

V&V Reference Report

L2 ASCDS Version : 10.0.1

Observation 15438 - L2 Version 2
Chandra X-Ray Center

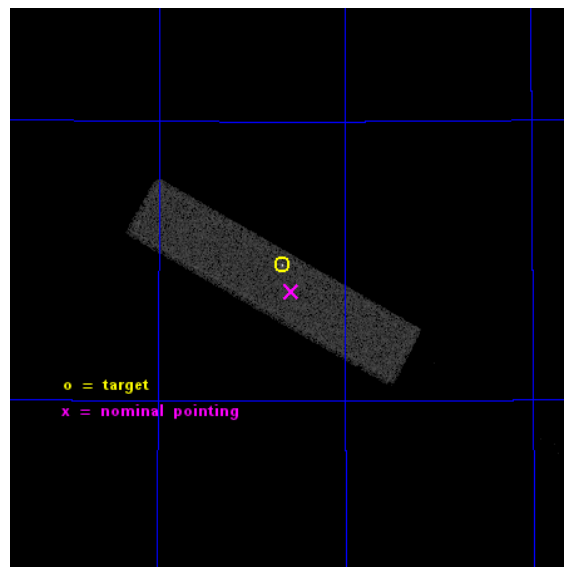
L2 Processing Date : Dec 6 2014

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
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

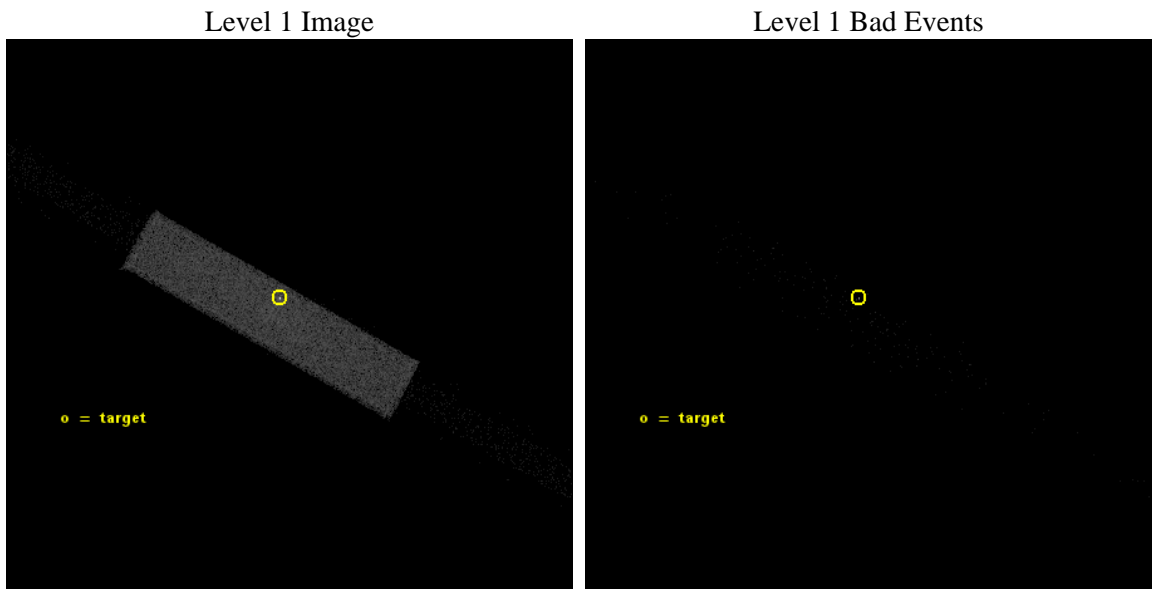
seq_num	291117	Sequence number
obs_id	15438	Observation id
title	AO-14 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.14385324073	Nominal RA [deg]
dec_nom	45.695405004372	Nominal Dec [deg]
roll_nom	208.77899756176	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1146.7188127041	[s]
livetime	1140.2113935713	Ontime multiplied by DTCOR
l2events	45957	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	1146.7188127041	[s]
caldbver	4.6.4	 	l1events	68982	Number of level 1 events
date	2014-12-06T11:25:38	Date and time of file creation			
revision	2	Processing version of data			

2.1.3 Events

Level 1 Events

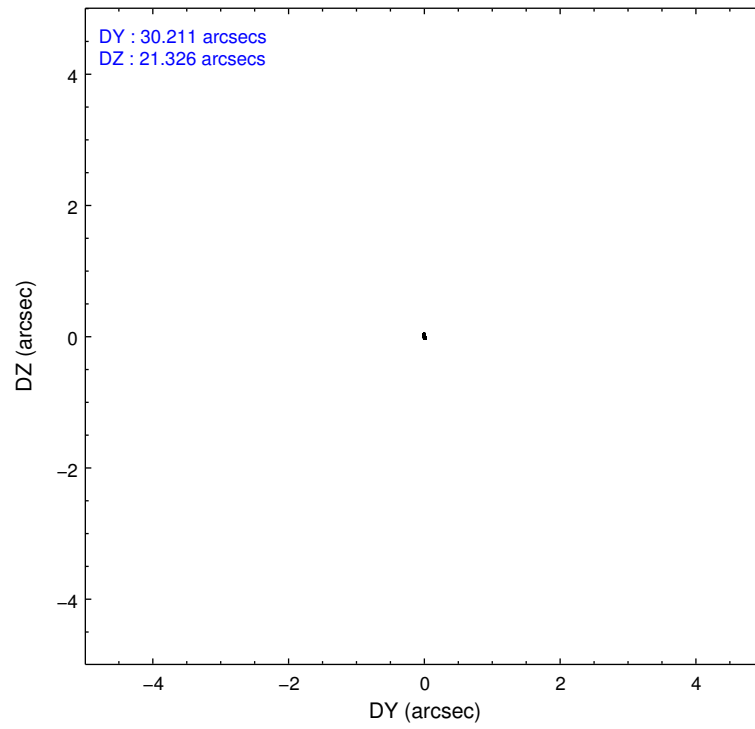
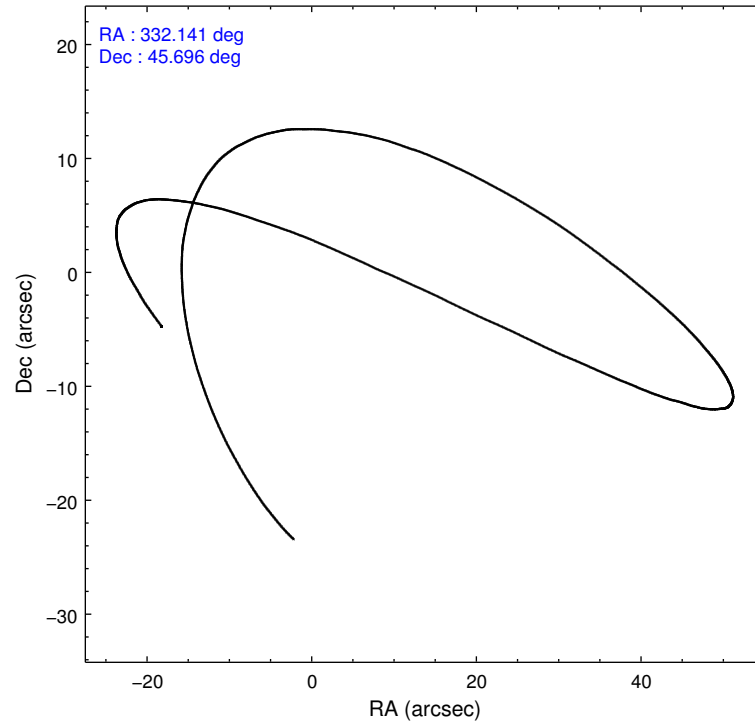
	segment 1	segment 2	segment 3
level 1 events	669	67664	649
rejected events	669	11542	643
rejected %	100%	17%	99%

