

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19859 - L2 Version 1
Chandra X-Ray Center

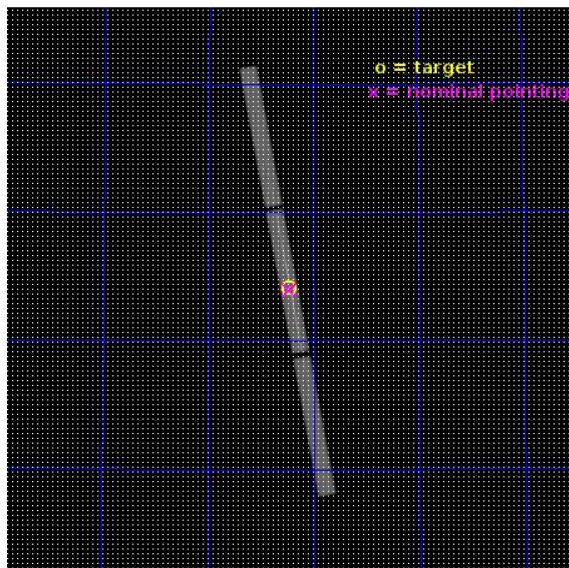
L2 Processing Date : Jun 23 2017

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 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	LETG Arm	17
A	Summary	19
A.1	Status	19
A.2	Comments	19

1 Front

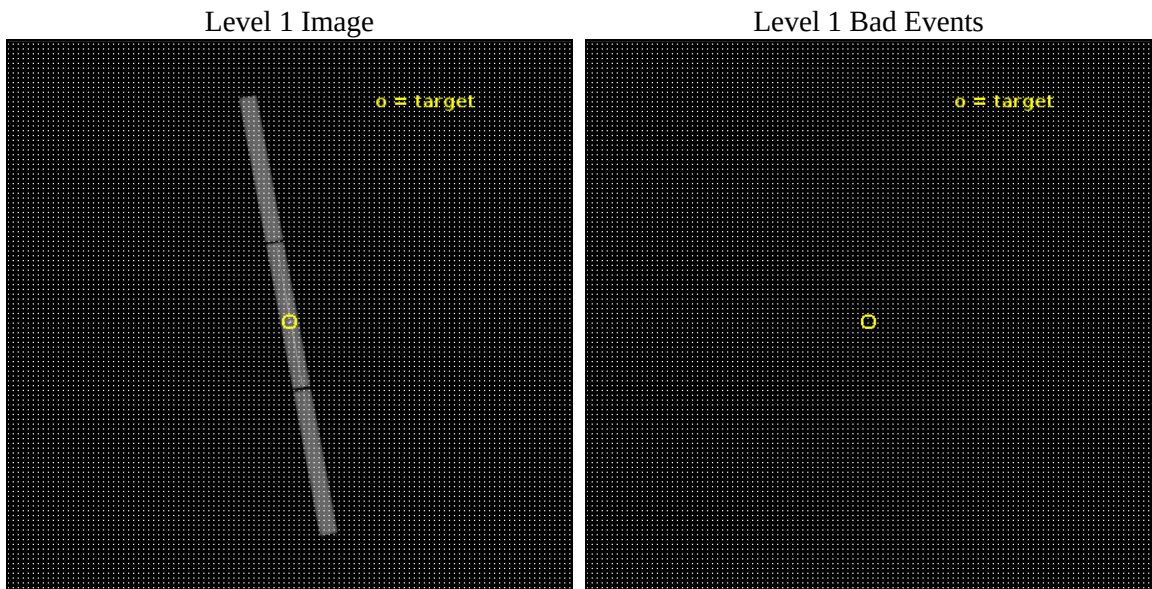
seq_num	790299	Sequence number
obs_id	19859	Observation id
title	AO-18 Calibration Observations of Mkn421	Proposal title
observer	CXC Calibration	Principal investigator
object	MKN421	Source name
ra_targ	166.113333	Observer's specified target RA [deg]
dec_targ	38.208806	Observer's specified target Dec [deg]
ra_nom	166.11920995708	Nominal RA [deg]
dec_nom	38.19974972484	Nominal Dec [deg]
roll_nom	259.82412985831	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10173.381842732	[s]
livetime	10063.215419931	Ontime multiplied by DTCOR
l2events	1048607	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	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	10173.381842732	[s]
caldbver	4.7.5	 	l1events	1298707	Number of level 1 events
date	2017-06-23T15:51:28	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(32883.17, 33019.48)	src1a sky pixel position

2.1.3 Events

Level 1 Events

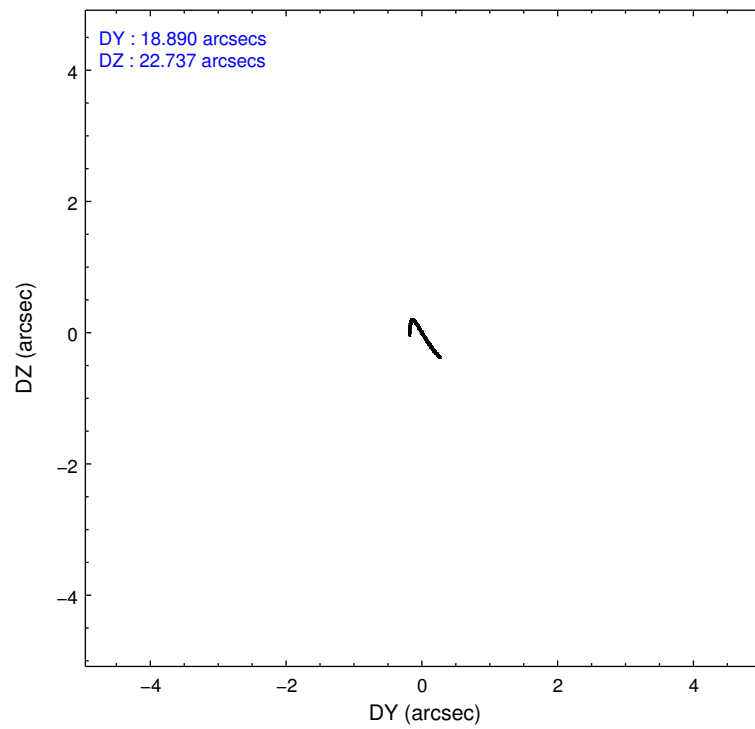
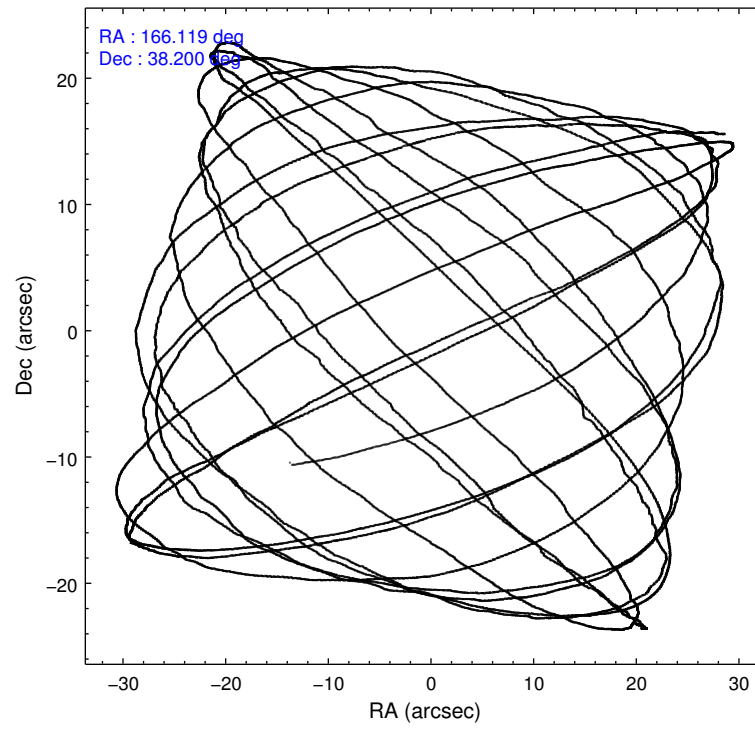
	segment 1	segment 2	segment 3
level 1 events	380816	534854	383037
rejected events	11003	13646	11027
rejected %	2%	2%	2%

