

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15130 - L2 Version 2
Chandra X-Ray Center

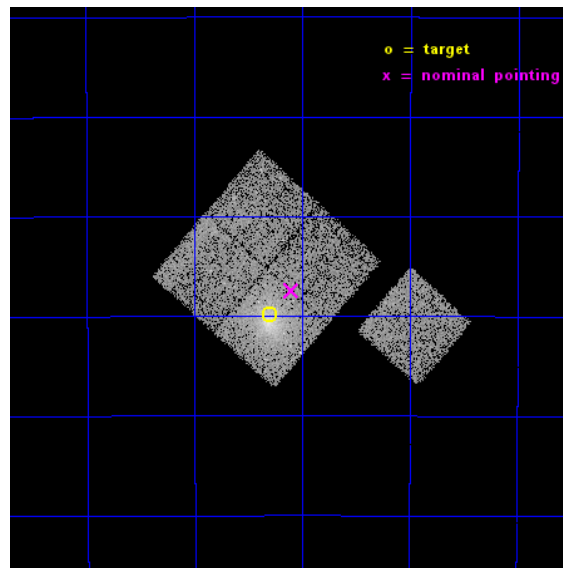
L2 Processing Date : Dec 10 2014

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

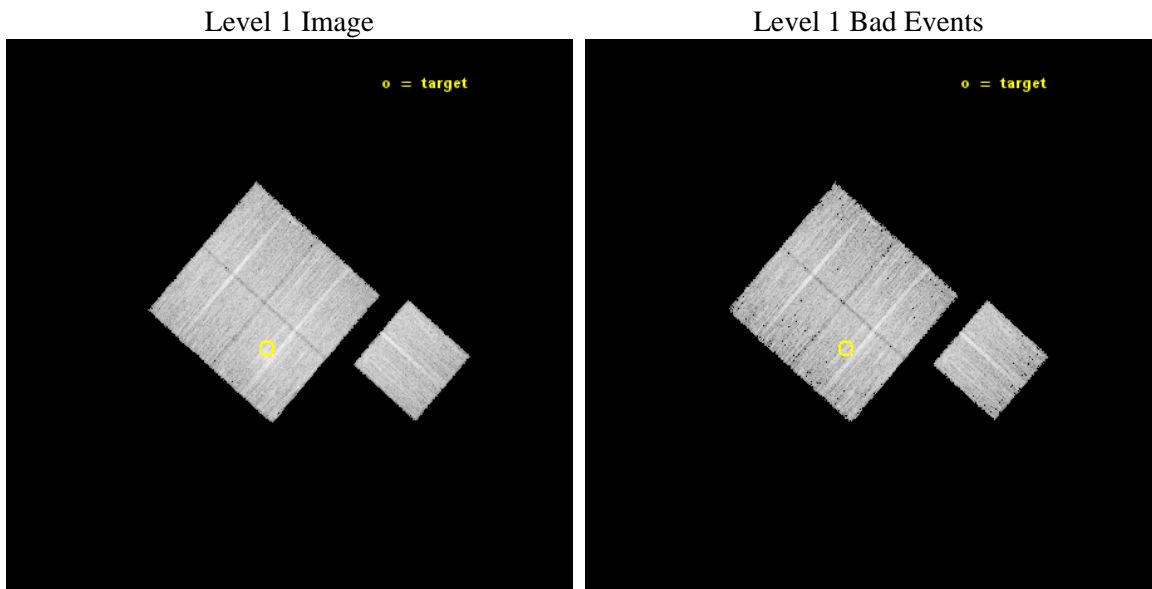
seq_num	801259	Sequence number
obs_id	15130	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G000.44-41.83	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	316.075	Observer's specified target RA [deg]
dec_targ	-41.33	Observer's specified target Dec [deg]
ra_nom	316.0249996328	Nominal RA [deg]
dec_nom	-41.290626310439	Nominal Dec [deg]
roll_nom	131.2852973846	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14080.159147918	Sum of GTIs [s]
livetime	13896.191502988	Livetime [s]
ontime0	14083.300108314	Sum of GTIs [s]
ontime1	14083.300108314	Sum of GTIs [s]
ontime2	14080.159147918	Sum of GTIs [s]
ontime3	14080.159147918	Sum of GTIs [s]
ontime6	14083.300108314	Sum of GTIs [s]
l2events	42685	Number of level 2 events



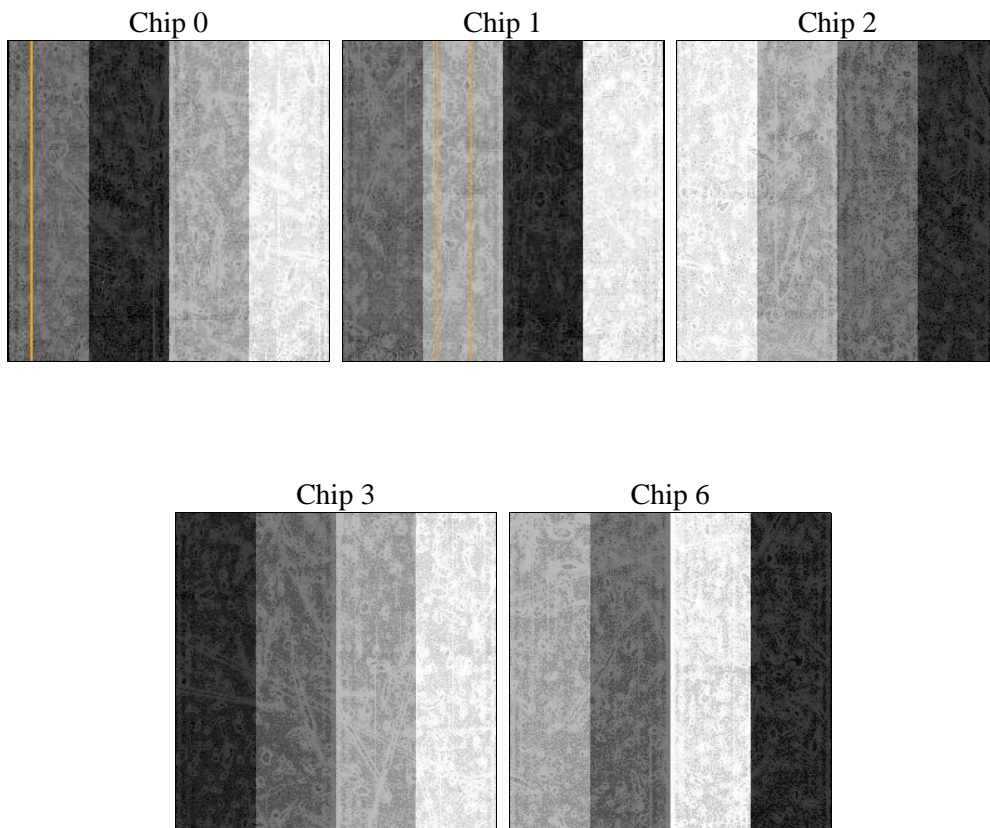
2 OBI

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	10.3.1	Processing system revision	ontime	14080.159147918	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	14083.300108314	Sum of GTIs [s]
date	2014-12-10T16:22:36	Date and time of file creation	ontime1	14083.300108314	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	14080.159147918	Sum of GTIs [s]
			ontime3	14080.159147918	Sum of GTIs [s]
			ontime6	14083.300108314	Sum of GTIs [s]
			l1events	321355	Number of level 1 events

