

V&V Reference Report

L2 ASCDS Version : 10.5.1.1

Observation 17140 - L2 Version 1
Chandra X-Ray Center

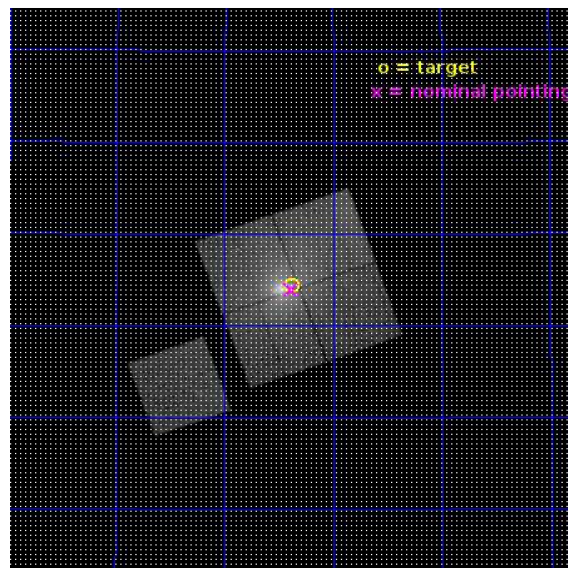
L2 Processing Date : Oct 3 2016

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1 Front

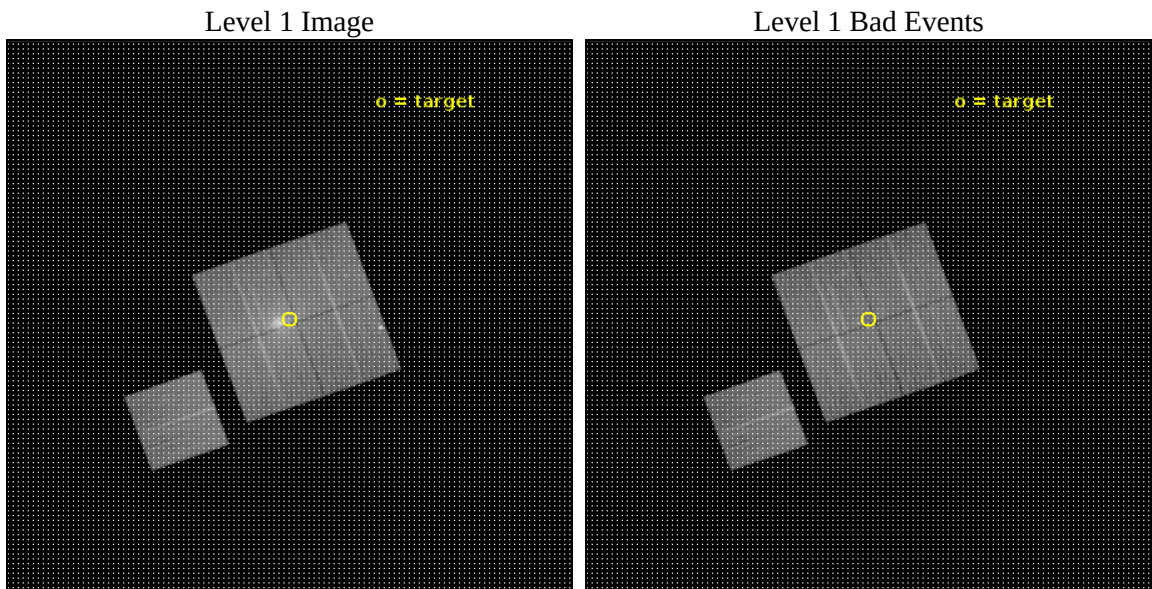
seq_num	703132	Sequence number
obs_id	17140	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - W Hotspot	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.845	Observer's specified target RA [deg]
dec_targ	40.740361	Observer's specified target Dec [deg]
ra_nom	299.84587289642	Nominal RA [deg]
dec_nom	40.732105666275	Nominal Dec [deg]
roll_nom	250.20811621666	Nominal Roll [deg]
revision	1	Processing version of data
ontime	35047.612146139	Sum of GTIs [s]
livetime	34589.689291773	Livetime [s]
ontime0	35053.771086574	Sum of GTIs [s]
ontime1	35050.671096325	Sum of GTIs [s]
ontime2	35053.85316658	Sum of GTIs [s]
ontime3	35047.612146139	Sum of GTIs [s]
ontime6	35047.448046207	Sum of GTIs [s]
l2events	292499	Number of level 2 events



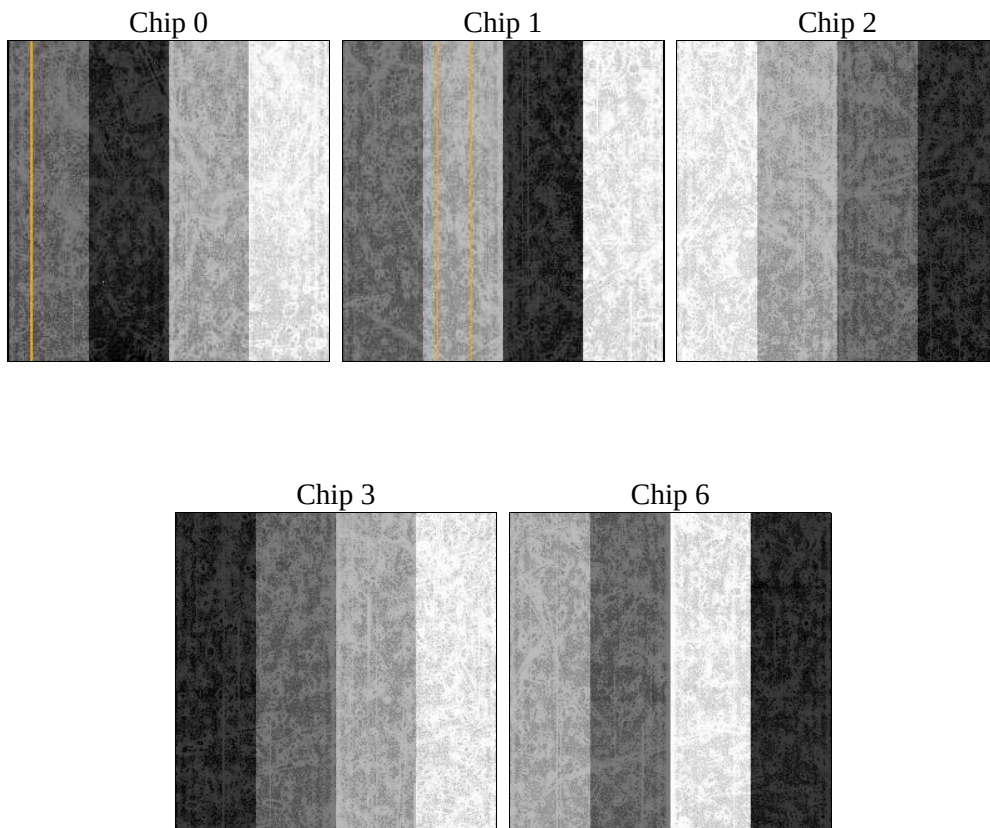
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.1.1	Processing system revision	ontime	35047.612146139	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	35053.771086574	Sum of GTIs [s]
date	2016-10-03T13:39:43	Date and time of file creation	ontime1	35050.671096325	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	35053.85316658	Sum of GTIs [s]
			ontime3	35047.612146139	Sum of GTIs [s]
			ontime6	35047.448046207	Sum of GTIs [s]
			l1events	1321778	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	229067	250502	264140	342314	235755
rejected events	180694	185277	208244	207877	208310
rejected %	78%	73%	78%	60%	88%