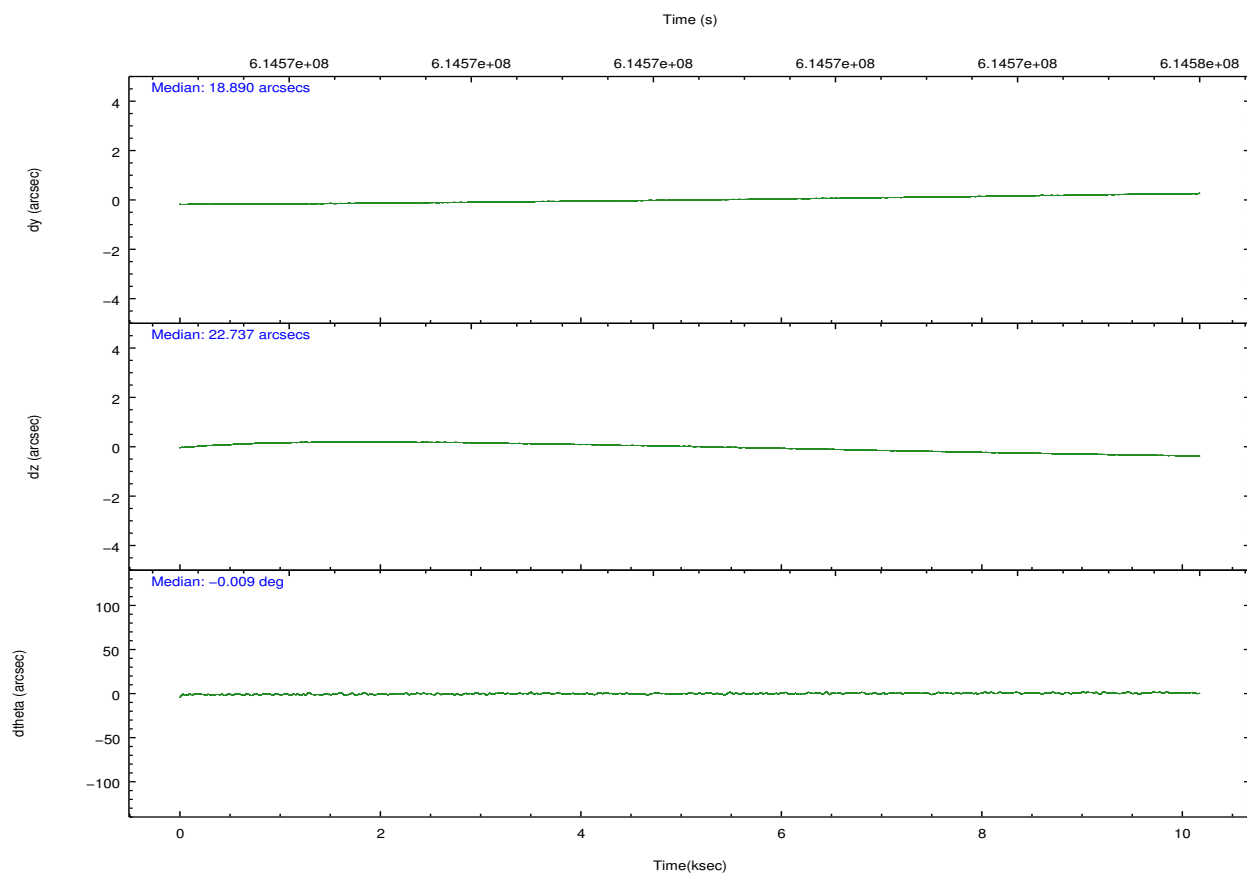
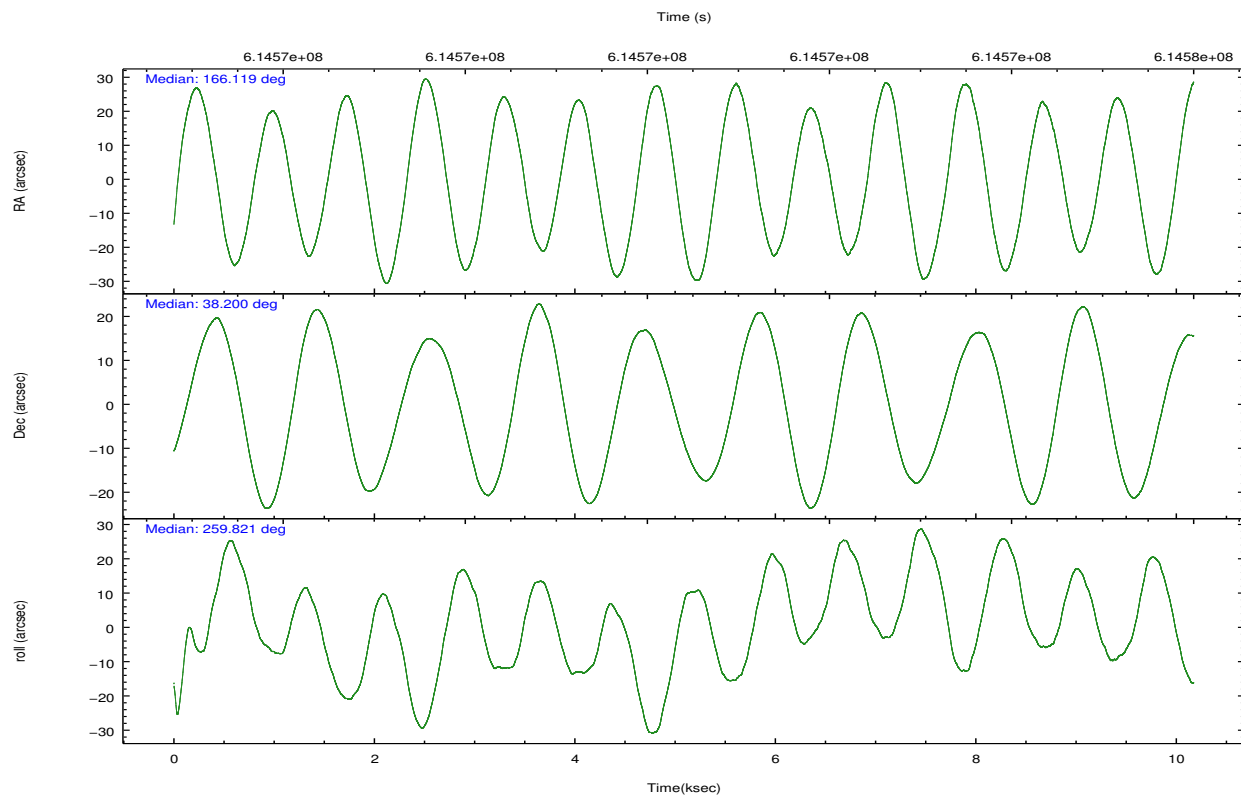
2.2 Compared Parameters

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	166.105003	166.1192099570766
[deg] Pointing Dec	38.226329	38.1997497248398
[deg] Pointing Roll	259.765641	259.8241298583067
[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)	614565495.184000	614565027.0686001
Observation start date	2017-06-23T00:37:06	2017-06-23T00:30:27
[s] Observation end time (MET)	614575495.184000	614575759.8442301
Observation end date	2017-06-23T03:23:46	2017-06-23T03:29:19

