

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 6562 - L2 Version 3
Chandra X-Ray Center

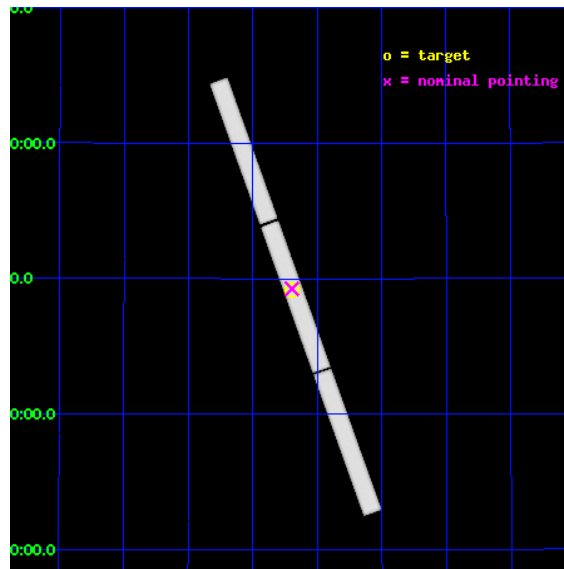
L2 Processing Date : Aug 10 2012

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1 Front

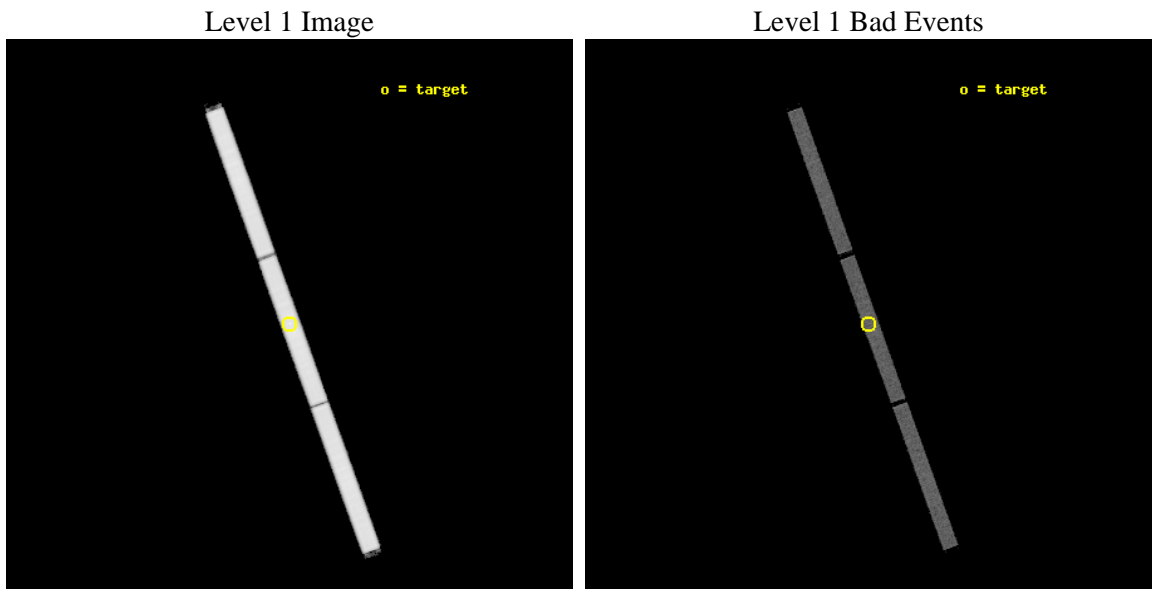
seq_num	300166	Sequence number
obs_id	6562	Observation id
title	High Resolution Spectroscopy of RX J0806.3+1527	Proposal title
observer	Dr. Tod Strohmayer	Principal investigator
object	RX J0806.3+1527	Source name
ra_targ	121.596667	Observer's specified target RA [deg]
dec_targ	15.458389	Observer's specified target Dec [deg]
ra_nom	121.5984173632	Nominal RA [deg]
dec_nom	15.462777562148	Nominal Dec [deg]
roll_nom	70.066872956349	Nominal Roll [deg]
revision	3	Processing version of data
ontime	37182.13297081	[s]
livetime	36890.626316639	Ontime multiplied by DTCOR
l2events	2403351	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	37000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	37182.13297081	[s]
caldsver	4.5.1.1	 	l1events	3397111	Number of level 1 events
date	2012-08-10T19:36:16	Date and time of file creation			
revision	3	Processing version of data			

2.1.3 Events

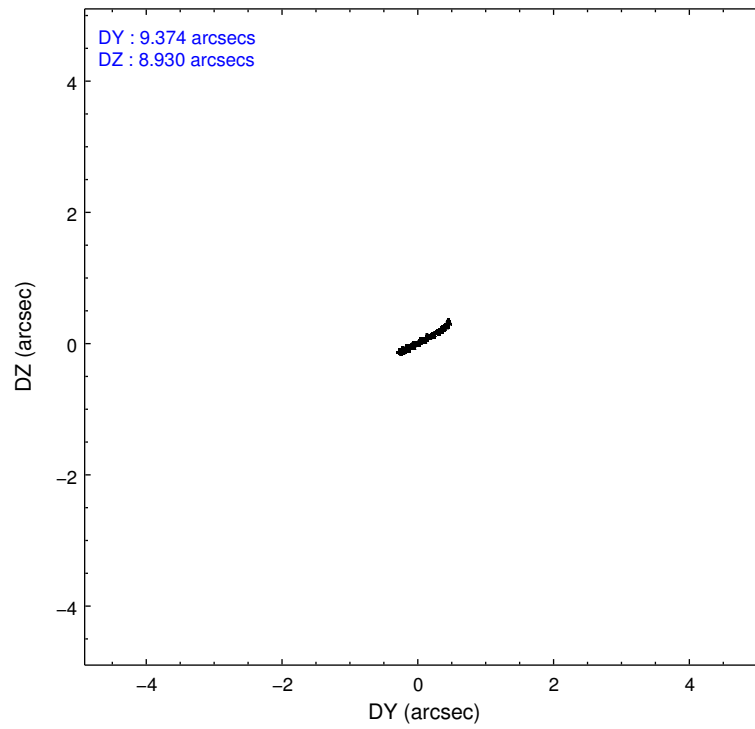
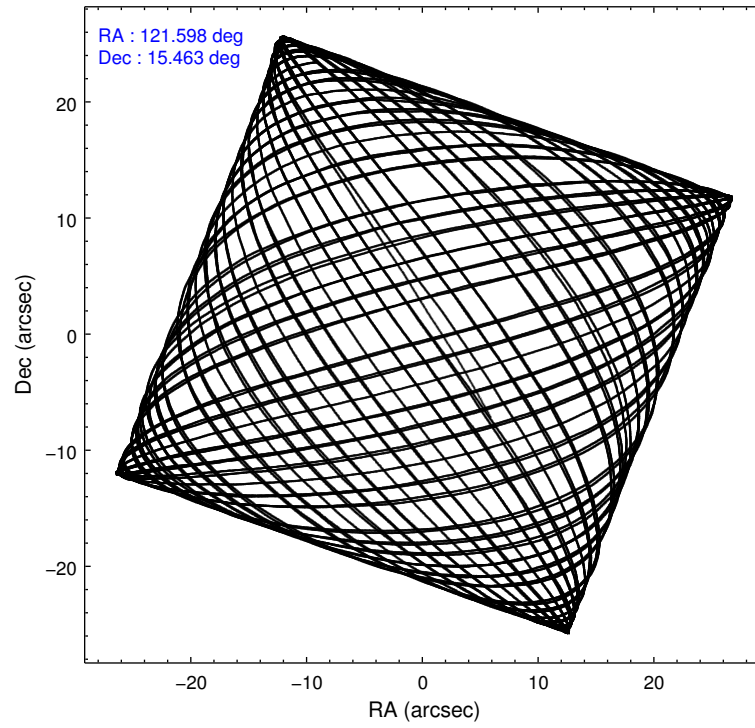
Level 1 Events

