

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 16637 - L2 Version 1  
Chandra X-Ray Center

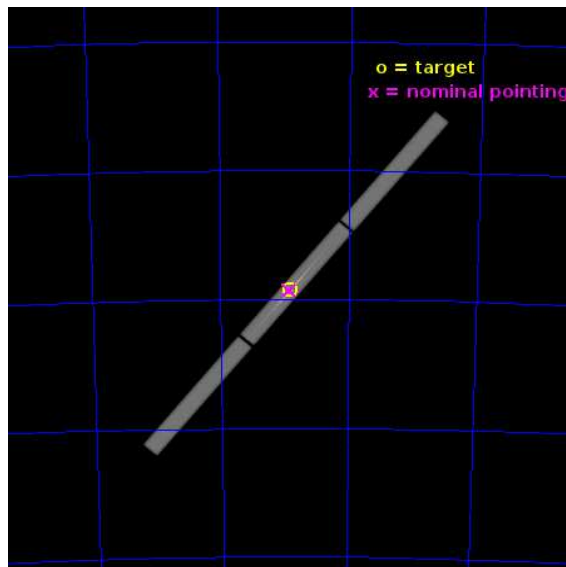
L2 Processing Date : Jul 14 2014

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# 1 Front

seq_num	401562	Sequence number
obs_id	16637	Observation id
title	LETGS Spectroscopy of the Ultracompact Binary 4U 1626-67	Proposal
observer	Prof. Deepto Chakrabarty	Principal investigator
object	4U 1626-67	Source name
ra_targ	248.069583	Observer's specified target RA [deg]
dec_targ	-67.461667	Observer's specified target Dec [deg]
ra_nom	248.0778017763	Nominal RA [deg]
dec_nom	-67.465463859139	Nominal Dec [deg]
roll_nom	310.07493422976	Nominal Roll [deg]
revision	1	Processing version of data
ontime	49795.78400743	[s]
livetime	49464.957068791	Ontime multiplied by DTCOR
l2events	2866760	Number of level 2 events

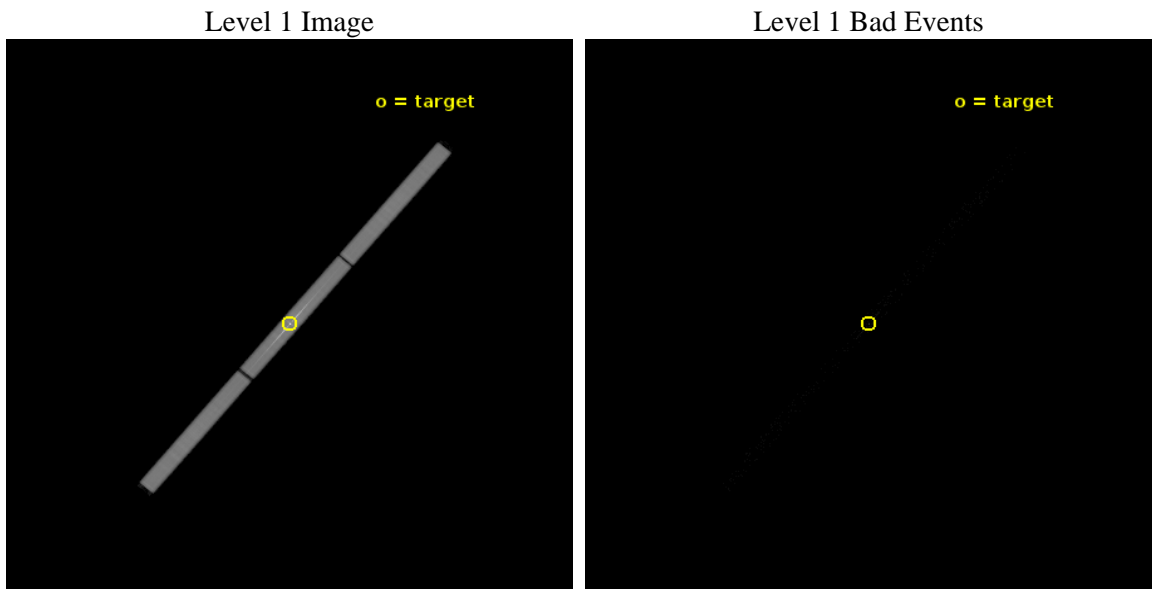




## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	49795.78400743	[s]
caldsver	4.6.2	&#160	l1events	3707676	Number of level 1 events
date	2014-07-14T17:03:20	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(32858.34, 32884.50)	src1a sky pixel position

### 2.1.3 Events

Level 1 Events

	segment 1	segment 2	segment 3
level 1 events	1151252	1399992	1156432
rejected events	2158	2390	2216
rejected %	0%	0%	0%

## 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	248.005864	248.0778017763017			
[deg] Pointing Dec	-67.456936	-67.46546385913892			
[deg] Pointing Roll	309.941150	310.0749342297573			
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	521666862.184000	521665807.59246			
Observation start date	2014-07-13T19:26:35	2014-07-13T19:10:07			
[s] Observation end time (MET)	521716862.184000	521717675.15784			
Observation end date	2014-07-14T09:19:55	2014-07-14T09:34:35			

