

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8548 - L2 Version 3
Chandra X-Ray Center

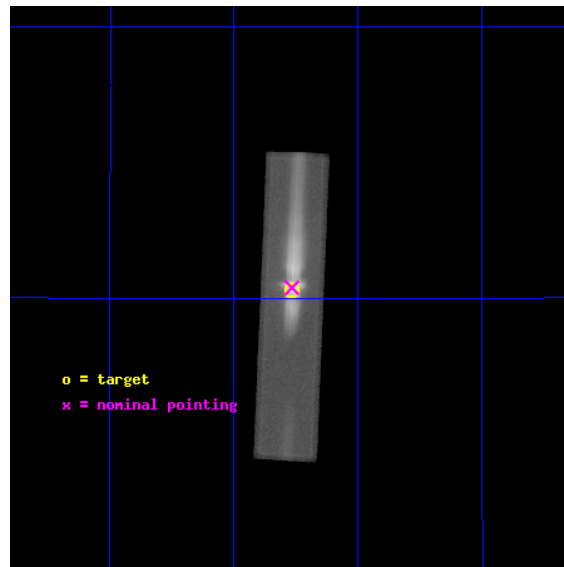
L2 Processing Date : Aug 12 2012

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 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

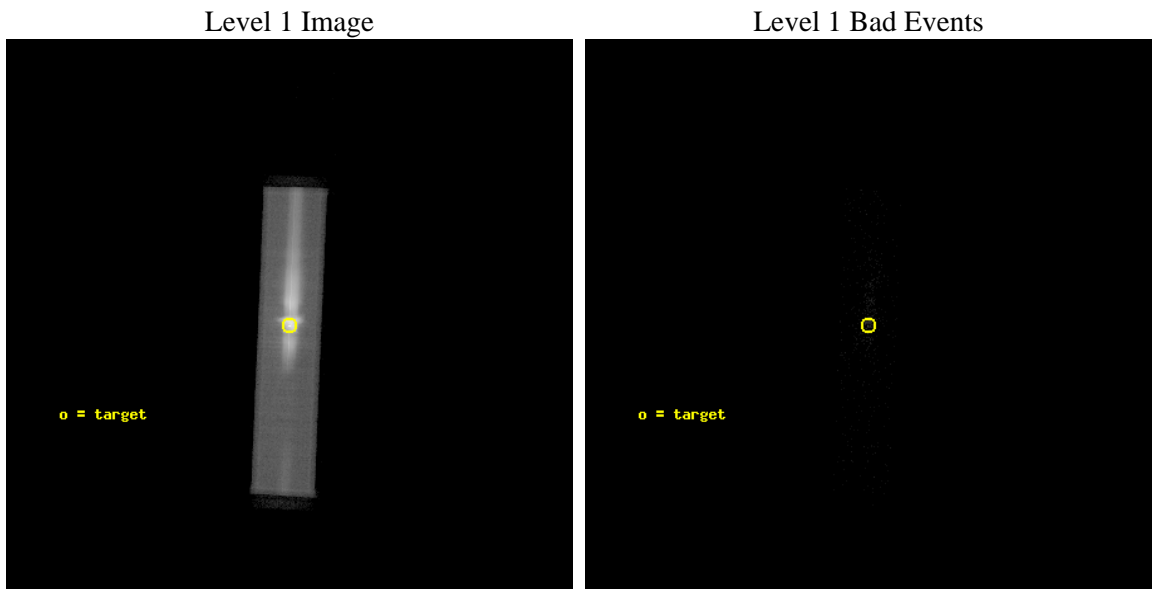
seq_num	500823	Sequence number
obs_id	8548	Observation id
title	AXAF OBSERVATIONS OF THE CRAB NEBULA AND PULSAR AND SPECTROSCOPY OF THE INTERSTELLAR MEDIUM	Proposal title
observer	Dr. Martin Weisskopf	Principal investigator
object	CRAB PULSAR	Source name
ra_targ	83.633333	Observer's specified target RA [deg]
dec_targ	22.014444	Observer's specified target Dec [deg]
ra_nom	83.633168581604	Nominal RA [deg]
dec_nom	22.019399928074	Nominal Dec [deg]
roll_nom	92.34831140592	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9129.6754399538	[s]
livetime	7713.7676887009	Ontime multiplied by DTCOR
l2events	1518958	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9129.6754399538	[s]
caldbver	4.5.1.1	 	l1events	1837128	Number of level 1 events
date	2012-08-12T04:34:51	Date and time of file creation			
revision	3	Processing version of data			

2.1.3 Events

Level 1 Events

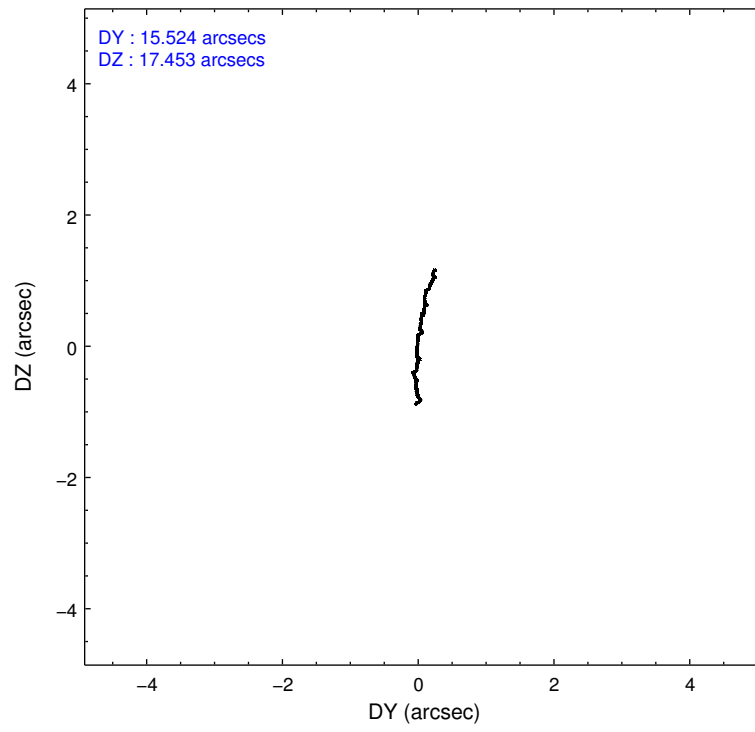
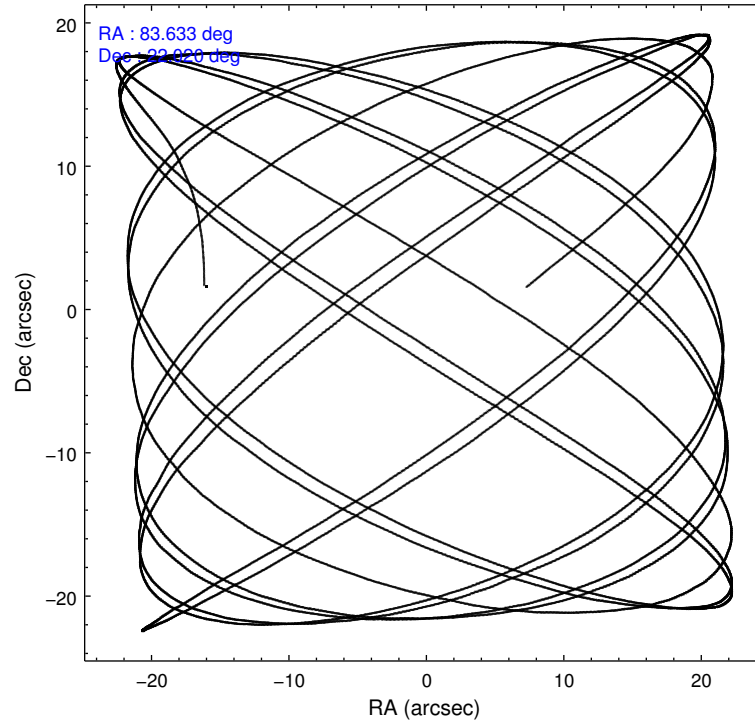
	segment 1	segment 2	segment 3
level 1 events	760	1836359	9
rejected events	141	153552	8
rejected %	18%	8%	88%

