V&V Reference Report
L2 ASCDS Version : 8.4.4

Observation 8206 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Apr 29 2012

Contents

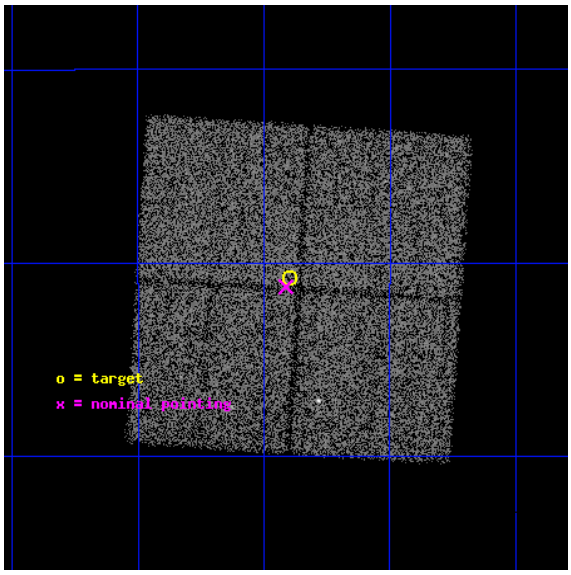
1 Front **2**

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	600642	Sequence number
obs_id	8206	Observation id
title	Galactic Bulge Latitude Survey-2	Proposal title
observer	Professor Johnathan Grindlay	Principal investigator
object	GBW26	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.6	Observer's specified target RA [deg]
dec_targ	-28.513056	Observer's specified target Dec [deg]
ra_nom	265.60329139152	Nominal RA [deg]
dec_nom	-28.52058783749	Nominal Dec [deg]
roll_nom	273.81026250993	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14695.798178971	Sum of GTIs [s]
livetime	14503.786756873	Livetime [s]
ontime0	14695.675058961	Sum of GTIs [s]
ontime1	14686.29314822	Sum of GTIs [s]
ontime2	14695.757138968	Sum of GTIs [s]
ontime3	14695.798178971	Sum of GTIs [s]
l2events	67598	Number of level 2 events

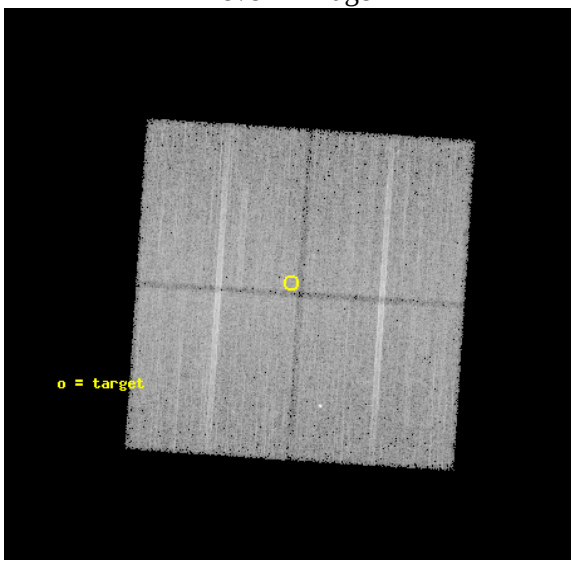


2 OBI

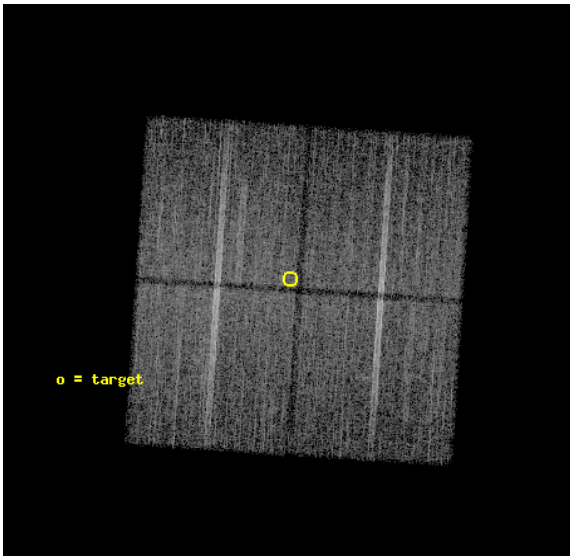
2.1 OBI

2.1.1 Images

Level 1 Image

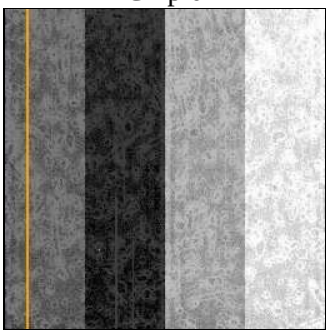


Level 1 Bad Events

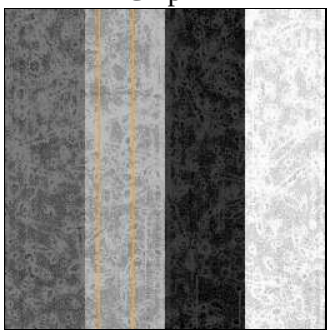


2.1.2 Bias

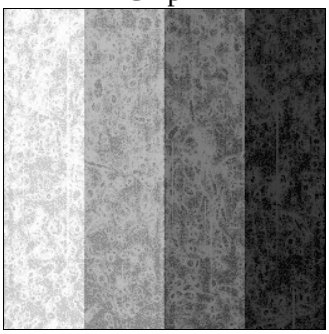
Chip 0



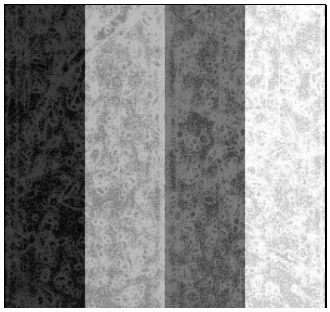
Chip 1



Chip 2



Chip 3



2.1.3 Parameters

obi_num	0	Obi number
ascdsver	8.4.4	Processing system revision
caldbver	4.4.9	
date	2012-04-29T02:13:25	Date and time of file creation
revision	2	Processing version of data

sched_exp_time	14900.000000	[s] Scheduled observation exposure time
ontime	14695.798178971	Sum of GTIs [s]
ontime0	14695.675058961	Sum of GTIs [s]
ontime1	14686.29314822	Sum of GTIs [s]
ontime2	14695.757138968	Sum of GTIs [s]
ontime3	14695.798178971	Sum of GTIs [s]
l1events	548208	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	132023	130648	145168	140369
rejected events	112008	110293	126632	121255
rejected %	84%	84%	87%	86%

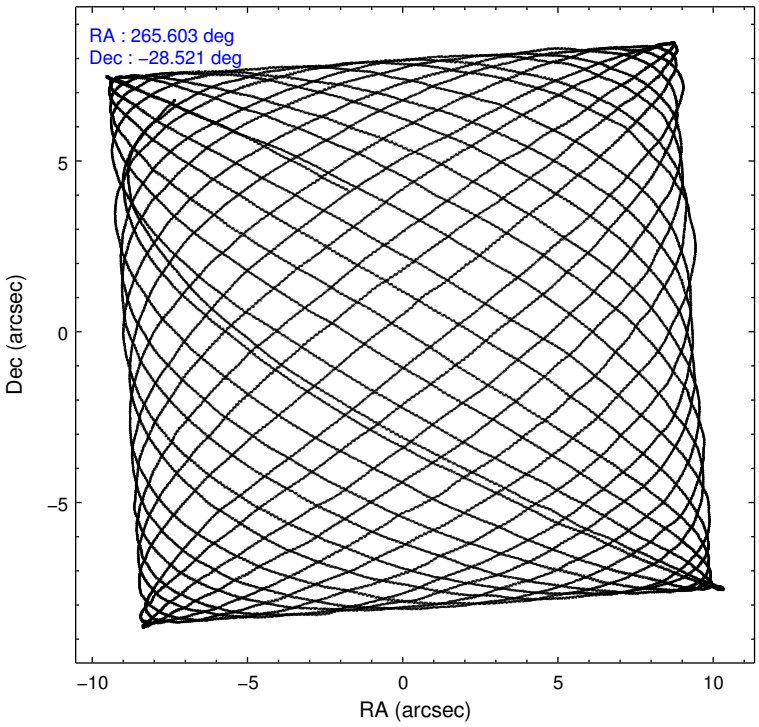
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	9451	8918	8844	9032
	7%	6%	6%	6%
grade 1 events	101	72	105	119
	0%	0%	0%	0%
grade 2 events	4136	4332	3723	3637
	3%	3%	2%	2%
grade 3 events	1693	1778	1619	1658
	1%	1%	1%	1%
grade 4 events	1622	1758	1613	1680
	1%	1%	1%	1%
grade 5 events	5694	5972	5587	6590
	4%	4%	3%	4%
grade 6 events	3117	3574	2739	3109
	2%	2%	1%	2%
grade 7 events	106209	104244	120938	114544
	80%	79%	83%	81%