## 2.3 Aspect

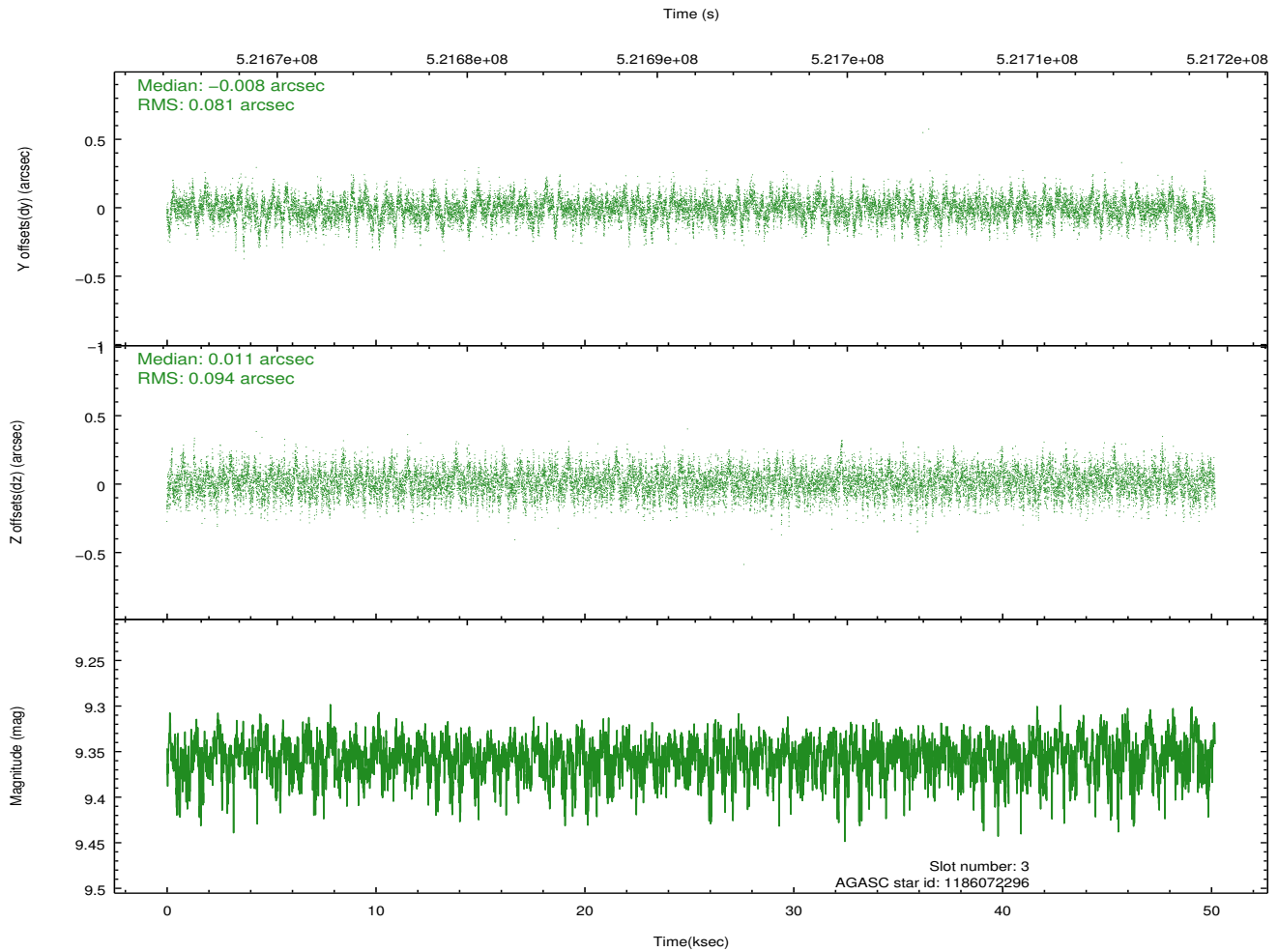
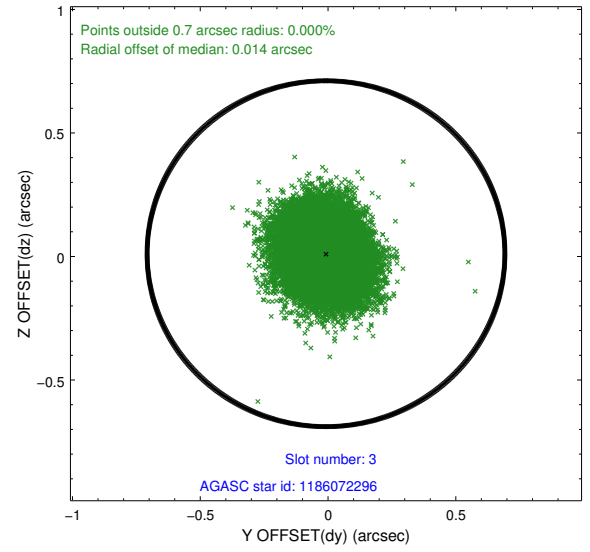
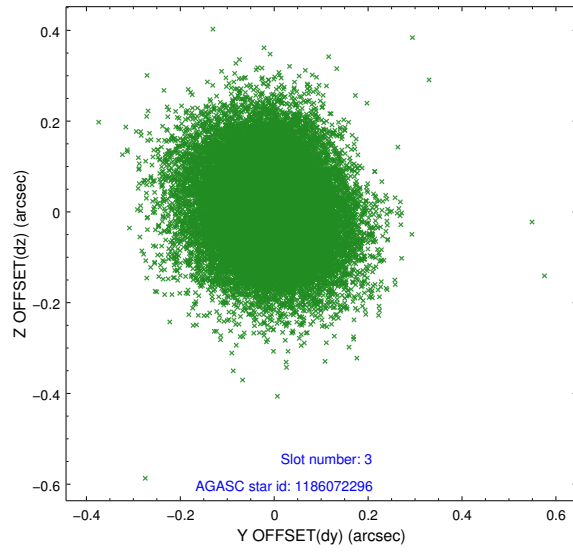


