

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 22284 - L2 Version 1
Chandra X-Ray Center

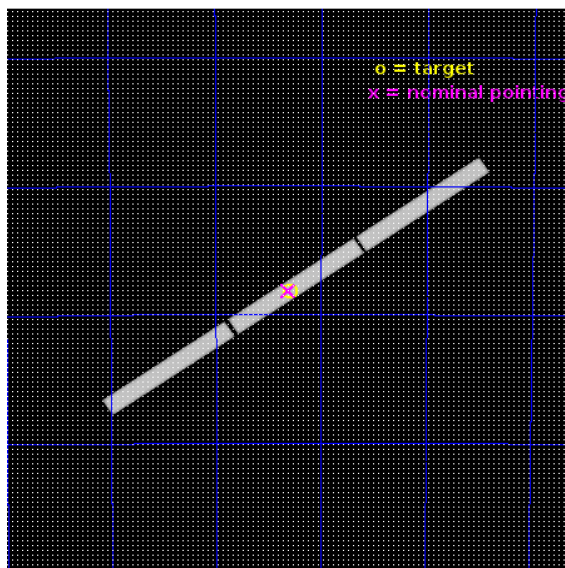
L2 Processing Date : Jul 21 2019

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1 Front

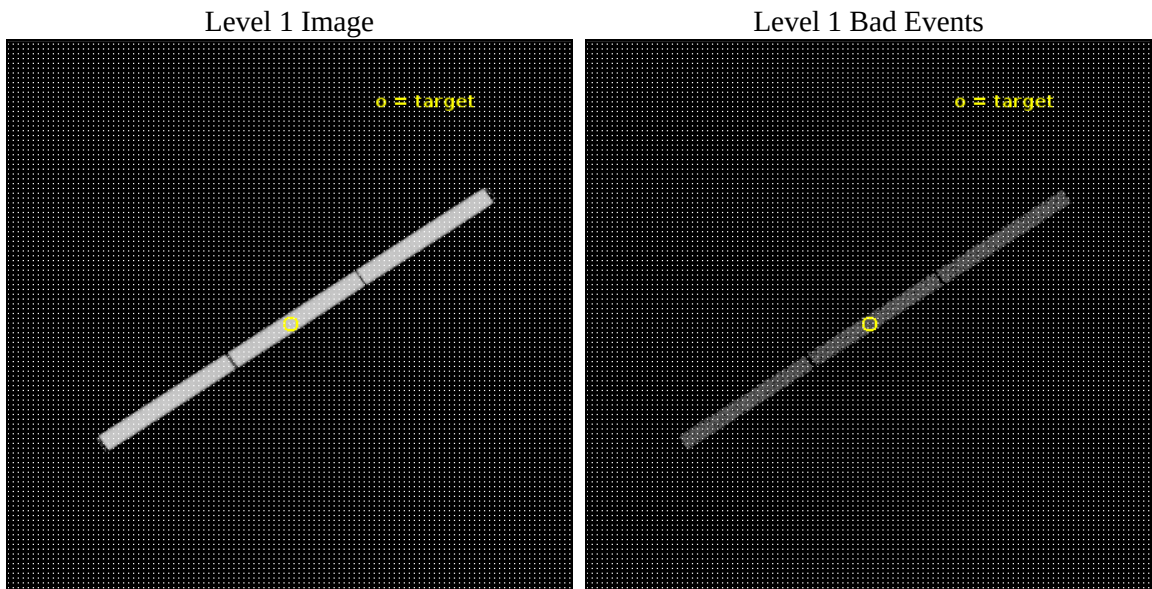
seq_num	503147	Sequence number
obs_id	22284	Observation id
title	eROSITA - Chandra cross-calibration: High Resolution LETGS Spectrum of the Isolated Neutron Star RXJ1856-37	Proposal title
observer	Dr. Peter Predehl	Principal investigator
object	RX J1856.5-3754	Source name
ra_targ	284.147083	Observer's specified target RA [deg]
dec_targ	-37.909556	Observer's specified target Dec [deg]
ra_nom	284.15445259266	Nominal RA [deg]
dec_nom	-37.908225020533	Nominal Dec [deg]
roll_nom	326.07189161551	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15427.532177329	[s]
livetime	15226.195571539	Ontime multiplied by DTCOR
l2events	1425193	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	15470.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	15427.532177329	[s]
caldbver	4.8.3.1	 	l1events	1846998	Number of level 1 events
date	2019-07-22T01:07:23	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(32850.84, 32705.25)	src1a sky pixel position

2.1.3 Events

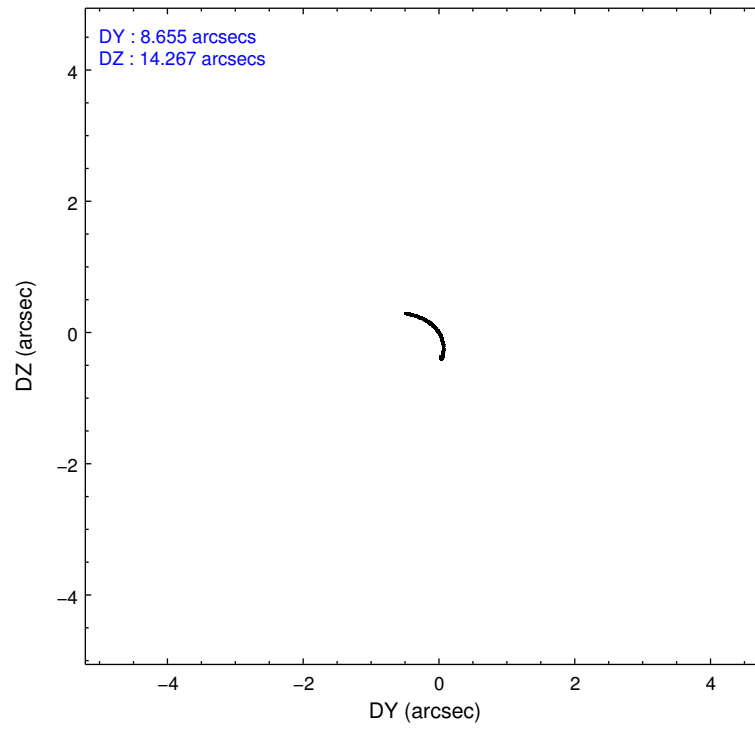
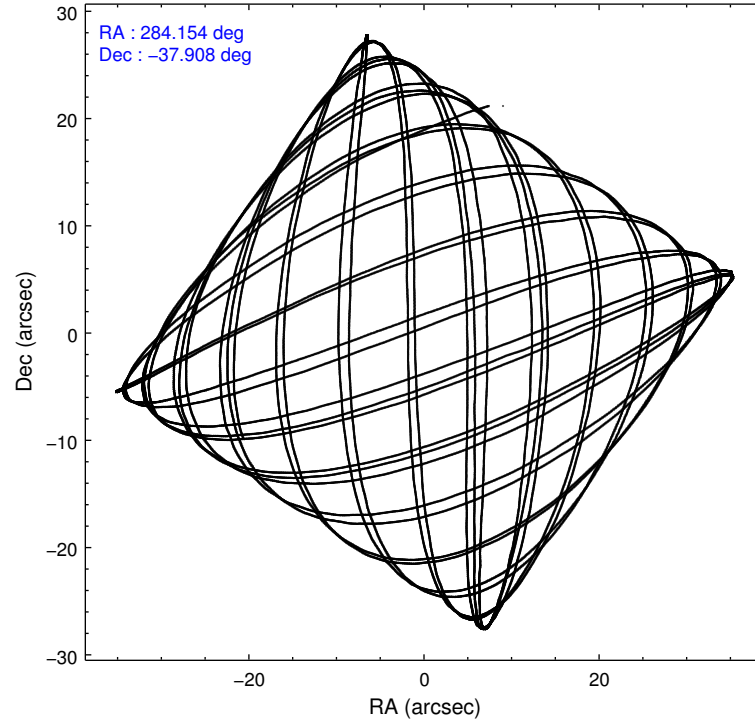
Level 1 Events

