

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15140 - L2 Version 2
Chandra X-Ray Center

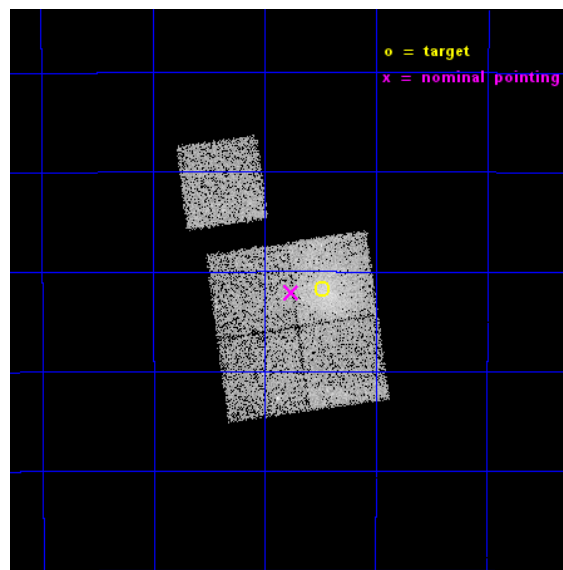
L2 Processing Date : Dec 10 2014

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1 Front

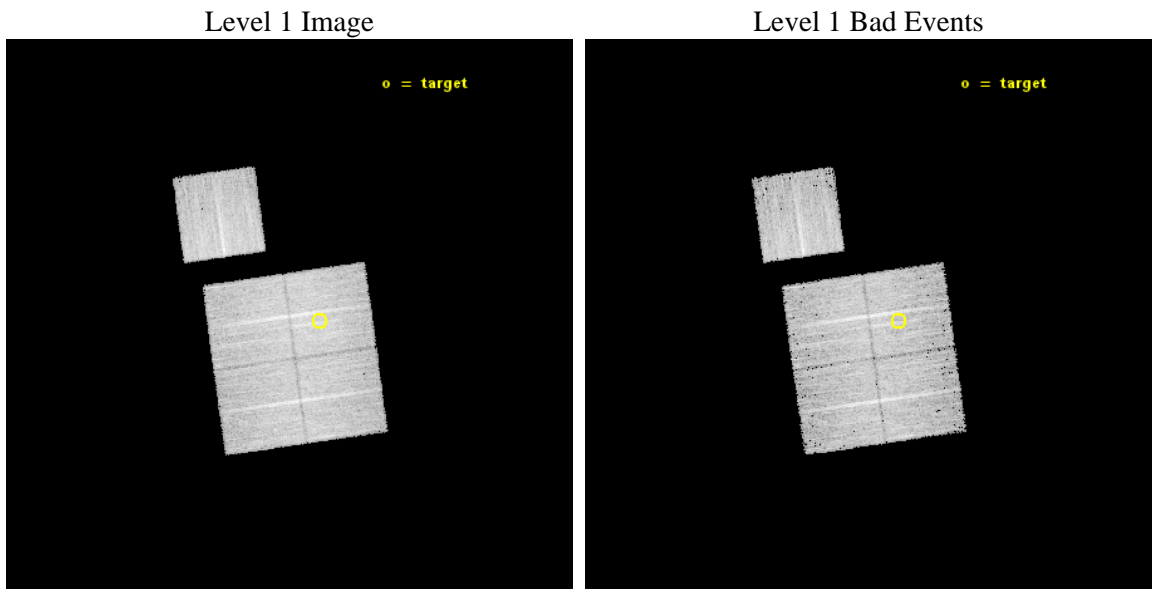
seq_num	801269	Sequence number
obs_id	15140	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G295.33+23.33	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	183.87	Observer's specified target RA [deg]
dec_targ	-39.029722	Observer's specified target Dec [deg]
ra_nom	183.9397793293	Nominal RA [deg]
dec_nom	-39.035104334178	Nominal Dec [deg]
roll_nom	351.99043657549	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15170.084420323	Sum of GTIs [s]
livetime	14971.876099318	Livetime [s]
ontime0	15173.102290809	Sum of GTIs [s]
ontime1	15173.143330812	Sum of GTIs [s]
ontime2	15173.184370816	Sum of GTIs [s]
ontime3	15170.084420323	Sum of GTIs [s]
ontime6	15173.061250806	Sum of GTIs [s]
l2events	45003	Number of level 2 events



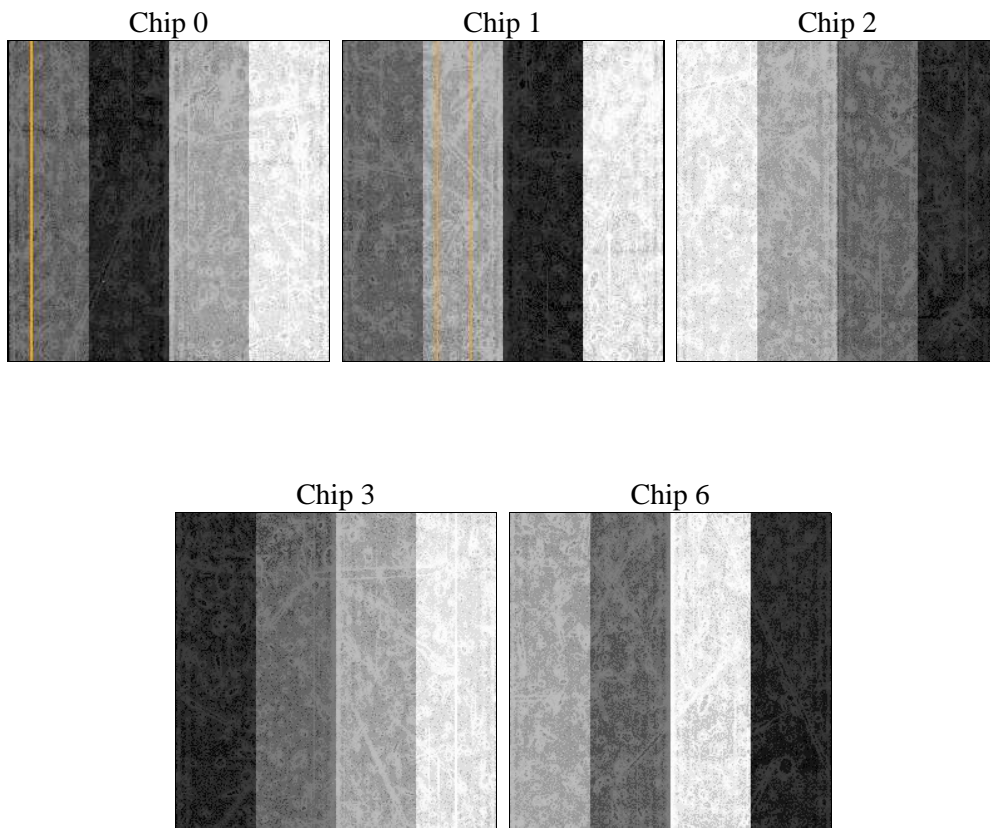
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15400.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	15170.084420323	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	15173.102290809	Sum of GTIs [s]
date	2014-12-10T19:08:08	Date and time of file creation	ontime1	15173.143330812	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15173.184370816	Sum of GTIs [s]
			ontime3	15170.084420323	Sum of GTIs [s]
			ontime6	15173.061250806	Sum of GTIs [s]
			l1events	340975	Number of level 1 events

