

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 19847 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : May 21 2017

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1 Front

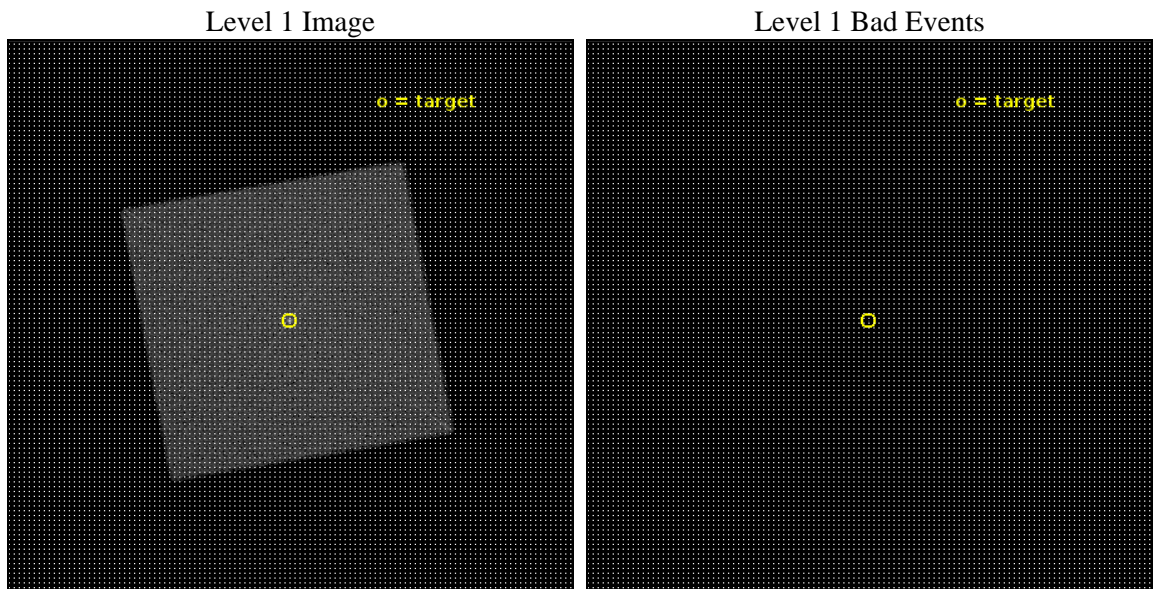
seq_num	291364	Sequence number
obs_id	19847	Observation id
title	AO-18 Calibration Observations of HZ43	Proposal title
observer	CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.090417	Observer's specified target RA [deg]
dec_targ	29.098306	Observer's specified target Dec [deg]
ra_nom	199.08789841495	Nominal RA [deg]
dec_nom	29.091459051333	Nominal Dec [deg]
roll_nom	214.90670082644	Nominal Roll [deg]
revision	1	Processing version of data
ontime	2096.1251218319	[s]
livetime	2069.111326502	Ontime multiplied by DTCOR
l2events	230860	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	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	2096.1251218319	[s]
caldsver	4.7.4	 	l1events	484763	Number of level 1 events
date	2017-05-21T03:41:14	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(16328.96, 16569.05)	src1a sky pixel position

2.1.3 Events

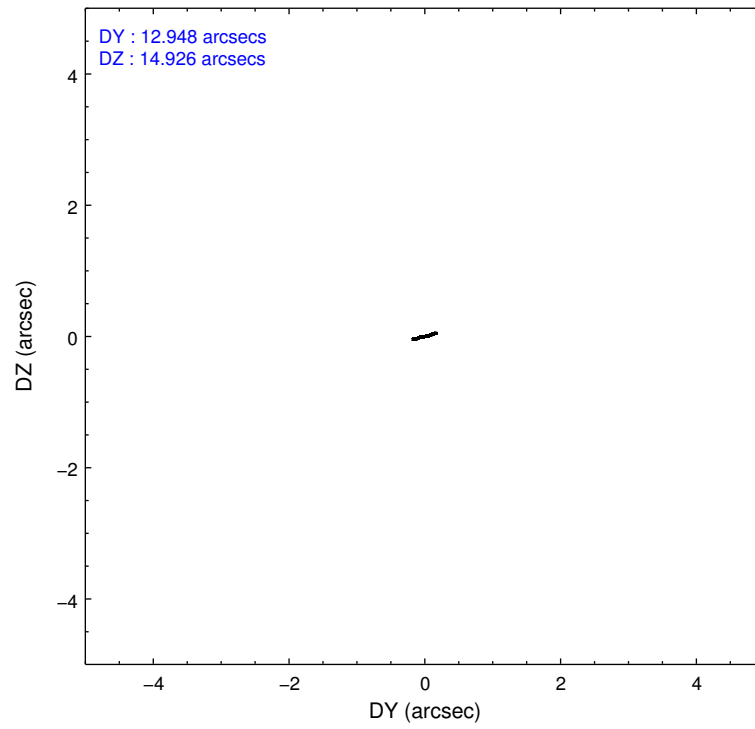
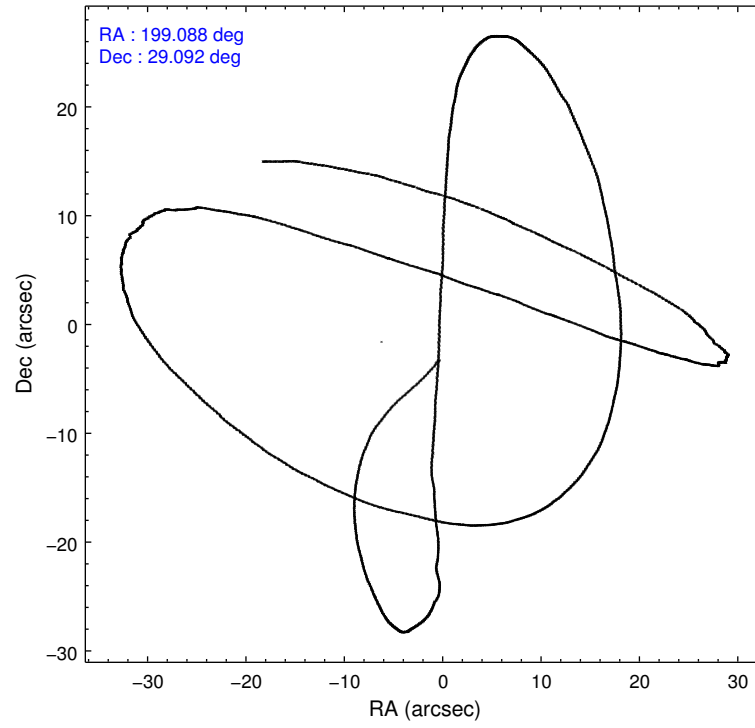
Level 1 Events

