

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 21778 - L2 Version 1  
Chandra X-Ray Center

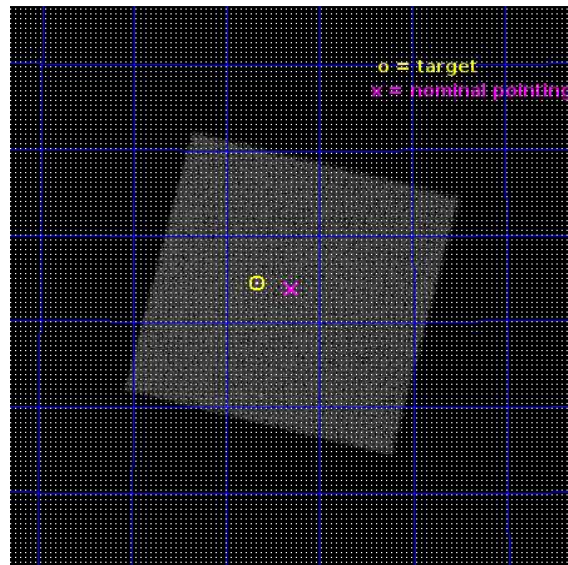
L2 Processing Date : Apr 9 2019

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
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
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

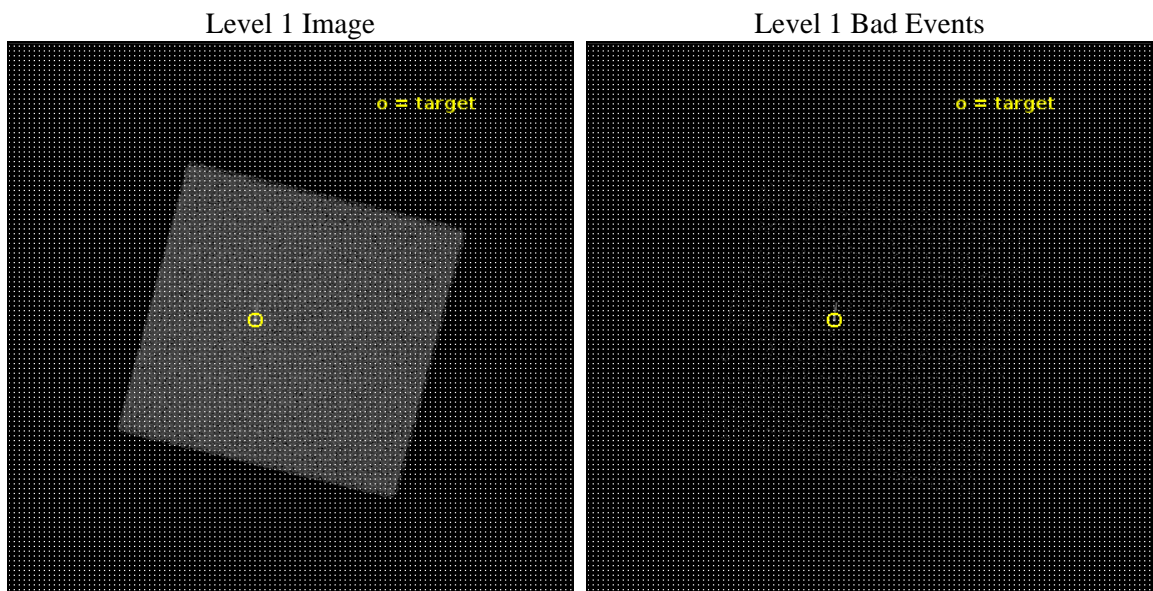
seq_num	291464	Sequence number
obs_id	21778	Observation id
title	AO-20 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.169666	Observer's specified target RA [deg]
dec_targ	45.742509	Observer's specified target Dec [deg]
ra_nom	332.07597775399	Nominal RA [deg]
dec_nom	45.73116389743	Nominal Dec [deg]
roll_nom	59.258730298636	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1196.4313217402	[s]
livetime	1178.3841216632	Ontime multiplied by DTCOR
l2events	154853	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	10.7.1	Processing system revision	ontime	1196.4313217402	[s]
caldsver	4.8.2	&#160	l1events	254287	Number of level 1 events
date	2019-04-09T03:57:00	Date and time of file creation			
revision	1	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

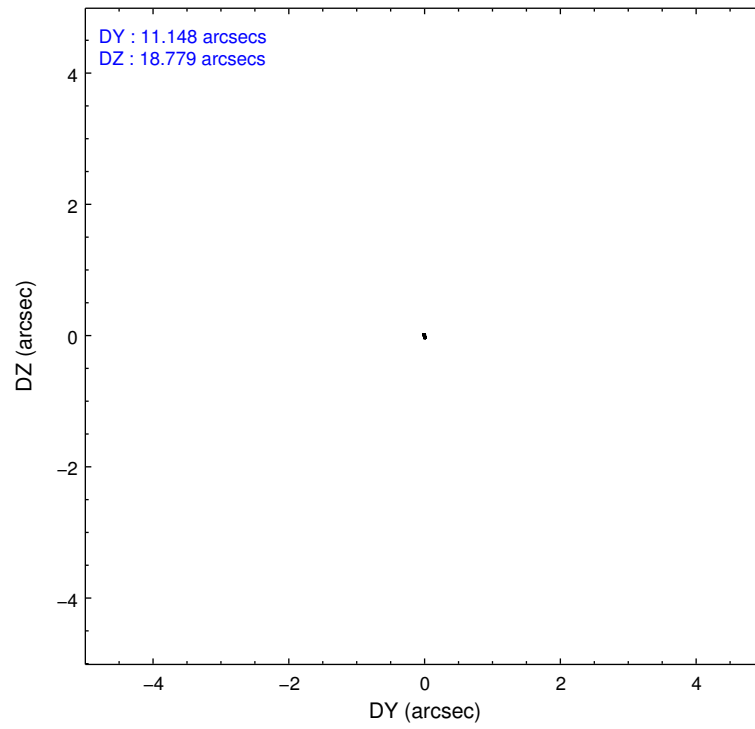
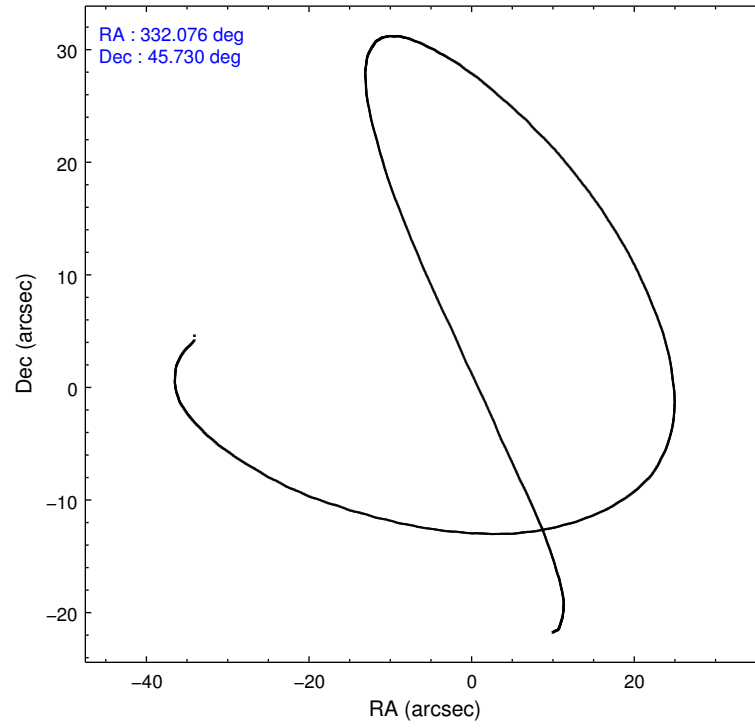
	<b>segment 0</b>
level 1 events	254287
rejected events	52558
rejected %	20%

