

V&V Reference Report

L2 ASCDS Version : 10.8.1

Observation 23093 - L2 Version 1
Chandra X-Ray Center

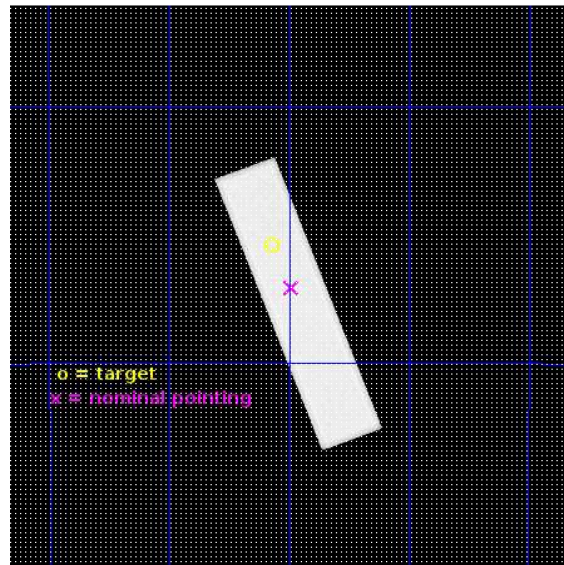
L2 Processing Date : Dec 19 2019

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

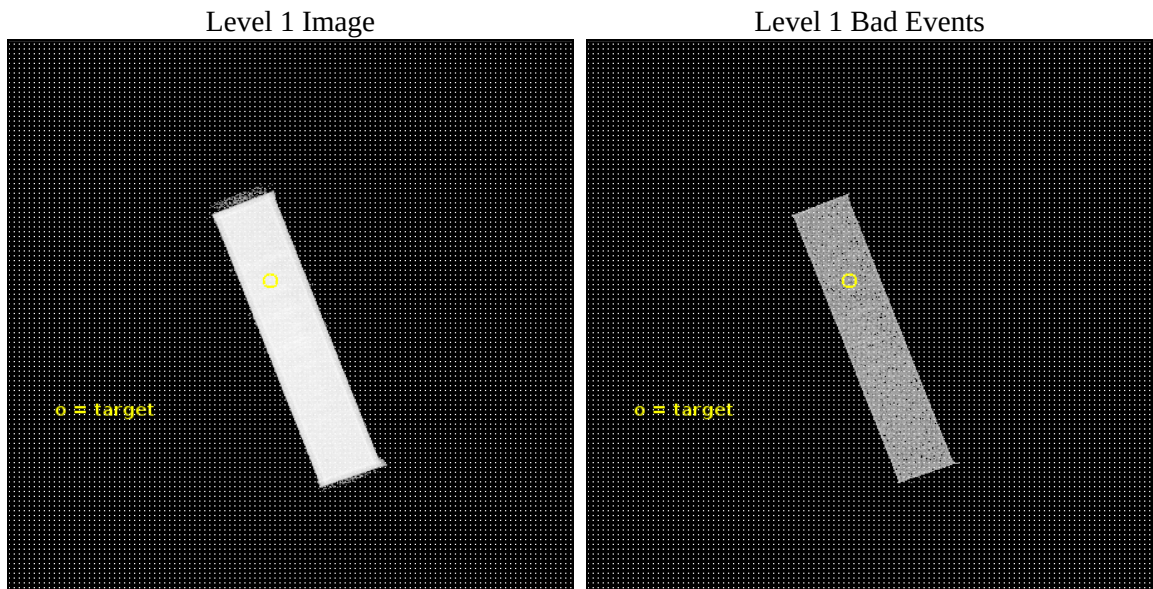
seq_num	100192	Sequence number
obs_id	23093	Observation id
title	Chandra Observations of the Interstellar Comet C/2019 Q4 Borisov	P
observer	Bradford Snios	Principal investigator
object	C/2019 Q4 Borisov	Source name
ra_targ	176.286646	Observer's specified target RA [deg]
dec_targ	-26.269885	Observer's specified target Dec [deg]
ra_nom	176.24498916867	Nominal RA [deg]
dec_nom	-26.353109912858	Nominal Dec [deg]
roll_nom	69.048870023762	Nominal Roll [deg]
revision	1	Processing version of data
ontime	12688.475766778	[s]
livetime	12582.287848243	Ontime multiplied by DTCOR
l2events	800312	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	12500.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	12688.475766778	[s]
caldbver	4.8.4.2	 	l1events	1020390	Number of level 1 events
date	2019-12-19T14:56:34	Date and time of file creation			
revision	1	Processing version of data			

2.1.3 Events

Level 1 Events

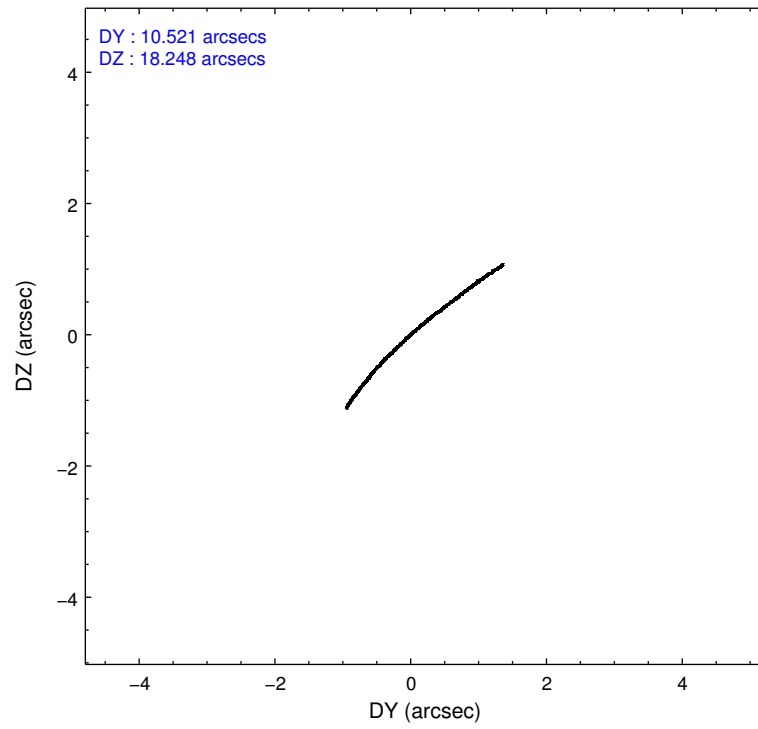
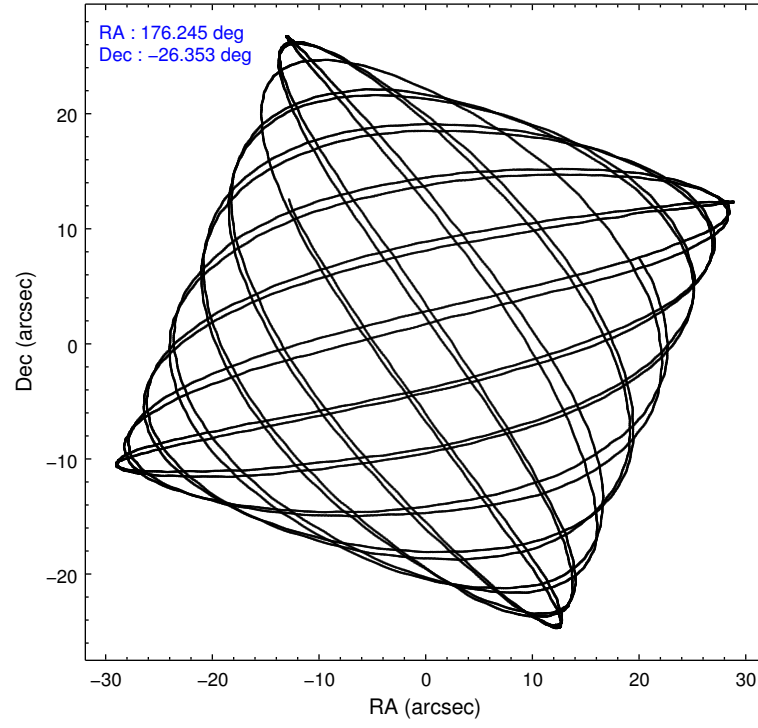
	segment 1	segment 2	segment 3
level 1 events	0	1020390	0
rejected events	0	81417	0
rejected %	0%	7%	0%

