V&V Reference Report
L2 ASCDS Version : 7.6.8.1

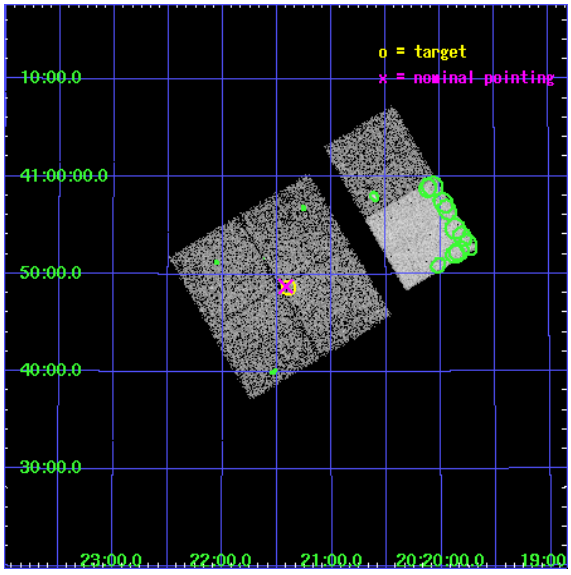
Observation 2827 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Sep 8 2006

Contents

1 Front

seq_num	500277
obs_id	2827
title	FINE FLUOROSCOPY ON MOLECULAR CLUMPS OVERTAKEN BY SUPERNOVA BLAST WAVE
observer	Dr. Yasunobu Uchiyama
object	G78.2+2.1 CLUMP-1
dtycycle	0
cycle	P
ra_targ	305.35
dec_targ	40.81
ra_nom	305.35495217906
dec_nom	40.812742640047
roll_nom	59.589538213448
revision	2
ontime	9564.8000089079
livetime	9443.684751964
ontime0	9564.8000089079
ontime1	9564.8000089079
ontime2	9564.8000089079
ontime3	9564.8000089079
ontime6	9561.5590785593
ontime7	9564.8000089079
l2events	56957

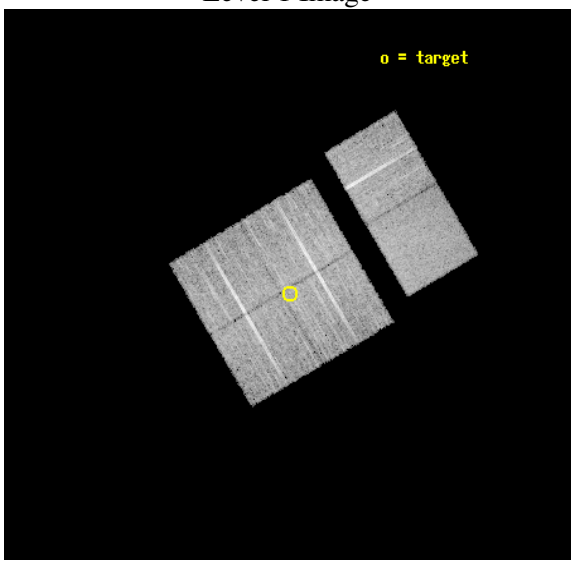


2 OBI

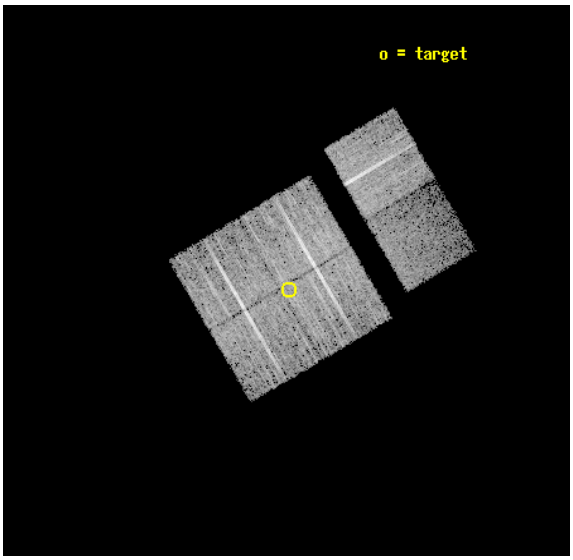
2.1 OBI

2.1.1 Images

Level 1 Image

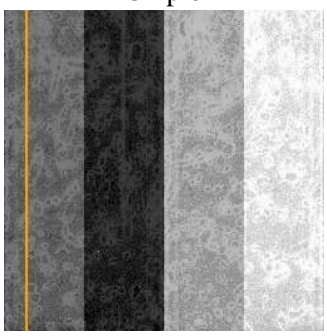


Level 1 Bad Events

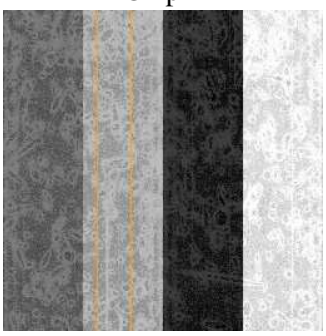


2.1.2 Bias

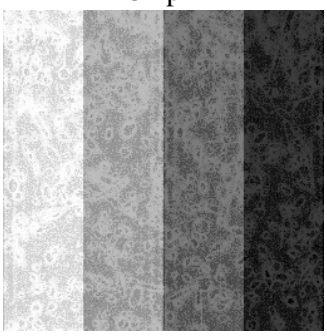
Chip 0



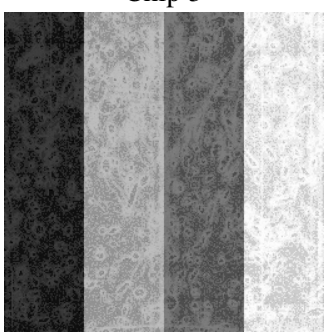
Chip 1



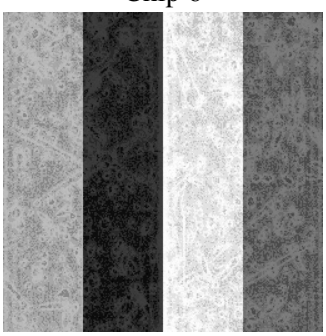
Chip 2



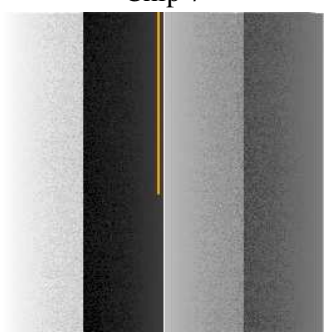
Chip 3



Chip 6



Chip 7



2.1.3 Parameters

obi_num	3
ascdsver	7.6.8.1
caldbver	3.2.3
date	2006-09-08T05:04:59
revision	2

sched_exp_time	9600.000000
ontime	9567.4275477827
ontime0	9567.4275477827
ontime1	9567.4275477827
ontime2	9567.4275477827
ontime3	9567.4275477827
ontime6	9564.186617434
ontime7	9567.4275477827
l1events	313069

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	50266	48439	57566	52906	54057	49835
rejected events	42200	41017	50286	45460	47108	24138
rejected %	83%	84%	87%	85%	87%	48%

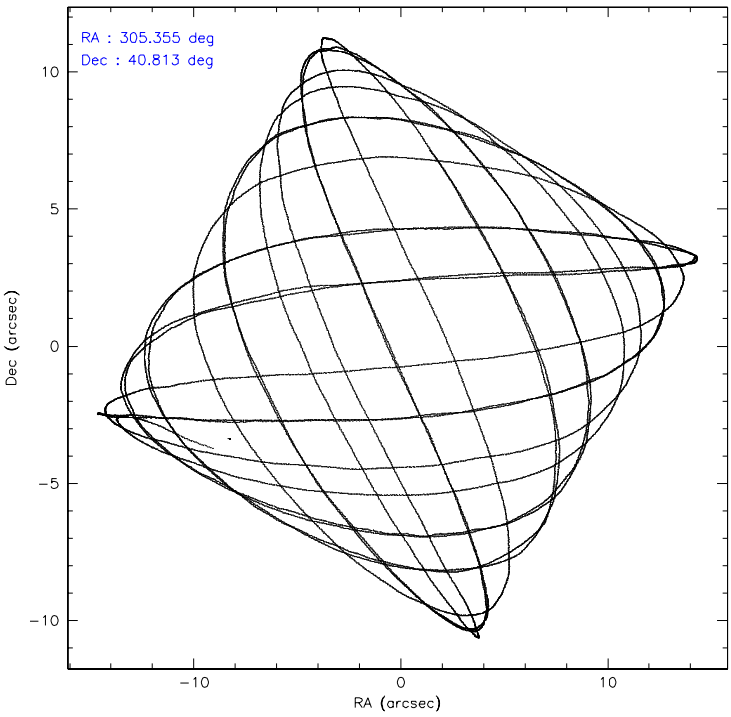
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	4509	3929	4046	4209	3524	2997
	8%	8%	7%	7%	6%	6%
grade 1 events	34	30	22	31	27	33
	0%	0%	0%	0%	0%	0%
grade 2 events	1400	1200	1268	1206	1196	6572
	2%	2%	2%	2%	2%	13%
grade 3 events	671	621	516	578	636	1884
	1%	1%	0%	1%	1%	3%
grade 4 events	566	693	570	574	623	1895
	1%	1%	0%	1%	1%	3%
grade 5 events	1336	1530	1197	1473	1695	3674
	2%	3%	2%	2%	3%	7%
grade 6 events	924	980	883	883	970	12361
	1%	2%	1%	1%	1%	24%
grade 7 events	40826	39456	49064	43952	45386	20419
	81%	81%	85%	83%	83%	40%

