

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18808 - L2 Version 1
Chandra X-Ray Center

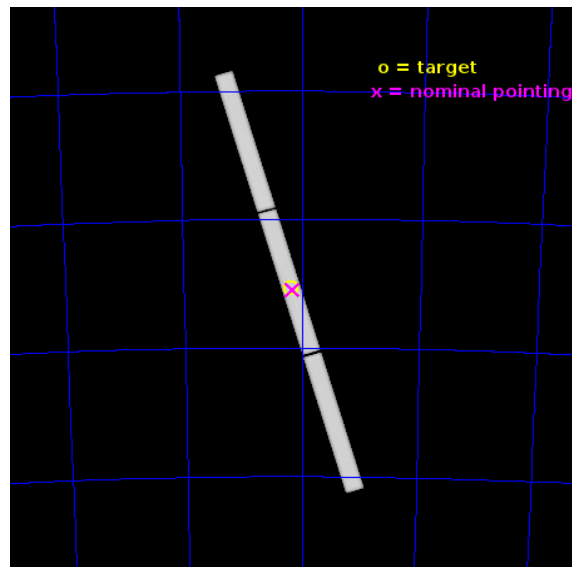
L2 Processing Date : Mar 31 2016

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1 Front

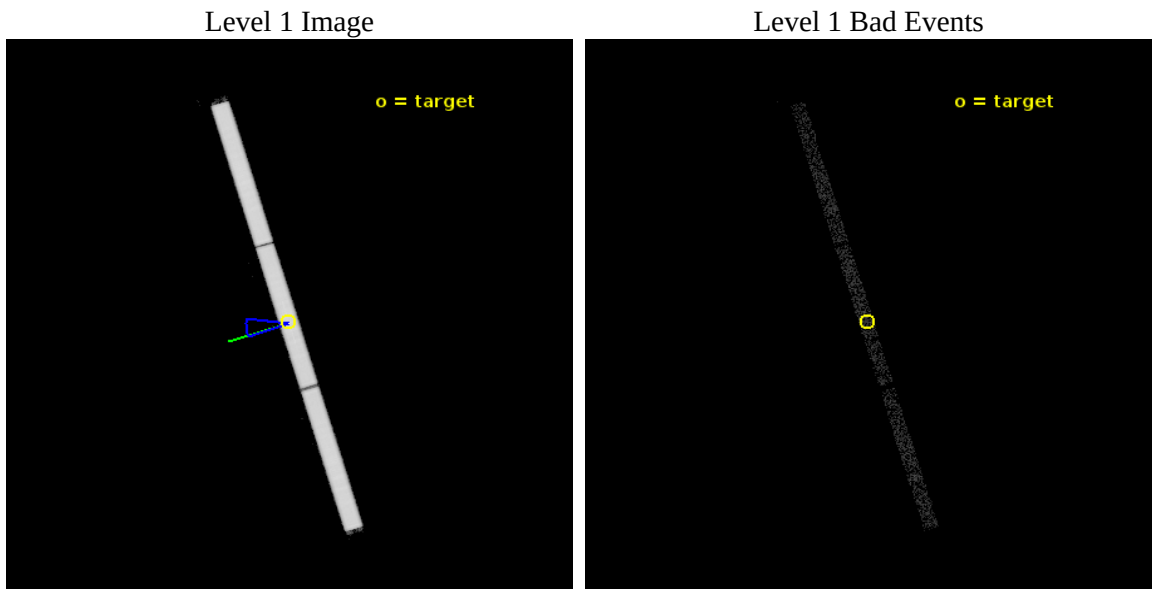
seq_num	502517	Sequence number
obs_id	18808	Observation id
title	CHANDRA CYCLE 17 SPATIAL AND SPECTRAL MONITORING OF SN 1987A	Propo
observer	David Burrows	Principal investigator
object	SNR 1987A	Source name
ra_targ	83.866667	Observer's specified target RA [deg]
dec_targ	-69.26975	Observer's specified target Dec [deg]
ra_nom	83.862583847687	Nominal RA [deg]
dec_nom	-69.274466965626	Nominal Dec [deg]
roll_nom	253.06350105583	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30016.101713061	[s]
livetime	29752.469532938	Ontime multiplied by DTCOR
l2events	2424823	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	2	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	30016.101713061	[s]
caldsver	4.7.1	 	l1events	2979682	Number of level 1 events
date	2016-04-01T00:09:45	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(32729.55, 32898.66)	src1a sky pixel position

2.1.3 Events

Level 1 Events

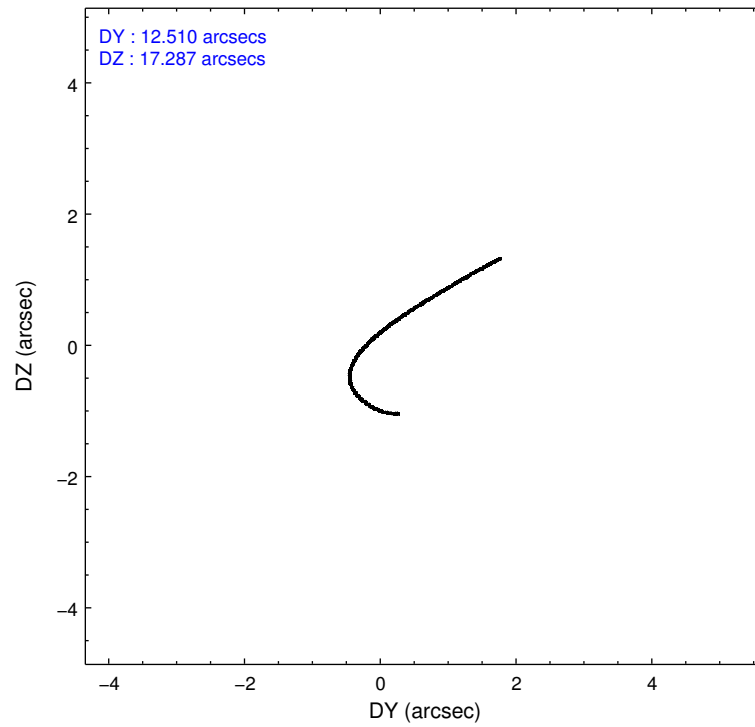
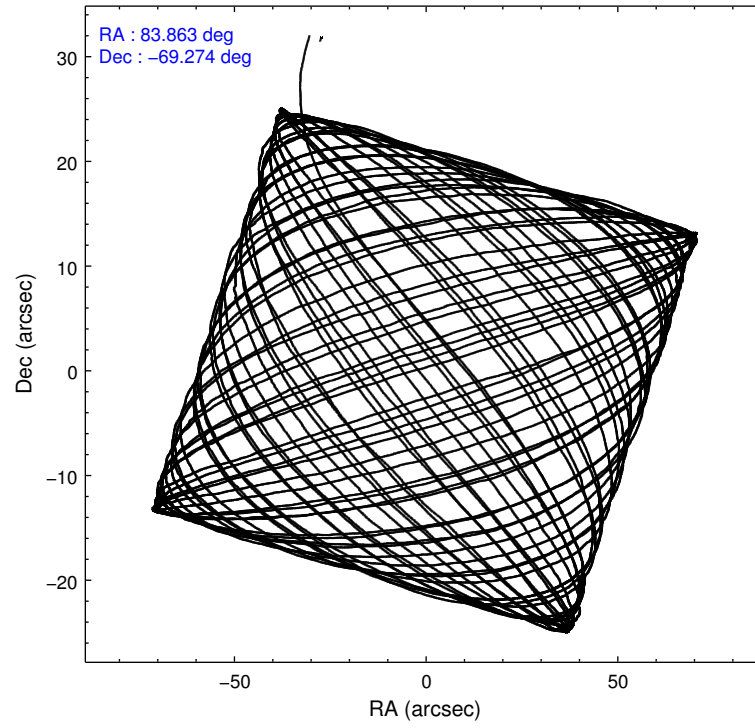
	segment 1	segment 2	segment 3
level 1 events	1011248	984453	983981
rejected events	2574	2699	2648
rejected %	0%	0%	0%

