

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4391 - L2 Version 3  
Chandra X-Ray Center

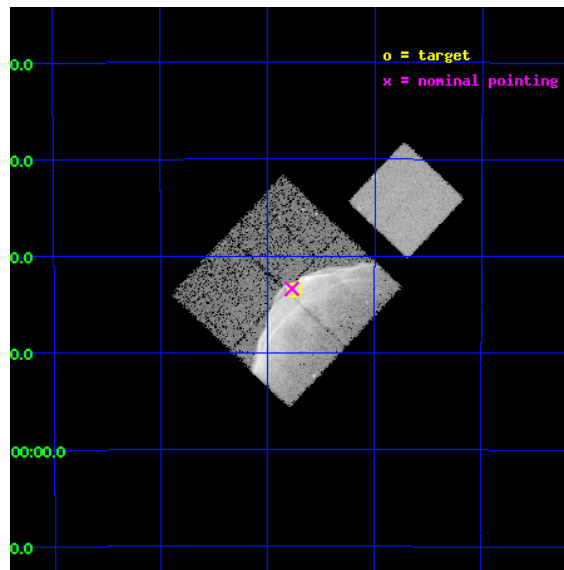
L2 Processing Date : Oct 26 2012

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# 1 Front

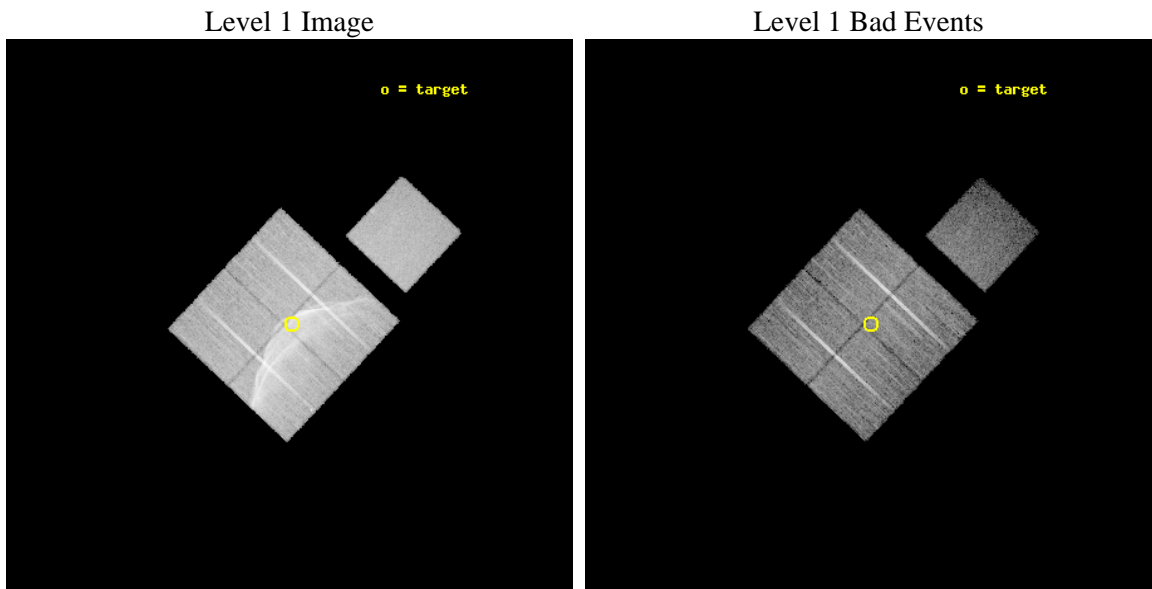
seq_num	500317	Sequence number
obs_id	4391	Observation id
title	STUDYING HIGH MACH NUMBER SHOCKS IN YOUNG SUPERNOVA REMNANTS WITH CHANDRA	Proposal title
observer	Prof. John Hughes	Principal investigator
object	SN1006	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	225.9375	Observer's specified target RA [deg]
dec_targ	-41.725	Observer's specified target Dec [deg]
ra_nom	225.94329328297	Nominal RA [deg]
dec_nom	-41.723407702068	Nominal Dec [deg]
roll_nom	43.212553180702	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20177.127422035	Sum of GTIs [s]
livetime	19913.498398081	Livetime [s]
ontime0	20177.004321933	Sum of GTIs [s]
ontime1	20180.186322242	Sum of GTIs [s]
ontime2	20180.227362245	Sum of GTIs [s]
ontime3	20177.127422035	Sum of GTIs [s]
ontime7	20180.309442252	Sum of GTIs [s]
l2events	210755	Number of level 2 events



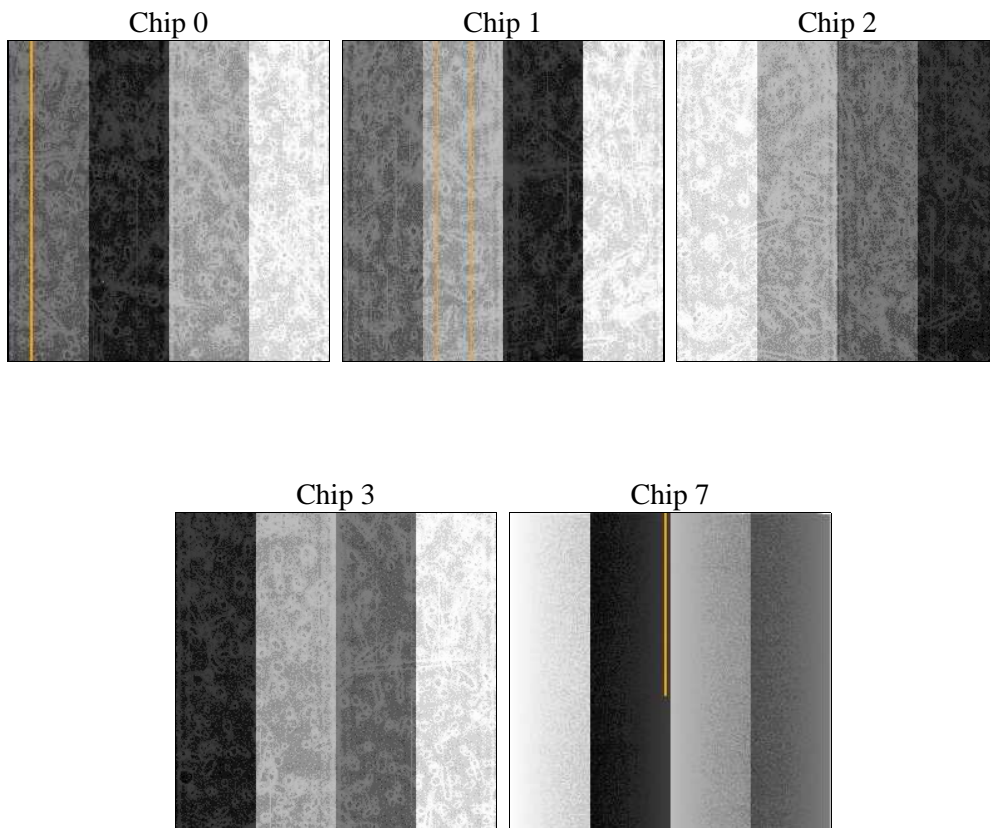
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20074.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20177.127422035	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	20177.004321933	Sum of GTIs [s]
date	2012-10-26T12:33:37	Date and time of file creation	ontime1	20180.186322242	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	20180.227362245	Sum of GTIs [s]
			ontime3	20177.127422035	Sum of GTIs [s]
			ontime7	20180.309442252	Sum of GTIs [s]
			l1events	622761	Number of level 1 events

