

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2480 - L2 Version 3
Chandra X-Ray Center

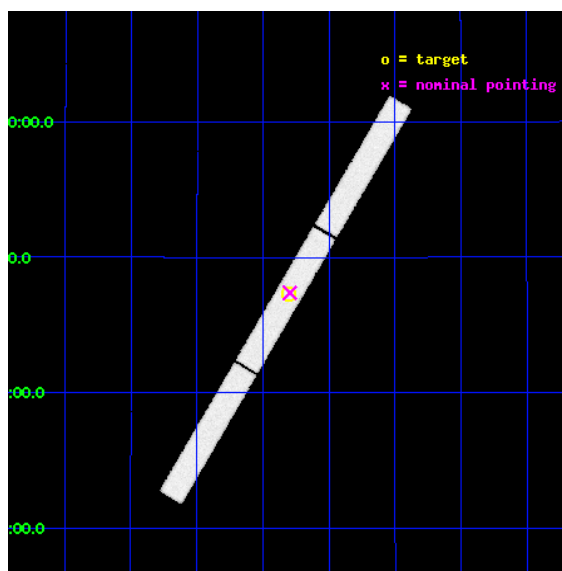
L2 Processing Date : Sep 20 2012

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

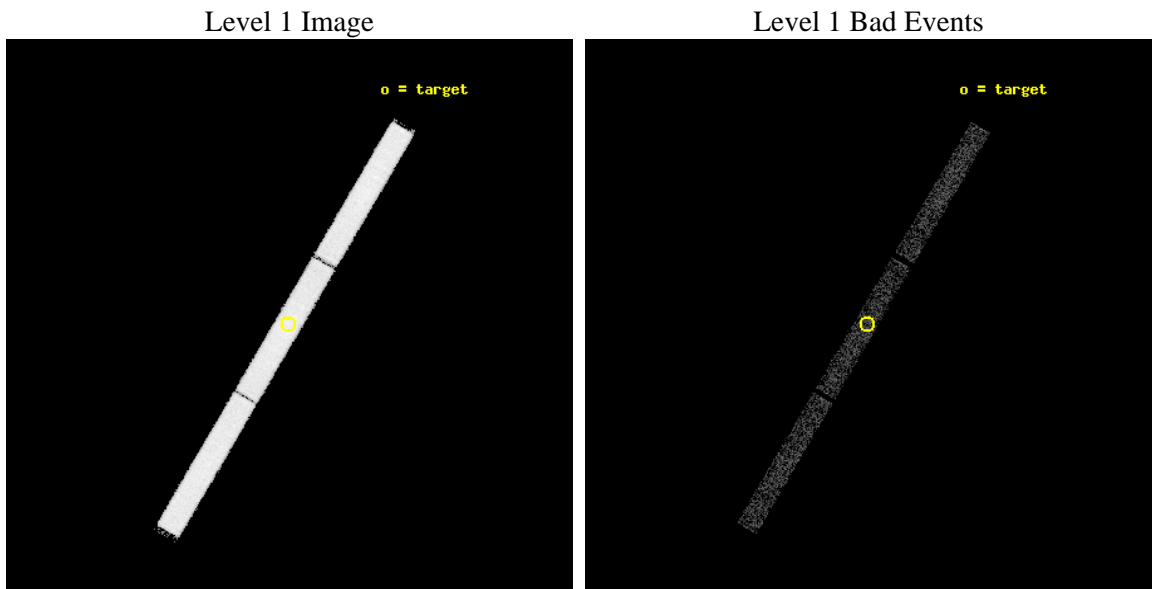
seq_num	100008	Sequence number
obs_id	2480	Observation id
title	SOLVING THE PUZZLE OF COMETARY X-RAY ORIGIN: OBSERVATIONS OF COMET 10P/TEMPEL 2	Proposal title
observer	DR W. THOMAS VESTRAND	Principal investigator
object	LINEAR 2001 A2	Source name
ra_targ	346.15039	Observer's specified target RA [deg]
dec_targ	9.36423	Observer's specified target Dec [deg]
ra_nom	346.14804351537	Nominal RA [deg]
dec_nom	9.3690198601735	Nominal Dec [deg]
roll_nom	120.46516832065	Nominal Roll [deg]
revision	3	Processing version of data
ontime	2401.8313439637	[s]
livetime	2385.1236882754	Ontime multiplied by DTCOR
l2events	154401	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	2250.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2401.8313439637	[s]
caldbver	4.5.1.1	 	l1events	244070	Number of level 1 events
date	2012-09-20T13:16:55	Date and time of file creation			
revision	3	Processing version of data			

2.1.3 Events

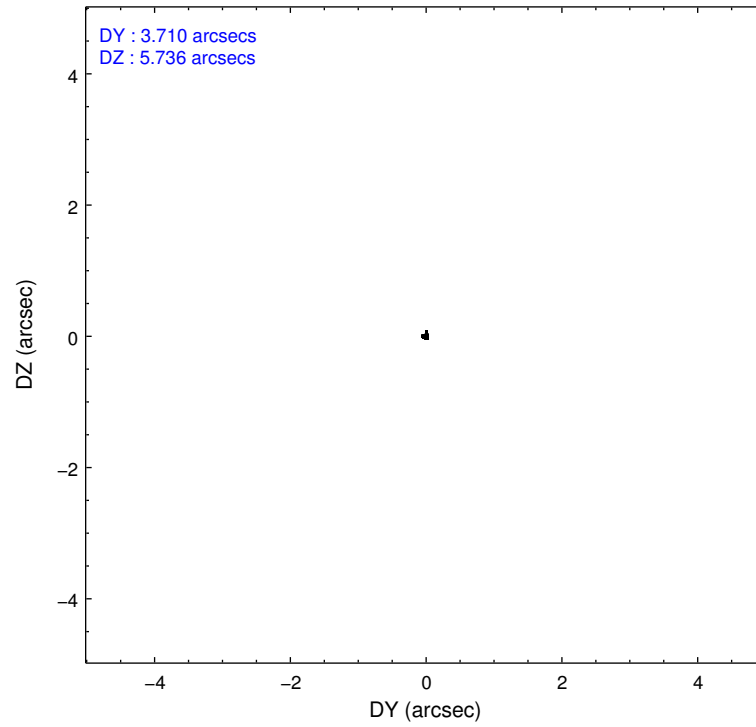
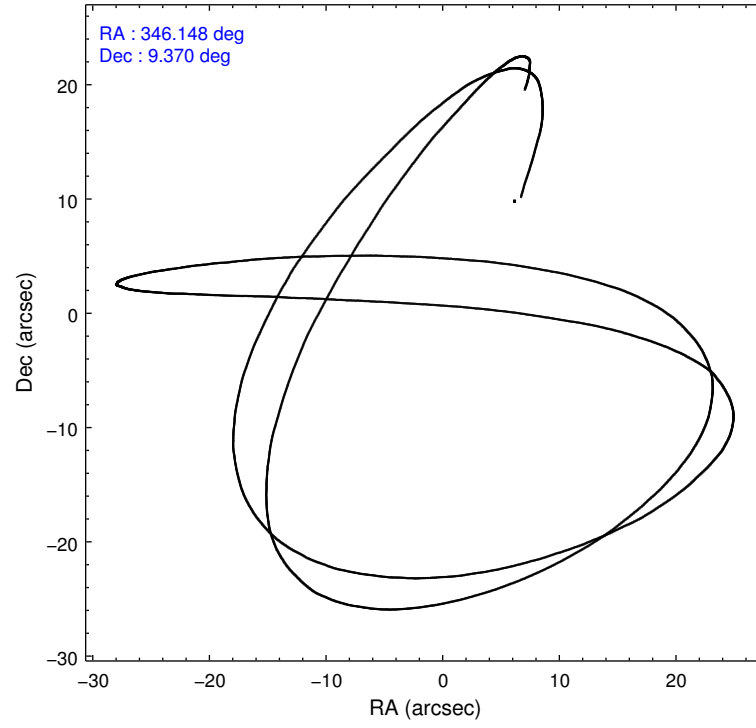
Level 1 Events

