

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 16419 - L2 Version 2
Chandra X-Ray Center

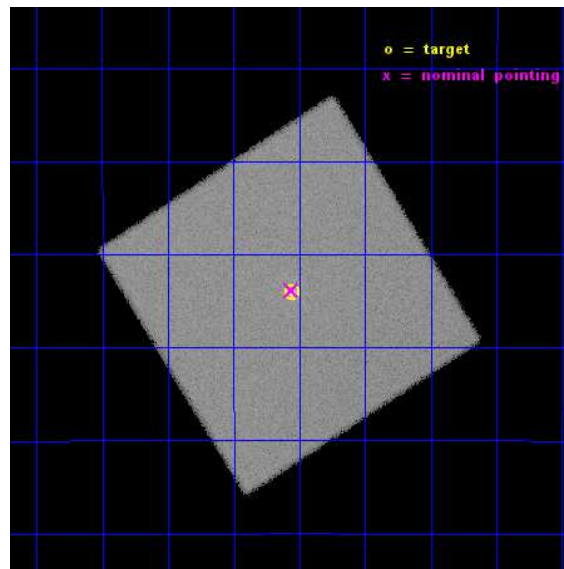
L2 Processing Date : Dec 11 2014

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1 Front

seq_num	590532	Sequence number
obs_id	16419	Observation id
title	AO-15 HRC-I Calibration Observation of G21.5-09	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-09	Source name
ra_targ	278.389583	Observer's specified target RA [deg]
dec_targ	-10.568528	Observer's specified target Dec [deg]
ra_nom	278.39025986547	Nominal RA [deg]
dec_nom	-10.564194313961	Nominal Dec [deg]
roll_nom	102.79558332473	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10147.500559688	[s]
livetime	10072.169781532	Ontime multiplied by DTCOR
l2events	583628	Number of level 2 events

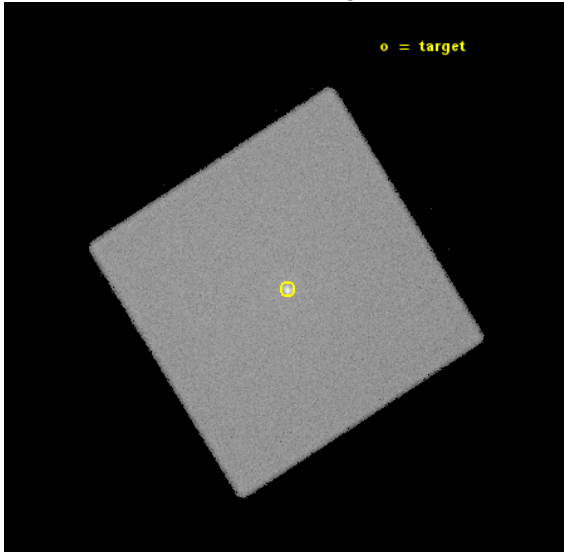


2 OBI

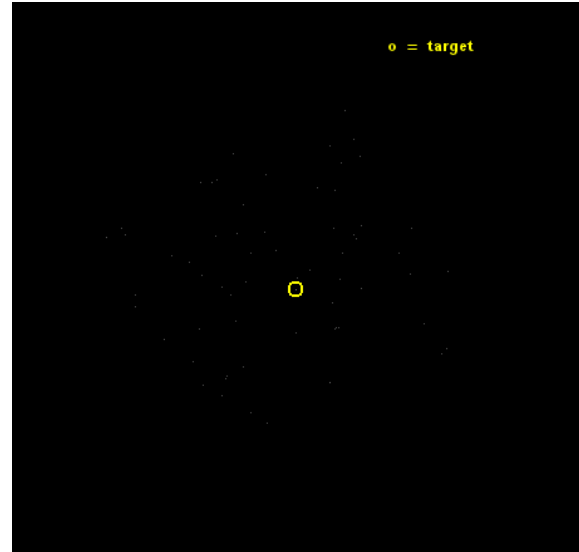
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	10147.500559688	[s]
caldbver	4.6.4	 	l1events	875138	Number of level 1 events
date	2014-12-11T12:27:15	Date and time of file creation			
revision	2	Processing version of data			

2.1.3 Events

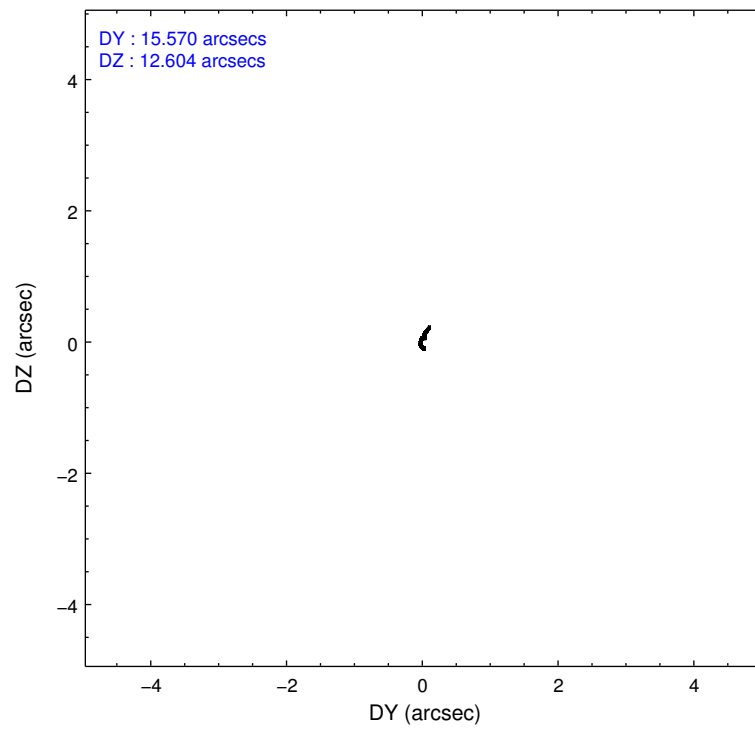
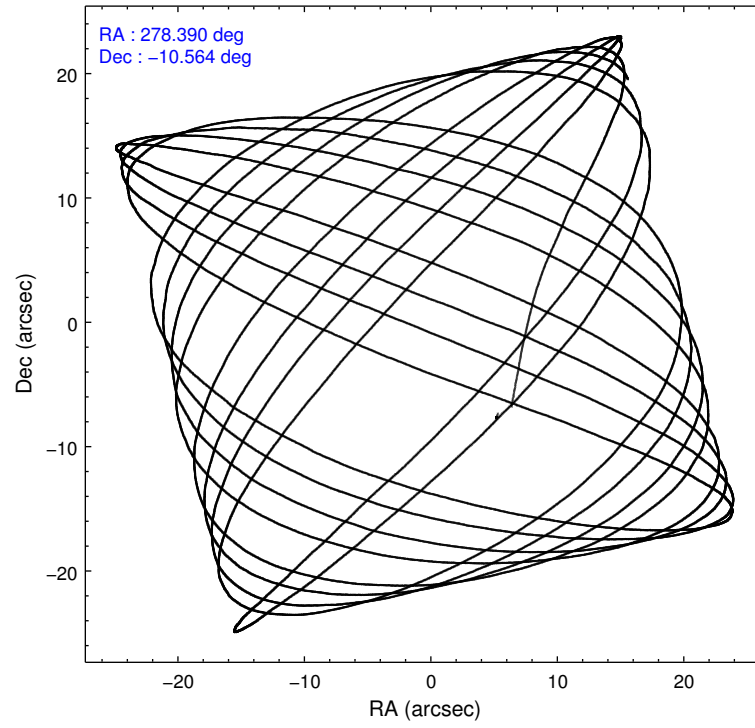
Level 1 Events

