

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9709 - L2 Version 3  
Chandra X-Ray Center

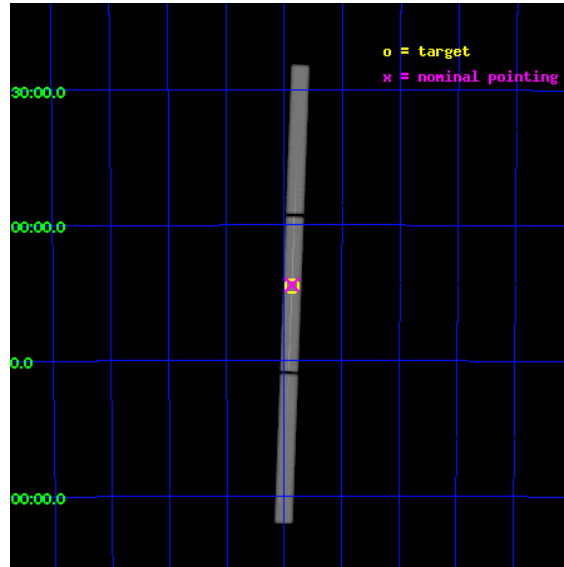
L2 Processing Date : Aug 12 2012

## 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

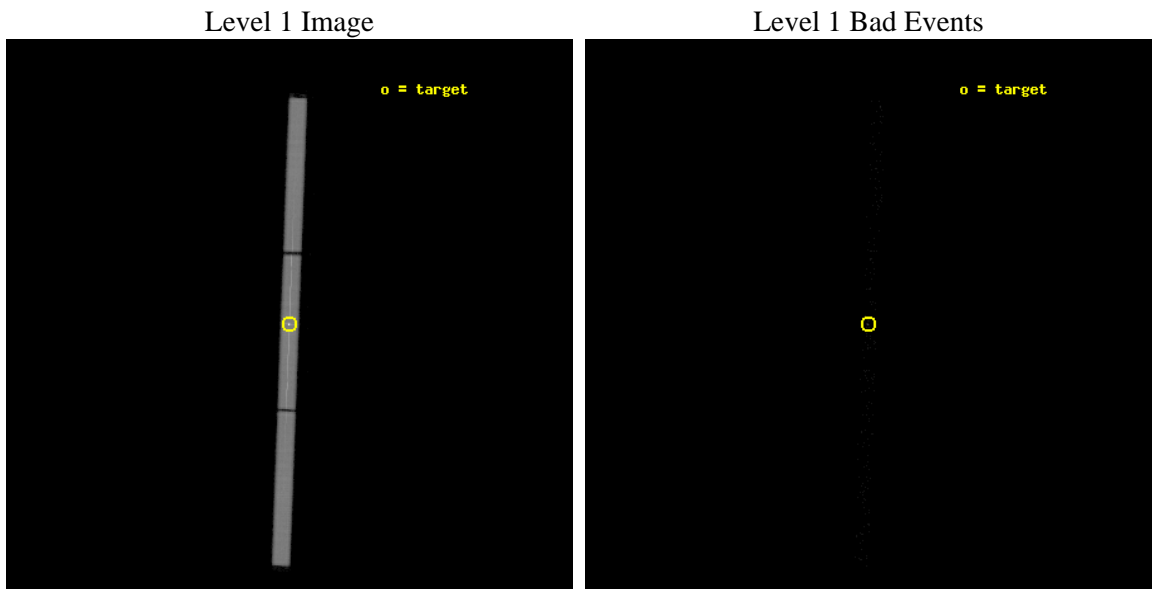
seq_num	790186	Sequence number
obs_id	9709	Observation id
title	AO9 Calibration Observations of PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.71642043061	Nominal RA [deg]
dec_nom	-30.220929916411	Nominal Dec [deg]
roll_nom	92.053367288052	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10187.731748641	[s]
liveltime	10080.580898365	Ontime multiplied by DTCOR
l2events	936612	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	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10187.731748641	[s]
caldsver	4.5.1.1	&#160	l1events	1229175	Number of level 1 events
date	2012-08-12T14:47:31	Date and time of file creation			
revision	3	Processing version of data			

### 2.1.3 Events

Level 1 Events

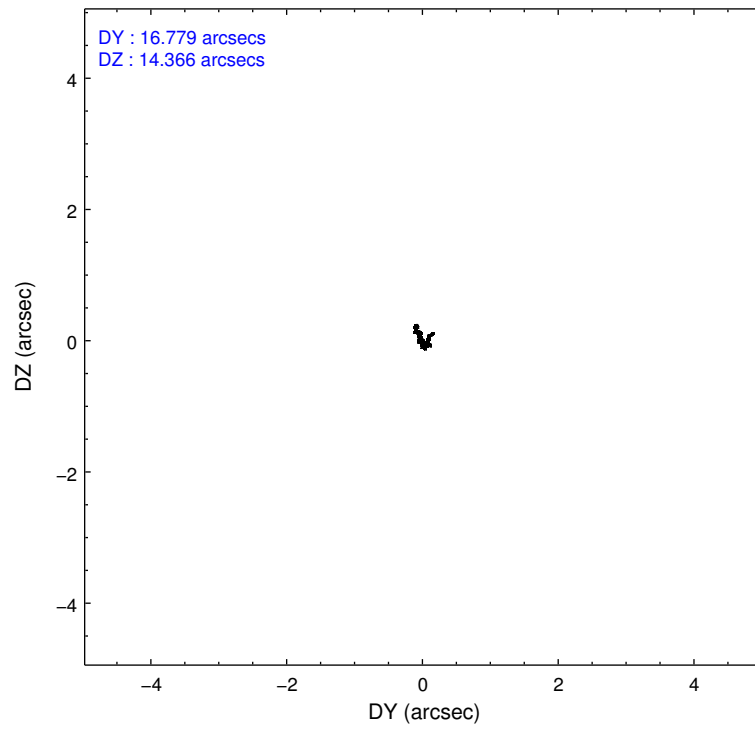
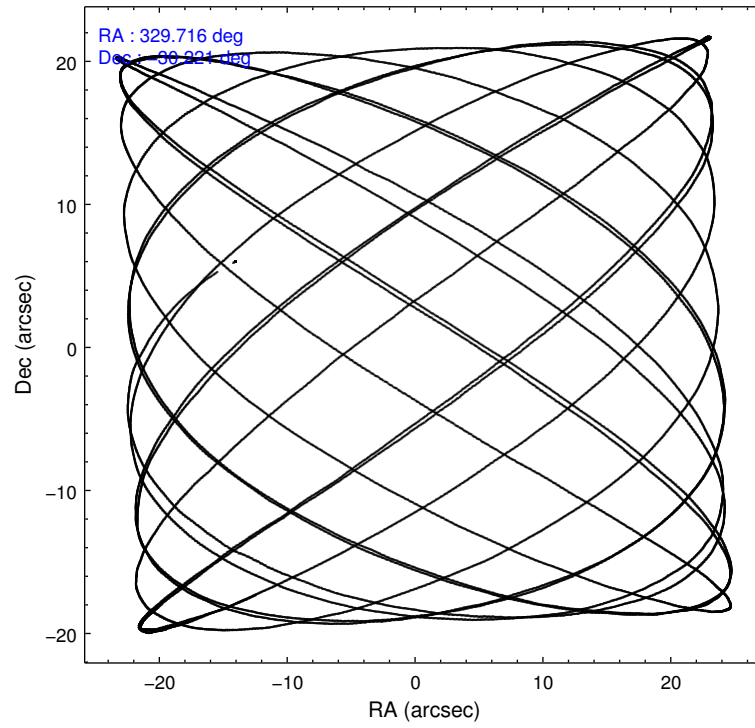
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	388739	450450	389986
rejected events	10370	11370	10491
rejected %	2%	2%	2%

