

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 5564 - L2 Version 4
Chandra X-Ray Center

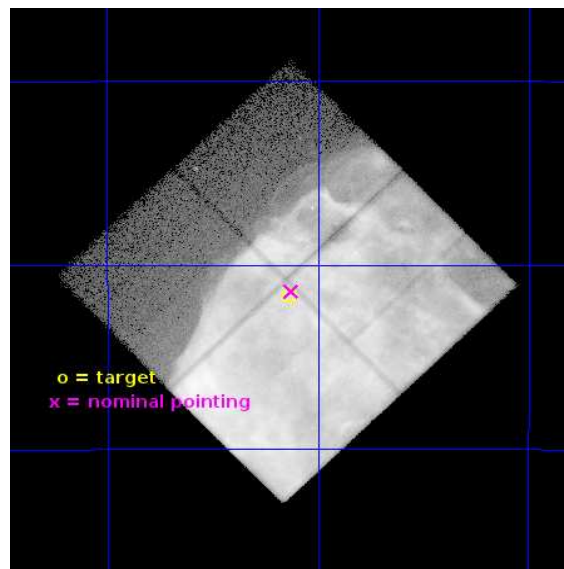
L2 Processing Date : Dec 2 2013

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1 Front

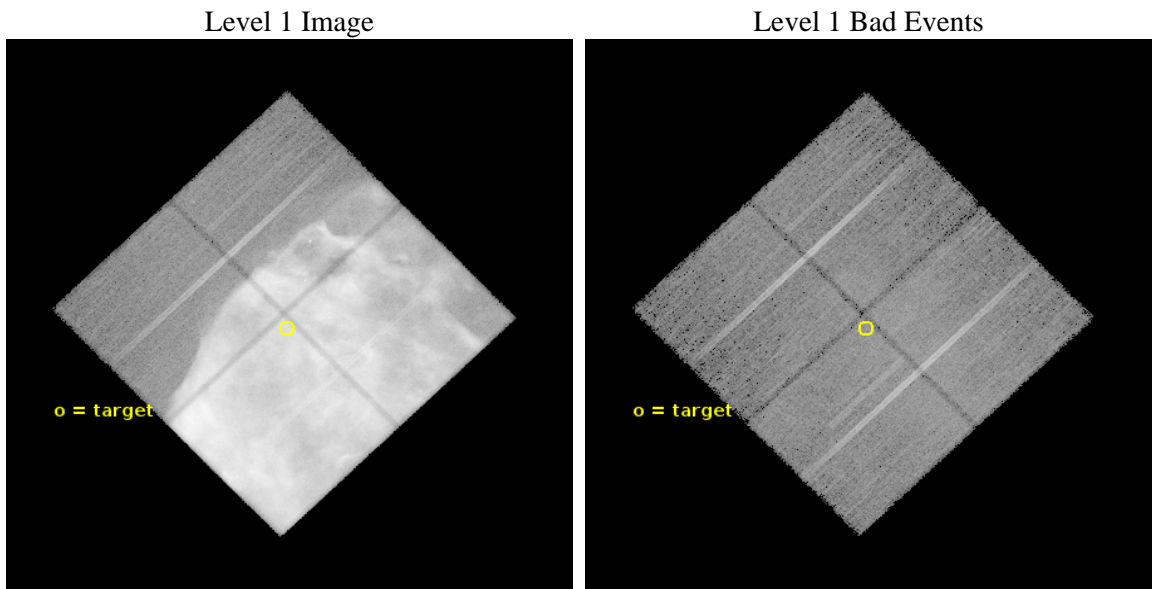
seq_num	500553	Sequence number
obs_id	5564	Observation id
title	Large-Scale Shock Interactions in Puppis A	Proposal title
observer	Dr Una Hwang	Principal investigator
object	Puppis A NE Shock Front	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	125.784	Observer's specified target RA [deg]
dec_targ	-42.694833	Observer's specified target Dec [deg]
ra_nom	125.78149874119	Nominal RA [deg]
dec_nom	-42.690550861022	Nominal Dec [deg]
roll_nom	136.00661079197	Nominal Roll [deg]
revision	4	Processing version of data
ontime	34478.199933678	Sum of GTIs [s]
livetime	34027.716869063	Livetime [s]
ontime0	34478.199933678	Sum of GTIs [s]
ontime1	34478.199933678	Sum of GTIs [s]
ontime2	34475.058963388	Sum of GTIs [s]
ontime3	34478.199933678	Sum of GTIs [s]
l2events	4934985	Number of level 2 events



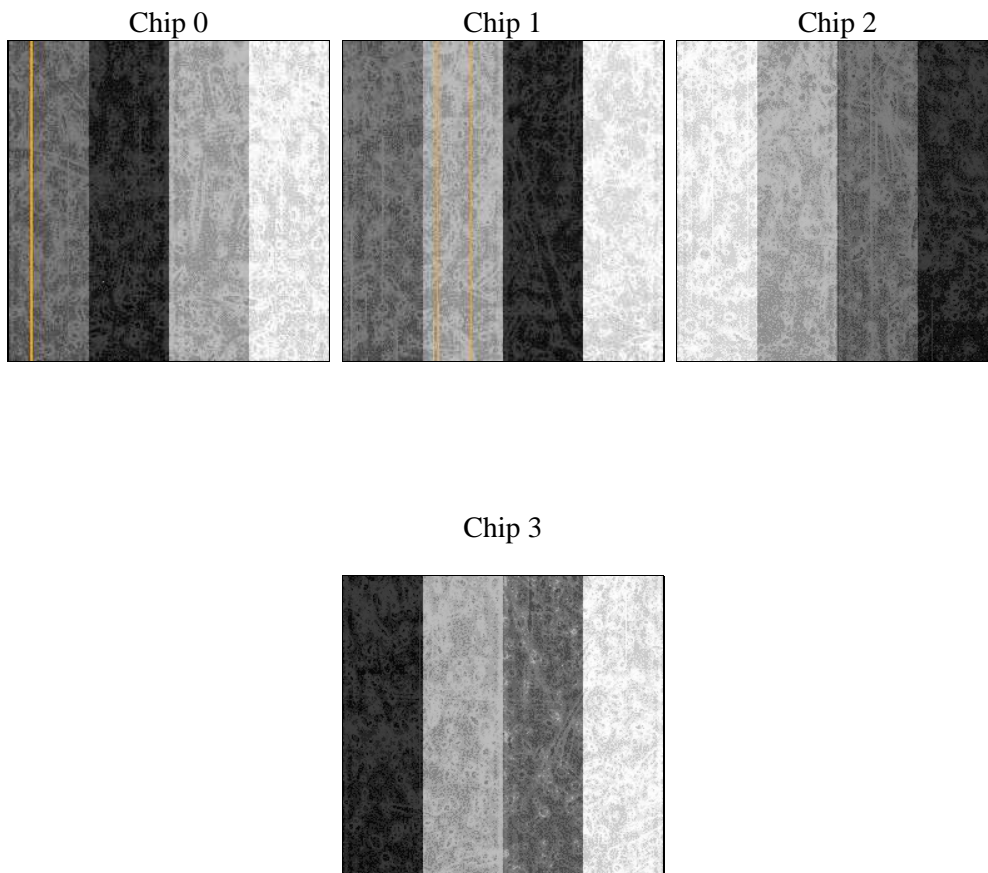
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34325.273000	[s] Scheduled observation exposure time
ascdsver	10.1.1	Processing system revision	ontime	34478.199933678	Sum of GTIs [s]
caldbver	4.5.9	 	ontime0	34478.199933678	Sum of GTIs [s]
date	2013-12-02T18:36:19	Date and time of file creation	ontime1	34478.199933678	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	34475.058963388	Sum of GTIs [s]
			ontime3	34478.199933678	Sum of GTIs [s]
			l1events	6039540	Number of level 1 events

