

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 15392 - L2 Version 2
Chandra X-Ray Center

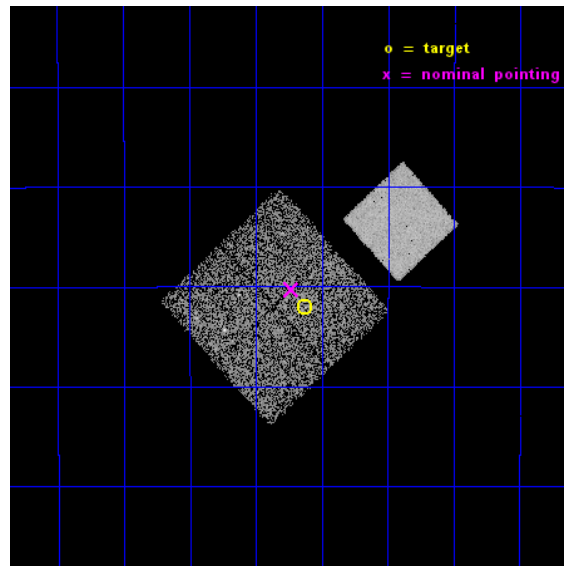
L2 Processing Date : Dec 6 2014

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1 Front

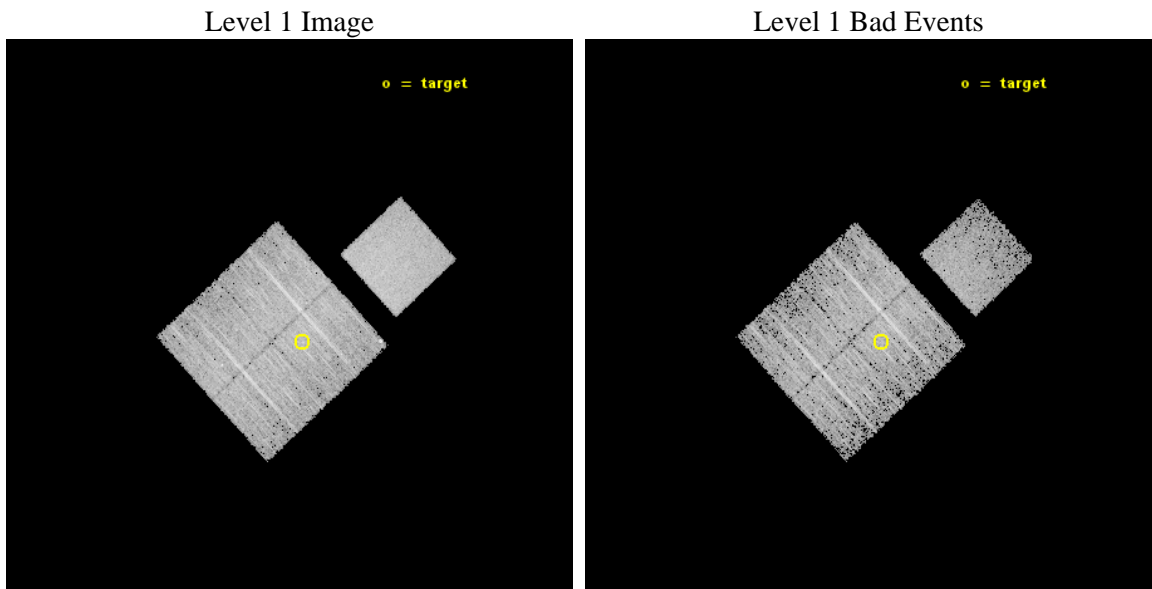
seq_num	601098	Sequence number
obs_id	15392	Observation id
title	Search for evidence of dwarf galaxy collisions in X-rays(2)	Propos
observer	Professor Gordon Garmire	Principal investigator
object	ngc1187	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	45.656667	Observer's specified target RA [deg]
dec_targ	-22.867222	Observer's specified target Dec [deg]
ra_nom	45.682648736603	Nominal RA [deg]
dec_nom	-22.837903989255	Nominal Dec [deg]
roll_nom	47.218775811318	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9312.4000716209	Sum of GTIs [s]
livetime	9190.726708996	Livetime [s]
ontime0	9312.4000716209	Sum of GTIs [s]
ontime1	9312.4000716209	Sum of GTIs [s]
ontime2	9312.4000716209	Sum of GTIs [s]
ontime3	9312.4000716209	Sum of GTIs [s]
ontime7	9312.4000716209	Sum of GTIs [s]
l2events	40177	Number of level 2 events



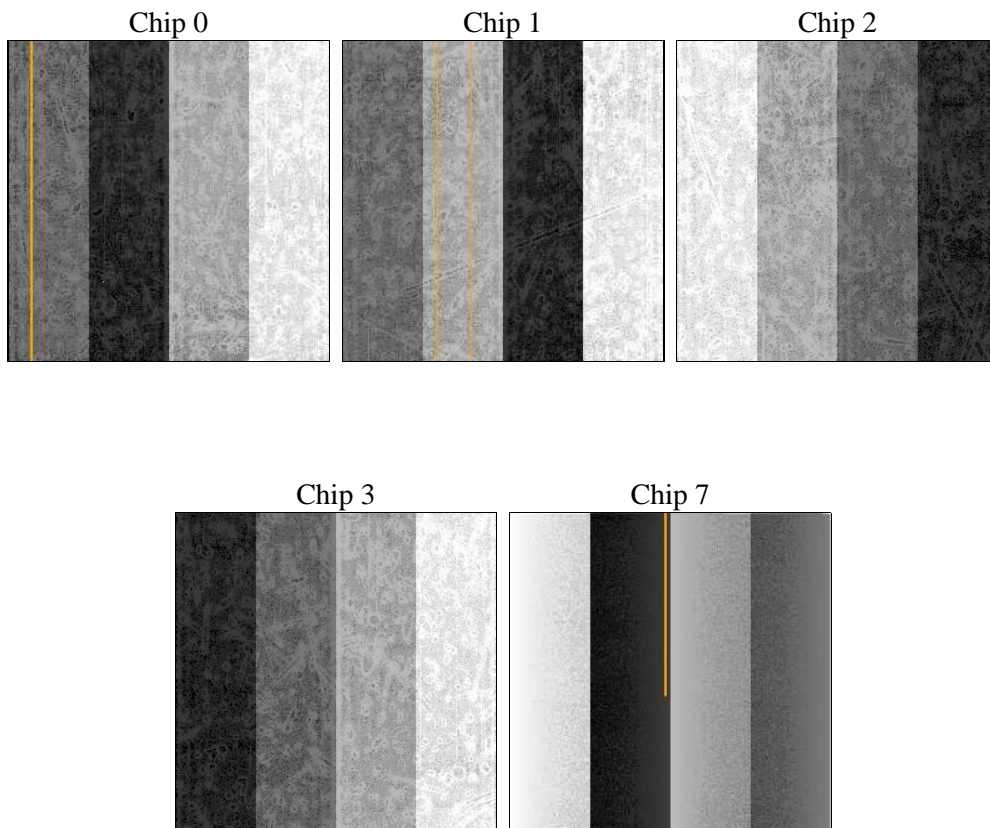
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9244.015000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	9312.4000716209	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	9312.4000716209	Sum of GTIs [s]
date	2014-12-07T02:01:10	Date and time of file creation	ontime1	9312.4000716209	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9312.4000716209	Sum of GTIs [s]
			ontime3	9312.4000716209	Sum of GTIs [s]
			ontime7	9312.4000716209	Sum of GTIs [s]
			l1events	208646	Number of level 1 events