### Slot Statistics

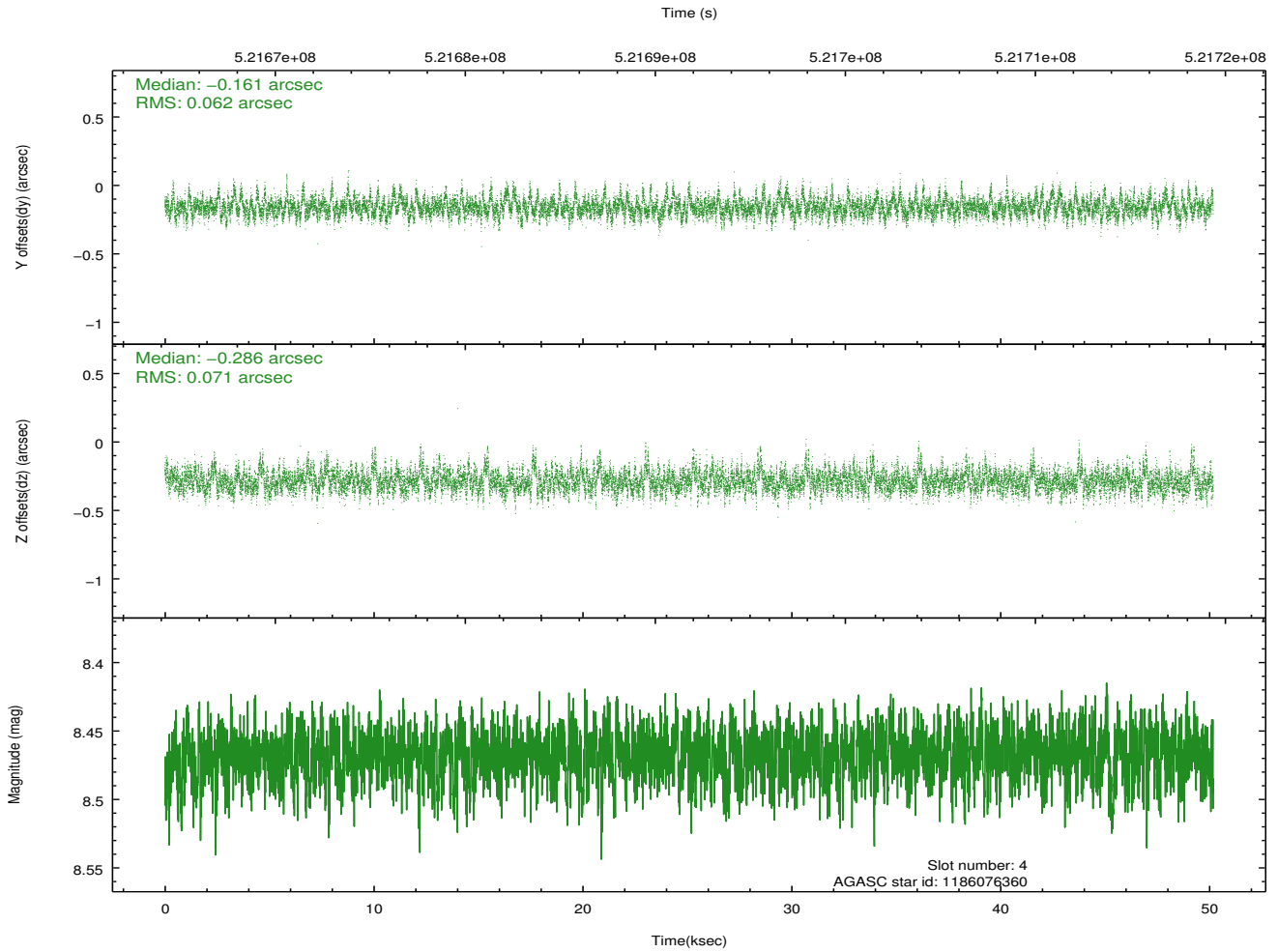
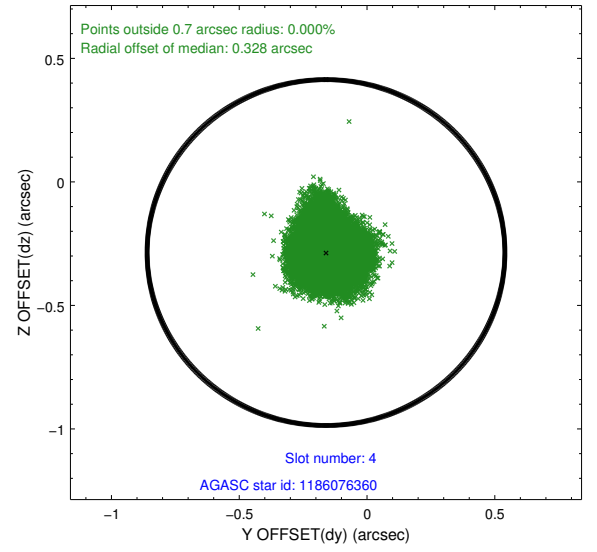
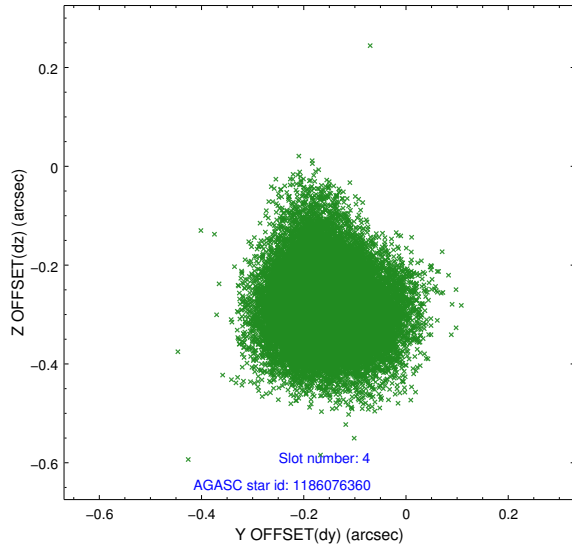
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-2	7.02	12242	0.162	-0.165	0.031	0.050	0.000000	0.000000	1221.56	-460.00
1	FID	HRC-S-3	7.04	12240	-0.055	-0.087	0.022	0.046	0.000000	0.000000	-1180.97	562.20
2	FID	HRC-S-4	6.97	12242	0.298	-0.047	0.027	0.053	0.000000	0.000000	1220.17	564.90
3	GUIDE	1186072296	9.36	24470	-0.008	0.011	0.132	0.215	247.909553	-67.035246	-1250.22	870.77
4	GUIDE	1186076360	8.47	24469	-0.161	-0.286	0.100	0.165	248.266100	-67.434021	168.34	328.16
5	GUIDE	1215569992	9.25	24464	-0.117	-0.180	0.143	0.239	249.398538	-67.627995	1713.85	1054.13
6	GUIDE	1215570568	8.41	24401	0.139	0.209	0.094	0.153	246.859352	-67.889721	209.49	-2200.47
7	GUIDE	1186071656	9.39	24459	0.153	0.242	0.156	0.251	247.561655	-67.321127	-767.91	-161.08

## 2.4 Star Slots

### 2.4.1 Slot 3

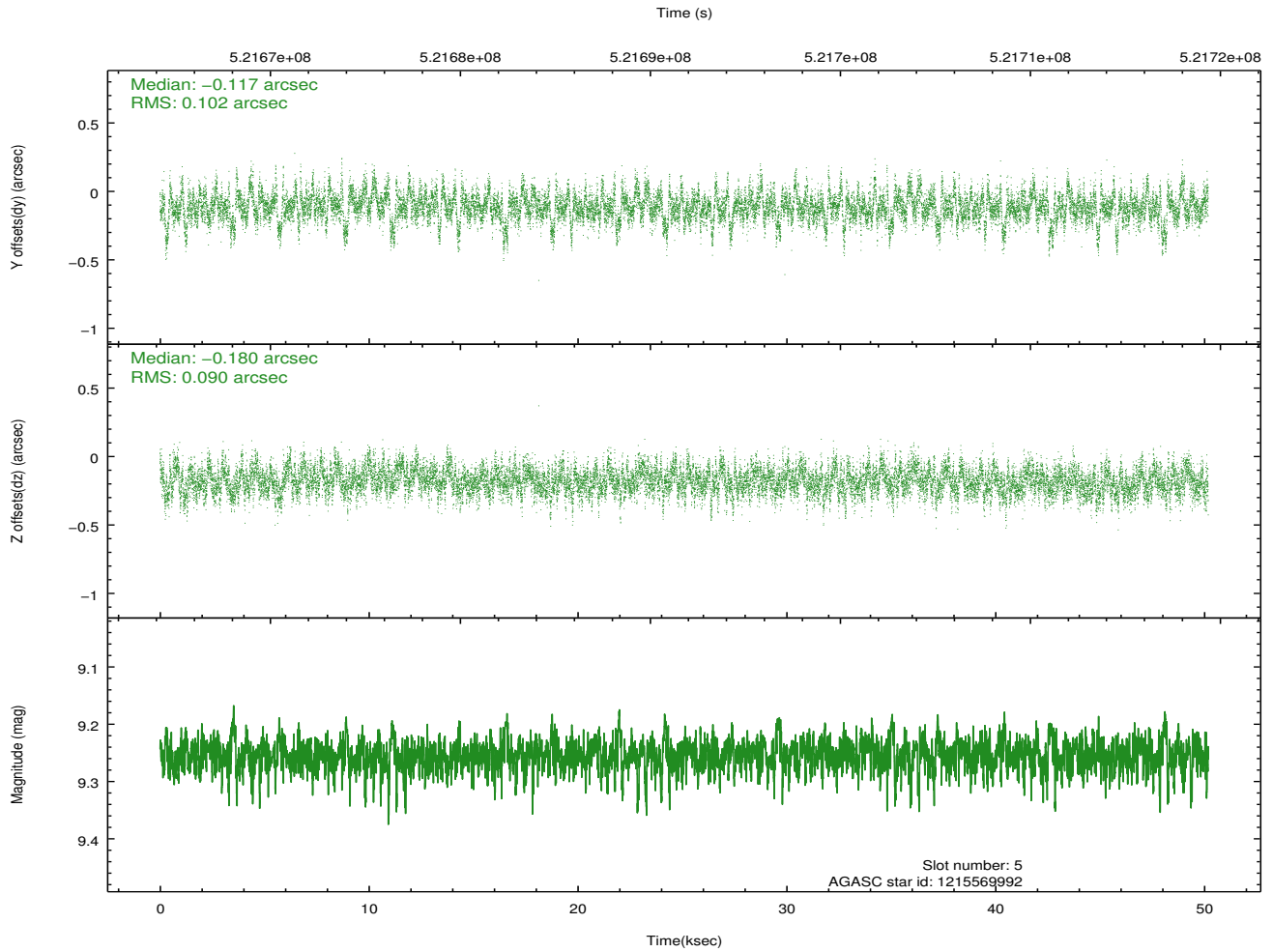
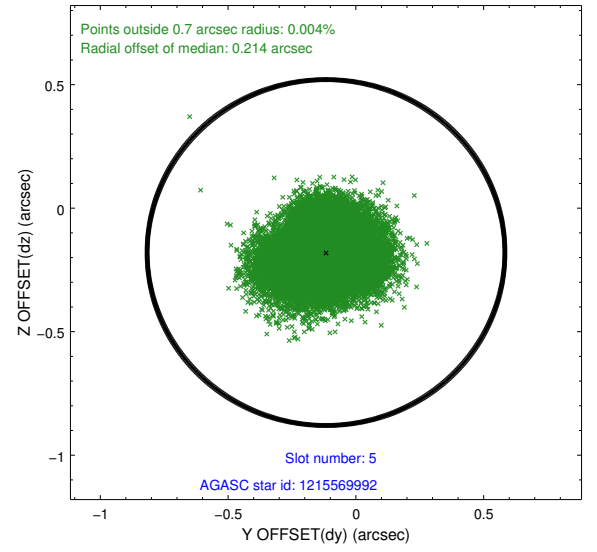
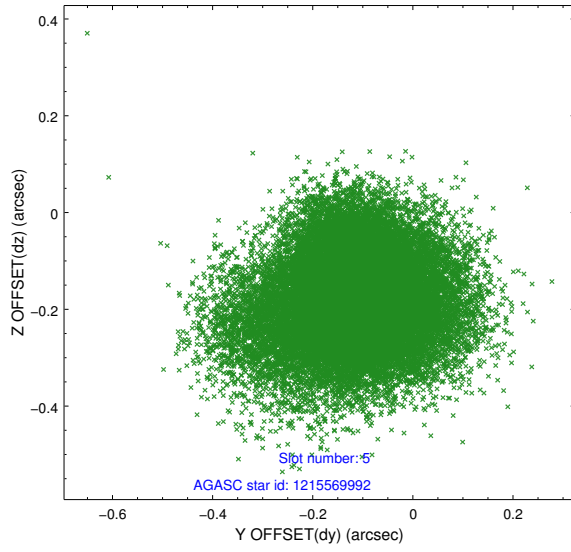


