V&V Reference Report
L2 ASCDS Version : 7.6.7.2

Observation 4634 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : May 24 2006

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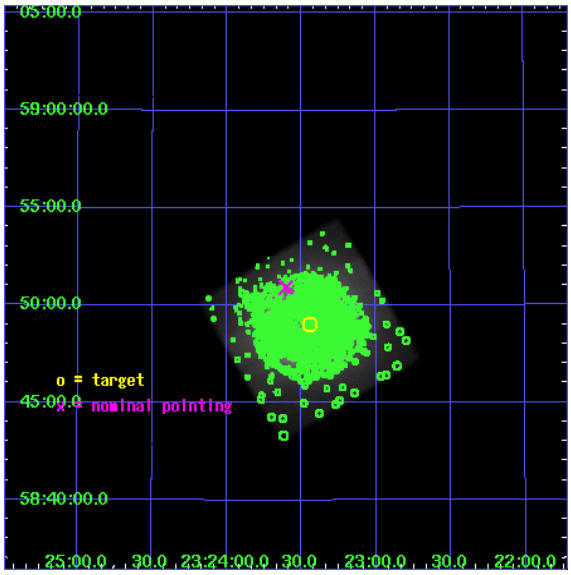
1 Front

seq_num	500459
obs_id	4634
title	The Cassiopeia A Explosion: Getting at the Core Issues
observer	Dr Una Hwang
object	Cassiopeia A
dtycycle	0
cycle	P
ra_targ	350.86125
dec_targ	58.8175
ra_nom	350.90109170943
dec_nom	58.848679051846
roll_nom	59.222537900688
revision	2
ontime	150657.0
livetime	148623.82605951
ontime7	150657.0
l2events	44704444

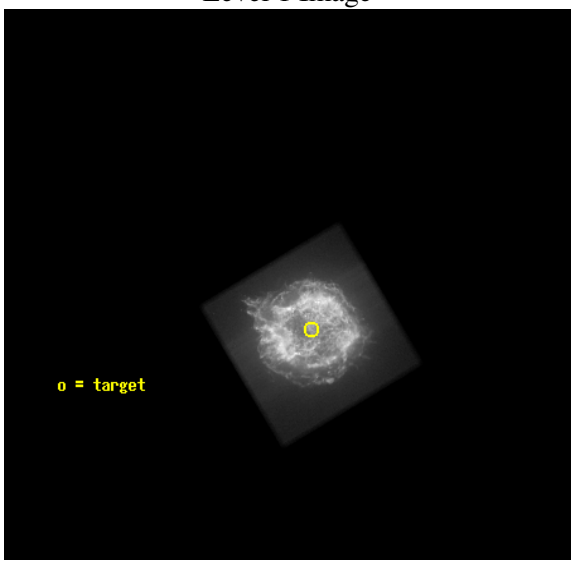


2 OBI

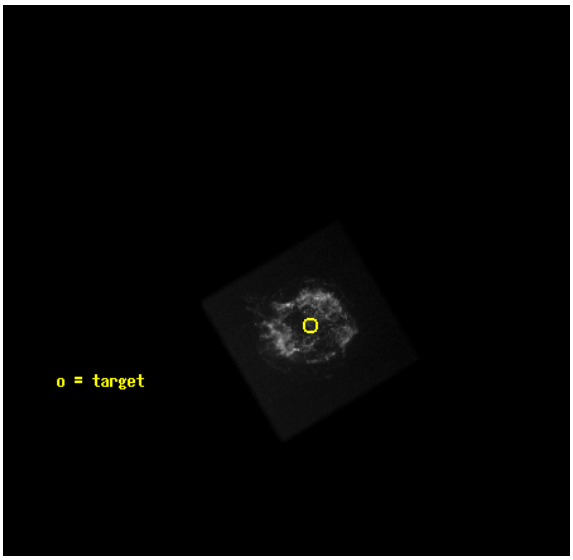
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0
ascdsver	7.6.7.2
caldbver	3.2.2
date	2006-05-23T14:48:43
revision	2

sched_exp_time	150552.340000
ontime	152123.10923645
ontime7	152123.10923645
l1events	47870899

2.1.3 Events

	ccd 7
level 1 events	47870899
rejected events	2719380
rejected %	5%

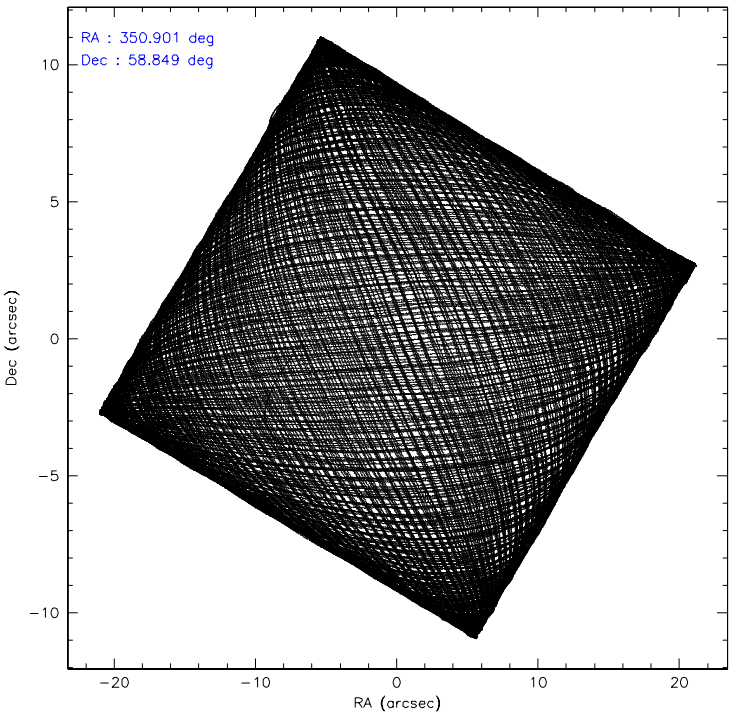
	ccd 7
grade 0 events	10149944
	21%
grade 1 events	181042
	0%
grade 2 events	13154607
	27%
grade 3 events	4887762
	10%
grade 4 events	4813117
	10%
grade 5 events	828107
	1%
grade 6 events	12215153
	25%
grade 7 events	1641167
	3%

