

# V&V Reference Report

## L2 ASCDS Version : 10.1

Observation 14557 - L2 Version 3  
Chandra X-Ray Center

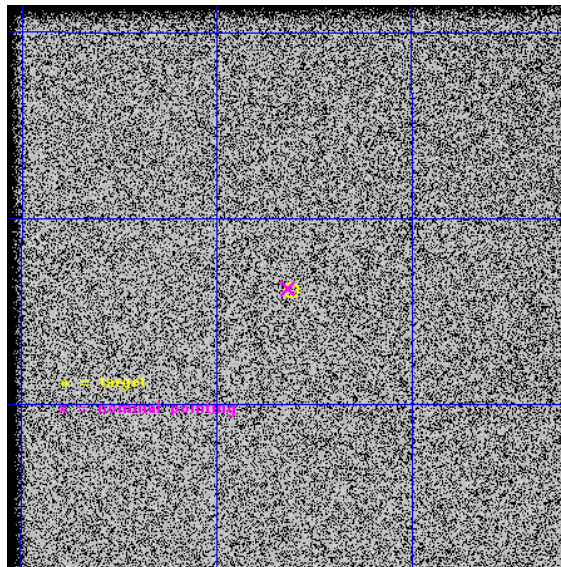
L2 Processing Date : Dec 8 2014

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# 1 Front

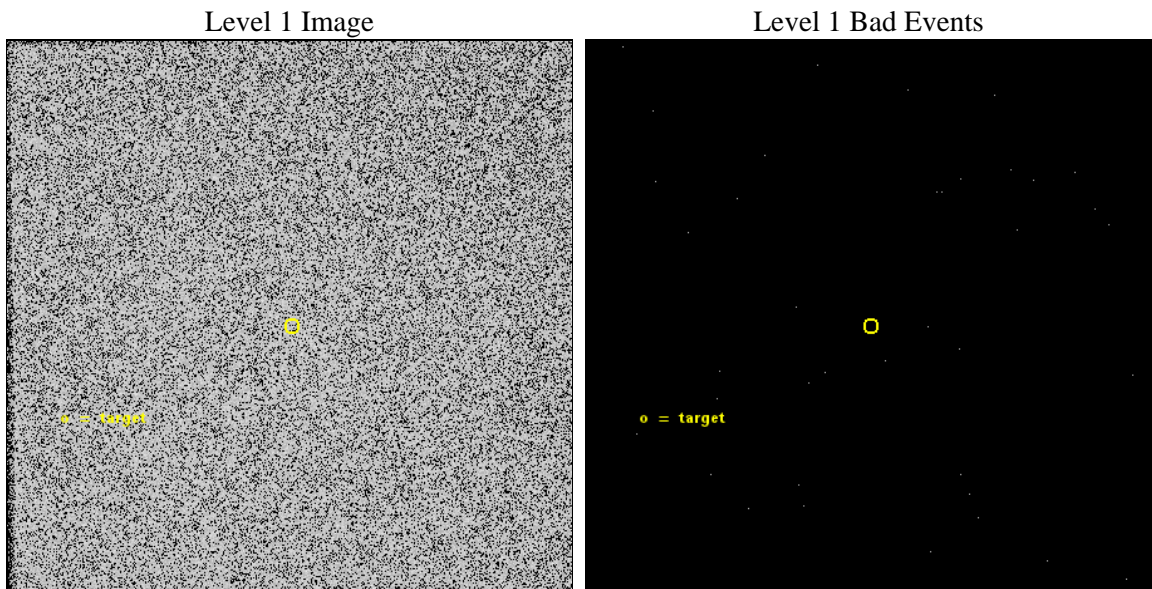
seq_num	200858	Sequence number
obs_id	14557	Observation id
title	Search for X-ray emission from a sample of luminous O-type subdwarfs	&#160
observer	Mr. Nicola La Palombara	Principal investigator
object	Feige 34	Source name
ra_targ	159.902917	Observer's specified target RA [deg]
dec_targ	43.102583	Observer's specified target Dec [deg]
ra_nom	159.90773964808	Nominal RA [deg]
dec_nom	43.104268789988	Nominal Dec [deg]
roll_nom	44.431421045751	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4178.9252285957	[s]
livetime	4147.97735198	Ontime multiplied by DTCOR
l2events	236087	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4178.9252285957	[s]
caldbver	4.6.4	&#160	l1events	443201	Number of level 1 events
date	2014-12-08T21:42:48	Date and time of file creation			
revision	3	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

