

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 5293 - L2 Version 4
Chandra X-Ray Center

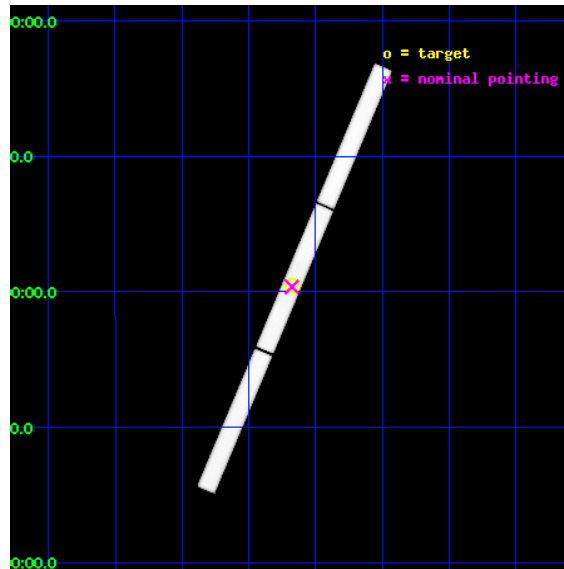
L2 Processing Date : Nov 13 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Parameters	4
2.1.3	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	LETG Arm	17
A	Summary	19
A.1	Status	19
A.2	Comments	19

1 Front

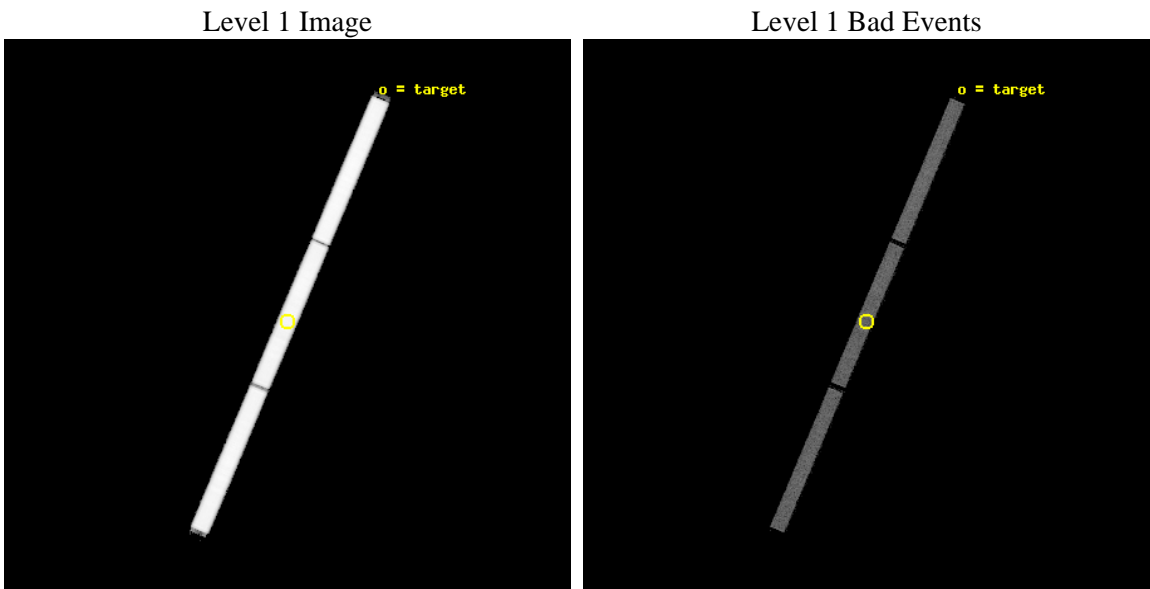
seq_num	300145	Sequence number
obs_id	5293	Observation id
title	Outburst in Mira AB?	Proposal title
observer	DR. MARGARITA KAROVSKA	Principal investigator
object	Mira AB	Source name
ra_targ	34.836667	Observer's specified target RA [deg]
dec_targ	-2.977639	Observer's specified target Dec [deg]
ra_nom	34.83838563493	Nominal RA [deg]
dec_nom	-2.9819954360212	Nominal Dec [deg]
roll_nom	292.97984978975	Nominal Roll [deg]
revision	4	Processing version of data
ontime	41953.508077592	[s]
livetime	41625.119013931	Ontime multiplied by DTCOR
l2events	2959692	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	42121.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	41953.508077592	[s]
caldbver	4.5.2	 	l1events	3754407	Number of level 1 events
date	2012-11-10T07:15:25	Date and time of file creation			
revision	4	Processing version of data			

2.1.3 Events

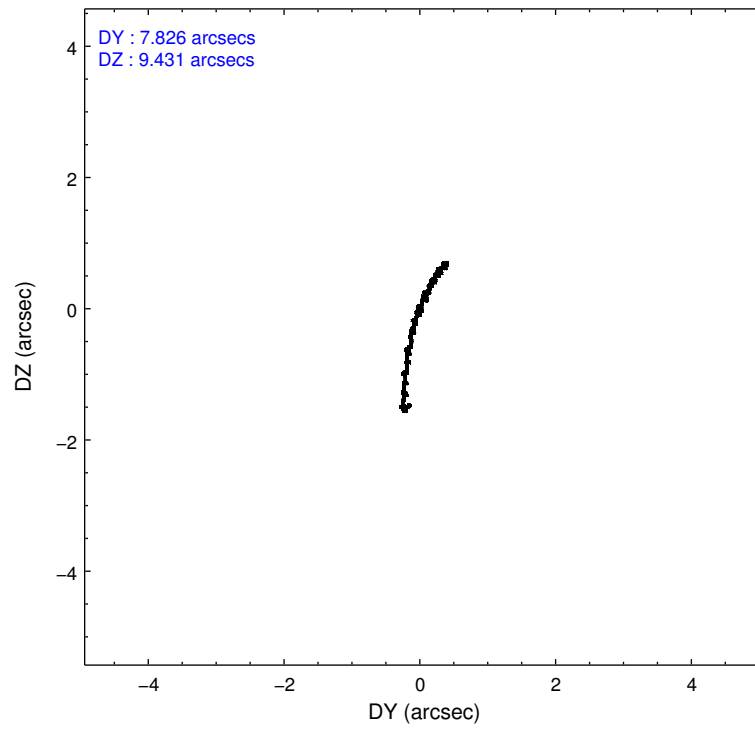
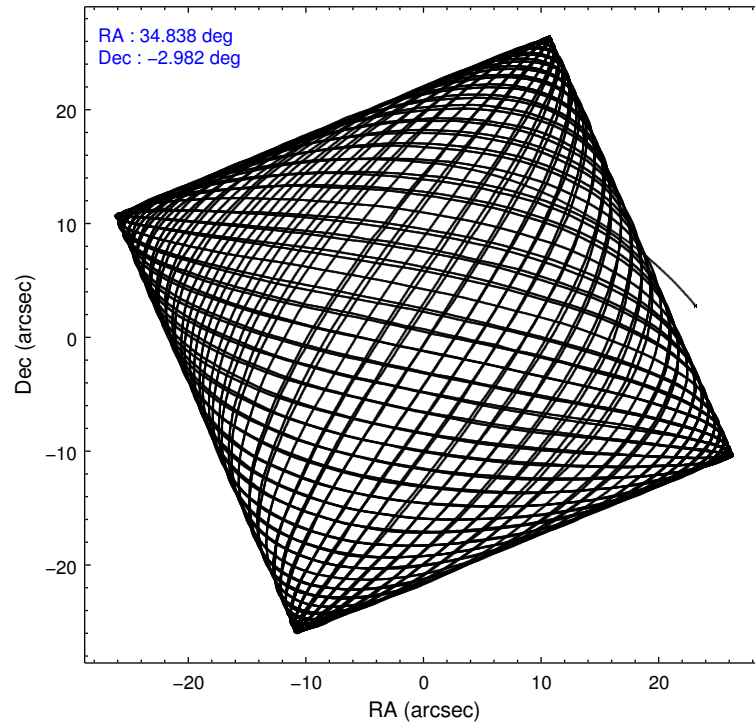
Level 1 Events

