

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21303 - L2 Version 1
Chandra X-Ray Center

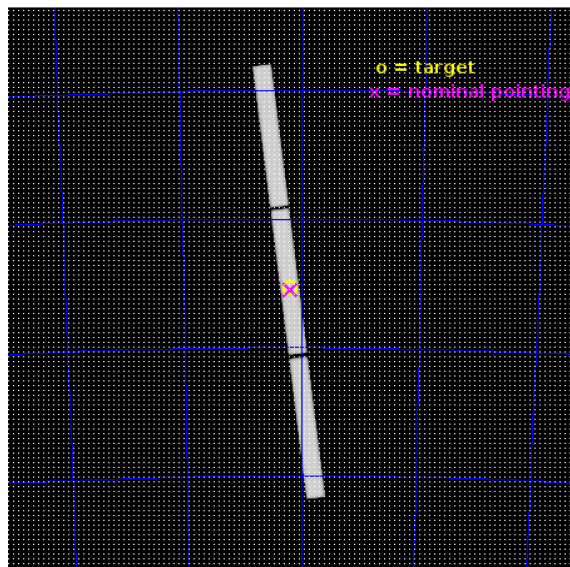
L2 Processing Date : Mar 19 2019

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1 Front

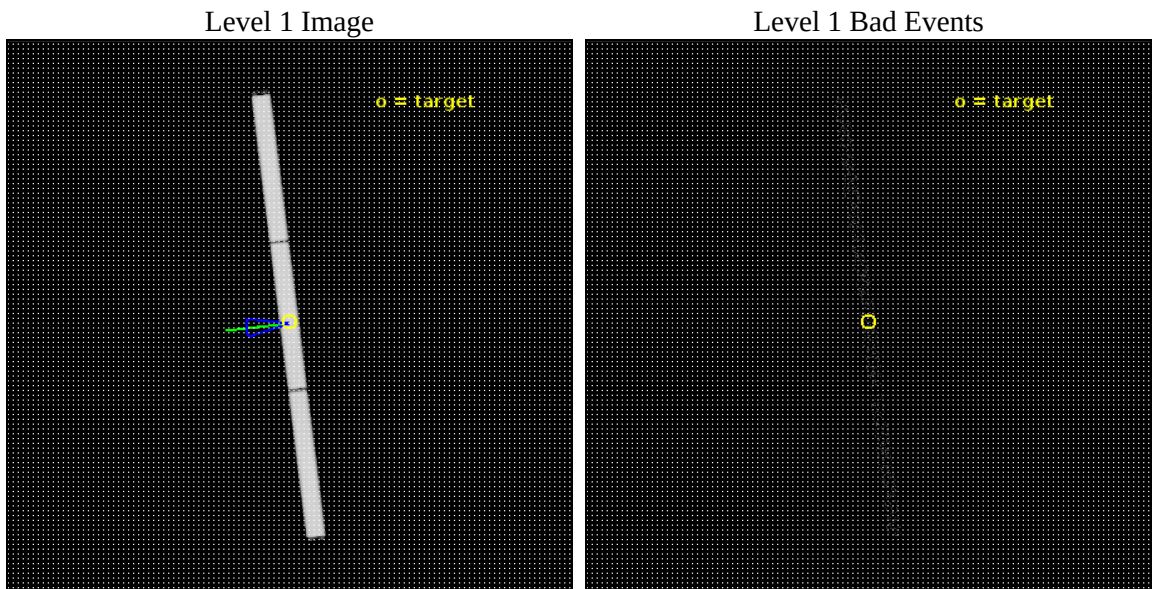
seq_num	503076	Sequence number
obs_id	21303	Observation id
title	CHANDRA CYCLE 20 SPATIAL AND SPECTRAL MONITORING OF SN1987A	Propos
observer	David Burrows	Principal investigator
object	SNR 1987A	Source name
ra_targ	83.866667	Observer's specified target RA [deg]
dec_targ	-69.26975	Observer's specified target Dec [deg]
ra_nom	83.878597104859	Nominal RA [deg]
dec_nom	-69.275794491933	Nominal Dec [deg]
roll_nom	263.07848080019	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20119.982453346	[s]
livetime	19909.940380108	Ontime multiplied by DTCOR
l2events	1839426	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	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	20119.982453346	[s]
caldbver	4.8.2	 	l1events	2439117	Number of level 1 events
date	2019-03-19T23:27:45	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(32886.39, 32930.35)	src1a sky pixel position

2.1.3 Events

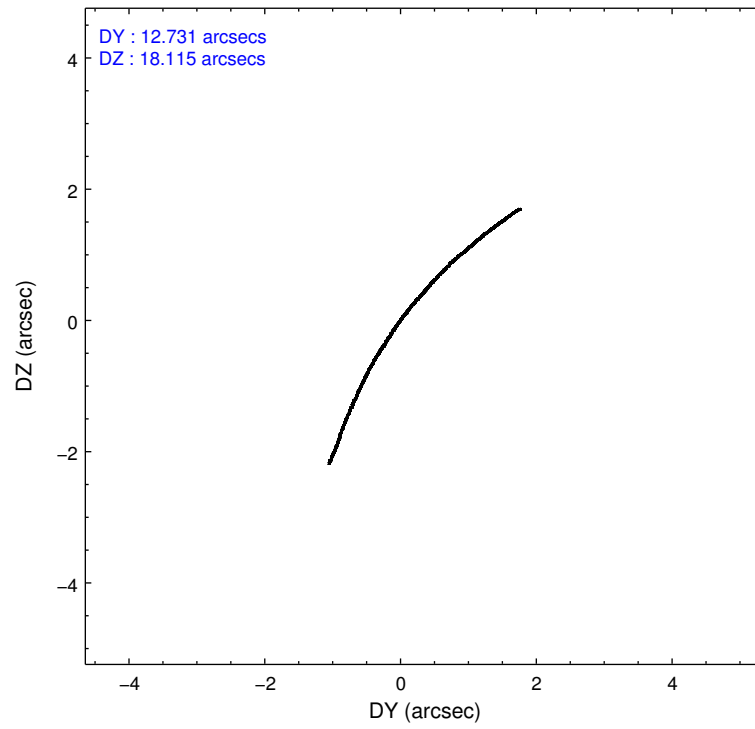
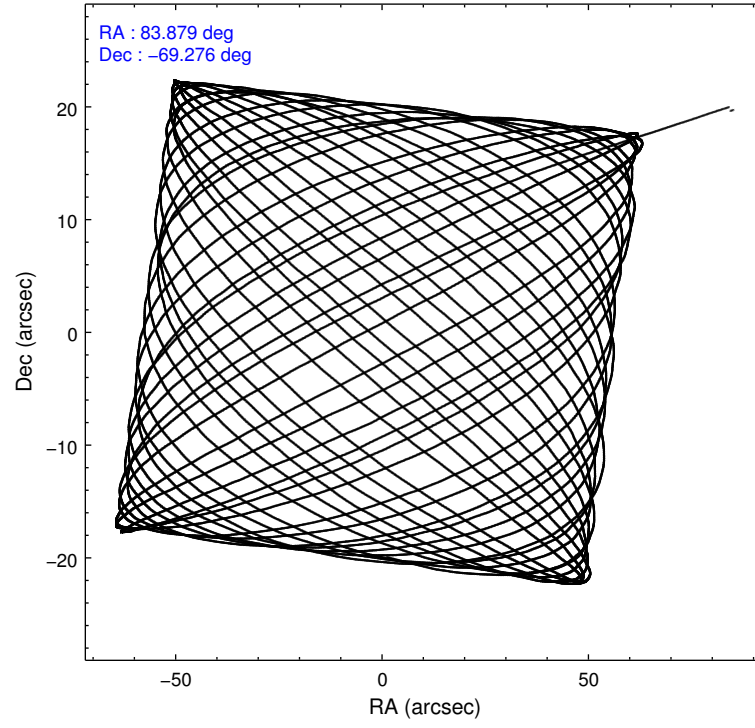
Level 1 Events