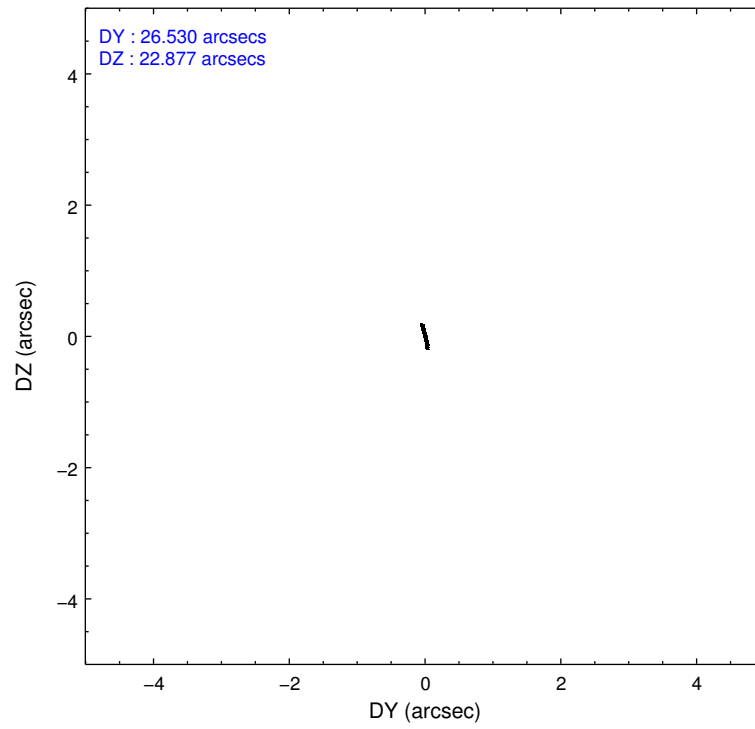
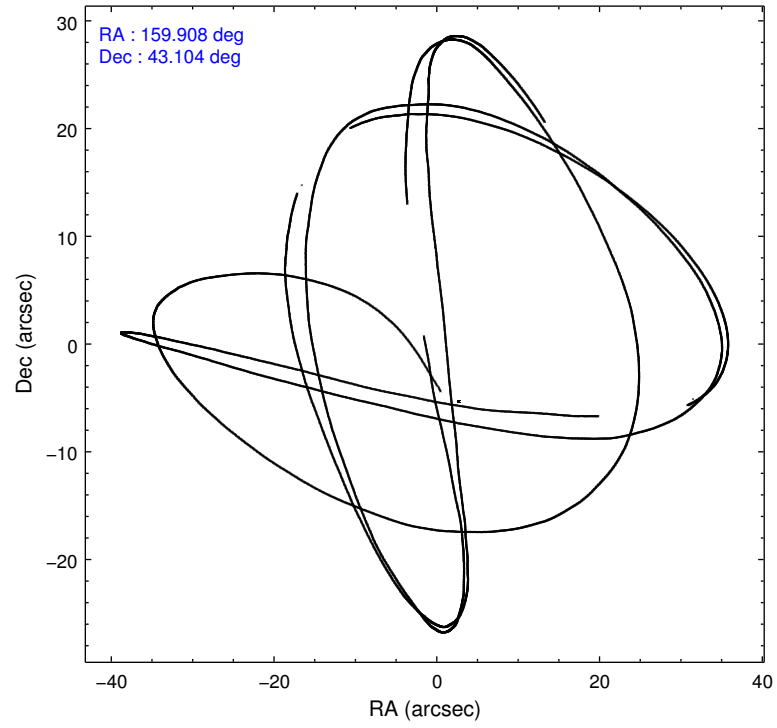
	<b>segment 0</b>
level 1 events	443201