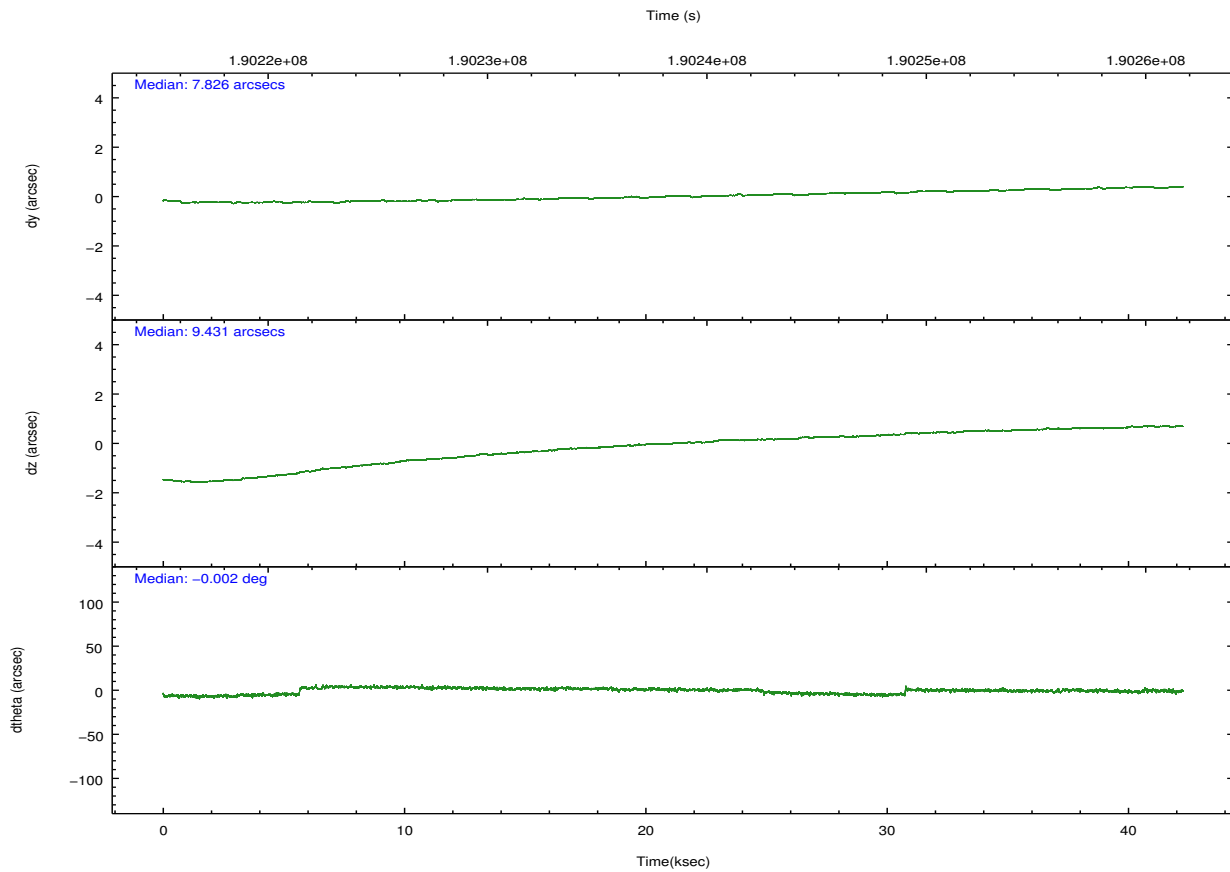
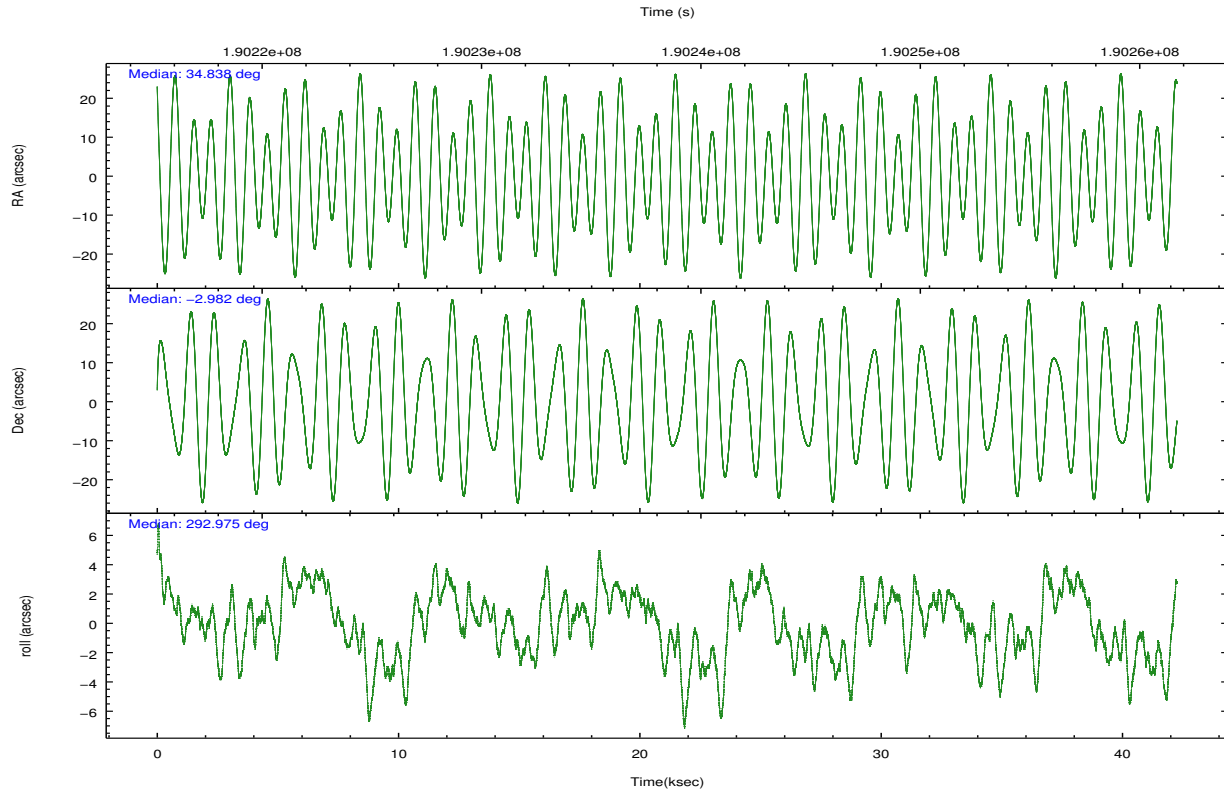
	segment 1	segment 2	segment 3
level 1 events	1321782	1218694	1213931
rejected events	25349	23384	22757
rejected %	1%	1%	1%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	34.814673	34.83838563493033			
[deg] Pointing Dec	-2.965930	-2.981995436021158			
[deg] Pointing Roll	292.911287	292.9798497897458			
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.4635187648994			
[mm] SIM translation stage offset	0	-0.007540371344731511			
[s] Observation start time (MET)	190217463.184000	190216340.45023			
Observation start date	2004-01-11T14:09:59	2004-01-11T13:52:20			
[s] Observation end time (MET)	190259584.184000	190260245.30214			
Observation end date	2004-01-12T01:52:00	2004-01-12T02:04:05			