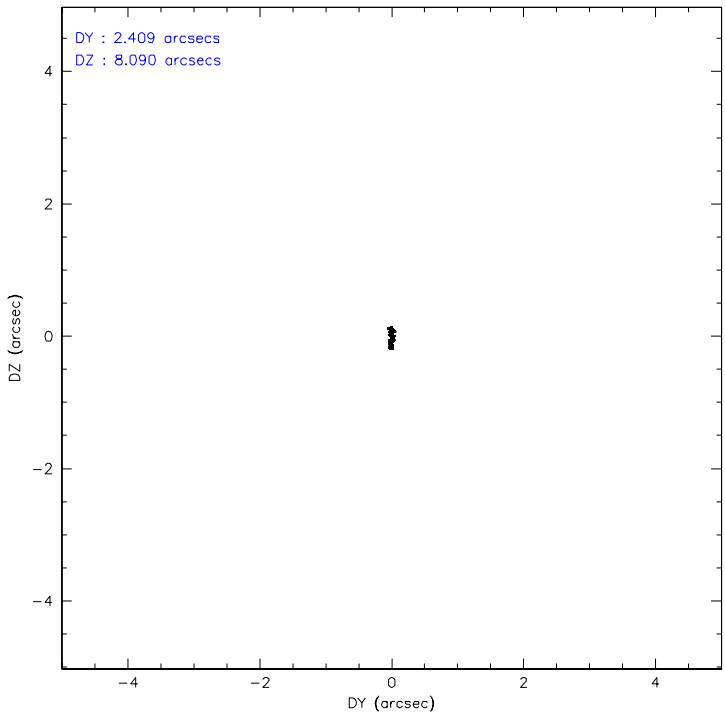
2.2 Compared Parameters

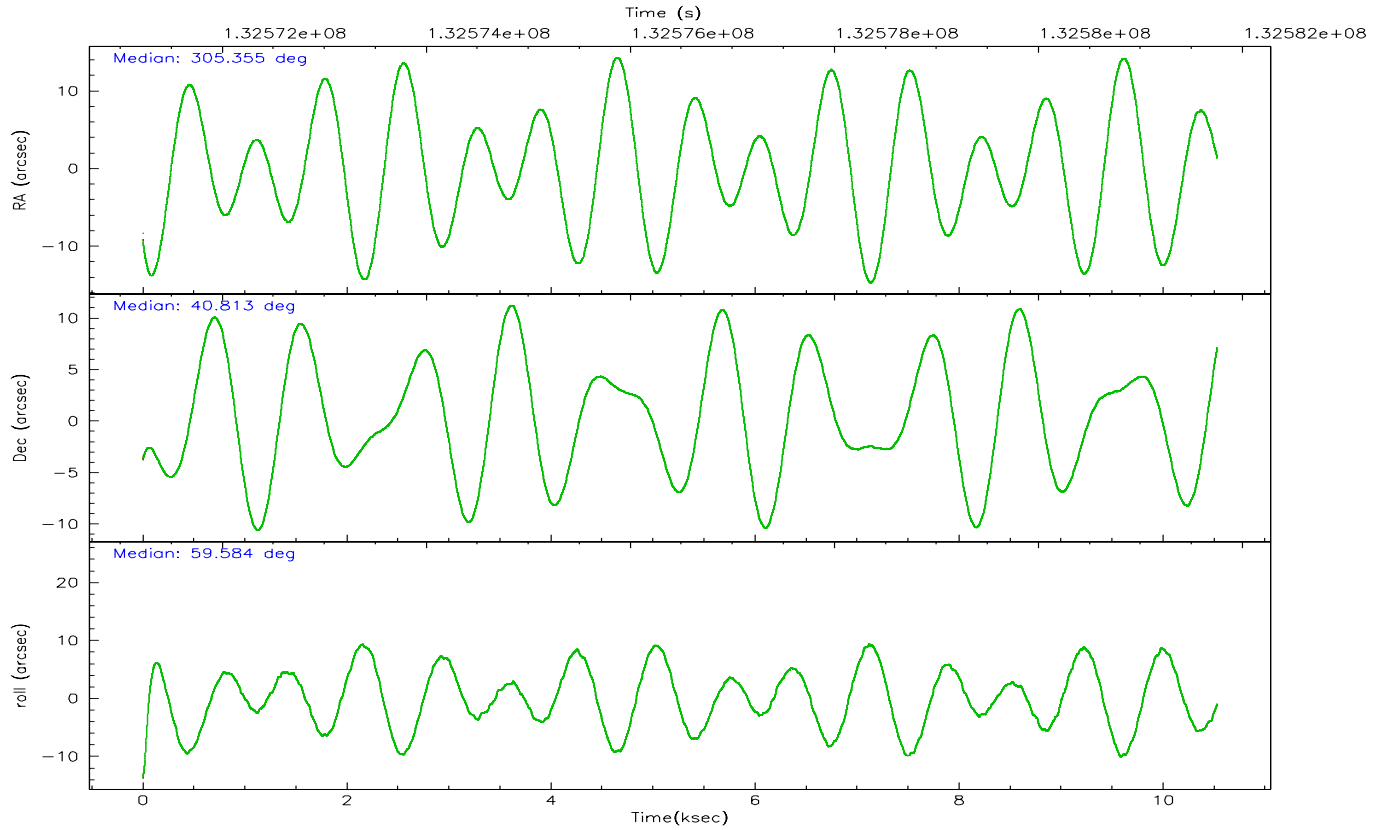
Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
Pointing RA	305.354801	305.3549521790623
Pointing Dec	40.785375	40.81274264004659
Pointing Roll	59.380964	59.58953821344798
SIM focus pos (mm)	-0.782348	-0.7809083437167272
SIM defocus (mm)	0	0.001439871863259334
SIM translation stage pos (mm)	-233.592463	-233.5874344608287
SIM translation stage offset (mm)	0	-0.005018542100998502
Observation start time	132572155.184000	132570824.90507
Observation start date	2002-03-15T09:34:51	2002-03-15T09:13:44
Observation end time	132581755.184000	132582301.31803
Observation end date	2002-03-15T12:14:51	2002-03-15T12:25:01
Read mode	TIMED	TIMED