rejected events	122916
rejected %	27%

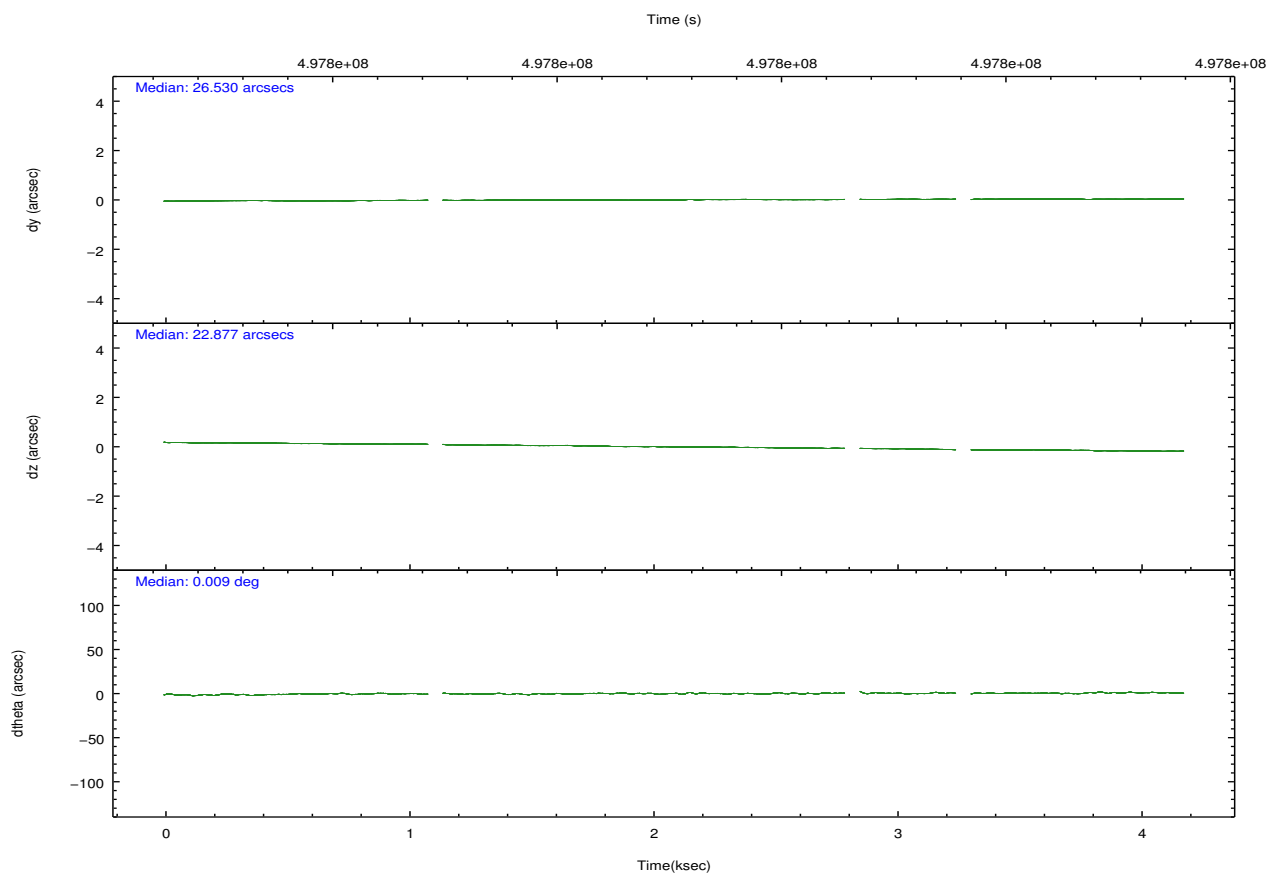
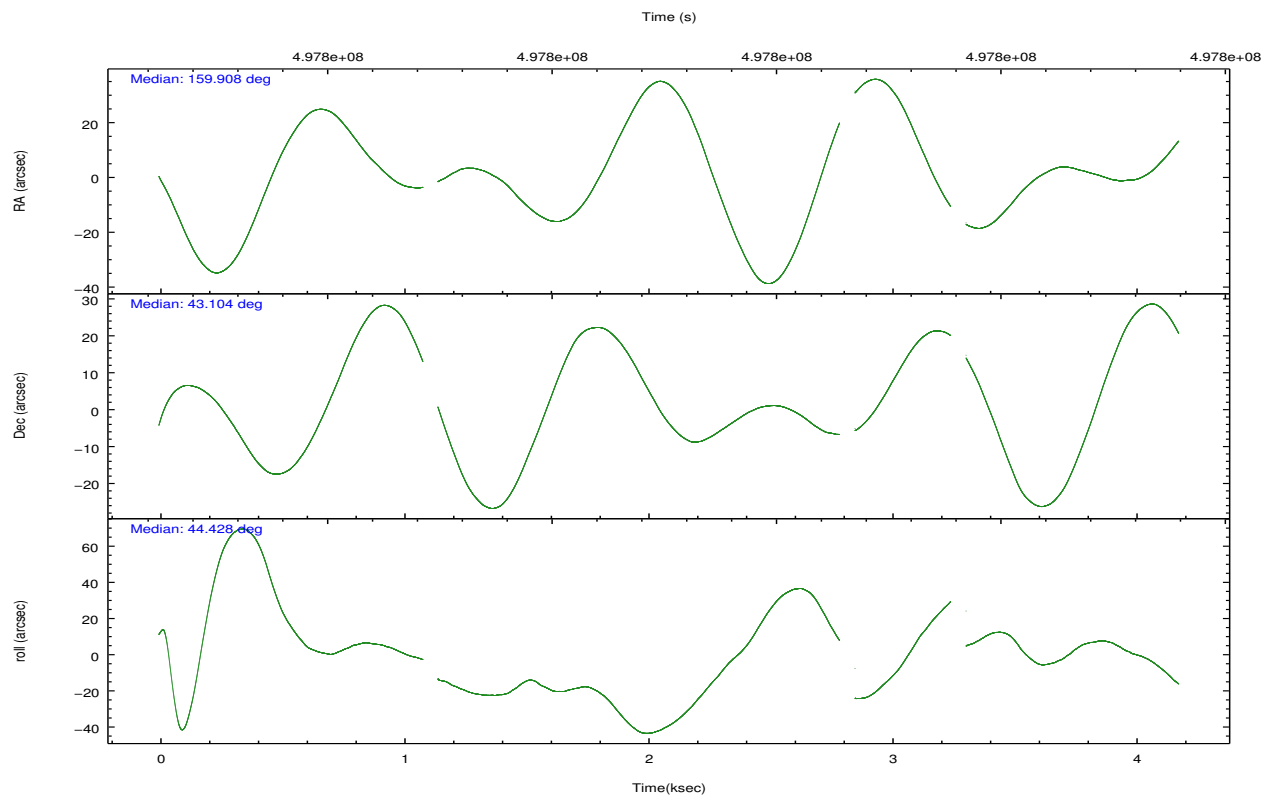