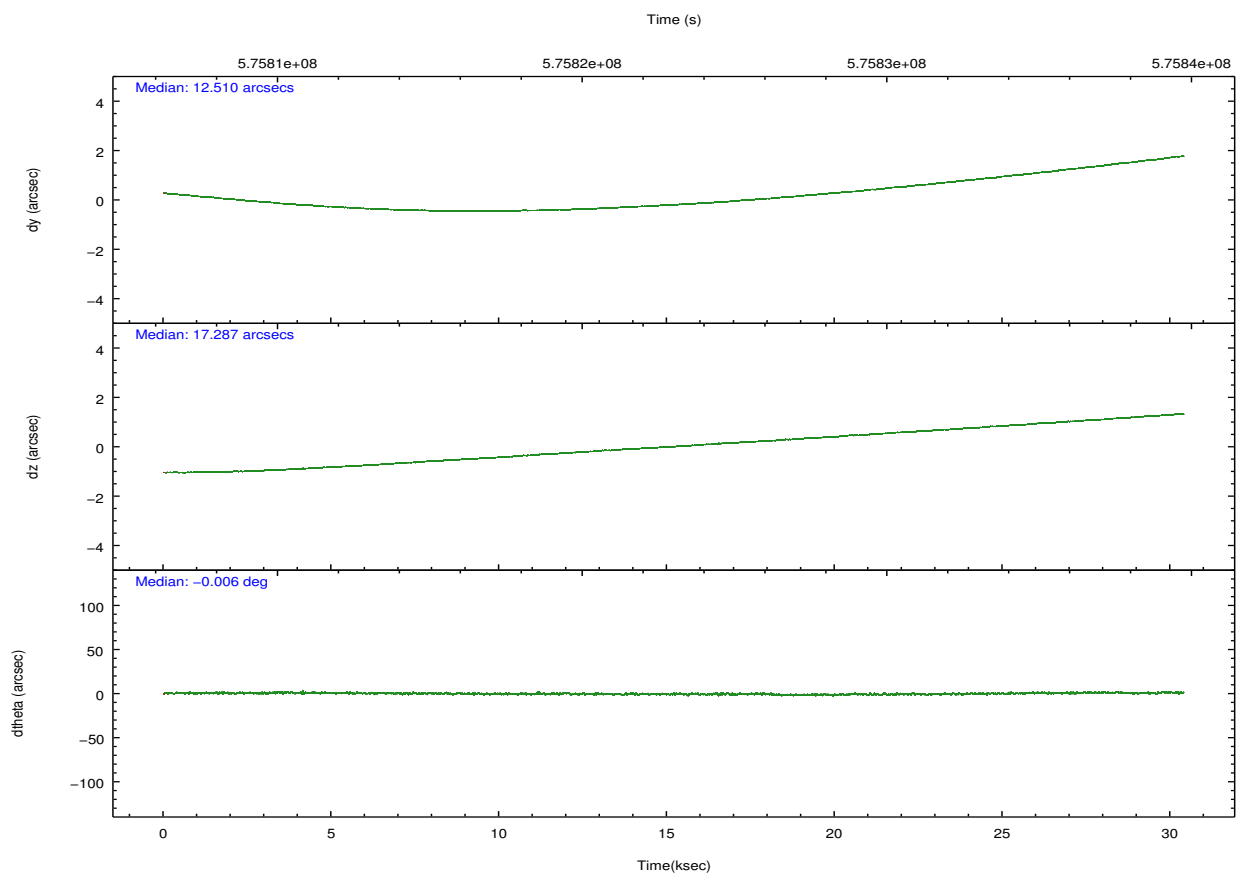
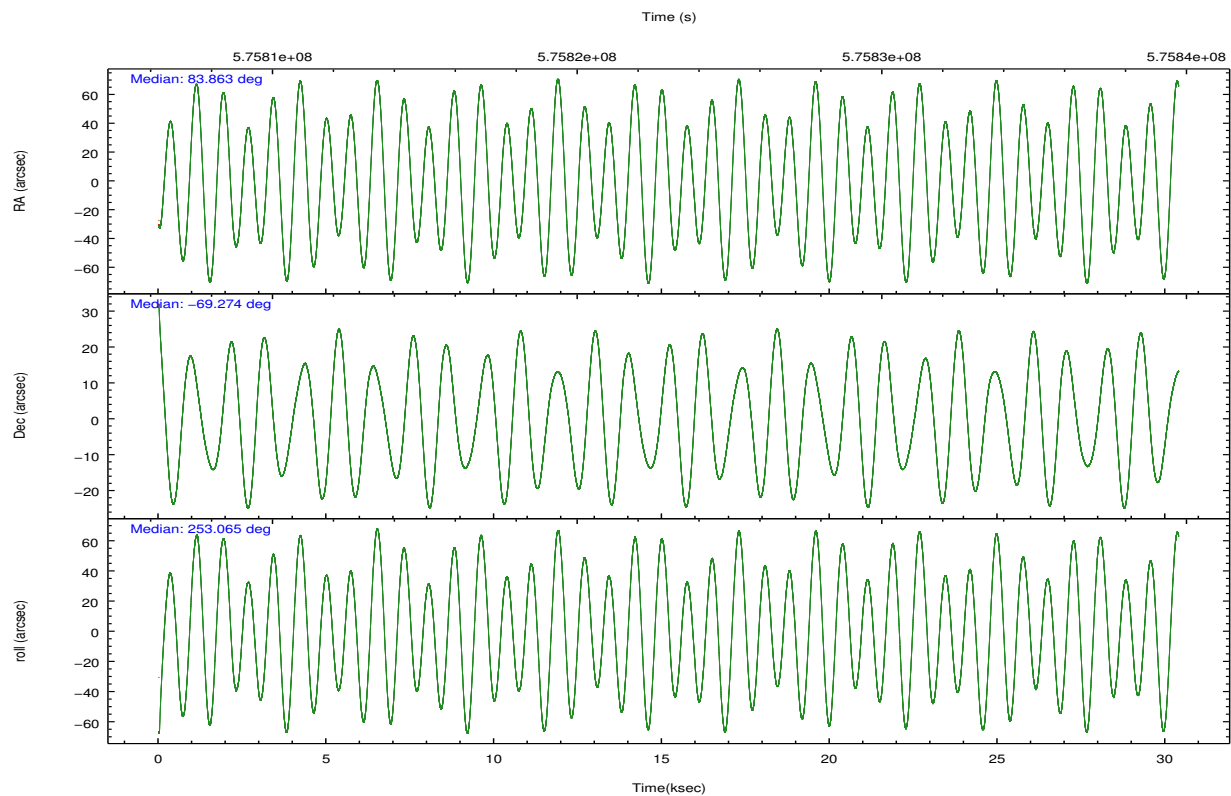
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	LETG	LETG
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	83.840343	83.86258384768749
[deg] Pointing Dec	-69.246688	-69.27446696562616
[deg] Pointing Roll	252.975386	253.0635010558327
[deg] Roll angle	264.000000	264.000000
[deg] Roll tolerance	12.000000	12.000000
Roll constraint allows 180D rotation	N	N
[s] Window start time (MET)	573868868.184000	573868868.184000
[s] Window stop time (MET)	575856068.184000	575856068.184000
[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)	575808222.184000	575806933.0201
Observation start date	2016-03-31T10:42:34	2016-03-31T10:22:13
[s] Observation end time (MET)	575838222.184000	575839260.49694
Observation end date	2016-03-31T19:02:34	2016-03-31T19:21:00