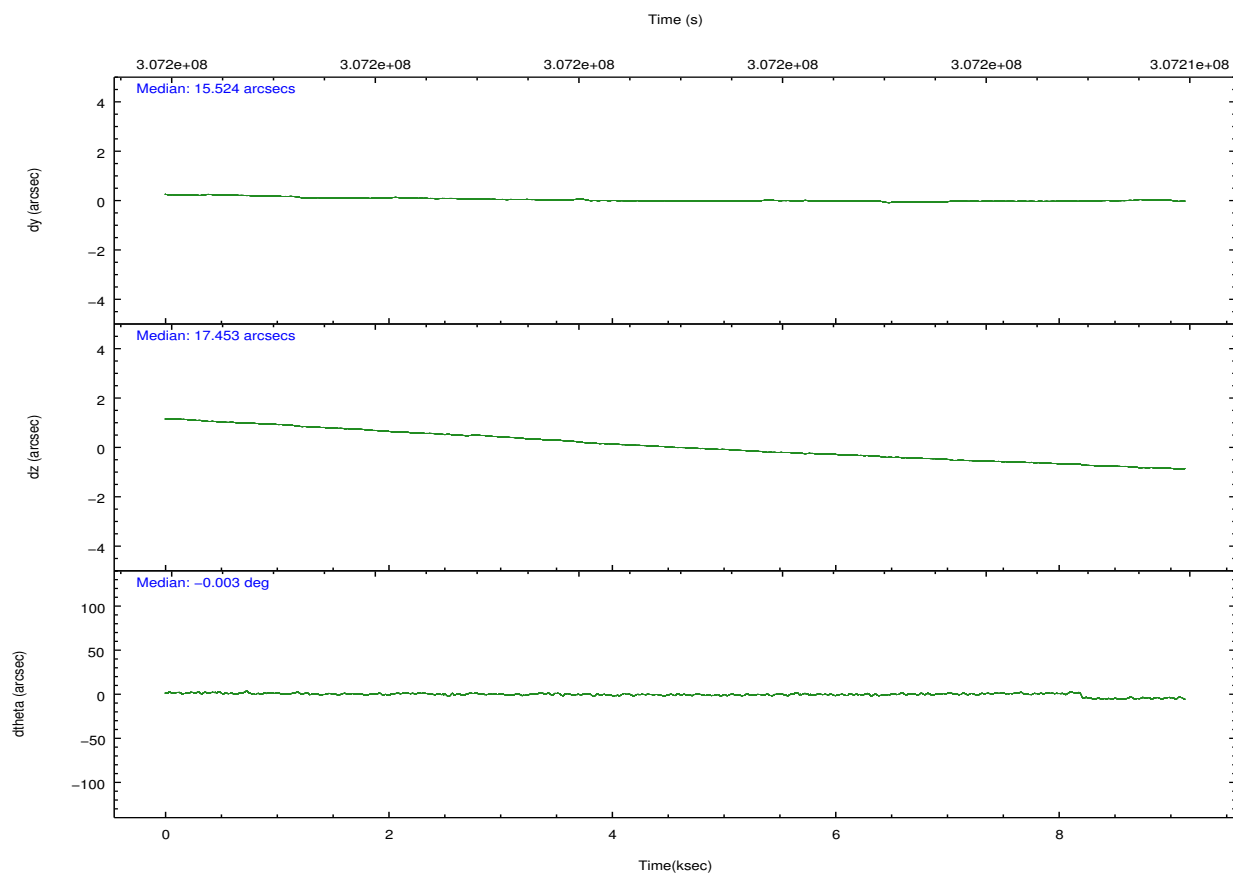
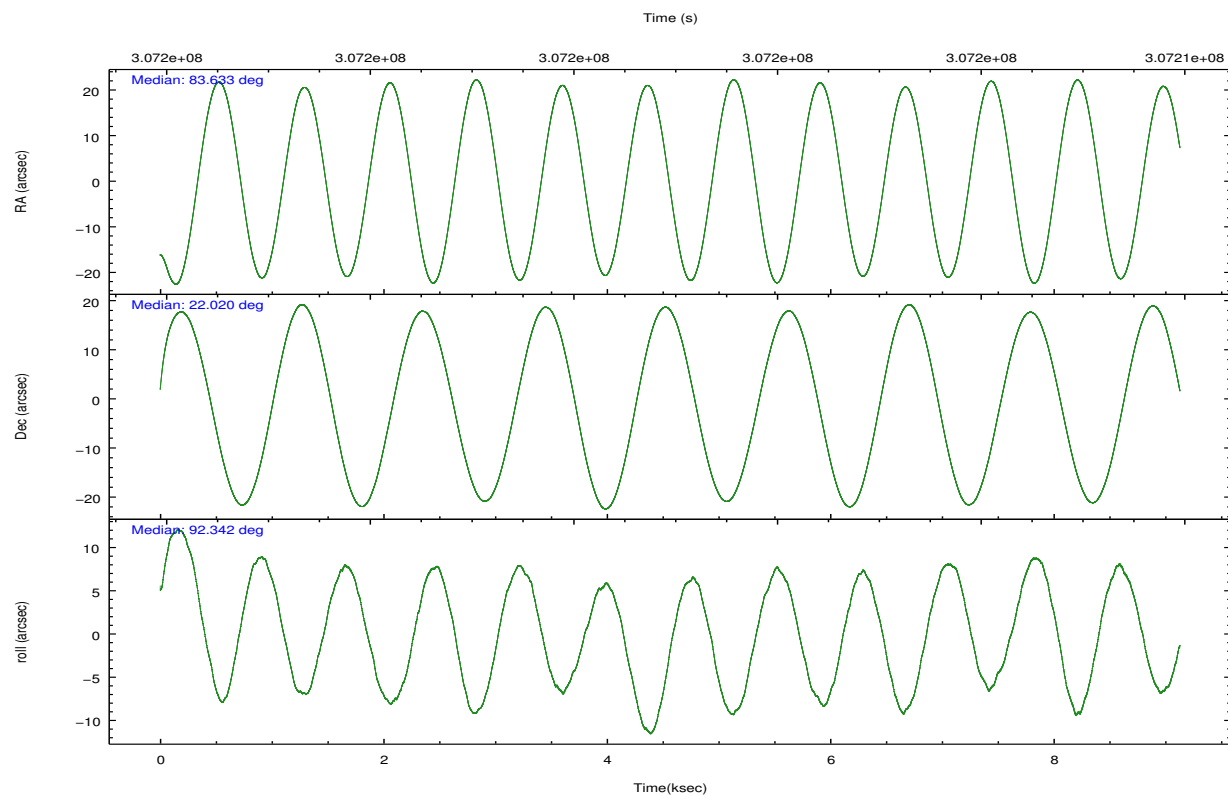
2.2 Compared Parameters