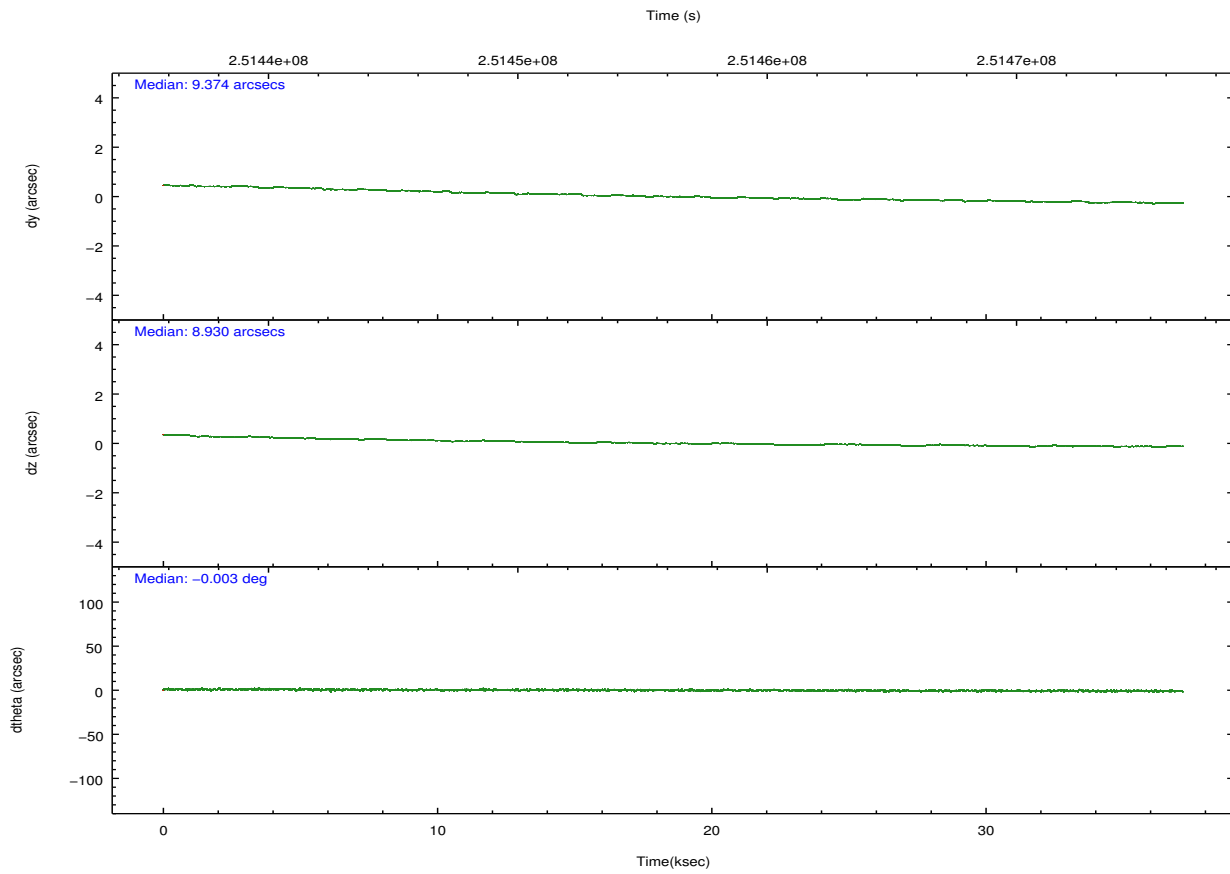
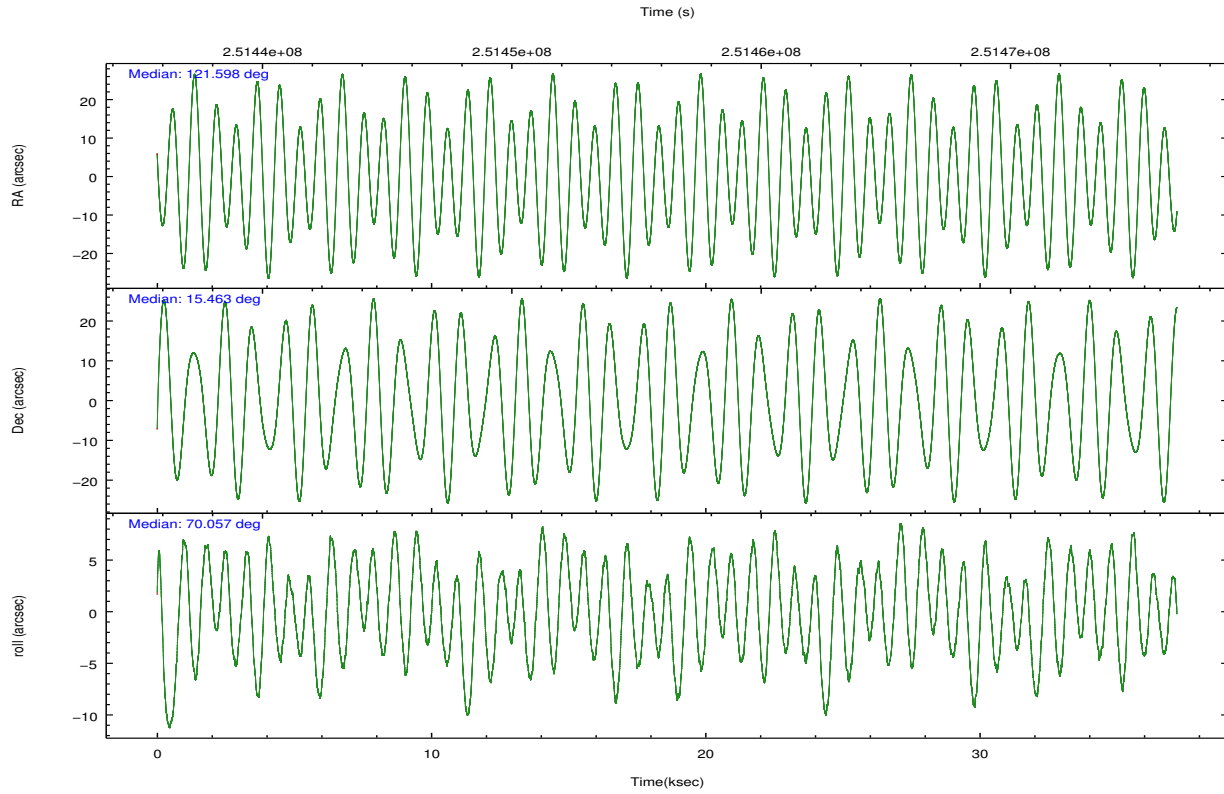
	segment 1	segment 2	segment 3
level 1 events	1142724	1116039	1138348
rejected events	61069	59451	61074
rejected %	5%	5%	5%

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	121.605082	121.5984173631989			
[deg] Pointing Dec	15.434864	15.46277756214812			
[deg] Pointing Roll	69.997755	70.06687295634873			
[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)	251437811.184000	251436463.88102			
Observation start date	2005-12-20T03:49:07	2005-12-20T03:27:43			
[s] Observation end time (MET)	251474811.184000	251475798.25784			
Observation end date	2005-12-20T14:05:47	2005-12-20T14:23:18			

