V&V Reference Report
L2 ASCDS Version : 7.6.7.2

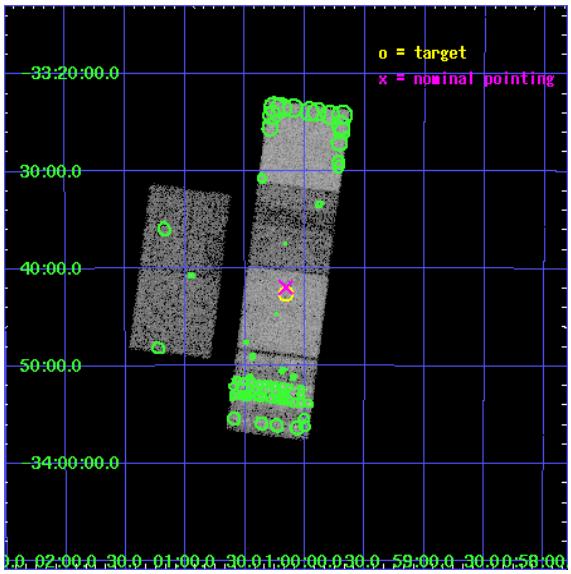
Observation 4705 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Apr 28 2006

Contents

1 Front

seq_num	600360
obs_id	4705
title	Using the Sculptor Dwarf Spheroidal Galaxy to Constrain X-ray Binary Production in Population II
observer	Dr. Thomas Maccarone
object	SCULPTOR DWARF SPHEROIDAL
dtycycle	0
cycle	P
ra_targ	15.039167
dec_targ	-33.708889
ra_nom	15.039748791852
dec_nom	-33.699226897518
roll_nom	97.341524369795
revision	2
ontime	5907.199977994
livetime	5832.3994549838
ontime2	5907.199977994
ontime3	5907.199977994
ontime5	5907.199977994
ontime6	5907.199977994
ontime7	5907.199977994
ontime8	5903.95910725
l2events	100045

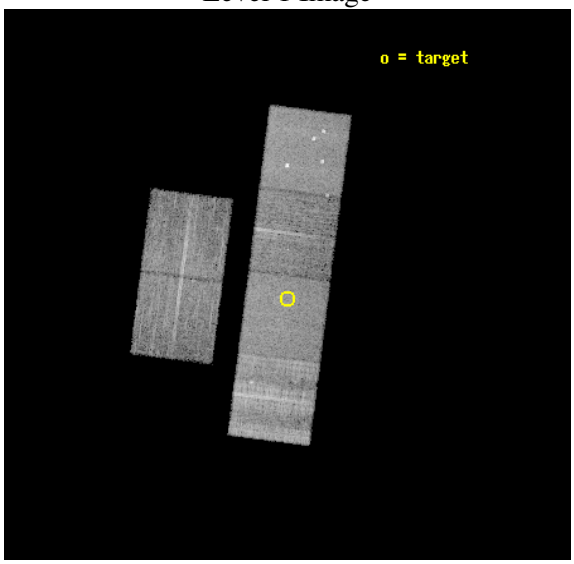


2 OBI

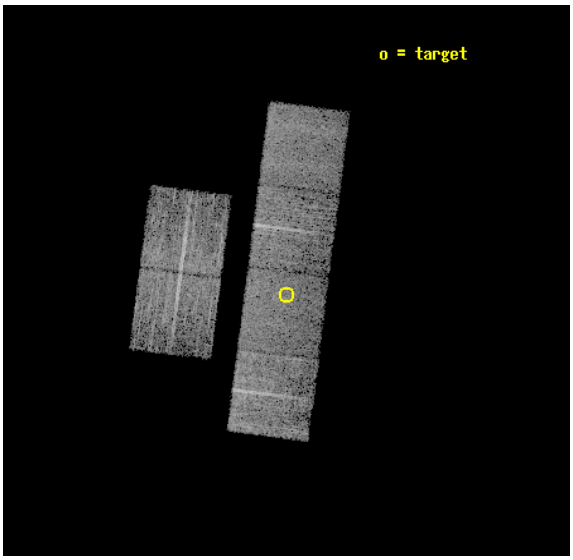
2.1 OBI

2.1.1 Images

Level 1 Image

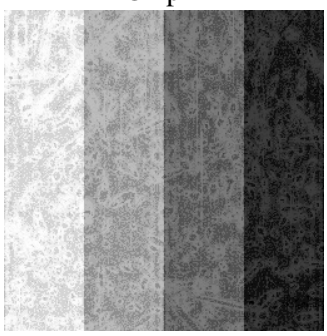


Level 1 Bad Events

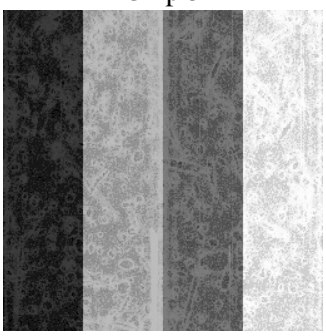


2.1.2 Bias

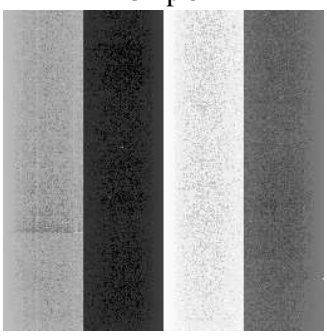
Chip 2



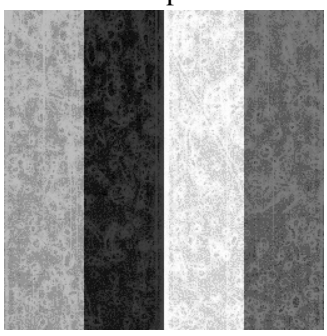
Chip 3



Chip 5



Chip 6



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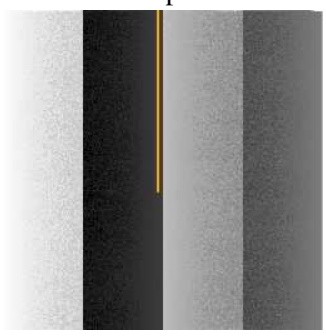

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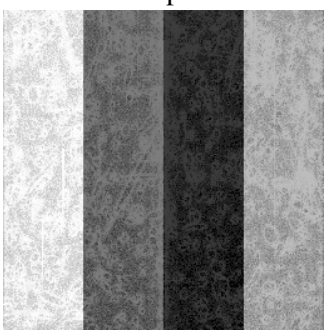


2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.2
caldbver	3.2.1
date	2006-04-28T06:23:24
revision	2

sched_exp_time	5953.000000
ontime	5914.8374529779
ontime2	5914.8374330401
ontime3	5914.8374330401
ontime5	5914.8374529779
ontime6	5914.8374330401
ontime7	5914.8374529779
ontime8	5911.5965622962
l1events	356626

2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	49130	47825	69044	47828	59971	82828
rejected events	39851	38214	35858	37661	34054	43428
rejected %	81%	79%	51%	78%	56%	52%

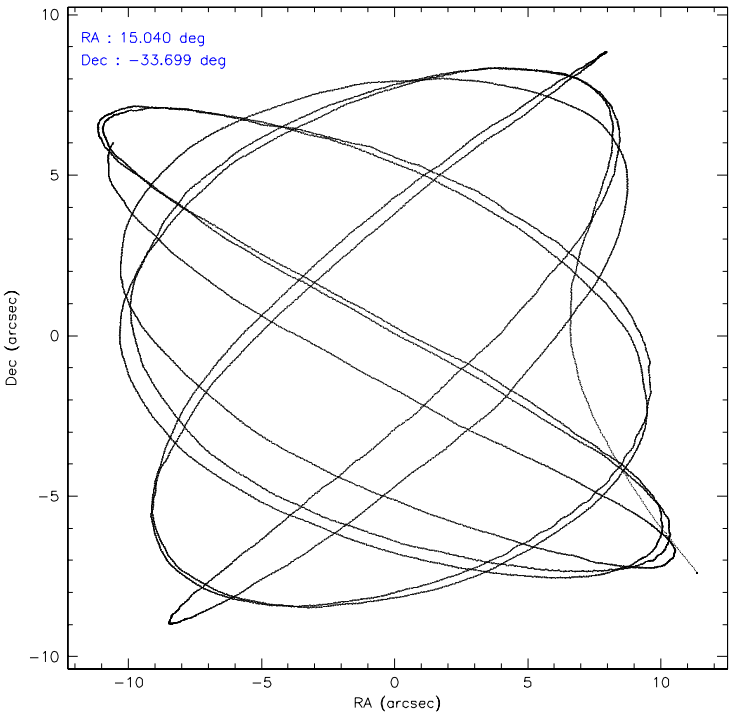
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	4479	4369	4566	4663	2127	15621
	9%	9%	6%	9%	3%	18%
grade 1 events	33	39	154	25	46	115
	0%	0%	0%	0%	0%	0%
grade 2 events	2039	2541	10229	2879	6512	5641
	4%	5%	14%	6%	10%	6%
grade 3 events	486	549	1054	507	1464	6238
	0%	1%	1%	1%	2%	7%
grade 4 events	663	510	962	530	1431	5700
	1%	1%	1%	1%	2%	6%
grade 5 events	1620	1702	3076	1749	3543	2475
	3%	3%	4%	3%	5%	2%
grade 6 events	1617	1648	16410	1594	14412	6224
	3%	3%	23%	3%	24%	7%
grade 7 events	38193	36467	32593	35881	30436	40814
	77%	76%	47%	75%	50%	49%

