

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 14324 - L2 Version 2
Chandra X-Ray Center

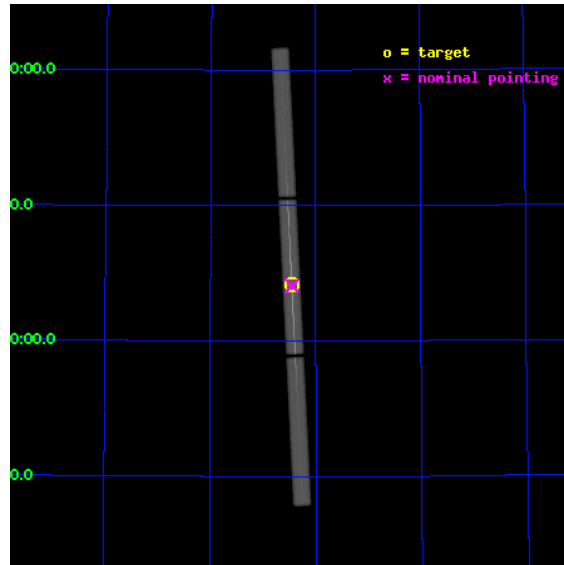
L2 Processing Date : Jul 26 2012

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1 Front

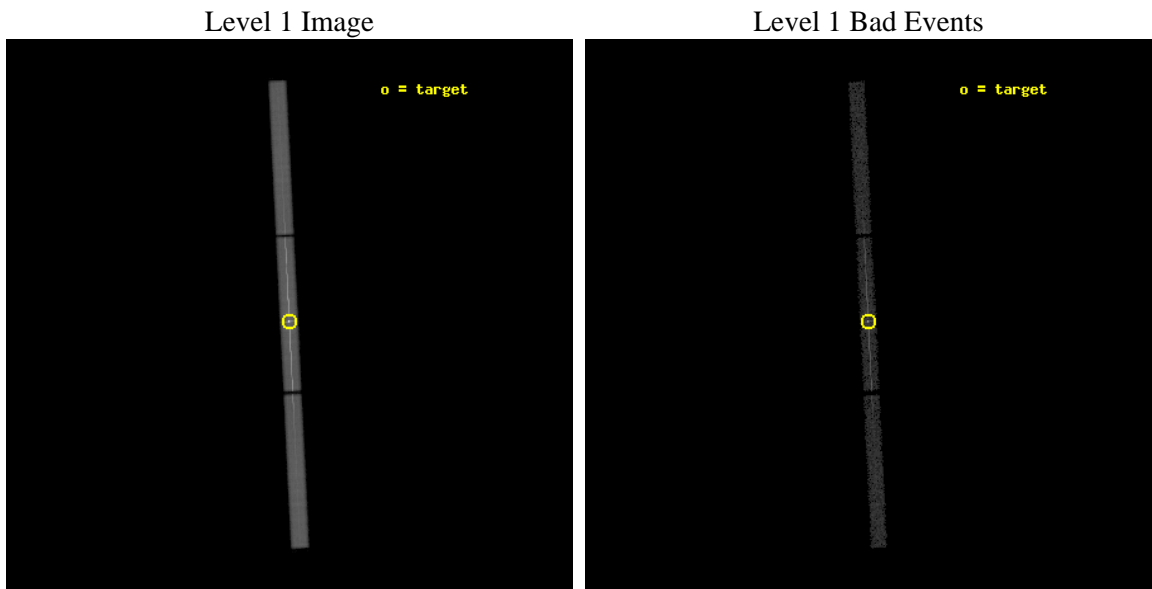
seq_num	790243	Sequence number
obs_id	14324	Observation id
title	AO-13 Calibration Observations of Mkn421 to Calibrate the New HRC-S HV Setting	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	MKN421[Voltage:original default]	Source name
ra_targ	166.113333	Observer's specified target RA [deg]
dec_targ	38.208806	Observer's specified target Dec [deg]
ra_nom	166.11303275928	Nominal RA [deg]
dec_nom	38.204023744769	Nominal Dec [deg]
roll_nom	267.10982564428	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9785.9317722321	[s]
livetime	9701.1195787729	Ontime multiplied by DTCOR
l2events	808015	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	8.4.5	Processing system revision	ontime	9785.9317722321	[s]
caldsver	4.5.1	 	l1events	1041869	Number of level 1 events
date	2012-07-26T23:22:59	Date and time of file creation			
revision	2	Processing version of data			

2.1.3 Events

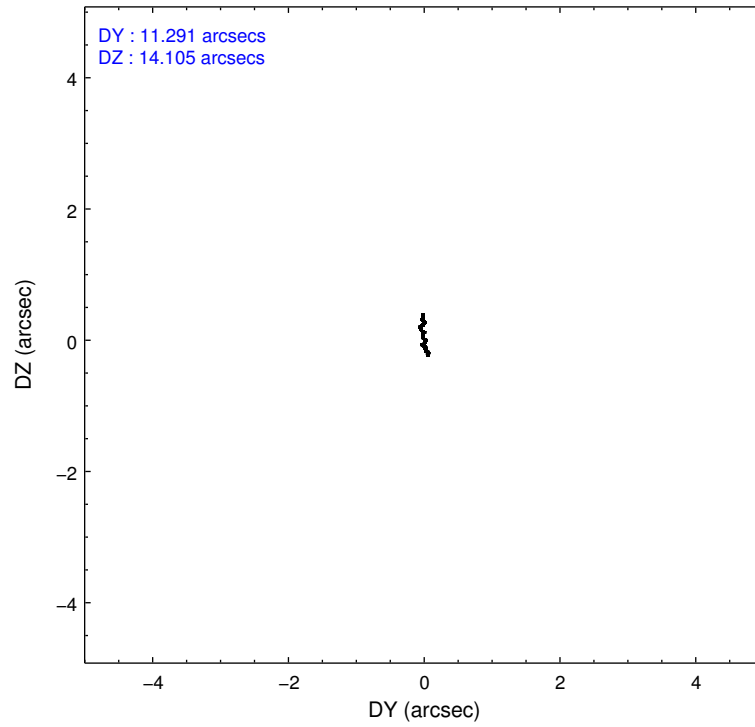
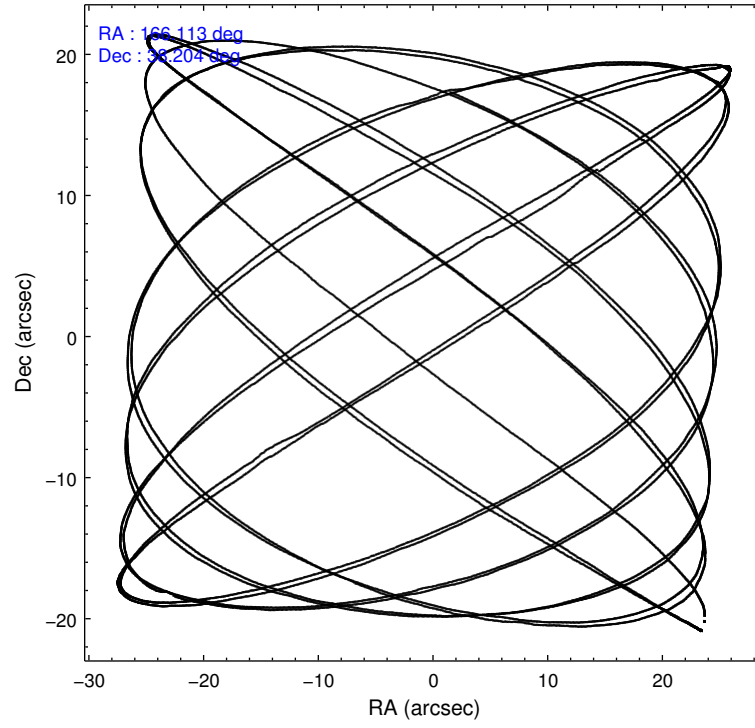
Level 1 Events

