V&V Reference Report
L2 ASCDS Version : 7.6.8

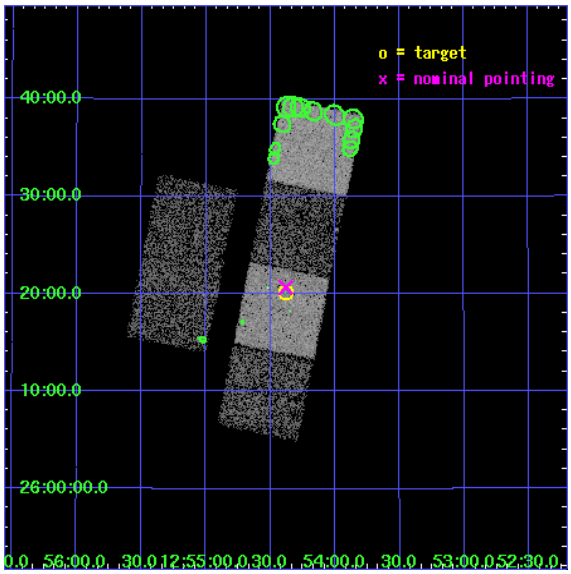
Observation 3074 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Jul 27 2006

Contents

1 Front

seq_num	700513
obs_id	3074
title	X-RAY WEAK BROAD-LINE QUASARS: ABSORPTION OR INTRINSIC X_RAY WEAKNESS ?
observer	Dr Guido Risaliti
object	HS 1251+2636
dtycycle	0
cycle	P
ra_targ	193.595417
dec_targ	26.334972
ra_nom	193.59520960878
dec_nom	26.344583051164
roll_nom	101.39229352137
revision	2
ontime	5756.7999785542
livetime	5683.903910897
ontime2	5756.7999785542
ontime3	5756.7999785542
ontime5	5756.7999785542
ontime6	5756.7999785542
ontime7	5756.7999785542
ontime8	5753.5589982867
l2events	54220

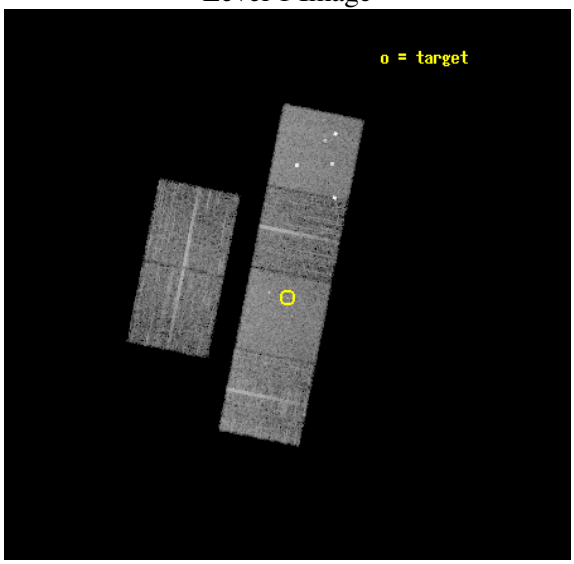


2 OBI

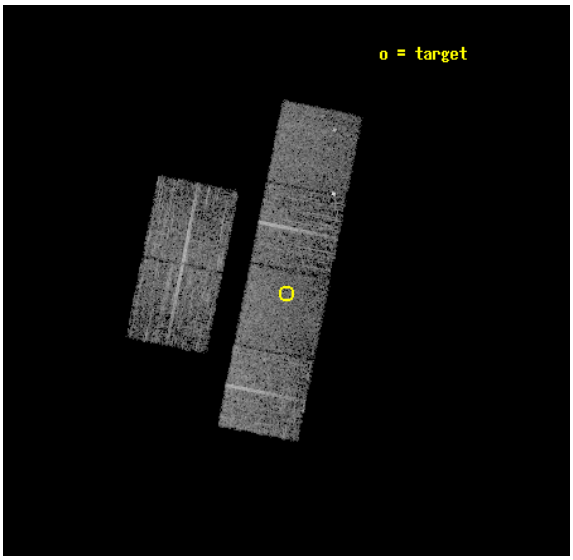
2.1 OBI

2.1.1 Images

Level 1 Image

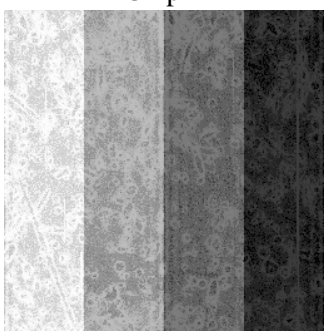


Level 1 Bad Events

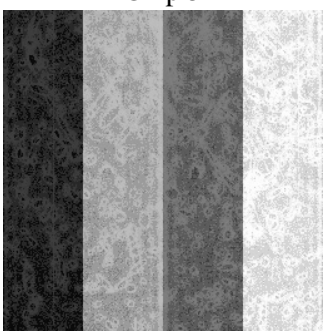


2.1.2 Bias

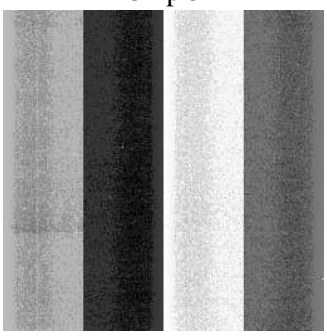
Chip 2



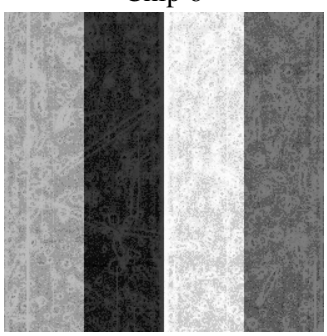
Chip 3



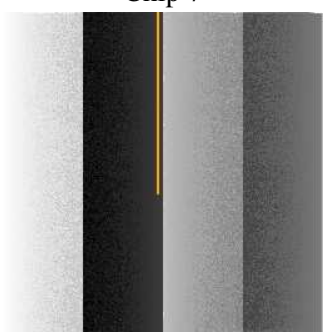
Chip 5



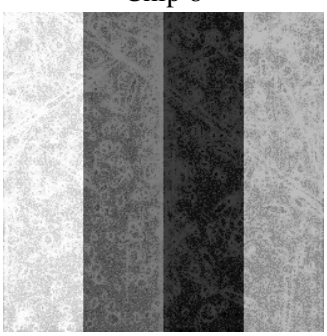
Chip 6



Chip 7



Chip 8



2.1.3 Parameters

obi_num	1
ascdsver	7.6.8
caldbver	3.2.2
date	2006-07-27T15:24:08
revision	2

sched_exp_time	6000.000000
ontime	5762.5147420168
ontime2	5762.5147420168
ontime3	5762.5147619247
ontime5	5762.5147420168
ontime6	5762.5147420168
ontime7	5762.5147420168
ontime8	5759.2736820877
l1events	258081

2.1.4 Events

	ccd 2	**ccd 3**	**ccd 5**	**ccd 6**	**ccd 7**	**ccd 8**
level 1 events	36906	34157	57047	35867	47809	46295
rejected events	32856	30054	29908	31683	29259	37307
rejected %	89%	87%	52%	88%	61%	80%

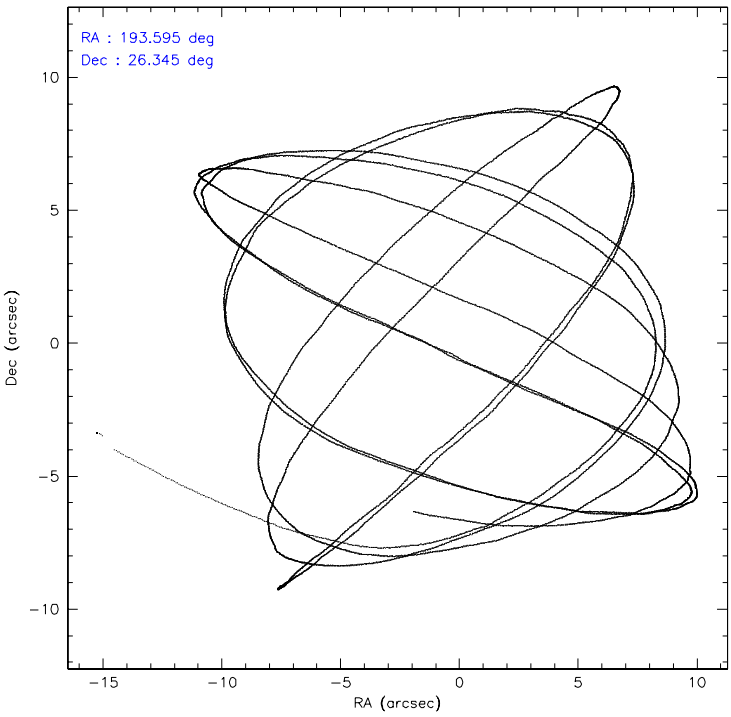
	ccd 2	**ccd 3**	**ccd 5**	**ccd 6**	**ccd 7**	**ccd 8**
grade 0 events	1740	1884	5422	1642	1255	2921
	4%	5%	9%	4%	2%	6%
grade 1 events	26	20	639	13	27	33
	0%	0%	1%	0%	0%	0%
grade 2 events	810	745	7348	868	4506	1916
	2%	2%	12%	2%	9%	4%
grade 3 events	416	382	645	423	1026	939
	1%	1%	1%	1%	2%	2%
grade 4 events	397	381	461	430	991	844
	1%	1%	0%	1%	2%	1%
grade 5 events	1335	1505	2866	1618	3155	1996
	3%	4%	5%	4%	6%	4%
grade 6 events	689	717	13287	827	10798	2373
	1%	2%	23%	2%	22%	5%
grade 7 events	31493	28523	26379	30046	26051	35273
	85%	83%	46%	83%	54%	76%

