

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8904 - L2 Version 2  
Chandra X-Ray Center

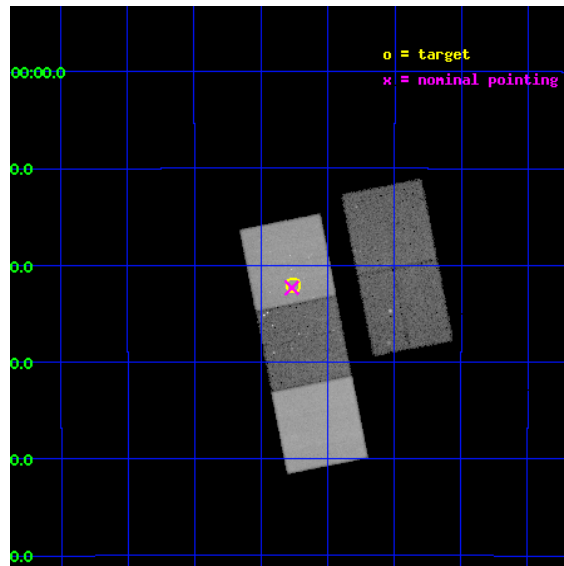
L2 Processing Date : May 16 2012

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# 1 Front

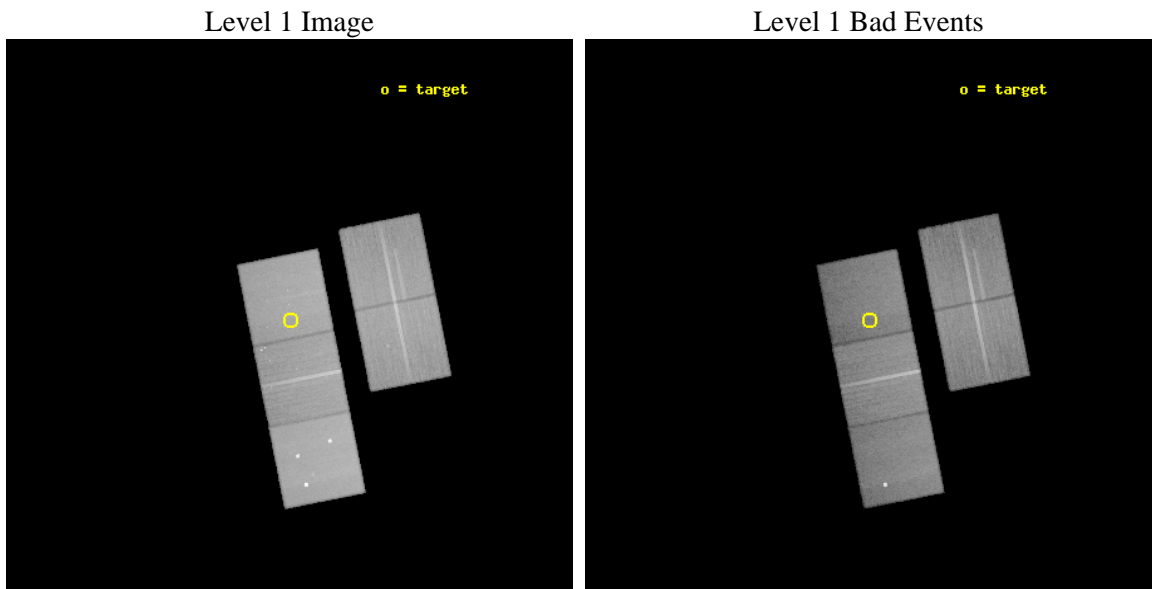
seq_num	200485	Sequence number
obs_id	8904	Observation id
title	Surveying Magnetic Activity in L and T Brown Dwarfs	Proposal title
observer	Prof. Marc Audard	Principal investigator
object	G1 570D	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	224.315417	Observer's specified target RA [deg]
dec_targ	-21.367972	Observer's specified target Dec [deg]
ra_nom	224.3172274837	Nominal RA [deg]
dec_nom	-21.372518209042	Nominal Dec [deg]
roll_nom	258.76309817214	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40157.400308847	Sum of GTIs [s]
livetime	39632.714310364	Livetime [s]
ontime2	40147.977407455	Sum of GTIs [s]
ontime3	40154.259318531	Sum of GTIs [s]
ontime5	40157.400308847	Sum of GTIs [s]
ontime6	40147.977367878	Sum of GTIs [s]
ontime7	40157.400308847	Sum of GTIs [s]
l2events	454677	Number of level 2 events



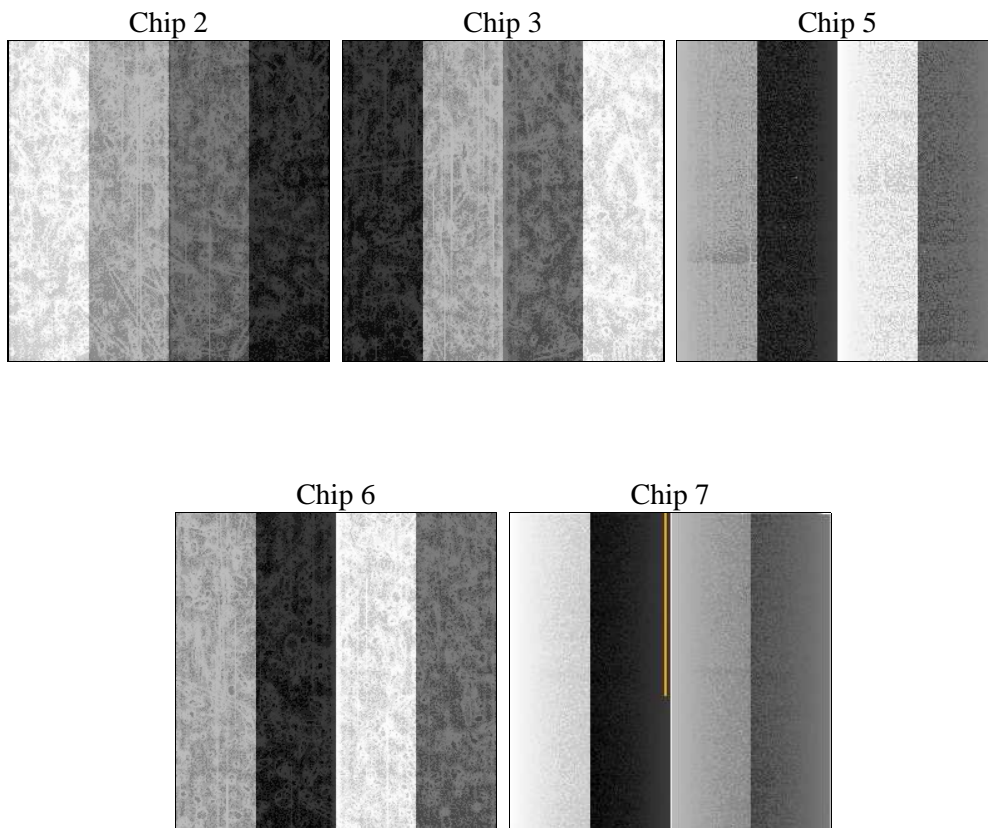
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	40157.400308847	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	40147.977407455	Sum of GTIs [s]
date	2012-05-16T16:26:50	Date and time of file creation	ontime3	40154.259318531	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	40157.400308847	Sum of GTIs [s]
			ontime6	40147.977367878	Sum of GTIs [s]
			ontime7	40157.400308847	Sum of GTIs [s]
			l1events	1790536	Number of level 1 events

