

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19753 - L2 Version 2
Chandra X-Ray Center

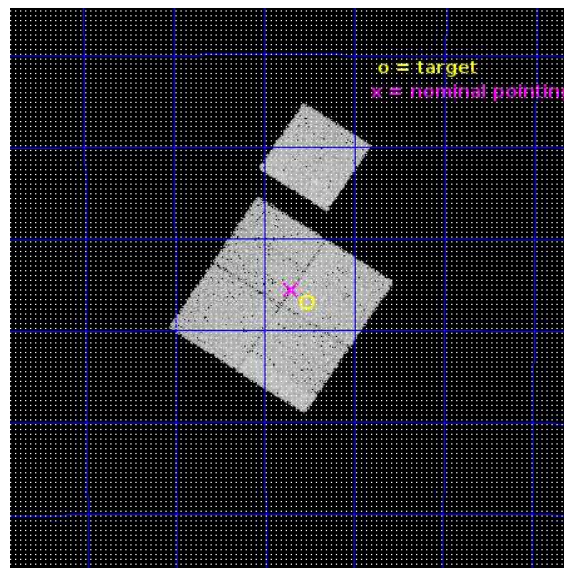
L2 Processing Date : Aug 21 2017

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1 Front

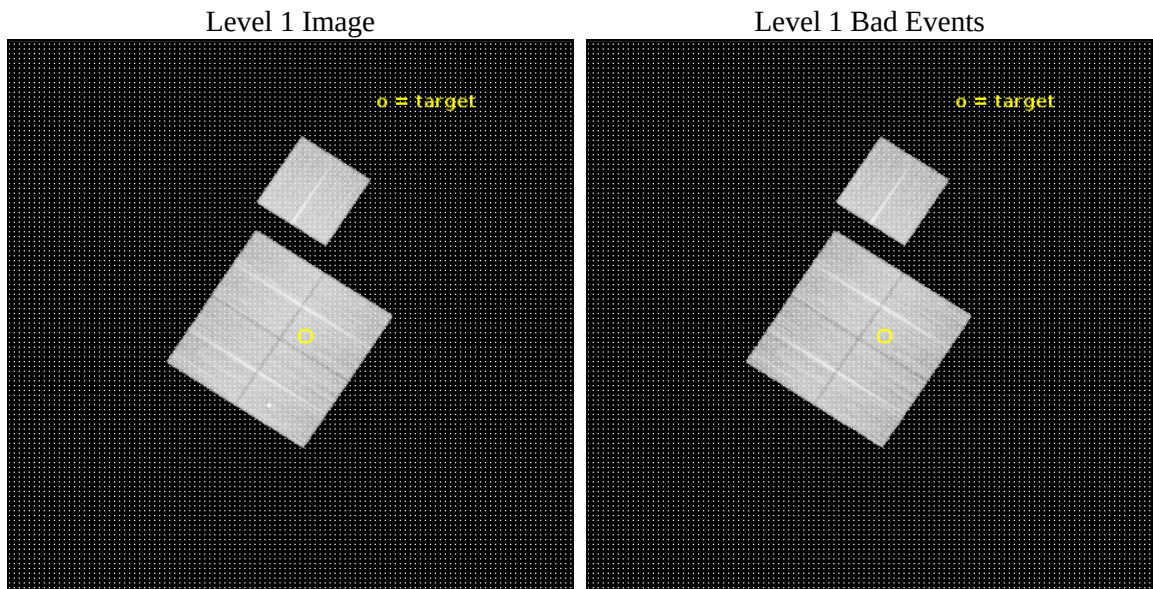
seq_num	801690	Sequence number
obs_id	19753	Observation id
title	A Chandra Survey of low-mass clusters at $0.7 < z < 0.8$ selected in the 100 deg ² SPT-Pol Deep Field	Proposal title
observer	Ralph Kraft	Principal investigator
object	SPT-CLJ2325-5116	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	351.380833	Observer's specified target RA [deg]
dec_targ	-51.283	Observer's specified target Dec [deg]
ra_nom	351.42595862849	Nominal RA [deg]
dec_nom	-51.259883832395	Nominal Dec [deg]
roll_nom	33.157833975355	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30069.83892417	Sum of GTIs [s]
livetime	29676.954341532	Livetime [s]
ontime0	30069.715824366	Sum of GTIs [s]
ontime1	30072.89791441	Sum of GTIs [s]
ontime2	30069.797884226	Sum of GTIs [s]
ontime3	30069.83892417	Sum of GTIs [s]
ontime6	30072.815834403	Sum of GTIs [s]
l2events	95395	Number of level 2 events



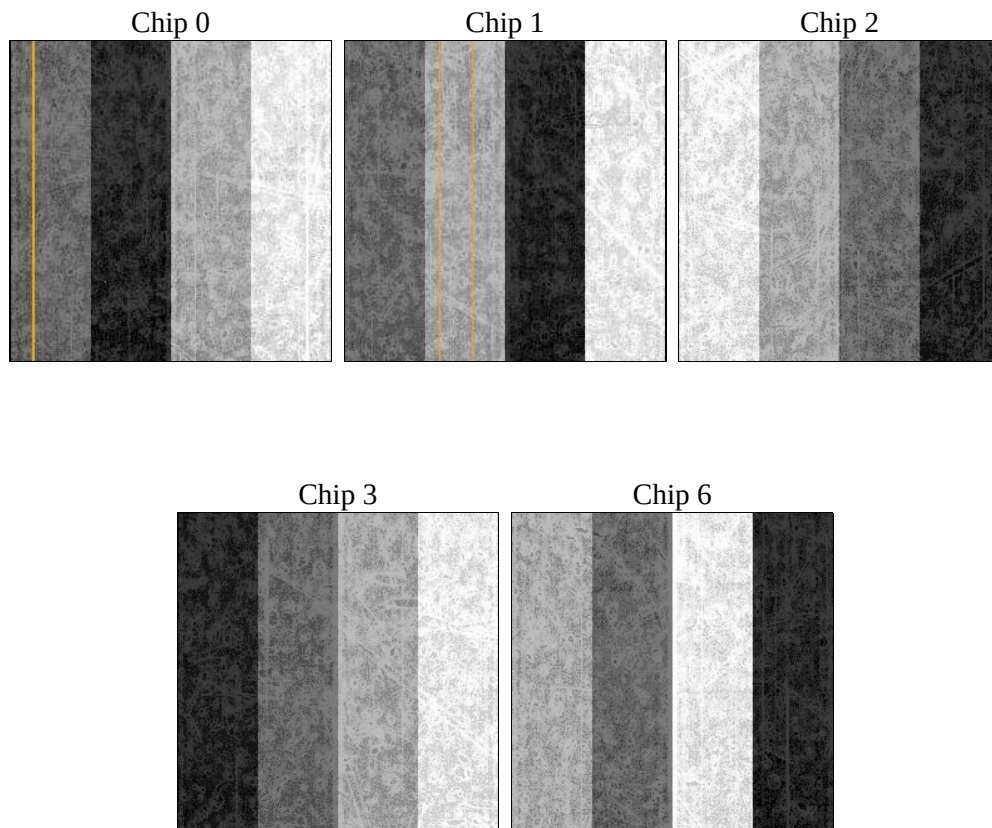
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	30069.83892417	Sum of GTIs [s]
caldsver	4.7.5	 	ontime0	30069.715824366	Sum of GTIs [s]
date	2017-08-21T23:49:37	Date and time of file creation	ontime1	30072.89791441	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30069.797884226	Sum of GTIs [s]
			ontime3	30069.83892417	Sum of GTIs [s]
			ontime6	30072.815834403	Sum of GTIs [s]
			l1events	952801	Number of level 1 events

