

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9764 - L2 Version 3
Chandra X-Ray Center

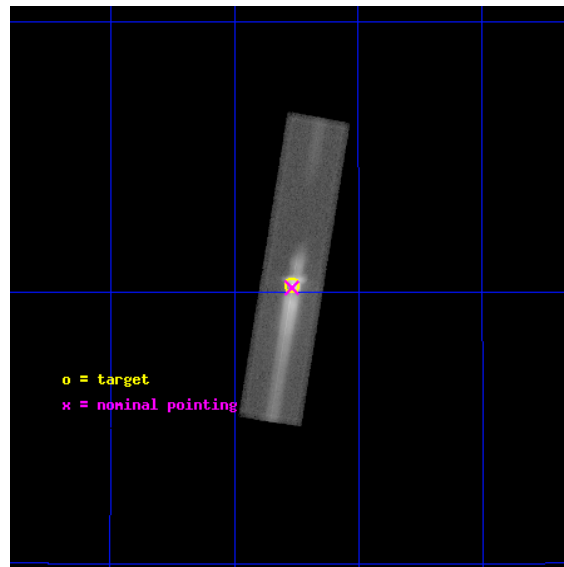
L2 Processing Date : Aug 12 2012

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 1	14
2.5.2	Slot 2	15
3	Gratings	16
3.1	LETG Arm	16
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

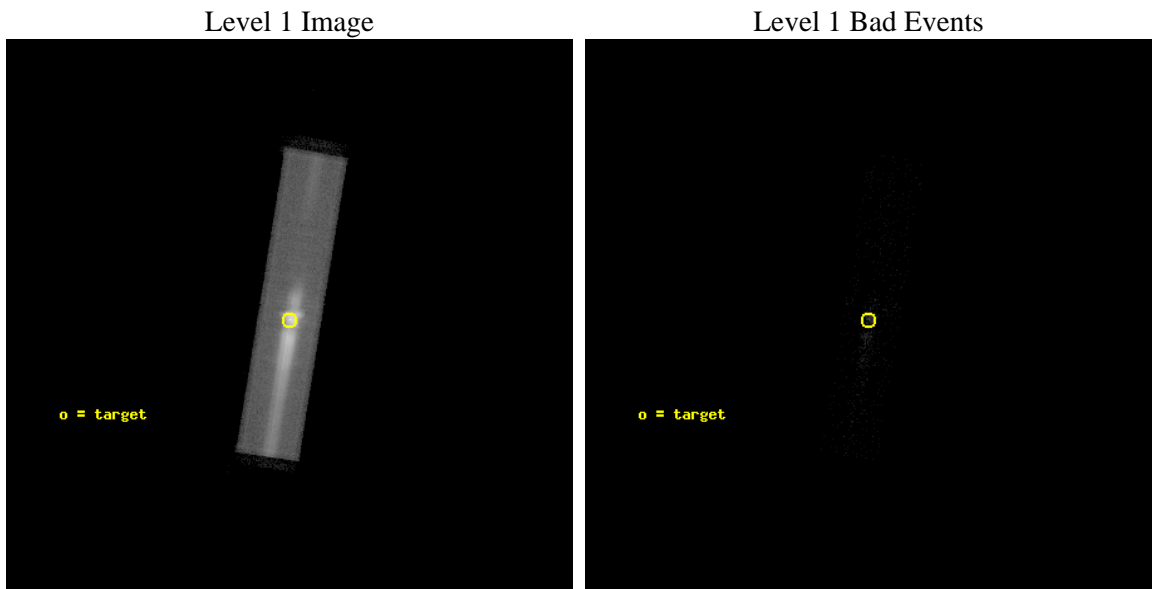
seq_num	501012	Sequence number
obs_id	9764	Observation id
title	AXAF OBSERVATIONS OF THE CRAB NEBULA AND PULSAR AND SPECTROSCOPY OF THE INTERSTELLAR MEDIUM	Proposal title
observer	Dr. Martin Weisskopf	Principal investigator
object	CRAB PULSAR	Source name
ra_targ	83.633333	Observer's specified target RA [deg]
dec_targ	22.014444	Observer's specified target Dec [deg]
ra_nom	83.634275403756	Nominal RA [deg]
dec_nom	22.009332944161	Nominal Dec [deg]
roll_nom	279.21045362464	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3750.4751814604	[s]
livetime	3618.8705601813	Ontime multiplied by DTCOR
l2events	585547	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	3600.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3750.4751814604	[s]
caldsver	4.5.1.1	 	l1events	758722	Number of level 1 events
date	2012-08-12T08:56:29	Date and time of file creation			
revision	3	Processing version of data			

2.1.3 Events

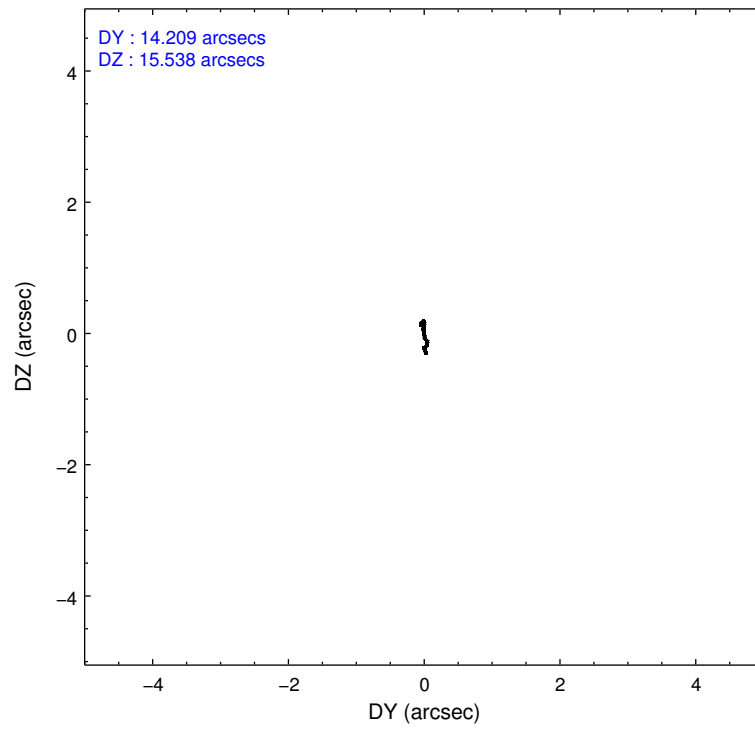
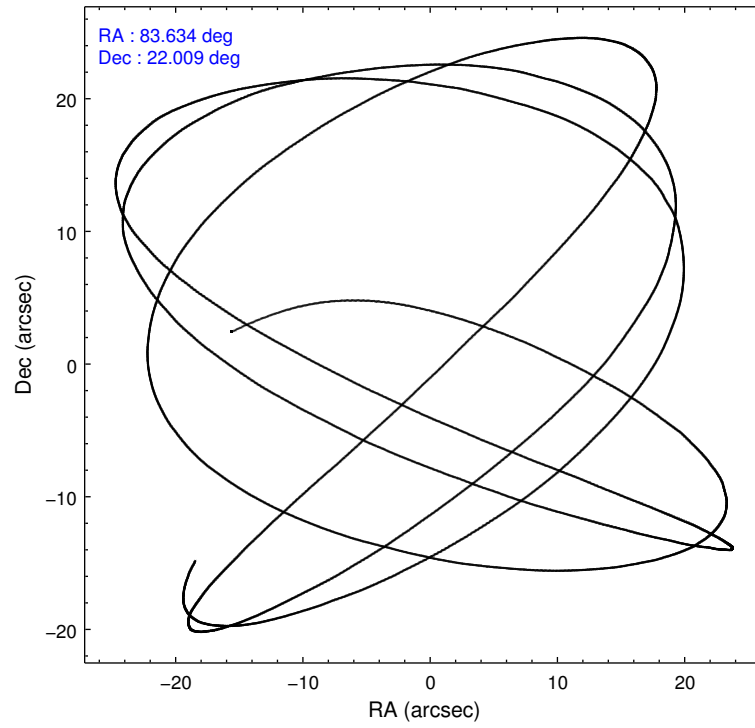
Level 1 Events