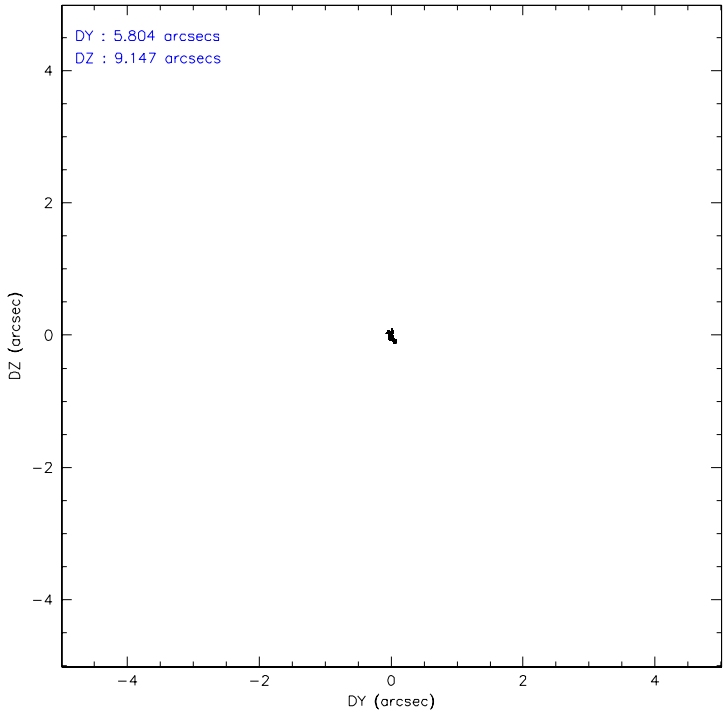
2.2 Compared Parameters

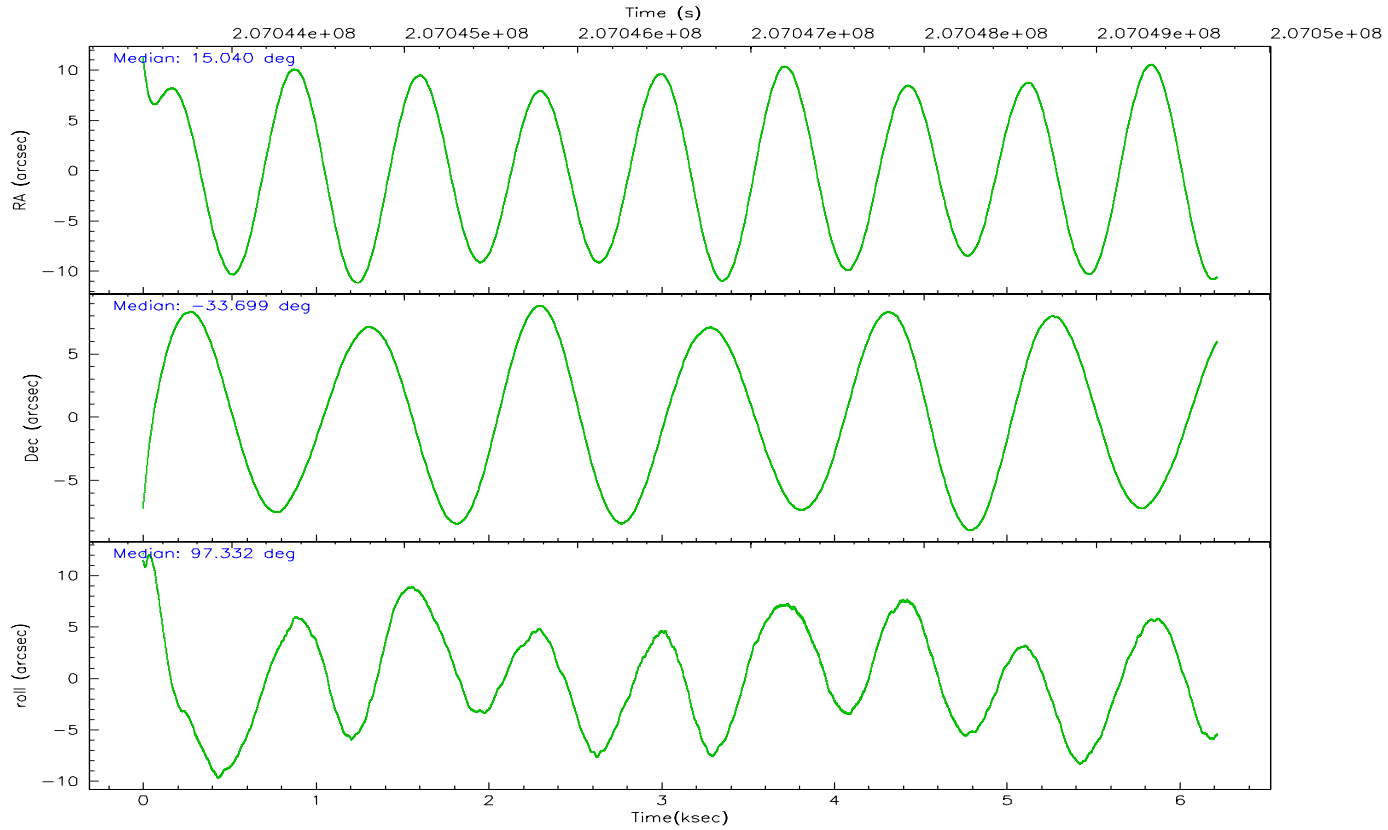
Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
Pointing RA	15.059936	15.03974879185214
Pointing Dec	-33.720648	-33.69922689751846
Pointing Roll	97.196099	97.34152436979454
SIM focus pos (mm)	-0.684267	-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	207043750.184000	207042747.34089
Observation start date	2004-07-24T08:08:06	2004-07-24T07:52:27
Observation end time	207049703.184000	207050557.32874
Observation end date	2004-07-24T09:47:19	2004-07-24T10:02:37
Read mode	TIMED	TIMED

