

V&V Reference Report

L2 ASCDS Version : 10.0.1

Observation 15447 - L2 Version 2
Chandra X-Ray Center

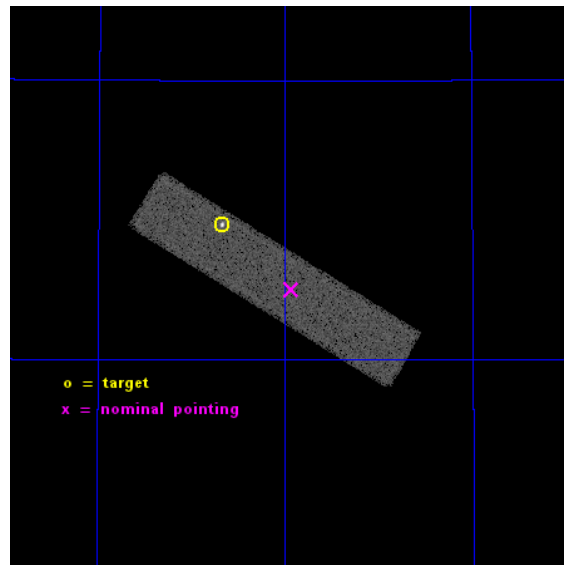
L2 Processing Date : Dec 6 2014

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

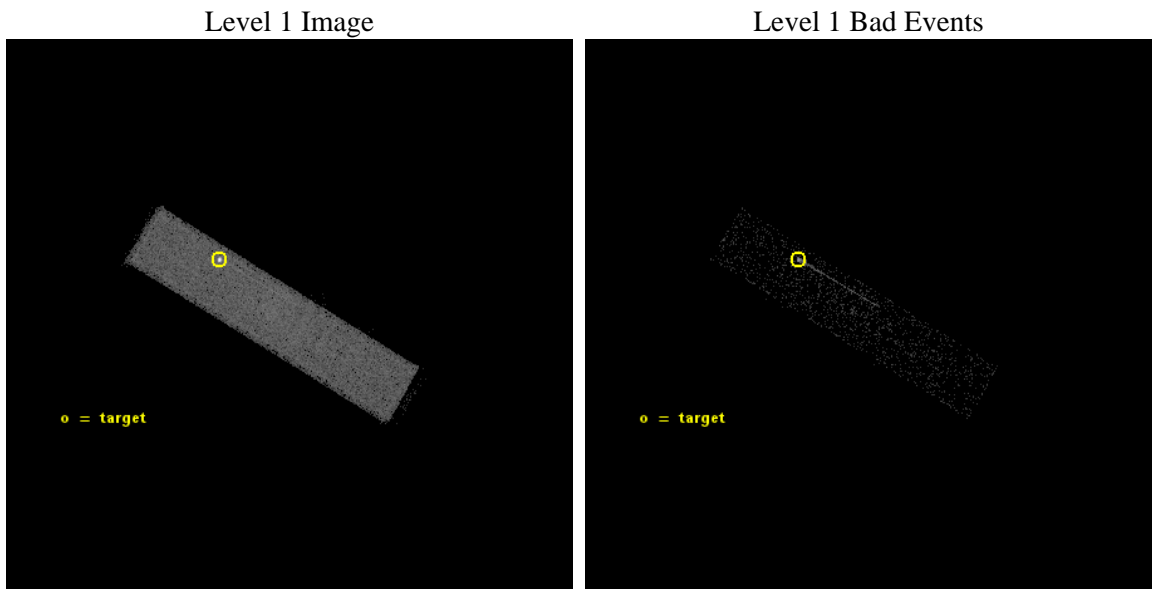
seq_num	291126	Sequence number
obs_id	15447	Observation id
title	AO-14 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	331.98296907969	Nominal RA [deg]
dec_nom	45.626082948054	Nominal Dec [deg]
roll_nom	210.8077286604	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1158.5063131452	[s]
livetime	1152.0367750272	Ontime multiplied by DTCOR
l2events	45176	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	1158.5063131452	[s]
caldsver	4.6.4	 	l1events	63631	Number of level 1 events
date	2014-12-06T14:10:03	Date and time of file creation			
revision	2	Processing version of data			

2.1.3 Events

Level 1 Events

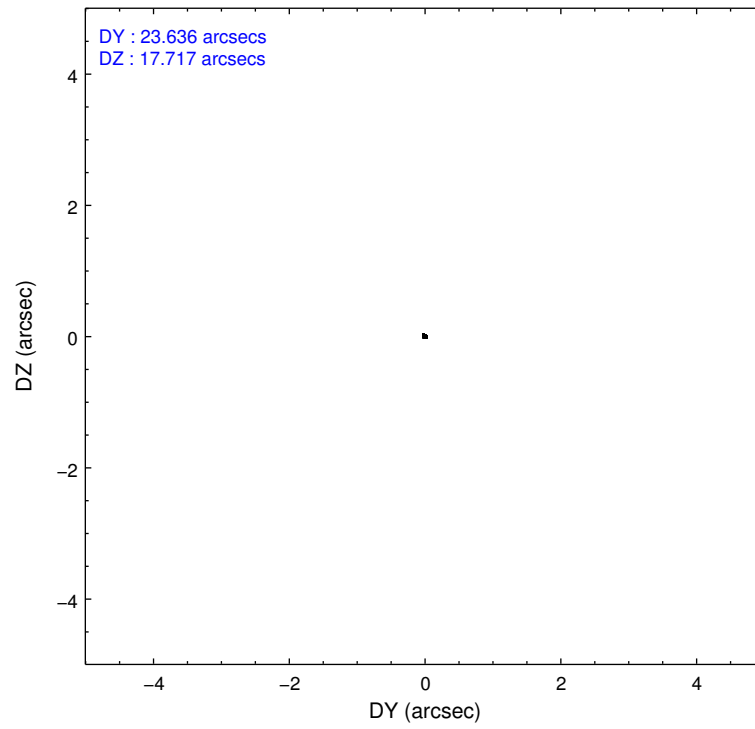
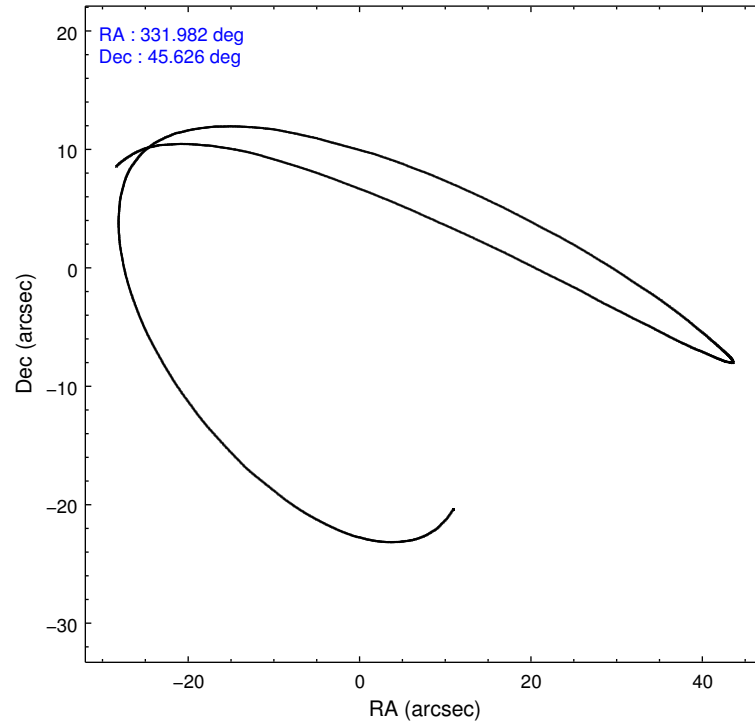
	segment 1	segment 2	segment 3
level 1 events	0	63631	0
rejected events	0	8297	0
rejected %	0%	13%	0%

