

# V&V Reference Report

## L2 ASCDS Version : 10.6

Observation 19827 - L2 Version 1  
Chandra X-Ray Center

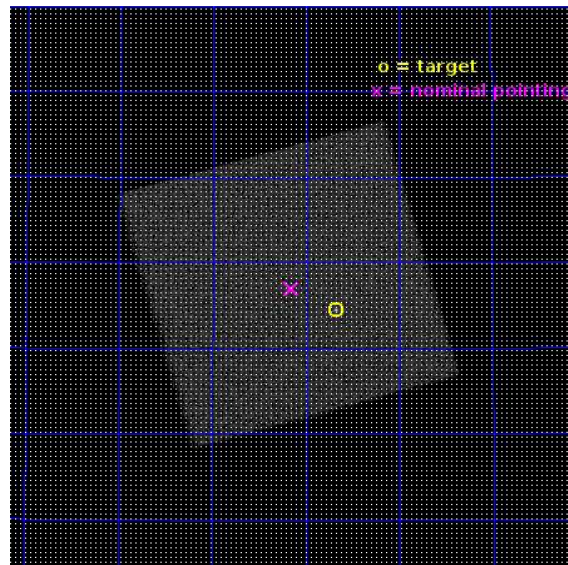
L2 Processing Date : Sep 17 2017

## 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

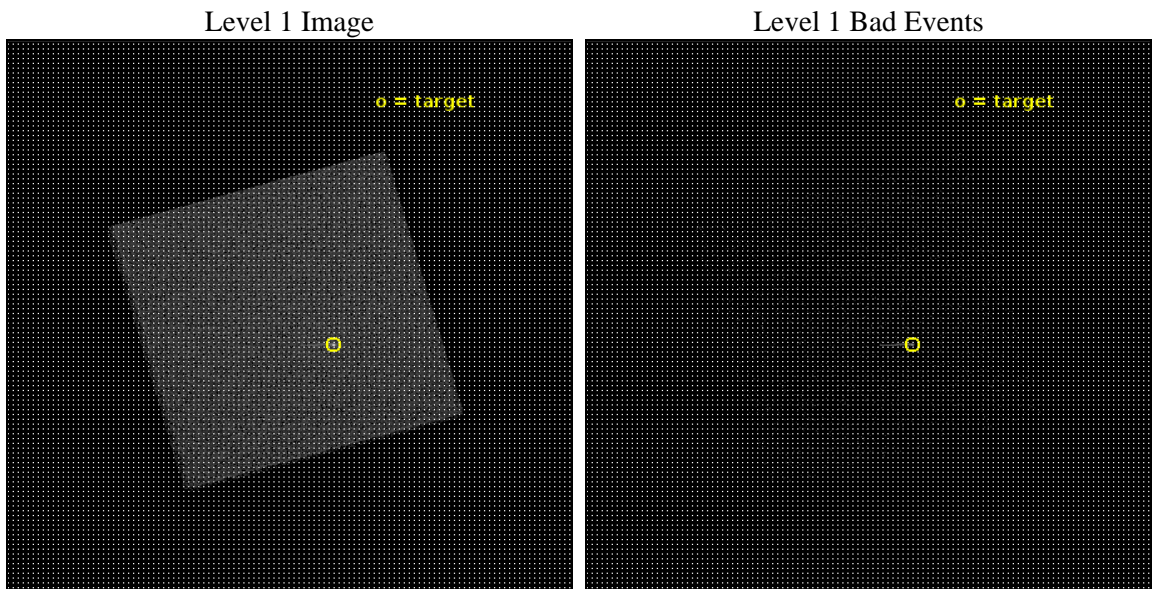
seq_num	291344	Sequence number
obs_id	19827	Observation id
title	AO-18 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.28849153887	Nominal RA [deg]
dec_nom	45.783459330034	Nominal Dec [deg]
roll_nom	208.99862545456	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1169.7813184261	[s]
livetime	1155.2998346315	Ontime multiplied by DTCOR
l2events	126284	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	1169.7813184261	[s]
caldsver	4.7.6	&#160	l1events	212802	Number of level 1 events
date	2017-09-17T15:31:50	Date and time of file creation			
revision	1	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

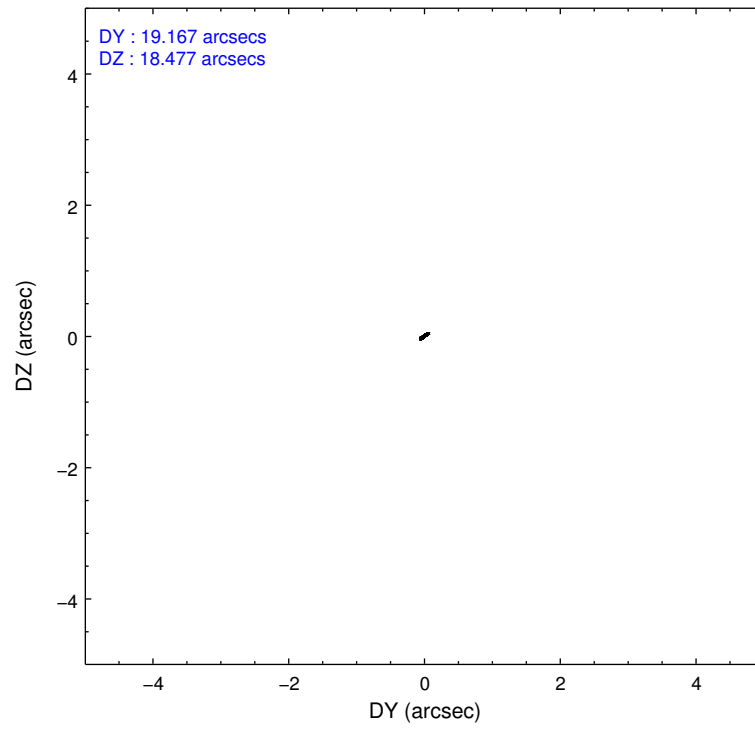
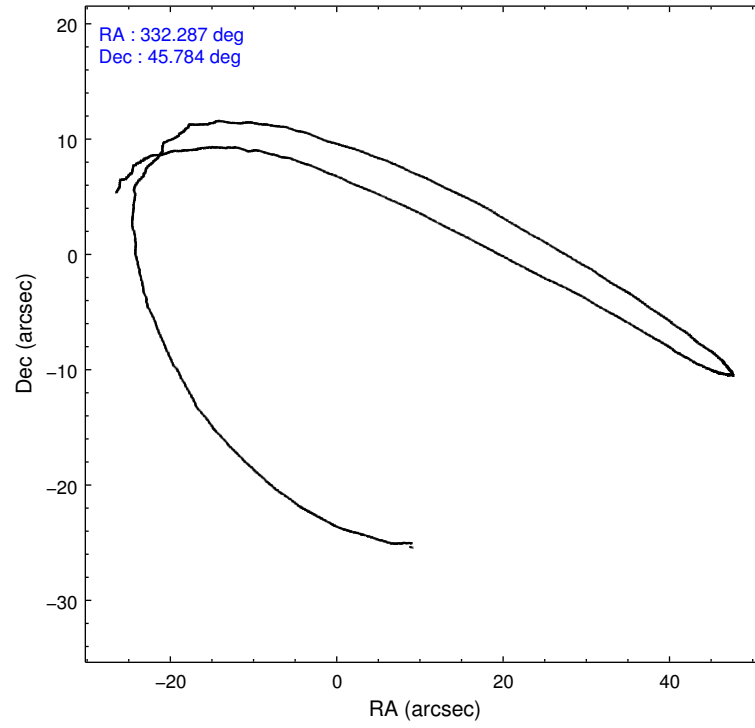
	<b>segment 0</b>
level 1 events	212802
rejected events	47766
rejected %	22%