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	83.651048	83.63316858160395
[deg] Pointing Dec	21.995745	22.01939992807378
[deg] Pointing Roll	92.274282	92.34831140592009
[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)	307196510.184000	307194617.9253
Observation start date	2007-09-26T12:20:45	2007-09-26T11:50:17
[s] Observation end time (MET)	307205510.184000	307206323.42586
Observation end date	2007-09-26T14:50:45	2007-09-26T15:05:23

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

2.3 Aspect



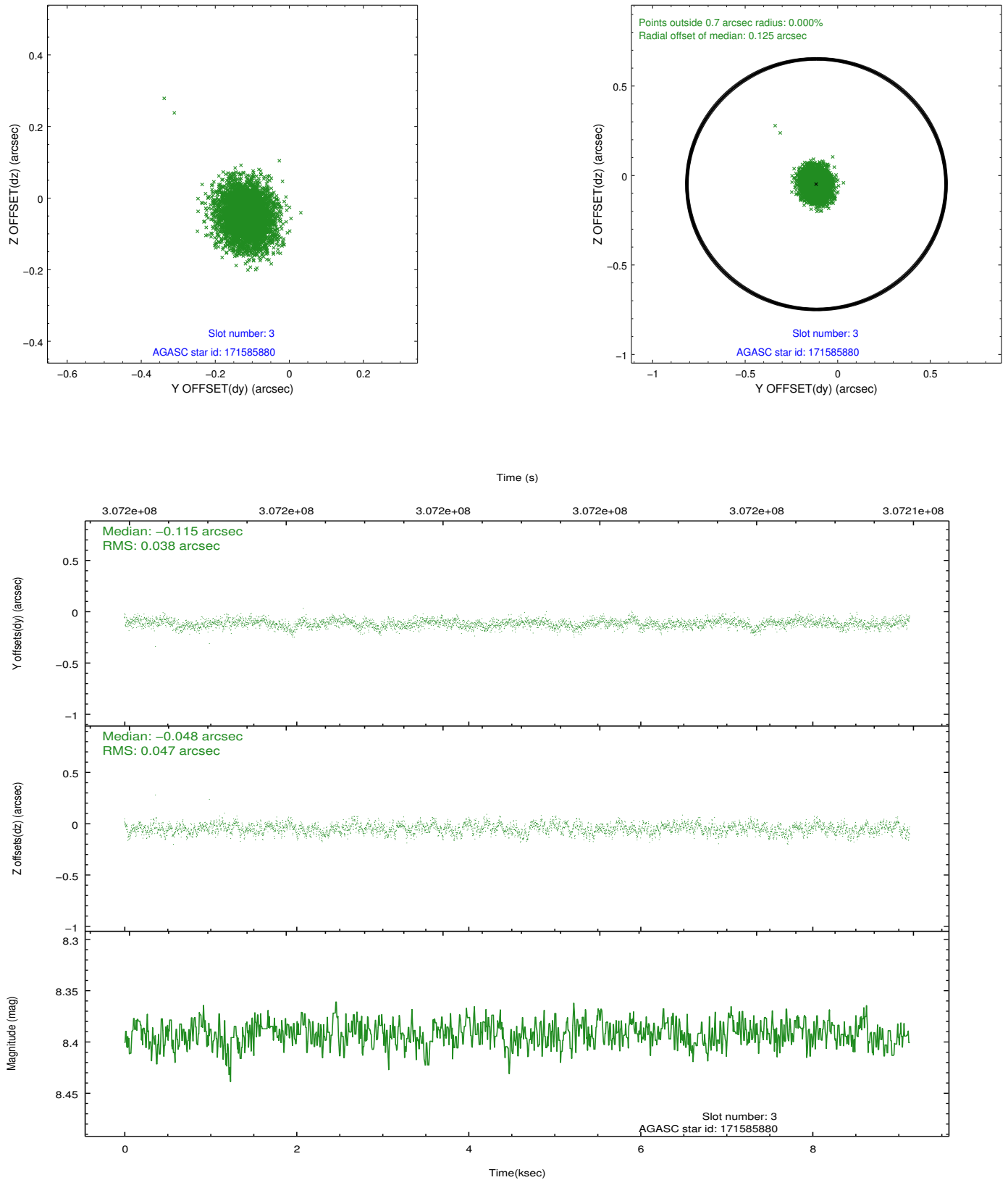


Slot Statistics

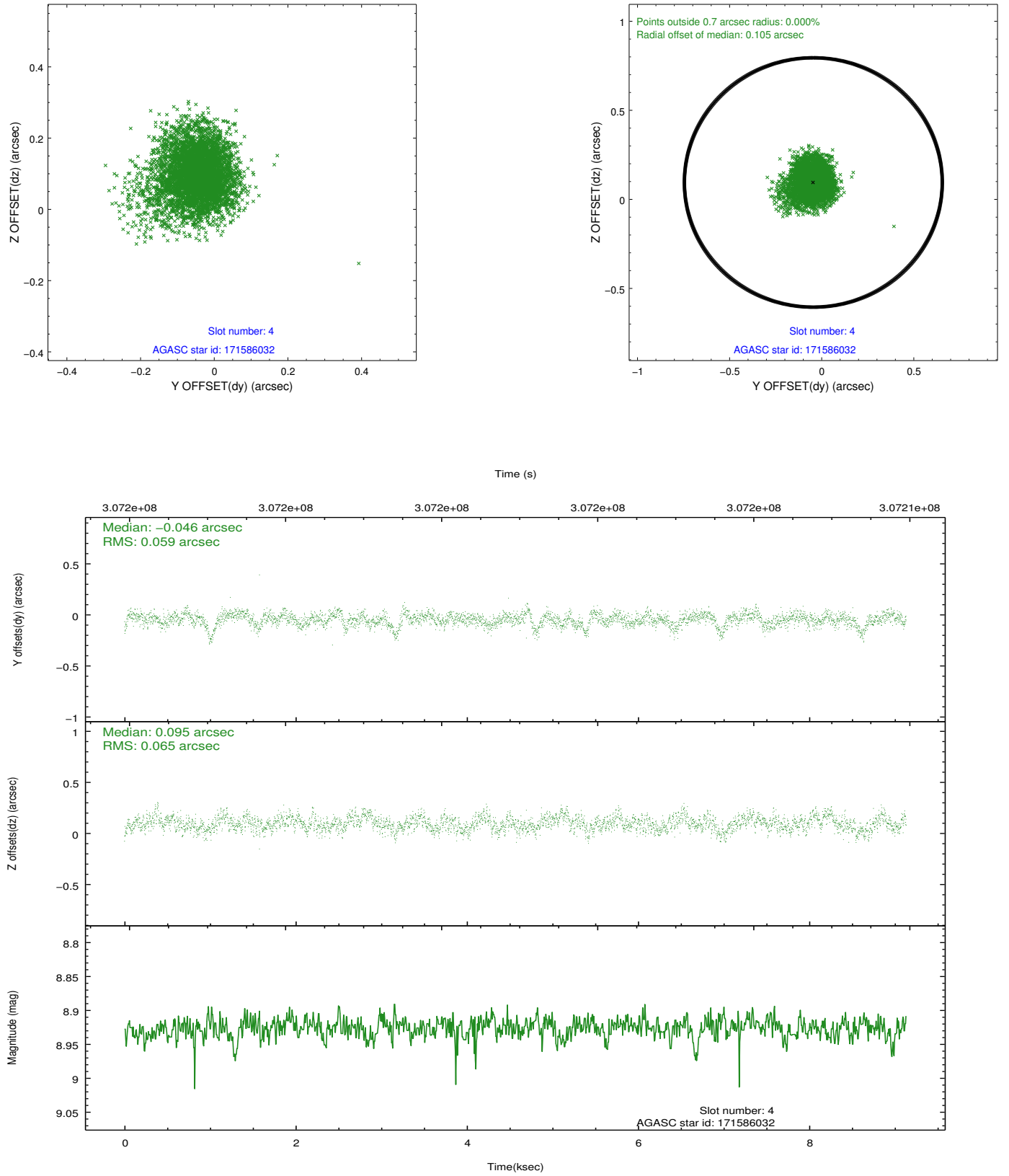
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-2	7.03	2227	0.159	-0.131	0.019	0.061	0.000000	0.000000	1229.79	-459.07
1	FID	HRC-S-3	7.04	2227	0.069	-0.088	0.008	0.020	0.000000	0.000000	-1172.15	562.94
2	FID	HRC-S-4	7.01	2227	0.177	-0.076	0.019	0.063	0.000000	0.000000	1227.85	565.98
3	GUIDE	171585880	8.39	4453	-0.115	-0.048	0.064	0.104	83.676260	22.176319	645.70	-109.63
4	GUIDE	171586032	8.93	4454	-0.046	0.095	0.090	0.156	83.950197	22.083225	275.83	-1009.45
5	GUIDE	171721904	9.18	4450	-0.024	0.097	0.123	0.199	84.272676	22.116922	357.69	-2088.98
6	GUIDE	243941560	8.30	4450	-0.139	0.083	0.073	0.115	83.733264	22.568598	2049.29	-354.89
7	GUIDE	171597832	9.15	4449	0.328	-0.230	0.087	0.144	83.183230	21.366702	-2198.02	1656.59