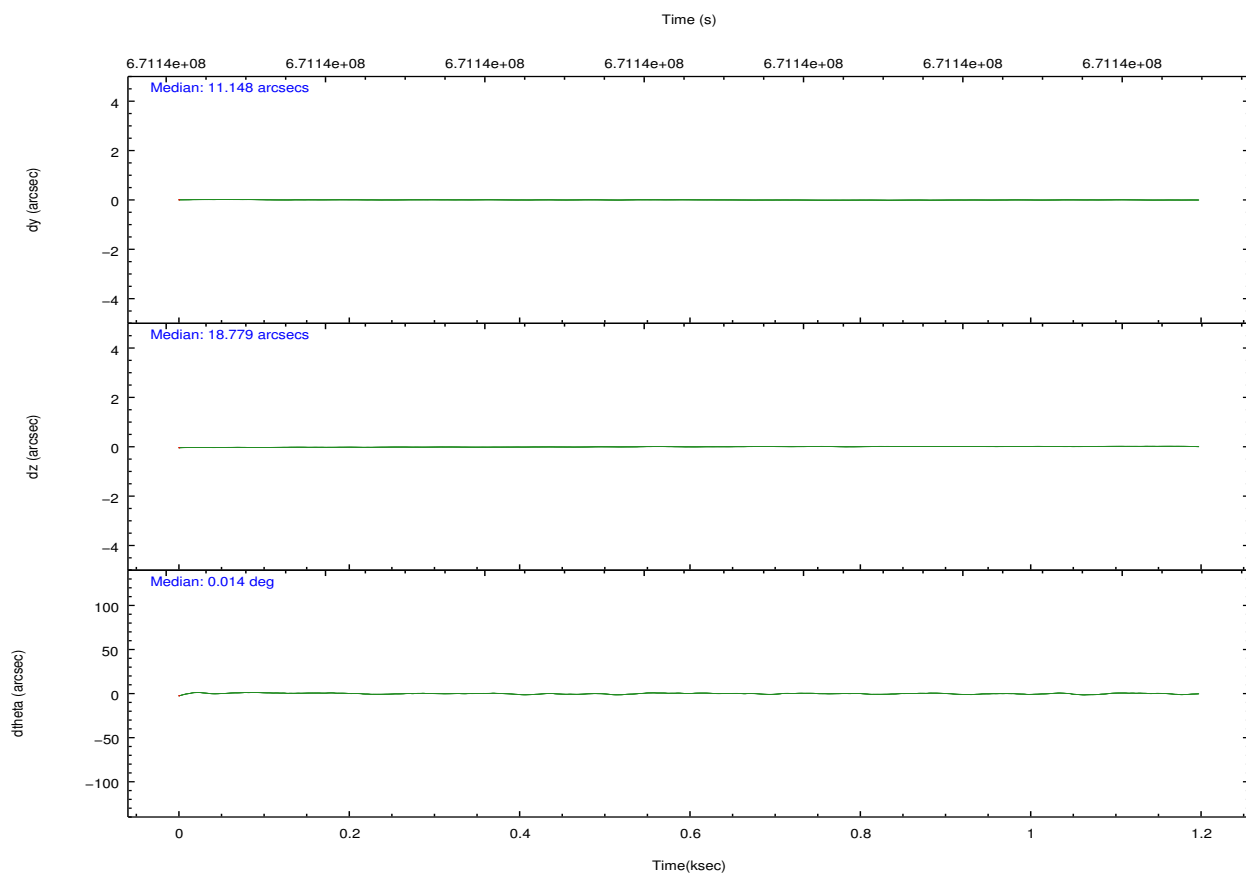
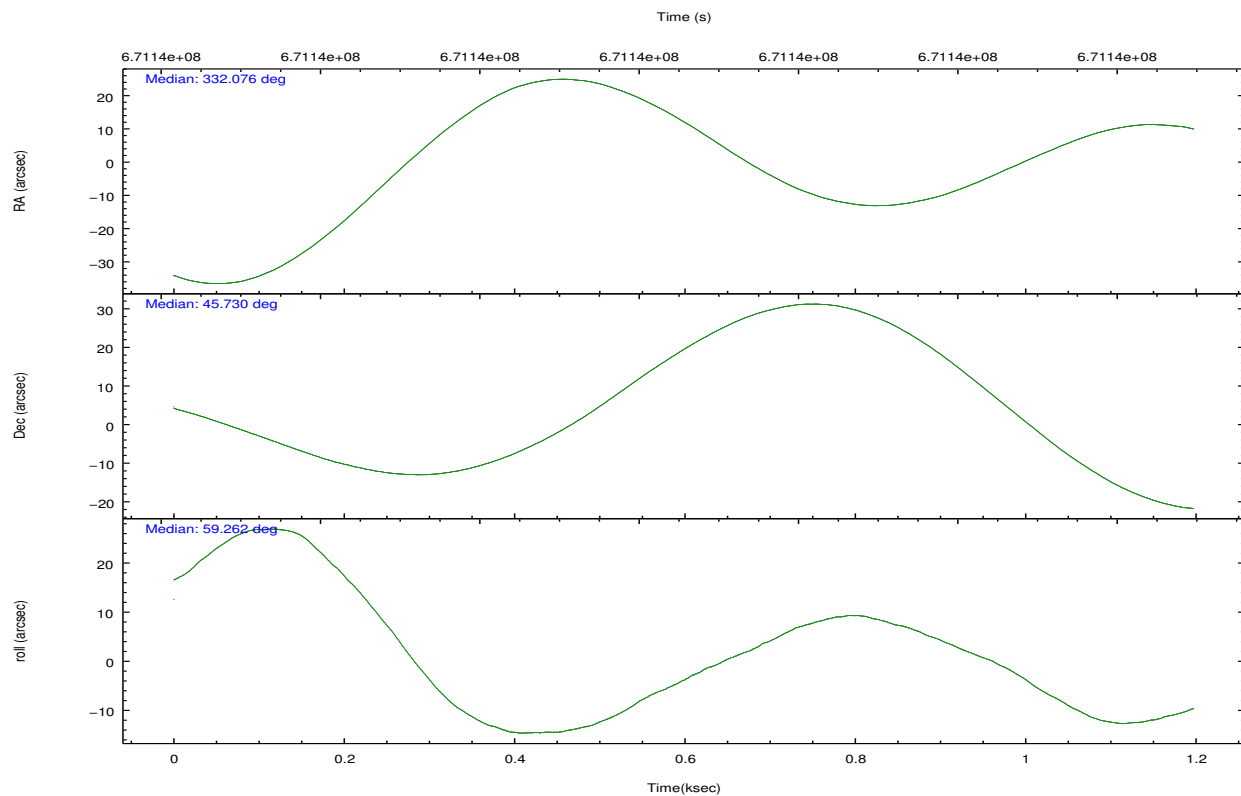
## 2.2 Compared Parameters

