

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 7473 - L2 Version 4
Chandra X-Ray Center

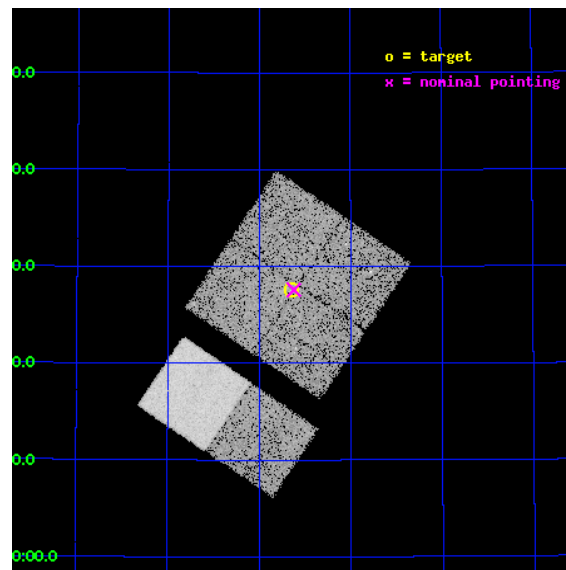
L2 Processing Date : May 1 2012

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1 Front

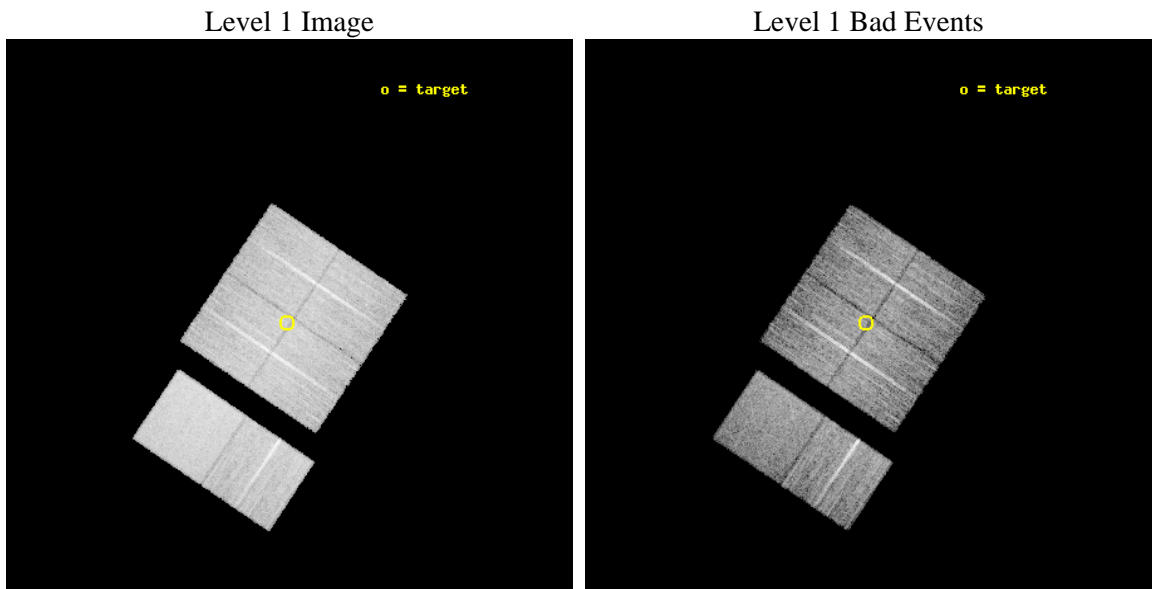
seq_num	400583	Sequence number
obs_id	7473	Observation id
title	A Pilot Study of X-ray Emission from Candidate Massive Star Clusters	
observer	Professor Gordon Garmire	Principal investigator
object	BDSB2003+67	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	70.1625	Observer's specified target RA [deg]
dec_targ	50.460833	Observer's specified target Dec [deg]
ra_nom	70.155293488187	Nominal RA [deg]
dec_nom	50.459787159188	Nominal Dec [deg]
roll_nom	213.99946621866	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10175.999962151	Sum of GTIs [s]
livetime	10047.145323379	Livetime [s]
ontime0	10175.999962151	Sum of GTIs [s]
ontime1	10175.999962151	Sum of GTIs [s]
ontime2	10175.999962151	Sum of GTIs [s]
ontime3	10175.999962151	Sum of GTIs [s]
ontime6	10175.999962151	Sum of GTIs [s]
ontime7	10175.999962151	Sum of GTIs [s]
l2events	91678	Number of level 2 events



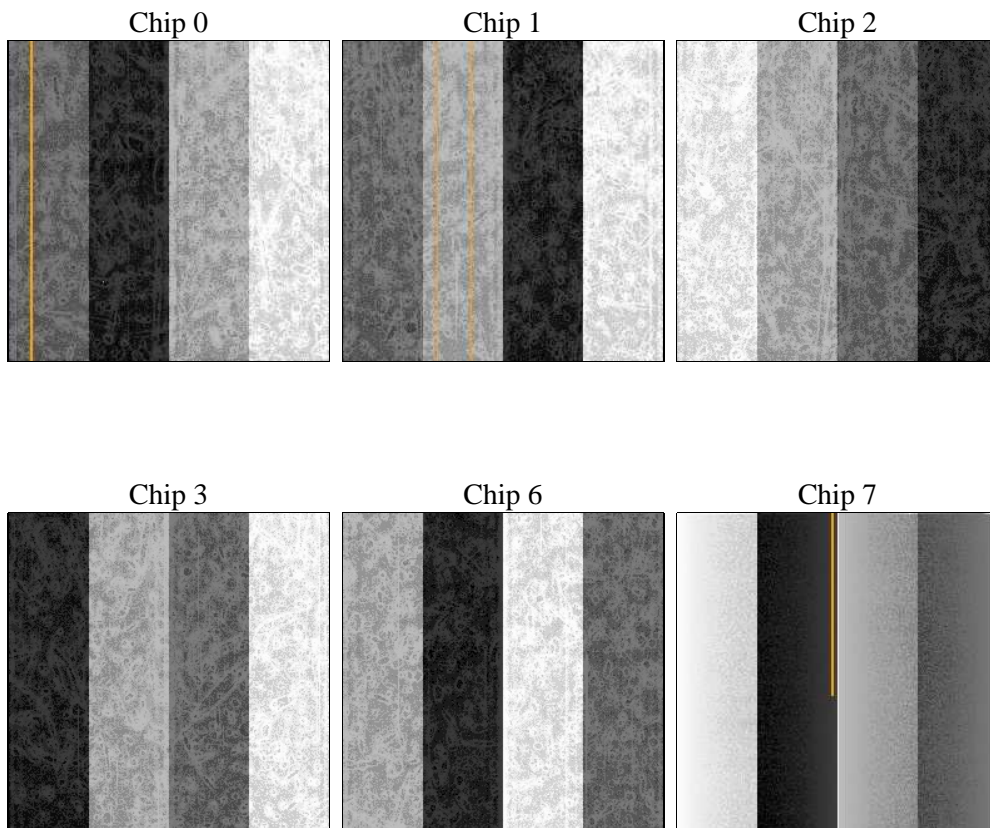
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	10175.999962151	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	10175.999962151	Sum of GTIs [s]
date	2012-05-01T18:46:25	Date and time of file creation	ontime1	10175.999962151	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	10175.999962151	Sum of GTIs [s]
			ontime3	10175.999962151	Sum of GTIs [s]
			ontime6	10175.999962151	Sum of GTIs [s]
			ontime7	10175.999962151	Sum of GTIs [s]
			l1events	540226	Number of level 1 events