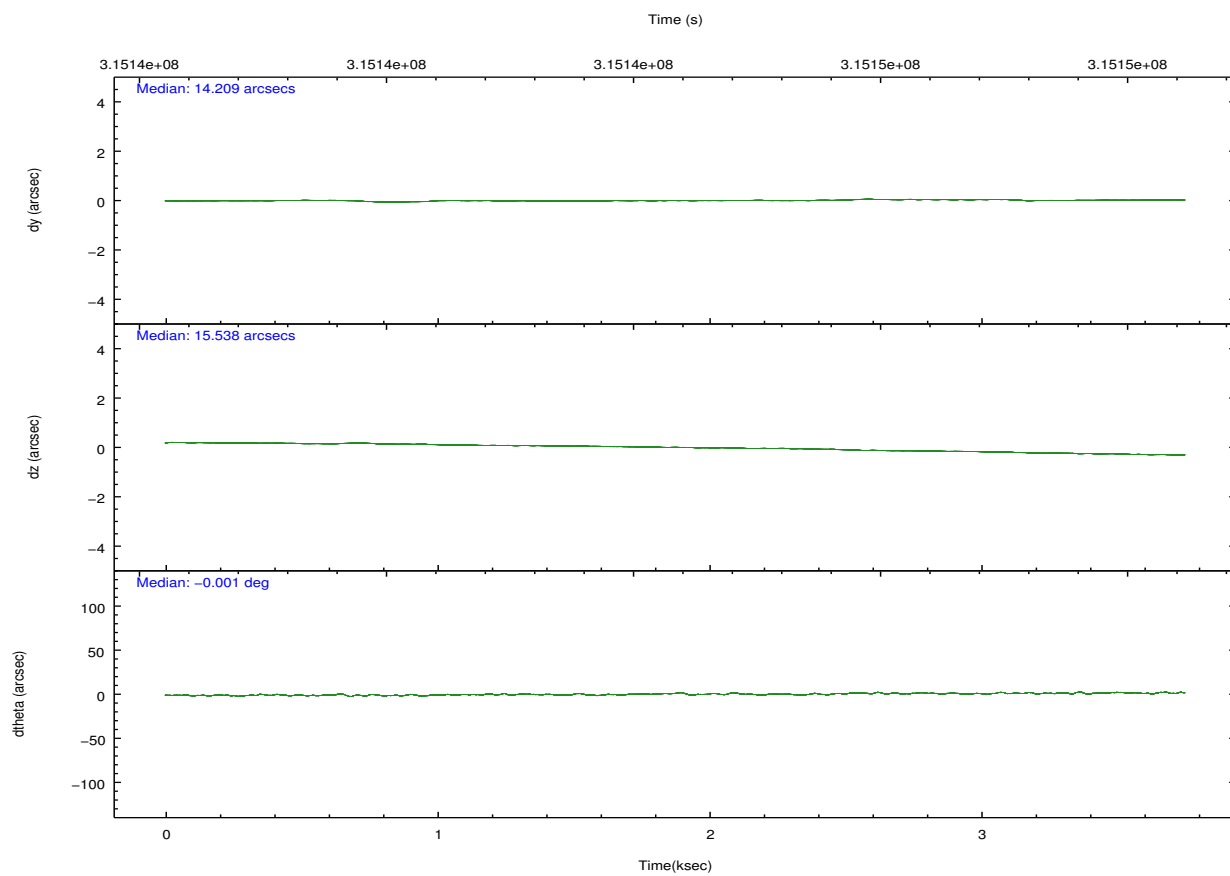
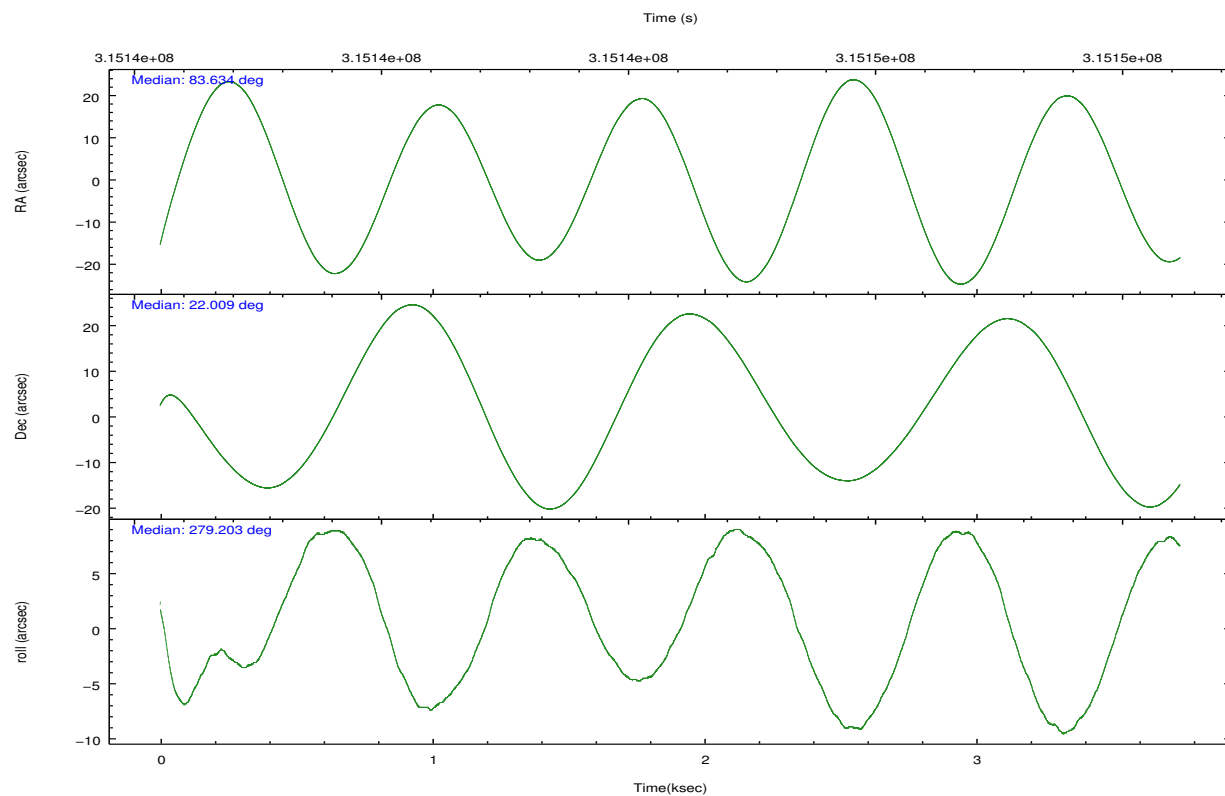
	segment 1	segment 2	segment 3
level 1 events	369	758348	5
rejected events	85	96368	3
rejected %	23%	12%	60%