2.4 Star Slots

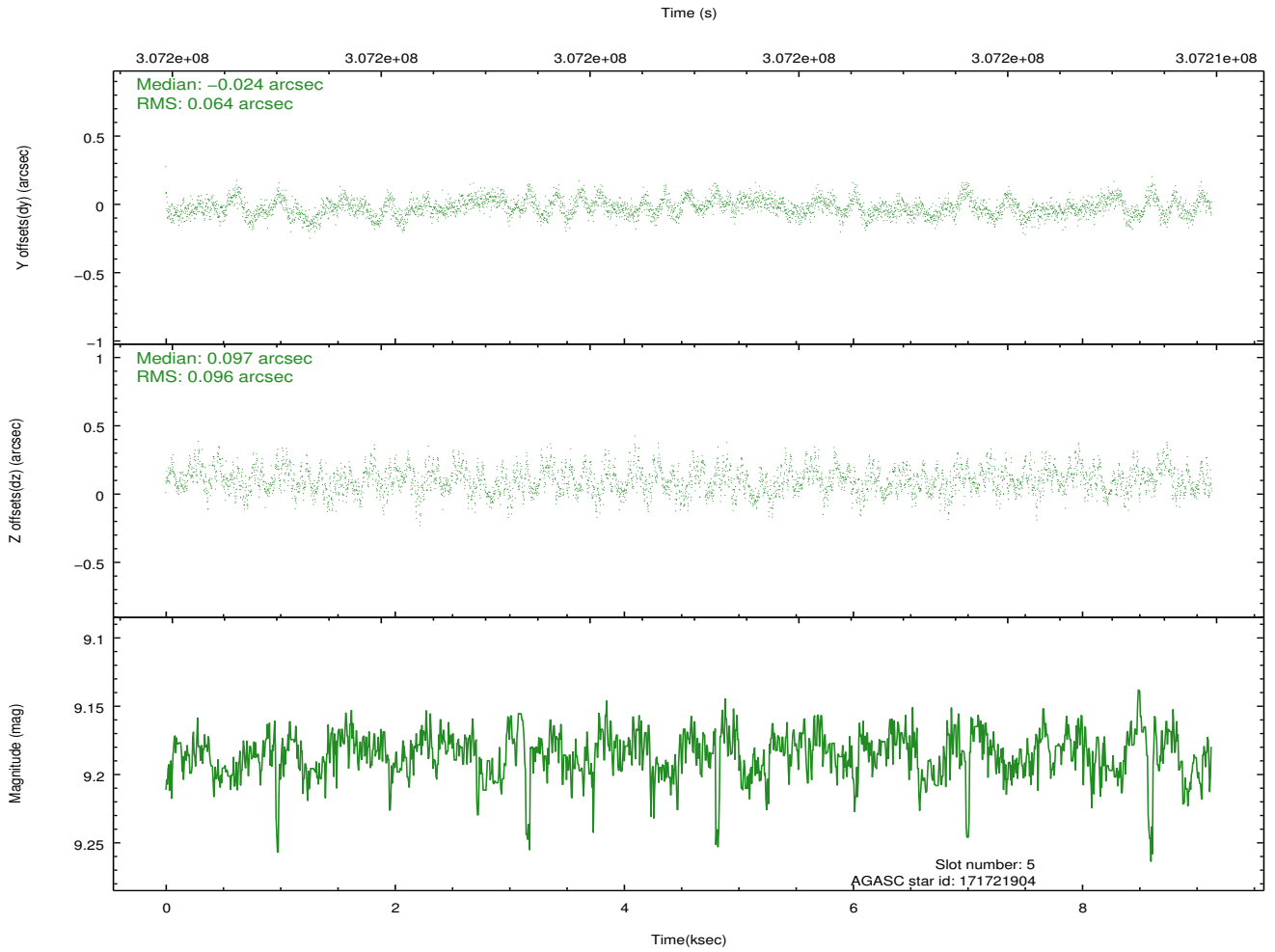
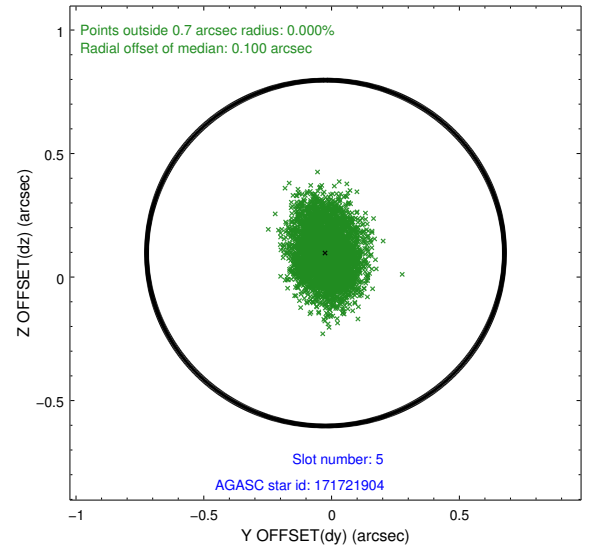
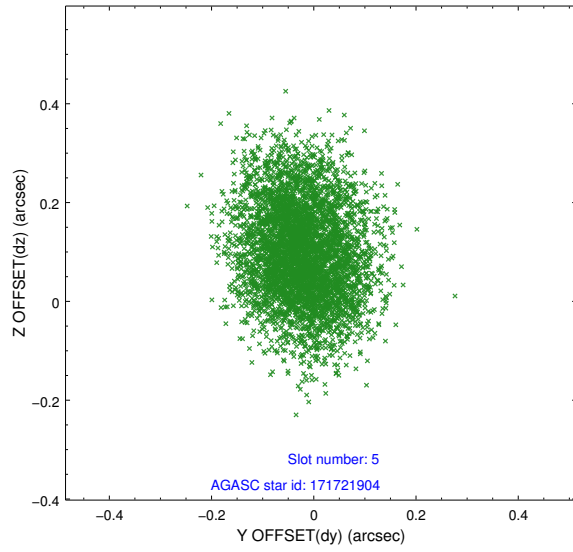
2.4.1 Slot 3



