

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10908 - L2 Version 3
Chandra X-Ray Center

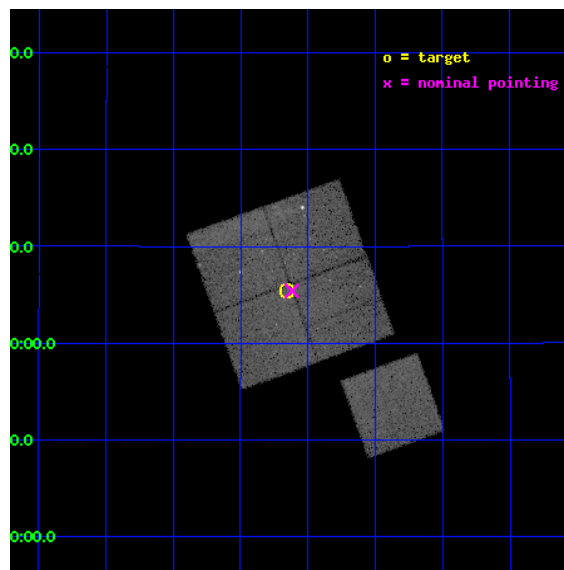
L2 Processing Date : Jun 7 2012

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1 Front

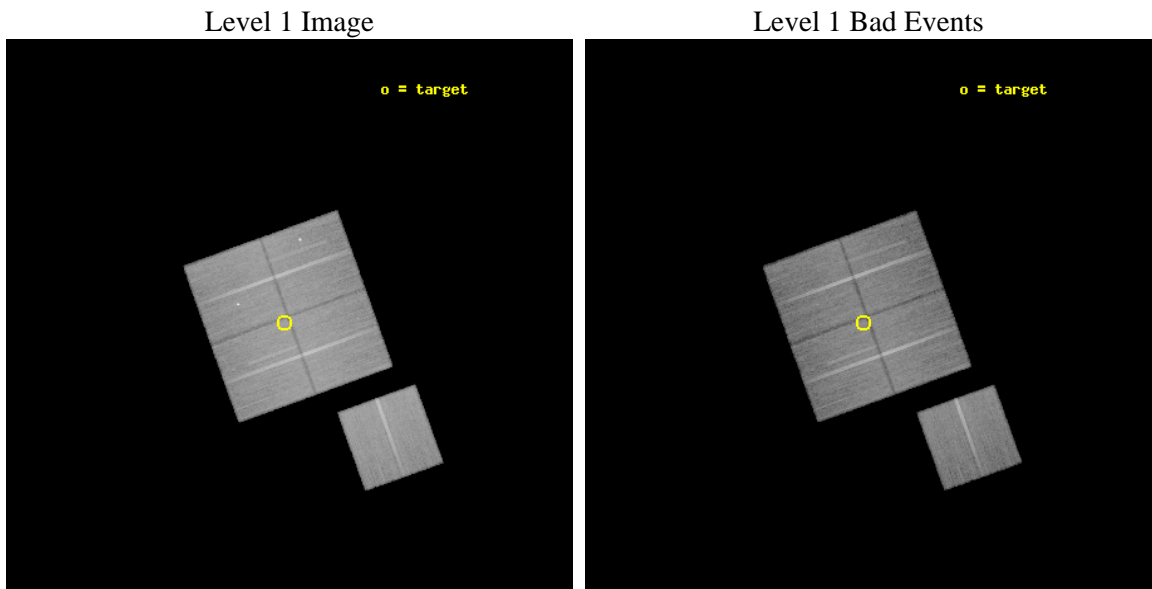
seq_num	701785	Sequence number
obs_id	10908	Observation id
title	The multi-faceted X-ray activity of low-redshift active galaxies	P
observer	Prof Mark Birkinshaw	Principal investigator
object	3C 326	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	238.038333	Observer's specified target RA [deg]
dec_targ	20.089917	Observer's specified target Dec [deg]
ra_nom	238.02972237764	Nominal RA [deg]
dec_nom	20.090251009378	Nominal Dec [deg]
roll_nom	160.21164229909	Nominal Roll [deg]
revision	3	Processing version of data
ontime	27875.159204185	Sum of GTIs [s]
livetime	27510.949727789	Livetime [s]
ontime0	27859.454232514	Sum of GTIs [s]
ontime1	27859.45422262	Sum of GTIs [s]
ontime2	27875.159214139	Sum of GTIs [s]
ontime3	27875.159204185	Sum of GTIs [s]
ontime6	27875.159204125	Sum of GTIs [s]
l2events	112071	Number of level 2 events



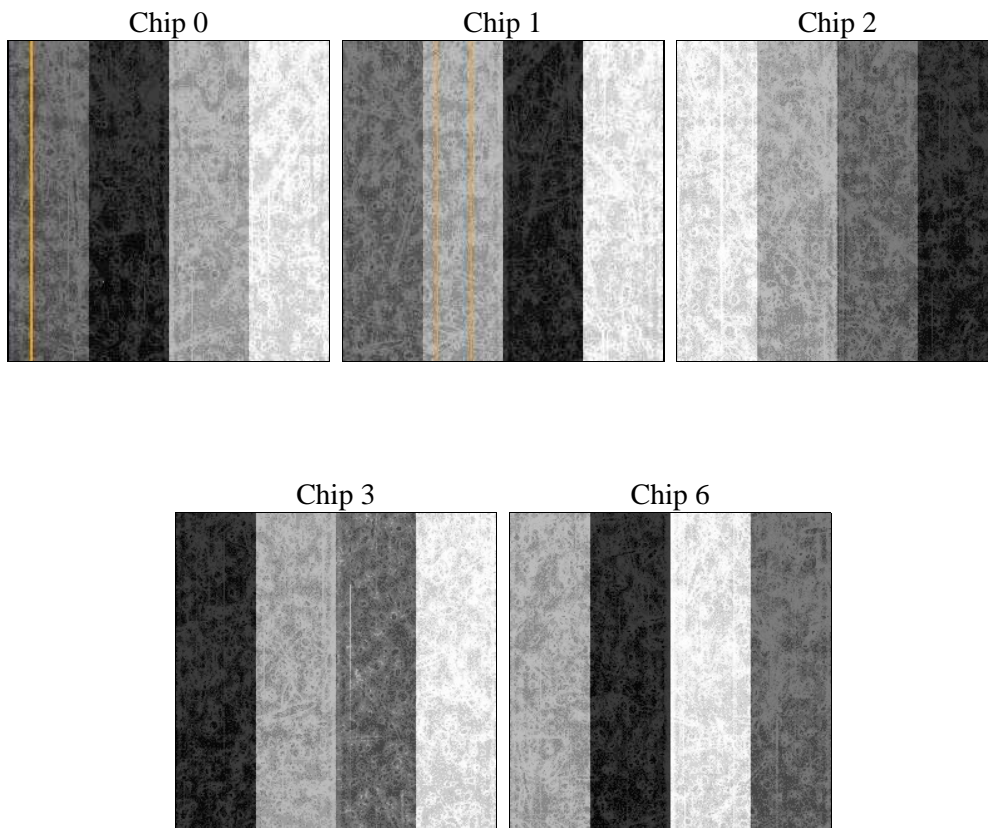
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	27875.159204185	Sum of GTIs [s]
caldbver	4.4.10	 	ontime0	27859.454232514	Sum of GTIs [s]
date	2012-06-07T16:29:04	Date and time of file creation	ontime1	27859.45422262	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	27875.159214139	Sum of GTIs [s]
			ontime3	27875.159204185	Sum of GTIs [s]
			ontime6	27875.159204125	Sum of GTIs [s]
			l1events	1228349	Number of level 1 events