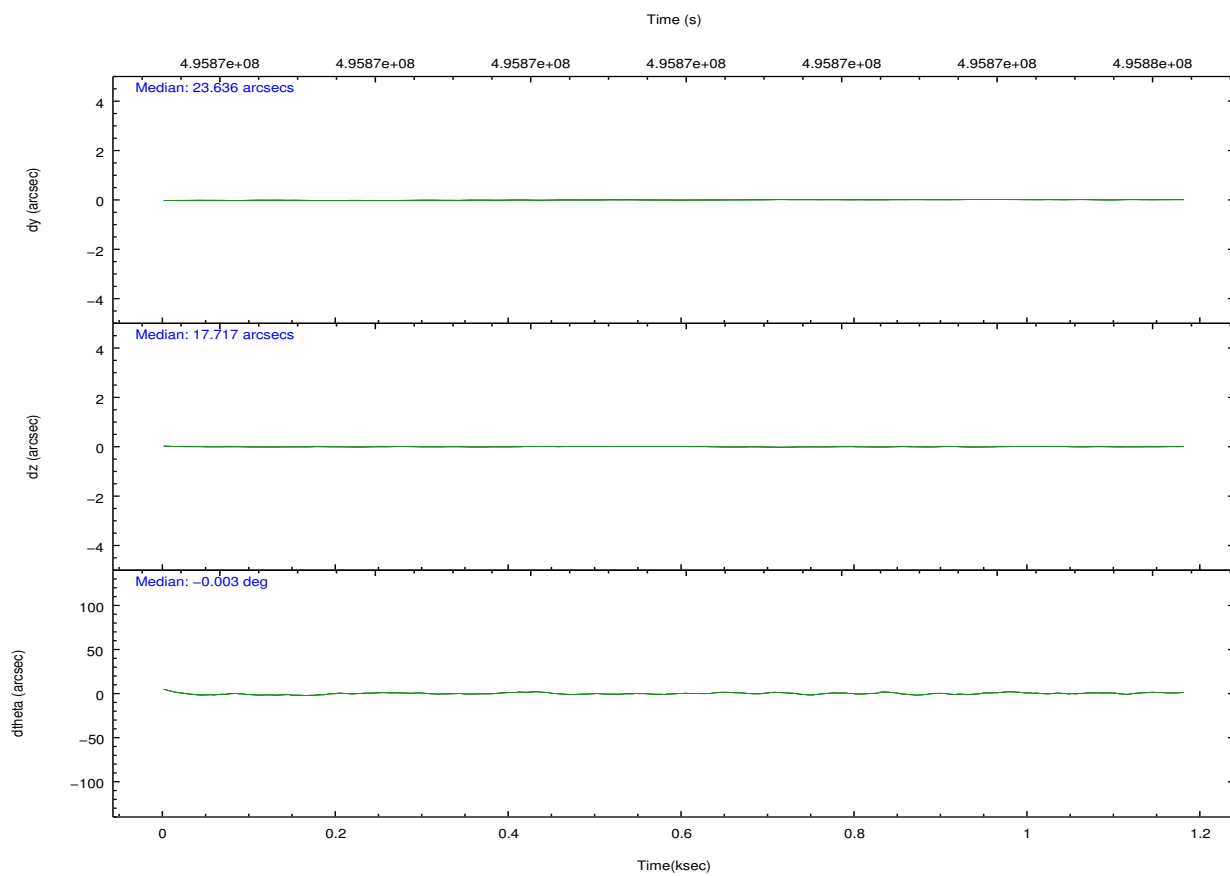
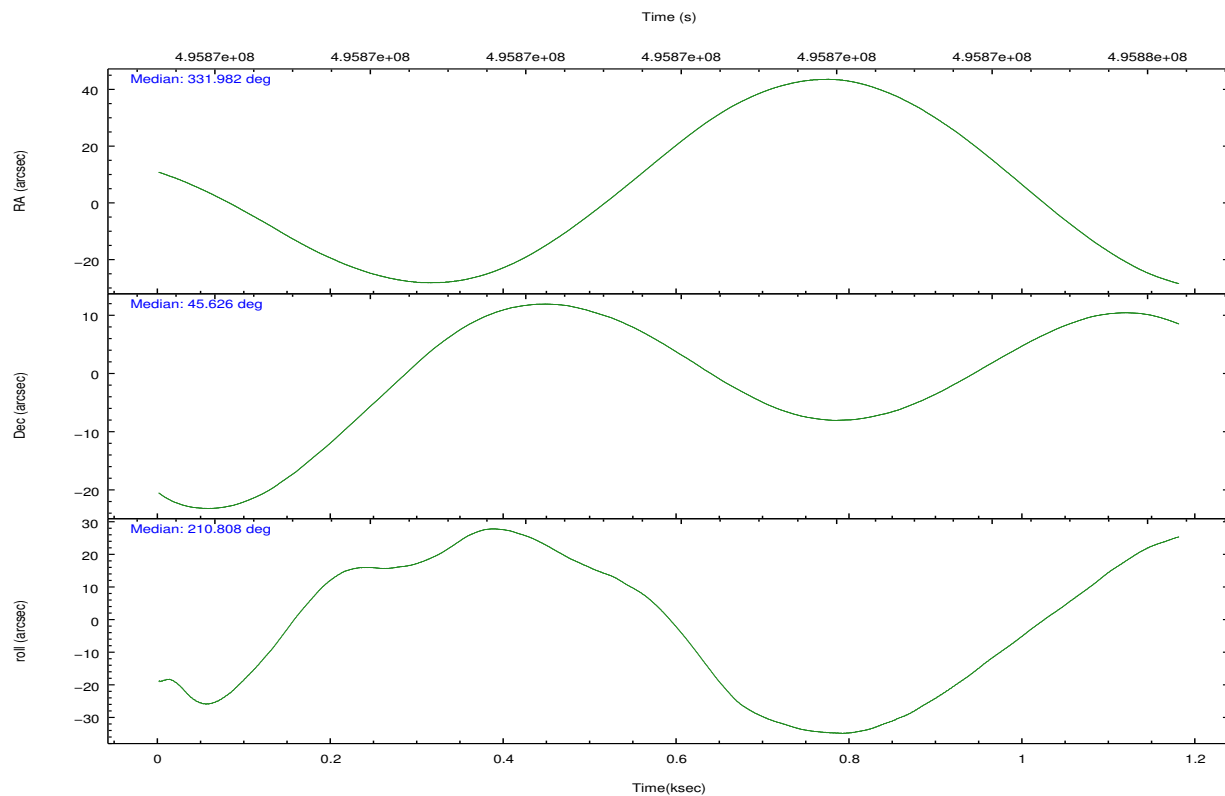
2.2 Compared Parameters

