

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4667 - L2 Version 4  
Chandra X-Ray Center

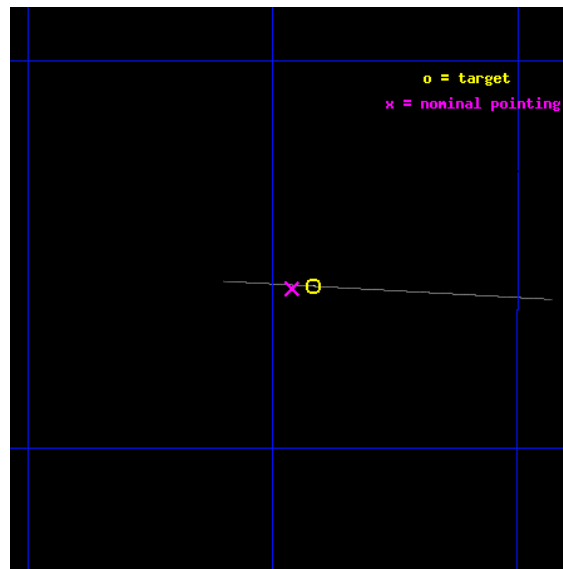
L2 Processing Date : Nov 9 2012

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# 1 Front

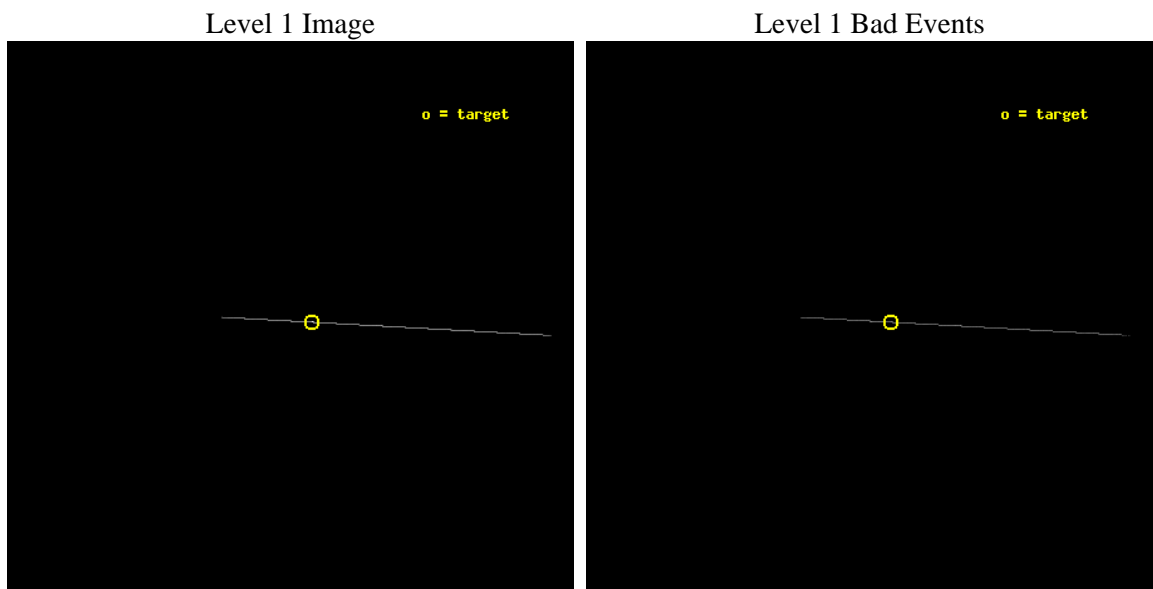
seq_num	500486	Sequence number
obs_id	4667	Observation id
title	Timing the Enigmatic Nearby Neutron Star RX J0720.4-3125	Proposal
observer	Prof. David Kaplan	Principal investigator
object	RX J0720.4-3125	Source name
ra_targ	110.104167	Observer's specified target RA [deg]
dec_targ	-31.430444	Observer's specified target Dec [deg]
ra_nom	110.11534910838	Nominal RA [deg]
dec_nom	-31.431640311599	Nominal Dec [deg]
roll_nom	3.1067644201762	Nominal Roll [deg]
revision	4	Processing version of data
ontime	4791.25	Sum of GTIs [s]
livetime	4772.5341796875	Livetime [s]
ontime7	4791.25	Sum of GTIs [s]
l2events	26048	Number of level 2 events



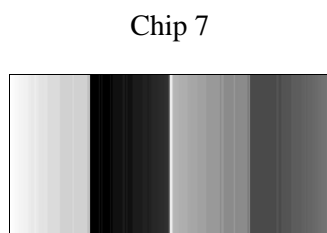
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4657.602000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4791.25	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime7	4791.25	Sum of GTIs [s]
date	2012-11-10T03:00:18	Date and time of file creation	l1events	37592	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	37592
rejected events	10887
rejected %	28%

	<b>ccd 7</b>
grade 0 events	7996
	21%
grade 1 events	86
	0%
grade 2 events	7295
	19%
grade 3 events	2645
	7%
grade 4 events	2591
	6%
grade 5 events	4414
	11%
grade 6 events	12565
	33%
grade 7 events	0
	0%

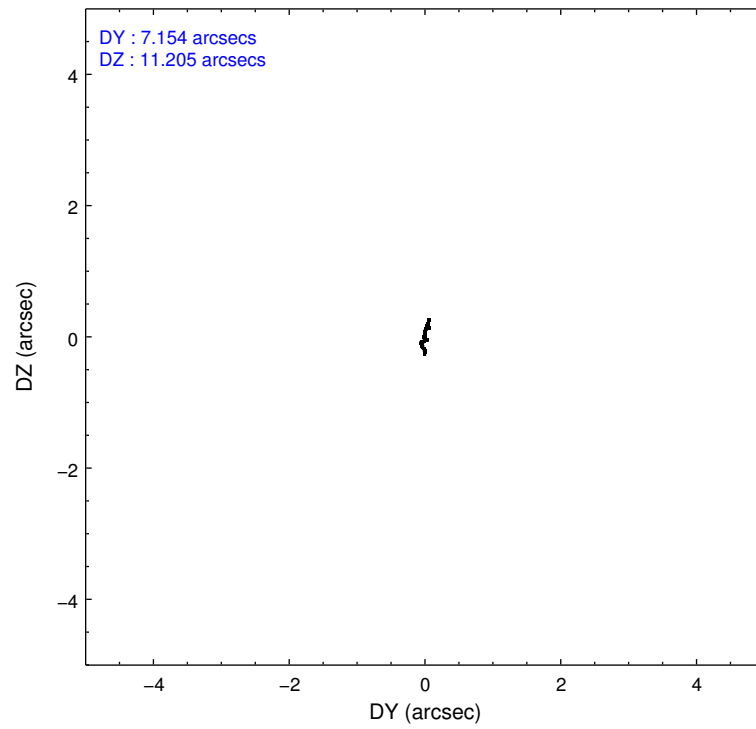
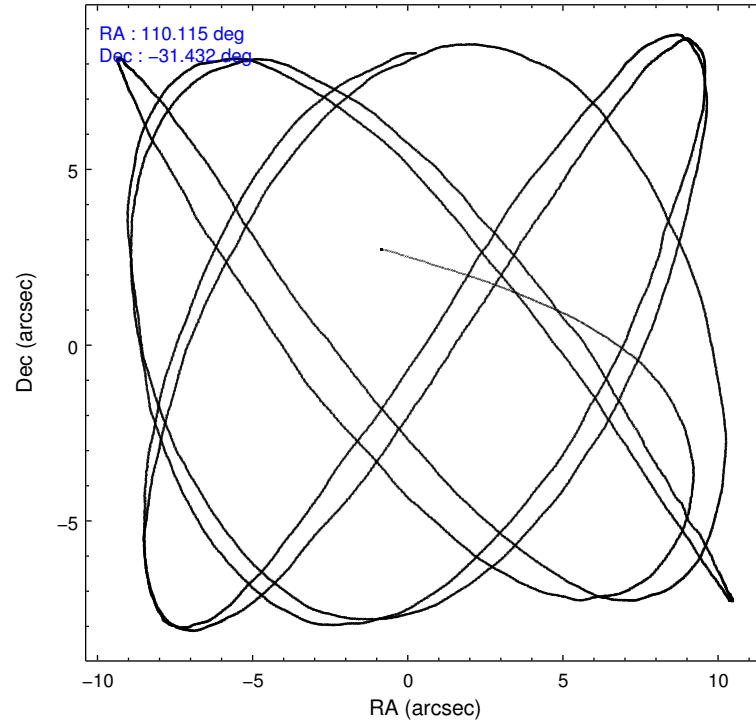


