

V&V Reference Report

L2 ASCDS Version : 10.3

Observation 17544 - L2 Version 1
Chandra X-Ray Center

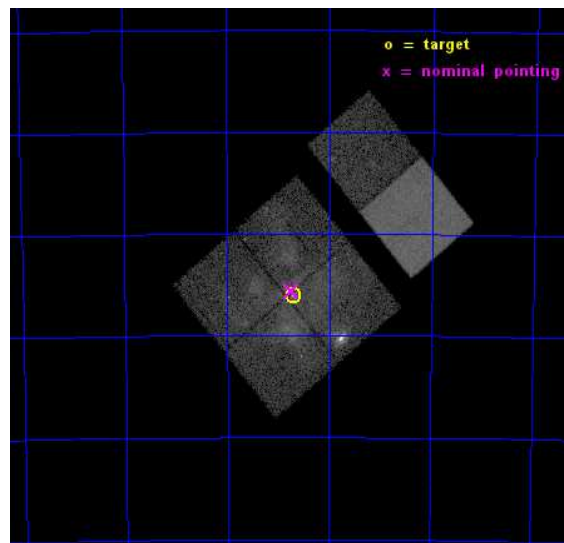
L2 Processing Date : Nov 2 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

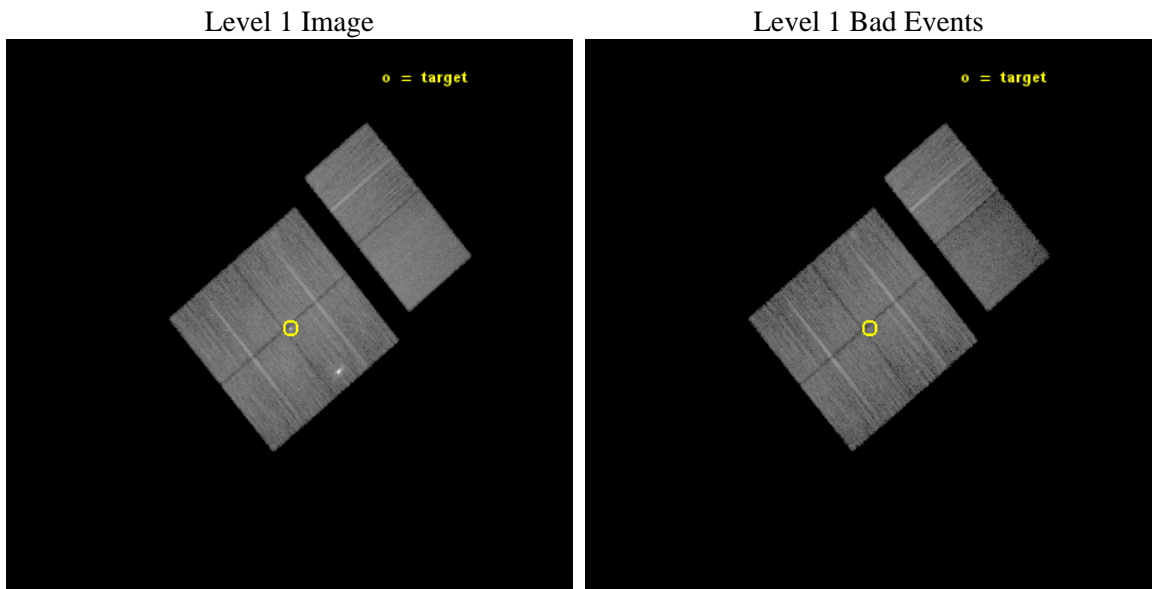
seq_num	901116	Sequence number
obs_id	17544	Observation id
title	The Tarantula -- Revealed by X-rays (T-ReX): A Definitive Chandra Investigation of 30 Doradus	Proposal title
observer	Dr. Leisa Townsley	Principal investigator
object	30 Doradus	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.676667	Observer's specified target RA [deg]
dec_targ	-69.100806	Observer's specified target Dec [deg]
ra_nom	84.685390727781	Nominal RA [deg]
dec_nom	-69.093251618262	Nominal Dec [deg]
roll_nom	50.216856719794	Nominal Roll [deg]
revision	1	Processing version of data
ontime	25970.966317832	Sum of GTIs [s]
livetime	25642.106304478	Livetime [s]
ontime0	25964.361197472	Sum of GTIs [s]
ontime1	25970.884237826	Sum of GTIs [s]
ontime2	25964.443307161	Sum of GTIs [s]
ontime3	25970.966317832	Sum of GTIs [s]
ontime6	25971.048397839	Sum of GTIs [s]
ontime7	25971.007357836	Sum of GTIs [s]
l2events	166209	Number of level 2 events



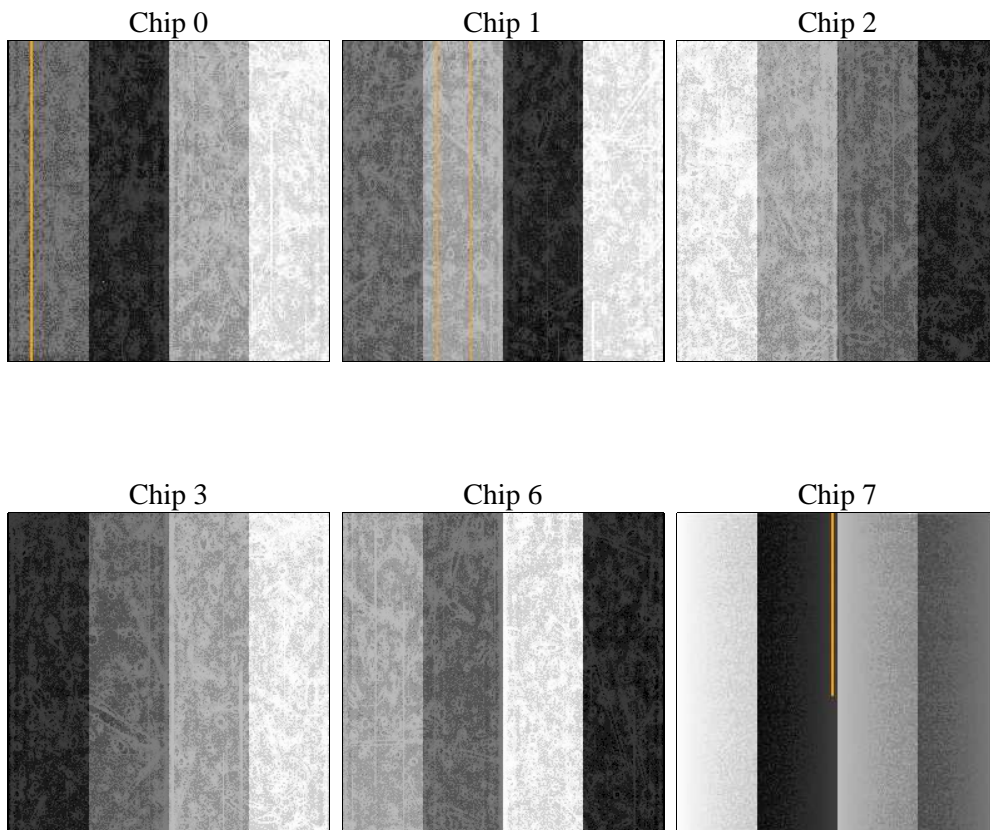
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	25970.966317832	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	25964.361197472	Sum of GTIs [s]
date	2014-11-02T11:45:06	Date and time of file creation	ontime1	25970.884237826	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	25964.443307161	Sum of GTIs [s]
			ontime3	25970.966317832	Sum of GTIs [s]
			ontime6	25971.048397839	Sum of GTIs [s]
			ontime7	25971.007357836	Sum of GTIs [s]
			l1events	773354	Number of level 1 events