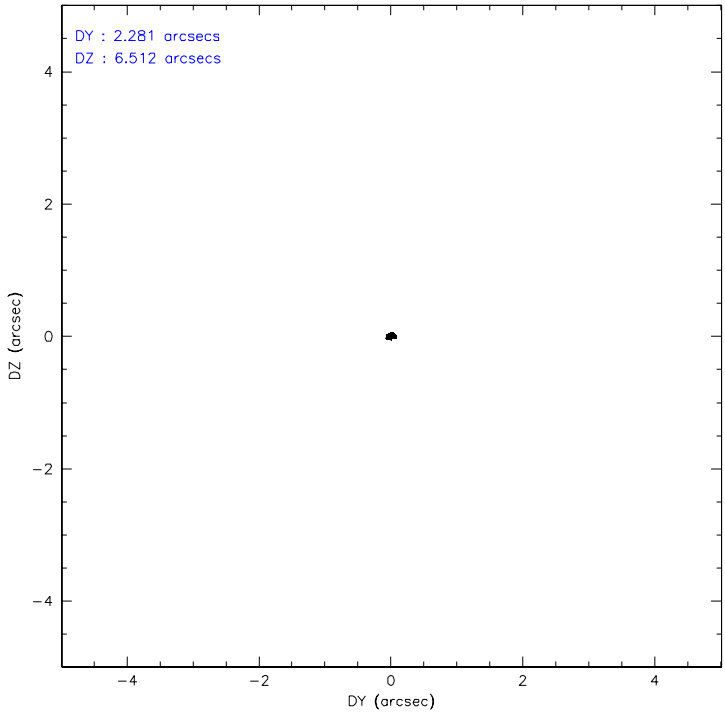
2.2 Compared Parameters

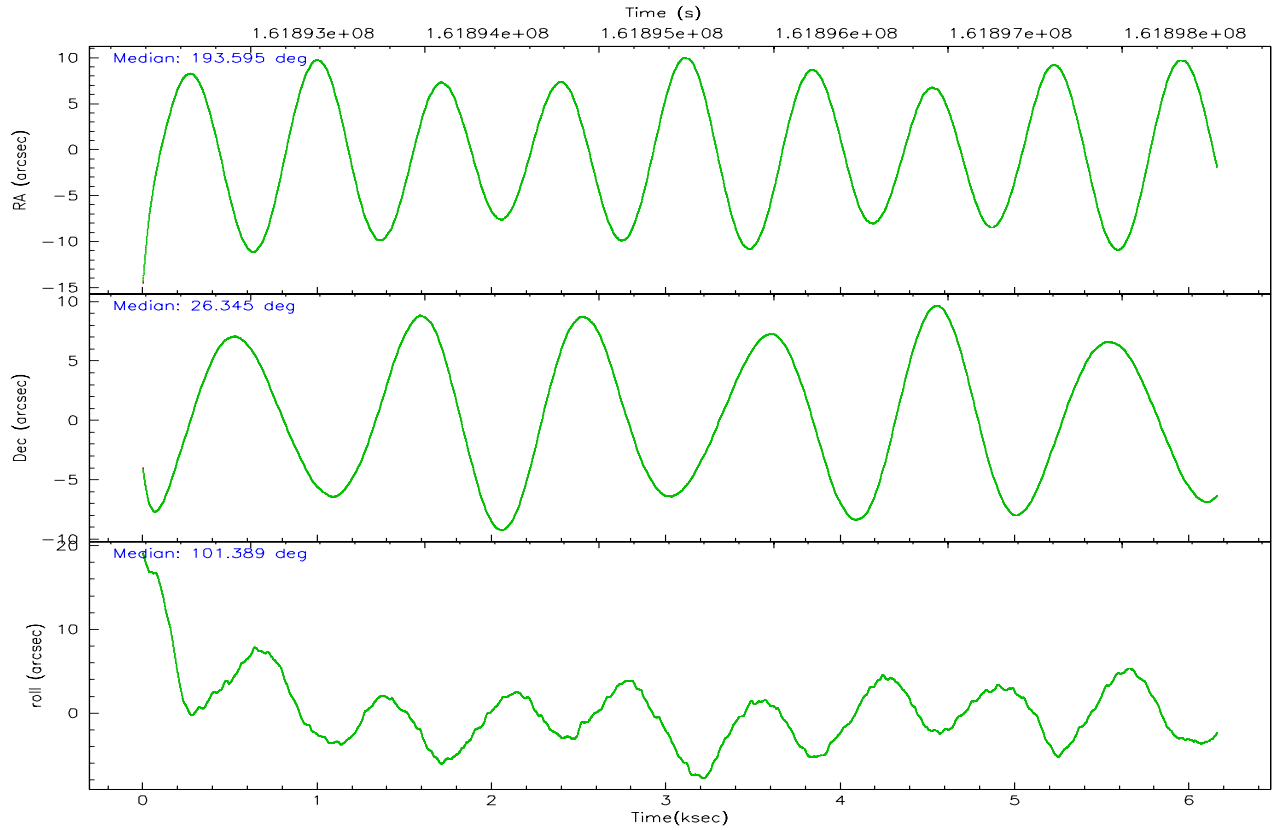
Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
Pointing RA	193.615566	193.5952096087838
Pointing Dec	26.324457	26.34458305116398
Pointing Roll	101.226628	101.3922935213709
SIM focus pos (mm)	-0.684267	-0.6828225247311905
SIM defocus (mm)	0	0.001444936568705701
SIM translation stage pos (mm)	-190.132523	-190.1400660498719
SIM translation stage offset (mm)	0	0.00754346686406393
Observation start time	161892547.184000	161891514.86515
Observation start date	2003-02-17T18:08:03	2003-02-17T17:51:54
Observation end time	161898547.184000	161899488.34049
Observation end date	2003-02-17T19:48:03	2003-02-17T20:04:48
Read mode	TIMED	TIMED