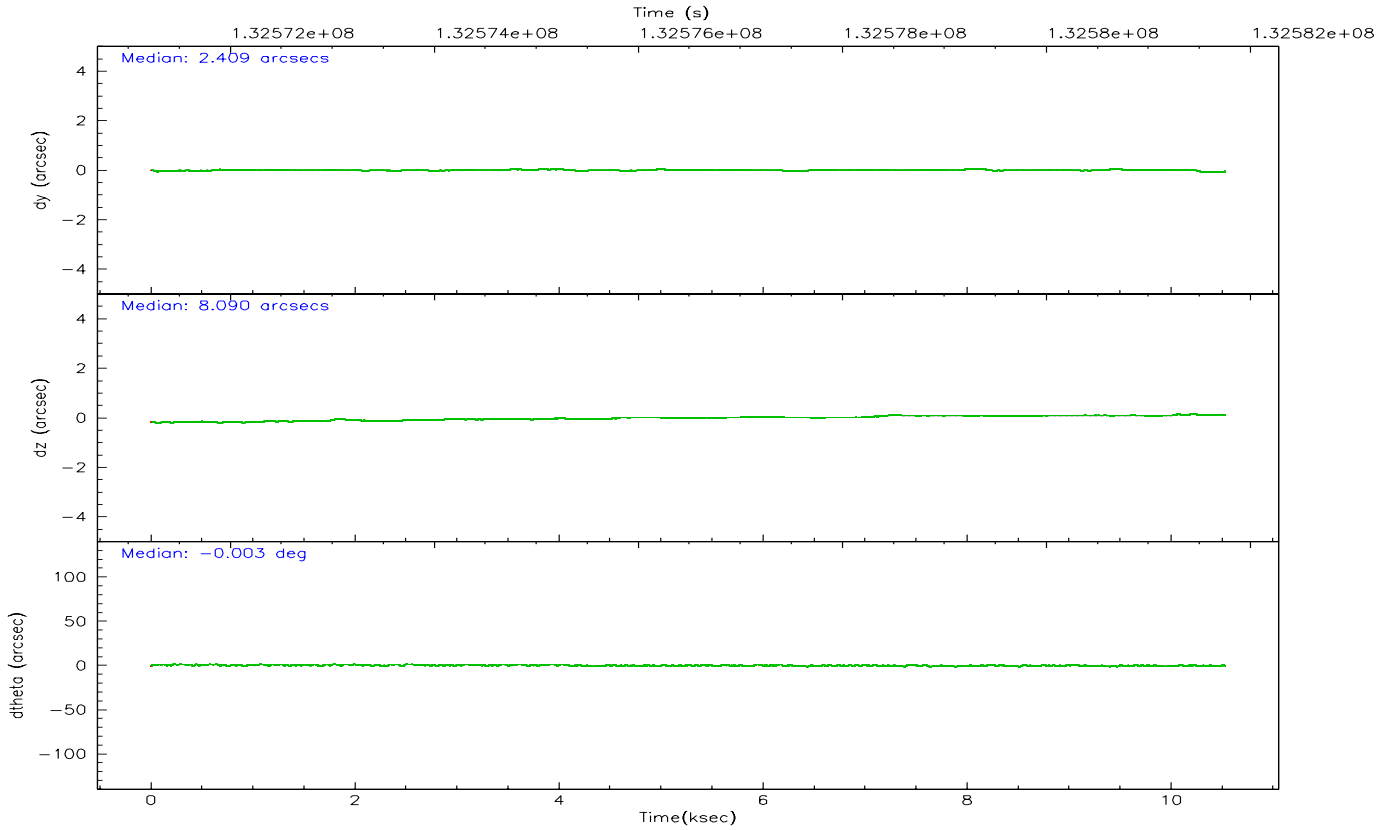
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
Primary exposure time	0.000000	3.2

2.3 Aspect


RA : 305.355 deg
Dec : 40.813 deg
Dec (arcsec)
RA (arcsec)
10
5
0
−5
−10
−10
0
10


DY : 2.409 arcsecs
DZ : 8.090 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
1.32572e+08
1.32574e+08
1.32576e+08
1.32578e+08
1.3258e+08
1.32582e+08
Median: 305.355 deg
RA (arcsec)
Median: 40.813 deg
Dec (arcsec)
Median: 59.584 deg
roll (arcsec)
Time(ksec)

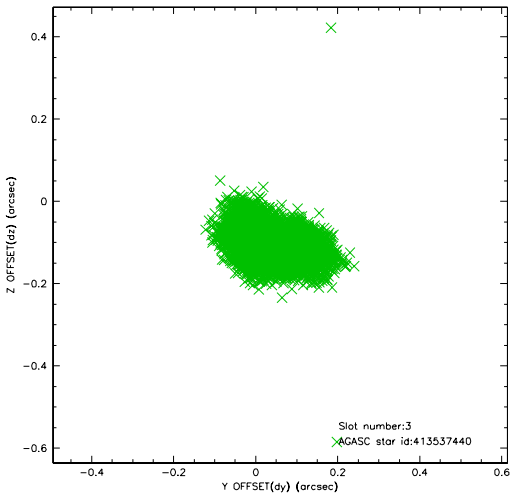

Time (s)
1.32572e+08
1.32574e+08
1.32576e+08
1.32578e+08
1.3258e+08
1.32582e+08
Median: 2.409 arcsecs
dy (arcsec)
Median: 8.090 arcsecs
dz (arcsec)
Median: −0.003 deg
dtheta (arcsec)
Time(ksec)

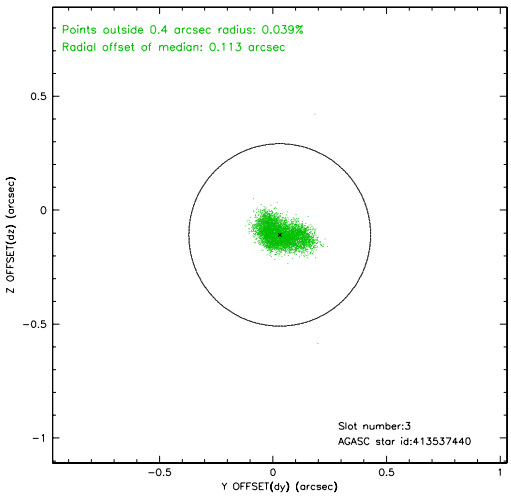
Slot Statistics

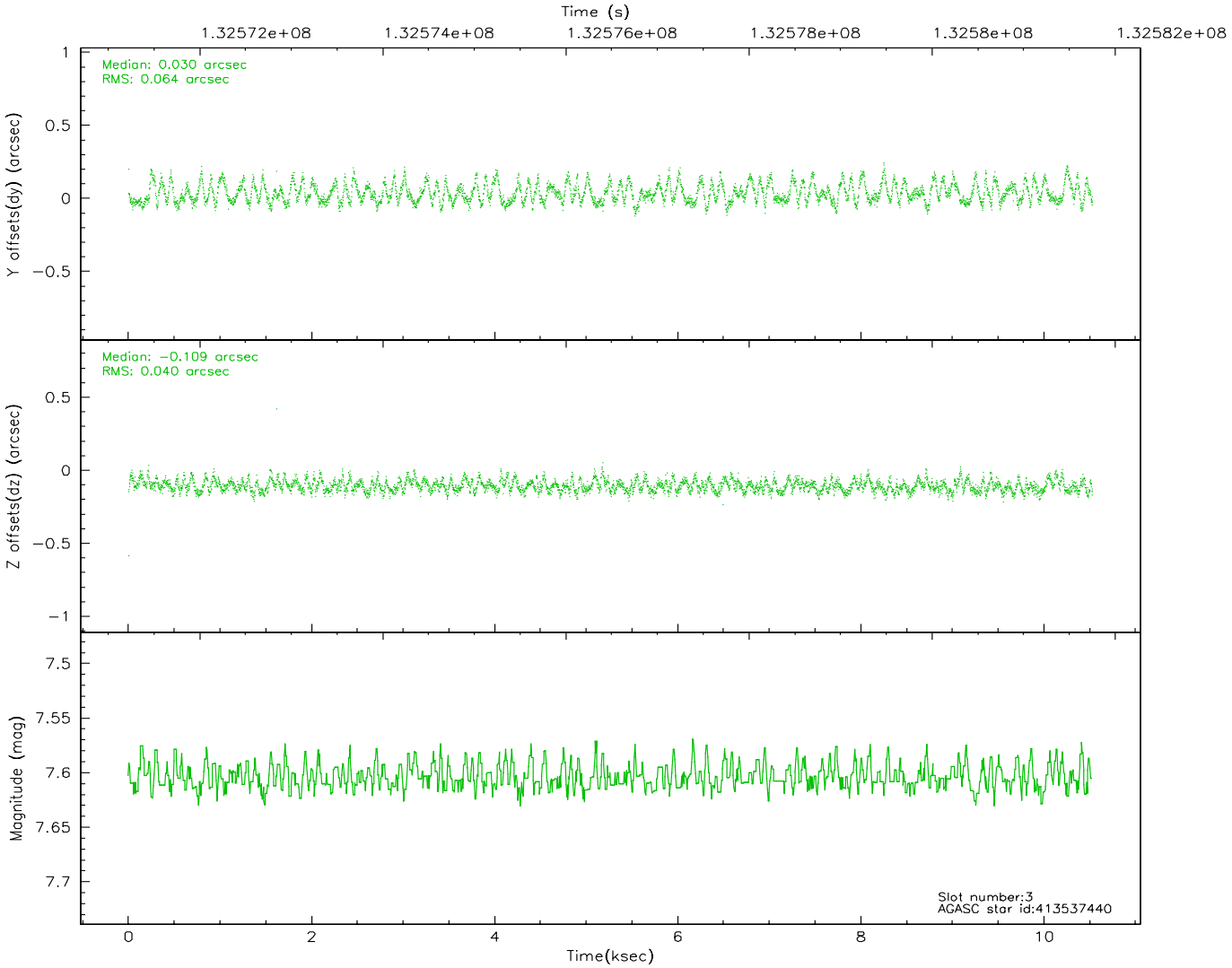
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-3	7.44	2569	-0.042	0.244	0.009	0.016	0.000000	0.000000	54.79	-964.49
1	FID	ACIS-I-5	7.24	2568	-0.012	-0.018	0.007	0.013	0.000000	0.000000	-1810.80	1065.64
2	FID	ACIS-I-6	7.26	2569	-0.037	-0.156	0.007	0.011	0.000000	0.000000	402.34	1710.66
3	GUIDE	413537440	7.61	5137	0.030	-0.109	0.080	0.130	304.302199	40.591389	-2052.37	2129.54
4	GUIDE	413669792	8.06	5135	-0.127	0.119	0.054	0.088	306.075459	41.023146	1739.63	-1243.23
5	GUIDE	413543888	8.20	5136	0.088	-0.032	0.057	0.091	304.596711	40.387769	-2282.97	1064.31
6	GUIDE	414057760	8.57	5135	0.051	-0.068	0.061	0.098	304.976464	41.602389	2013.35	2376.52
7	GUIDE	413670992	8.84	5135	-0.045	0.090	0.090	0.138	306.315225	40.998645	2002.26	-1846.16

