

V&V Reference Report

L2 ASCDS Version : 10.4.3

Observation 17163 - L2 Version 1
Chandra X-Ray Center

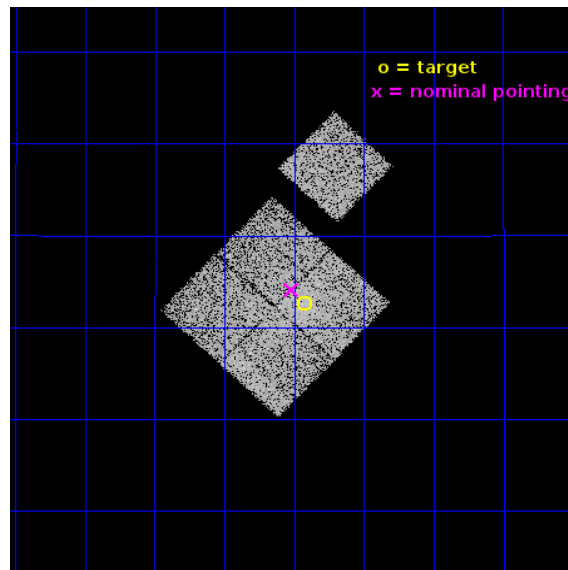
L2 Processing Date : Jan 8 2016

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1 Front

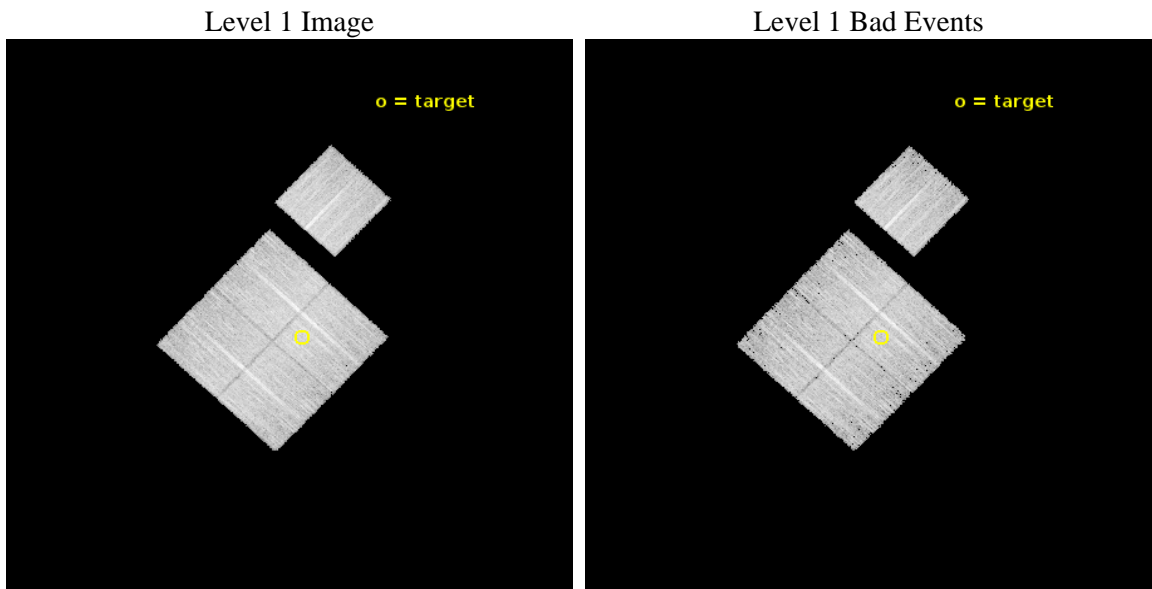
seq_num	801451	Sequence number
obs_id	17163	Observation id
title	Chandra Calibration of the Richness-Mass Relation of Galaxy Clusters: Enabling Cluster Cosmology with the DES	Proposal title
observer	Eduardo Rozo	Principal investigator
object	RM J164325.4+132235.9	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	250.855833	Observer's specified target RA [deg]
dec_targ	13.376639	Observer's specified target Dec [deg]
ra_nom	250.88000172804	Nominal RA [deg]
dec_nom	13.401923560153	Nominal Dec [deg]
roll_nom	43.20308160177	Nominal Roll [deg]
revision	1	Processing version of data
ontime	12068.218162417	Sum of GTIs [s]
livetime	11910.538007632	Livetime [s]
ontime0	12074.467810988	Sum of GTIs [s]
ontime1	12074.500092983	Sum of GTIs [s]
ontime2	12074.500092983	Sum of GTIs [s]
ontime3	12068.218162417	Sum of GTIs [s]
ontime6	12074.426770926	Sum of GTIs [s]
l2events	36407	Number of level 2 events



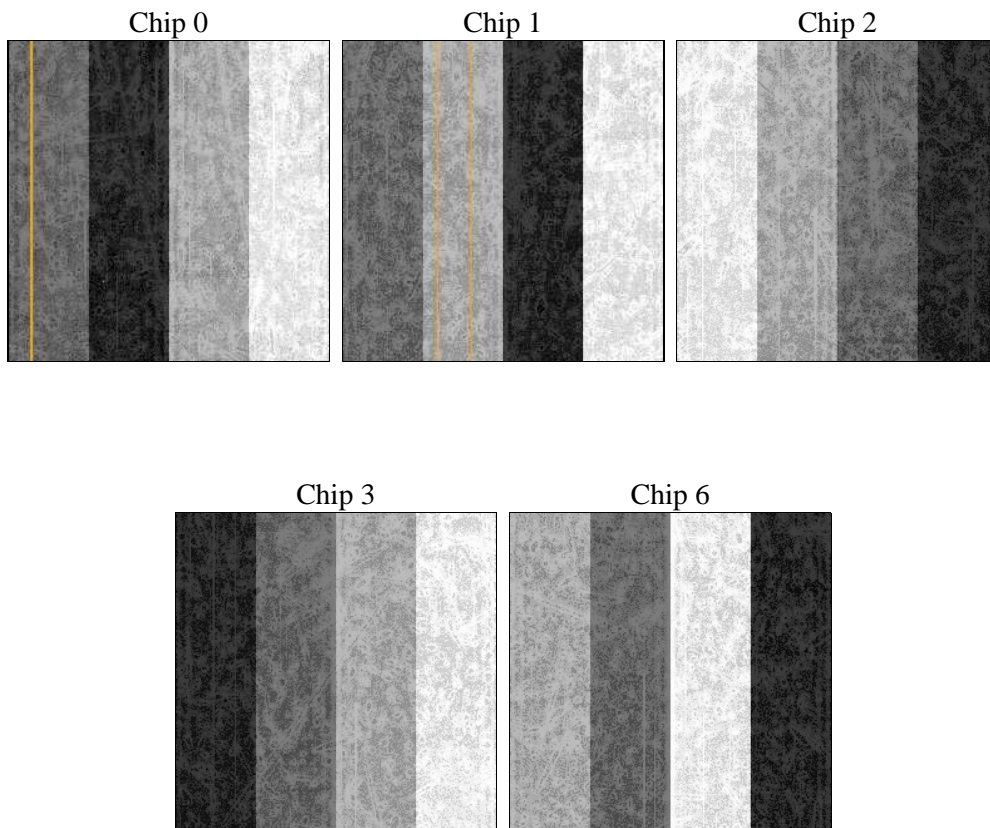
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3	Processing system revision	ontime	12068.218162417	Sum of GTIs [s]
caldsver	4.7.0	 	ontime0	12074.467810988	Sum of GTIs [s]
date	2016-01-08T16:53:08	Date and time of file creation	ontime1	12074.500092983	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	12074.500092983	Sum of GTIs [s]
			ontime3	12068.218162417	Sum of GTIs [s]
			ontime6	12074.426770926	Sum of GTIs [s]
			l1events	338653	Number of level 1 events

