

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 17524 - L2 Version 1
Chandra X-Ray Center

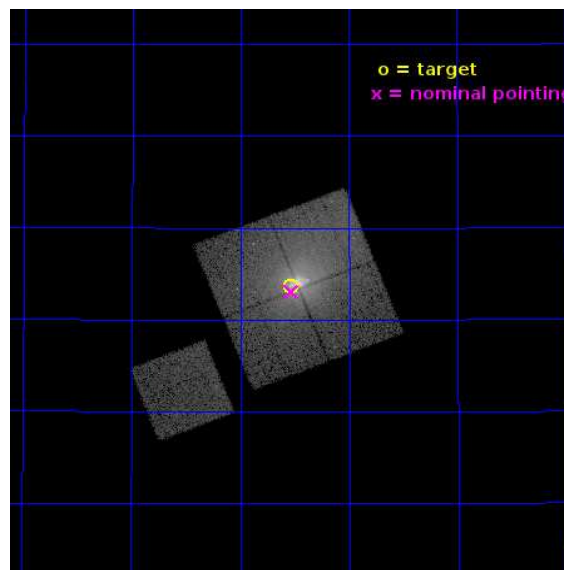
L2 Processing Date : Sep 9 2015

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

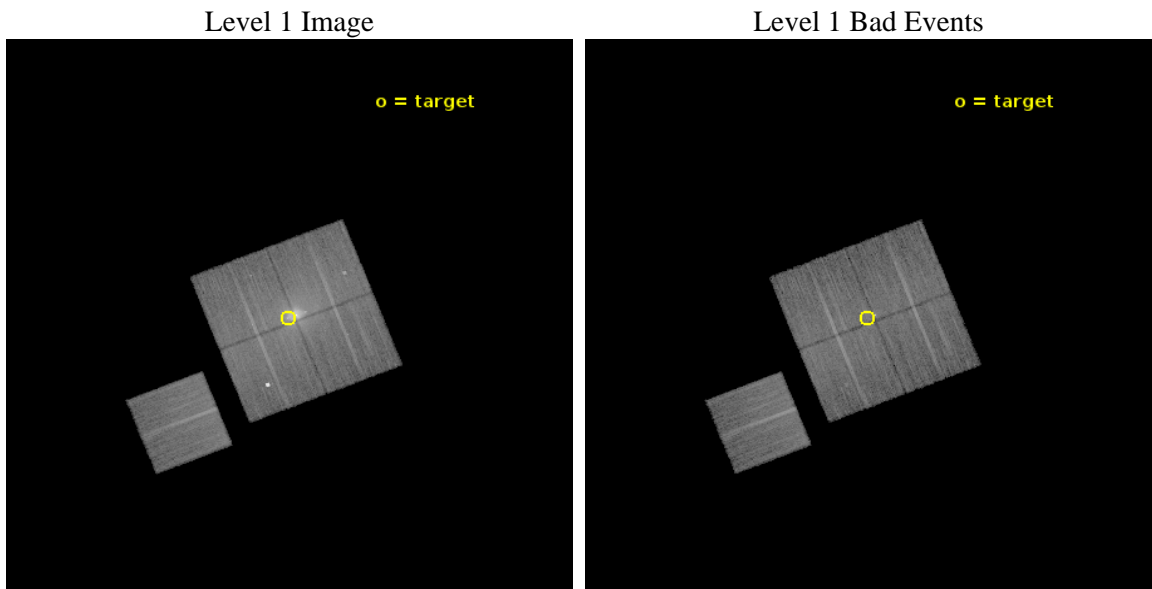
seq_num	703133	Sequence number
obs_id	17524	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - E Hotspot	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.883333	Observer's specified target RA [deg]
dec_targ	40.727889	Observer's specified target Dec [deg]
ra_nom	299.88277455927	Nominal RA [deg]
dec_nom	40.717874316928	Nominal Dec [deg]
roll_nom	248.50906825726	Nominal Roll [deg]
revision	1	Processing version of data
ontime	23314.971124291	Sum of GTIs [s]
livetime	23010.343862321	Livetime [s]
ontime0	23314.848004341	Sum of GTIs [s]
ontime1	23311.747974038	Sum of GTIs [s]
ontime2	23314.930084348	Sum of GTIs [s]
ontime3	23314.971124291	Sum of GTIs [s]
ontime6	23314.806964278	Sum of GTIs [s]
l2events	168259	Number of level 2 events



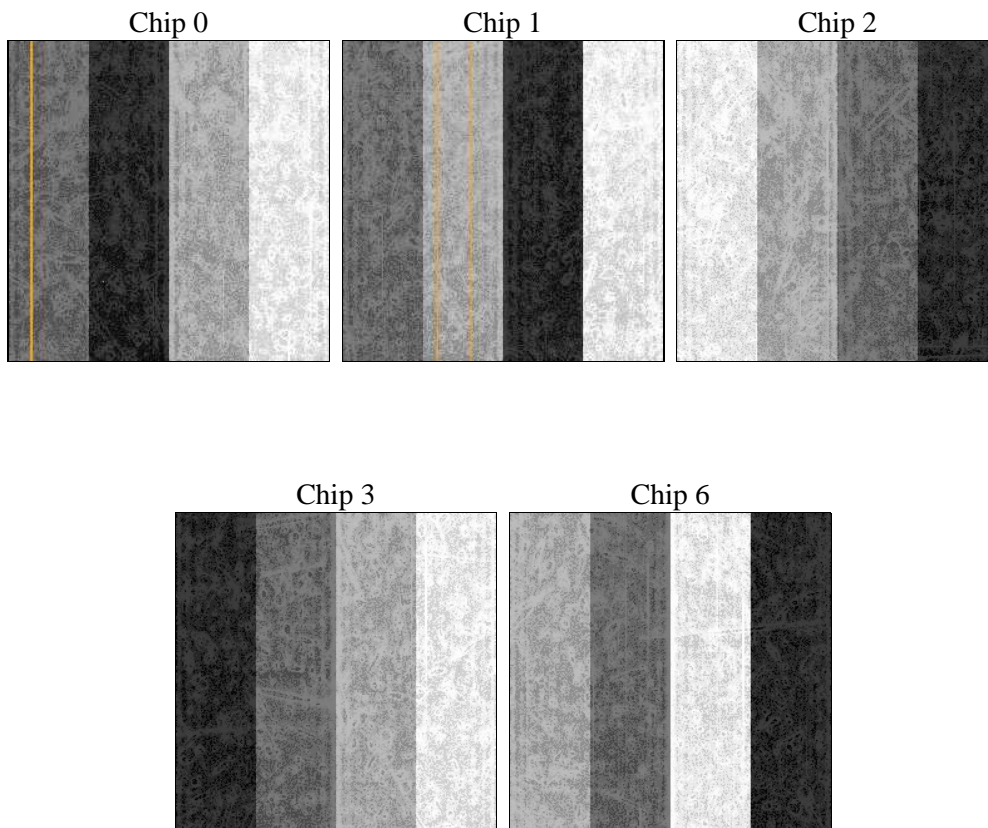
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23250.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	23314.971124291	Sum of GTIs [s]
caldbver	4.6.8	 	ontime0	23314.848004341	Sum of GTIs [s]
date	2015-09-09T19:28:04	Date and time of file creation	ontime1	23311.747974038	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	23314.930084348	Sum of GTIs [s]
			ontime3	23314.971124291	Sum of GTIs [s]
			ontime6	23314.806964278	Sum of GTIs [s]
			l1events	740556	Number of level 1 events