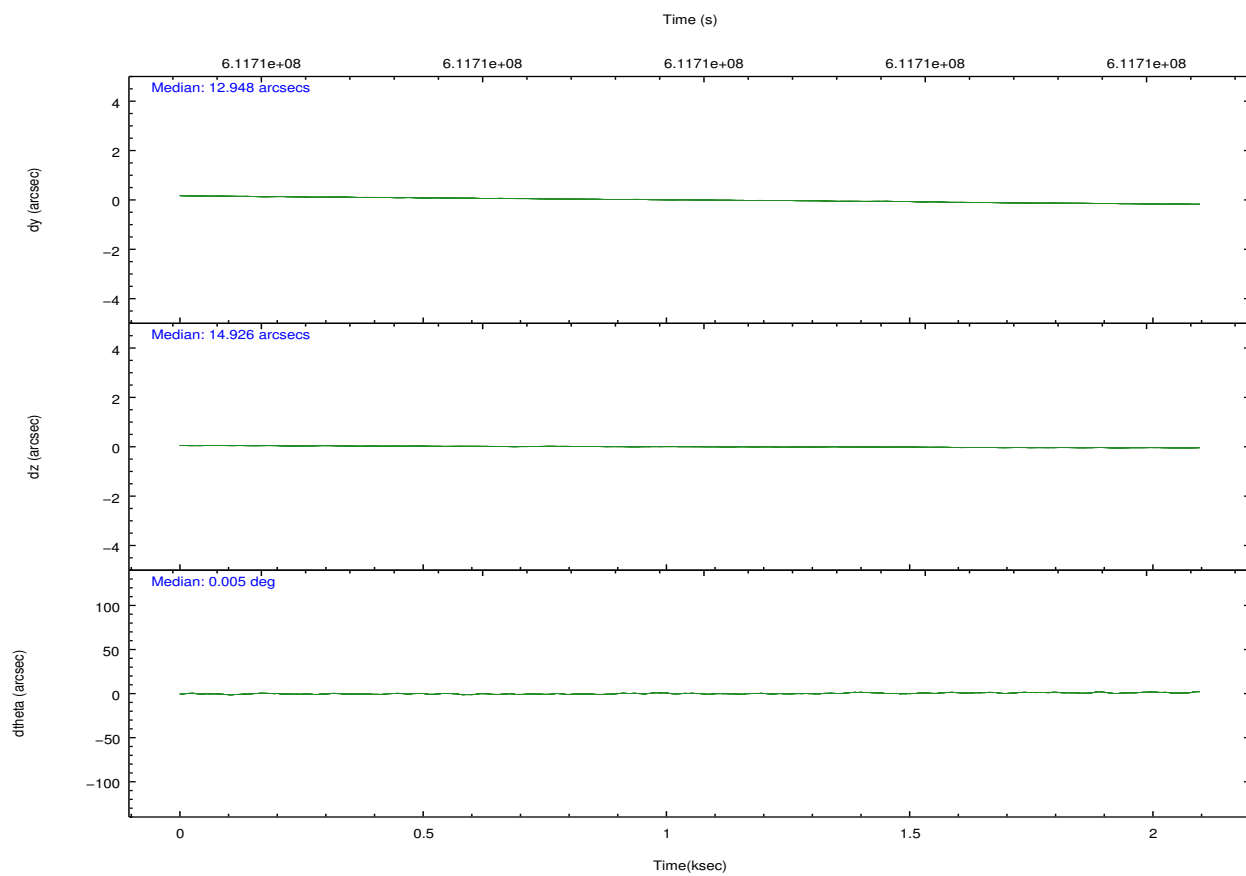
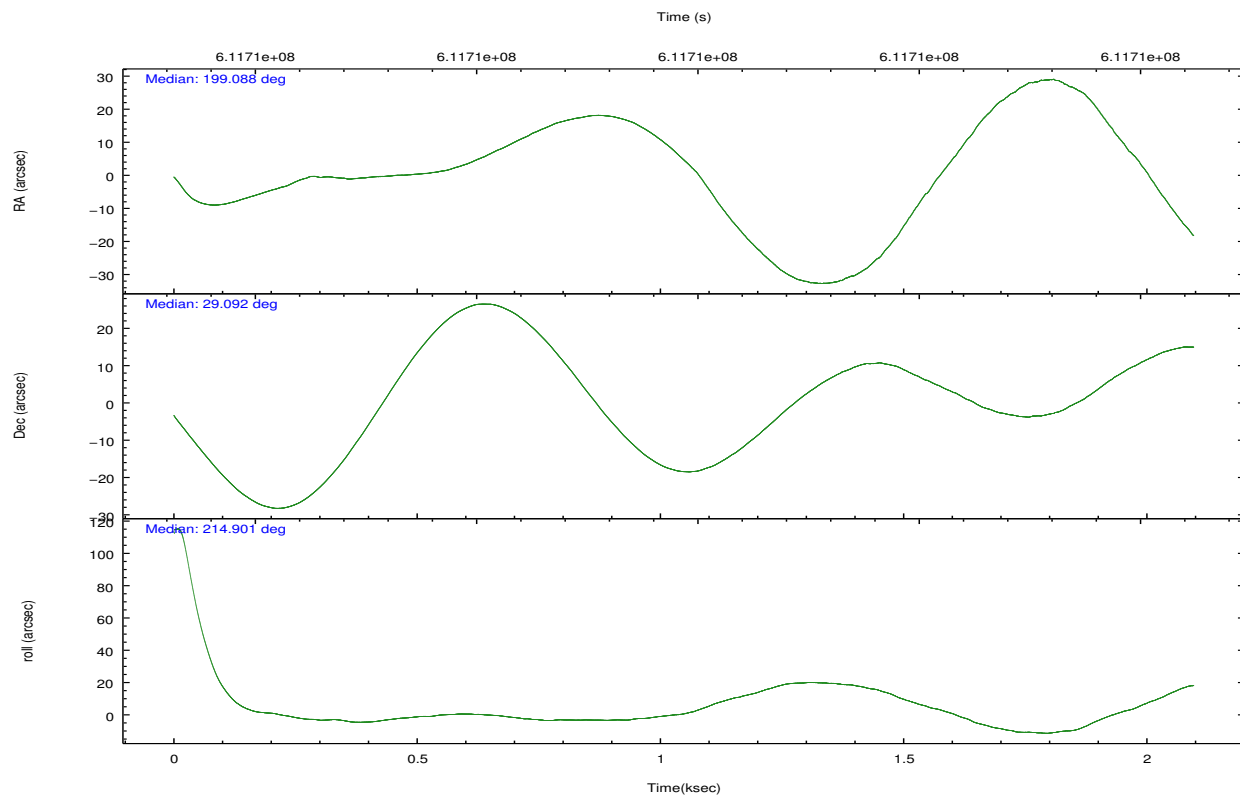
	segment 0
level 1 events	484763
rejected events	180581
rejected %	37%

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	199.100022	199.0878984149496			
[deg] Pointing Dec	29.116831	29.09145905133308			
[deg] Pointing Roll	214.995329	214.9067008264427			
[s] Window start time (MET)	611193669.184000	611193669.184000			
[s] Window stop time (MET)	613872069.184000	613872069.184000			
[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)	611707009.184000	611705666.91467			
Observation start date	2017-05-20T22:35:40	2017-05-20T22:14:26			
[s] Observation end time (MET)	611709009.184000	611709891.96491			
Observation end date	2017-05-20T23:09:00	2017-05-20T23:24:51			