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	332.001460	331.9829690796911
[deg] Pointing Dec	45.651957	45.62608294805431
[deg] Pointing Roll	210.727191	210.8077286604022
[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)	495873973.184000	495873594.33588
Observation start date	2013-09-18T06:45:06	2013-09-18T06:39:54
[s] Observation end time (MET)	495874973.184000	495875107.23596
Observation end date	2013-09-18T07:01:46	2013-09-18T07:05:07

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

2.3 Aspect



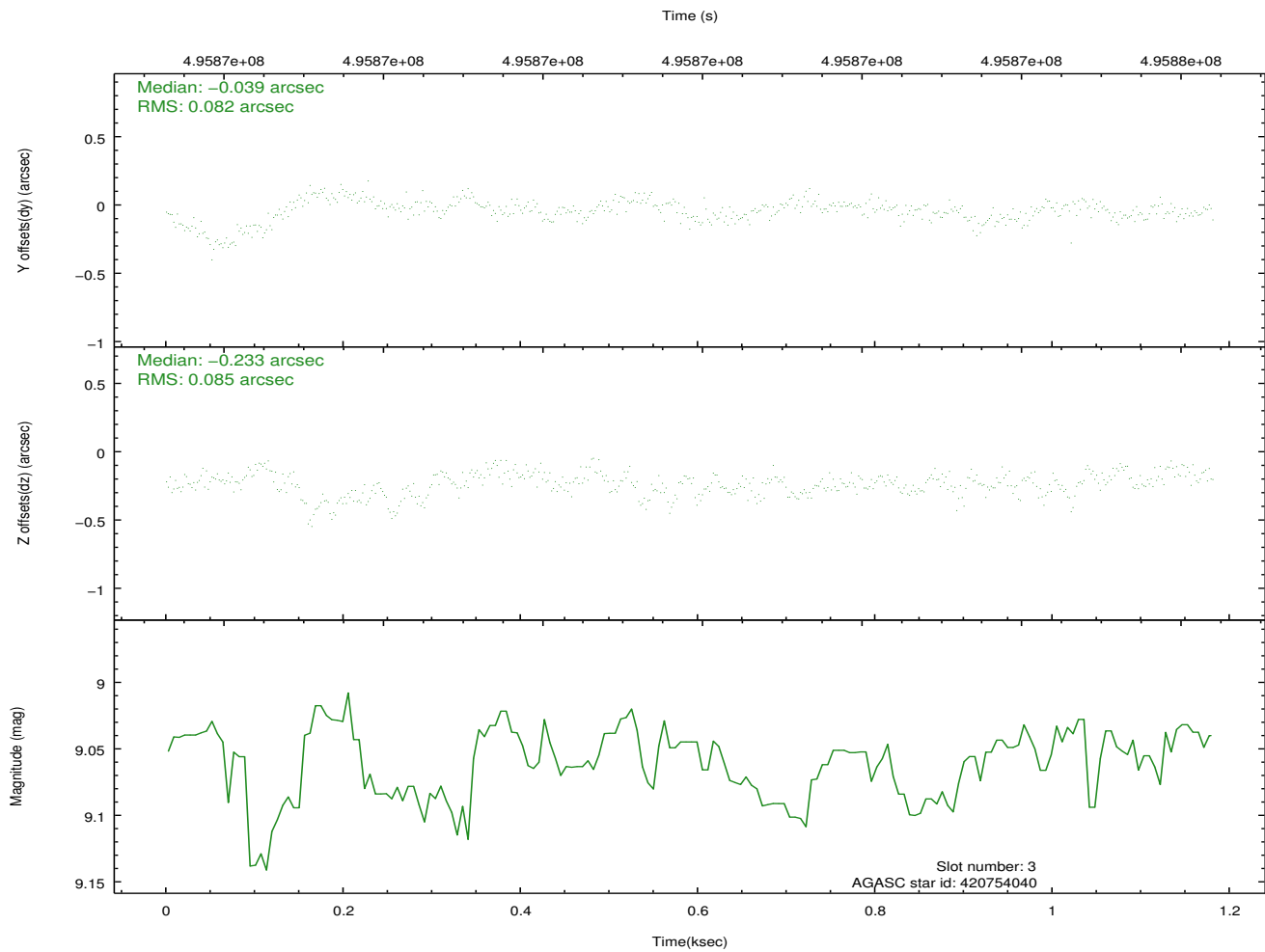
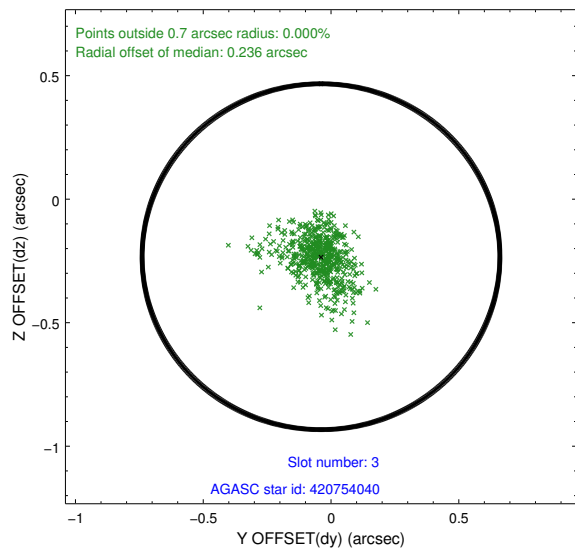
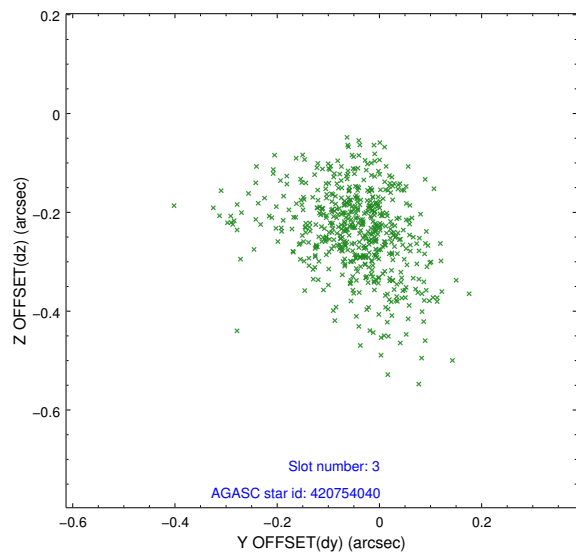


