

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 17153 - L2 Version 1
Chandra X-Ray Center

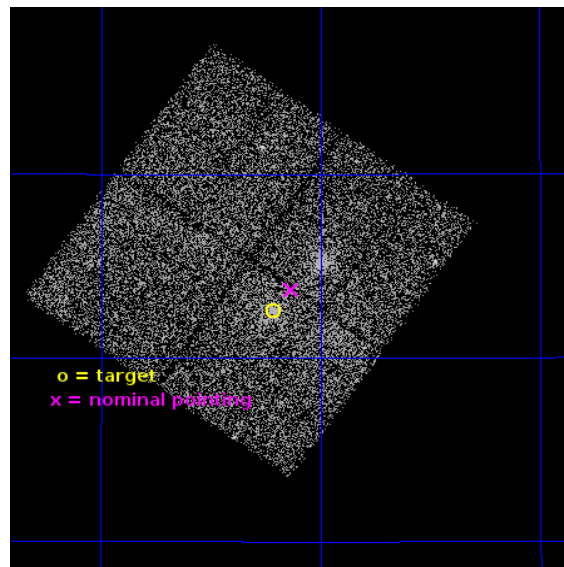
L2 Processing Date : Feb 11 2016

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1 Front

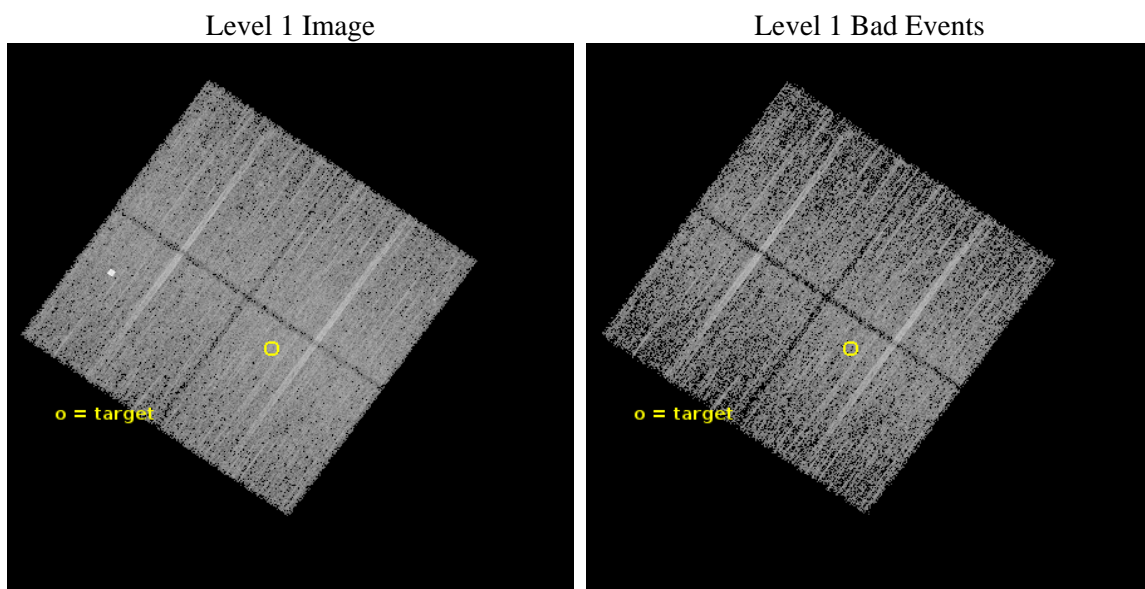
seq_num	801441	Sequence number
obs_id	17153	Observation id
title	Chandra Calibration of the Richness-Mass Relation of Galaxy Clusters: Enabling Cluster Cosmology with the DES	Proposal title
observer	Eduardo Rozo	Principal investigator
object	RM J113613.0+400235.8	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	174.054167	Observer's specified target RA [deg]
dec_targ	40.043278	Observer's specified target Dec [deg]
ra_nom	174.03320846521	Nominal RA [deg]
dec_nom	40.061872655833	Nominal Dec [deg]
roll_nom	125.24095772228	Nominal Roll [deg]
revision	1	Processing version of data
ontime	14082.293923259	Sum of GTIs [s]
livetime	13898.298385917	Livetime [s]
ontime0	14079.029713035	Sum of GTIs [s]
ontime1	14075.929682732	Sum of GTIs [s]
ontime2	14082.252883315	Sum of GTIs [s]
ontime3	14082.293923259	Sum of GTIs [s]
l2events	32856	Number of level 2 events



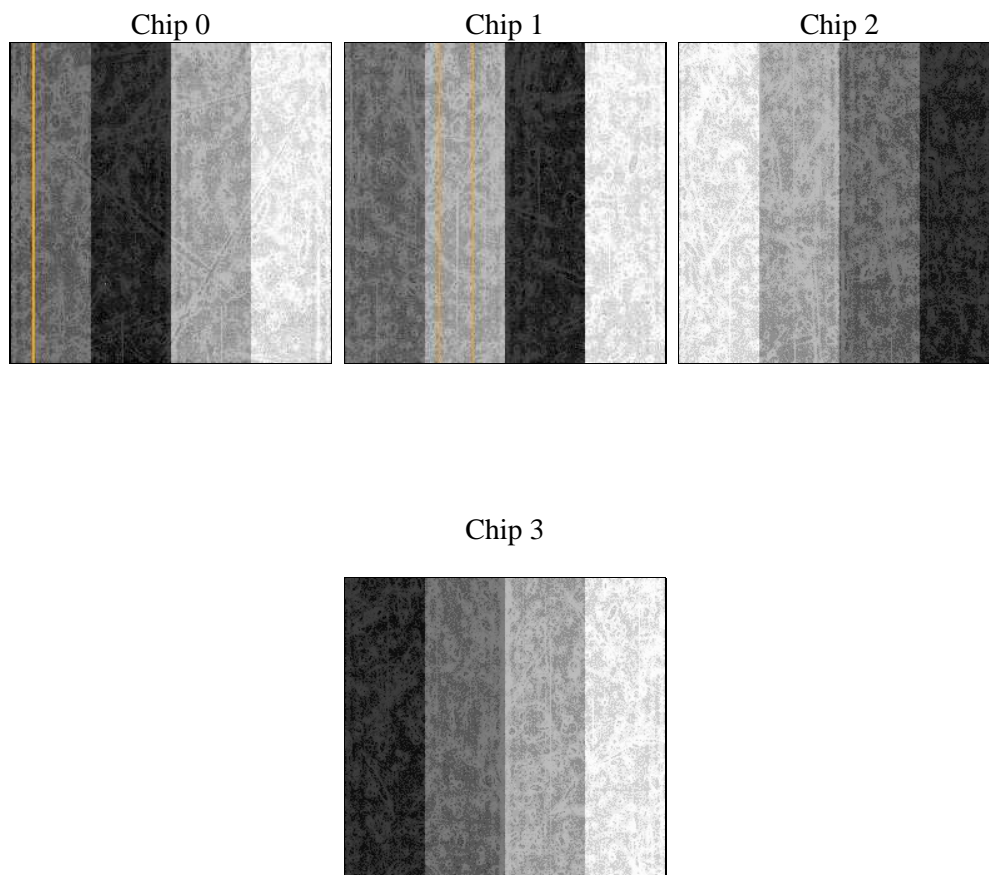
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	14082.293923259	Sum of GTIs [s]
caldsver	4.7.0	 	ontime0	14079.029713035	Sum of GTIs [s]
date	2016-02-11T12:06:20	Date and time of file creation	ontime1	14075.929682732	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	14082.252883315	Sum of GTIs [s]
			ontime3	14082.293923259	Sum of GTIs [s]
			l1events	337162	Number of level 1 events

