

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 17155 - L2 Version 1
Chandra X-Ray Center

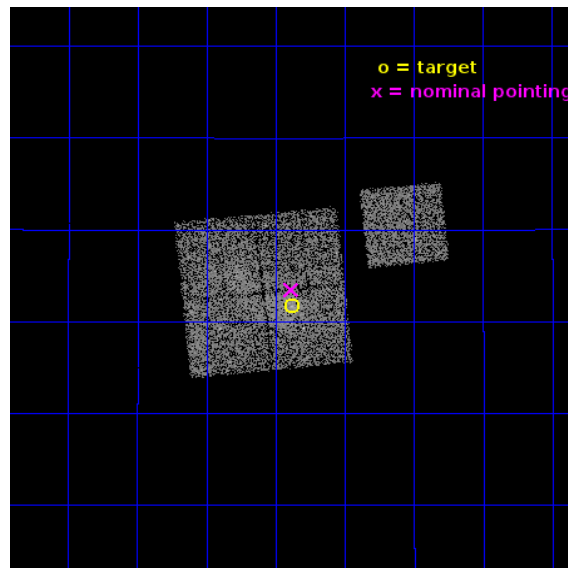
L2 Processing Date : Feb 9 2016

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1 Front

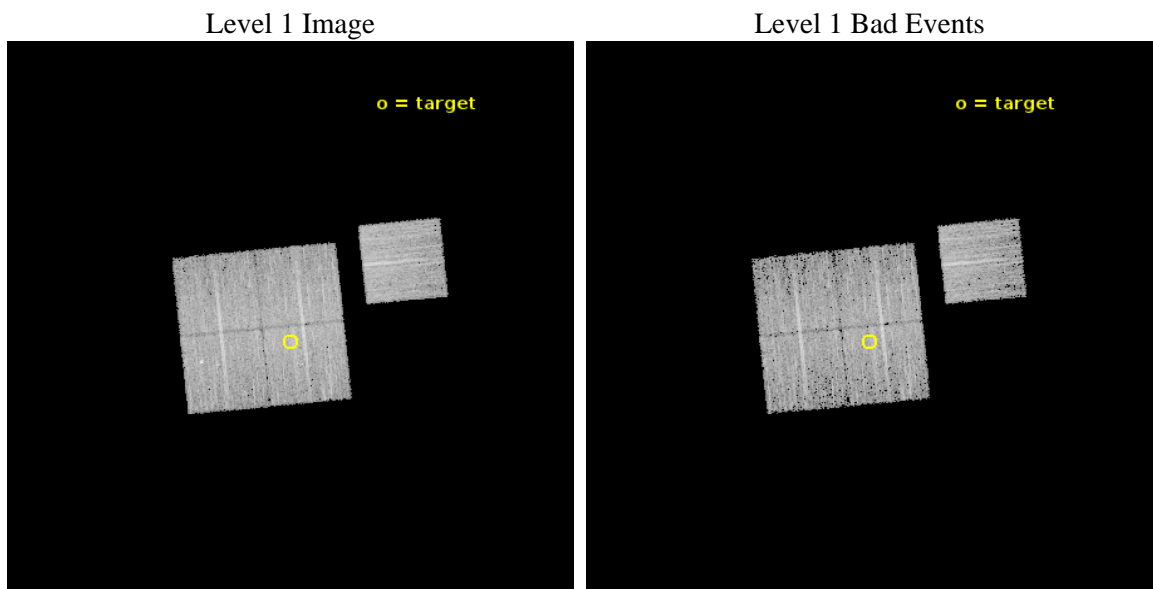
seq_num	801443	Sequence number
obs_id	17155	Observation id
title	Chandra Calibration of the Richness-Mass Relation of Galaxy Clusters: Enabling Cluster Cosmology with the DES	Proposal title
observer	Eduardo Rozo	Principal investigator
object	RM J123416.1+151508.4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	188.471	Observer's specified target RA [deg]
dec_targ	15.195	Observer's specified target Dec [deg]
ra_nom	188.47159924815	Nominal RA [deg]
dec_nom	15.224531598492	Nominal Dec [deg]
roll_nom	84.249373710483	Nominal Roll [deg]
revision	1	Processing version of data
ontime	8246.0000635386	Sum of GTIs [s]
livetime	8138.2600020915	Livetime [s]
ontime0	8246.0000635386	Sum of GTIs [s]
ontime1	8246.0000635386	Sum of GTIs [s]
ontime2	8246.0000635386	Sum of GTIs [s]
ontime3	8246.0000635386	Sum of GTIs [s]
ontime6	8246.0000635386	Sum of GTIs [s]
l2events	25606	Number of level 2 events



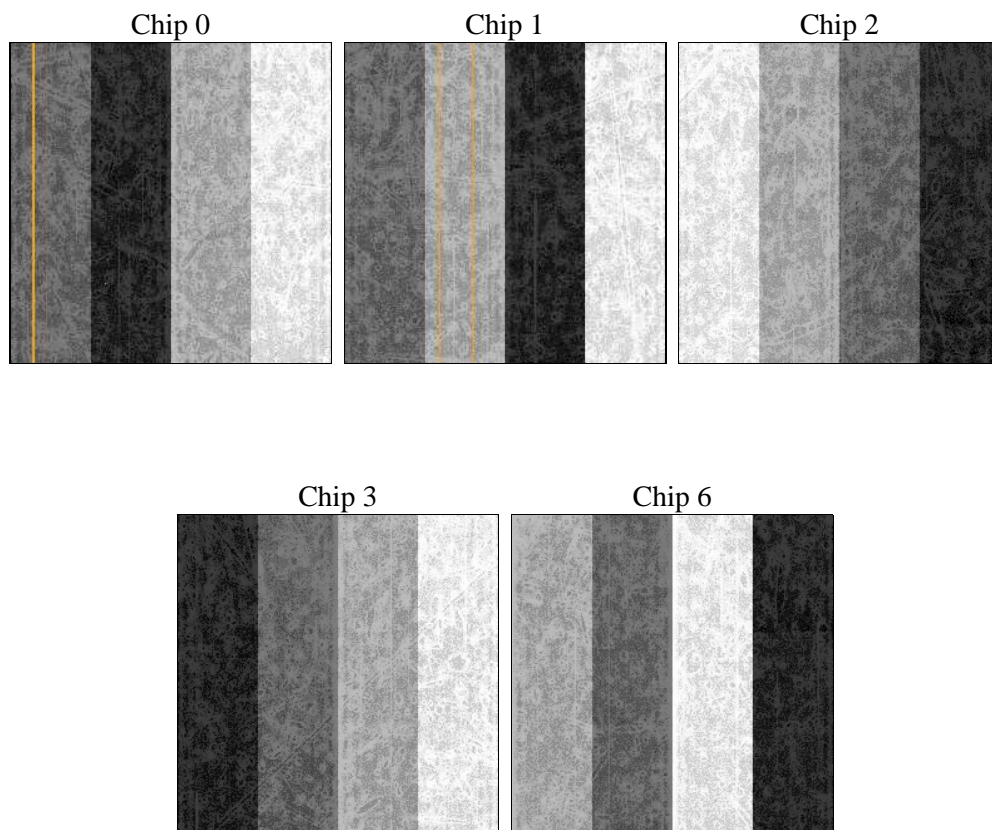
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8200.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	8246.0000635386	Sum of GTIs [s]
caldsver	4.7.0	 	ontime0	8246.0000635386	Sum of GTIs [s]
date	2016-02-10T01:18:20	Date and time of file creation	ontime1	8246.0000635386	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	8246.0000635386	Sum of GTIs [s]
			ontime3	8246.0000635386	Sum of GTIs [s]
			ontime6	8246.0000635386	Sum of GTIs [s]
			l1events	243903	Number of level 1 events

