

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 6231 - L2 Version 3  
Chandra X-Ray Center

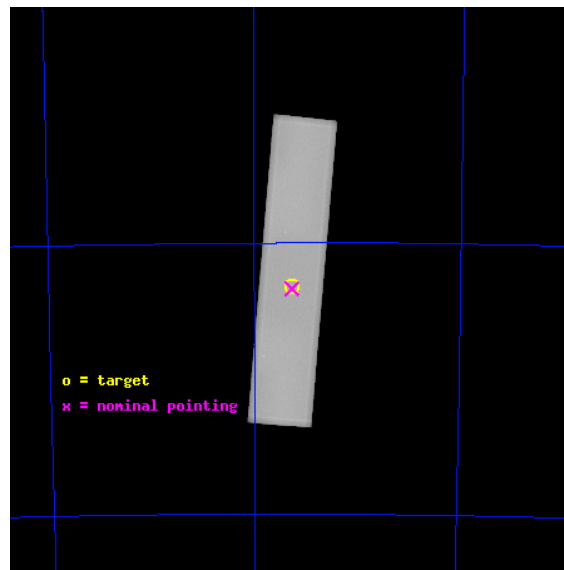
L2 Processing Date : Aug 11 2012

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# 1 Front

seq_num	500535	Sequence number
obs_id	6231	Observation id
title	Search for Sub-Millisecond Pulsars in 47 Tuc	Proposal title
observer	Prof. Robert Rutledge	Principal investigator
object	47 Tuc	Source name
ra_targ	6.021667	Observer's specified target RA [deg]
dec_targ	-72.080528	Observer's specified target Dec [deg]
ra_nom	6.0224964070218	Nominal RA [deg]
dec_nom	-72.085179879624	Nominal Dec [deg]
roll_nom	274.84843486977	Nominal Roll [deg]
revision	3	Processing version of data
ontime	47147.183433235	[s]
livetime	46894.199173792	Ontime multiplied by DTCOR
l2events	2580965	Number of level 2 events

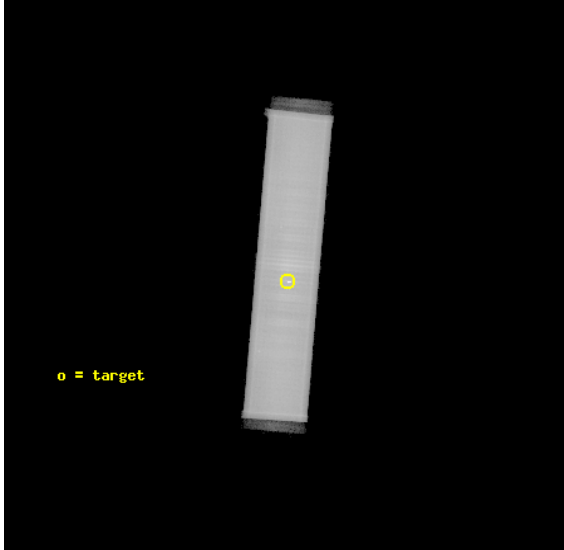


## 2 OBI

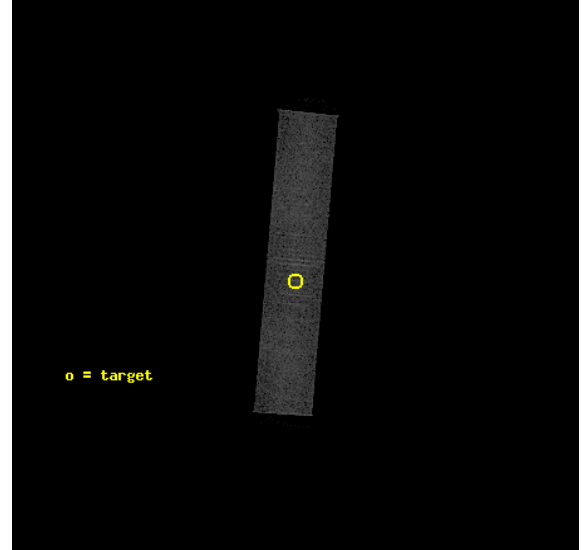
### 2.1 OBI

#### 2.1.1 Images

Level 1 Image



Level 1 Bad Events



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	47000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	47147.183433235	[s]
caldsver	4.5.1.1	&#160	l1events	3638947	Number of level 1 events
date	2012-08-10T22:34:42	Date and time of file creation			
revision	3	Processing version of data			

### 2.1.3 Events

Level 1 Events

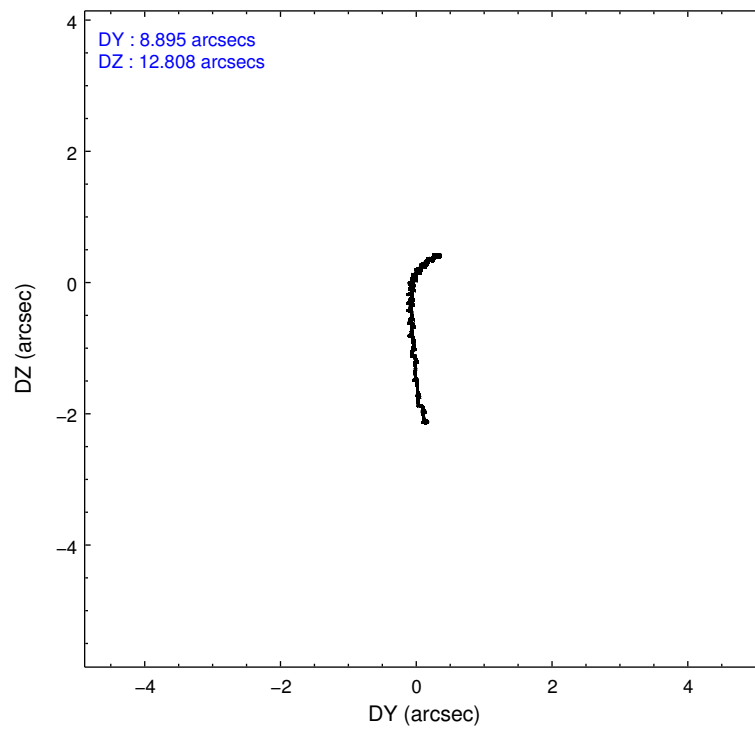
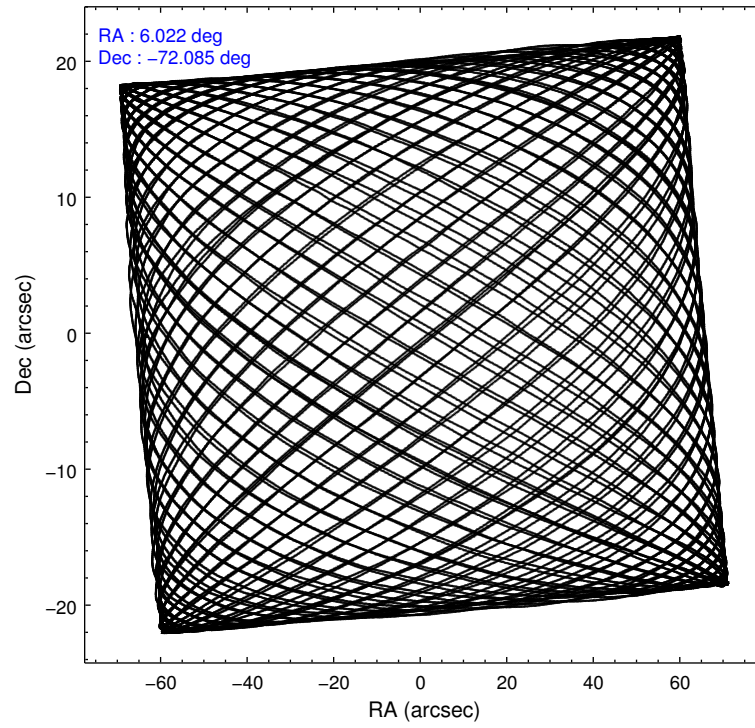
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	3608	36353327	
rejected events	126	192942	0
rejected %	3%	5%	0%

