

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 16636 - L2 Version 2
Chandra X-Ray Center

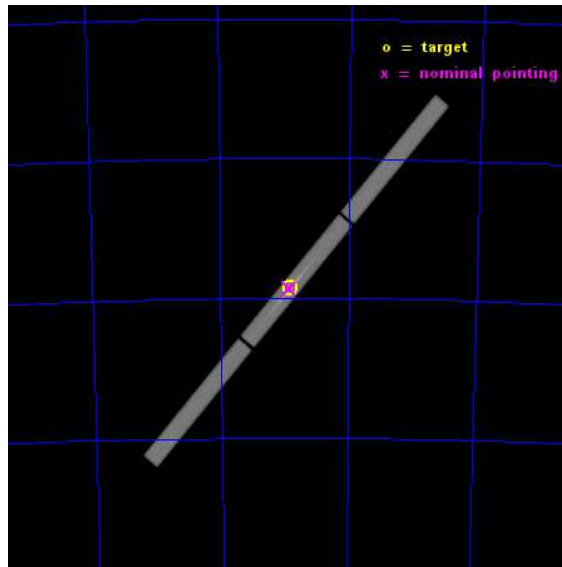
L2 Processing Date : Dec 12 2014

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1 Front

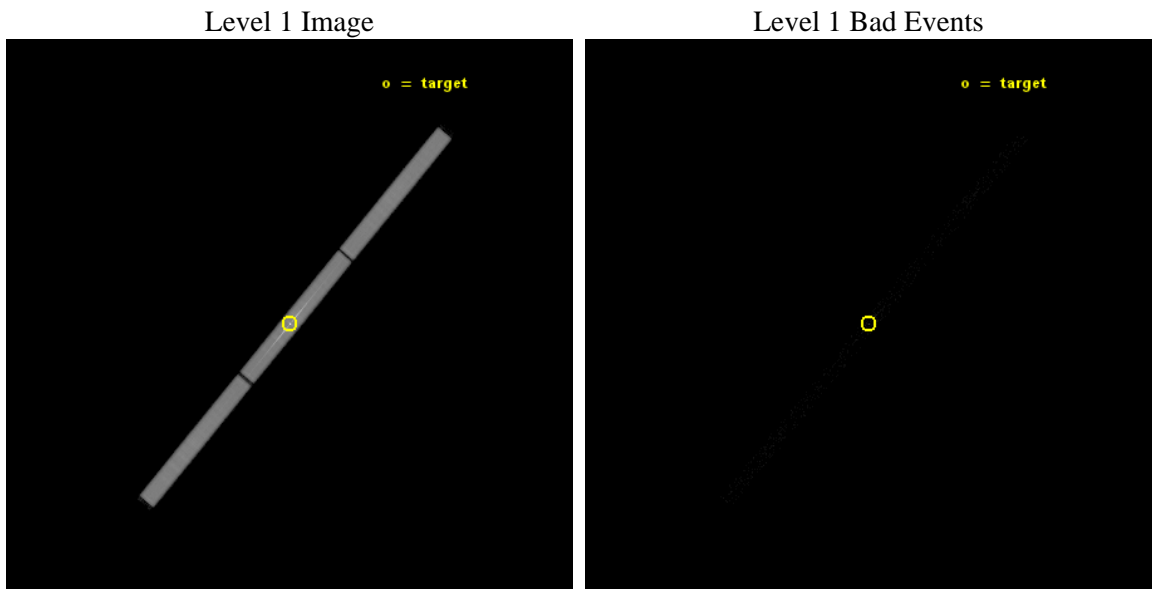
seq_num	401562	Sequence number
obs_id	16636	Observation id
title	LETGS Spectroscopy of the Ultracompact Binary 4U 1626-67	Proposal
observer	Prof. Deepto Chakrabarty	Principal investigator
object	4U 1626-67	Source name
ra_targ	248.069583	Observer's specified target RA [deg]
dec_targ	-67.461667	Observer's specified target Dec [deg]
ra_nom	248.07778207649	Nominal RA [deg]
dec_nom	-67.465460537253	Nominal Dec [deg]
roll_nom	310.07492148191	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23182.682533443	[s]
livetime	23028.699731788	Ontime multiplied by DTCOR
l2events	1330181	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	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	23182.682533443	[s]
caldsver	4.6.4	 	l1events	1770093	Number of level 1 events
date	2014-12-12T20:28:11	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	2	Processing version of data	zo_pos	(32859.20, 32884.30)	src1a sky pixel position

2.1.3 Events

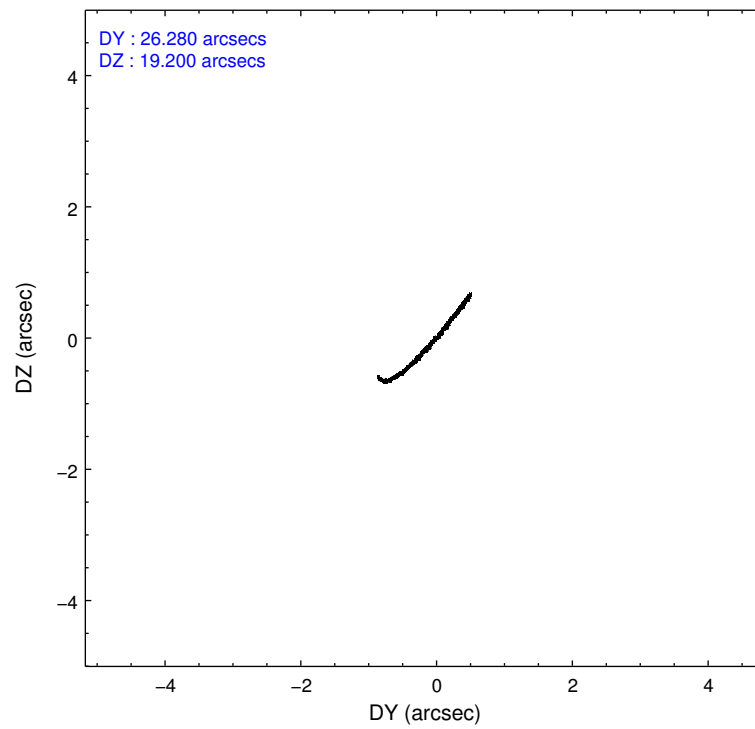
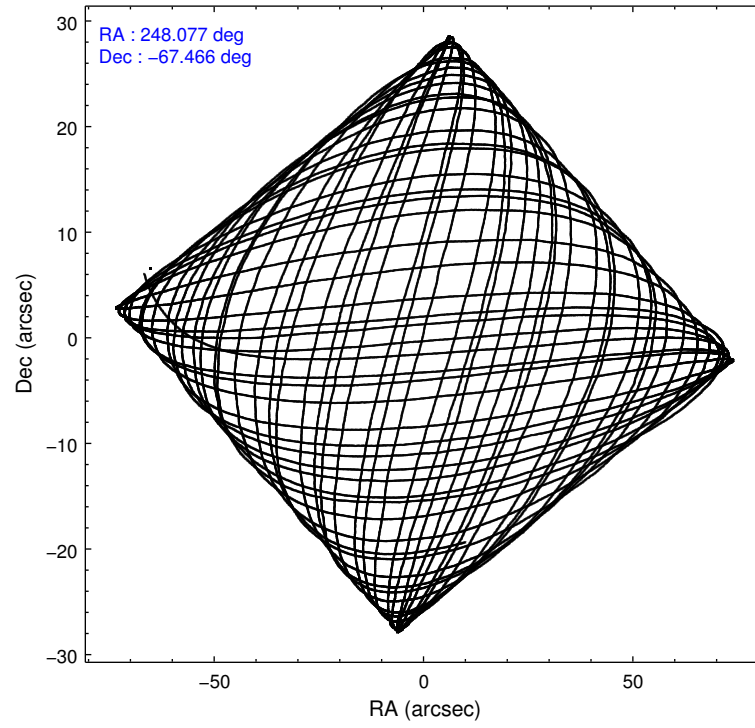
Level 1 Events

