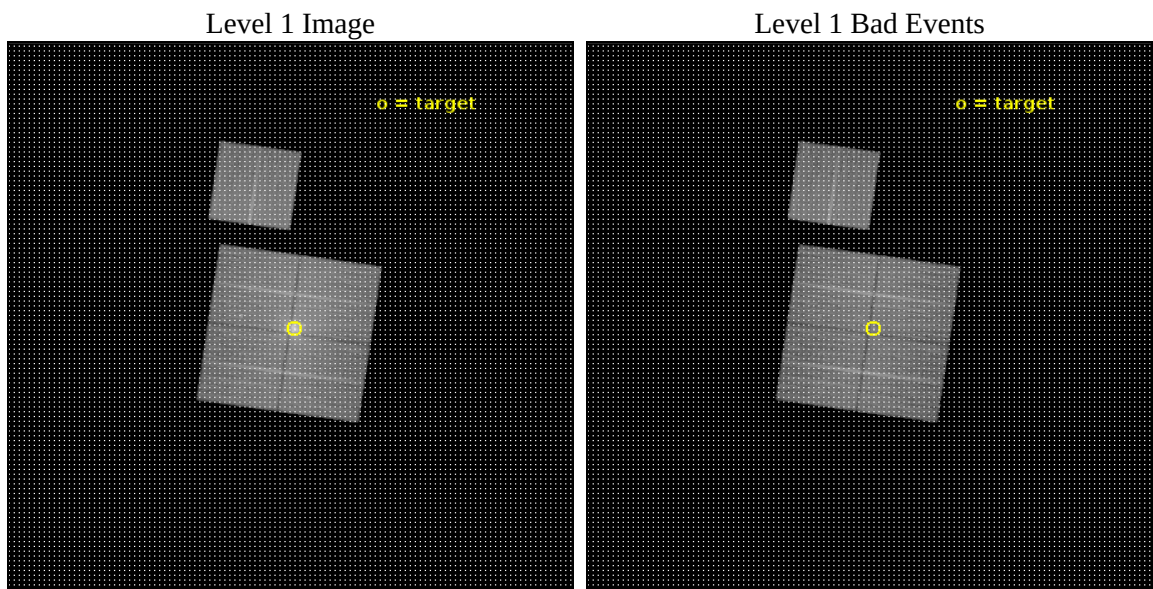
seq_num	703131	Sequence number
obs_id	19996	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - Nucleus	Source name
dtcycle	0	
cycle	P	events from which exps? 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	299.87749171178	Nominal RA [deg]
dec_nom	40.738550008636	Nominal Dec [deg]
roll_nom	8.2024401177296	Nominal Roll [deg]
revision	1	Processing version of data
ontime	29276.359225154	Sum of GTIs [s]
livetime	28893.842038935	Livetime [s]
ontime0	29273.104011774	Sum of GTIs [s]
ontime1	29279.427012324	Sum of GTIs [s]
ontime2	29276.327072501	Sum of GTIs [s]
ontime3	29276.359225154	Sum of GTIs [s]
ontime6	29273.062932134	Sum of GTIs [s]
l2events	236031	Number of level 2 events



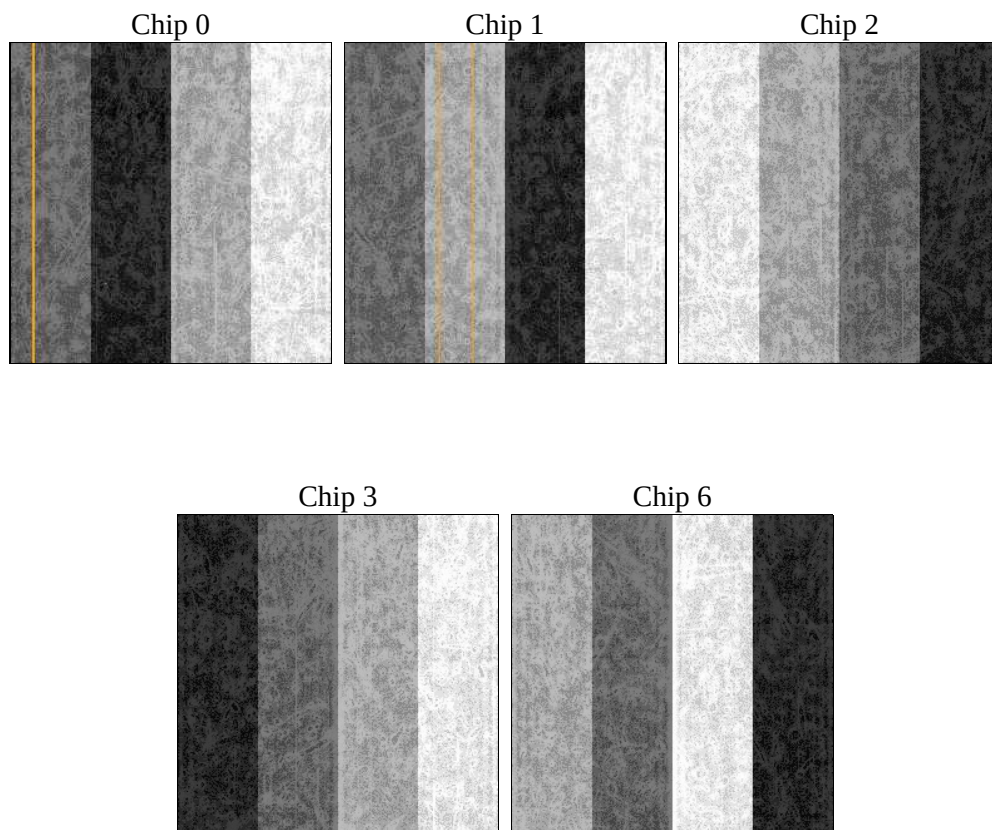
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29505.331000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	29276.359225154	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	29273.104011774	Sum of GTIs [s]
date	2017-01-31T08:45:37	Date and time of file creation	ontime1	29279.427012324	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	29276.327072501	Sum of GTIs [s]
			ontime3	29276.359225154	Sum of GTIs [s]
			ontime6	29273.062932134	Sum of GTIs [s]
			l1events	1172724	Number of level 1 events