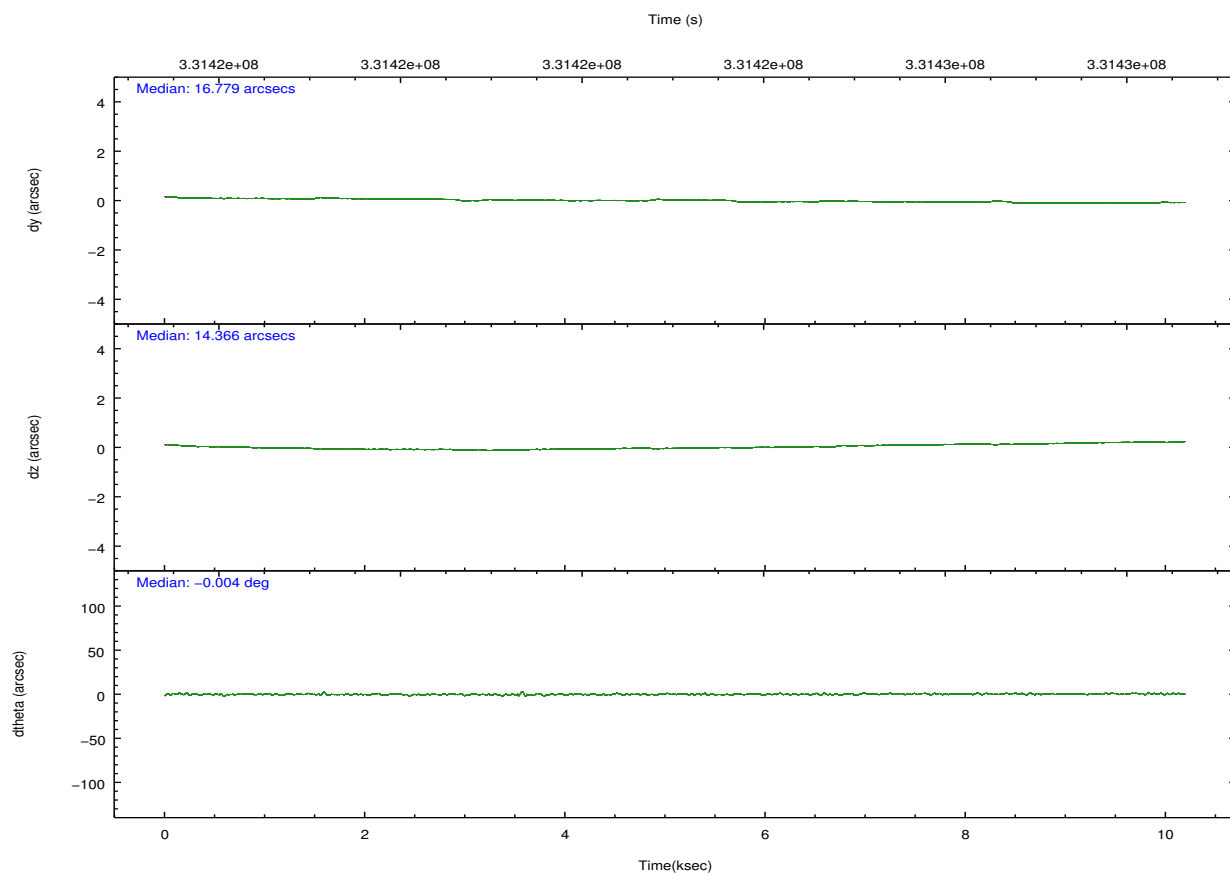
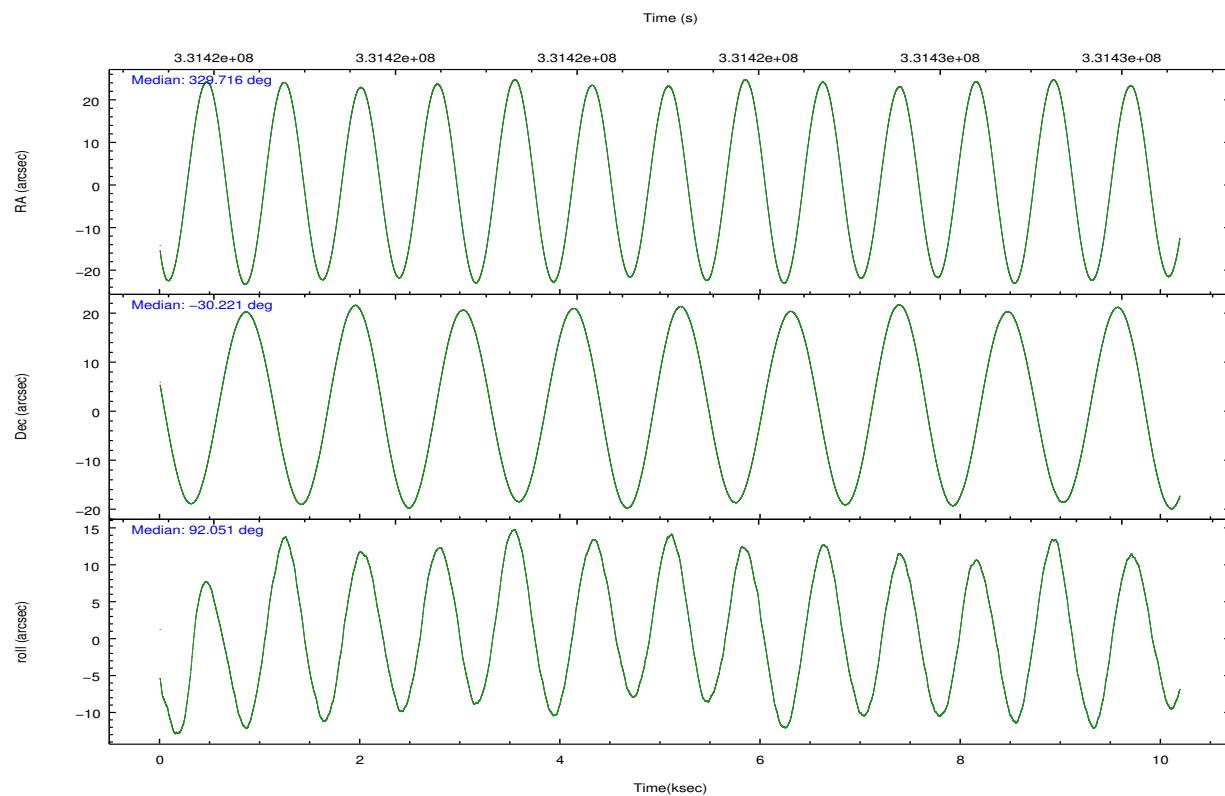


## 2.2 Compared Parameters

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	329.735568	329.7164204306109			
[deg] Pointing Dec	-30.244328	-30.22092991641063			
[deg] Pointing Roll	91.995666	92.05336728805186			
[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)	331418116.184000	331417651.26341			
Observation start date	2008-07-02T20:34:11	2008-07-02T20:27:31			
[s] Observation end time (MET)	331428116.184000	331428378.91394			
Observation end date	2008-07-02T23:20:51	2008-07-02T23:26:18			