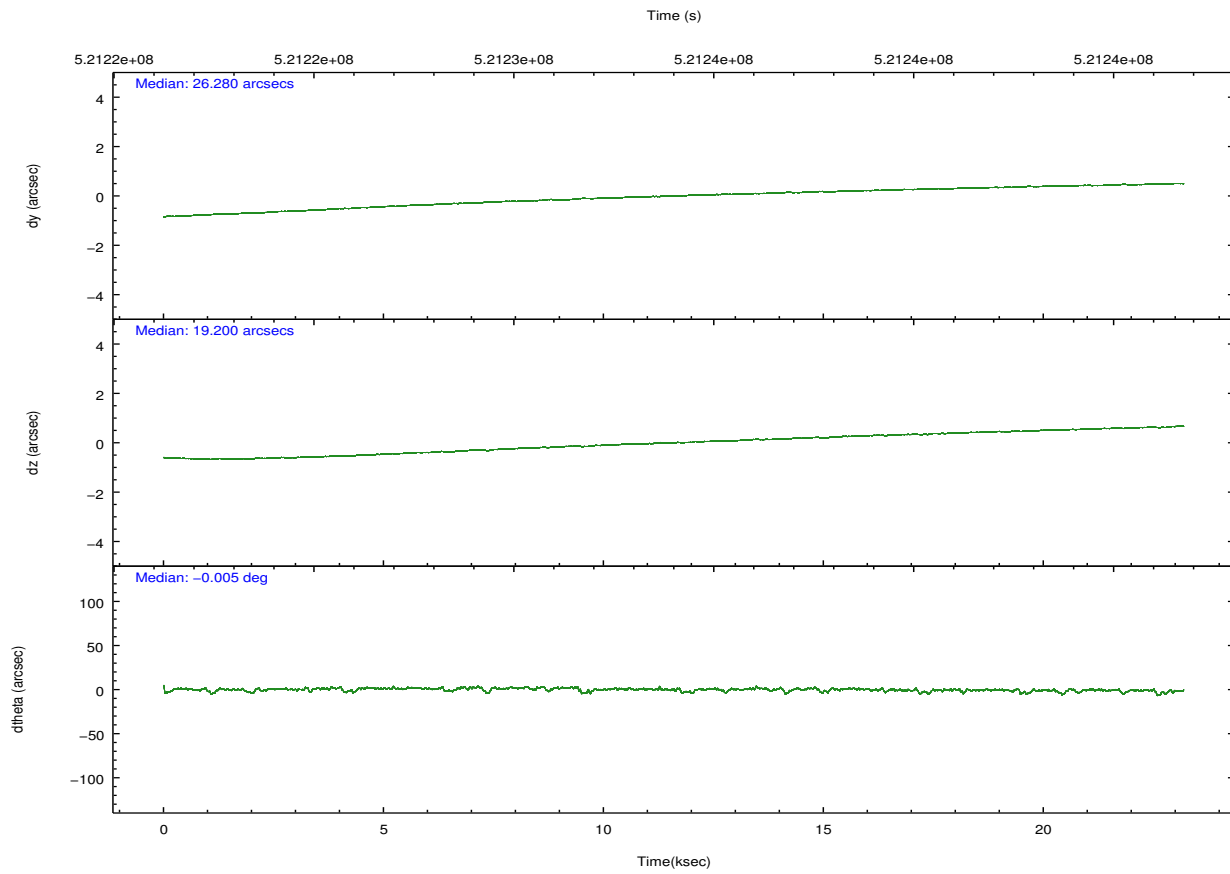
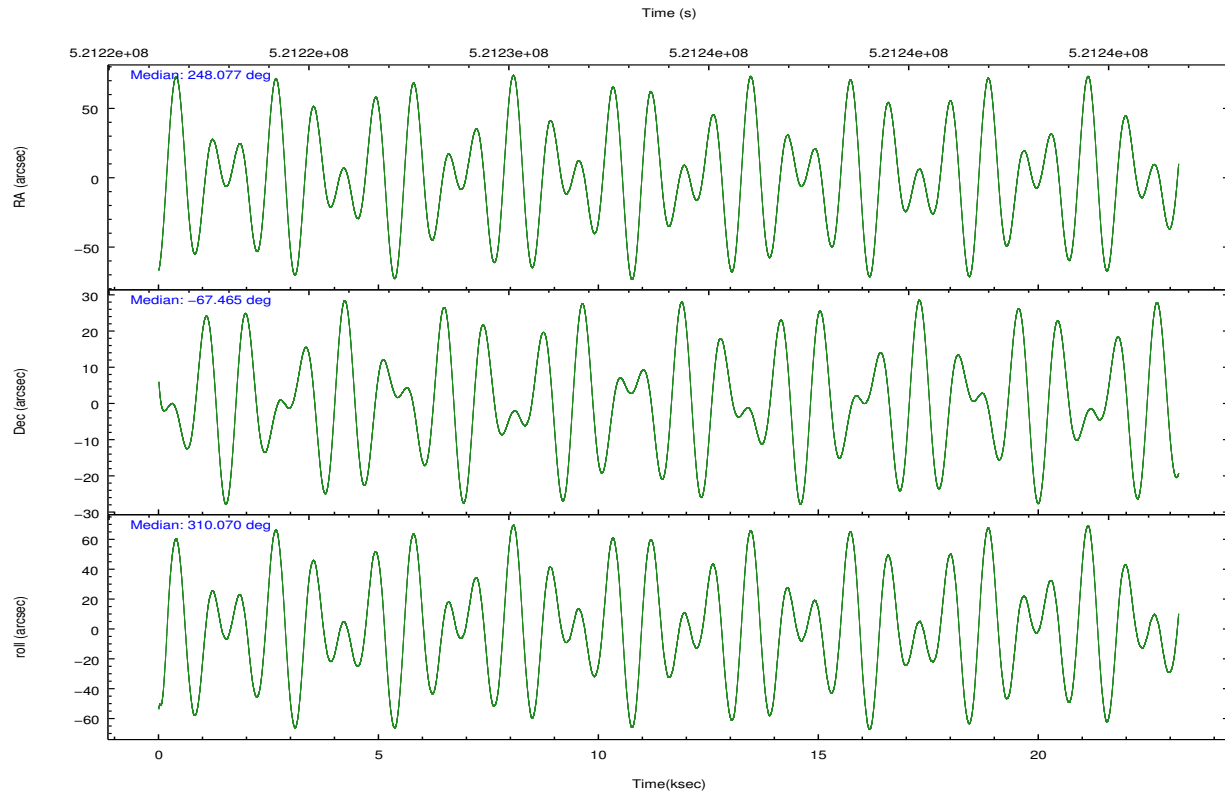
	segment 1	segment 2	segment 3
level 1 events	559310	650241	560542
rejected events	16685	17702	16647
rejected %	2%	2%	2%

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	248.005864	248.0777820764874			
[deg] Pointing Dec	-67.456936	-67.46546053725254			
[deg] Pointing Roll	309.941150	310.0749214819107			
[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)	521222593.184000	521221735.03038			
Observation start date	2014-07-08T16:02:06	2014-07-08T15:48:55			
[s] Observation end time (MET)	521245593.184000	521246670.20676			
Observation end date	2014-07-08T22:25:26	2014-07-08T22:44:30			

