

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 5164 - L2 Version 4  
Chandra X-Ray Center

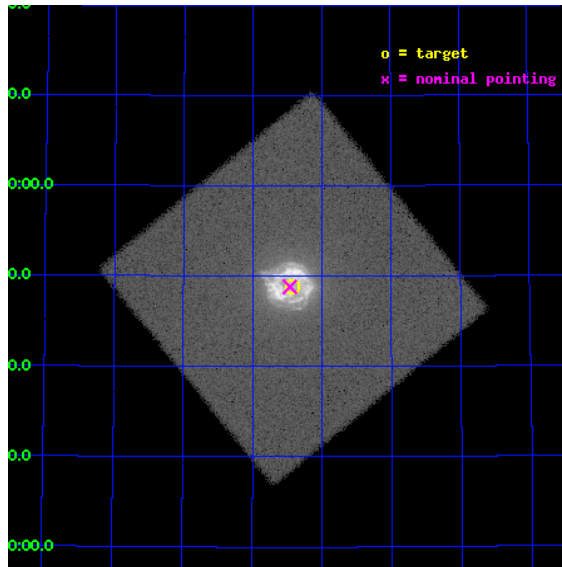
L2 Processing Date : Nov 13 2012

## 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

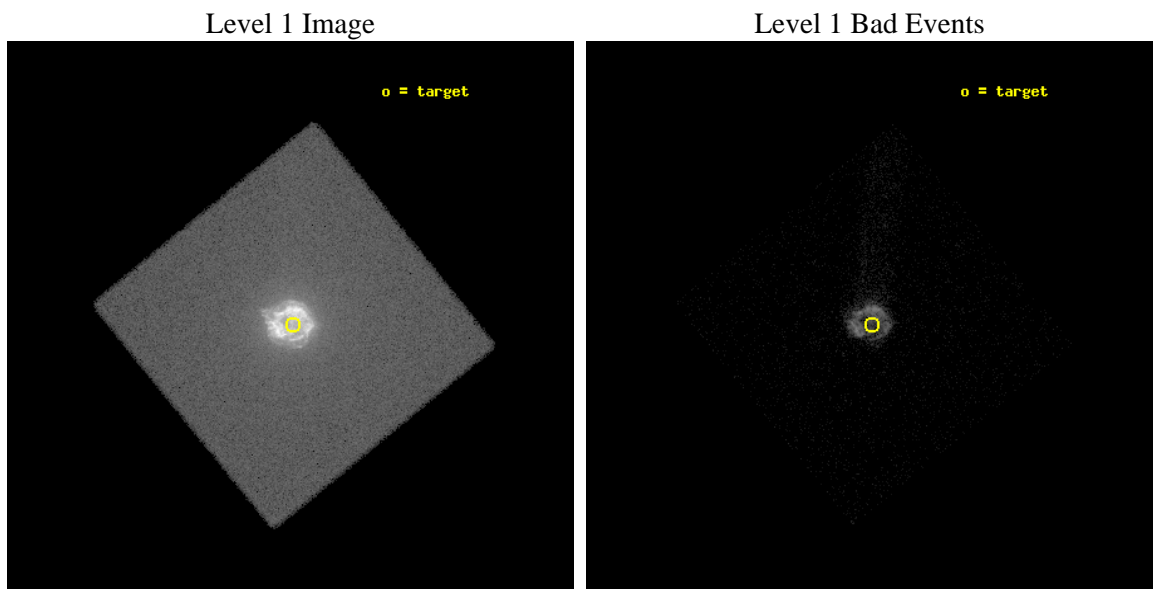
seq_num	590362	Sequence number
obs_id	5164	Observation id
title	AO5A Observations of the Standard Candles Cas A and G21.5-09	Propo
observer	Dr. CXC Calibration	Principal investigator
object	Cas A	Source name
ra_targ	350.8575	Observer's specified target RA [deg]
dec_targ	58.814833	Observer's specified target Dec [deg]
ra_nom	350.86563749888	Nominal RA [deg]
dec_nom	58.813751028641	Nominal Dec [deg]
roll_nom	5.8554303567293	Nominal Roll [deg]
revision	4	Processing version of data
ontime	4874.1314638853	[s]
livetime	4464.4562677049	Ontime multiplied by DTCOR
l2events	690602	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	5002.669000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4874.1314638853	[s]
caldbver	4.5.2	&#160	l1events	852726	Number of level 1 events
date	2012-11-13T20:09:26	Date and time of file creation			
revision	4	Processing version of data			

### 2.1.3 Events

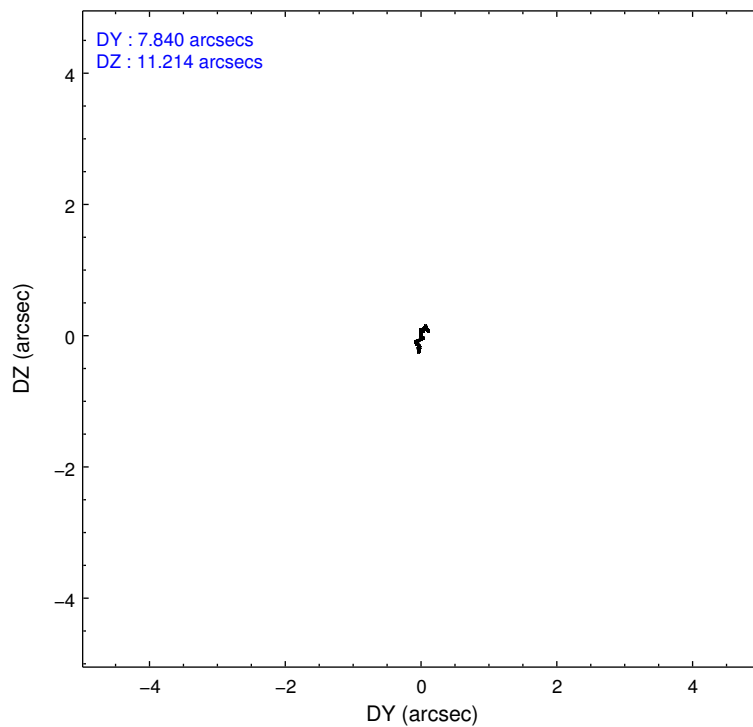
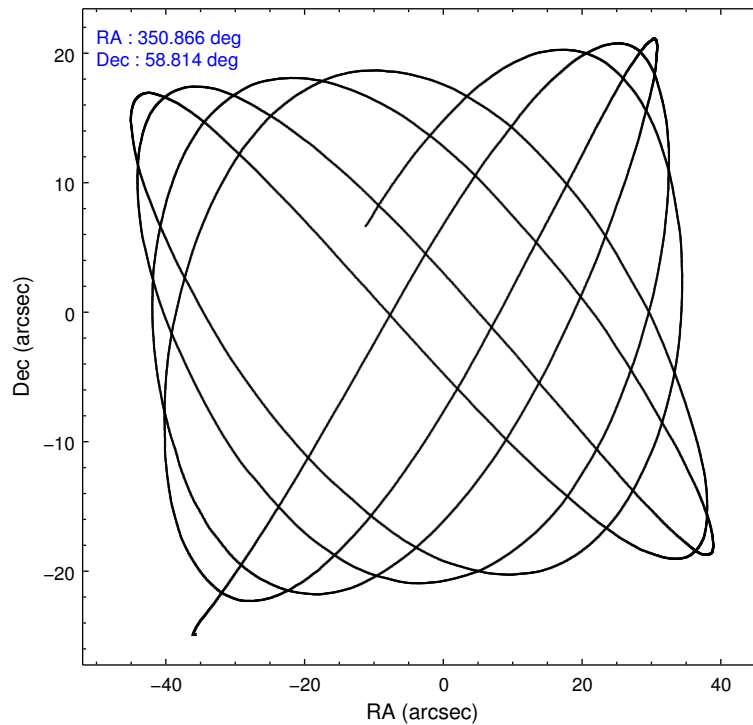
#### Level 1 Events