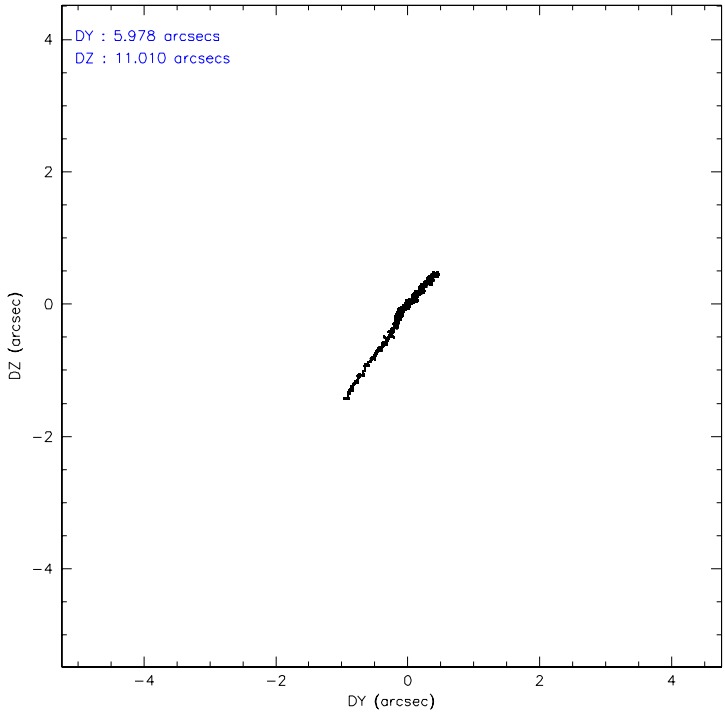
2.2 Compared Parameters

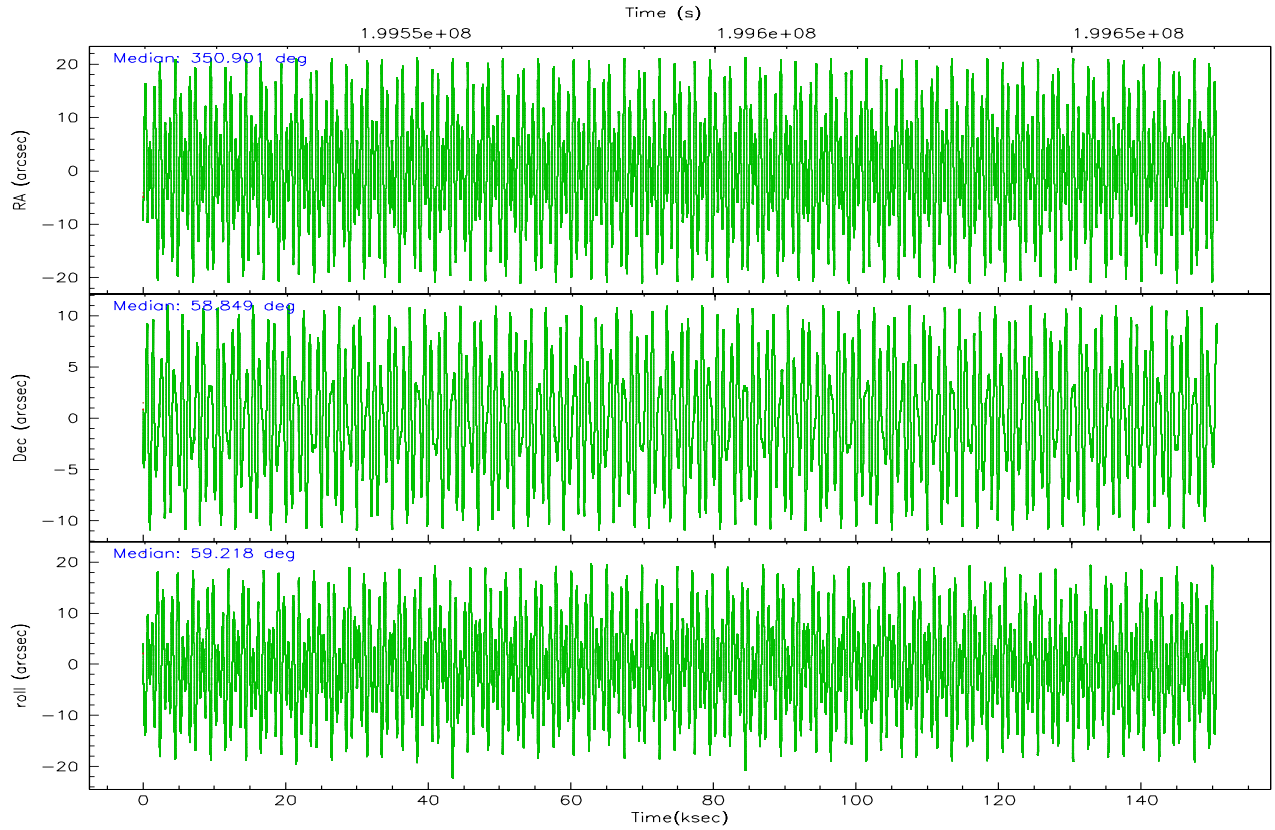
Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	GRADED	GRADED
Observation mode	POINTING	POINTING
Pointing RA	350.901100	350.9010917094309
Pointing Dec	58.821462	58.84867905184603
Pointing Roll	59.065901	59.22253790068765
SIM focus pos (mm)	-0.684267	-0.6828225247311905
SIM defocus (mm)	0	0.001444936568705701
SIM translation stage pos (mm)	-190.132523	-190.1425803651734
SIM translation stage offset (mm)	0	0.01005778216563158
Observation start time	199519843.184000	199518270.18299
Observation start date	2004-04-28T06:09:39	2004-04-28T05:44:30
Observation end time	199670395.184000	199670709.72721
Observation end date	2004-04-29T23:58:51	2004-04-30T00:05:09
Read mode	TIMED	TIMED

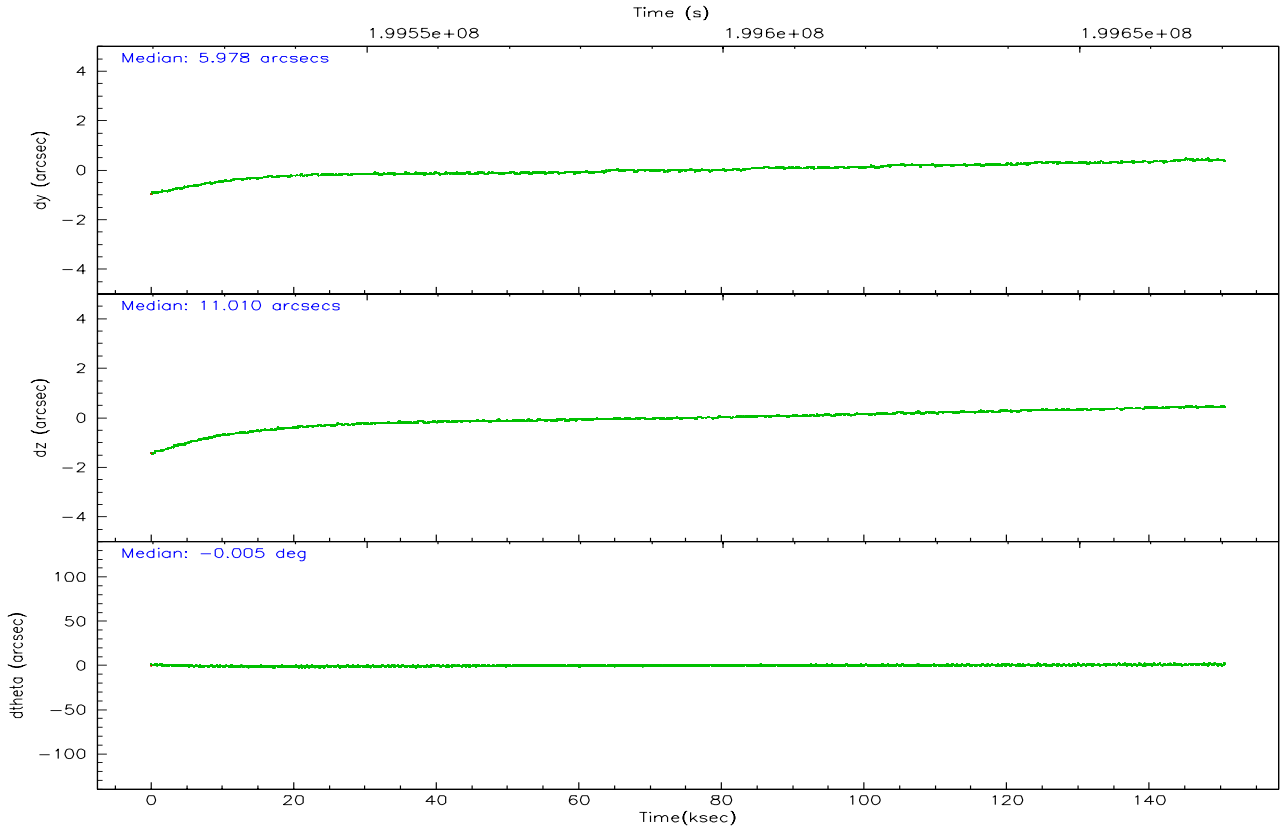
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
Primary exposure time	0.000000	3

2.3 Aspect


RA : 350.901 deg
Dec : 58.849 deg
Dec (arcsec)
RA (arcsec)
10
5
0
−5
−10
−20
−10
0
10
20


DY : 5.978 arcsecs
DZ : 11.010 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
1.9955e+08
1.996e+08
1.9965e+08
Median: 350.901 deg
RA (arcsec)
Median: 58.849 deg
Dec (arcsec)
Median: 59.218 deg
roll (arcsec)
Time(ksec)