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

2.3 Aspect



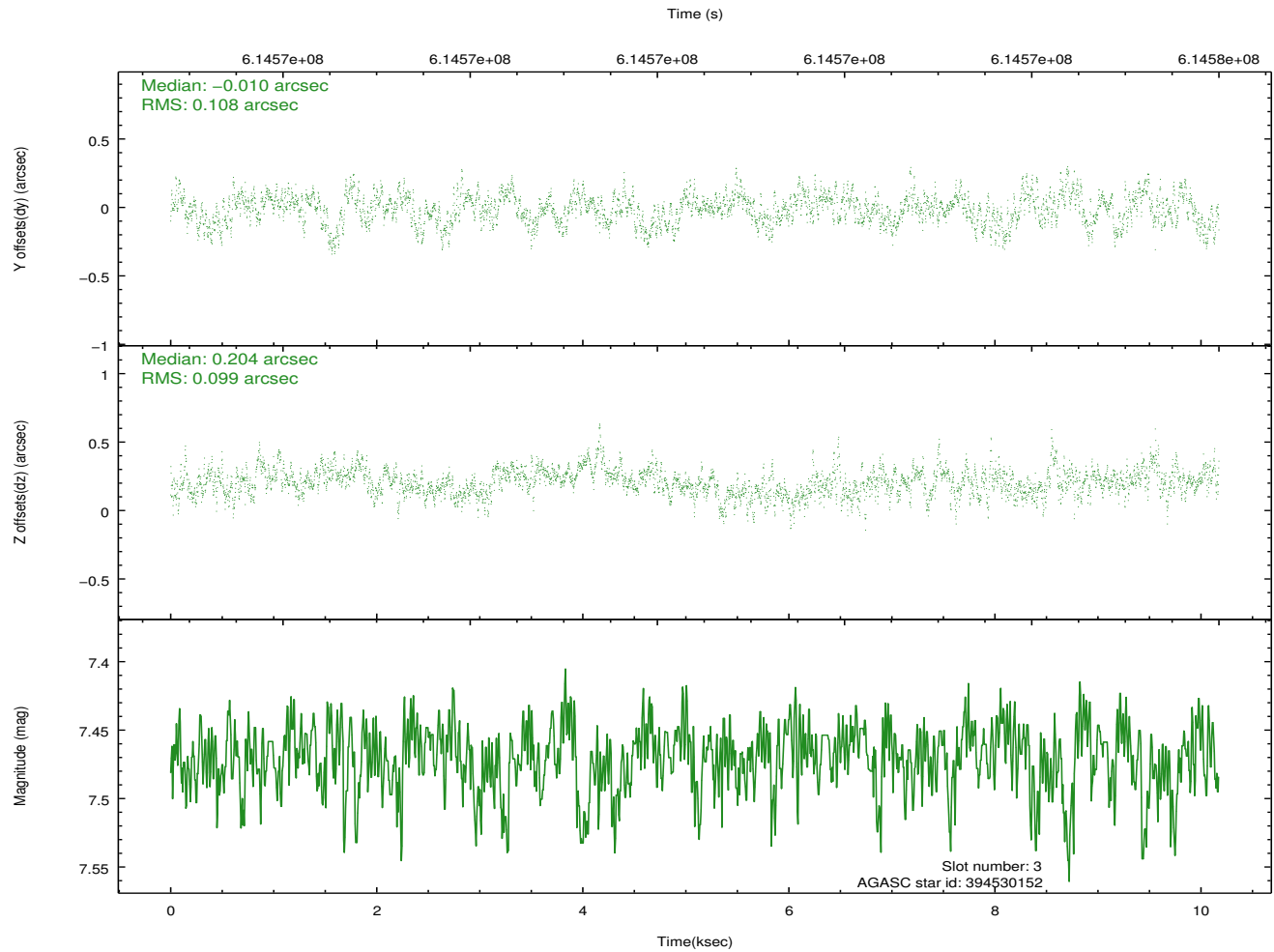
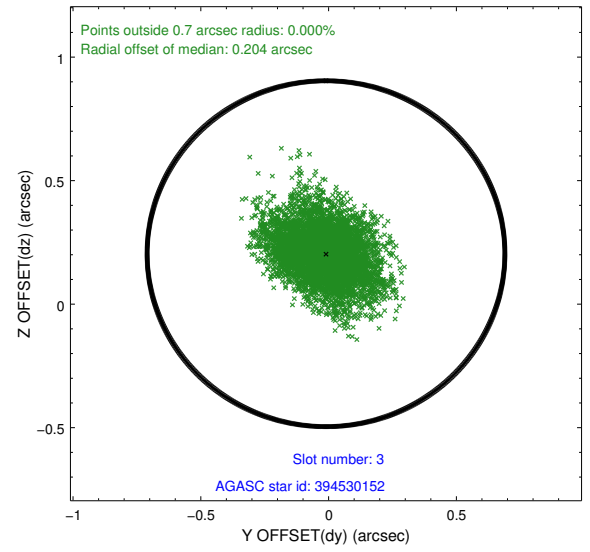
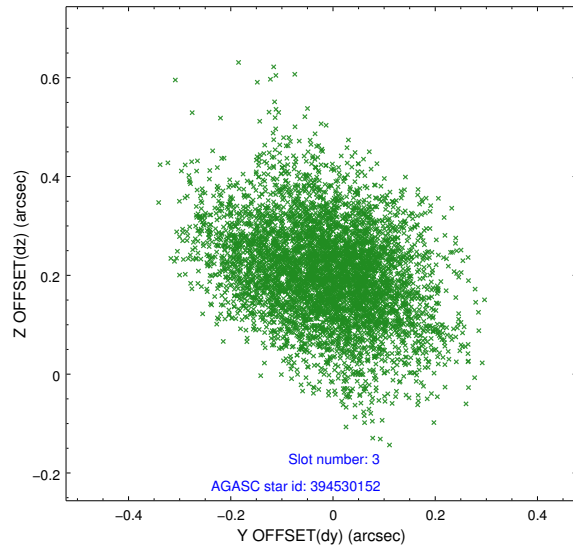


Slot Statistics

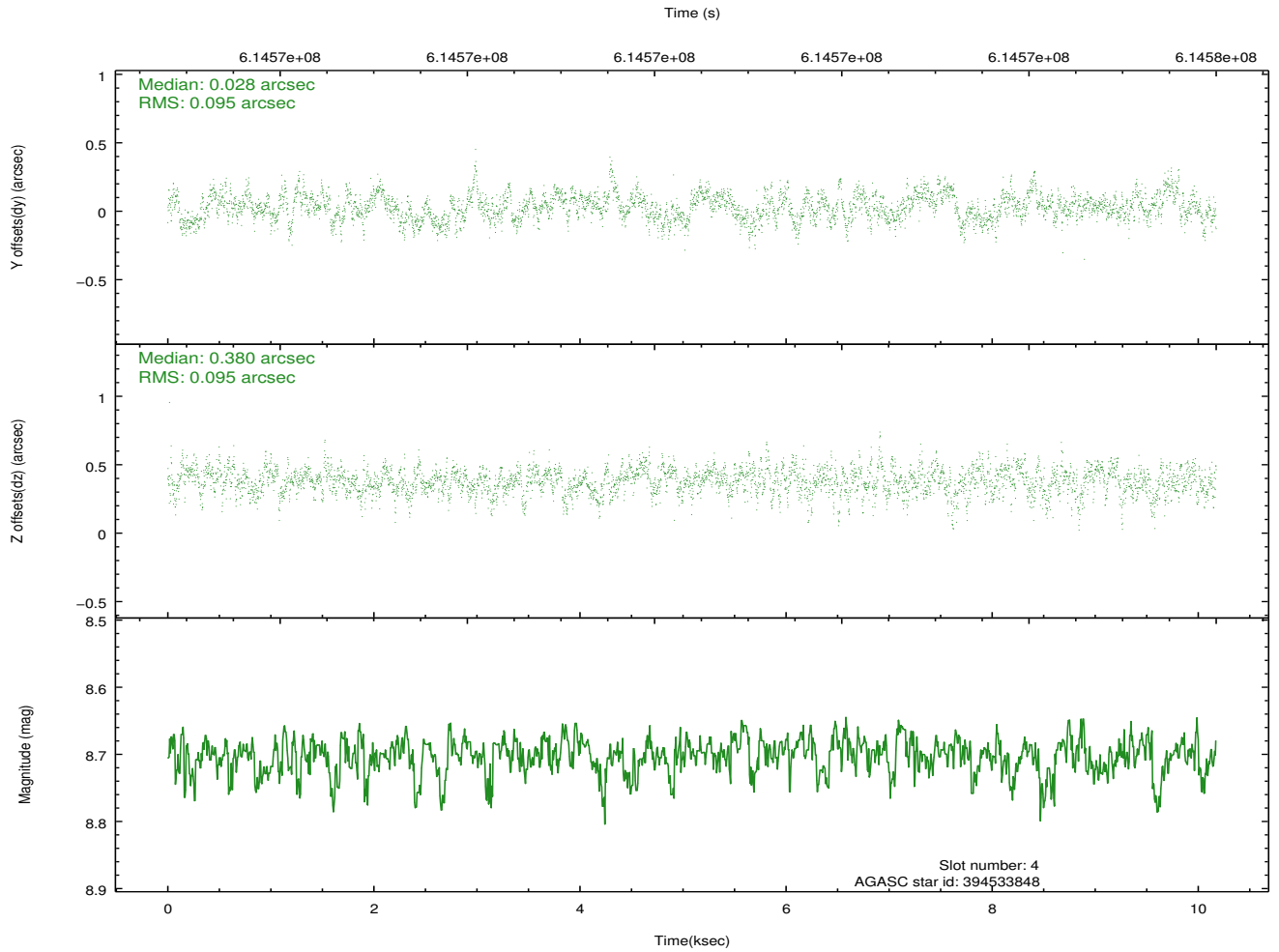
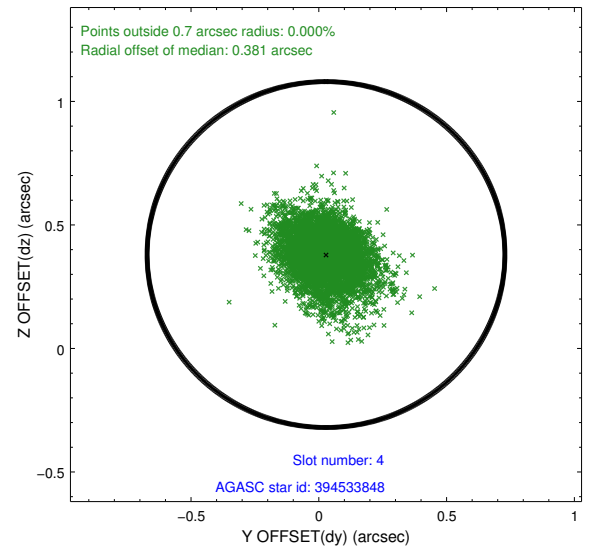
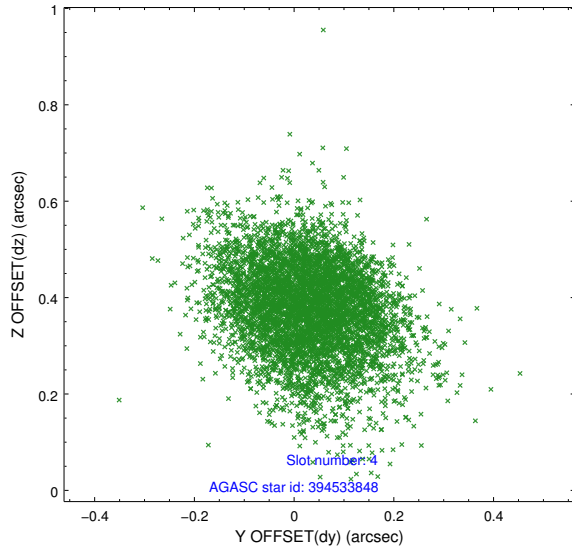
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-1	7.05	2482	-0.048	-0.176	0.009	0.014	0.000000	0.000000	-1173.47	-471.92
1	FID		HRC-S-2	7.01	2482	0.322	-0.106	0.005	0.010	0.000000	0.000000	1226.11	-464.46
2	FID		HRC-S-3	7.03	2482	0.115	-0.020	0.008	0.014	0.000000	0.000000	-1175.62	557.58
3	GUIDE	used	394530152	7.47	4964	-0.010	0.204	0.155	0.257	166.075805	38.868252	-2258.98	-491.10
4	GUIDE	used	394533848	8.70	4961	0.028	0.380	0.139	0.237	166.382906	38.276007	-316.54	735.18
5	GUIDE	used	394543960	9.74	4947	0.209	0.227	0.268	0.425	165.802757	37.787371	1707.35	-565.24
6	GUIDE	used	394546712	6.58	4963	-0.343	0.345	0.126	0.222	166.451462	38.394357	-769.65	853.10
7	GUIDE	used	394546720	6.41	4962	0.114	-1.148	0.150	0.238	166.130115	38.241361	-65.29	59.26