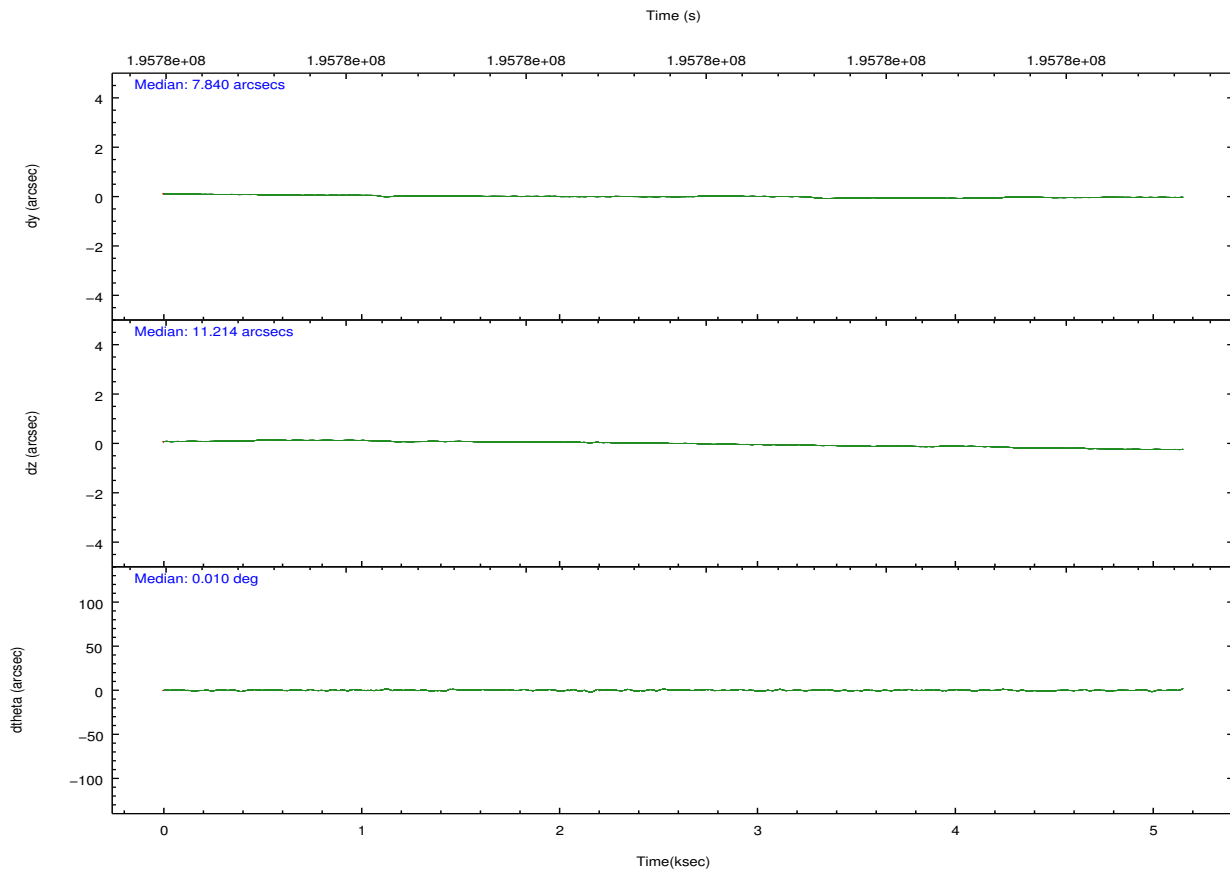
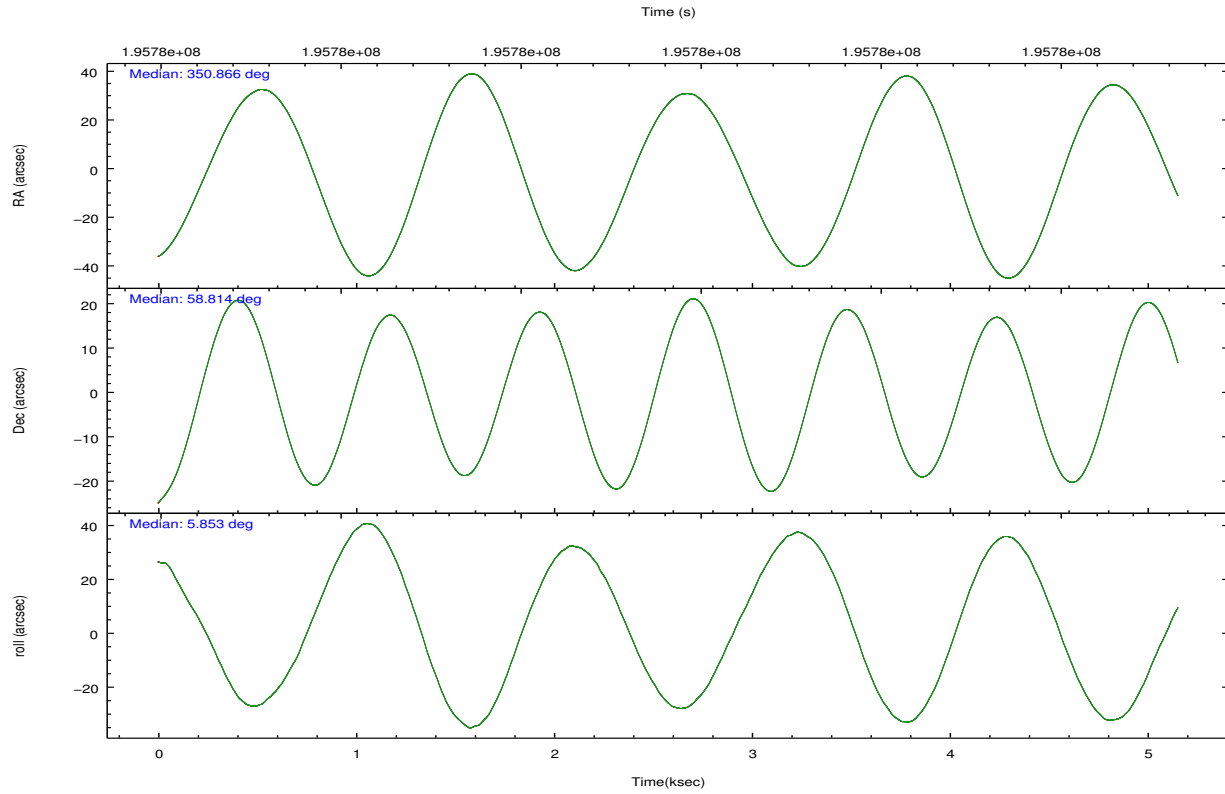
	<b>segment 0</b>
level 1 events	852726
rejected events	33863
rejected %	3%

## 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	350.823522	350.8656374988842			
[deg] Pointing Dec	58.797237	58.81375102864083			
[deg] Pointing Roll	5.986964	5.855430356729282			
[s] Window start time (MET)	194486464.184000	194486464.184000			
[s] Window stop time (MET)	197078464.184000	197078464.184000			
[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)	195780388.184000	195779987.90605			
Observation start date	2004-03-15T23:25:24	2004-03-15T23:19:47			
[s] Observation end time (MET)	195785391.184000	195785705.3563			
Observation end date	2004-03-16T00:48:47	2004-03-16T00:55:05			