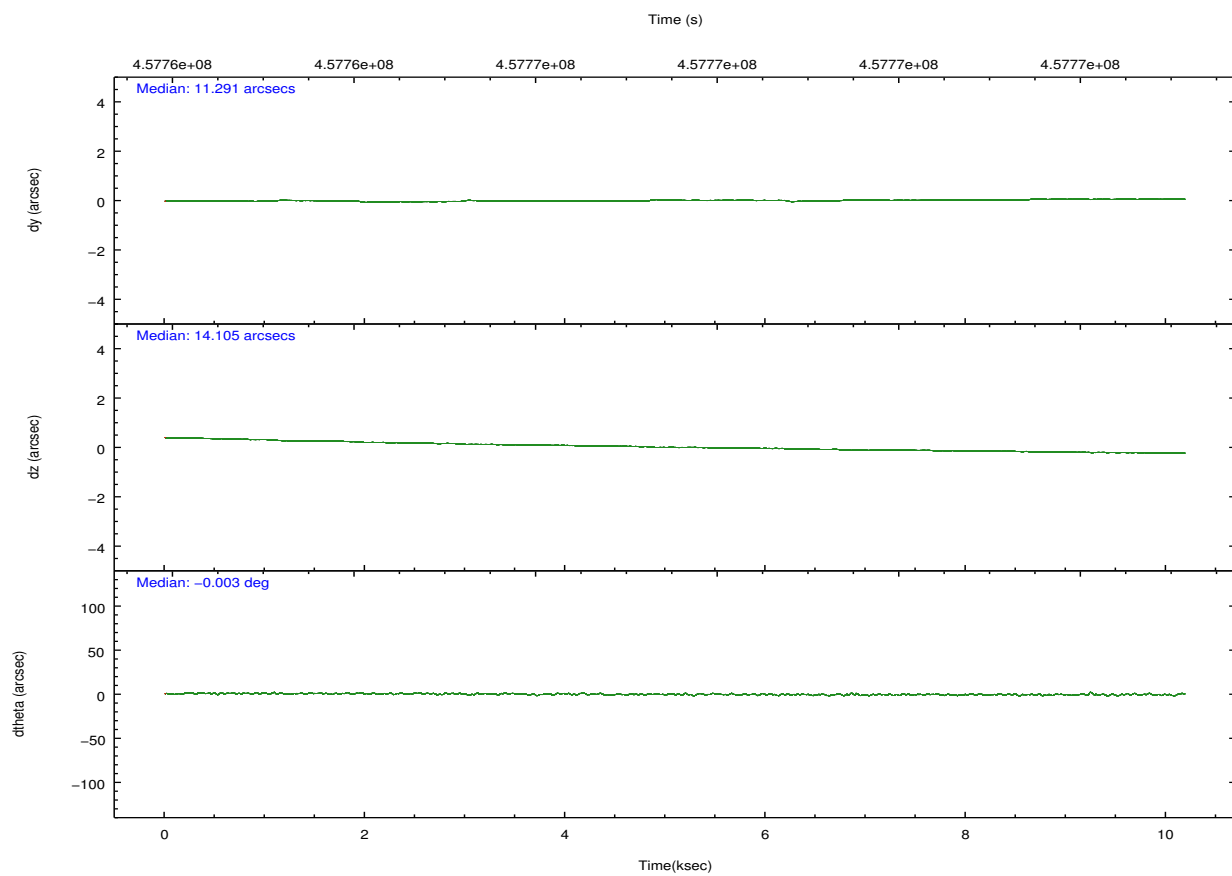
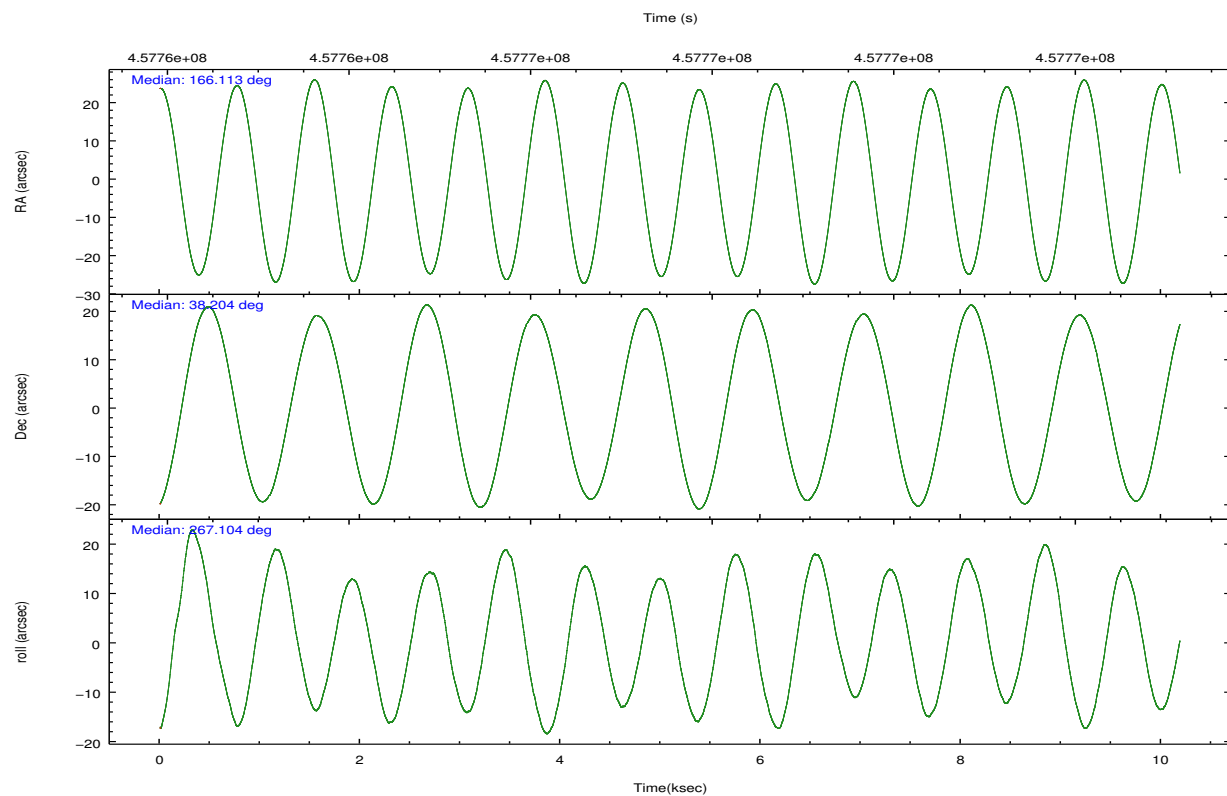
	segment 1	segment 2	segment 3
level 1 events	282037	469062	290770
rejected events	17463	27660	17668
rejected %	6%	5%	6%