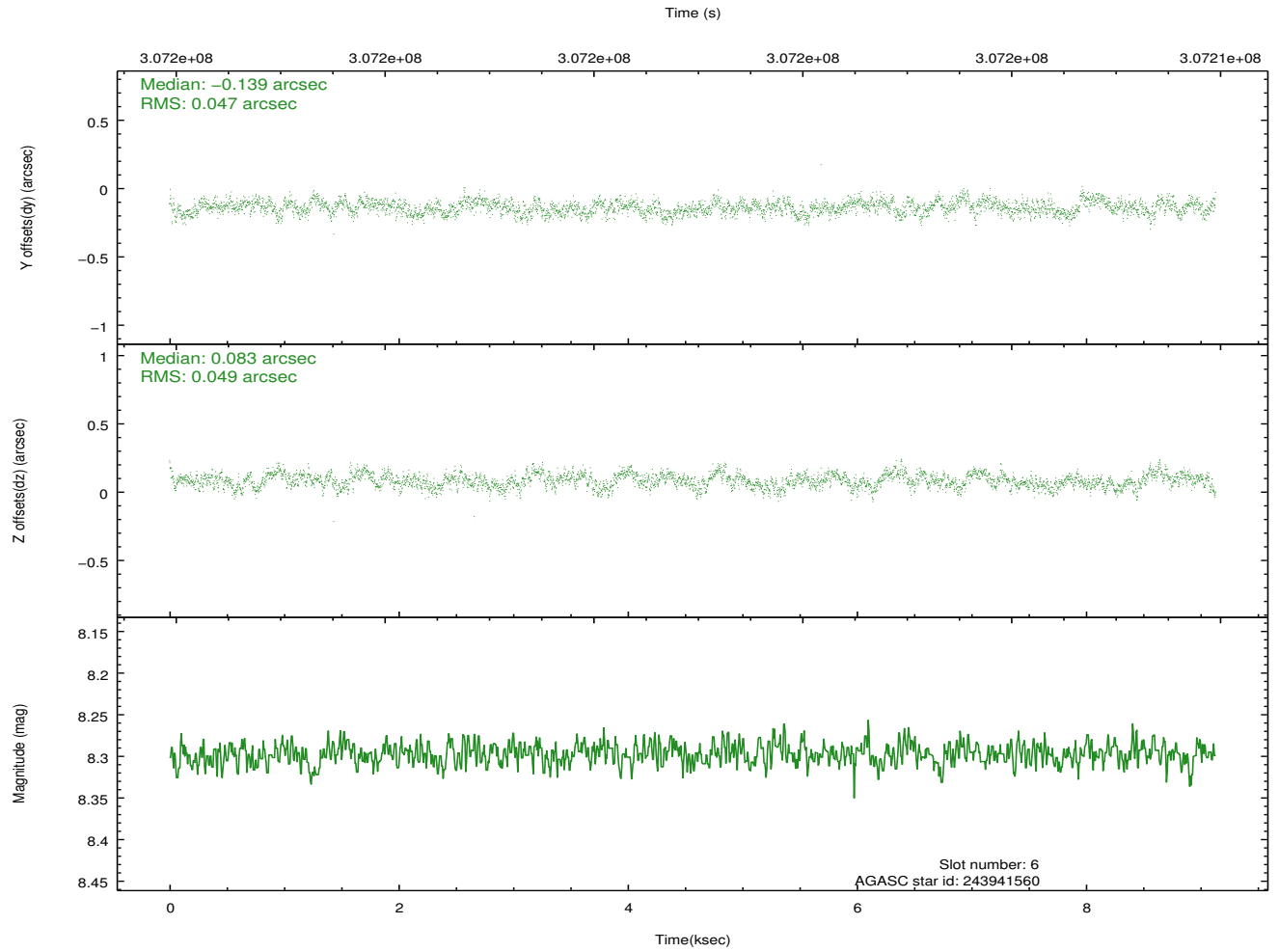
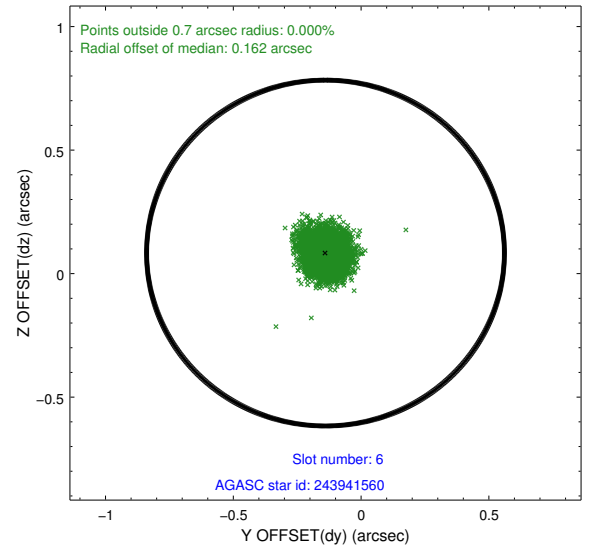
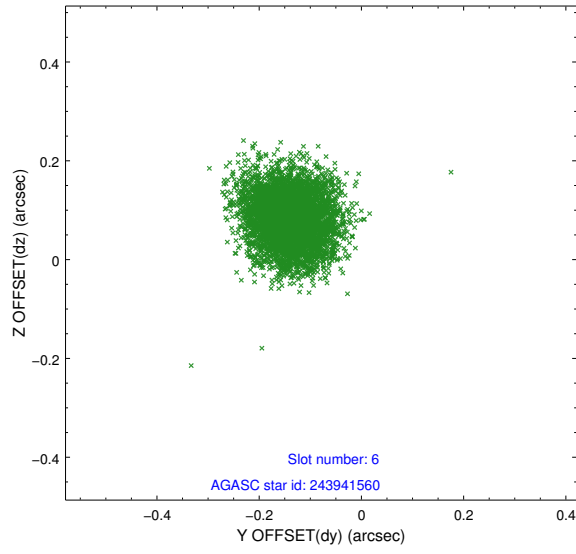
2.4.2 Slot 4