## 2.3 Aspect



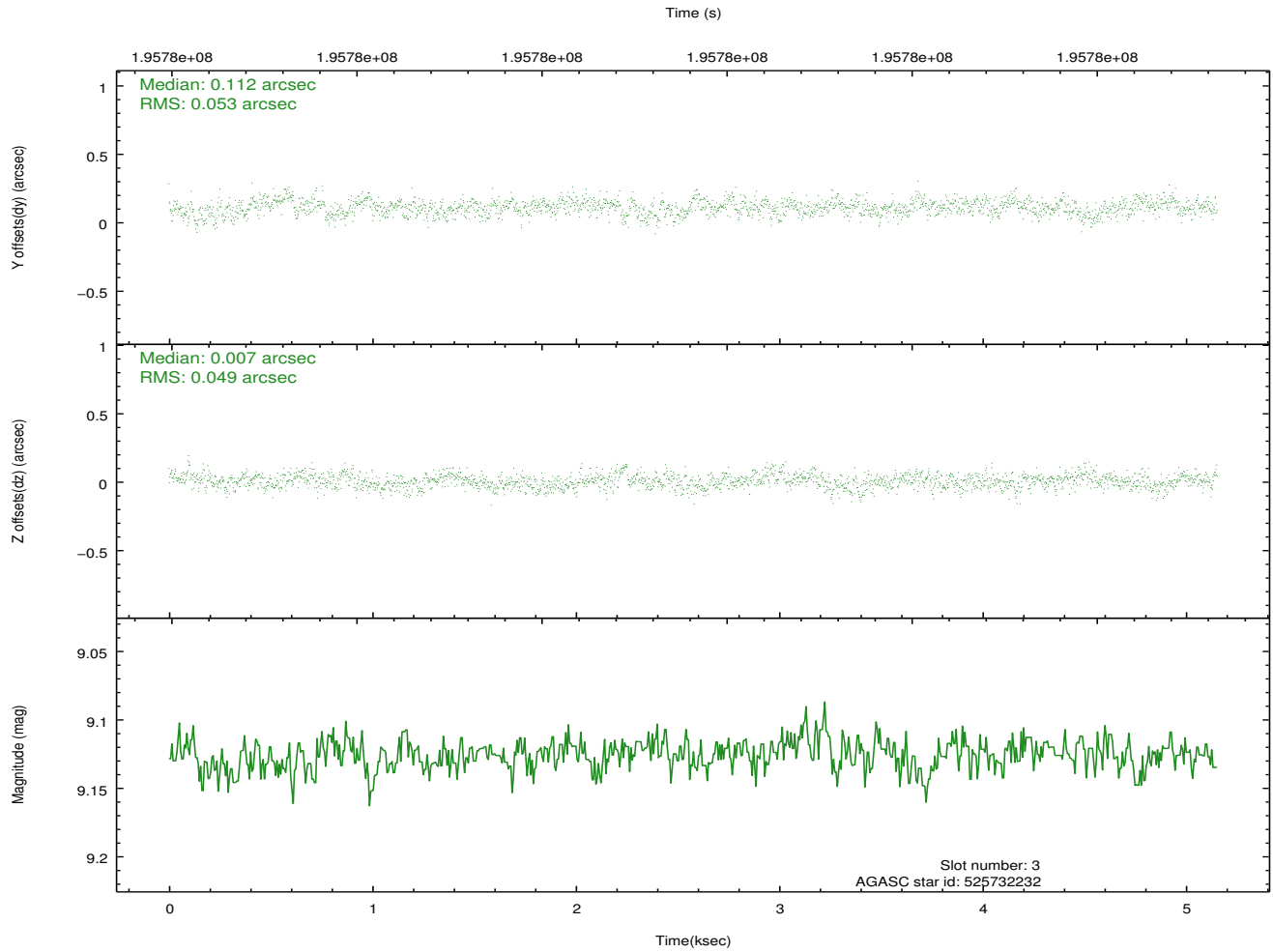
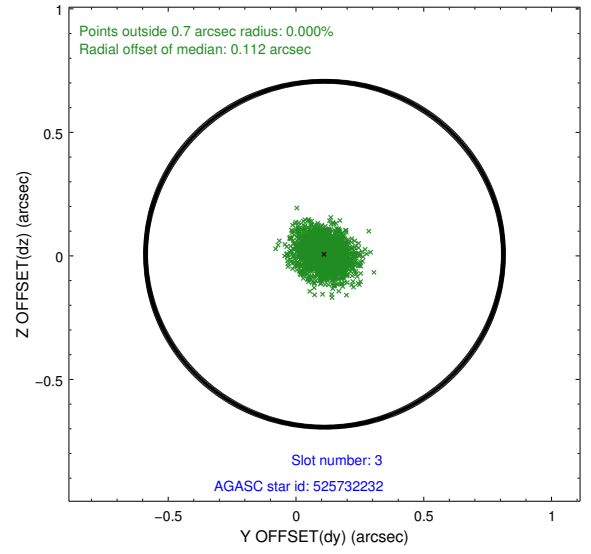
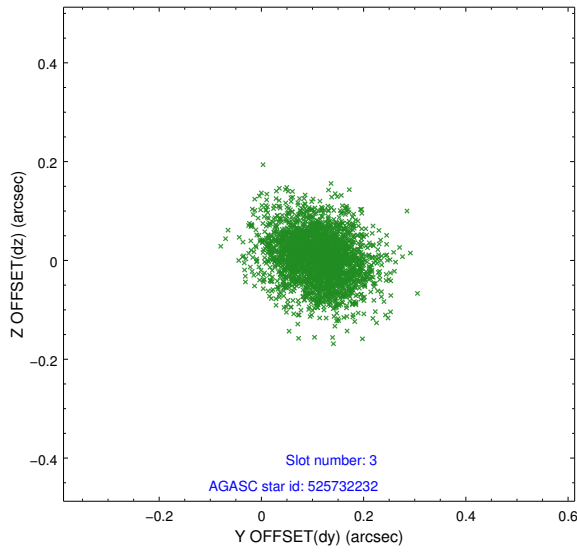