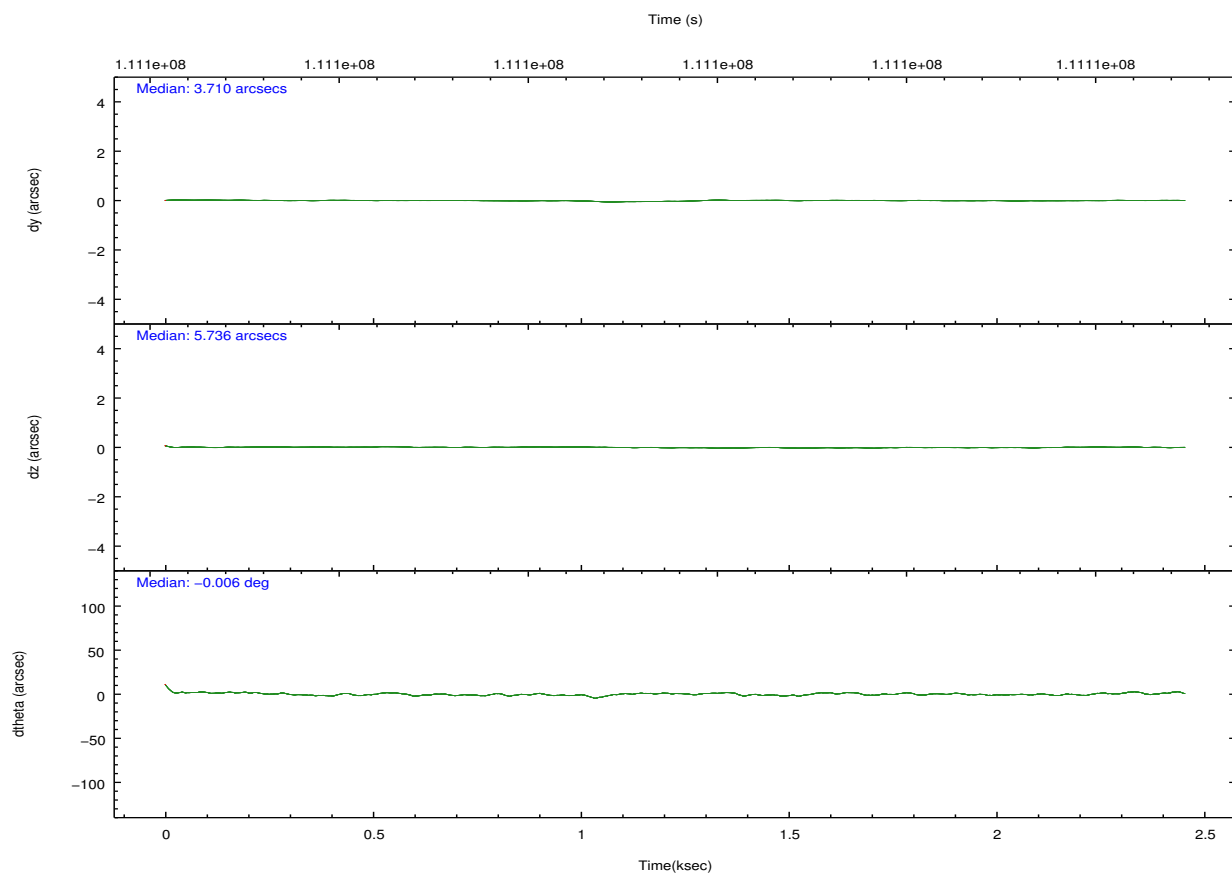
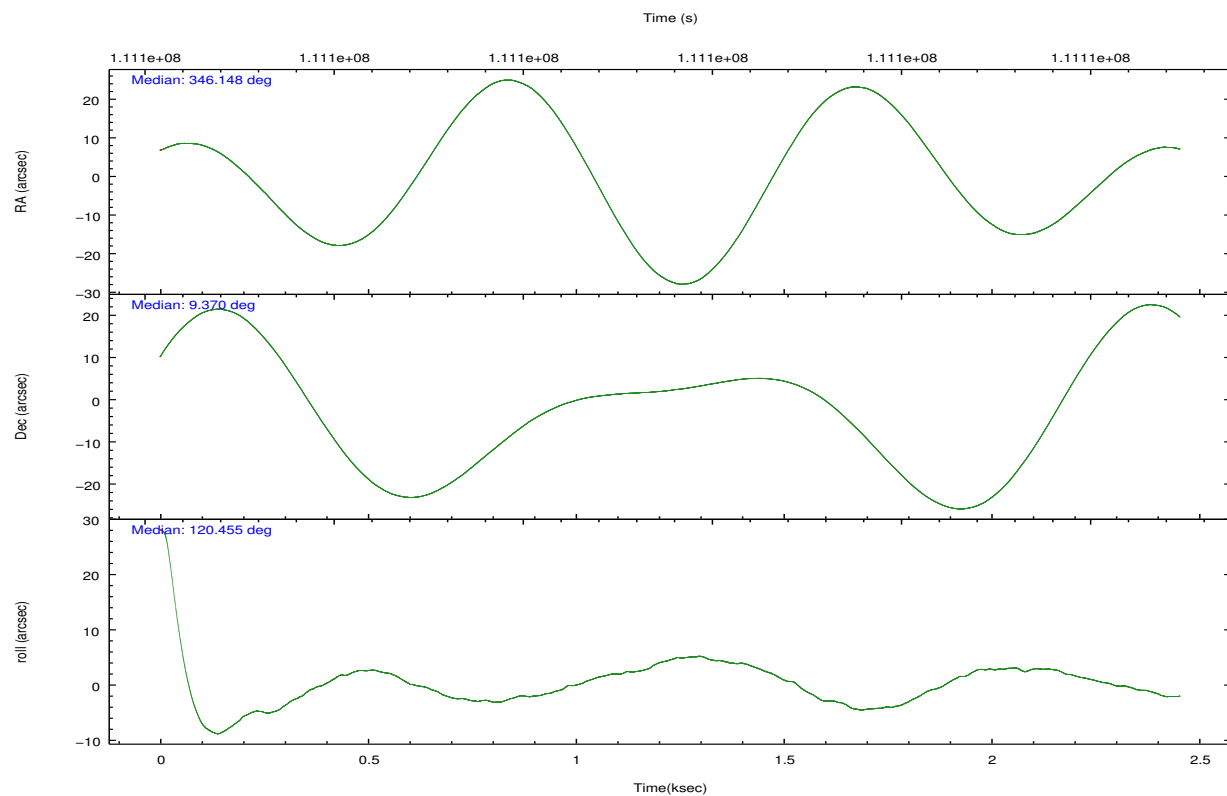
	segment 1	segment 2	segment 3
level 1 events	81634	79835	82601
rejected events	10082	9935	10264
rejected %	12%	12%	12%

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	346.173998	346.1480435153653			
[deg] Pointing Dec	9.355476	9.369019860173546			
[deg] Pointing Roll	120.393405	120.4651683206529			
[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)	111103362.184000	111102985.73678			
Observation start date	2001-07-09T22:01:38	2001-07-09T21:56:25			
[s] Observation end time (MET)	111105612.184000	111105746.06188			
Observation end date	2001-07-09T22:39:08	2001-07-09T22:42:26			