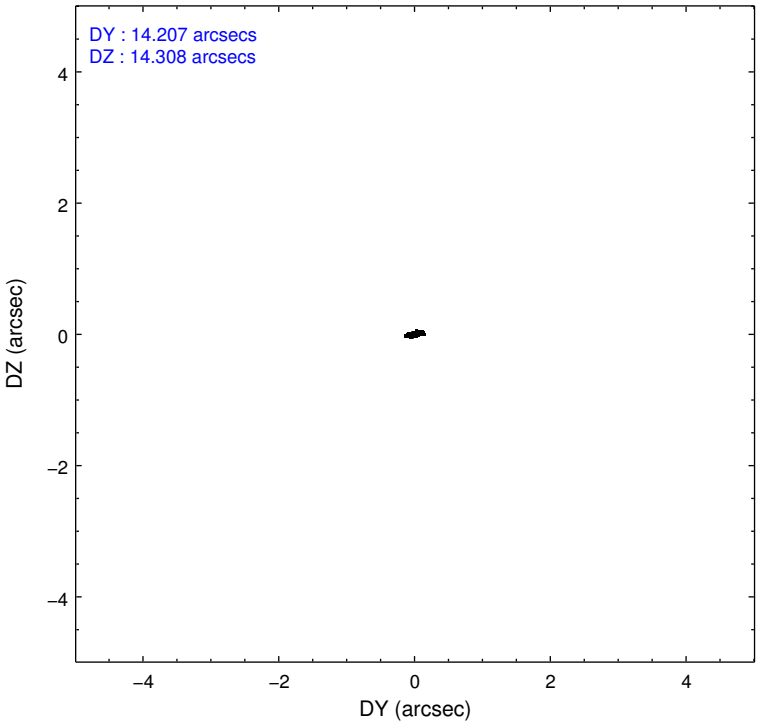
2.2 Compared Parameters

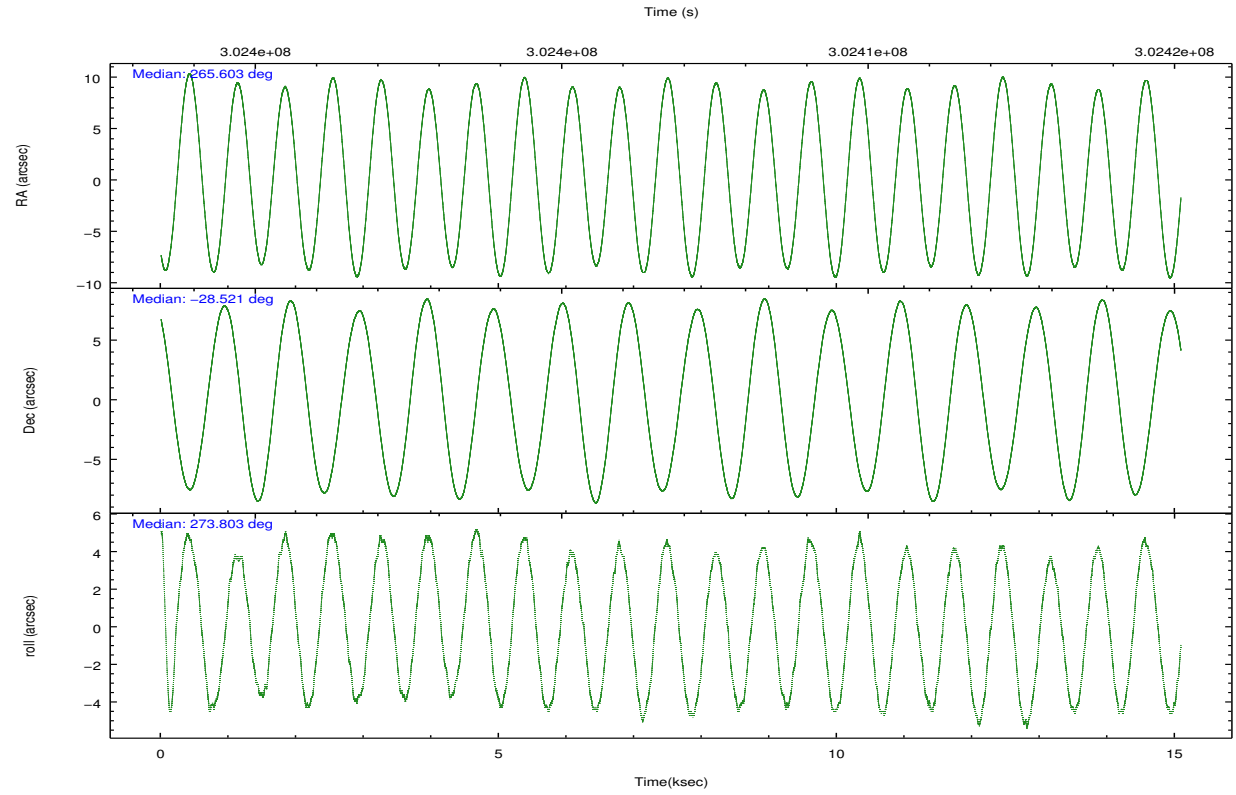
Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	265.585801	265.6032913915164
[deg] Pointing Dec	-28.497809	-28.52058783749007
[deg] Pointing Roll	273.593225	273.8102625099338
[mm] 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)	302399430.184000	302399054.74476
Observation start date	2007-08-01T23:49:25	2007-08-01T23:44:14
[s] Observation end time (MET)	302414330.184000	302414464.5955
Observation end date	2007-08-02T03:57:45	2007-08-02T04:01:04
Read mode	TIMED	TIMED

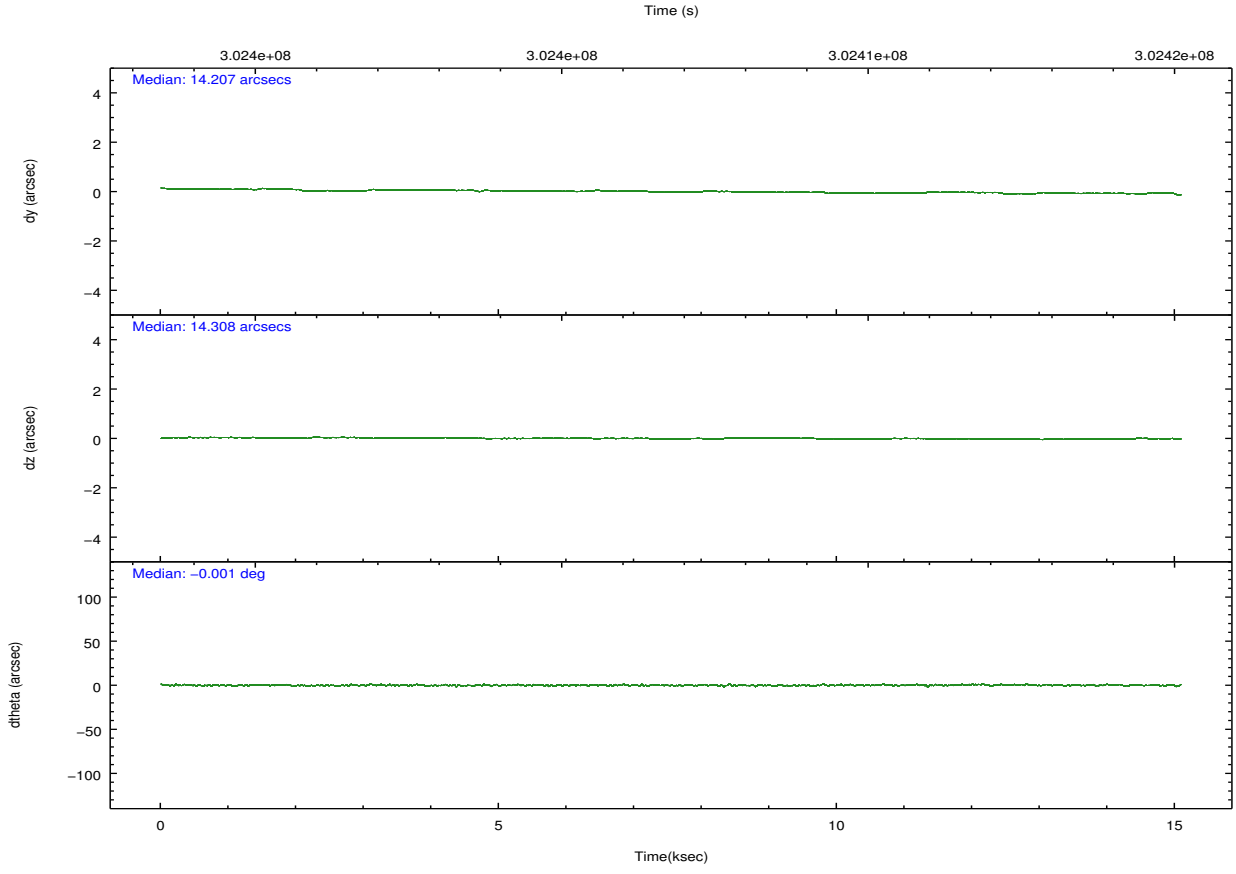
Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect