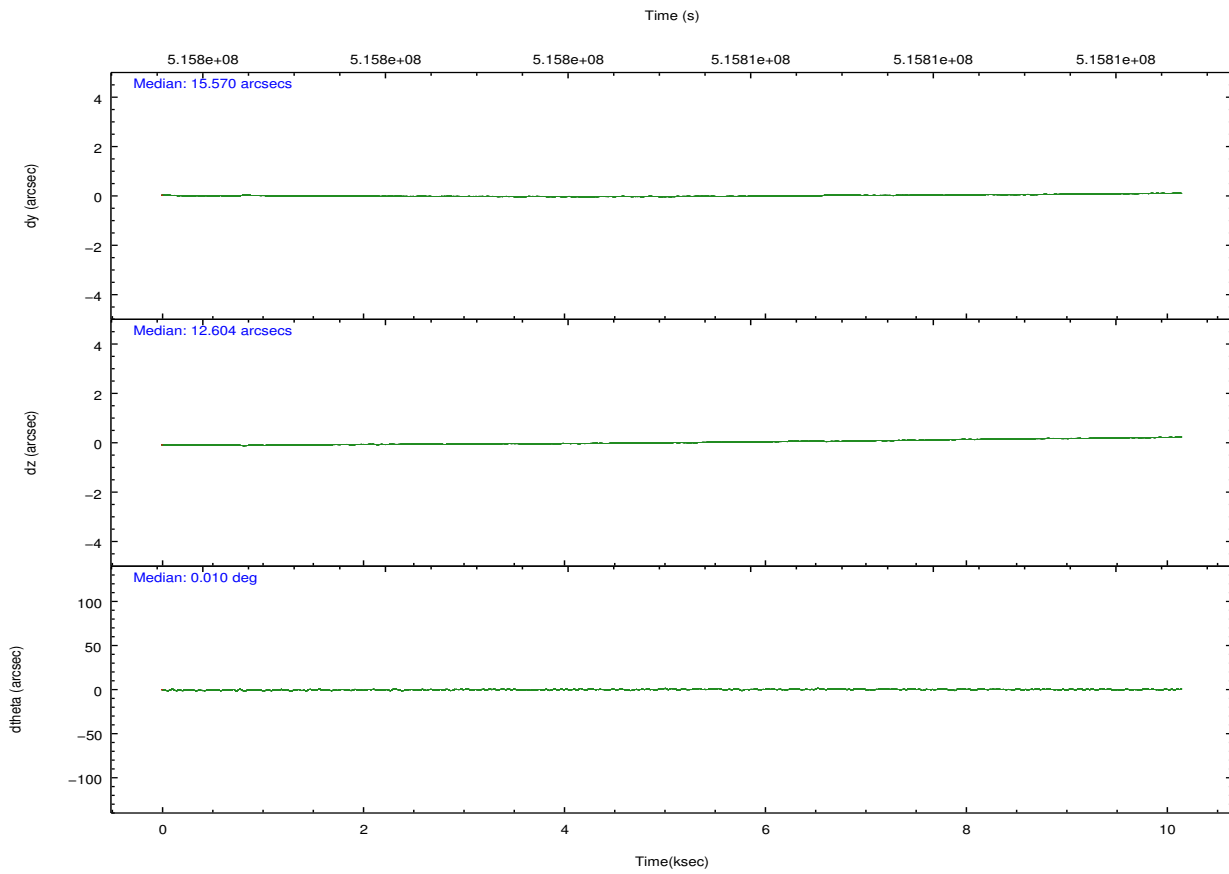
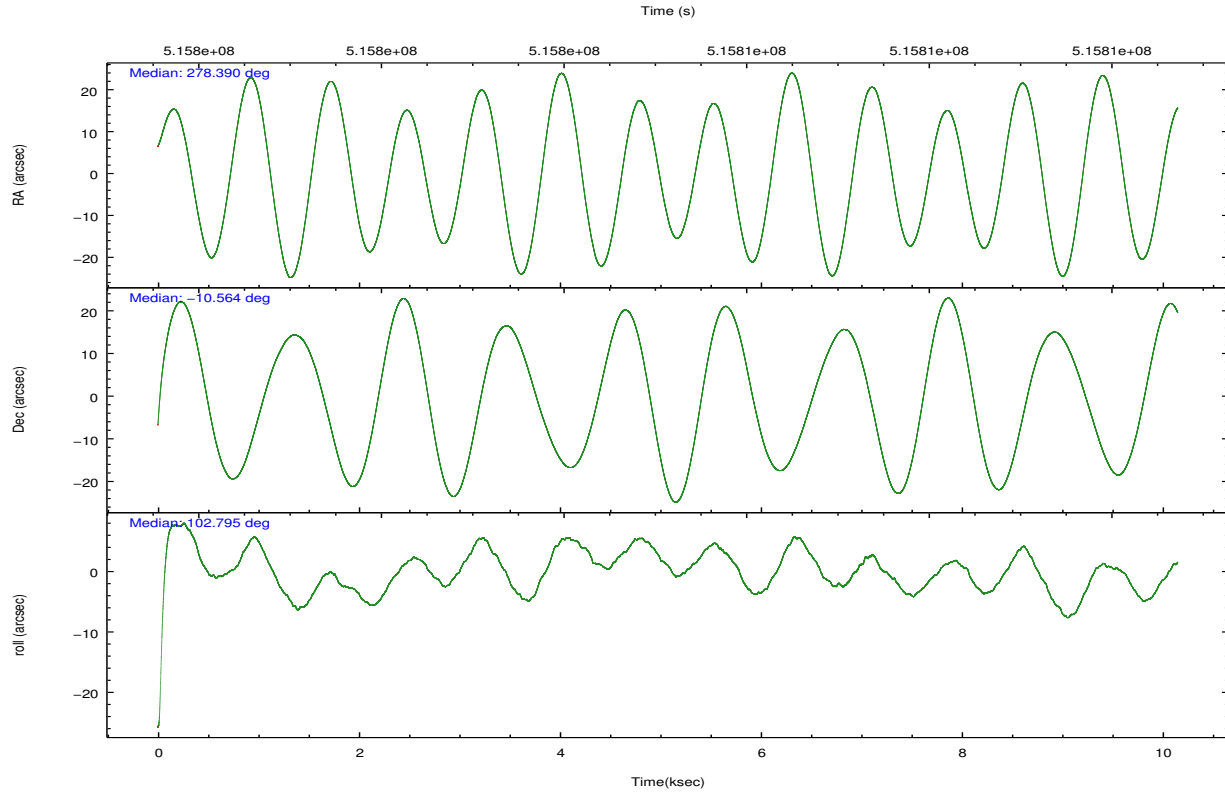
	segment 0
level 1 events	875138
rejected events	88962
rejected %	10%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-I	HRC-I	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	278.409509	278.3902598654652			
[deg] Pointing Dec	-10.583872	-10.56419431396074			
[deg] Pointing Roll	102.894644	102.7955833247345			
[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)	515800206.184000	515798930.20558			
Observation start date	2014-05-06T21:48:59	2014-05-06T21:28:50			
[s] Observation end time (MET)	515810206.184000	515810434.80621			
Observation end date	2014-05-07T00:35:39	2014-05-07T00:40:34			