2.1.4 Events

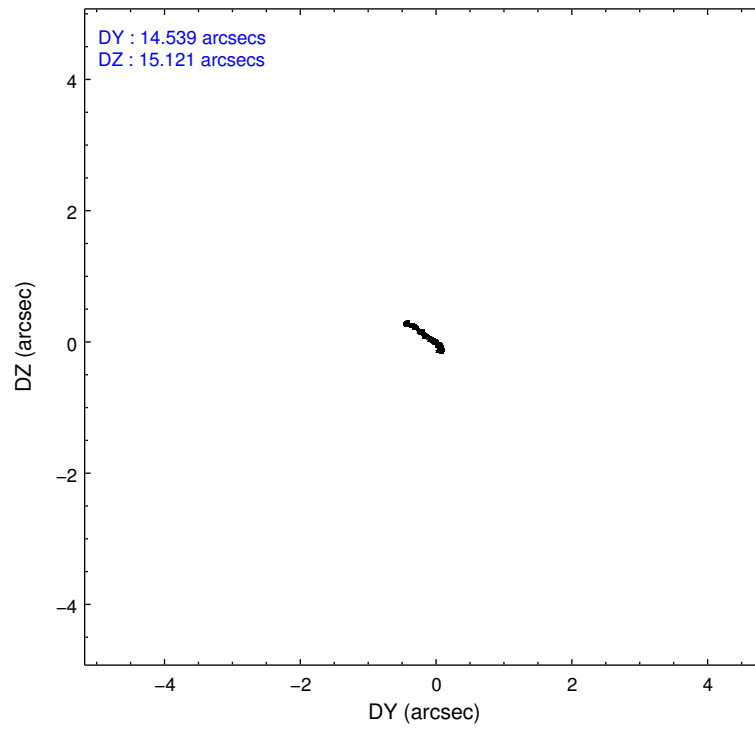
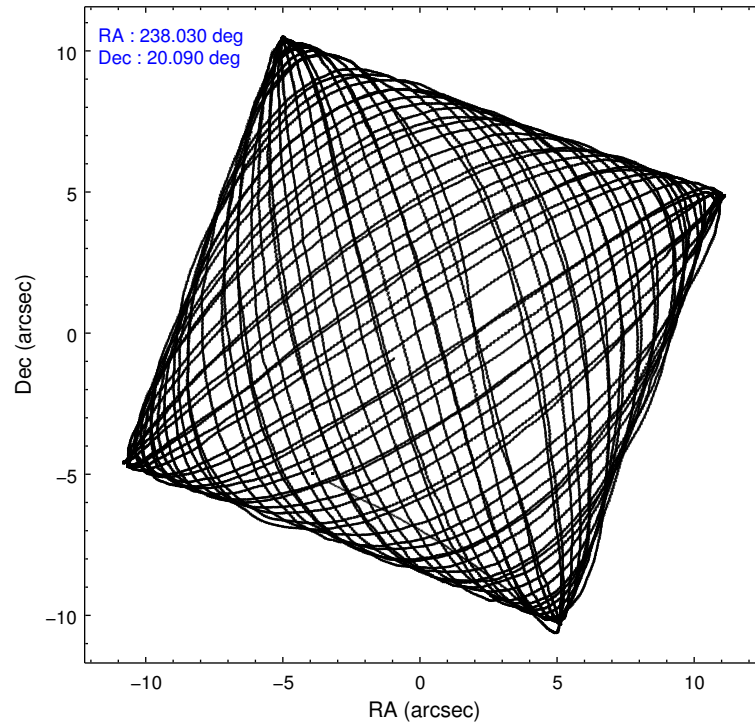
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	234077	237572	258914	248949	248837
rejected events	205726	206171	233915	225378	223608
rejected %	87%	86%	90%	90%	89%

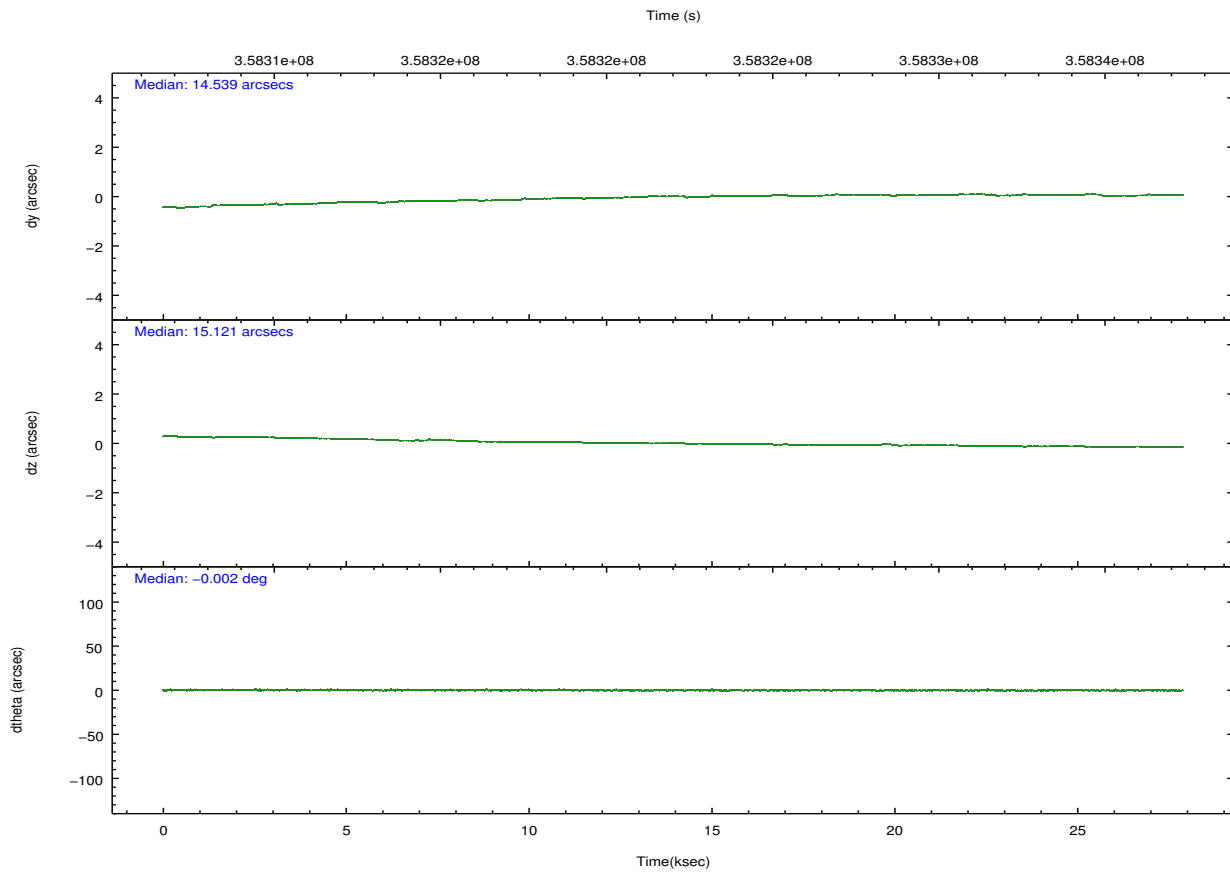
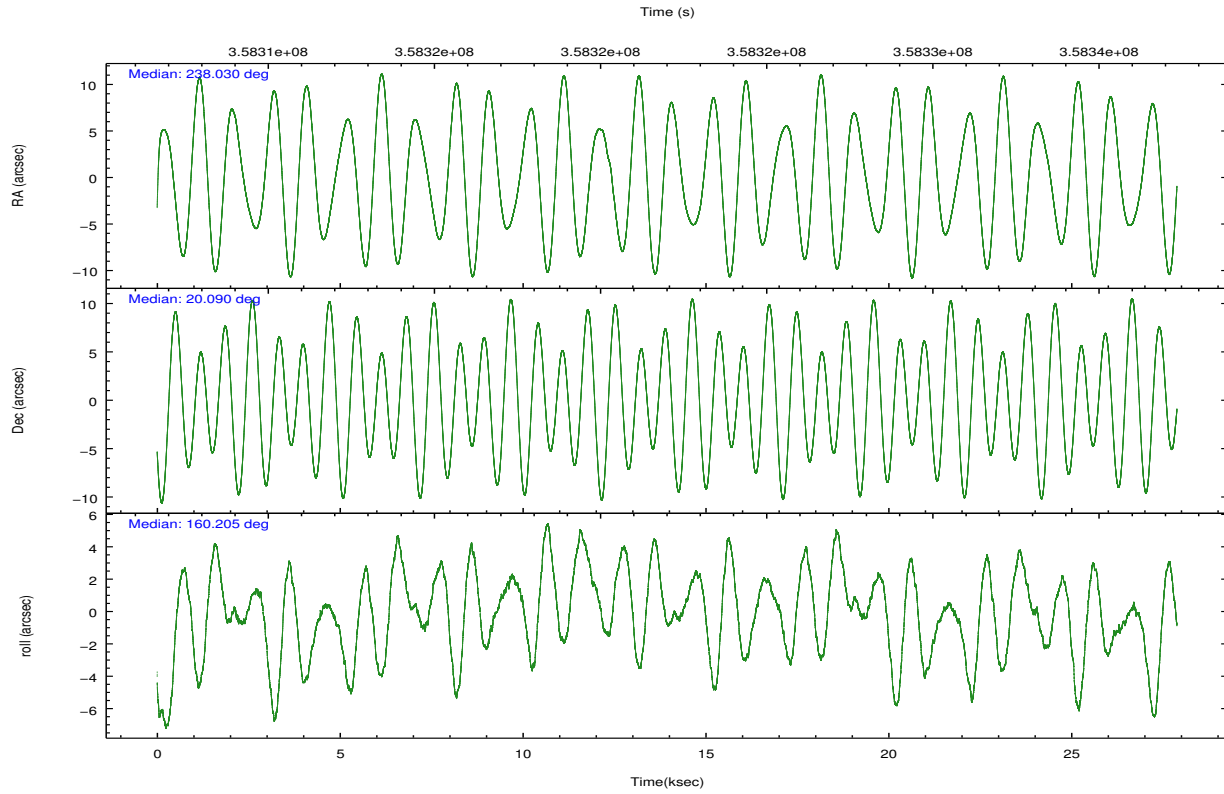
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	11809	13186	9439	8427	8965
	5%	5%	3%	3%	3%
grade 1 events	157	186	152	144	122
	0%	0%	0%	0%	0%
grade 2 events	6464	6878	6015	5418	5727
	2%	2%	2%	2%	2%
grade 3 events	2899	3010	2646	2706	2741
	1%	1%	1%	1%	1%
grade 4 events	2735	3042	2593	2585	2665
	1%	1%	1%	1%	1%
grade 5 events	9021	9616	8662	10381	10103
	3%	4%	3%	4%	4%
grade 6 events	4932	5824	4740	4861	5567
	2%	2%	1%	1%	2%
grade 7 events	196060	195830	224667	214427	212947
	83%	82%	86%	86%	85%