2.1.4 Events

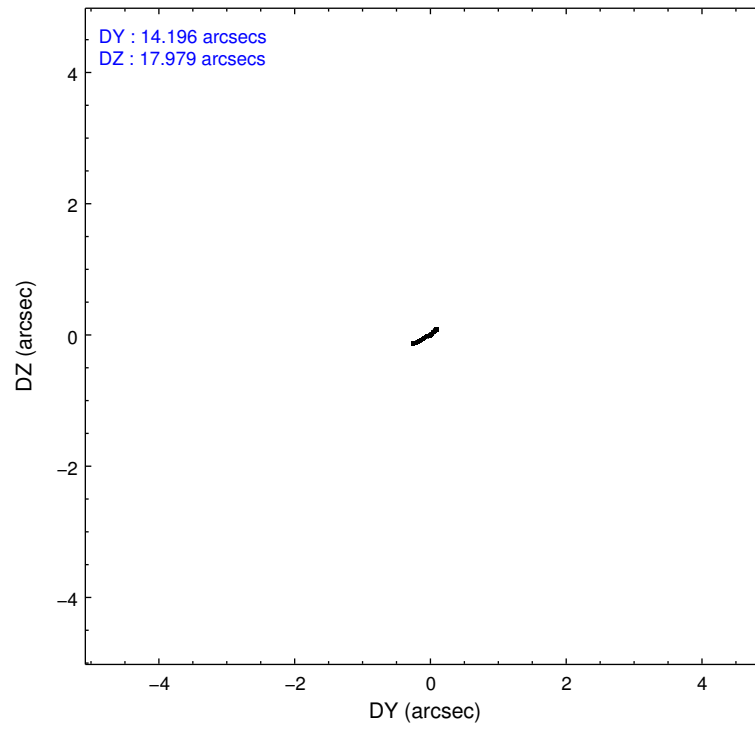
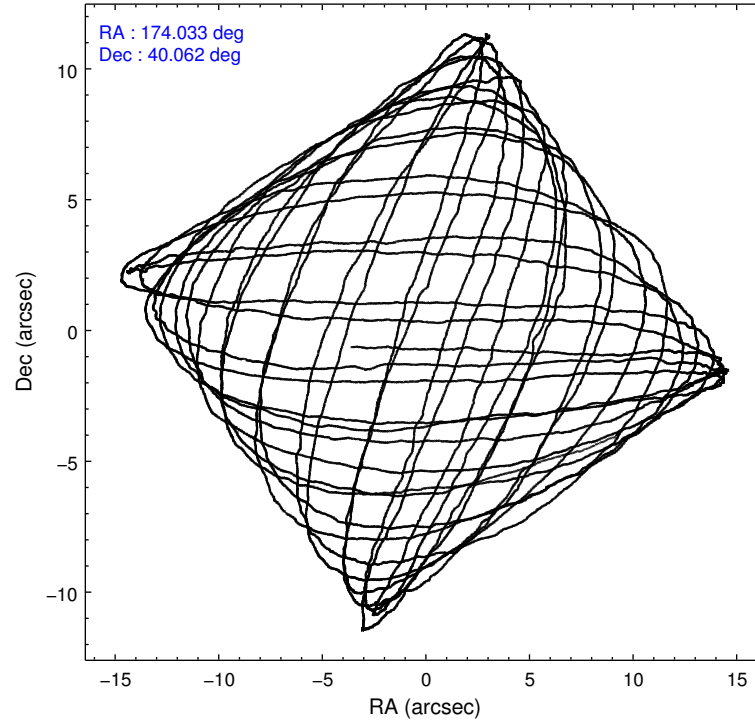
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	78713	82574	89429	86446
rejected events	69363	69328	79767	76570
rejected %	88%	83%	89%	88%

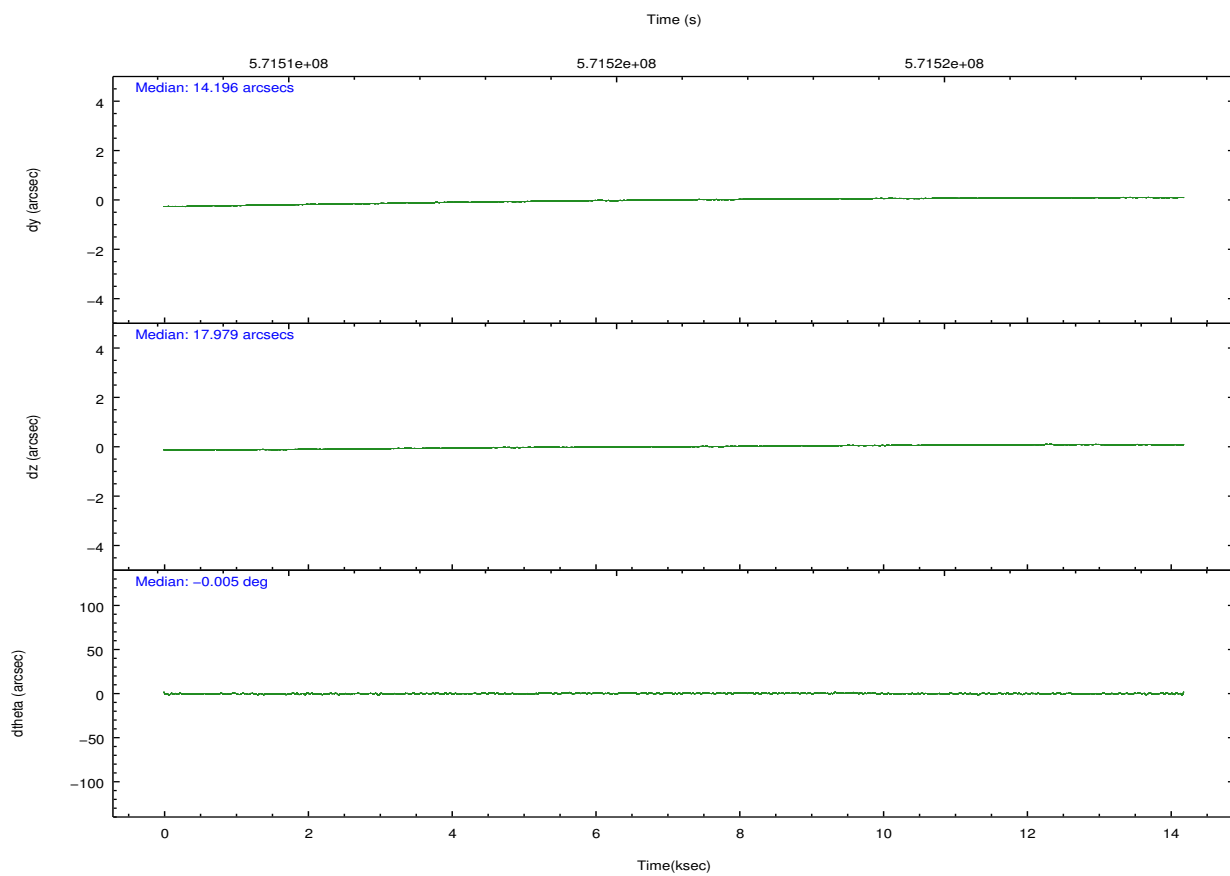
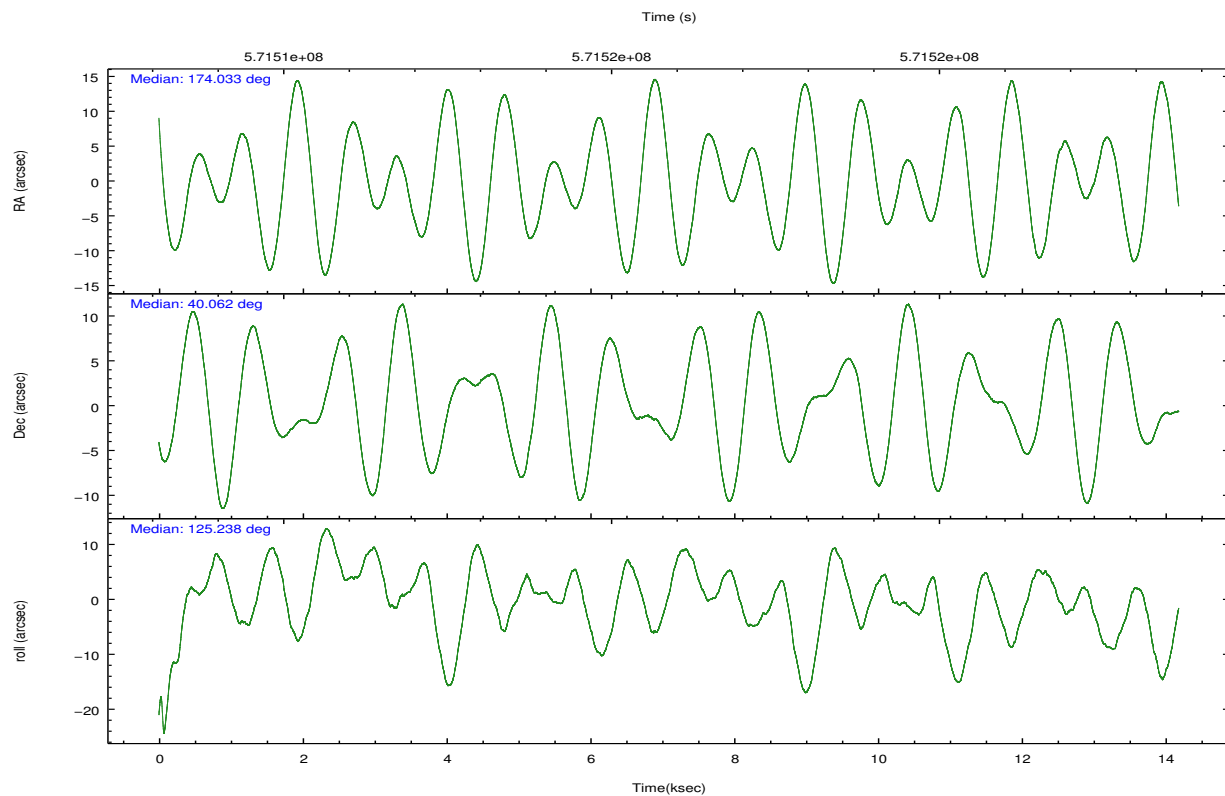
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	3088	6489	3880	3934
	3%	7%	4%	4%
grade 1 events	41	57	53	45
	0%	0%	0%	0%
grade 2 events	2286	2433	2150	2014
	2%	2%	2%	2%
grade 3 events	1069	932	921	972
	1%	1%	1%	1%
grade 4 events	929	919	914	1008
	1%	1%	1%	1%
grade 5 events	3700	3658	3371	4035
	4%	4%	3%	4%
grade 6 events	1981	2478	1801	1957
	2%	3%	2%	2%
grade 7 events	65619	65608	76339	72481
	83%	79%	85%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	174.066004	174.0332084652051	CCD I2 on	Y	Y
[deg] Pointing Dec	40.050417	40.06187265583347	CCD I3 on	Y	Y
[deg] Pointing Roll	125.011153	125.2409577222794	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	N
[mm] SIM translation stage pos	-227.742463	-227.734108438797	CCD S3 on	N	N
[mm] SIM translation stage offset	-5.85	-5.858344564132665	CCD S4 on	N	N
[s] Observation start time (MET)	571508973.184000	571508058.23944	CCD S5 on	N	N
Observation start date	2016-02-10T16:28:25	2016-02-10T16:14:18	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	571522973.184000	571523652.59033	On-chip summing requested	N	N
Observation end date	2016-02-10T20:21:45	2016-02-10T20:34:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