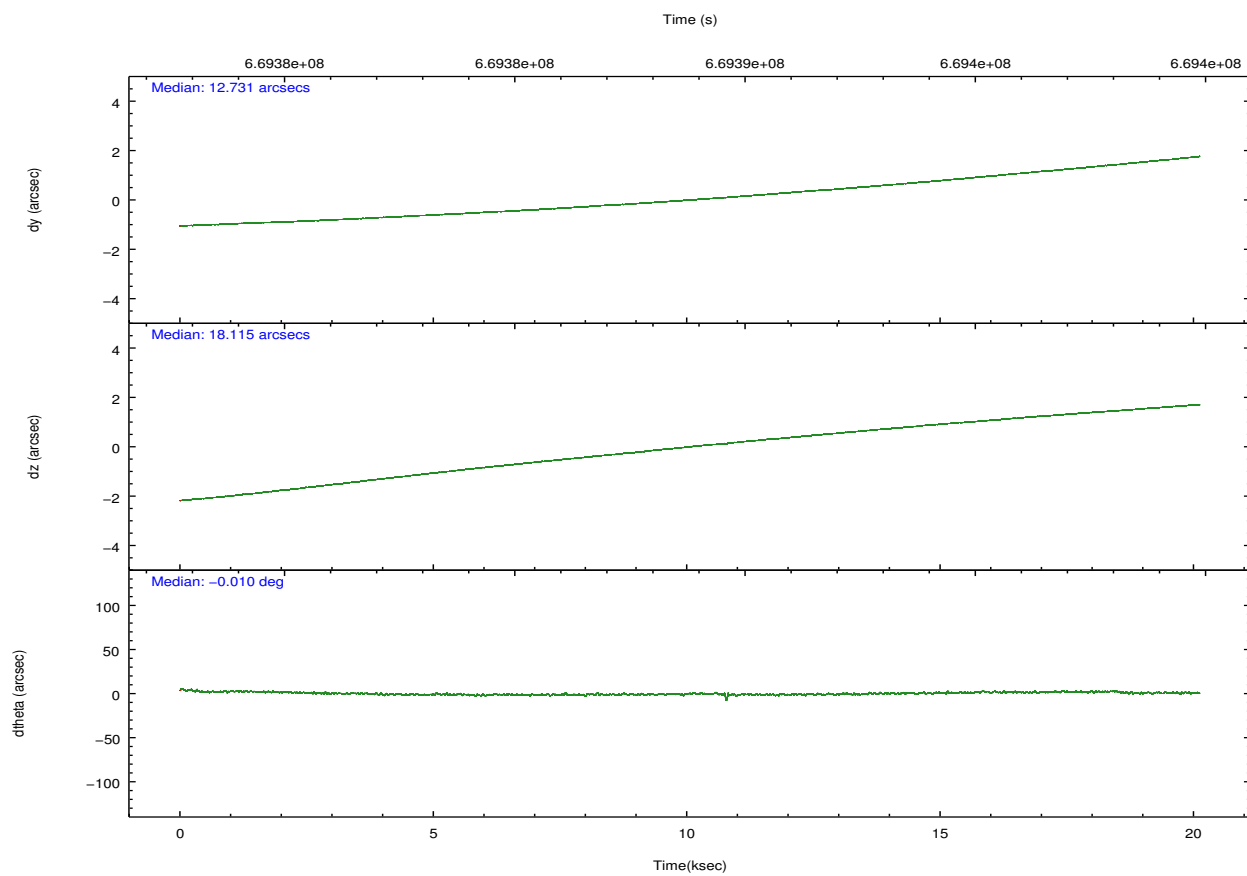
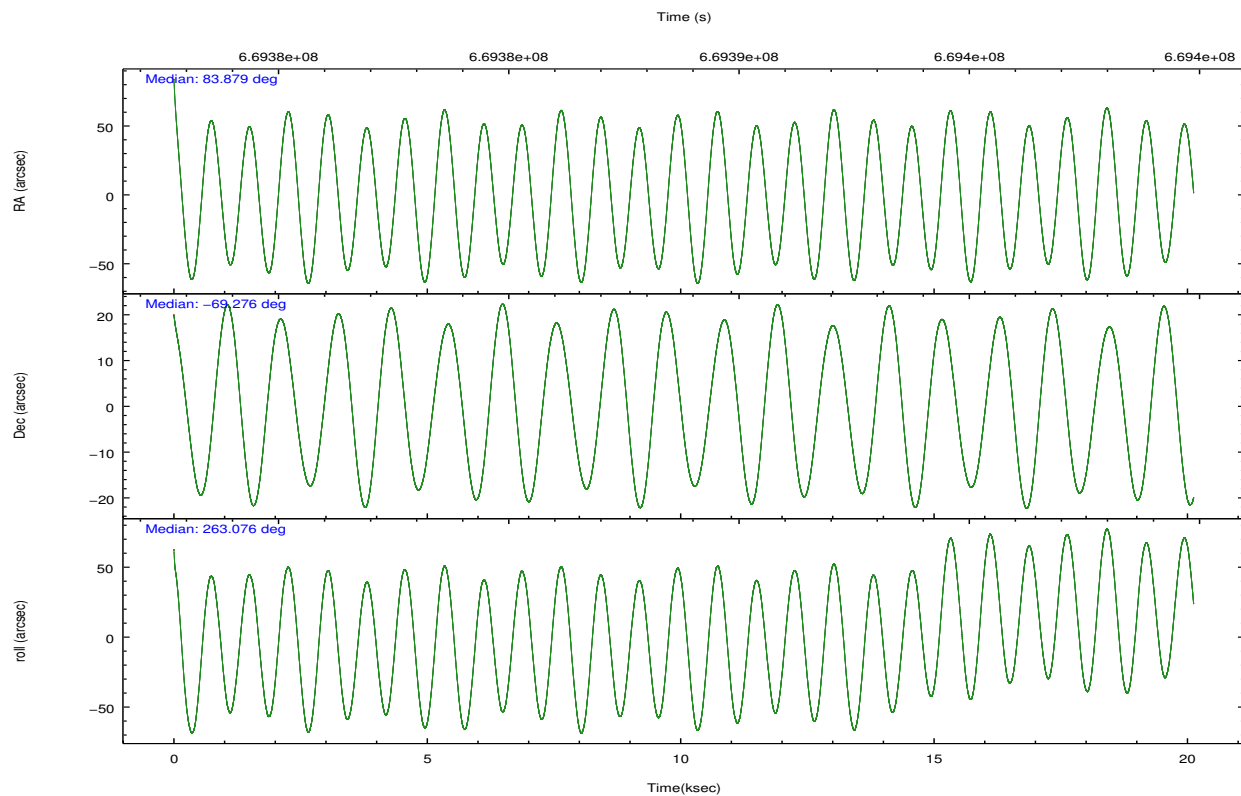
	segment 1	segment 2	segment 3
level 1 events	811598	816125	811394
rejected events	62563	62112	62502
rejected %	7%	7%	7%

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	83.843017	83.87859710485877			
[deg] Pointing Dec	-69.249771	-69.2757944919335			
[deg] Pointing Roll	262.977887	263.078480800193			
[deg] Roll angle	264.000000	264.000000			
[deg] Roll tolerance	12.000000	12.000000			
Roll constraint allows 180D rotation	N	N			
[s] Window start time (MET)	668476869.184000	668476869.184000			
[s] Window stop time (MET)	670464069.184000	670464069.184000			
[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)	669378878.184000	669377101.1618201			
Observation start date	2019-03-19T10:33:29	2019-03-19T10:05:01			
[s] Observation end time (MET)	669398878.184000	669399656.80067			
Observation end date	2019-03-19T16:06:49	2019-03-19T16:20:56			