RA : 265.603 deg
Dec : −28.521 deg
Dec (arcsec)
RA (arcsec)
5
0
−5
−10
−5
0
5
10


DY : 14.207 arcsecs
DZ : 14.308 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
3.024e+08
3.024e+08
3.0241e+08
3.0242e+08
Median: 265.603 deg
RA (arcsec)
Median: −28.521 deg
Dec (arcsec)
Median: 273.803 deg
roll (arcsec)
Time(ksec)

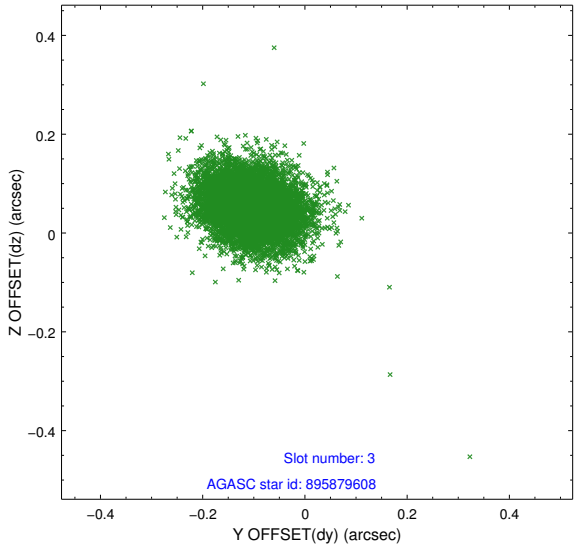

Time (s)
3.024e+08
3.024e+08
3.0241e+08
3.0242e+08
Median: 14.207 arcsecs
dy (arcsec)
Median: 14.308 arcsecs
dz (arcsec)
Median: −0.001 deg
dtheta (arcsec)
Time(ksec)

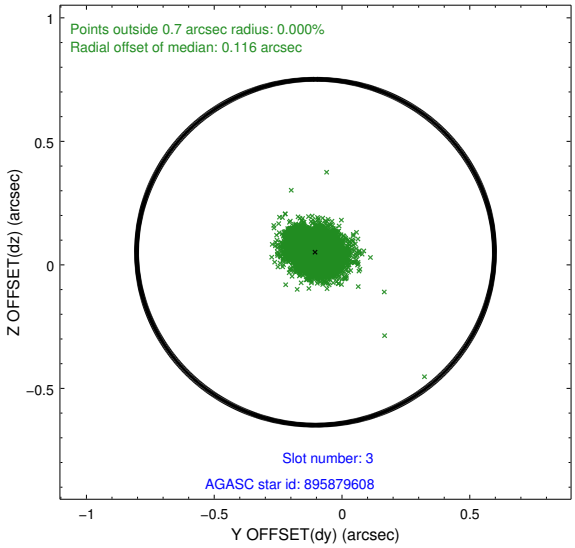
Slot Statistics

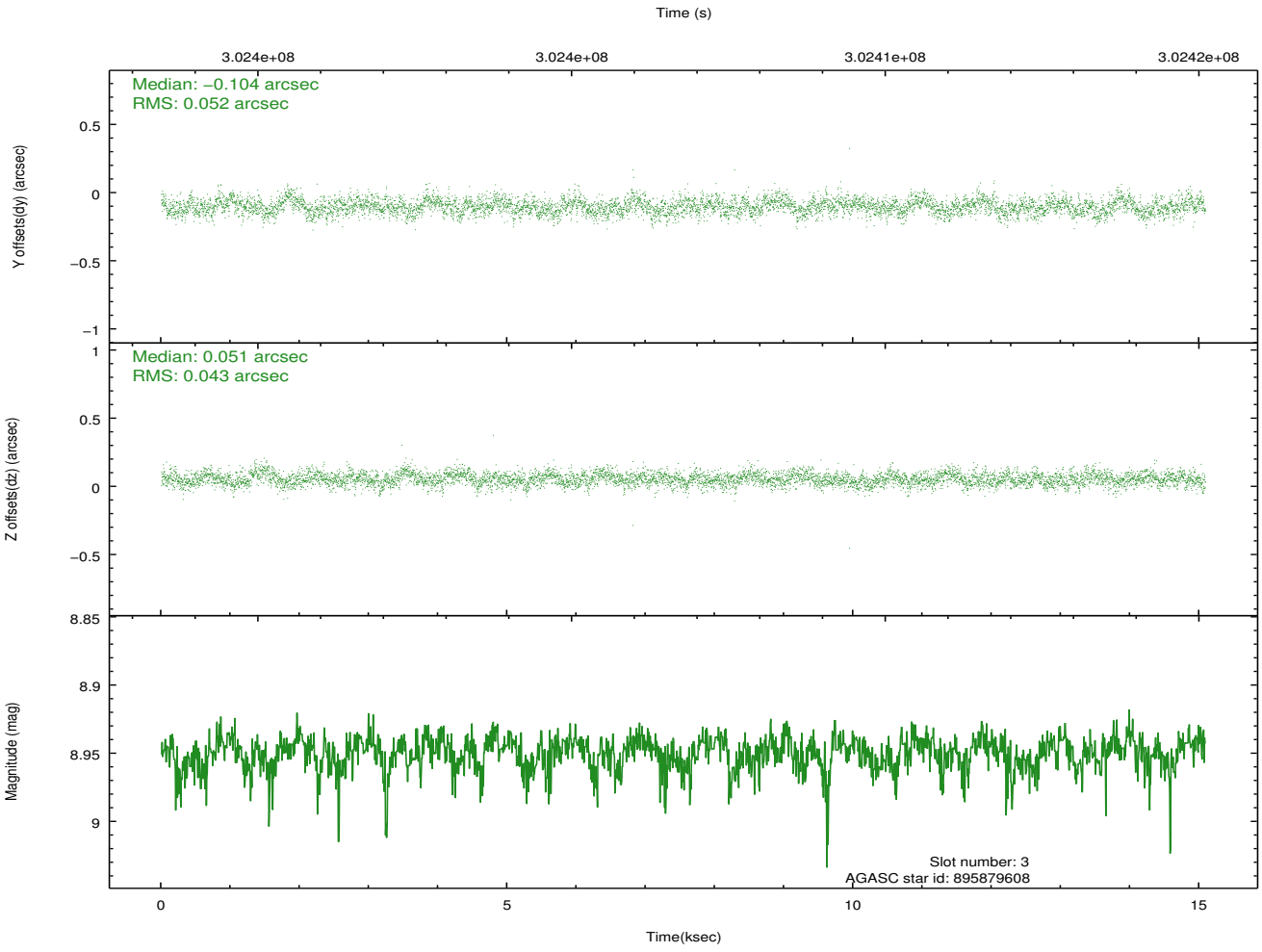
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.14	3680	-0.015	-0.056	0.009	0.018	0.000000	0.000000	-768.93	-844.29
1	FID	ACIS-I-5	7.22	3680	-0.204	0.036	0.008	0.014	0.000000	0.000000	-1823.32	1059.51
2	FID	ACIS-I-6	7.24	3680	0.125	0.088	0.007	0.011	0.000000	0.000000	390.64	1704.38
3	GUIDE	895879608	8.95	7355	-0.104	0.051	0.070	0.116	265.708239	-27.843915	-2324.64	536.54
4	GUIDE	896402656	8.85	7355	-0.003	0.134	0.073	0.117	265.739192	-28.230753	-928.80	546.16
5	GUIDE	896402976	7.47	7360	0.116	-0.072	0.065	0.105	265.099474	-28.923203	1436.01	-1625.15
6	GUIDE	896538696	6.80	7360	-0.171	-0.176	0.053	0.085	266.298470	-28.325572	-470.61	2292.22
7	GUIDE	896532680	8.76	7357	0.160	0.055	0.093	0.144	266.342632	-28.496299	152.27	2390.30