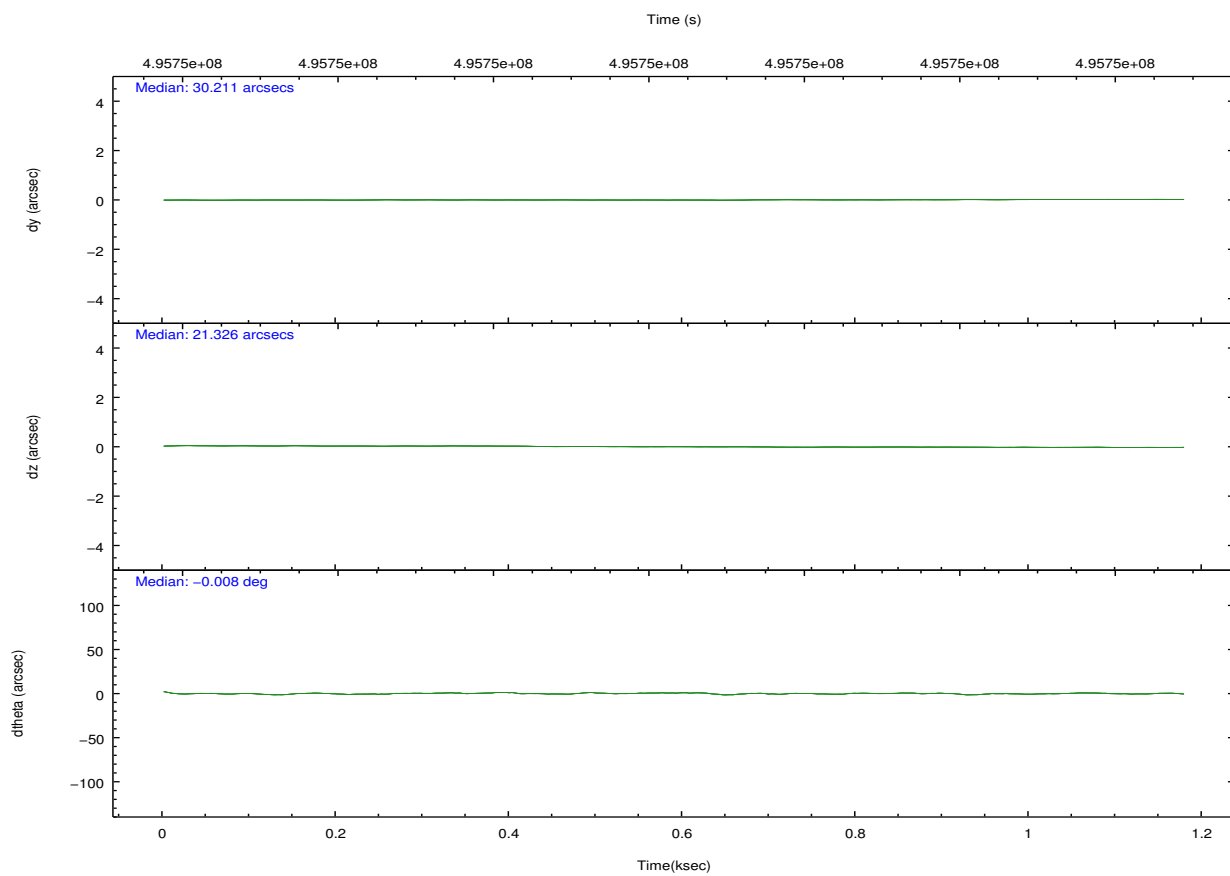
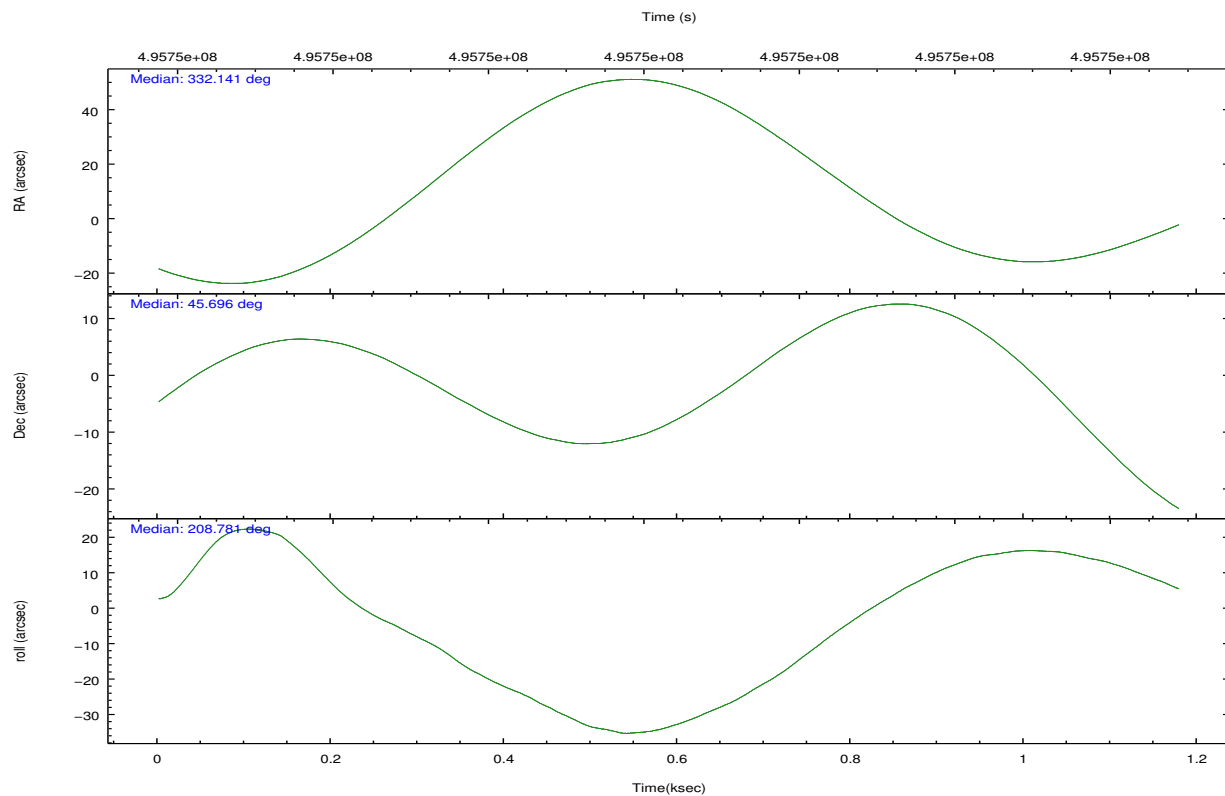
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	332.164562	332.143853240727
[deg] Pointing Dec	45.720081	45.69540500437163
[deg] Pointing Roll	208.696935	208.7789975617598
[mm] SIM focus pos	-1.533336	-1.526339935833849
[mm] SIM defocus	7.710433287538843e-07	0.006996703570447904
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	495747220.184000	495746844.87897
Observation start date	2013-09-16T19:32:33	2013-09-16T19:27:24
[s] Observation end time (MET)	495748220.184000	495748397.24155
Observation end date	2013-09-16T19:49:13	2013-09-16T19:53:17