2.1.4 Events

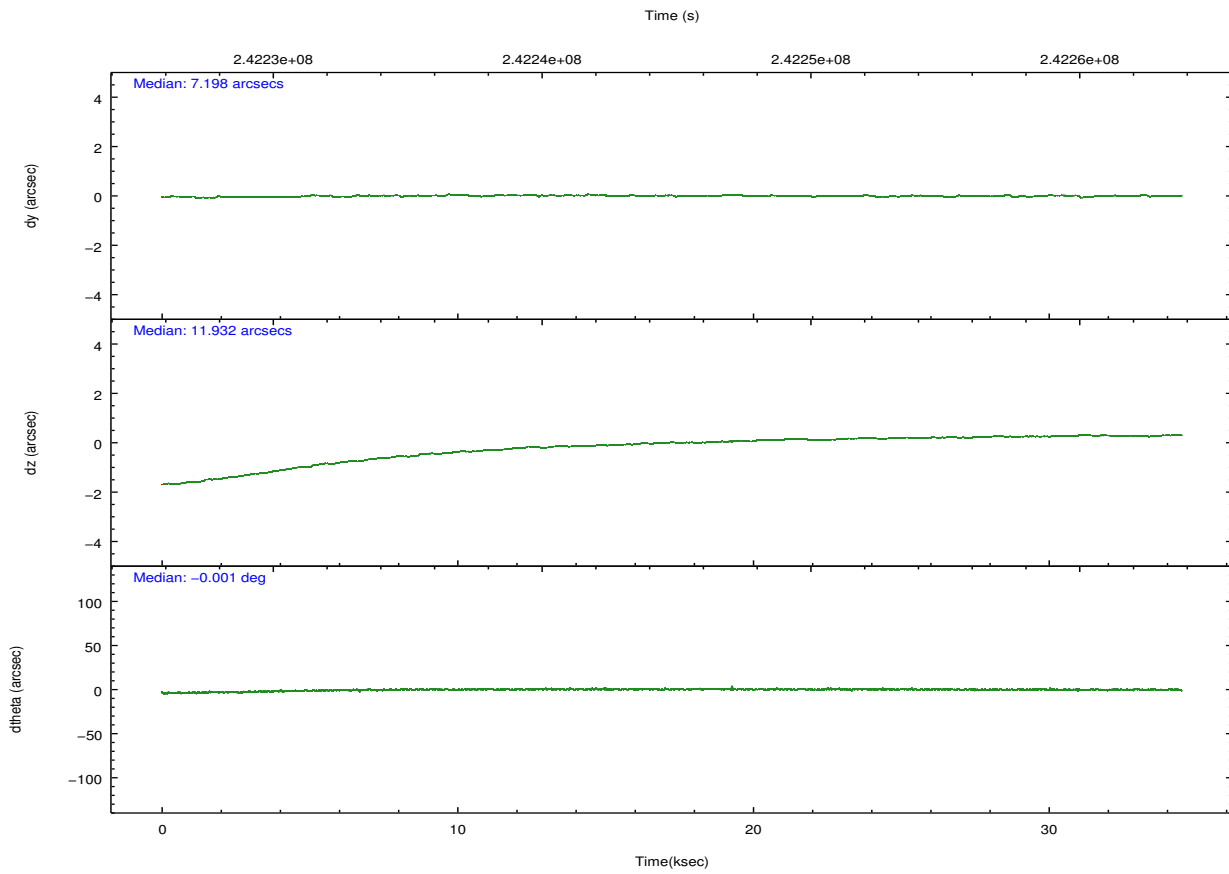
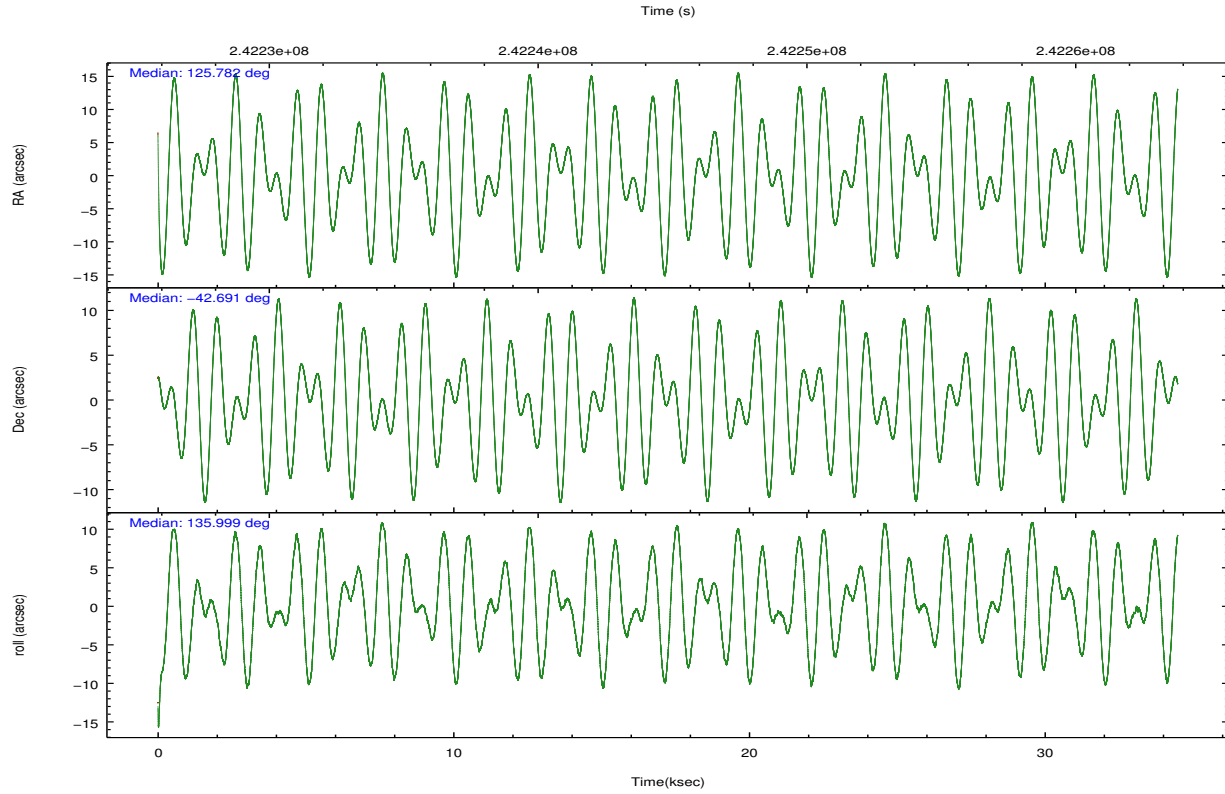
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	639471	662099	1771668	2966302
rejected events	186569	180222	233960	246390
rejected %	29%	27%	13%	8%

	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	398410	422507	1377824	2407797
	62%	63%	77%	81%
grade 1 events	1795	1799	7268	11286
	0%	0%	0%	0%
grade 2 events	34752	37499	105461	201050
	5%	5%	5%	6%
grade 3 events	9097	10163	26138	51544
	1%	1%	1%	1%
grade 4 events	9177	9967	25724	51389
	1%	1%	1%	1%
grade 5 events	7062	8094	9765	14037
	1%	1%	0%	0%
grade 6 events	6317	7427	12126	23389
	0%	1%	0%	0%
grade 7 events	172861	164643	207362	205810
	27%	24%	11%	6%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	125.817719	125.7814987411854	Subarray requested	NONE	NONE
[deg] Pointing Dec	-42.697078	-42.69055086102156	Alternating exposures requested	N	N
[deg] Pointing Roll	135.822496	136.0066107919736	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	242227738.184000	242226565.80644			
Observation start date	2005-09-04T13:27:54	2005-09-04T13:09:25			
[s] Observation end time (MET)	242262064.184000	242263019.42062			
Observation end date	2005-09-04T23:00:00	2005-09-04T23:16:59			
Read mode	TIMED	TIMED			