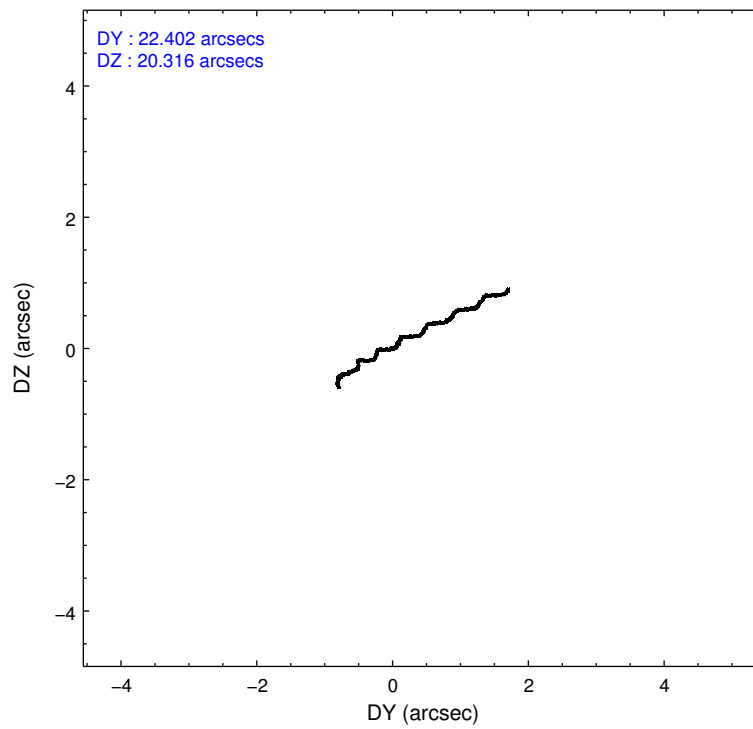
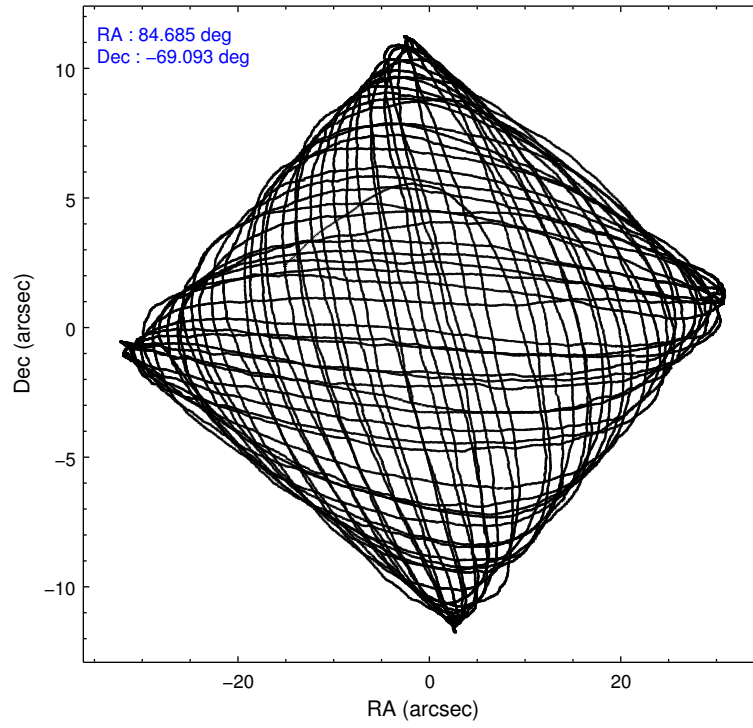
2.1.4 Events

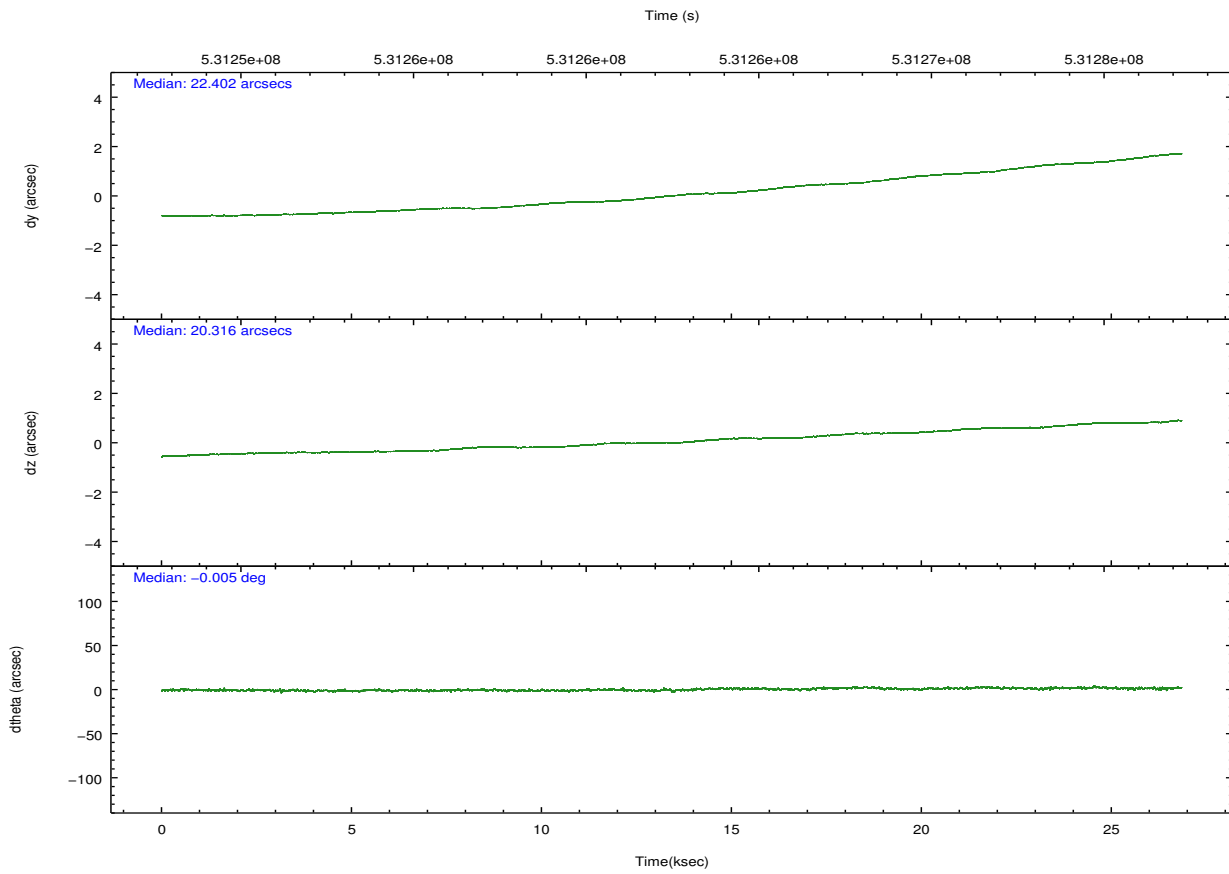
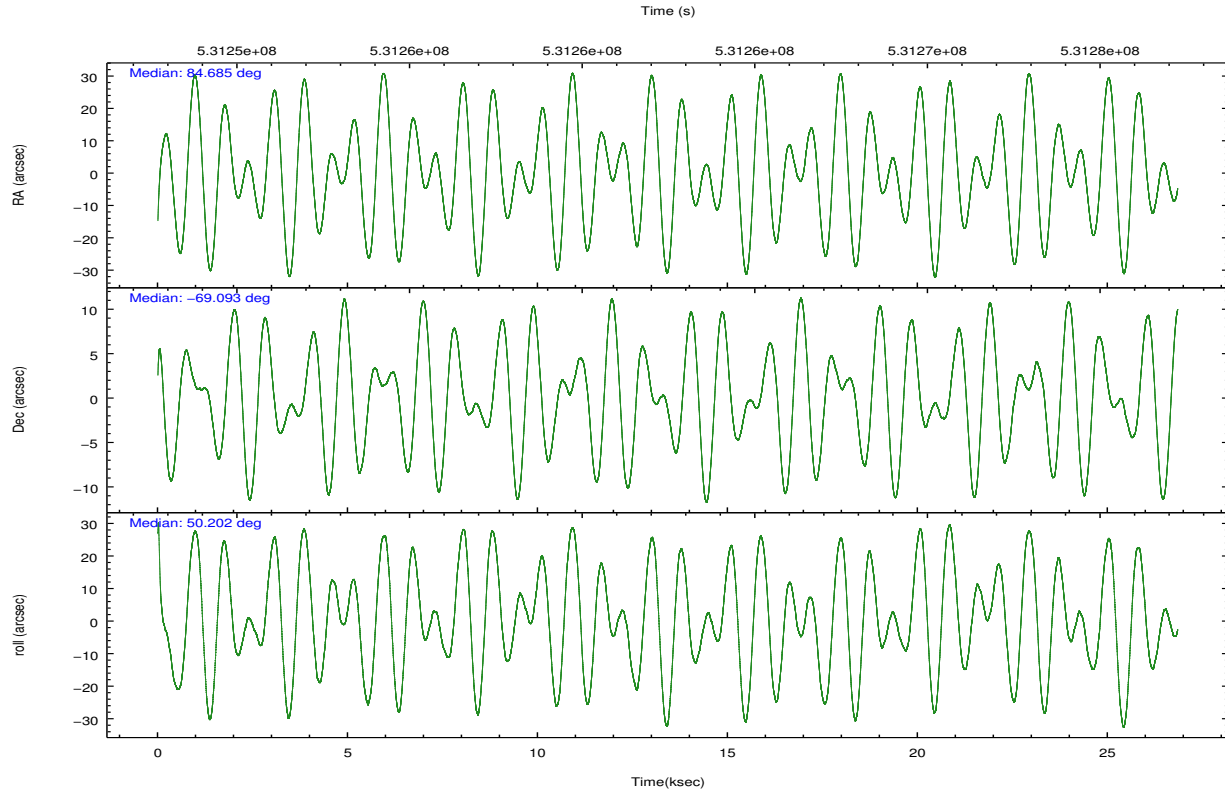
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	114497	118511	130771	141429	128515	139631	grade 0 events	9487	11643	11370	24620	6021	6786
rejected events	95064	96329	109489	103946	112995	72827		8%	9%	8%	17%	4%	4%
rejected %	83%	81%	83%	73%	87%	52%	grade 1 events	101	88	107	195	65	224
								0%	0%	0%	0%	0%	0%
							grade 2 events	4179	4183	4389	5419	3618	14559
								3%	3%	3%	3%	2%	10%
							grade 3 events	1629	1630	1446	2070	1457	5926
								1%	1%	1%	1%	1%	4%
							grade 4 events	1462	1623	1503	2150	1363	5802
								1%	1%	1%	1%	1%	4%
							grade 5 events	4784	4974	4499	5411	5425	14552
								4%	4%	3%	3%	4%	10%
							grade 6 events	2683	3108	2579	3239	3062	33754
								2%	2%	1%	2%	2%	24%
							grade 7 events	90172	91262	104878	98325	107504	58028
								78%	77%	80%	69%	83%	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	84.672527	84.68539072778091	CCD I2 on	Y	Y
[deg] Pointing Dec	-69.120445	-69.0932516182622	CCD I3 on	Y	Y
[deg] Pointing Roll	49.996131	50.21685671979368	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	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	531249910.184000	531247928.88681	CCD S5 on	N	N
Observation start date	2014-11-01T17:24:03	2014-11-01T16:52:08	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	531275910.184000	531276508.4509	On-chip summing requested	N	N
Observation end date	2014-11-02T00:37:23	2014-11-02T00:48:28	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





