

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13159 - L2 Version 3
Chandra X-Ray Center

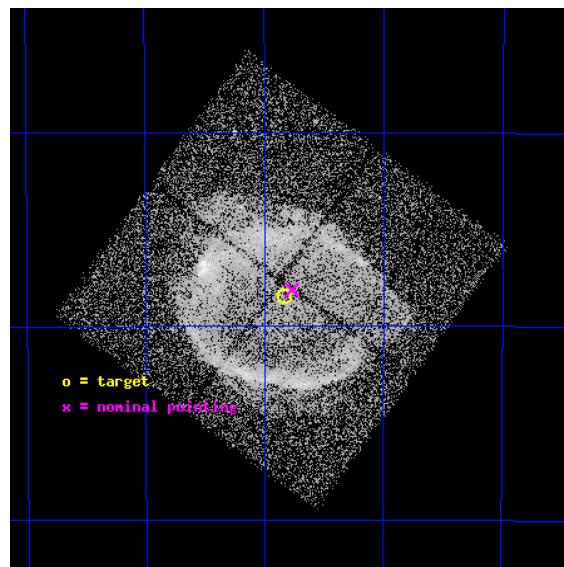
L2 Processing Date : Jul 6 2012

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

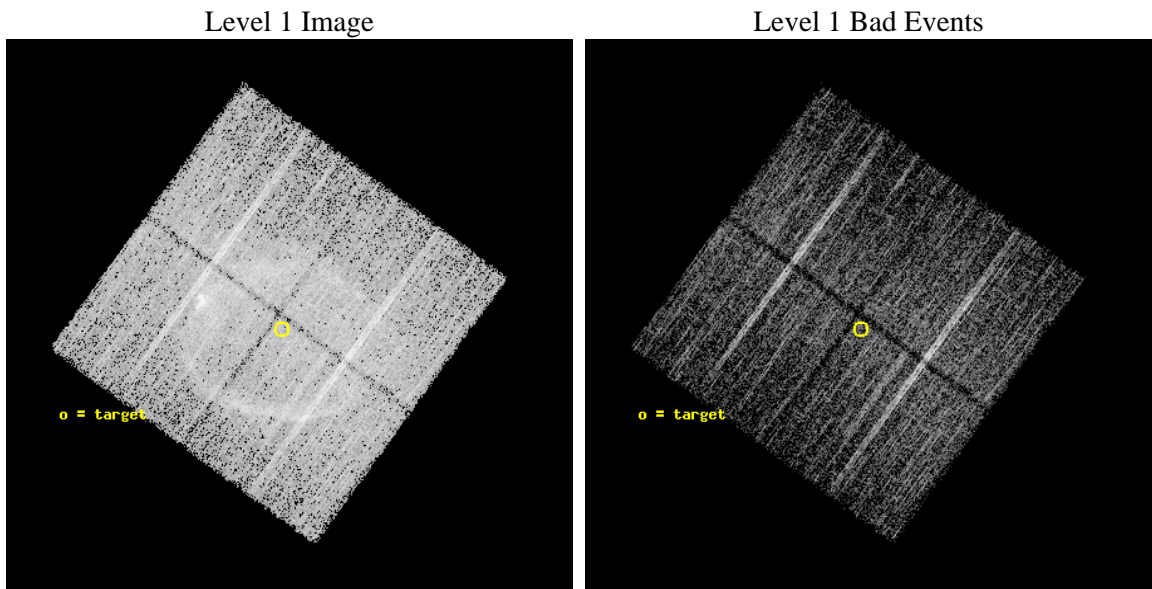
seq_num	501186	Sequence number
obs_id	13159	Observation id
title	A Detailed Study of the Type Ia Supernova Remnant G299.2-2.9	Propo
observer	DR. Sangwook Park	Principal investigator
object	G299.2-2.9	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	183.708333	Observer's specified target RA [deg]
dec_targ	-65.473611	Observer's specified target Dec [deg]
ra_nom	183.69265921015	Nominal RA [deg]
dec_nom	-65.468835538942	Nominal Dec [deg]
roll_nom	126.19442941498	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10065.700077415	Sum of GTIs [s]
livetime	9934.1842956425	Livetime [s]
ontime0	10065.700077415	Sum of GTIs [s]
ontime1	10065.700077415	Sum of GTIs [s]
ontime2	10065.700077415	Sum of GTIs [s]
ontime3	10065.700077415	Sum of GTIs [s]
l2events	63557	Number of level 2 events



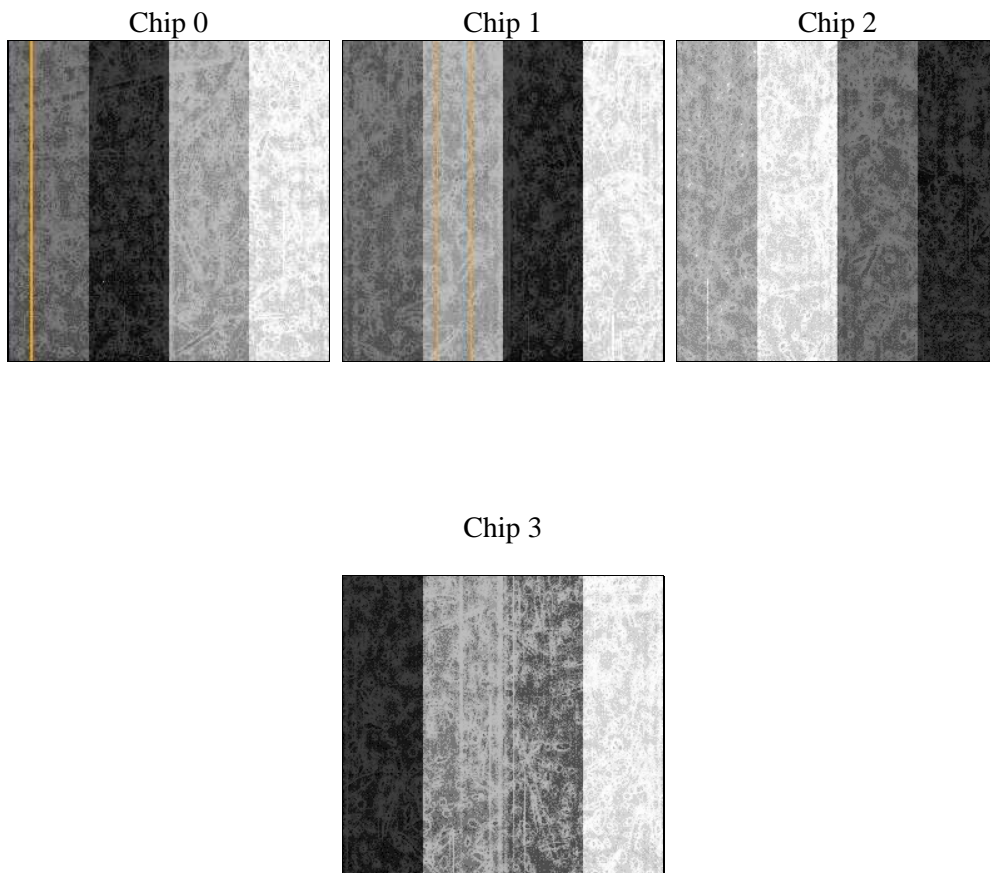
2 OBI

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	8.4.5	Processing system revision	ontime	10065.700077415	Sum of GTIs [s]
caldbver	4.5.0	 	ontime0	10065.700077415	Sum of GTIs [s]
date	2012-07-06T14:09:33	Date and time of file creation	ontime1	10065.700077415	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10065.700077415	Sum of GTIs [s]
			ontime3	10065.700077415	Sum of GTIs [s]
			l1events	294215	Number of level 1 events

