

# V&V Reference Report

## L2 ASCDS Version : 10.5.1.1

Observation 18367 - L2 Version 1  
Chandra X-Ray Center

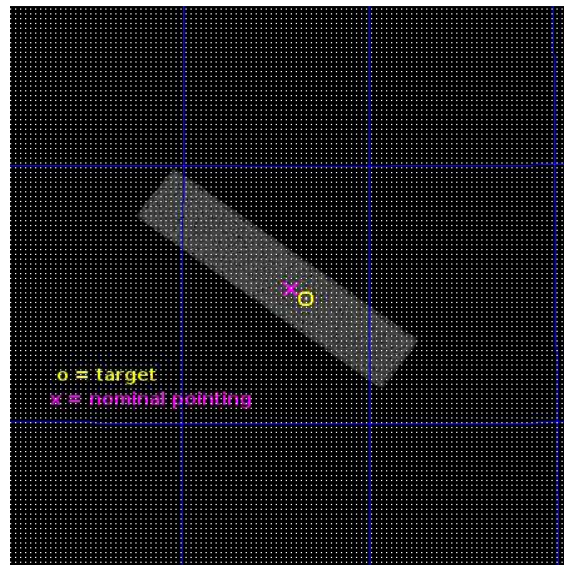
L2 Processing Date : Sep 22 2016

## 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

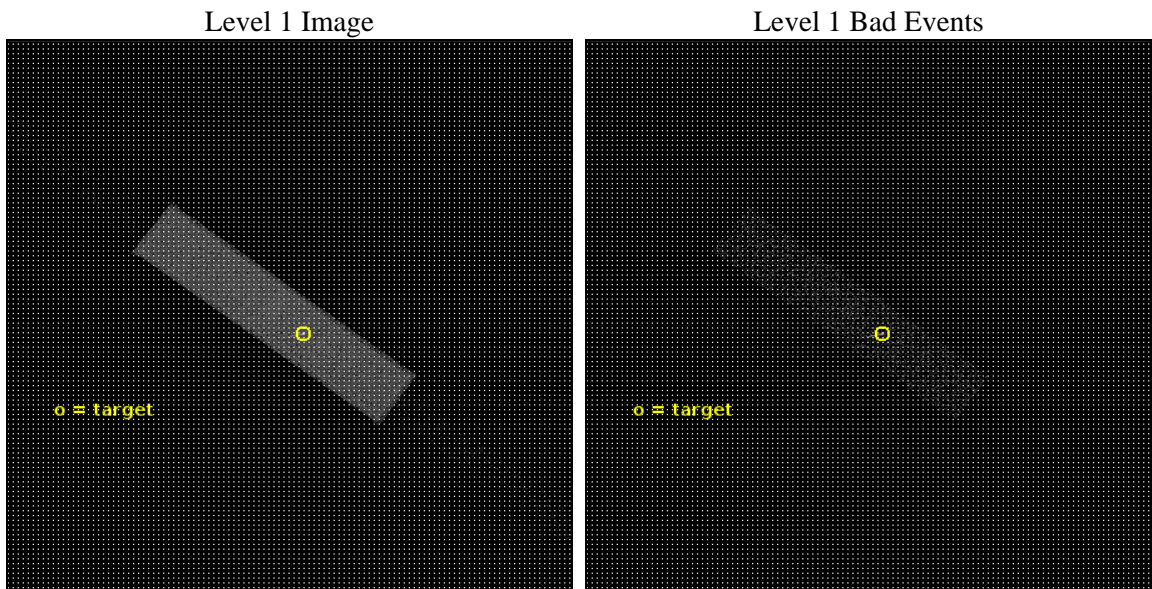
seq_num	291262	Sequence number
obs_id	18367	Observation id
title	AO-17 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.20757149618	Nominal RA [deg]
dec_nom	45.761195679275	Nominal Dec [deg]
roll_nom	216.15448256313	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1028.3313094378	[s]
livetime	1020.3014734439	Ontime multiplied by DTCOR
l2events	59250	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	10.5.1.1	Processing system revision	ontime	1028.3313094378	[s]
caldbver	4.7.2	&#160	l1events	101755	Number of level 1 events
date	2016-09-23T01:51:39	Date and time of file creation			
revision	1	Processing version of data			

### 2.1.3 Events

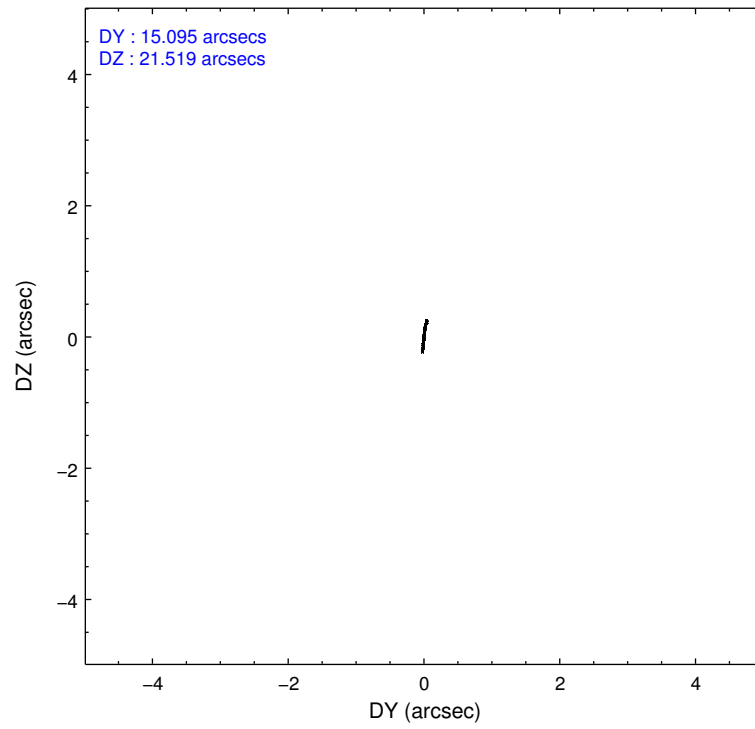
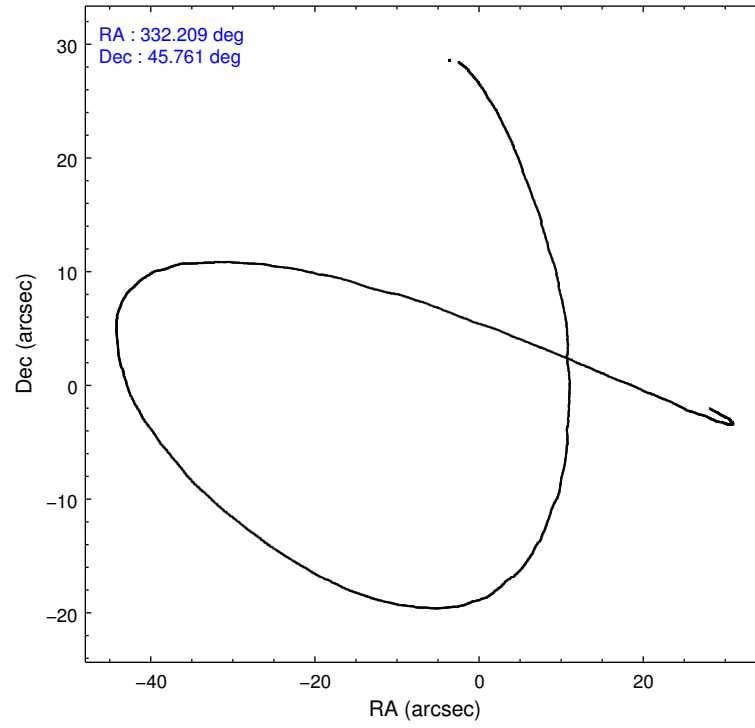
Level 1 Events

