

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 5582 - L2 Version 3  
Chandra X-Ray Center

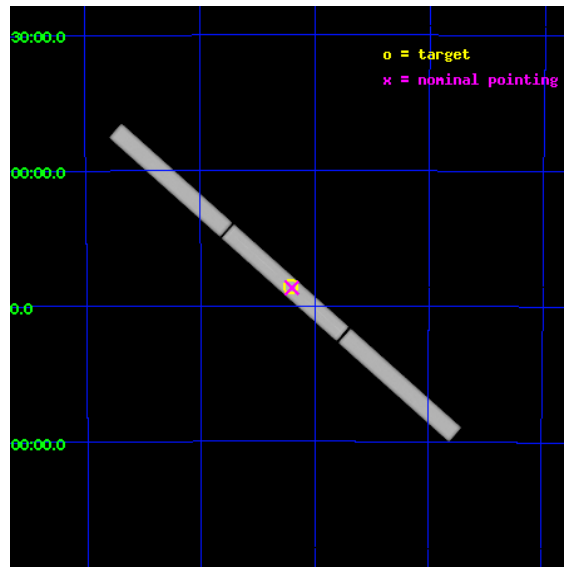
L2 Processing Date : Dec 24 2012

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# 1 Front

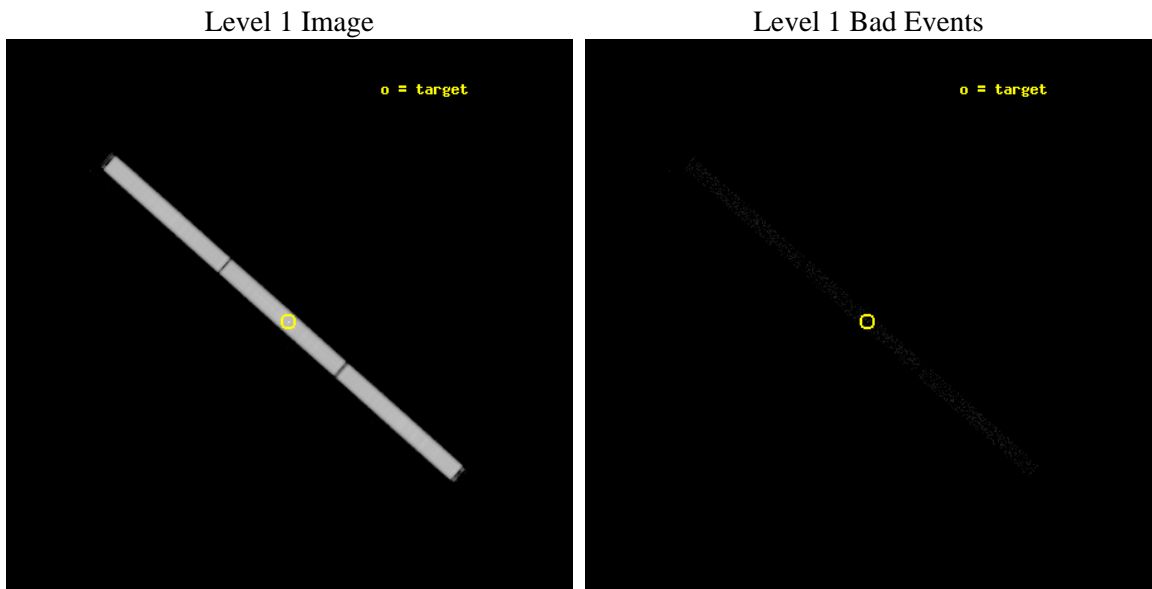
seq_num	500571	Sequence number
obs_id	5582	Observation id
title	Spectra of Neutron Stars with Strongly Magnetized Hydrogen Atmospheres	Proposal title
observer	Prof. Marten van Kerkwijk	Principal investigator
object	RX J0720.4-3125	Source name
ra_targ	110.104167	Observer's specified target RA [deg]
dec_targ	-31.430611	Observer's specified target Dec [deg]
ra_nom	110.09992544841	Nominal RA [deg]
dec_nom	-31.433620485607	Nominal Dec [deg]
roll_nom	221.38592837851	Nominal Roll [deg]
revision	3	Processing version of data
ontime	70172.784451276	[s]
livetime	69667.269566734	Ontime multiplied by DTCOR
l2events	4149303	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	70000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	70172.784451276	[s]
caldbver	4.5.5	&#160	l1events	5685908	Number of level 1 events
date	2012-12-24T14:09:44	Date and time of file creation			
revision	3	Processing version of data			

## 2.1.3 Events

### Level 1 Events

	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	1907851	1876972	1901085
rejected events	35874	34193	34860
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	110.109061	110.0999254484064			
[deg] Pointing Dec	-31.406081	-31.43362048560654			
[deg] Pointing Roll	221.323352	221.3859283785125			
[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)	234017693.184000	234016298.51818			
Observation start date	2005-06-01T12:53:49	2005-06-01T12:31:38			
[s] Observation end time (MET)	234087693.184000	234088558.45898			
Observation end date	2005-06-02T08:20:29	2005-06-02T08:35:58			