## 2.3 Aspect



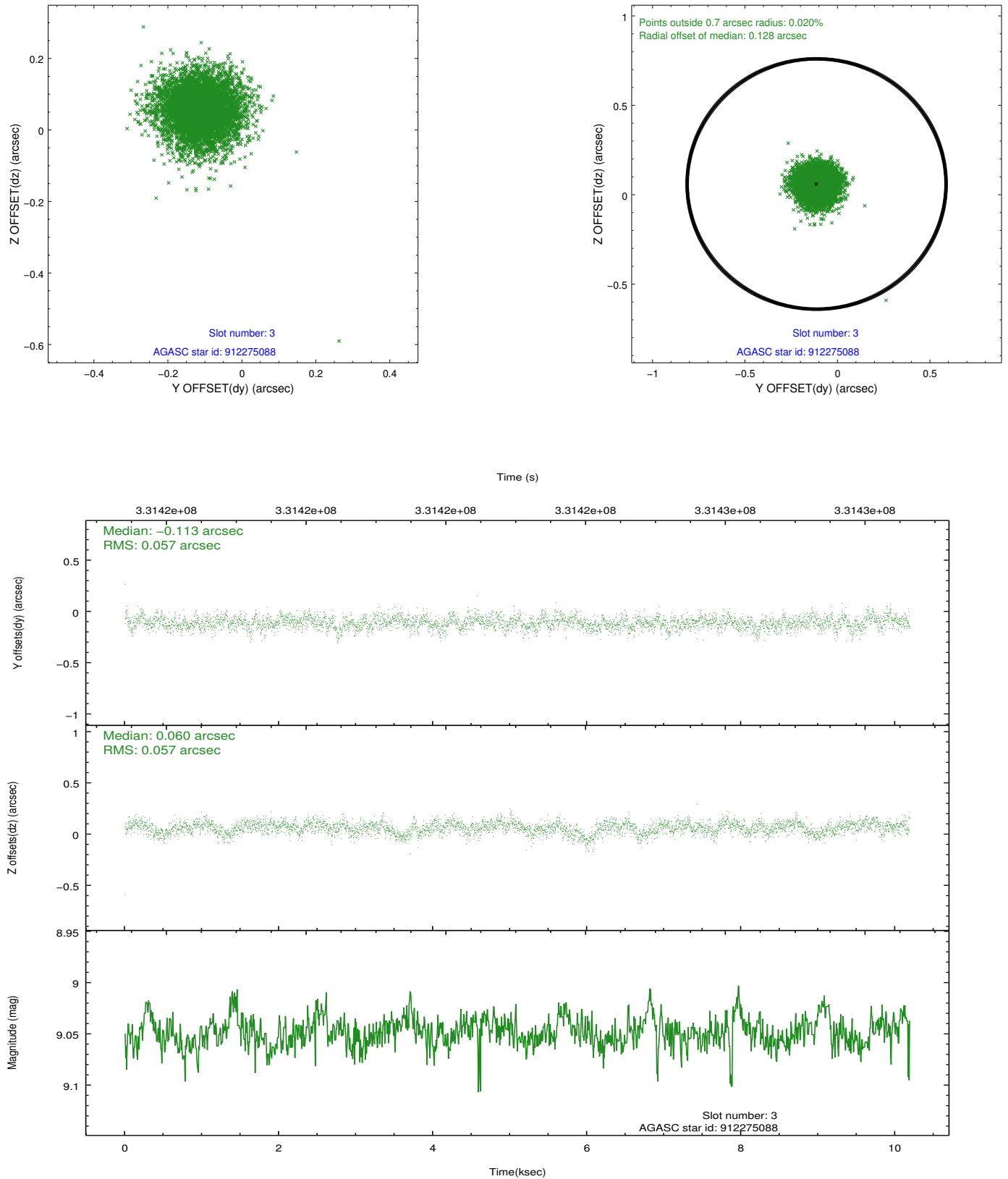


### Slot Statistics

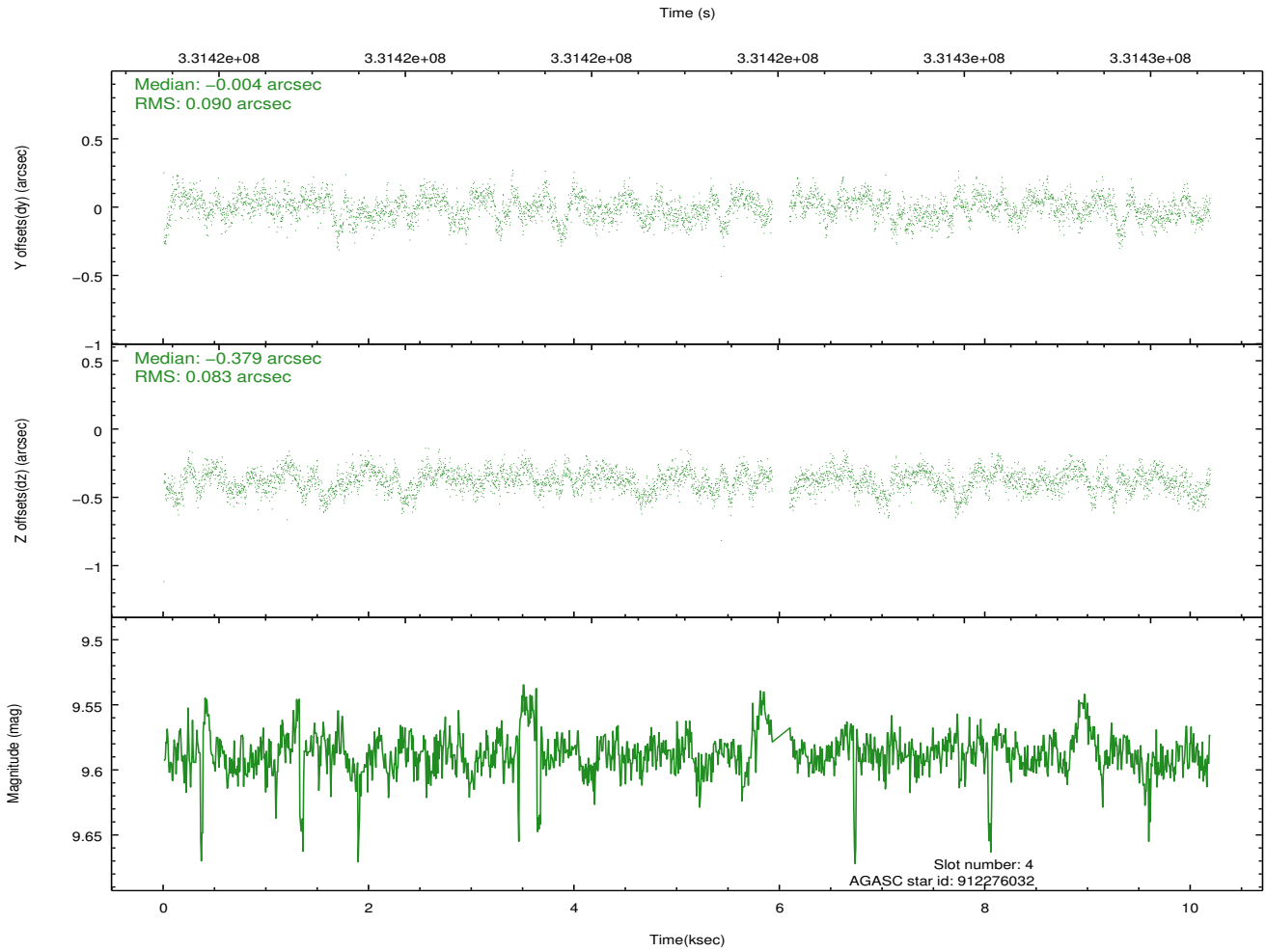
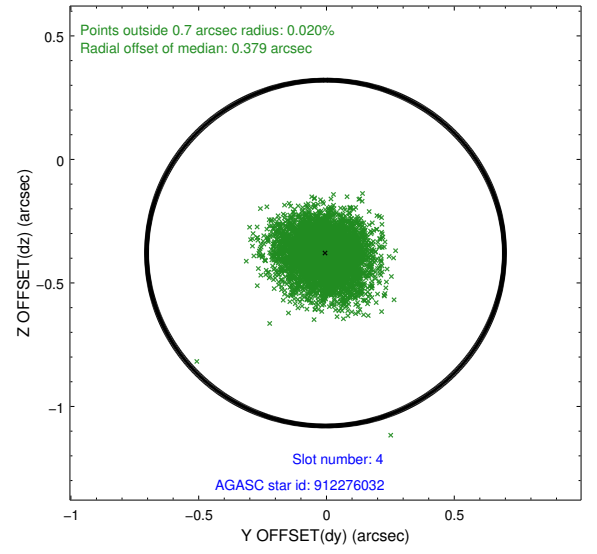
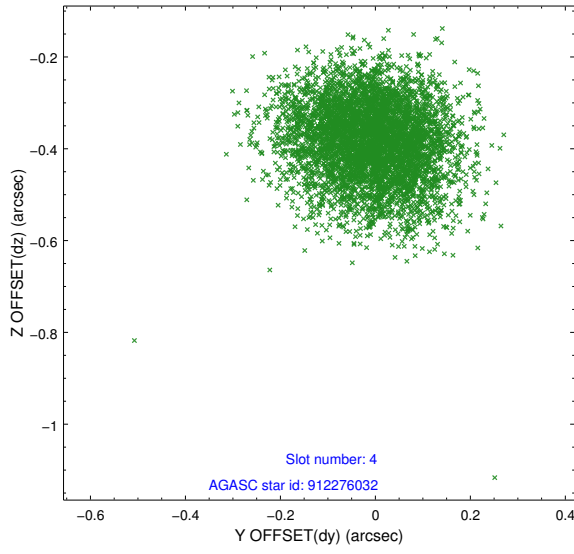
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.01	2486	0.069	-0.196	0.008	0.013	0.000000	0.000000	-1171.24	-463.28
1	FID	HRC-S-2	6.98	2486	0.238	-0.120	0.006	0.010	0.000000	0.000000	1228.14	-456.01
2	FID	HRC-S-3	7.01	2486	0.083	0.015	0.007	0.012	0.000000	0.000000	-1173.46	566.28
3	GUIDE	912275088	9.05	4965	-0.113	0.060	0.084	0.137	329.619228	-29.738698	1832.04	299.92
4	GUIDE	912276032	9.59	4881	-0.004	-0.379	0.130	0.210	329.395967	-29.803466	1622.33	1004.39
5	GUIDE	981468128	9.36	4962	0.143	0.545	0.112	0.189	329.756350	-30.158334	307.99	-75.11
6	GUIDE	981471664	6.35	4971	-0.066	-0.265	0.085	0.132	328.981826	-30.605916	-1227.16	2378.65
7	GUIDE	981475568	8.18	4970	0.042	0.039	0.094	0.157	328.999408	-30.923402	-2371.02	2357.83