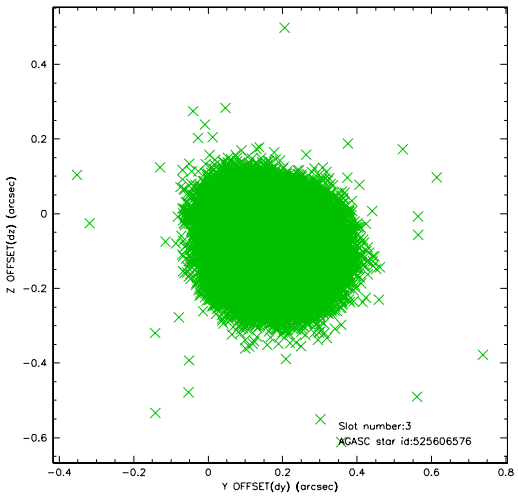

Time (s)
1.9955e+08
1.996e+08
1.9965e+08
Median: 5.978 arcsecs
dy (arcsec)
Median: 11.010 arcsecs
dz (arcsec)
Median: −0.005 deg
dtheta (arcsec)
Time(ksec)

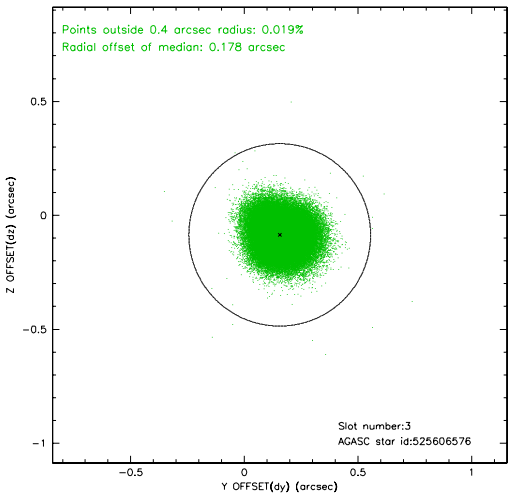
Slot Statistics

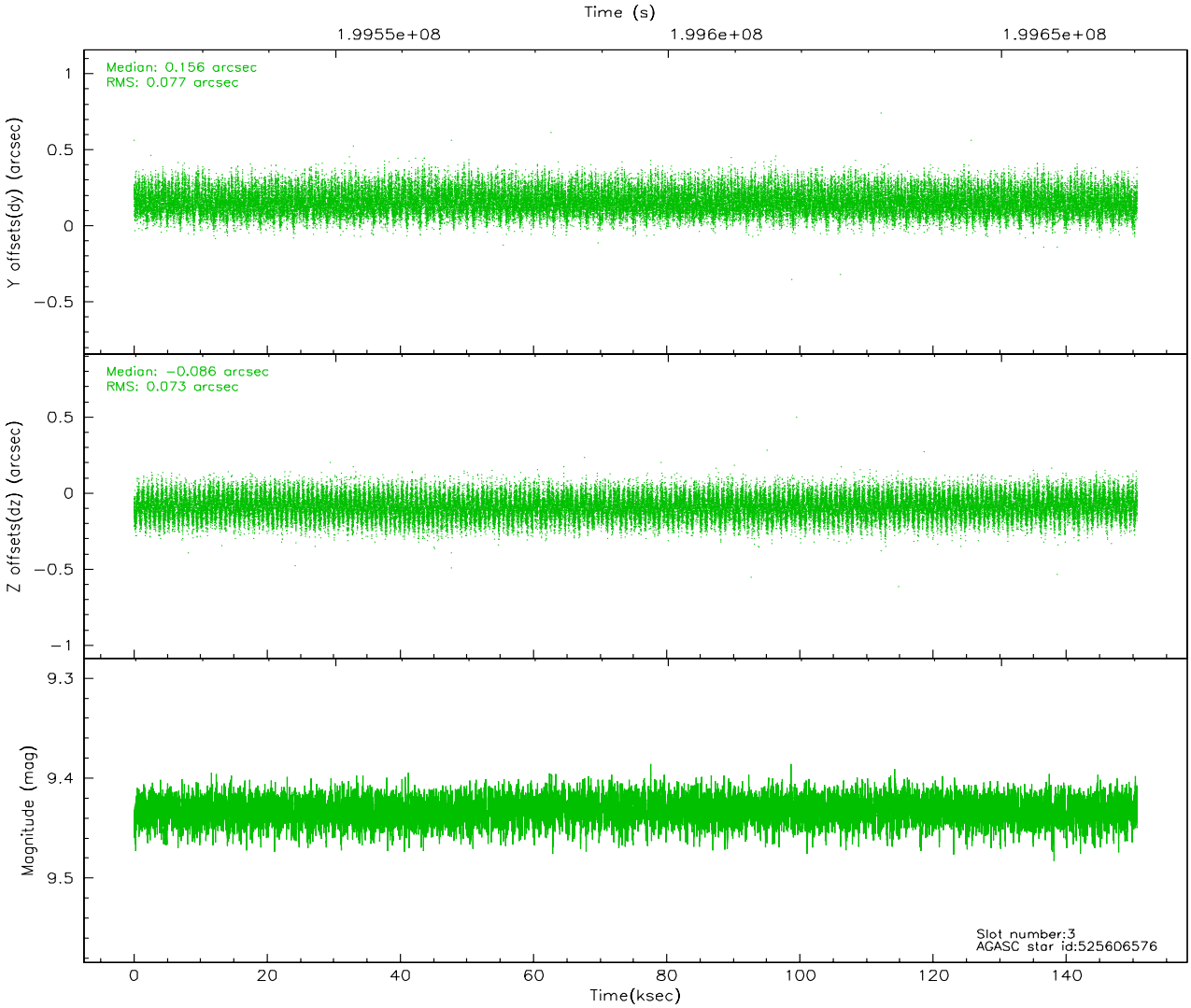
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	36745	-0.044	0.008	0.013	0.028	0.000000	0.000000	-758.73	-1732.19
1	FID	ACIS-S-4	7.20	36746	0.024	0.018	0.014	0.053	0.000000	0.000000	2154.66	176.45
2	FID	ACIS-S-5	7.23	36744	-0.014	-0.018	0.011	0.034	0.000000	0.000000	-1811.71	169.91
3	GUIDE	525606576	9.43	73360	0.156	-0.086	0.114	0.179	349.543555	58.678895	-1724.01	1928.50
4	GUIDE	525731480	9.50	73448	-0.206	-0.011	0.087	0.146	351.647209	58.687294	310.07	-1441.28
5	GUIDE	525732232	9.11	73384	-0.042	-0.034	0.083	0.132	351.669550	58.757012	545.83	-1346.19
6	GUIDE	525732488	8.40	73481	0.063	-0.076	0.072	0.116	350.087090	58.516915	-1718.83	753.91
7	GUIDE	525732528	9.38	73440	0.025	0.209	0.085	0.138	351.607241	59.298932	2147.71	-225.44