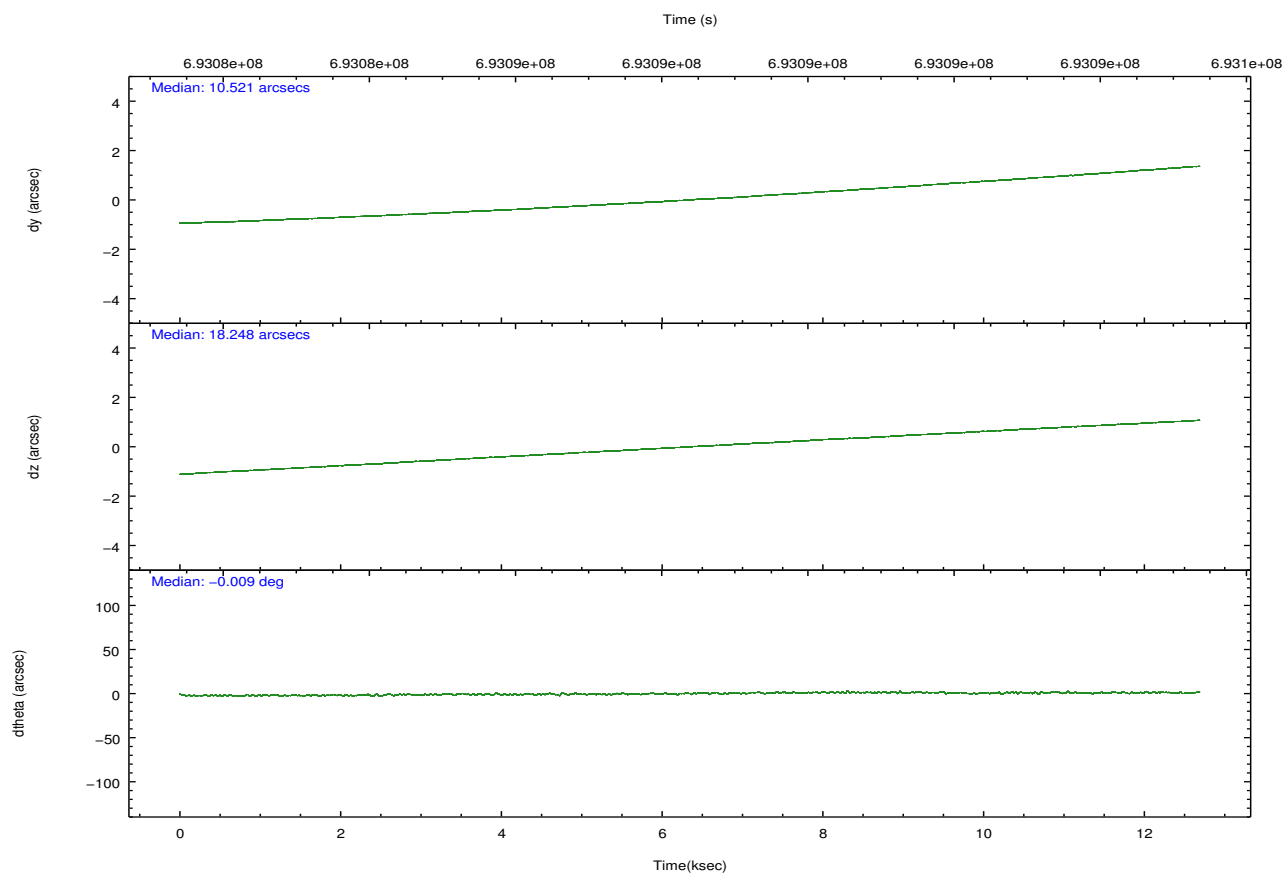
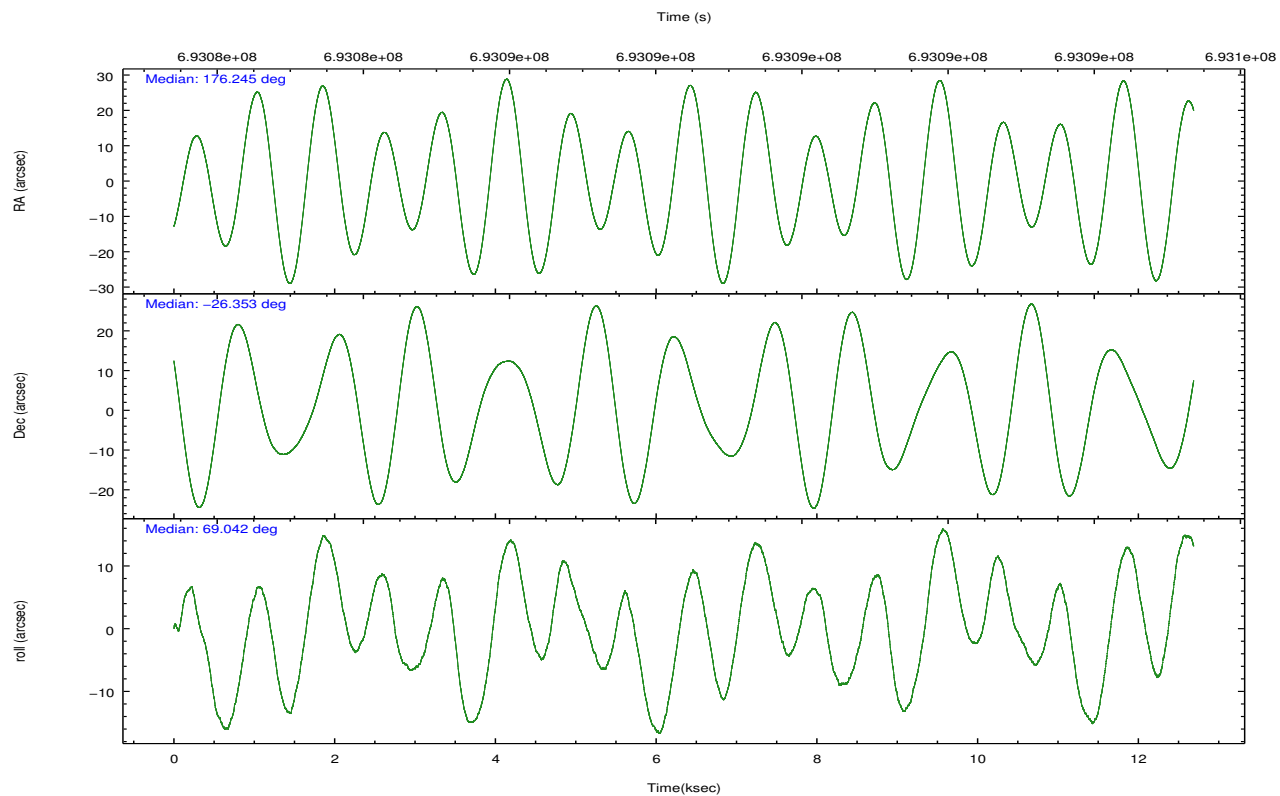
2.2 Compared Parameters