2.1.4 Events

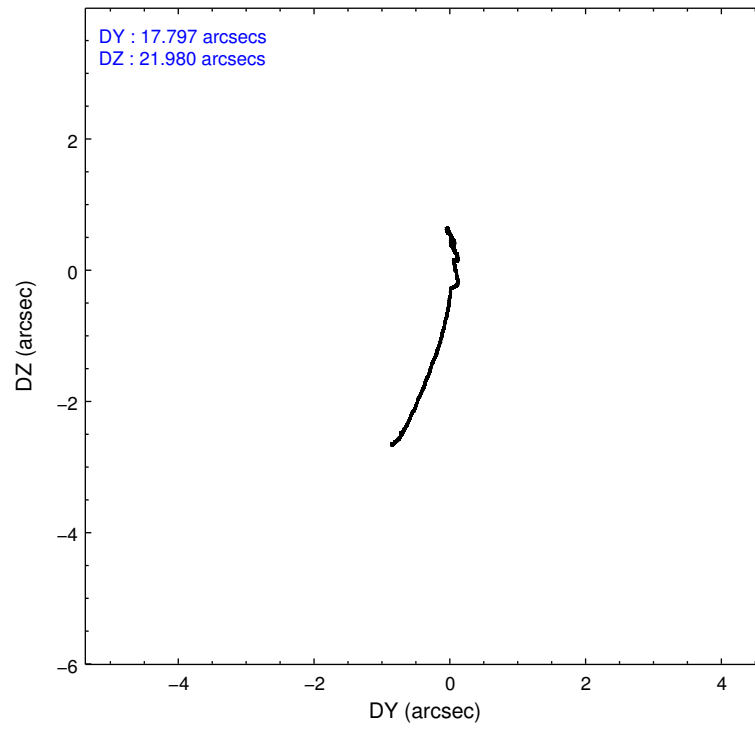
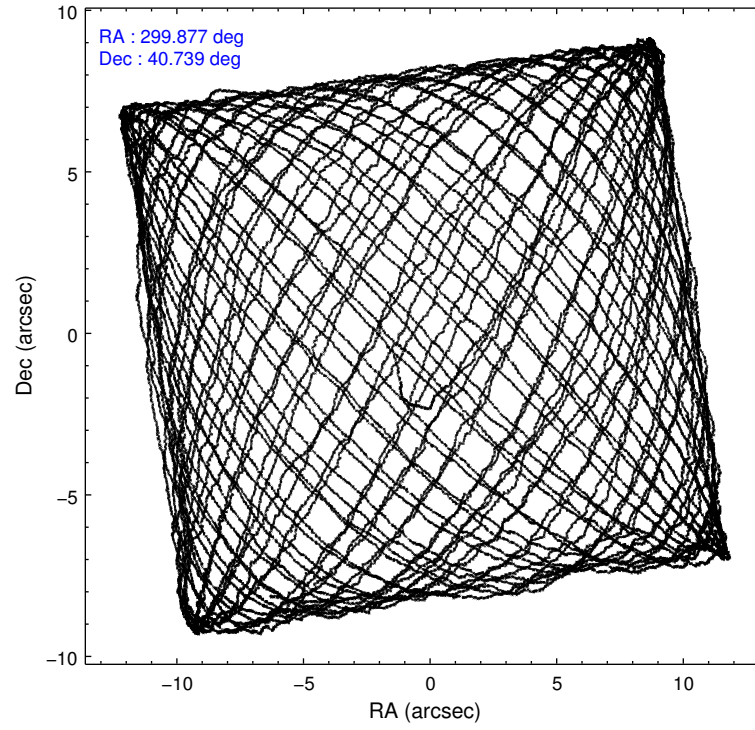
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	204499	210996	246342	298062	212825
rejected events	168962	167980	196050	191187	187688
rejected %	82%	79%	79%	64%	88%

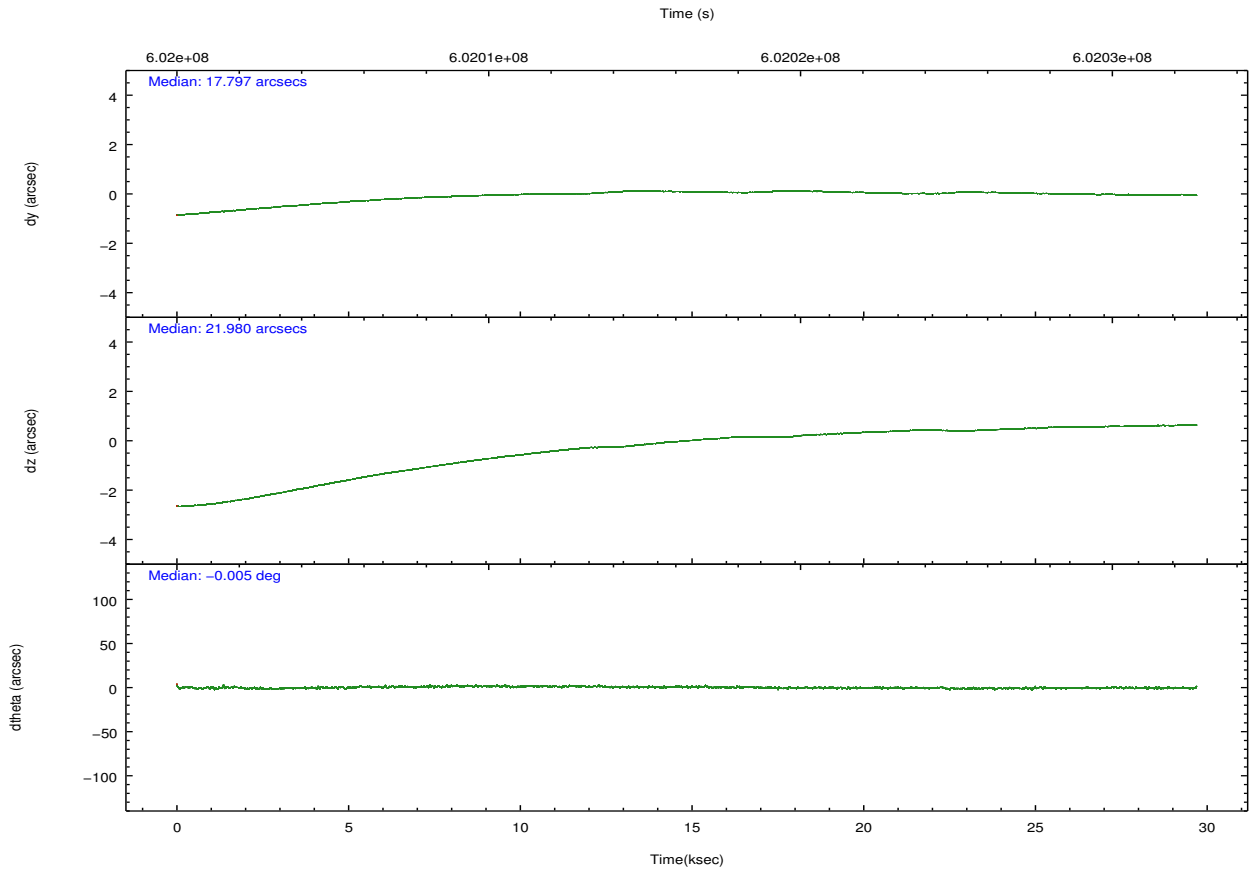
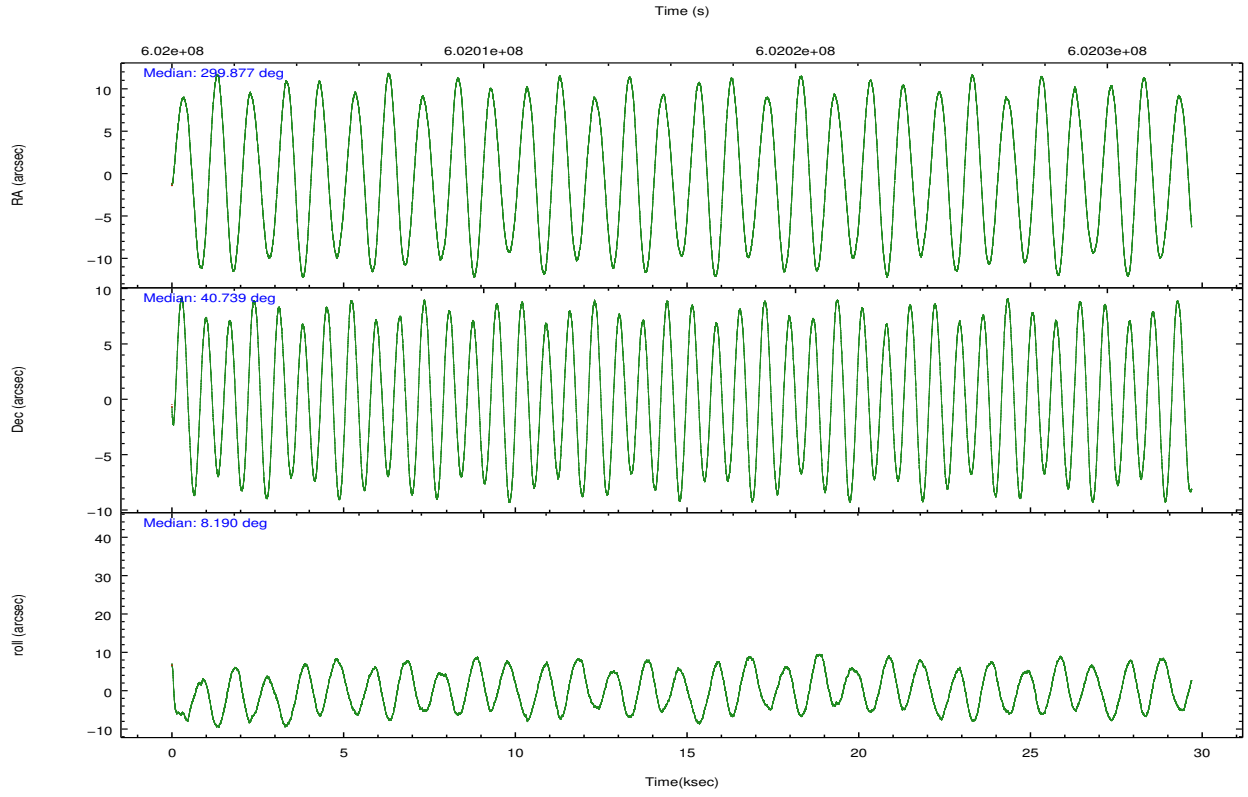
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	17570	21782	30357	73518	9101
	8%	10%	12%	24%	4%
grade 1 events	172	146	292	802	121
	0%	0%	0%	0%	0%
grade 2 events	7463	9059	8264	14159	5716
	3%	4%	3%	4%	2%
grade 3 events	2673	3010	3188	5427	2342
	1%	1%	1%	1%	1%
grade 4 events	2676	2923	3160	5421	2315
	1%	1%	1%	1%	1%
grade 5 events	8270	8887	7915	10599	9446
	4%	4%	3%	3%	4%
grade 6 events	5157	6245	5329	8360	5667
	2%	2%	2%	2%	2%
grade 7 events	160518	158944	187837	179776	178117
	78%	75%	76%	60%	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	299.848933	299.8774917117833	CCD I2 on	Y	Y
[deg] Pointing Dec	40.721399	40.73855000863615	CCD I3 on	Y	Y
[deg] Pointing Roll	8.012395	8.20244011772958	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)	602001684.184000	602000642.45143	CCD S5 on	N	N
Observation start date	2017-01-28T14:40:15	2017-01-28T14:24:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	602031190.184000	602031424.22821	On-chip summing requested	N	N
Observation end date	2017-01-28T22:52:01	2017-01-28T22:57:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