### 2.1.4 Events

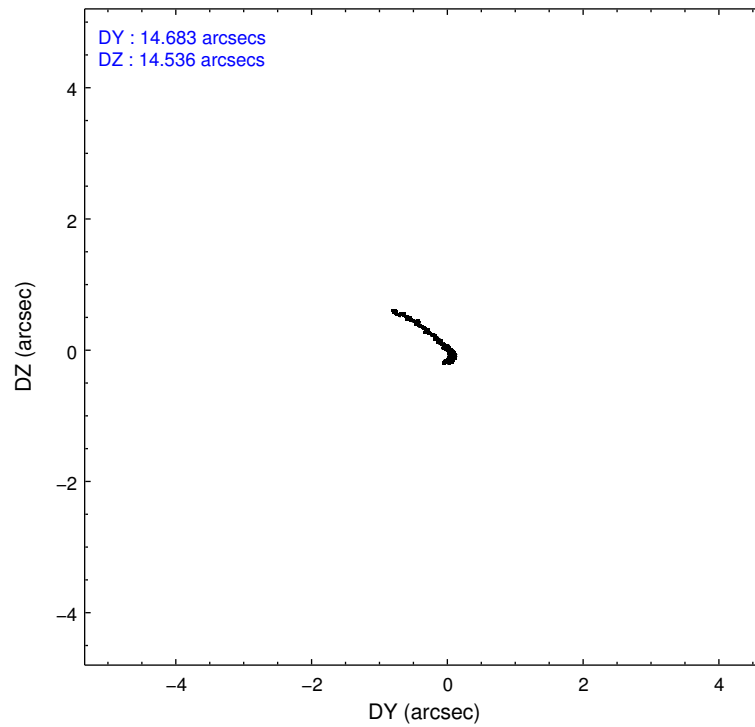
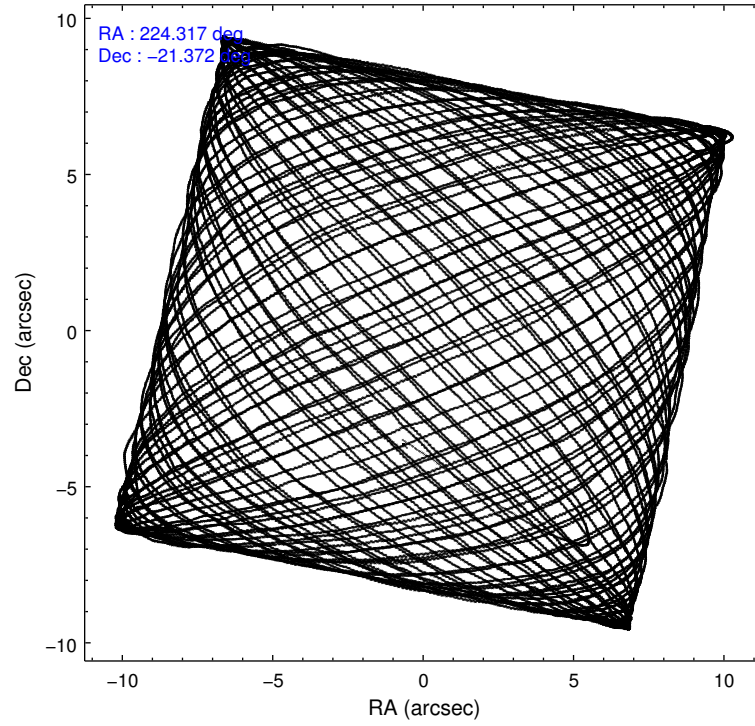
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	328336	303737	467573	326444	364446
rejected events	296436	273578	233847	289331	199024
rejected %	90%	90%	50%	88%	54%

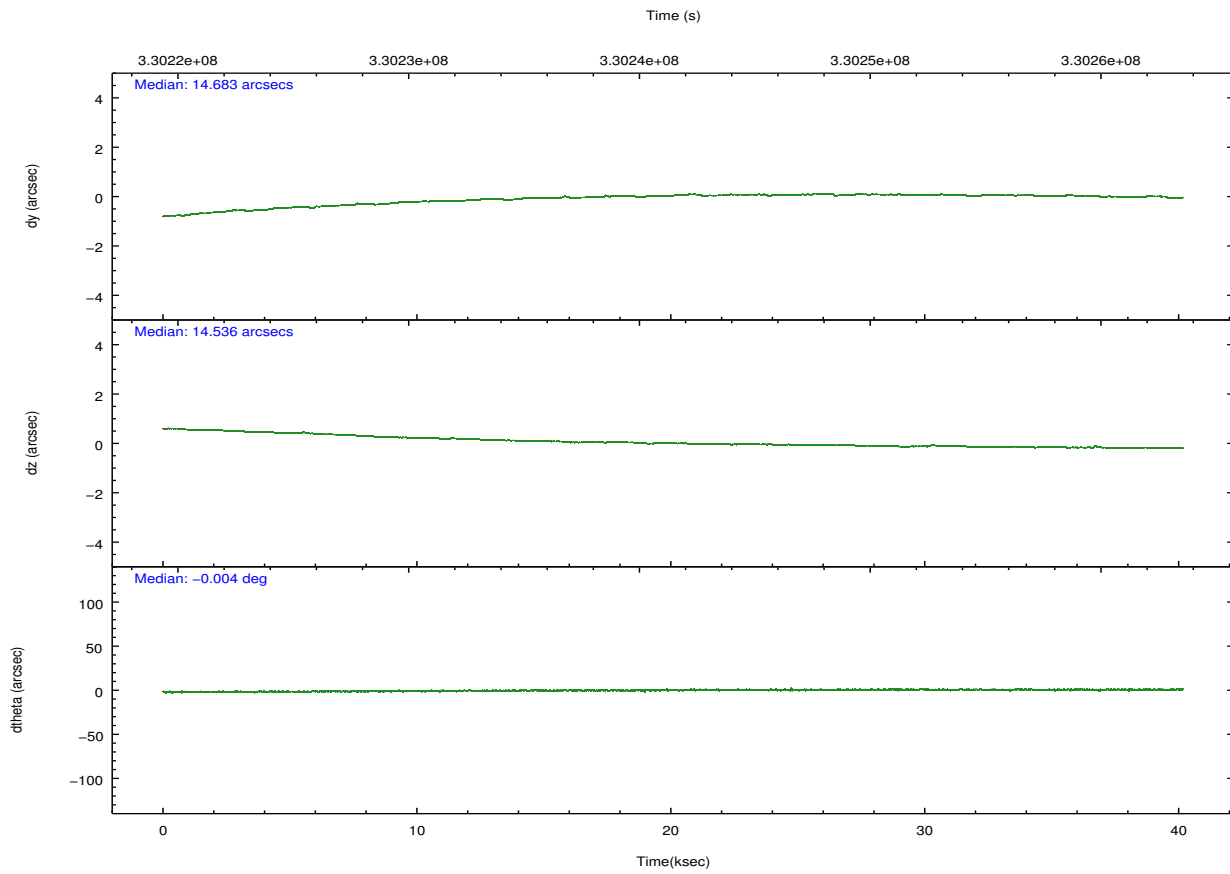
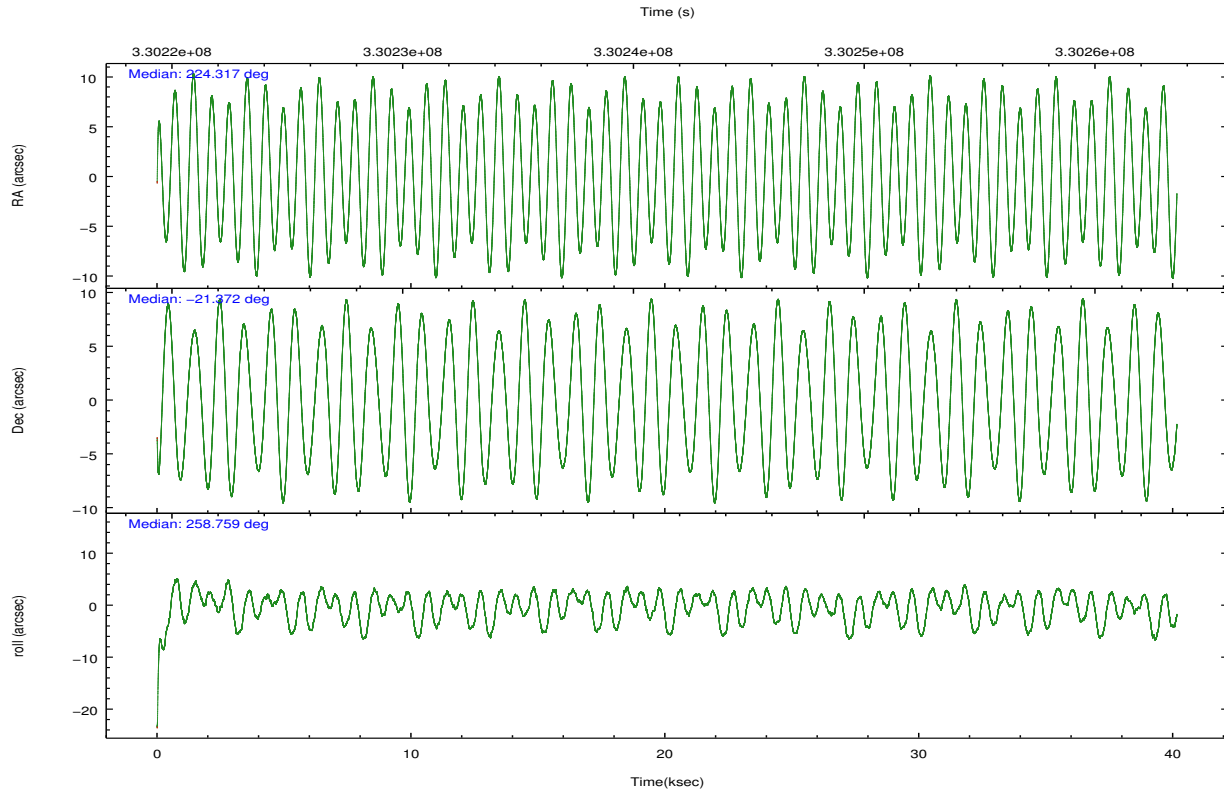
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	11954	10937	30258	15093	16034
	3%	3%	6%	4%	4%
grade 1 events	175	182	800	195	486
	0%	0%	0%	0%	0%
grade 2 events	7711	6538	70442	7785	33627
	2%	2%	15%	2%	9%
grade 3 events	3398	3406	9346	3710	15249
	1%	1%	1%	1%	4%
grade 4 events	3344	3360	9078	3625	15140
	1%	1%	1%	1%	4%
grade 5 events	10411	13038	36362	13324	37769
	3%	4%	7%	4%	10%
grade 6 events	5710	6113	116217	7116	86444
	1%	2%	24%	2%	23%
grade 7 events	285633	260163	195070	275596	159697
	86%	85%	41%	84%	43%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	224.307413	224.3172274836999	Subarray requested	NONE	NONE
[deg] Pointing Dec	-21.346749	-21.37251820904196	Alternating exposures requested	N	N
[deg] Pointing Roll	258.602901	258.7630981721361	[s] Primary exposure time	0.000000	3.1
[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)	330221545.184000	330220420.96736			
Observation start date	2008-06-19T00:11:20	2008-06-18T23:53:40			
[s] Observation end time (MET)	330261545.184000	330262603.81943			
Observation end date	2008-06-19T11:18:00	2008-06-19T11:36:43			
Read mode	TIMED	TIMED			