2.4 Star Slots

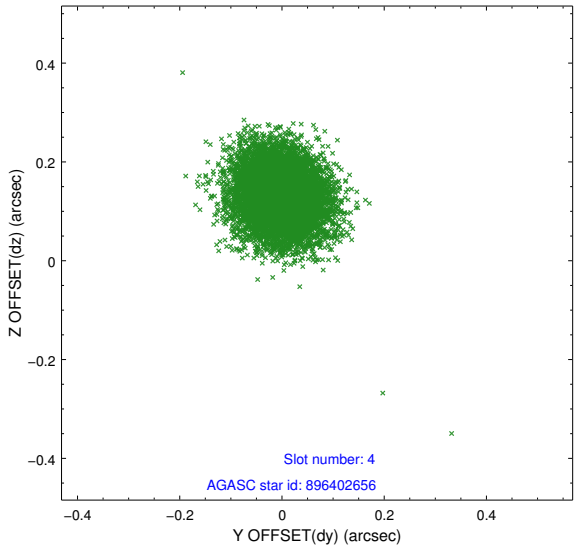
2.4.1 Slot 3

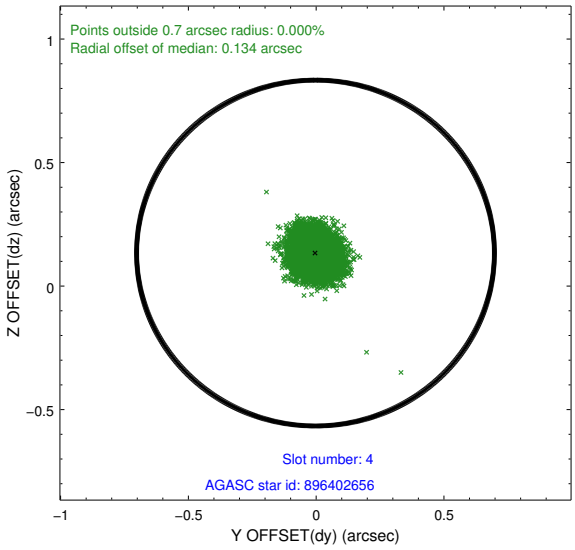


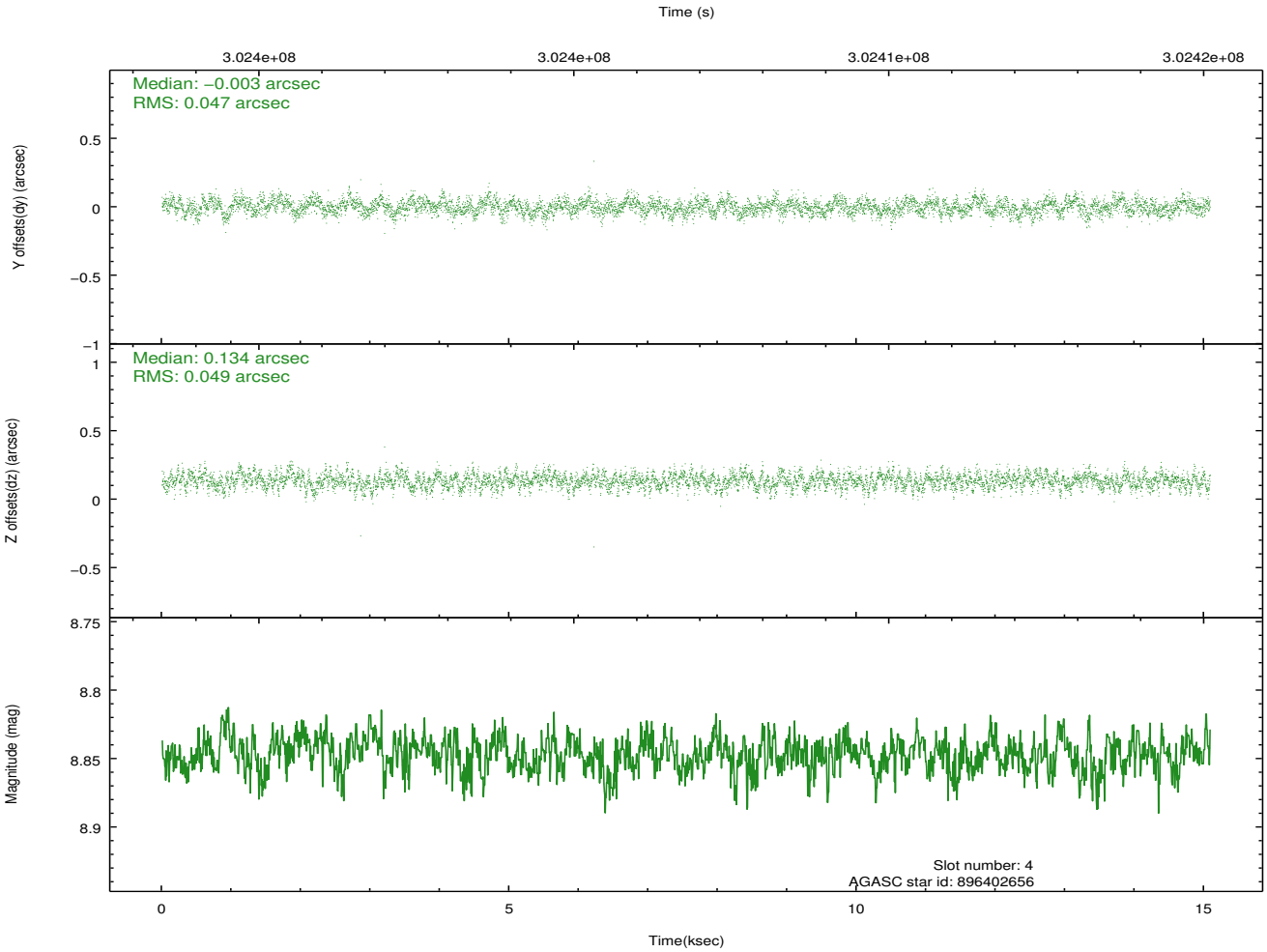




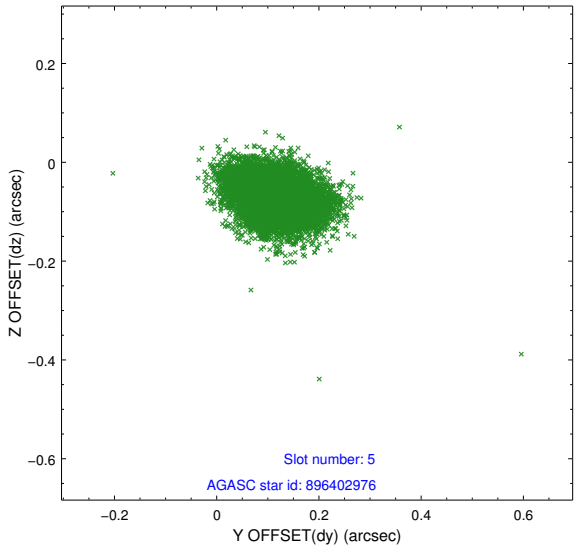
2.4.2 Slot 4

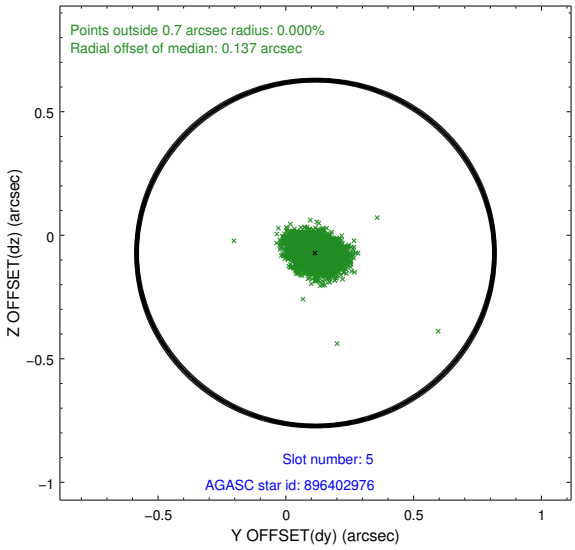

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 4
AGASC star id: 896402656

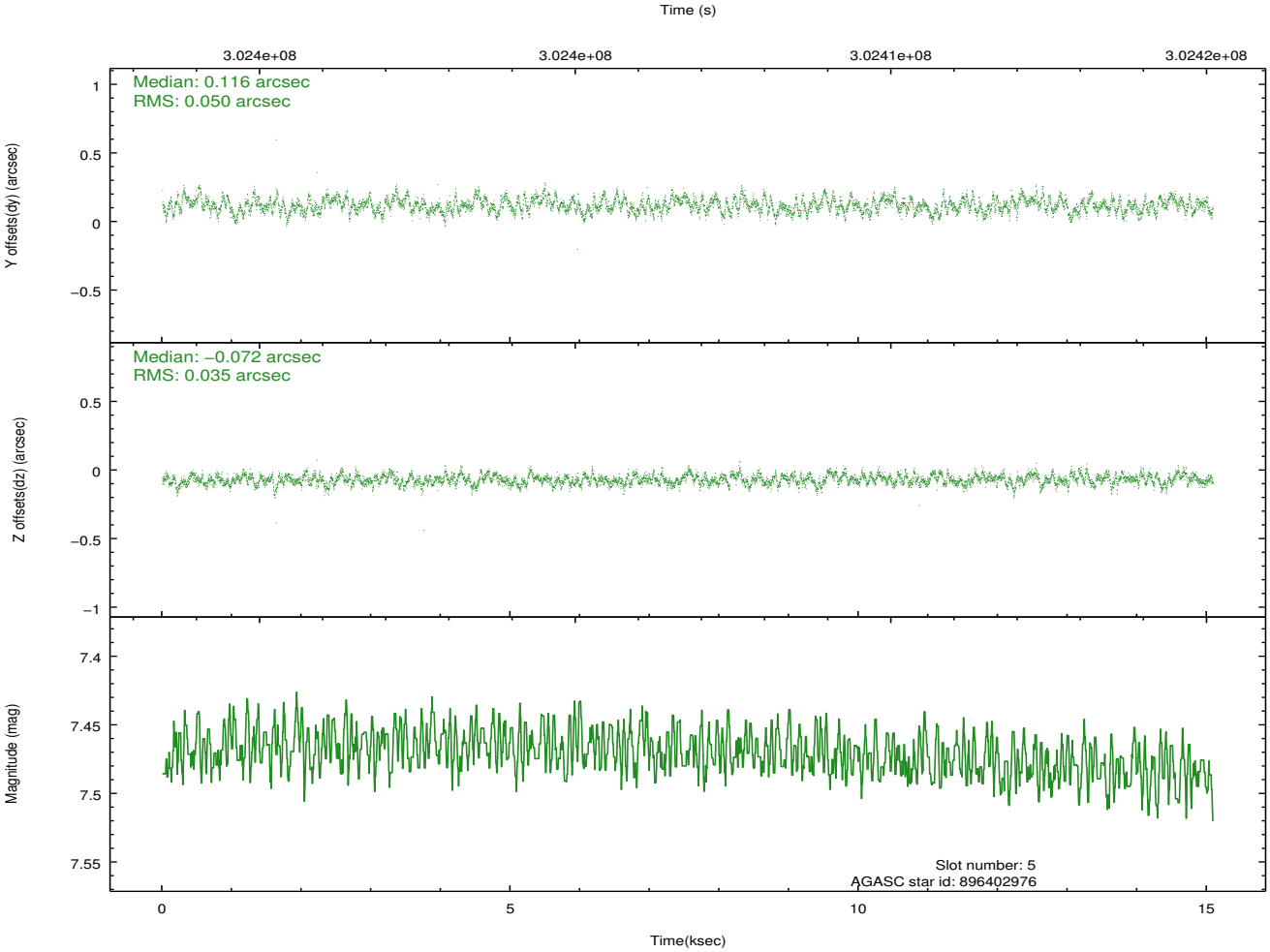

Points outside 0.7 arcsec radius: 0.000%
Radial offset of median: 0.134 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 4
AGASC star id: 896402656


Time (s)
3.024e+08
3.024e+08
3.0241e+08