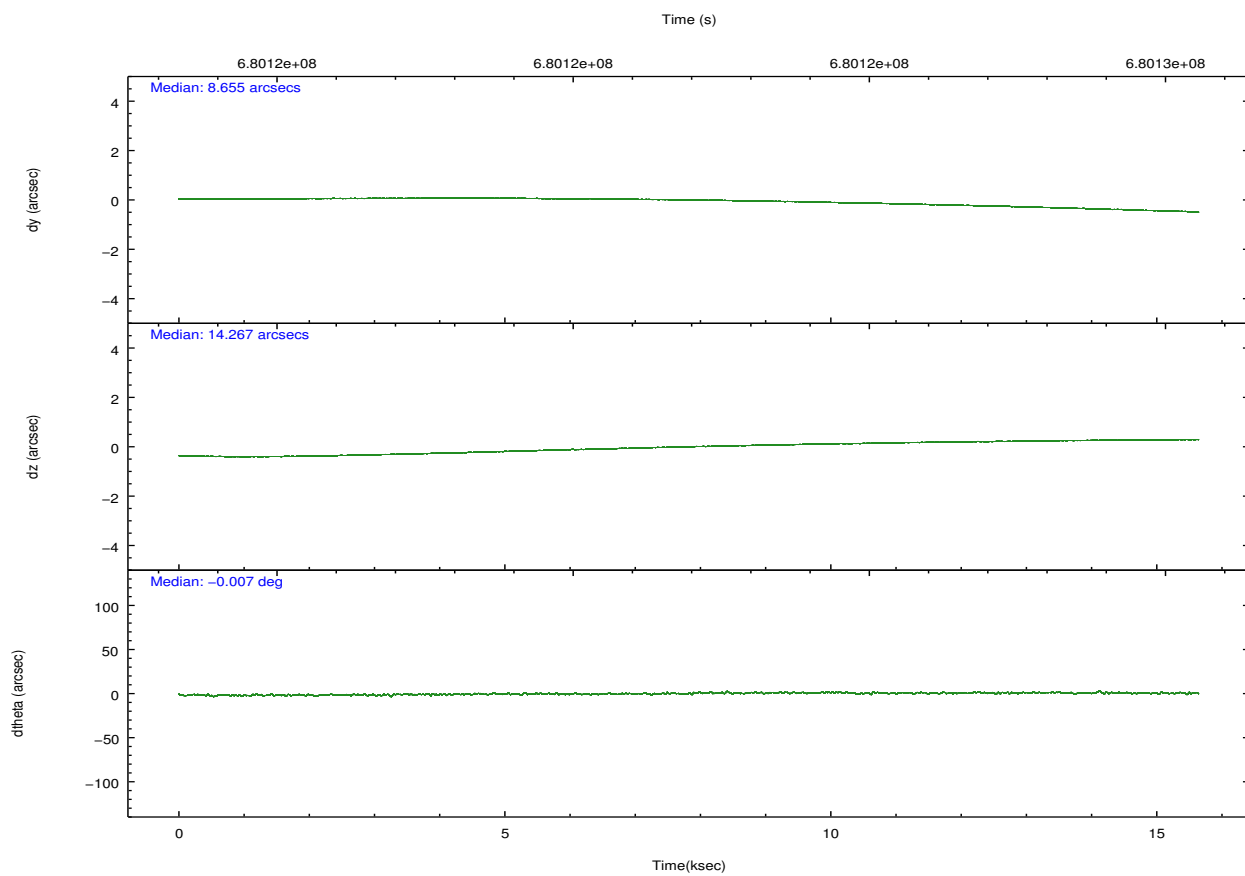
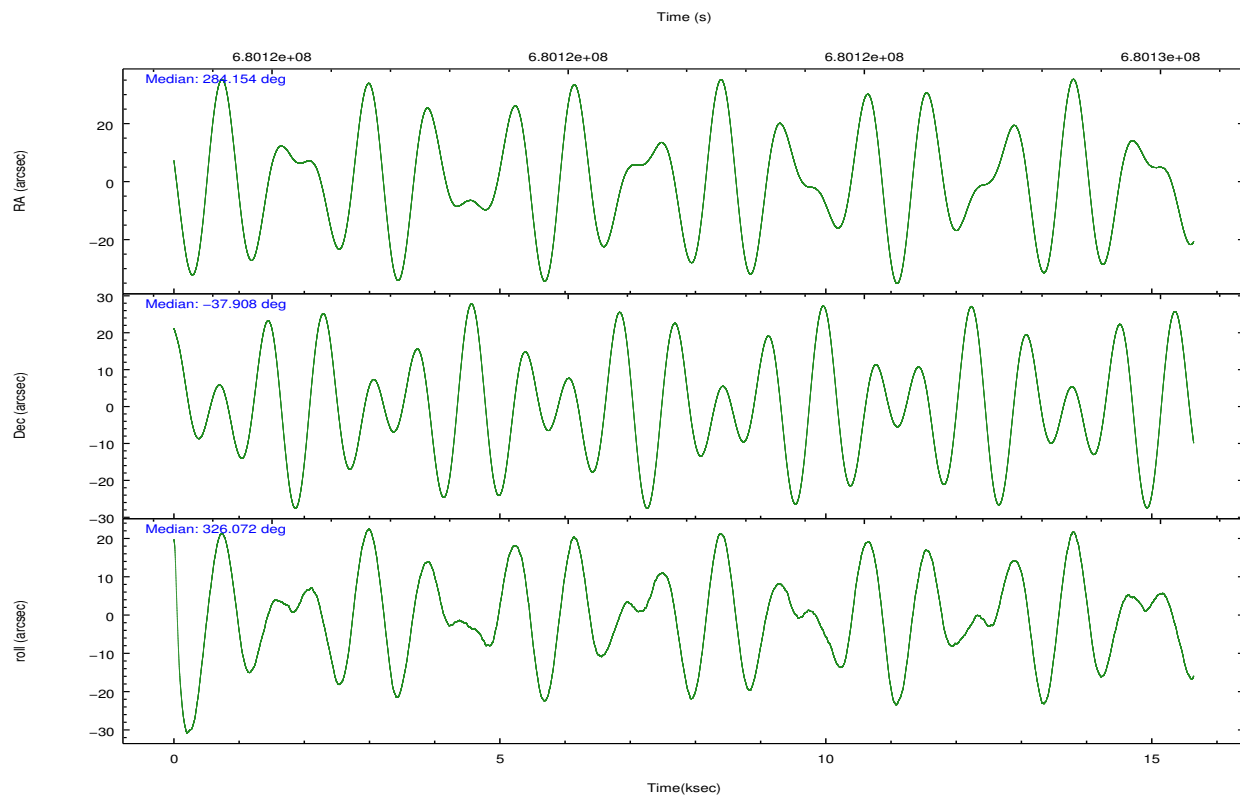
	segment 1	segment 2	segment 3
level 1 events	615226	618652	613120
rejected events	34589	34155	34630
rejected %	5%	5%	5%

