

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10600 - L2 Version 3  
Chandra X-Ray Center

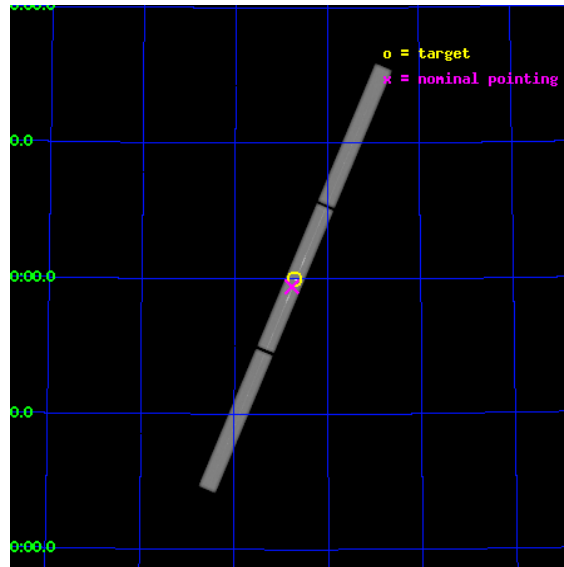
L2 Processing Date : Aug 13 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
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
<b>3</b>	<b>Gratings</b>	<b>17</b>
3.1	LETG Arm . . . . .	17
<b>A</b>	<b>Summary</b>	<b>19</b>
A.1	Status . . . . .	19
A.2	Comments . . . . .	19

# 1 Front

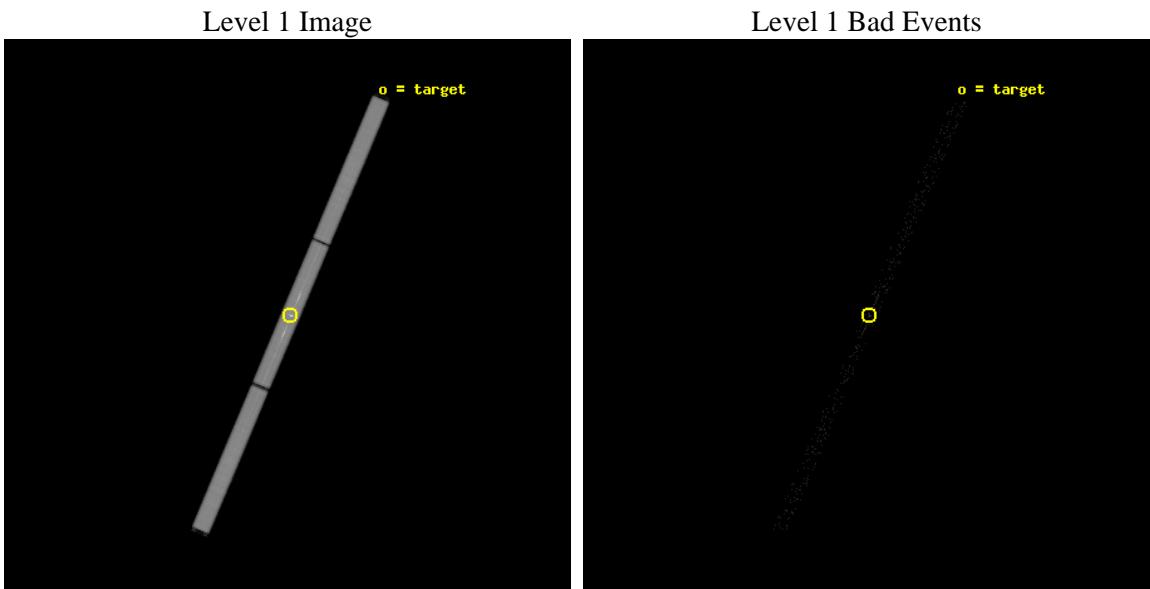
seq_num	290836	Sequence number
obs_id	10600	Observation id
title	AO-10 Calibration Observations of Capella	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	Capella	Source name
ra_targ	79.17625	Observer's specified target RA [deg]
dec_targ	45.997889	Observer's specified target Dec [deg]
ra_nom	79.192849156602	Nominal RA [deg]
dec_nom	45.970378580187	Nominal Dec [deg]
roll_nom	292.90046808427	Nominal Roll [deg]
revision	3	Processing version of data
ontime	29921.032740474	[s]
liveltime	29580.164643725	Overtime multiplied by DTCOR
l2events	2983390	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	29767.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	29921.032740474	[s]
caldbver	4.5.1.1	&#160	l1events	3899952	Number of level 1 events
date	2012-08-13T07:04:26	Date and time of file creation			
revision	3	Processing version of data			

## 2.1.3 Events

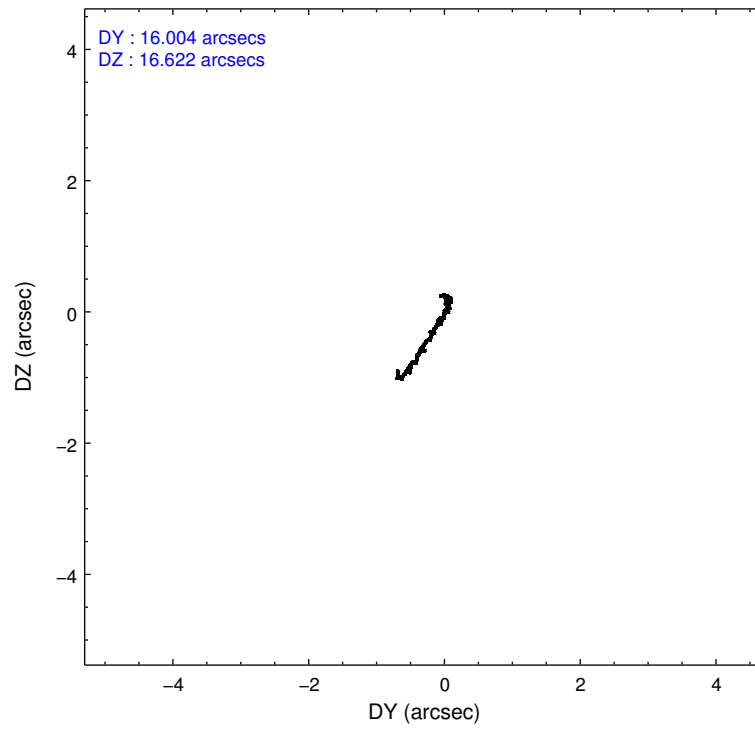
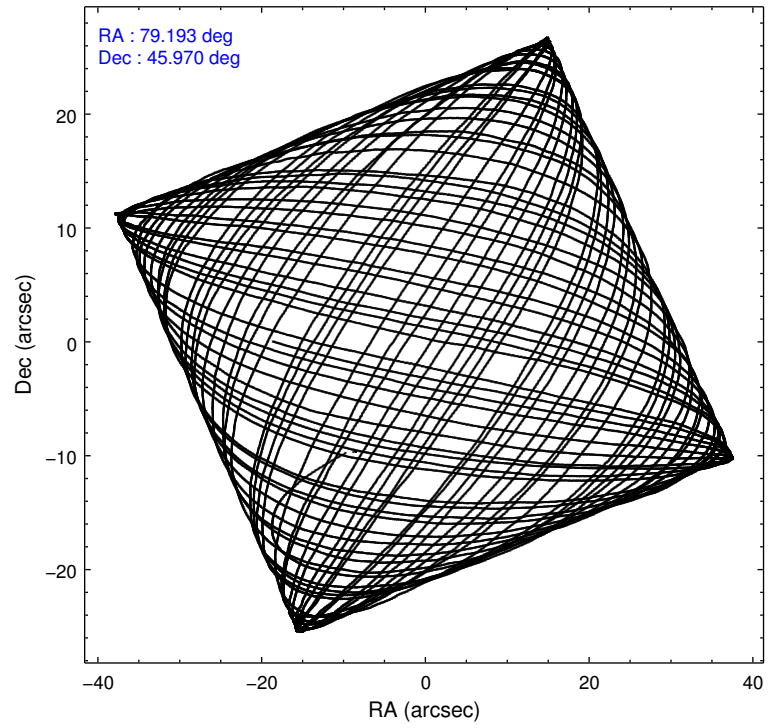
### Level 1 Events

