

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1516 - L2 Version 7
Chandra X-Ray Center

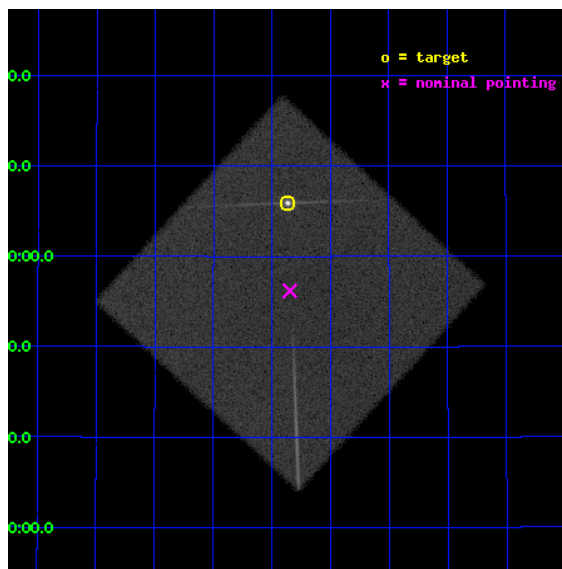
L2 Processing Date : Aug 21 2012

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

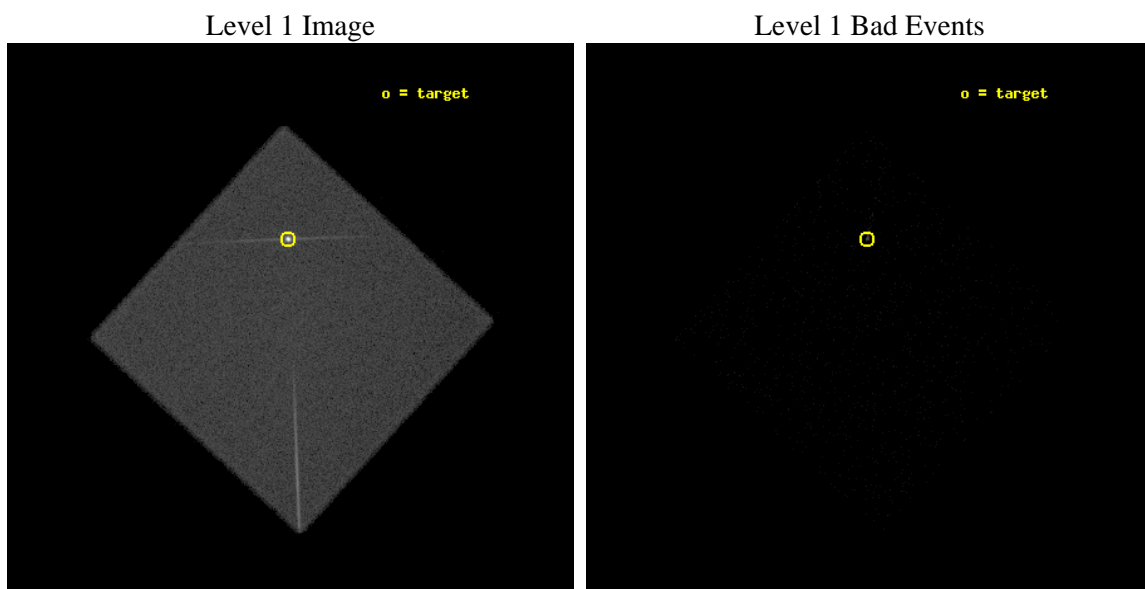
seq_num	280466	Sequence number
obs_id	1516	Observation id
title	GRATINGS CALIBRATION OBSERVATIONS OF A SOFT CONTINUUM: HZ43	Propos
observer	Dr. CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.092083	Observer's specified target RA [deg]
dec_targ	29.099	Observer's specified target Dec [deg]
ra_nom	199.08658498105	Nominal RA [deg]
dec_nom	28.936800681087	Nominal Dec [deg]
roll_nom	87.589263479217	Nominal Roll [deg]
revision	7	Processing version of data
ontime	10267.681623802	[s]
livetime	10204.719397491	Ontime multiplied by DTCOR
l2events	321188	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	9784.694000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10267.681623802	[s]
caldbver	4.5.1.1	 	l1events	493802	Number of level 1 events
date	2012-08-22T00:52:30	Date and time of file creation			
revision	6	Processing version of data			

2.1.3 Events

Level 1 Events

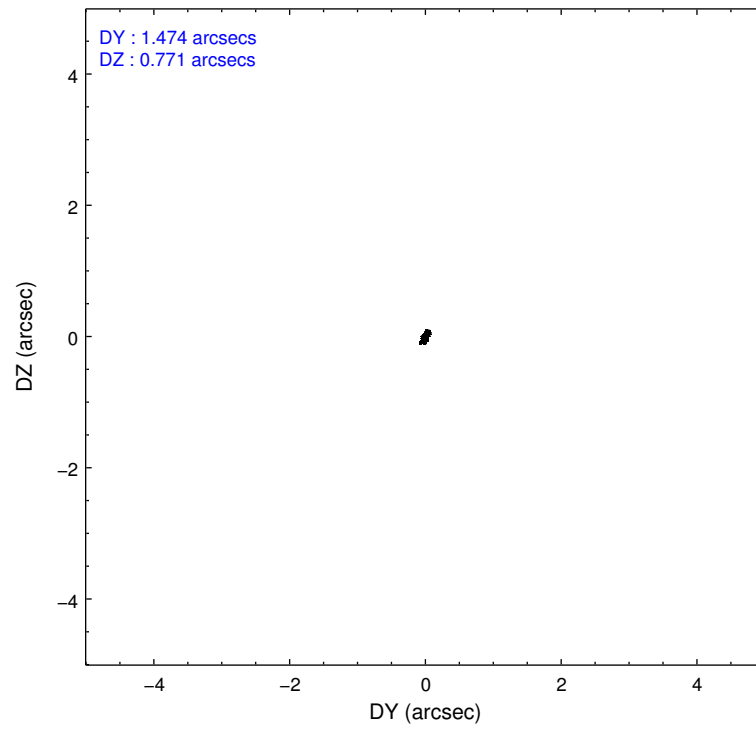
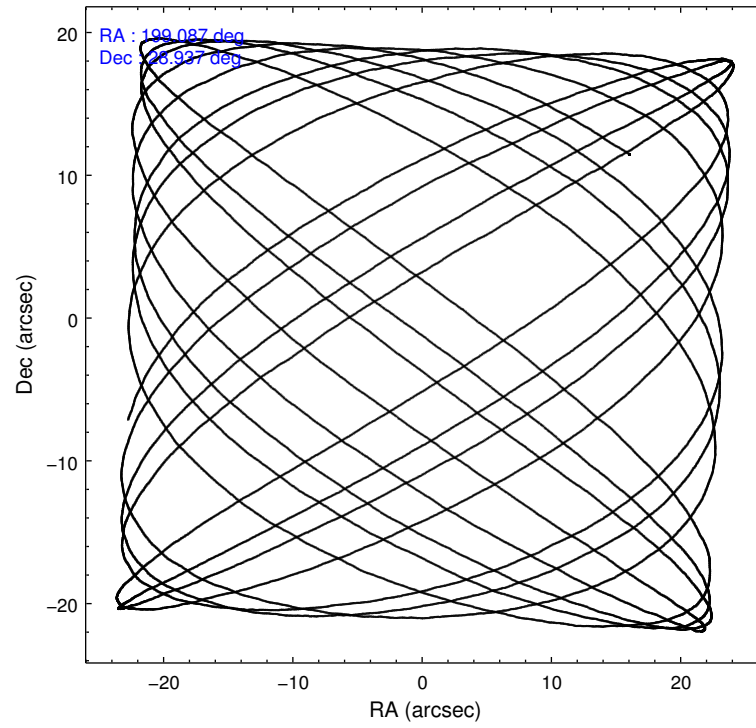
	segment 0
level 1 events	493802
rejected events	19200
rejected %	3%