Slot Statistics

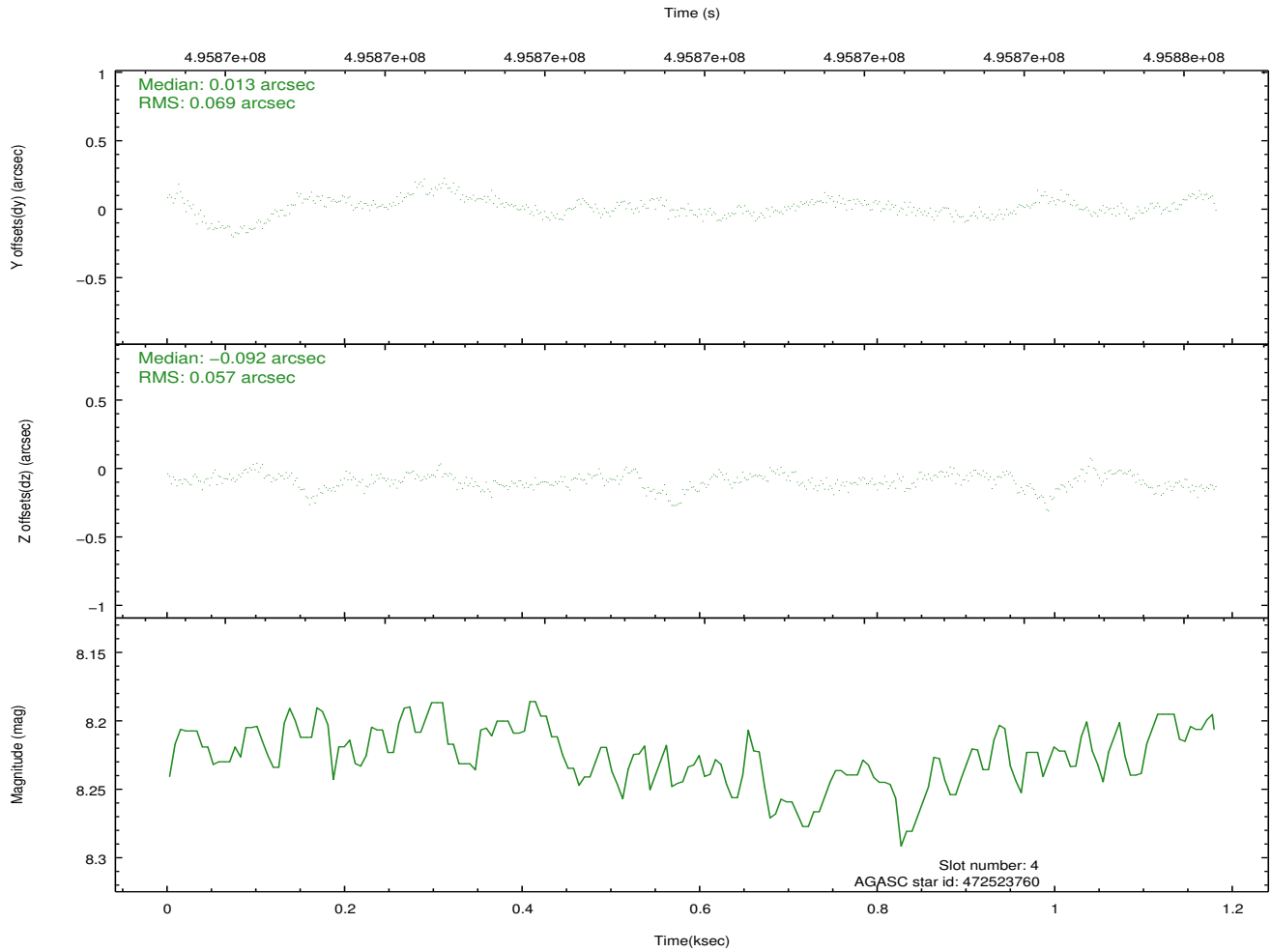
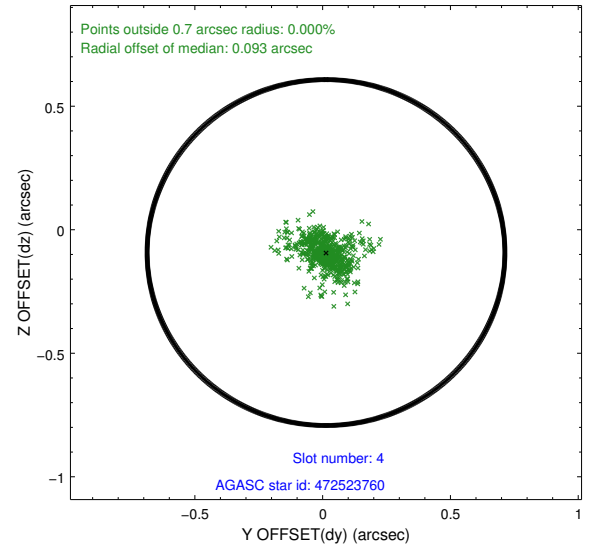
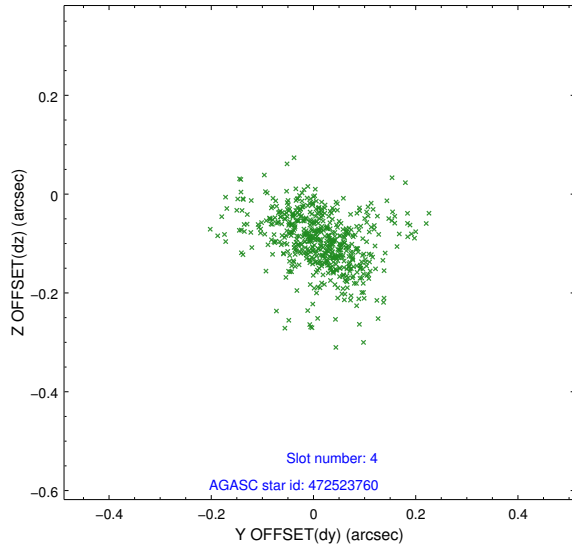
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-1	7.03	288	-0.091	-0.193	0.006	0.010	0.000000	0.000000	-1178.44	-466.69
1	FID		HRC-S-2	7.00	288	0.148	-0.056	0.009	0.019	0.000000	0.000000	1217.37	-460.85
2	FID		HRC-S-4	6.96	288	0.346	-0.055	0.008	0.017	0.000000	0.000000	1224.48	563.89
3	GUIDE	used	420754040	9.06	577	-0.039	-0.233	0.121	0.225	331.917939	44.882543	1596.20	2272.37
4	GUIDE	used	472523760	8.22	577	0.013	-0.092	0.091	0.174	331.645363	45.403260	1232.53	312.00
5	GUIDE	used	472527720	7.01	577	-0.345	-0.119	0.096	0.159	331.460205	45.112509	2173.21	963.39
6	GUIDE	used	472661712	9.97	566	0.351	0.359	0.228	0.462	331.914954	46.059715	-560.71	-1370.11
7	GUIDE	used	472654568	9.41	576	0.016	0.089	0.136	0.228	332.194449	45.063576	658.66	2068.86