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

2.3 Aspect



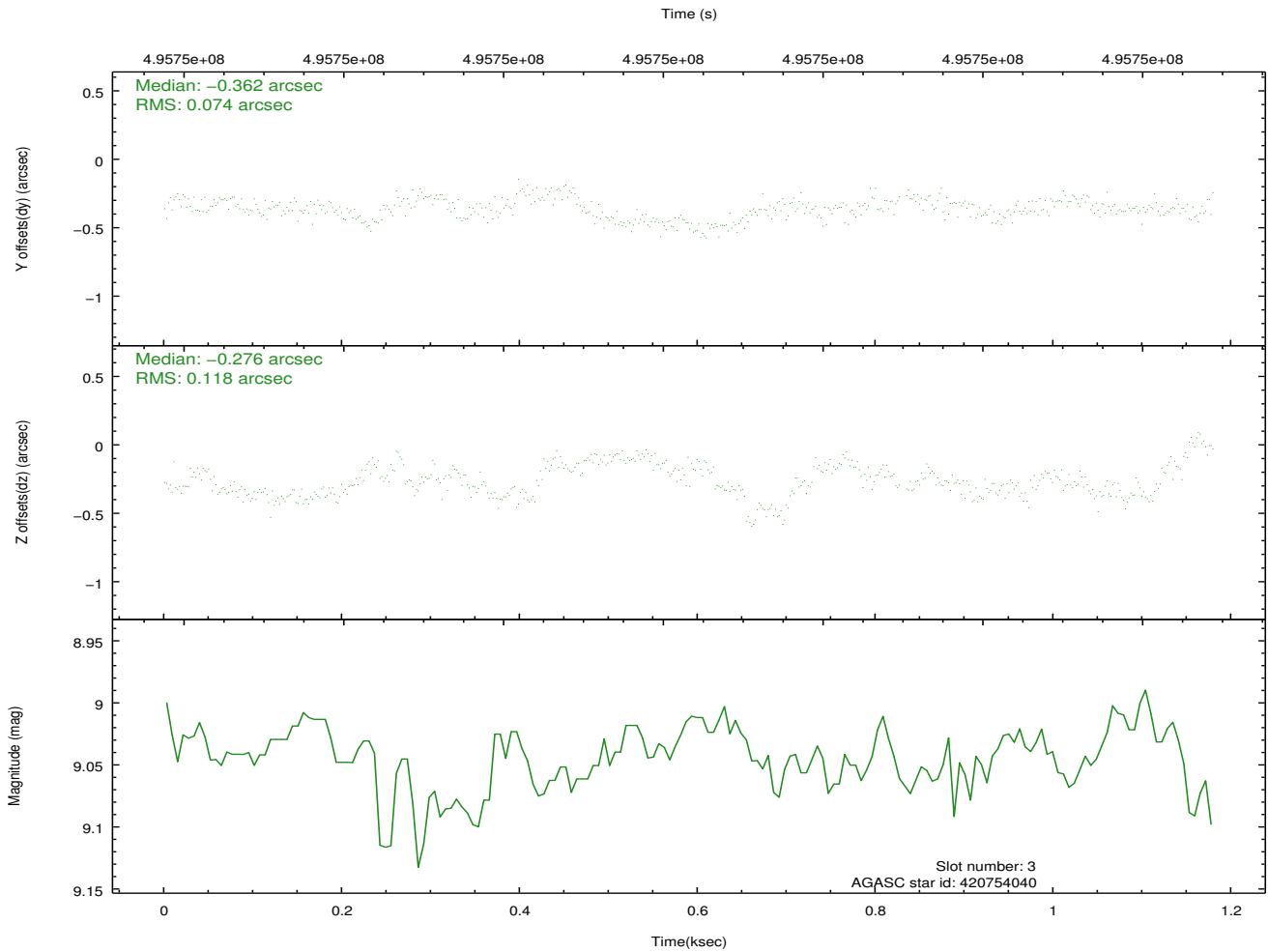
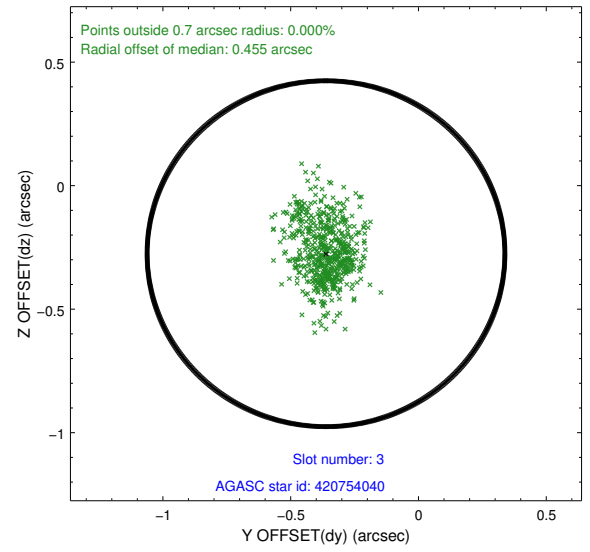
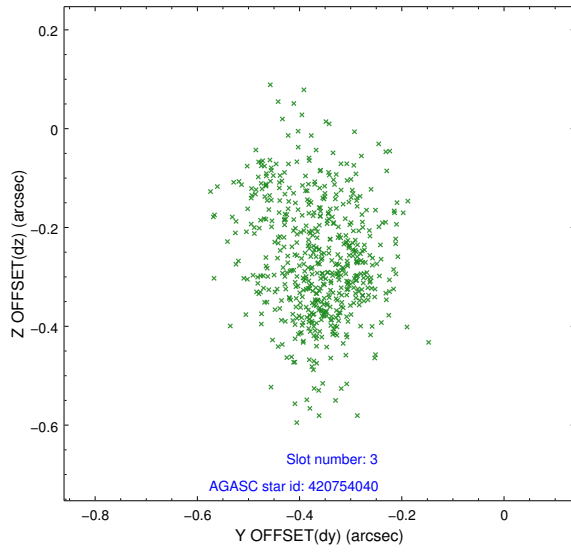