## 2.3 Aspect



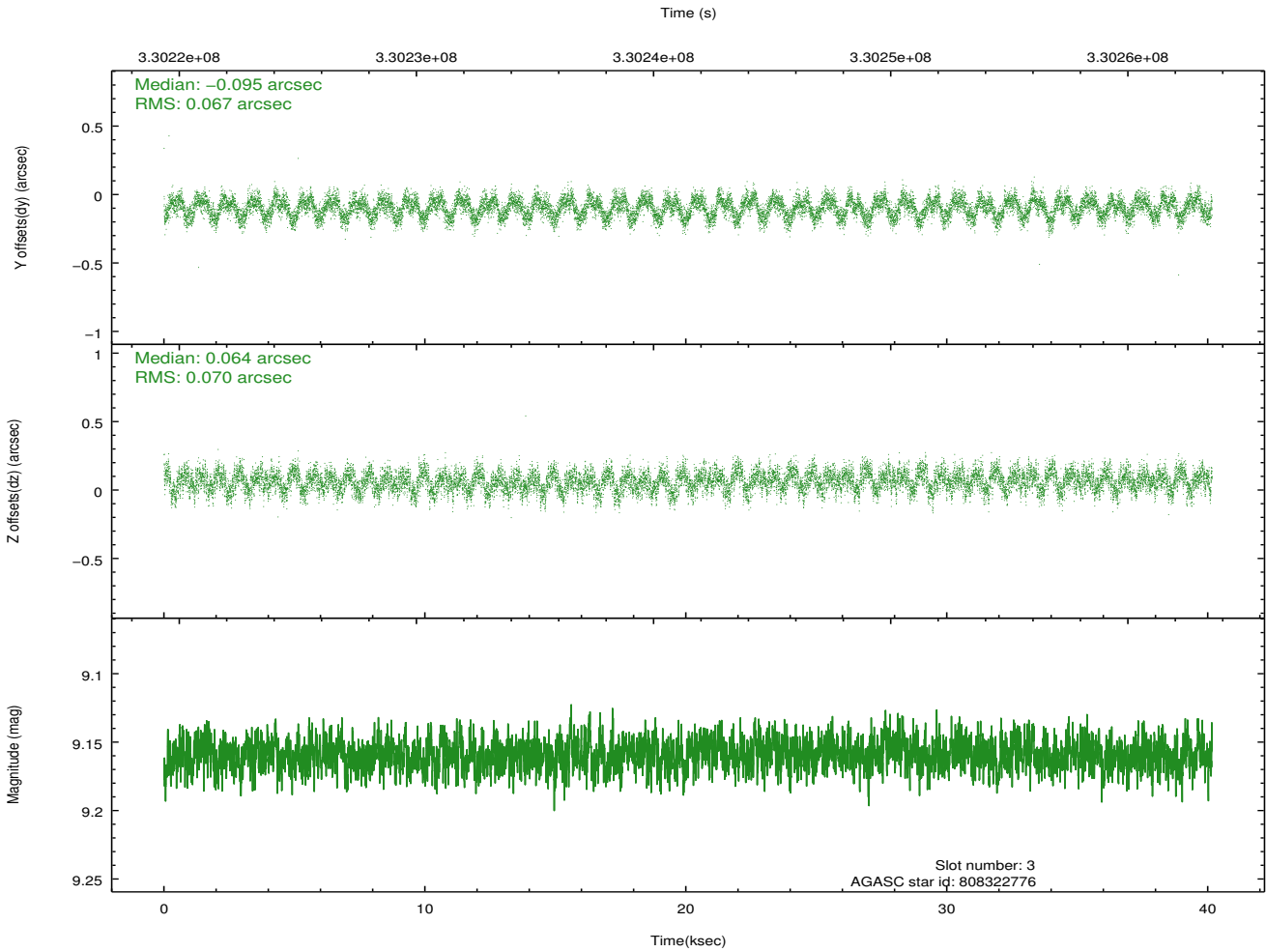
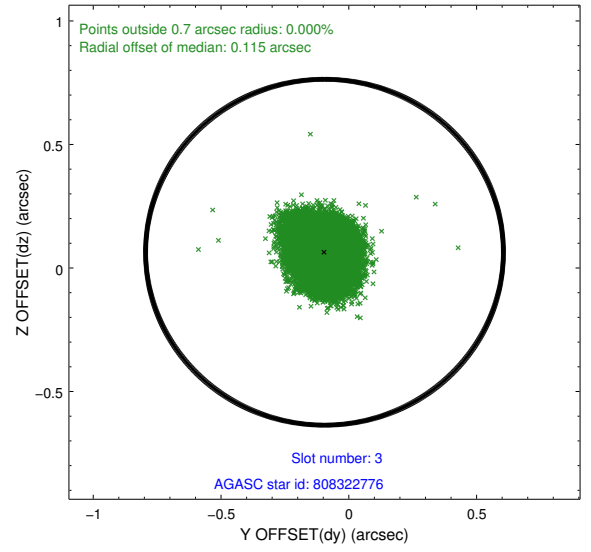
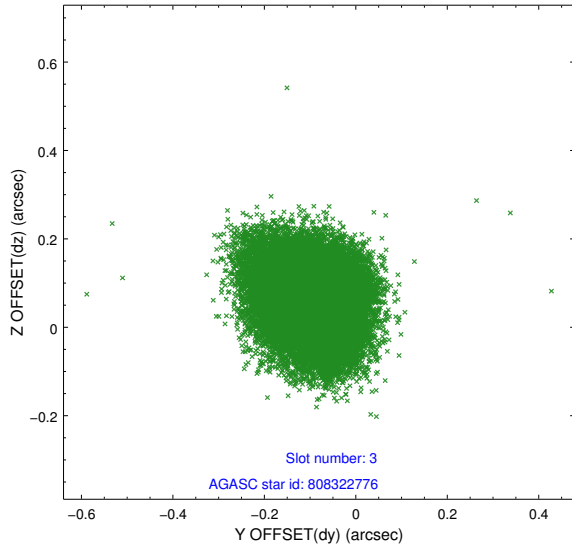


