V&V Reference Report
L2 ASCDS Version : 7.6.7.2

Observation 5345 - L2 Version 001
### Chandra X-Ray Center

L2 Processing Date : Apr 26 2006

Contents

1 Front

seq_num	290442
obs_id	5345
title	Monitoring the health of the HRC UV Ion shield
observer	Dr. CXC Calibration
object	Vega
ra_targ	279.235
dec_targ	38.783778
ra_nom	278.89932993104
dec_nom	38.570363199537
roll_nom	219.36179903363
revision	2
ontime	3287.4313961864
livetime	1122.6824407186
l2events	503294

2 OBI

2.1 OBI

2.1.1 Images
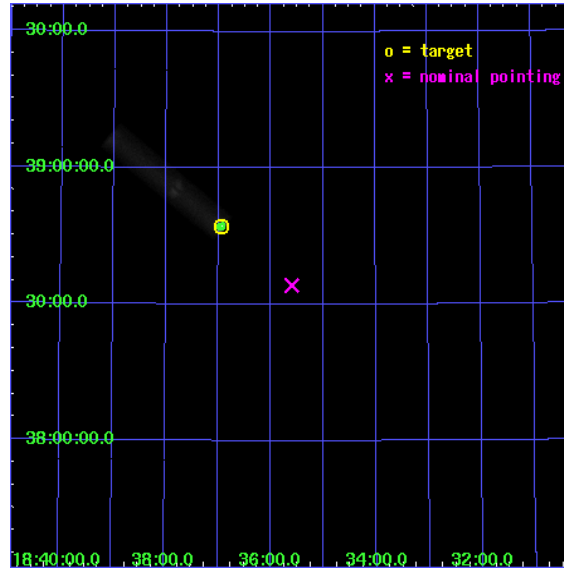
Level 1 Image   Level 1 Bad Events
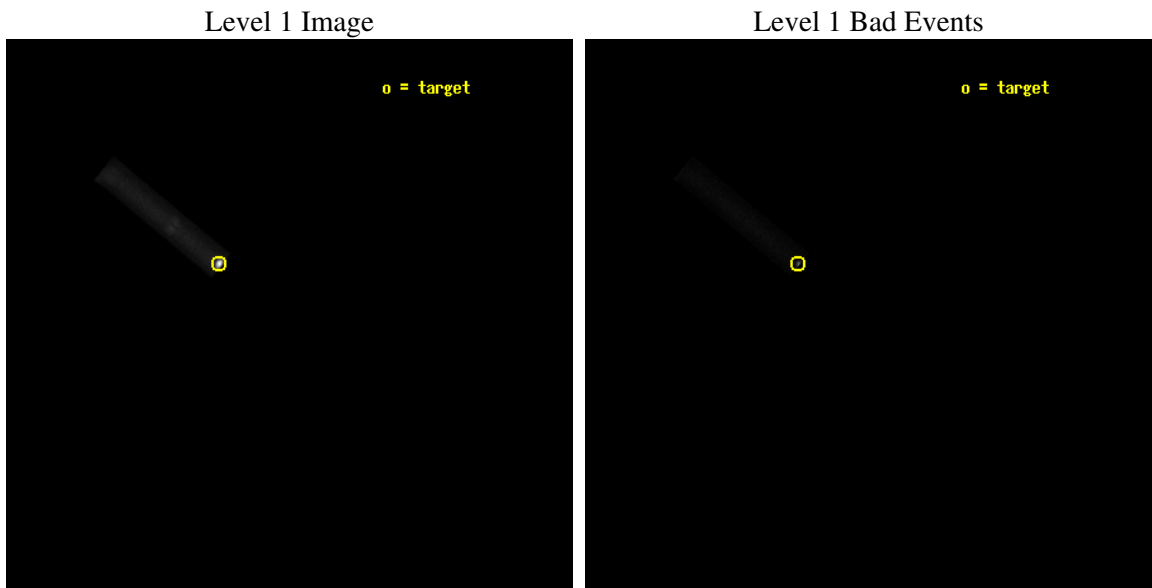
2.1.2 Parameters

obi_num	2
ascdsver	7.6.7.2
caldbver	3.2.1
date	2006-04-26T13:54:02
revision	2

sched_exp_time	3100.000000
ontime	3288.2001462281
l1events	698913

2.1.3 Events

Level 1 Events

	segment 1	segment 2	segment 3
level 1 events	698857	56	0
rejected events	102176	24	0
rejected %	14%	42%	0%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	278.910509	278.8993299310403
Pointing Dec	38.597522	38.57036319953661
Pointing Roll	219.287476	219.361799033628
Window start time	207705664.184000	207705664.184000
Window stop time	210384004.184000	210384004.184000
SIM focus pos (mm)	-1.429586	-1.428180813131781
SIM defocus (mm)	0.1037507710433287	0.1051558262725154
SIM translation stage pos (mm)	250.455976	250.466033080201
SIM translation stage offset (mm)	0	-0.01005468664627074
Observation start time	208100573.184000	208100197.35041
Observation start date	2004-08-05T13:41:49	2004-08-05T13:36:37
Observation end time	208103673.184000	208104413.17559
Observation end date	2004-08-05T14:33:29	2004-08-05T14:46:53

Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3   Aspect

RA : 278.899 deg
Dec : 38.570 deg

DY : 7.303 arcsecs
DZ : 10.754 arcsecs

7
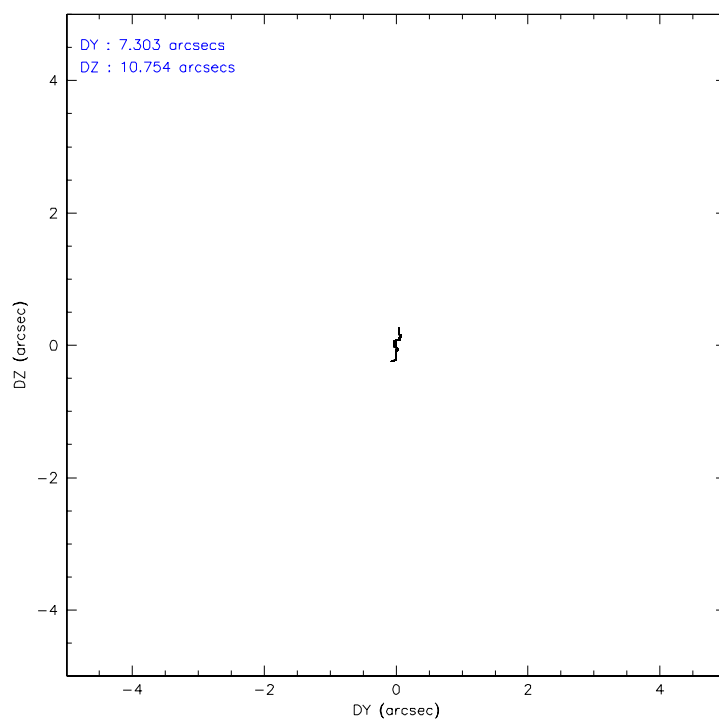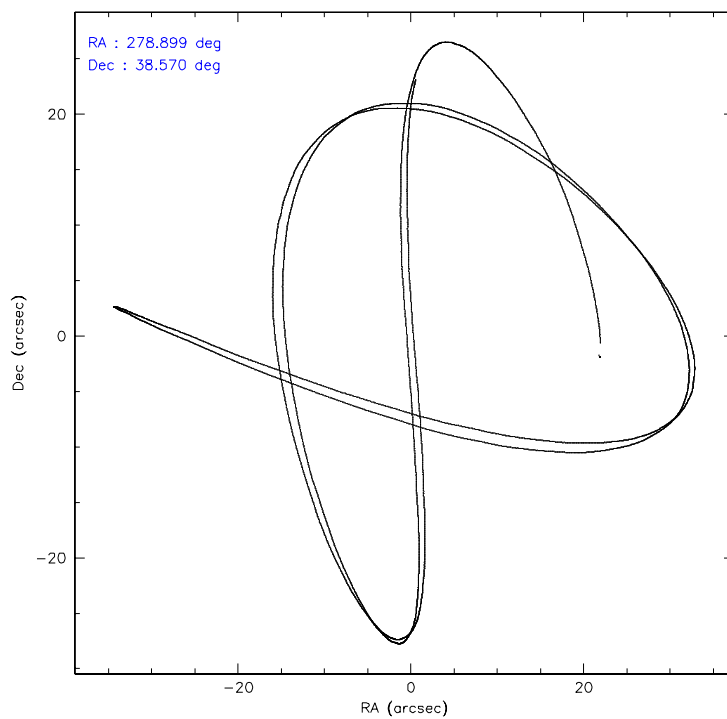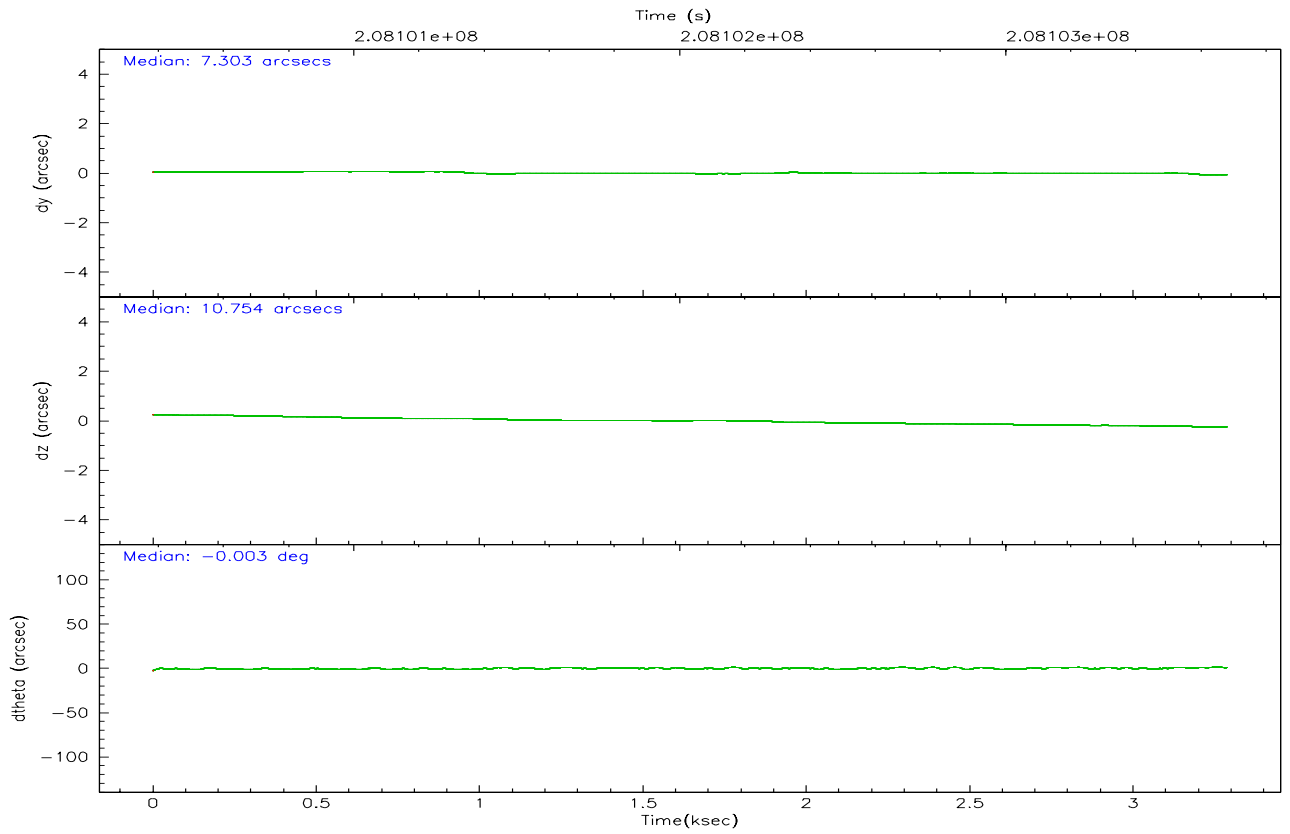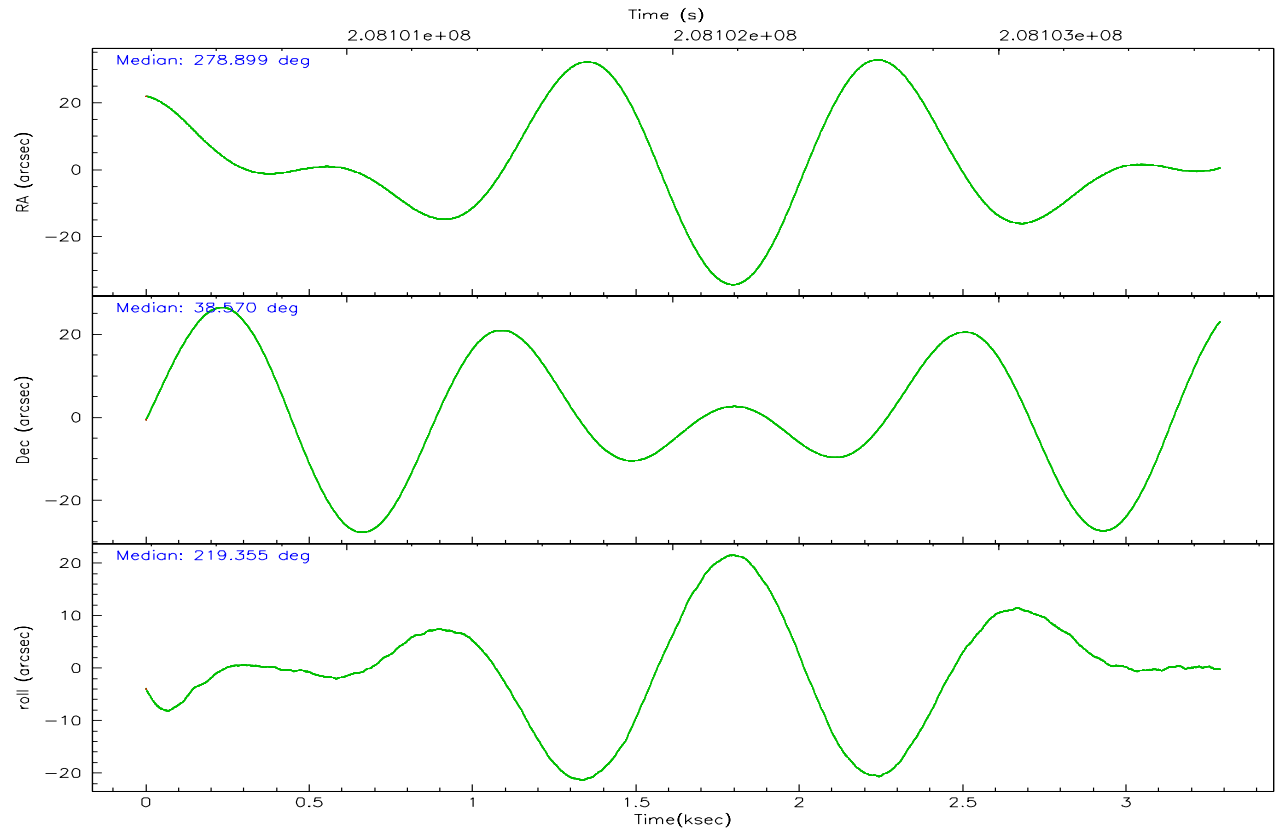
Slot Statistics

| slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.01	803	0.121	-0.172	0.010	0.016	0.000000	0.000000	-1161.47	-459.46
1	FID	HRC-S-2	7.00	803	0.175	-0.116	0.005	0.009	0.000000	0.000000	1236.81	-452.62
2	FID	HRC-S-3	7.02	803	0.094	-0.014	0.010	0.016	0.000000	0.000000	-1162.68	569.66
3	GUIDE	406980288	9.31	1604	-0.090	0.030	0.099	0.162	278.903147	39.061646	-1042.84	-1306.37
4	GUIDE	406985120	7.42	1604	-0.020	-0.044	0.070	0.115	278.839732	38.894839	-524.41	-954.62
5	GUIDE	406987384	8.95	1604	0.030	-0.073	0.079	0.129	278.815518	38.115336	1307.35	1172.91
6	GUIDE	406990192	8.99	1601	0.138	0.066	0.073	0.125	278.510952	38.533654	1016.35	-535.18
7	GUIDE	406993992	7.62	1603	-0.059	0.029	0.071	0.116	279.053714	38.034587	969.50	1825.77

2.4 Star Slots

2.4.1 Slot 3
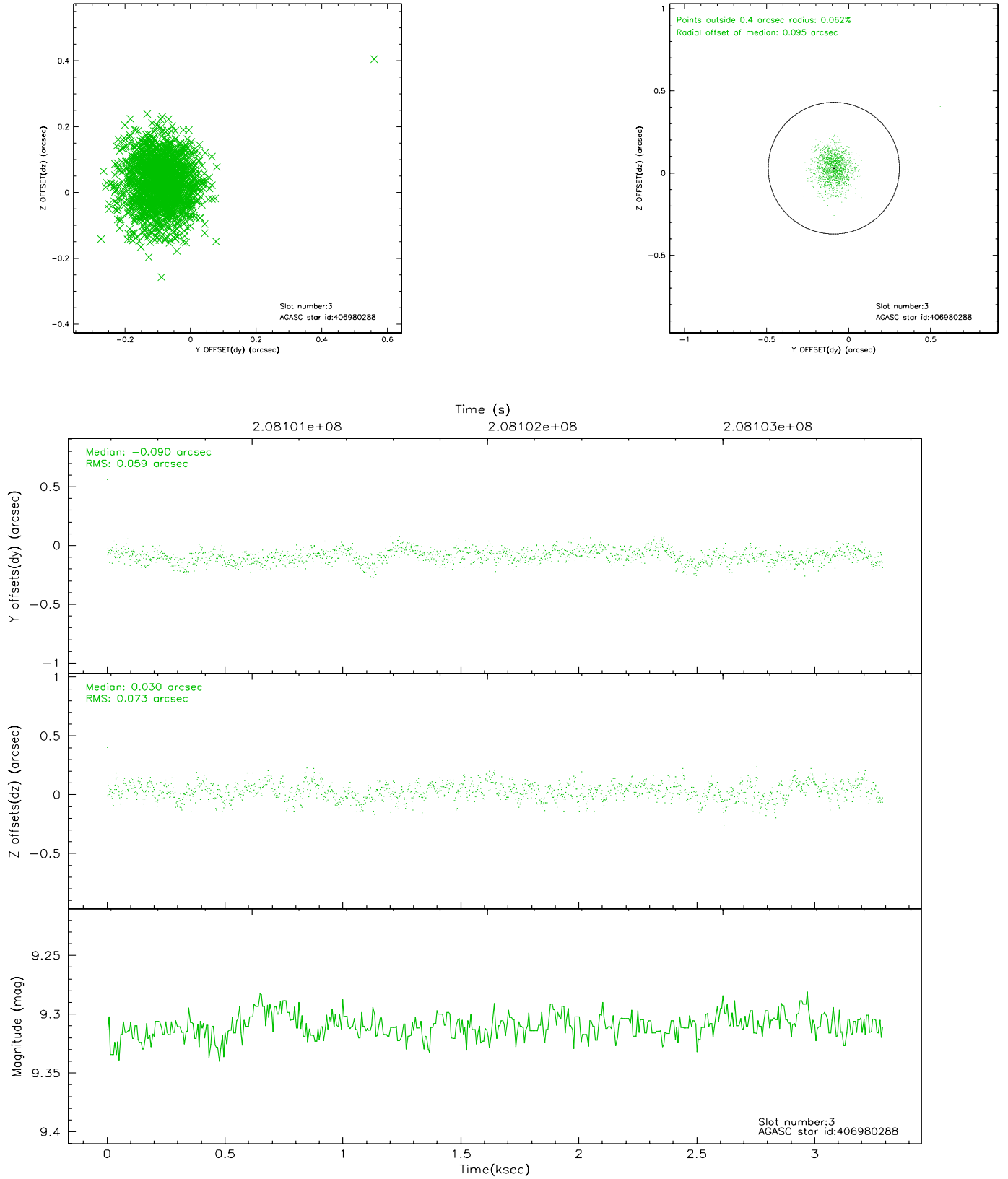