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	83.613330	83.63427540375564			
[deg] Pointing Dec	22.031036	22.00933294416134			
[deg] Pointing Roll	279.150953	279.2104536246434			
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.4635187648994			
[mm] SIM translation stage offset	0	-0.007540371344731511			
[s] Observation start time (MET)	315143442.184000	315142270.48398			
Observation start date	2007-12-27T11:49:37	2007-12-27T11:31:10			
[s] Observation end time (MET)	315147042.184000	315147915.67175			
Observation end date	2007-12-27T12:49:37	2007-12-27T13:05:15			

2.3 Aspect



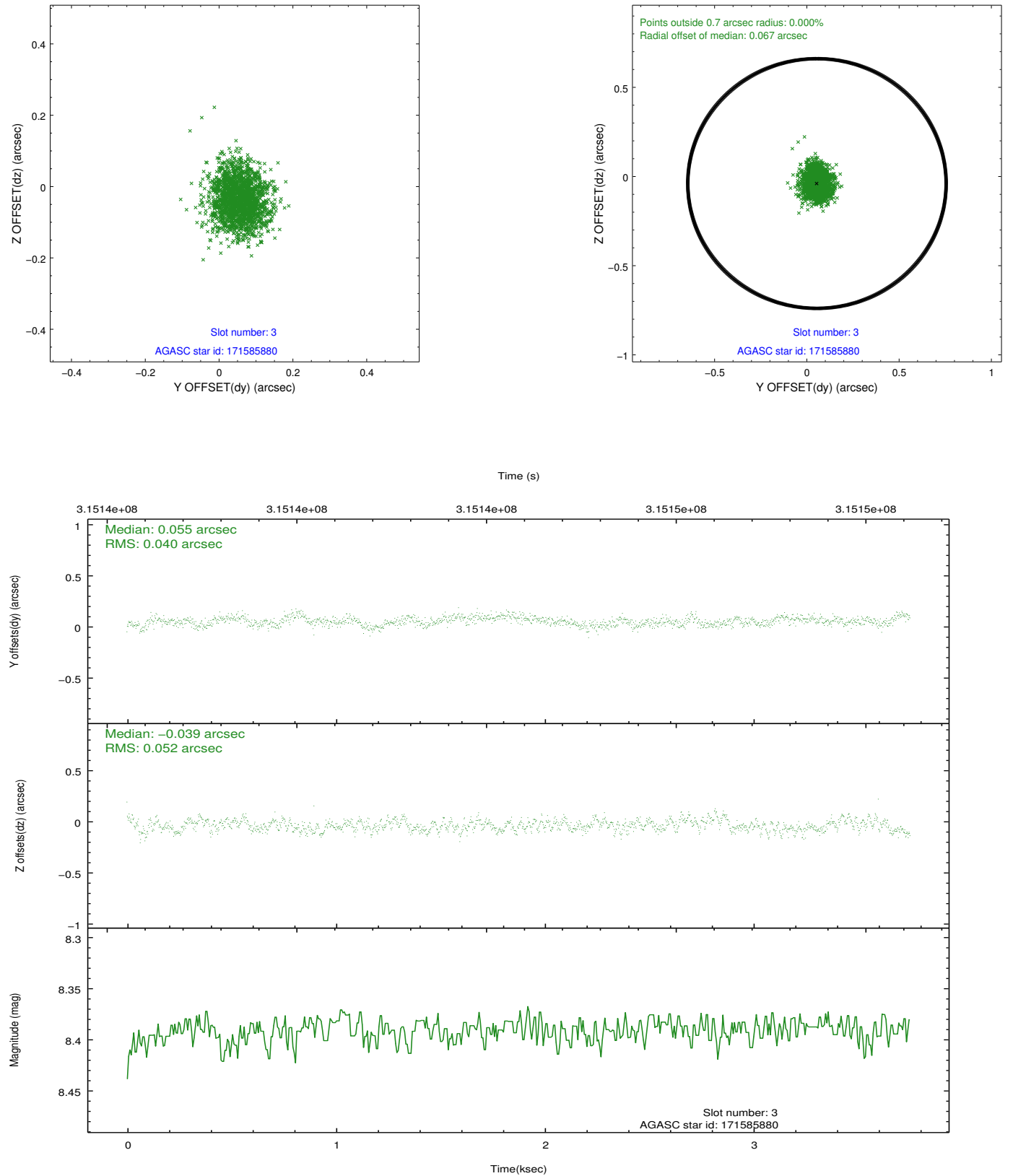


Slot Statistics

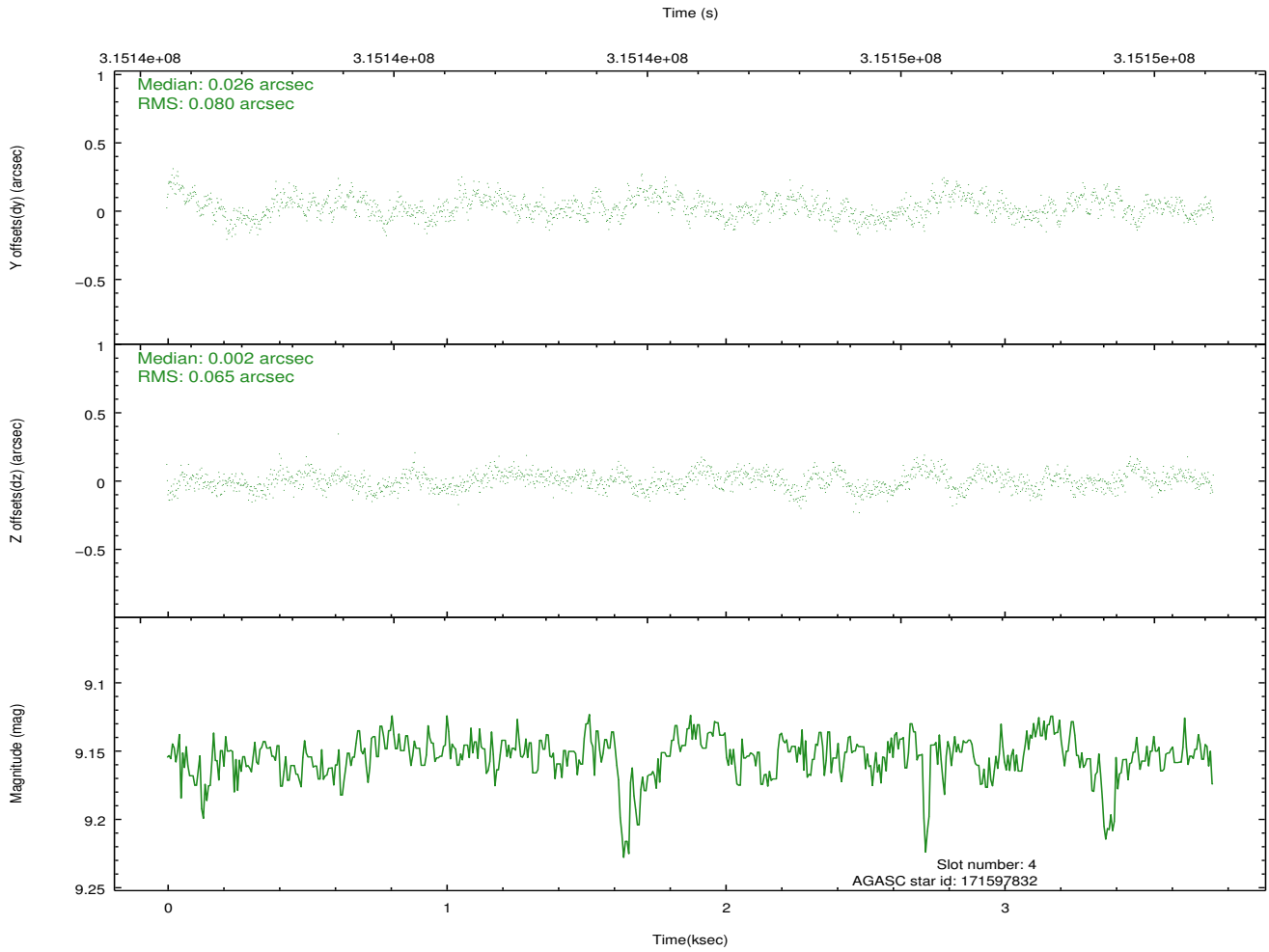
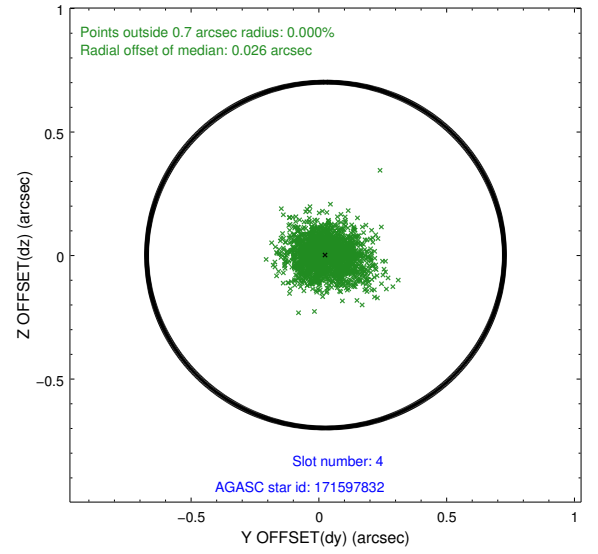
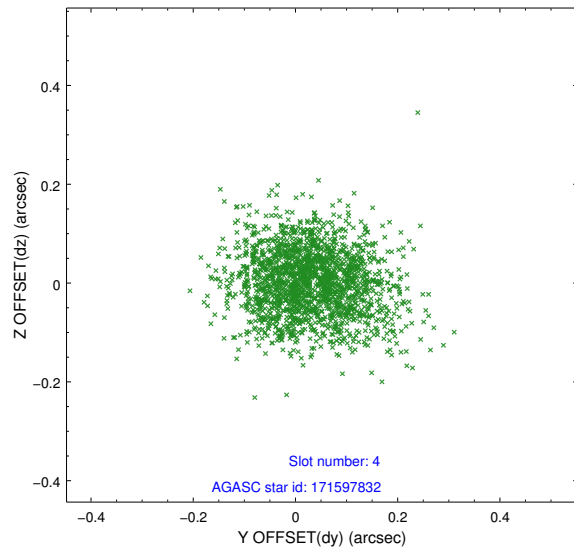
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
1	FID	HRC-S-2	6.97	915	0.169	-0.114	0.004	0.008	0.000000	0.000000	1231.16	-456.97
2	FID	HRC-S-3	7.00	915	0.098	-0.084	0.004	0.008	0.000000	0.000000	-1169.93	564.81
3	GUIDE	171585880	8.39	1831	0.055	-0.039	0.070	0.112	83.676260	22.176319	-484.12	290.08
4	GUIDE	171597832	9.15	1828	0.026	0.002	0.108	0.180	83.183230	21.366702	2128.80	-1803.37
5	GUIDE	243941560	8.28	1831	-0.063	0.003	0.064	0.106	83.733264	22.568598	-1847.31	699.96
6	GUIDE	171600224	9.66	1828	-0.041	0.032	0.142	0.233	82.941815	21.636094	1039.73	-2443.50
7	GUIDE	171586976	8.46	1830	0.019	0.001	0.083	0.131	83.857953	22.438065	-1318.26	1035.30