Slot Statistics

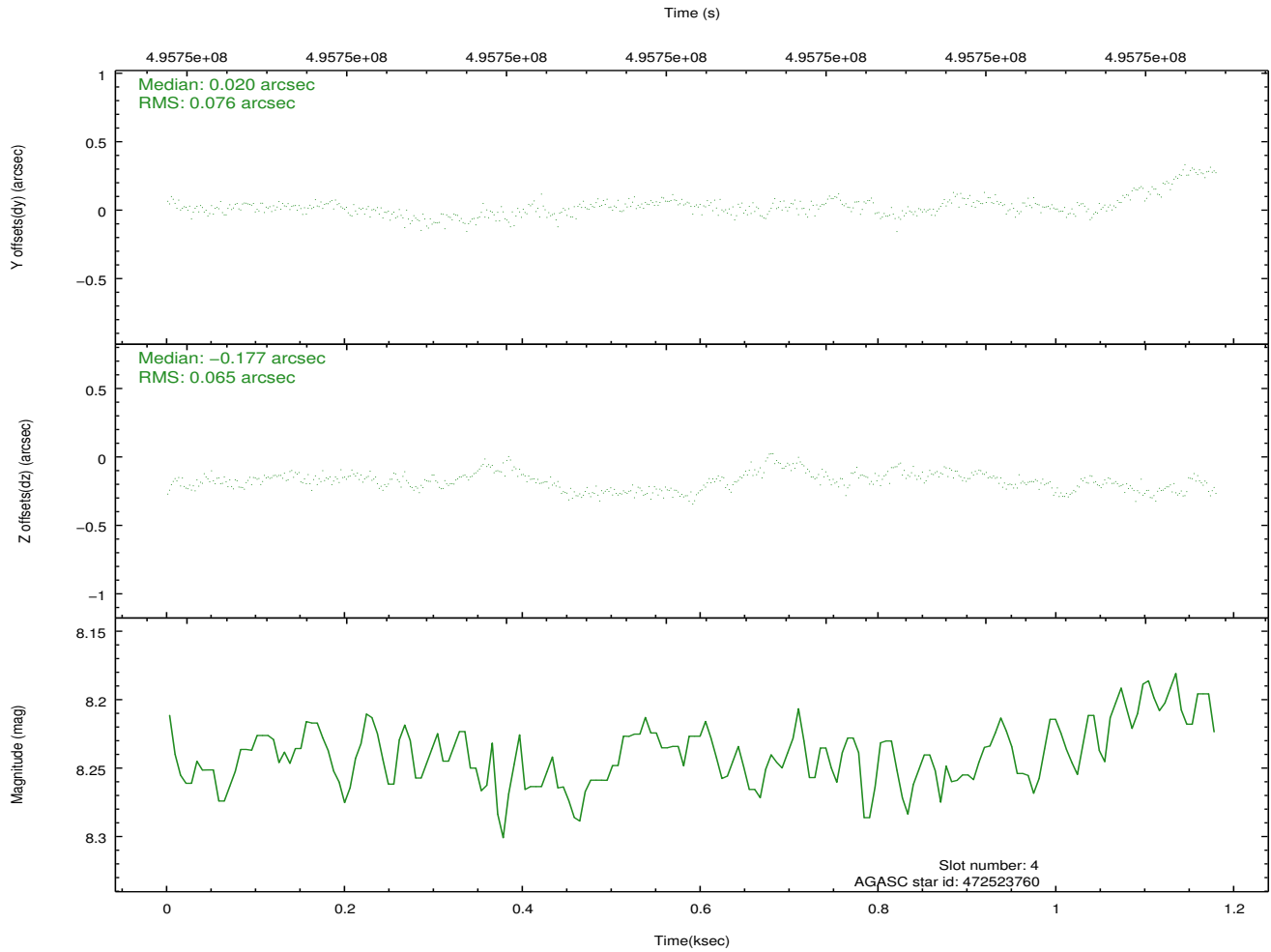
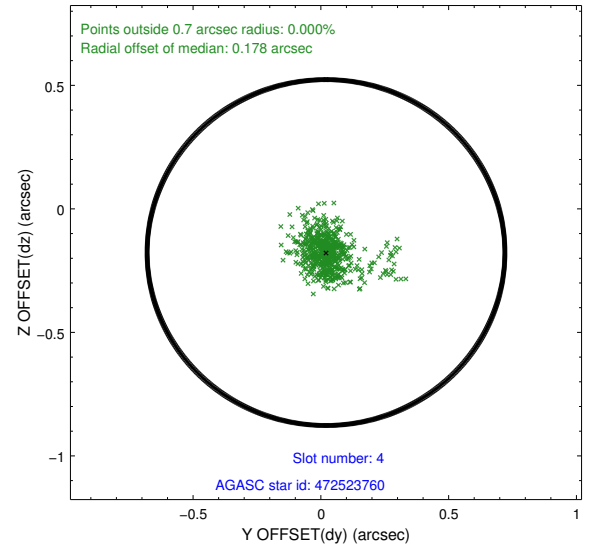
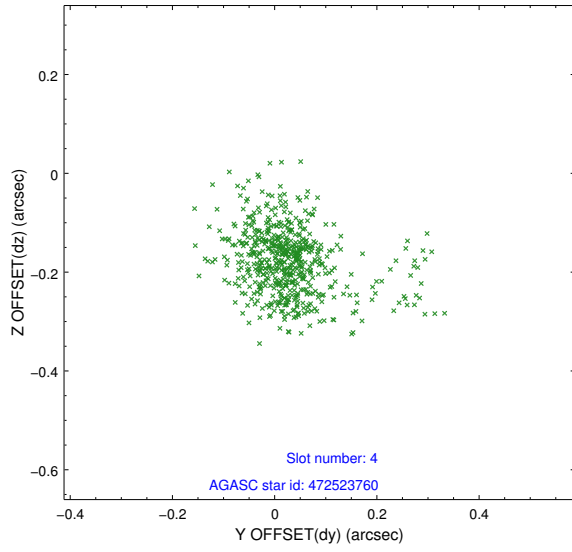
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-1	7.04	288	-0.043	-0.120	0.006	0.013	0.000000	0.000000	-1185.09	-470.48
1	FID		HRC-S-2	7.01	288	0.370	-0.129	0.005	0.009	0.000000	0.000000	1210.87	-464.55
2	FID		HRC-S-3	7.05	288	0.062	-0.054	0.006	0.012	0.000000	0.000000	-1183.59	557.49
3	GUIDE	used	420754040	9.04	573	-0.362	-0.276	0.146	0.254	331.917939	44.882543	1995.98	2345.38
4	GUIDE	used	472523760	8.24	576	0.020	-0.177	0.095	0.200	331.645363	45.403260	1699.11	373.97
5	GUIDE	used	472525528	6.65	576	-0.531	-0.013	0.085	0.143	331.551102	45.248694	2176.97	740.89
6	GUIDE	used	472665256	9.00	573	0.593	0.173	0.099	0.171	332.808125	46.195041	-2227.77	-730.53
7	GUIDE	used	472659832	9.44	569	0.288	0.287	0.159	0.255	332.780399	46.098139	-2009.81	-458.19