2.1.4 Events

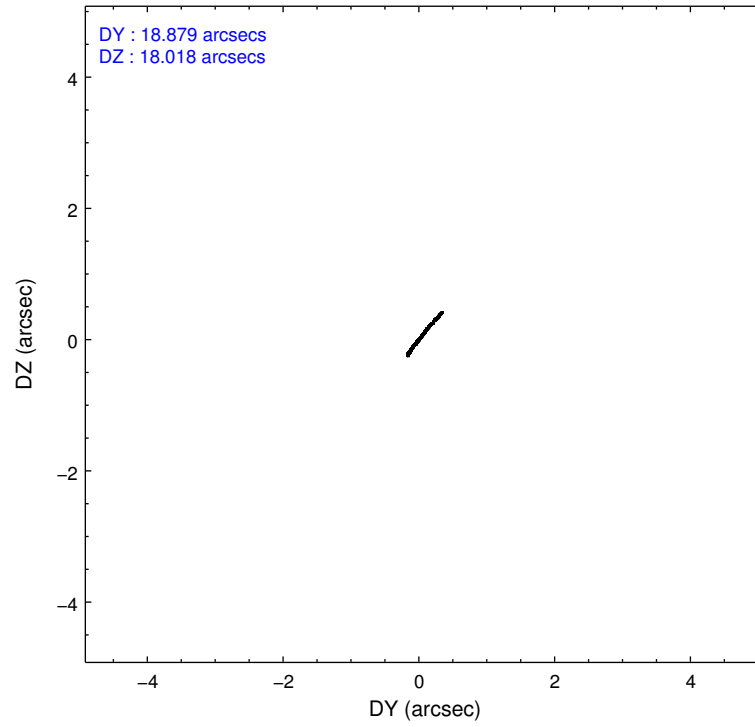
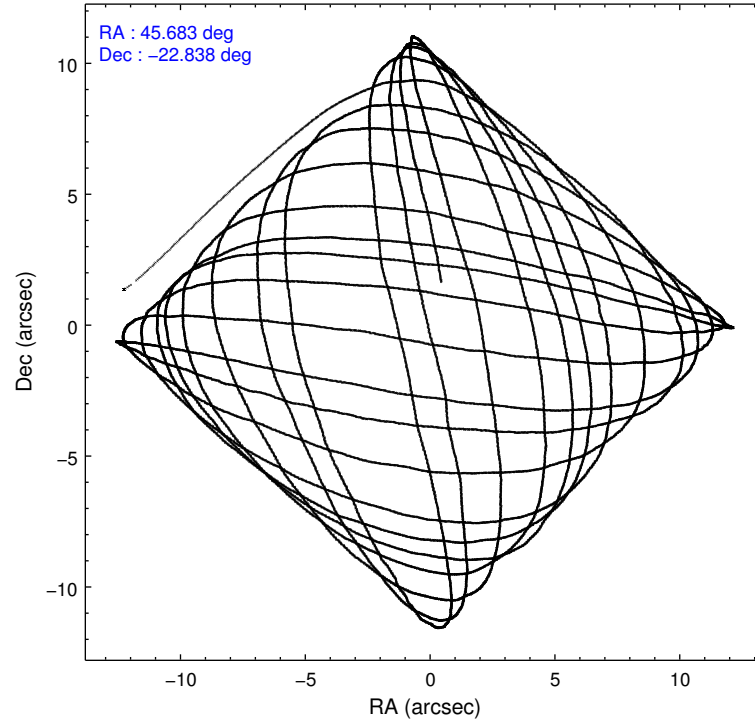
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	37470	37687	42125	40687	50677
rejected events	32081	32599	37166	35432	26658
rejected %	85%	86%	88%	87%	52%

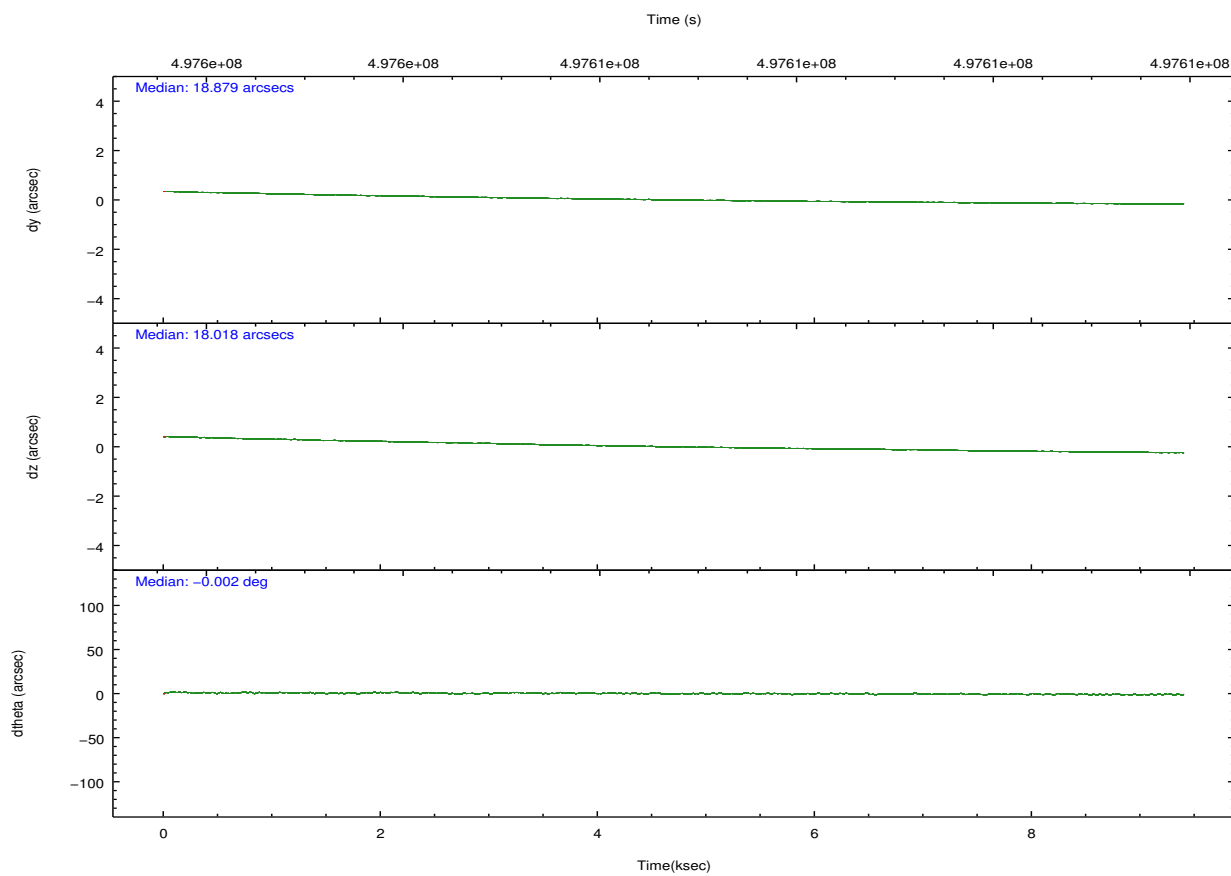
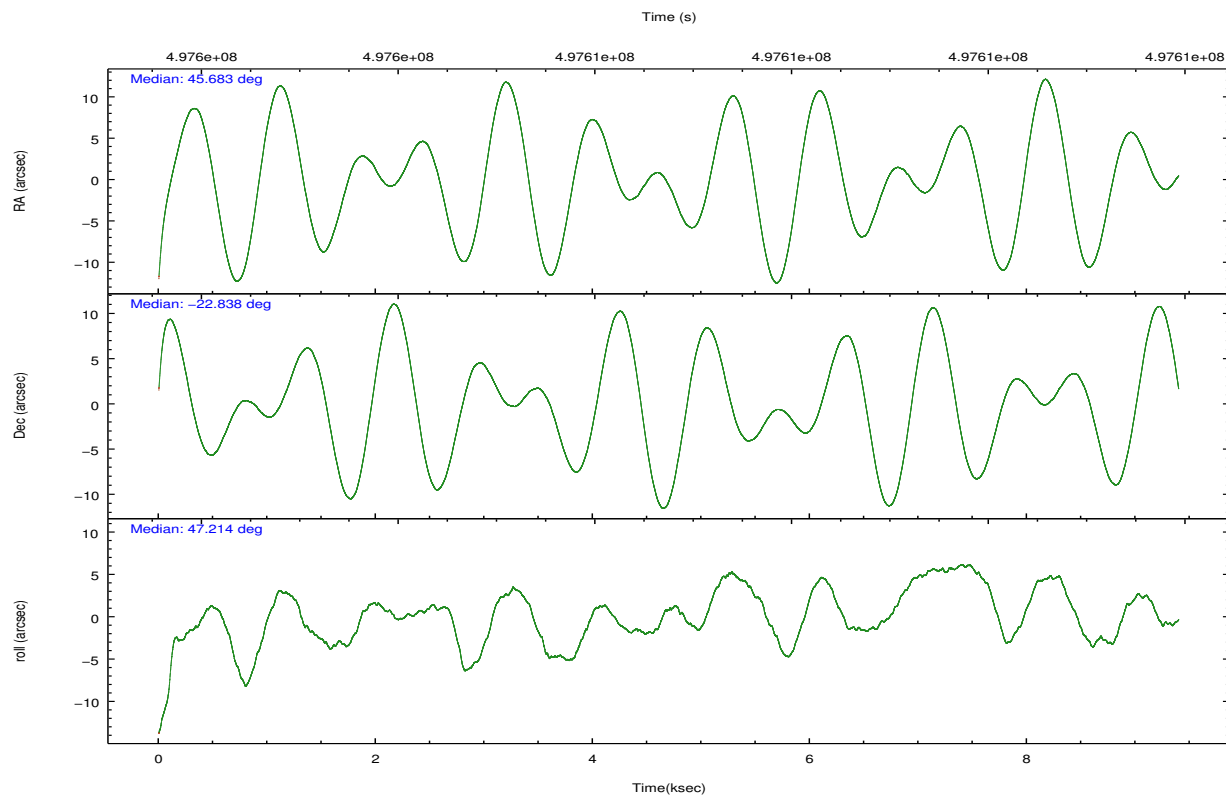
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2016	1669	1835	2271	2337
	5%	4%	4%	5%	4%
grade 1 events	36	22	32	26	77
	0%	0%	0%	0%	0%
grade 2 events	1332	1220	1207	1044	5089
	3%	3%	2%	2%	10%
grade 3 events	556	511	490	469	2122
	1%	1%	1%	1%	4%
grade 4 events	495	563	493	529	2046
	1%	1%	1%	1%	4%
grade 5 events	1771	1880	1594	1962	5350
	4%	4%	3%	4%	10%
grade 6 events	998	1130	937	947	12442
	2%	2%	2%	2%	24%
grade 7 events	30266	30692	35537	33439	21214
	80%	81%	84%	82%	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	45.676160	45.6826487366033	CCD I2 on	Y	Y
[deg] Pointing Dec	-22.864820	-22.83790398925538	CCD I3 on	Y	Y
[deg] Pointing Roll	47.007572	47.21877581131823	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	N
[mm] SIM translation stage pos	-228.592463	-228.5990329025337	CCD S3 on	O2	Y
[mm] SIM translation stage offset	-5	-4.993420100396037	CCD S4 on	N	N
[s] Observation start time (MET)	497602208.184000	497601141.73027	CCD S5 on	N	N
Observation start date	2013-10-08T06:49:01	2013-10-08T06:32:21	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	497611452.184000	497611690.00584	On-chip summing requested	N	N
Observation end date	2013-10-08T09:23:05	2013-10-08T09:28:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