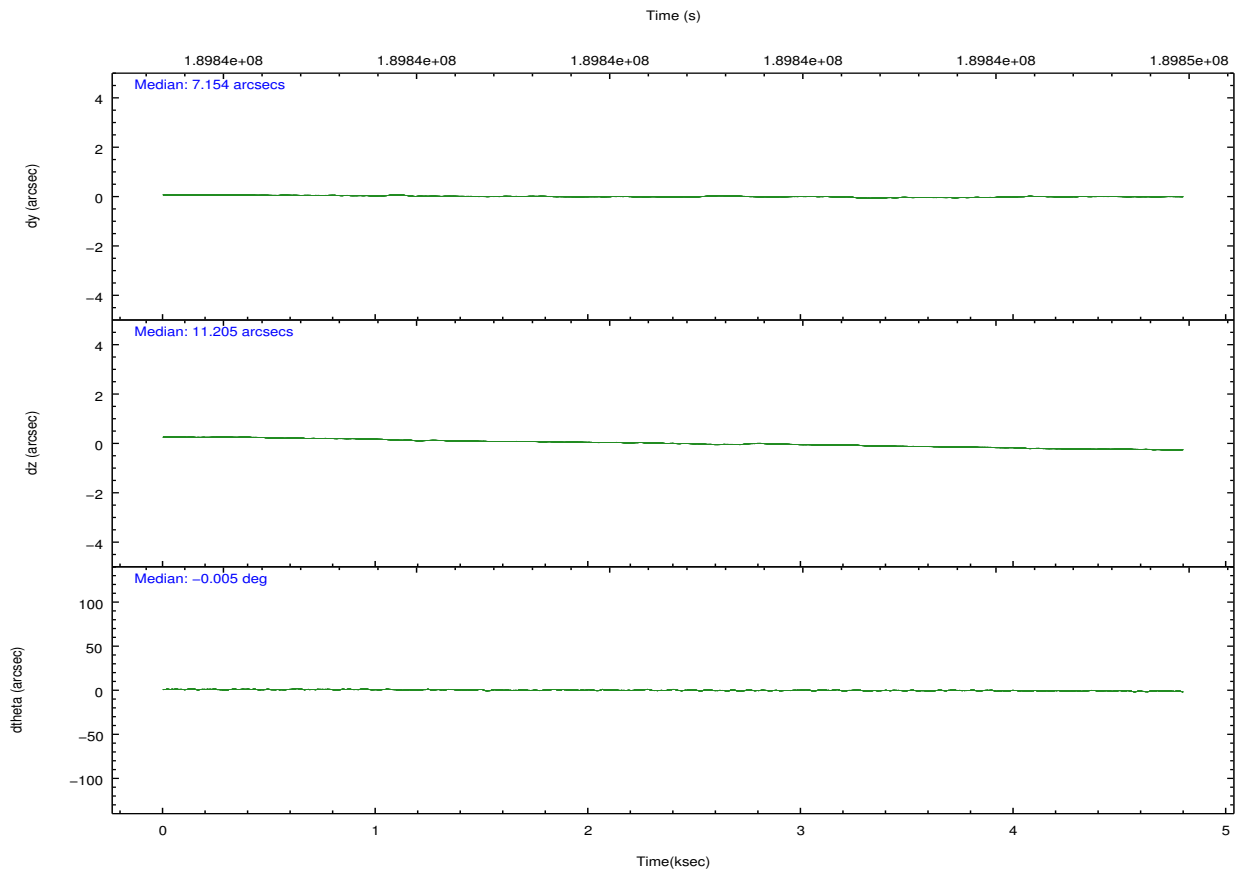
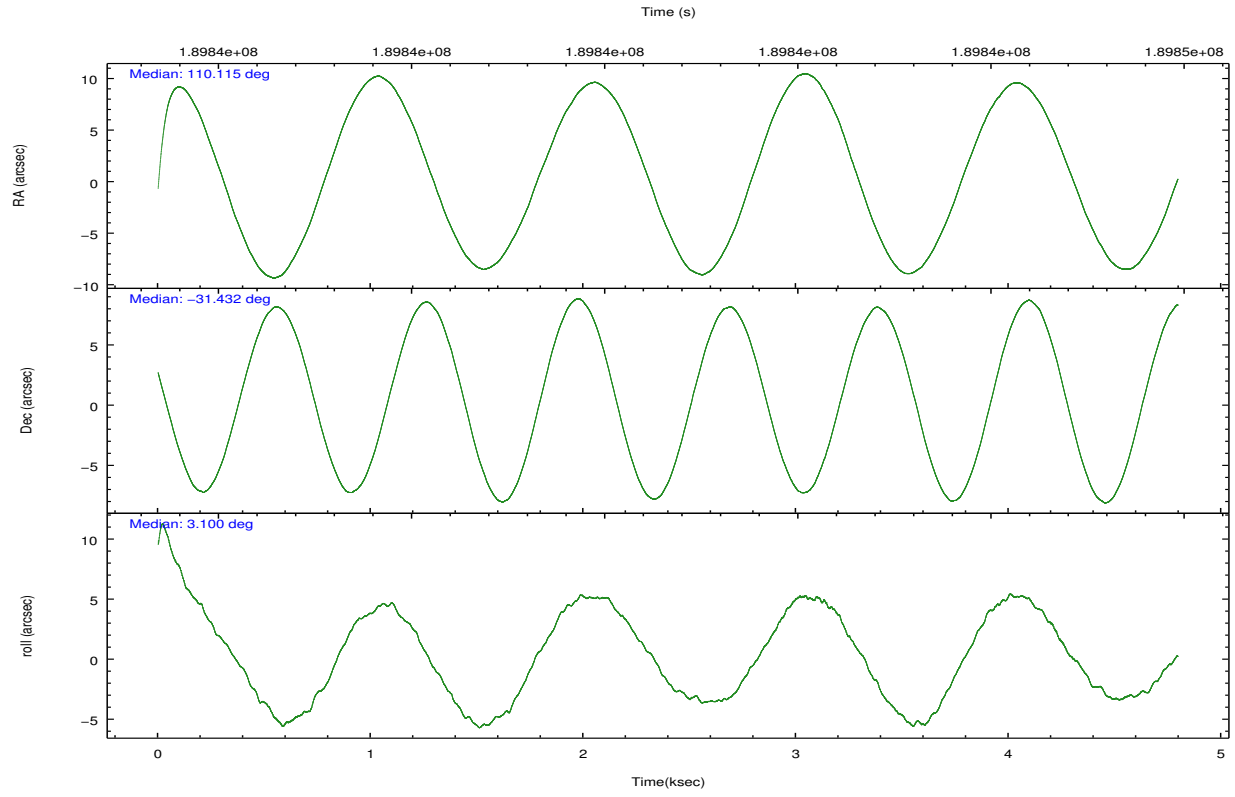
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	CC33_FAINT	CC33_FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	110.088914	110.1153491083784
[deg] Pointing Dec	-31.446801	-31.43164031159942
[deg] Pointing Roll	2.936326	3.106764420176214
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	189841069.184000	189839158.8838
Observation start date	2004-01-07T05:36:45	2004-01-07T05:05:58
[s] Observation end time (MET)	189845727.184000	189846041.2466
Observation end date	2004-01-07T06:54:23	2004-01-07T07:00:41
Read mode	CONTINUOUS	CONTINUOUS