2.4 Star Slots

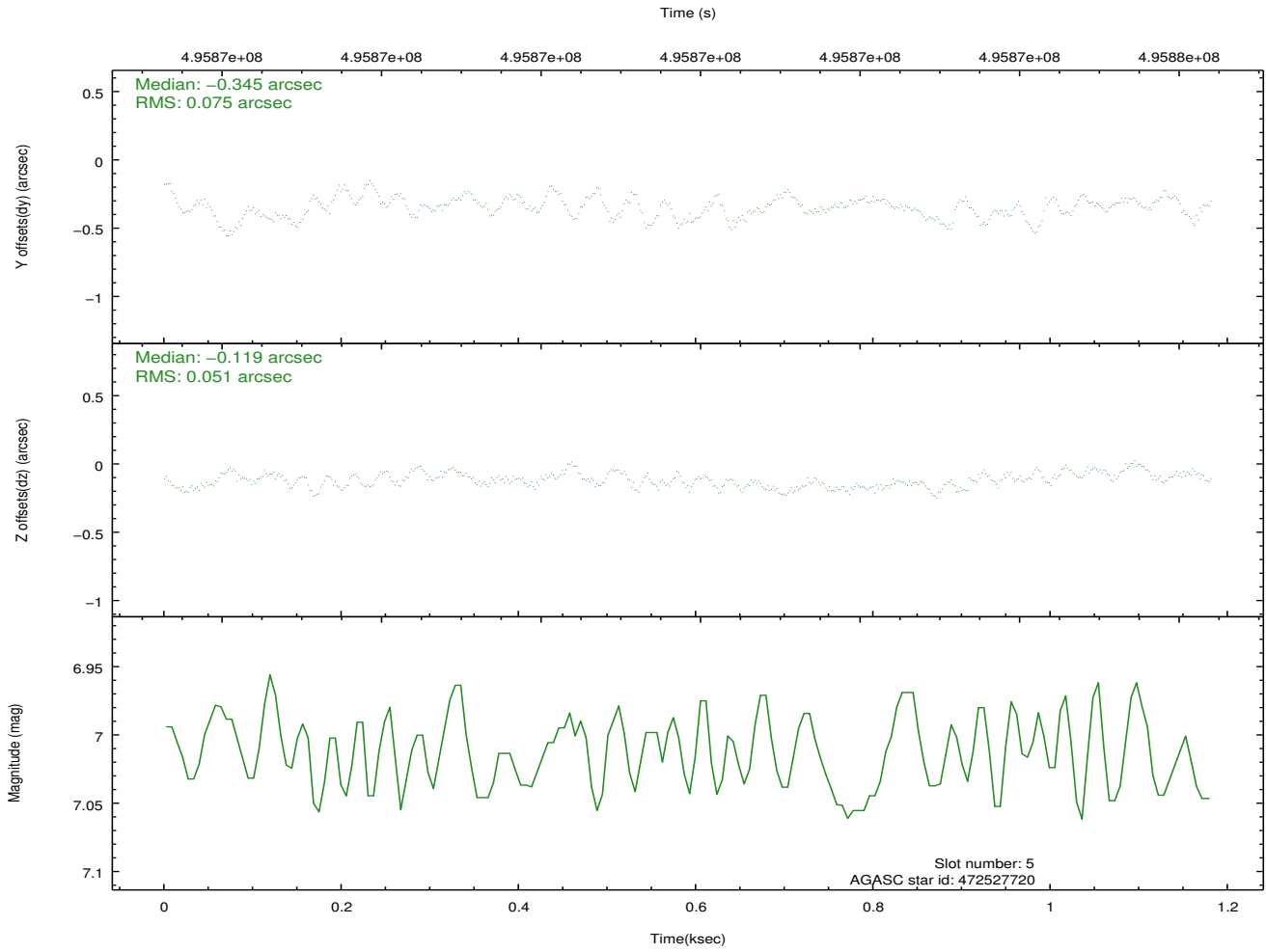
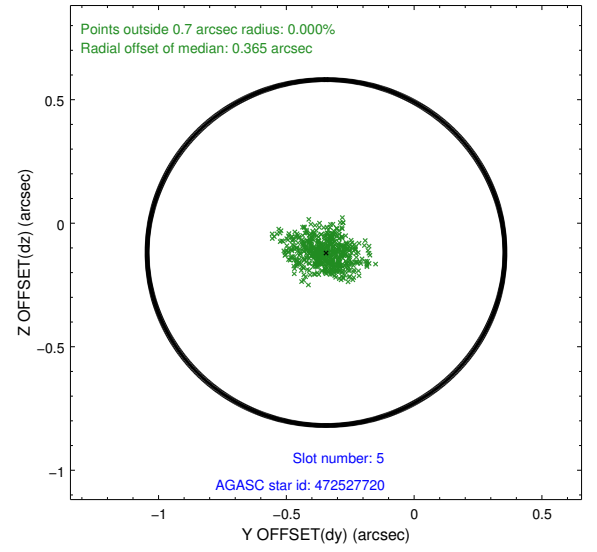
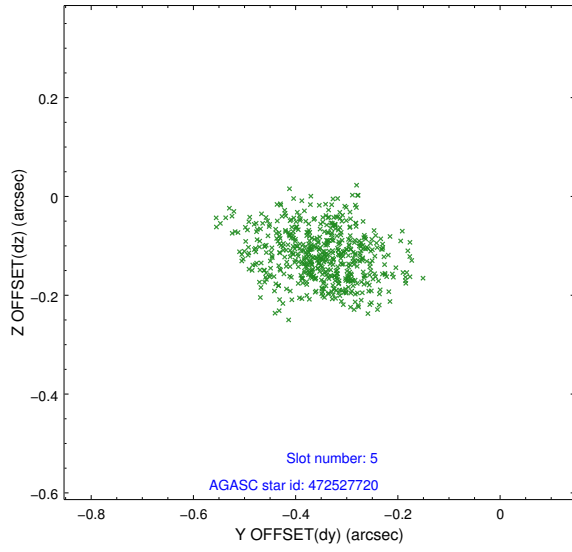
2.4.1 Slot 3