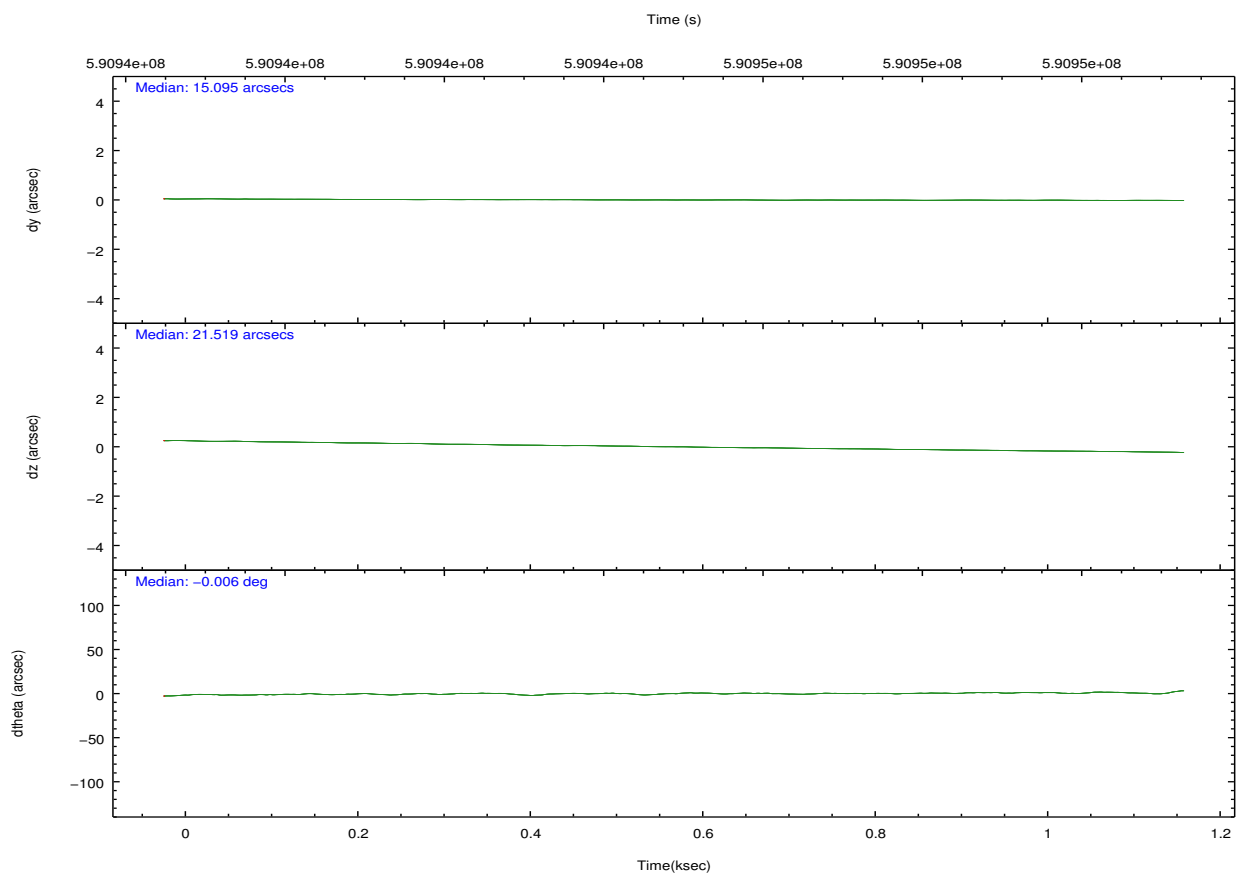
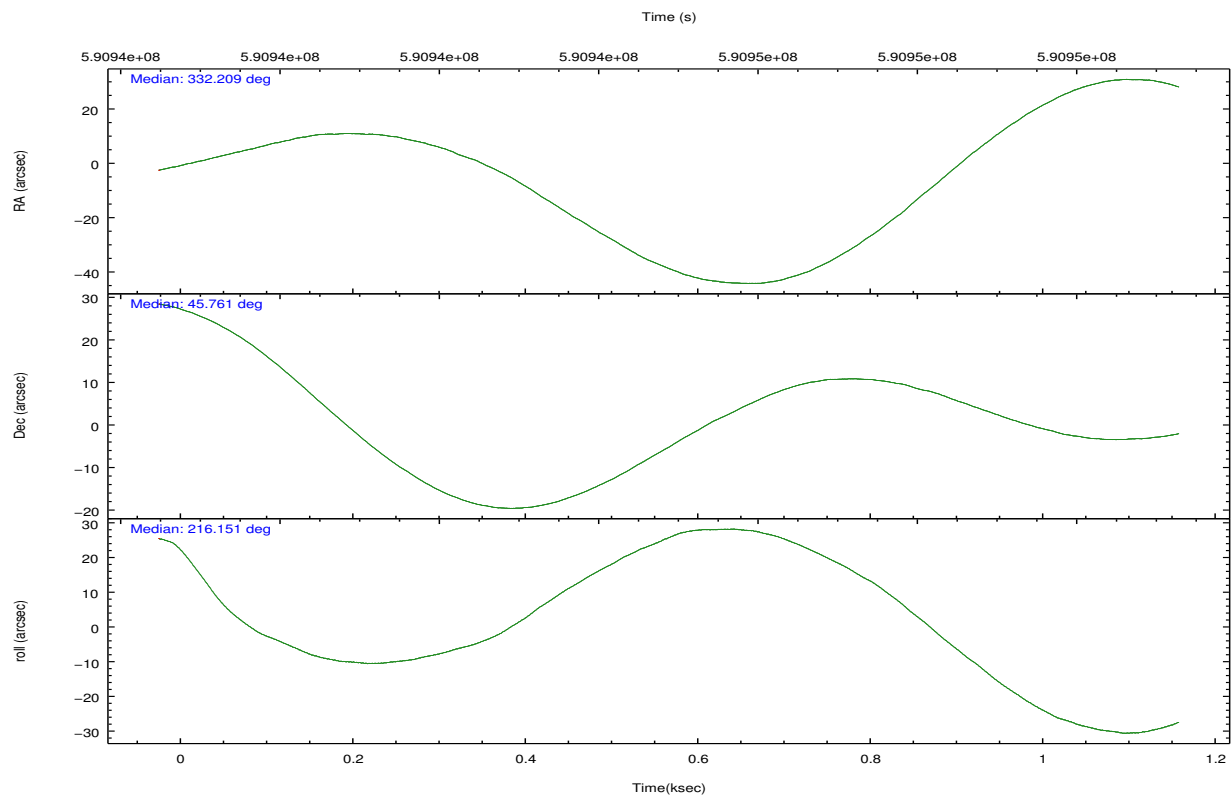
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	855	100141	759
rejected events	855	31566	759
rejected %	100%	31%	100%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	332.221537	332.2075714961839			
[deg] Pointing Dec	45.788241	45.76119567927489			
[deg] Pointing Roll	216.077023	216.1544825631311			
[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)	590944670.184000	590944294.8128901			
Observation start date	2016-09-22T15:16:42	2016-09-22T15:11:34			
[s] Observation end time (MET)	590945670.184000	590945804.63798			
Observation end date	2016-09-22T15:33:22	2016-09-22T15:36:44			