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect



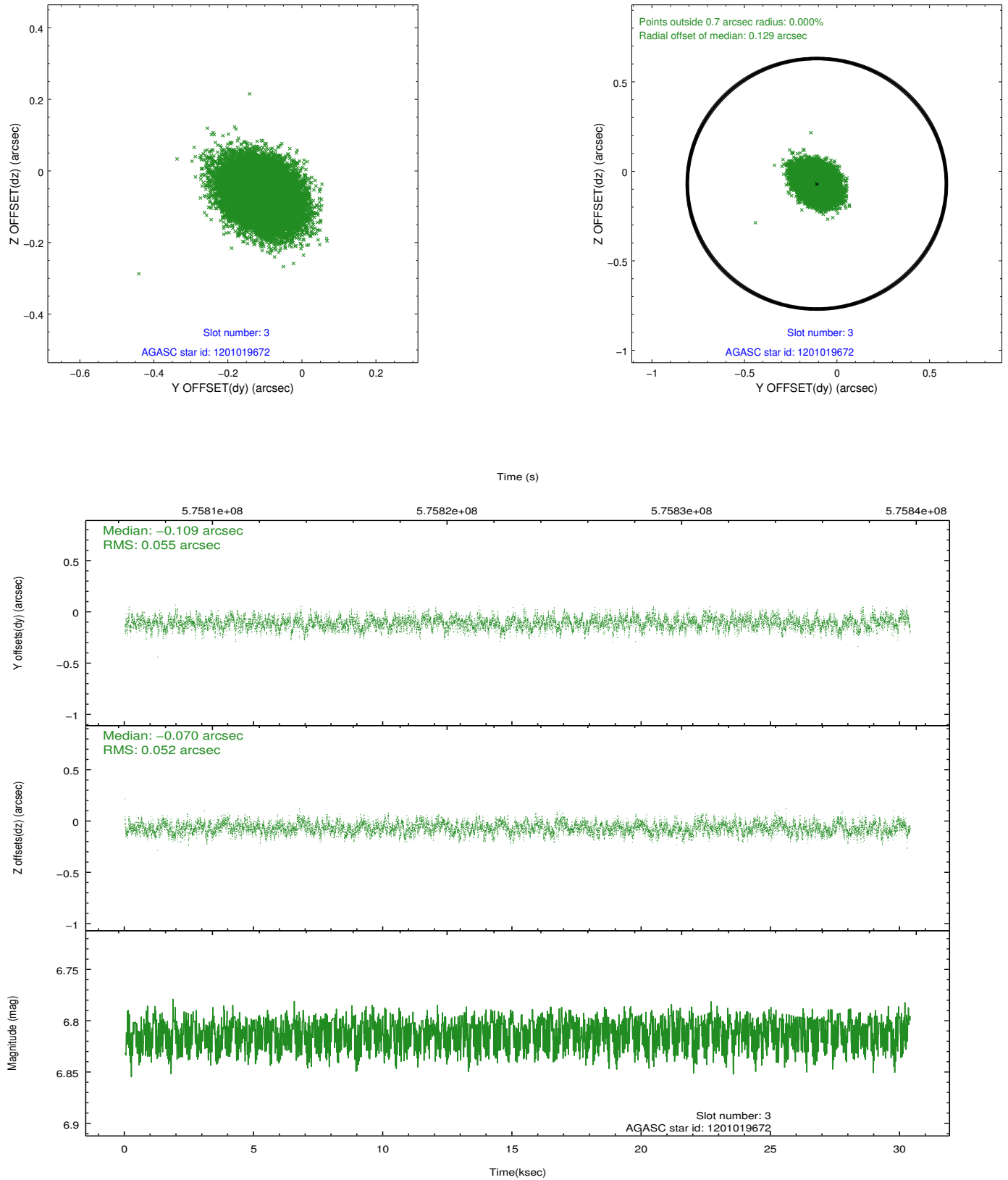


Slot Statistics

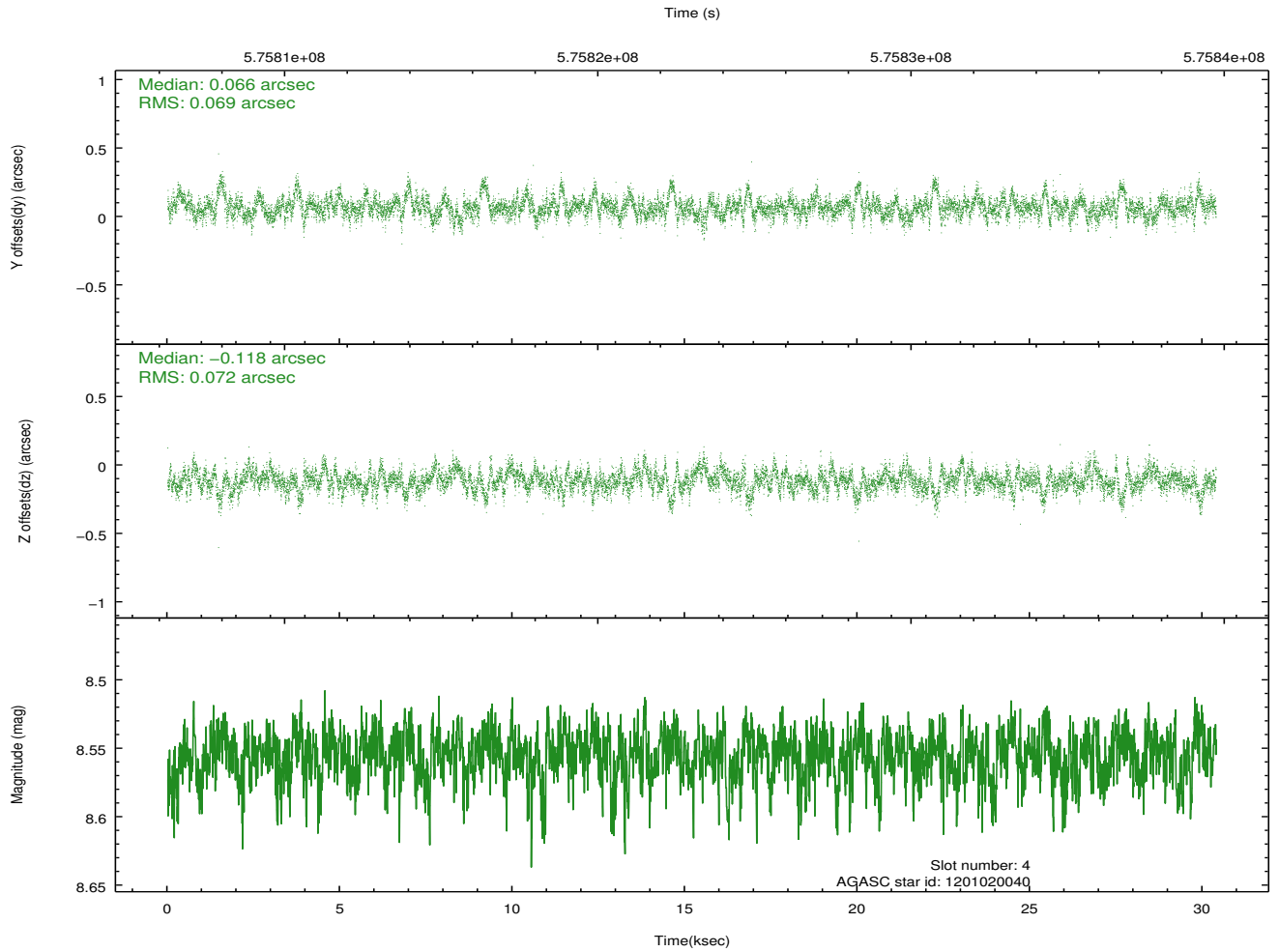
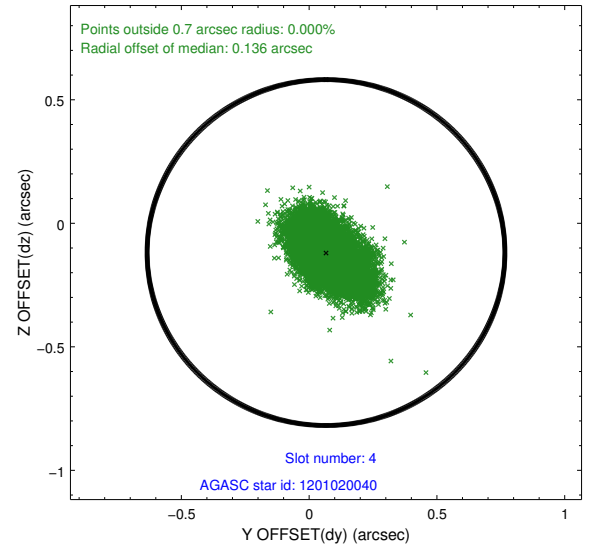
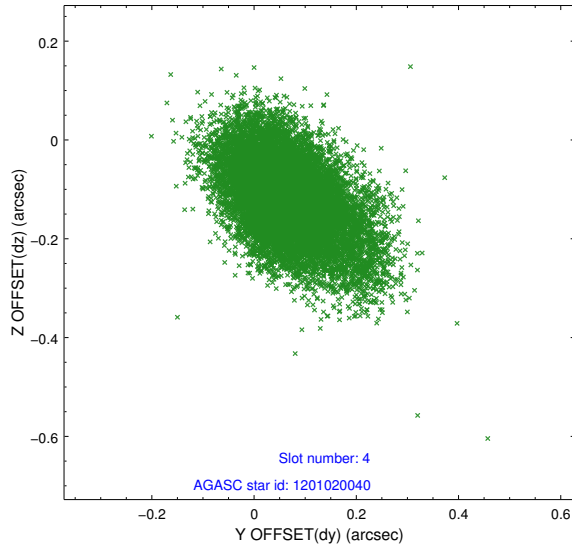
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-1	7.04	7411	-0.023	-0.163	0.020	0.052	0.000000	0.000000	-1167.14	-466.29
1	FID		HRC-S-2	7.03	7412	0.370	-0.137	0.023	0.051	0.000000	0.000000	1232.77	-458.86
2	FID		HRC-S-3	7.03	7411	0.043	-0.003	0.027	0.057	0.000000	0.000000	-1169.66	563.35
3	GUIDE	used	1201019672	6.81	14821	-0.109	-0.070	0.081	0.129	85.312192	-68.770187	-2179.93	1339.01
4	GUIDE	used	1201020040	8.55	14816	0.066	-0.118	0.100	0.184	85.379163	-68.879396	-1824.70	1528.77
5	GUIDE	used	1201542672	8.17	14821	-0.224	-0.223	0.080	0.133	84.492488	-69.957531	2212.39	1519.83
6	GUIDE	used	1200884248	9.42	14811	0.369	0.287	0.149	0.245	83.880915	-68.565170	-2361.40	-666.52
7	GUIDE	used	1201410616	9.32	14809	-0.110	0.124	0.160	0.271	82.516808	-69.784406	2349.86	-1002.22