## 2.3 Aspect

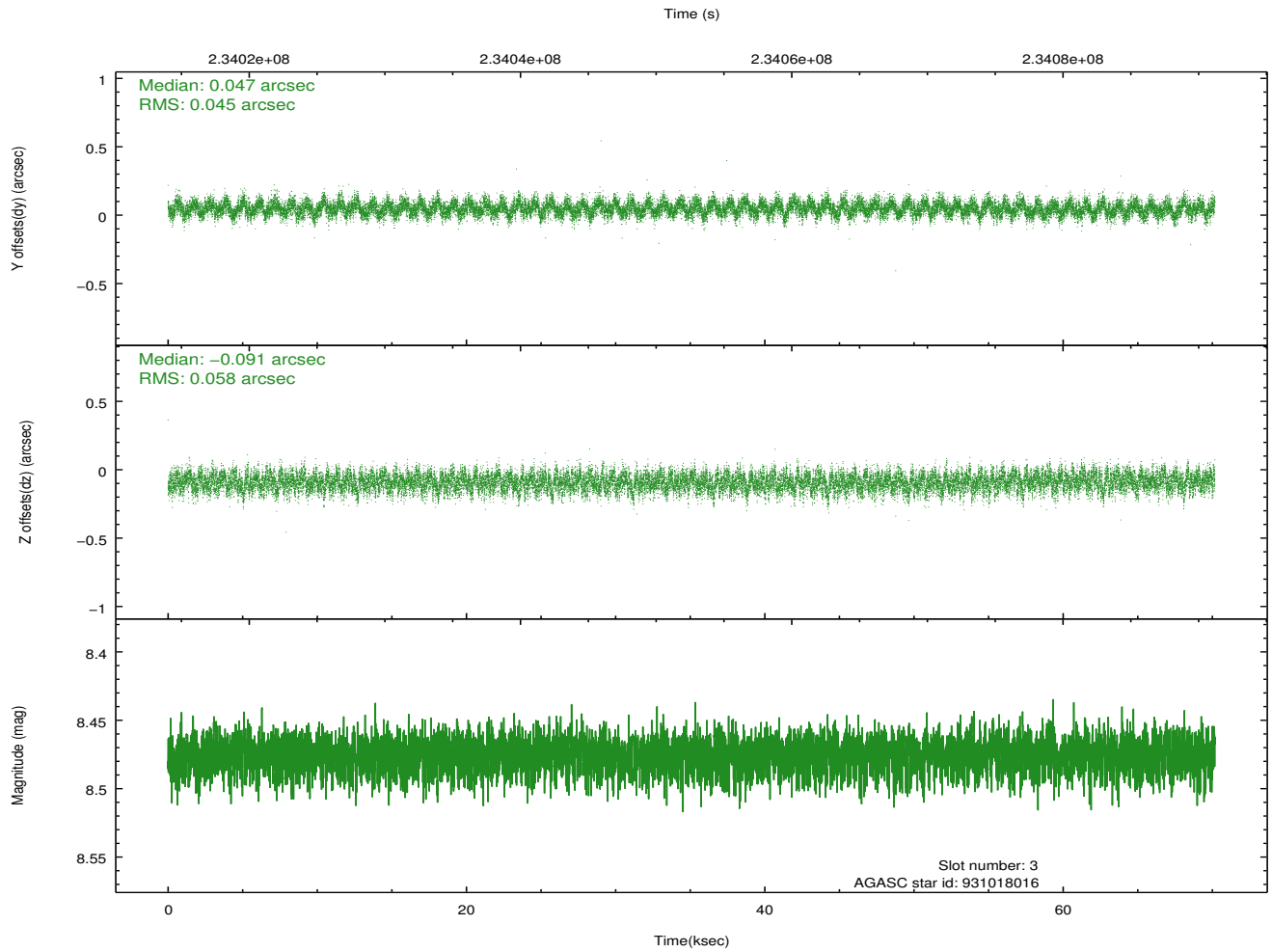
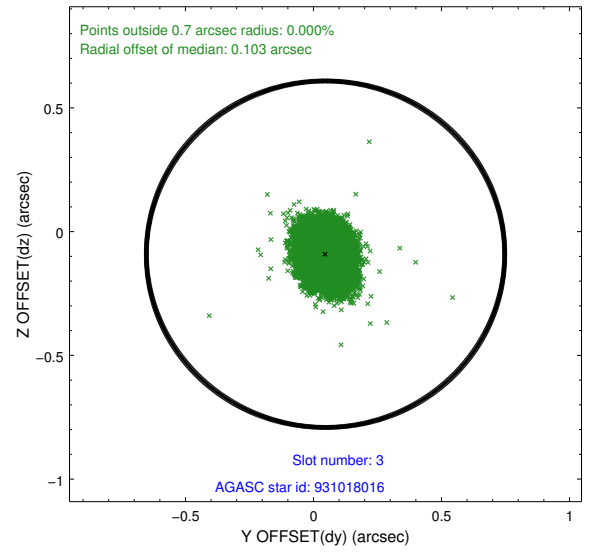
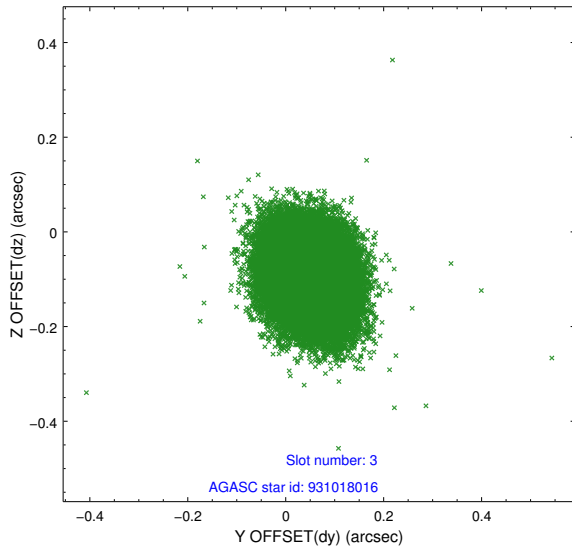


### Slot Statistics

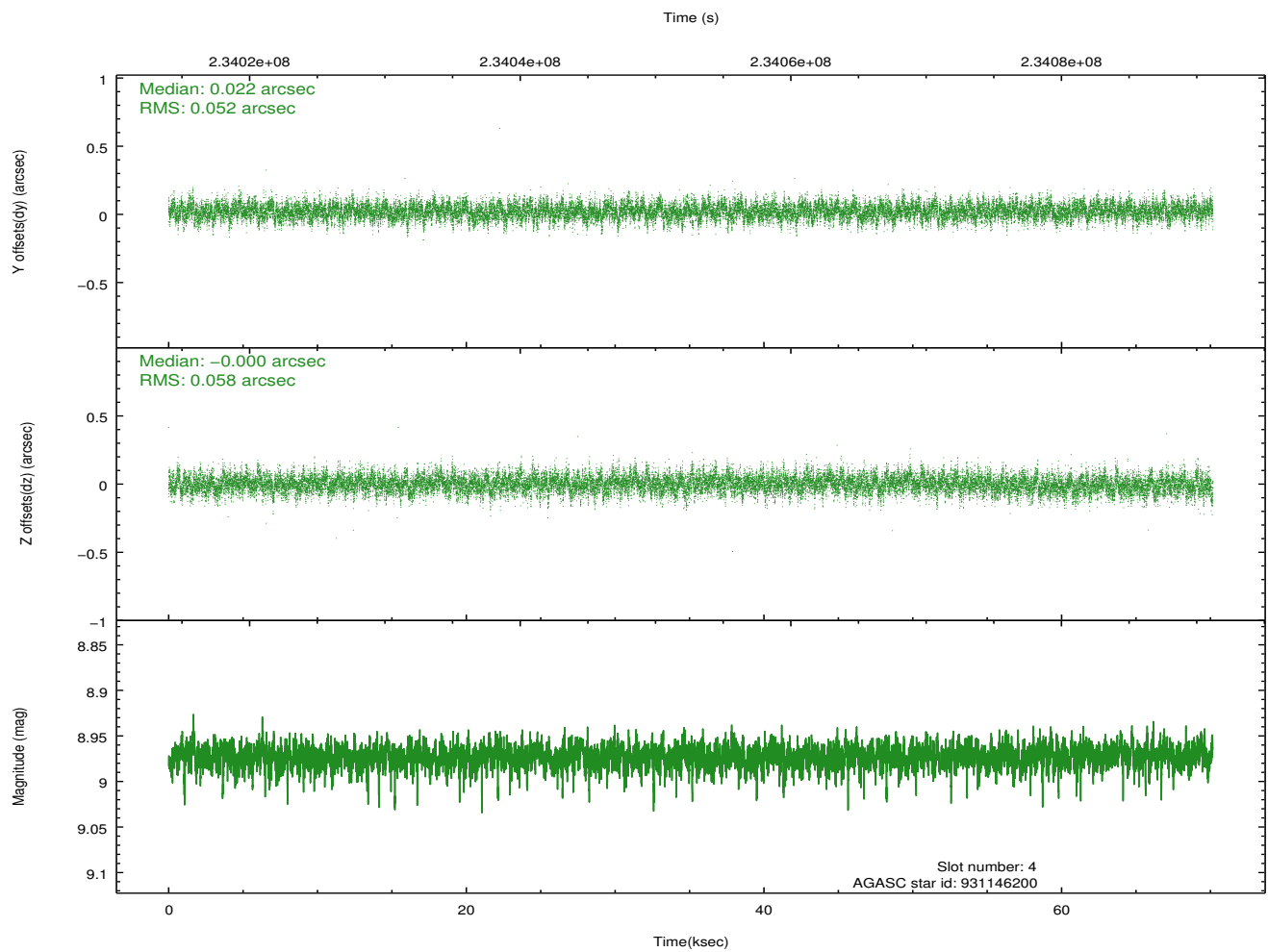
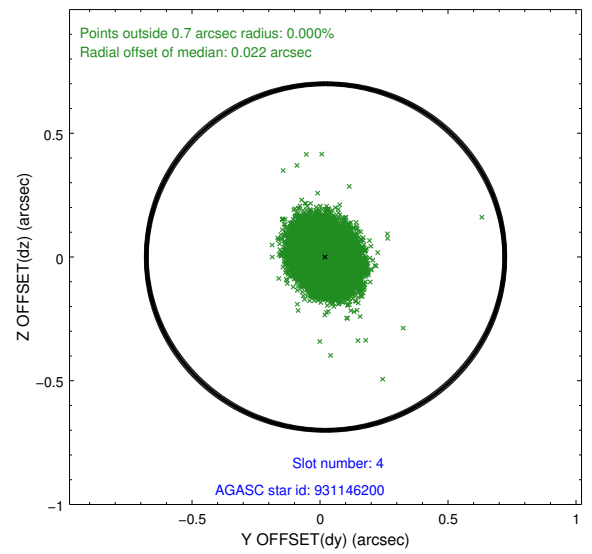
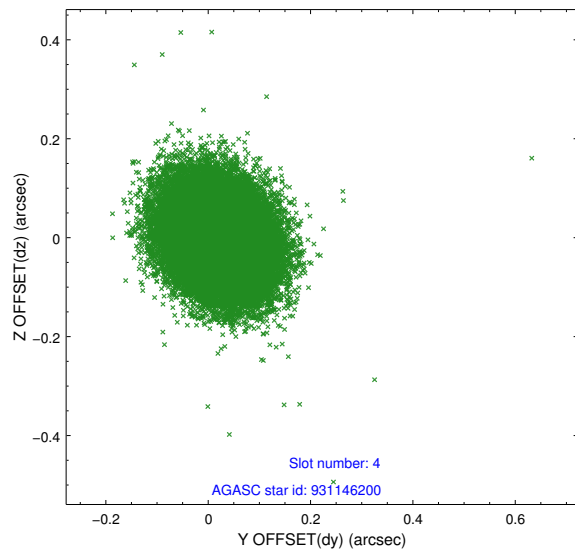
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.01	17115	0.136	-0.148	0.016	0.025	0.000000	0.000000	-1162.05	-460.07
1	FID	HRC-S-2	7.01	17116	0.154	-0.112	0.014	0.039	0.000000	0.000000	1237.58	-452.71
2	FID	HRC-S-3	7.02	17113	0.103	-0.042	0.014	0.026	0.000000	0.000000	-1164.72	569.54
3	GUIDE	931018016	8.48	34220	0.047	-0.091	0.078	0.127	109.684535	-31.226562	556.74	-1346.07
4	GUIDE	931146200	8.97	34208	0.022	-0.000	0.082	0.136	110.586199	-31.643611	-531.45	1610.43
5	GUIDE	931160352	8.63	34220	-0.071	-0.056	0.078	0.126	110.268138	-30.864891	-1655.30	-1138.25
6	GUIDE	931019296	8.68	34216	0.078	0.043	0.073	0.118	109.471771	-31.694370	2155.59	-504.64
7	GUIDE	931163512	8.45	34227	-0.077	0.107	0.082	0.131	110.894384	-31.299941	-2060.81	1314.93