2.3 Aspect



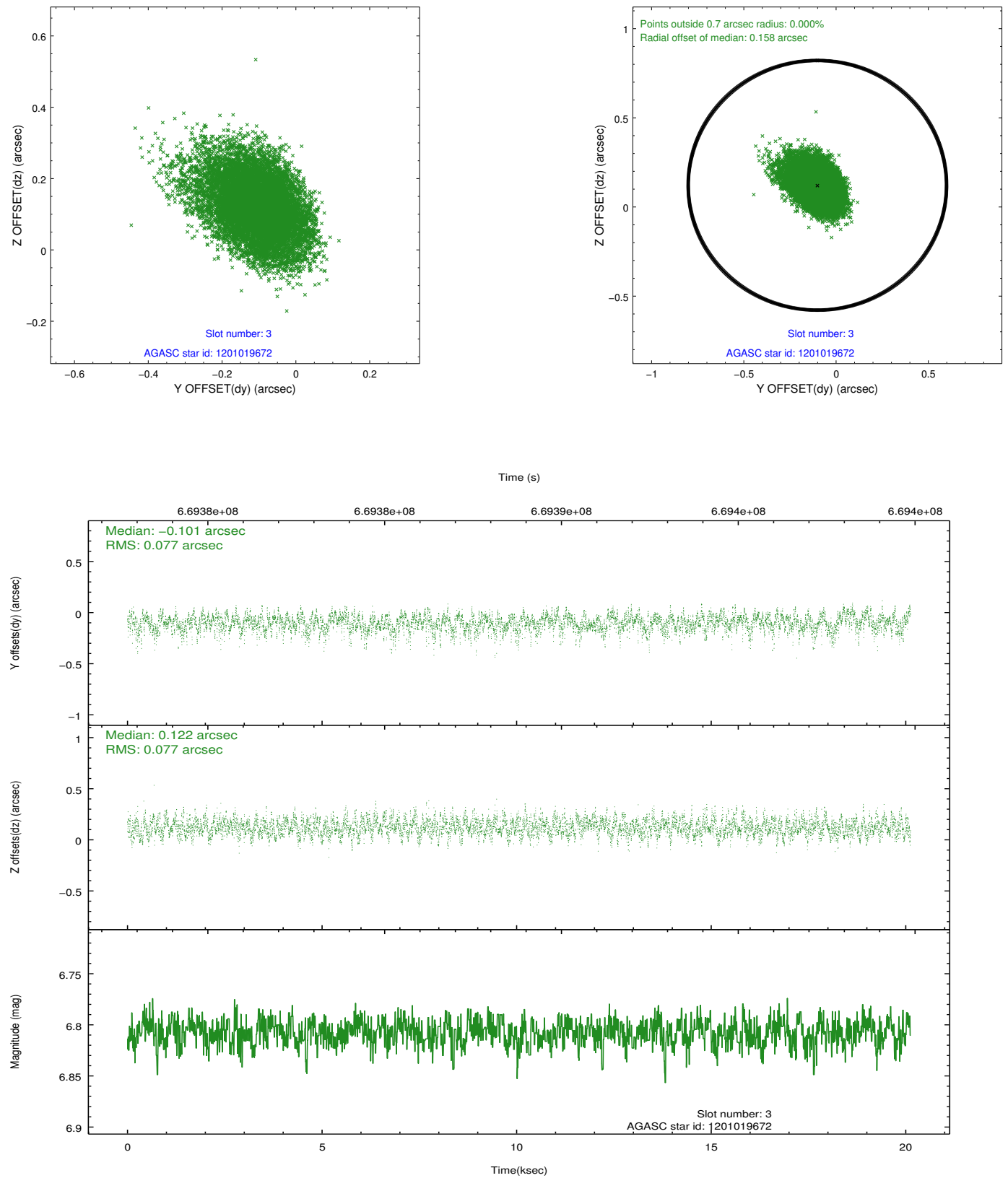


Slot Statistics

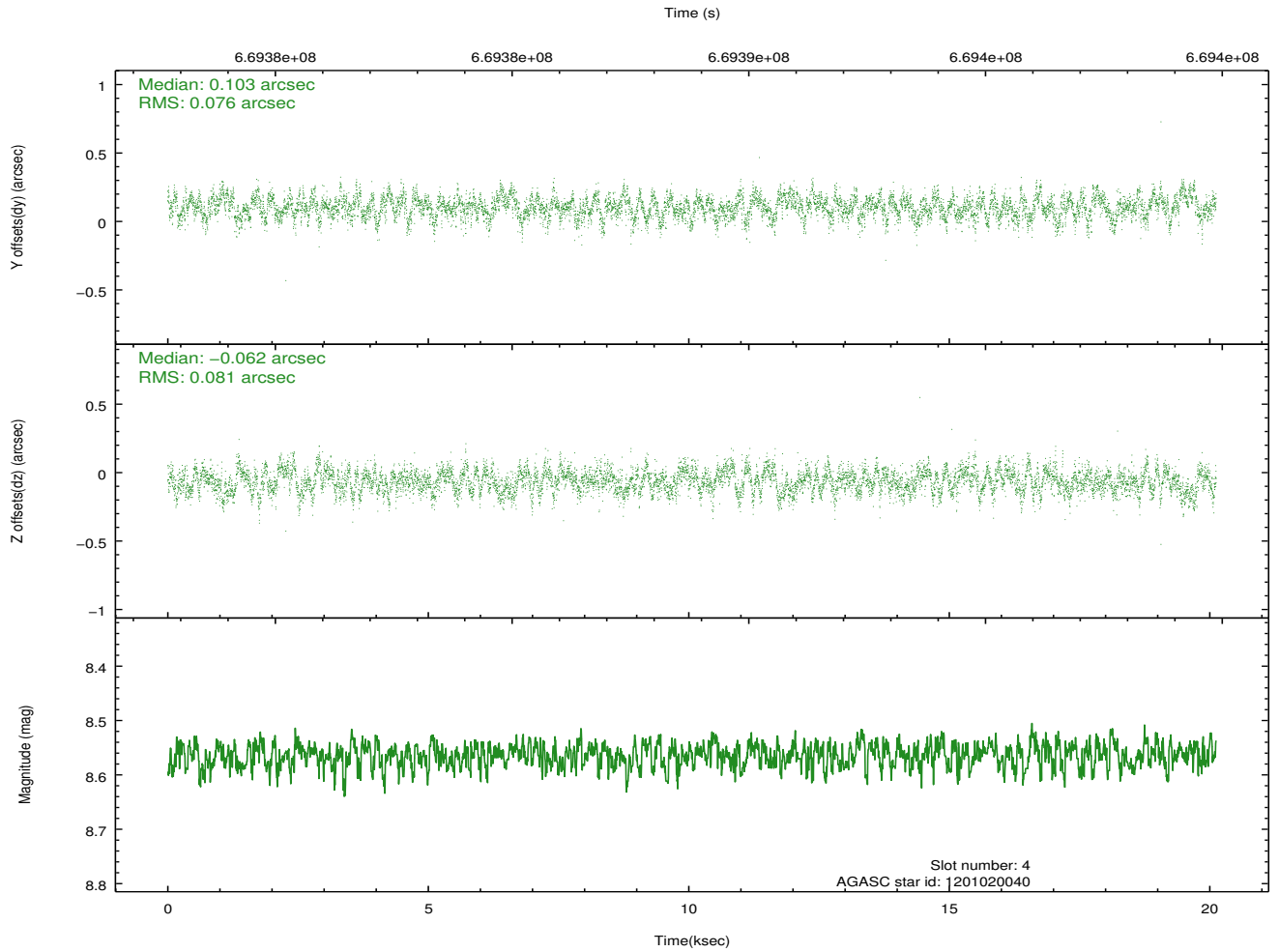
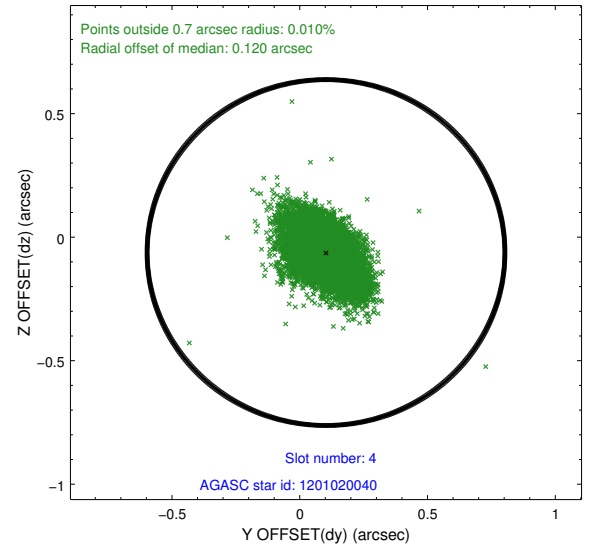
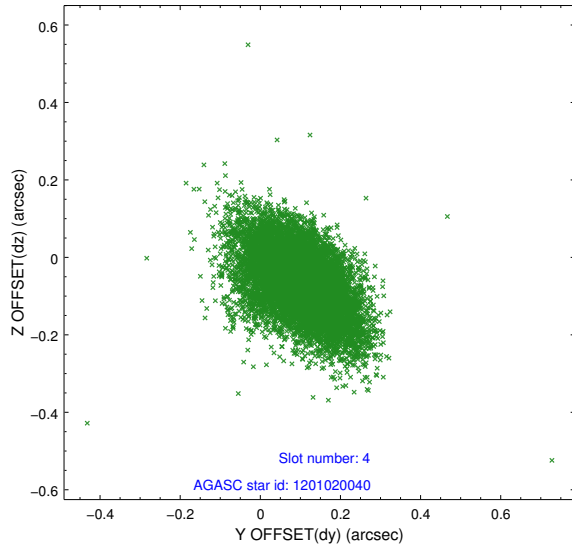
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.07	4909	1.000	-0.120	-0.206	0.049	0.084	0.000000	0.000000	-1167.33	-467
1	FID		HRC-S-2	7.05	4909	1.000	0.499	-0.150	0.024	0.039	0.000000	0.000000	1232.73	-459
2	FID		HRC-S-3	7.05	4909	1.000	0.011	0.058	0.043	0.075	0.000000	0.000000	-1169.77	562
3	GUIDE	used	1201019672	6.81	9816	1.000	-0.101	0.122	0.113	0.191	85.312192	-68.770187	-1925.13	1692
4	GUIDE	used	1201020040	8.56	9810	1.000	0.103	-0.062	0.115	0.198	85.379163	-68.879396	-1542.38	1817
5	GUIDE	used	1201406992	9.22	9799	1.000	0.108	0.199	0.196	0.315	83.682859	-69.471866	818.48	-102
6	GUIDE	used	1201542672	8.18	9810	1.000	-0.317	-0.421	0.115	0.202	84.492488	-69.957531	2431.48	1107
7	GUIDE	used	1201410616	9.29	9803	1.000	0.213	0.171	0.242	0.408	82.516808	-69.784406	2129.86	-1399