2.1.4 Events

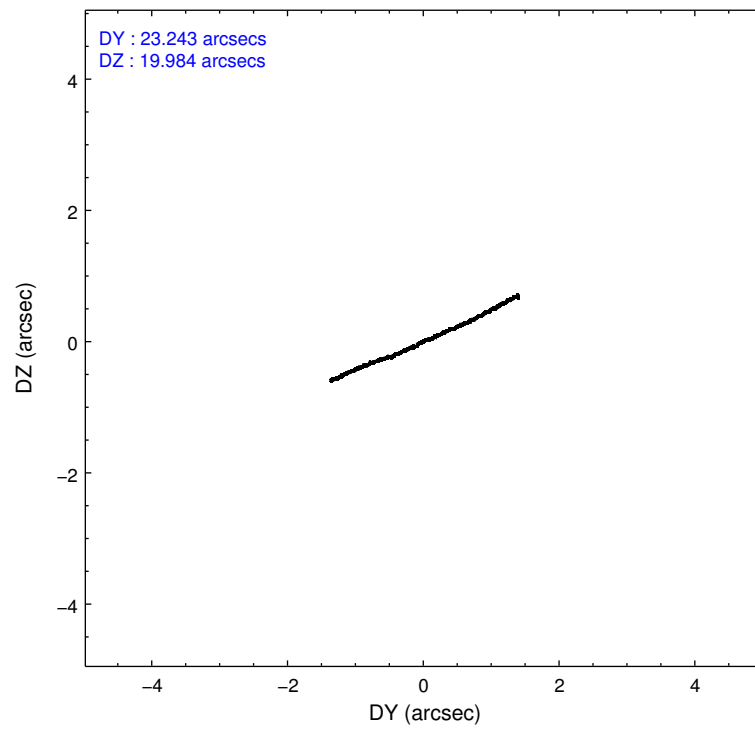
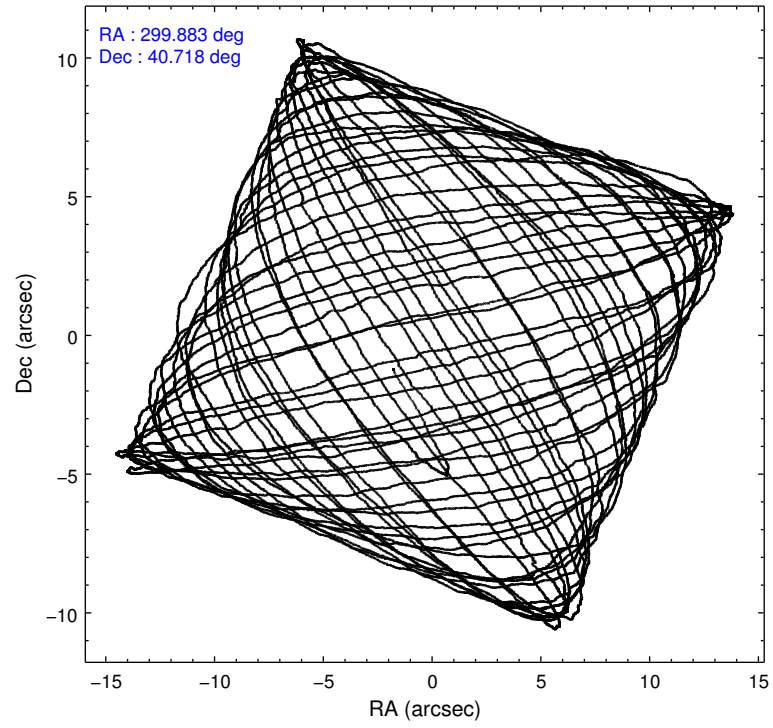
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	127046	181486	151177	154333	126514
rejected events	98578	106398	111845	110668	111763
rejected %	77%	58%	73%	71%	88%

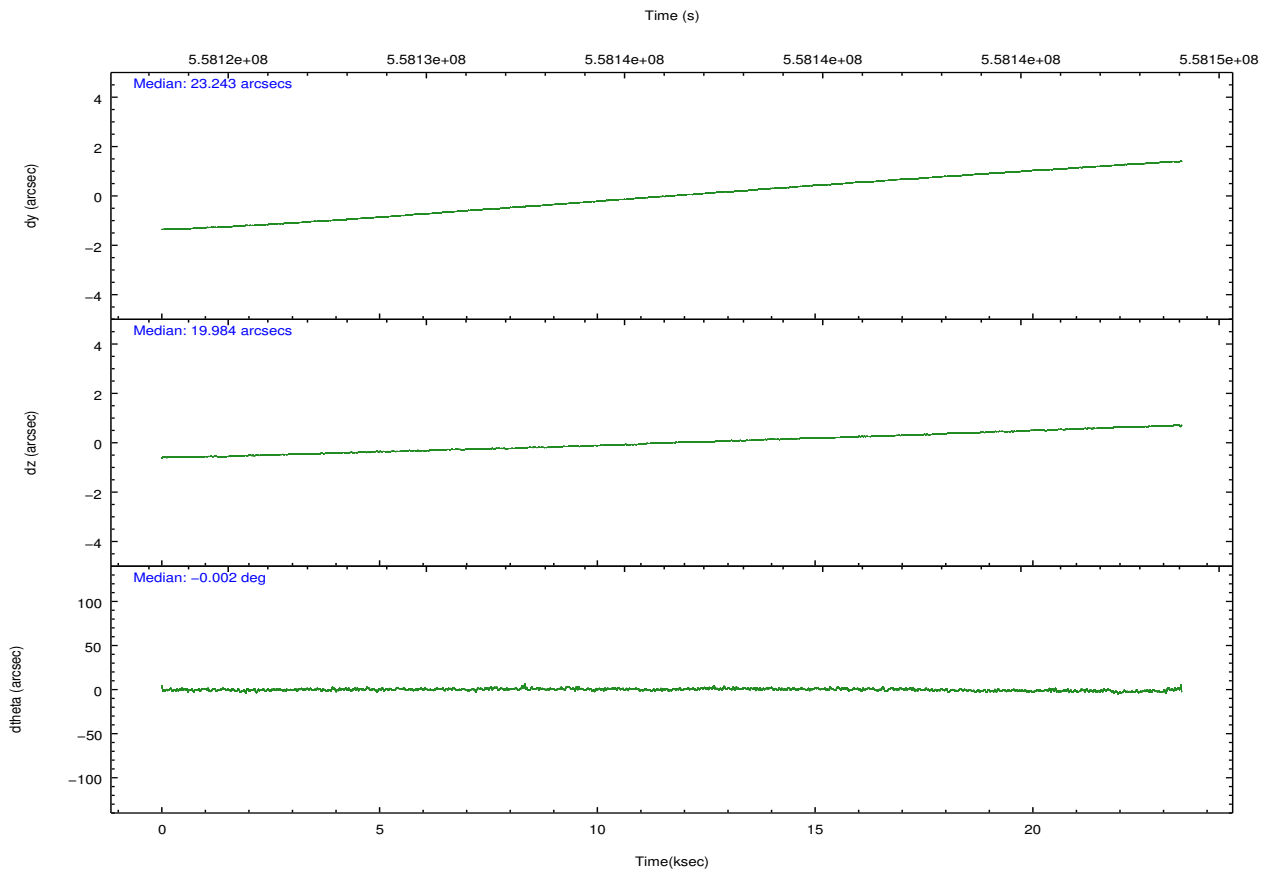
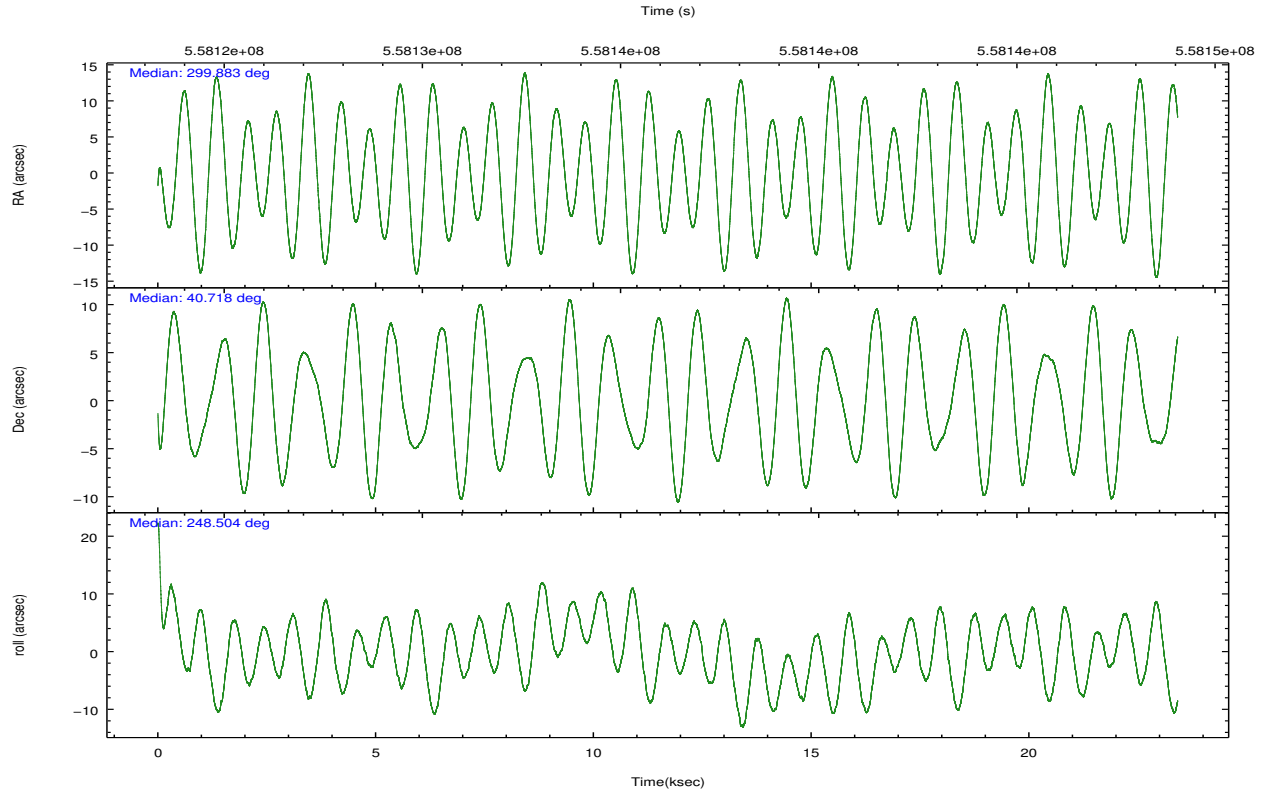
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	16373	48869	28259	28768	5133
	12%	26%	18%	18%	4%
grade 1 events	97	353	159	191	54
	0%	0%	0%	0%	0%
grade 2 events	5108	12988	4447	6135	3287
	4%	7%	2%	3%	2%
grade 3 events	1903	3433	1837	2421	1441
	1%	1%	1%	1%	1%
grade 4 events	1763	3311	1715	2388	1357
	1%	1%	1%	1%	1%
grade 5 events	5374	6298	5172	6203	5898
	4%	3%	3%	4%	4%
grade 6 events	3324	6500	3081	3961	3534
	2%	3%	2%	2%	2%
grade 7 events	93104	99734	106507	104266	105810
	73%	54%	70%	67%	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	299.877237	299.8827745592675	CCD I2 on	Y	Y
[deg] Pointing Dec	40.745152	40.71787431692839	CCD I3 on	Y	Y
[deg] Pointing Roll	248.303976	248.5090682572632	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)	558124647.184000	558123137.2421499	CCD S5 on	N	N
Observation start date	2015-09-08T18:36:19	2015-09-08T18:12:17	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	558147897.184000	558148538.28107	On-chip summing requested	N	N
Observation end date	2015-09-09T01:03:49	2015-09-09T01:15:38	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