## 2.4 Star Slots

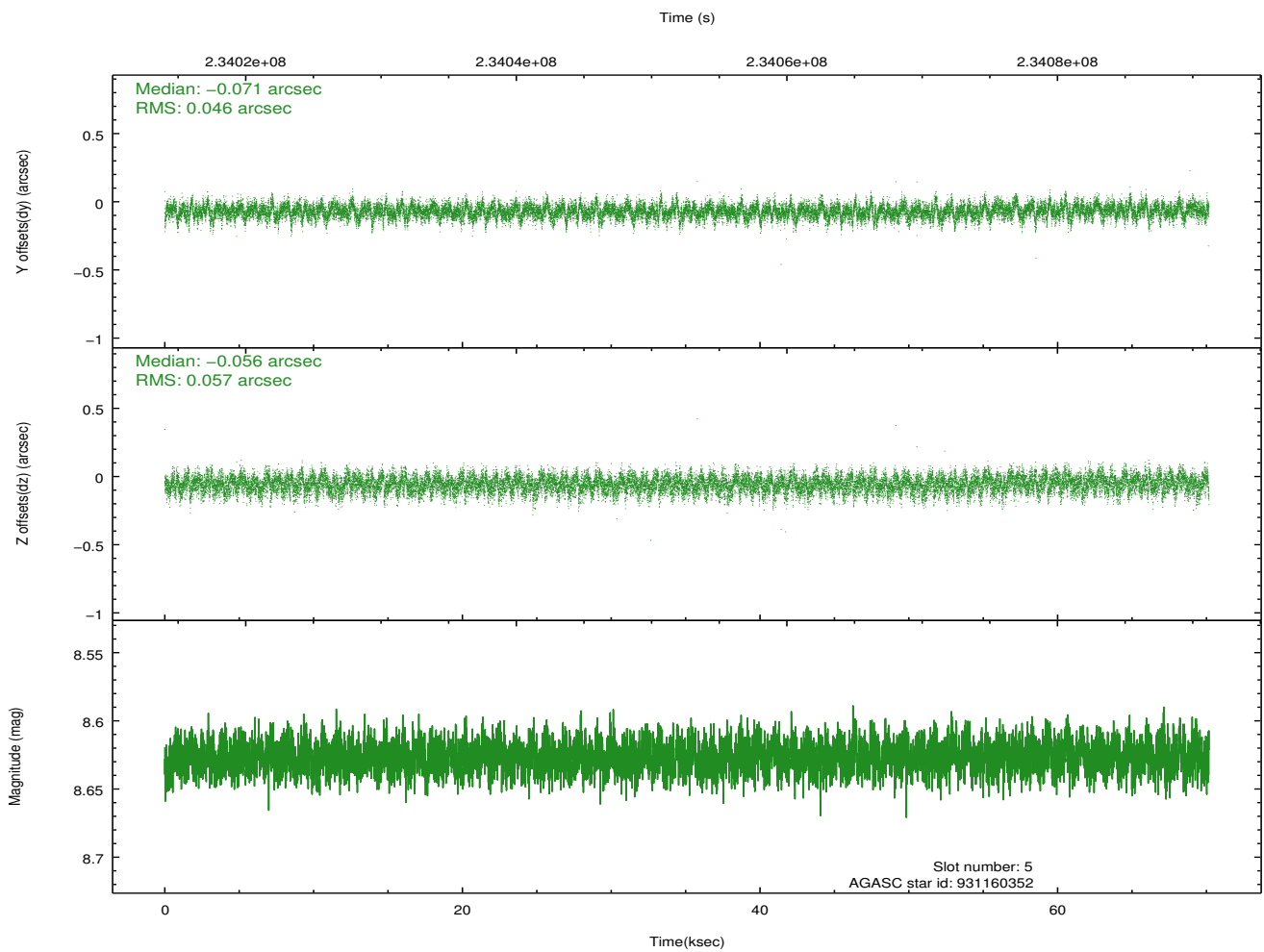
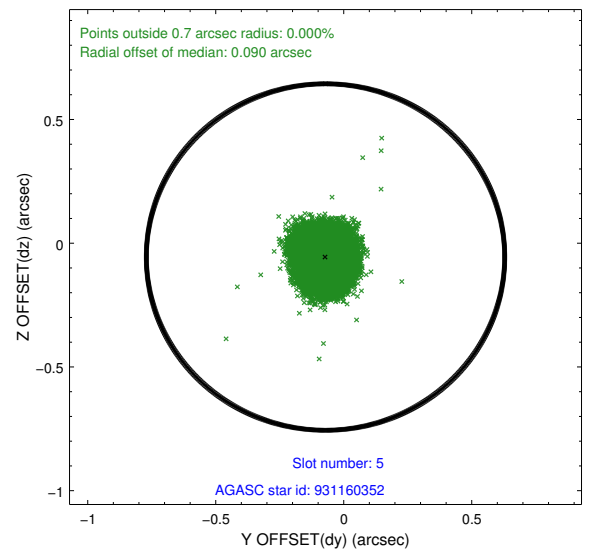
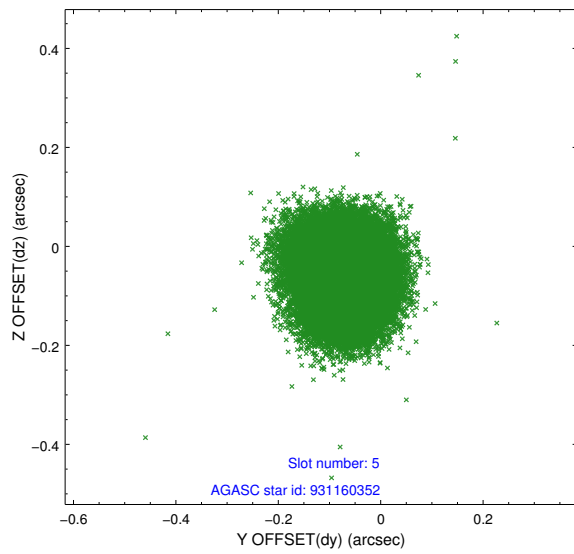
### 2.4.1 Slot 3



