

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19846 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Nov 25 2016

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Parameters	4
2.1.3	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 5	10
2.4.3	Slot 6	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
3	Gratings	16
3.1	LETG Arm	16
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

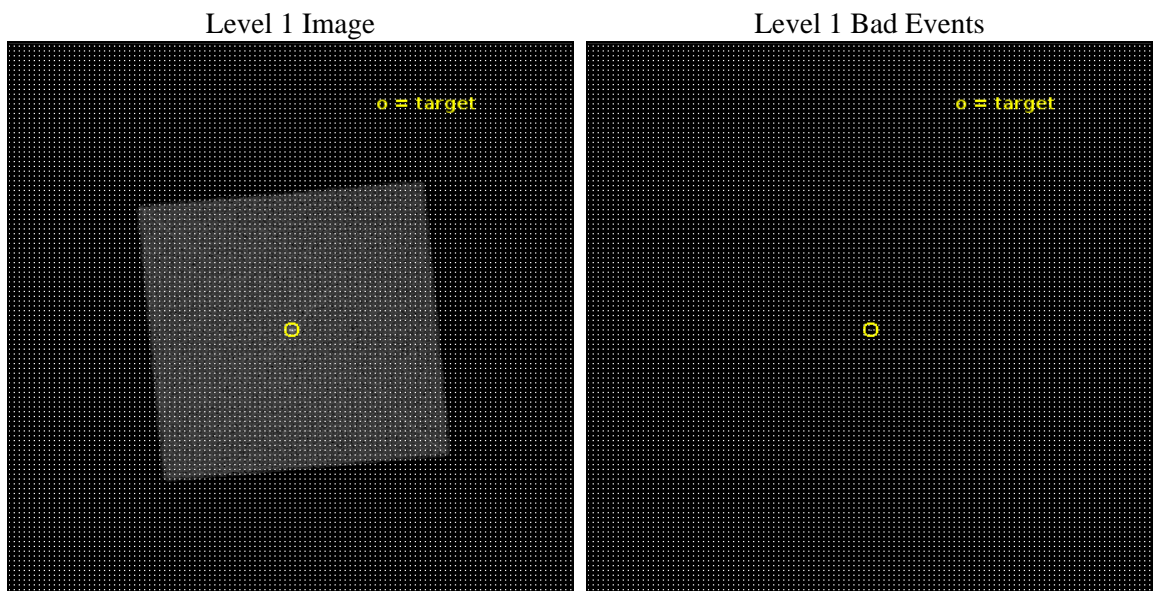
seq_num	291363	Sequence number
obs_id	19846	Observation id
title	AO-18 Calibration Observations of HZ43	Proposal title
observer	CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.090417	Observer's specified target RA [deg]
dec_targ	29.098306	Observer's specified target Dec [deg]
ra_nom	199.09353998712	Nominal RA [deg]
dec_nom	29.106494374084	Nominal Dec [deg]
roll_nom	39.687296129007	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2183.2501261234	[s]
livetime	2156.0175336712	Ontime multiplied by DTCOR
l2events	228751	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	10.5.2	Processing system revision	ontime	2183.2501261234	[s]
caldbver	4.7.2	 	l1events	466820	Number of level 1 events
date	2016-11-25T15:08:16	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	2	Processing version of data	zo_pos	(16467.22, 16158.23)	src1a sky pixel position

2.1.3 Events

Level 1 Events

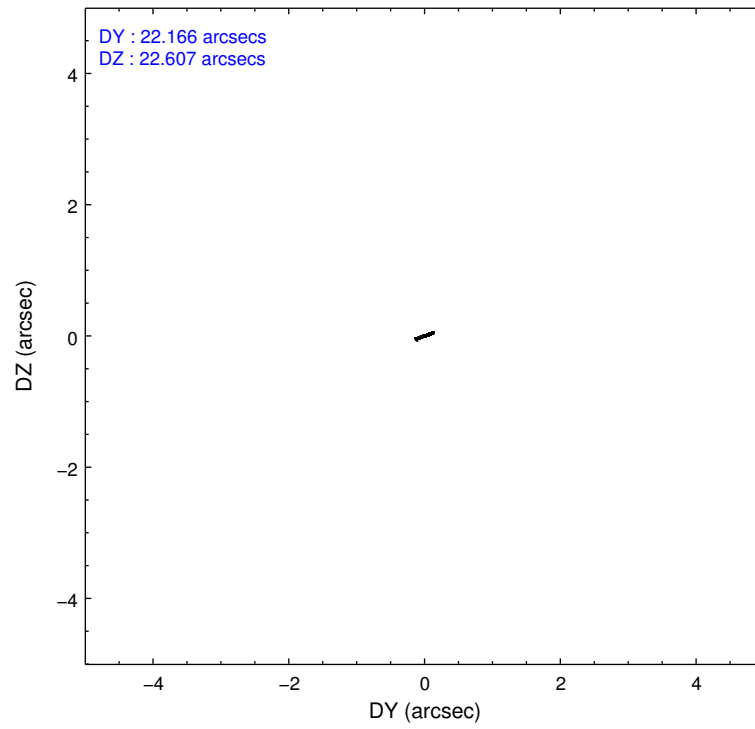
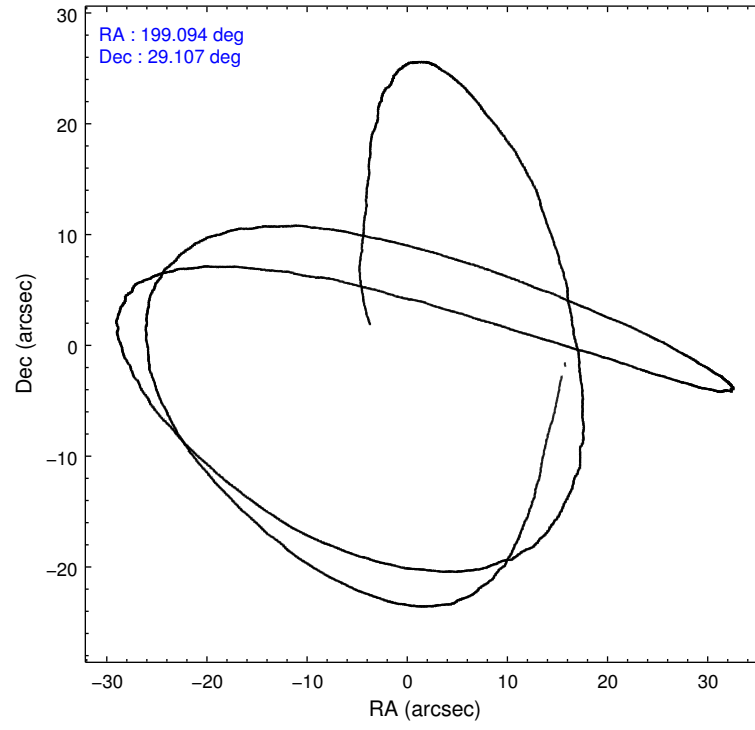
	segment 0
level 1 events	466820
rejected events	163939
rejected %	35%