## 2.4 Star Slots

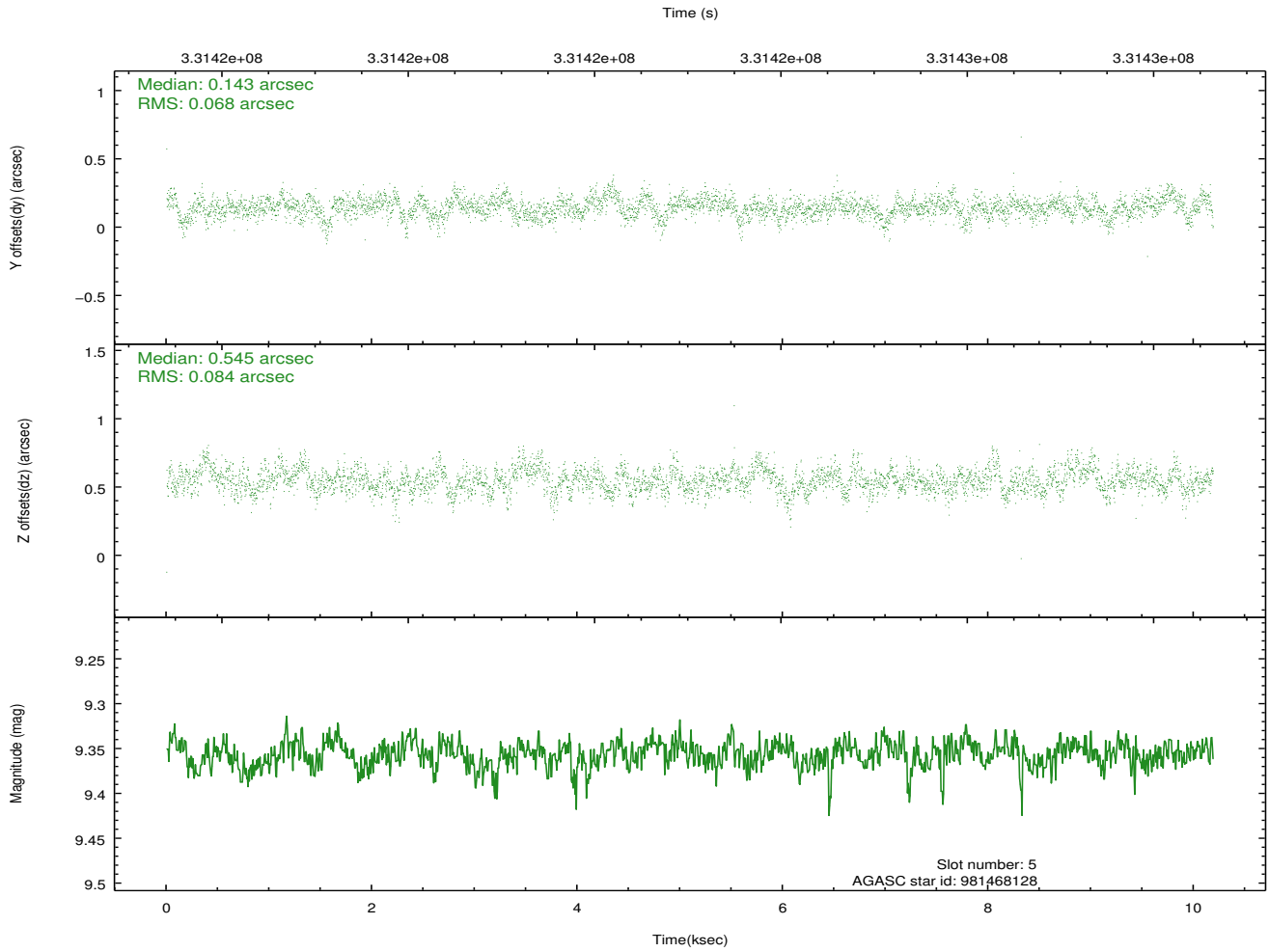
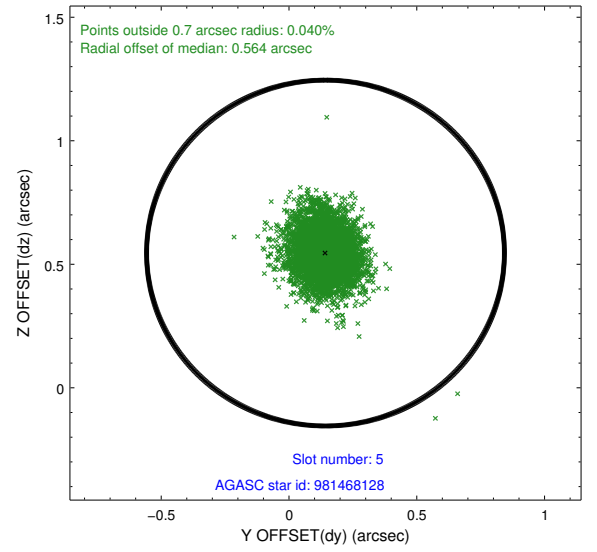
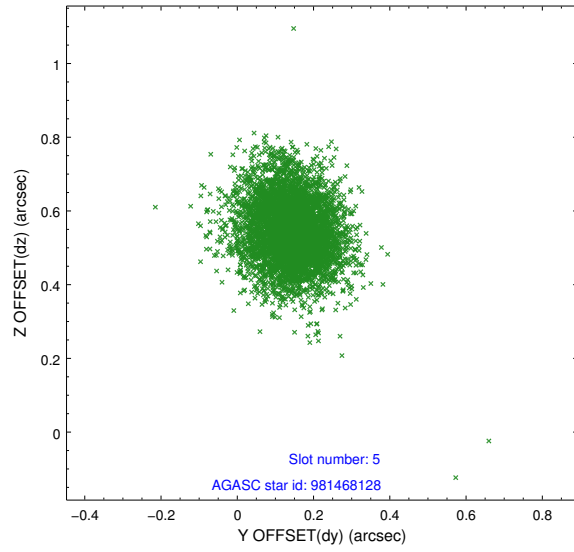
### 2.4.1 Slot 3