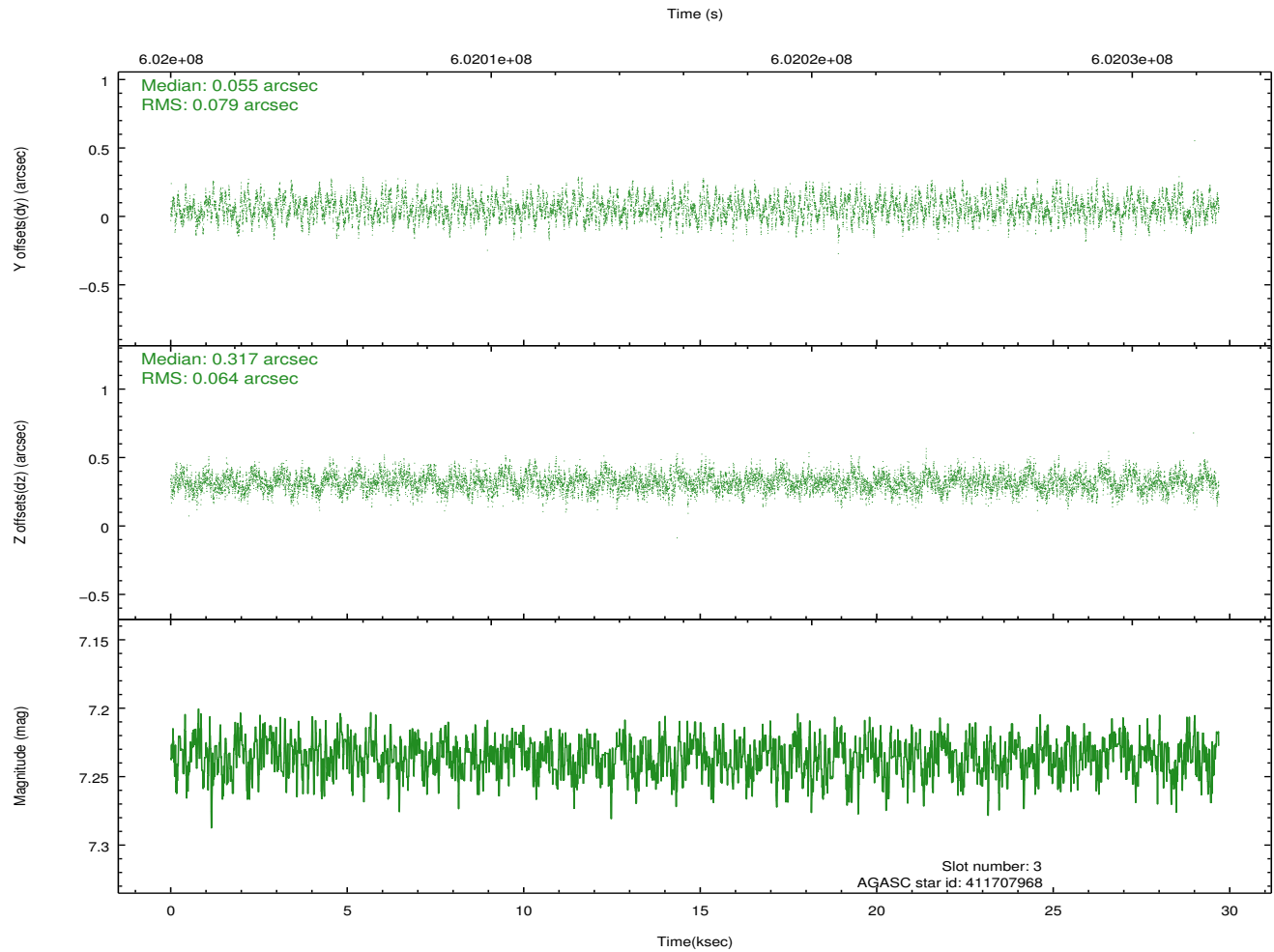
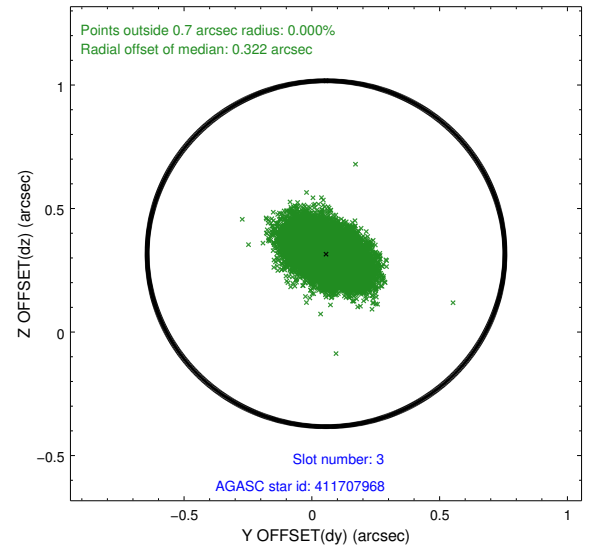
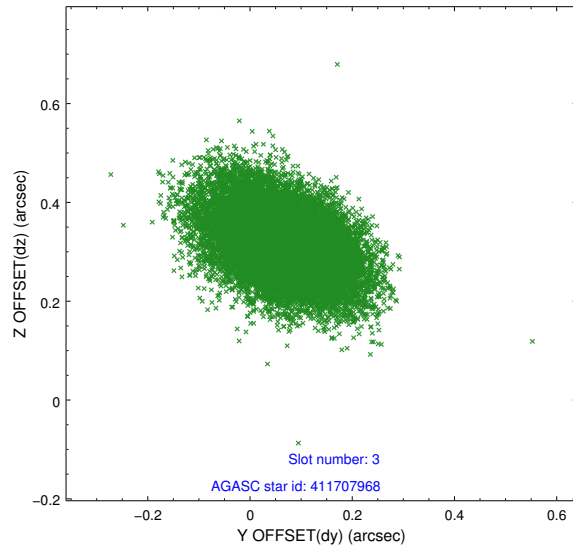