2.3 Aspect



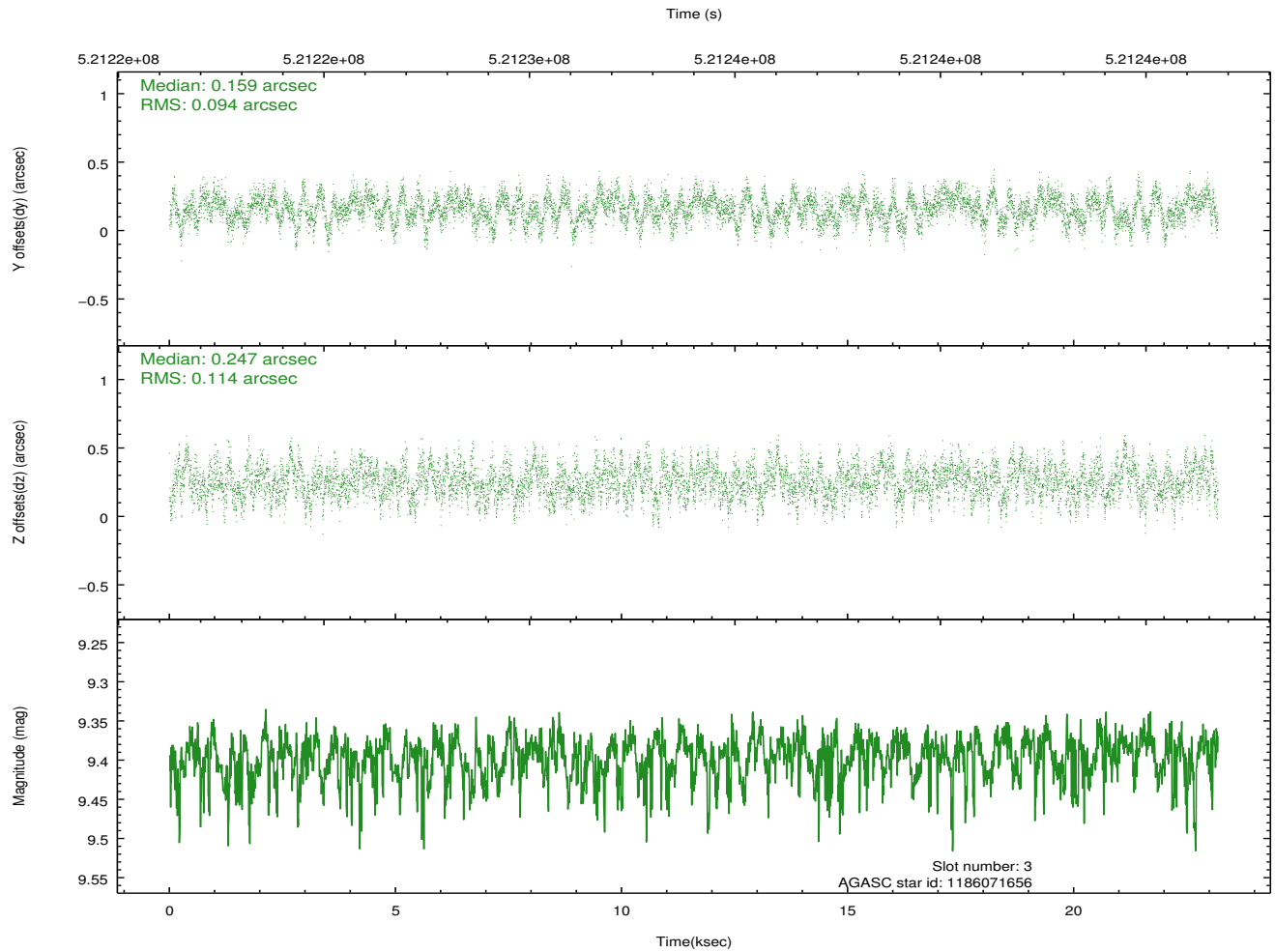
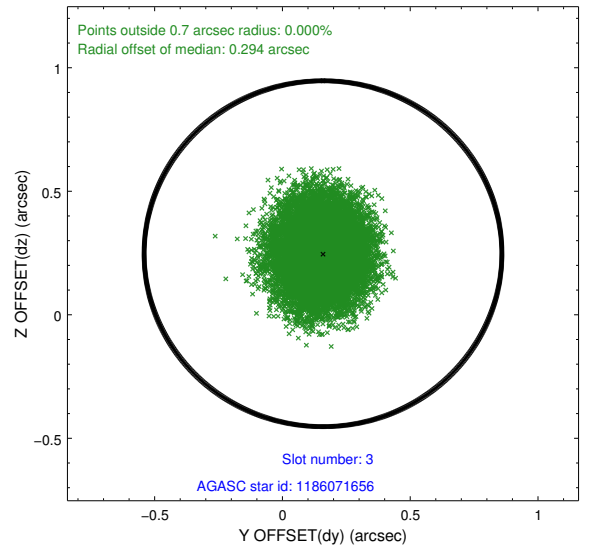
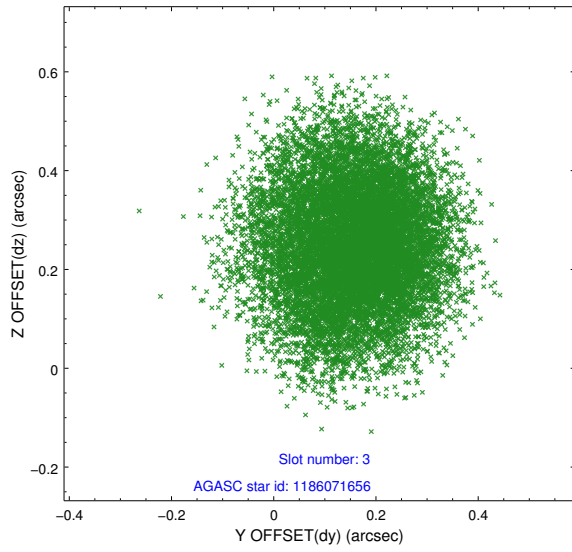


Slot Statistics

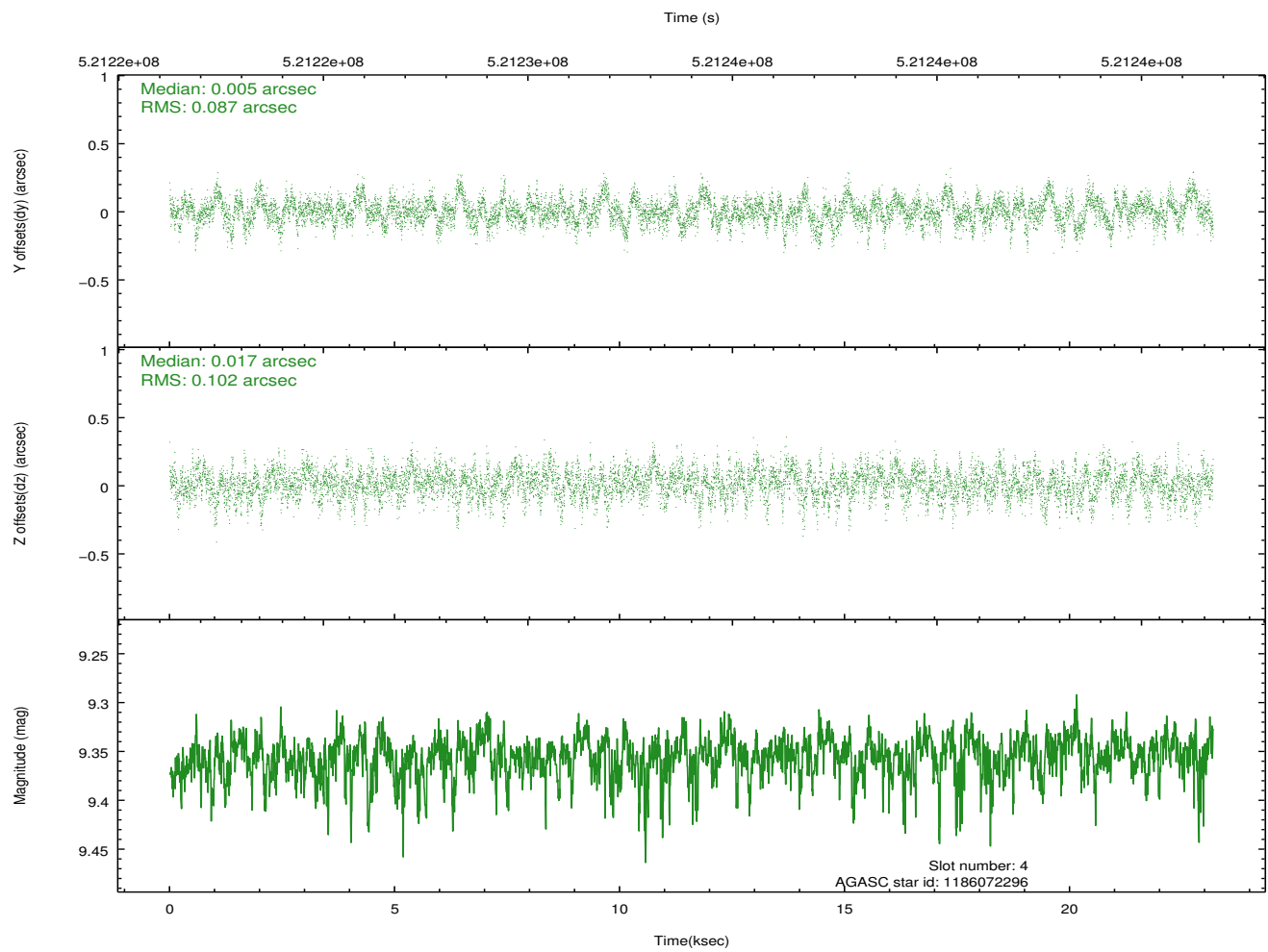
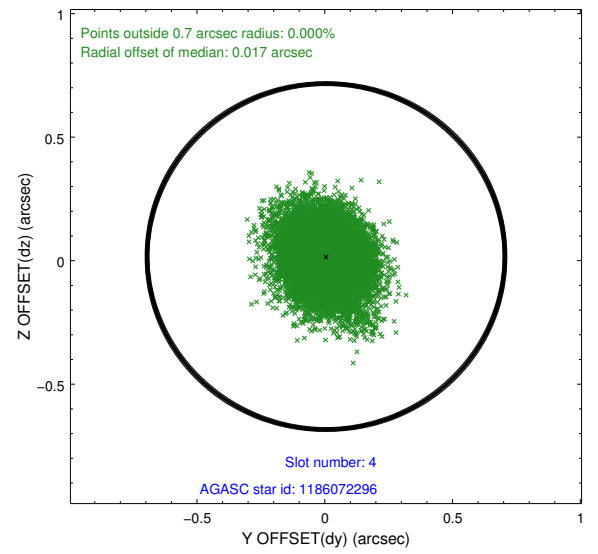
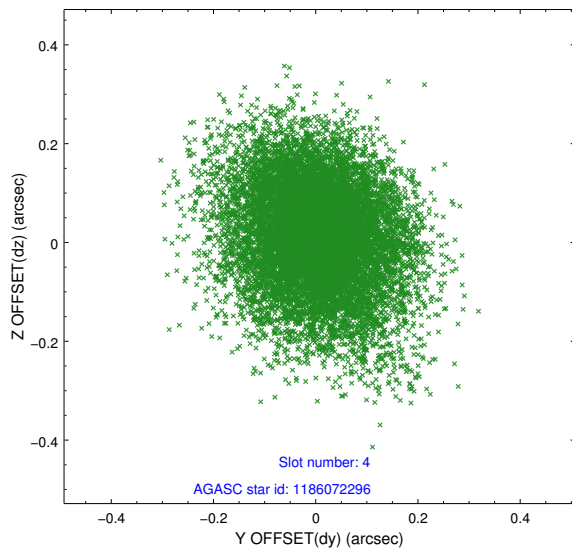
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-2	6.95	5655	0.213	-0.147	0.040	0.063	0.000000	0.000000	1218.90	-460.79
1	FID		HRC-S-3	6.99	5654	-0.156	-0.065	0.015	0.040	0.000000	0.000000	-1183.67	561.32
2	FID		HRC-S-4	6.91	5654	0.348	-0.085	0.034	0.053	0.000000	0.000000	1217.38	564.09
3	GUIDE	used	1186071656	9.40	11306	0.159	0.247	0.161	0.250	247.561655	-67.321127	-767.88	-160.97
4	GUIDE	used	1186072296	9.35	11306	0.005	0.017	0.142	0.235	247.909553	-67.035246	-1250.23	870.79
5	GUIDE	used	1186076360	8.46	11304	-0.167	-0.310	0.111	0.180	248.266100	-67.434021	168.31	328.20
6	GUIDE	used	1215569992	9.25	11309	-0.155	-0.214	0.143	0.238	249.398538	-67.627995	1713.87	1054.12
7	GUIDE	used	1215570568	8.41	11305	0.155	0.253	0.103	0.178	246.859352	-67.889721	209.66	-2200.41