2.1.4 Events

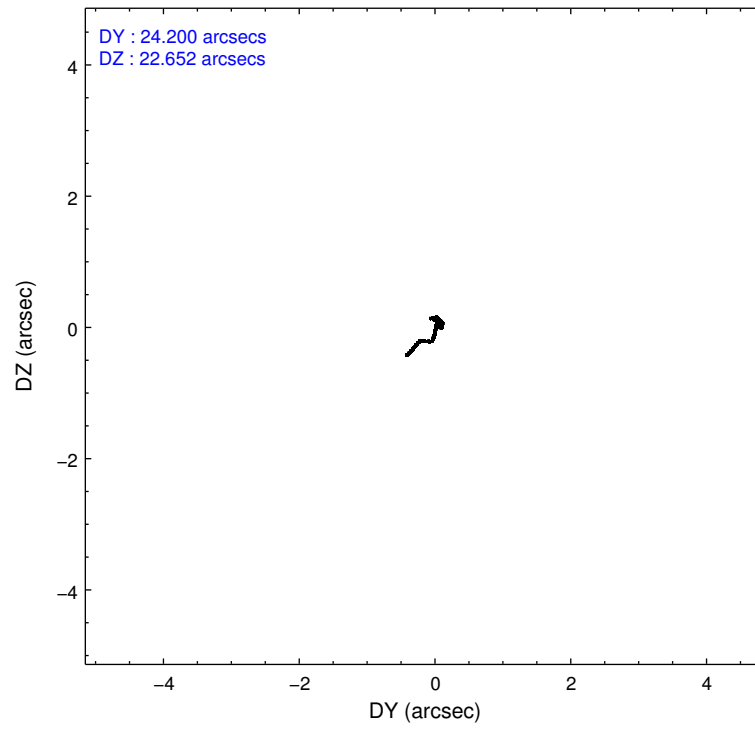
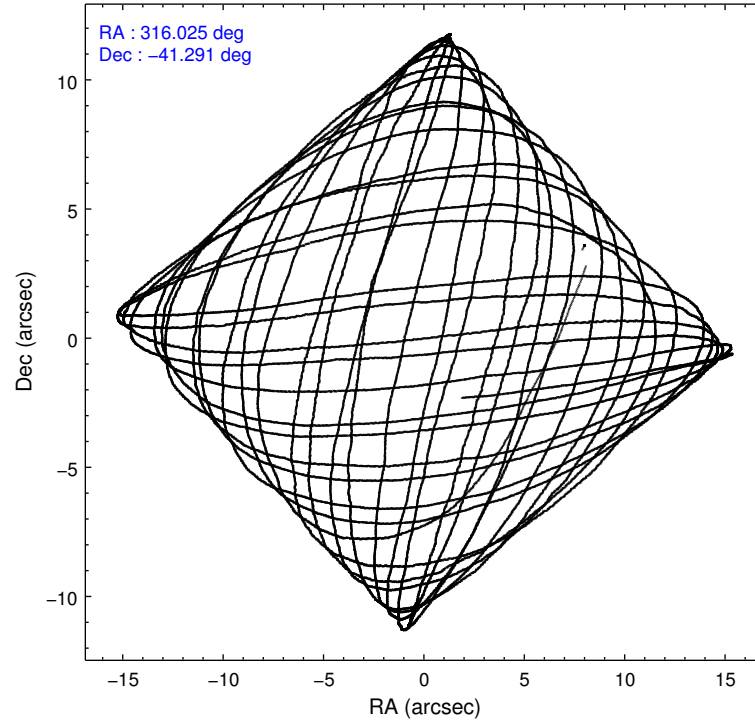
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	60112	61731	63953	72943	62616
rejected events	51877	52729	55954	57231	54466
rejected %	86%	85%	87%	78%	86%

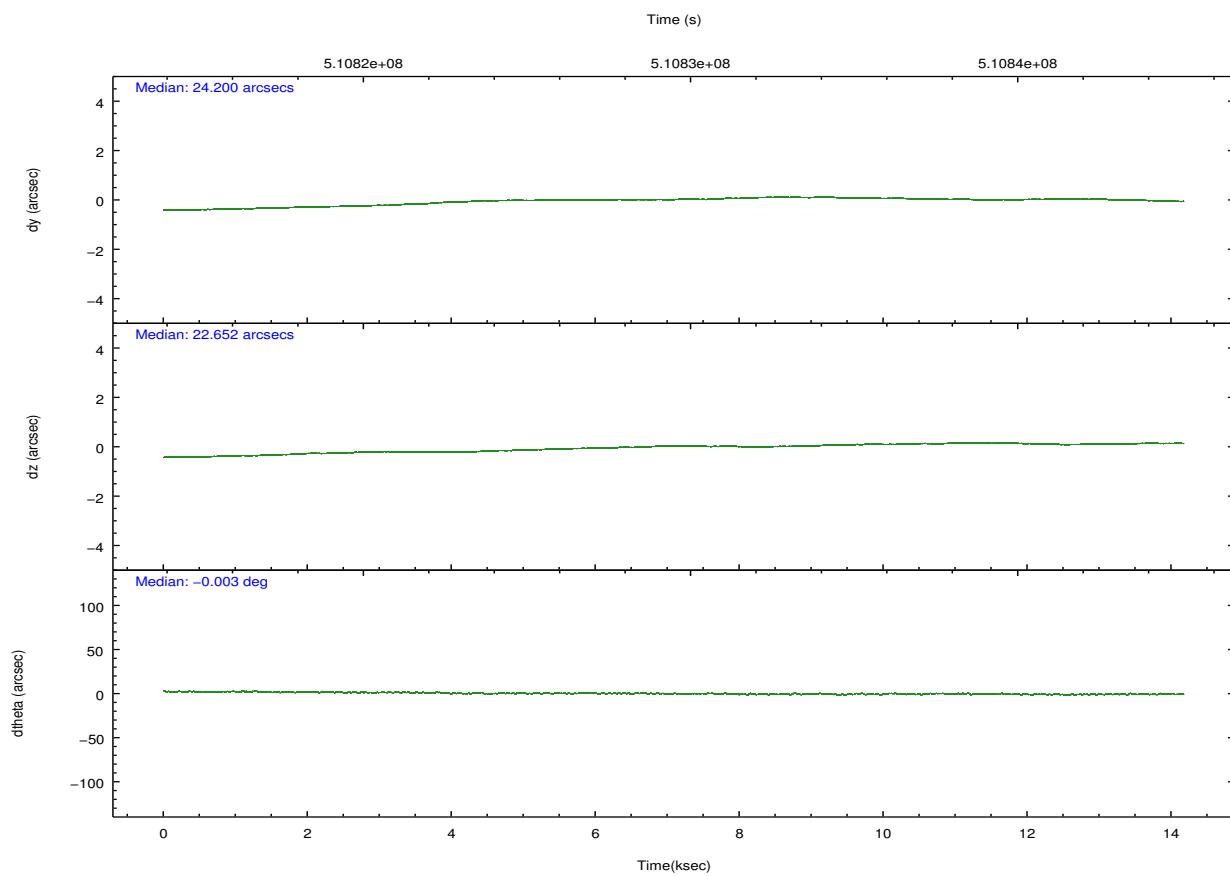
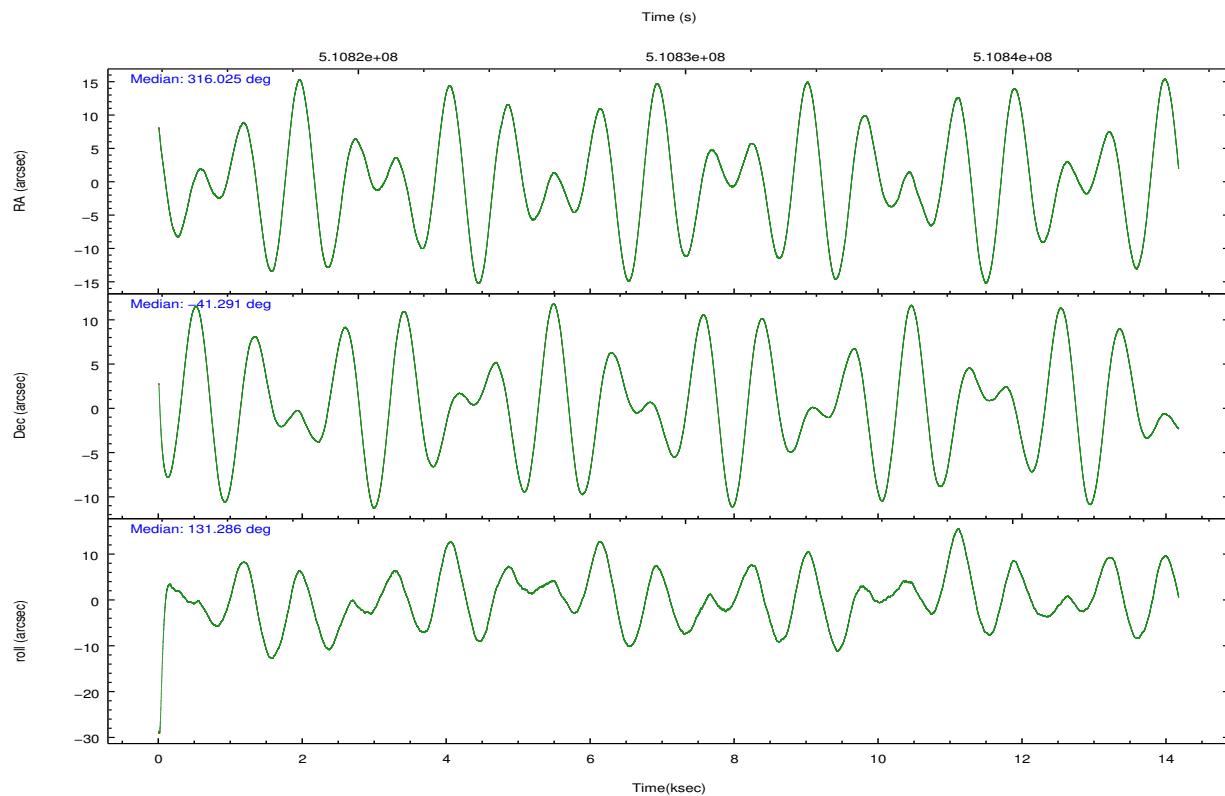
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3007	3174	3020	9381	2752
	5%	5%	4%	12%	4%
grade 1 events	34	37	32	61	31
	0%	0%	0%	0%	0%
grade 2 events	1992	2276	1889	2475	1785
	3%	3%	2%	3%	2%
grade 3 events	824	832	745	1056	868
	1%	1%	1%	1%	1%
grade 4 events	760	799	814	1041	853
	1%	1%	1%	1%	1%
grade 5 events	3140	3255	2982	3494	3394
	5%	5%	4%	4%	5%
grade 6 events	1657	1922	1534	1763	1898
	2%	3%	2%	2%	3%
grade 7 events	48698	49436	52937	53672	51035
	81%	80%	82%	73%	81%