2.1.4 Events

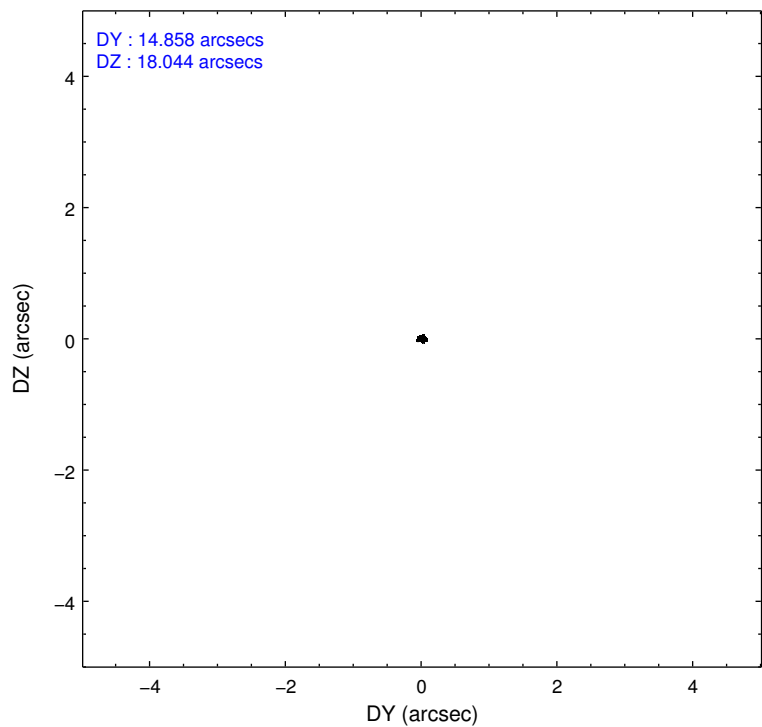
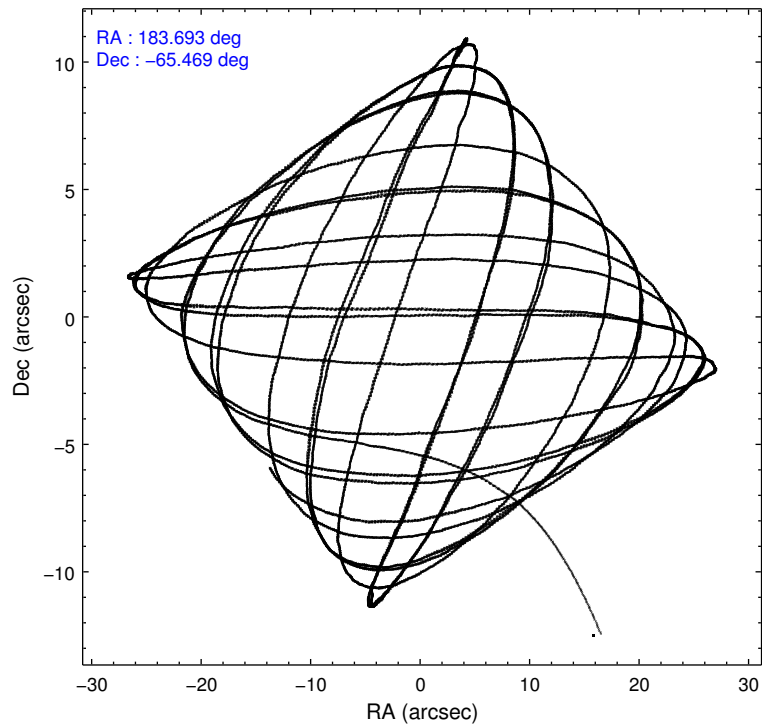
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	69503	73726	74526	76460
rejected events	53100	52972	59565	57323
rejected %	76%	71%	79%	74%

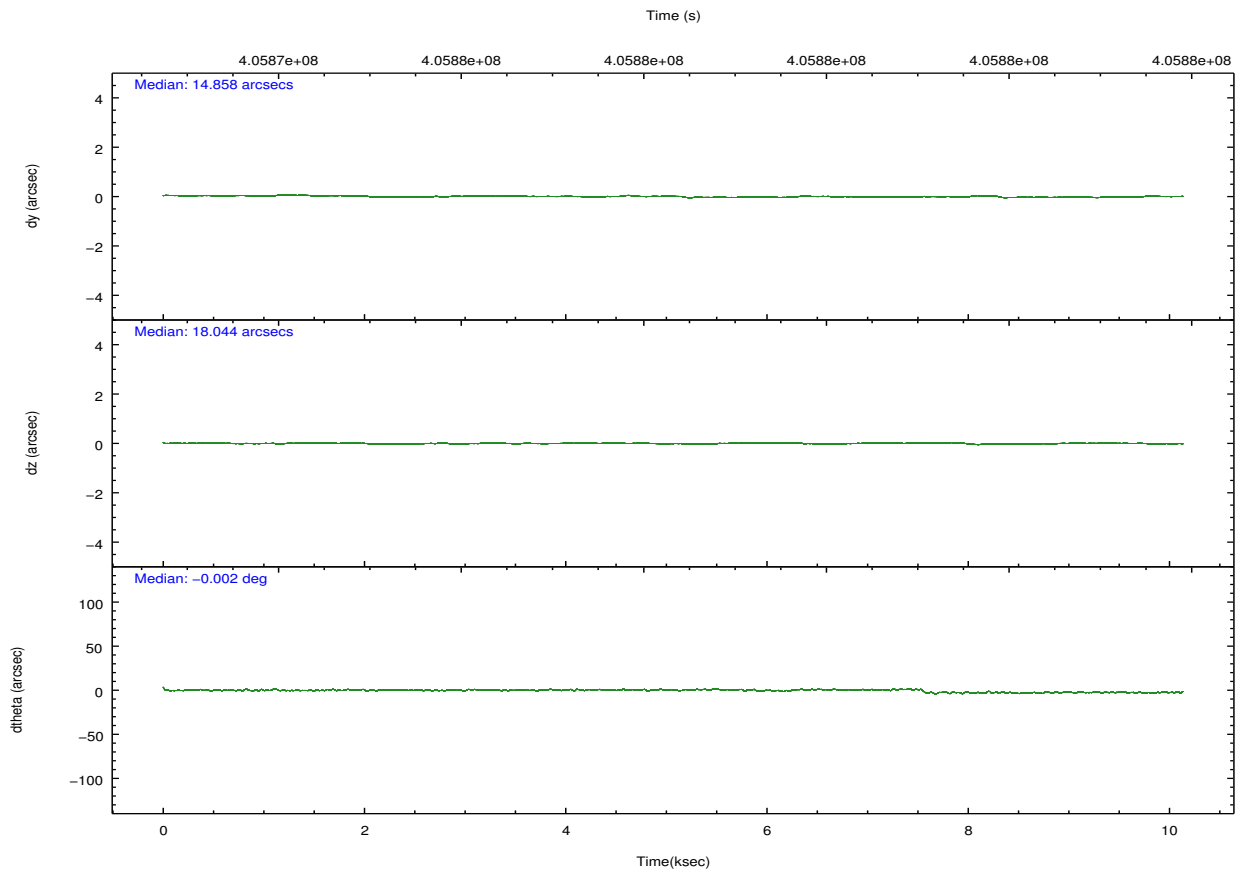
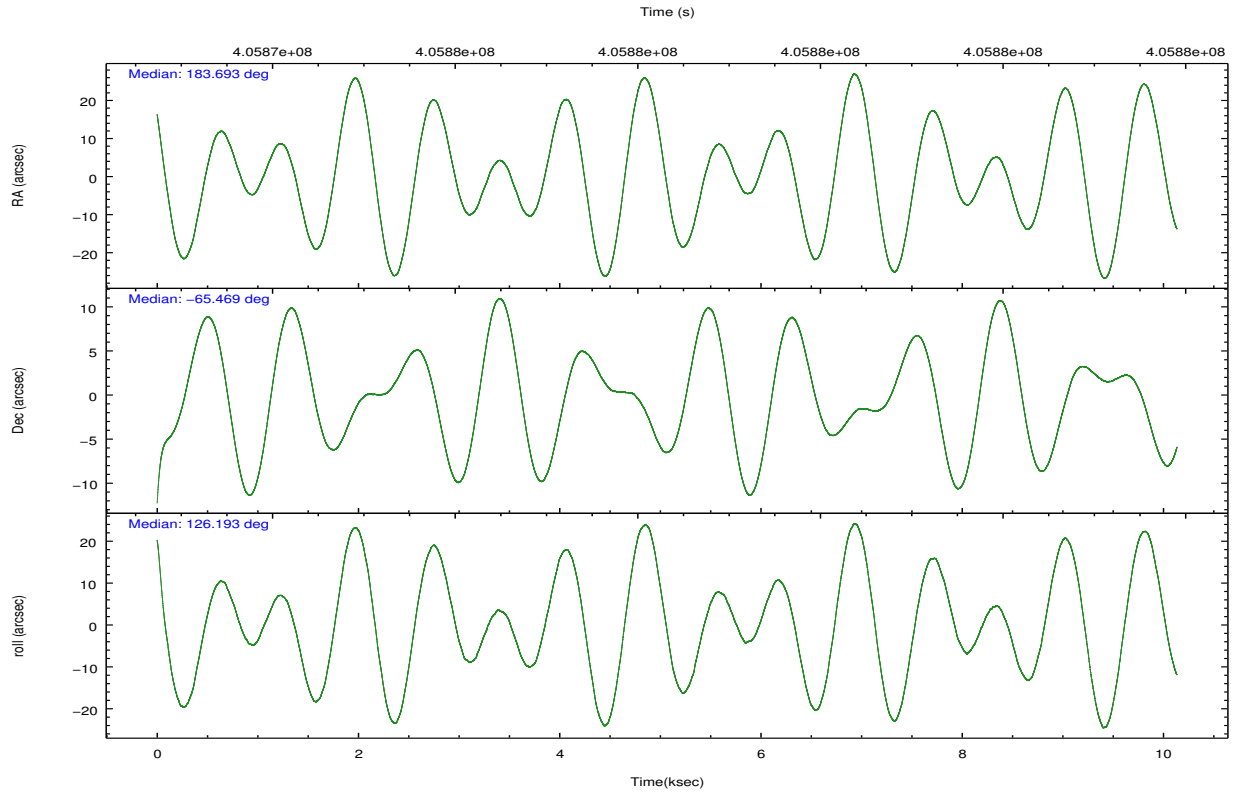
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	10774	14442	9704	13486
	15%	19%	13%	17%
grade 1 events	73	96	79	97
	0%	0%	0%	0%
grade 2 events	2448	2720	2268	2373
	3%	3%	3%	3%
grade 3 events	904	1026	822	929
	1%	1%	1%	1%
grade 4 events	909	956	875	927
	1%	1%	1%	1%
grade 5 events	2345	2581	2277	2635
	3%	3%	3%	3%
grade 6 events	1374	1617	1299	1429
	1%	2%	1%	1%
grade 7 events	50676	50288	57202	54584
	72%	68%	76%	71%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	183.753400	183.6926592101548	Subarray requested	NONE	NONE
[deg] Pointing Dec	-65.479782	-65.46883553894207	Alternating exposures requested	N	N
[deg] Pointing Roll	126.040999	126.19442941498	[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)	405873382.184000	405871971.72297			
Observation start date	2010-11-11T14:35:16	2010-11-11T14:12:51			
[s] Observation end time (MET)	405883382.184000	405884169.2236			
Observation end date	2010-11-11T17:21:56	2010-11-11T17:36:09			
Read mode	TIMED	TIMED			