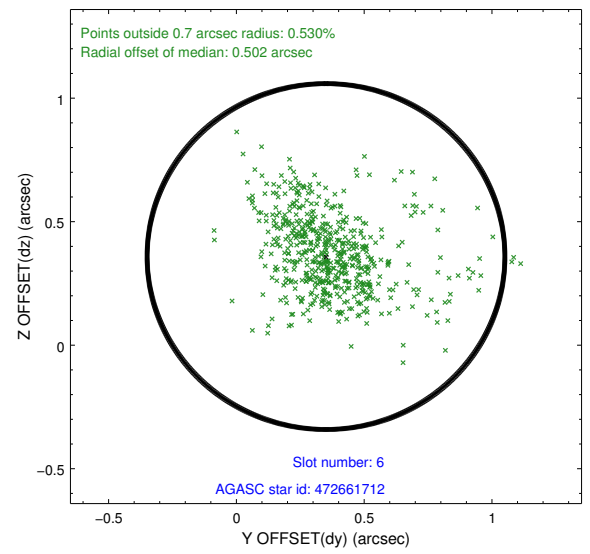
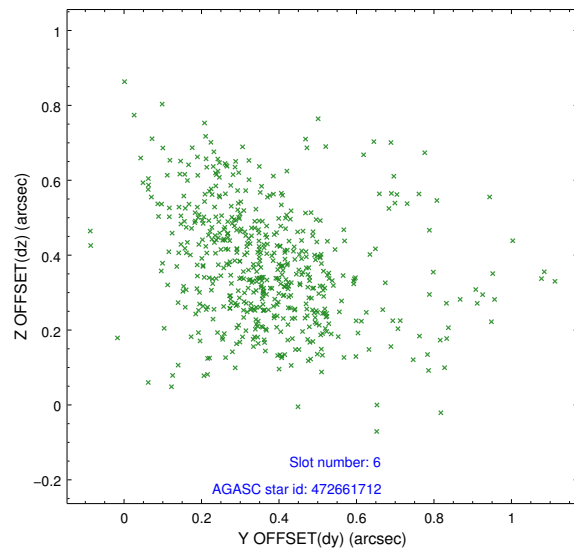
2.4.2 Slot 4



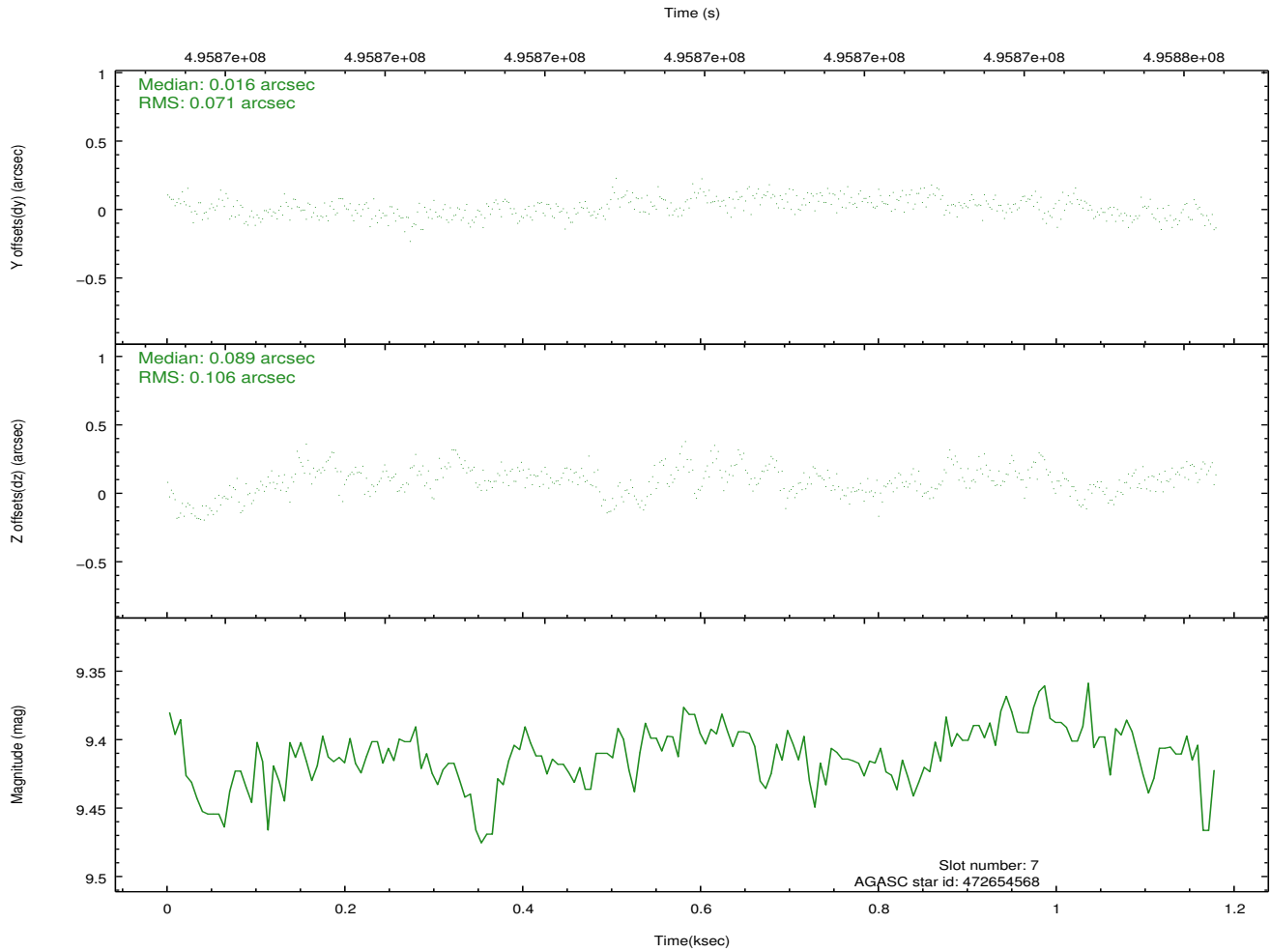
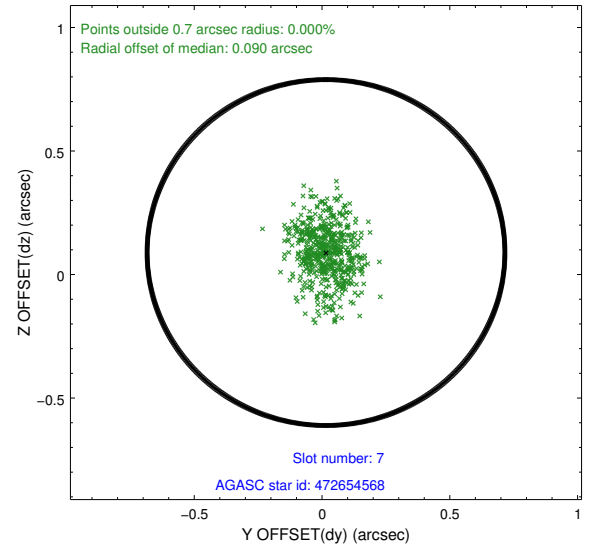
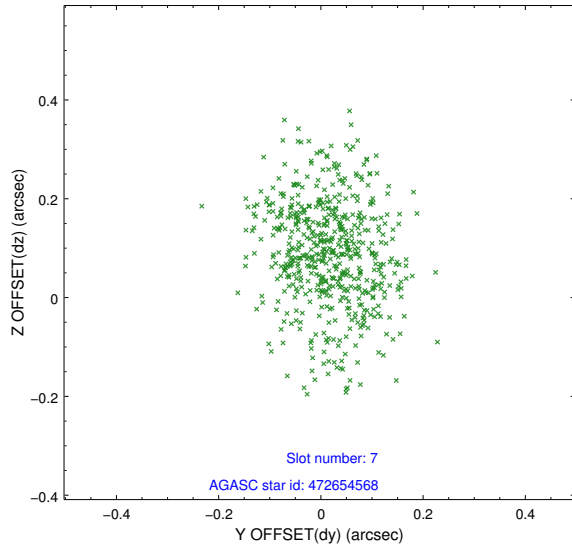
2.4.3 Slot 5



