

V&V Reference Report

L2 ASCDS Version : 10.0.1

Observation 15420 - L2 Version 3
Chandra X-Ray Center

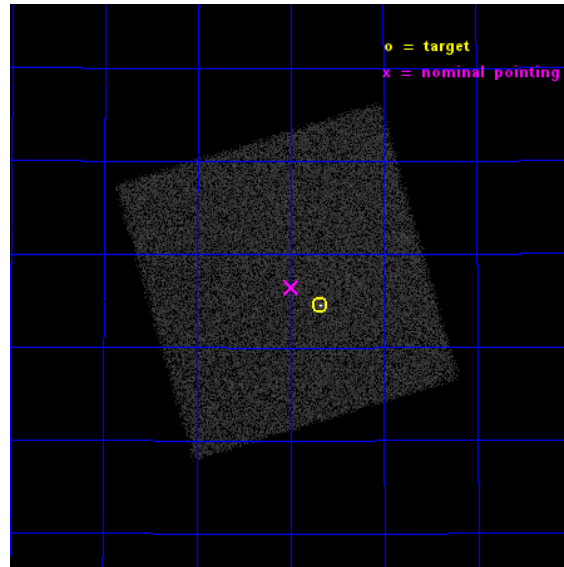
L2 Processing Date : Dec 6 2014

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1 Front

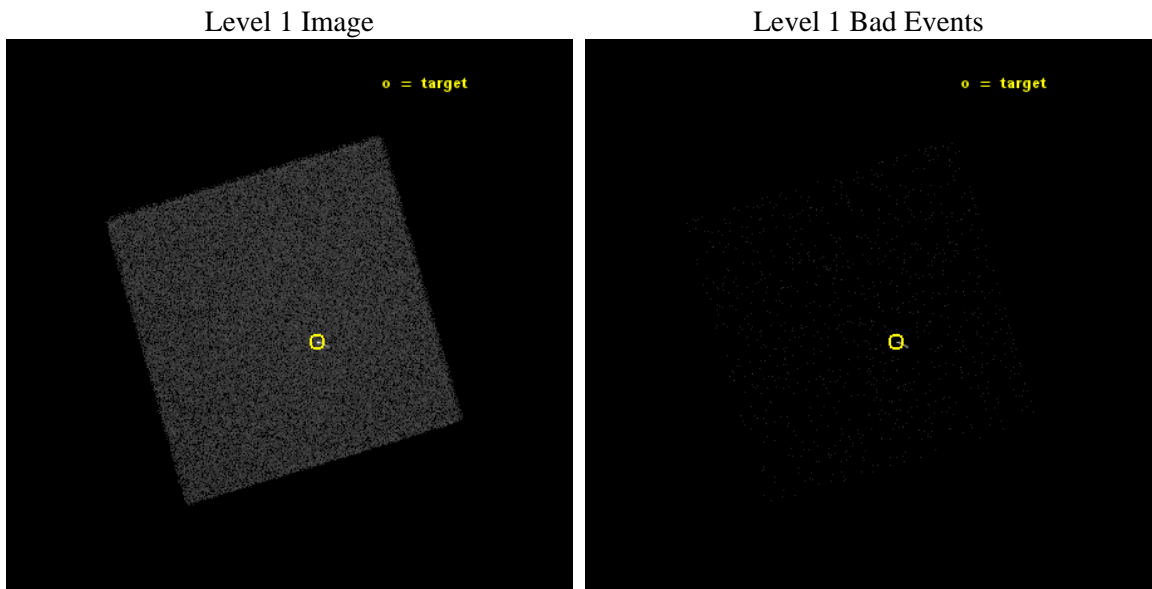
seq_num	291099	Sequence number
obs_id	15420	Observation id
title	AO-14 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.24721676865	Nominal RA [deg]
dec_nom	45.774538582808	Nominal Dec [deg]
roll_nom	208.52873956474	Nominal Roll [deg]
revision	3	Processing version of data
ontime	1184.1313146949	[s]
livetime	1174.9266498785	Ontime multiplied by DTCOR
l2events	72724	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	1000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	1184.1313146949	[s]
caldbver	4.6.4	 	l1events	123820	Number of level 1 events
date	2014-12-06T12:12:37	Date and time of file creation			
revision	3	Processing version of data			

2.1.3 Events

Level 1 Events

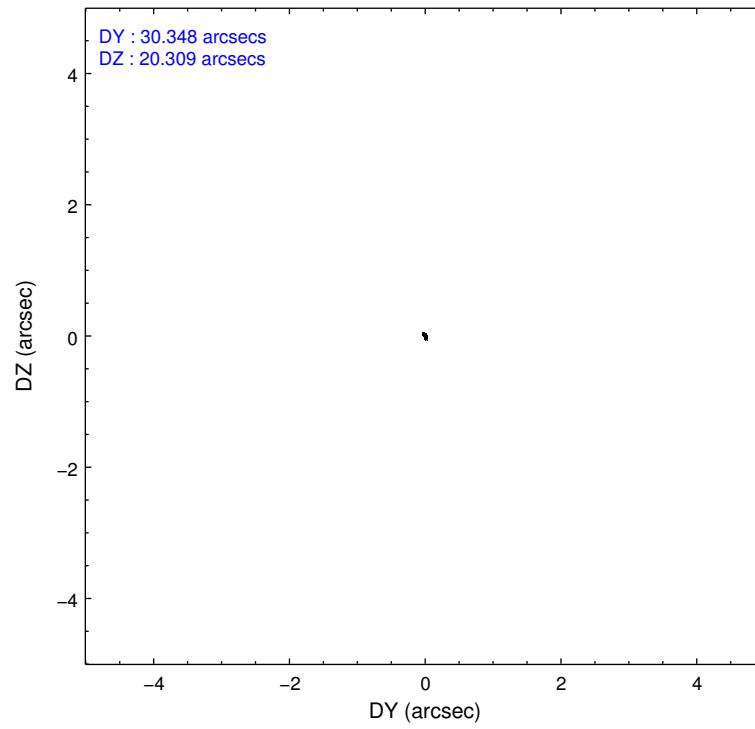
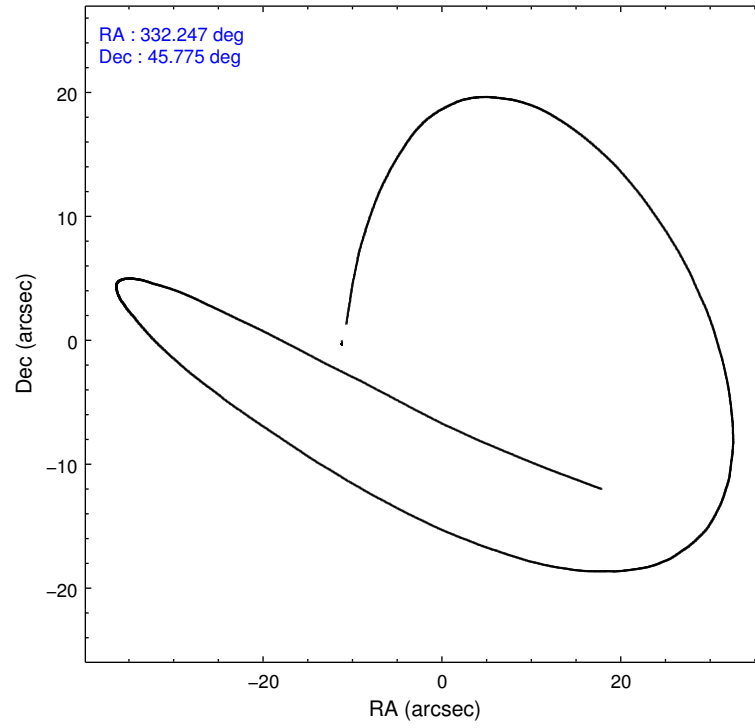
	segment 0
level 1 events	123820
rejected events	26799
rejected %	21%