2.1.4 Events

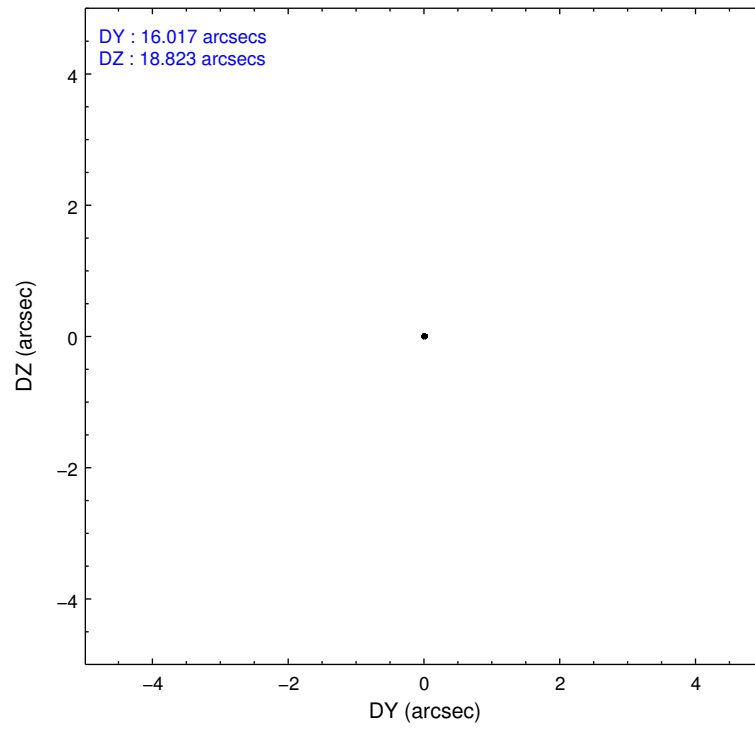
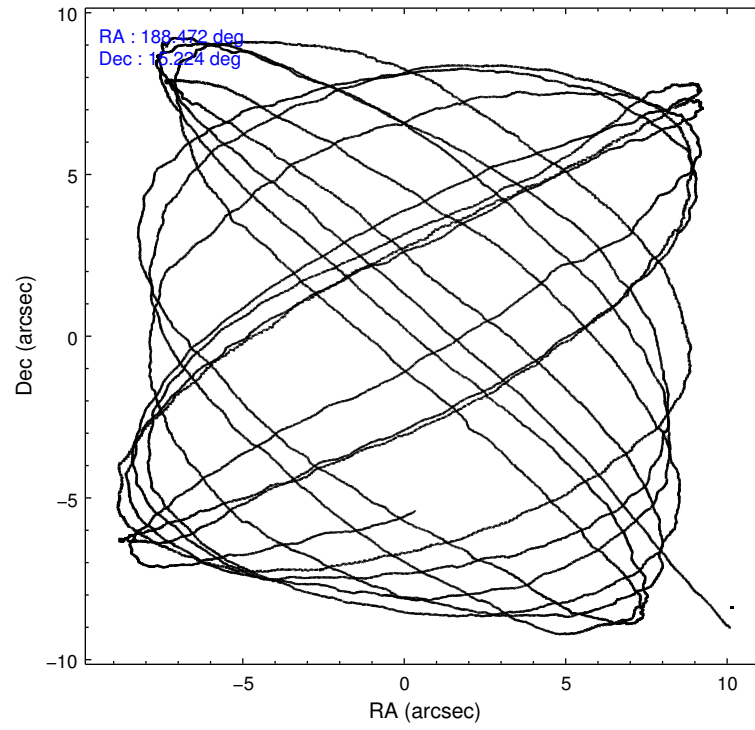
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	45119	47163	48548	50836	52237
rejected events	39101	40508	43279	44413	46502
rejected %	86%	85%	89%	87%	89%

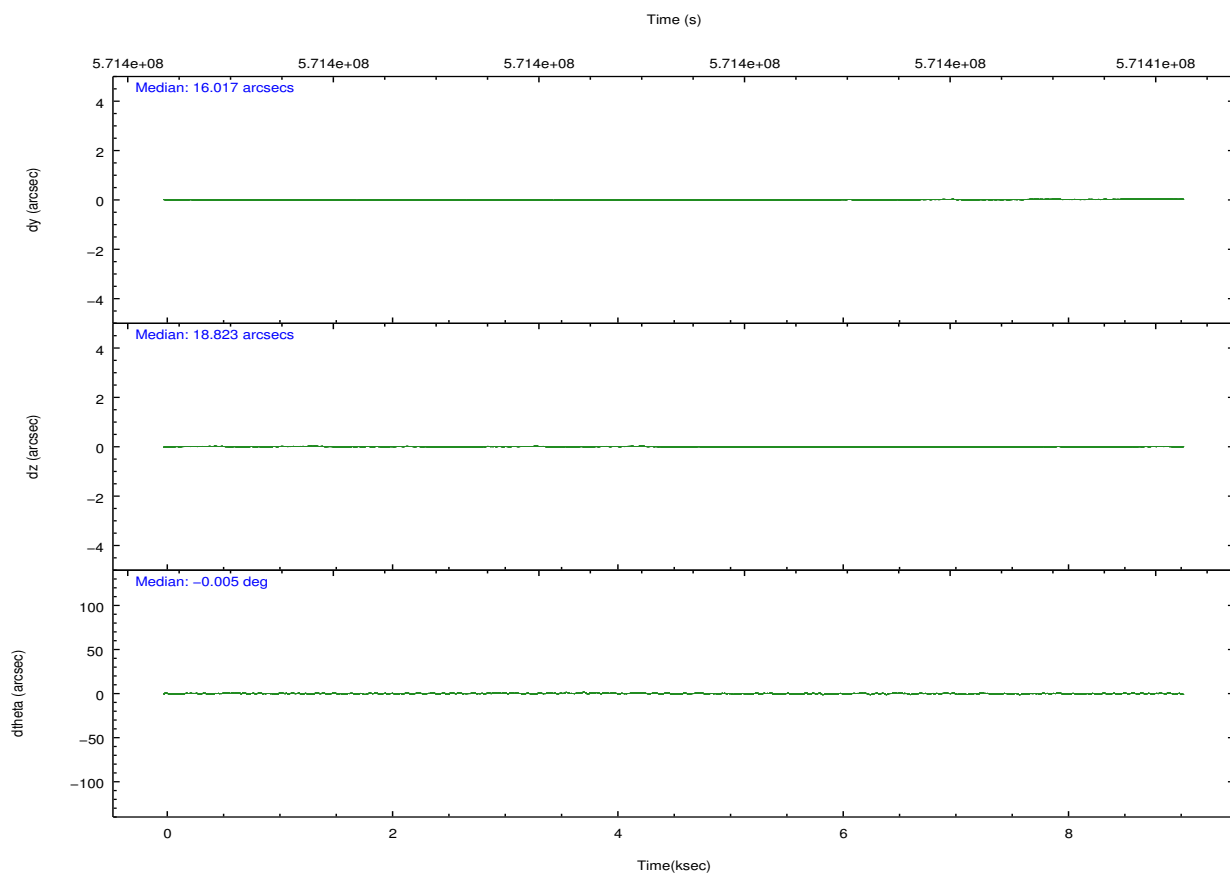
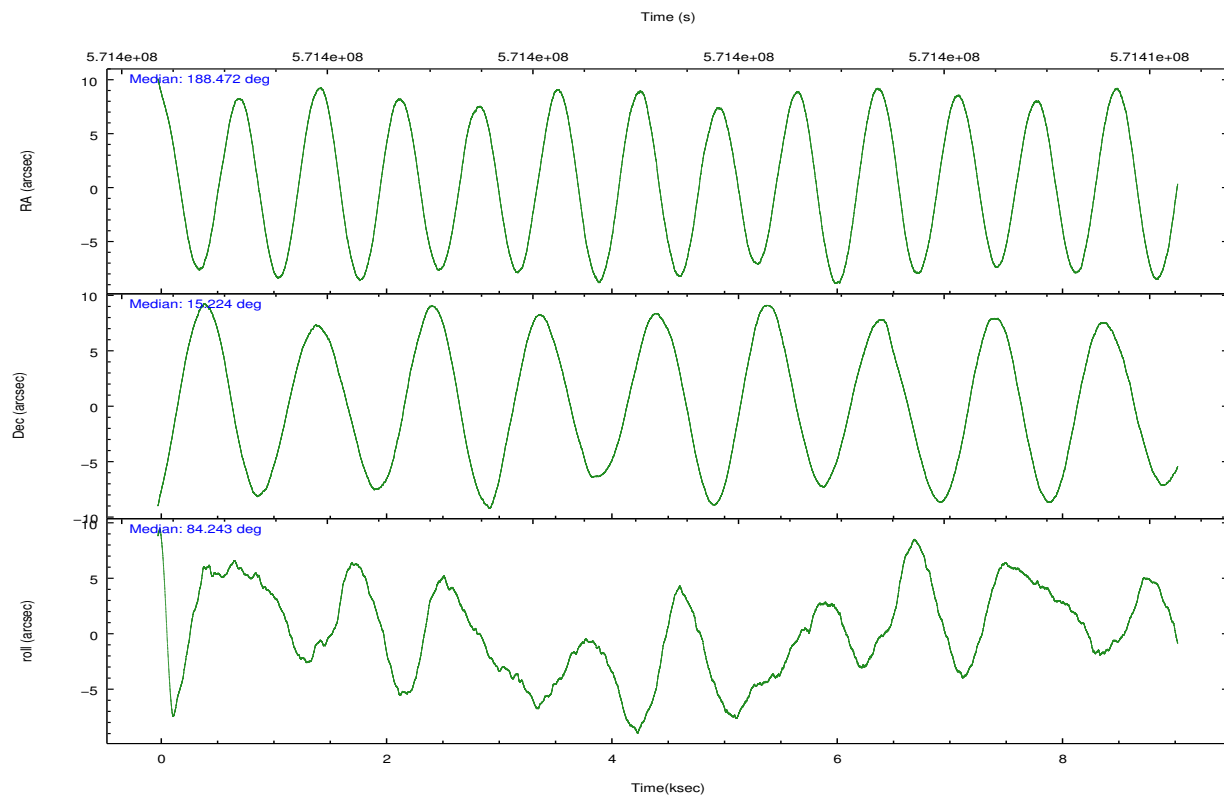
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2369	2626	2028	2878	1848
	5%	5%	4%	5%	3%
grade 1 events	11	28	19	35	32
	0%	0%	0%	0%	0%
grade 2 events	1372	1530	1196	1180	1371
	3%	3%	2%	2%	2%
grade 3 events	593	541	549	589	547
	1%	1%	1%	1%	1%
grade 4 events	559	538	509	603	529
	1%	1%	1%	1%	1%
grade 5 events	2060	2141	1891	2346	2243
	4%	4%	3%	4%	4%
grade 6 events	1127	1423	990	1177	1440
	2%	3%	2%	2%	2%
grade 7 events	37028	38336	41366	42028	44227
	82%	81%	85%	82%	84%