### Slot Statistics

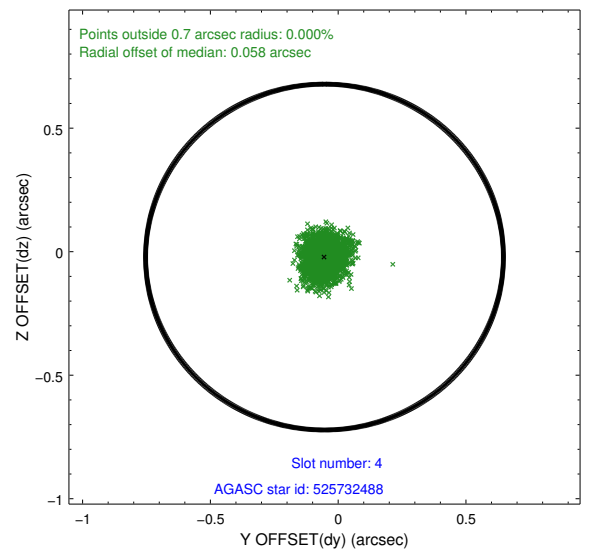
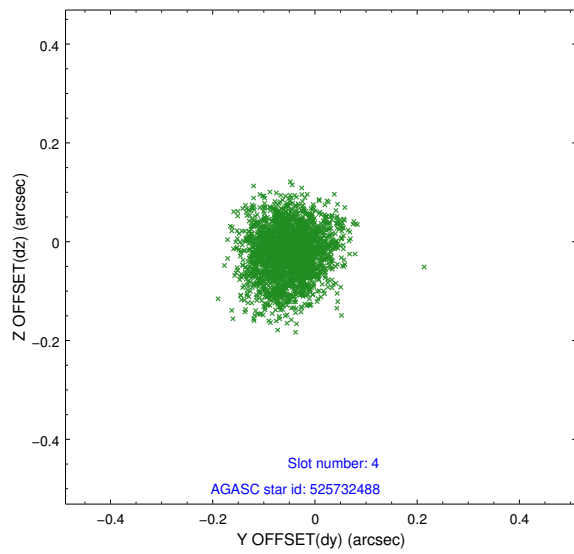
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	7.03	1257	0.021	-0.019	0.008	0.013	0.000000	0.000000	-763.46	-1299.16
1	FID	HRC-I-3	7.12	1257	-0.045	-0.053	0.009	0.016	0.000000	0.000000	-1192.56	1004.35
2	FID	HRC-I-4	7.06	1258	0.138	-0.017	0.007	0.012	0.000000	0.000000	1278.56	1003.77
3	GUIDE	525732232	9.13	2514	0.112	0.007	0.076	0.127	351.669550	58.757012	1556.95	-299.59
4	GUIDE	525732488	8.41	2515	-0.053	-0.022	0.071	0.114	350.087090	58.516915	-1481.43	-852.14
5	GUIDE	525735976	8.91	2515	-0.082	-0.030	0.087	0.140	350.142956	58.277622	-1476.95	-1720.28
6	GUIDE	525736400	9.07	2515	0.055	-0.006	0.096	0.157	350.974563	59.175145	417.79	1323.35
7	GUIDE	525732528	9.36	2513	-0.028	0.053	0.100	0.162	351.607241	59.298932	1621.32	1654.80

## 2.4 Star Slots

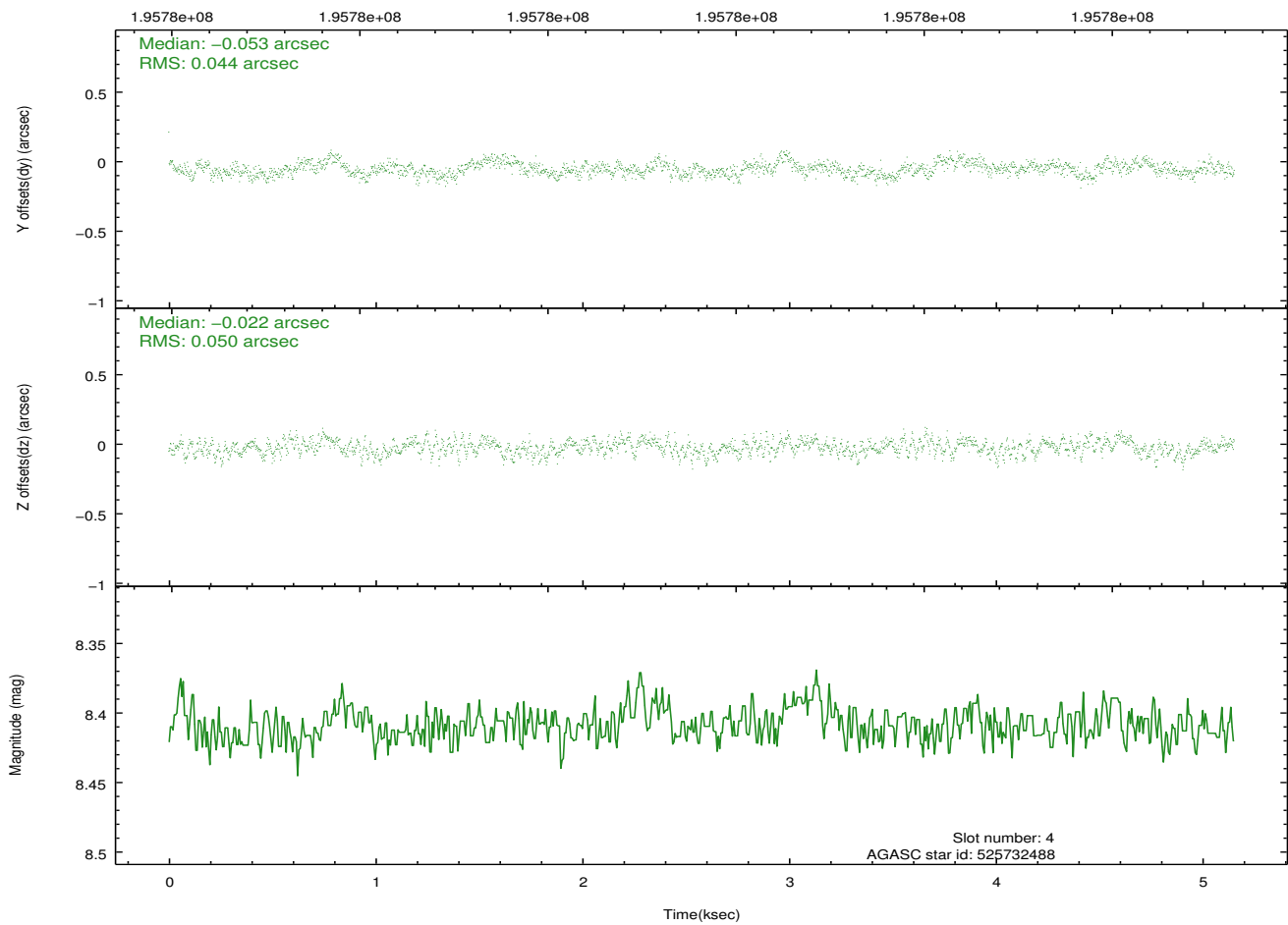
### 2.4.1 Slot 3



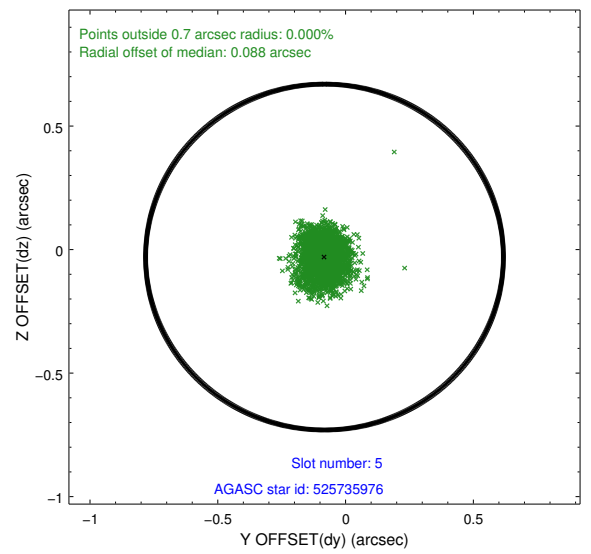
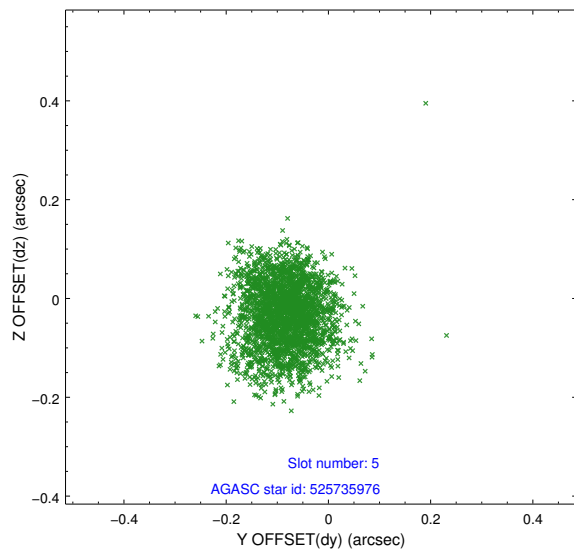
## 2.4.2 Slot 4