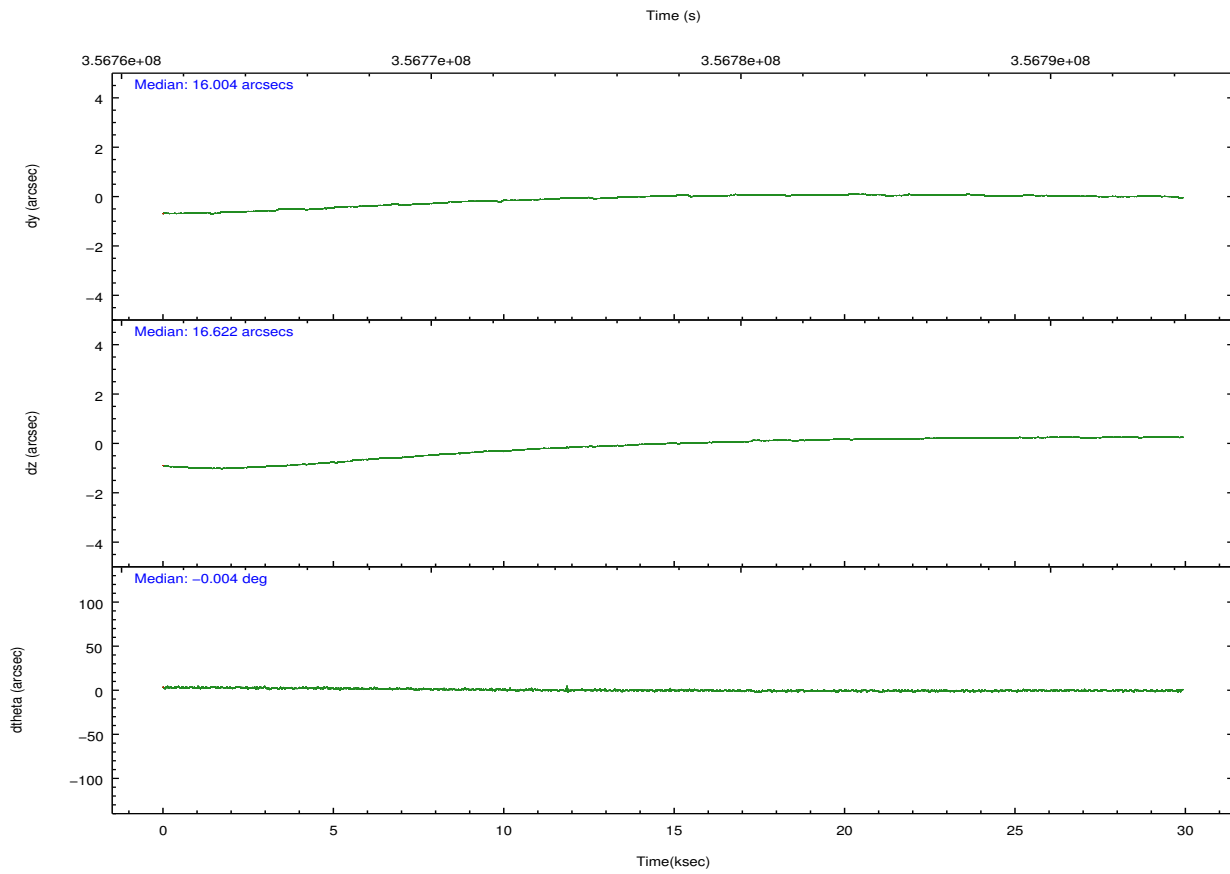
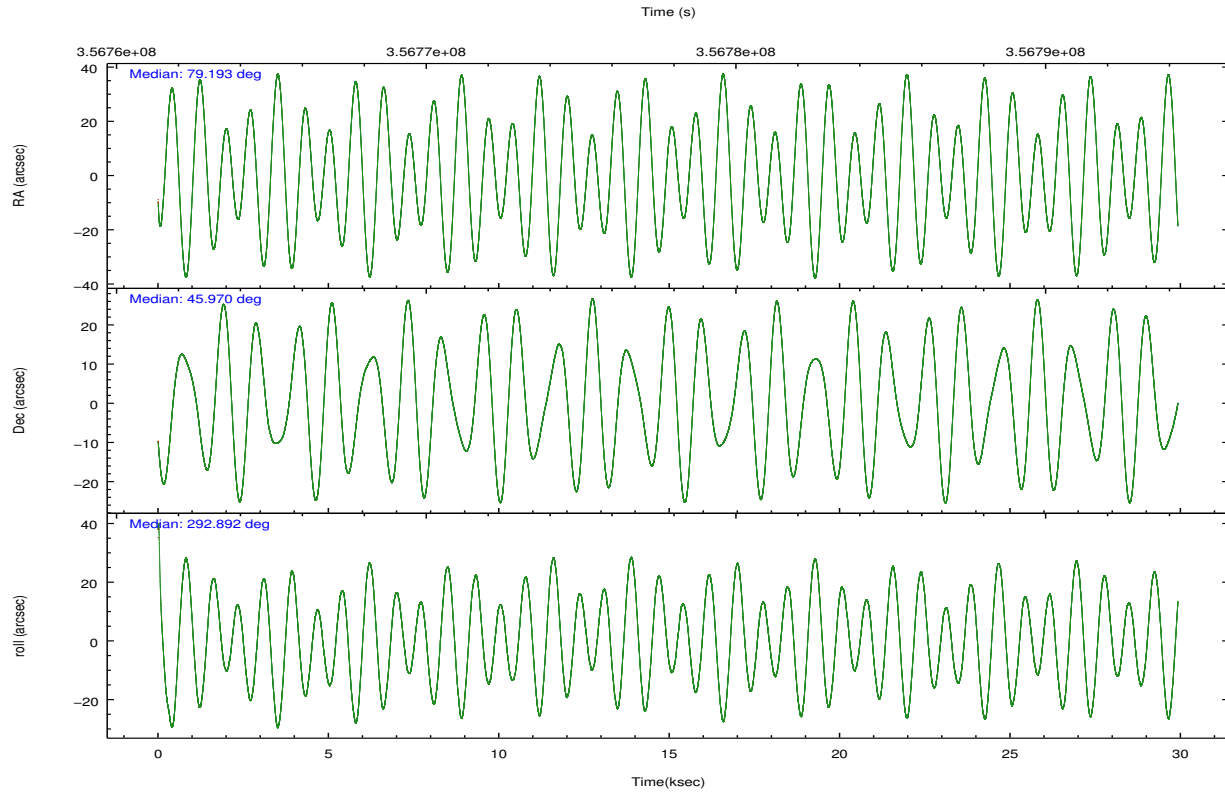
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	1241965	1409512	1248475
rejected events	35664	36658	36331
rejected %	2%	2%	2%

## 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	79.158639	79.19284915660198			
[deg] Pointing Dec	45.986579	45.97037858018747			
[deg] Pointing Roll	292.857716	292.9004680842746			
[s] Window start time (MET)	349833666.184000	349833666.184000			
[s] Window stop time (MET)	357436866.184000	357436866.184000			
[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)	356763010.184000	356761983.1994			
Observation start date	2009-04-22T04:49:04	2009-04-22T04:33:03			
[s] Observation end time (MET)	356792777.184000	356793041.21345			
Observation end date	2009-04-22T13:05:11	2009-04-22T13:10:41			