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	188.483482	188.4715992481456	CCD I2 on	Y	Y
[deg] Pointing Dec	15.199423	15.22453159849194	CCD I3 on	Y	Y
[deg] Pointing Roll	84.037562	84.24937371048289	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	-227.012463	-227.0124999472493	CCD S3 on	N	N
[mm] SIM translation stage offset	-6.58	-6.579953055680392	CCD S4 on	N	N
[s] Observation start time (MET)	571397623.184000	571396350.14563	CCD S5 on	N	N
Observation start date	2016-02-09T09:32:35	2016-02-09T09:12:30	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	571405823.184000	571406606.29618	On-chip summing requested	N	N
Observation end date	2016-02-09T11:49:15	2016-02-09T12:03:26	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



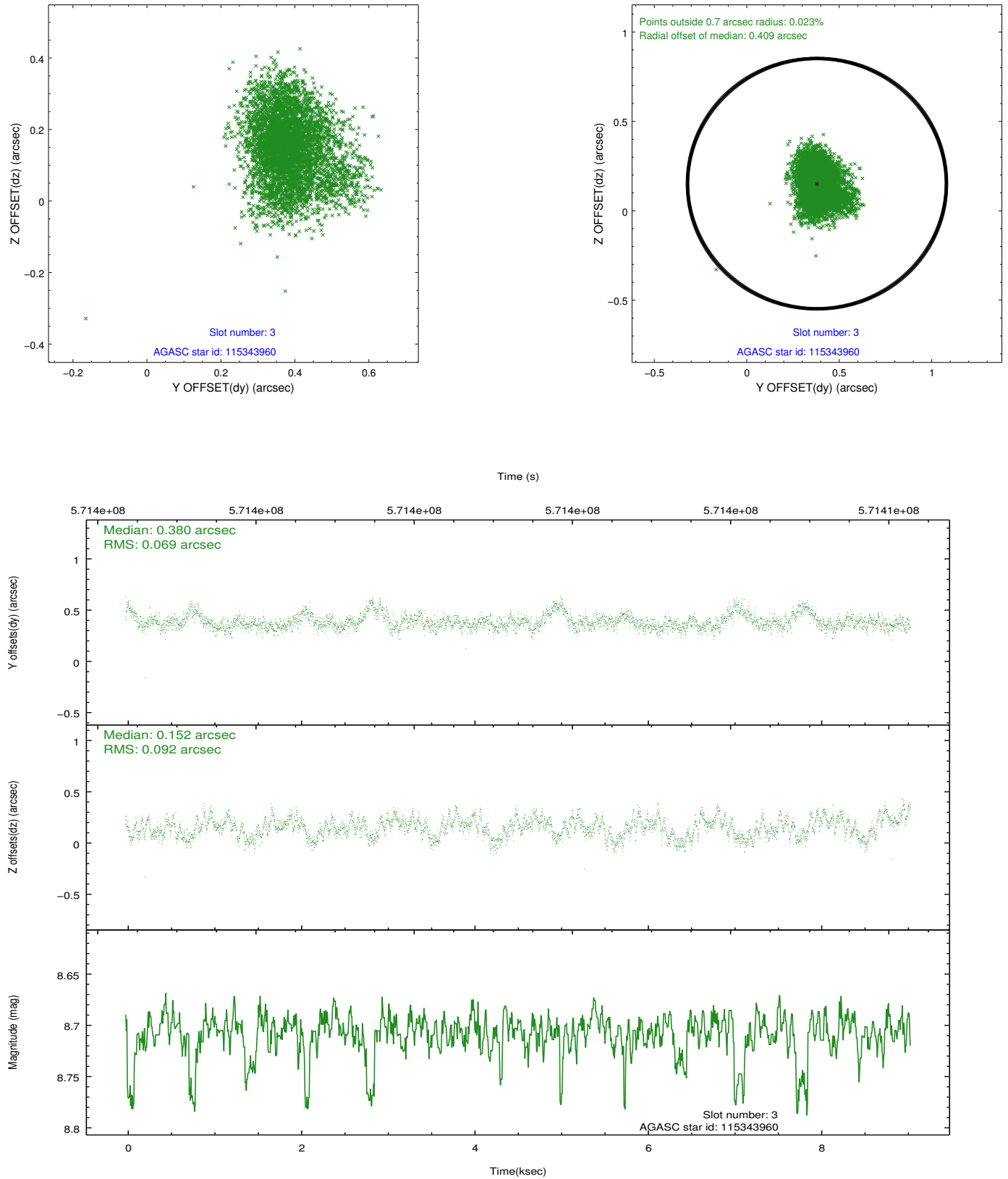


Slot Statistics

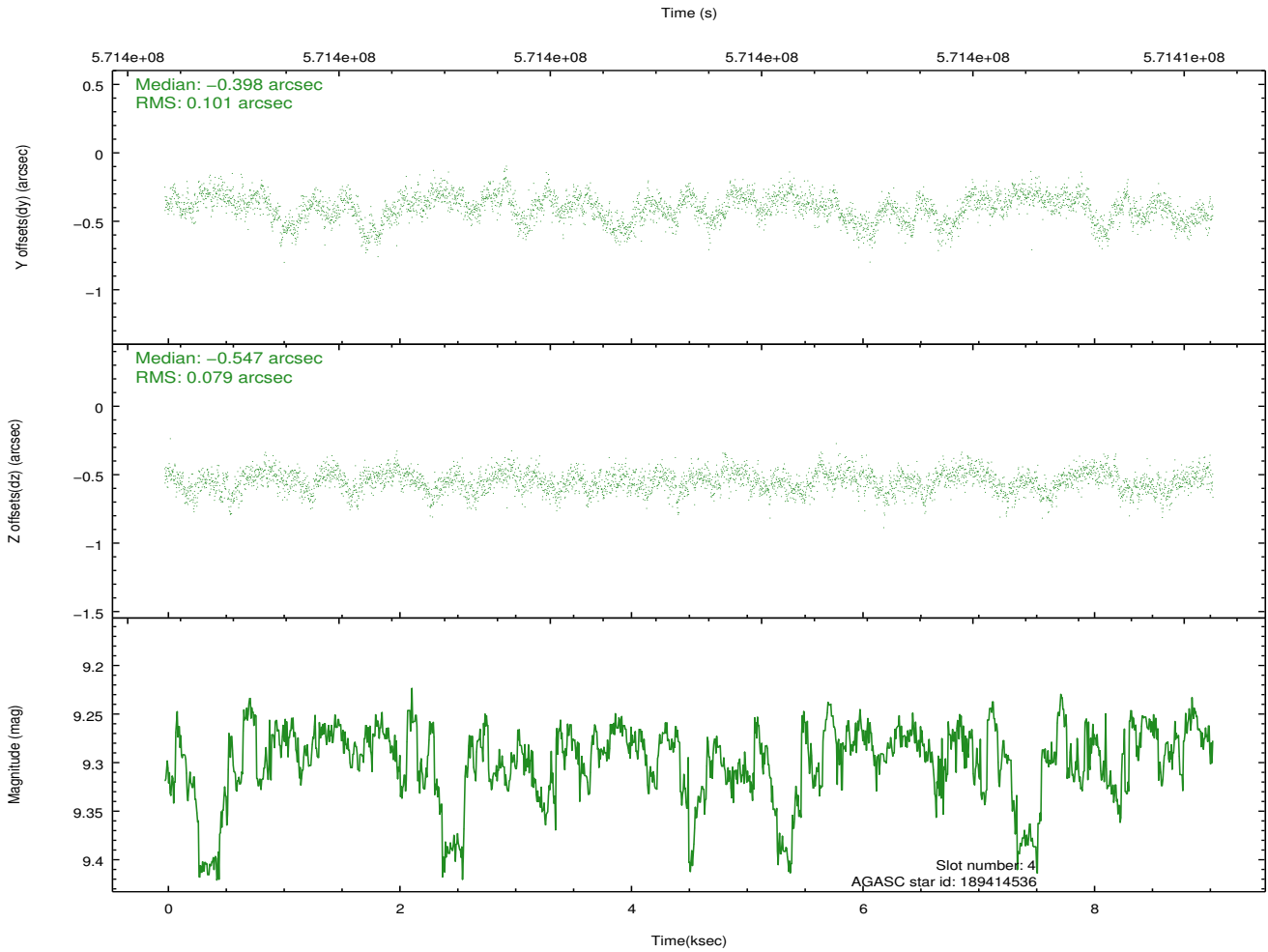
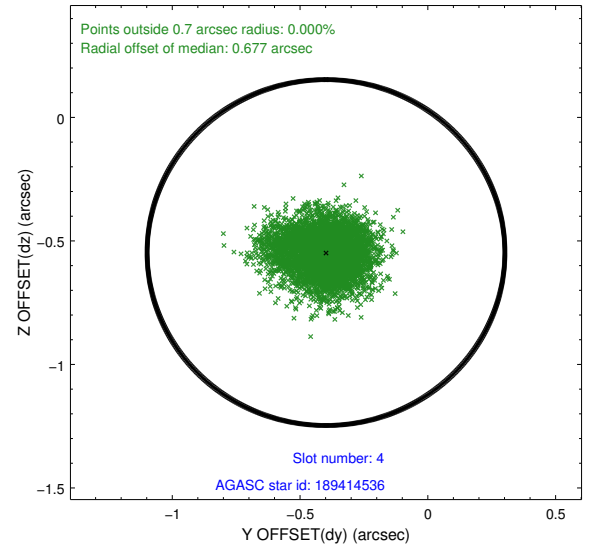
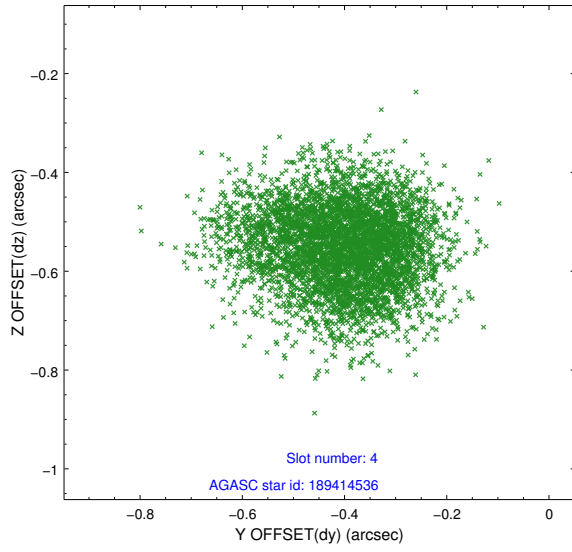
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.26	2208	0.154	-0.176	0.006	0.011	0.000000	0.000000	923.49	-977.72
1	FID		ACIS-I-5	7.26	2208	-0.407	0.078	0.006	0.010	0.000000	0.000000	-1824.94	919.53
2	FID		ACIS-I-6	7.29	2208	0.162	0.168	0.007	0.010	0.000000	0.000000	388.27	1564.91
3	GUIDE	used	115343960	8.71	4415	0.380	0.152	0.124	0.200	188.590007	14.643744	-1949.96	-576.49
4	GUIDE	used	189414536	9.29	4410	-0.398	-0.547	0.136	0.224	187.941558	15.891419	2284.68	2125.00
5	GUIDE	used	189539160	7.66	4357	-0.078	-0.004	0.100	0.159	188.888395	15.636427	1712.78	-1232.10
6	GUIDE	used	189543784	9.06	4416	0.123	0.344	0.135	0.217	189.184903	15.264210	490.26	-2398.05
7	GUIDE	used	189544160	9.79	4401	-0.023	0.057	0.231	0.376	188.849376	15.785595	2231.54	-1041.12