### Slot Statistics

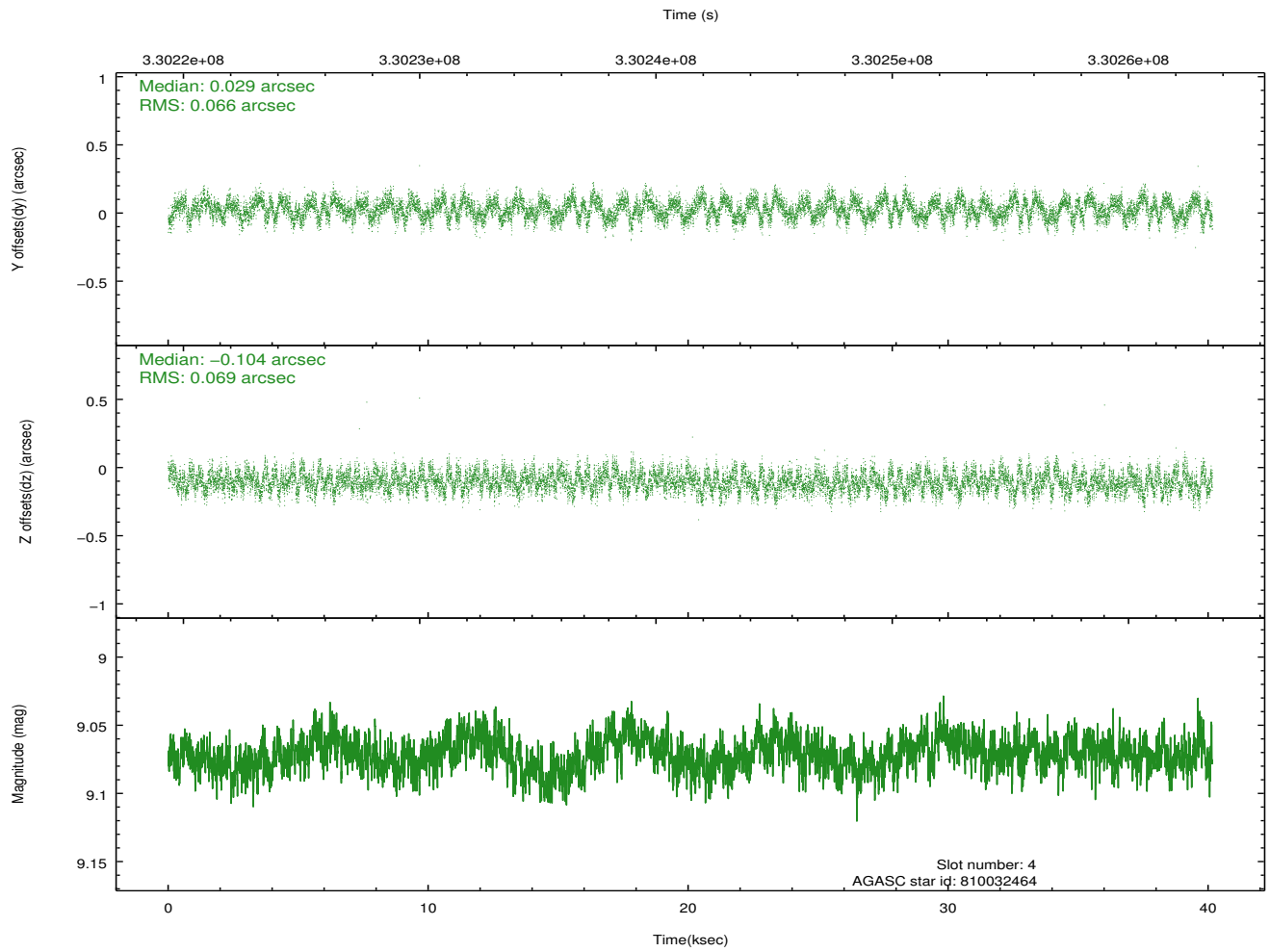
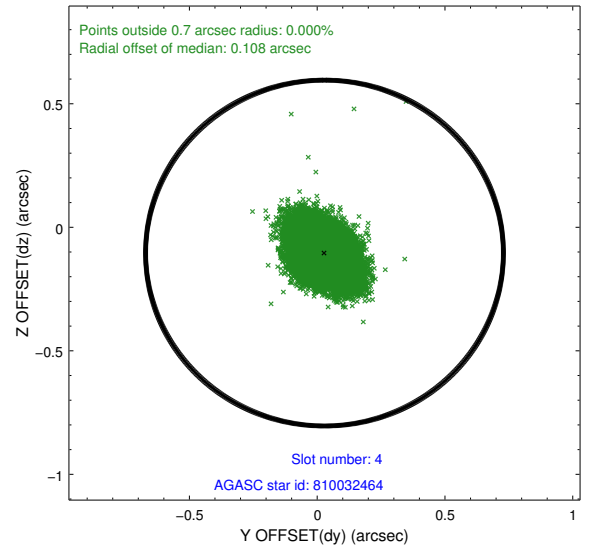
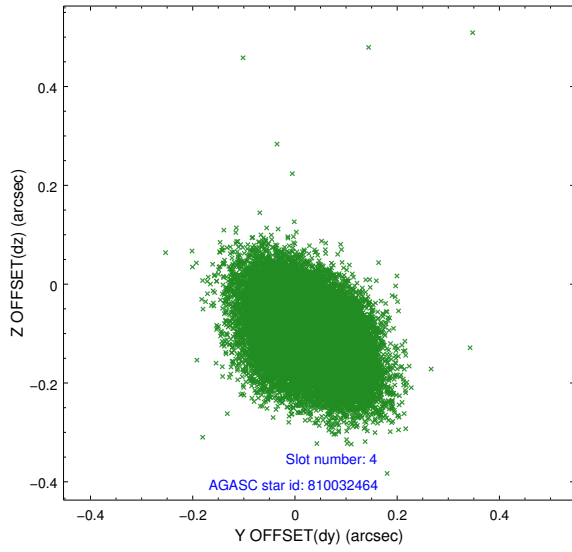
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	9796	-0.076	-0.025	0.009	0.018	0.000000	0.000000	-767.59	-1735.96
1	FID	ACIS-S-4	6.98	9796	0.168	0.043	0.011	0.017	0.000000	0.000000	2145.91	172.59
2	FID	ACIS-S-5	7.01	9792	-0.125	-0.009	0.012	0.018	0.000000	0.000000	-1820.48	166.21
3	GUIDE	808322776	9.16	19577	-0.095	0.064	0.104	0.162	223.762851	-21.355764	396.27	-1782.72
4	GUIDE	810032464	9.07	19578	0.029	-0.104	0.102	0.162	224.942617	-21.179299	-1007.93	1971.92
5	GUIDE	810032968	9.75	19565	0.103	0.216	0.112	0.184	224.031917	-21.243858	-179.22	-978.67
6	GUIDE	810029880	8.01	19584	0.006	-0.096	0.074	0.118	224.100918	-21.985287	2390.38	-221.14
7	GUIDE	810026592	10.25	19559	-0.039	-0.079	0.224	0.337	224.936114	-20.863938	-2117.42	1730.85