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-I	HRC-I	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	159.899082	159.9077396480835			
[deg] Pointing Dec	43.077860	43.1042687899881			
[deg] Pointing Roll	44.532620	44.43142104575082			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	126.985494	126.9829799899862			
[mm] SIM translation stage offset	0	0.002508901615314585			
[s] Observation start time (MET)	497797611.184000	497795872.26595			
Observation start date	2013-10-10T13:05:44	2013-10-10T12:37:52			
[s] Observation end time (MET)	497801611.184000	497802683.90382			
Observation end date	2013-10-10T14:12:24	2013-10-10T14:31:23			

## 2.3 Aspect



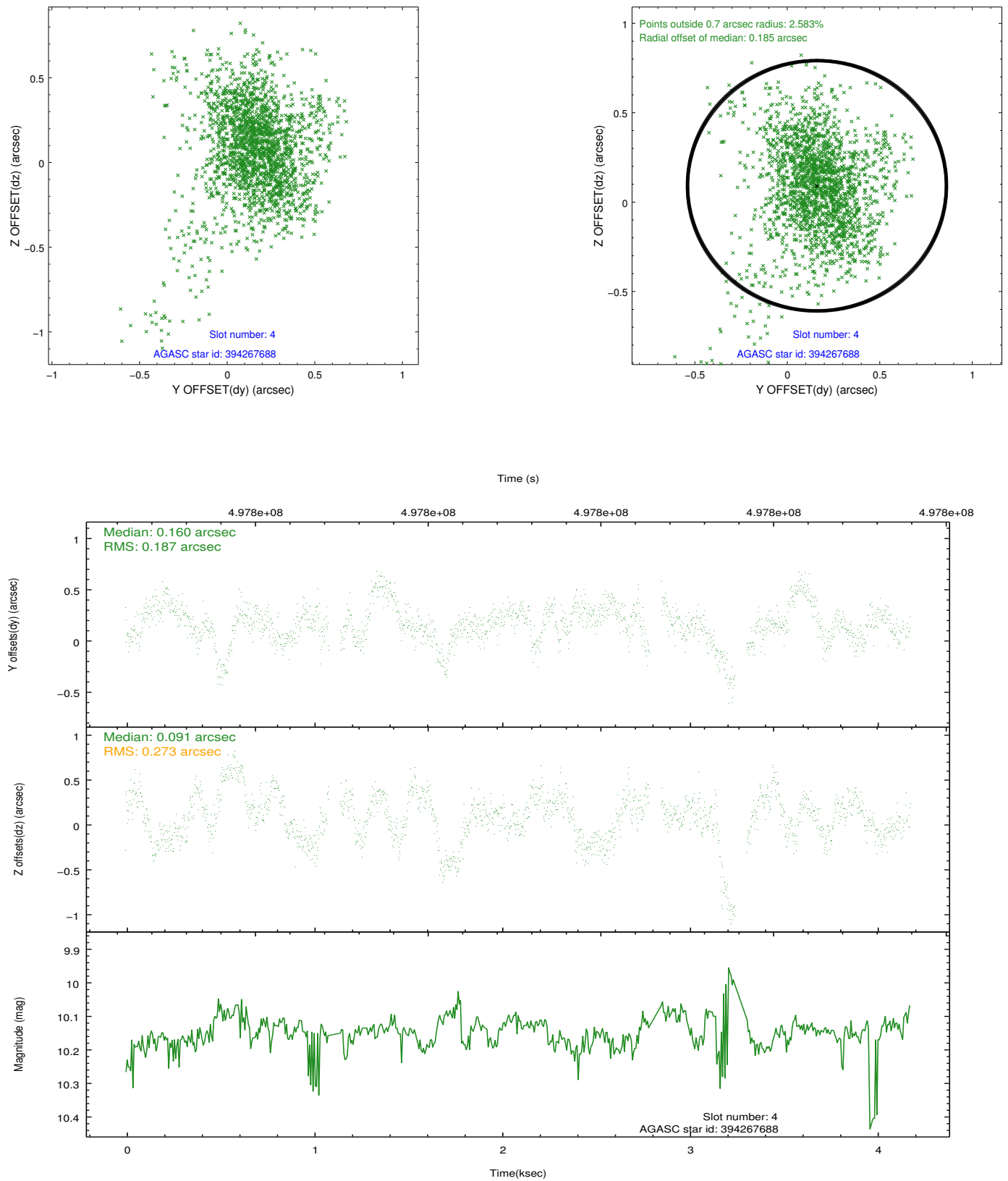


Slot Statistics

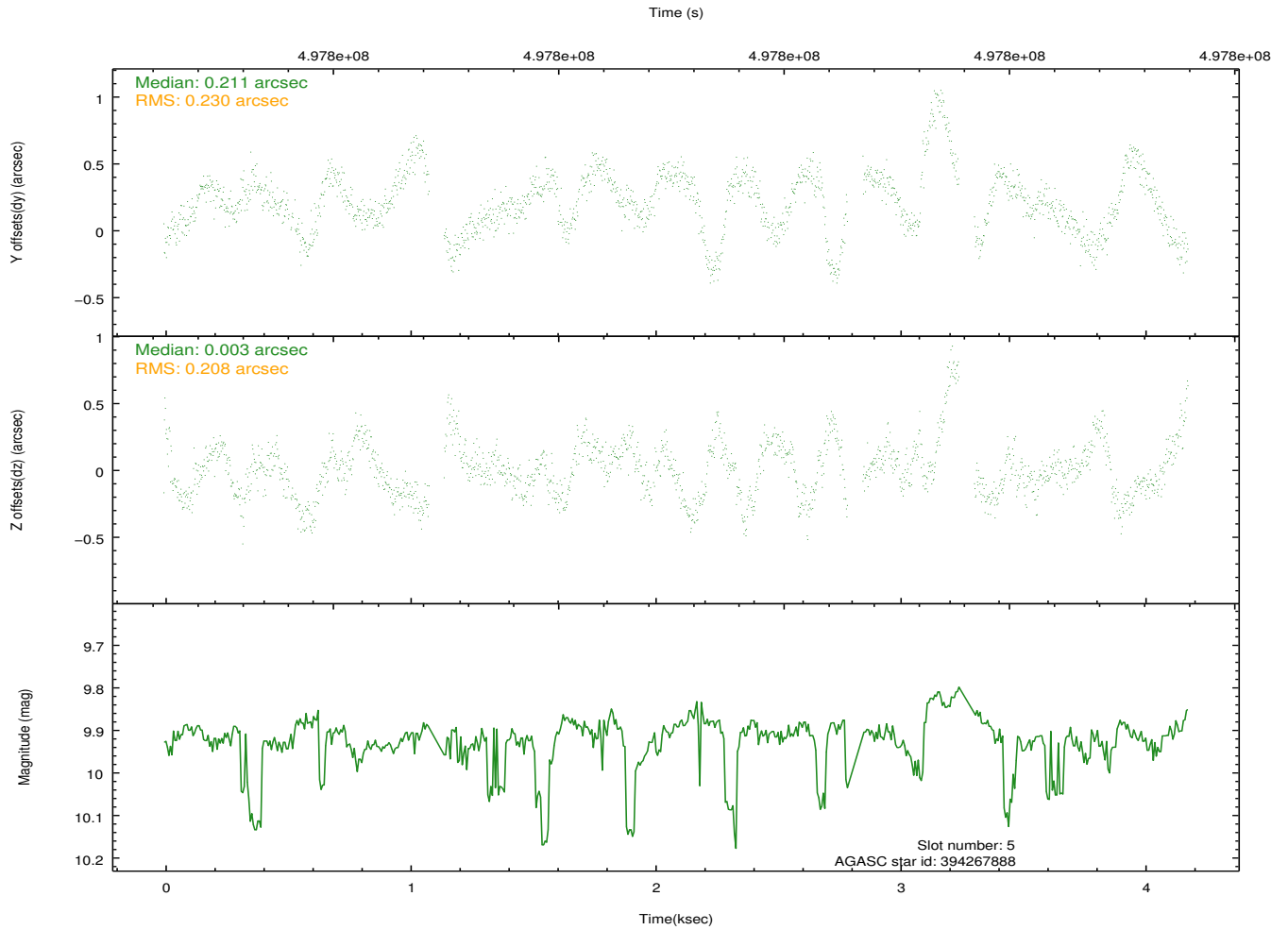