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0

## 2.3 Aspect



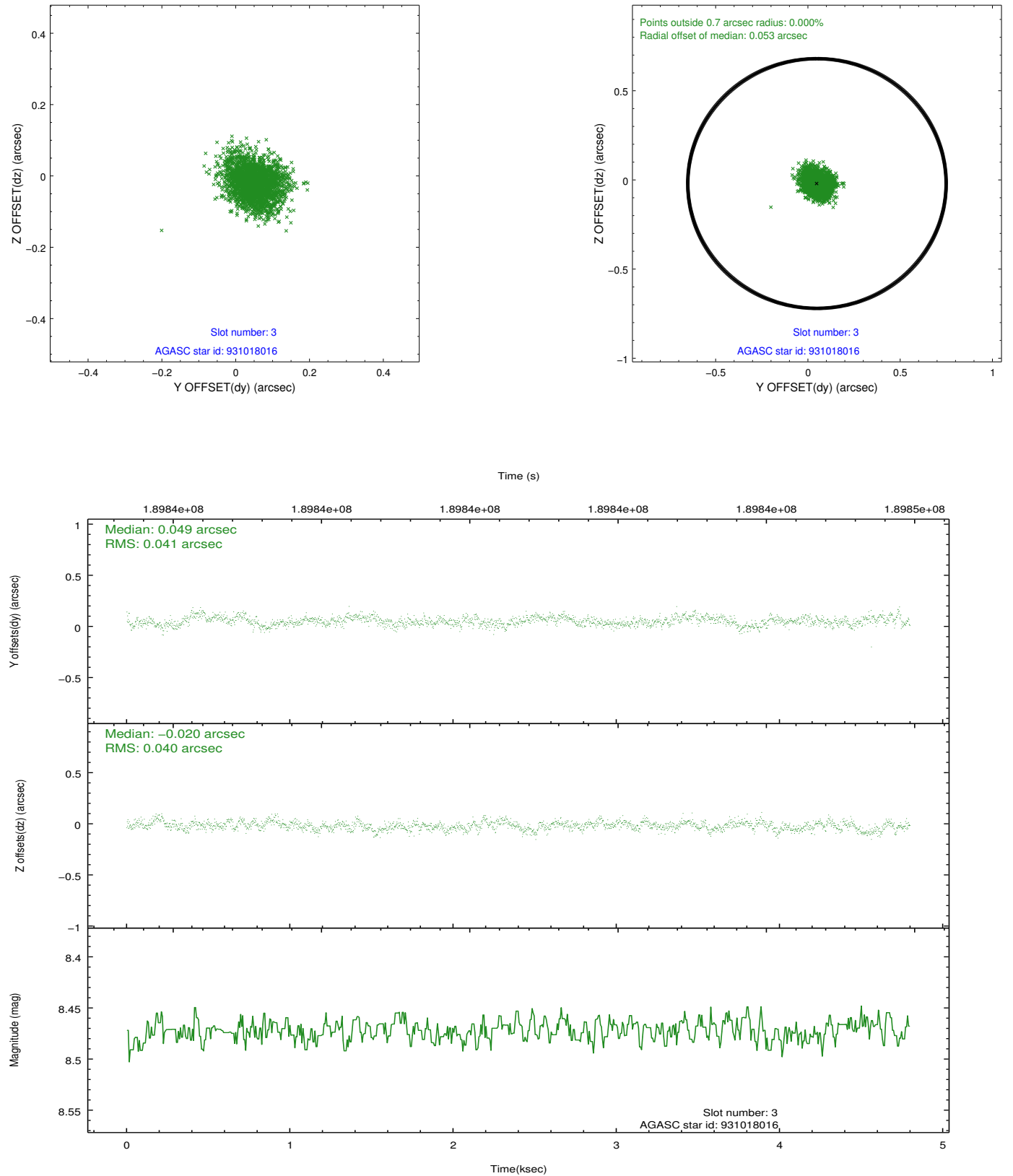


### Slot Statistics

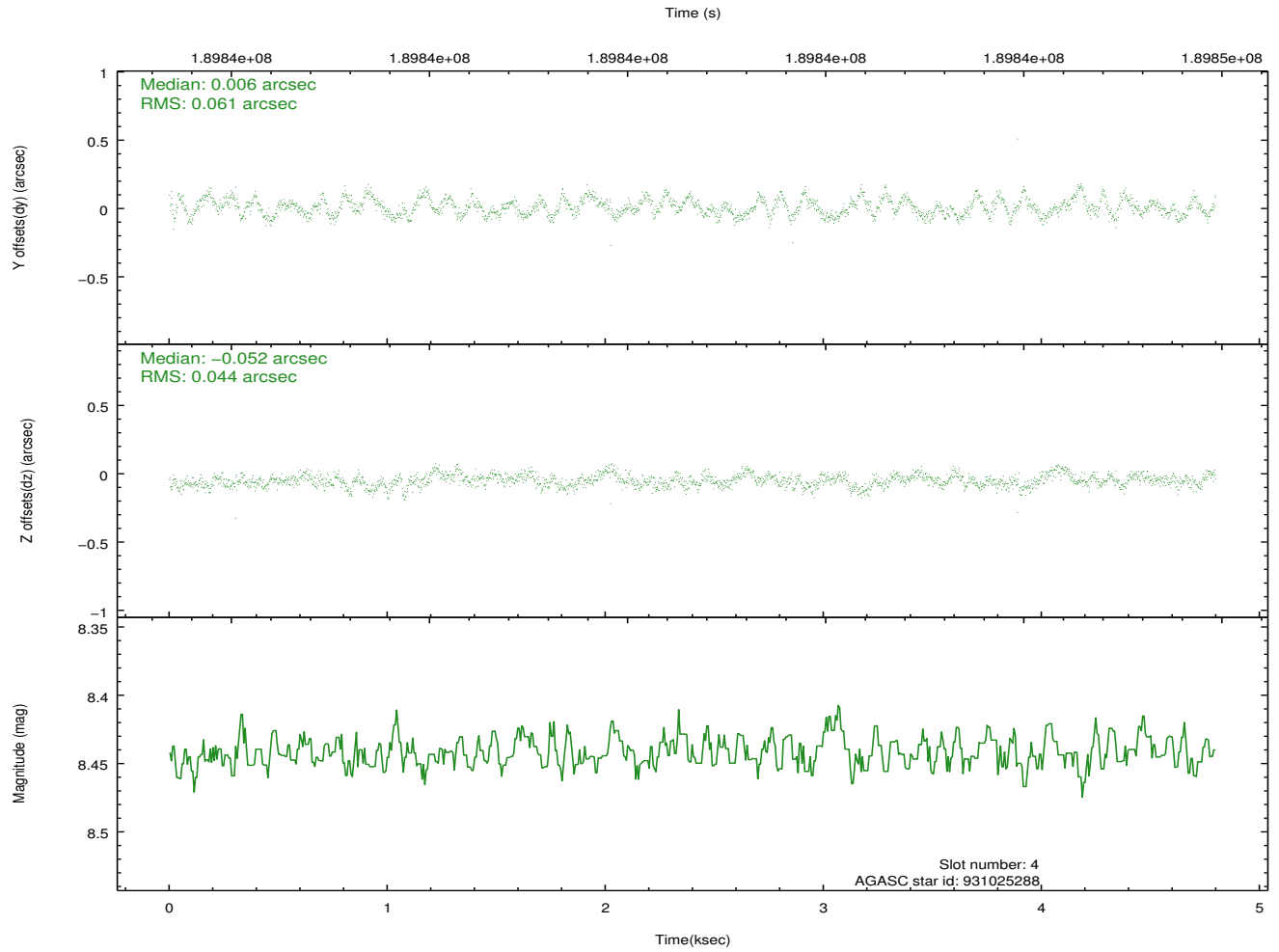
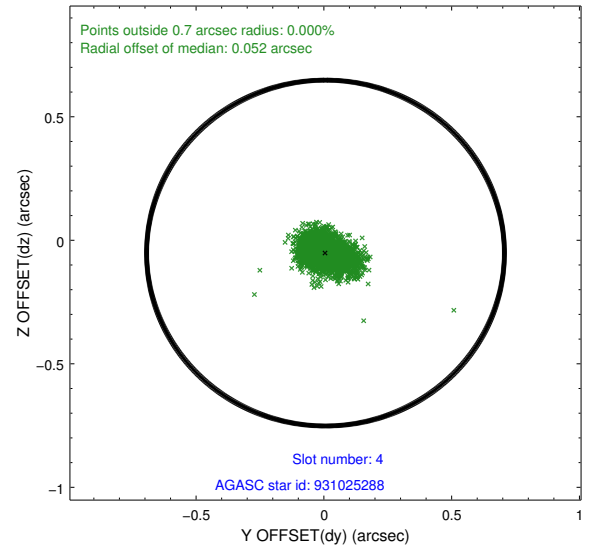
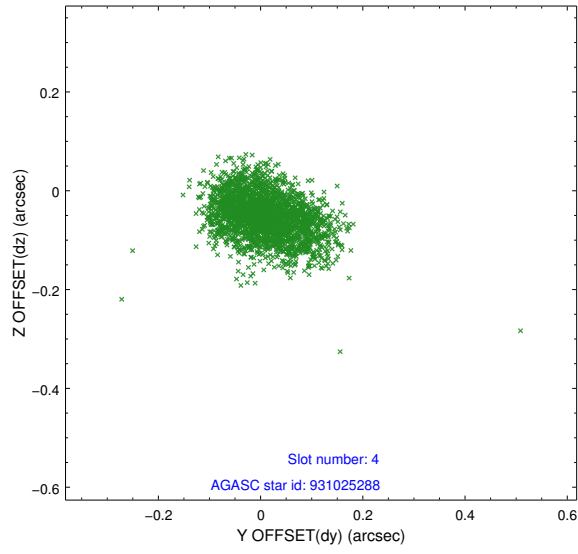
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1170	-0.032	-0.003	0.008	0.013	0.000000	0.000000	-759.93	-1732.45
1	FID	ACIS-S-4	7.20	1170	0.047	0.016	0.006	0.010	0.000000	0.000000	2152.83	174.77
2	FID	ACIS-S-5	7.23	1171	-0.046	-0.004	0.008	0.014	0.000000	0.000000	-1811.17	169.83
3	GUIDE	931018016	8.47	2340	0.049	-0.020	0.060	0.099	109.684535	-31.226562	-1202.39	853.39
4	GUIDE	931025288	8.44	2340	0.006	-0.052	0.080	0.127	109.511084	-30.937793	-1688.65	1917.18
5	GUIDE	931695048	7.38	2341	-0.059	0.115	0.082	0.127	110.648539	-32.046020	1594.67	-2244.85
6	GUIDE	931019296	8.66	2341	0.066	0.090	0.070	0.114	109.471771	-31.694370	-1932.71	-799.64
7	GUIDE	931160352	8.63	2340	-0.057	-0.138	0.079	0.127	110.268138	-30.864891	659.65	2063.28