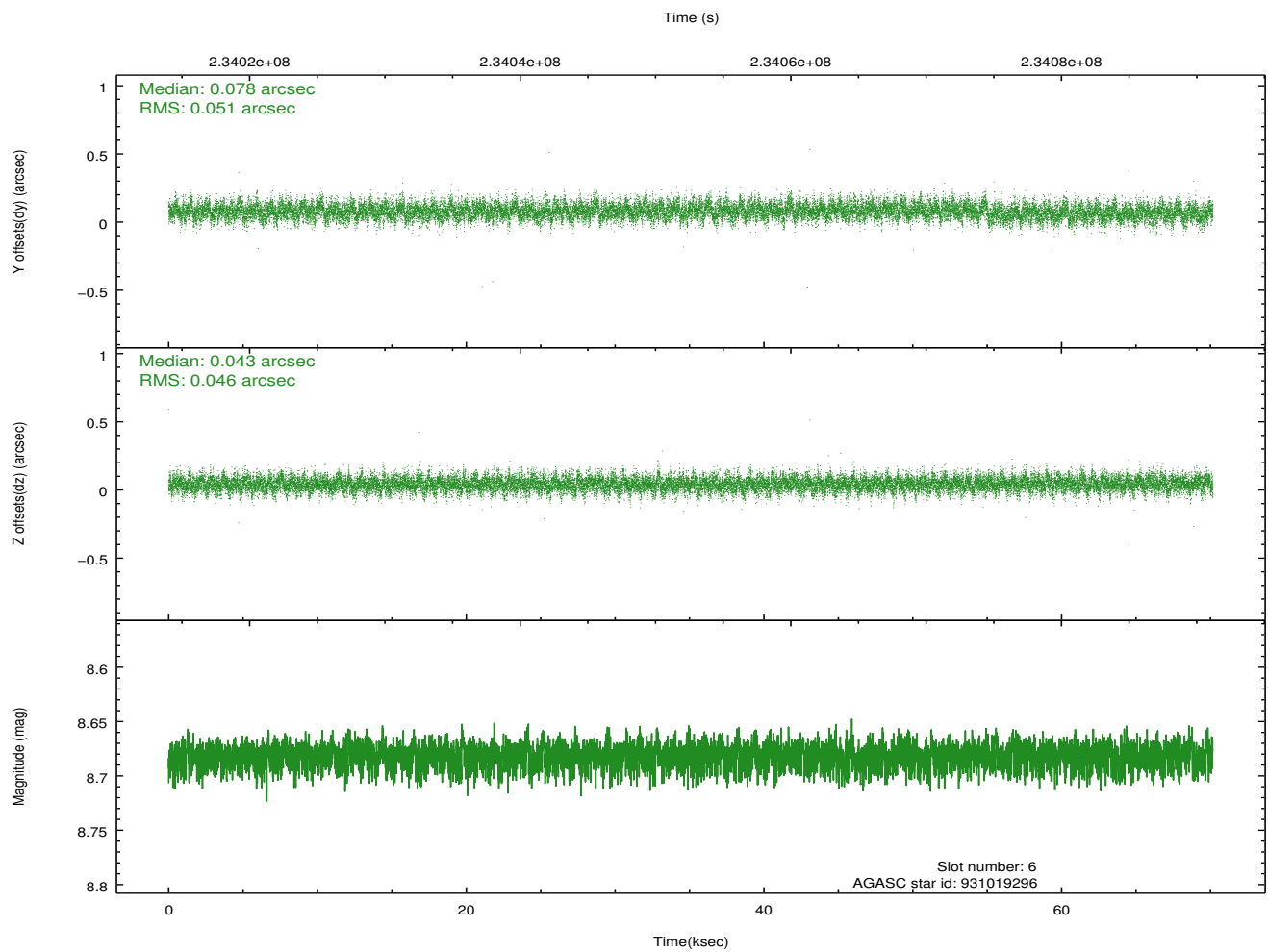
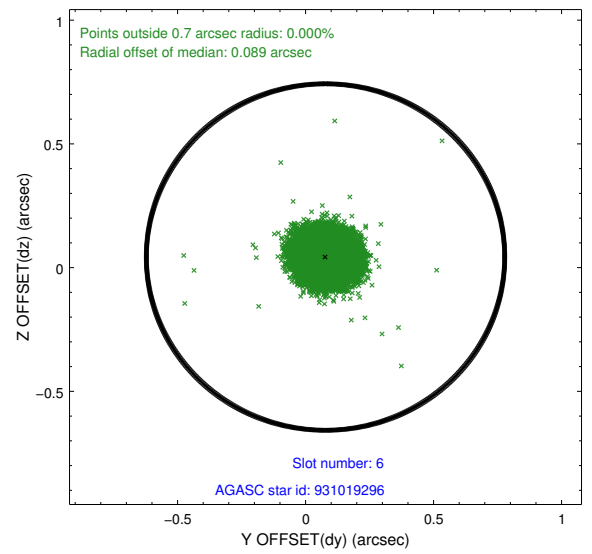
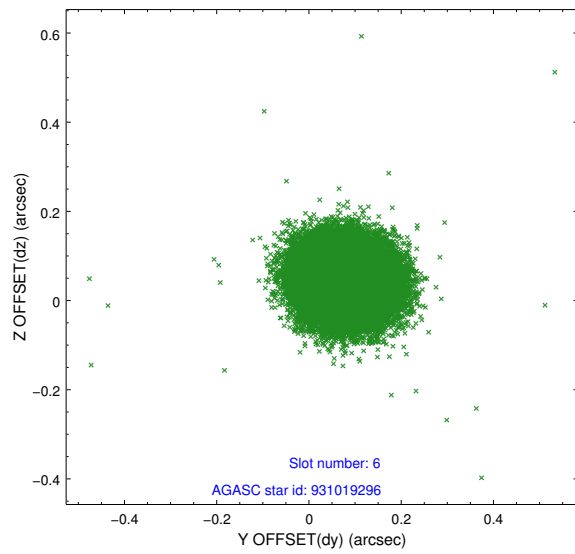
## 2.4.2 Slot 4