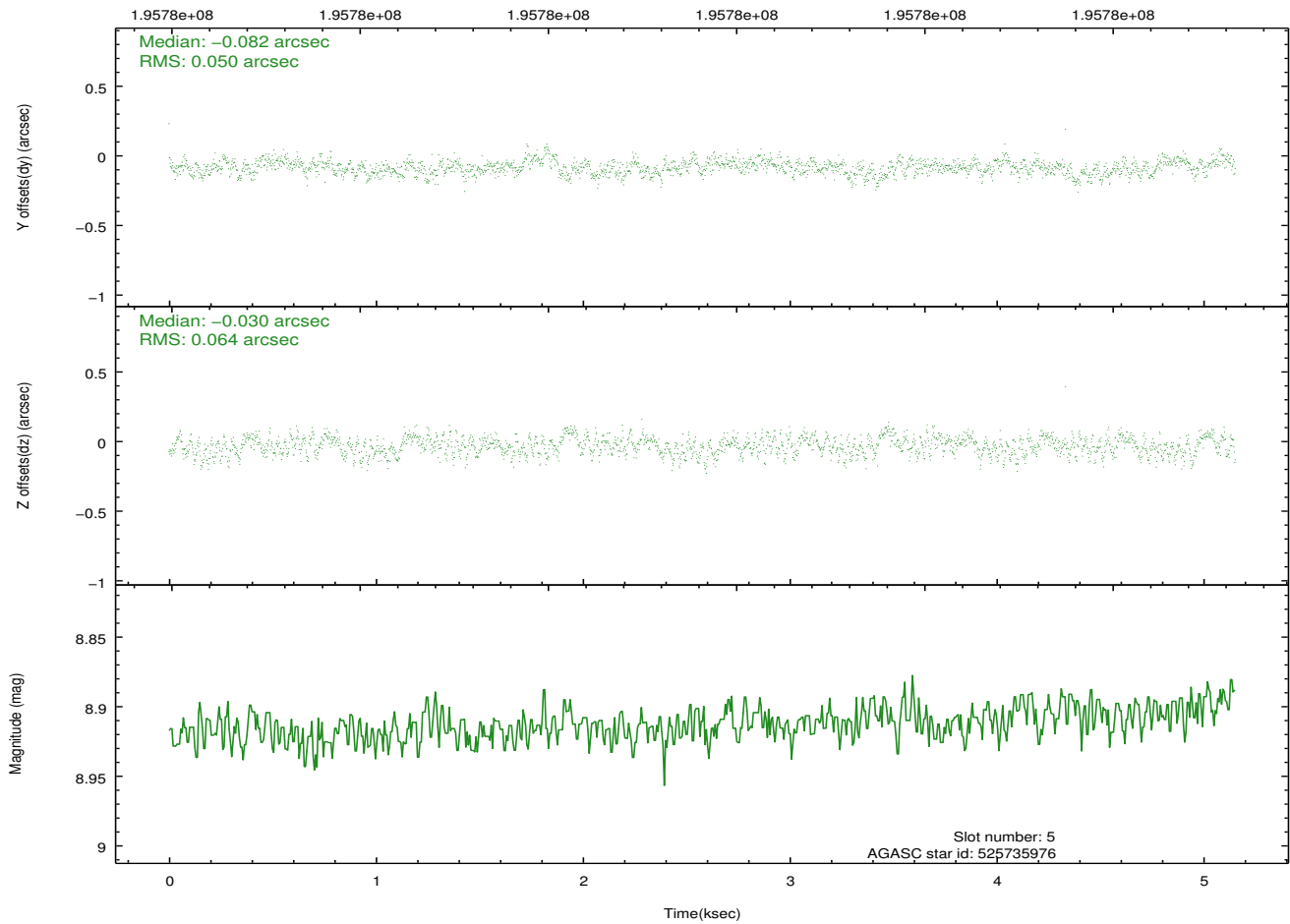
Time (s)