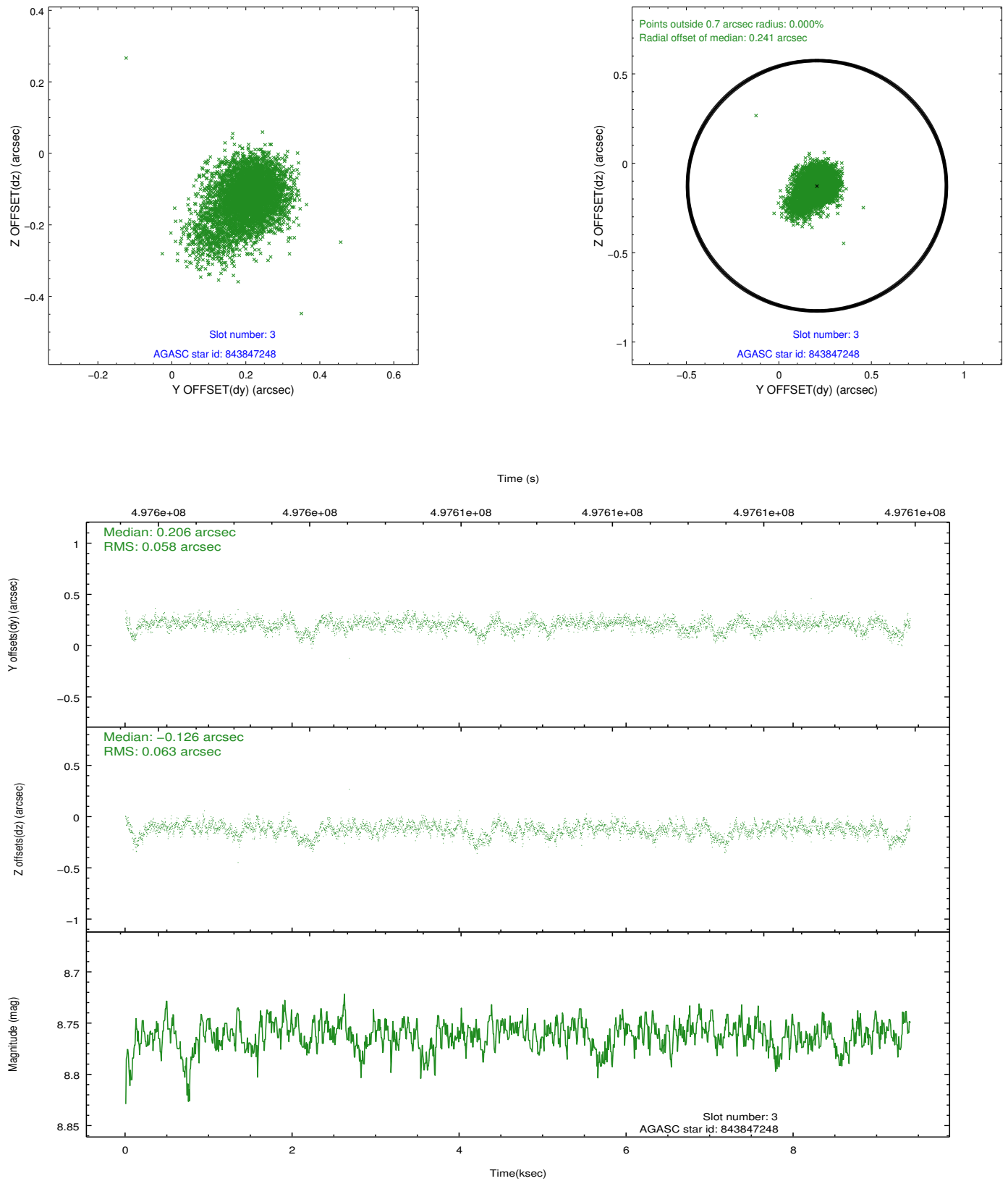


Slot Statistics

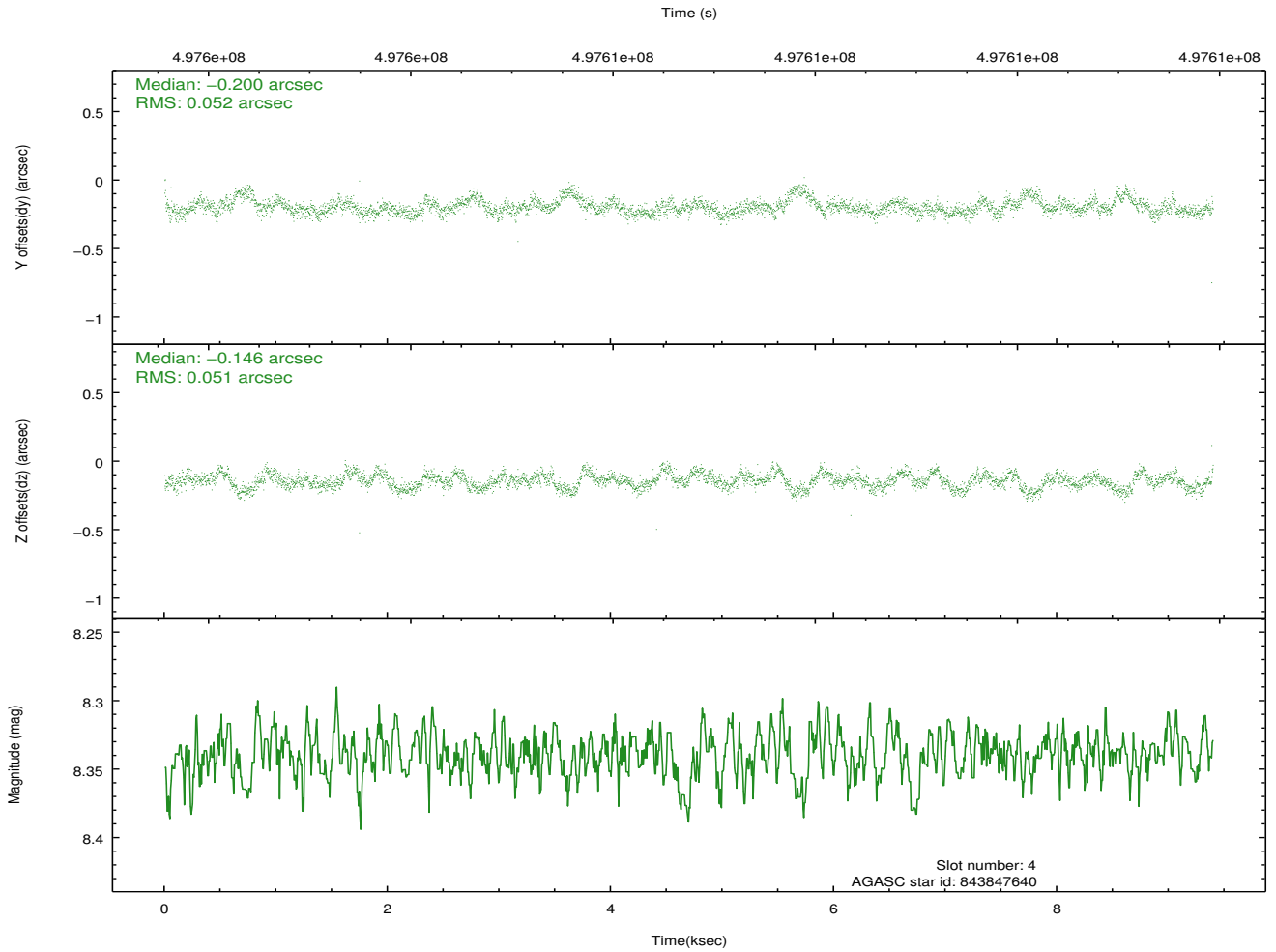
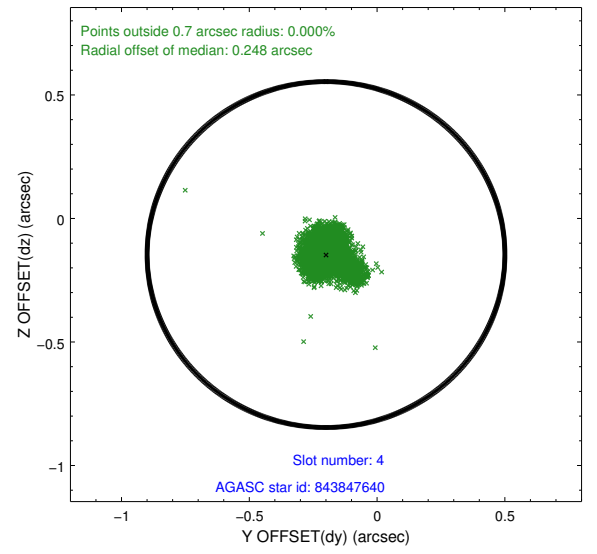
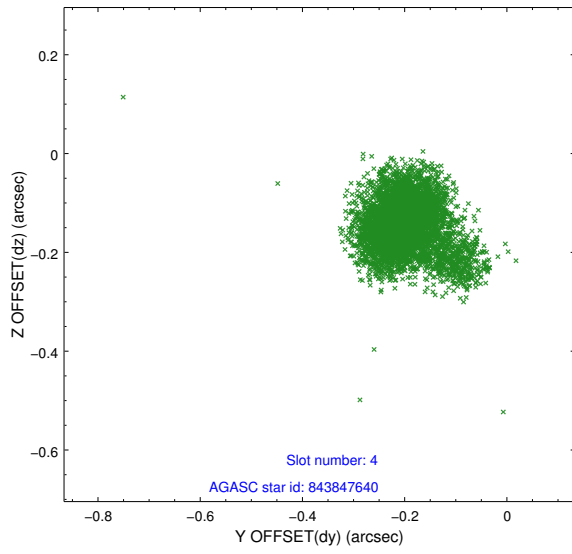
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	2292	0.131	-0.129	0.007	0.012	0.000000	0.000000	920.49	-944.32
1	FID		ACIS-I-5	7.11	2293	-0.350	0.080	0.008	0.013	0.000000	0.000000	-1827.80	953.02
2	FID		ACIS-I-6	7.10	2293	0.128	0.120	0.008	0.013	0.000000	0.000000	385.38	1598.24
3	GUIDE	used	843847248	8.76	4580	0.206	-0.126	0.087	0.157	45.247726	-22.941116	-1170.70	850.01
4	GUIDE	used	843847640	8.34	4584	-0.200	-0.146	0.074	0.130	45.691776	-22.534731	904.22	772.44
5	GUIDE	used	843847680	10.07	4540	0.273	0.414	0.210	0.352	45.778102	-23.658054	-1857.74	-2192.85
6	GUIDE	used	843848072	8.99	4569	0.003	0.235	0.120	0.196	46.055215	-23.143632	120.11	-1603.72
7	GUIDE	used	769526576	9.44	4582	-0.274	-0.368	0.120	0.194	45.442990	-22.112118	1451.02	2415.62