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	316.059704	316.0249996327956	CCD I2 on	Y	Y
[deg] Pointing Dec	-41.299330	-41.29062631043908	CCD I3 on	Y	Y
[deg] Pointing Roll	131.099554	131.285297384598	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	510822834.184000	510821706.74362	CCD S5 on	N	N
Observation start date	2014-03-10T07:12:47	2014-03-10T06:55:06	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	510836834.184000	510837725.4445	On-chip summing requested	N	N
Observation end date	2014-03-10T11:06:07	2014-03-10T11:22:05	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



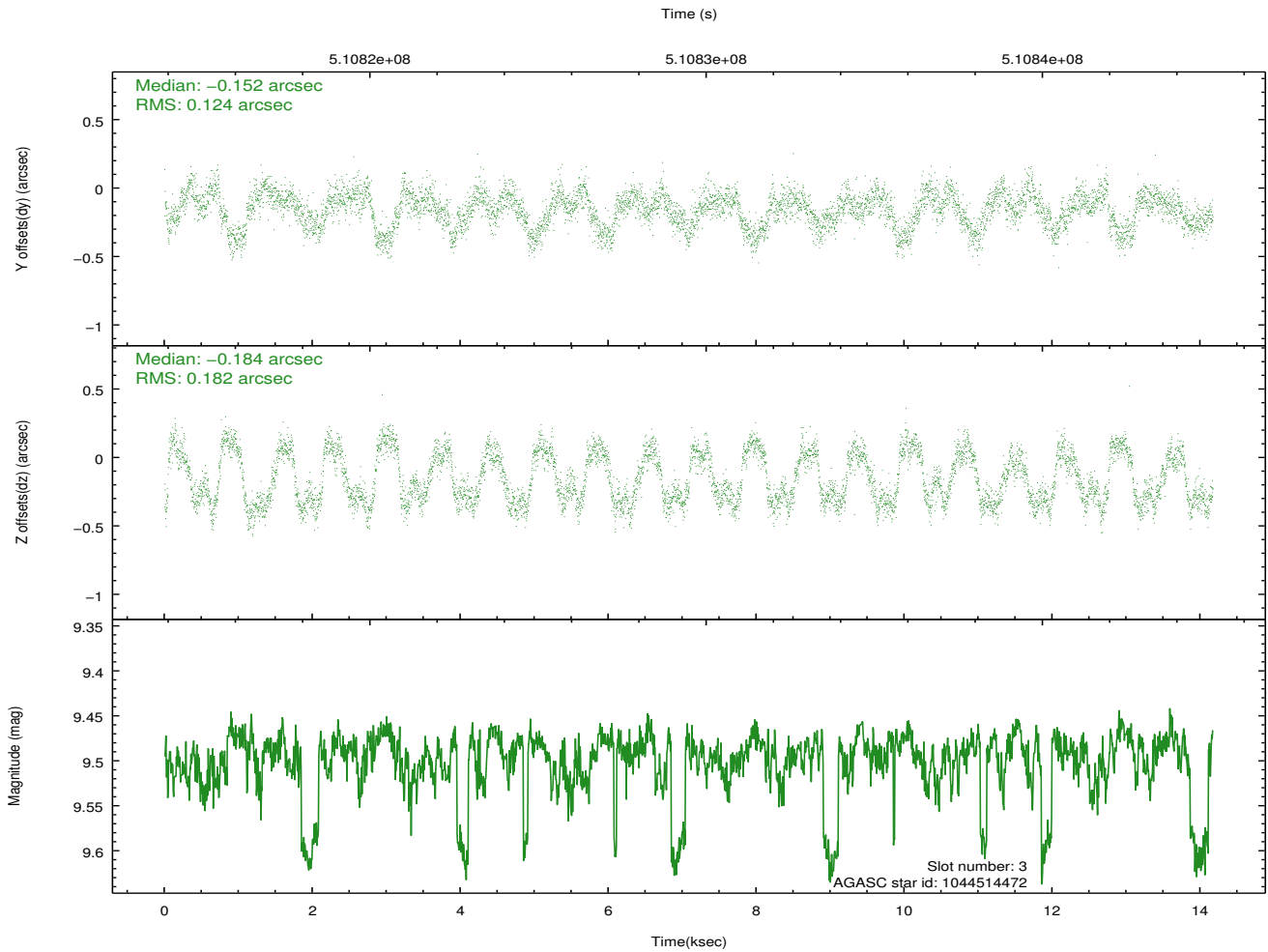
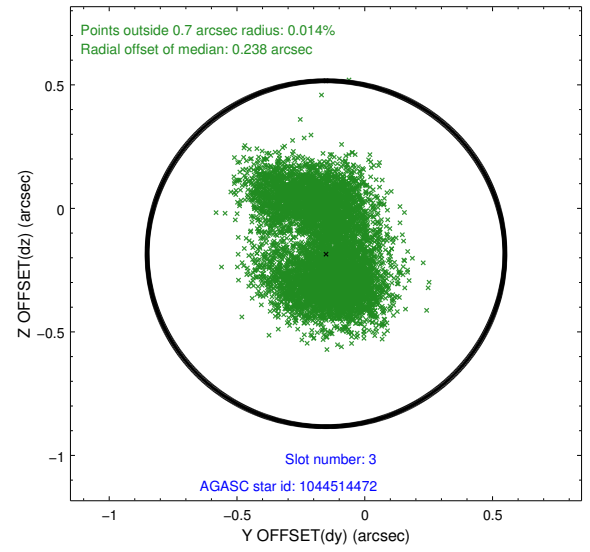
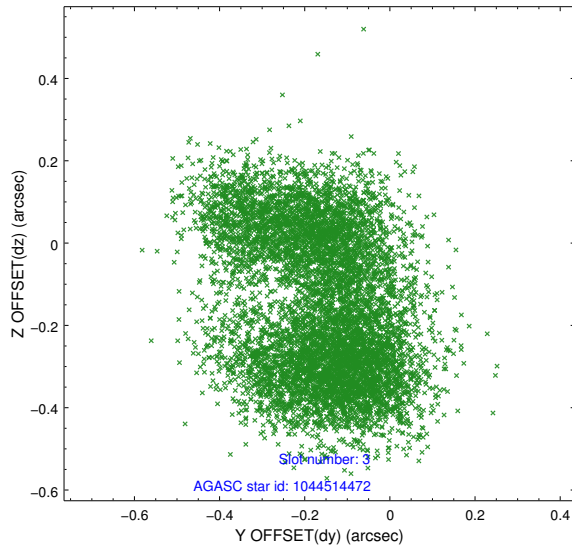