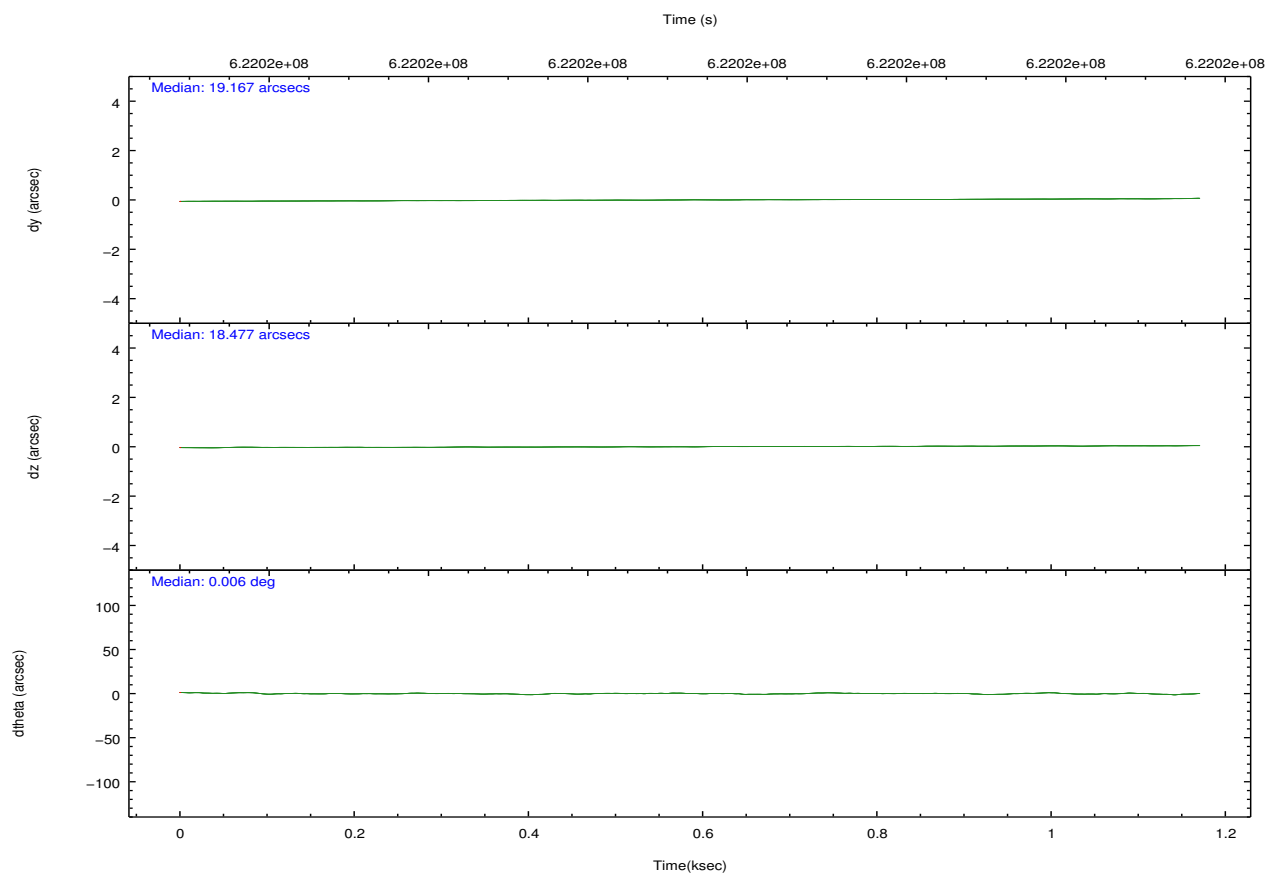
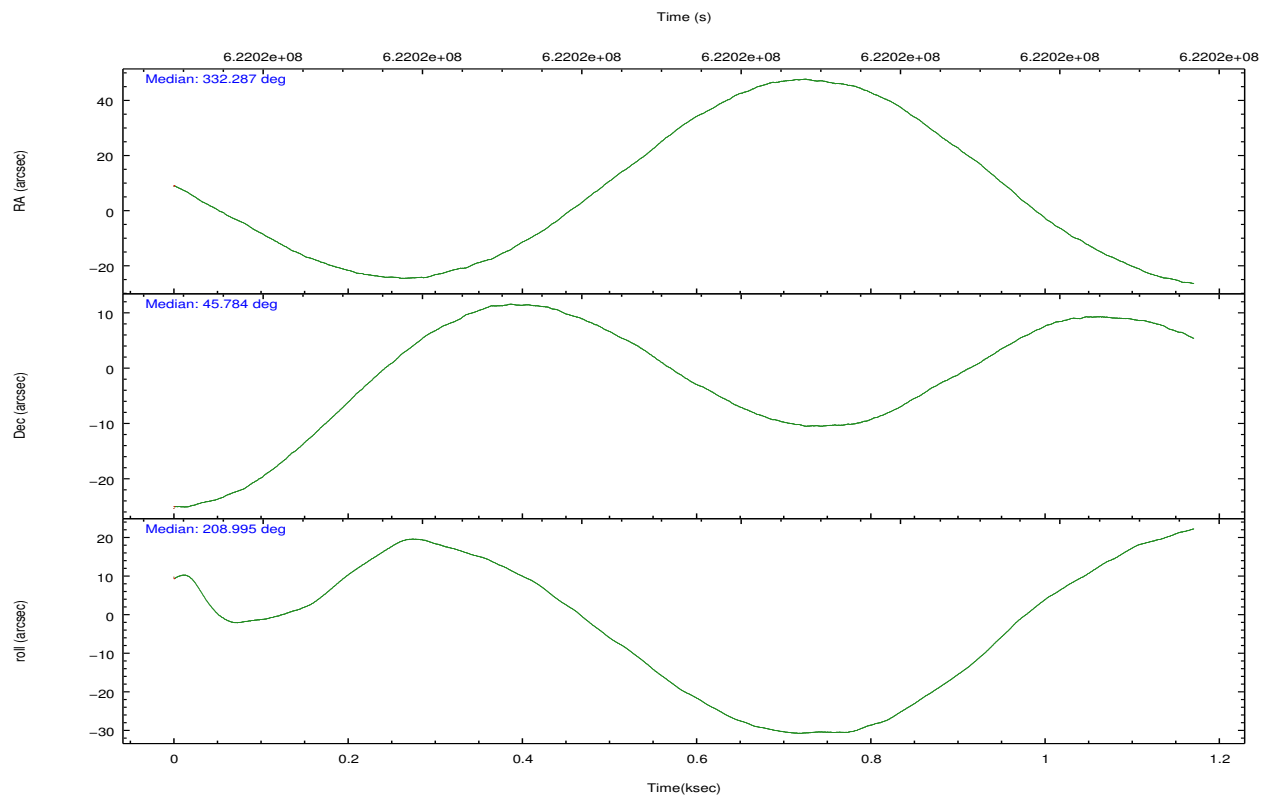
## 2.2 Compared Parameters