2.4 Star Slots

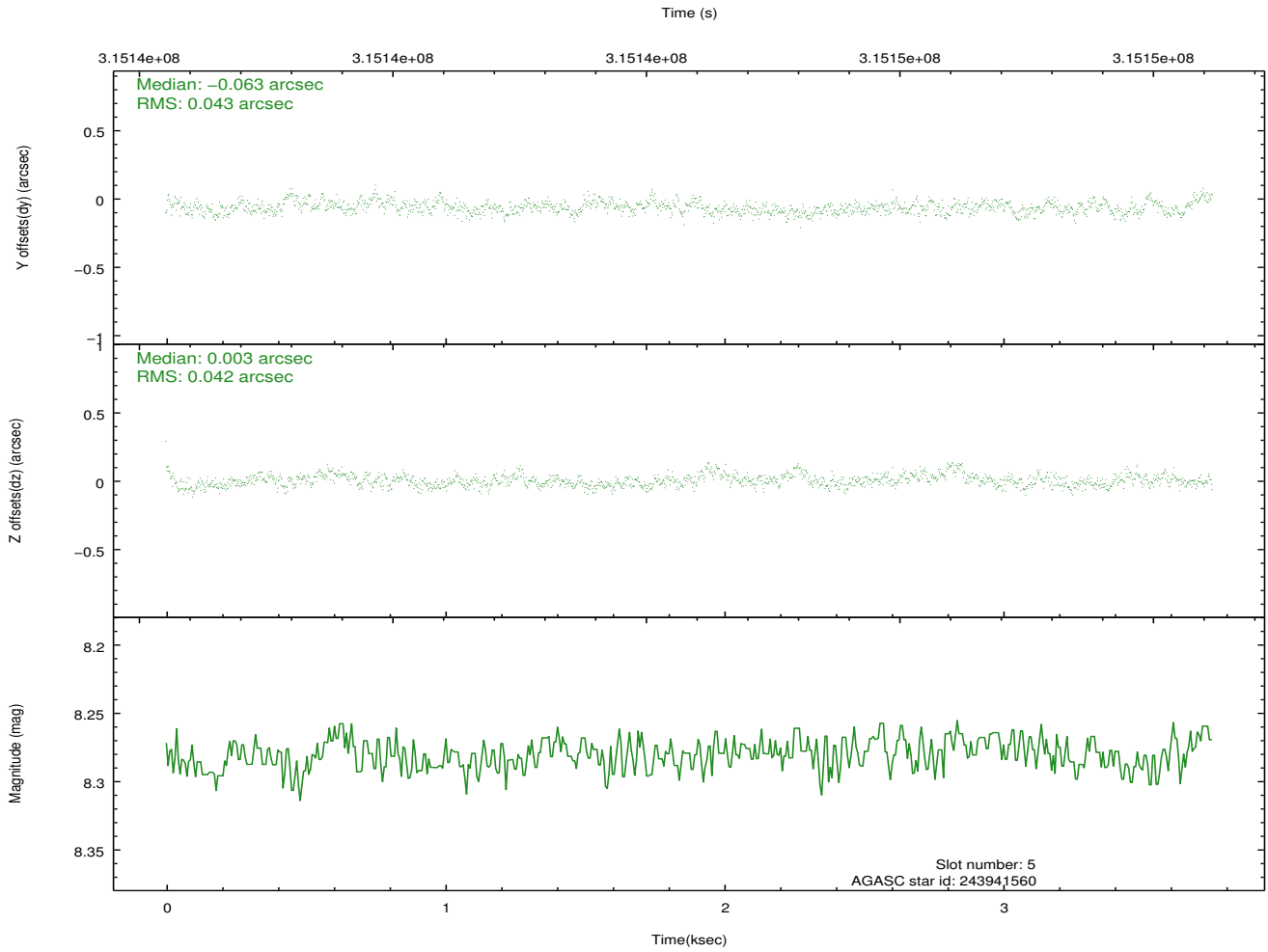
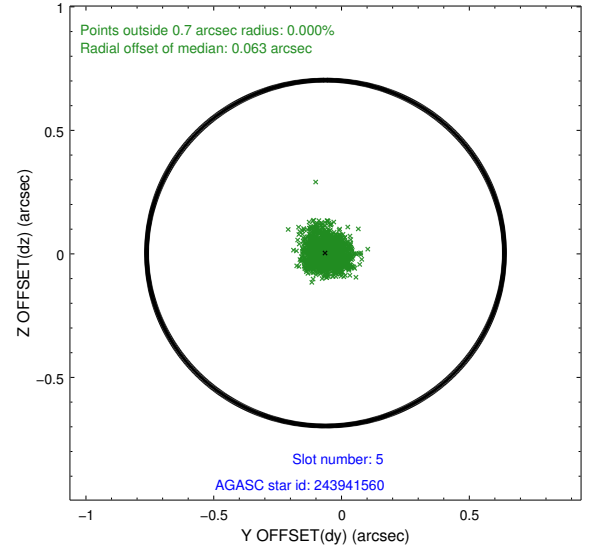
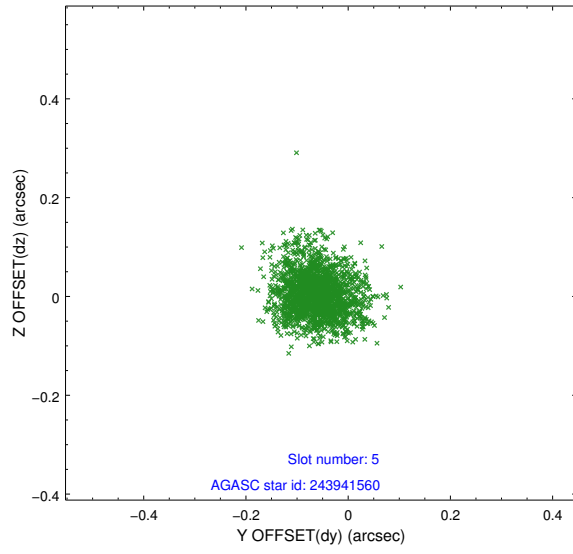