## 2.4 Star Slots

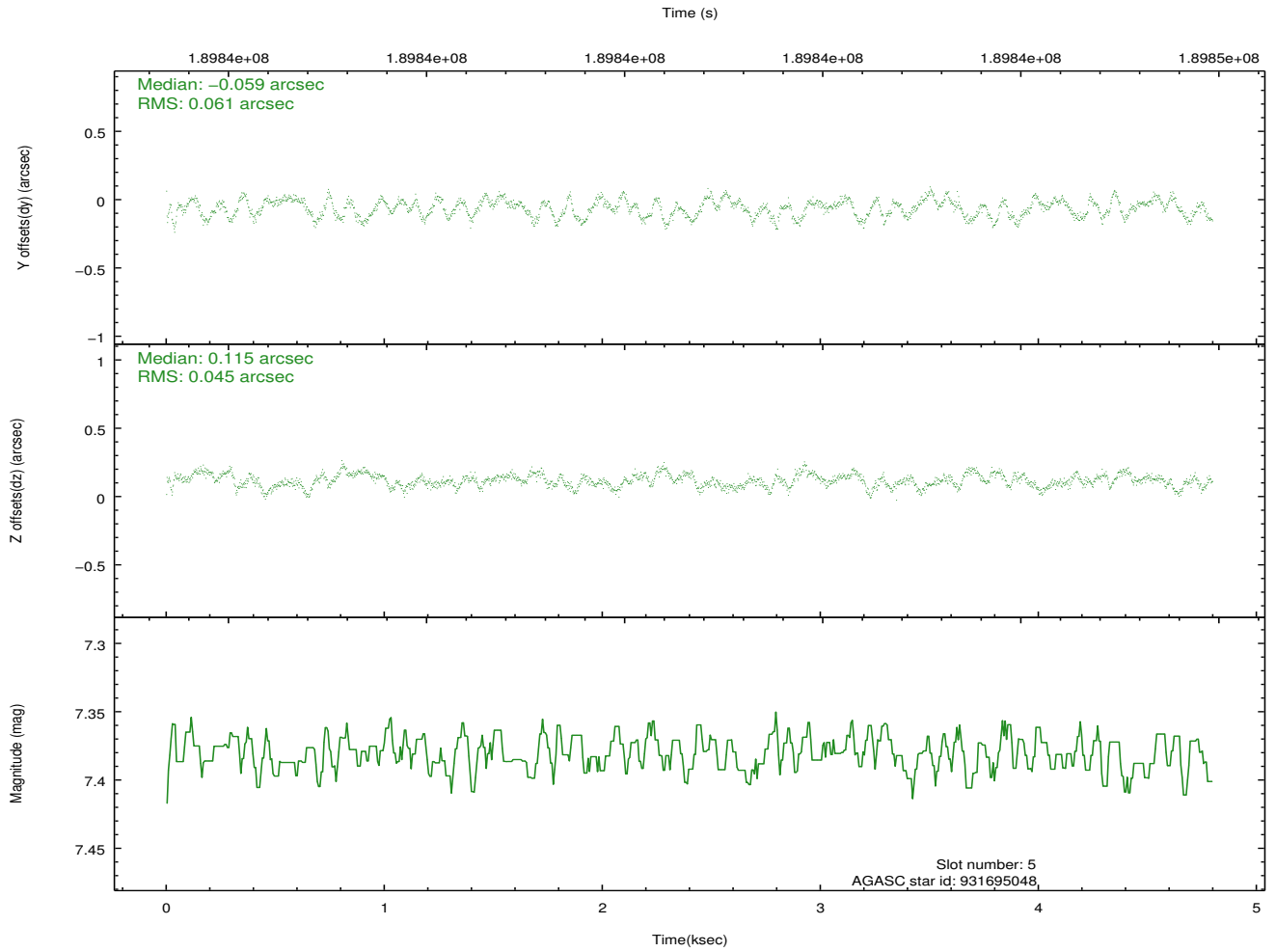
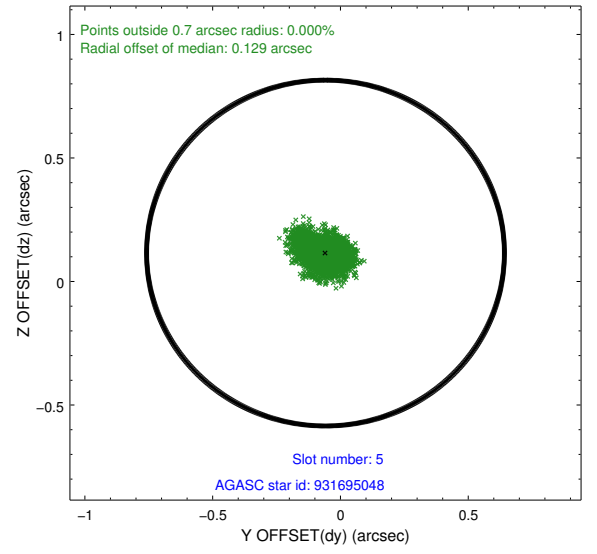
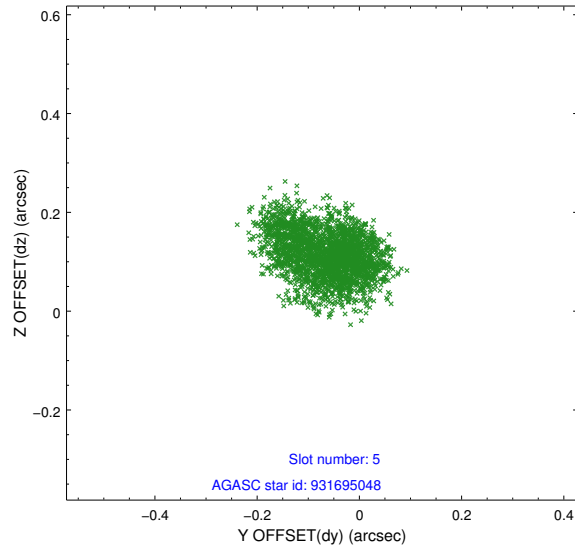
### 2.4.1 Slot 3