3.0242e+08
Median: −0.003 arcsec
RMS: 0.047 arcsec
Y offsets(dy) (arcsec)
Median: 0.134 arcsec
RMS: 0.049 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number: 4
AGASC star id: 896402656
Time(ksec)

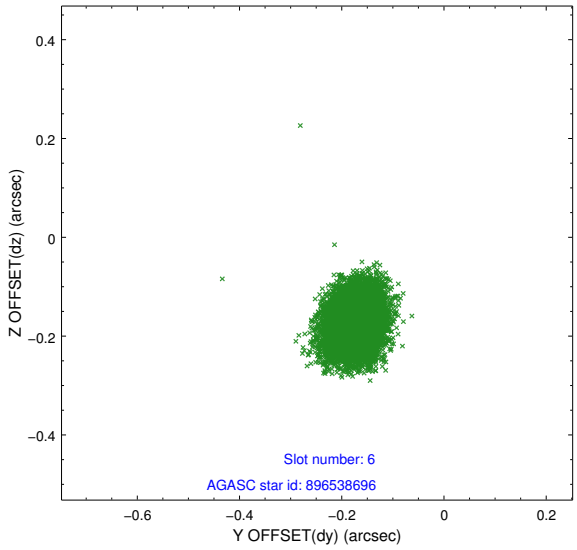
2.4.3 Slot 5

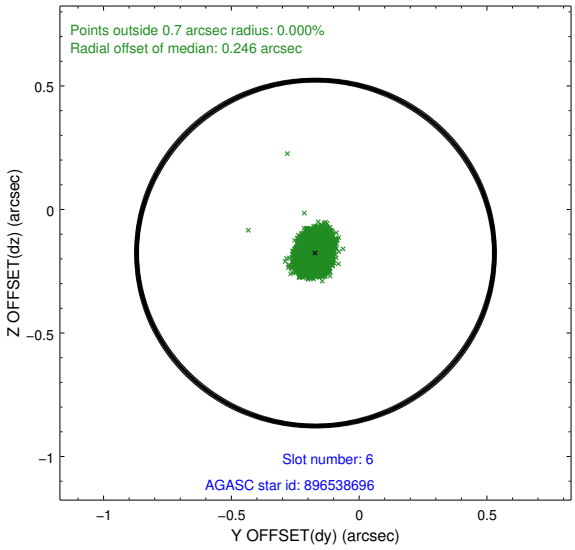

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 5
AGASC star id: 896402976

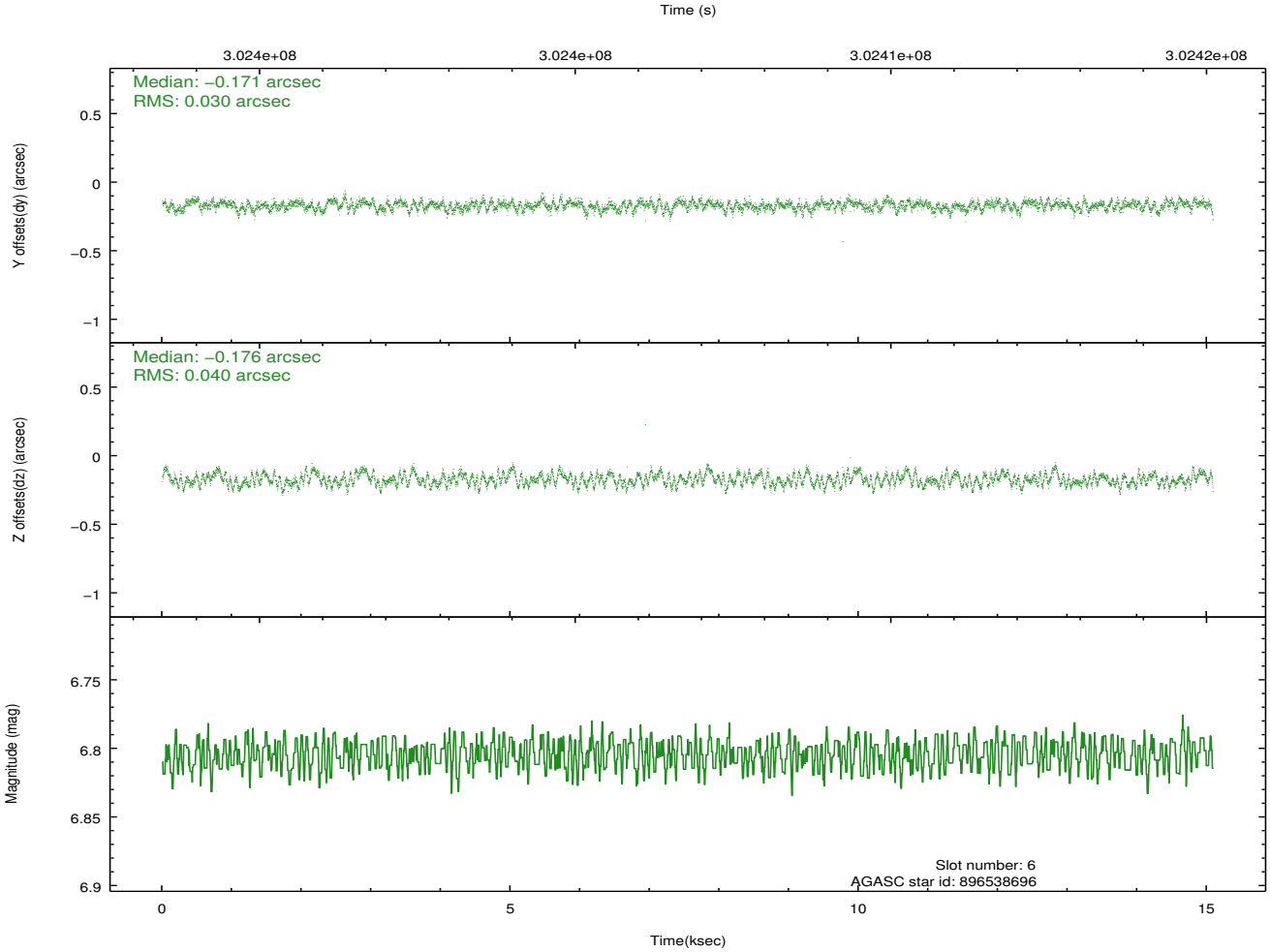

Points outside 0.7 arcsec radius: 0.000%
Radial offset of median: 0.137 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 5
AGASC star id: 896402976