2.4 Star Slots

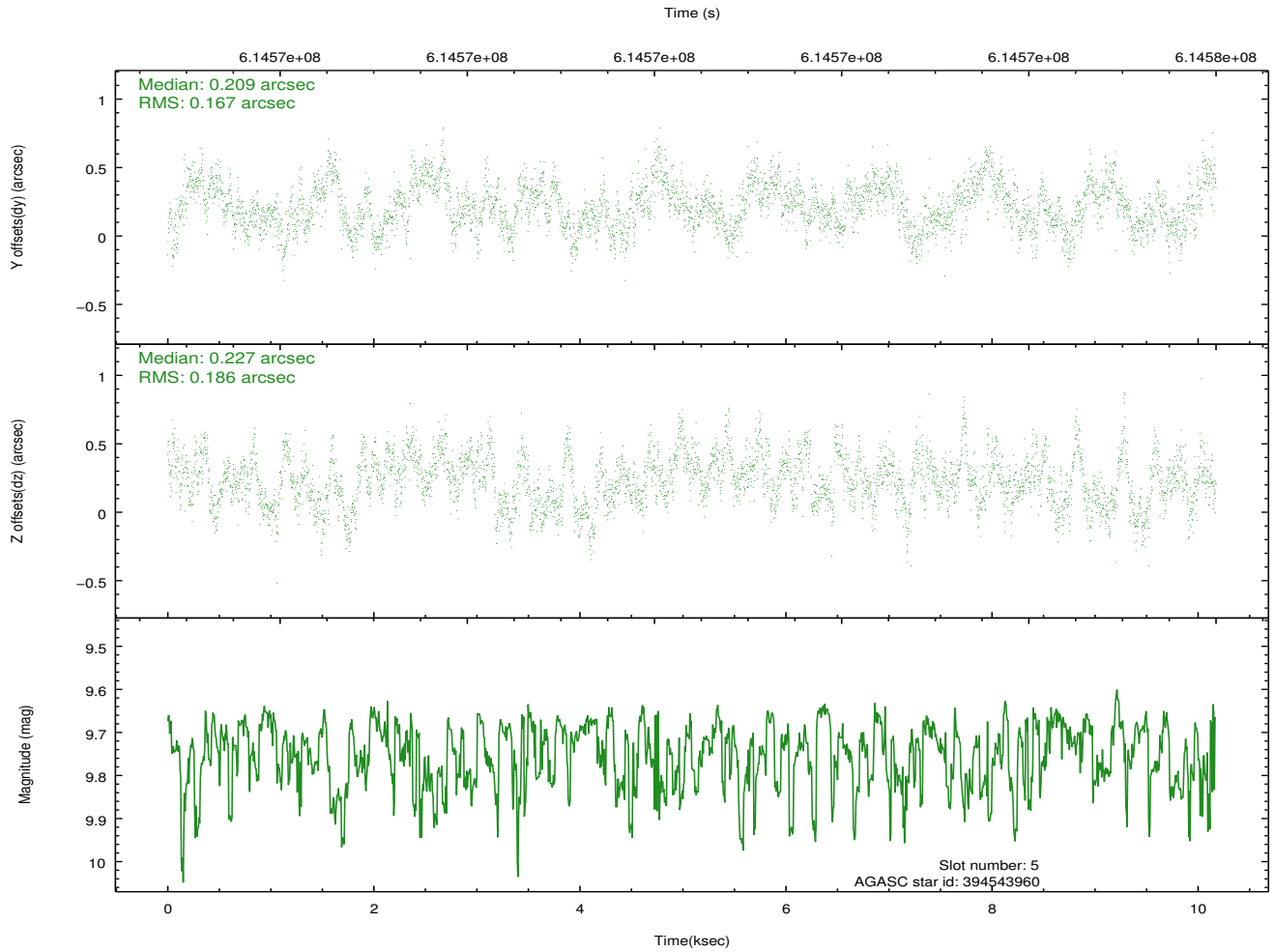
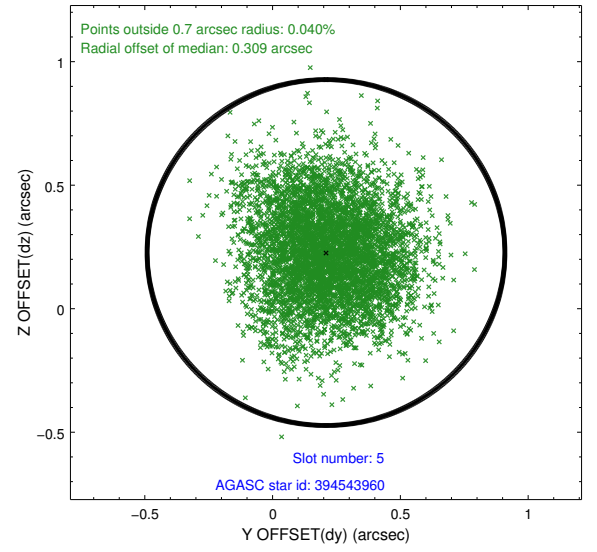
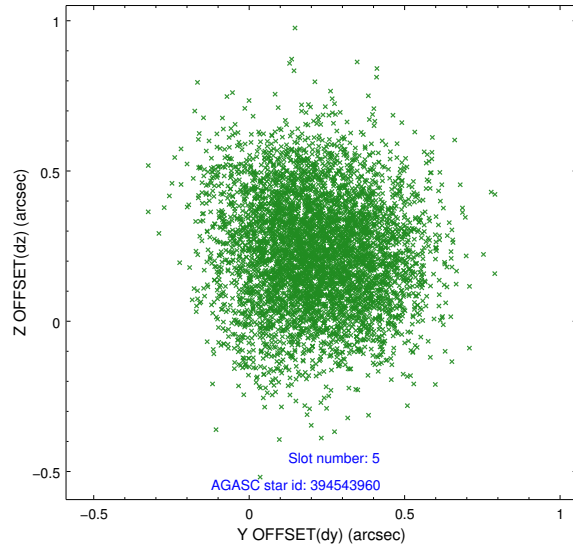
2.4.1 Slot 3