Slot Statistics

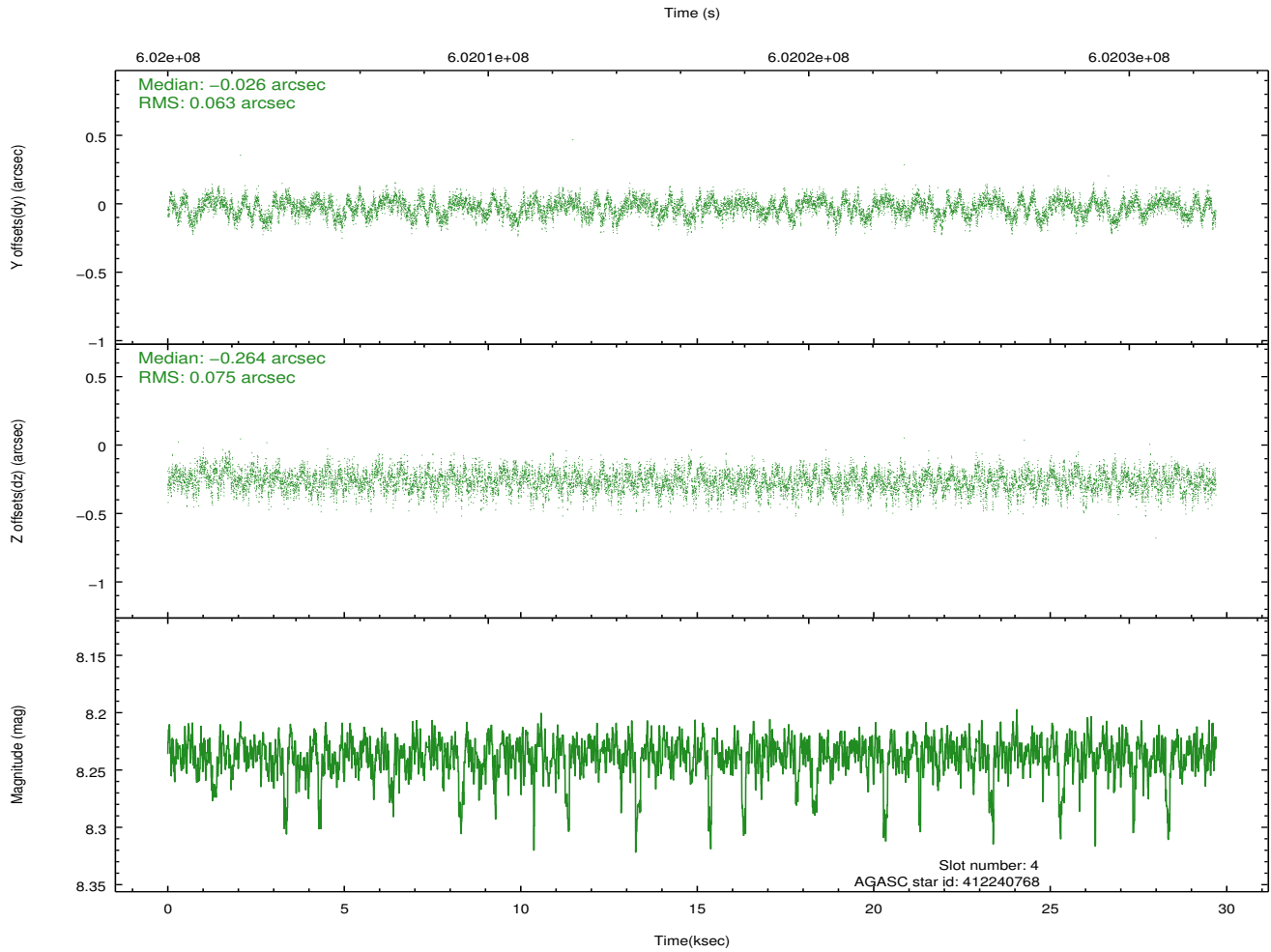
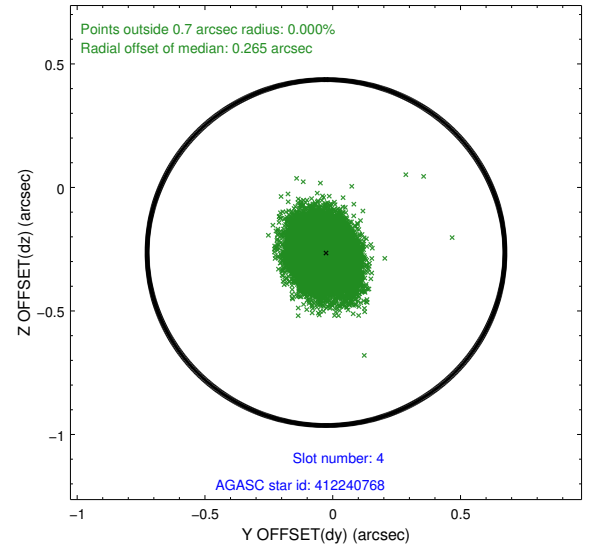
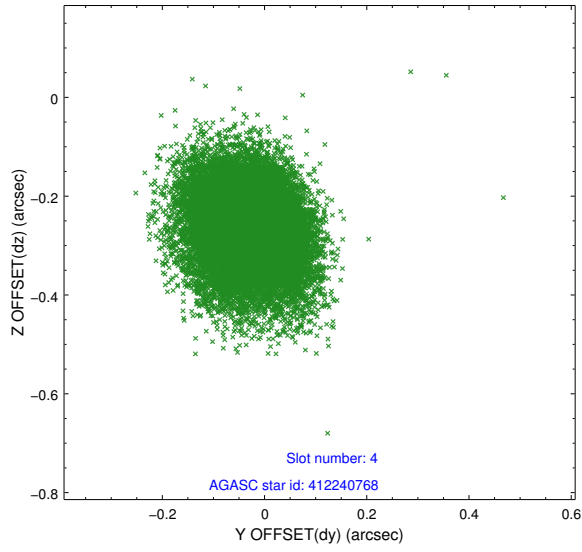
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.23	7240	-0.079	-0.088	0.031	0.052	0.000000	0.000000	921.66	-845.39
1	FID		ACIS-I-4	7.16	7242	0.437	0.125	0.017	0.045	0.000000	0.000000	2142.14	1054.66
2	FID		ACIS-I-5	7.22	7243	-0.458	0.035	0.024	0.033	0.000000	0.000000	-1826.74	1052.28
3	GUIDE	used	411707968	7.24	14483	0.055	0.317	0.109	0.177	299.509933	40.926839	-809.35	862.80
4	GUIDE	used	412240768	8.24	14477	-0.026	-0.264	0.104	0.168	299.999696	41.280279	684.23	1935.52
5	GUIDE	used	413405352	8.32	14476	-0.114	-0.189	0.095	0.161	300.290830	41.091941	1373.68	1156.69
6	GUIDE	used	413421016	8.70	14482	-0.110	0.139	0.173	0.264	300.612426	40.446254	1934.92	-1263.24
7	GUIDE	used	413425016	7.99	14480	0.186	0.004	0.149	0.266	300.758532	40.173167	2205.31	-2290.42