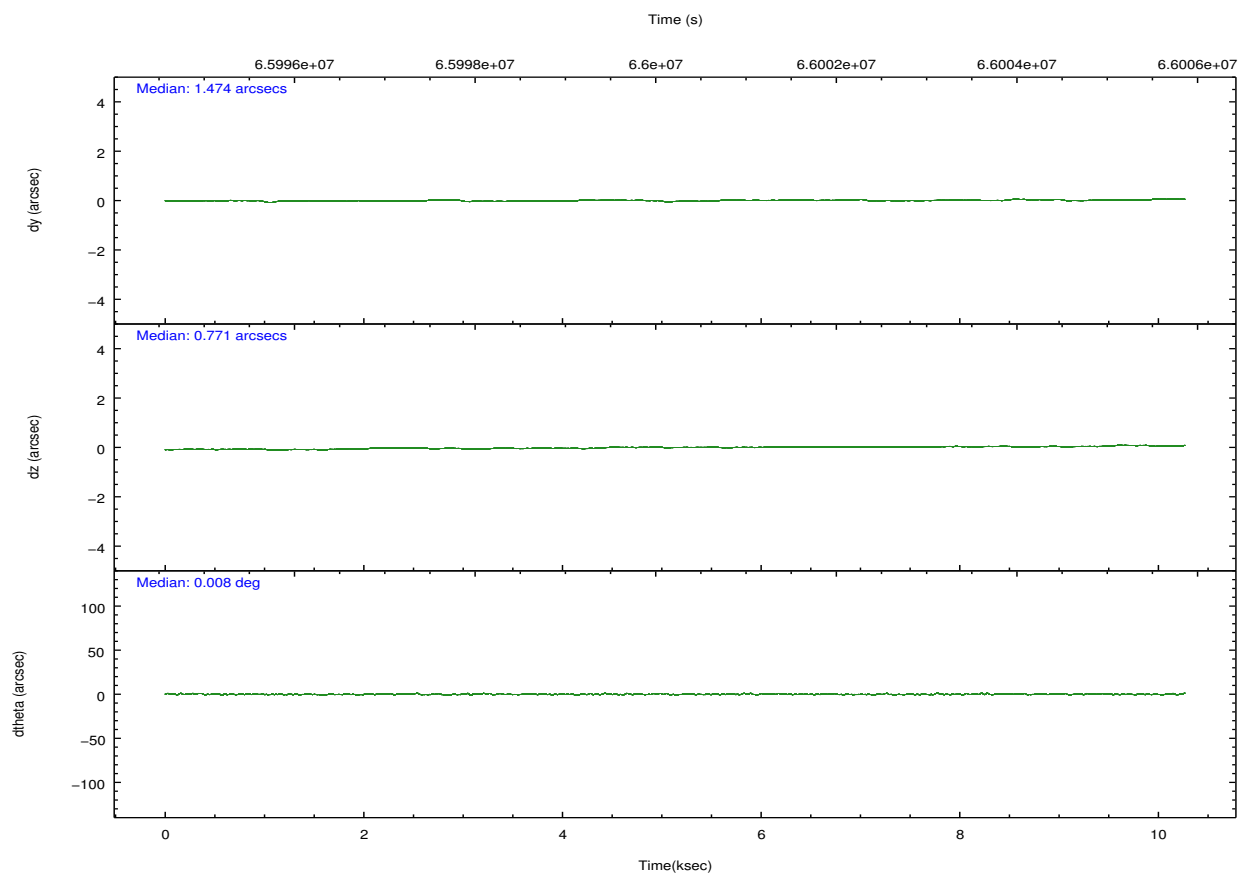
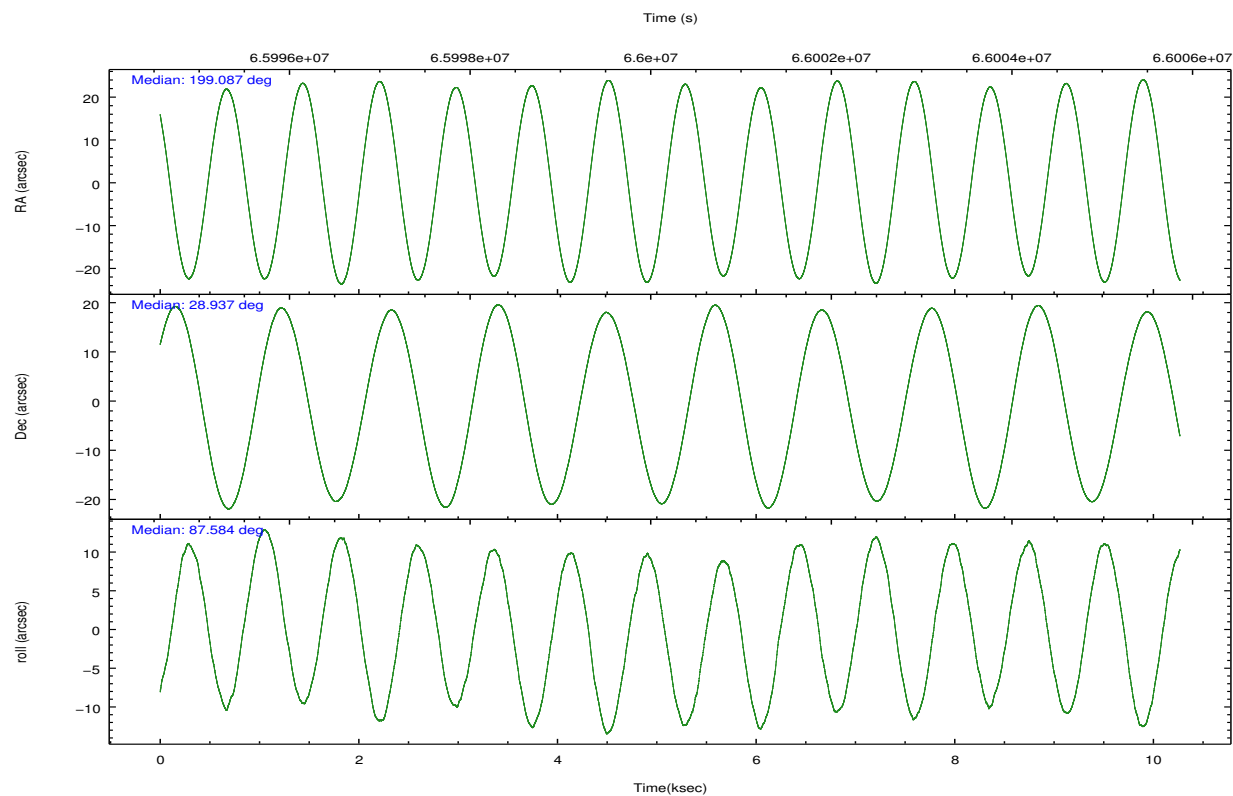
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	LETG	LETG
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	199.101371	199.0865849810478
[deg] Pointing Dec	28.912508	28.93680068108706
[deg] Pointing Roll	87.677594	87.58926347921673
[mm] SIM focus pos	-1.040293	-1.038866356238299
[mm] SIM defocus	0	0.001426264420575141
[mm] SIM translation stage pos	126.985494	126.9829799899862
[mm] SIM translation stage offset	0	0.002508901615314585
[s] Observation start time (MET)	65995562.184000	65994896.216579
Observation start date	2000-02-03T20:04:58	2000-02-03T19:54:56
[s] Observation end time (MET)	66005347.184000	66006361.866997
Observation end date	2000-02-03T22:48:03	2000-02-03T23:06:01