2.4 Star Slots

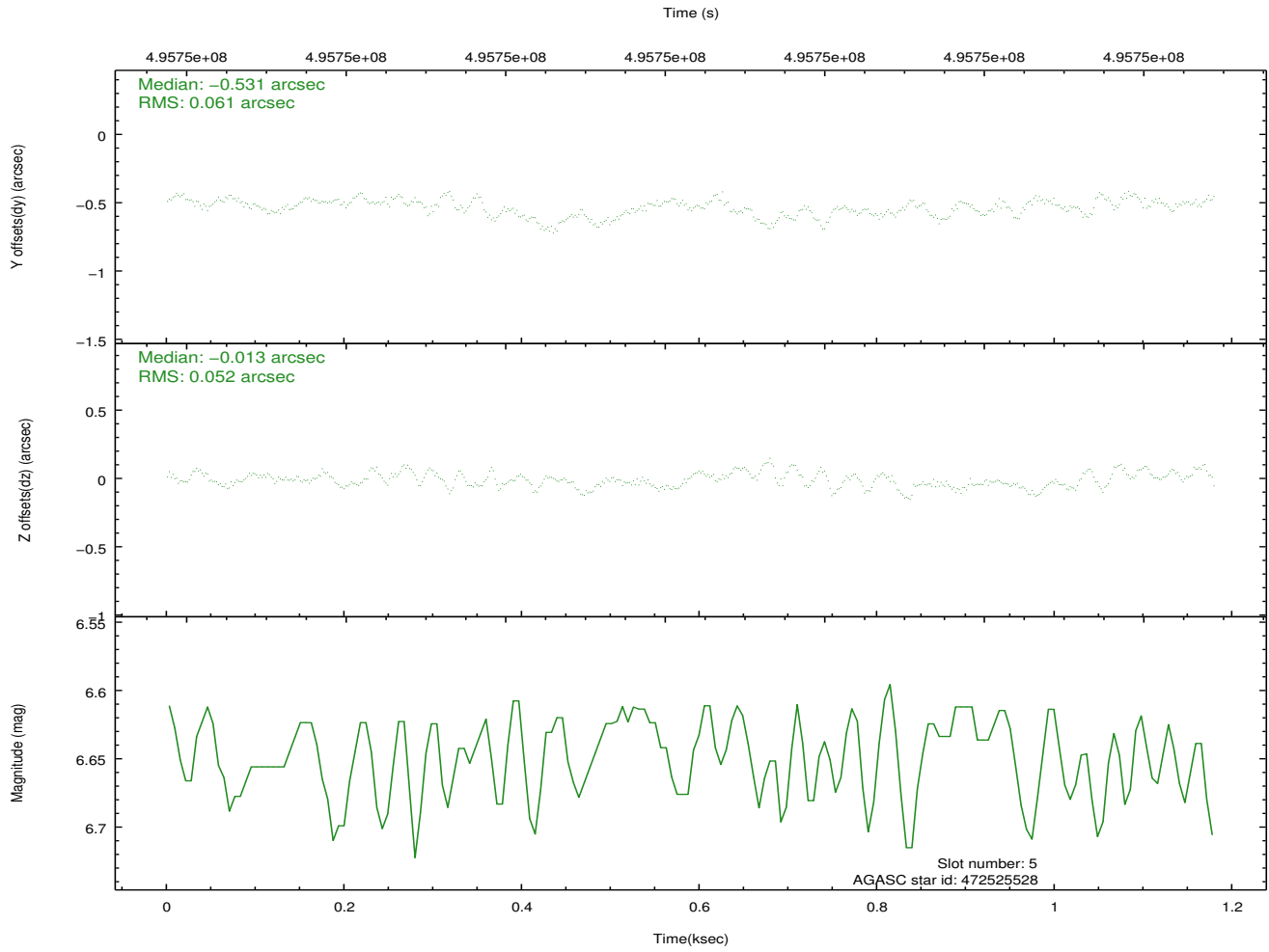
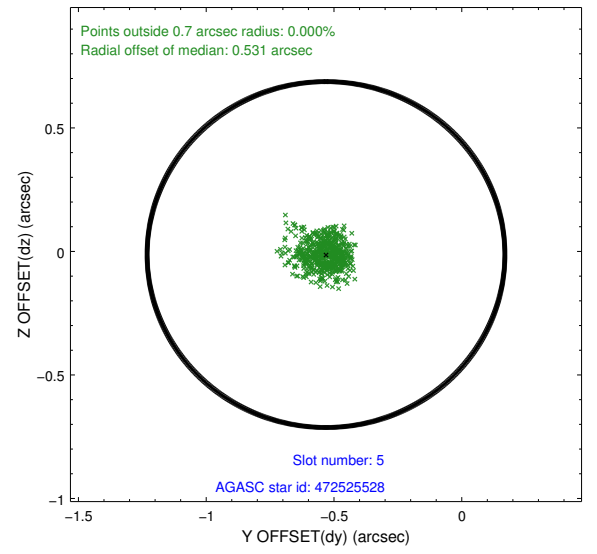
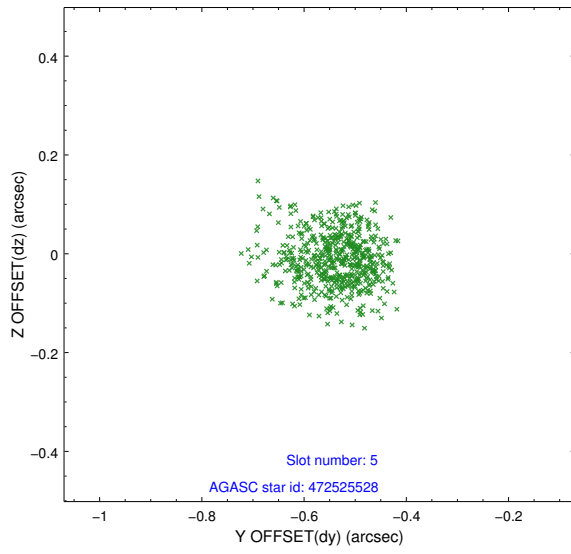
2.4.1 Slot 3