### 2.1.4 Events

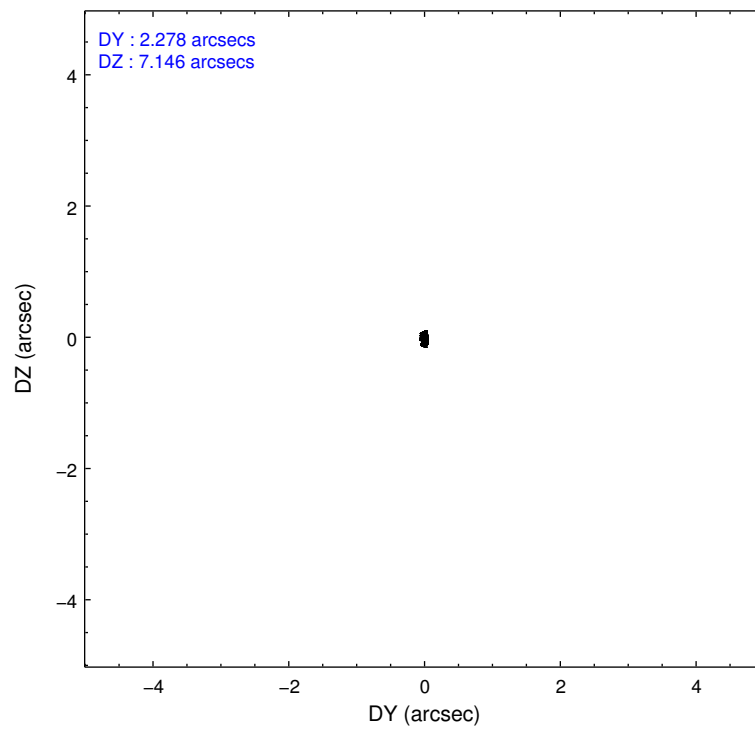
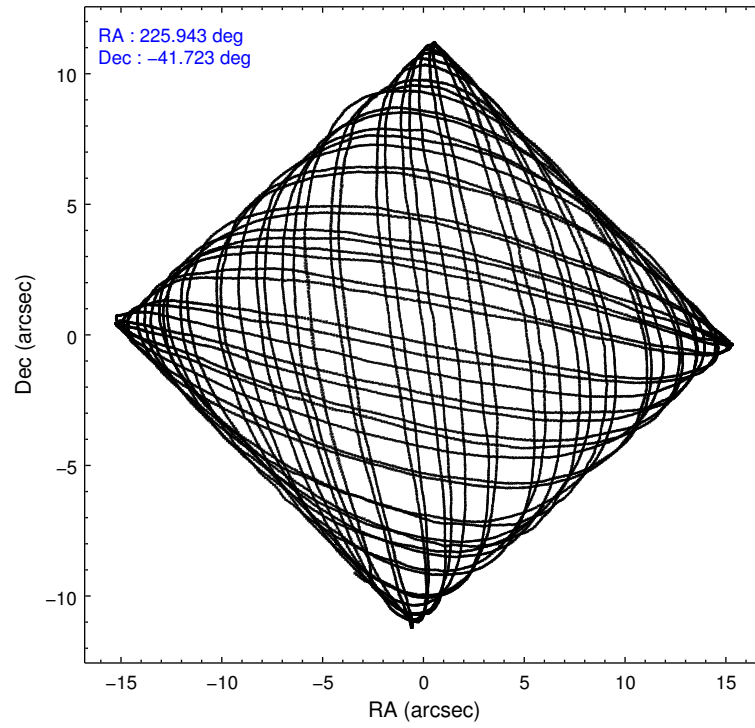
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	93882	176965	104225	154256	93433
rejected events	82175	85406	92832	88783	48905
rejected %	87%	48%	89%	57%	52%

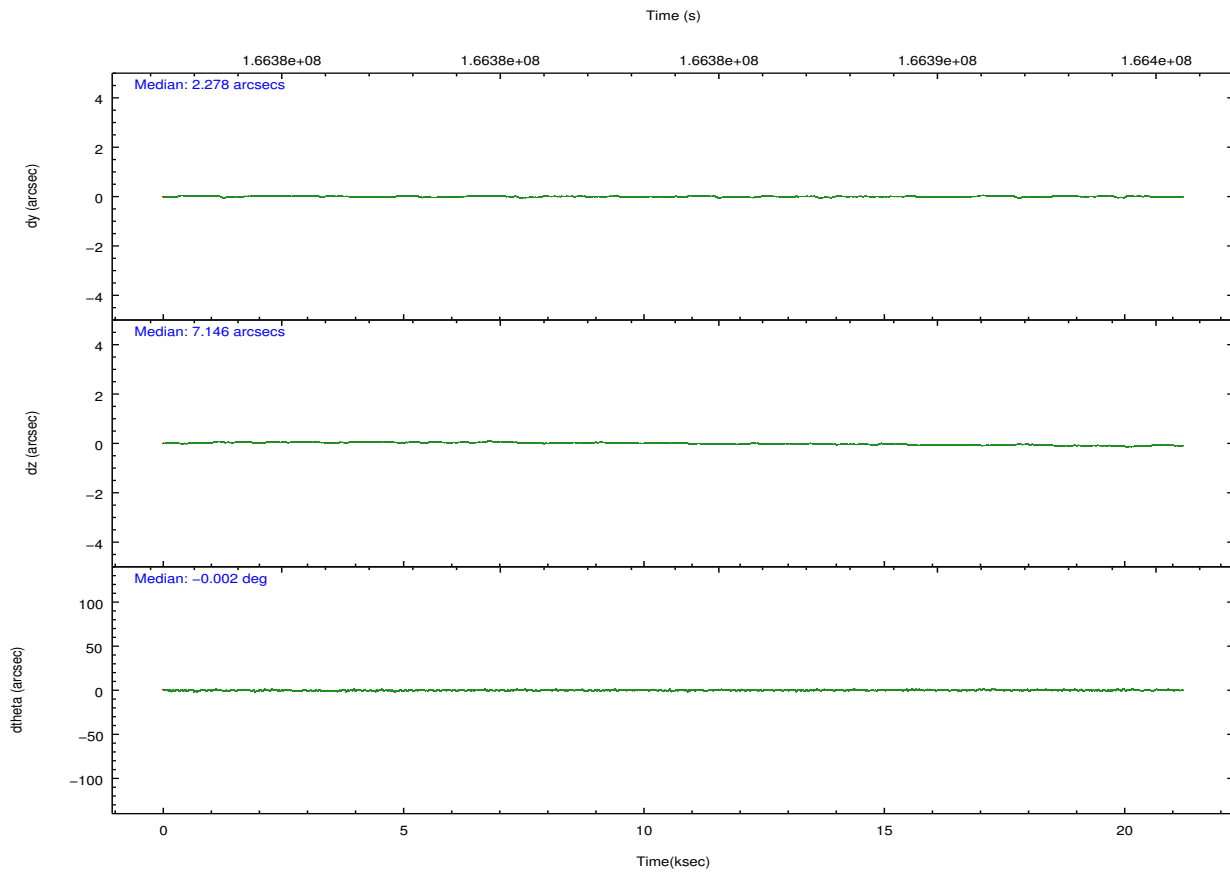
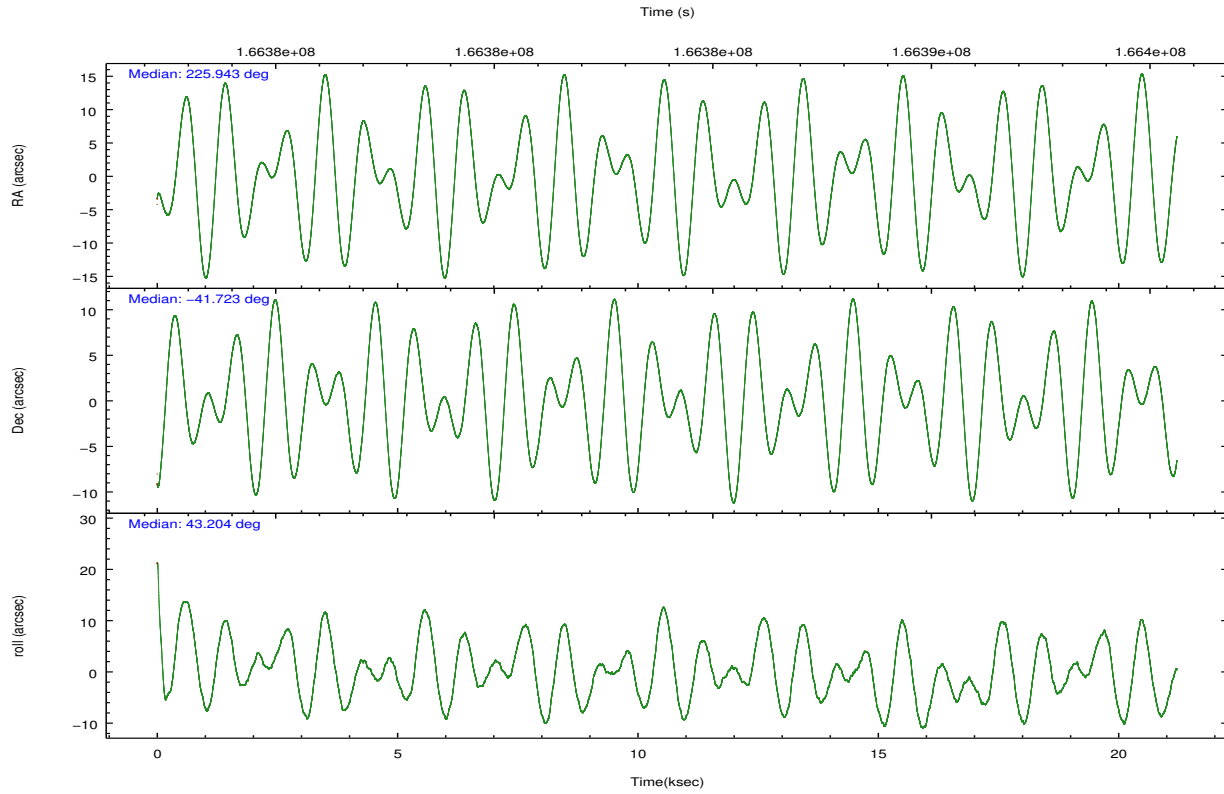
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	5422	73562	5349	52155	4592
	5%	41%	5%	33%	4%
grade 1 events	41	254	49	272	83
	0%	0%	0%	0%	0%
grade 2 events	2267	8928	2259	6446	8745
	2%	5%	2%	4%	9%
grade 3 events	1185	3050	1028	2250	3991
	1%	1%	0%	1%	4%
grade 4 events	1090	3037	1122	2282	4054
	1%	1%	1%	1%	4%
grade 5 events	3012	3425	2775	3371	10107
	3%	1%	2%	2%	10%
grade 6 events	1743	3000	1638	2354	23152
	1%	1%	1%	1%	24%
grade 7 events	79122	81709	90005	85126	38709
	84%	46%	86%	55%	41%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	225.932867	225.9432932829661	Subarray requested	NONE	NONE
[deg] Pointing Dec	-41.749644	-41.72340770206839	Alternating exposures requested	N	N
[deg] Pointing Roll	42.996918	43.21255318070219	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	166374481.184000	166373043.1164			
Observation start date	2003-04-10T15:06:57	2003-04-10T14:44:03			
[s] Observation end time (MET)	166394555.184000	166394689.06731			
Observation end date	2003-04-10T20:41:31	2003-04-10T20:44:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect