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	332.308458	332.2884915388736
[deg] Pointing Dec	45.807057	45.78345933003372
[deg] Pointing Roll	209.079626	208.9986254545575
[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)	622023738.184000	622023362.6165299
Observation start date	2017-09-17T08:21:09	2017-09-17T08:16:02
[s] Observation end time (MET)	622024738.184000	622024872.44162
Observation end date	2017-09-17T08:37:49	2017-09-17T08:41:12

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

## 2.3 Aspect





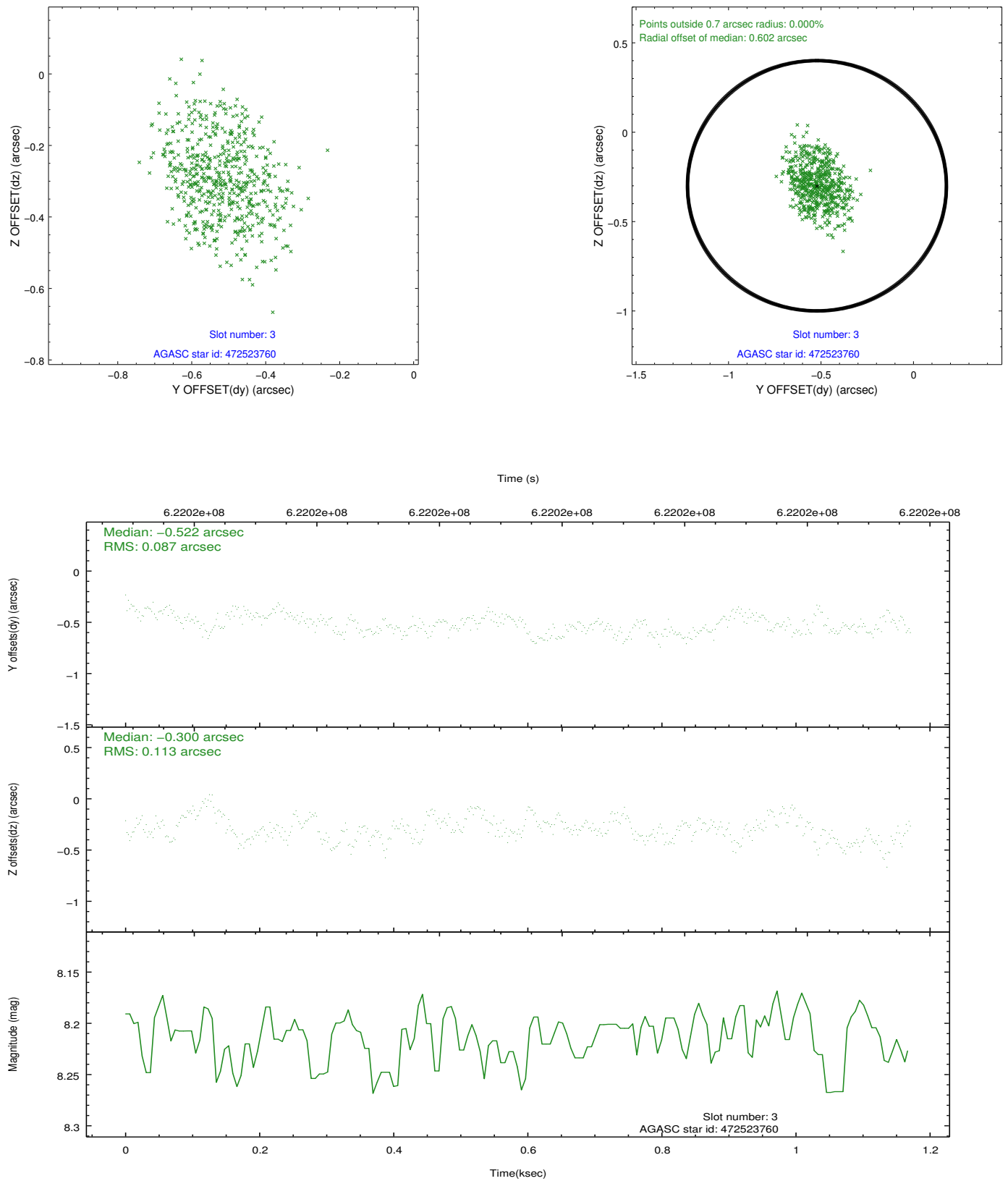
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	7.03	286	-0.202	0.003	0.006	0.012	0.000000	0.000000	-775.21	-1306.70
1	FID		HRC-I-2	7.05	286	0.364	-0.130	0.006	0.010	0.000000	0.000000	835.27	-1312.89
2	FID		HRC-I-3	7.11	286	-0.042	0.038	0.006	0.009	0.000000	0.000000	-1200.73	993.29
3	GUIDE	used	472523760	8.21	572	-0.522	-0.300	0.154	0.239	331.645363	45.403260	2167.04	451.08
4	GUIDE	used	472665256	8.97	572	0.232	0.116	0.143	0.243	332.808125	46.195041	-1765.39	-616.74
5	GUIDE	used	472533912	9.11	572	0.072	0.311	0.260	0.441	331.791136	46.368695	135.01	-2394.60
6	GUIDE	used	472655152	9.40	571	-0.104	-0.367	0.230	0.367	332.504239	45.862991	-527.50	59.06
7	GUIDE	used	472663080	9.34	571	0.320	0.264	0.180	0.287	332.652741	46.473840	-1914.57	-1683.02

