

V&V Reference Report

L2 ASCDS Version : 10.4.3

Observation 18414 - L2 Version 1
Chandra X-Ray Center

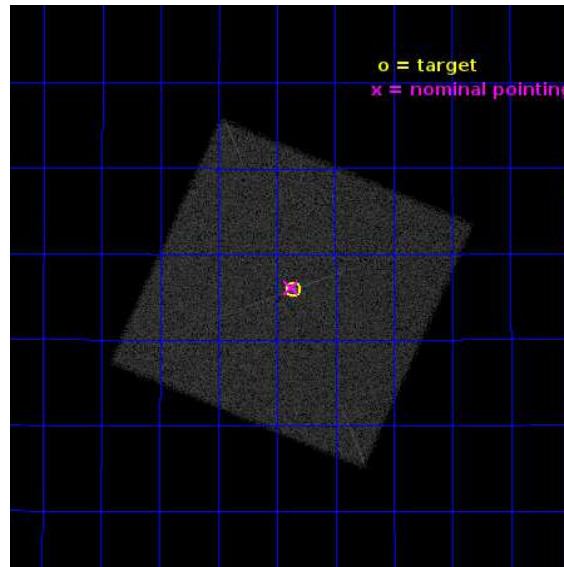
L2 Processing Date : Jan 6 2016

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1 Front

seq_num	291309	Sequence number
obs_id	18414	Observation id
title	AO-17 Calibration Observations of HZ43	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.090417	Observer's specified target RA [deg]
dec_targ	29.098306	Observer's specified target Dec [deg]
ra_nom	199.09388538759	Nominal RA [deg]
dec_nom	29.101409578596	Nominal Dec [deg]
roll_nom	68.46955097476	Nominal Roll [deg]
revision	1	Processing version of data
ontime	2186.5813741684	[s]
liveltime	2164.9838129301	Ontime multiplied by DTCOR
l2events	179387	Number of level 2 events

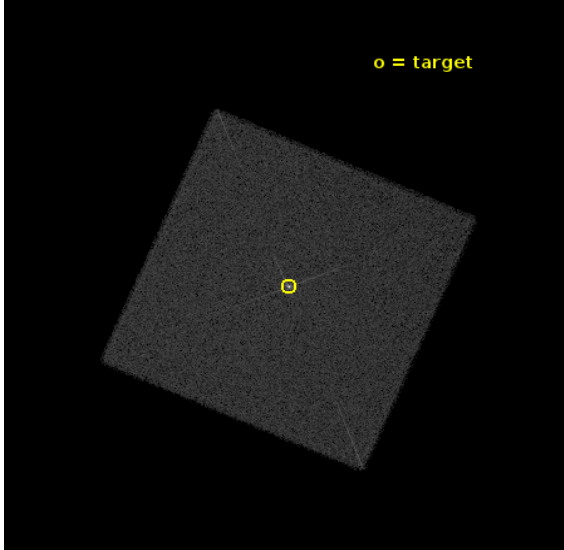


2 OBI

2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3	Processing system revision	ontime	2186.5813741684	[s]
caldbver	4.7.0	 	l1events	329694	Number of level 1 events
date	2016-01-06T11:44:49	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(16474.72, 16297.17)	src1a sky pixel position

2.1.3 Events

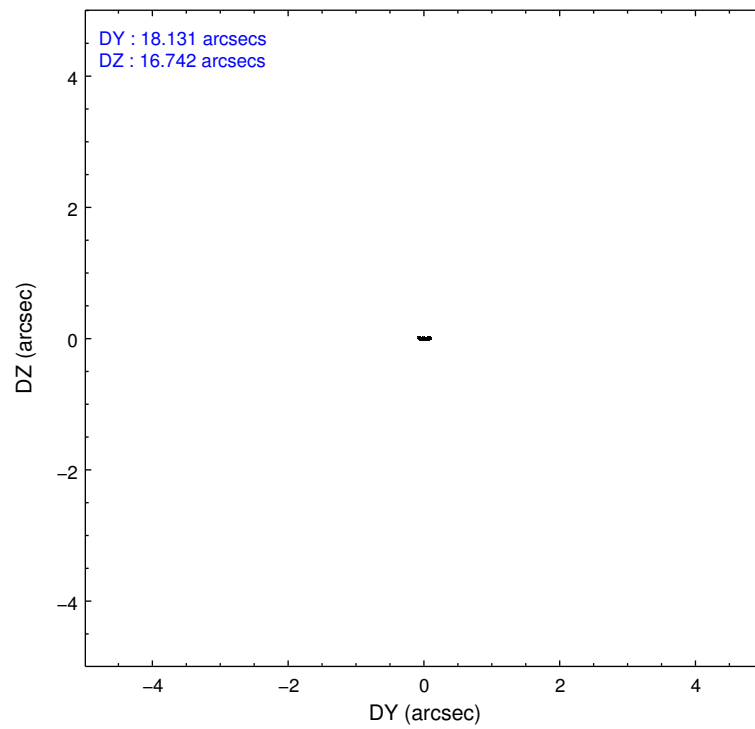
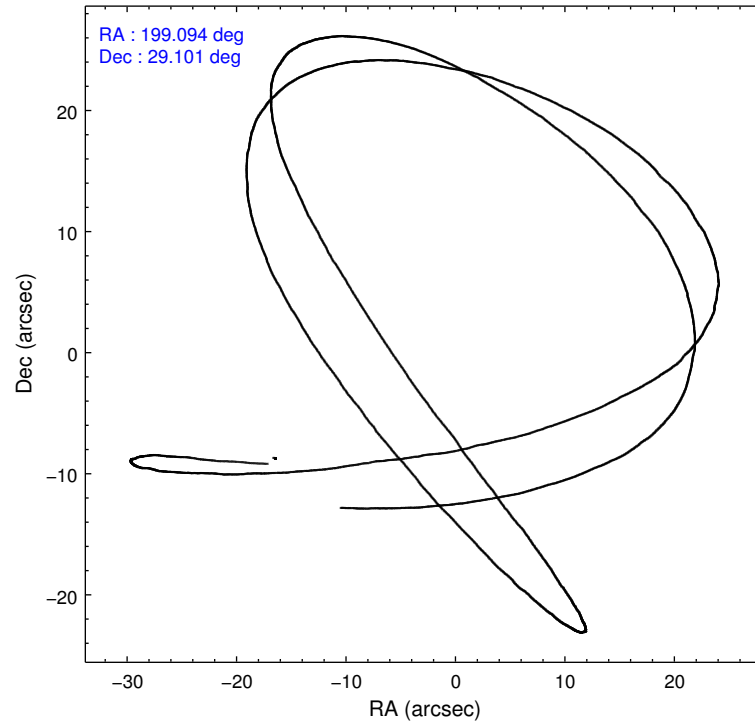
Level 1 Events