2.3 Aspect



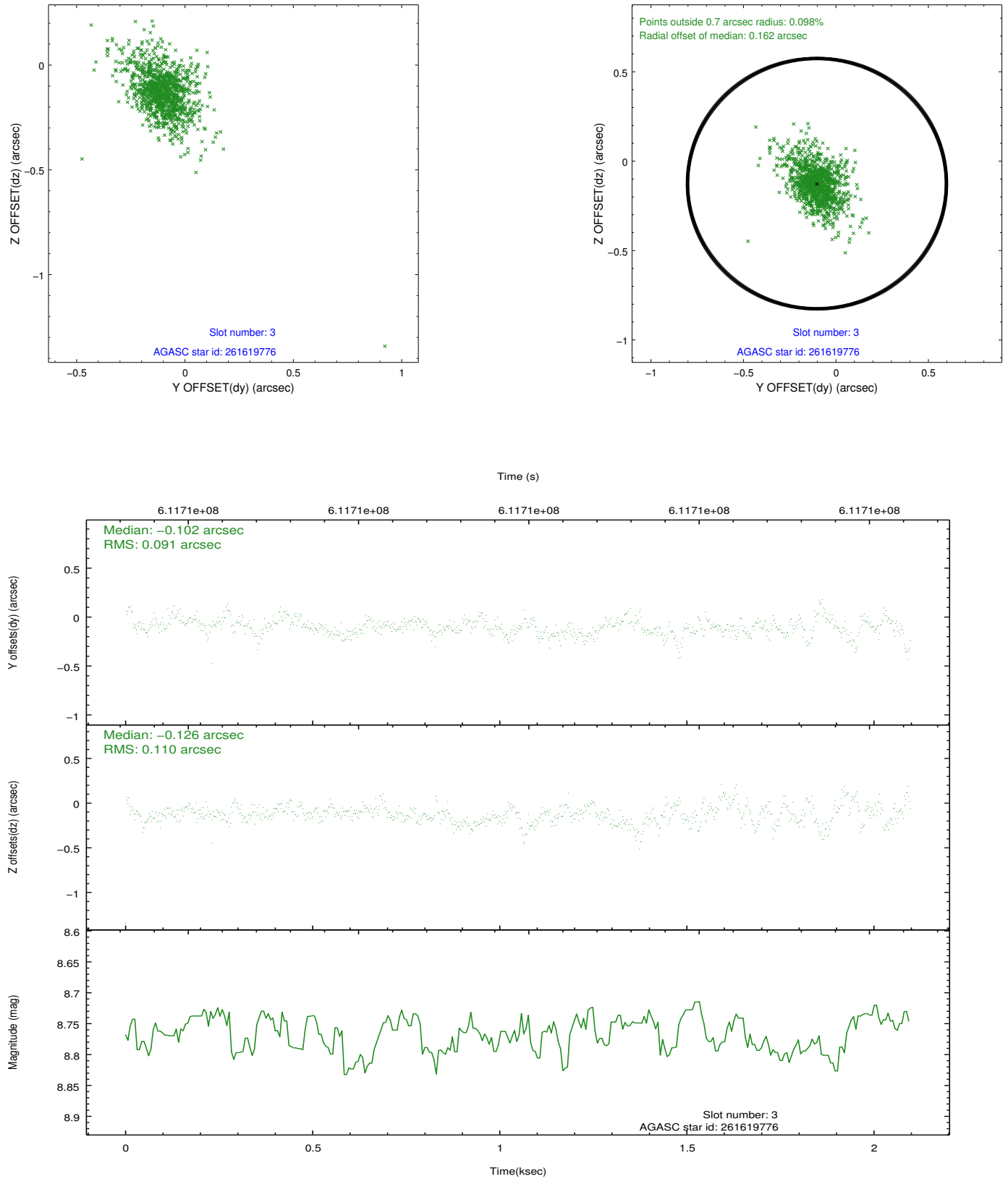


Slot Statistics

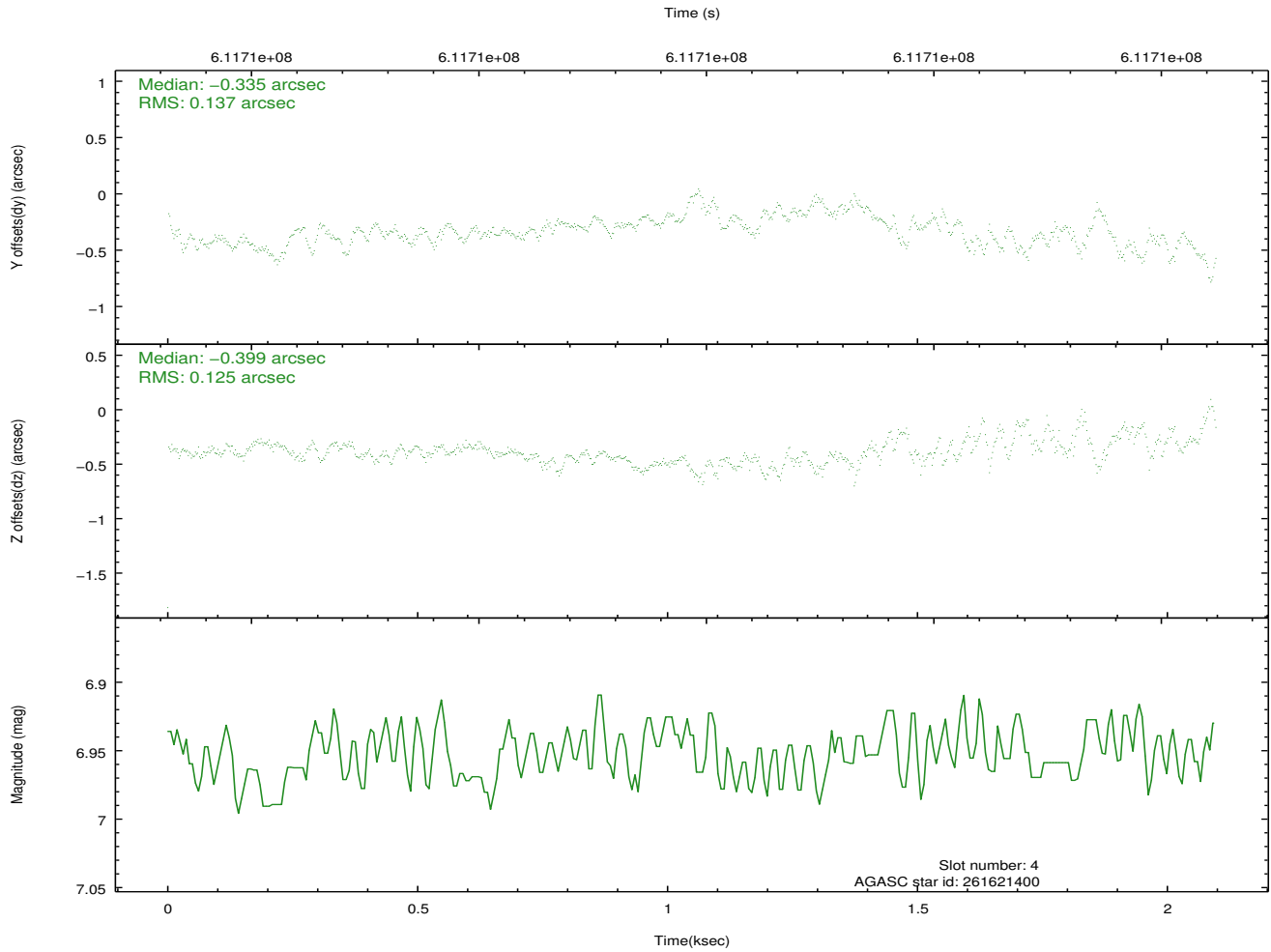
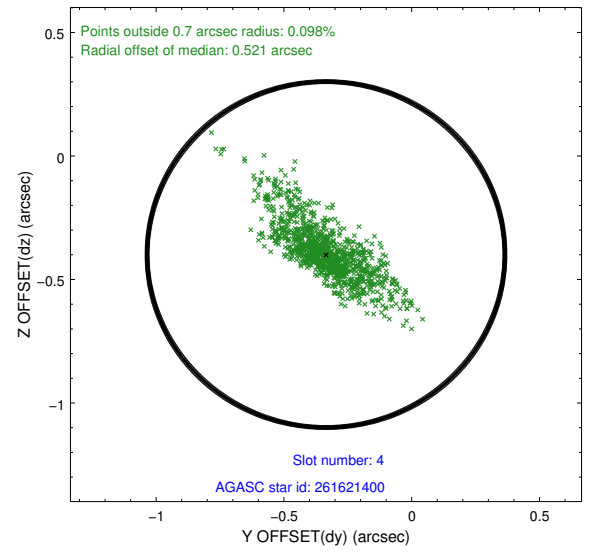
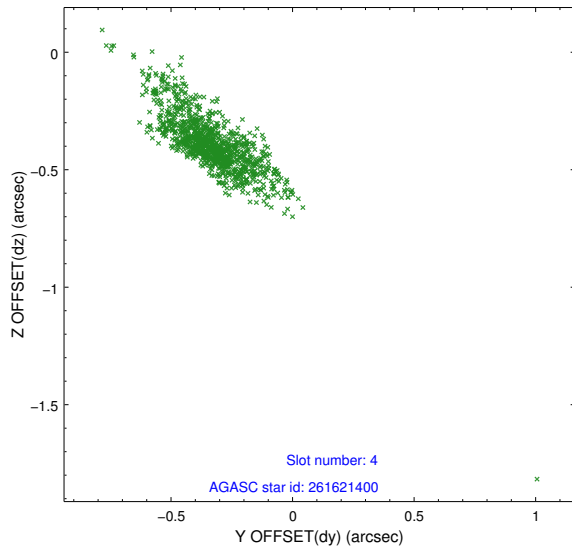
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	6.97	512	-0.195	-0.008	0.008	0.014	0.000000	0.000000	-768.81	-1303.06
1	FID		HRC-I-2	7.01	512	0.318	-0.084	0.007	0.013	0.000000	0.000000	842.84	-1307.16
2	FID		HRC-I-3	7.07	512	-0.003	0.001	0.010	0.019	0.000000	0.000000	-1195.58	998.94