2.3 Aspect



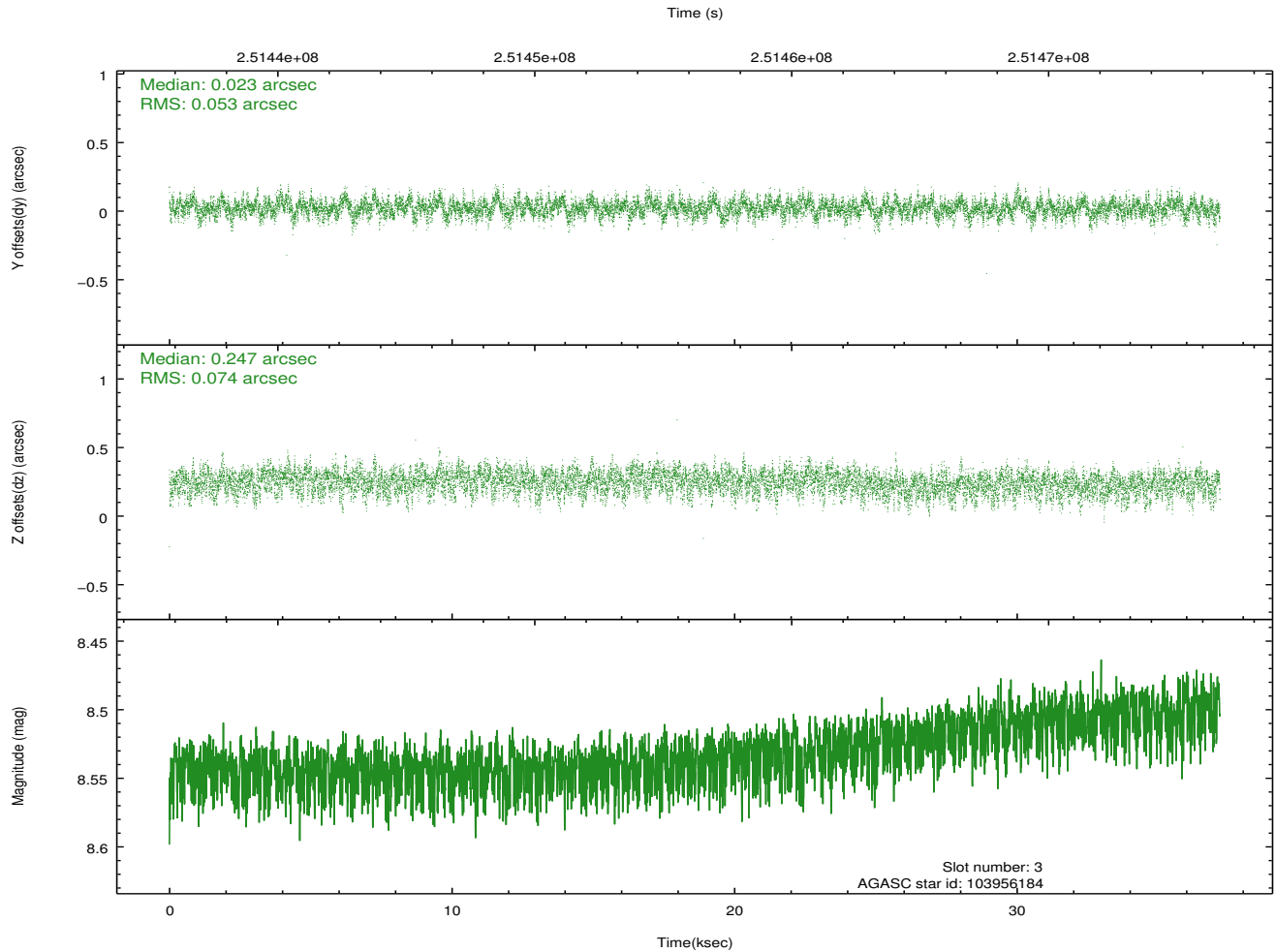
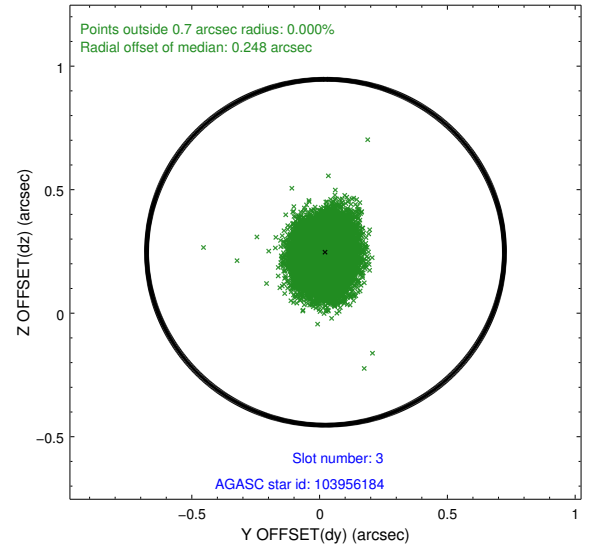
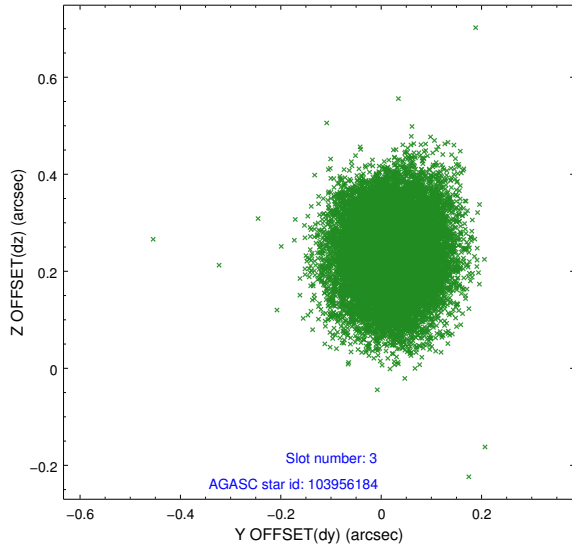


Slot Statistics

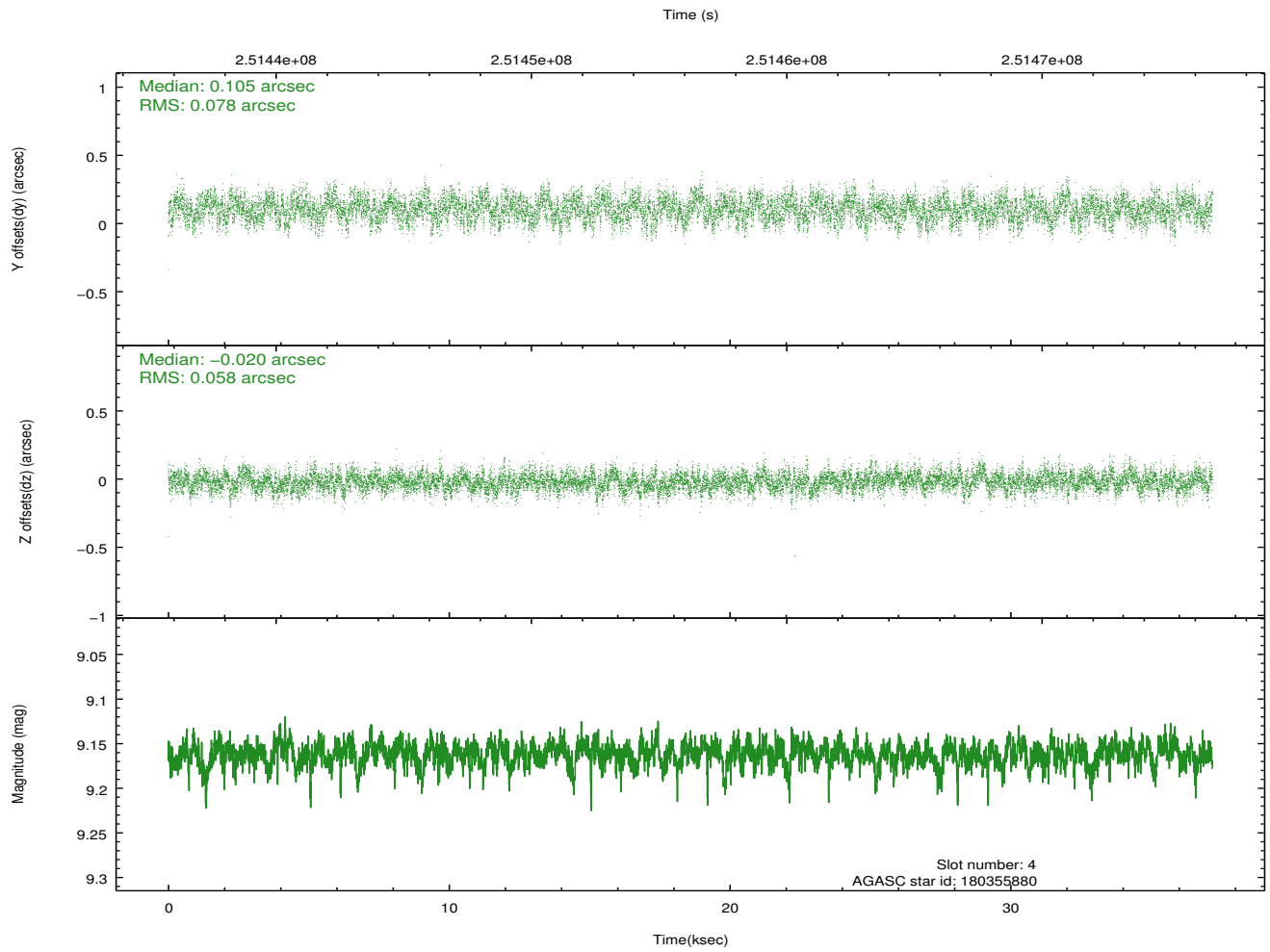
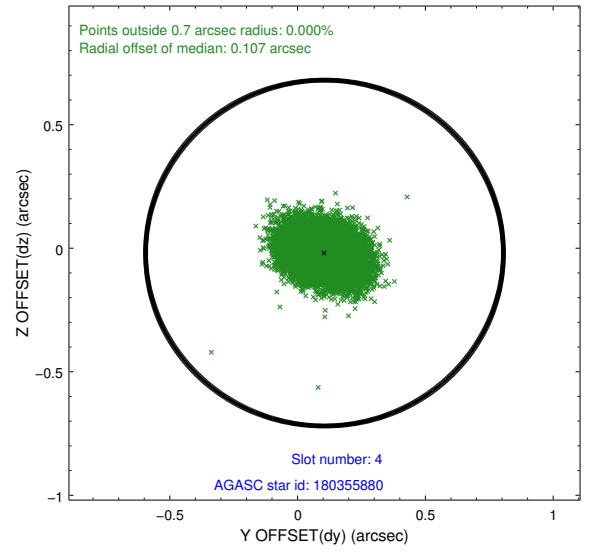
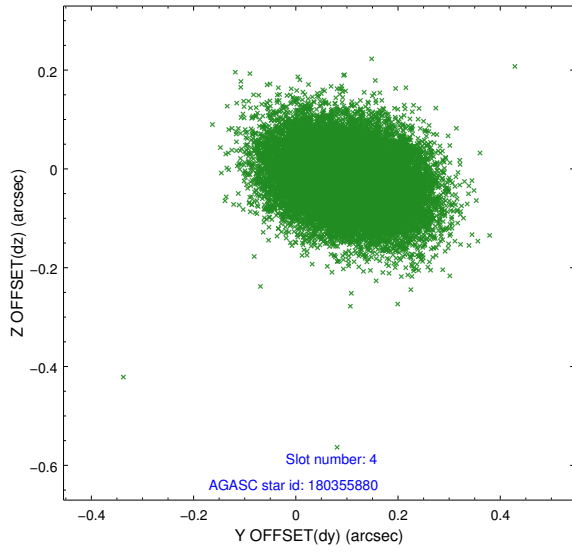
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.02	9069	0.147	-0.181	0.008	0.014	0.000000	0.000000	-1163.62	-457.65
1	FID	HRC-S-2	7.01	9069	0.127	-0.106	0.008	0.014	0.000000	0.000000	1235.92	-450.27
2	FID	HRC-S-3	7.03	9068	0.117	-0.014	0.009	0.015	0.000000	0.000000	-1166.23	572.00
3	GUIDE	103956184	8.53	18129	0.023	0.247	0.097	0.158	122.093586	14.853591	-1382.77	-2312.16
4	GUIDE	180355880	9.16	18115	0.105	-0.020	0.103	0.169	120.943434	15.103820	-1903.45	1754.29
5	GUIDE	180370112	8.40	18136	-0.042	0.009	0.070	0.116	121.144488	15.364256	-786.21	1416.73
6	GUIDE	180372496	7.92	18134	0.025	0.055	0.070	0.110	121.745221	15.155380	-778.62	-801.62
7	GUIDE	180367416	9.14	18120	-0.110	-0.288	0.107	0.168	120.920648	15.525818	-501.33	2343.96