2.4 Star Slots

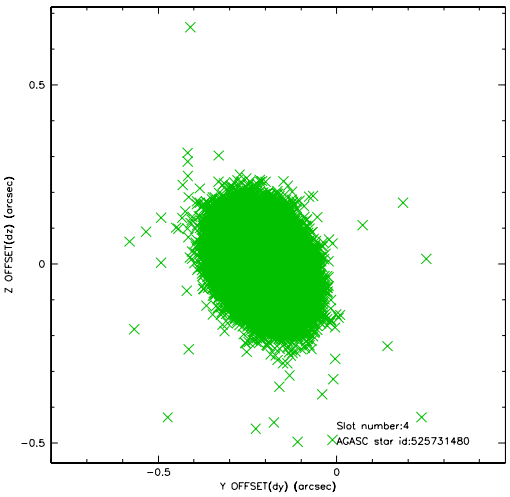
2.4.1 Slot 3

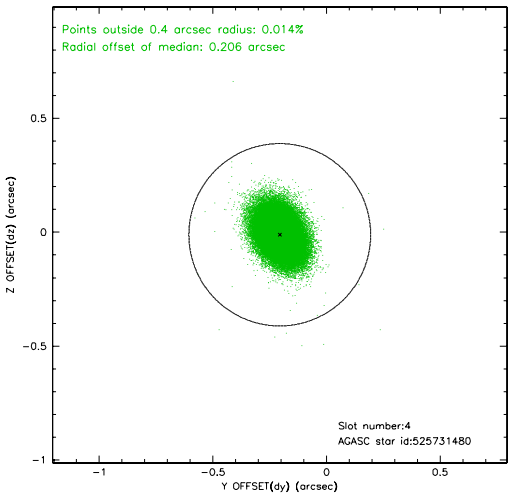


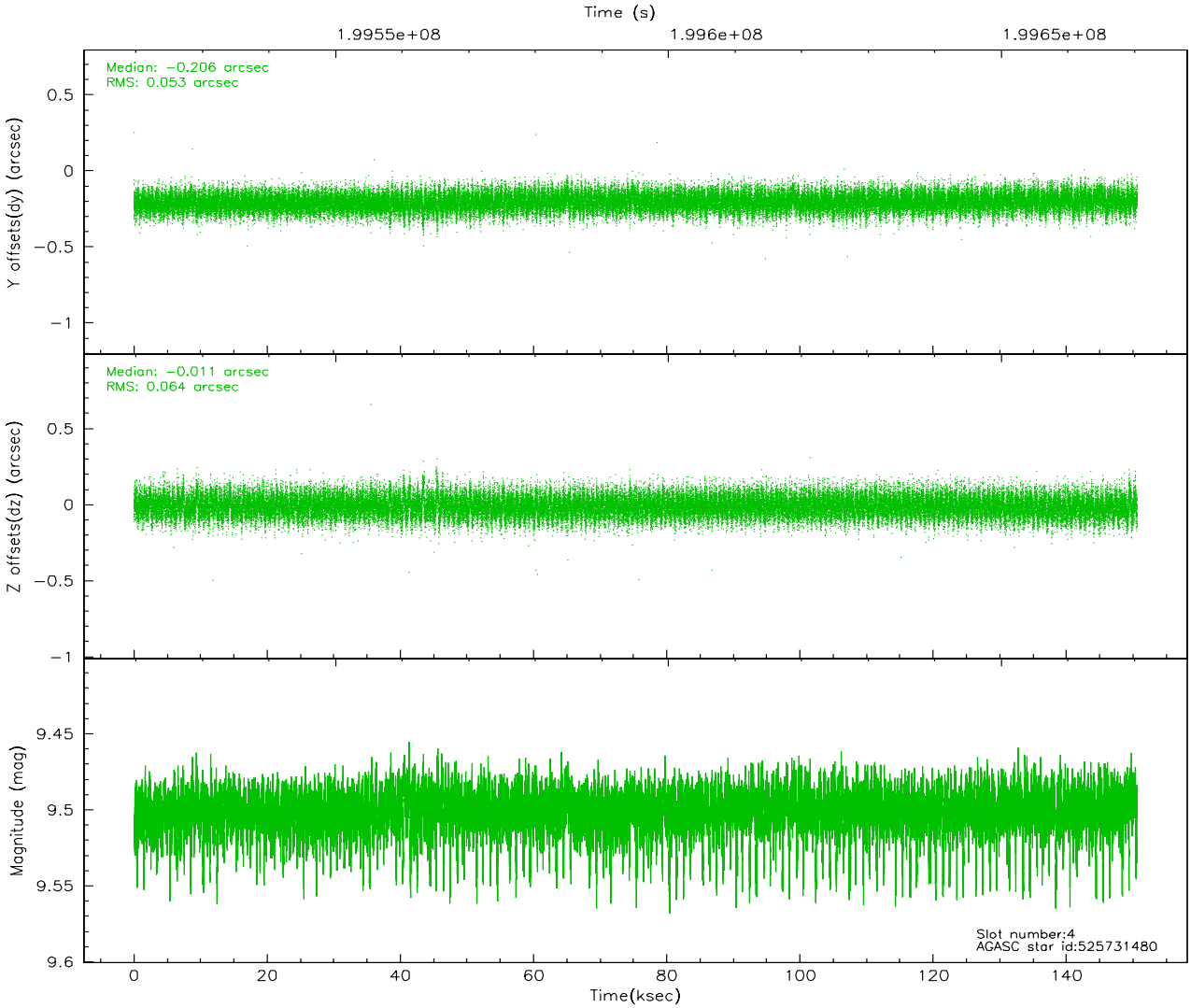




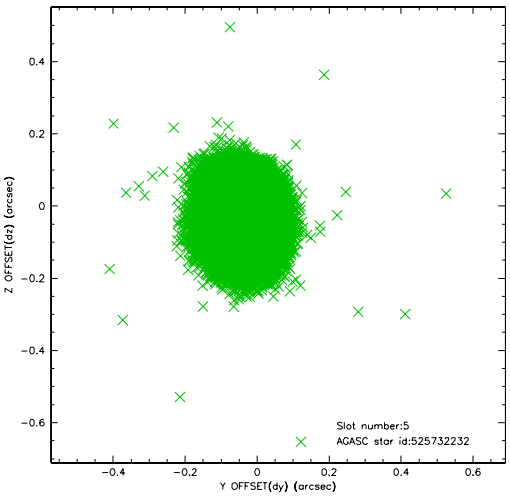
2.4.2 Slot 4

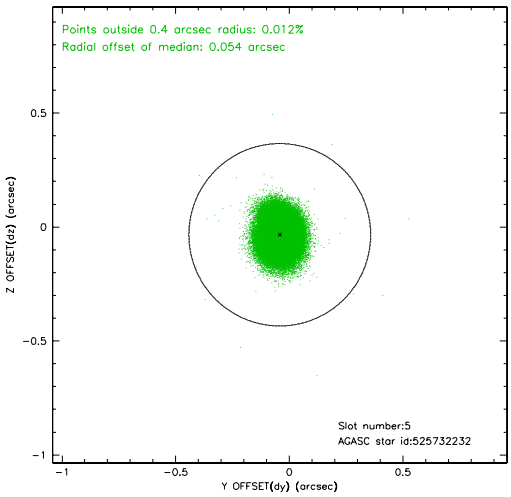

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:525731480

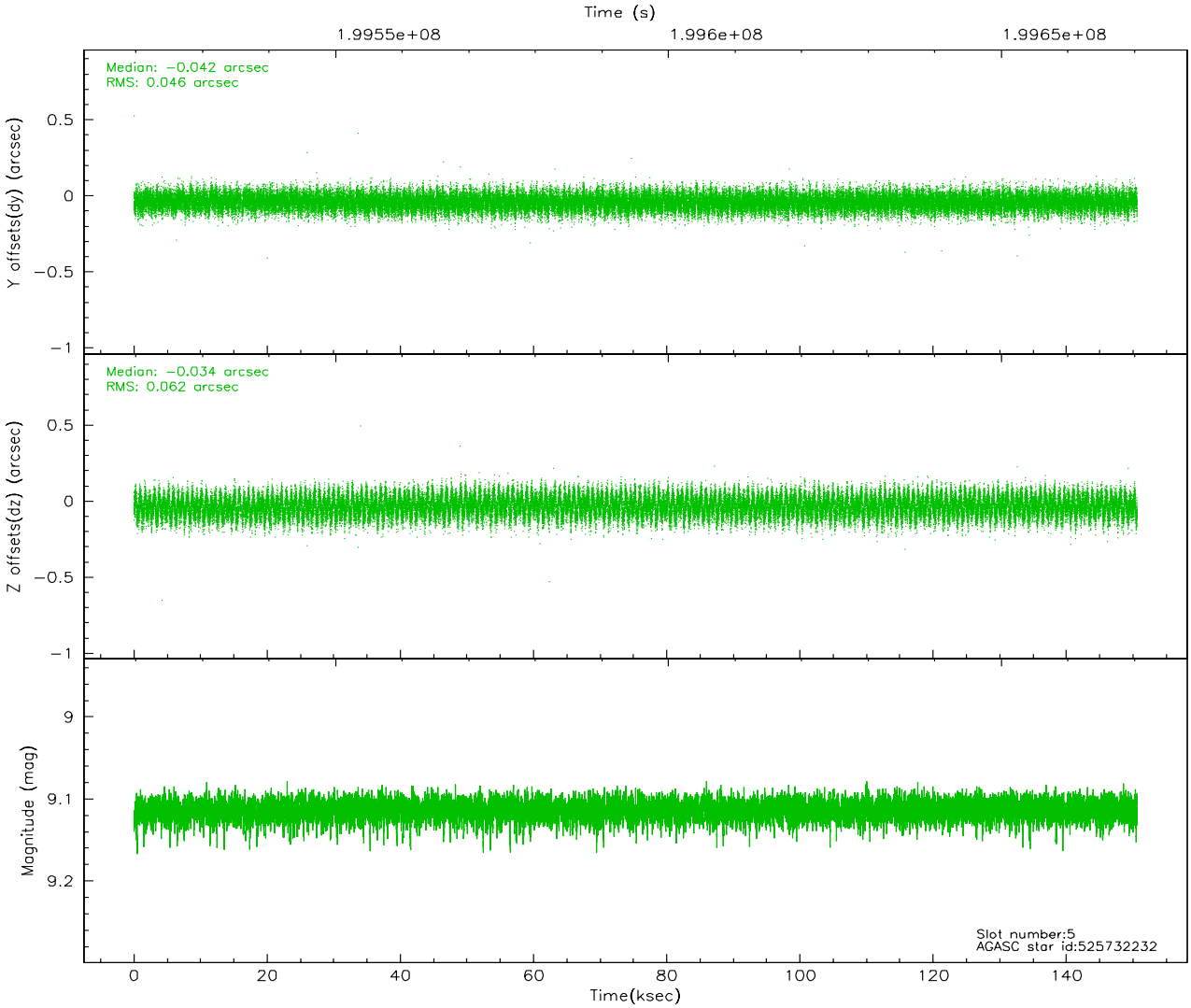

Points outside 0.4 arcsec radius: 0.014%
Radial offset of median: 0.206 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:525731480


Time (s)
1.9955e+08
1.996e+08