2.4 Star Slots

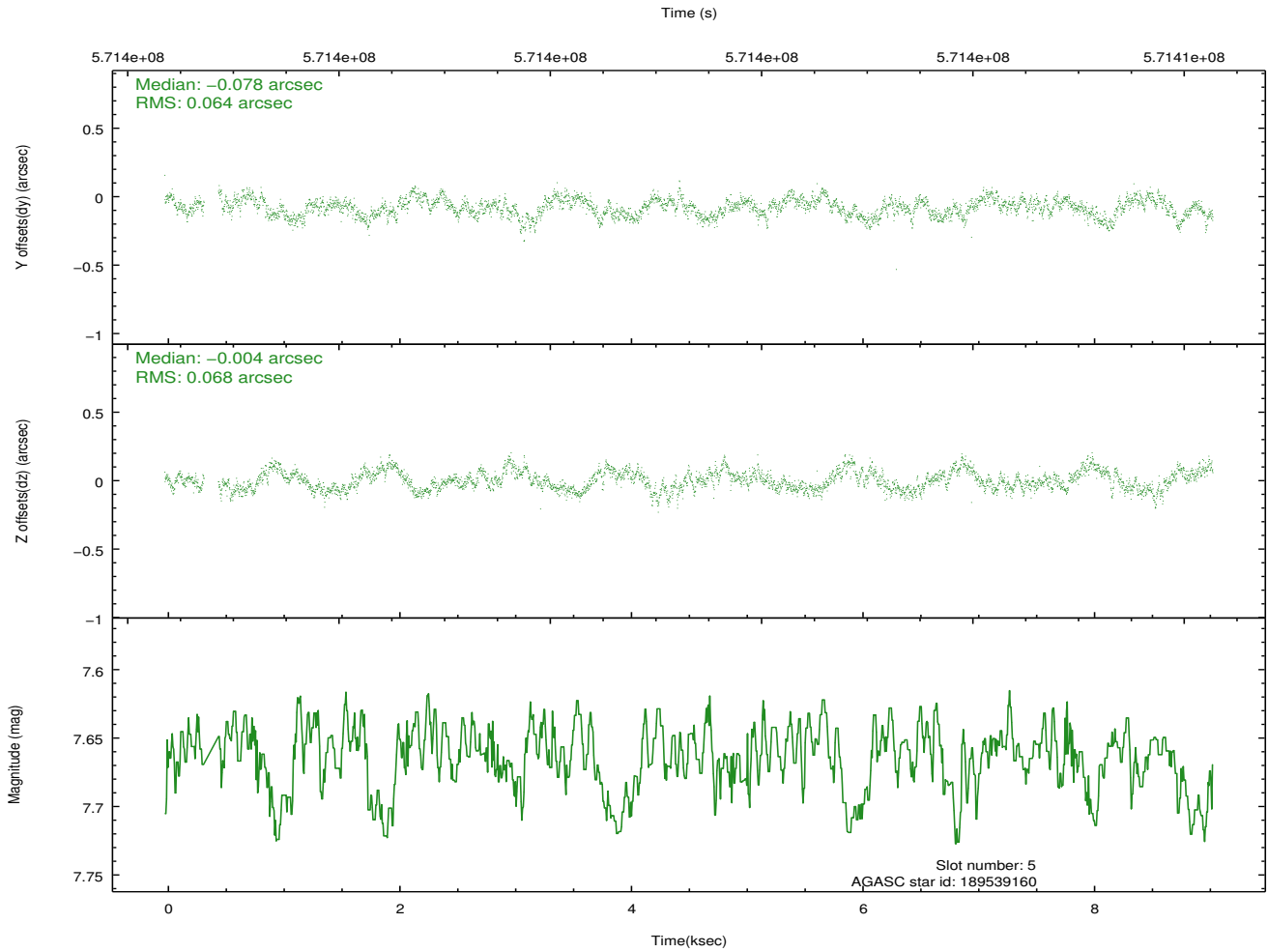
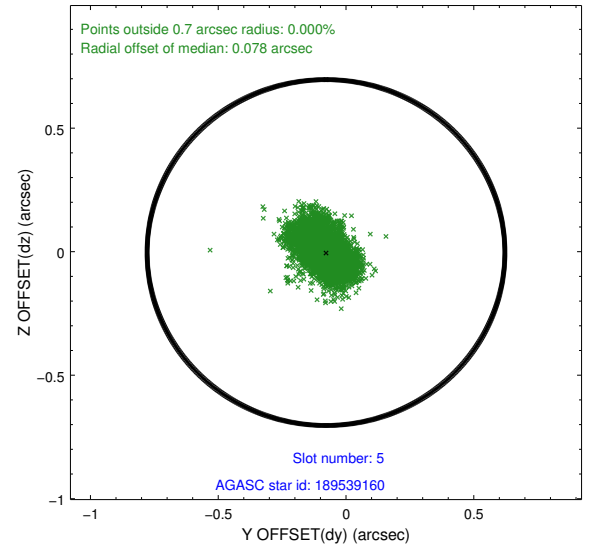
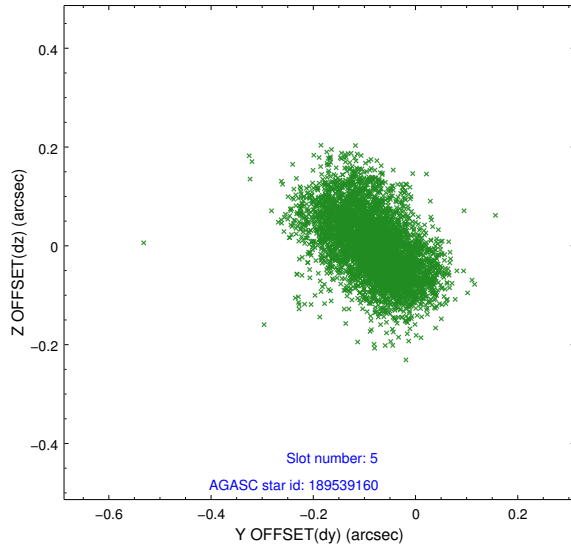
2.4.1 Slot 3