2.3 Aspect

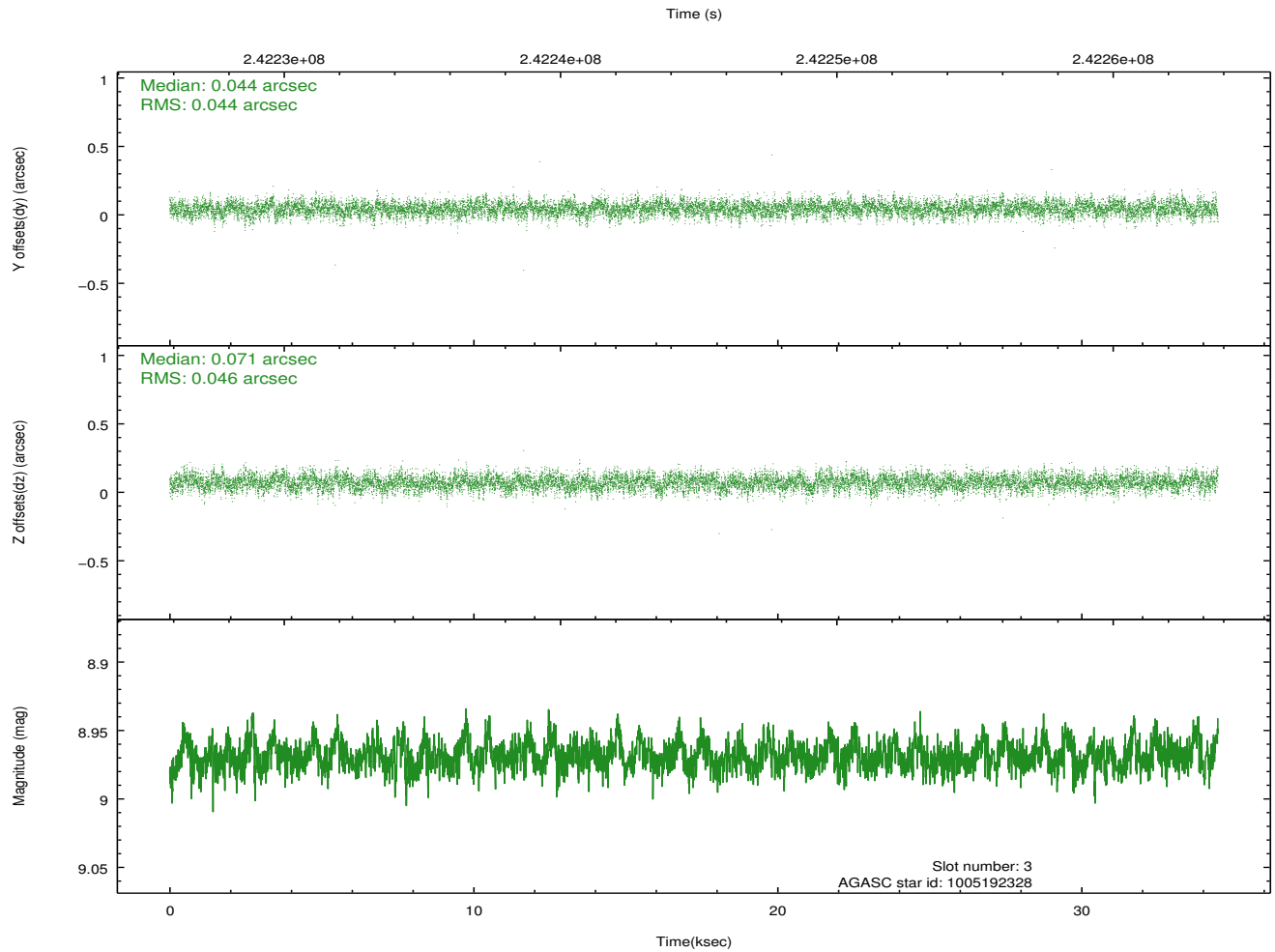
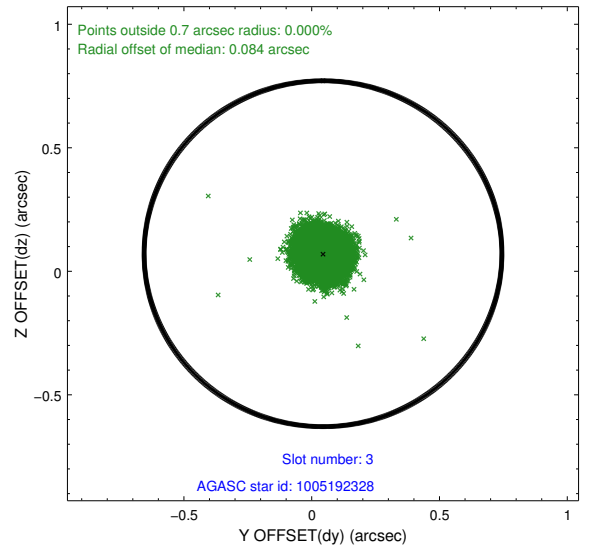
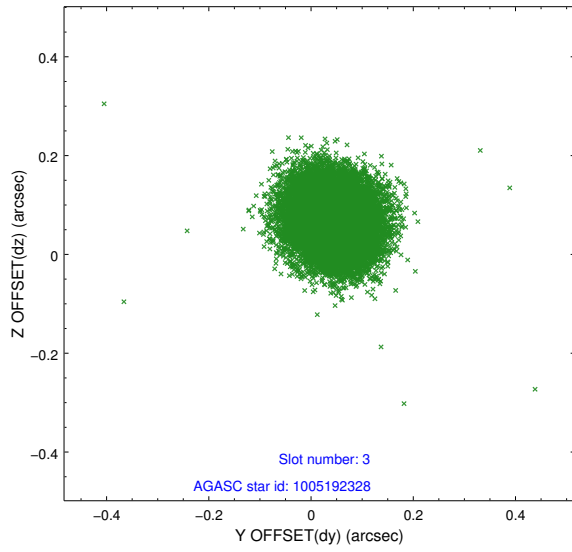