2.3 Aspect



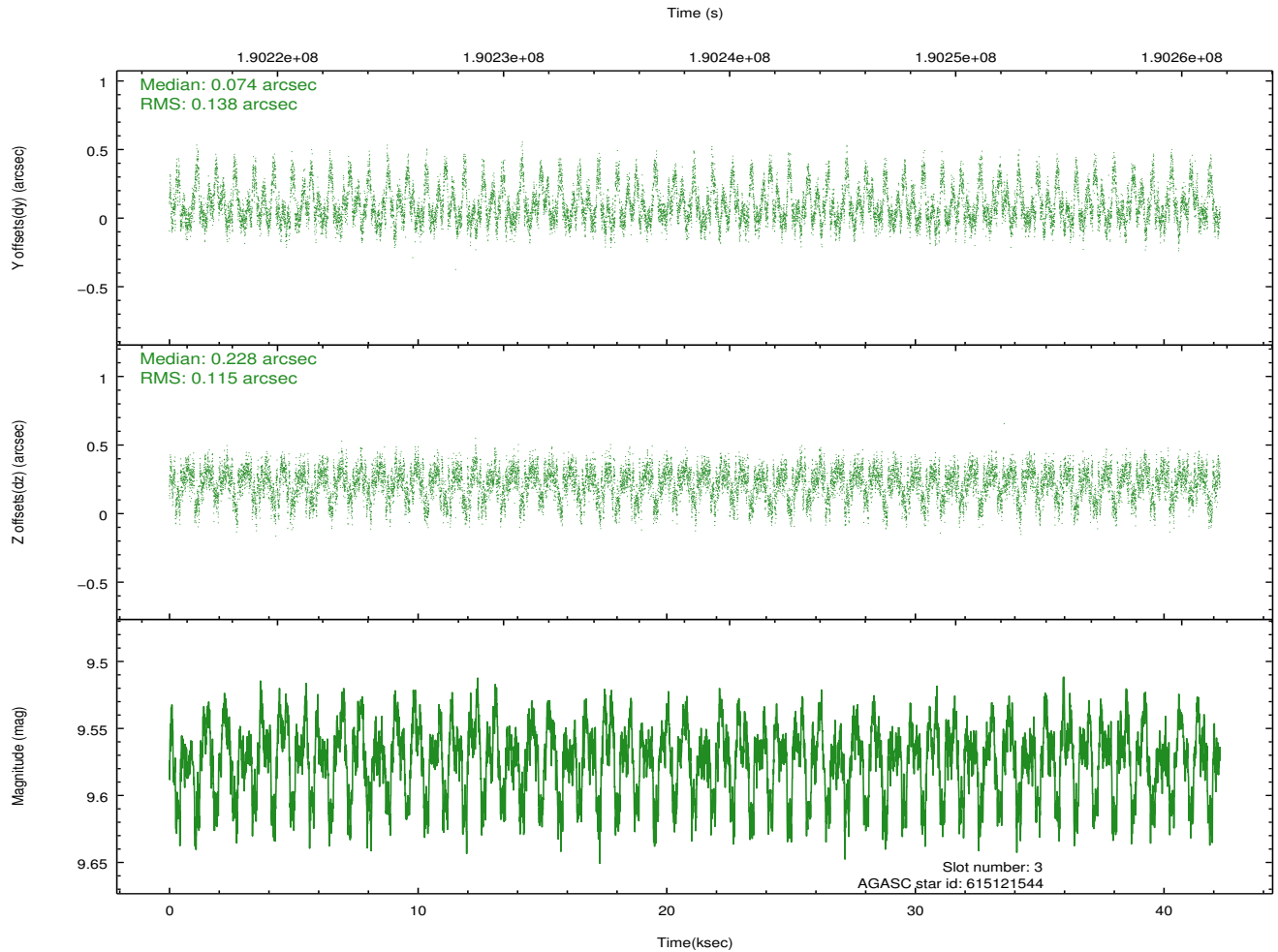
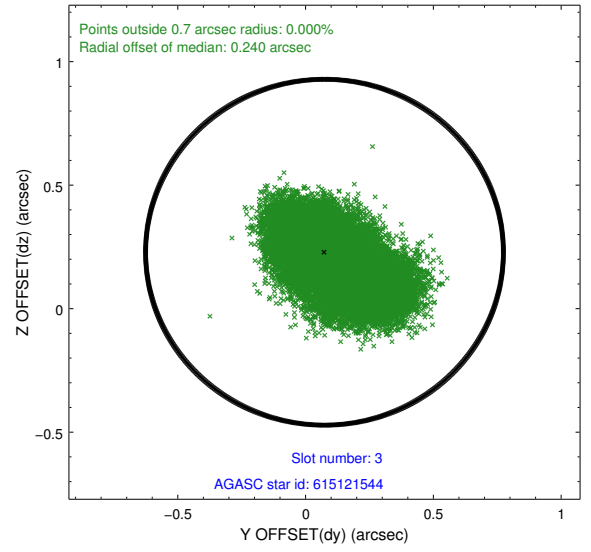
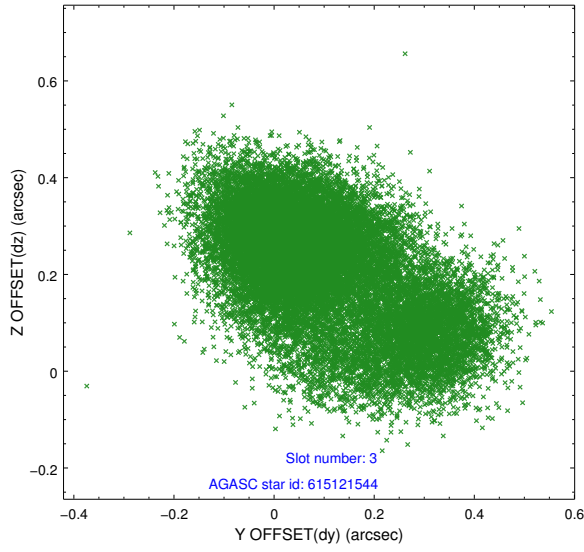


Slot Statistics

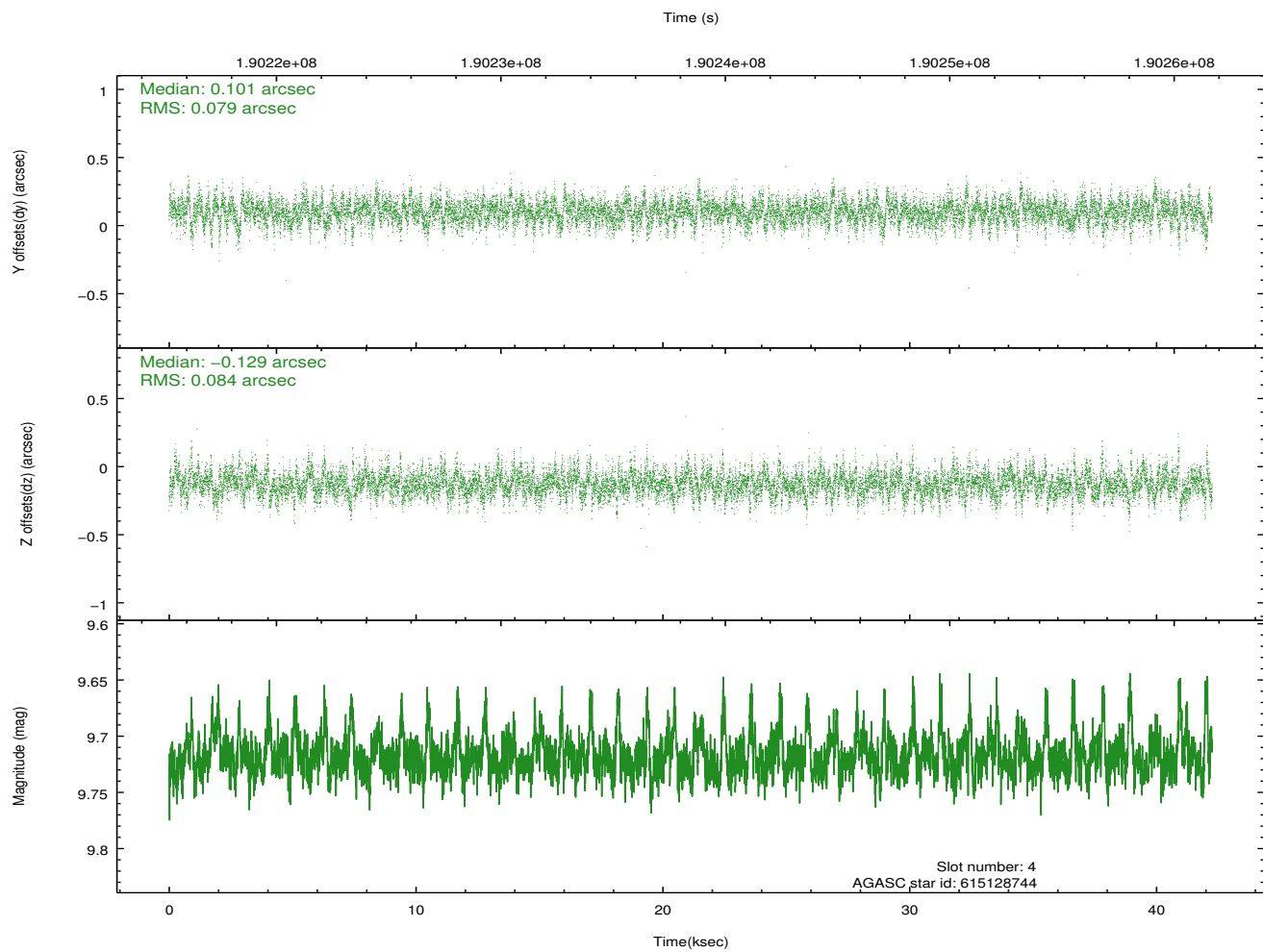
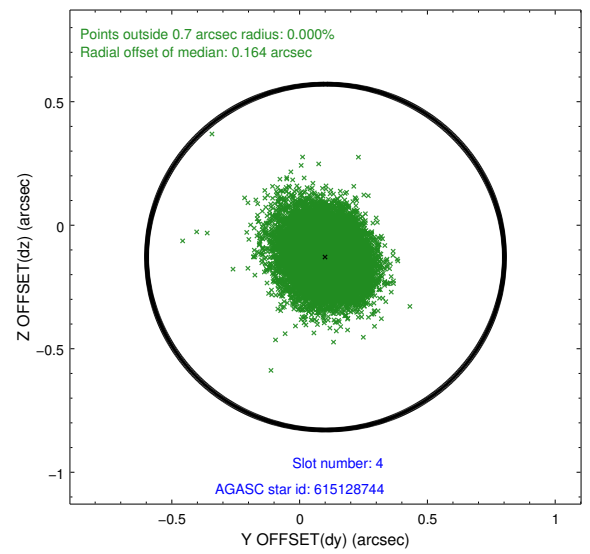
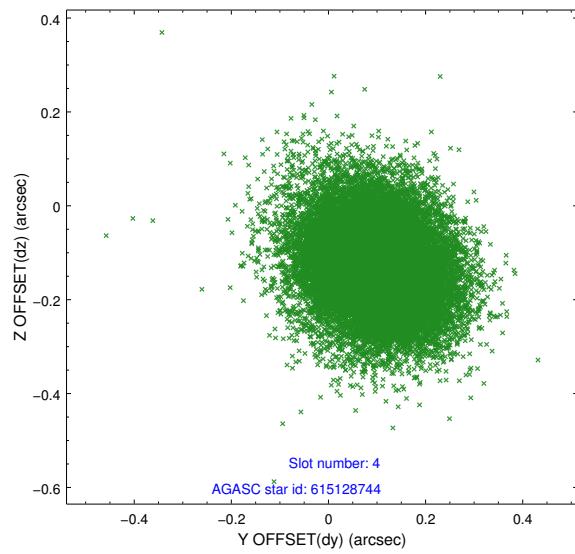
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	6.98	10308	0.125	-0.175	0.026	0.067	0.000000	0.000000	-1162.04	-457.84
1	FID	HRC-S-3	7.00	10308	0.072	-0.023	0.027	0.074	0.000000	0.000000	-1164.90	571.78
2	FID	HRC-S-4	6.96	10307	0.192	-0.098	0.009	0.016	0.000000	0.000000	1236.20	574.30
3	GUIDE	615121544	9.57	20610	0.074	0.228	0.185	0.332	34.477810	-2.784253	-1073.29	-860.73
4	GUIDE	615128744	9.72	20593	0.101	-0.129	0.121	0.203	34.665081	-3.483267	1506.69	-1219.96
5	GUIDE	615258928	9.97	20561	0.162	0.088	0.173	0.281	35.464337	-3.241835	1825.39	1764.34
6	GUIDE	614734344	8.70	20609	-0.275	0.050	0.092	0.148	34.946145	-2.225313	-2271.70	1473.95
7	GUIDE	615121360	9.69	20603	-0.086	-0.219	0.159	0.260	34.206276	-2.936187	-949.26	-1973.05