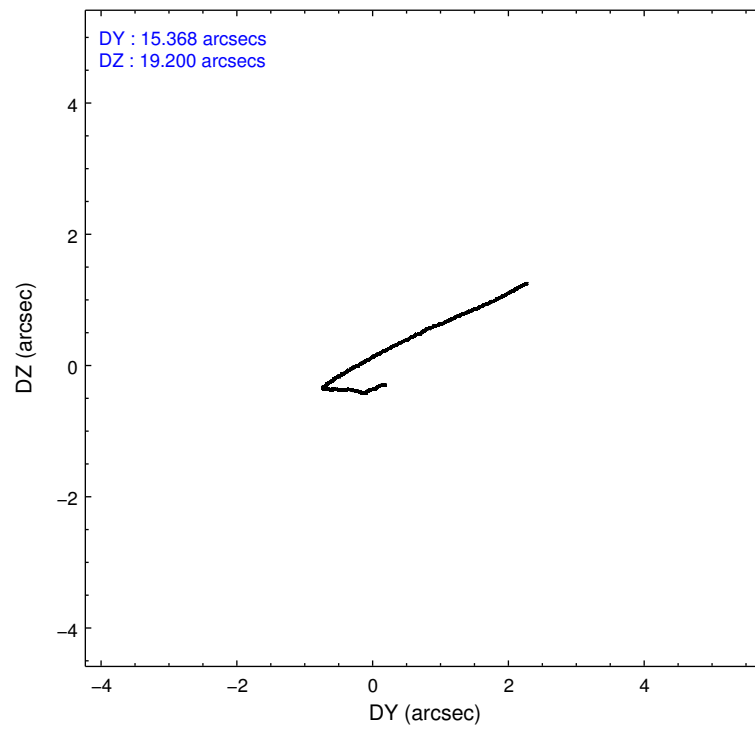
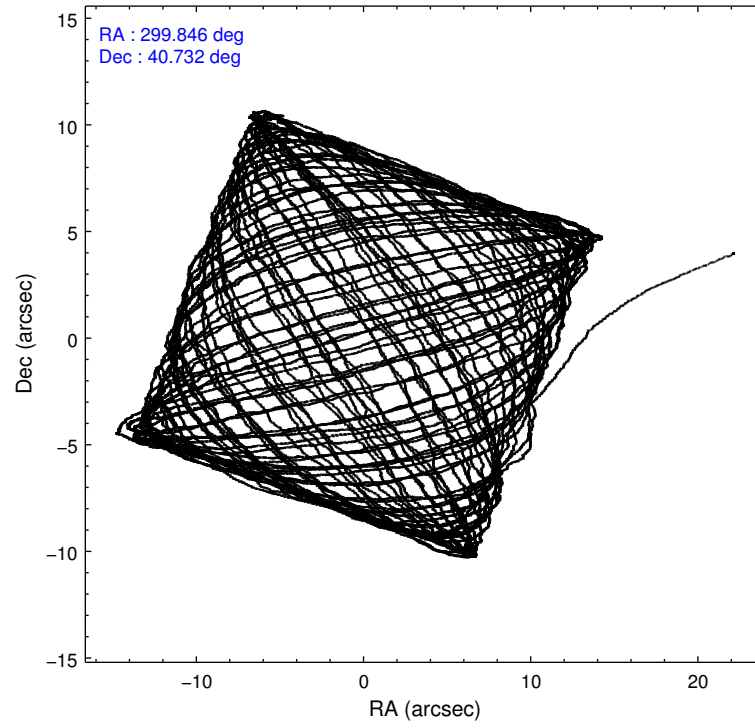
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	28514	38009	33131	93571	9742
	12%	15%	12%	27%	4%
grade 1 events	214	224	260	1069	98
	0%	0%	0%	0%	0%
grade 2 events	8047	11607	9680	17720	6229
	3%	4%	3%	5%	2%
grade 3 events	3121	3943	3617	6489	2621
	1%	1%	1%	1%	1%
grade 4 events	2876	3970	3641	6802	2666
	1%	1%	1%	1%	1%
grade 5 events	10209	10864	9616	12515	10911
	4%	4%	3%	3%	4%
grade 6 events	5825	7710	5839	9881	6188
	2%	3%	2%	2%	2%
grade 7 events	170261	174175	198356	194267	197300
	74%	69%	75%	56%	83%

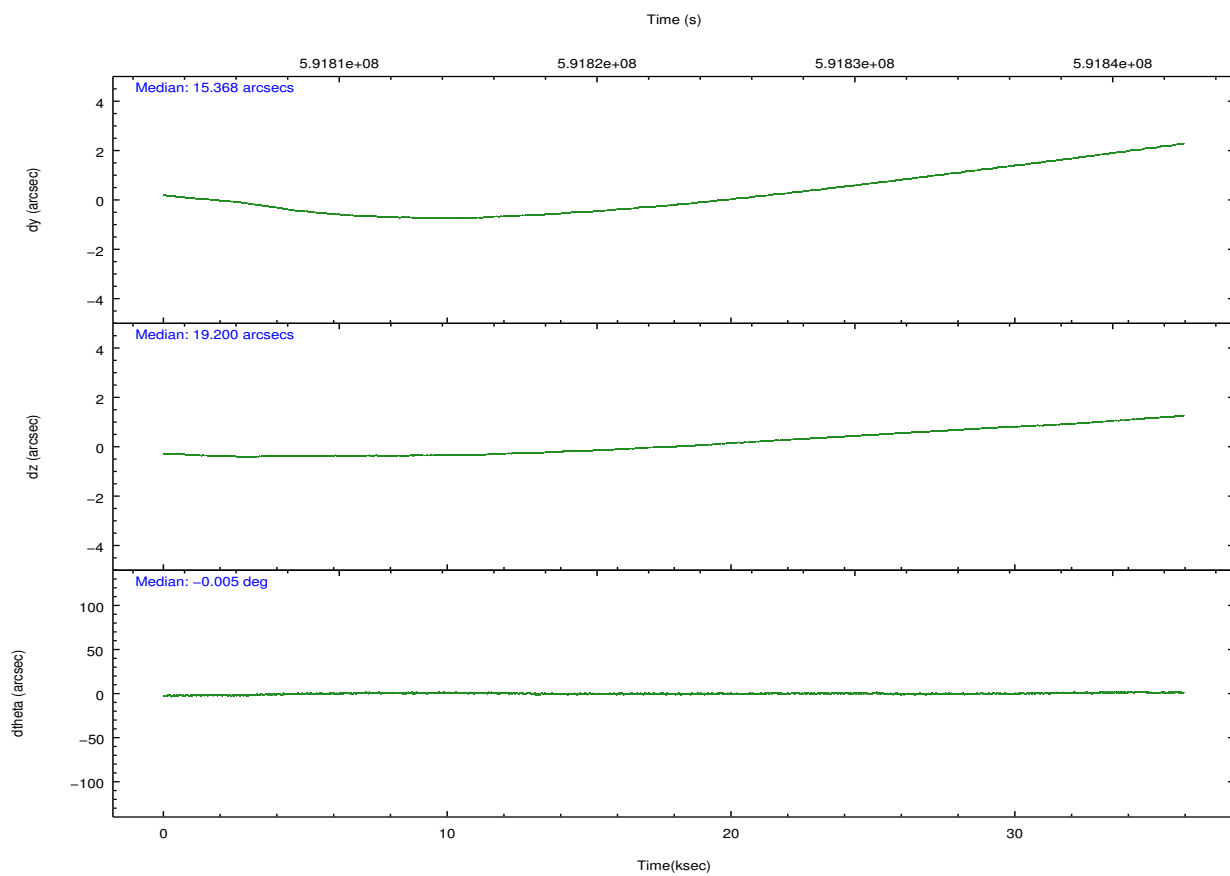
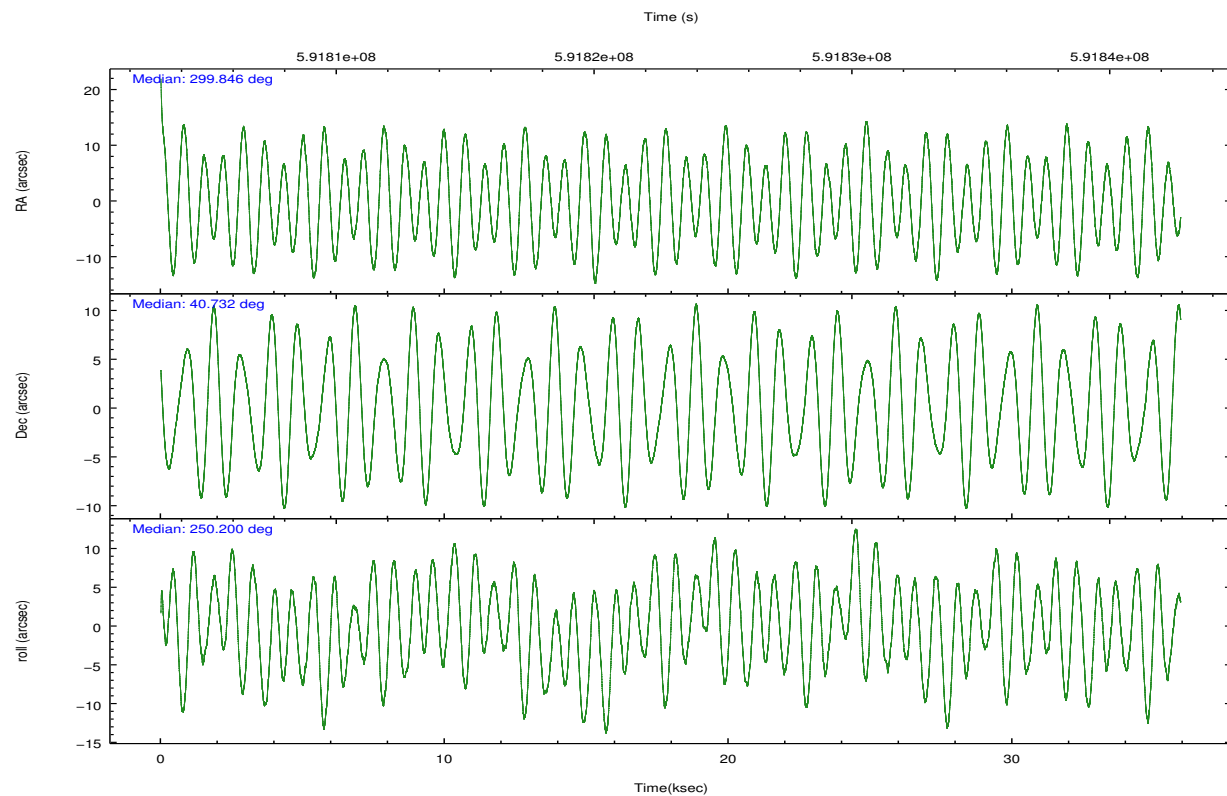
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	299.839292	299.8458728964243
[deg] Pointing Dec	40.759258	40.73210566627468
[deg] Pointing Roll	250.003728	250.2081162166606
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	591805940.184000	591804243.21245
Observation start date	2016-10-02T14:31:12	2016-10-02T14:04:03
[s] Observation end time (MET)	591840940.184000	591841574.7395999
Observation end date	2016-10-03T00:14:32	2016-10-03T00:26:14
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	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
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