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	176.251562	176.2449891686673
[deg] Pointing Dec	-26.381224	-26.35310991285776
[deg] Pointing Roll	68.984460	69.04887002376176
[s] Window start time (MET)	692625669.184000	692625669.184000
[s] Window stop time (MET)	693835269.184000	693835269.184000
[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)	693082251.184000	693081875.27404
Observation start date	2019-12-18T18:49:42	2019-12-18T18:44:35
[s] Observation end time (MET)	693094751.184000	693095669.72487
Observation end date	2019-12-18T22:18:02	2019-12-18T22:34:29

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

2.3 Aspect



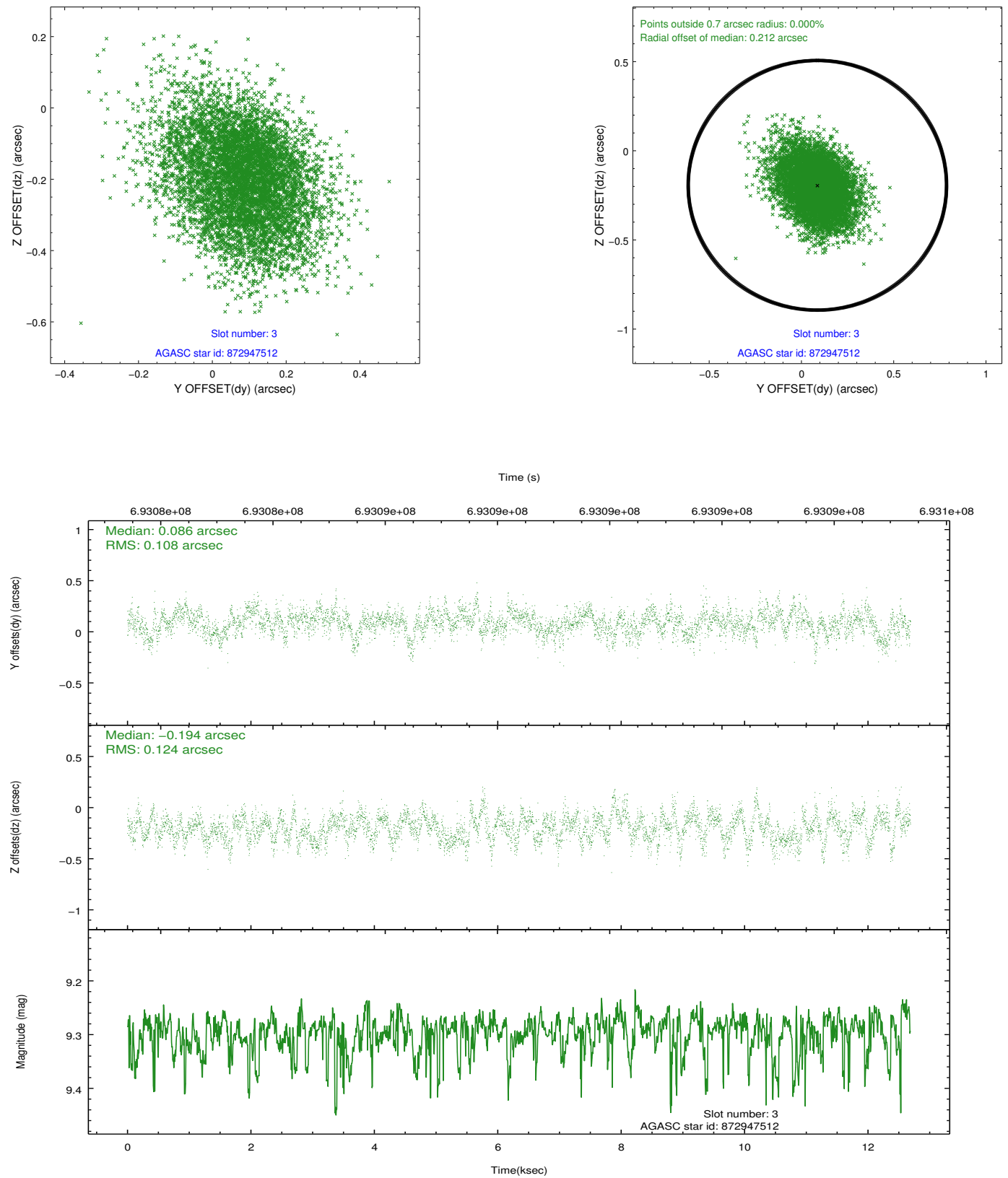


Slot Statistics

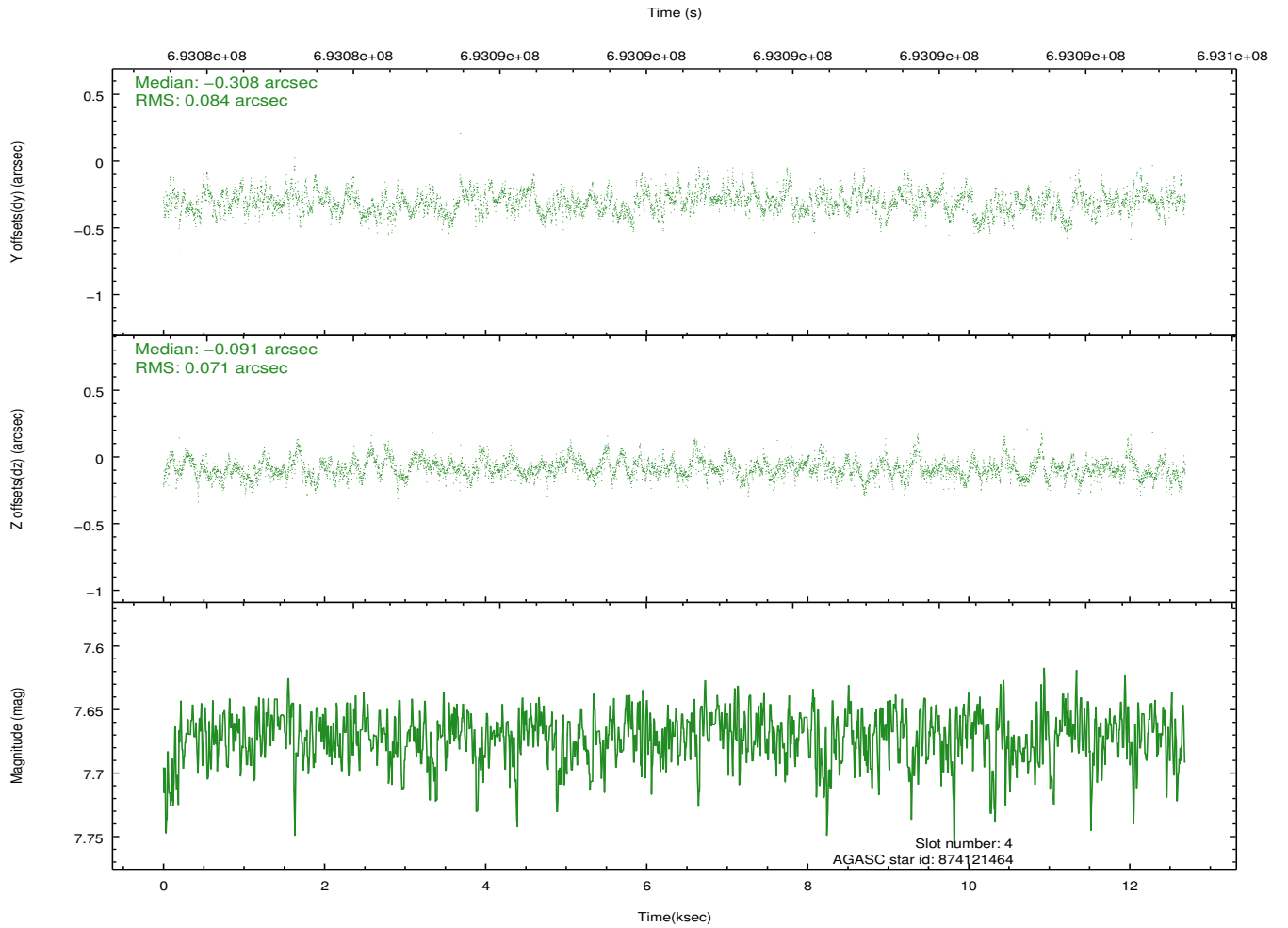
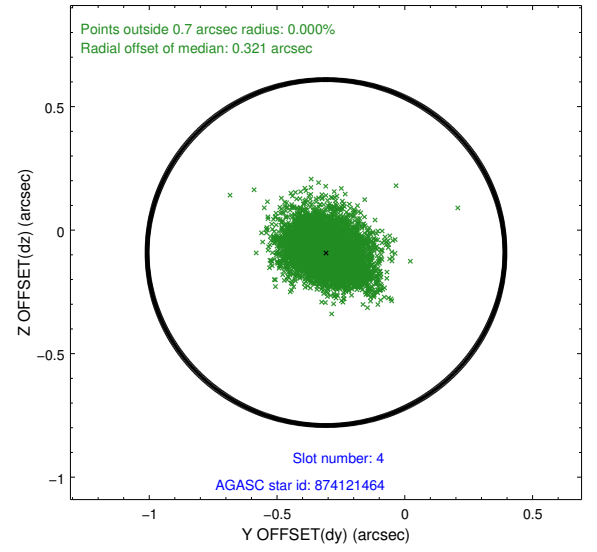
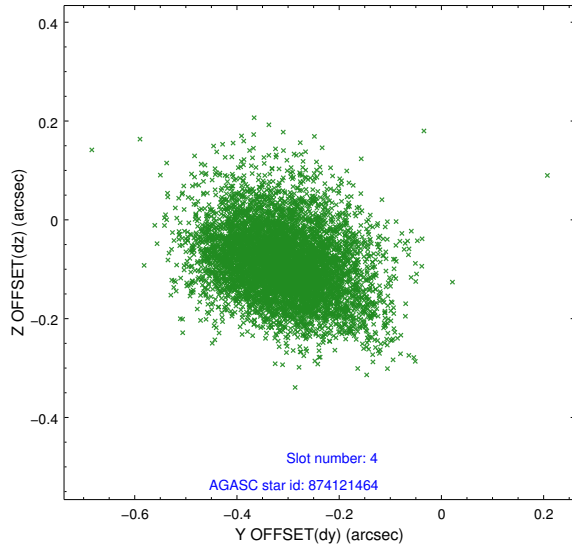
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.05	3095	1.000	-0.079	-0.201	0.028	0.049	0.000000	0.000000	-1164.96	-467
1	FID		HRC-S-2	7.03	3094	1.000	0.446	-0.146	0.028	0.048	0.000000	0.000000	1234.86	-459
2	FID		HRC-S-3	7.05	3095	1.000	0.021	0.045	0.034	0.058	0.000000	0.000000	-1167.28	562
3	GUIDE	used	872947512	9.29	6183	1.000	0.086	-0.194	0.174	0.287	175.707382	-26.856443	-2227.00	1018
4	GUIDE	used	874121464	7.67	6185	1.000	-0.308	-0.091	0.114	0.195	176.832990	-25.961470	2081.64	-1214
5	GUIDE	used	874649568	8.77	6182	1.000	-0.201	0.263	0.144	0.244	176.829393	-26.547037	107.58	-1951
6	GUIDE	used	874651224	8.96	6184	1.000	0.319	0.356	0.145	0.230	176.582396	-27.063650	-1913.02	-1870
7	GUIDE	used	874651352	8.98	6186	1.000	0.103	-0.328	0.176	0.272	176.013783	-26.883302	-1961.42	64