1.9965e+08
Median: −0.206 arcsec
RMS: 0.053 arcsec
Y offsets(dy) (arcsec)
Median: −0.011 arcsec
RMS: 0.064 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:525731480
Time(ksec)

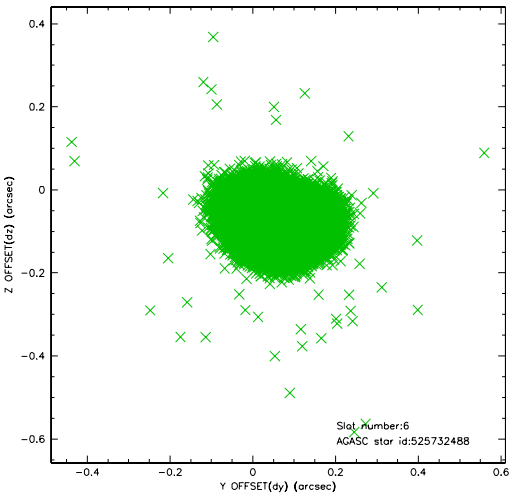
2.4.3 Slot 5

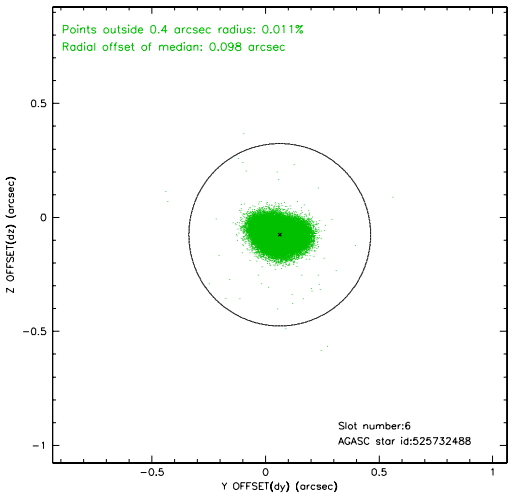

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:525732232

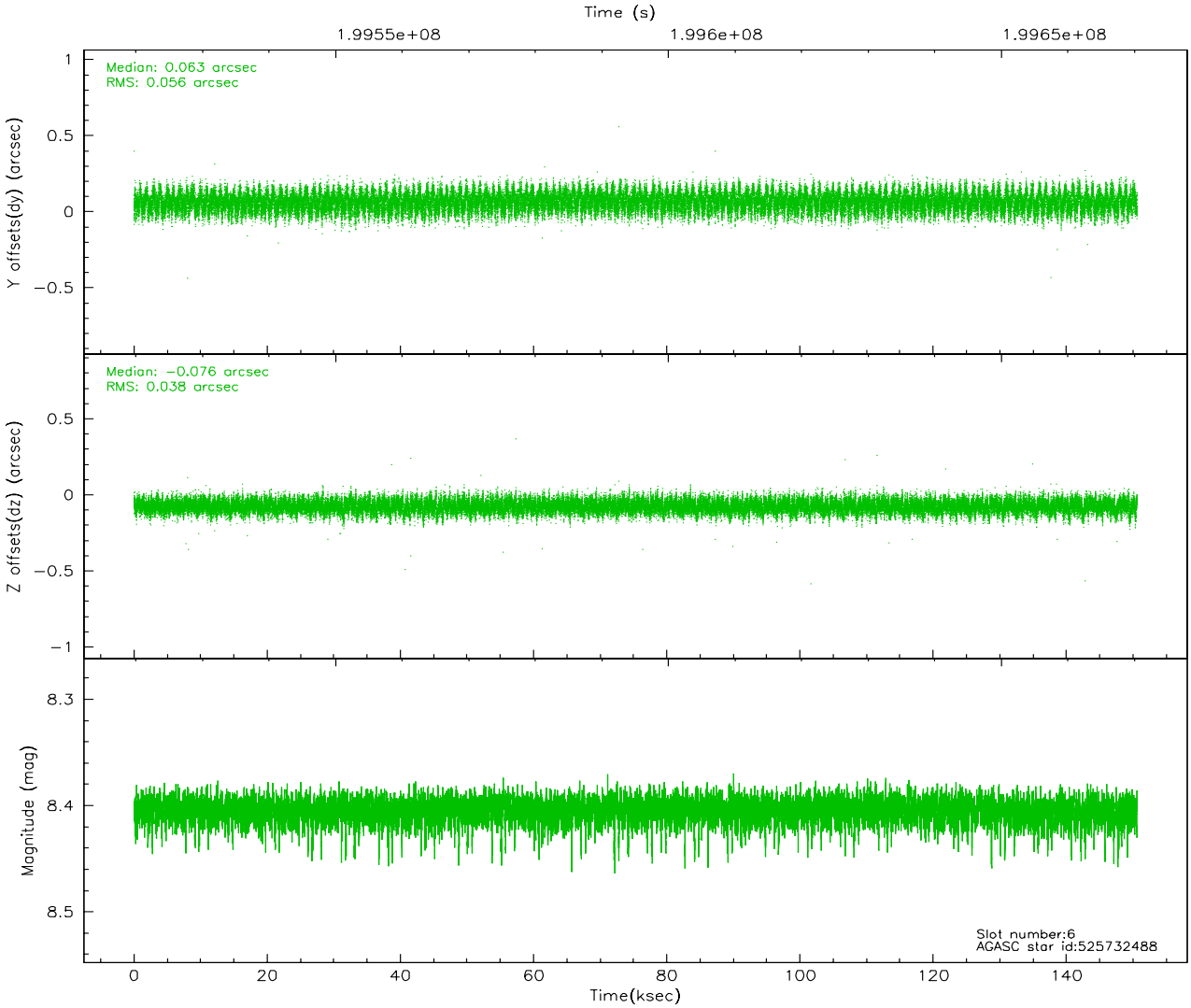

Points outside 0.4 arcsec radius: 0.012%
Radial offset of median: 0.054 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:525732232