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	238.058526	238.0297223776424	CCD I2 on	Y	Y
[deg] Pointing Dec	20.095257	20.09025100937791	CCD I3 on	Y	Y
[deg] Pointing Roll	159.993059	160.2116422990901	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	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	358308240.184000	358306998.5764	CCD S5 on	N	N
Observation start date	2009-05-10T02:02:54	2009-05-10T01:43:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	358335940.184000	358336390.96536	On-chip summing requested	N	N
Observation end date	2009-05-10T09:44:34	2009-05-10T09:53:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



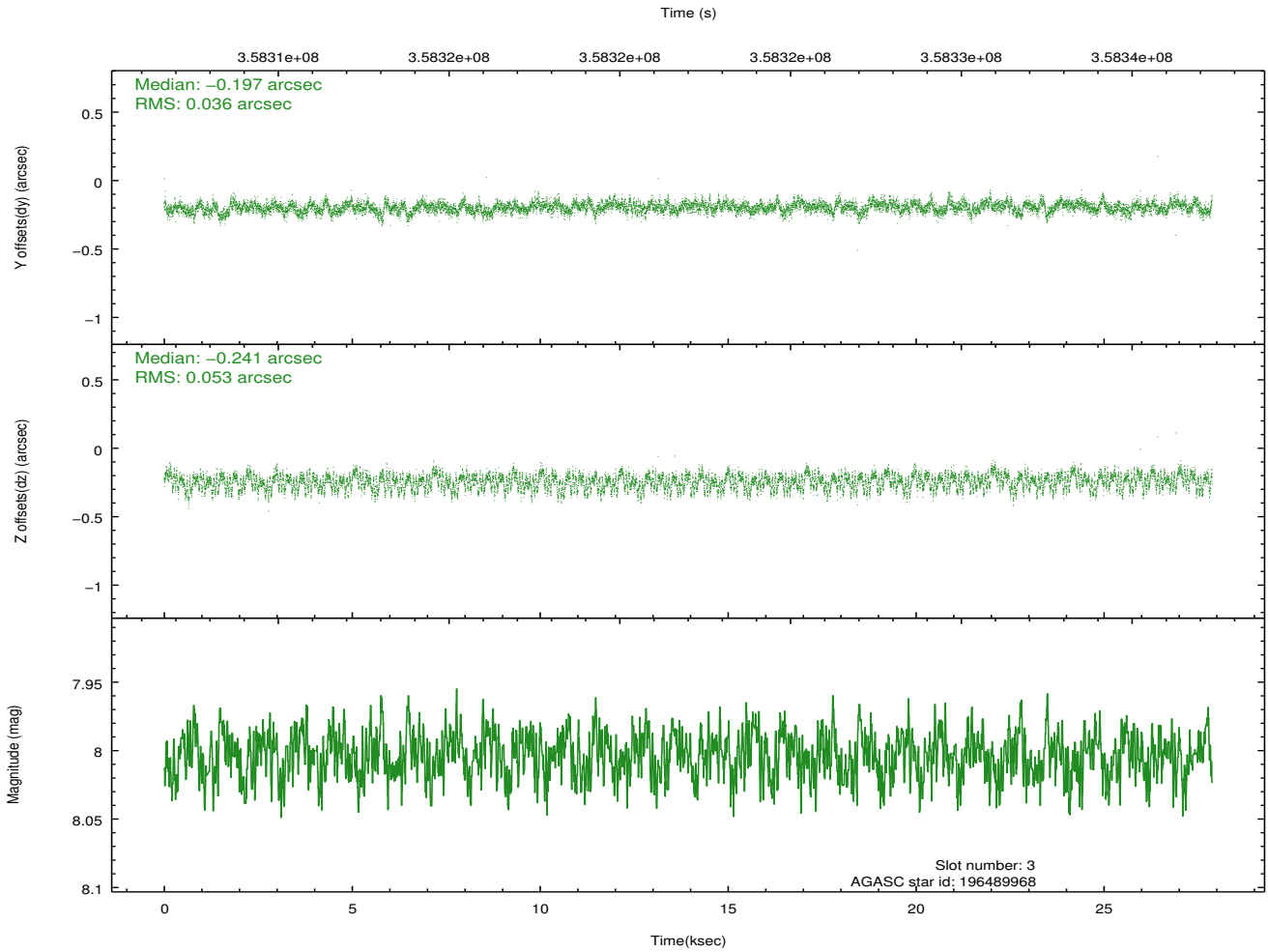
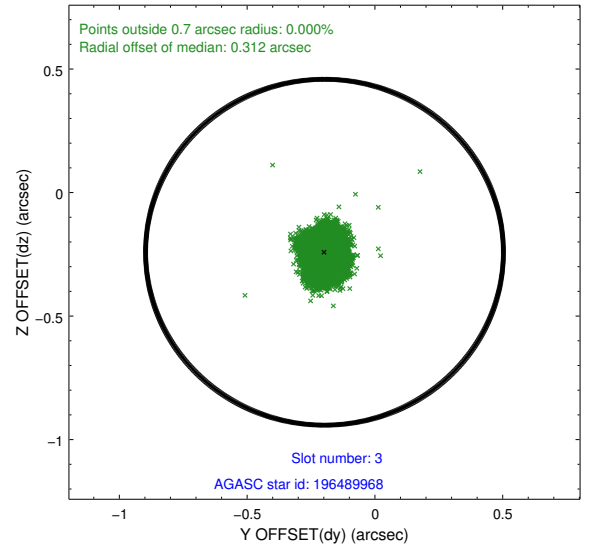
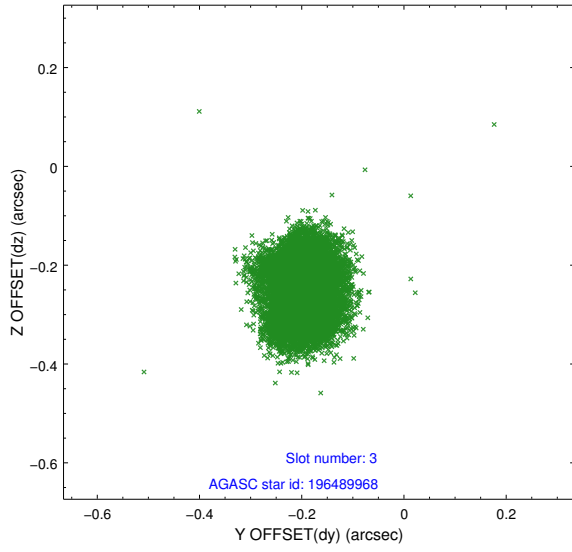