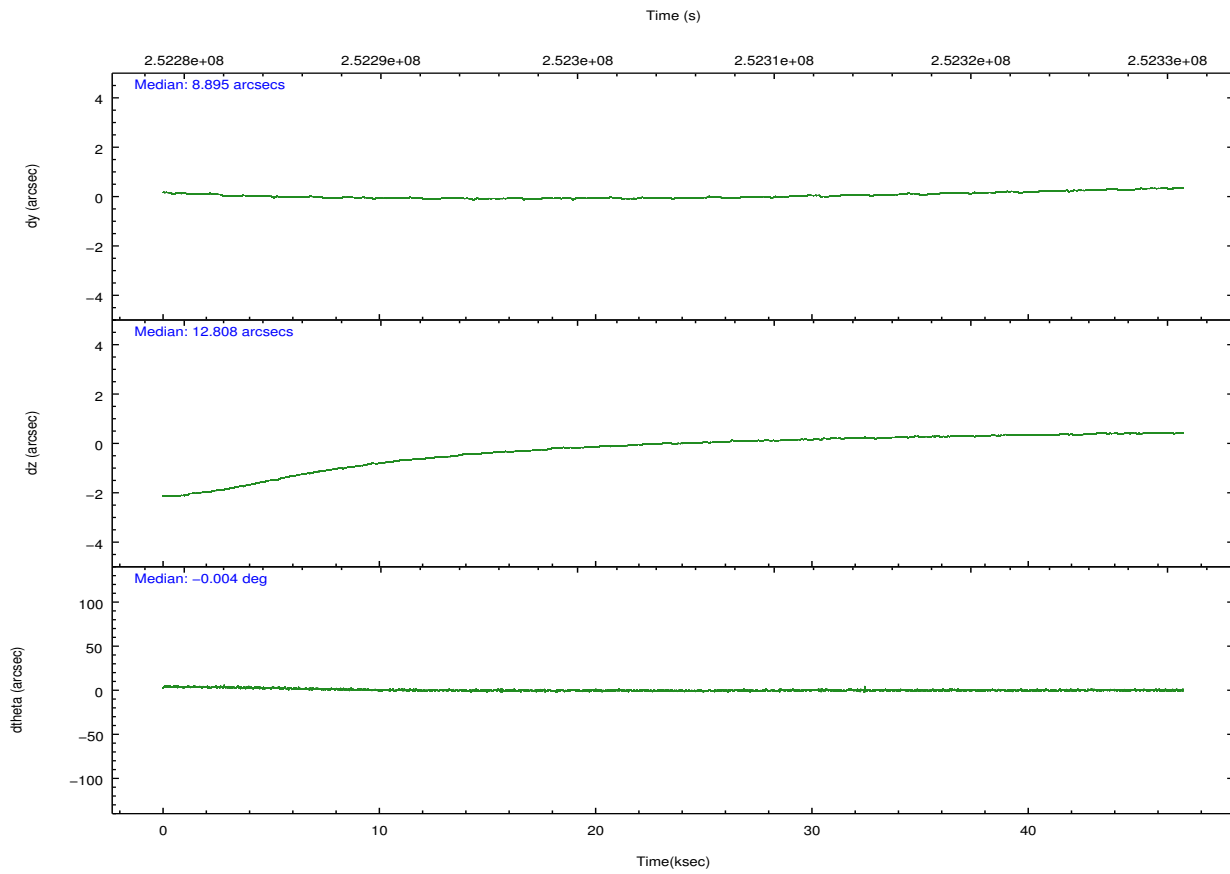
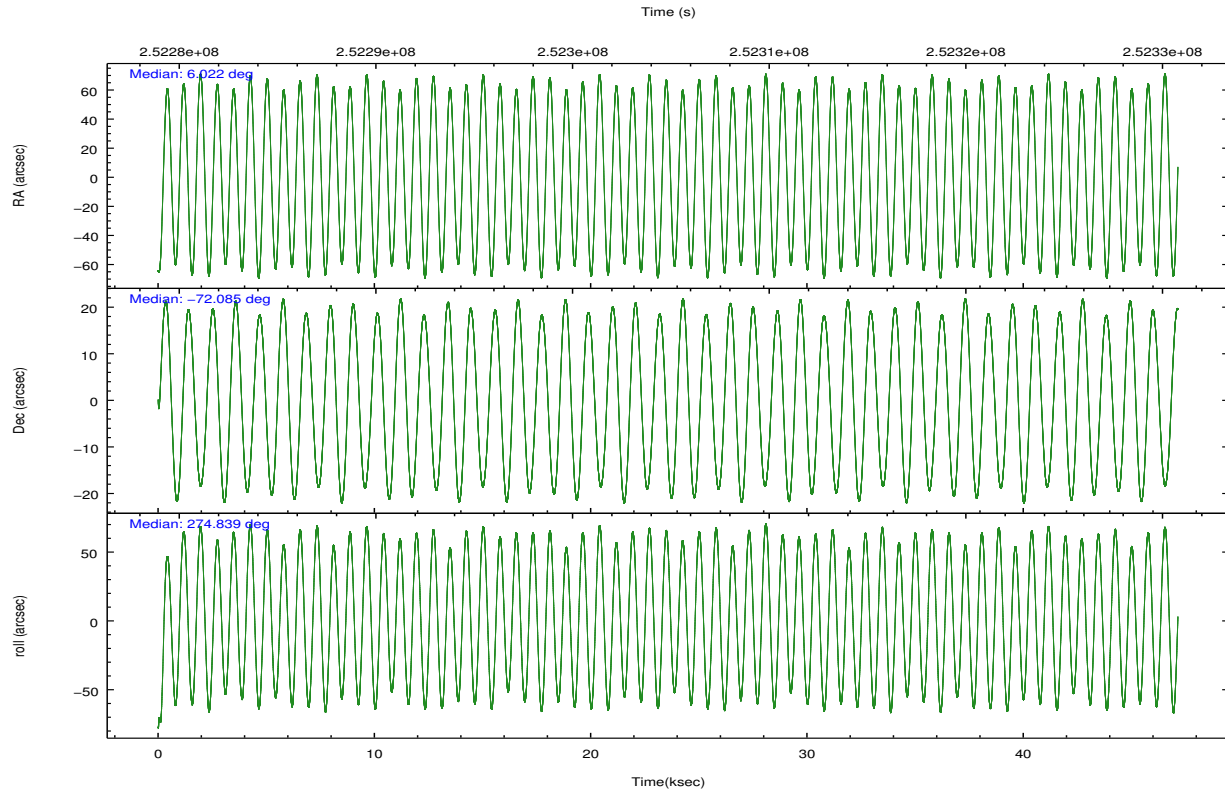
## 2.2 Compared Parameters

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	5.965743	6.022496407021819
[deg] Pointing Dec	-72.062563	-72.08517987962367
[deg] Pointing Roll	274.727104	274.8484348697748
[mm] SIM focus pos	-1.533336	-1.526339935833849
[mm] SIM defocus	7.710433287538843e-07	0.006996703570447904
[mm] SIM translation stage pos	250.455976	250.4635187648994
[mm] SIM translation stage offset	0	-0.007540371344731511
[s] Observation start time (MET)	252281433.184000	252280287.48259
Observation start date	2005-12-29T22:09:29	2005-12-29T21:51:27
[s] Observation end time (MET)	252328433.184000	252329351.15986
Observation end date	2005-12-30T11:12:49	2005-12-30T11:29:11