2.3 Aspect



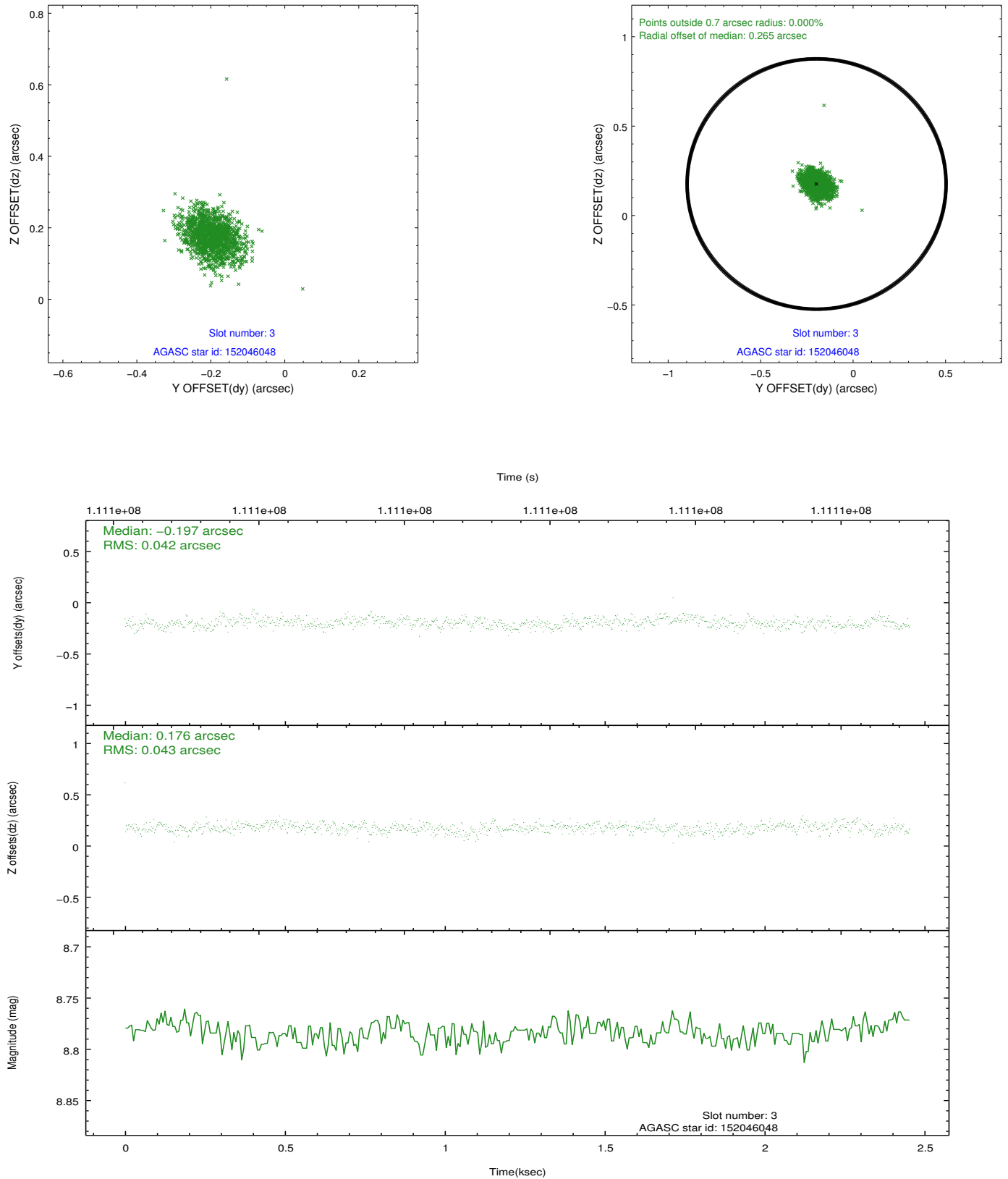


Slot Statistics

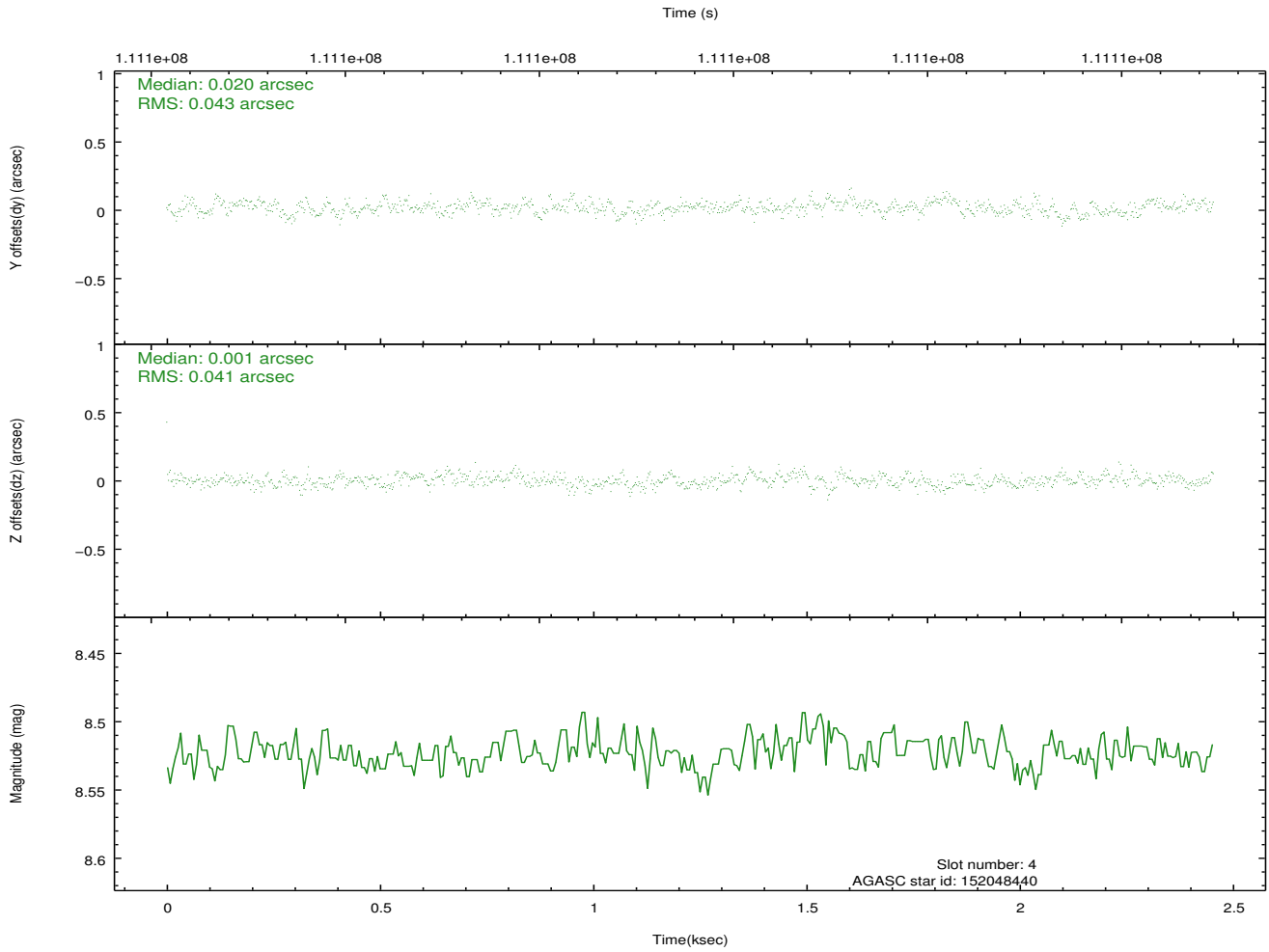
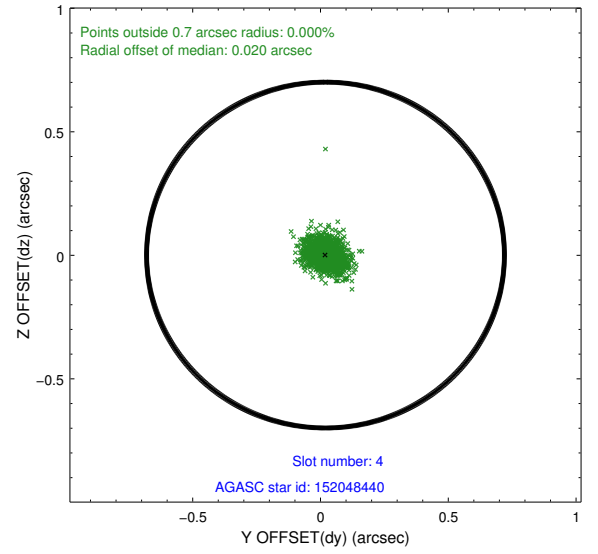
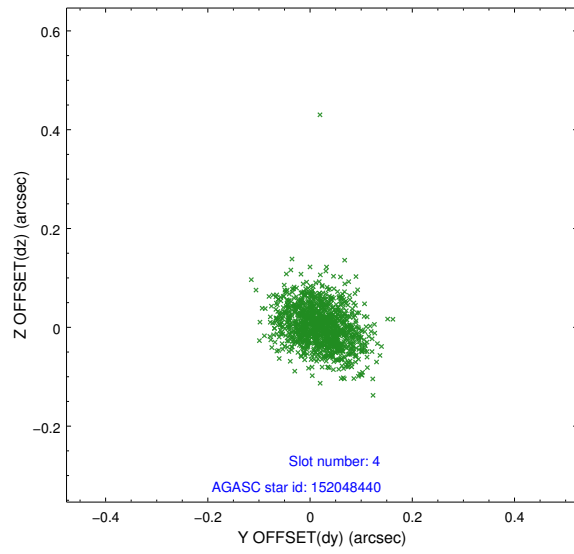
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	6.98	599	0.123	-0.149	0.010	0.022	0.000000	0.000000	-1157.76	-454.32
1	FID	HRC-S-3	7.00	599	0.172	-0.050	0.009	0.022	0.000000	0.000000	-1162.41	574.55
2	FID	HRC-S-4	6.92	599	0.092	-0.097	0.007	0.014	0.000000	0.000000	1238.49	578.87
3	GUIDE	152046048	8.78	1198	-0.197	0.176	0.063	0.100	346.265854	9.604114	605.93	-731.94
4	GUIDE	152048440	8.52	1197	0.020	0.001	0.062	0.100	346.200519	9.070077	-934.65	439.61
5	GUIDE	152051496	8.89	1198	0.060	-0.137	0.099	0.158	345.877098	8.806843	-1171.19	1912.06
6	GUIDE	152055208	9.18	1198	0.092	-0.311	0.116	0.181	345.804159	8.661169	-1492.08	2402.57
7	GUIDE	152046384	9.41	1195	0.014	0.274	0.082	0.133	346.457953	9.242143	-864.31	-660.06