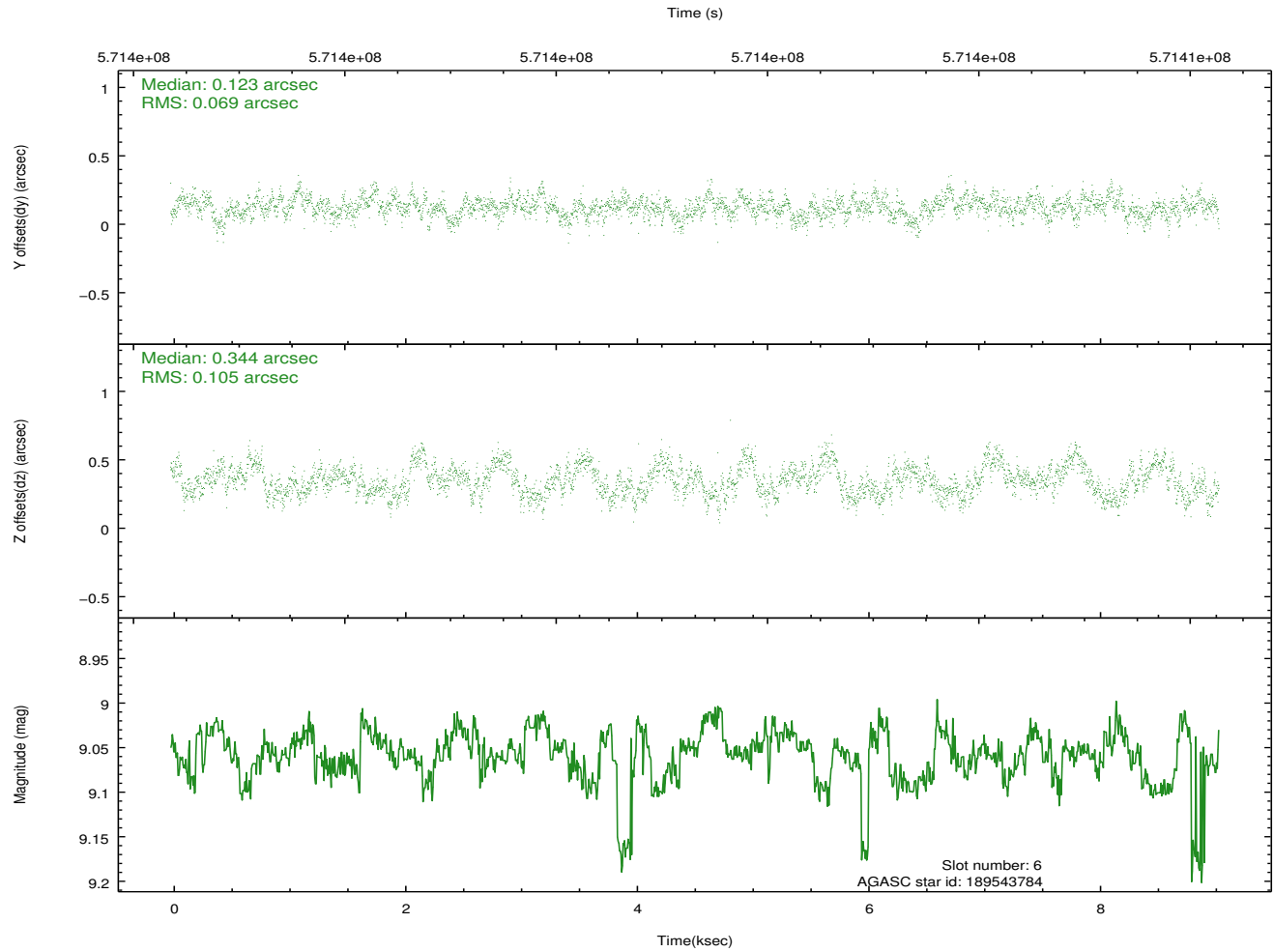
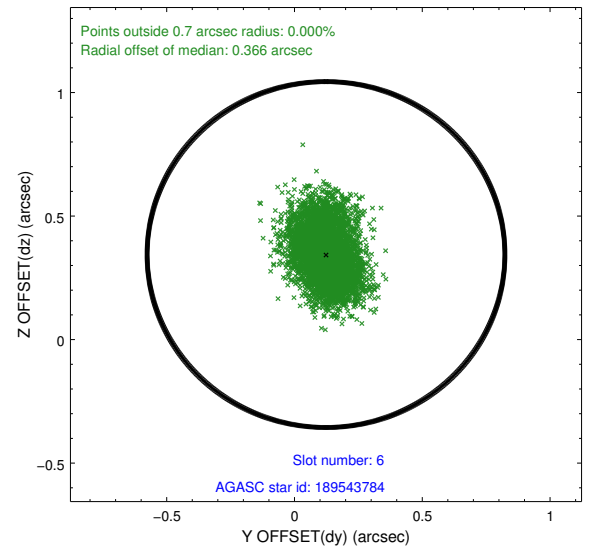
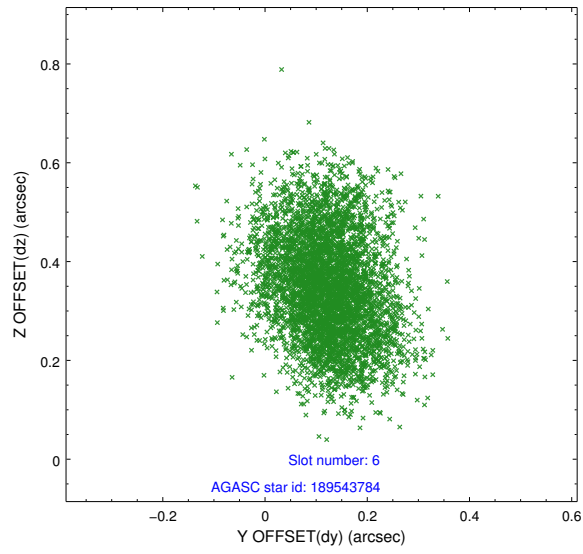
2.4.2 Slot 4