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

## 2.3 Aspect



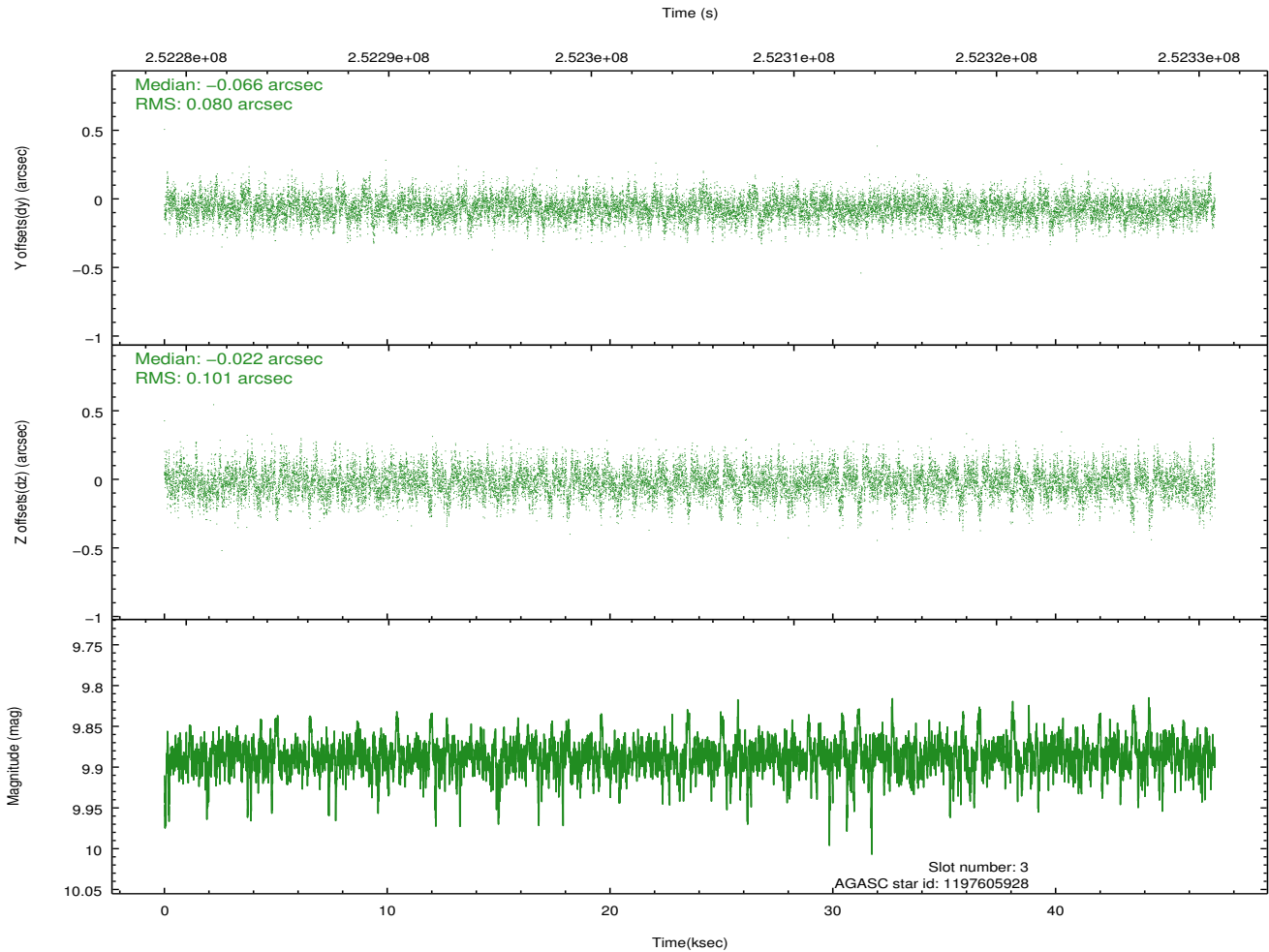
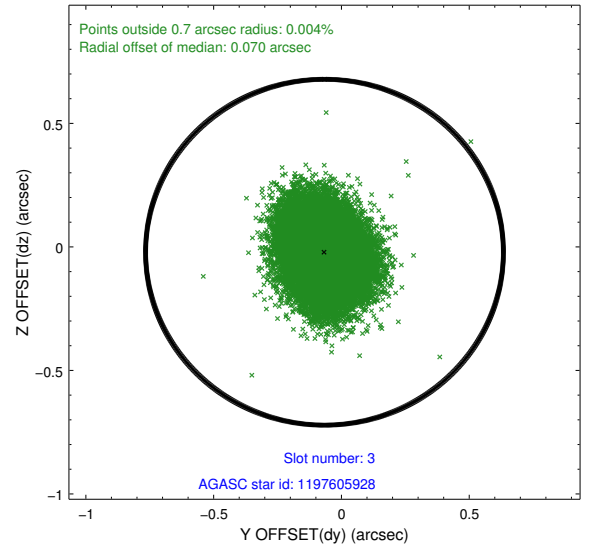
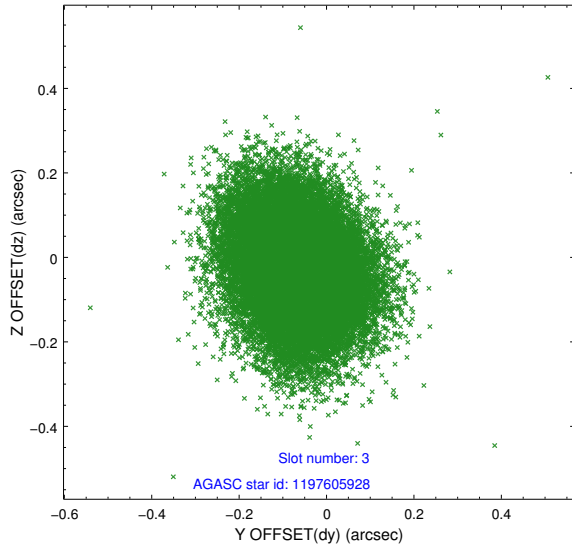