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	166.094677	166.1130327592778			
[deg] Pointing Dec	38.228919	38.20402374476862			
[deg] Pointing Roll	267.053849	267.1098256442788			
[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)	457762629.184000	457762252.40347			
Observation start date	2012-07-04T04:16:02	2012-07-04T04:10:52			
[s] Observation end time (MET)	457772629.184000	457772890.36654			
Observation end date	2012-07-04T07:02:42	2012-07-04T07:08:10			

2.3 Aspect



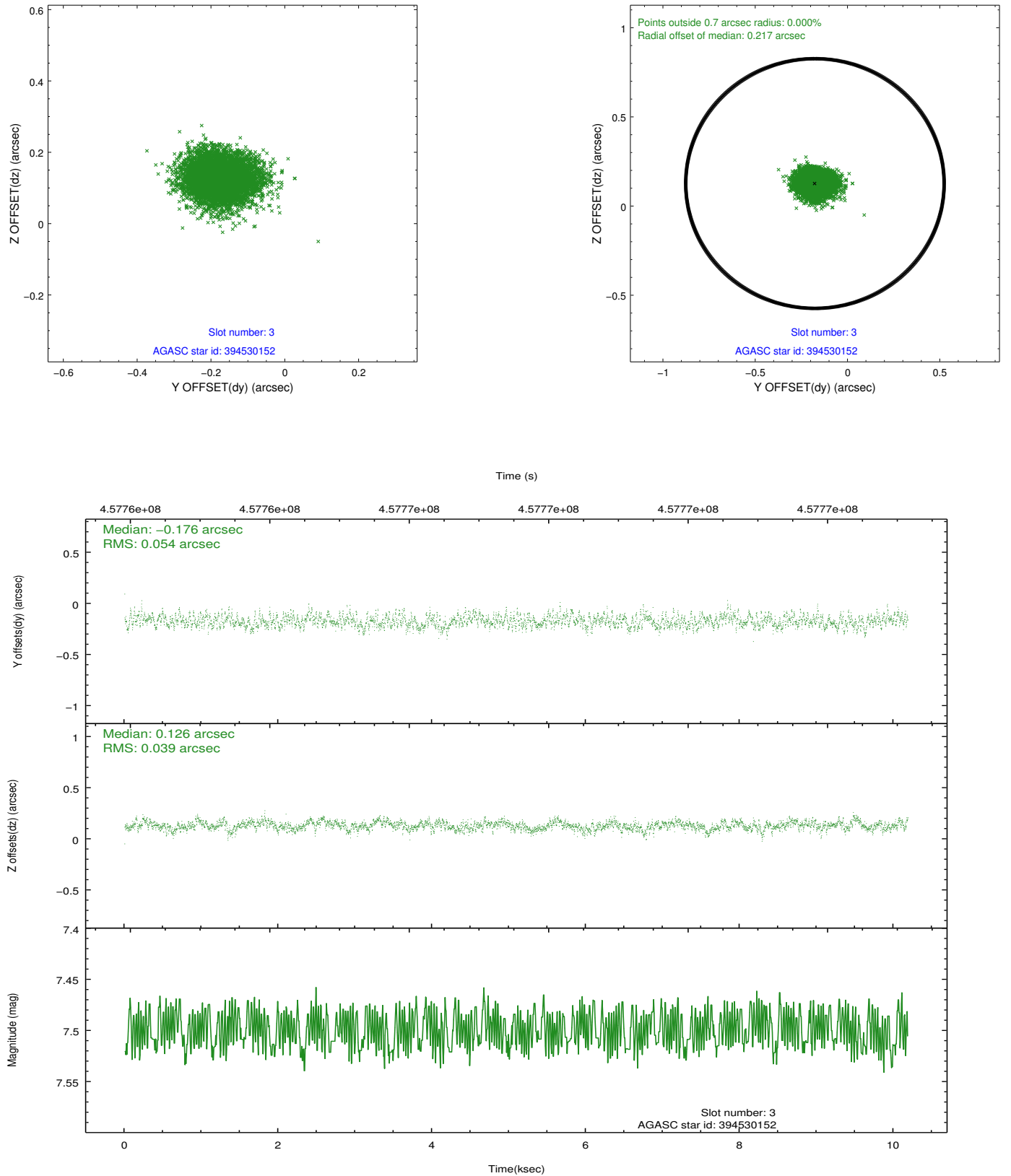


Slot Statistics

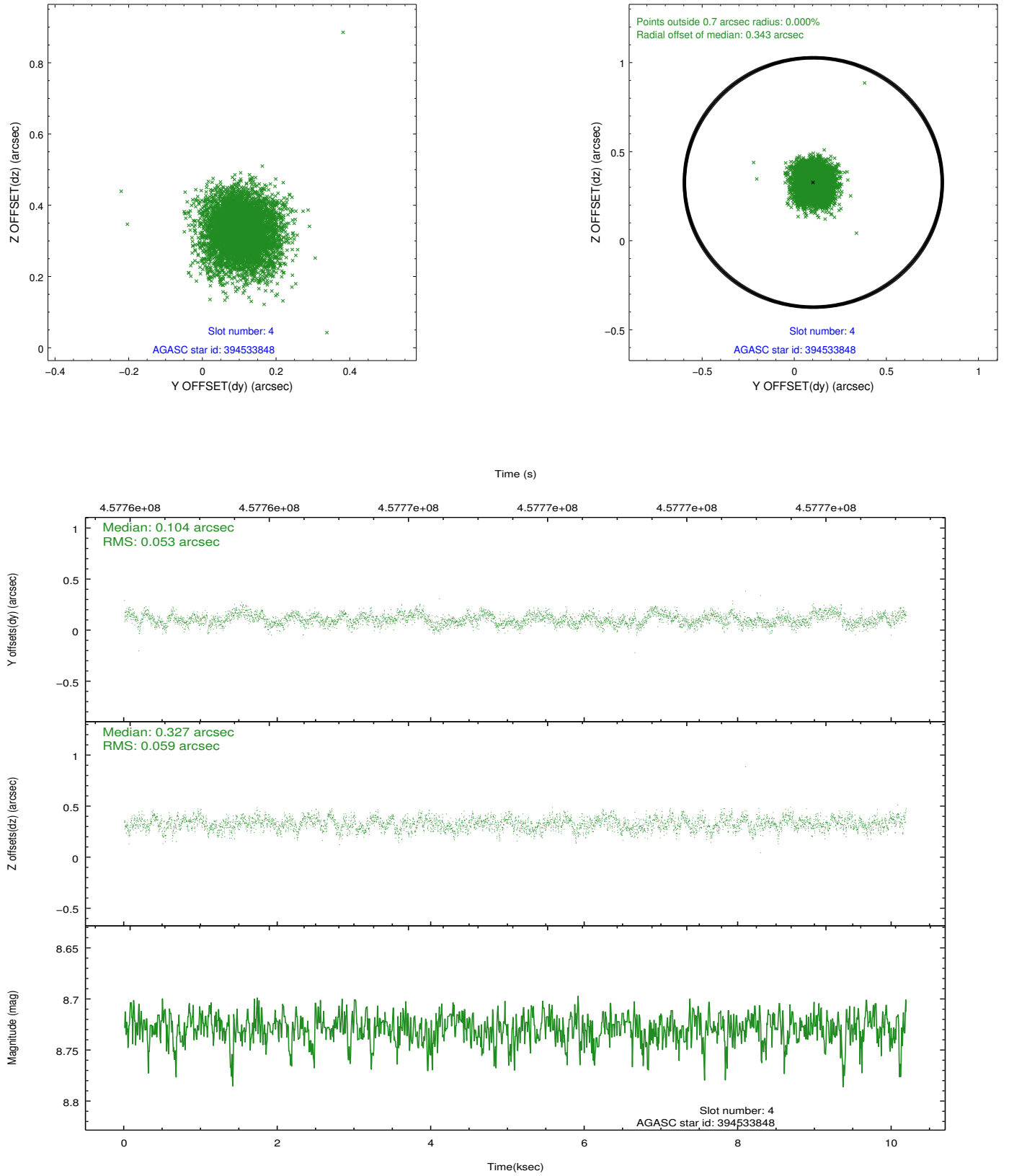
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.01	2485	0.056	-0.174	0.011	0.020	0.000000	0.000000	-1165.62	-462.97
1	FID	HRC-S-2	7.00	2485	0.273	-0.130	0.005	0.009	0.000000	0.000000	1233.81	-455.75
2	FID	HRC-S-3	7.02	2485	0.060	0.002	0.011	0.020	0.000000	0.000000	-1167.84	566.56
3	GUIDE	394530152	7.50	4969	-0.176	0.126	0.071	0.113	166.075805	38.868252	-2295.82	-171.30
4	GUIDE	394533848	8.73	4966	0.104	0.327	0.084	0.136	166.382906	38.276007	-213.23	800.67
5	GUIDE	394543960	9.80	4939	0.176	0.195	0.154	0.246	165.802757	37.787371	1629.18	-747.41
6	GUIDE	394546712	6.60	4969	-0.178	0.292	0.081	0.128	166.451462	38.394357	-647.96	973.70
7	GUIDE	394546720	6.42	4968	0.073	-0.939	0.104	0.177	166.130115	38.241361	-49.79	96.94