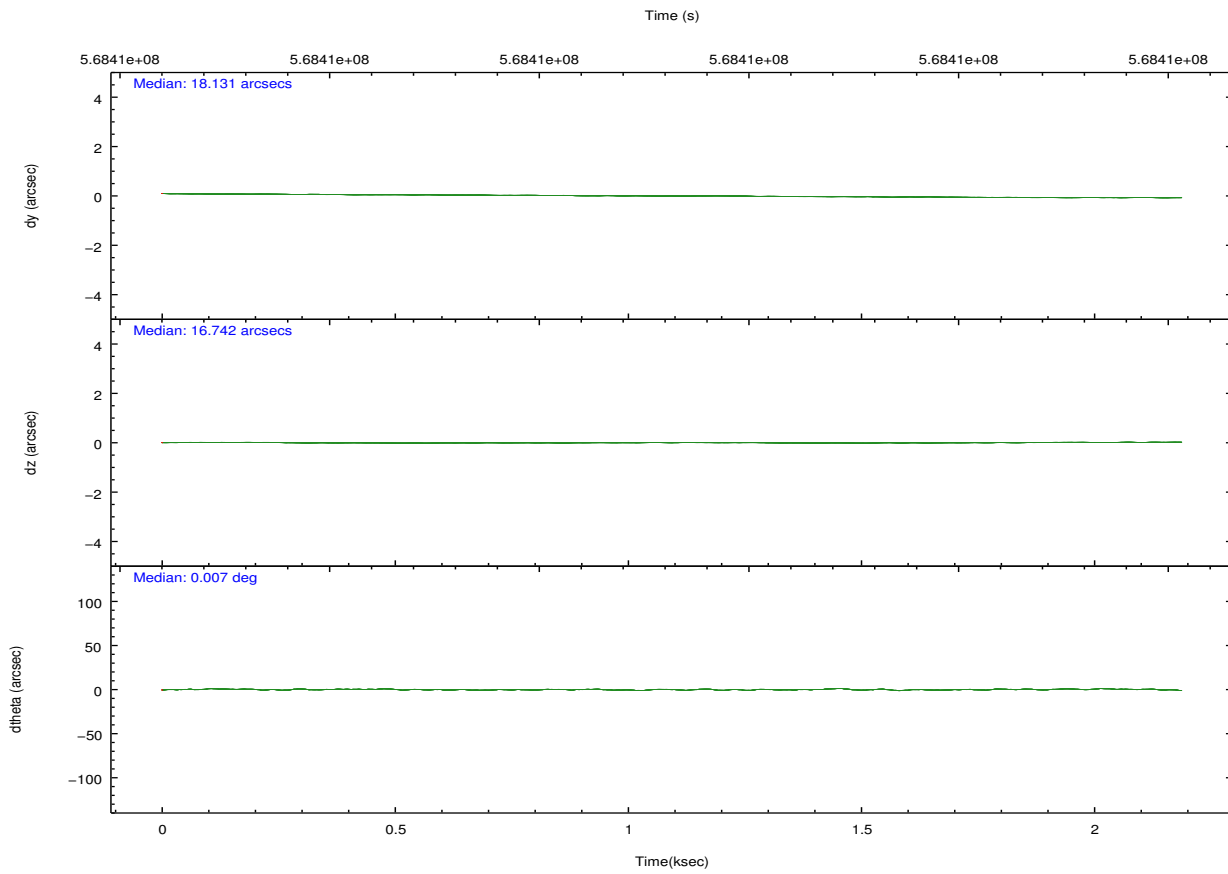
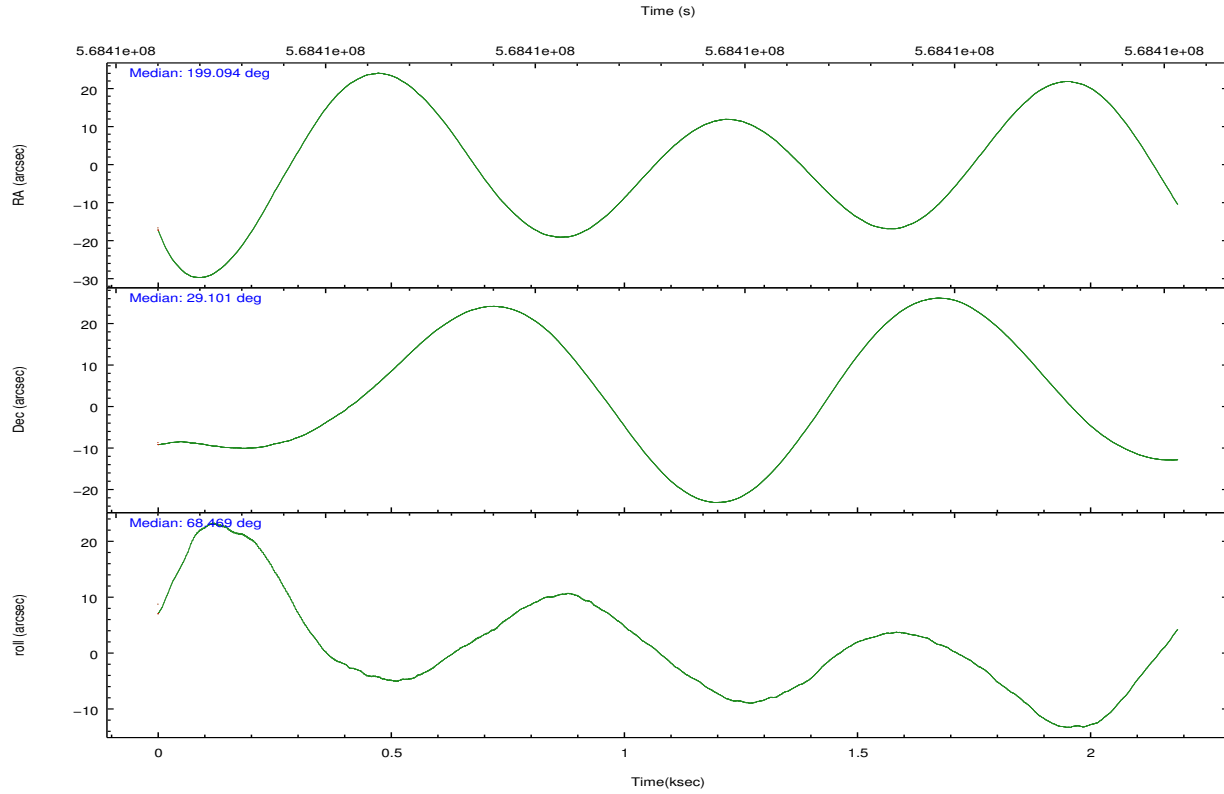
	segment 0
level 1 events	329694
rejected events	92788
rejected %	28%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-I	HRC-I	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	199.099022	199.0938853875927			
[deg] Pointing Dec	29.074582	29.10140957859571			
[deg] Pointing Roll	68.562592	68.46955097476001			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	126.985494	126.9829799899862			
[mm] SIM translation stage offset	0	0.002508901615314585			
[s] Observation start time (MET)	568409916.184000	568408982.35094			
Observation start date	2016-01-05T19:37:28	2016-01-05T19:23:02			
[s] Observation end time (MET)	568411916.184000	568412049.66361			
Observation end date	2016-01-05T20:10:48	2016-01-05T20:14:09			

2.3 Aspect



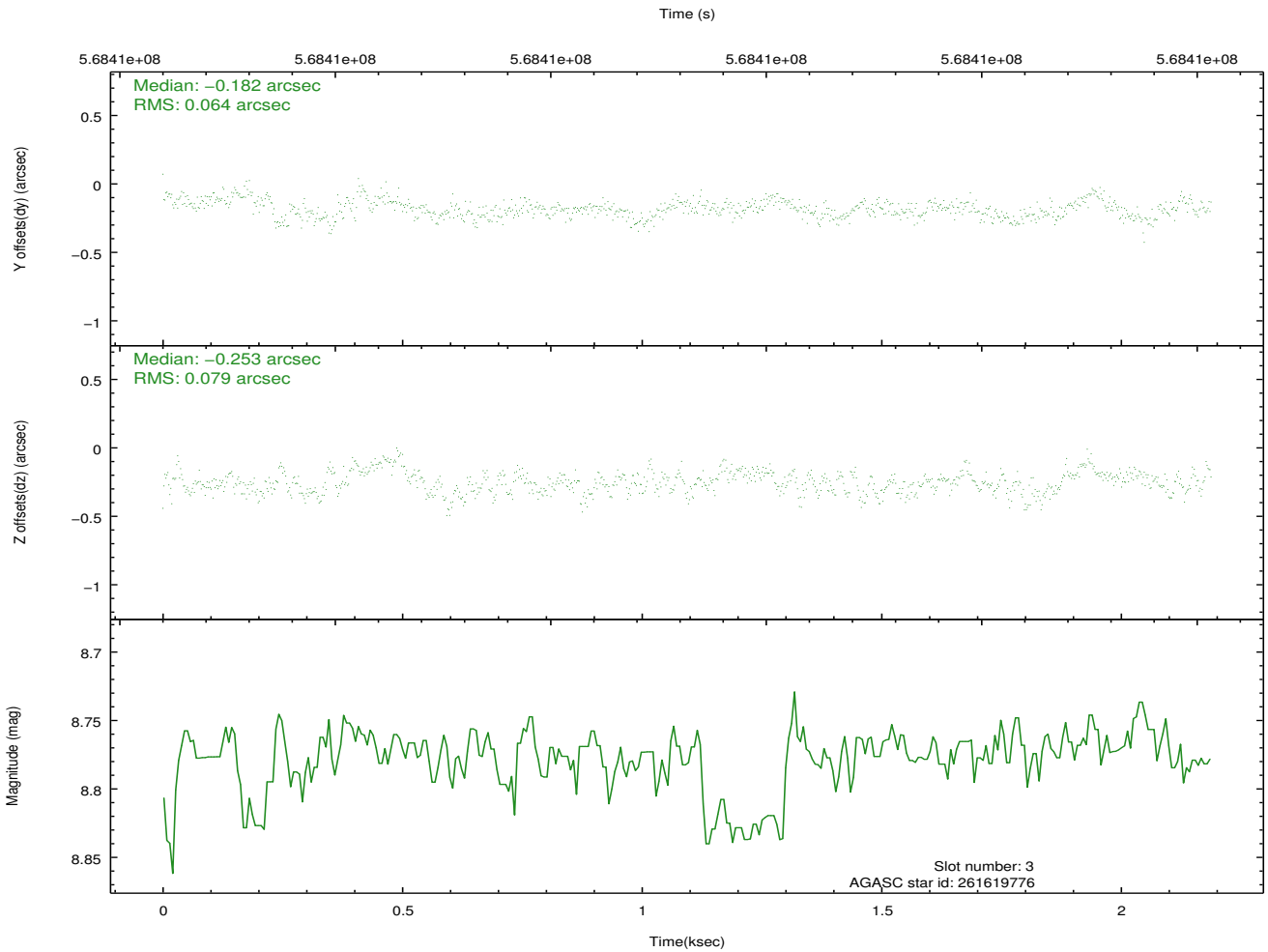
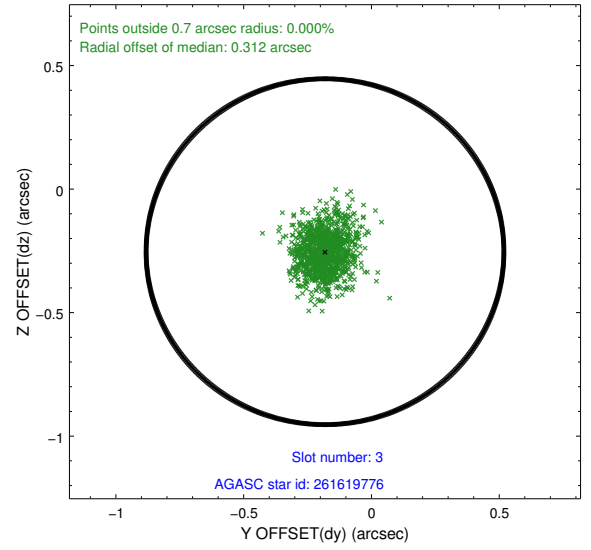
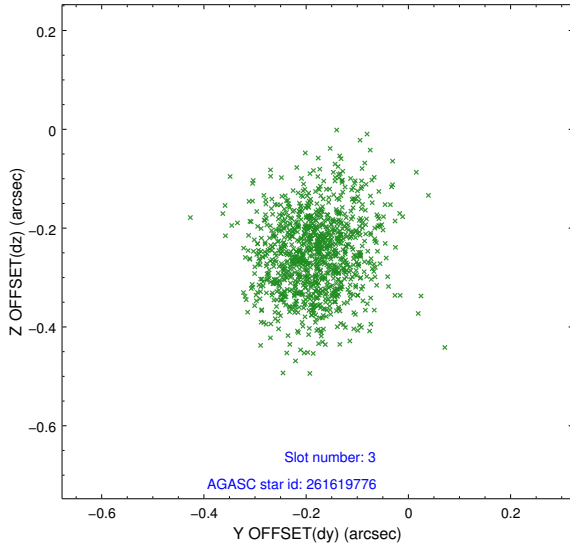