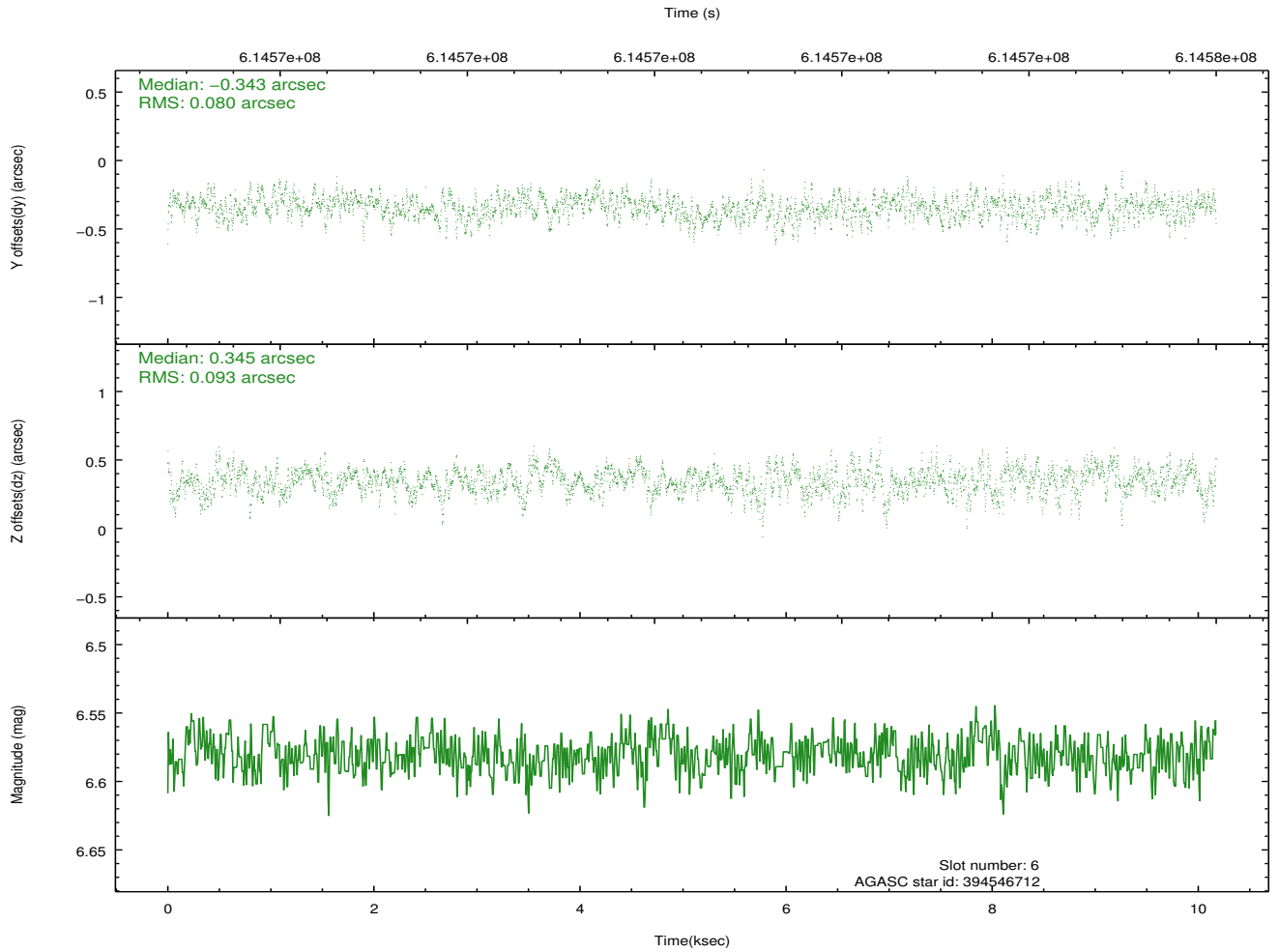
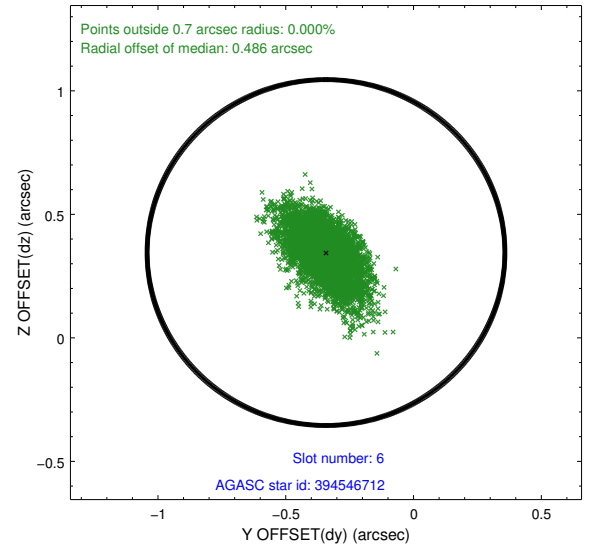
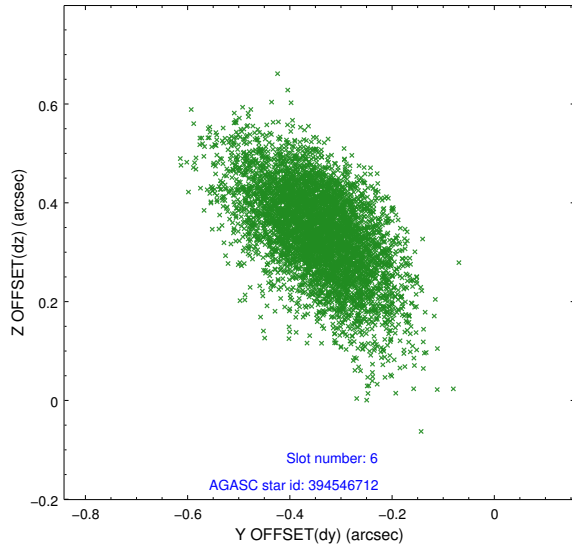
2.4.2 Slot 4



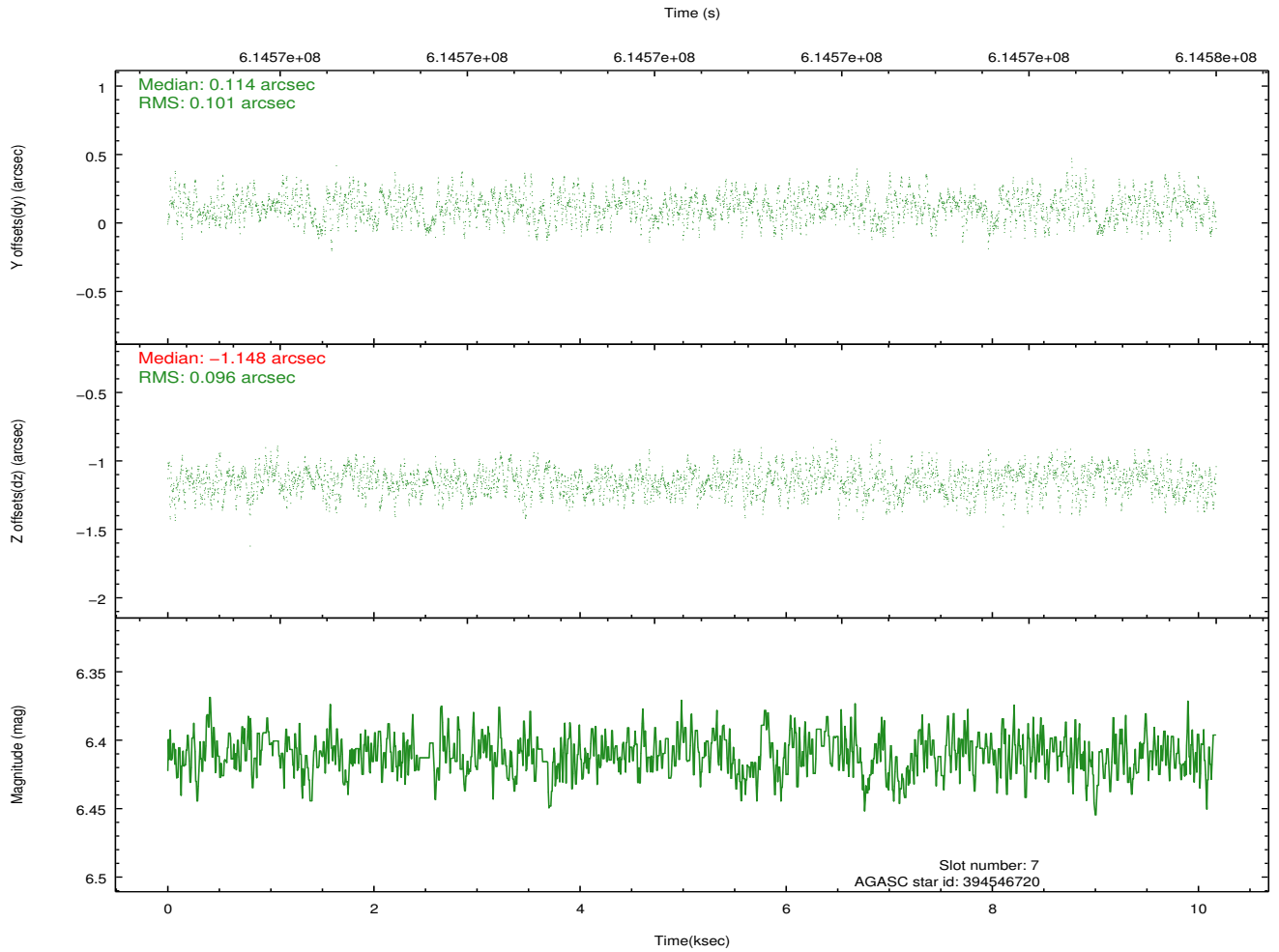
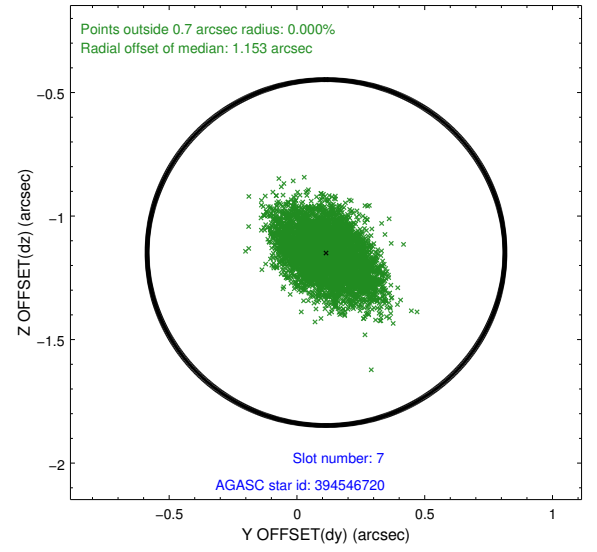
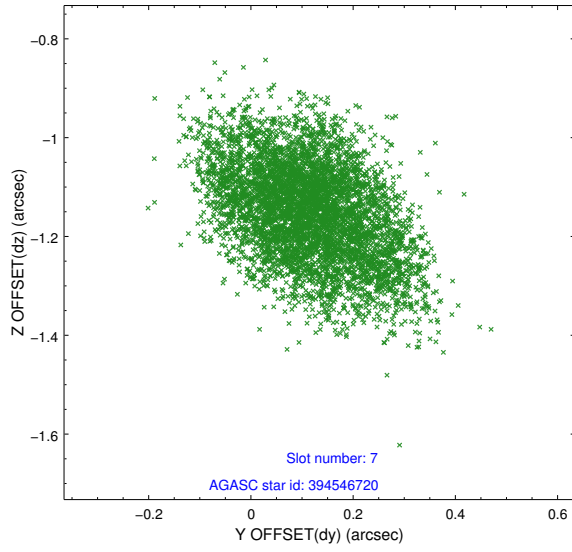
2.4.3 Slot 5