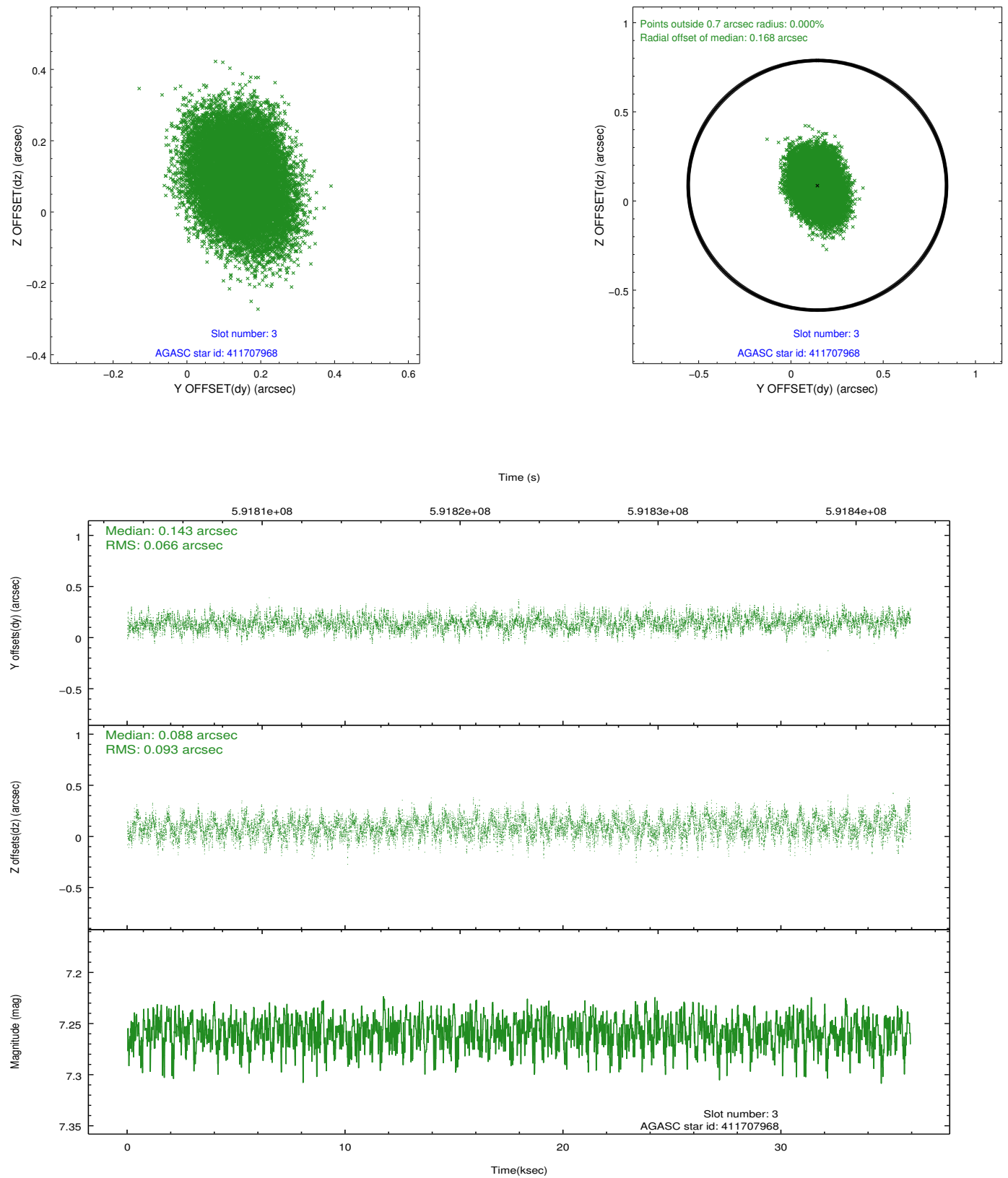


Slot Statistics

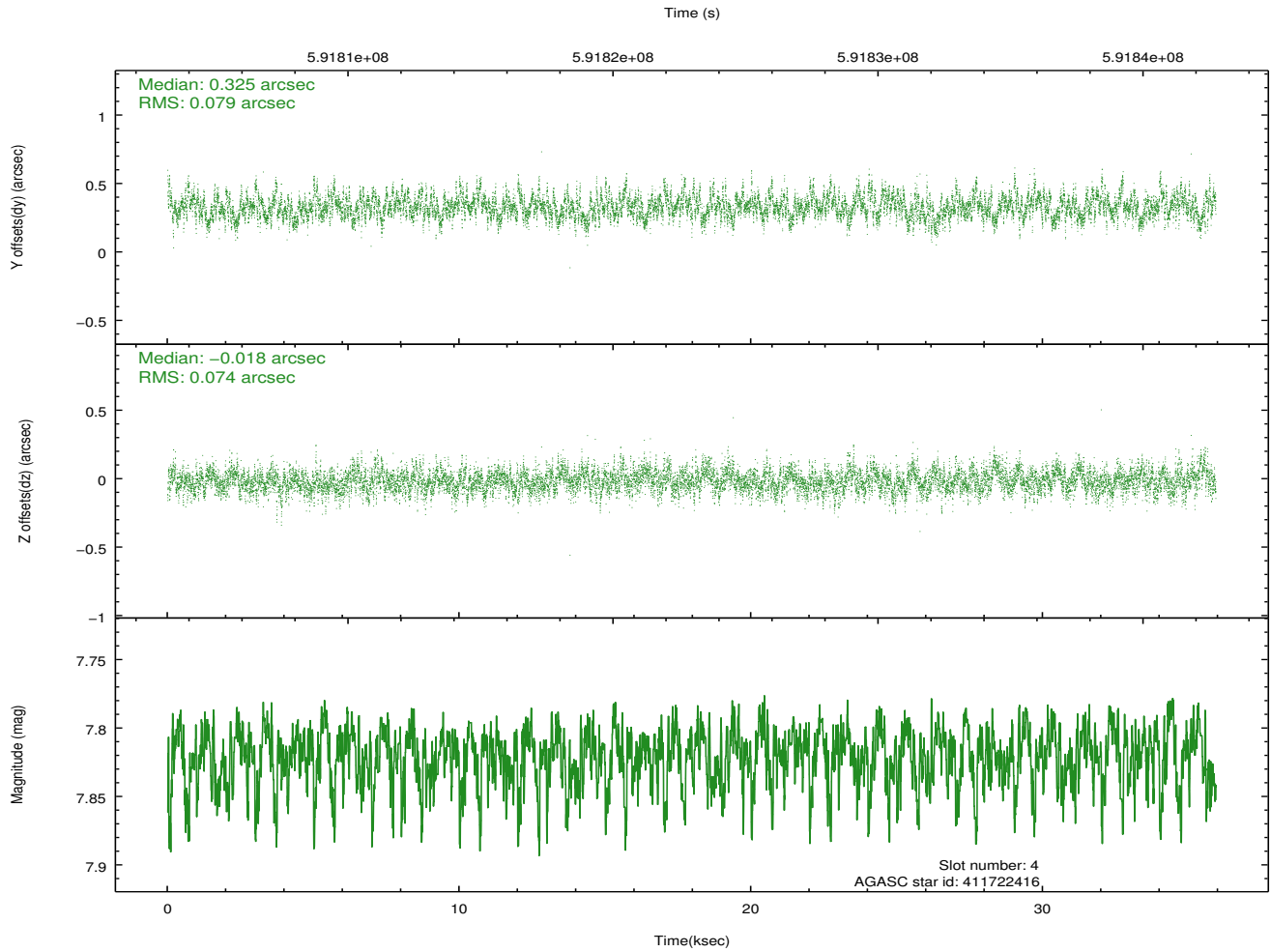
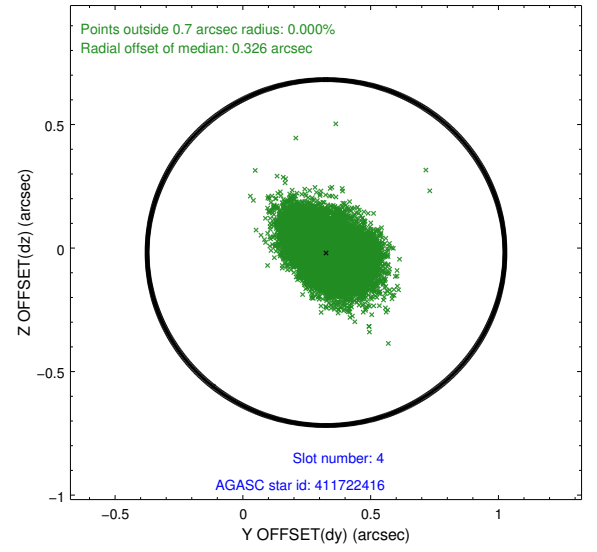
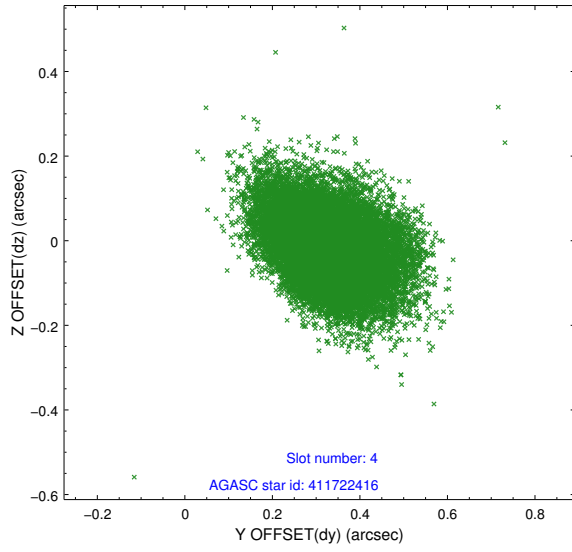
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	8764	0.057	-0.007	0.020	0.062	0.000000	0.000000	923.90	-843.05
1	FID		ACIS-I-5	7.11	8763	-0.352	0.022	0.012	0.032	0.000000	0.000000	-1824.69	1054.32
2	FID		ACIS-I-6	7.12	8763	0.205	0.054	0.024	0.059	0.000000	0.000000	389.43	1699.02
3	GUIDE	used	411707968	7.26	17526	0.143	0.088	0.122	0.196	299.509933	40.926839	-261.77	-1048.45
4	GUIDE	used	411722416	7.82	17522	0.325	-0.018	0.113	0.193	298.936507	40.391736	2078.88	-1877.64
5	GUIDE	used	412240768	8.27	17525	0.049	0.602	0.103	0.169	299.999696	41.280279	-1910.78	-233.37
6	GUIDE	used	413425232	8.62	17517	-0.183	-0.361	0.107	0.177	300.417382	40.029012	1920.38	2394.85
7	GUIDE	used	413421016	8.69	17515	-0.332	-0.315	0.108	0.179	300.612426	40.446254	325.88	2372.54