2.4 Star Slots

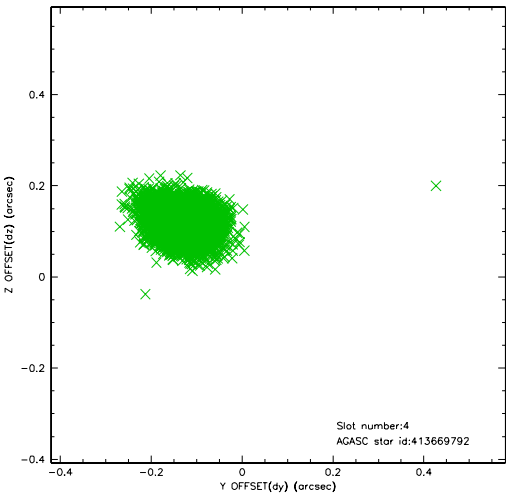
2.4.1 Slot 3

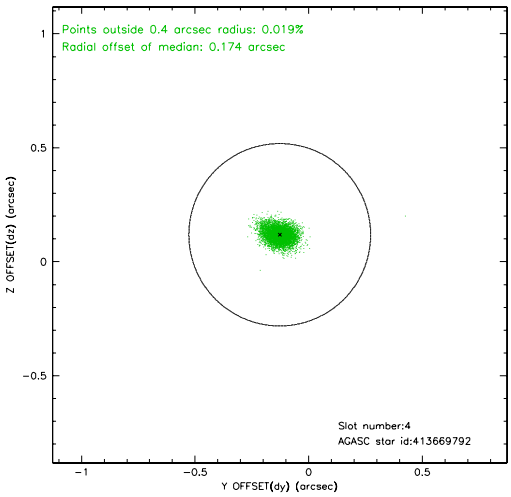


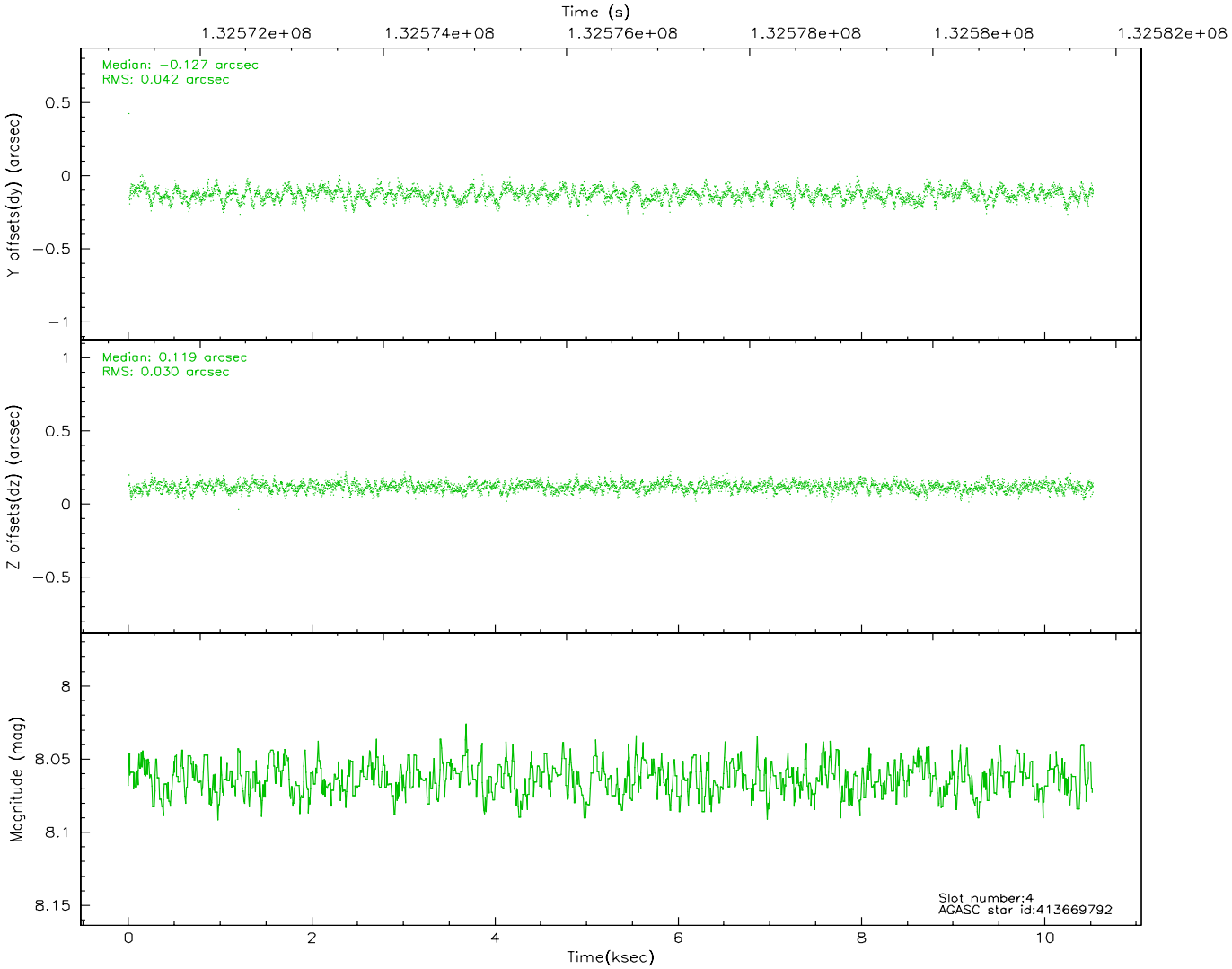




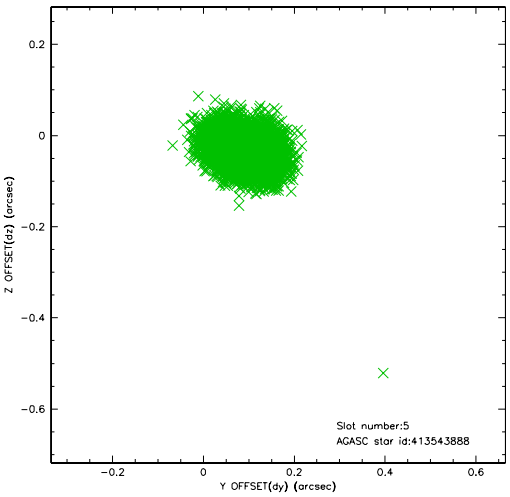
2.4.2 Slot 4

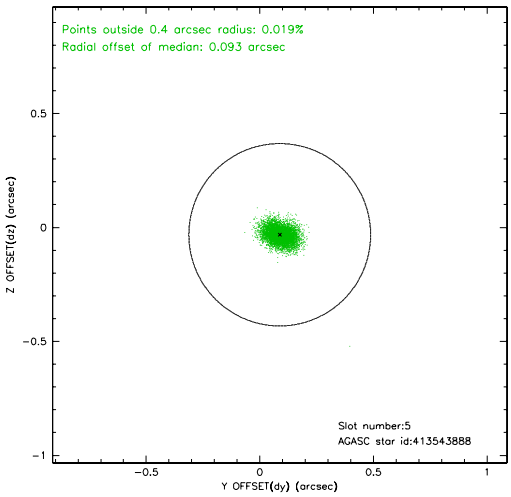

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:413669792

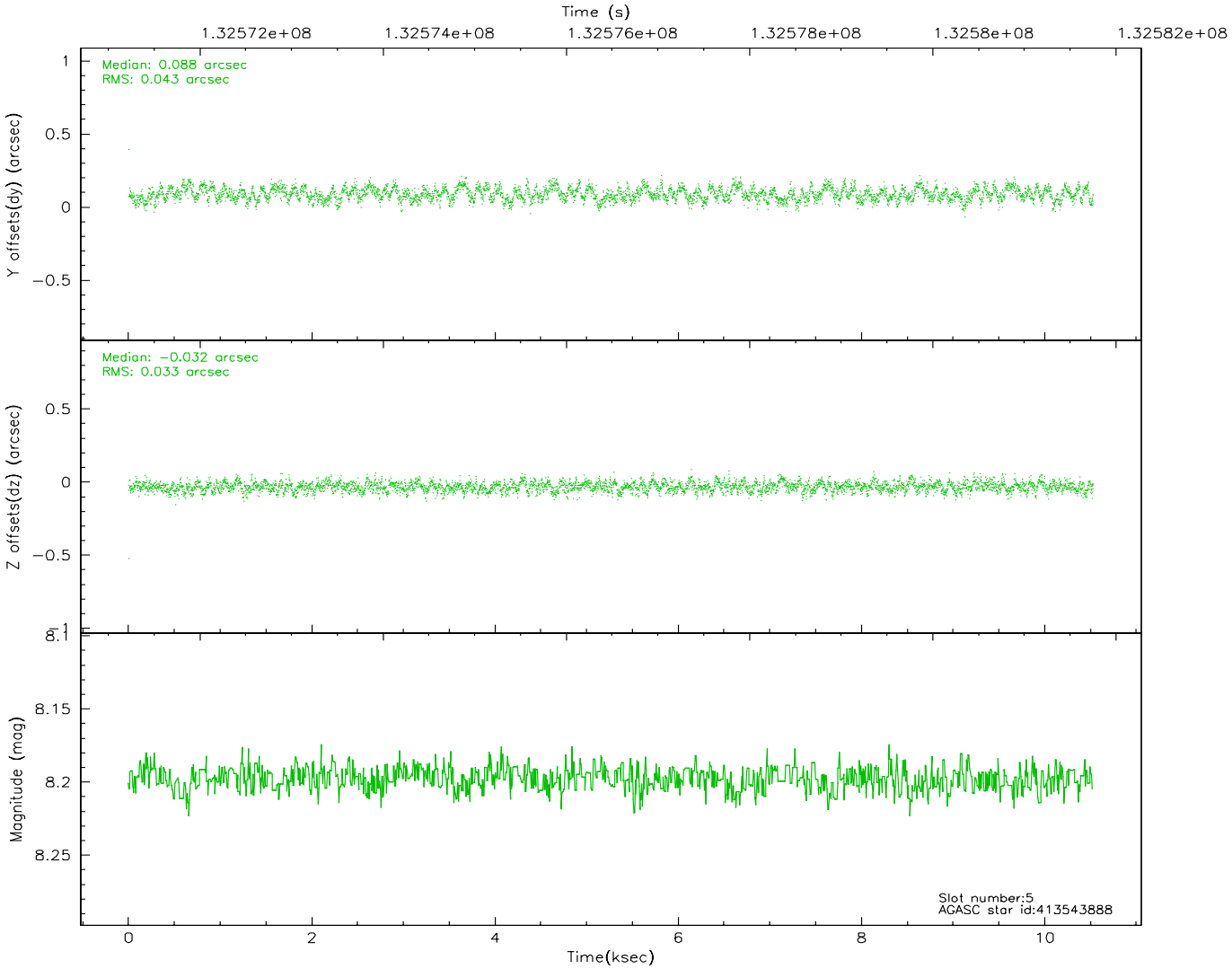

Points outside 0.4 arcsec radius: 0.019%
Radial offset of median: 0.174 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:413669792


Time (s)
1.32572e+08
1.32574e+08
1.32576e+08