2.4 Star Slots

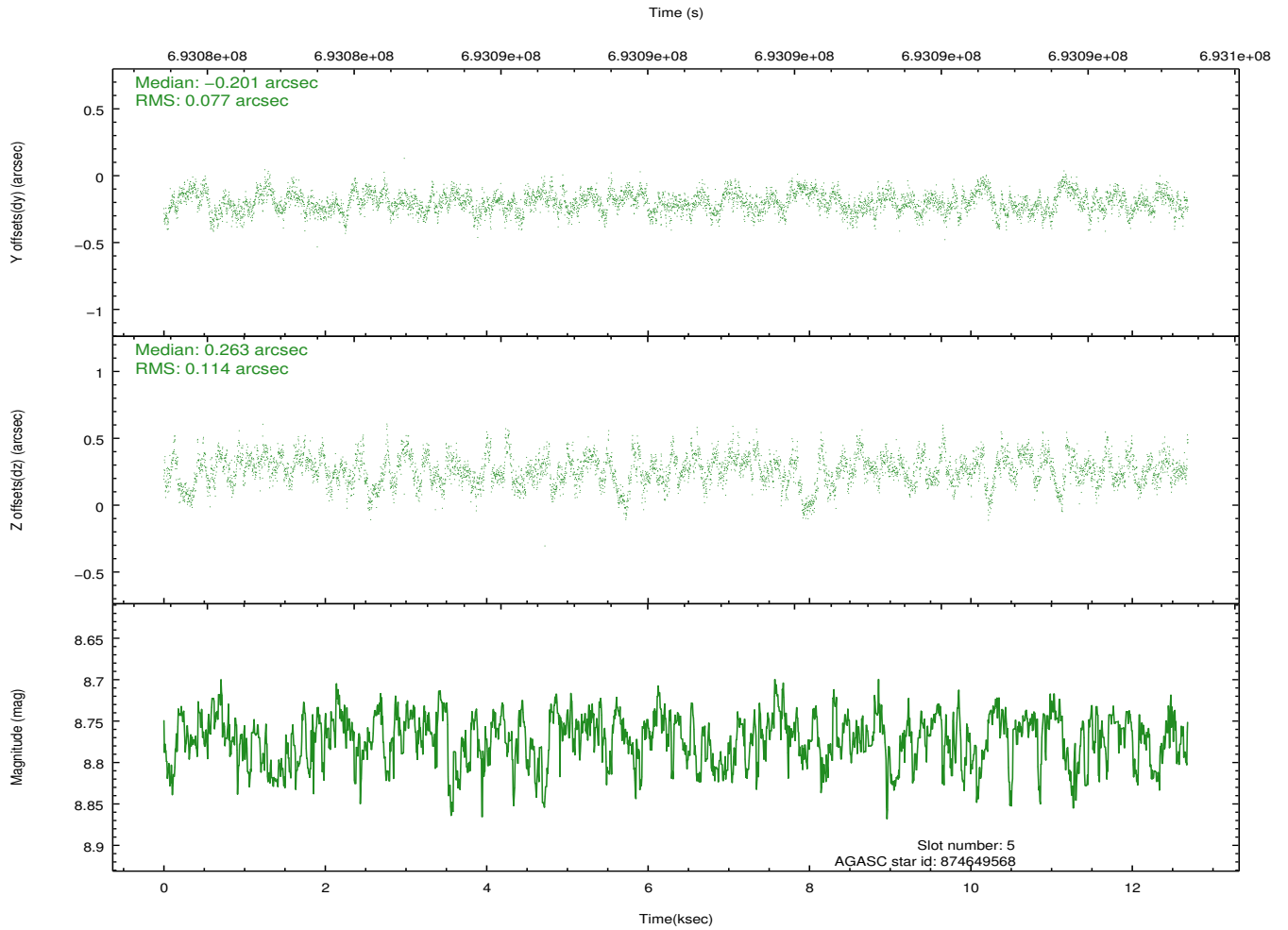
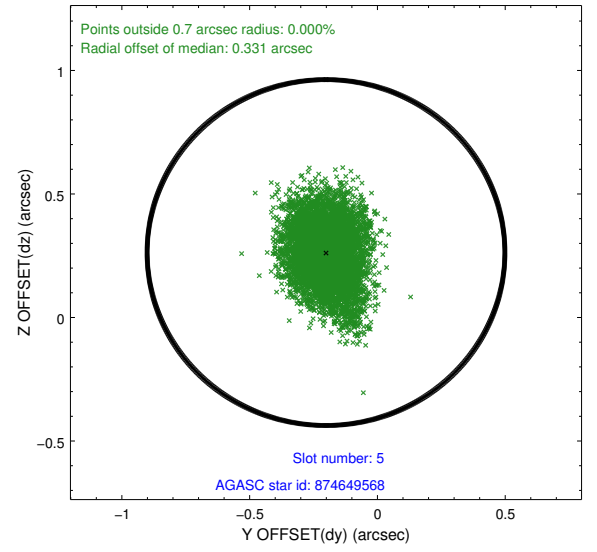
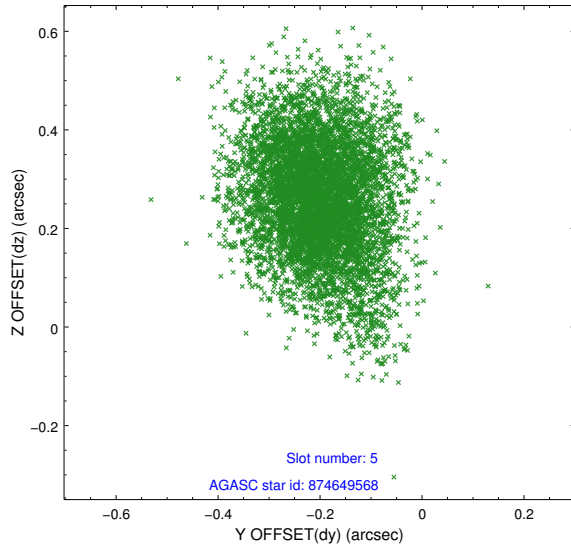
