

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 6079 - L2 Version 3  
Chandra X-Ray Center

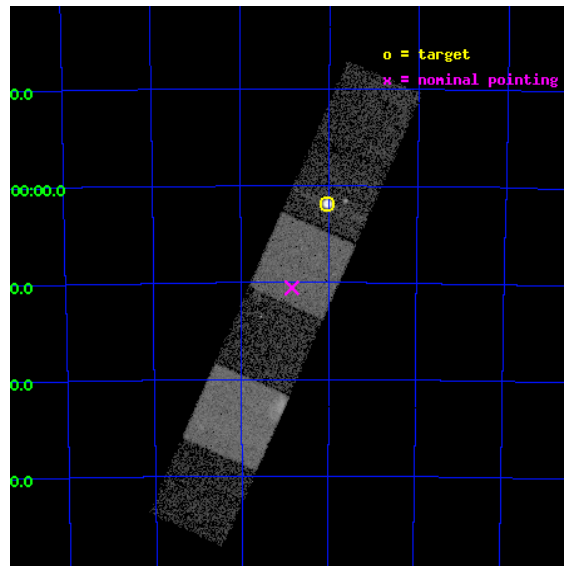
L2 Processing Date : Dec 14 2012

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# 1 Front

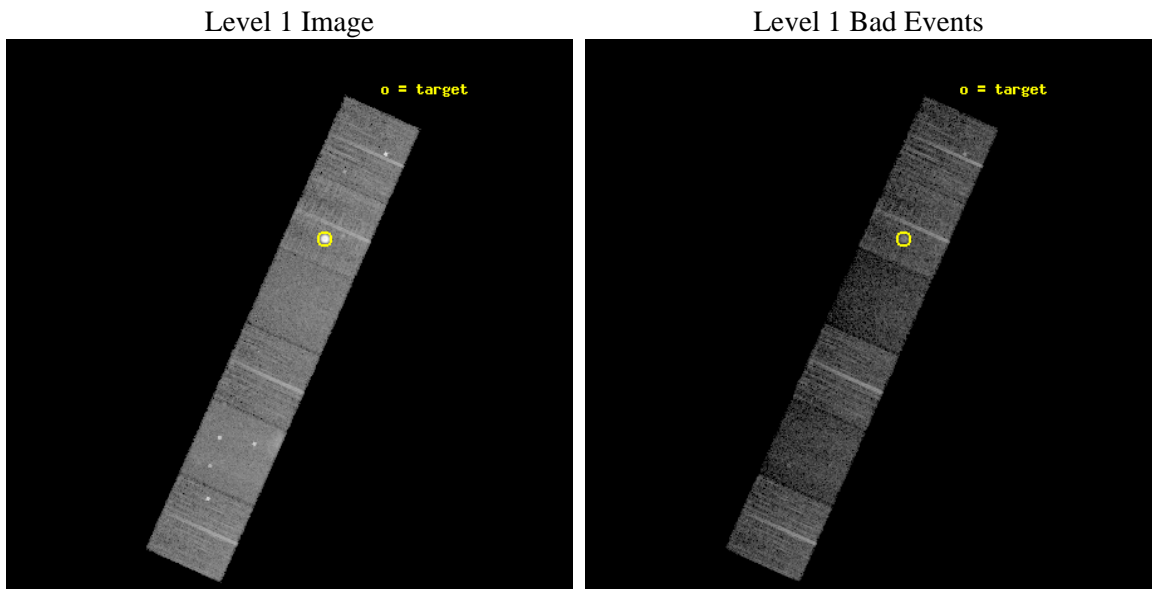
seq_num	590406	Sequence number
obs_id	6079	Observation id
title	AO6A ACIS-S Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[S4,-120,-9.15,0,0]	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.210138508107	Nominal RA [deg]
dec_nom	-72.175993492517	Nominal Dec [deg]
roll_nom	293.97526172342	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7954.9588756263	Sum of GTIs [s]
livetime	7854.228396442	Livetime [s]
ontime4	7951.8820653558	Sum of GTIs [s]
ontime5	7955.0409556329	Sum of GTIs [s]
ontime6	7954.9999156296	Sum of GTIs [s]
ontime7	7955.0819956362	Sum of GTIs [s]
ontime8	7954.9588756263	Sum of GTIs [s]
ontime9	7954.9178356528	Sum of GTIs [s]
l2events	96740	Number of level 2 events



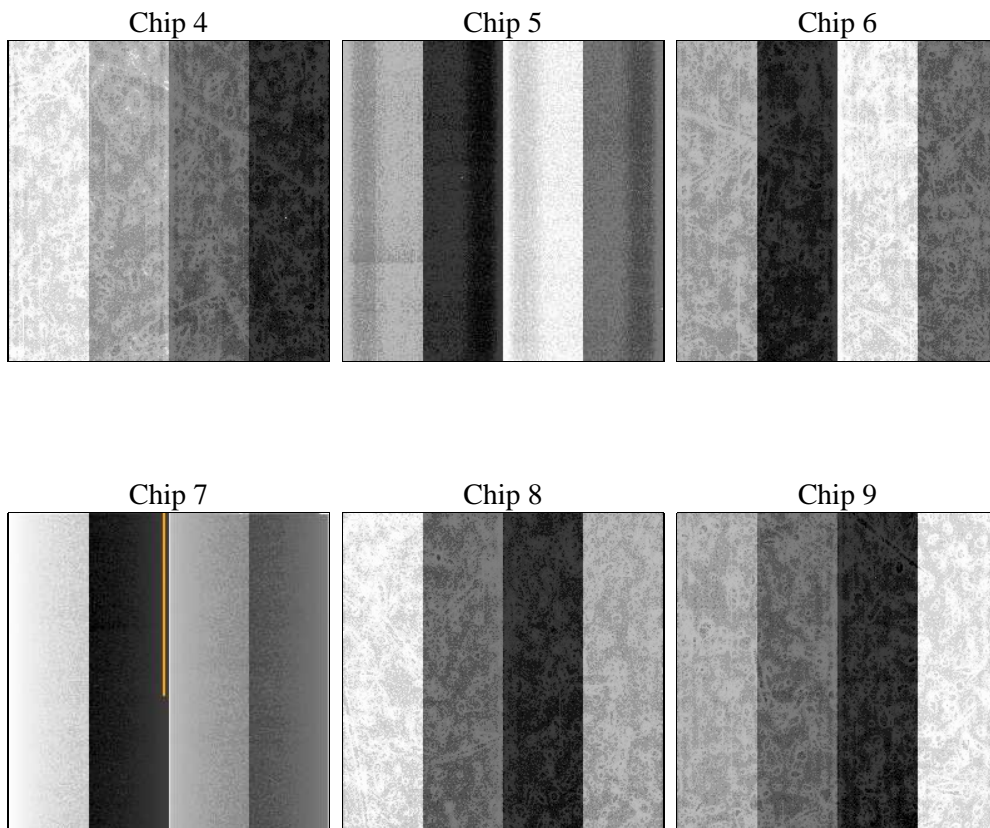
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	7954.9588756263	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime4	7951.8820653558	Sum of GTIs [s]
date	2012-12-14T20:48:32	Date and time of file creation	ontime5	7955.0409556329	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	7954.9999156296	Sum of GTIs [s]
			ontime7	7955.0819956362	Sum of GTIs [s]
			ontime8	7954.9588756263	Sum of GTIs [s]
			ontime9	7954.9178356528	Sum of GTIs [s]
			l1events	355430	Number of level 1 events