2.4.2 Slot 4
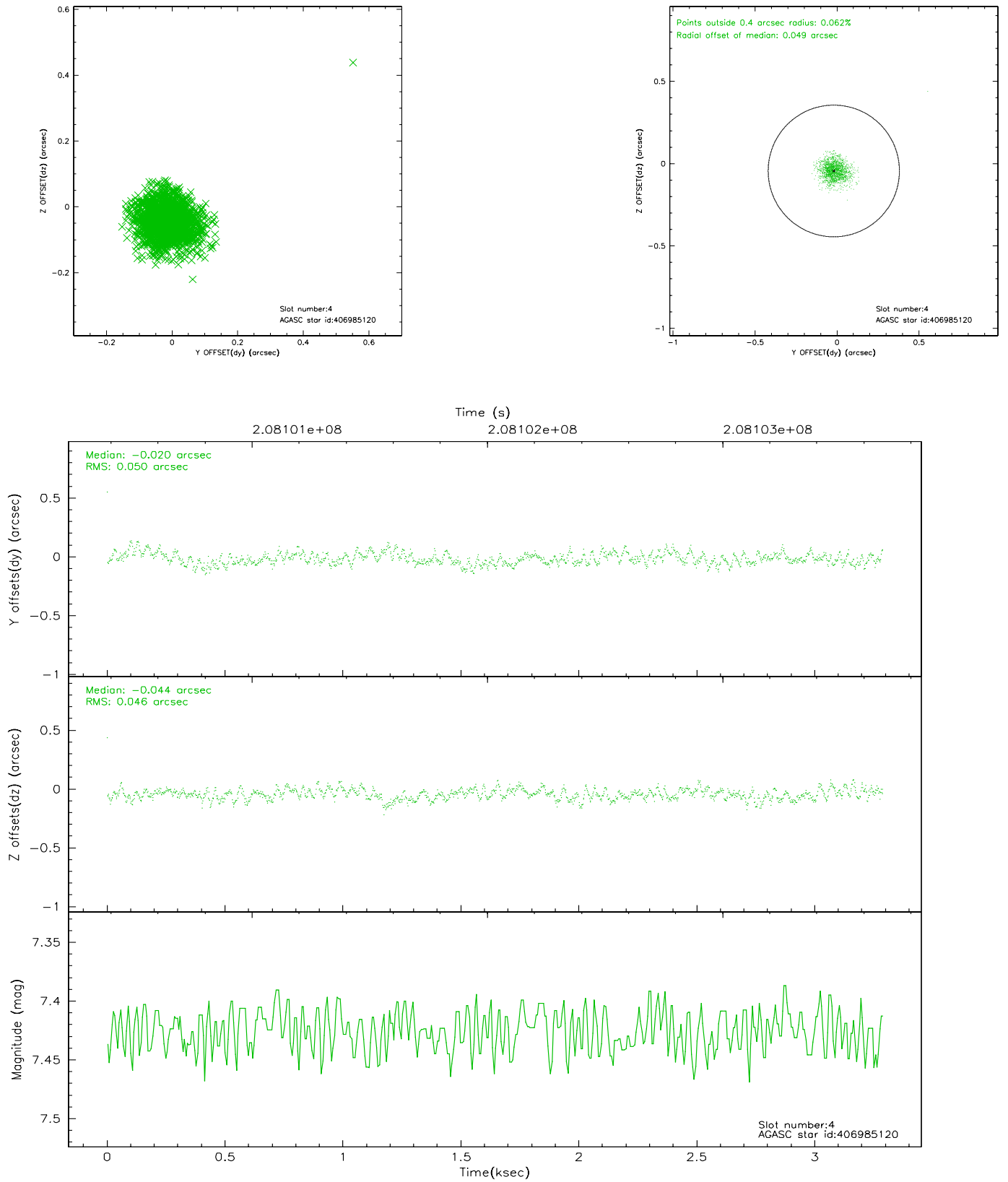
2.4.3   Slot 5
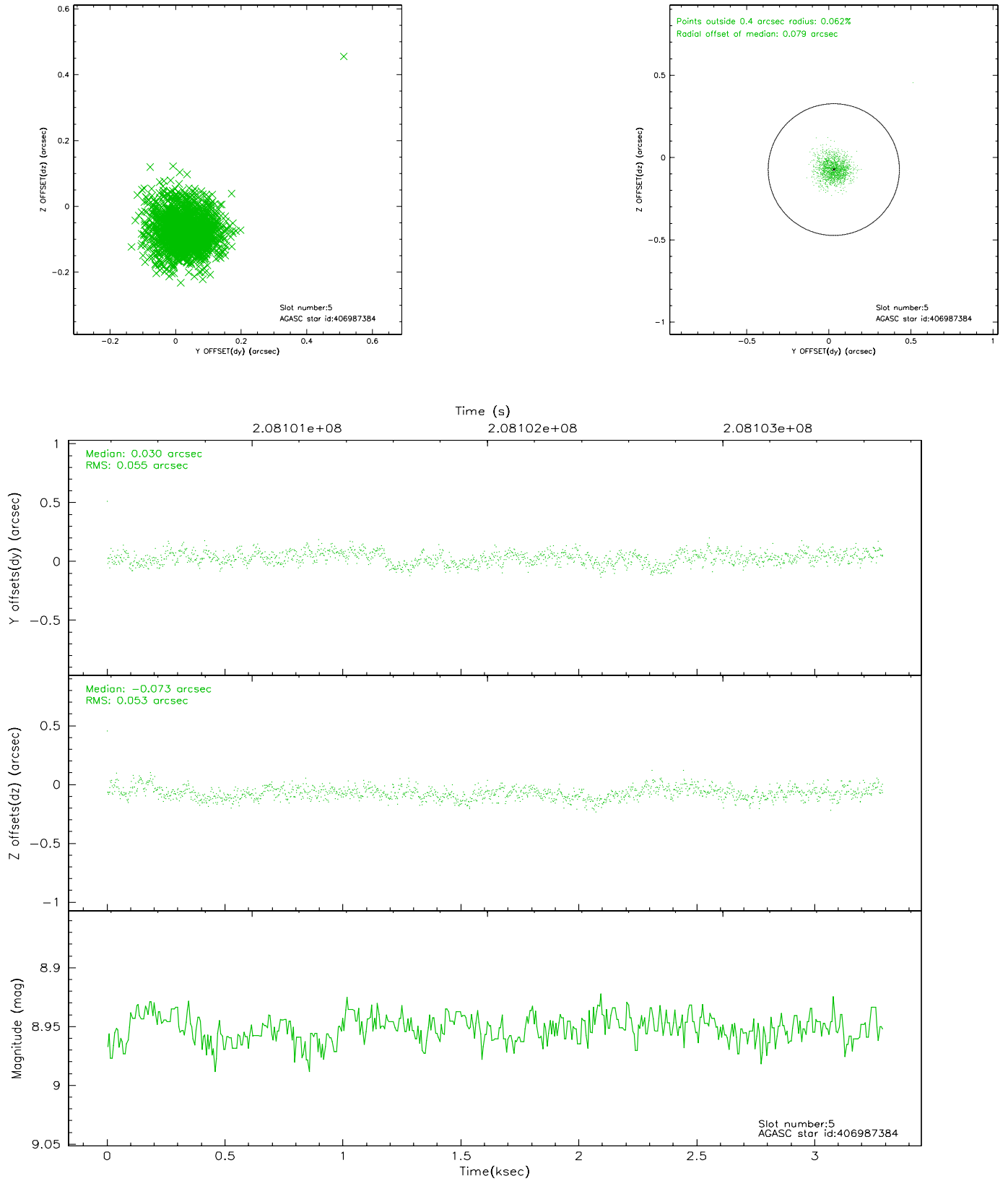
2.4.4 Slot 6
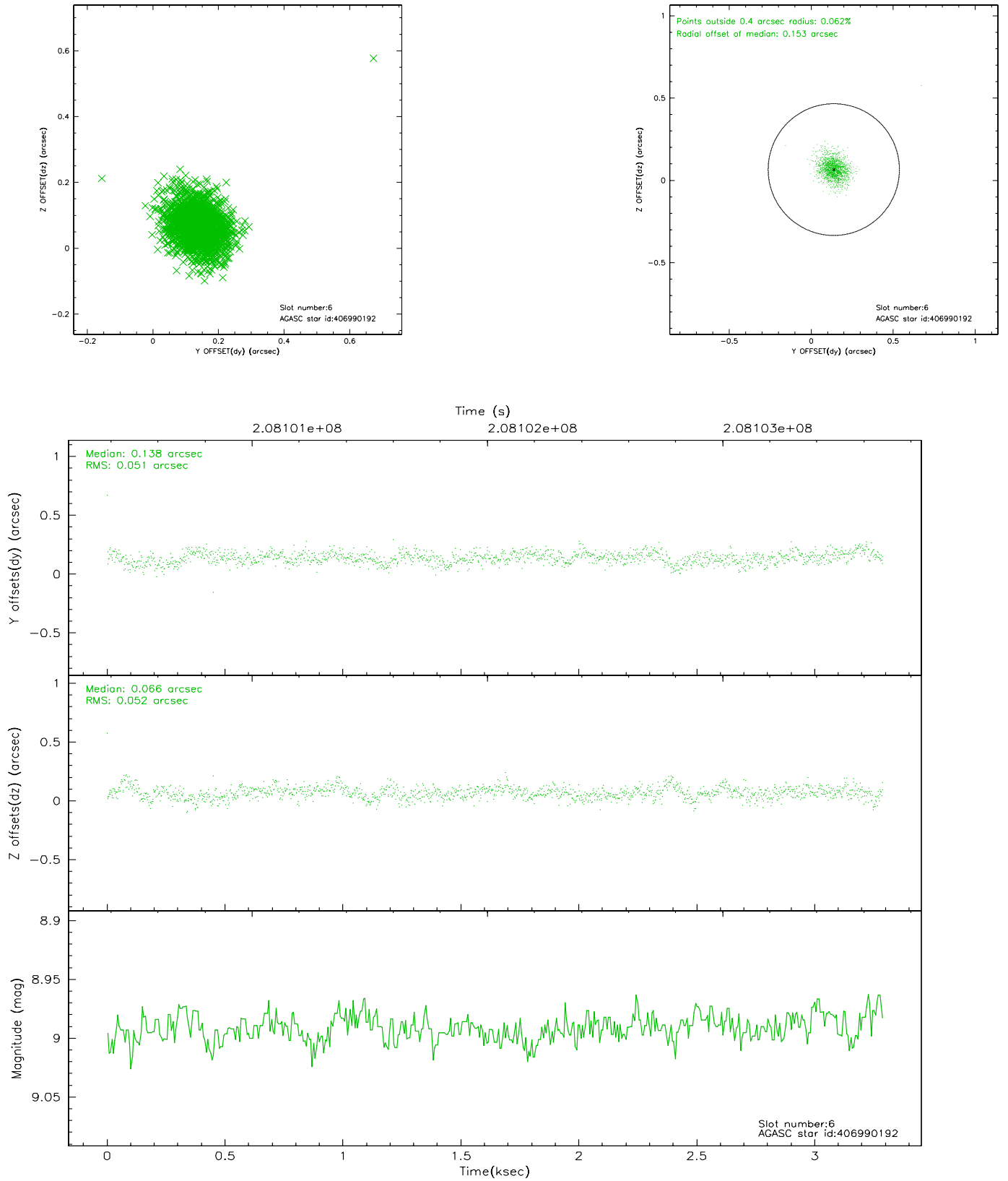
2.4.5   Slot 7
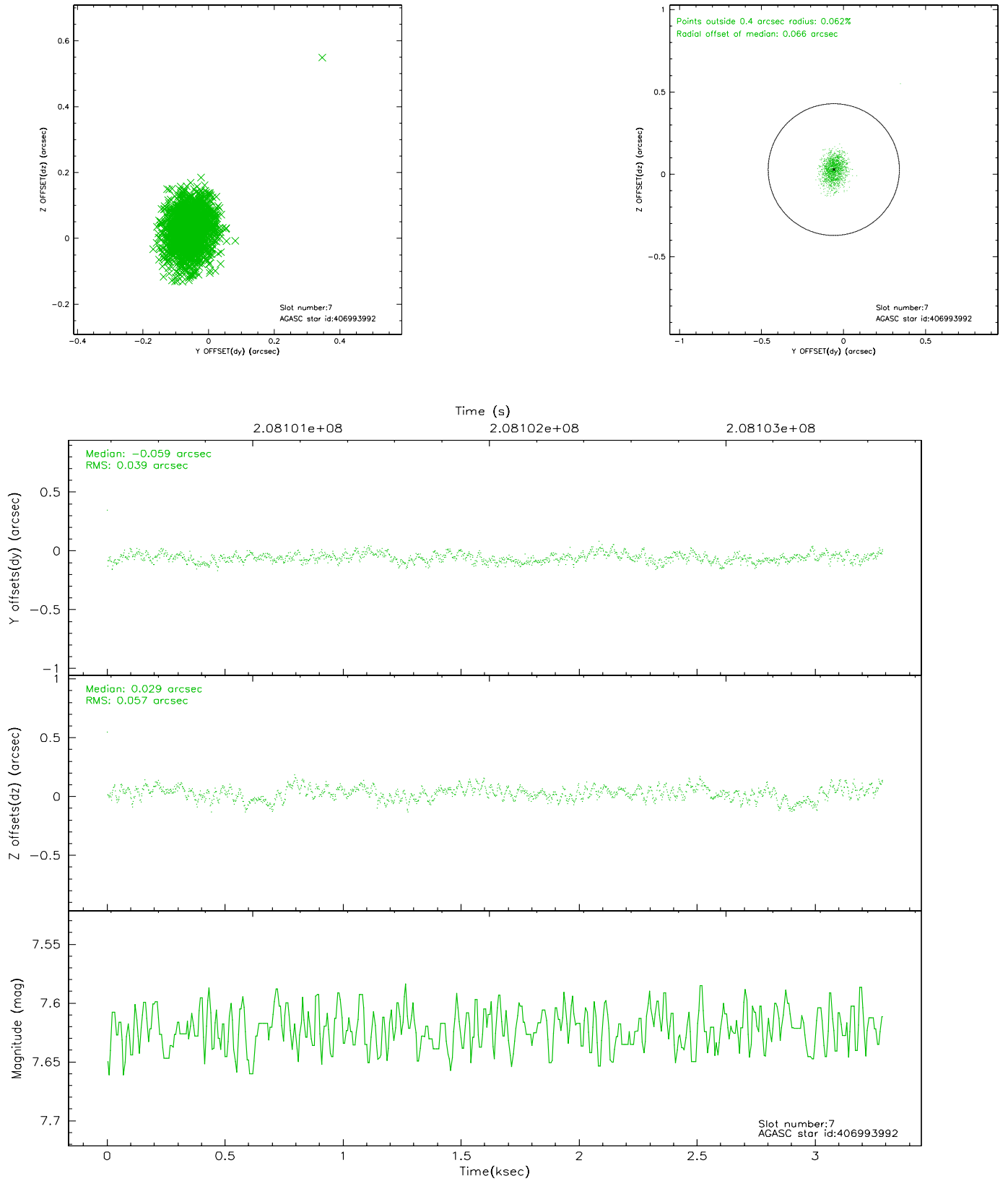
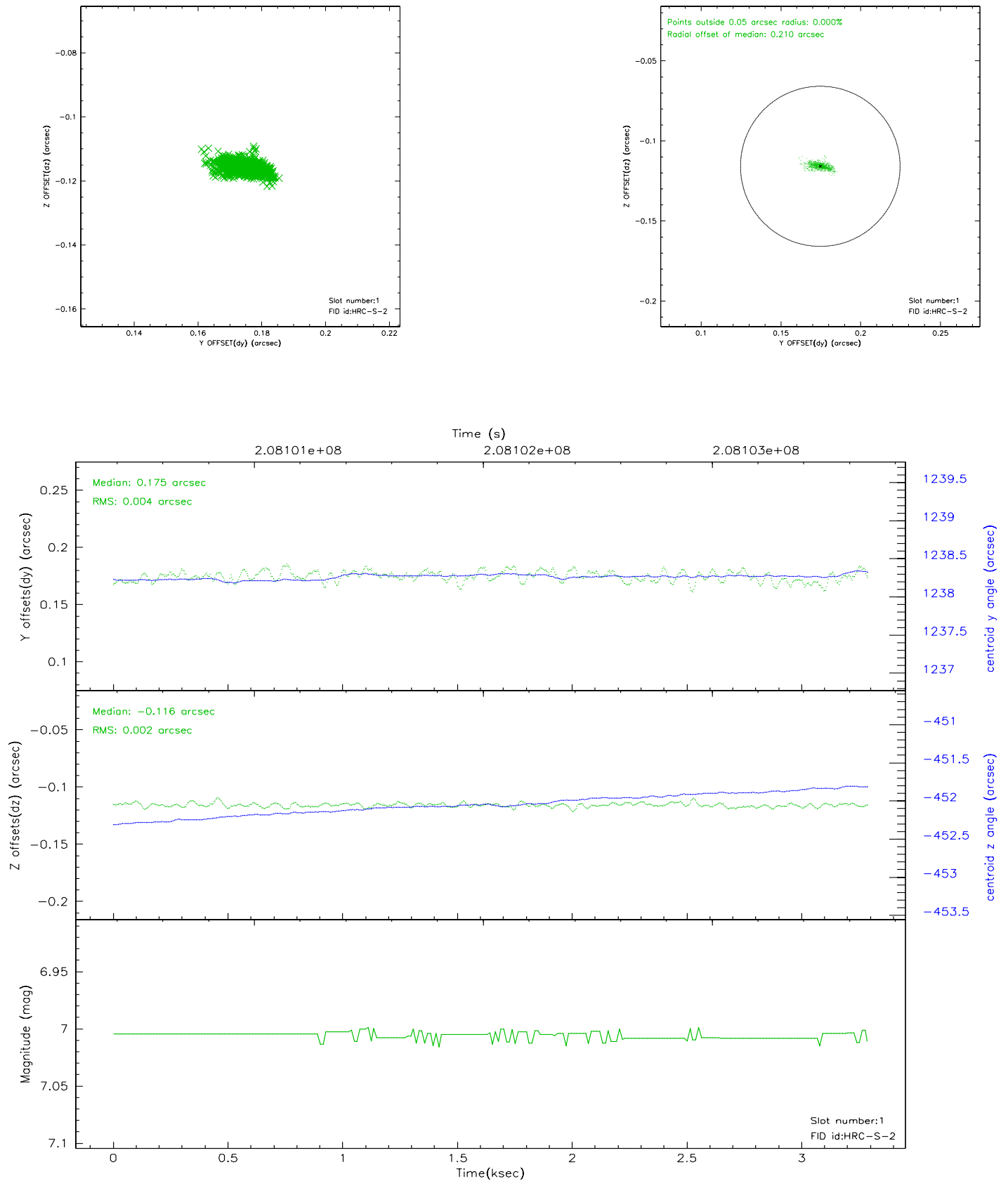## 2.5 FID Slots