2.4.1 Slot 3



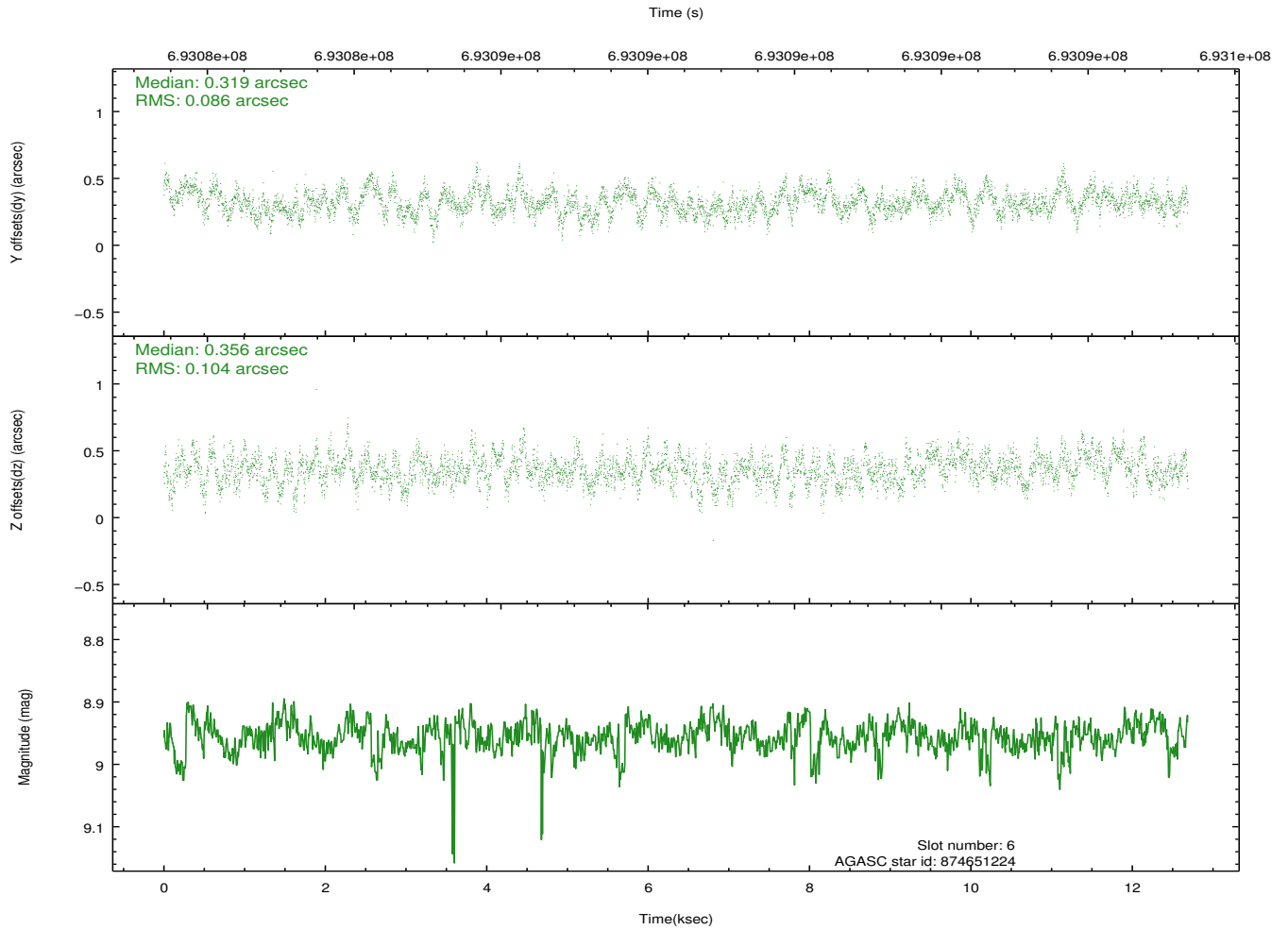
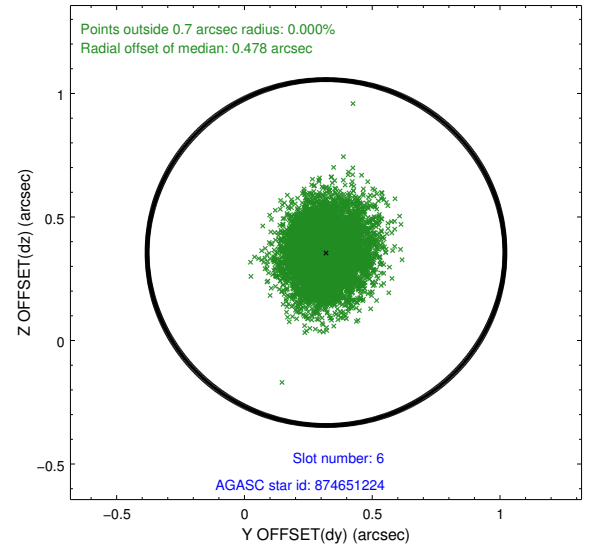
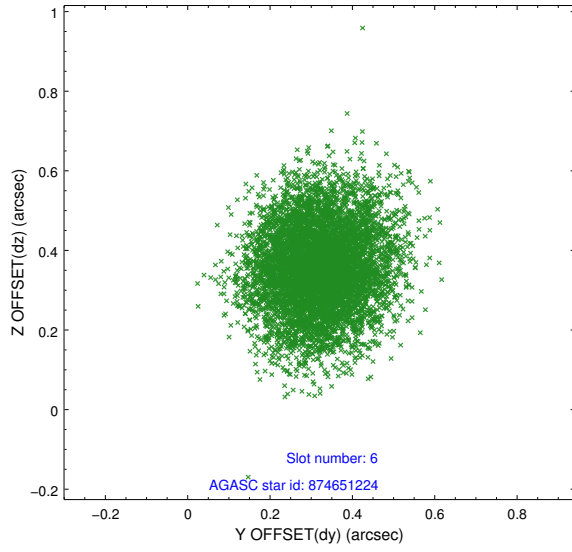
2.4.2 Slot 4