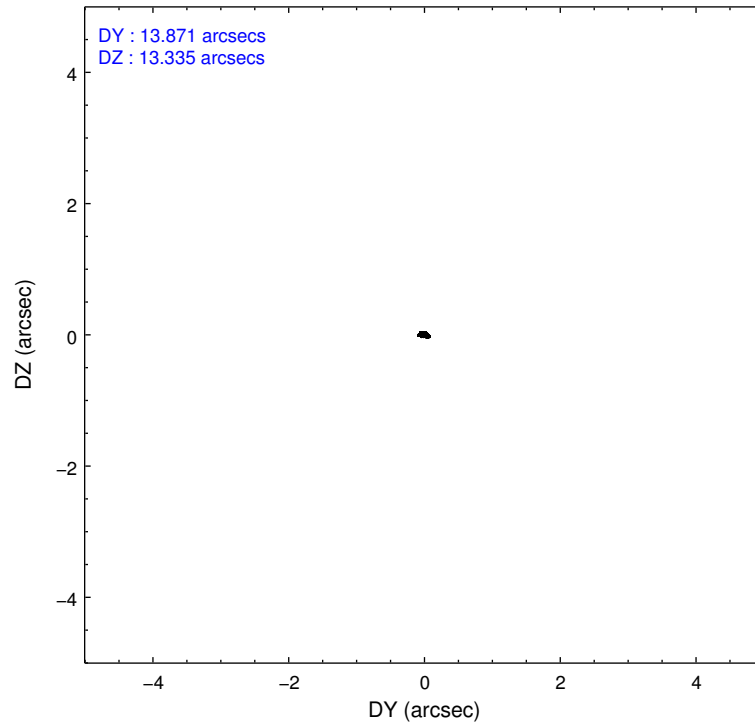
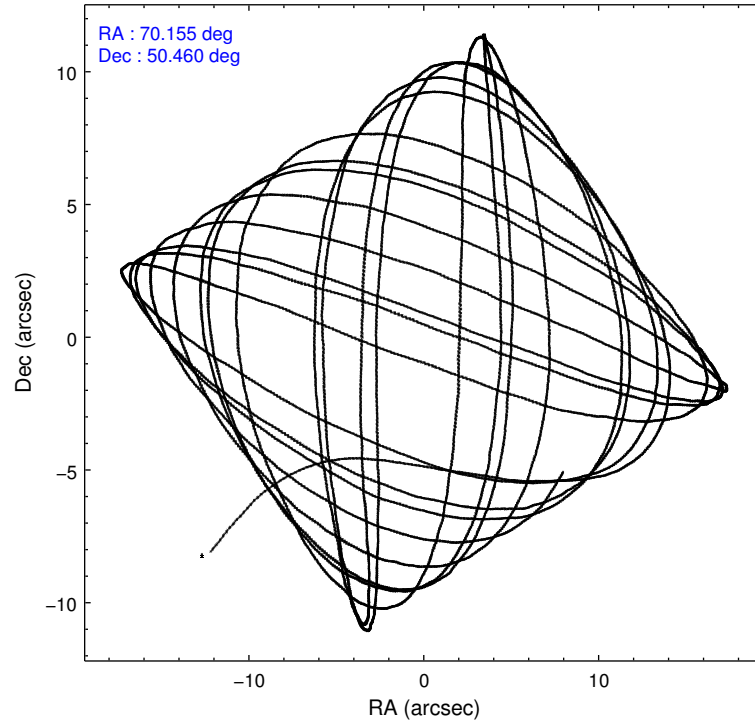
2.1.4 Events

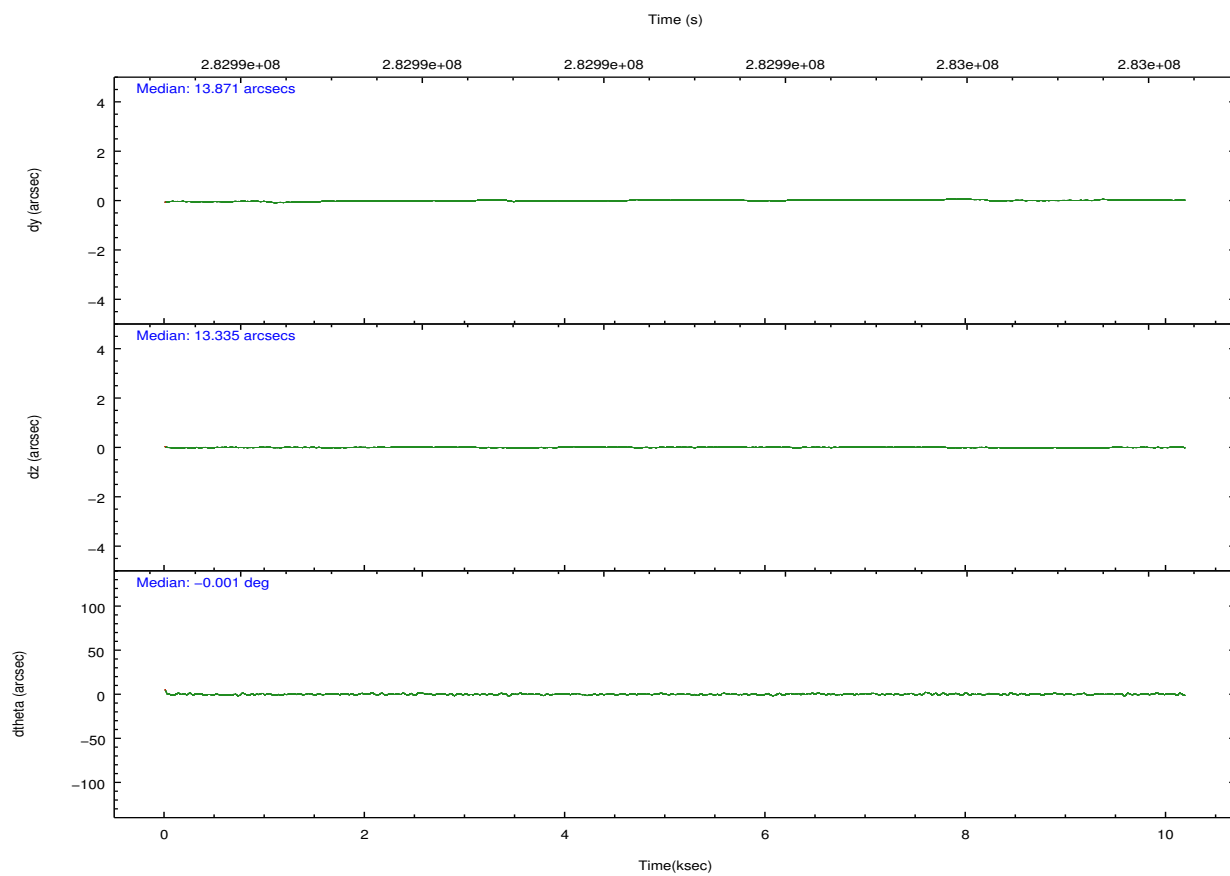
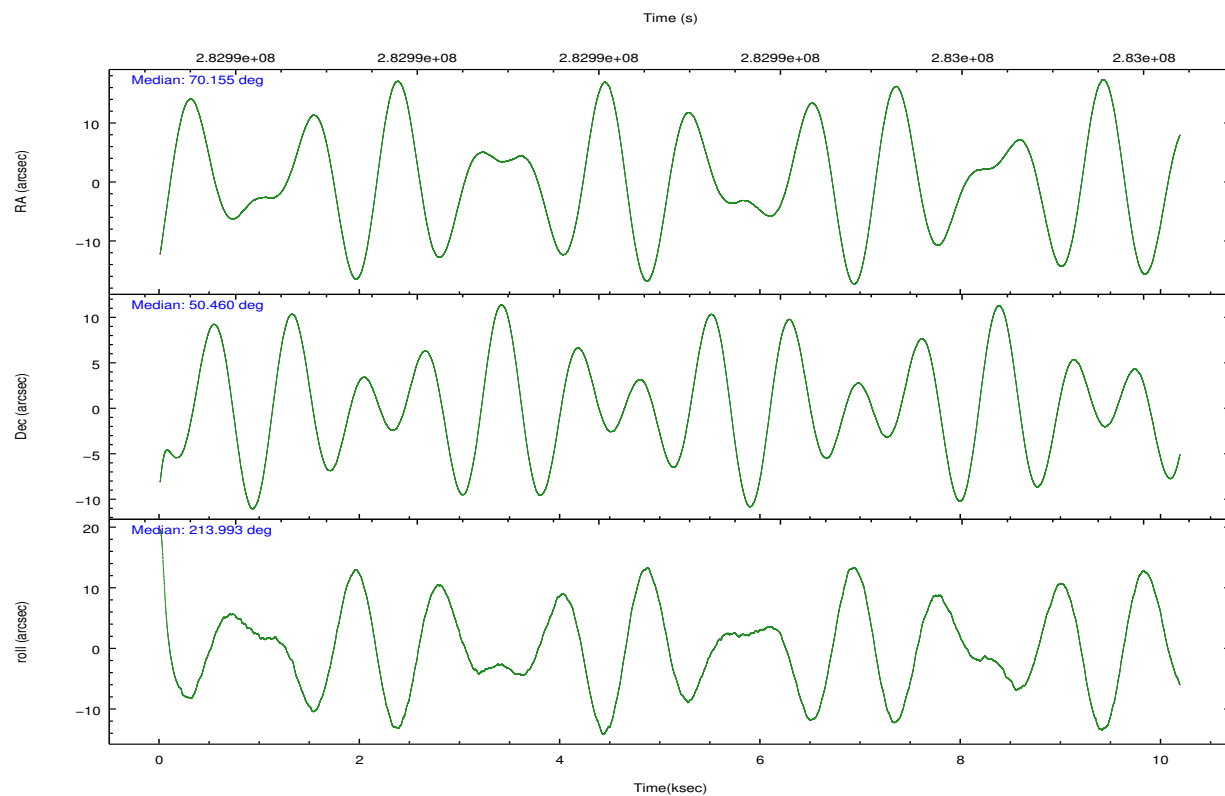
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	79679	82499	86810	85455	87538	118245	grade 0 events	4499	4196	4465	4586	4055	4085
rejected events	69255	71601	76620	75160	77104	70634		5%	5%	5%	5%	4%	3%
rejected %	86%	86%	88%	87%	88%	59%	grade 1 events	60	43	44	46	40	97
								0%	0%	0%	0%	0%	0%
							grade 2 events	2336	2524	2165	2082	2407	9615
								2%	3%	2%	2%	2%	8%
							grade 3 events	981	1118	921	966	967	4146
								1%	1%	1%	1%	1%	3%
							grade 4 events	900	1069	1027	1030	969	4119
								1%	1%	1%	1%	1%	3%
							grade 5 events	3442	3837	3374	4068	4103	11127
								4%	4%	3%	4%	4%	9%
							grade 6 events	1865	2153	1736	1796	2179	26356
								2%	2%	1%	2%	2%	22%
							grade 7 events	65596	67559	73078	70881	72818	58700
								82%	81%	84%	82%	83%	49%