## 2.3 Aspect



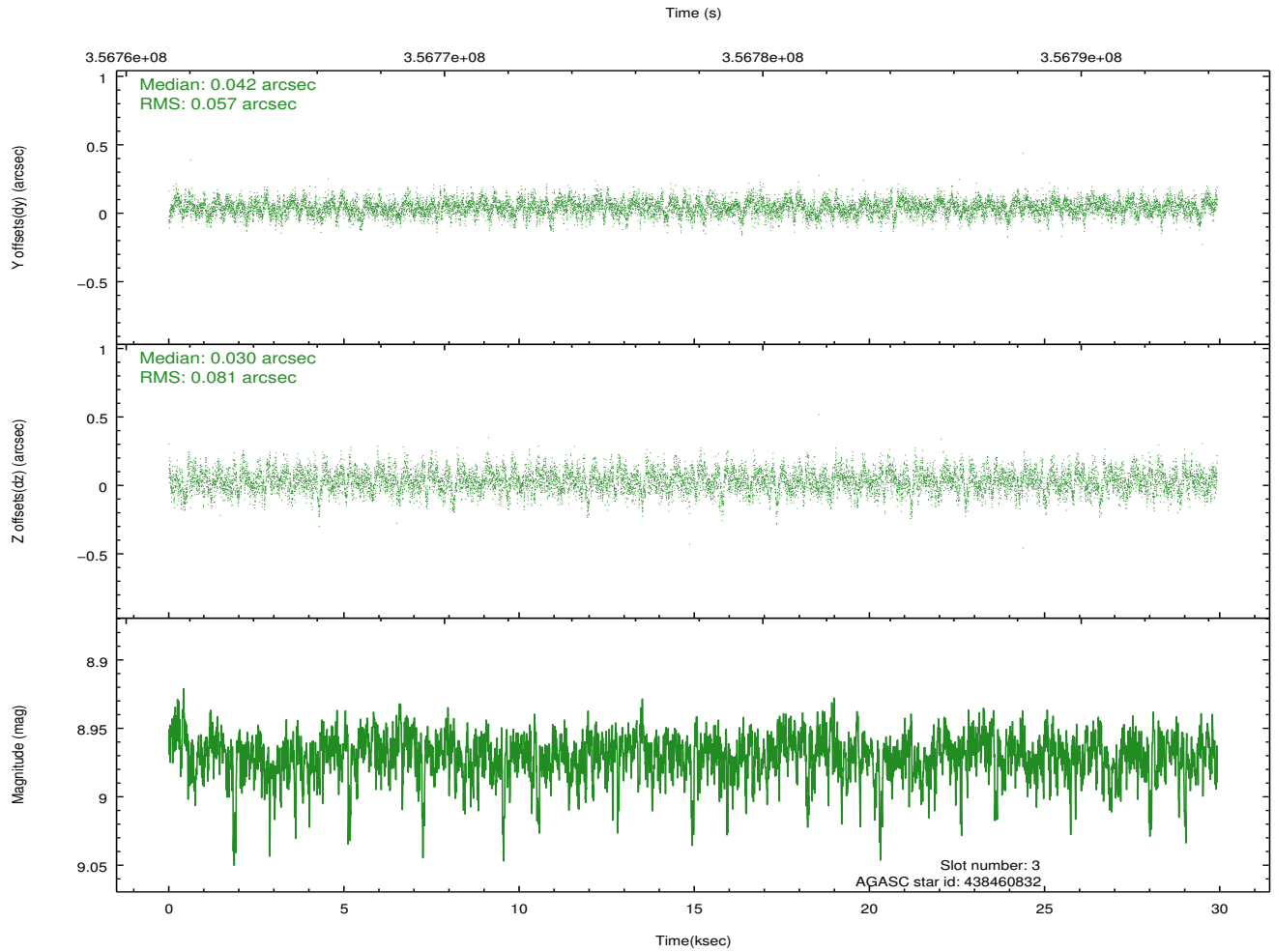
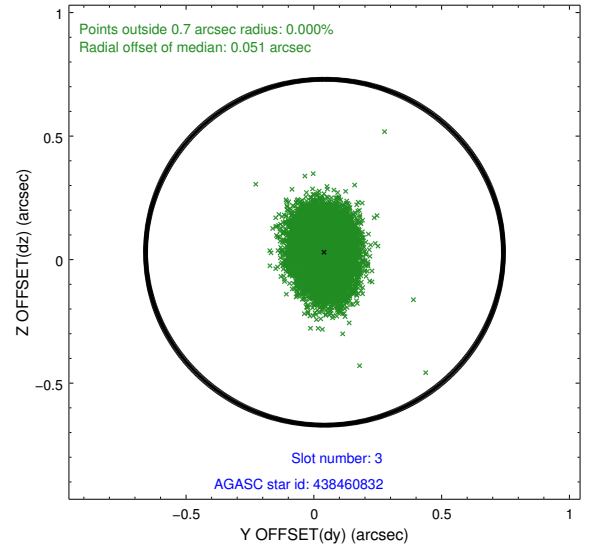
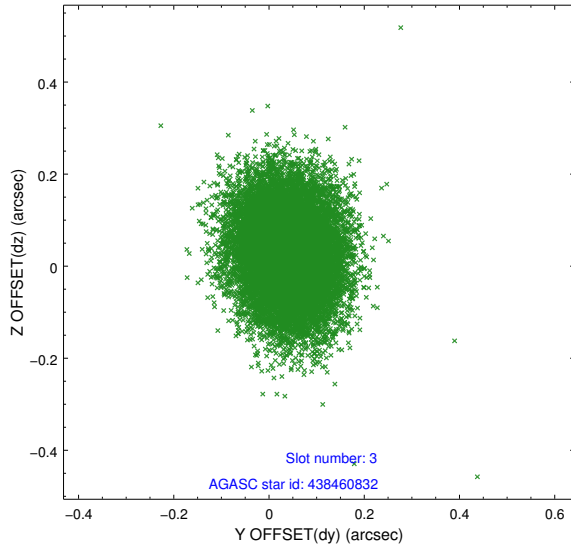


### Slot Statistics

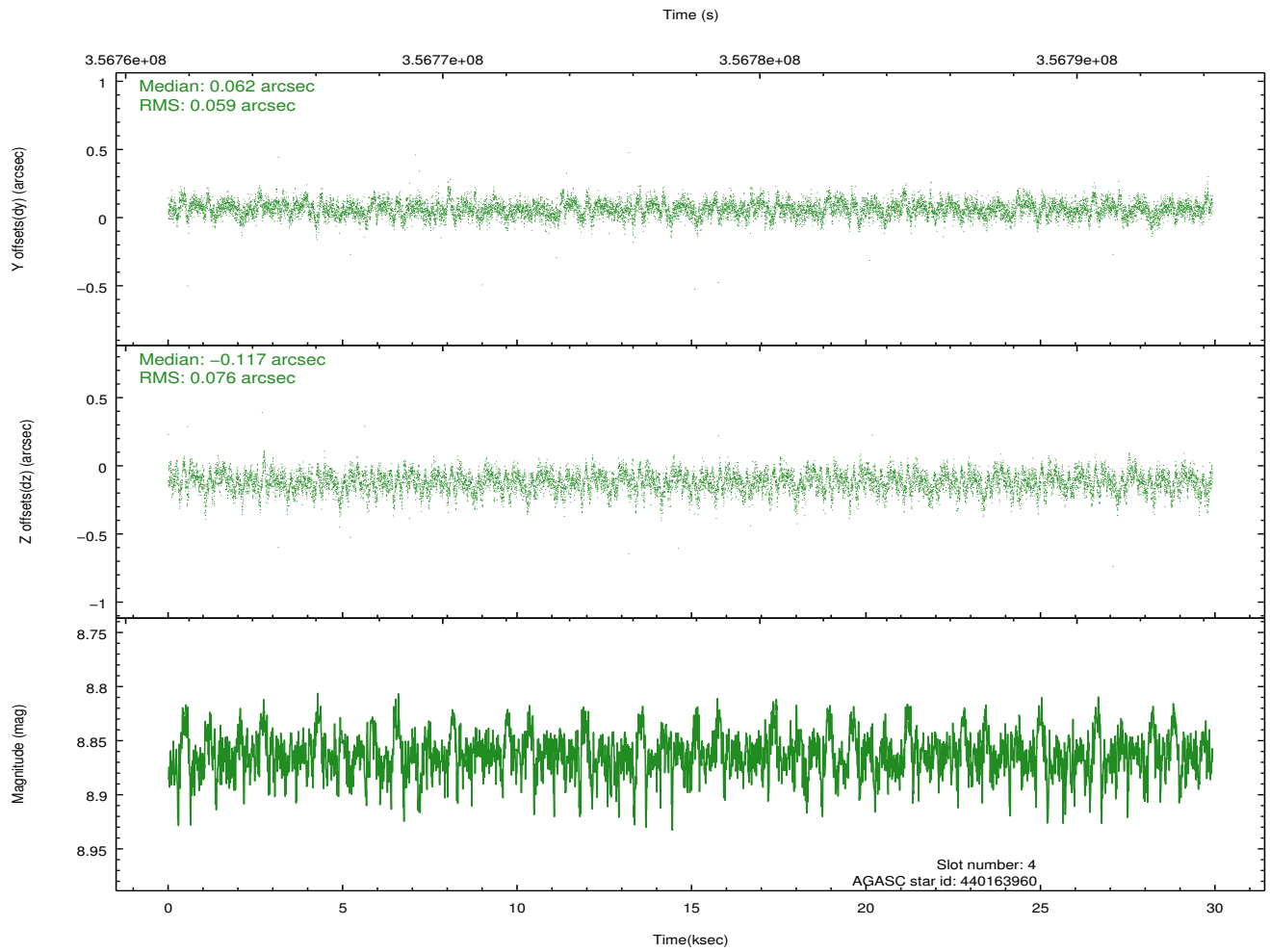
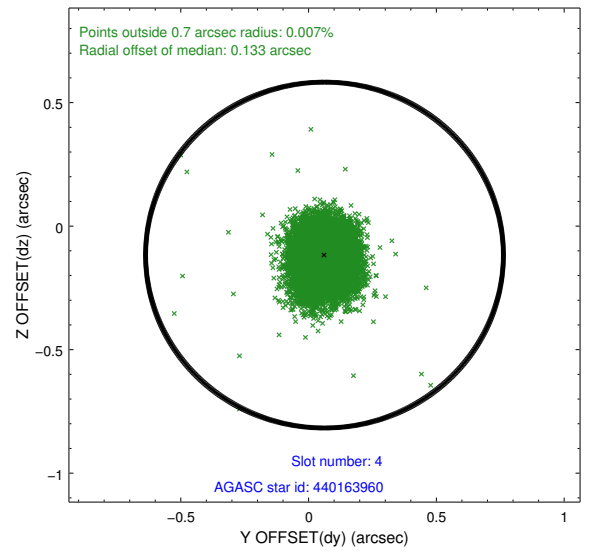
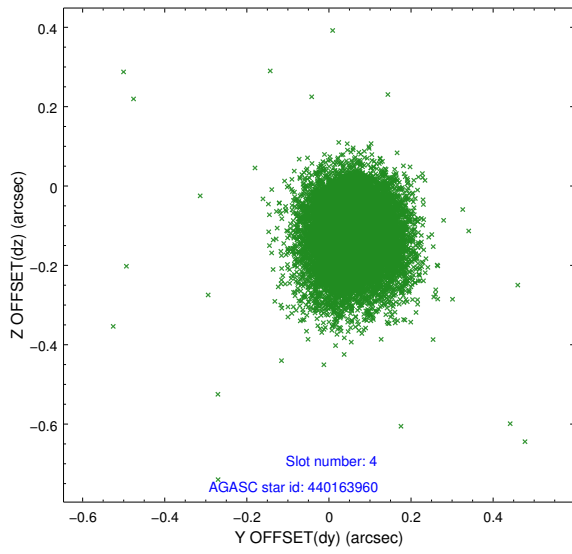
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.04	7296	0.053	-0.163	0.017	0.054	0.000000	0.000000	-1170.31	-465.37
1	FID	HRC-S-2	7.03	7297	0.245	-0.116	0.008	0.019	0.000000	0.000000	1229.40	-458.00
2	FID	HRC-S-3	7.04	7298	0.092	-0.022	0.017	0.052	0.000000	0.000000	-1172.83	564.26
3	GUIDE	438460832	8.97	14586	0.042	0.030	0.104	0.174	78.414614	45.554782	696.64	-2328.35
4	GUIDE	440163960	8.86	14574	0.062	-0.117	0.099	0.167	79.298370	45.827072	665.21	100.33
5	GUIDE	438441368	9.99	14388	0.238	0.217	0.157	0.255	78.646413	46.420494	-1936.47	-562.76
6	GUIDE	440150048	7.17	14594	-0.271	-0.044	0.090	0.146	79.112838	46.416060	-1469.22	495.82
7	GUIDE	440164960	8.30	14589	-0.072	-0.078	0.085	0.138	79.132526	46.140947	-536.92	155.85