Time (s)
3.024e+08
3.024e+08
3.0241e+08
3.0242e+08
Median: 0.116 arcsec
RMS: 0.050 arcsec
Y offsets(dy) (arcsec)
Median: −0.072 arcsec
RMS: 0.035 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number: 5
AGASC star id: 896402976
Time(ksec)

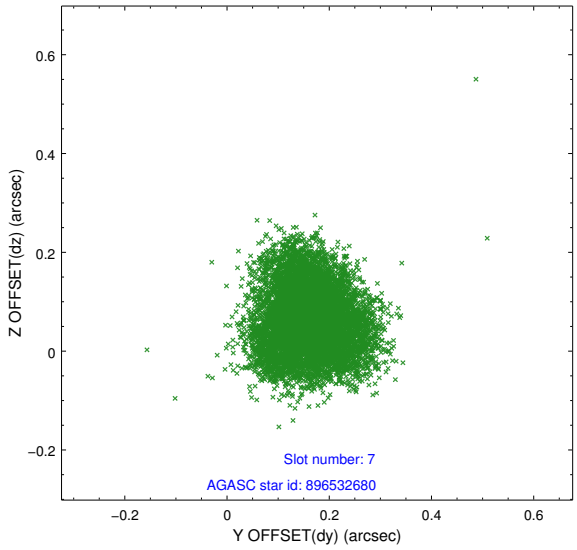
2.4.4 Slot 6

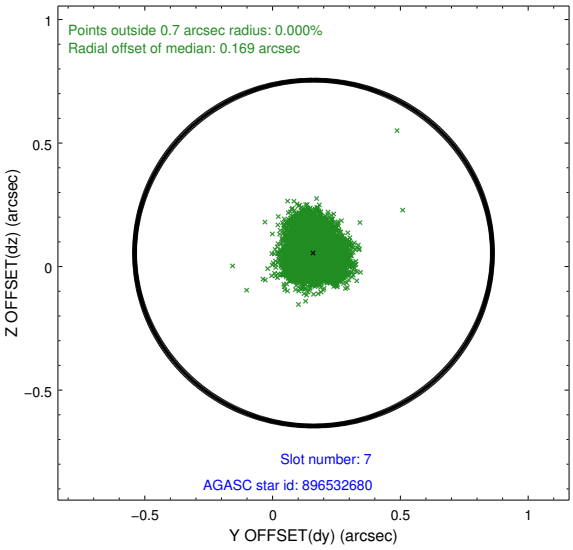

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 6
AGASC star id: 896538696

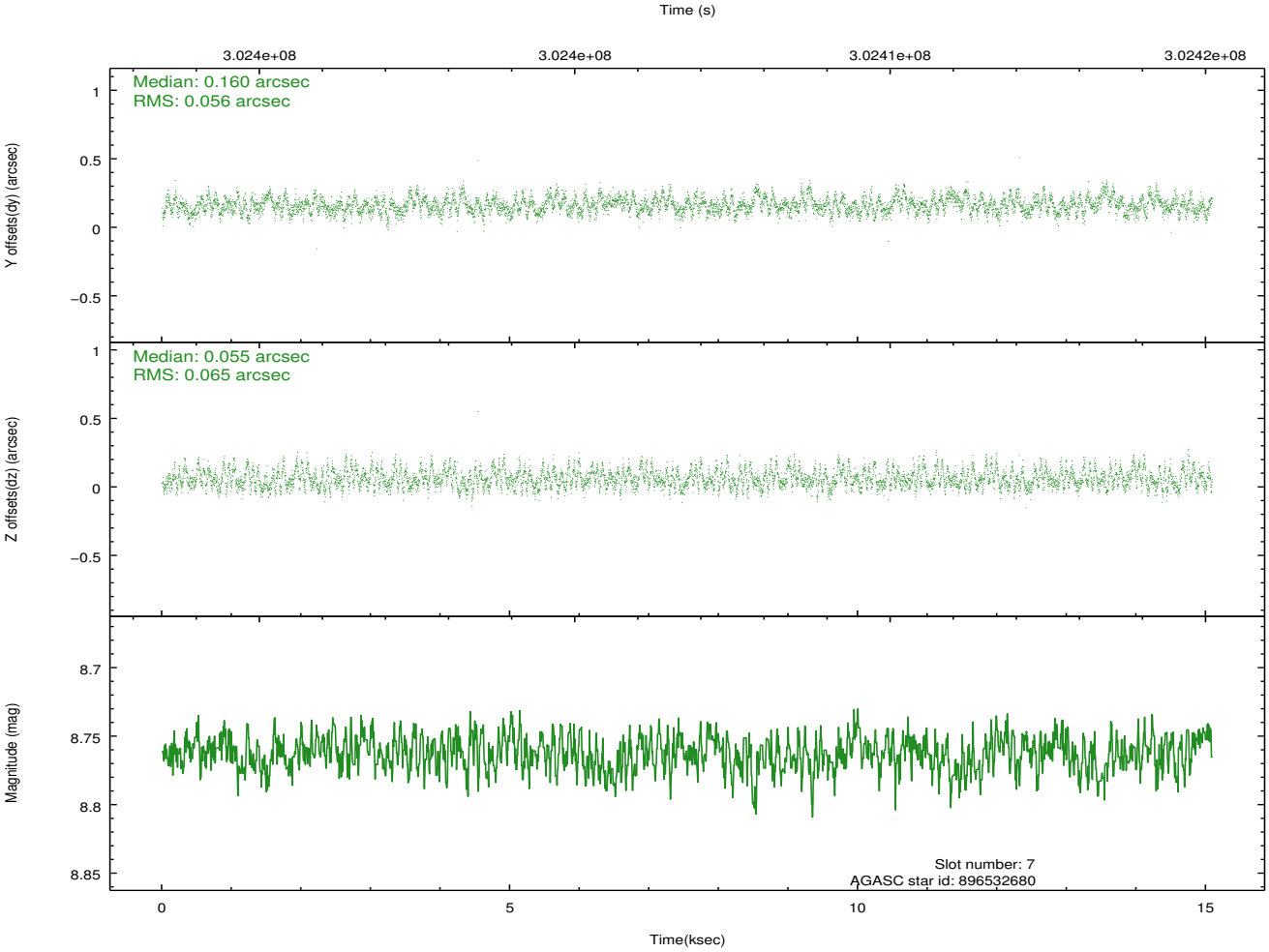

Points outside 0.7 arcsec radius: 0.000%
Radial offset of median: 0.246 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 6
AGASC star id: 896538696


Time (s)
3.024e+08
3.024e+08
3.0241e+08
3.0242e+08
Median: –0.171 arcsec
RMS: 0.030 arcsec
Y offsets(dy) (arcsec)
Median: –0.176 arcsec
RMS: 0.040 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number: 6
AGASC star id: 896538696
Time(ksec)

2.4.5 Slot 7

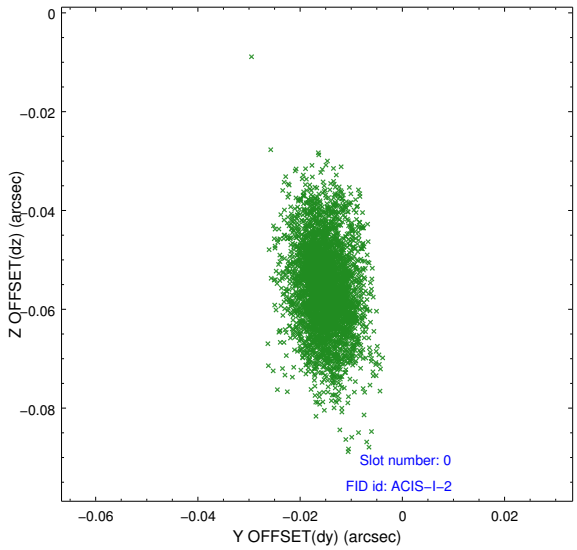

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 7
AGASC star id: 896532680

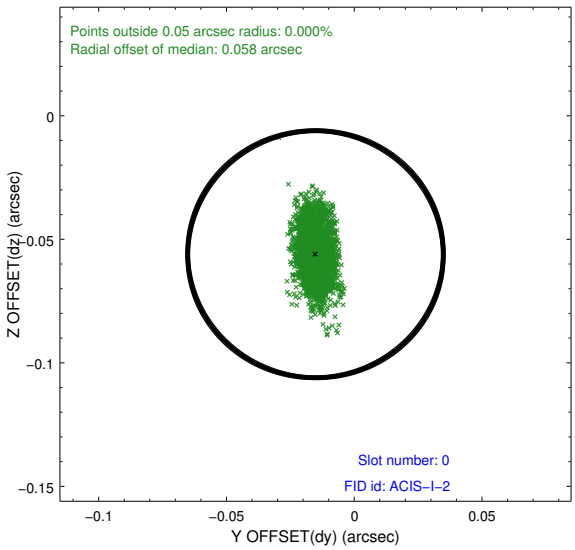

Points outside 0.7 arcsec radius: 0.000%
Radial offset of median: 0.169 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 7
AGASC star id: 896532680