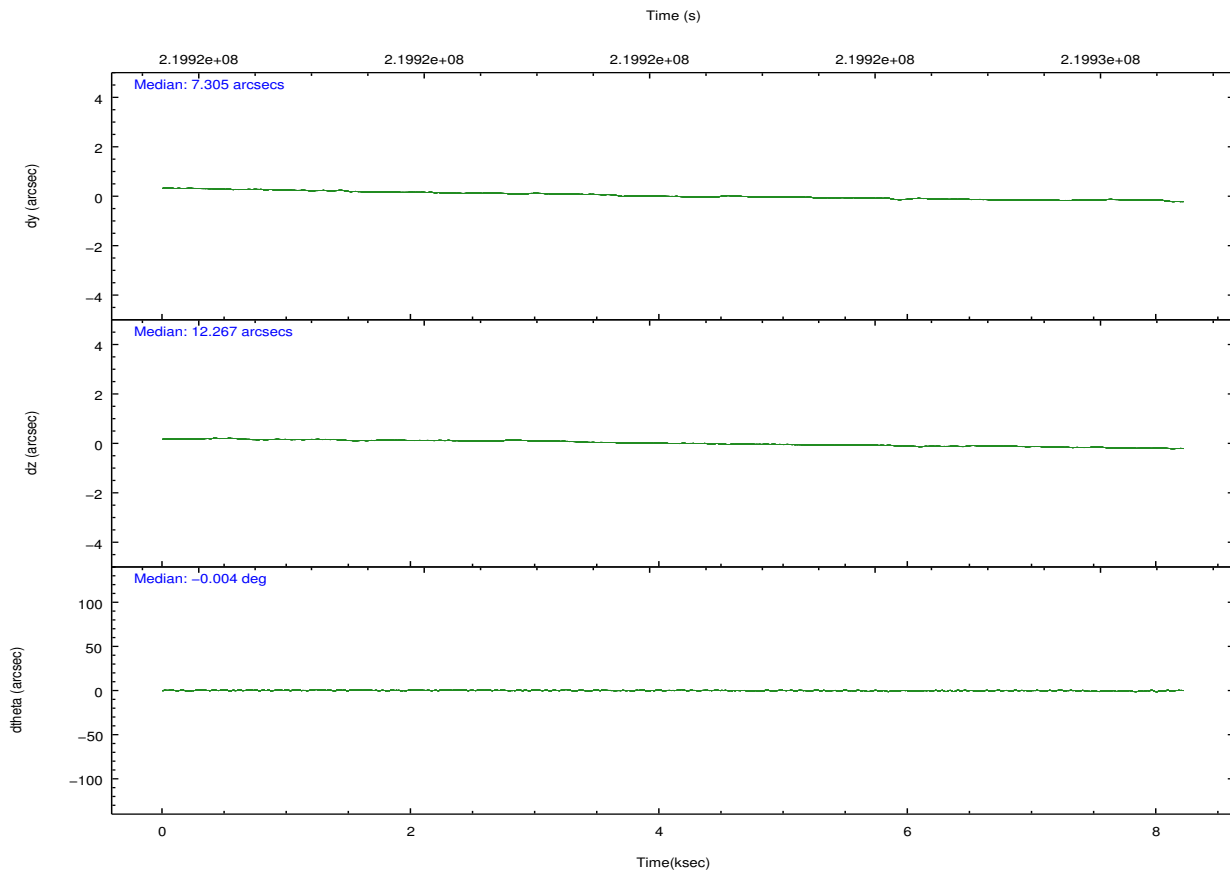
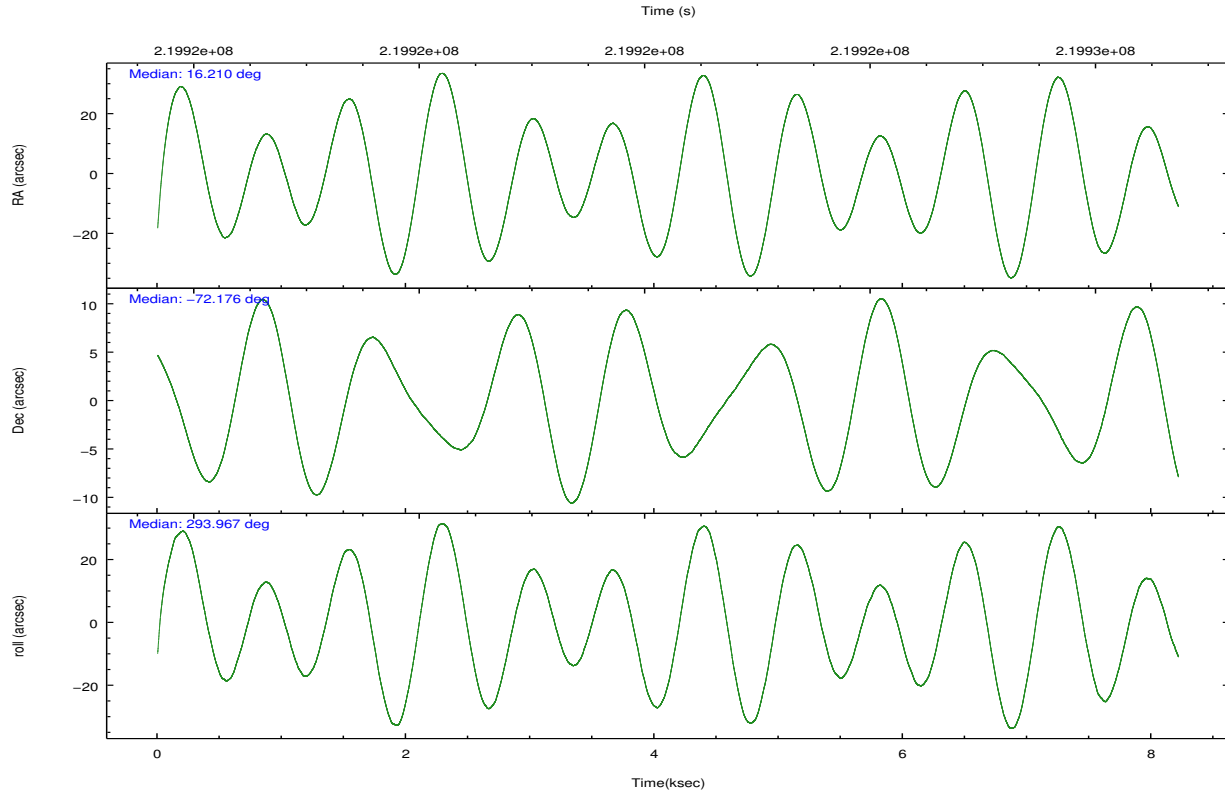
### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	57777	63484	50768	47295	85450	50656	grade 0 events	3597	6996	1994	2745	26467	2055
rejected events	51065	27514	45666	23403	45999	42969		6%	11%	3%	5%	30%	4%
rejected %	88%	43%	89%	49%	53%	84%	grade 1 events	63	160	22	51	208	252
								0%	0%	0%	0%	0%	0%
							grade 2 events	1231	9613	1053	5057	5135	3439
								2%	15%	2%	10%	6%	6%
							grade 3 events	565	1718	587	2364	1963	585
								0%	2%	1%	4%	2%	1%
							grade 4 events	536	1665	547	2384	1904	599
								0%	2%	1%	5%	2%	1%
							grade 5 events	1611	5011	1597	4911	2500	1766
								2%	7%	3%	10%	2%	3%
							grade 6 events	784	15996	927	11349	4011	1014
								1%	25%	1%	23%	4%	2%
							grade 7 events	49390	22325	44041	18434	43262	40946
								85%	35%	86%	38%	50%	80%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	16.137364	16.21013850810709	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.160260	-72.17599349251665	Alternating exposures requested	N	N
[deg] Pointing Roll	293.749345	293.9752617234194	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	215654464.184000	215654464.184000			
[s] Window stop time (MET)	220838464.184000	220838464.184000			
[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)	219918320.184000	219917340.36662			
Observation start date	2004-12-20T08:24:16	2004-12-20T08:09:00			
[s] Observation end time (MET)	219926320.184000	219926454.15453			
Observation end date	2004-12-20T10:37:36	2004-12-20T10:40:54			
Read mode	TIMED	TIMED			