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	284.117984	284.1544525926623			
[deg] Pointing Dec	-37.907710	-37.90822502053314			
[deg] Pointing Roll	325.982116	326.0718916155123			
[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)	680114319.184000	680113493.00538			
Observation start date	2019-07-21T16:37:30	2019-07-21T16:24:53			
[s] Observation end time (MET)	680129789.184000	680130808.84392			
Observation end date	2019-07-21T20:55:20	2019-07-21T21:13:28			

2.3 Aspect



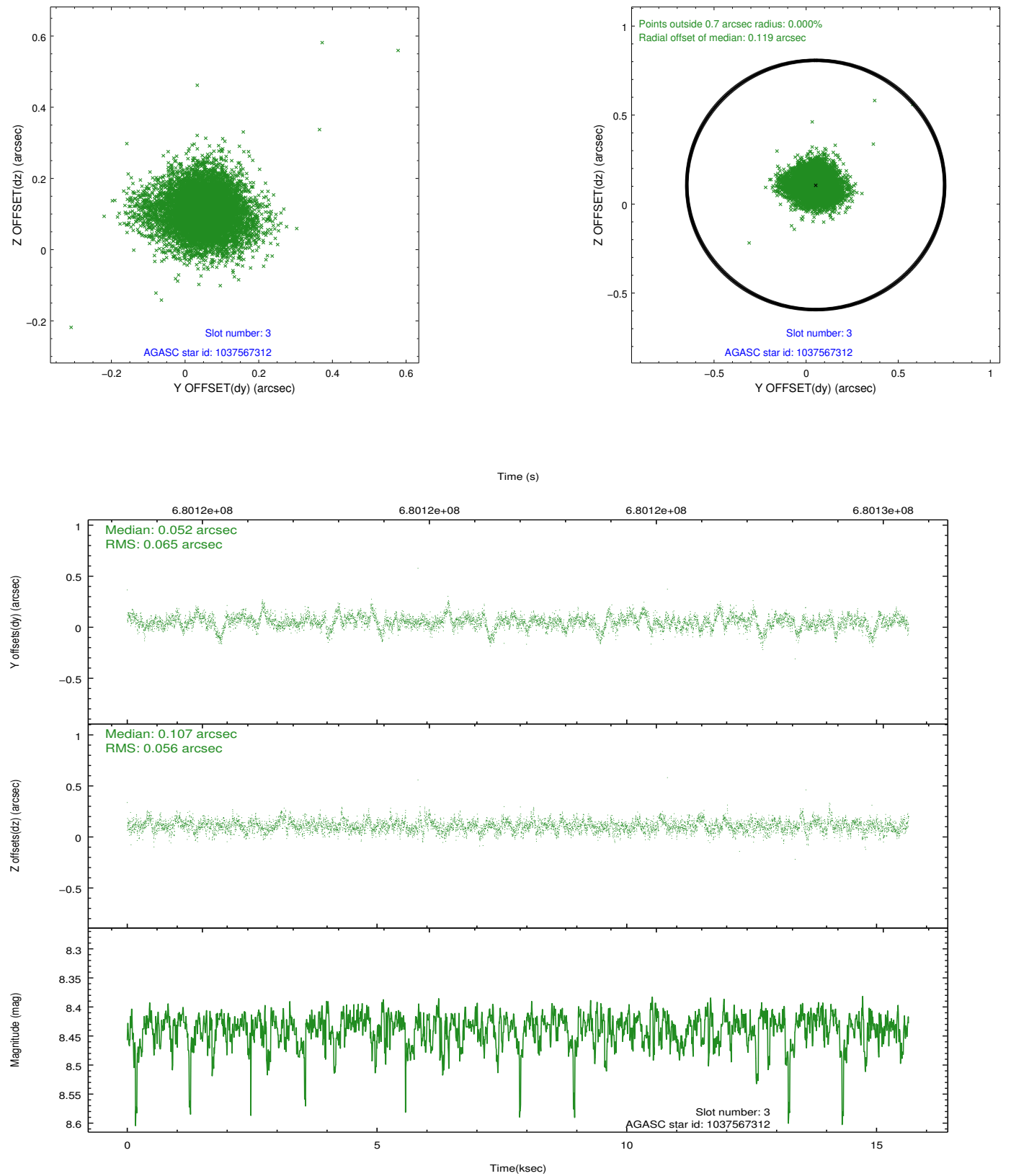


Slot Statistics

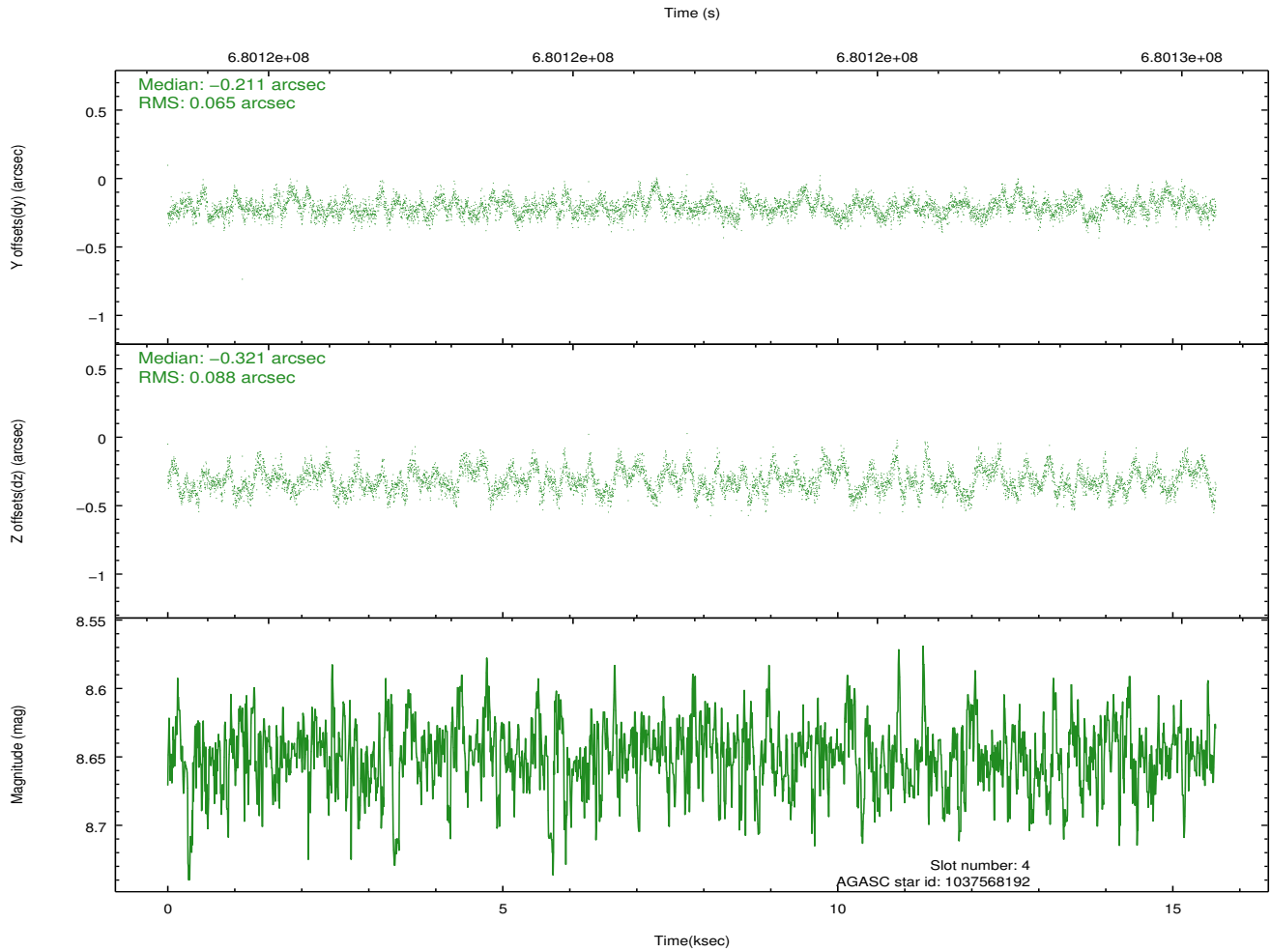
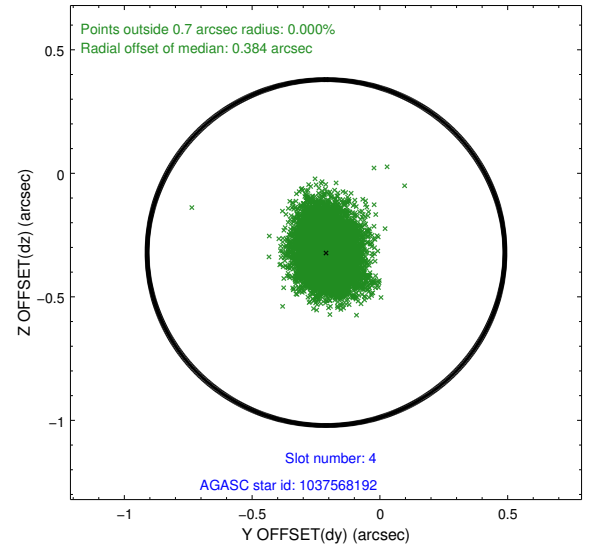
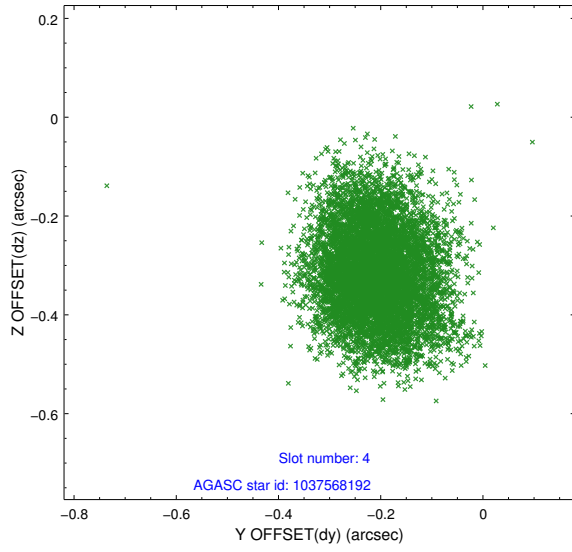
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.07	3816	1.000	-0.028	-0.210	0.011	0.021	0.000000	0.000000	-1162.87	-463