2.4 Star Slots

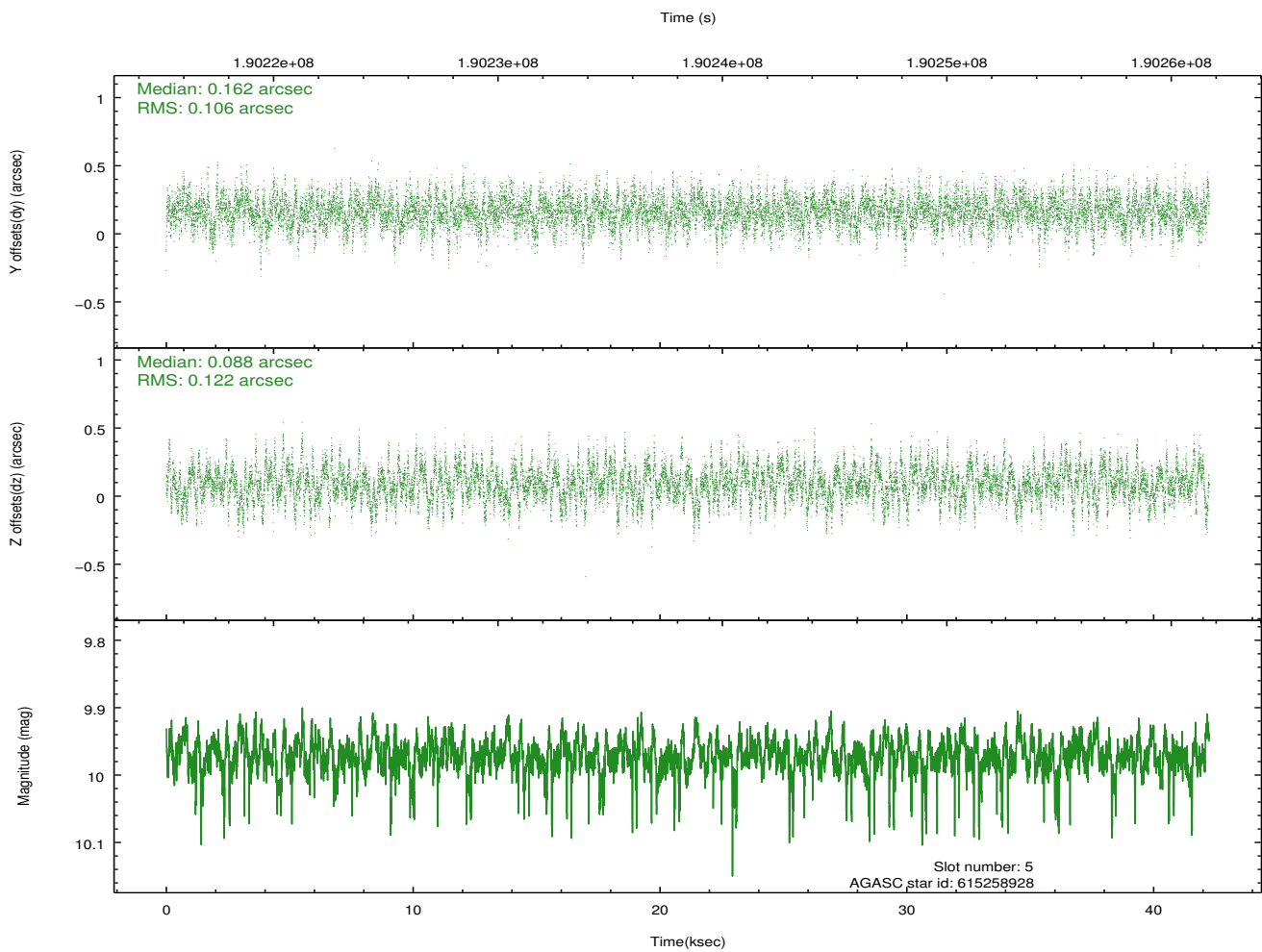
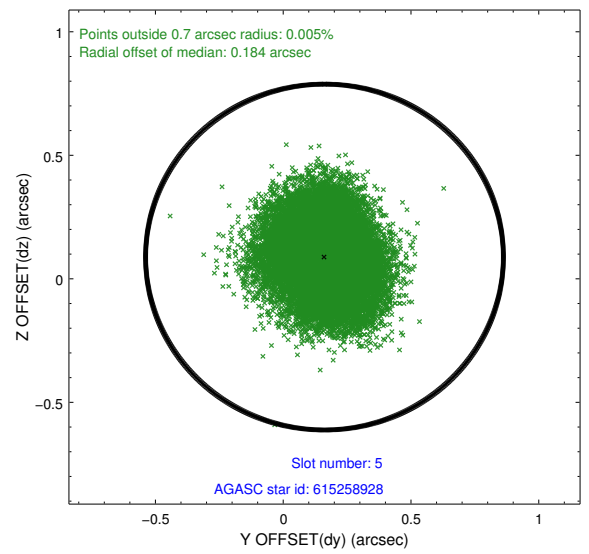
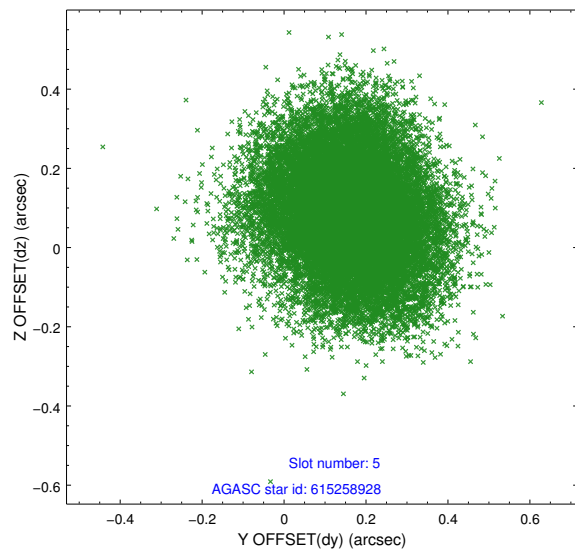
2.4.1 Slot 3