2.4 Star Slots

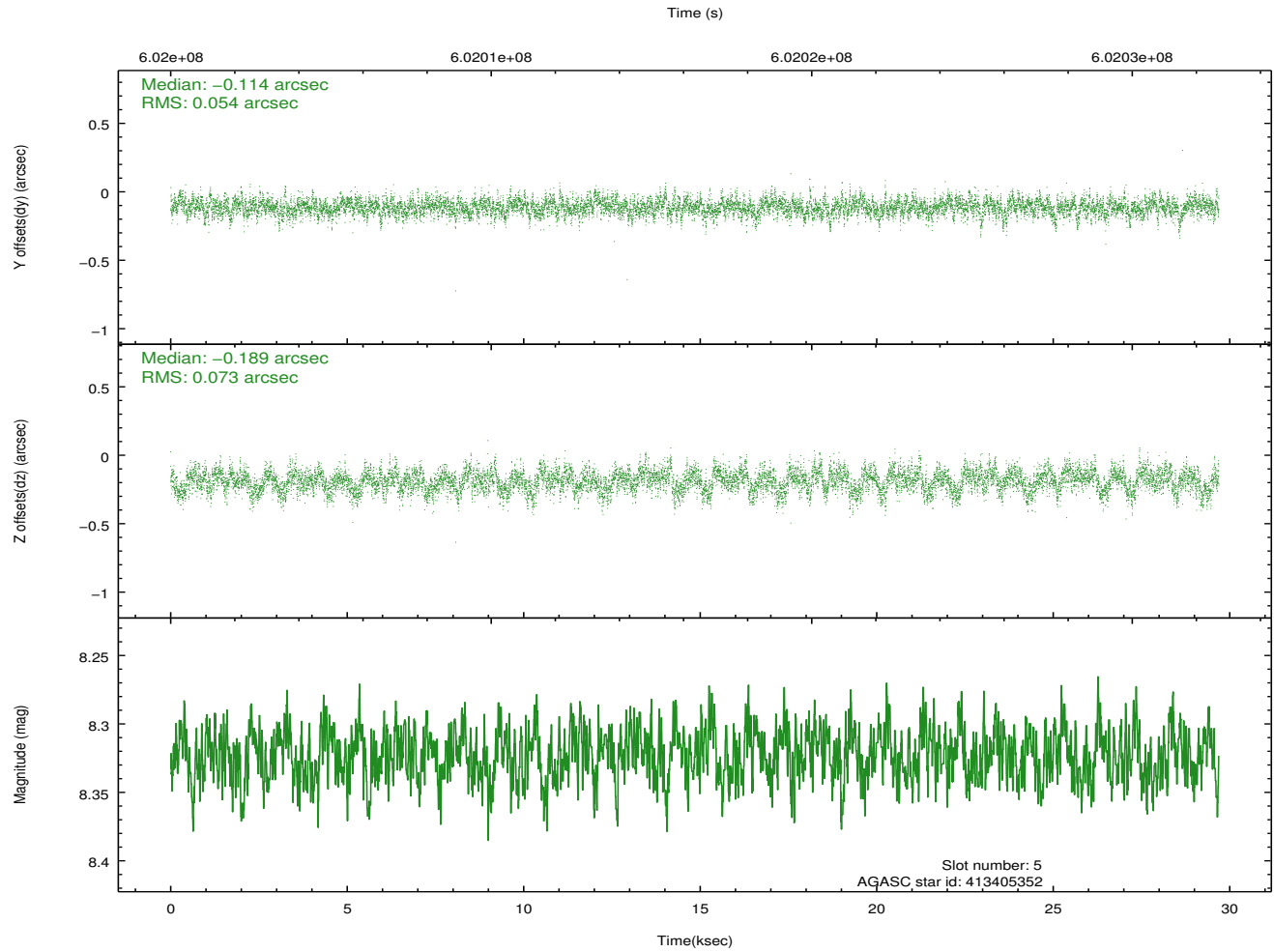
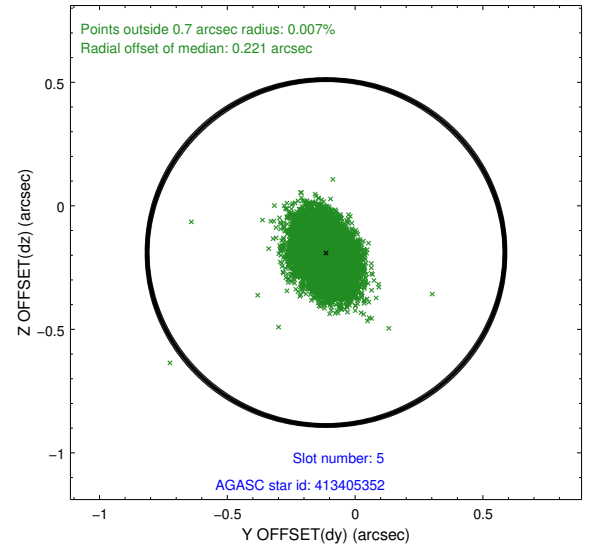
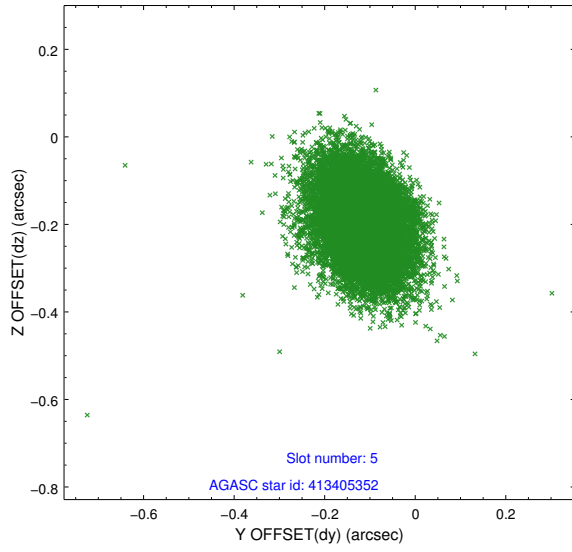
2.4.1 Slot 3