## 2.3 Aspect

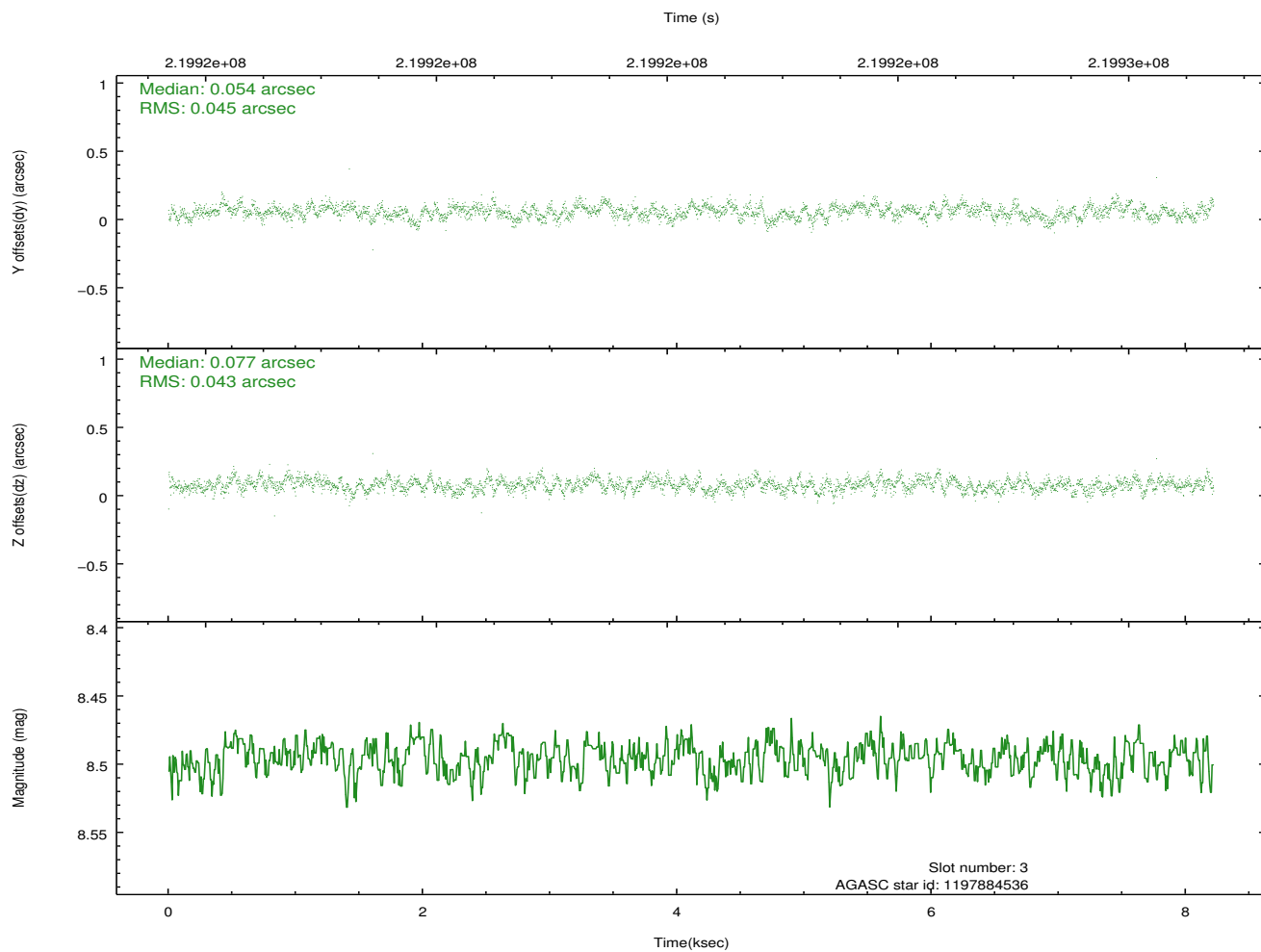
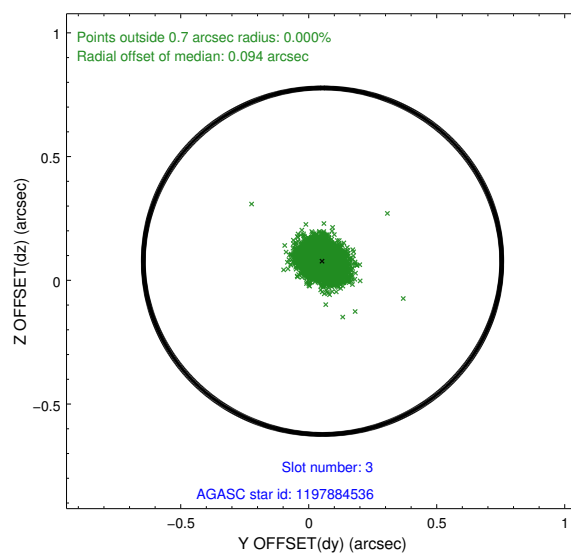
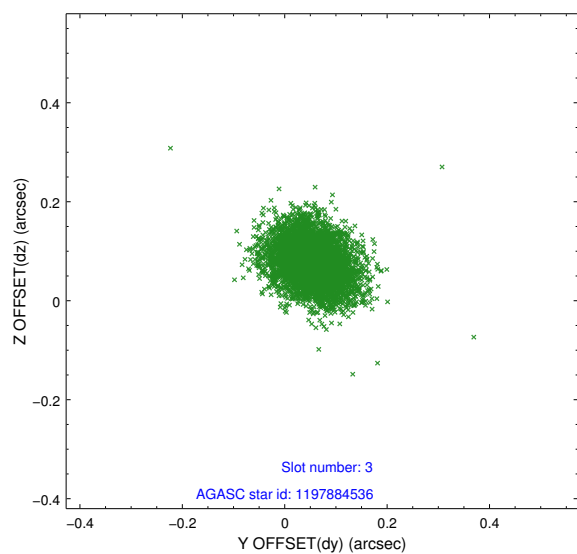