2.1.4 Events

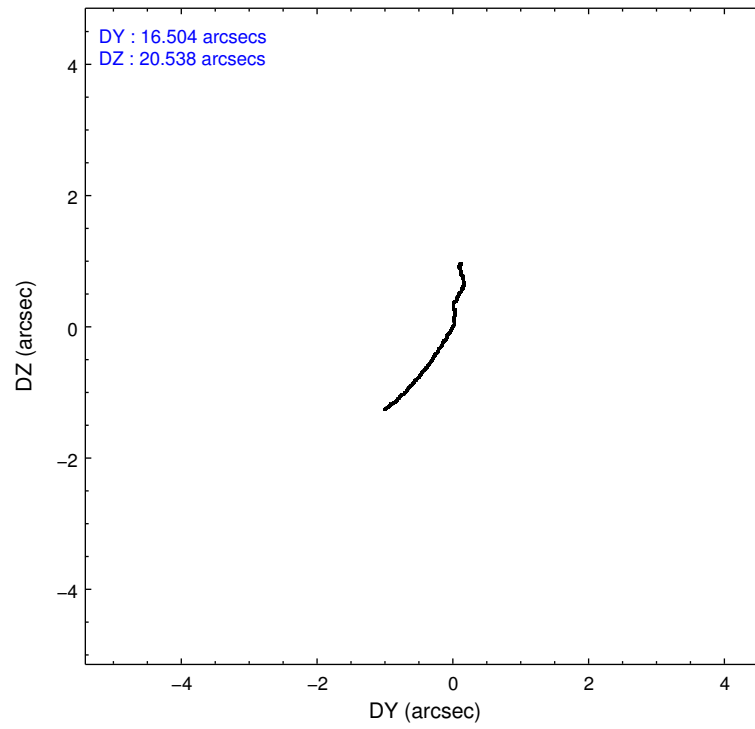
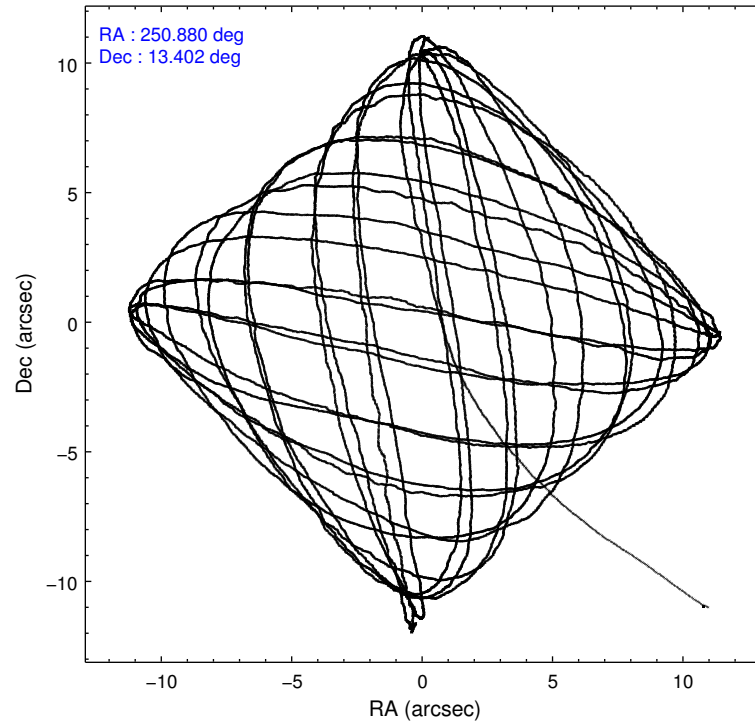
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	62552	65635	70359	69583	70524
rejected events	54262	56450	62206	60466	62363
rejected %	86%	86%	88%	86%	88%