## 2.3 Aspect





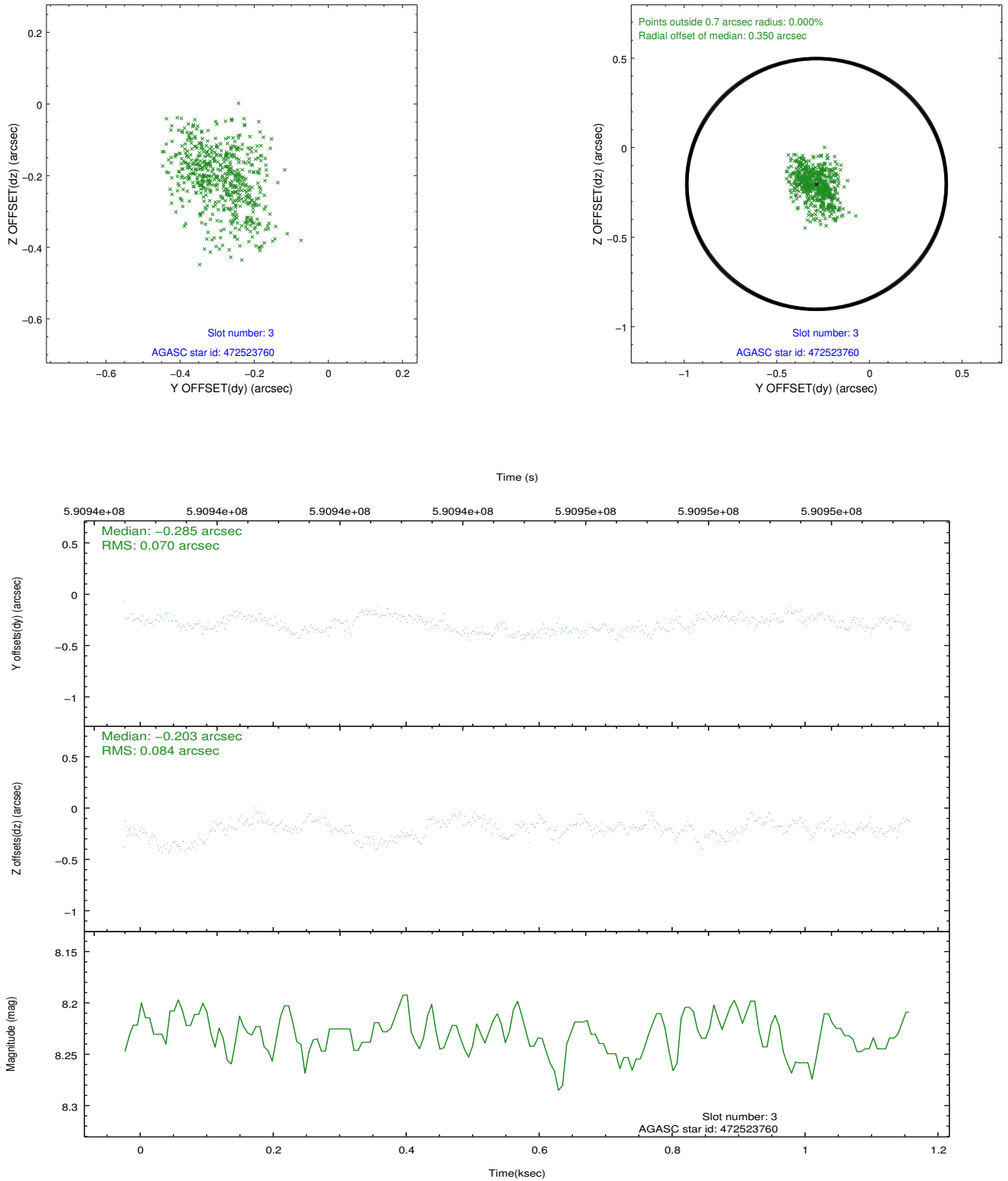
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-1	7.11	289	-0.046	-0.208	0.010	0.018	0.000000	0.000000	-1169.57	-470.65
1	FID		HRC-S-2	7.07	289	0.350	-0.119	0.005	0.011	0.000000	0.000000	1226.43	-464.74
2	FID		HRC-S-3	7.08	289	0.085	0.026	0.011	0.019	0.000000	0.000000	-1167.96	557.49
3	GUIDE	used	472523760	8.23	578	-0.285	-0.203	0.117	0.191	331.645363	45.403260	1992.05	256.89
4	GUIDE	used	472533912	9.13	578	0.237	0.172	0.149	0.233	331.791136	46.368695	-362.28	-2321.54
5	GUIDE	used	472655152	9.38	577	-0.189	-0.277	0.221	0.354	332.504239	45.862991	-730.80	193.44
6	GUIDE	used	472665256	8.98	578	0.028	0.171	0.152	0.239	332.808125	46.195041	-2046.15	-328.12
7	GUIDE	used	472663080	9.38	576	0.210	0.148	0.148	0.246	332.652741	46.473840	-2320.47	-1369.45