Slot Statistics

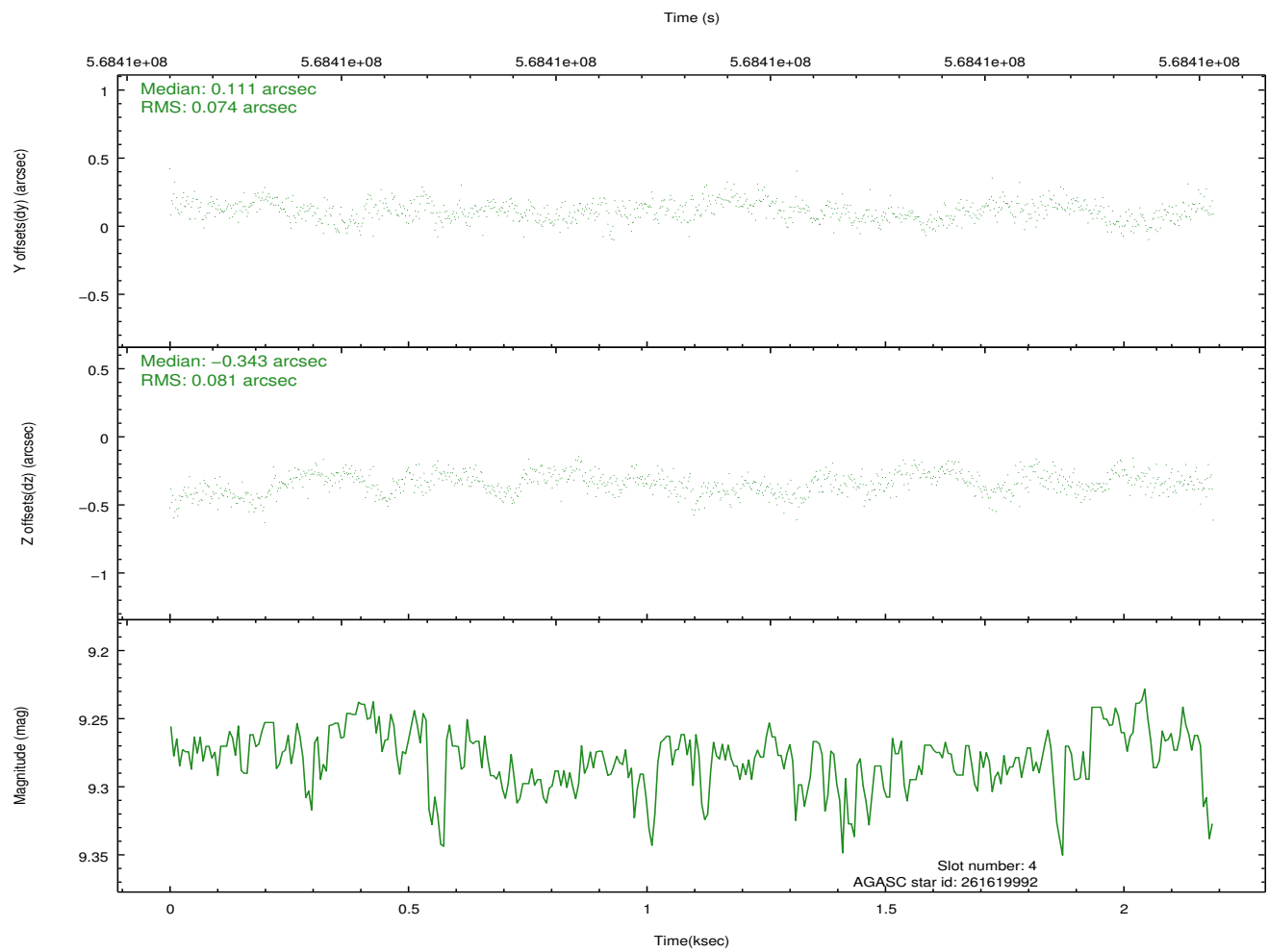
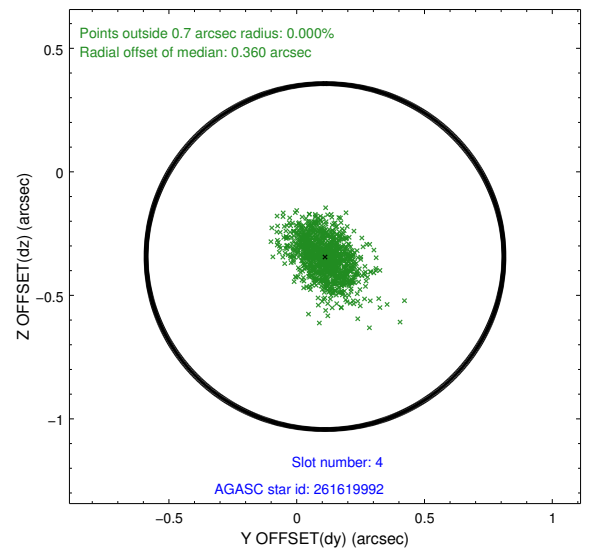
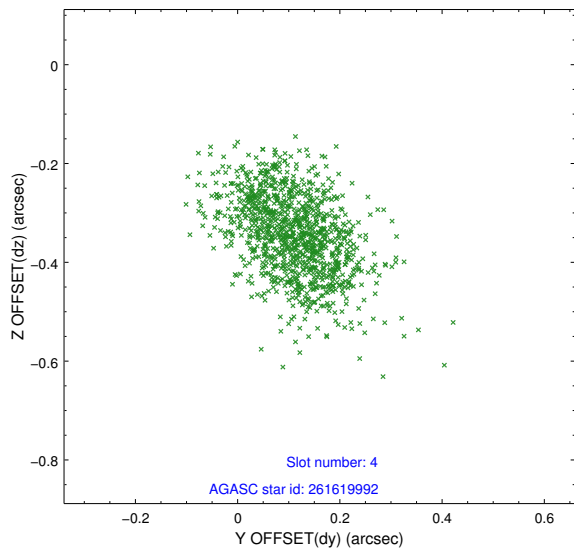
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	7.00	534	-0.164	0.023	0.007	0.011	0.000000	0.000000	-774.15	-1304.87
1	FID		HRC-I-2	7.03	534	0.344	-0.156	0.006	0.010	0.000000	0.000000	837.54	-1309.02
2	FID		HRC-I-3	7.09	534	-0.061	0.043	0.006	0.010	0.000000	0.000000	-1201.02	997.25
3	GUIDE	used	261619776	8.78	1068	-0.182	-0.253	0.106	0.178	198.654383	29.401174	586.78	1728.33
4	GUIDE	used	261619992	9.28	1068	0.111	-0.343	0.115	0.191	198.395553	28.647634	-2236.11	1511.59
5	GUIDE	used	261621400	6.97	1068	0.199	-0.202	0.095	0.166	198.901600	28.741982	-1343.70	145.25
6	GUIDE	used	261623040	9.10	1067	-0.529	-0.492	0.118	0.193	198.792686	29.757643	1938.51	1790.91
7	GUIDE	used	261623624	9.09	1062	0.396	1.302	0.147	0.237	199.611555	28.454113	-1480.74	-2321.28