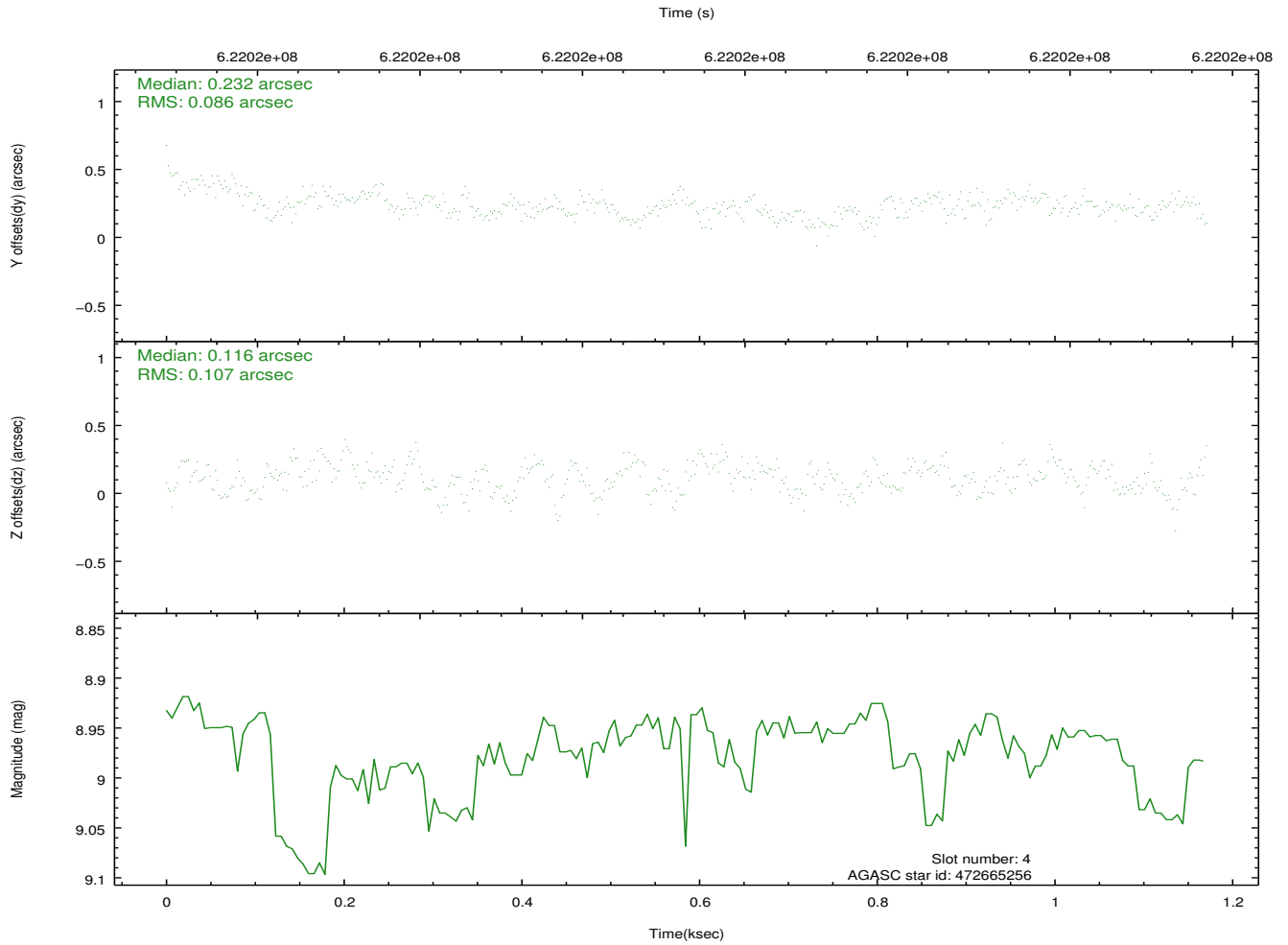
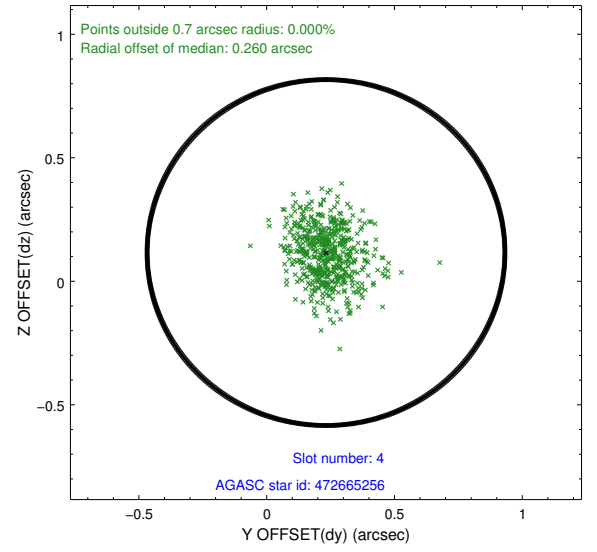
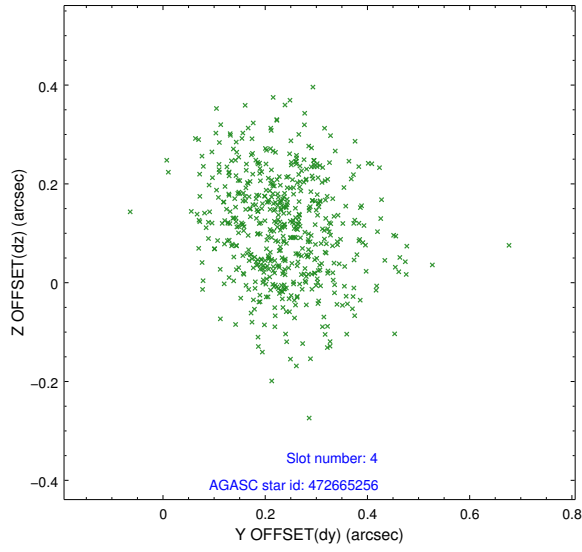