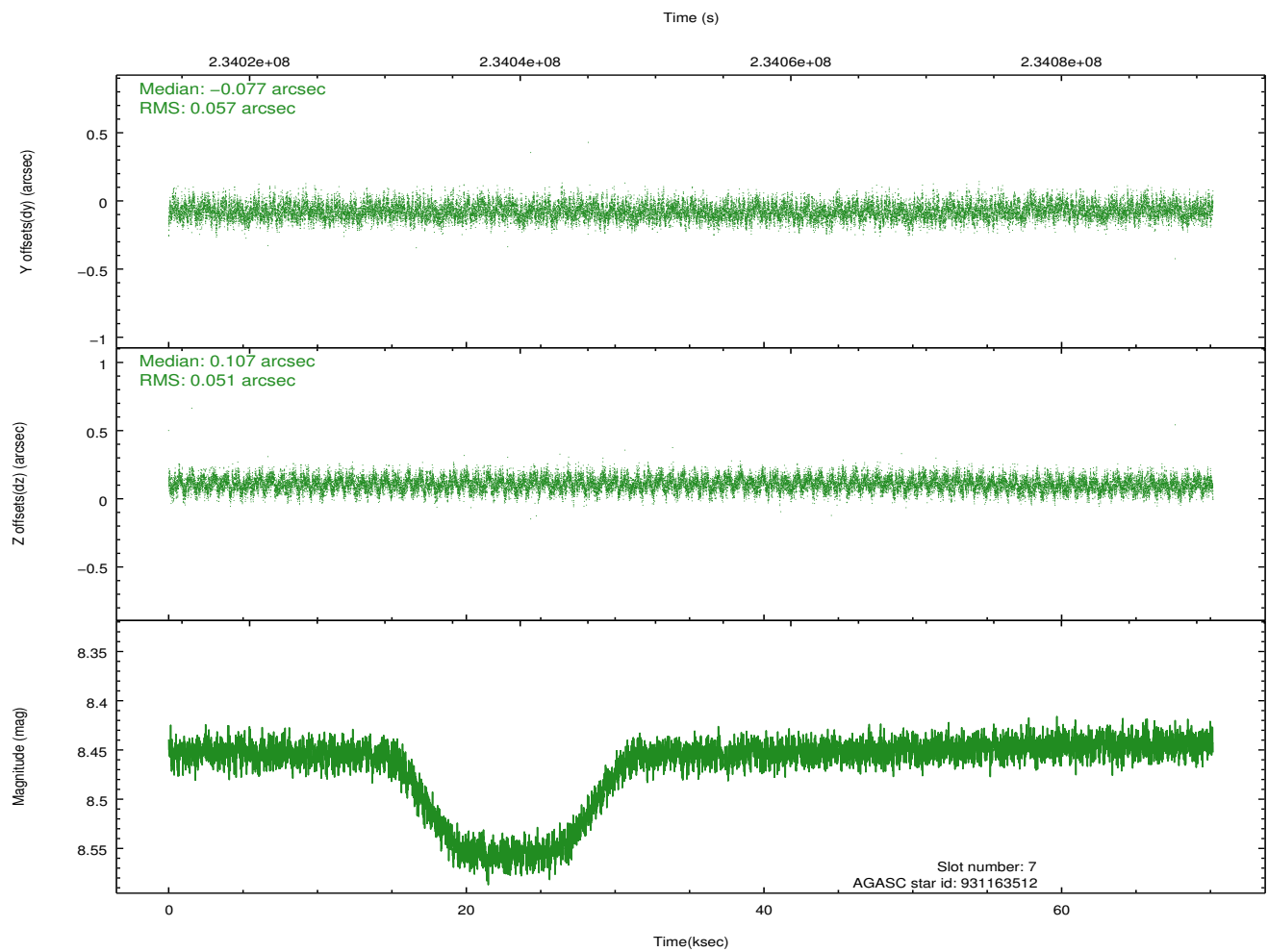
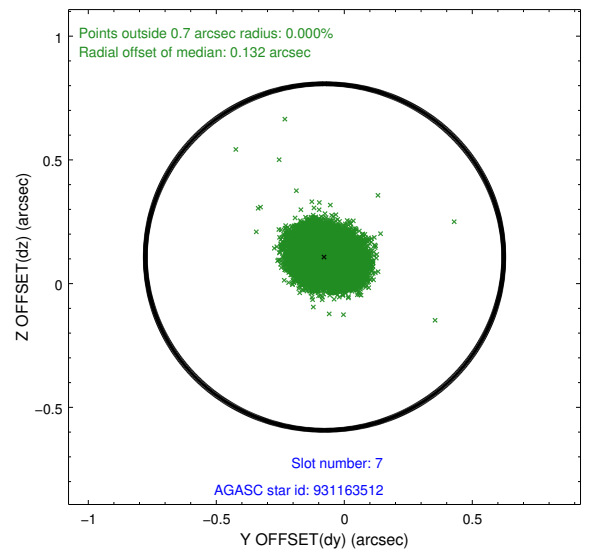
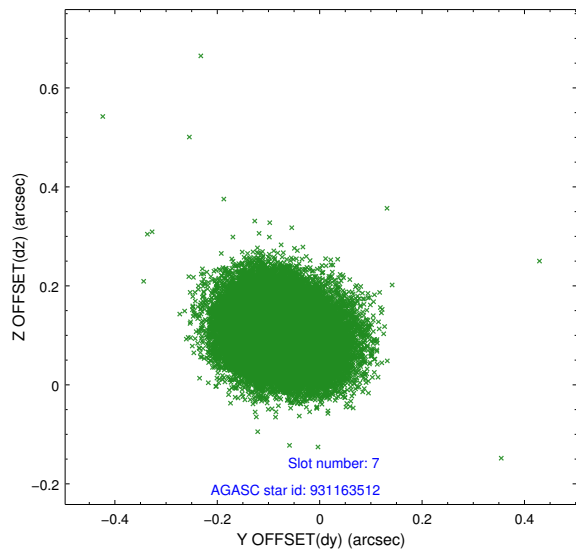
### 2.4.3 Slot 5