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

2.3 Aspect



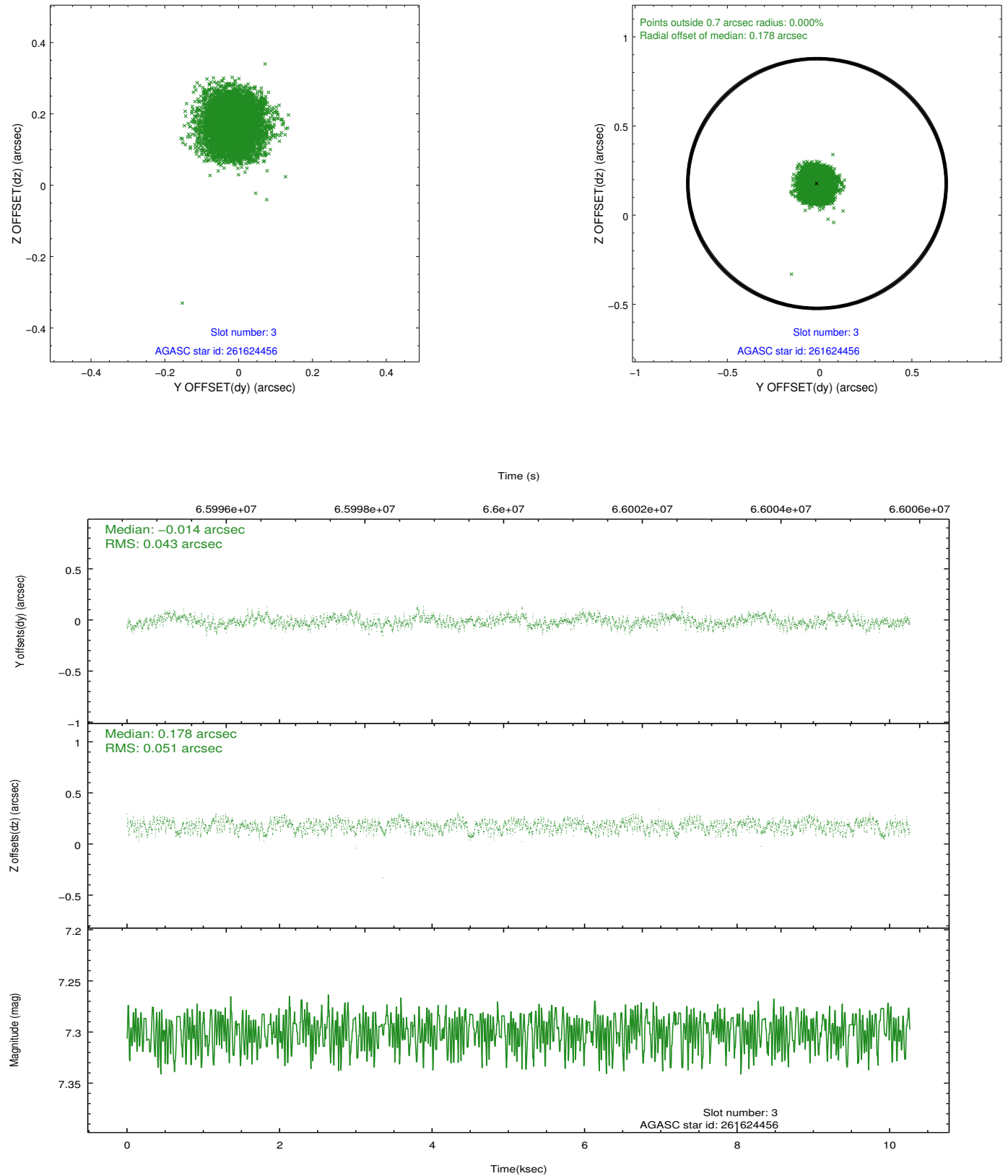


Slot Statistics

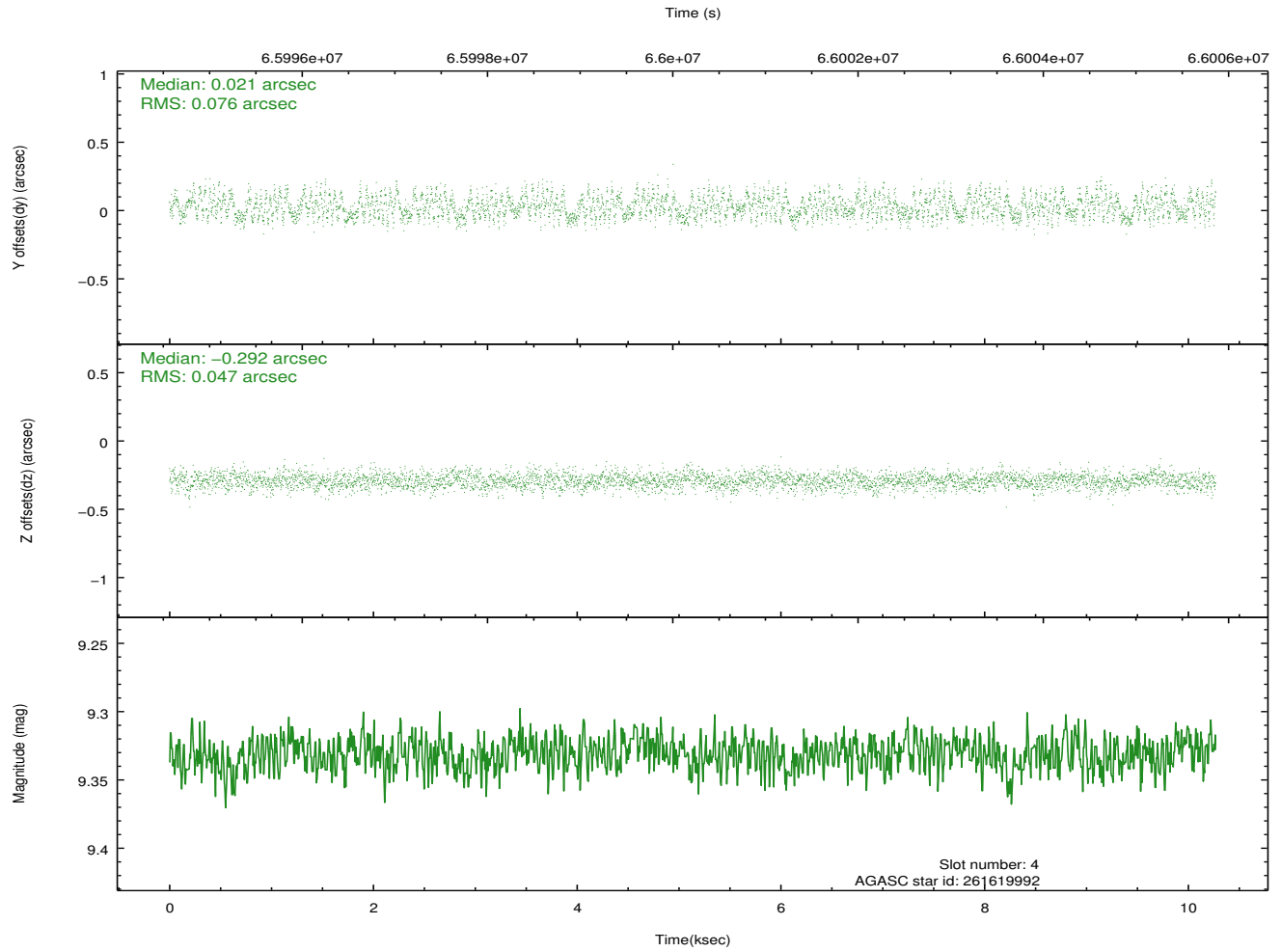
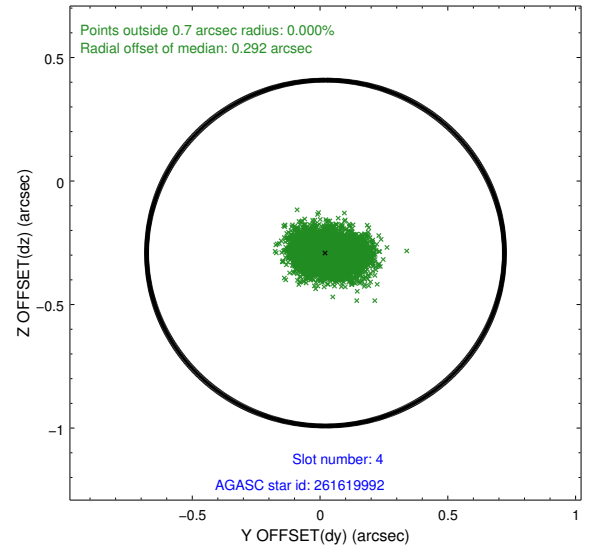
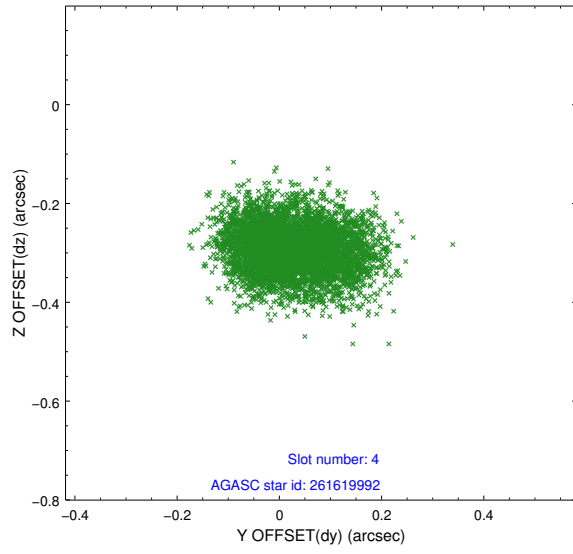
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.97	2505	0.007	-0.029	0.006	0.010	0.000000	0.000000	-756.90	-1288.46
1	FID	HRC-I-3	7.07	2505	0.044	-0.058	0.007	0.012	0.000000	0.000000	-1185.66	1015.56
2	FID	HRC-I-4	7.01	2505	0.063	-0.002	0.005	0.009	0.000000	0.000000	1285.47	1014.15
3	GUIDE	261624456	7.30	5010	-0.014	0.178	0.073	0.110	199.758056	28.567828	-1150.60	-2123.78
4	GUIDE	261619992	9.33	5008	0.021	-0.292	0.096	0.152	198.395553	28.647634	-1037.69	2189.65
5	GUIDE	261619776	8.80	5007	-0.129	-0.035	0.070	0.115	198.654383	29.401174	1702.40	1473.47
6	GUIDE	261623624	9.12	5008	0.118	0.186	0.082	0.129	199.611555	28.454113	-1580.18	-1679.14
7	GUIDE	261626376	9.72	5006	-0.004	-0.032	0.091	0.150	198.947288	29.347445	1544.08	547.12