2.1.4 Events

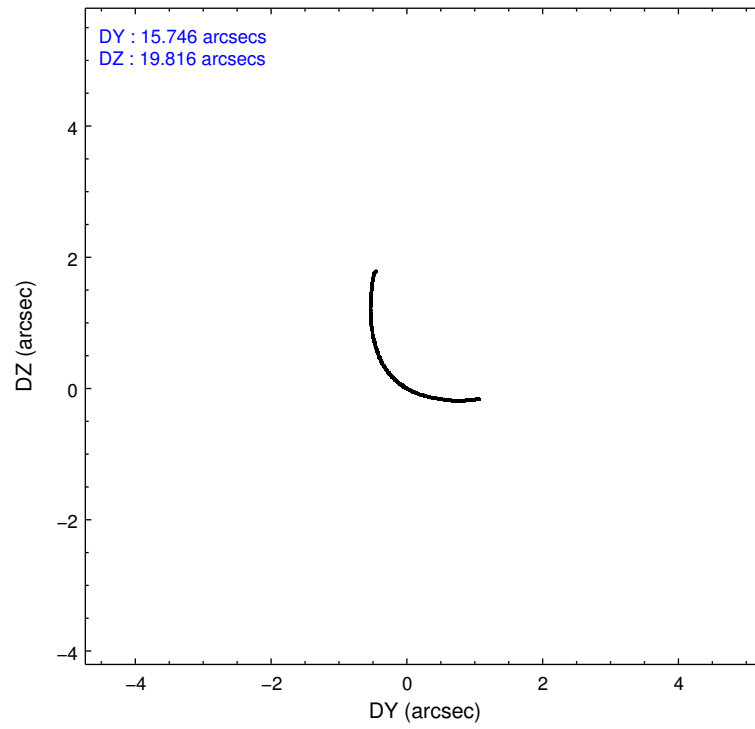
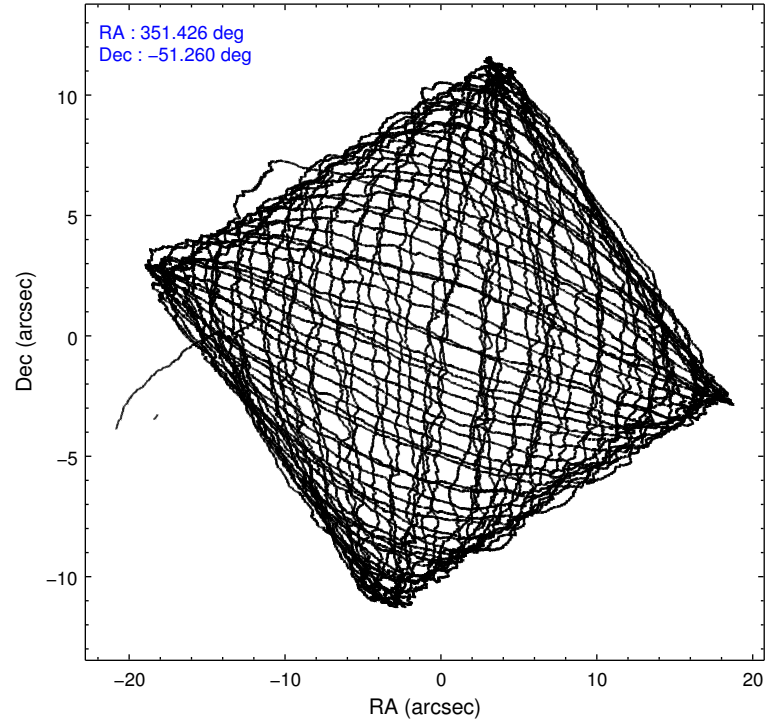
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	183039	189808	195071	189207	195676
rejected events	160317	163148	173618	167972	172758
rejected %	87%	85%	89%	88%	88%