### Slot Statistics

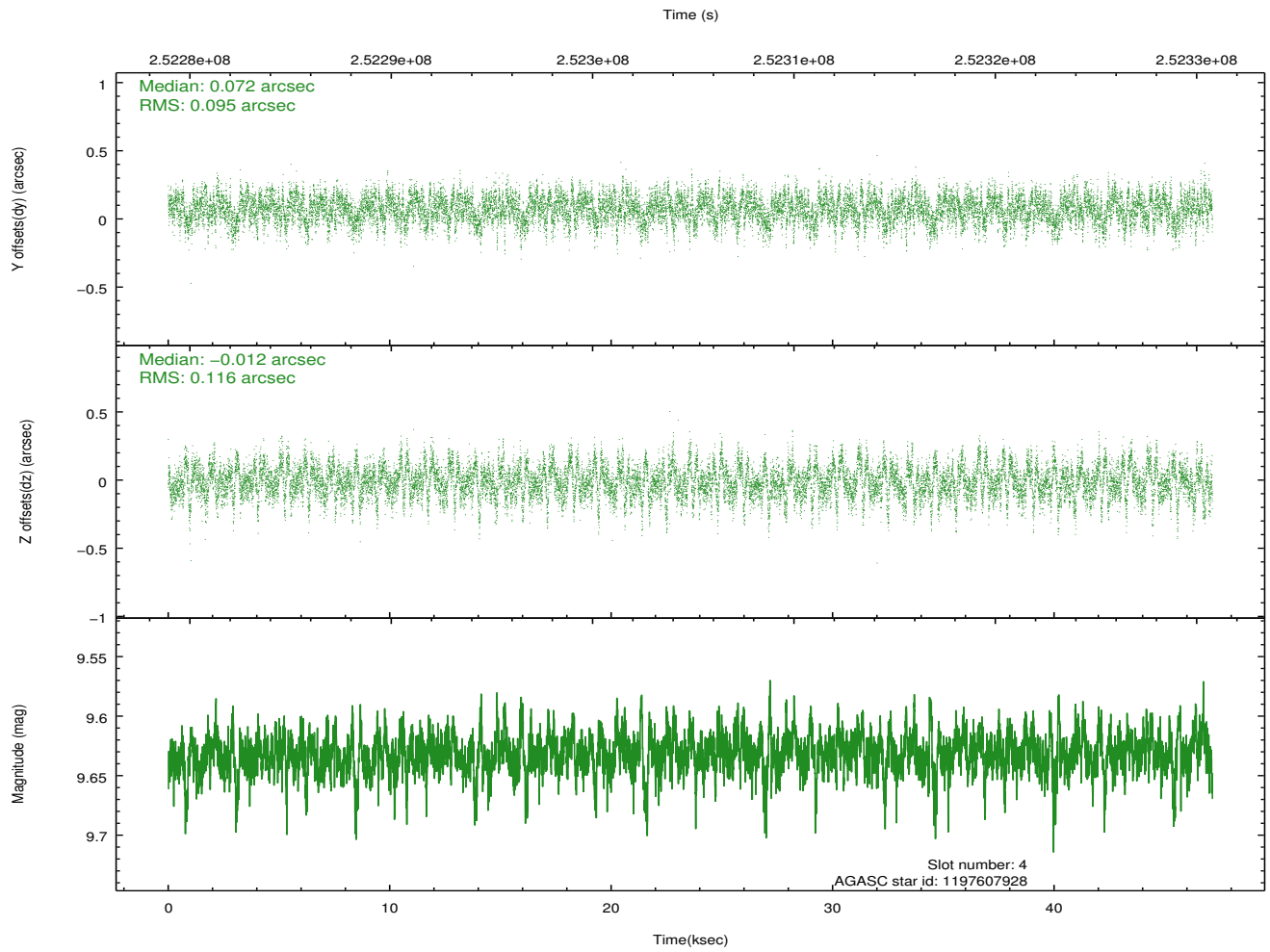
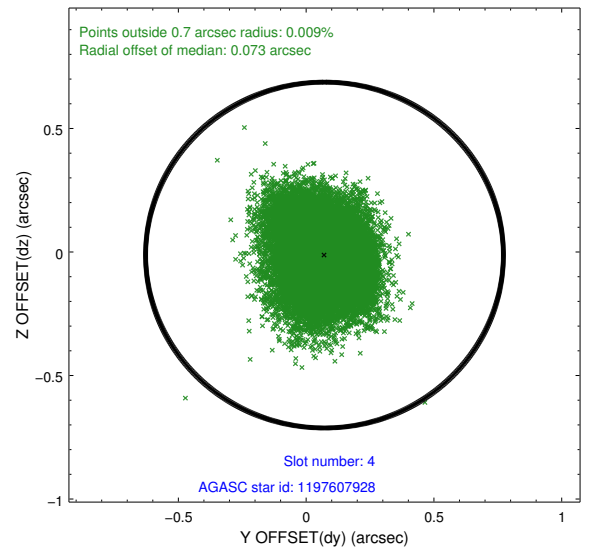
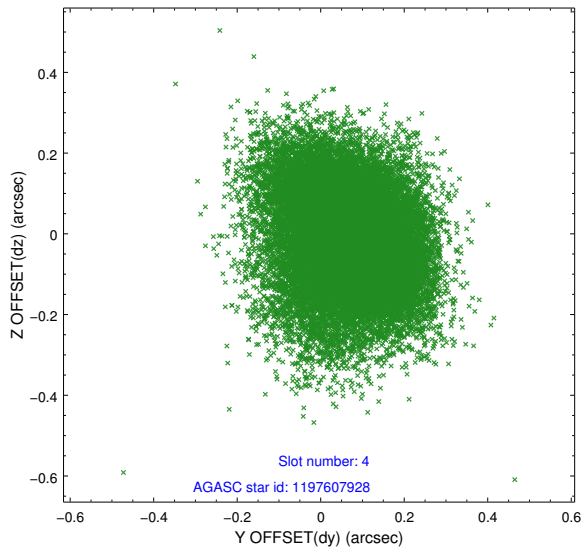
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.01	11500	0.139	-0.133	0.012	0.047	0.000000	0.000000	-1163.10	-461.22
1	FID	HRC-S-2	7.01	11500	0.134	-0.106	0.007	0.015	0.000000	0.000000	1236.45	-453.84
2	FID	HRC-S-3	7.02	11500	0.116	-0.063	0.012	0.052	0.000000	0.000000	-1165.75	568.34
3	GUIDE	1197605928	9.89	22972	-0.066	-0.022	0.136	0.226	4.361277	-72.423732	1176.11	-1846.59
4	GUIDE	1197607928	9.63	22980	0.072	-0.012	0.158	0.264	7.837743	-72.165759	572.54	2023.92
5	GUIDE	1197619752	10.01	22975	0.033	-0.162	0.162	0.262	4.510721	-71.856694	-852.31	-1565.31
6	GUIDE	1197620848	10.03	22961	-0.027	-0.025	0.187	0.301	3.913465	-71.739620	-1309.53	-2214.19
7	GUIDE	1197617752	10.25	22950	-0.009	0.235	0.229	0.425	4.480632	-72.284129	681.58	-1687.99

## 2.4 Star Slots

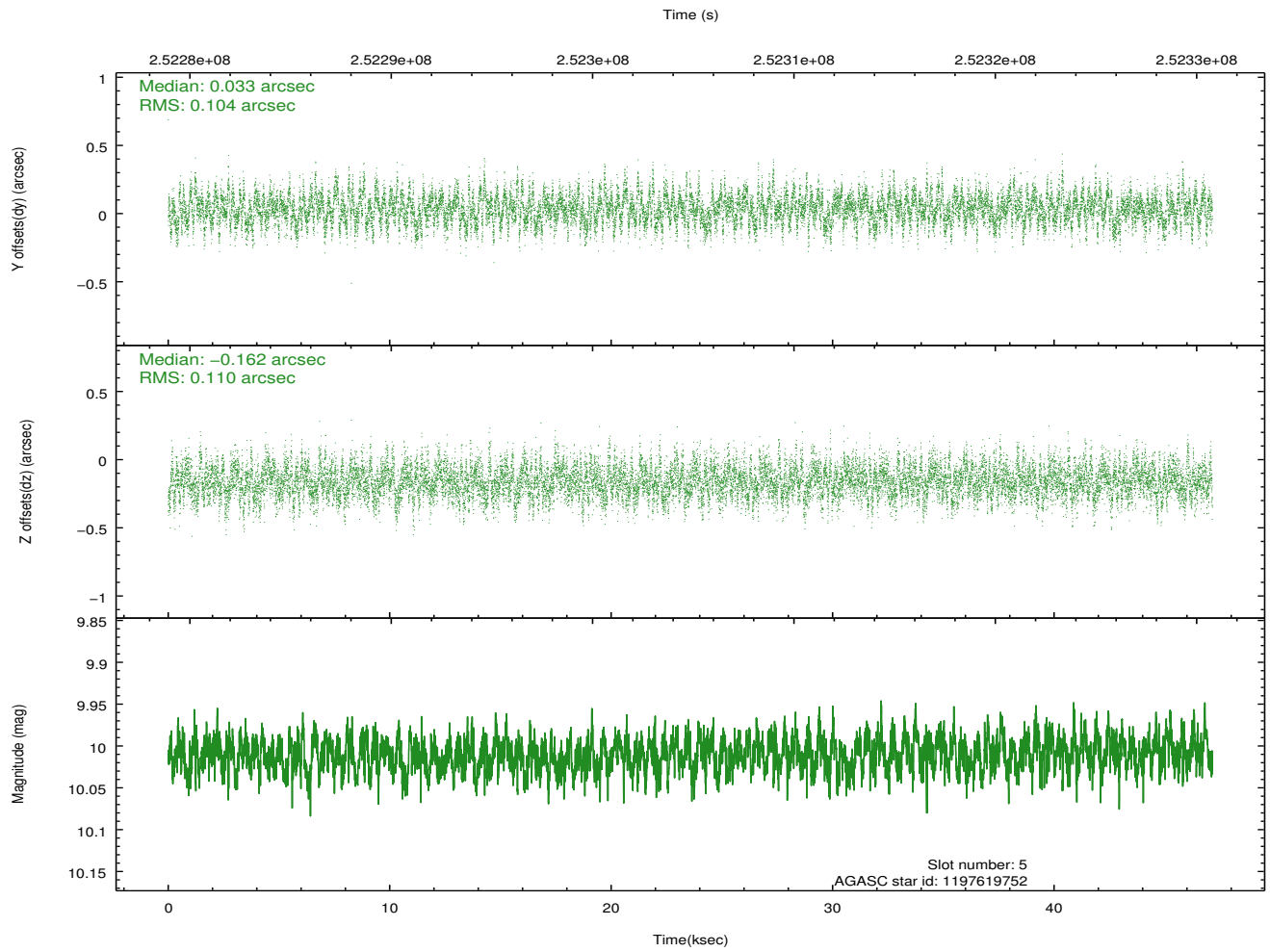
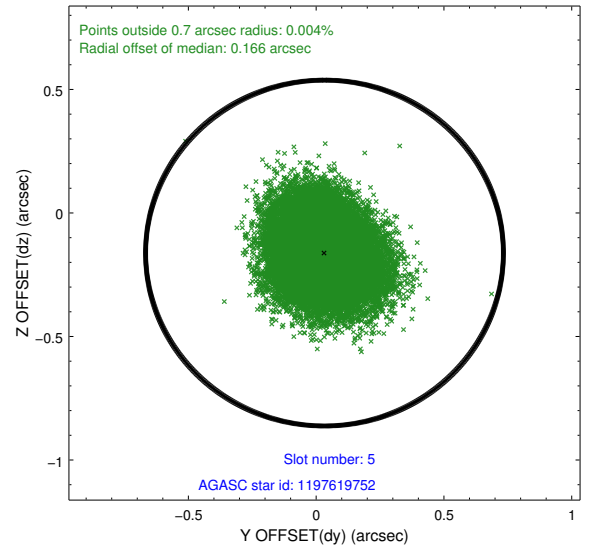
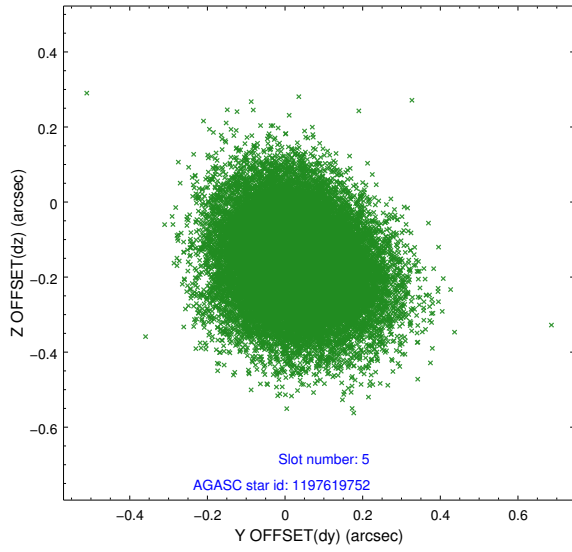
### 2.4.1 Slot 3