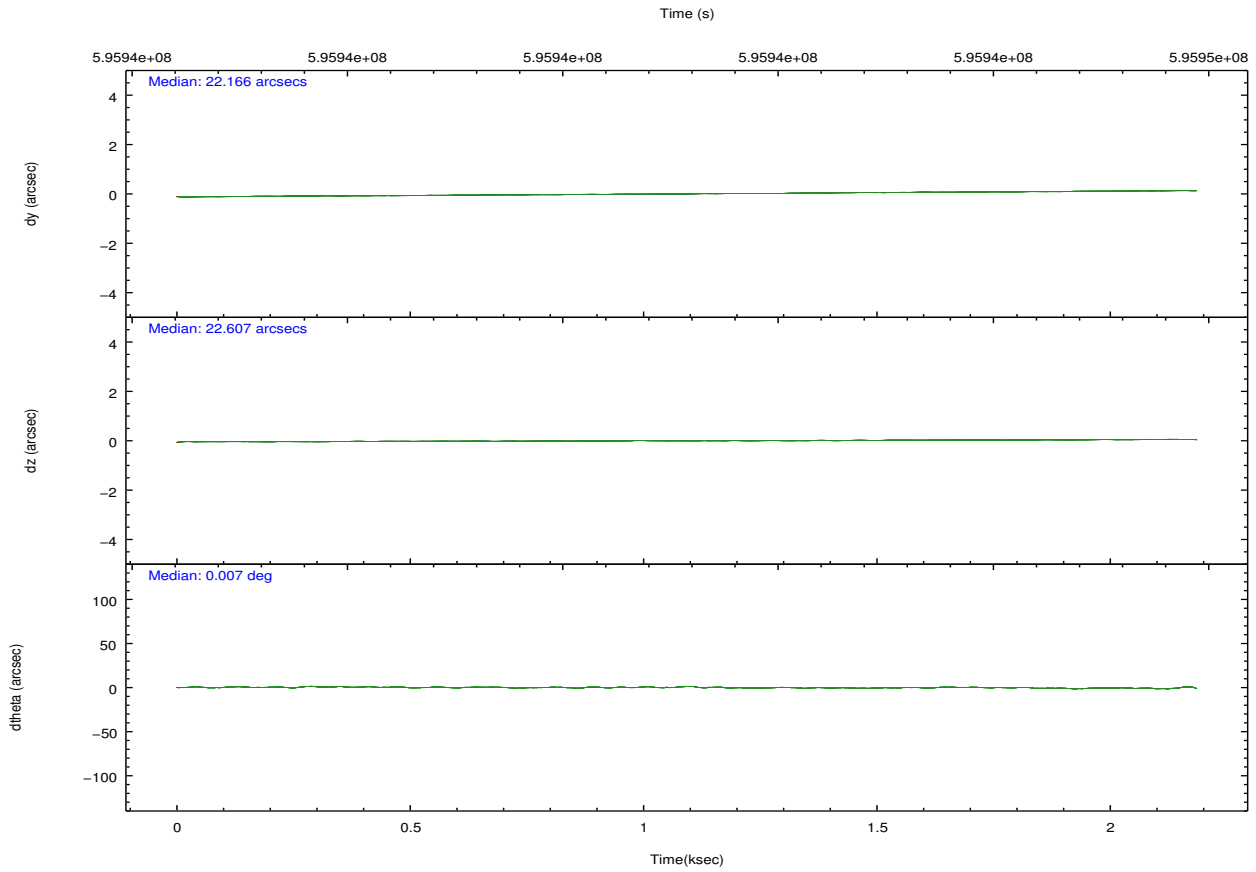
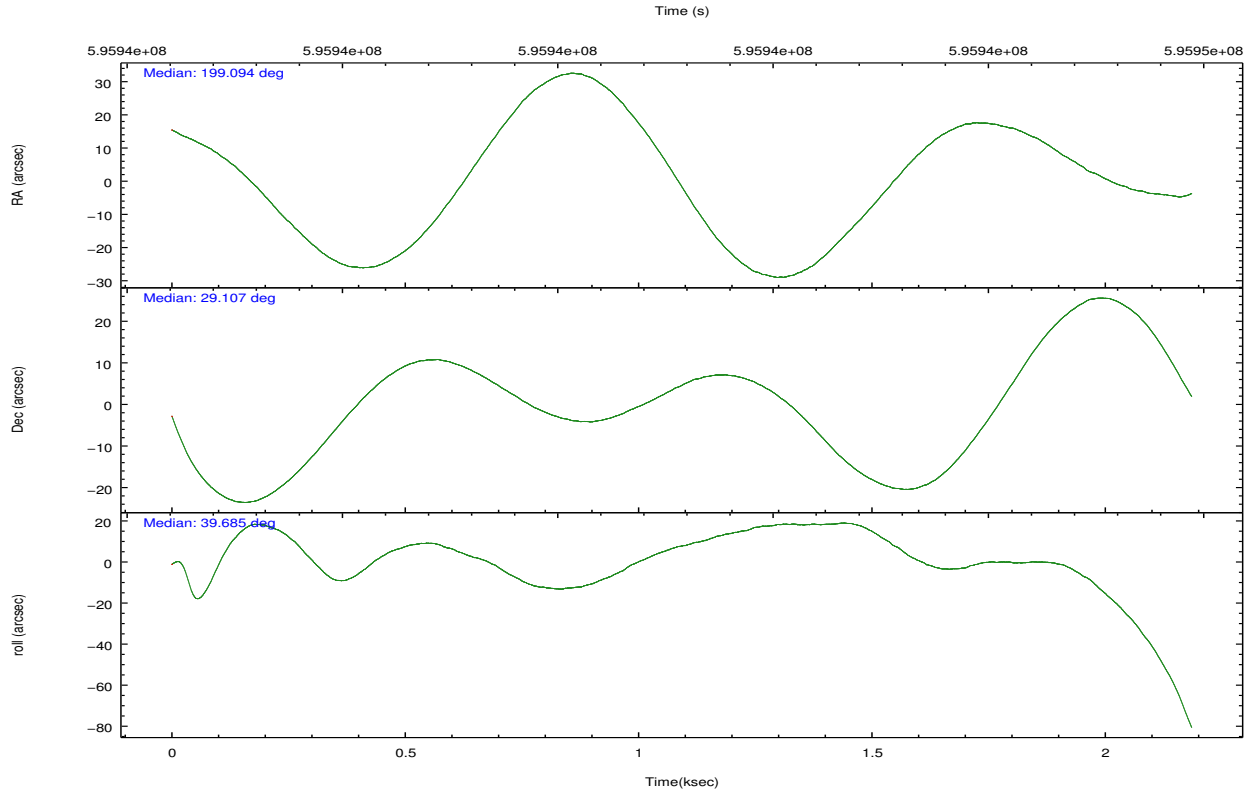
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	LETG	LETG
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	199.083385	199.09353998712
[deg] Pointing Dec	29.080559	29.10649437408431
[deg] Pointing Roll	39.787264	39.68729612900707
[s] Window start time (MET)	595555268.184000	595555268.184000
[s] Window stop time (MET)	598147268.184000	598147268.184000
[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)	595943368.184000	595942012.65107
Observation start date	2016-11-19T11:48:20	2016-11-19T11:26:52
[s] Observation end time (MET)	595945368.184000	595946345.3263201
Observation end date	2016-11-19T12:21:40	2016-11-19T12:39:05