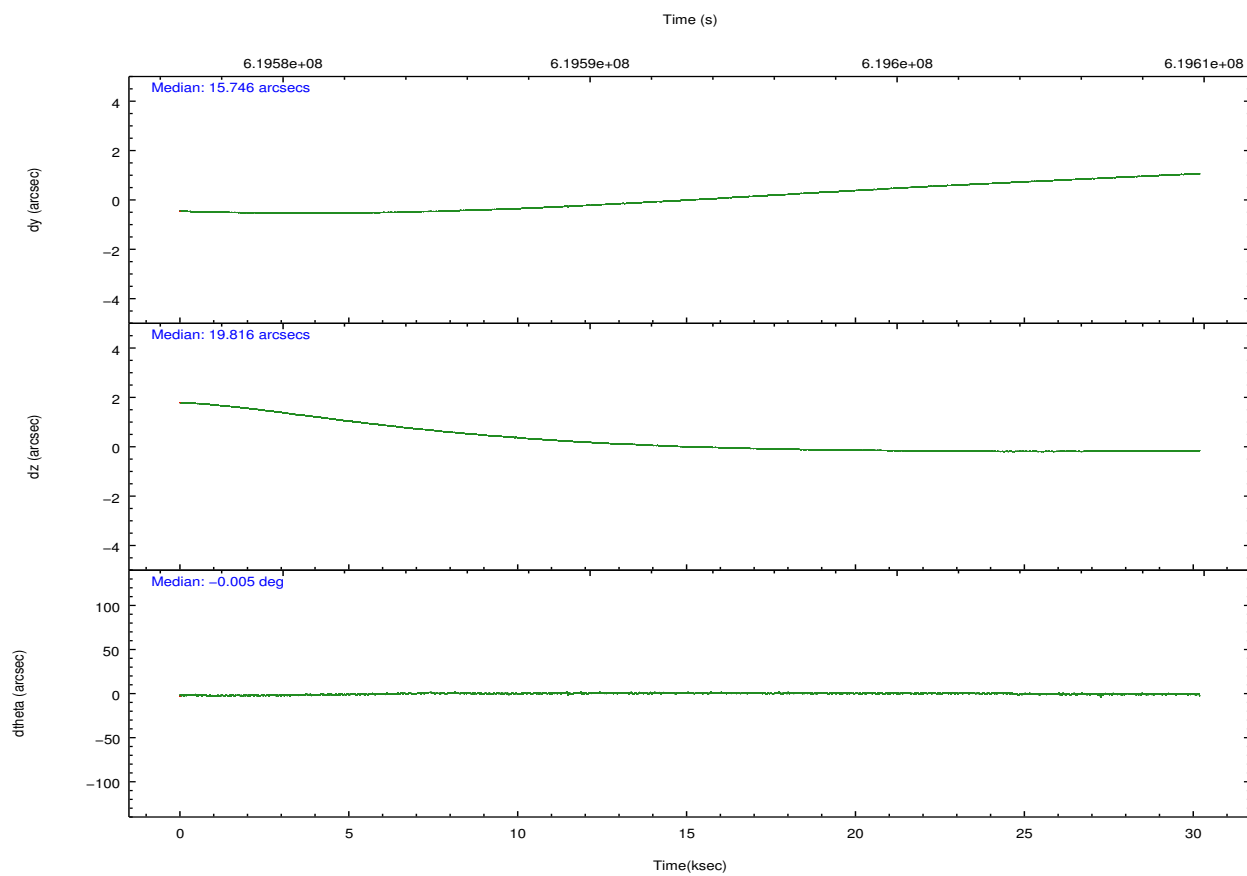
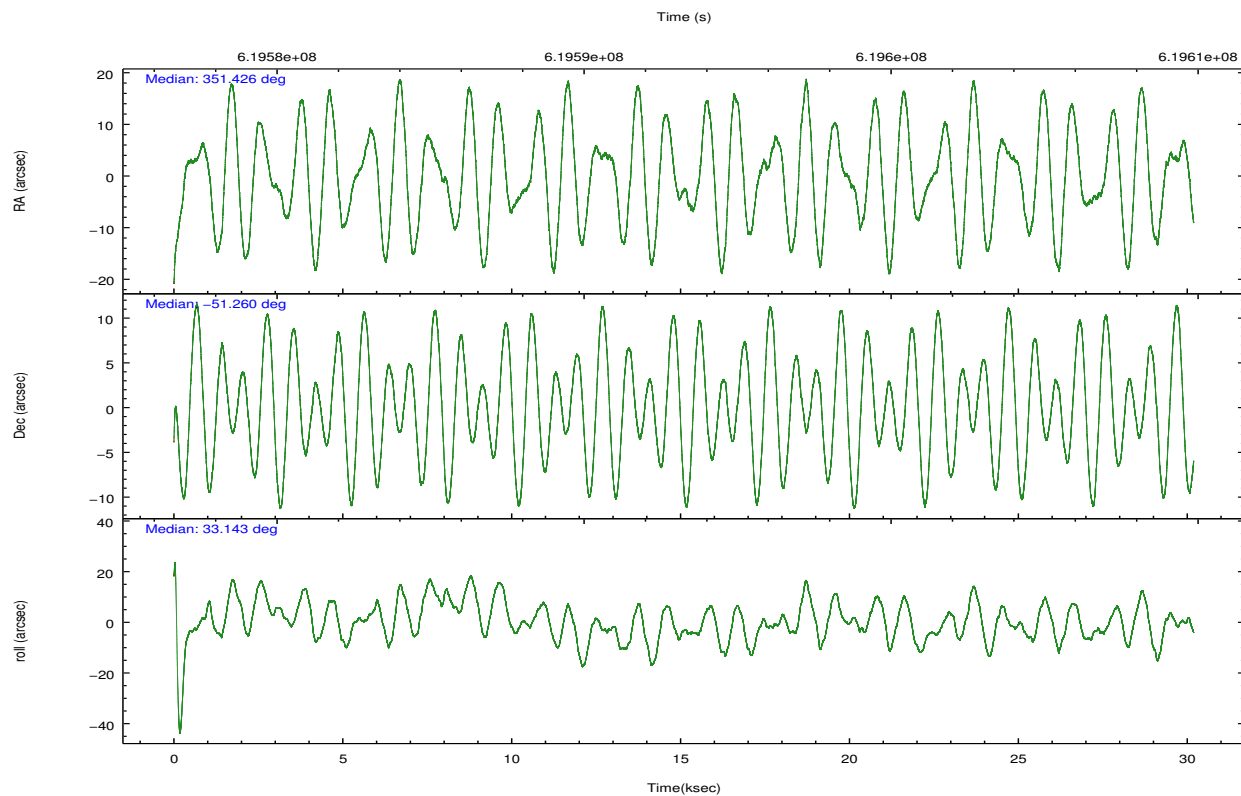
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	7620	10212	7566	7587	7658
	4%	5%	3%	4%	3%
grade 1 events	94	128	115	127	103
	0%	0%	0%	0%	0%
grade 2 events	5836	6107	5490	4776	5323
	3%	3%	2%	2%	2%
grade 3 events	2306	2465	2081	2219	2247
	1%	1%	1%	1%	1%
grade 4 events	2229	2445	2161	2200	2298
	1%	1%	1%	1%	1%
grade 5 events	8533	9169	7889	10147	9578
	4%	4%	4%	5%	4%
grade 6 events	4740	5440	4159	4457	5397
	2%	2%	2%	2%	2%
grade 7 events	151681	153842	165610	157694	163072
	82%	81%	84%	83%	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	351.406191	351.4259586284928	CCD I2 on	Y	Y
[deg] Pointing Dec	-51.284529	-51.25988383239516	CCD I3 on	Y	Y
[deg] Pointing Roll	32.933698	33.15783397535471	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	-230.082463	-230.0875075610572	CCD S3 on	N	N
[mm] SIM translation stage offset	-3.51	-3.504945441872508	CCD S4 on	N	N
[s] Observation start time (MET)	619578276.184000	619577005.73605	CCD S5 on	N	N
Observation start date	2017-08-20T01:03:27	2017-08-20T00:43:25	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	619608276.184000	619608942.17541	On-chip summing requested	N	N
Observation end date	2017-08-20T09:23:27	2017-08-20T09:35:42	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