Slot Statistics

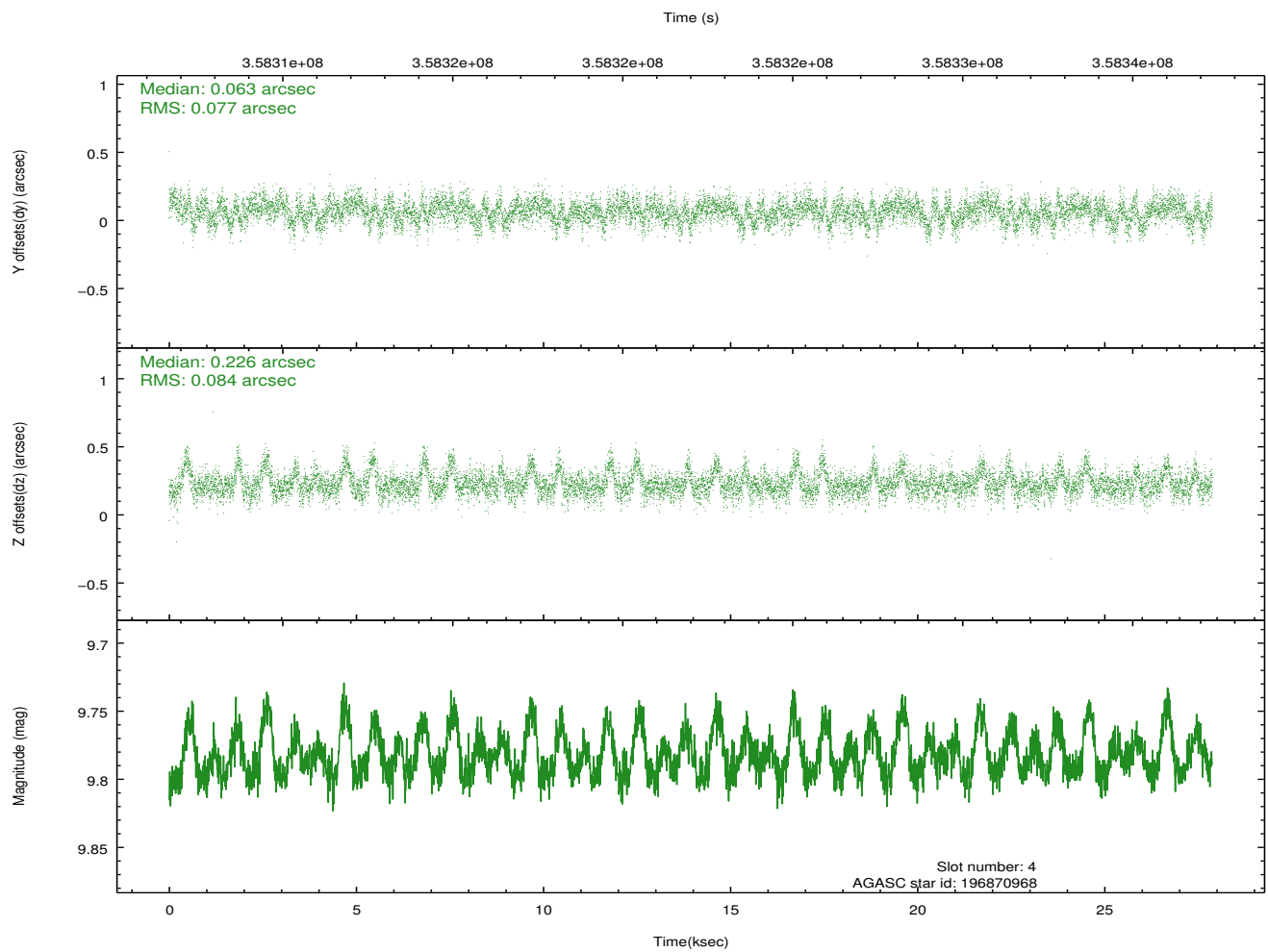
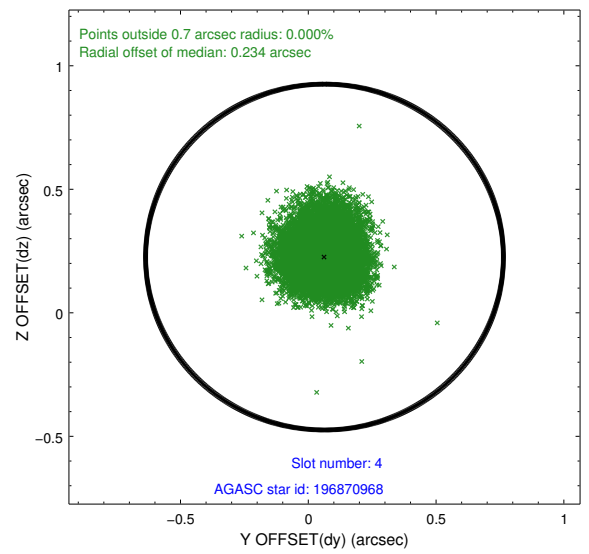
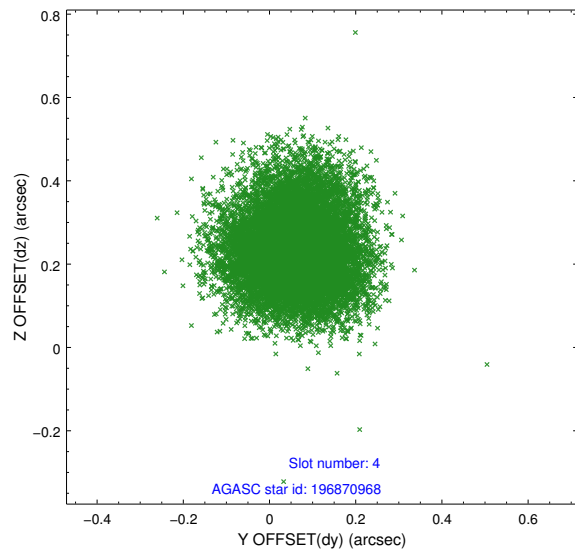
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.04	6801	0.032	-0.001	0.007	0.013	0.000000	0.000000	925.05	-838.75
1	FID	ACIS-I-5	7.03	6800	-0.213	0.037	0.006	0.011	0.000000	0.000000	-1823.27	1058.72
2	FID	ACIS-I-6	7.04	6800	0.090	0.035	0.008	0.013	0.000000	0.000000	390.53	1703.34
3	GUIDE	196489968	8.00	13596	-0.197	-0.241	0.068	0.110	237.504150	19.692523	1270.17	2002.58
4	GUIDE	196870968	9.78	13586	0.063	0.226	0.120	0.199	238.606443	20.079805	-1758.57	-584.05
5	GUIDE	196873248	8.72	13594	0.171	-0.024	0.075	0.120	238.212487	20.381335	-135.14	-1145.44
6	GUIDE	196876760	9.84	13586	-0.052	0.109	0.155	0.241	238.130265	20.742811	571.25	-2272.75
7	GUIDE	196480344	8.81	13585	0.016	-0.077	0.084	0.138	238.522484	19.410970	-2322.13	1773.82