2.4 Star Slots

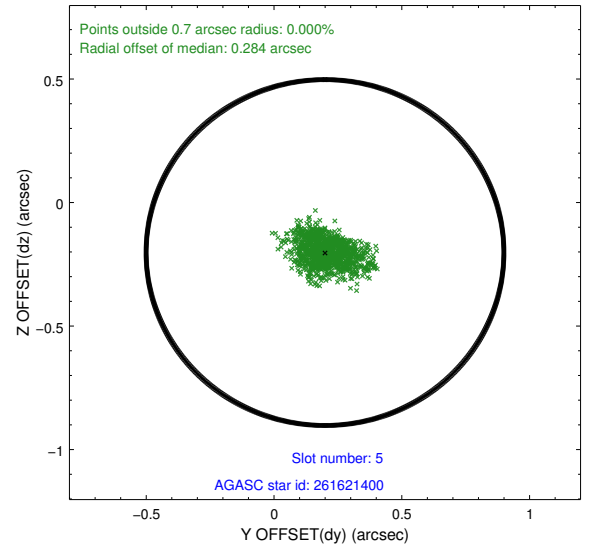
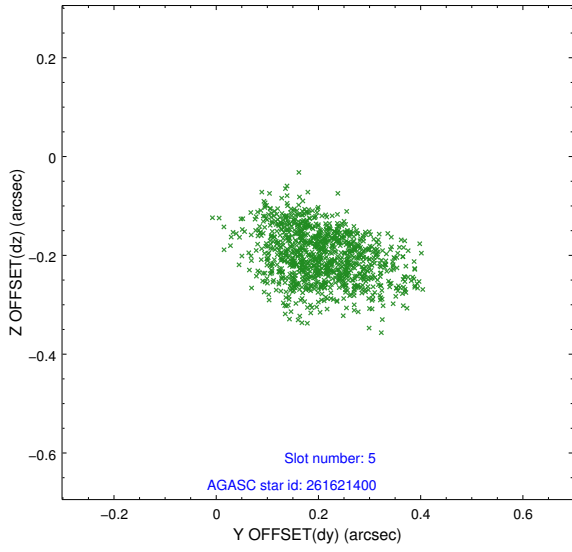
2.4.1 Slot 3