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

2.3 Aspect



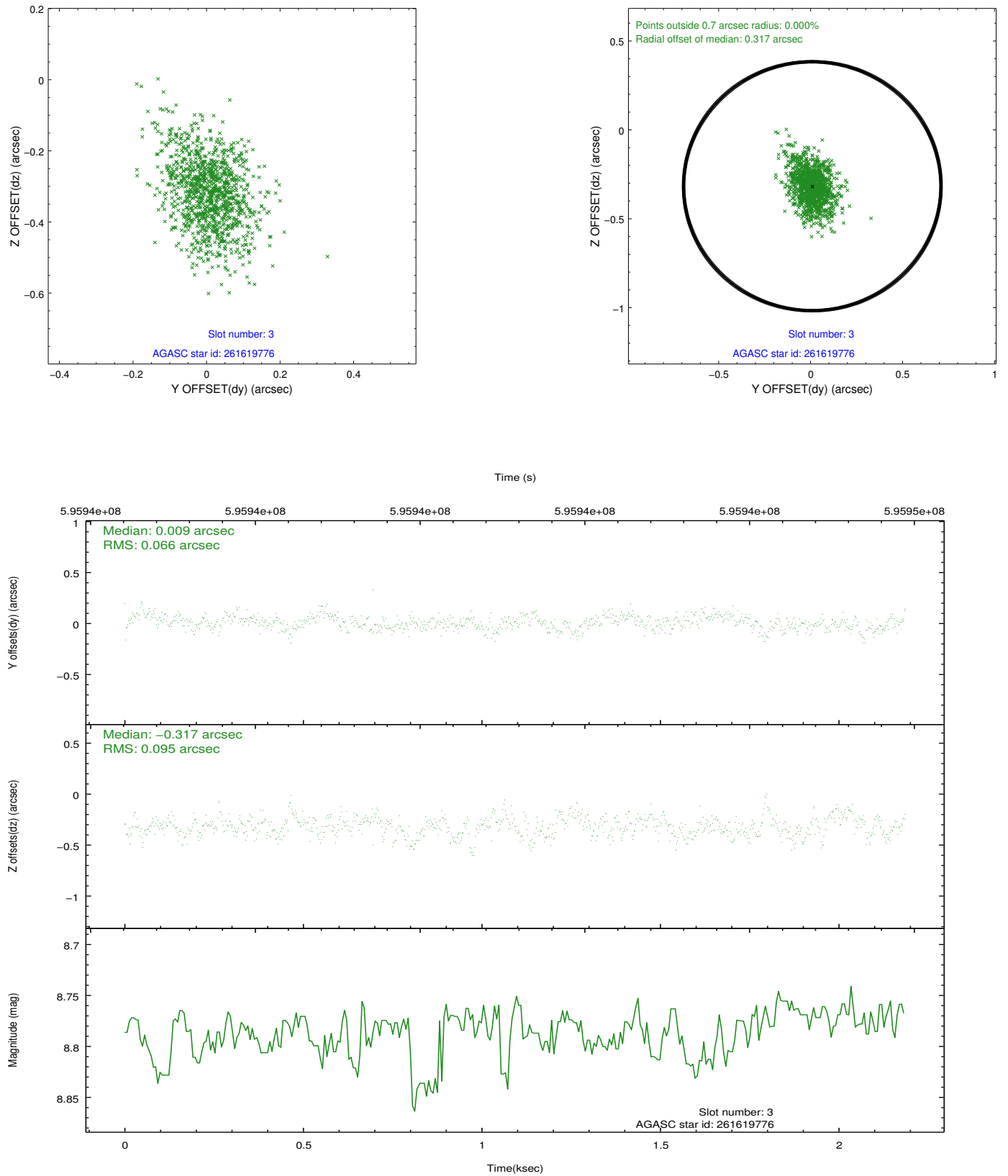


Slot Statistics

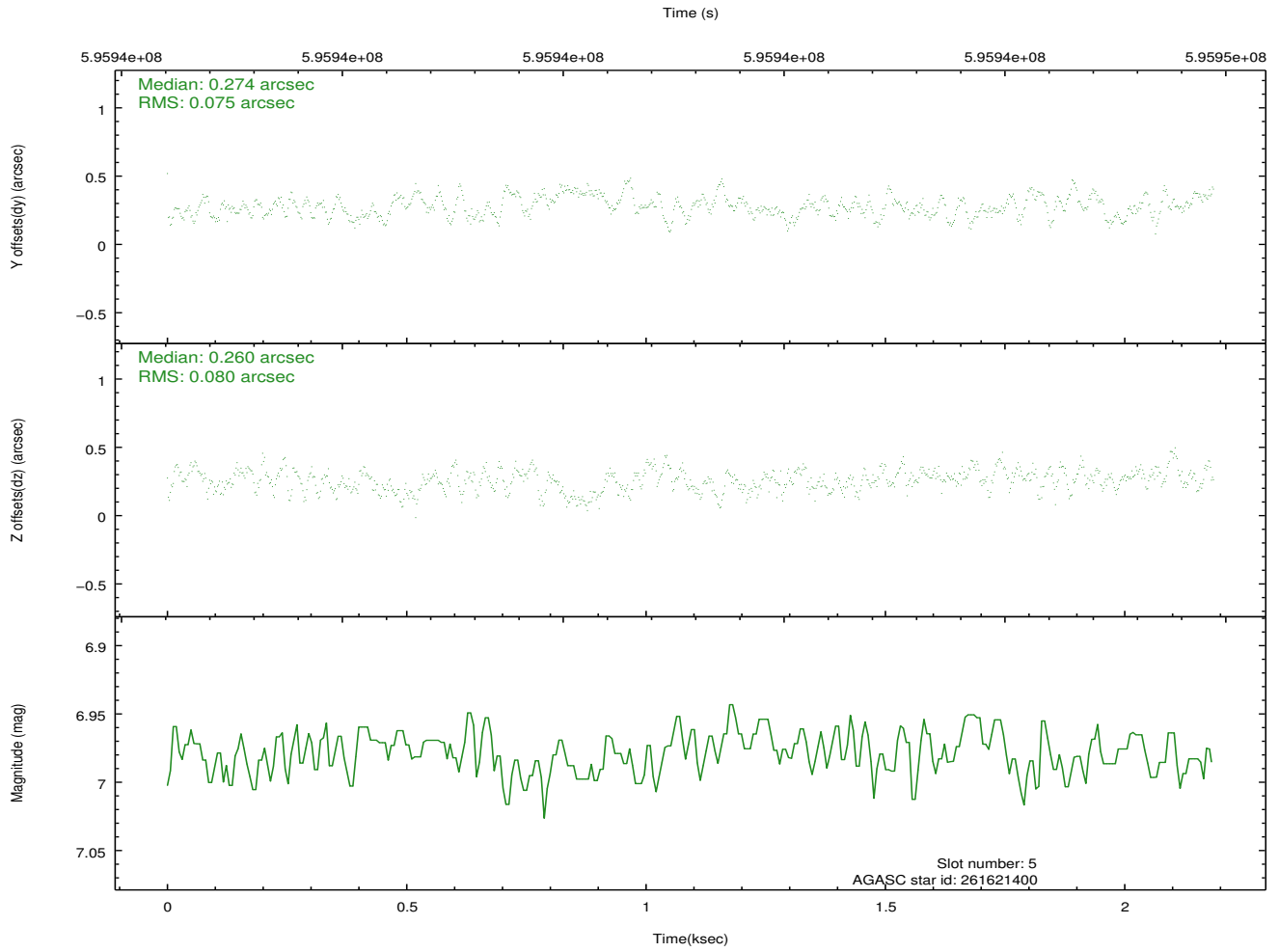
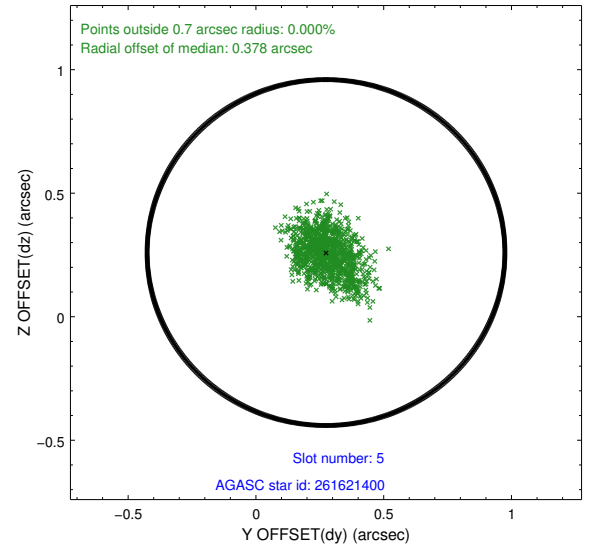
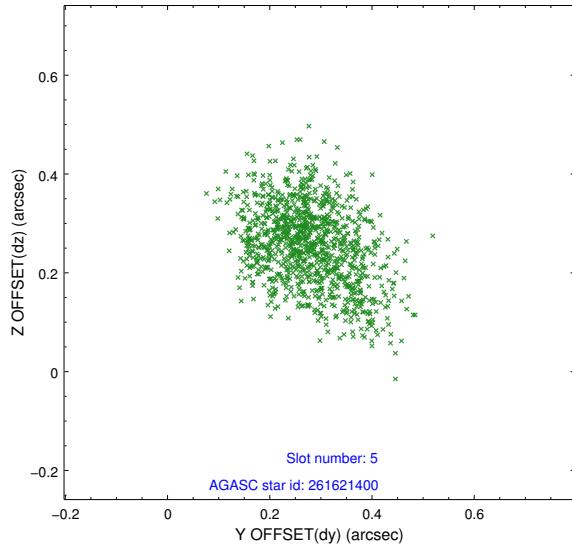
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	7.04	533	-0.179	0.004	0.008	0.014	0.000000	0.000000	-778.31	-1310.92
1	FID		HRC-I-2	7.07	534	0.357	-0.149	0.008	0.013	0.000000	0.000000	833.40	-1315.06
2	FID		HRC-I-3	7.13	534	-0.059	0.056	0.008	0.016	0.000000	0.000000	-1205.17	991.22
3	GUIDE	used	261619776	8.78	1065	0.009	-0.317	0.120	0.205	198.654383	29.401174	-293.35	1748.14
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	261621400	6.98	1067	0.274	0.260	0.117	0.194	198.901600	28.741982	-1220.81	-567.07
6	GUIDE	used	261626376	9.68	1066	-0.122	-0.229	0.182	0.314	198.947288	29.347445	285.36	1011.26
7	GUIDE	used	261629720	8.10	1064	-0.166	0.289	0.107	0.174	199.236176	29.044452	286.88	-406.42