### Slot Statistics

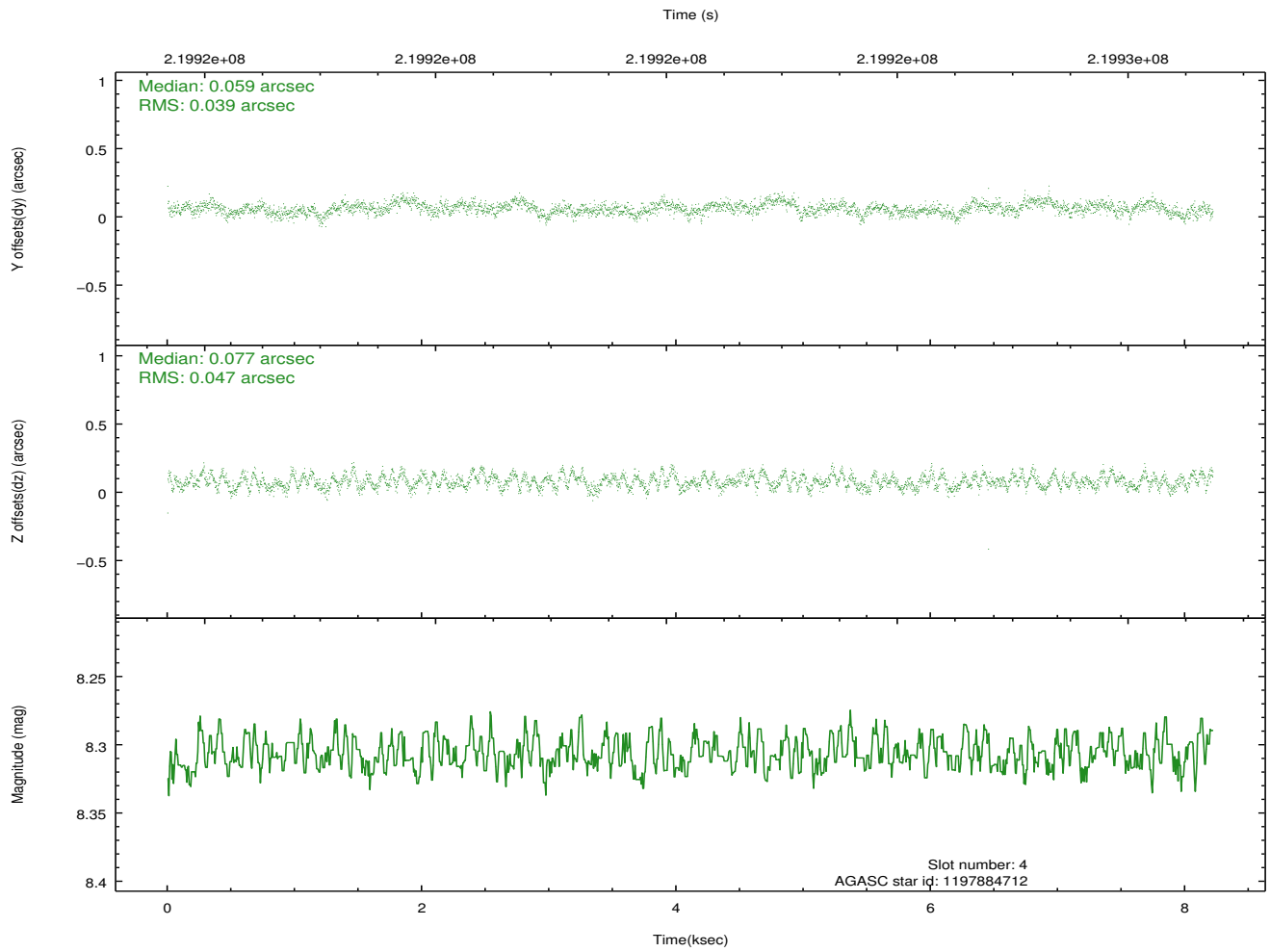
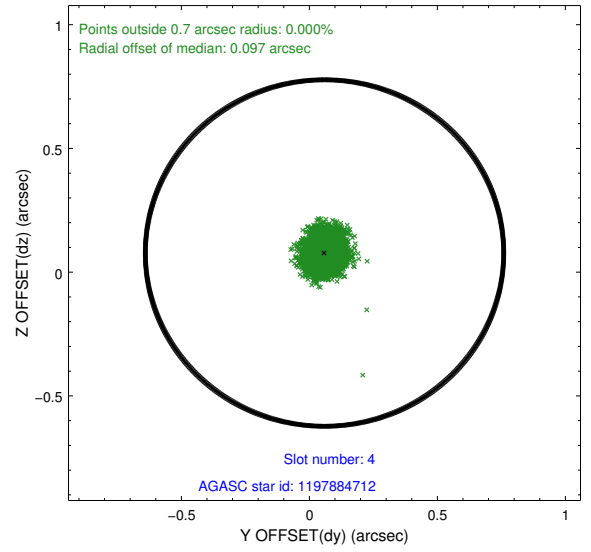
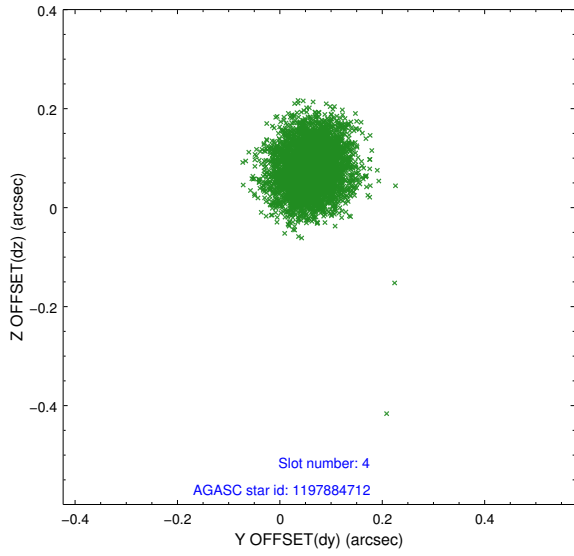
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	2005	-0.018	-0.030	0.009	0.014	0.000000	0.000000	-760.12	-1733.55
1	FID	ACIS-S-4	7.20	2005	0.061	0.017	0.007	0.013	0.000000	0.000000	2152.93	174.26
2	FID	ACIS-S-5	7.23	2005	-0.074	0.022	0.012	0.021	0.000000	0.000000	-1812.14	168.73
3	GUIDE	1197884536	8.50	4010	0.054	0.077	0.066	0.105	17.160729	-71.835289	-599.40	1518.44
4	GUIDE	1197884712	8.31	4009	0.059	0.077	0.066	0.102	16.087398	-72.252690	282.60	-183.71
5	GUIDE	1197885328	7.23	4010	-0.010	-0.051	0.054	0.086	16.283090	-71.733943	-1338.30	768.81
6	GUIDE	1198189696	7.37	4010	-0.097	-0.017	0.050	0.081	15.223750	-72.697522	1383.25	-1676.90
7	GUIDE	1197750936	7.55	4009	-0.012	-0.086	0.054	0.086	15.387940	-71.549550	-2350.73	100.90