3	GUIDE	used	261619776	8.76	1023	-0.102	-0.126	0.132	0.246	198.654383	29.401174	557.22	-1643.05
4	GUIDE	used	261621400	6.95	1024	-0.335	-0.399	0.172	0.339	198.901600	28.741982	1288.45	741.78
5	GUIDE	used	261626376	9.66	1022	0.231	0.076	0.222	0.359	198.947288	29.347445	-80.56	-956.68
6	GUIDE	used	261623040	9.09	1023	0.218	0.441	0.178	0.285	198.792686	29.757643	-535.52	-2443.98
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

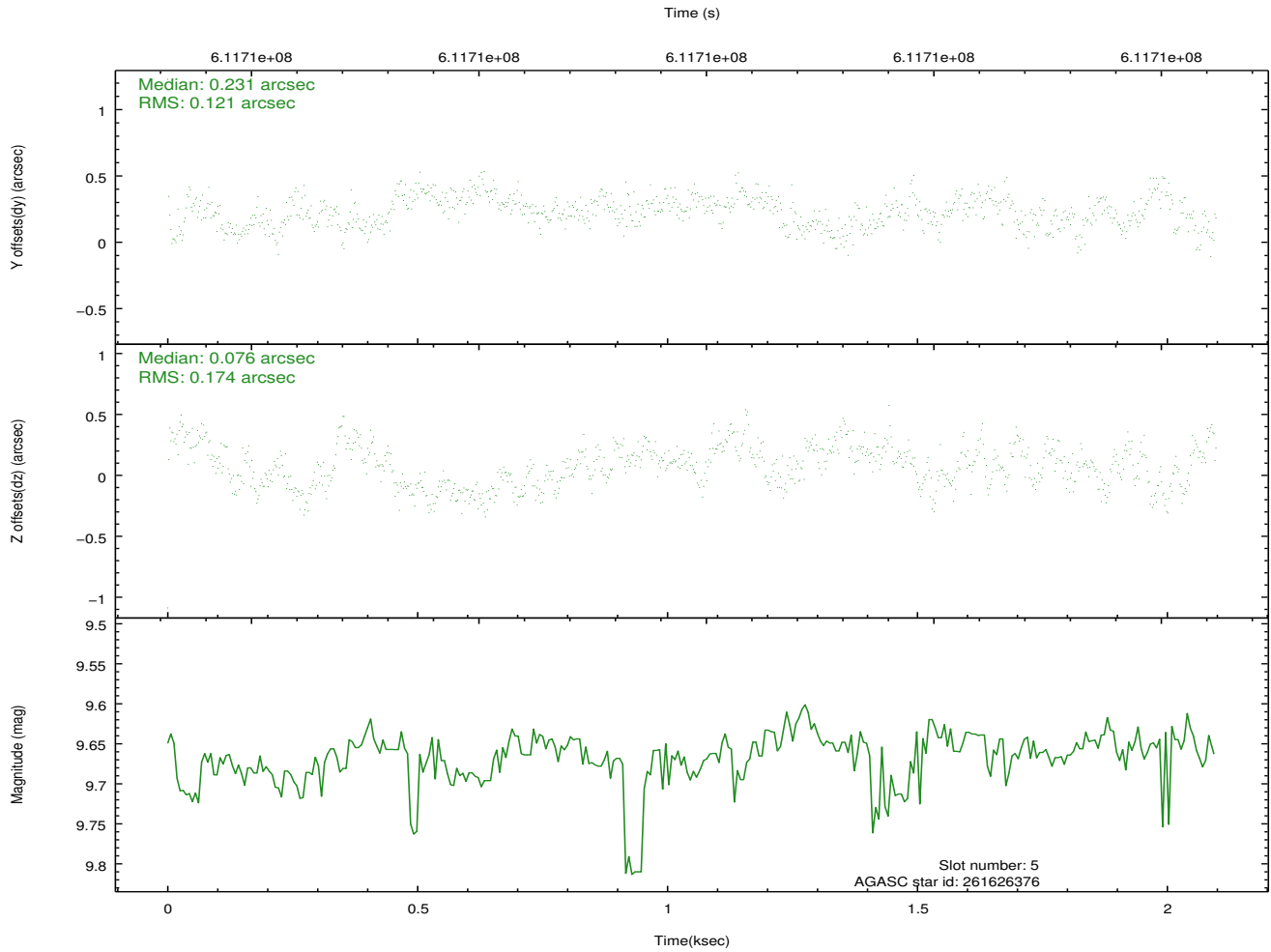
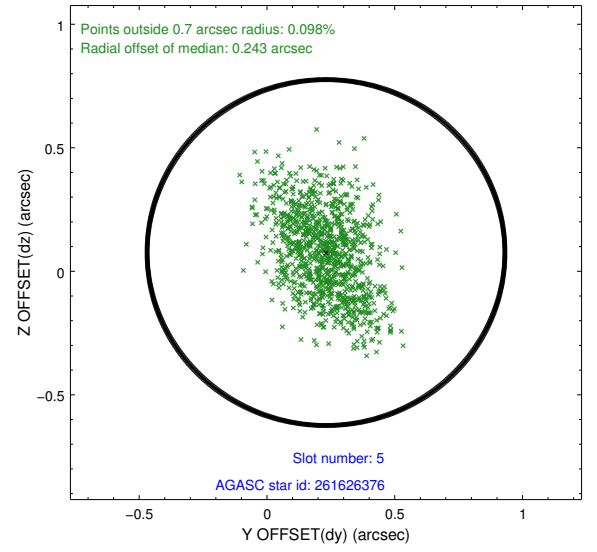
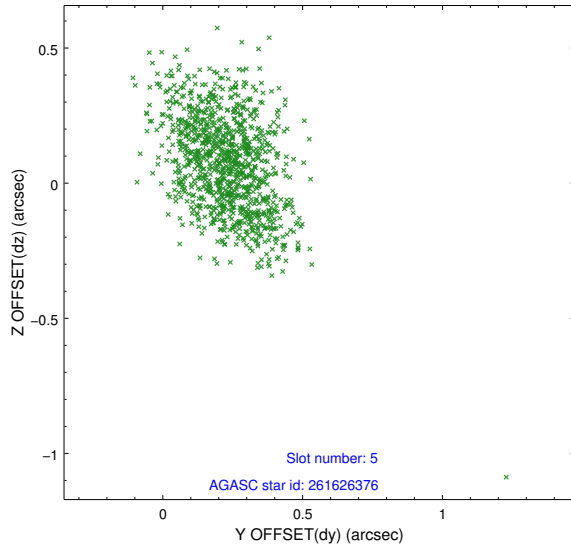
2.4.1 Slot 3