2.4 Star Slots

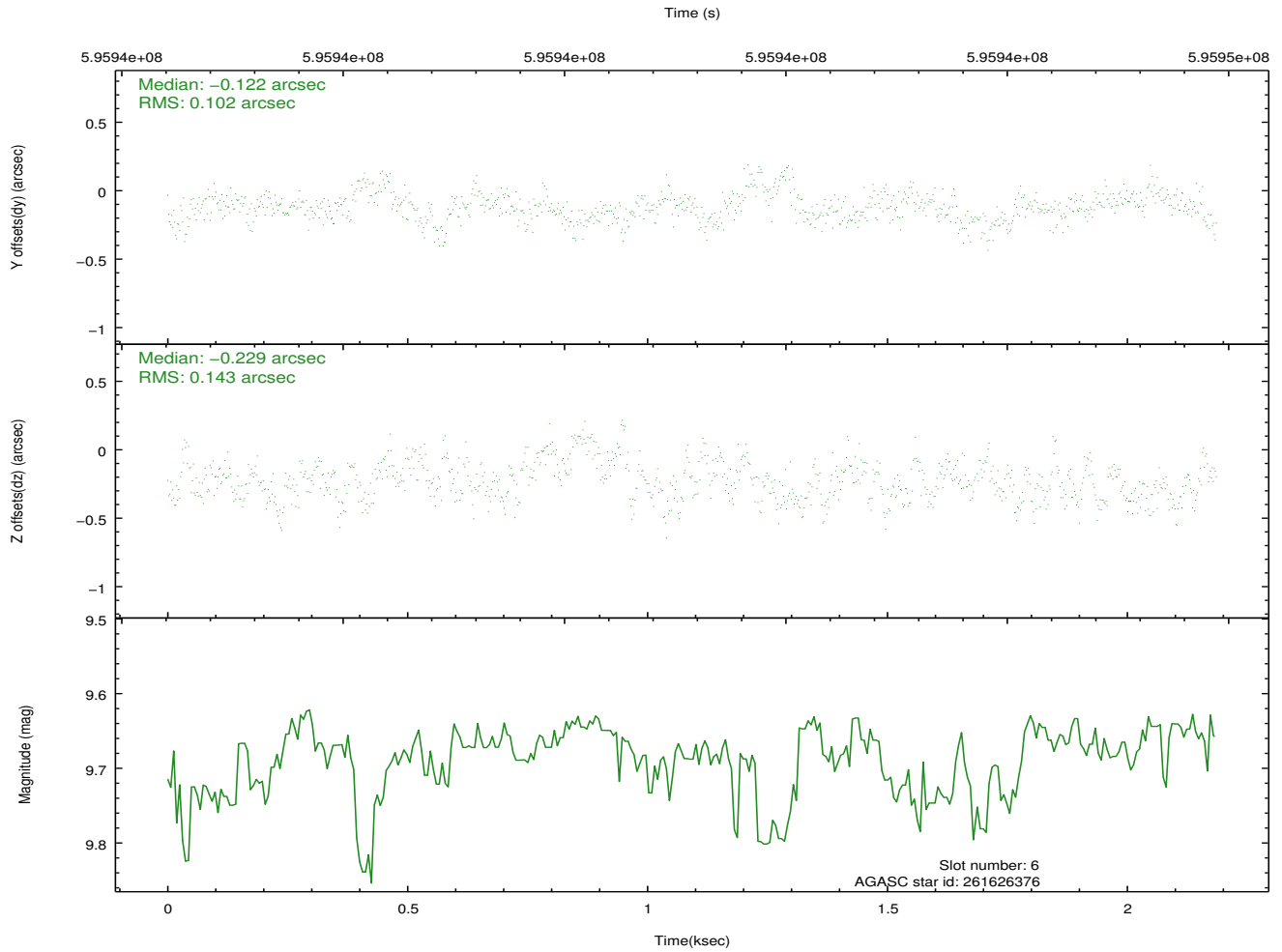
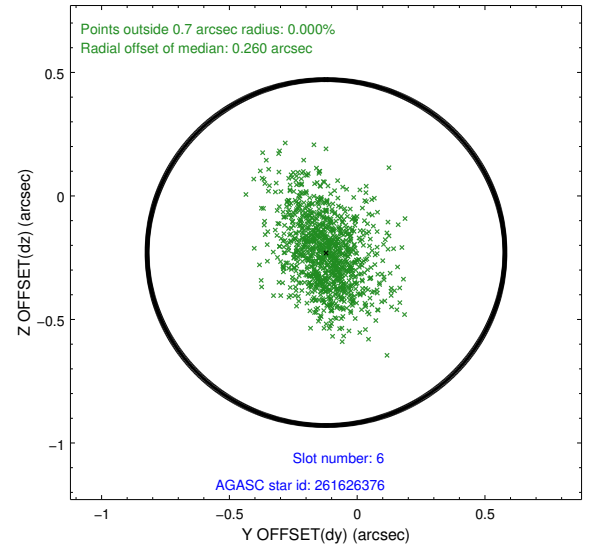
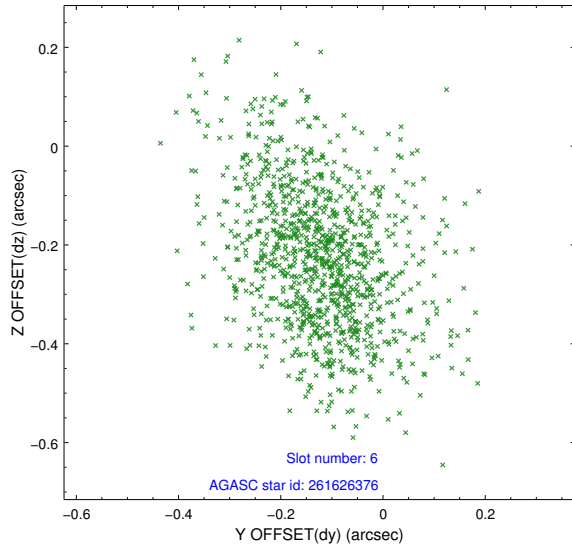
2.4.1 Slot 3