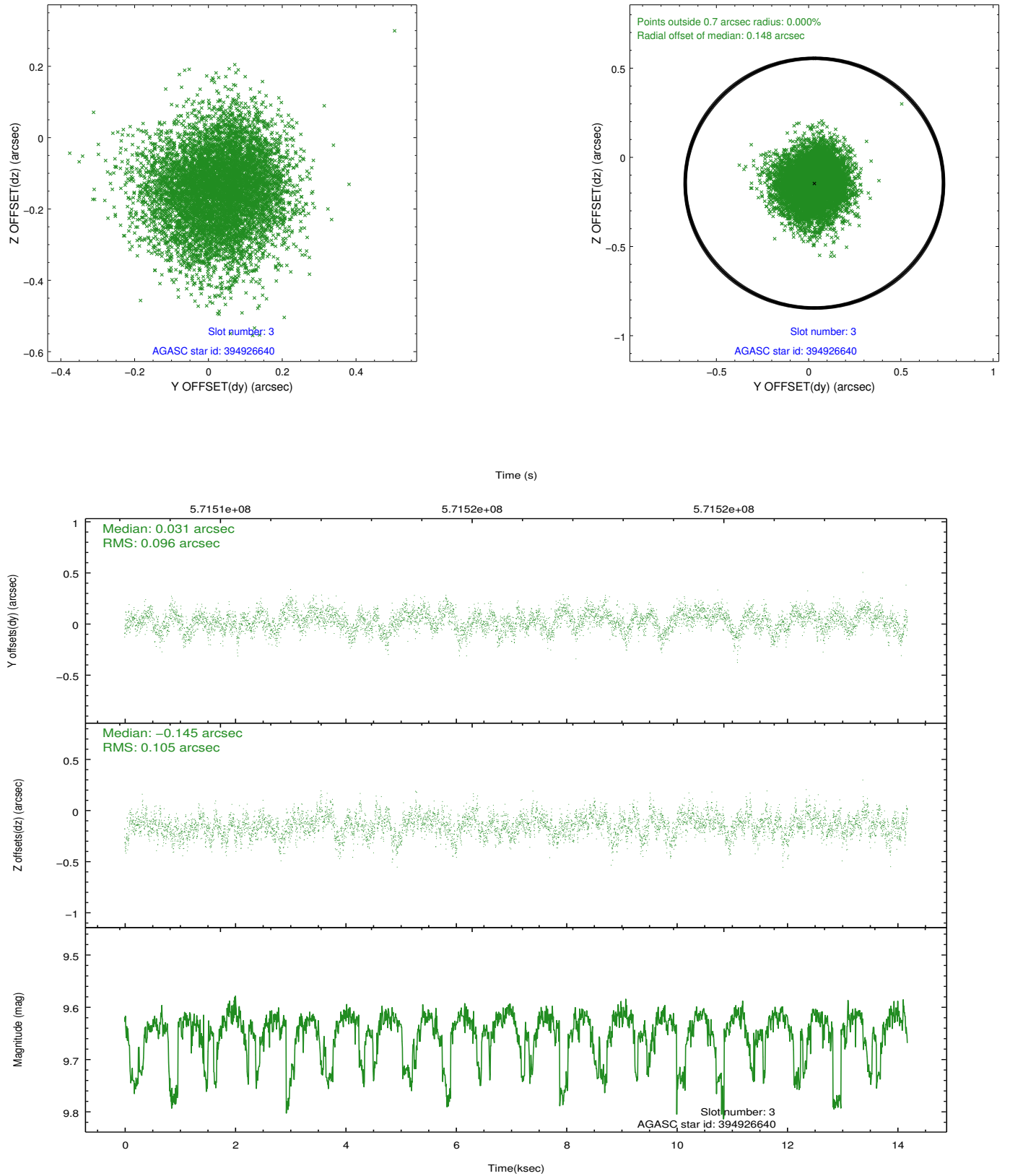


Slot Statistics

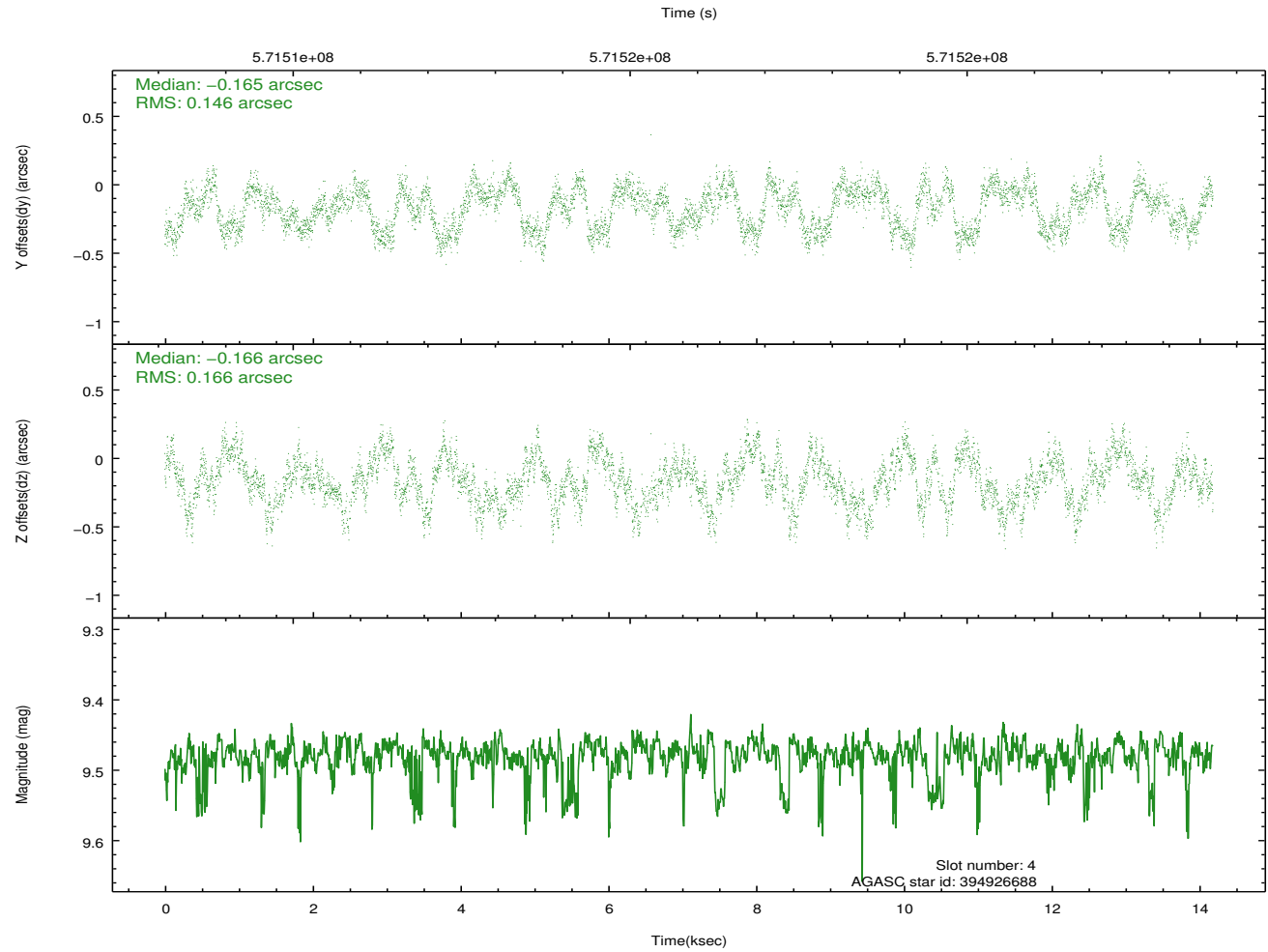
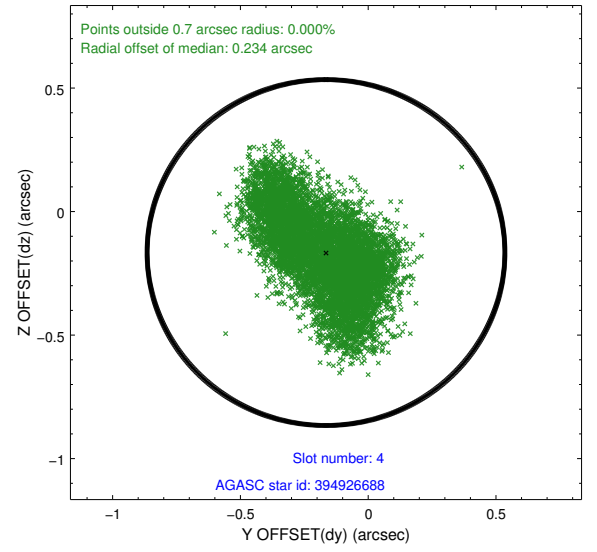
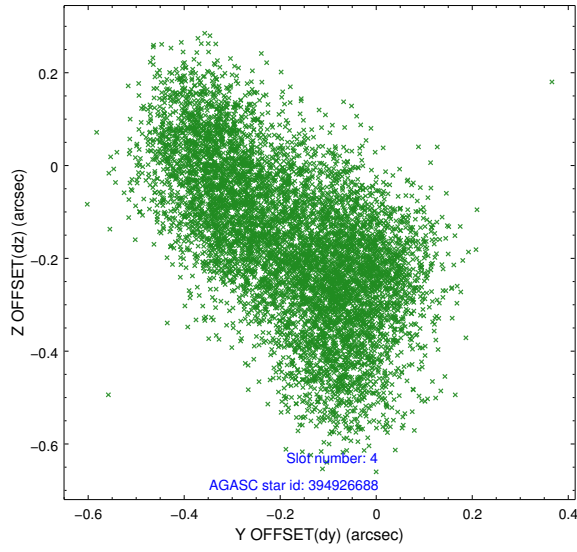
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.28	3460	0.122	-0.098	0.007	0.013	0.000000	0.000000	925.38	-961.94
1	FID		ACIS-I-5	7.27	3460	-0.382	0.067	0.007	0.012	0.000000	0.000000	-1823.15	935.36
2	FID		ACIS-I-6	7.30	3459	0.169	0.102	0.008	0.015	0.000000	0.000000	390.48	1580.40
3	GUIDE	used	394926640	9.64	6910	0.031	-0.145	0.152	0.245	173.878475	39.896177	-156.78	742.54
4	GUIDE	used	394926688	9.48	6715	-0.165	-0.166	0.240	0.376	174.298235	40.455505	831.59	-1356.85
5	GUIDE	used	394928496	9.63	6915	-0.145	-0.026	0.269	0.476	174.051572	40.654214	1803.42	-1214.78
6	GUIDE	used	394929744	9.46	6903	-0.377	-0.581	0.169	0.281	174.437447	40.145172	-304.95	-1034.69
7	GUIDE	used	394931512	7.91	6914	0.668	0.942	0.112	0.191	174.735608	40.251854	-454.79	-1925.90