2.4 Star Slots

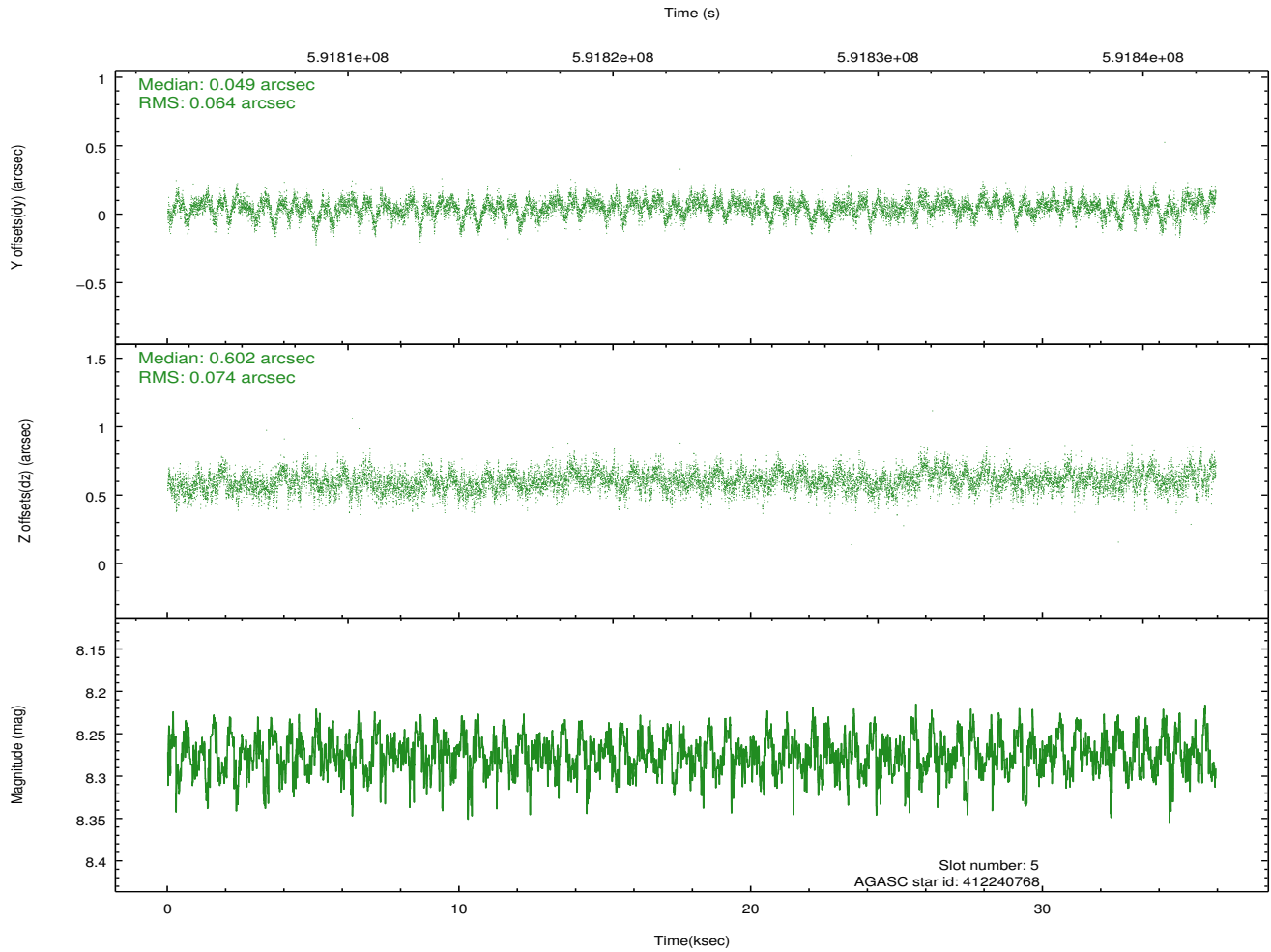
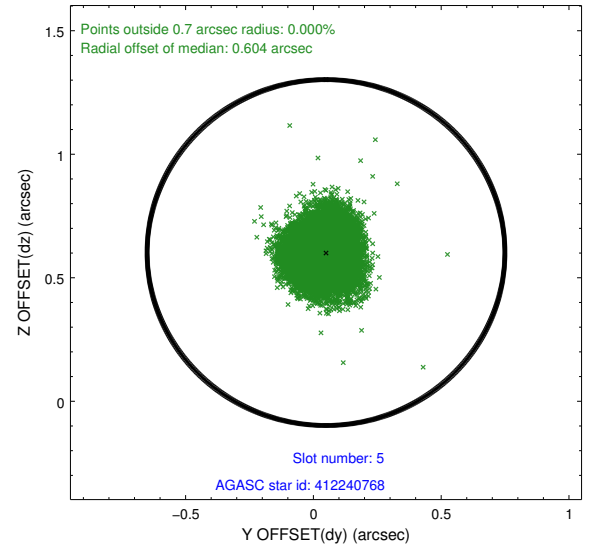
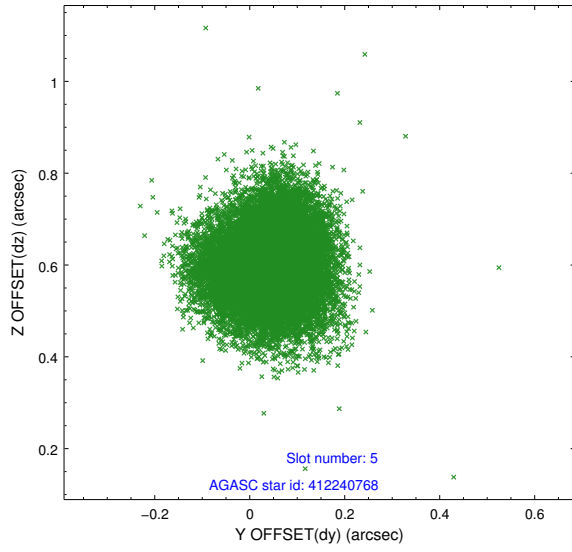
2.4.1 Slot 3



