

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 25 - L2 Version 5  
Chandra X-Ray Center

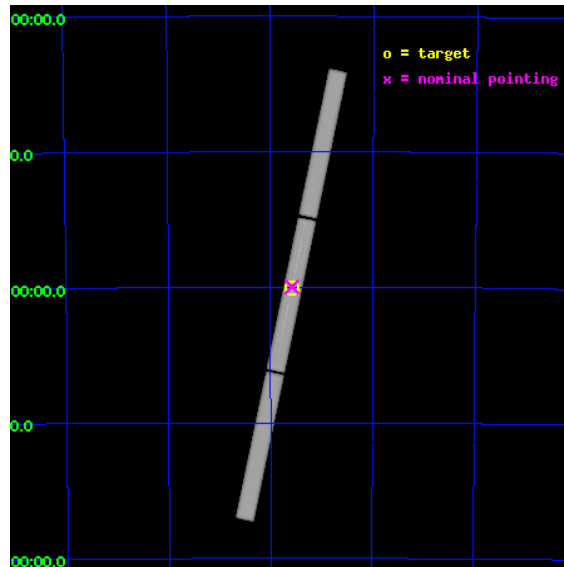
L2 Processing Date : Sep 5 2012

## 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

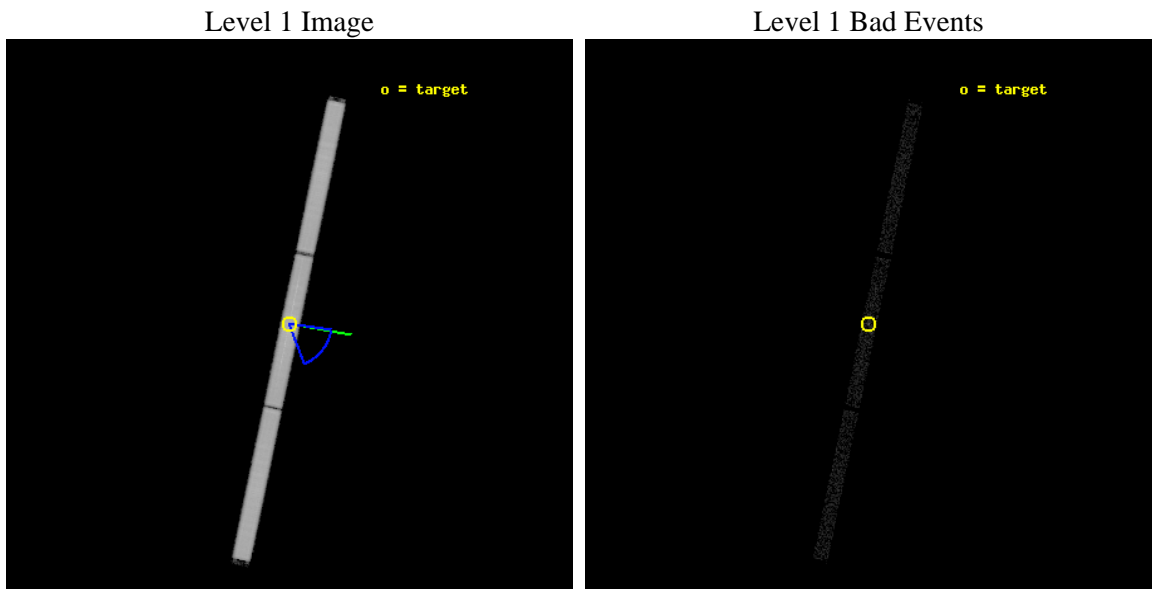
seq_num	200023	Sequence number
obs_id	25	Observation id
title	EMISSION FROM EARLY-TYPE STARS	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	Z eta Pup	Source name
ra_targ	120.89625	Observer's specified target RA [deg]
dec_targ	-40.003333	Observer's specified target Dec [deg]
ra_nom	120.89519893089	Nominal RA [deg]
dec_nom	-39.99853616987	Nominal Dec [deg]
roll_nom	101.82659838679	Nominal Roll [deg]
revision	5	Processing version of data
ontime	24981.557191521	[s]
livetime	24848.830883217	Ontime multiplied by DTCOR
l2events	1019761	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	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	24981.557192519	[s]
caldbver	4.5.1.1	&#160	l1events	1470792	Number of level 1 events
date	2012-09-05T15:40:28	Date and time of file creation			
revision	5	Processing version of data			

## 2.1.3 Events

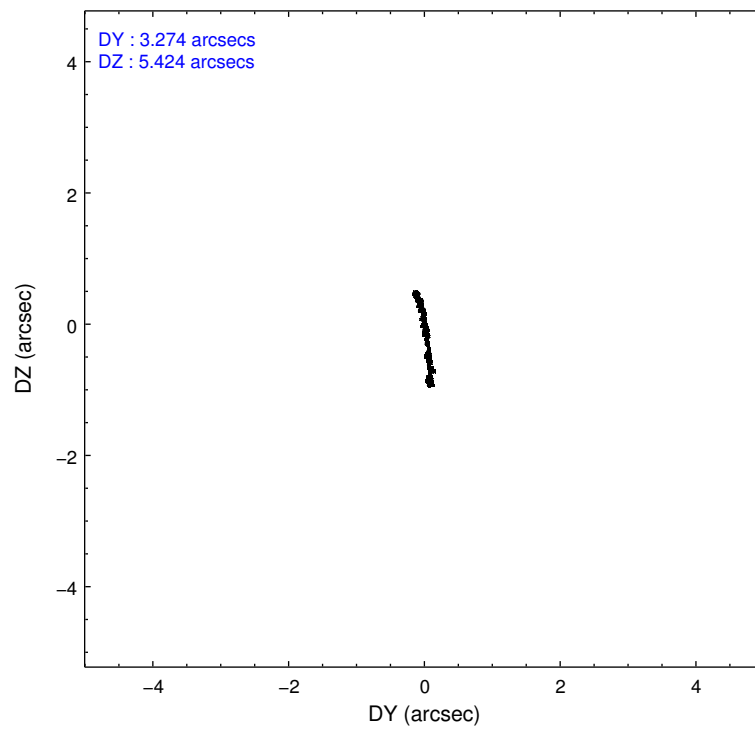
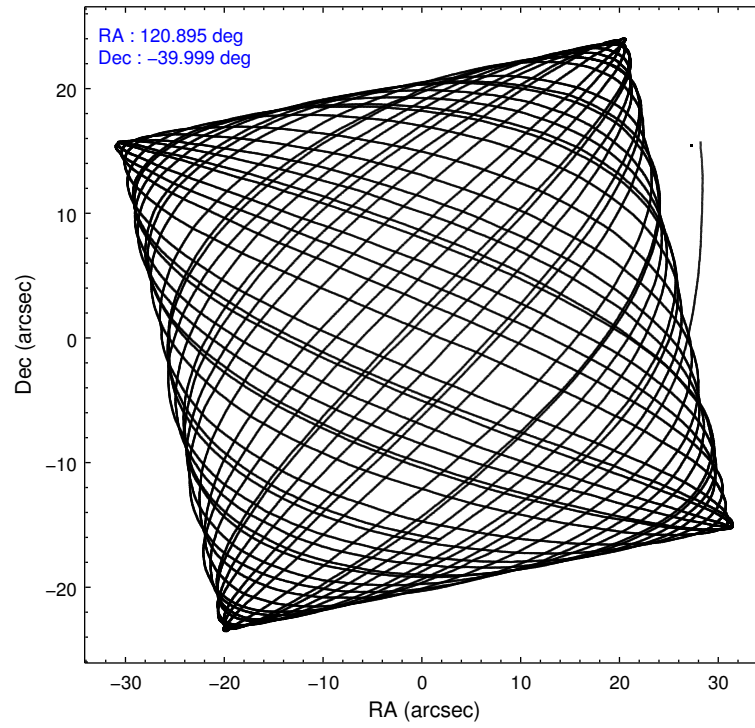
### Level 1 Events