Slot Statistics

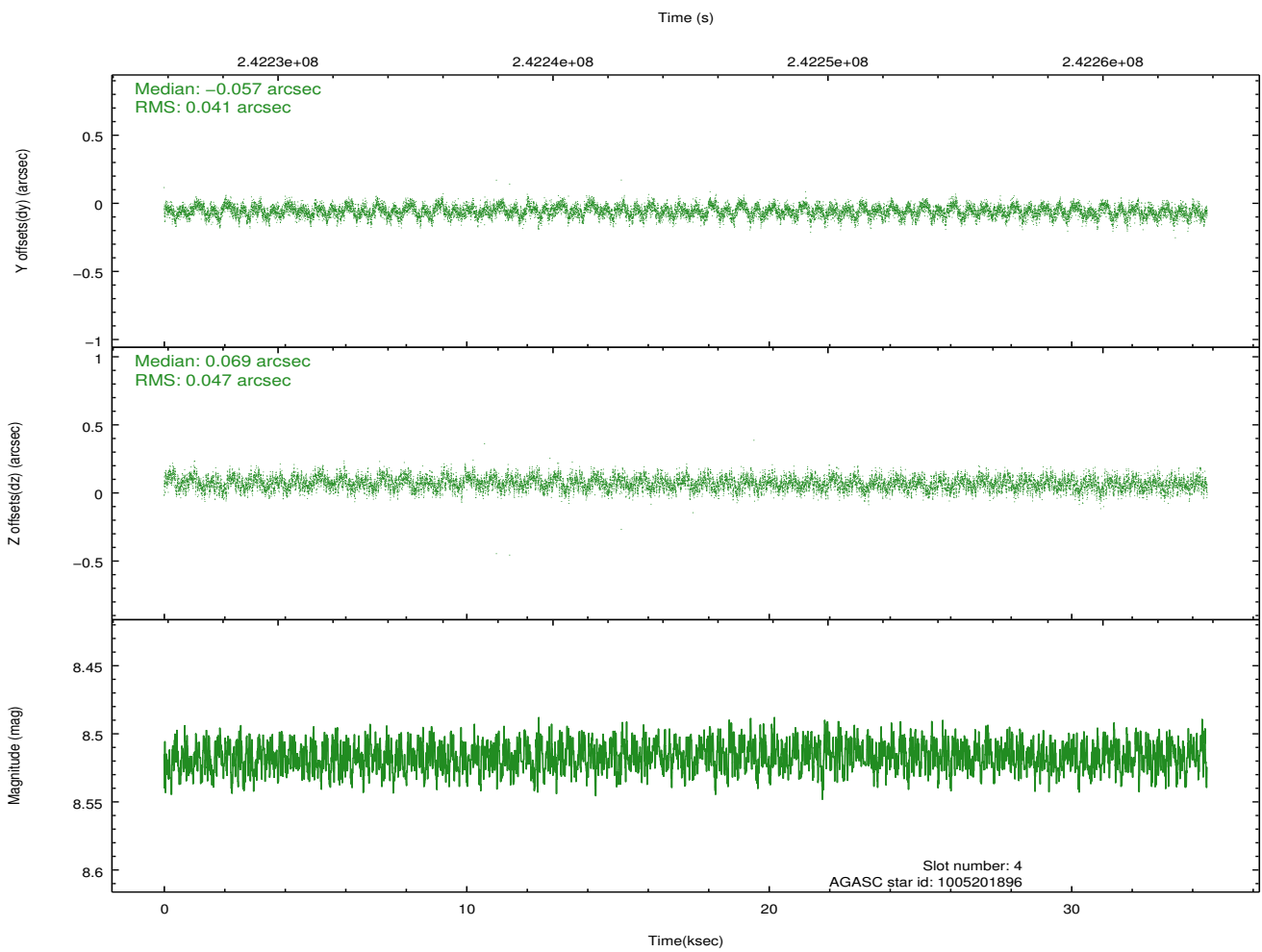
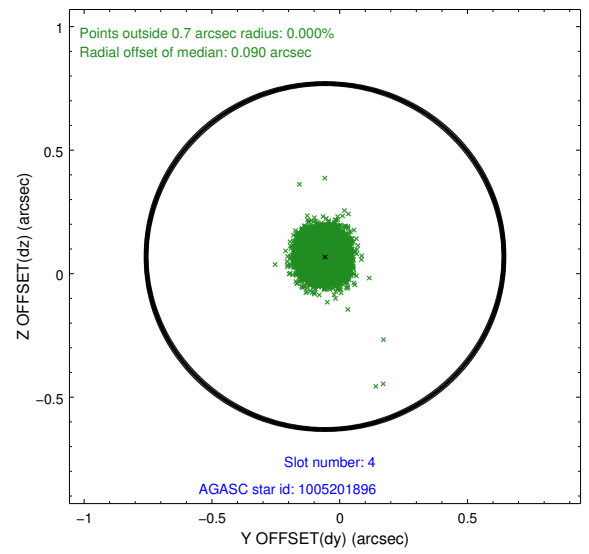
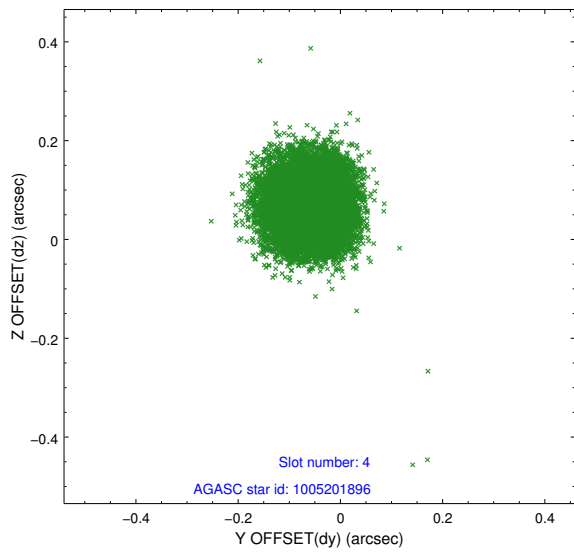
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	8412	0.042	-0.010	0.012	0.026	0.000000	0.000000	932.50	-835.25
1	FID	ACIS-I-5	7.23	8412	-0.166	0.060	0.009	0.026	0.000000	0.000000	-1815.75	1062.34
2	FID	ACIS-I-6	7.25	8409	0.033	0.022	0.015	0.029	0.000000	0.000000	398.05	1706.82
3	GUIDE	1005192328	8.97	16819	0.044	0.071	0.068	0.109	126.494374	-42.919317	-1841.62	-664.19
4	GUIDE	1005201896	8.52	16812	-0.057	0.069	0.067	0.106	126.670468	-42.695868	-1622.83	-1567.27
5	GUIDE	1005216672	7.94	16824	-0.053	-0.043	0.078	0.125	125.948907	-42.033869	1412.41	-1956.27
6	GUIDE	1005724040	7.60	16824	-0.036	-0.137	0.103	0.162	125.738175	-43.227880	-1182.04	1515.81
7	GUIDE	1005199176	9.34	16808	0.099	0.030	0.104	0.166	125.827015	-41.895026	1994.82	-2087.61