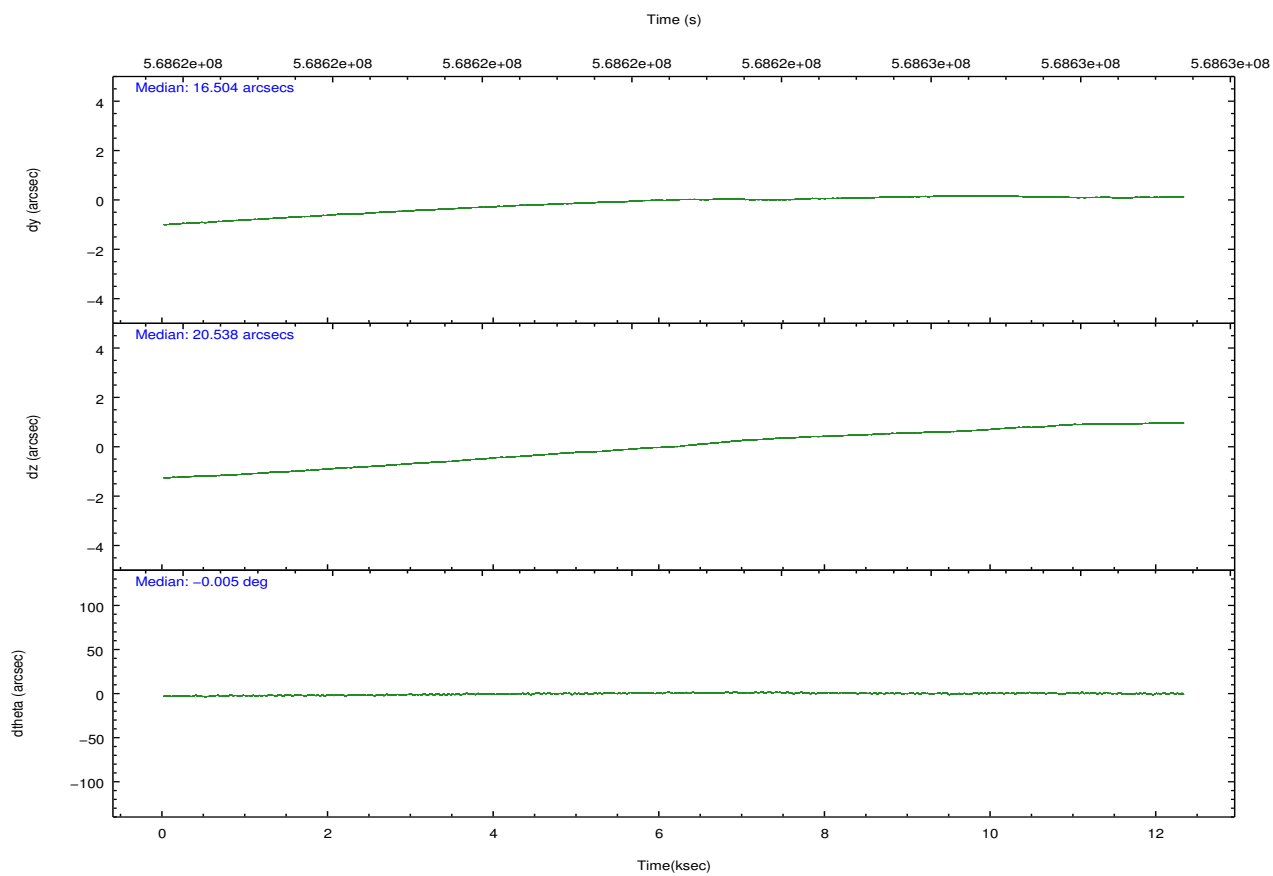
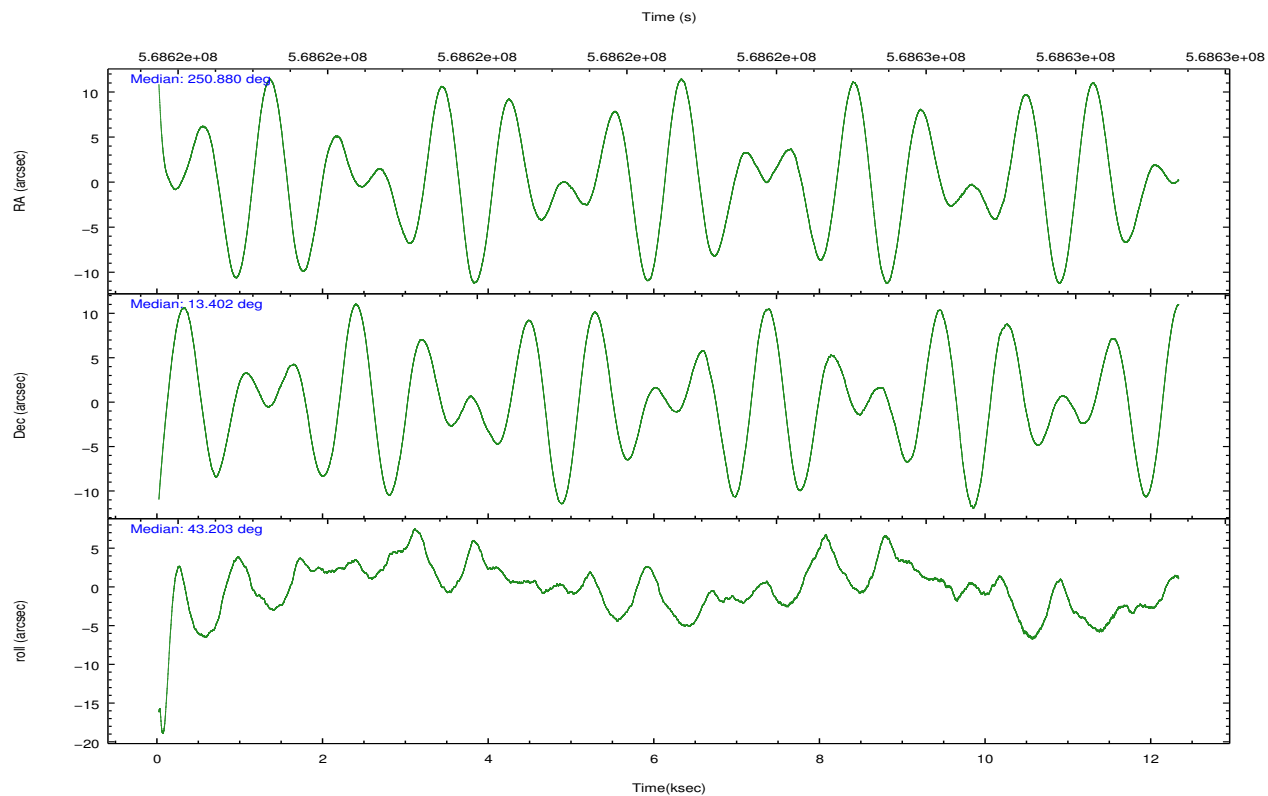
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2972	3371	2958	3982	2762
	4%	5%	4%	5%	3%
grade 1 events	33	38	40	35	33
	0%	0%	0%	0%	0%
grade 2 events	2062	2219	1987	1800	1811
	3%	3%	2%	2%	2%
grade 3 events	823	873	821	844	849
	1%	1%	1%	1%	1%
grade 4 events	811	831	810	847	887
	1%	1%	1%	1%	1%
grade 5 events	3120	3355	2967	3637	3491
	4%	5%	4%	5%	4%
grade 6 events	1628	1894	1583	1647	1854
	2%	2%	2%	2%	2%
grade 7 events	51103	53054	59193	56791	58837
	81%	80%	84%	81%	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	250.871891	250.8800017280355	CCD I2 on	Y	Y
[deg] Pointing Dec	13.375452	13.40192356015325	CCD I3 on	Y	Y
[deg] Pointing Roll	42.996277	43.20308160176997	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	-228.472463	-228.4783457680588	CCD S3 on	N	N
[mm] SIM translation stage offset	-5.12	-5.114107234870914	CCD S4 on	N	N
[s] Observation start time (MET)	568616722.184000	568615657.72516	CCD S5 on	N	N
Observation start date	2016-01-08T05:04:14	2016-01-08T04:47:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	568628722.184000	568629736.10096	On-chip summing requested	N	N
Observation end date	2016-01-08T08:24:14	2016-01-08T08:42:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