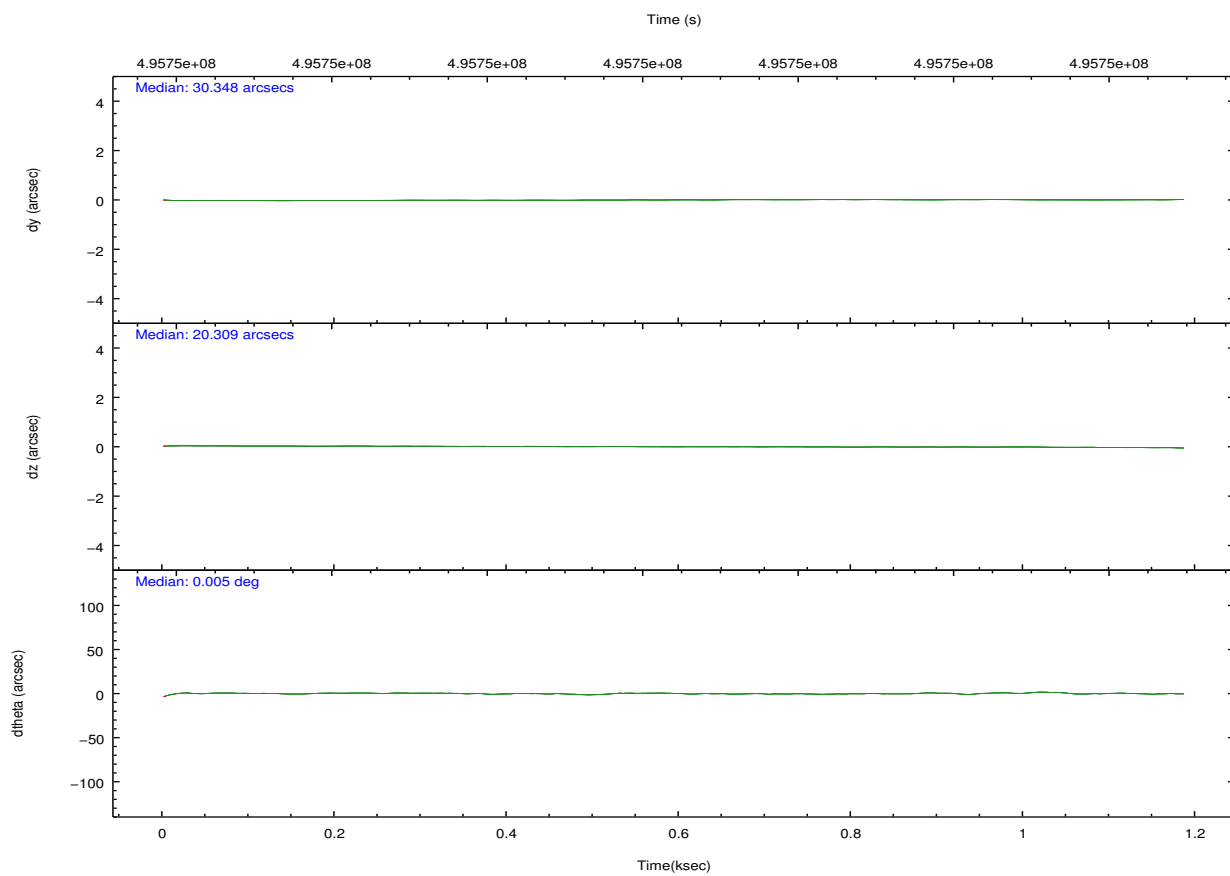
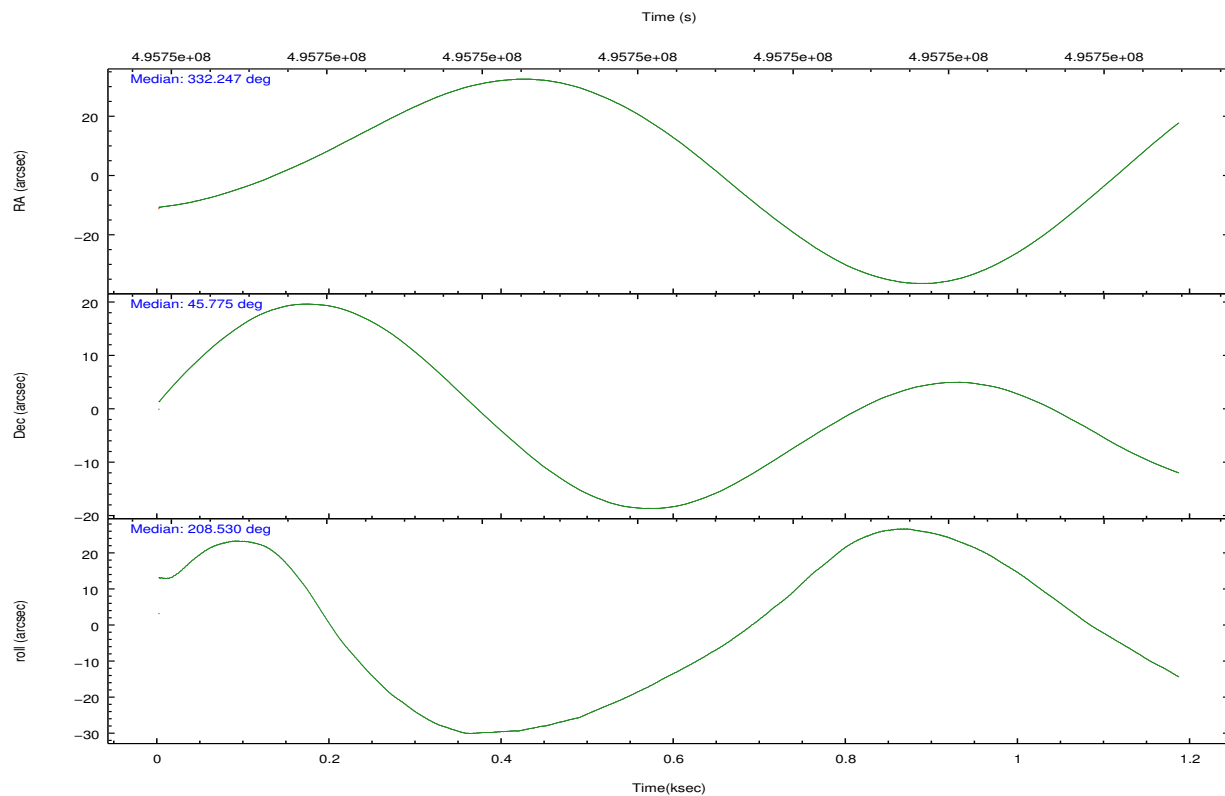
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	332.267426	332.2472167686474
[deg] Pointing Dec	45.797276	45.77453858280818
[deg] Pointing Roll	208.609849	208.5287395647402
[mm] SIM focus pos	-1.040293	-1.038866356238299
[mm] SIM defocus	0	0.001426264420575141
[mm] SIM translation stage pos	126.985494	126.9854943052878
[mm] SIM translation stage offset	0	-5.413686238853188e-06
[s] Observation start time (MET)	495751835.184000	495751459.42922
Observation start date	2013-09-16T20:49:28	2013-09-16T20:44:19
[s] Observation end time (MET)	495752835.184000	495752969.2543
Observation end date	2013-09-16T21:06:08	2013-09-16T21:09:29