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	332.076692	332.075977753994
[deg] Pointing Dec	45.704214	45.73116389743041
[deg] Pointing Roll	59.353705	59.25873029863574
[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)	671139064.184000	671138687.7921799
Observation start date	2019-04-08T19:29:55	2019-04-08T19:24:47
[s] Observation end time (MET)	671140064.184000	671140197.61727
Observation end date	2019-04-08T19:46:35	2019-04-08T19:49:57

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

## 2.3 Aspect





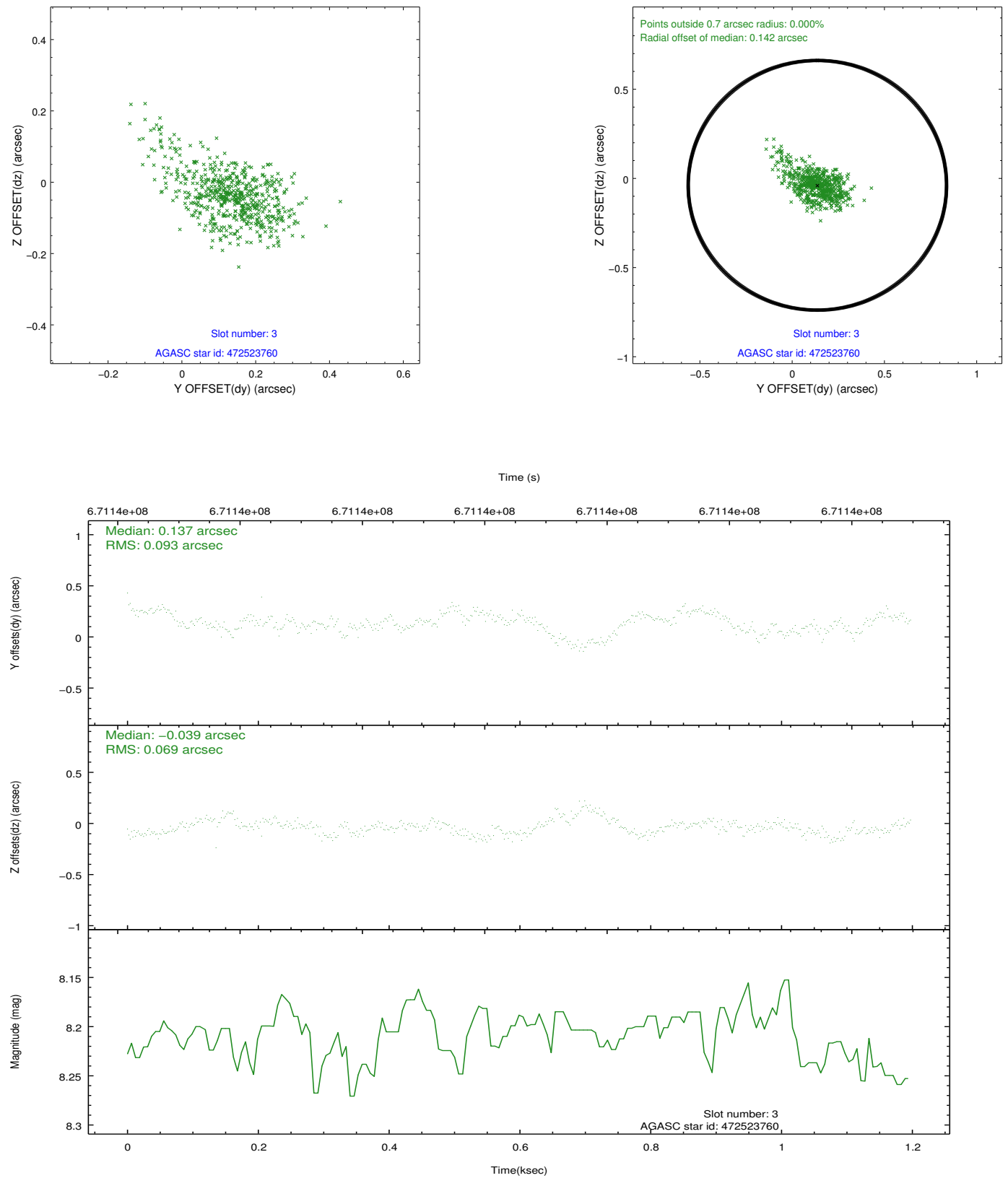
Slot Statistics

	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	m
	FID		HRC-I-1	7.02	293	1.000	-0.140	-0.157	0.006	0.014	0.000000	0.000000	-767.10	-13
	FID		HRC-I-3	7.08	293	1.000	-0.248	-0.089	0.007	0.021	0.000000	0.000000	-1198.10	9
	FID		HRC-I-4	7.03	293	1.000	0.501	0.157	0.006	0.011	0.000000	0.000000	1272.46	9
	GUIDE	used	472523760	8.21	584	1.000	0.137	-0.039	0.117	0.216	331.645363	45.403260	-1483.89	3
	GUIDE	used	472525528	6.62	585	1.000	0.167	-0.097	0.118	0.180	331.551102	45.248694	-2086.73	3
	GUIDE	used	472533912	9.11	583	1.000	-0.127	-0.342	0.169	0.274	331.791136	46.368695	1695.48	18
	GUIDE	used	472665256	8.96	584	1.000	-0.067	0.237	0.202	0.371	332.808125	46.195041	2460.75	-6
	BAD	used	472649352	9.69	553	1.000	-0.099	0.270	0.279	0.473	332.034169	45.325407	-1222.27	-6