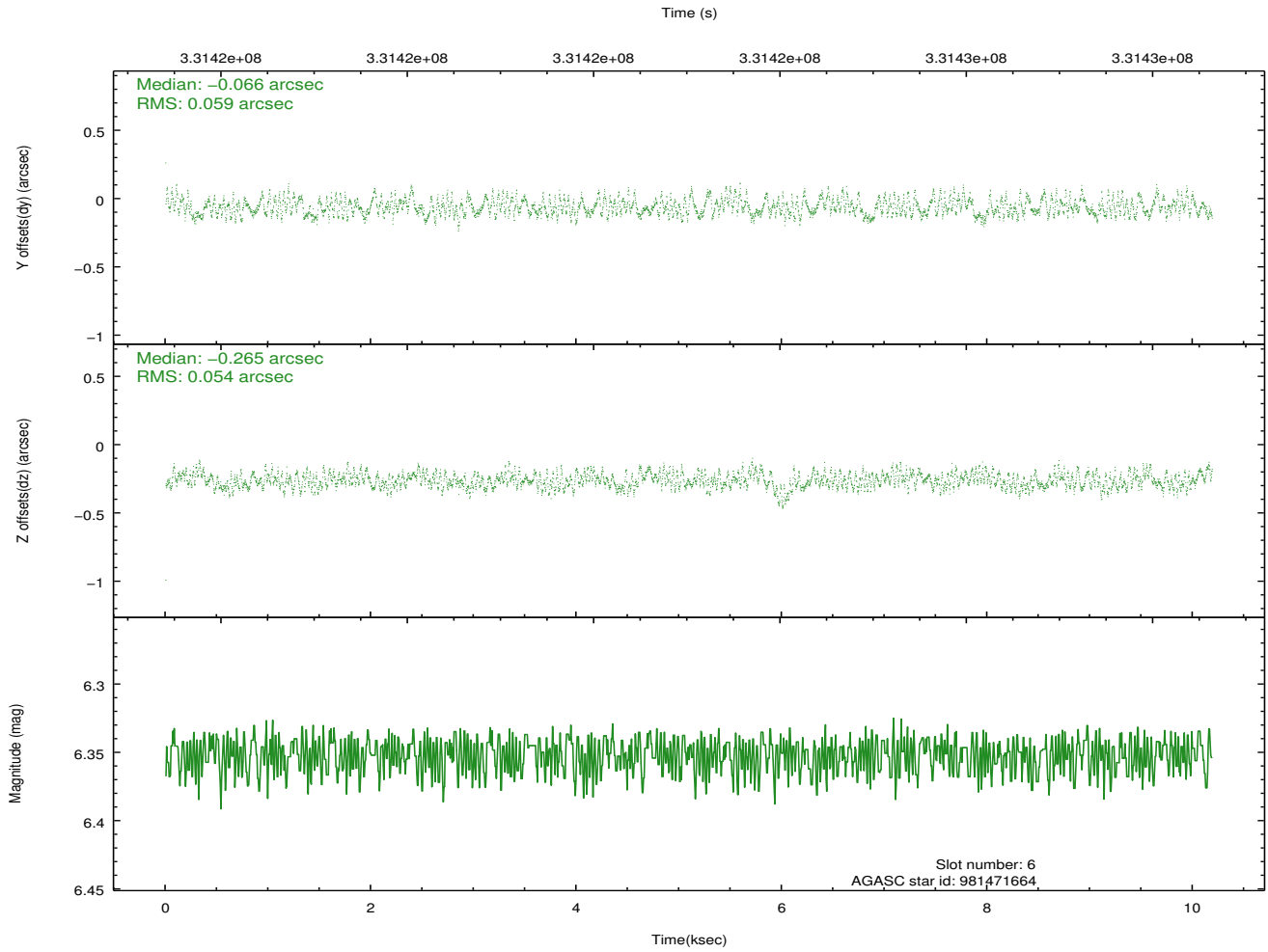
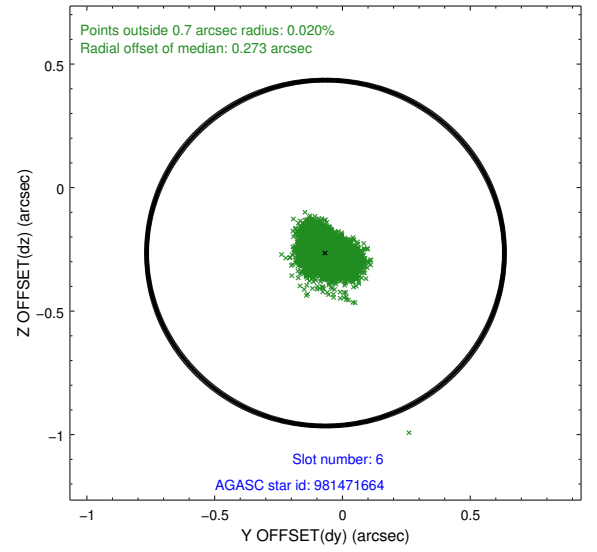
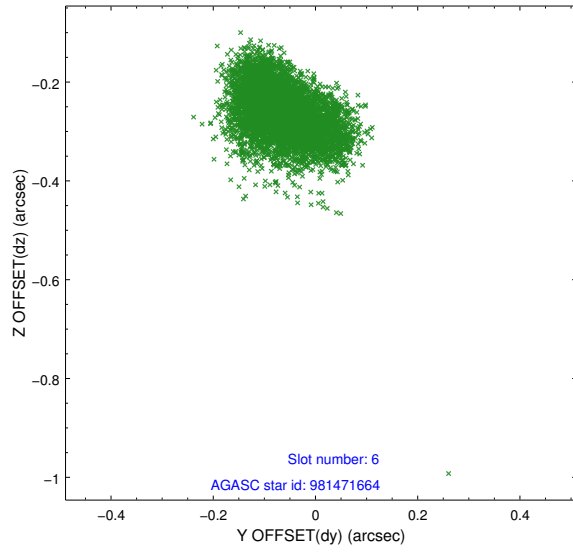
## 2.4.2 Slot 4