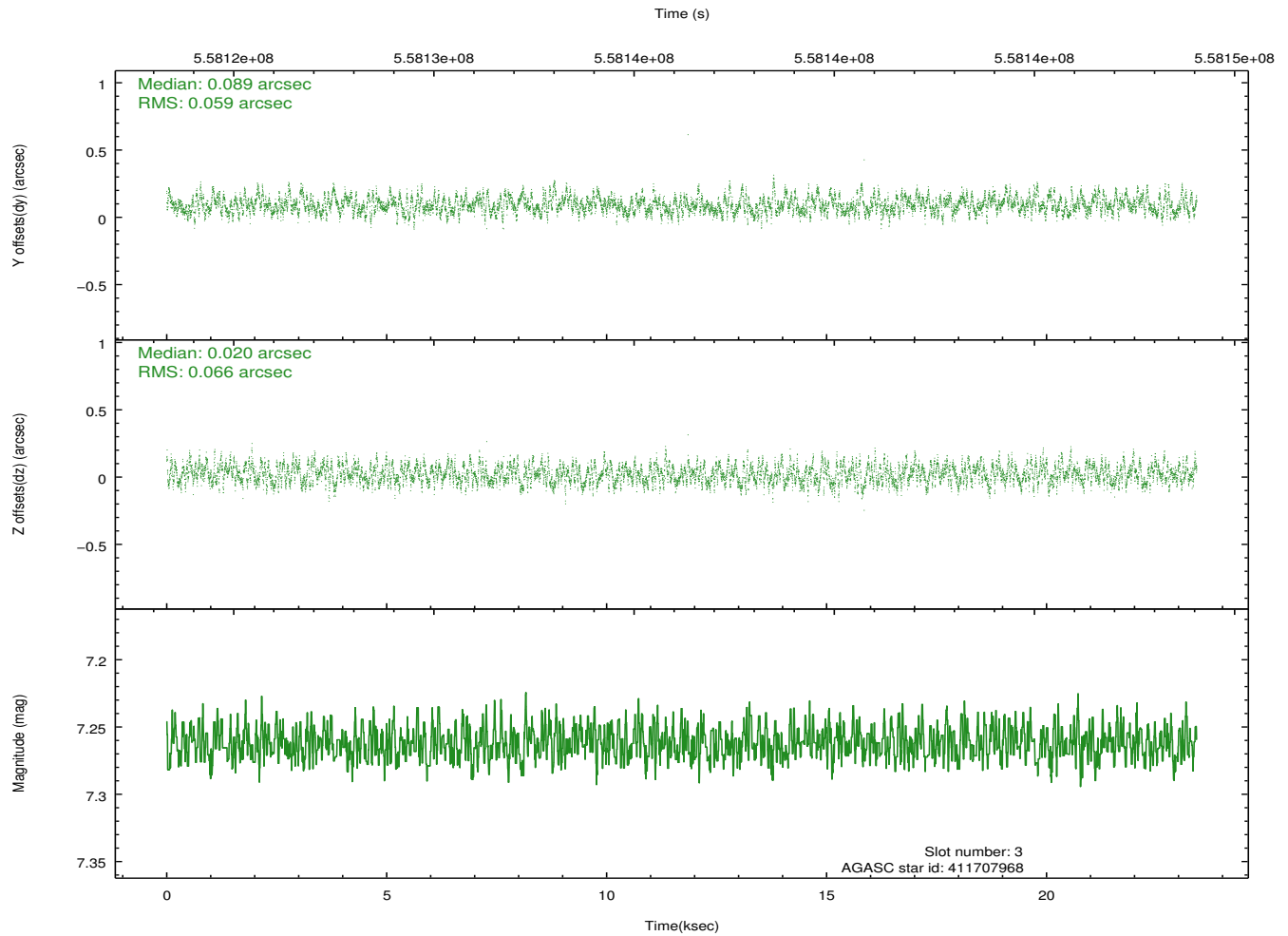
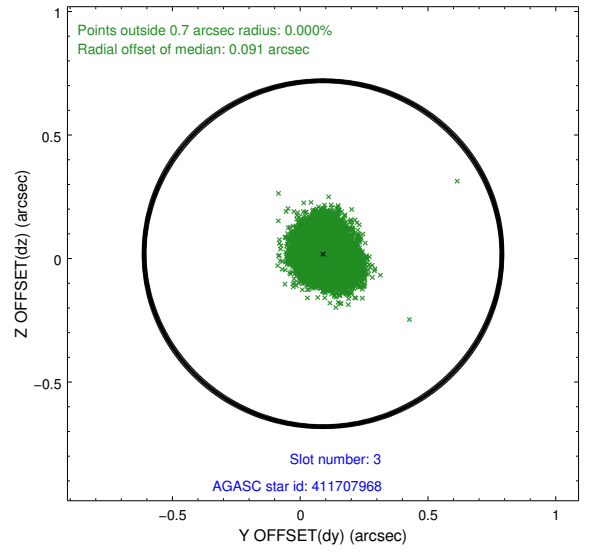
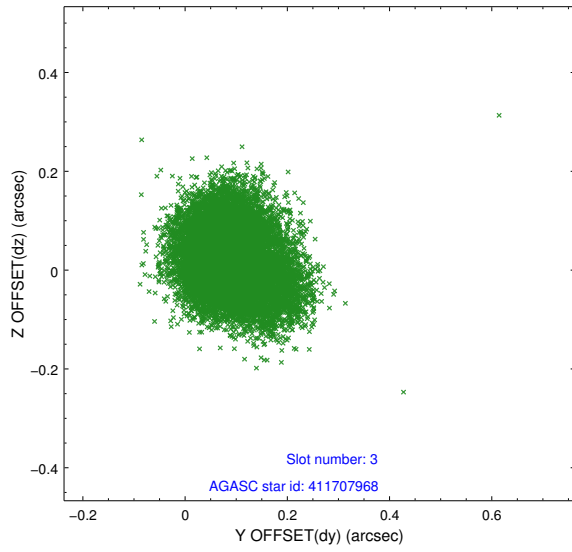
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.27	5711	-0.042	-0.013	0.024	0.035	0.000000	0.000000	915.95	-843.73
1	FID		ACIS-I-2	7.16	5712	-0.275	-0.128	0.020	0.036	0.000000	0.000000	-778.29	-850.36
2	FID		ACIS-I-4	7.19	5711	0.216	0.210	0.015	0.026	0.000000	0.000000	2136.03	1056.23
3	GUIDE	used	411707968	7.26	11423	0.089	0.020	0.095	0.146	299.509933	40.926839	-239.97	-1170.52
4	GUIDE	used	411722416	7.84	11423	0.306	-0.007	0.101	0.166	298.936507	40.391736	2123.88	-1931.05
5	GUIDE	used	412240768	8.24	11417	0.069	0.507	0.073	0.120	299.999696	41.280279	-1911.92	-403.99
6	GUIDE	used	413405352	8.34	11419	-0.083	-0.082	0.085	0.137	300.290830	41.091941	-1577.08	580.29
7	GUIDE	used	413425232	8.65	11411	-0.388	-0.442	0.099	0.160	300.417382	40.029012	1840.58	2335.03