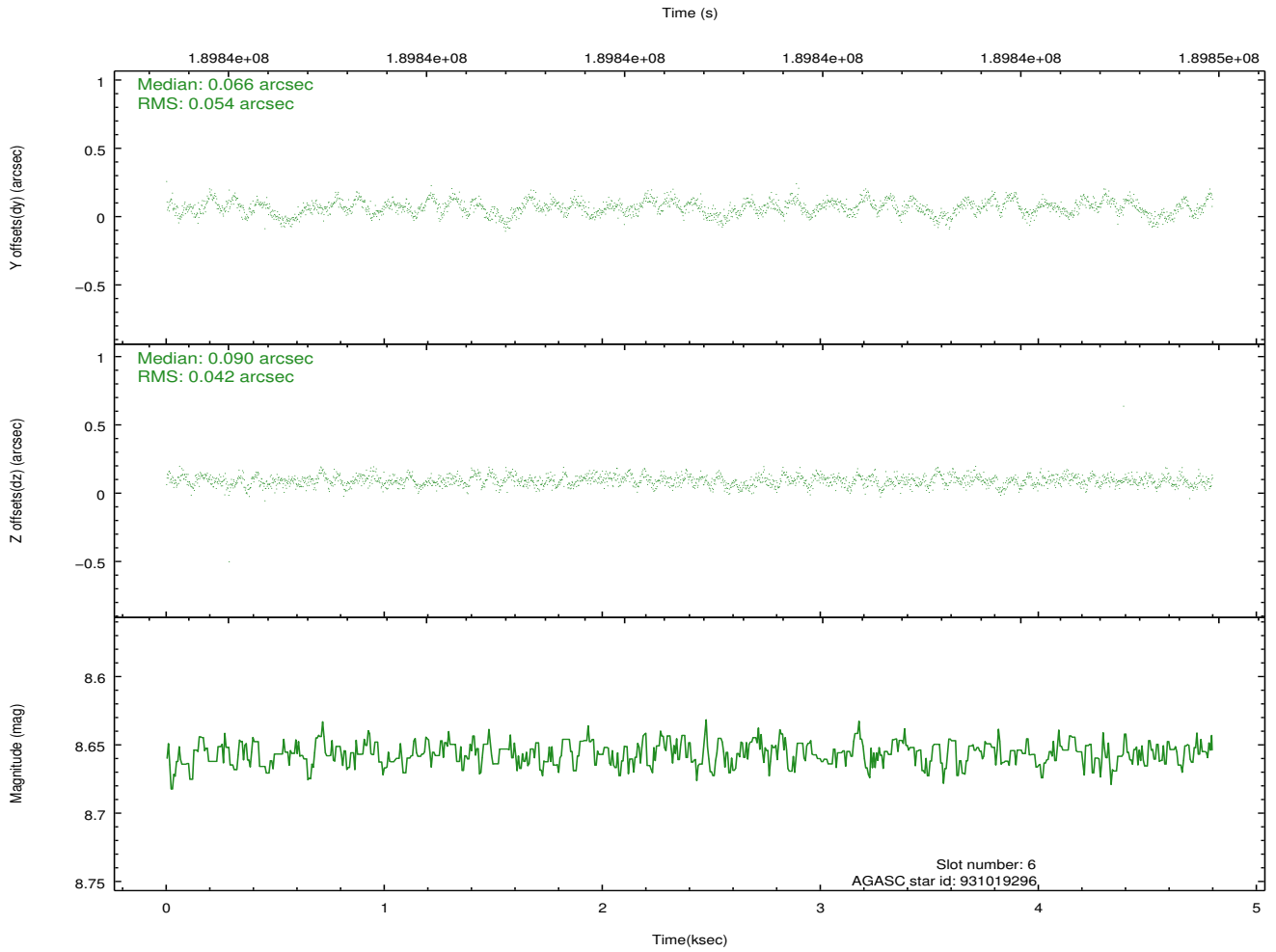
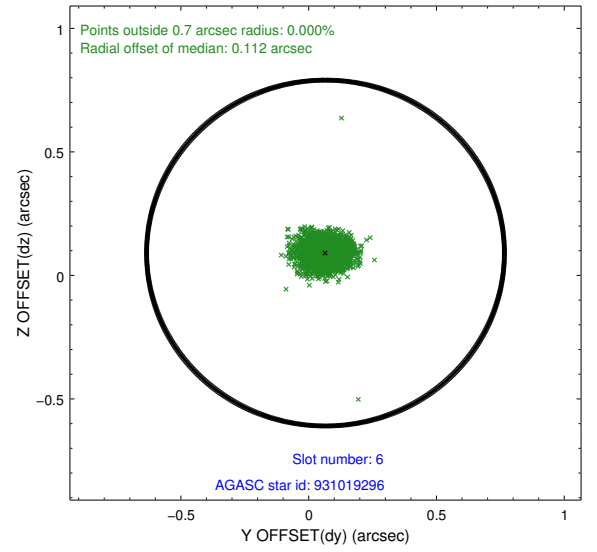
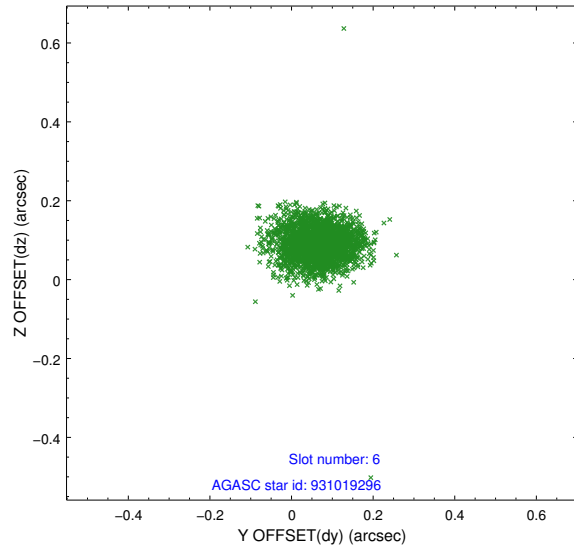