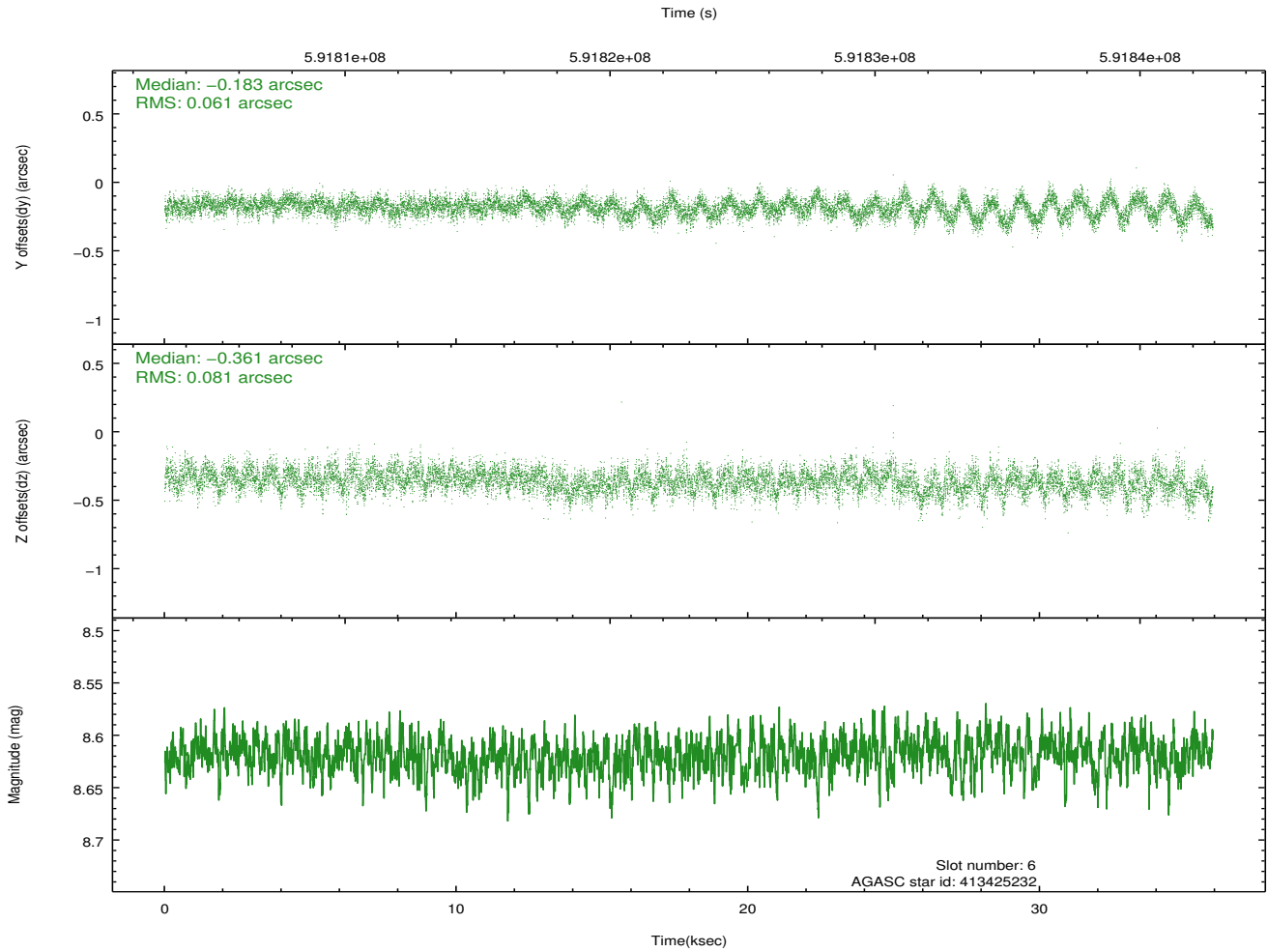
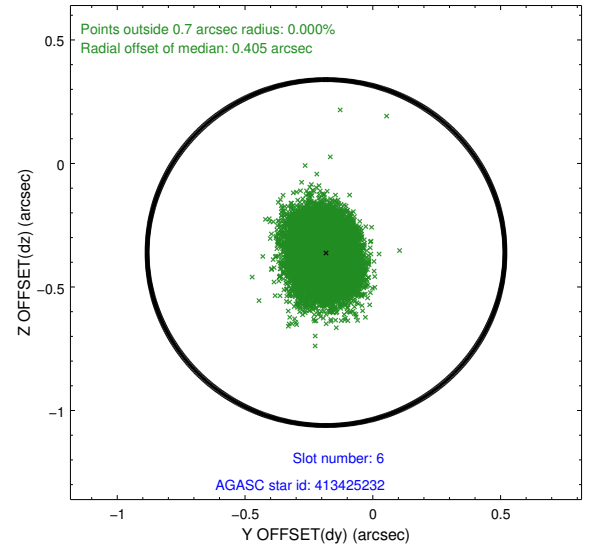
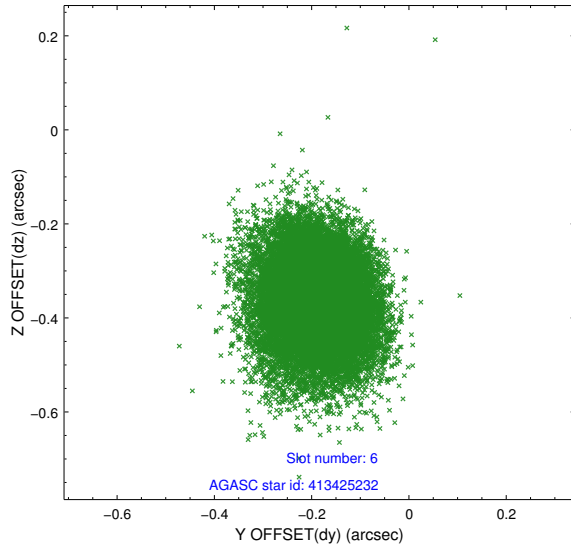
2.4.2 Slot 4