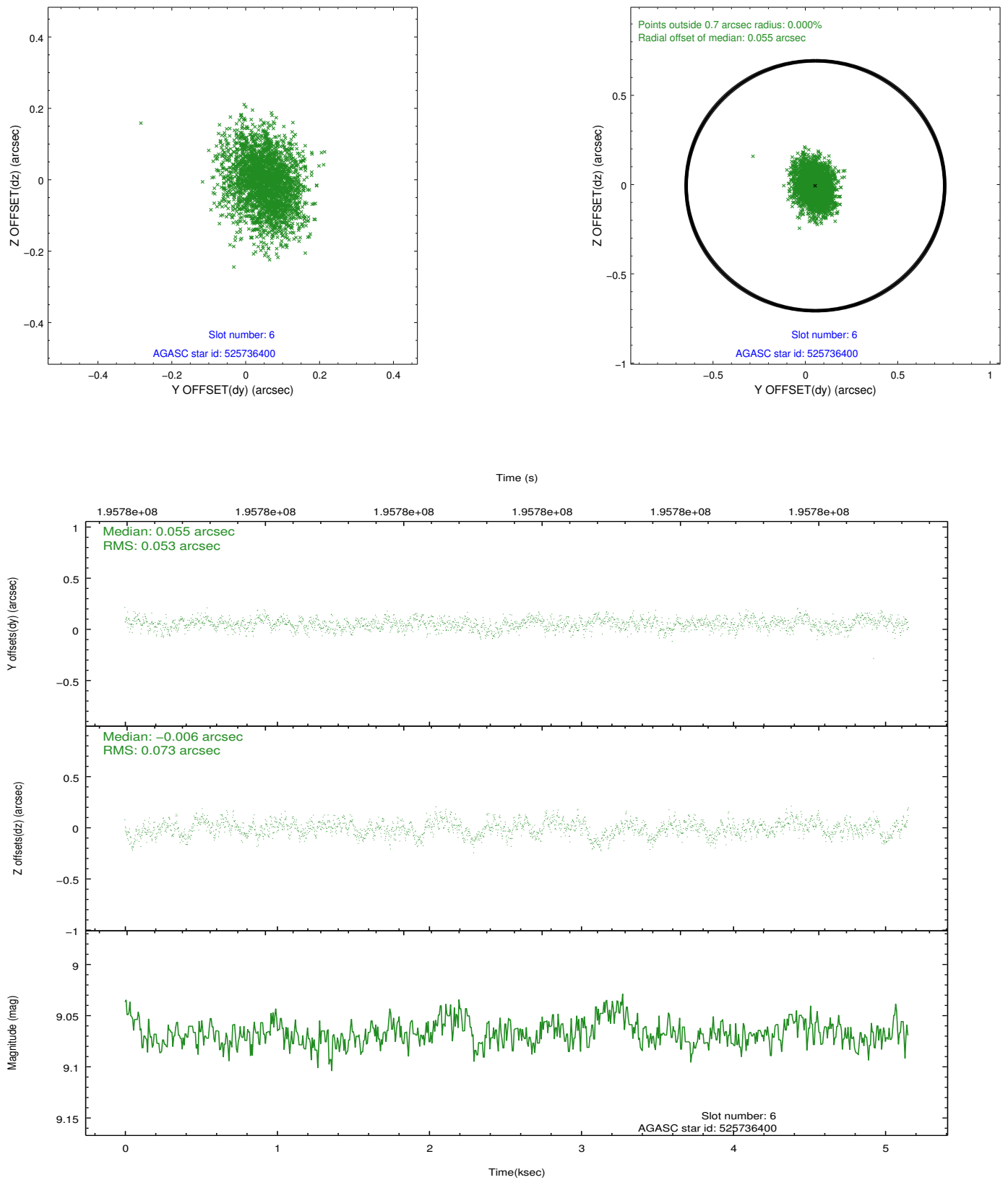
### 2.4.3 Slot 5



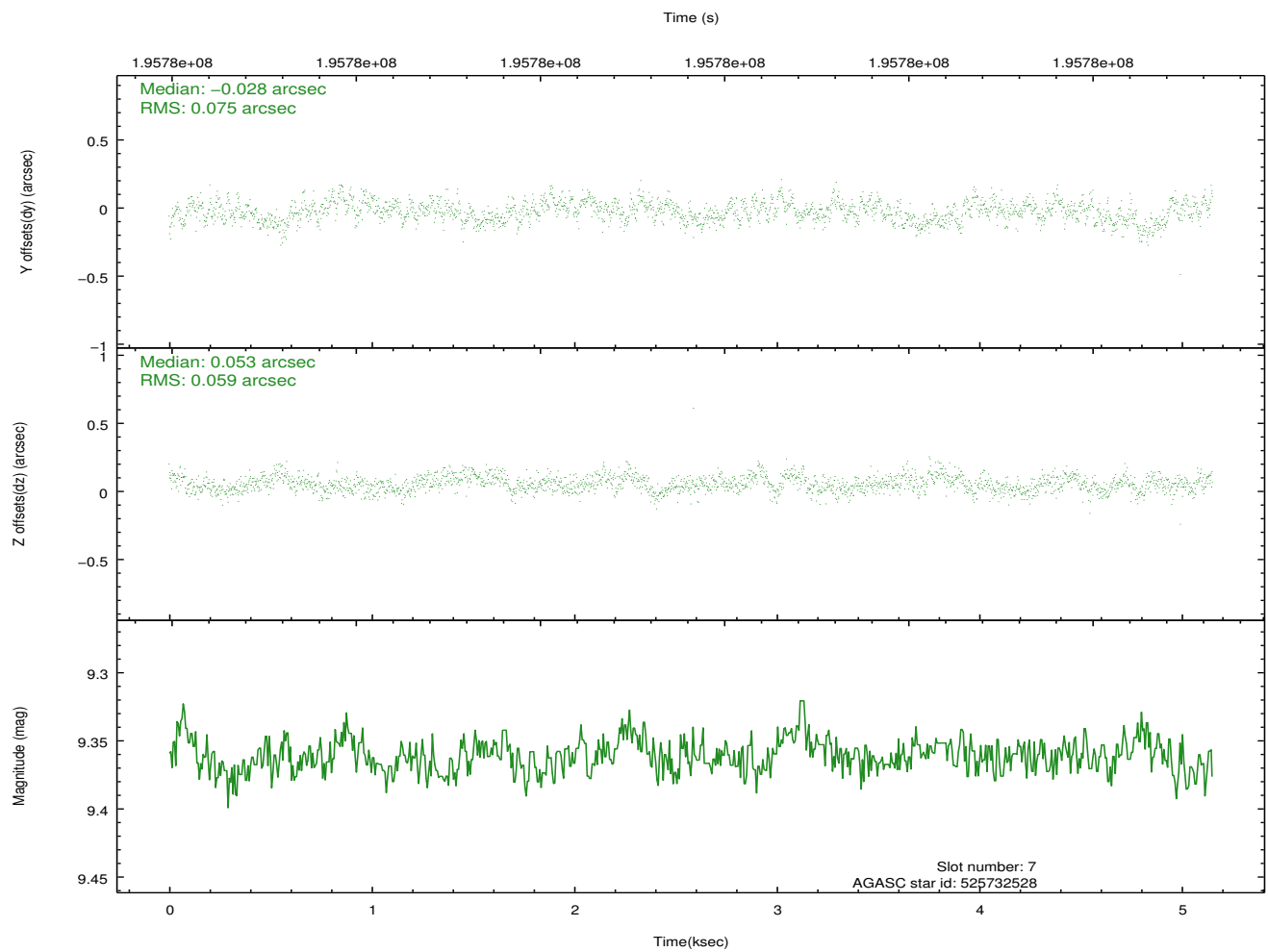
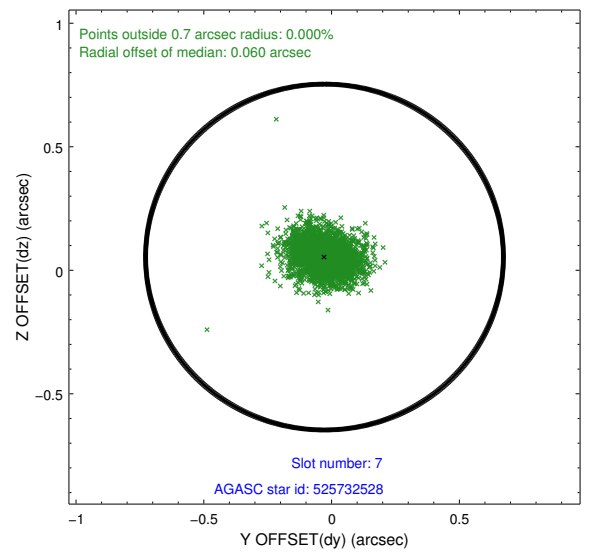
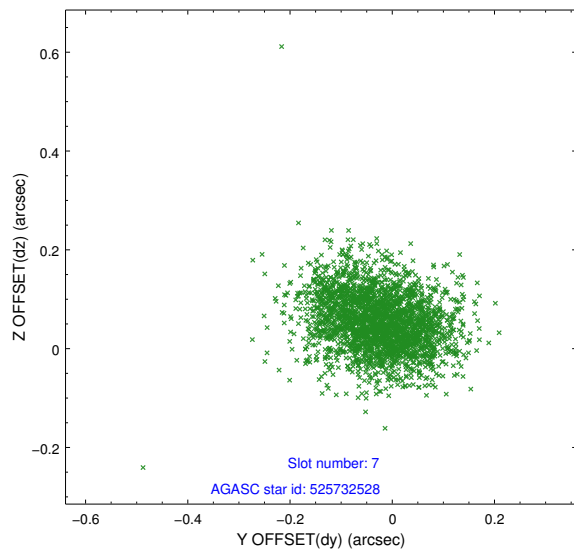
Time (s)