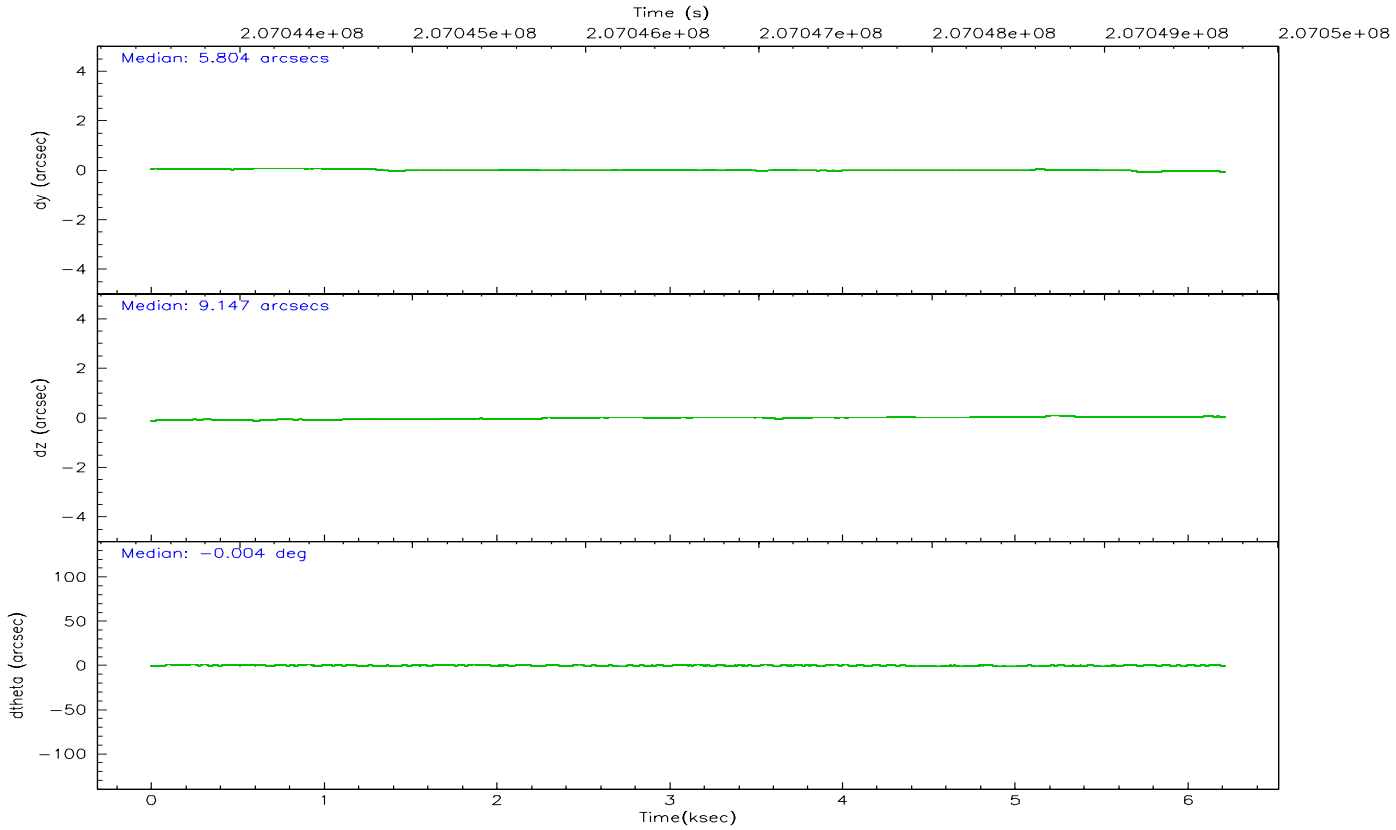
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
Primary exposure time	0.000000	3.2

2.3 Aspect


RA : 15.040 deg
Dec : −33.699 deg
Dec (arcsec)
RA (arcsec)
10
5
0
−5
−10
−10
−5
0
5
10


DY : 5.804 arcsecs
DZ : 9.147 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
2.07044e+08
2.07045e+08
2.07046e+08
2.07047e+08
2.07048e+08
2.07049e+08
2.0705e+08
Median: 15.040 deg
RA (arcsec)
Median: −33.699 deg
Dec (arcsec)
Median: 97.332 deg
roll (arcsec)
Time(ksec)

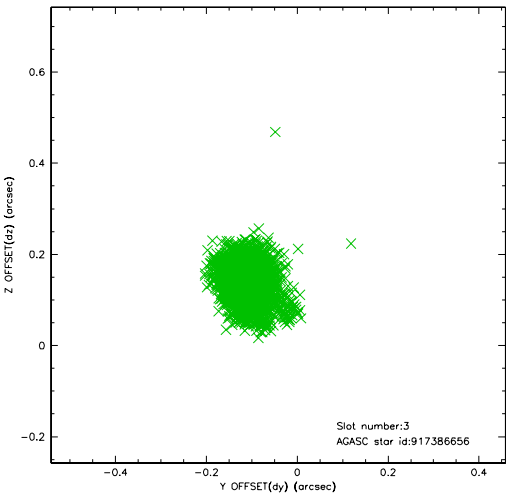

Time (s)
2.07044e+08
2.07045e+08
2.07046e+08
2.07047e+08
2.07048e+08
2.07049e+08
2.0705e+08
Median: 5.804 arcsecs
dy (arcsec)
Median: 9.147 arcsecs
dz (arcsec)
Median: −0.004 deg
dtheta (arcsec)
Time(ksec)

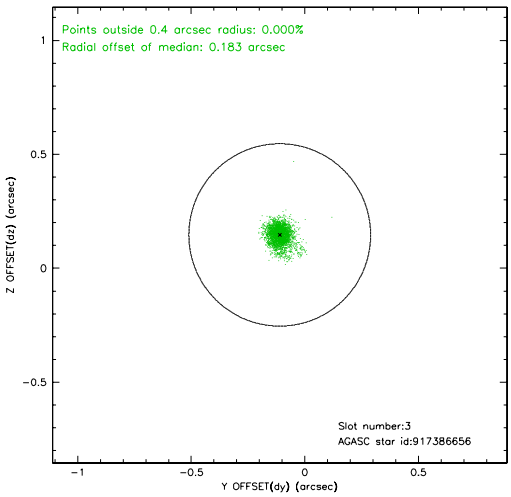
Slot Statistics

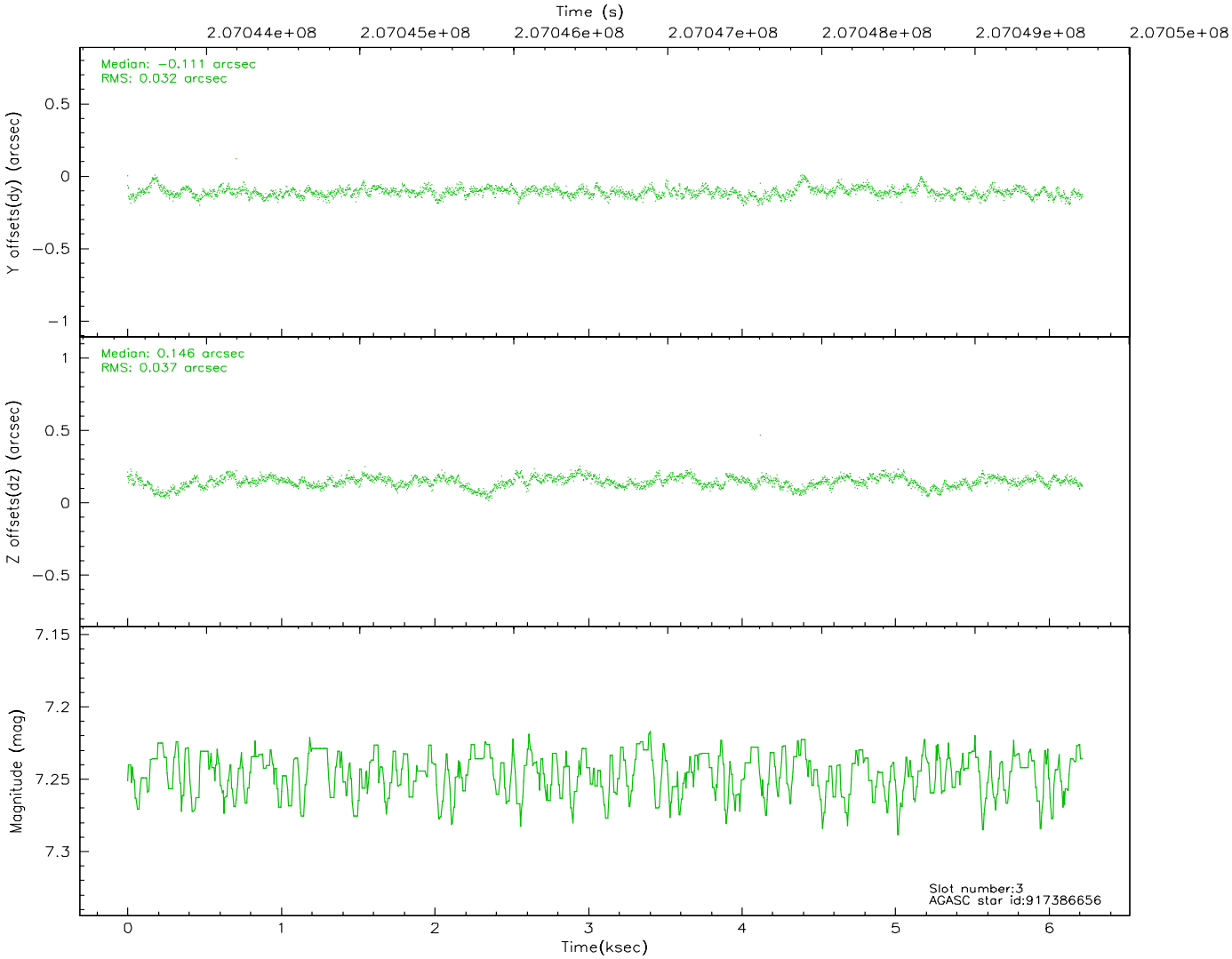
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	1517	0.002	0.026	0.006	0.011	0.000000	0.000000	937.48	-1725.98
1	FID	ACIS-S-5	7.23	1517	-0.050	0.007	0.006	0.011	0.000000	0.000000	-1811.00	170.64
2	FID	ACIS-S-6	7.35	1517	0.026	-0.023	0.007	0.013	0.000000	0.000000	402.08	815.60
3	GUIDE	917386656	7.24	3034	-0.111	0.146	0.049	0.087	15.342124	-33.359890	1181.35	-1003.80
4	GUIDE	917389080	10.15	3032	-0.042	0.104	0.125	0.210	15.722484	-33.662555	-46.67	-1994.94
5	GUIDE	917389288	9.57	3028	-0.104	0.198	0.114	0.183	15.394706	-33.185862	1782.29	-1241.51
6	GUIDE	917650528	8.73	3032	0.093	-0.355	0.070	0.117	14.274554	-33.869842	-247.25	2396.94
7	GUIDE	917651048	9.65	3026	0.170	-0.084	0.103	0.169	14.655628	-34.424089	-2364.44	1509.35