## 2.4 Star Slots

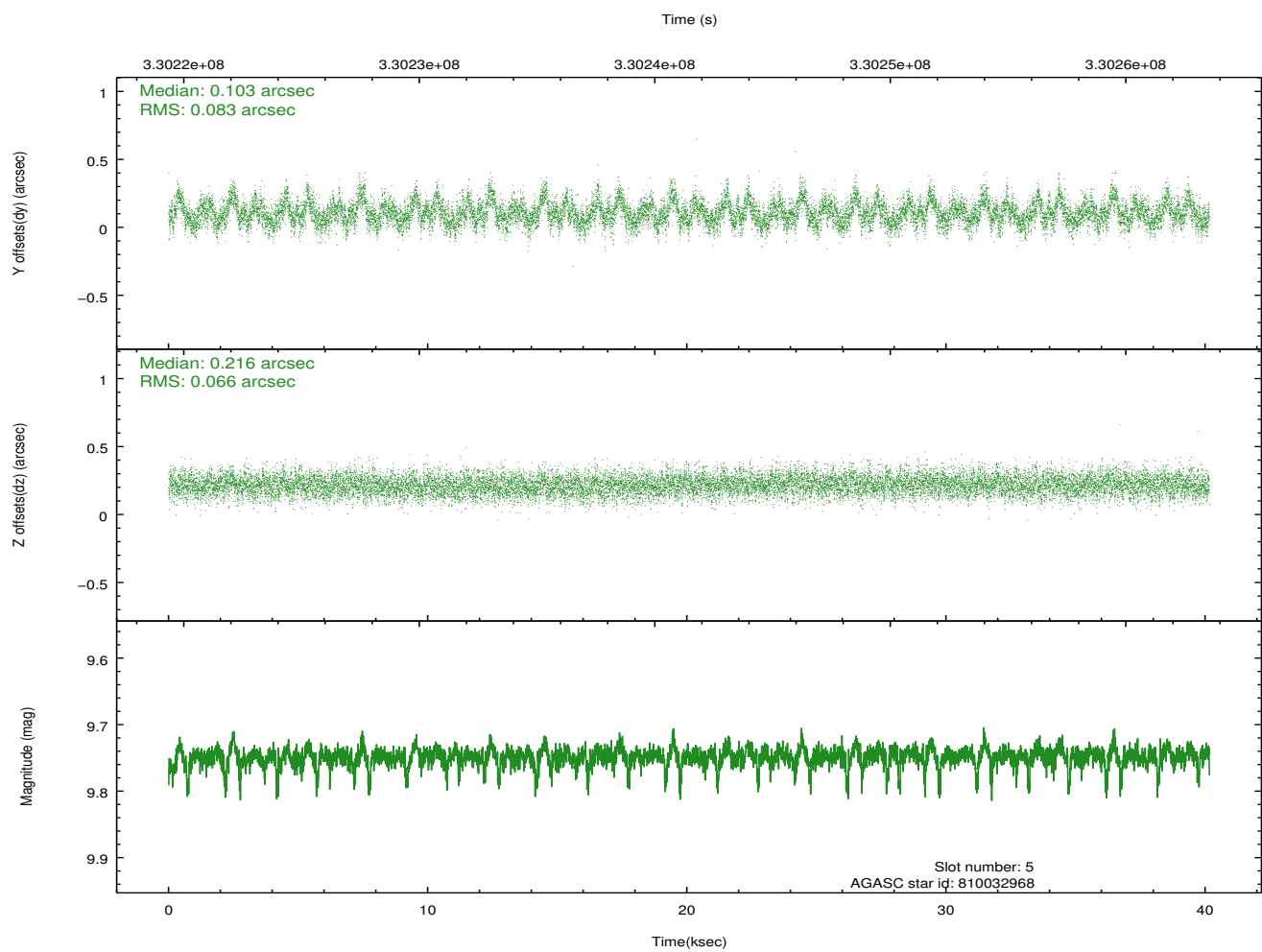
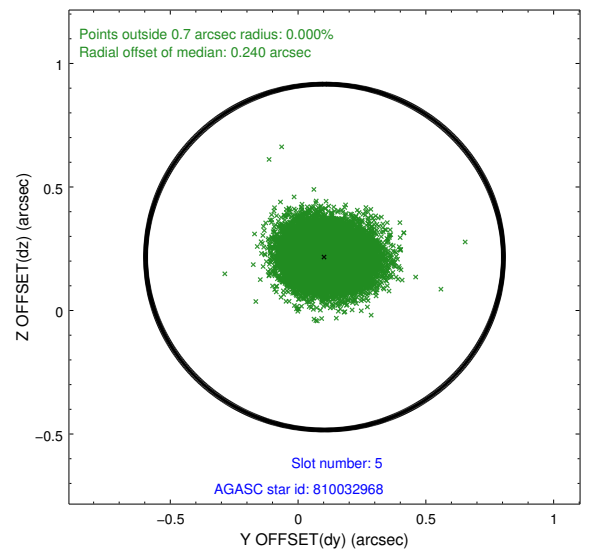
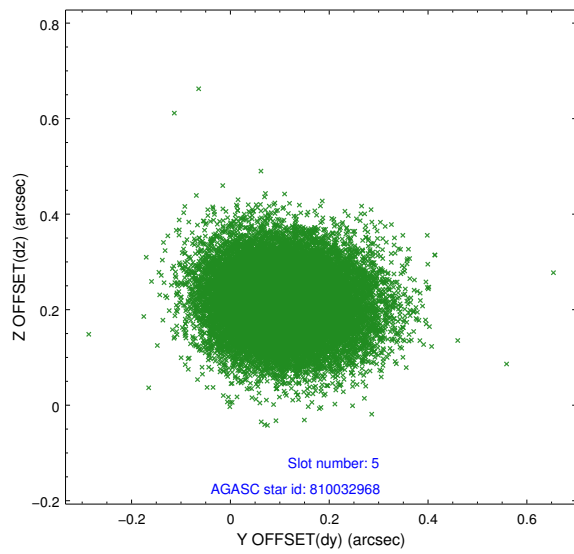
### 2.4.1 Slot 3



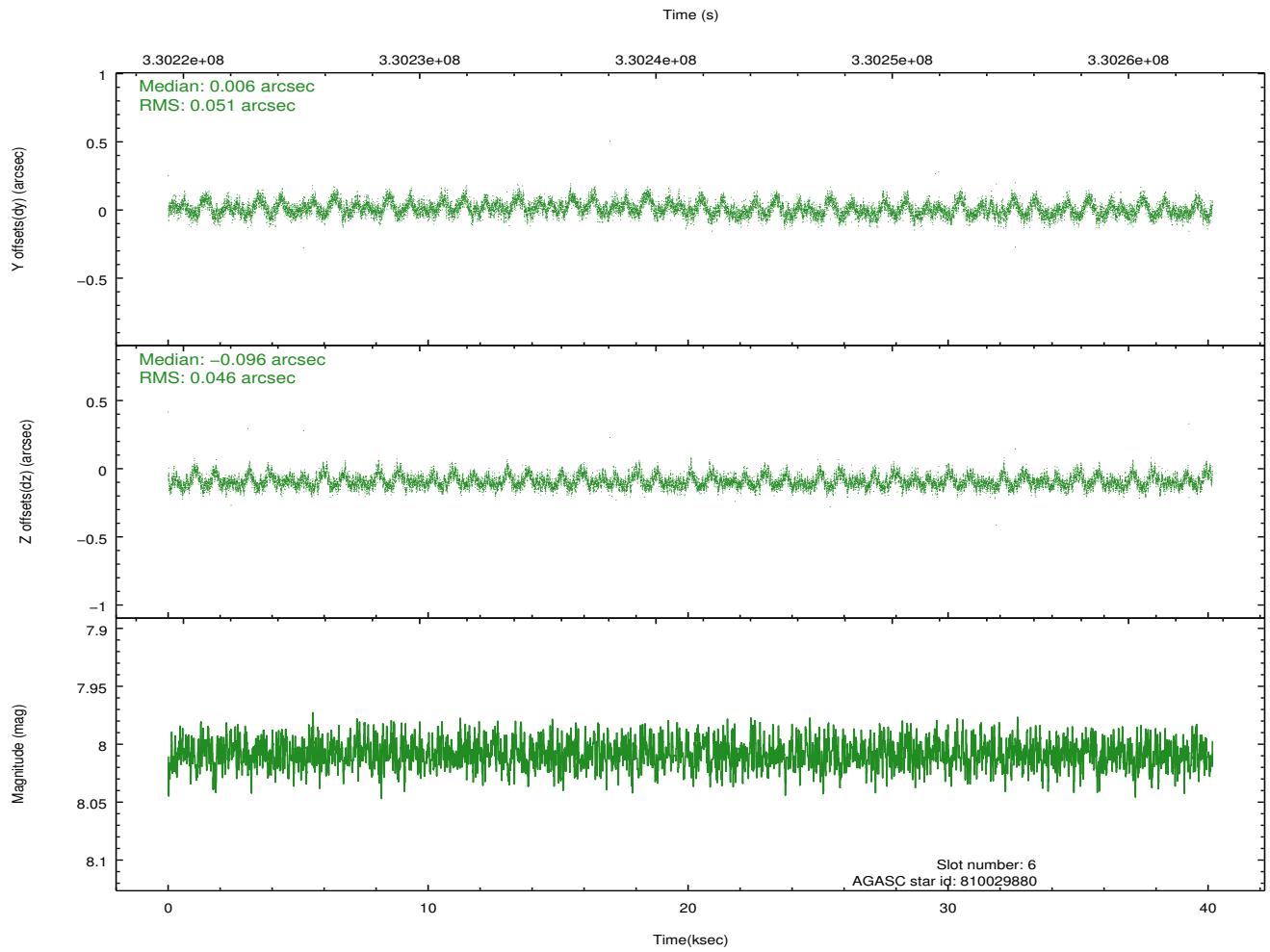
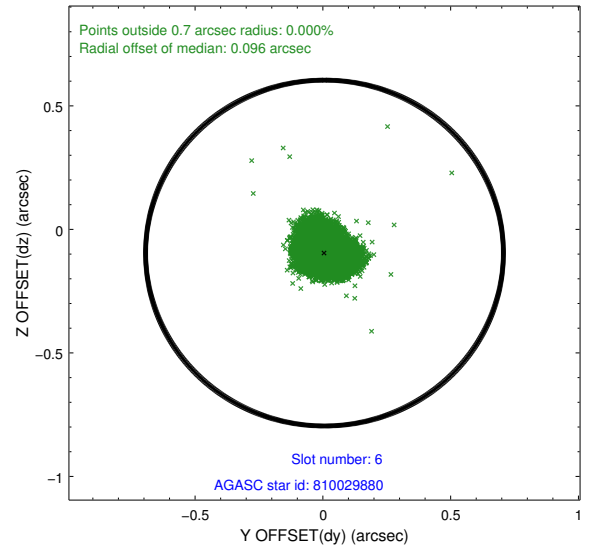
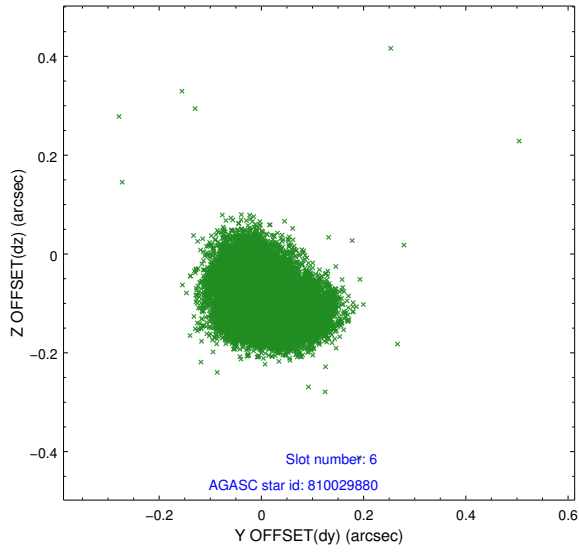
### 2.4.2 Slot 4