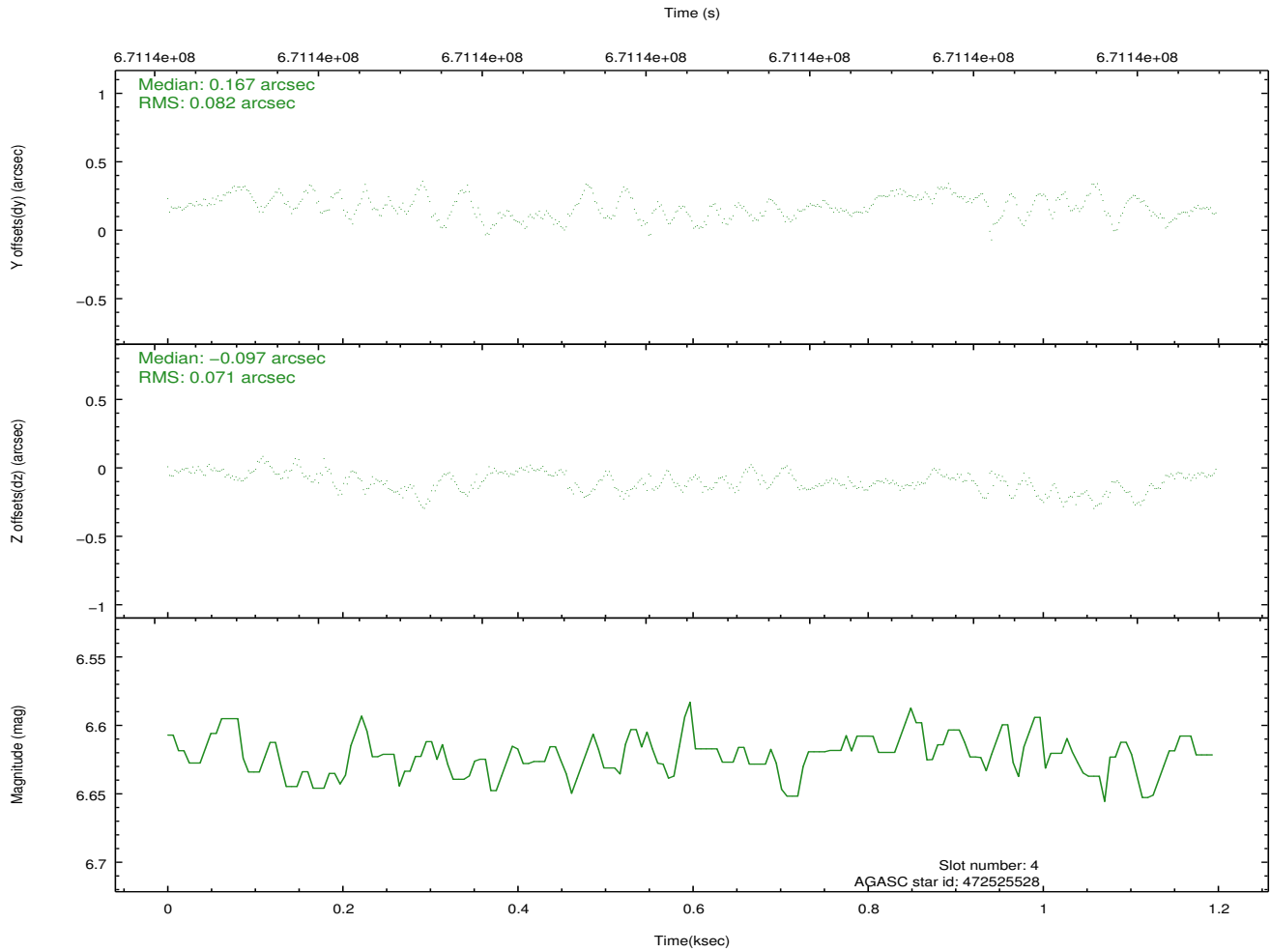
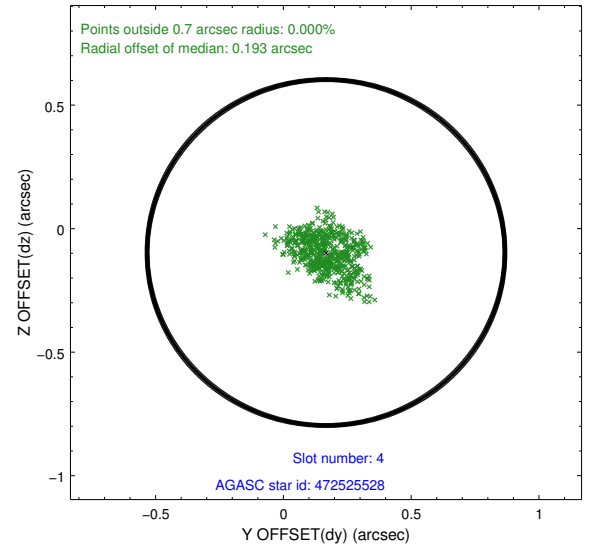
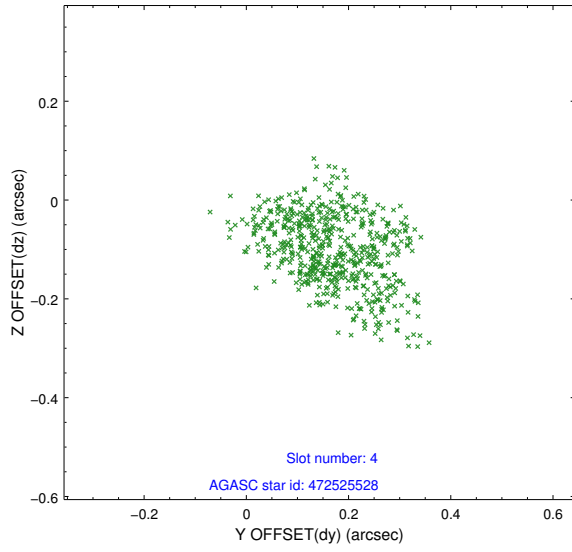