Slot Statistics

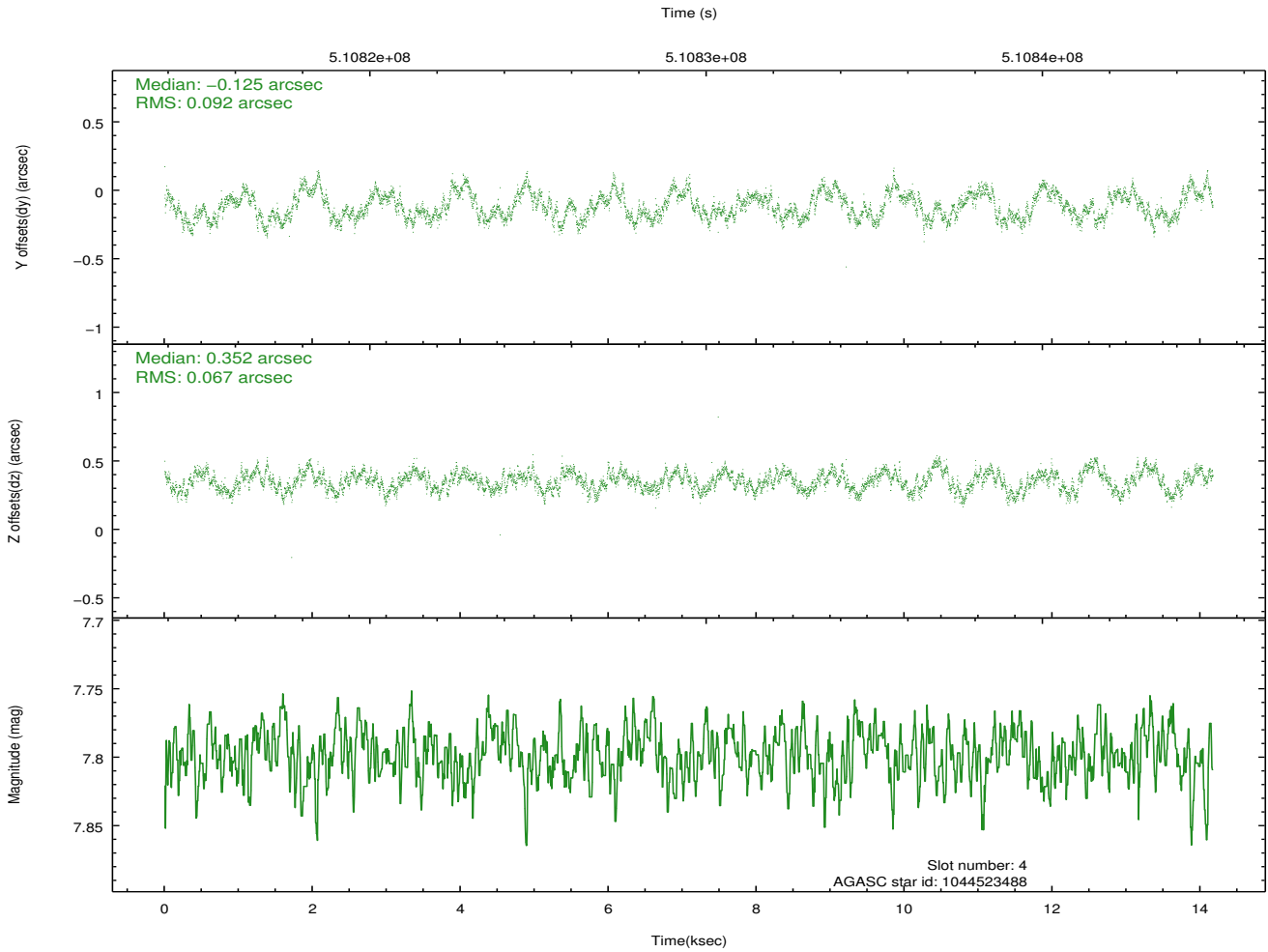
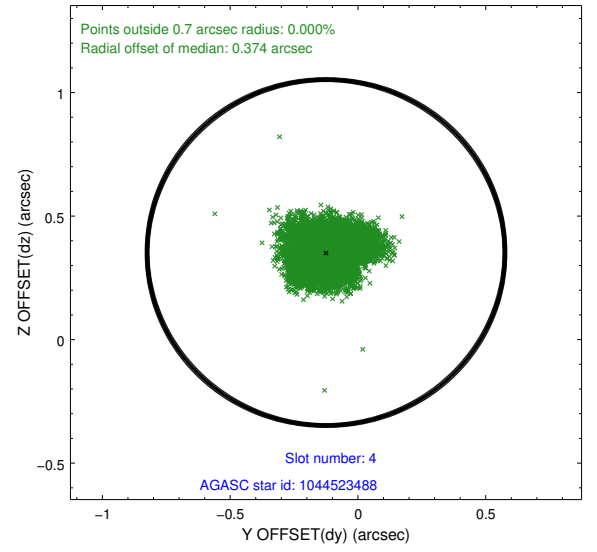
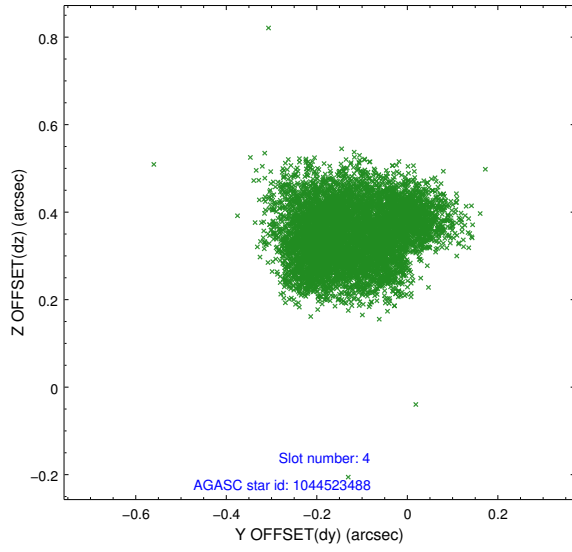
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	3456	0.123	-0.052	0.012	0.023	0.000000	0.000000	915.07	-1005.50
1	FID		ACIS-I-5	7.06	3456	-0.358	0.088	0.008	0.013	0.000000	0.000000	-1833.38	891.86
2	FID		ACIS-I-6	7.07	3456	0.142	0.037	0.009	0.014	0.000000	0.000000	380.21	1536.74
3	GUIDE	used	1044514472	9.50	6910	-0.152	-0.184	0.239	0.361	315.312243	-40.949783	2276.89	710.59
4	GUIDE	used	1044523488	7.80	6912	-0.125	0.352	0.124	0.183	315.953746	-40.690772	1841.43	-1221.05
5	GUIDE	used	1045041792	9.69	6906	0.347	-0.198	0.179	0.280	315.901477	-42.089187	-1864.21	2188.06
6	GUIDE	used	1045046656	8.02	6911	0.284	0.368	0.122	0.210	316.653823	-41.384614	-1290.46	-1002.57
7	GUIDE	used	1045046624	9.48	6904	-0.357	-0.378	0.168	0.255	315.067302	-41.416846	1430.34	2307.13