2.4 Star Slots

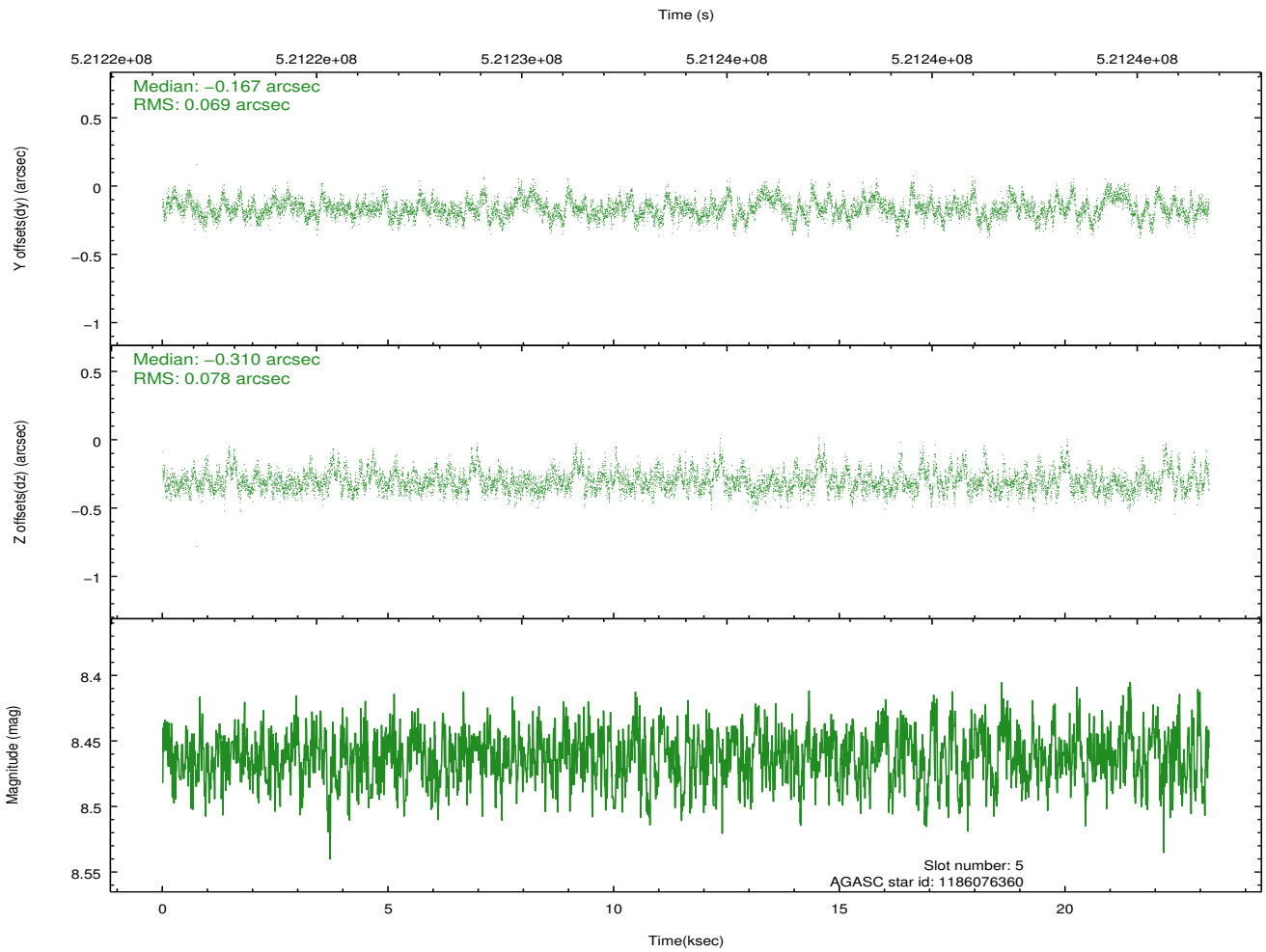
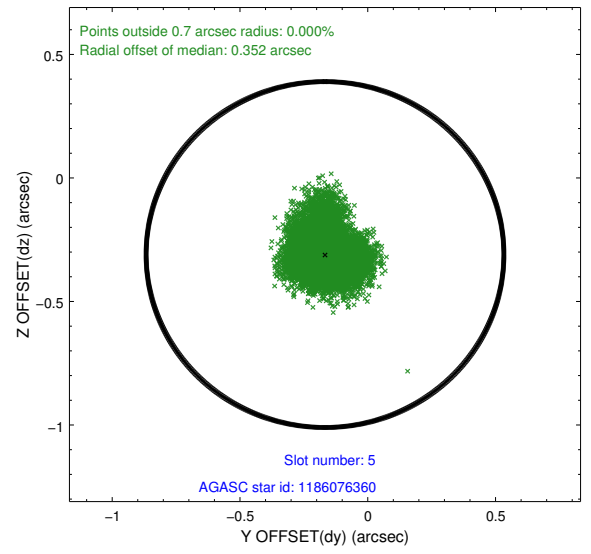
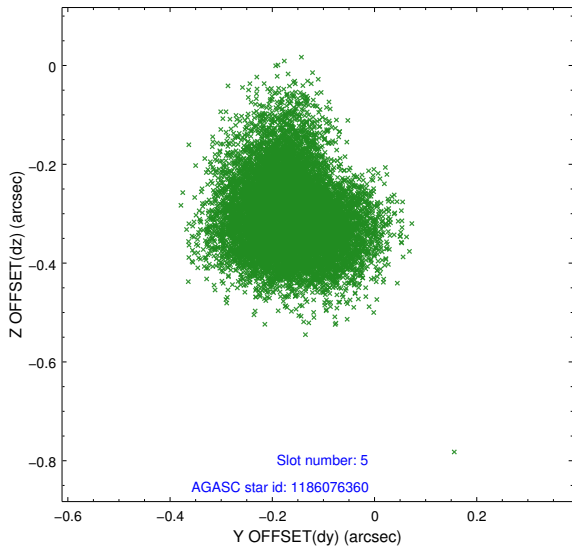
2.4.1 Slot 3