## 2.4 Star Slots

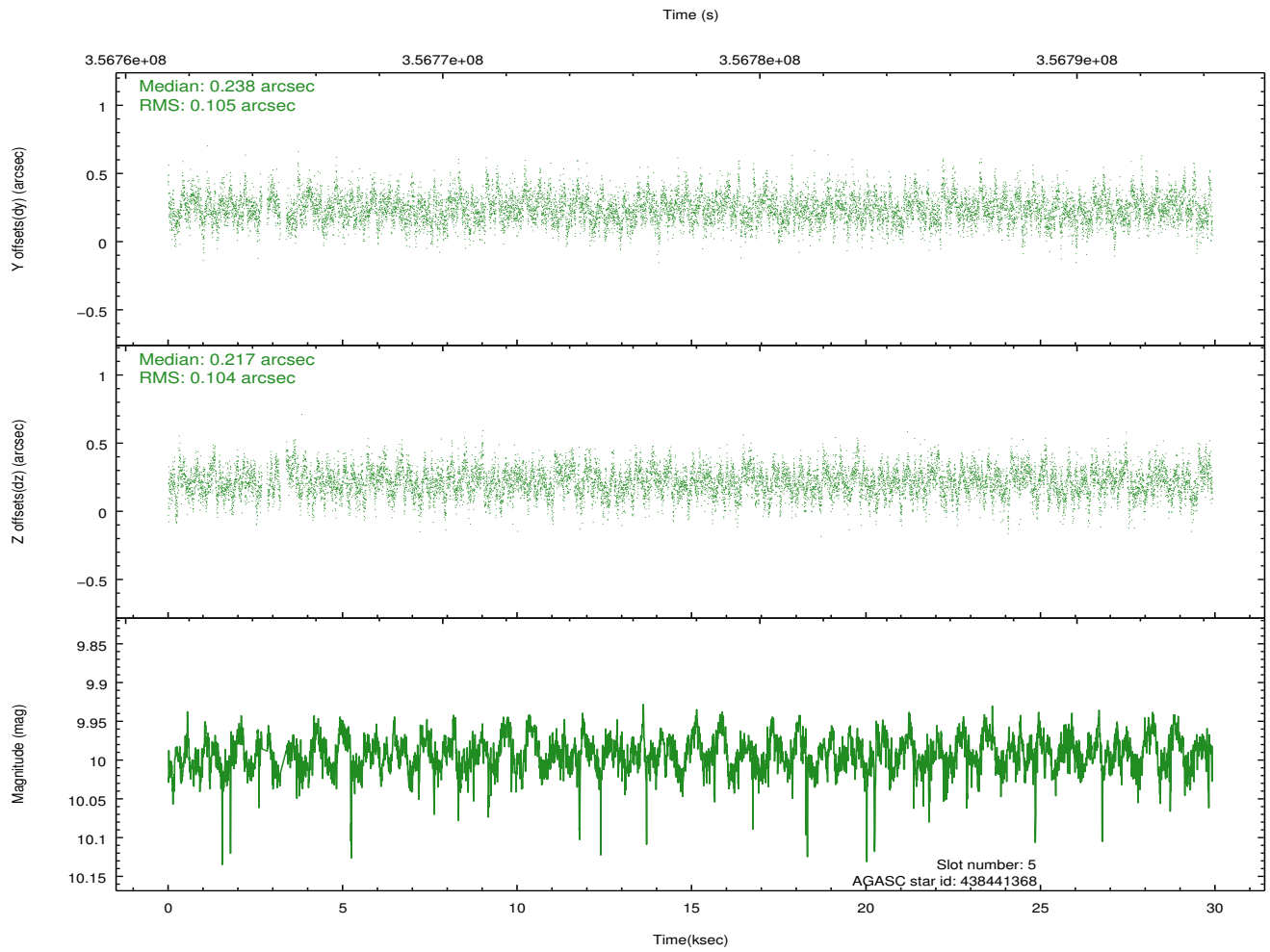
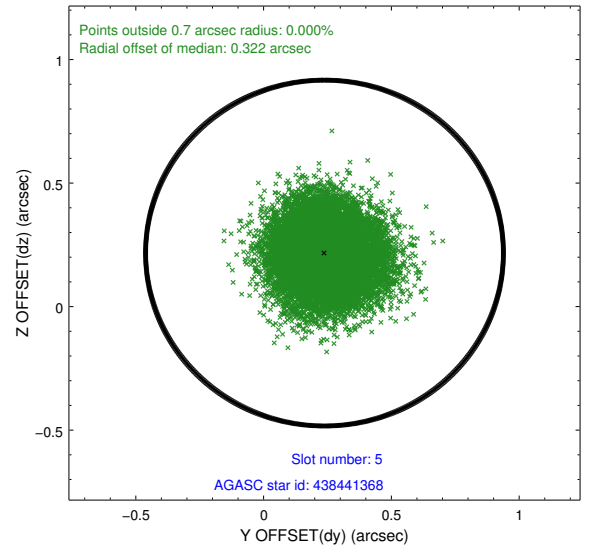
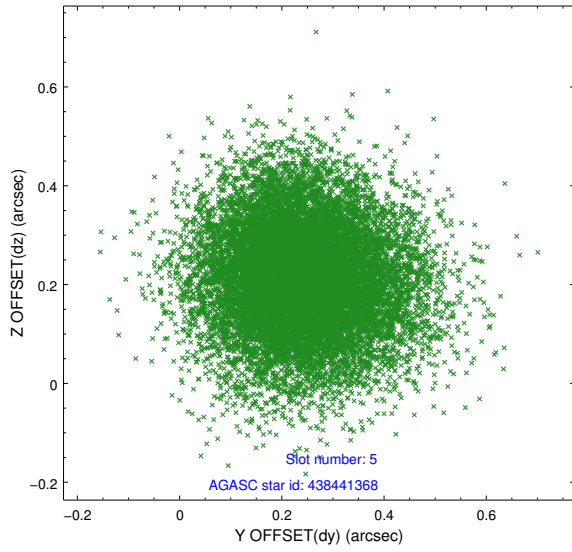
### 2.4.1 Slot 3