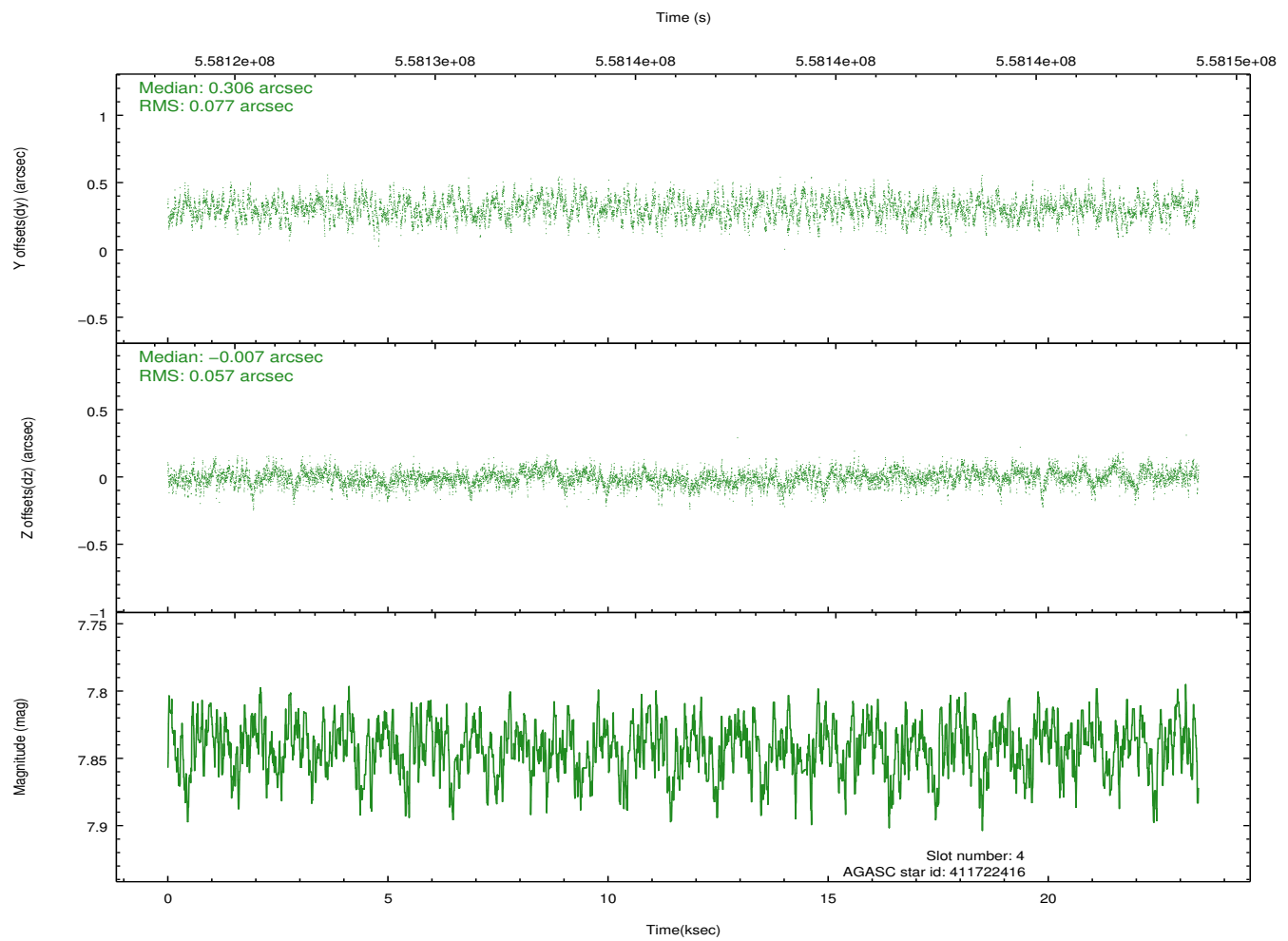
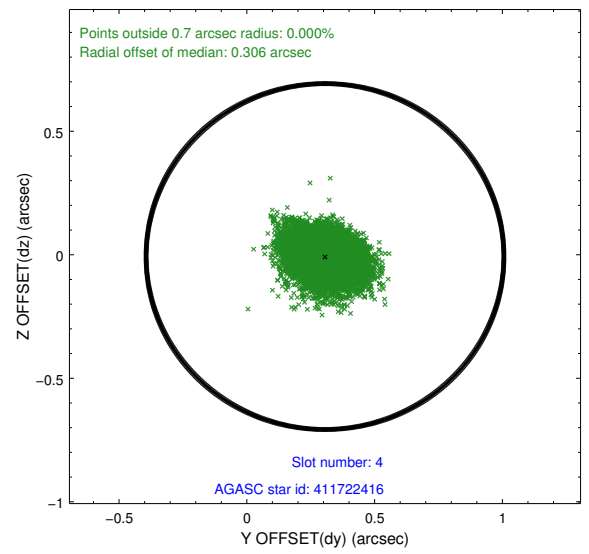
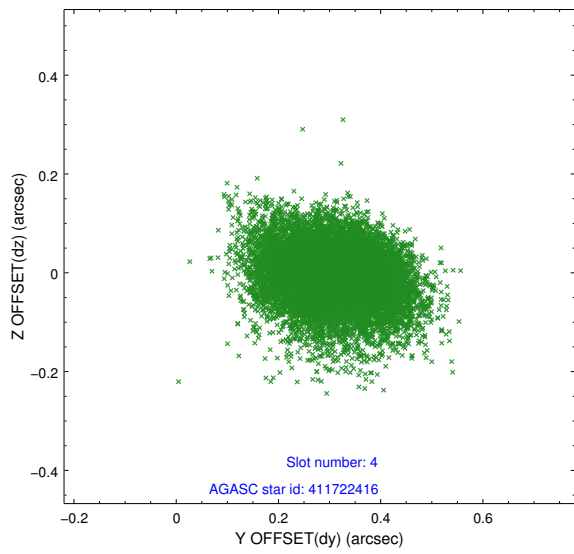
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2.4 Star Slots