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	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	70.174059	70.15529348818662	CCD I2 on	Y	Y
[deg] Pointing Dec	50.484602	50.45978715918814	CCD I3 on	Y	Y
[deg] Pointing Roll	213.776294	213.999466218662	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	282987873.184000	282986723.85726	CCD S5 on	N	N
Observation start date	2006-12-20T07:43:28	2006-12-20T07:25:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	282997873.184000	282998820.39533	On-chip summing requested	N	N
Observation end date	2006-12-20T10:30:08	2006-12-20T10:47:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



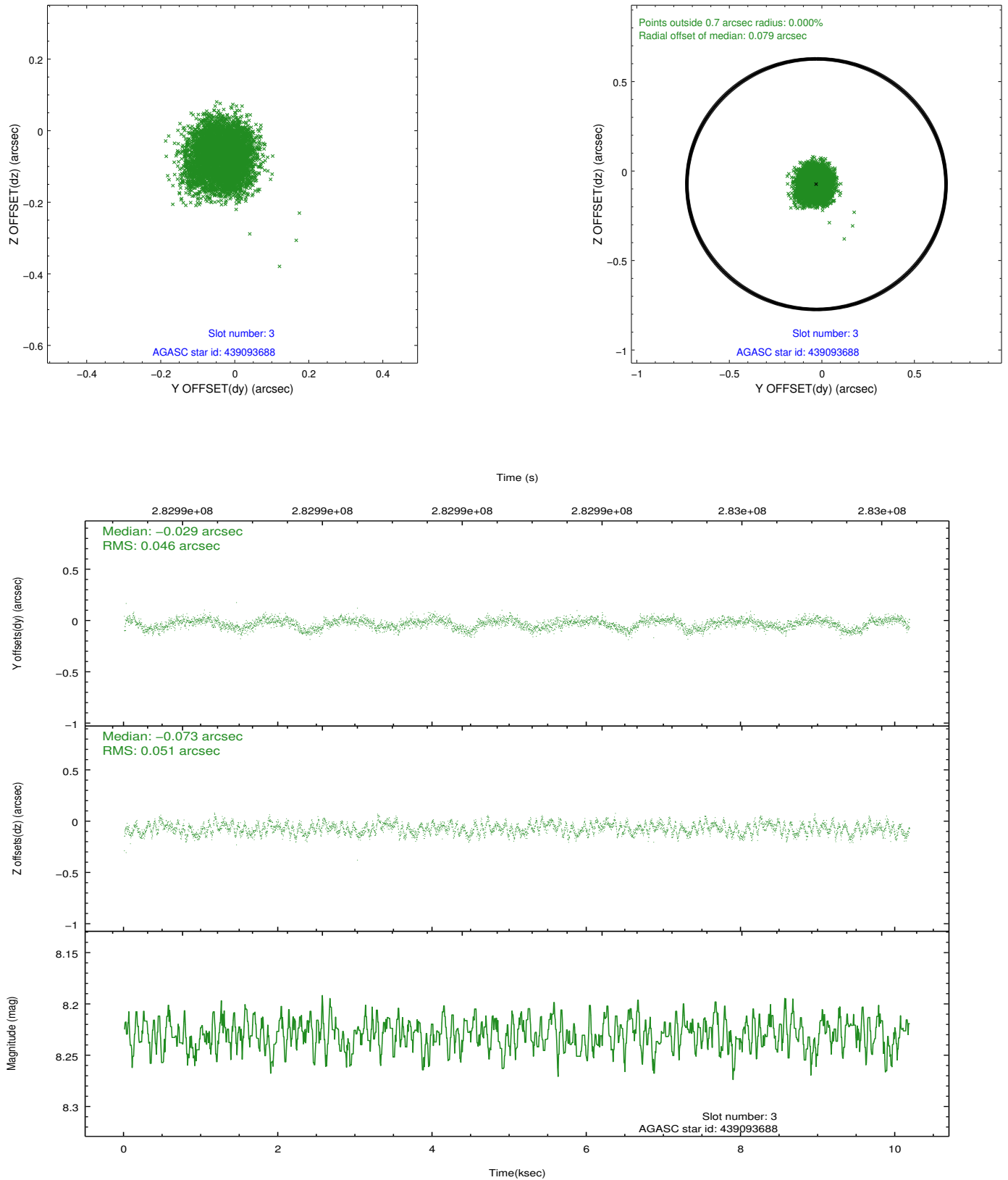


Slot Statistics

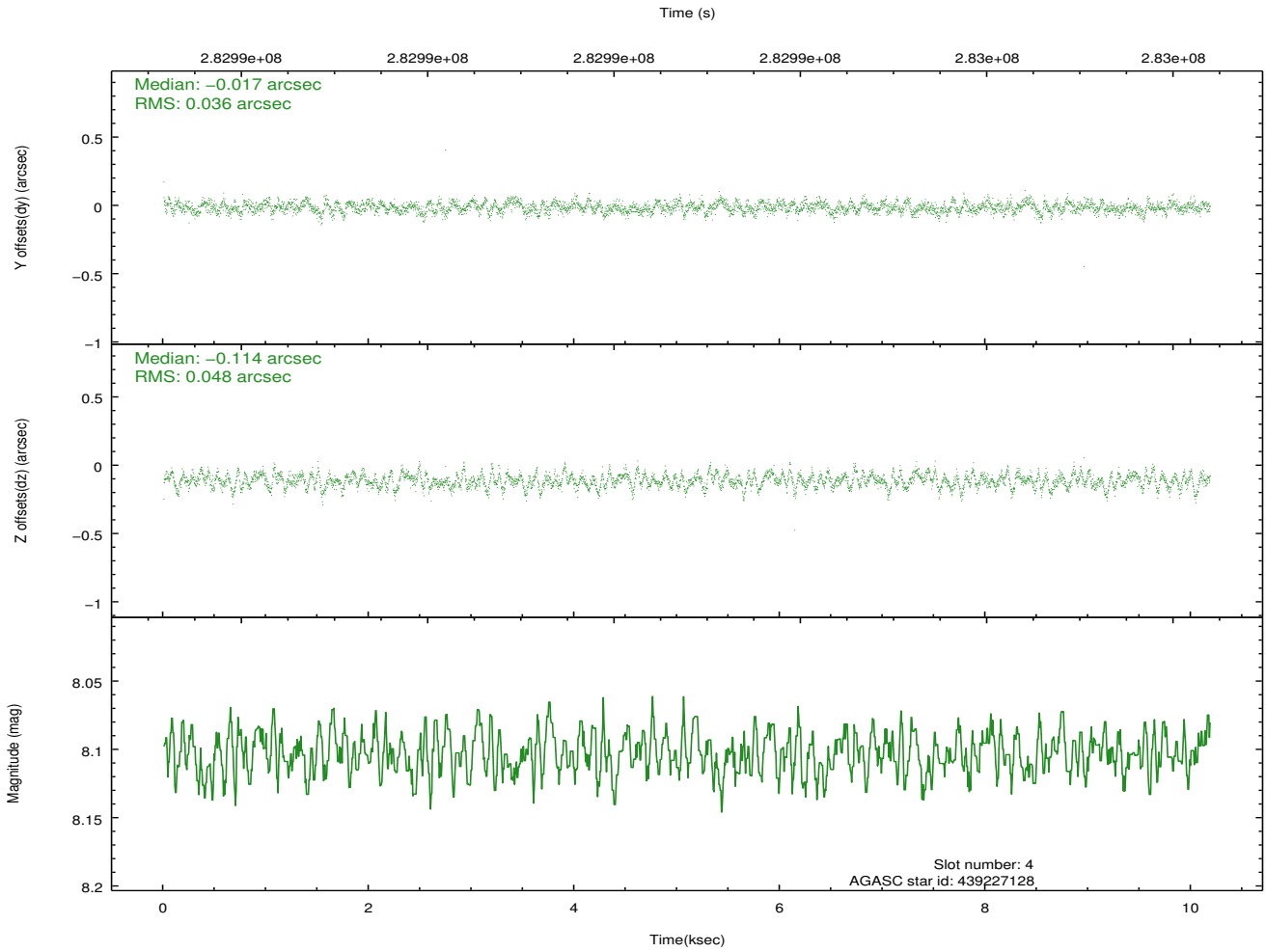
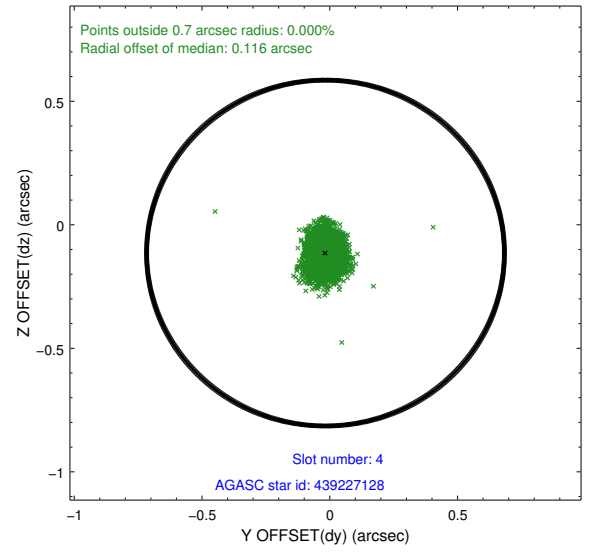
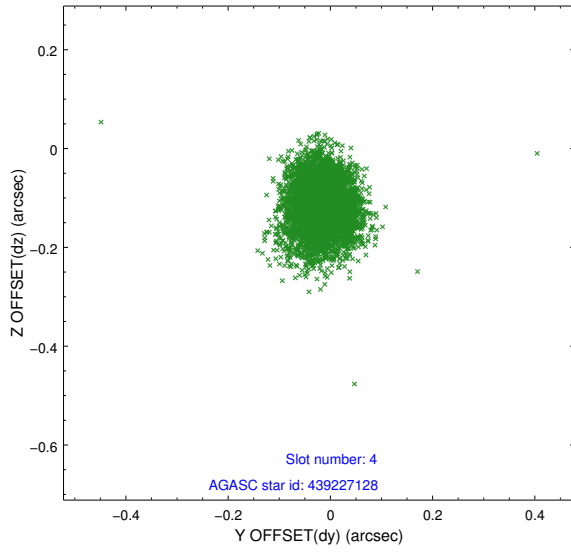
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.13	2483	-0.094	-0.079	0.009	0.016	0.000000	0.000000	-768.66	-843.31
1	FID	ACIS-I-4	7.18	2484	0.259	0.078	0.006	0.011	0.000000	0.000000	2145.55	1062.70
2	FID	ACIS-I-5	7.22	2484	-0.266	0.070	0.008	0.015	0.000000	0.000000	-1821.96	1061.21
3	GUIDE	439093688	8.23	4968	-0.029	-0.073	0.074	0.114	70.270649	50.066339	651.55	1376.26
4	GUIDE	439227128	8.10	4965	-0.017	-0.114	0.063	0.105	70.543832	49.919830	416.87	2165.17
5	GUIDE	439621272	7.86	4966	0.064	0.022	0.061	0.097	70.061370	51.107148	-1033.84	-2004.31
6	GUIDE	439752984	7.91	4967	-0.065	0.103	0.055	0.088	70.829467	50.794004	-1862.60	-102.61
7	GUIDE	439094776	9.11	4964	0.046	0.063	0.084	0.144	69.568640	50.505997	1106.19	-839.18