Time (s)
1.9955e+08
1.996e+08
1.9965e+08
Median: −0.042 arcsec
RMS: 0.046 arcsec
Y offsets(dy) (arcsec)
Median: −0.034 arcsec
RMS: 0.062 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:525732232
Time(ksec)

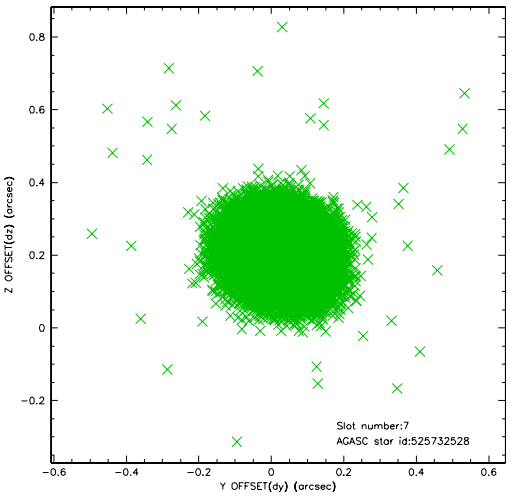
2.4.4 Slot 6

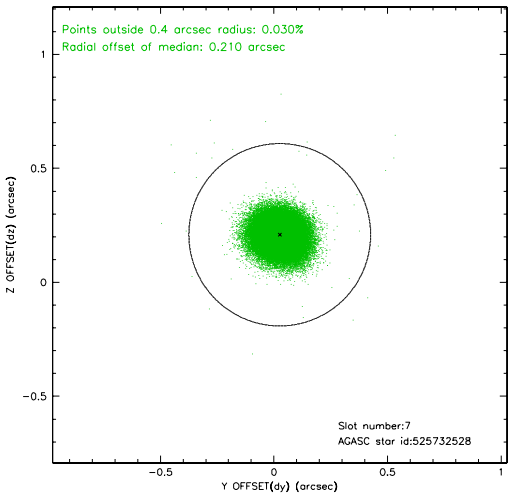

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:525732488

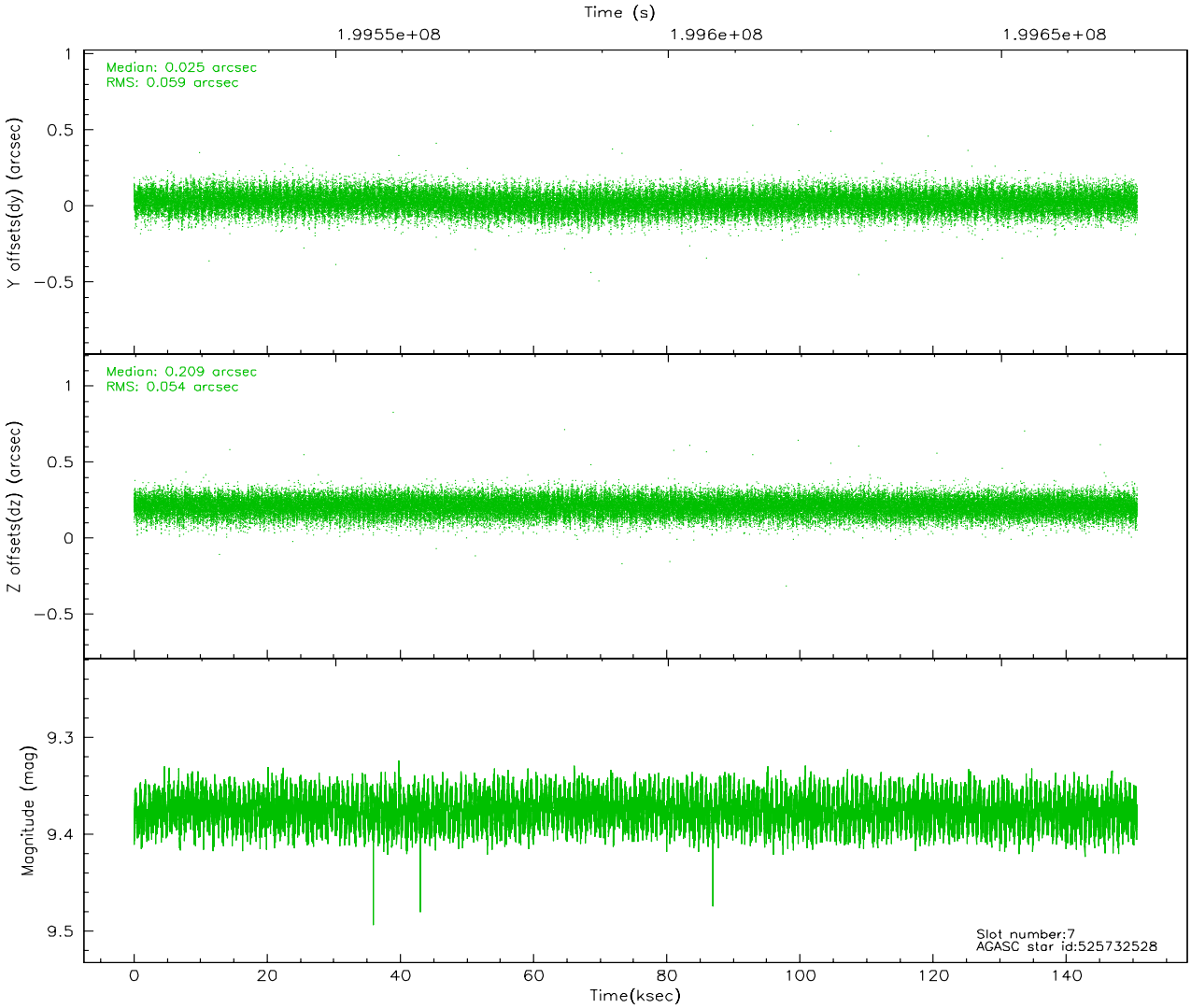

Points outside 0.4 arcsec radius: 0.011%
Radial offset of median: 0.098 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:525732488


Time (s)
1.9955e+08
1.996e+08
1.9965e+08
Median: 0.063 arcsec
RMS: 0.056 arcsec
Y offsets(dy) (arcsec)
Median: −0.076 arcsec
RMS: 0.038 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:525732488
Time(ksec)

2.4.5 Slot 7

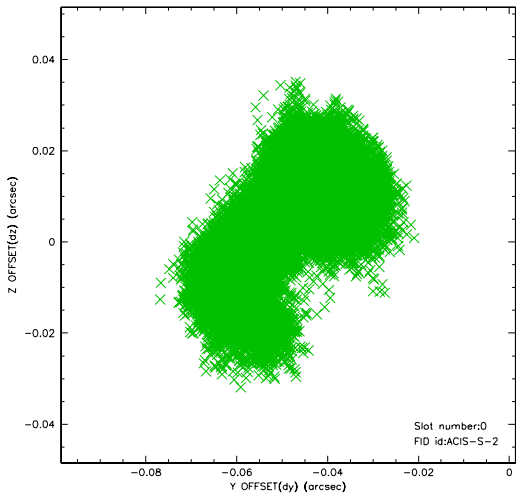

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:525732528

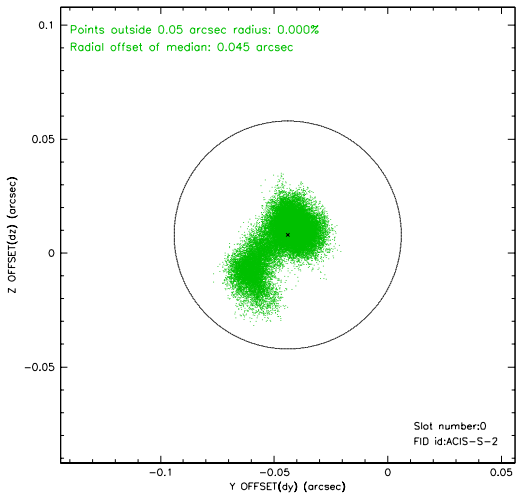

Points outside 0.4 arcsec radius: 0.030%
Radial offset of median: 0.210 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:525732528