## 2.4.2 Slot 4

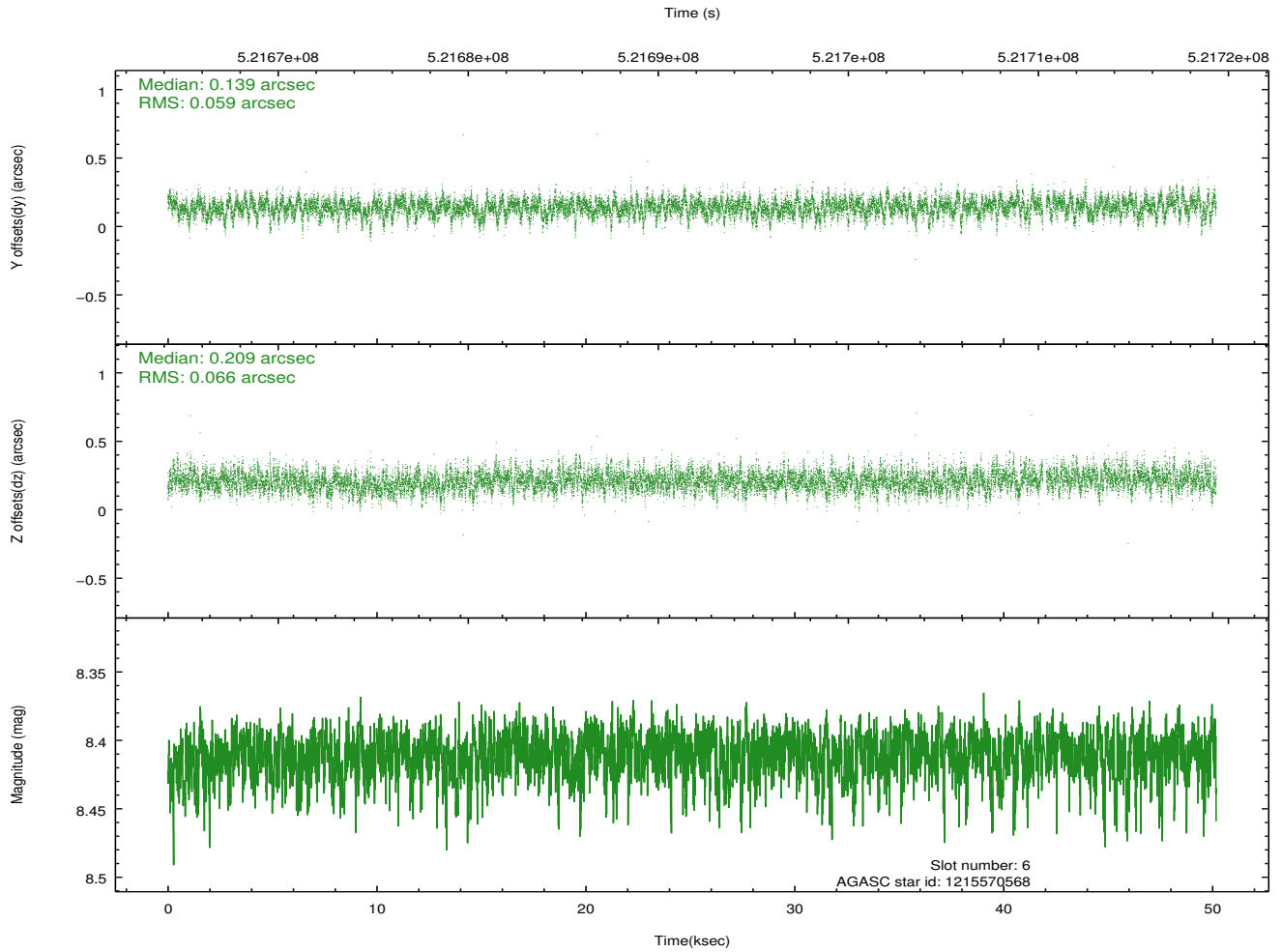
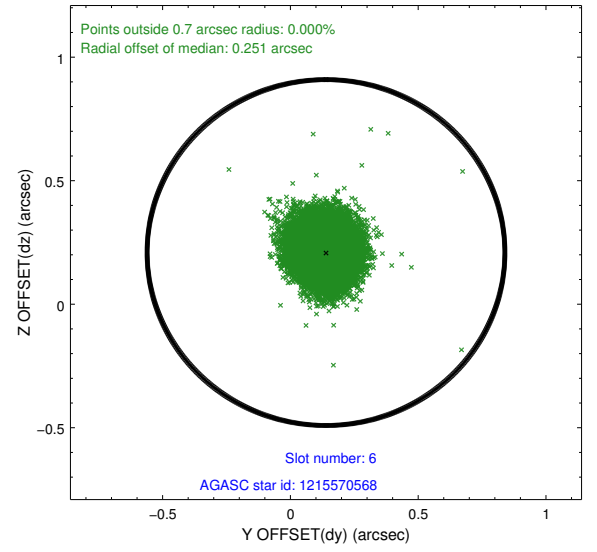
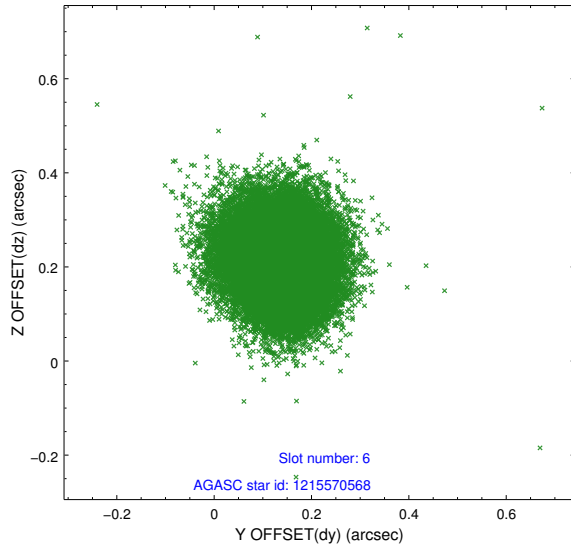