2.4.4 Slot 6

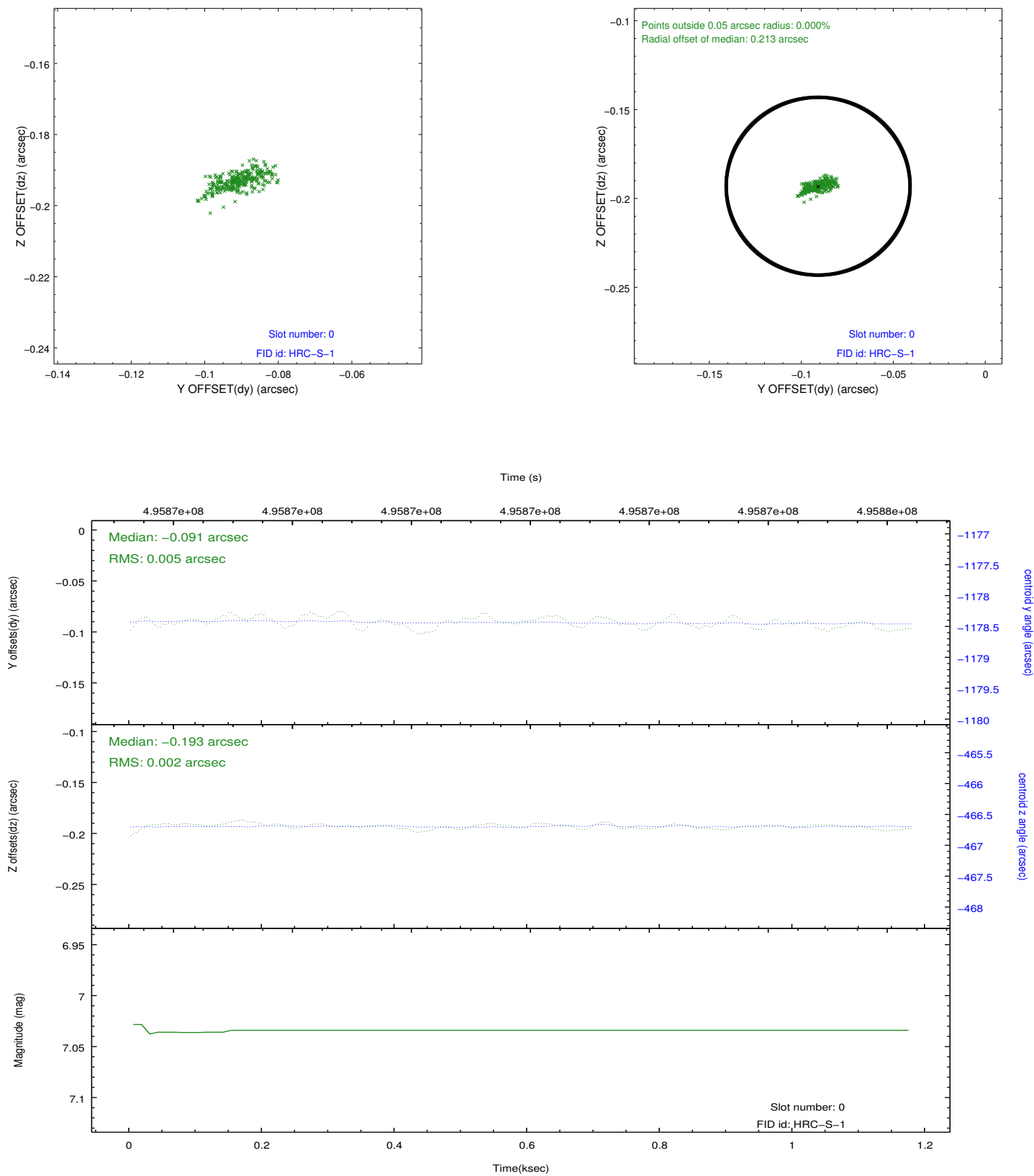


2.4.5 Slot 7

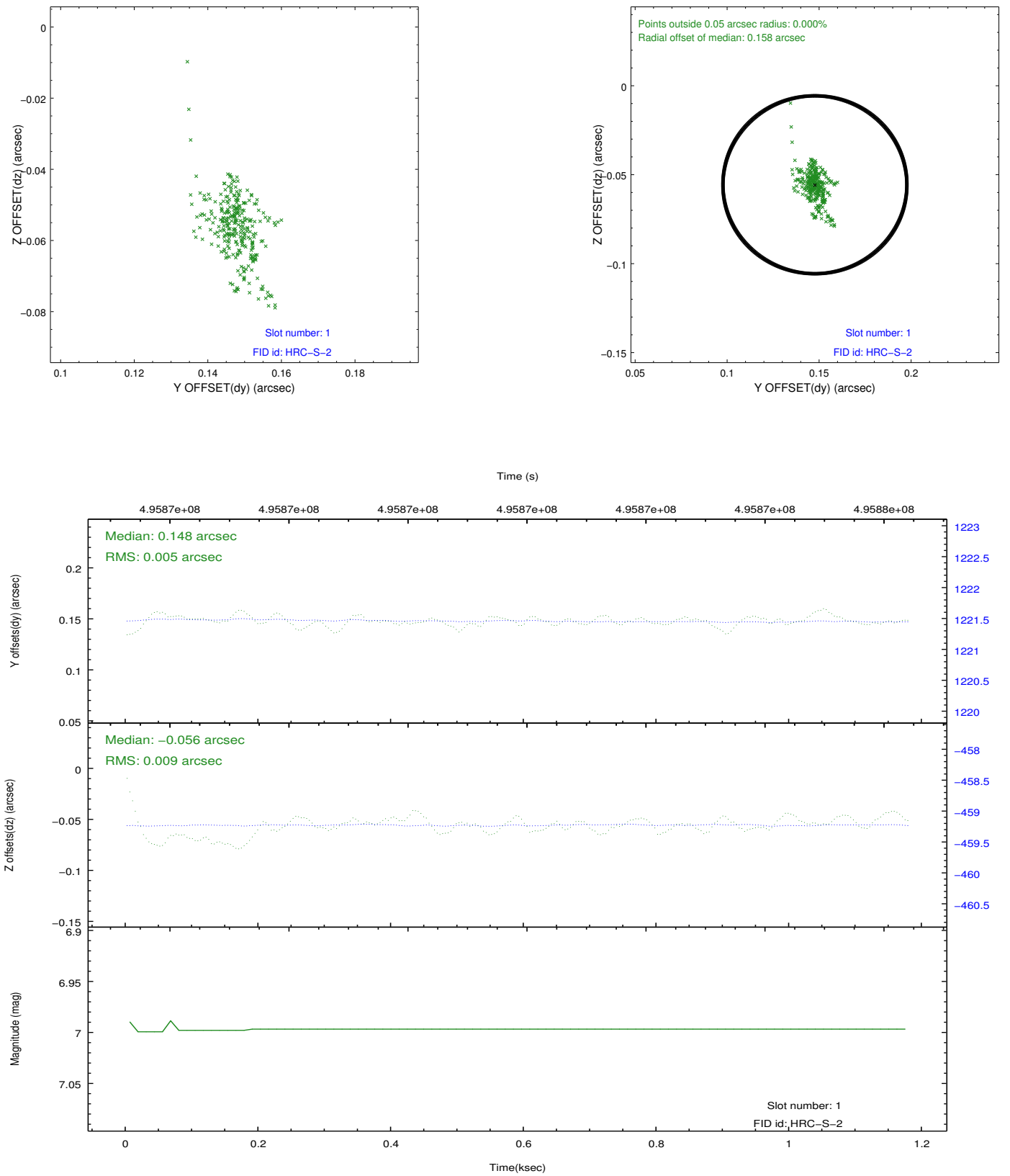


2.5 FID Slots