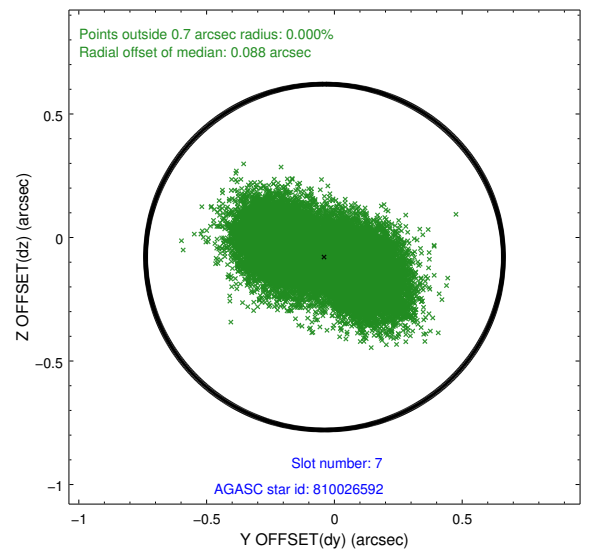
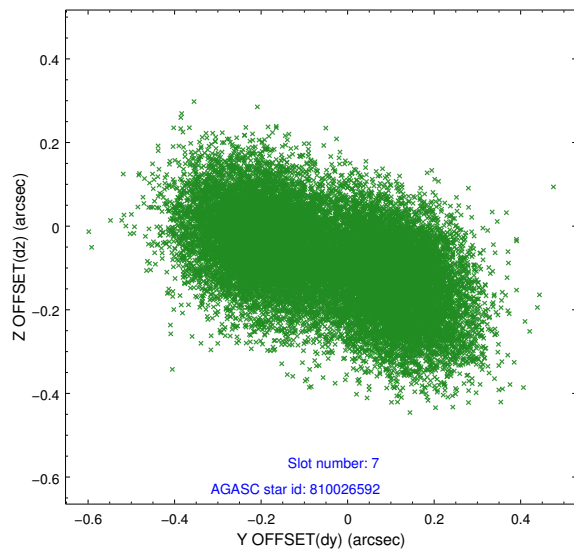
### 2.4.3 Slot 5