## 2.4 Star Slots

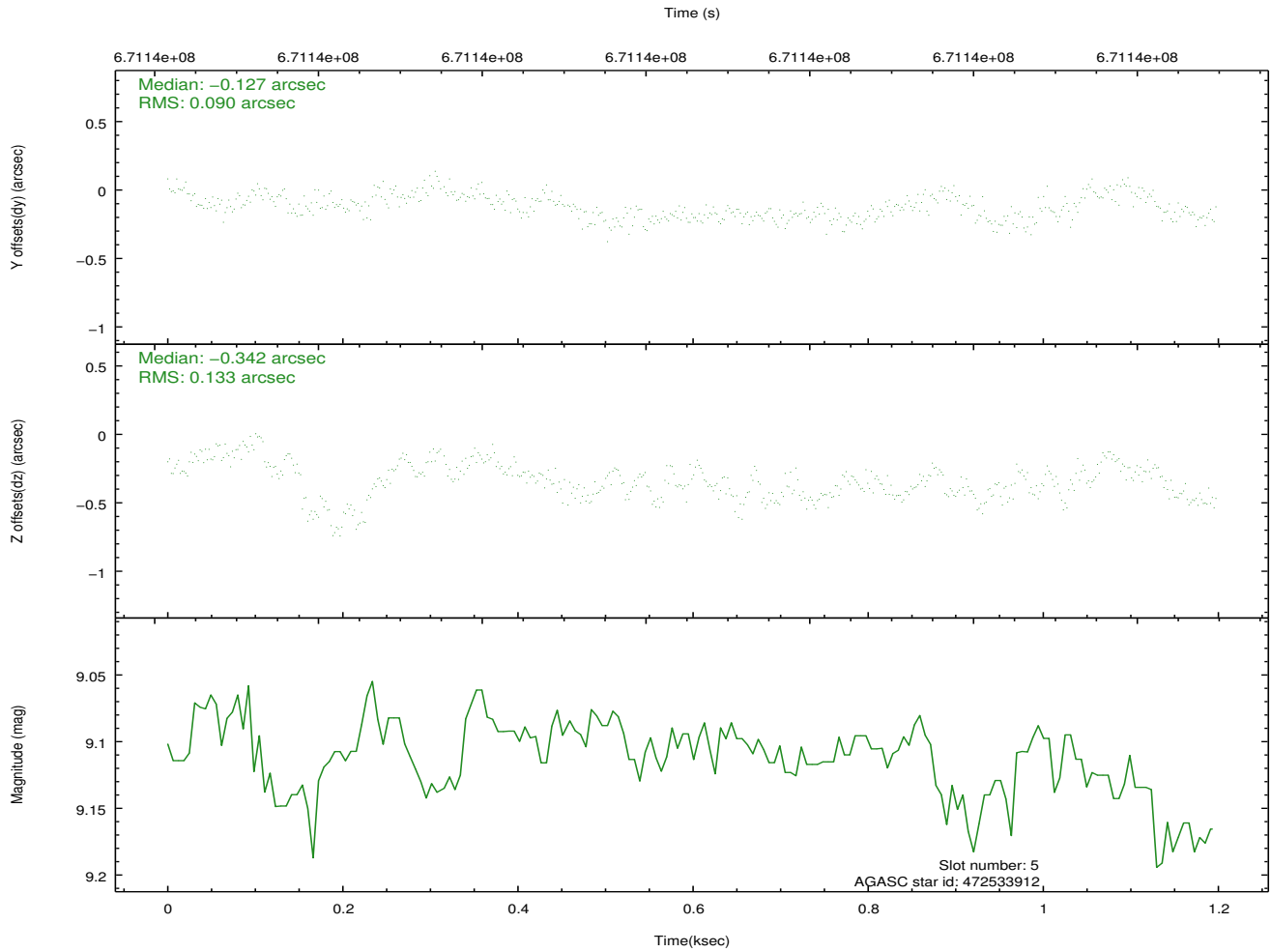
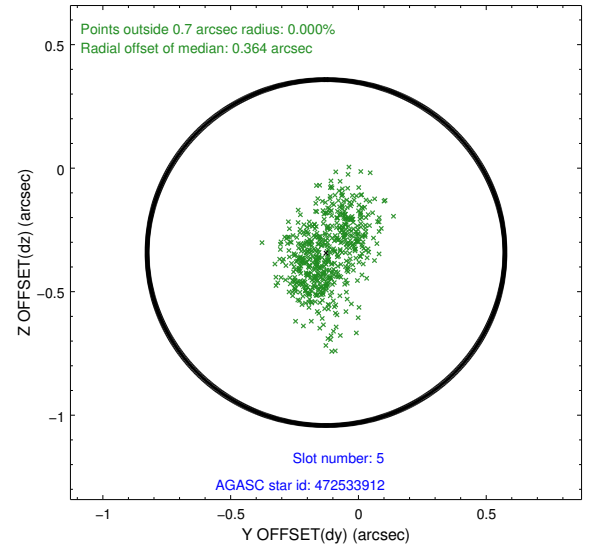
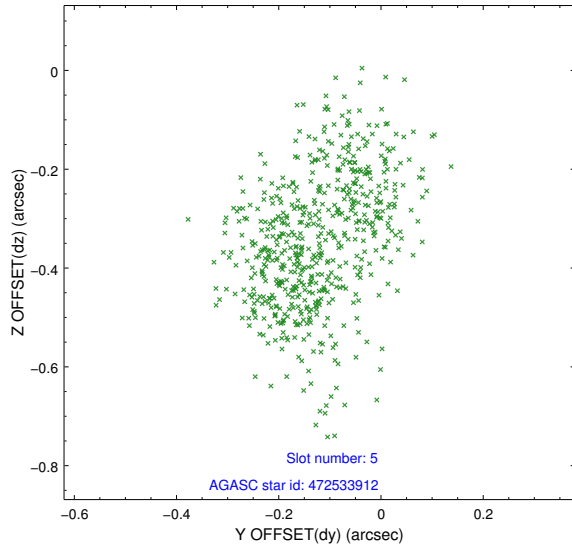
### 2.4.1 Slot 3



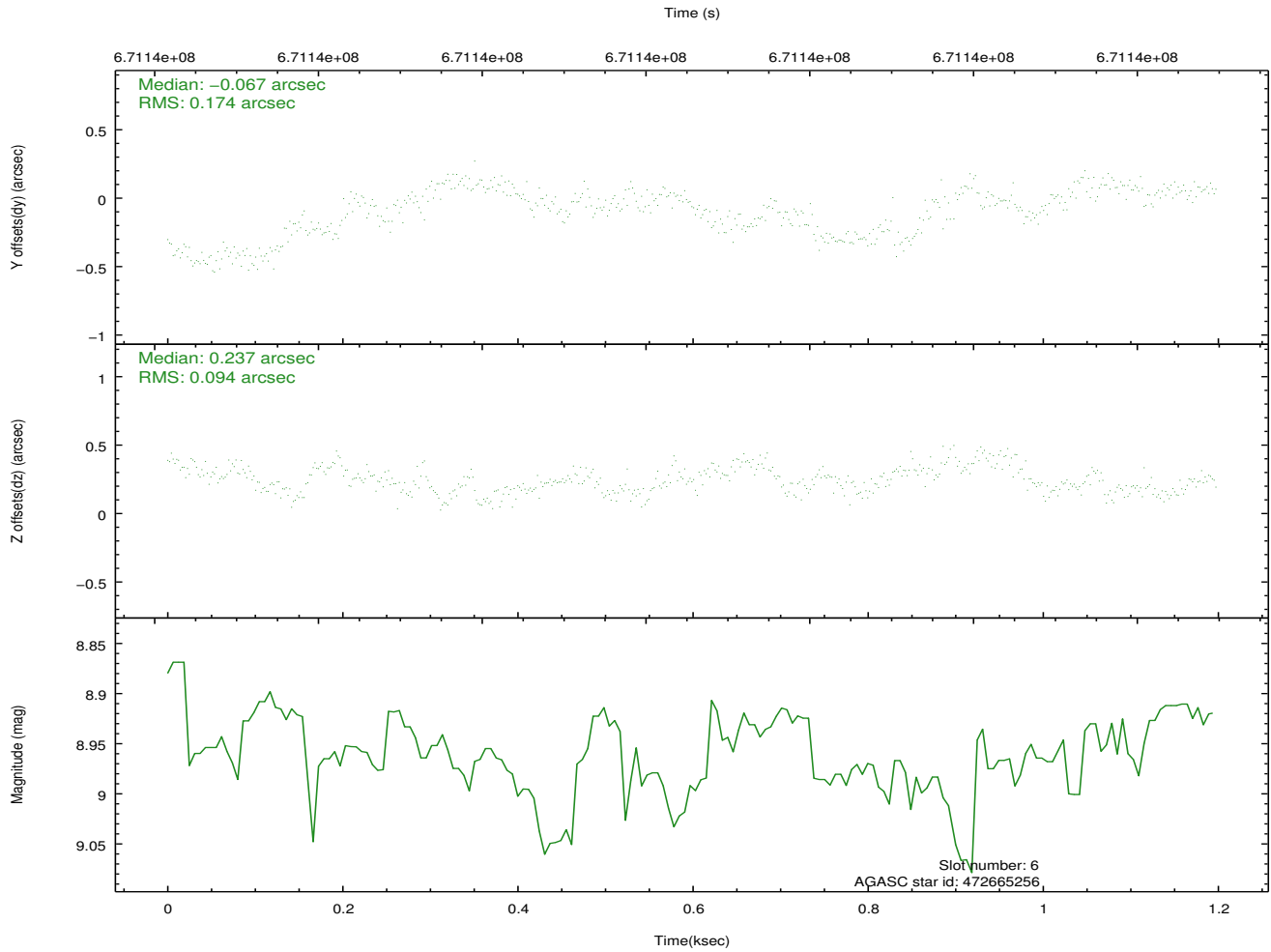
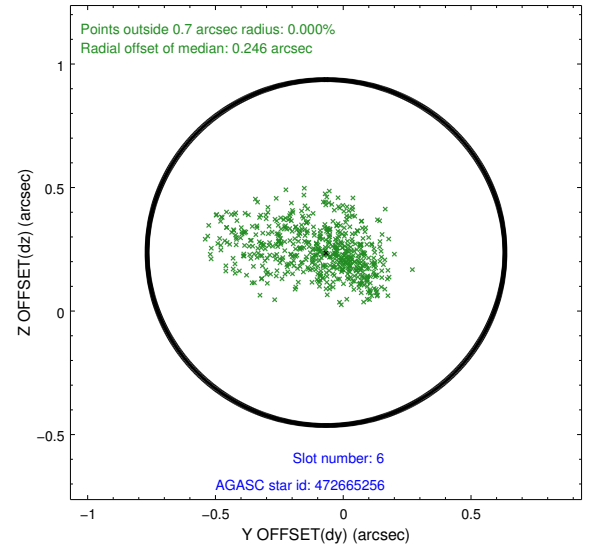
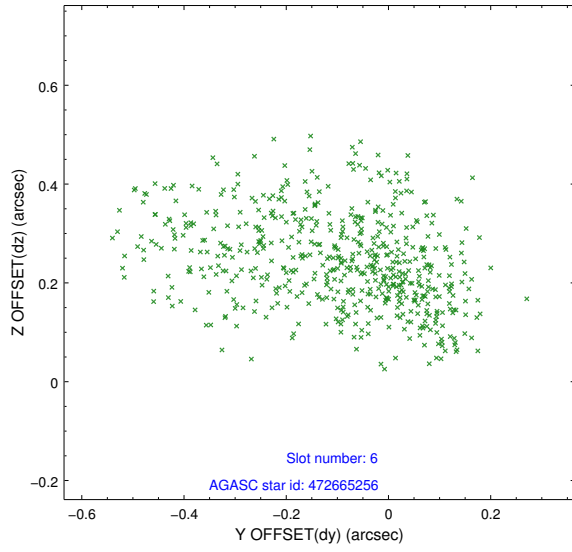
## 2.4.2 Slot 4