2.3 Aspect



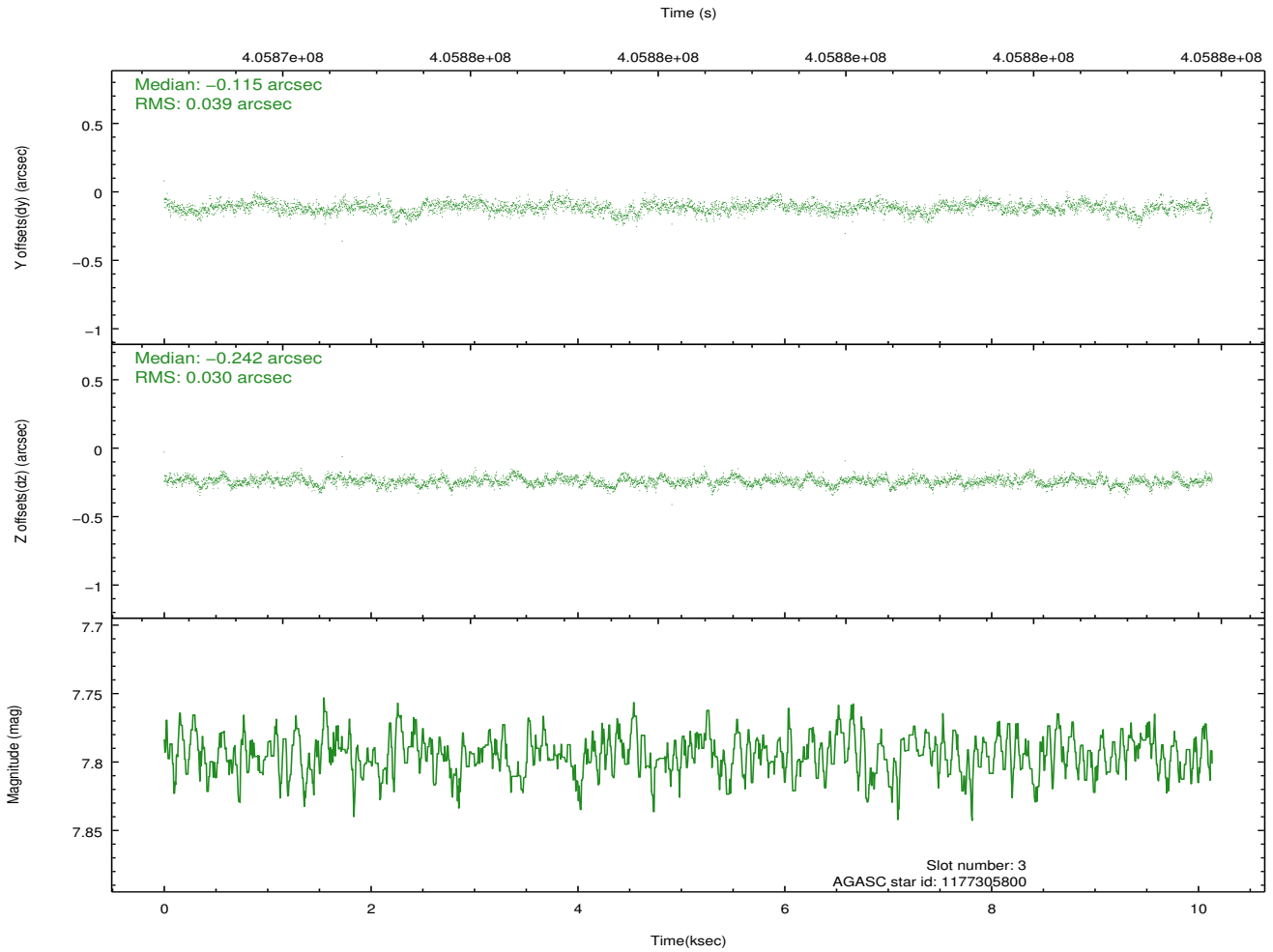
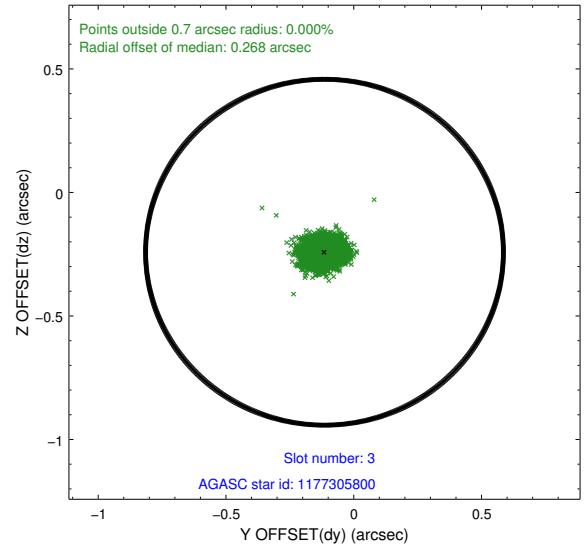
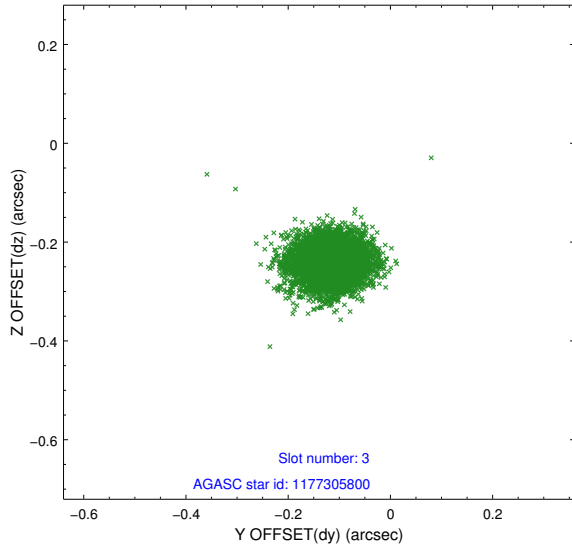