2.4 Star Slots

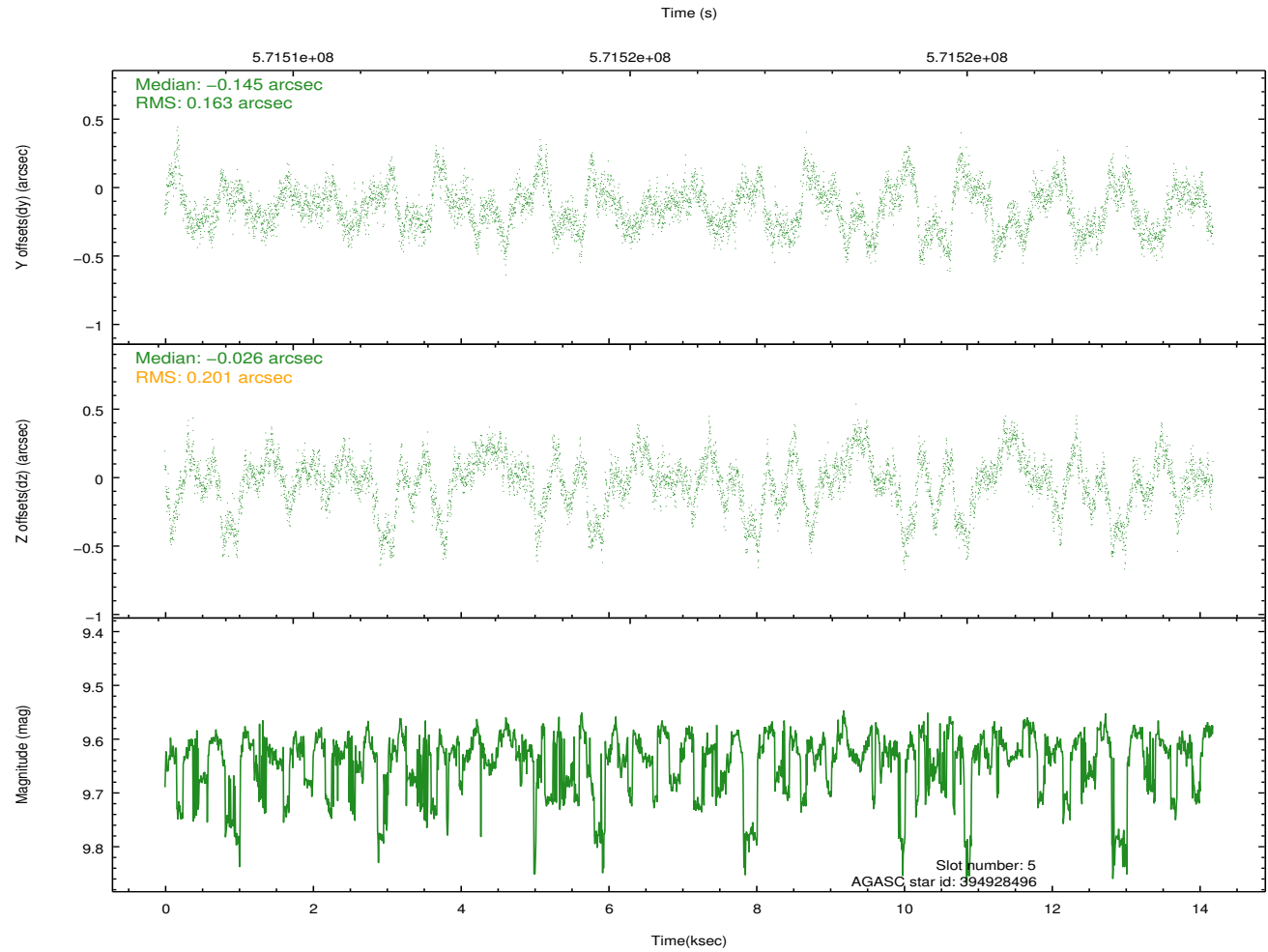
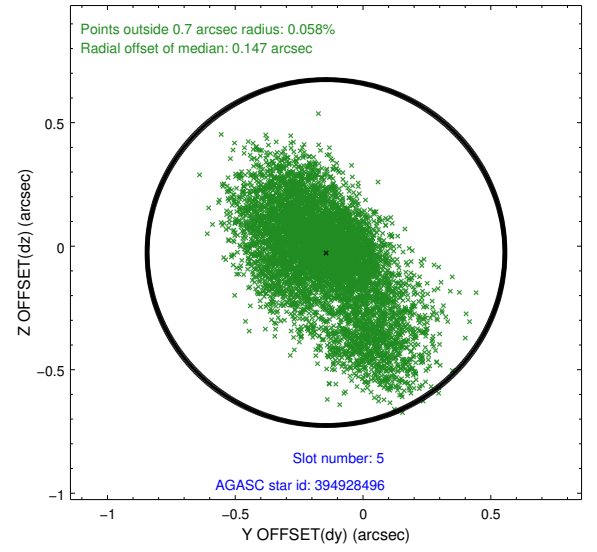
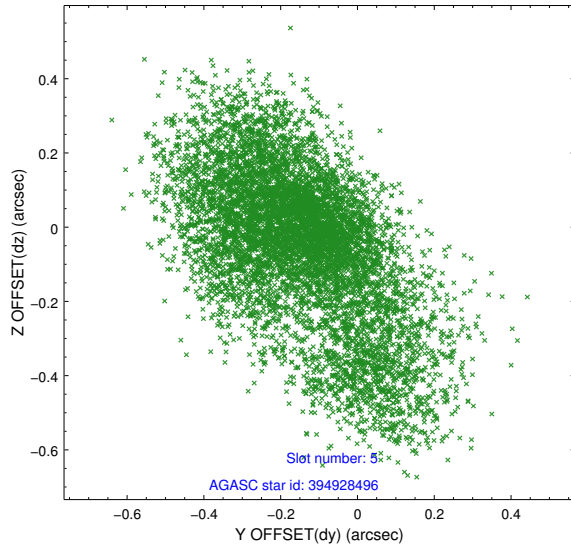
2.4.1 Slot 3