2.4 Star Slots

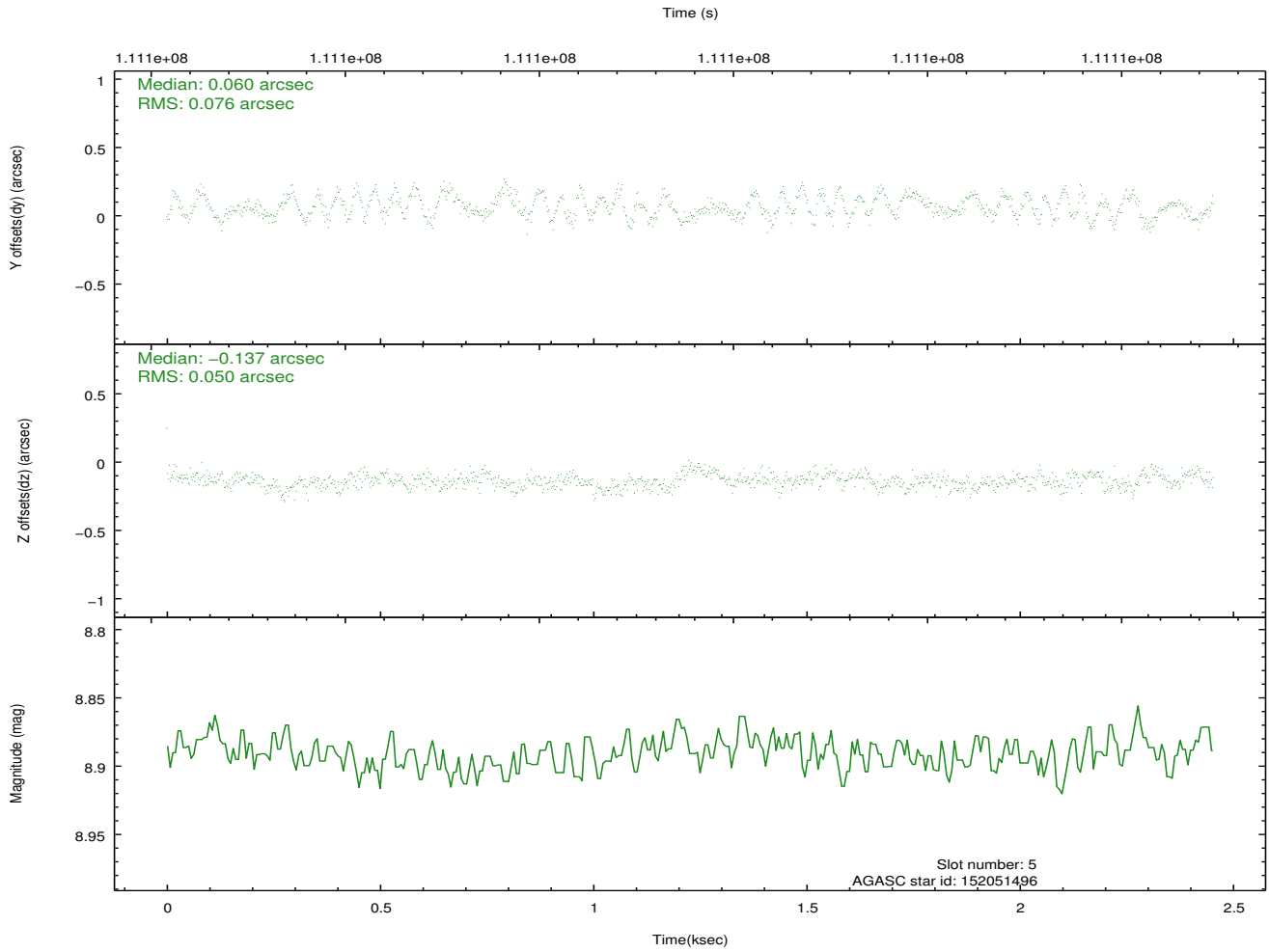
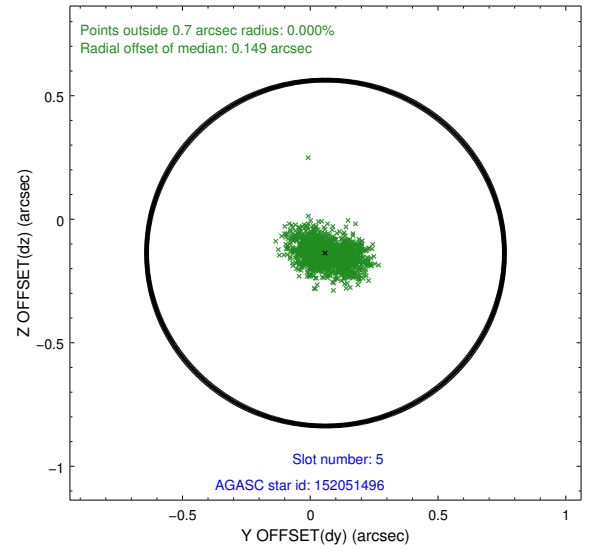
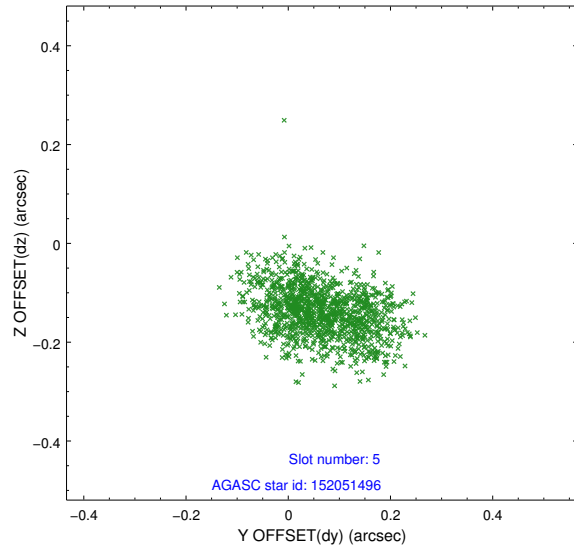
2.4.1 Slot 3