## 2.4.2 Slot 4



### 2.4.3 Slot 5

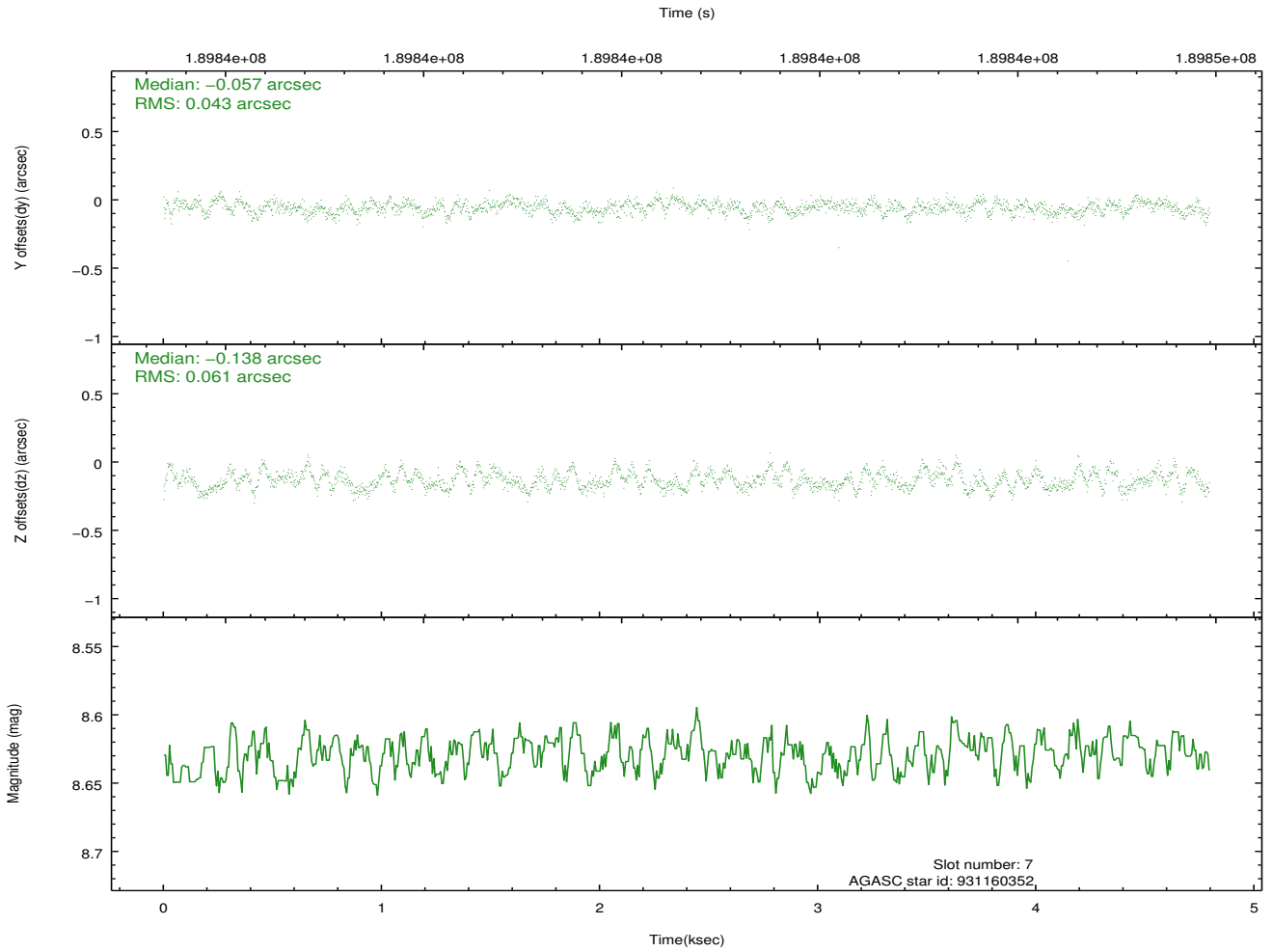
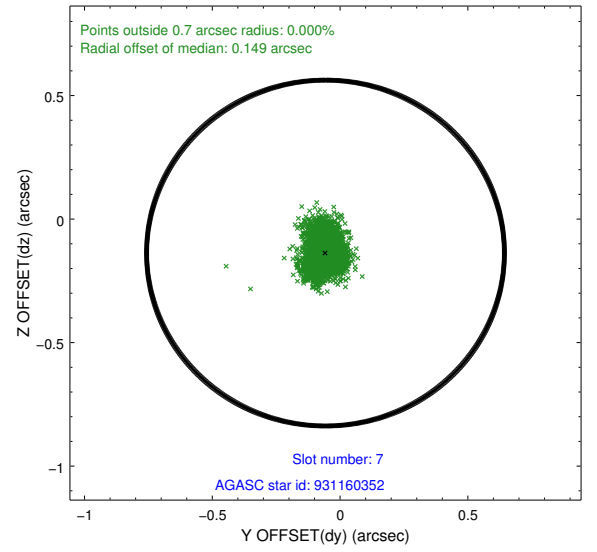
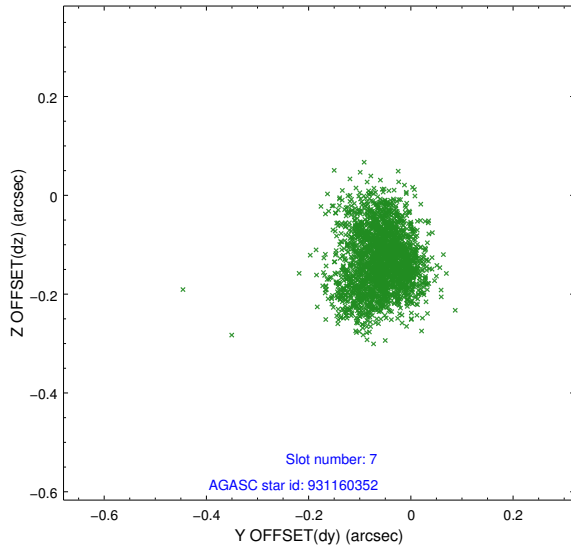