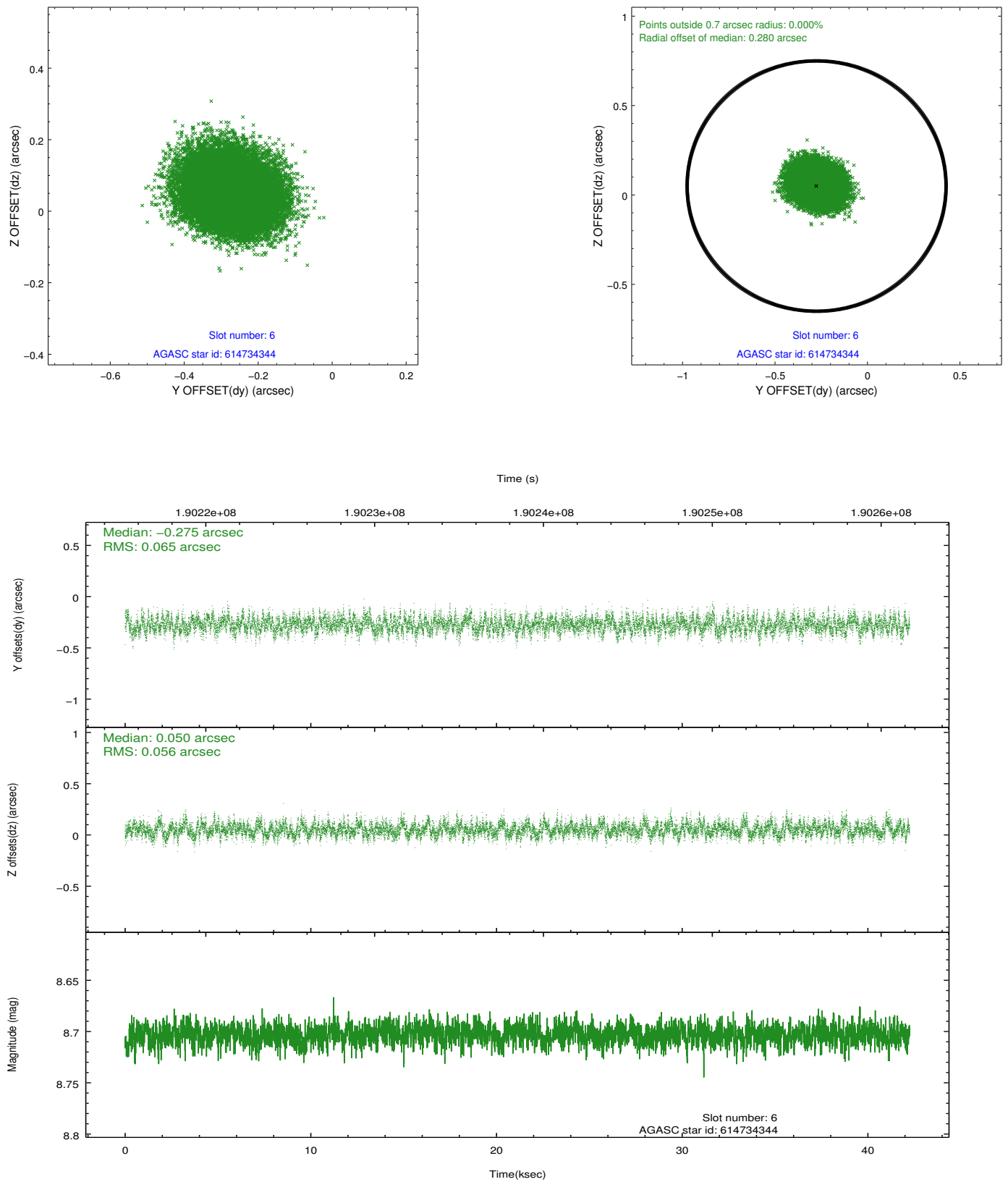
2.4.2 Slot 4



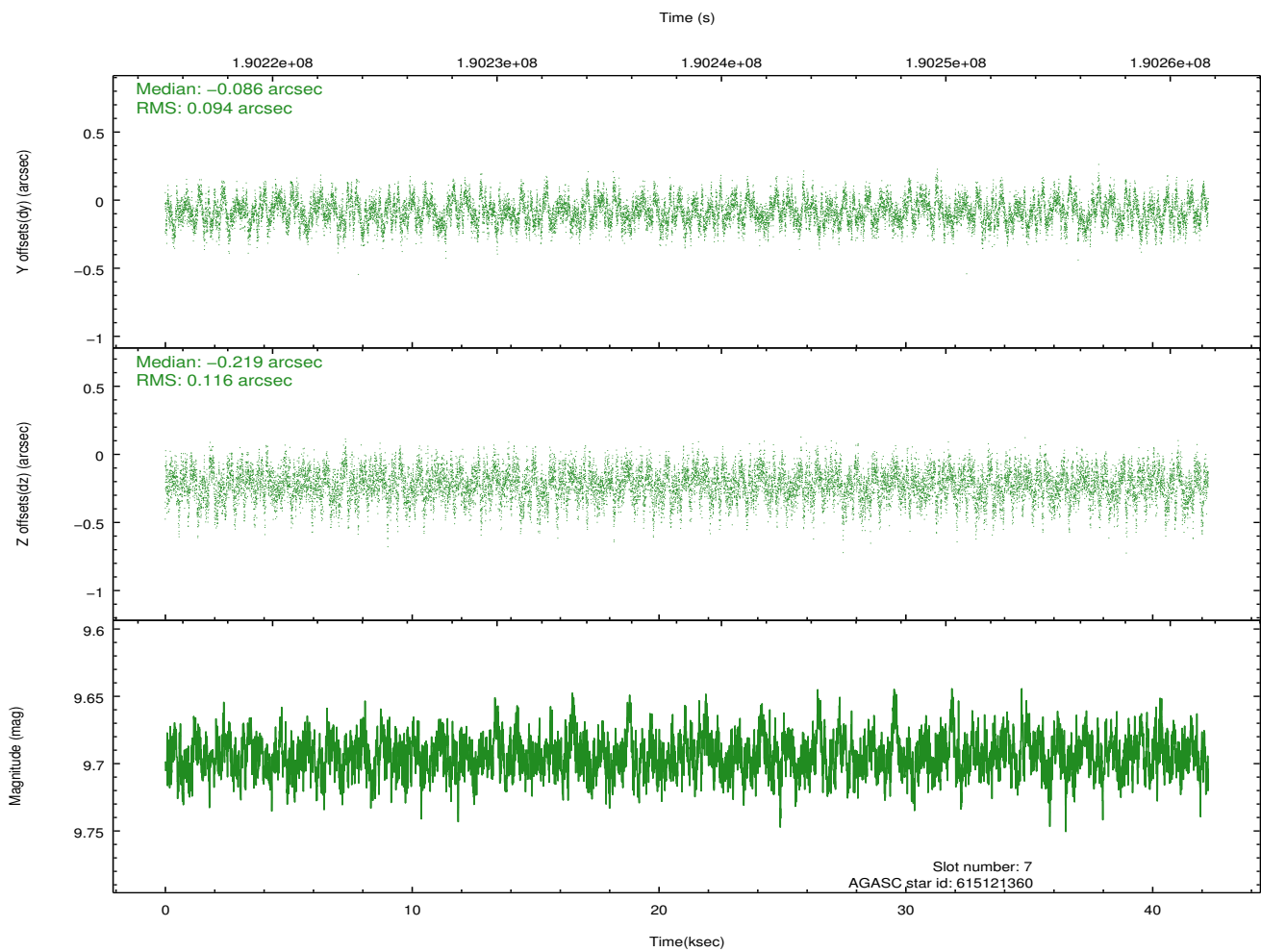
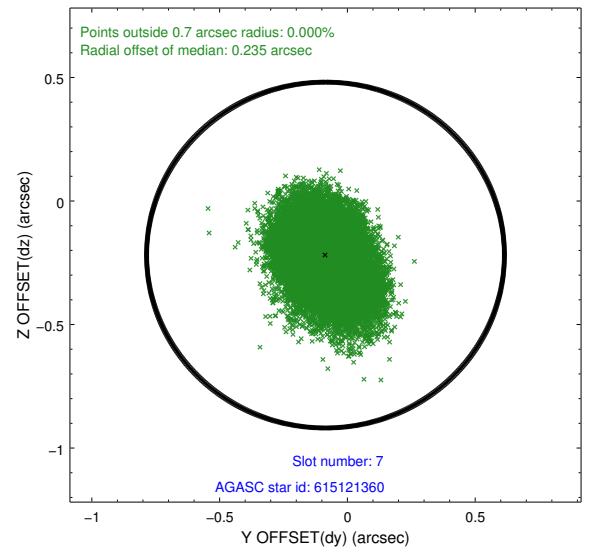
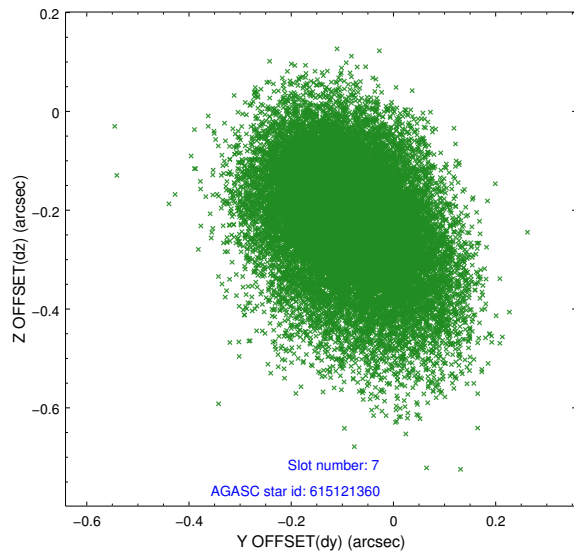
2.4.3 Slot 5