2.4.4 Slot 6

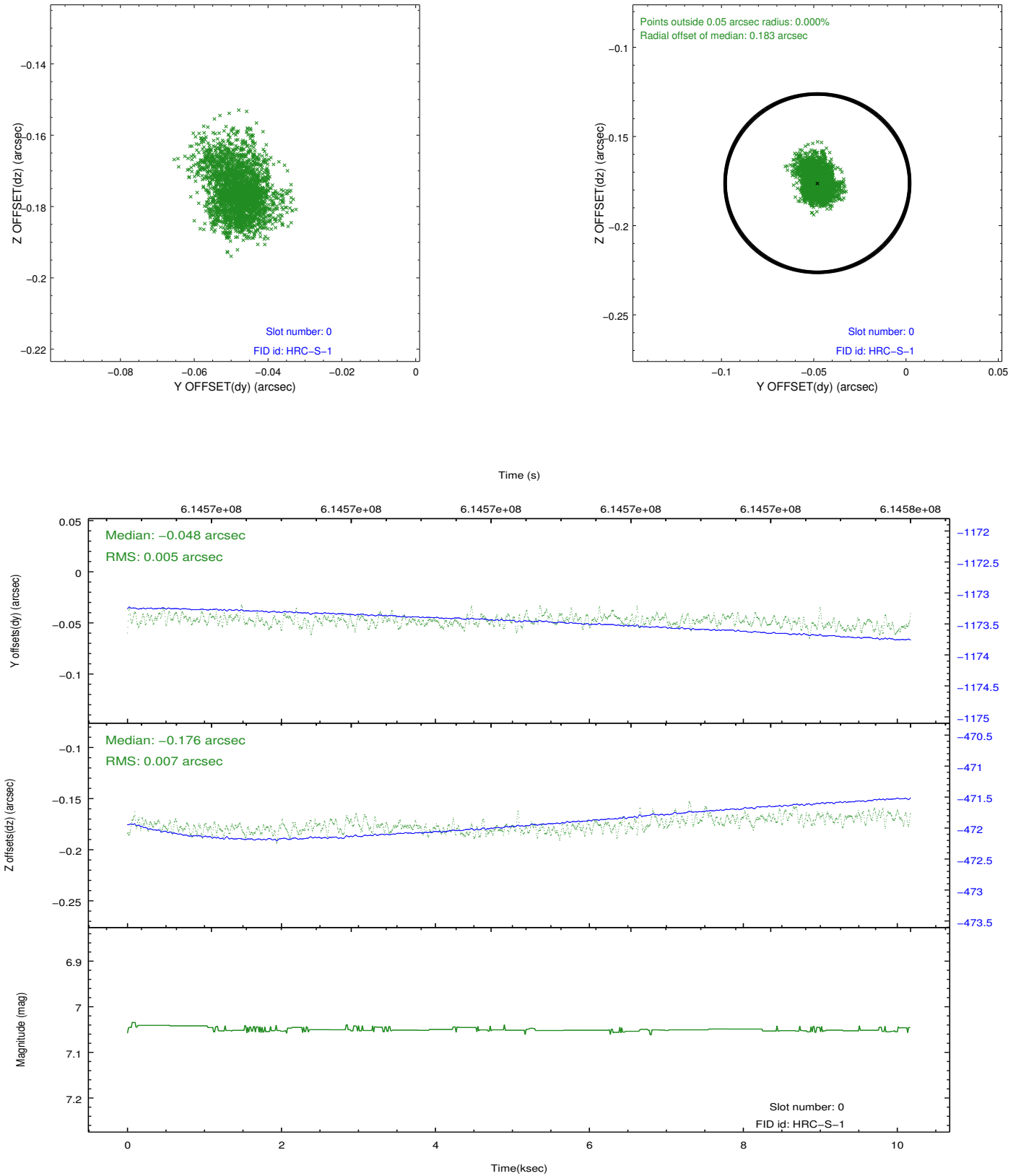


2.4.5 Slot 7

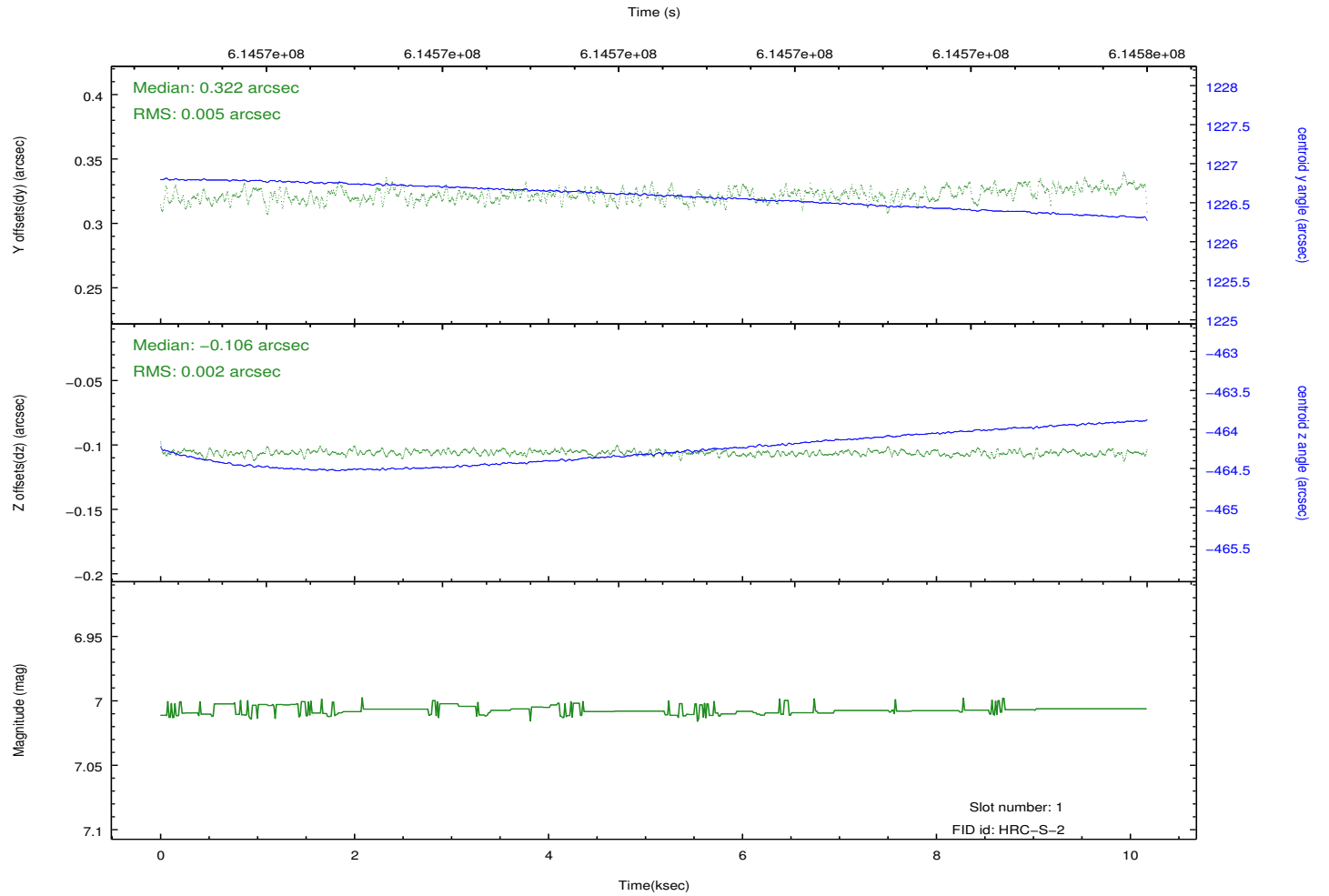
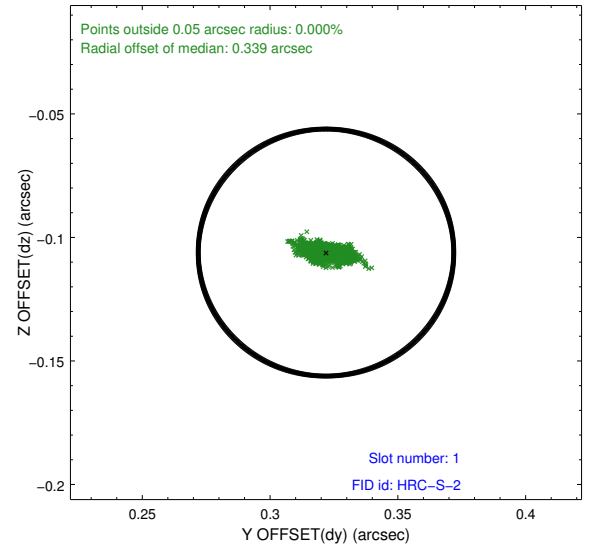
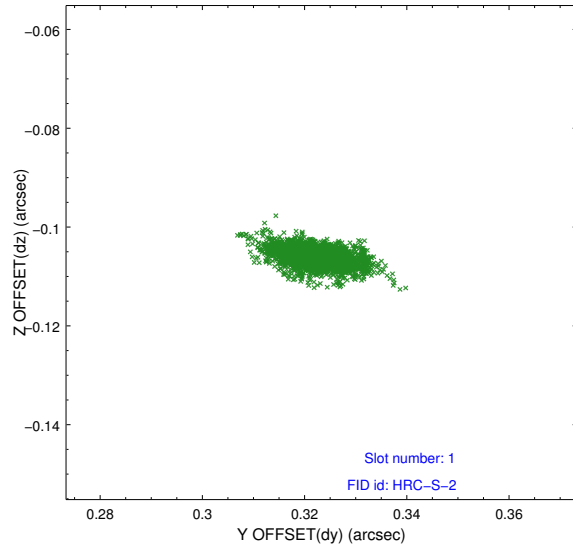