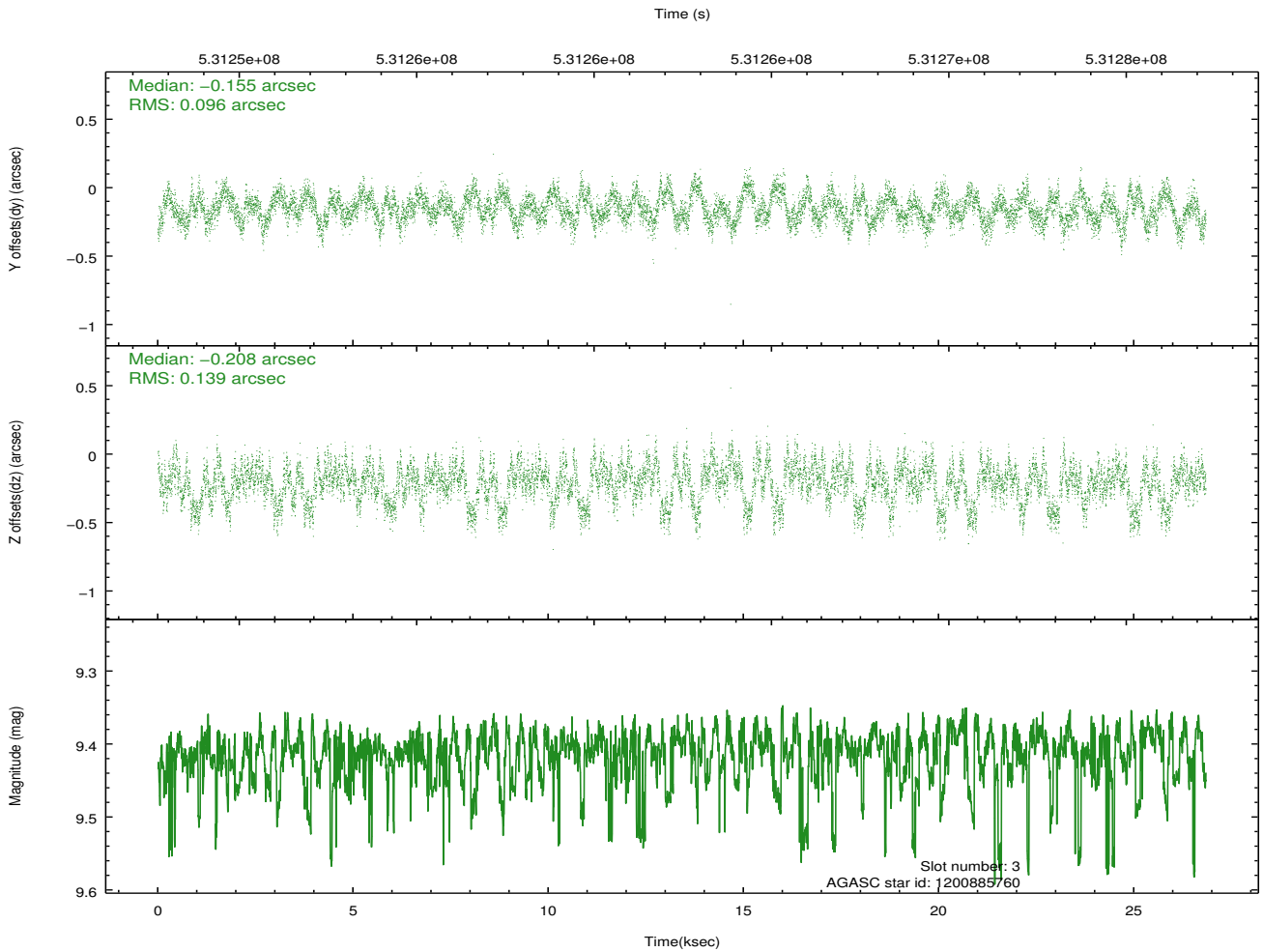
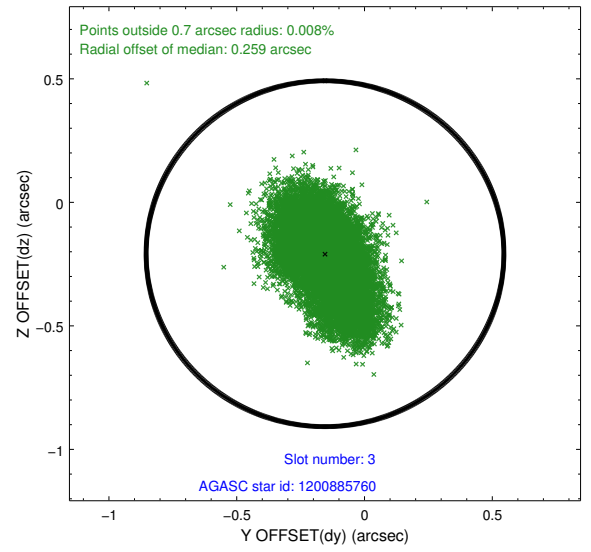
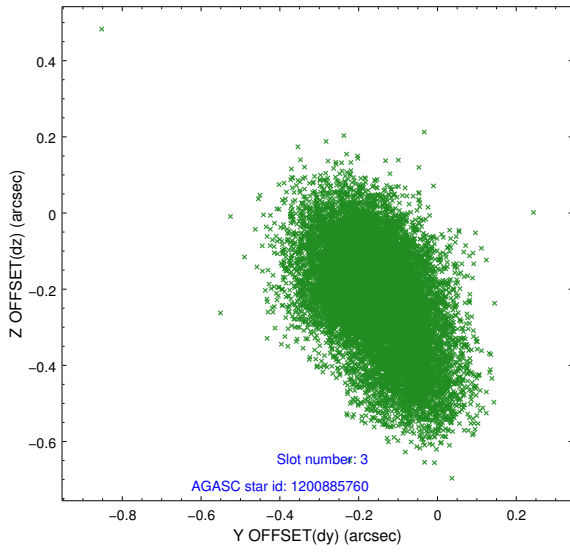
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.00	6547	-0.116	-0.090	0.027	0.057	0.000000	0.000000	-777.55	-850.63
1	FID		ACIS-I-4	7.03	6545	0.312	0.089	0.024	0.041	0.000000	0.000000	2136.82	1055.81
2	FID		ACIS-I-5	7.07	6547	-0.293	0.065	0.014	0.023	0.000000	0.000000	-1831.50	1053.56
3	GUIDE	used	1200885760	9.41	13085	-0.155	-0.208	0.177	0.302	83.723637	-68.777667	142.62	1733.96
4	GUIDE	used	1201020040	8.58	13090	-0.040	0.141	0.107	0.171	85.379163	-68.879396	1250.17	-147.02
5	GUIDE	used	1201540776	9.54	13082	0.409	0.549	0.202	0.315	85.107945	-69.858480	-1688.49	-2122.52
6	GUIDE	used	1200884248	9.43	13082	-0.199	-0.251	0.147	0.237	83.880915	-68.565170	856.52	2078.24
7	GUIDE	used	1201018384	9.06	13084	-0.013	-0.210	0.127	0.208	85.801362	-68.593260	2397.56	75.38