2.4 Star Slots

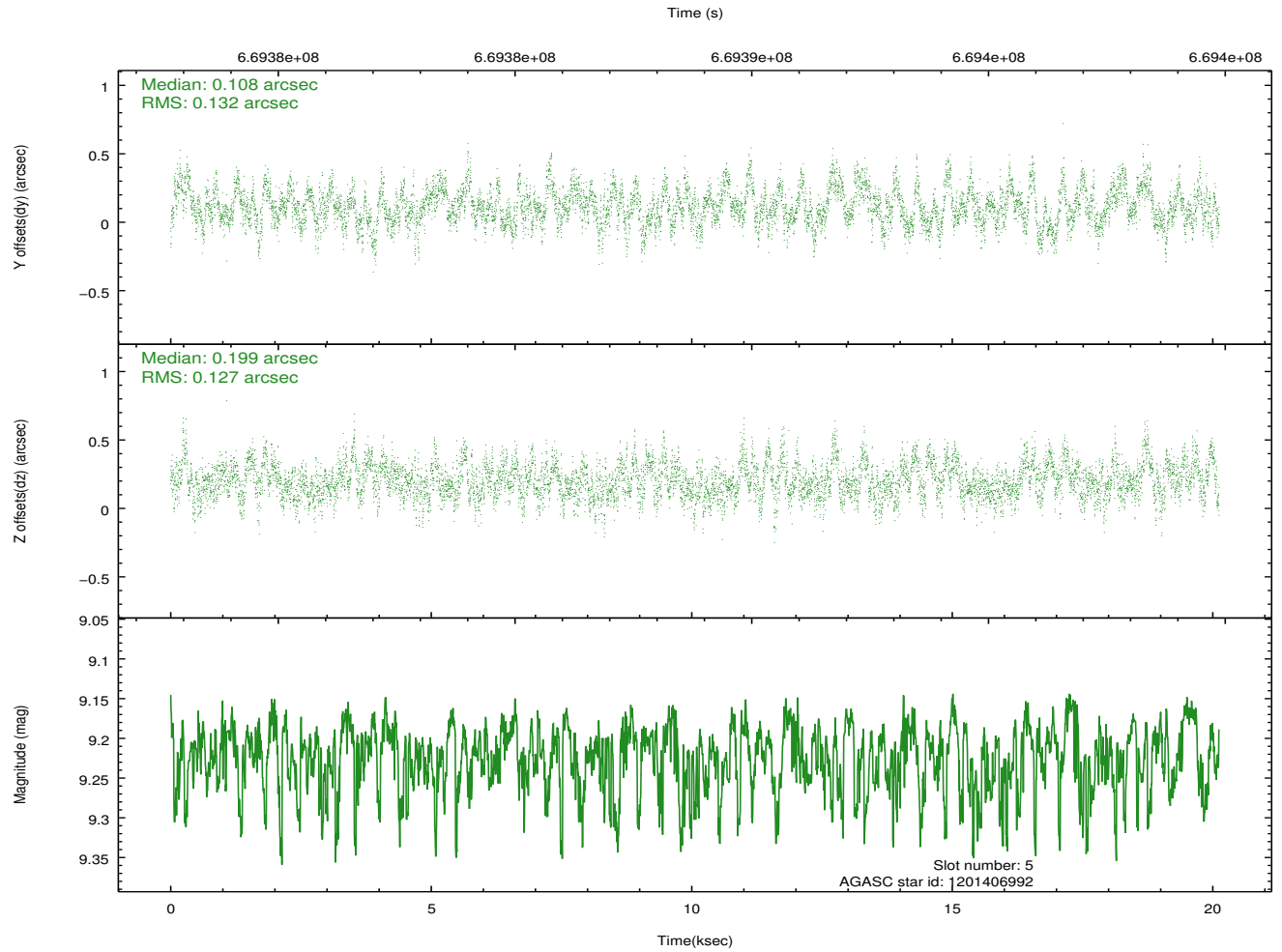
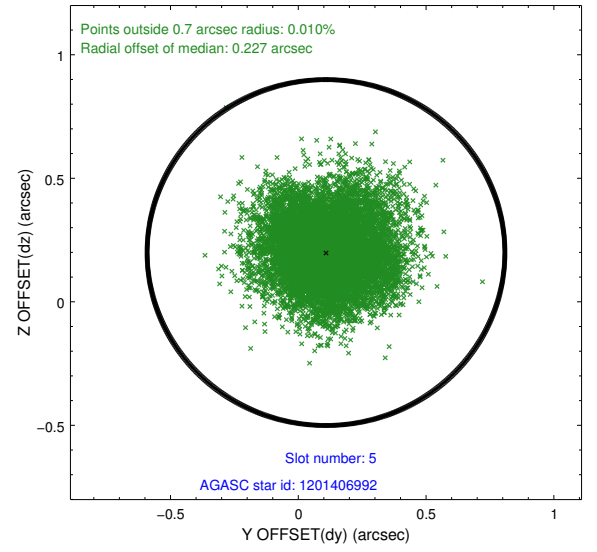
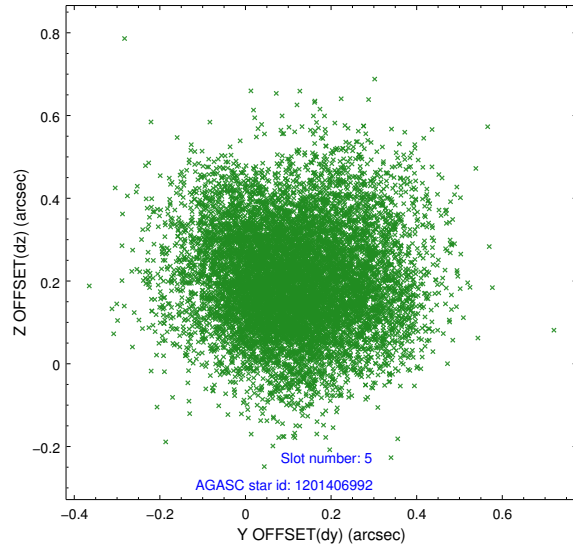
2.4.1 Slot 3