2.4 Star Slots

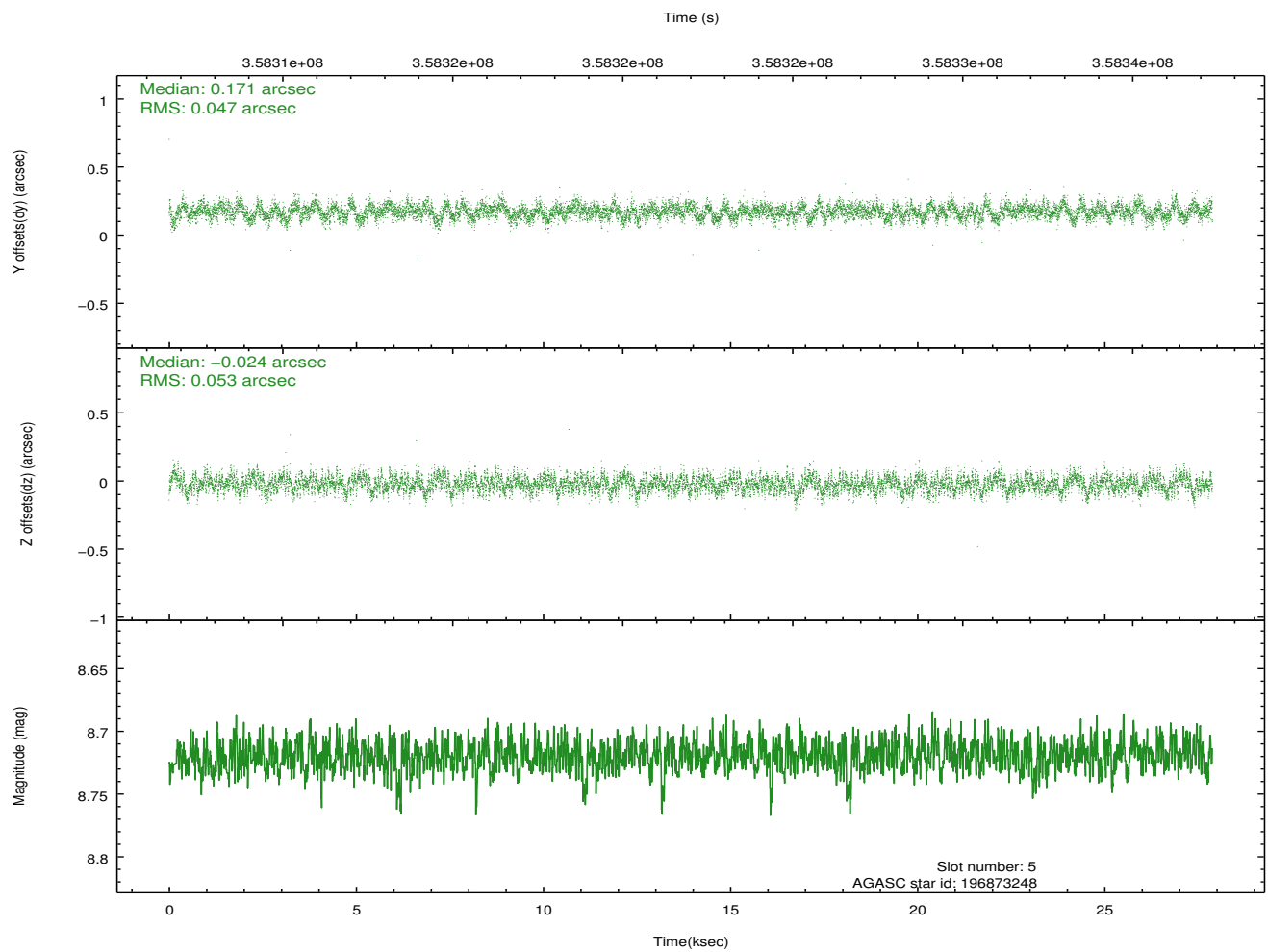
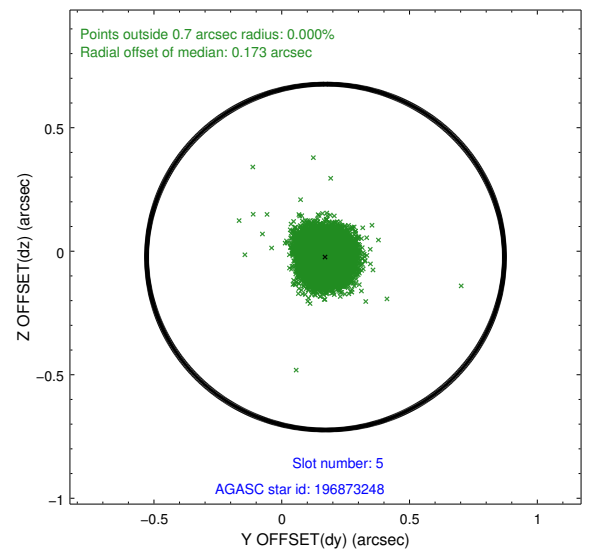
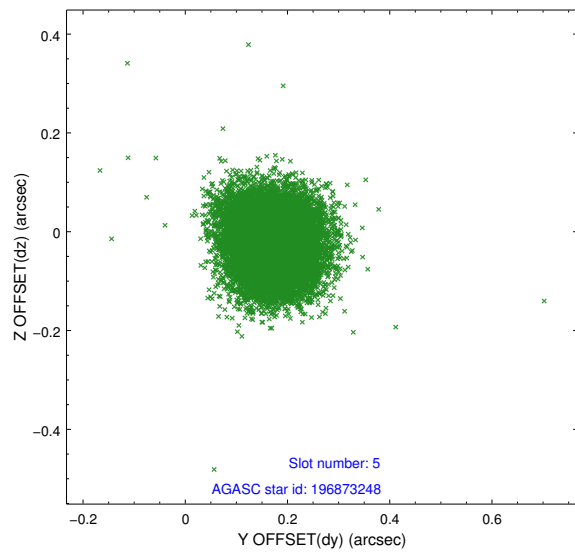
2.4.1 Slot 3



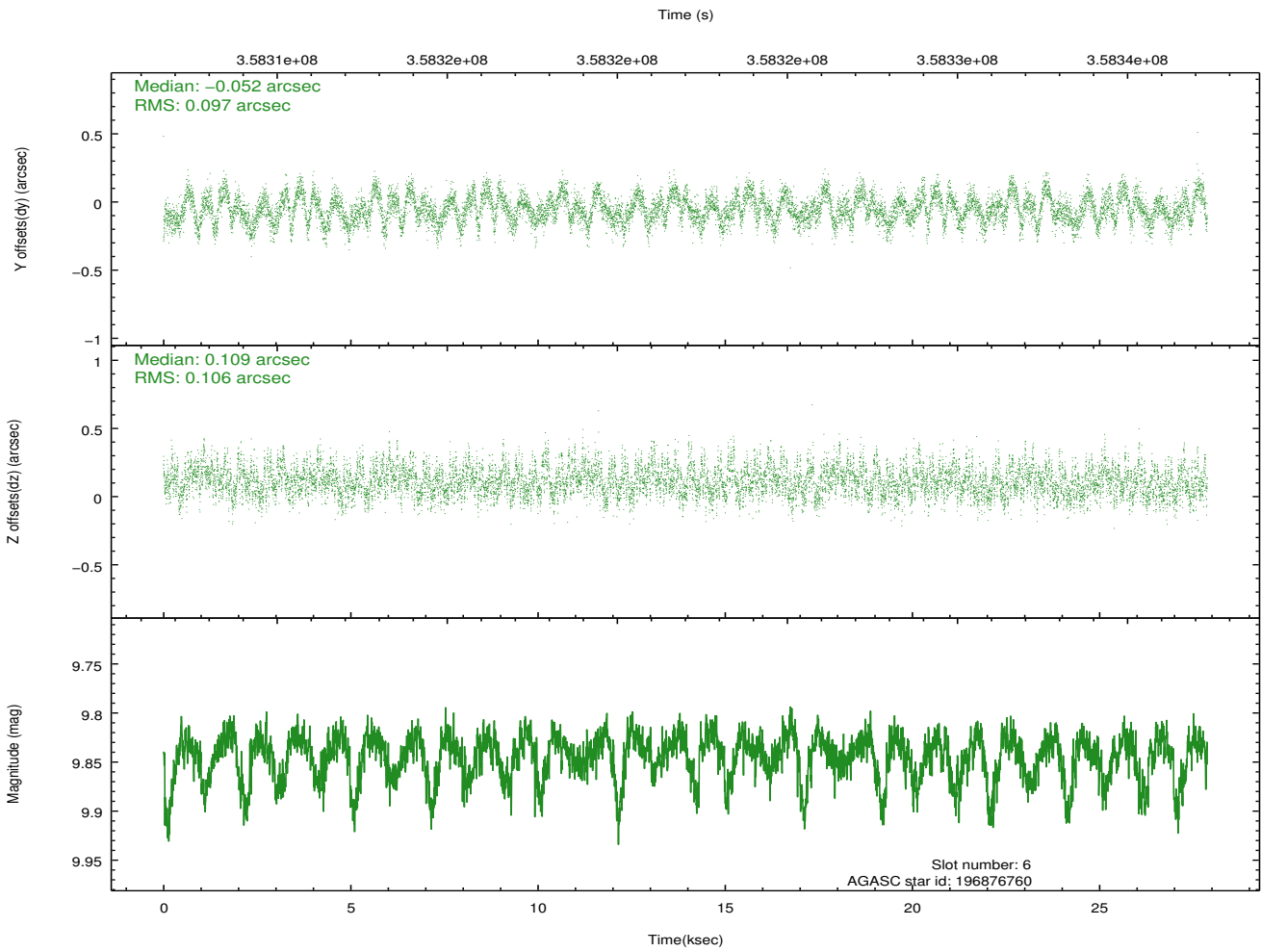
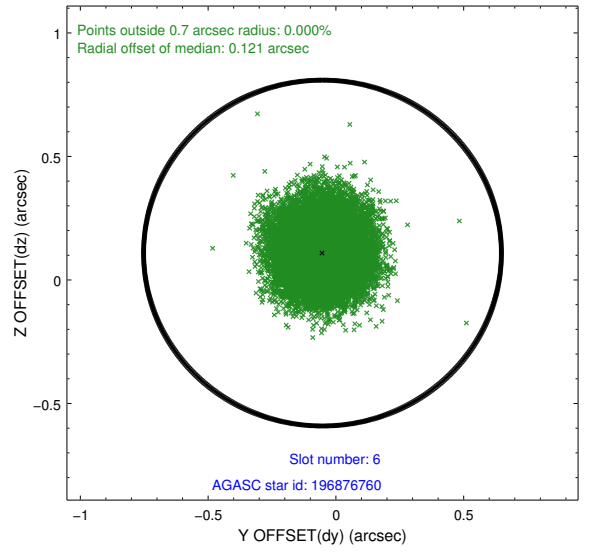
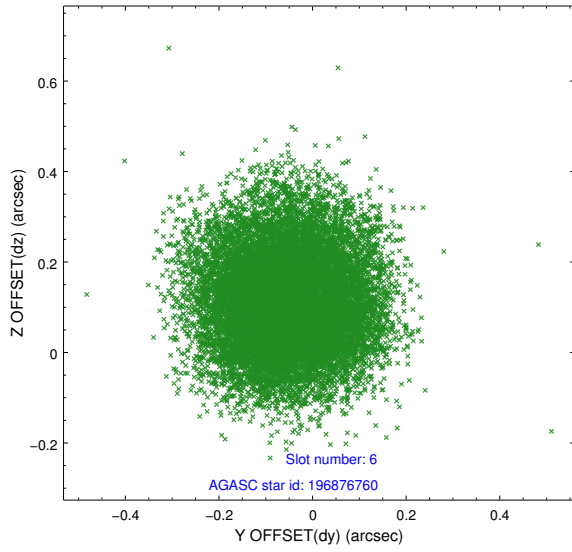
2.4.2 Slot 4