2.1.4 Events

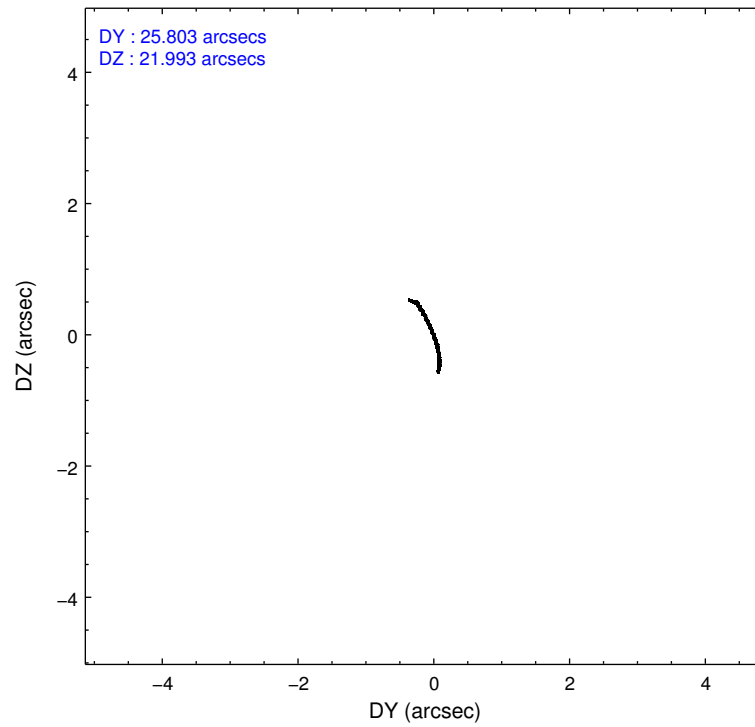
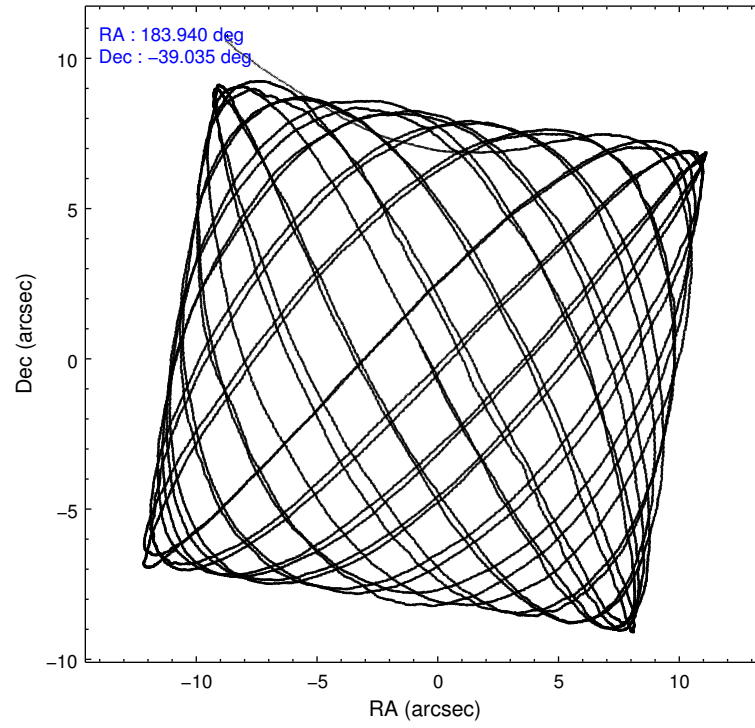
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	63225	64447	69429	74380	69494
rejected events	54597	54595	60248	58935	60861
rejected %	86%	84%	86%	79%	87%

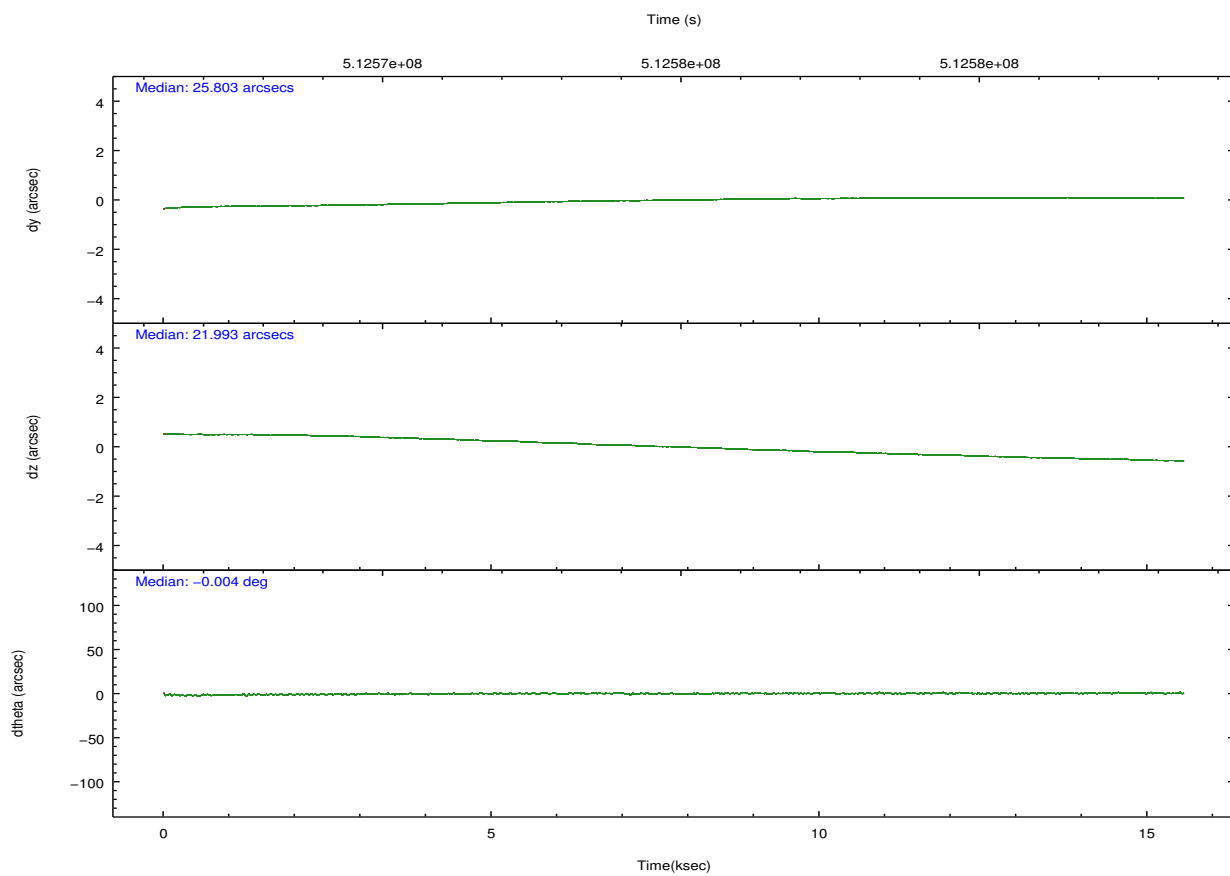
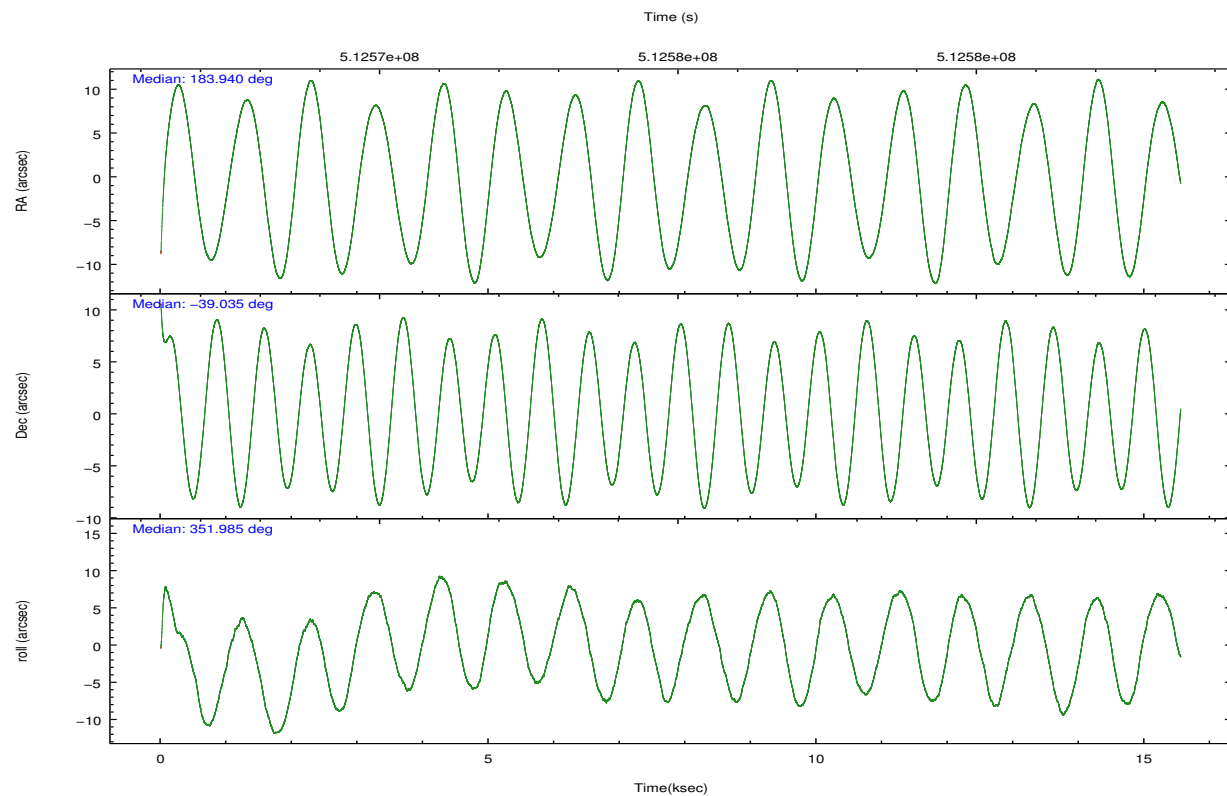
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3072	3744	3623	8770	2923
	4%	5%	5%	11%	4%
grade 1 events	31	25	37	69	34
	0%	0%	0%	0%	0%
grade 2 events	2102	2265	2196	2589	1956
	3%	3%	3%	3%	2%
grade 3 events	874	931	822	1067	917
	1%	1%	1%	1%	1%
grade 4 events	853	899	816	1154	871
	1%	1%	1%	1%	1%
grade 5 events	3402	3575	3105	3822	3675
	5%	5%	4%	5%	5%
grade 6 events	1728	2017	1726	1868	1972
	2%	3%	2%	2%	2%
grade 7 events	51163	50991	57104	55041	57146
	80%	79%	82%	73%	82%