## 2.4.4 Slot 6



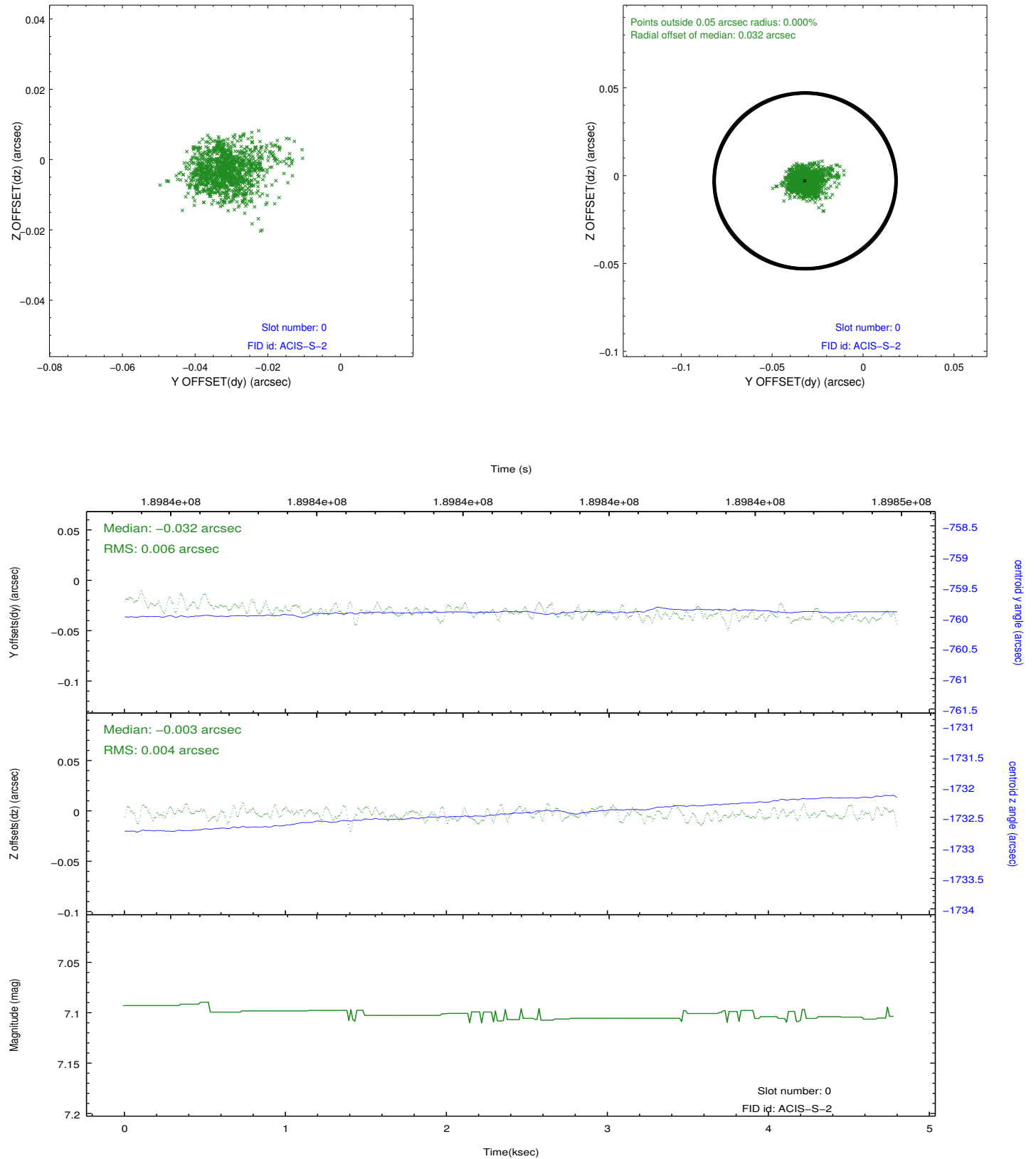


## 2.4.5 Slot 7

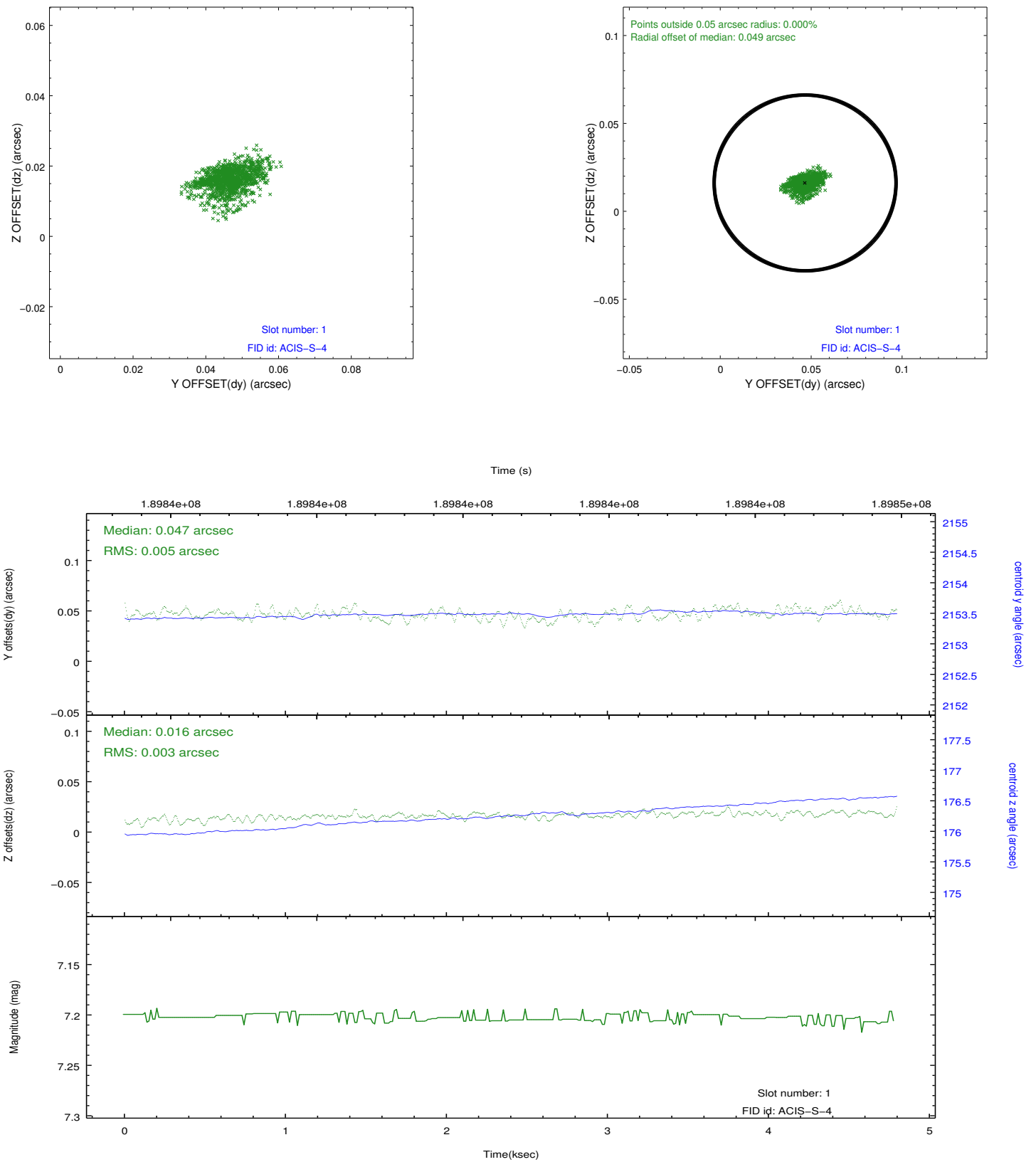