### 2.4.3 Slot 5

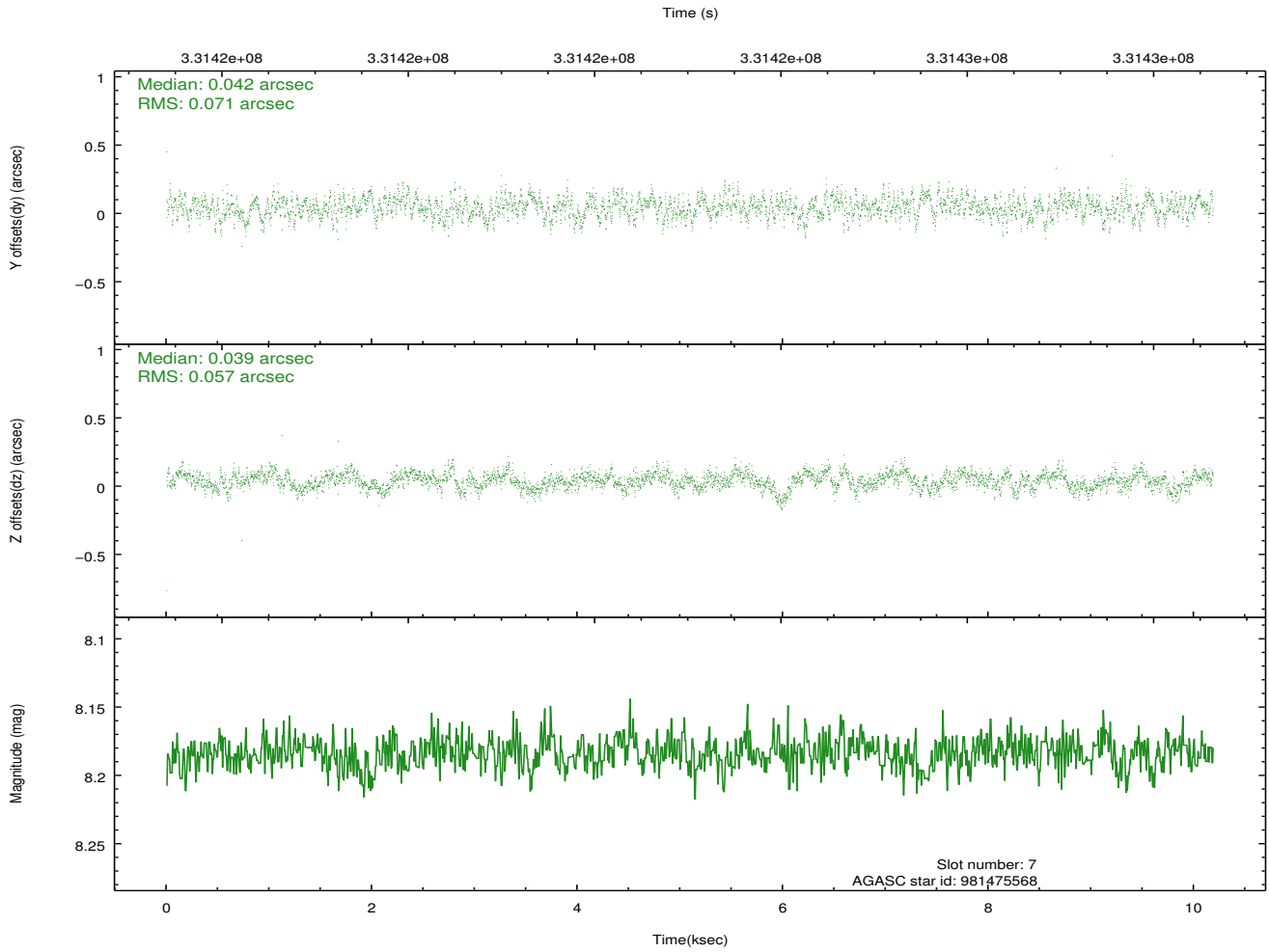
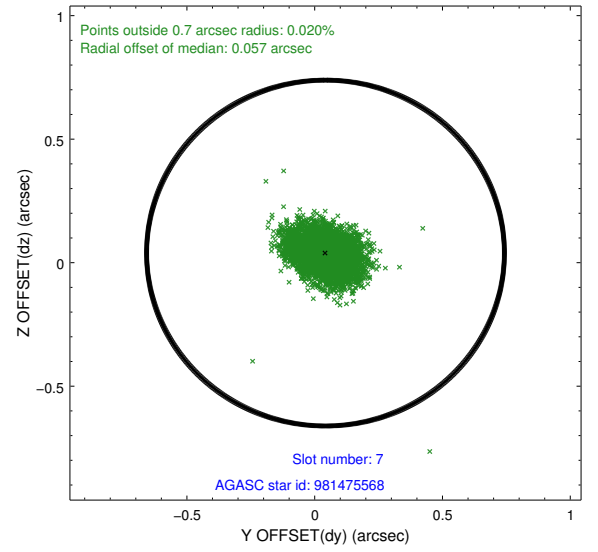
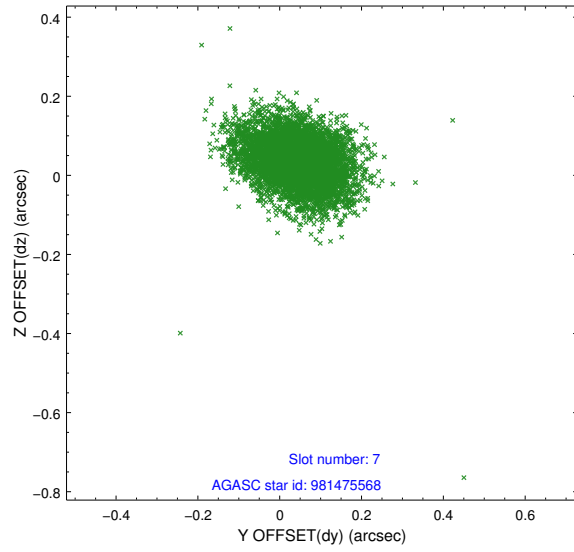