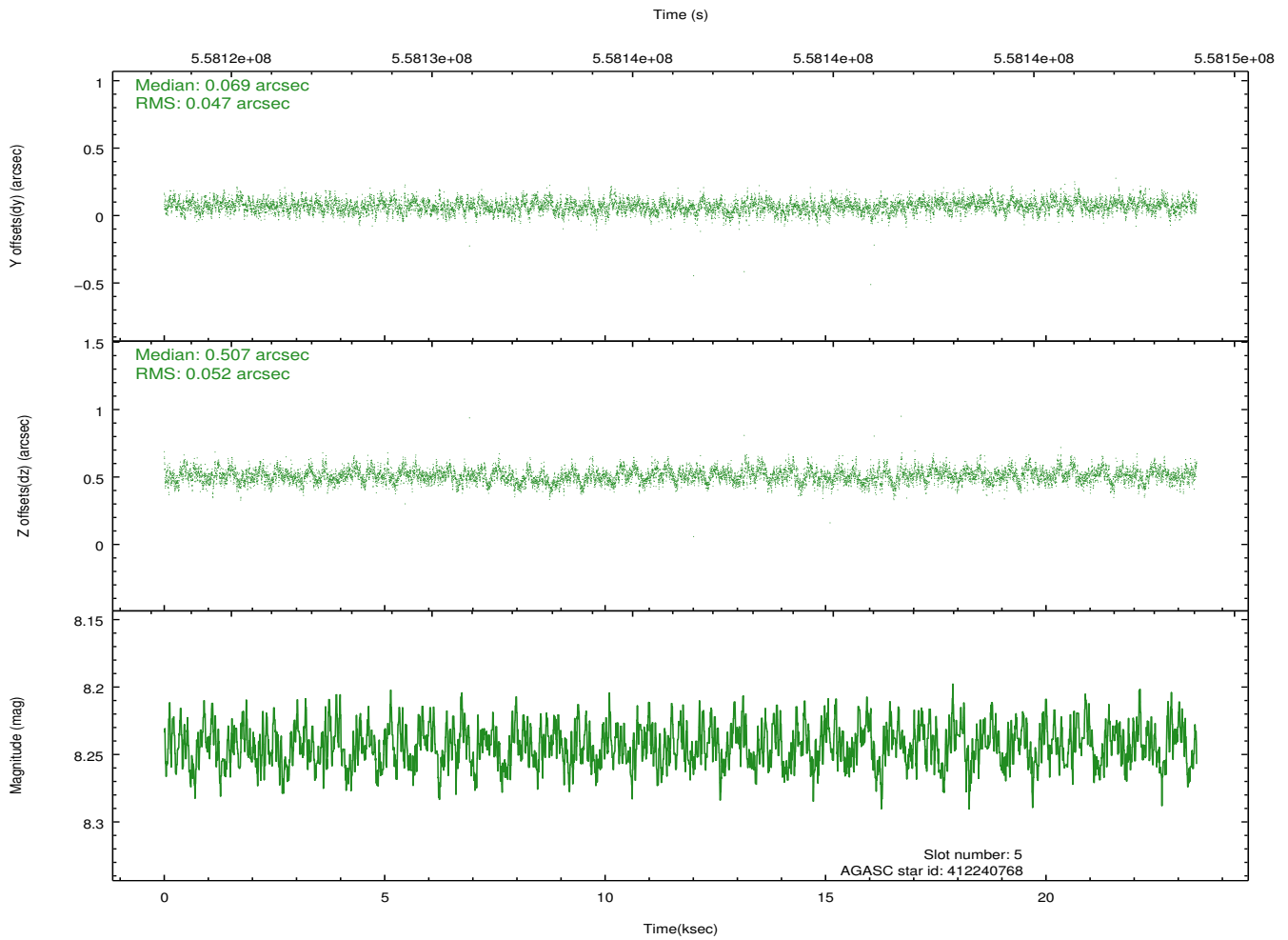
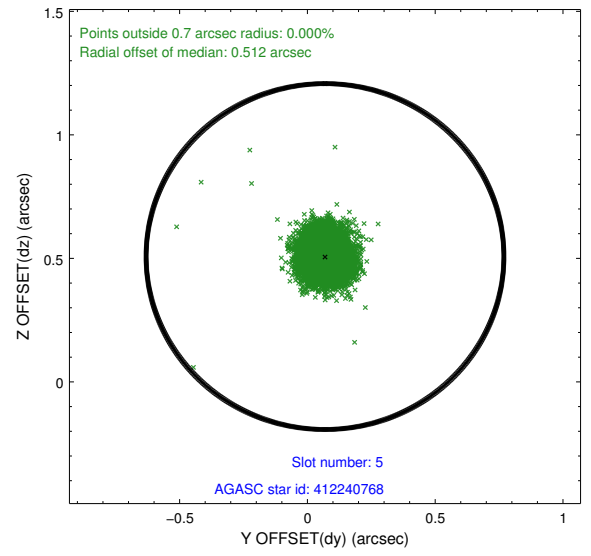
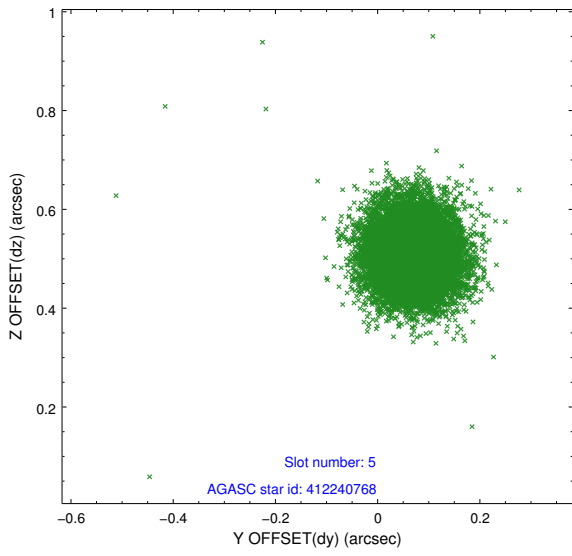
2.4.1 Slot 3



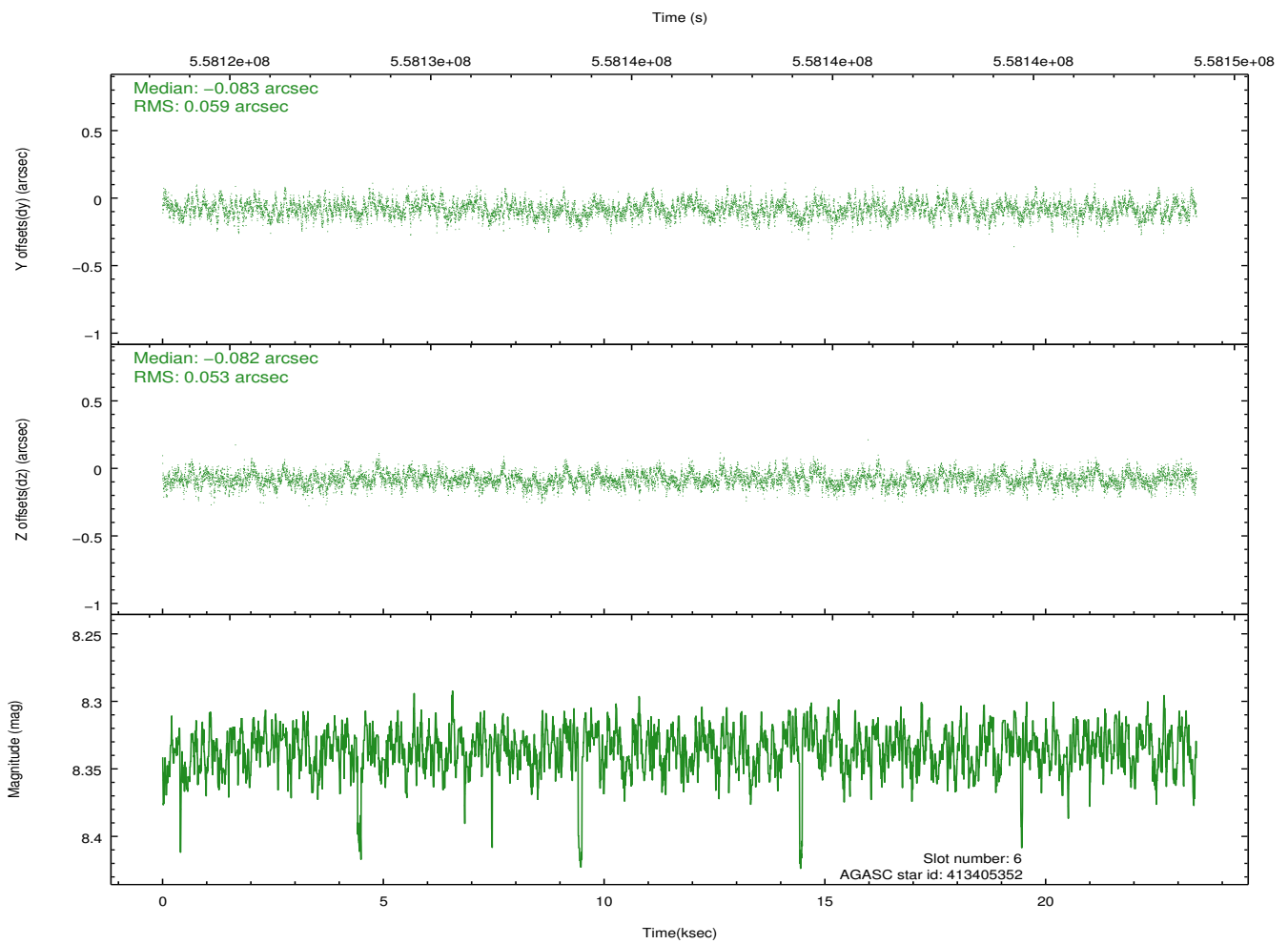
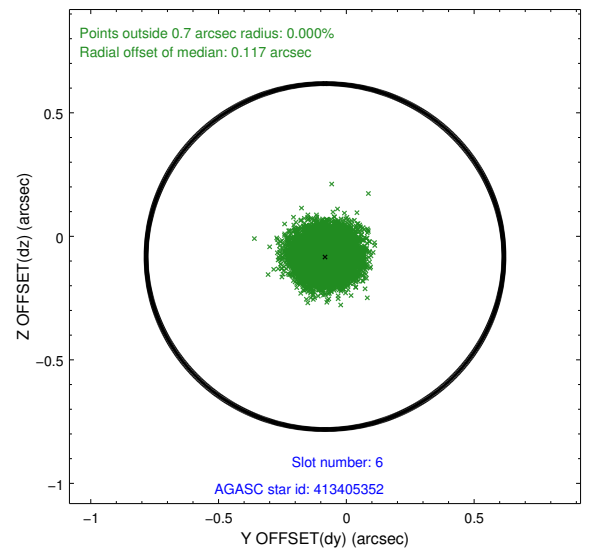
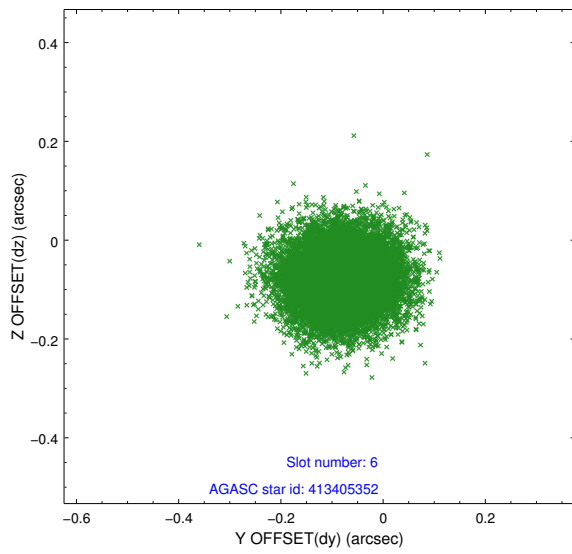
2.4.2 Slot 4