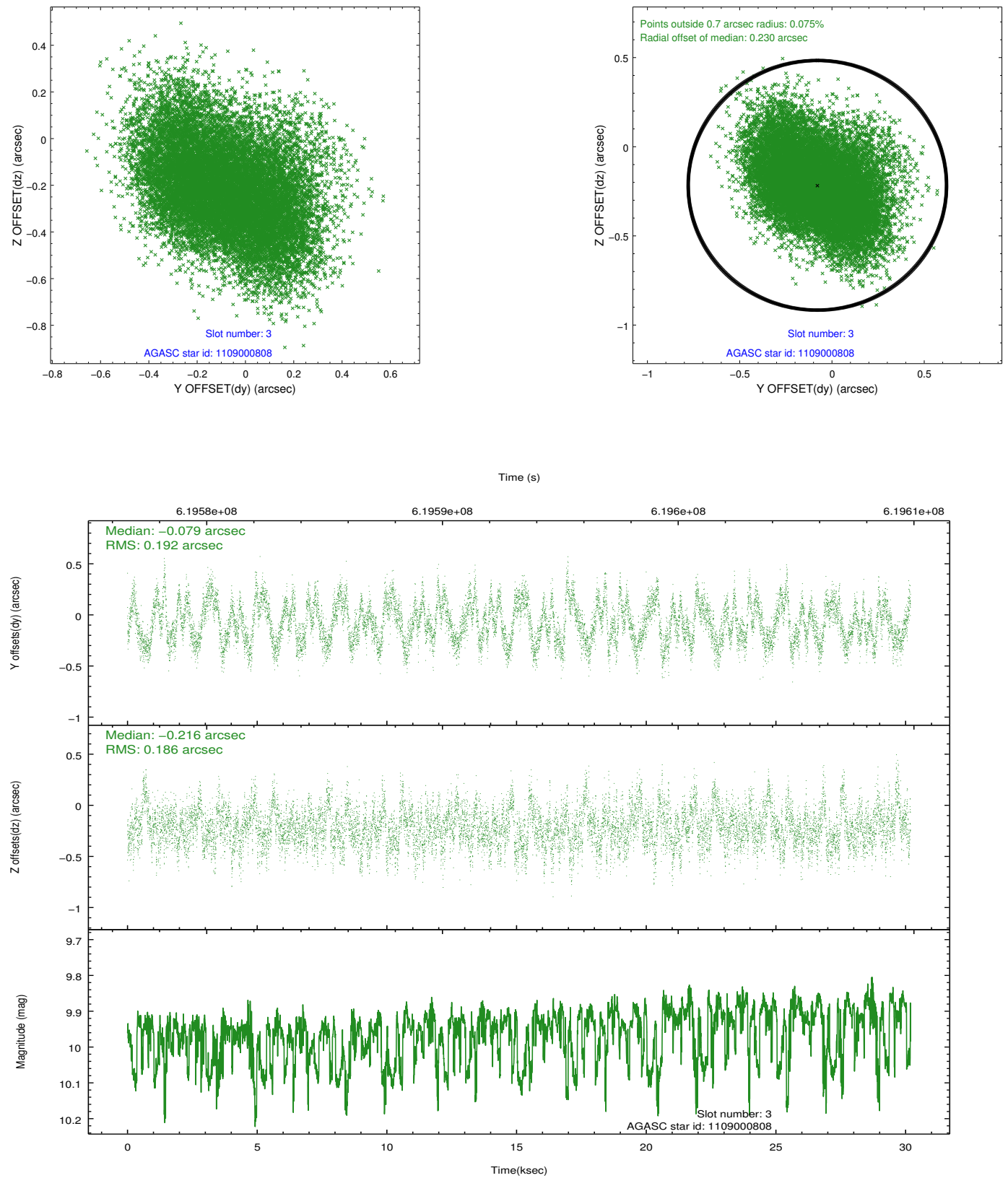


Slot Statistics

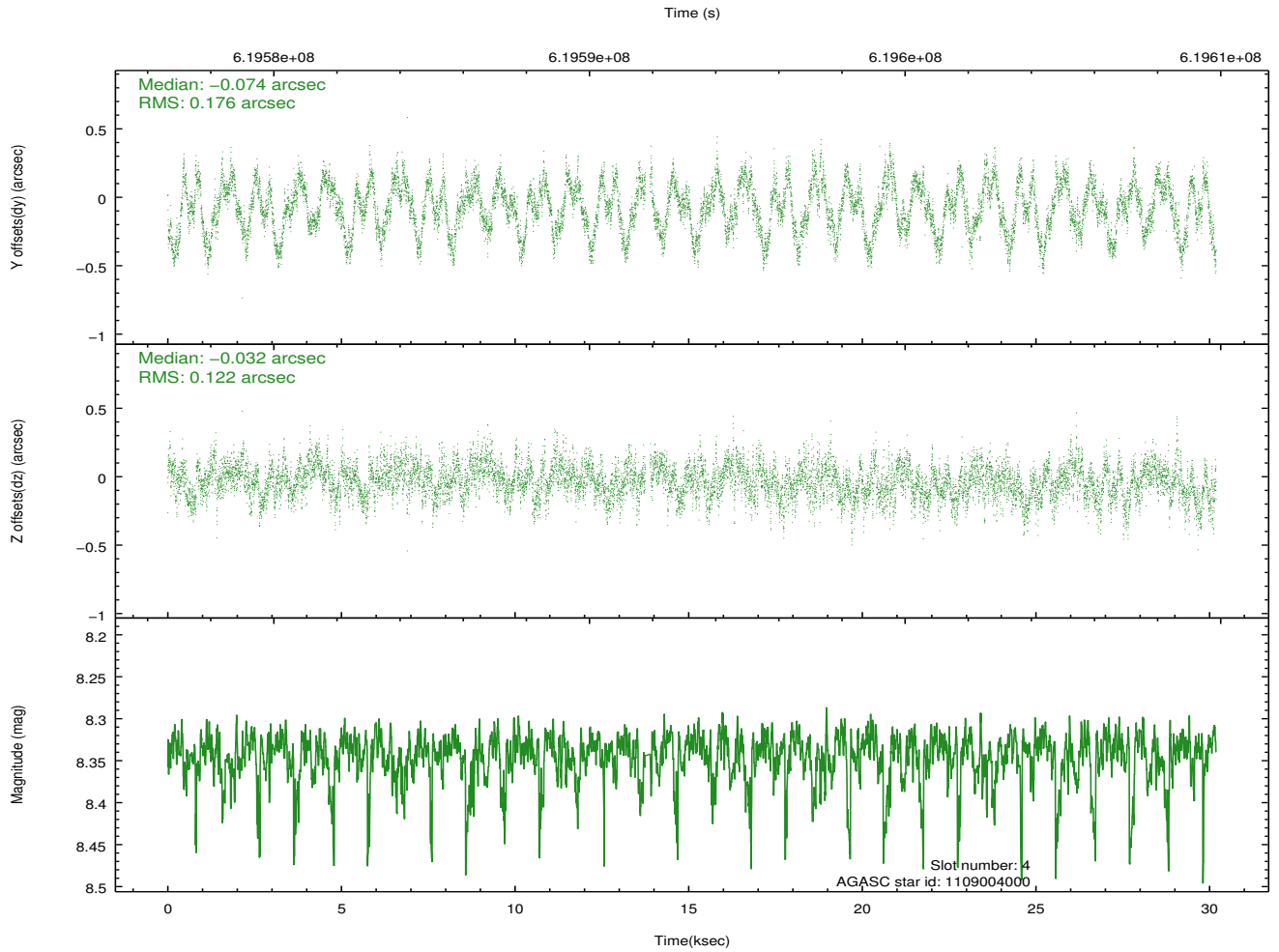
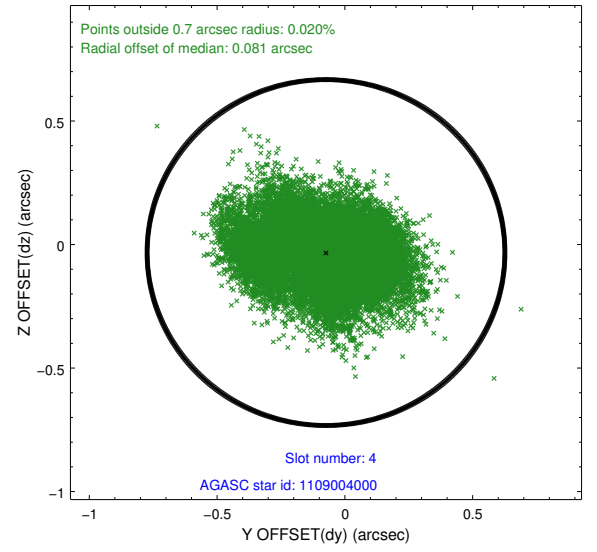
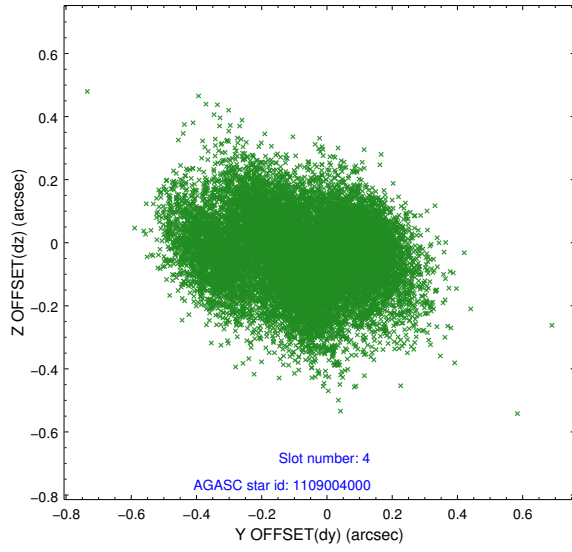
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.18	7364	0.133	-0.091	0.028	0.064	0.000000	0.000000	923.71	-915.79
1	FID		ACIS-I-5	7.16	7364	-0.397	0.078	0.011	0.019	0.000000	0.000000	-1824.98	981.67
2	FID		ACIS-I-6	7.17	7364	0.176	0.083	0.024	0.050	0.000000	0.000000	389.09	1626.37
3	GUIDE	used	1109000808	9.95	14702	-0.079	-0.216	0.288	0.459	351.239761	-50.640375	941.42	2152.25
4	GUIDE	used	1109004000	8.34	14651	-0.074	-0.032	0.234	0.357	352.284405	-51.019762	2183.12	-290.40
5	GUIDE	used	1109006064	9.19	14710	-0.206	0.152	0.200	0.337	352.185536	-51.436354	1166.44	-1416.94
6	GUIDE	used	1109008528	9.73	14705	0.363	0.096	0.230	0.360	351.698938	-51.358906	407.05	-583.48
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