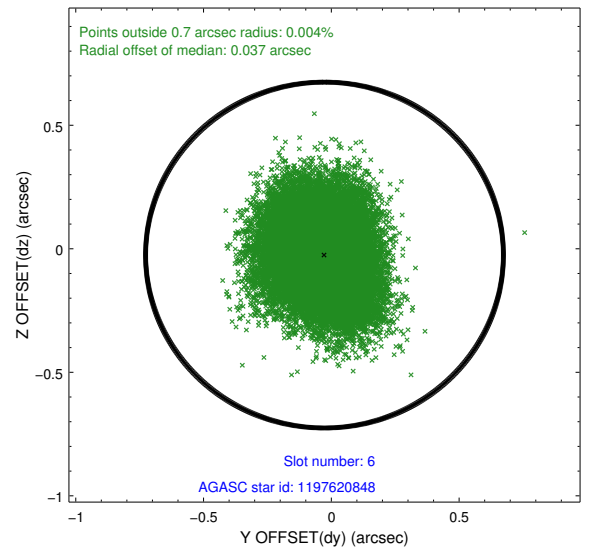
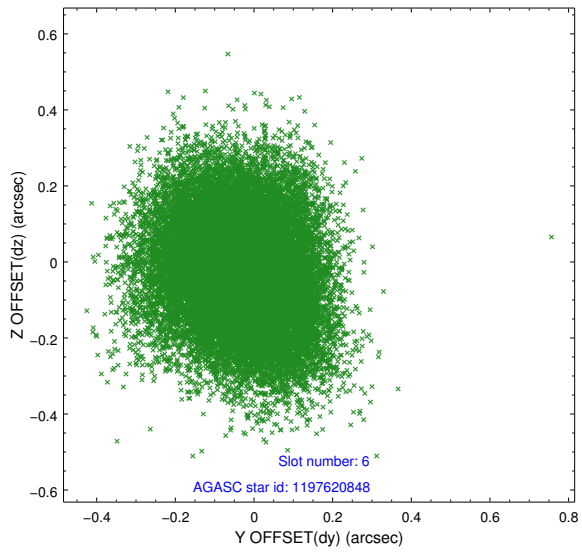
## 2.4.2 Slot 4