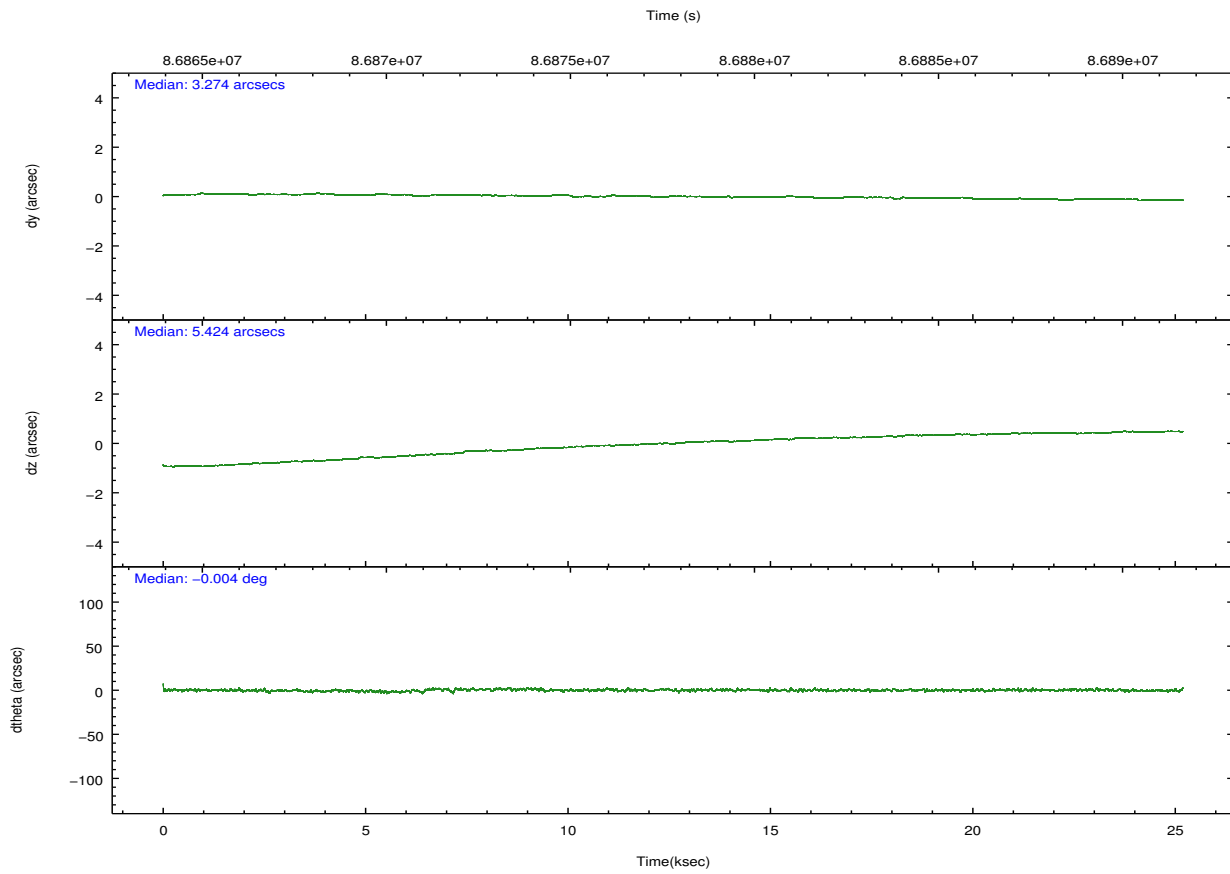
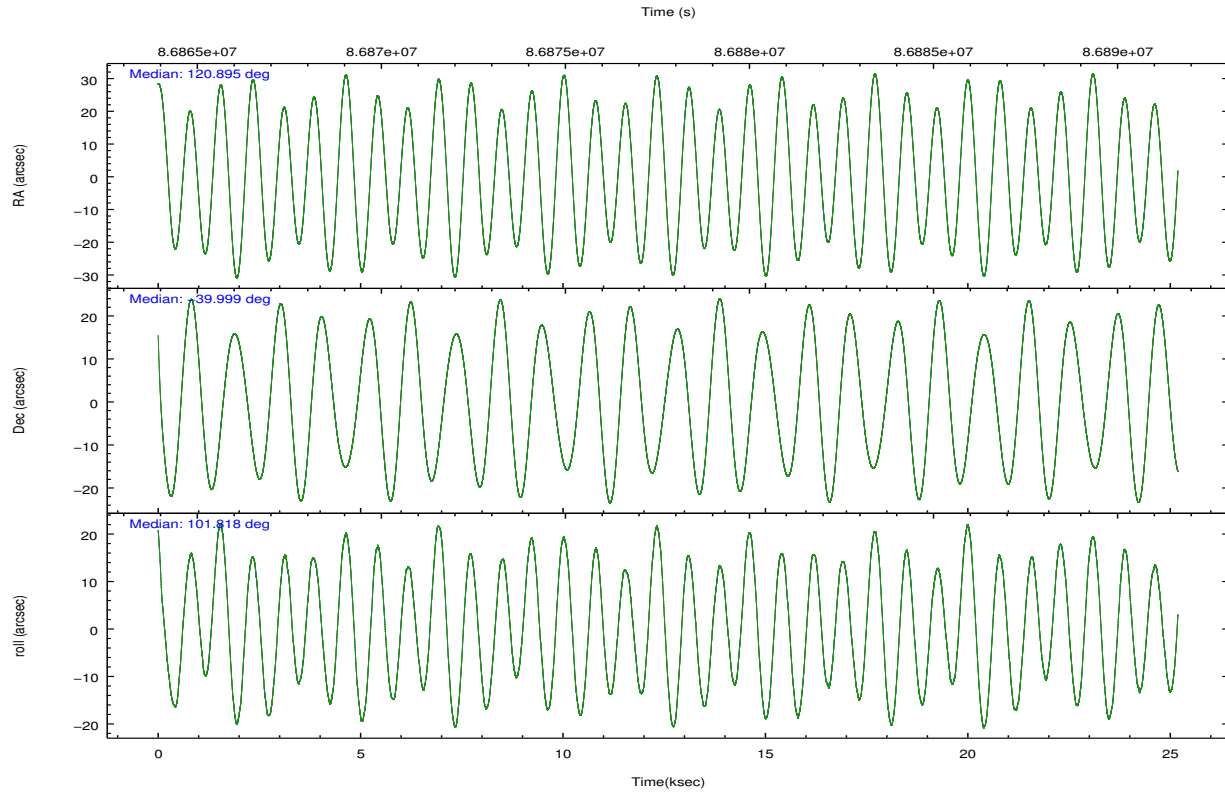
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	488268	491164	491360
rejected events	3169	3392	3237
rejected %	0%	0%	0%

## 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	120.921430	120.8951989308902			
[deg] Pointing Dec	-40.019062	-39.99853616986999			
[deg] Pointing Roll	101.776120	101.8265983867882			
[deg] Roll angle	130.000000	130.000000			
[deg] Roll tolerance	30.000000	30.000000			
Roll constraint allows 180D rotation	N	N			
[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)	86865381.184000	86864628.37856001			
Observation start date	2000-10-02T09:15:17	2000-10-02T09:03:48			
[s] Observation end time (MET)	86890381.184000	86890515.77953701			
Observation end date	2000-10-02T16:11:57	2000-10-02T16:15:15			