2.4 Star Slots

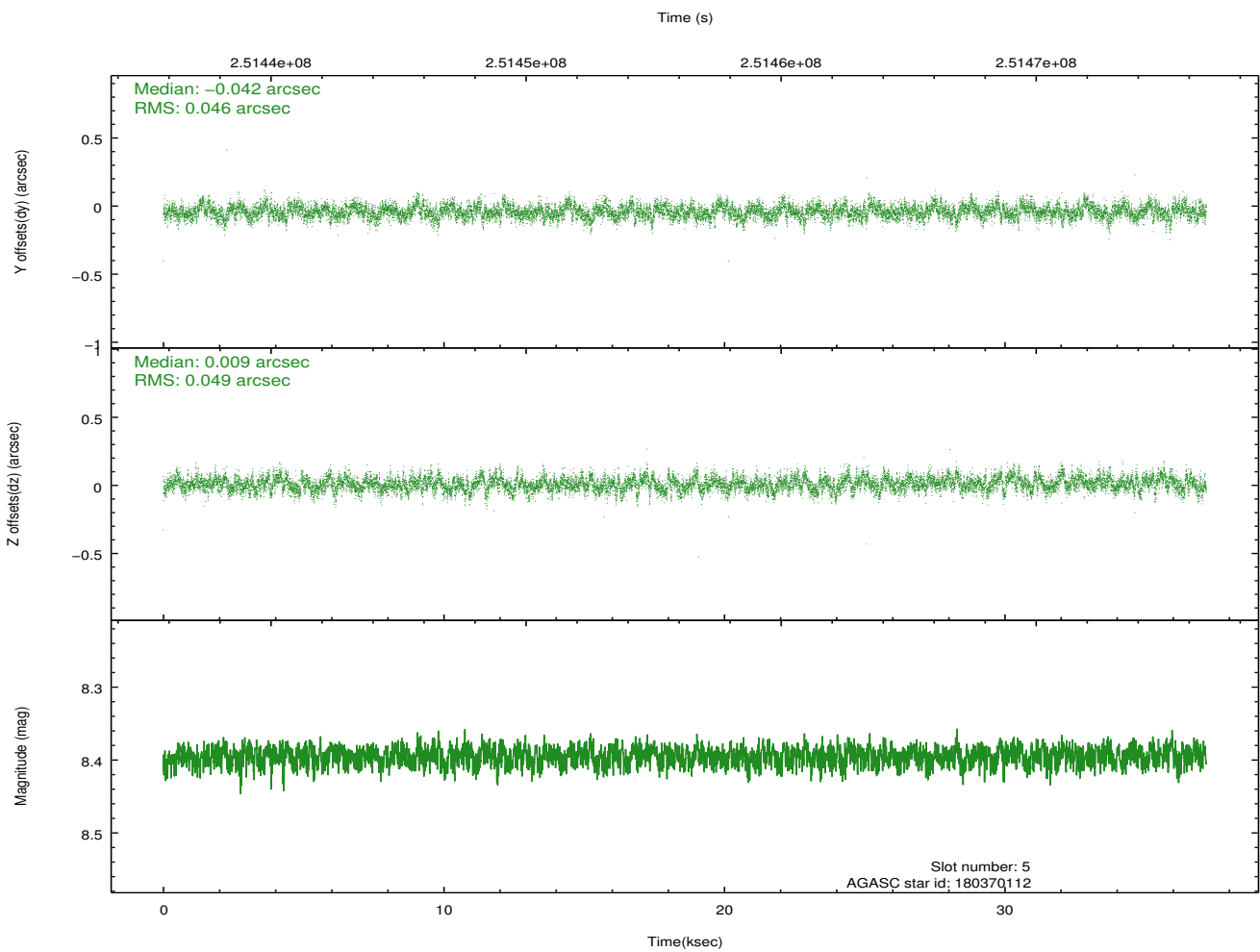
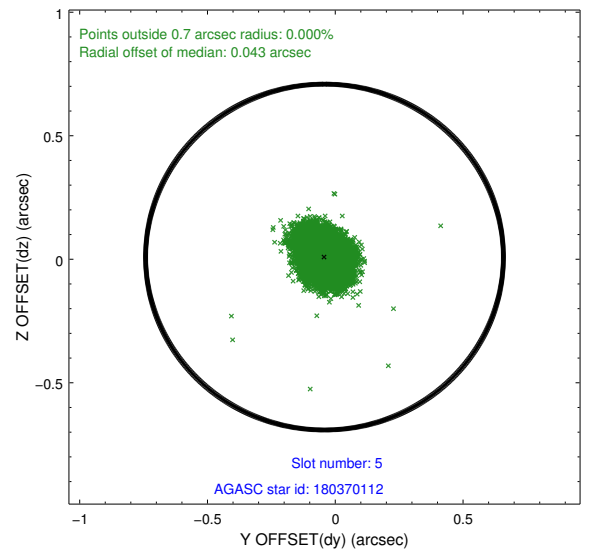
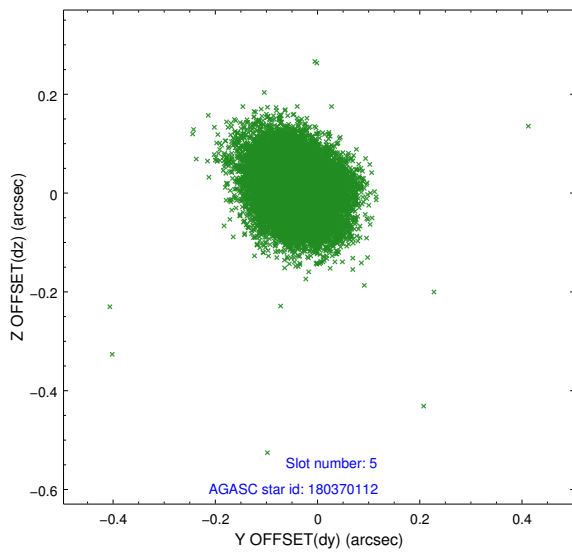
2.4.1 Slot 3