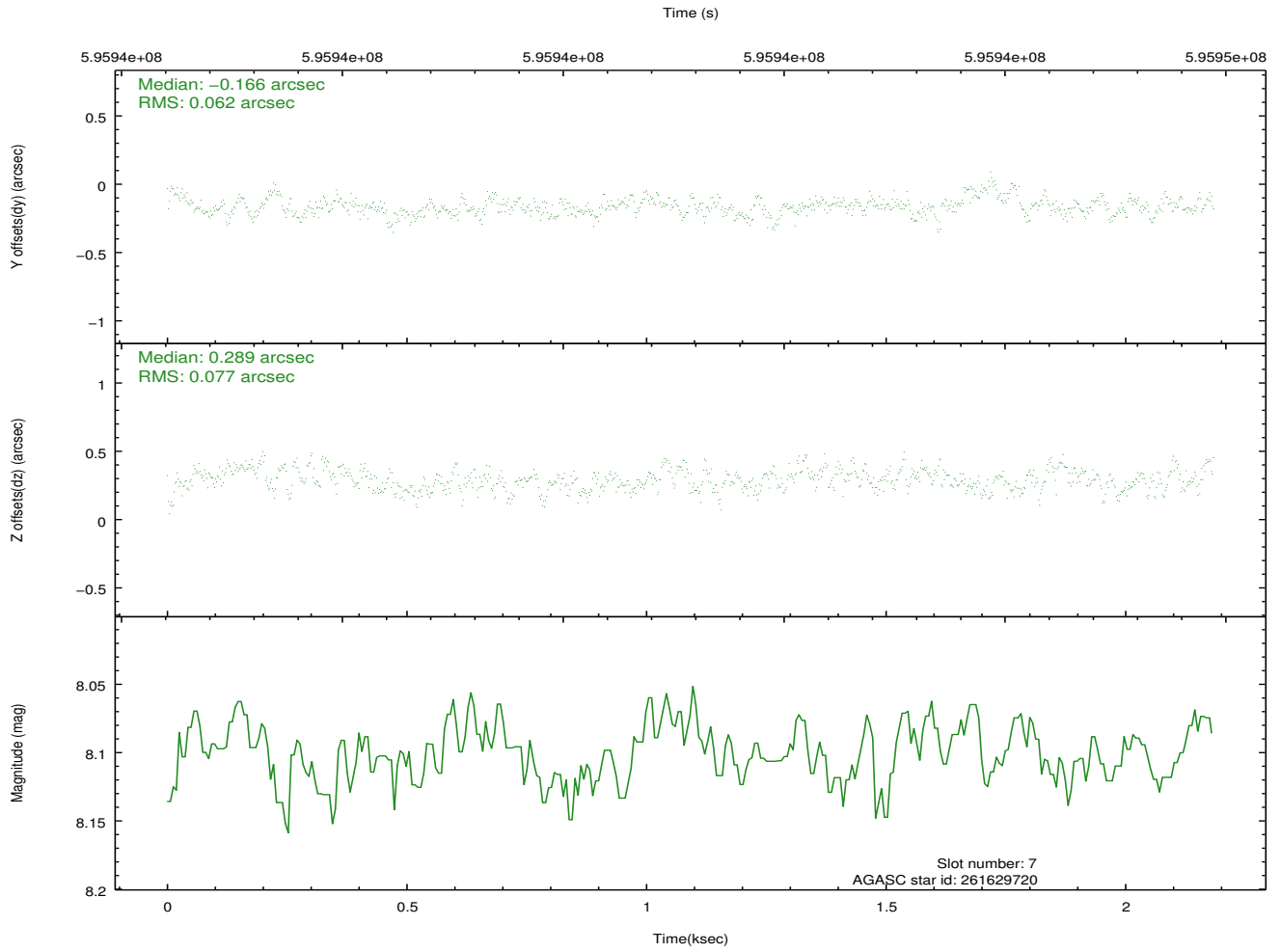
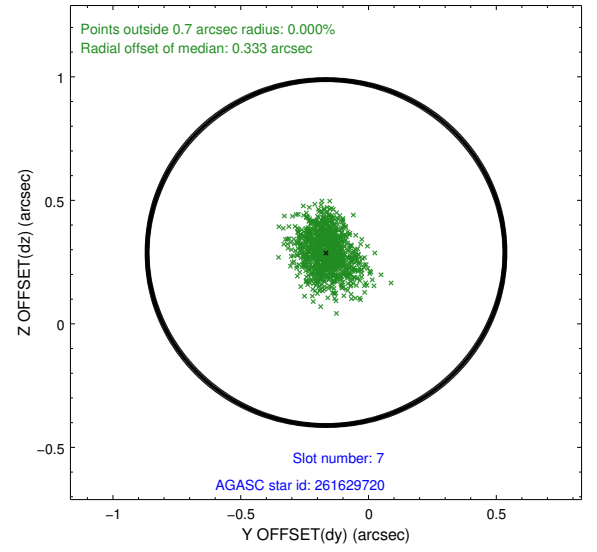
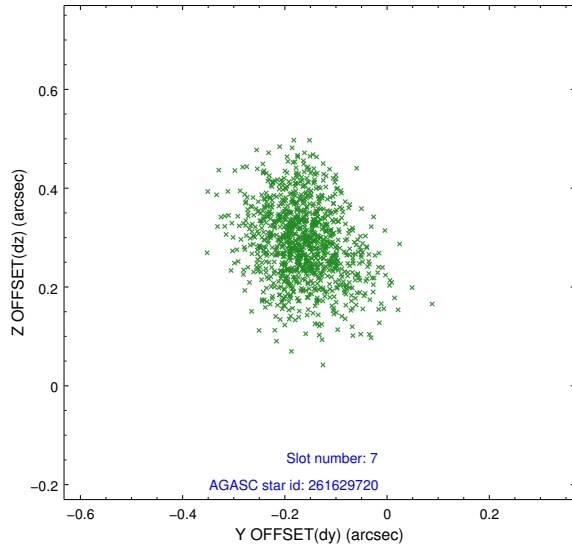
2.4.2 Slot 5