1	FID		HRC-S-2	7.05	3816	1.000	0.423	-0.158	0.009	0.015	0.000000	0.000000	1236.96	-455
2	FID		HRC-S-3	7.07	3815	1.000	-0.005	0.066	0.015	0.027	0.000000	0.000000	-1165.31	566
3	GUIDE	used	1037567312	8.43	7625	1.000	0.052	0.107	0.089	0.152	283.456056	-37.976515	-1413.68	-1261
4	GUIDE	used	1037568192	8.65	7631	1.000	-0.211	-0.321	0.116	0.188	284.446060	-38.037443	1033.73	131
5	GUIDE	used	1037578168	8.10	7629	1.000	-0.016	0.151	0.101	0.163	284.493659	-38.169059	1411.58	-189
6	GUIDE	used	1037566080	7.79	7632	1.000	0.175	0.055	0.085	0.145	283.069097	-37.947159	-2378.38	-1797
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

2.4 Star Slots

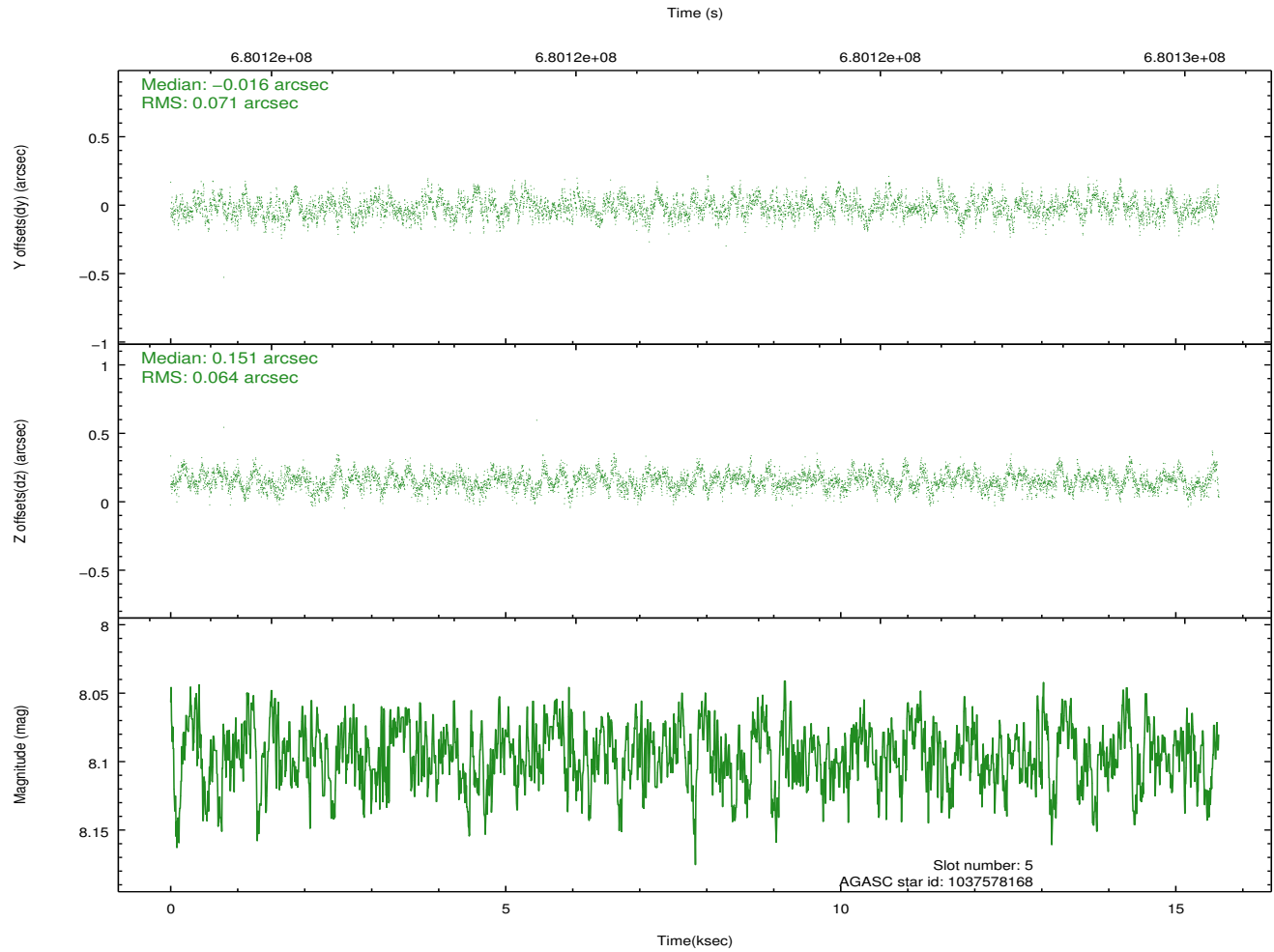
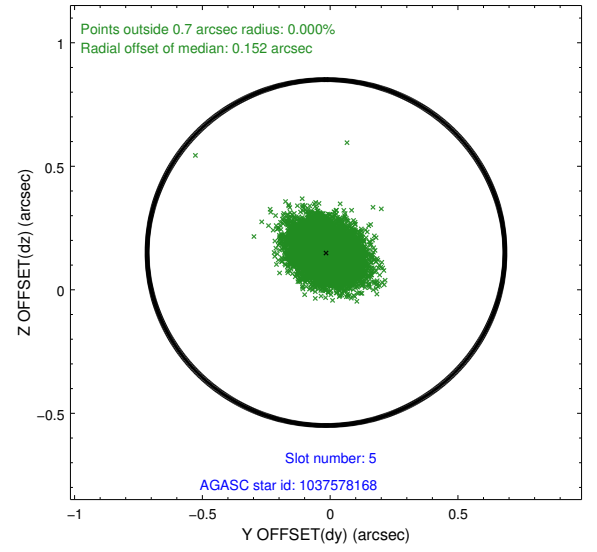
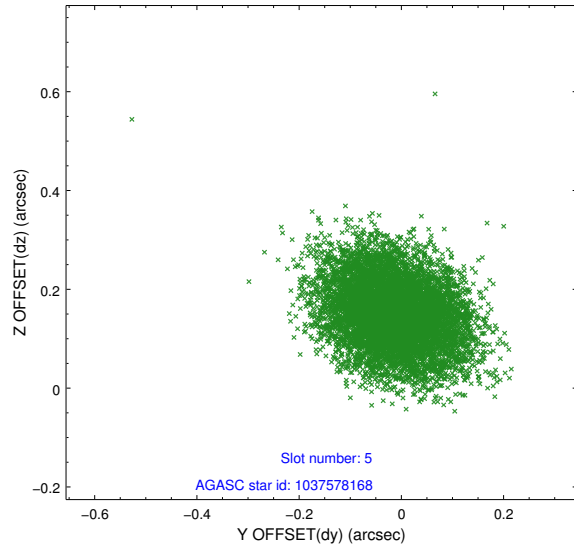
2.4.1 Slot 3