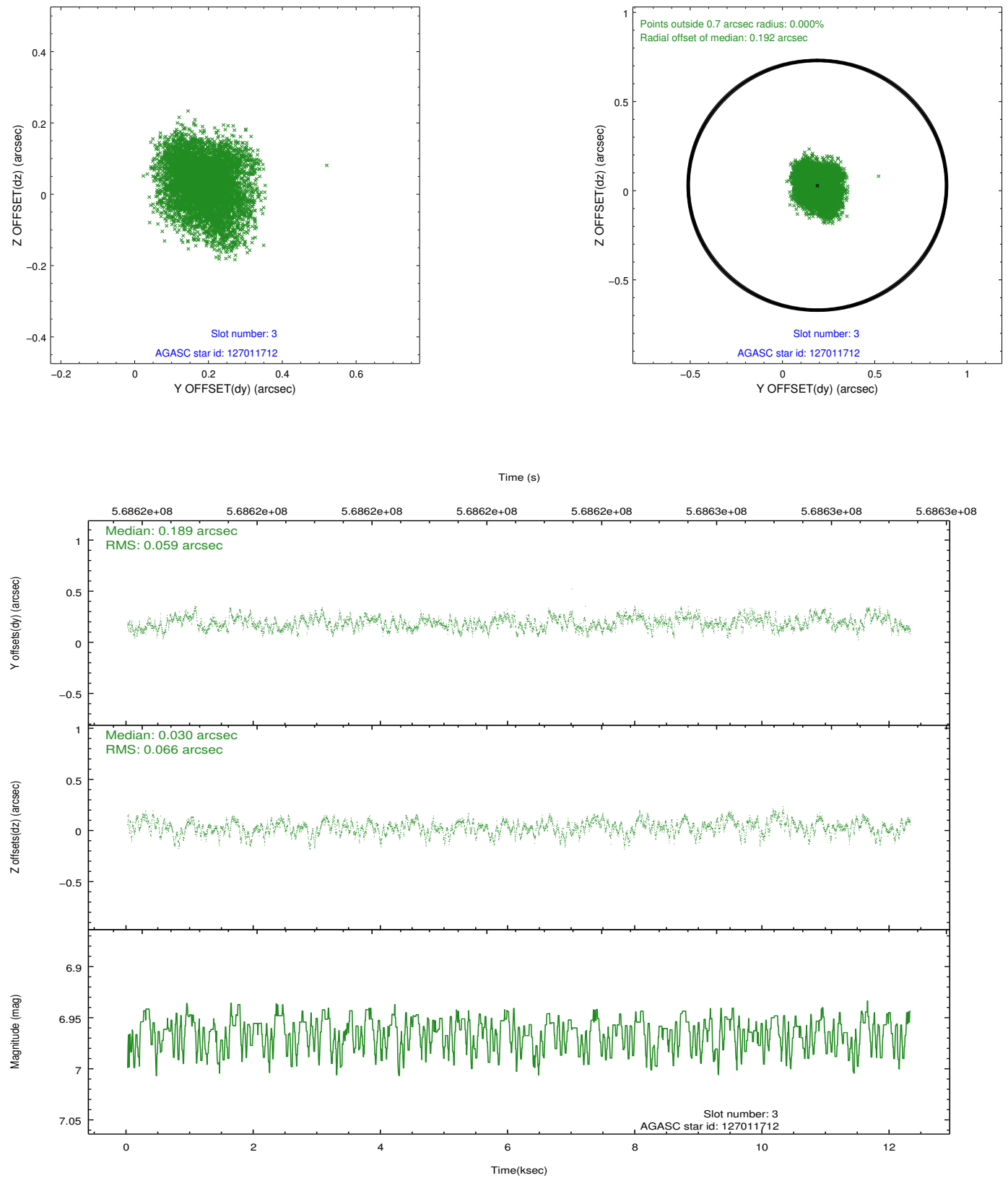


Slot Statistics

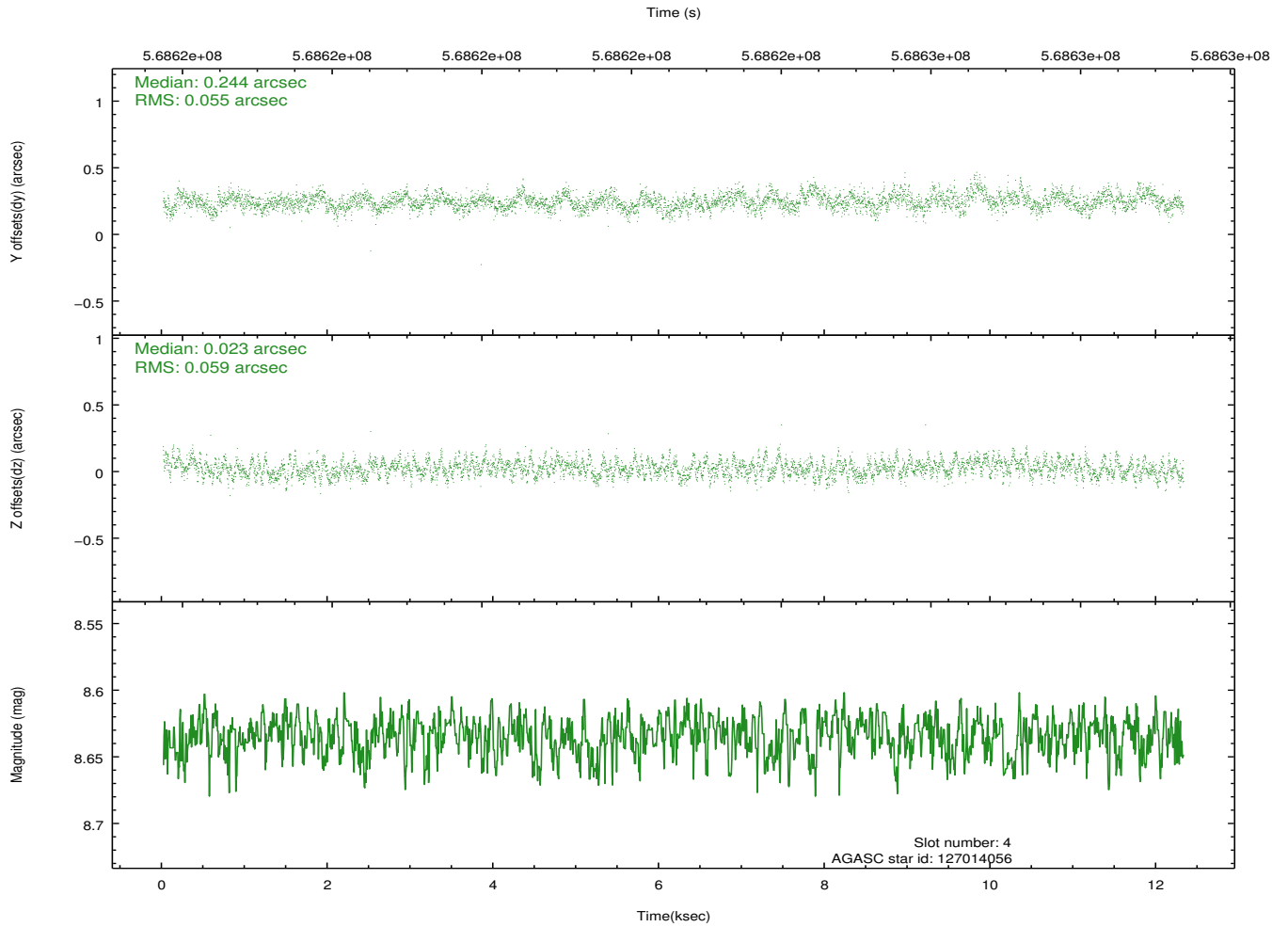
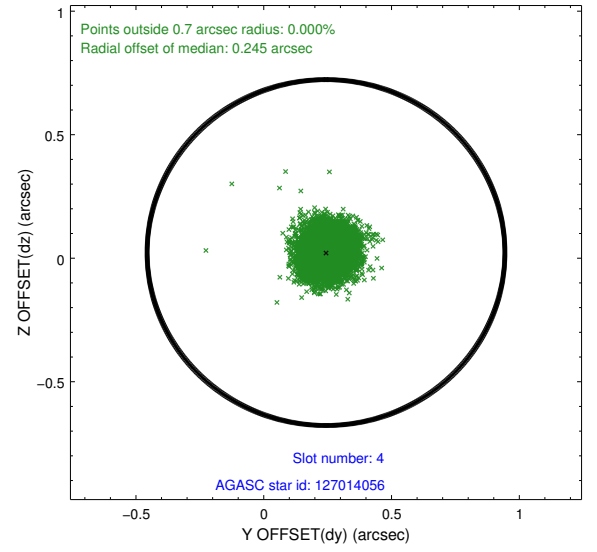
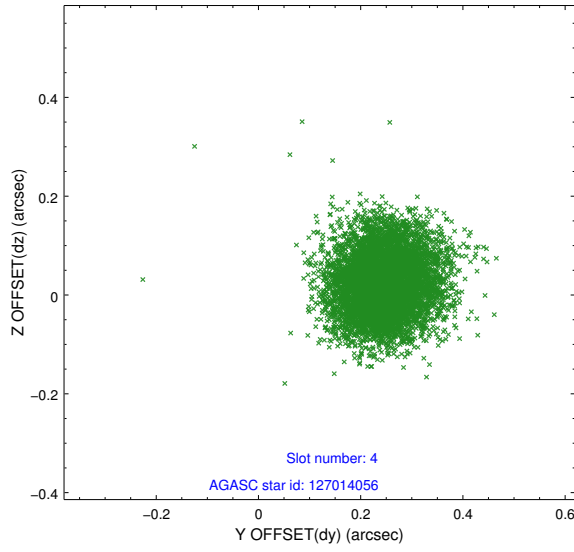
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	3004	0.167	-0.143	0.024	0.039	0.000000	0.000000	923.21	-949.30
1	FID		ACIS-I-5	7.24	3004	-0.397	0.104	0.013	0.038	0.000000	0.000000	-1825.32	948.06
2	FID		ACIS-I-6	7.25	3004	0.141	0.125	0.021	0.044	0.000000	0.000000	388.17	1593.14
3	GUIDE	used	127011712	6.96	6008	0.189	0.030	0.096	0.152	250.811156	12.878325	-1376.18	-1163.54
4	GUIDE	used	127014056	8.63	6006	0.244	0.023	0.085	0.138	250.593282	13.041177	-1534.68	-213.70
5	GUIDE	used	127669976	8.20	6007	-0.067	0.197	0.081	0.135	251.504812	13.355771	1575.17	-1561.27
6	GUIDE	used	127673616	8.96	6005	-0.086	0.037	0.126	0.210	251.262968	13.618528	1598.87	-292.36
7	GUIDE	used	127674072	9.16	6002	-0.270	-0.288	0.165	0.269	251.208226	13.988211	2364.63	812.62