2.4.3 Slot 6

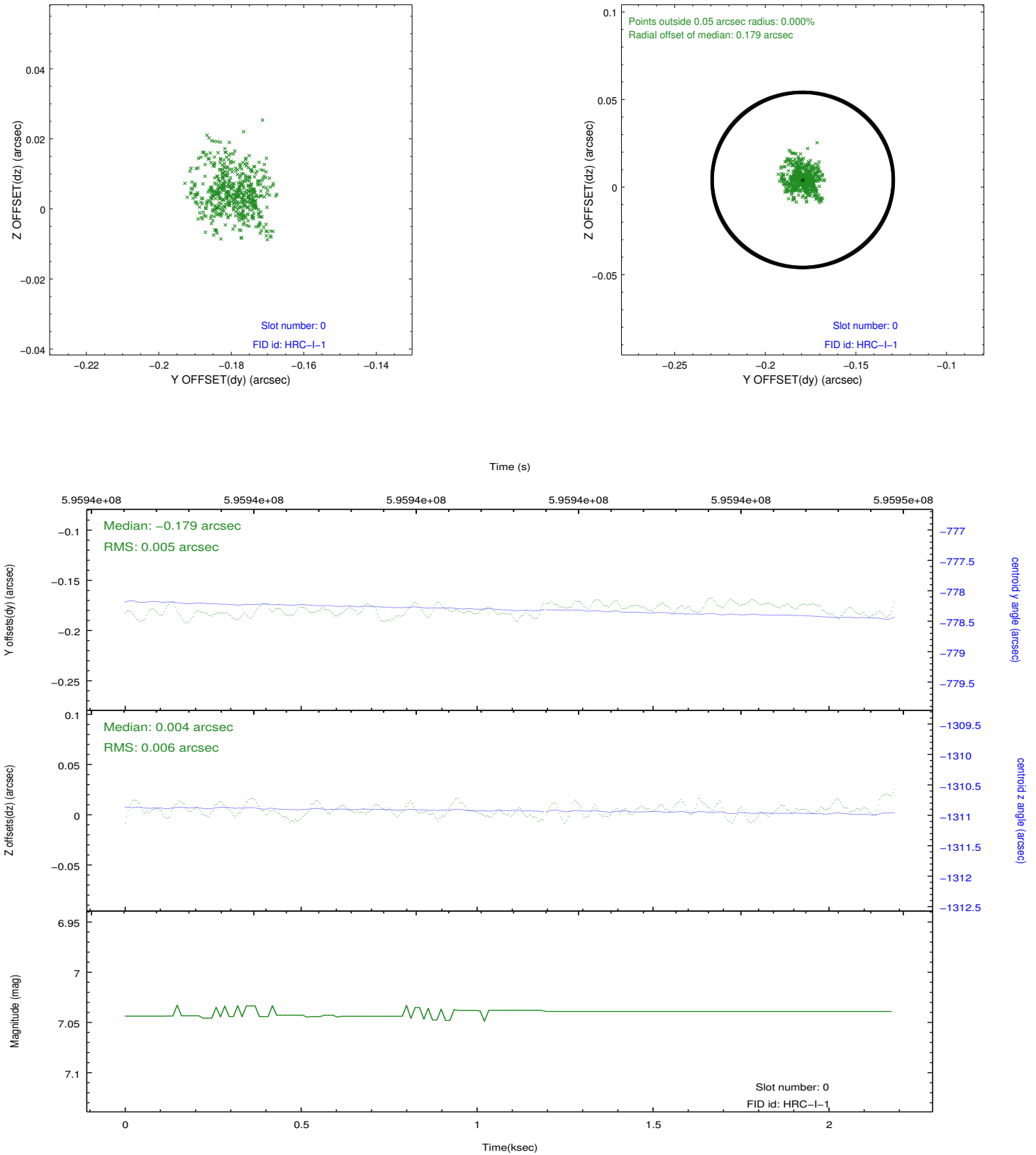


2.4.4 Slot 7

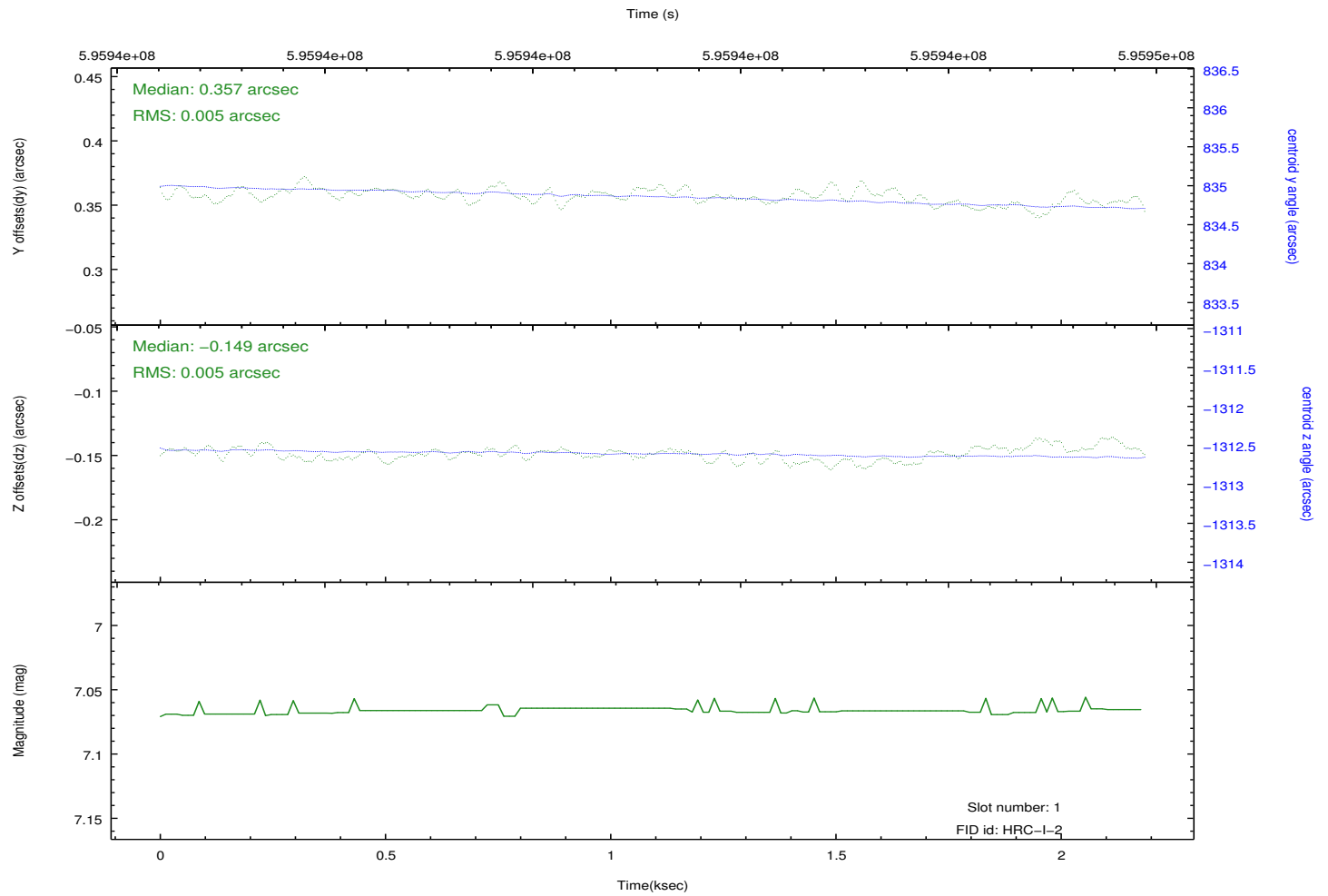
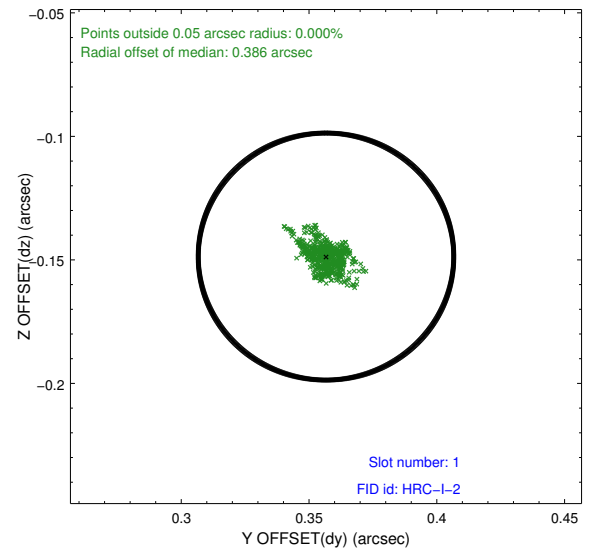
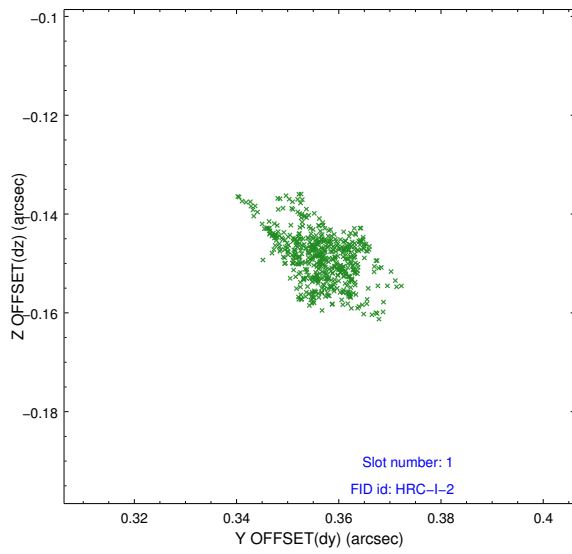