2.4.4 Slot 6

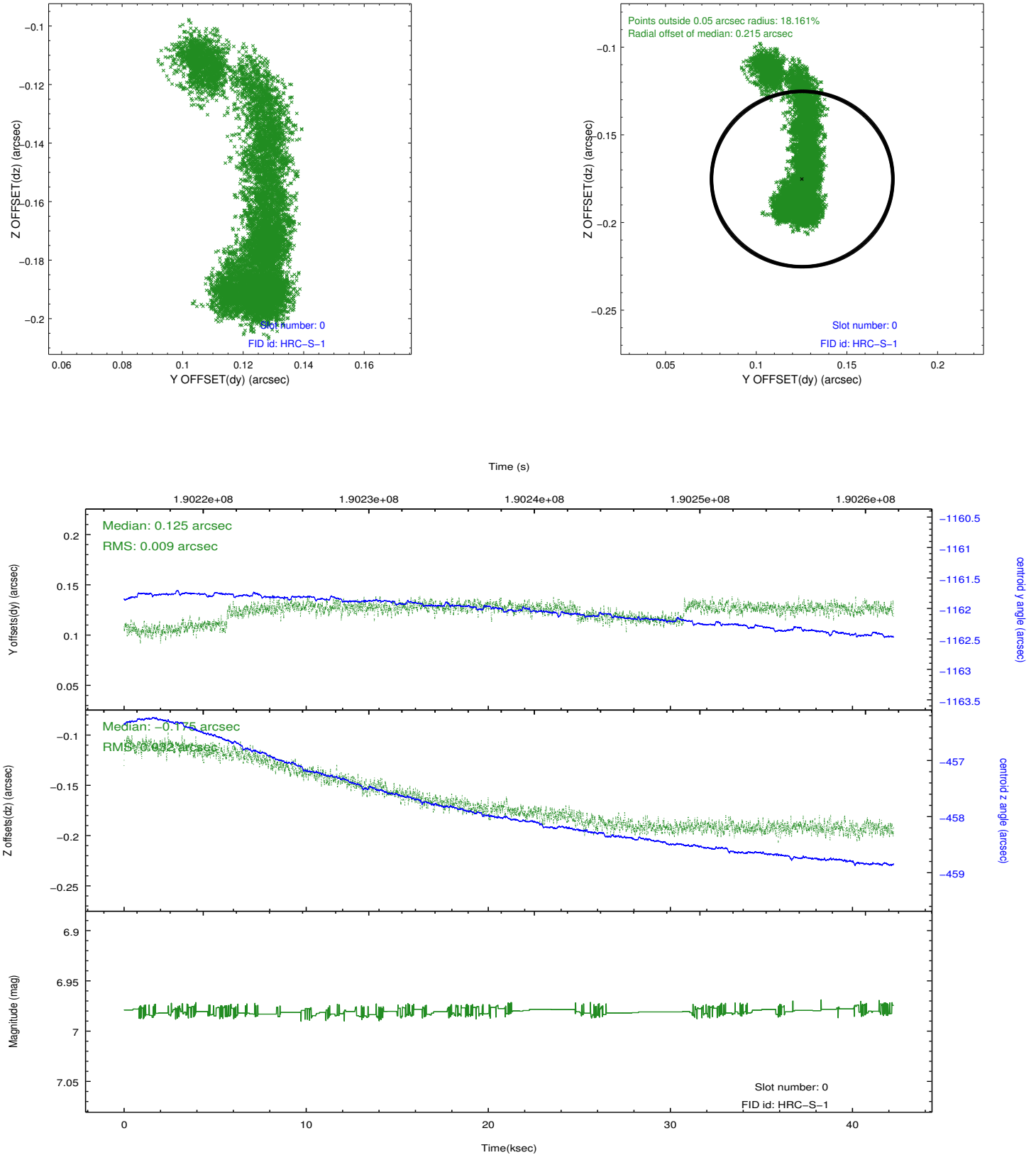


2.4.5 Slot 7

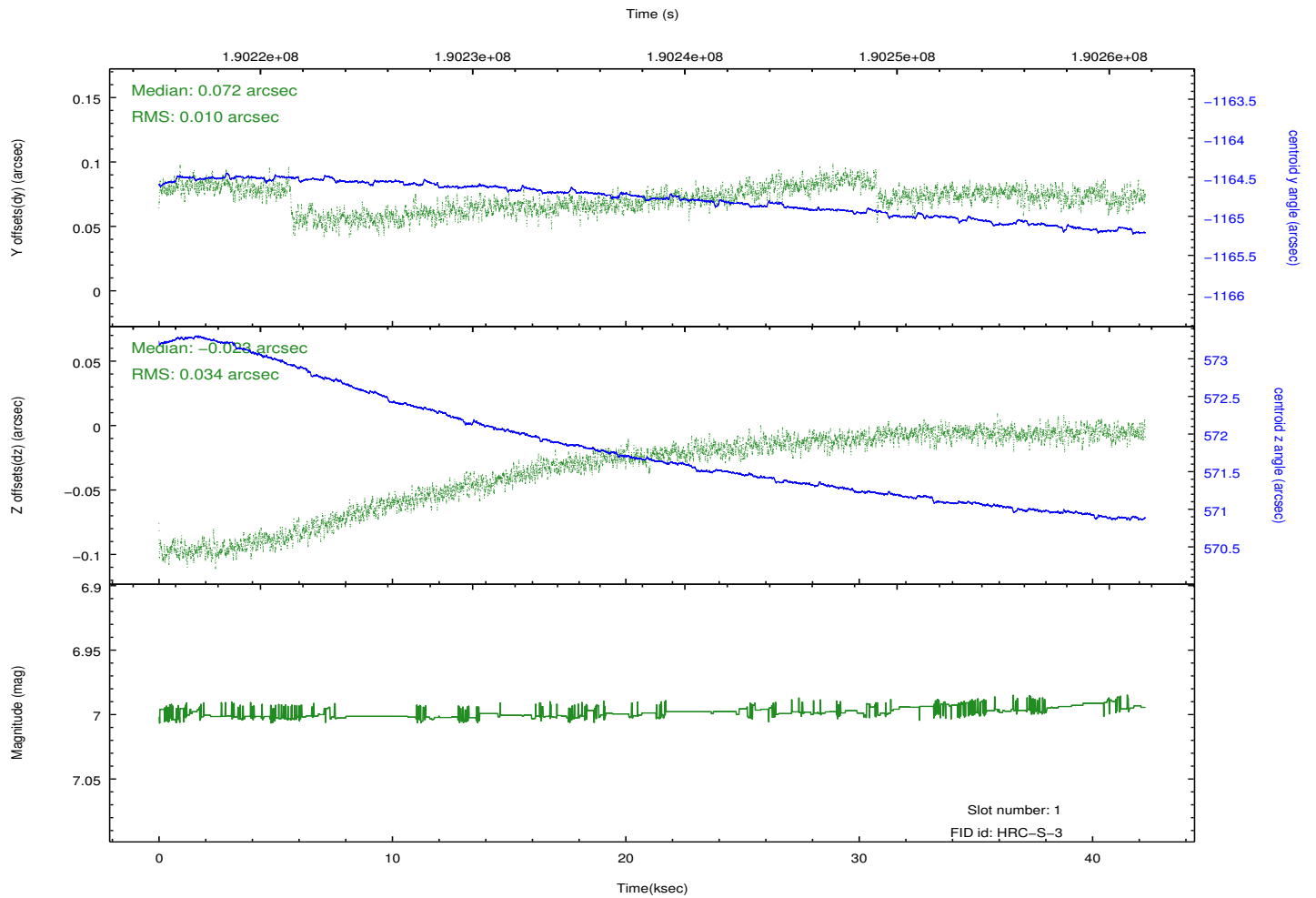
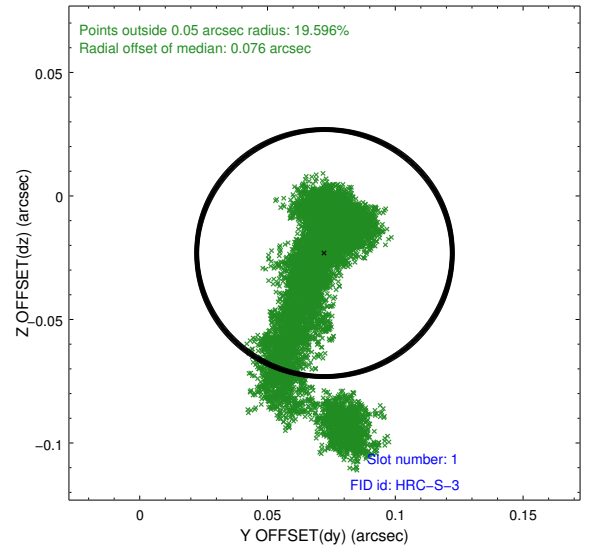
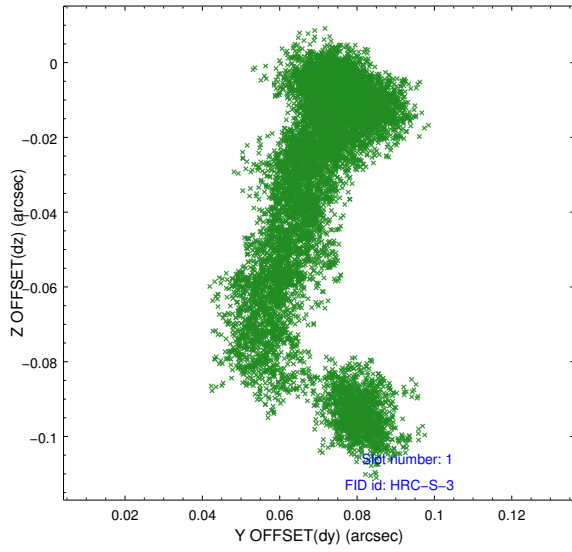