## 2.4.4 Slot 6

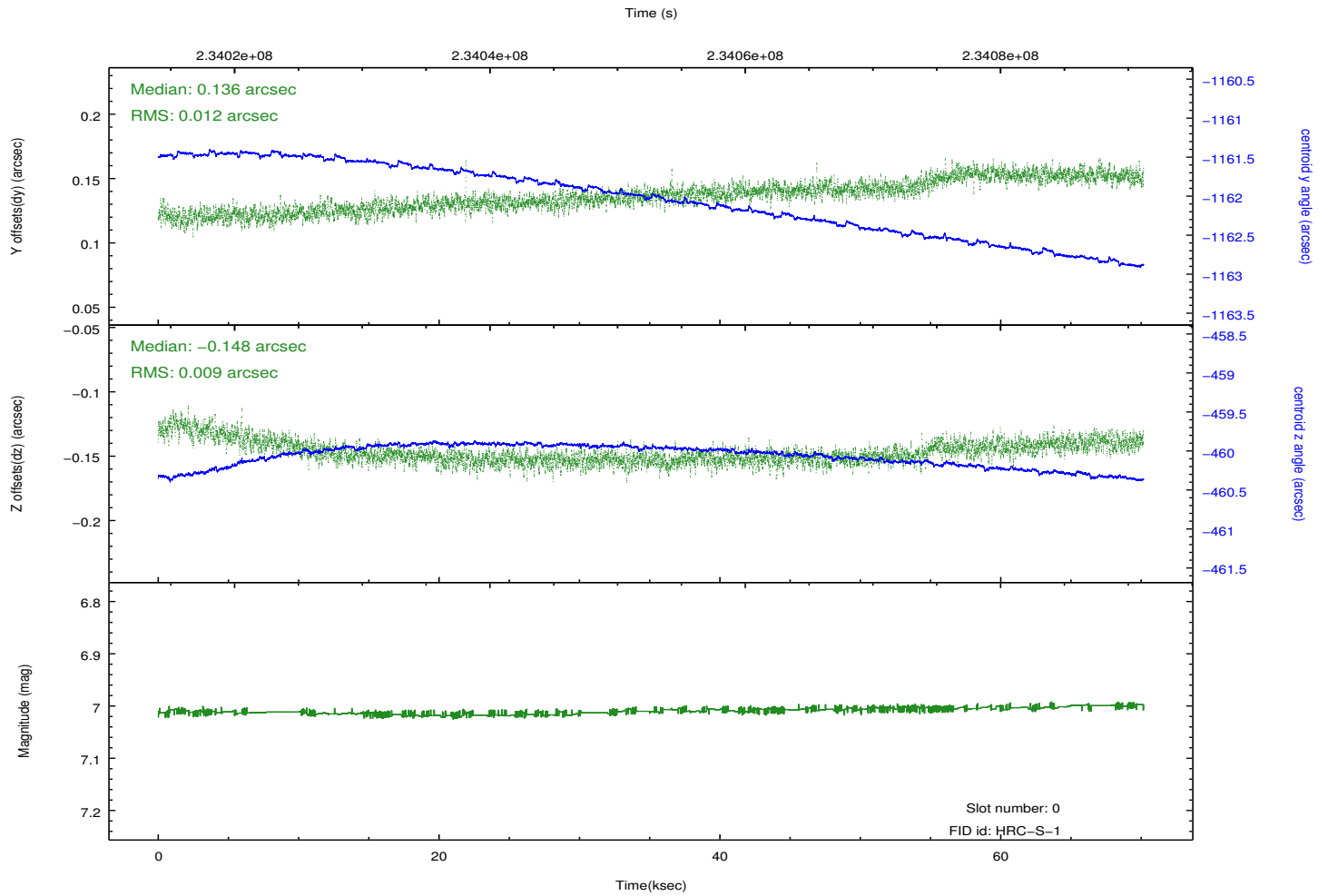
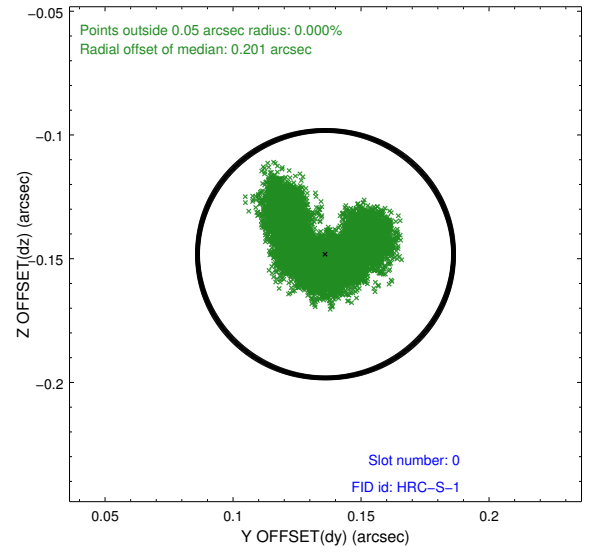
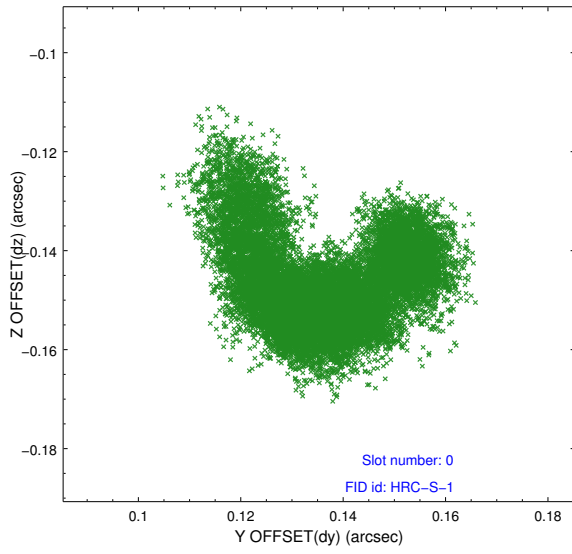


## 2.4.5 Slot 7

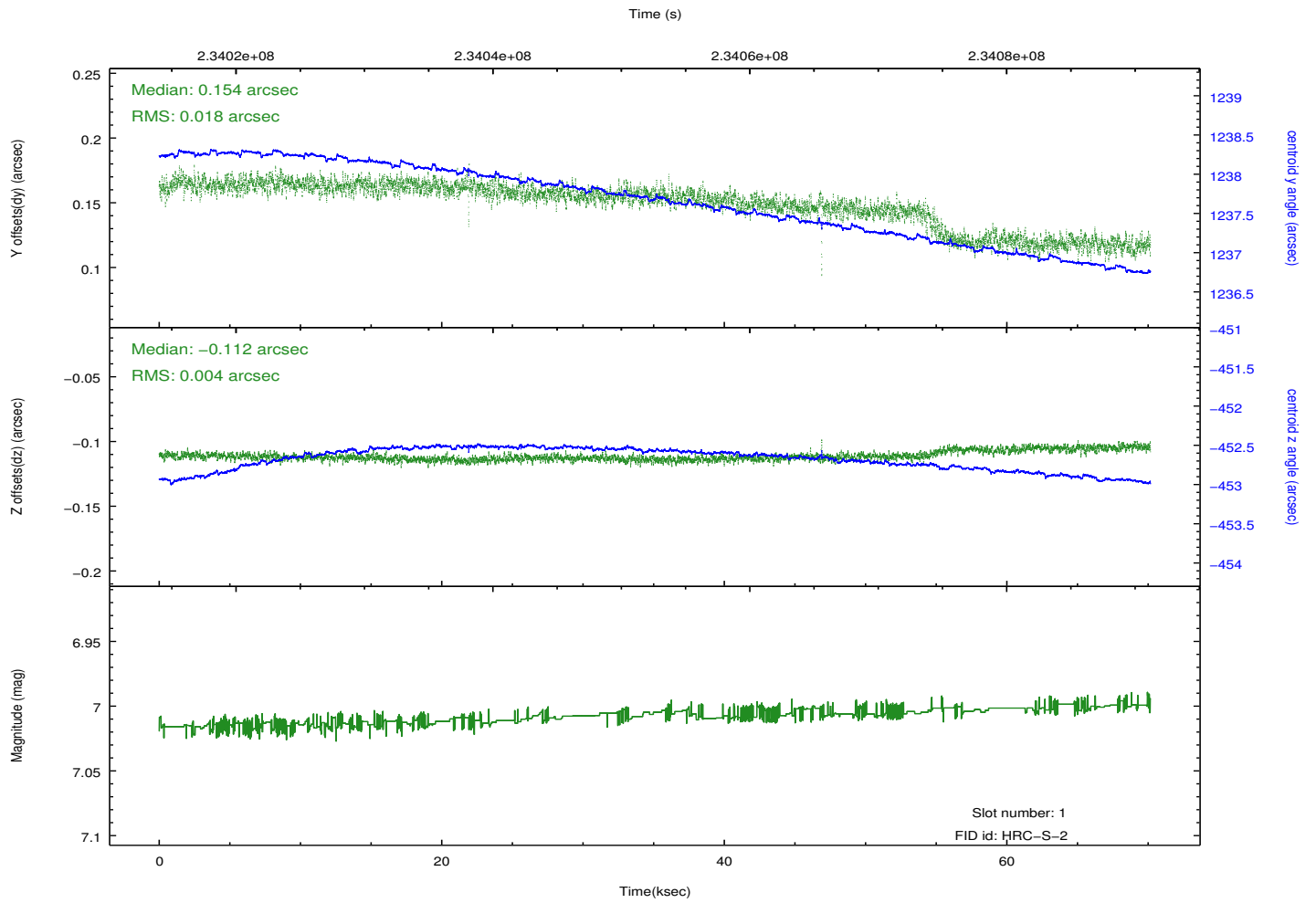
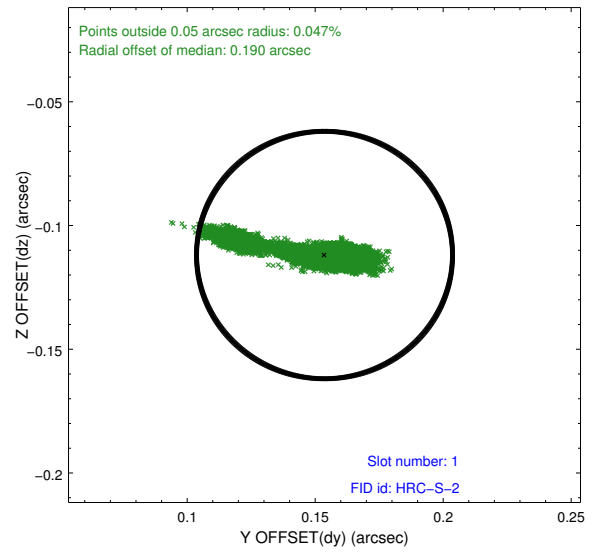
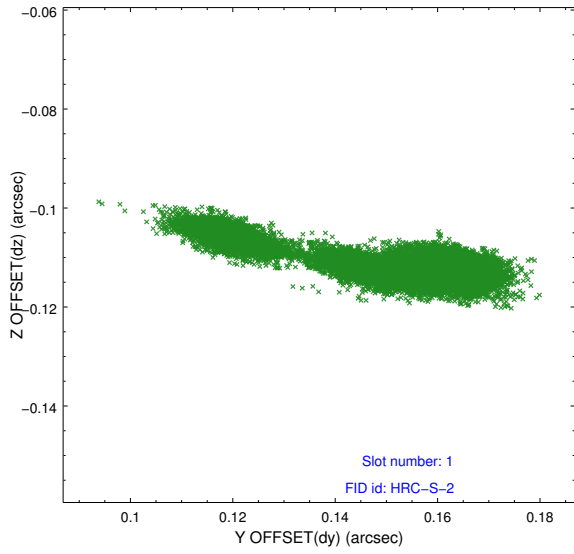