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

2.3 Aspect



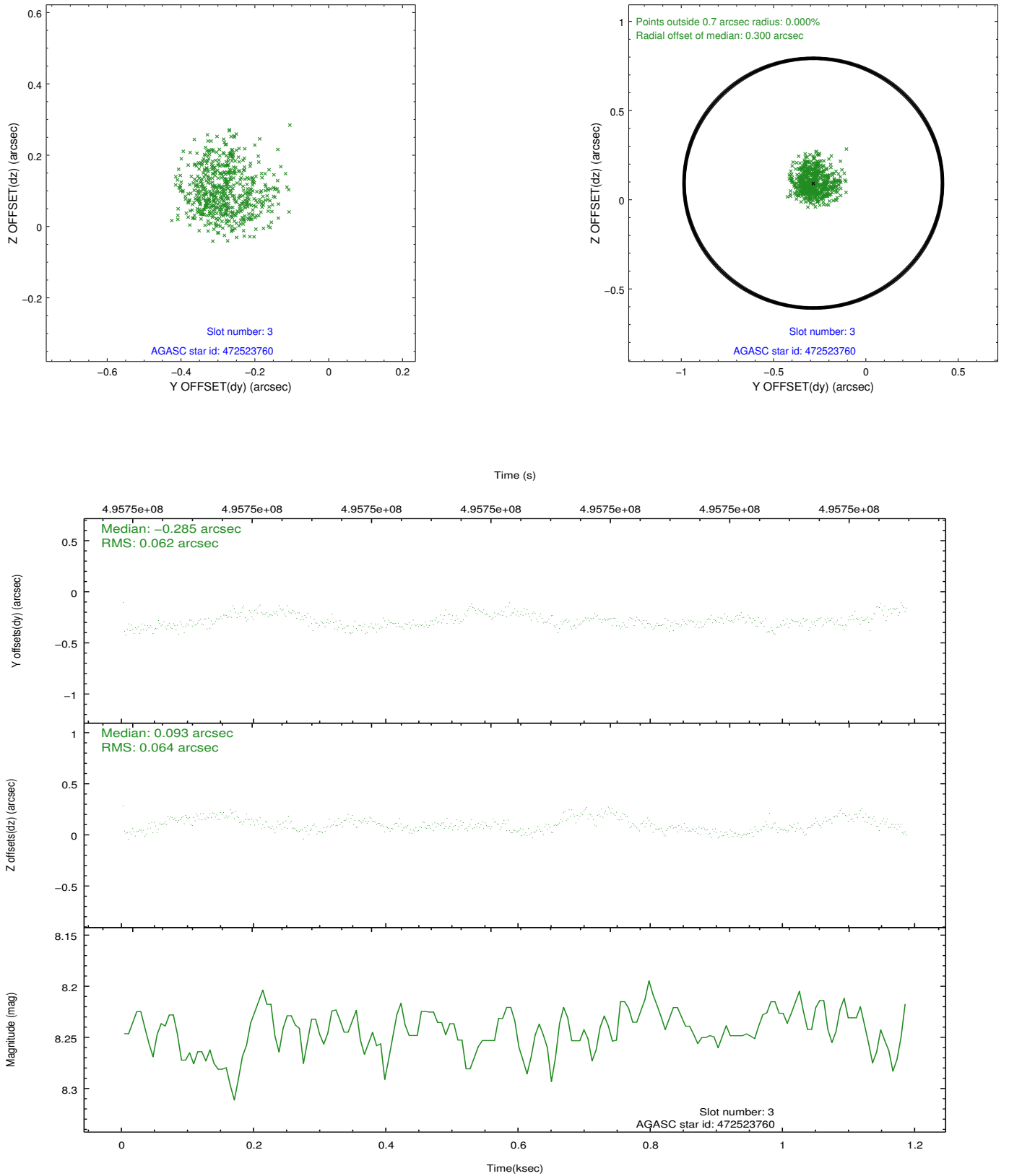


Slot Statistics

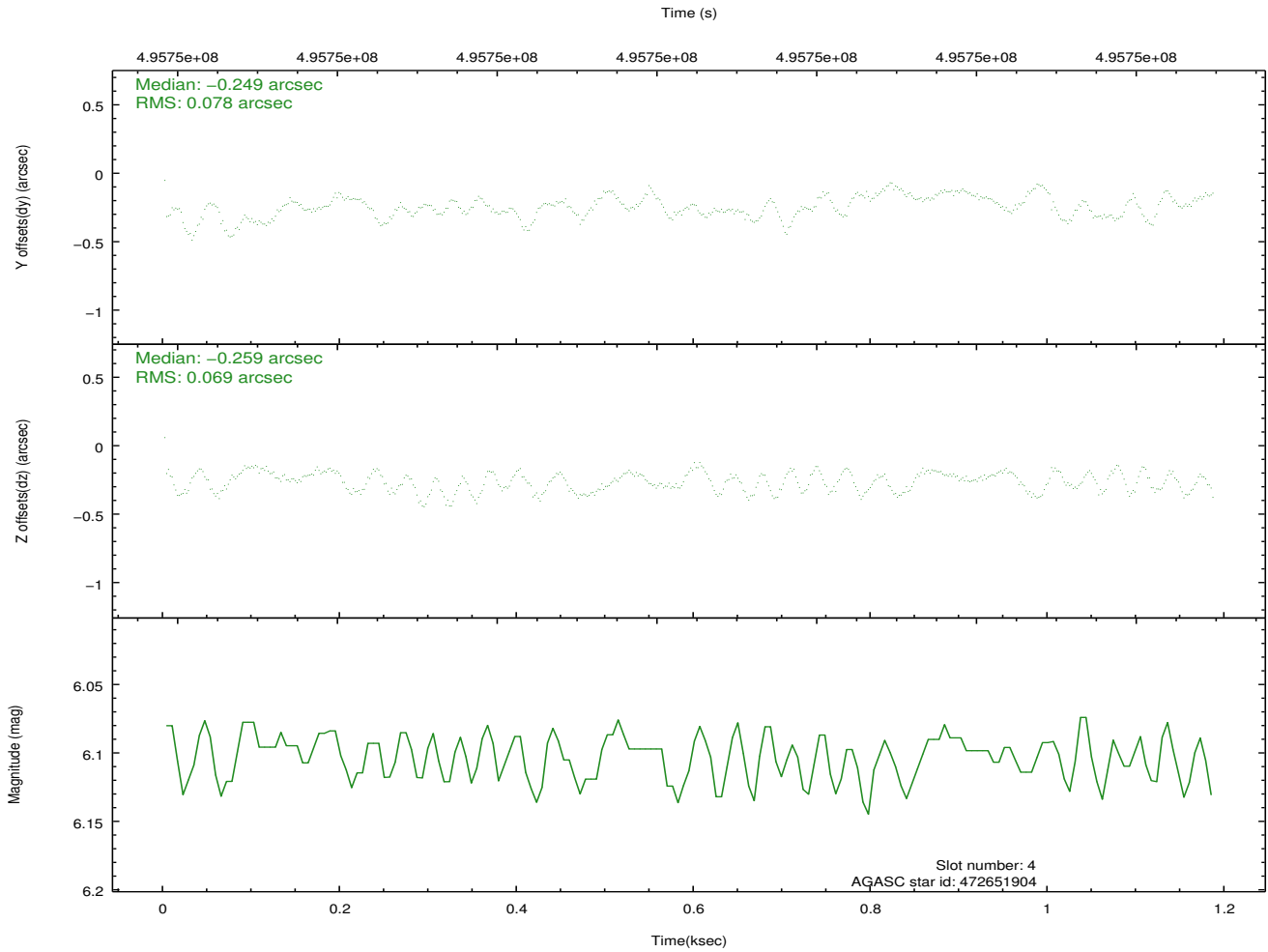
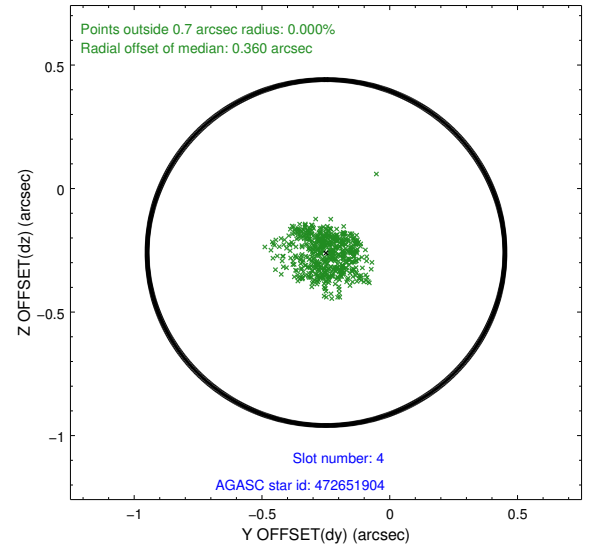
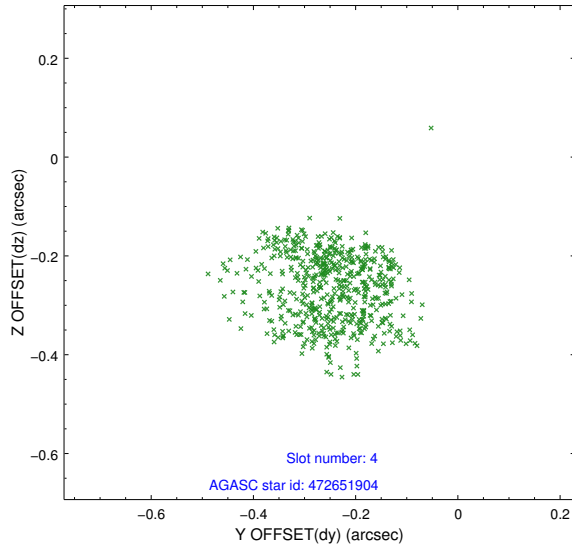
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	7.01	290	-0.139	-0.009	0.009	0.014	0.000000	0.000000	-786.63	-1308.66
1	FID		HRC-I-2	7.05	290	0.224	-0.043	0.007	0.011	0.000000	0.000000	823.65	-1314.69
2	FID		HRC-I-3	7.11	289	0.033	-0.038	0.008	0.012	0.000000	0.000000	-1212.22	991.30
3	GUIDE	used	472523760	8.24	579	-0.285	0.093	0.098	0.150	331.645363	45.403260	2057.00	490.47
4	GUIDE	used	472651904	6.10	579	-0.249	-0.259	0.114	0.175	332.170077	45.742257	313.57	59.67
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	472665256	9.00	579	0.348	0.299	0.116	0.165	332.808125	46.195041	-1869.40	-612.13
7	GUIDE	used	472655152	9.43	575	0.188	-0.135	0.178	0.276	332.504239	45.862991	-637.59	78.32