## 2.4 Star Slots

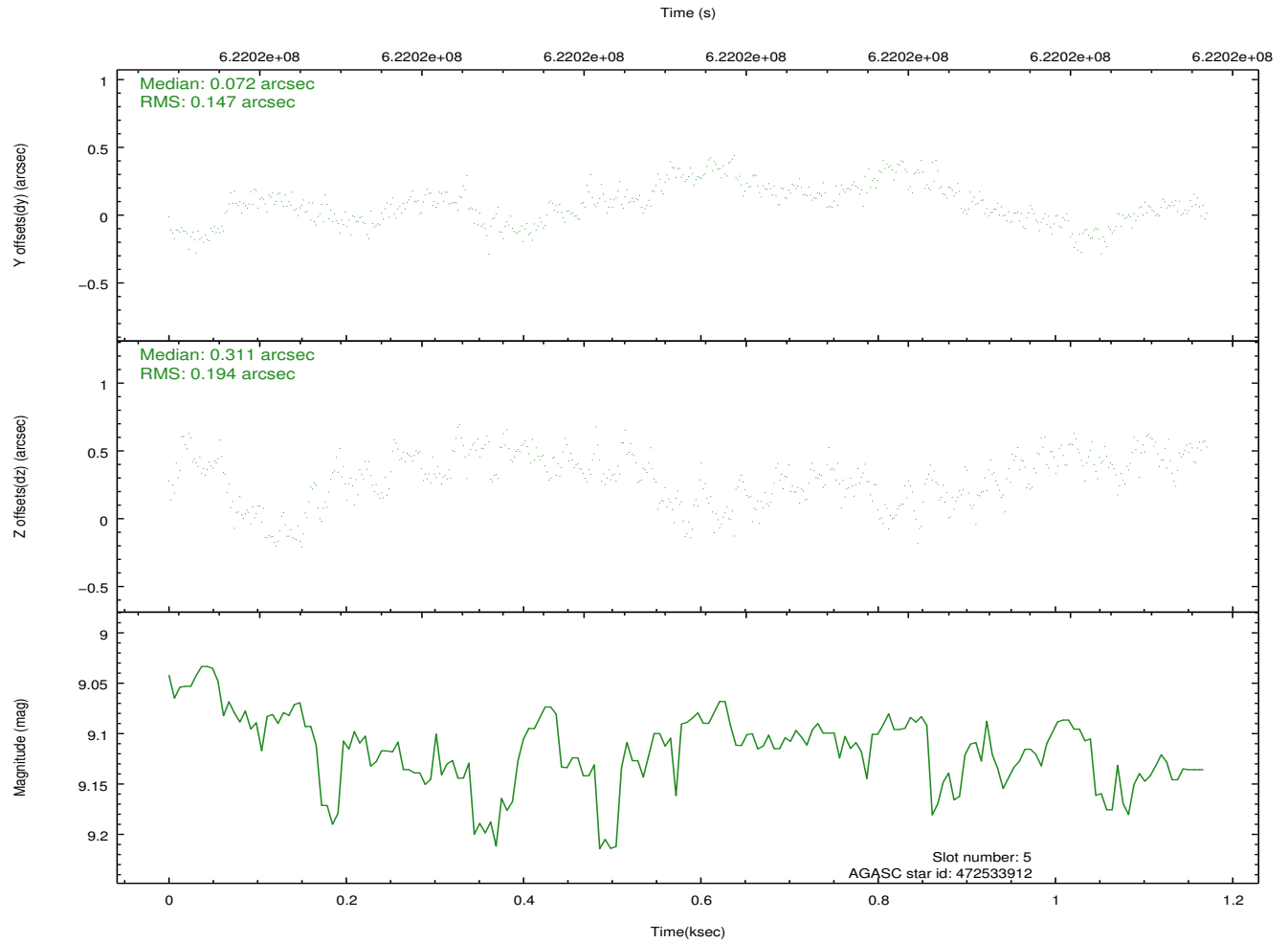
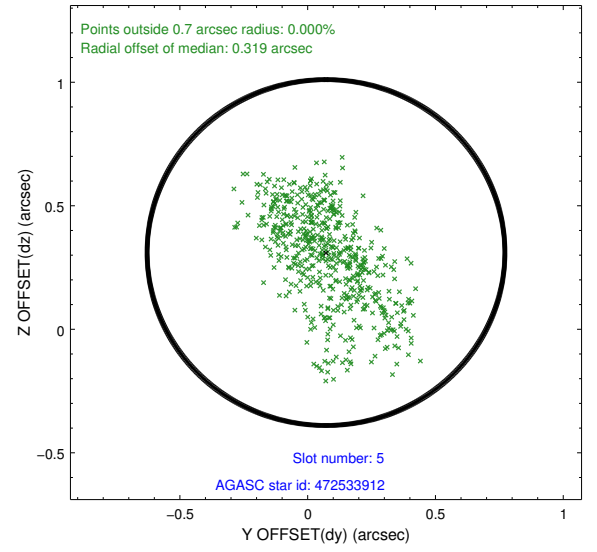
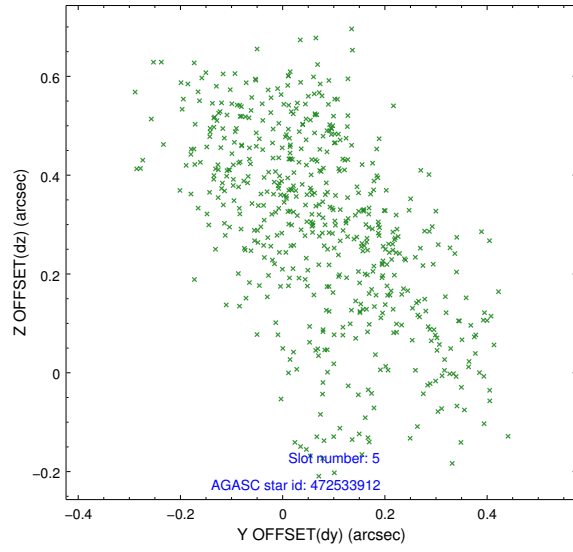
### 2.4.1 Slot 3



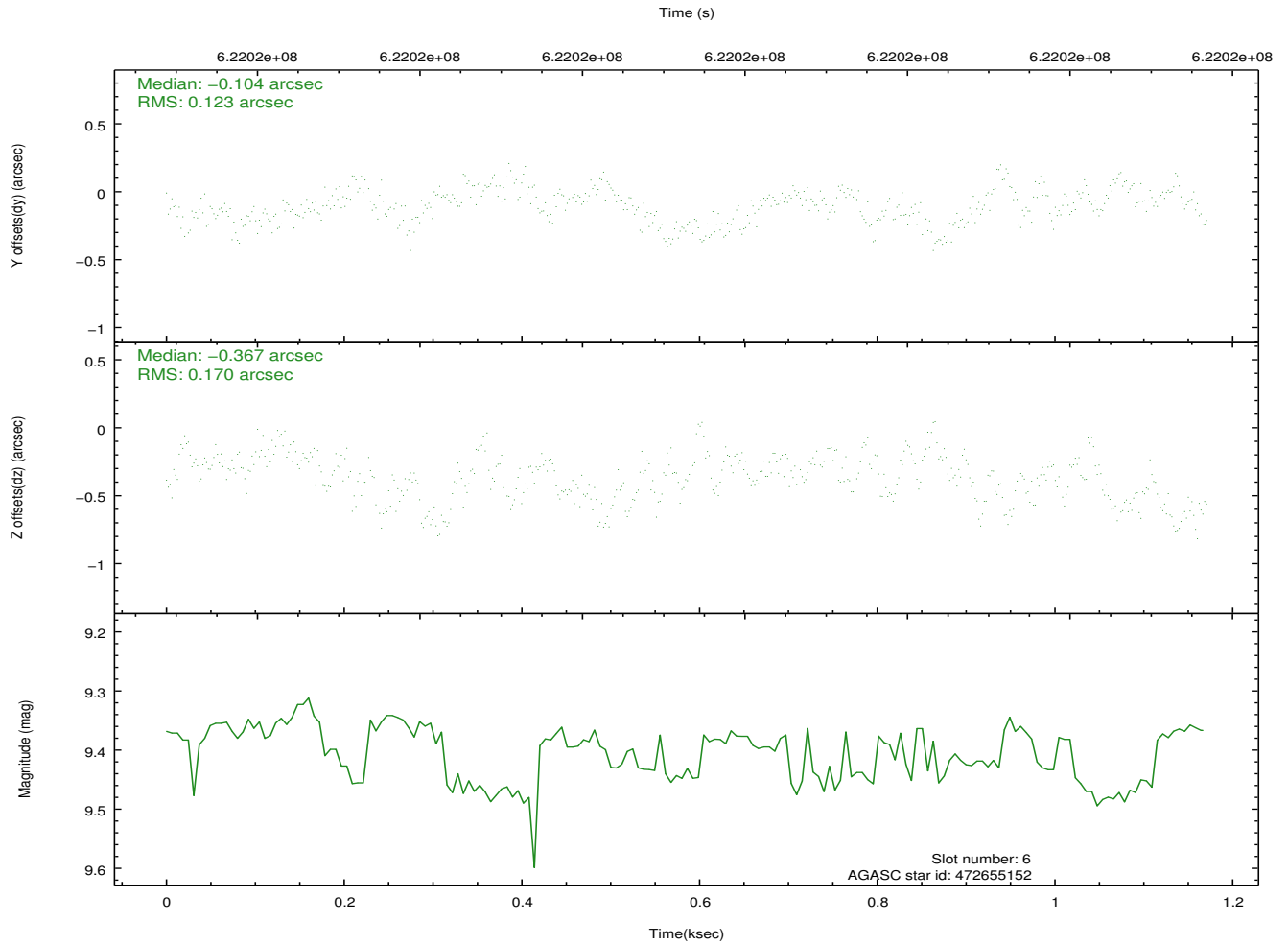
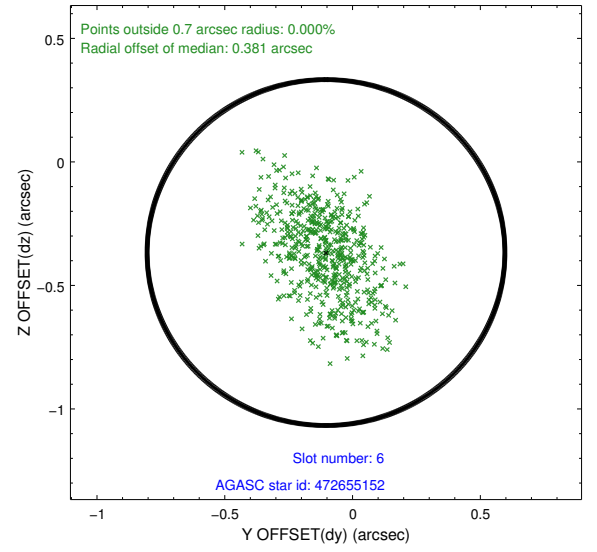
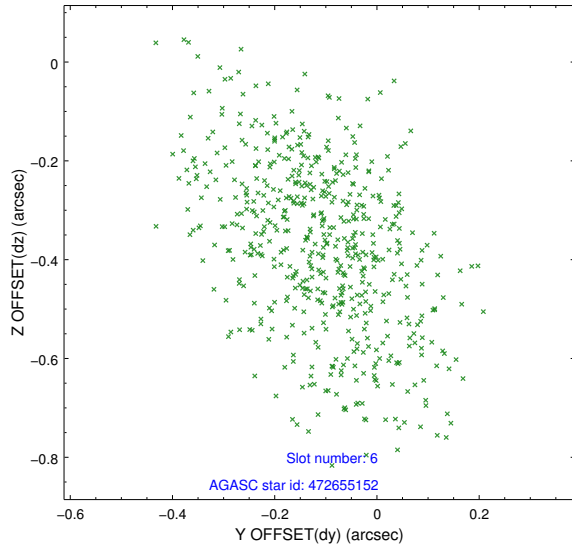
## 2.4.2 Slot 4