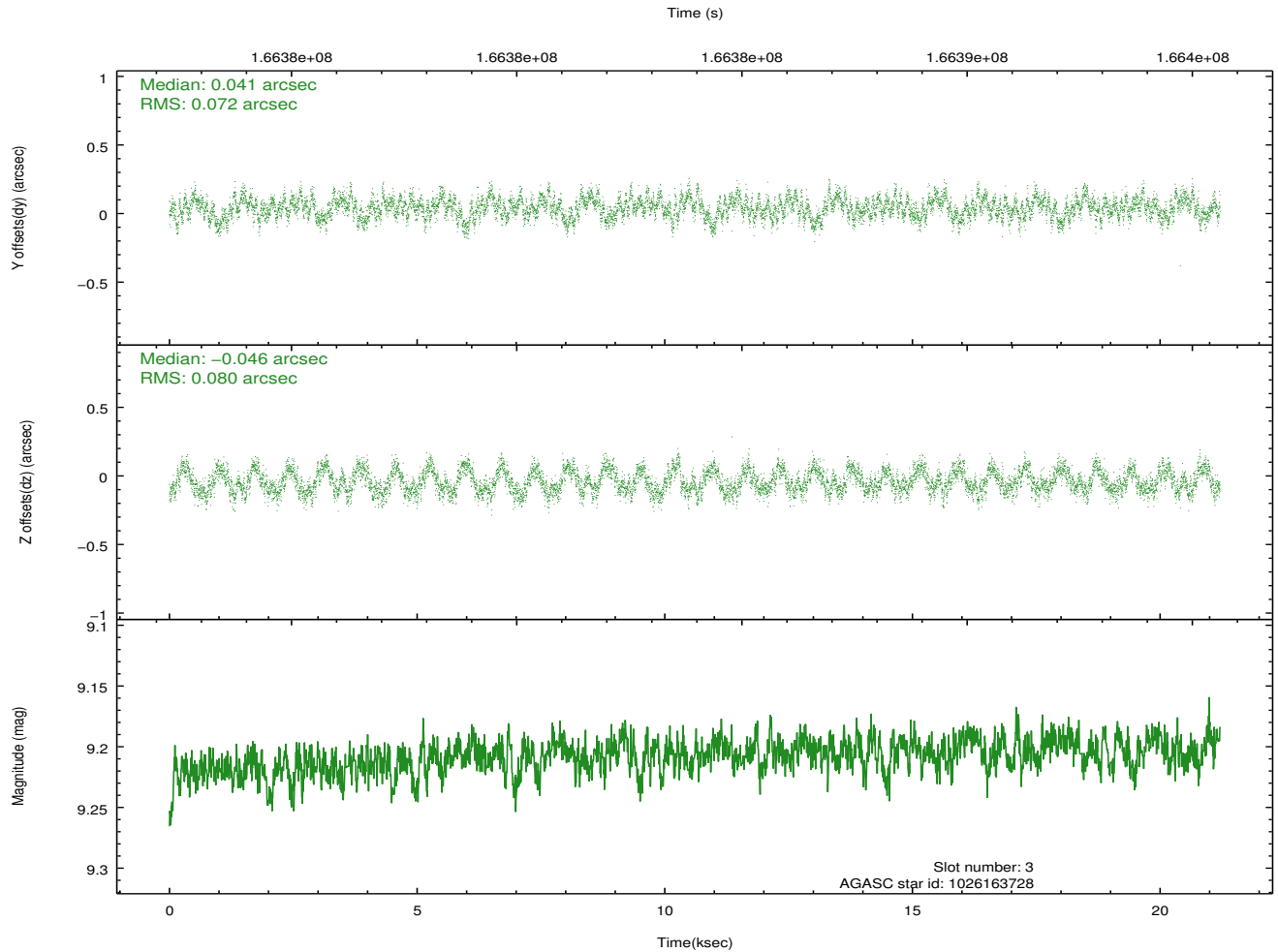
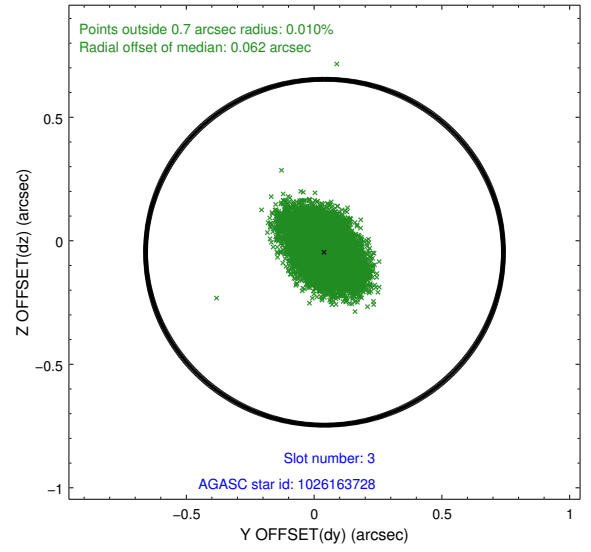
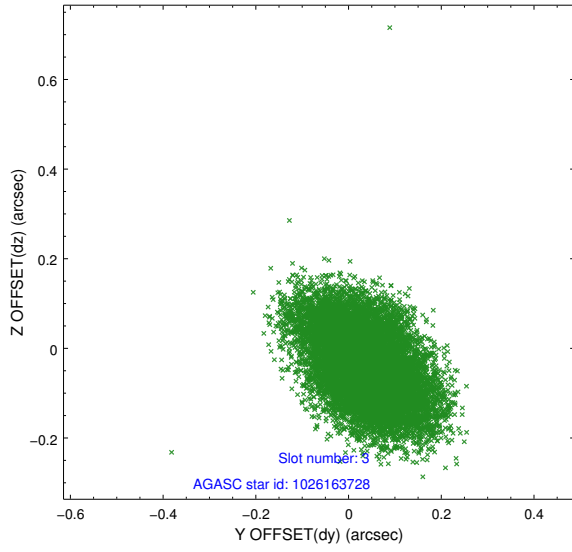