Slot Statistics

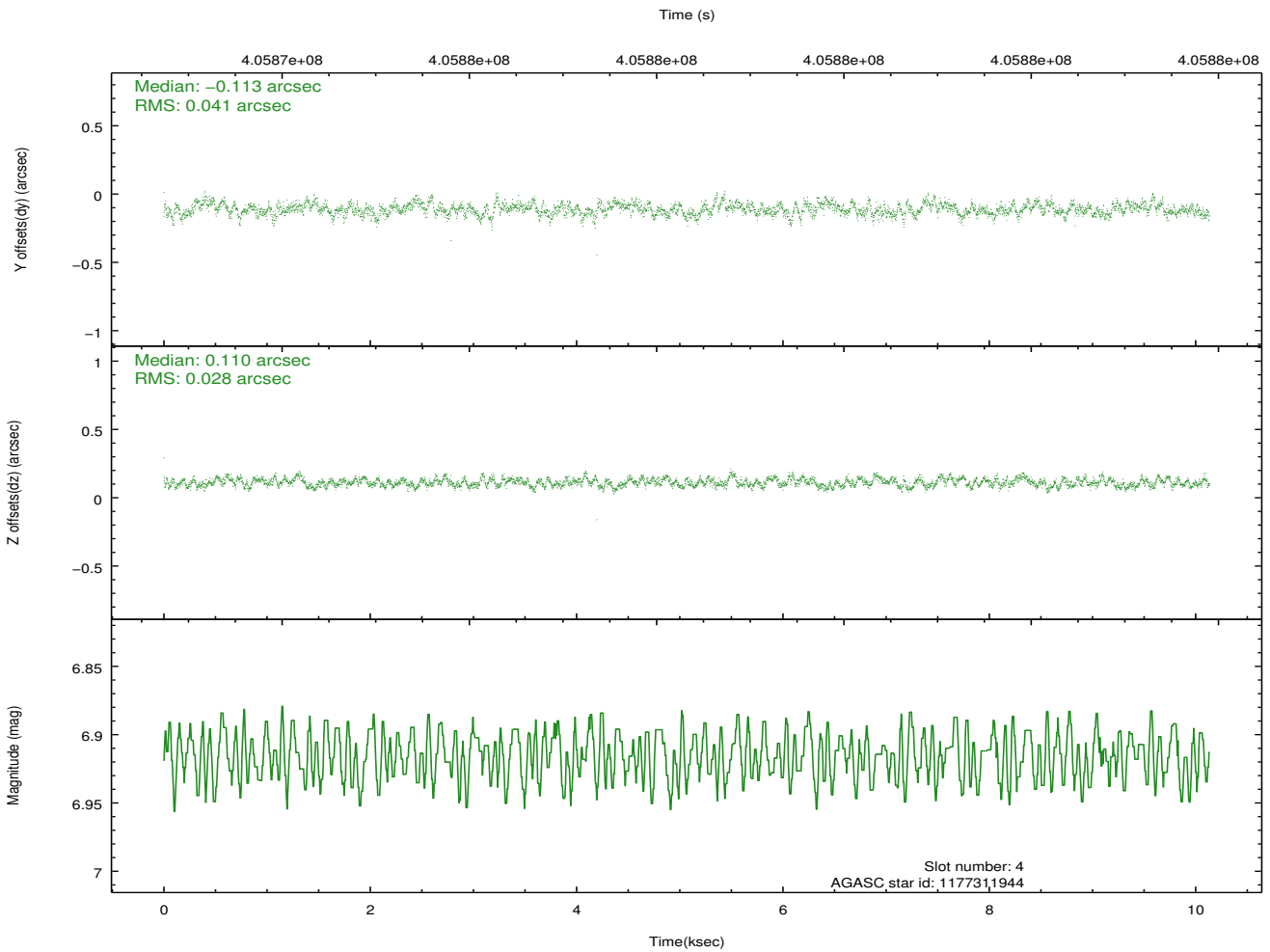
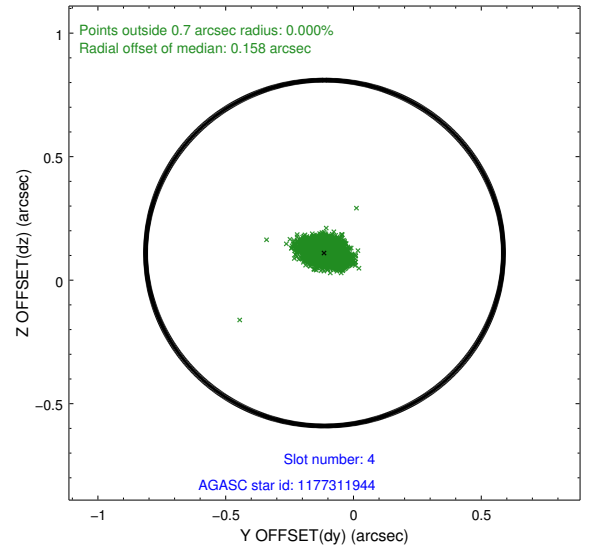
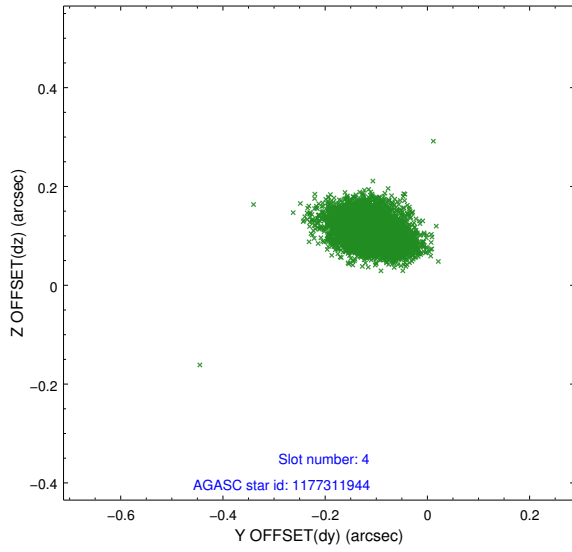
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	2472	-0.001	-0.019	0.012	0.037	0.000000	0.000000	924.61	-841.74
1	FID	ACIS-I-4	6.95	2471	0.138	0.037	0.011	0.029	0.000000	0.000000	2145.07	1057.88
2	FID	ACIS-I-5	6.99	2471	-0.236	0.053	0.009	0.017	0.000000	0.000000	-1822.97	1056.31
3	GUIDE	1177305800	7.79	4945	-0.115	-0.242	0.052	0.086	182.814616	-65.027625	2147.44	202.10
4	GUIDE	1177311944	6.92	4945	-0.113	0.110	0.052	0.086	182.934554	-64.948787	2273.87	-110.16
5	GUIDE	1177433968	8.14	4943	0.101	0.019	0.059	0.096	185.582517	-65.608358	-2004.93	-1903.02
6	GUIDE	1177434688	8.72	4943	0.126	0.074	0.084	0.137	185.679282	-65.435625	-1602.44	-2398.14
7	GUIDE	1177944384	6.70	4944	-0.009	0.031	0.058	0.118	185.117599	-65.842660	-2256.06	-843.65