2.3 Aspect





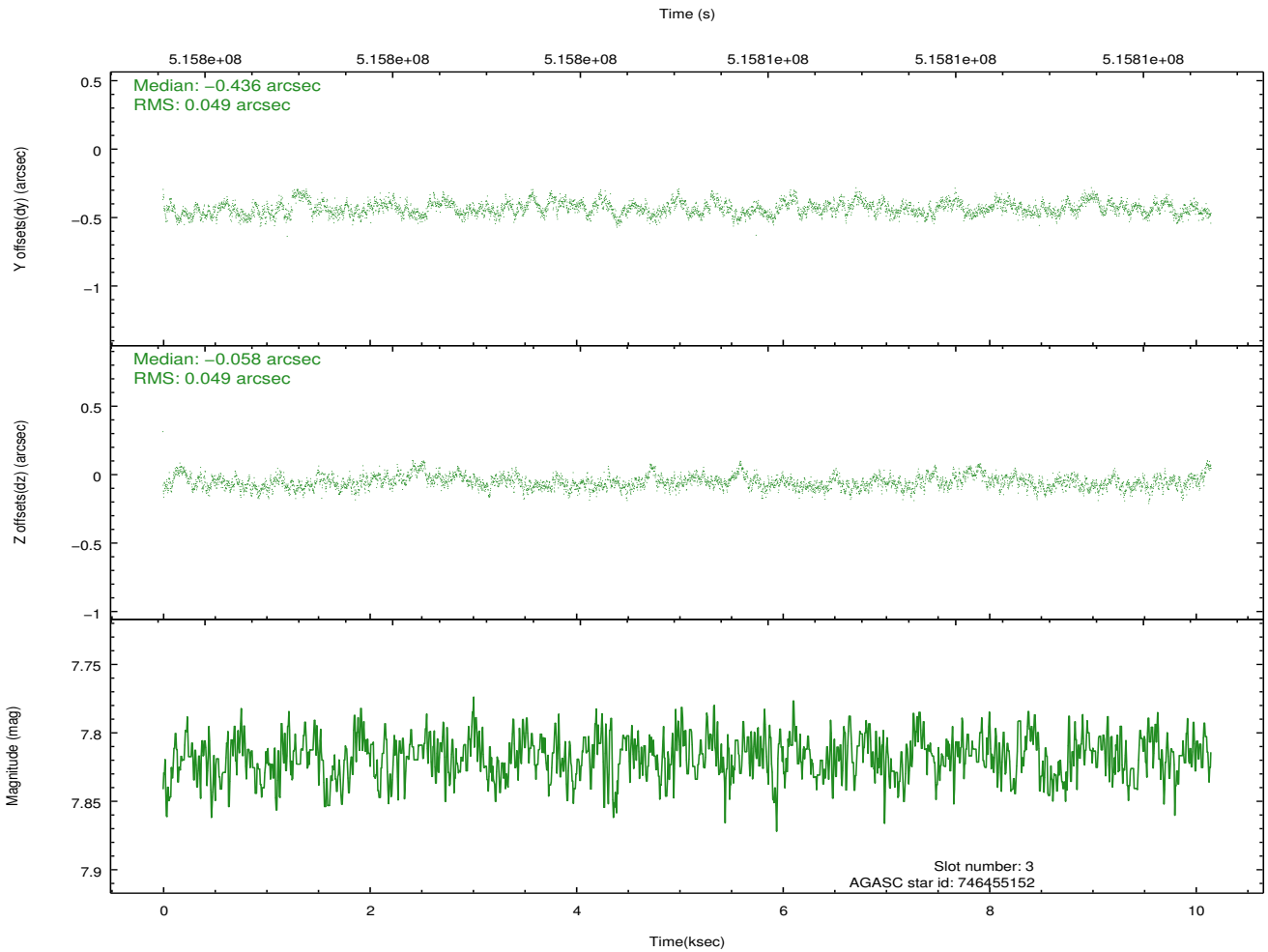
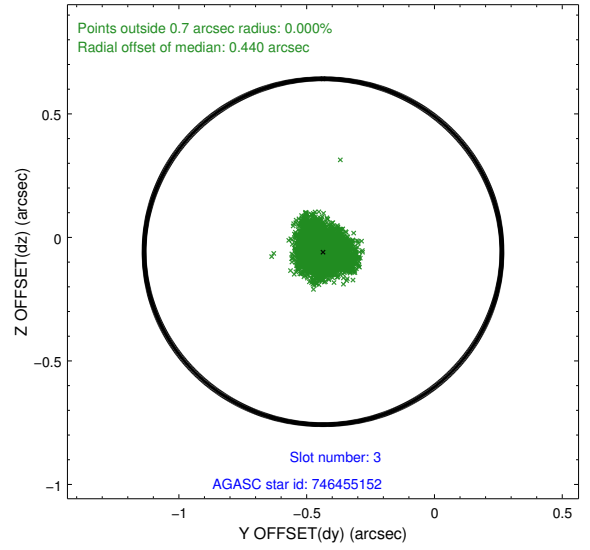
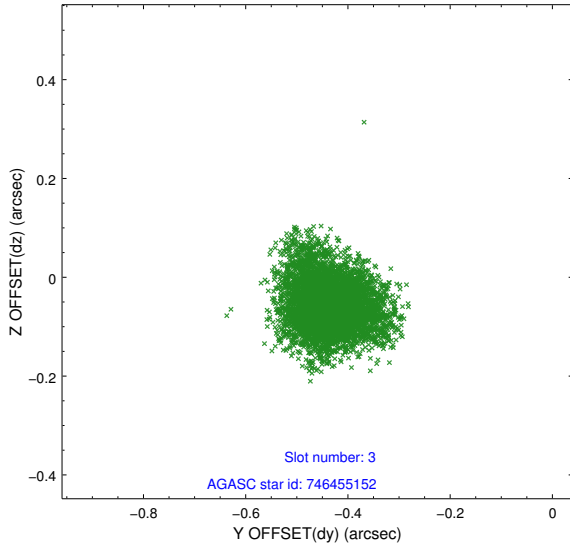
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	6.95	2476	-0.084	0.031	0.007	0.012	0.000000	0.000000	-771.51	-1300.60
1	FID		HRC-I-2	6.98	2476	0.236	-0.125	0.008	0.020	0.000000	0.000000	841.13	-1302.88
2	FID		HRC-I-3	7.04	2476	-0.033	0.006	0.008	0.023	0.000000	0.000000	-1199.56	1003.42
3	GUIDE	used	746455152	7.82	4952	-0.436	-0.058	0.073	0.121	278.447893	-9.976732	2099.82	-620.04
4	GUIDE	used	746460272	8.91	4951	-0.094	0.046	0.104	0.170	278.847488	-10.152127	1168.10	-1859.18
5	GUIDE	used	746460328	9.79	4942	-0.059	-0.049	0.208	0.319	278.603974	-9.898096	2251.59	-1222.76
6	GUIDE	used	746462392	8.53	4947	0.325	0.088	0.095	0.155	279.038421	-10.890715	-1577.47	-1921.18
7	GUIDE	used	746462680	9.01	4950	0.270	-0.030	0.096	0.156	278.660755	-10.782756	-896.56	-706.25