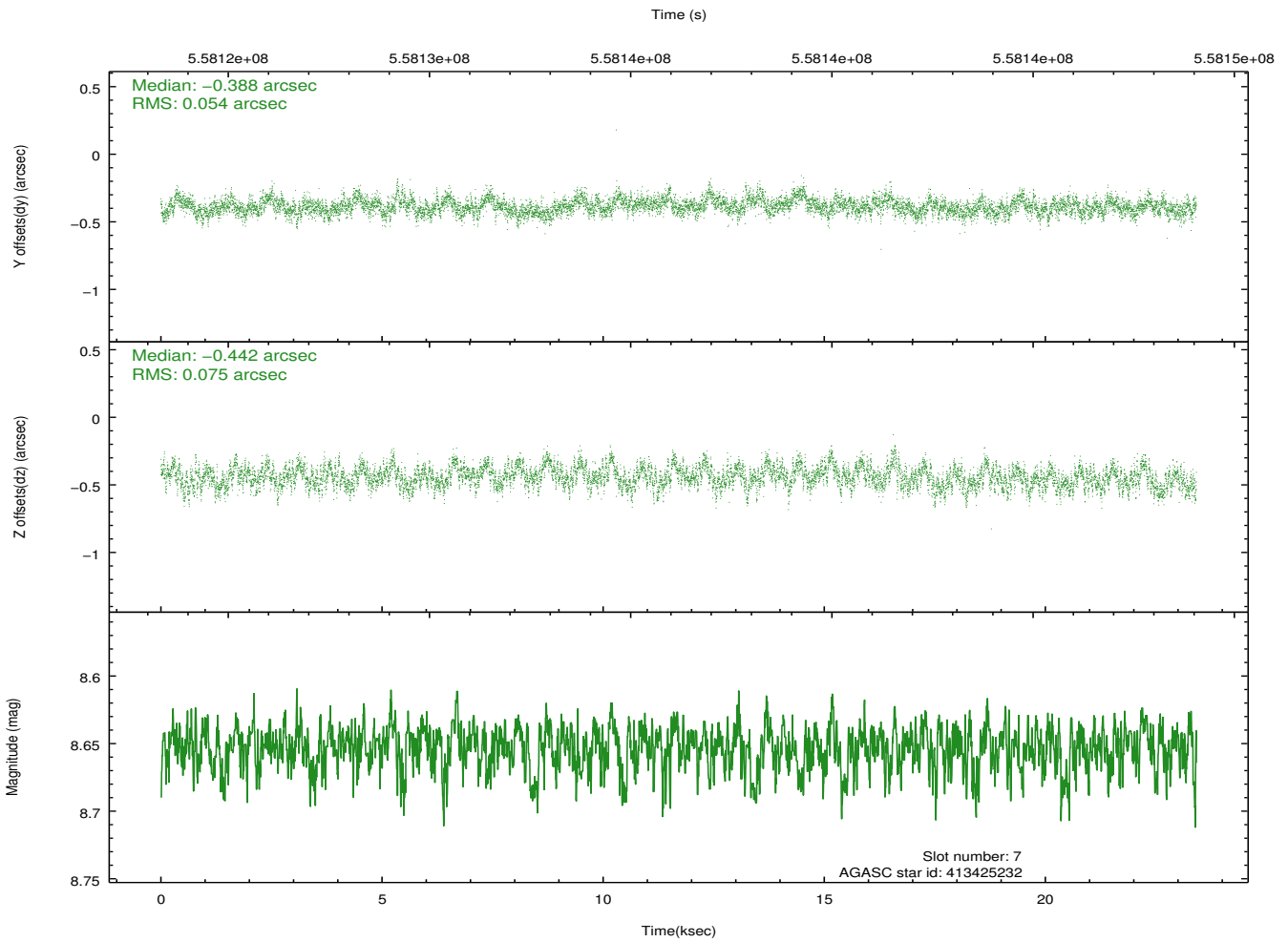
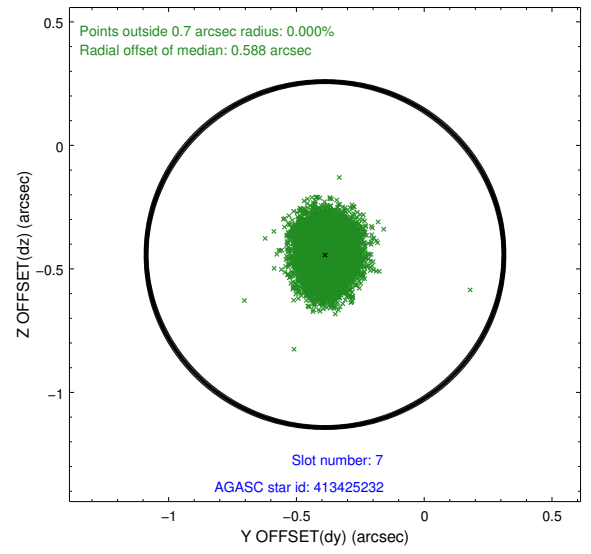
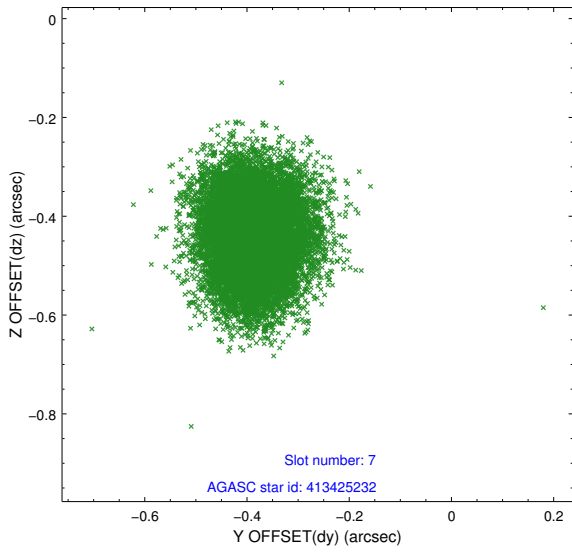
2.4.3 Slot 5