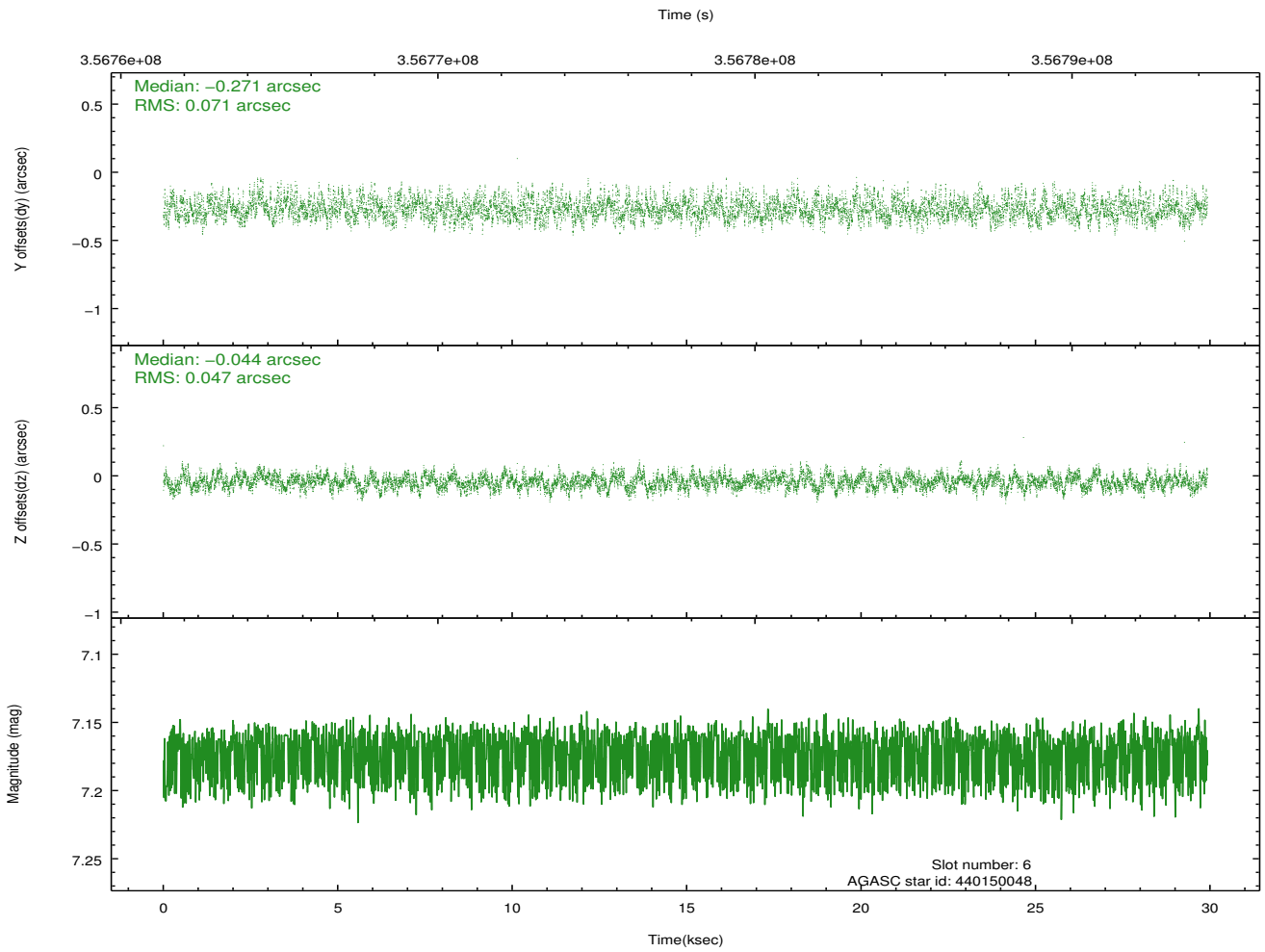
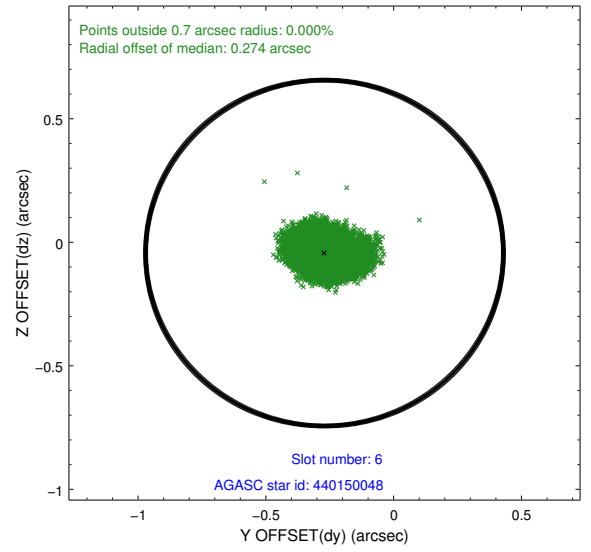
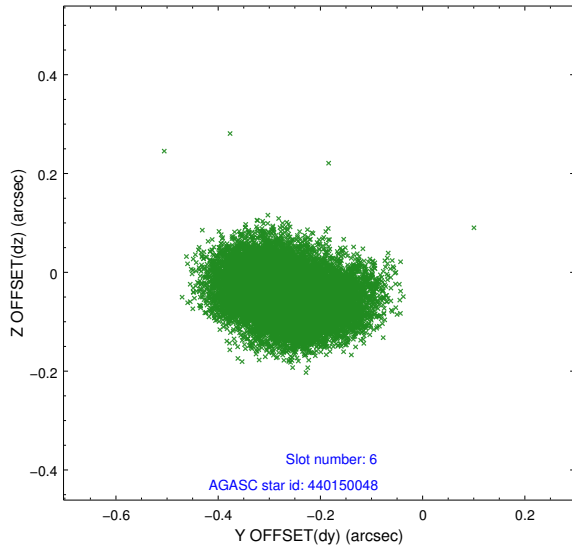
## 2.4.2 Slot 4



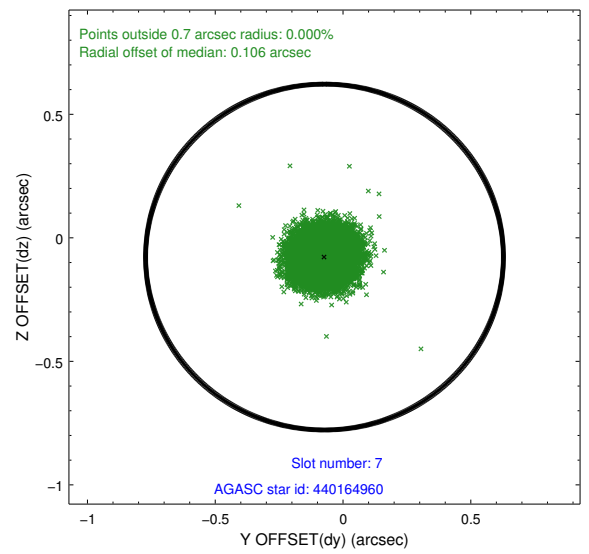
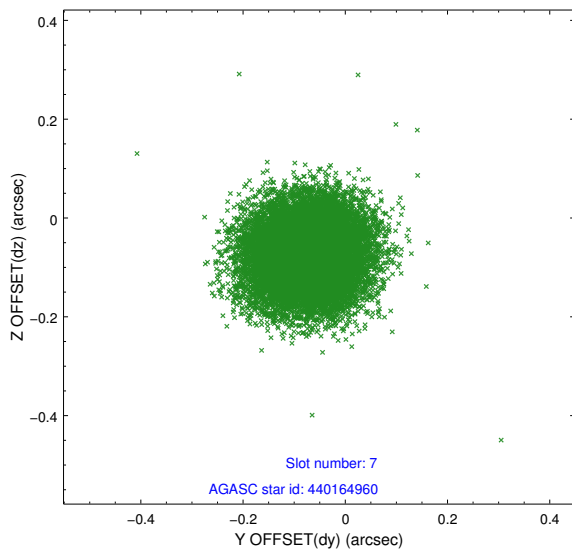
### 2.4.3 Slot 5