## 2.5 FID Slots

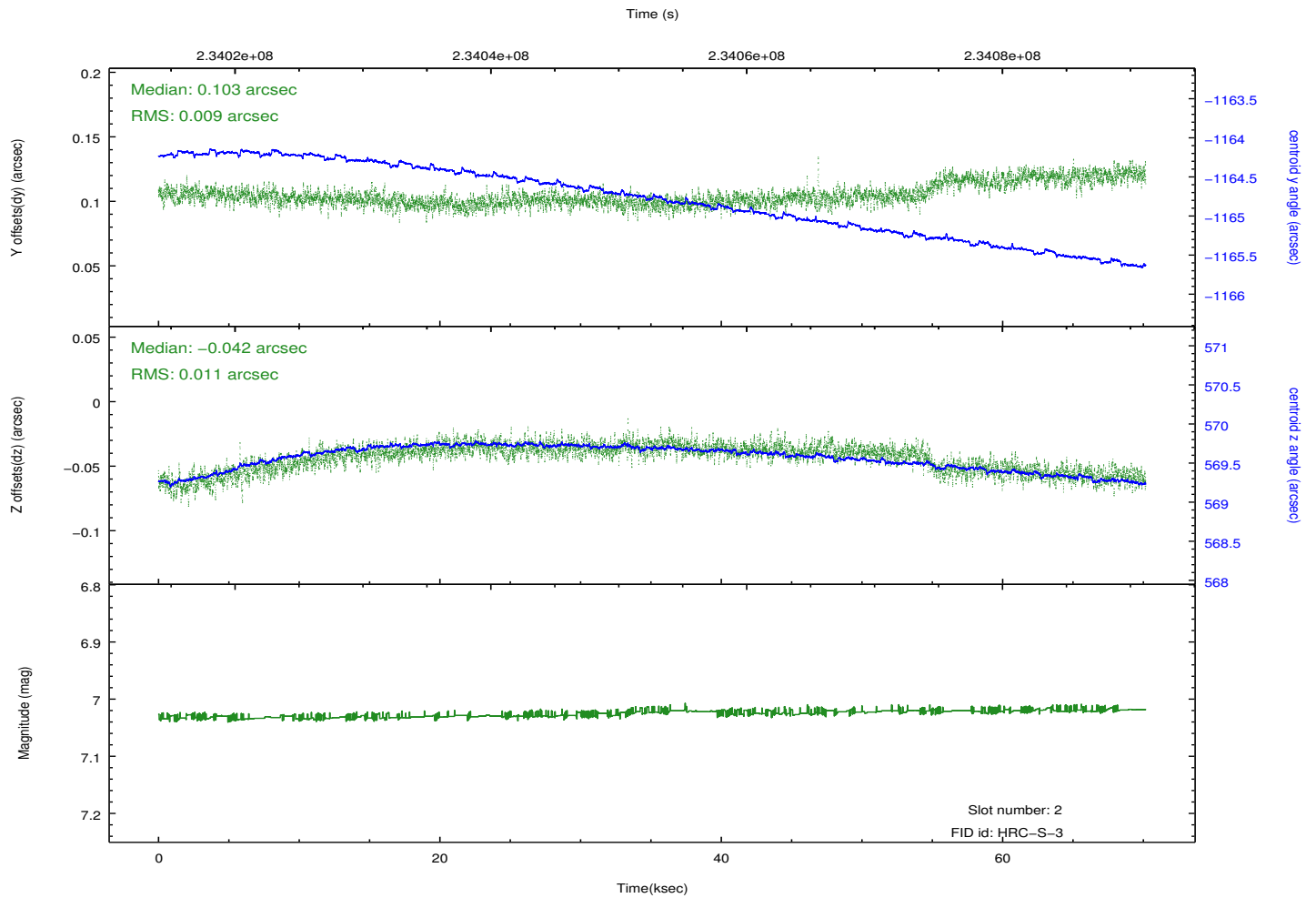
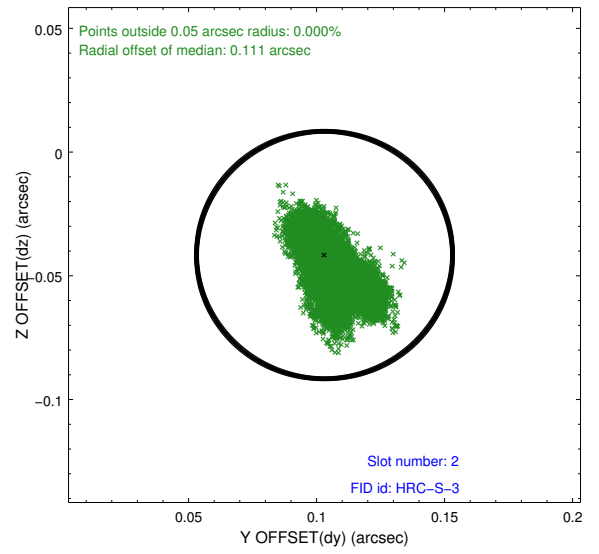
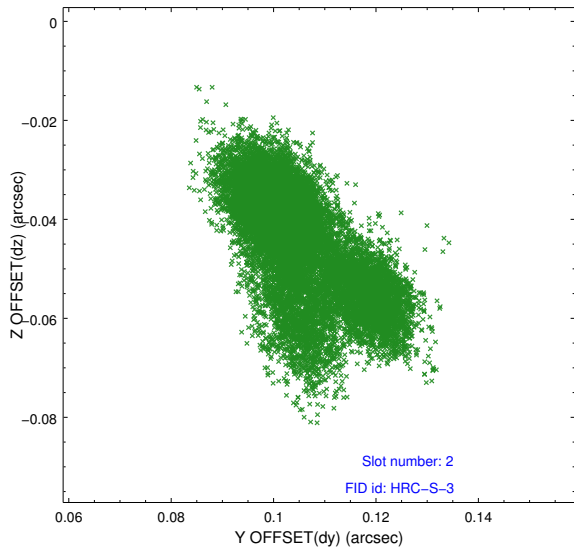
### 2.5.1 Slot 0