2.4 Star Slots

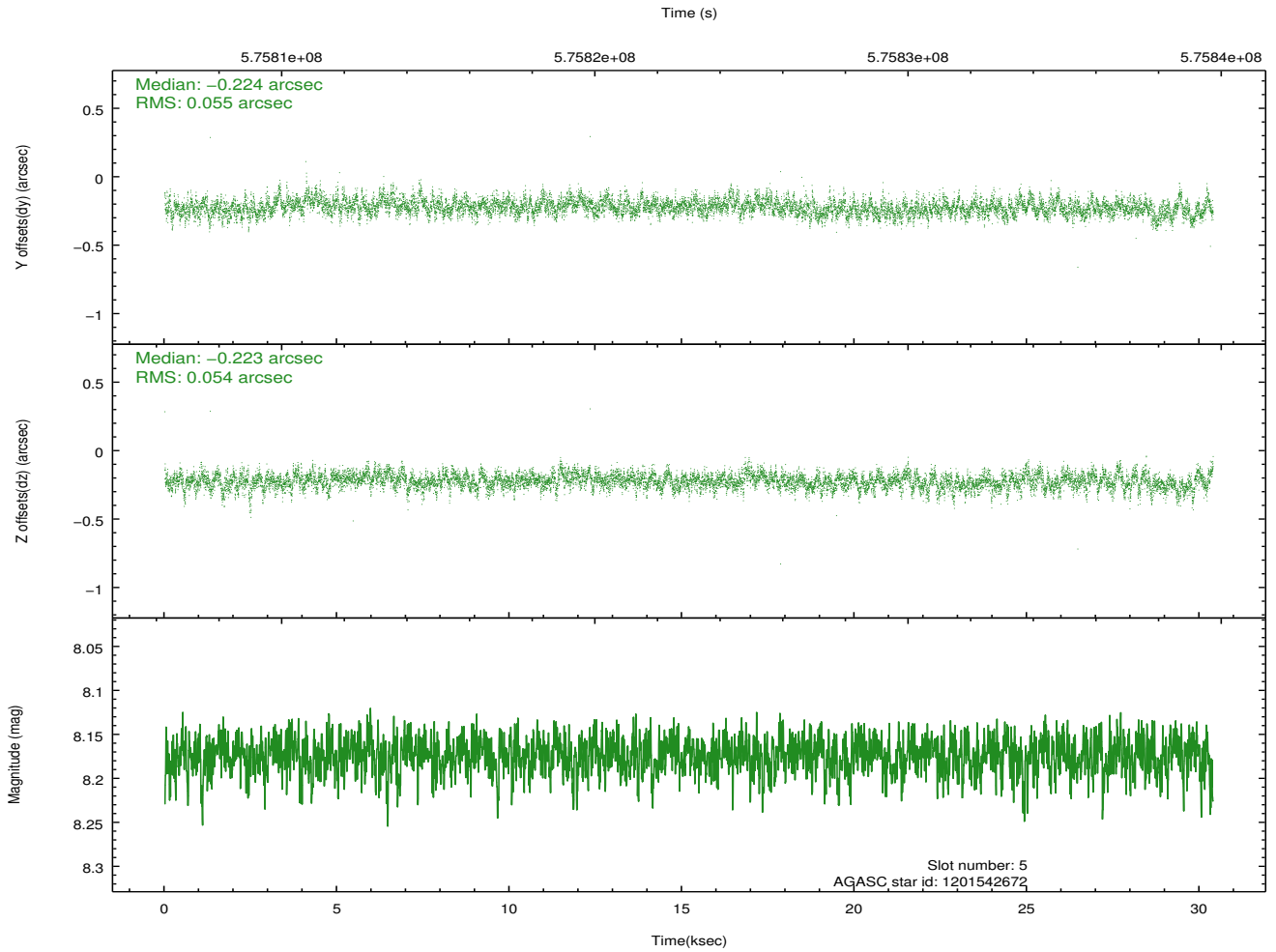
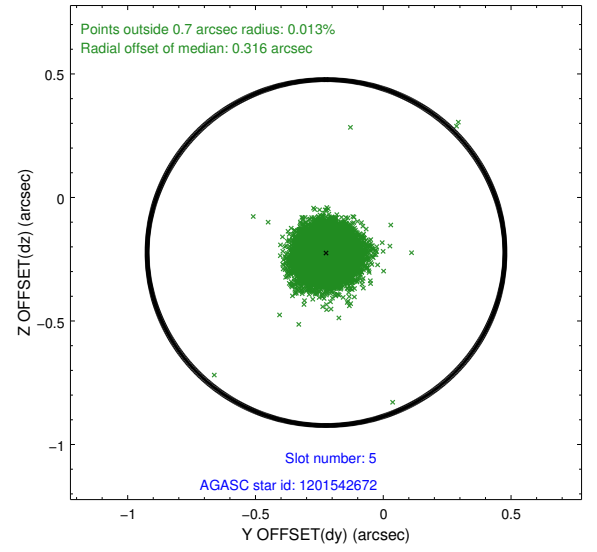
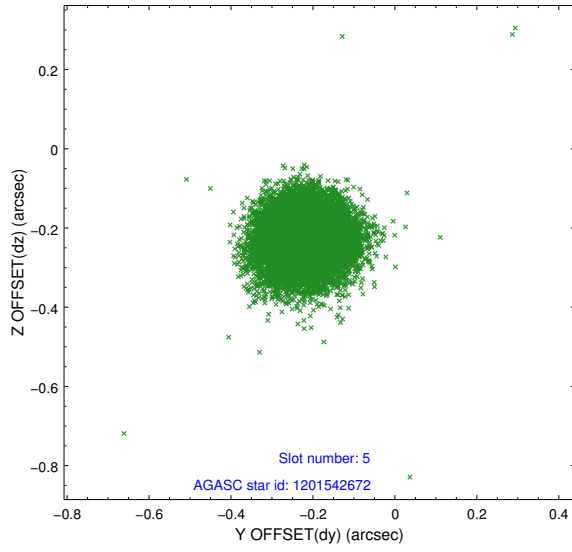
2.4.1 Slot 3