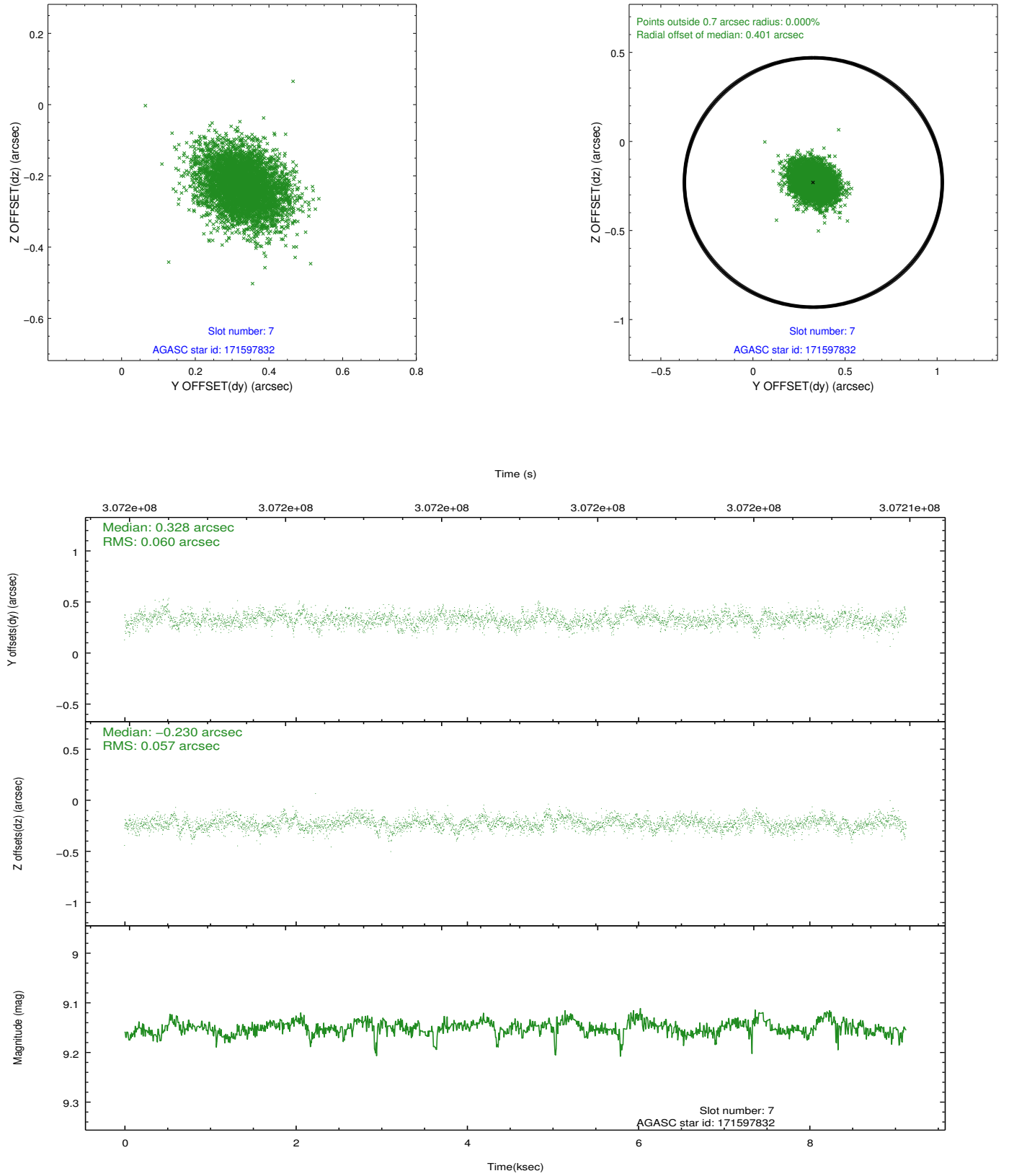
2.4.3 Slot 5



2.4.4 Slot 6

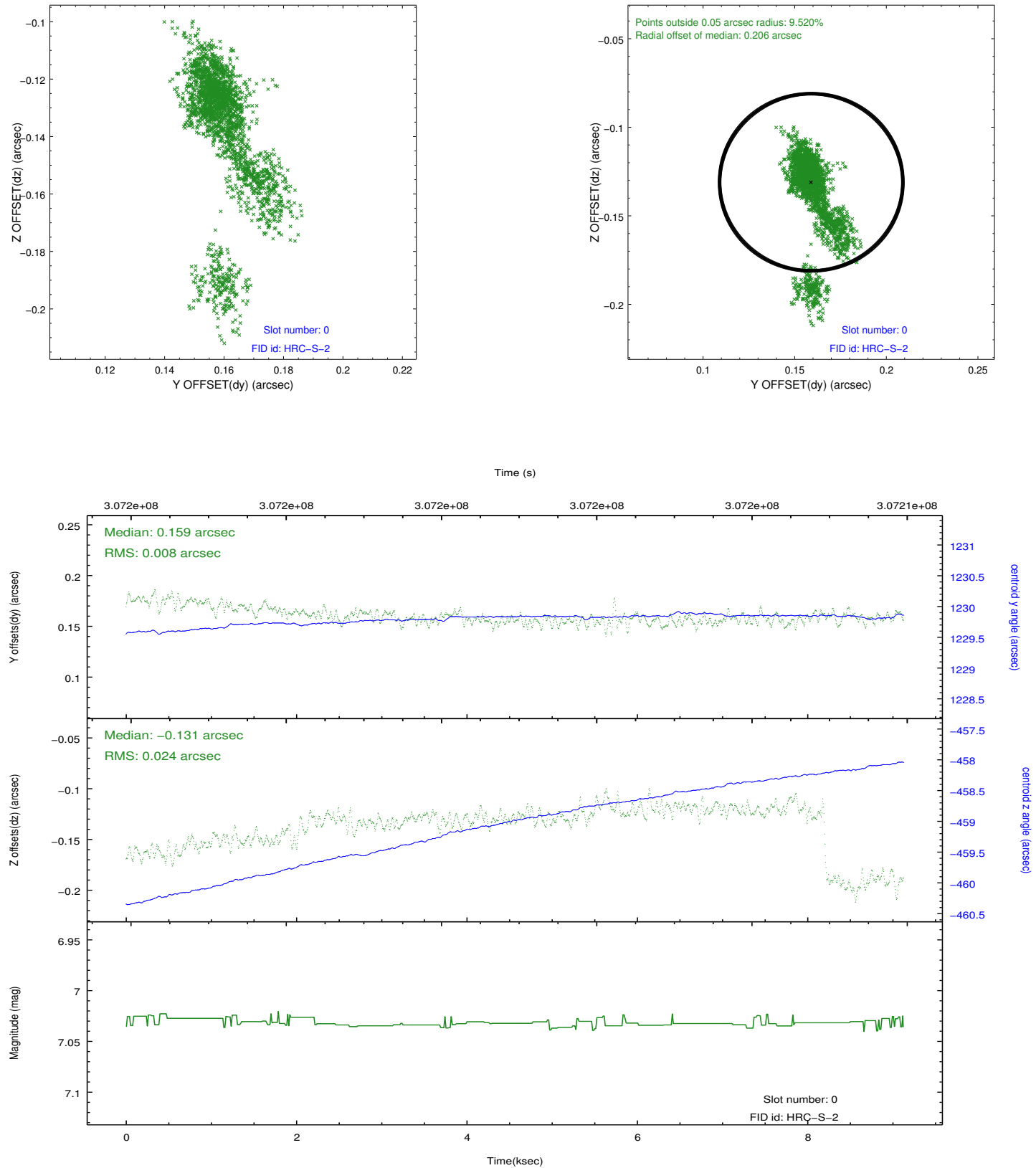


2.4.5 Slot 7

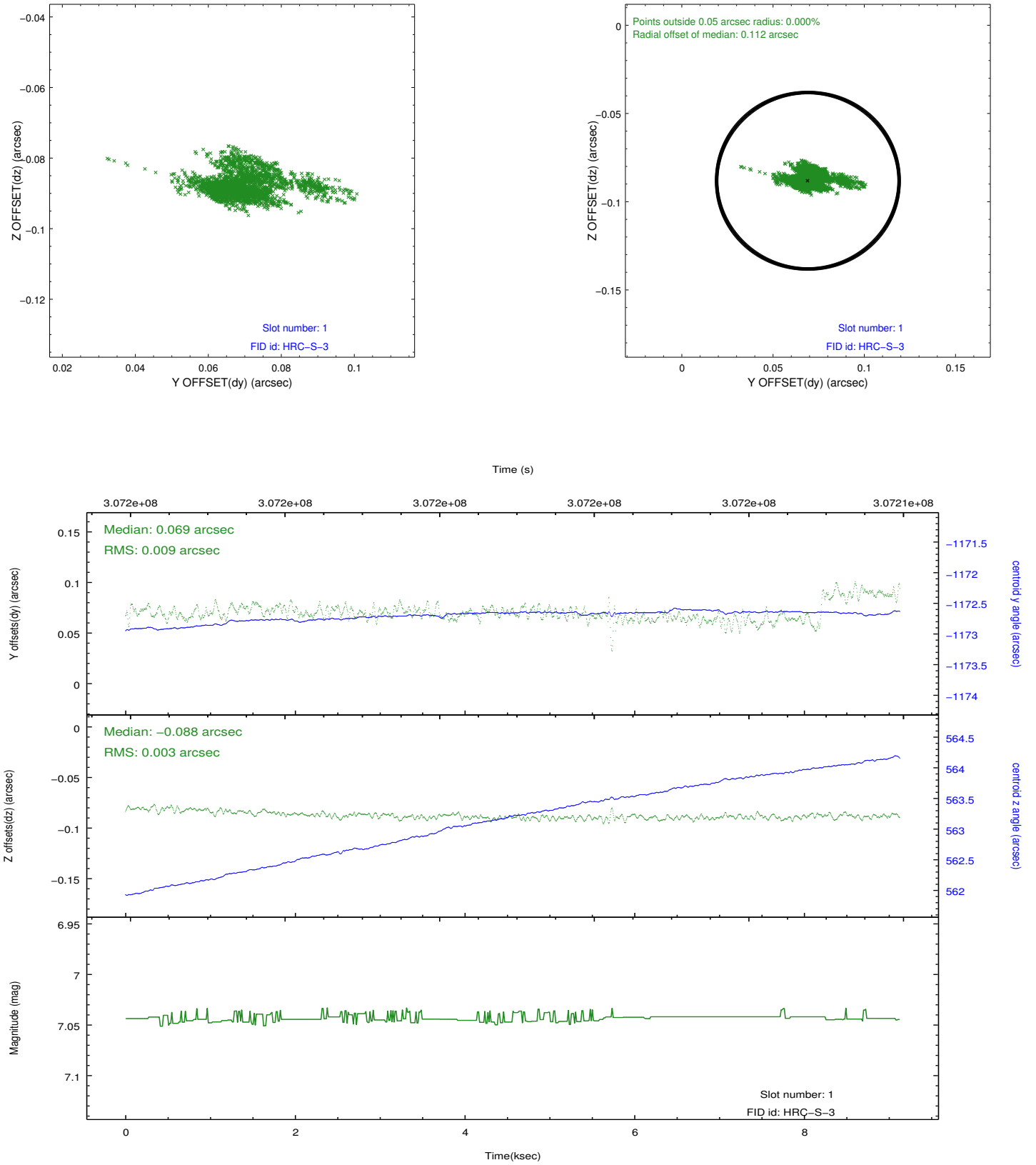


2.5 FID Slots

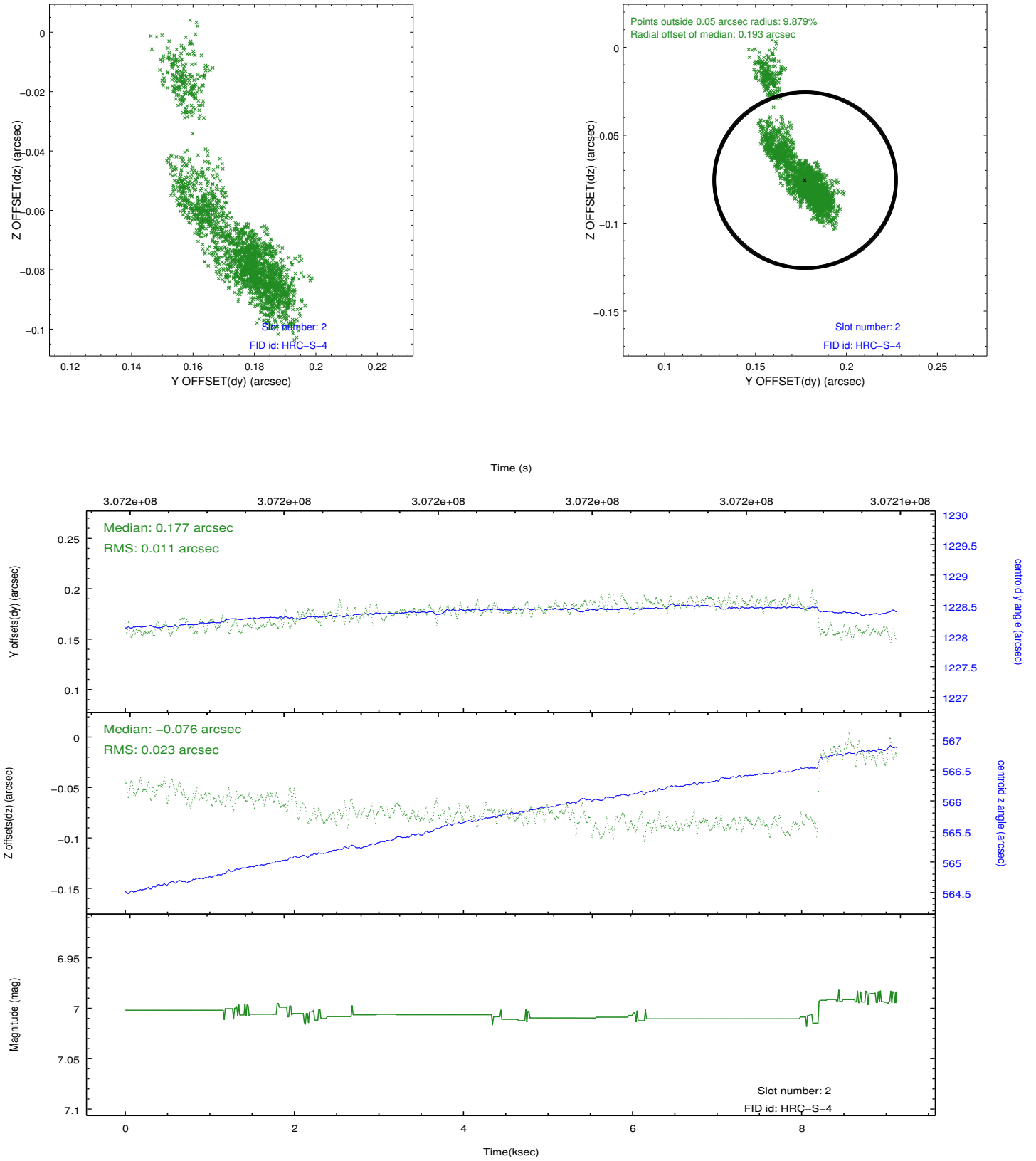
2.5.1 Slot 0



2.5.2 Slot 1

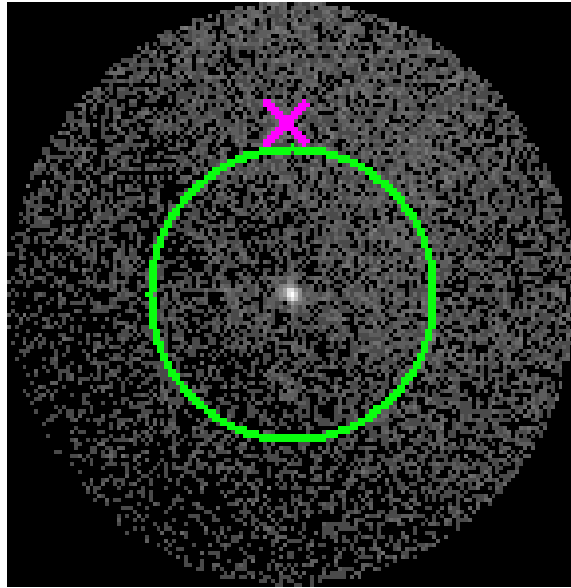


2.5.3 Slot 2