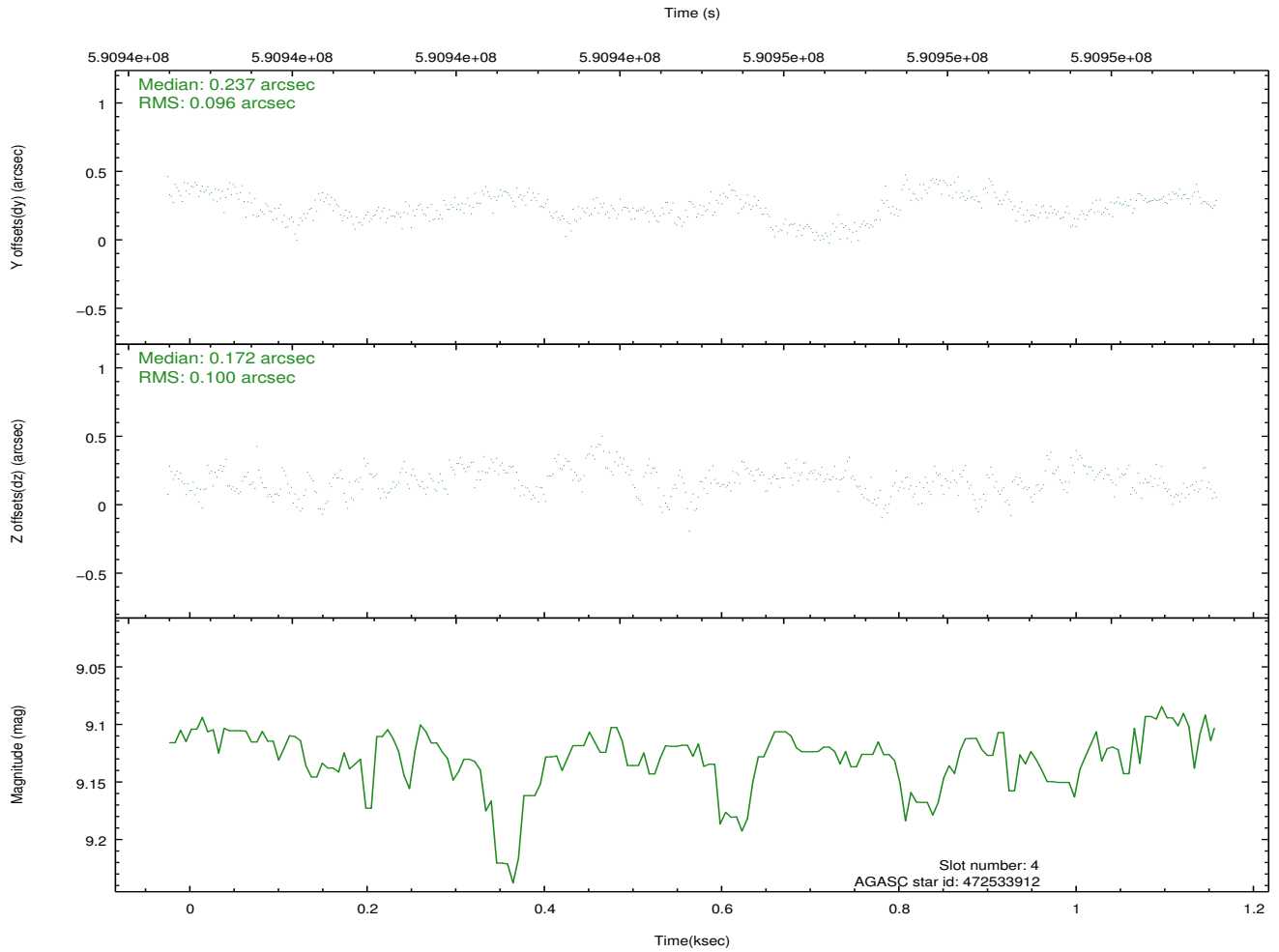
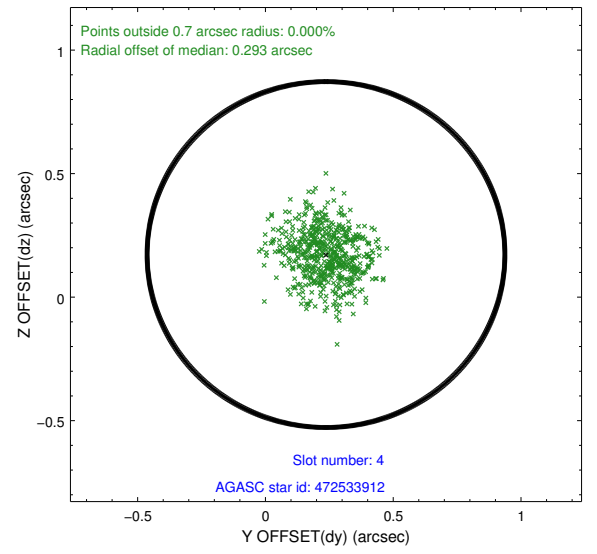
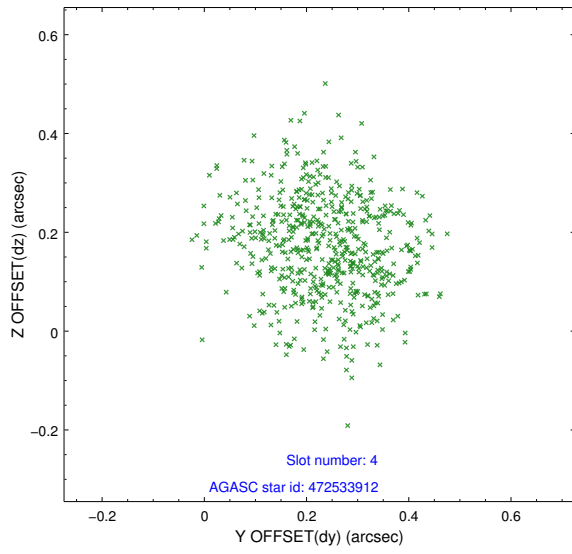


## 2.4 Star Slots

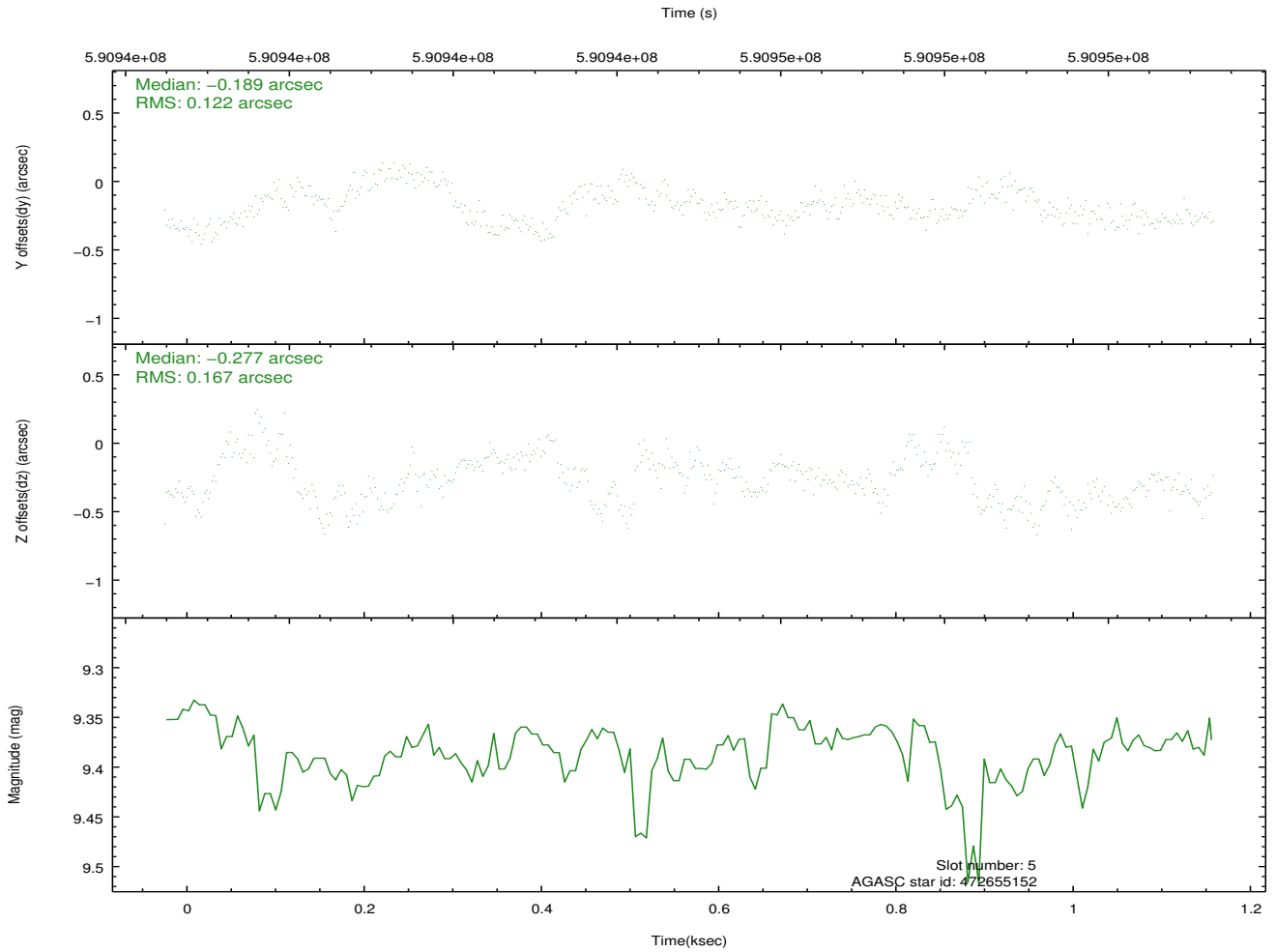
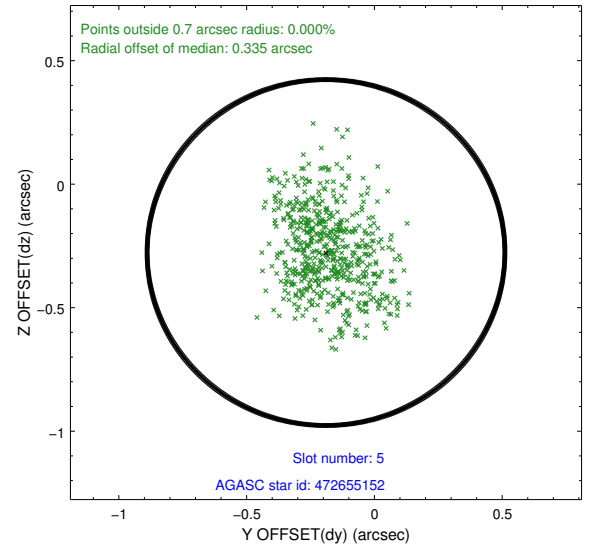
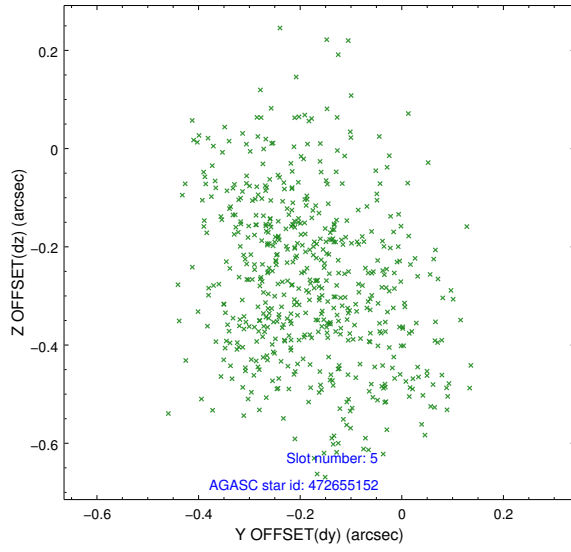
### 2.4.1 Slot 3