## 2.3 Aspect



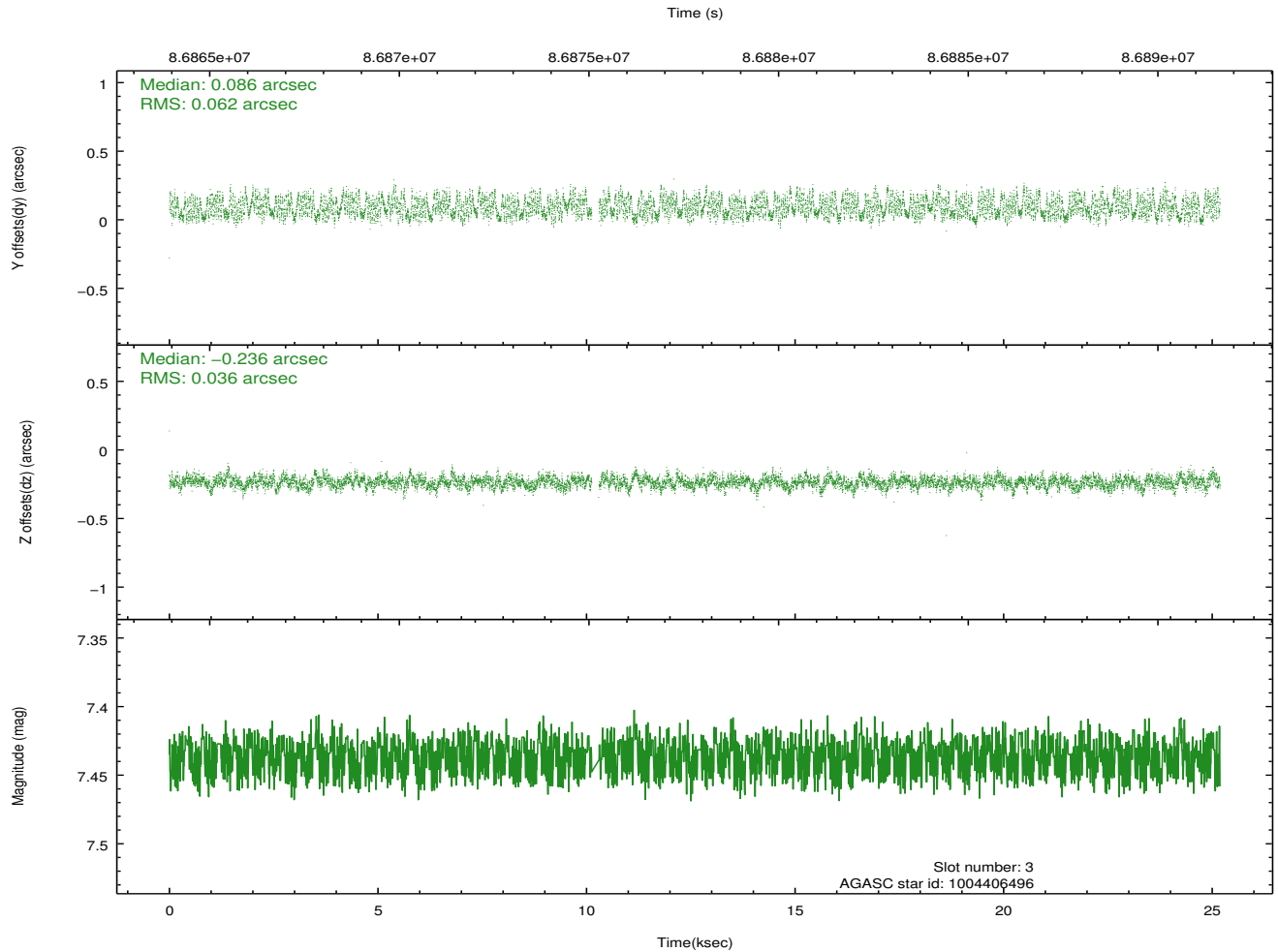
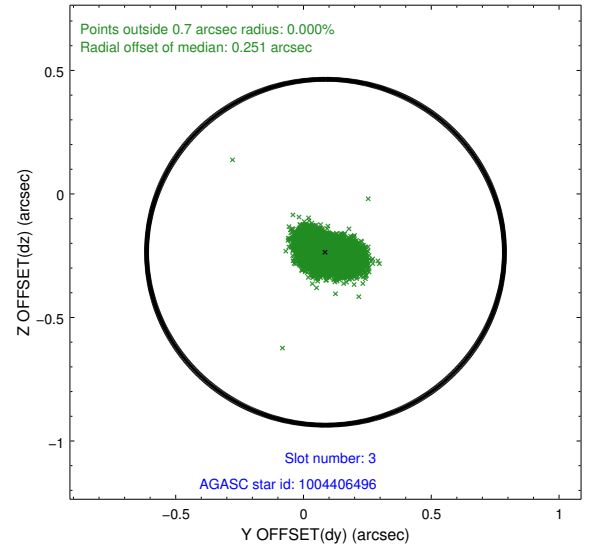
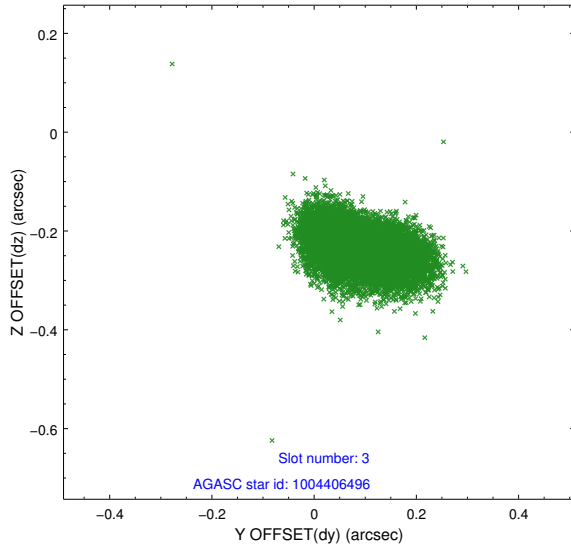


### Slot Statistics

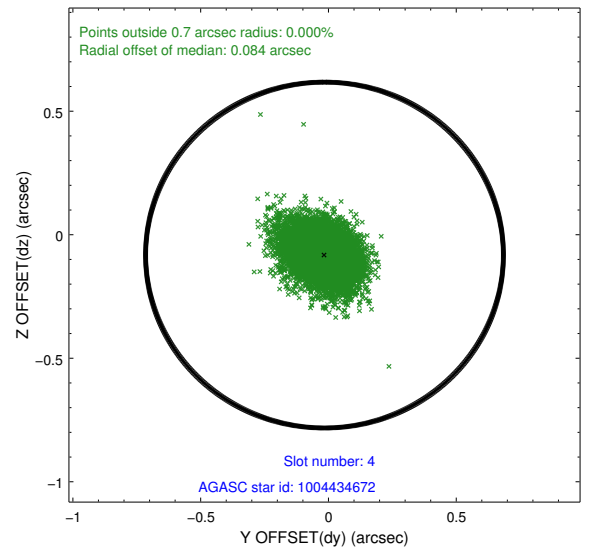
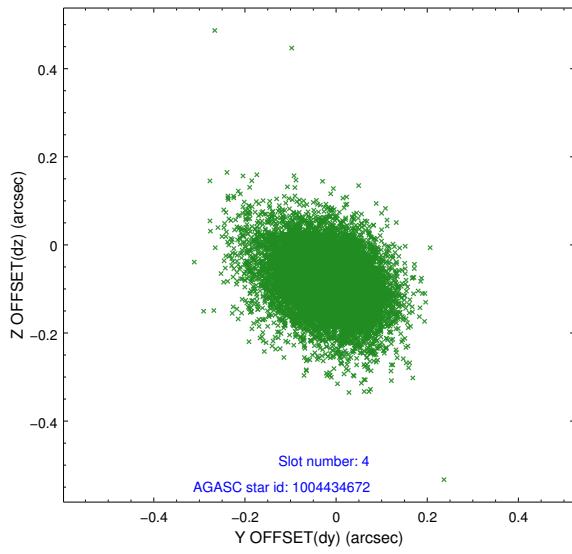
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.00	6144	0.161	-0.105	0.005	0.011	0.000000	0.000000	-1157.29	-453.83
1	FID	HRC-S-2	7.00	6144	0.102	-0.140	0.012	0.021	0.000000	0.000000	1242.14	-446.56
2	FID	HRC-S-4	6.96	6142	0.141	-0.059	0.011	0.021	0.000000	0.000000	1241.14	578.25
3	GUIDE	1004406496	7.44	12205	0.086	-0.236	0.078	0.123	120.210035	-40.527356	-1402.33	2280.04
4	GUIDE	1004434672	9.31	12283	-0.016	-0.082	0.095	0.165	120.272530	-40.020944	351.48	1753.93
5	GUIDE	1004435080	9.01	12282	-0.146	0.105	0.075	0.120	121.357562	-39.510372	1542.56	-1558.77
6	GUIDE	1004423416	9.16	12287	0.133	0.139	0.079	0.130	121.507371	-40.465709	-1906.58	-1242.35
7	GUIDE	1004434400	9.40	12263	-0.057	0.073	0.090	0.144	121.260742	-39.526654	1541.10	-1283.85