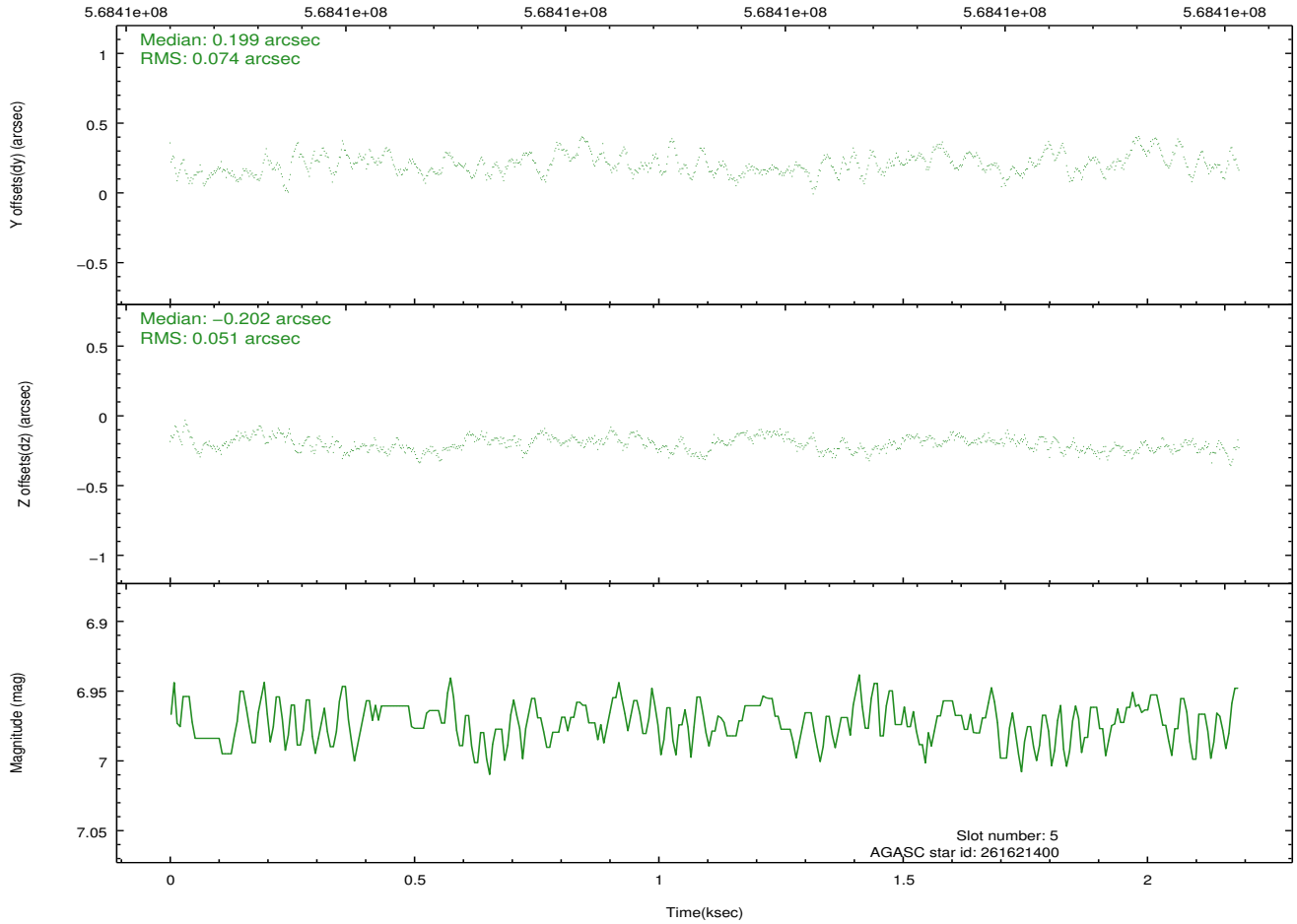
2.4.2 Slot 4



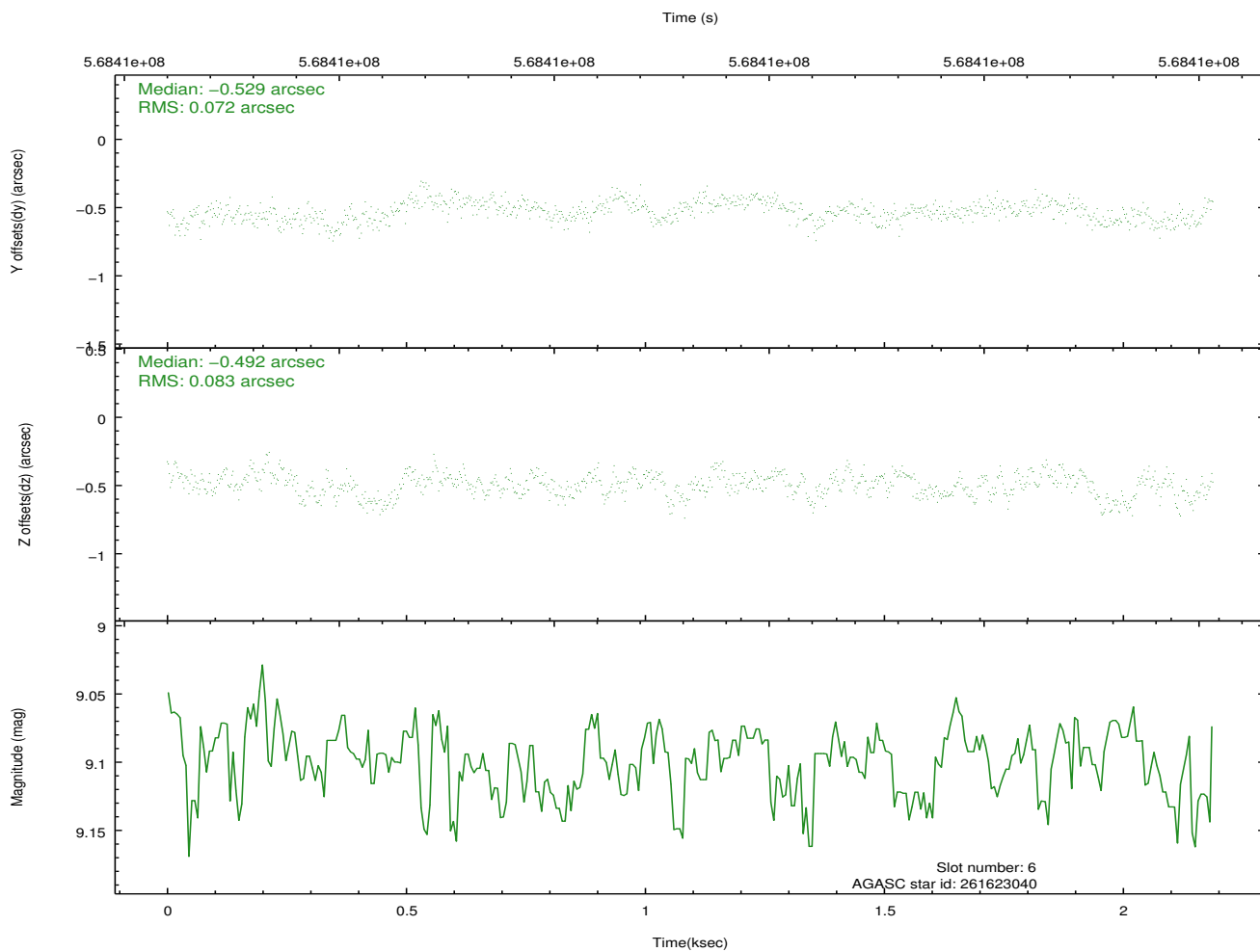
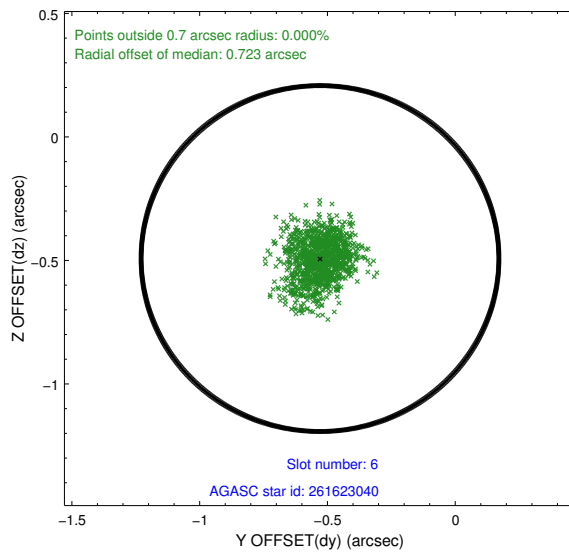
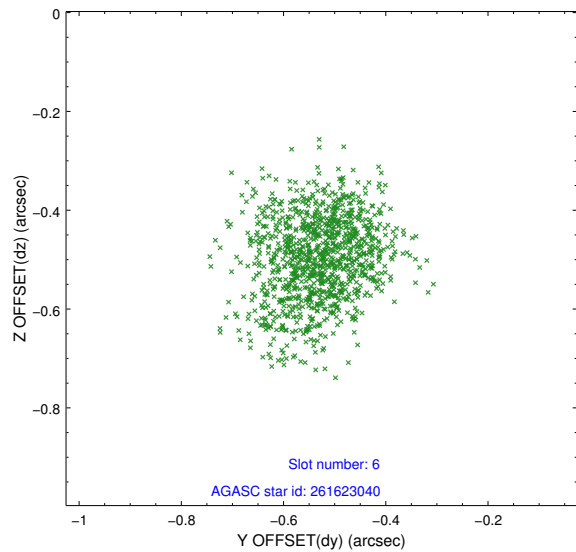
2.4.3 Slot 5



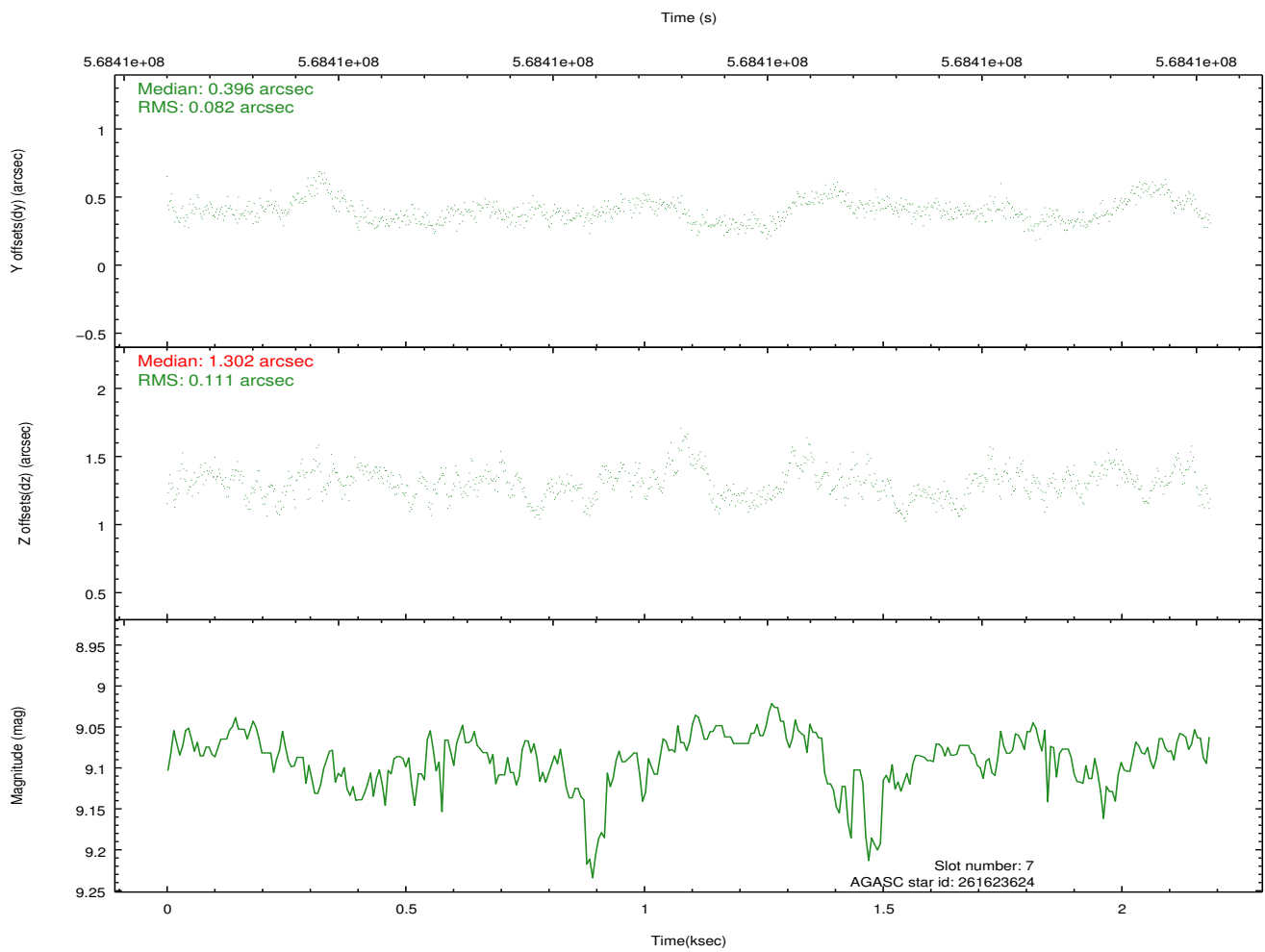
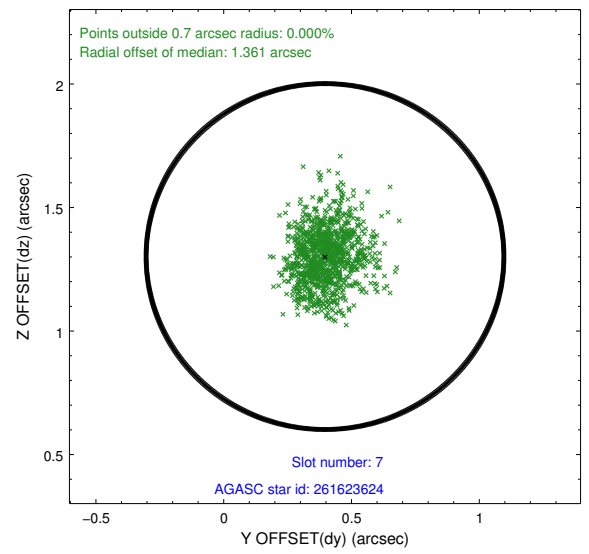
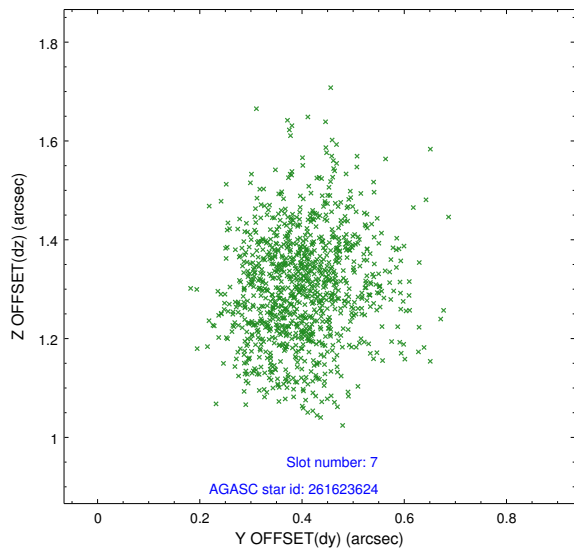
Time (s)