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	183.906953	183.9397793293008	CCD I2 on	Y	Y
[deg] Pointing Dec	-39.045507	-39.03510433417781	CCD I3 on	Y	Y
[deg] Pointing Roll	351.761074	351.9904365754854	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)	512567266.184000	512566179.9647	CCD S5 on	N	N
Observation start date	2014-03-30T11:46:39	2014-03-30T11:29:39	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	512582666.184000	512584146.16569	On-chip summing requested	N	N
Observation end date	2014-03-30T16:03:19	2014-03-30T16:29:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



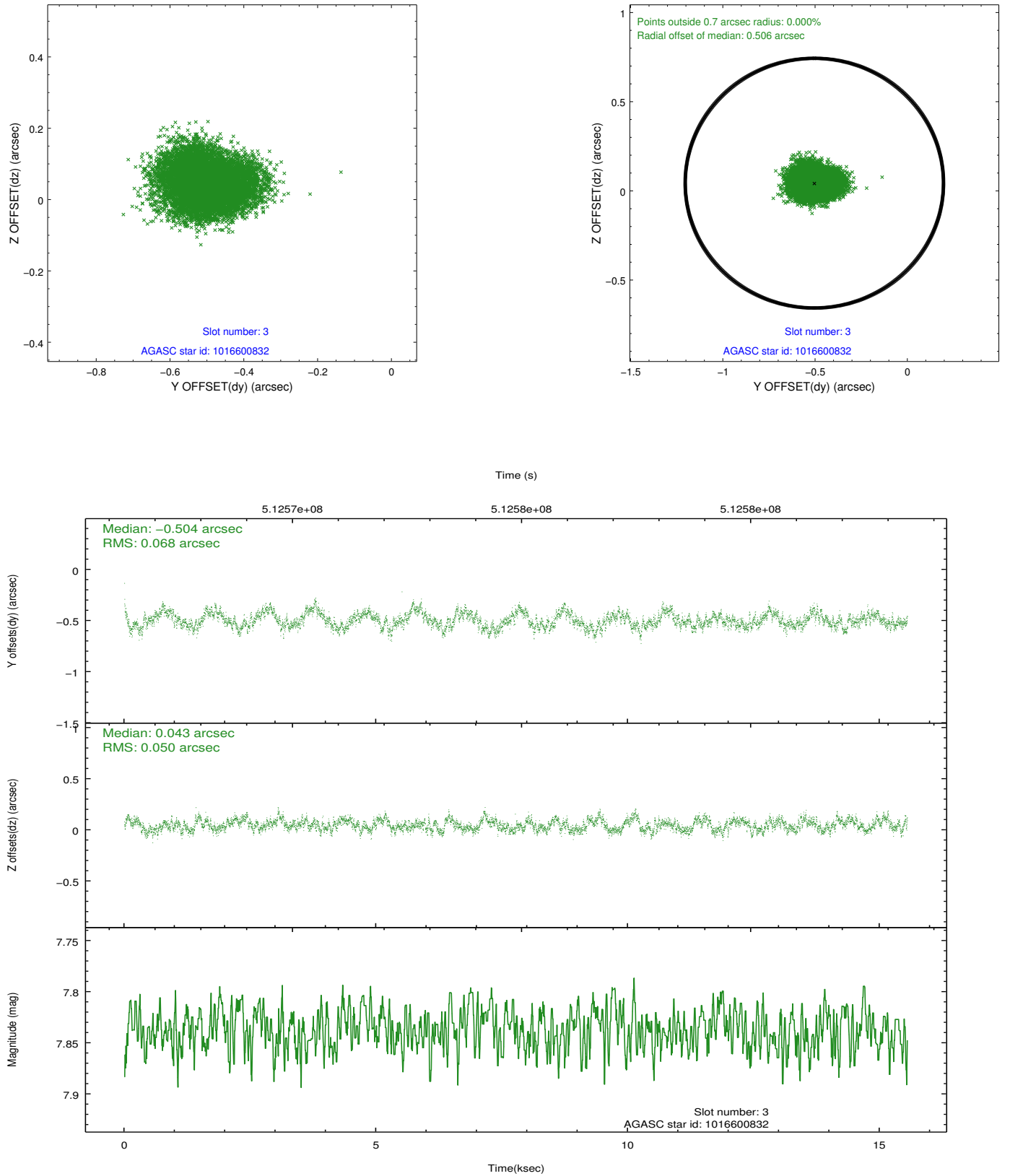


Slot Statistics

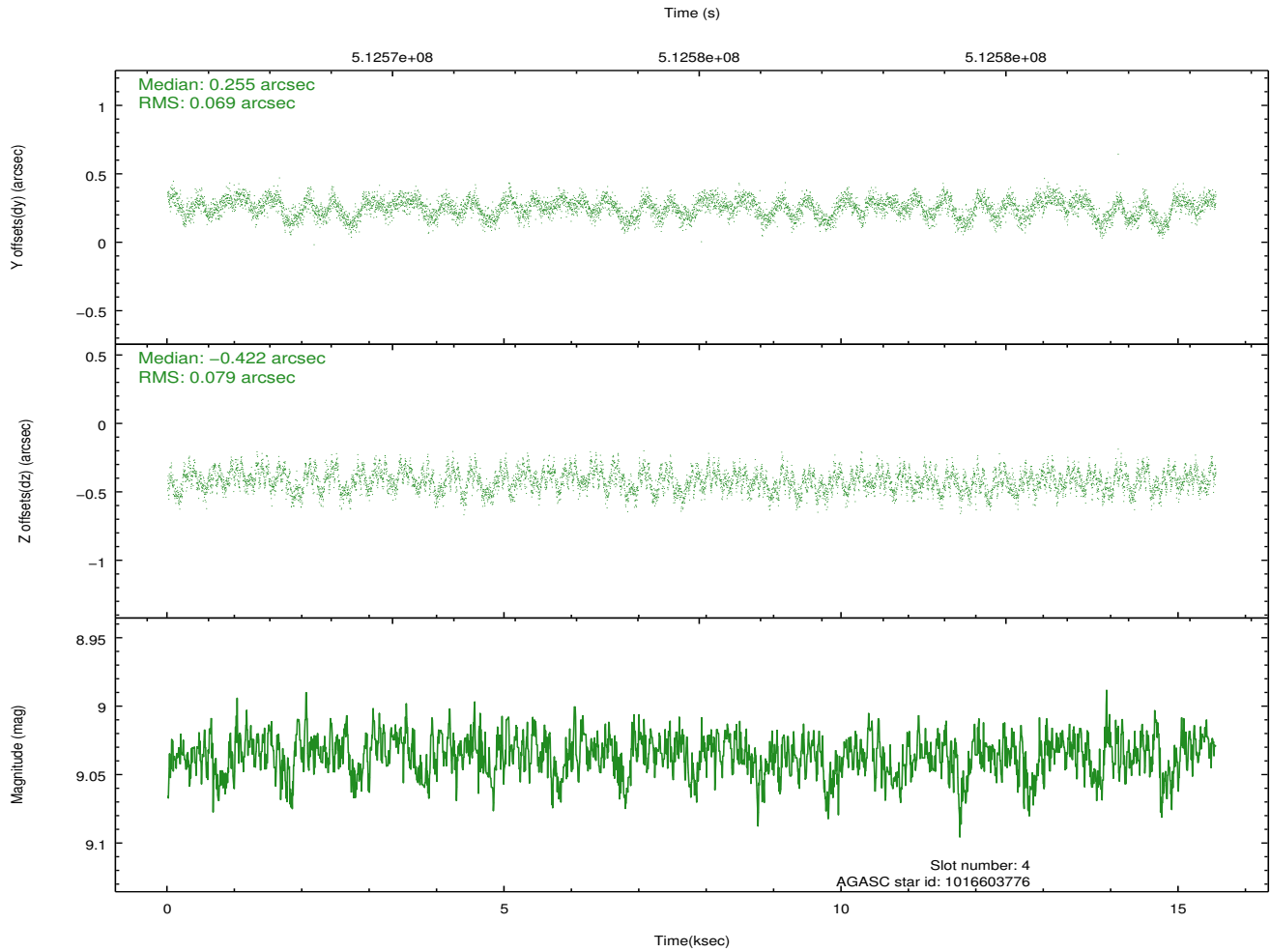
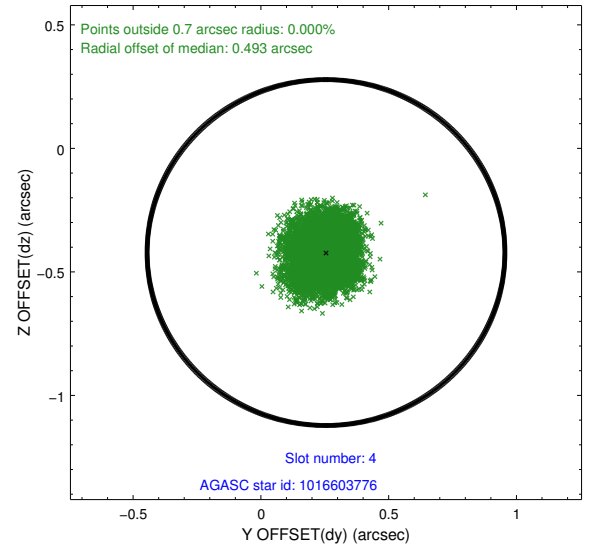
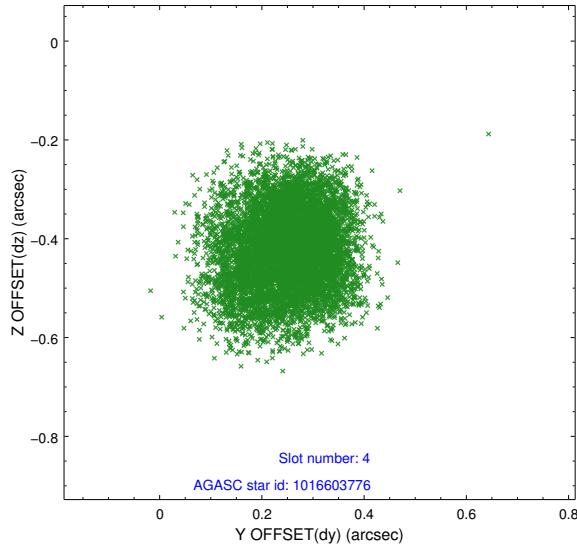
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	3793	0.143	-0.089	0.013	0.024	0.000000	0.000000	913.43	-1004.91
1	FID		ACIS-I-5	7.07	3792	-0.369	0.098	0.007	0.013	0.000000	0.000000	-1835.08	892.50
2	FID		ACIS-I-6	7.08	3793	0.134	0.060	0.012	0.020	0.000000	0.000000	378.58	1537.36
3	GUIDE	used	1016600832	7.84	7585	-0.504	0.043	0.091	0.141	184.593242	-39.271285	2010.18	-537.16
4	GUIDE	used	1016603776	9.04	7582	0.255	-0.422	0.114	0.177	183.896334	-38.769093	-171.48	980.13
5	GUIDE	used	1017121872	9.31	7578	0.335	0.351	0.140	0.234	183.425132	-39.590583	-1040.51	-2136.64
6	GUIDE	used	1017127072	7.52	7585	-0.056	0.022	0.076	0.122	184.654151	-39.418400	2249.76	-1039.00
7	GUIDE	used	1016605312	9.32	7574	-0.033	0.005	0.162	0.248	183.129714	-38.711449	-2331.42	867.87