2.4.4 Slot 6

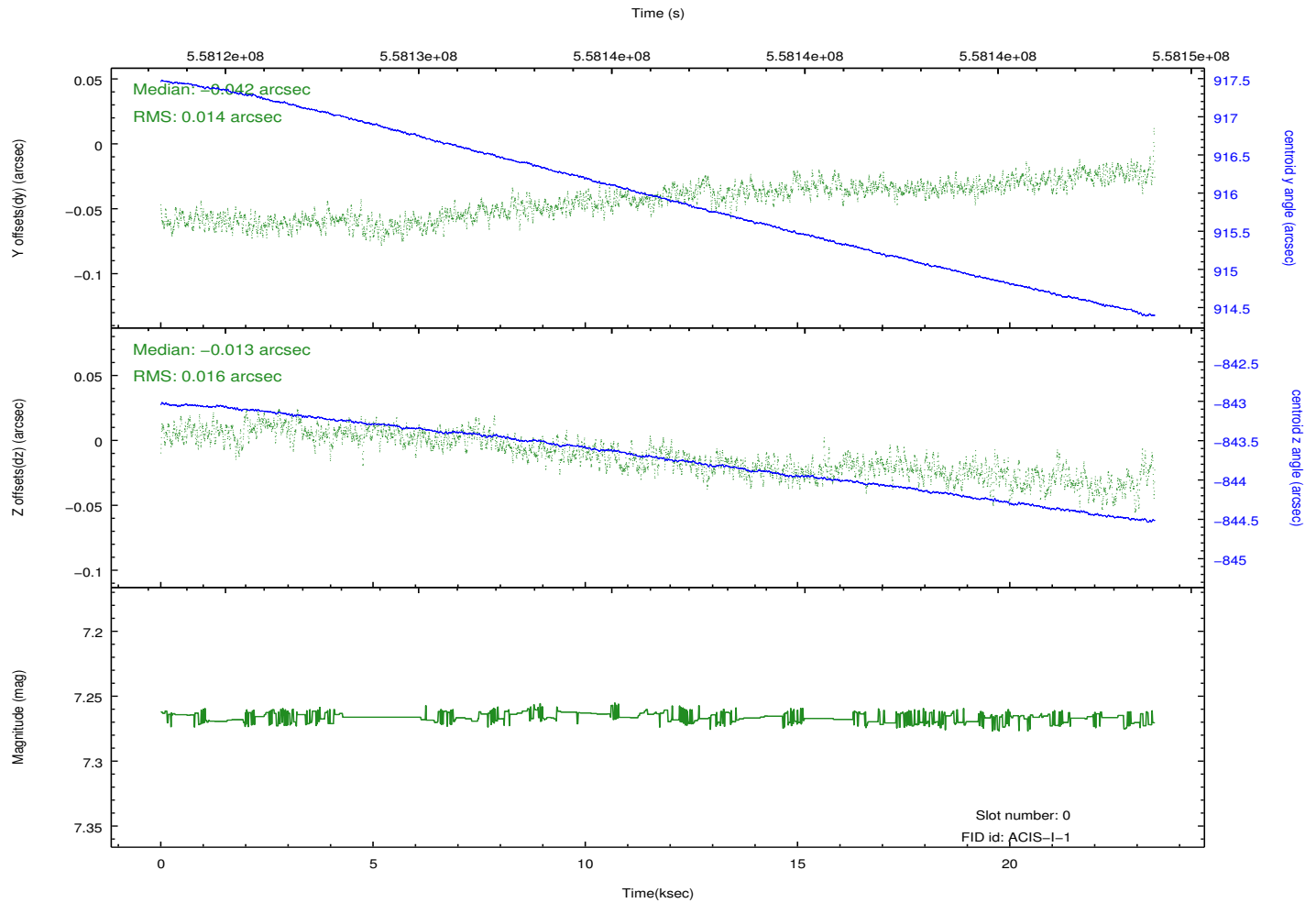
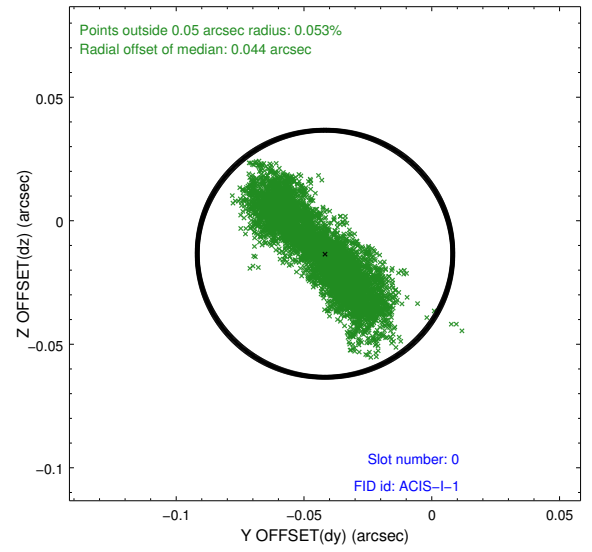
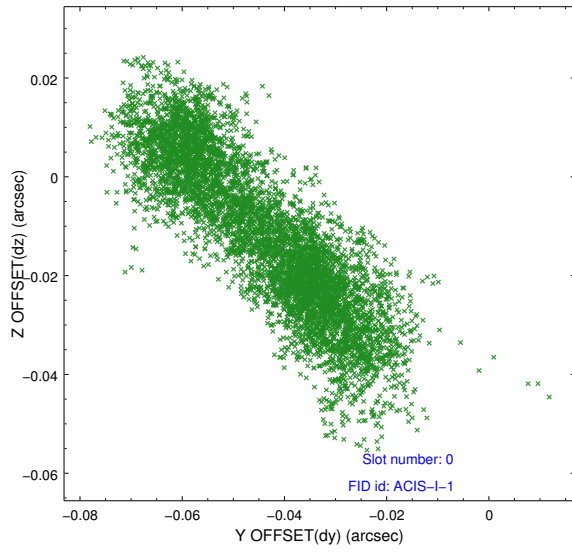


2.4.5 Slot 7

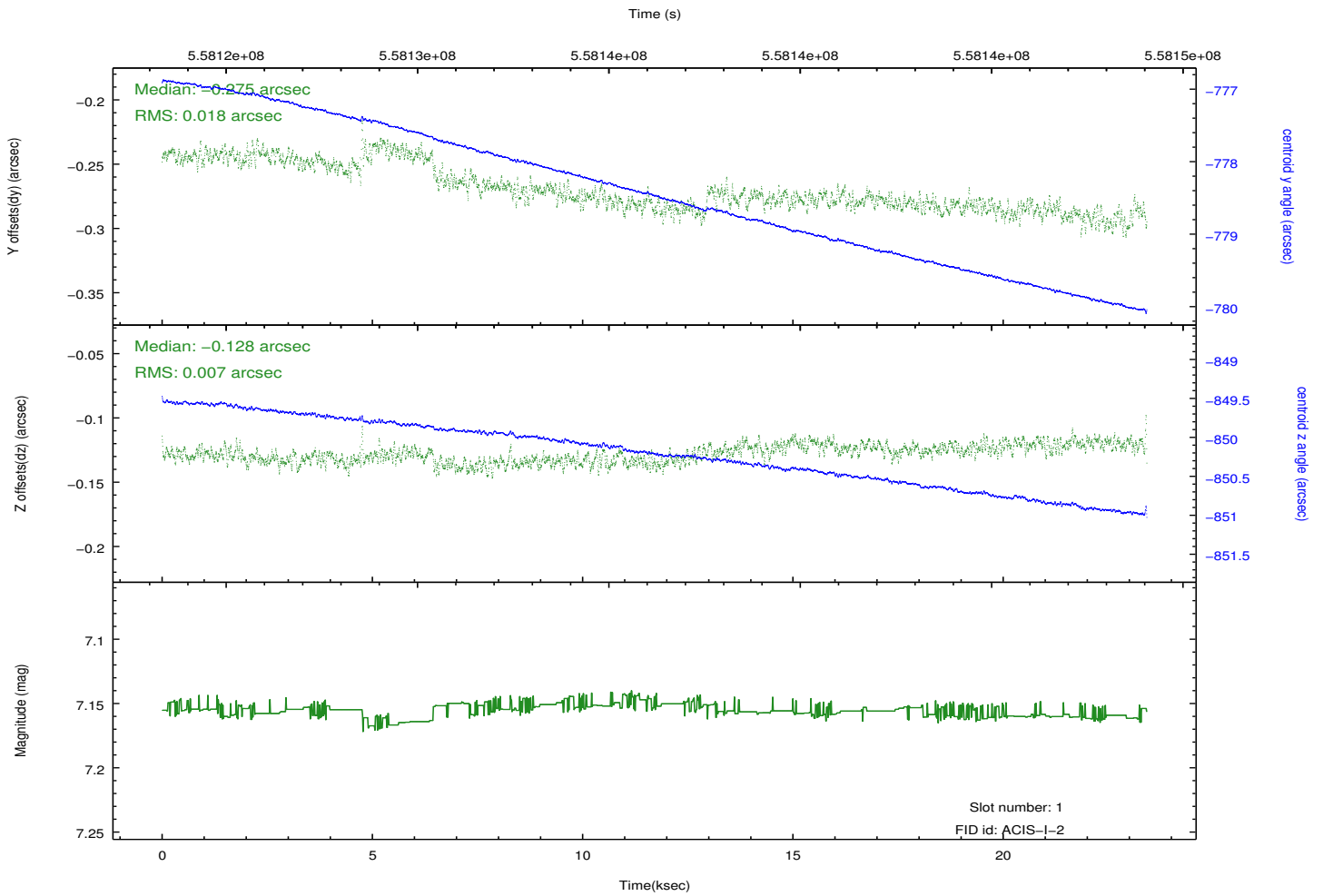
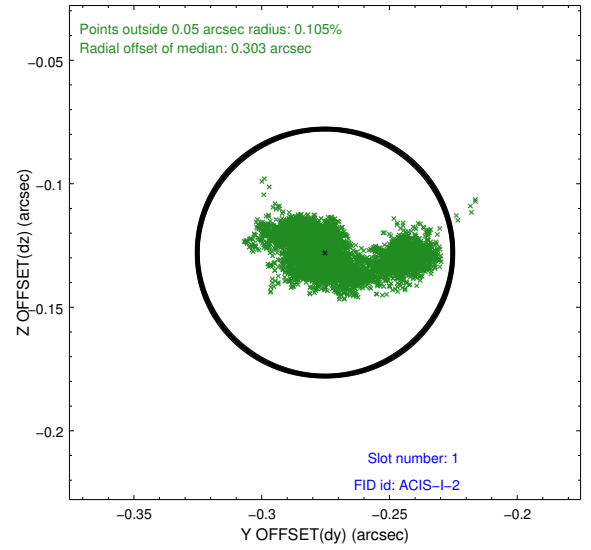
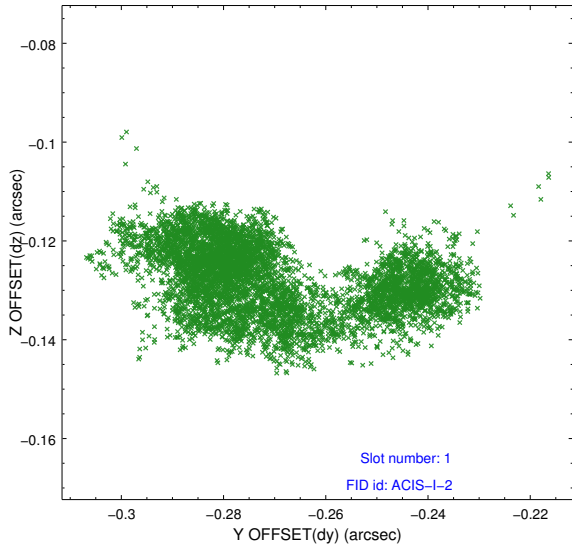