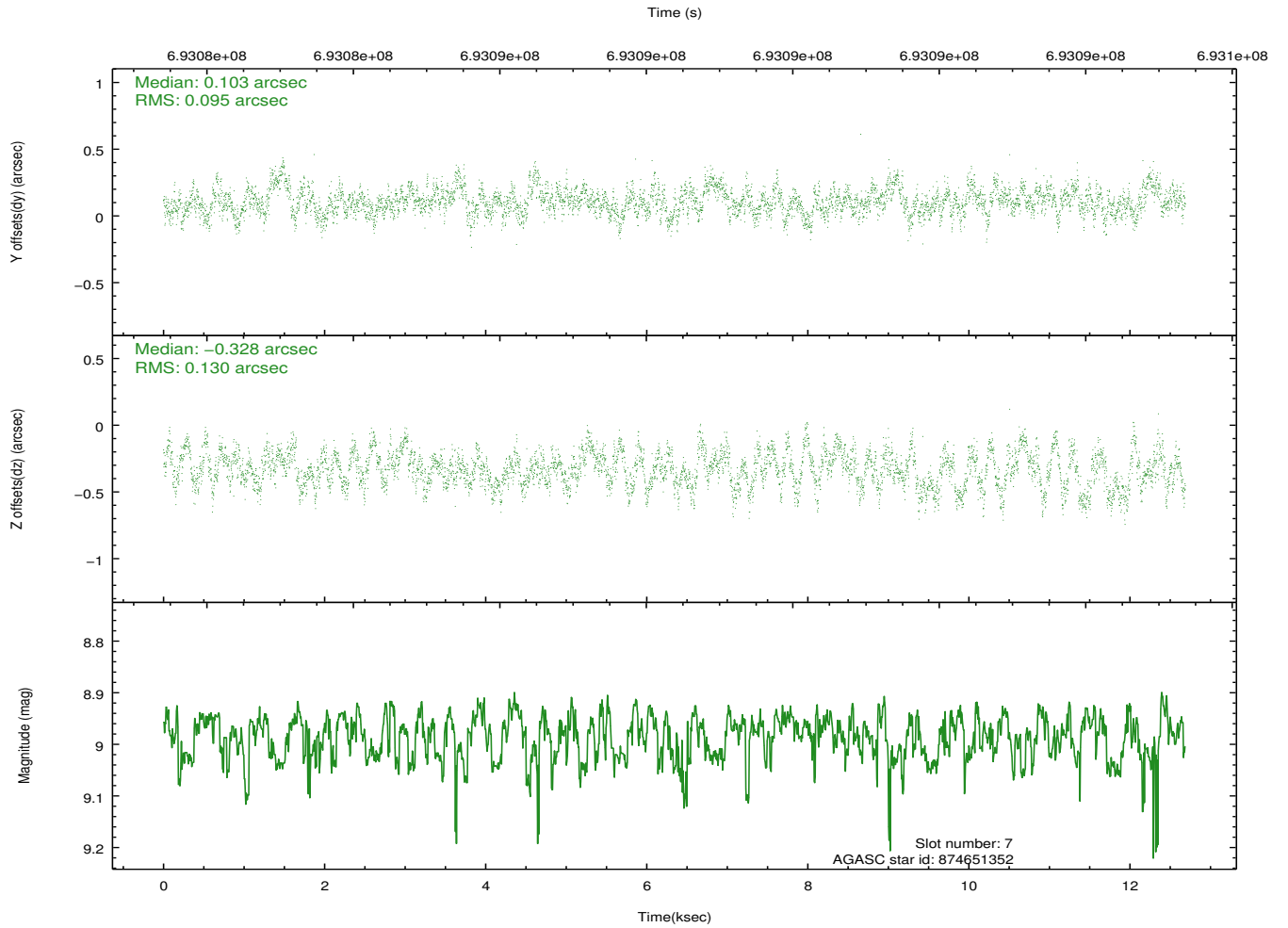
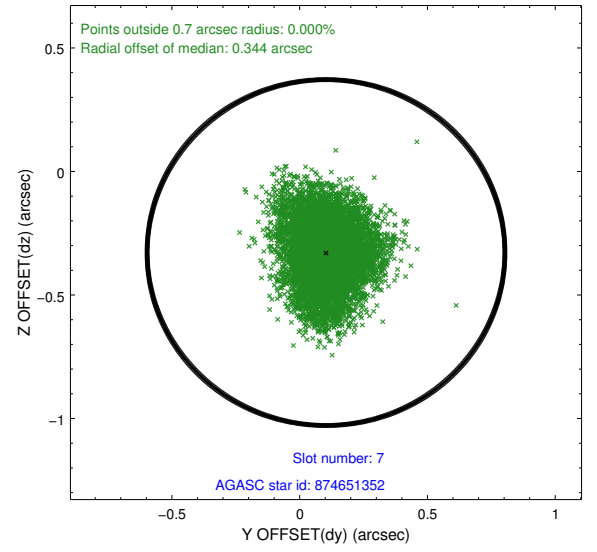
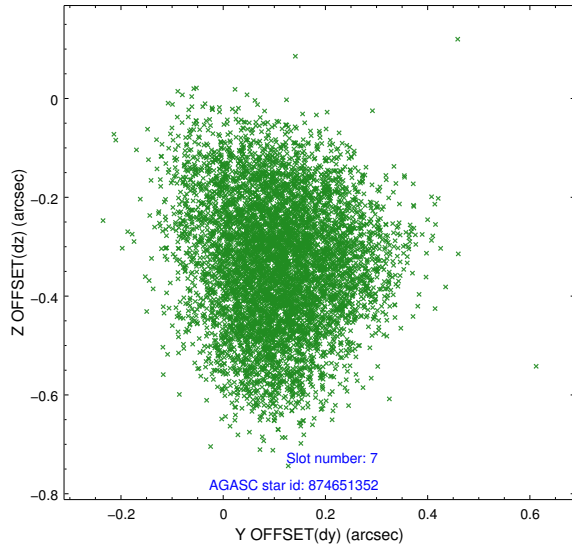
2.4.3 Slot 5