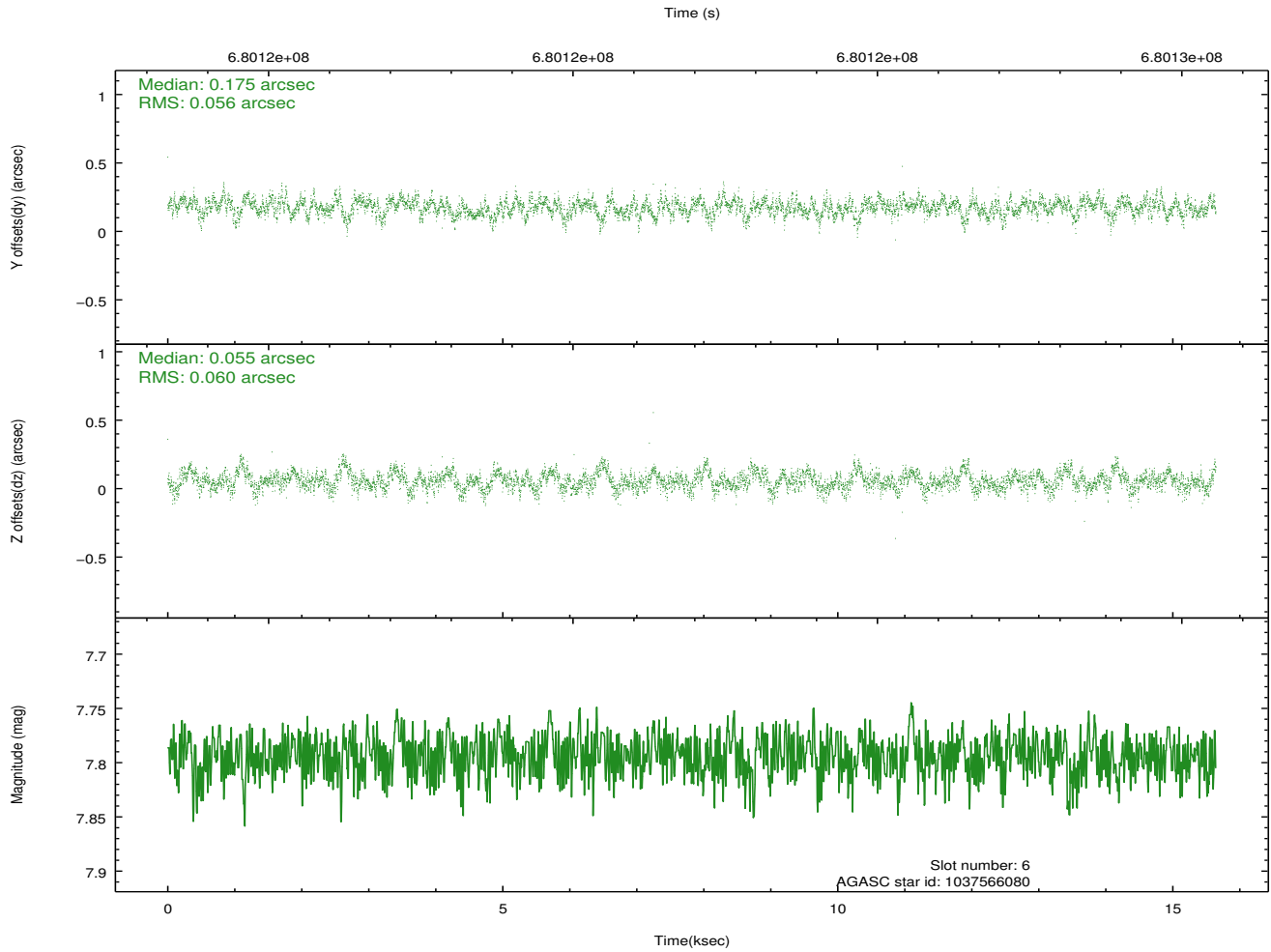
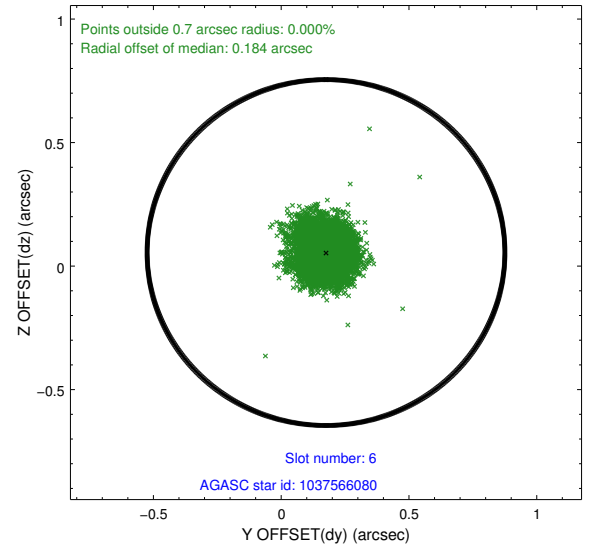
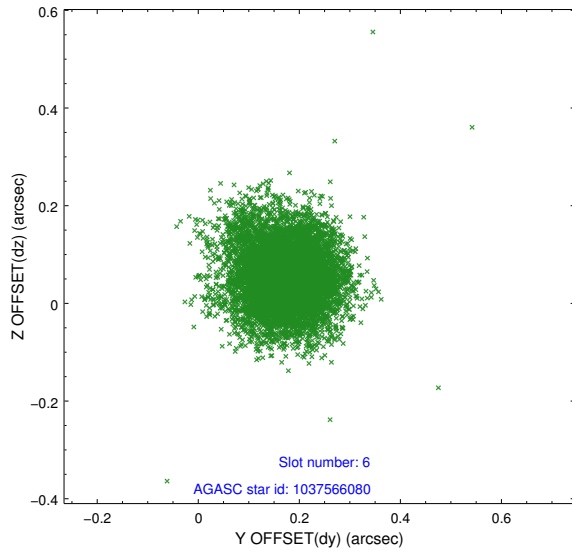
2.4.2 Slot 4