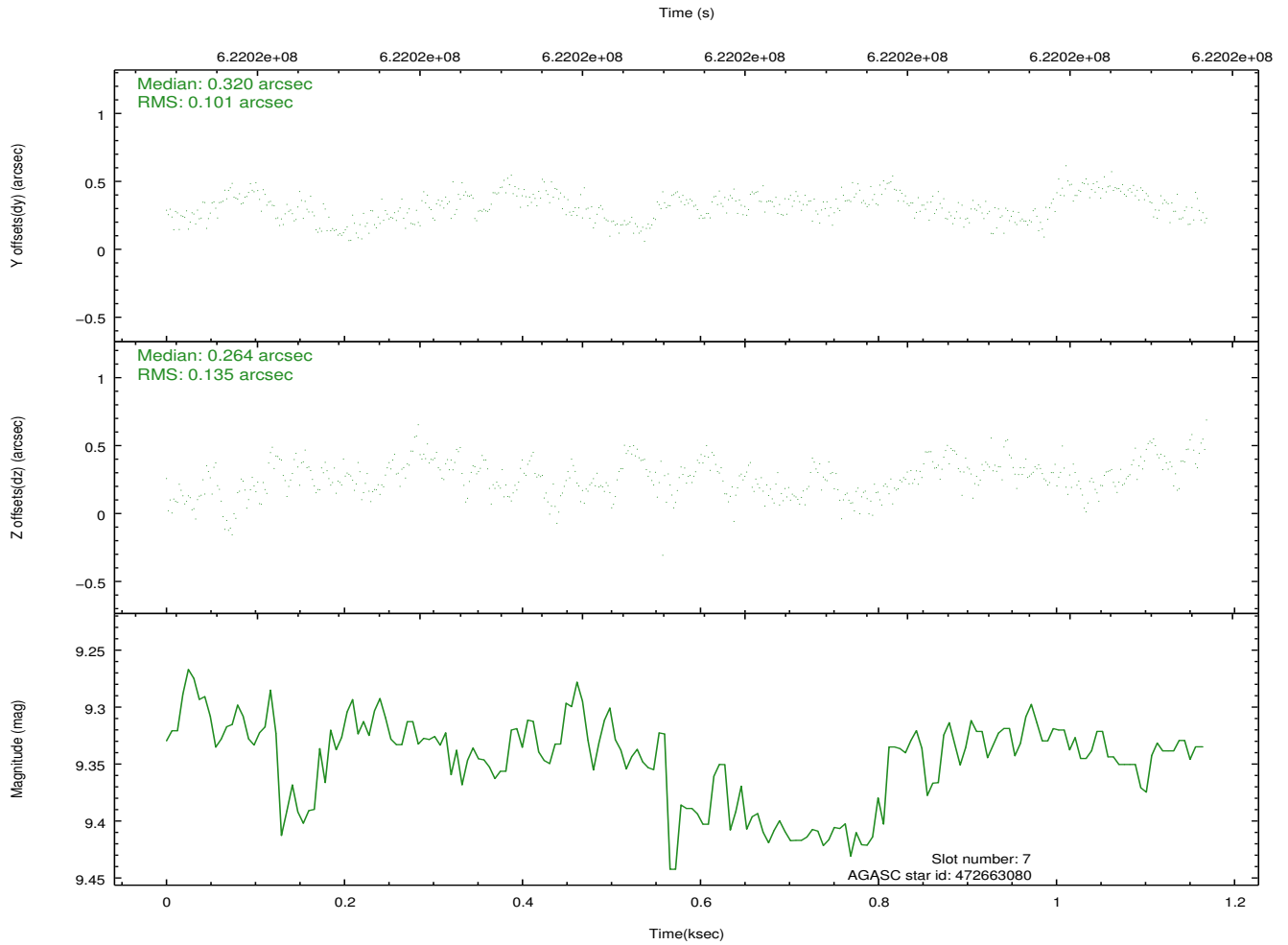
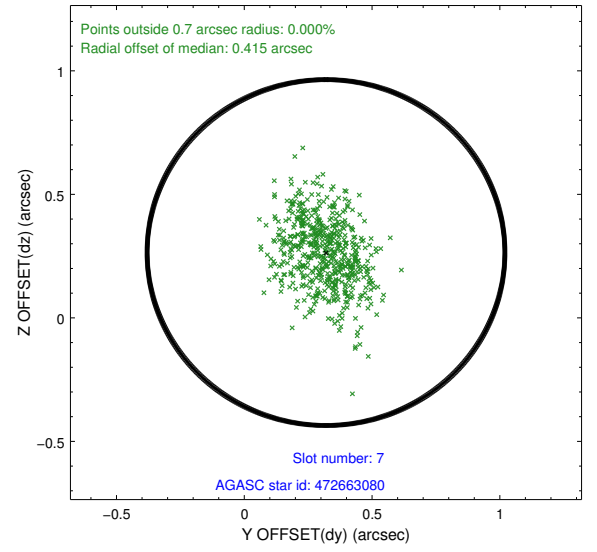
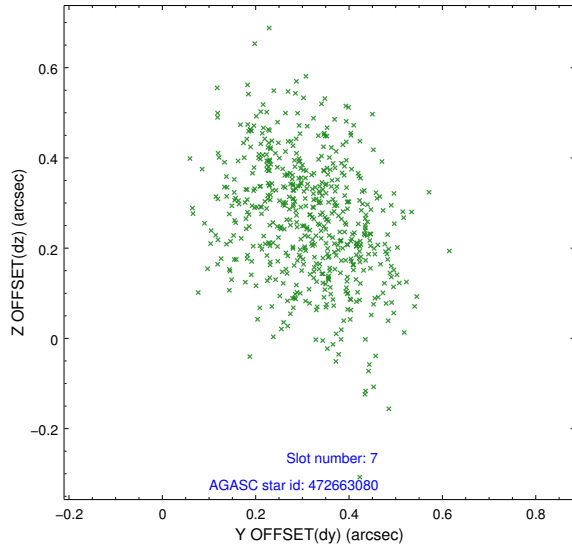
### 2.4.3 Slot 5