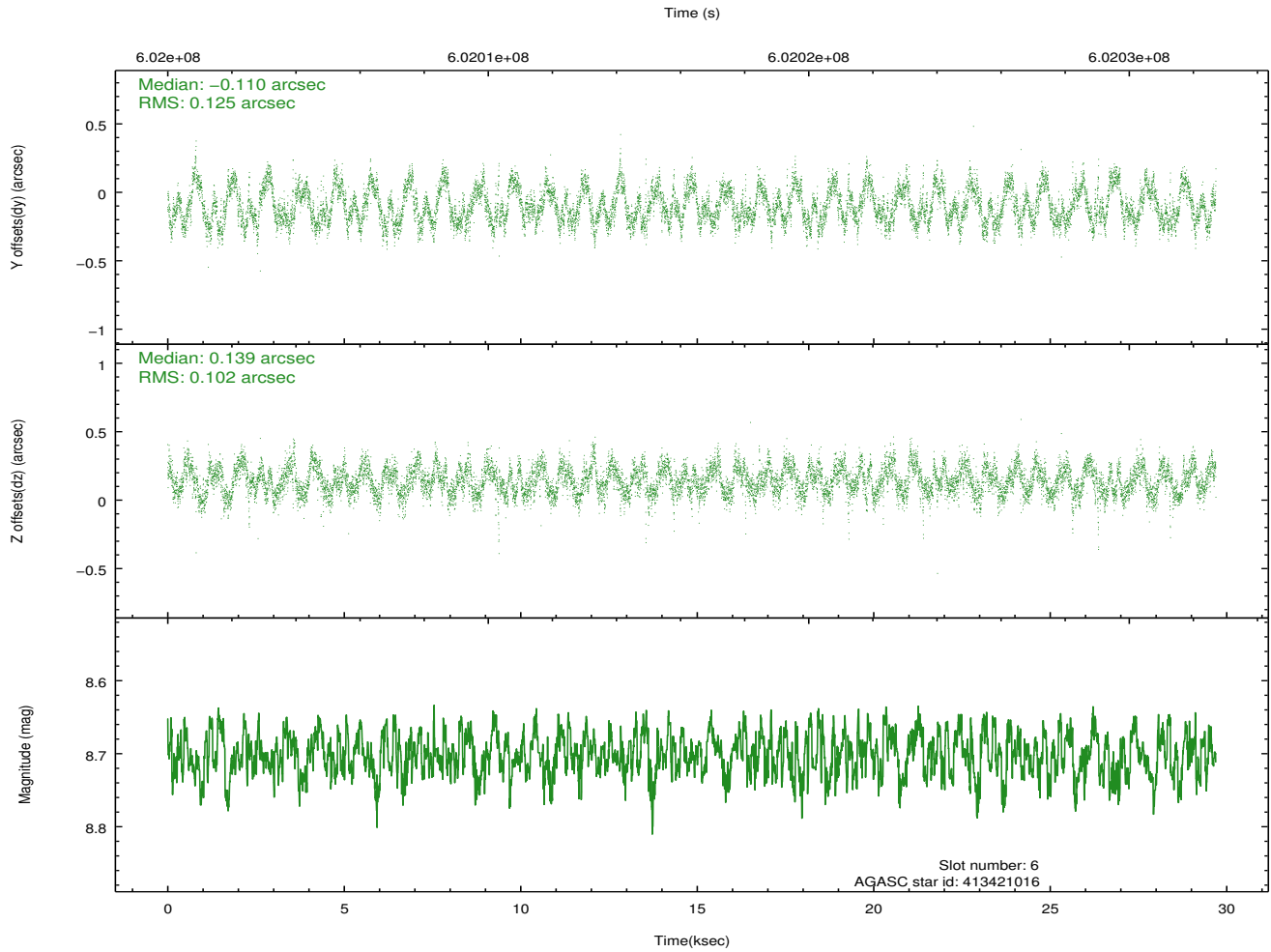
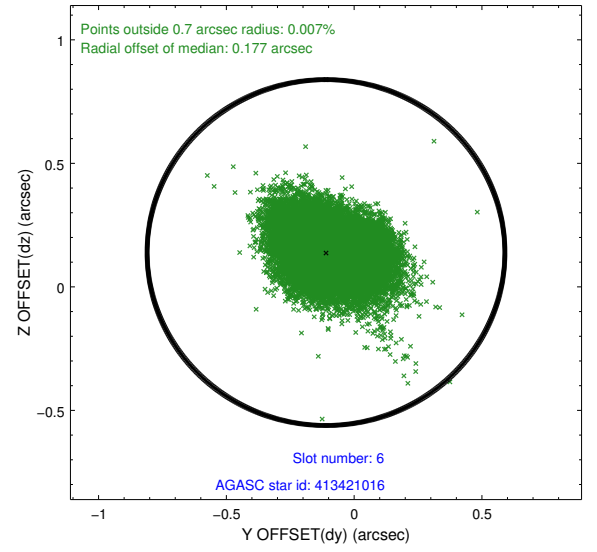
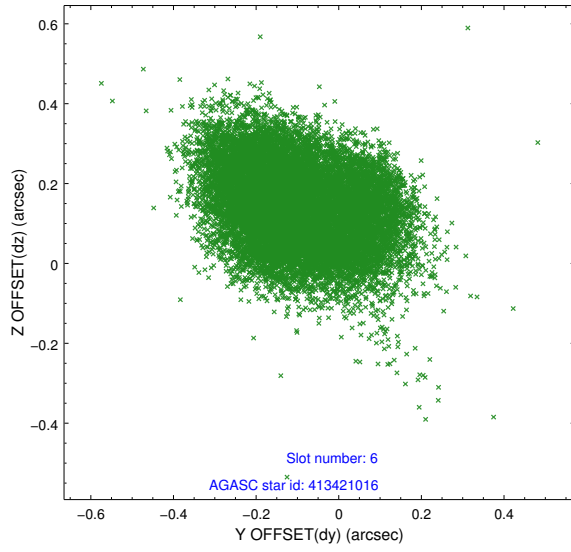
2.4.2 Slot 4



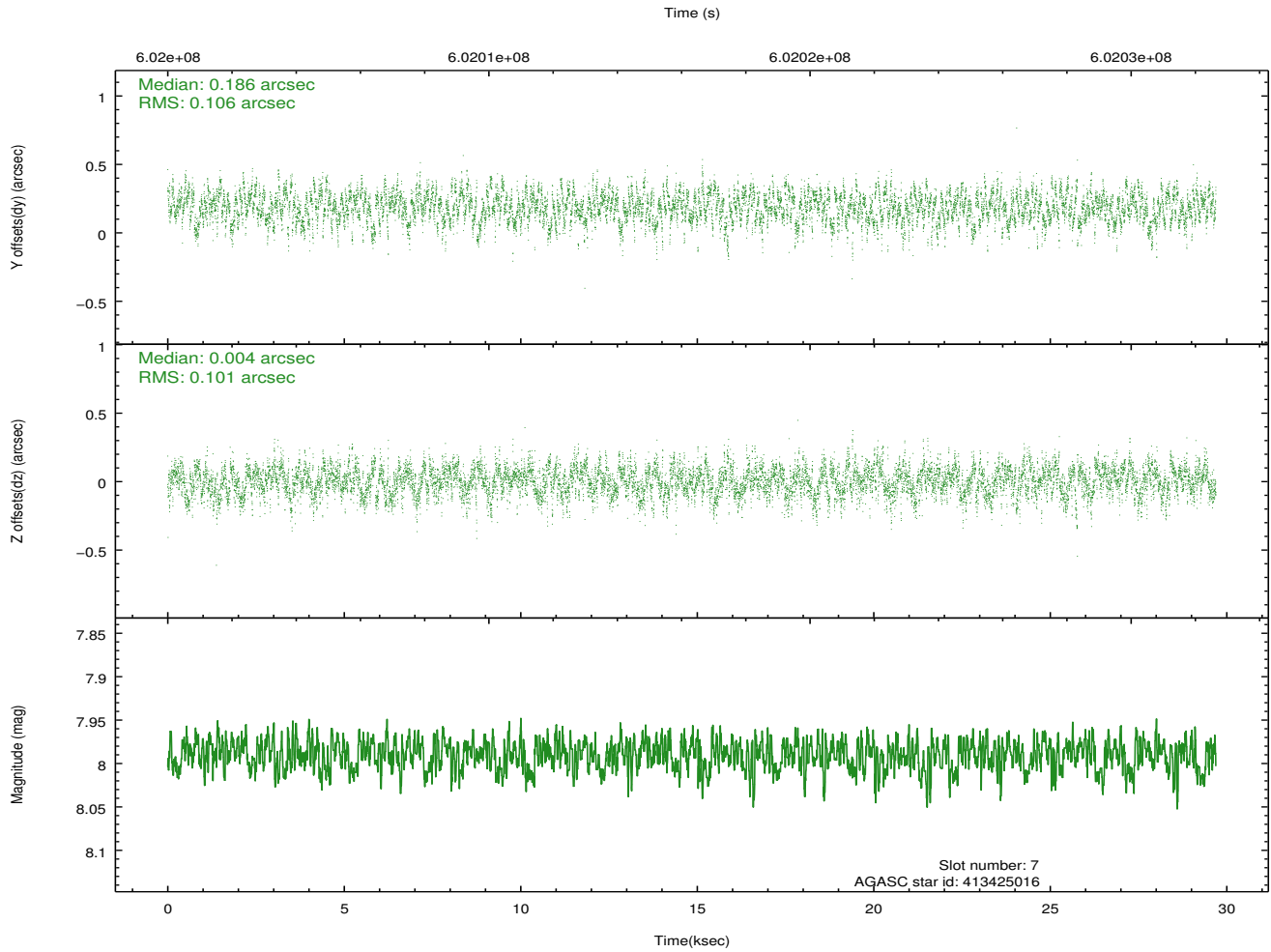
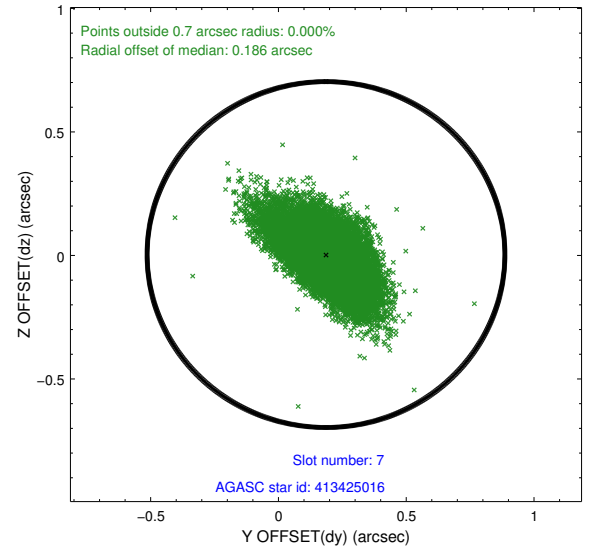
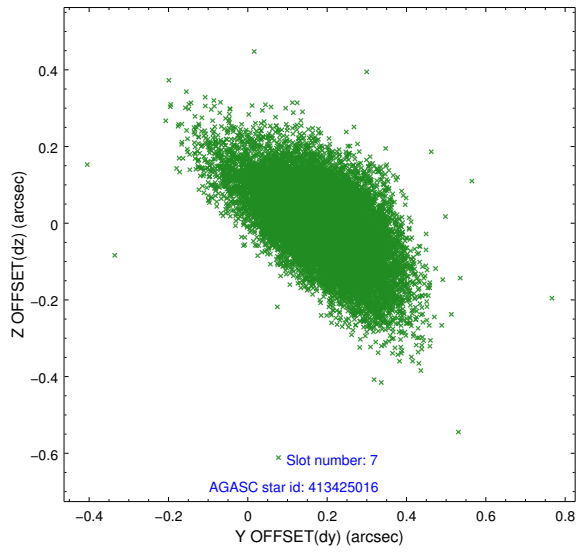
2.4.3 Slot 5