2.4 Star Slots

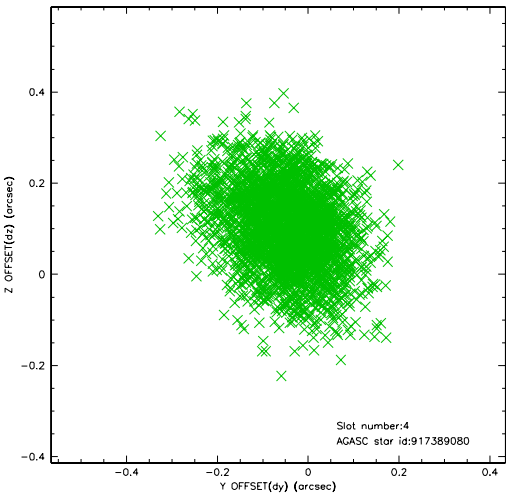
2.4.1 Slot 3

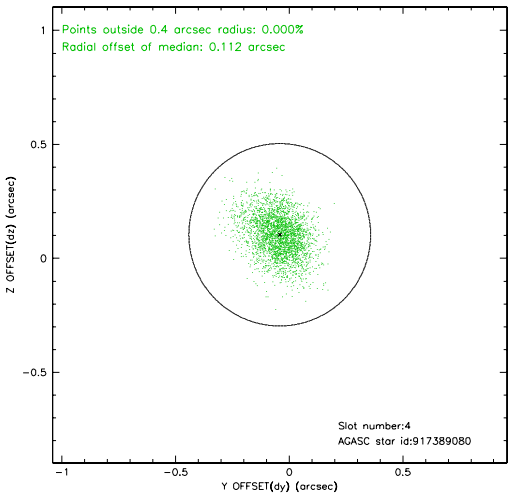


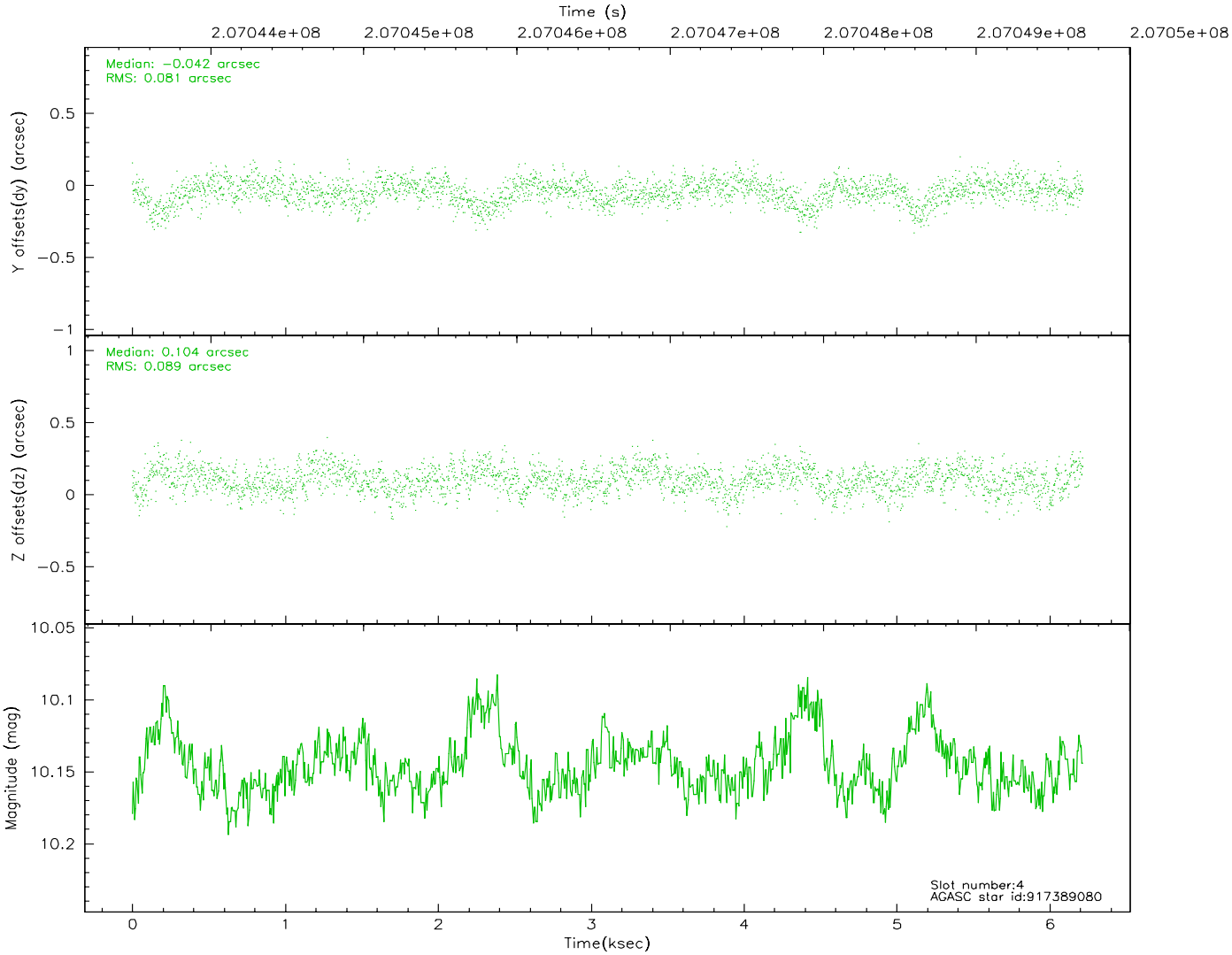




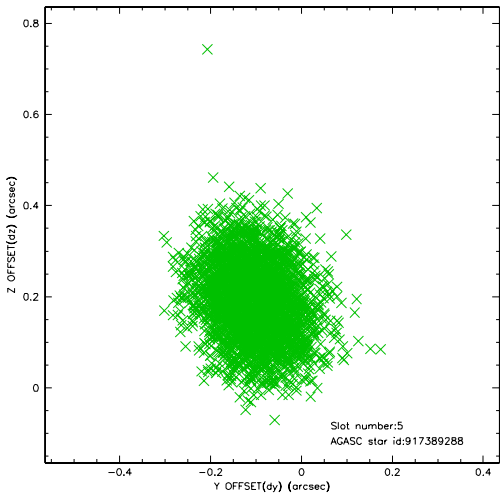
2.4.2 Slot 4

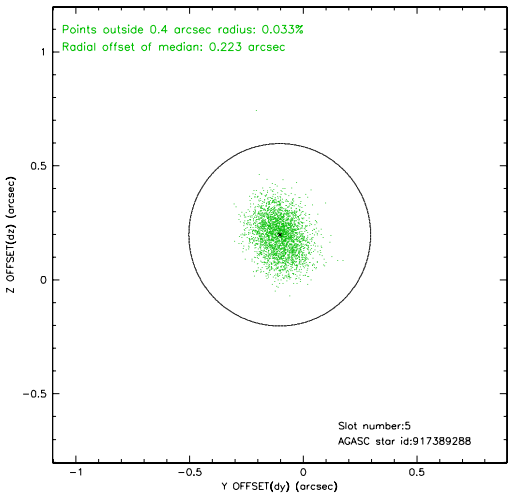

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:917389080

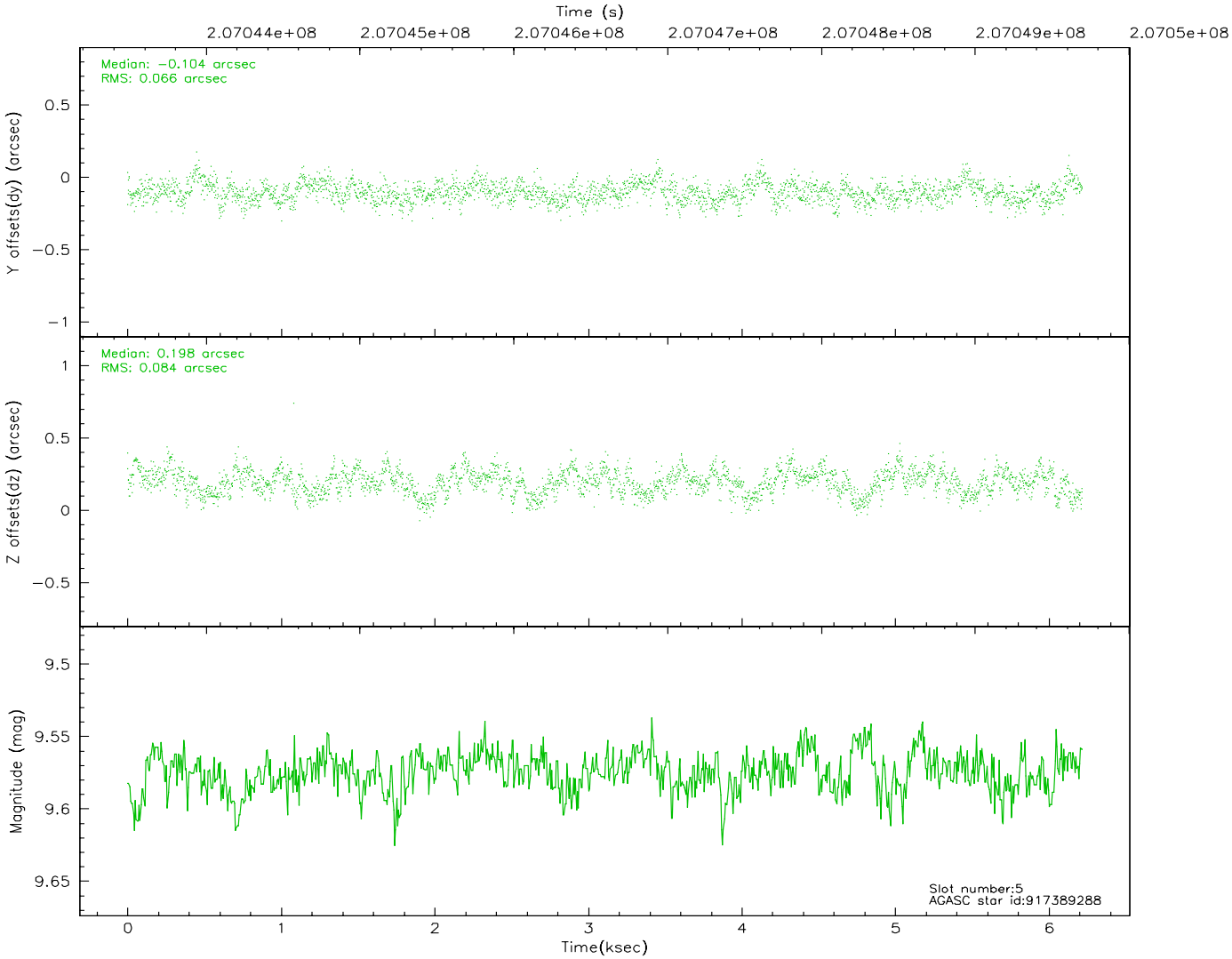

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.112 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:917389080


Time (s)