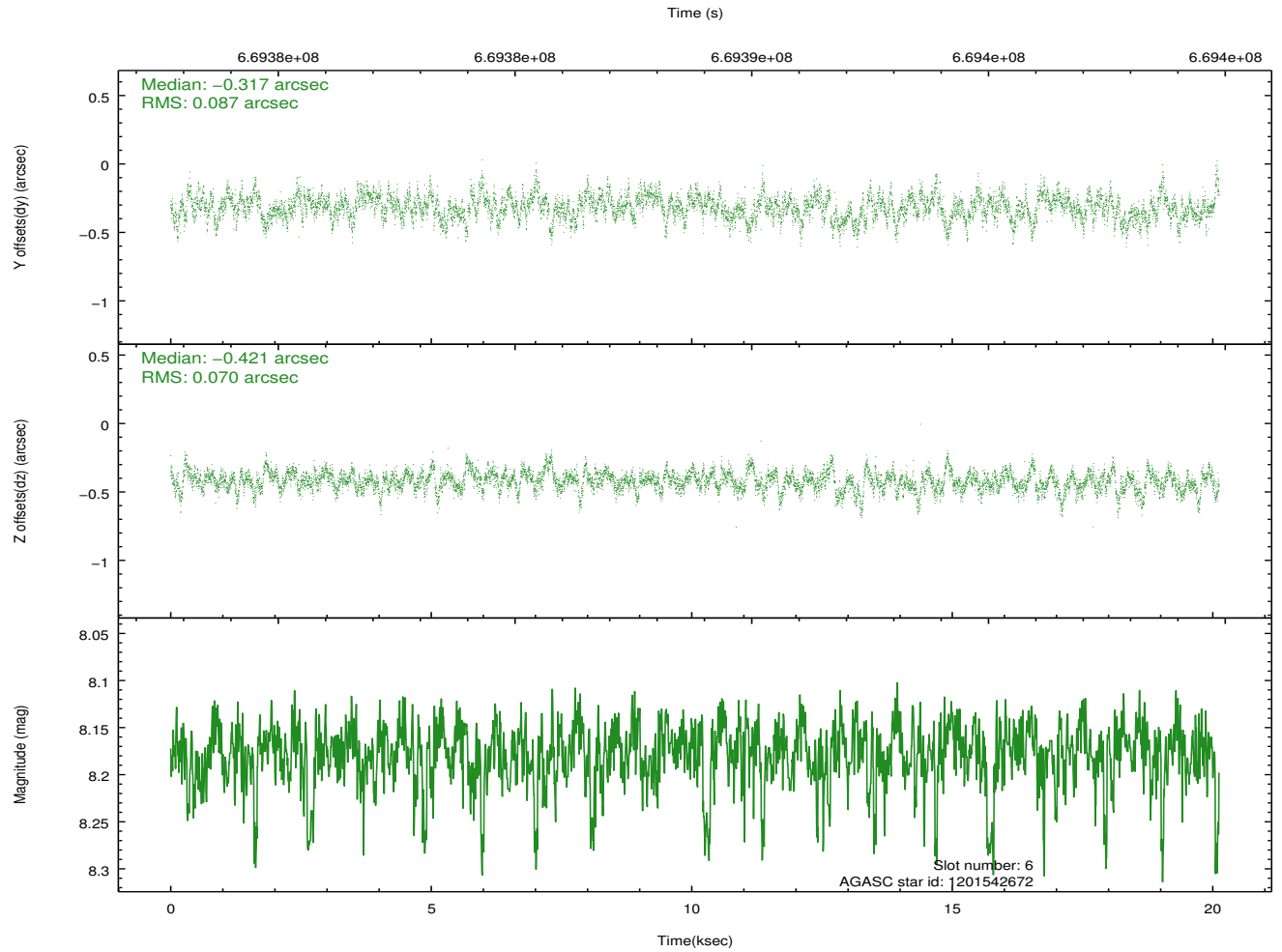
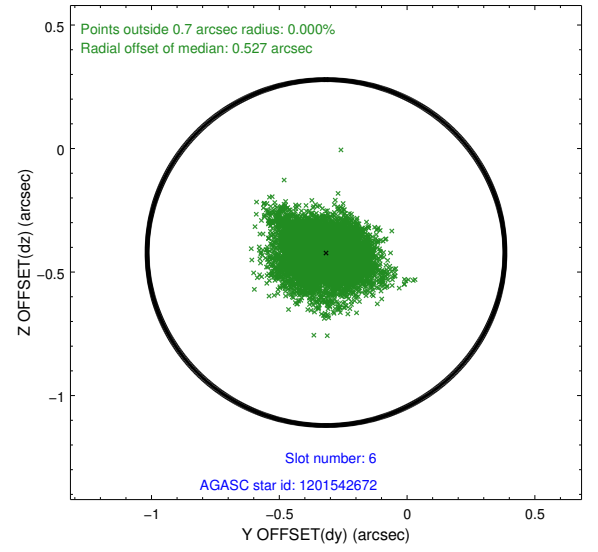
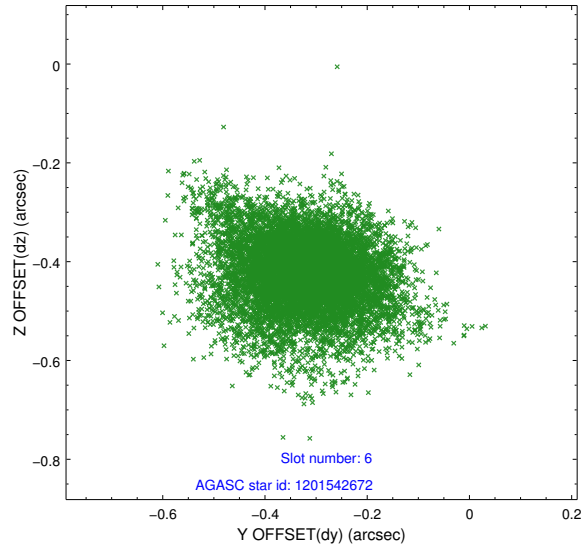
2.4.2 Slot 4



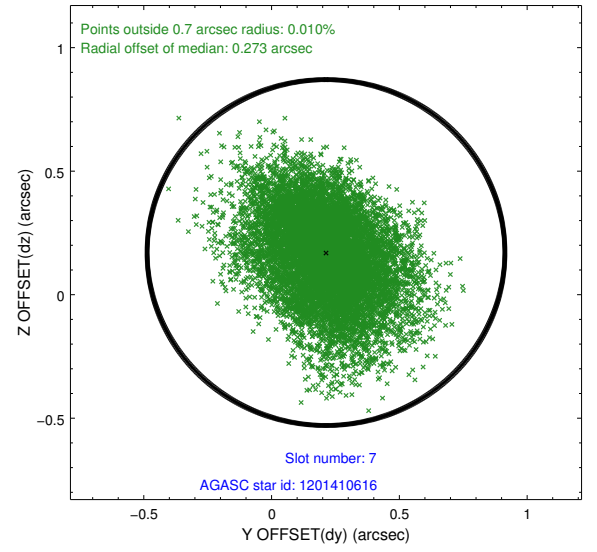
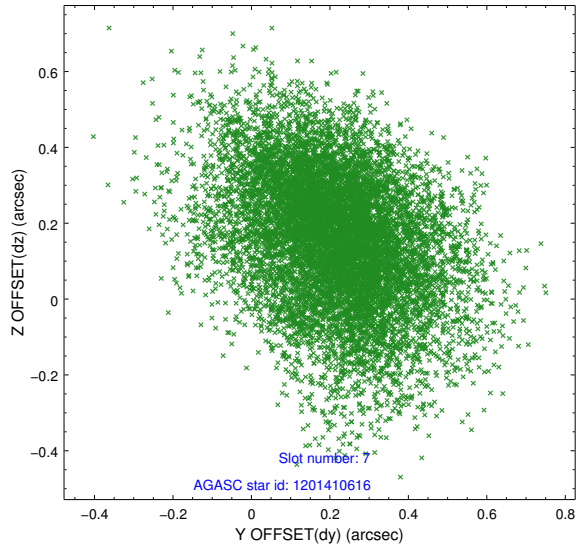
2.4.3 Slot 5