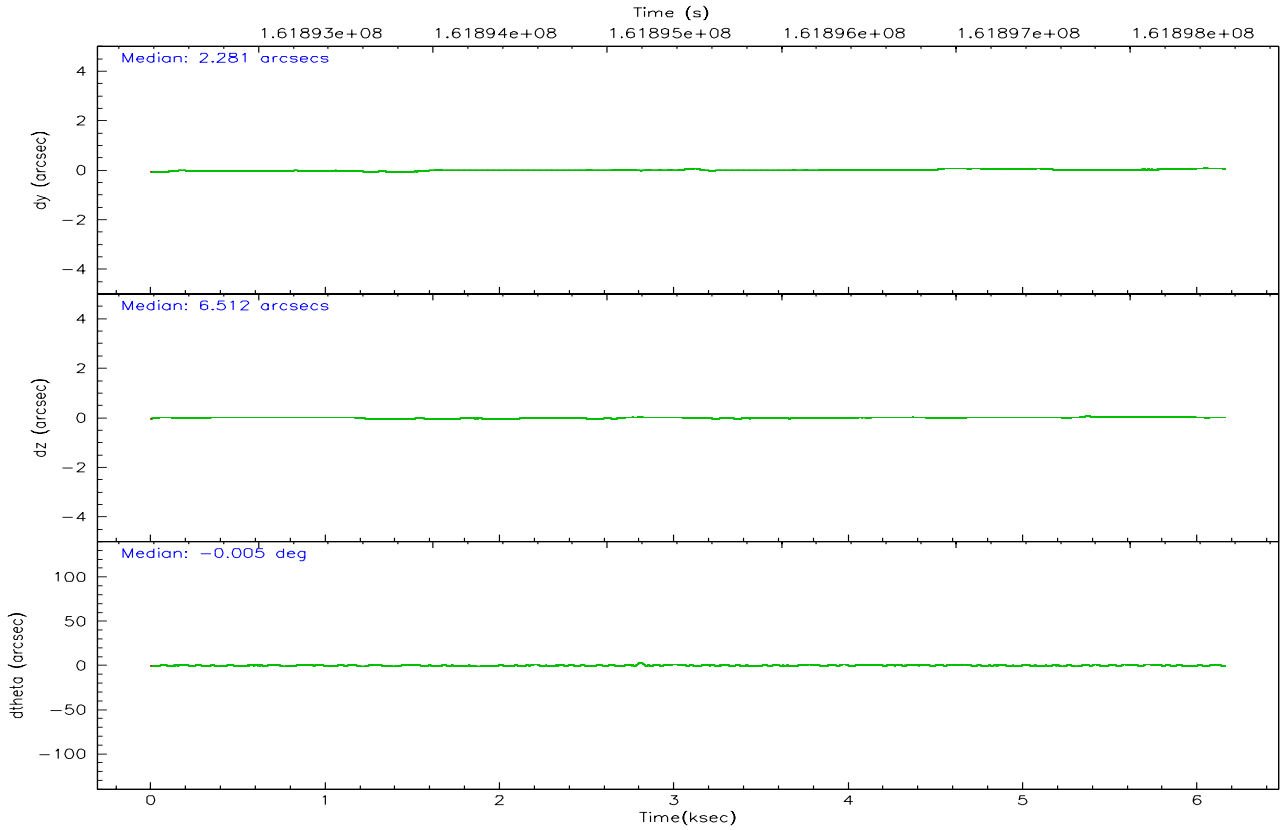
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
Primary exposure time	0.000000	3.2

2.3 Aspect


RA : 193.595 deg
Dec : 26.345 deg
Dec (arcsec)
RA (arcsec)
10
5
0
−5
−10
−15
−10
−5
0
5
10


DY : 2.281 arcsecs
DZ : 6.512 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
1.61893e+08
1.61894e+08
1.61895e+08
1.61896e+08
1.61897e+08
1.61898e+08
Median: 193.595 deg
RA (arcsec)
Median: 26.345 deg
Dec (arcsec)
Median: 101.389 deg
roll (arcsec)
Time(ksec)

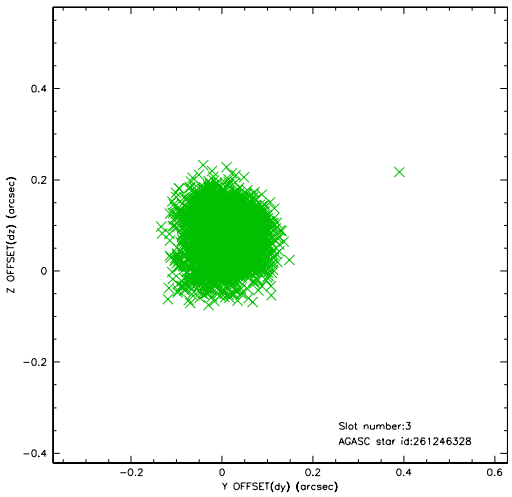

Time (s)
1.61893e+08
1.61894e+08
1.61895e+08
1.61896e+08
1.61897e+08
1.61898e+08
Median: 2.281 arcsecs
dy (arcsec)
Median: 6.512 arcsecs
dz (arcsec)
Median: −0.005 deg
dtheta (arcsec)
Time(ksec)

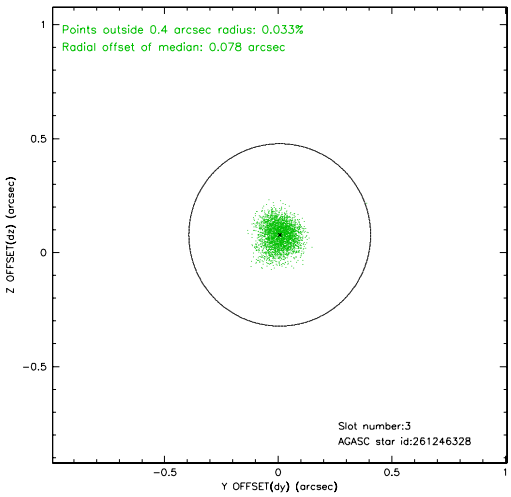
Slot Statistics

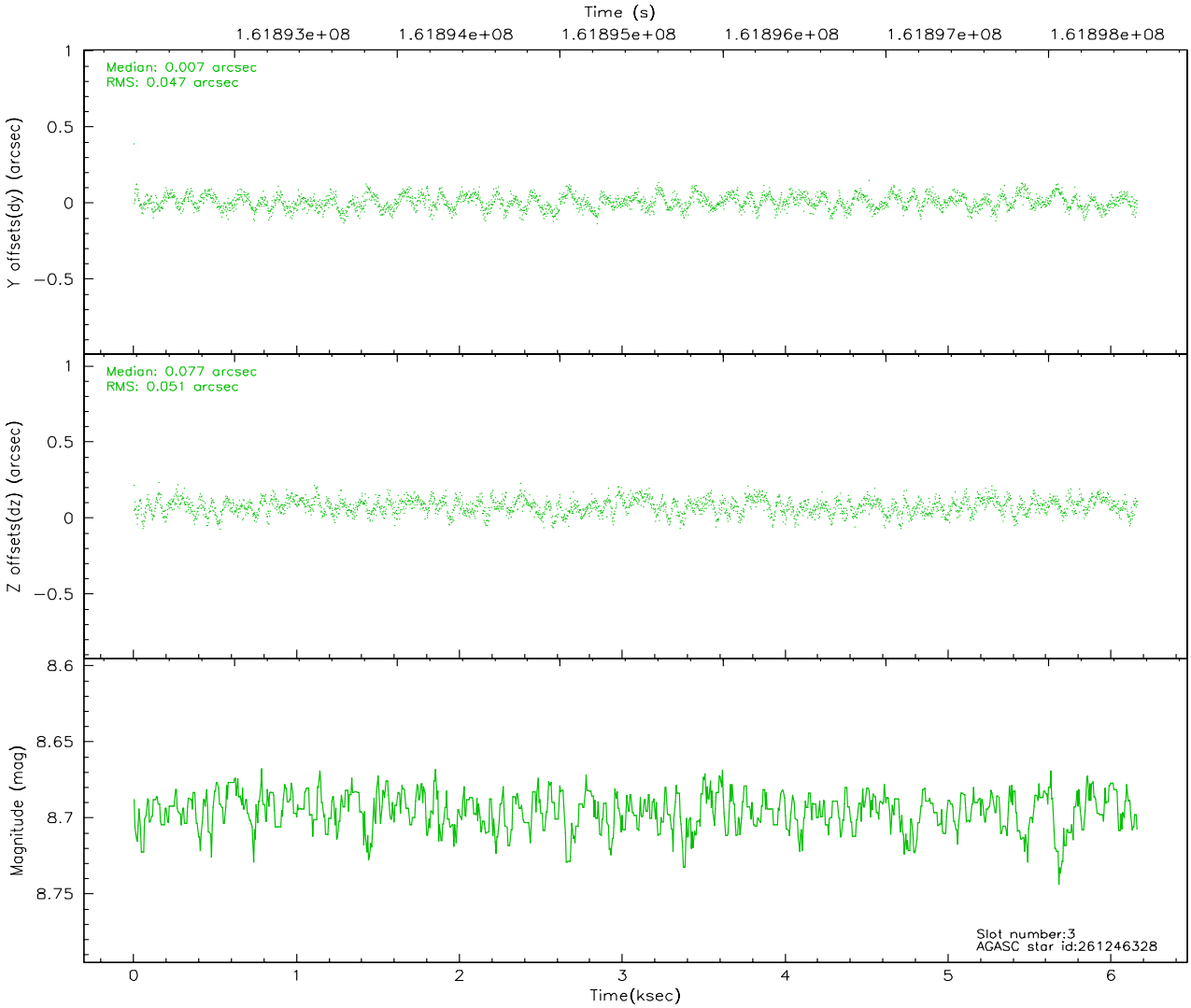
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1503	-0.032	0.026	0.007	0.011	0.000000	0.000000	-754.91	-1727.65
1	FID	ACIS-S-4	7.20	1503	-0.047	0.009	0.005	0.009	0.000000	0.000000	2157.89	179.88
2	FID	ACIS-S-5	7.24	1503	0.048	-0.025	0.006	0.010	0.000000	0.000000	-1806.47	174.54
3	GUIDE	261246328	8.70	3006	0.007	0.077	0.074	0.118	194.437444	25.936229	-1880.26	-2339.17
4	GUIDE	261490112	9.76	3006	-0.043	0.102	0.096	0.159	194.017210	26.469930	263.42	-1372.34
5	GUIDE	261508488	9.45	3005	-0.093	-0.092	0.108	0.170	193.081632	26.490574	925.27	1570.25
6	GUIDE	261242160	8.49	3005	0.154	-0.051	0.066	0.107	193.867779	25.738065	-2228.63	-390.85
7	GUIDE	261491608	9.99	2997	-0.024	-0.031	0.135	0.234	193.422918	26.972540	2408.64	152.49