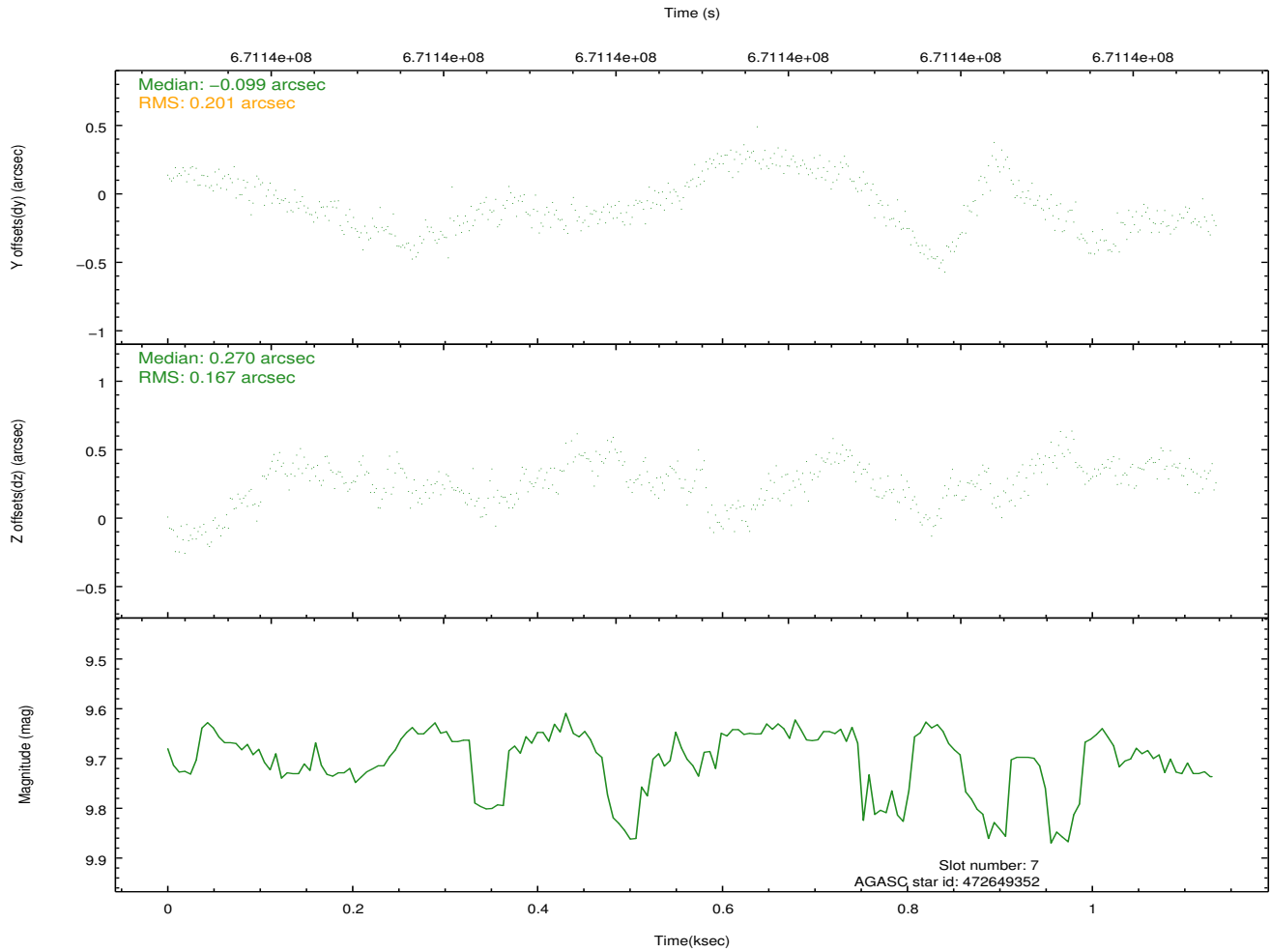
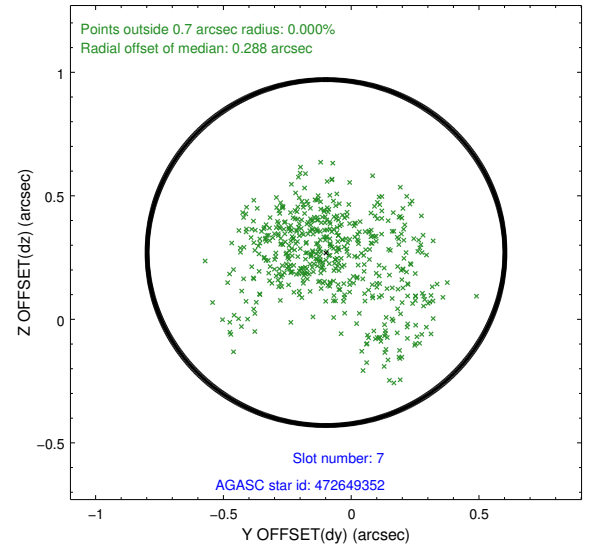
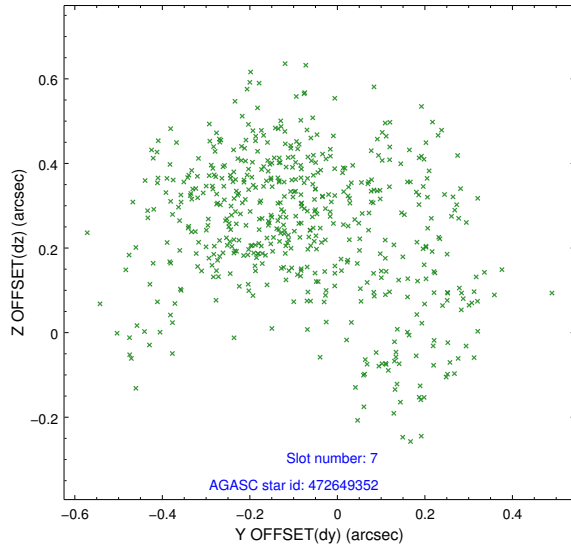
### 2.4.3 Slot 5