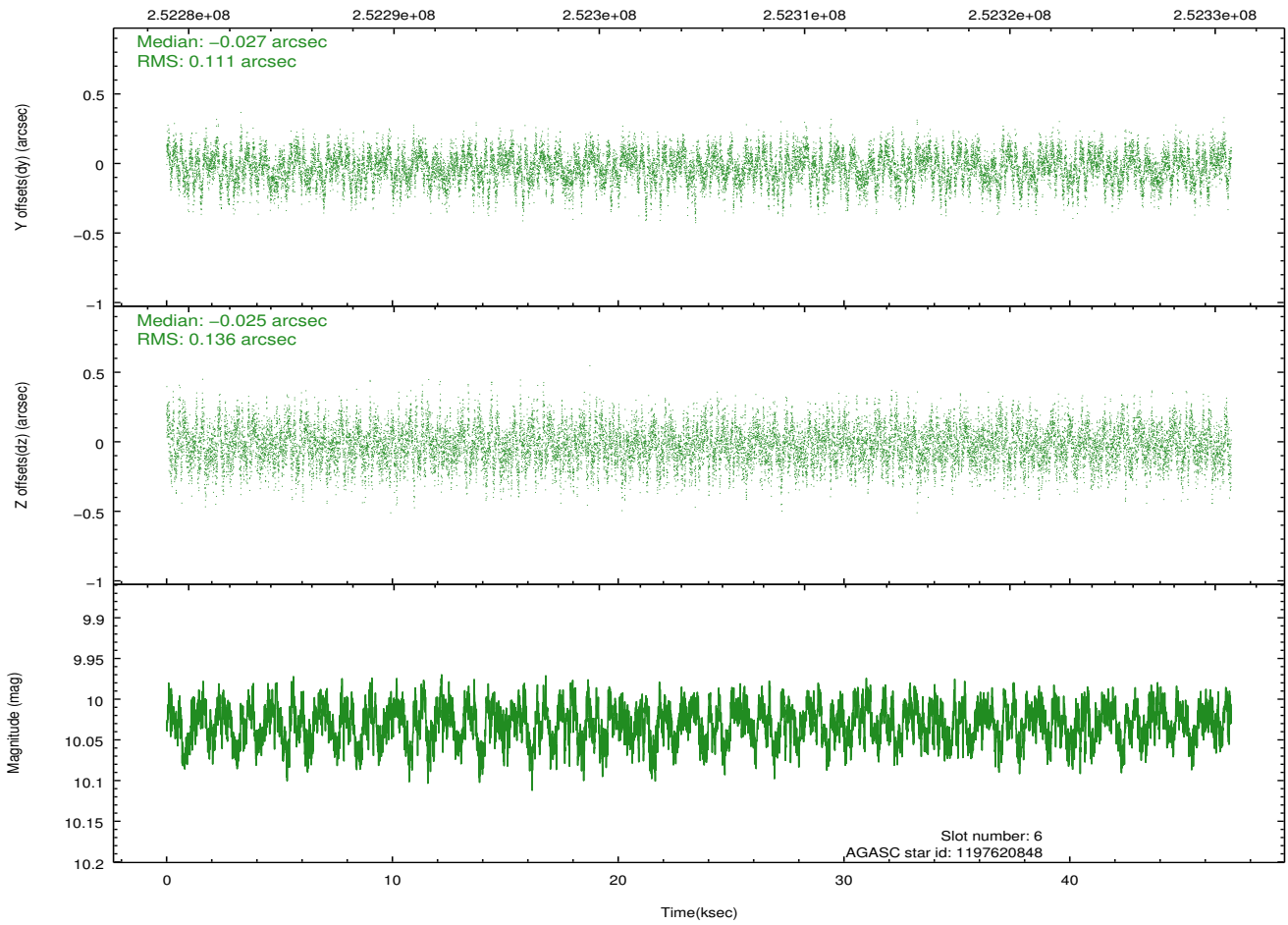
### 2.4.3 Slot 5



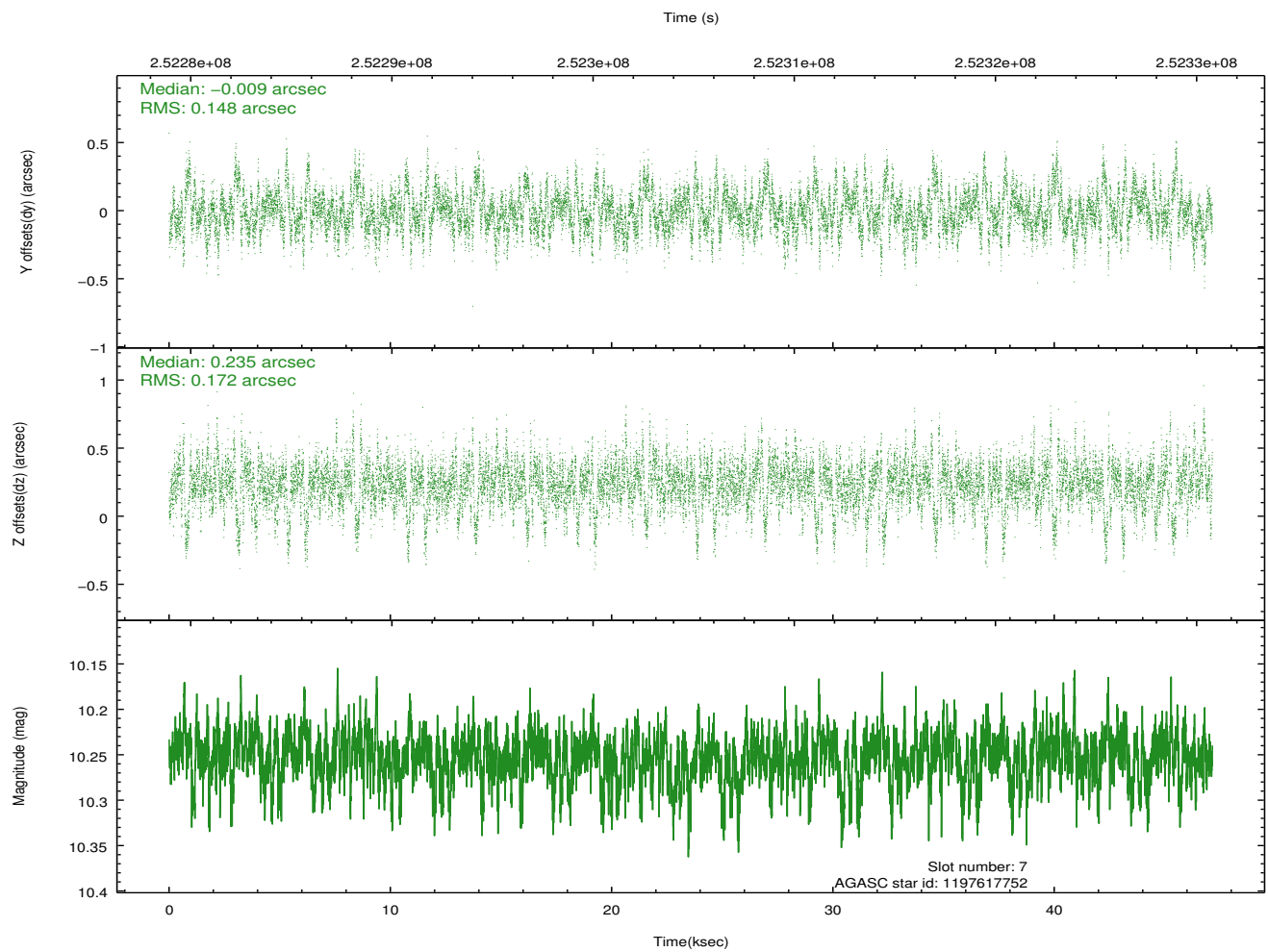
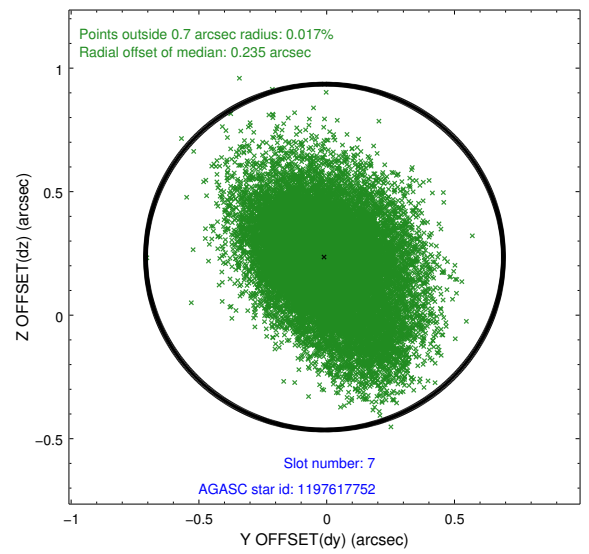
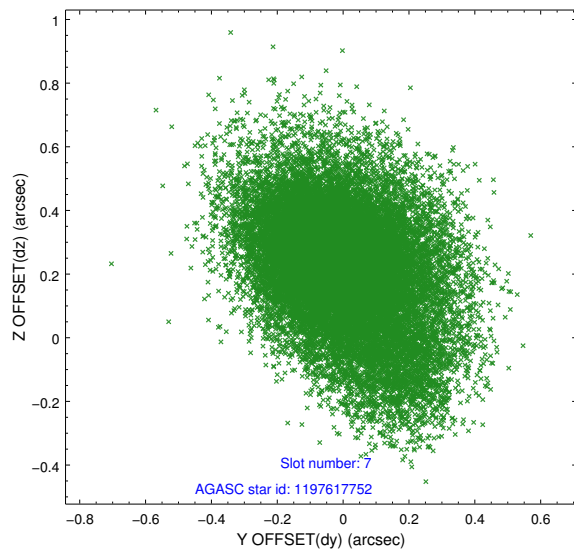
## 2.4.4 Slot 6



Time (s)