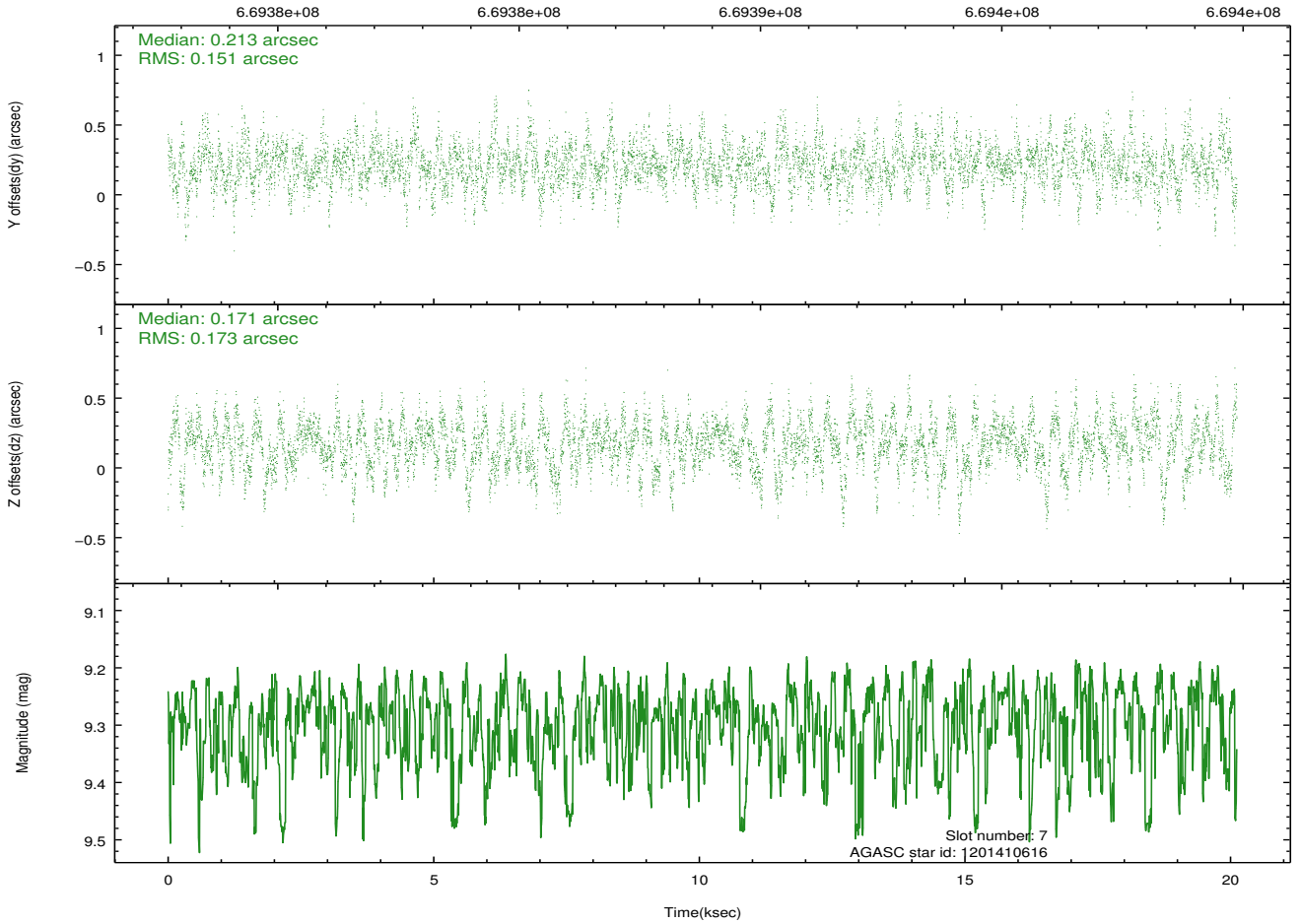
2.4.4 Slot 6



2.4.5 Slot 7

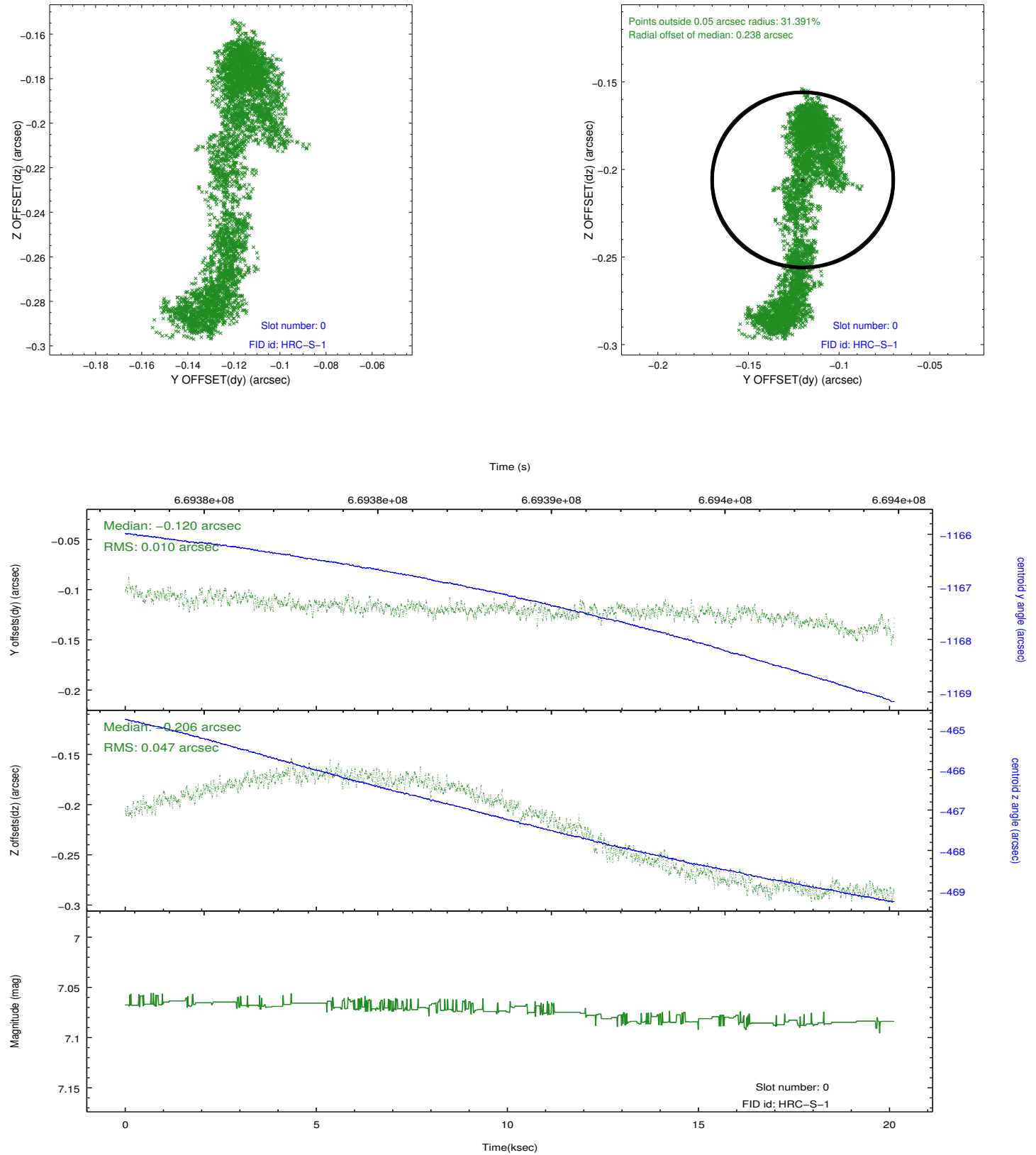


Time (s)