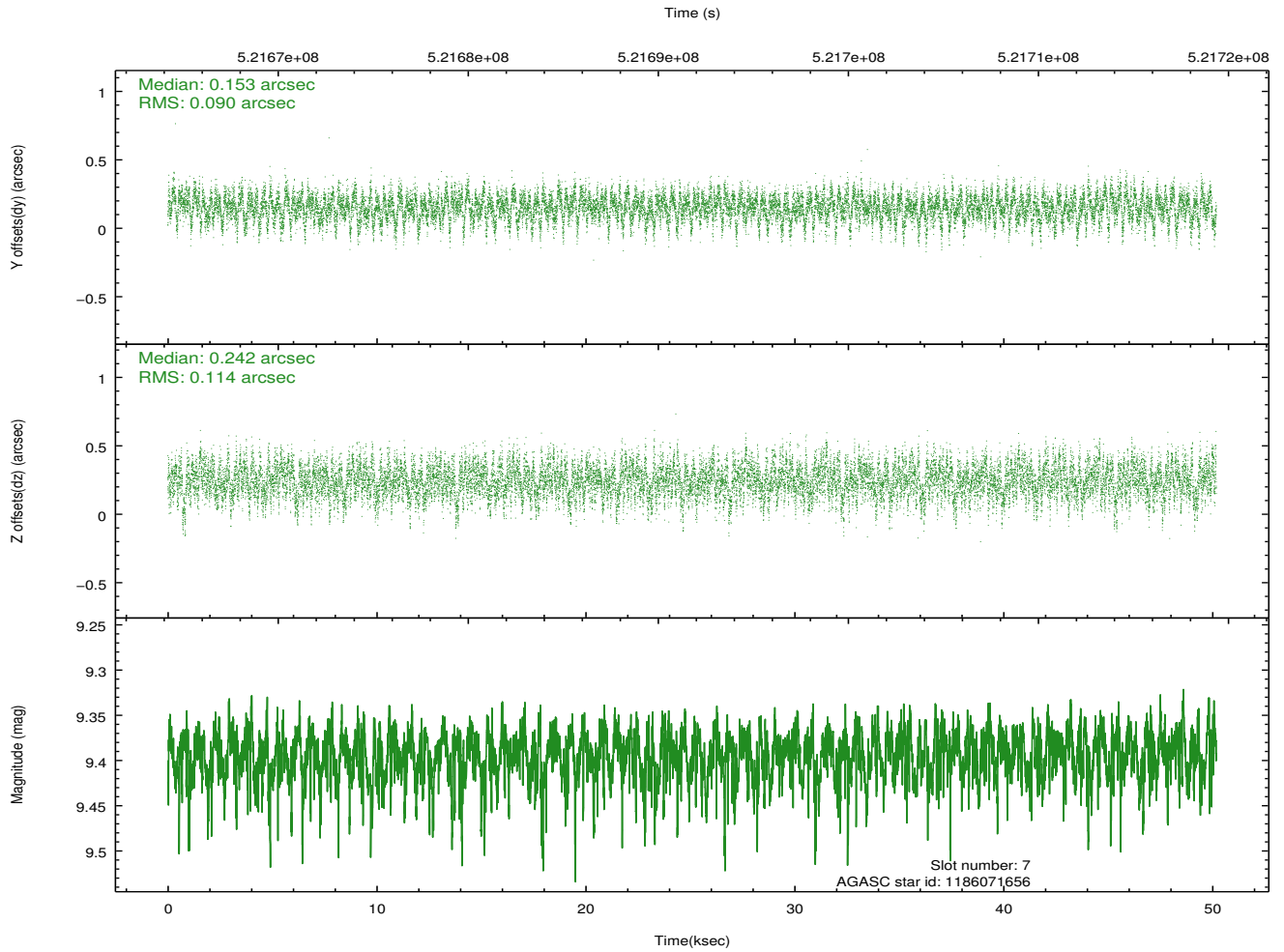
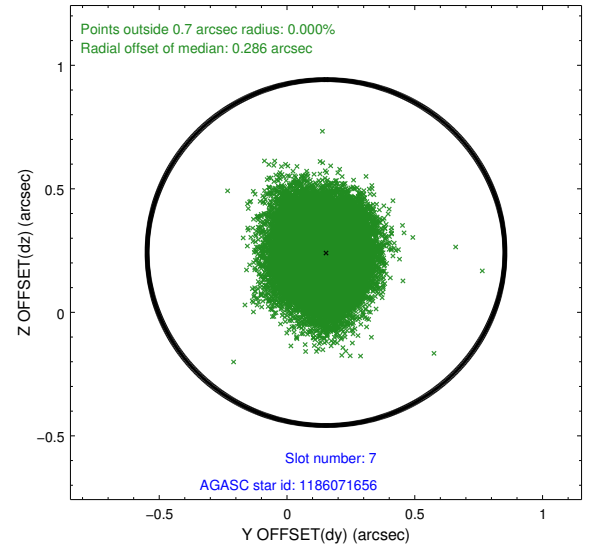
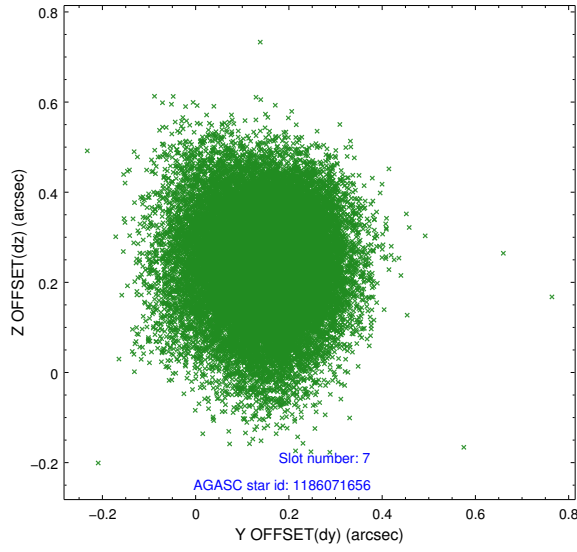
### 2.4.3 Slot 5