2.4 Star Slots

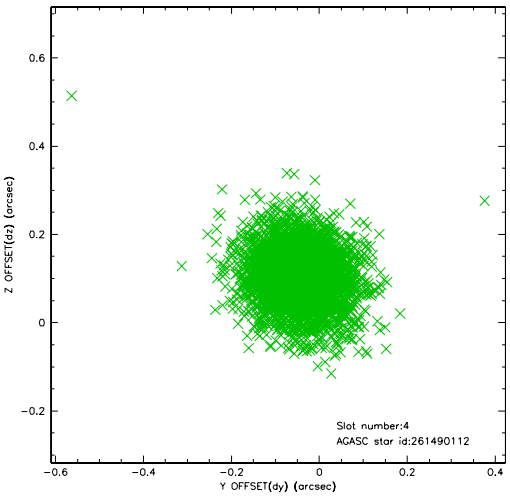
2.4.1 Slot 3

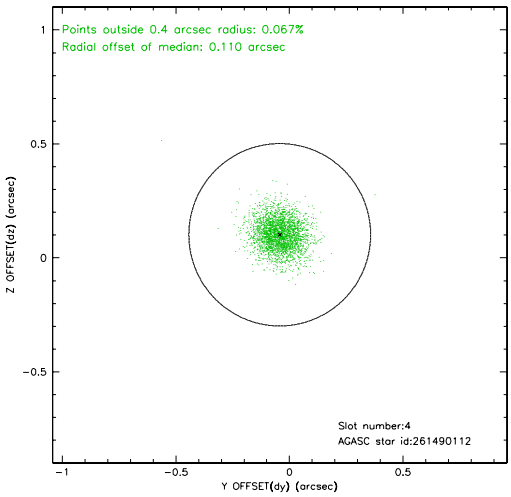


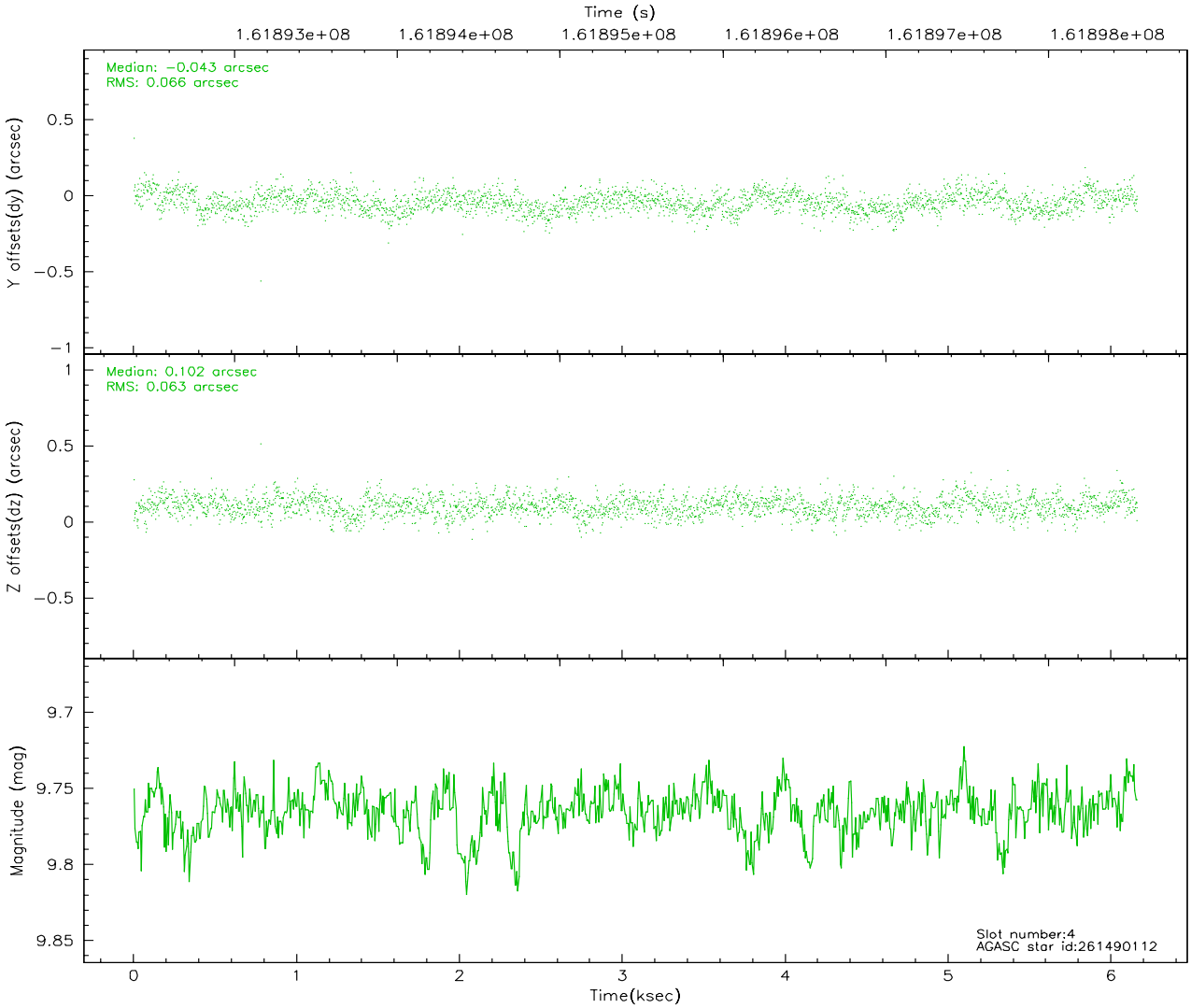




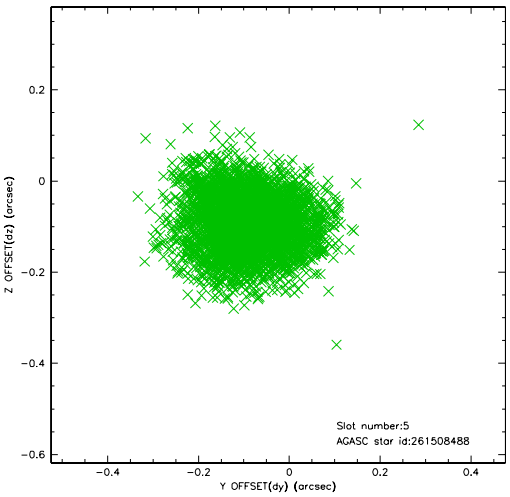
2.4.2 Slot 4

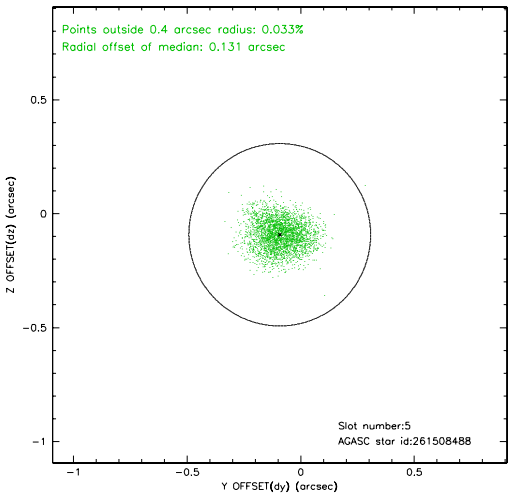

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:261490112

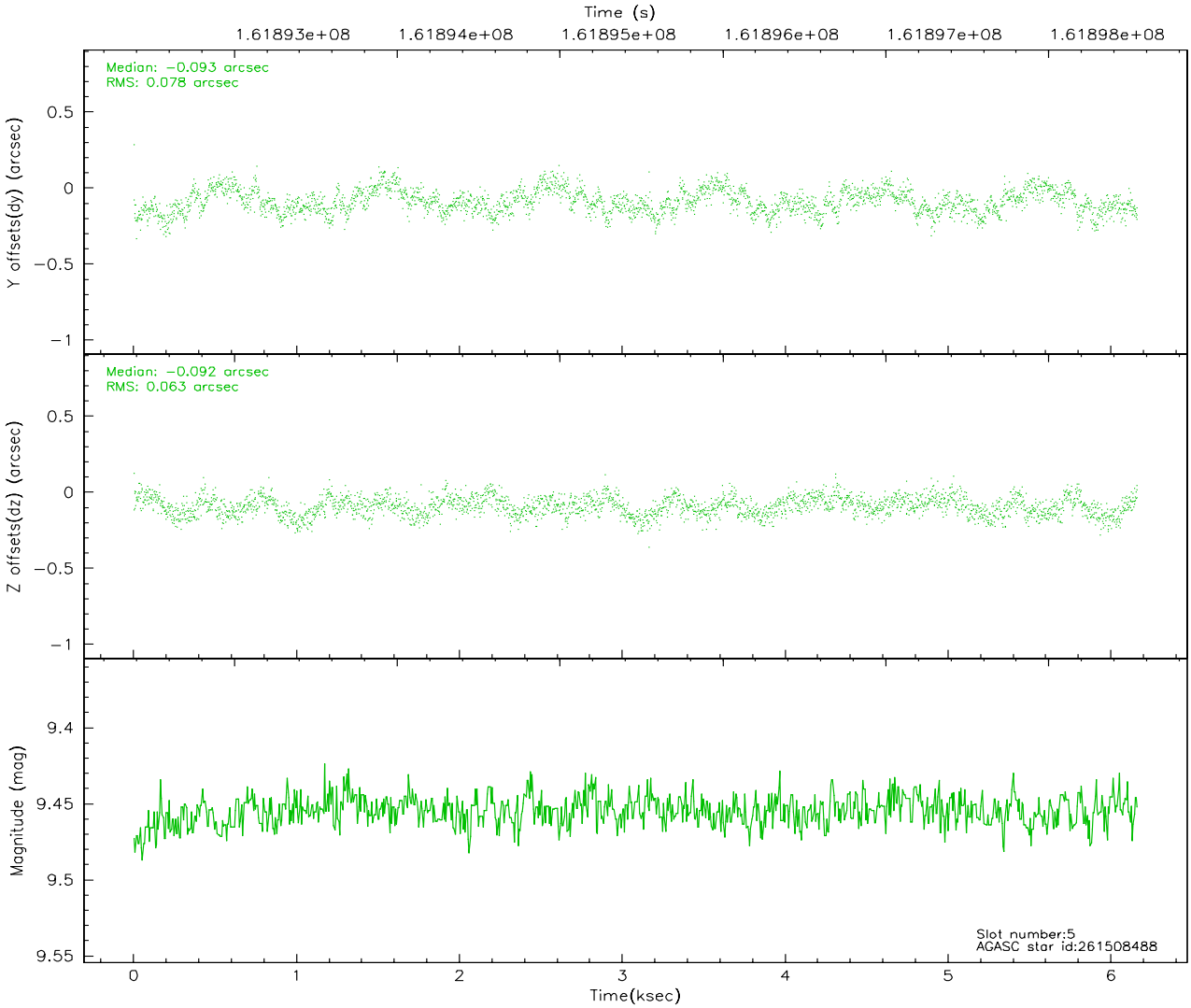

Points outside 0.4 arcsec radius: 0.067%
Radial offset of median: 0.110 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:261490112


Time (s)