2.4.4 Slot 6

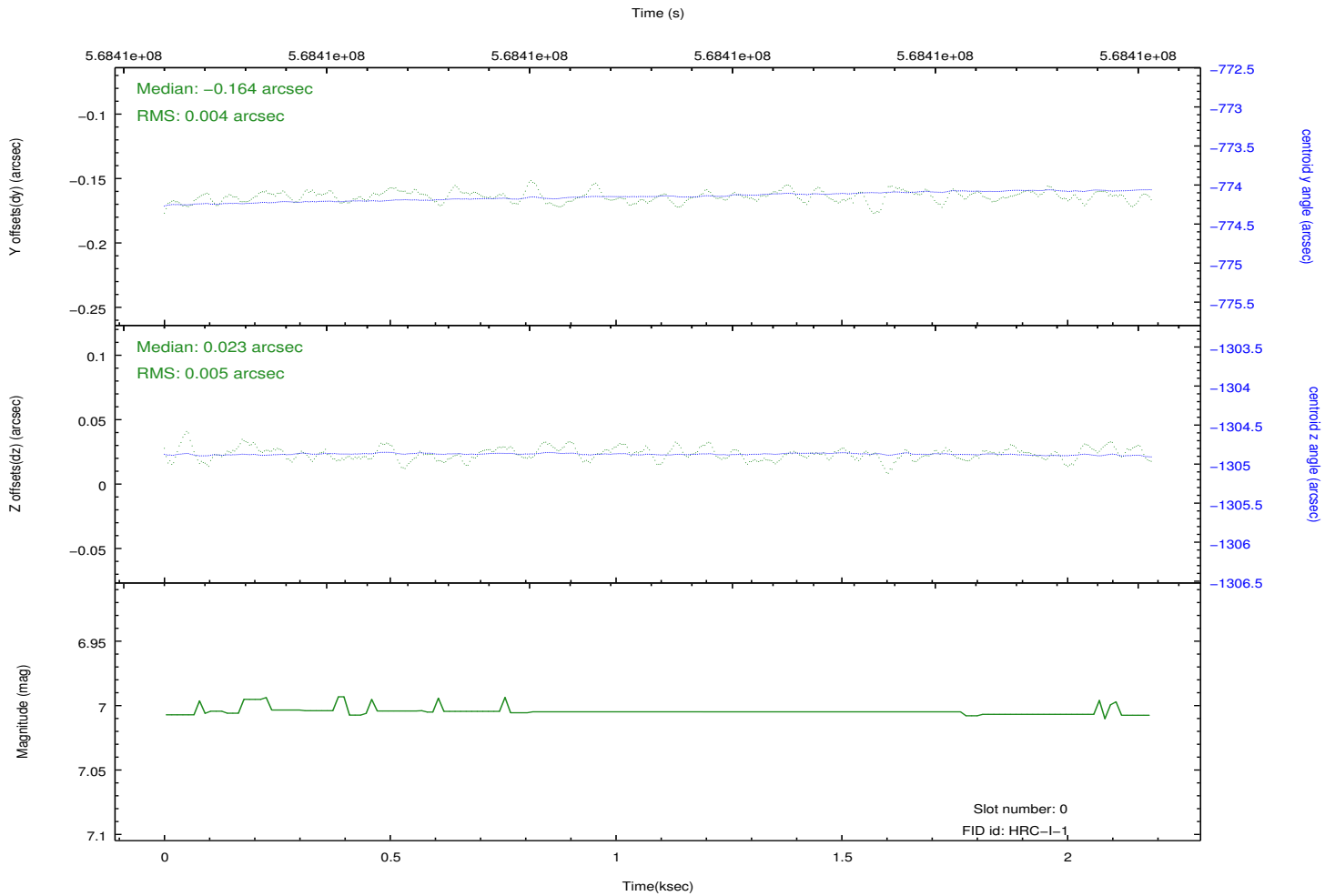
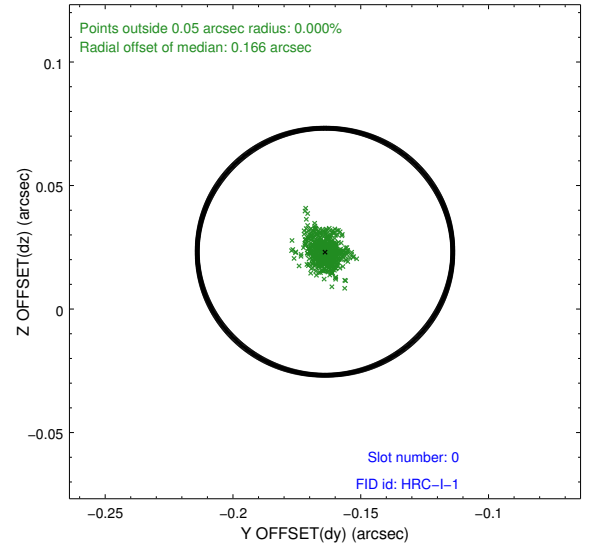
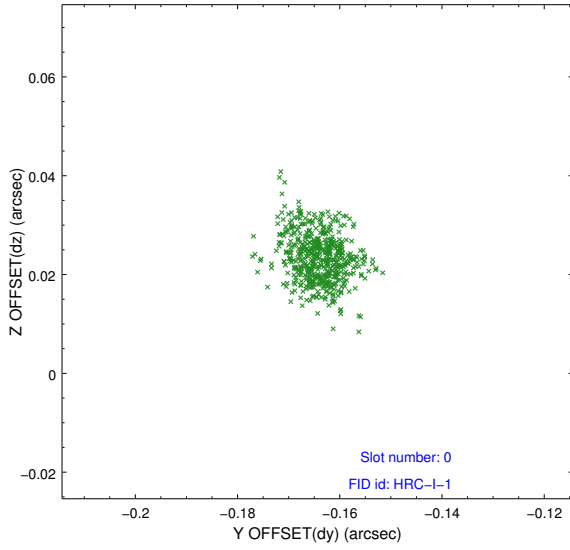