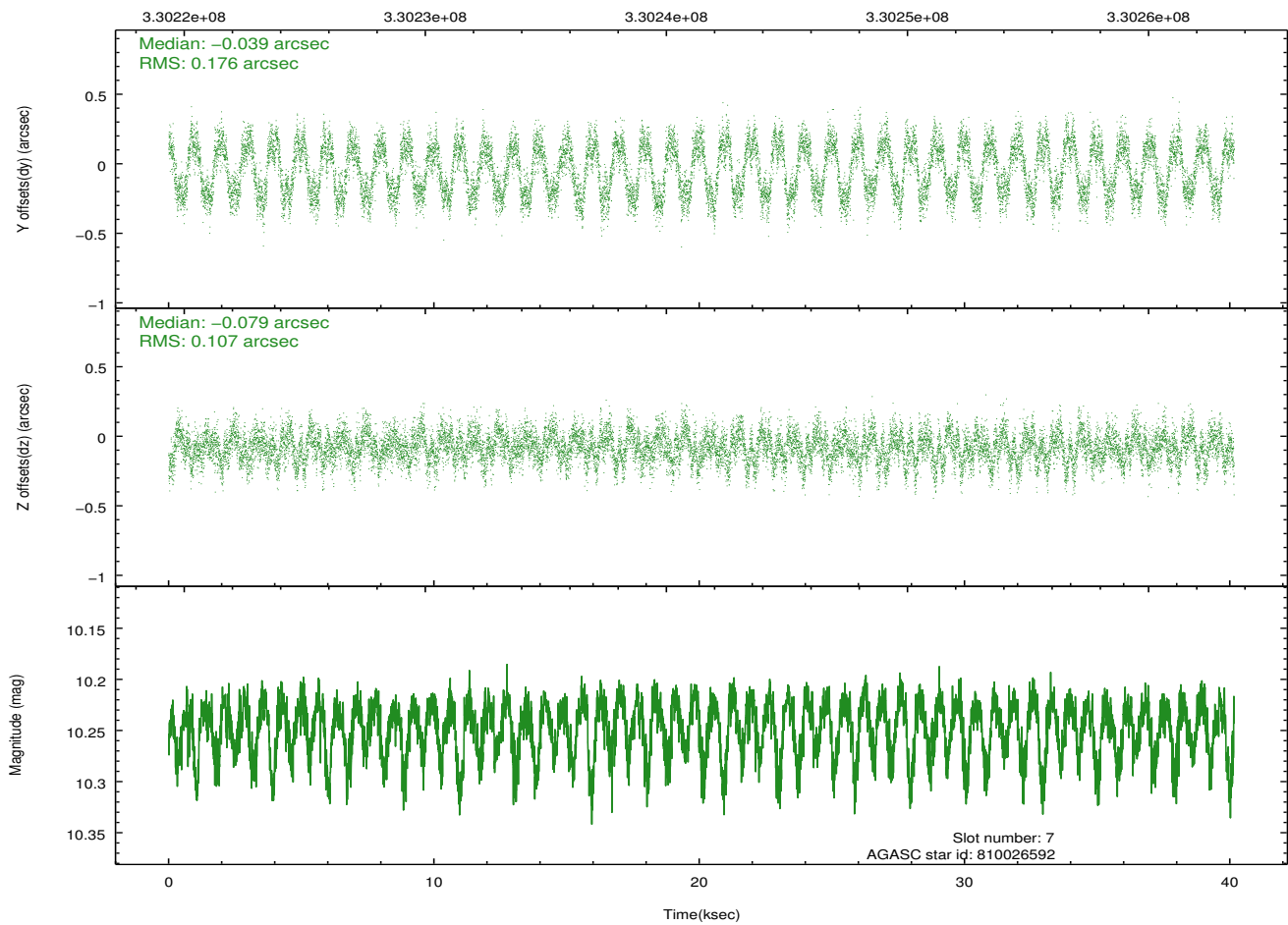
### 2.4.4 Slot 6



## 2.4.5 Slot 7

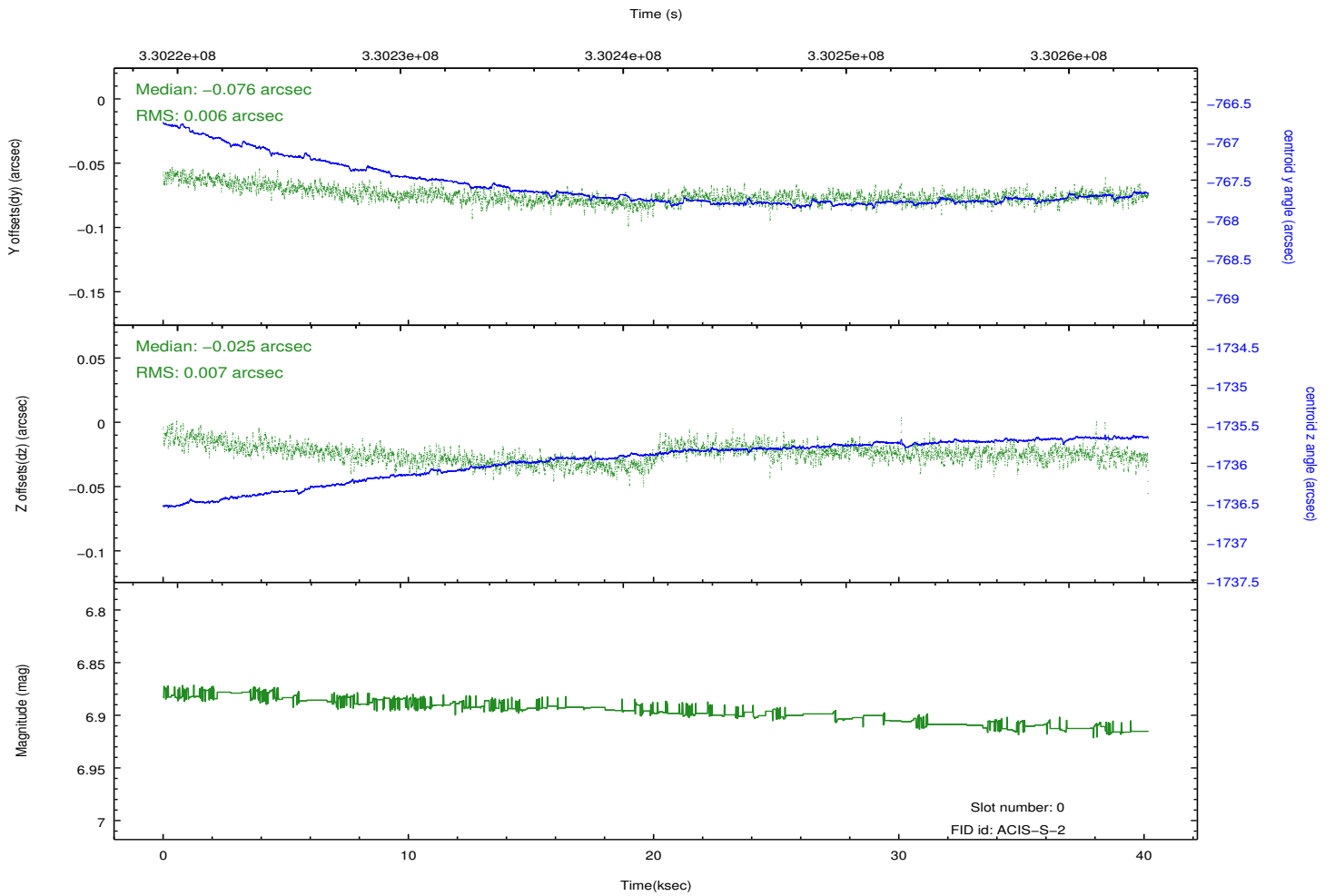
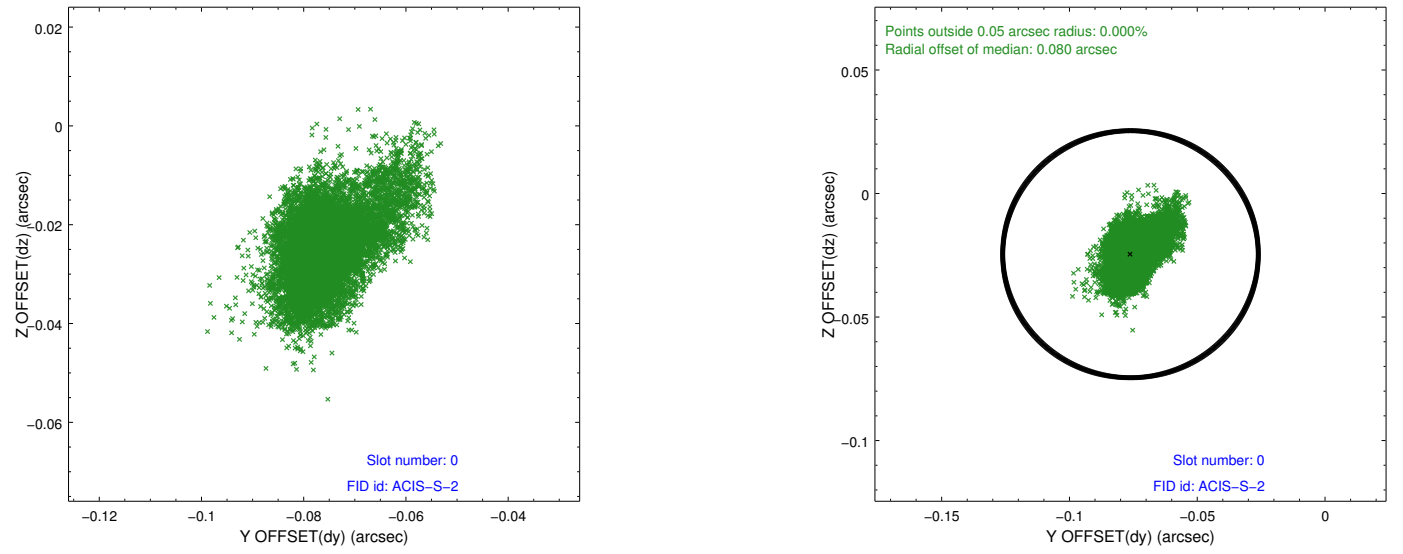


Time (s)

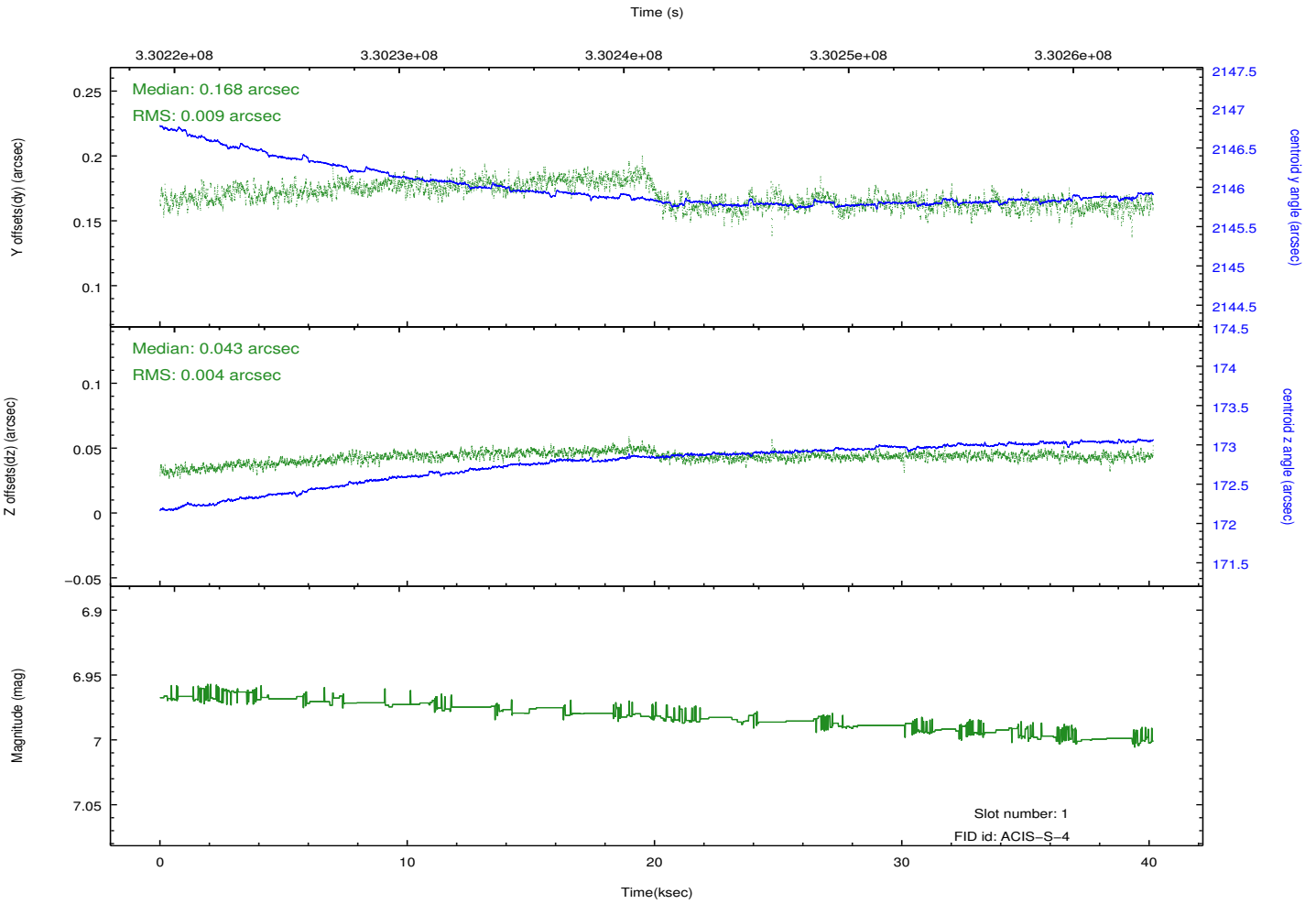
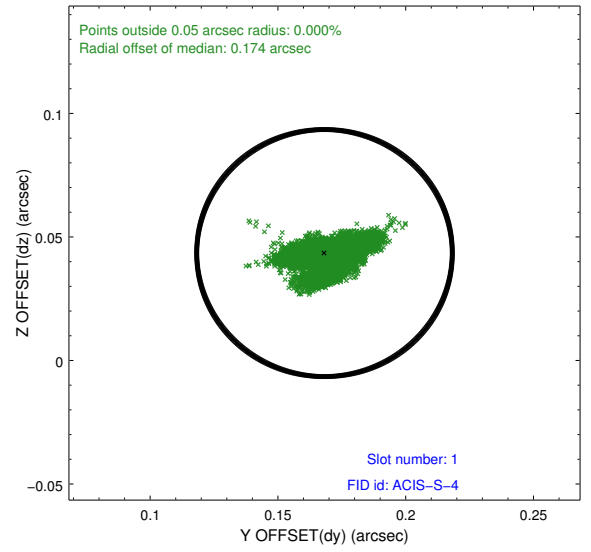
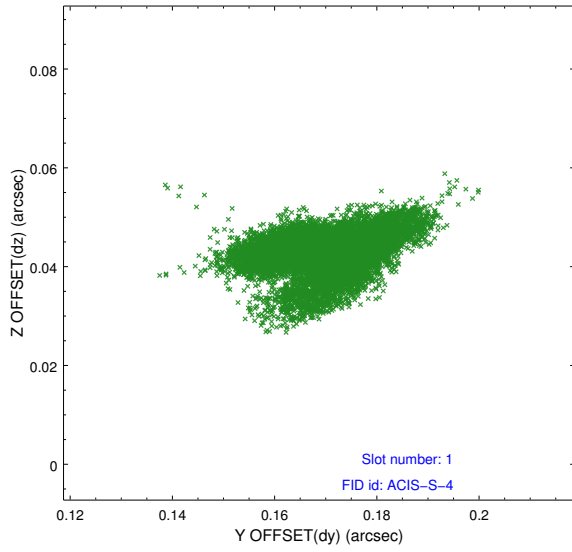