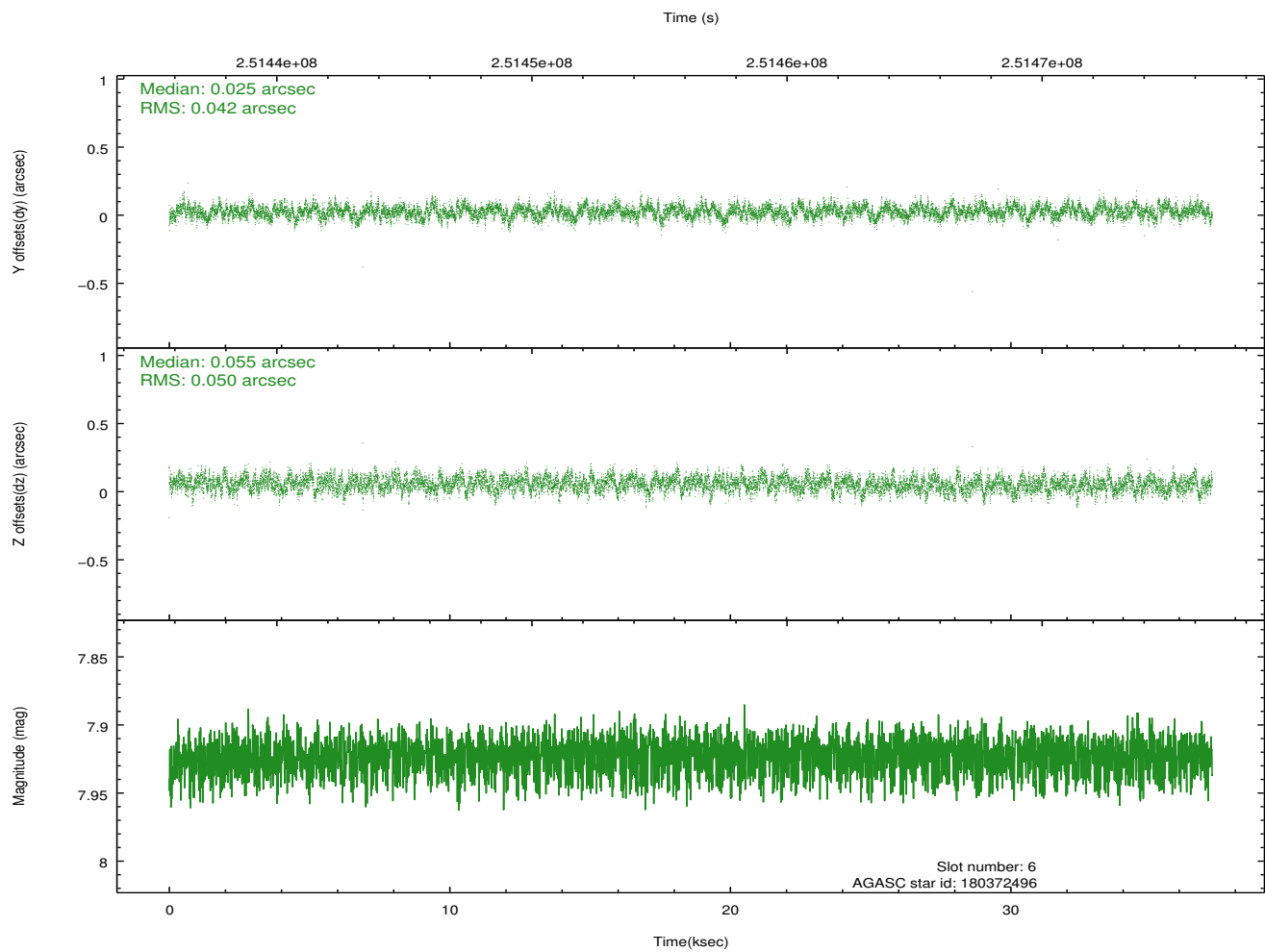
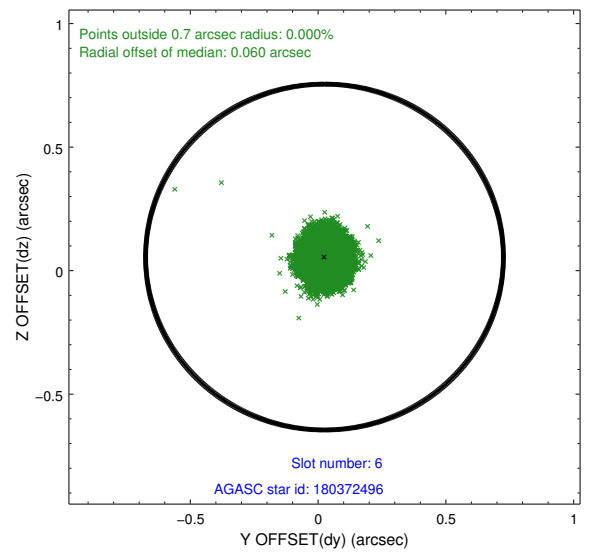
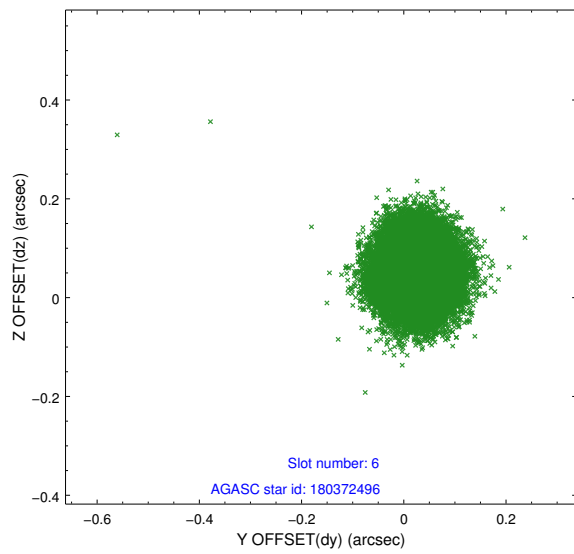
2.4.2 Slot 4



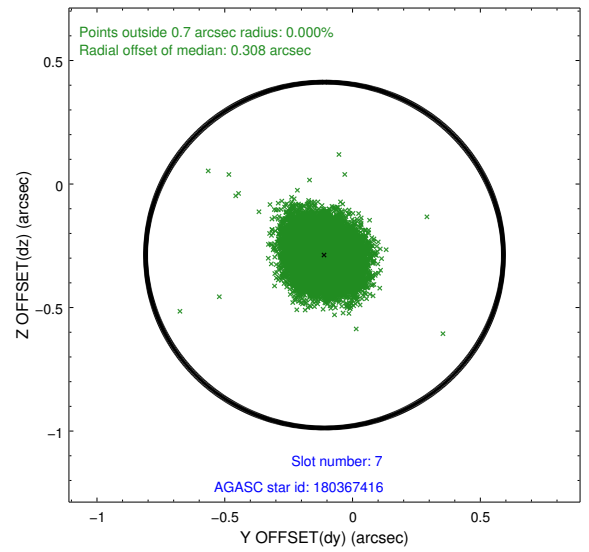
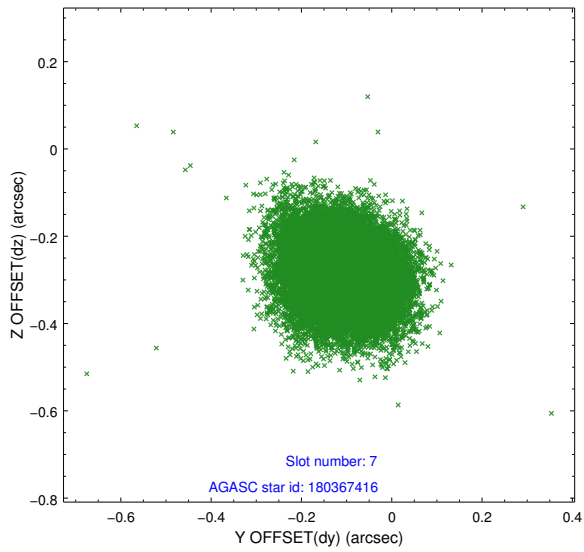
2.4.3 Slot 5