2.4 Star Slots

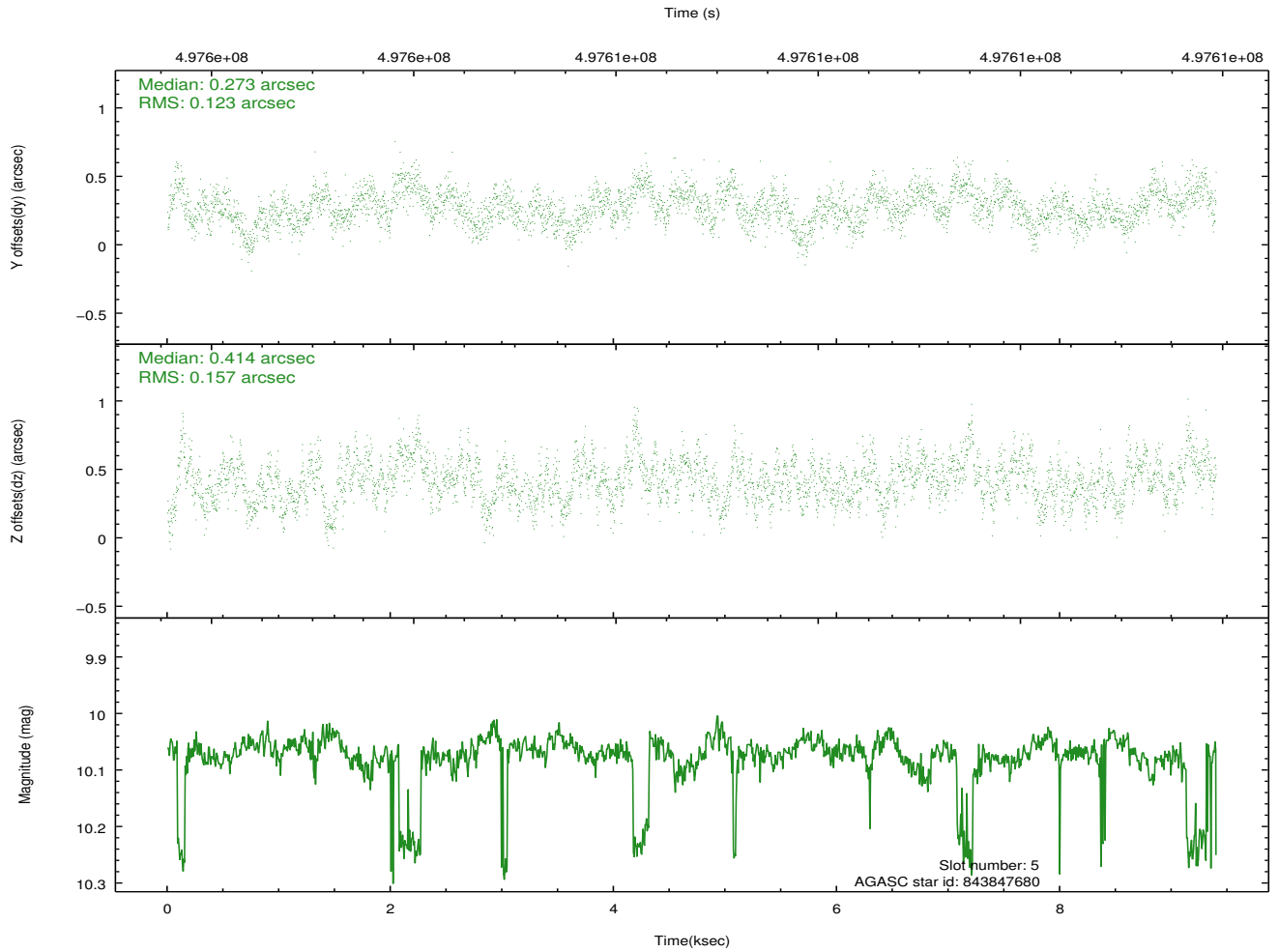
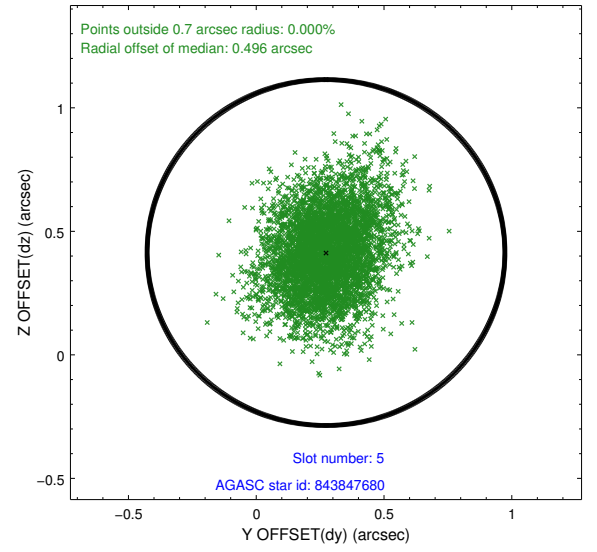
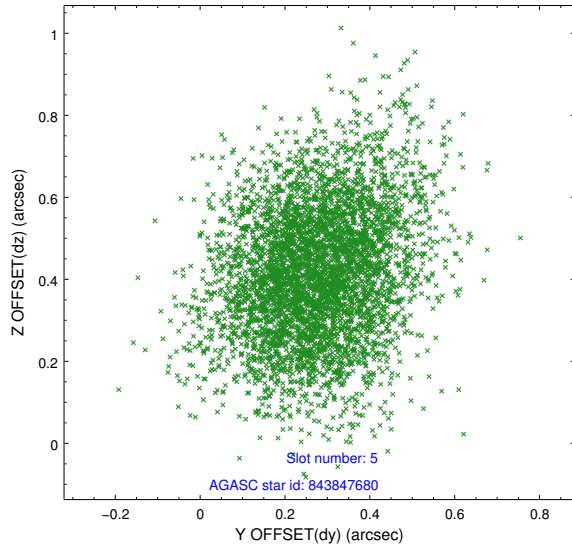
2.4.1 Slot 3