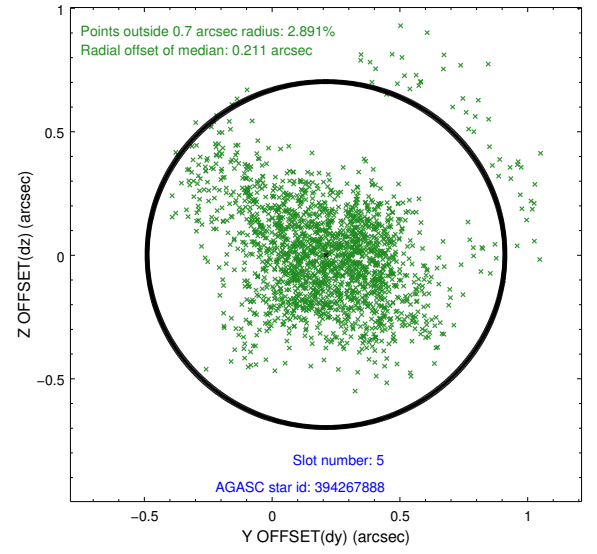
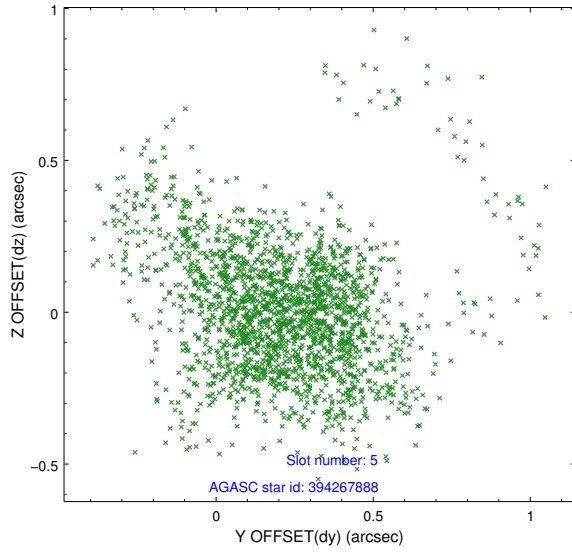
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-2	7.09	975	0.088	-0.103	0.008	0.013	0.000000	0.000000	830.07	-1312.86
1	FID		HRC-I-3	7.13	975	-0.270	0.028	0.007	0.013	0.000000	0.000000	-1210.55	992.06
2	FID		HRC-I-4	7.08	975	0.301	-0.012	0.006	0.010	0.000000	0.000000	1259.21	991.98
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	394267688	10.15	1936	0.160	0.091	0.320	0.597	159.395885	42.745124	-1785.37	80.26
5	GUIDE	used	394267888	9.92	1937	0.211	0.003	0.297	0.590	159.080037	43.087895	-1502.17	1541.95
6	GUIDE	used	394271736	10.15	1913	-0.066	-0.116	0.324	0.640	159.162873	43.360811	-653.23	2081.99
7	GUIDE	used	394670752	10.24	1934	-0.288	0.009	0.336	0.621	160.322540	43.678059	2303.04	769.09