2.4 Star Slots

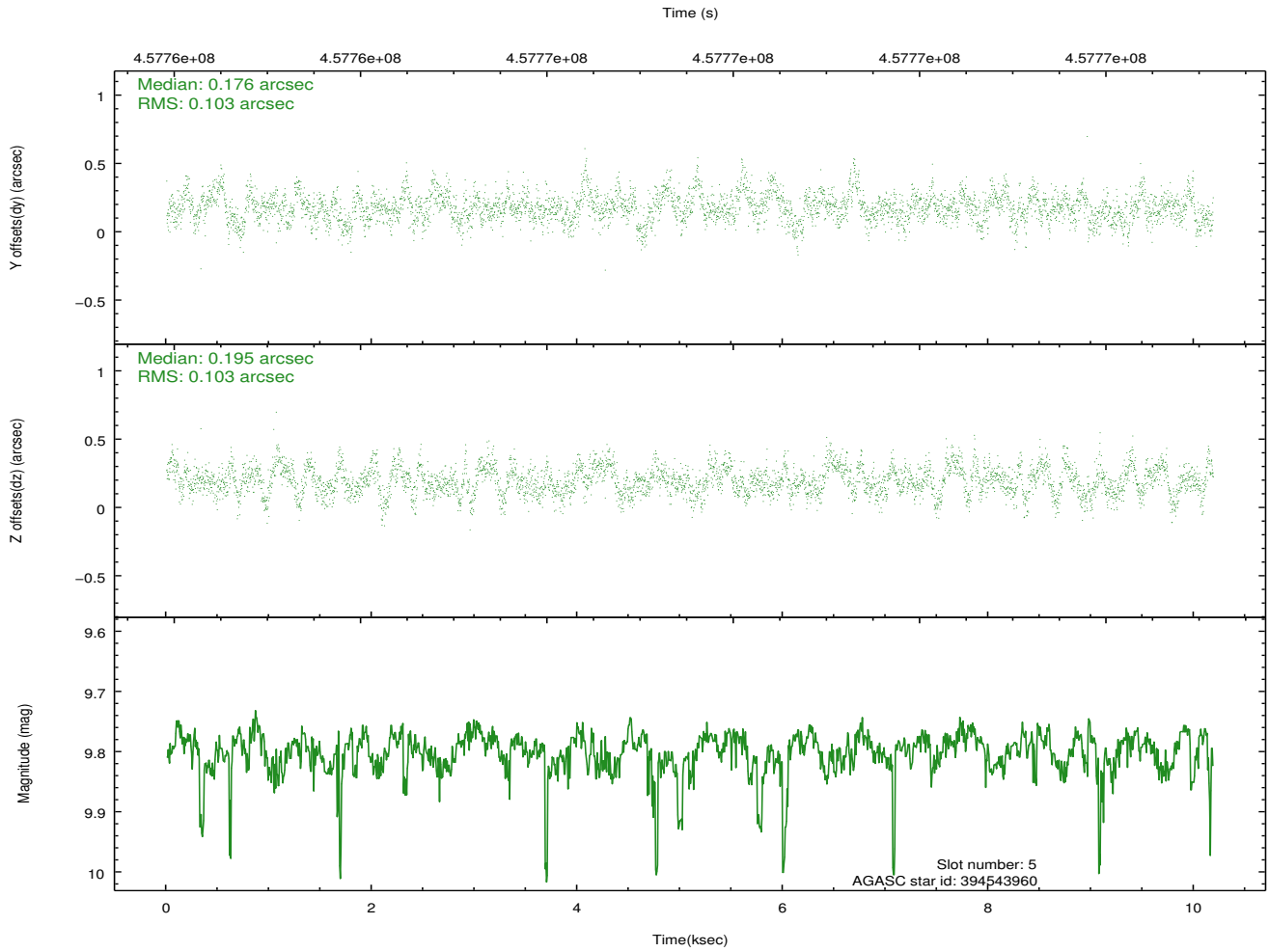
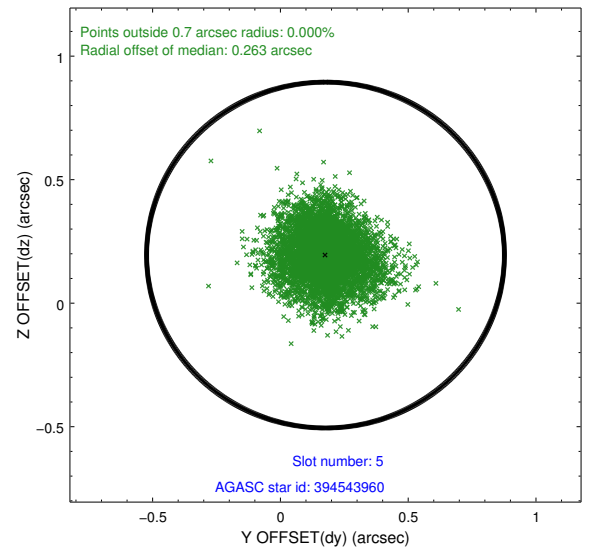
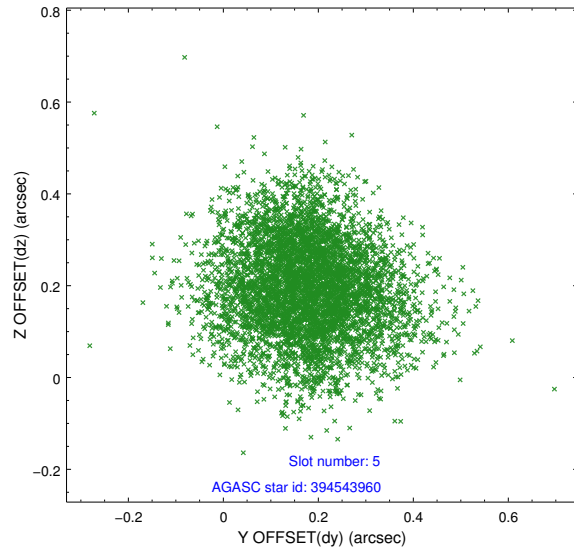
2.4.1 Slot 3