2.4 Star Slots

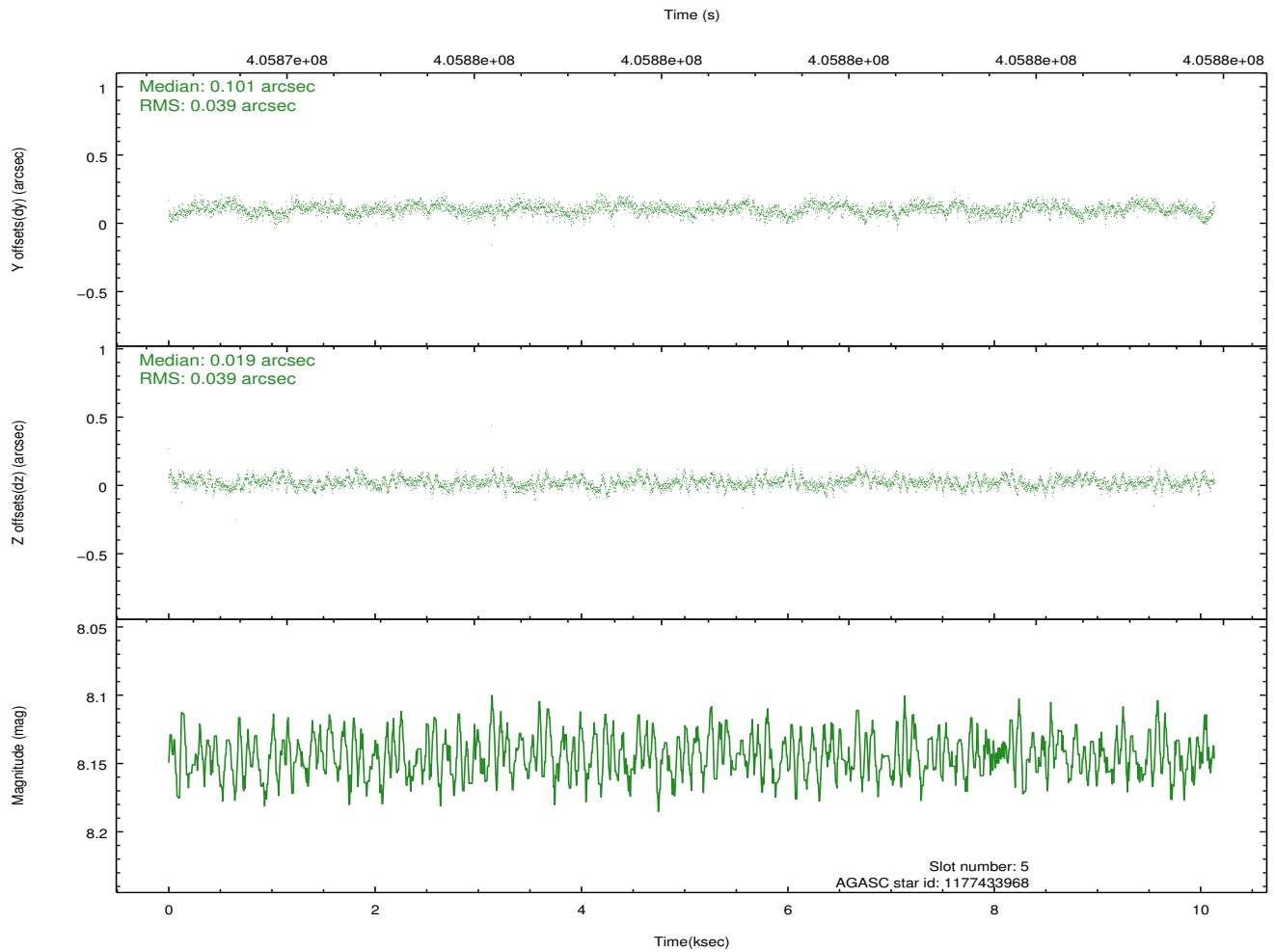
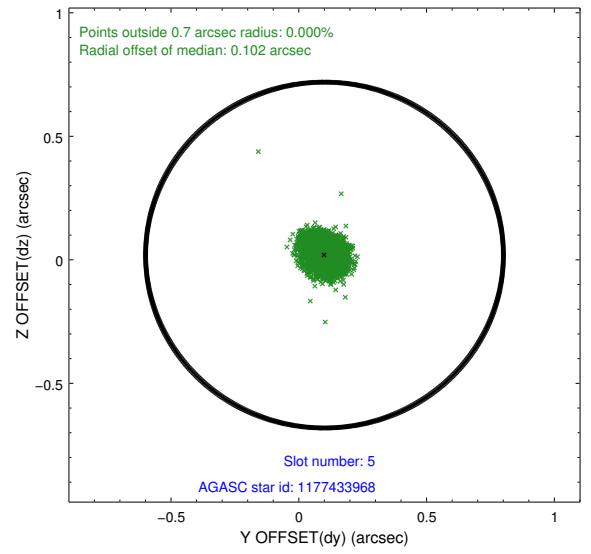
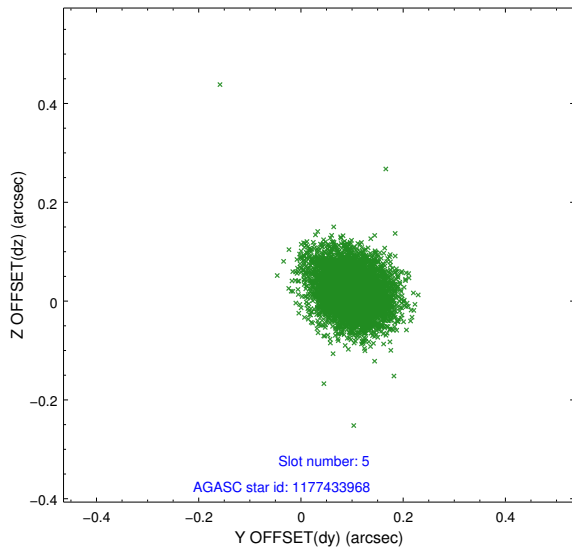
2.4.1 Slot 3



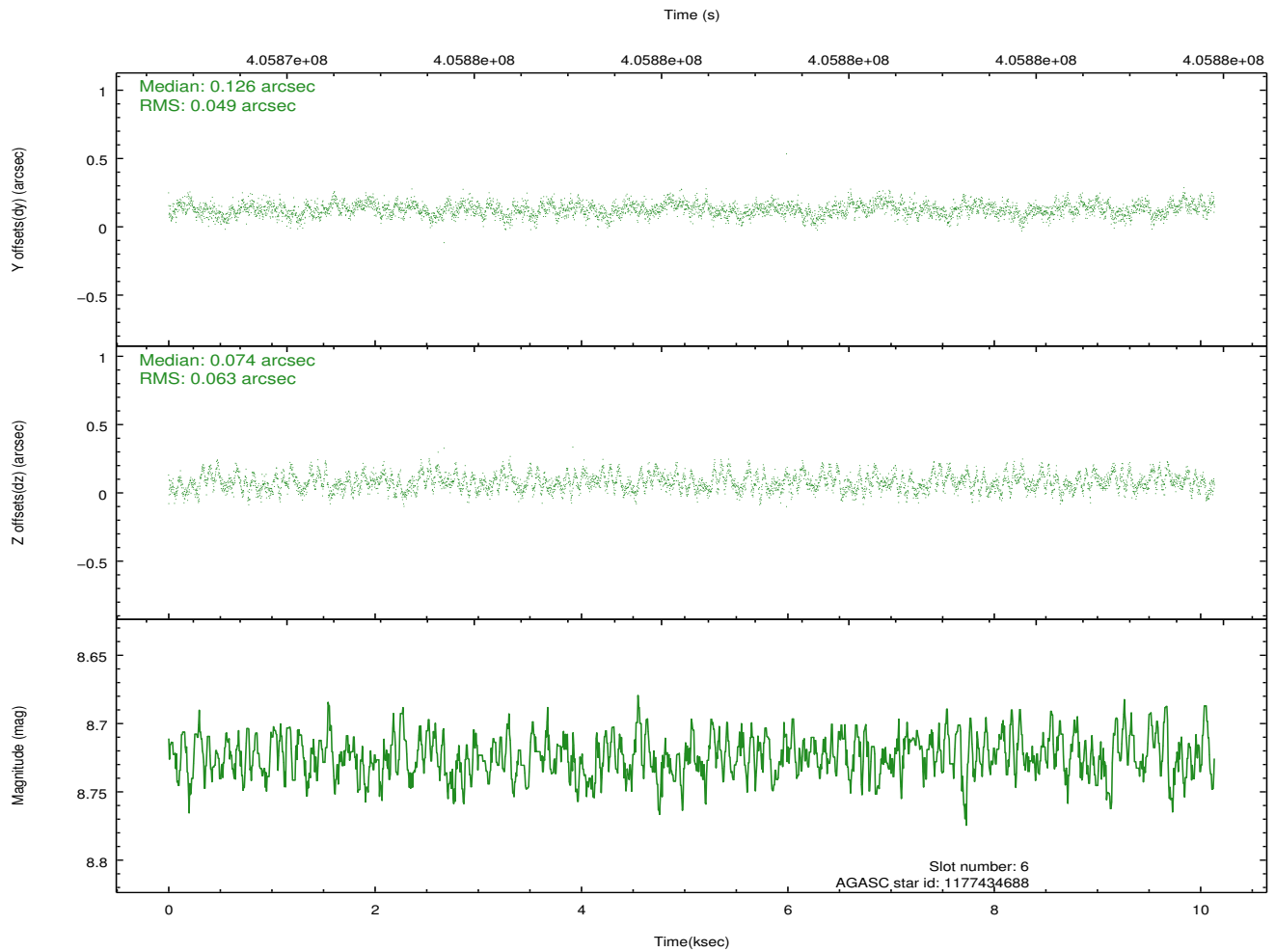
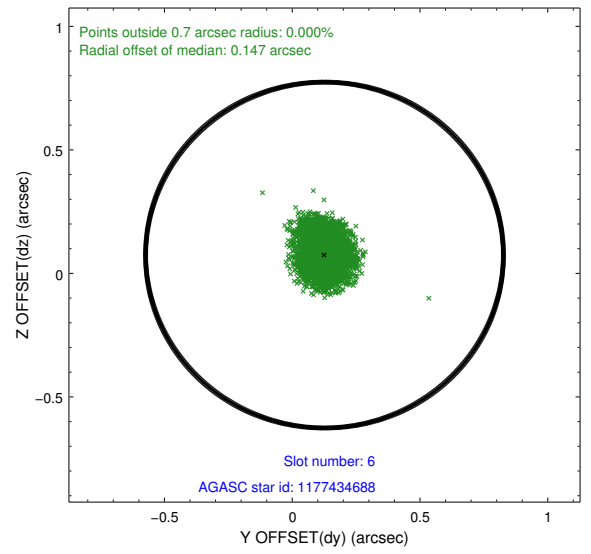
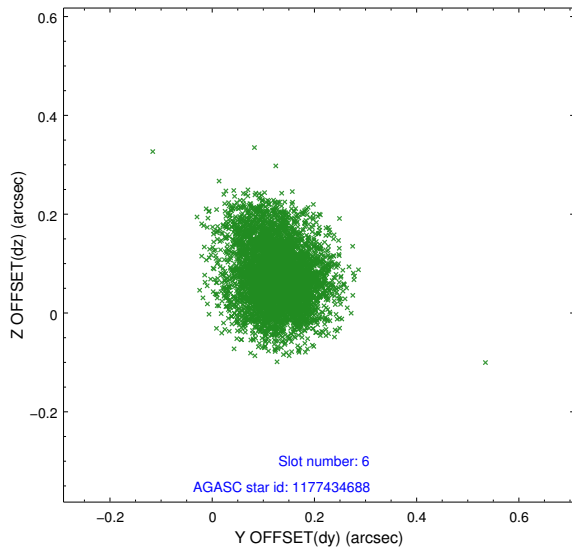
2.4.2 Slot 4