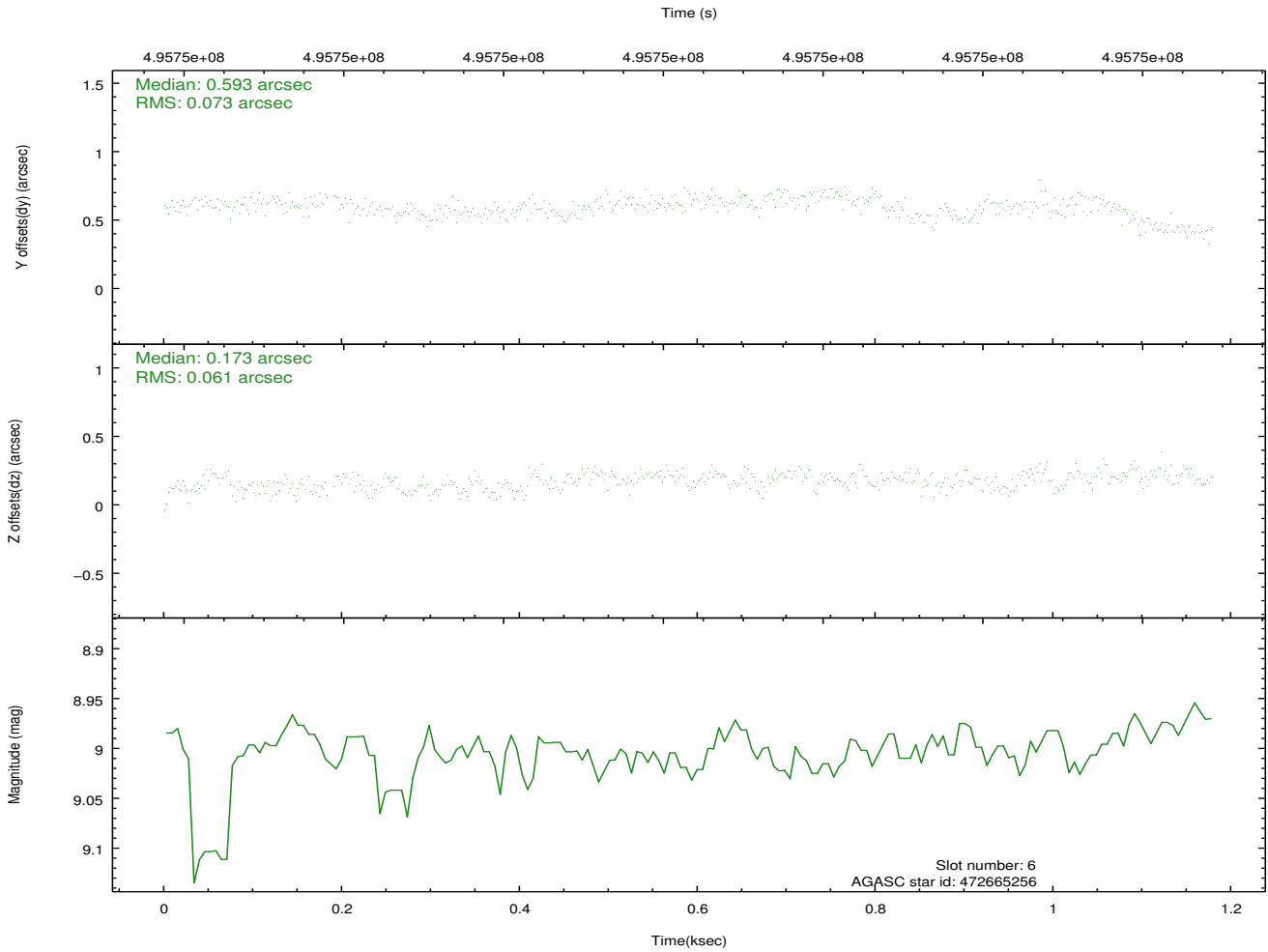
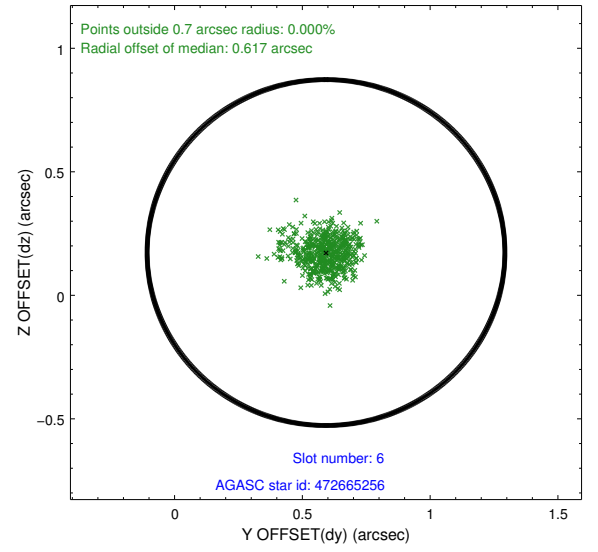
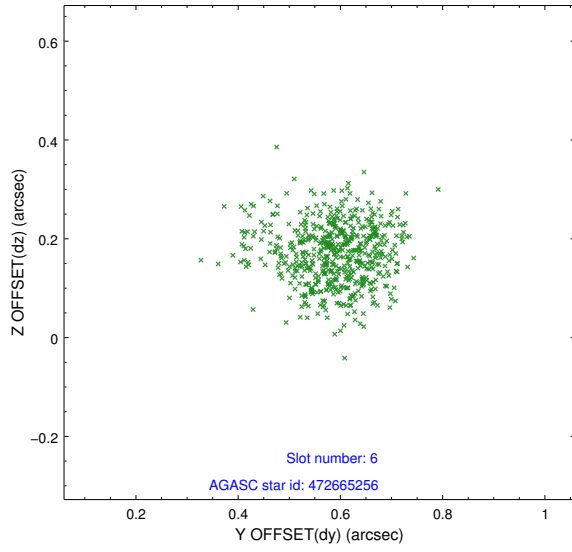
2.4.2 Slot 4



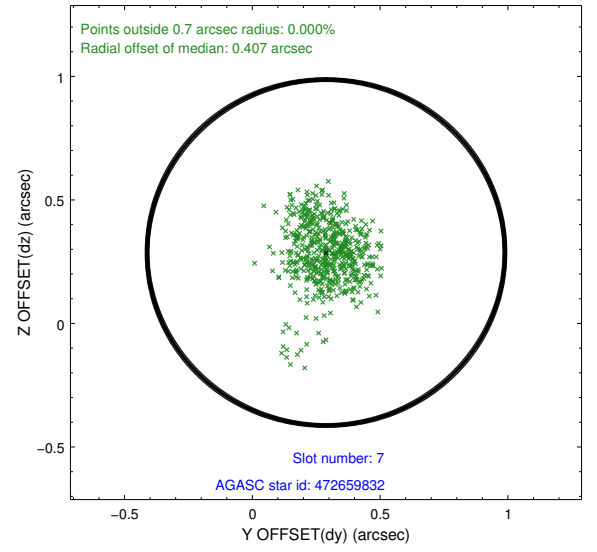
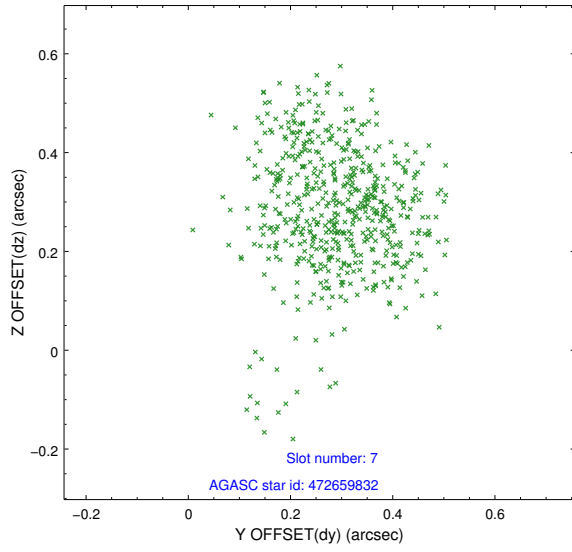
2.4.3 Slot 5