2.4.5 Slot 7

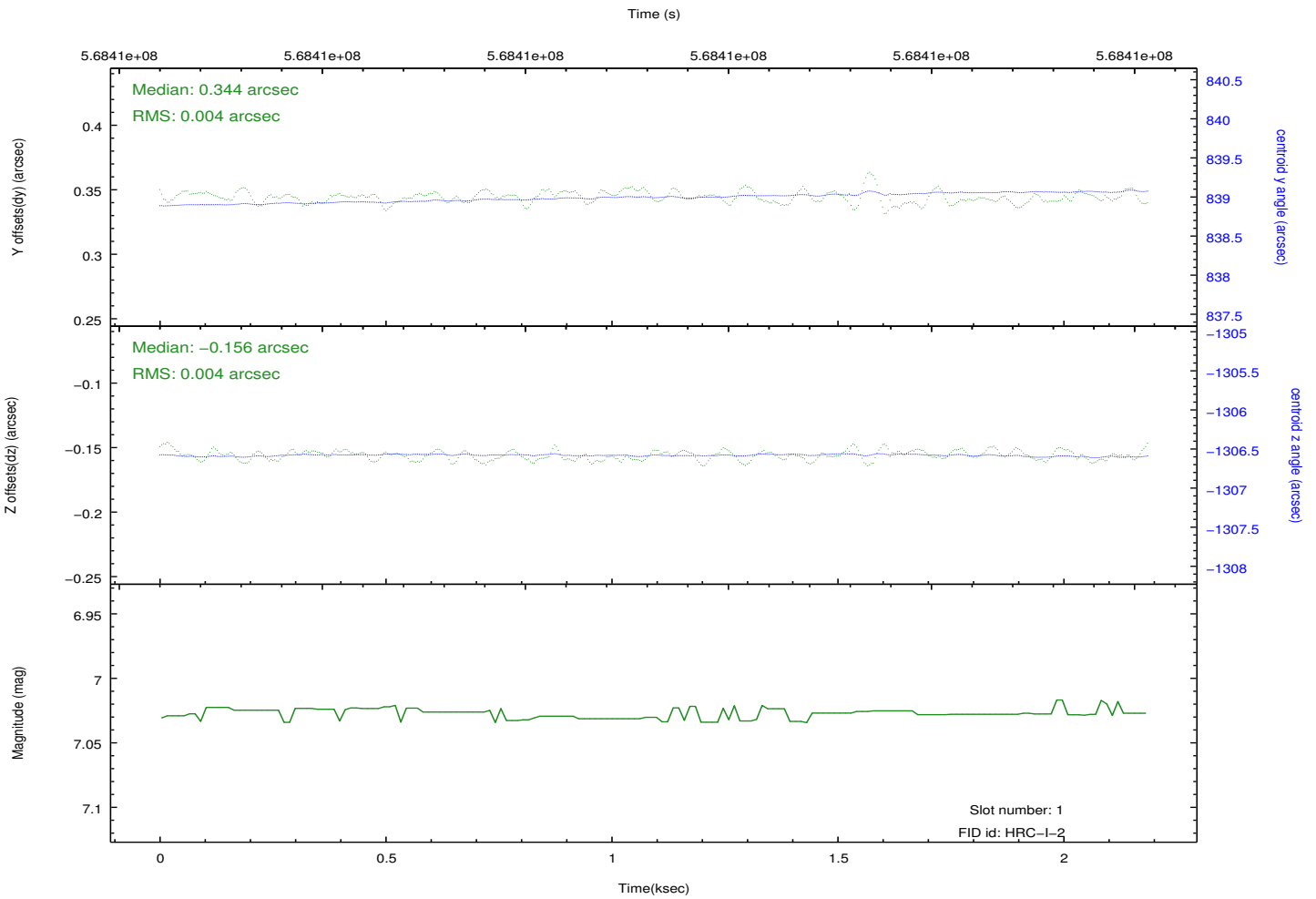
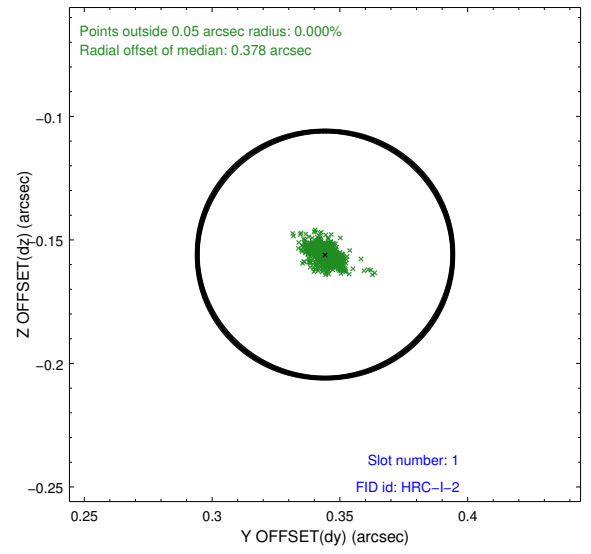
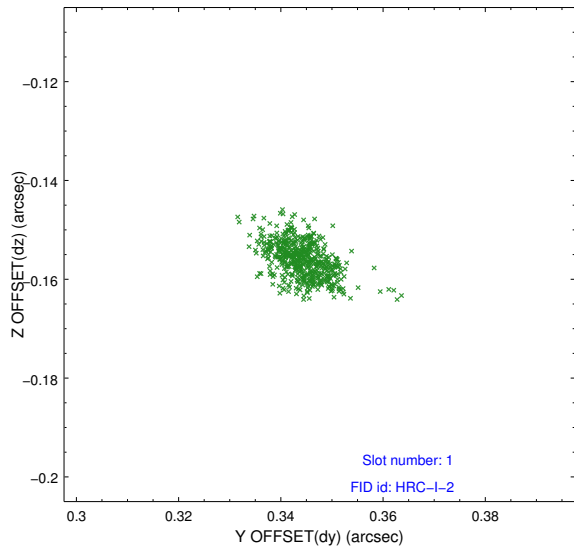


2.5 FID Slots

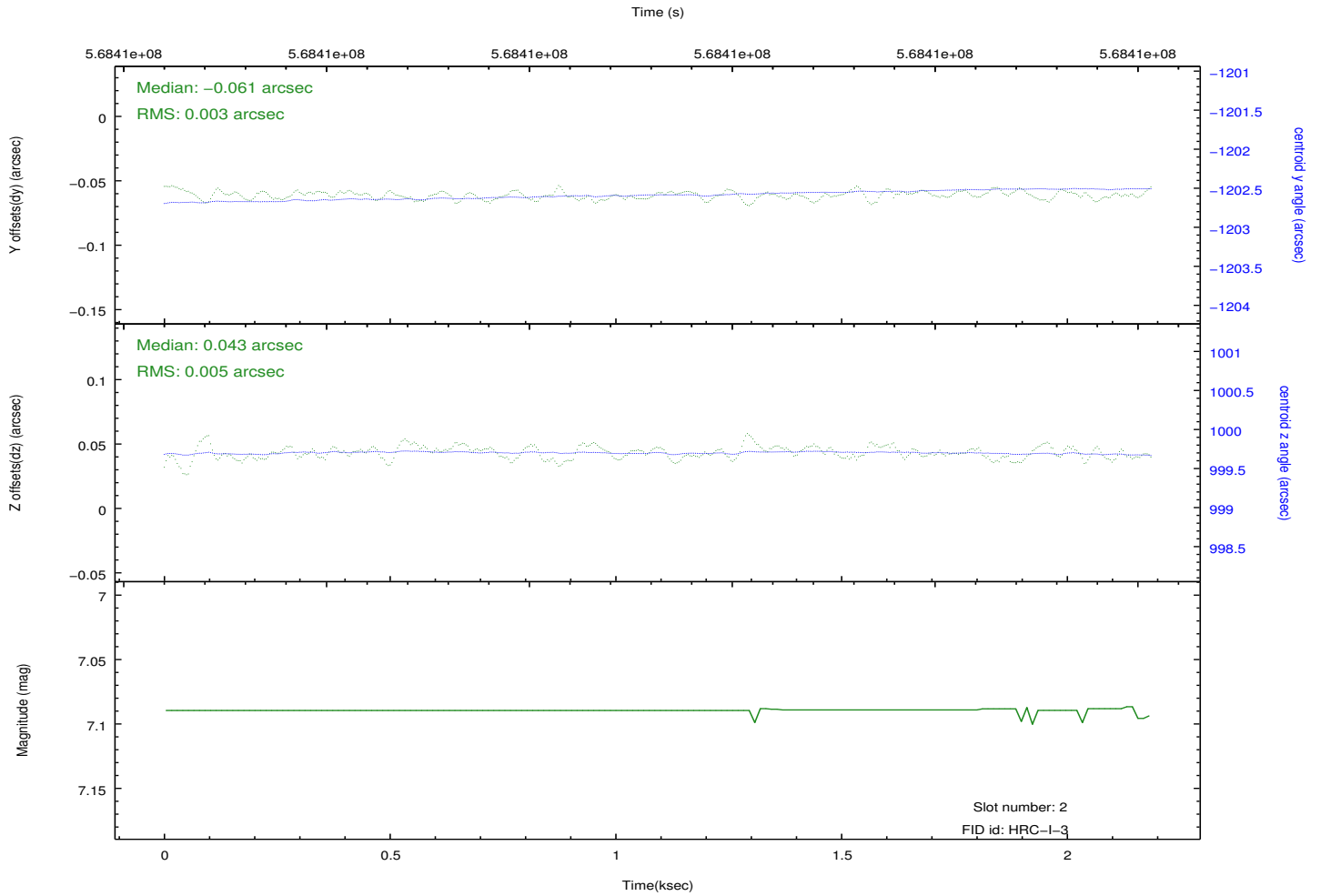
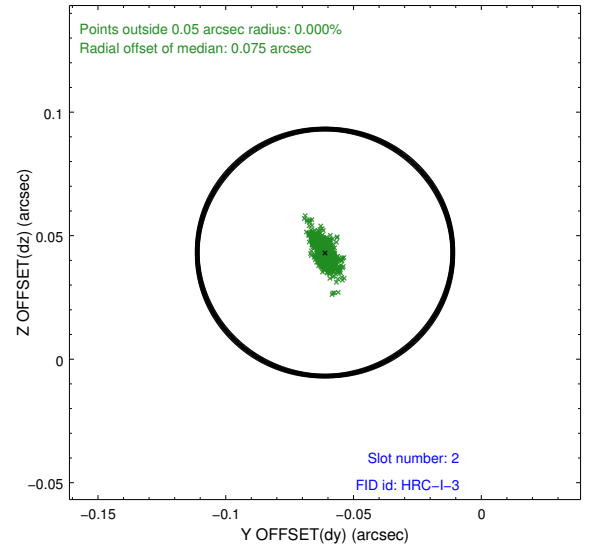
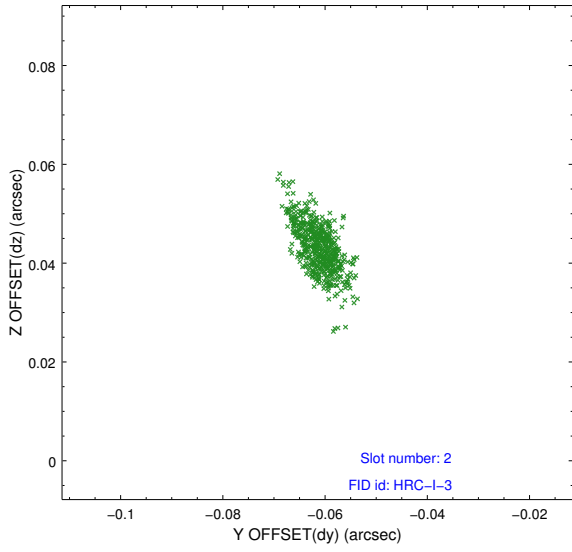
2.5.1 Slot 0