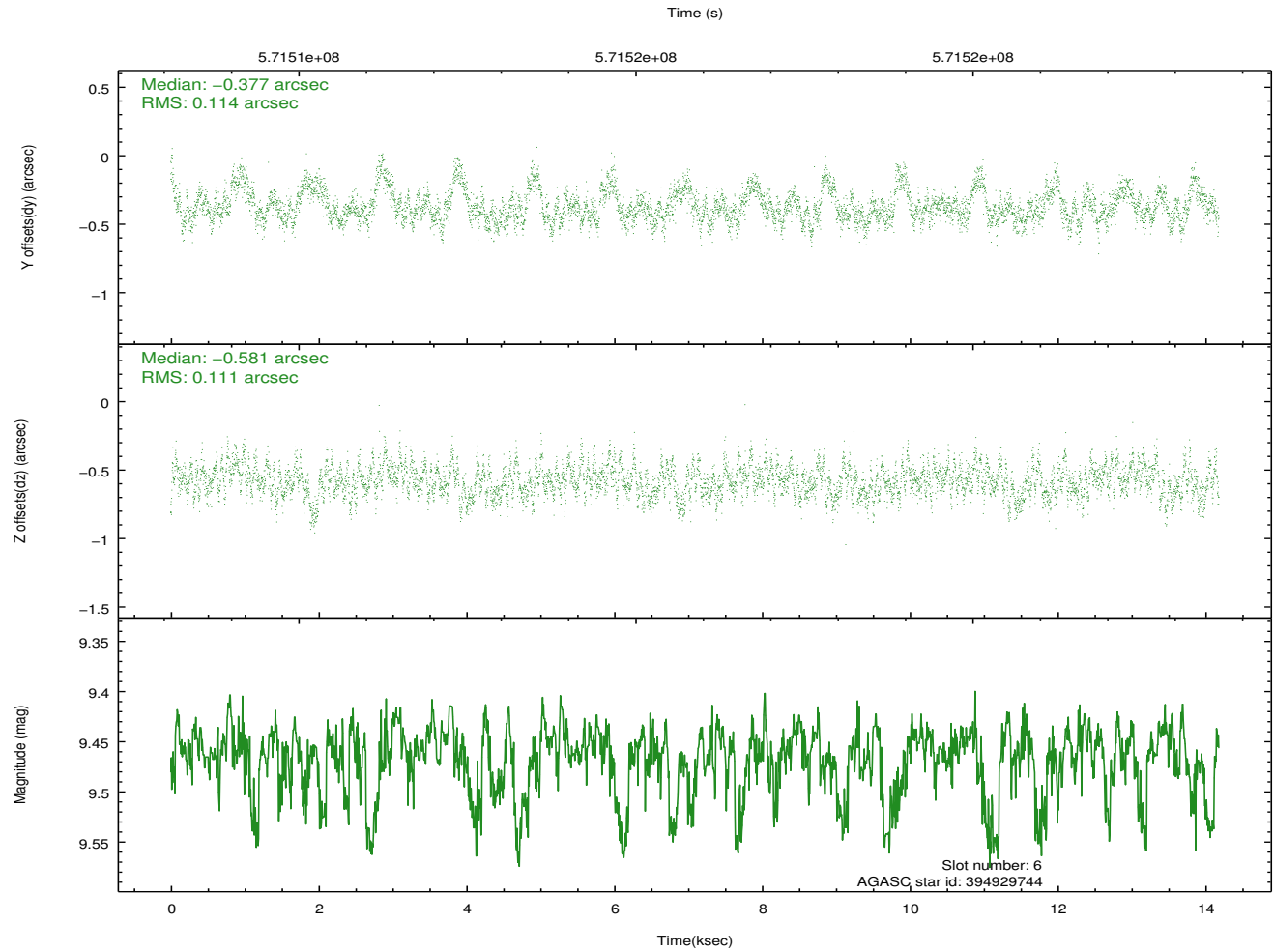
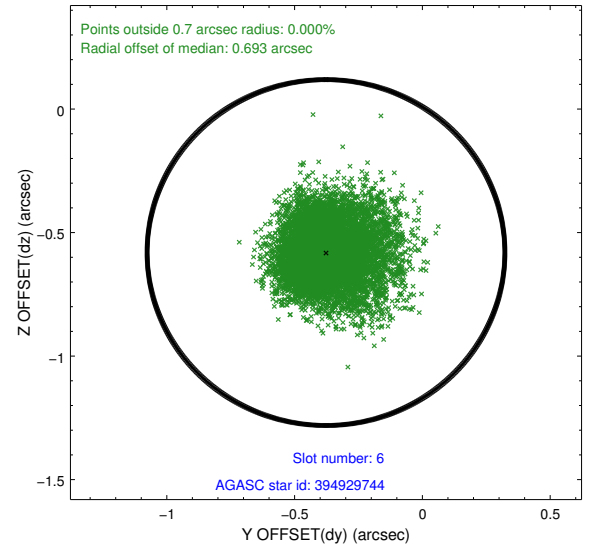
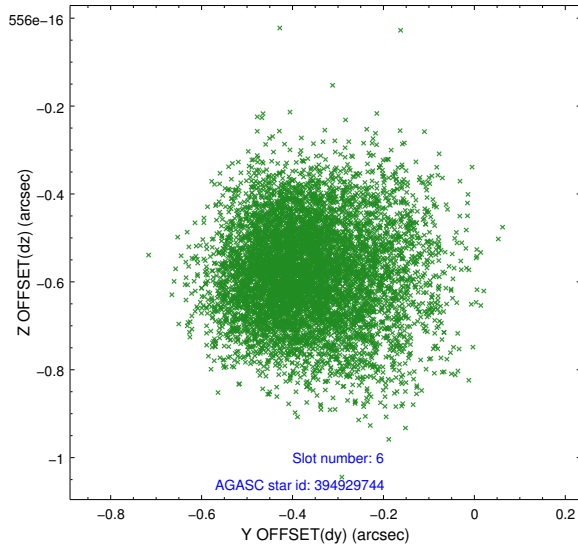
2.4.2 Slot 4