### Slot Statistics

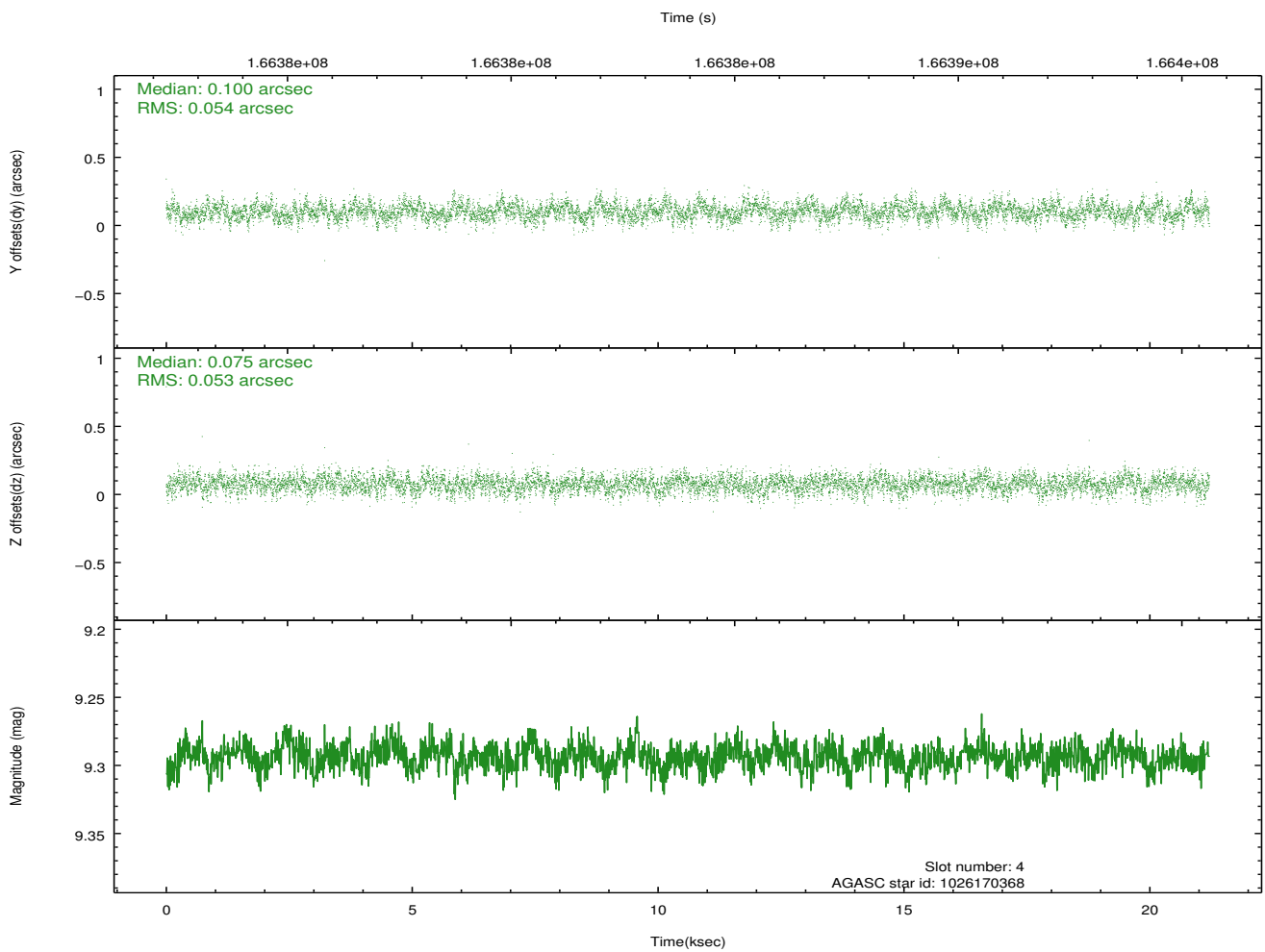
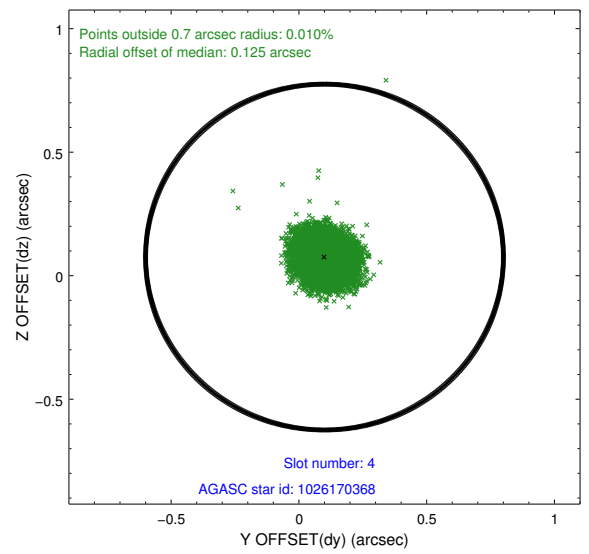
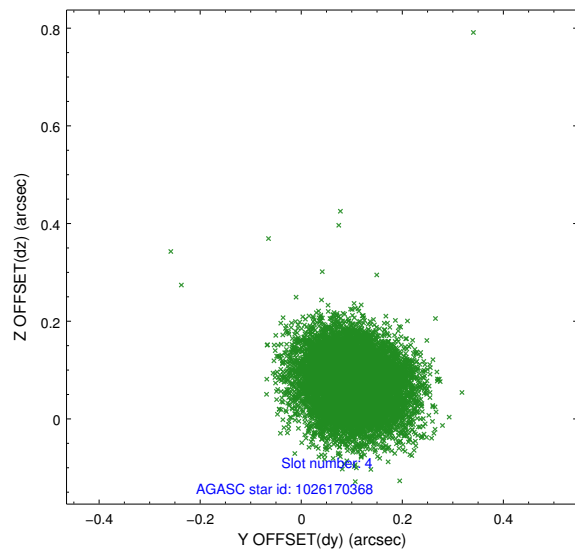
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	5173	-0.034	-0.044	0.008	0.014	0.000000	0.000000	937.50	-830.58
1	FID	ACIS-I-4	7.17	5174	0.021	0.070	0.007	0.012	0.000000	0.000000	2157.70	1069.25
2	FID	ACIS-I-5	7.23	5174	-0.085	0.044	0.007	0.012	0.000000	0.000000	-1810.32	1067.29
3	GUIDE	1026163728	9.21	10345	0.041	-0.046	0.115	0.184	225.377558	-41.568164	-651.60	1494.18
4	GUIDE	1026170368	9.29	10346	0.100	0.075	0.080	0.130	225.763429	-42.291155	-1659.23	-1118.41
5	GUIDE	1026185256	9.32	10340	0.082	0.073	0.101	0.163	226.095983	-42.018643	-341.20	-1006.12
6	GUIDE	1026183784	9.17	10303	-0.100	0.124	0.082	0.136	226.363370	-41.841537	617.25	-1031.30
7	GUIDE	1025649216	9.69	10337	-0.108	-0.231	0.116	0.189	225.652215	-41.077666	1091.85	2287.72