Median: −0.042 arcsec
RMS: 0.081 arcsec
Y offsets(dy) (arcsec)
Median: 0.104 arcsec
RMS: 0.089 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:917389080
Time(ksec)

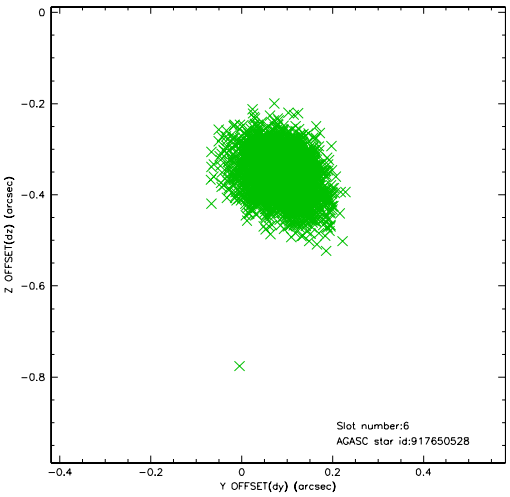
2.4.3 Slot 5

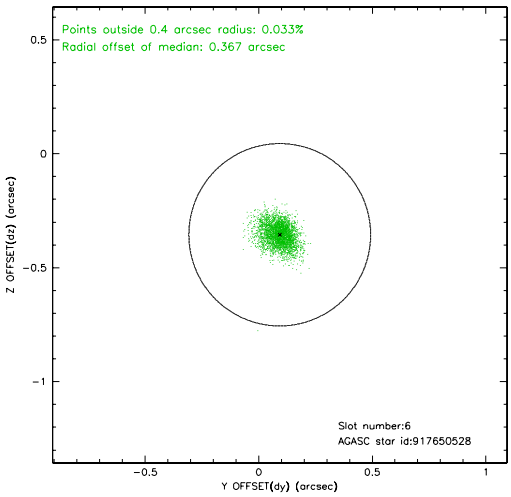

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:917389288

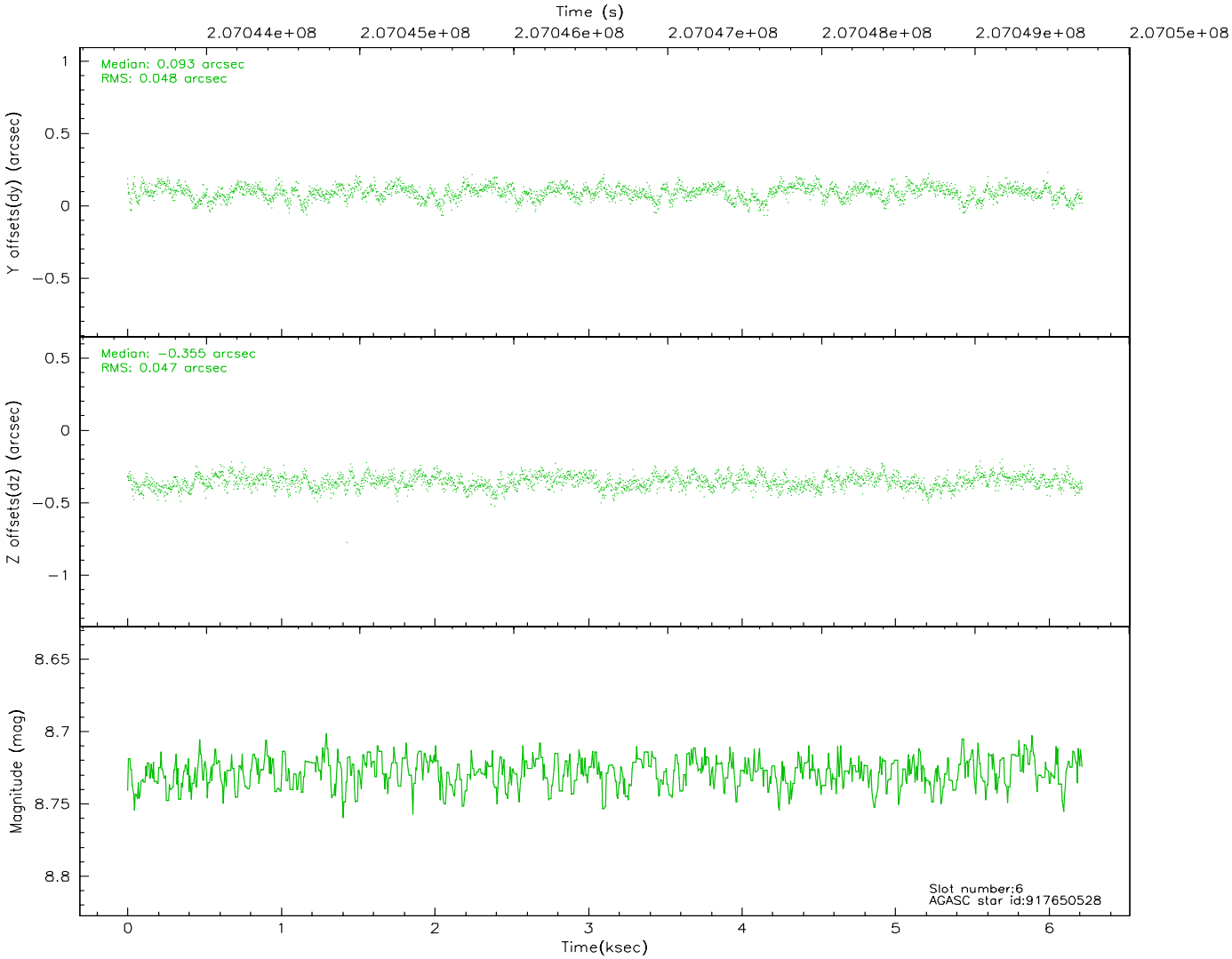

Points outside 0.4 arcsec radius: 0.033%
Radial offset of median: 0.223 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:917389288