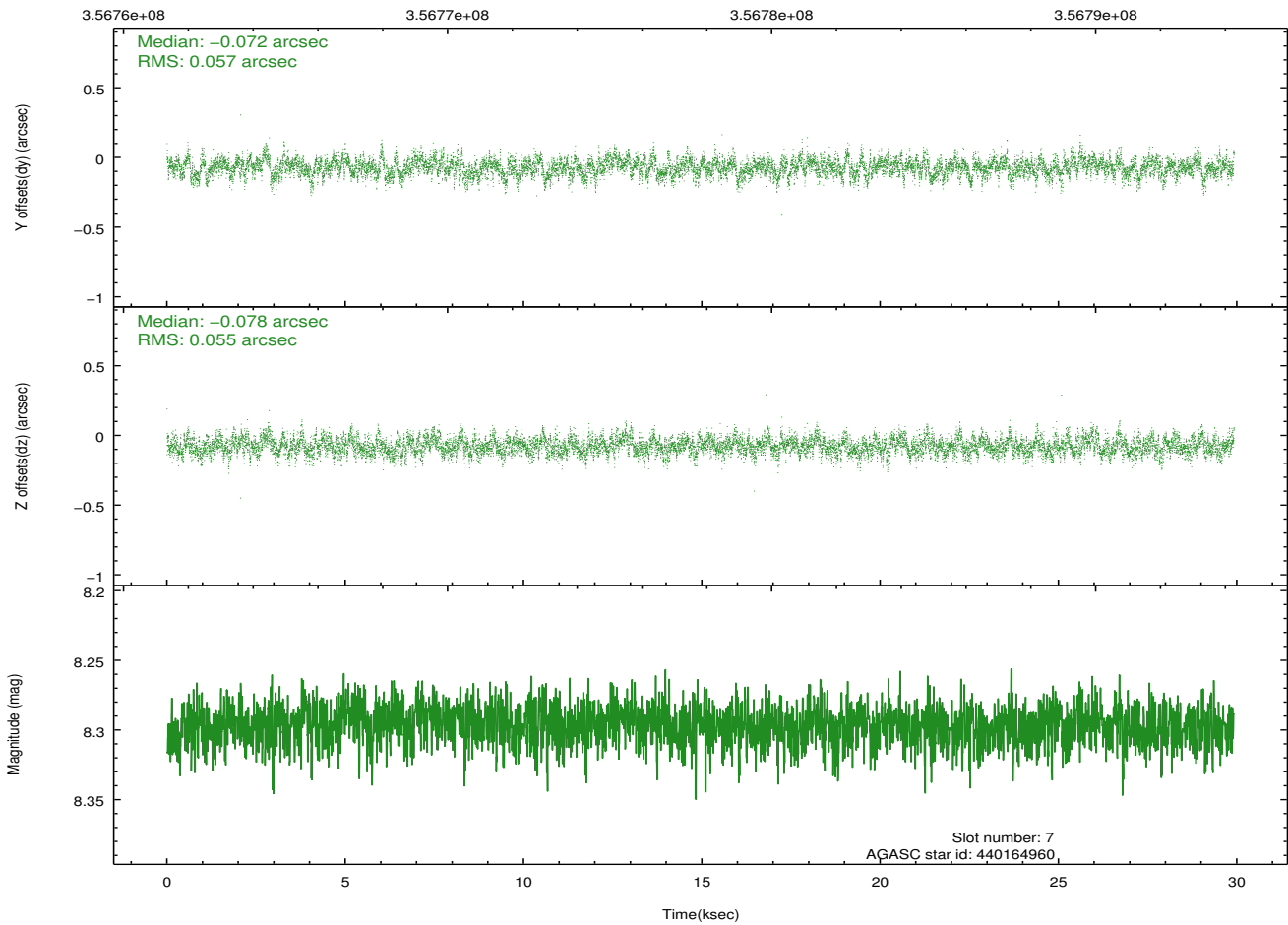
### 2.4.4 Slot 6



## 2.4.5 Slot 7

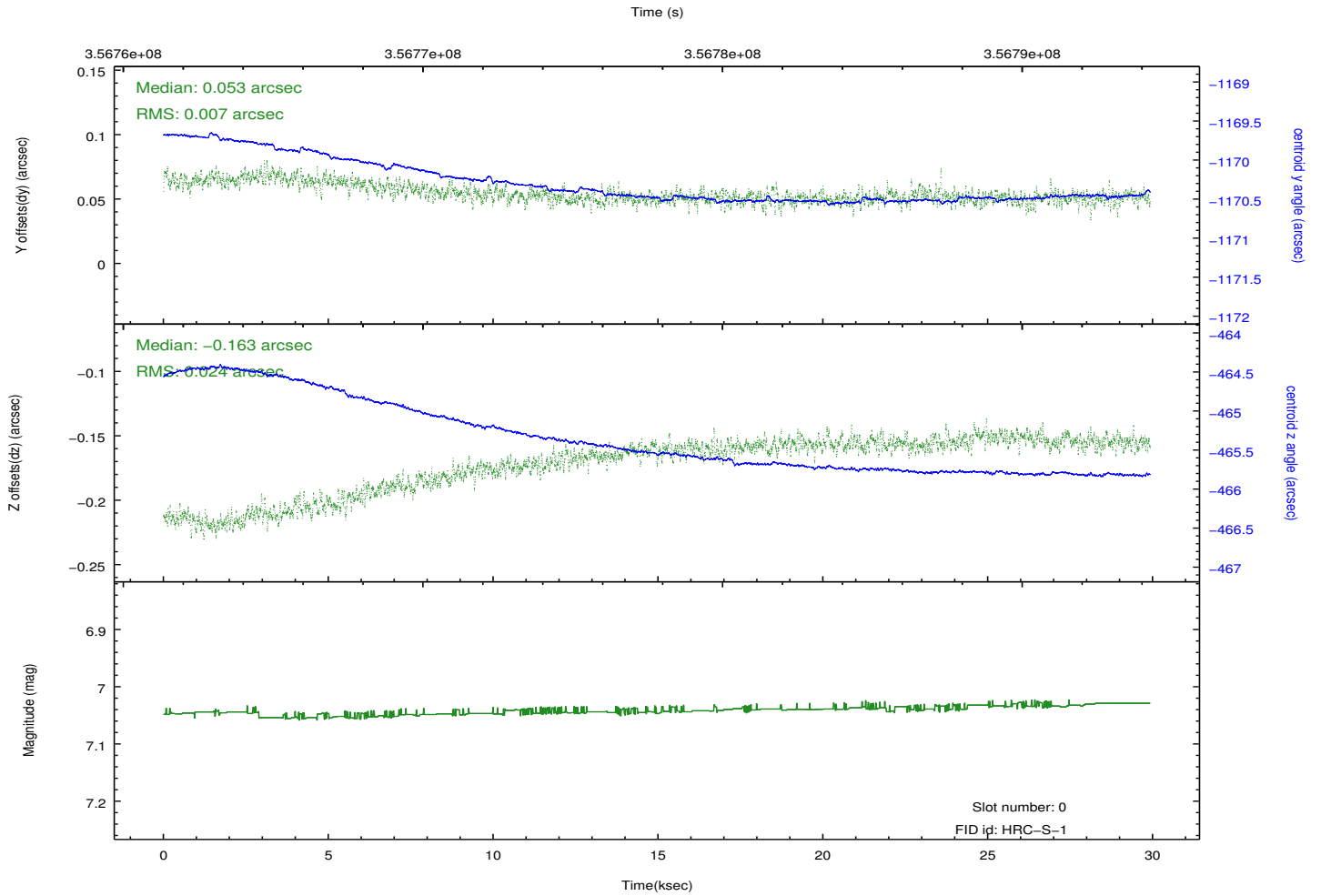
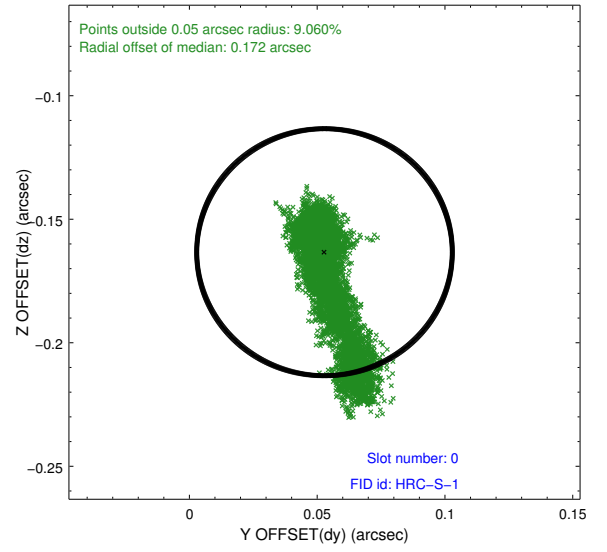
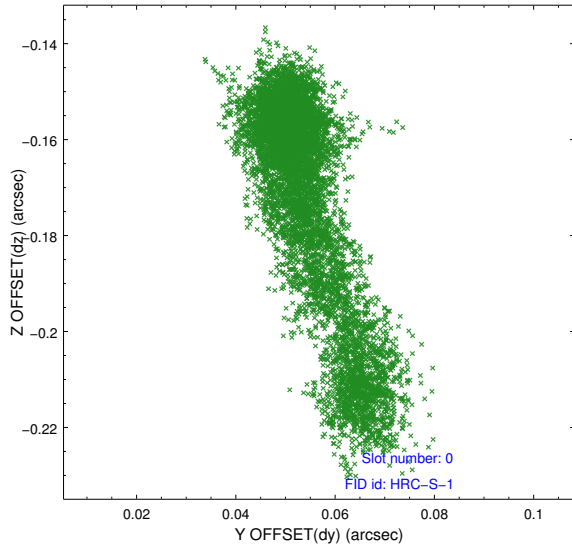


Time (s)