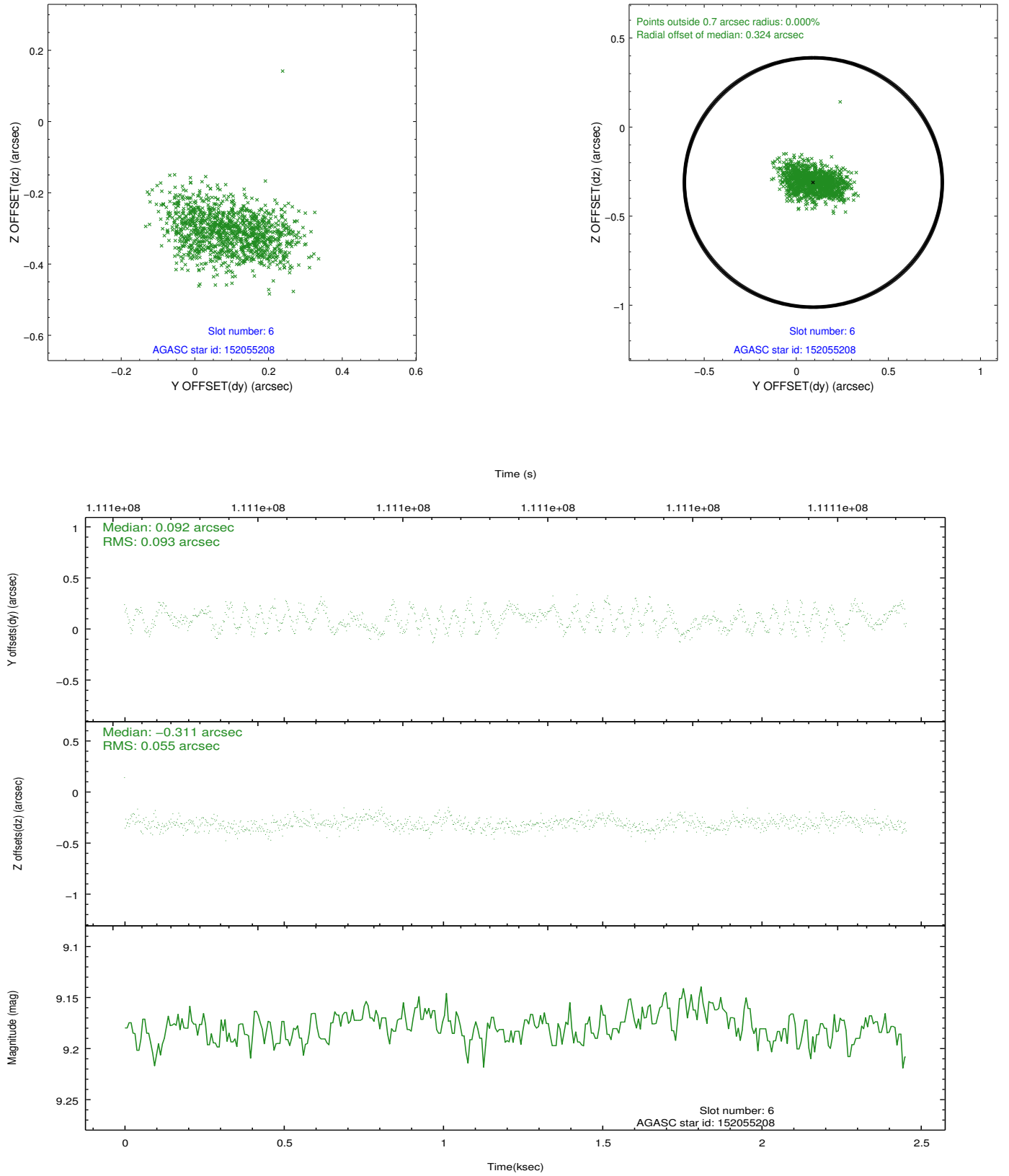
2.4.2 Slot 4



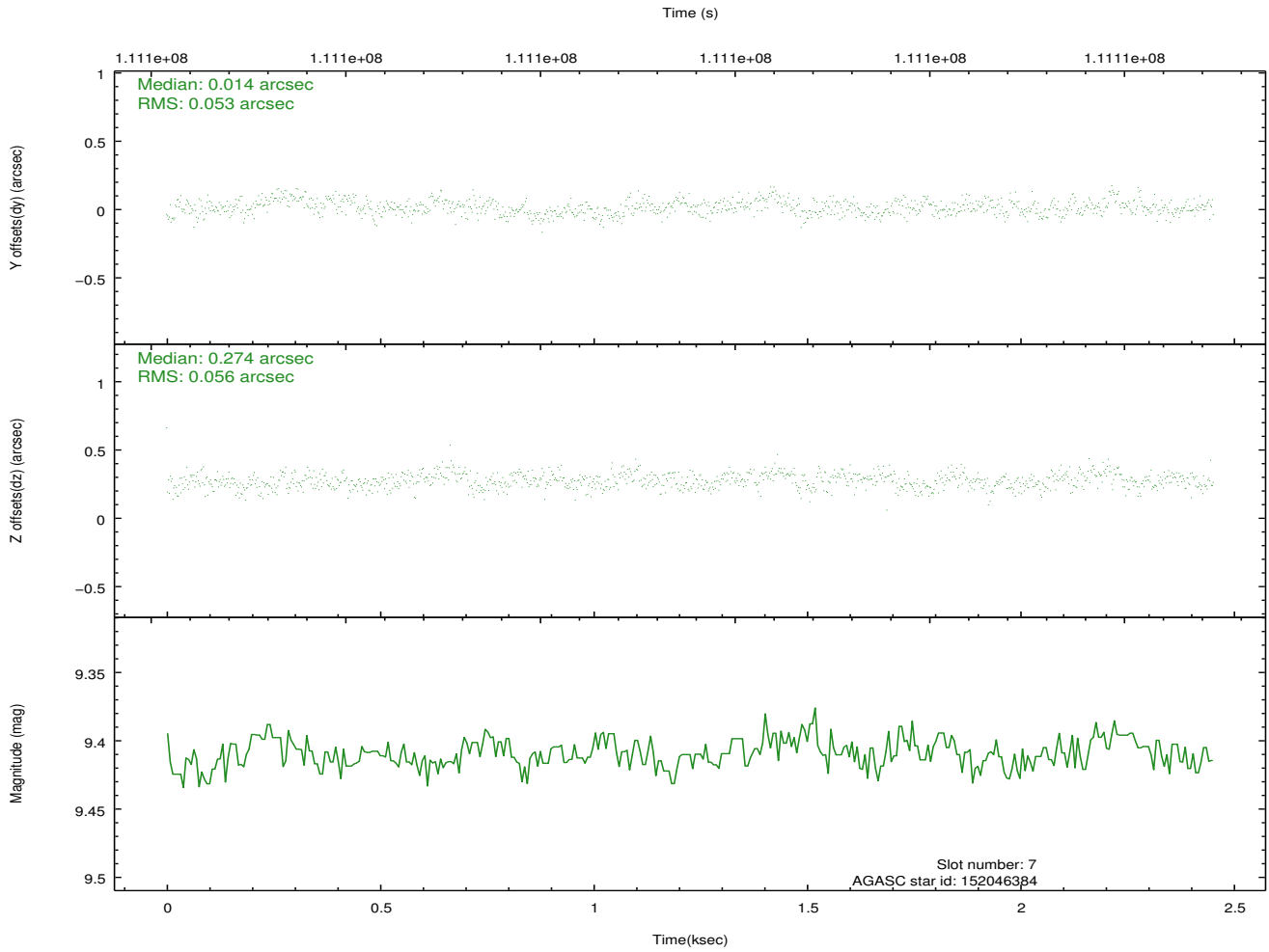
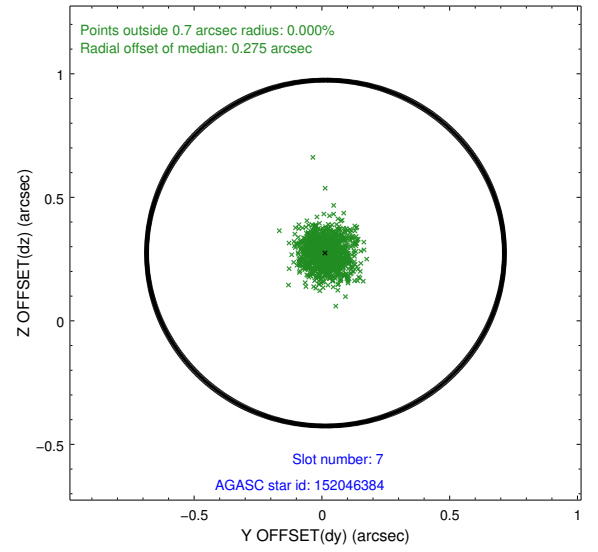
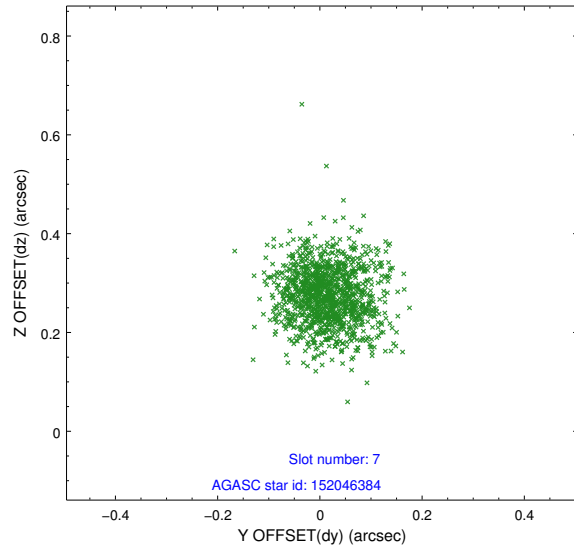
2.4.3 Slot 5