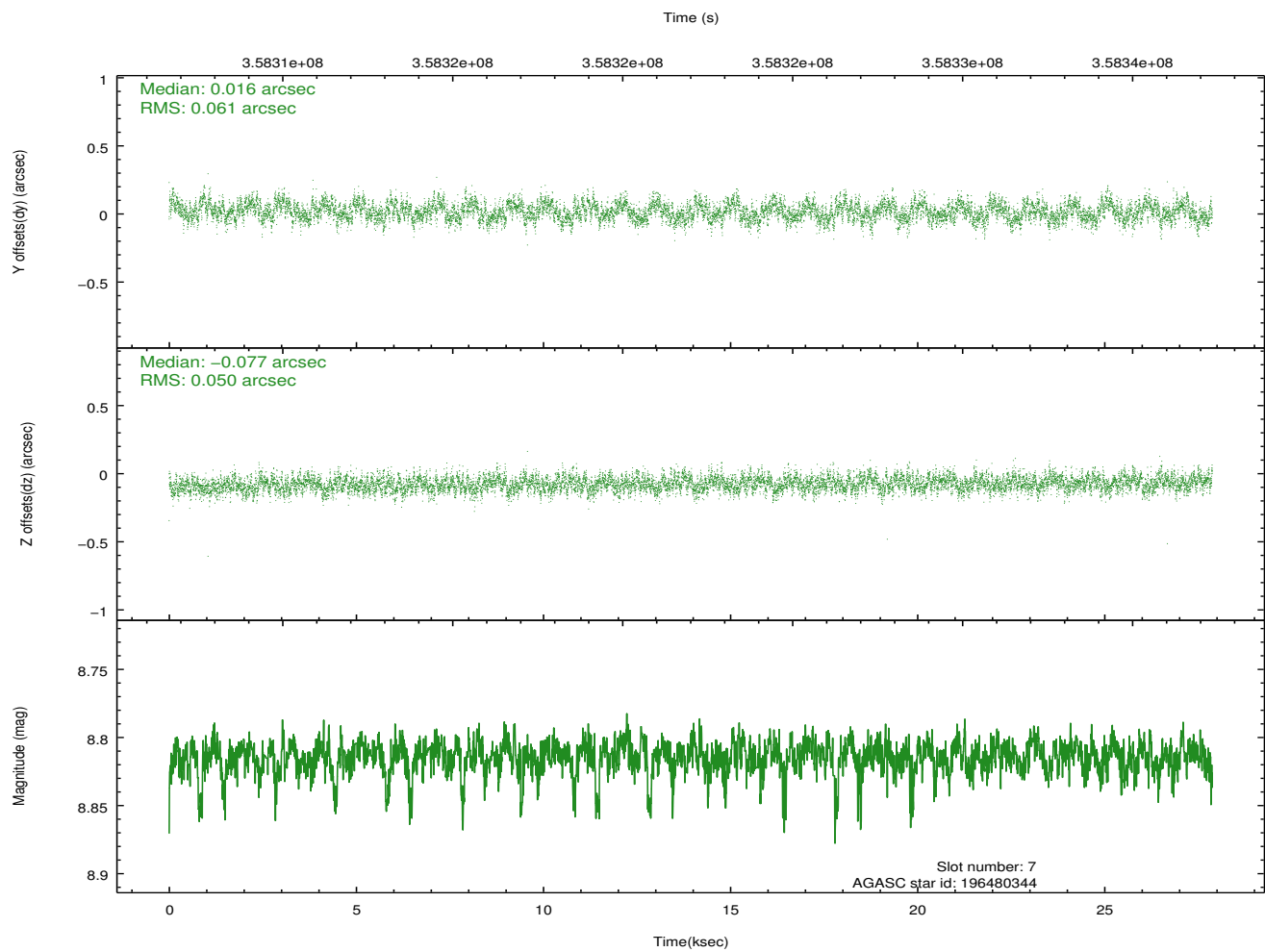
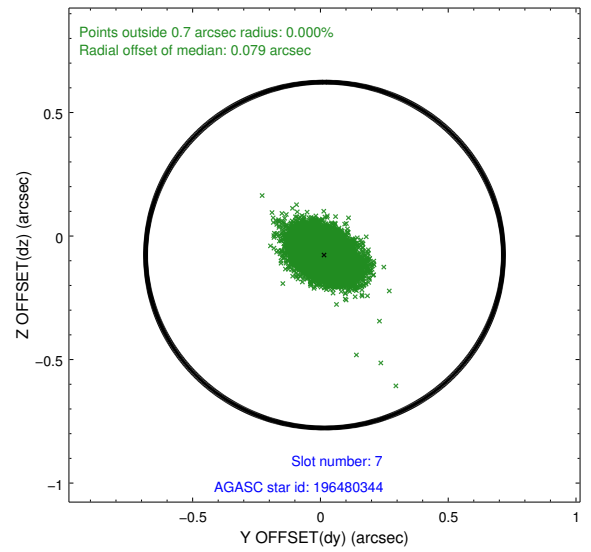
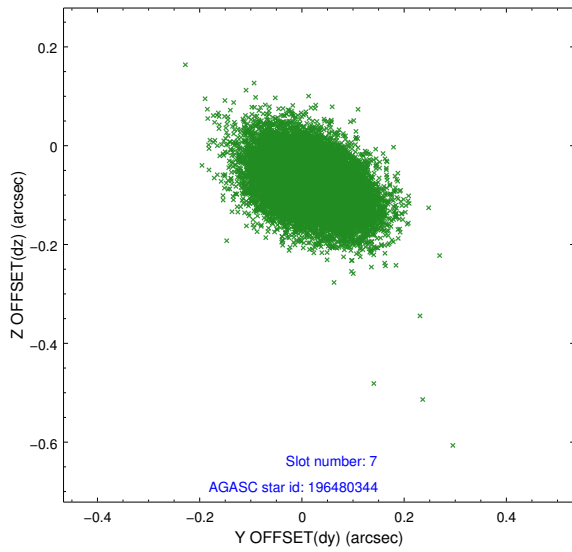
2.4.3 Slot 5