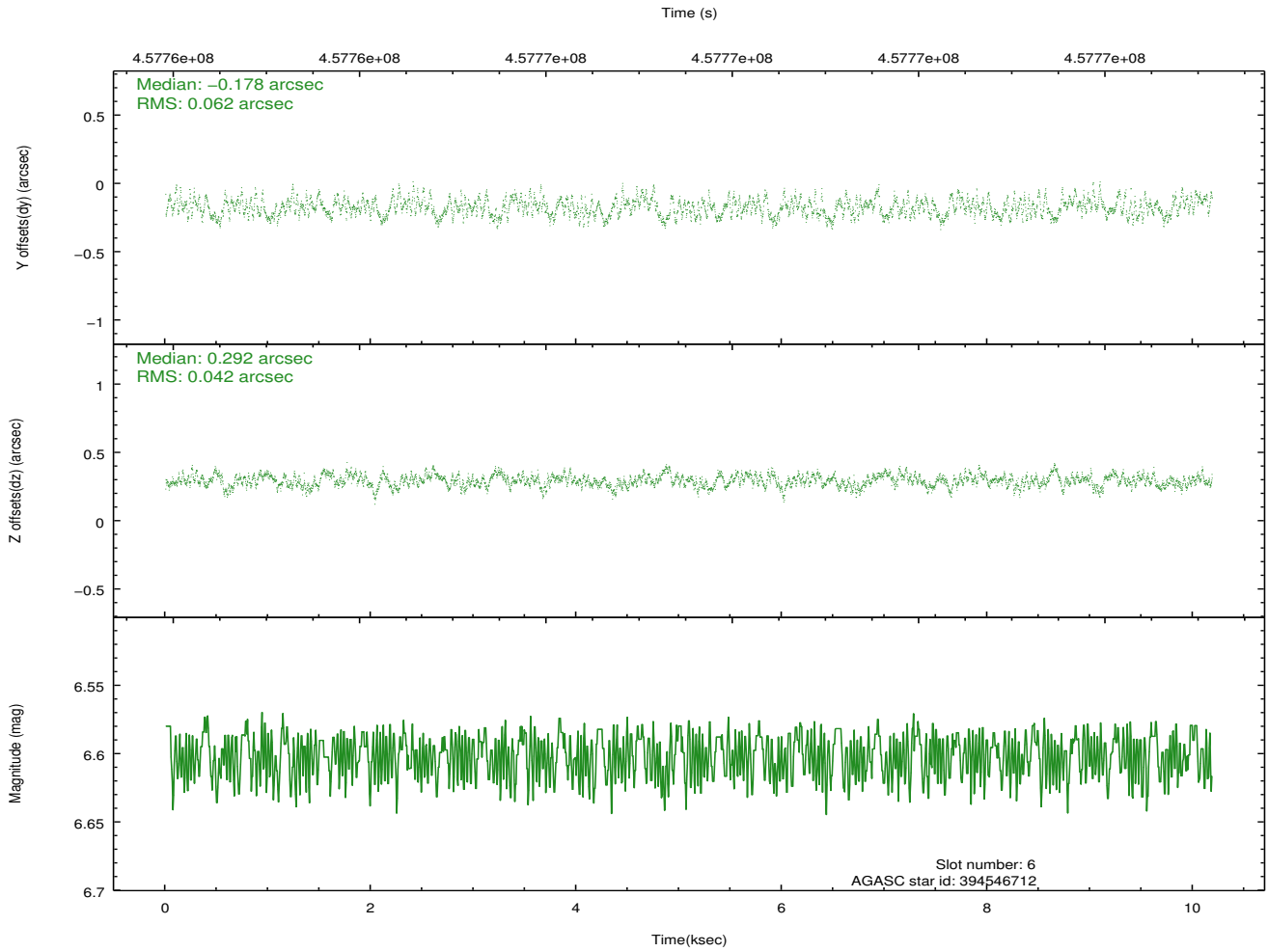
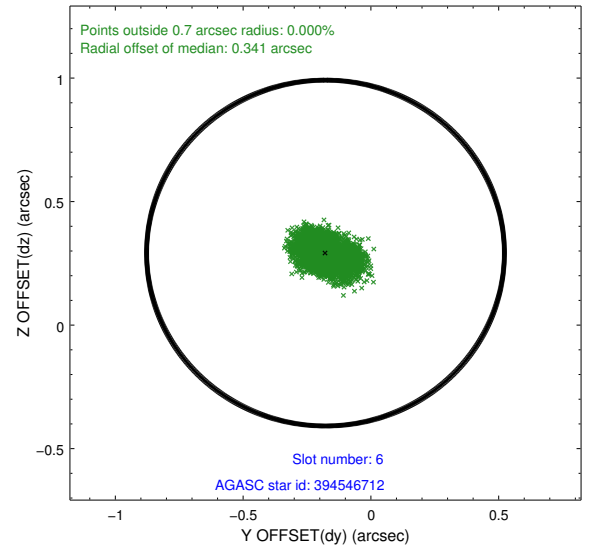
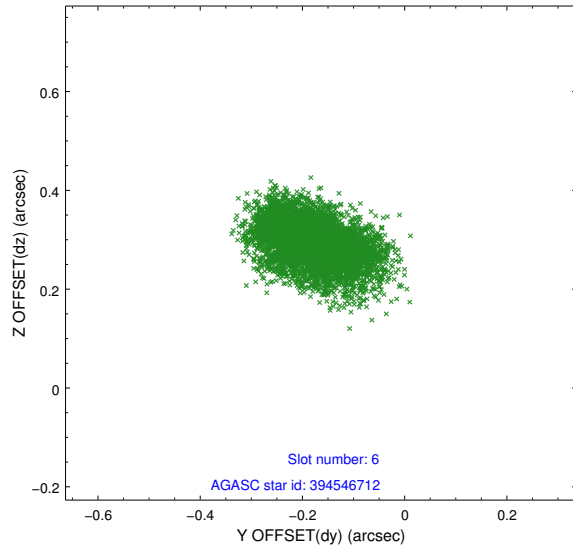
2.4.2 Slot 4