1.32578e+08
1.3258e+08
1.32582e+08
Median: −0.127 arcsec
RMS: 0.042 arcsec
Y offsets(dy) (arcsec)
Median: 0.119 arcsec
RMS: 0.030 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:413669792
Time(ksec)

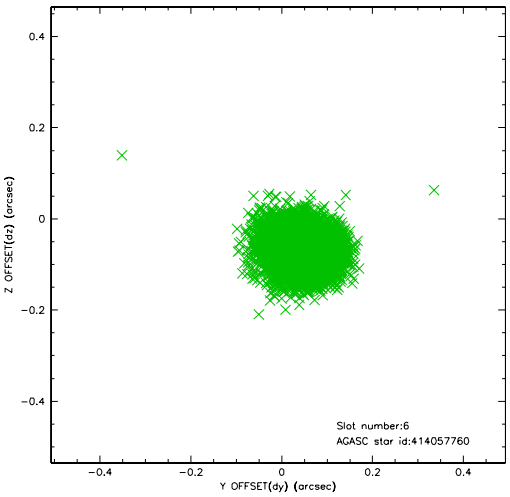
2.4.3 Slot 5

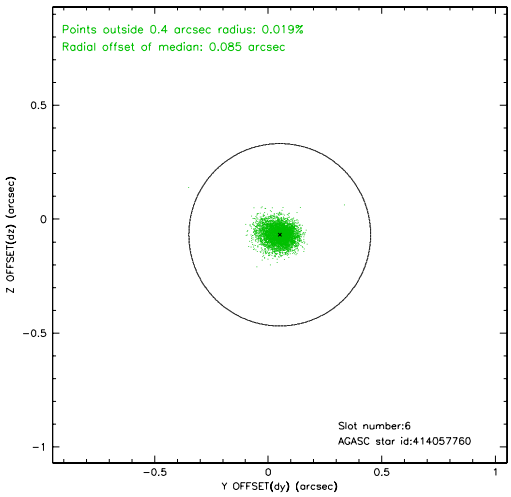

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:413543888

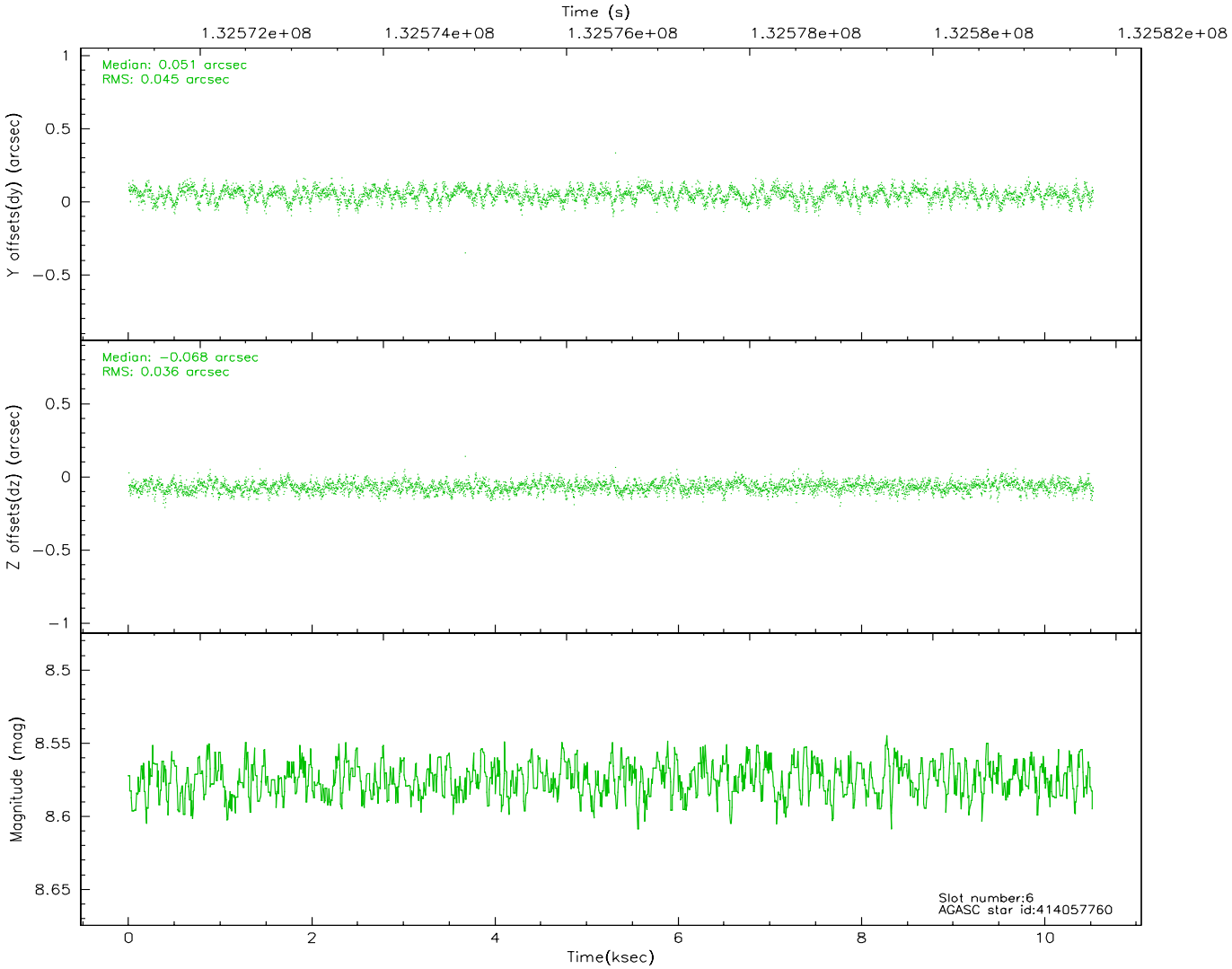

Points outside 0.4 arcsec radius: 0.019%
Radial offset of median: 0.093 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:413543888