2.4 Star Slots

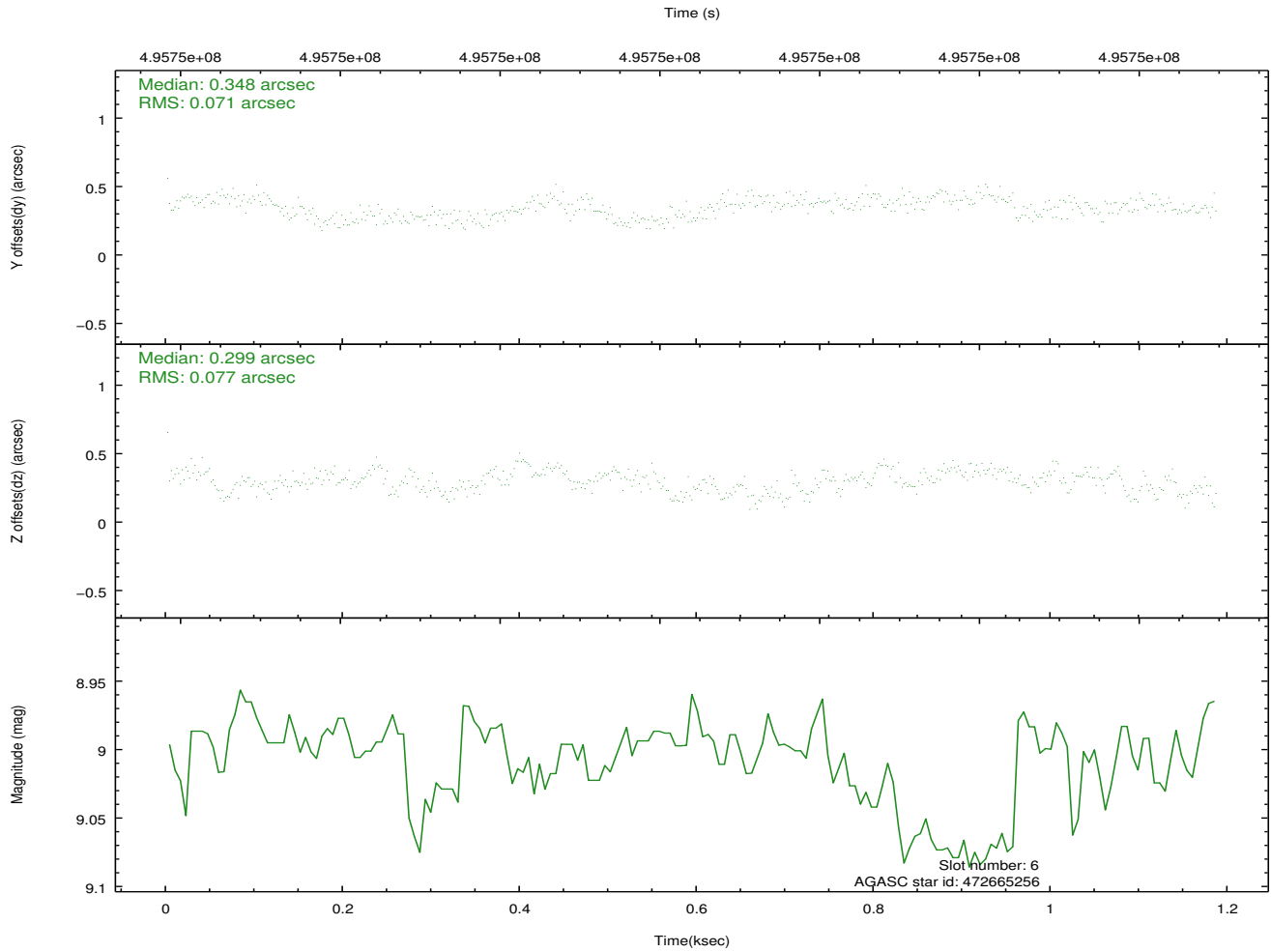
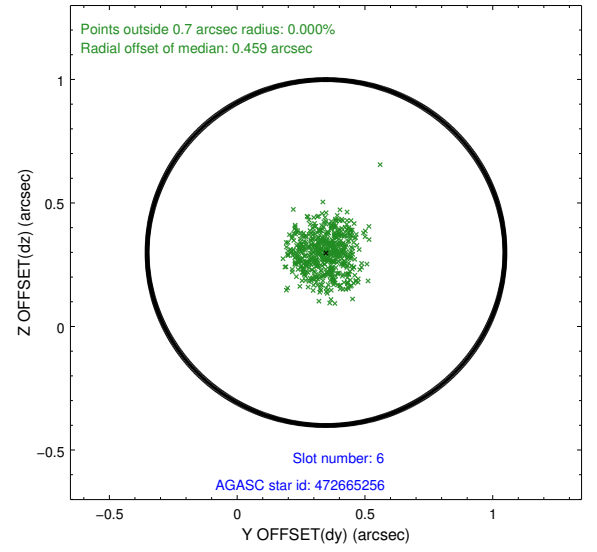
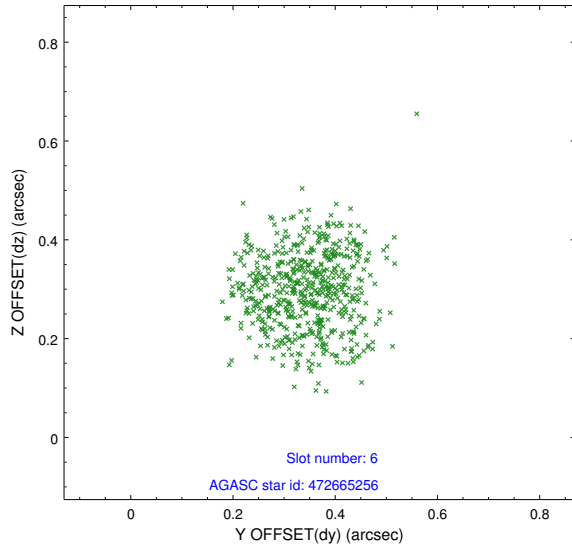
2.4.1 Slot 3