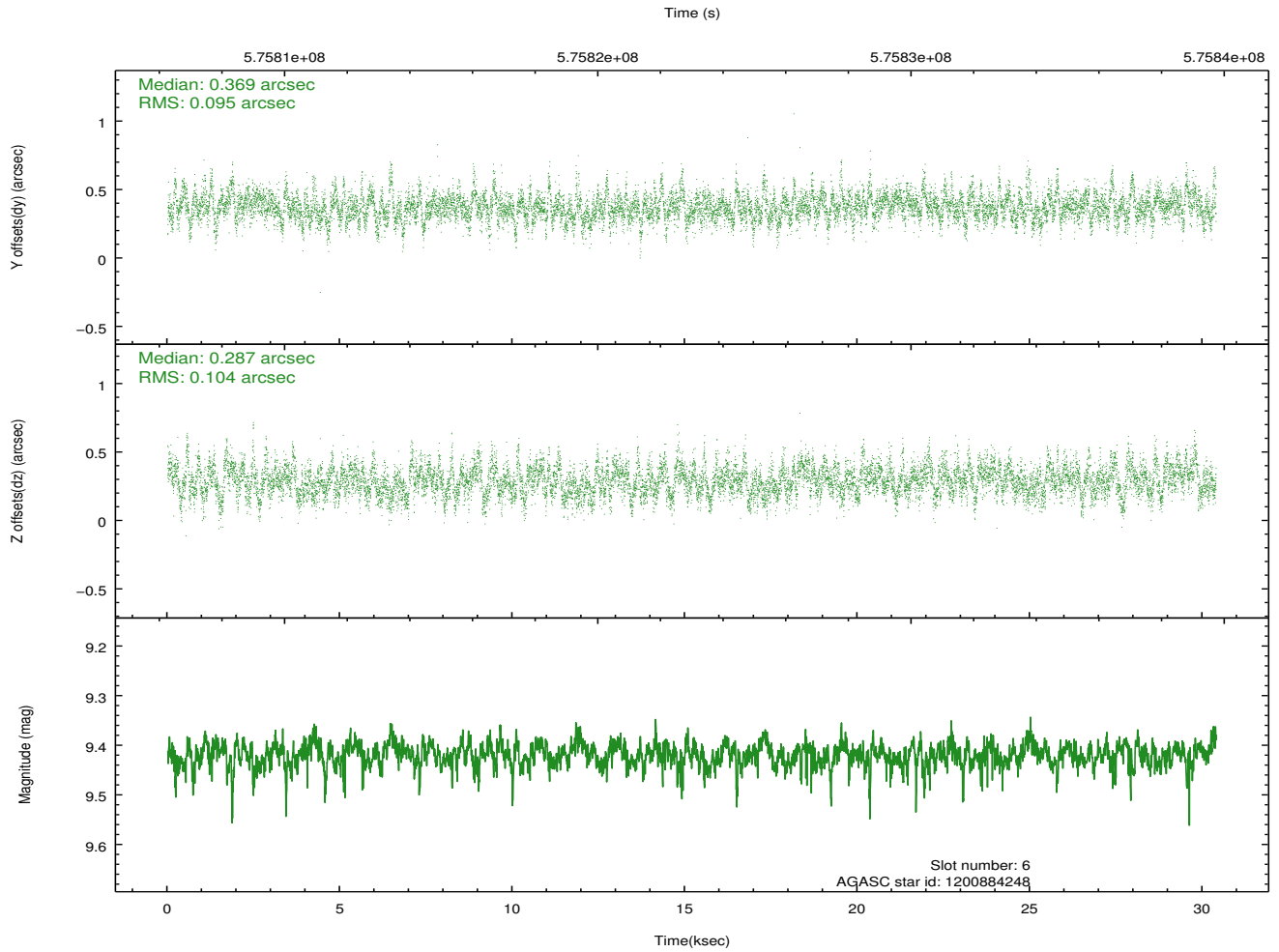
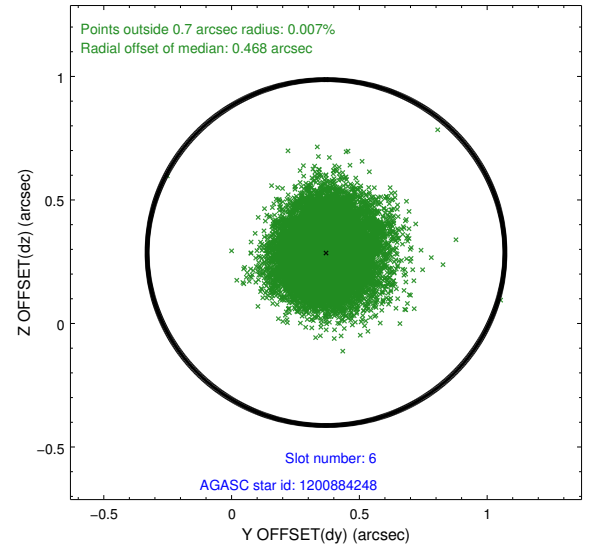
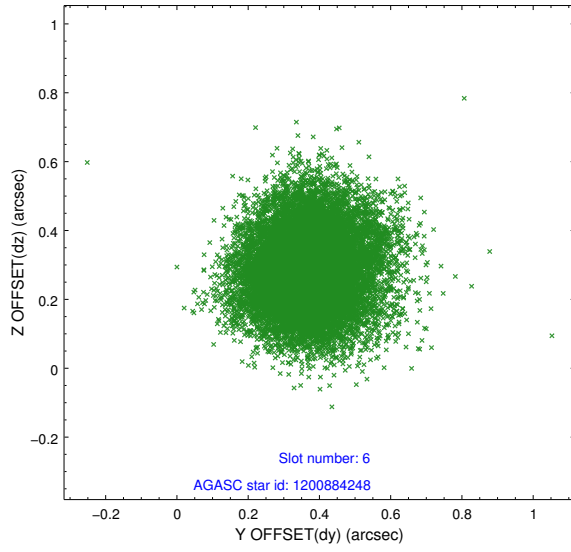
2.4.2 Slot 4