2.4 Star Slots

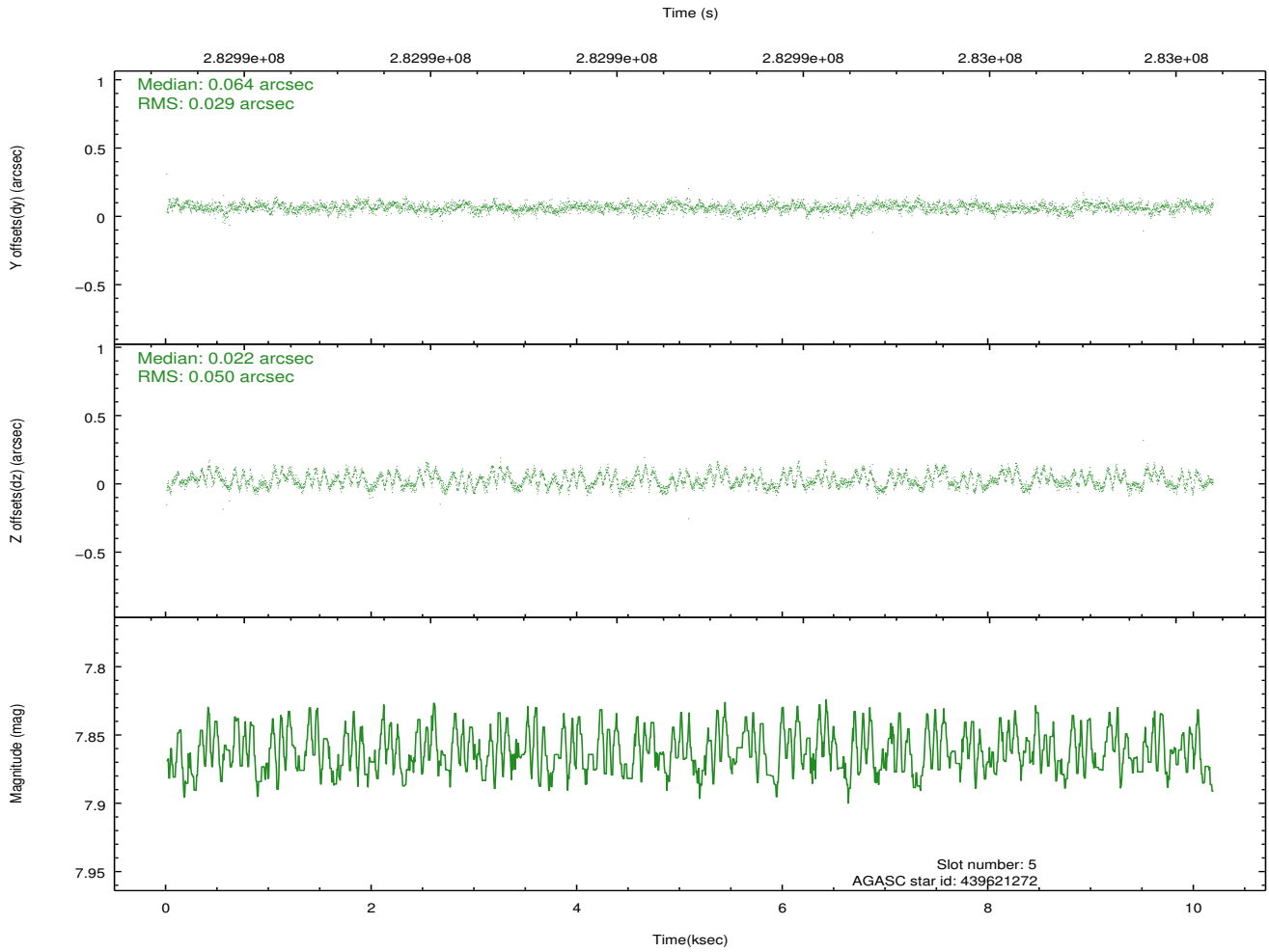
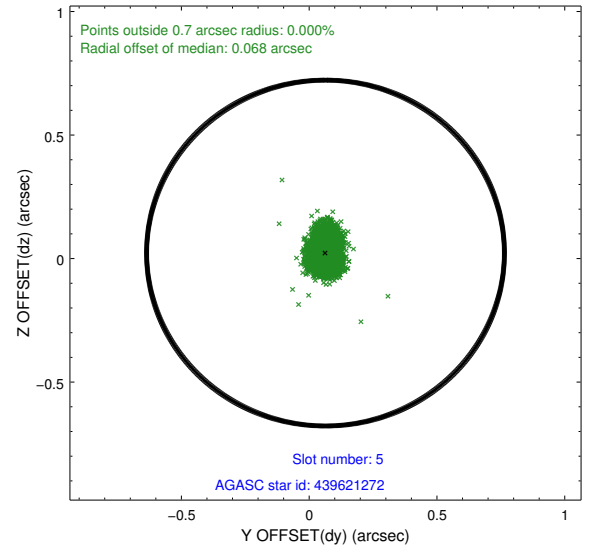
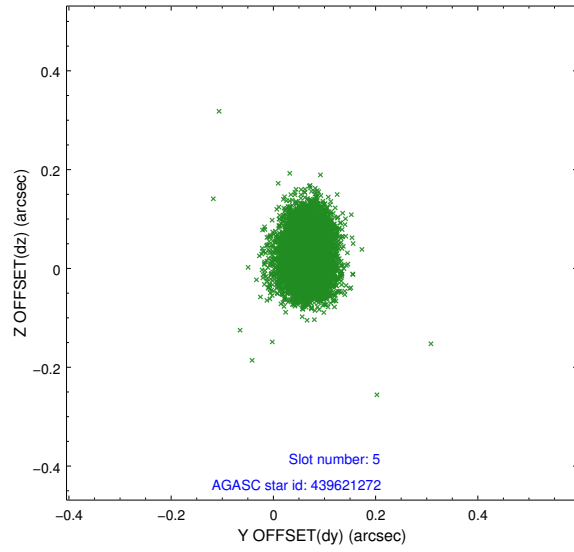
2.4.1 Slot 3