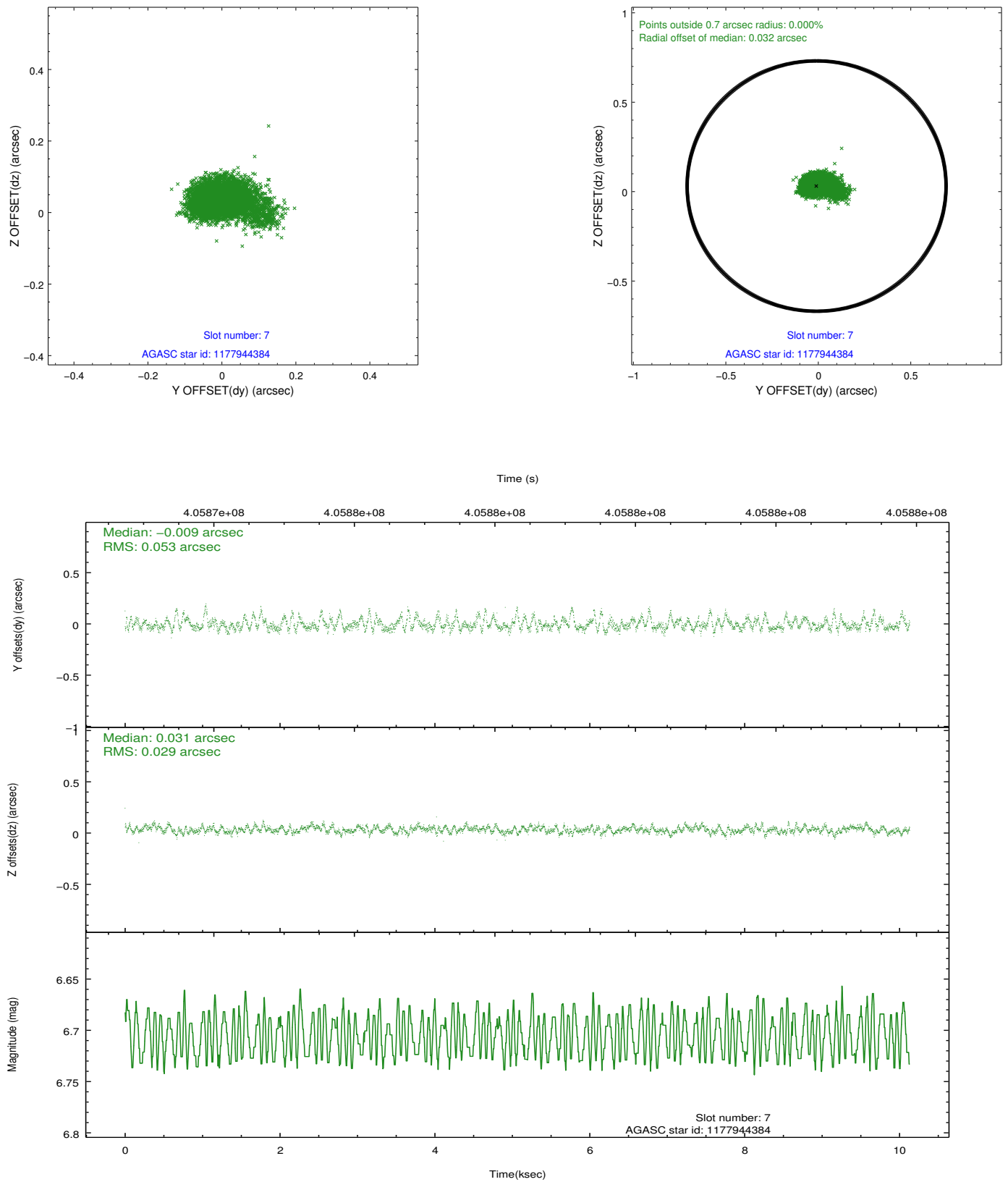
2.4.3 Slot 5



2.4.4 Slot 6

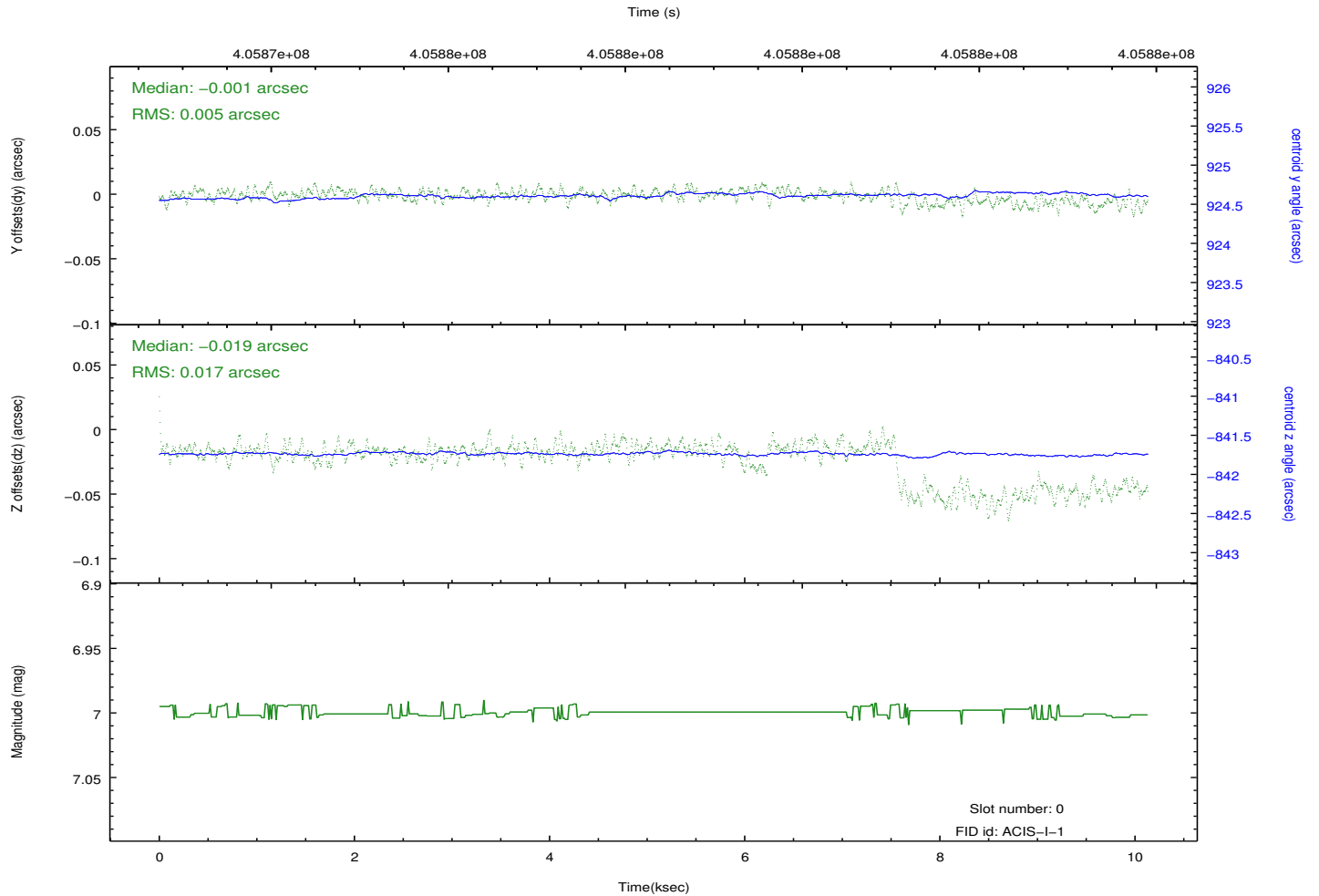
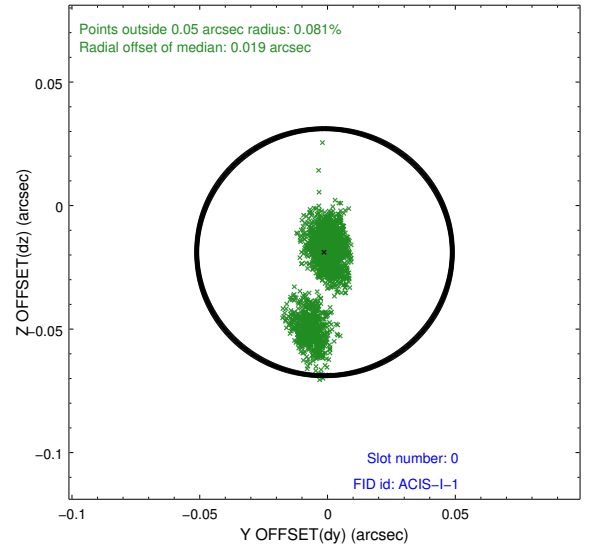