2.4 Star Slots

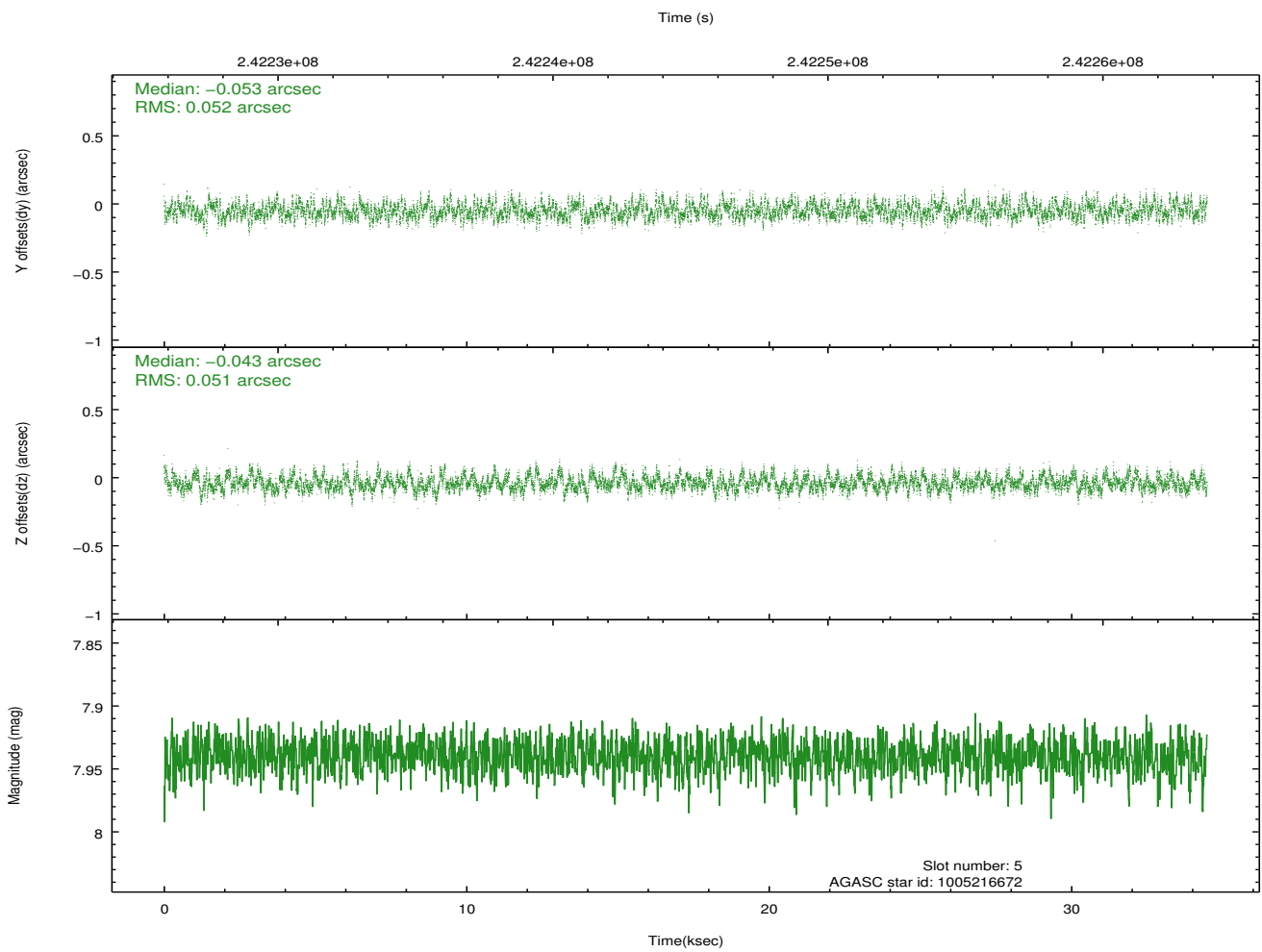
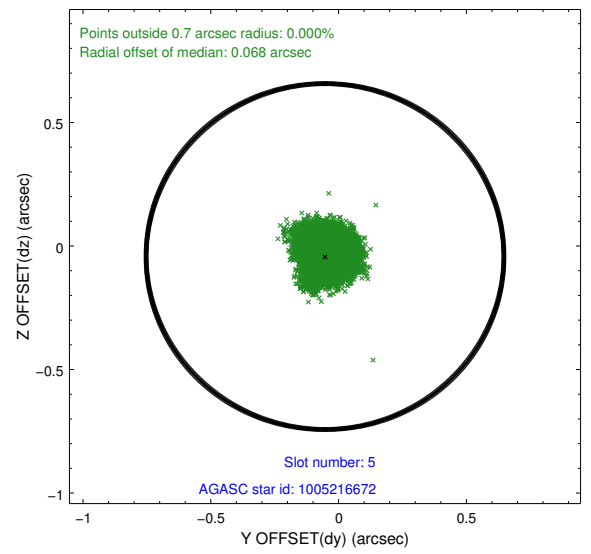
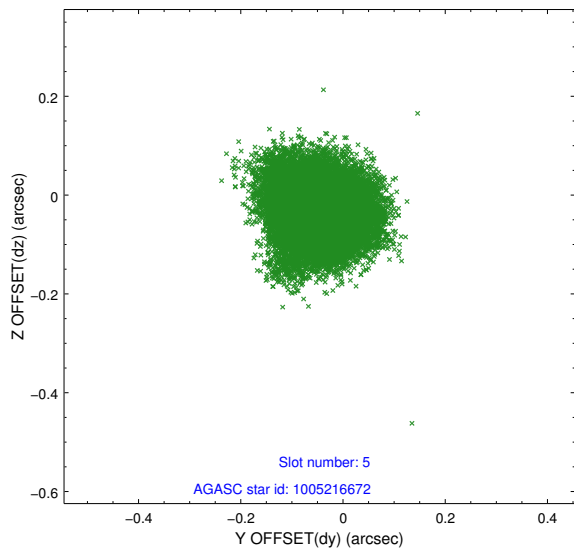
2.4.1 Slot 3



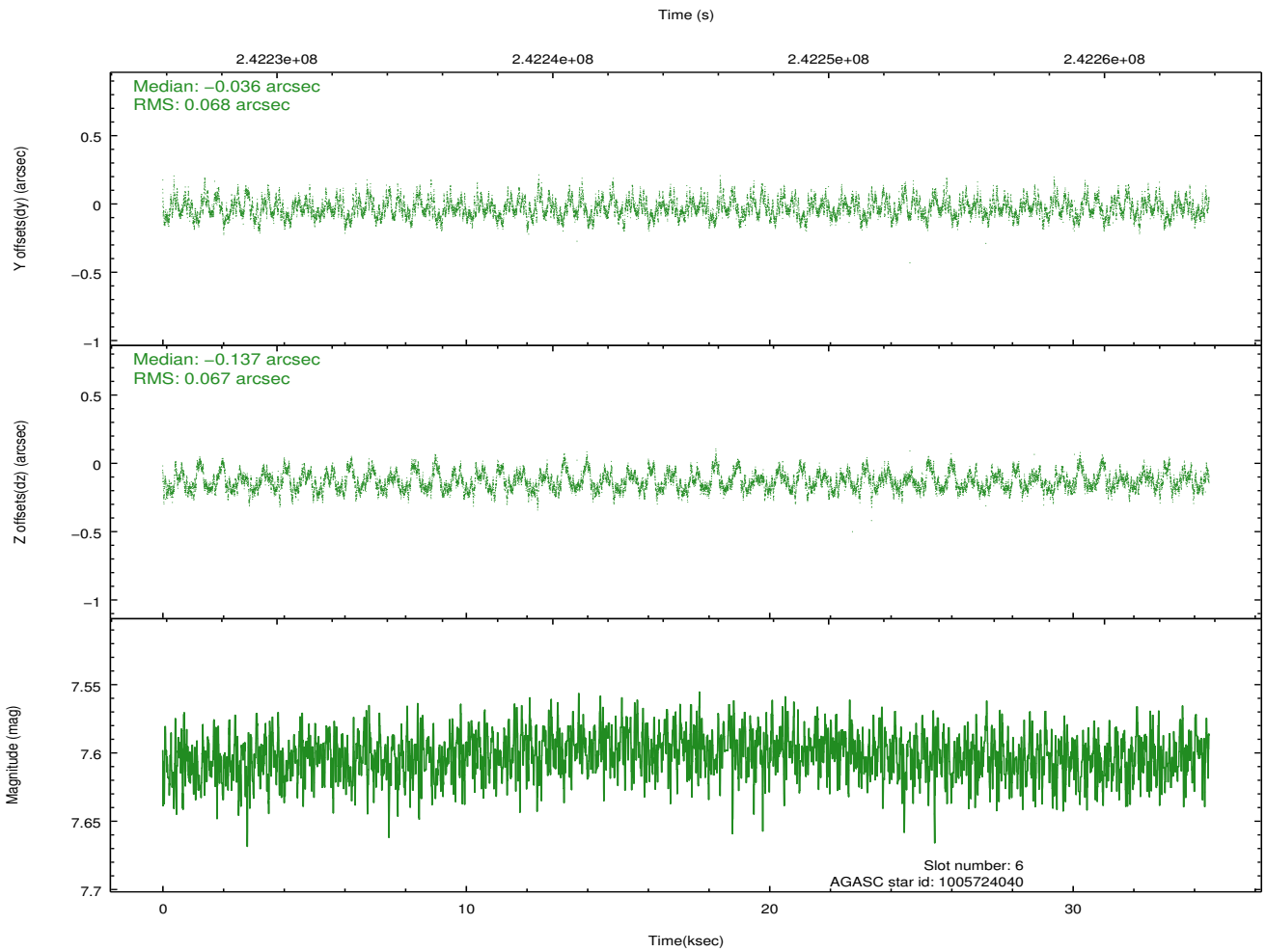
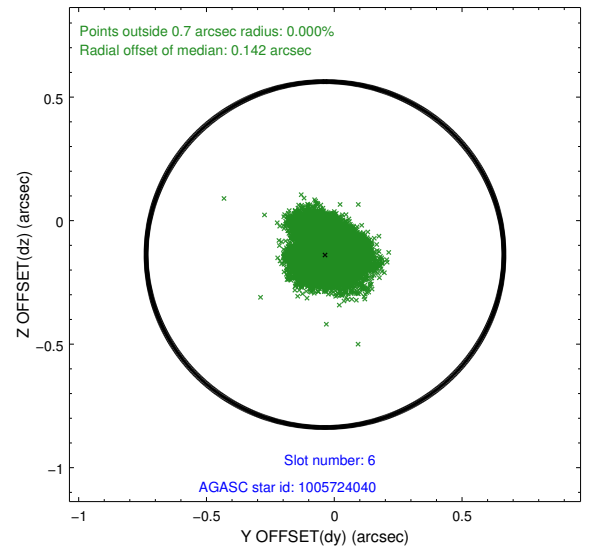
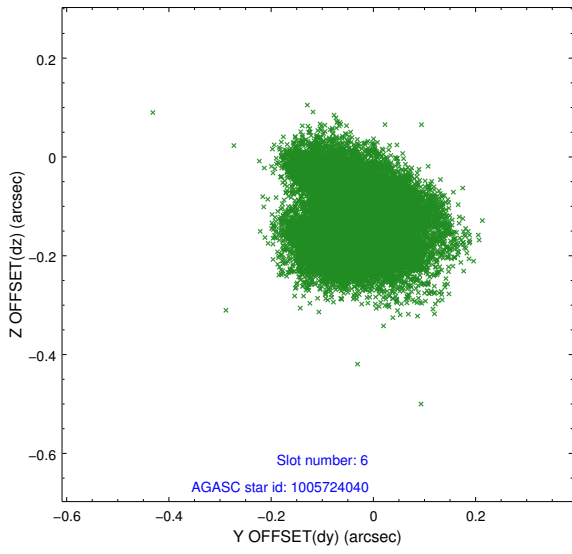
2.4.2 Slot 4