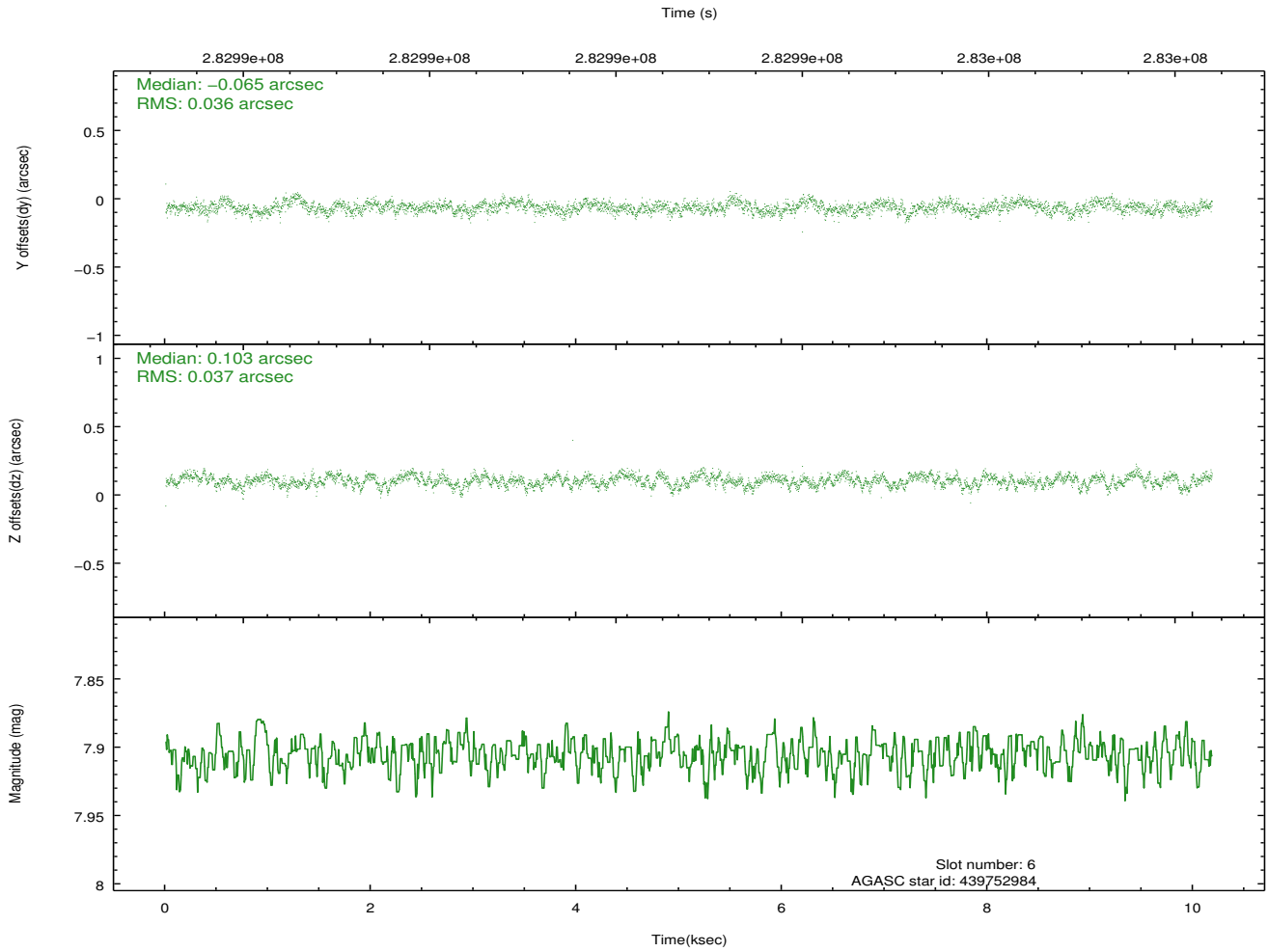
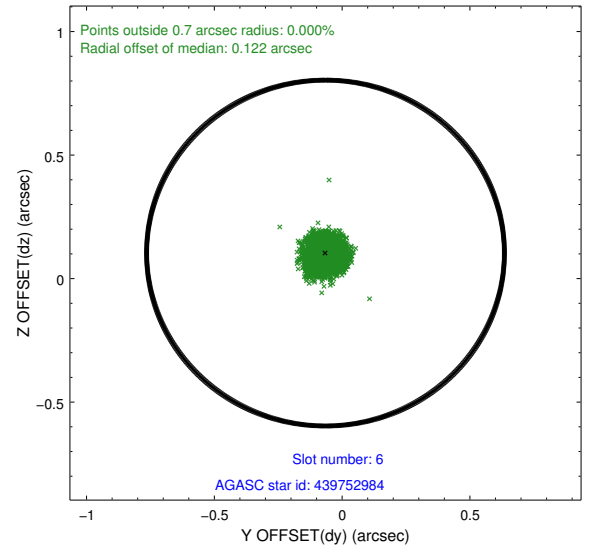
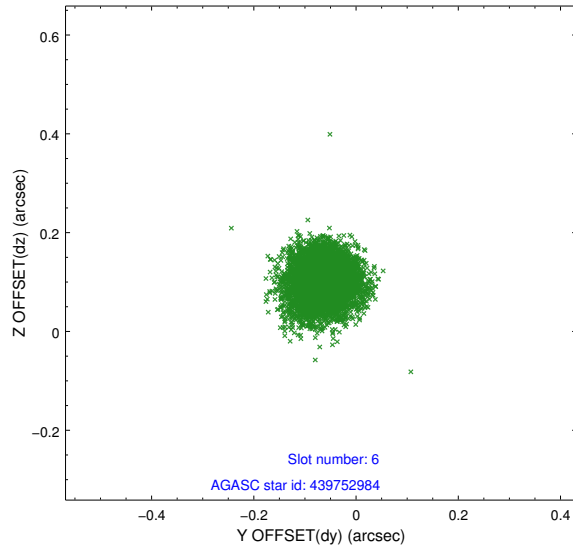
2.4.2 Slot 4