## 2.4.4 Slot 6

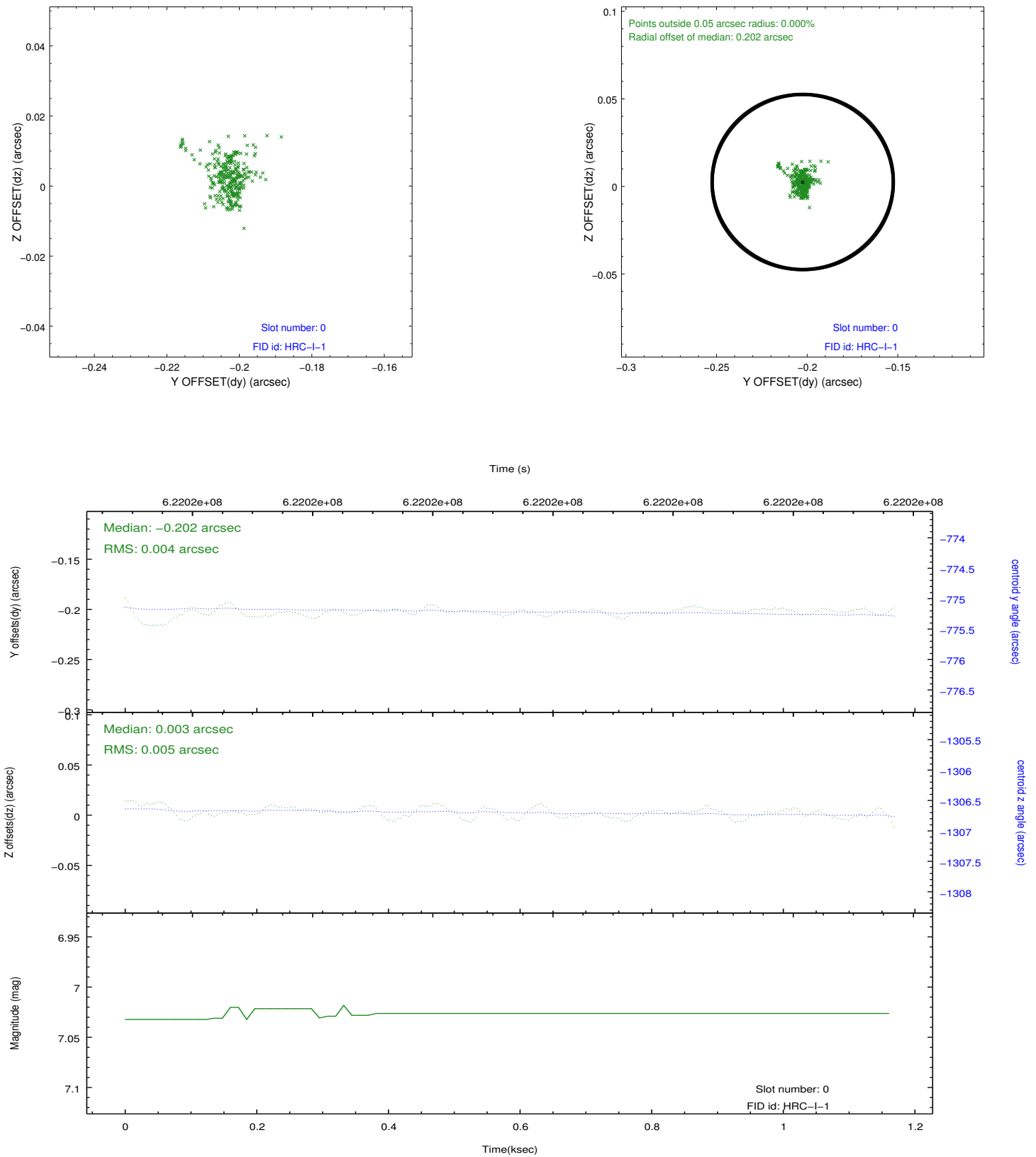


## 2.4.5 Slot 7

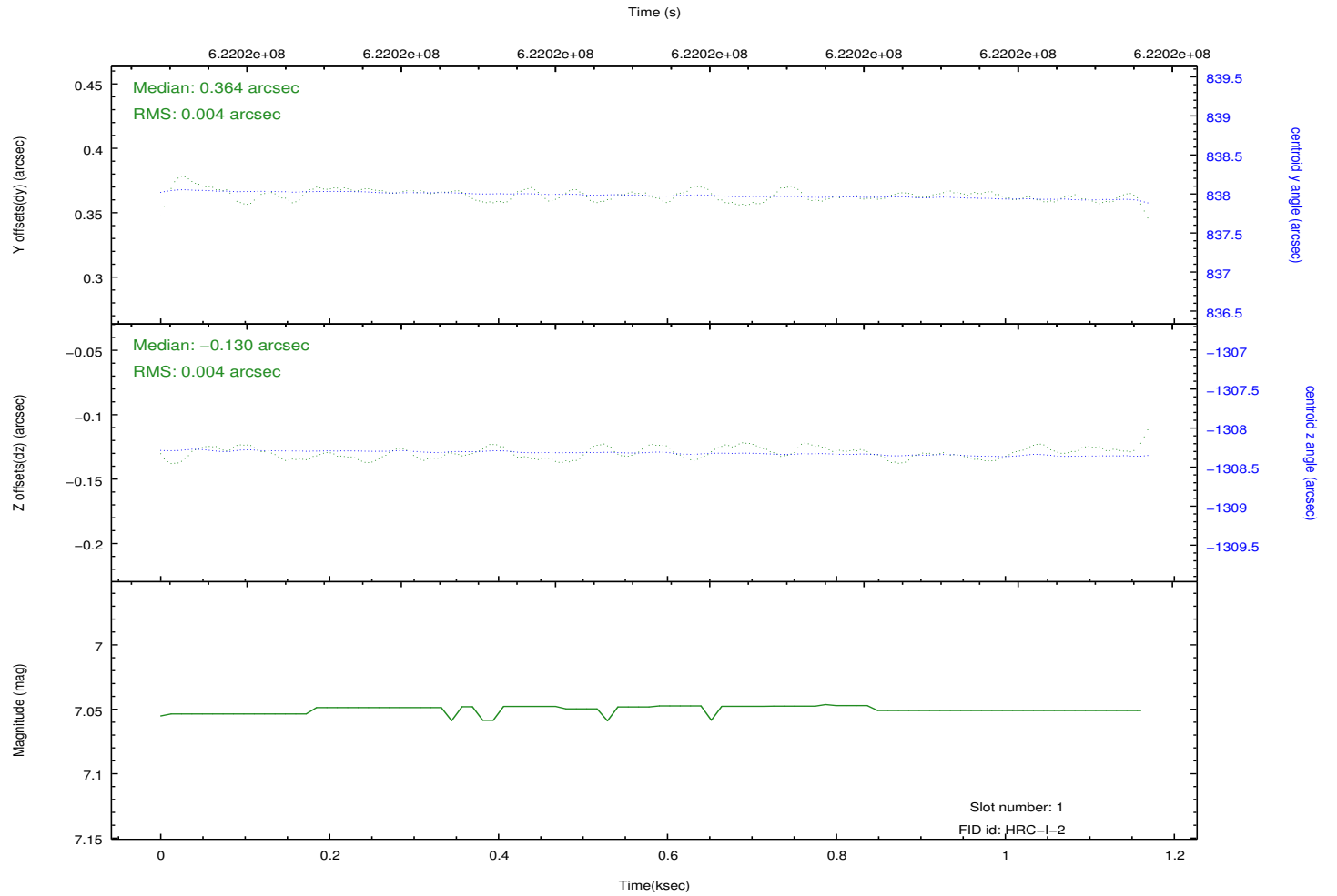
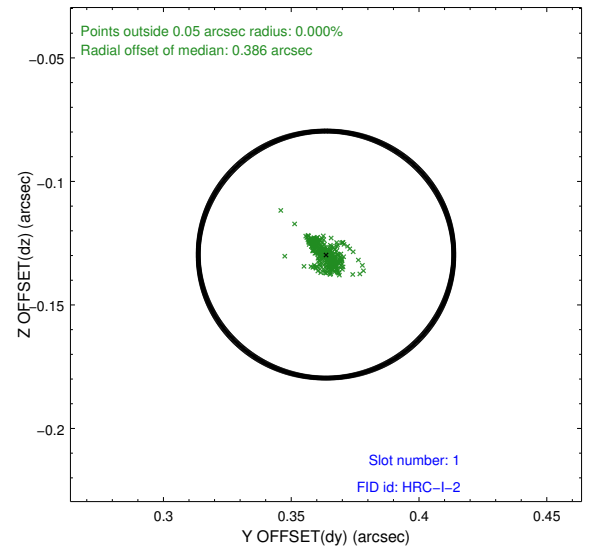
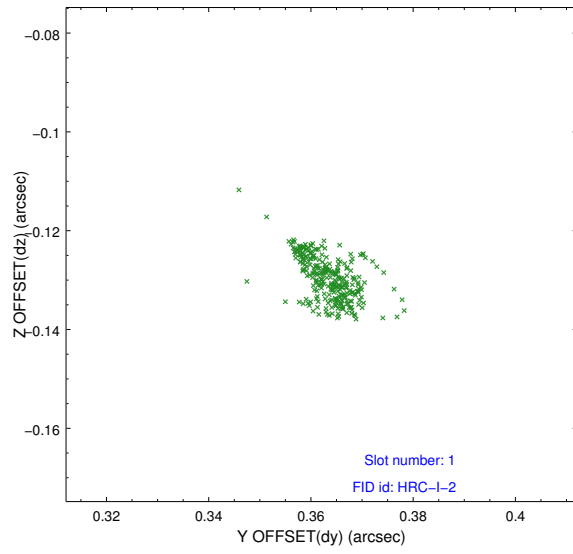