Median: −0.043 arcsec
RMS: 0.066 arcsec
Y offsets(dy) (arcsec)
Median: 0.102 arcsec
RMS: 0.063 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:261490112
Time(ksec)

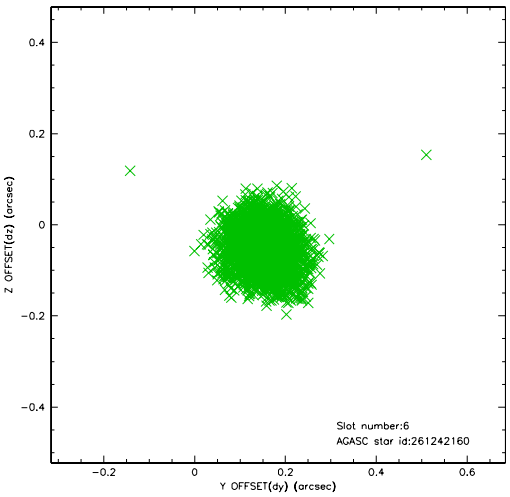
2.4.3 Slot 5

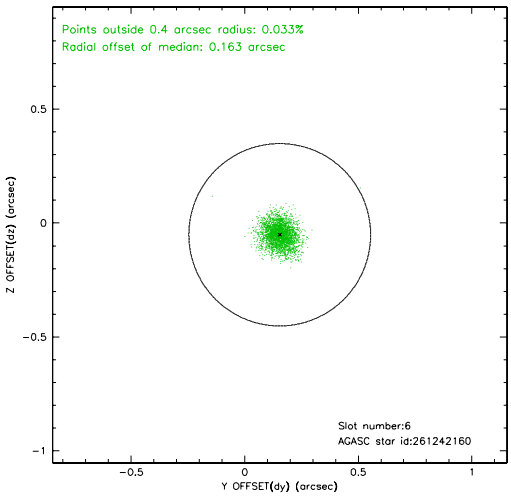

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:261508488

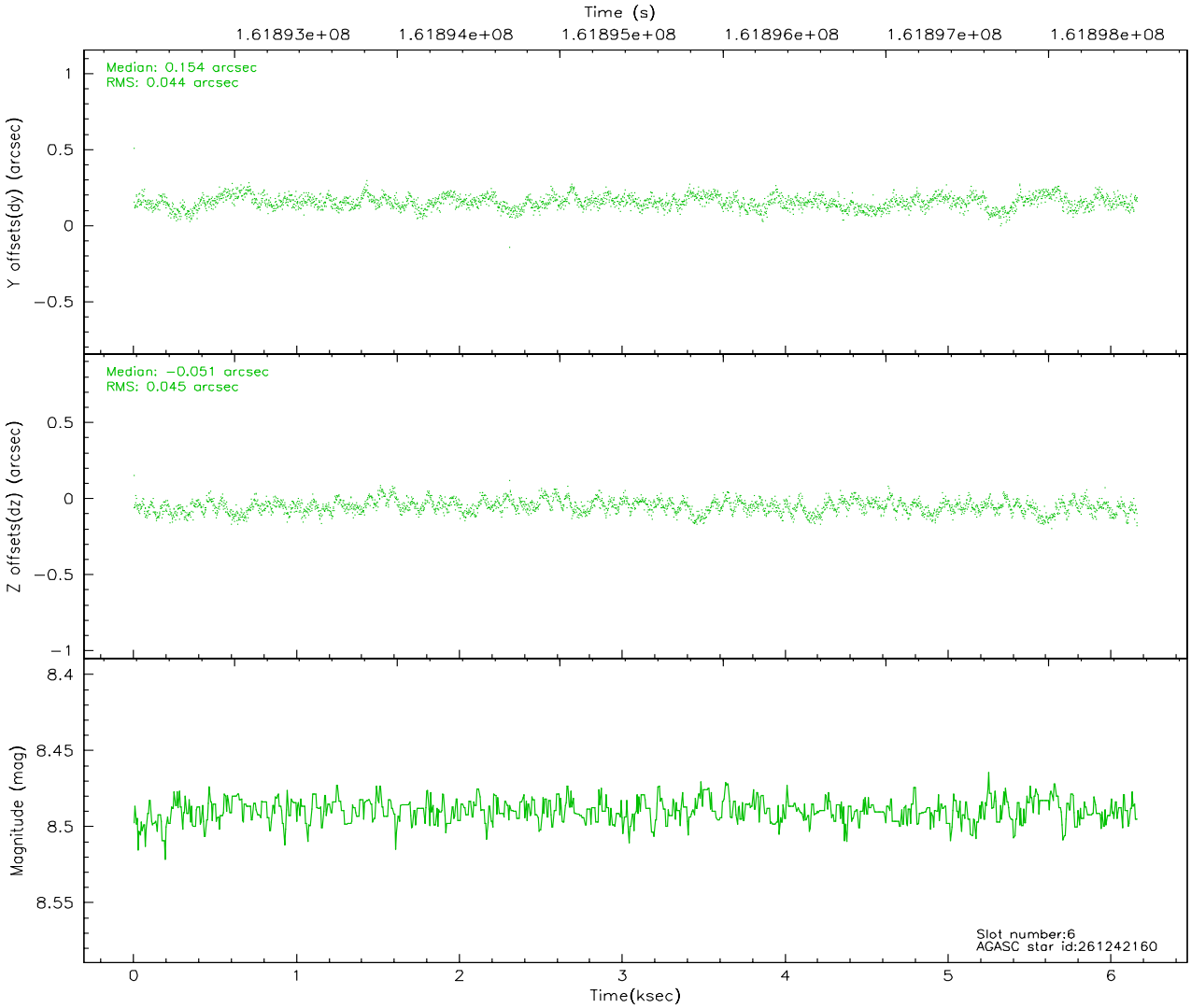

Points outside 0.4 arcsec radius: 0.033%
Radial offset of median: 0.131 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:261508488