2.5 FID Slots

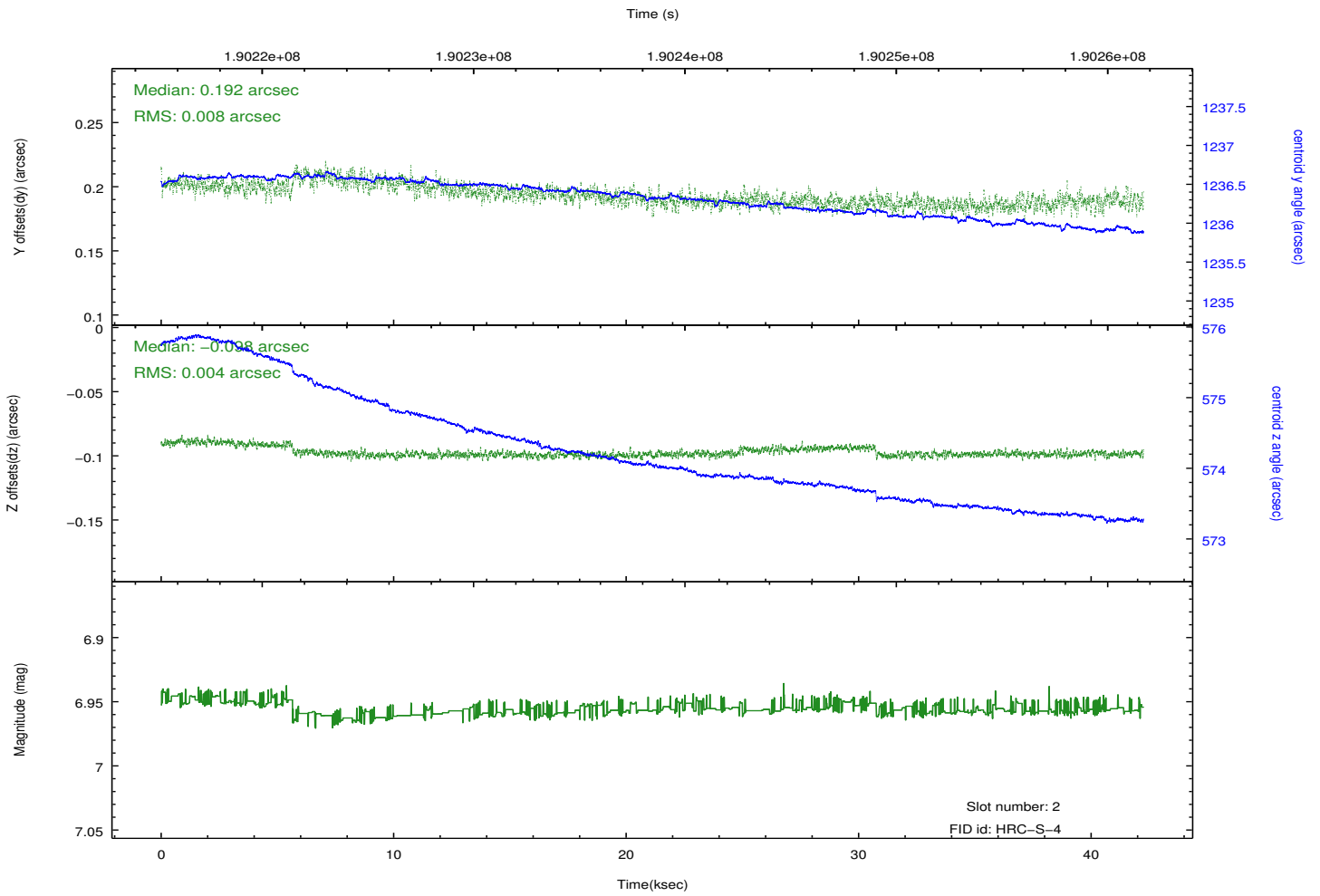
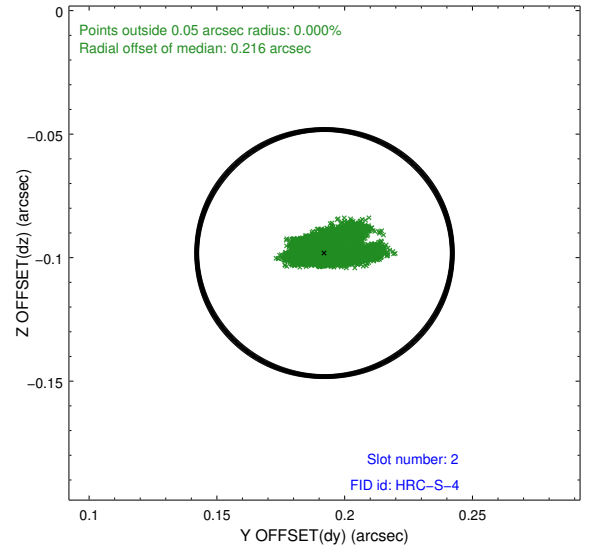
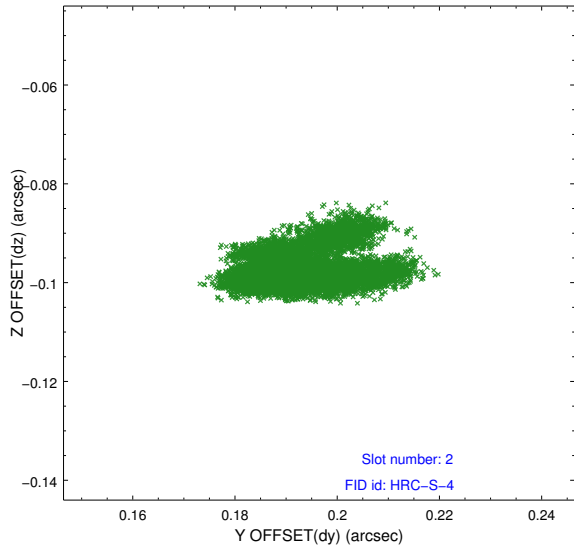
2.5.1 Slot 0