## 2.5 FID Slots

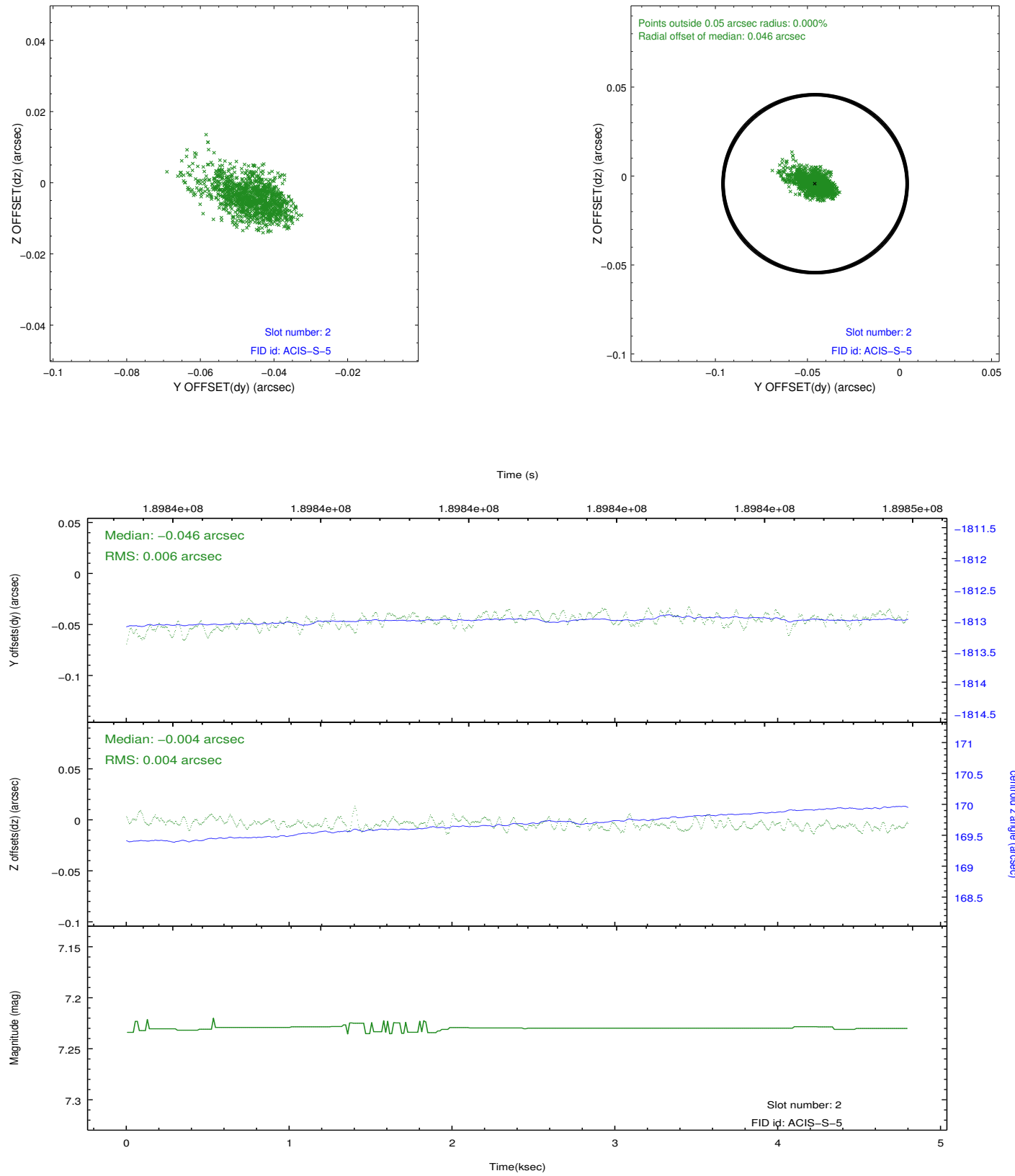
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.794

### A.2 Comments