2.4 Star Slots

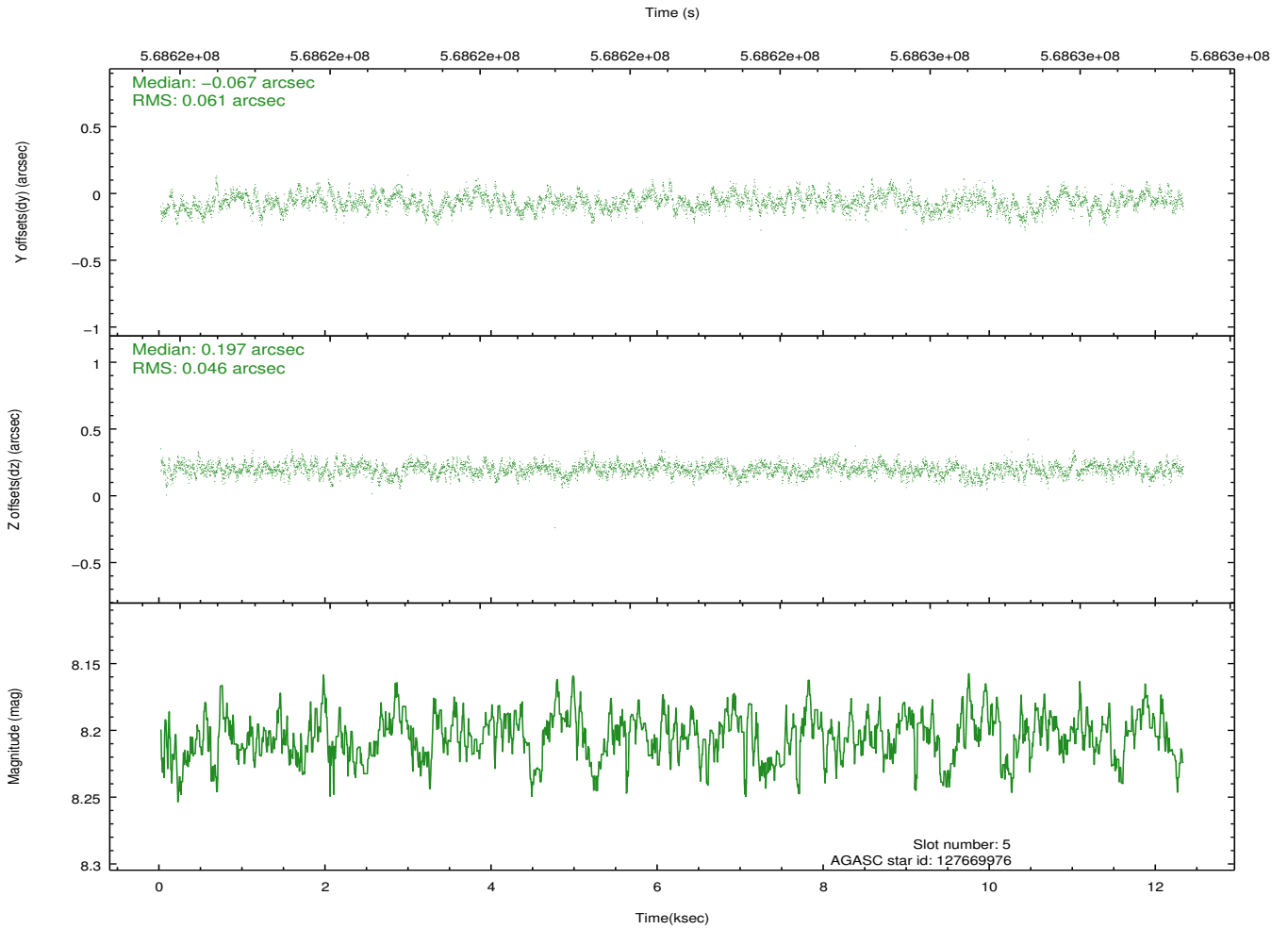
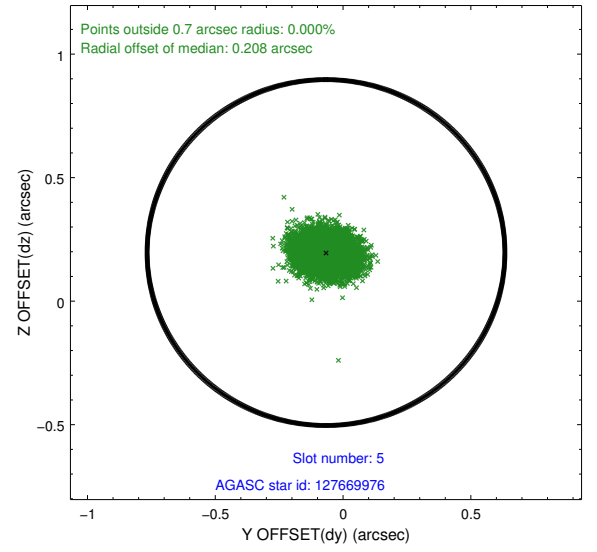
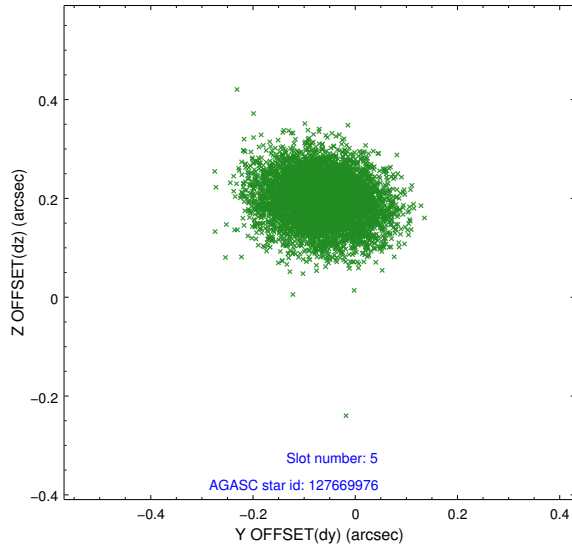
2.4.1 Slot 3