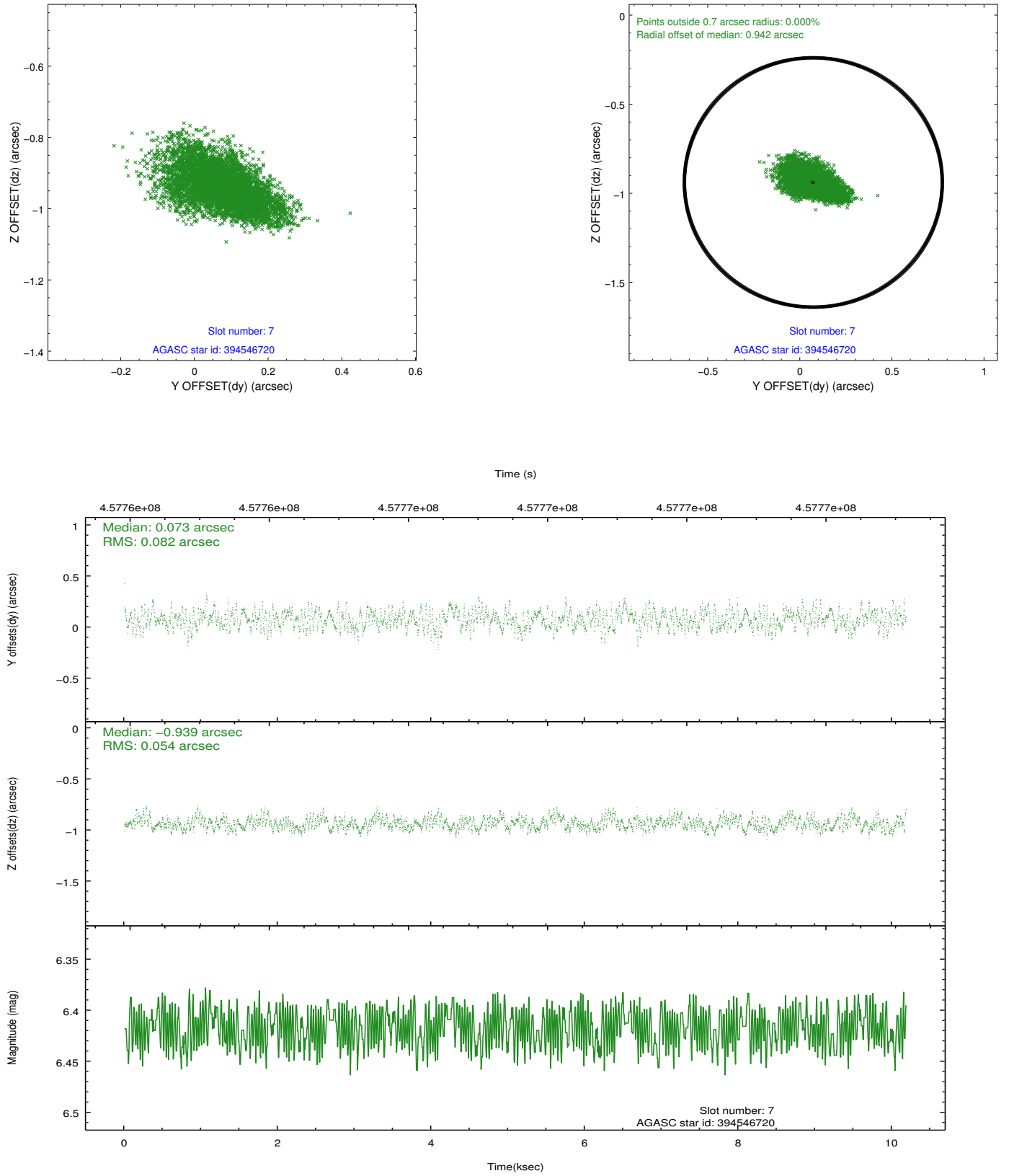
2.4.3 Slot 5



2.4.4 Slot 6

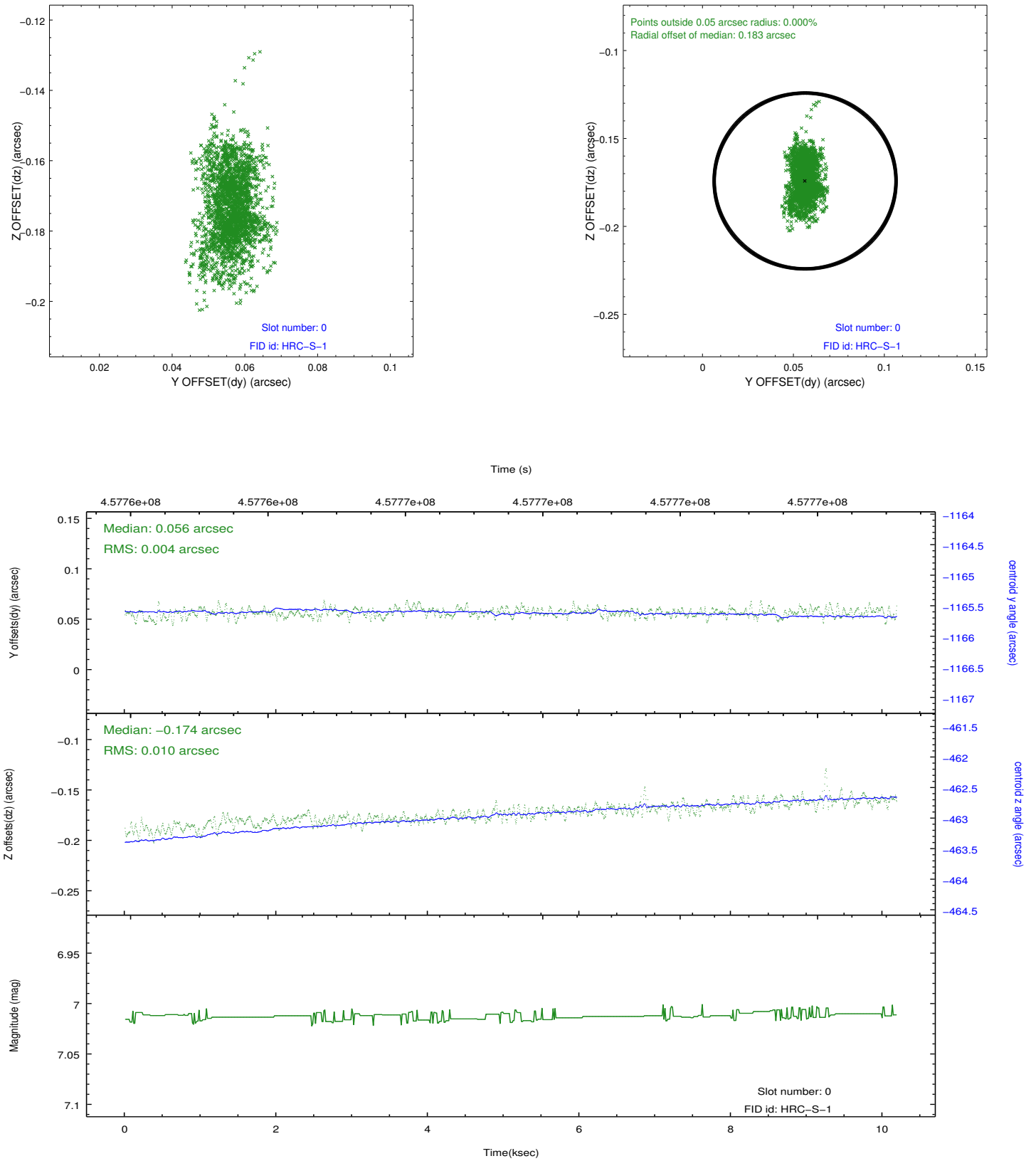


2.4.5 Slot 7

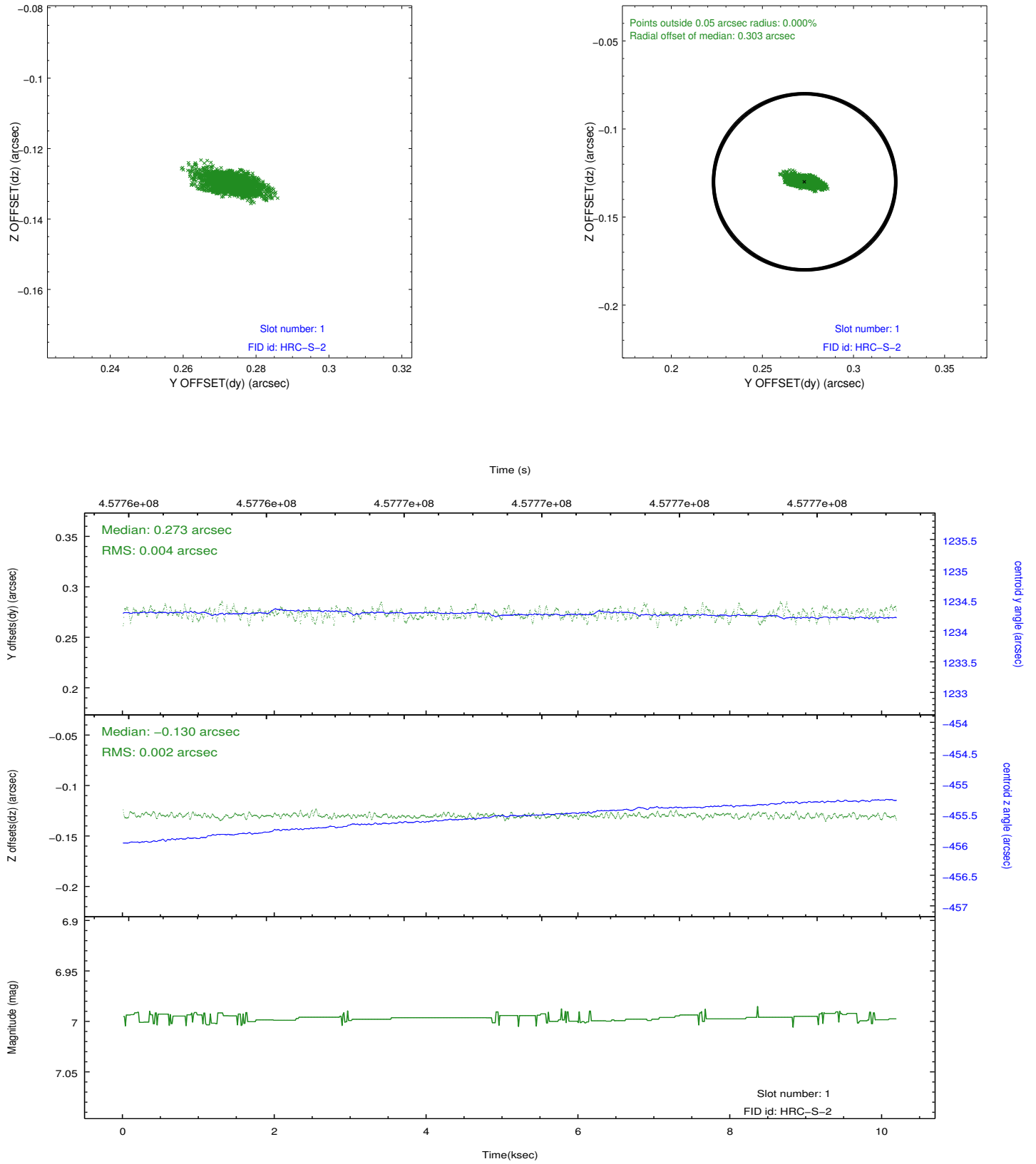


2.5 FID Slots

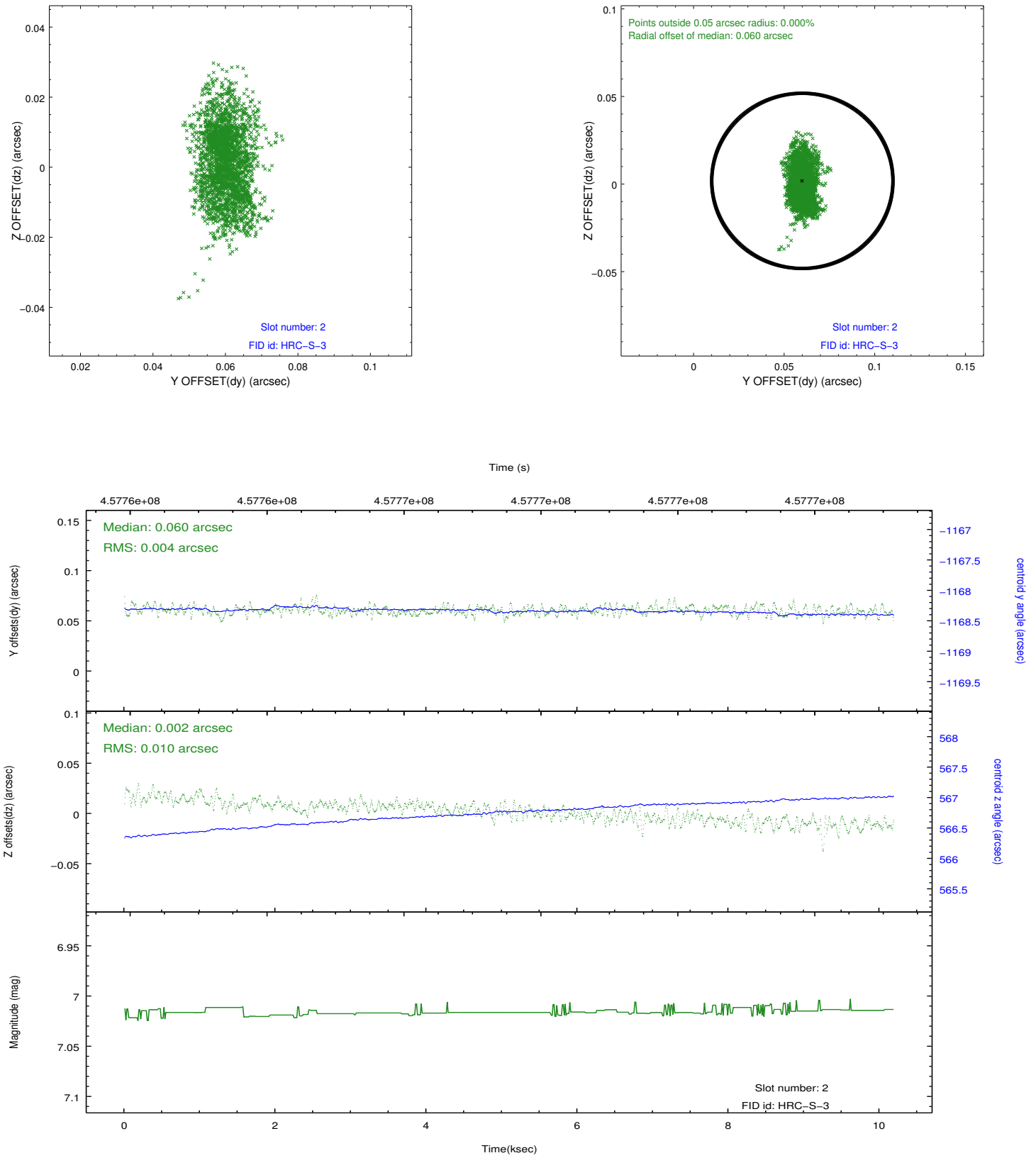
2.5.1 Slot 0



2.5.2 Slot 1

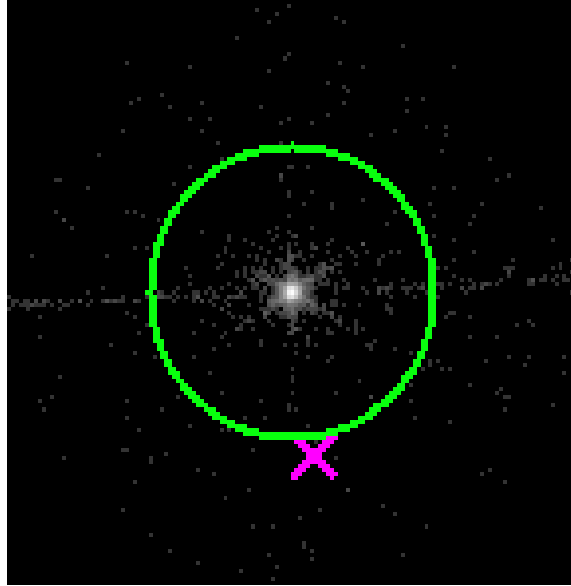


2.5.3 Slot 2

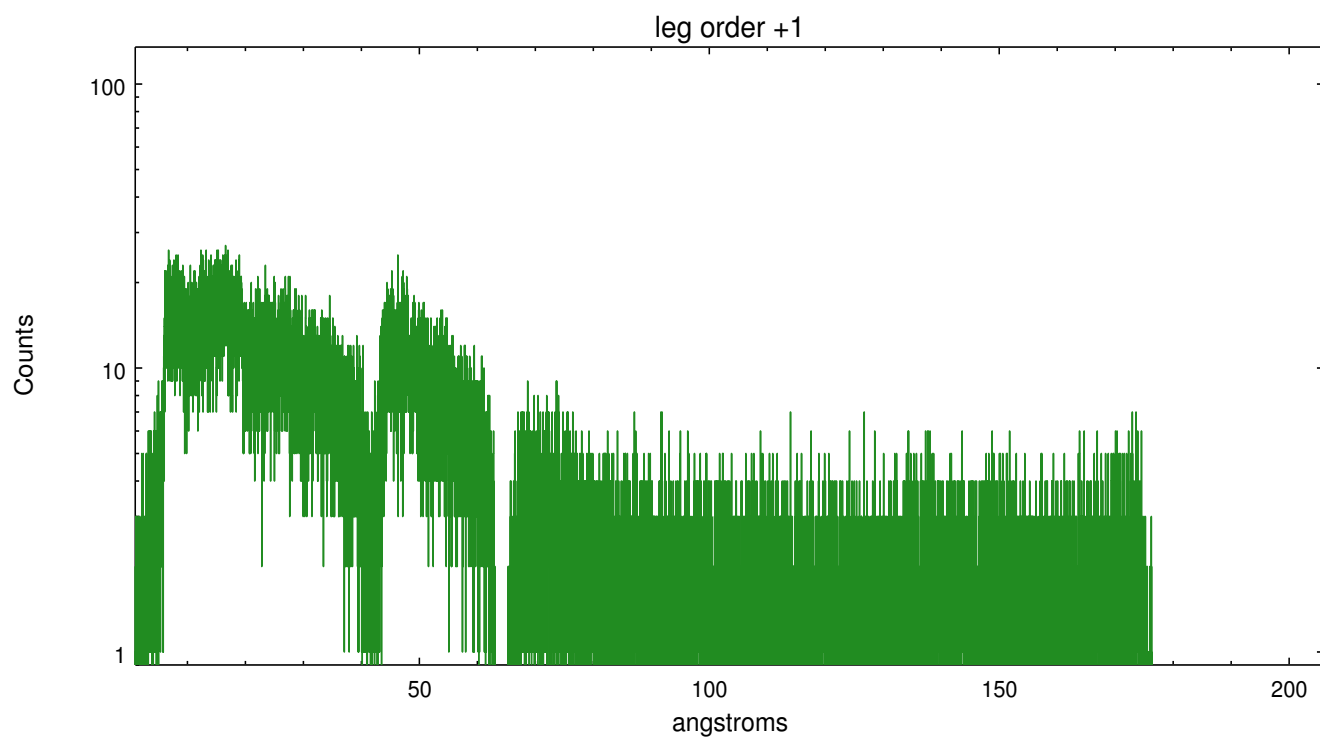