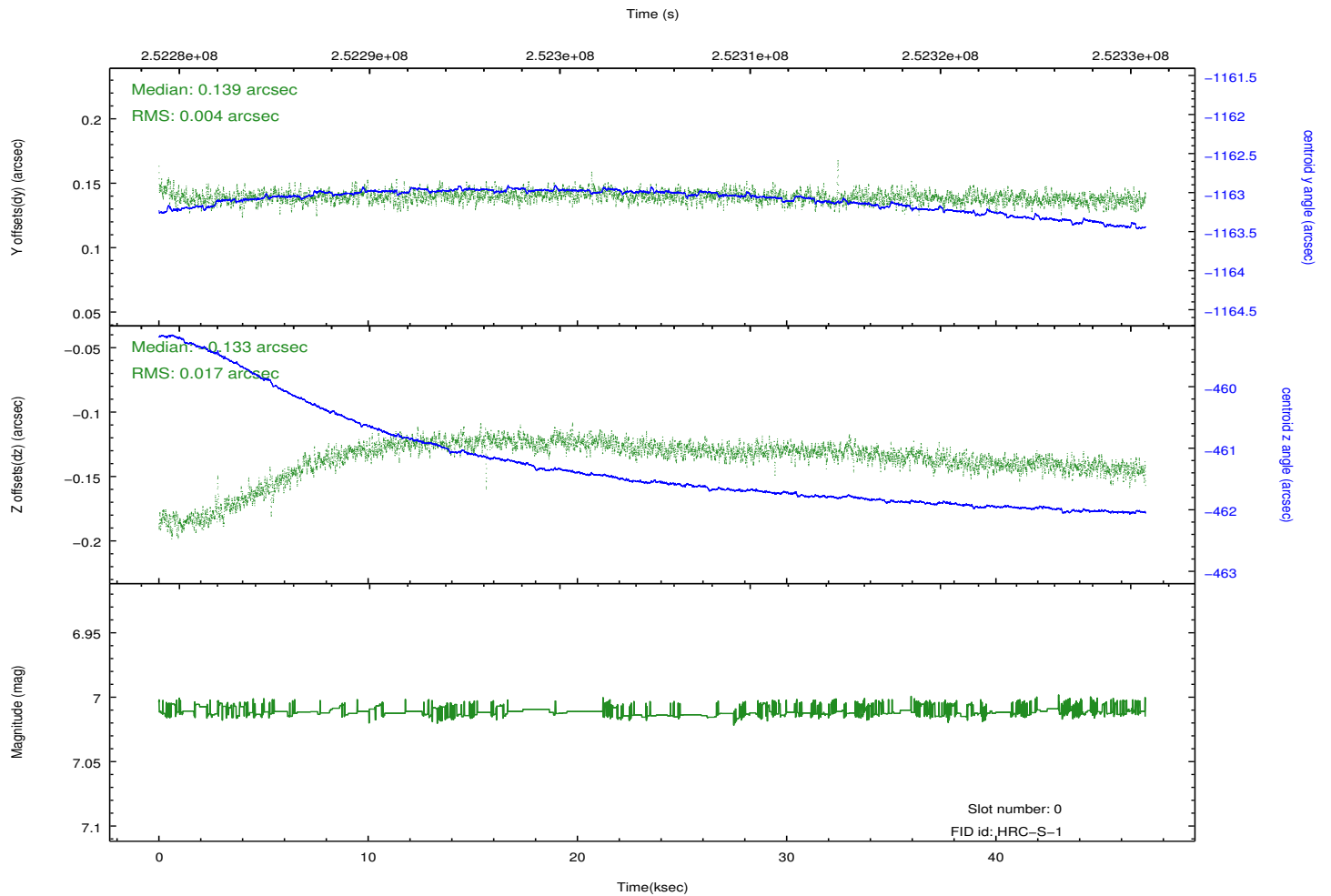
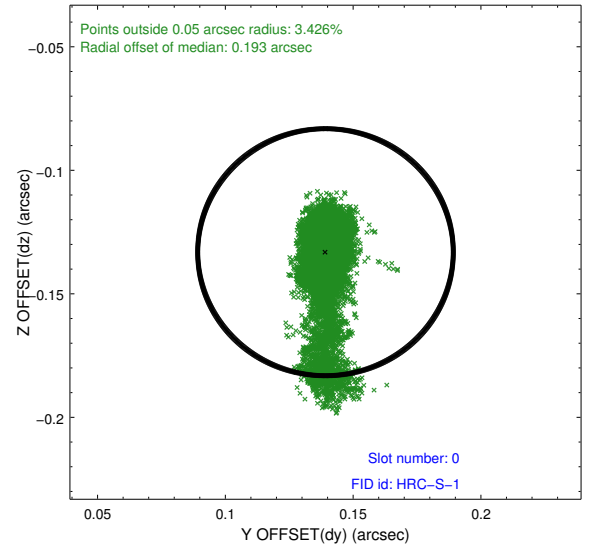
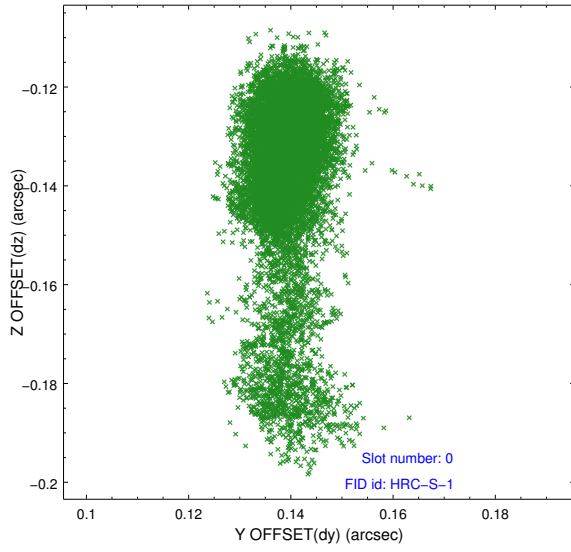


## 2.4.5 Slot 7

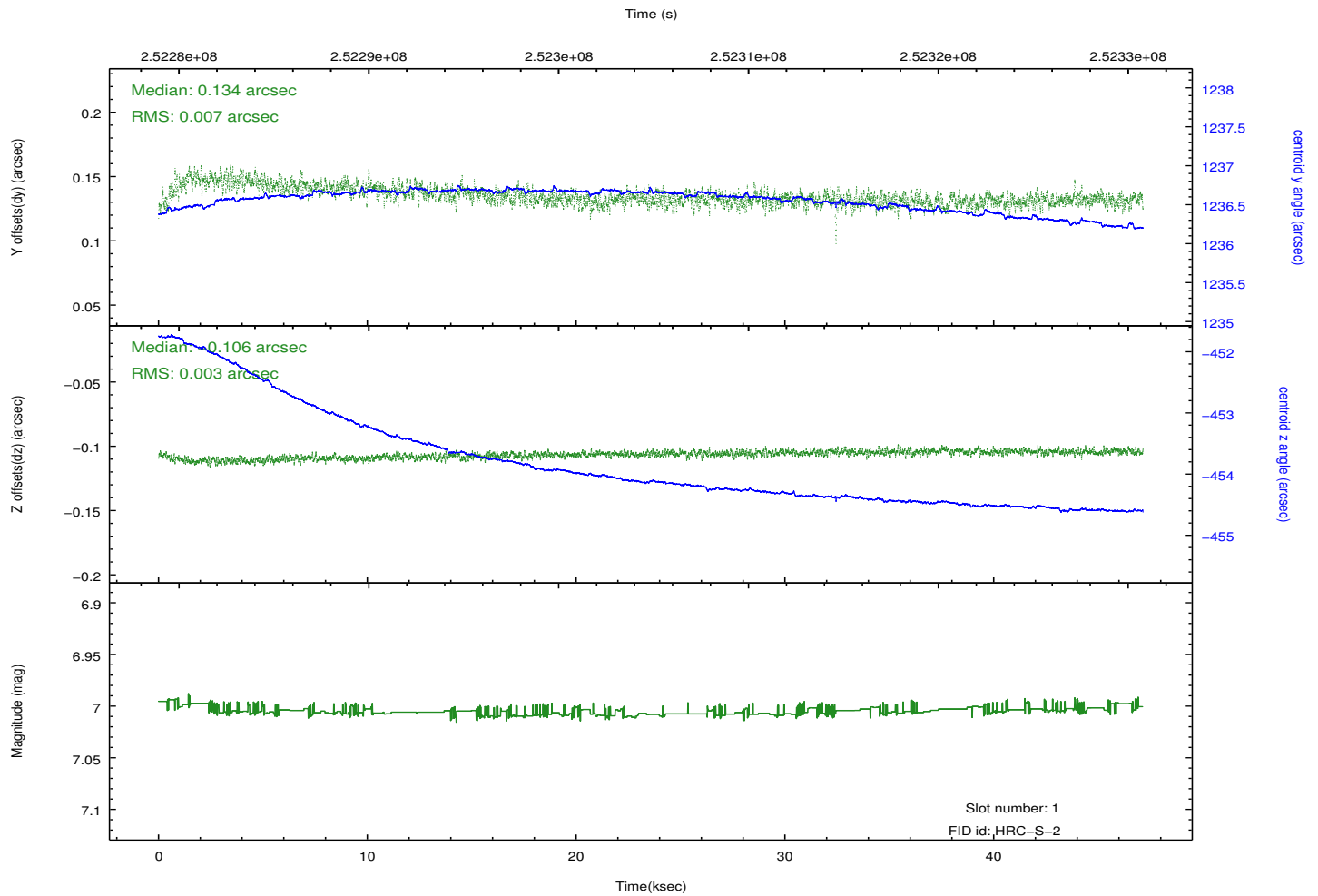
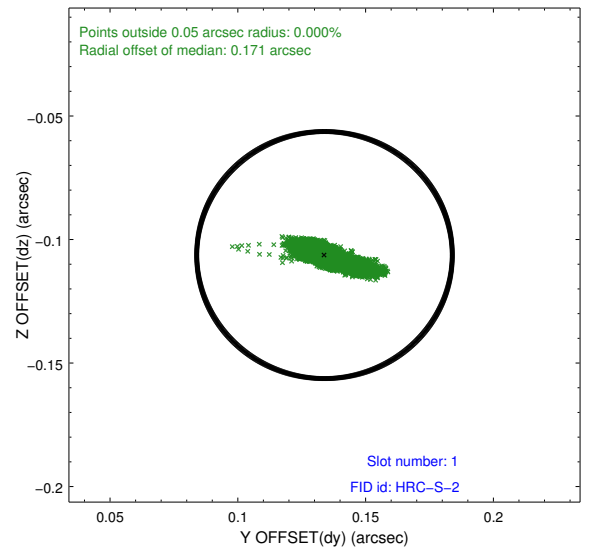
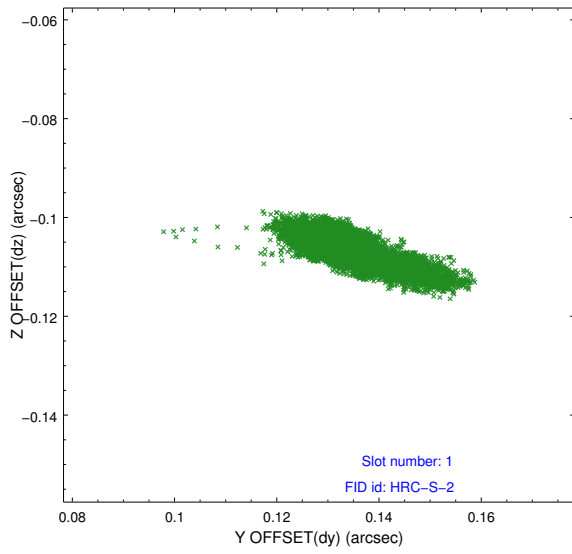