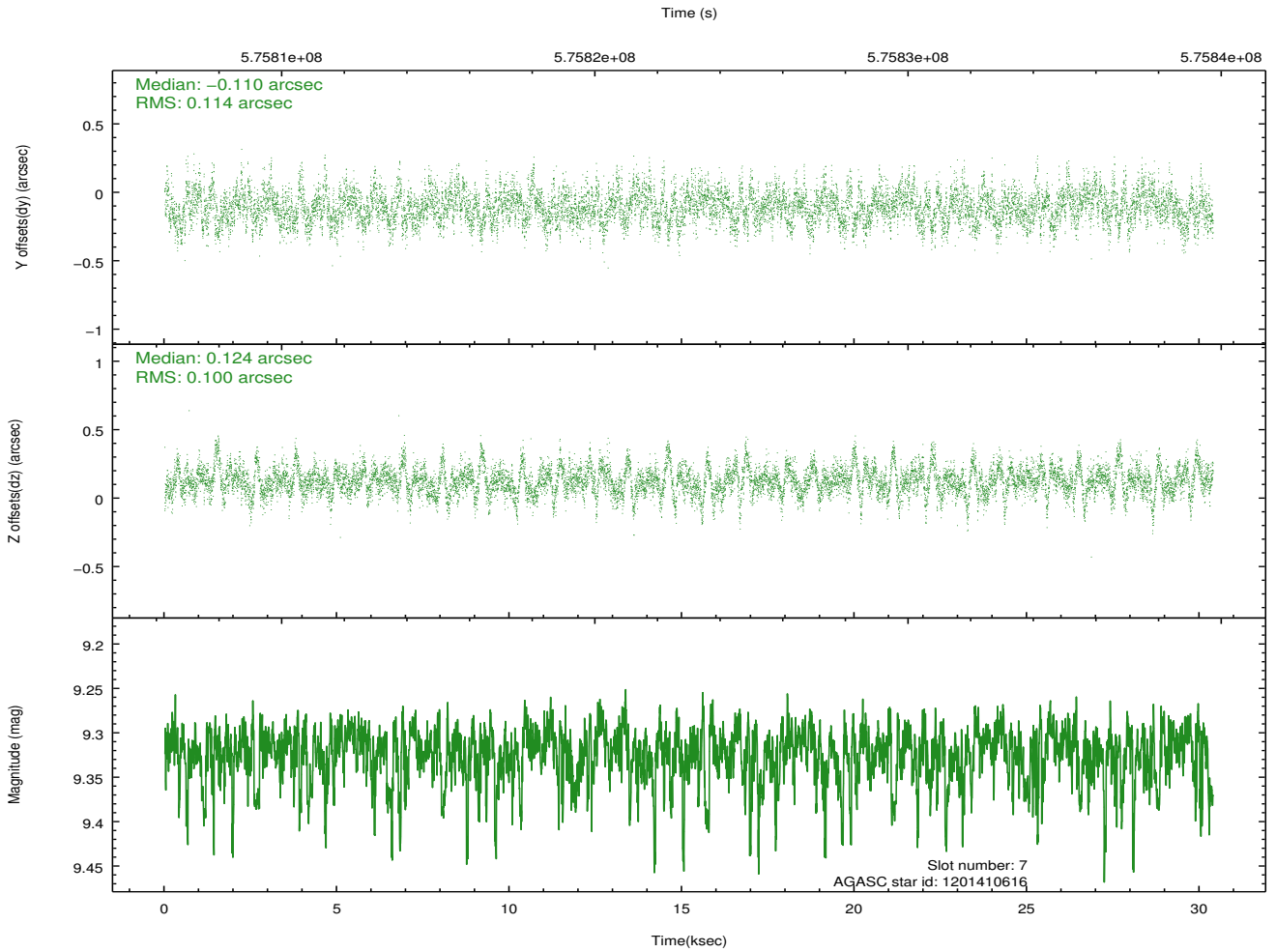
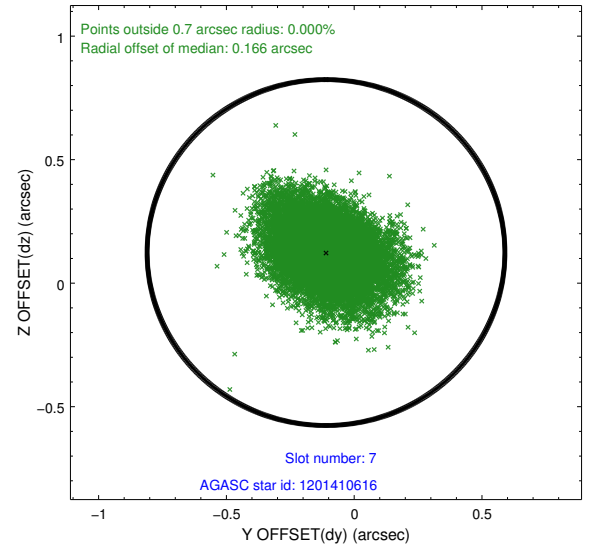
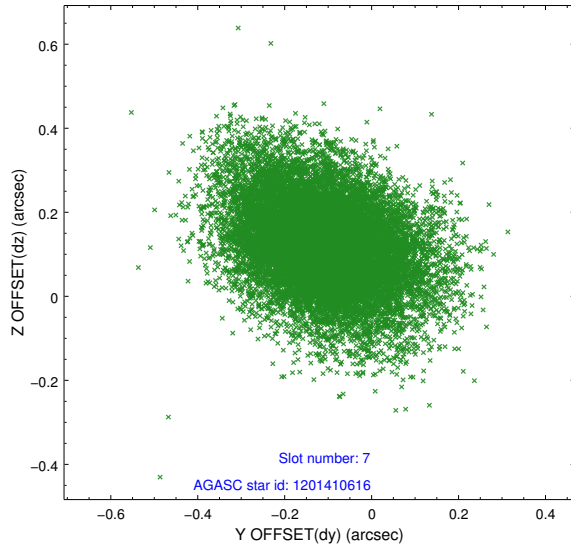
2.4.3 Slot 5