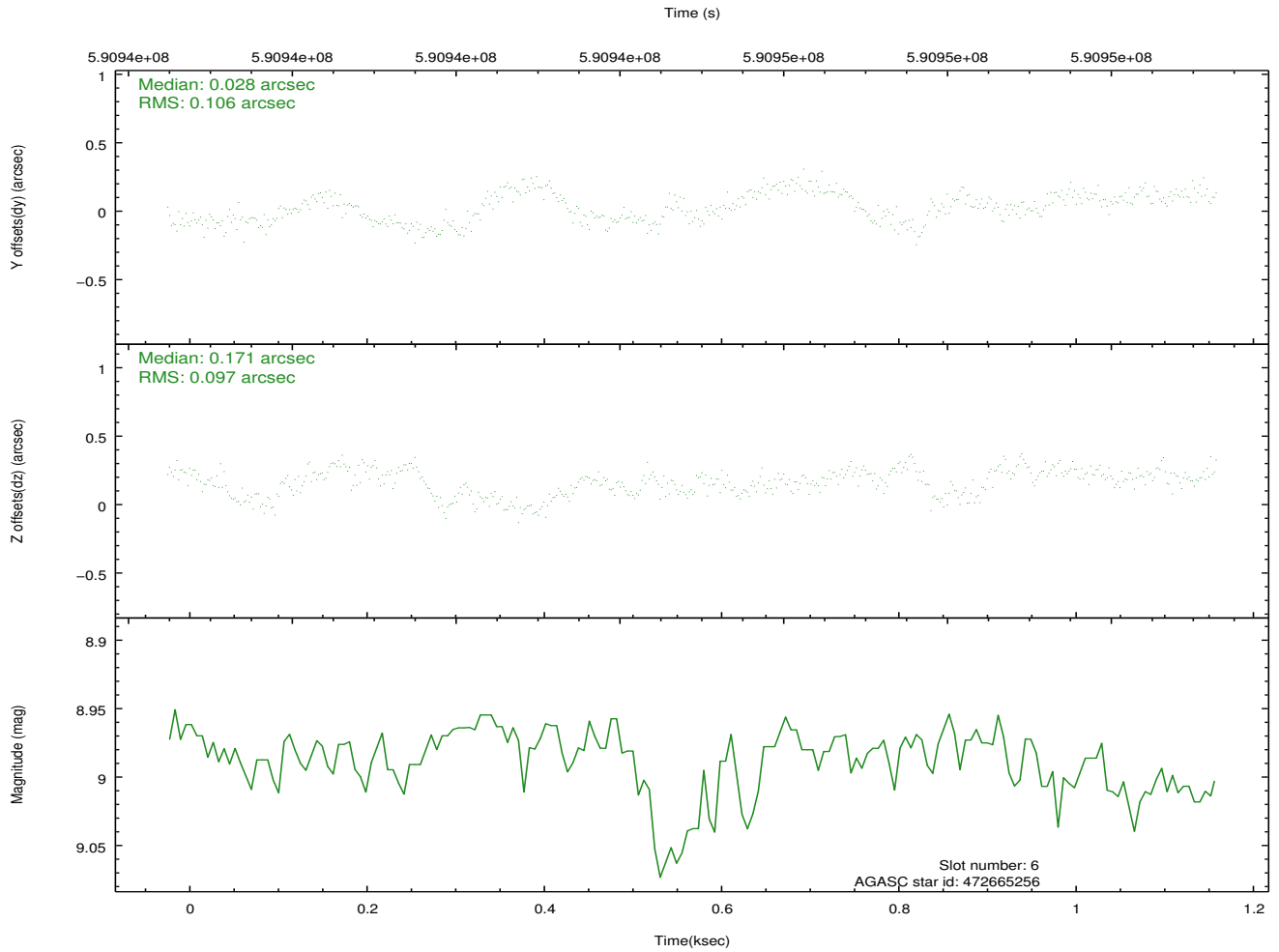
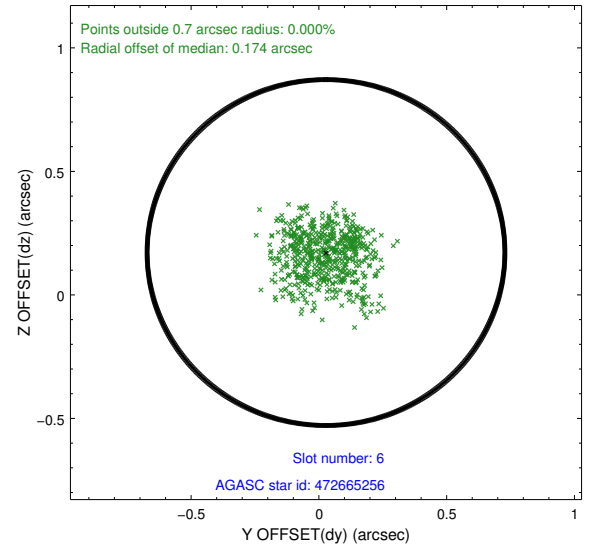
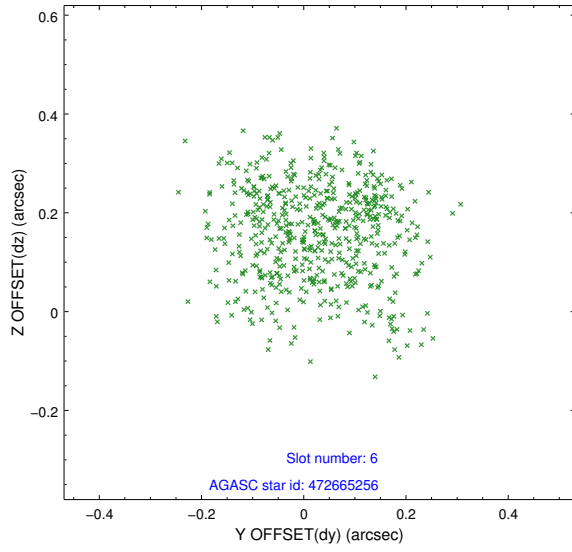
## 2.4.2 Slot 4