2.5.1 Slot 0
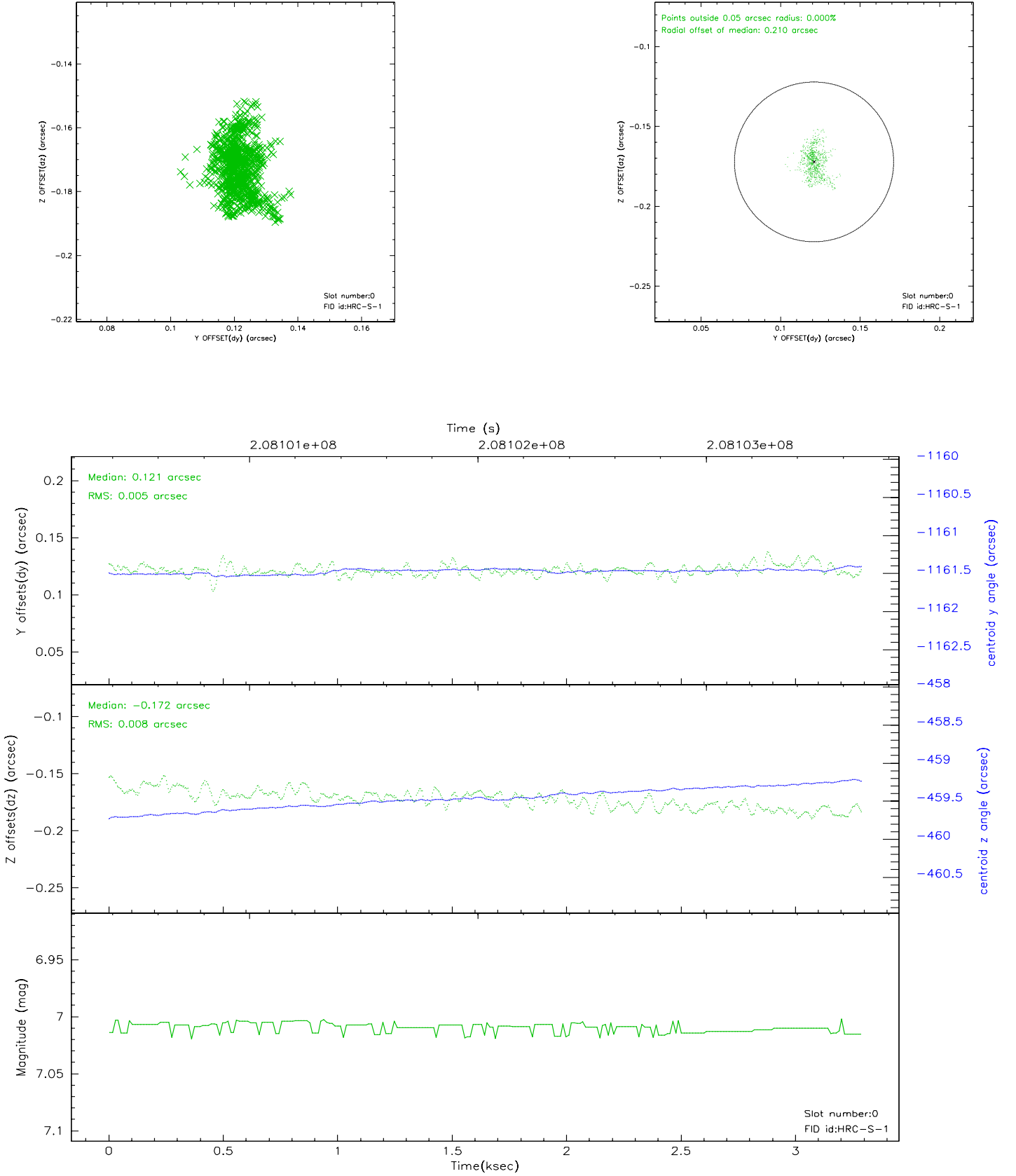
2.5.2   Slot 1

2.5.3 Slot 2
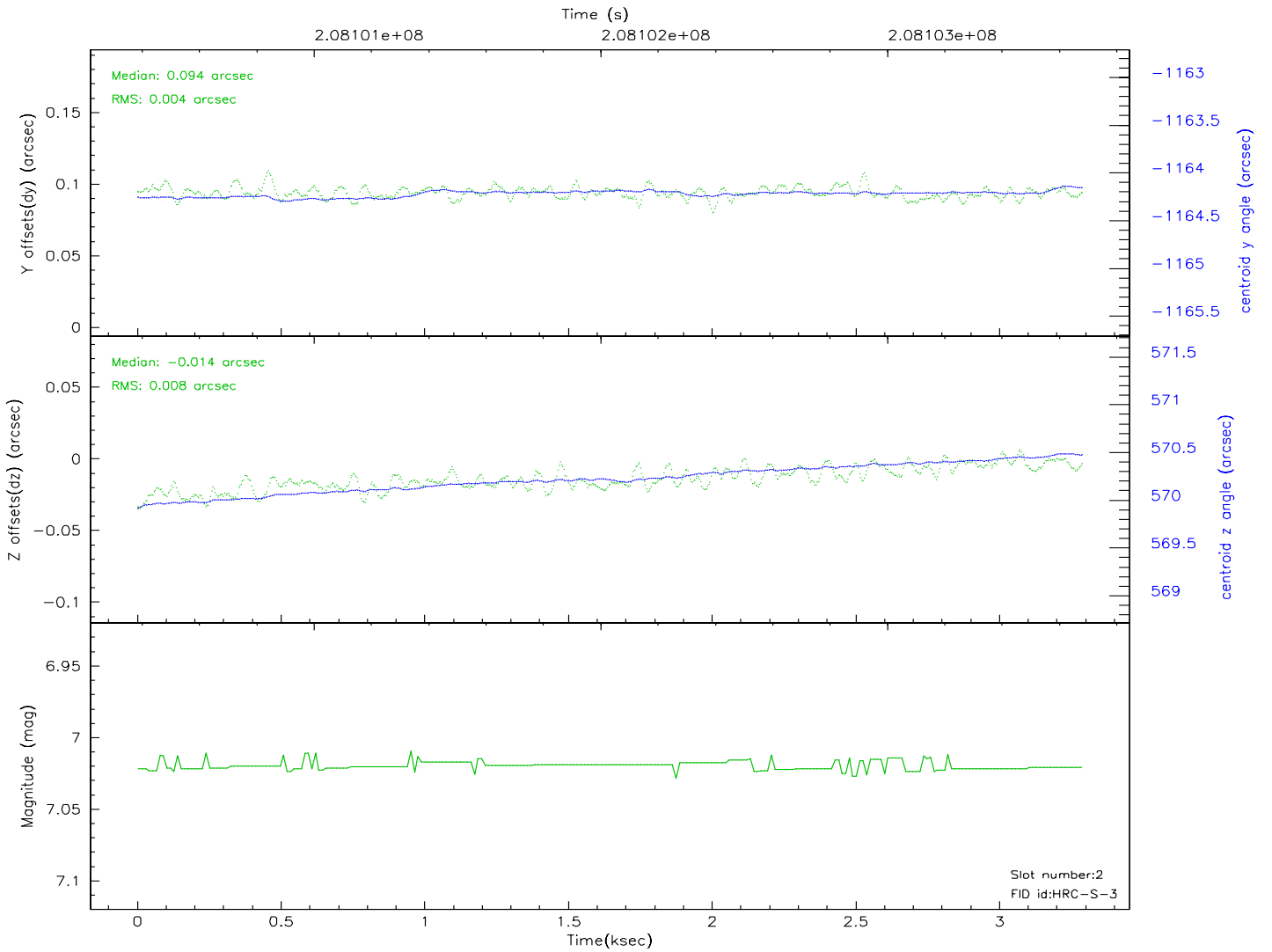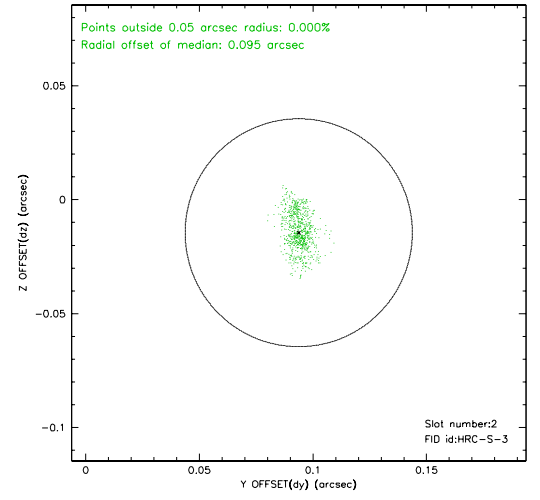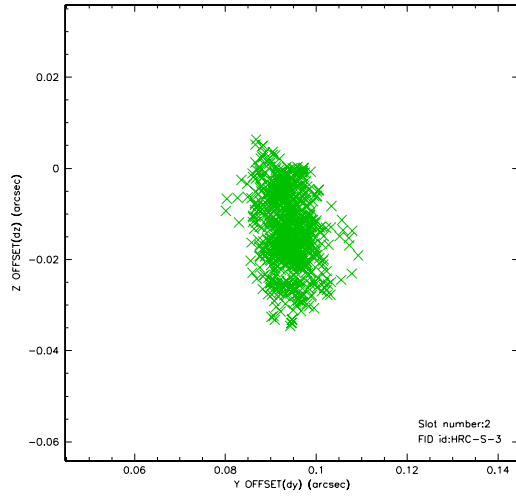
3 Point Sources

A   Summary

A.1   Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.287

A.2   Comments

Window constraint met. The chip and target source are off-axis, causing
internal reflections to fall on the detector.

The keywords DTCOR, EXPOSURE, and LIVETIME in the Level 2 event file and
the
keyword DTCOR in the Level 1 event file have been incorrectly
determined due to a software bug. The correct value of DTCOR can
be found in the file DTFSTATS file that can be obtained by downloading
the Secondary Data Products. In most cases, the difference between
the correct DTCOR value and the incorrect DTCOR value in the Level 2
event file is very small and does not affect the data analysis.
However, there are cases of significant differences and the user is
advised to use the DTCOR in the DTFSTATS file for analysis. Corrected
data products will be made available in the archive as soon as feasible.