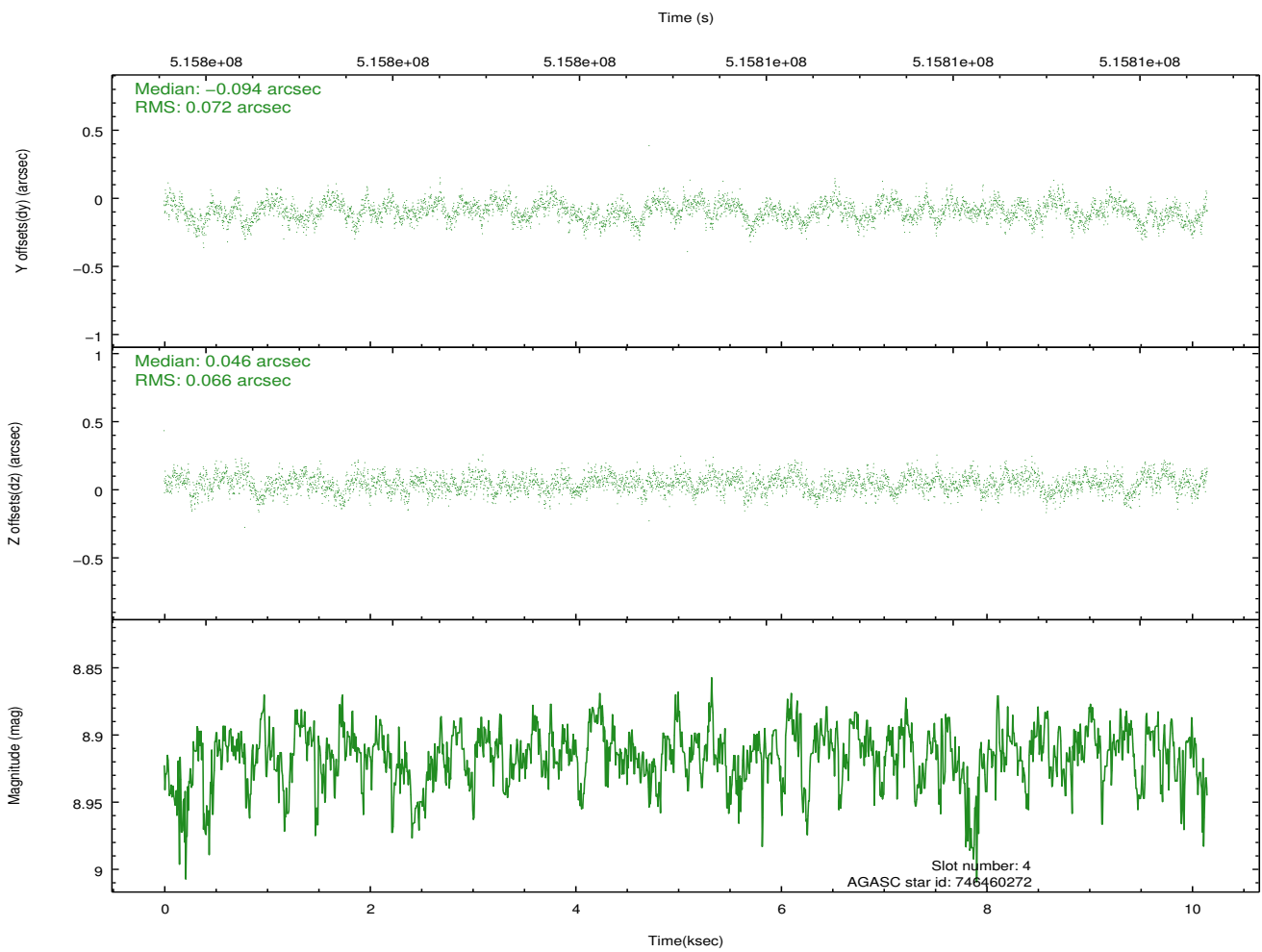
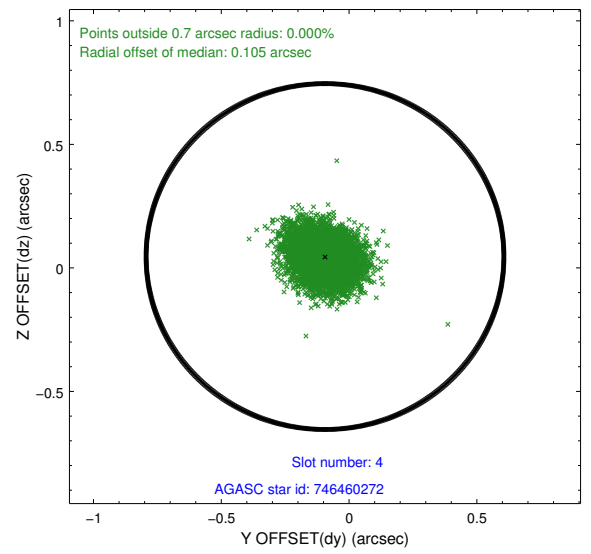
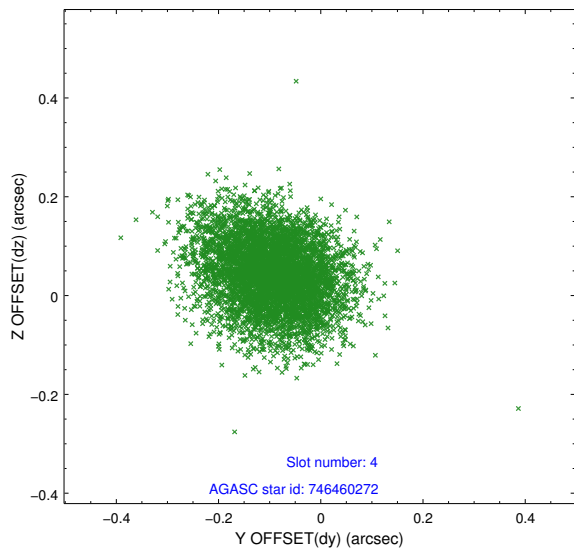
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2.4 Star Slots