2.4 Star Slots

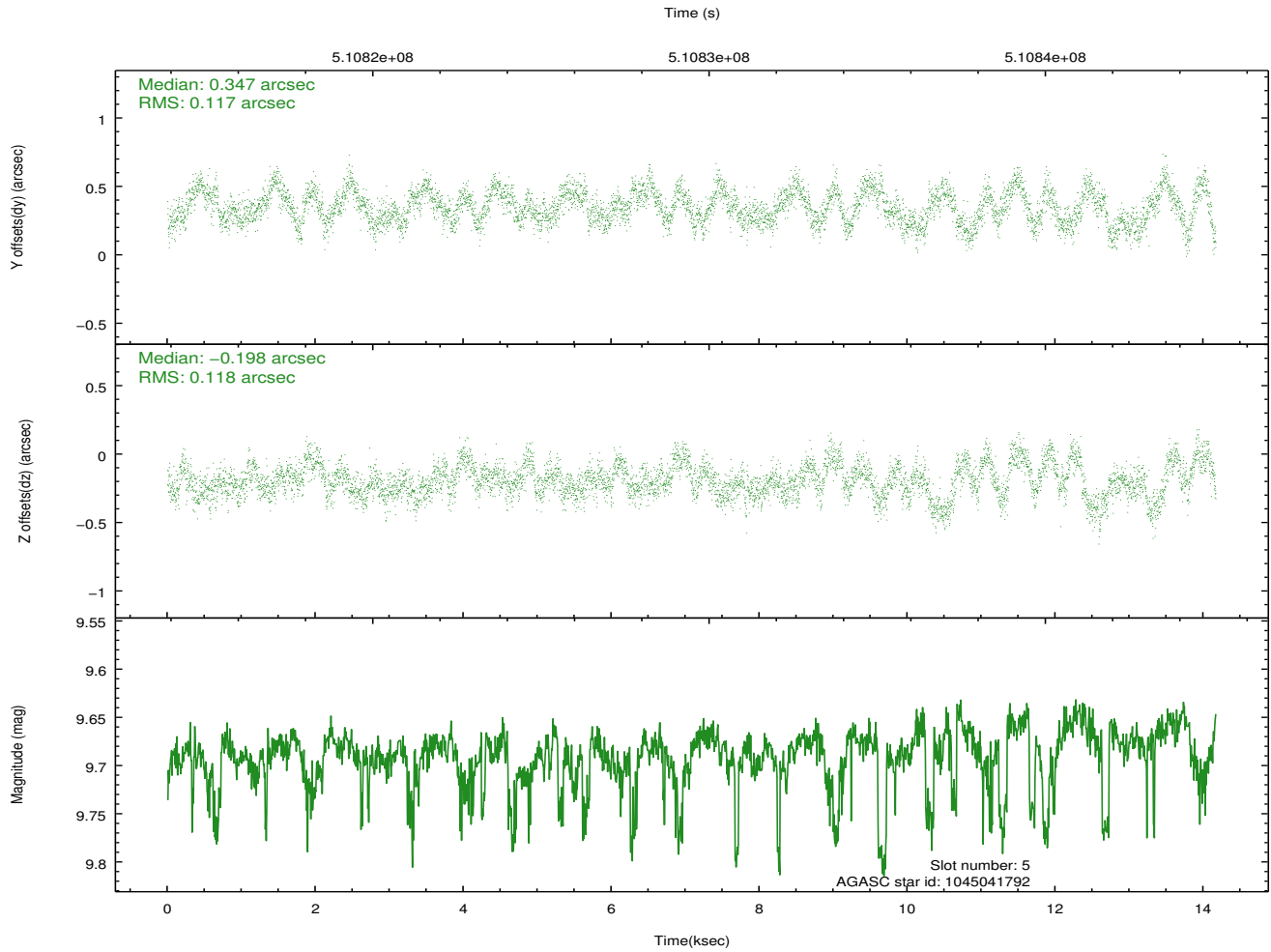
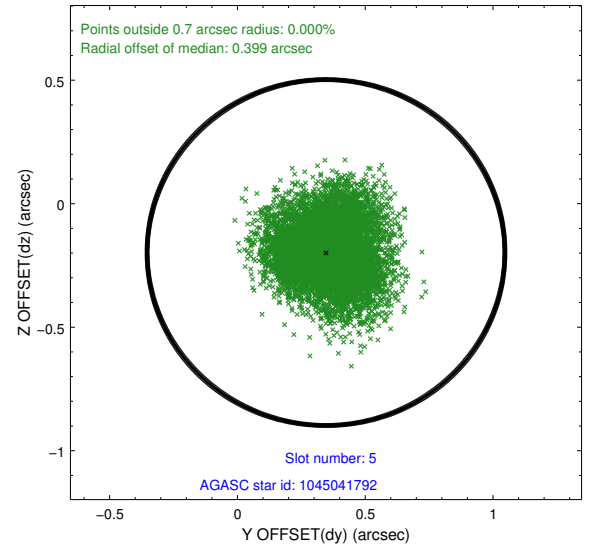
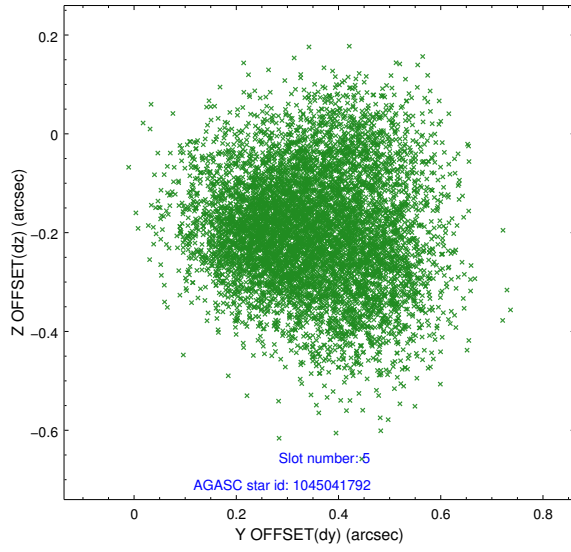
2.4.1 Slot 3