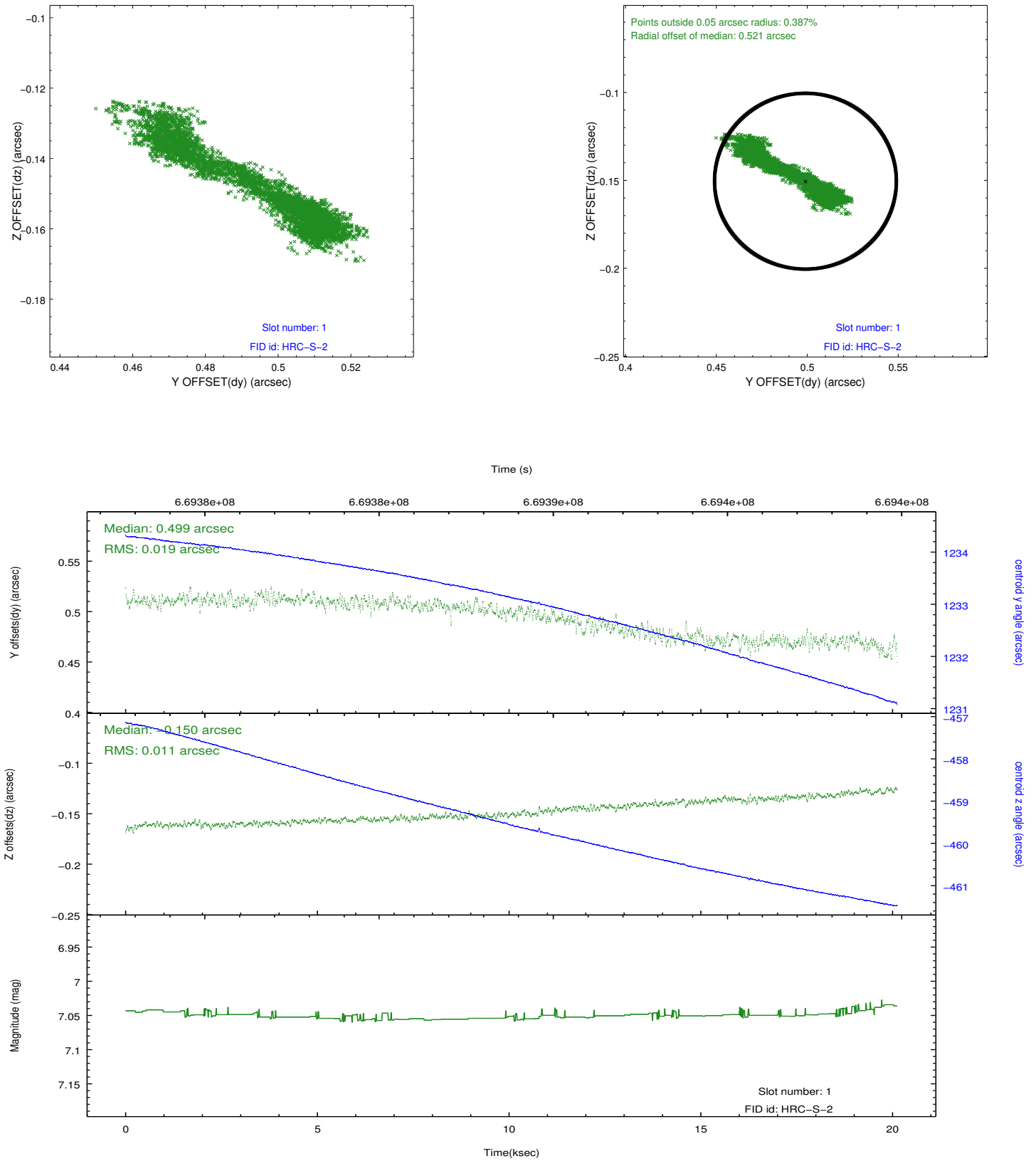


2.5 FID Slots

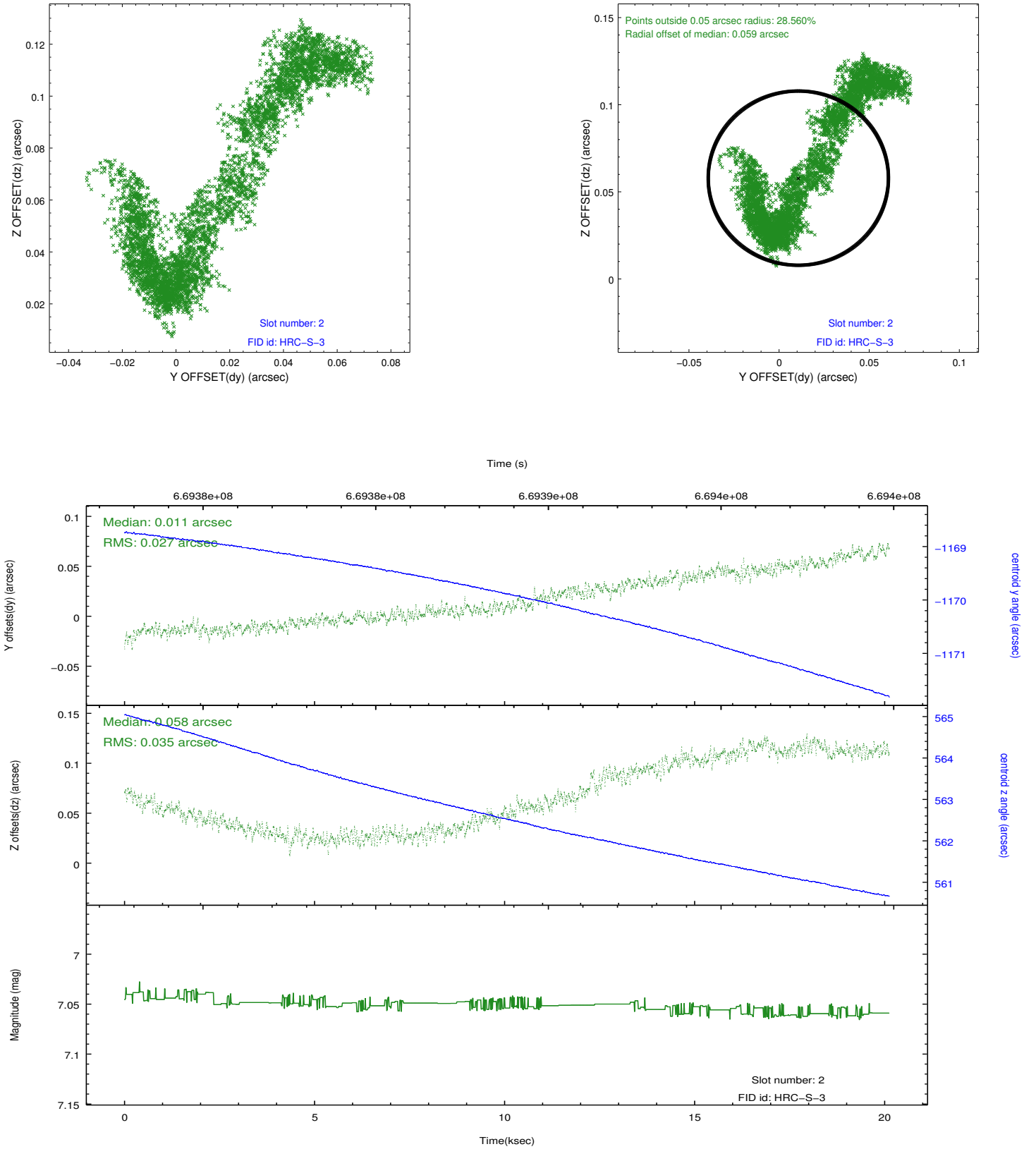
2.5.1 Slot 0



2.5.2 Slot 1

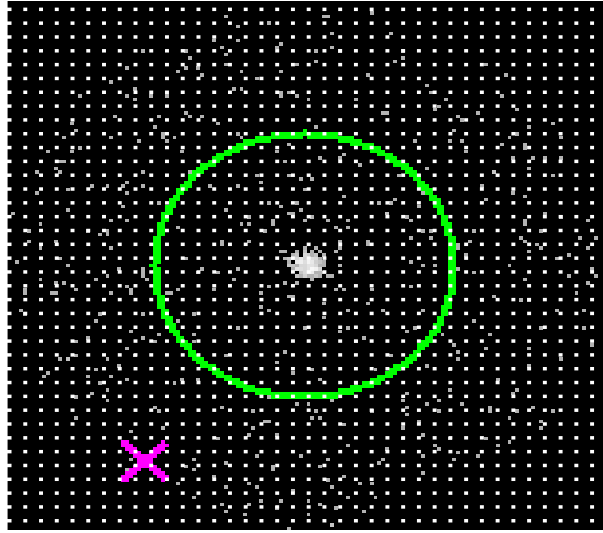


2.5.3 Slot 2