2.4 Star Slots

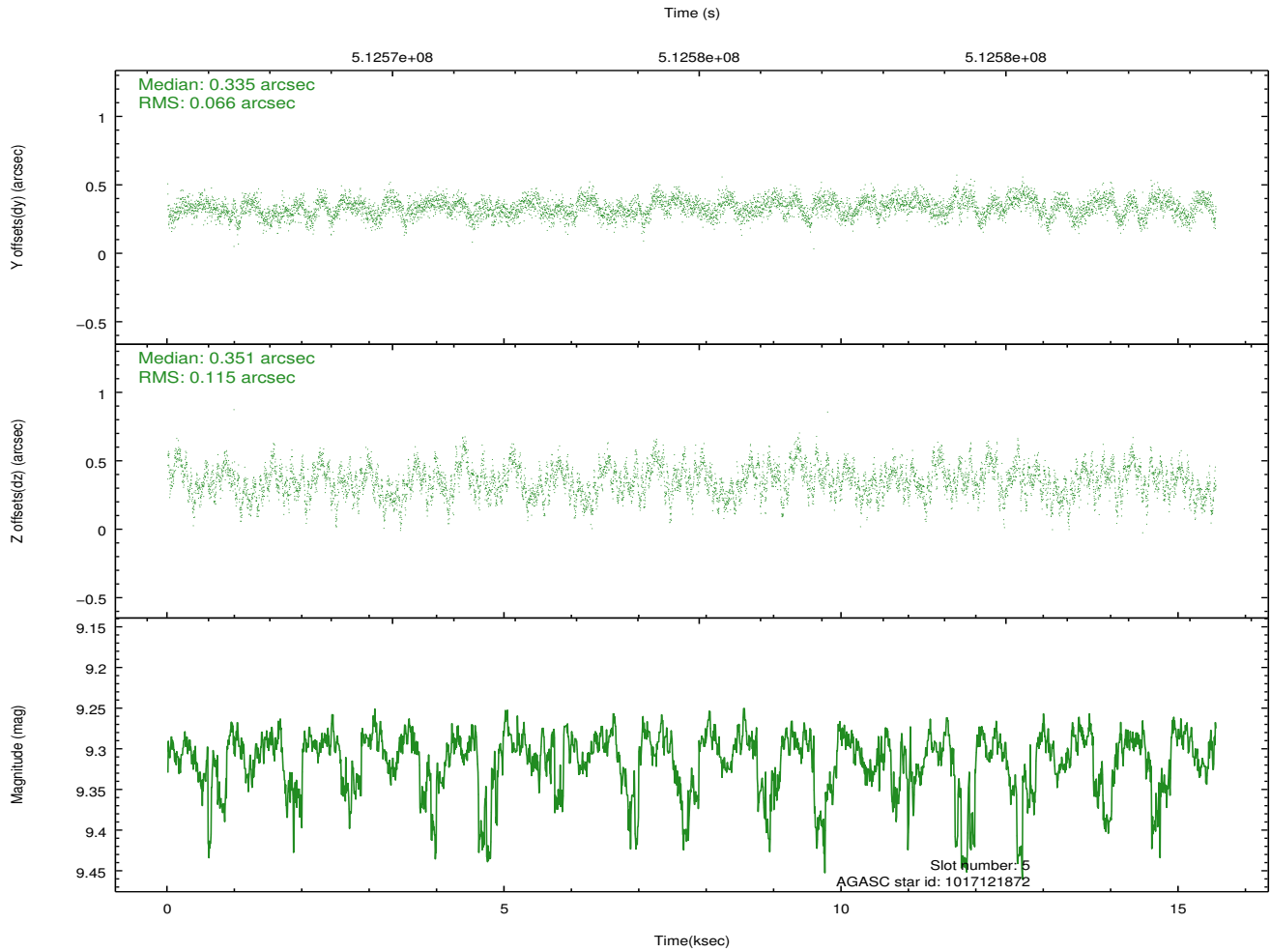
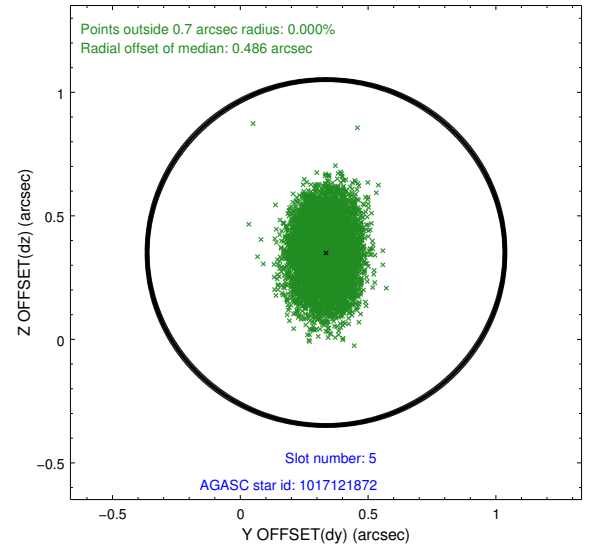
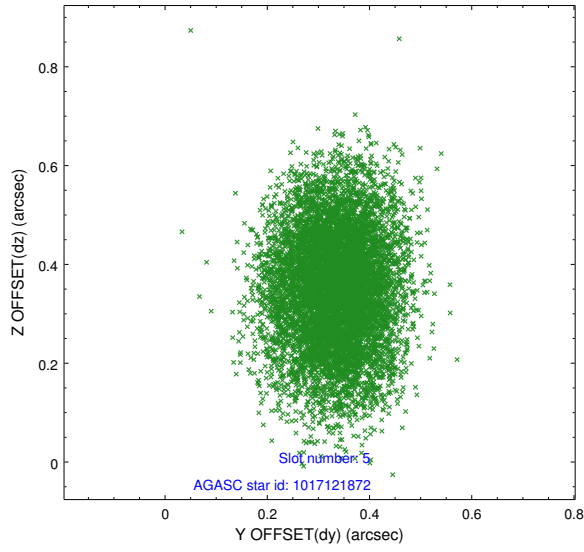
2.4.1 Slot 3