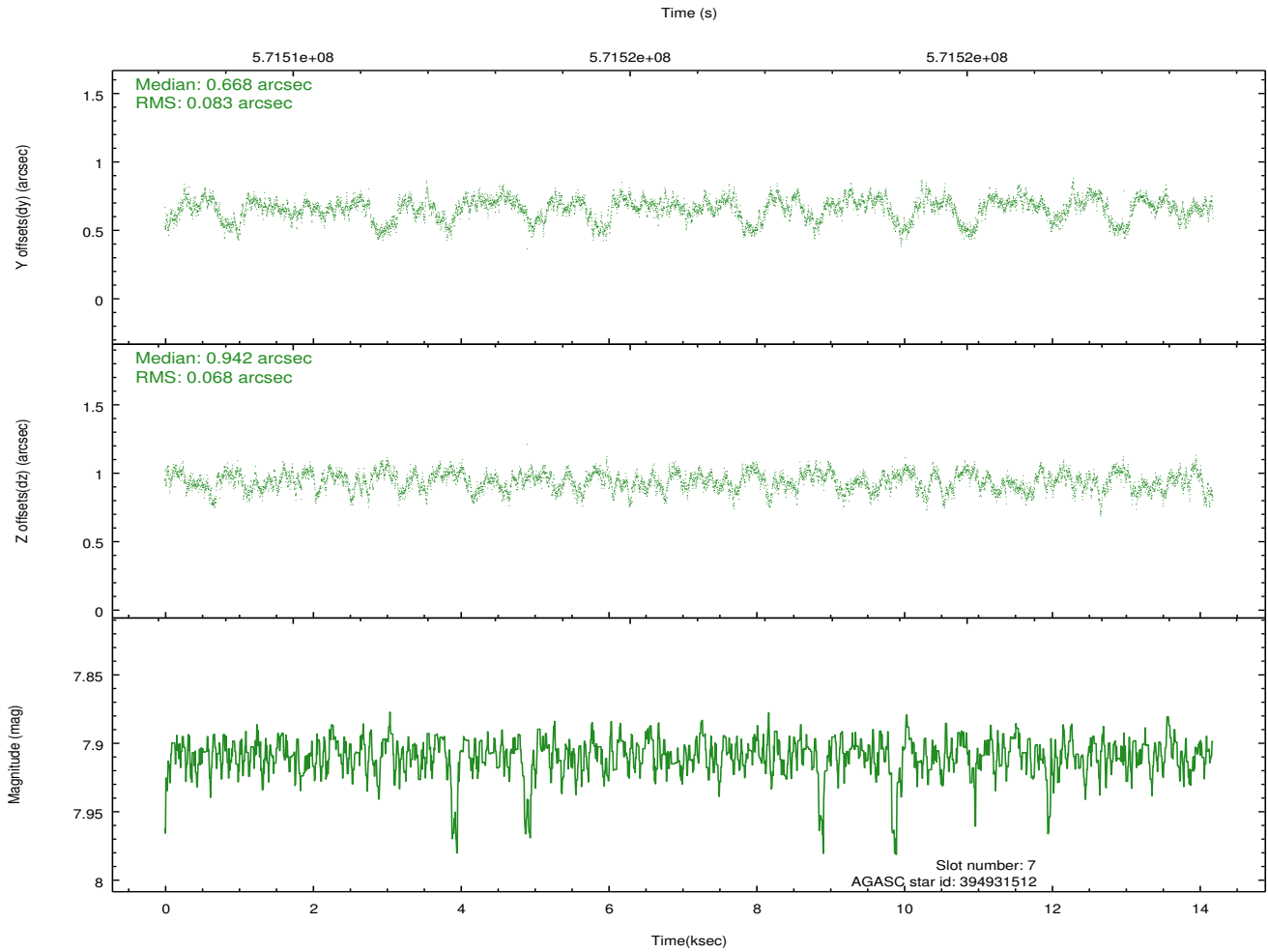
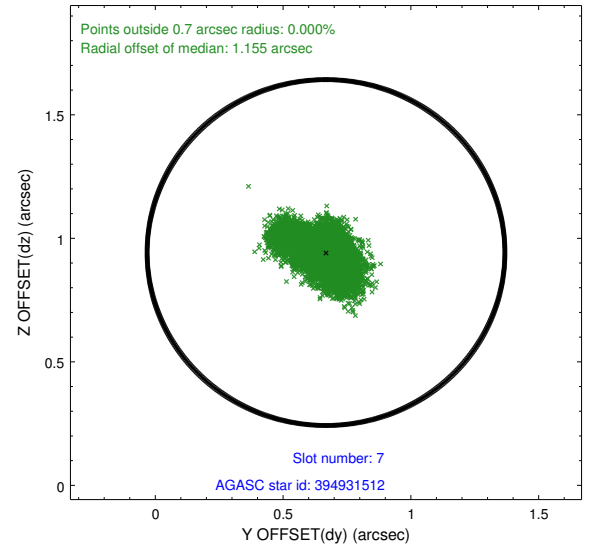
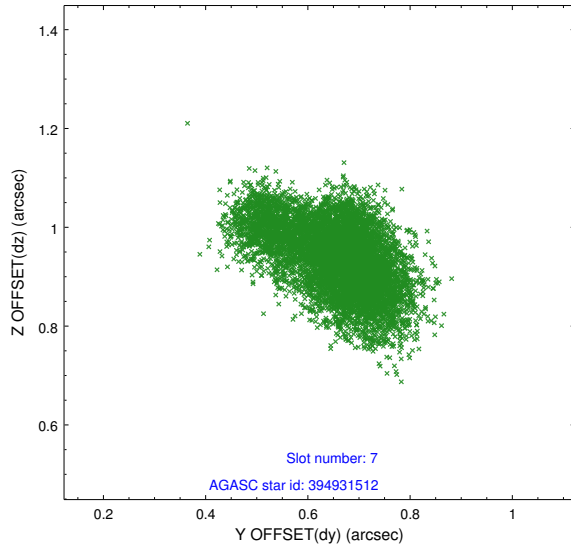
2.4.3 Slot 5