## 2.4 Star Slots

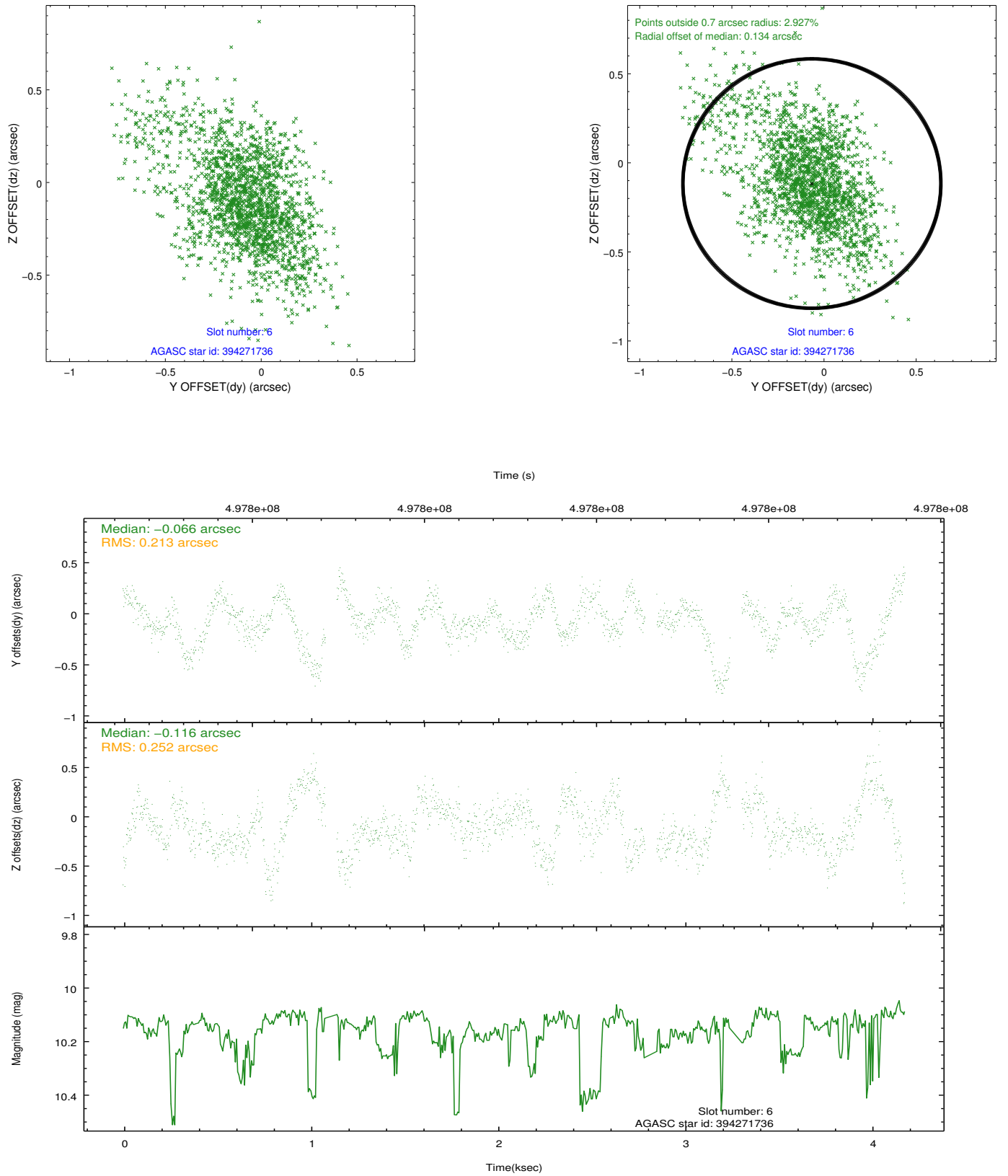
### 2.4.1 Slot 4



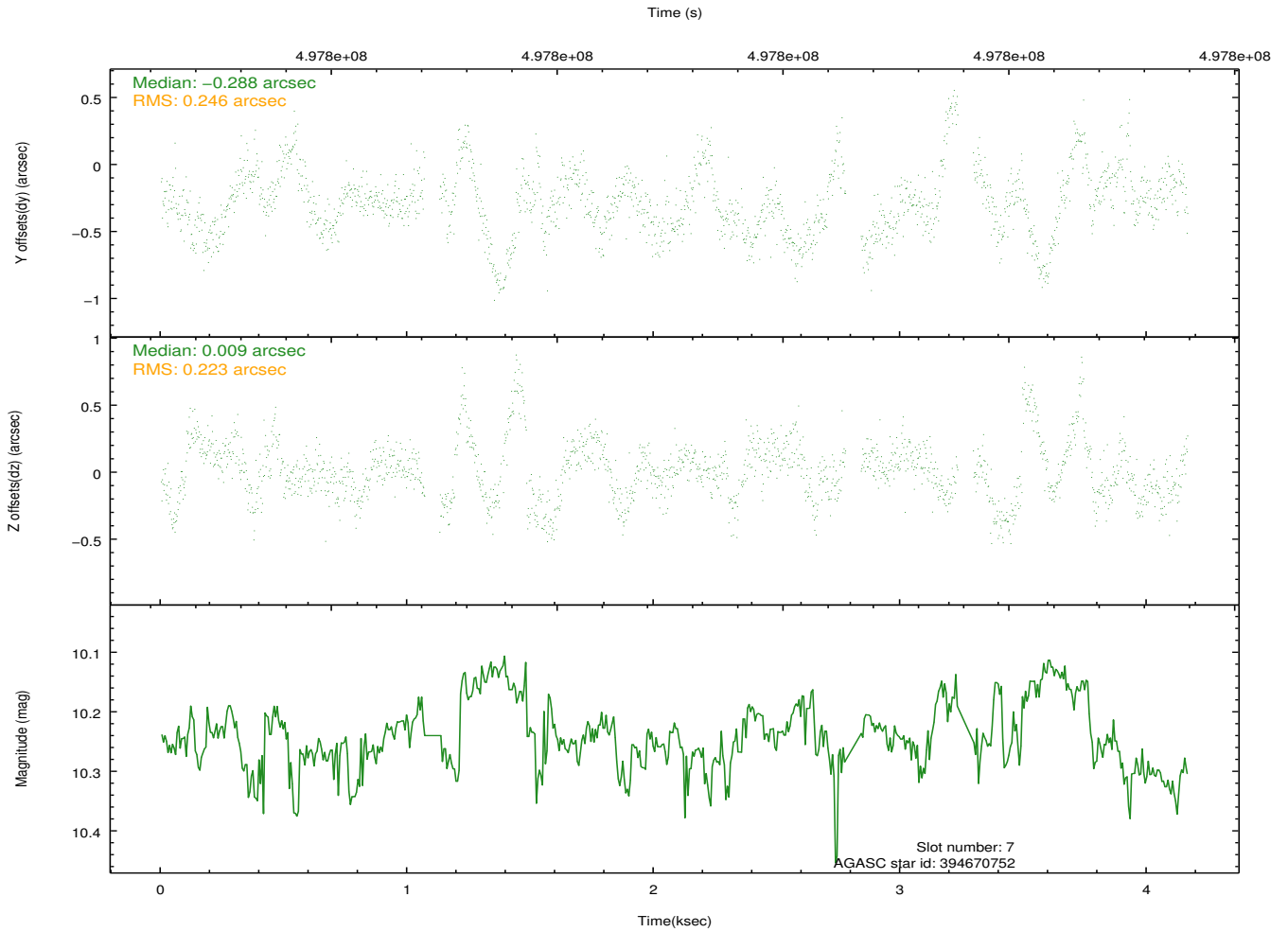
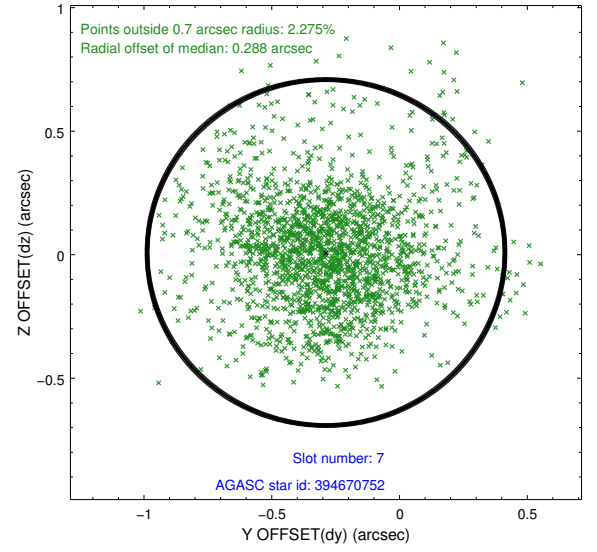
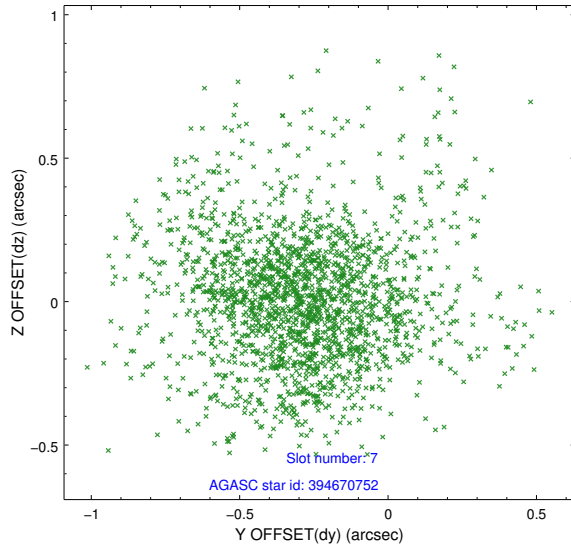
## 2.4.2 Slot 5