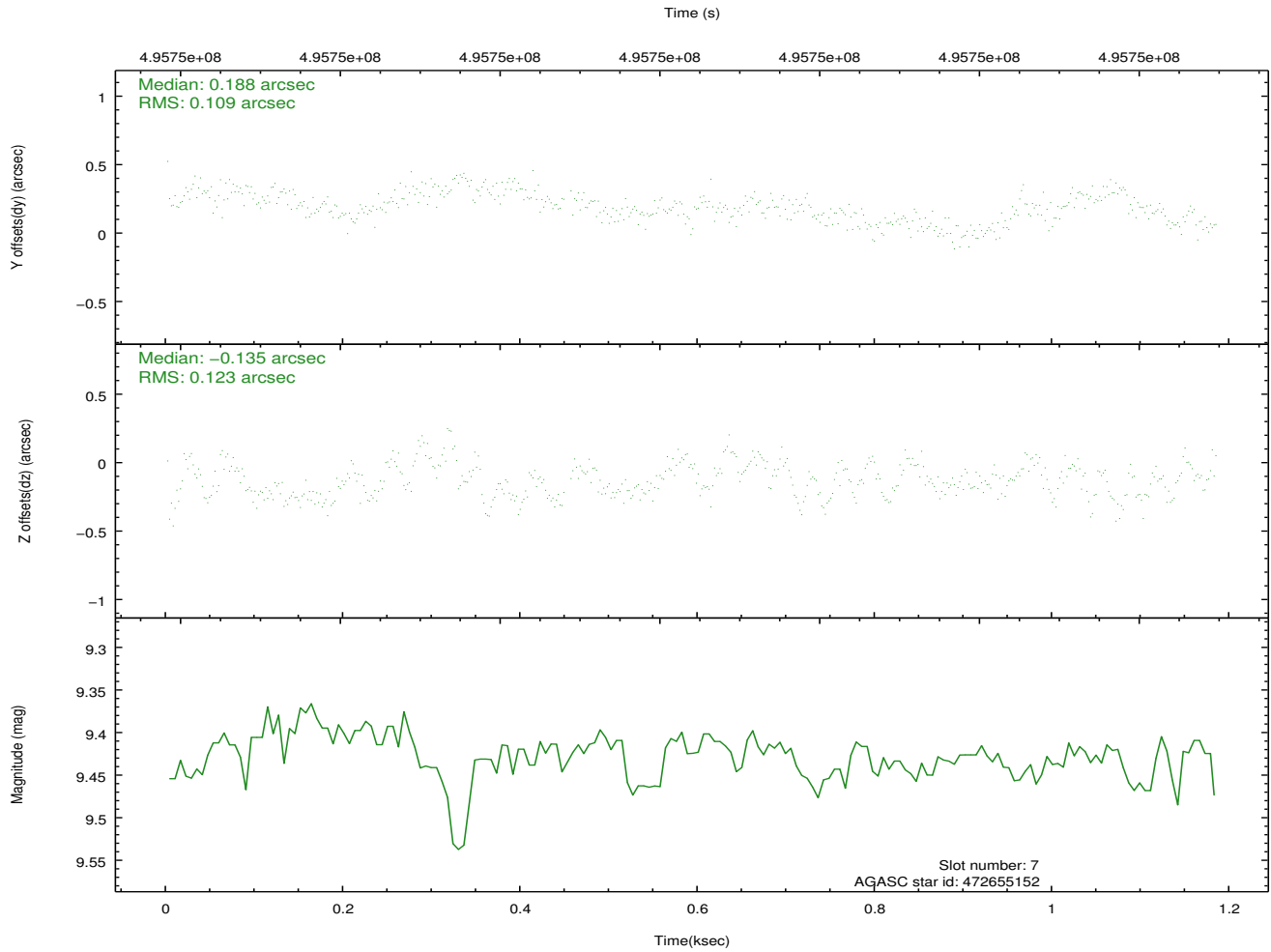
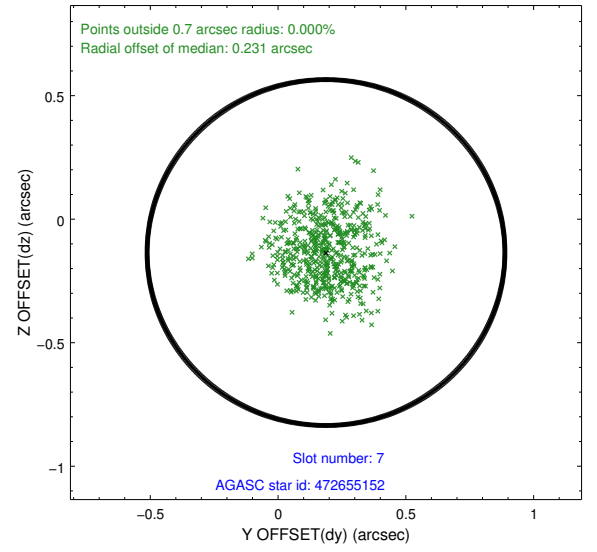
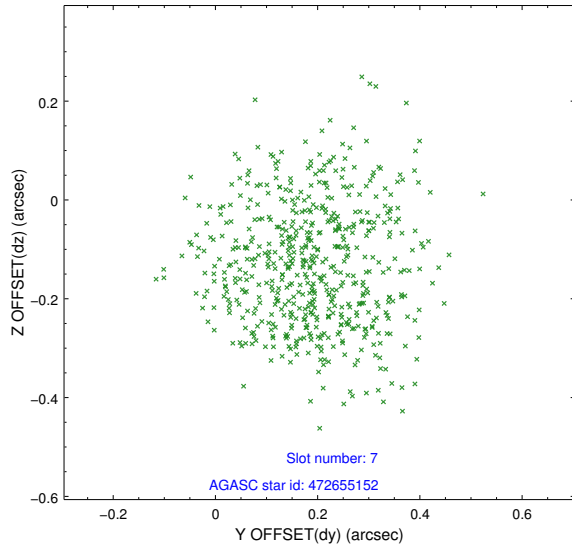
2.4.2 Slot 4