## 2.4 Star Slots

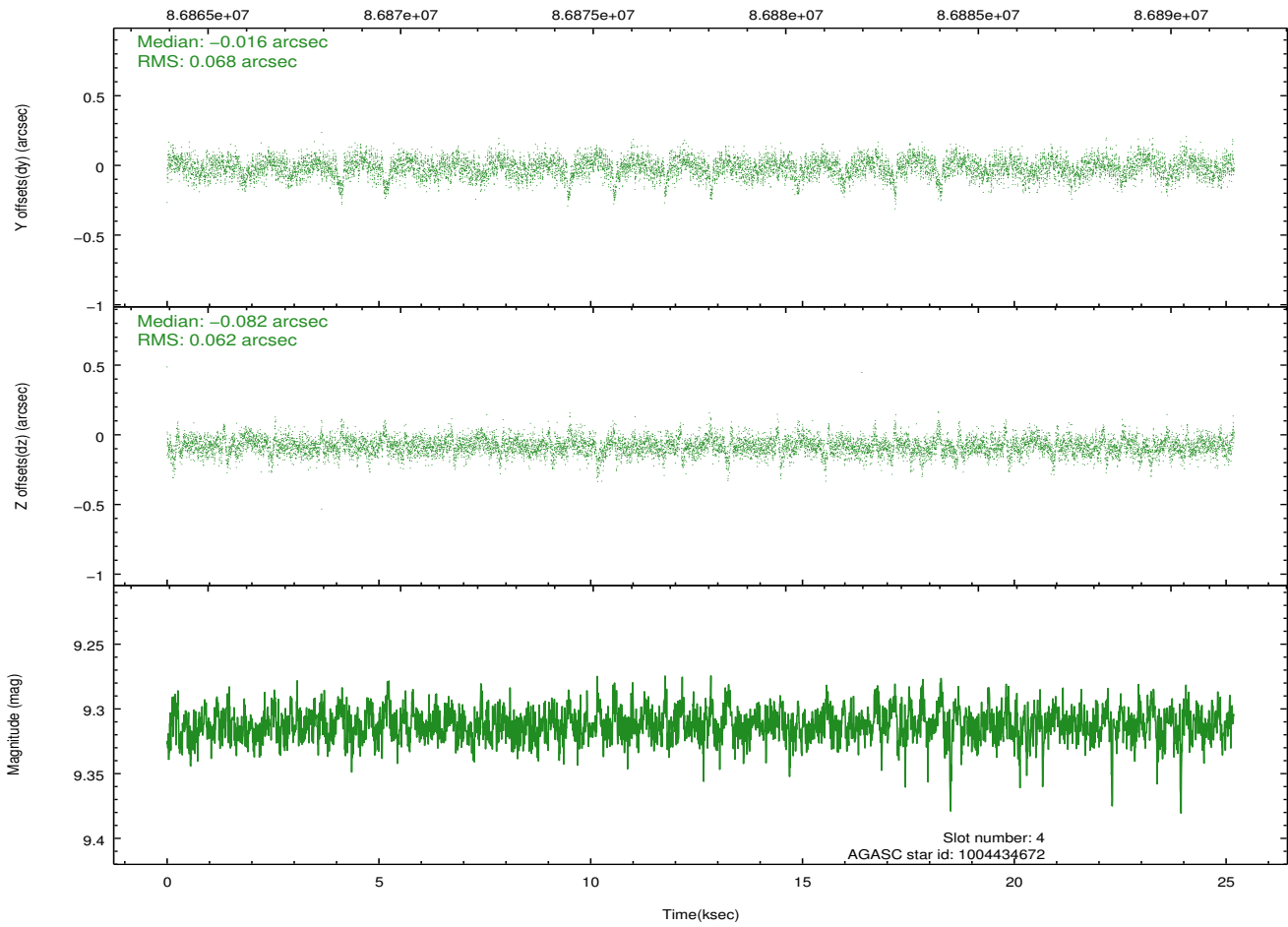
### 2.4.1 Slot 3



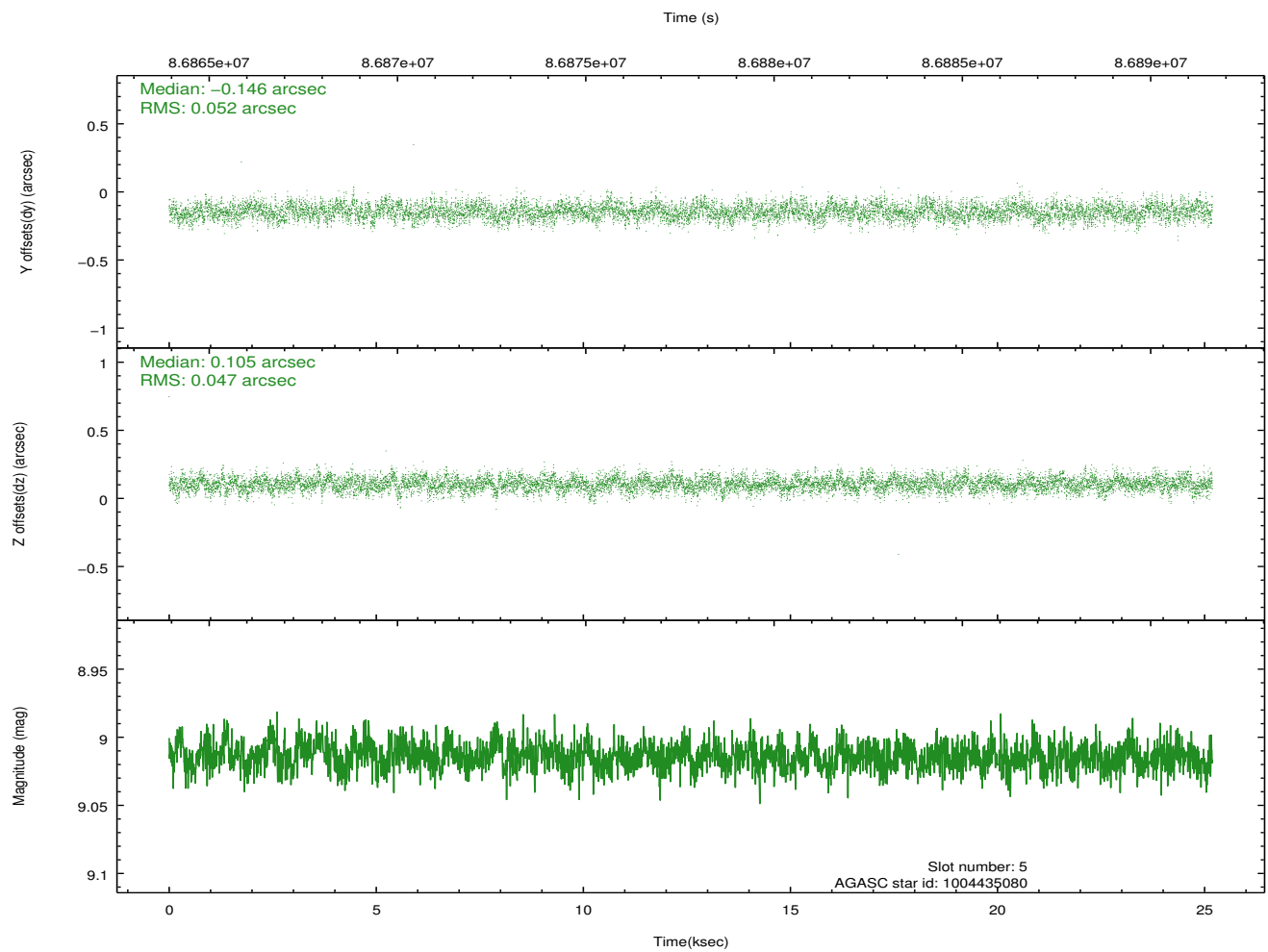
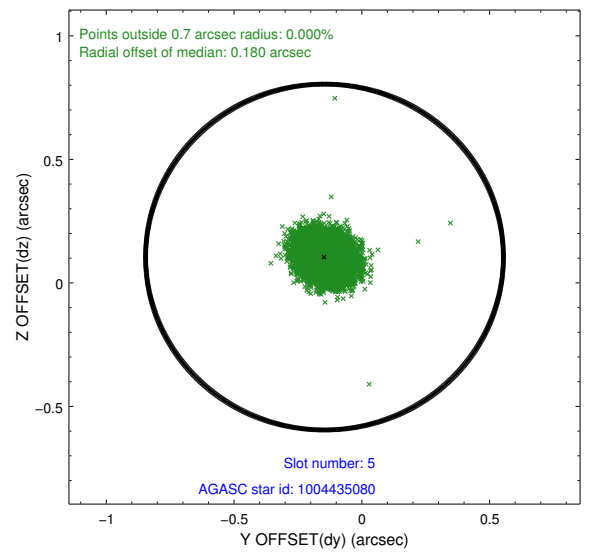
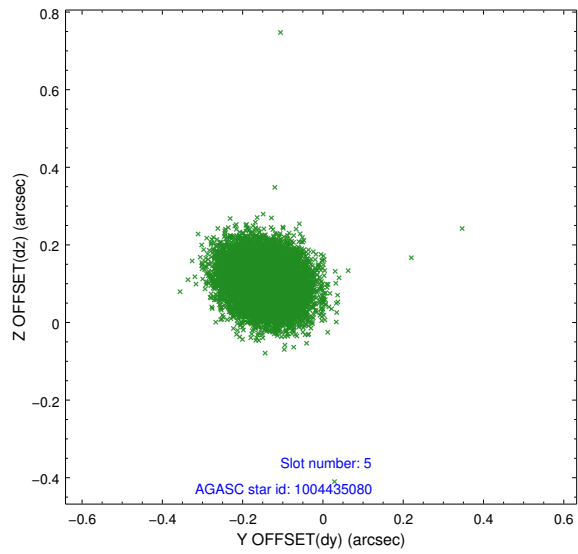
## 2.4.2 Slot 4