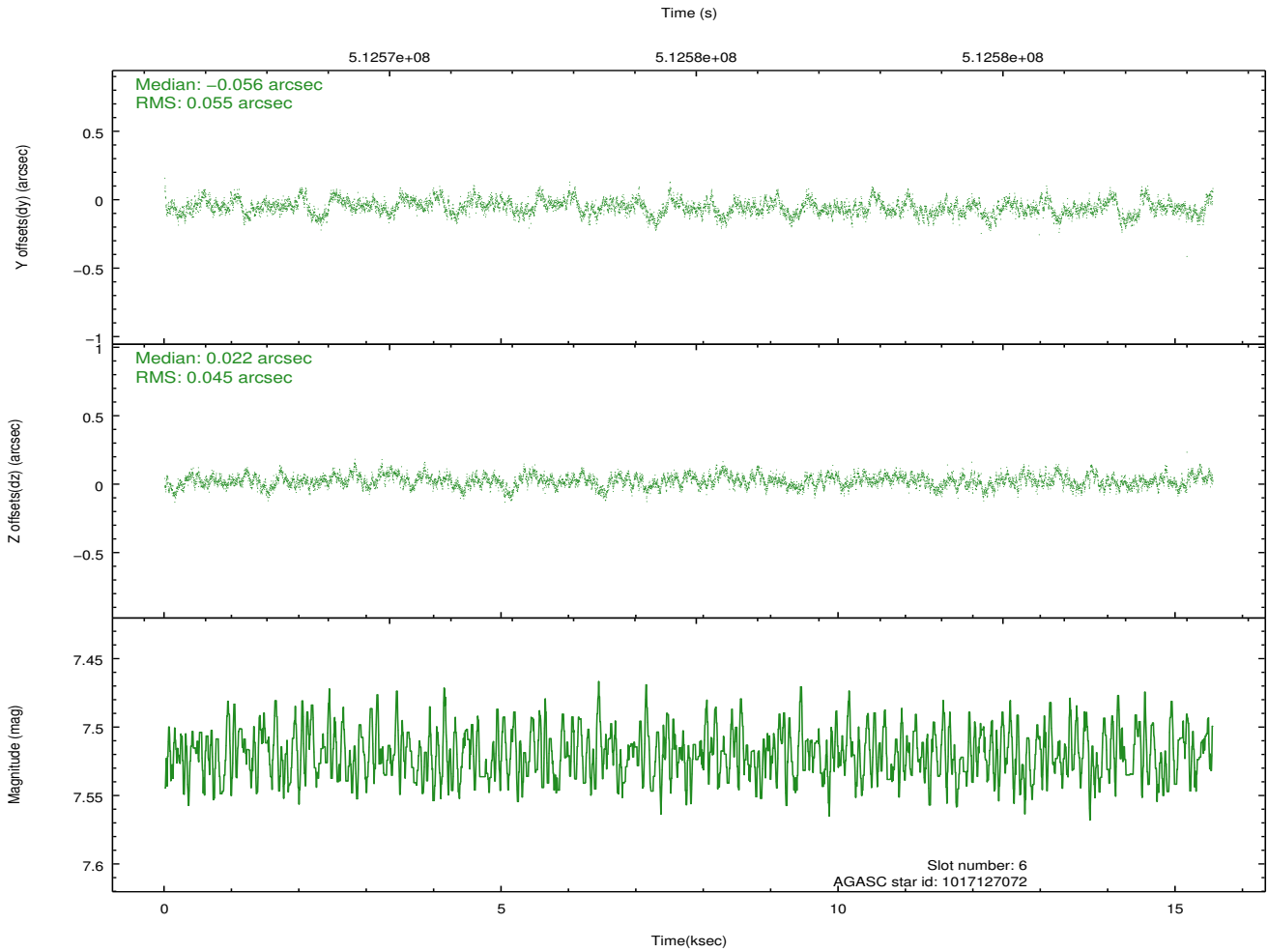
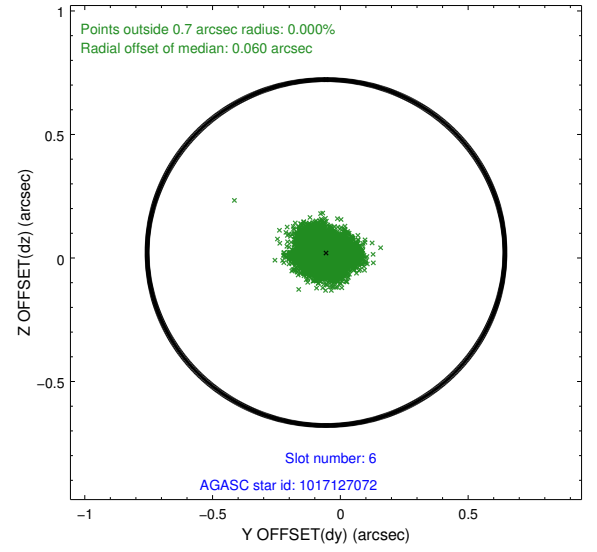
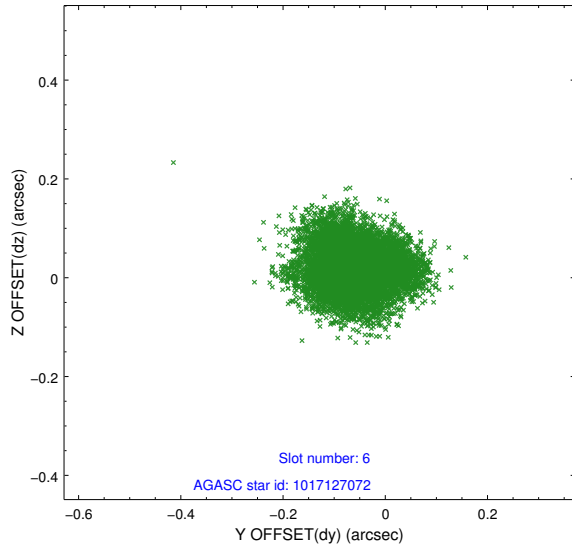
2.4.2 Slot 4