2.4.4 Slot 6

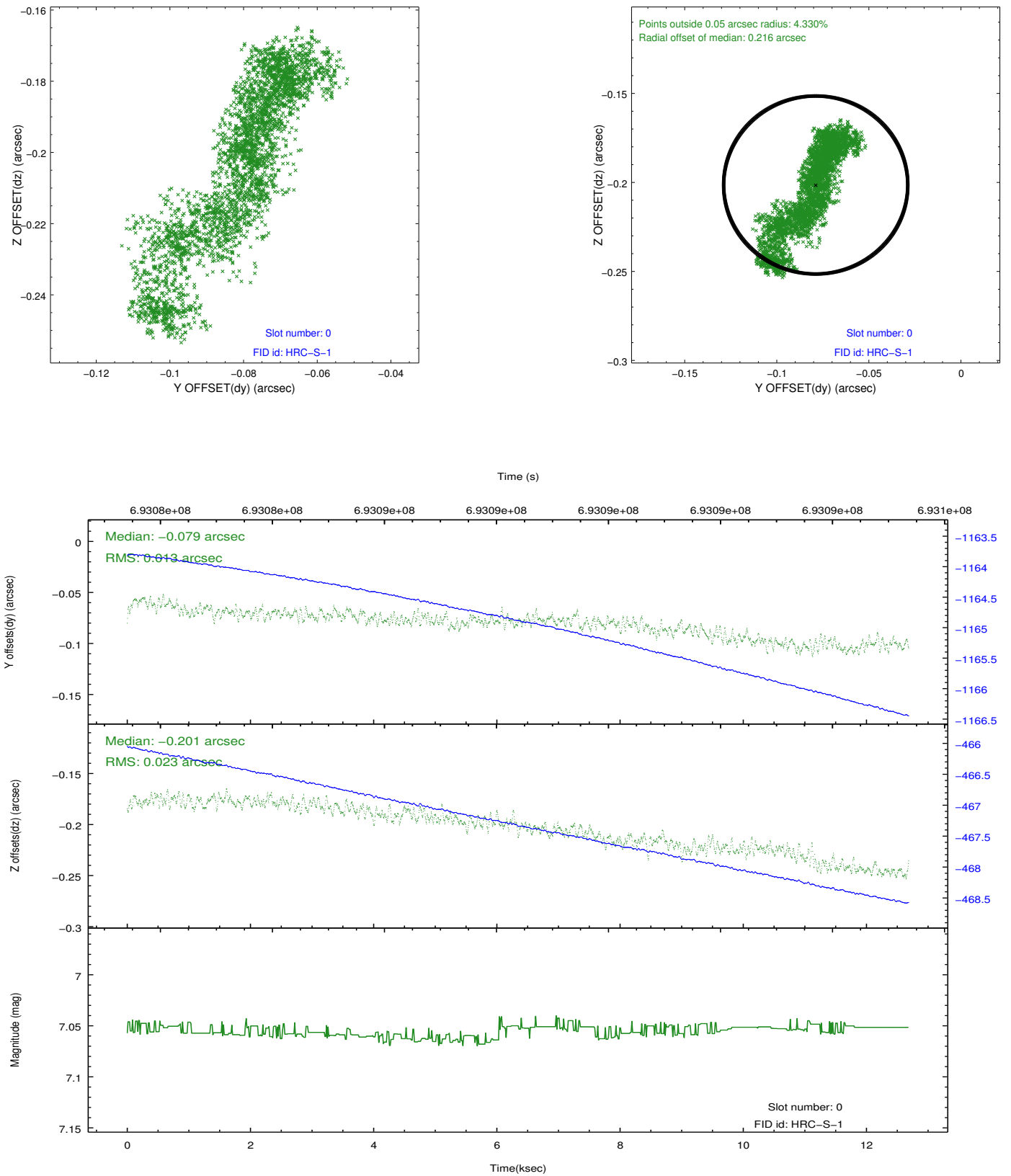


2.4.5 Slot 7

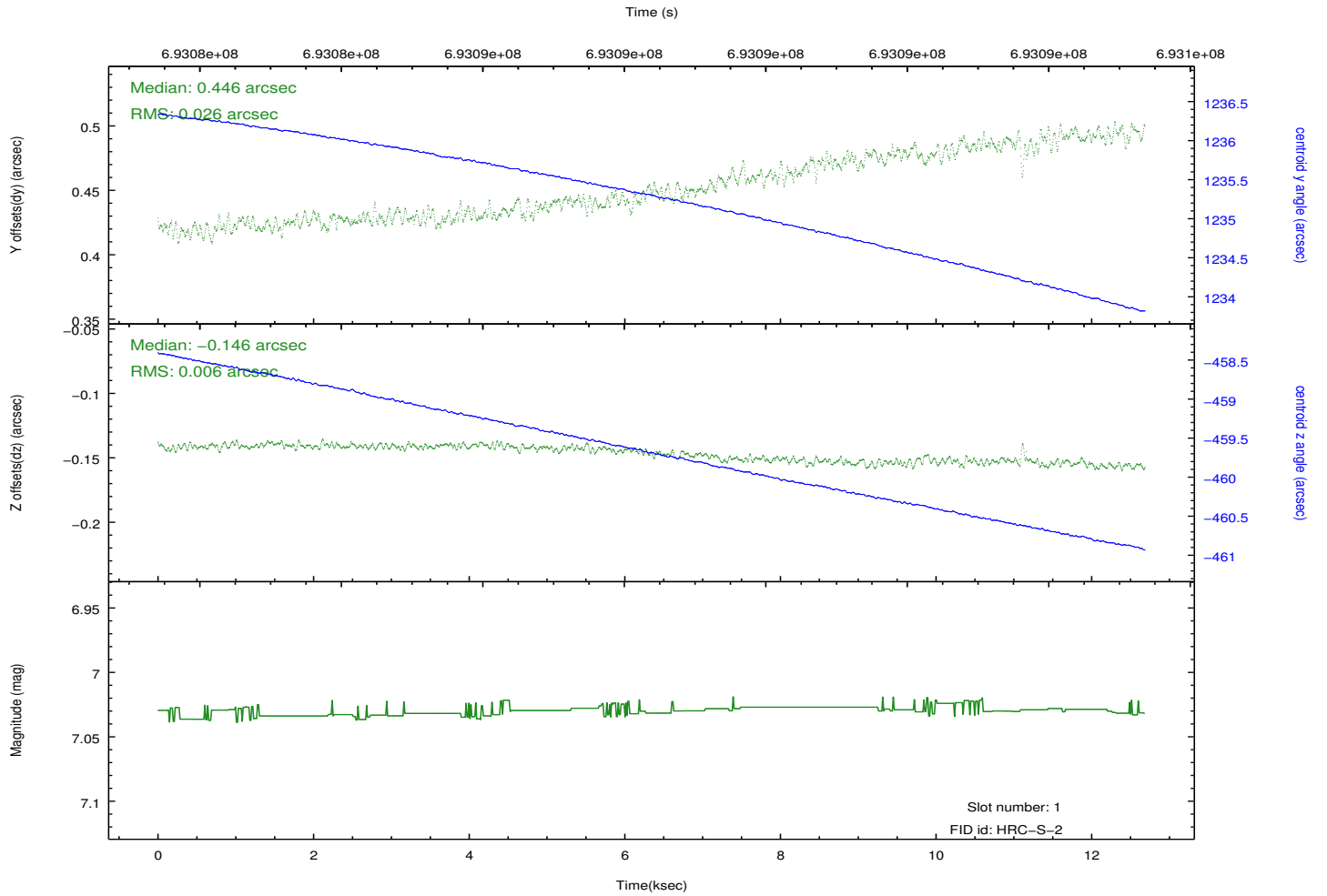
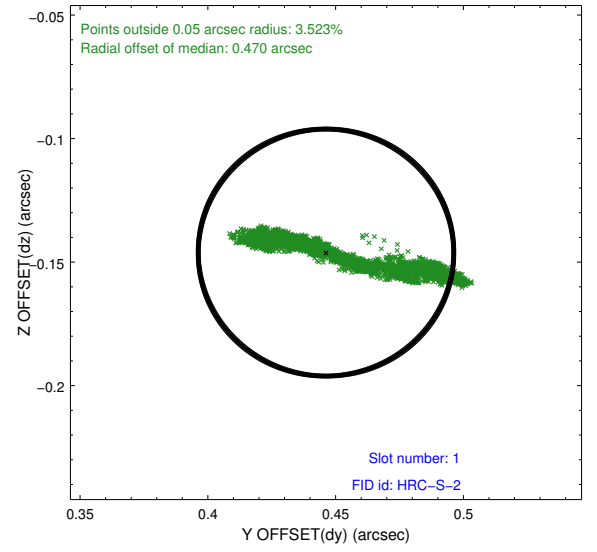
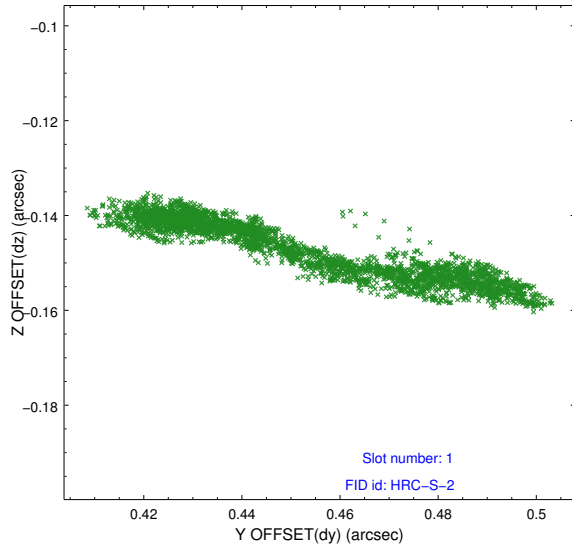


2.5 FID Slots

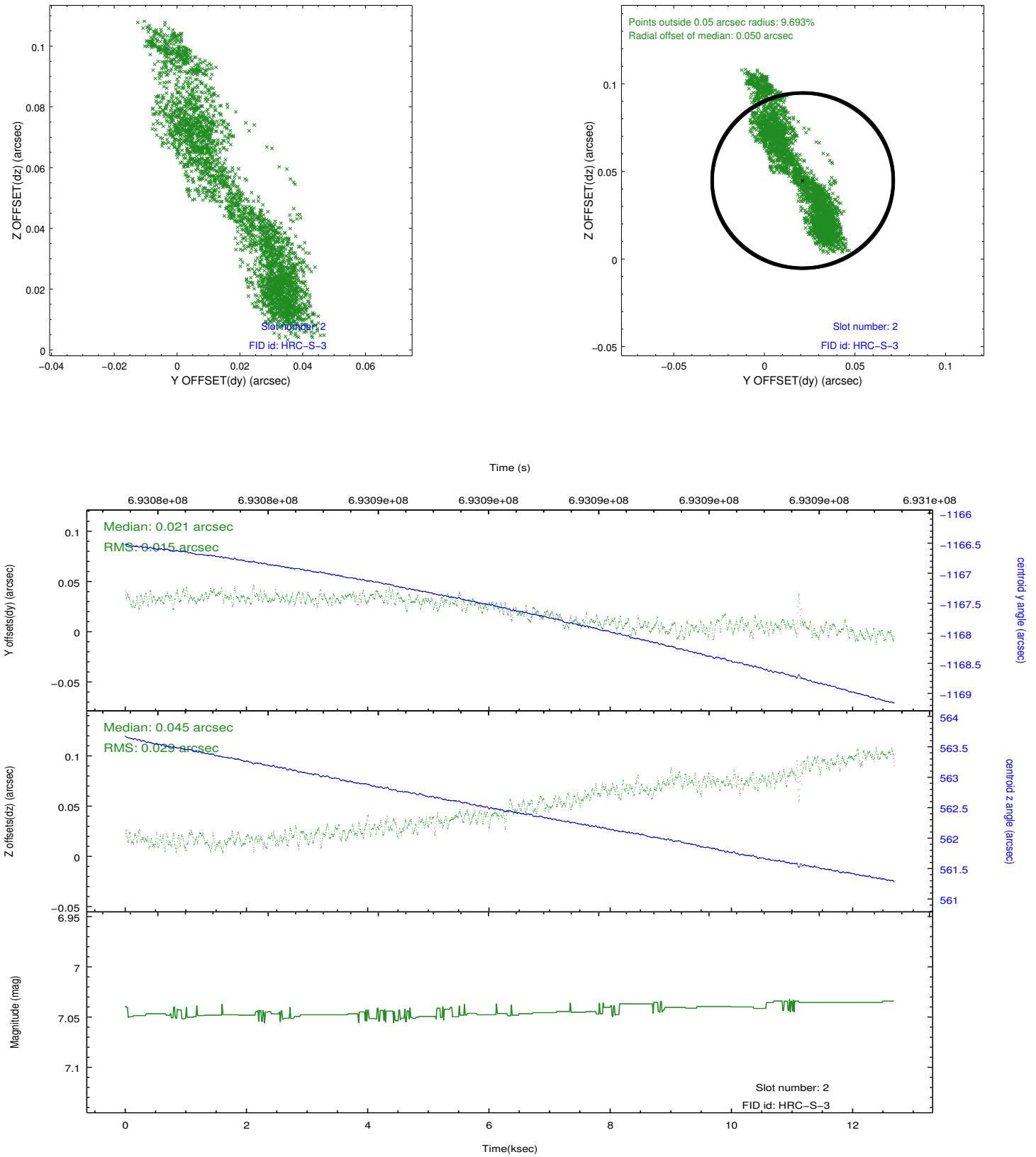
2.5.1 Slot 0



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)	2019.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.688475766778

A.2 Comments

Window constraint met.

This is an observation of a moving target. Users will need to run sso_freeze or similar software to position the events in the reference frame of the target.