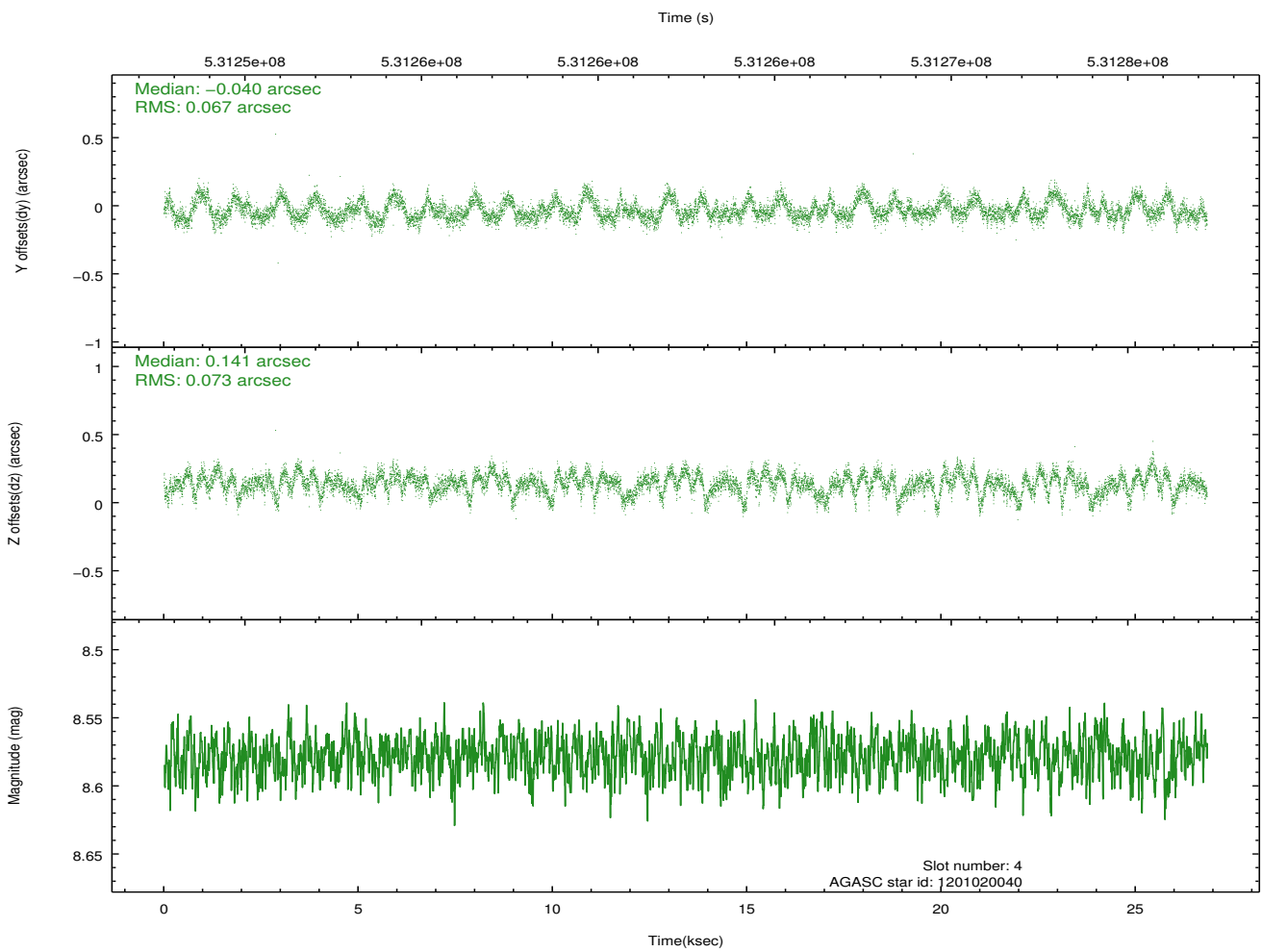
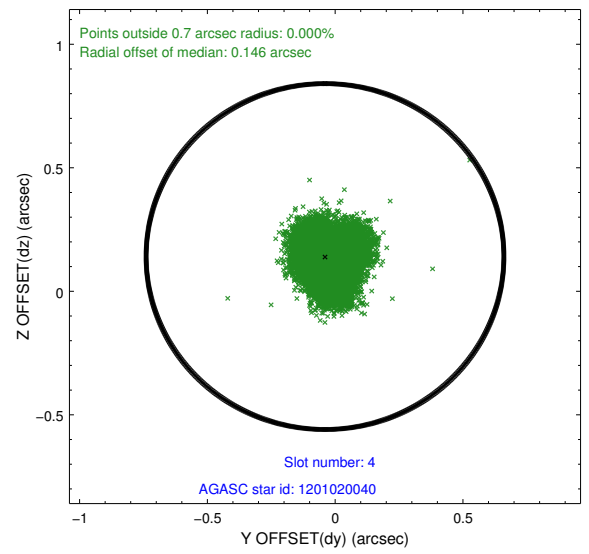
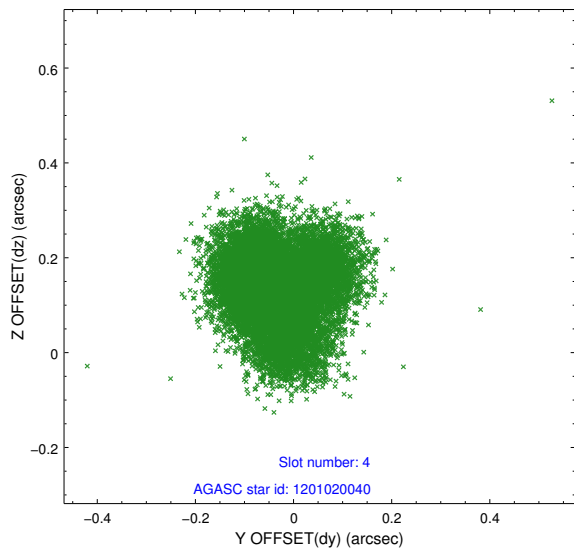
∞