## 2.5 FID Slots

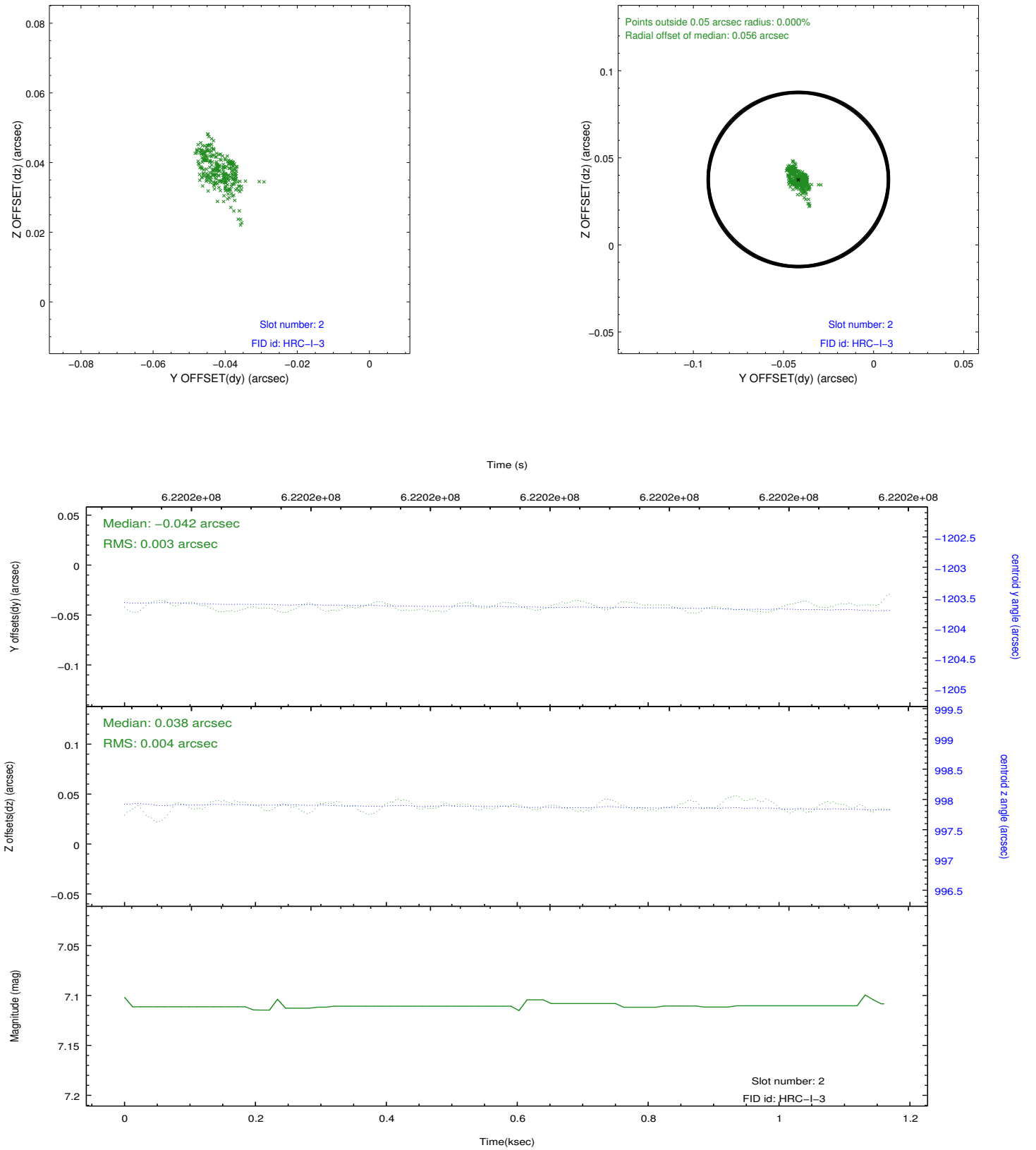
### 2.5.1 Slot 0



## 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)	2017.09.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1697813184261

### **A.2 Comments**