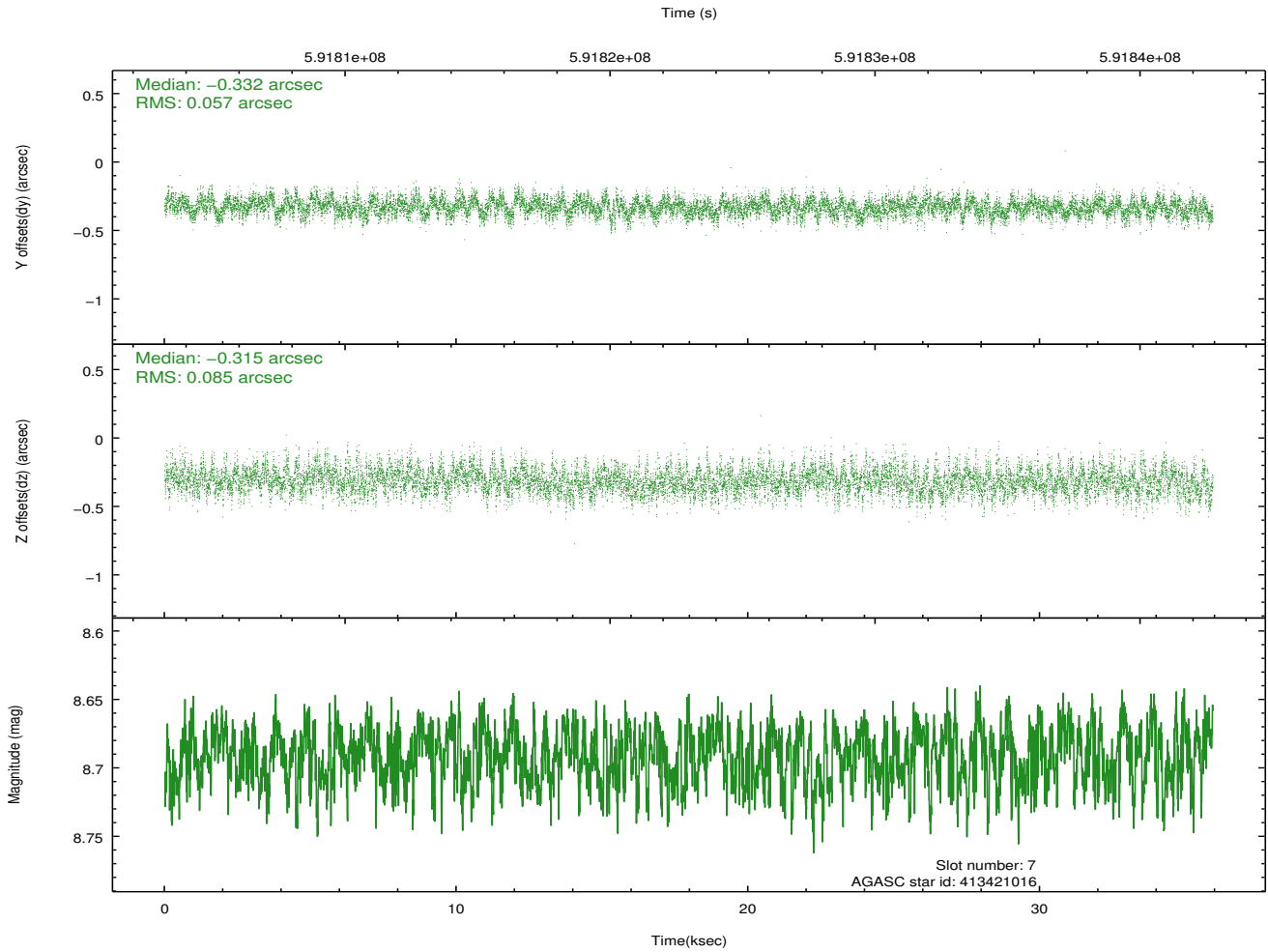
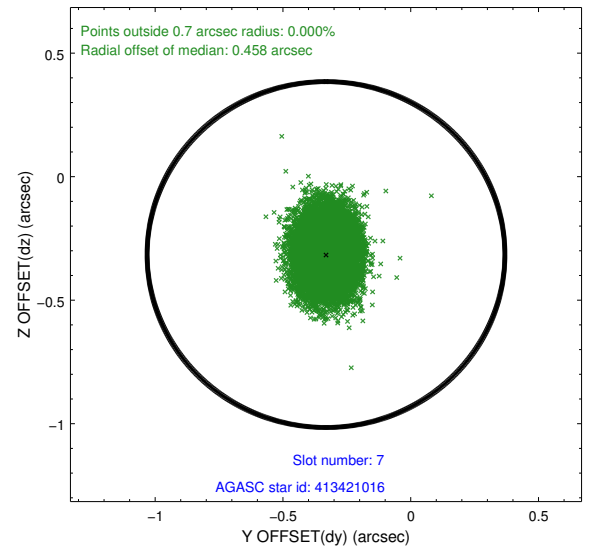
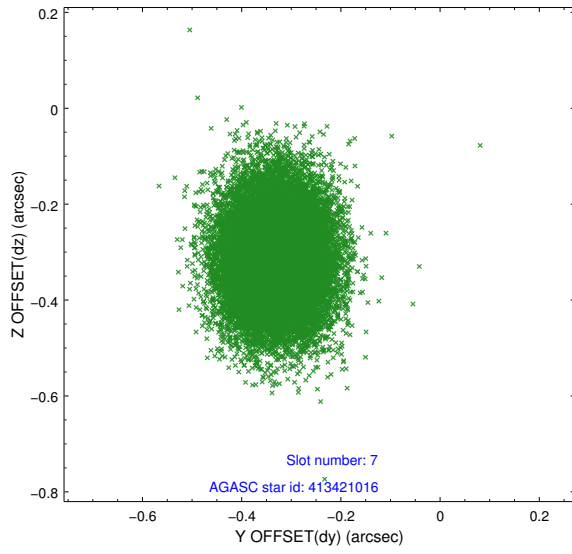
2.4.3 Slot 5