2.5.2 Slot 1

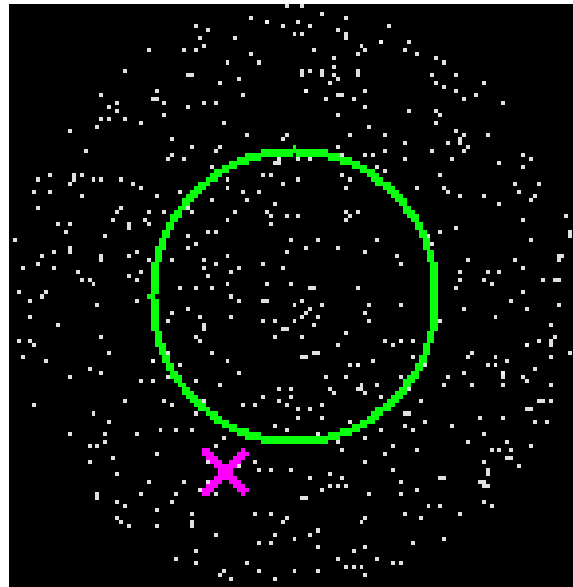


2.5.3 Slot 2



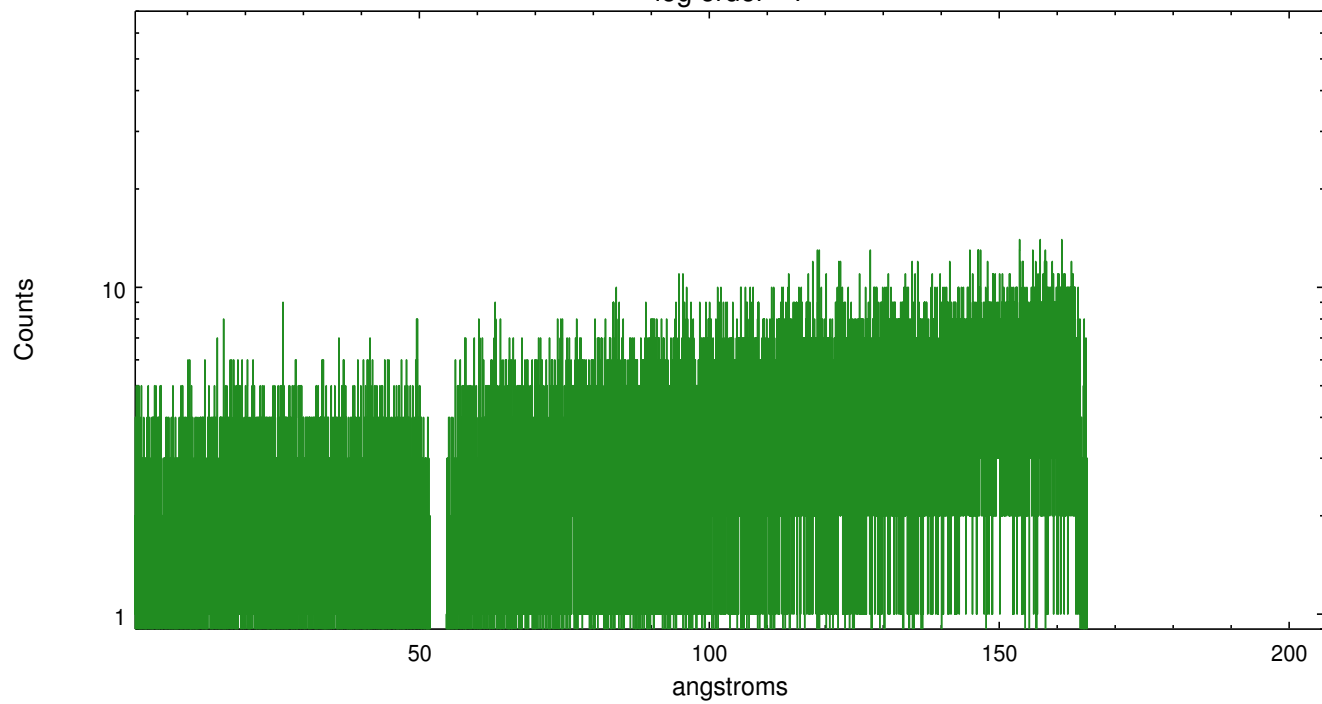
3 Gratings

3.1 LETG Arm

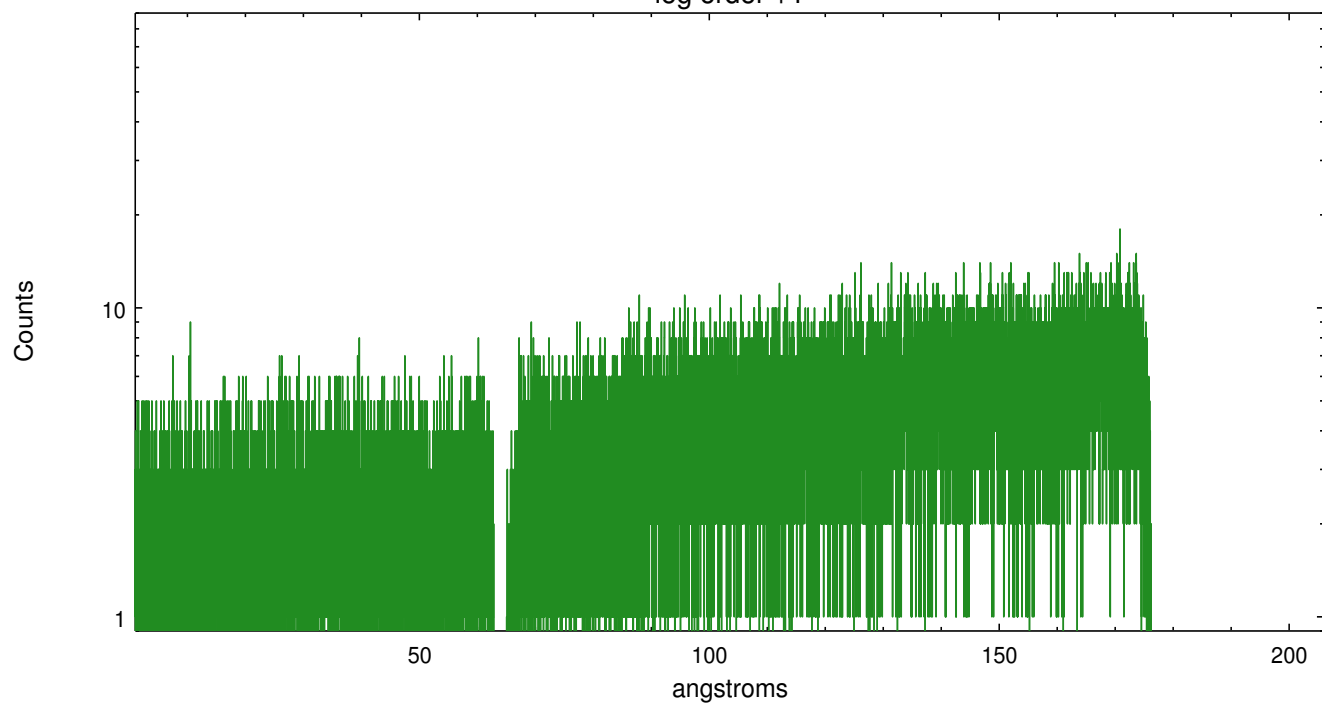


LETG Zero Order

leg order -1



leg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	41.953

A.2 Comments

Standard software processing technique using the tool `tgdetect` failed to find a source for the zeroth order for this observation. The SIMBAD position for Mira A was used as the zeroth order position (sky coordinates `x=32816.55`, `y=32887.493`).

These are the same zeroth order coordinates used in TGCat. The following

custom parameters were used for location of the zeroth order and definition of the extraction regions:

```
===
```

```
pset_0th_order 32816.55 32887.493
```

```
===
```

```
pset grt_lev15 use_user_pars=yes===
```

```
pset grt_lev15 sA_zero_x=32816.55===
```

```
pset grt_lev15 sA_zero_y=32887.493===
```

```
pset grt_lev15 sA_zero_rad=100===
```

```
pset grt_lev15 sA_width_leg=1500
```