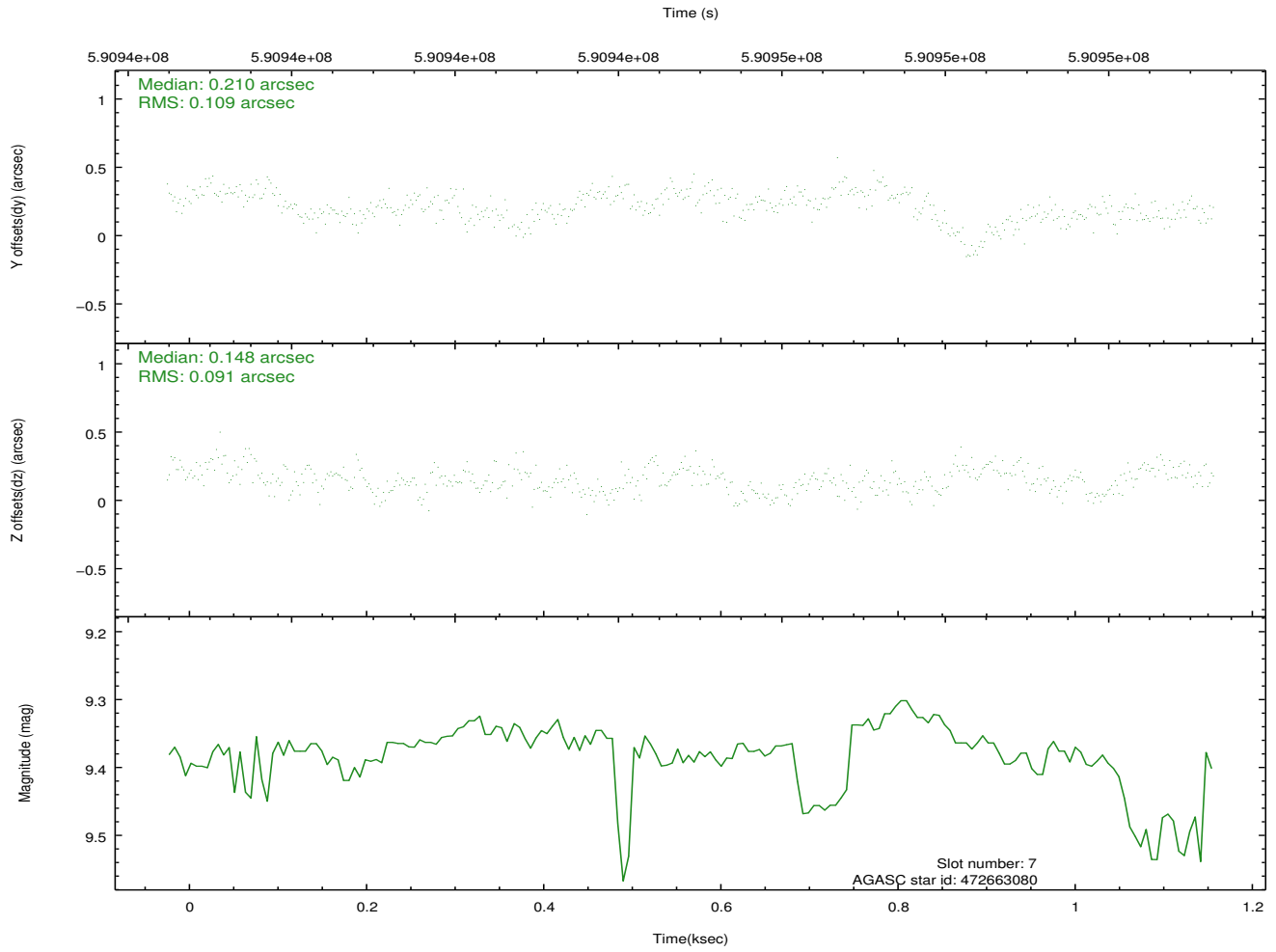
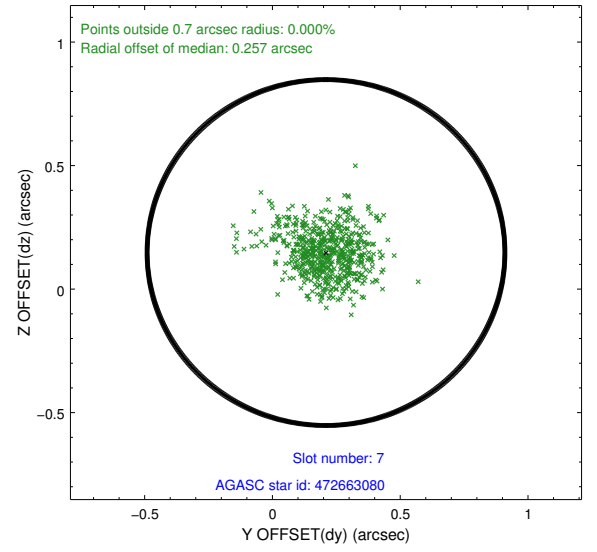
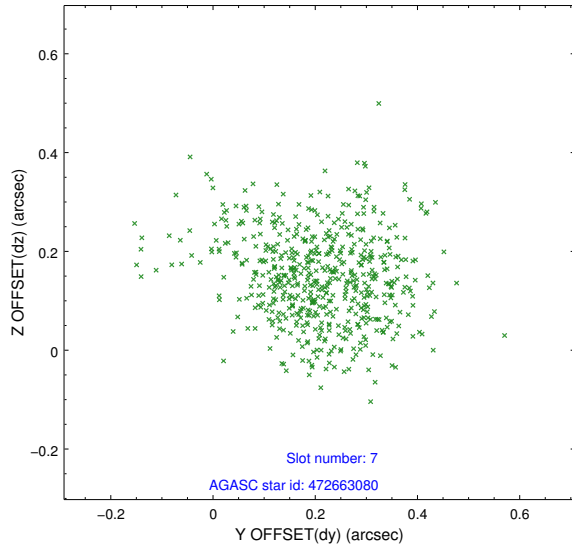
### 2.4.3 Slot 5