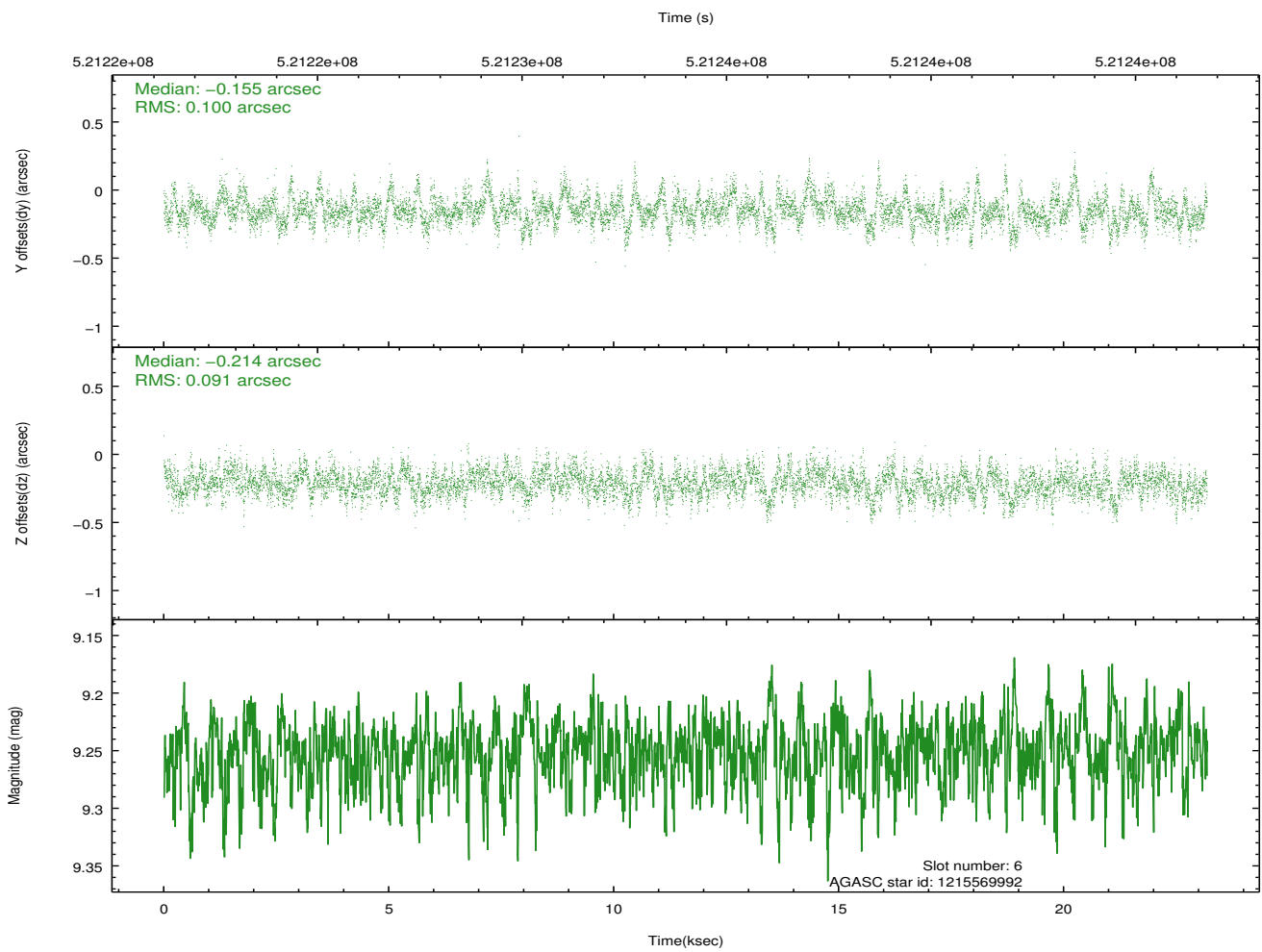
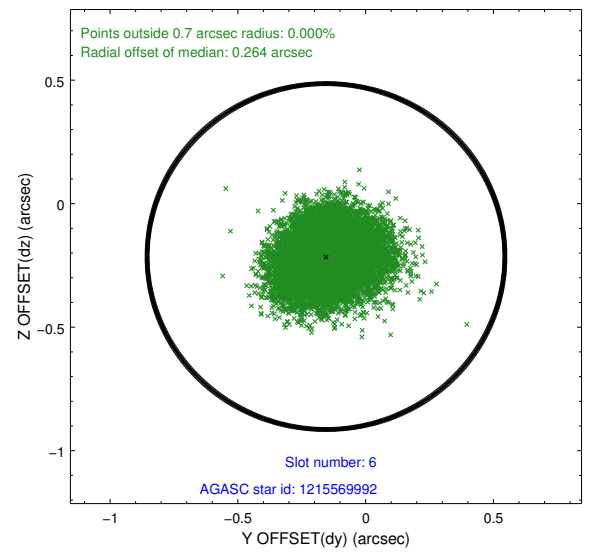
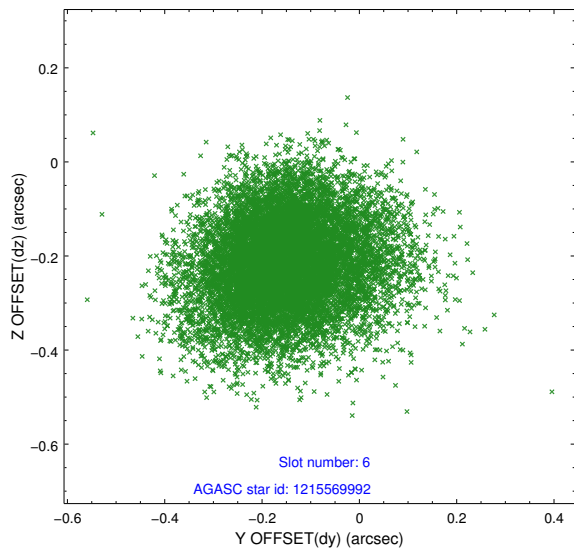
2.4.2 Slot 4



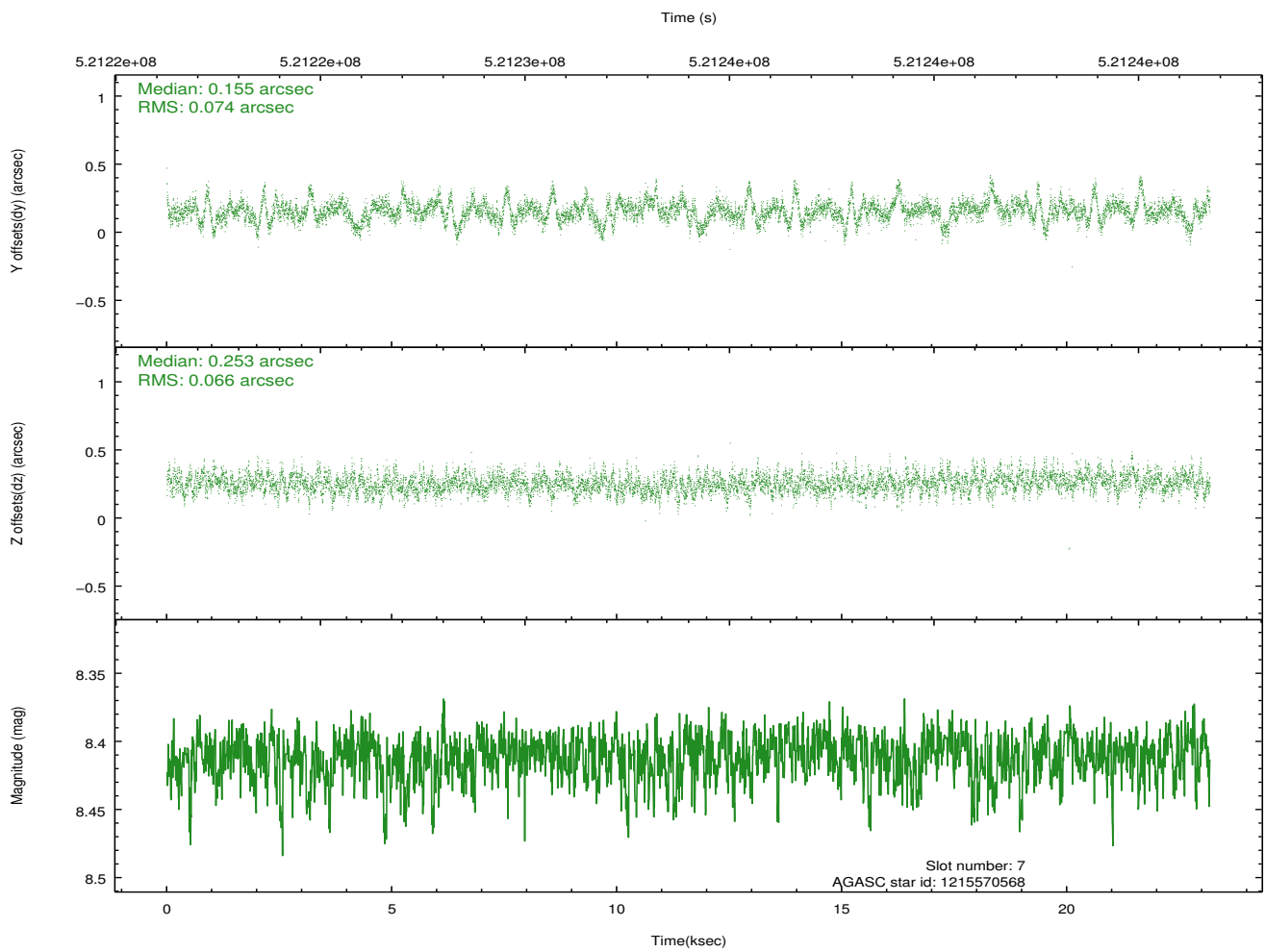
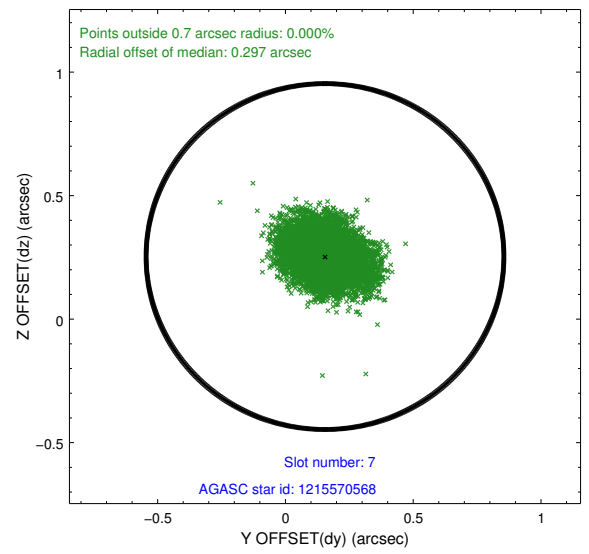
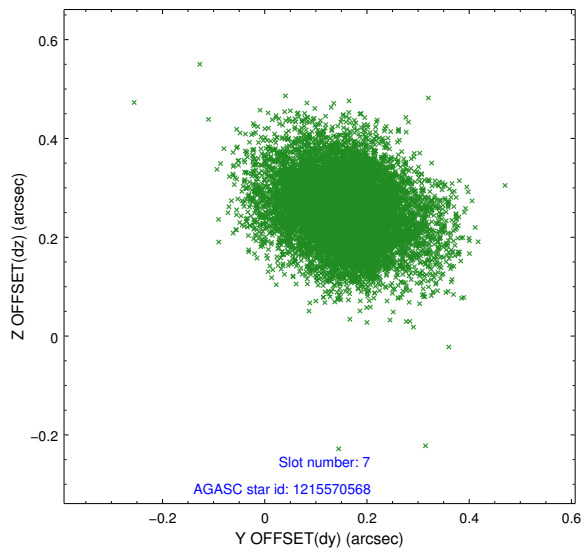
2.4.3 Slot 5