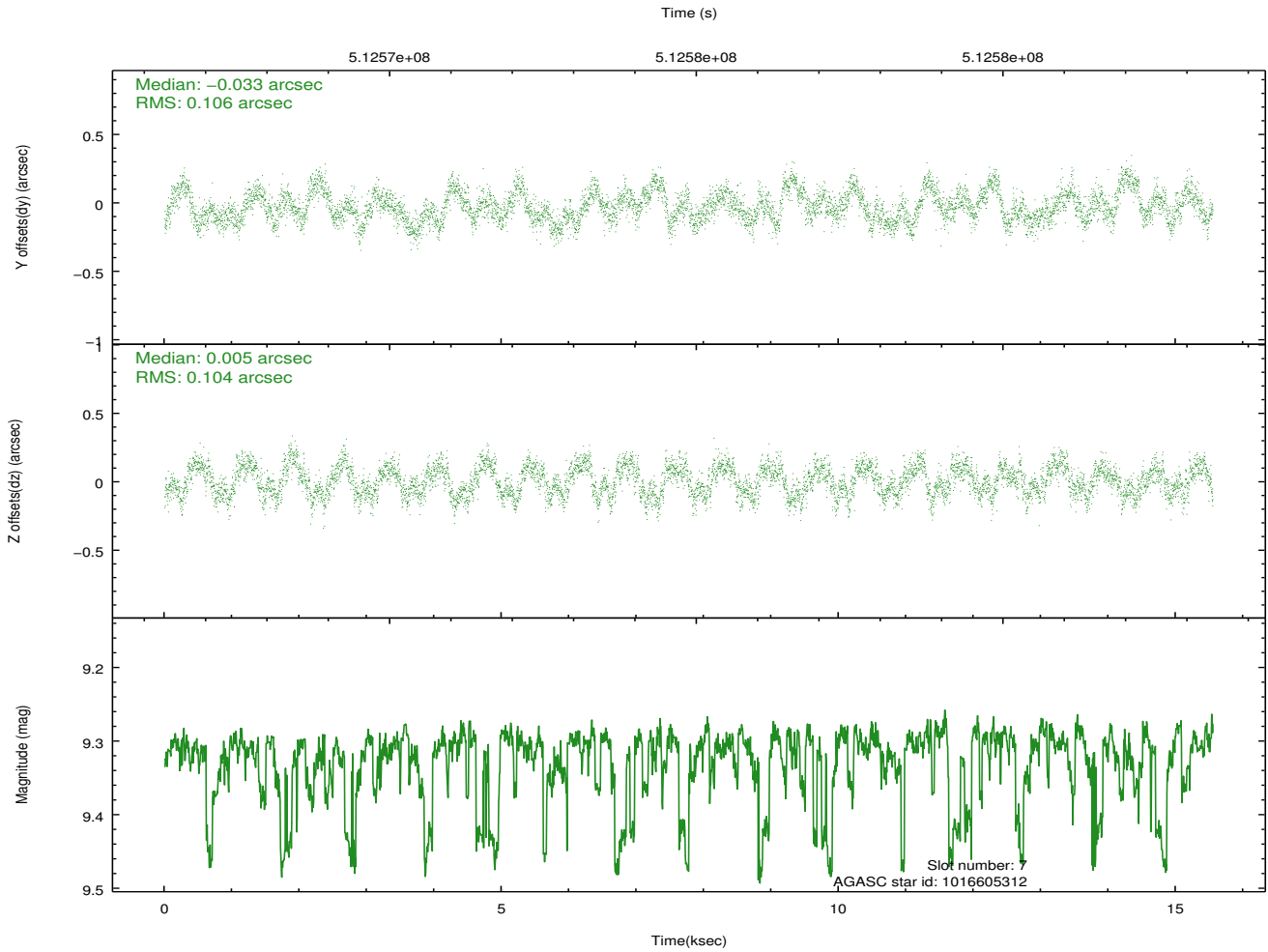
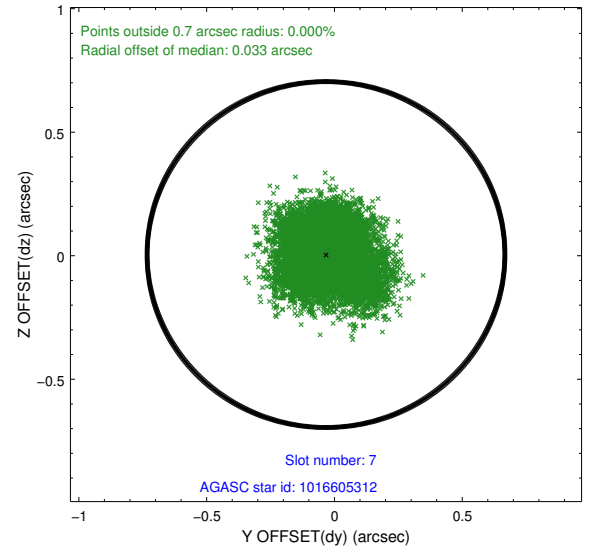
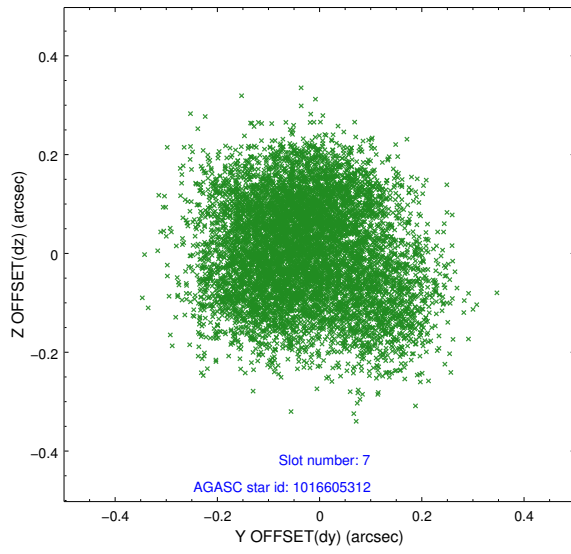
2.4.3 Slot 5