2.4 Star Slots

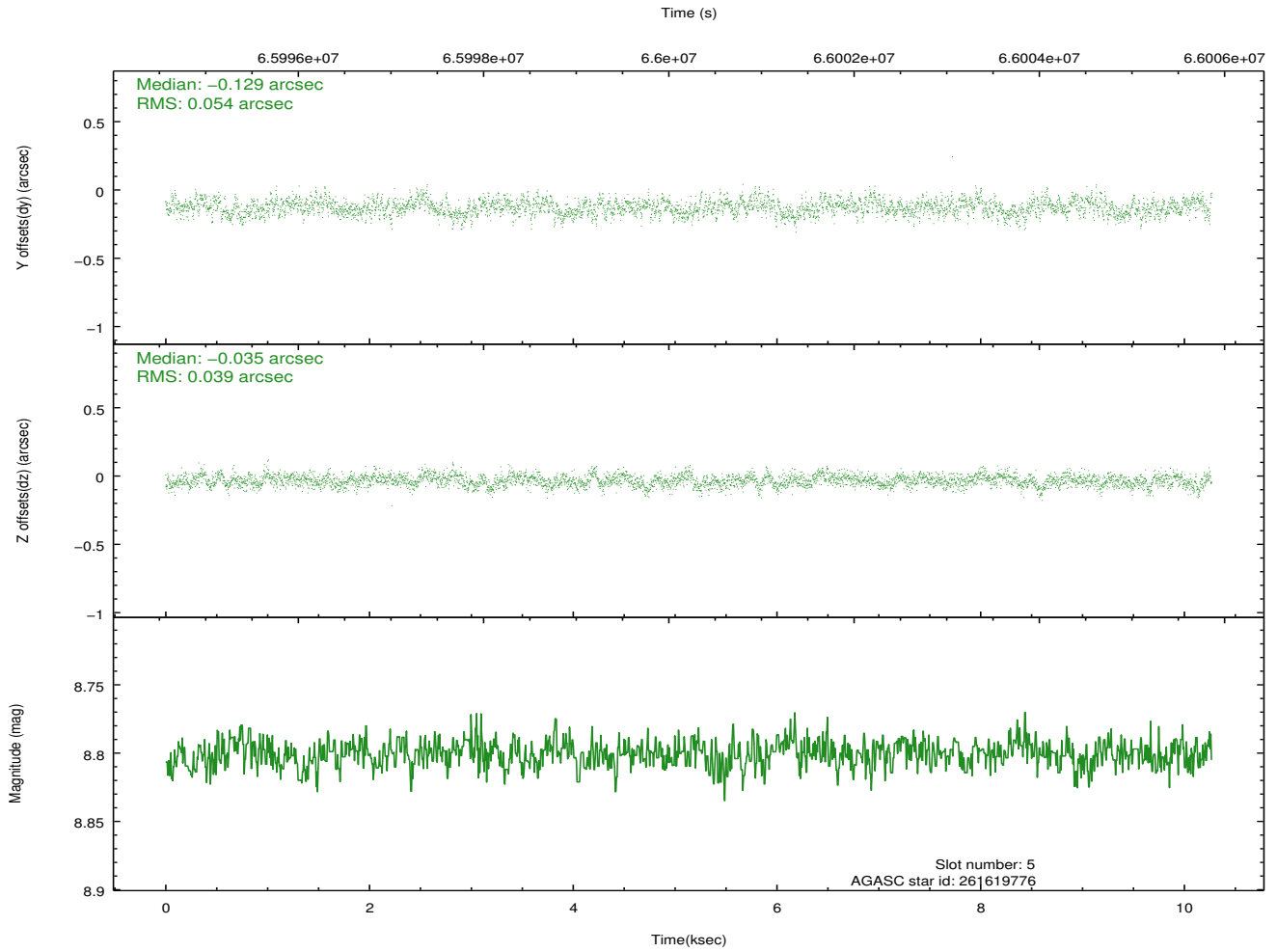
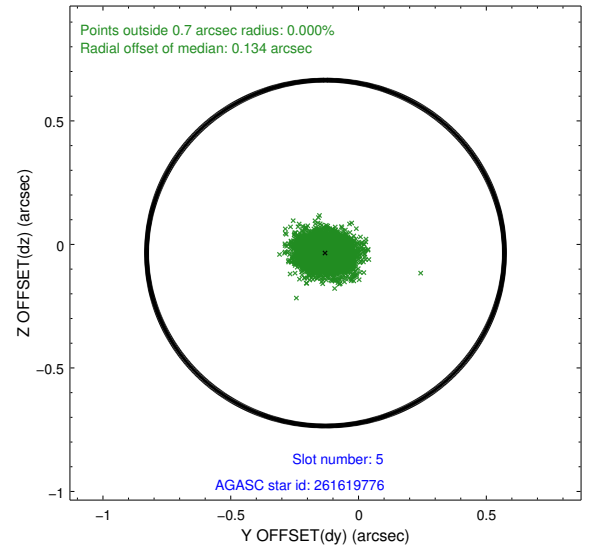
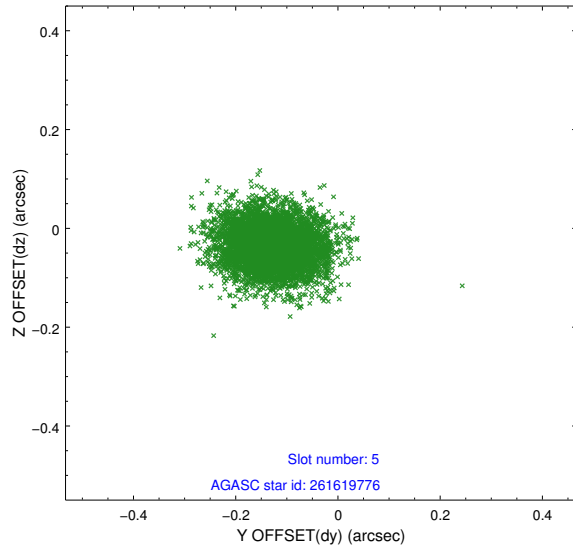
2.4.1 Slot 3