## 2.4.4 Slot 6

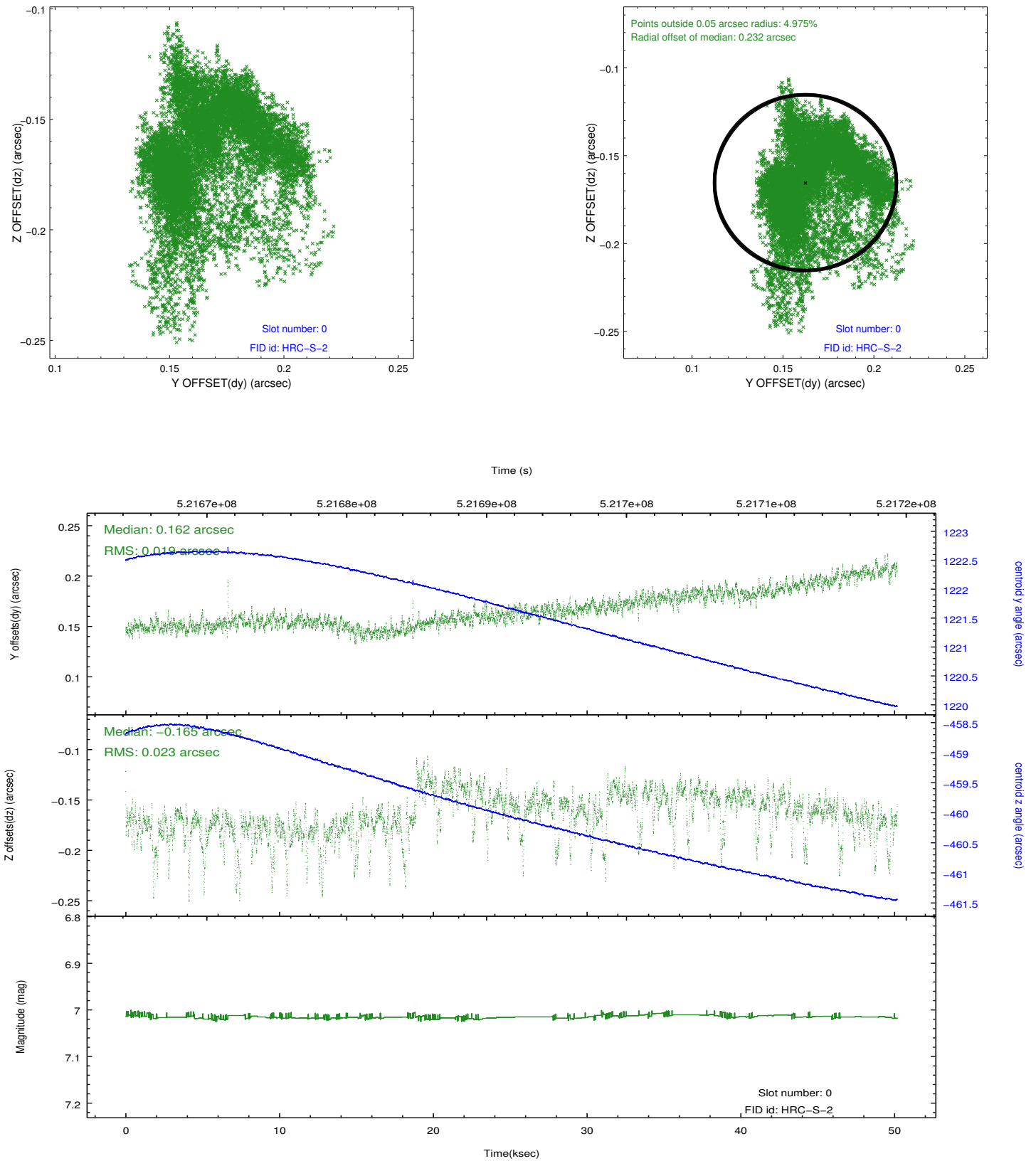


## 2.4.5 Slot 7

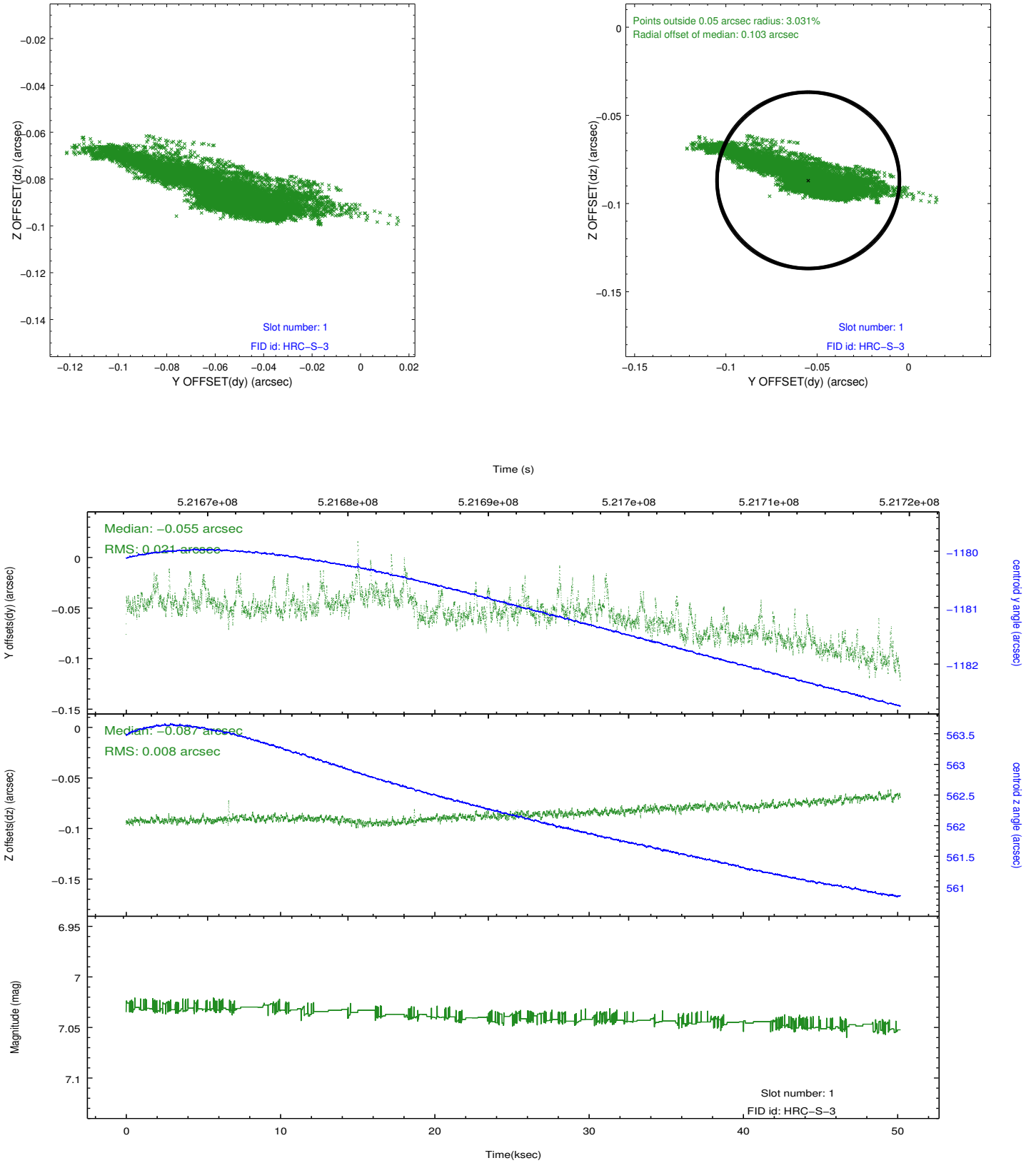