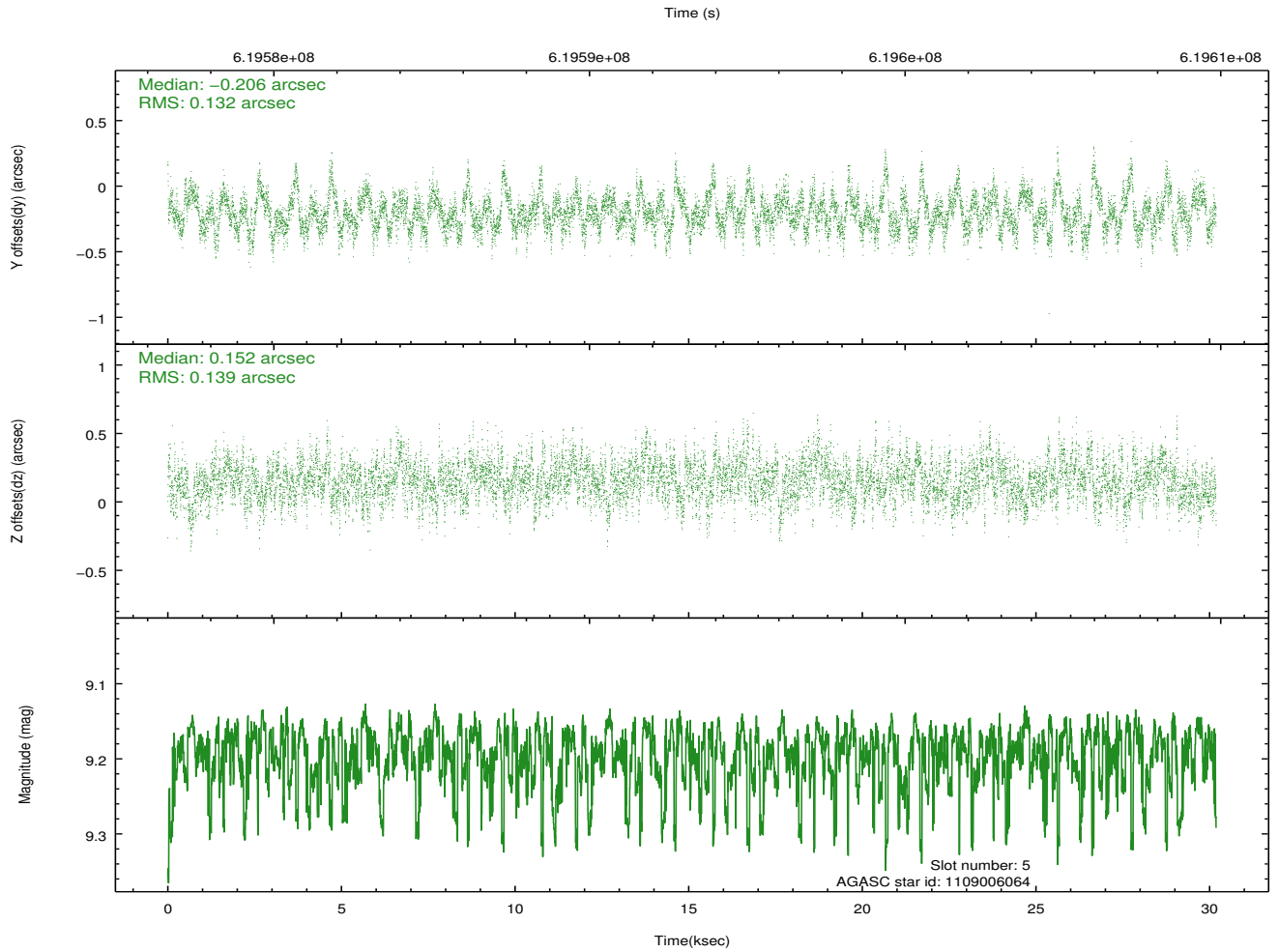
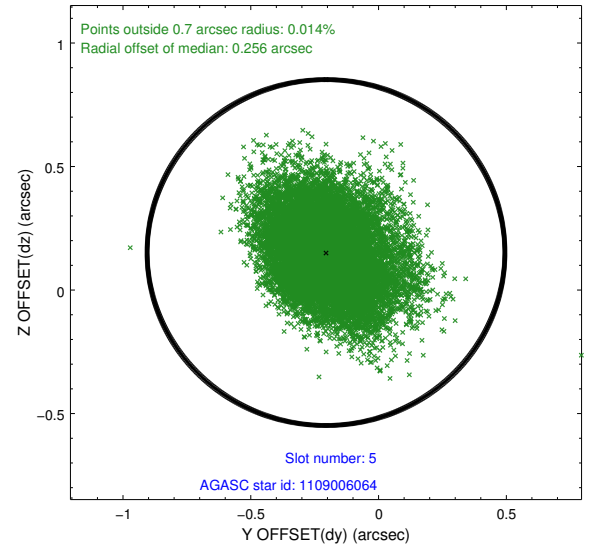
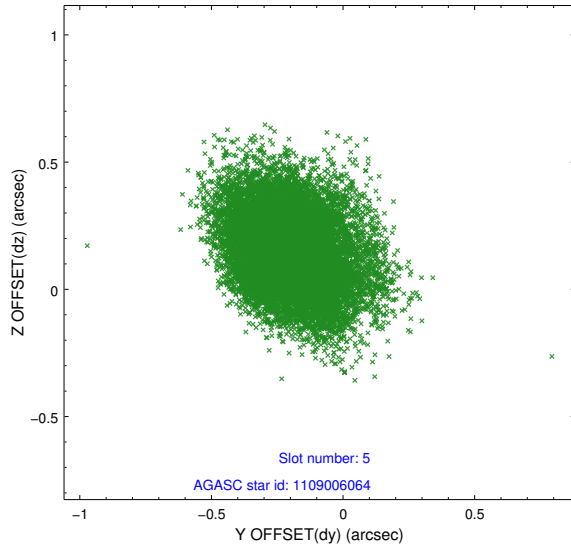
2.4.1 Slot 3