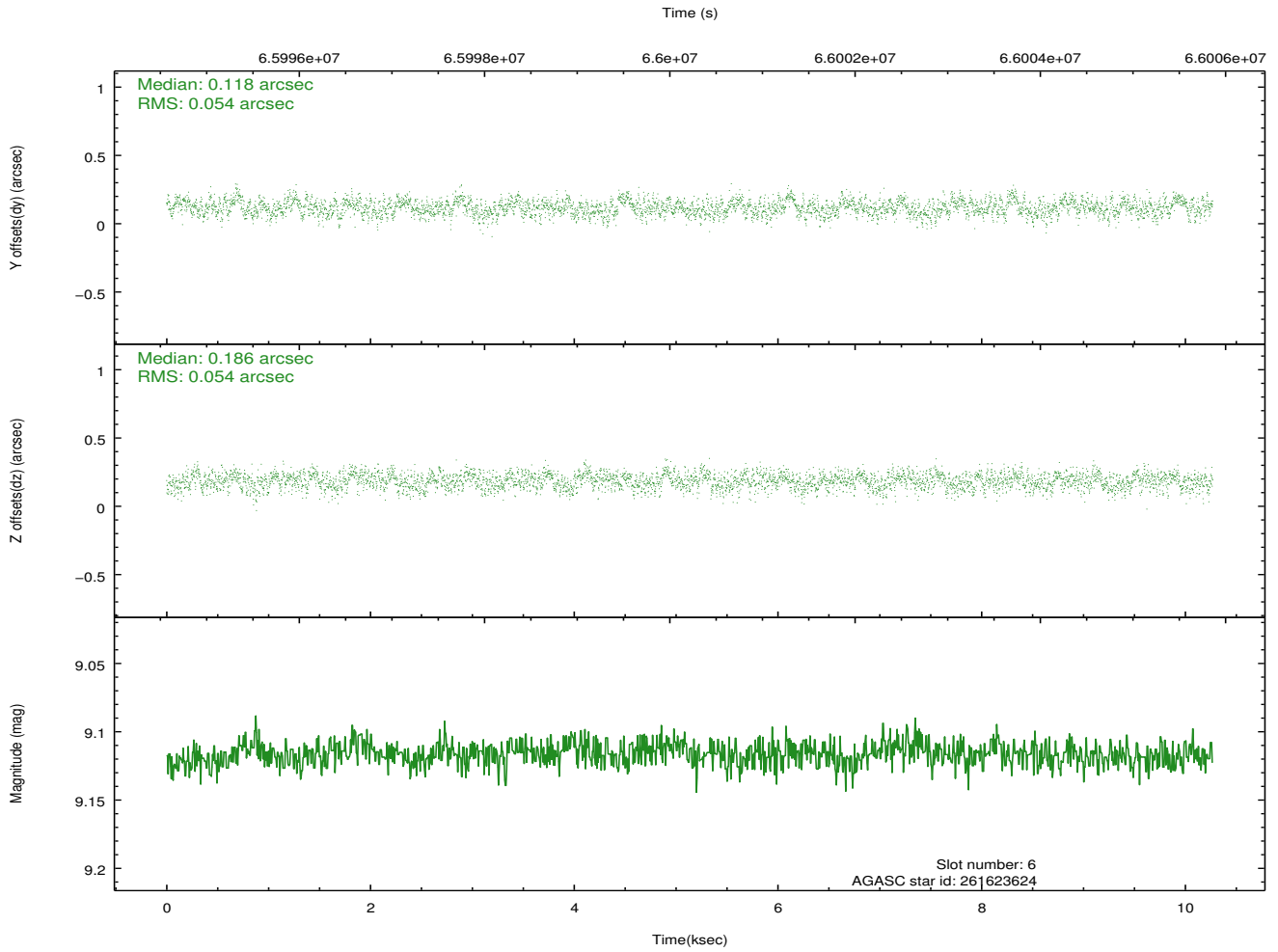
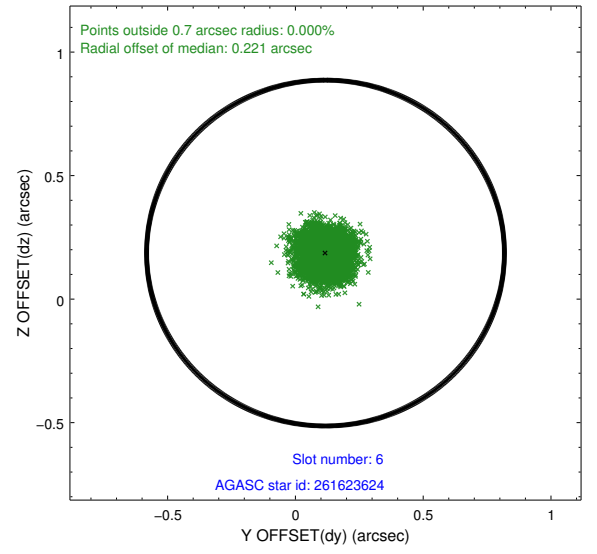
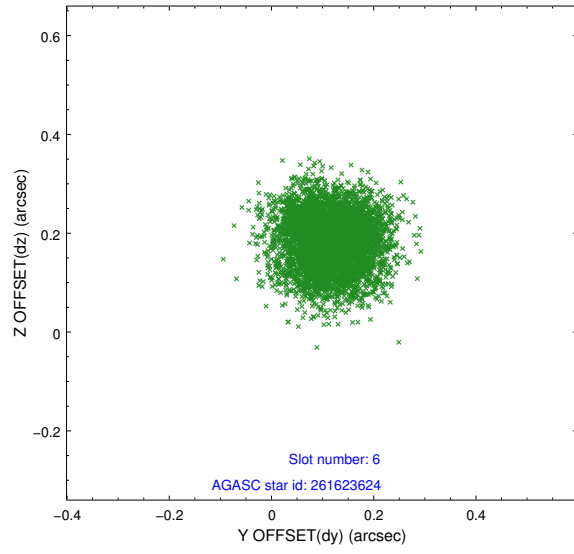
2.4.2 Slot 4