2.4.3 Slot 6

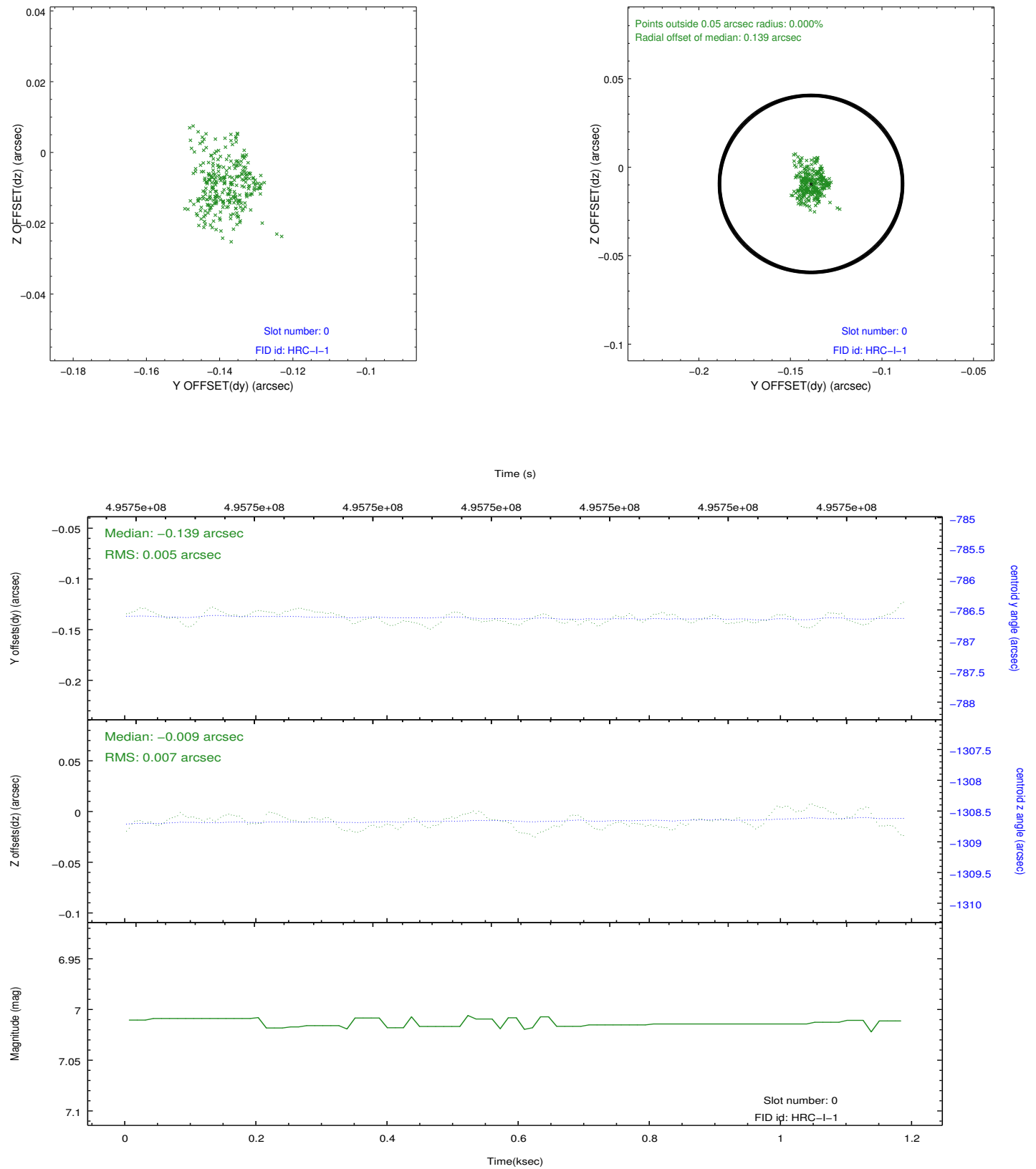


2.4.4 Slot 7

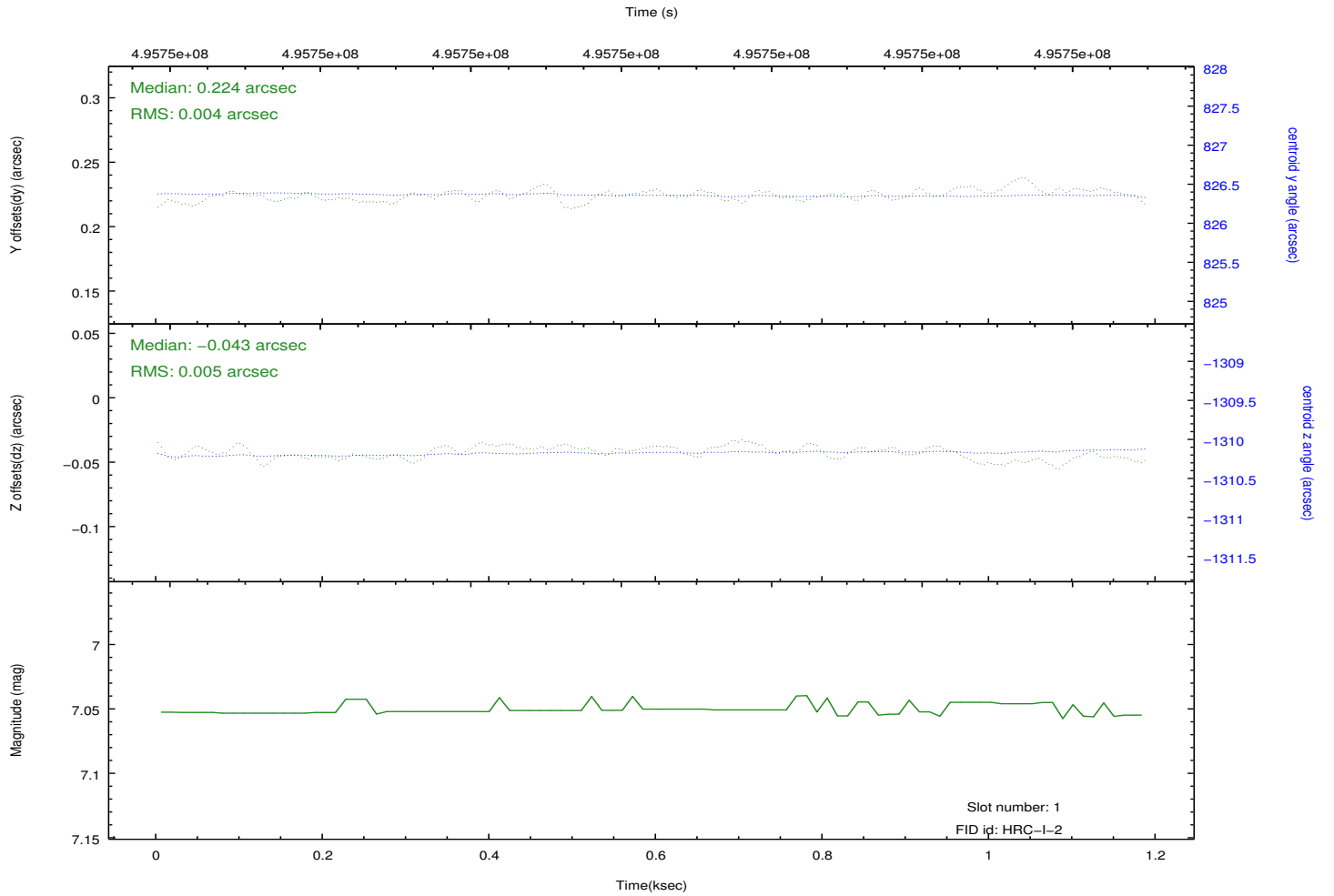
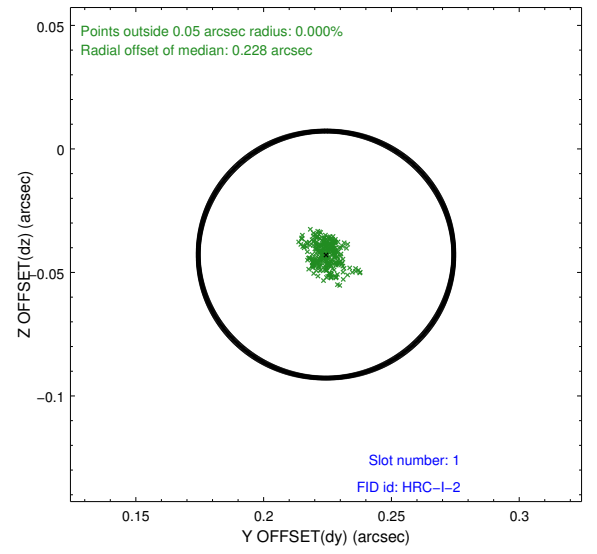
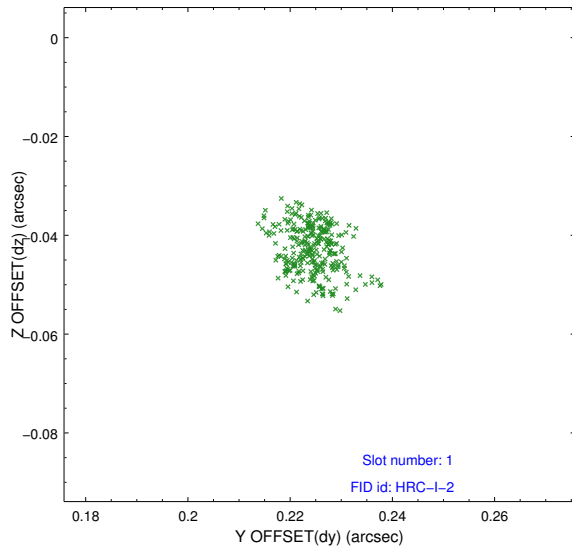