2.4.4 Slot 6

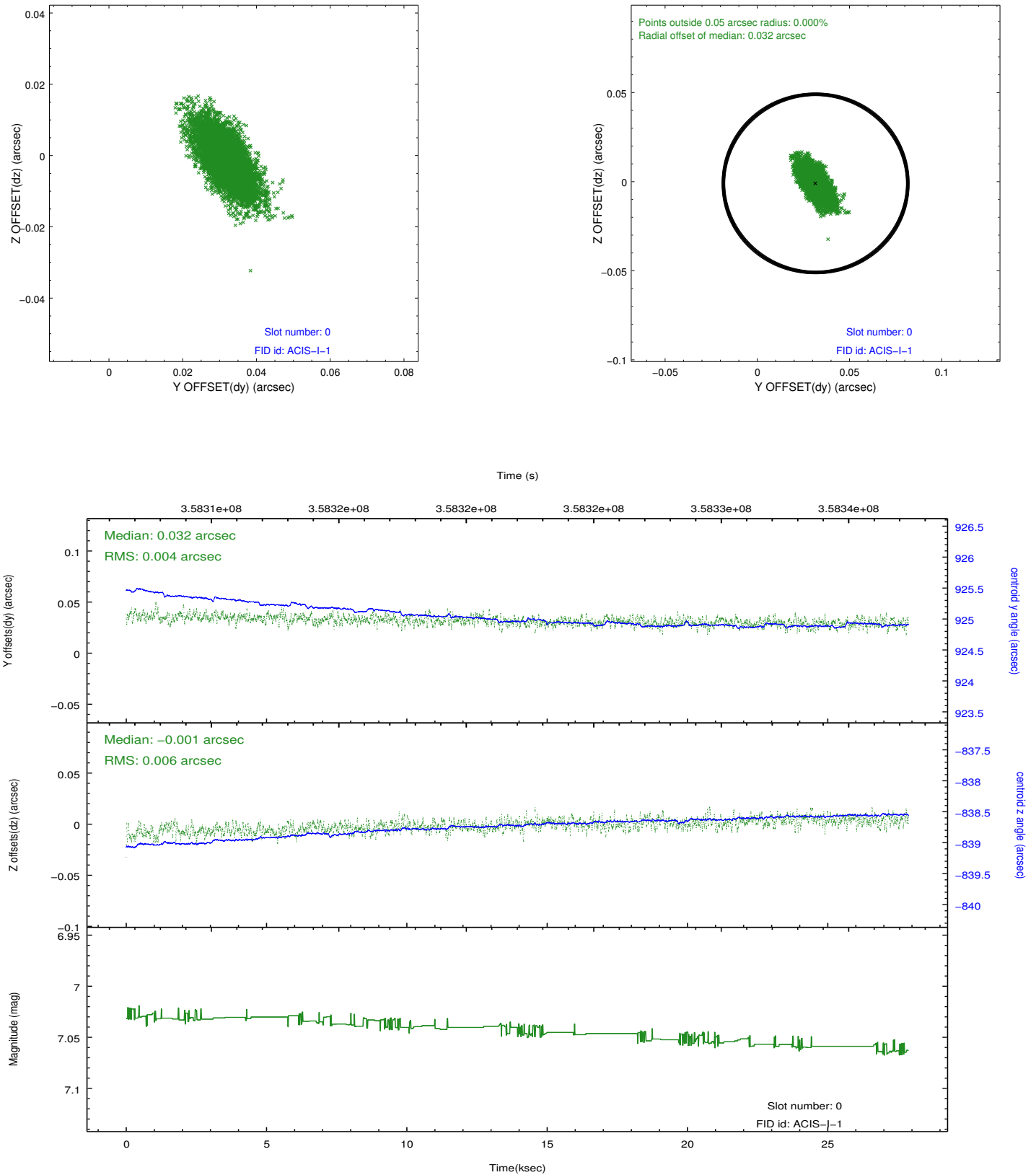


2.4.5 Slot 7

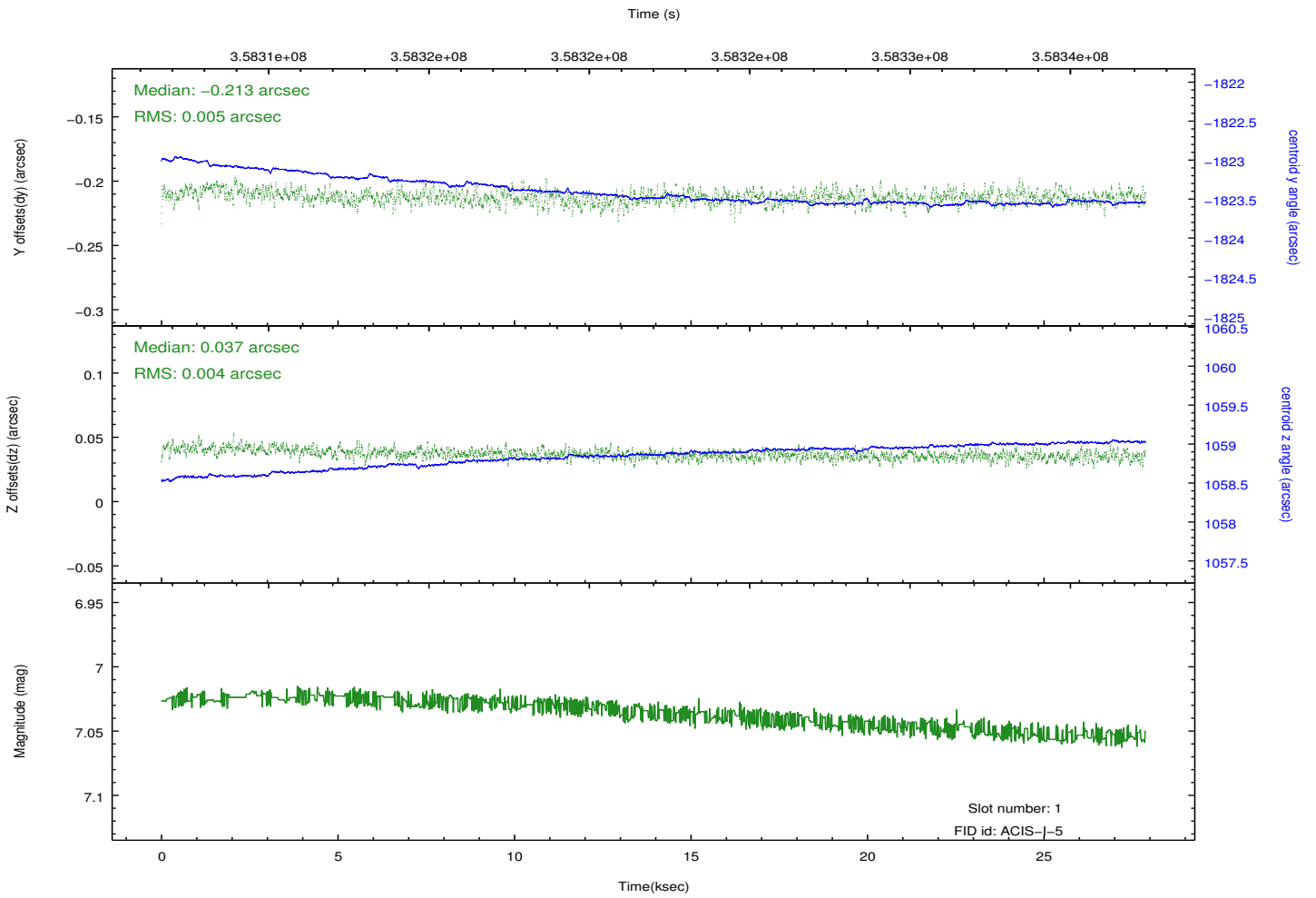
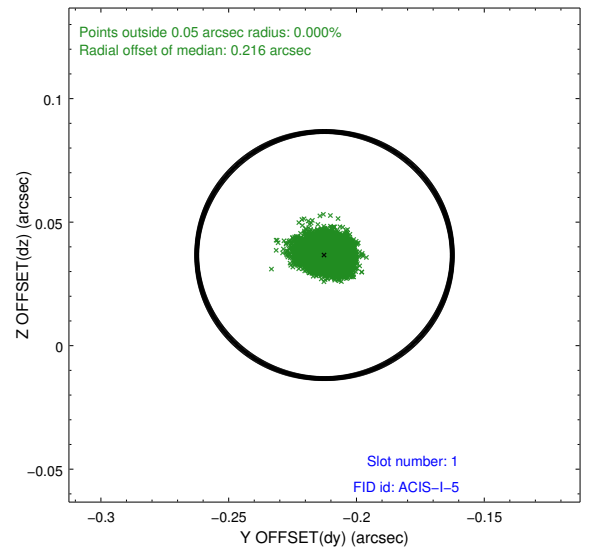
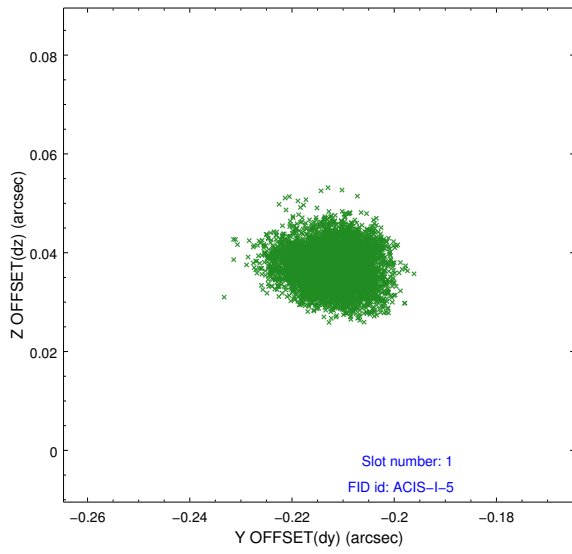