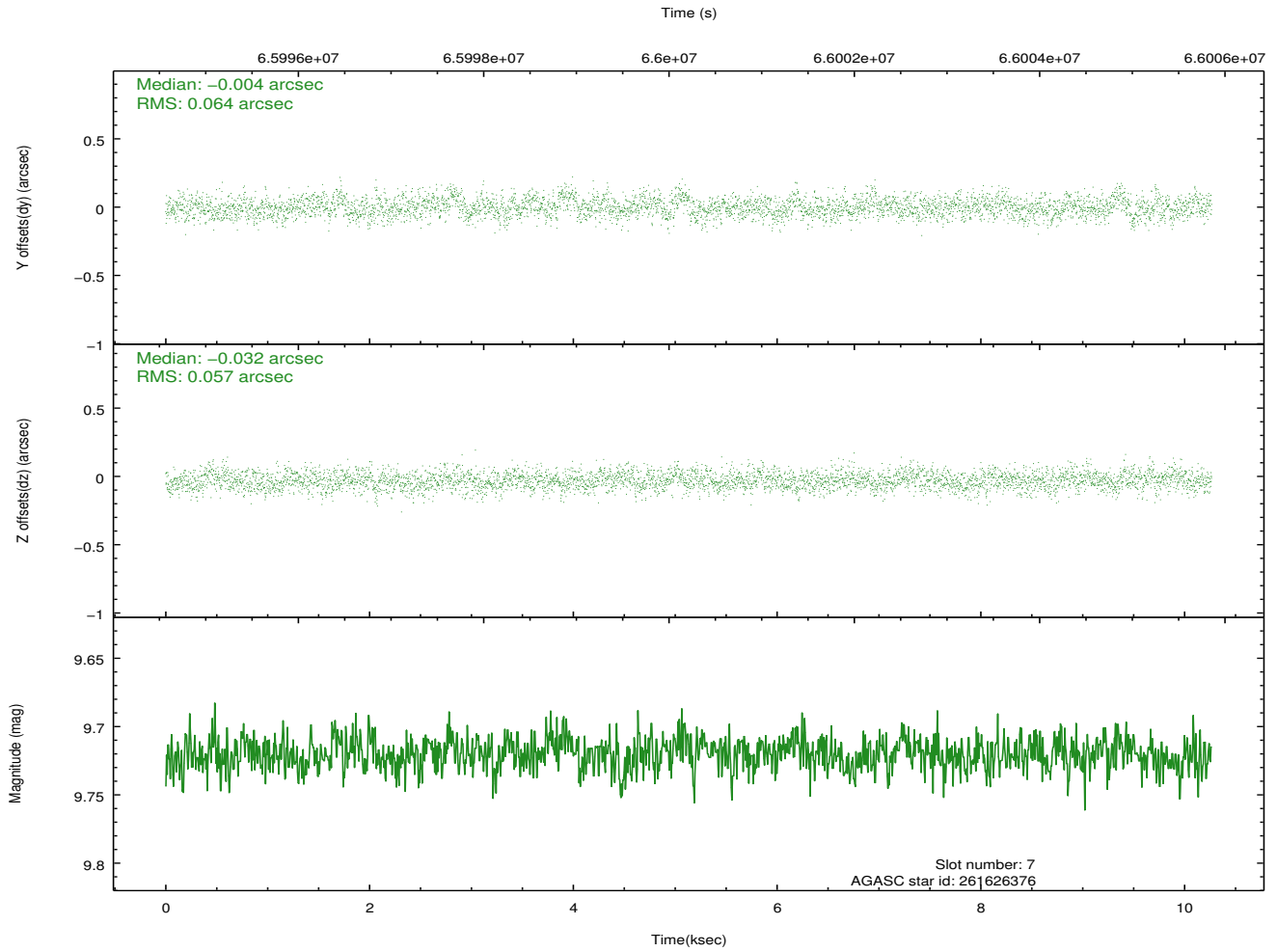
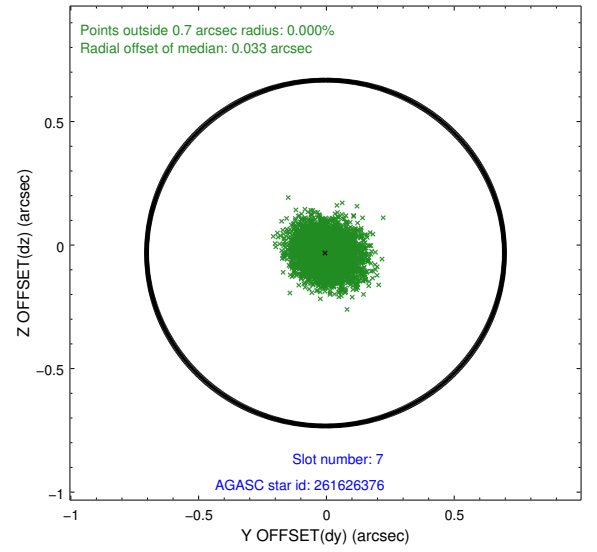
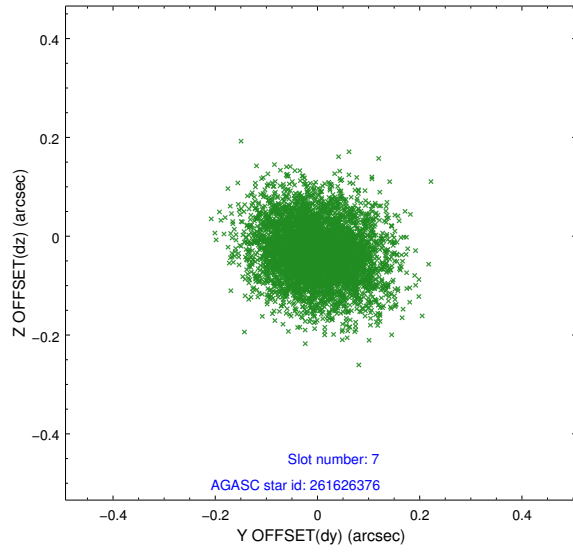
2.4.3 Slot 5