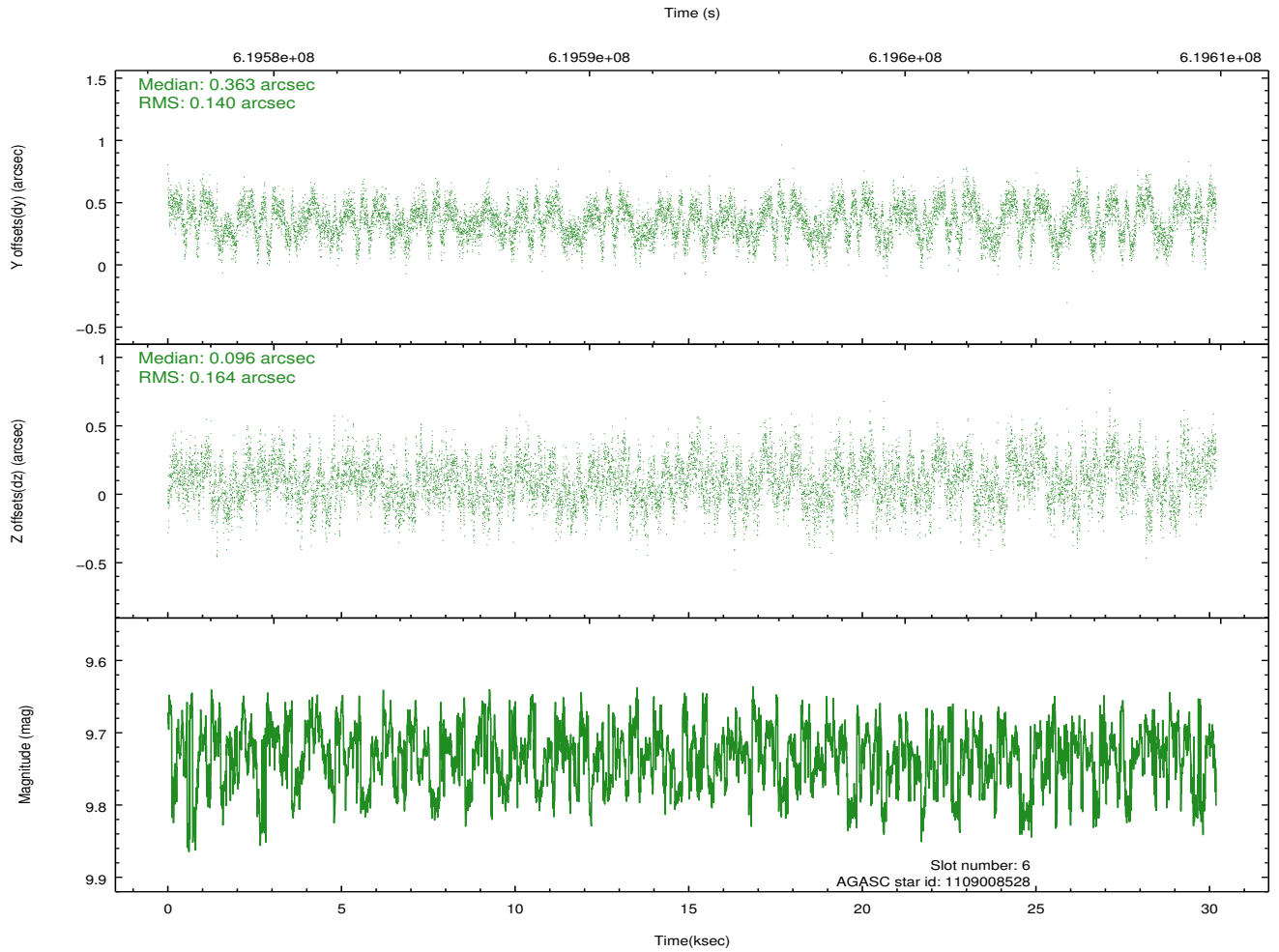
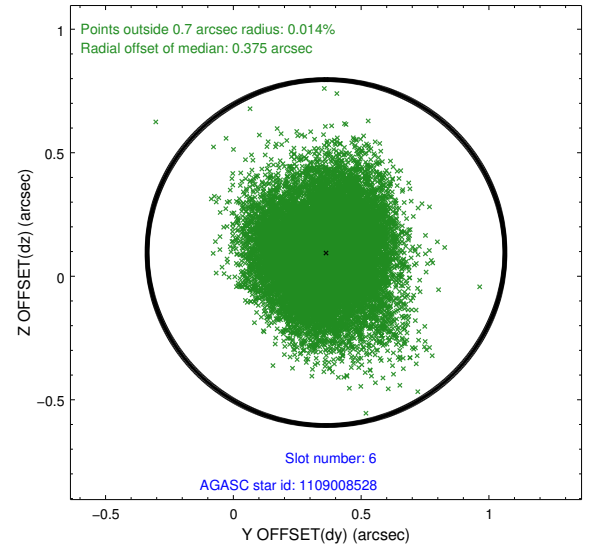
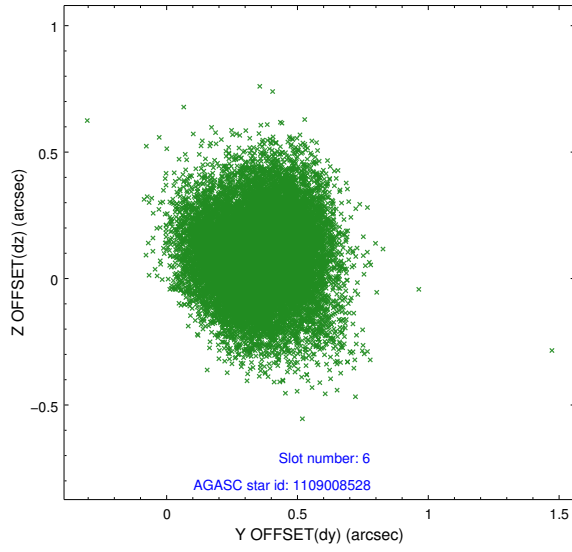
2.4.2 Slot 4