## 2.4 Star Slots

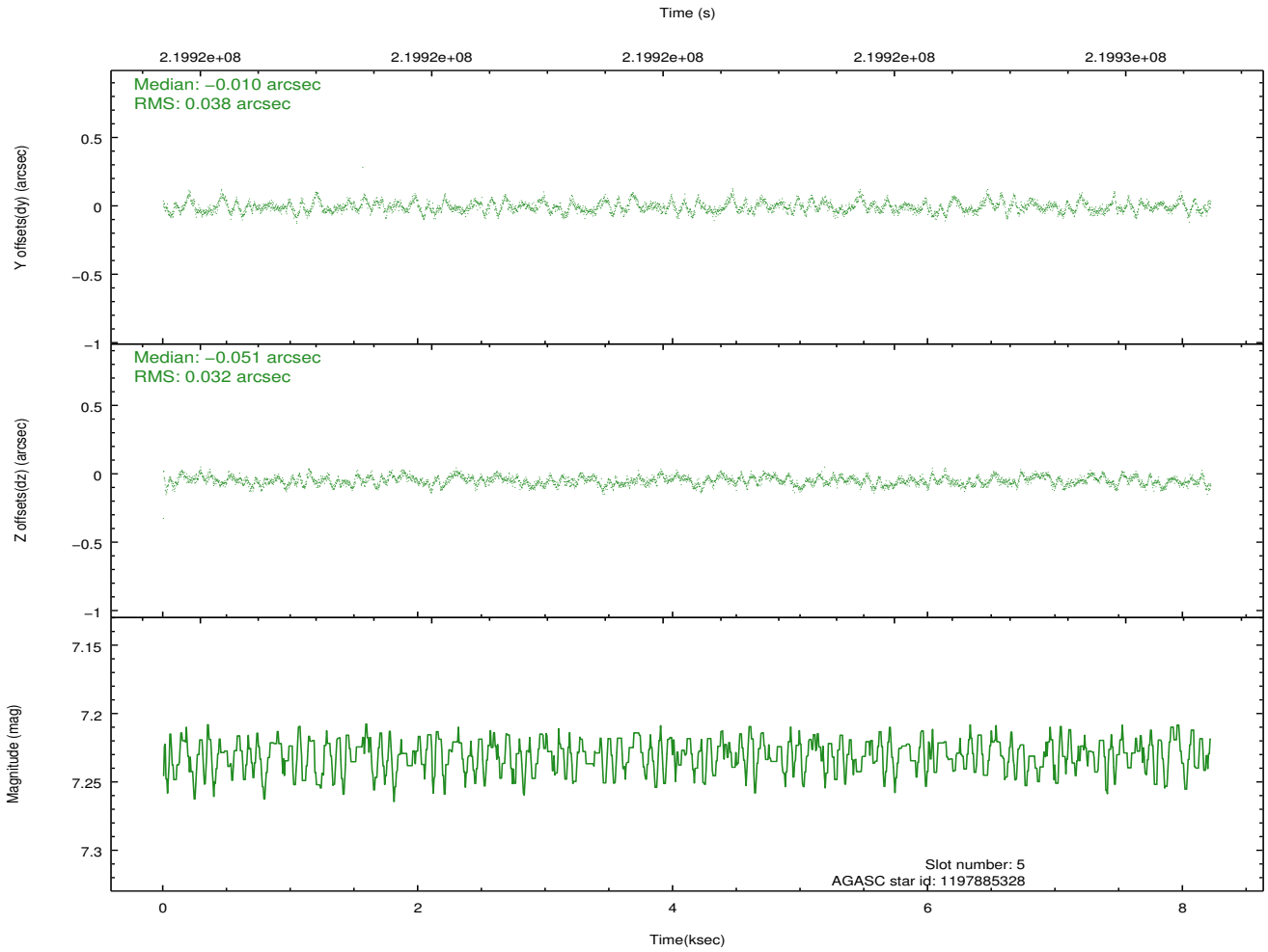
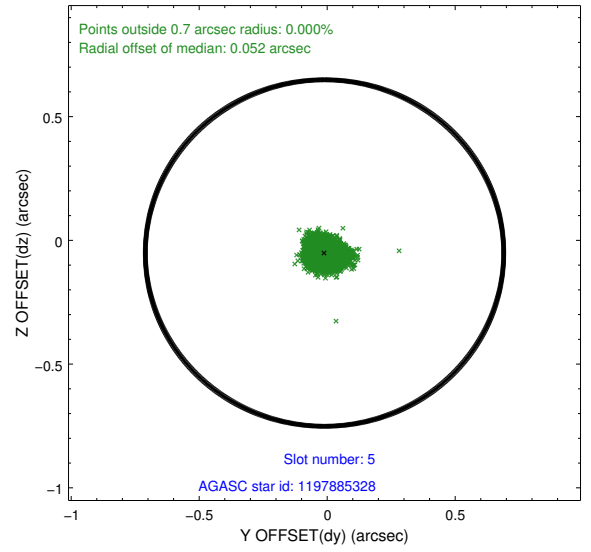
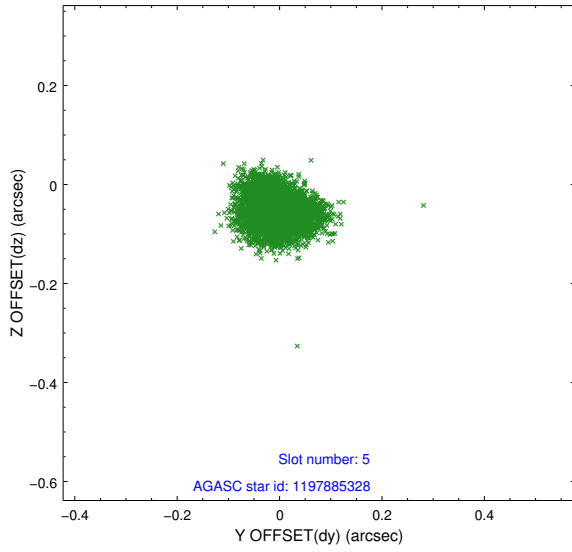