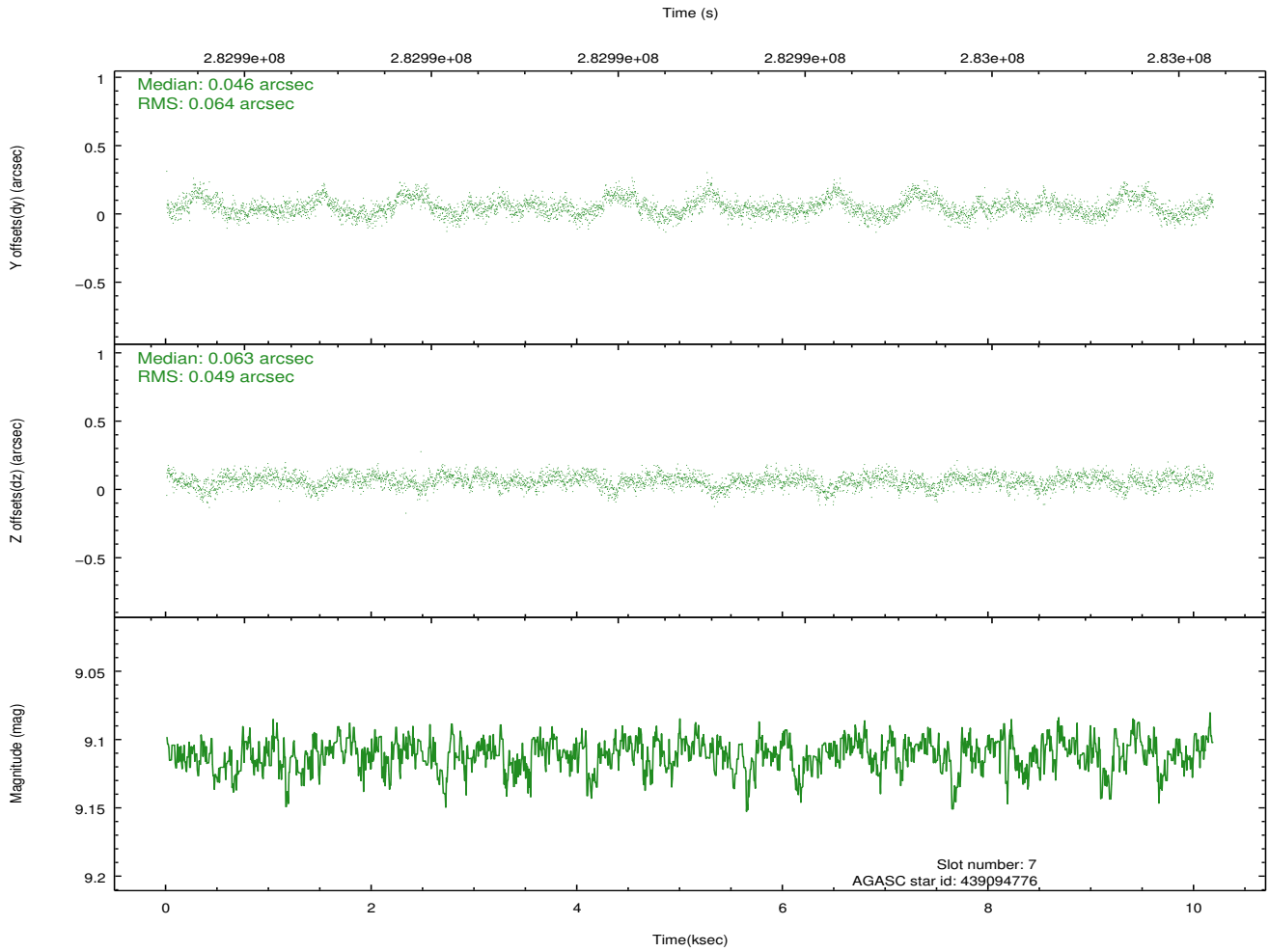
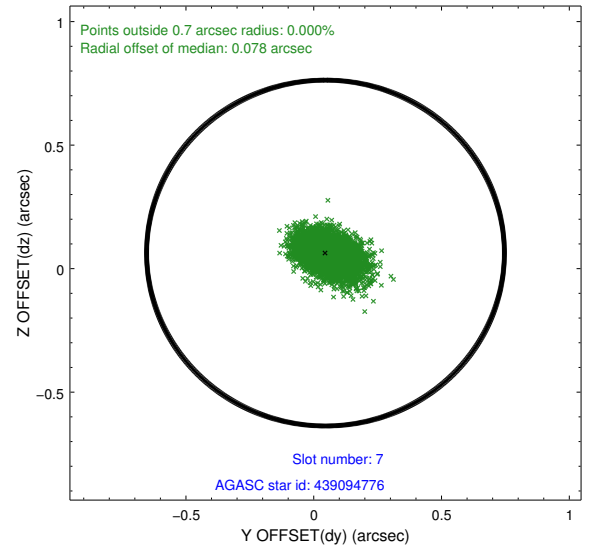
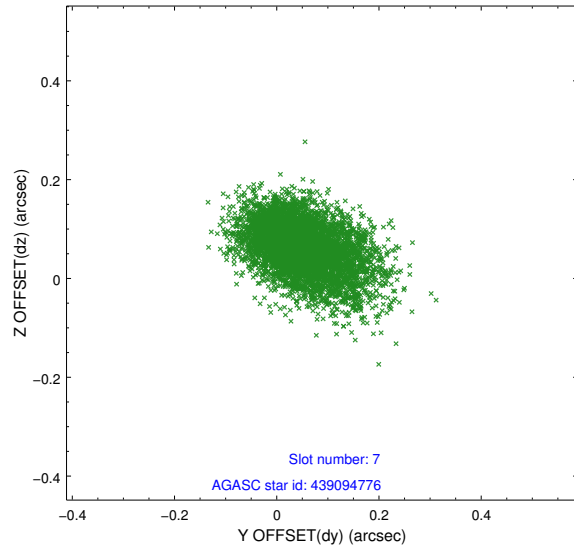
2.4.3 Slot 5