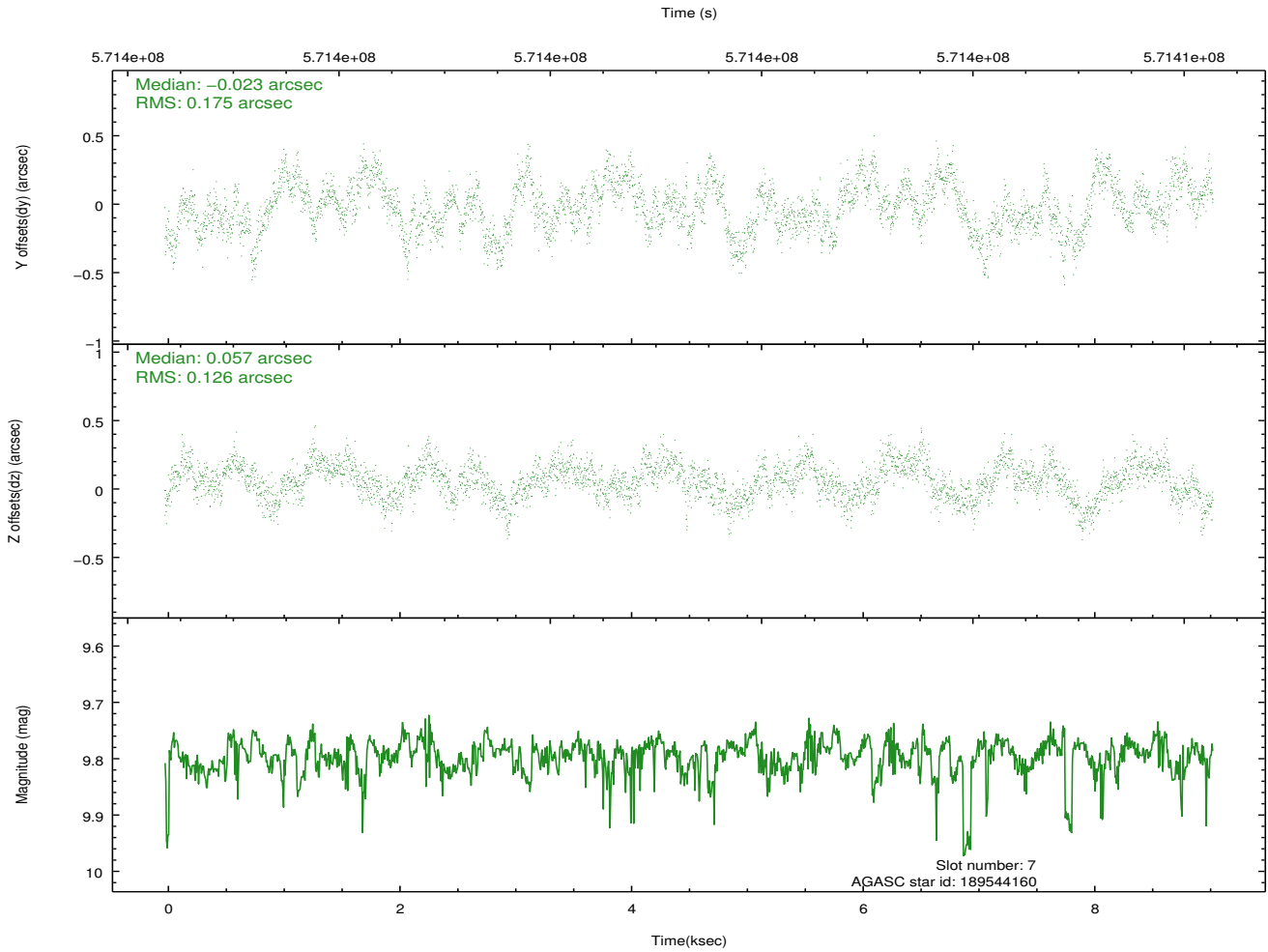
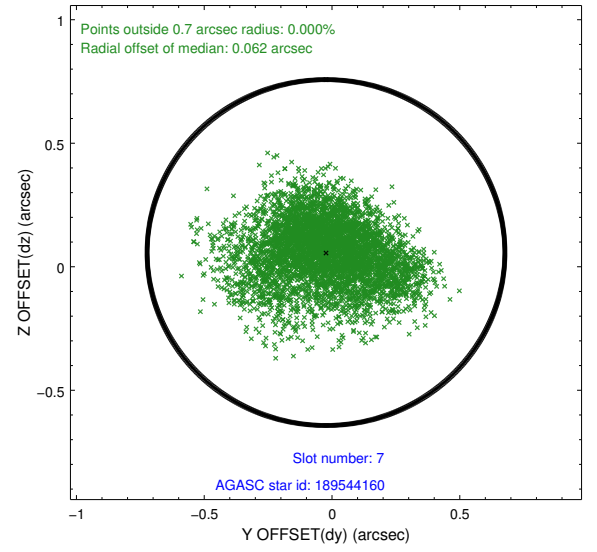
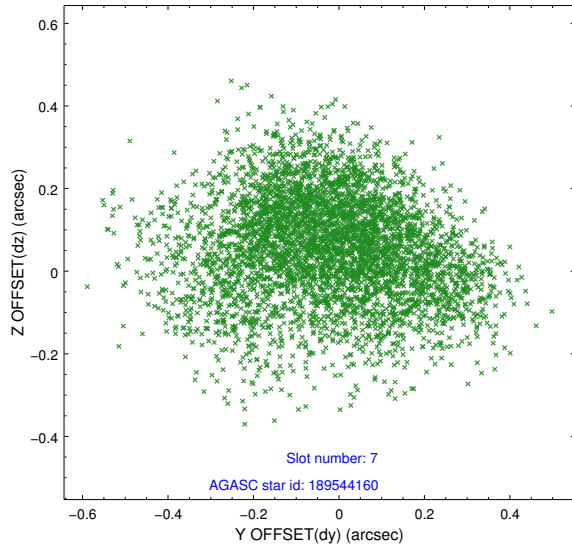
2.4.3 Slot 5