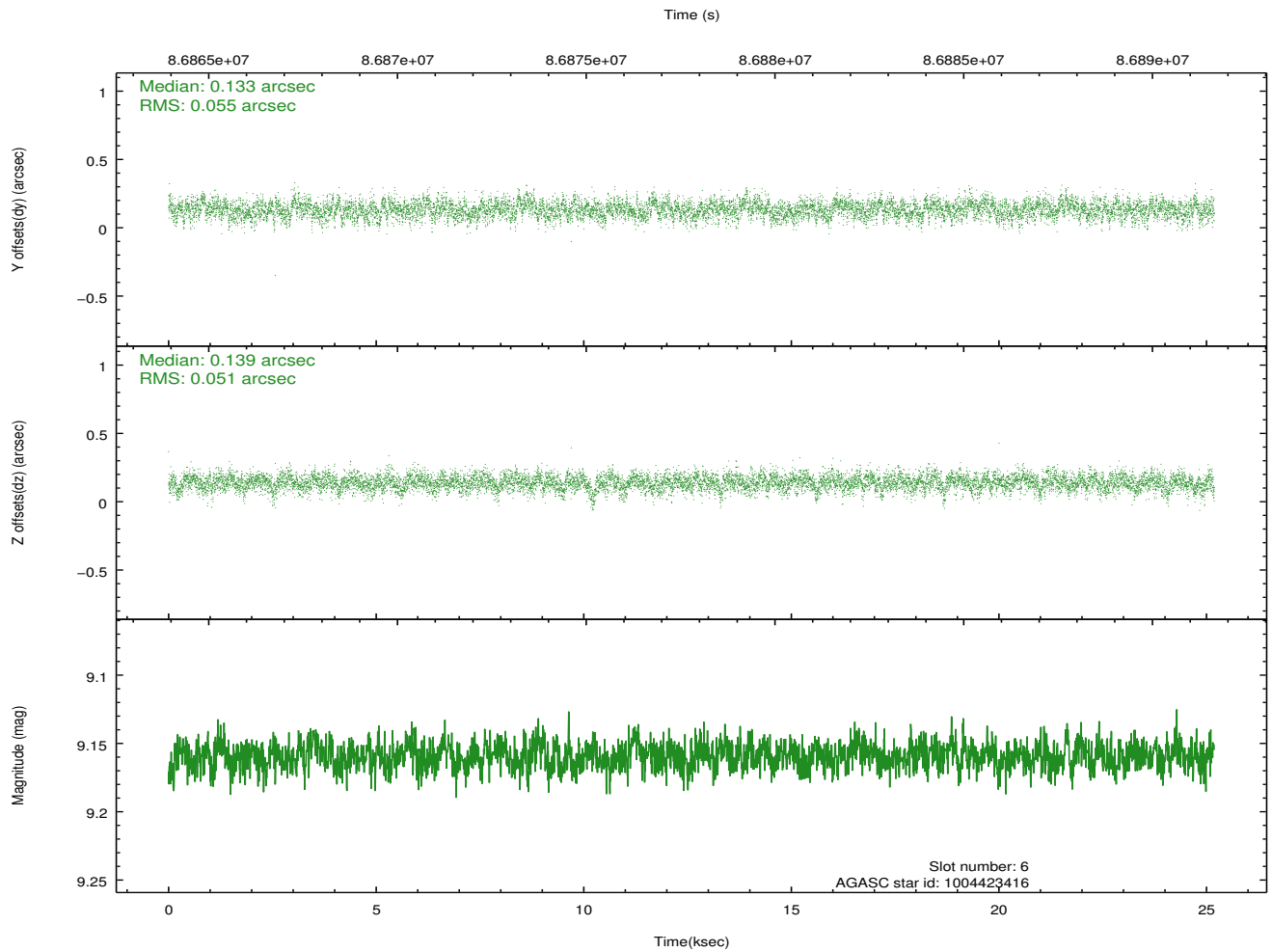
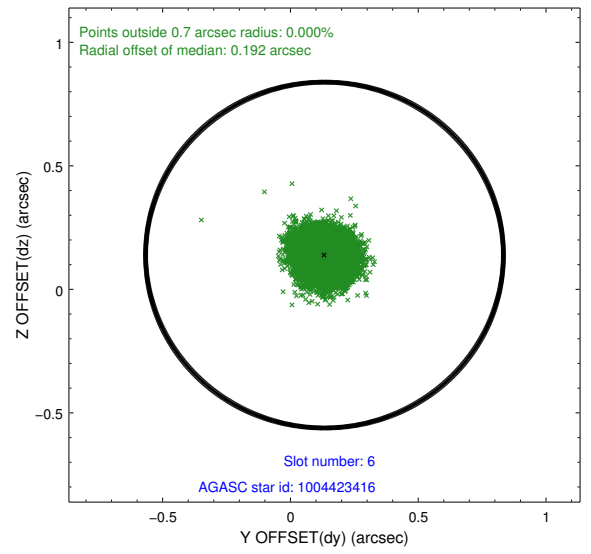
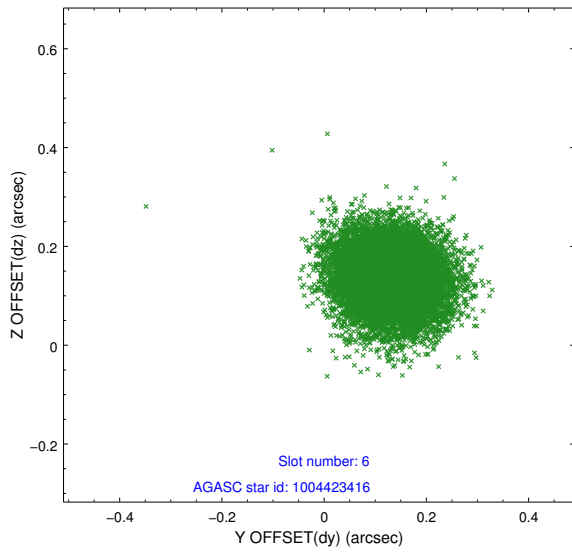
Time (s)



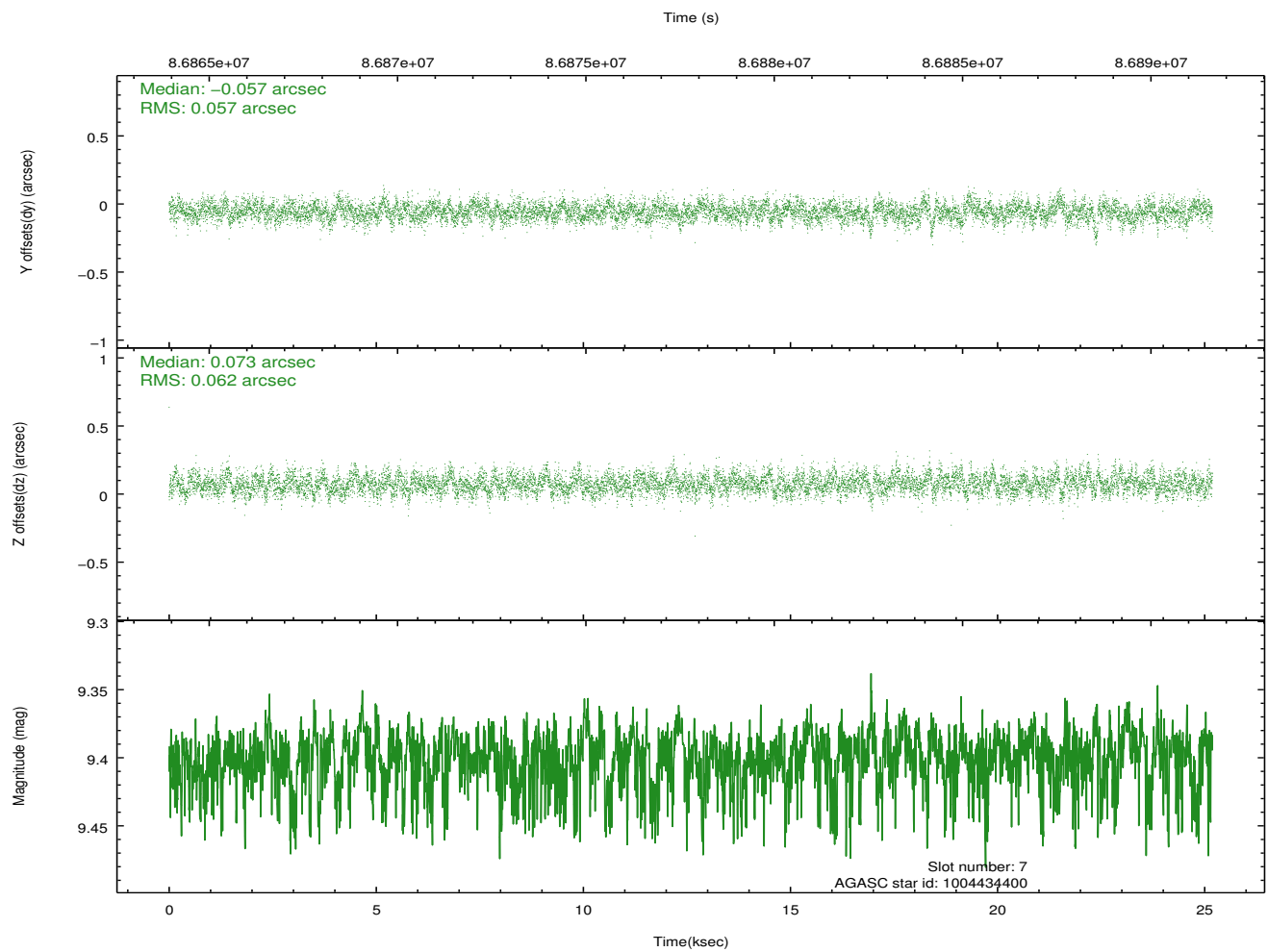
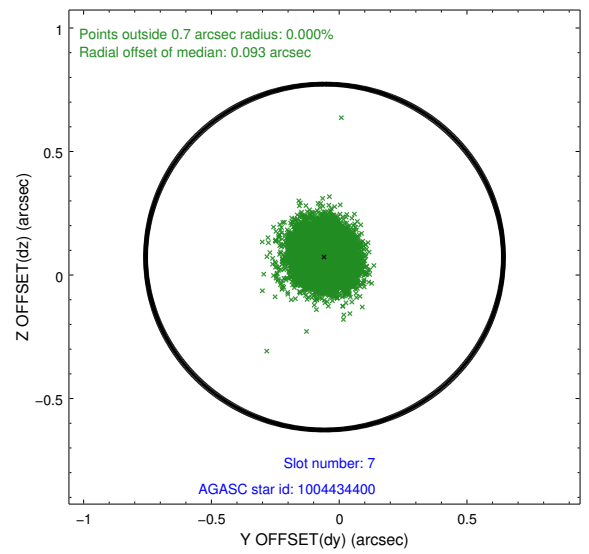
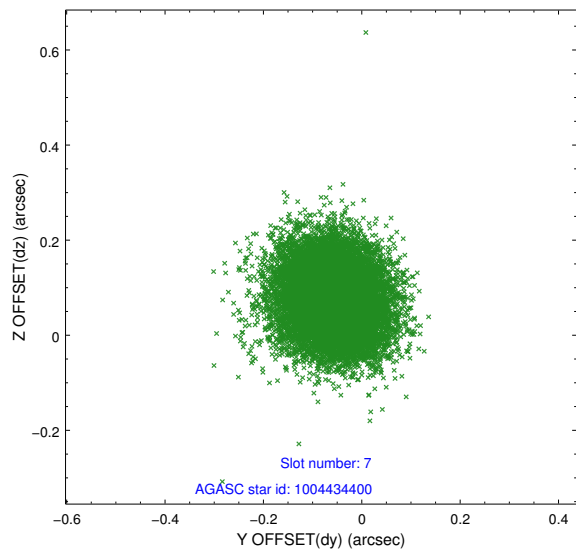
### 2.4.3 Slot 5