## 2.5 FID Slots

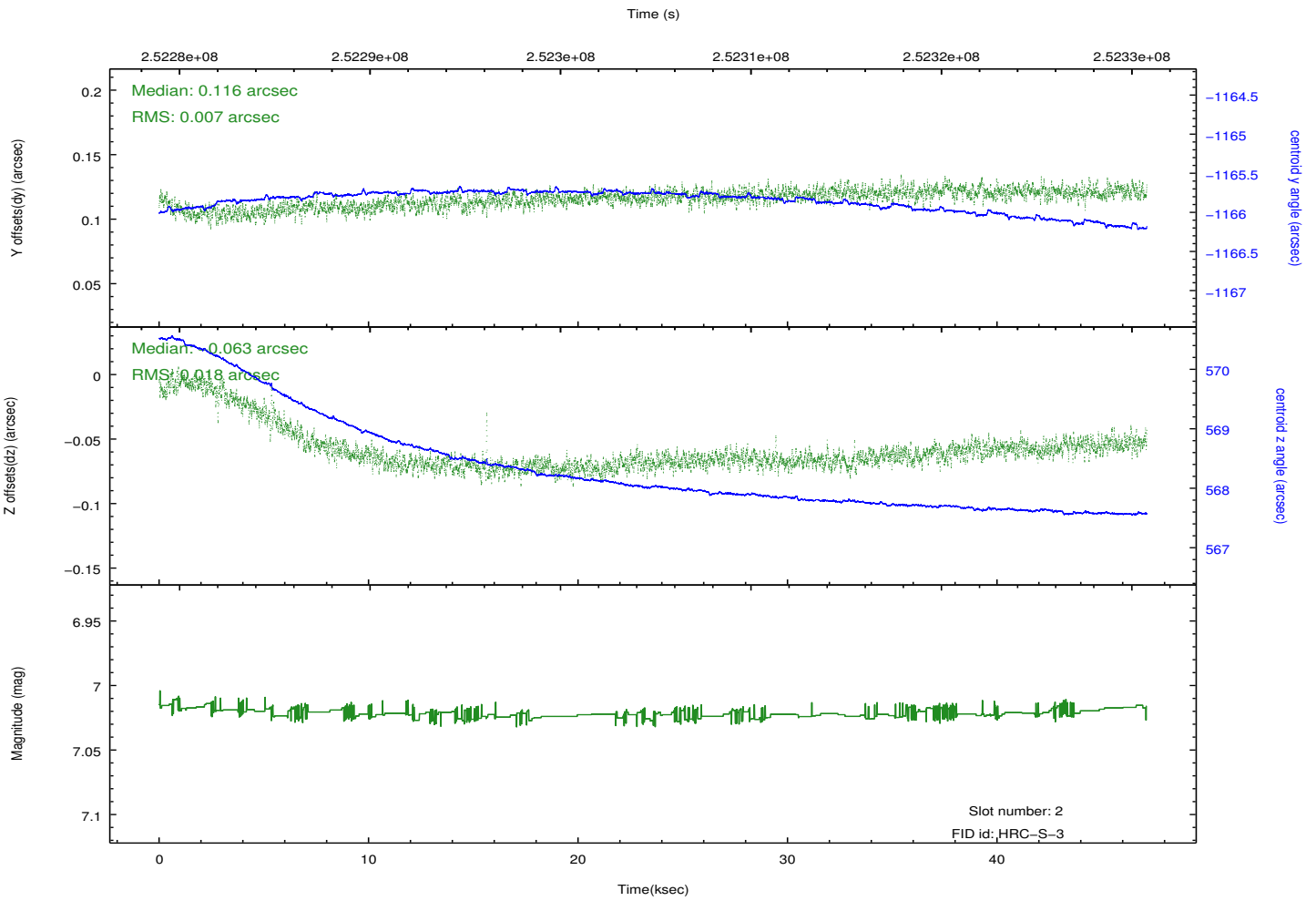
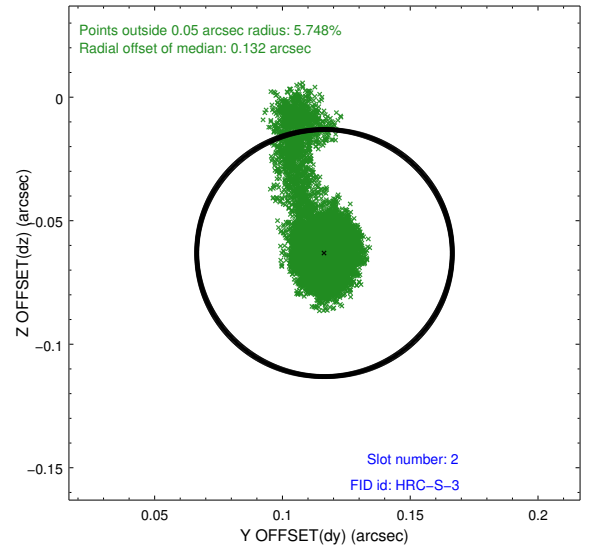
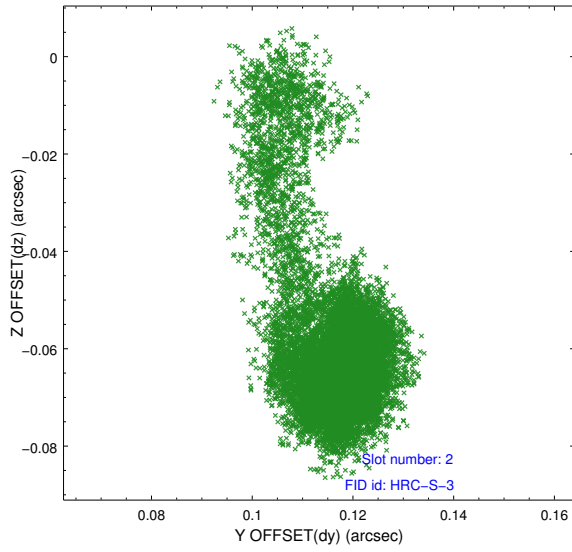
### 2.5.1 Slot 0



## 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)	2012.08.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.14692

## A.2 Comments

Period of high count rate about 38 ksec into exposure, presumed to be due to a high solar radiation event. There are also a few periods of slightly elevated count rate.