2.4.1 Slot 3



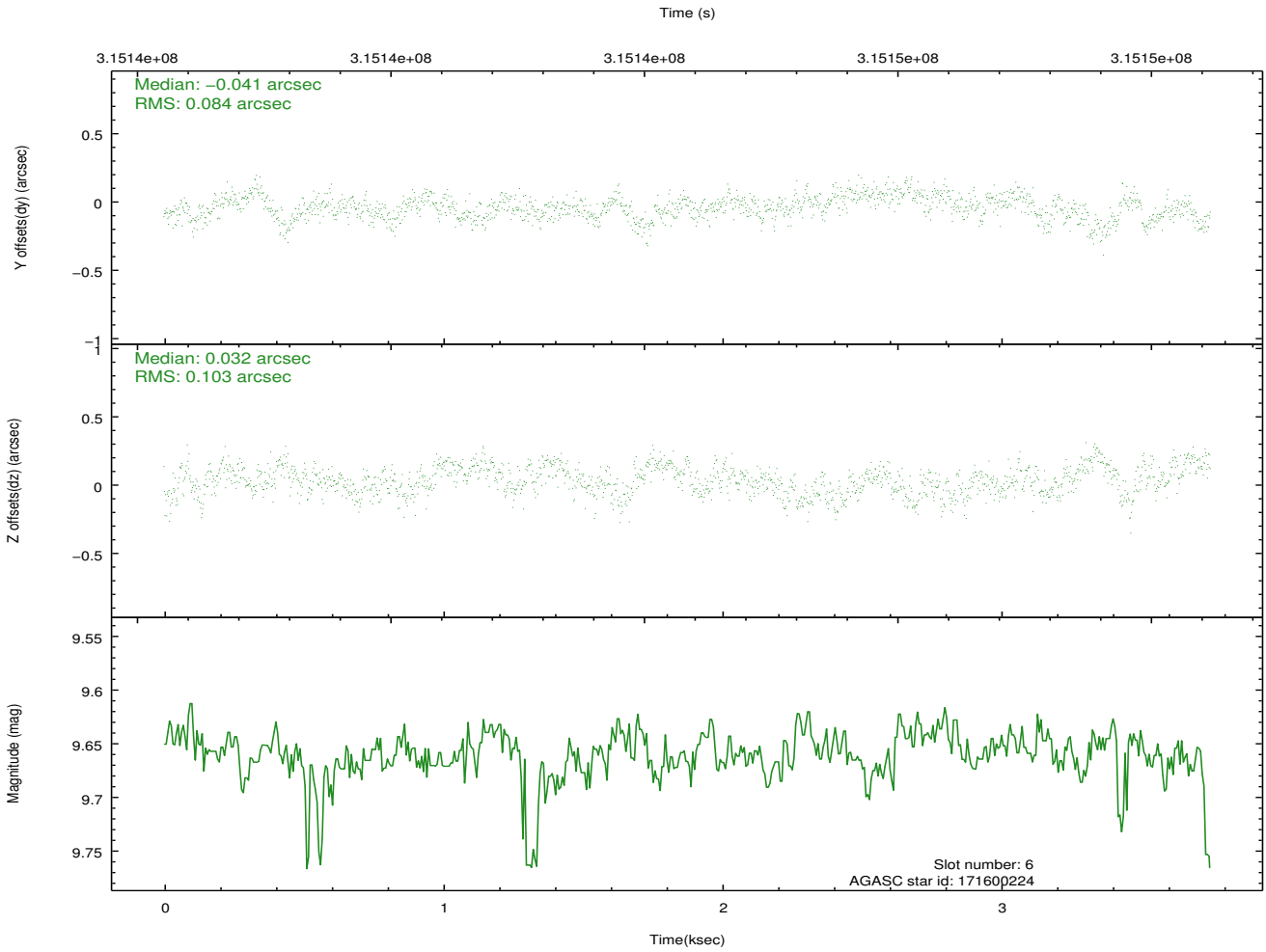
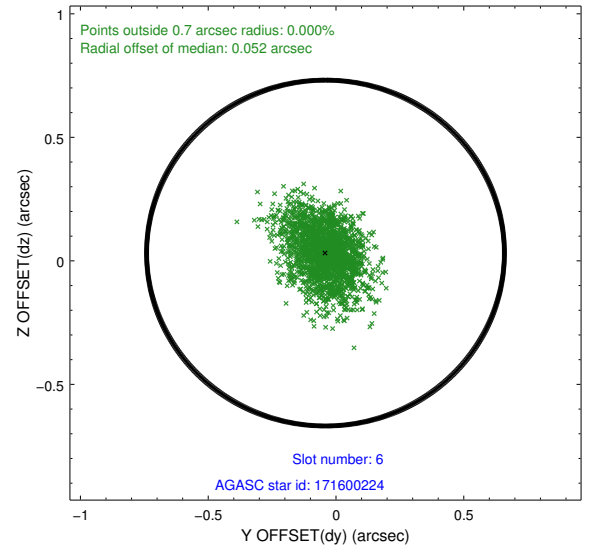
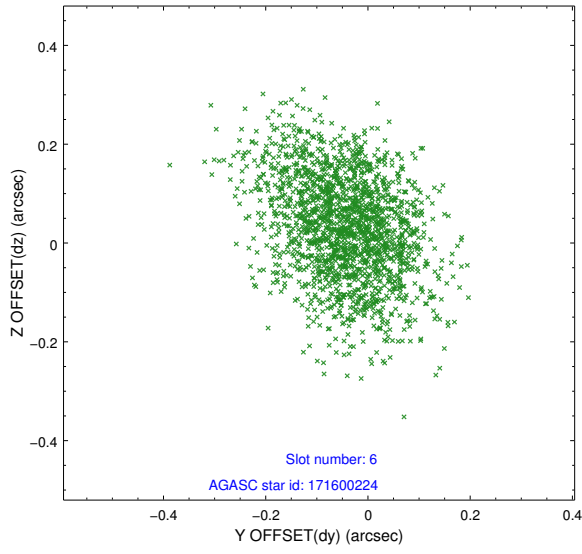
2.4.2 Slot 4