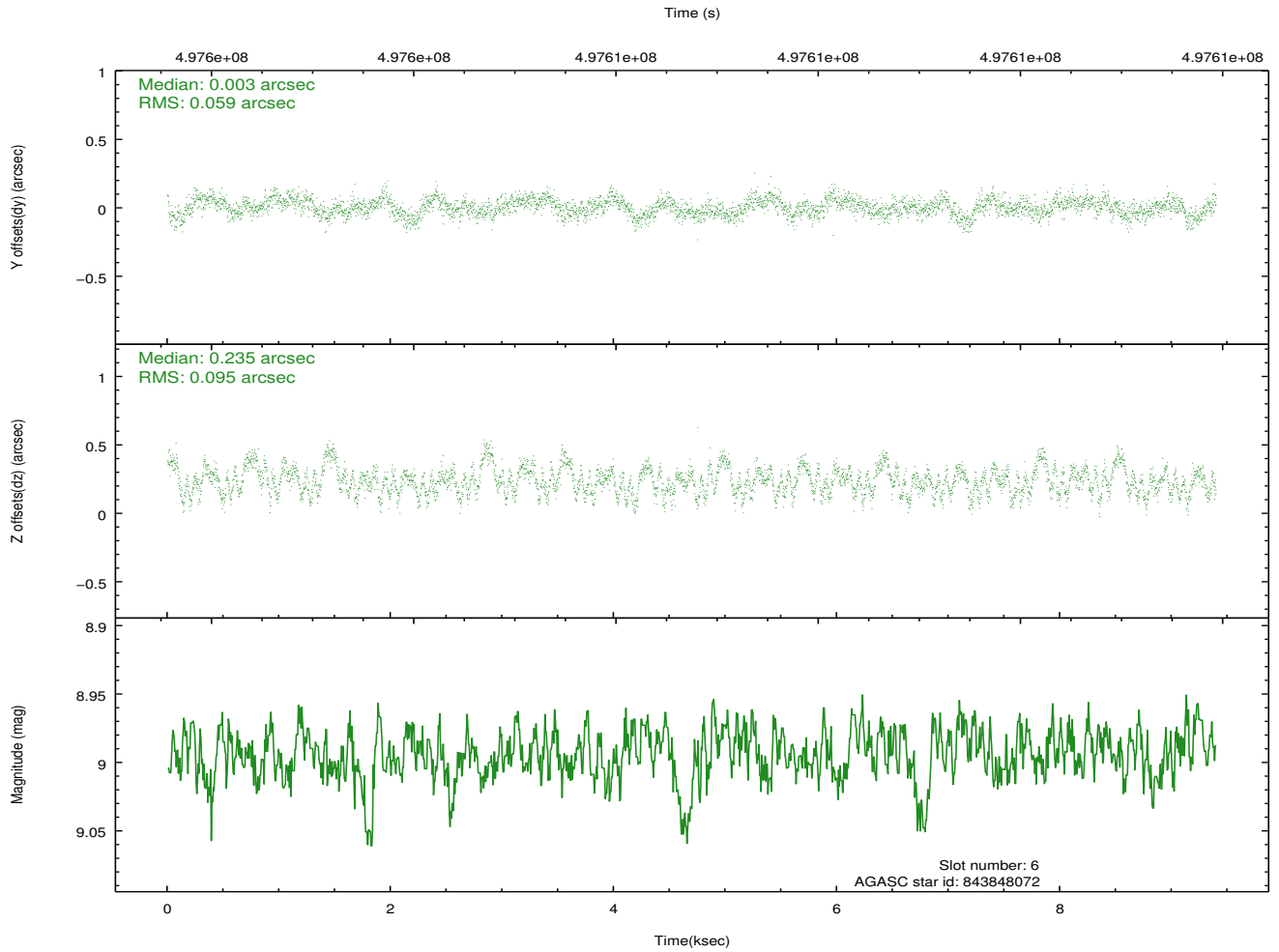
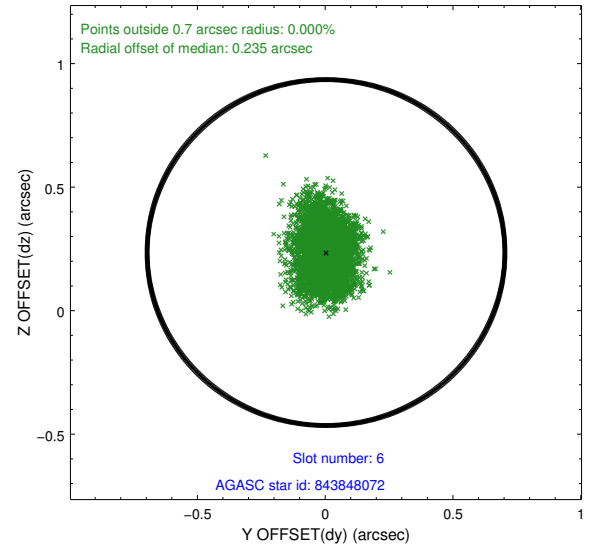
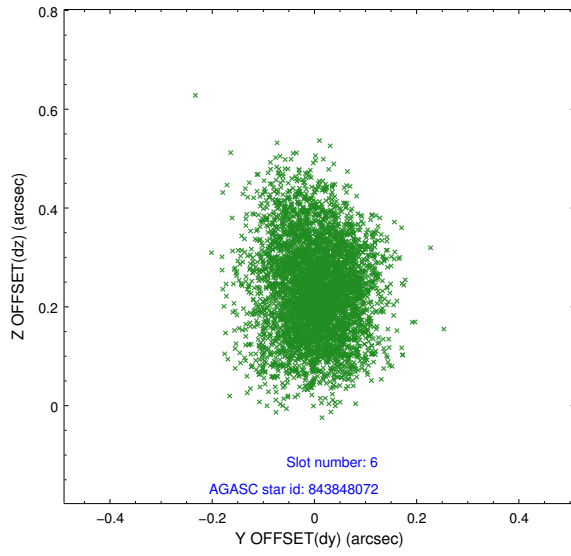
2.4.2 Slot 4