Time (s)
1.32572e+08
1.32574e+08
1.32576e+08
1.32578e+08
1.3258e+08
1.32582e+08
Median: 0.088 arcsec
RMS: 0.043 arcsec
Y offsets(dy) (arcsec)
Median: −0.032 arcsec
RMS: 0.033 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:413543888
Time(ksec)

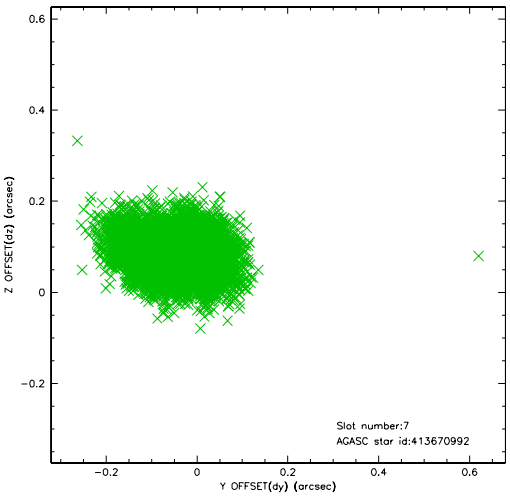
2.4.4 Slot 6

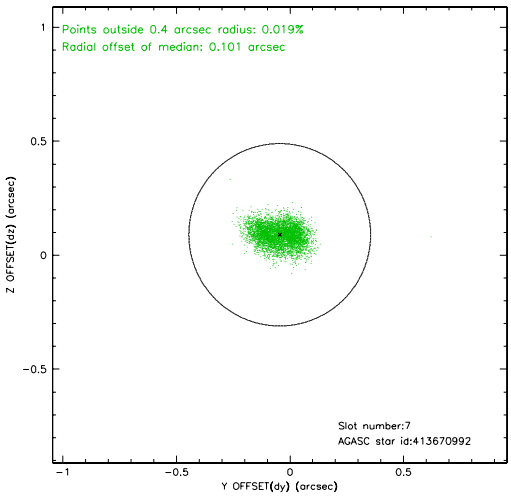

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:414057760

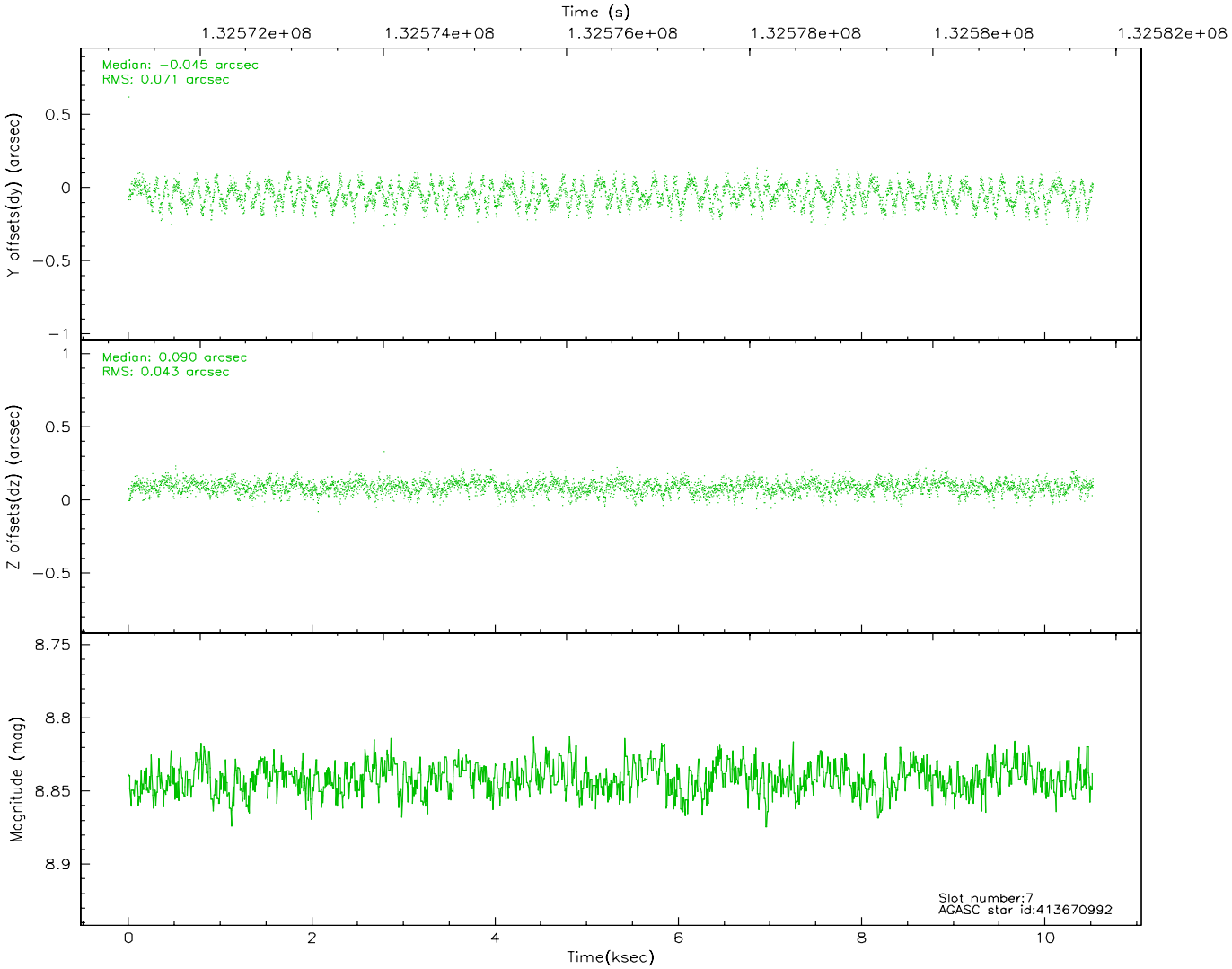

Points outside 0.4 arcsec radius: 0.019%
Radial offset of median: 0.085 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:414057760


Time (s)
1.32572e+08
1.32574e+08
1.32576e+08
1.32578e+08
1.3258e+08
1.32582e+08
Median: 0.051 arcsec
RMS: 0.045 arcsec
Y offsets(dy) (arcsec)
Median: −0.068 arcsec
RMS: 0.036 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:414057760
Time(ksec)

2.4.5 Slot 7

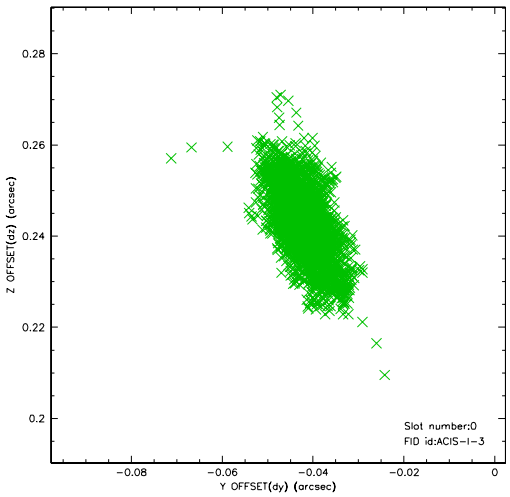

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:413670992

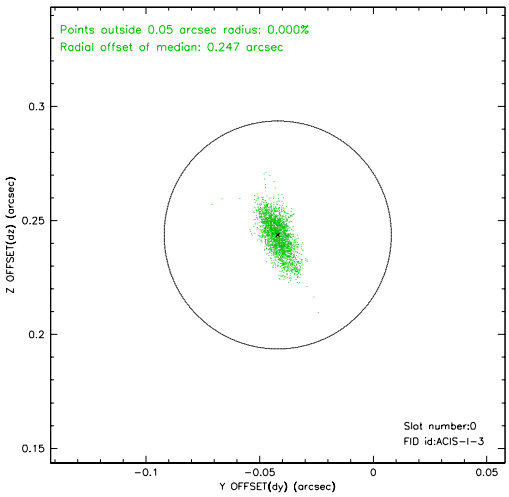

Points outside 0.4 arcsec radius: 0.019%
Radial offset of median: 0.101 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:413670992