2.4 Star Slots

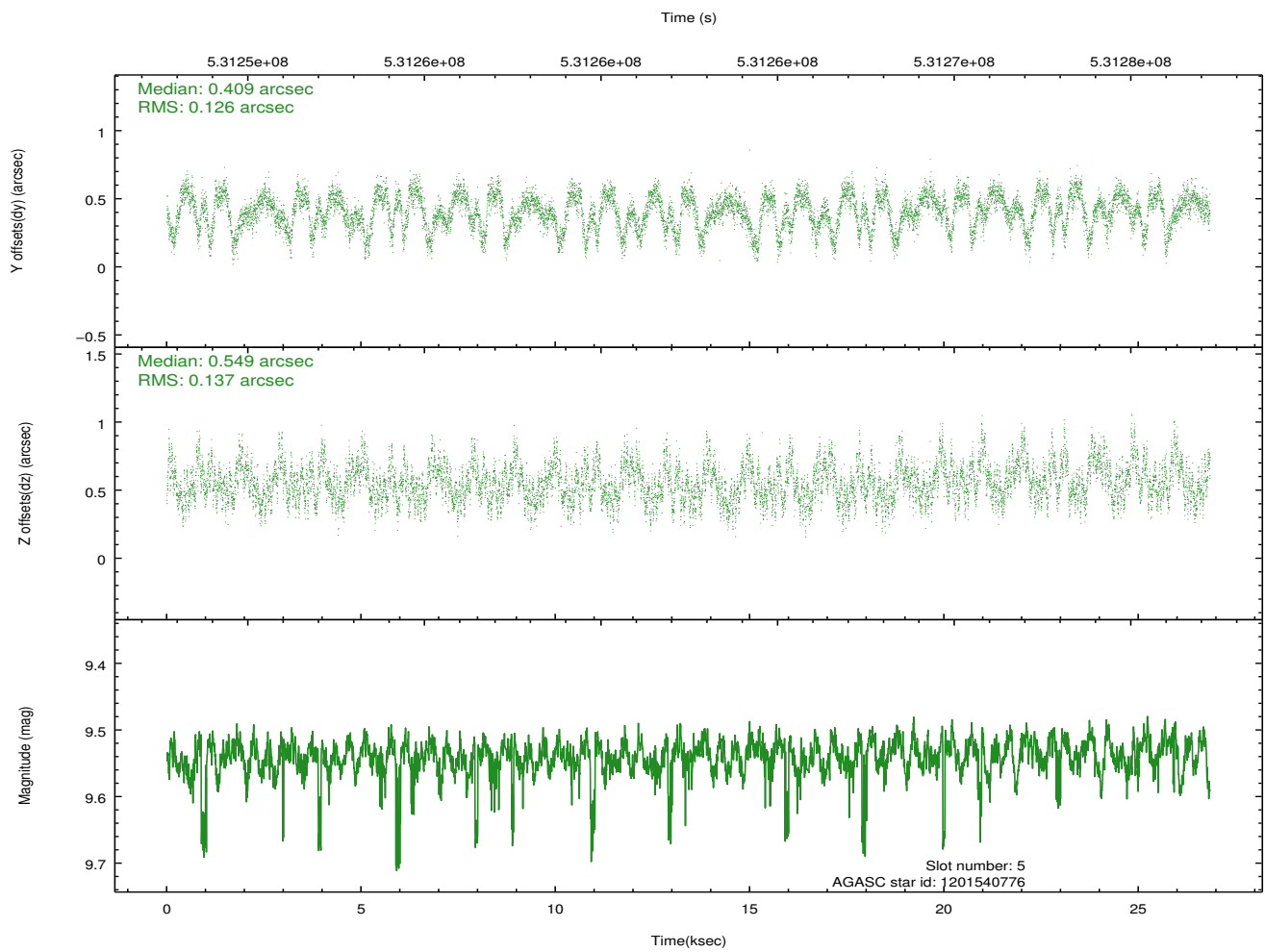
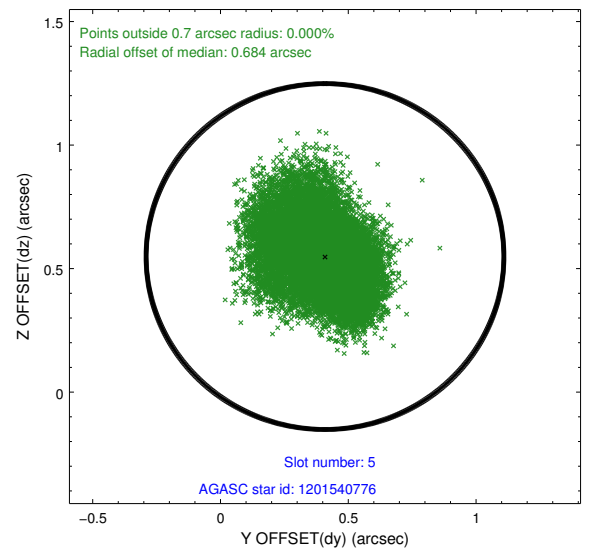
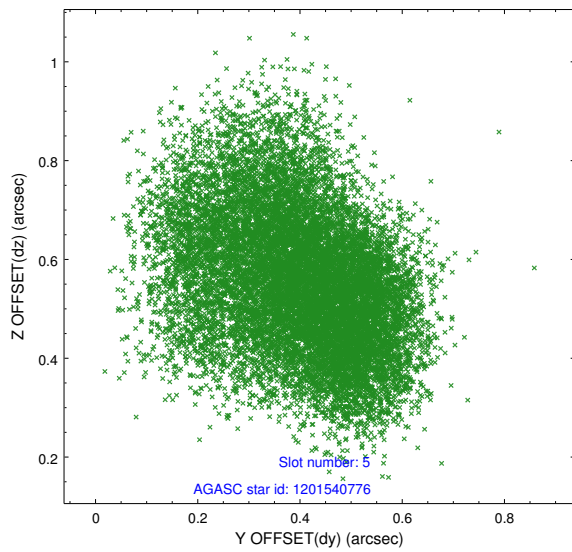
2.4.1 Slot 3



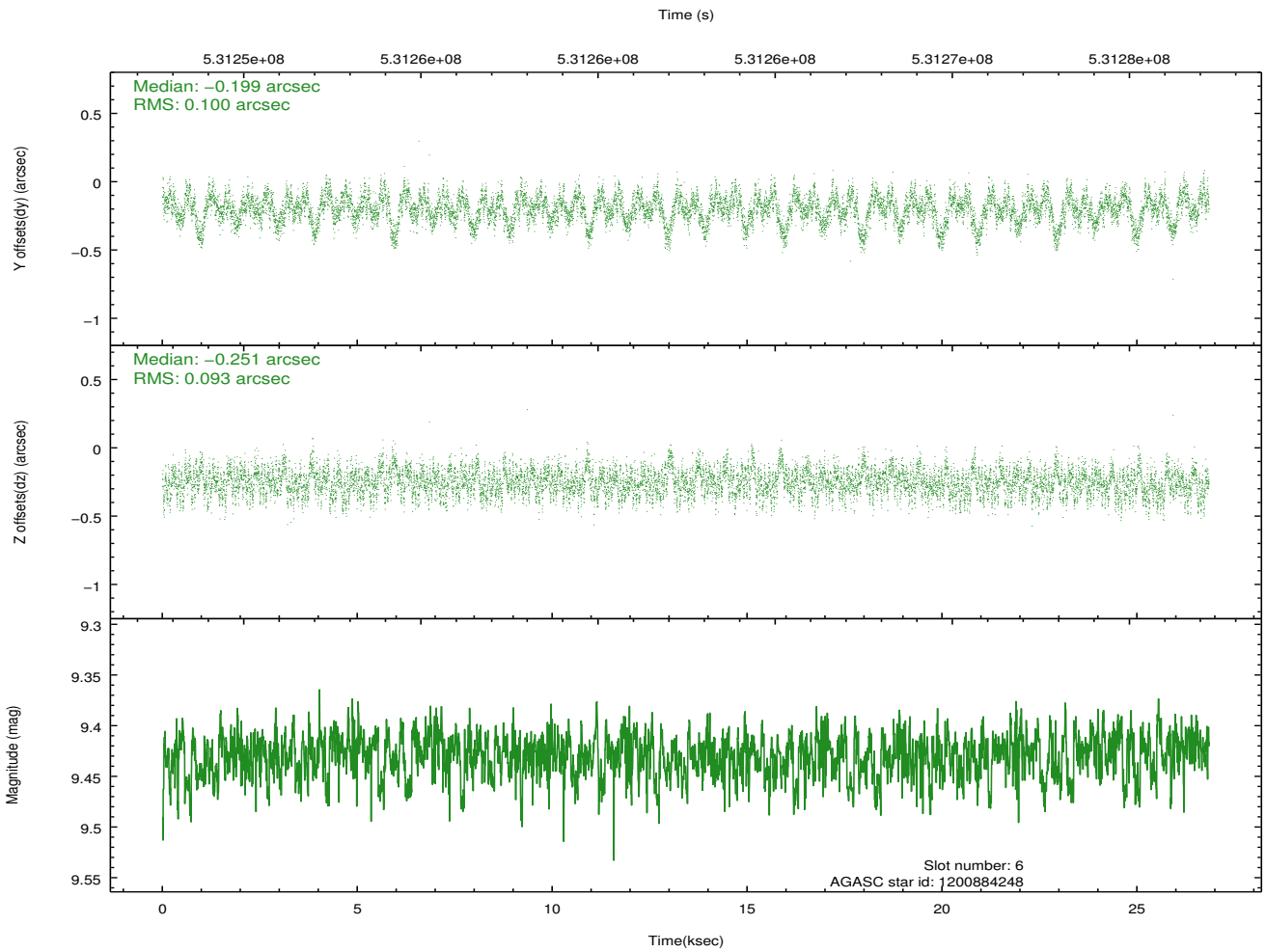
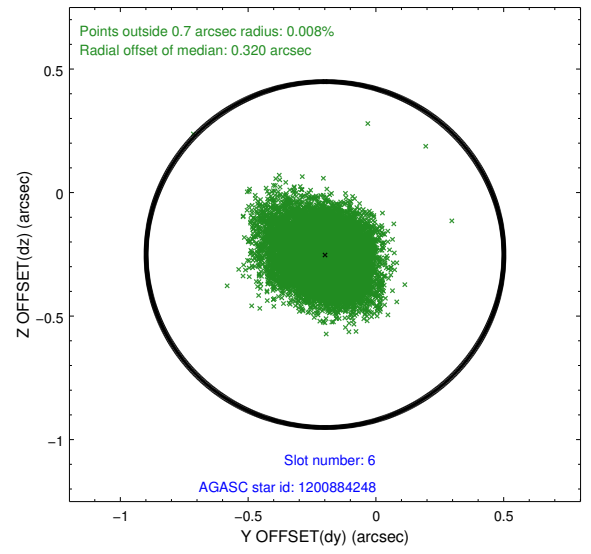
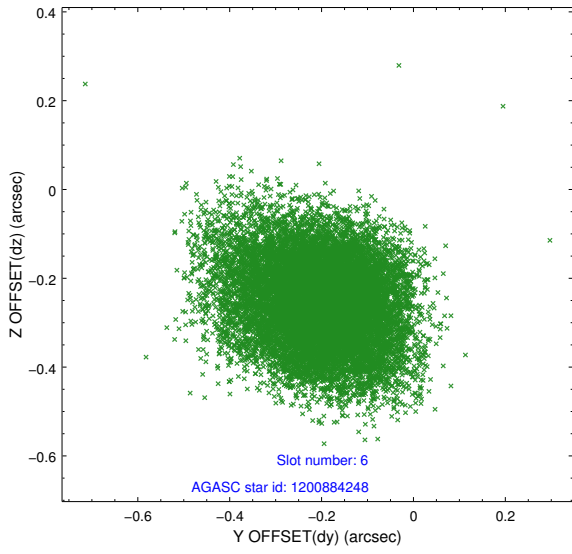
2.4.2 Slot 4