## 2.5 FID Slots

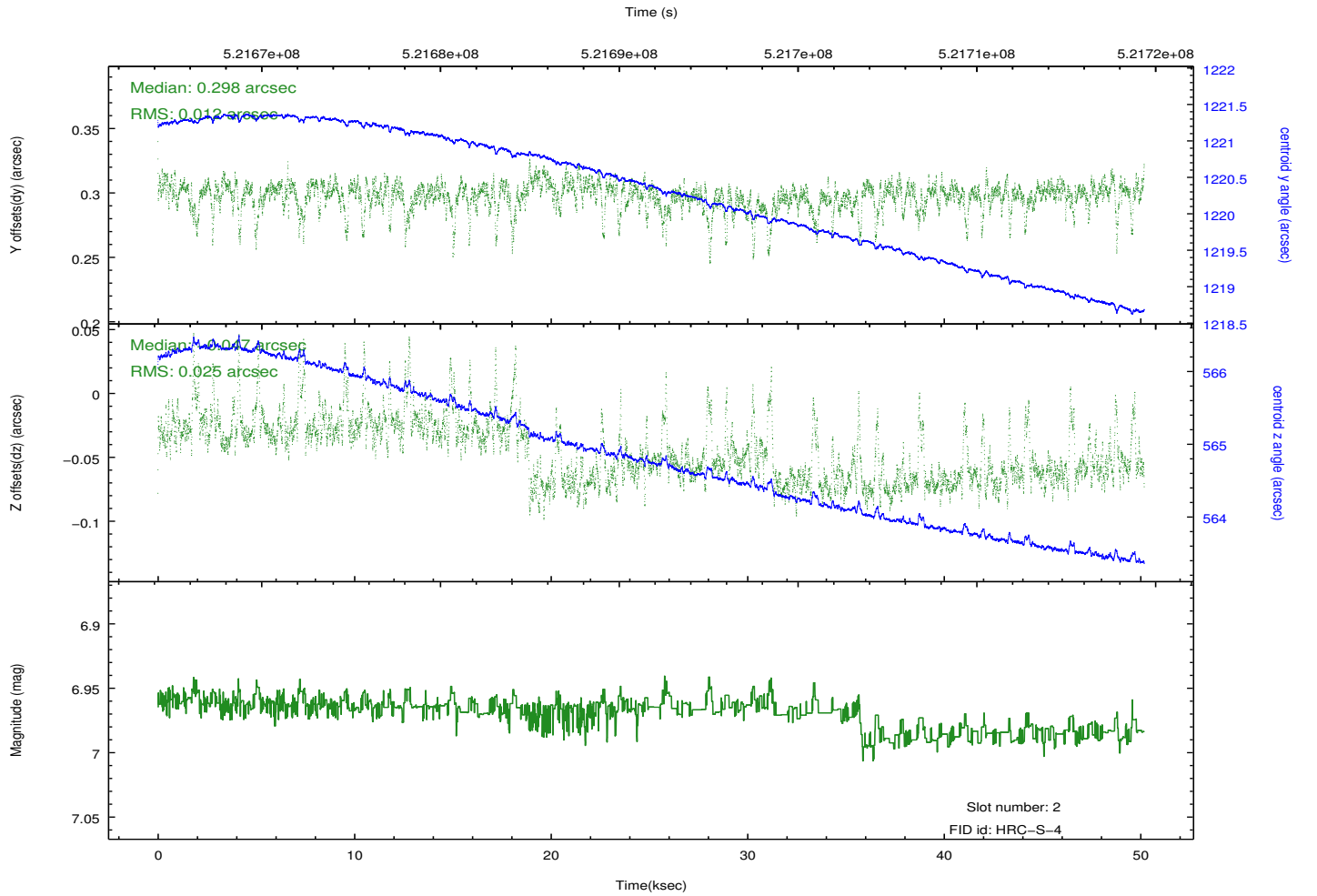
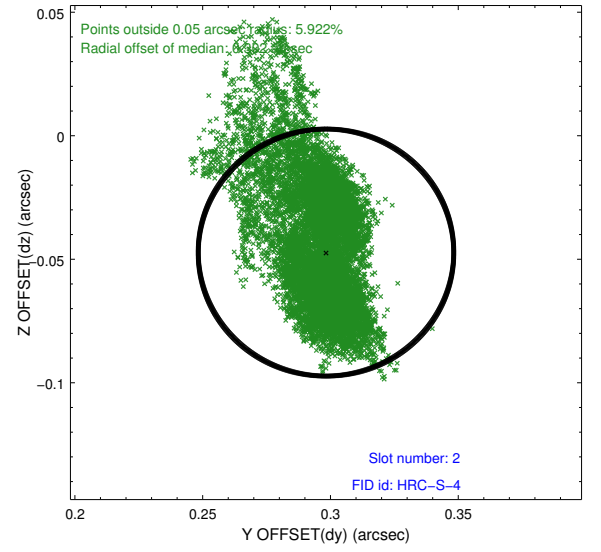
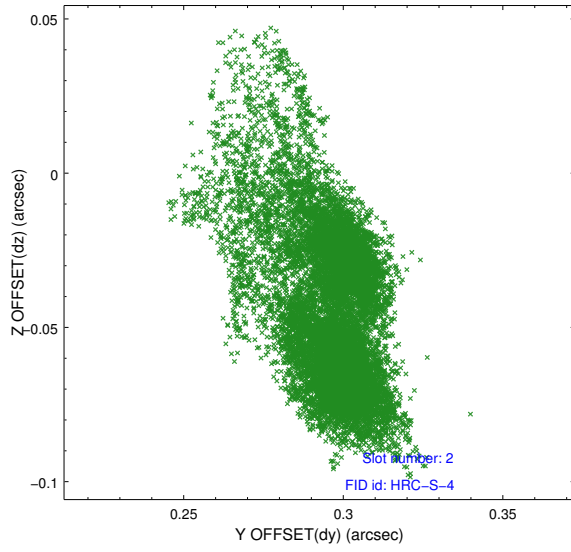
### 2.5.1 Slot 0