2.4.3 Slot 5

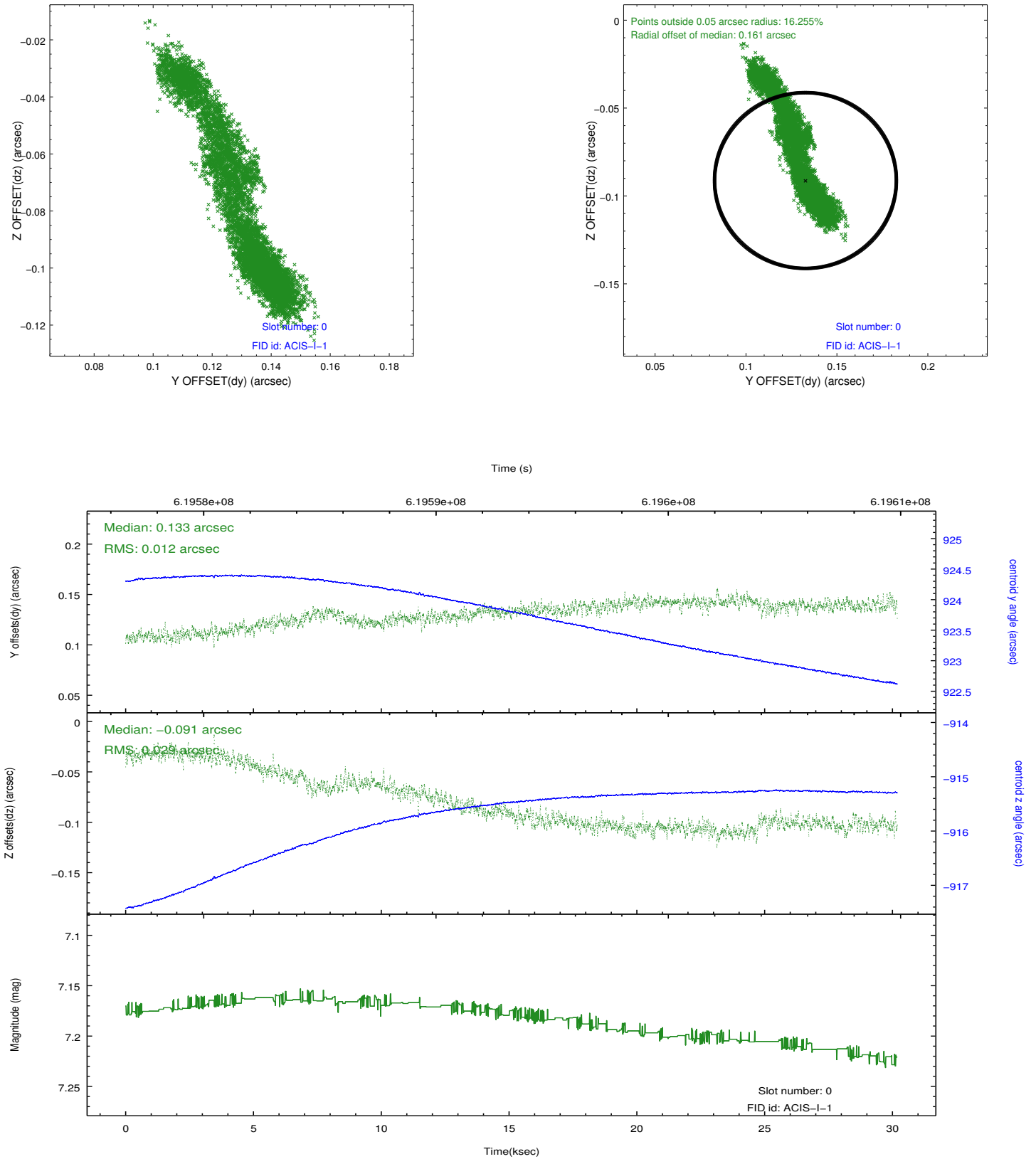


2.4.4 Slot 6

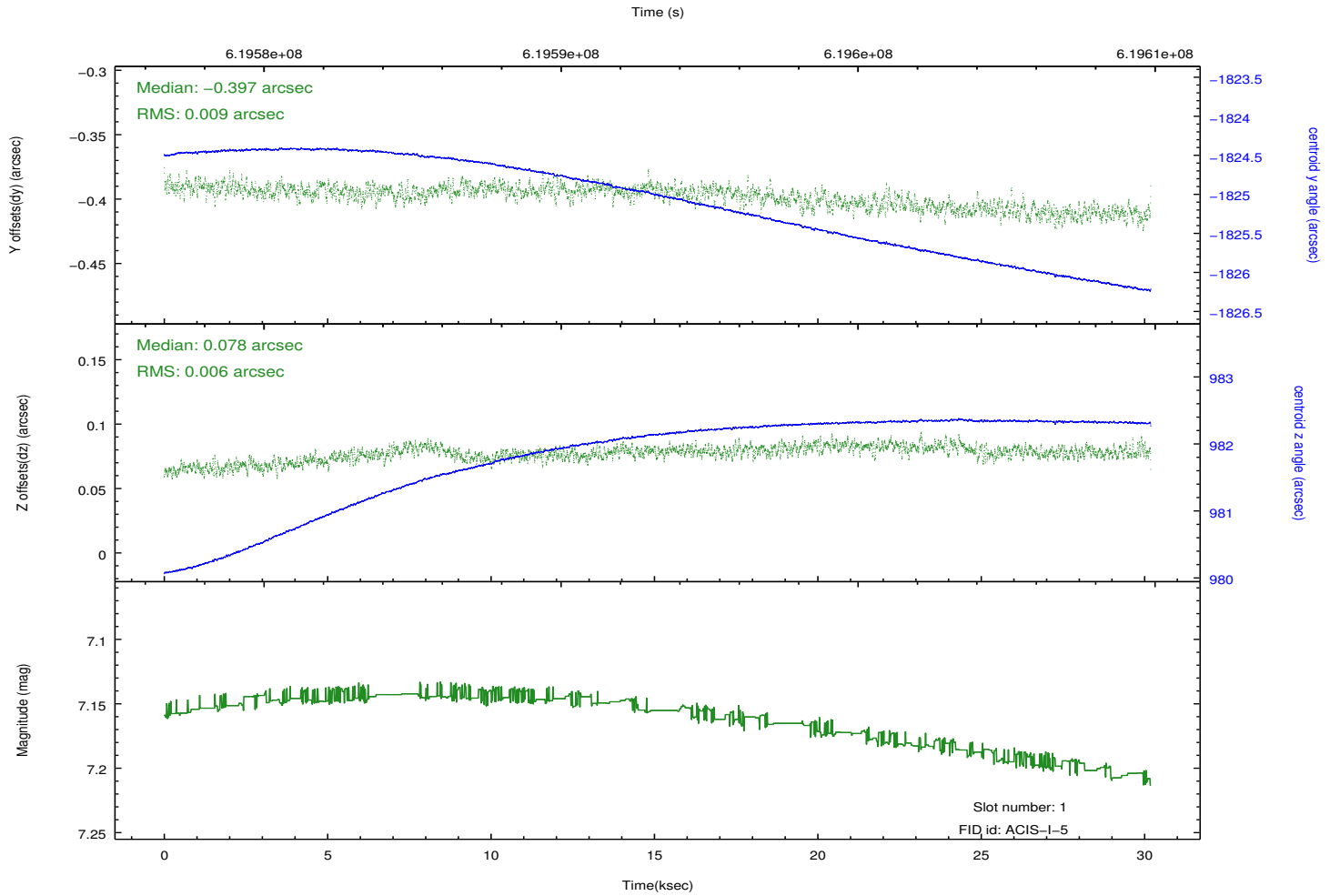
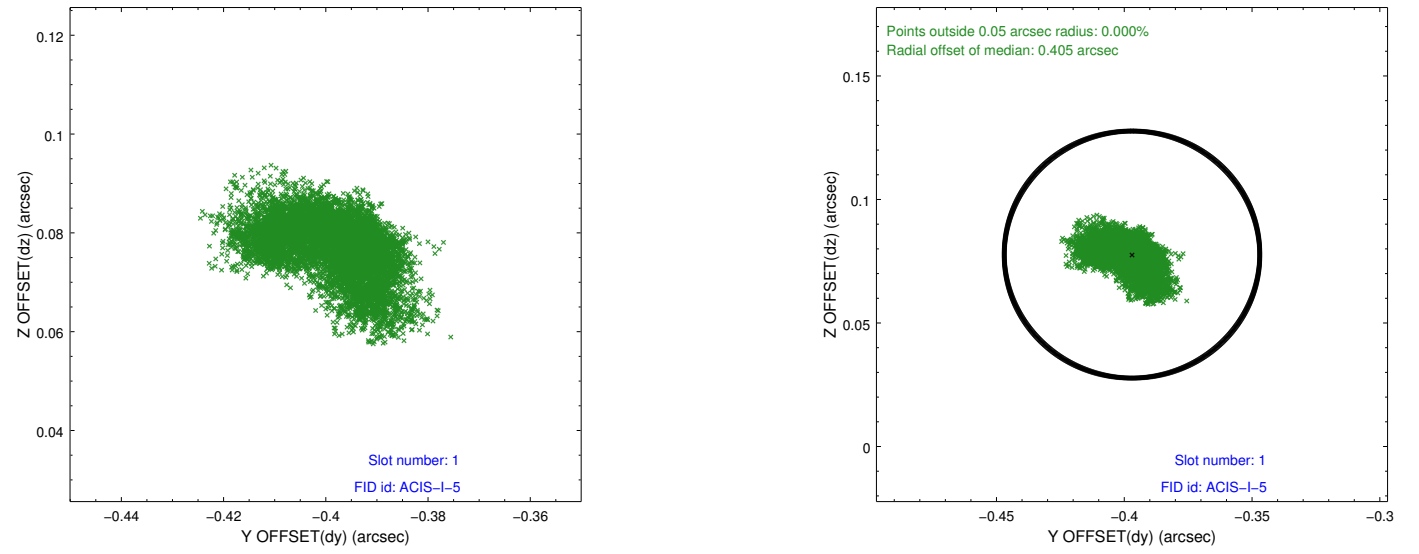