## 2.4.4 Slot 6

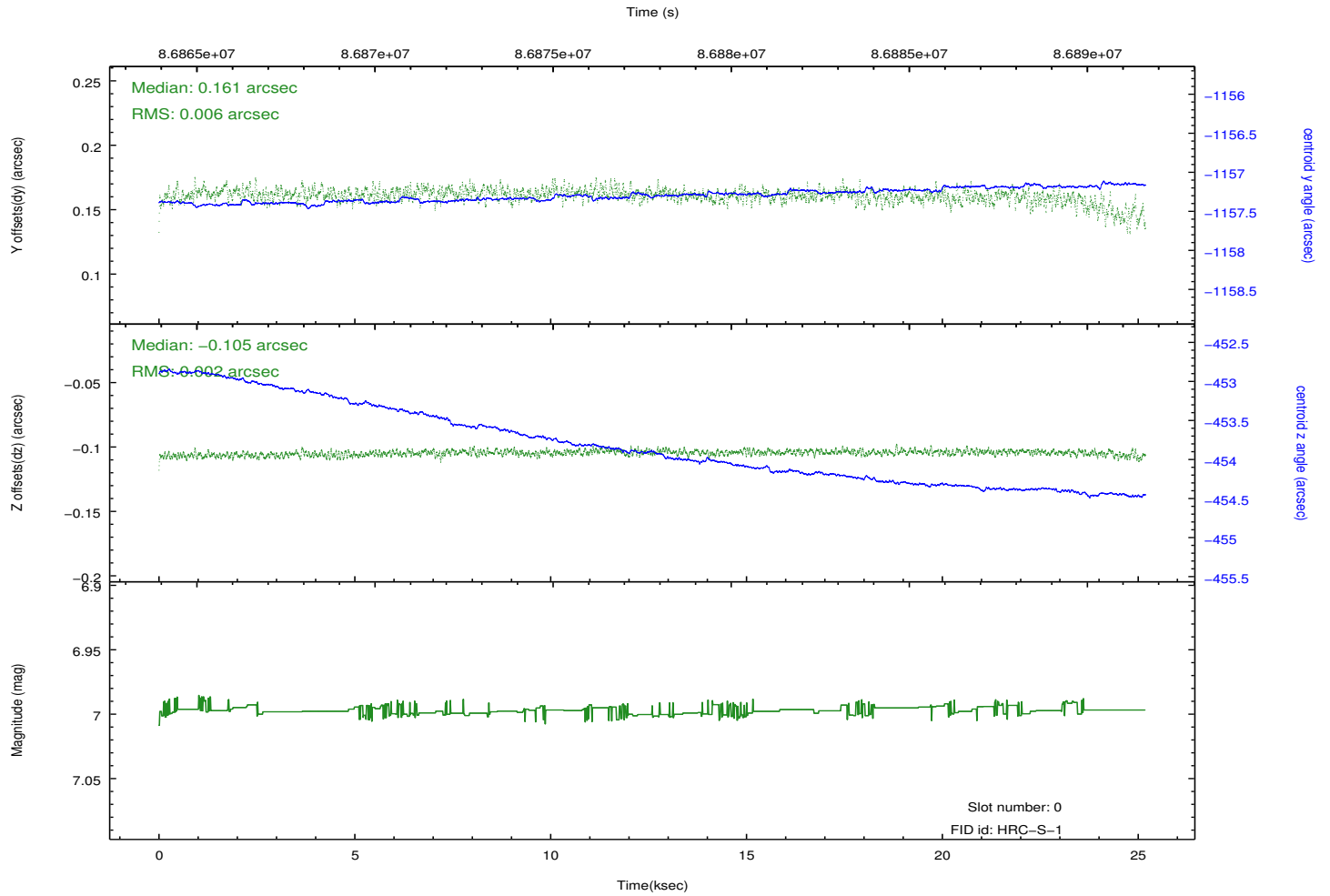
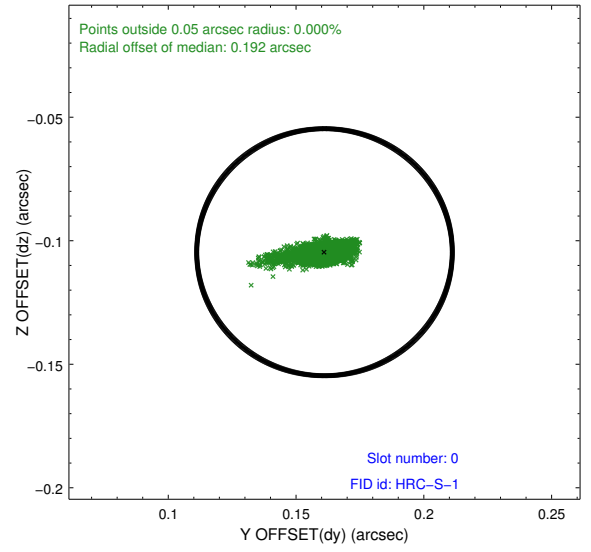
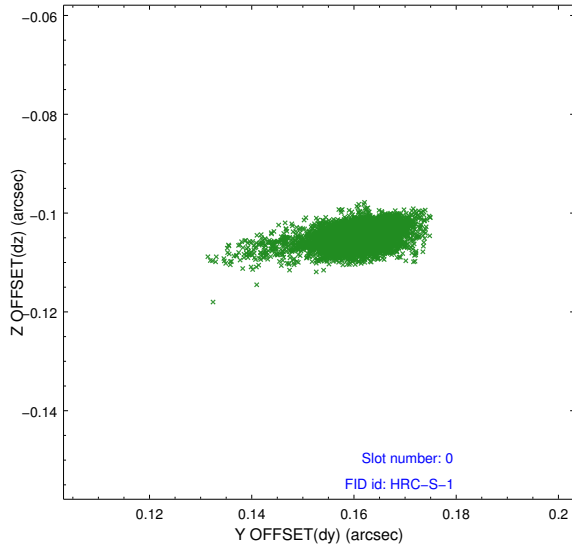