Time (s)
Median: −0.093 arcsec
RMS: 0.078 arcsec
Y offsets(dy) (arcsec)
Median: −0.092 arcsec
RMS: 0.063 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:261508488
Time(ksec)

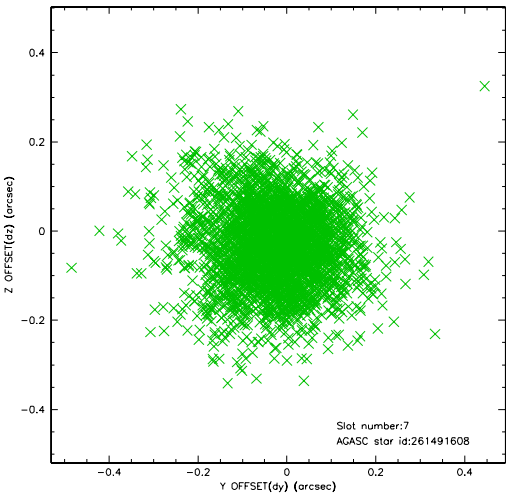
2.4.4 Slot 6

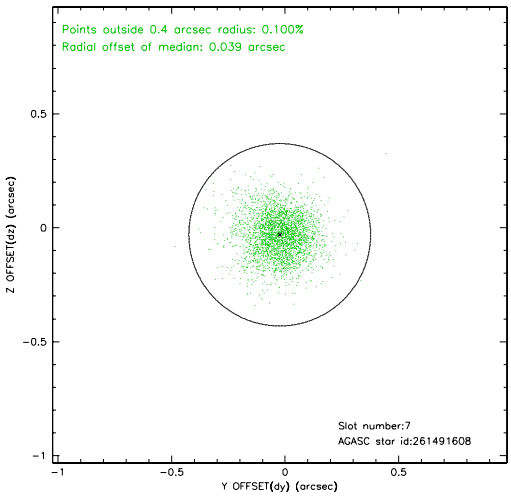

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:261242160

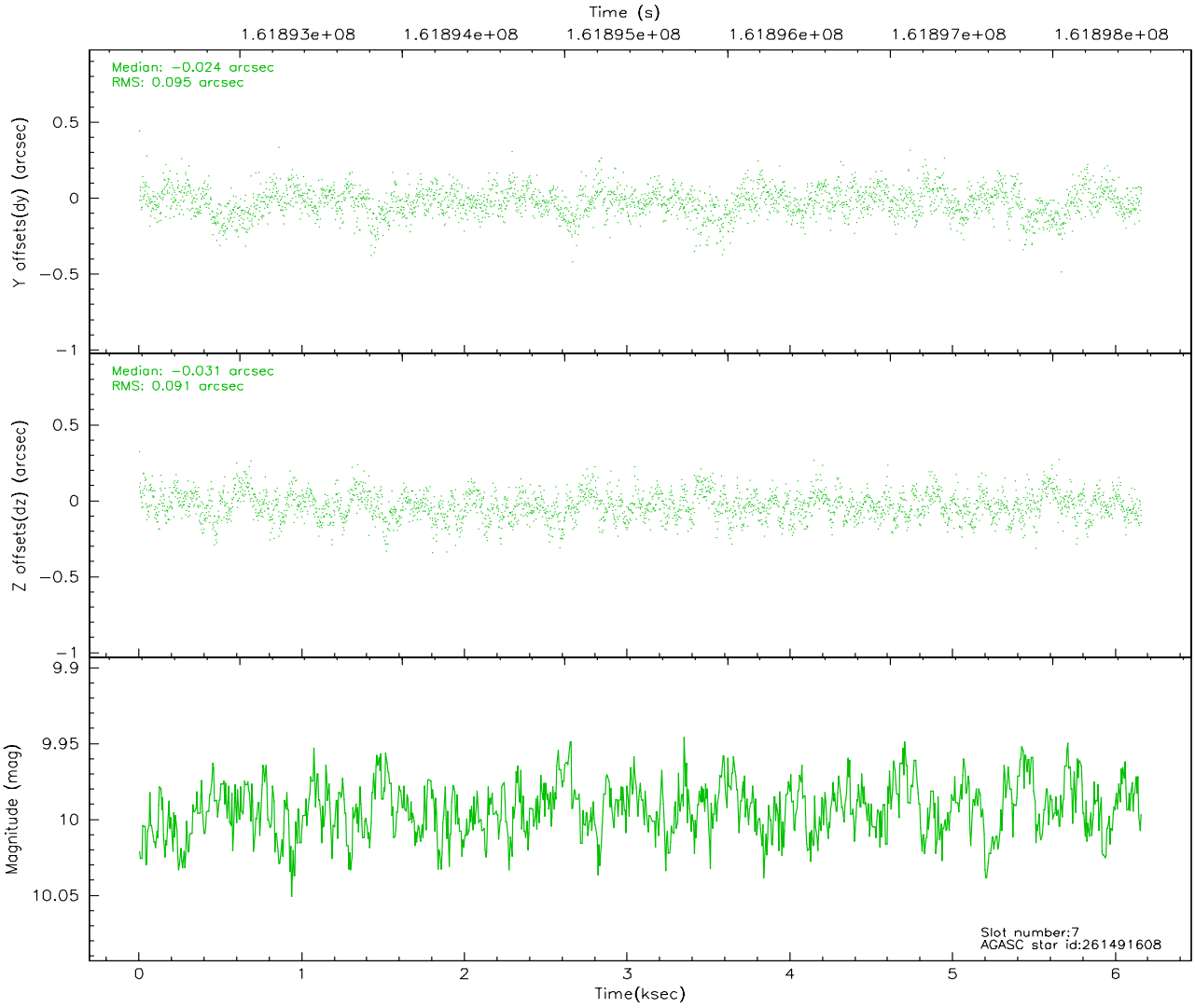

Points outside 0.4 arcsec radius: 0.033%
Radial offset of median: 0.163 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:261242160


Time (s)
1.61893e+08
1.61894e+08
1.61895e+08
1.61896e+08
1.61897e+08
1.61898e+08
Median: 0.154 arcsec
RMS: 0.044 arcsec
Y offsets(dy) (arcsec)
Median: −0.051 arcsec
RMS: 0.045 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:261242160
Time(ksec)

2.4.5 Slot 7

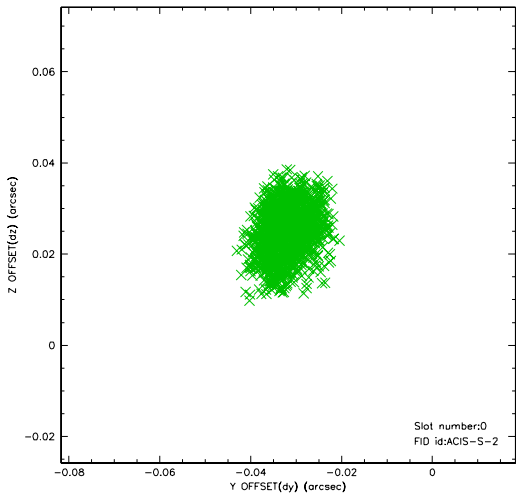

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:261491608

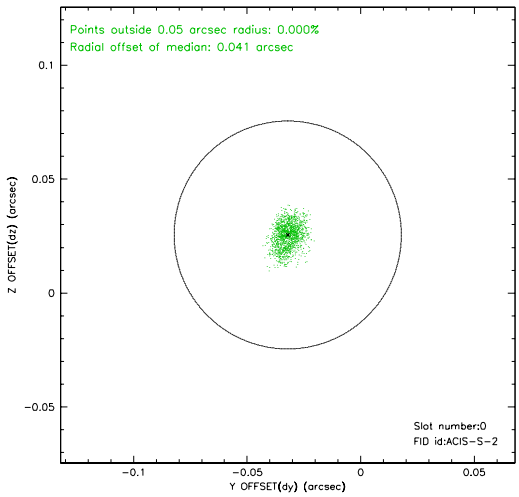

Points outside 0.4 arcsec radius: 0.100%
Radial offset of median: 0.039 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:261491608