2.4.3 Slot 5

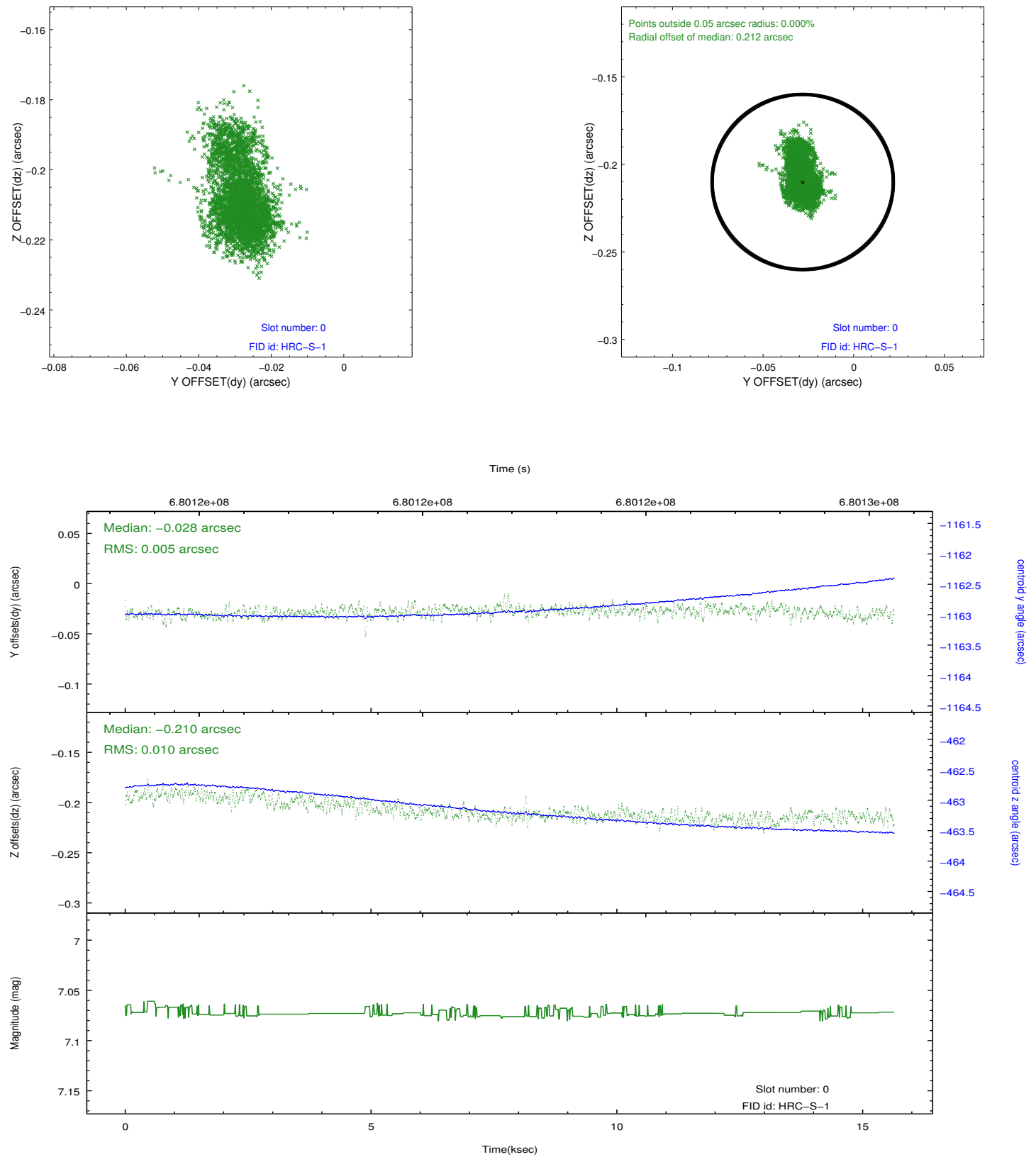


2.4.4 Slot 6

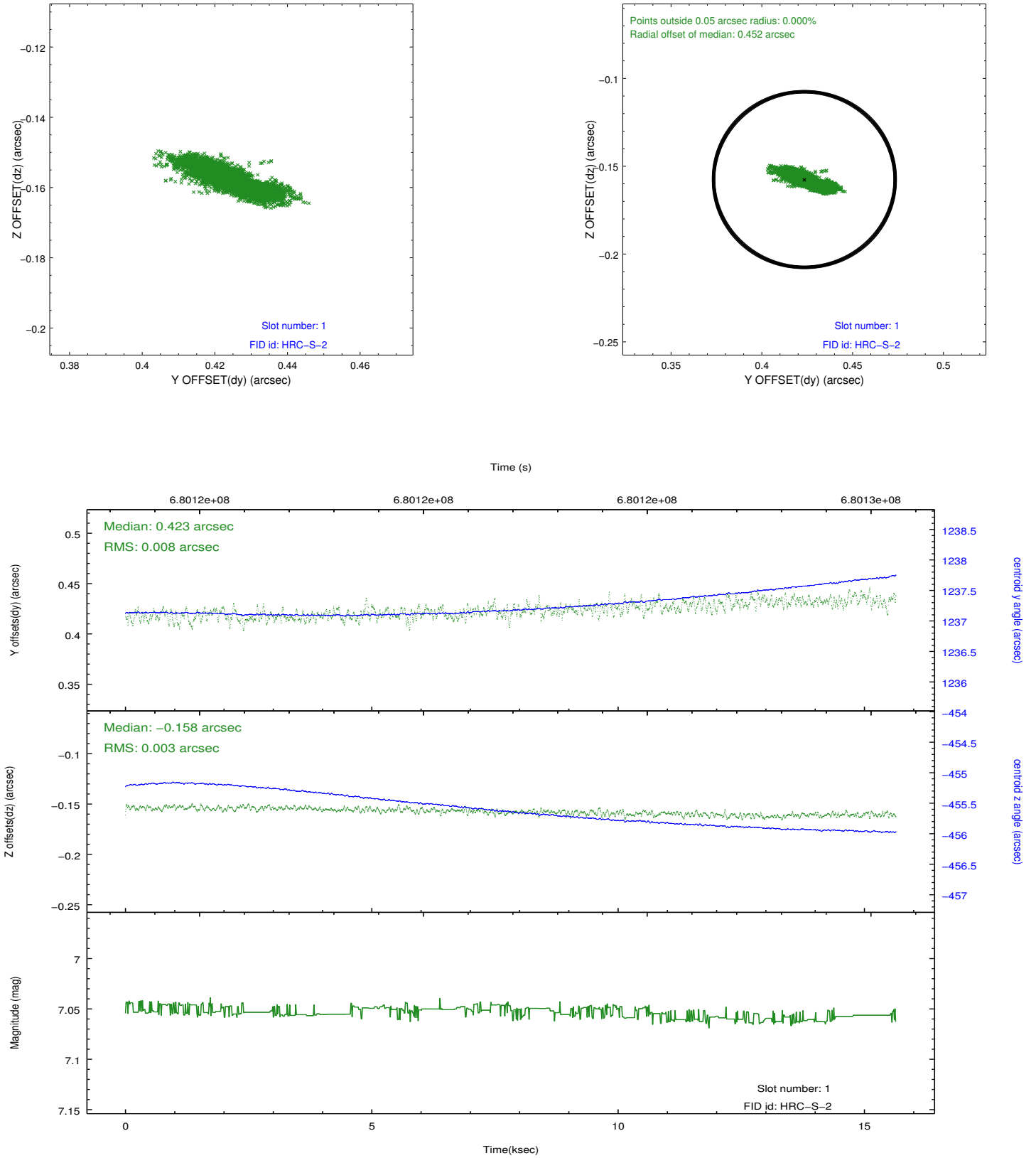


2.5 FID Slots