### 2.4.1 Slot 3



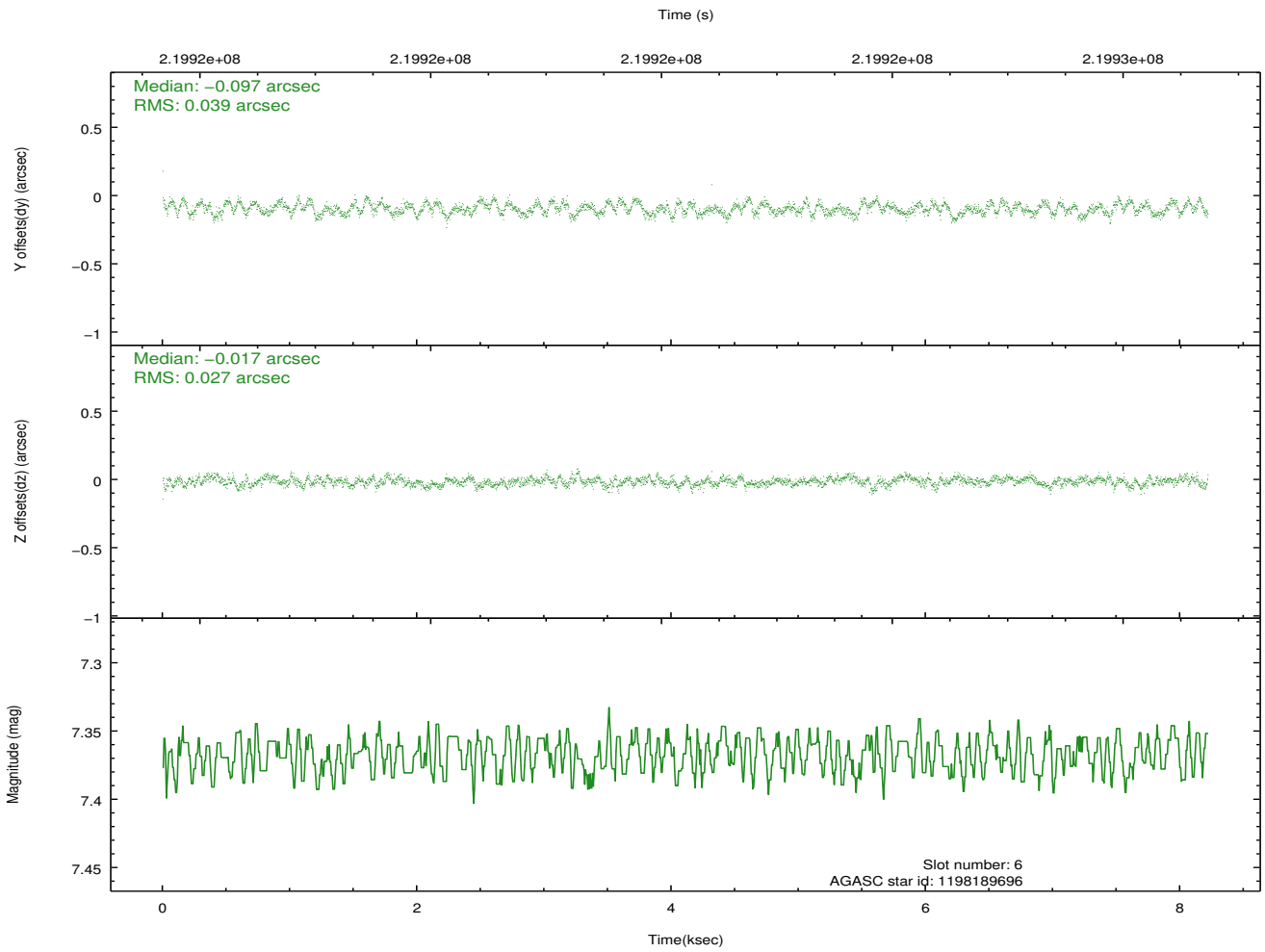
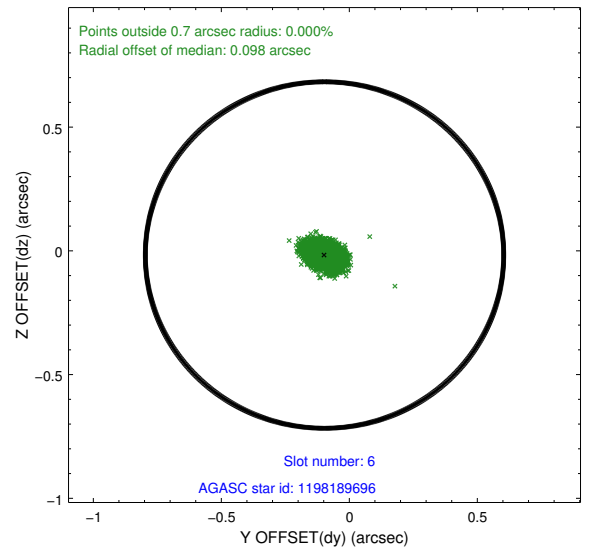
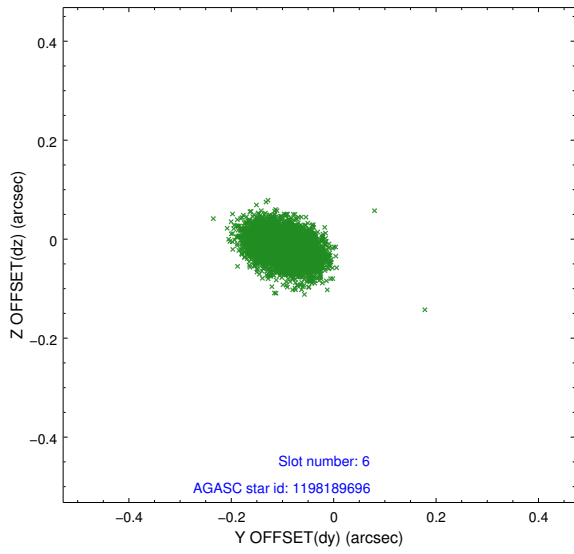
### 2.4.2 Slot 4