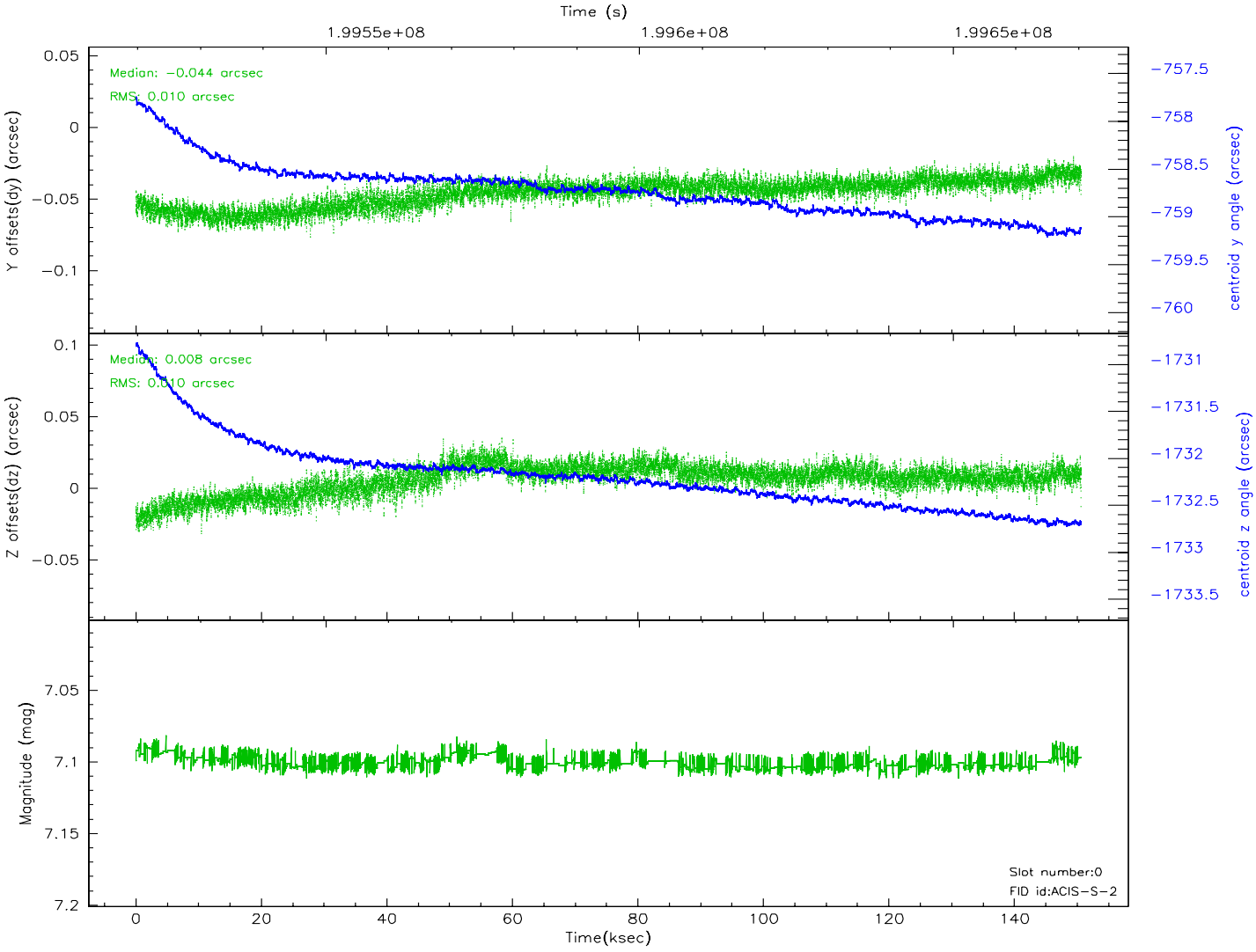

Time (s)
1.9955e+08
1.996e+08
1.9965e+08
Median: 0.025 arcsec
RMS: 0.059 arcsec
Y offsets(dy) (arcsec)
Median: 0.209 arcsec
RMS: 0.054 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:525732528
Time(ksec)