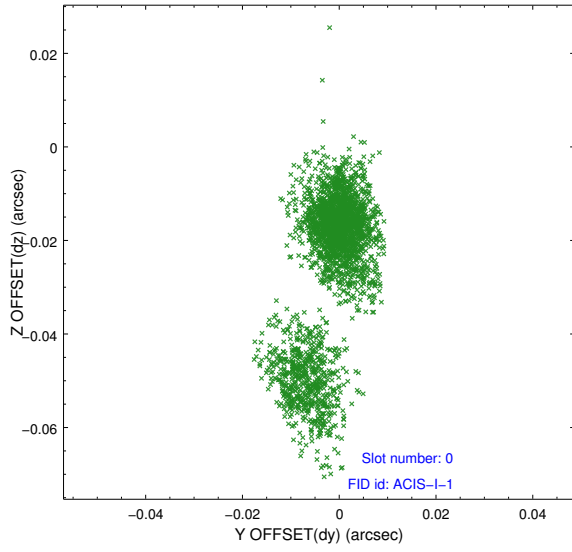


2.4.5 Slot 7

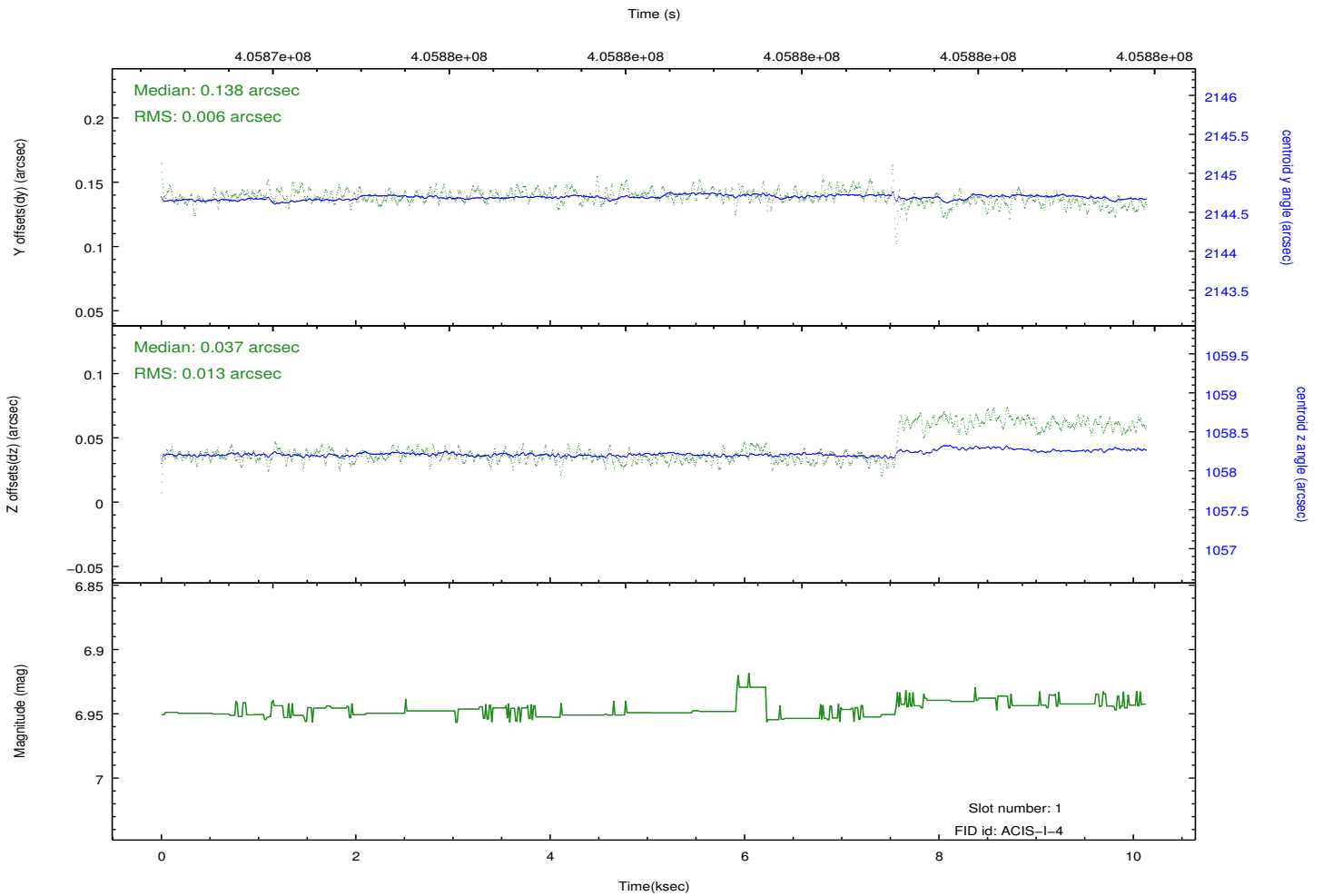
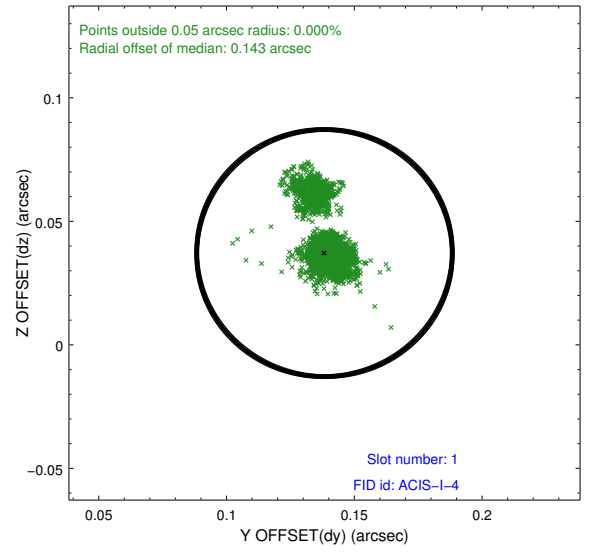
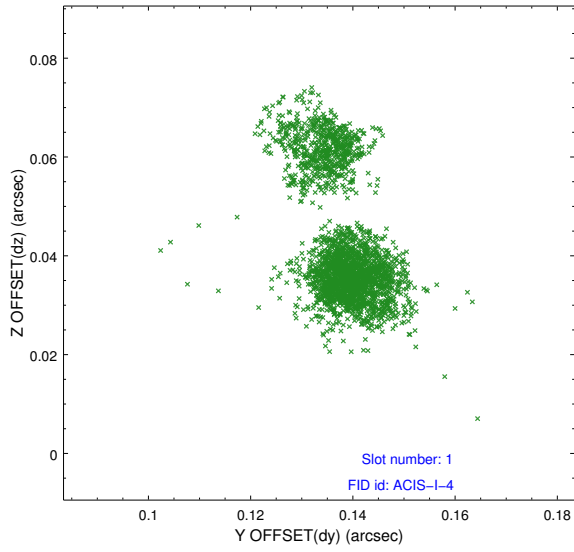