## 2.4 Star Slots

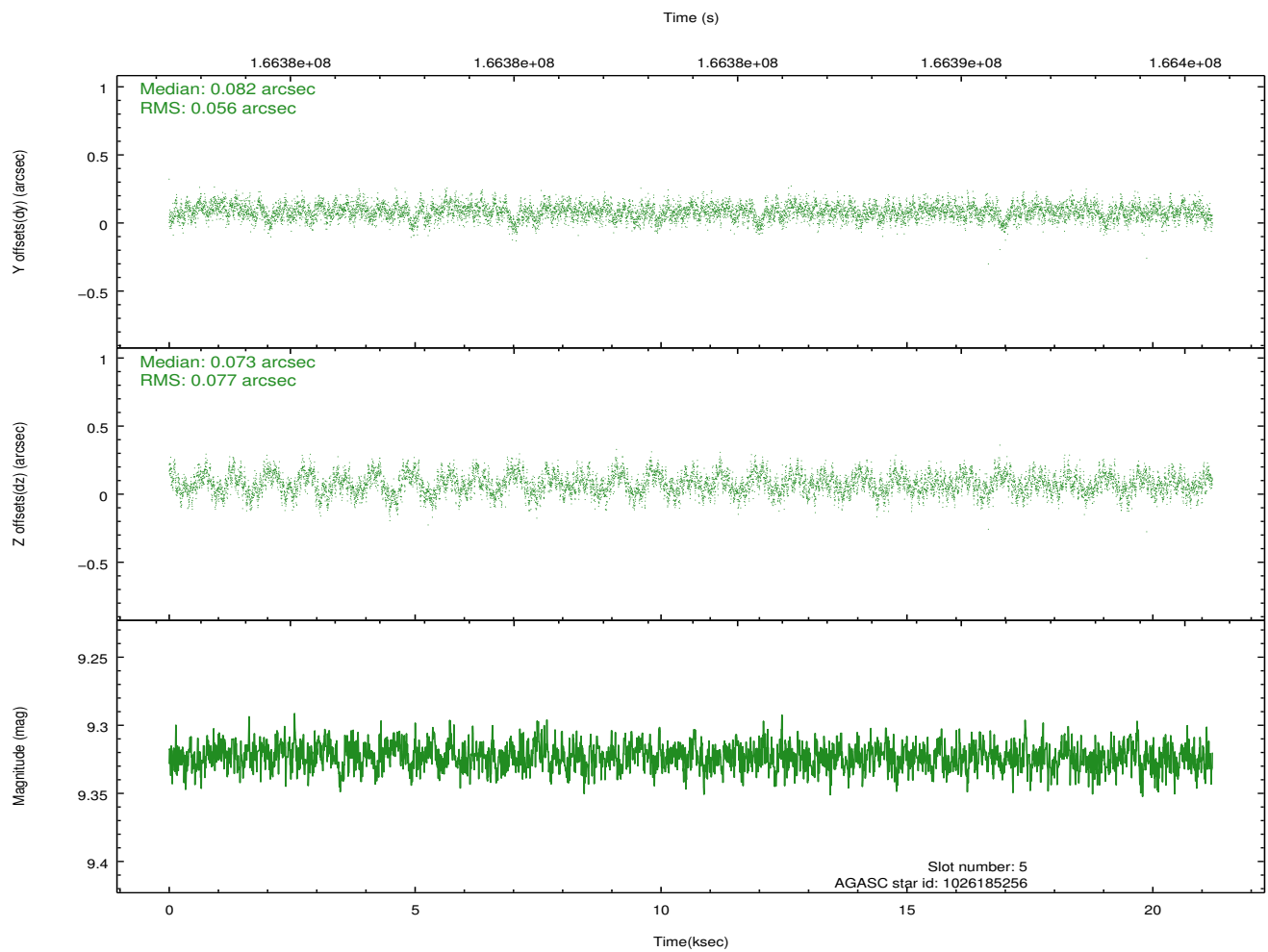
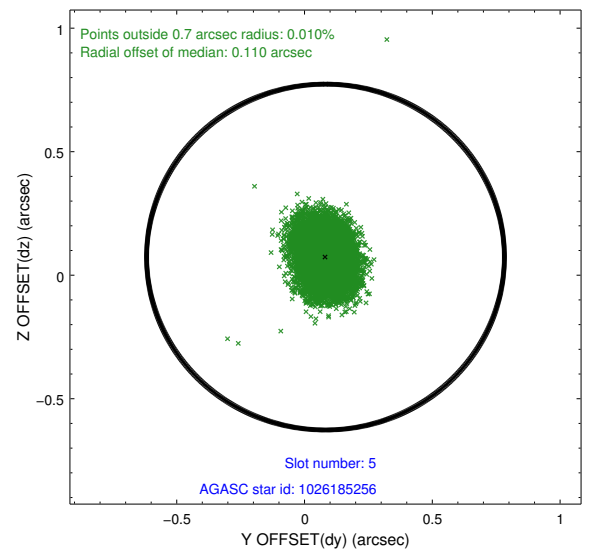
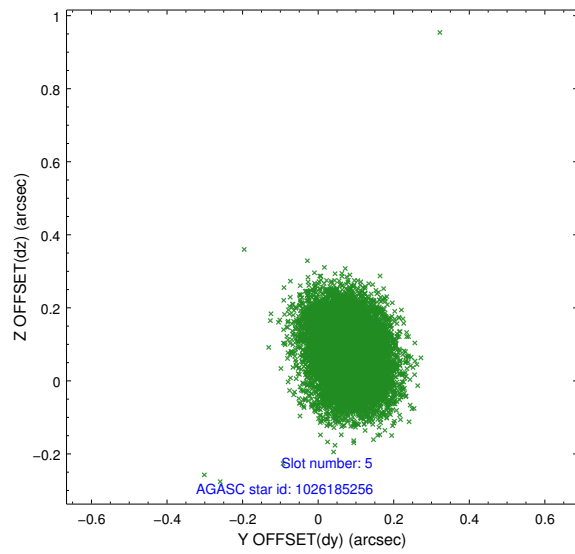
### 2.4.1 Slot 3



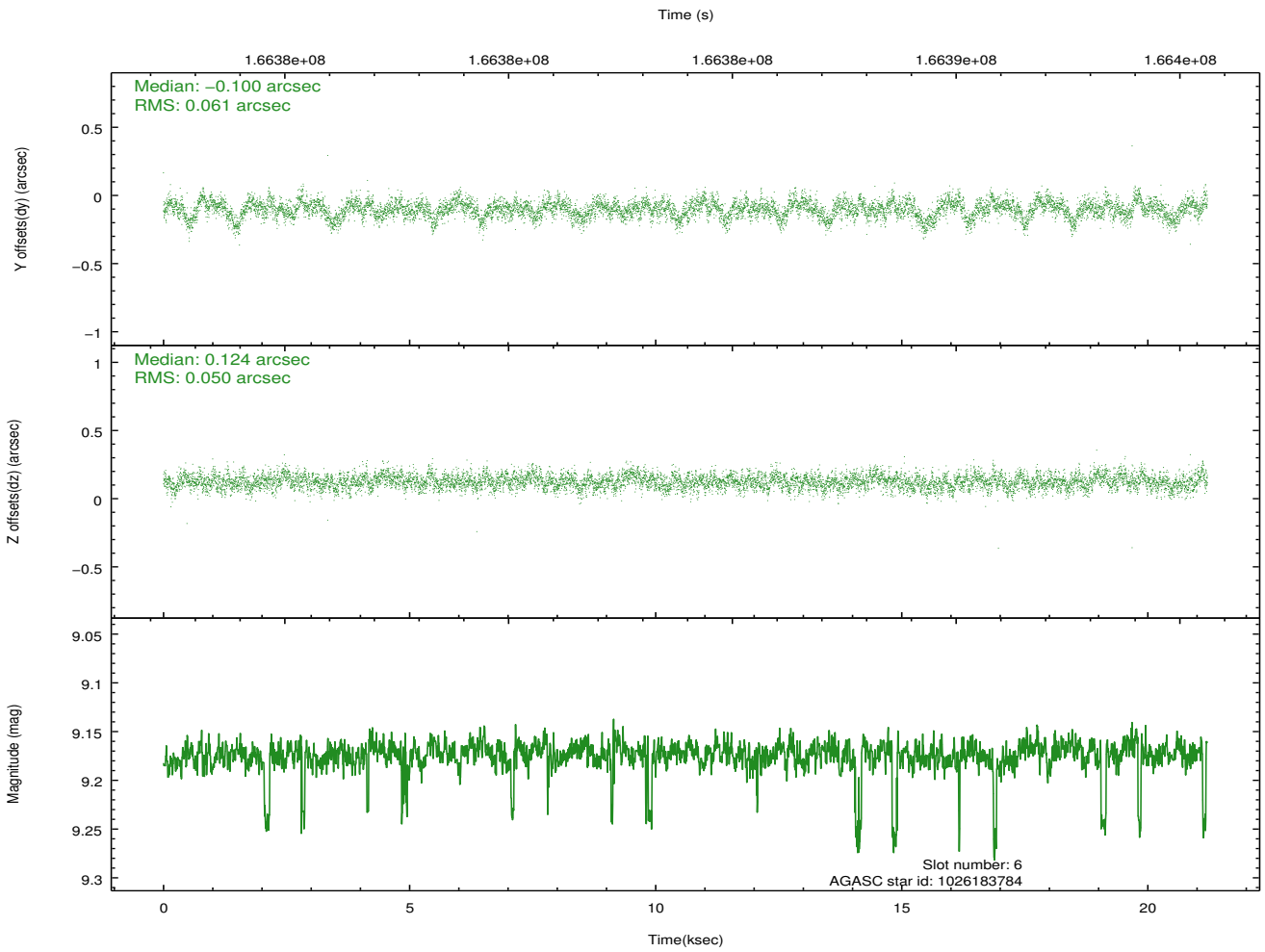
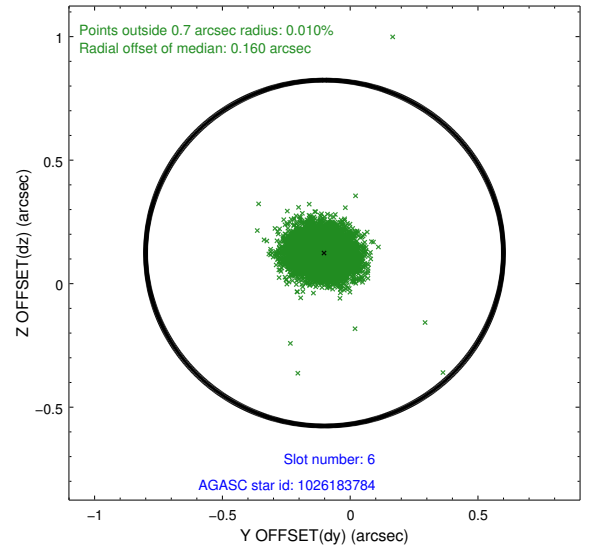
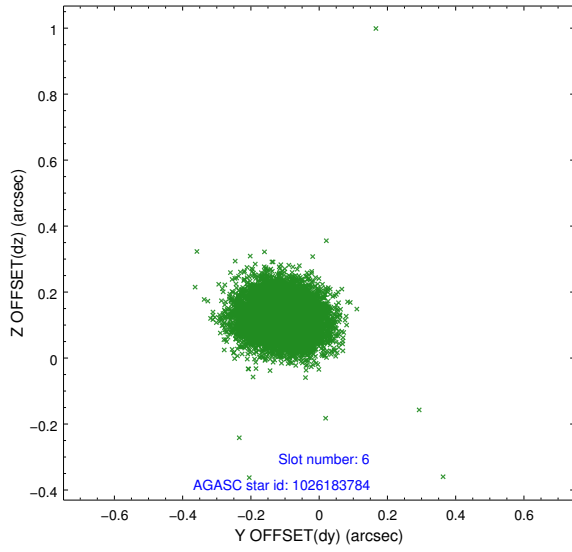
## 2.4.2 Slot 4