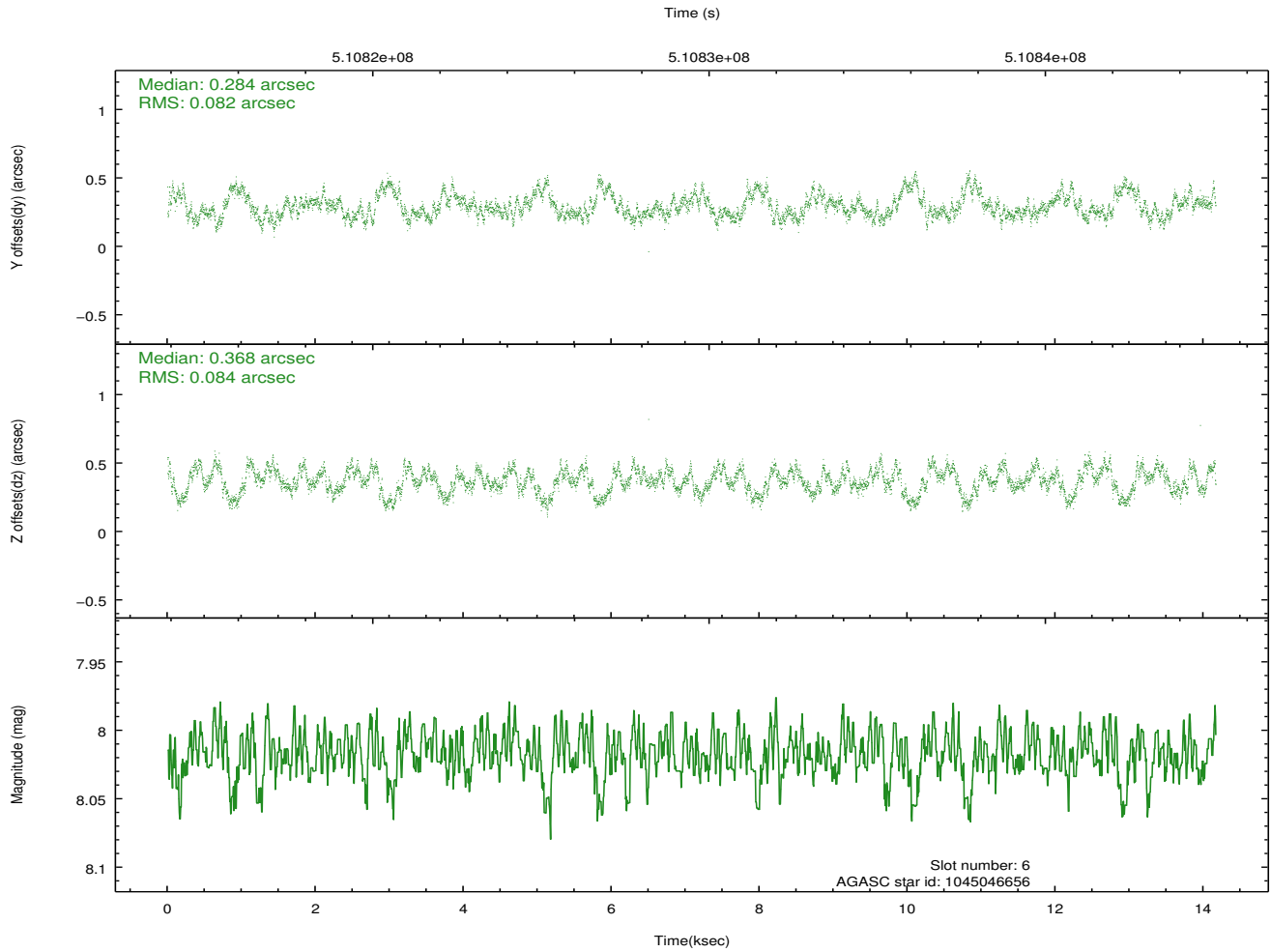
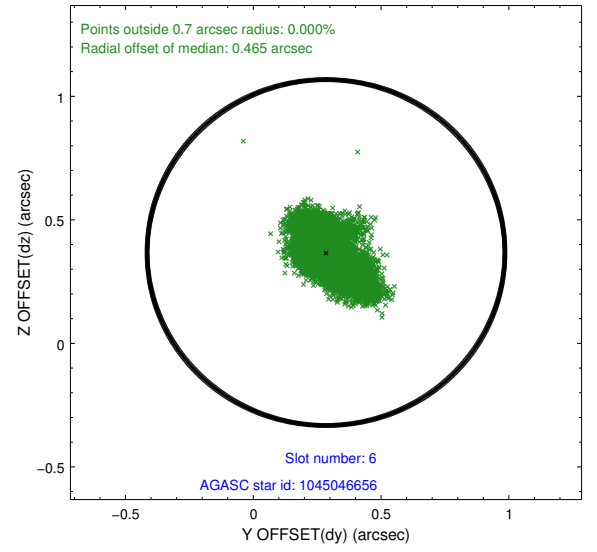
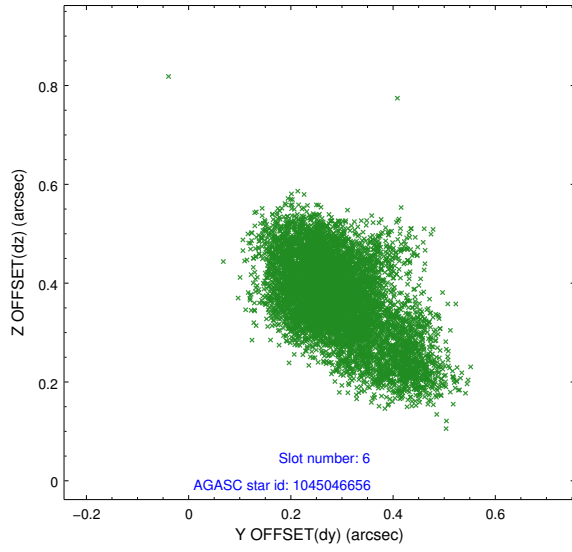
2.4.2 Slot 4