2.4.4 Slot 6

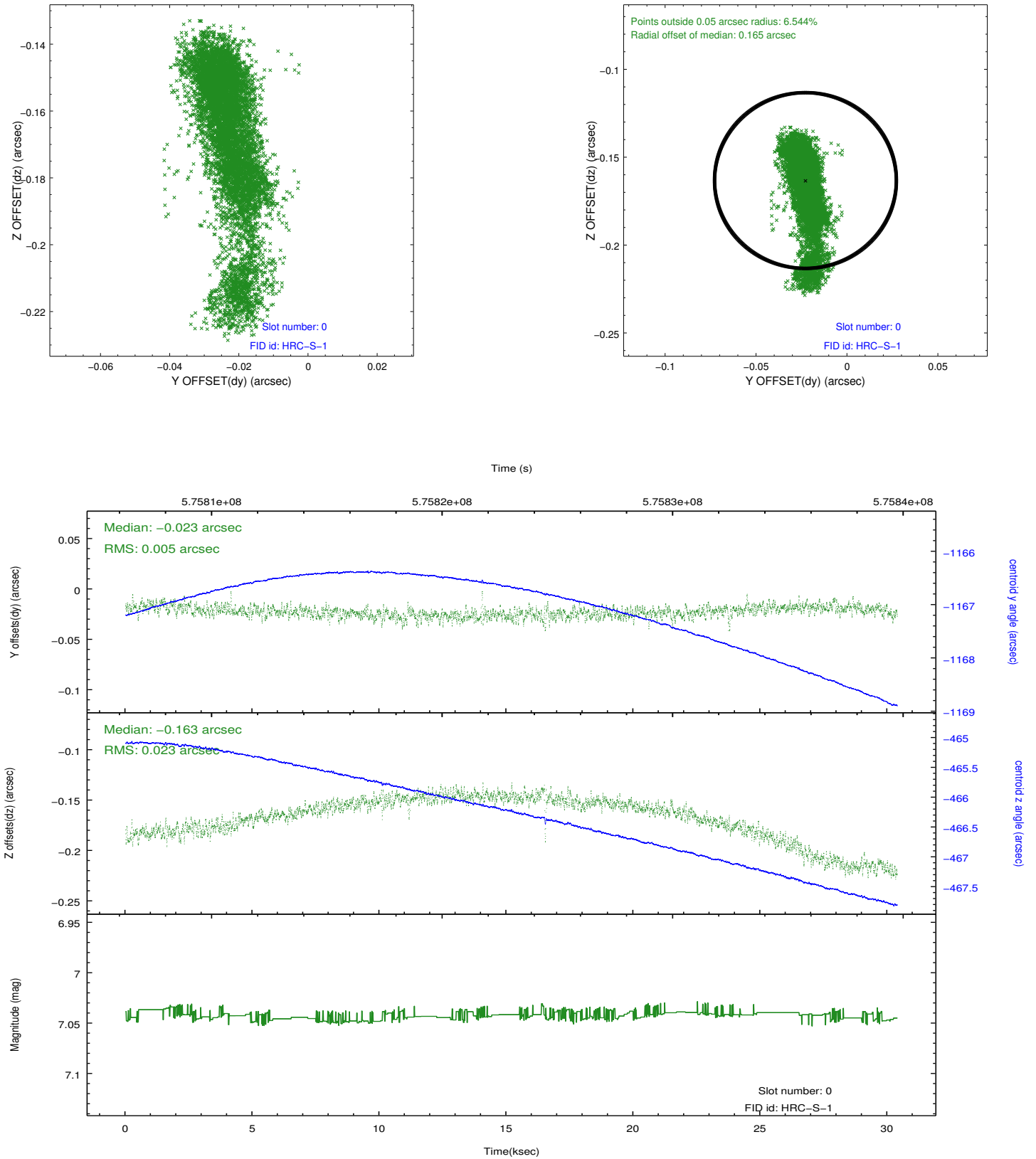


2.4.5 Slot 7

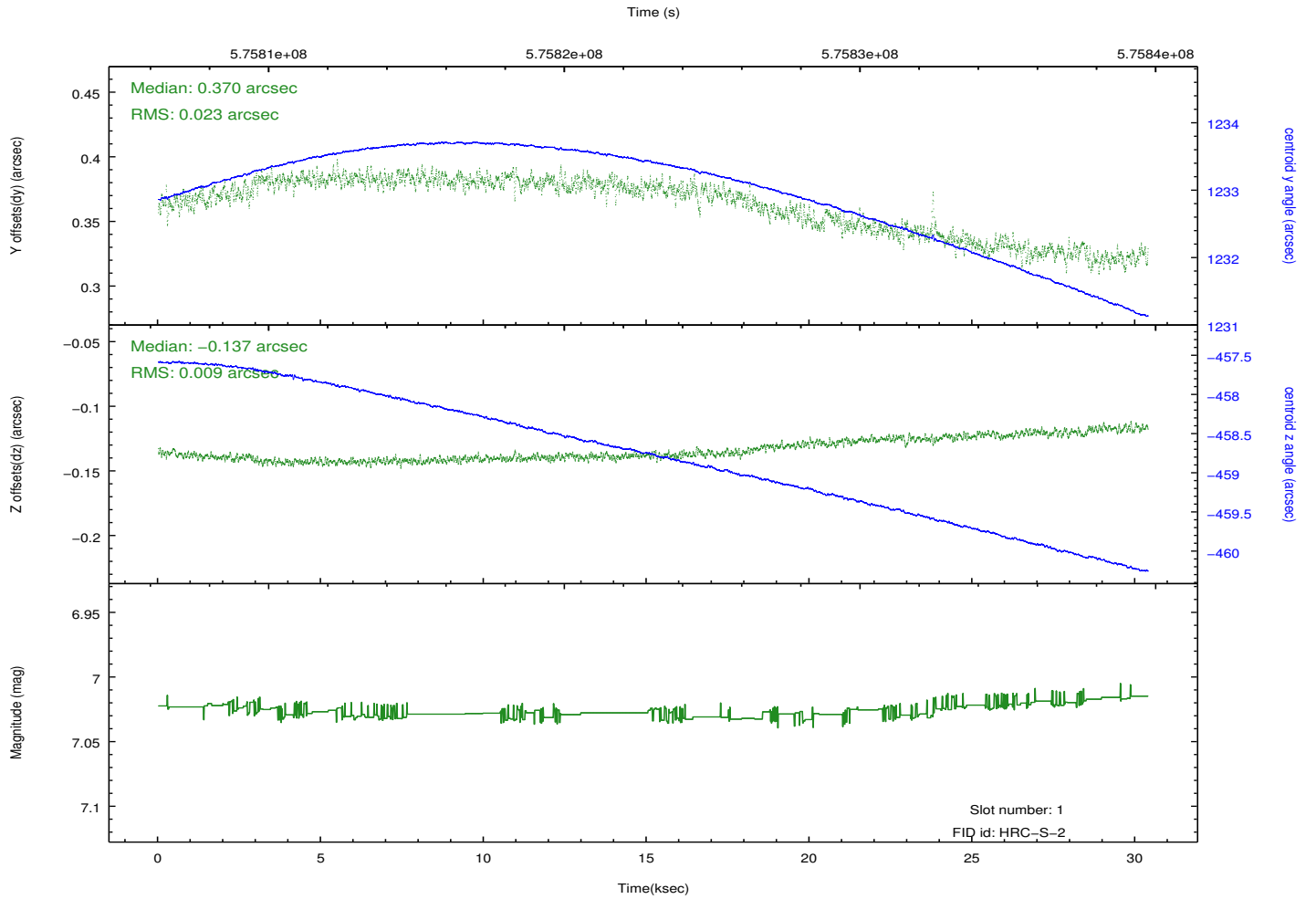
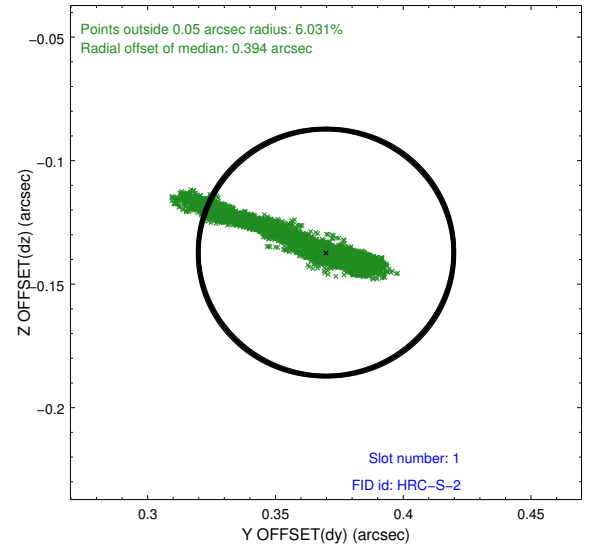
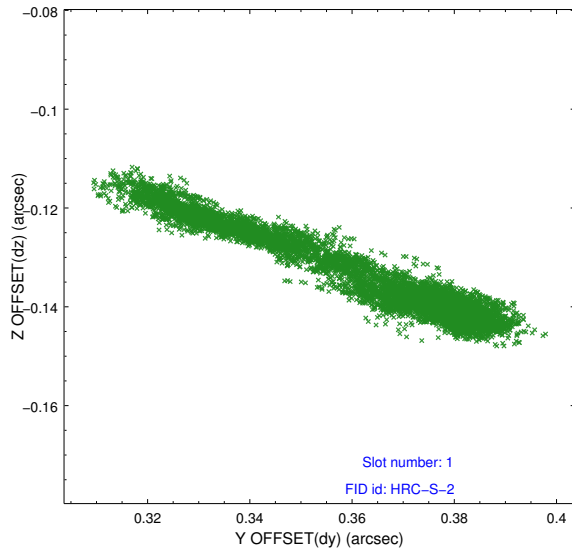