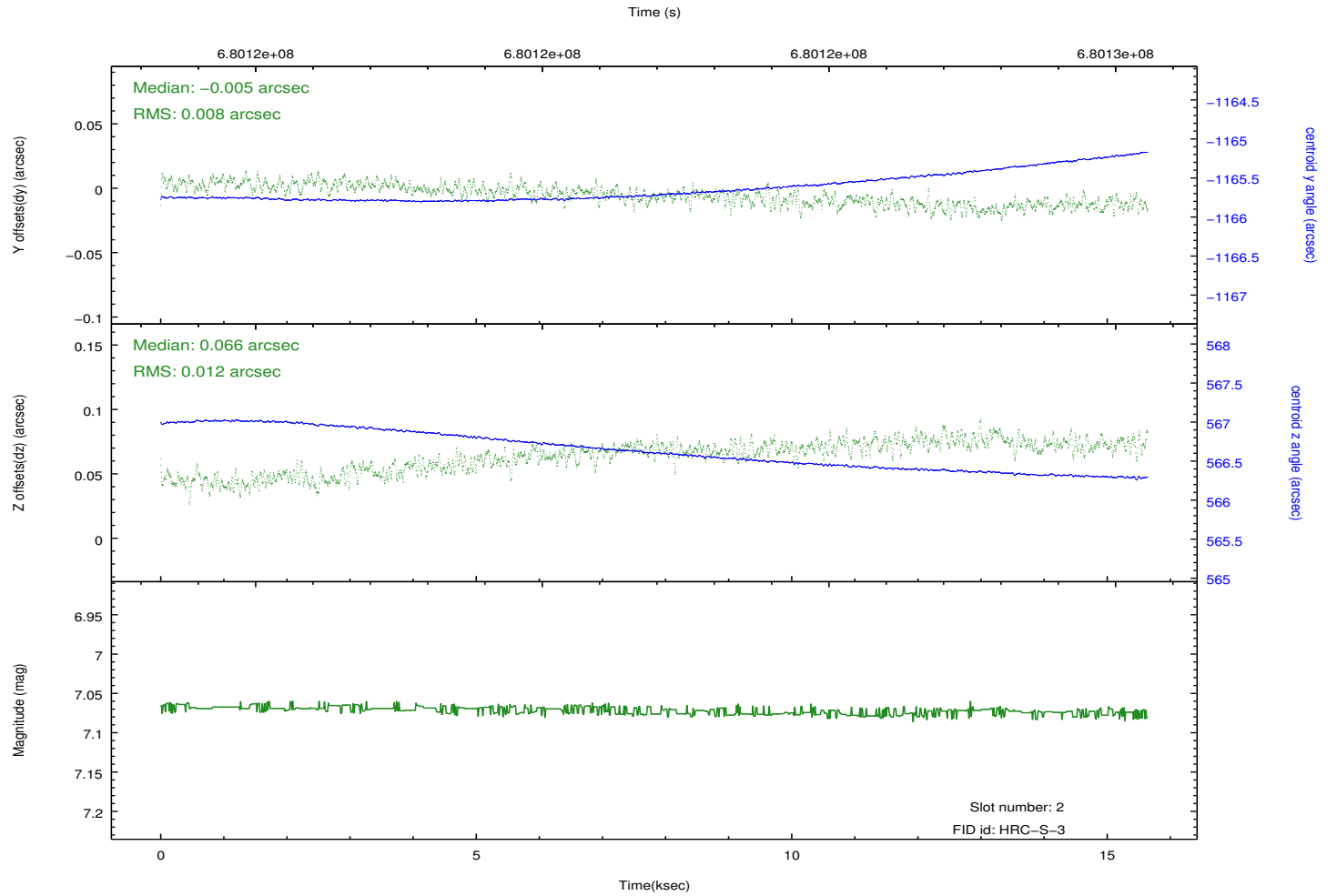
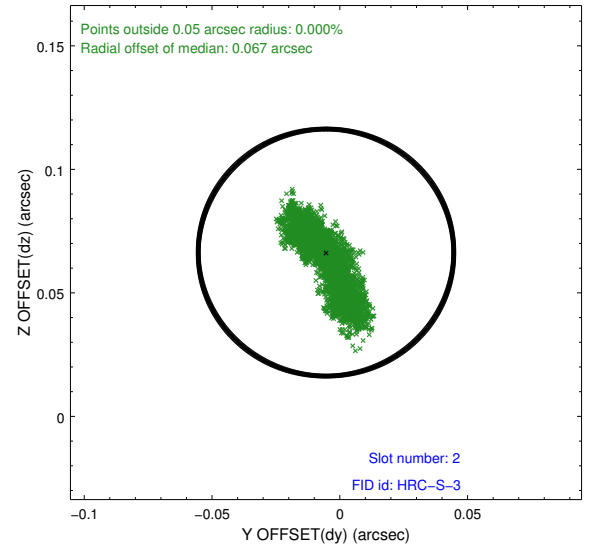
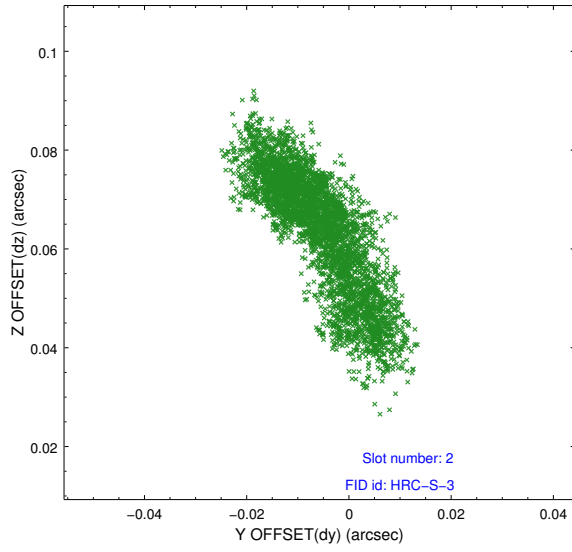
2.5.1 Slot 0