## 2.5 FID Slots

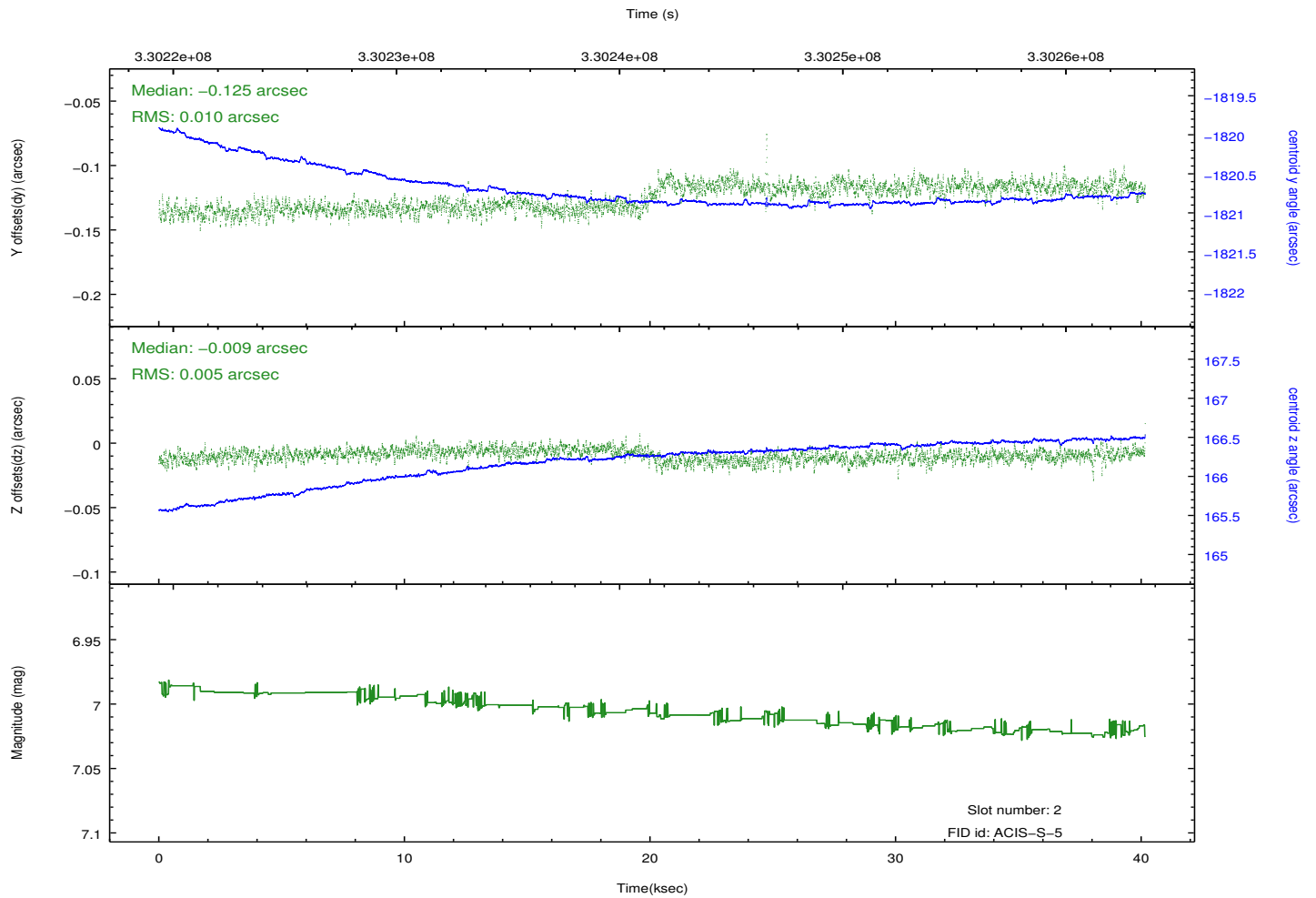
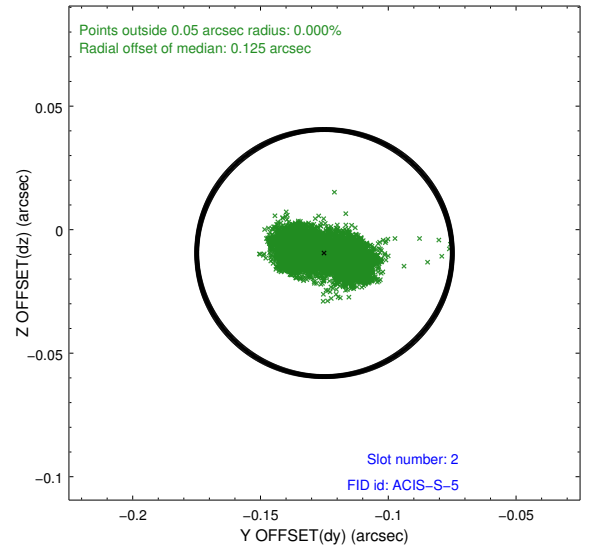
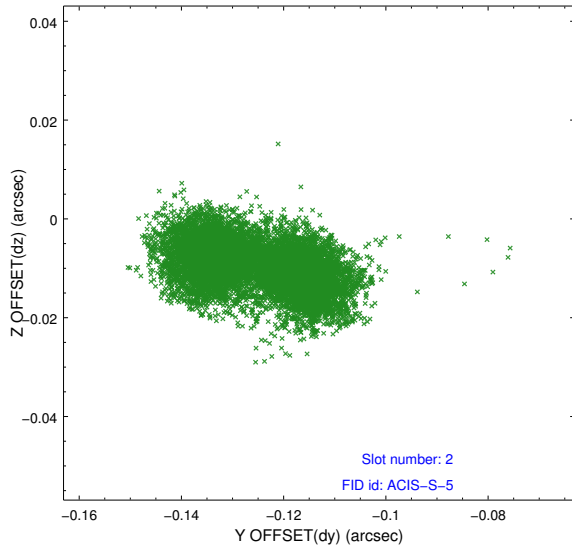
### 2.5.1 Slot 0



## 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)	2012.05.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.1574003

## A.2 Comments

Joint Proposal: NRAO