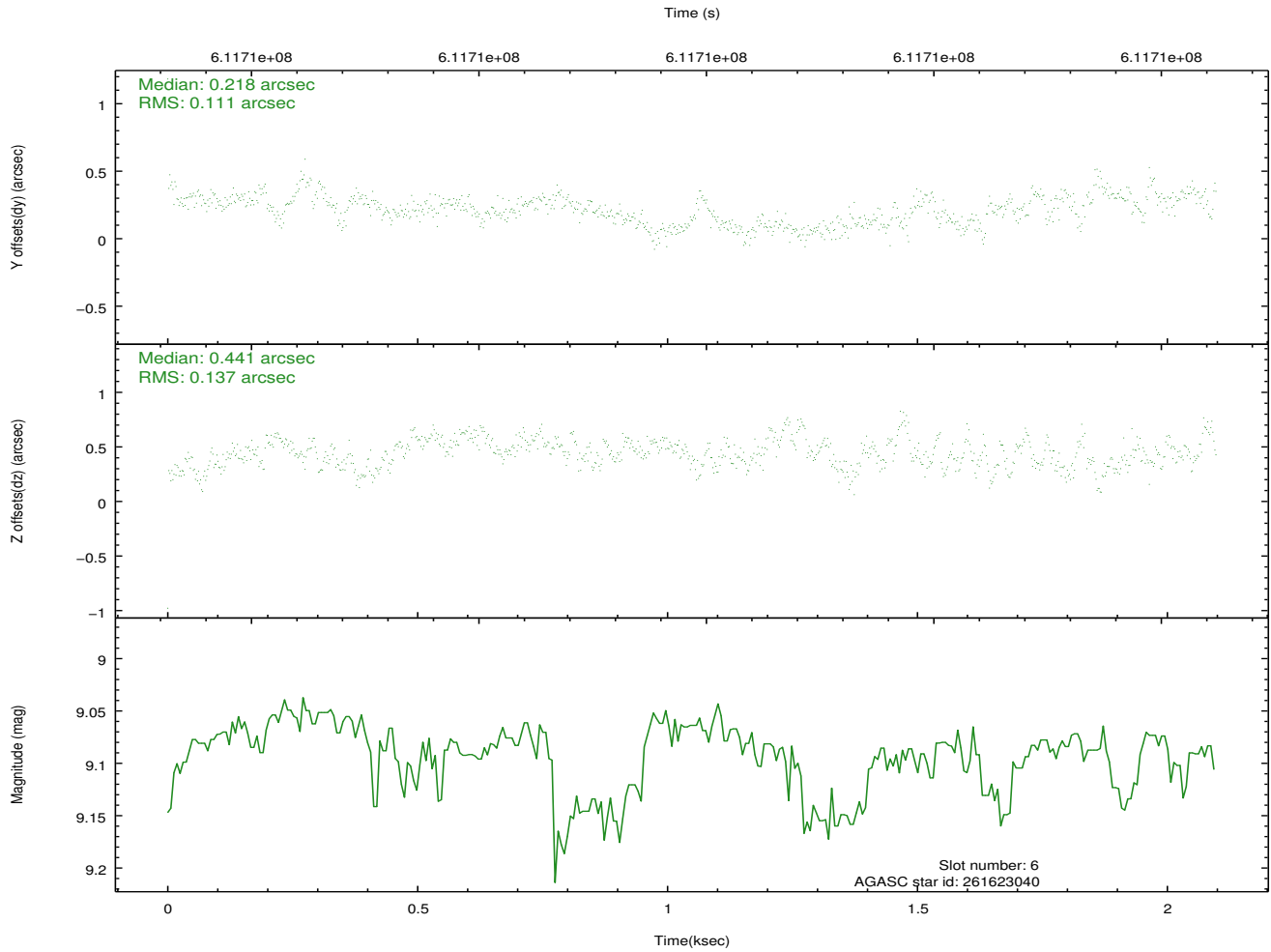
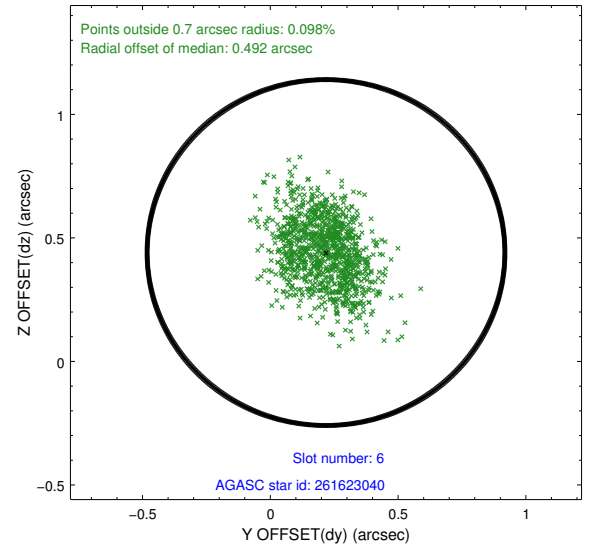
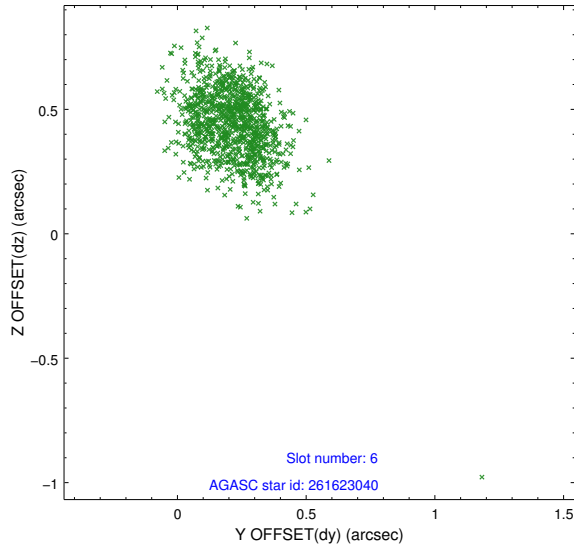
2.4.2 Slot 4