2.5 FID Slots

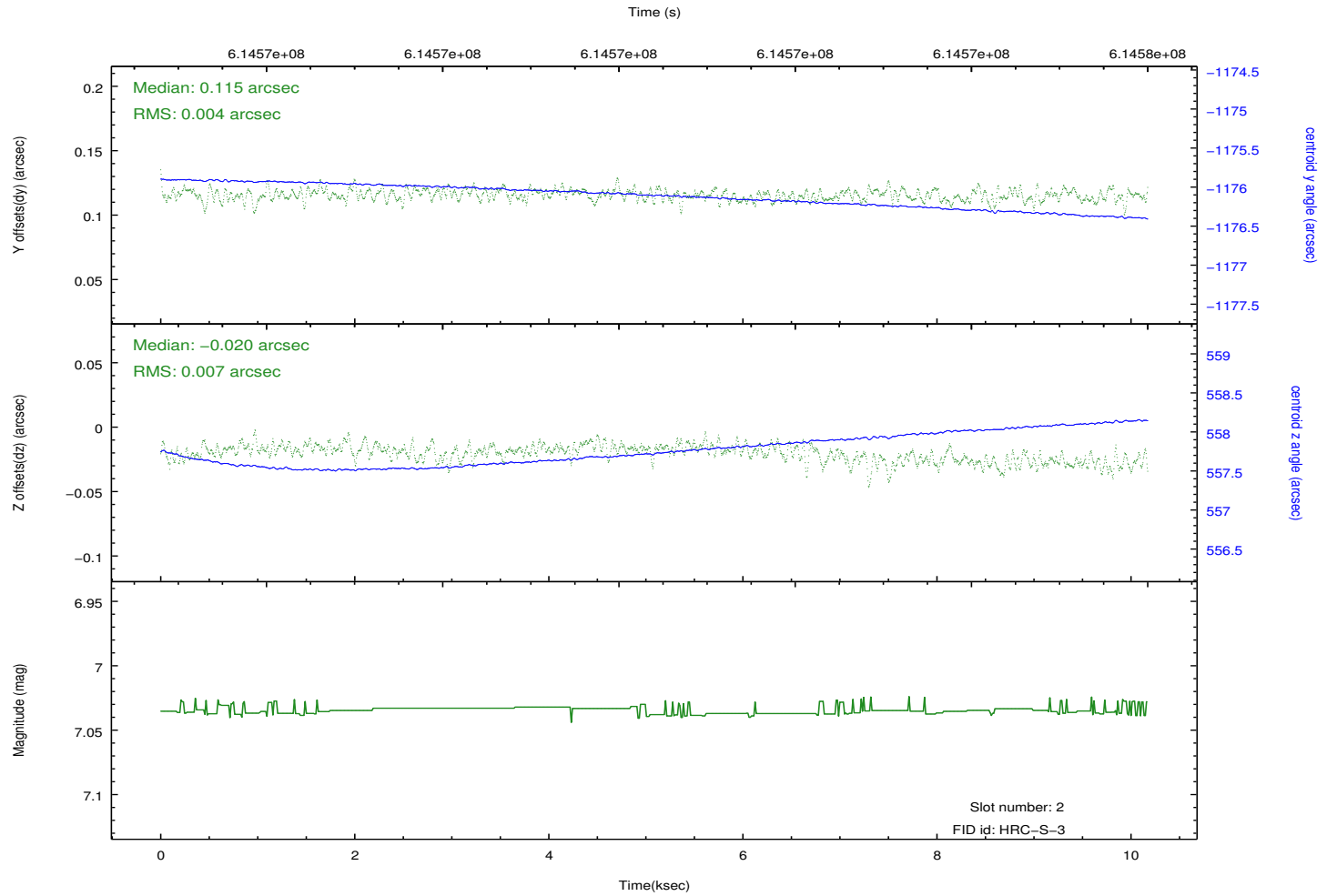
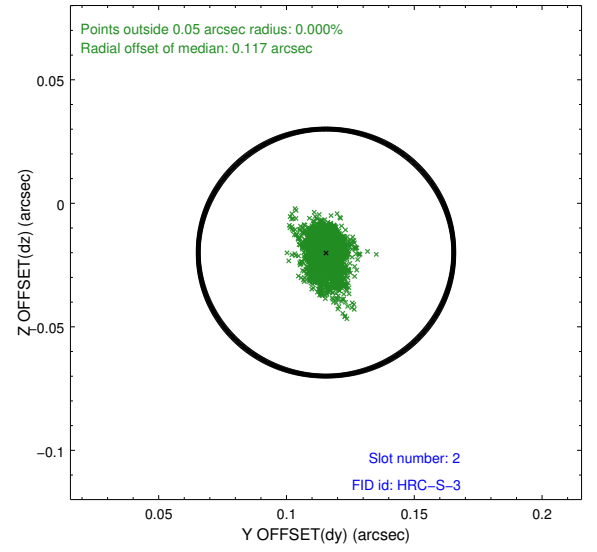
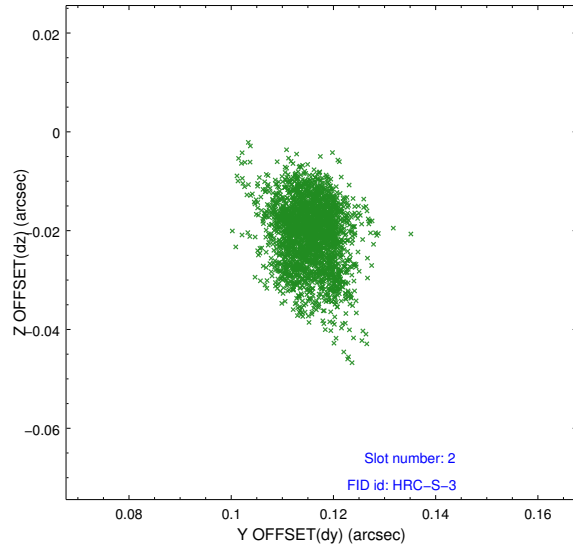
2.5.1 Slot 0