2.4.4 Slot 6

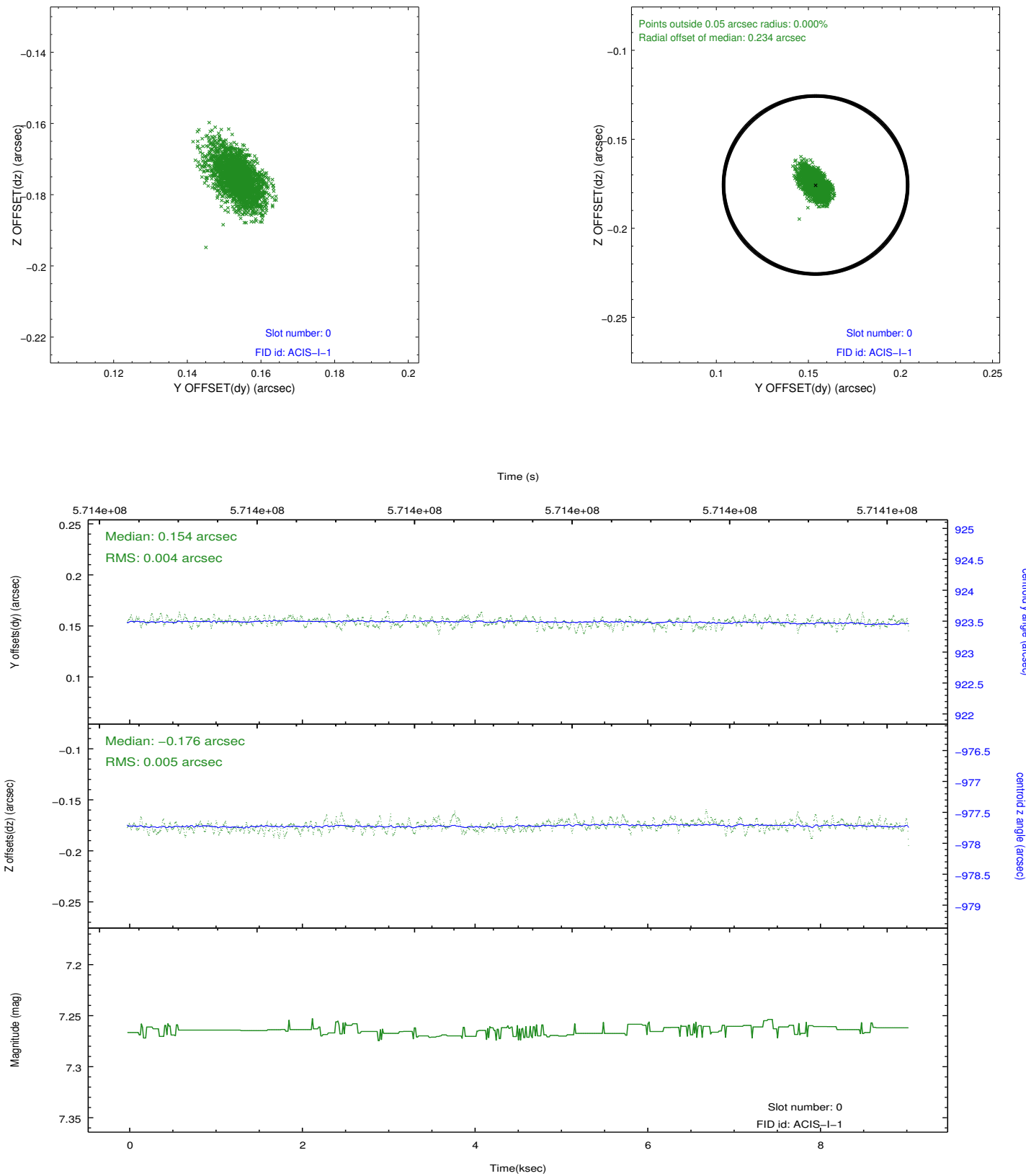


2.4.5 Slot 7

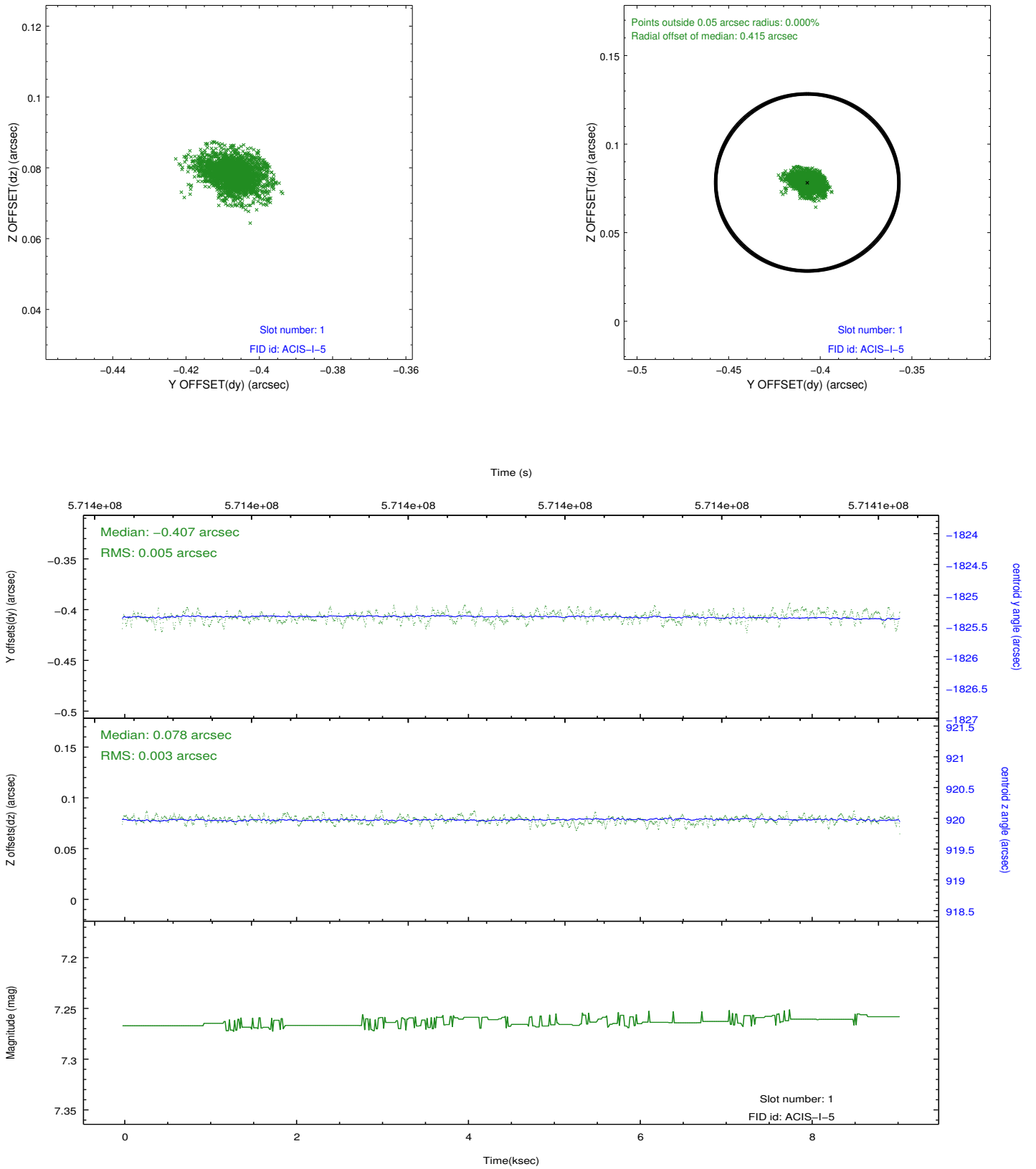


2.5 FID Slots

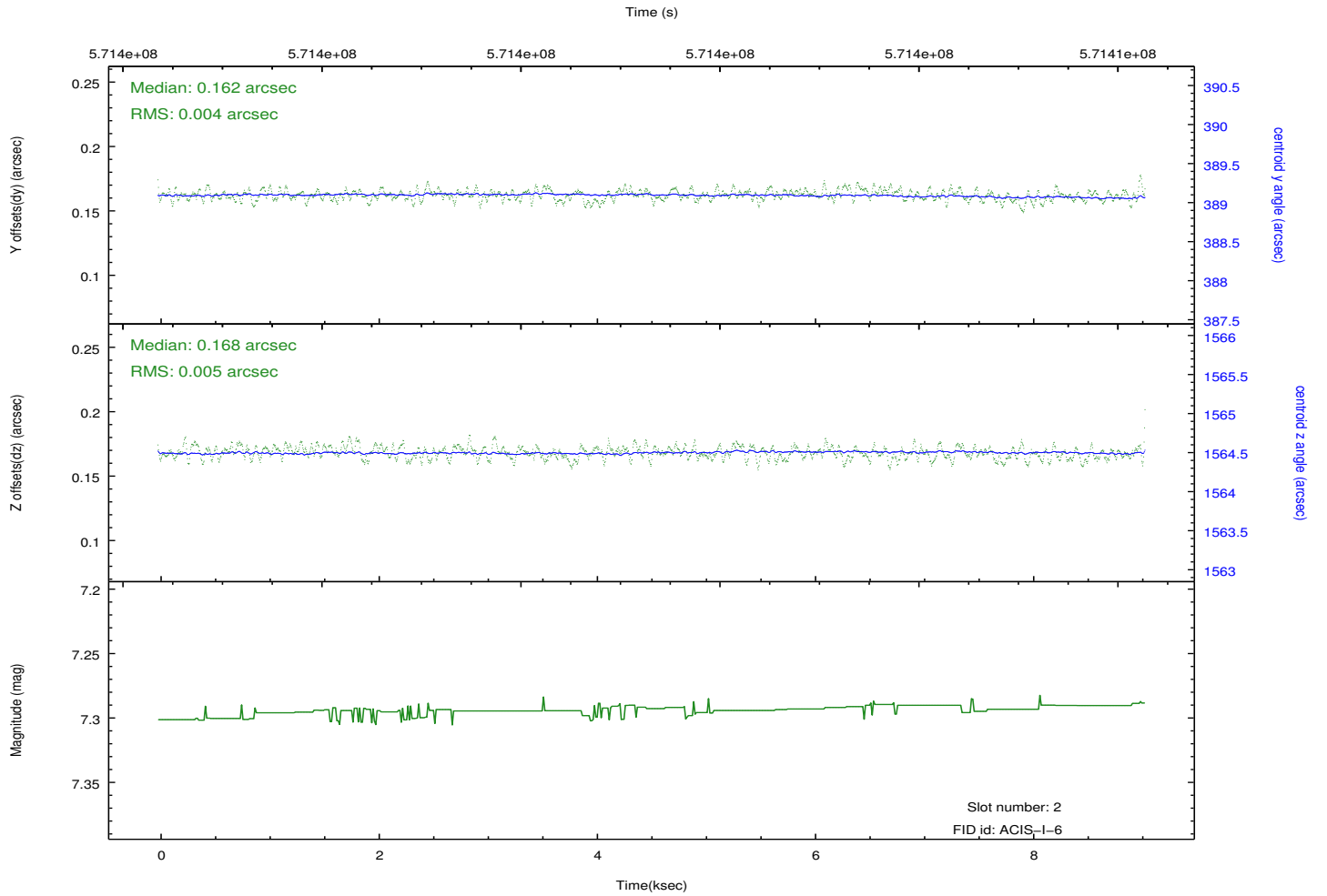