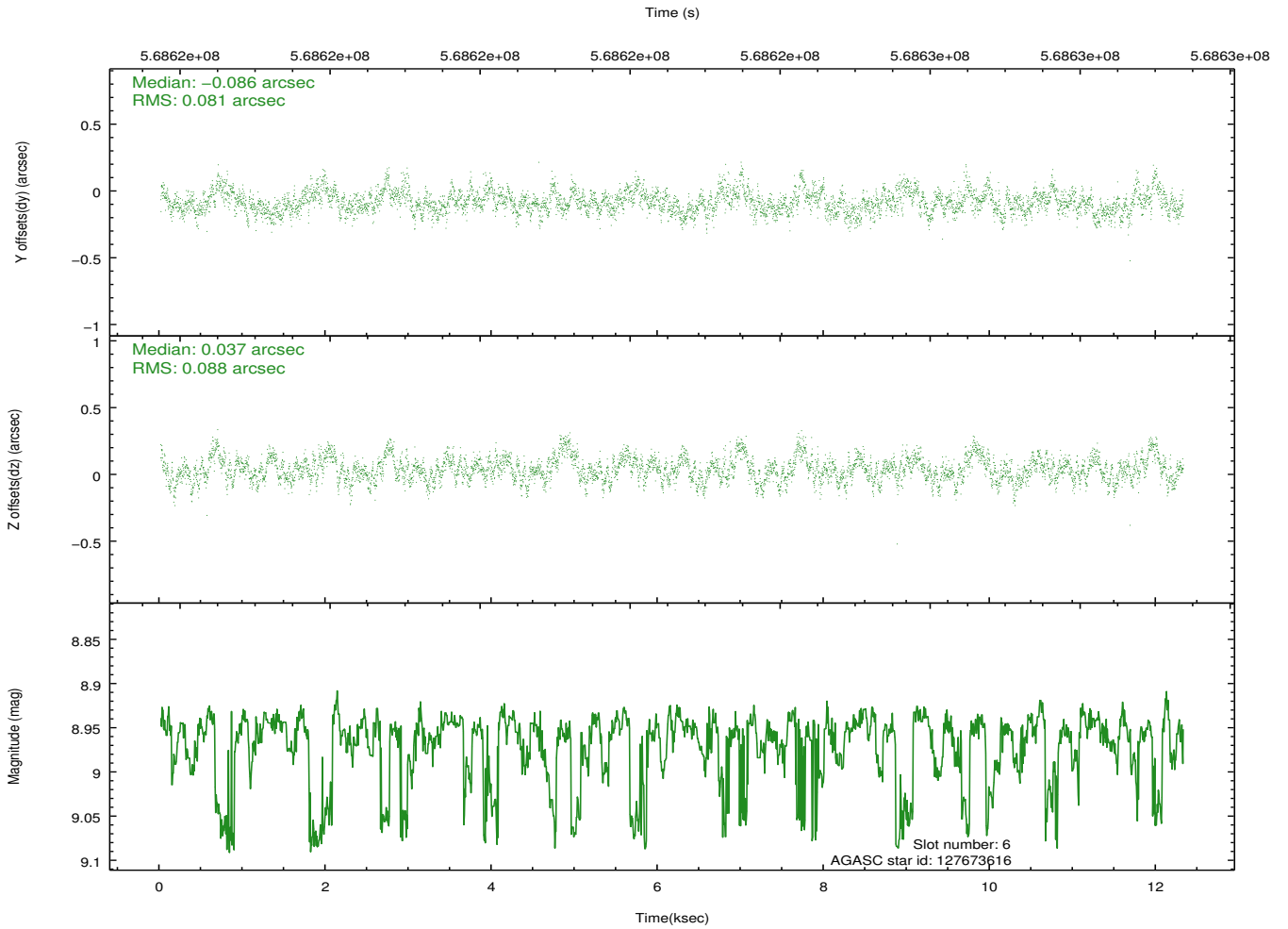
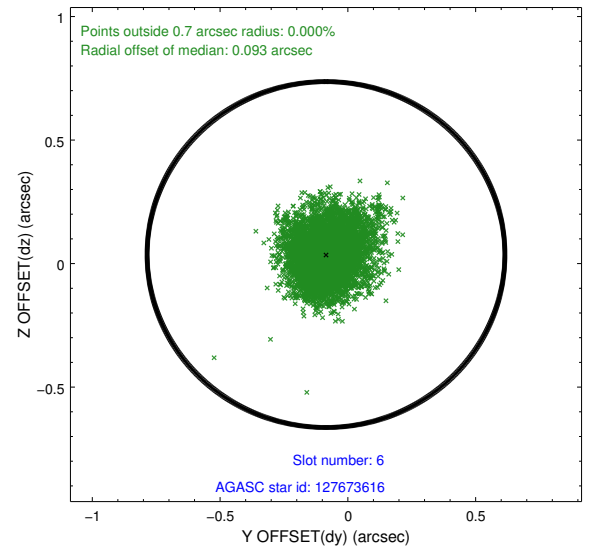
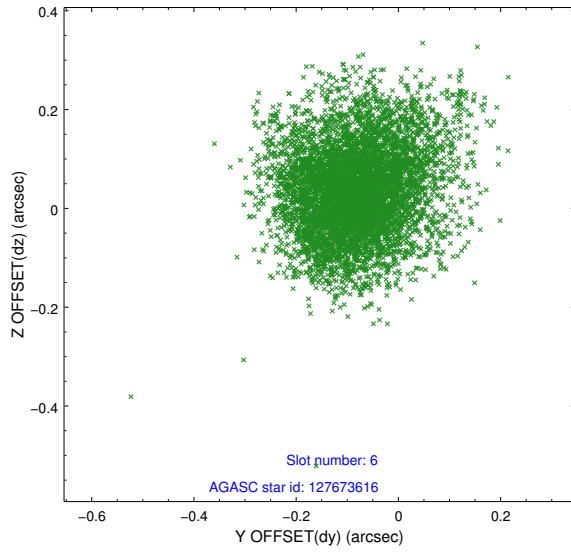
2.4.2 Slot 4



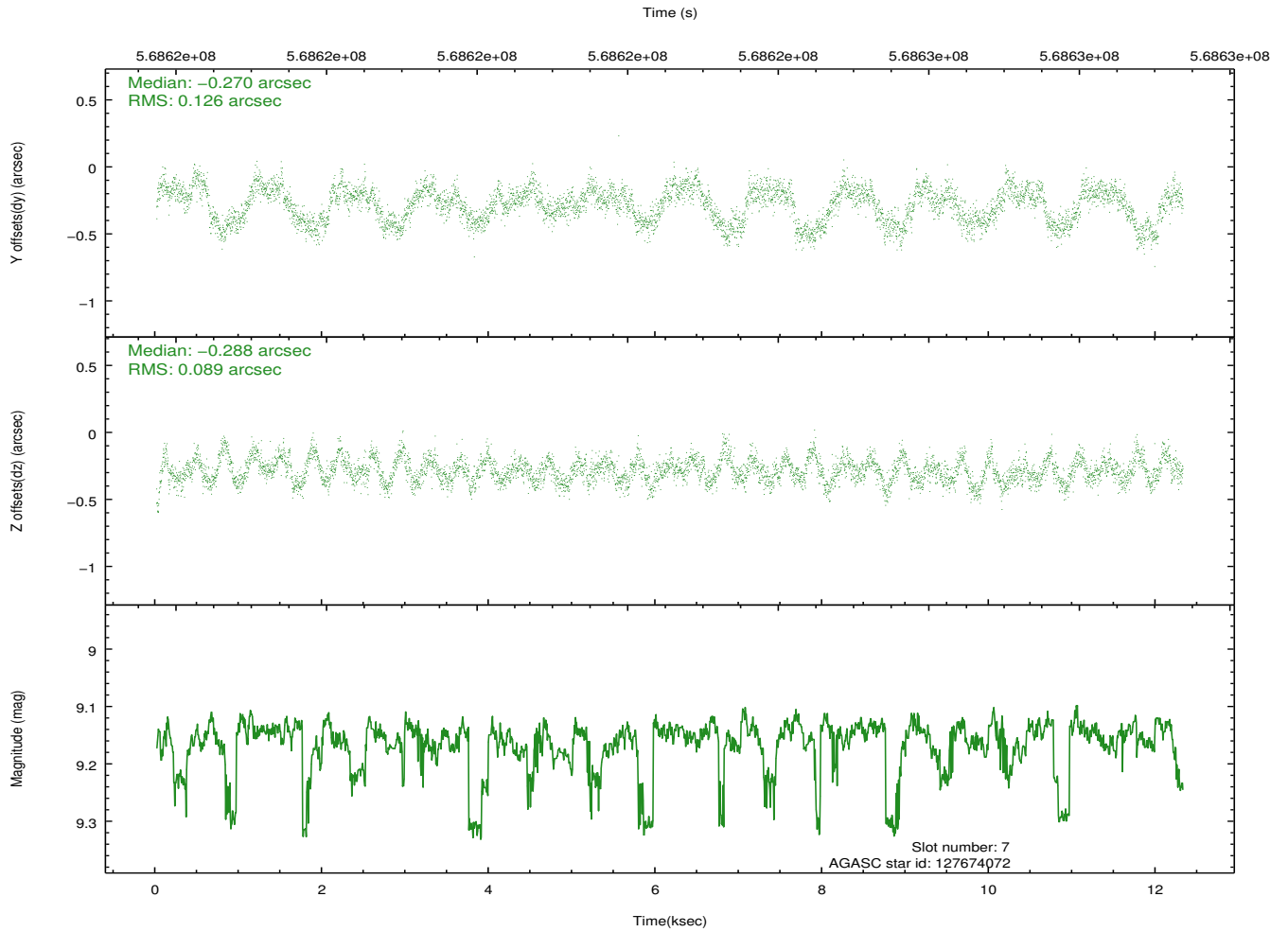
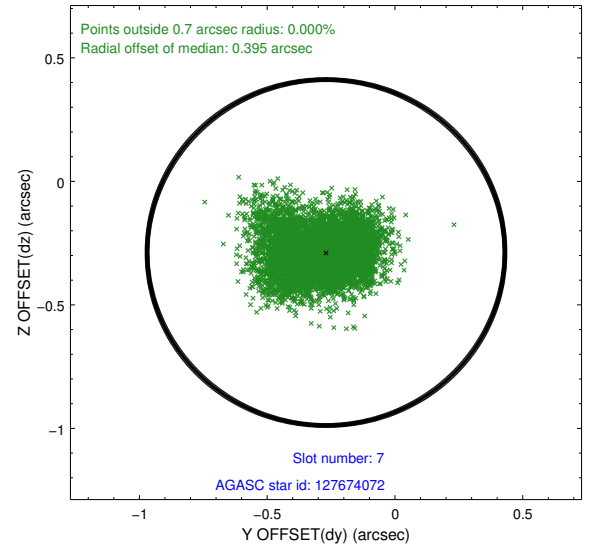
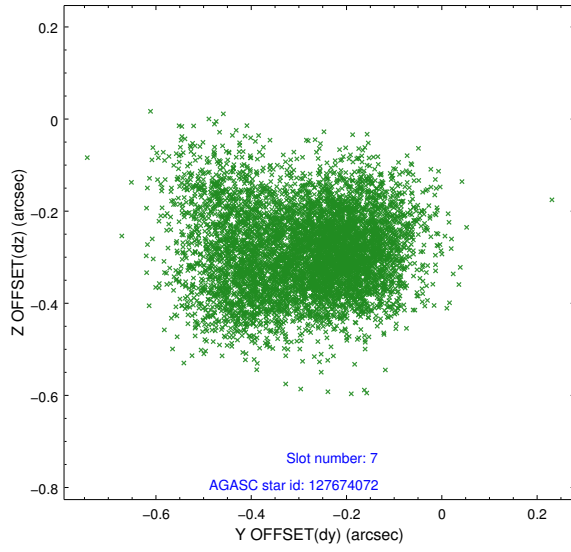
2.4.3 Slot 5