2.5.2 Slot 1

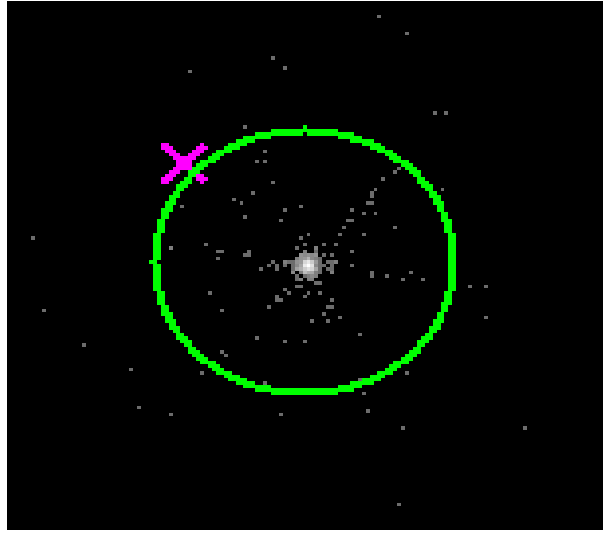


2.5.3 Slot 2

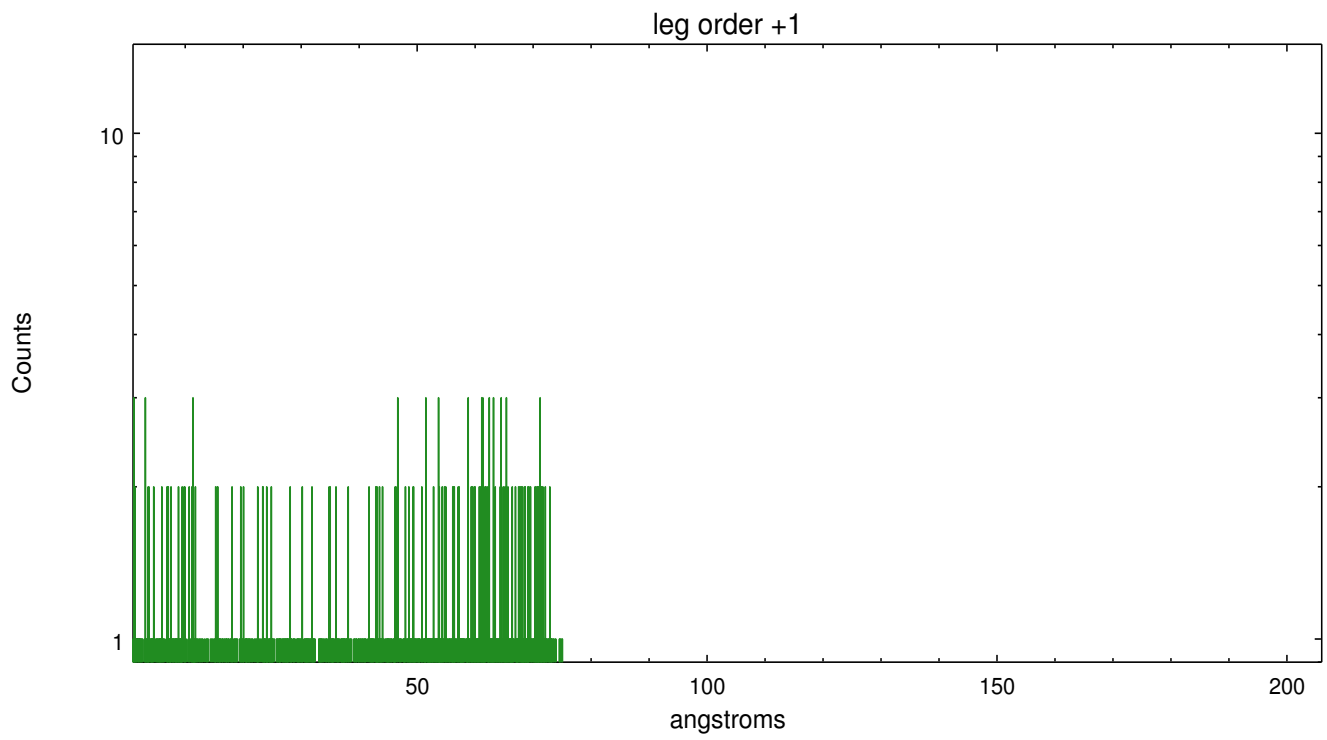
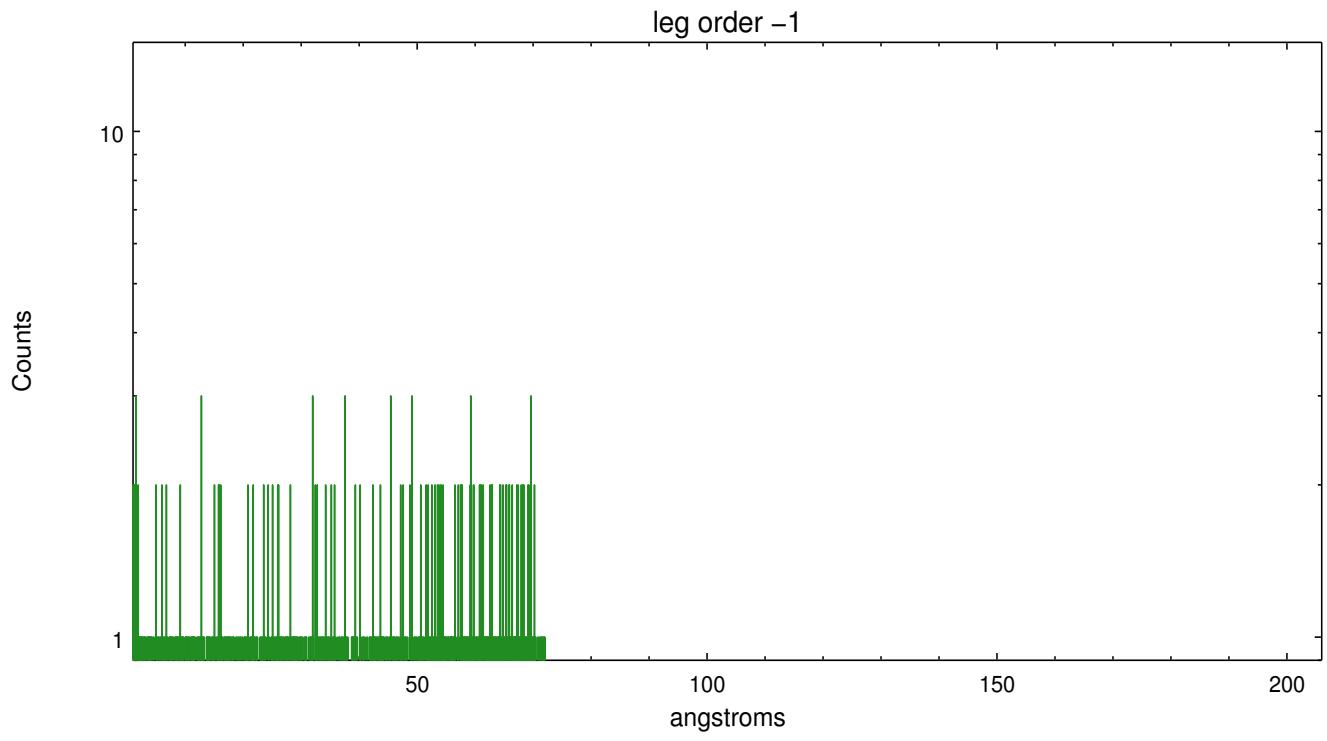


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.01.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.1865813741684

A.2 Comments

WARNING: this is a calibration observation with a non-standard combination of LETG with HRC-I. Spectral processing is not officially supported; custom processing and careful review will be necessary. Some calibration products will not be available (e.g., grating response matrices for calibrated line profiles; correct coordinate transformations --- there is a large residual tilt in the diffraction coordinates).