2.4.3 Slot 5

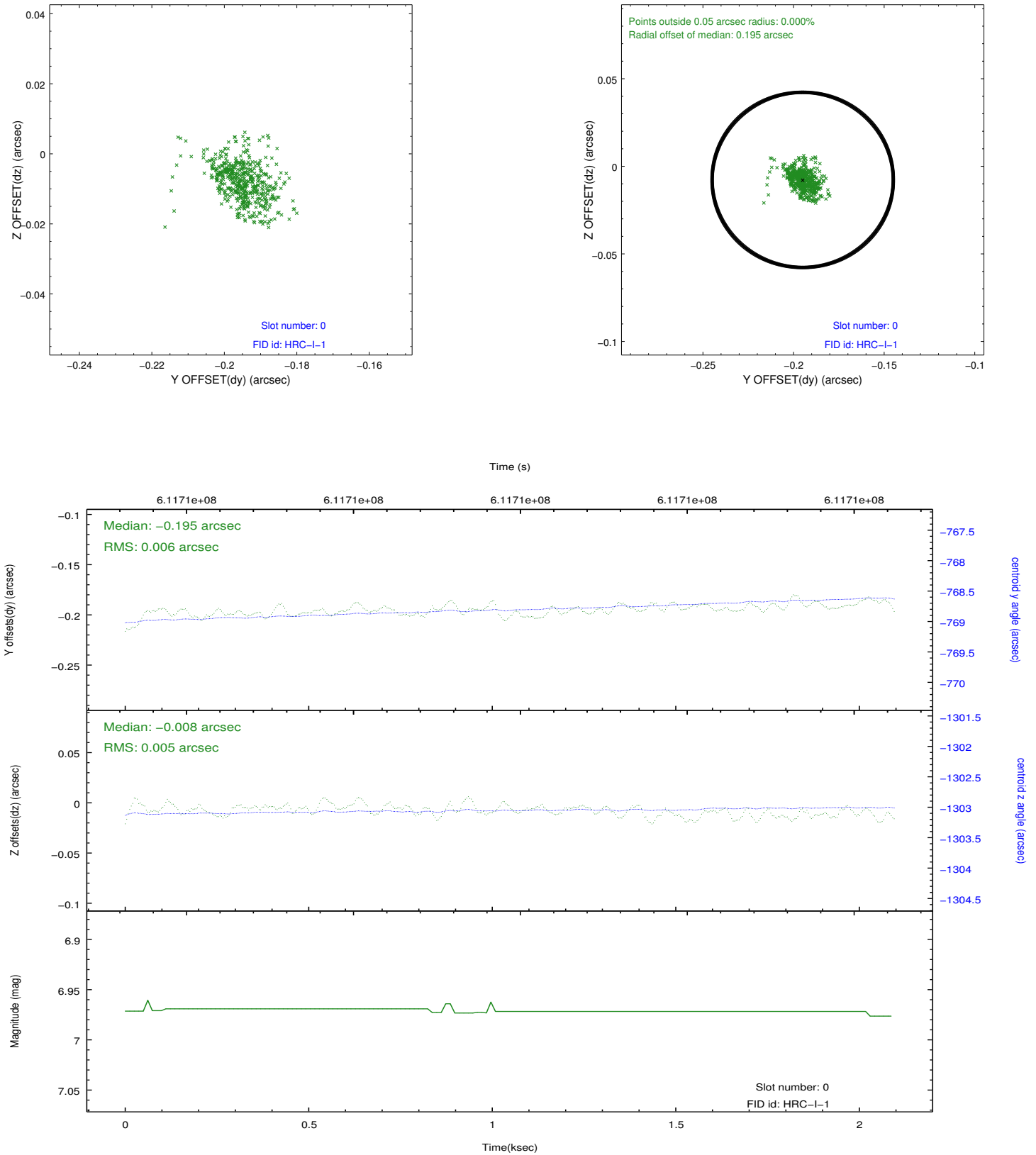


2.4.4 Slot 6

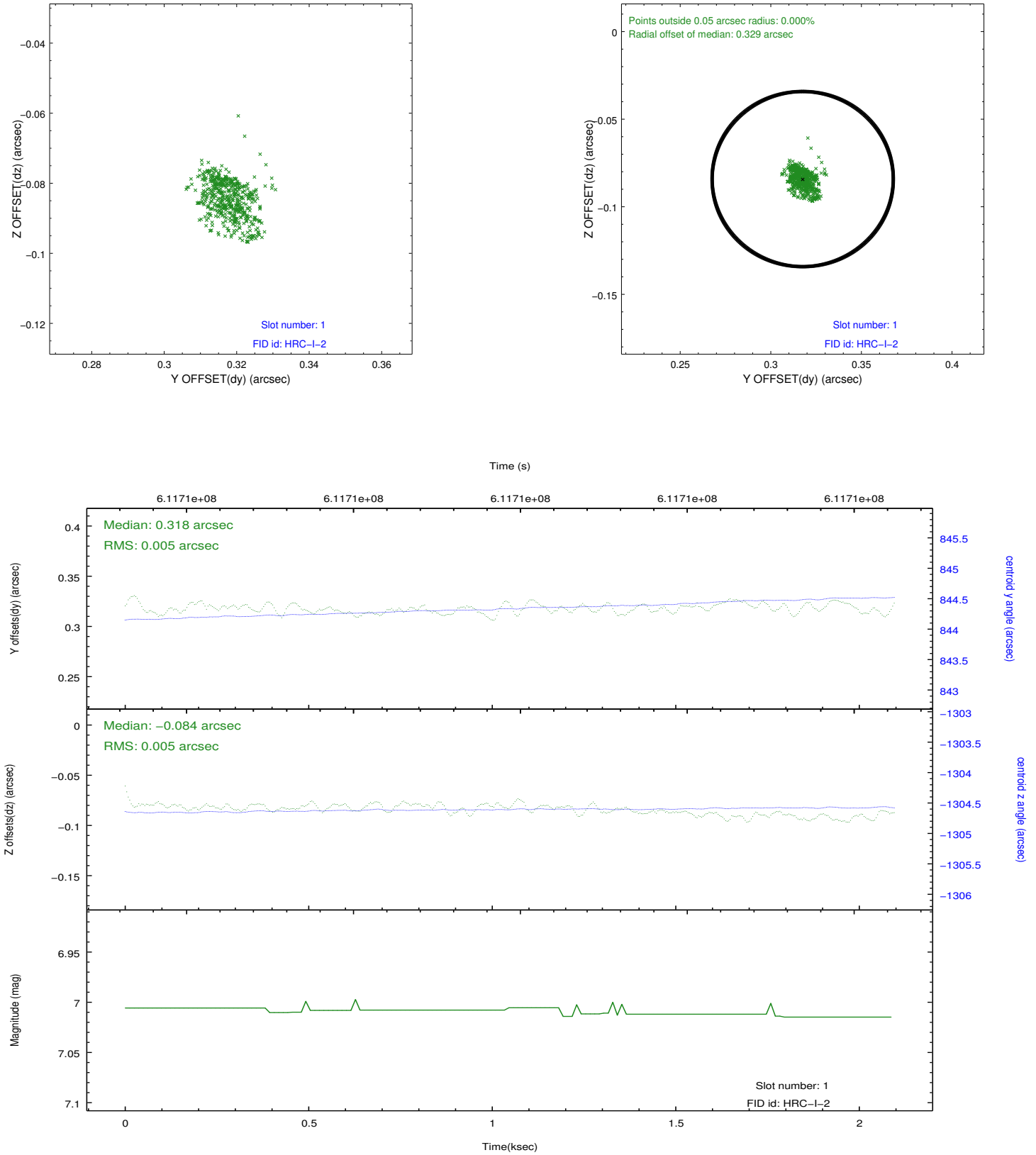


2.5 FID Slots

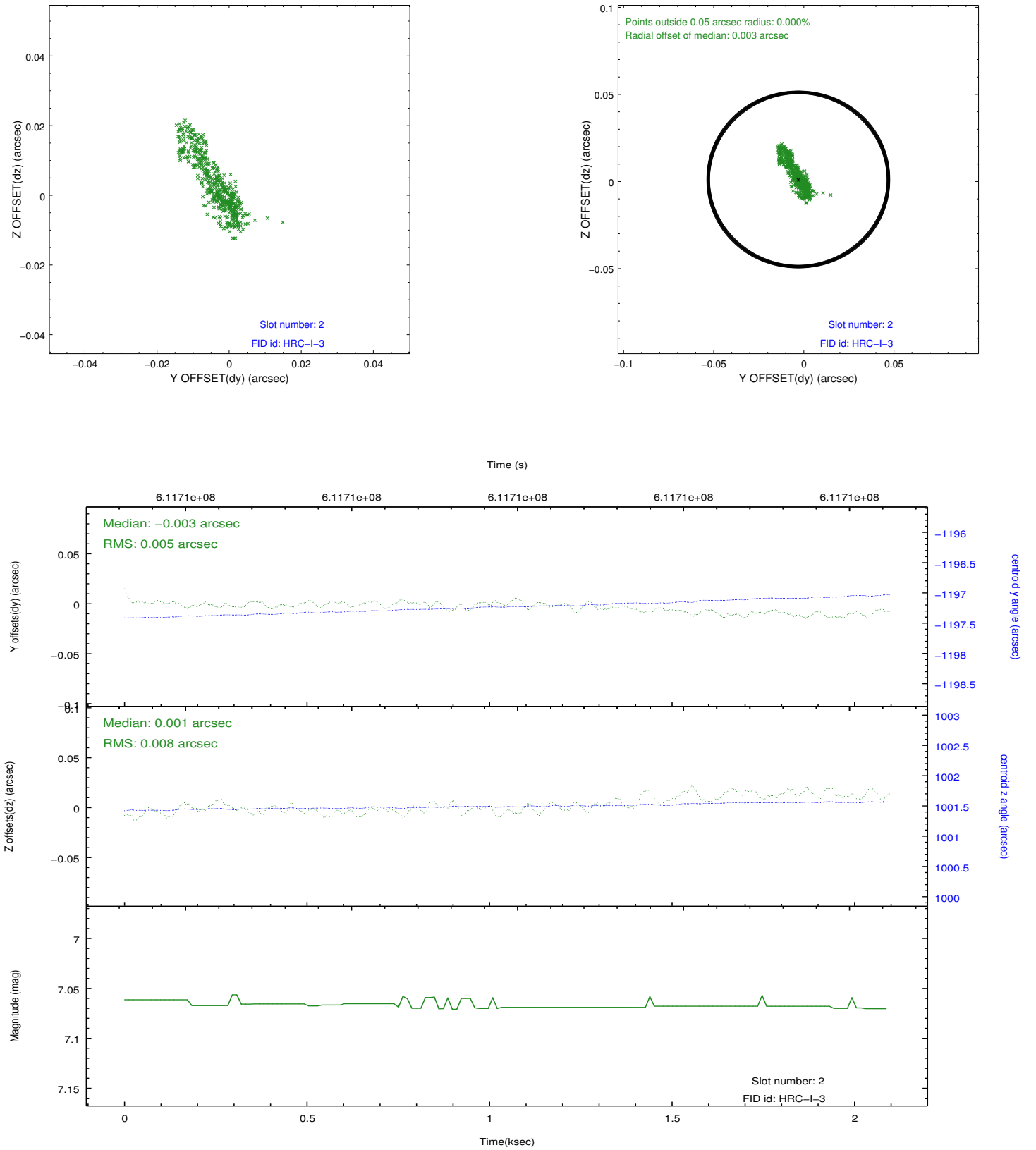