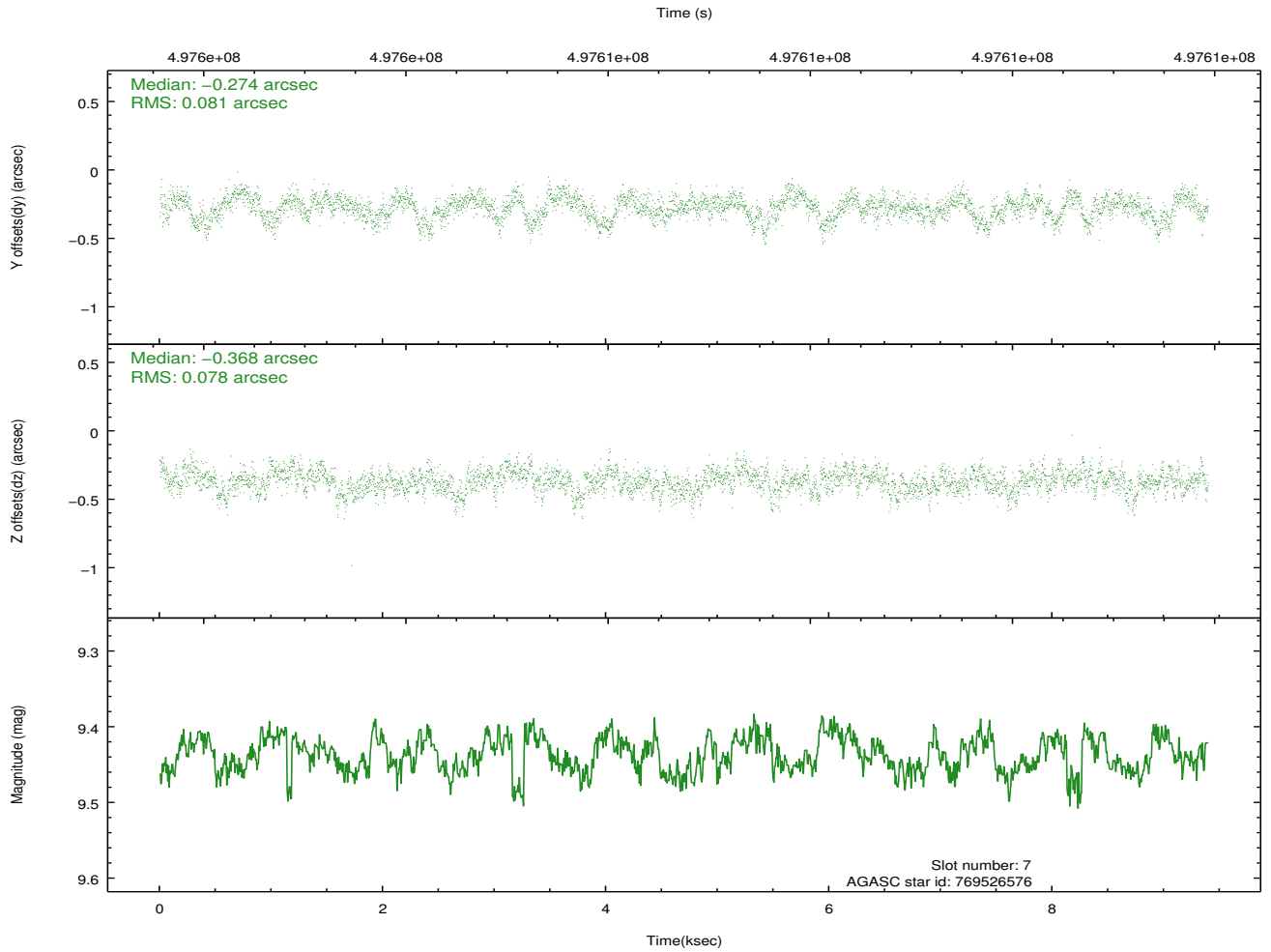
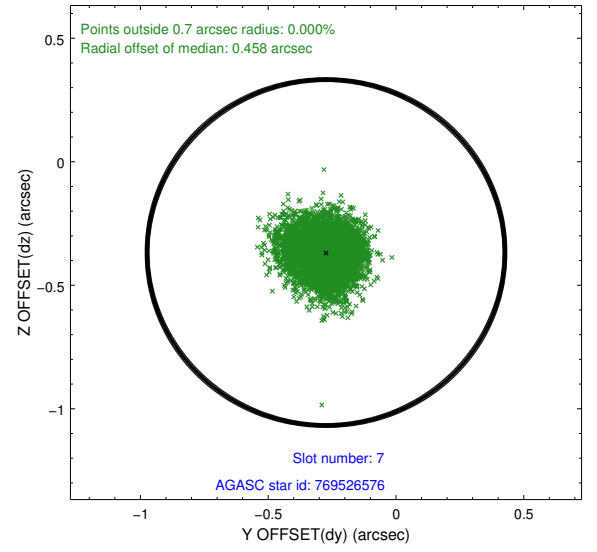
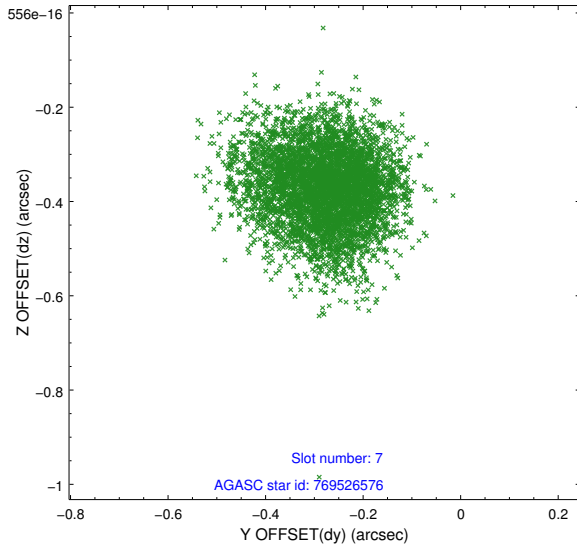
2.4.3 Slot 5