## 2.4.4 Slot 6

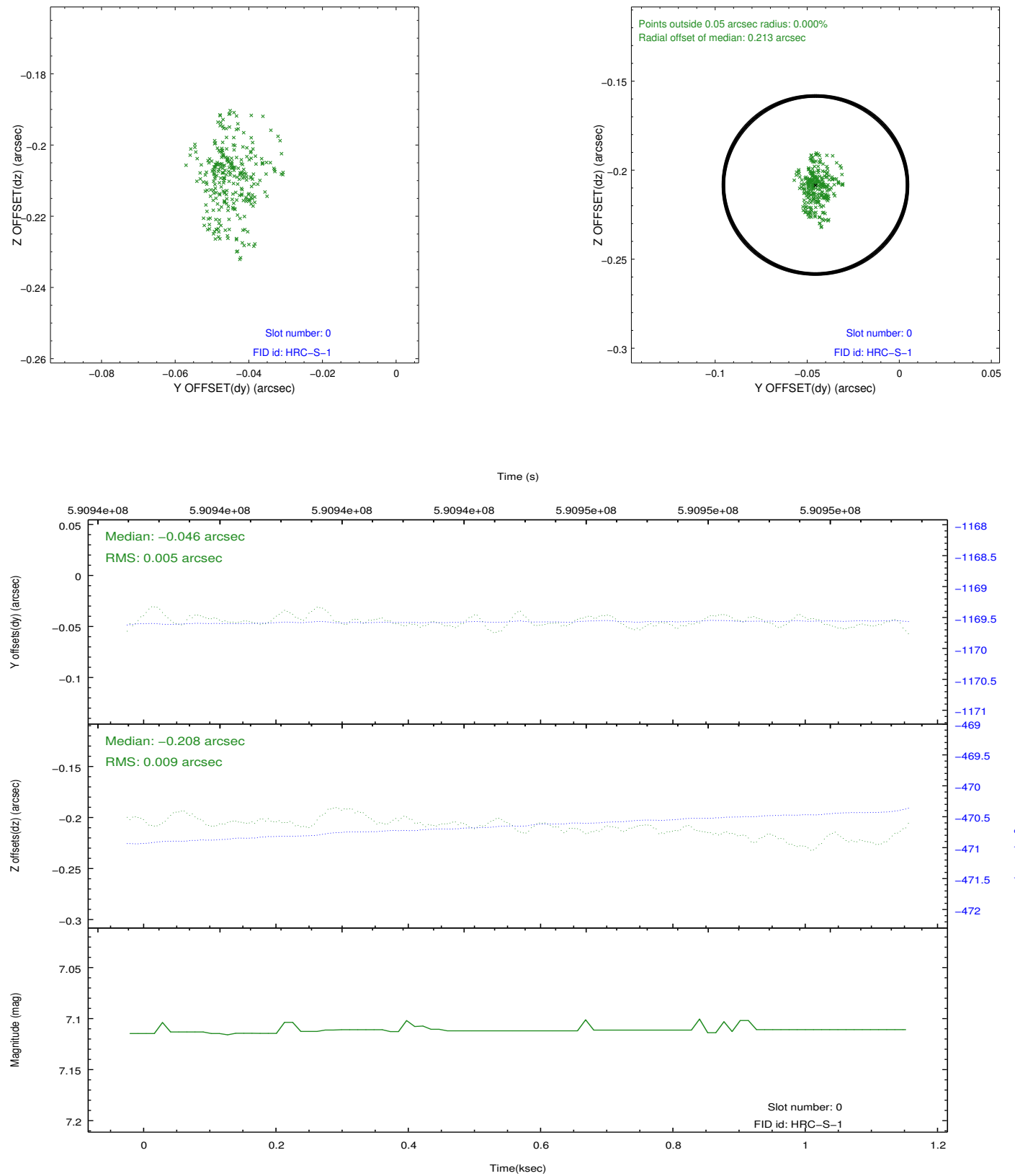


## 2.4.5 Slot 7

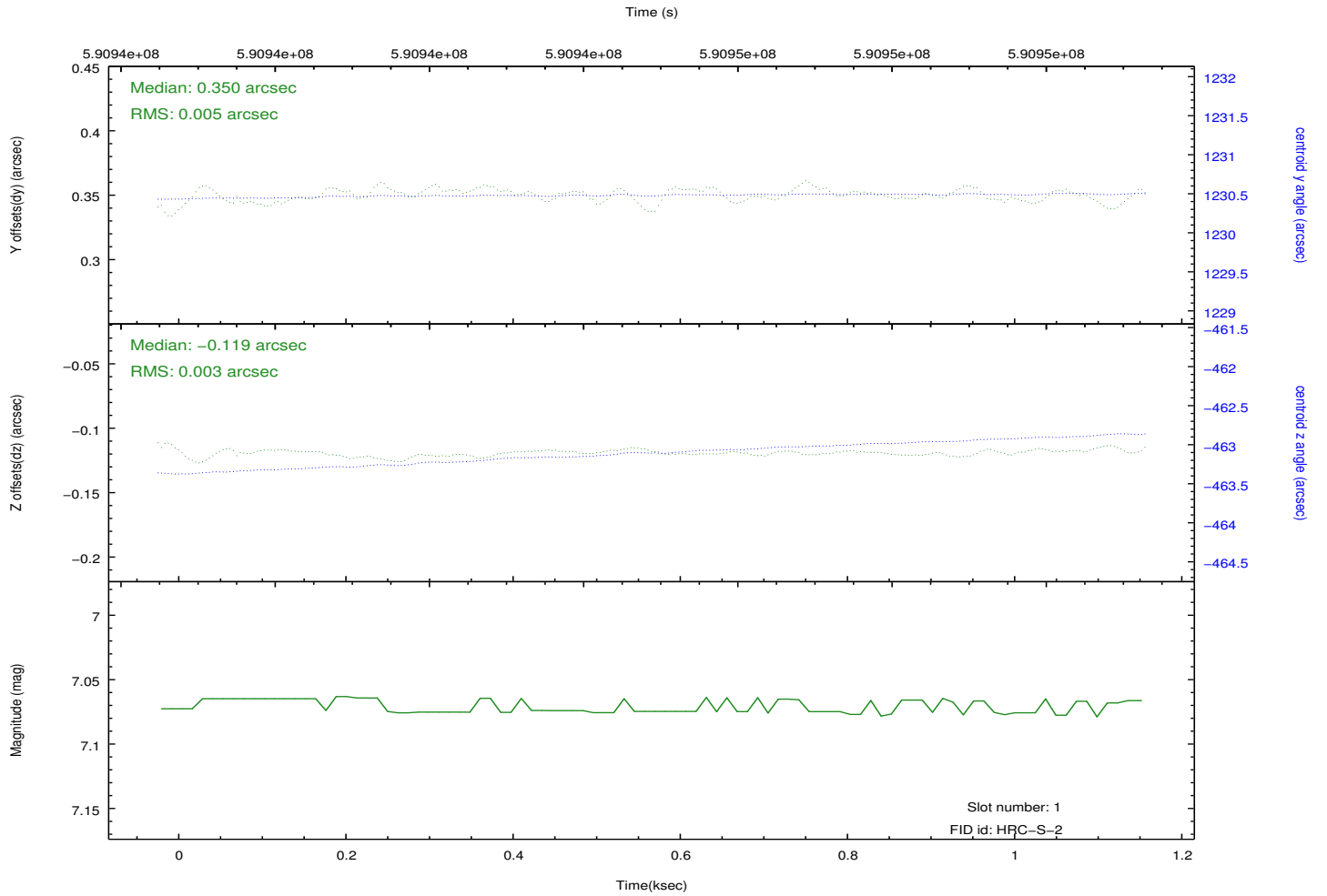
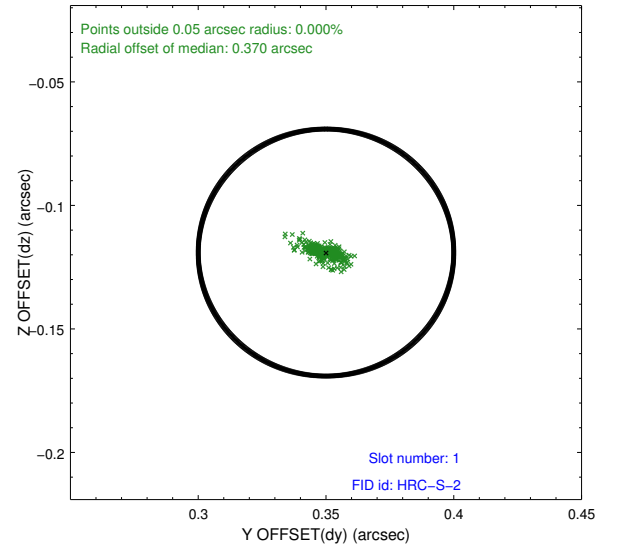
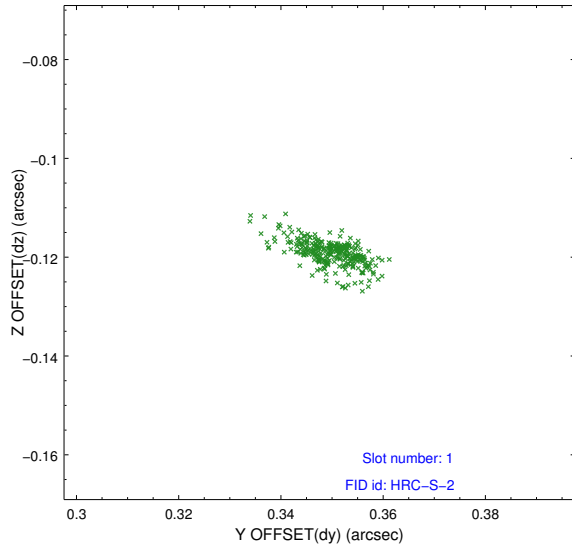