## 2.5.2 Slot 1

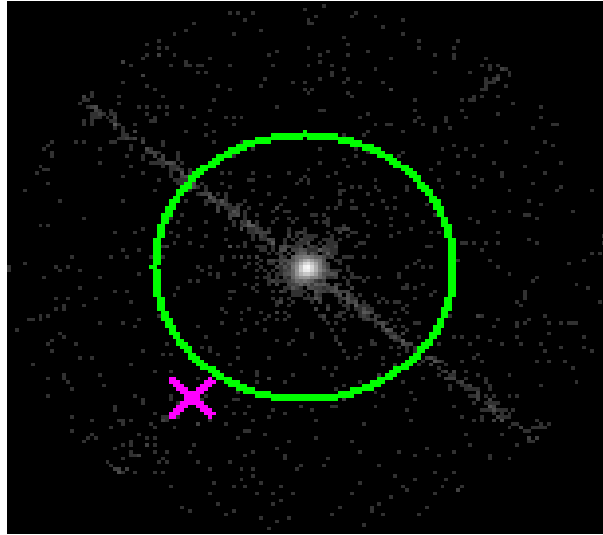


### 2.5.3 Slot 2

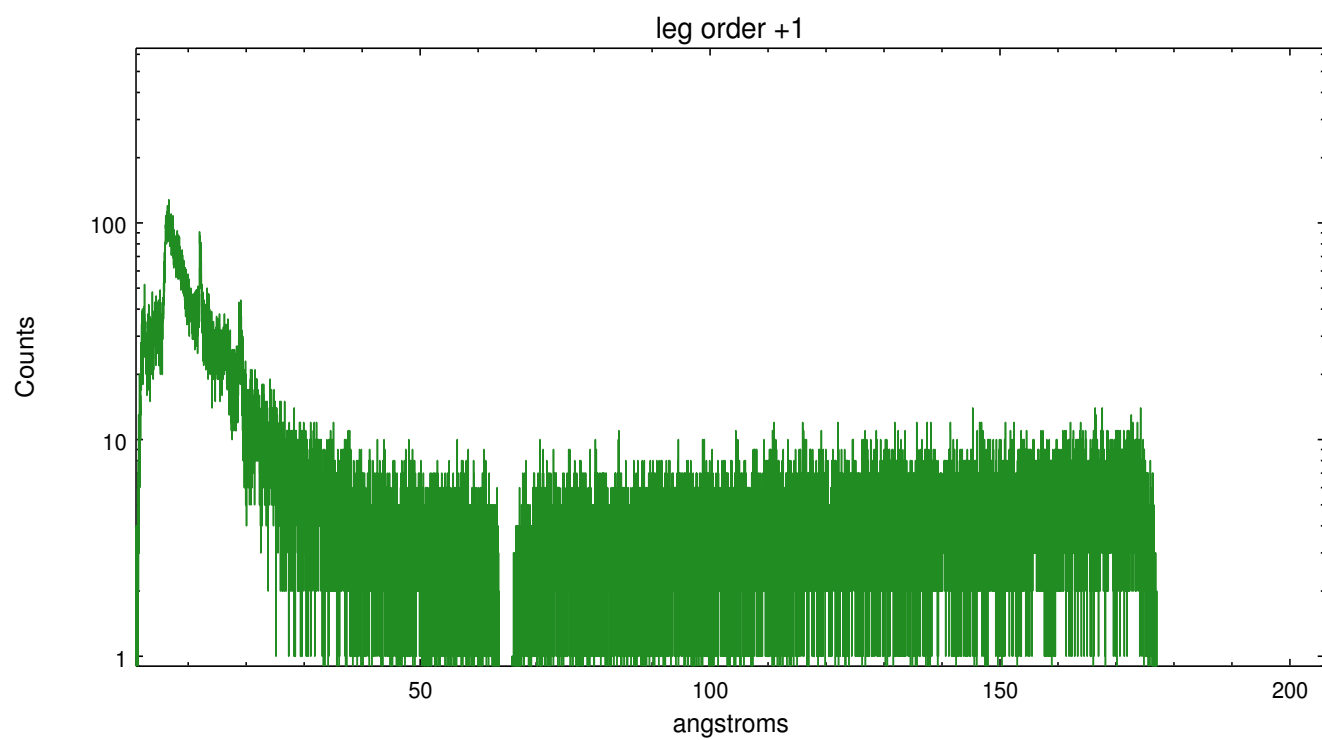
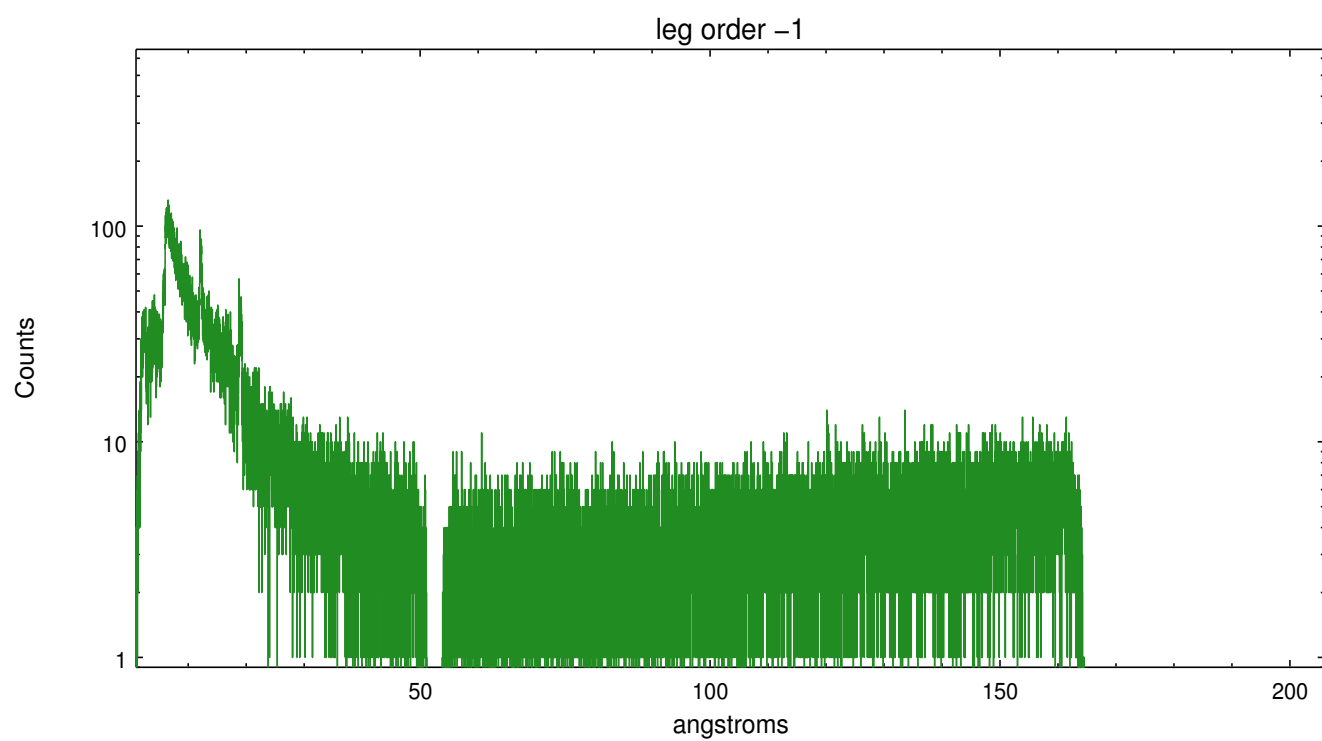


## 3 Gratings

### 3.1 LETG Arm



LETG Zero Order





## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2014.07.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.79578400743

### A.2 Comments