## 2.4.5 Slot 7

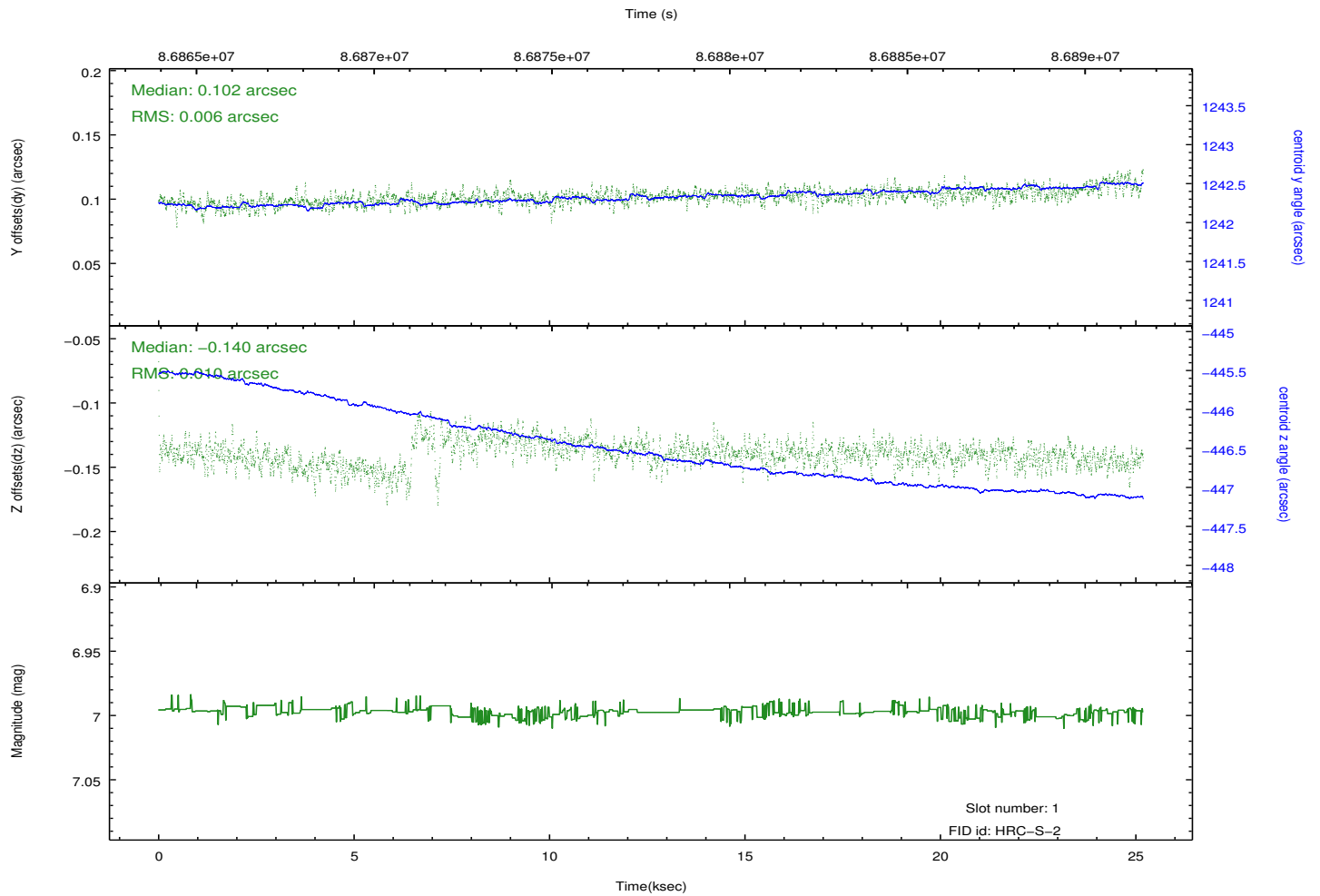
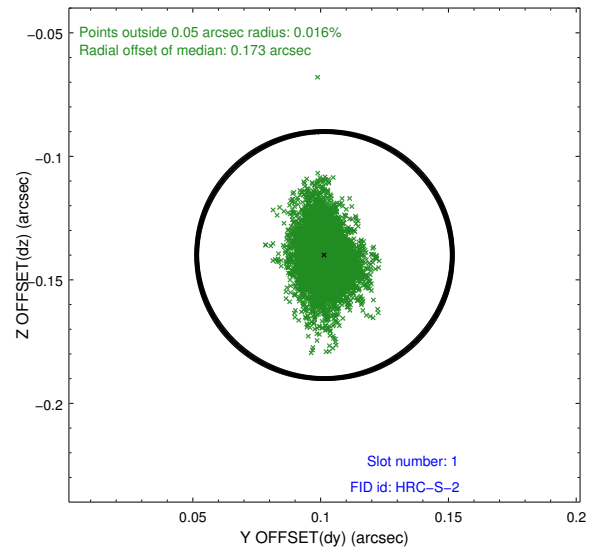
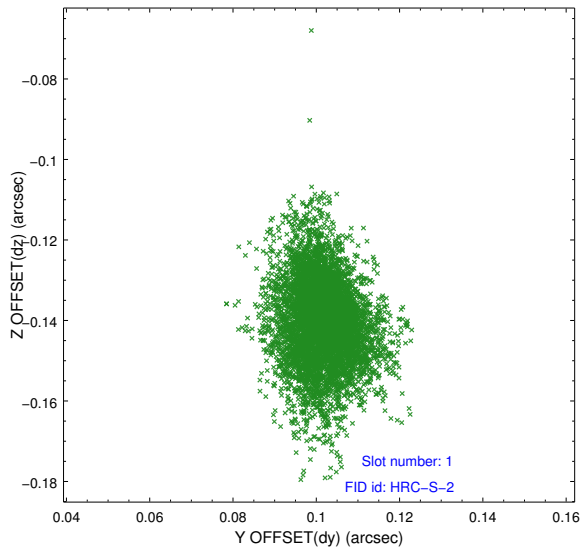


## 2.5 FID Slots

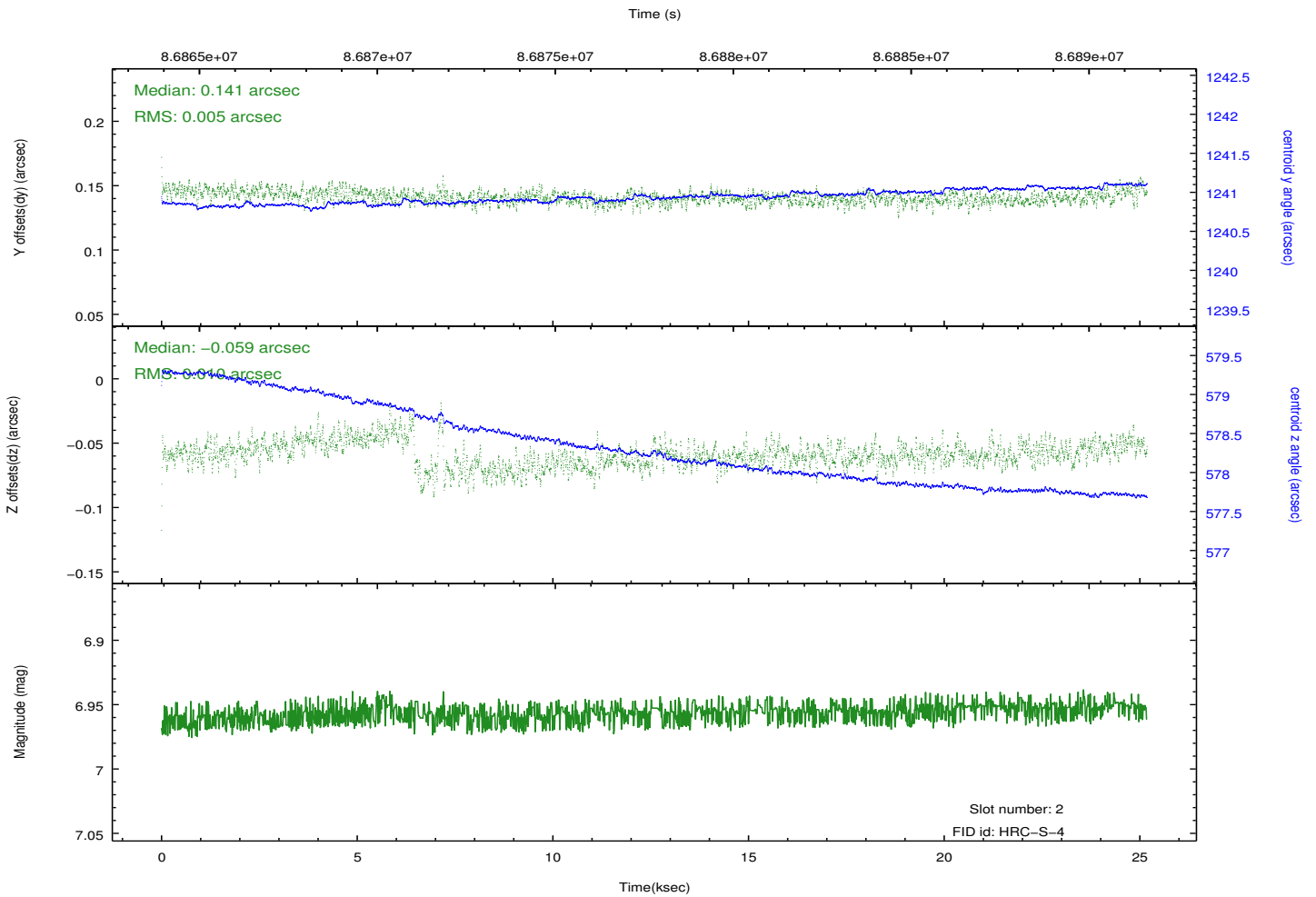
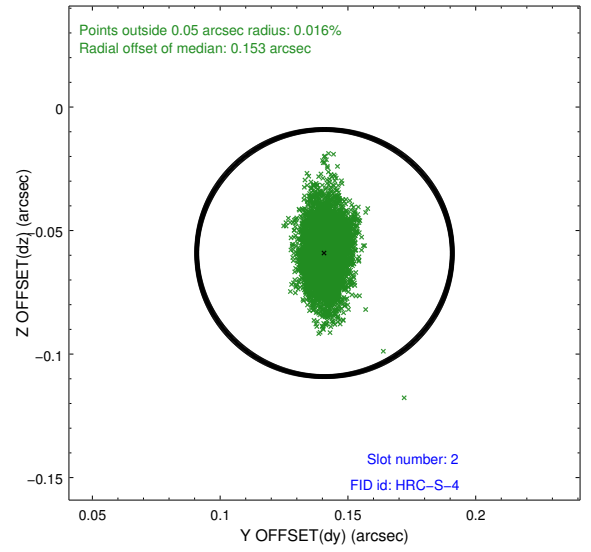
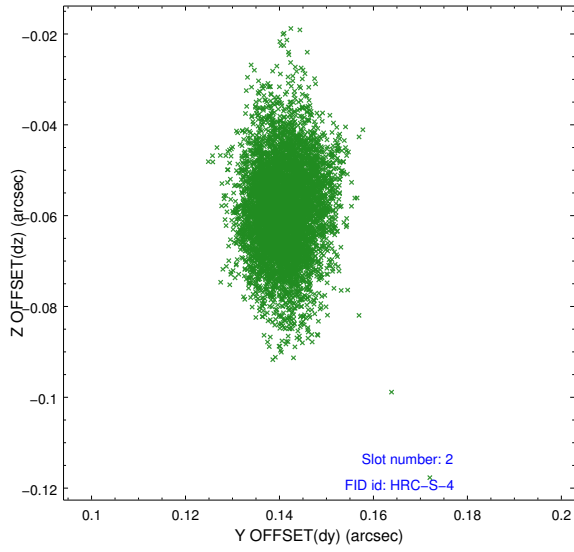
### 2.5.1 Slot 0