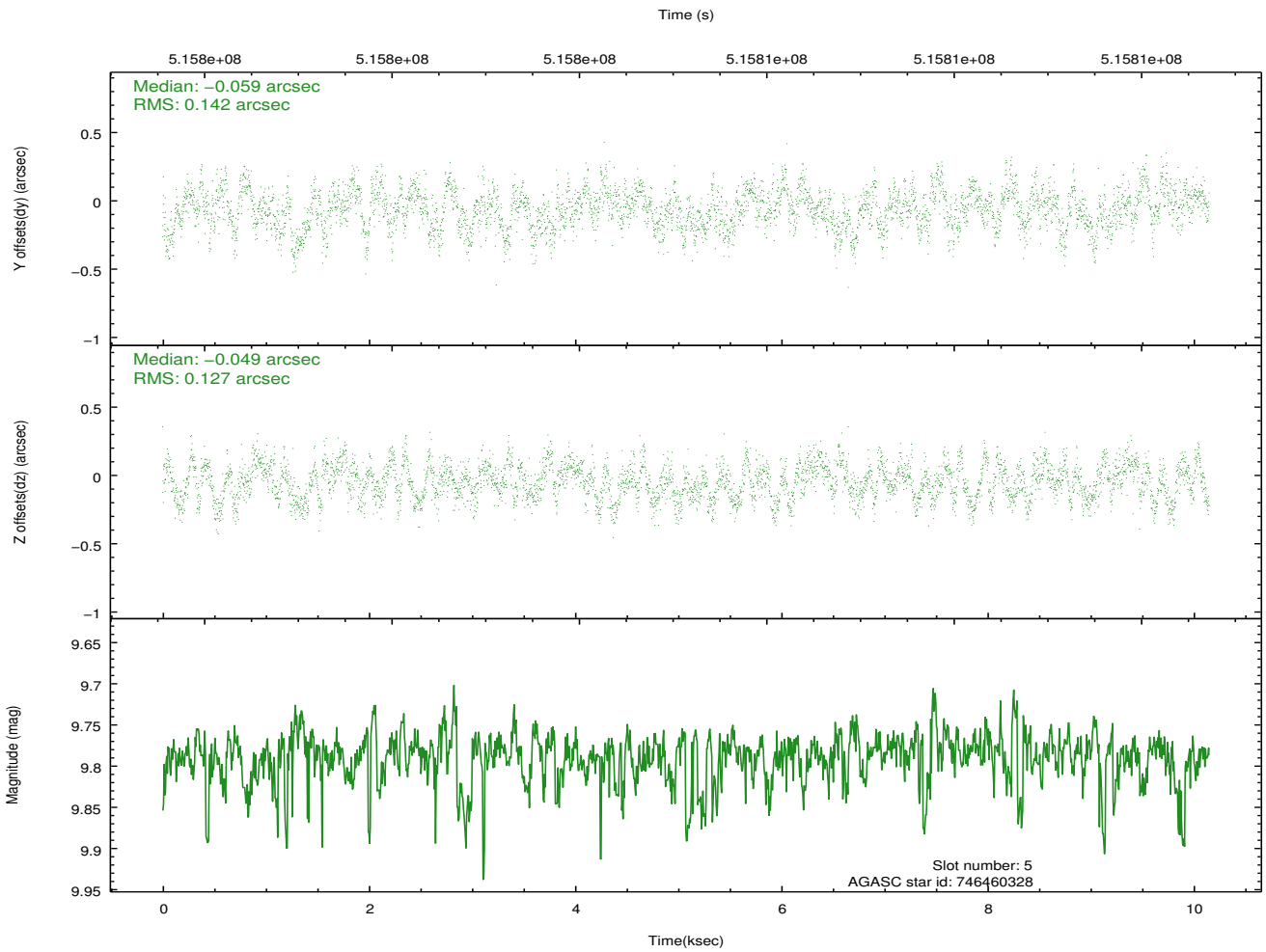
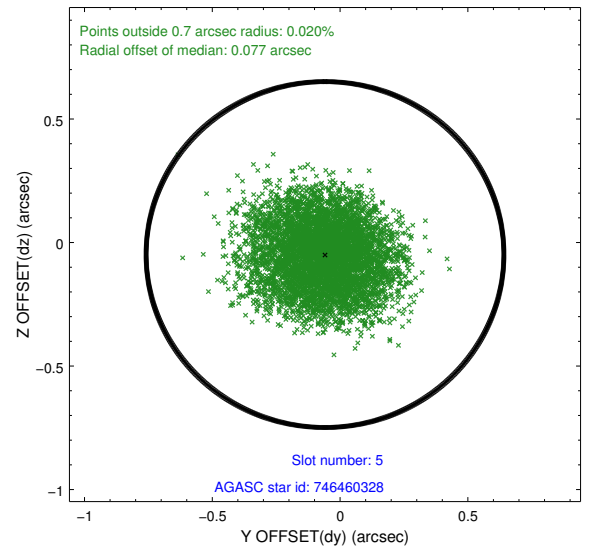
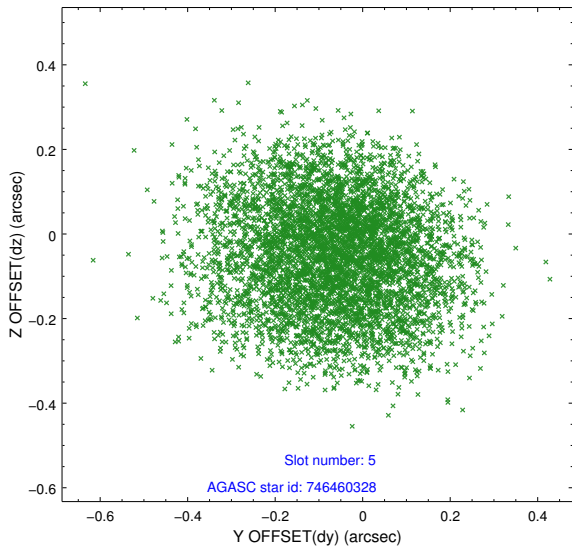
2.4.1 Slot 3



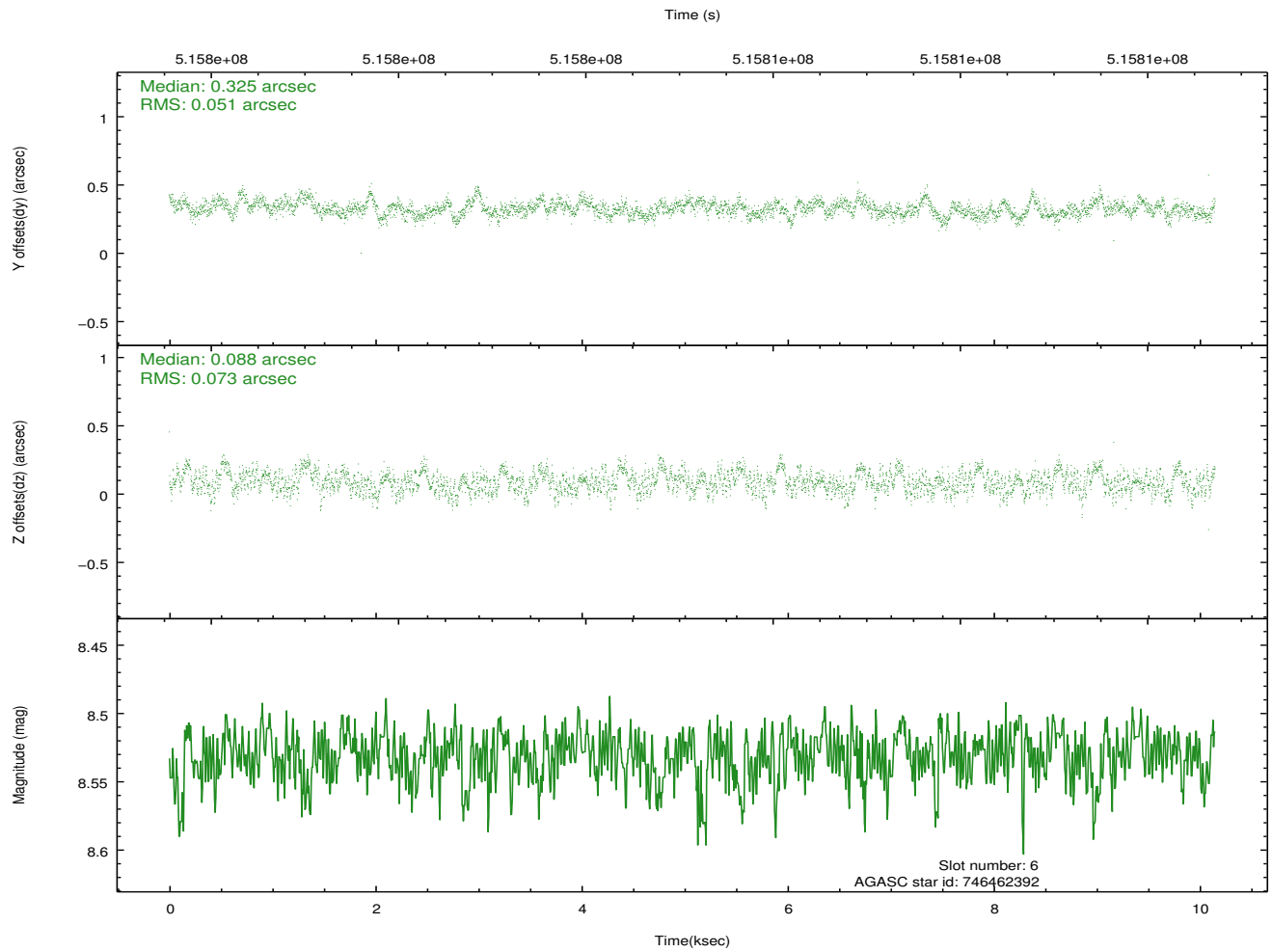
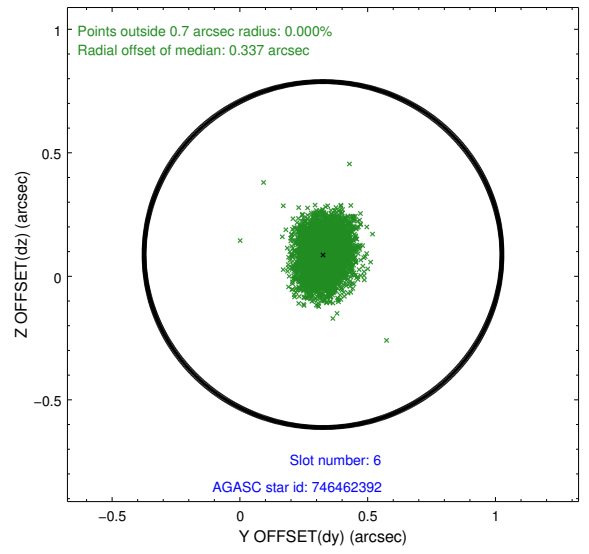
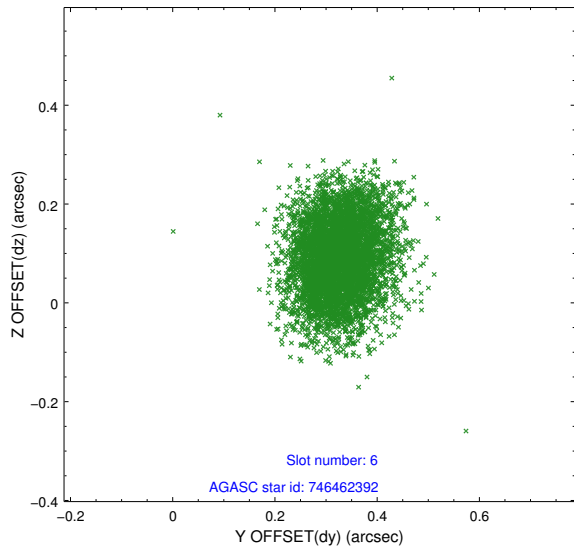
2.4.2 Slot 4