2.4.4 Slot 6

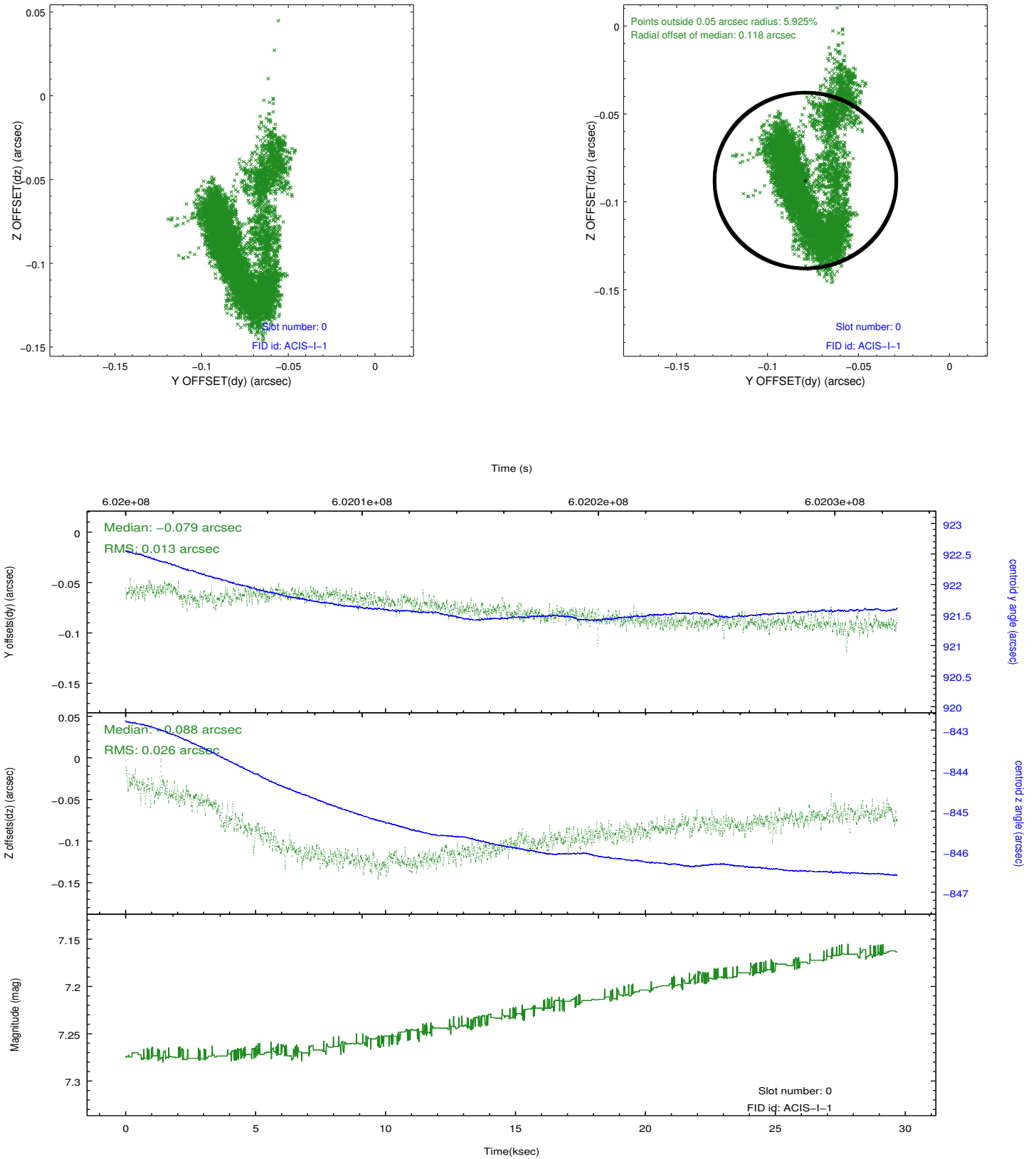


2.4.5 Slot 7

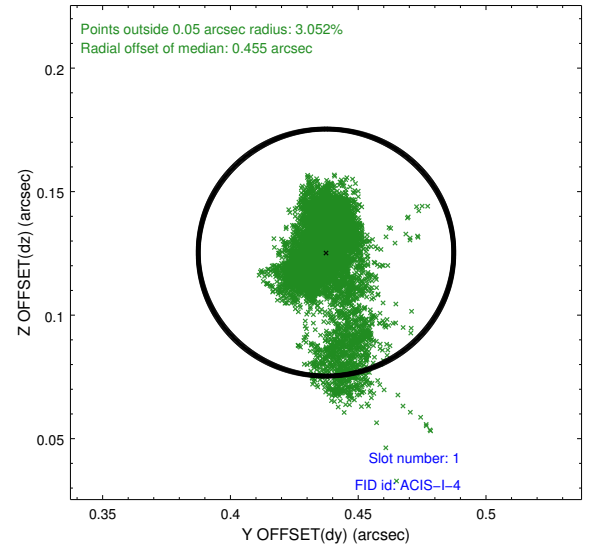
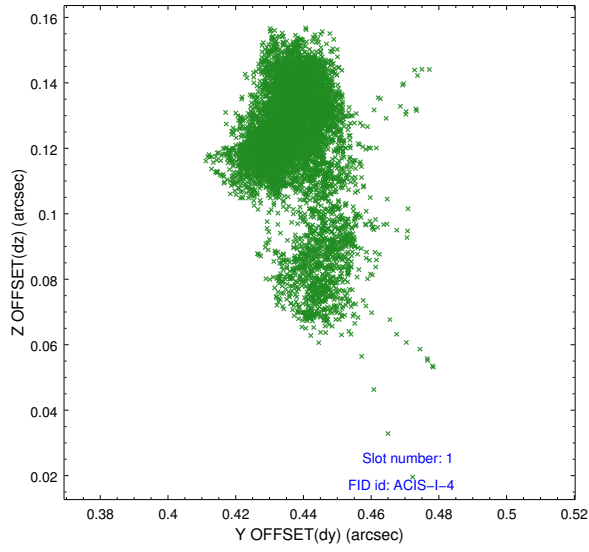