2.5.2 Slot 1

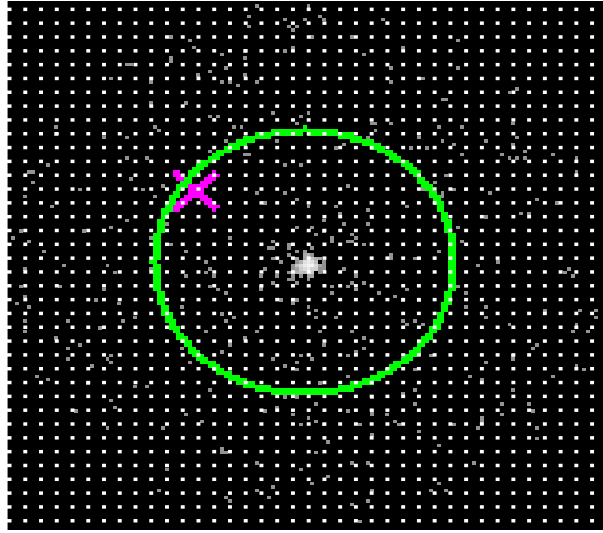


2.5.3 Slot 2

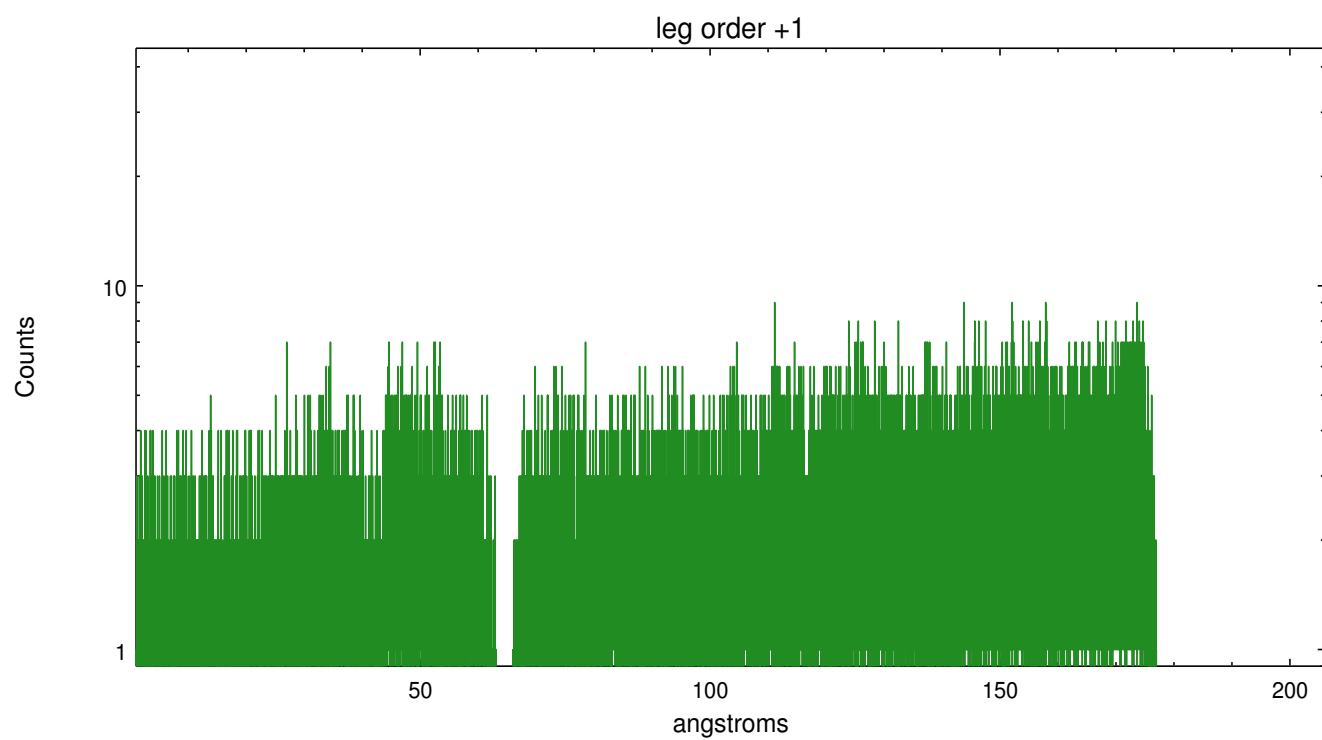
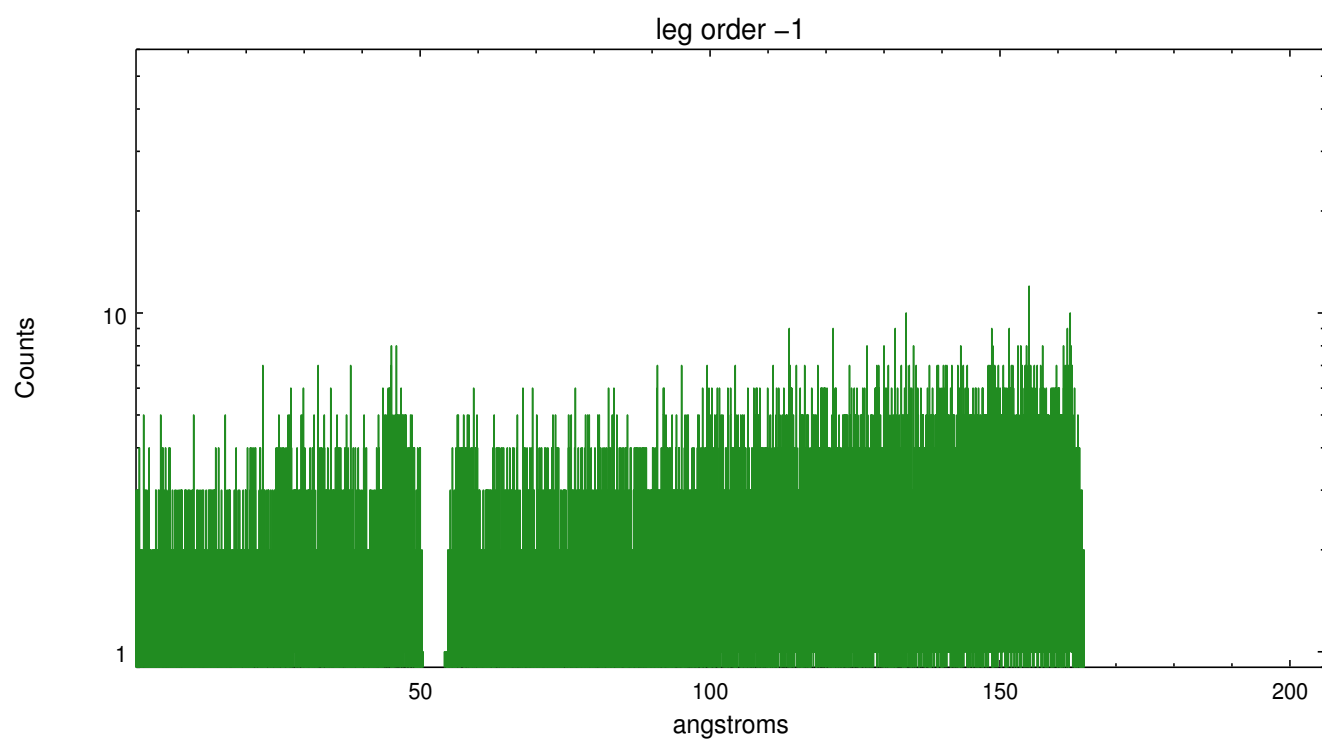


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.11.14
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	15.427532177329

A.2 Comments

Due to corruption of the secondary science data during this observation, some instrument parameters have bogus values. The data in this observation have been inspected by the HRC team. PLEASE NOTE: All the event data in this observation are good. The short gaps in the GTI intervals can be eliminated (i.e., use the first START and last STOP). THE DTF values during this observation can be estimated by dropping all the low values and averaging the remaining values near 1.0.

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The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.