Time (s)
Median: −0.104 arcsec
RMS: 0.066 arcsec
Y offsets(dy) (arcsec)
Median: 0.198 arcsec
RMS: 0.084 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:917389288
Time(ksec)

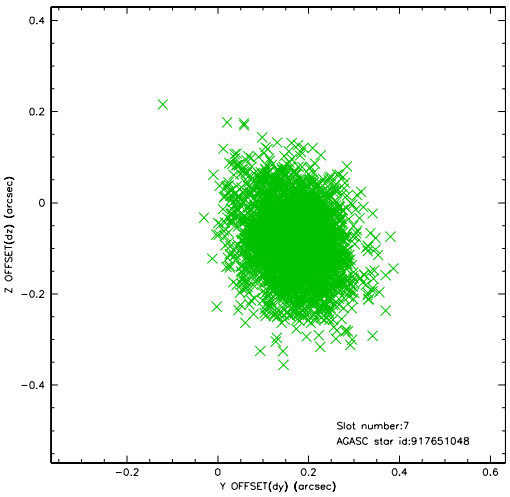
2.4.4 Slot 6

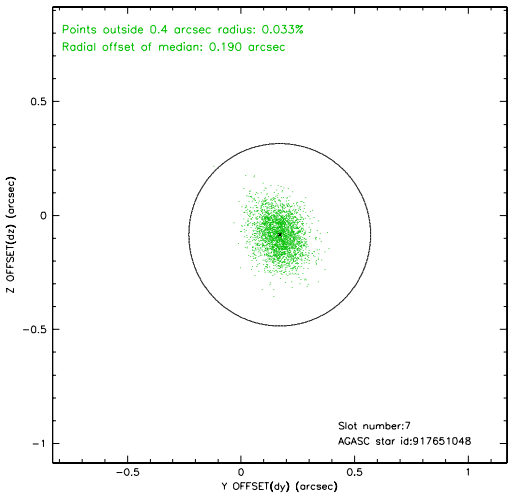

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:917650528

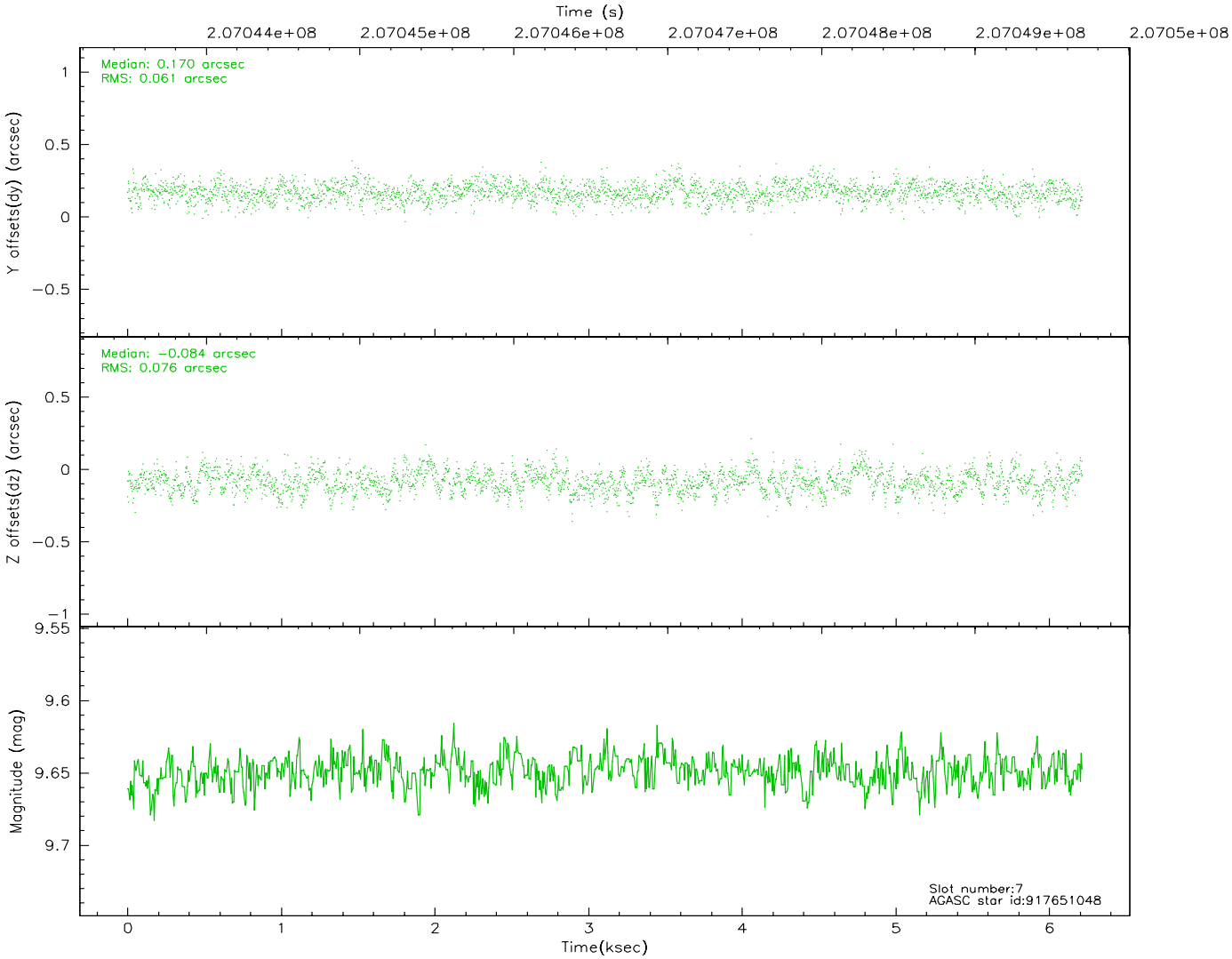

Points outside 0.4 arcsec radius: 0.033%
Radial offset of median: 0.367 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:917650528


Time (s)
2.07044e+08
2.07045e+08
2.07046e+08
2.07047e+08
2.07048e+08
2.07049e+08
2.0705e+08
Median: 0.093 arcsec
RMS: 0.048 arcsec
Y offsets(dy) (arcsec)
Median: −0.355 arcsec
RMS: 0.047 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:917650528
Time(ksec)

2.4.5 Slot 7

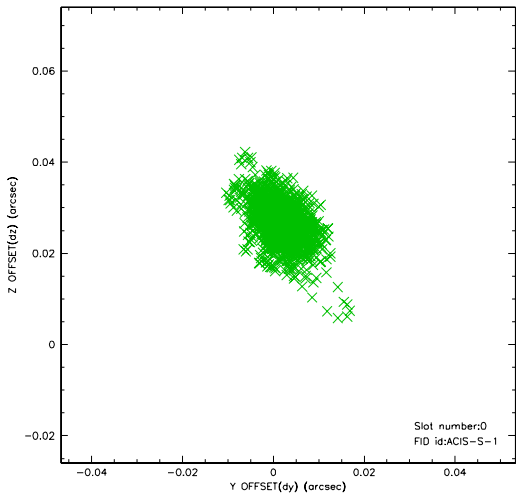

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:917651048

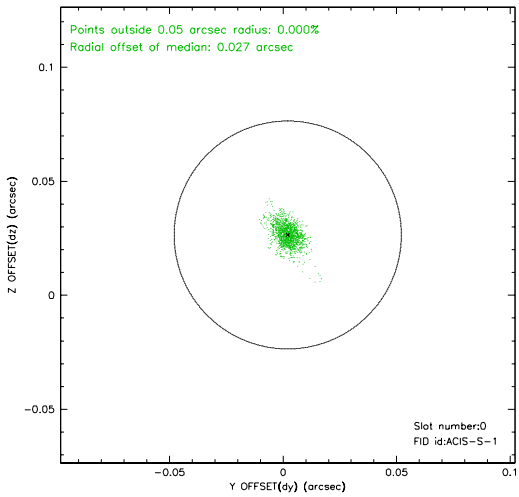

Points outside 0.4 arcsec radius: 0.033%
Radial offset of median: 0.190 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:917651048