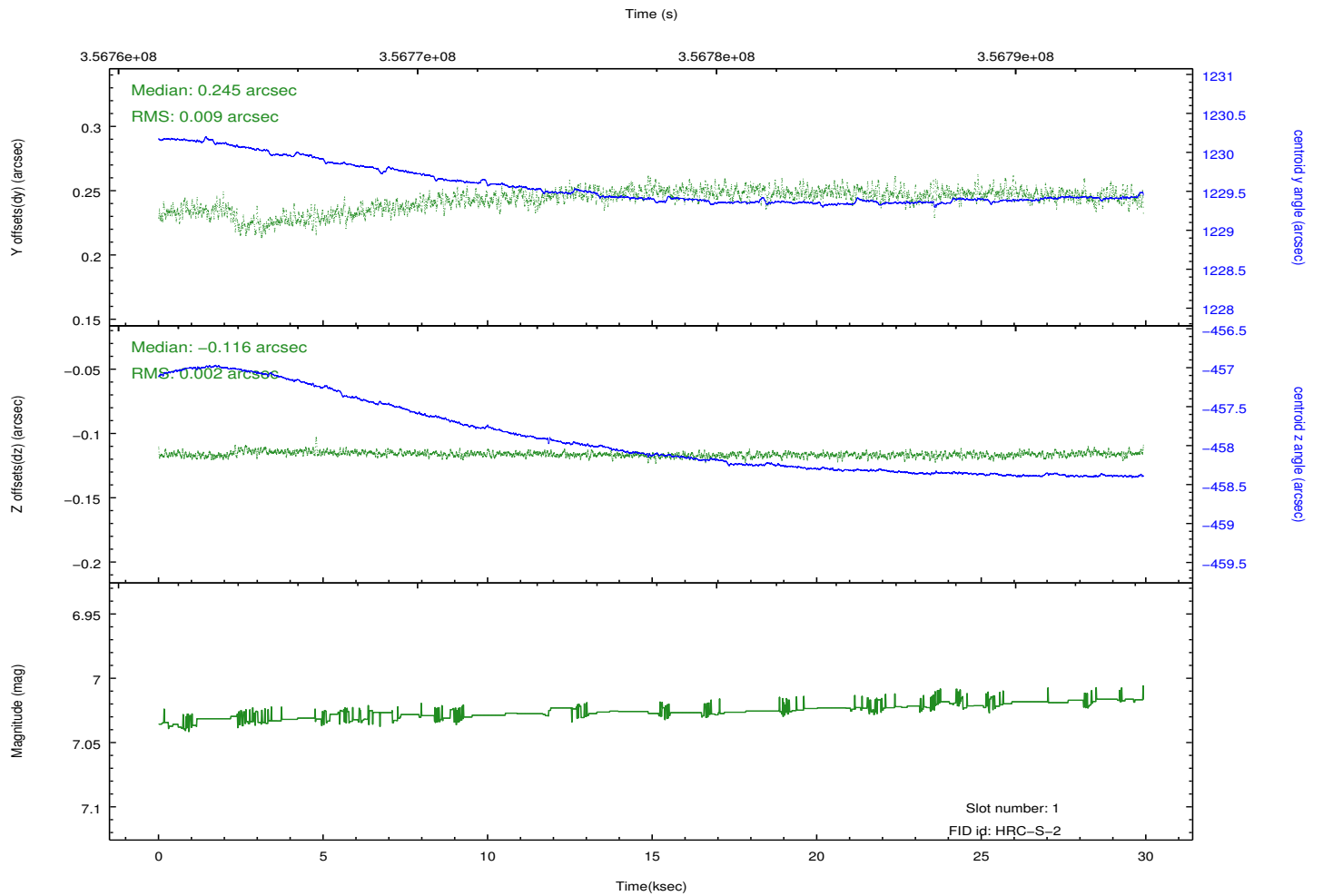
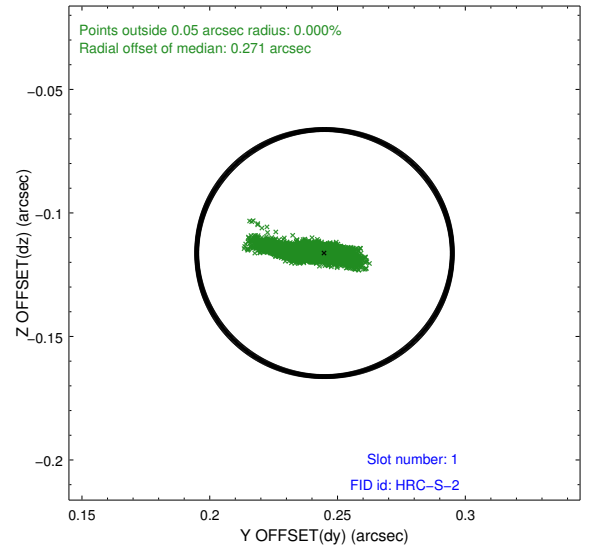
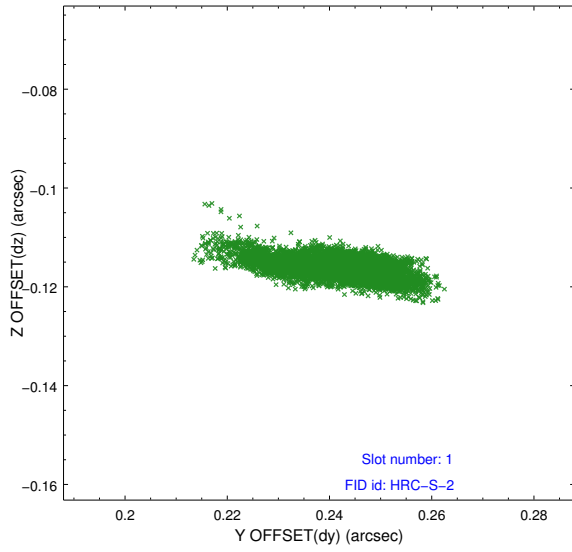


## 2.5 FID Slots

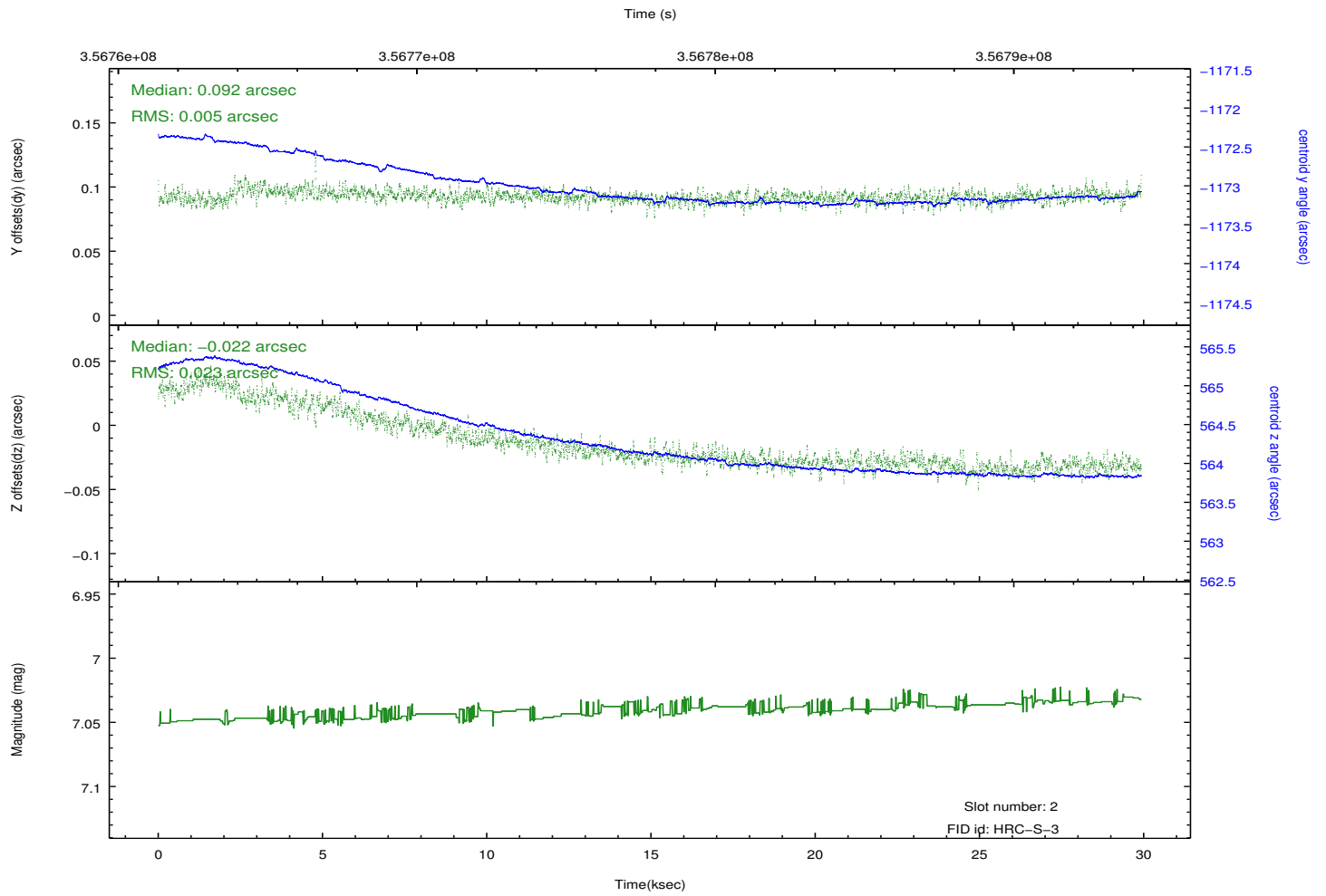
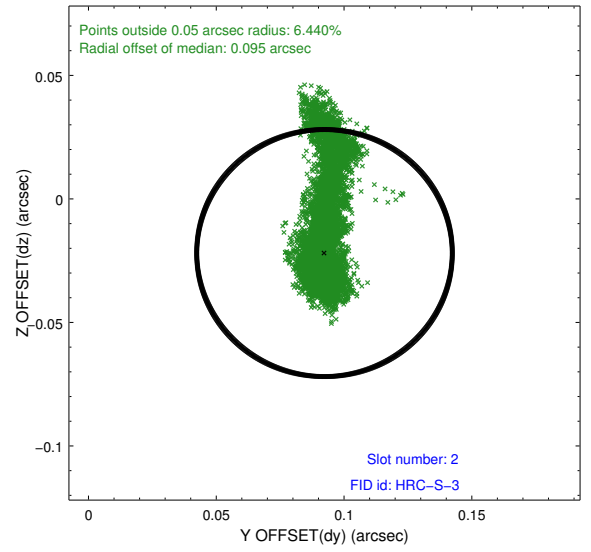
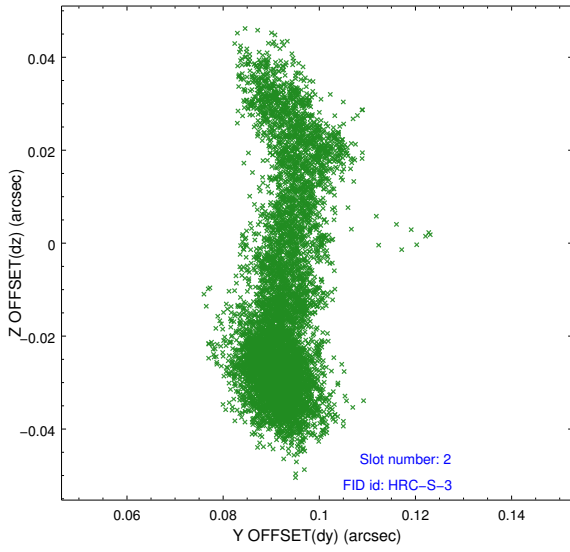
### 2.5.1 Slot 0