2.4.4 Slot 6

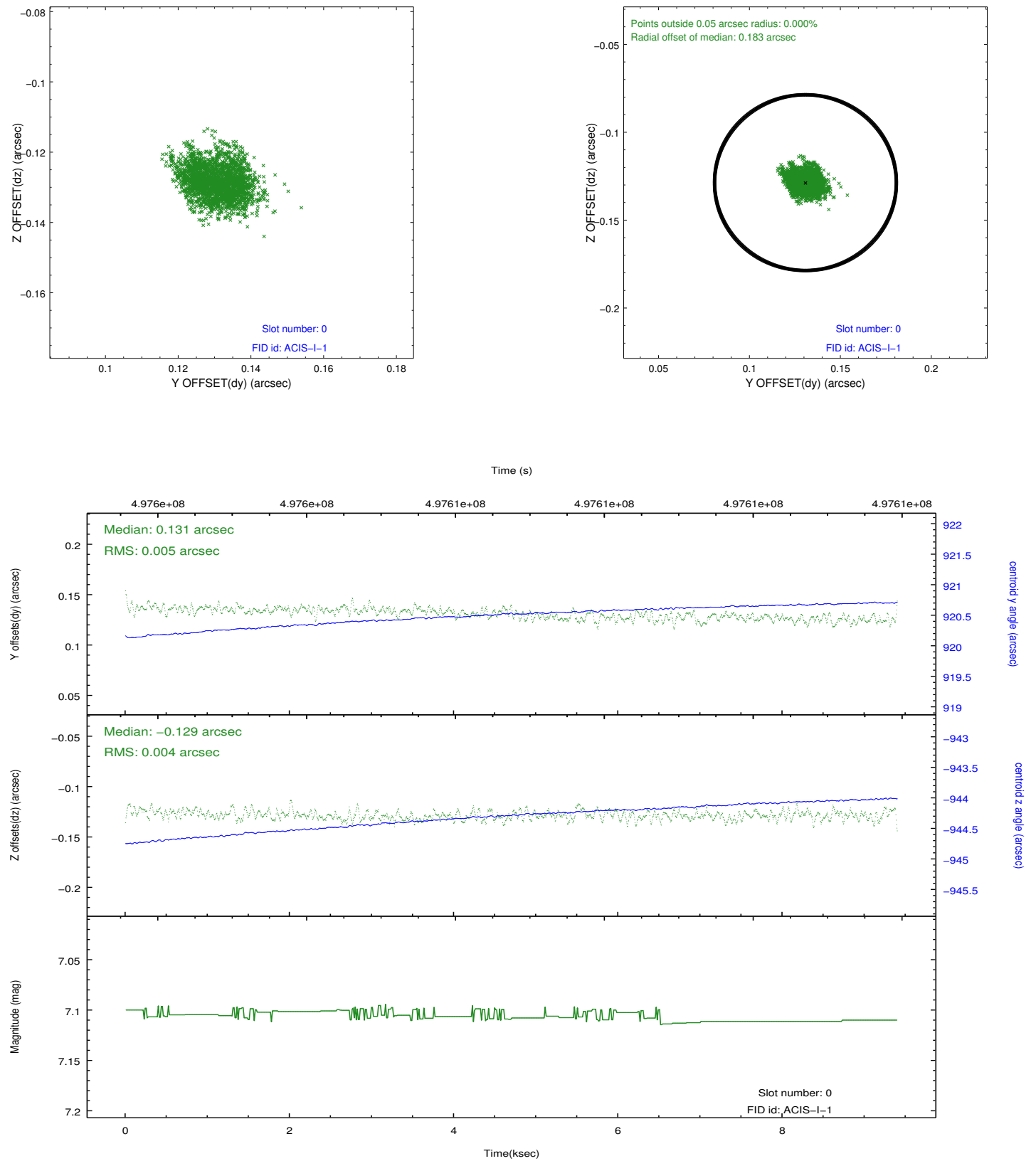


2.4.5 Slot 7

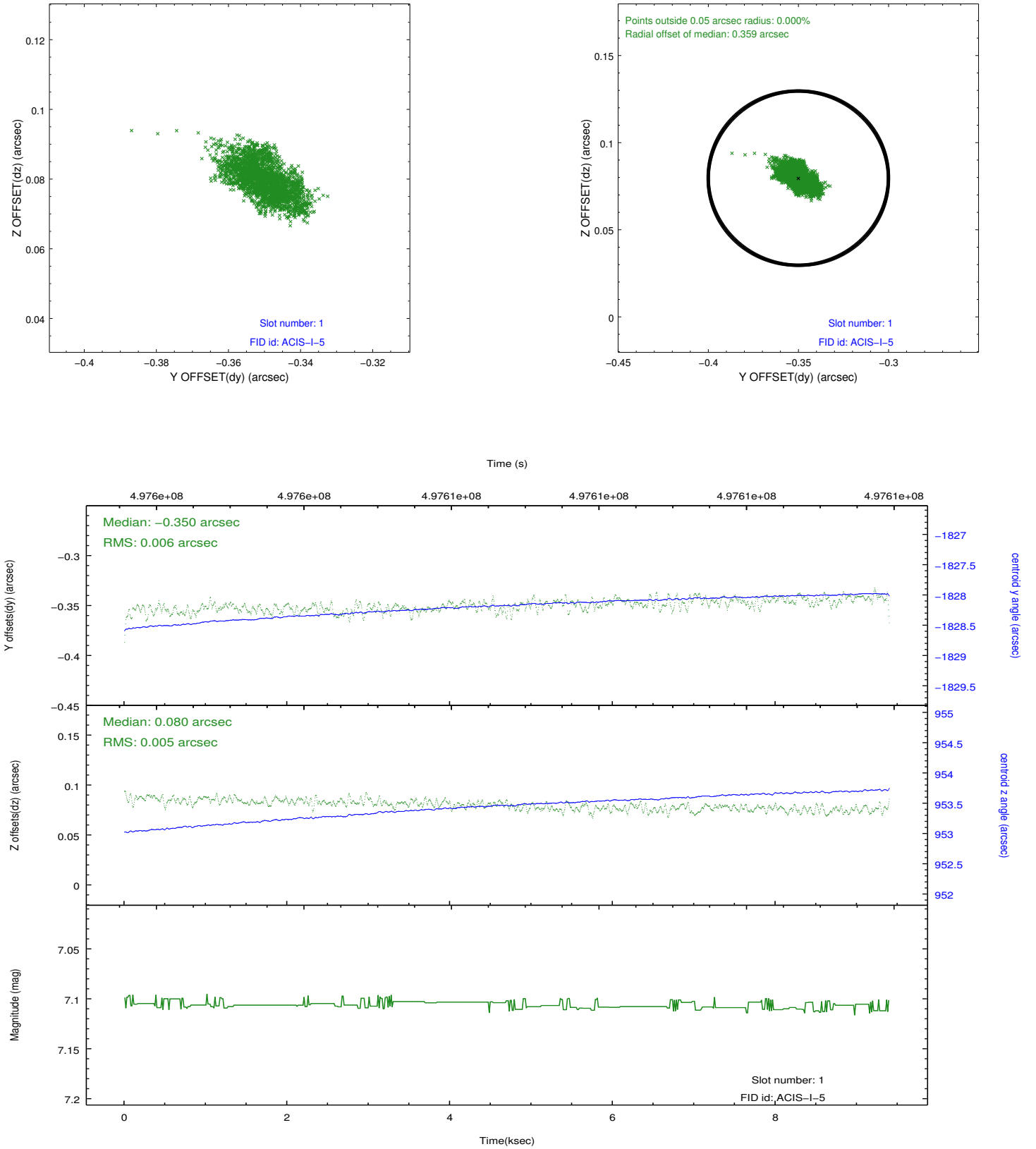


2.5 FID Slots

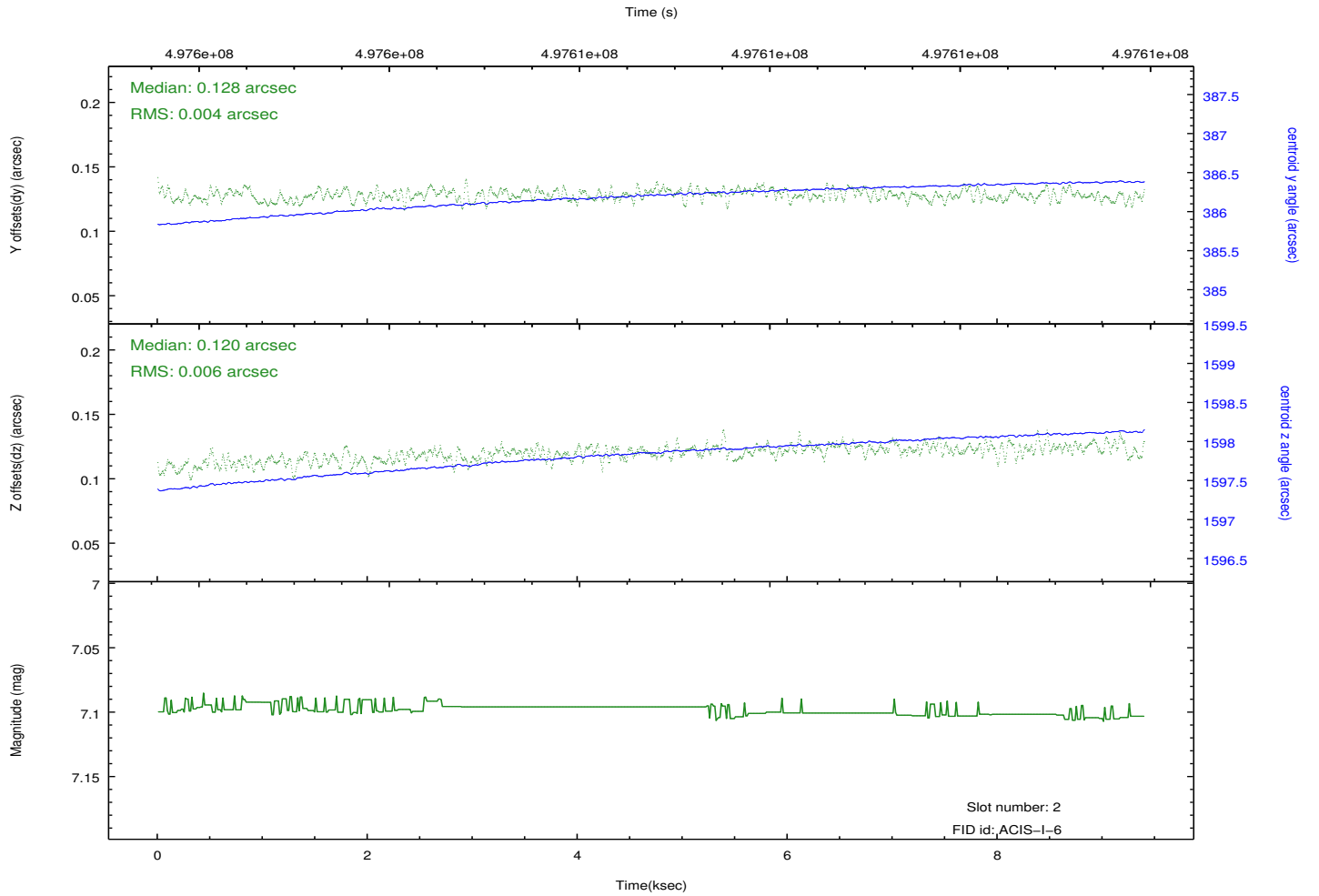