2.4.4 Slot 6

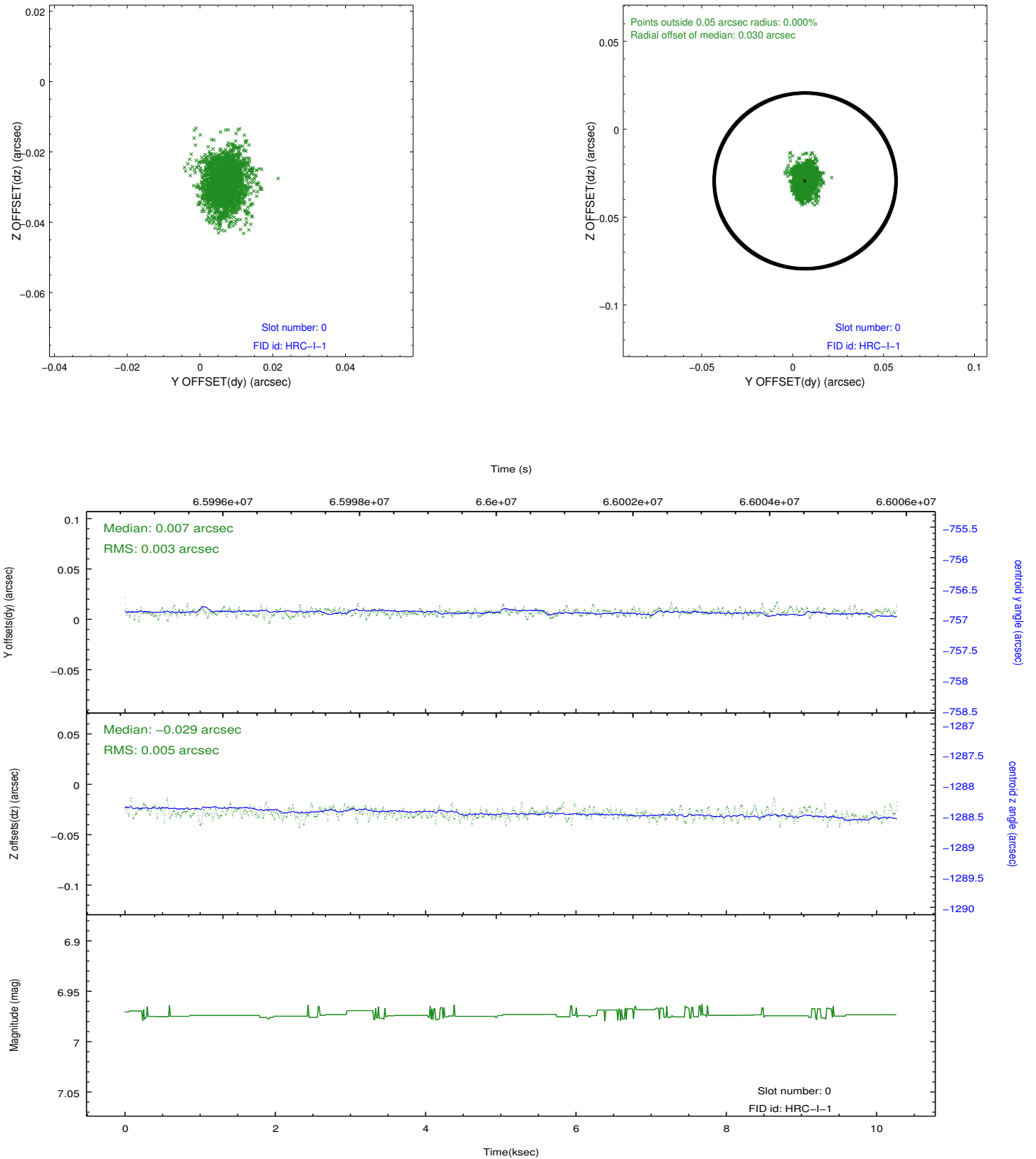


2.4.5 Slot 7

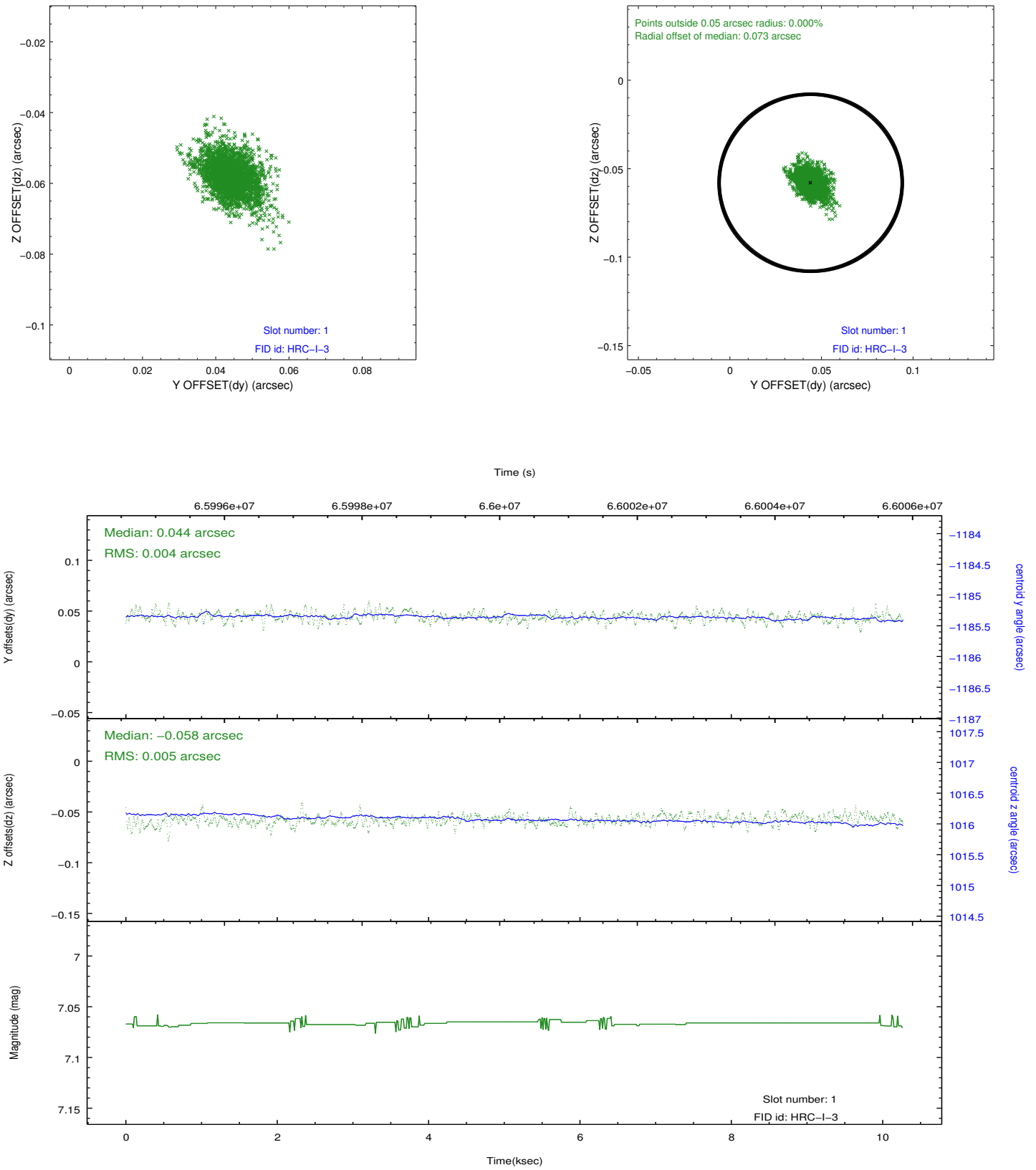


2.5 FID Slots

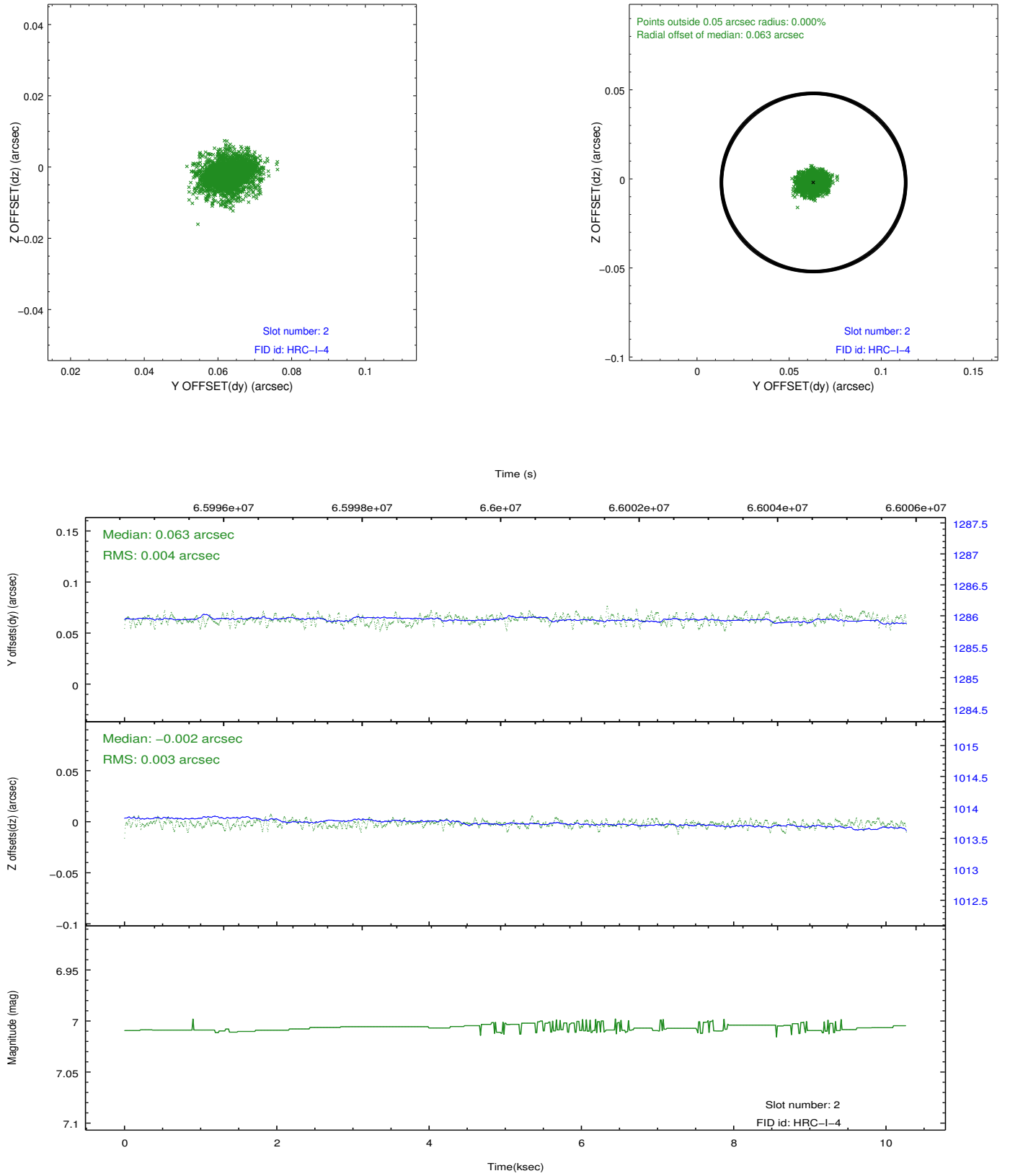
2.5.1 Slot 0



2.5.2 Slot 1

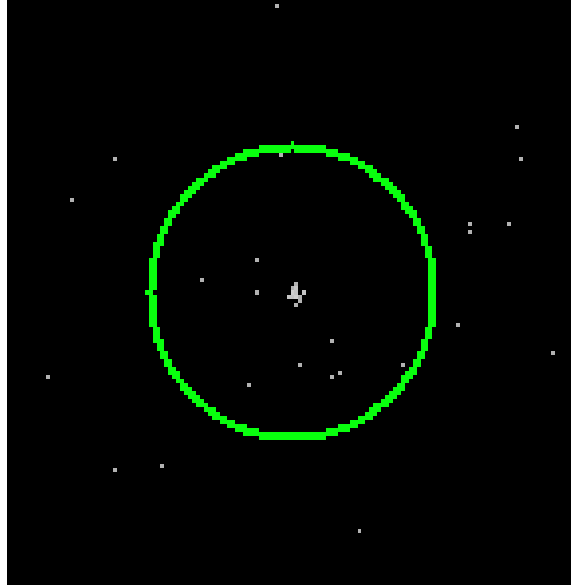


2.5.3 Slot 2

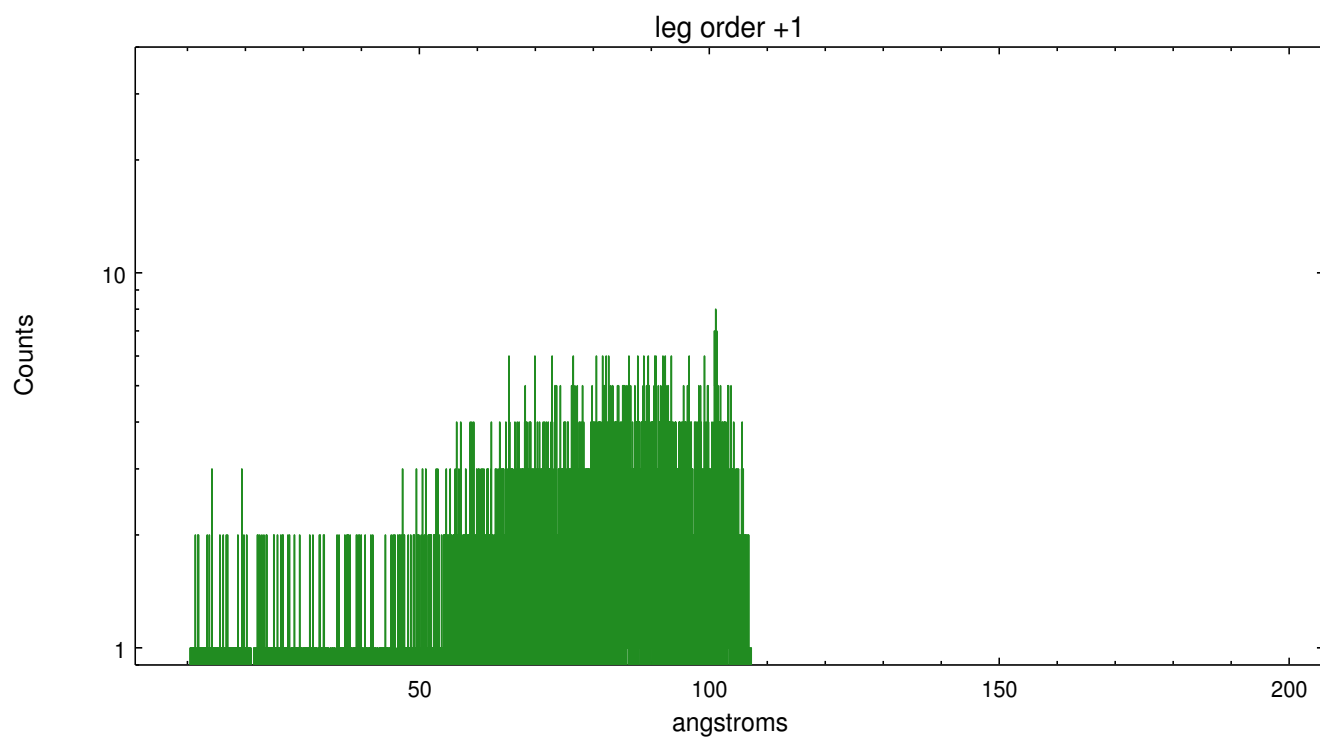
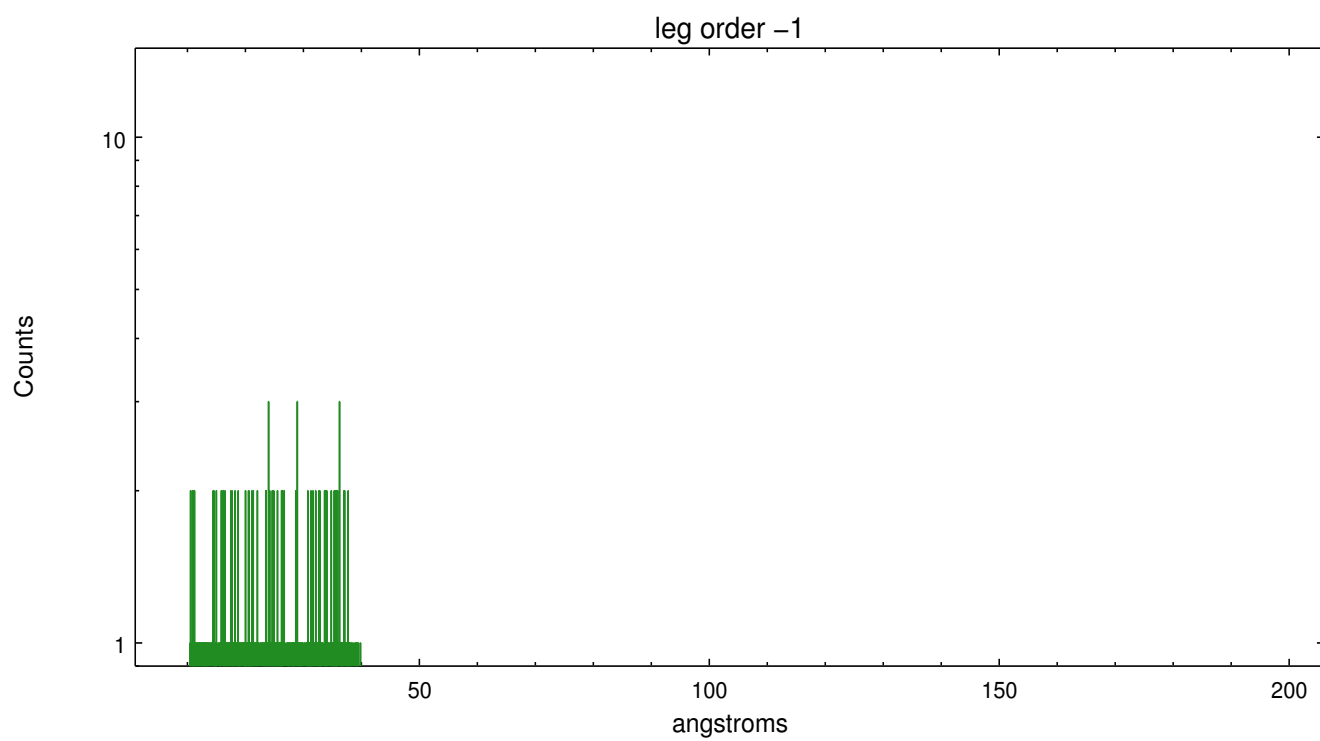


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.265

A.2 Comments

Source is quite far off-axis. The PSF is asymmetric and contains the pattern of the struts. The zeroth order is not found at the precise center of the PSF, but is within about 1 arcsec. The off-axis position yields a plus side spectrum with energies beyond 100 A. The minus side spectrum is truncated.

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Standard software processing technique using the tool tgdetect failed to determine an accurate position for the zeroth order for this observation. The source is extended and asymmetric. due to the off-axis PSF. The processing software defaulted to the coordinates supplied by the user for the position of the zeroth order for the grating spectral extraction.