## 2.5.2 Slot 1

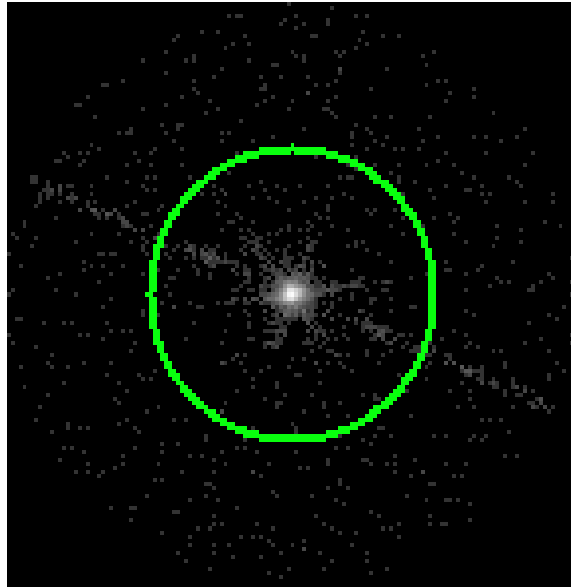


### 2.5.3 Slot 2

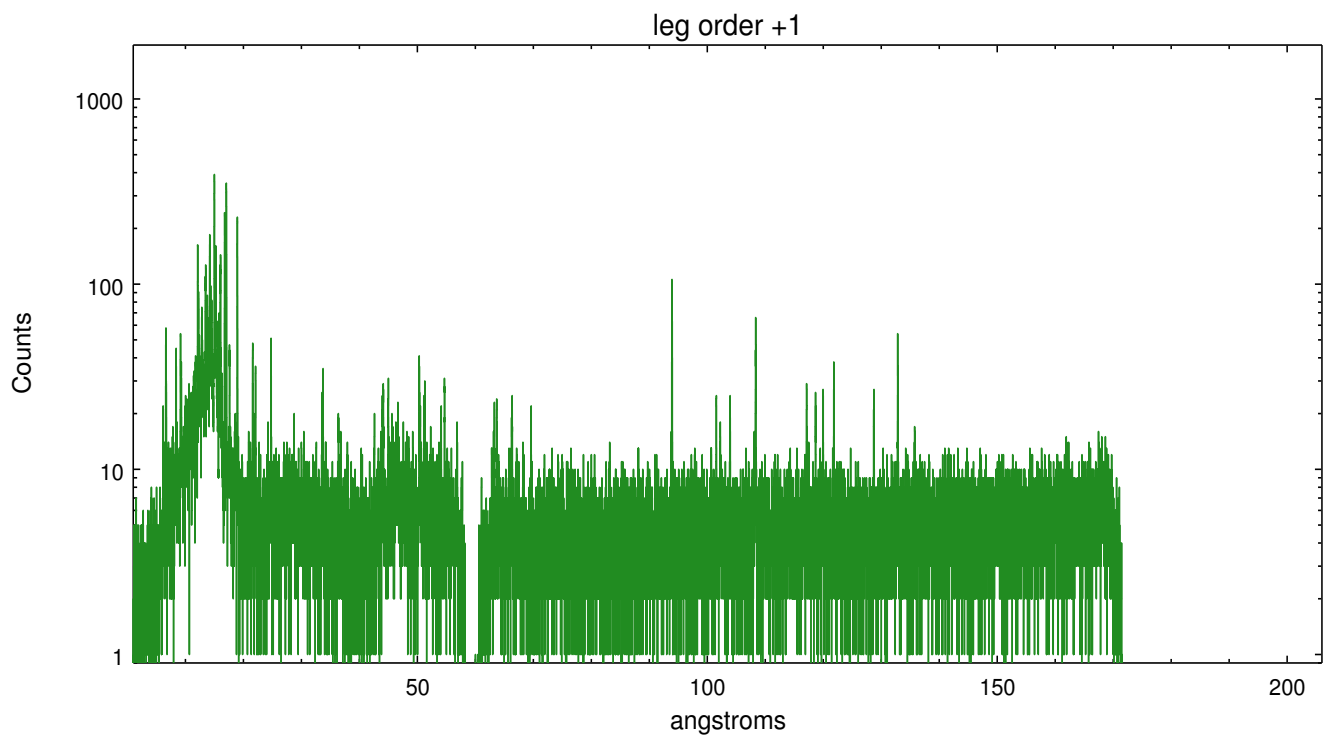
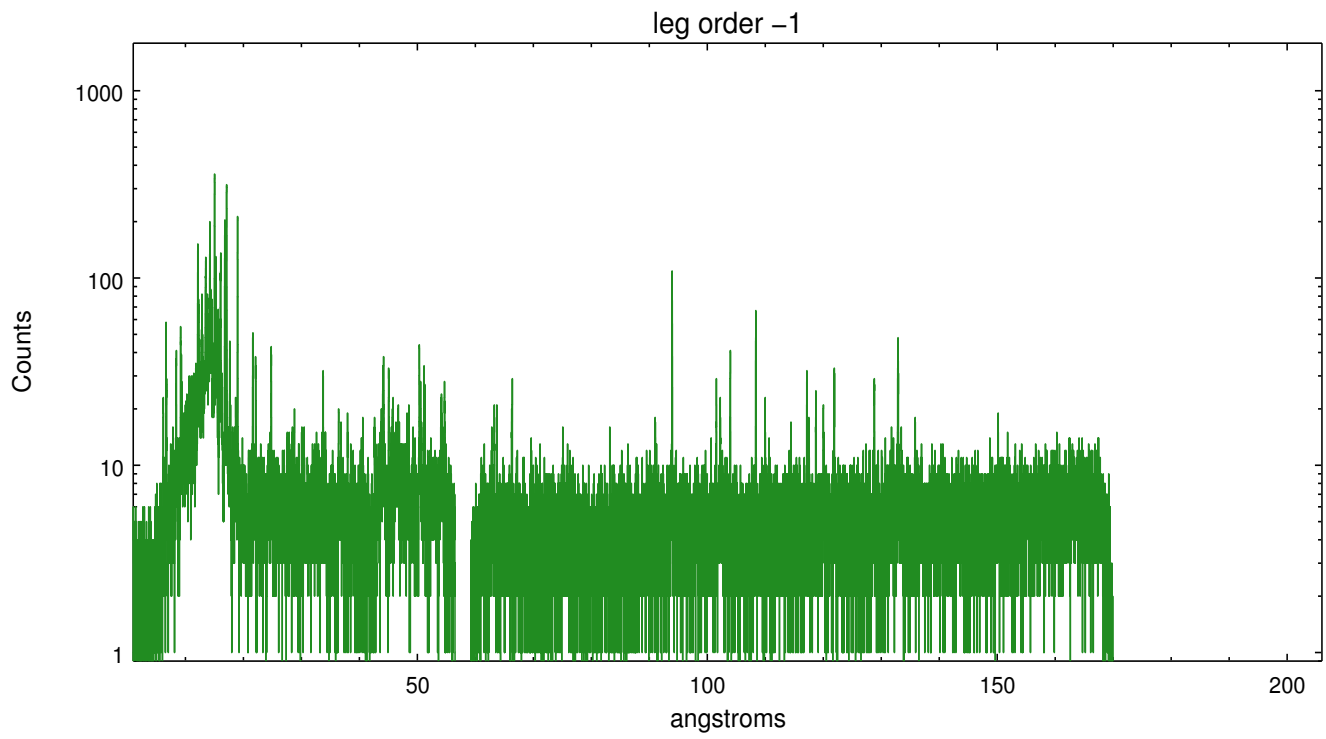


## 3 Gratings

### 3.1 LETG Arm



LETG Zero Order



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.9210327

## A.2 Comments

Target offset 1.5 arcmin in Y.