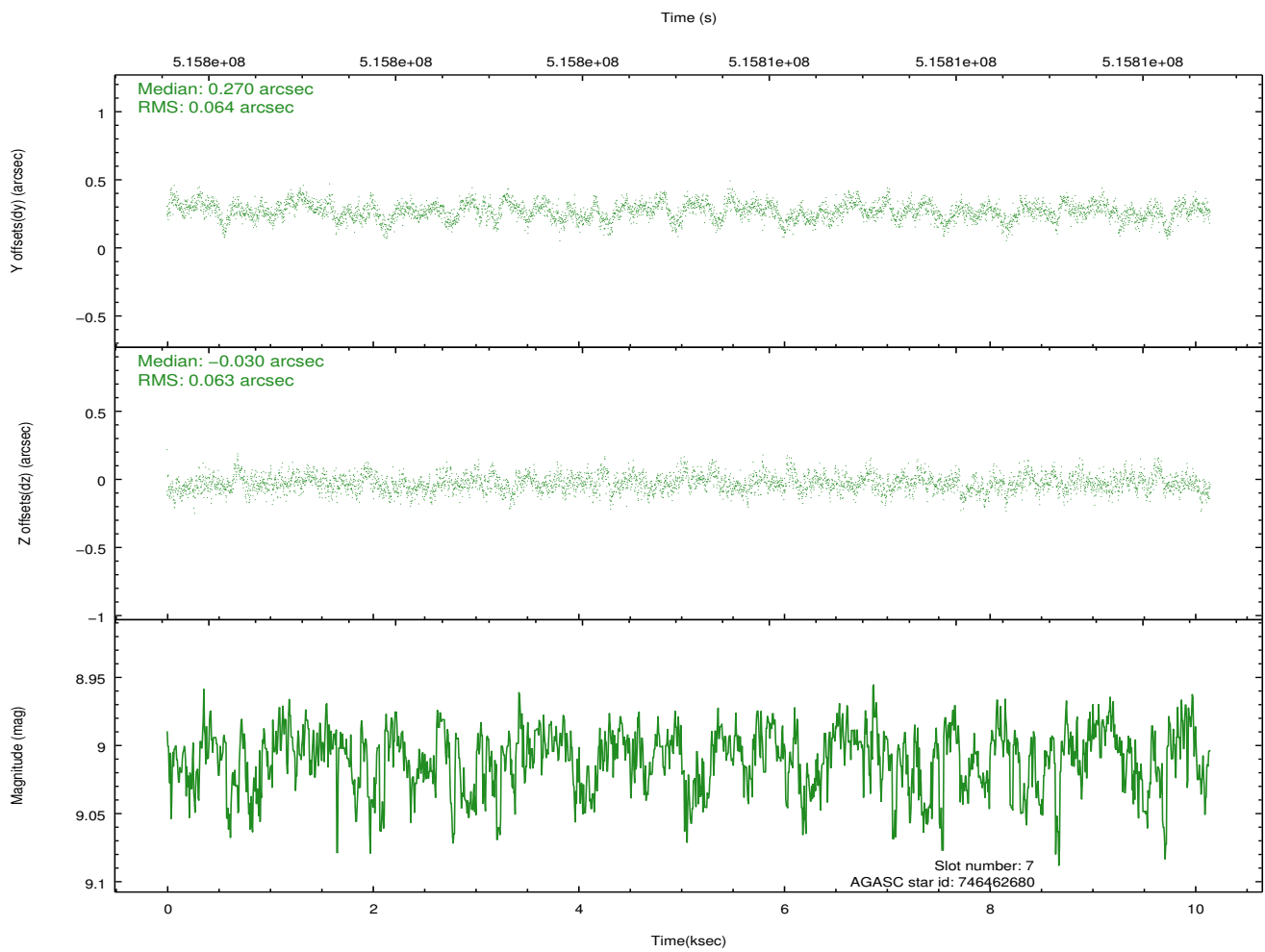
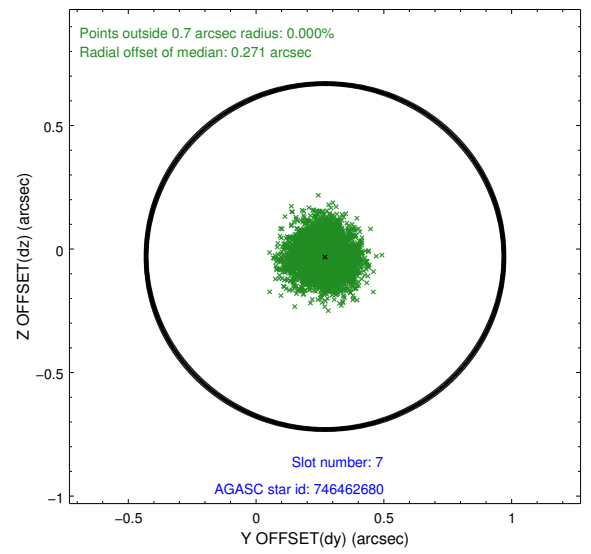
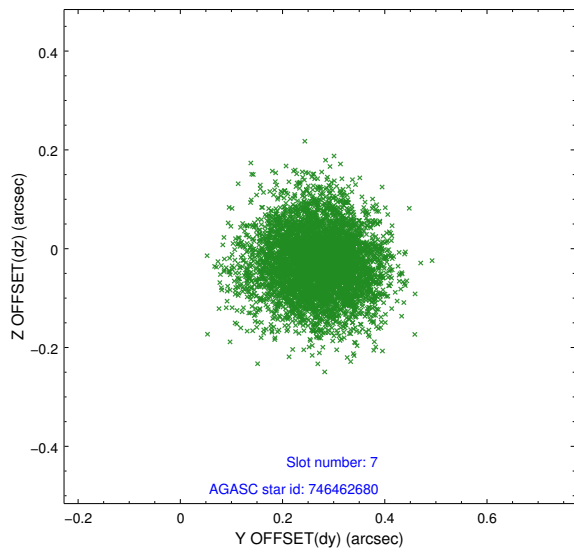
2.4.3 Slot 5