## 2.4.4 Slot 6



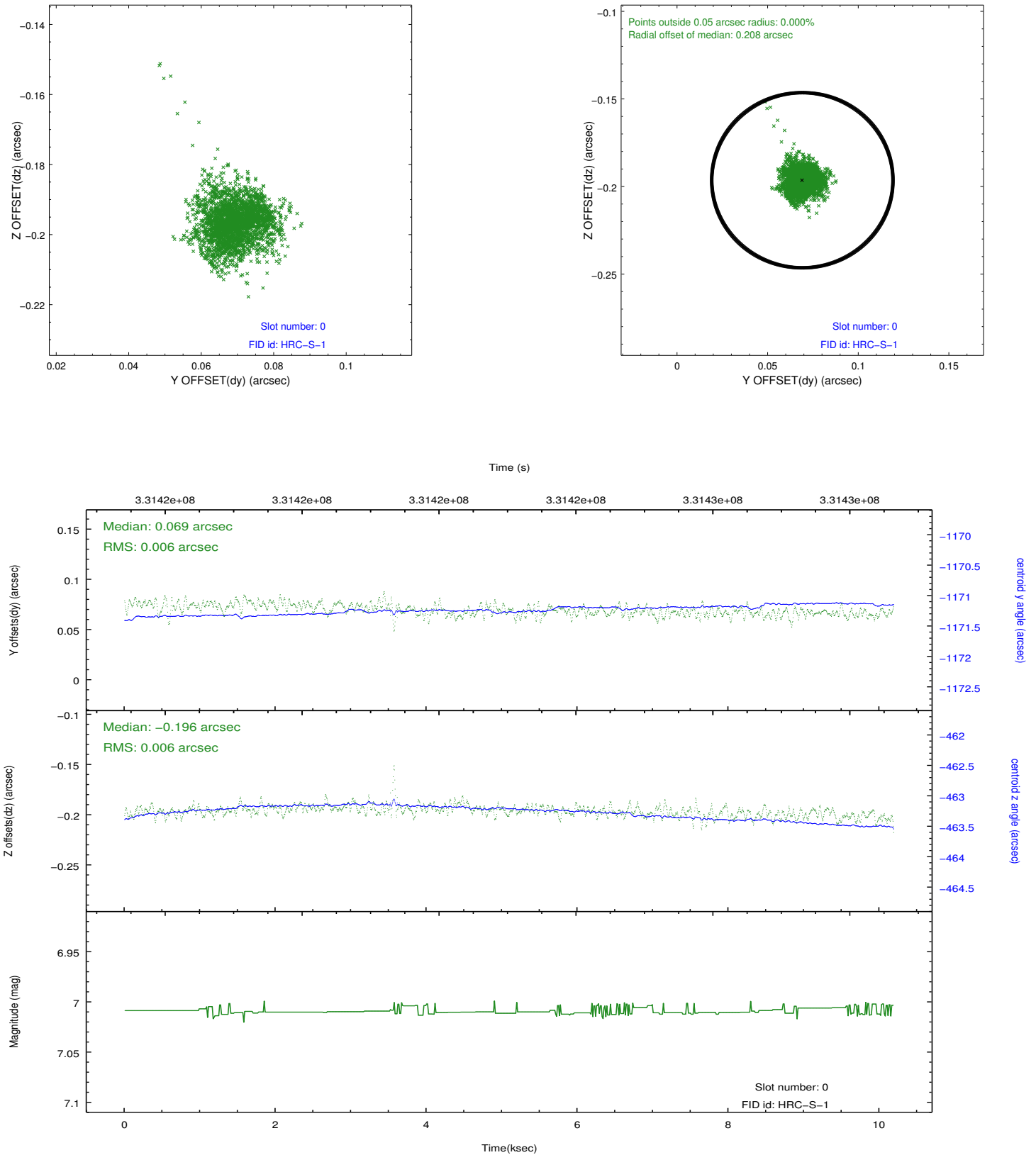


## 2.4.5 Slot 7

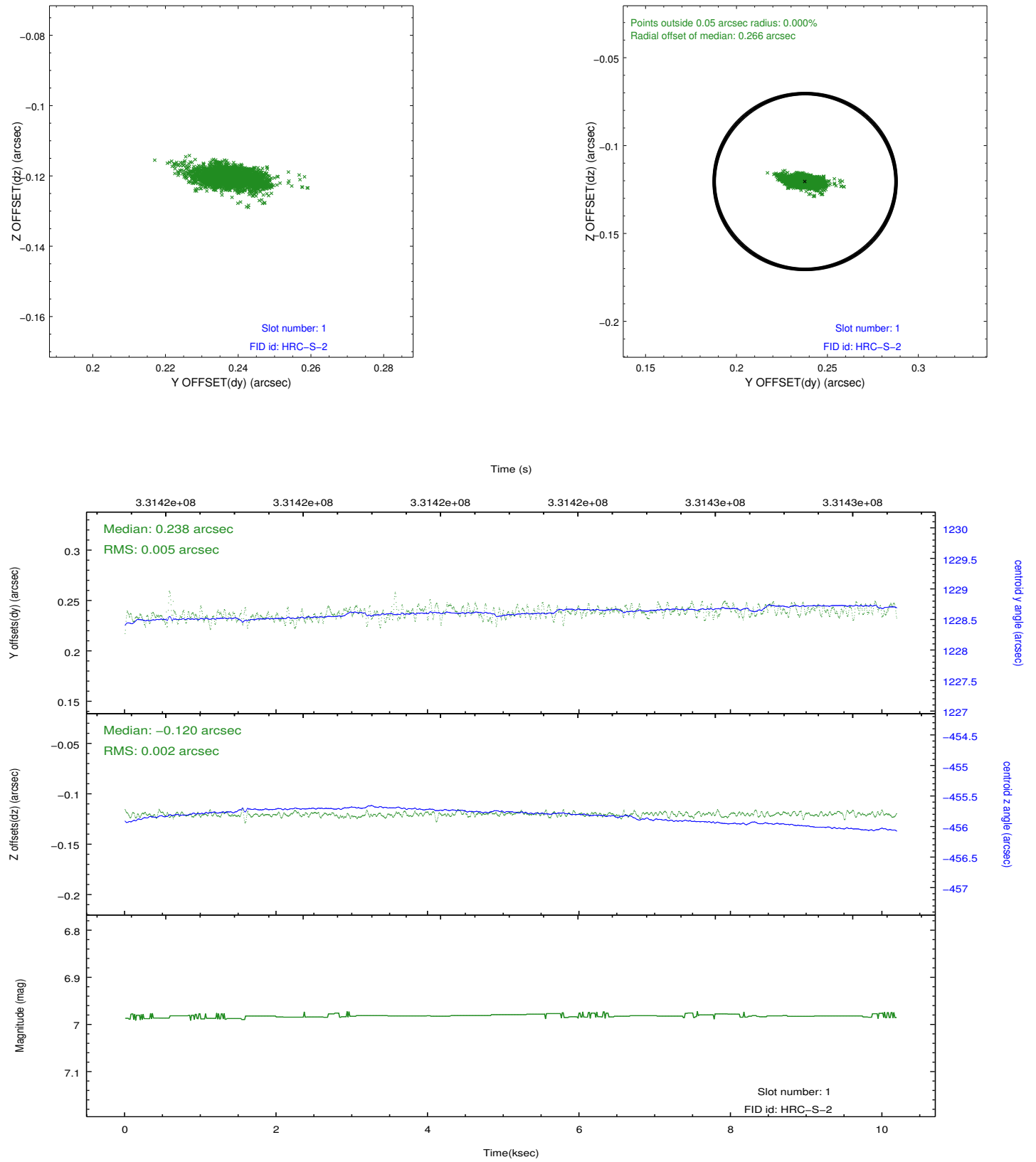


## 2.5 FID Slots

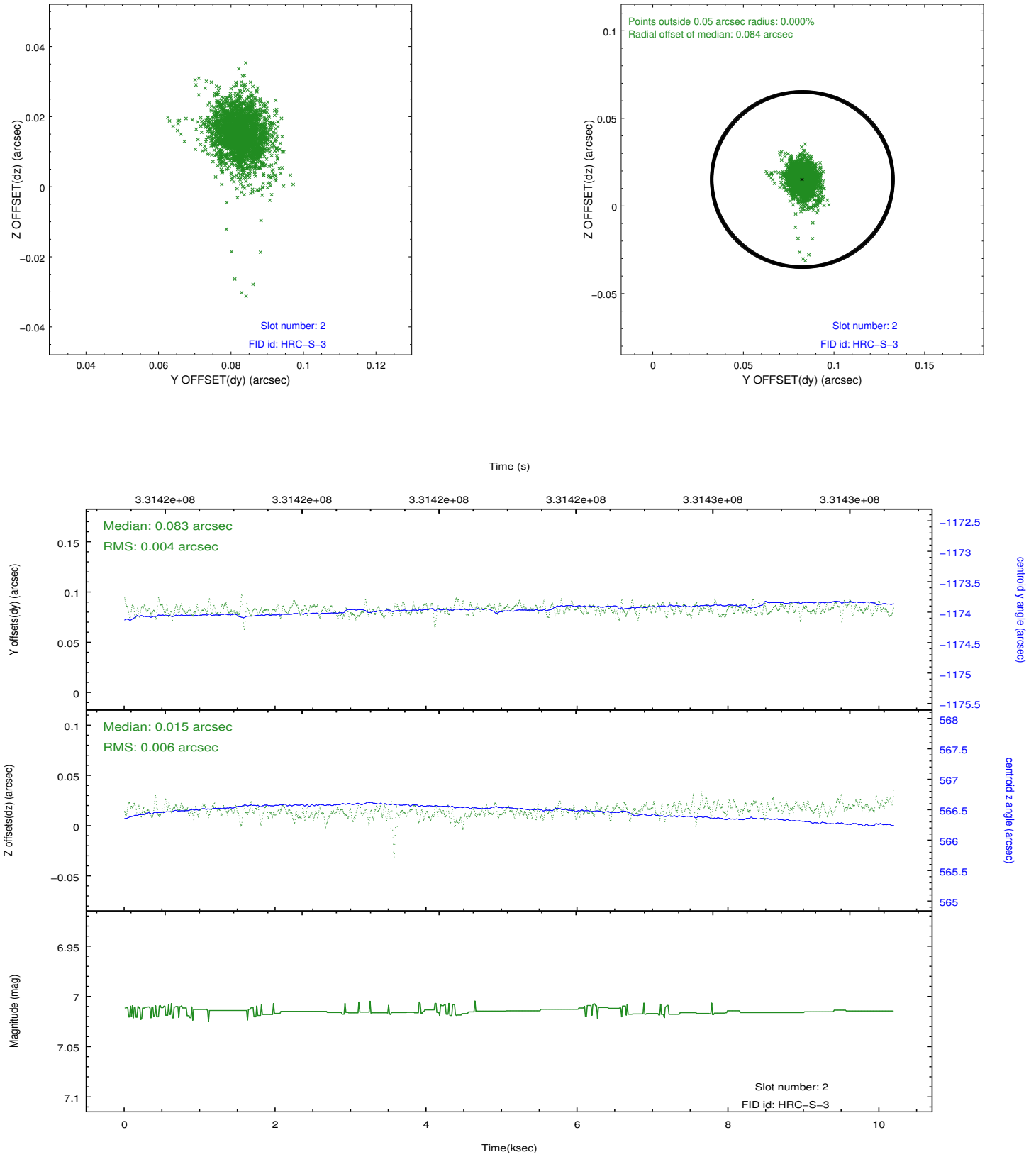
### 2.5.1 Slot 0



## 2.5.2 Slot 1

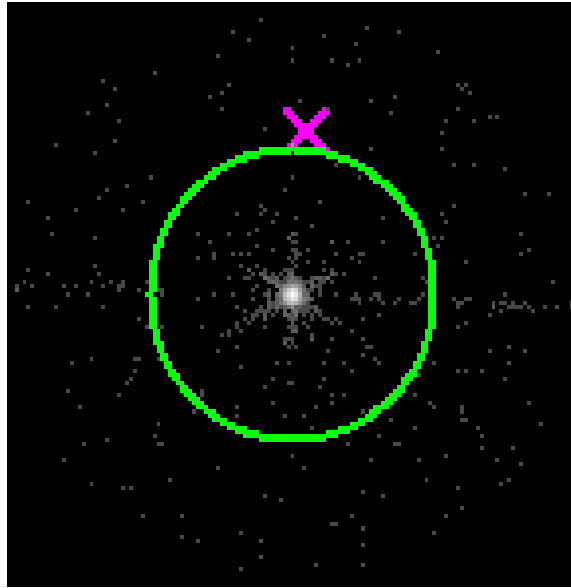