2.4.4 Slot 6

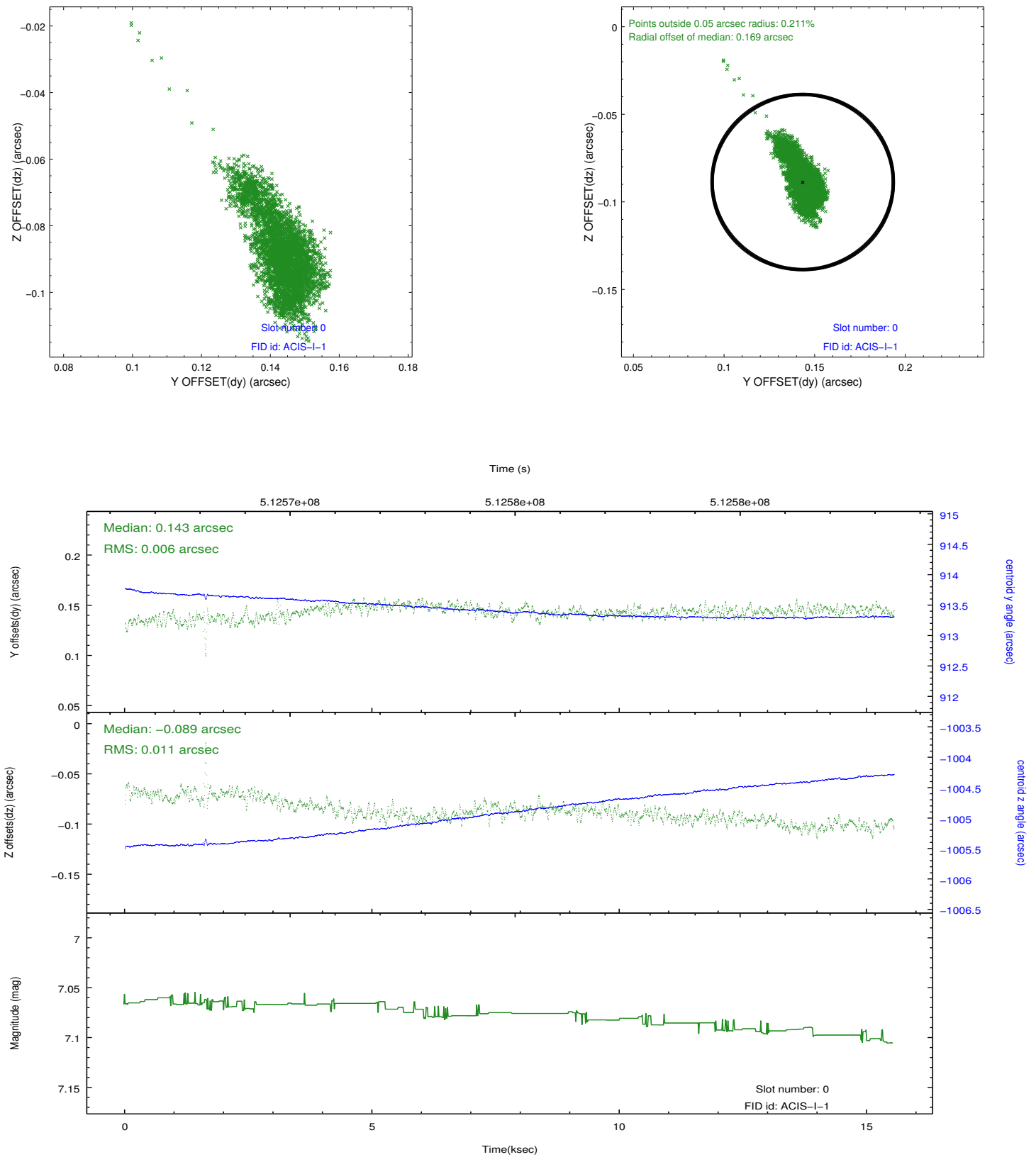


2.4.5 Slot 7

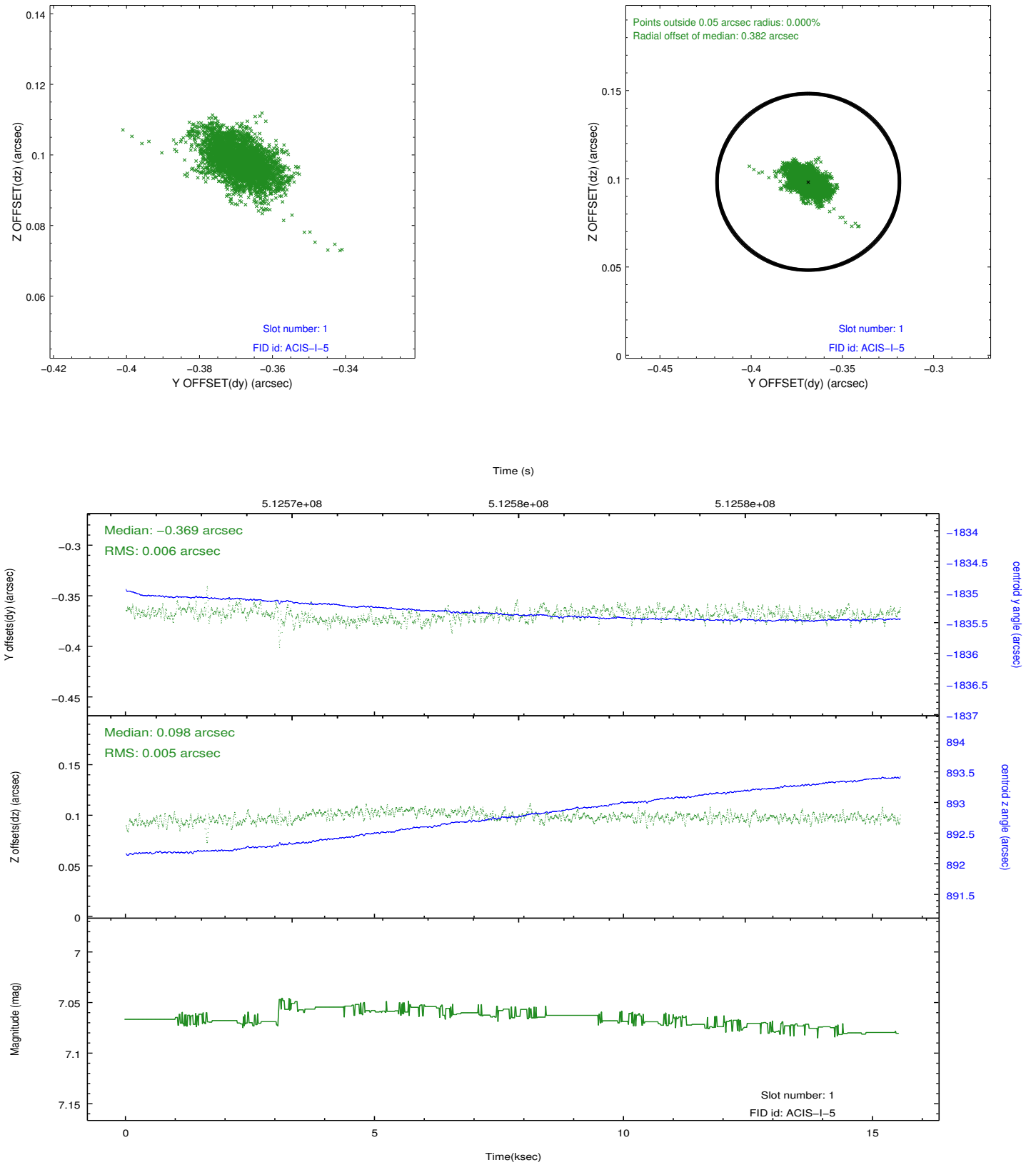


2.5 FID Slots

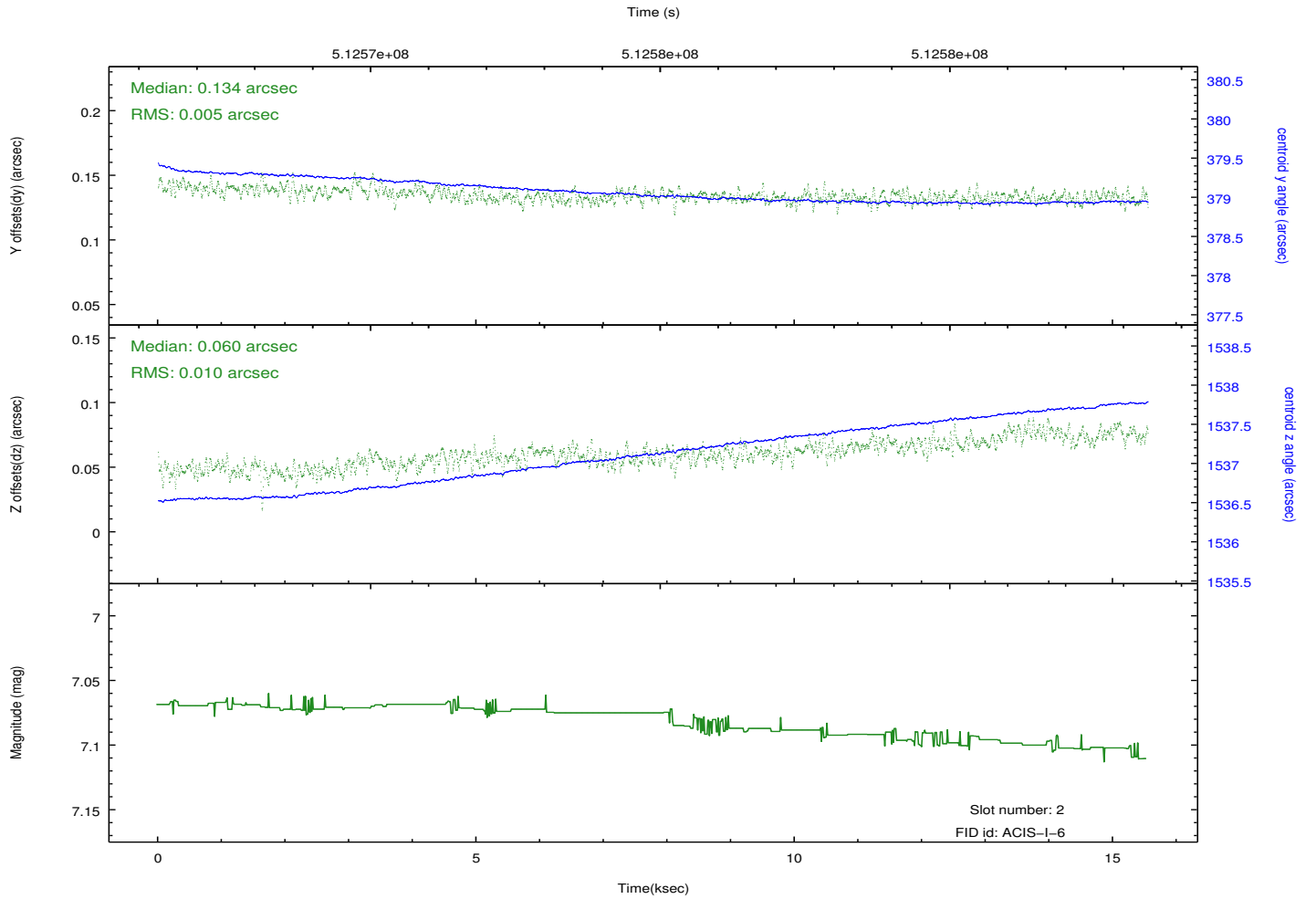