2.4.4 Slot 6

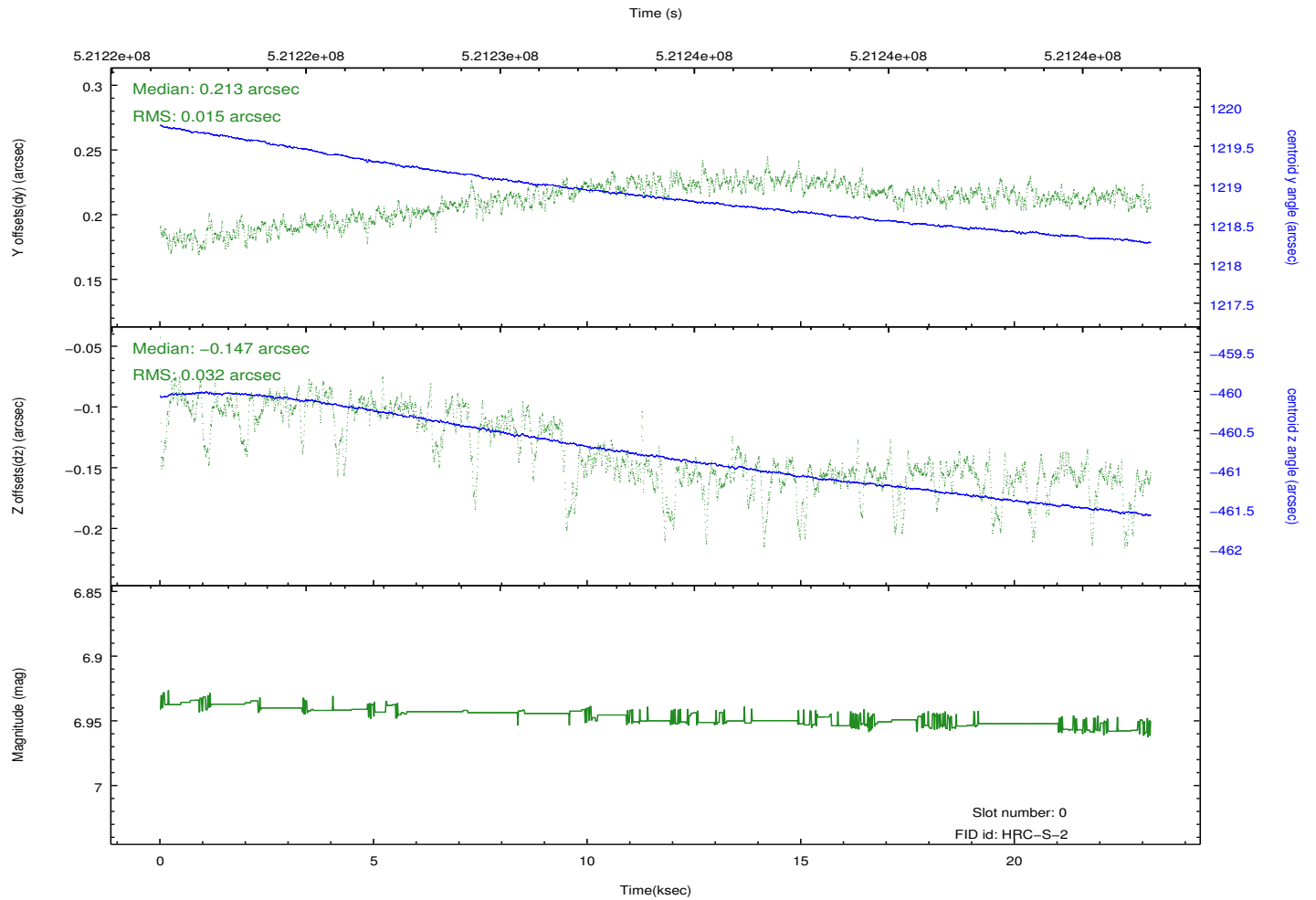
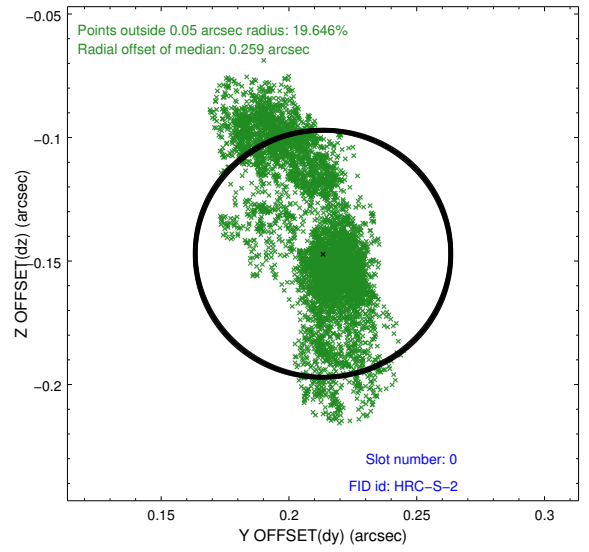
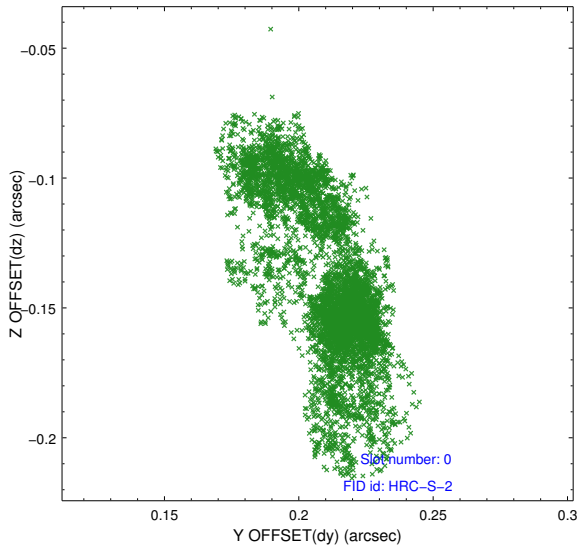