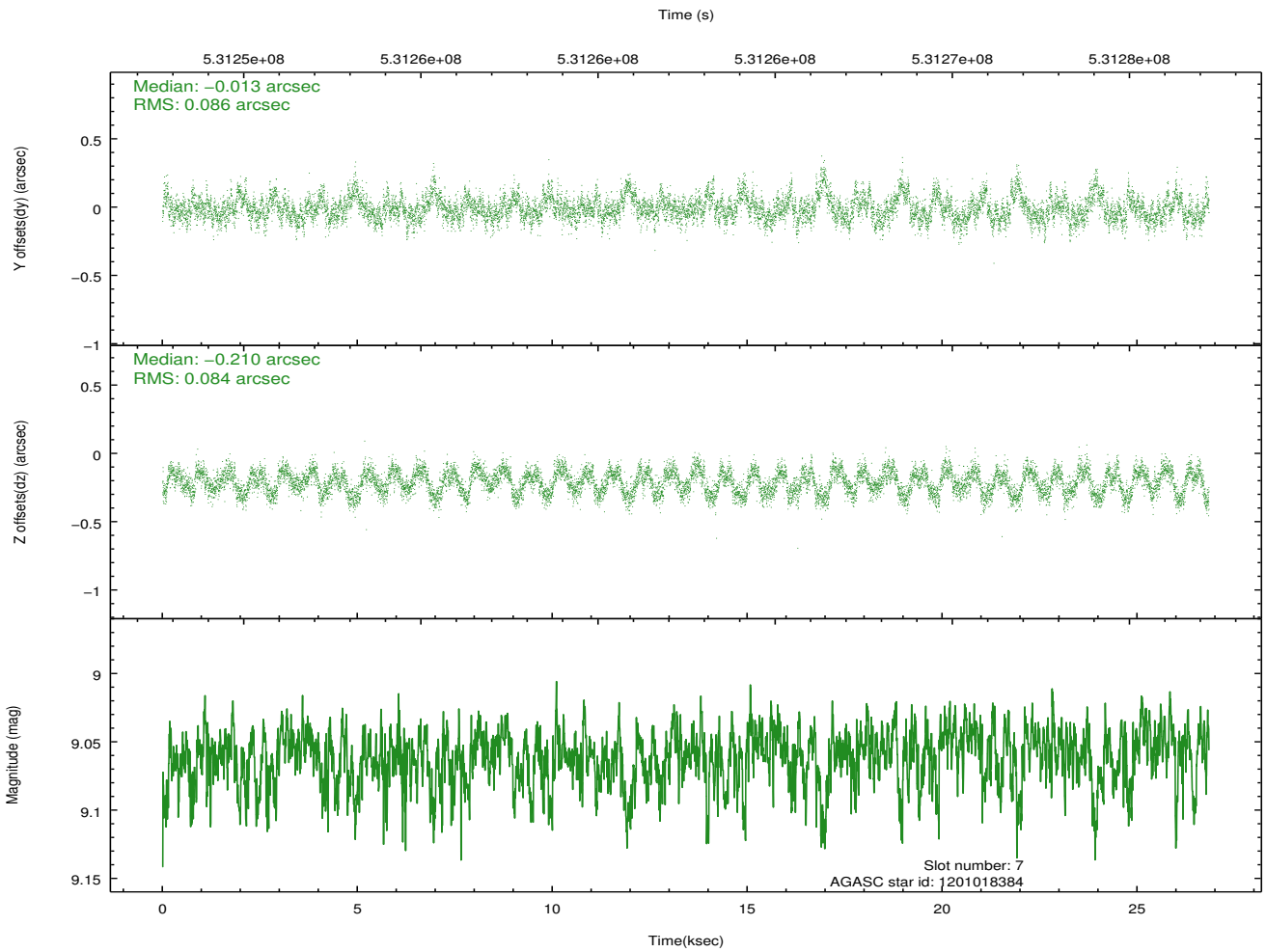
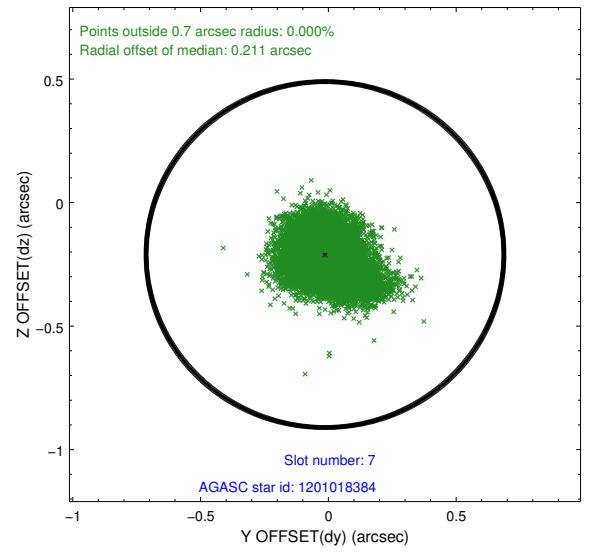
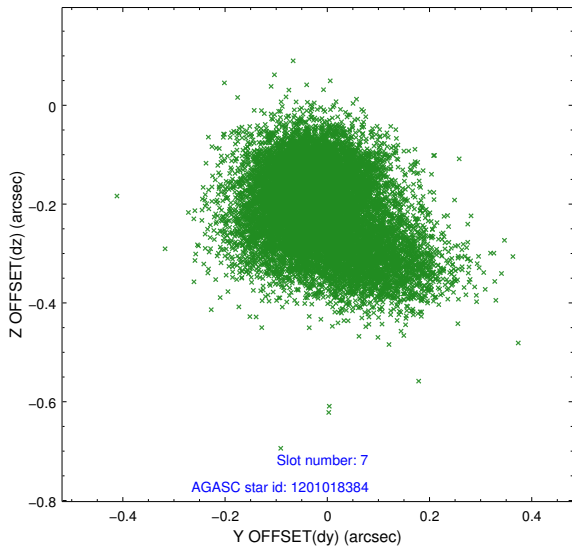
2.4.3 Slot 5