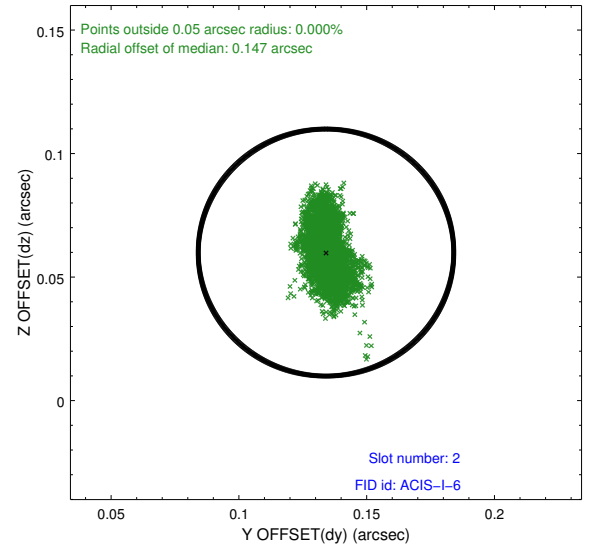
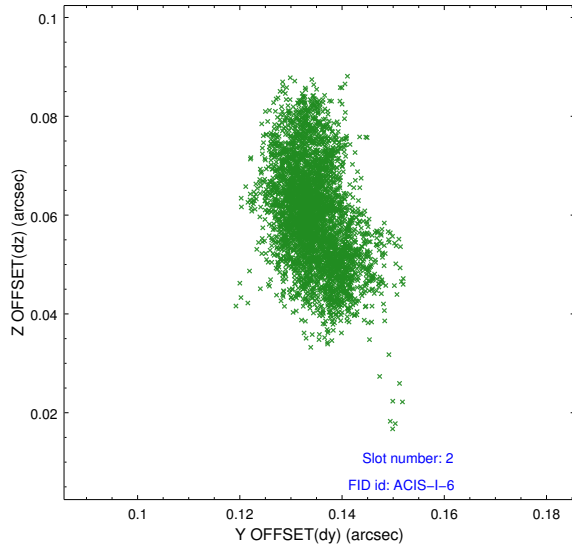
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.170084420323

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.