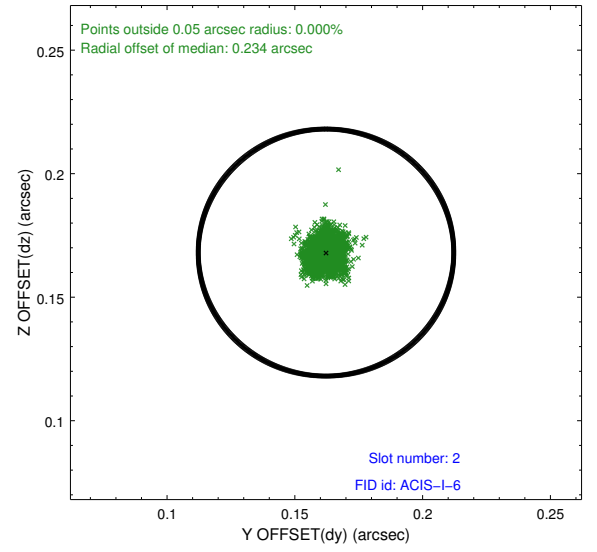
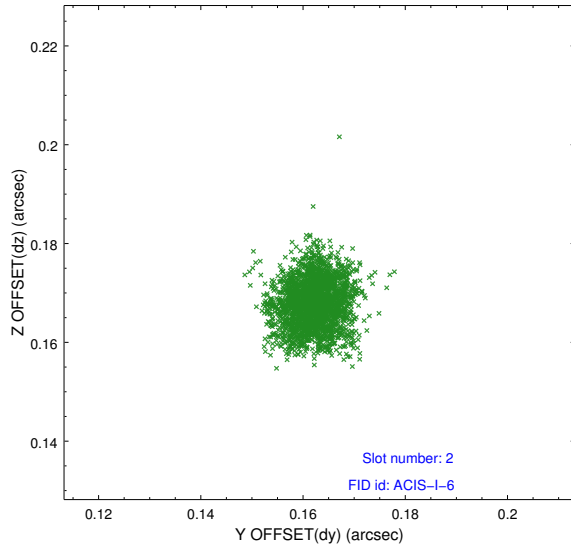
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2460000635386

A.2 Comments