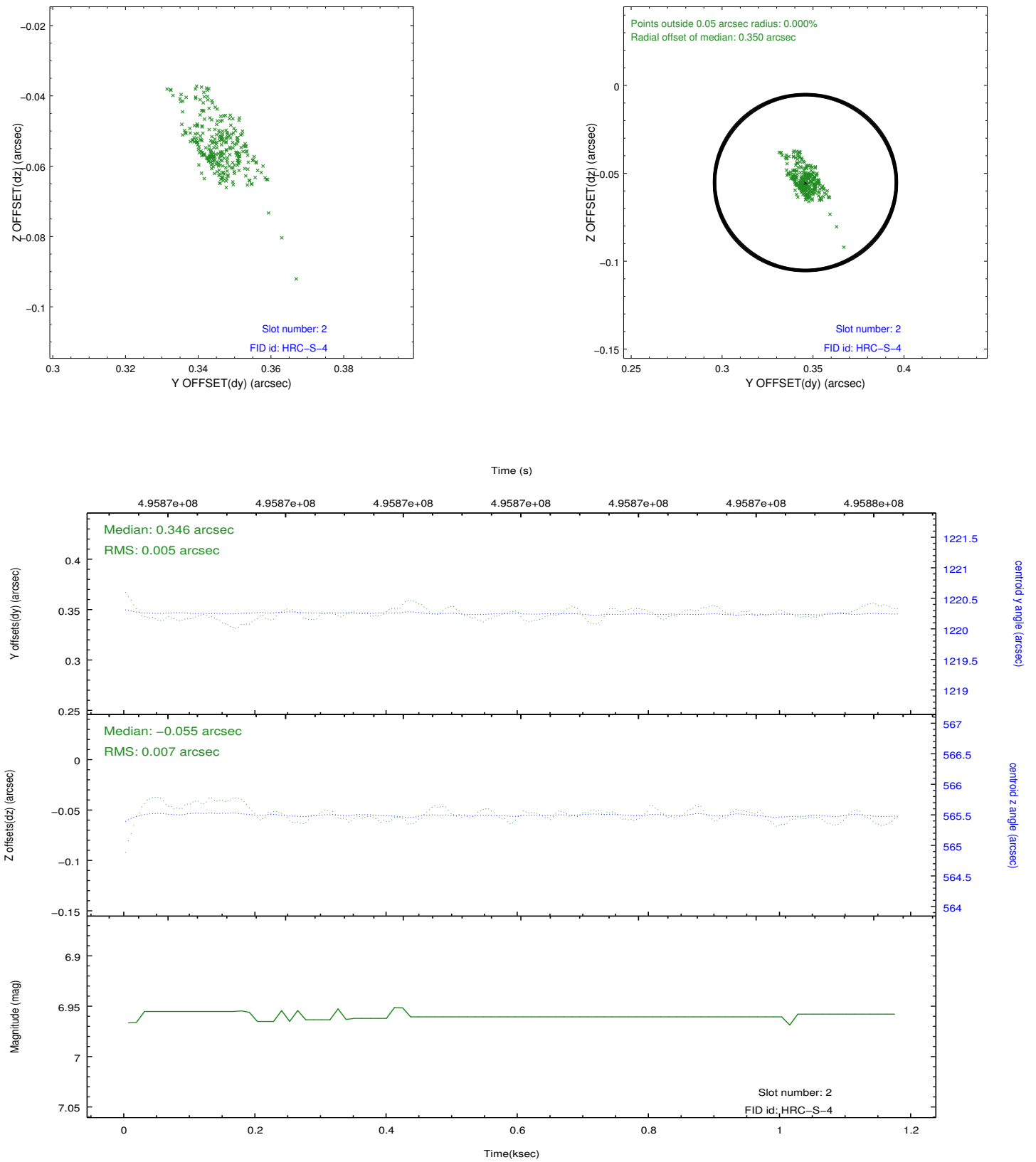
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1585063131452

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.