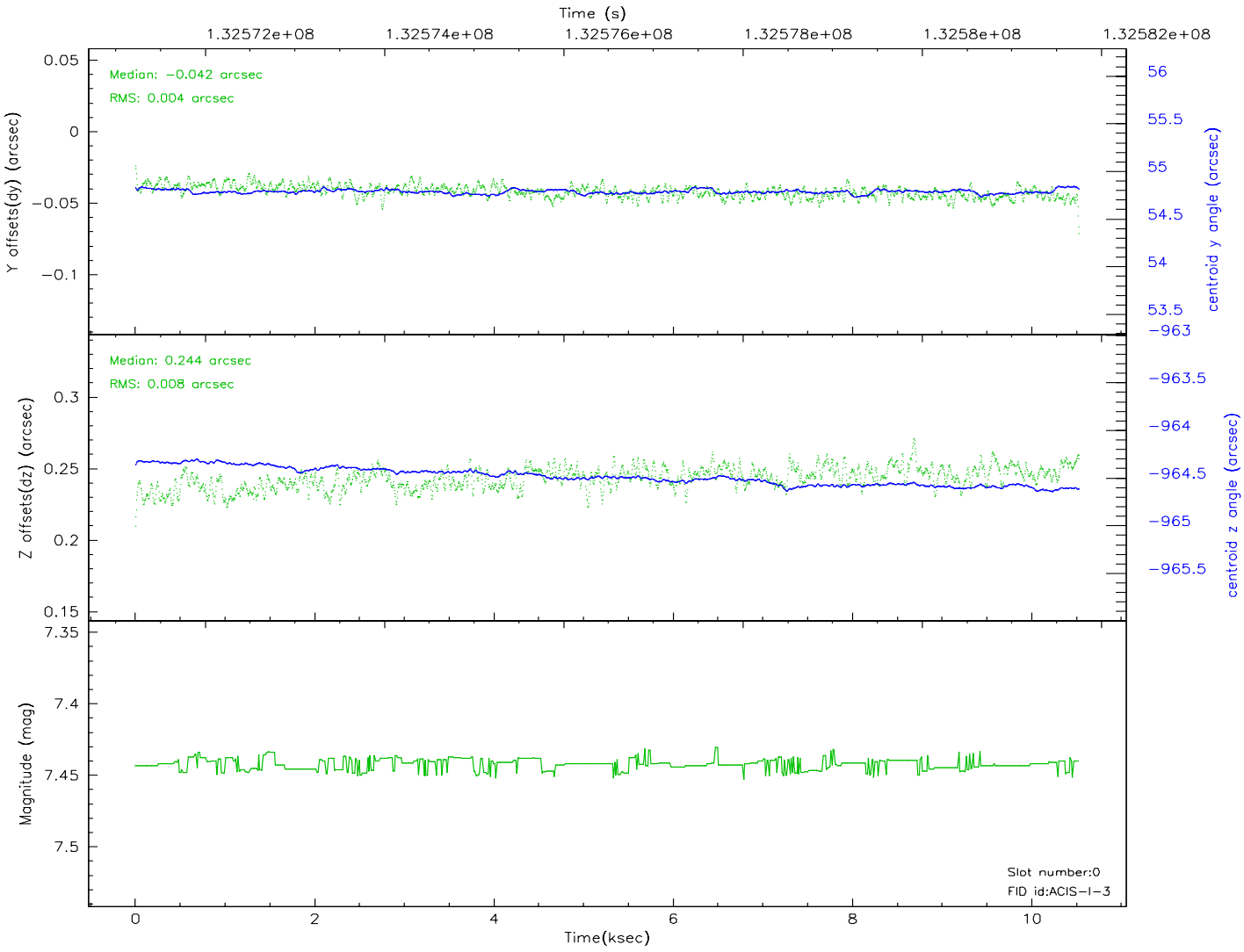

Time (s)
1.32572e+08
1.32574e+08
1.32576e+08
1.32578e+08
1.3258e+08
1.32582e+08
Median: −0.045 arcsec
RMS: 0.071 arcsec
Y offsets(dy) (arcsec)
Median: 0.090 arcsec
RMS: 0.043 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:413670992
Time(ksec)