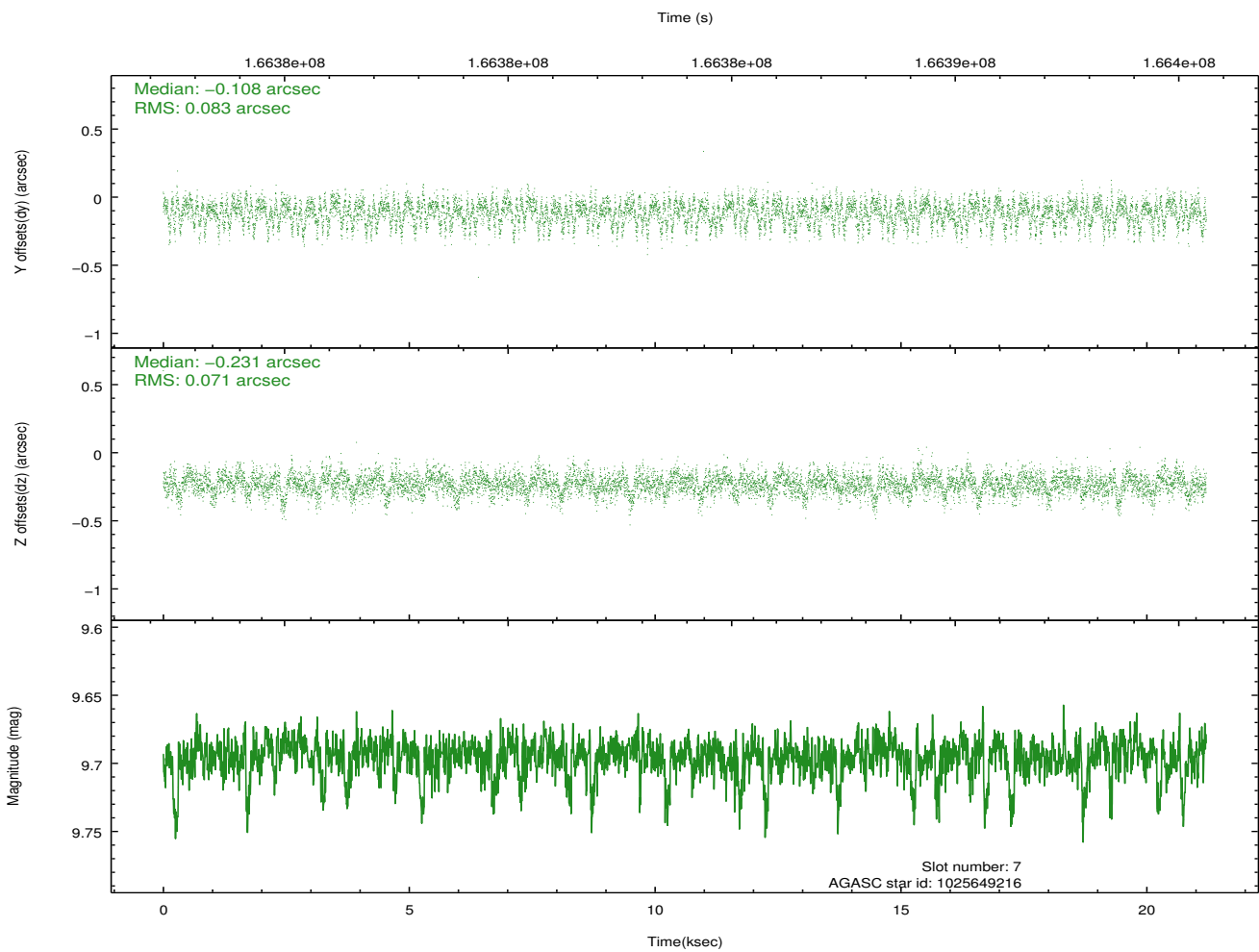
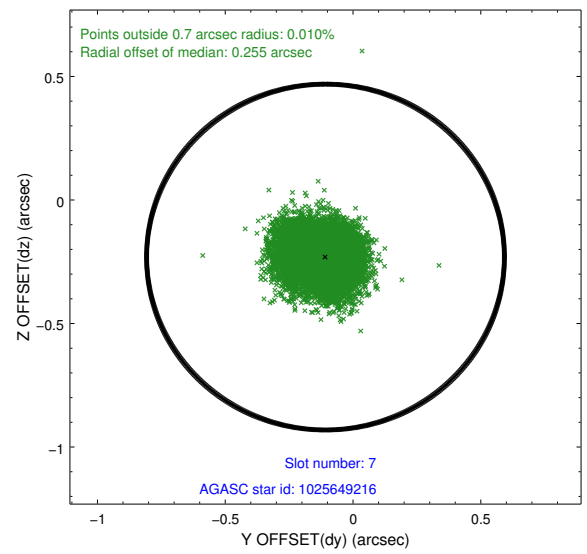
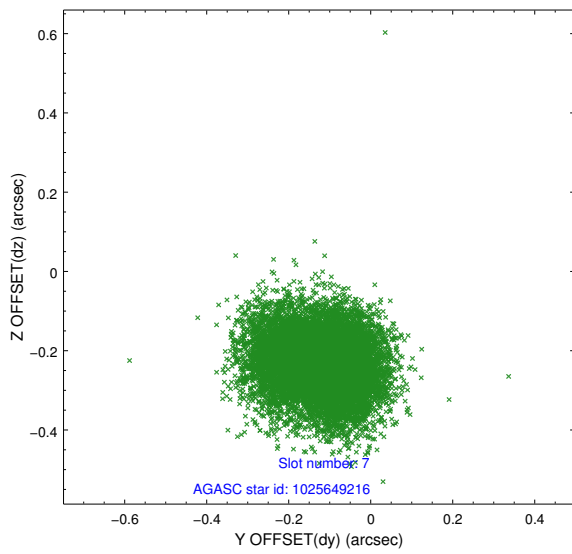
### 2.4.3 Slot 5