### 2.5.3 Slot 2

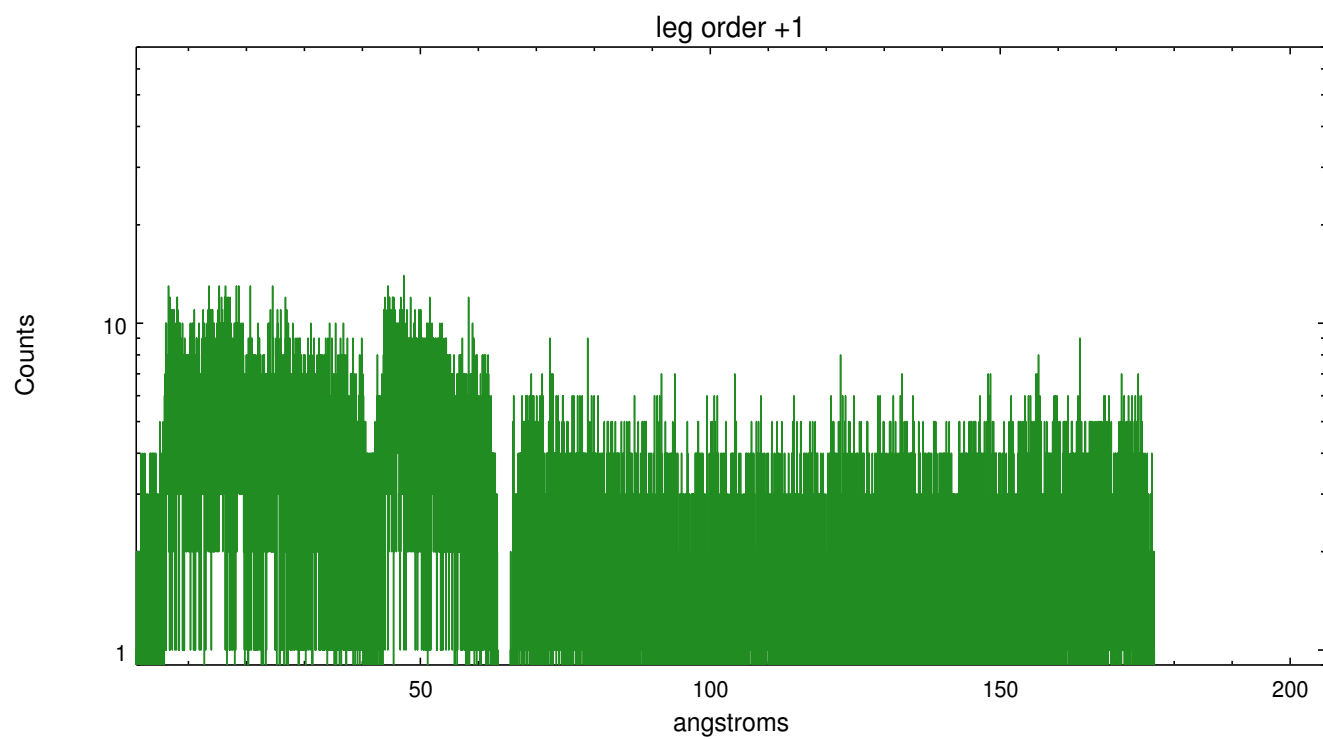
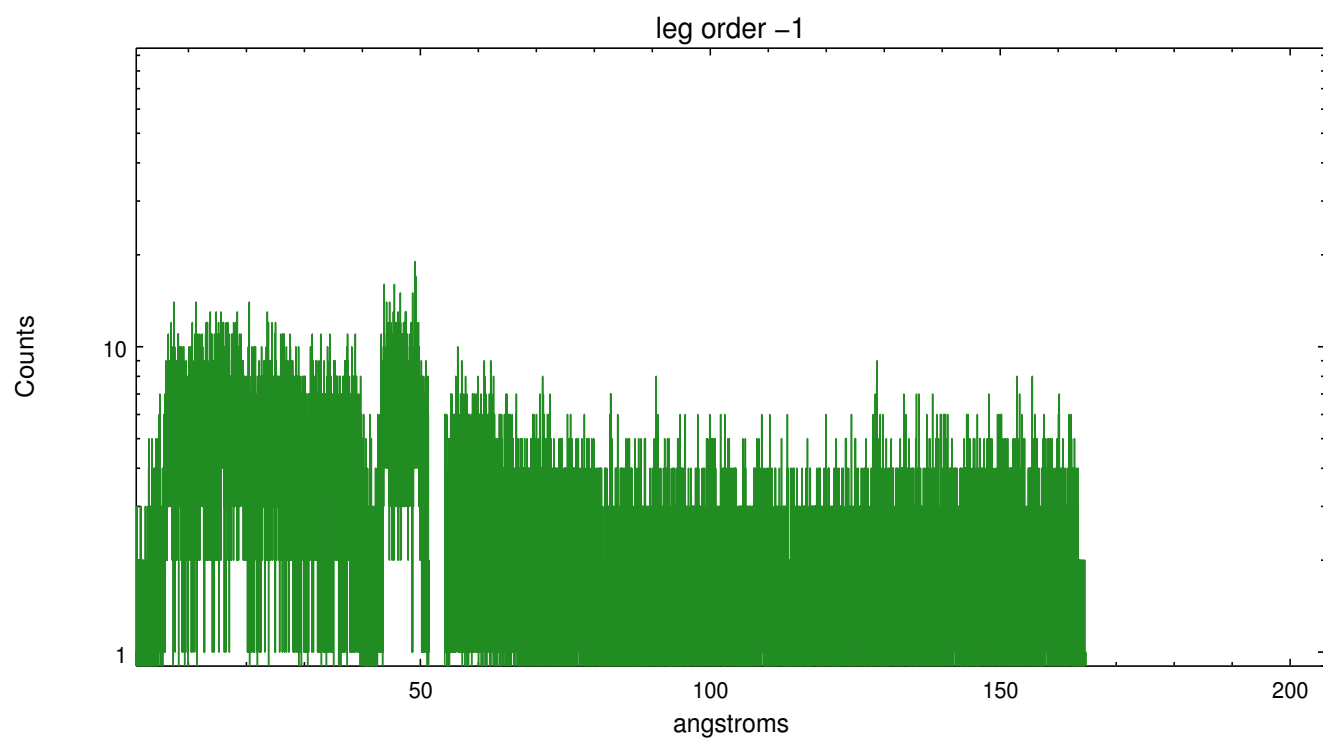


## 3 Gratings

### 3.1 LETG Arm



LETG Zero Order



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.1877317

### A.2 Comments