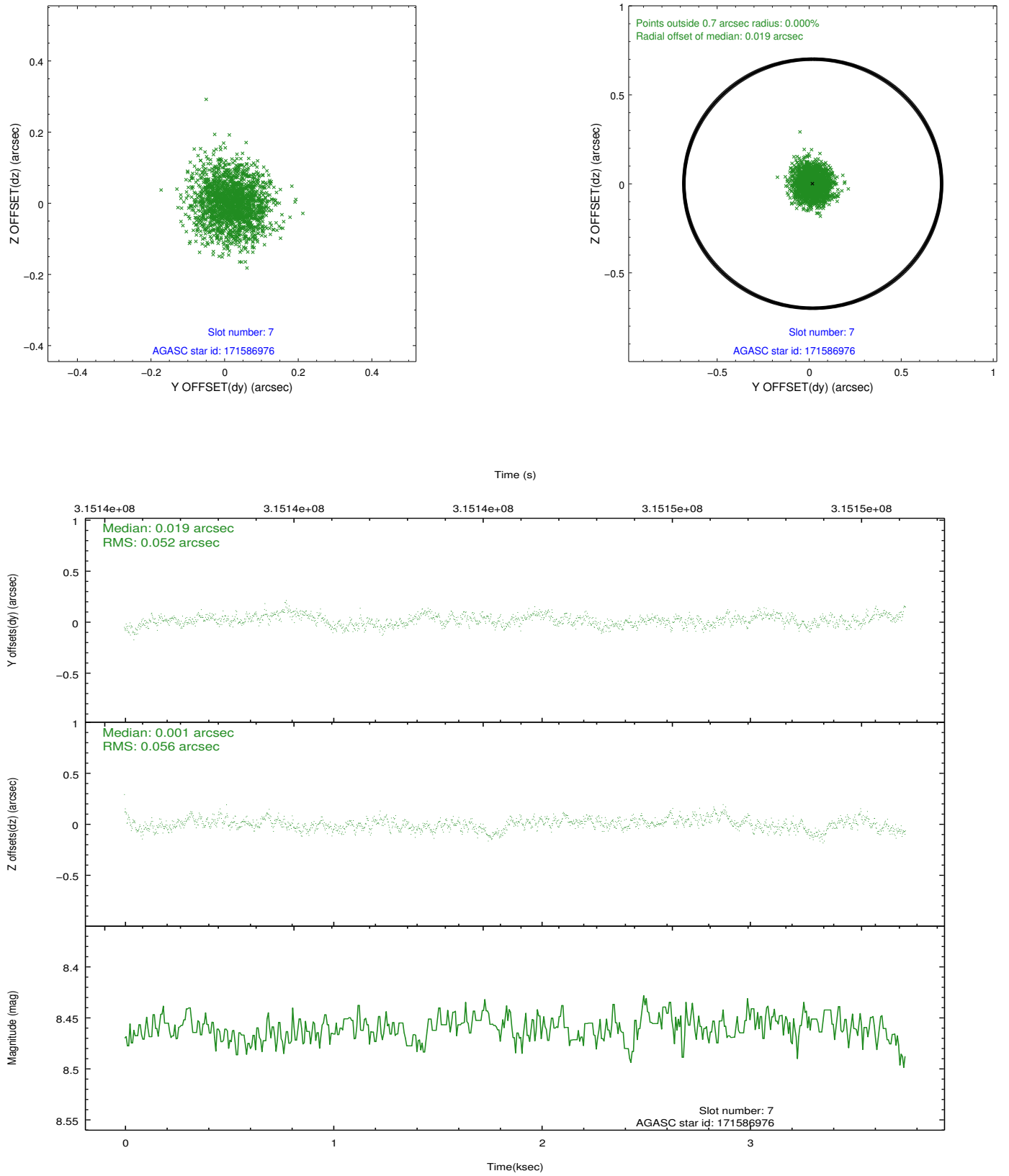
2.4.3 Slot 5



2.4.4 Slot 6

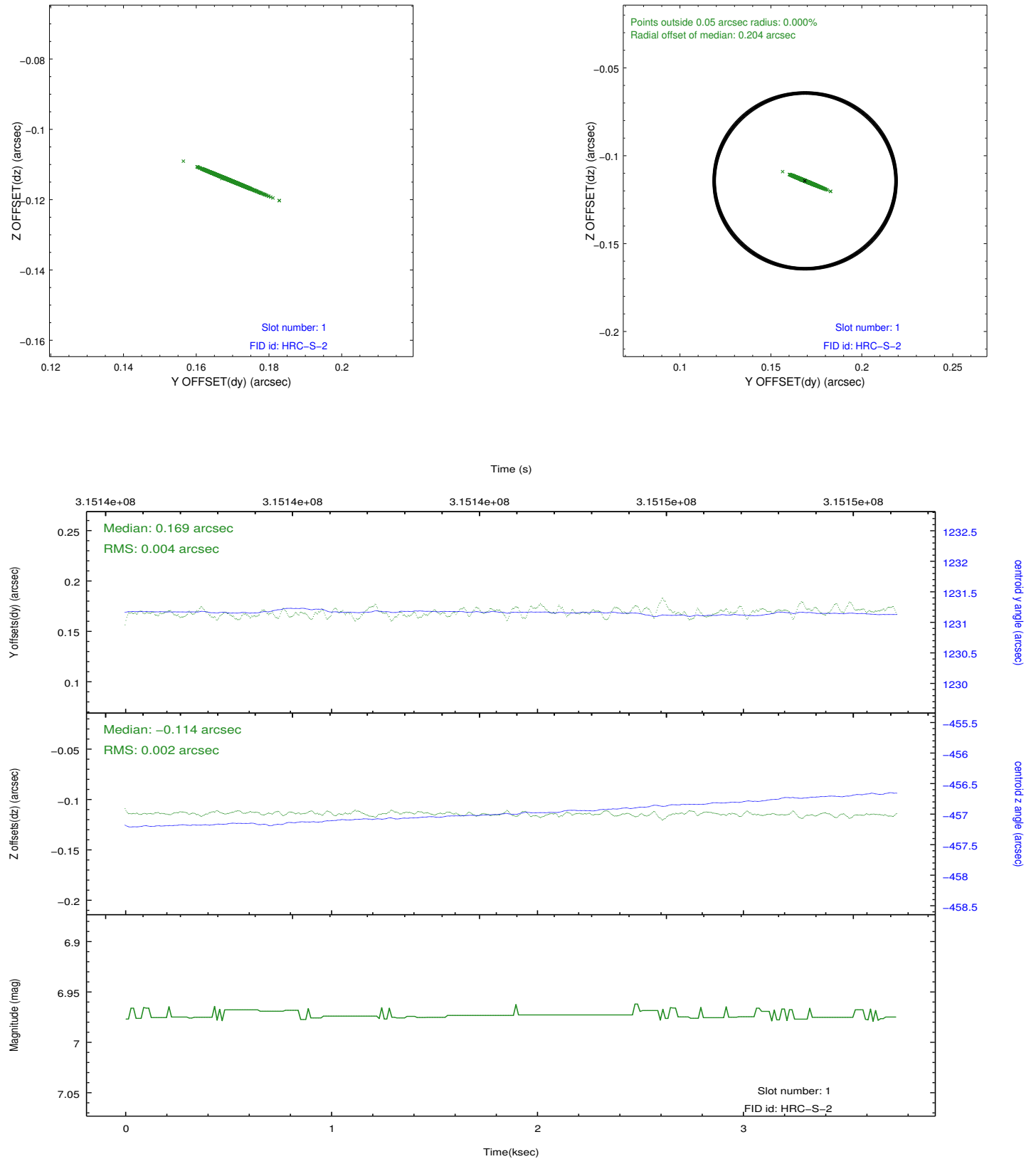


2.4.5 Slot 7

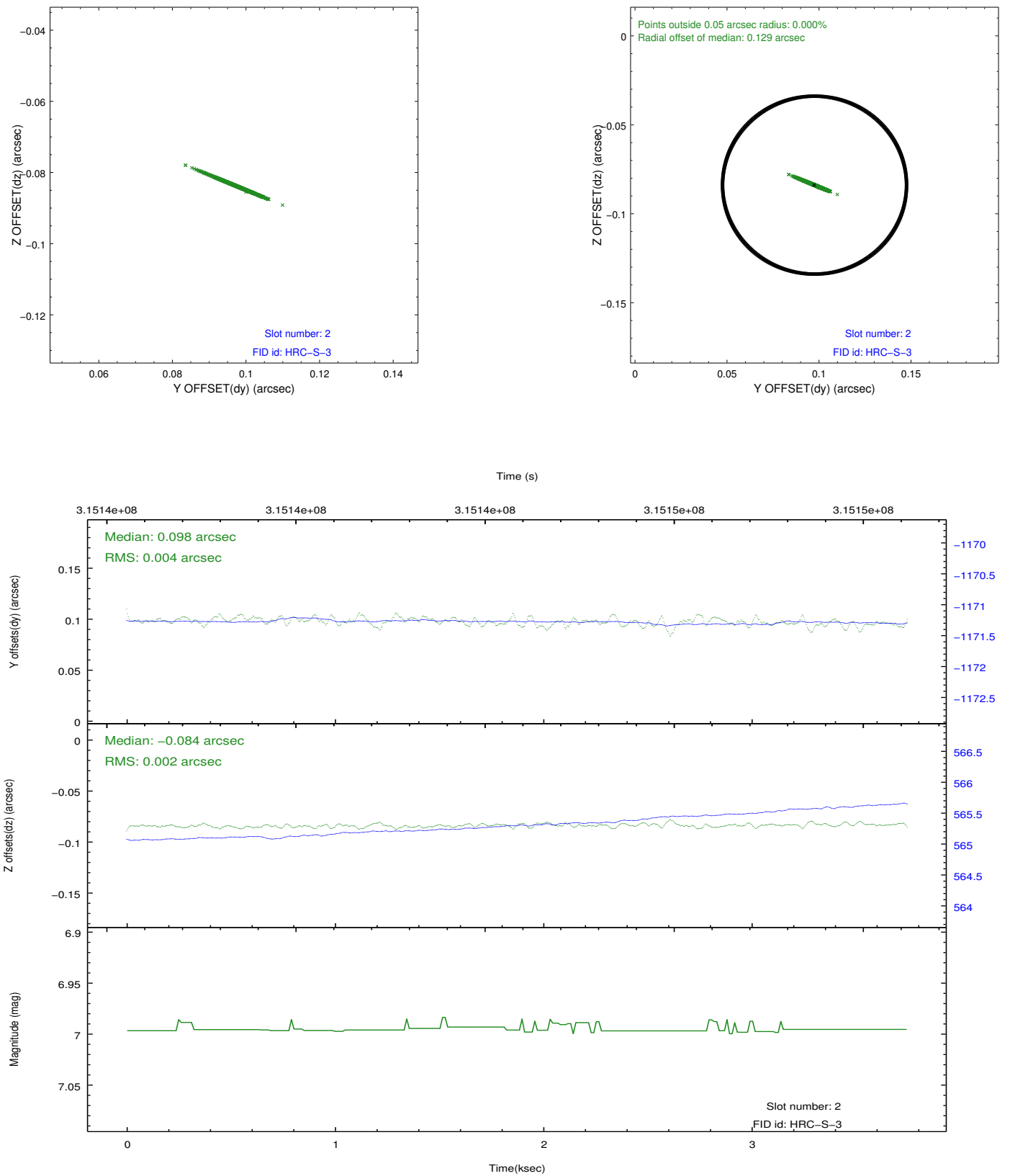


2.5 FID Slots

2.5.1 Slot 1

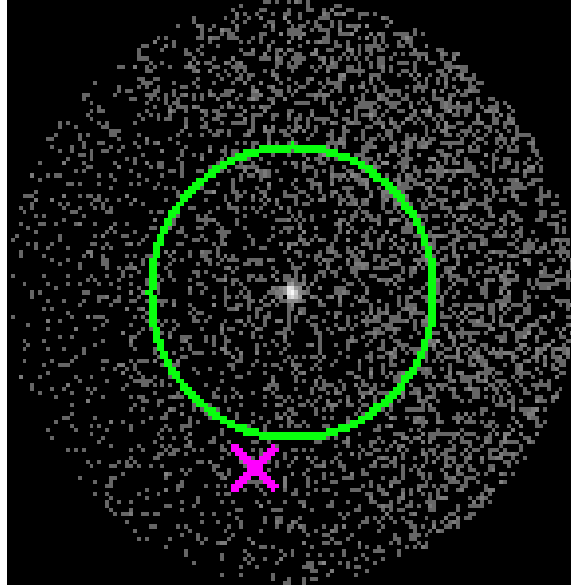


2.5.2 Slot 2

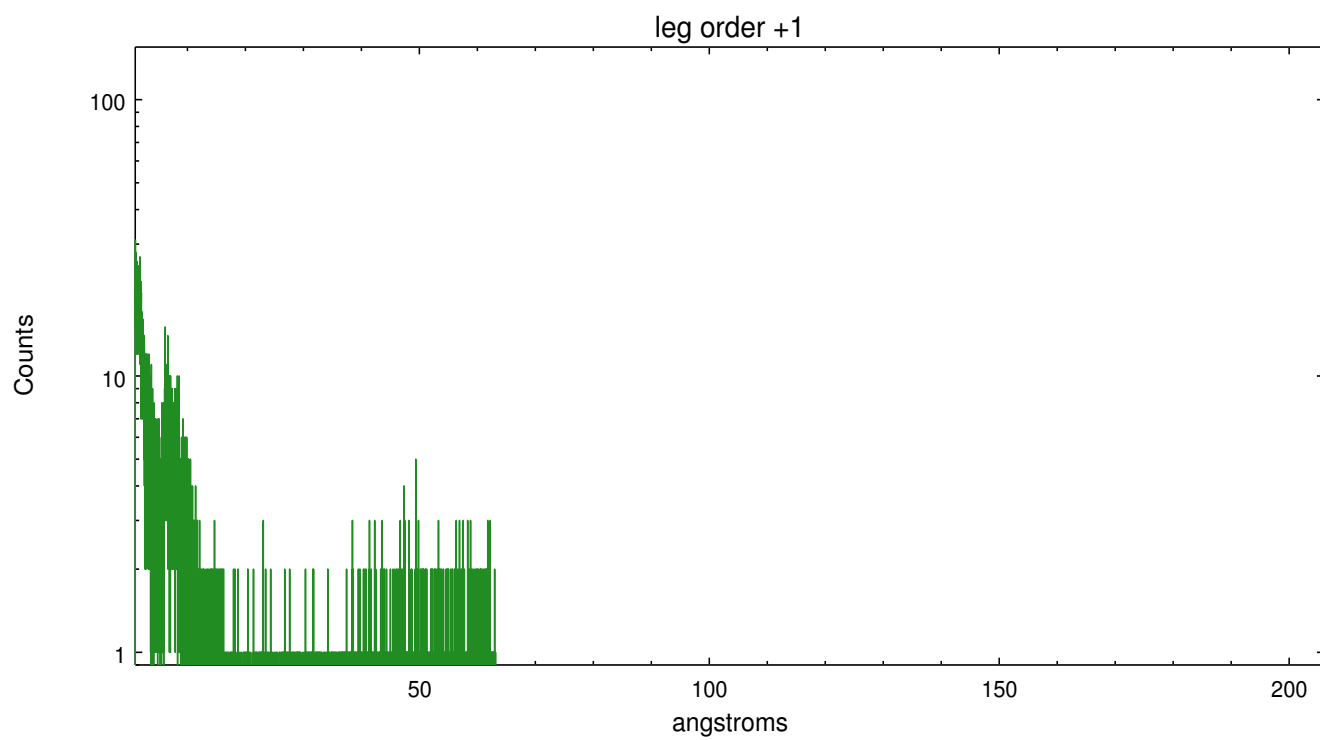
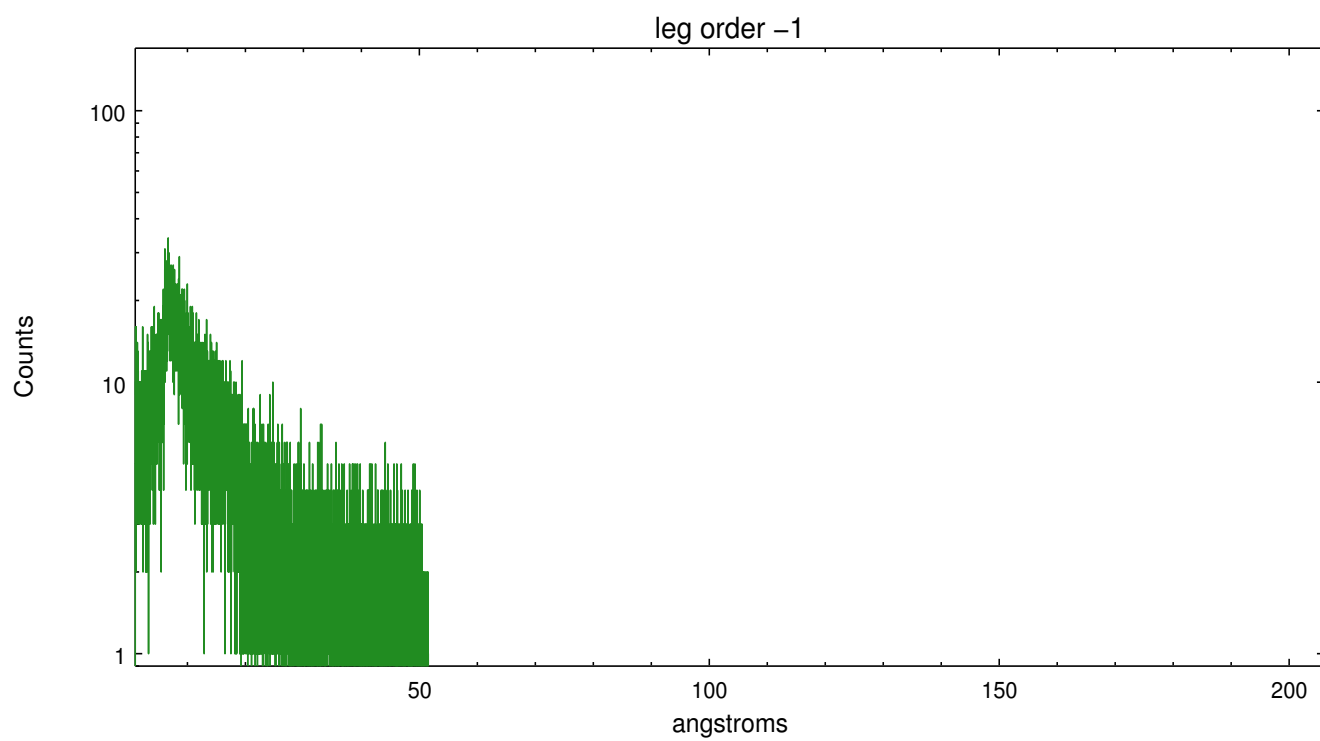


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.75073143

A.2 Comments

This is an extended source. Grating processing assumes a point source, so the default spectrum is extracted from a region narrower than the source extent. Note that only one HRC-S chip was on (as intended), so the LETGS spectrum has a limited range. OCAT Remarks: 'Test of HRC shutter configuration to avoid telemetry saturation. Inserted the +Y shutter to an angle of +1.5 degree from the nominal 50% blocking position (734 motor steps from HOME) and repositioned the shutter in 0.5 degree (8 motor step) steps every 1.2ks from the start of the observation. === Only 2 fid lights were available for this observation because the shutter blocked one.