### 2.4.3 Slot 6



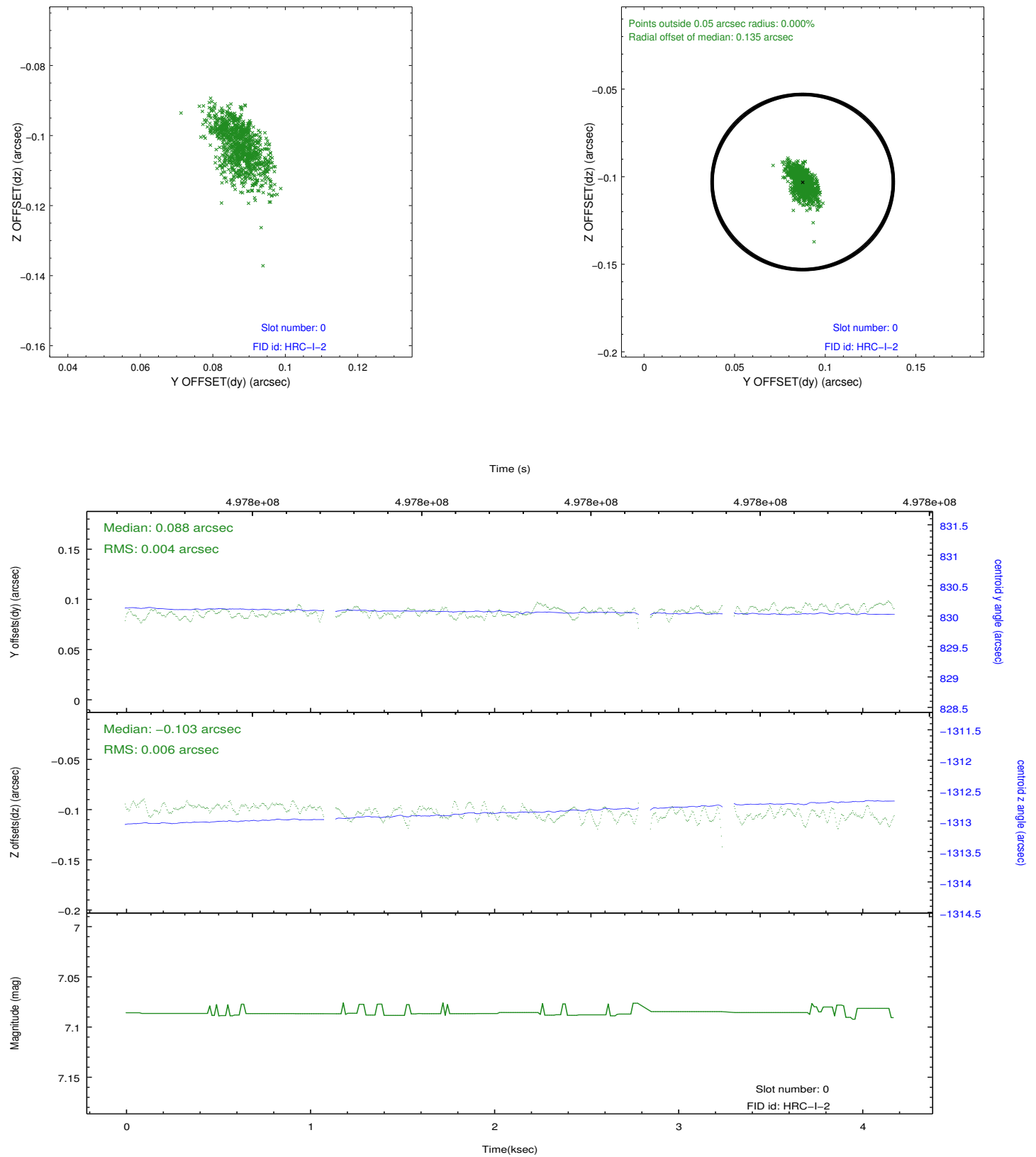
## 2.4.4 Slot 7



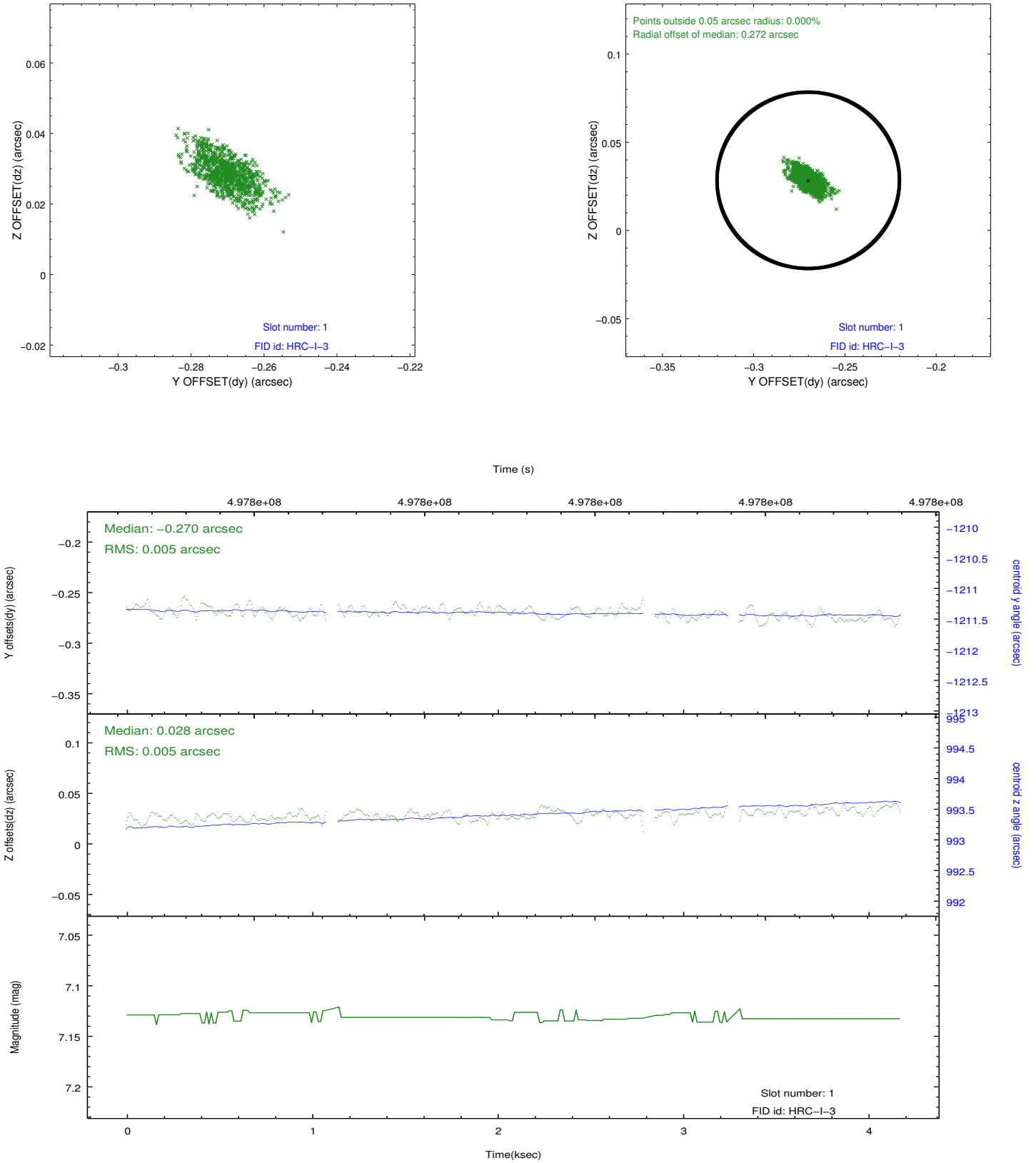


## 2.5 FID Slots

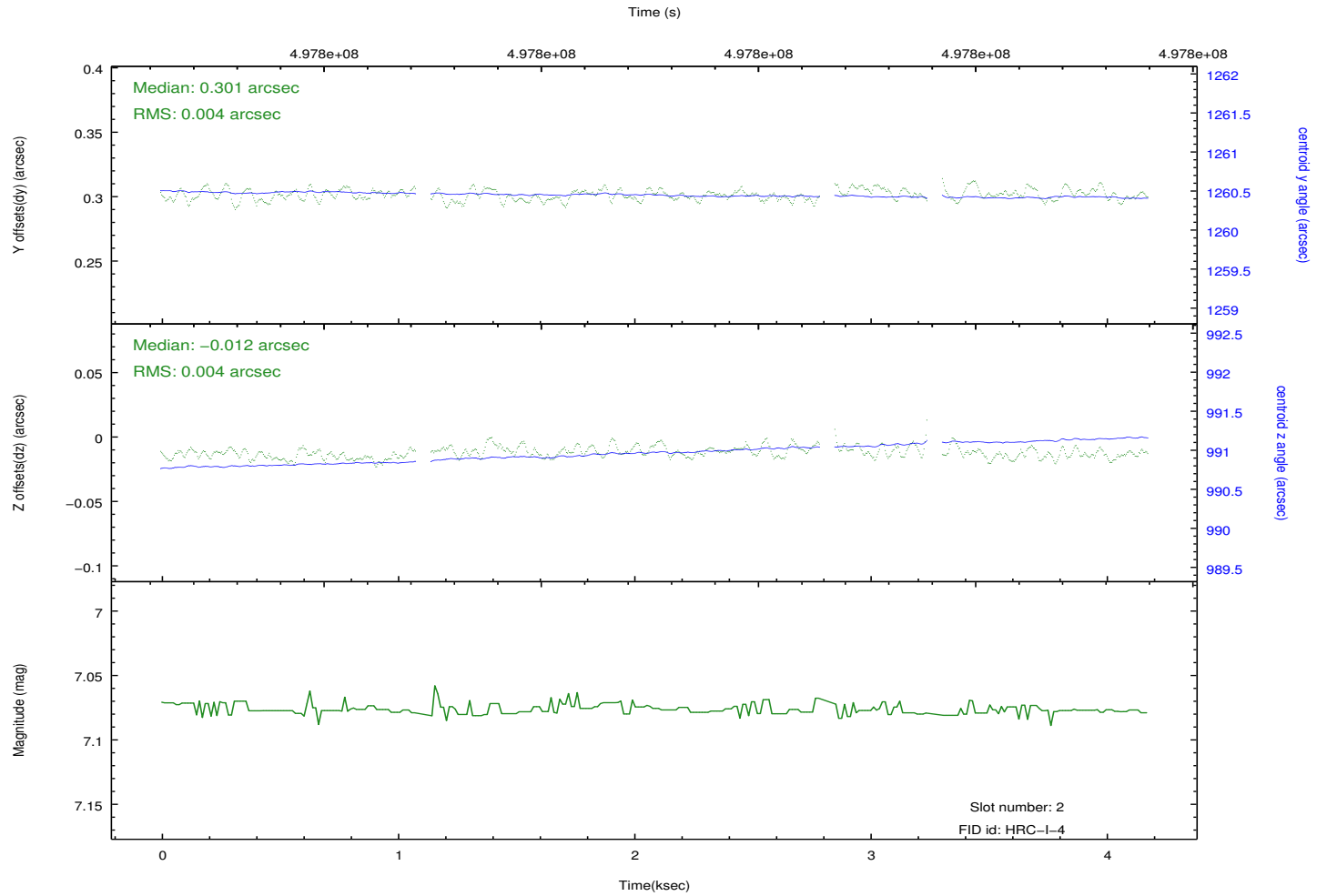