## 2.5.2 Slot 1

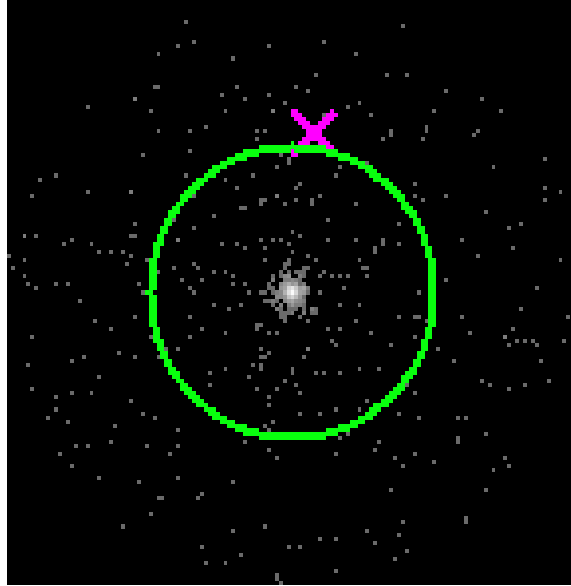


### 2.5.3 Slot 2

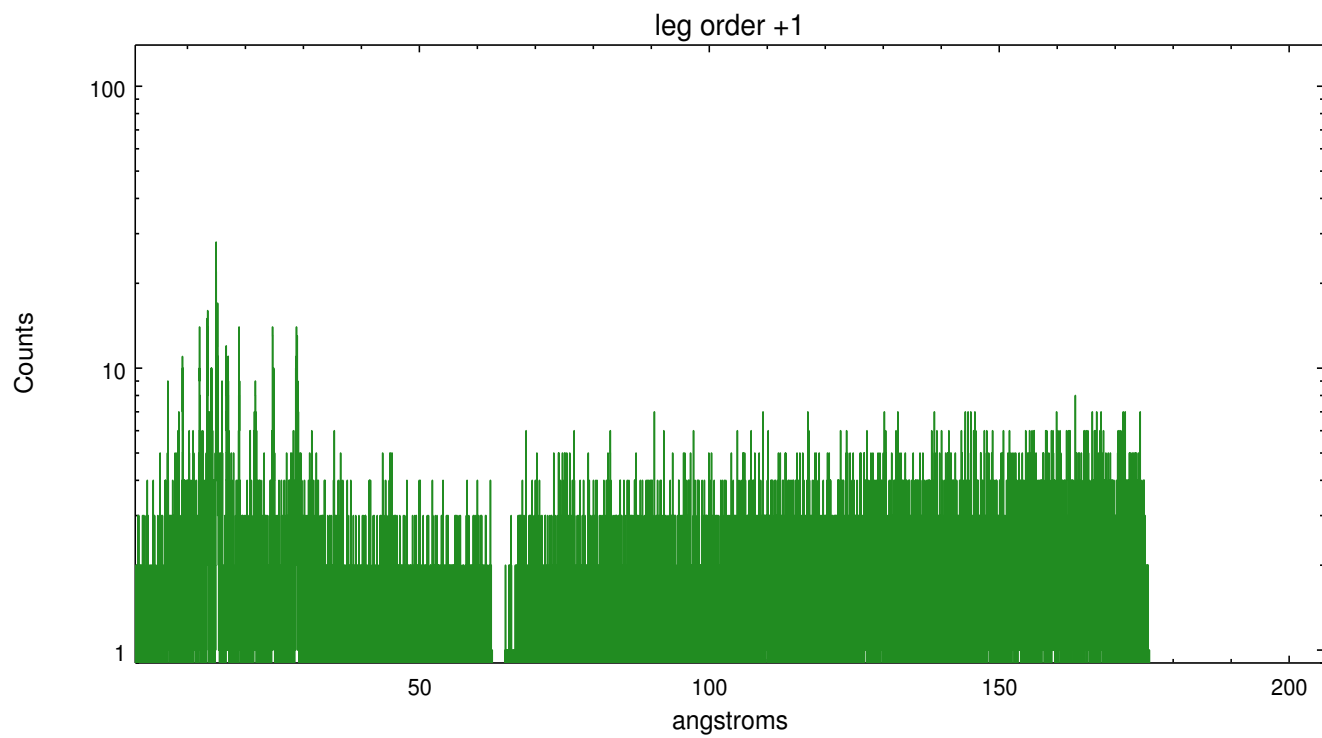
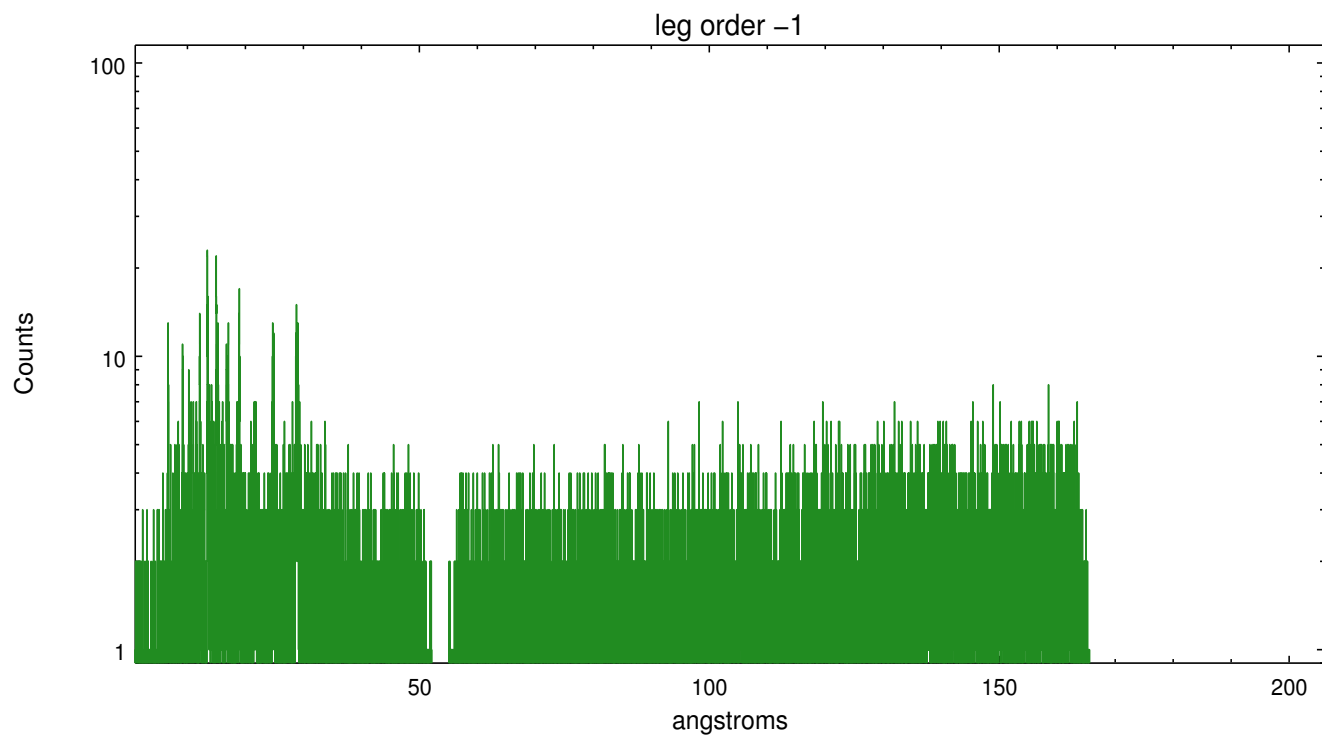


## 3 Gratings

### 3.1 LETG Arm



LETG Zero Order



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.09.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.973

## A.2 Comments

Roll requested was  $130 \pm 30$ .  $ROLL\_NOM = 272$ . not equal  $130 \pm 30$ , modulo 180. 8 degrees shy (280-340) CDO >> There is interfering source at roll of 85 deg. Observation done at CDO >> 92 deg., so OK.