2.5 FID Slots

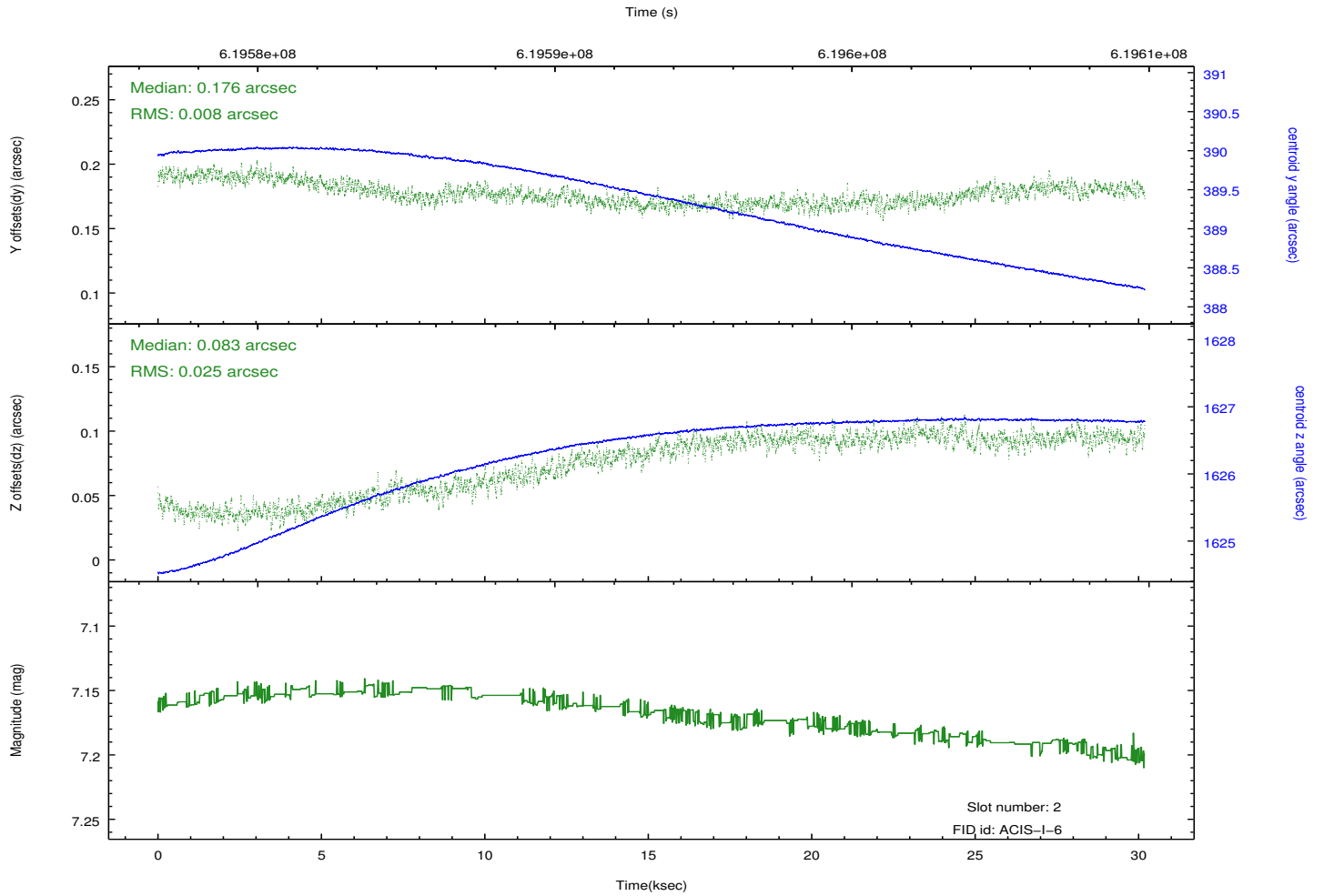
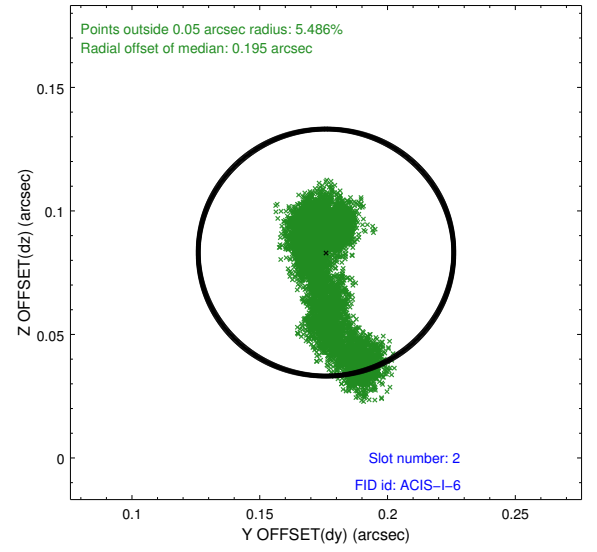
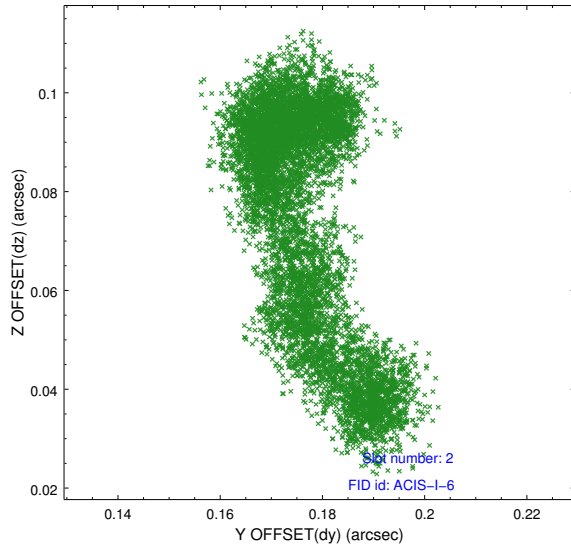
2.5.1 Slot 0



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)	2017.08.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.06983892417

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.