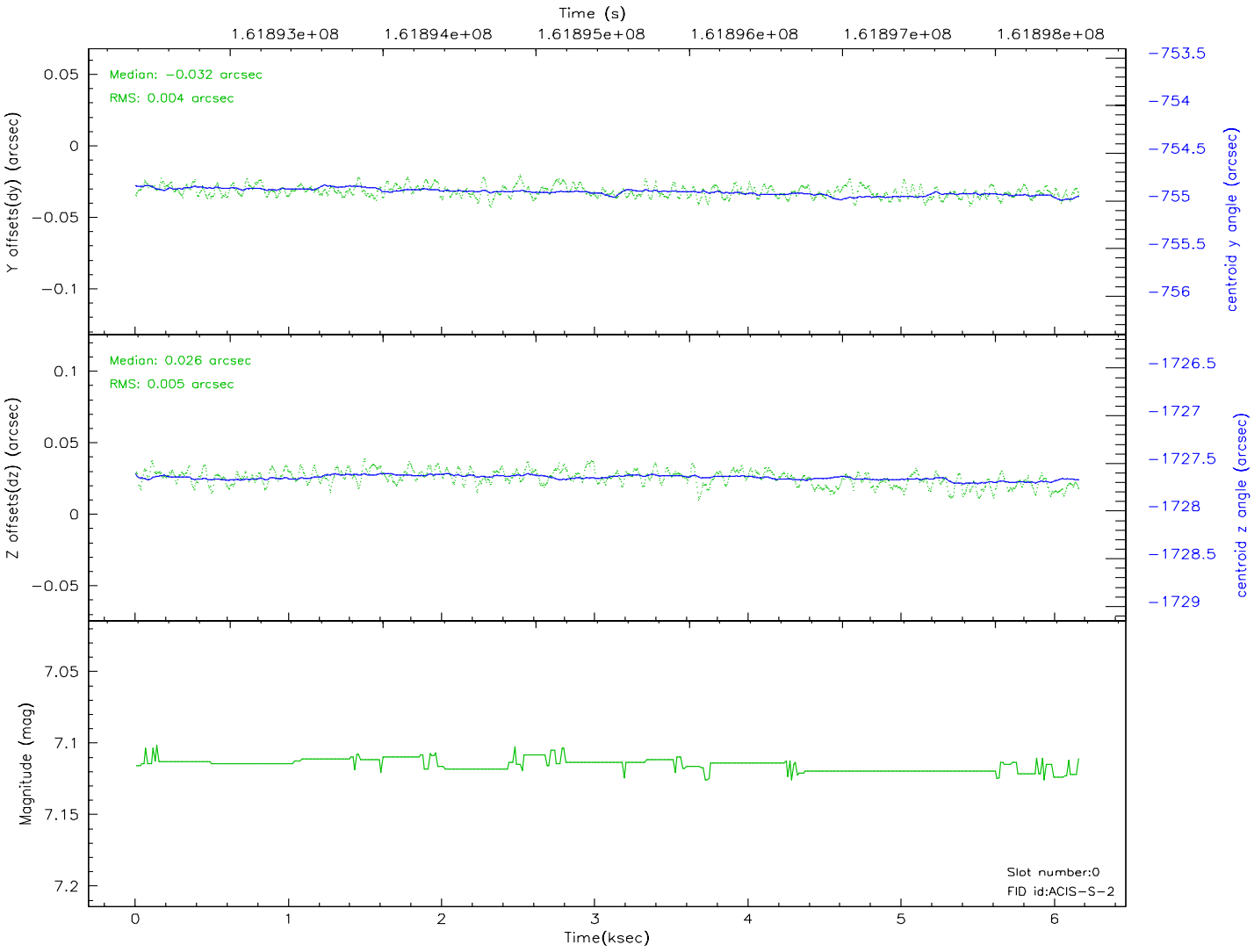

Time (s)
1.61893e+08
1.61894e+08
1.61895e+08
1.61896e+08
1.61897e+08
1.61898e+08
Median: −0.024 arcsec
RMS: 0.095 arcsec
Y offsets(dy) (arcsec)
Median: −0.031 arcsec
RMS: 0.091 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:261491608
Time(ksec)