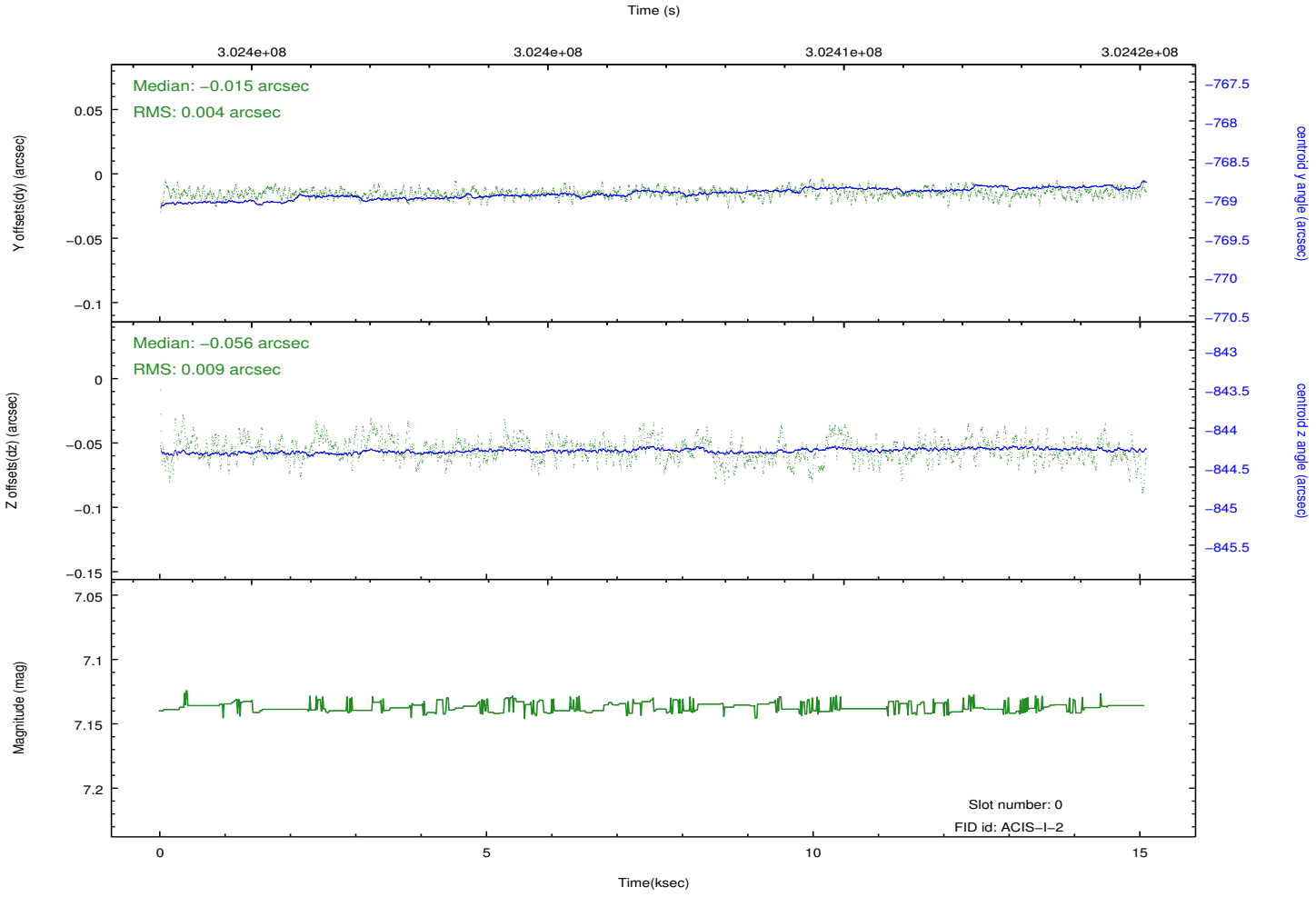

Time (s)
3.024e+08
3.024e+08
3.0241e+08
3.0242e+08
Median: 0.160 arcsec
RMS: 0.056 arcsec
Y offsets(dy) (arcsec)
Median: 0.055 arcsec
RMS: 0.065 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number: 7
AGASC star id: 896532680
Time(ksec)