2.5 FID Slots

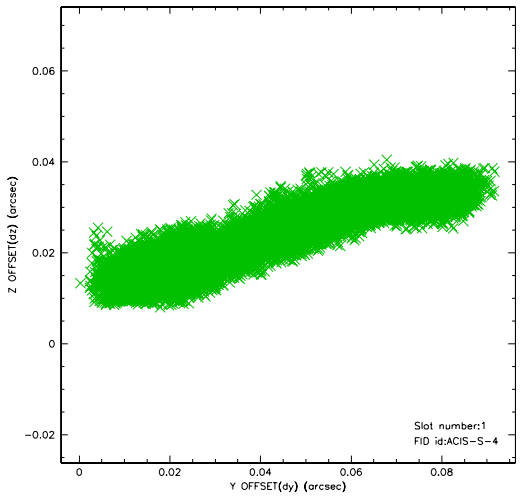
2.5.1 Slot 0

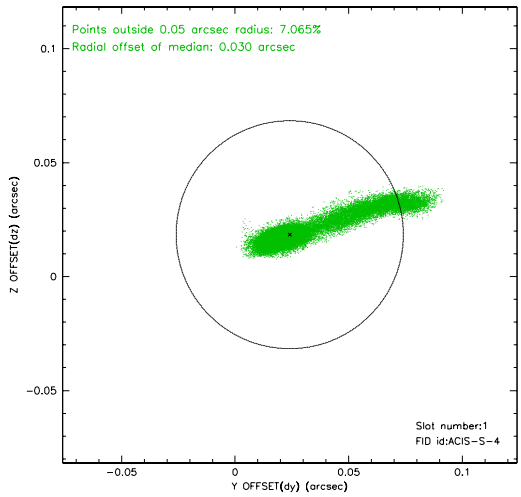


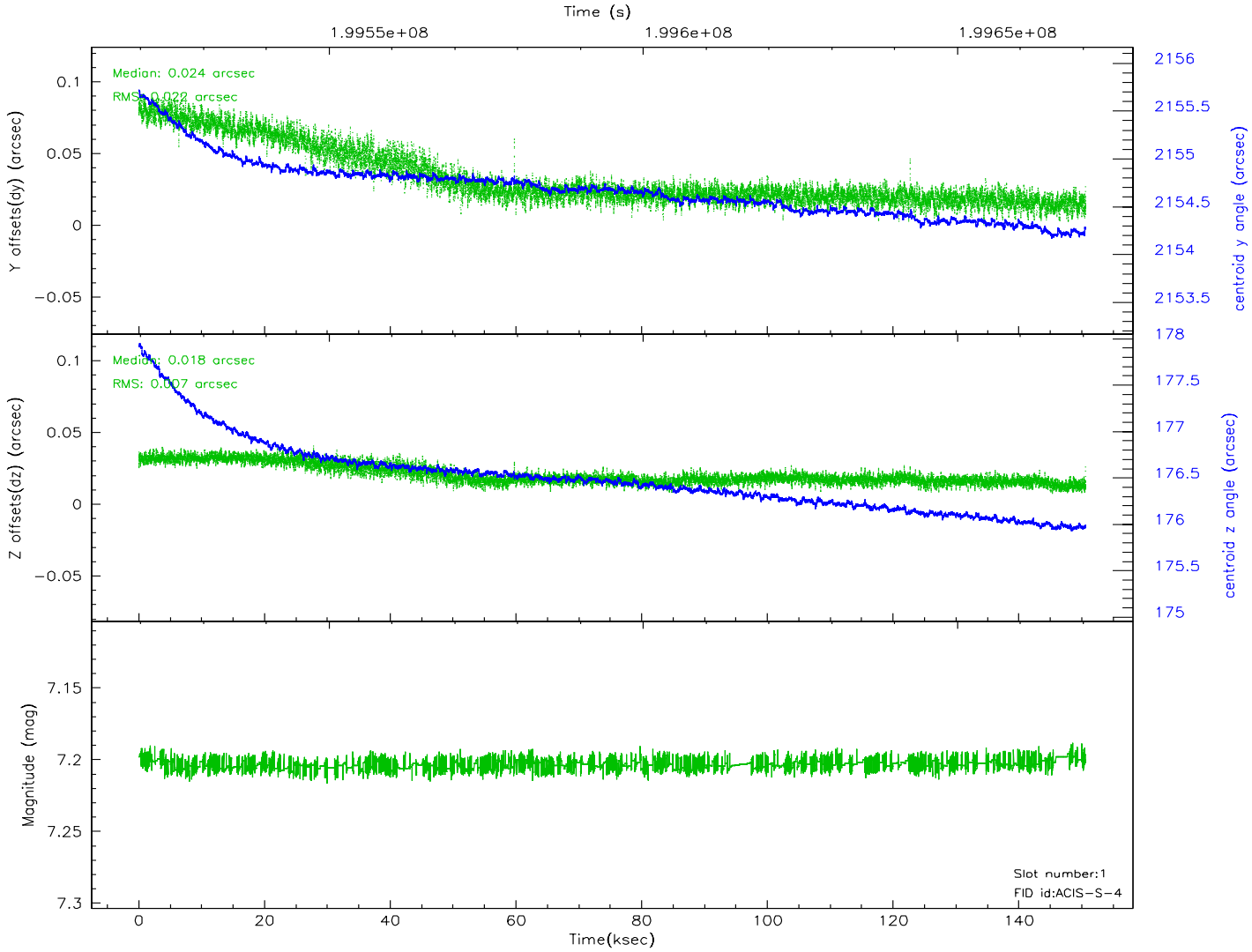




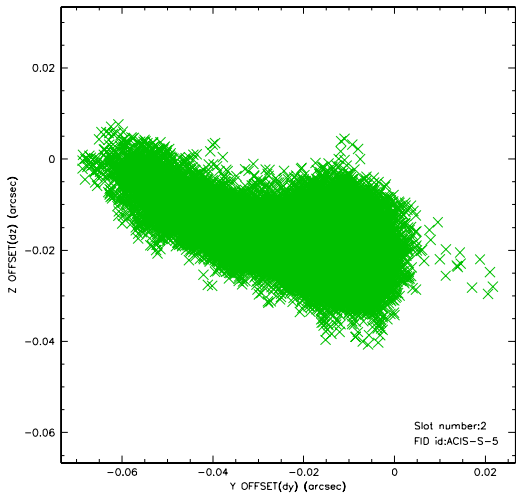
2.5.2 Slot 1

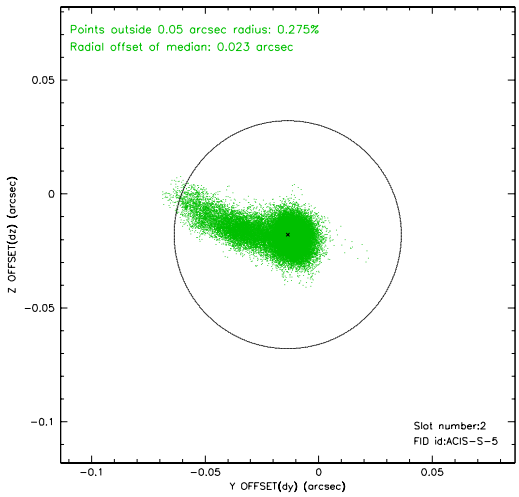

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-S-4

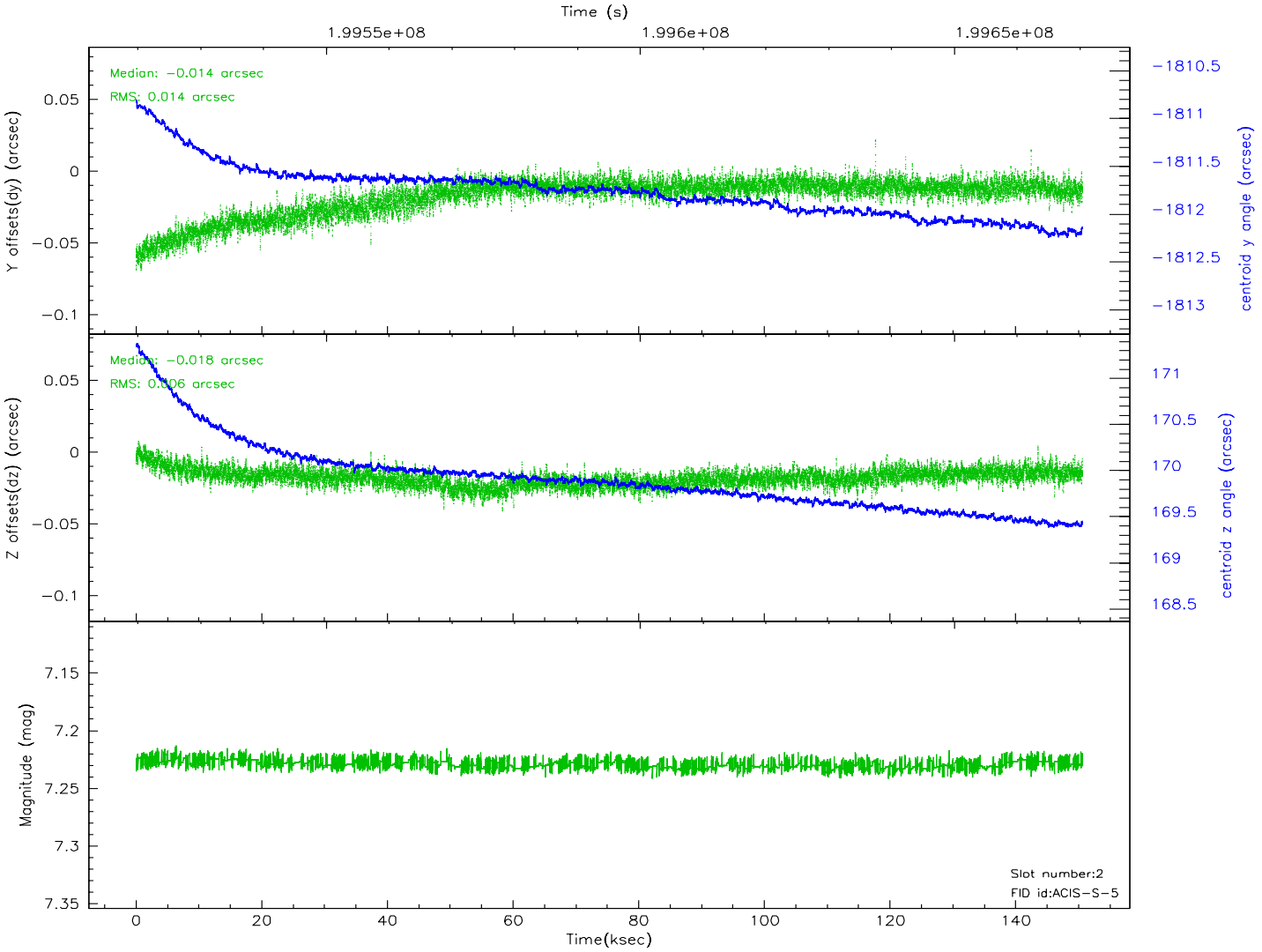

Points outside 0.05 arcsec radius: 7.065%
Radial offset of median: 0.030 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-S-4


Time (s)
1.9955e+08
1.996e+08
1.9965e+08
Median: 0.024 arcsec
RMS: 0.022 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: 0.018 arcsec
RMS: 0.007 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:ACIS-S-4
Time(ksec)

2.5.3 Slot 2

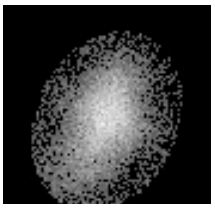

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:ACIS-S-5


Points outside 0.05 arcsec radius: 0.275%
Radial offset of median: 0.023 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:ACIS-S-5


Time (s)
1.9955e+08
1.996e+08
1.9965e+08
Median: −0.014 arcsec
RMS: 0.014 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.018 arcsec
RMS: 0.006 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:ACIS-S-5
Time(ksec)

3 Point Sources

2.46 arcmin



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.05.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	150.594

A.2 Comments