2.5 FID Slots

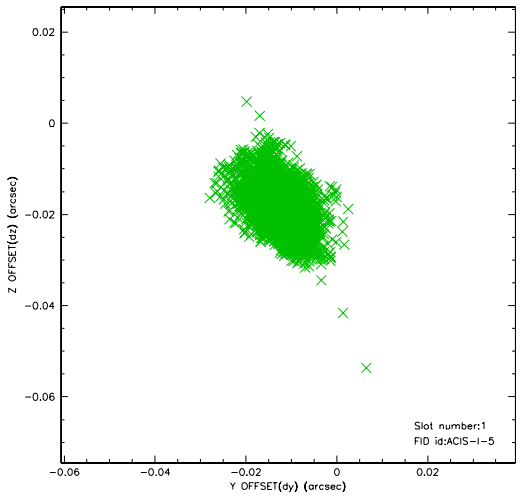
2.5.1 Slot 0

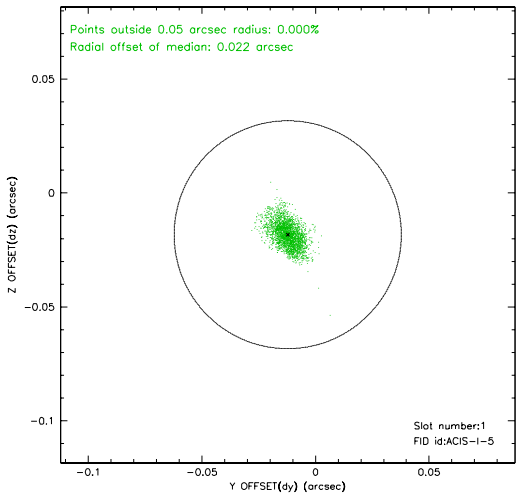






2.5.2 Slot 1


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: 0.022 arcsec
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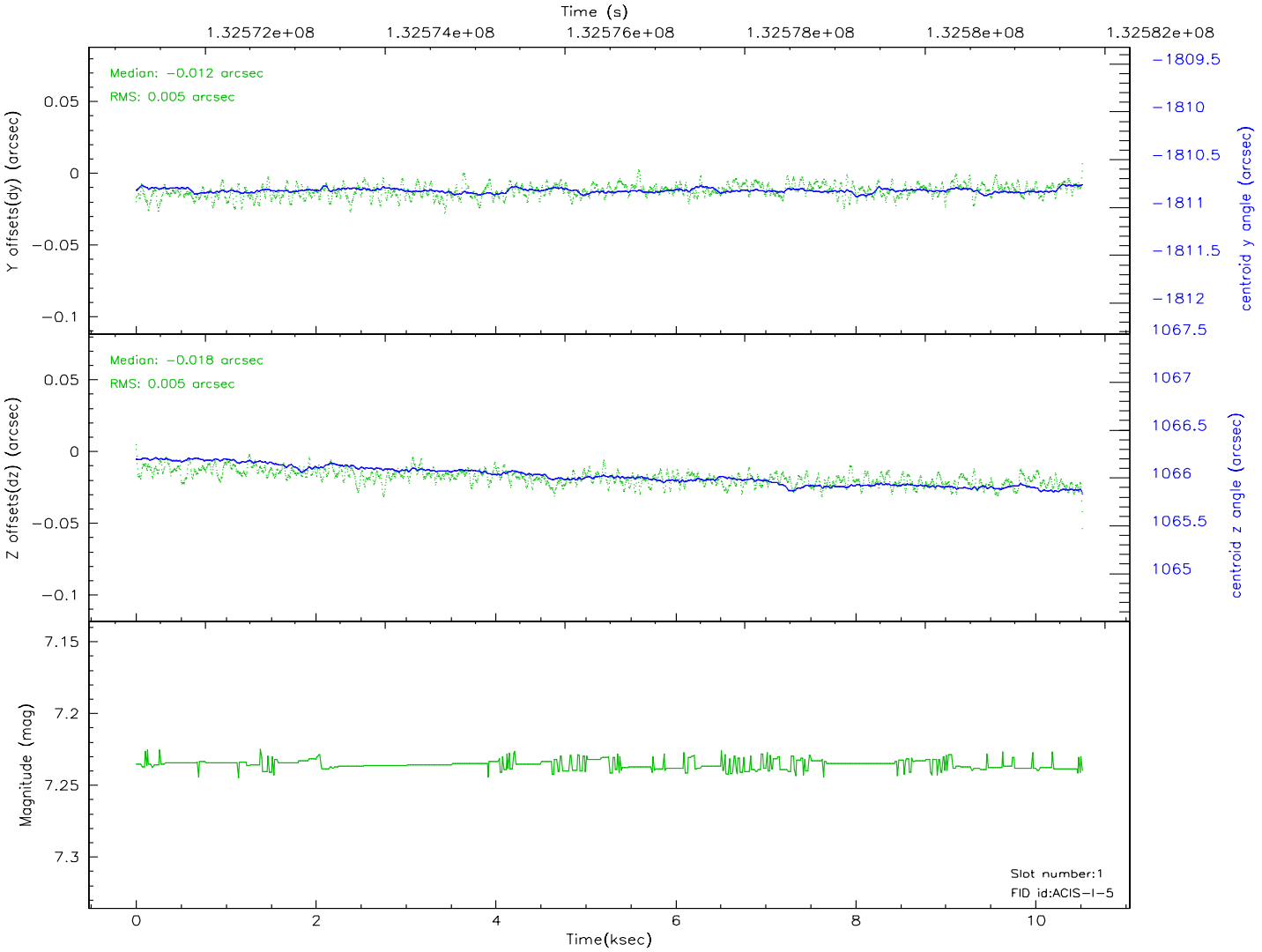
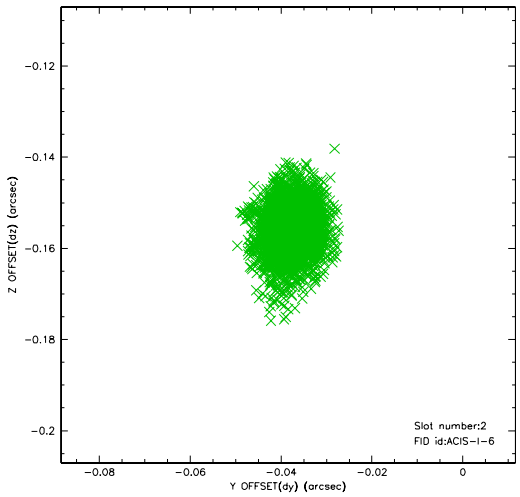
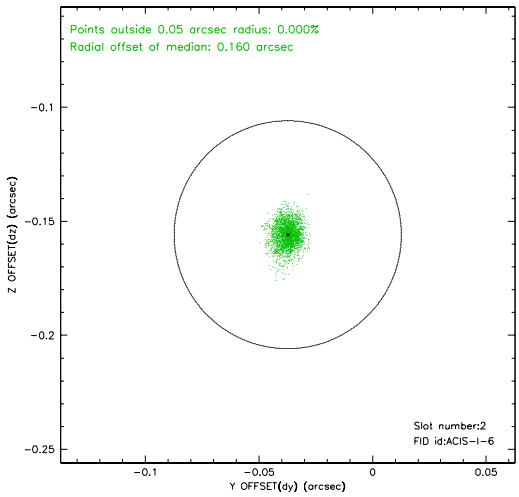
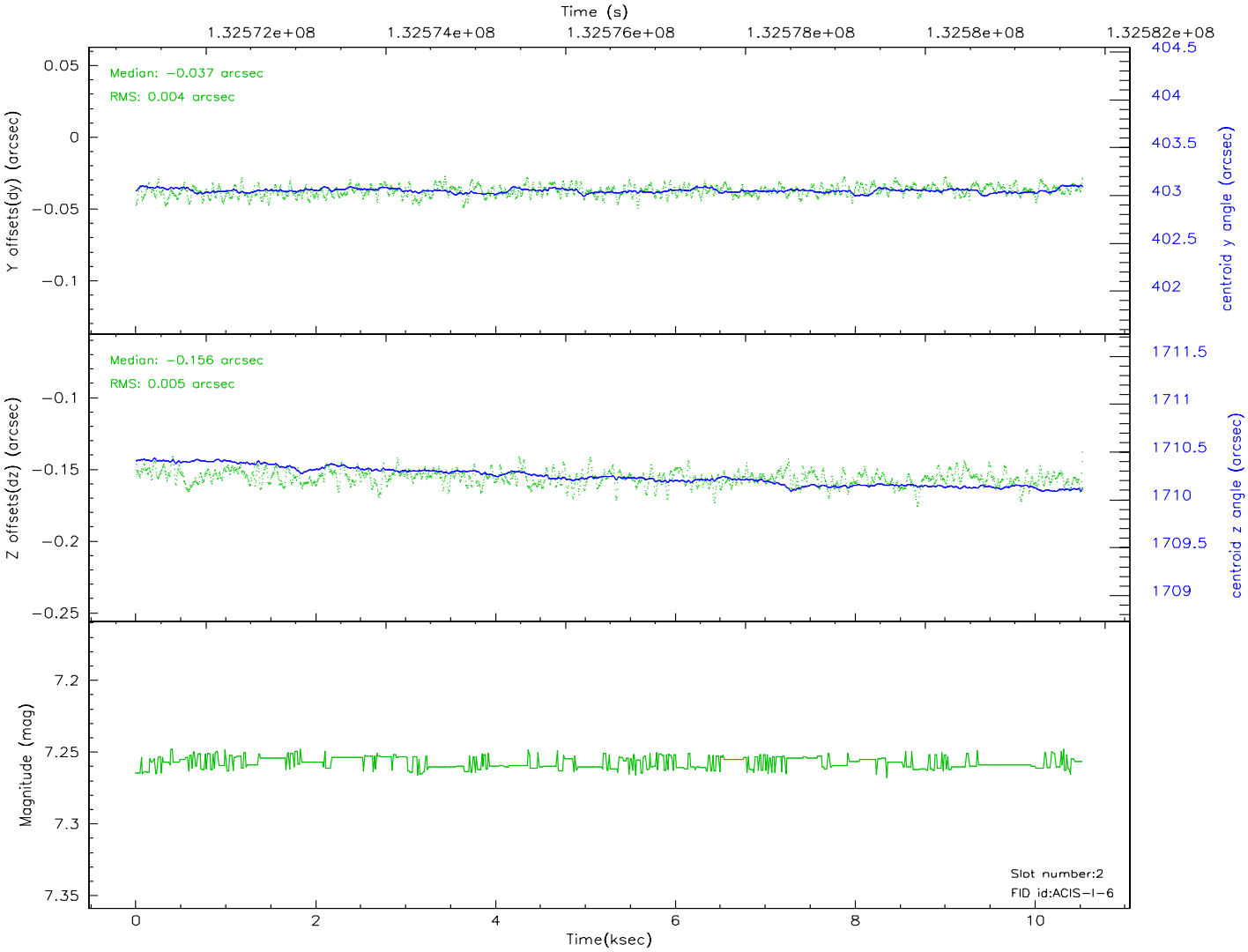
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-I-5


Time (s)
1.32572e+08
1.32574e+08
1.32576e+08
1.32578e+08
1.3258e+08
1.32582e+08
Median: −0.012 arcsec
RMS: 0.005 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.018 arcsec
RMS: 0.005 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:ACIS-I-5
Time(ksec)

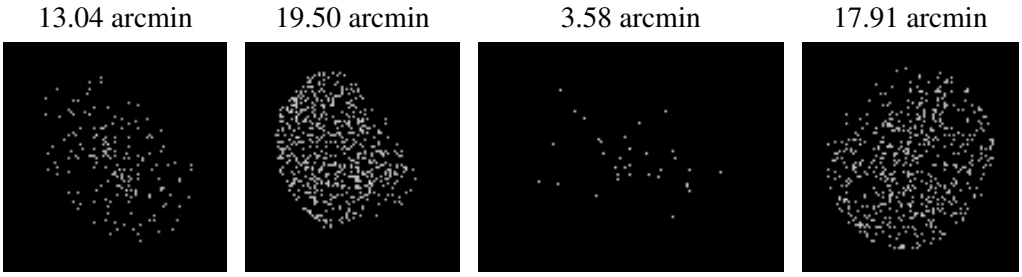
2.5.3 Slot 2


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


Time (s)
Median: −0.037 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.156 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)

3 Point Sources



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.09.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.564

A.2 Comments