2.4.4 Slot 6

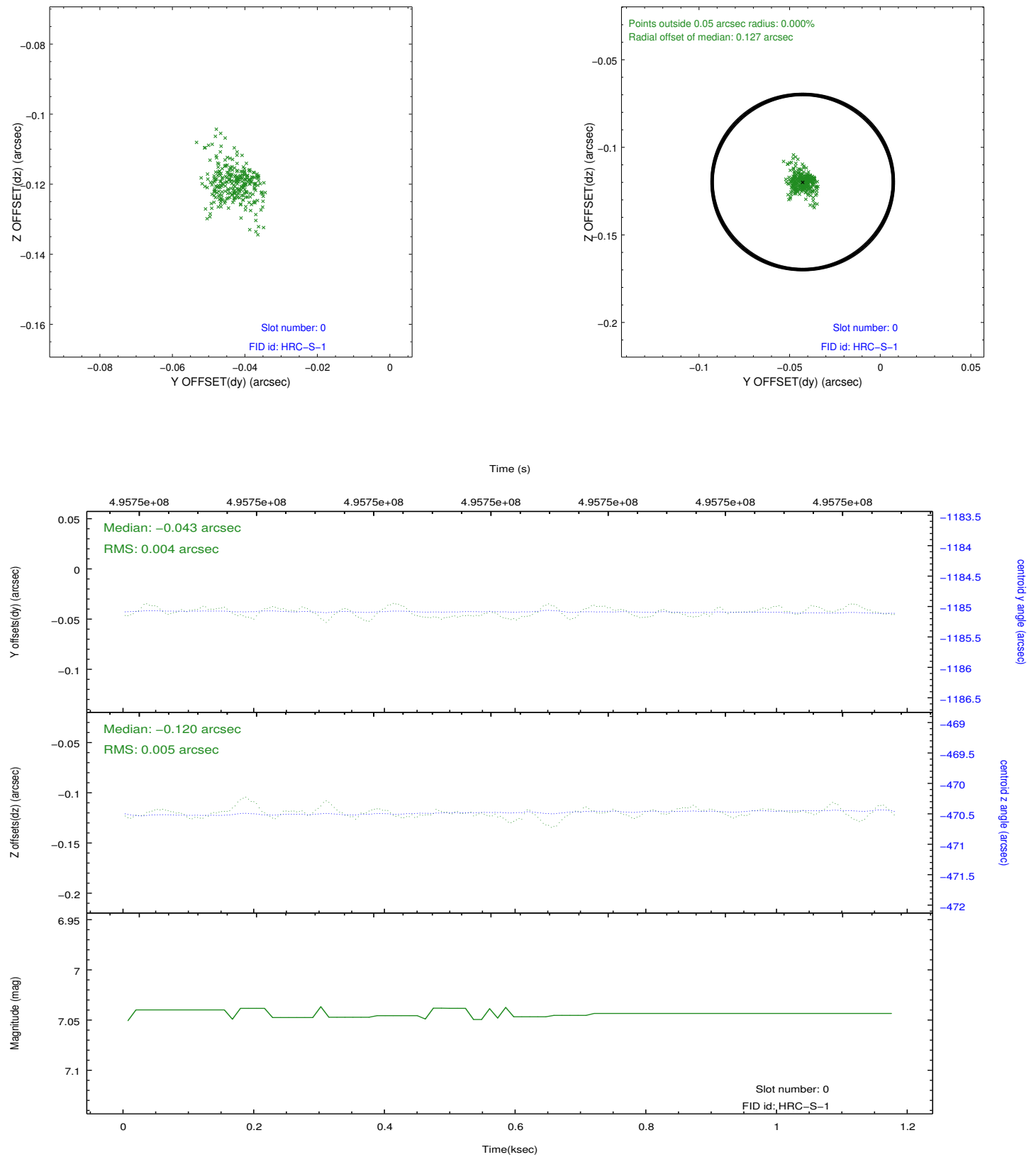


2.4.5 Slot 7

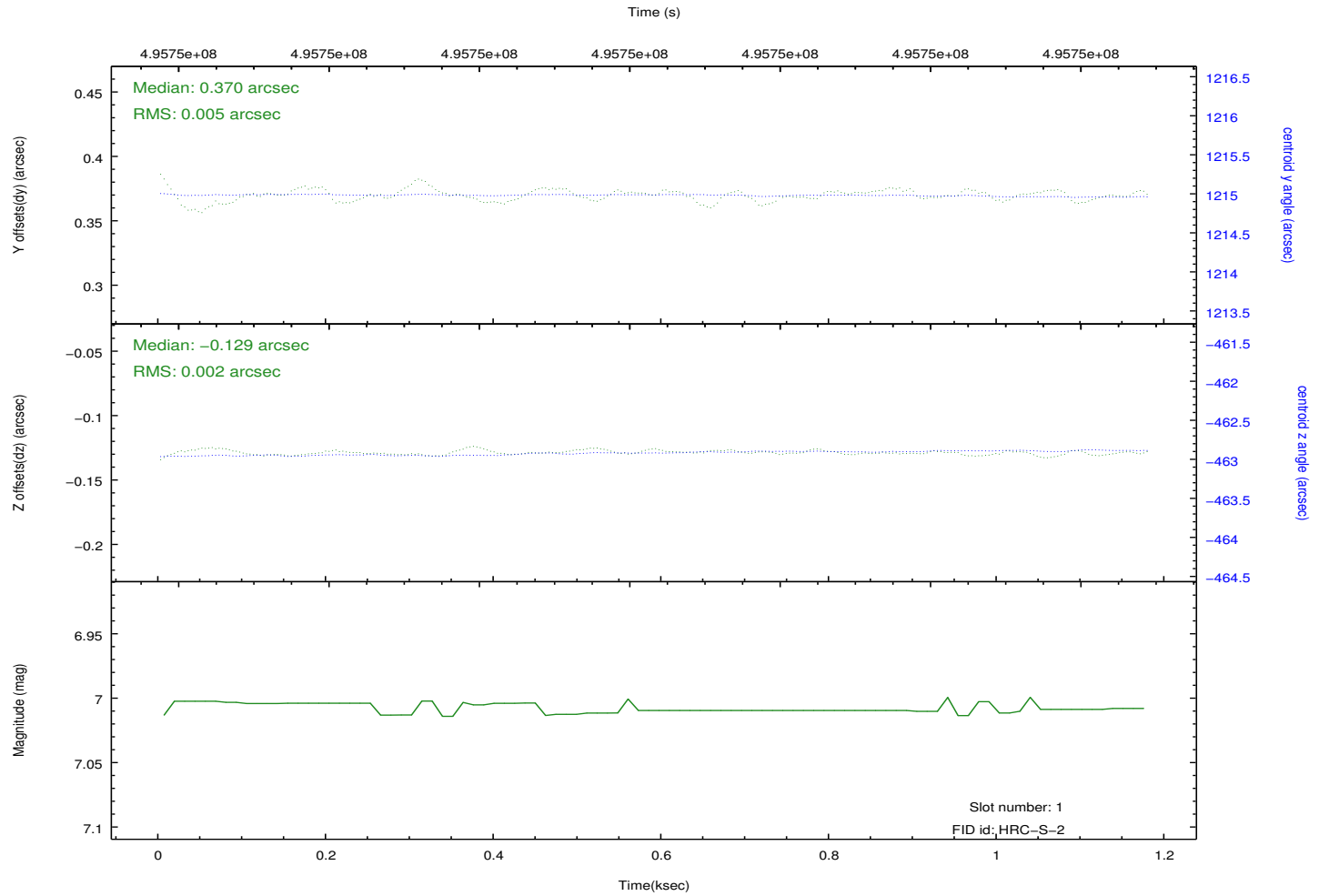
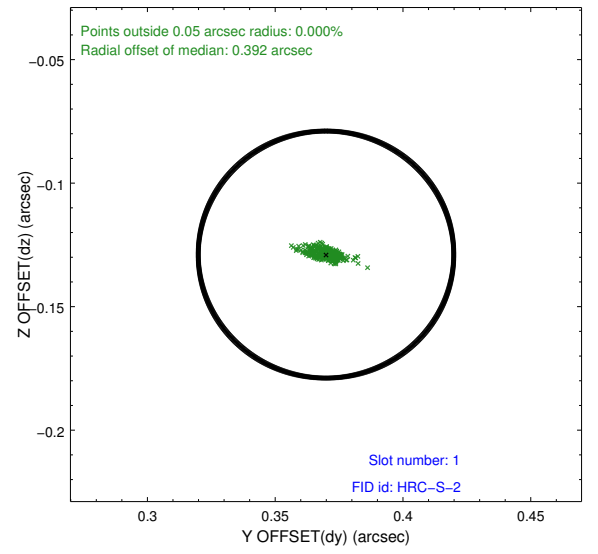
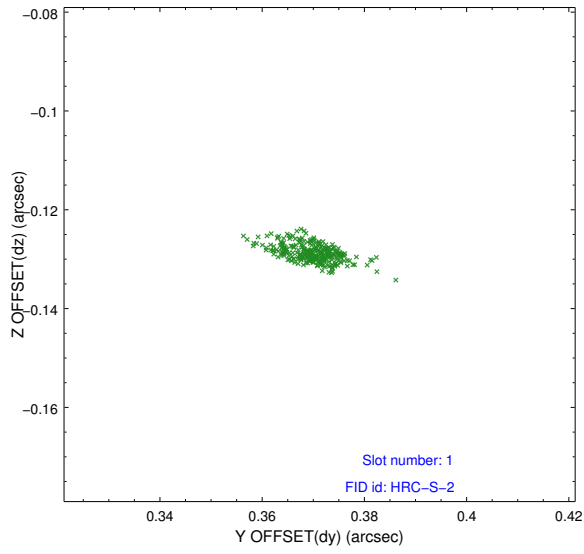


2.5 FID Slots