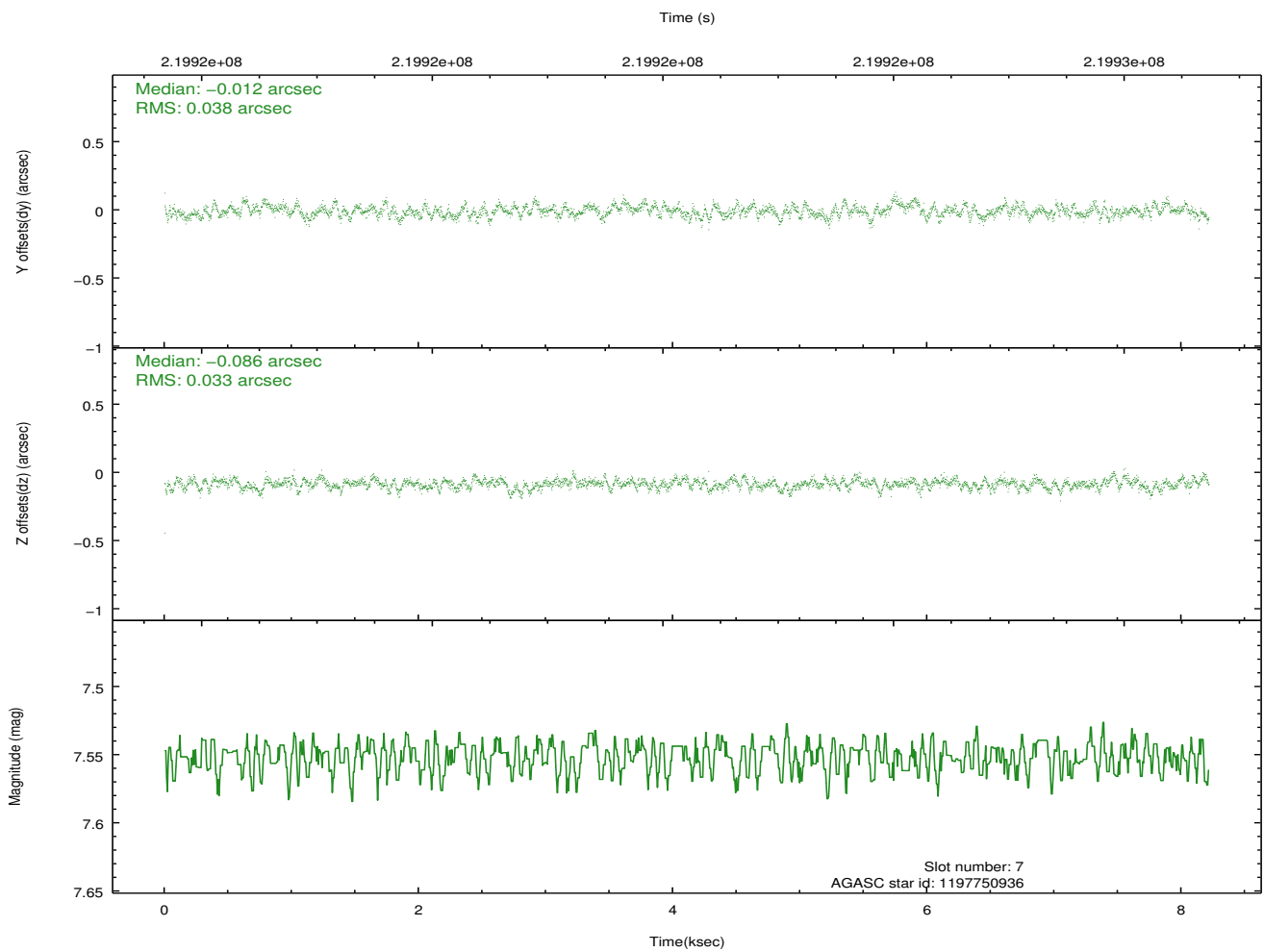
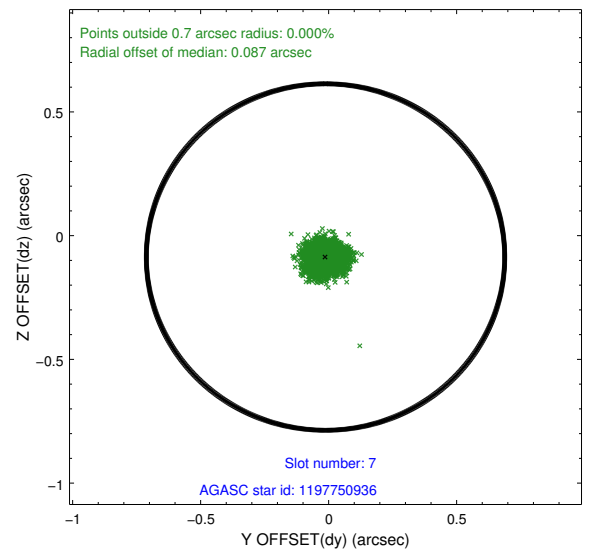
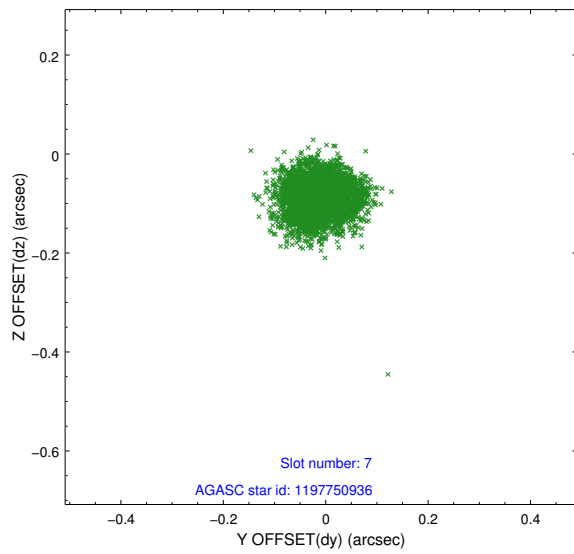
### 2.4.3 Slot 5