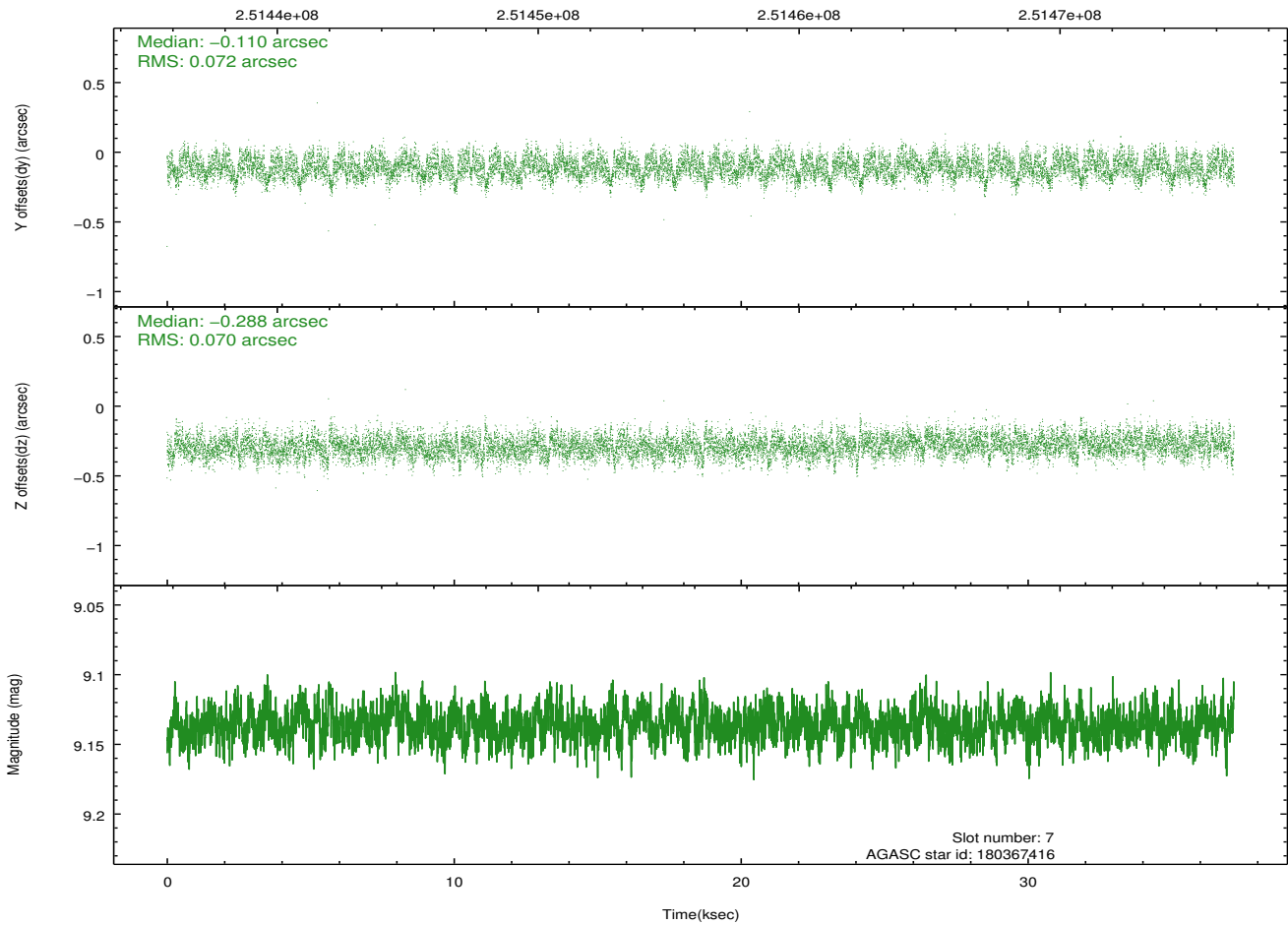
2.4.4 Slot 6



2.4.5 Slot 7

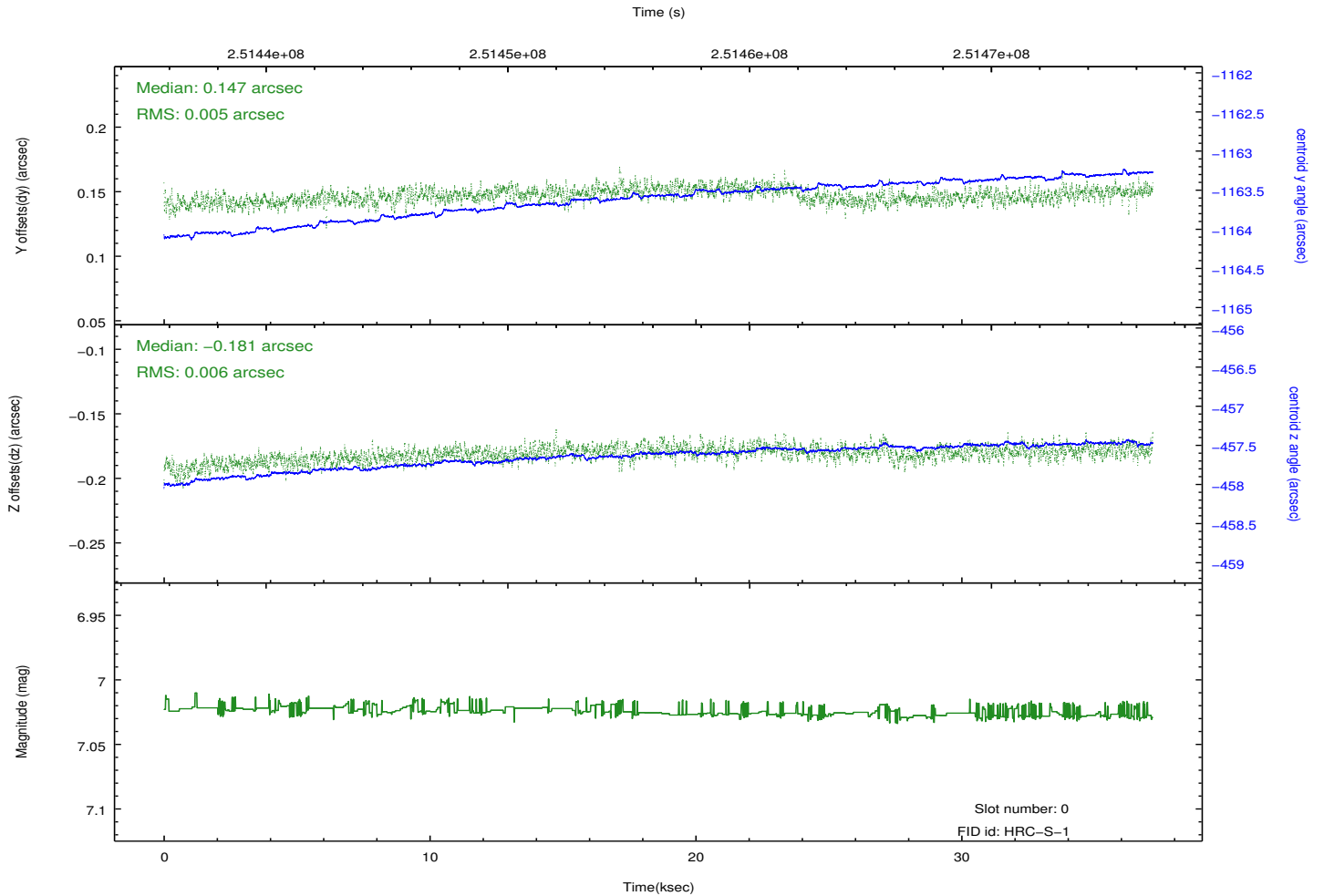
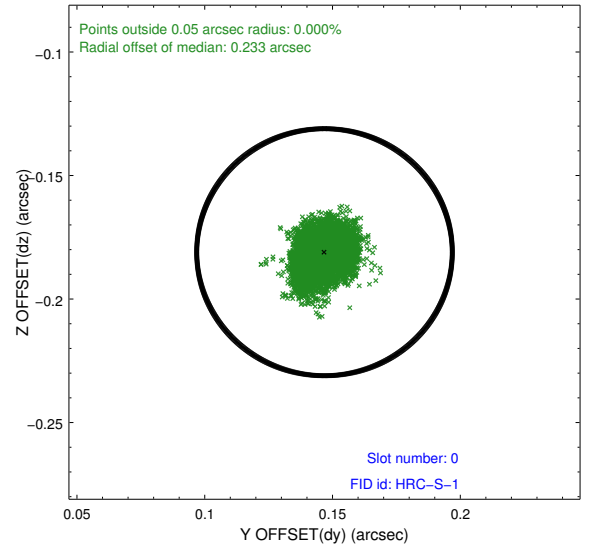
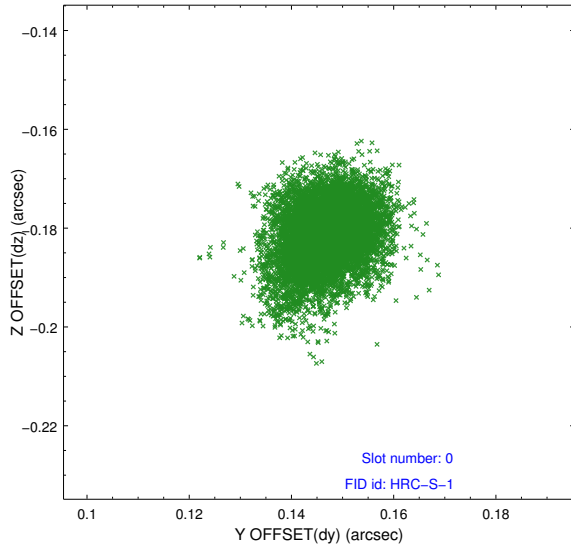


Time (s)