2.5.1 Slot 0



2.5.2 Slot 1

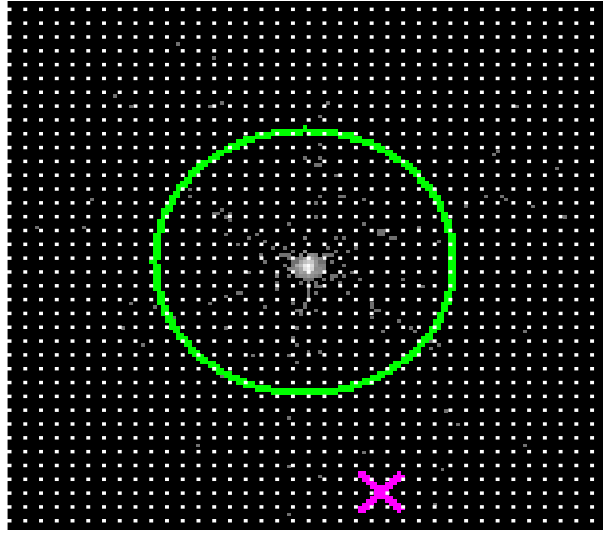


2.5.3 Slot 2

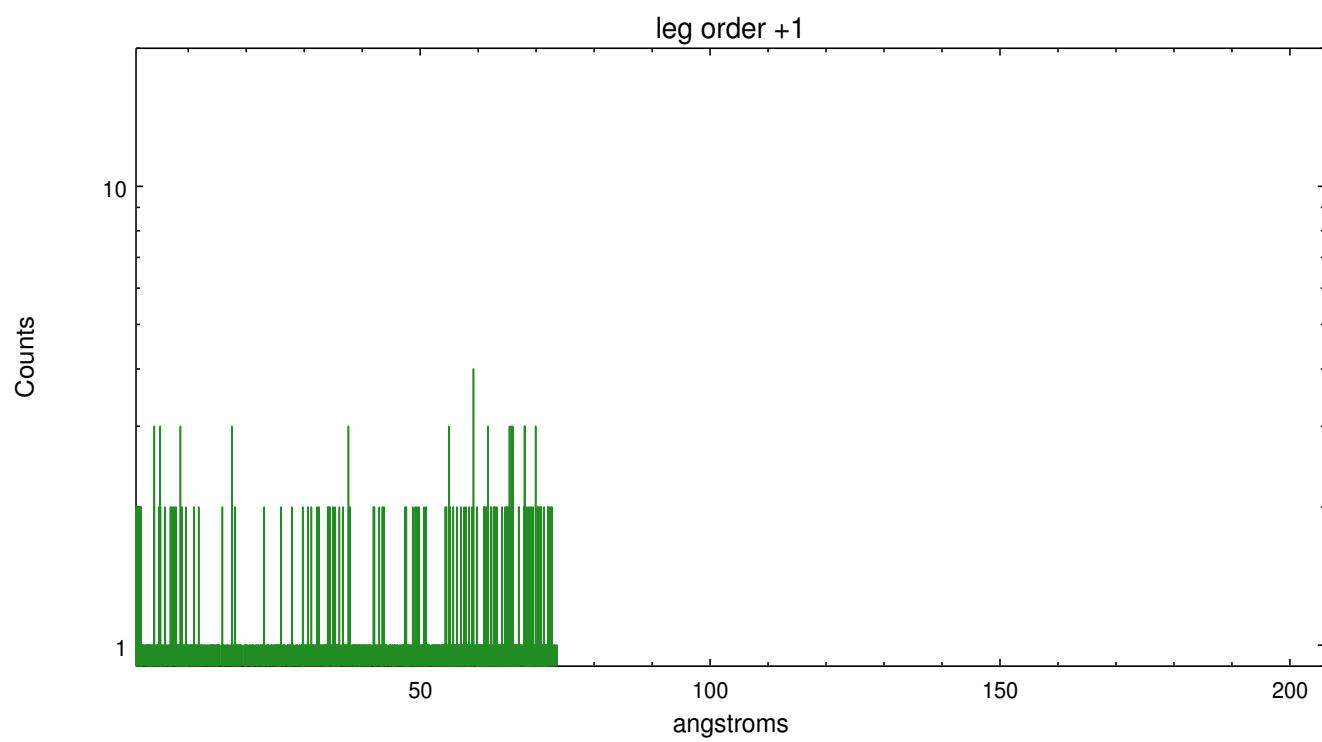
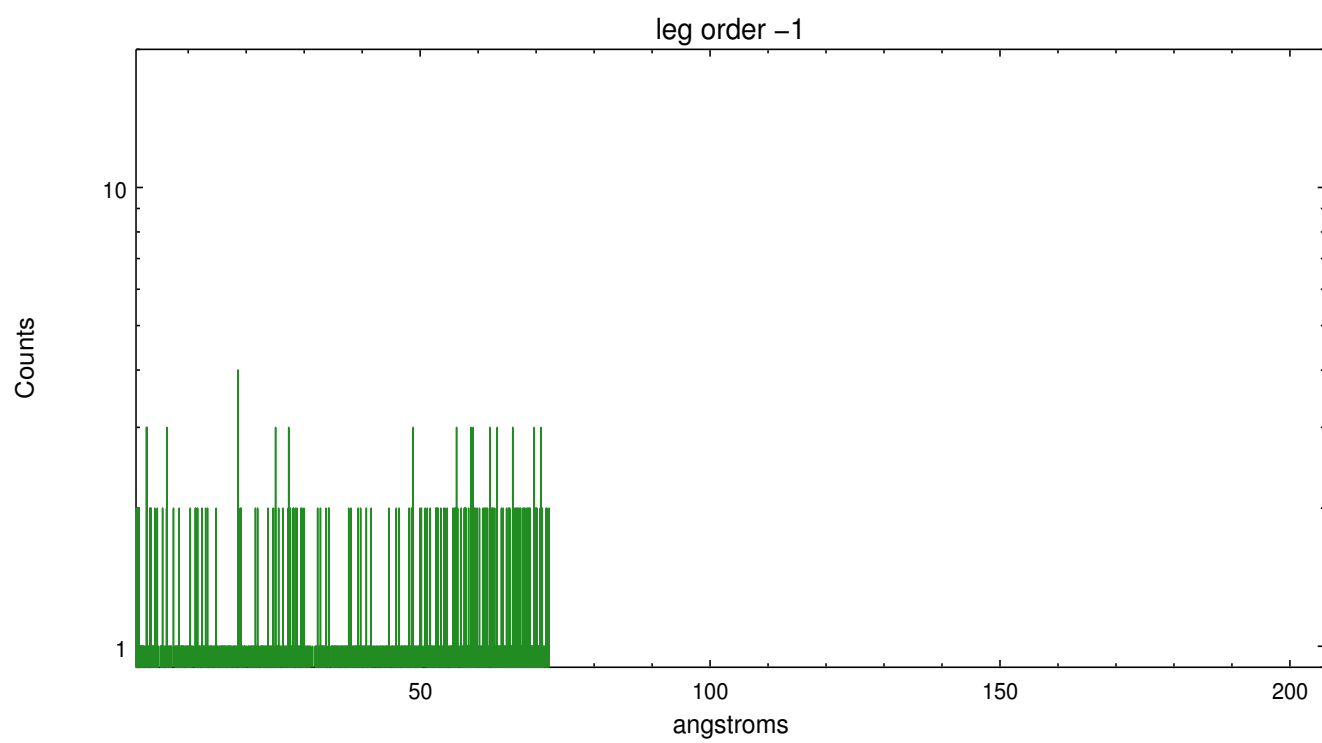


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2017.05.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0961251218319

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).1