## 2.5 FID Slots

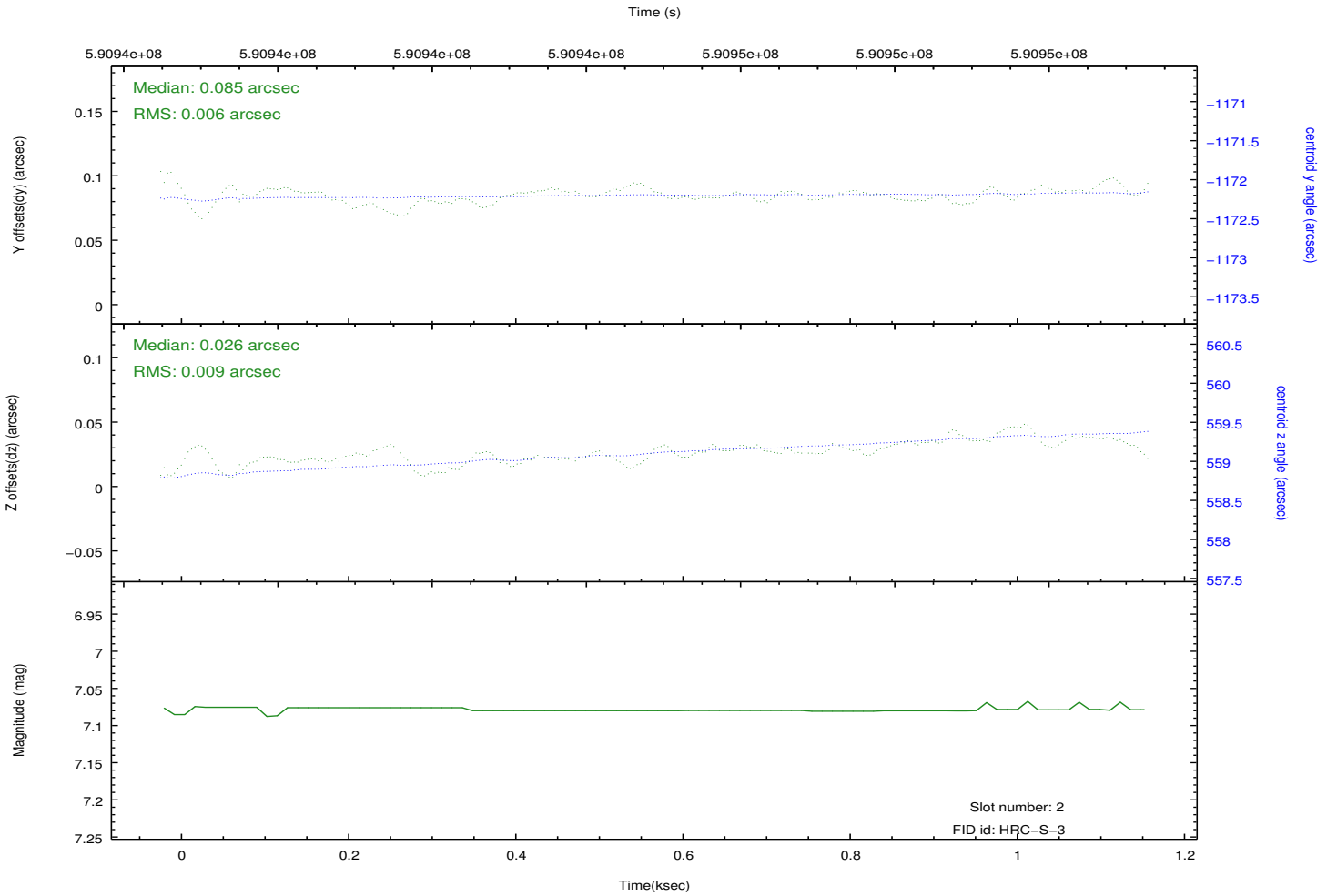
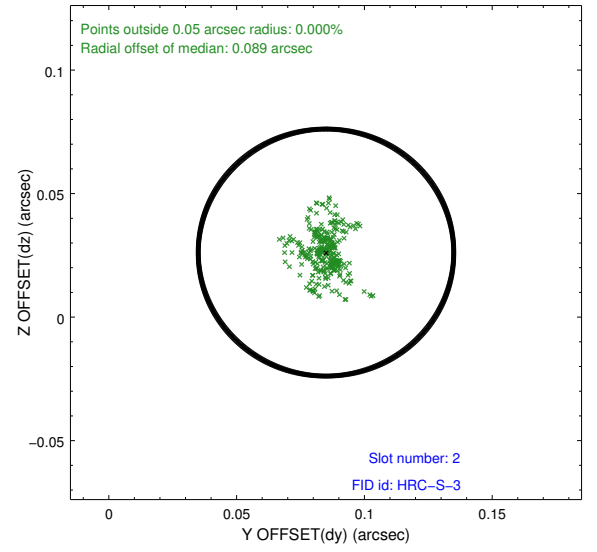
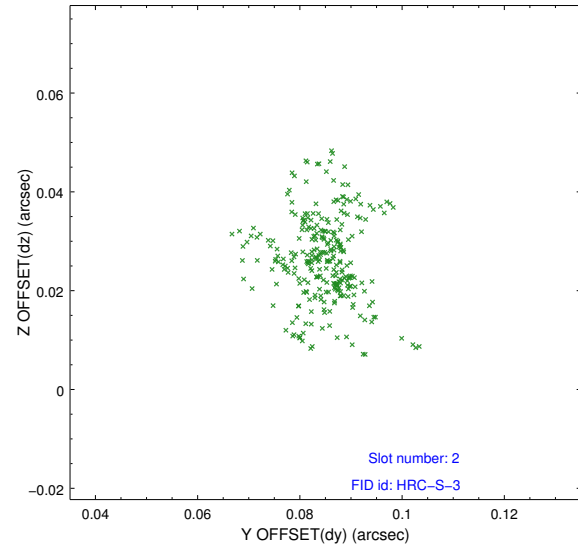
### 2.5.1 Slot 0



## 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)	2016.09.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.0283313094378

### A.2 Comments