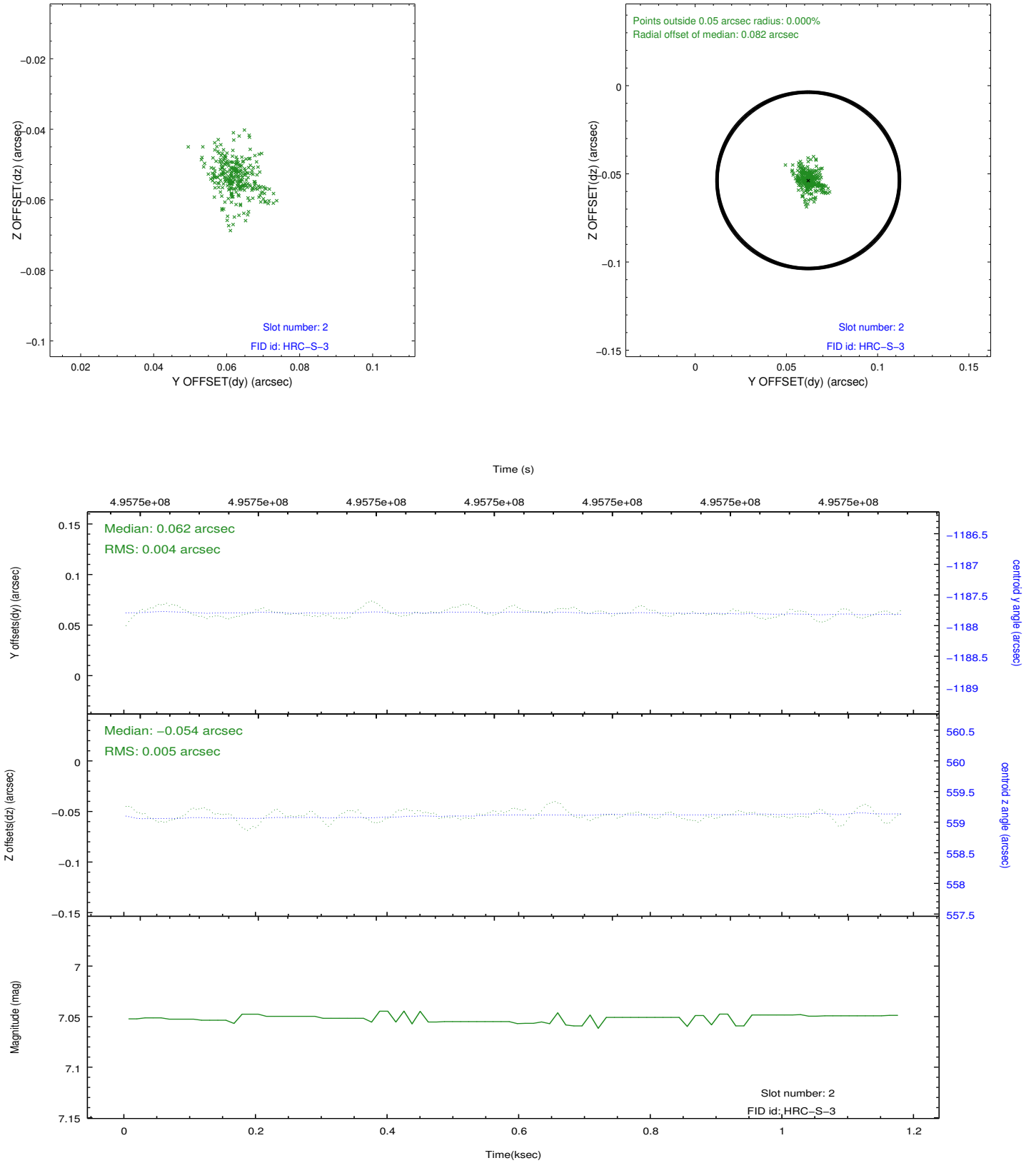
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



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	1.1467188127041

A.2 Comments

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.