2.5 FID Slots

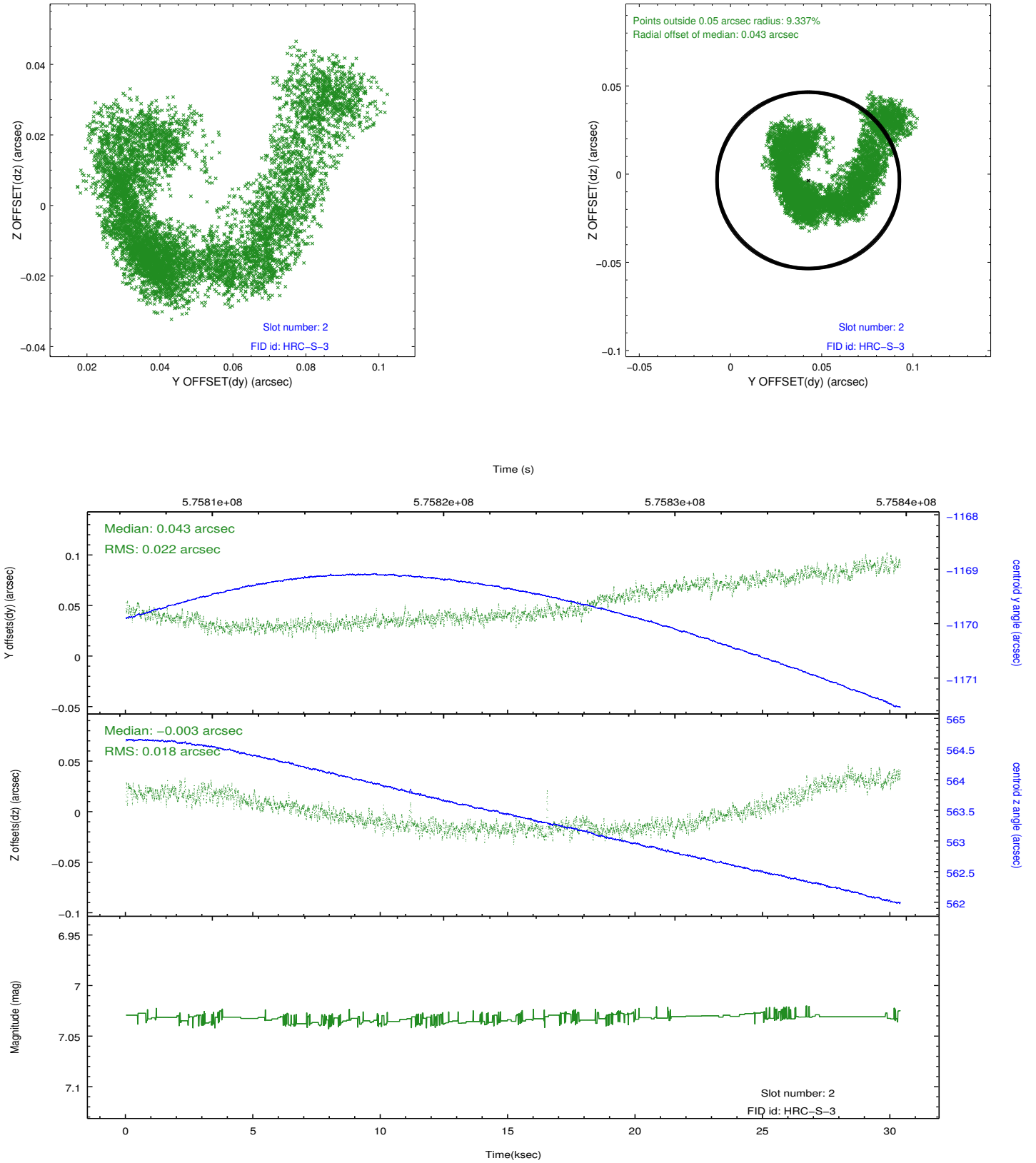
2.5.1 Slot 0



2.5.2 Slot 1

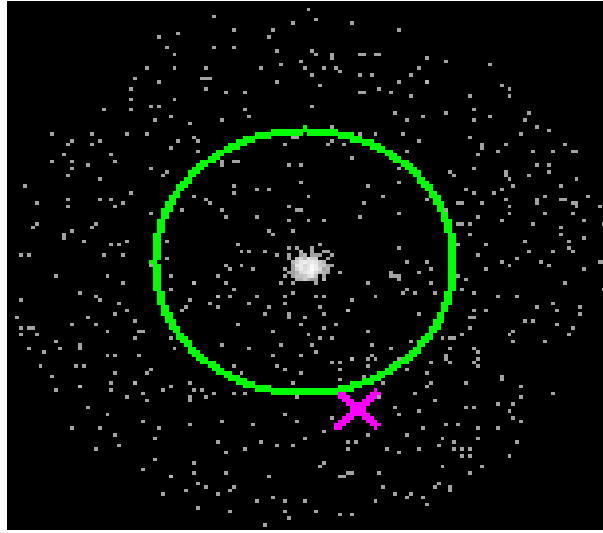


2.5.3 Slot 2

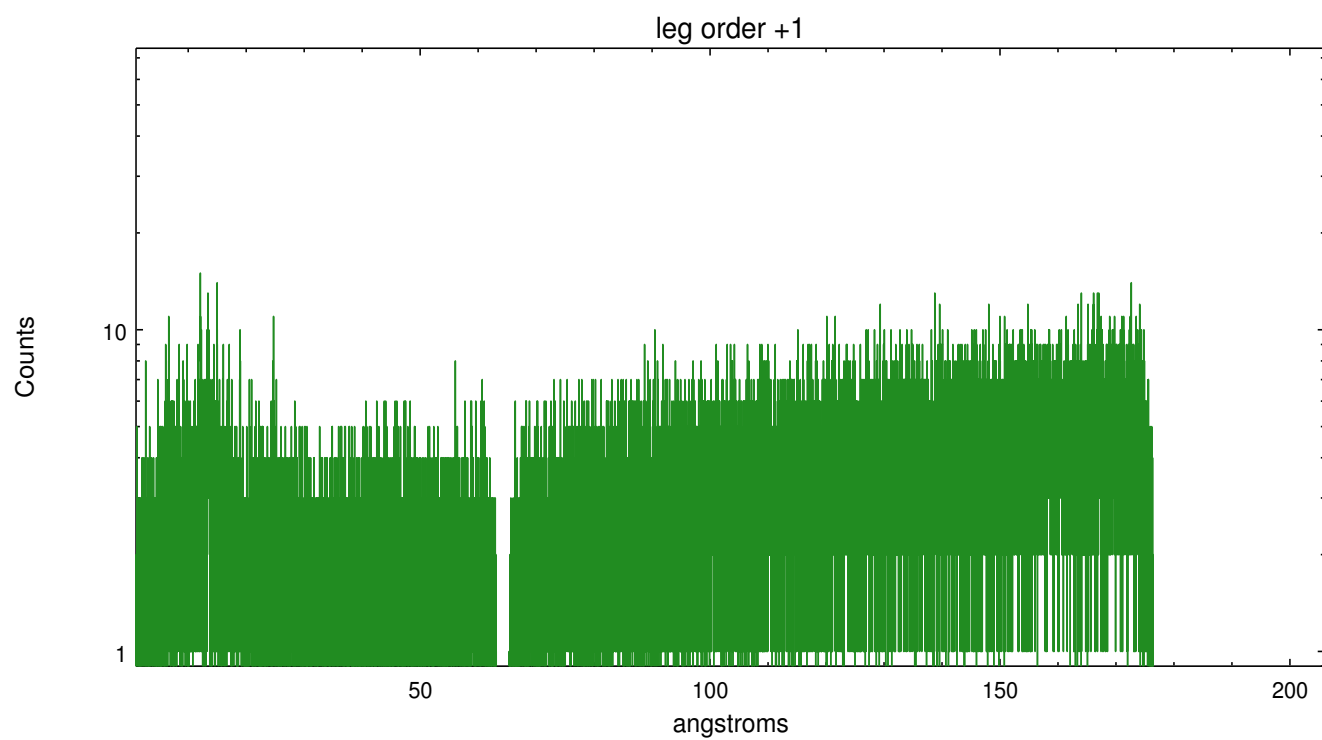
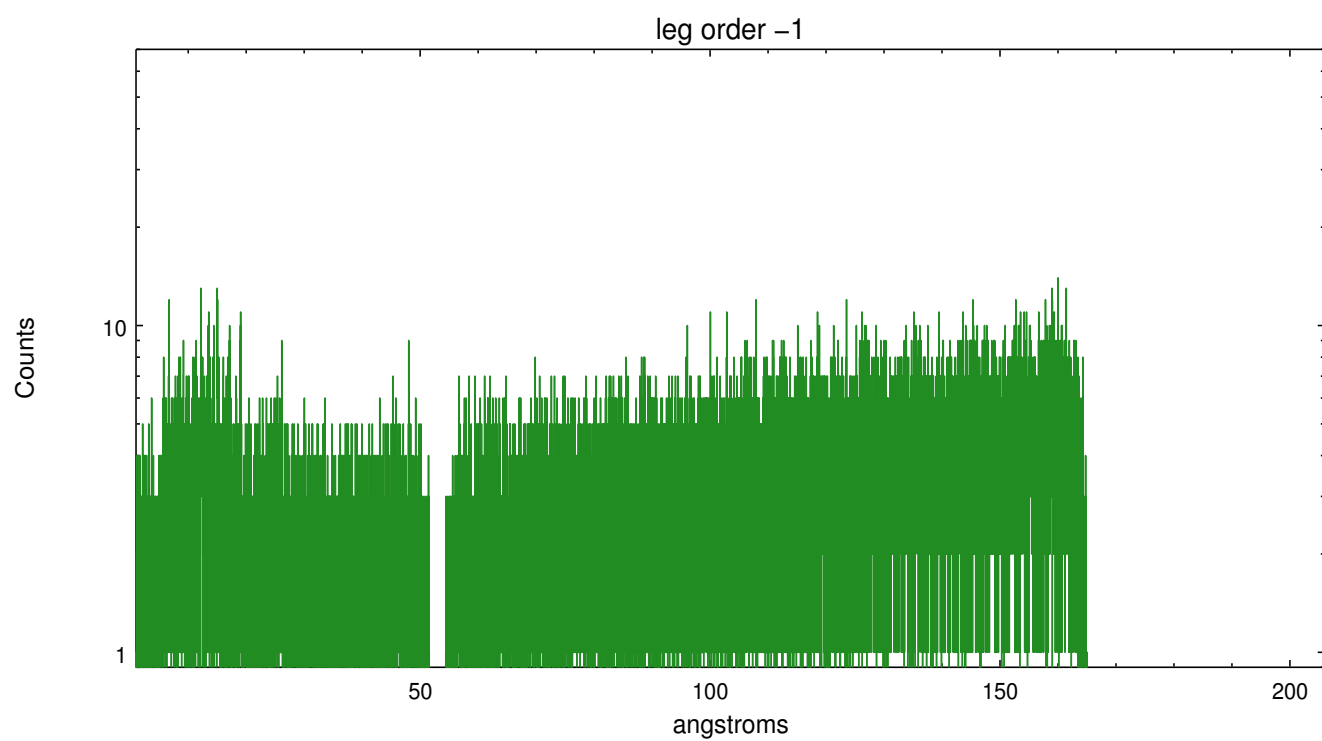


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.04.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.016101713061

A.2 Comments

Roll constraint met. === WARNING: Zeroth order selected by pipeline tools is a weighted centroid near the center of the supernova remnant but is not at the position(s) 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.