2.4.4 Slot 6

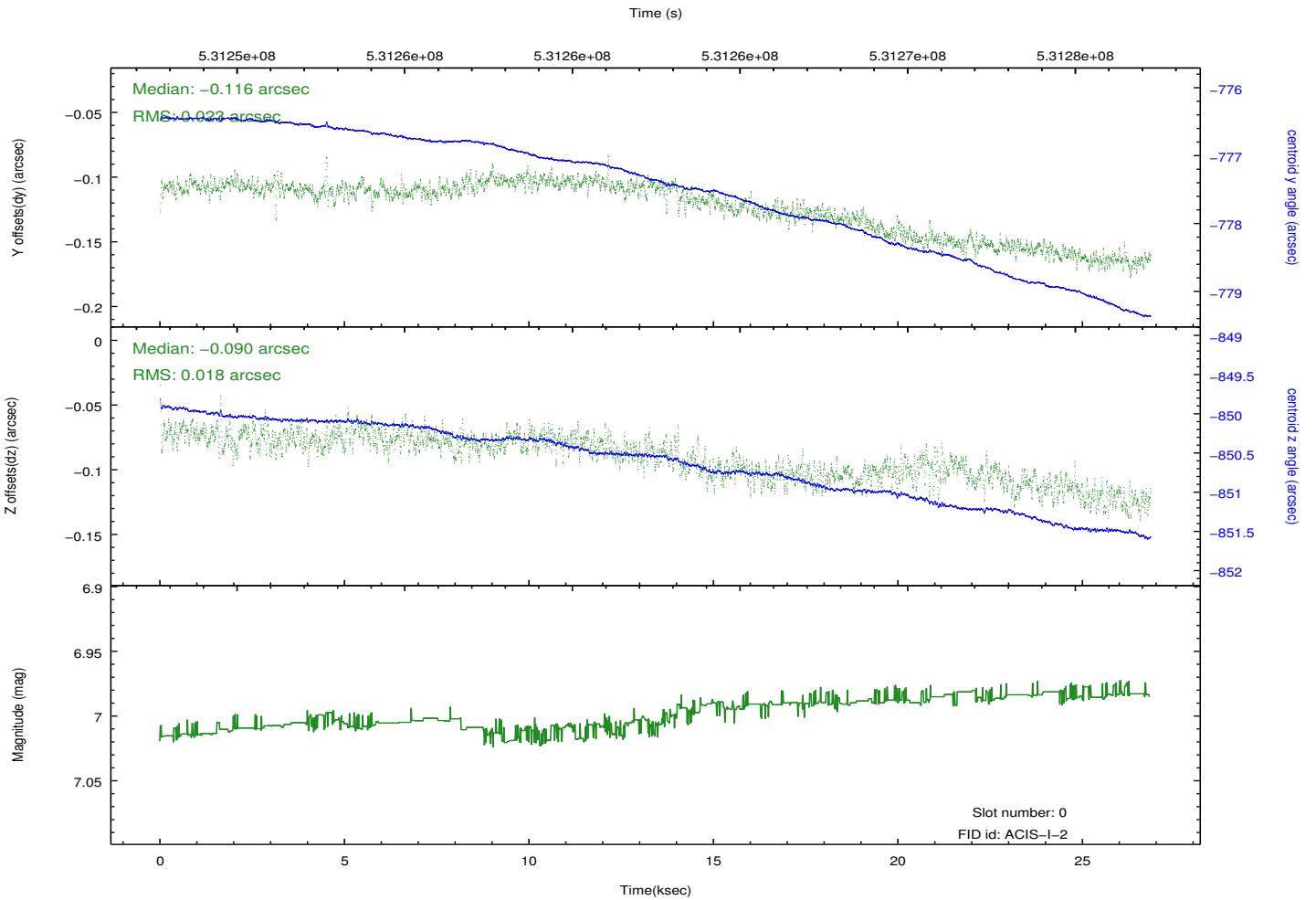
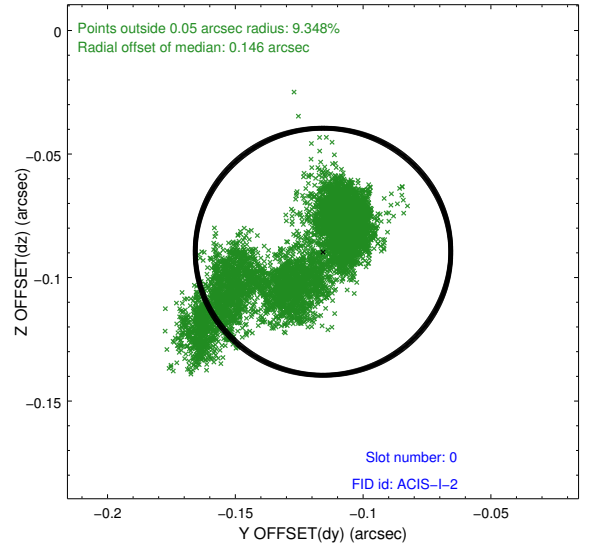
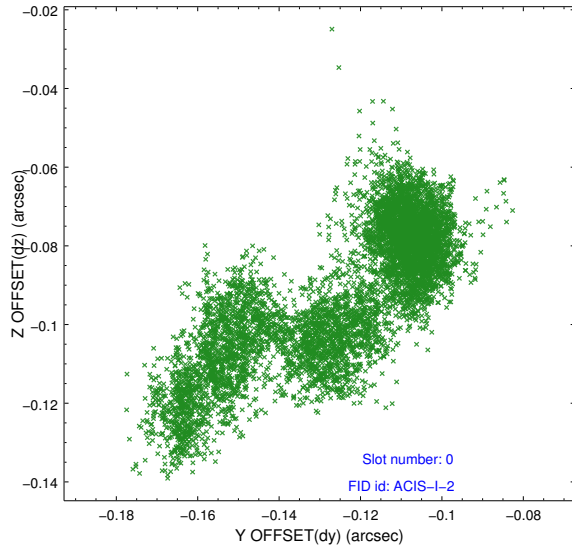


2.4.5 Slot 7

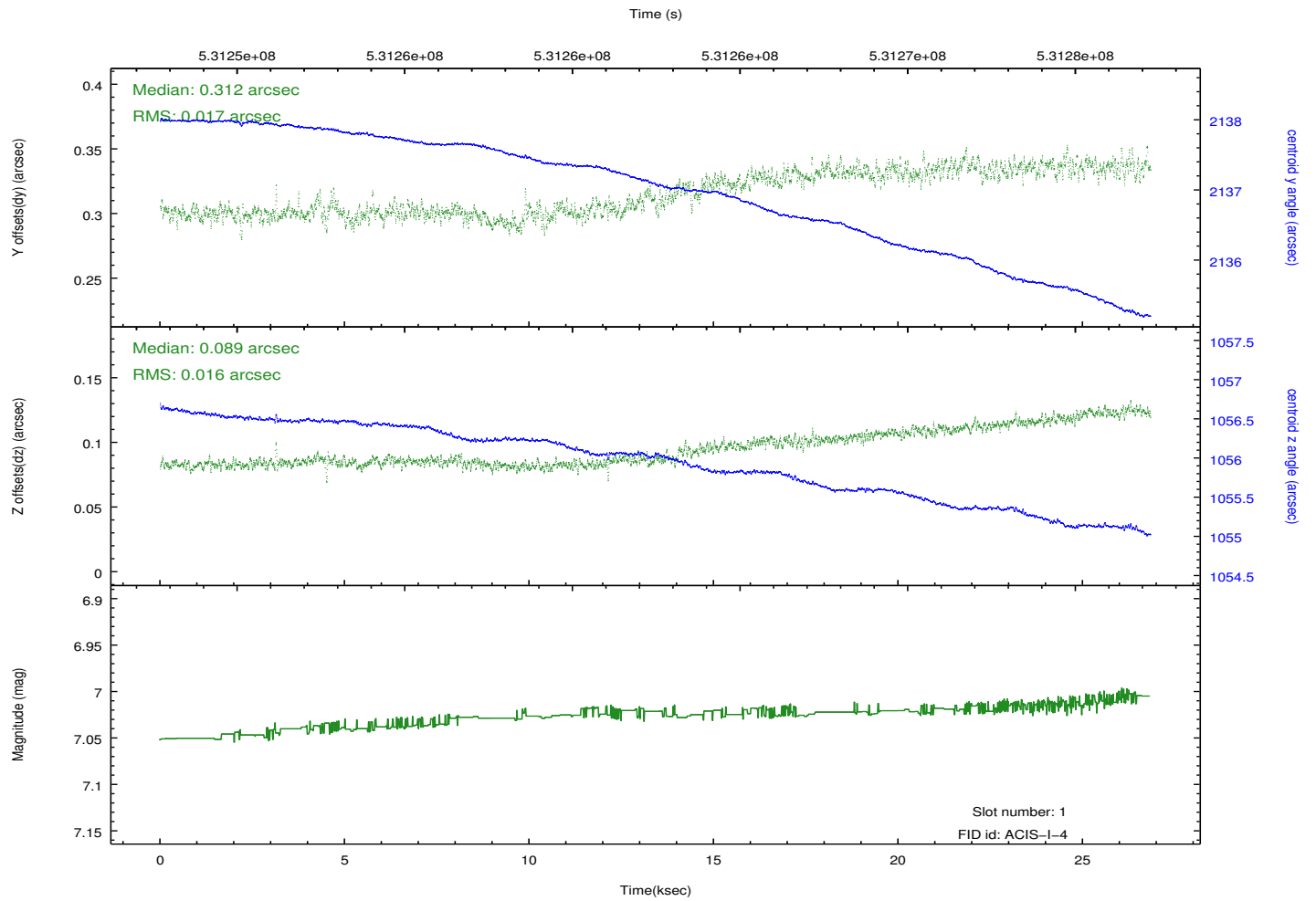
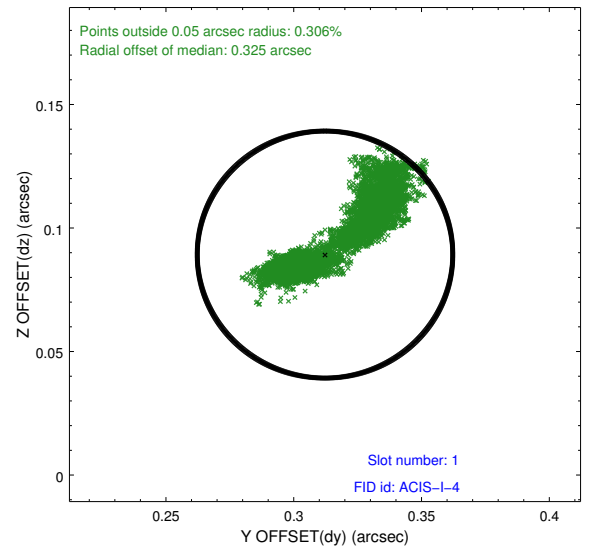
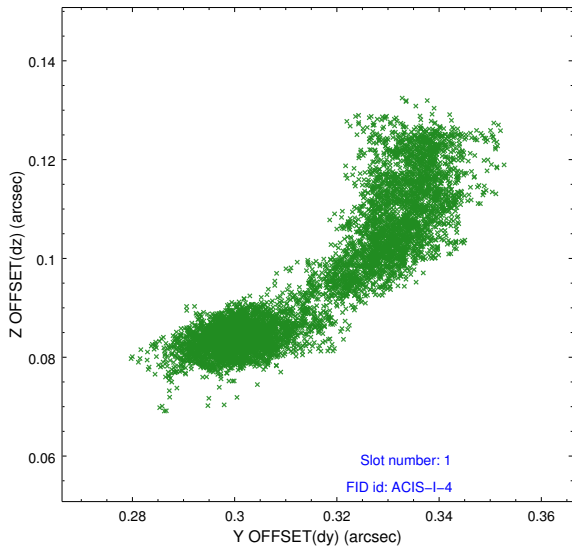