2.5 FID Slots

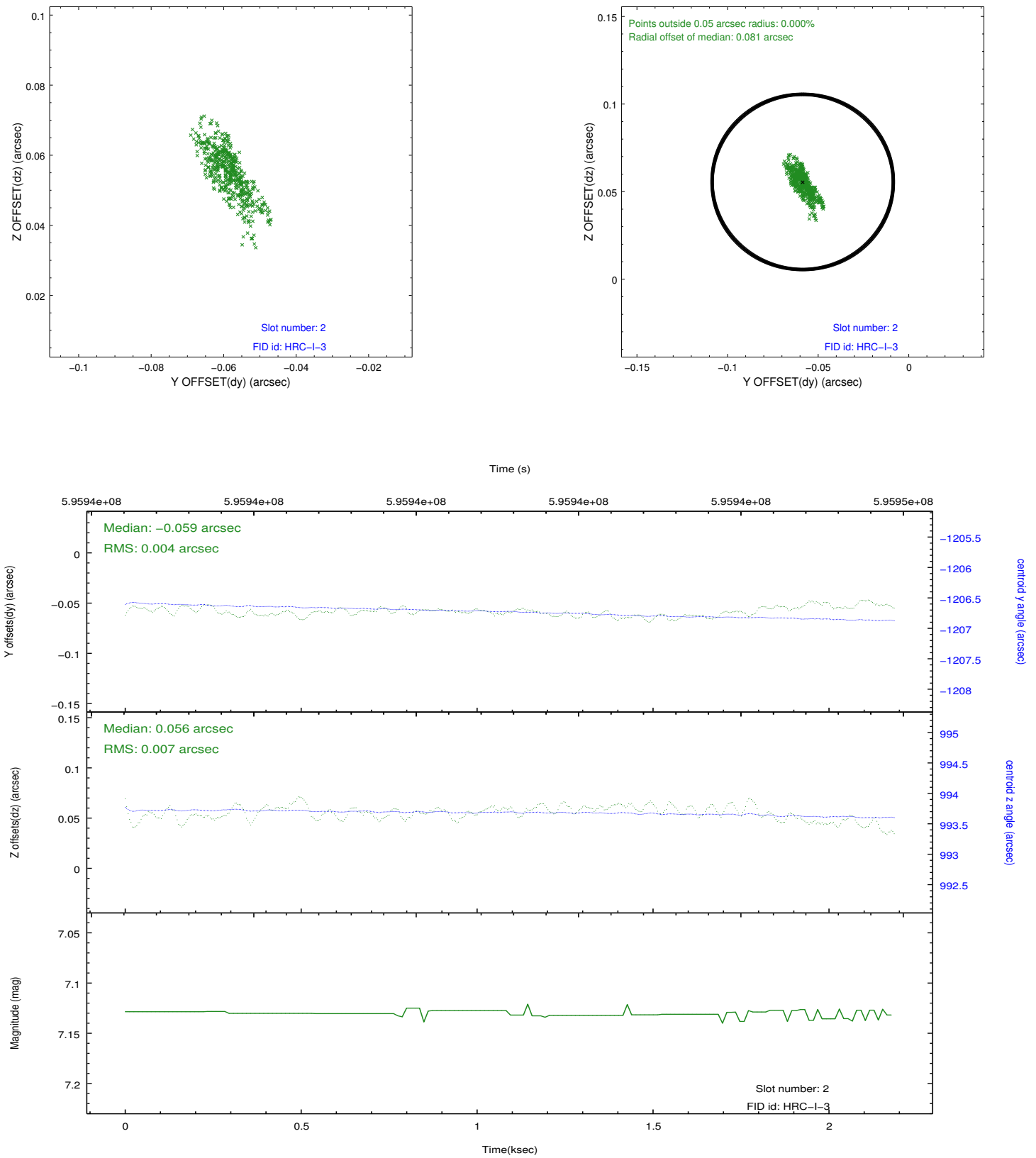
2.5.1 Slot 0



2.5.2 Slot 1

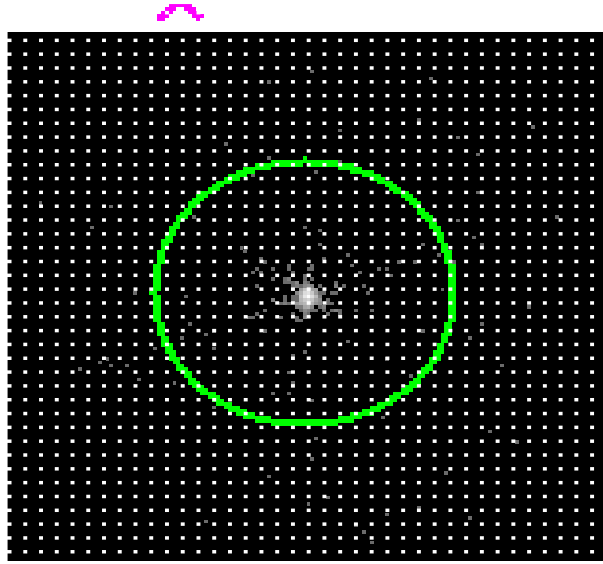


2.5.3 Slot 2

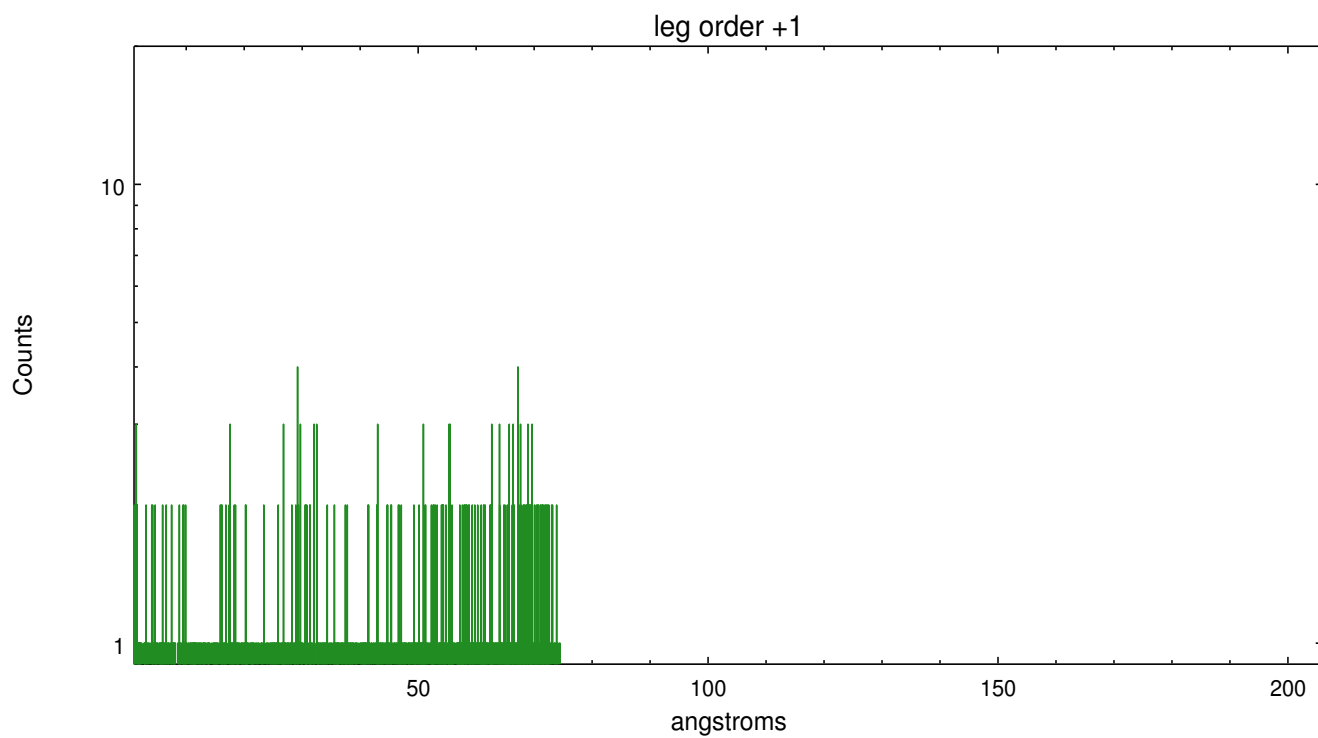
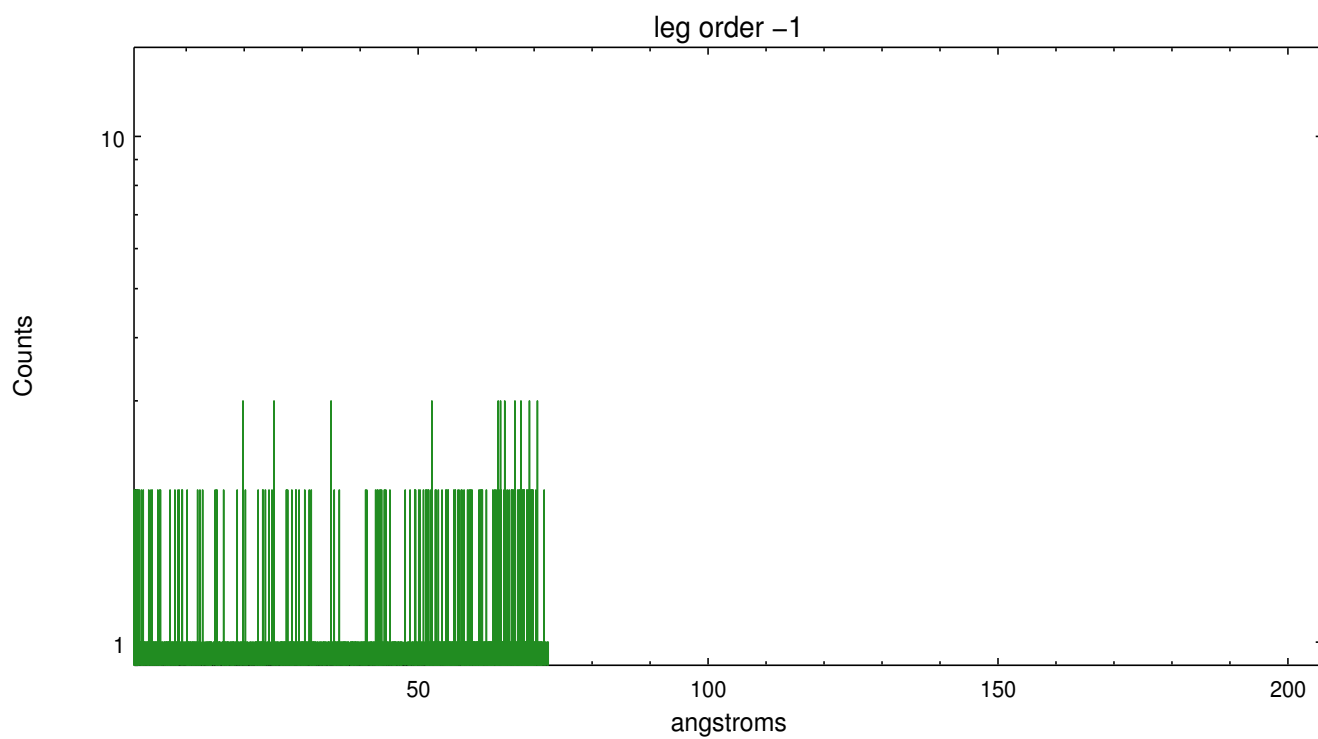


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.11.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.1832501261234

A.2 Comments

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.