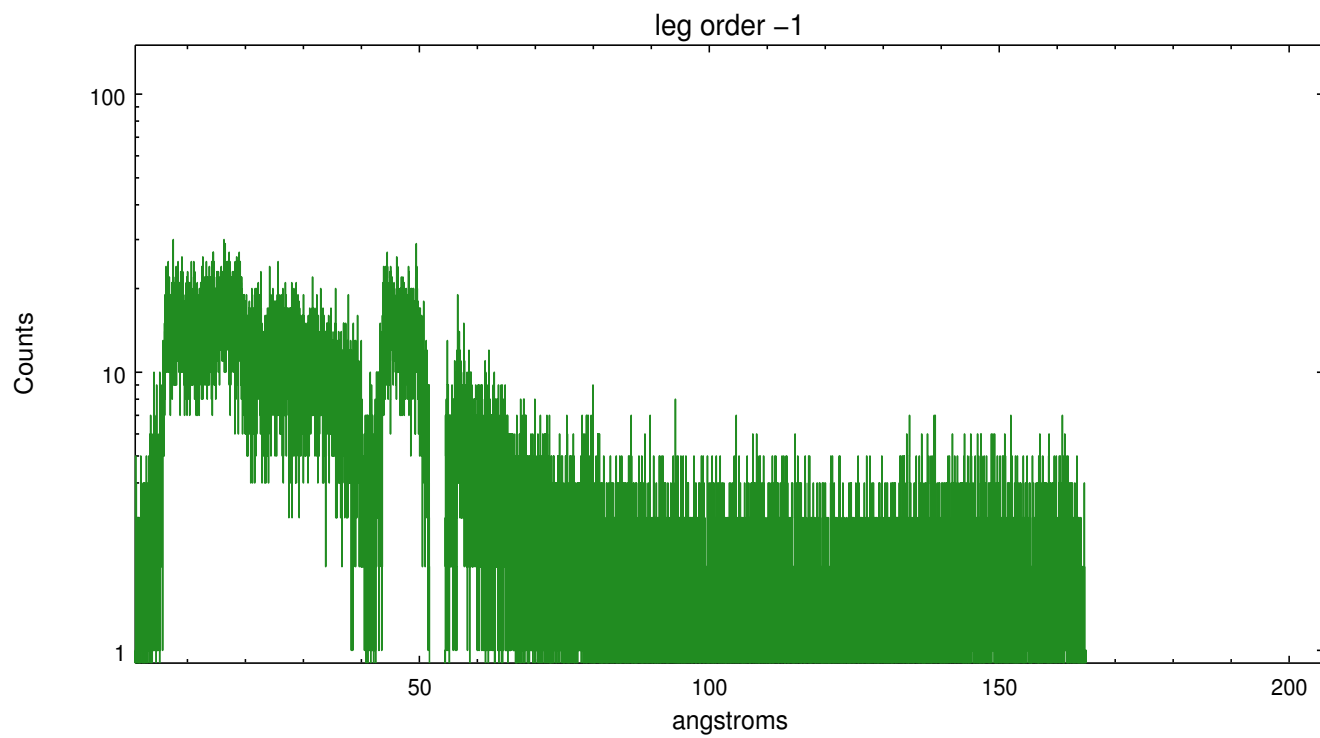


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.07.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.7859317722321

A.2 Comments

HRC was commanded to use the old (pre-March 2012) voltage settings for this observation. Appropriate calibration files for this instrument configuration were manually linked into the processing.

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The charge time associated with this processing of the data is different from the original processing due to more appropriate calibrations files.

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NEW CHARGE TIME = 9.785932 ks, 1 Obis===

Original CHARGE TIME = 9.160682 ks, 1 Obis.