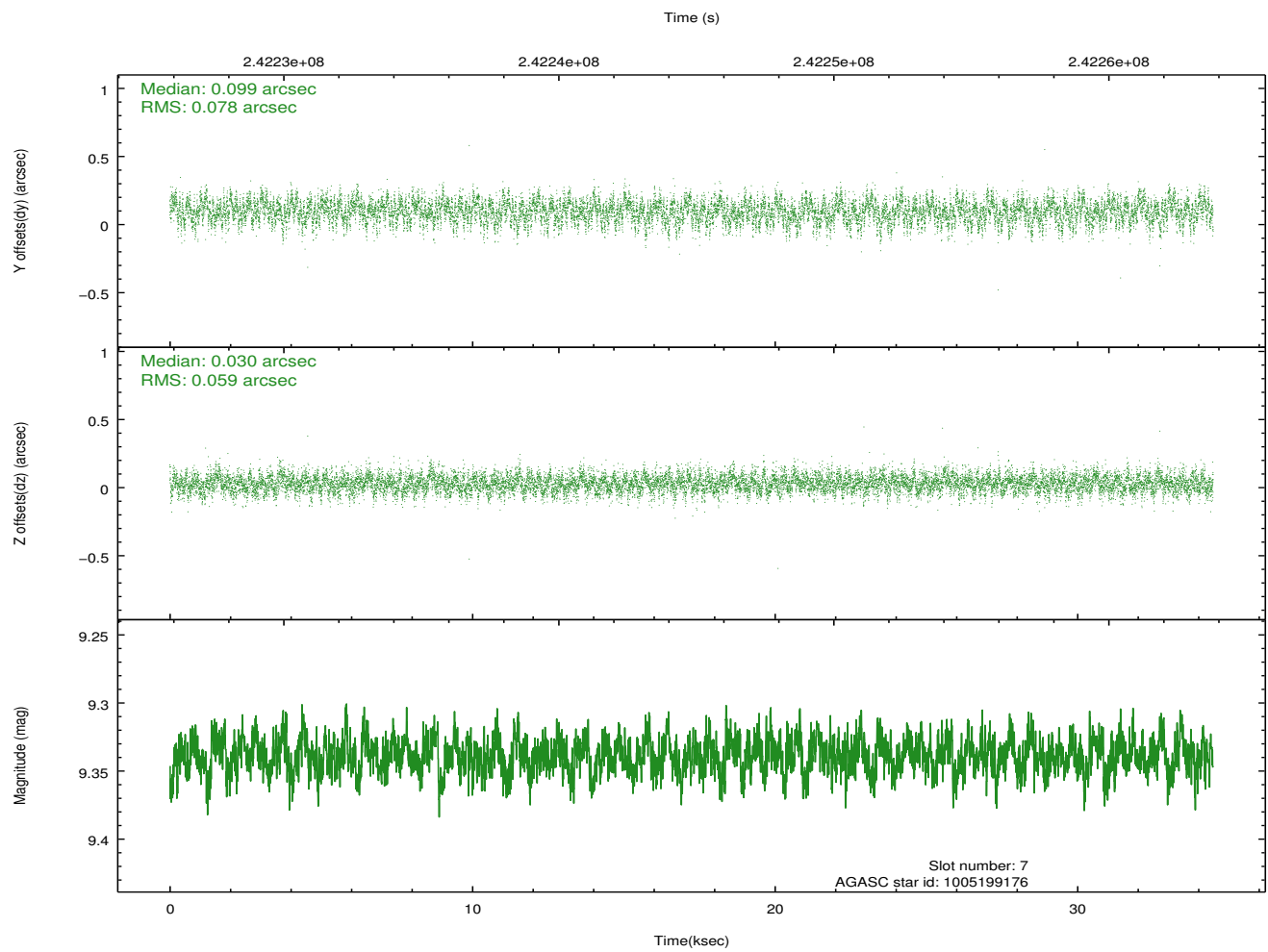
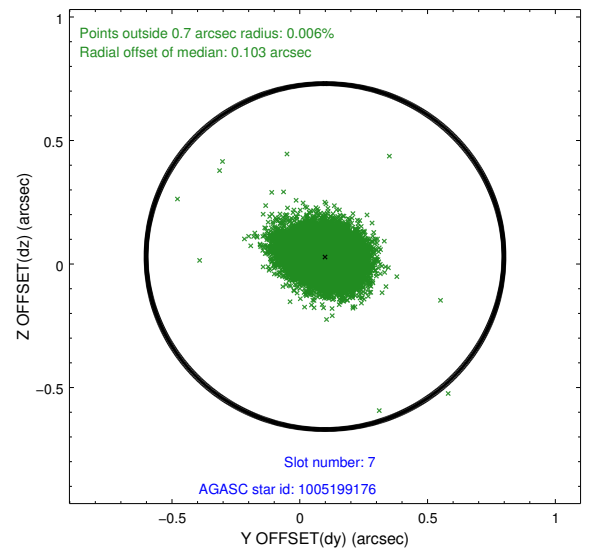
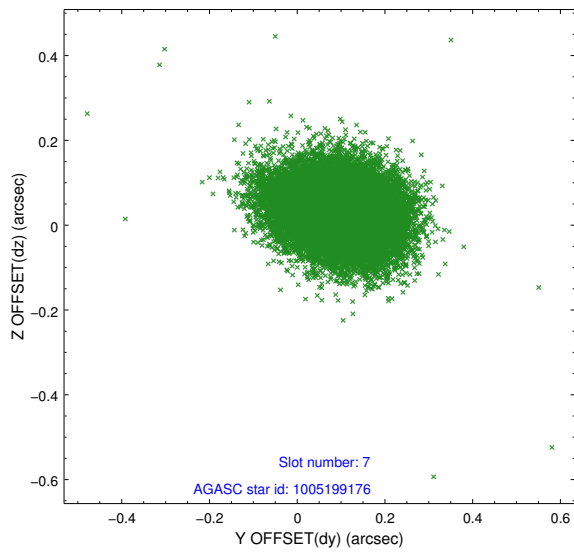
2.4.3 Slot 5