2.5 FID Slots

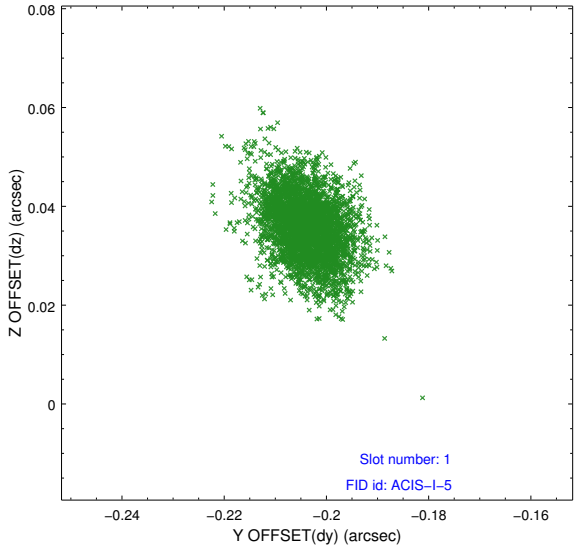
2.5.1 Slot 0

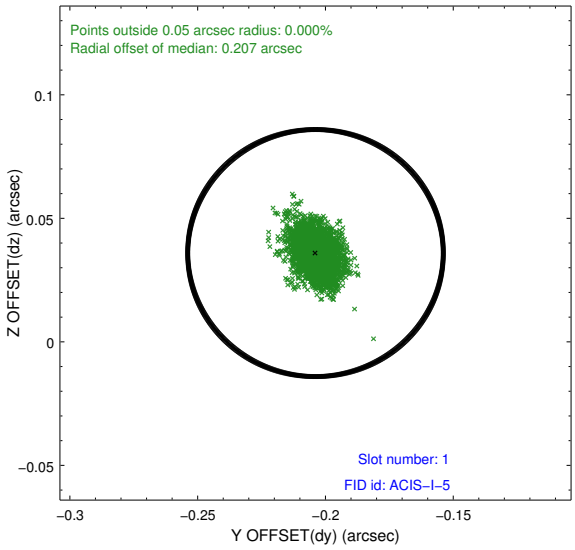


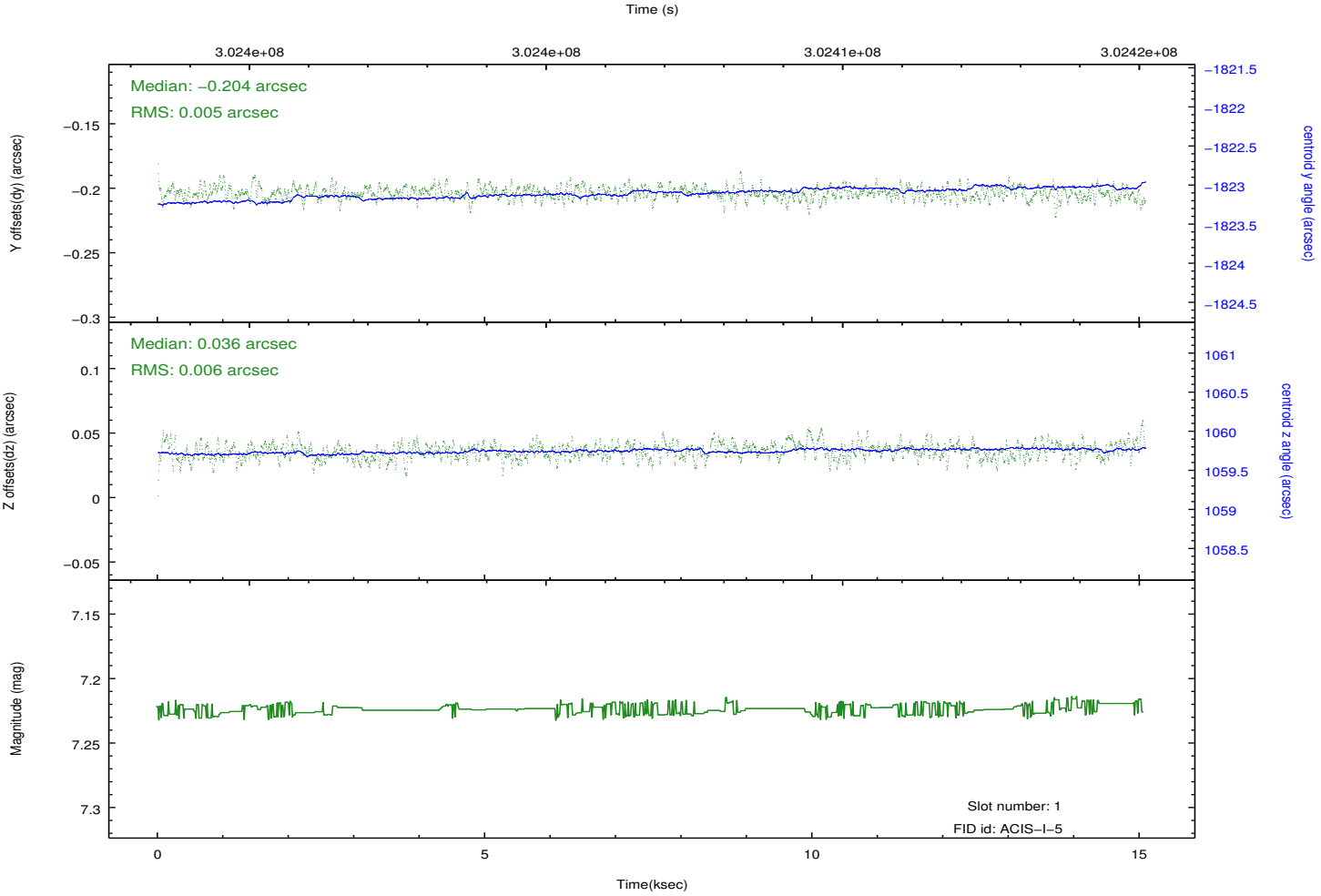




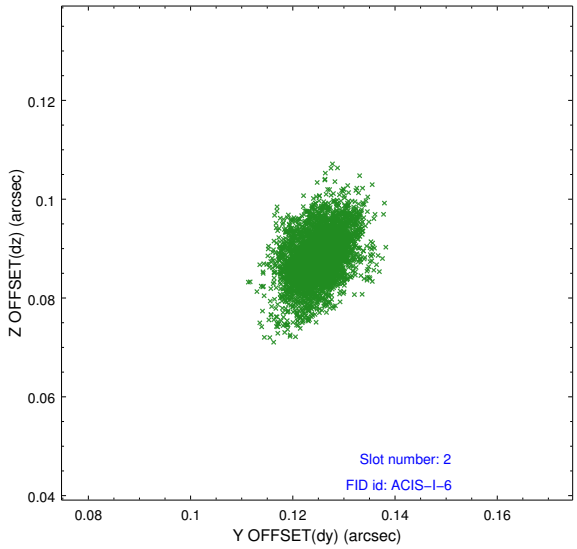
2.5.2 Slot 1

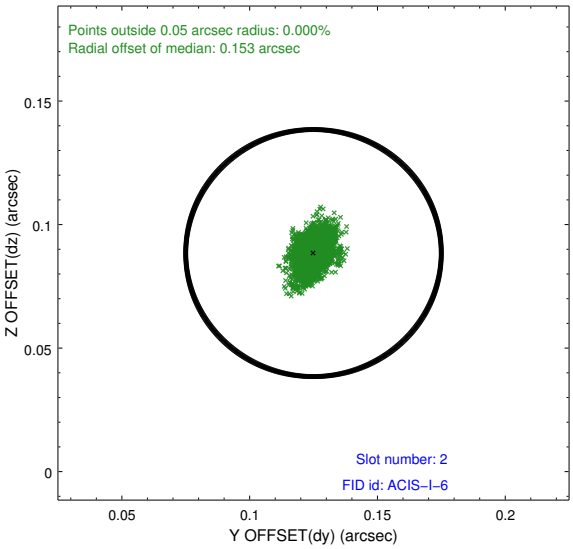

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 1
FID id: ACIS−I−5

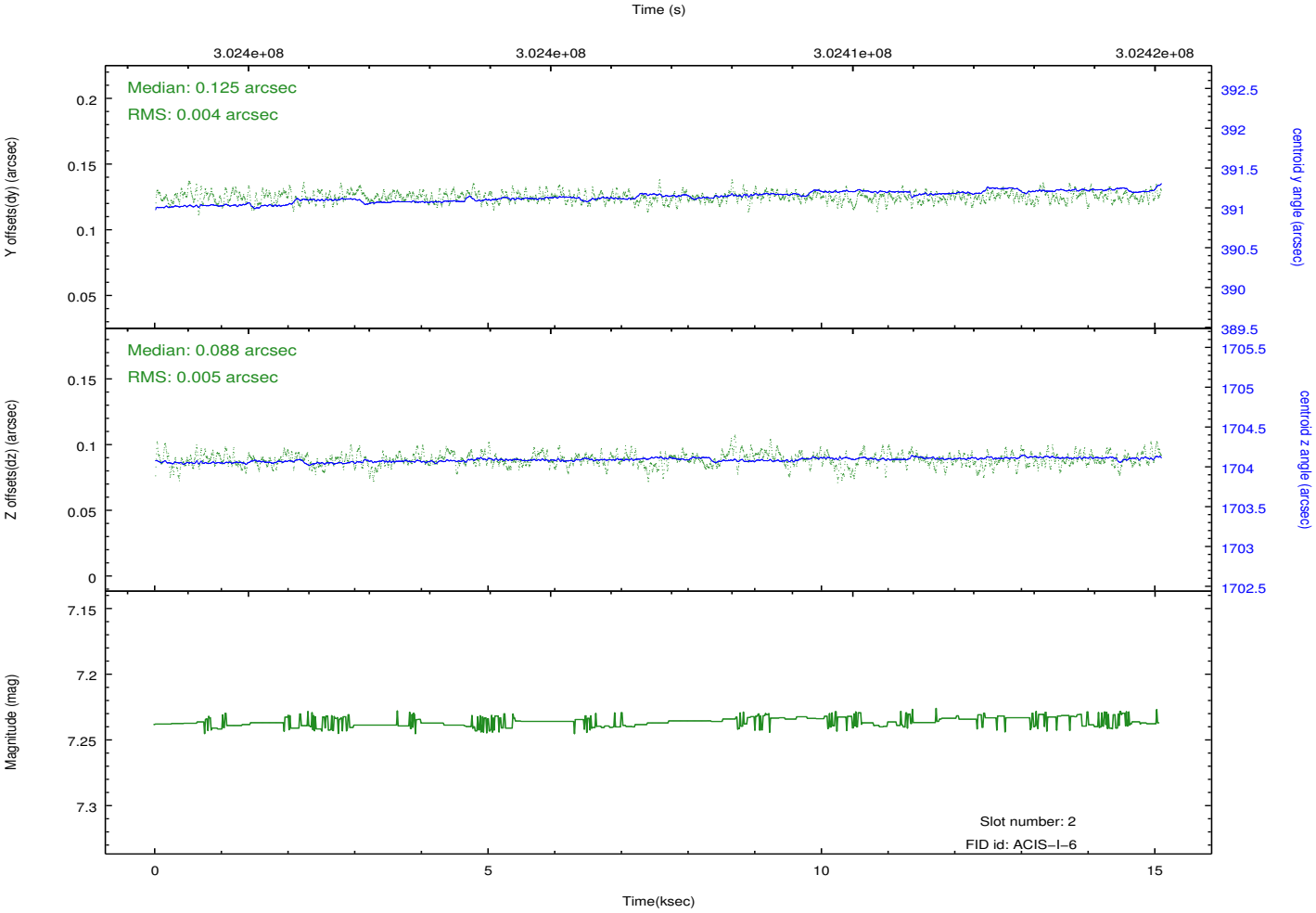

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.207 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 1
FID id: ACIS−I−5


Time (s)
Median: −0.204 arcsec
RMS: 0.005 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: 0.036 arcsec
RMS: 0.006 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number: 1
FID id: ACIS−I−5
Time(ksec)

2.5.3 Slot 2


Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 2
FID id: ACIS−I−6


Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.153 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number: 2
FID id: ACIS−I−6


Time (s)
Median: 0.125 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: 0.088 arcsec
RMS: 0.005 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number: 2
FID id: ACIS−I−6
Time(ksec)

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.6971001

A.2 Comments

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Joint Proposal: NOAO. Roll preference met.
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