2.4.5 Slot 7

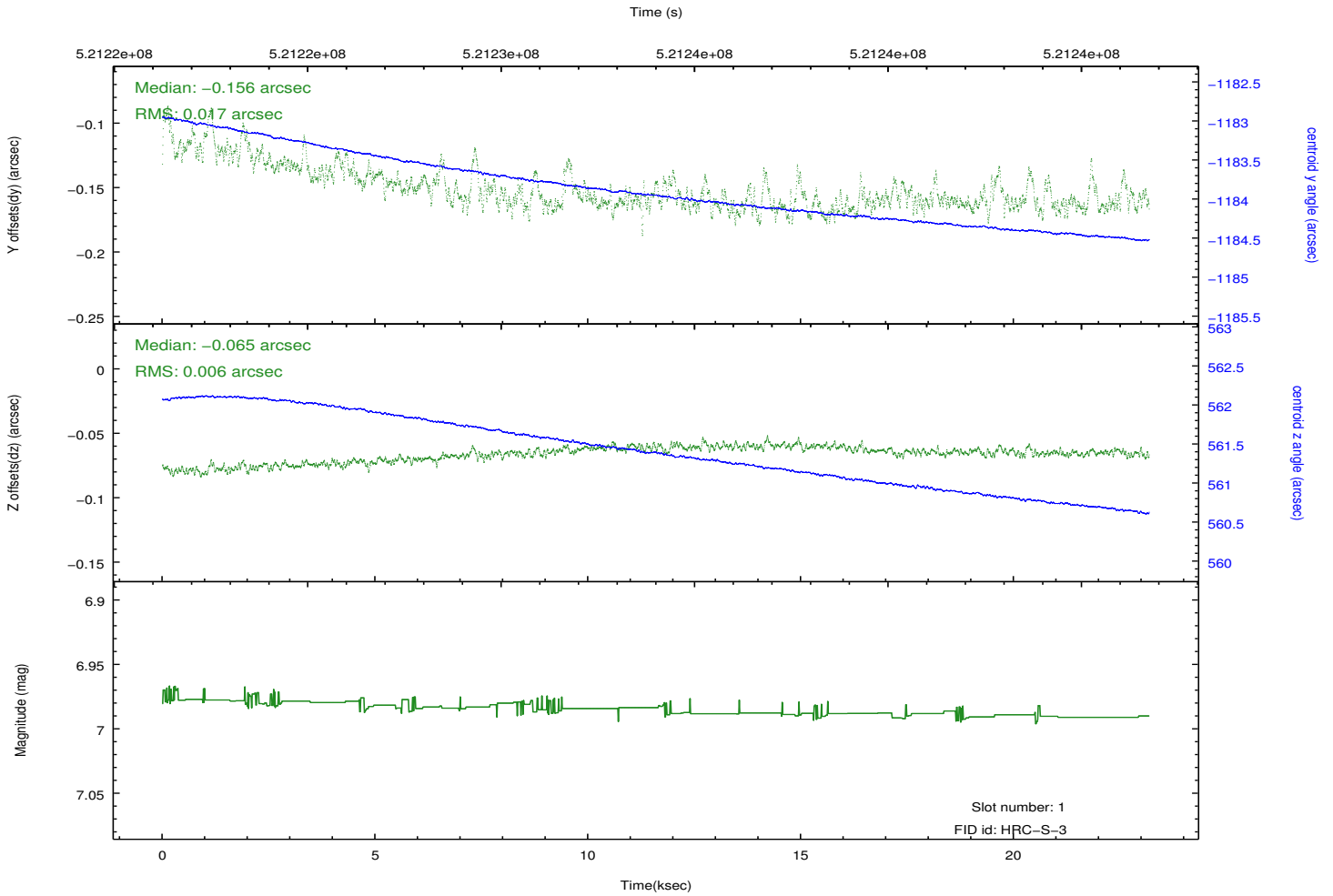
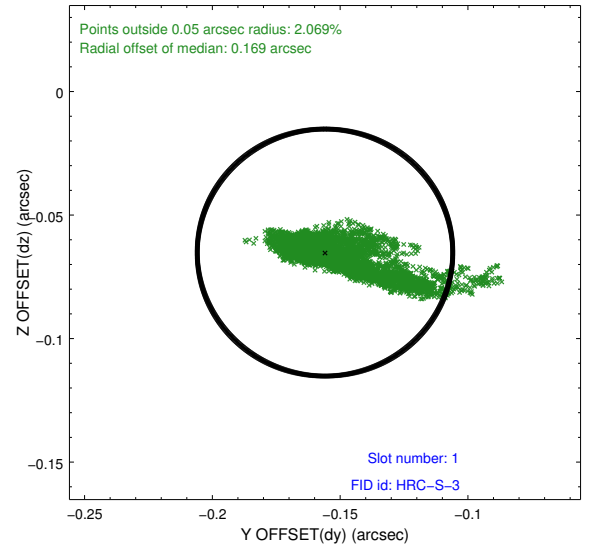
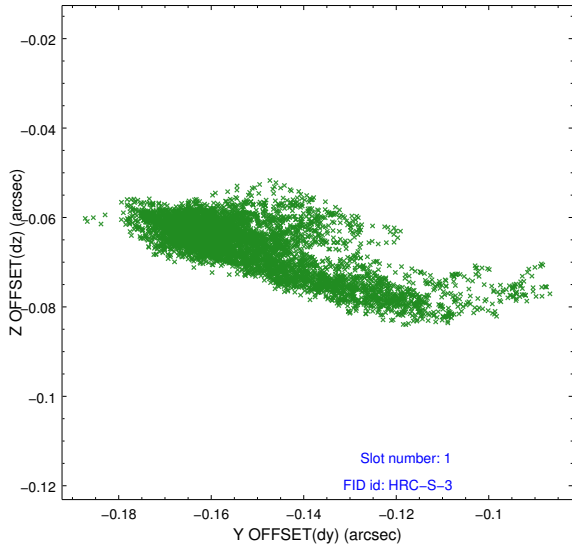


2.5 FID Slots

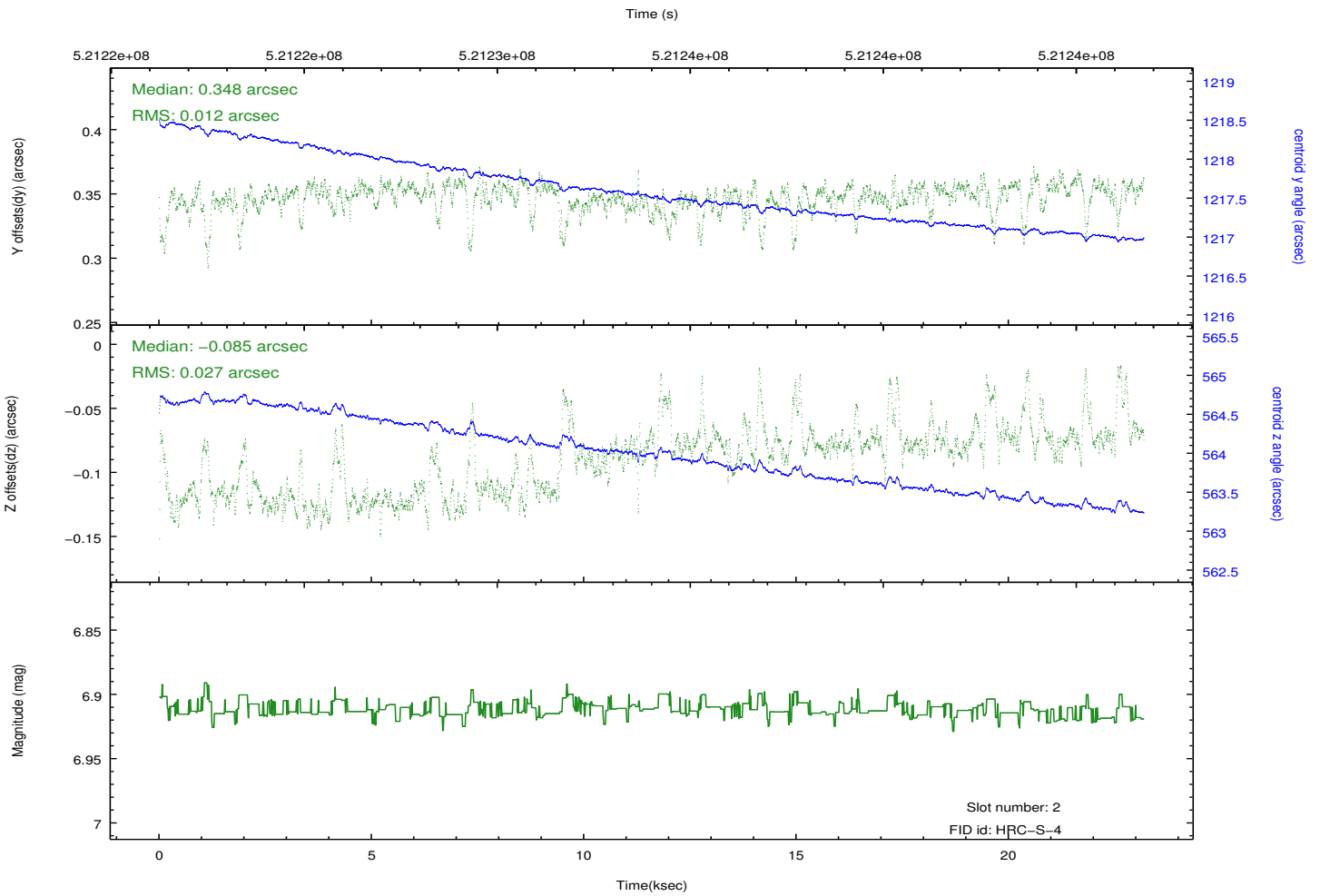
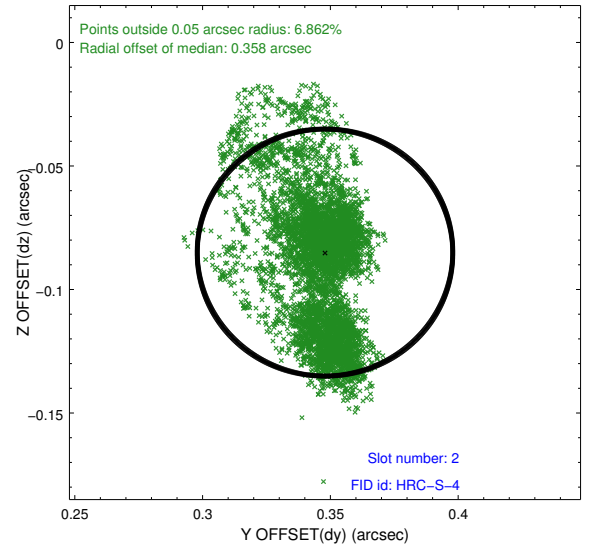
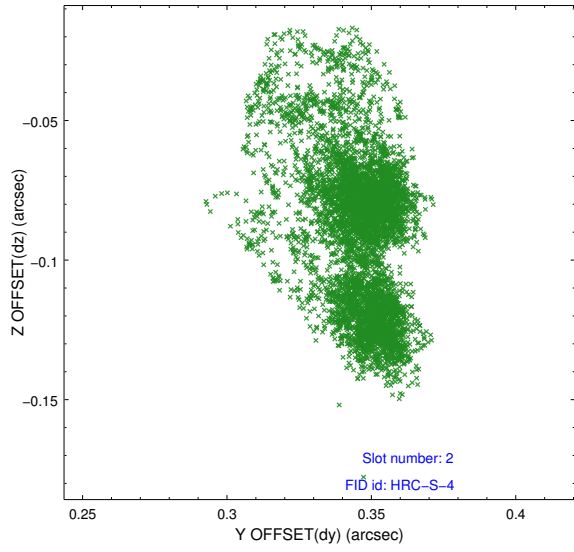
2.5.1 Slot 0