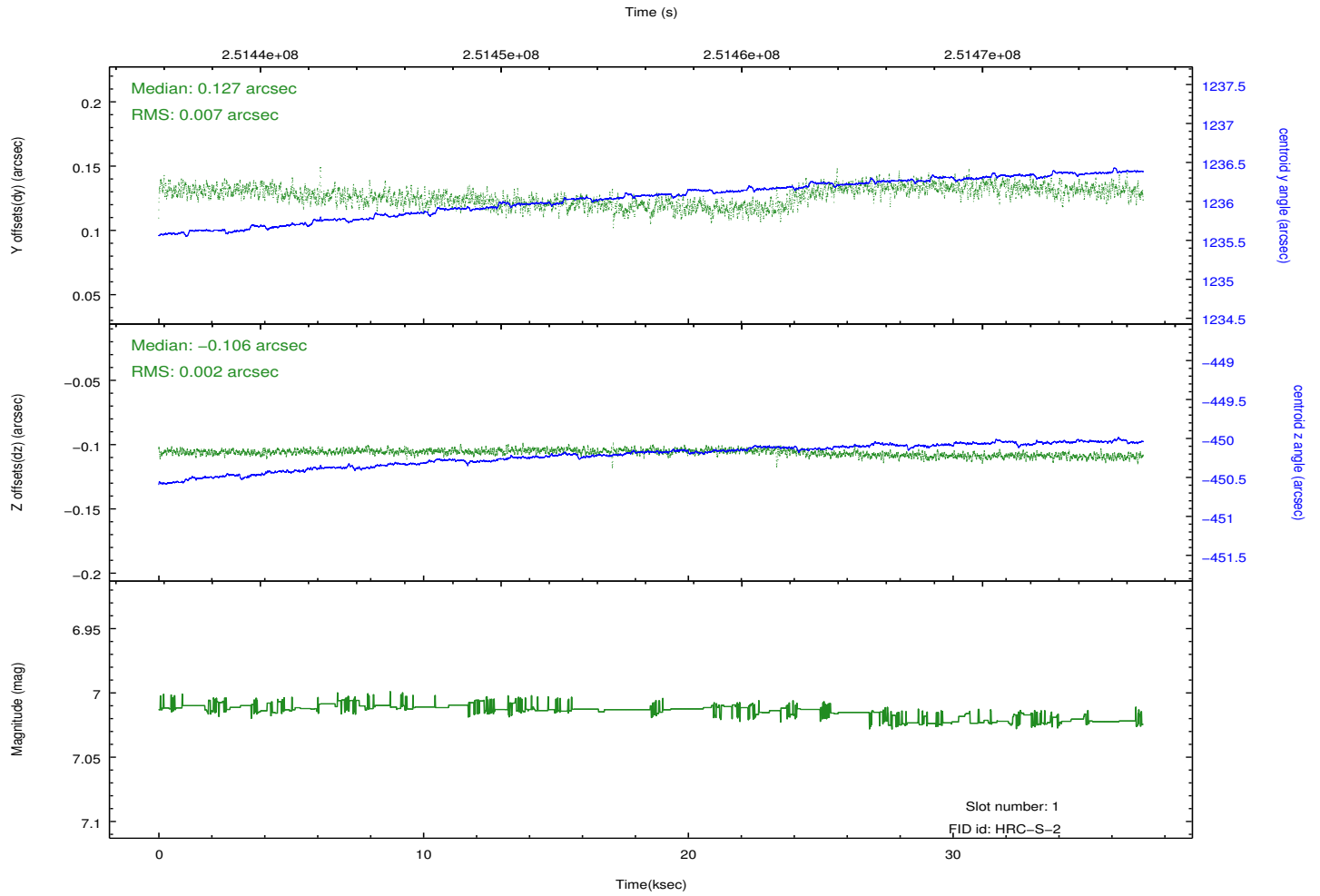
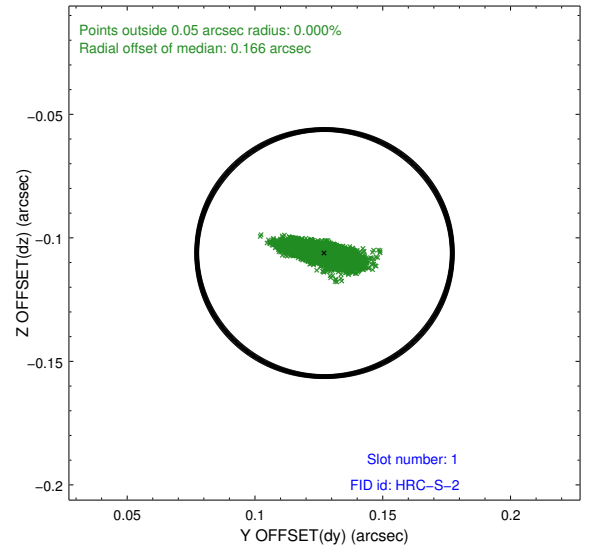
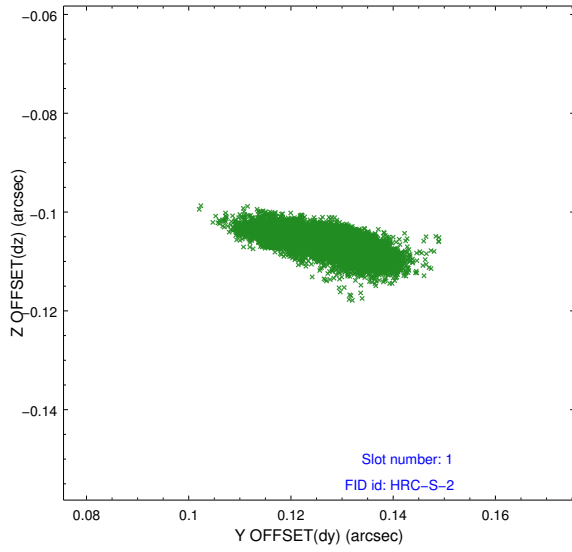


2.5 FID Slots

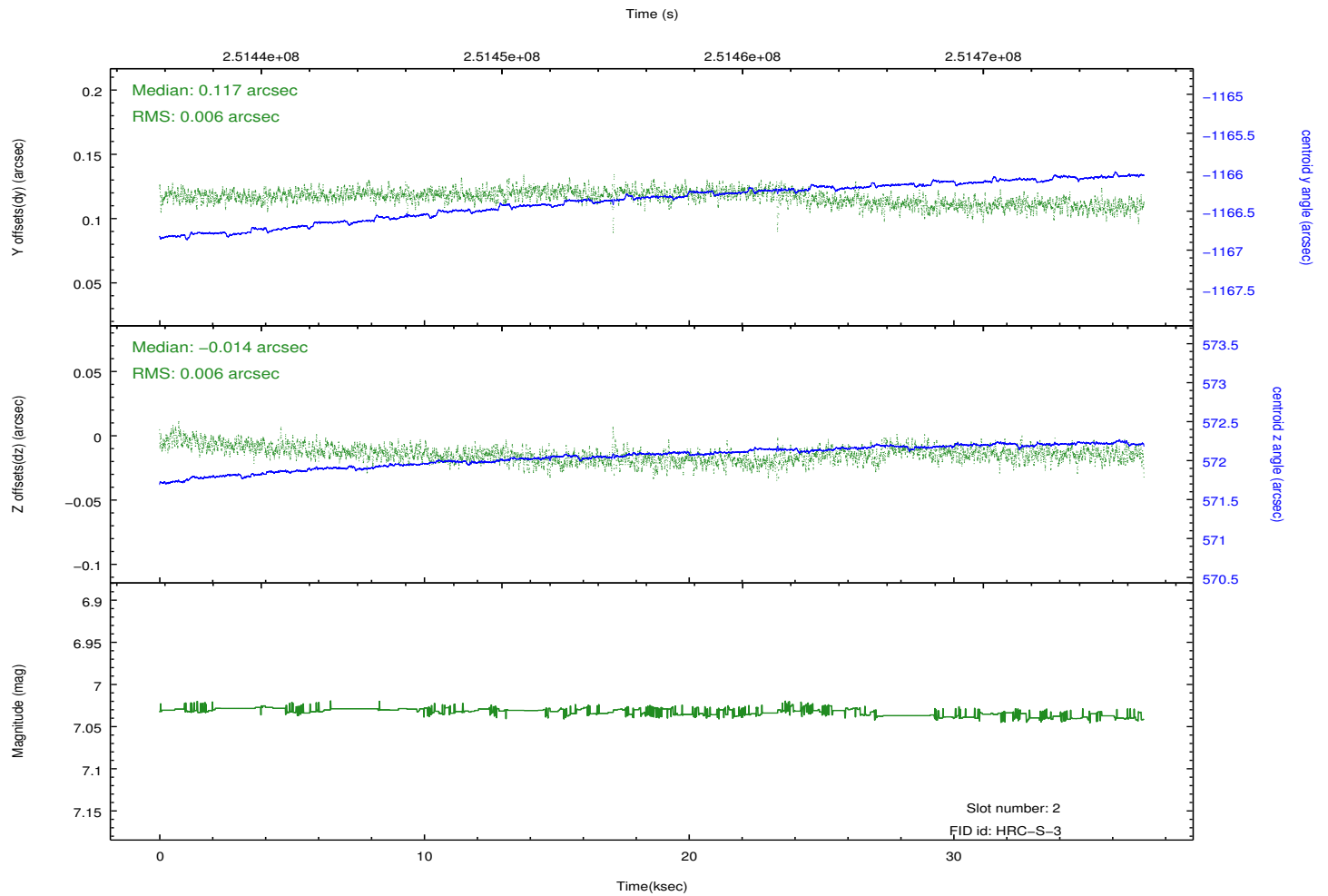
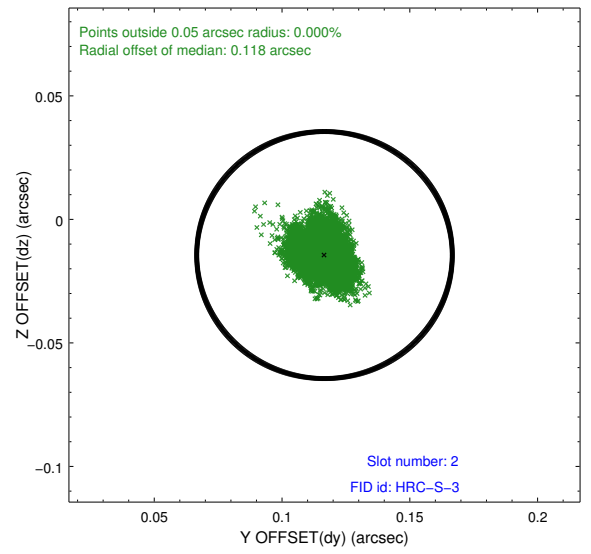
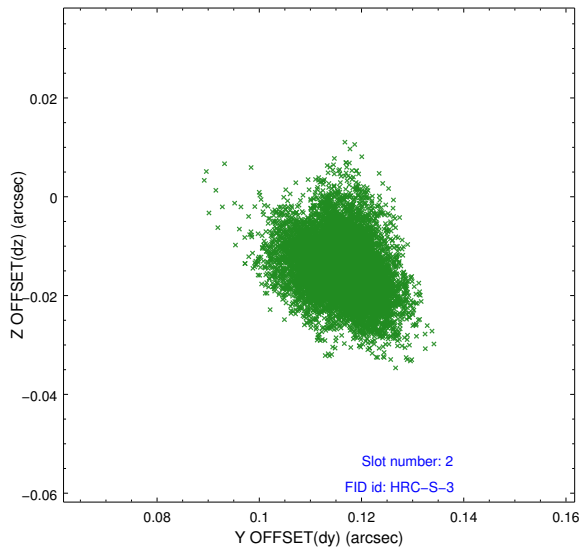
2.5.1 Slot 0