## 2.4.4 Slot 6

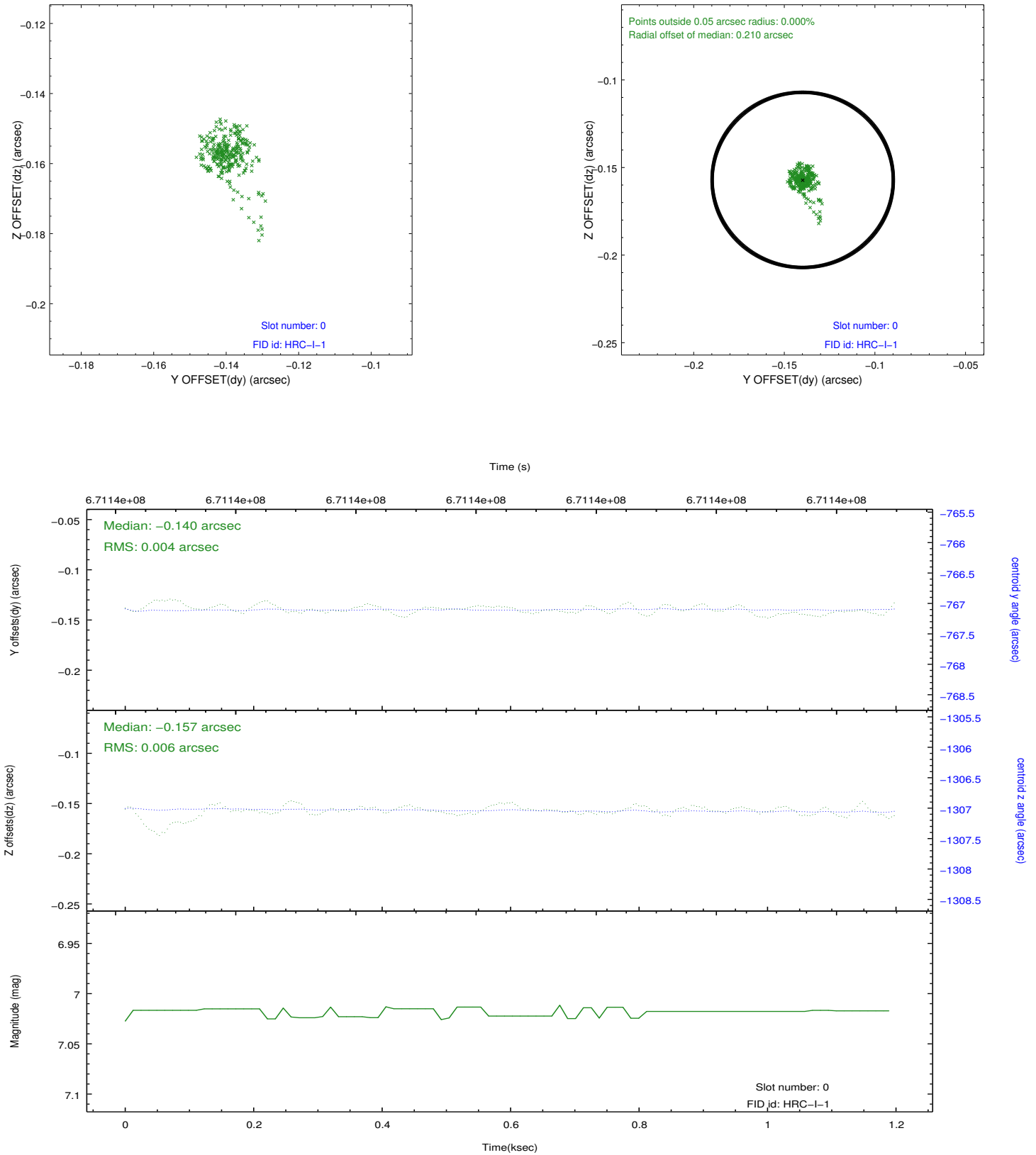


## 2.4.5 Slot 7

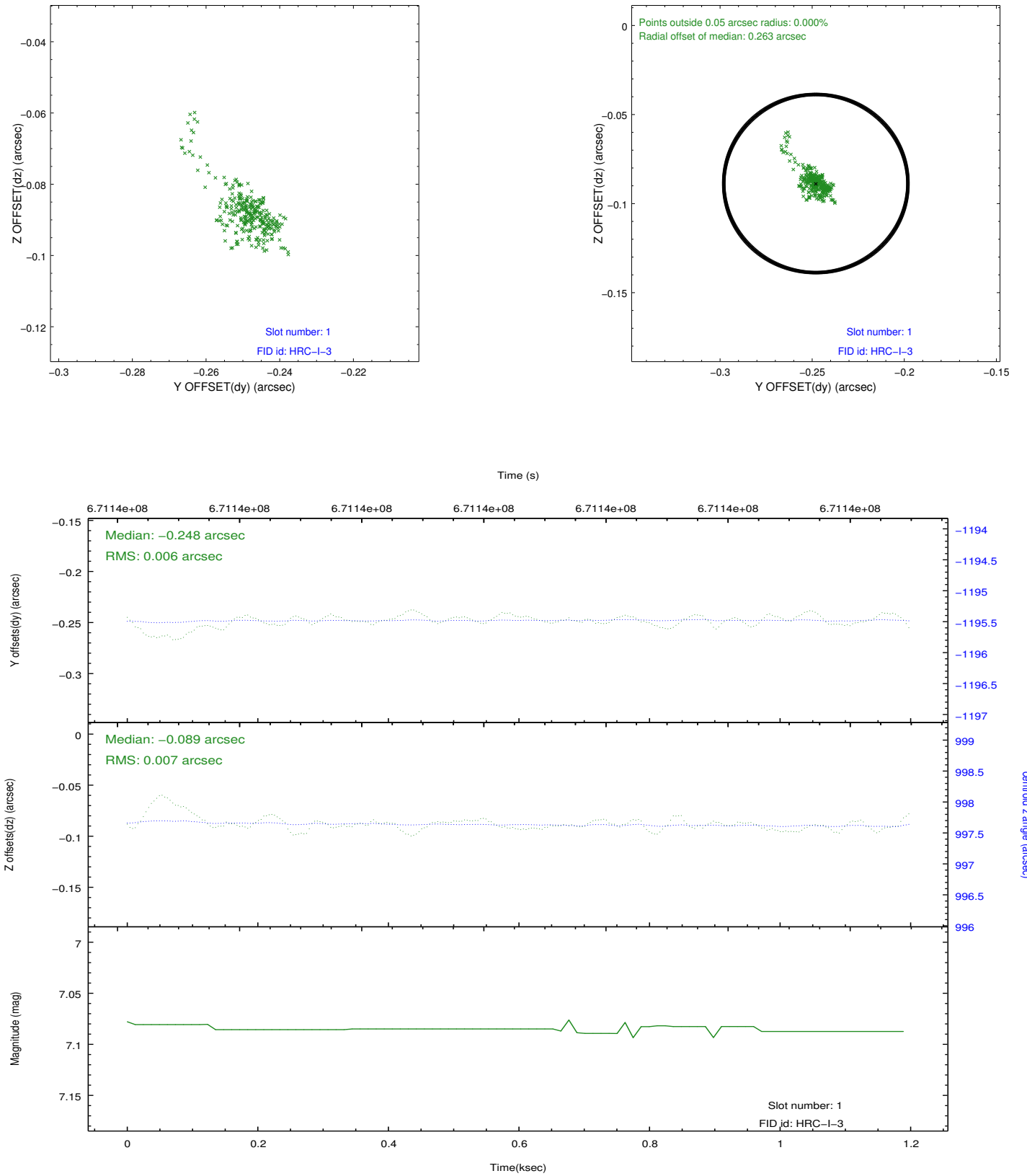


## 2.5 FID Slots

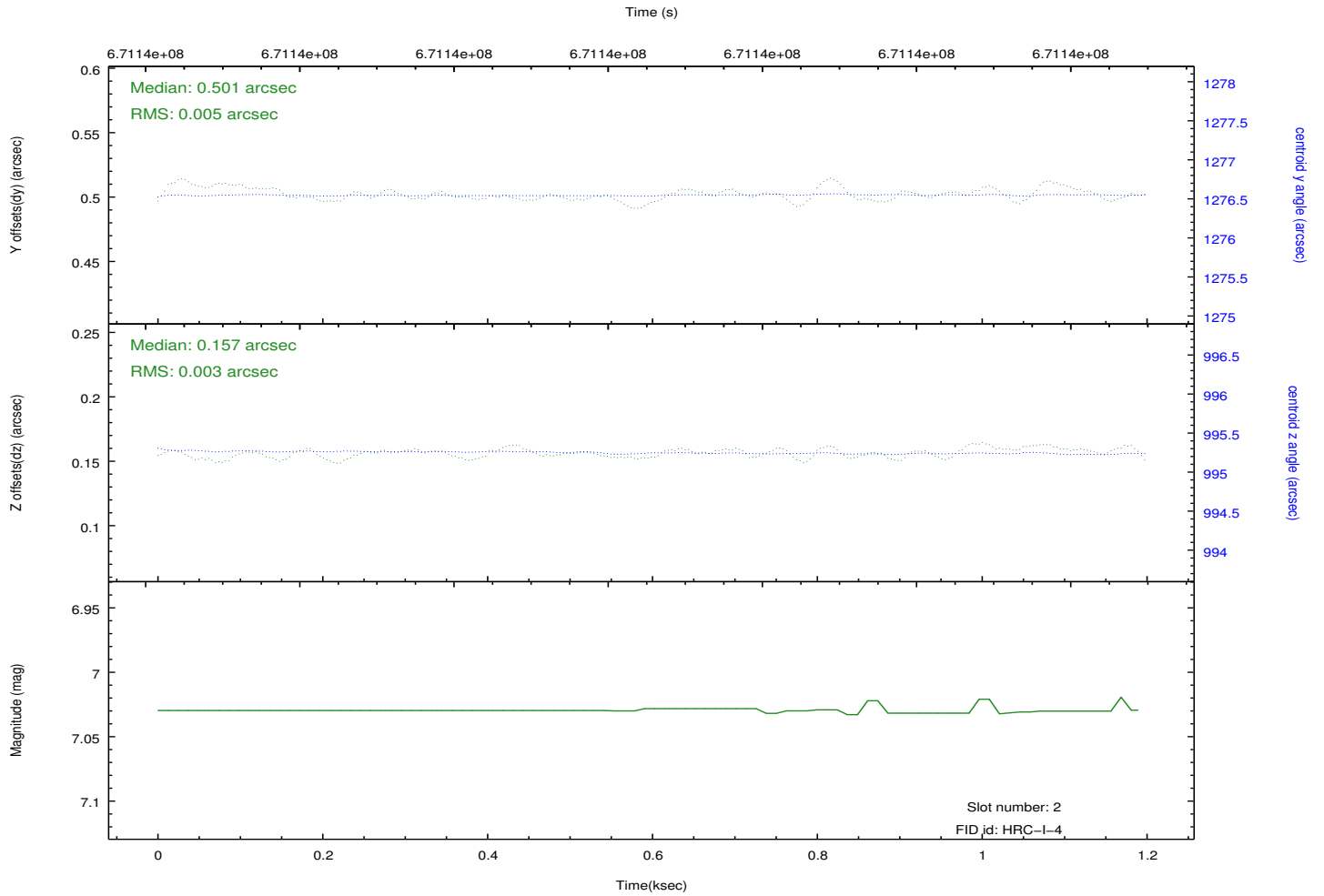
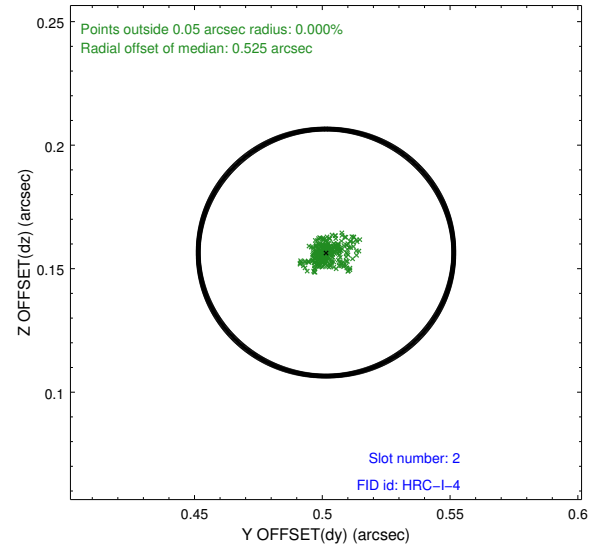
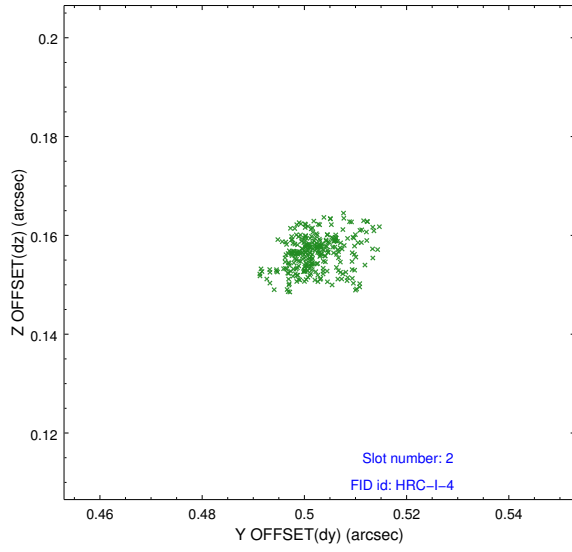
### 2.5.1 Slot 0



## 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)	2019.04.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1964313217402

### A.2 Comments