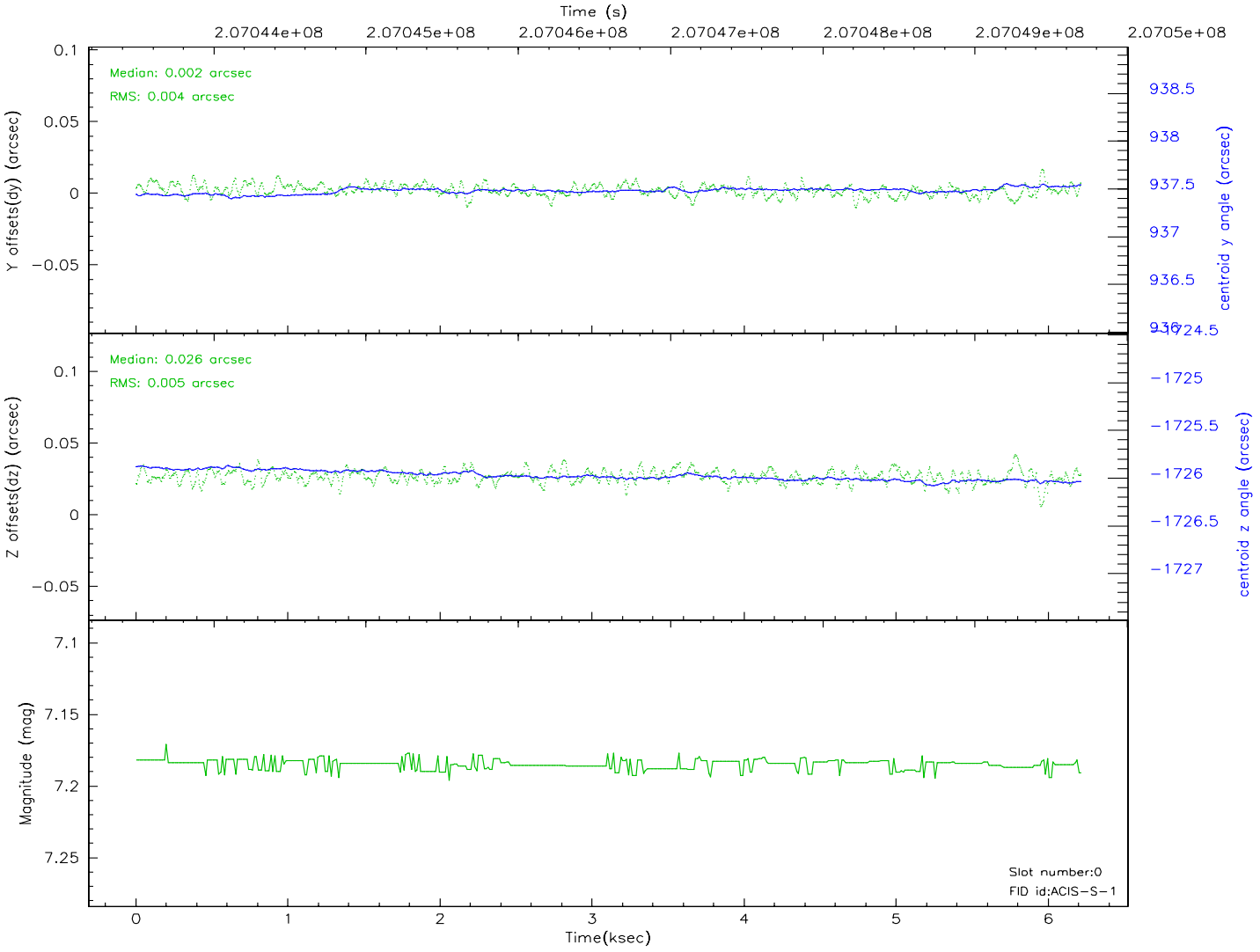

Time (s)
Median: 0.170 arcsec
RMS: 0.061 arcsec
Y offsets(dy) (arcsec)
Median: −0.084 arcsec
RMS: 0.076 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:917651048
Time(ksec)