2.4.4 Slot 6

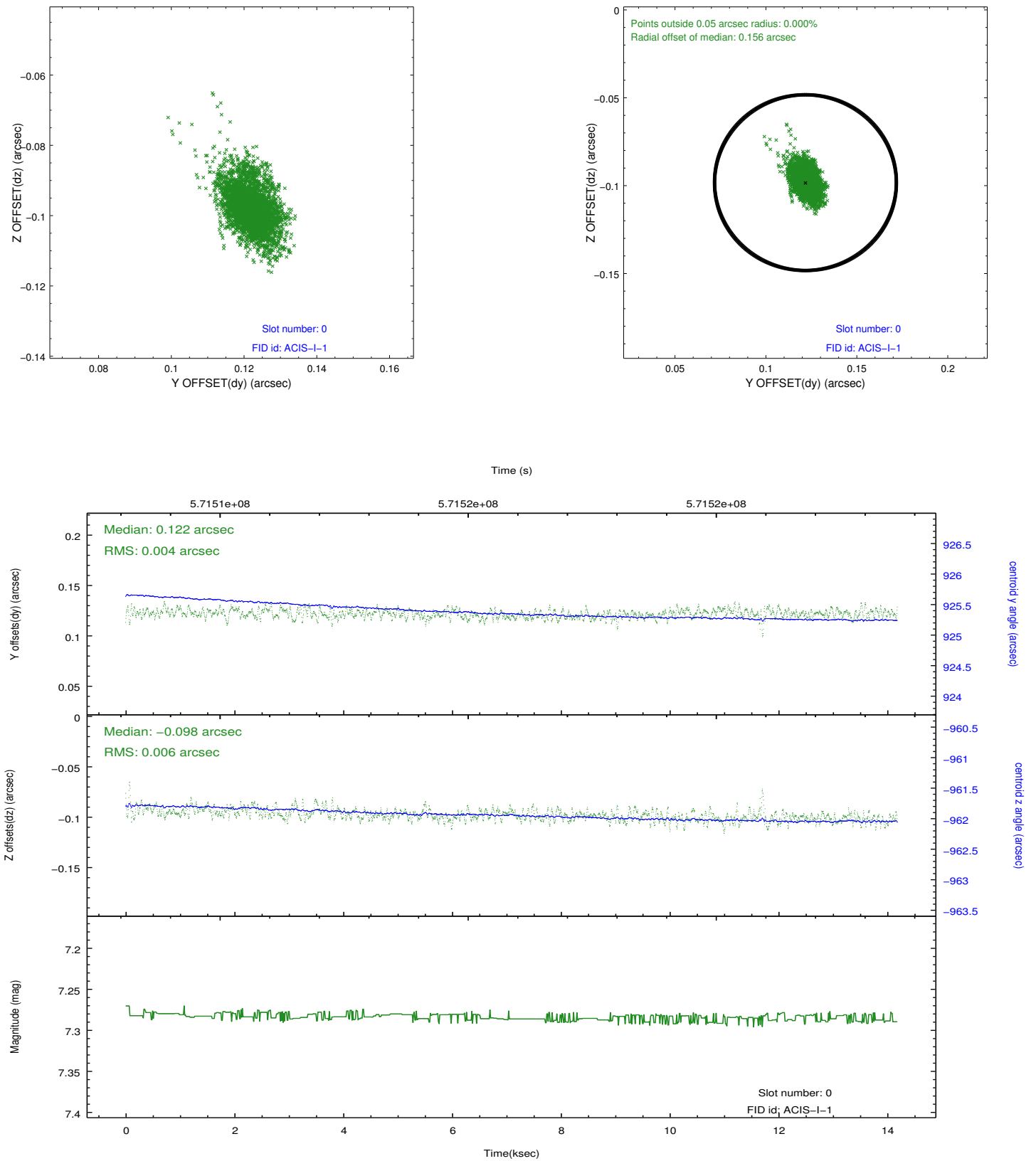


2.4.5 Slot 7

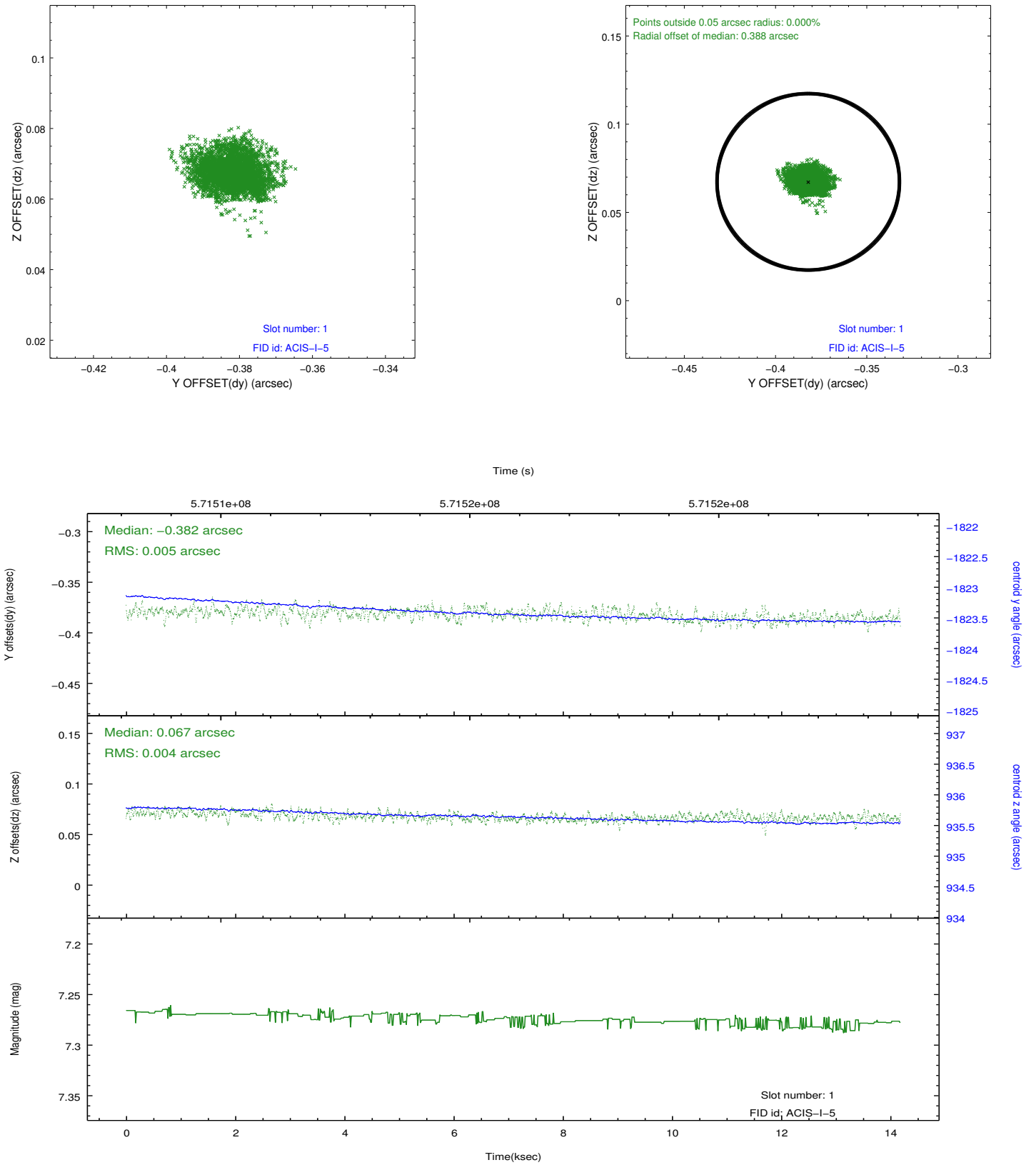


2.5 FID Slots

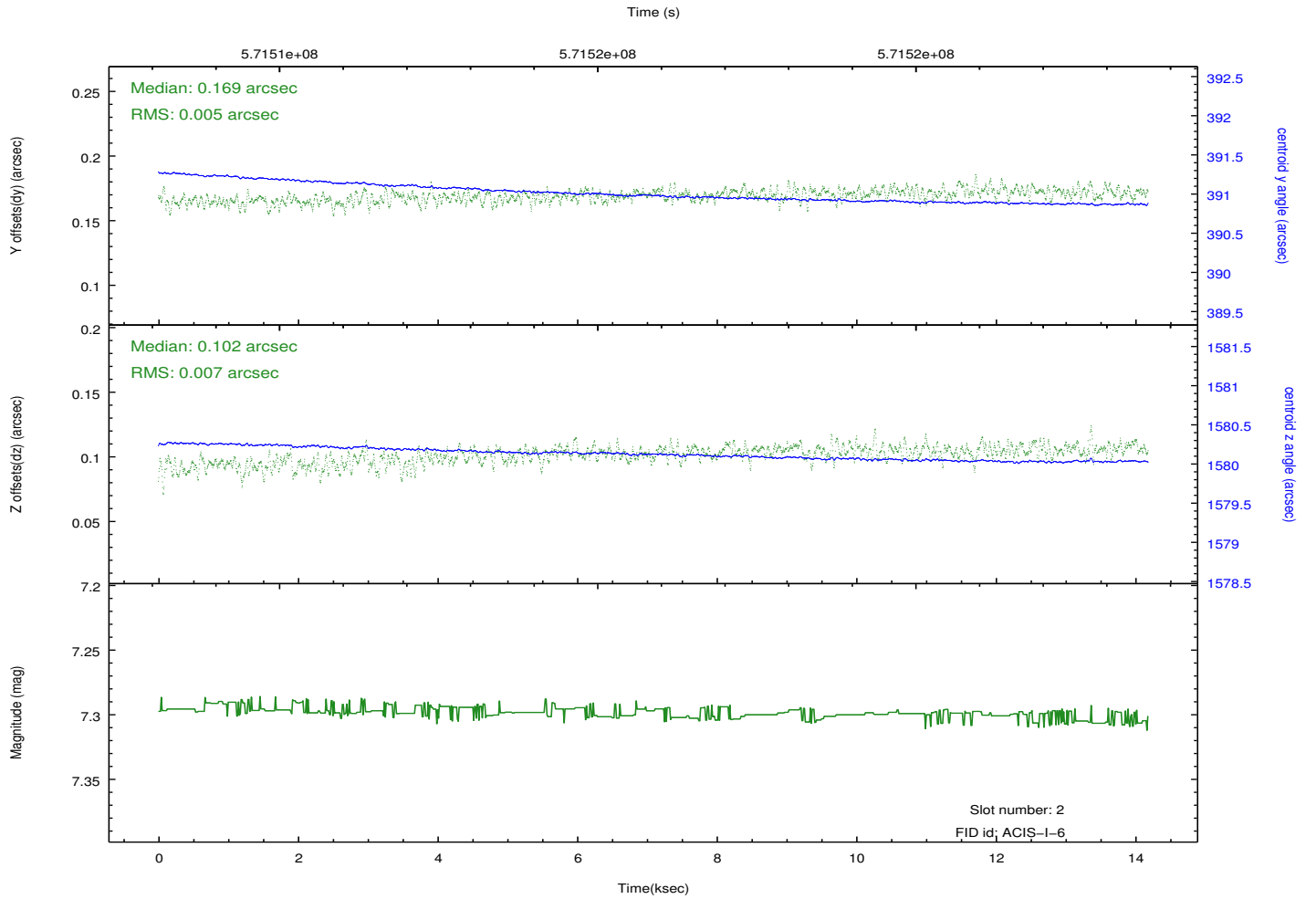
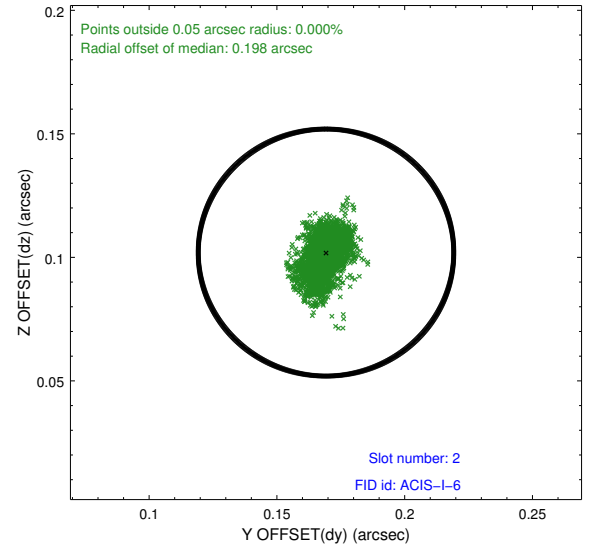
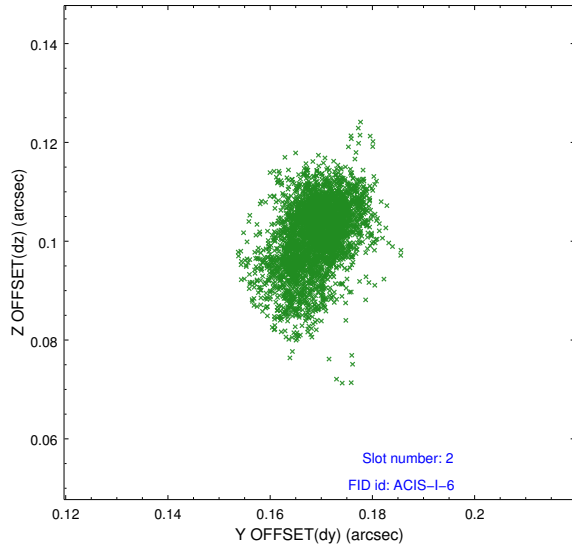
2.5.1 Slot 0



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)	2016.02.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.082293923259

A.2 Comments

Optional chip S2 was dropped.