2.5.2 Slot 1

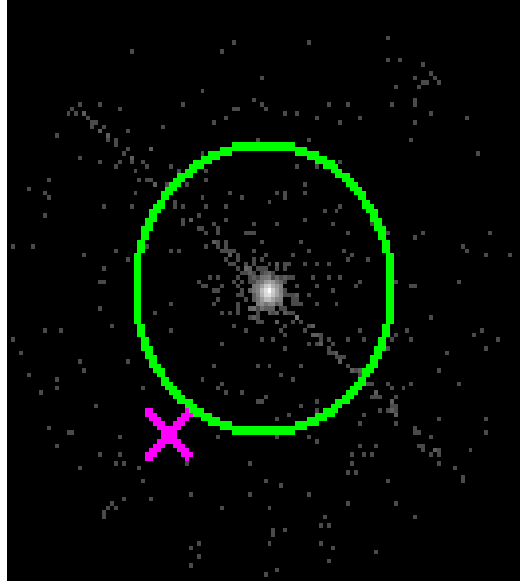


2.5.3 Slot 2

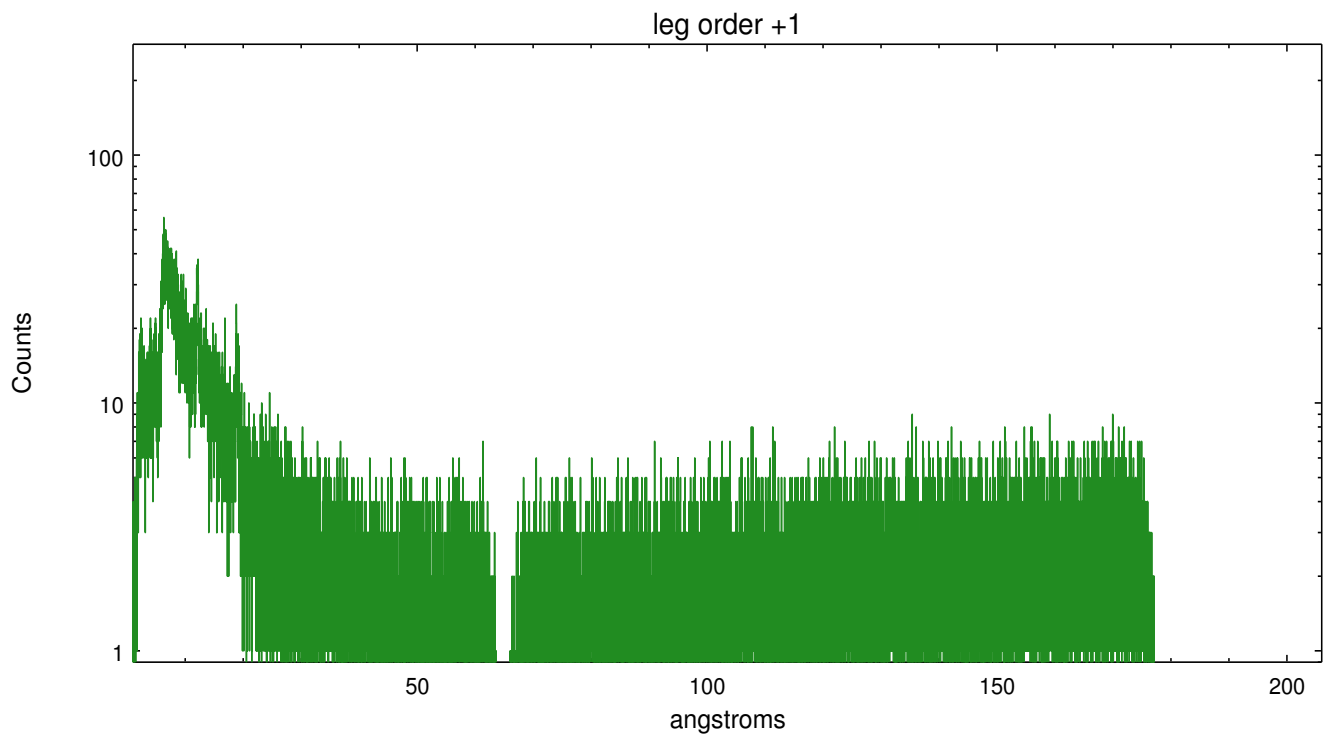
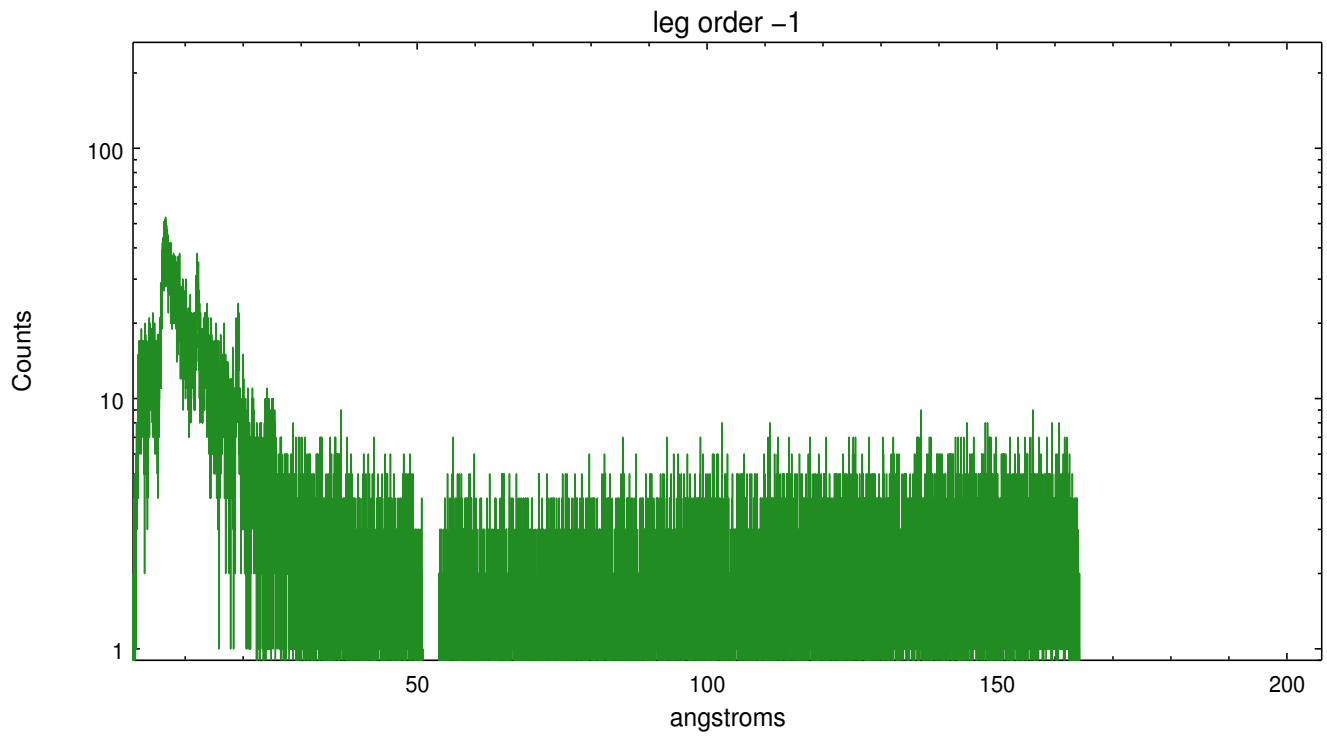


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.11.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.182682533443

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.