2.5 FID Slots

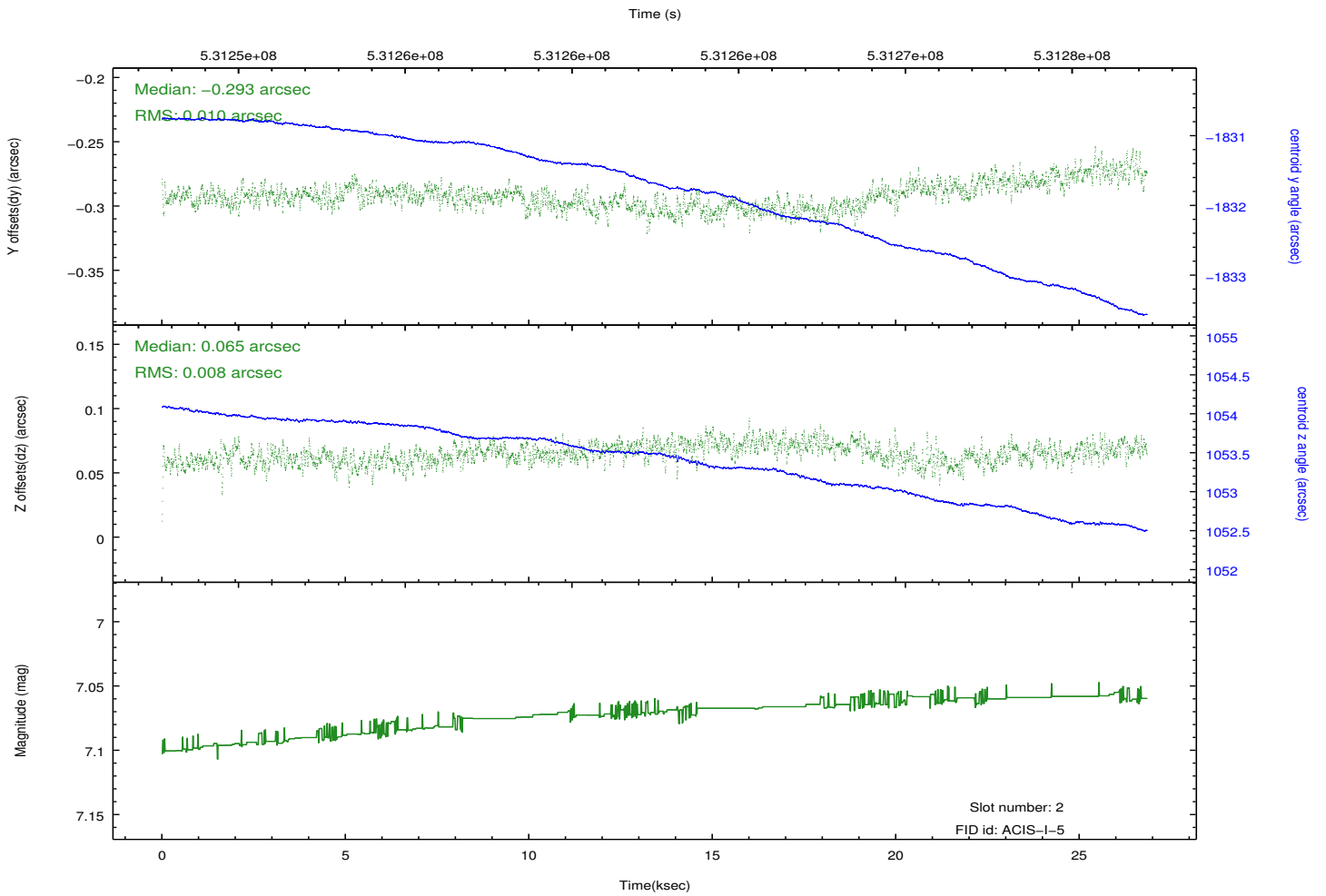
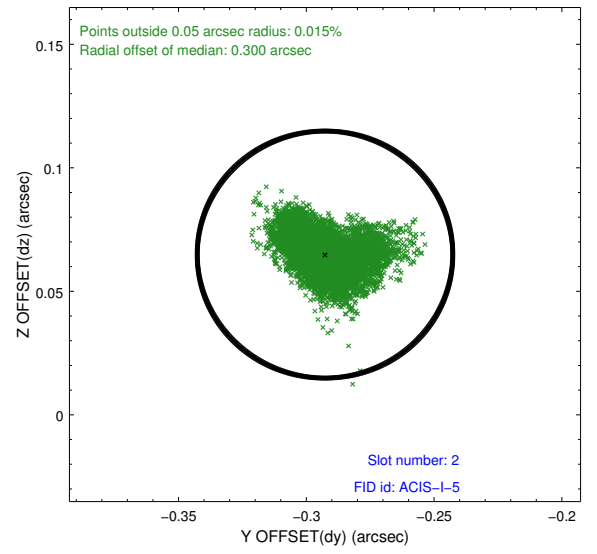
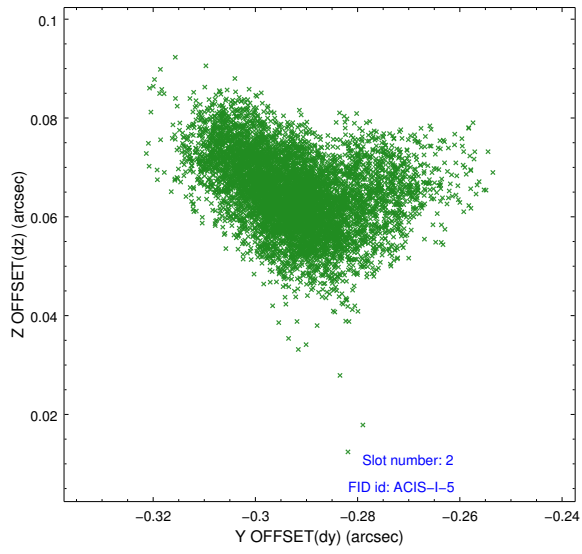
2.5.1 Slot 0



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)	2014.11.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.970966317832

A.2 Comments