## 2.5.2 Slot 1

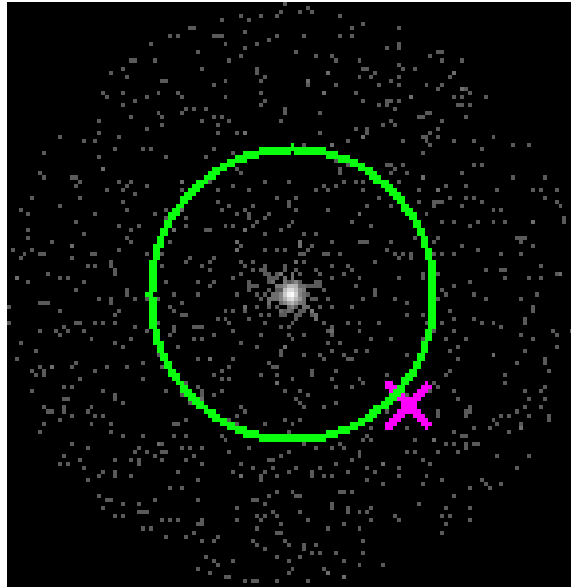


### 2.5.3 Slot 2



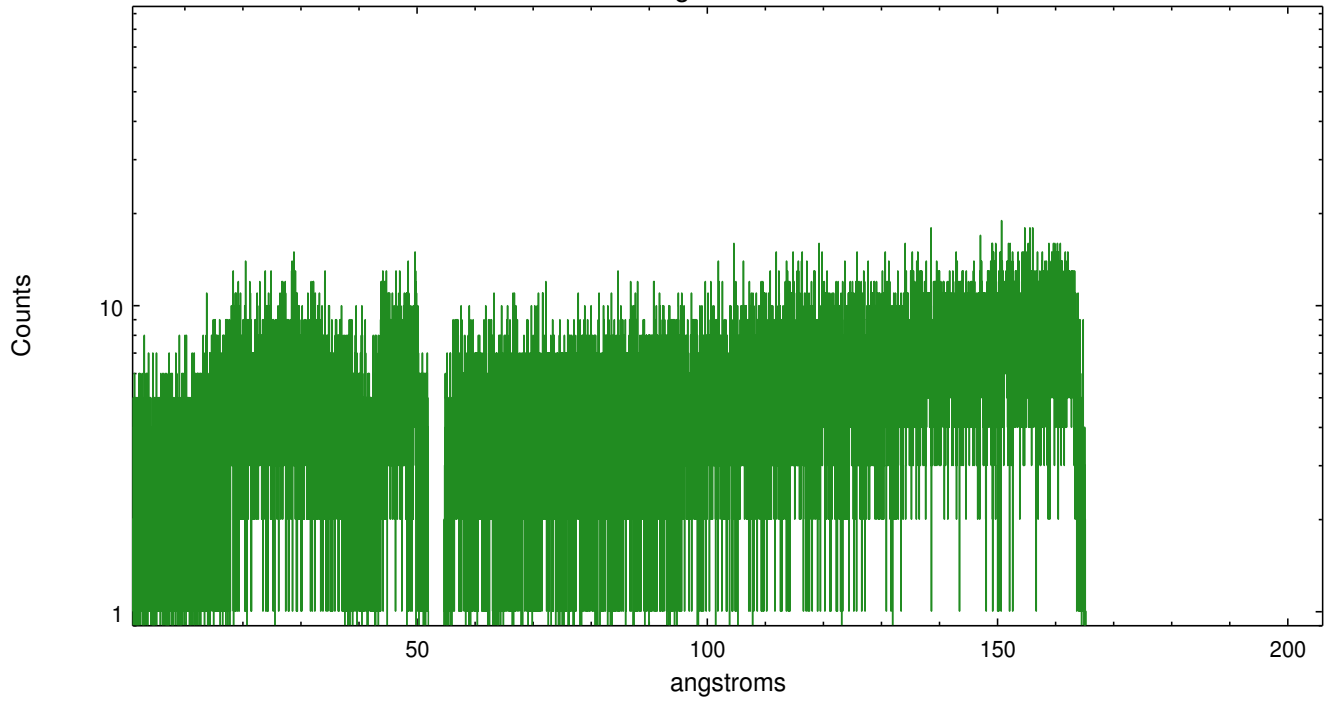
### 3 Gratings

#### 3.1 LETG Arm

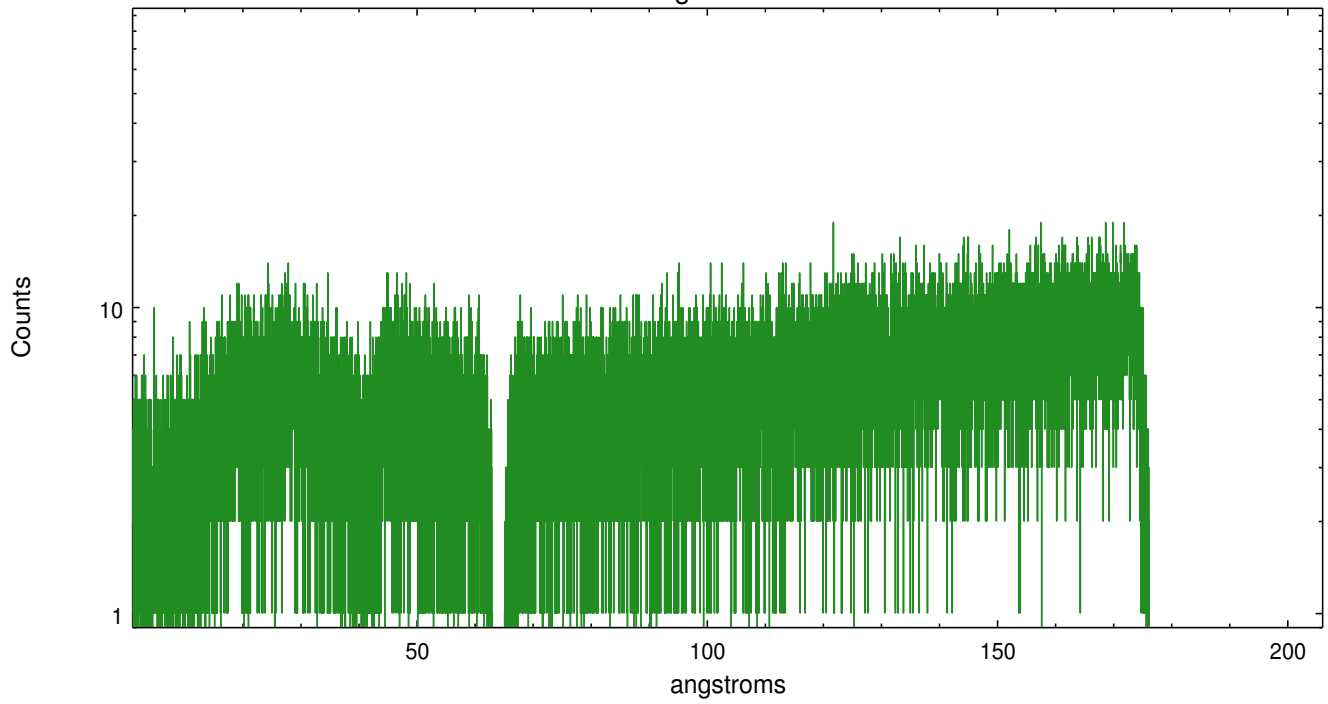


LETG Zero Order

leg order -1



leg order +1



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	70.17278

## A.2 Comments