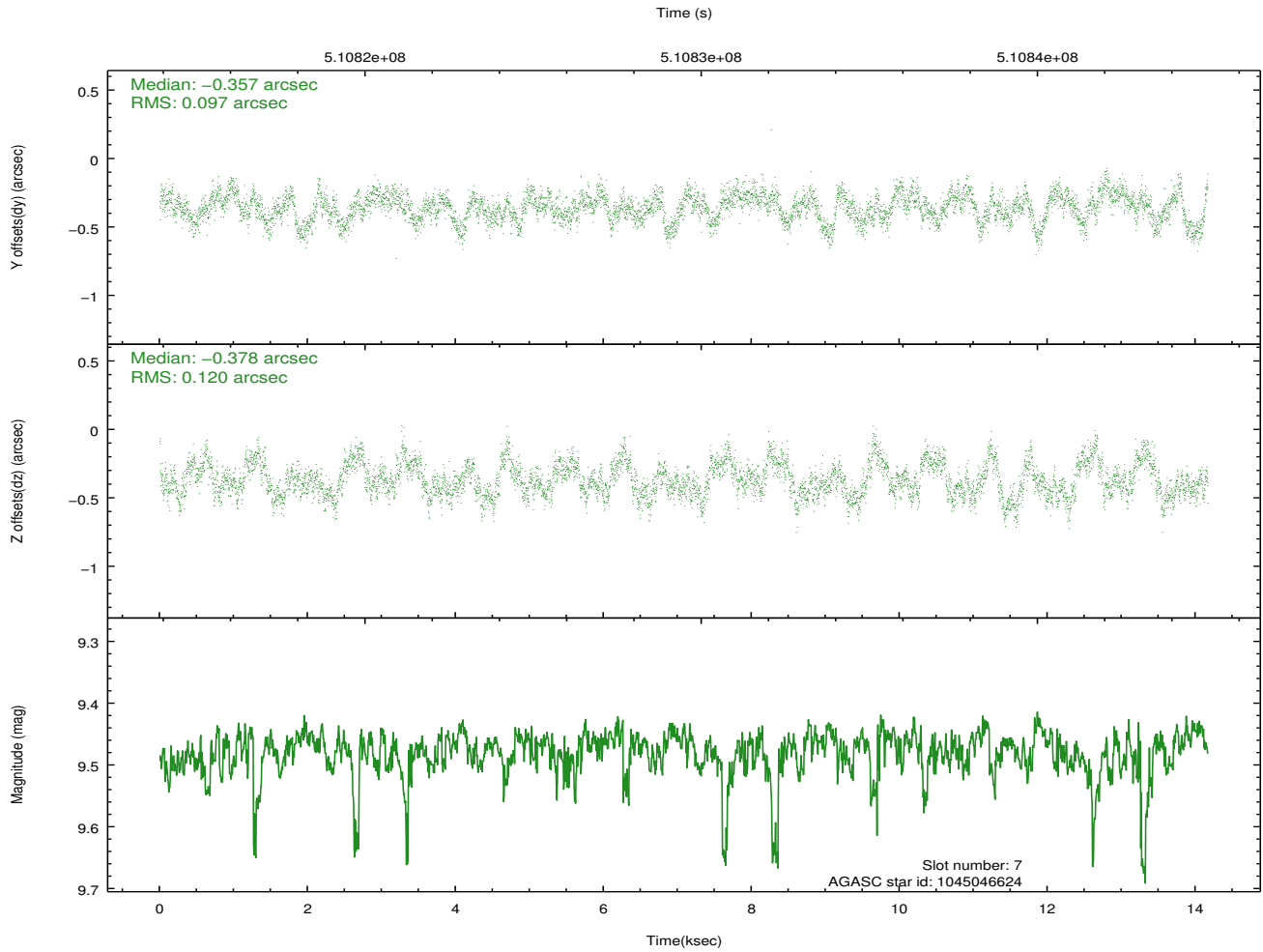
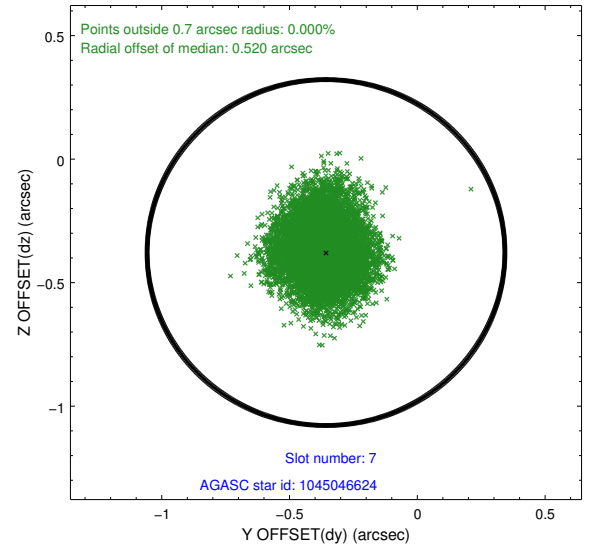
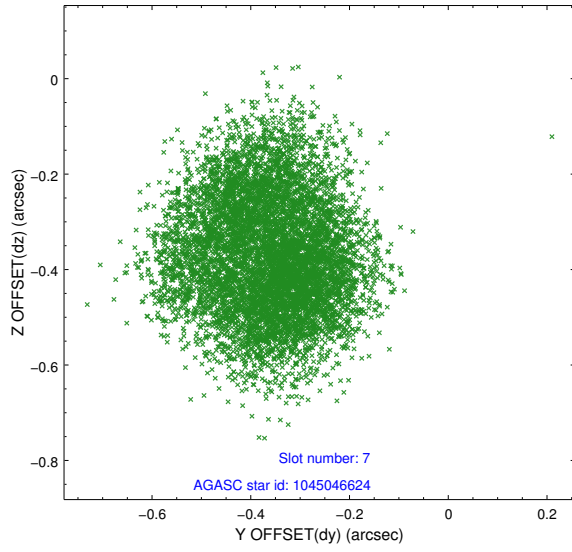
2.4.3 Slot 5