2.4.4 Slot 6

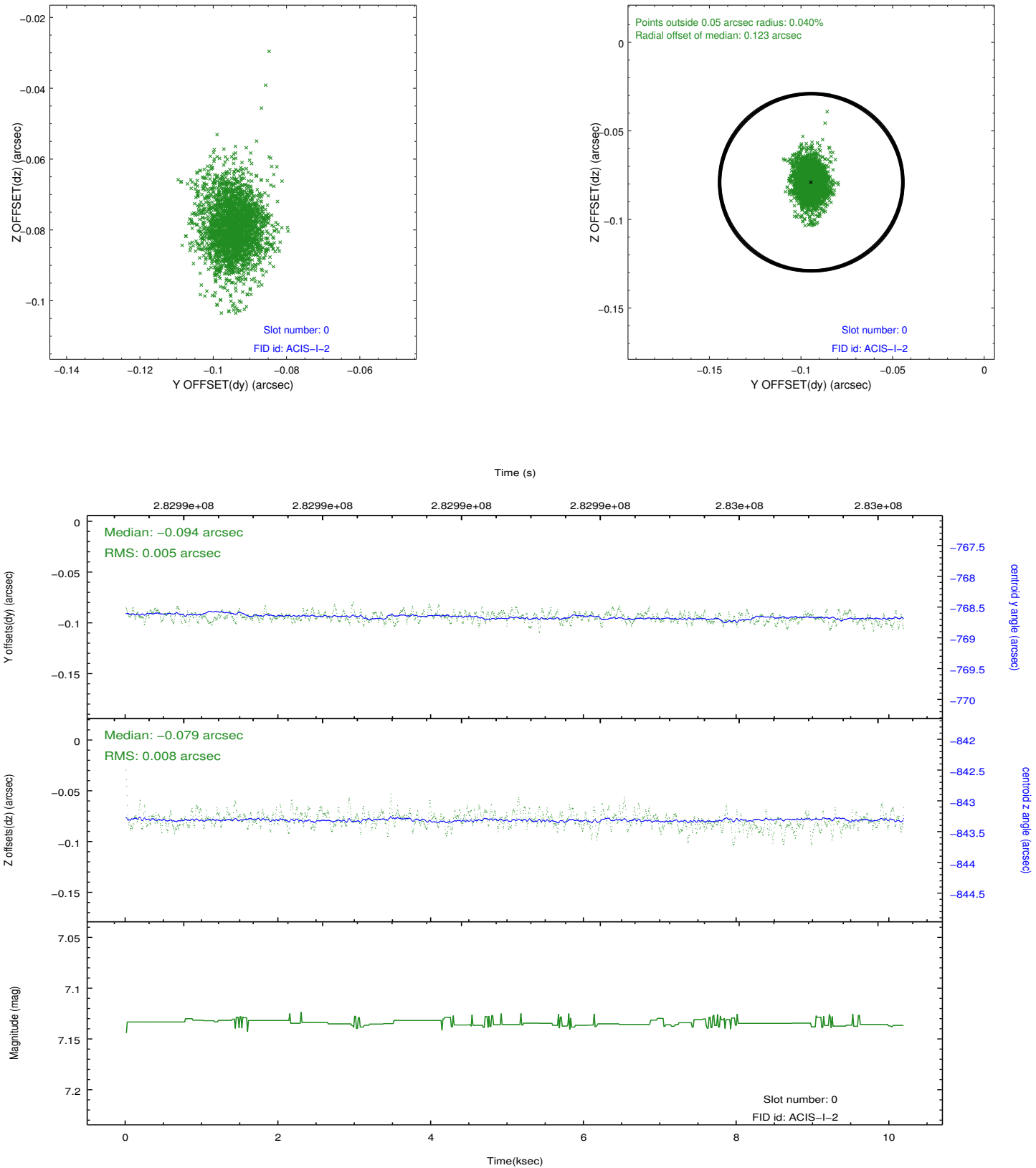


2.4.5 Slot 7

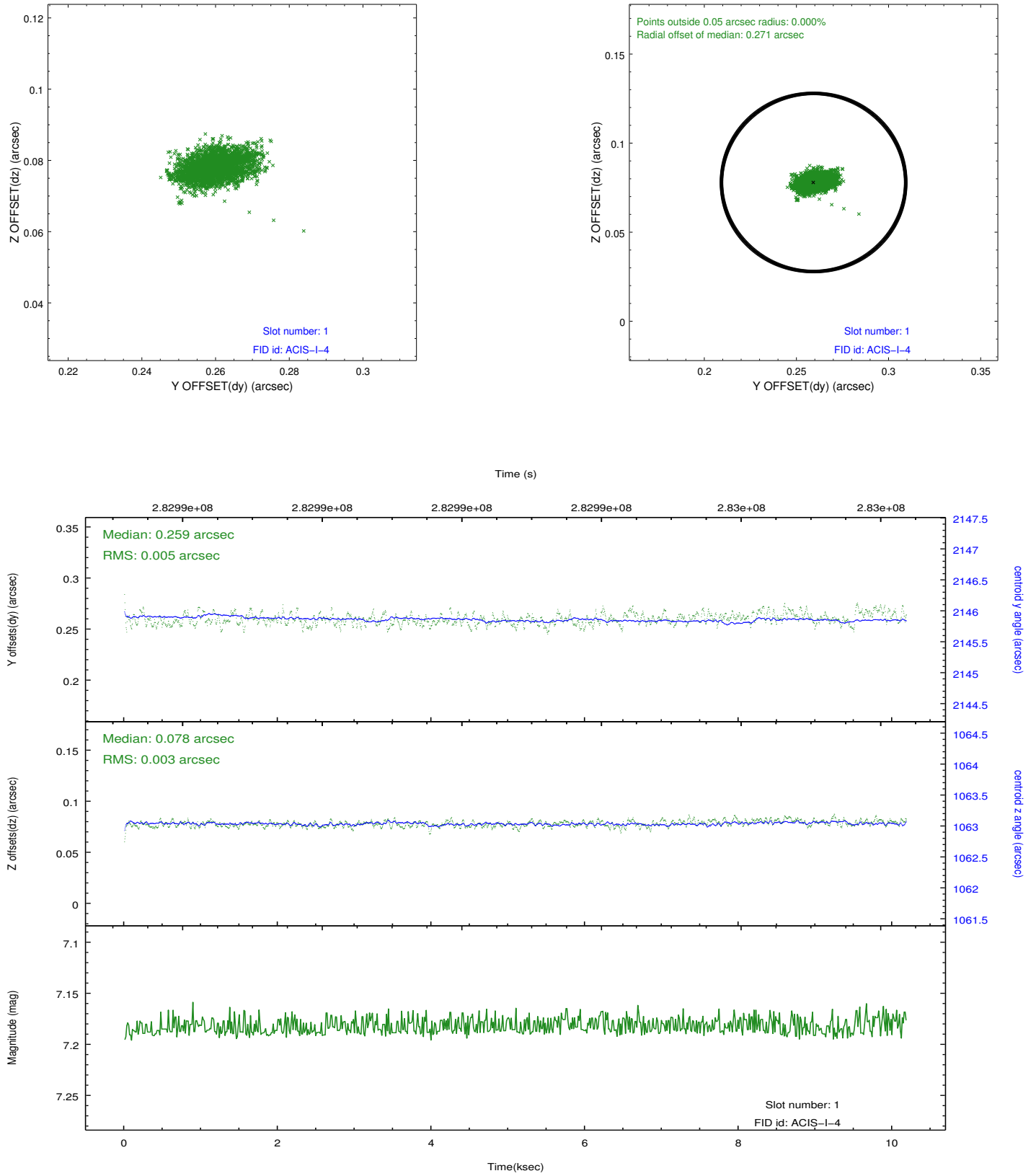


2.5 FID Slots

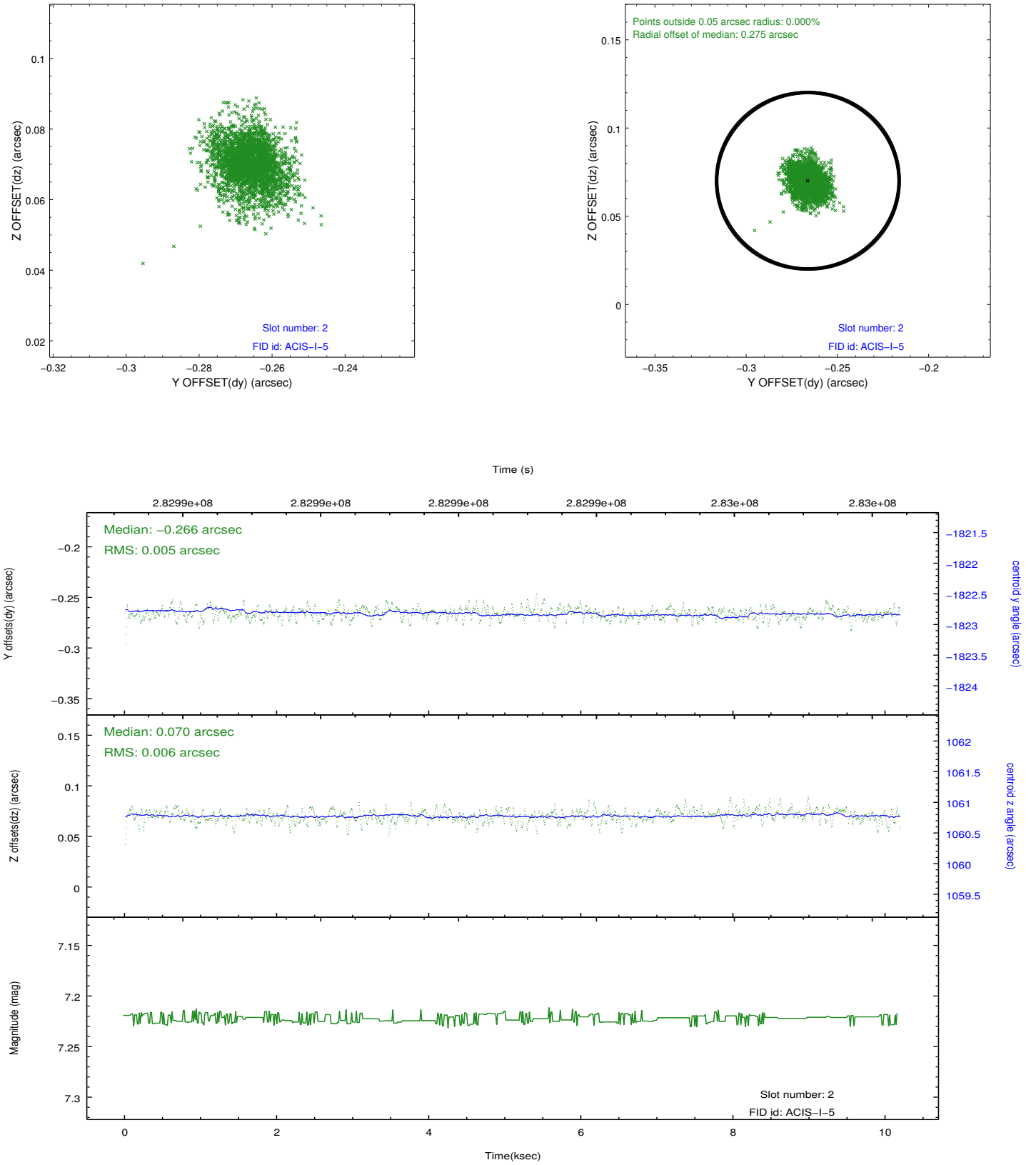
2.5.1 Slot 0



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)	2012.05.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.1759999

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:

(69.90029,50.44524),(69.90425,50.44151),(69.98789,50.47764),(69.98394,50.48137)