2.5 FID Slots

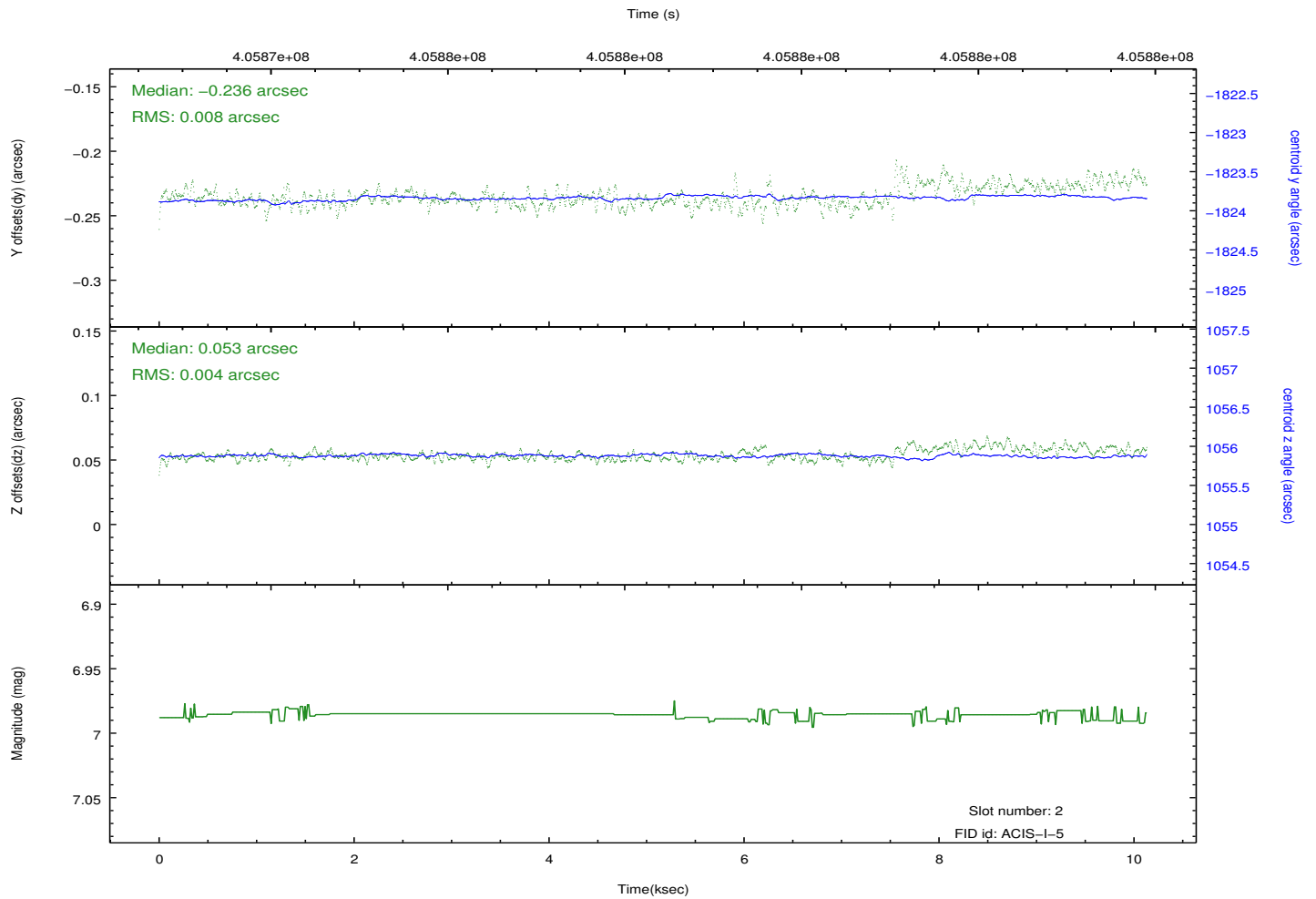
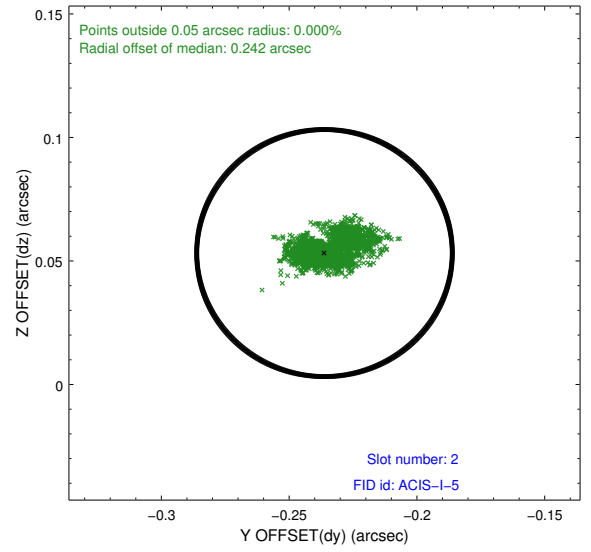
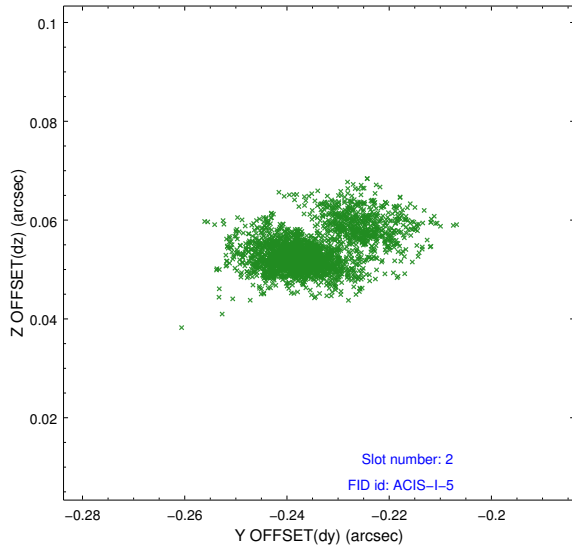
2.5.1 Slot 0



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)	2012.07.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.065700077415

A.2 Comments

A spatial region of the original bias map for CCD = 1 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 = 1 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:
(184.07260, -65.52611), (184.07629, -65.52497), (183.95257, -65.45559), (183.94888, -65.45673)