2.4.4 Slot 6

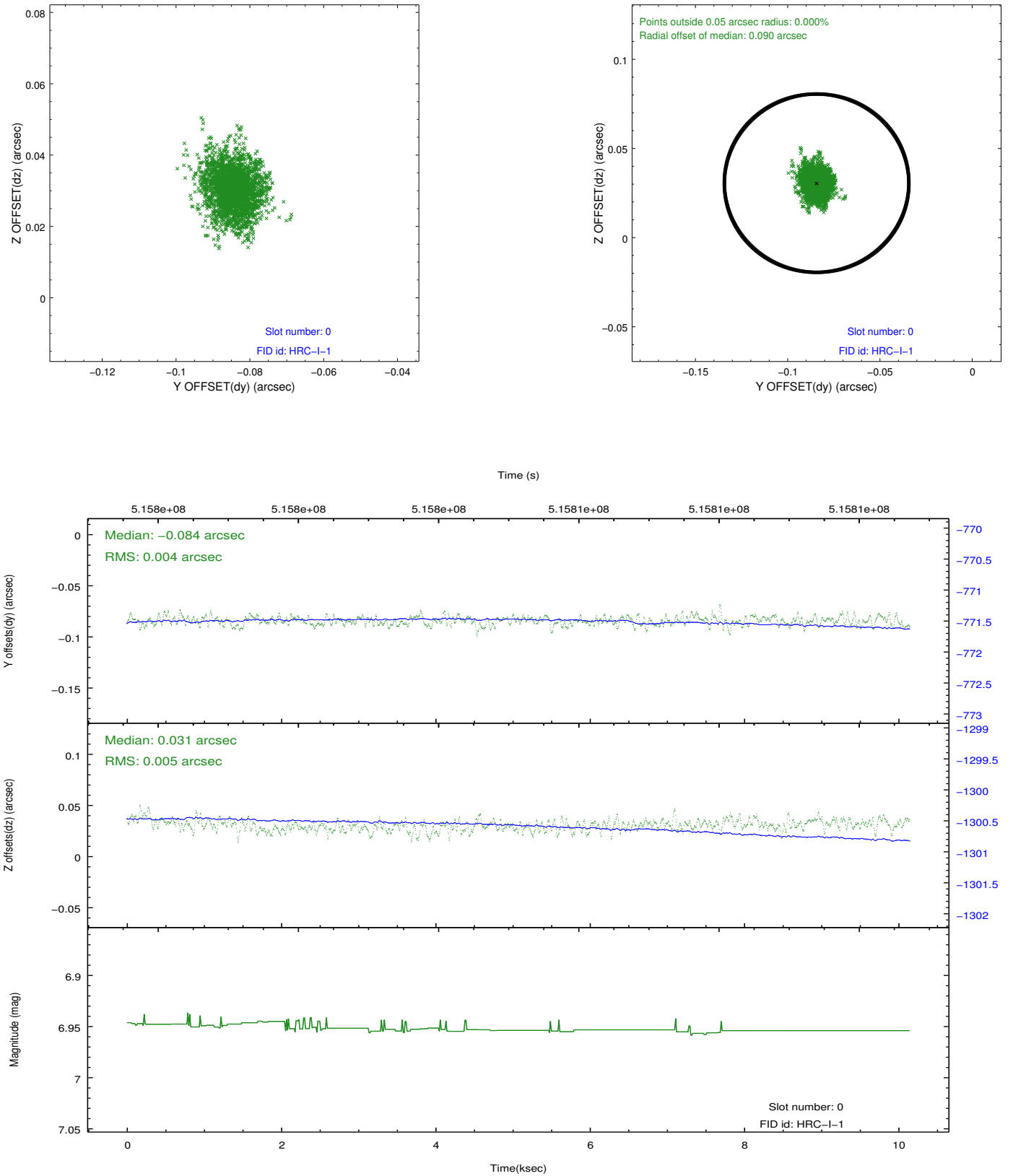


2.4.5 Slot 7

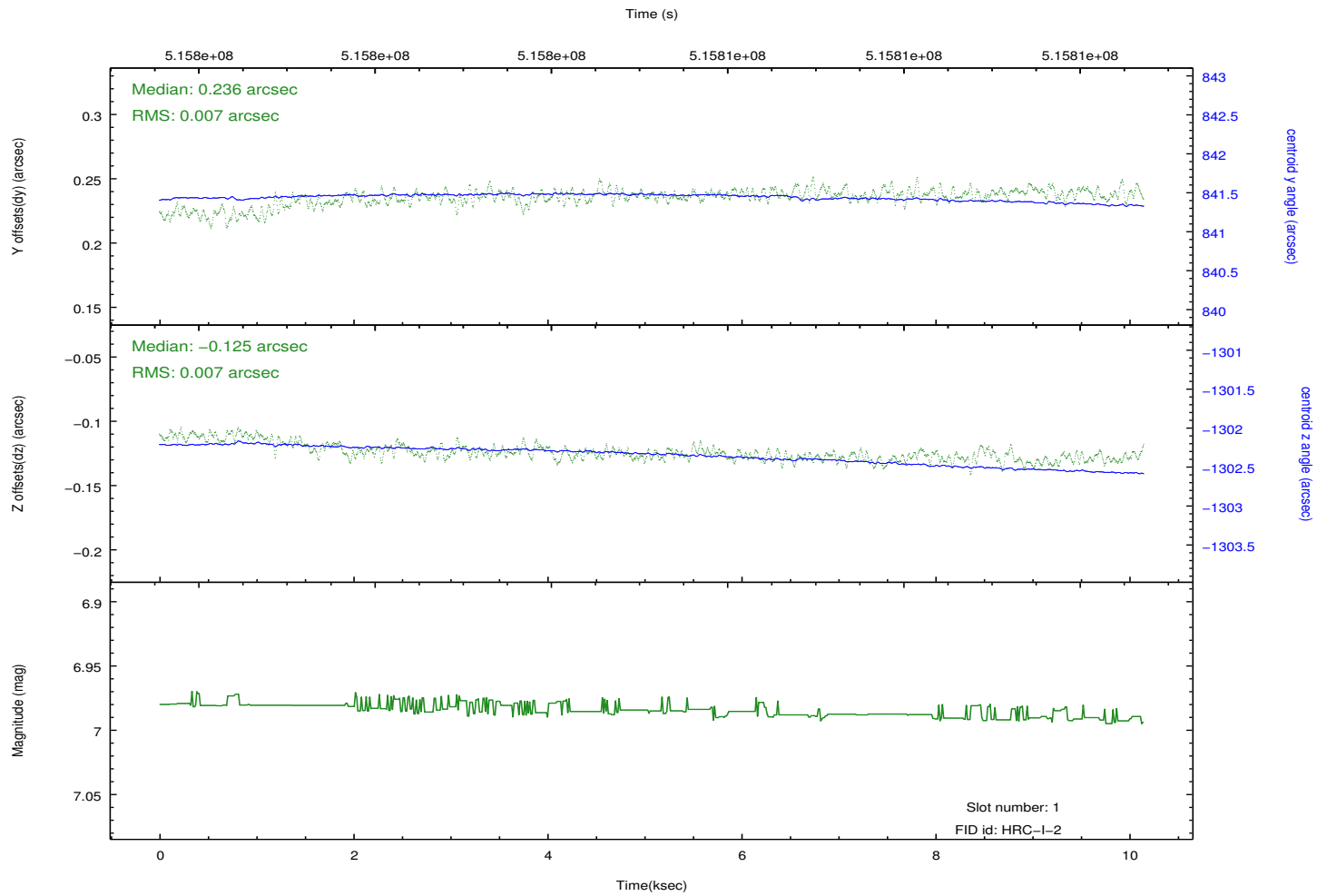
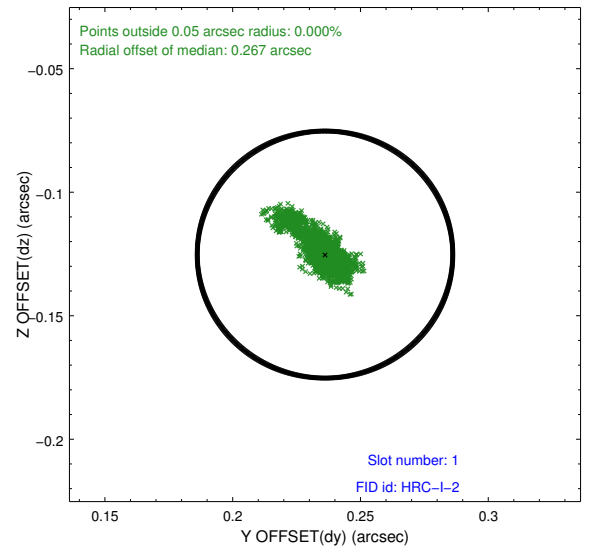
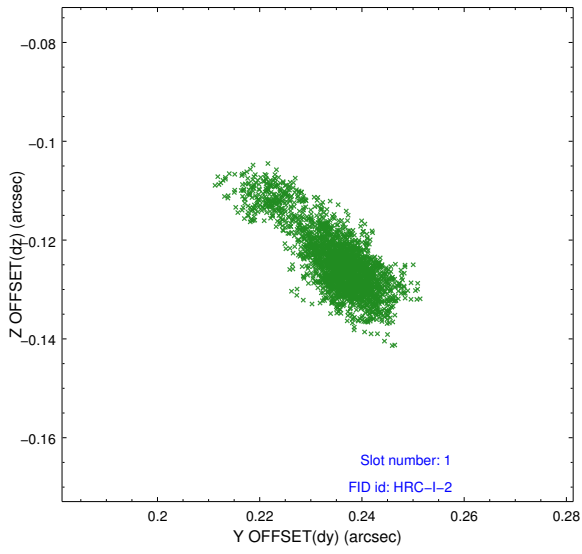