2.4.4 Slot 6

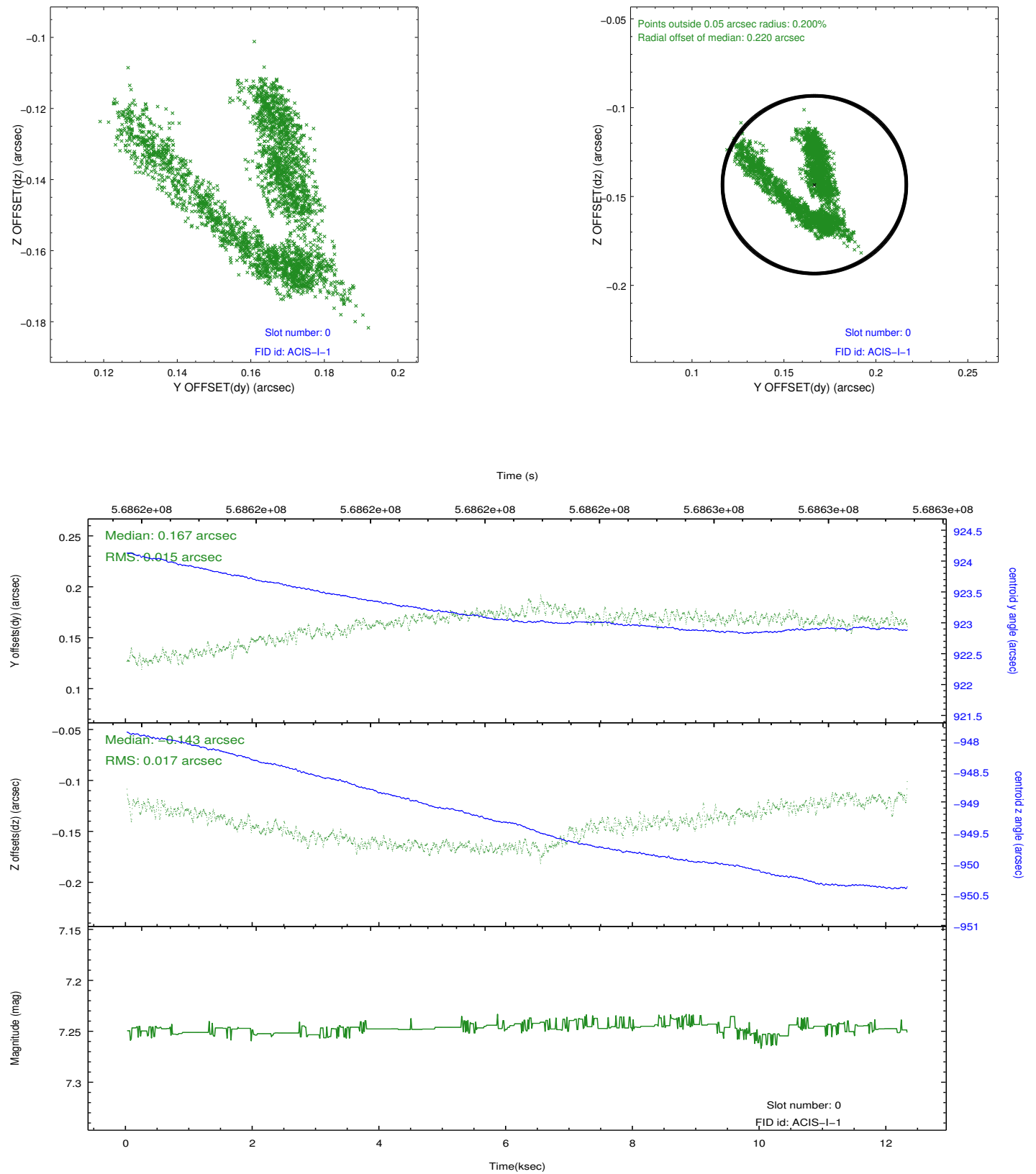


2.4.5 Slot 7

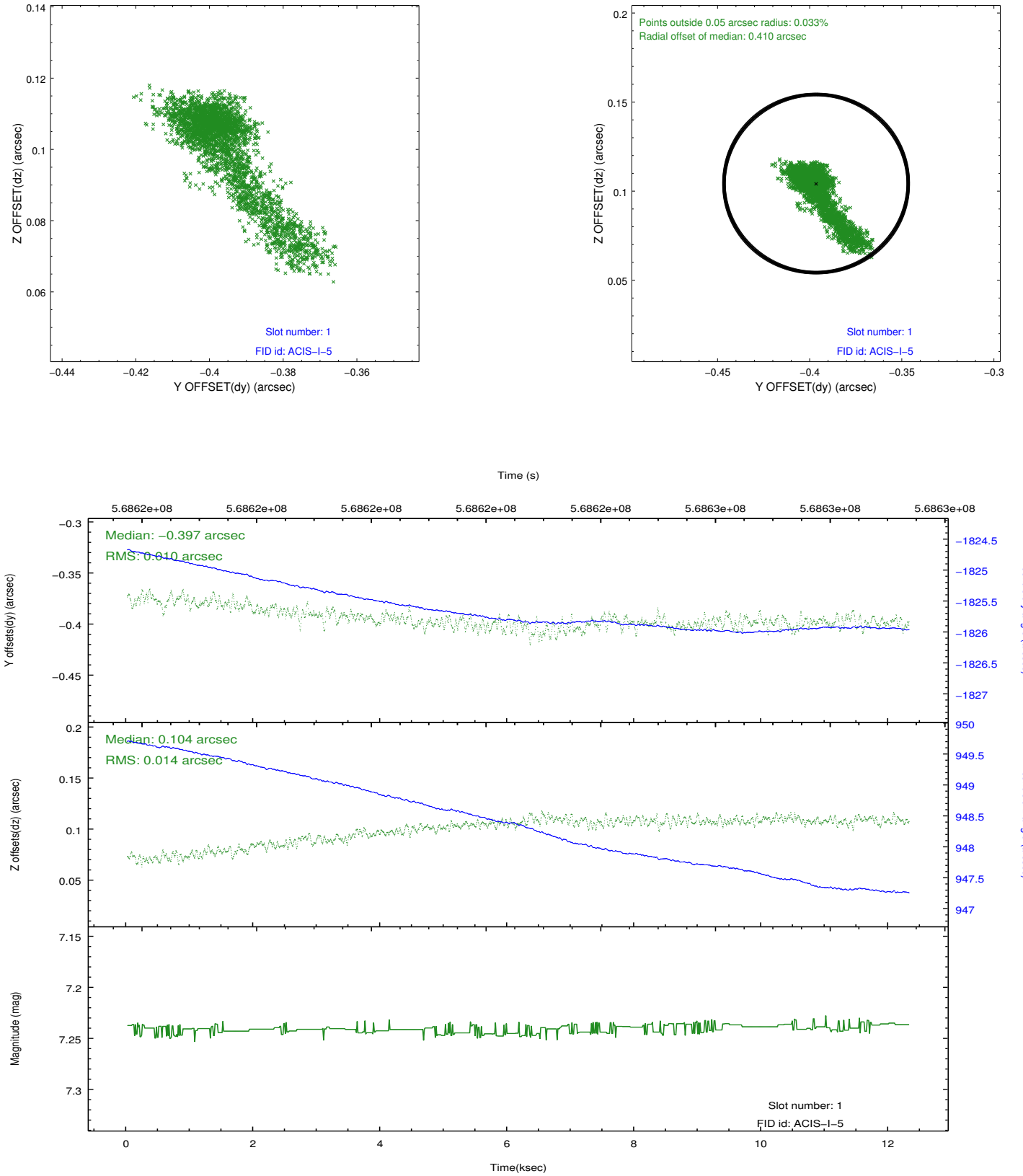


2.5 FID Slots

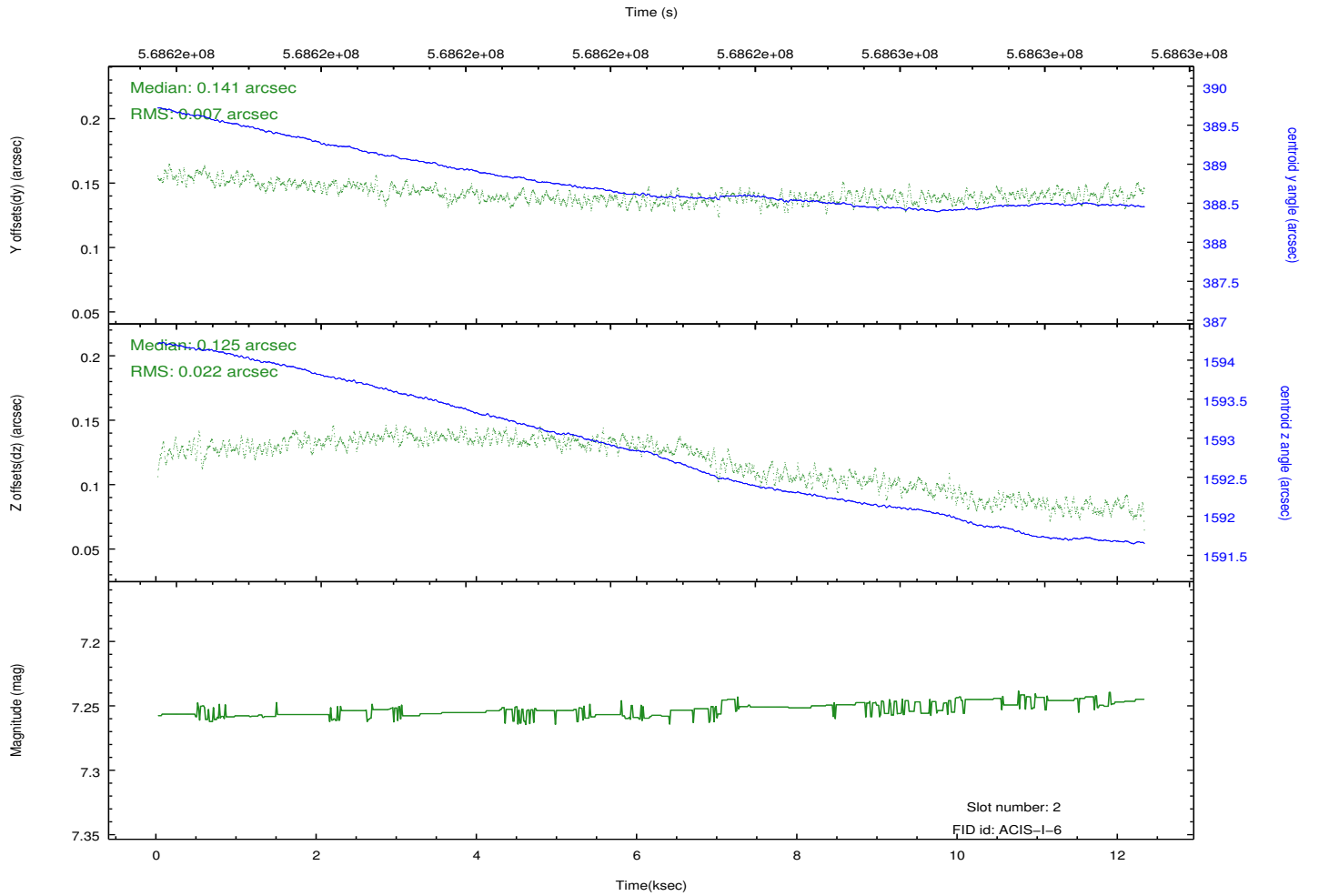
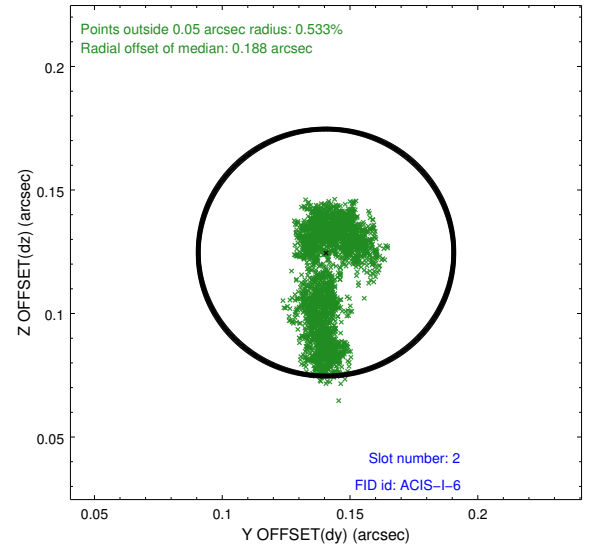
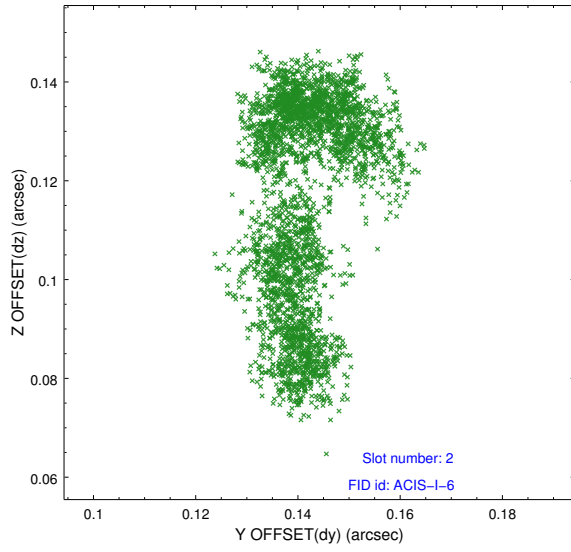
2.5.1 Slot 0



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)	2016.01.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.068218162417

A.2 Comments