## 2.4.4 Slot 6

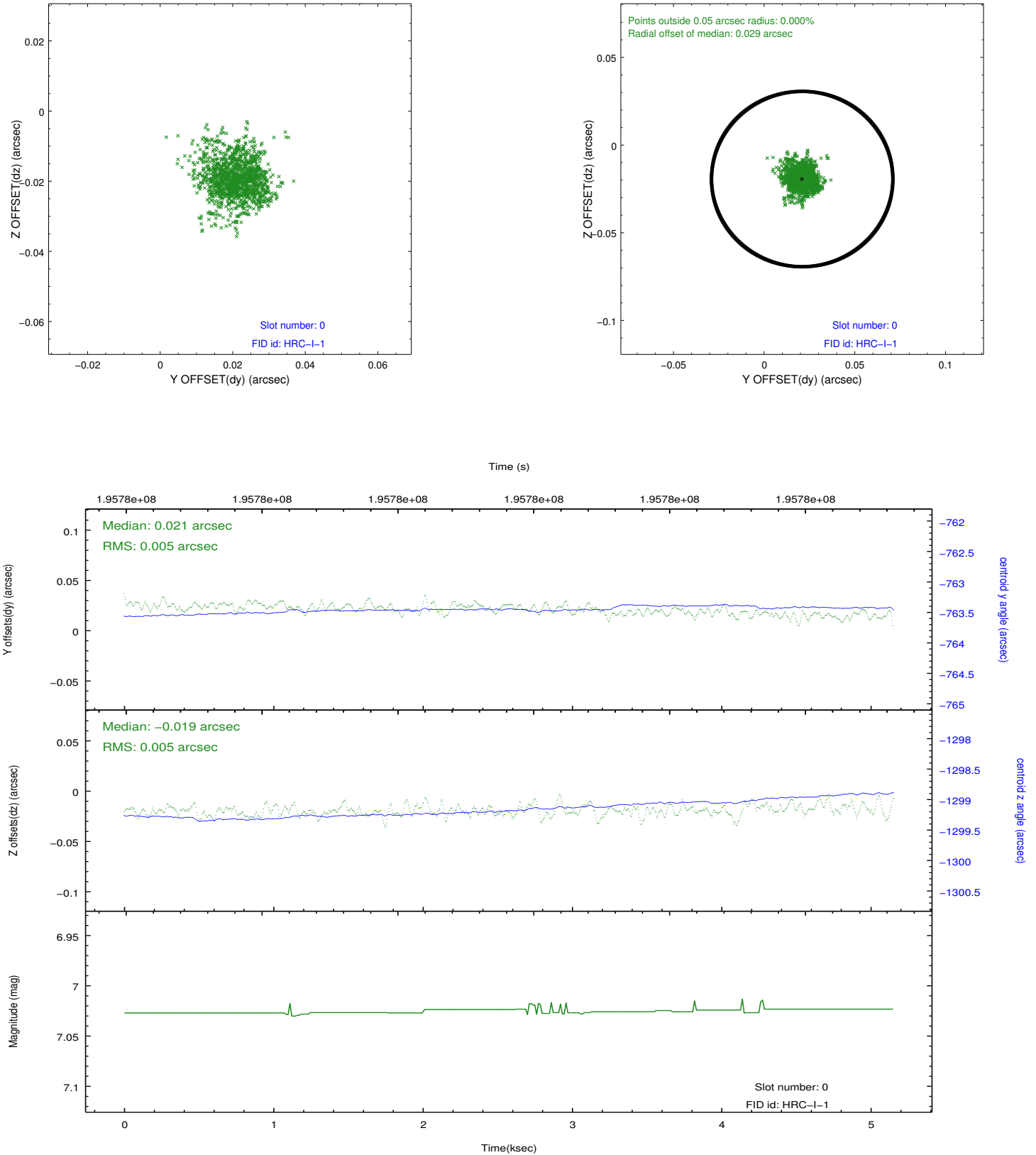


## 2.4.5 Slot 7

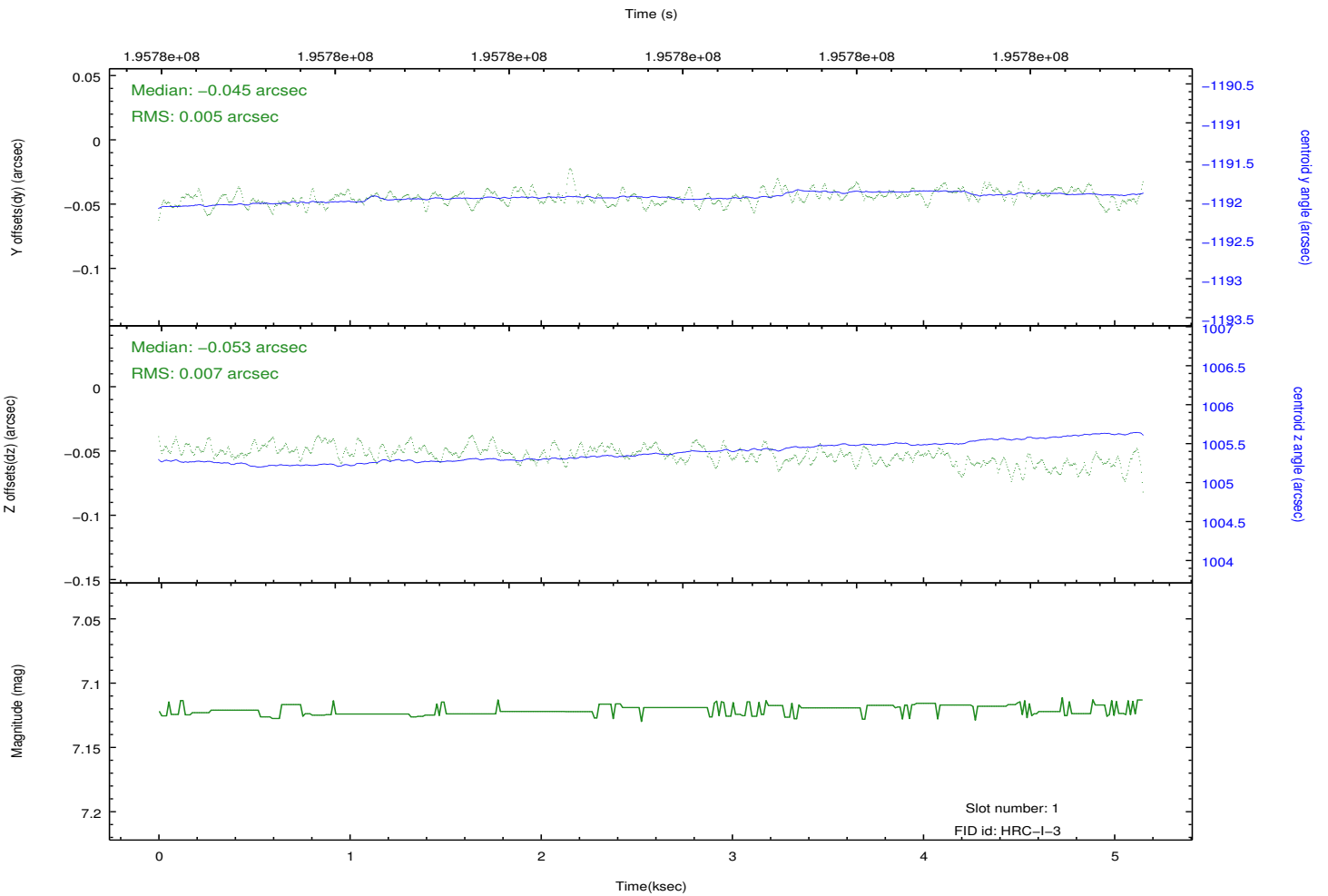
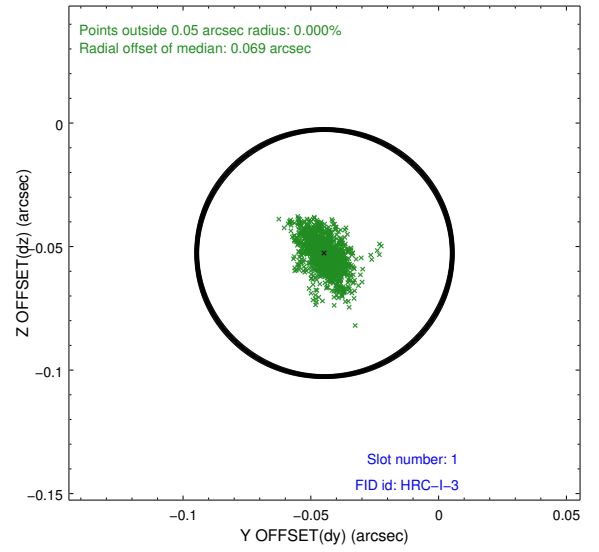
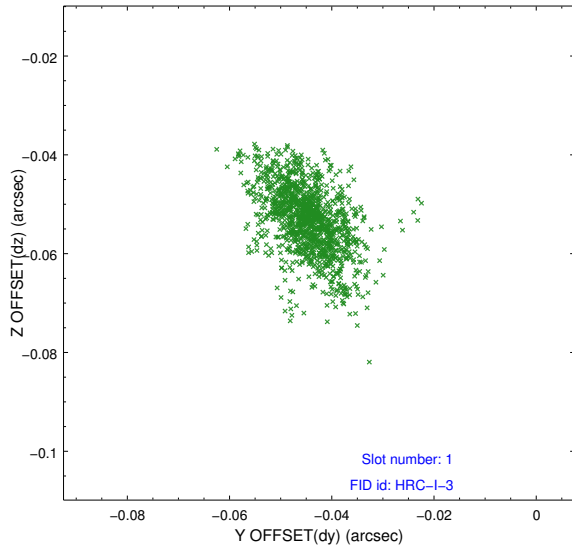