## 2.4.4 Slot 6

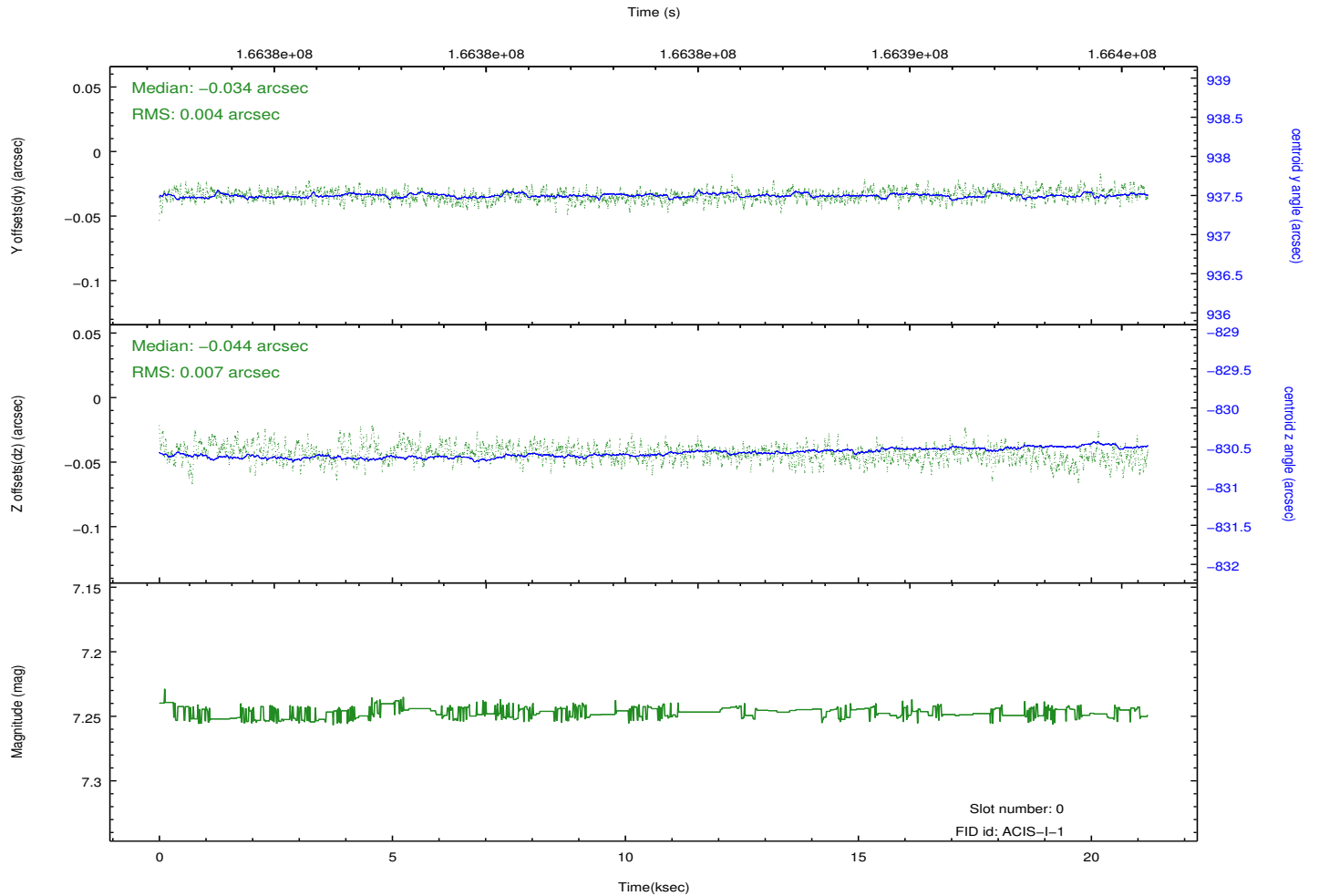
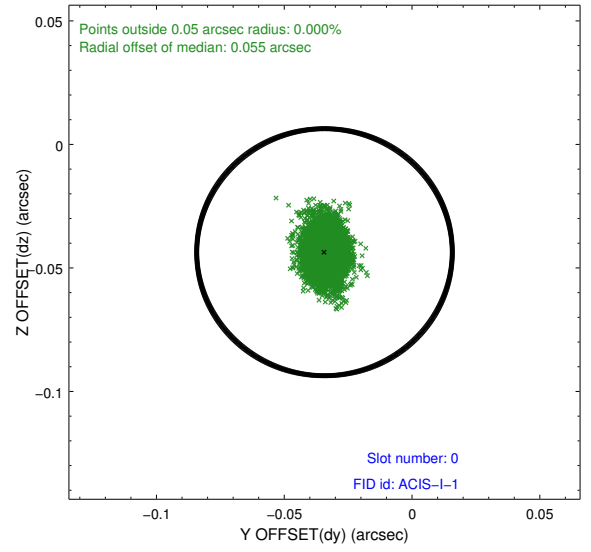
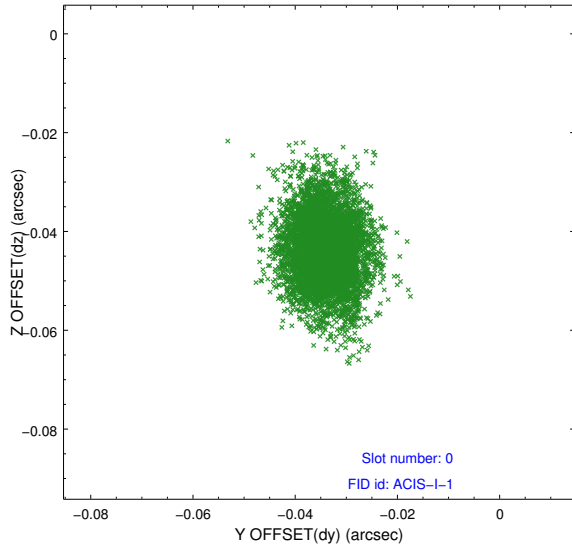