2.5 FID Slots

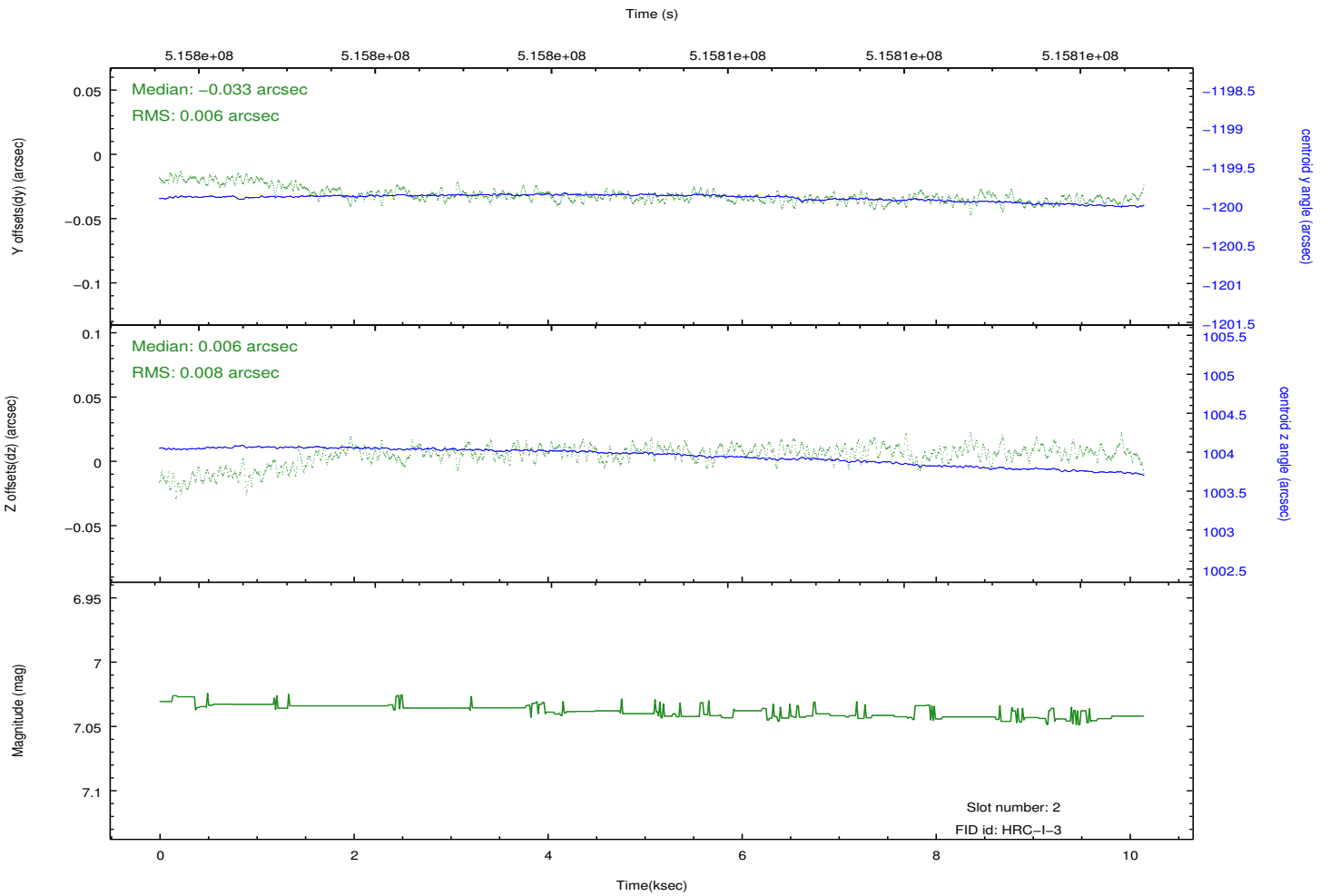
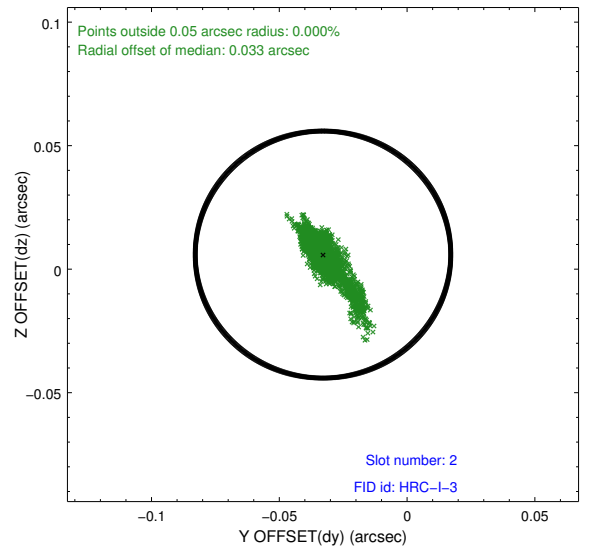
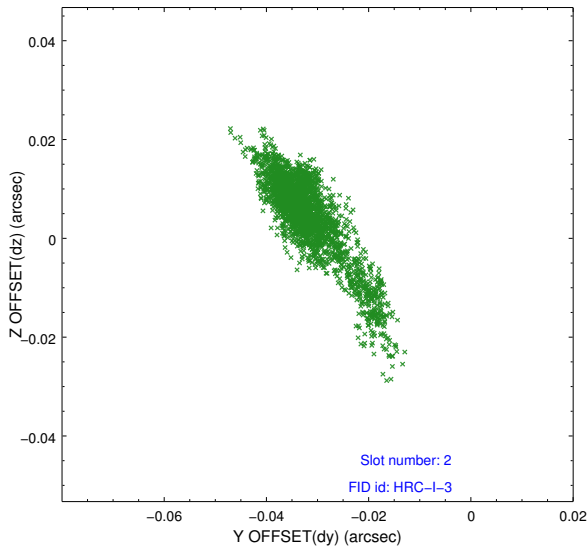
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.147500559688

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.