2.5.2 Slot 1

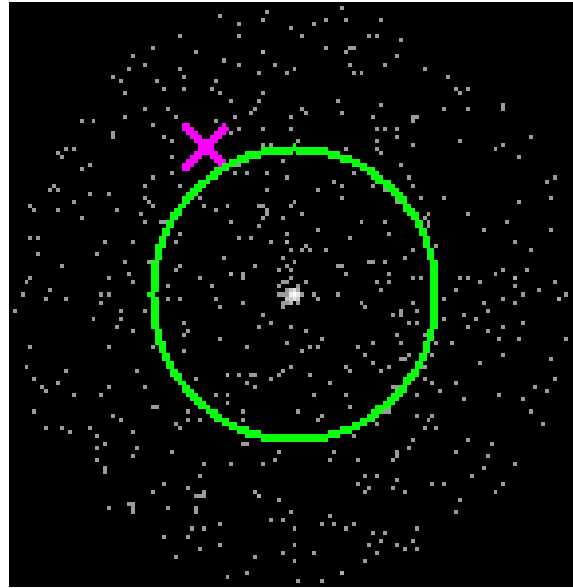


2.5.3 Slot 2



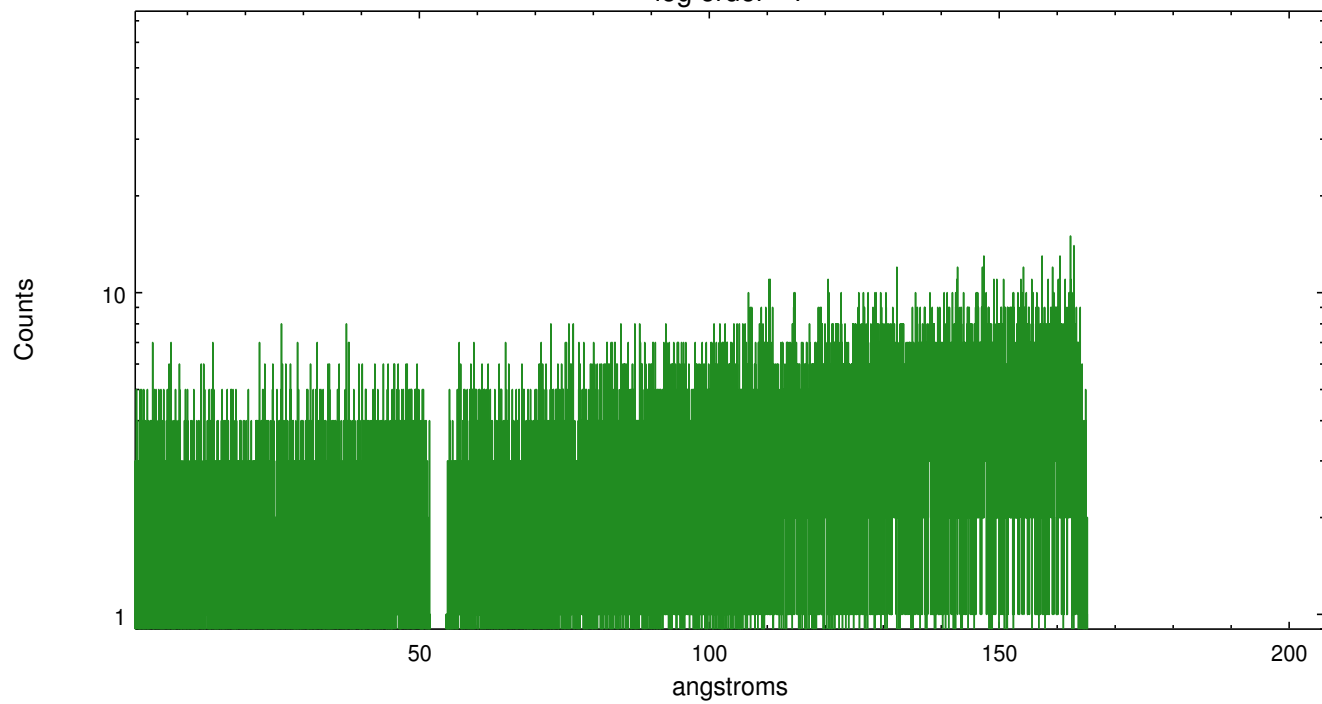
3 Gratings

3.1 LETG Arm

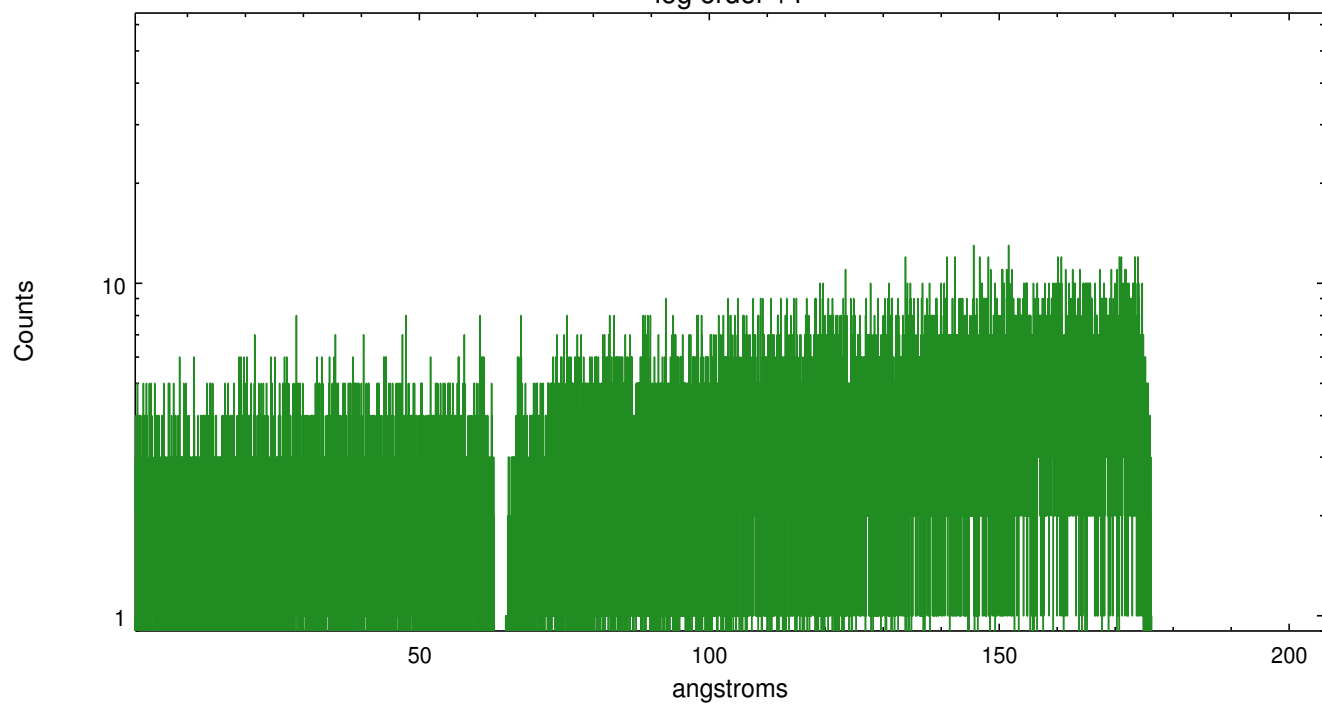


LETG Zero Order

leg order -1



leg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.18213

A.2 Comments

Source is extended and asymmetric. Zeroth order selected by pipeline tools for extracting spectral data is well-centered in the emission source but is not at the position of brightest emission. The user may want to select a region or source of interest, then use software tools such as CIAO to specify the coordinates of the zeroth order source of interest before running the tools to resolve the dispersed events.
====WARNING: there are no standard ciao tools for analysis of grating spectra from extended sources. The shape of an emission 'line' will be the shape of the zero order spatial structure convolved with the instrumental LSF. Grating extractions can be used, but need to be combined with custom spatial-spectral analysis, since wavelength is multi-valued at any particular diffraction angle.