2.4.4 Slot 6

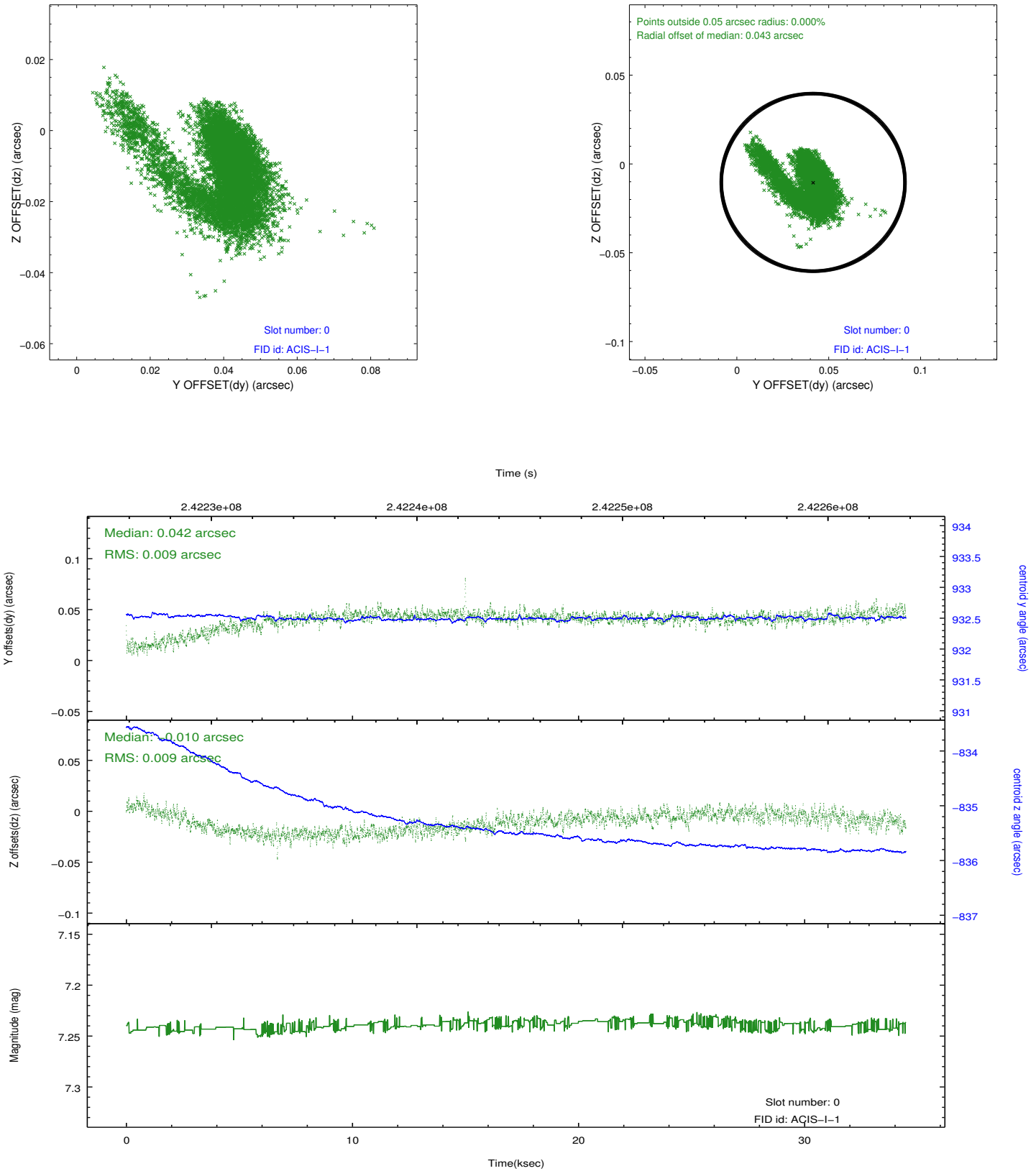


2.4.5 Slot 7

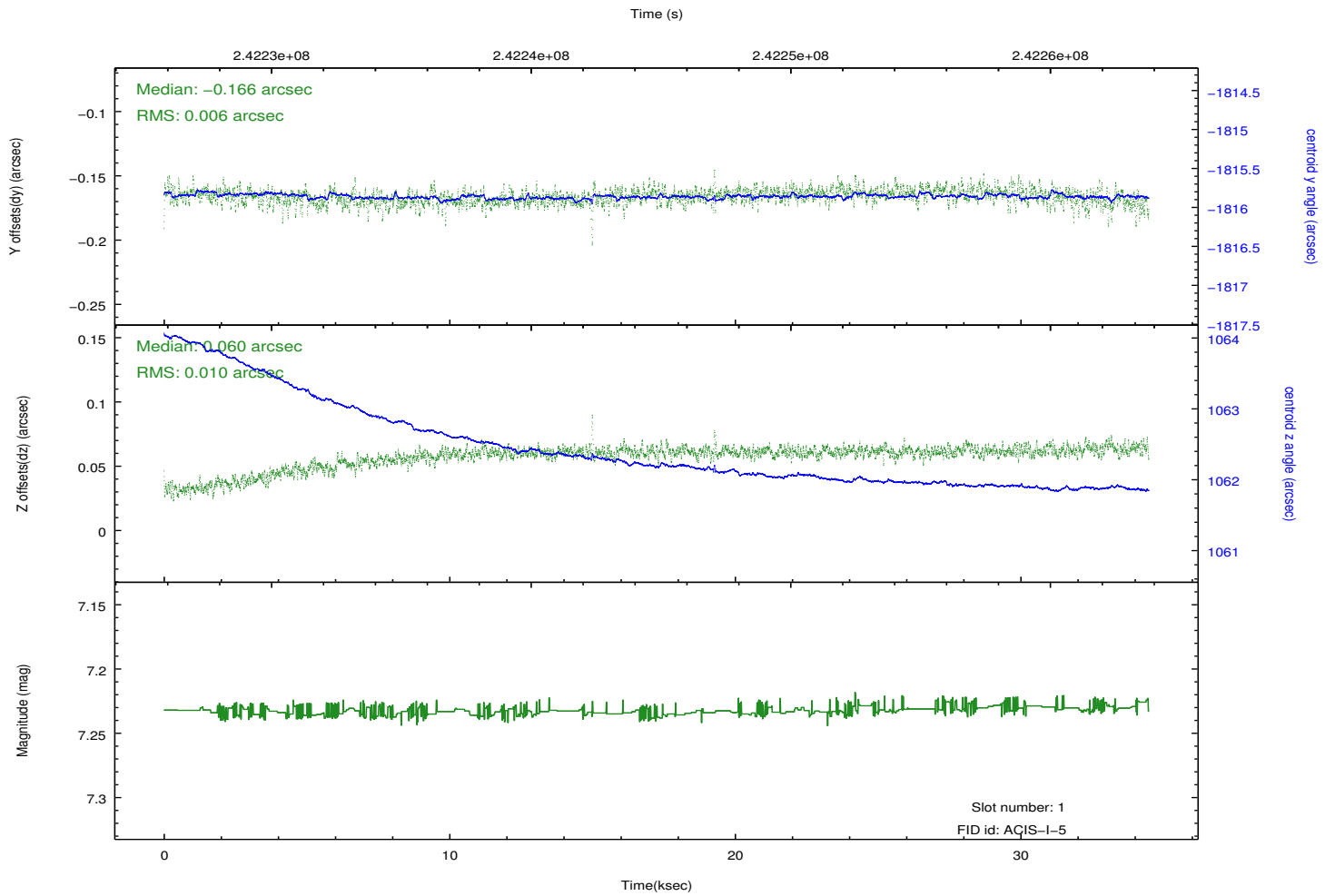
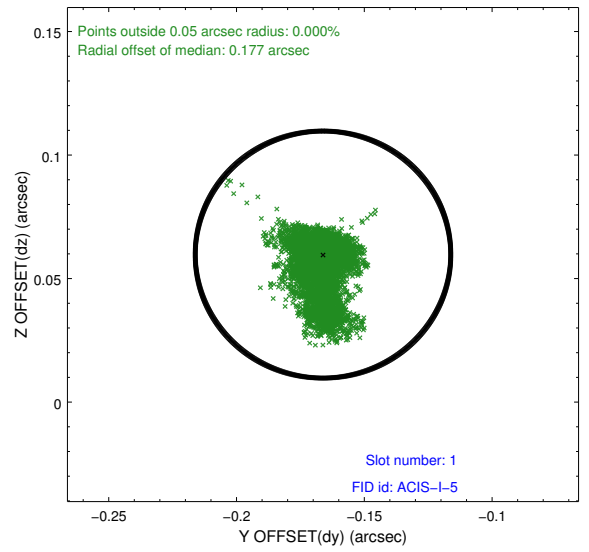
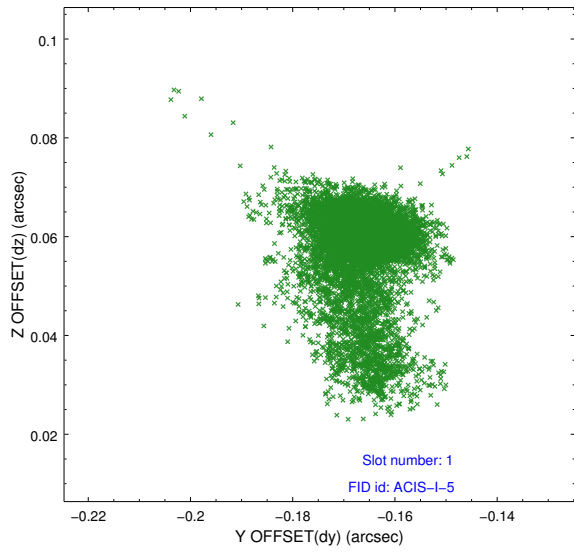