## 2.5 FID Slots

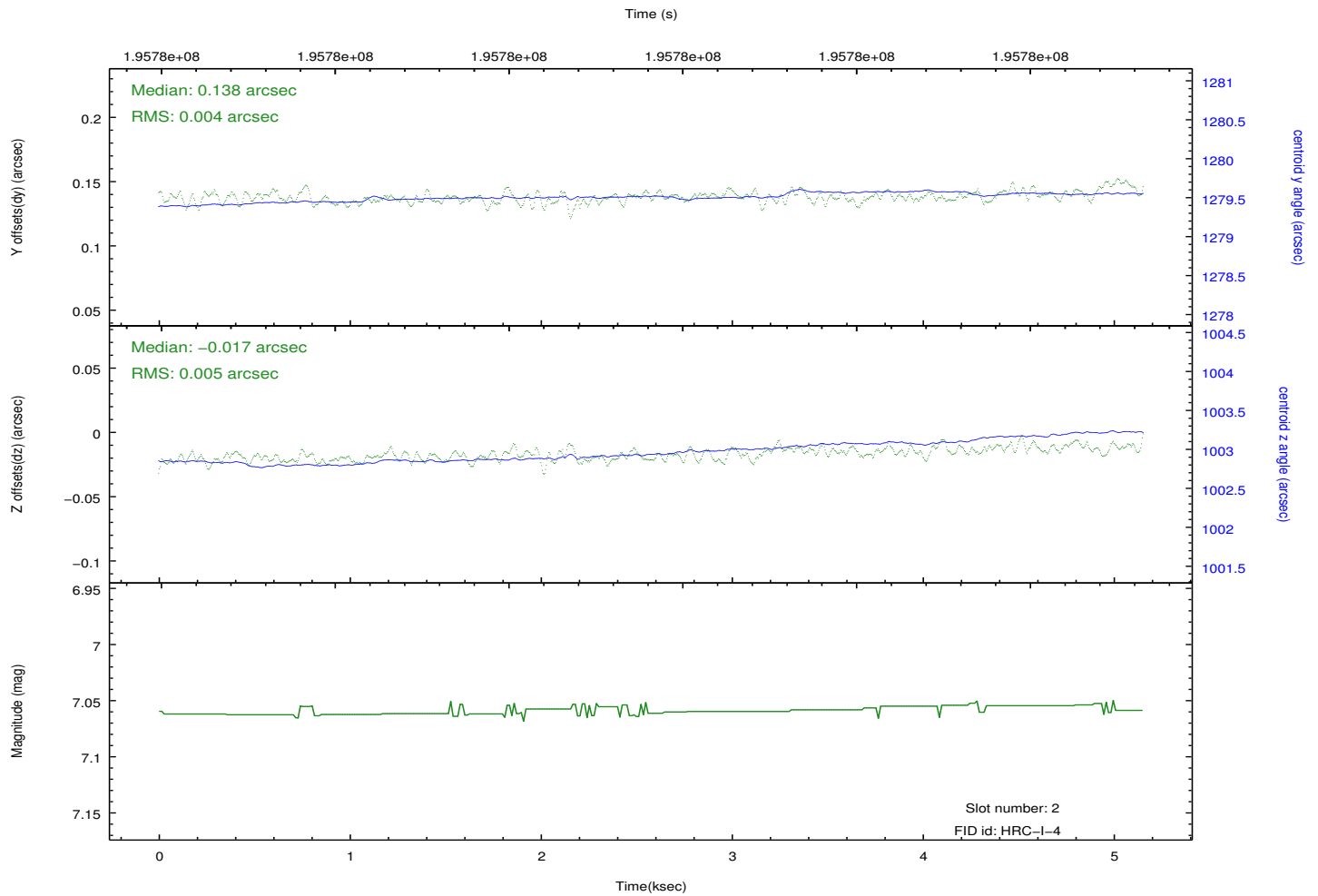
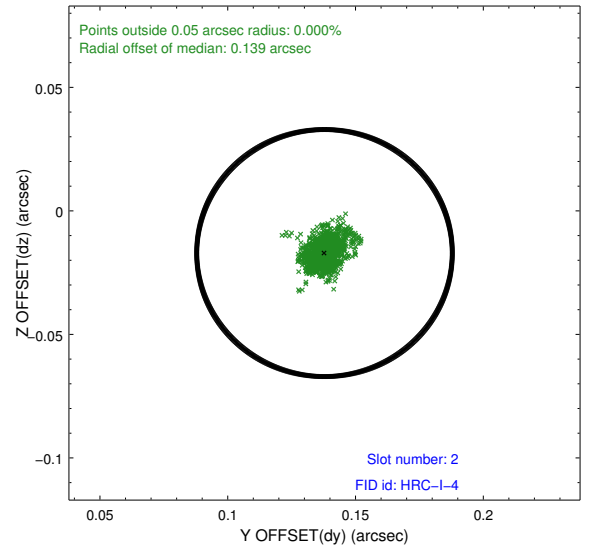
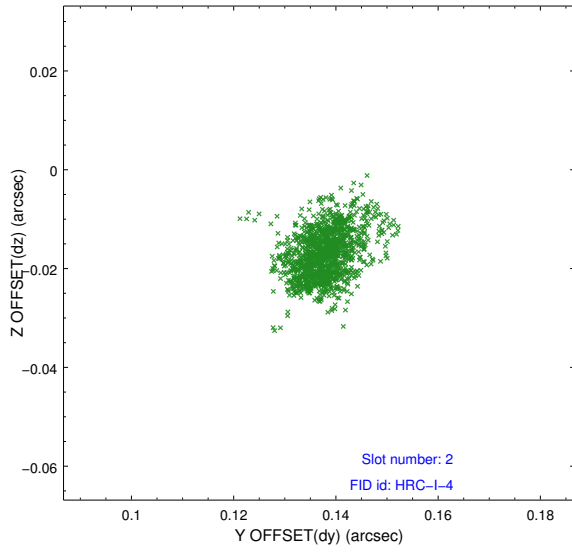
### 2.5.1 Slot 0



## 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)	2012.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.874

## A.2 Comments

Window preference met.