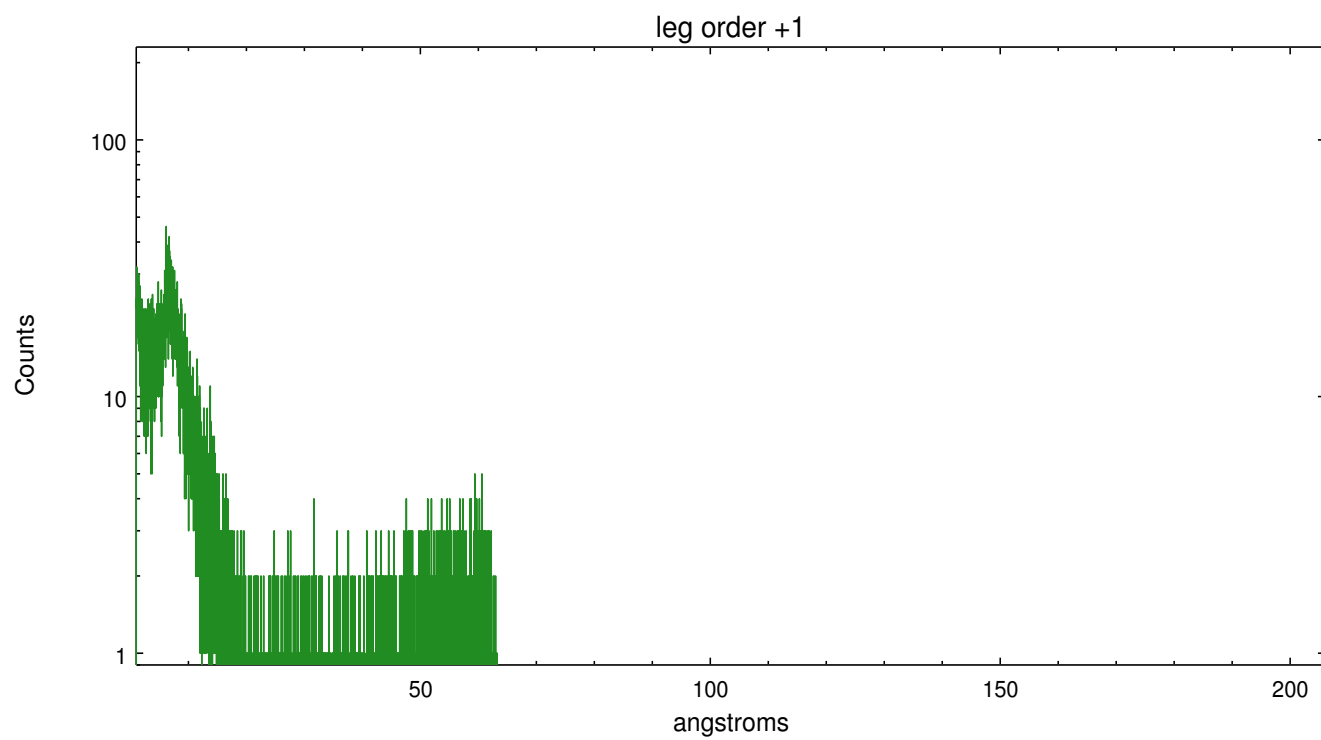
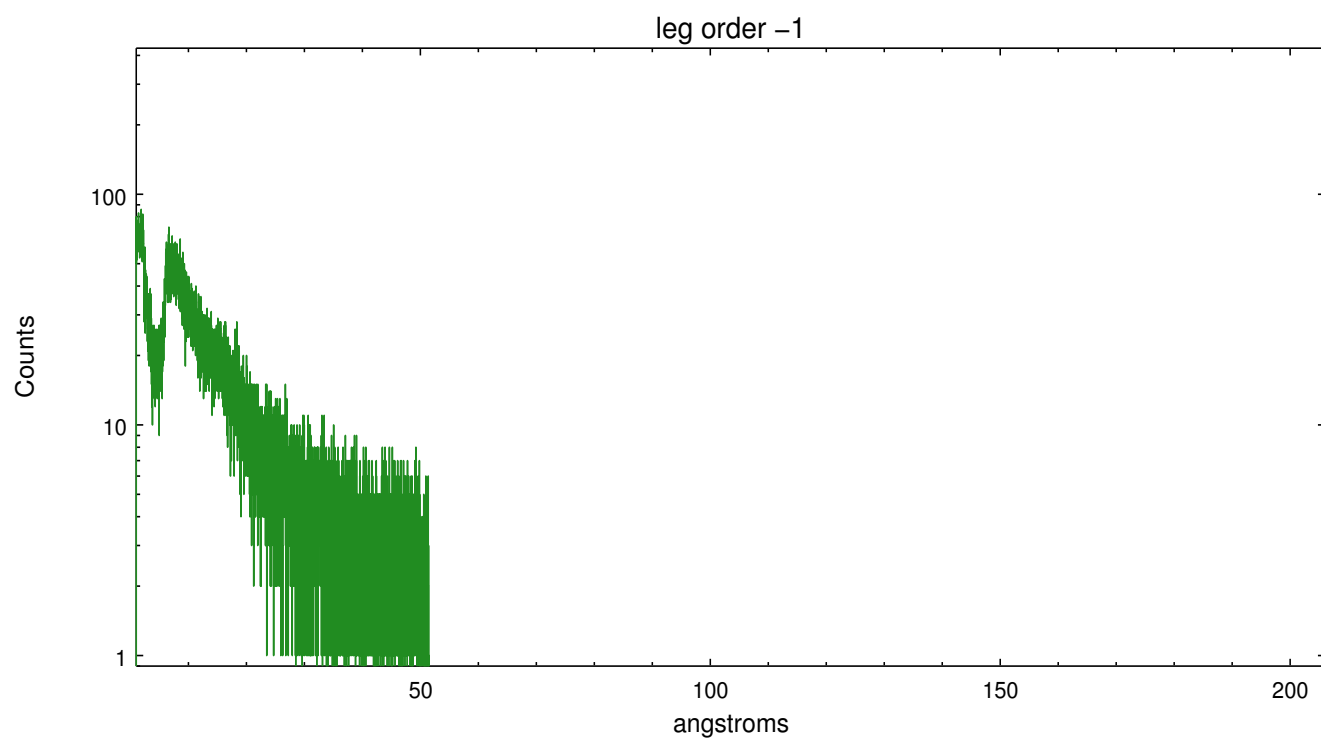


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.12941918

A.2 Comments

Test of HRC shutter configuration to avoid telemetry saturation. The +Y shutter was supposed to be in a partially closed configuration with the initial starting angle +1 degree from nominal 1/2 blocking. The shutter was supposed to be repositioned during the observation in 0.25 degree steps every 1ks from the start of the observation. However, for unknown reasons, the shutter never moved from the initial starting position during the observation. Telemetry was saturated during the observation.