2.5 FID Slots

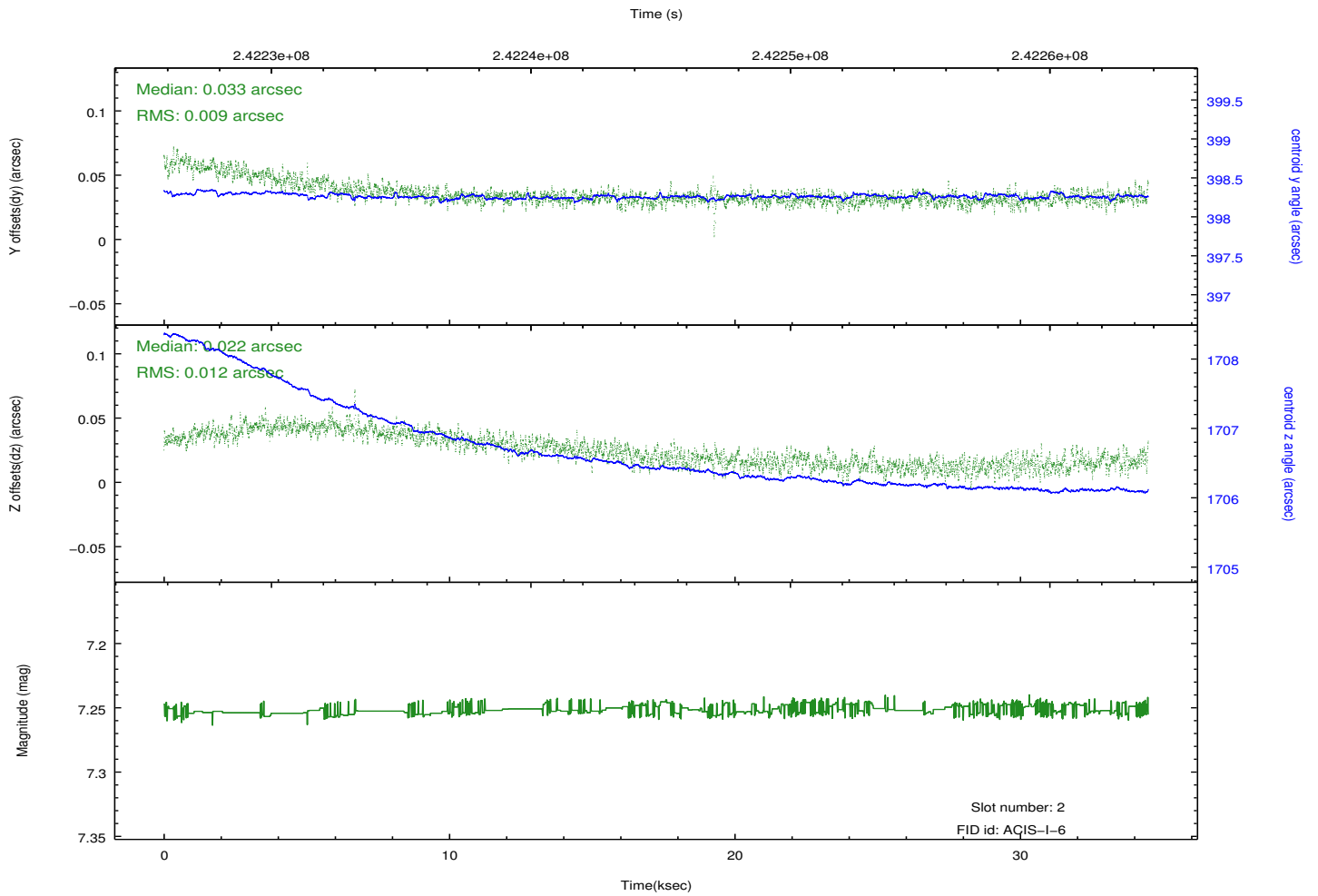
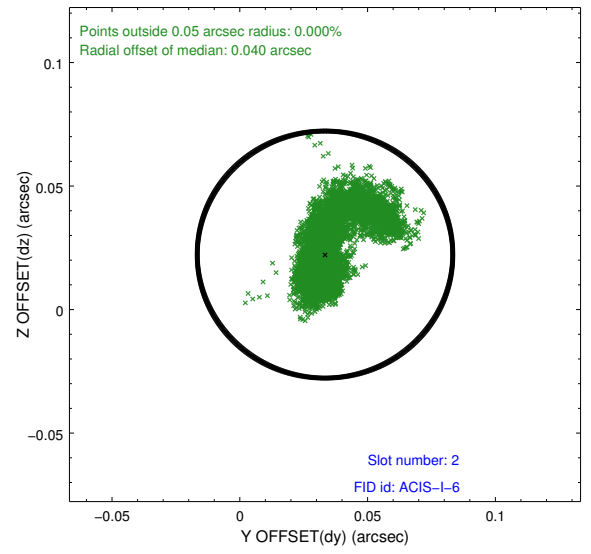
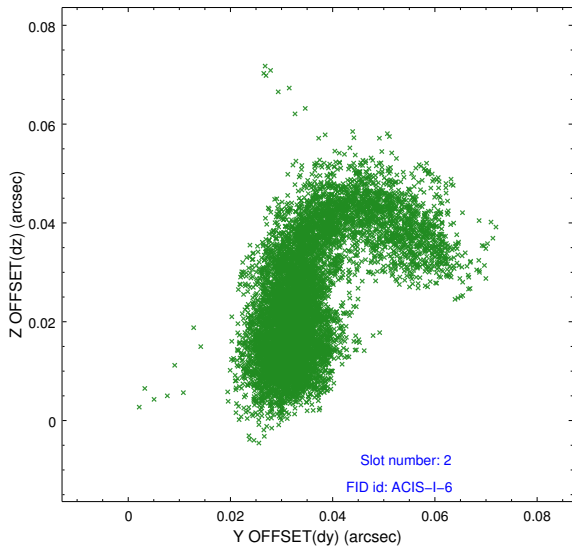
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.47819

A.2 Comments

A spatial region of the original bias map for CCD = 0 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 0 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (125.69393, -42.57503), (125.69096, -42.57728), (125.75354, -42.62182), (125.75504, -42.61853).

This region does include some of the extended emission.