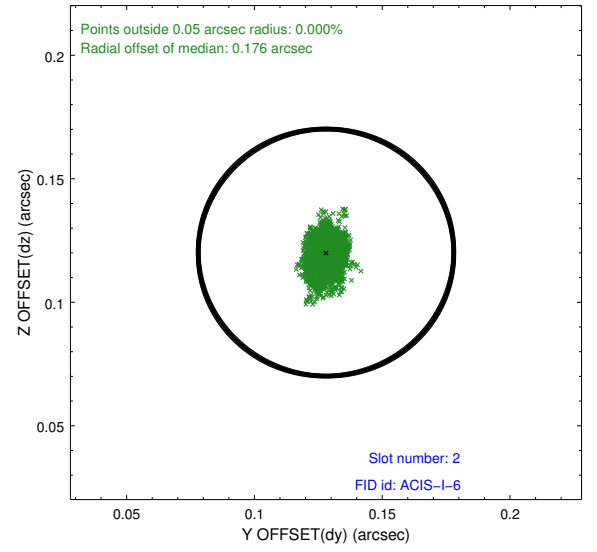
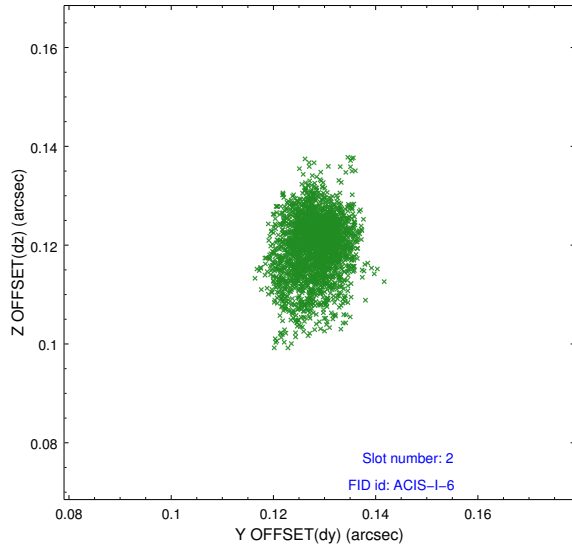
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.3124000716209

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.