2.5.2 Slot 1

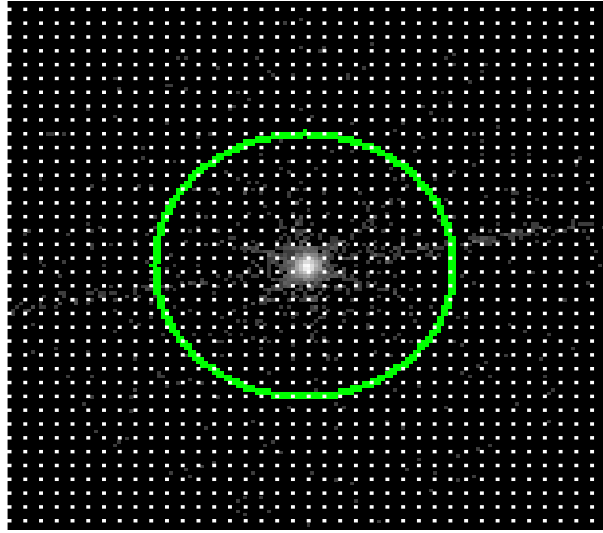


2.5.3 Slot 2

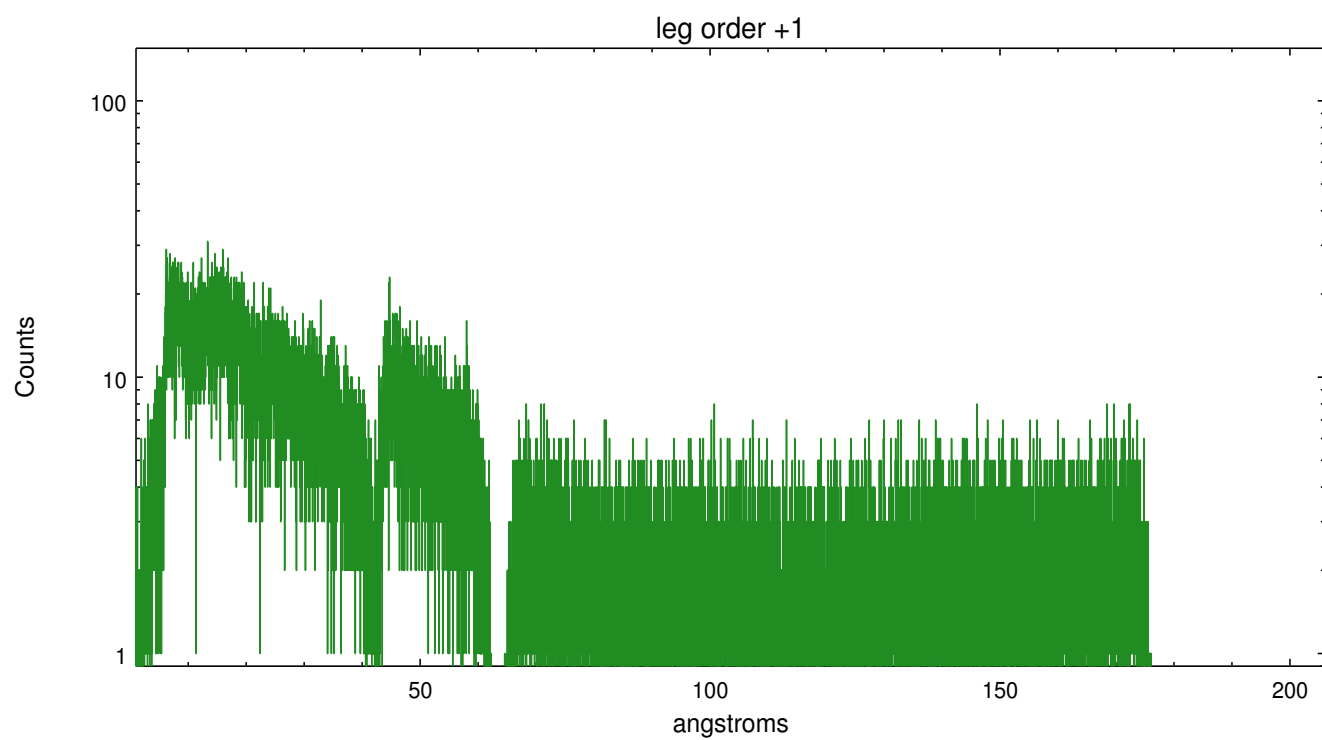
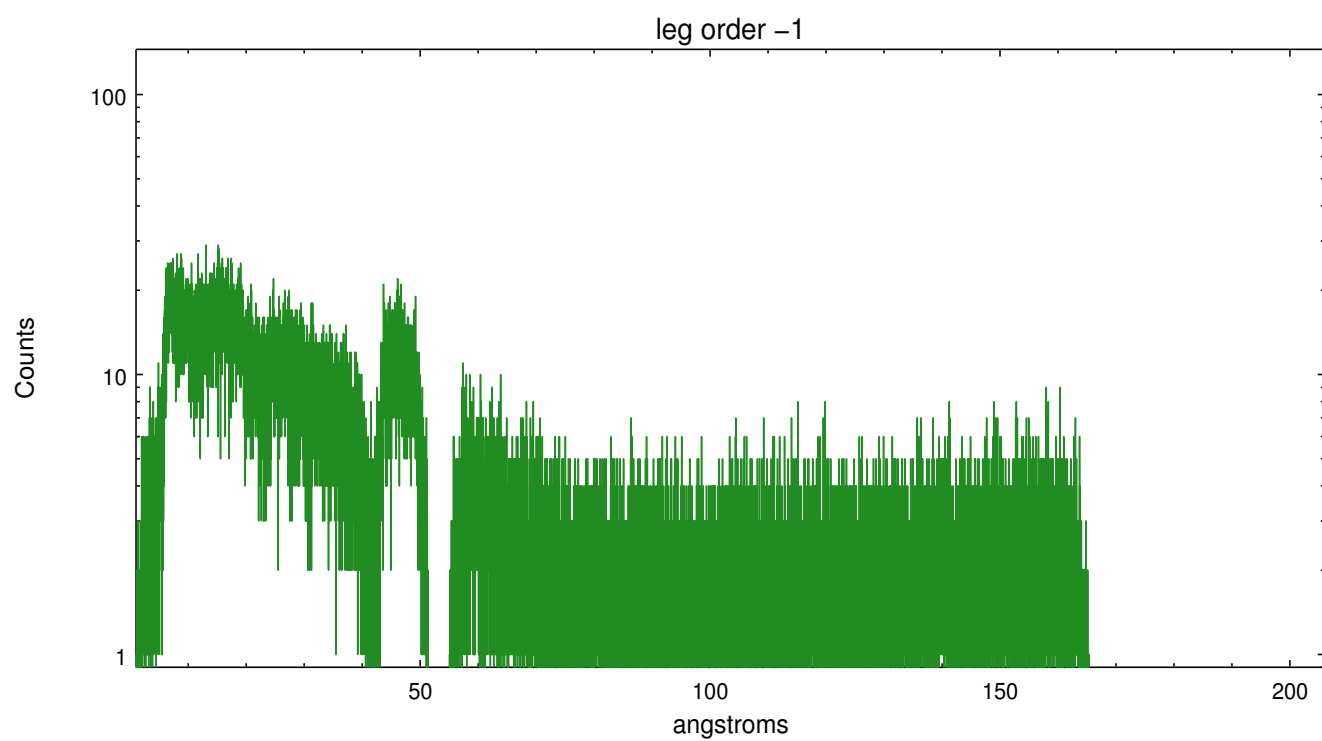


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2017.06.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.173381842732

A.2 Comments