2.4.4 Slot 6

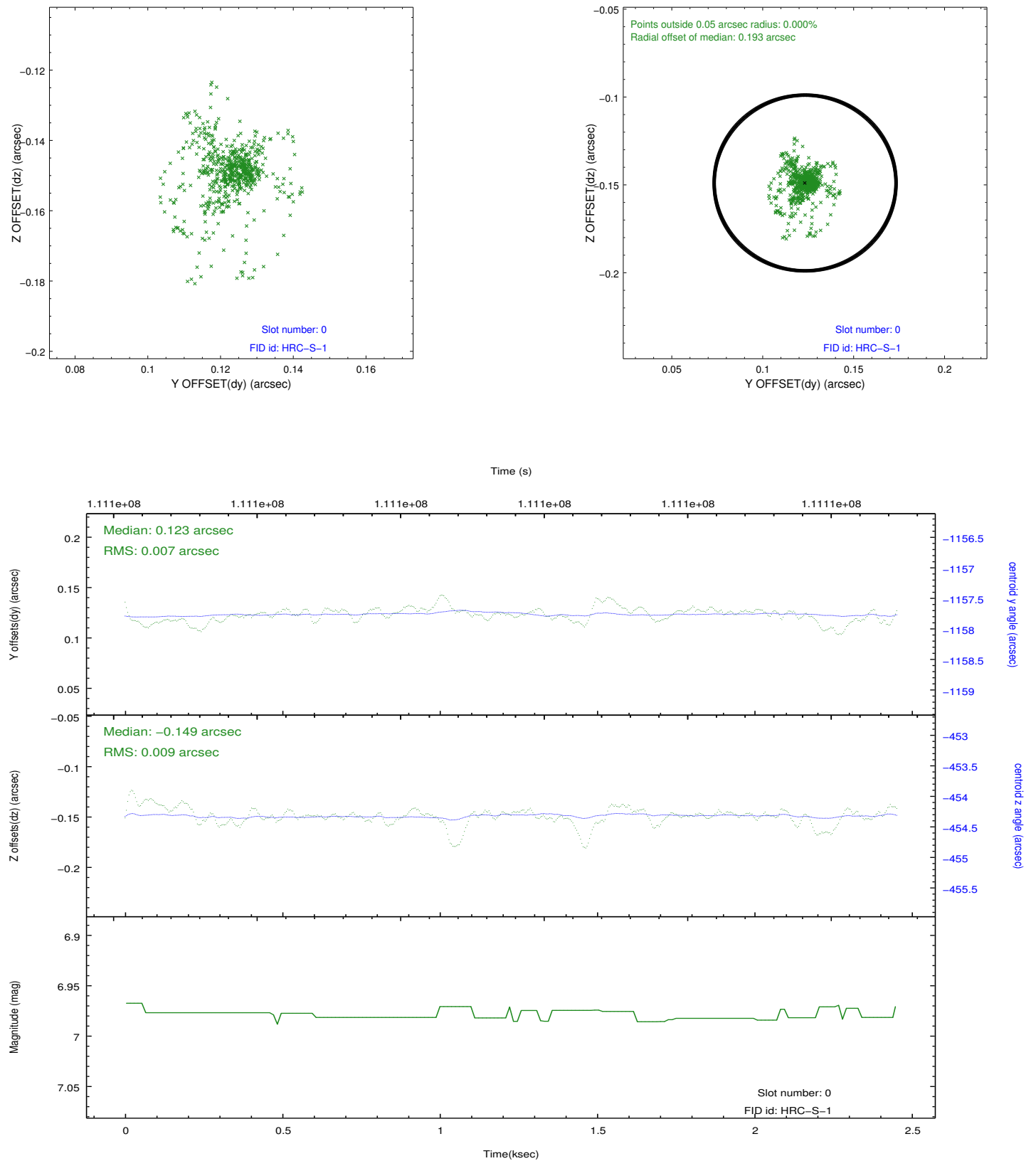


2.4.5 Slot 7

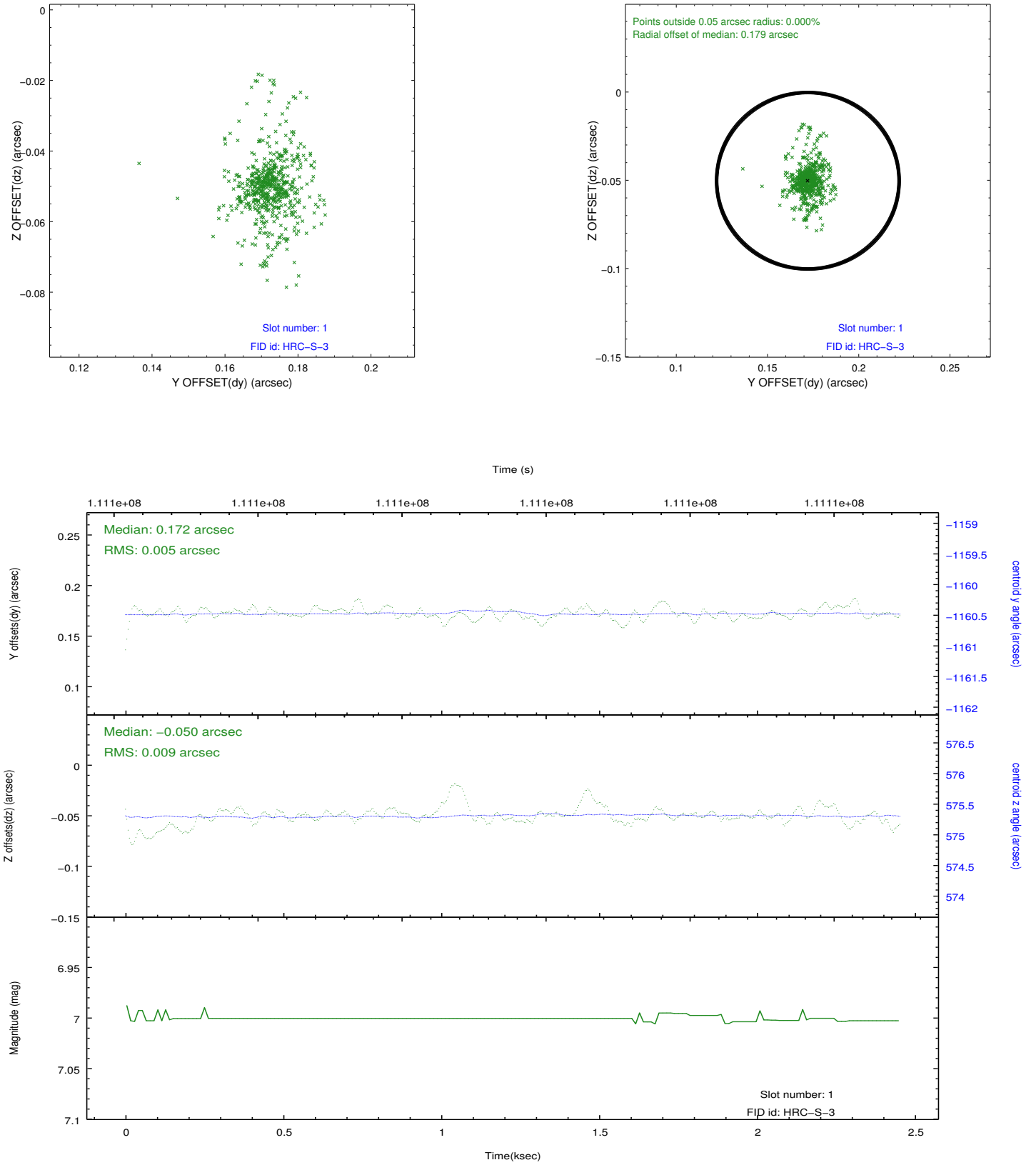


2.5 FID Slots

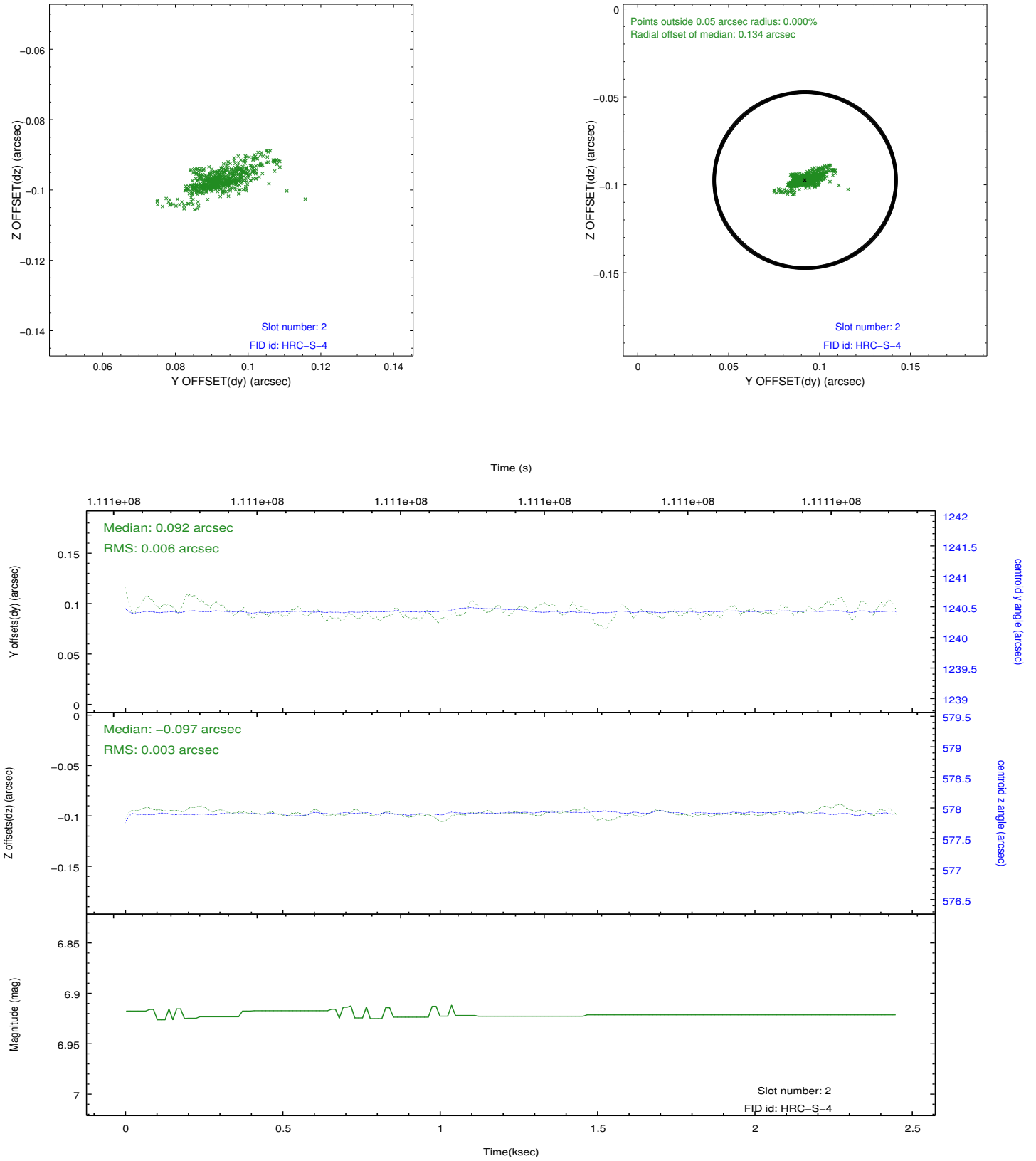
2.5.1 Slot 0



2.5.2 Slot 1

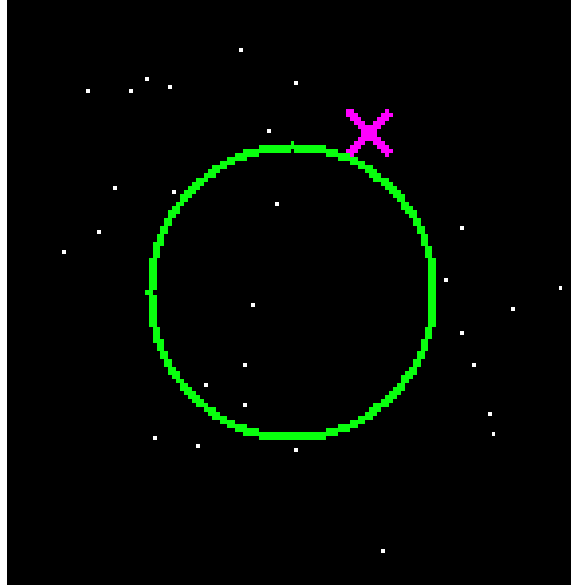


2.5.3 Slot 2

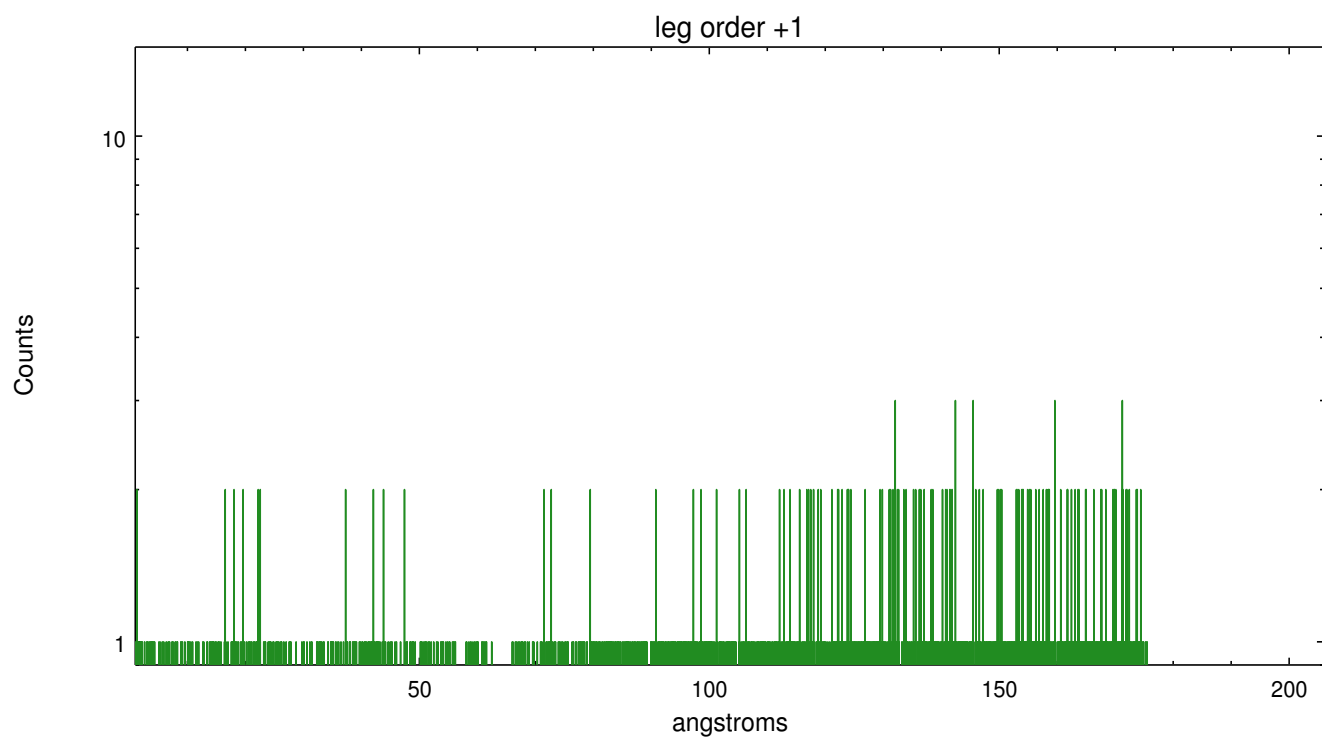
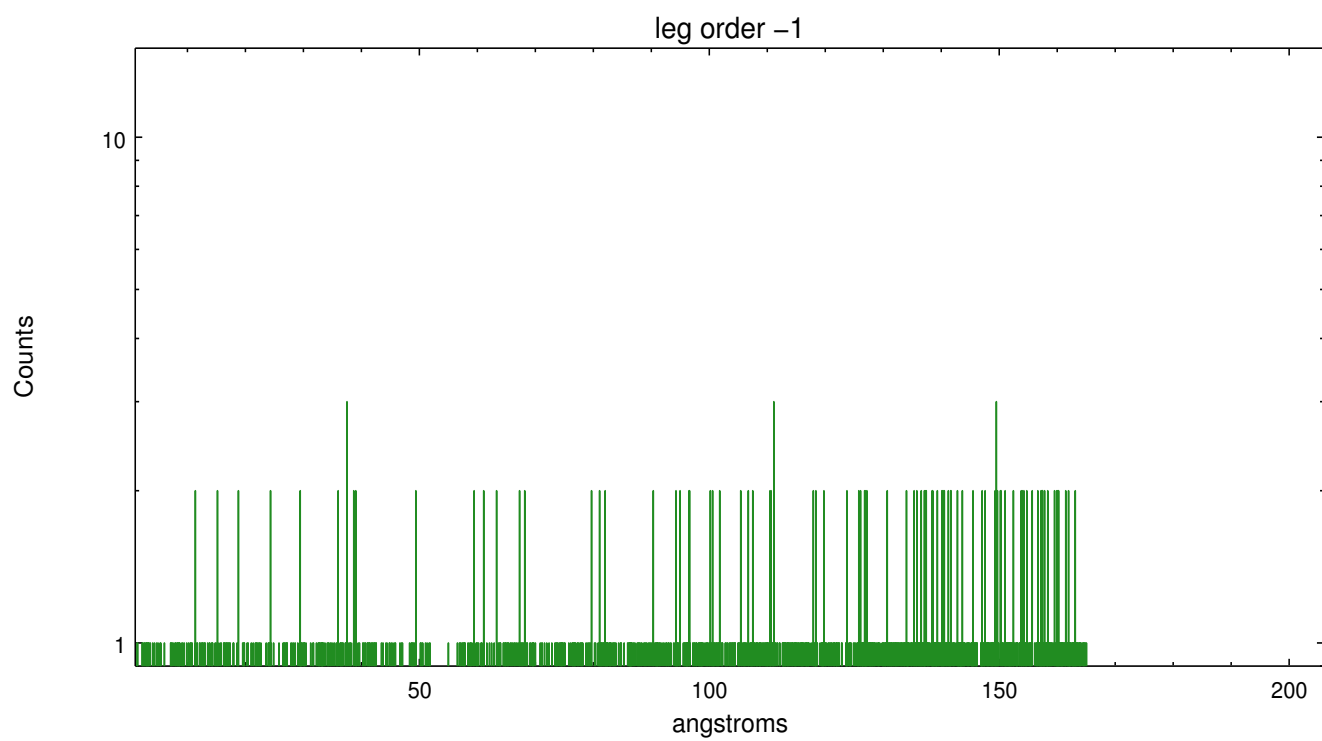


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.446

A.2 Comments

This is an observation of a moving target. Event positions are in the reference from of Chandra, not of the comet. Users should run a software tool such as sso_freeze to reposition the events in the reference from of the comet, then run normal data analysis tools such as tgdetect and spectral extraction.

===

Standard software processing technique using the tool tgdetect failed to determine an accurate position for the zeroth order for this observation. The target is moving through the field of view during the observation. The processing software defaulted to the coordinates supplied by the user for the position of the zeroth order for the grating spectral extraction. Spectra products from this processing, which does not include sso_freeze, are not useful.

Charge time for this ObsId remains at previous value of 2.446 ks, although with the current processing the charge time would be 2.403 ks.