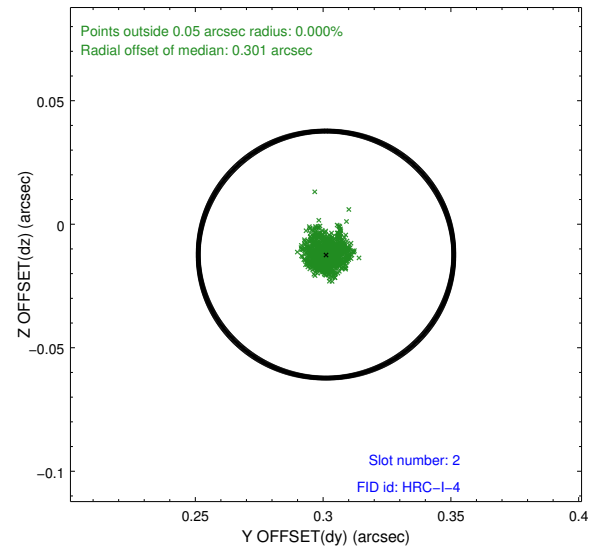
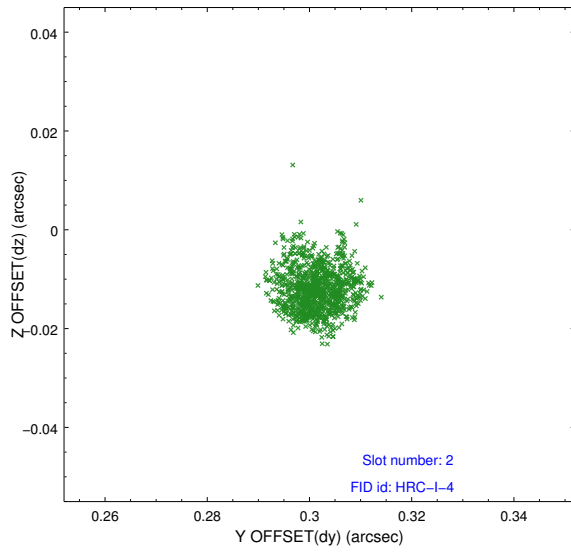
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.1789252285957

## A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.