2.5 FID Slots

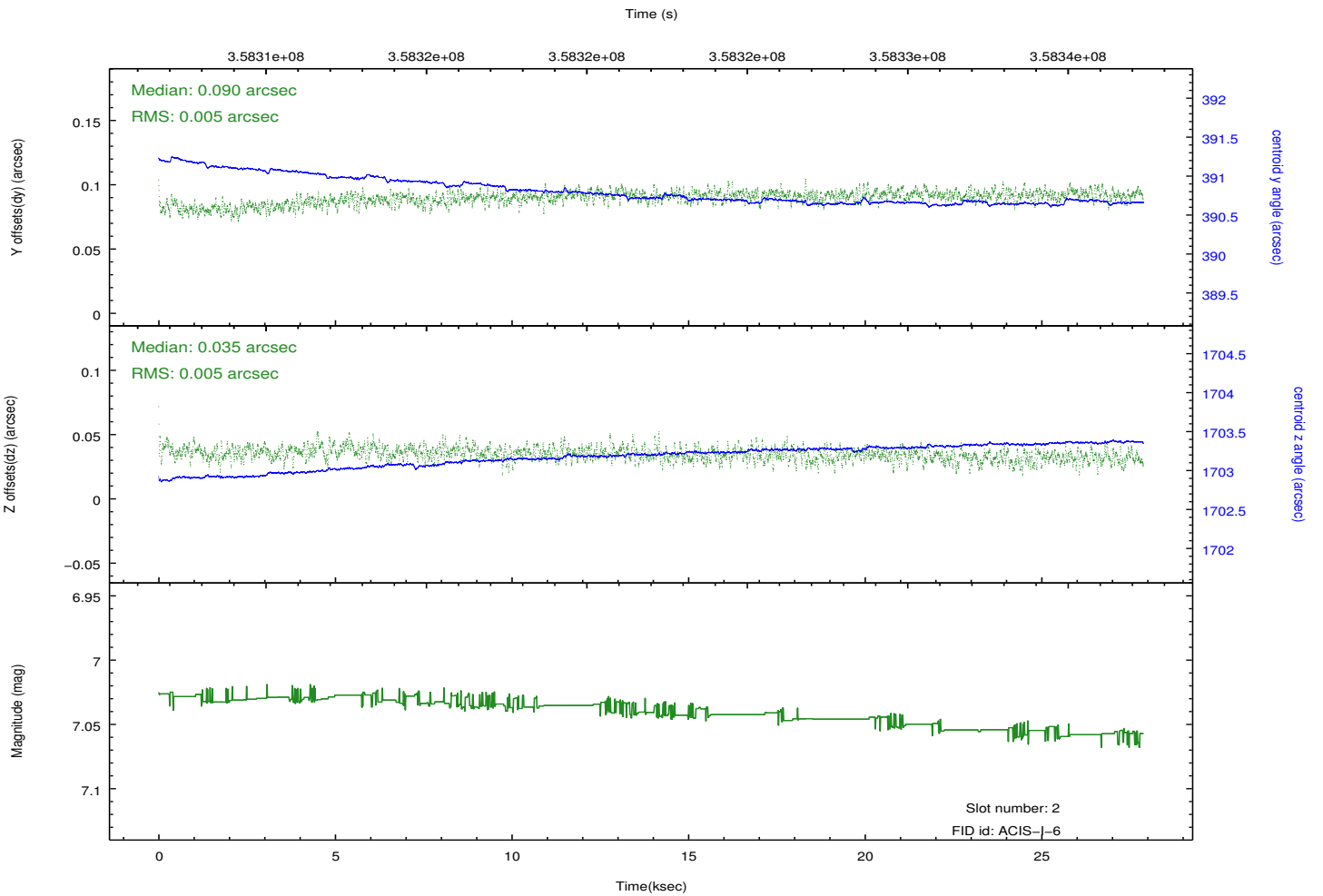
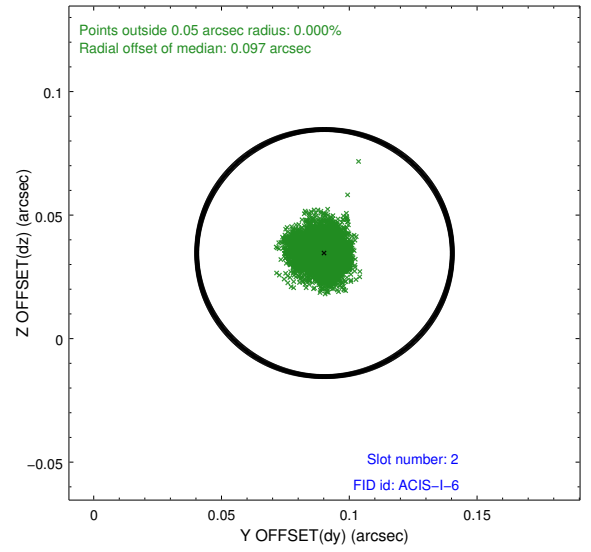
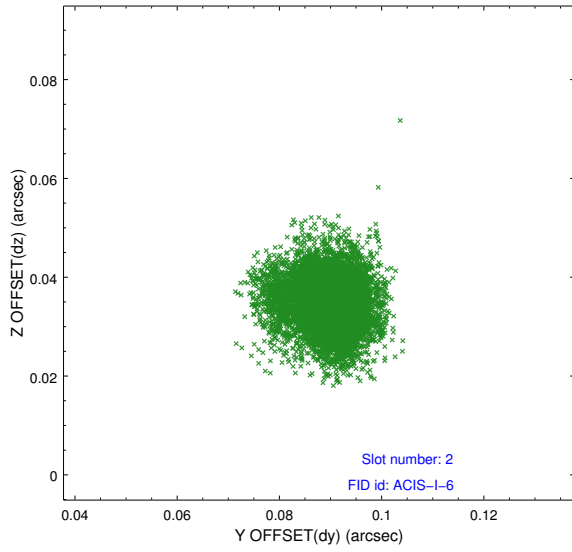
2.5.1 Slot 0



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)	2012.06.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.8751592

A.2 Comments

Joint proposal: HST.

=====

Spatial regions of the original bias maps for CCD = 2 and 6 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 maps for CCD = 2 and 6 have 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:

CCD 2:

(237.94134,20.02995), (237.93939,20.02481), (237.98240,20.01029), (237.98435,20.01543)

CCD 6:

(237.86128,19.81200), (237.86606,19.81039), (237.88938,19.87168), (237.87790,19.85569)