2.4.4 Slot 6

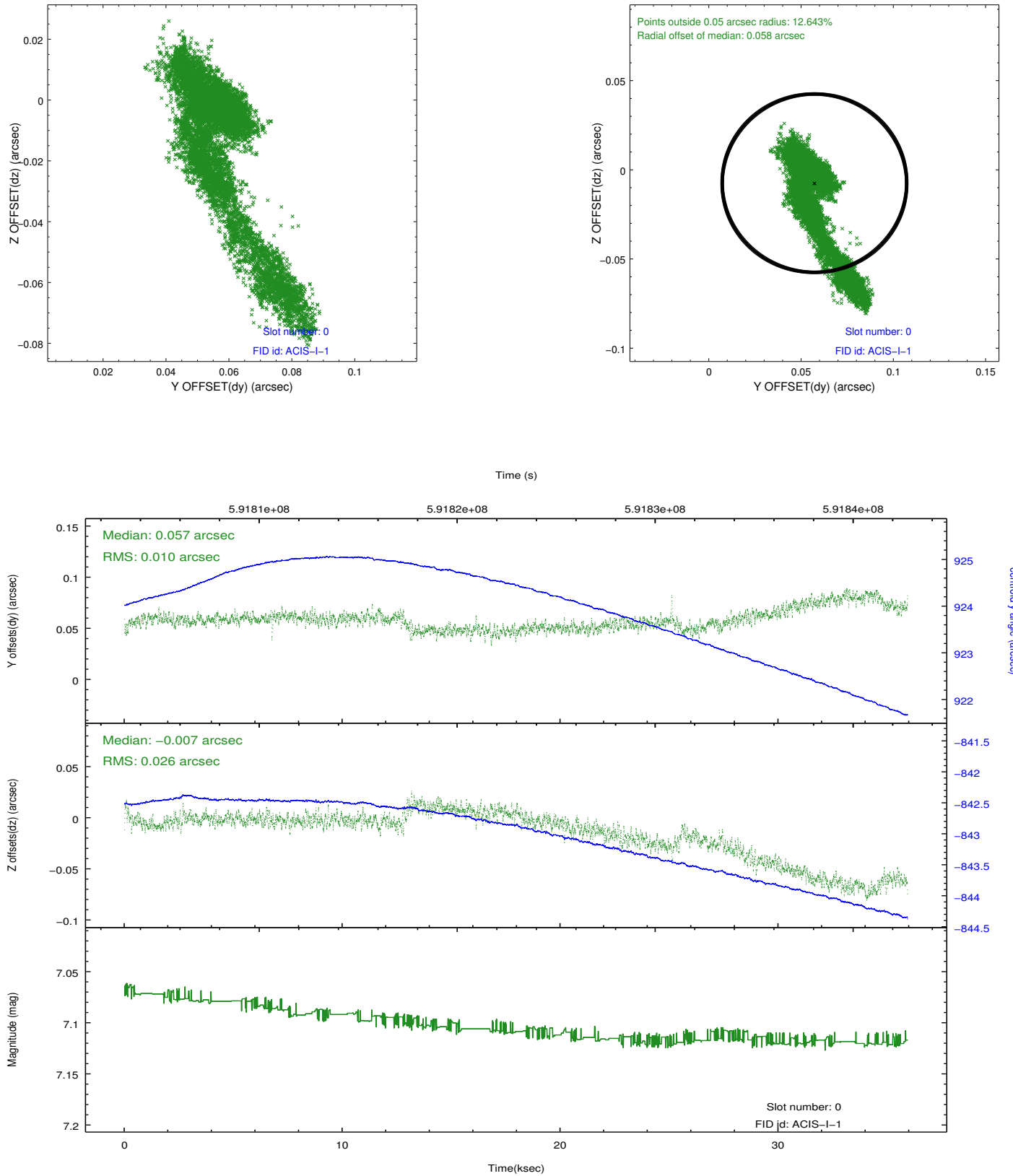


2.4.5 Slot 7

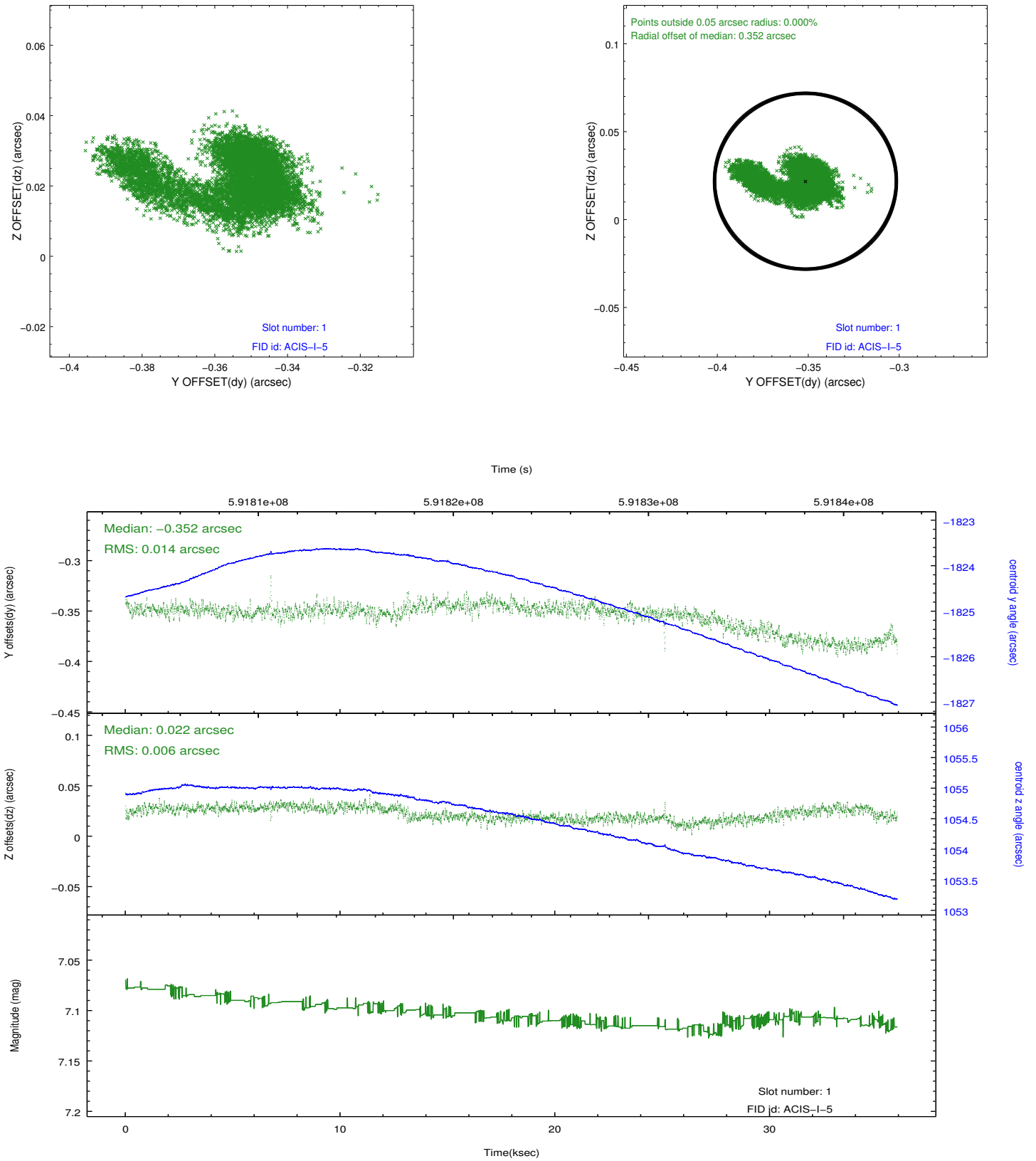


2.5 FID Slots

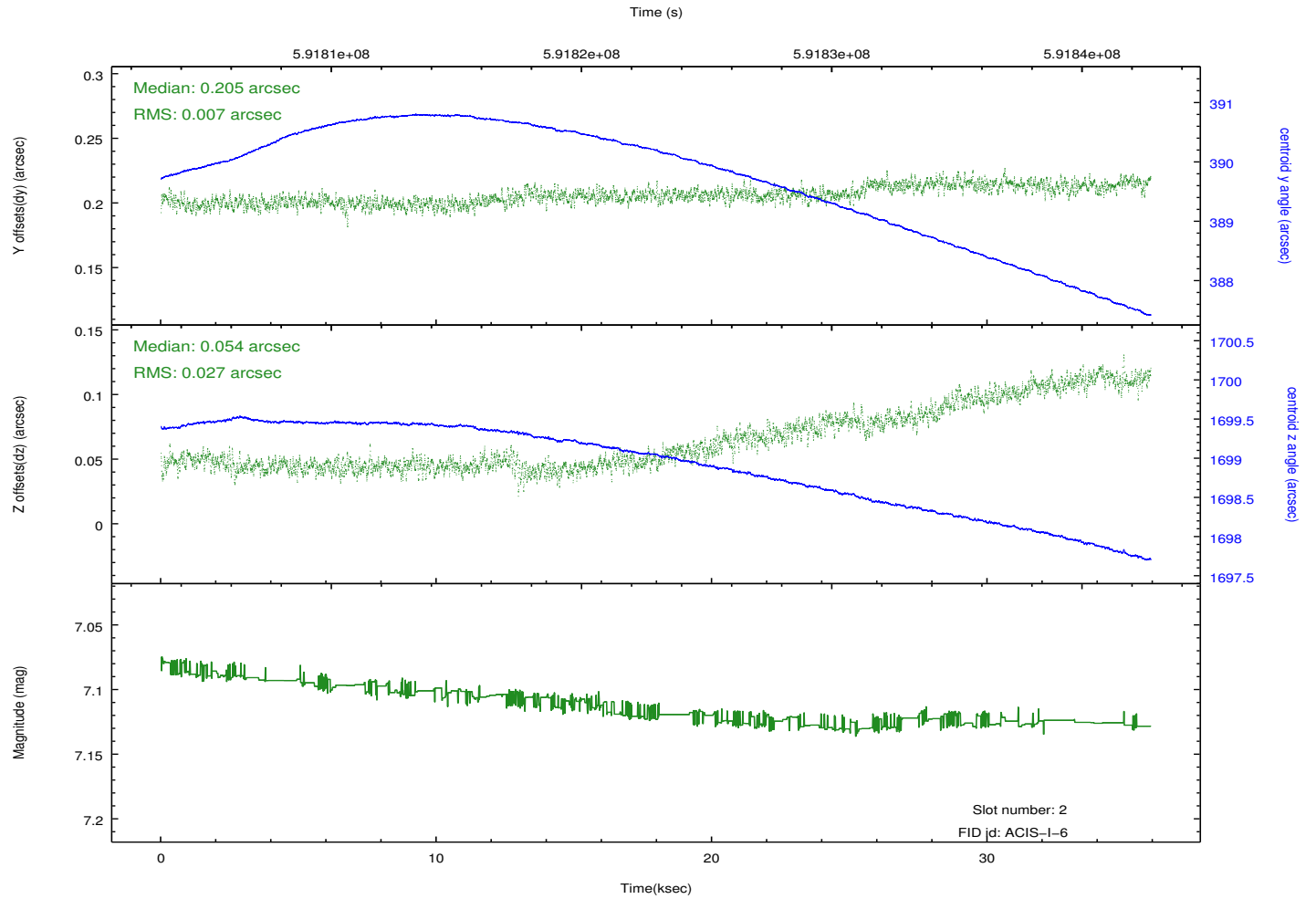
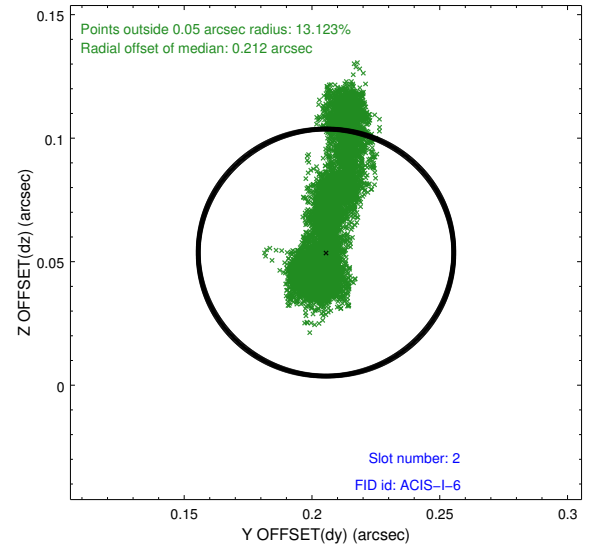
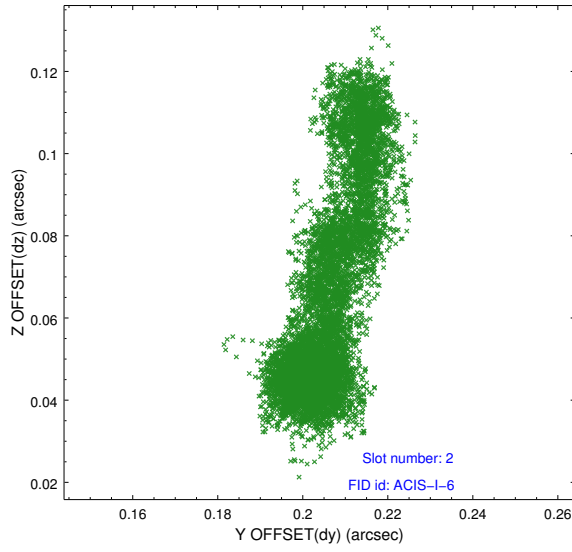
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2016.10.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.047612146139

A.2 Comments