2.5 FID Slots

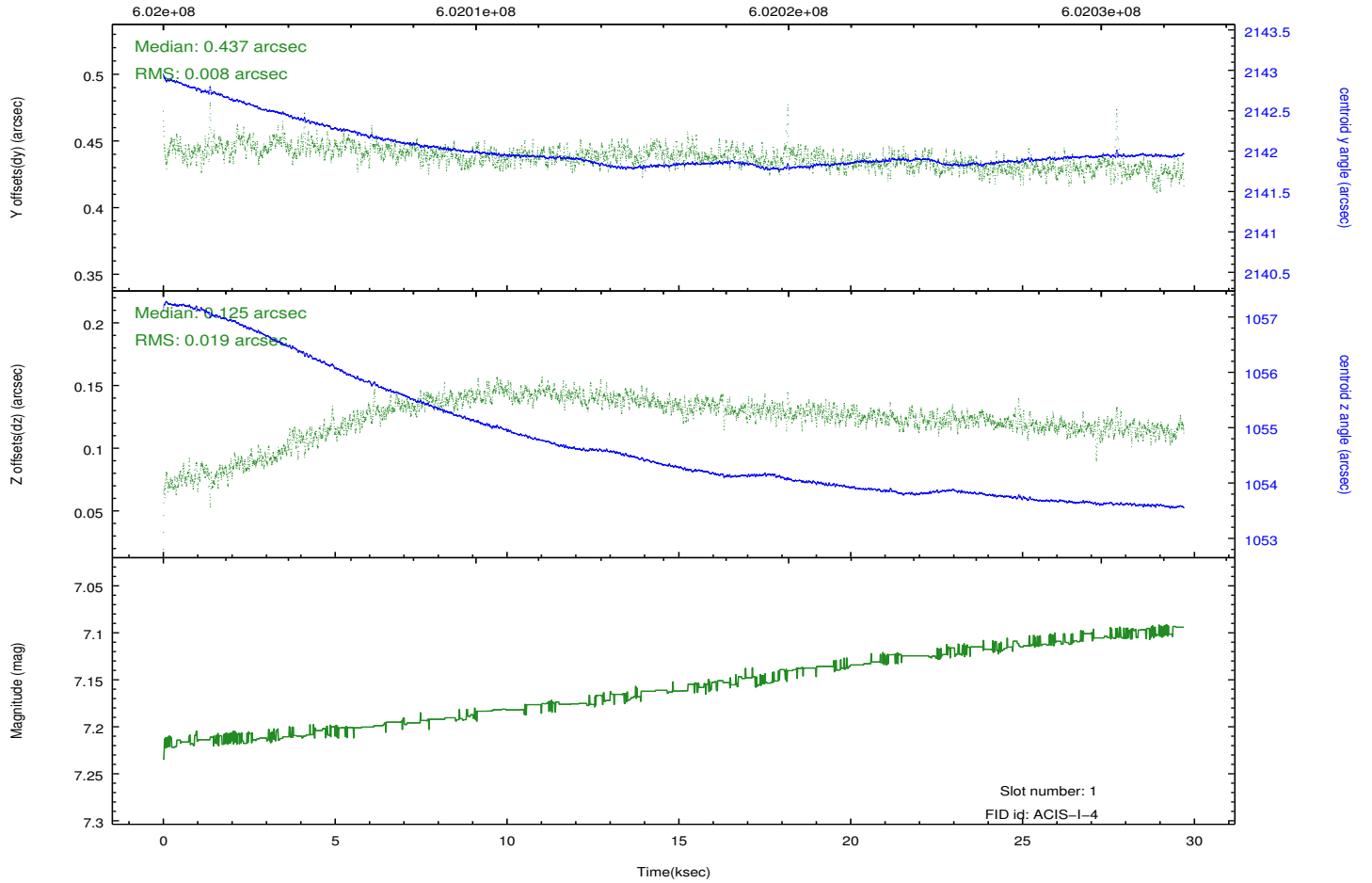
2.5.1 Slot 0



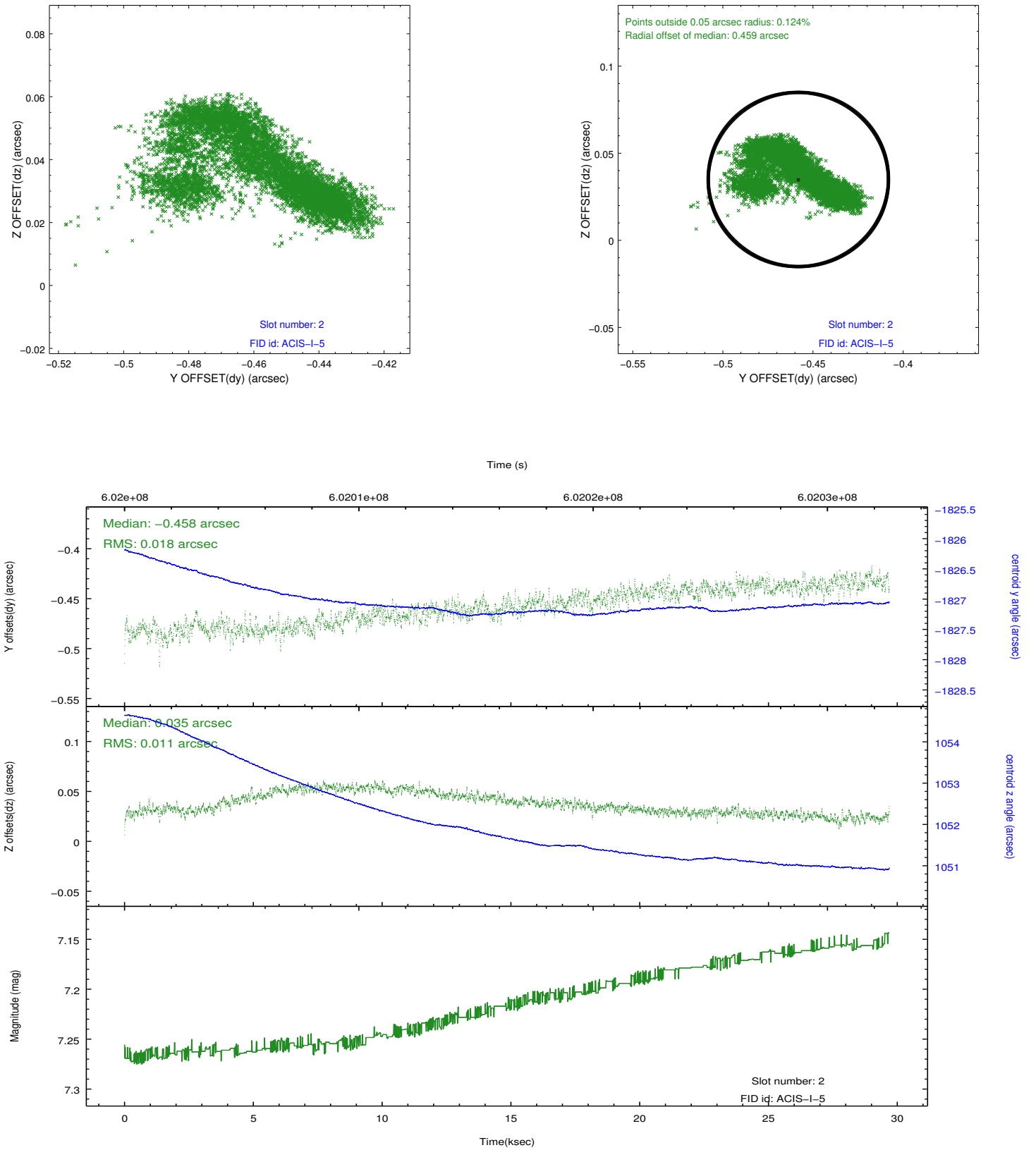
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.01.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.276359225154

A.2 Comments