2.5 FID Slots

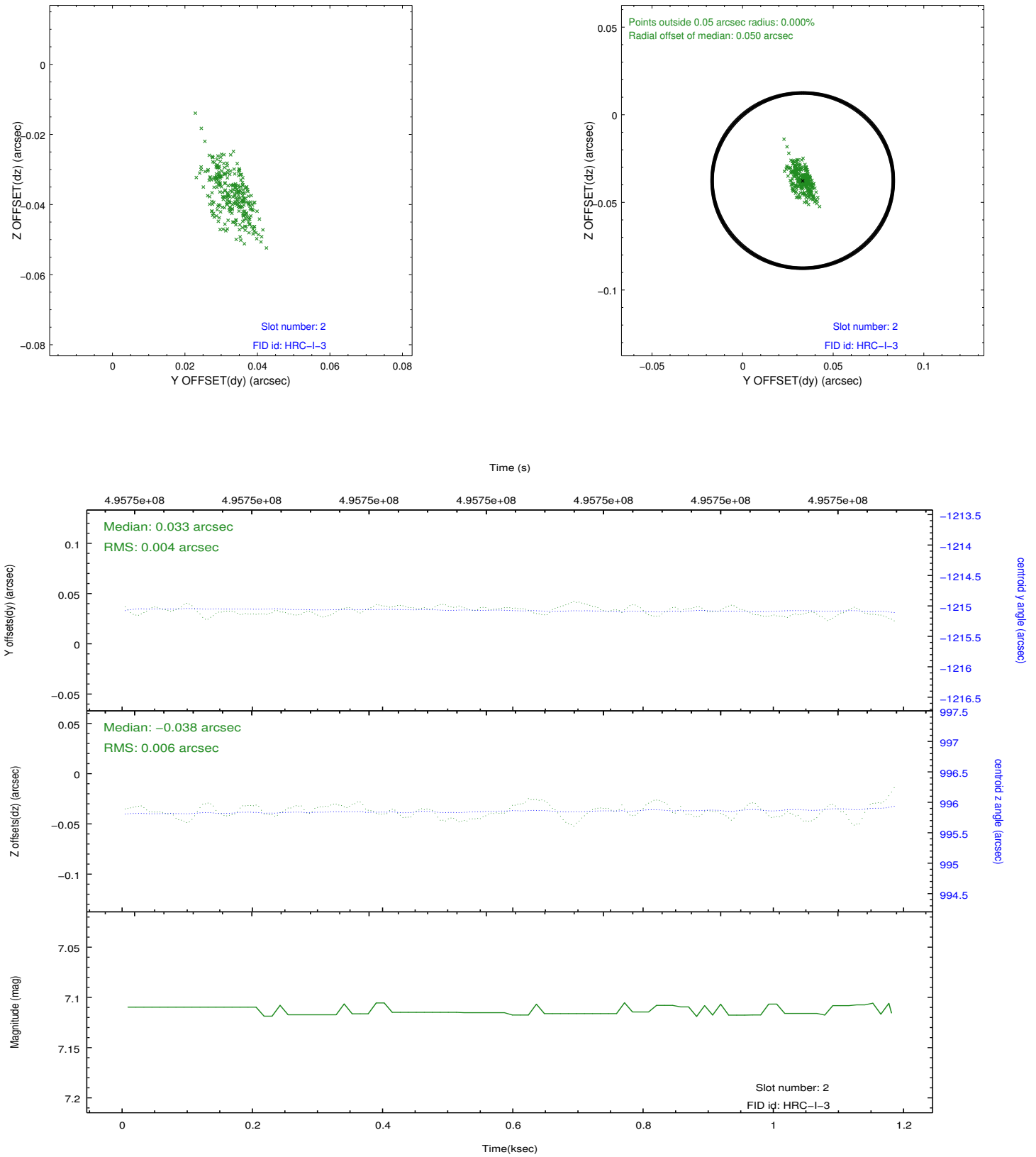
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1841313146949

A.2 Comments

The guide star in slot 5 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.