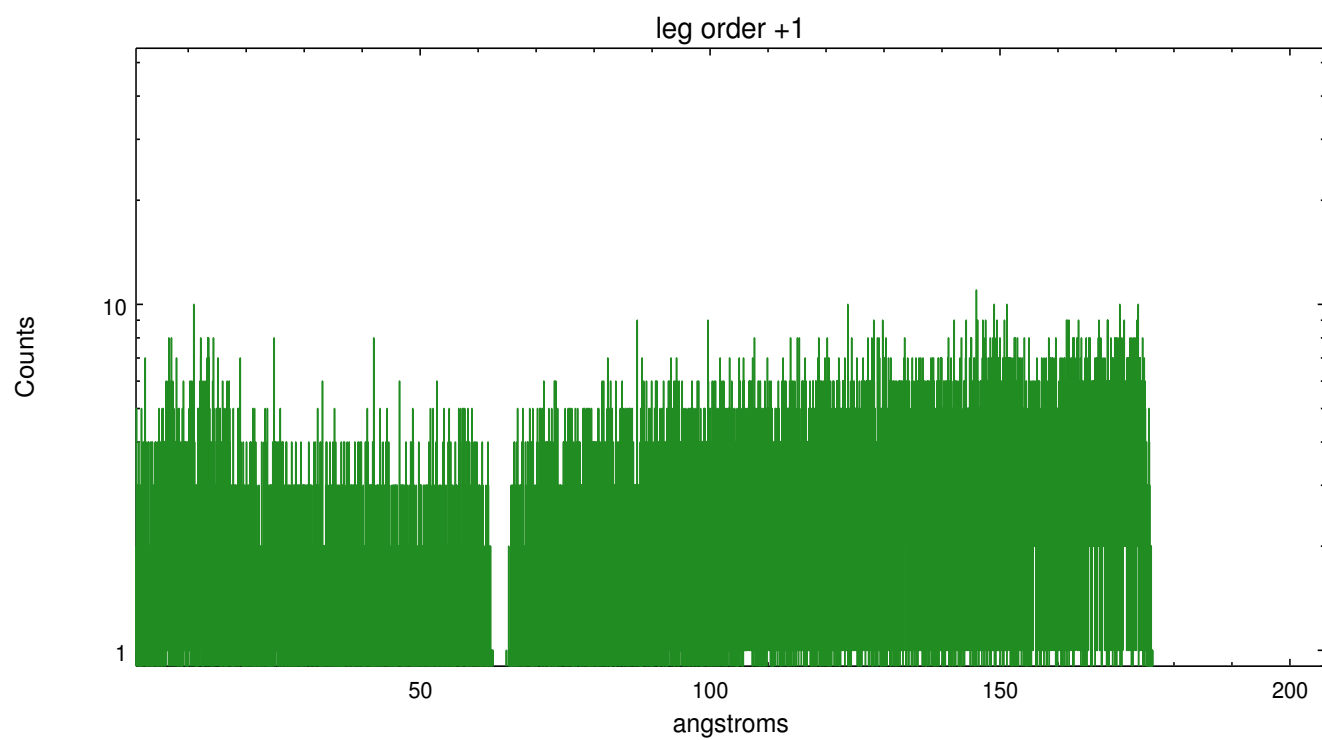
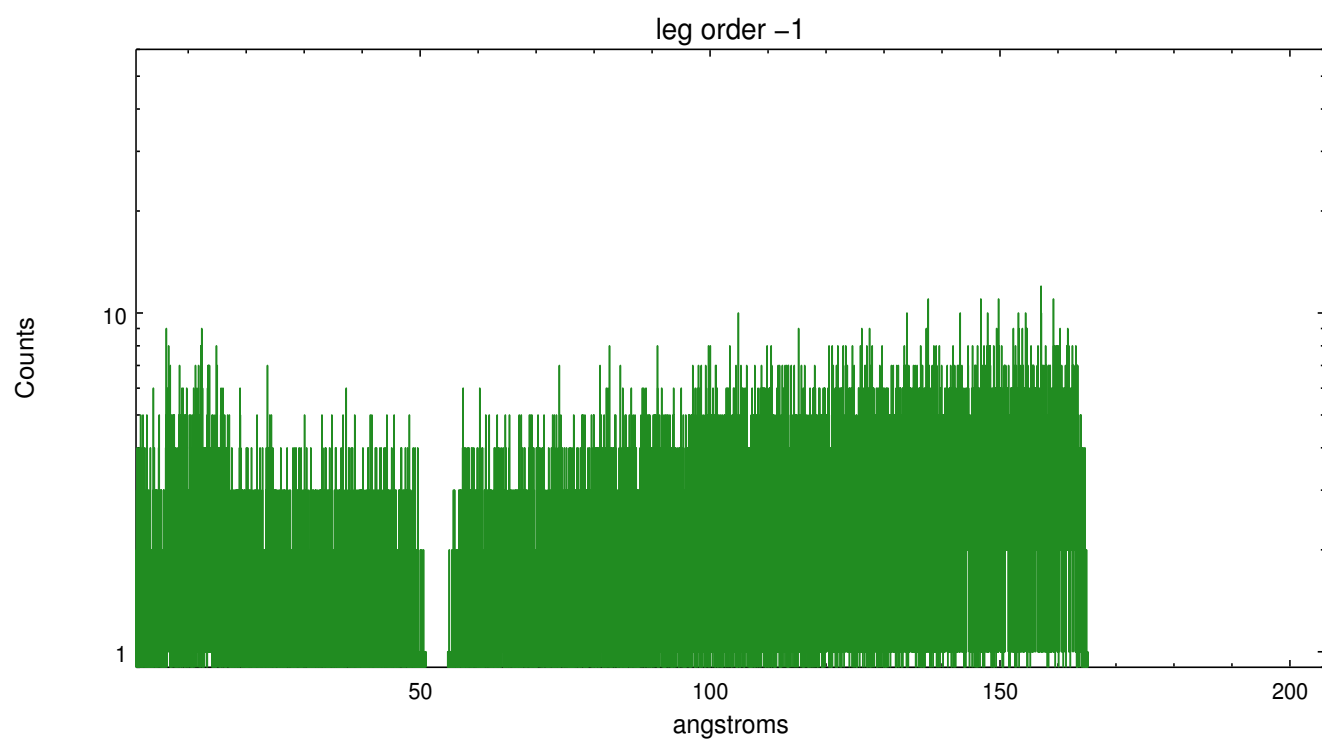


3 Gratings

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	20.119982453346

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.