2.5 FID Slots

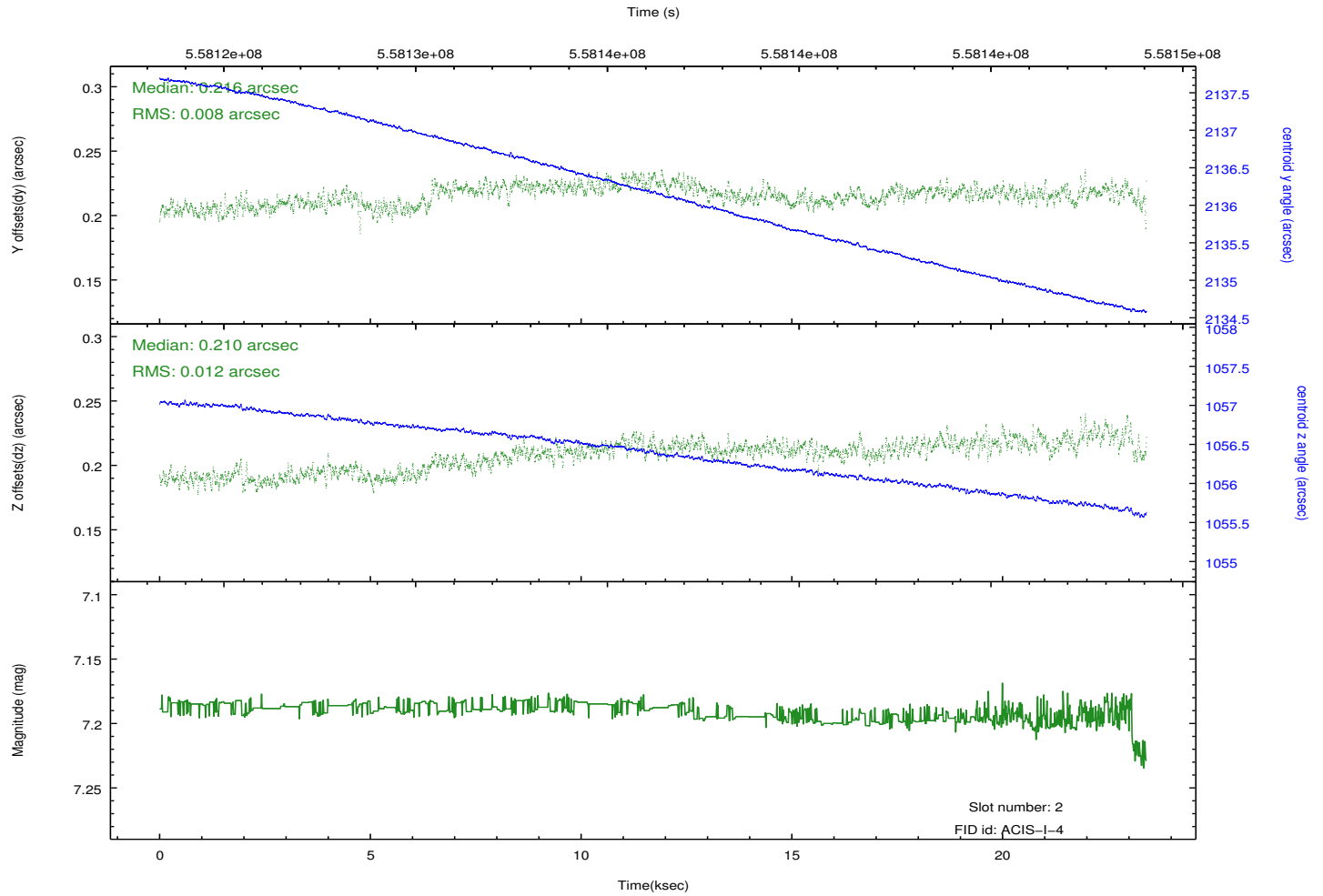
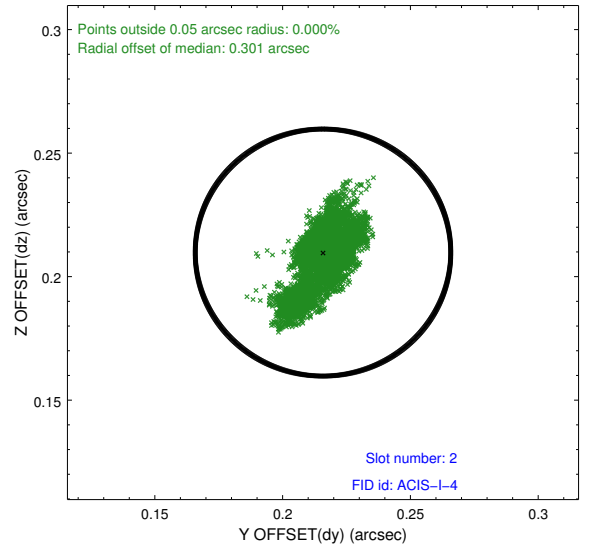
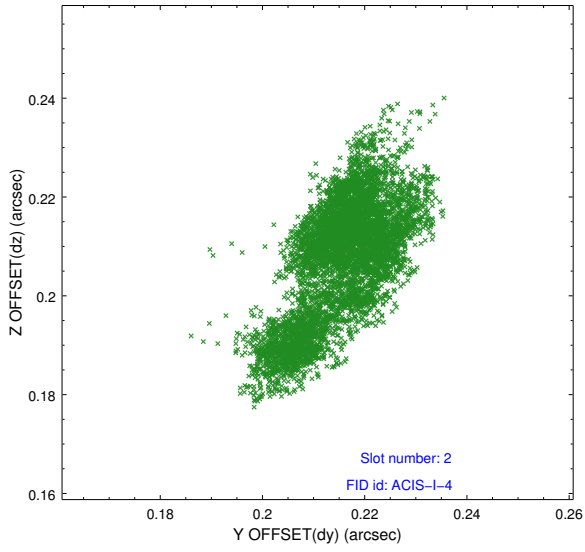
2.5.1 Slot 0



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)	2015.09.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.314971124291

A.2 Comments