2.4.4 Slot 6

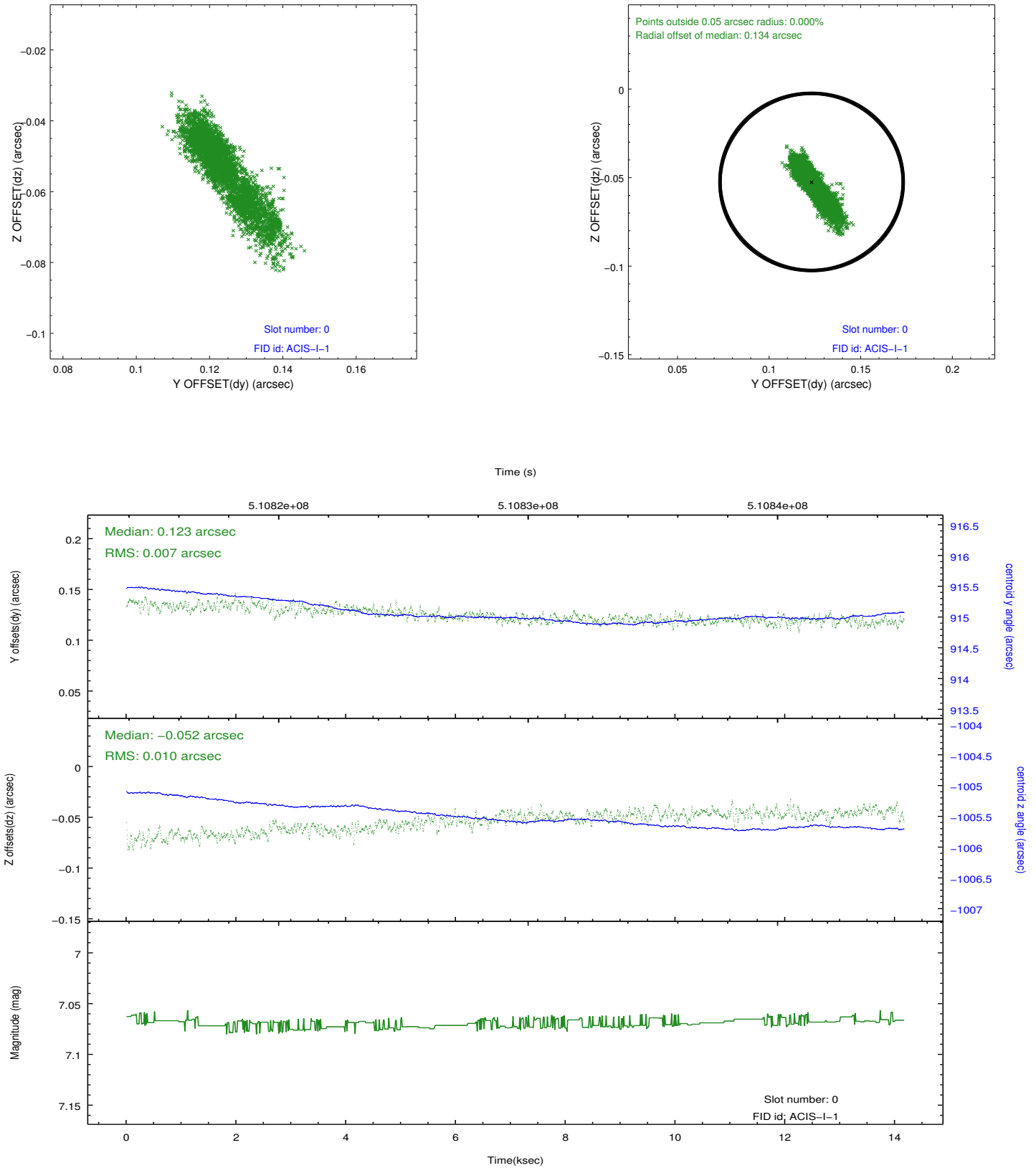


2.4.5 Slot 7

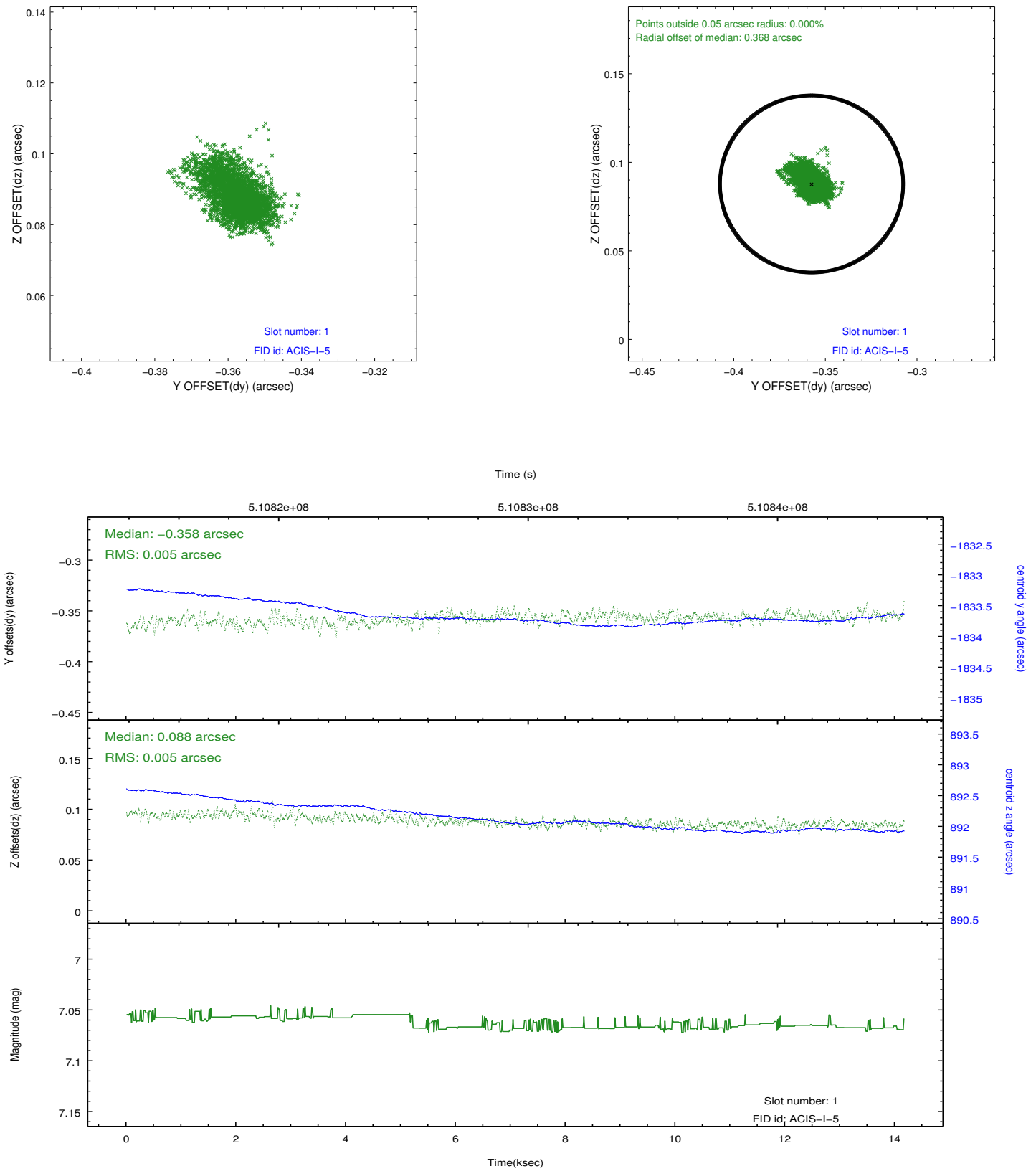


2.5 FID Slots

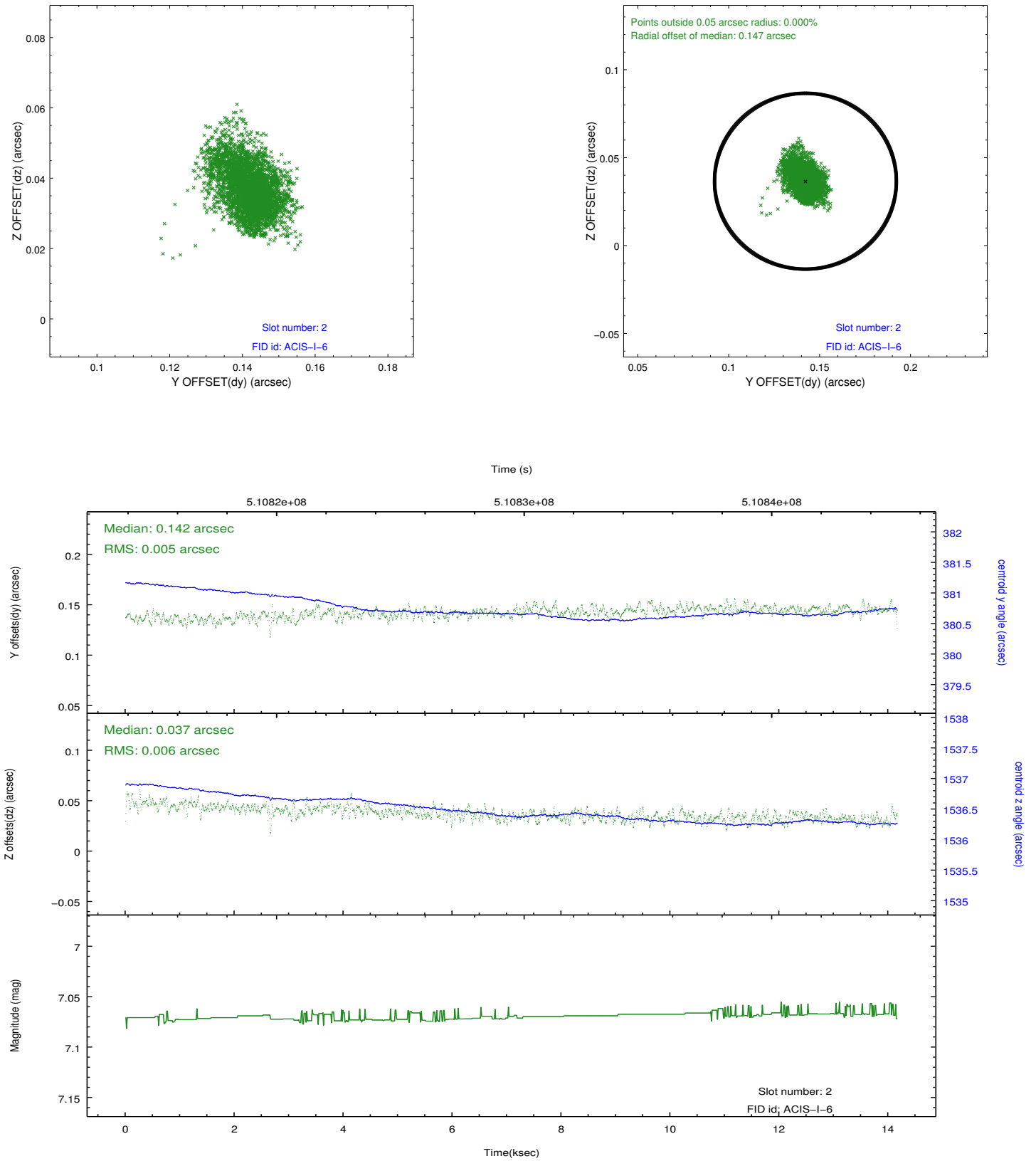
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.080159147918

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.