2.5 FID Slots

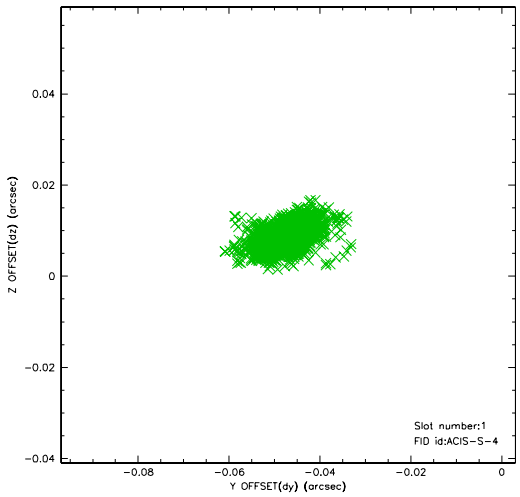
2.5.1 Slot 0

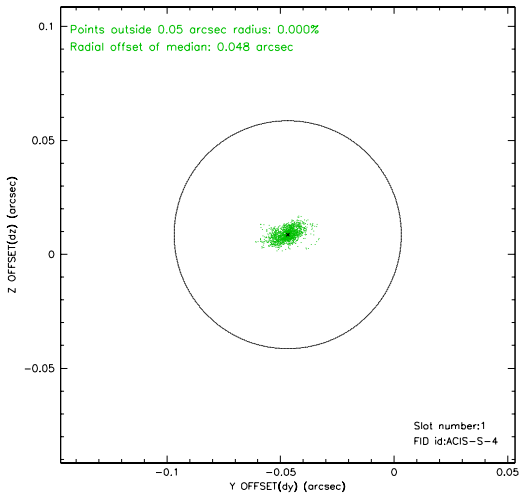


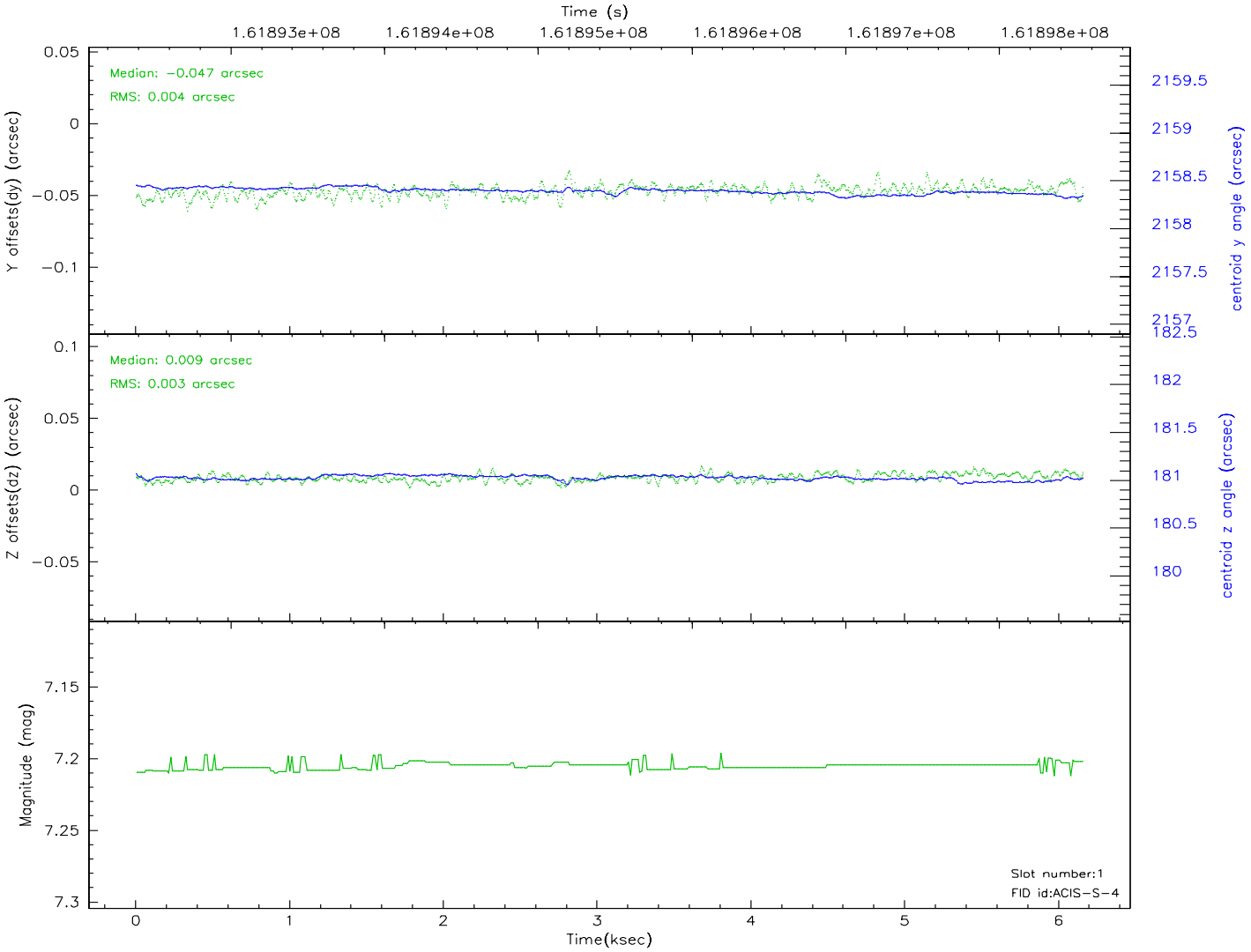




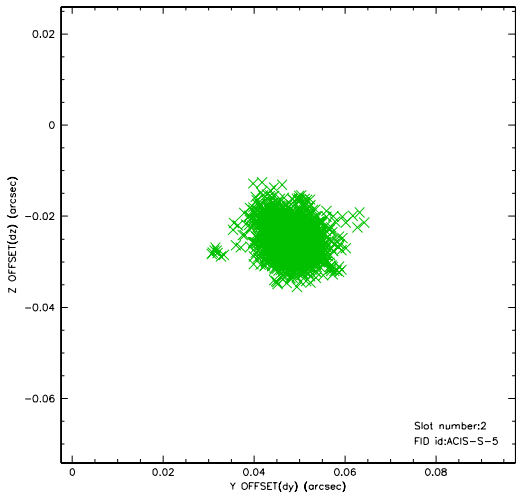
2.5.2 Slot 1

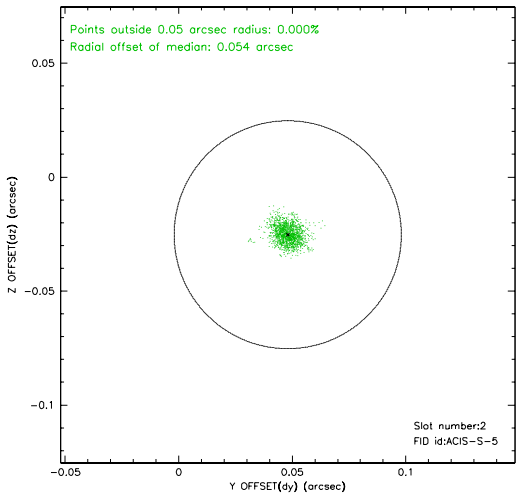

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-S-4

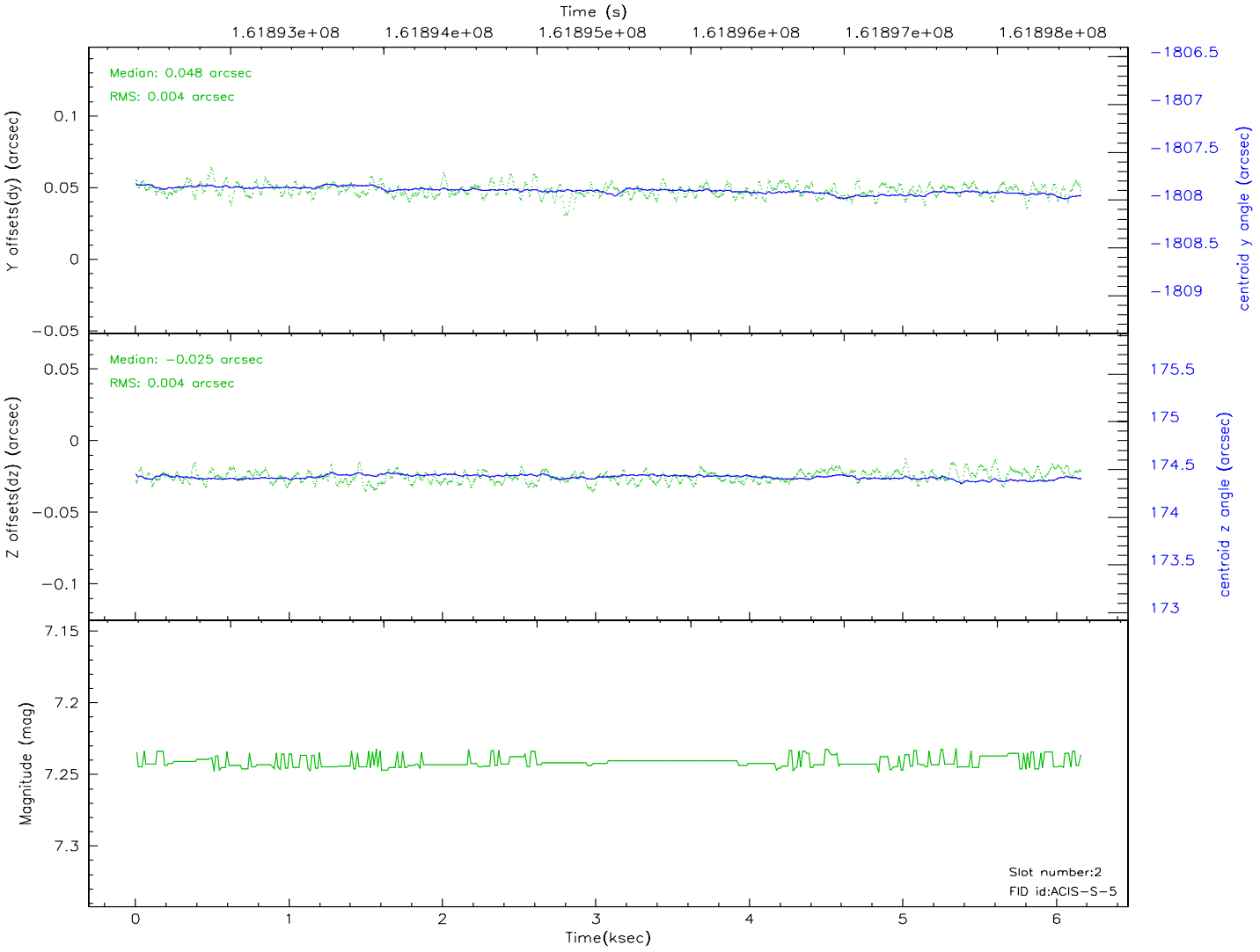

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.048 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-S-4


Time (s)
Median: −0.047 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: 0.009 arcsec
RMS: 0.003 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:ACIS-S-4
Time(ksec)

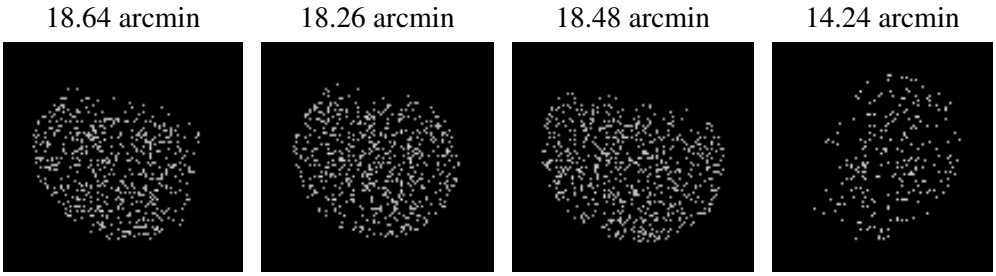
2.5.3 Slot 2


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


Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.054 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:ACIS-S-5


Time (s)
Median: 0.048 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.025 arcsec
RMS: 0.004 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:ACIS-S-5
Time(ksec)

3 Point Sources



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.07.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.76

A.2 Comments