## 2.4.5 Slot 7

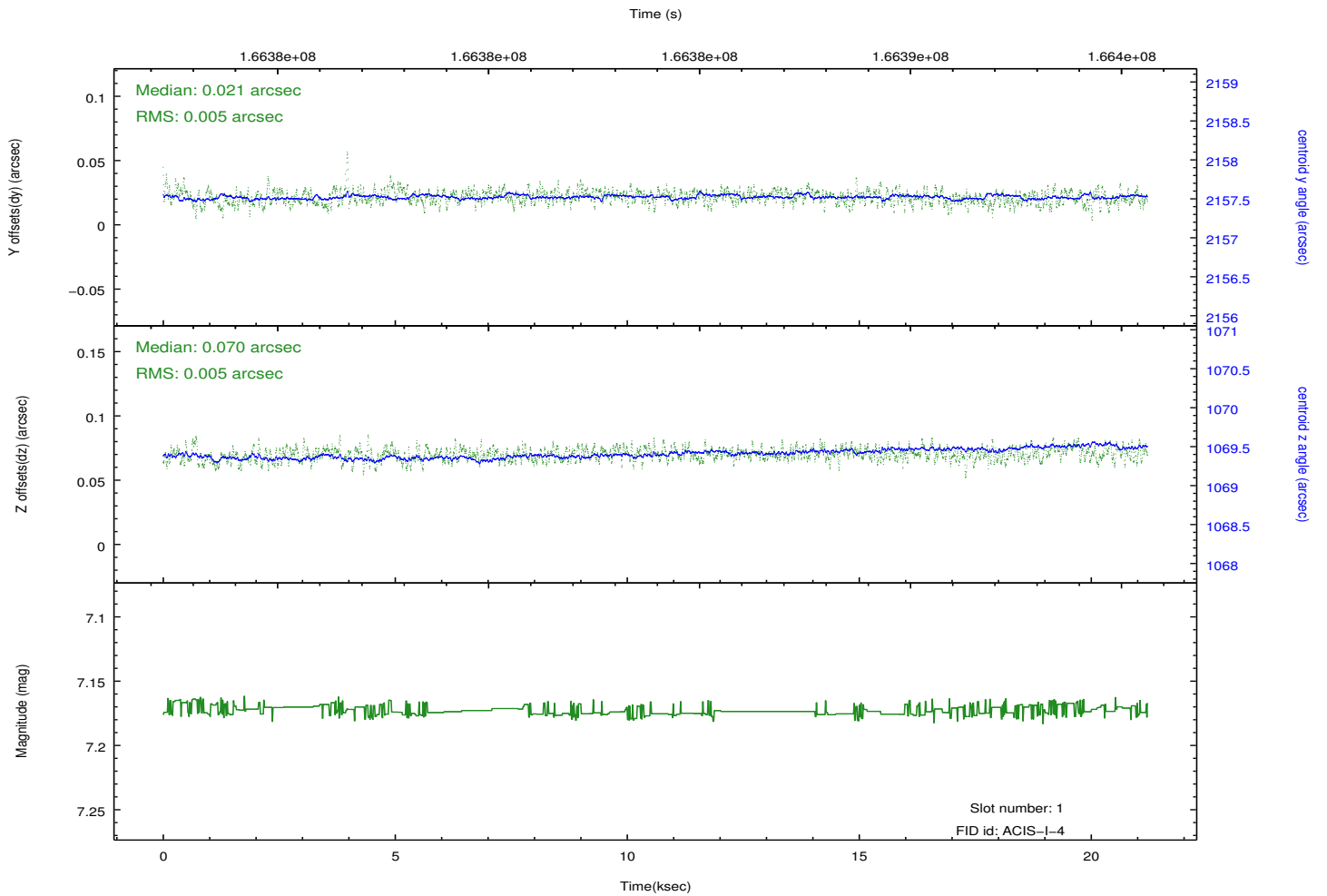
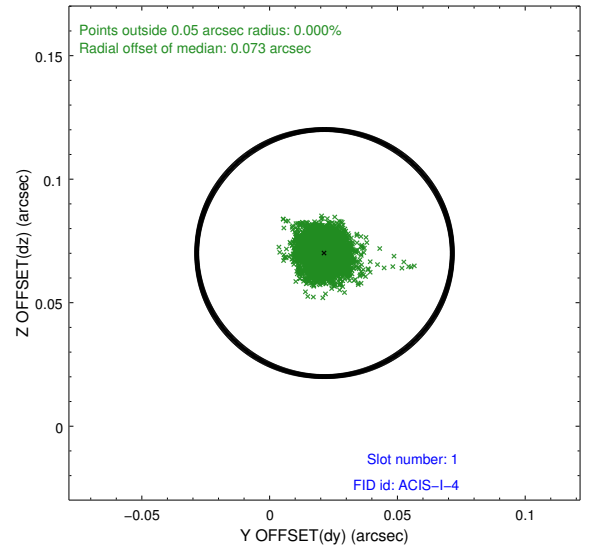
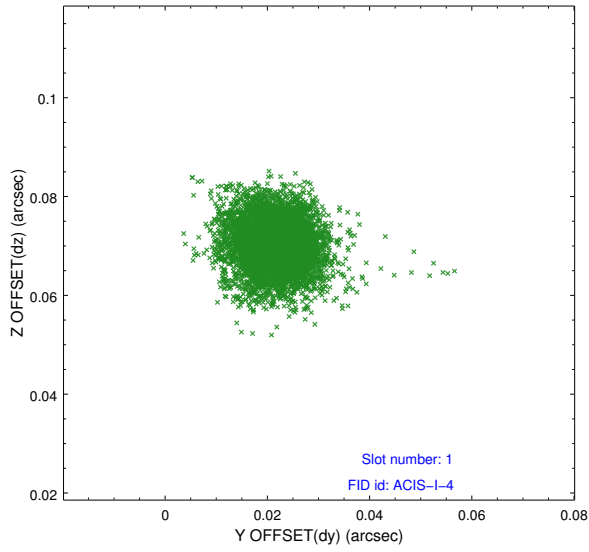


## 2.5 FID Slots

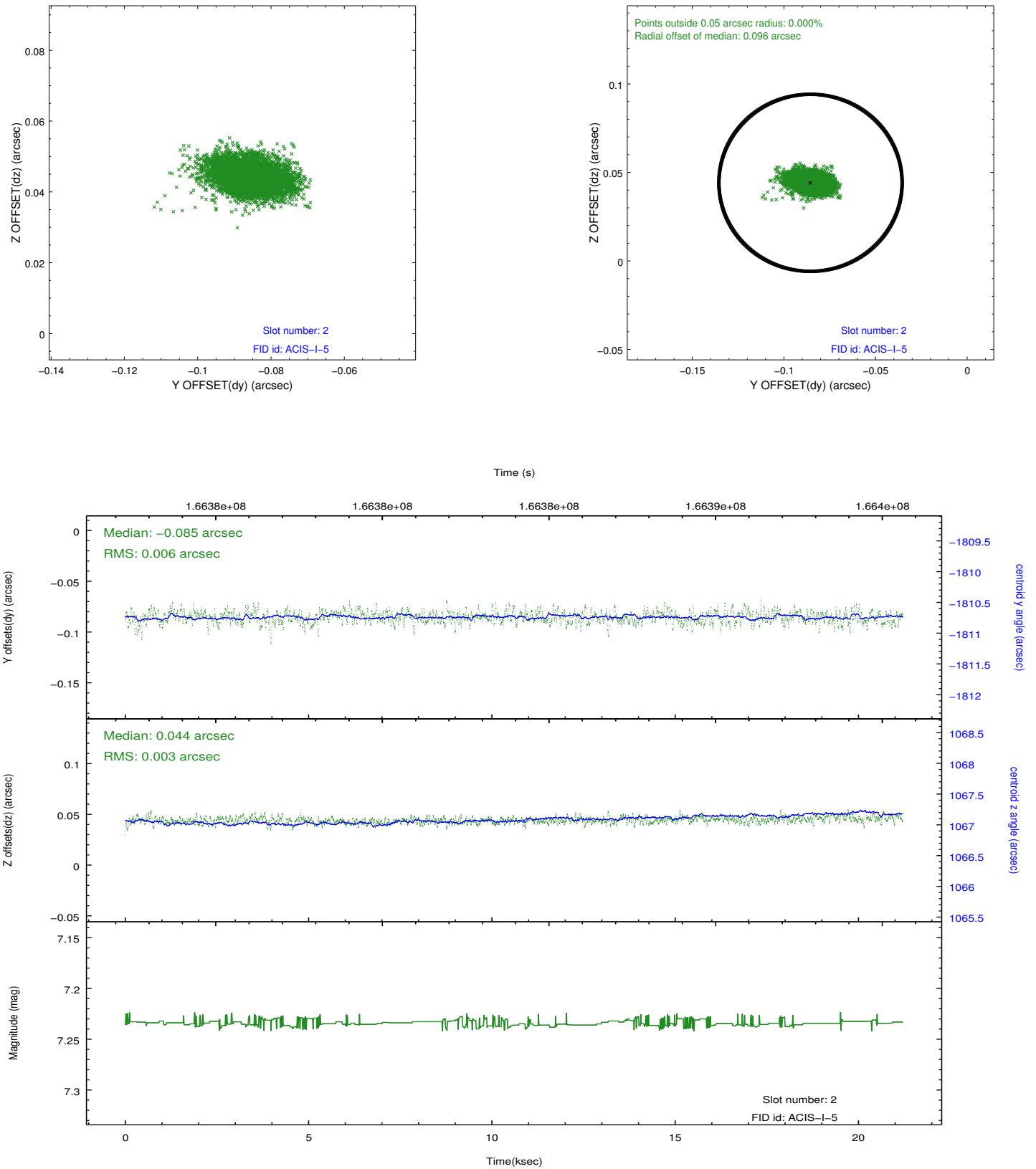
### 2.5.1 Slot 0



## 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)	2012.11.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.178

## A.2 Comments