2.5 FID Slots

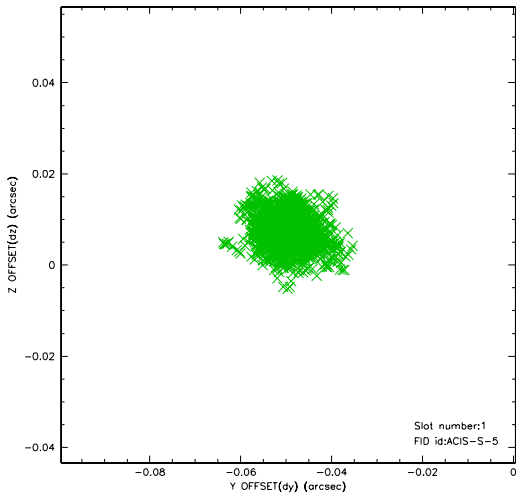
2.5.1 Slot 0

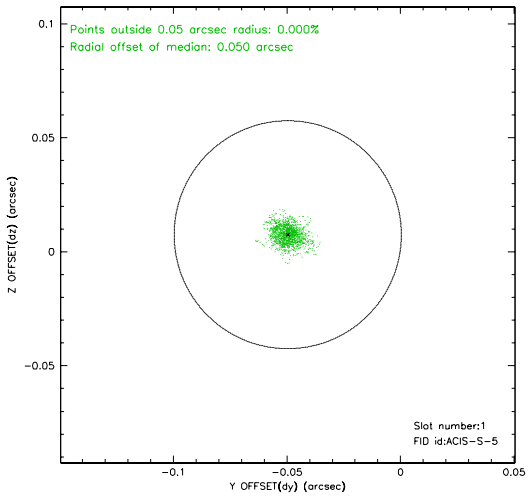


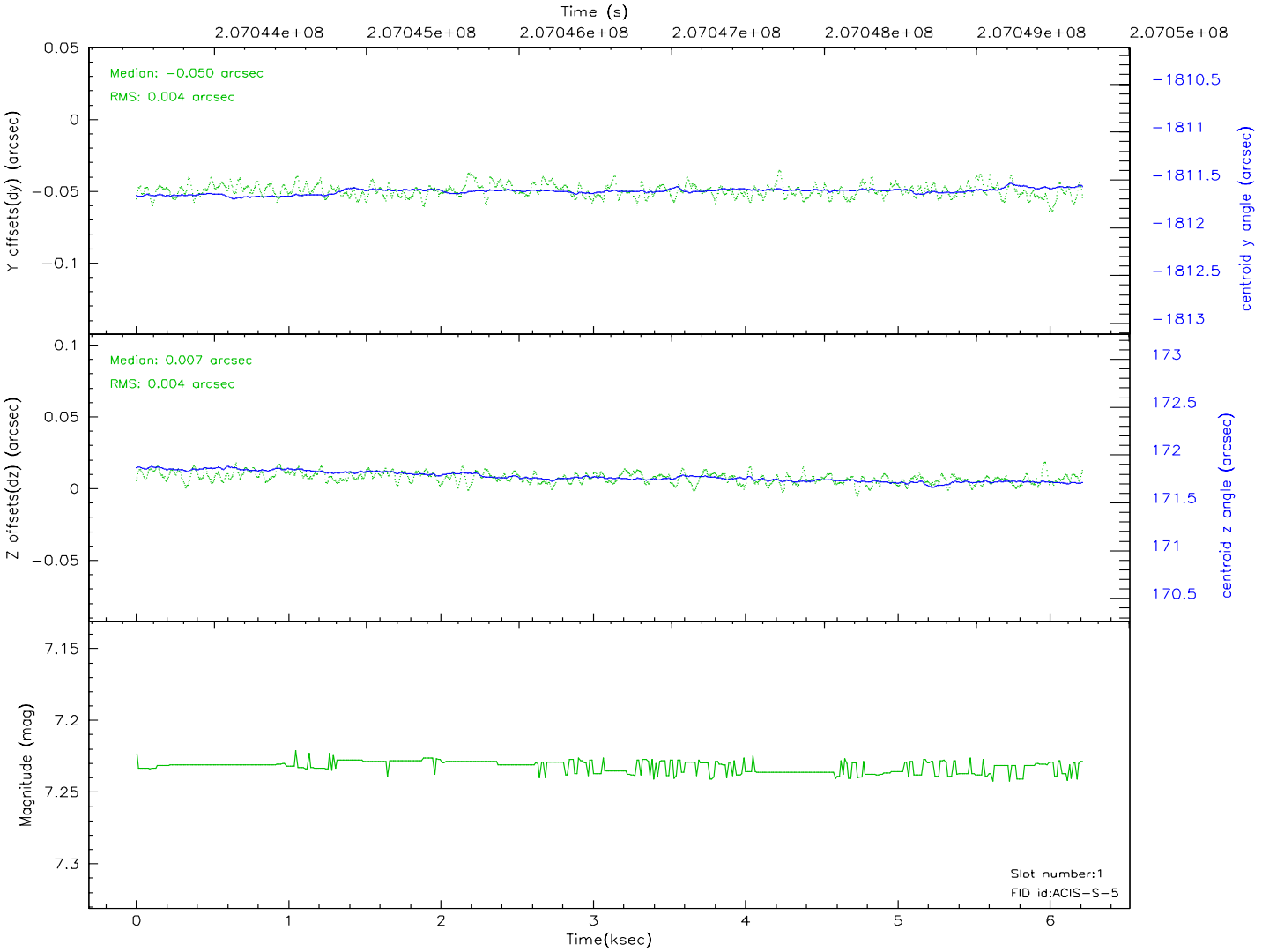




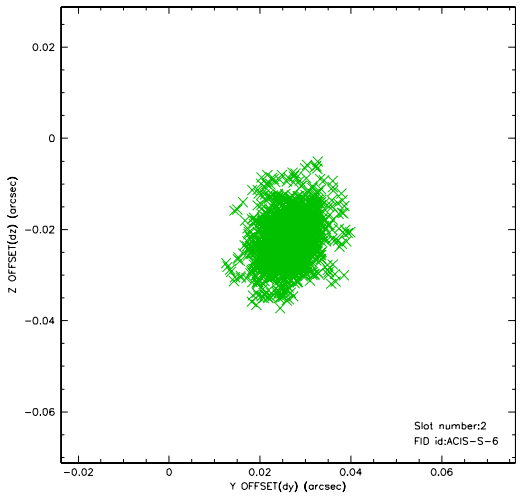
2.5.2 Slot 1

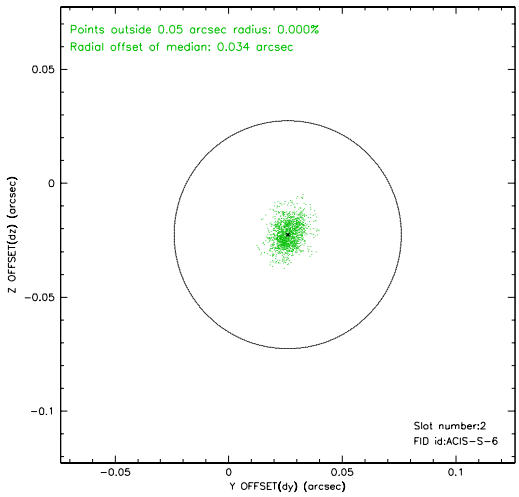

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-S-5

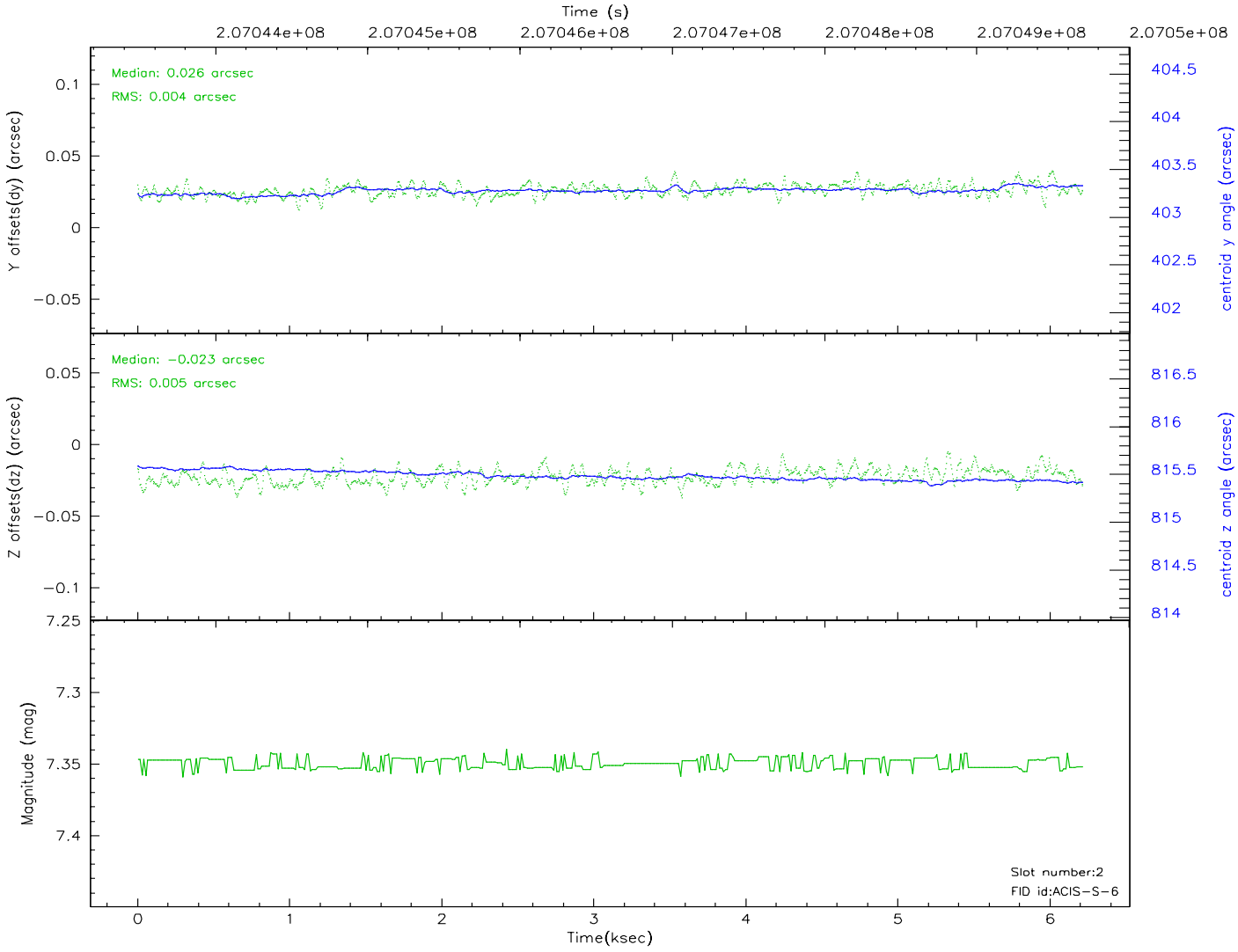

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.050 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-S-5


Time (s)
Median: −0.050 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: 0.007 arcsec
RMS: 0.004 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:ACIS-S-5
Time(ksec)

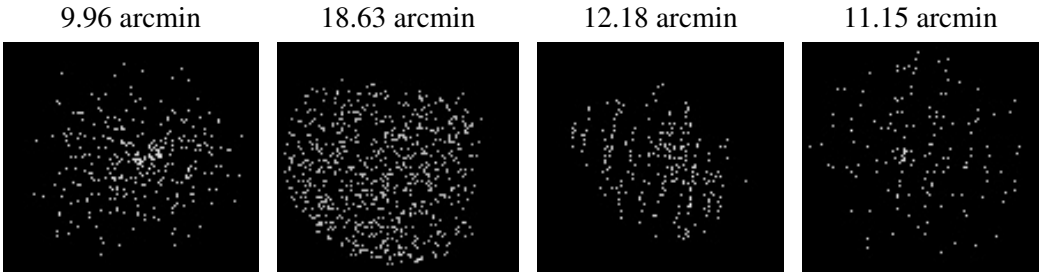
2.5.3 Slot 2


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


Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.034 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:ACIS-S-6


Time (s)
Median: 0.026 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.023 arcsec
RMS: 0.005 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:ACIS-S-6
Time(ksec)

3 Point Sources



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.907

A.2 Comments

```
Monitor constraint met.
```