### 2.4.4 Slot 6

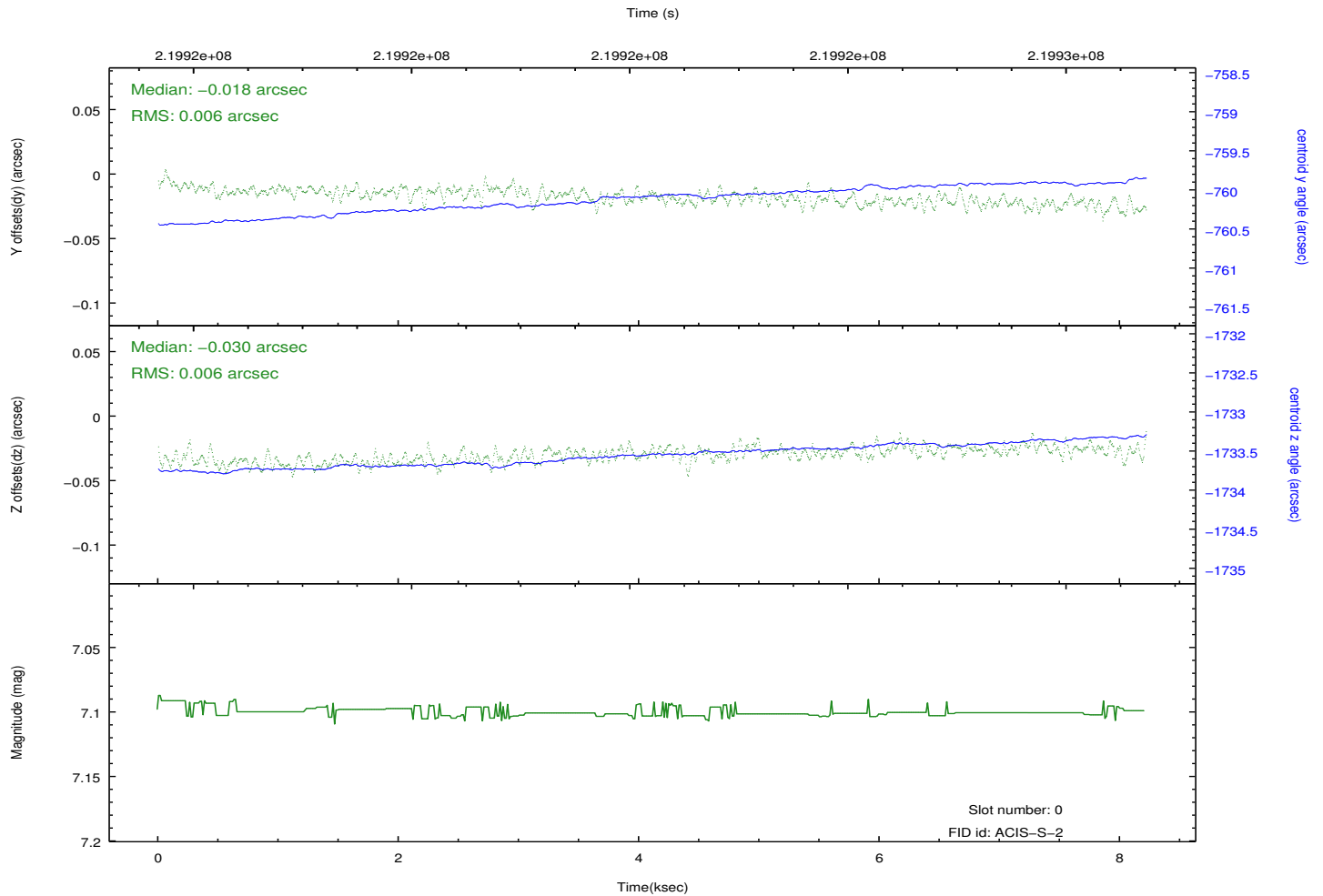
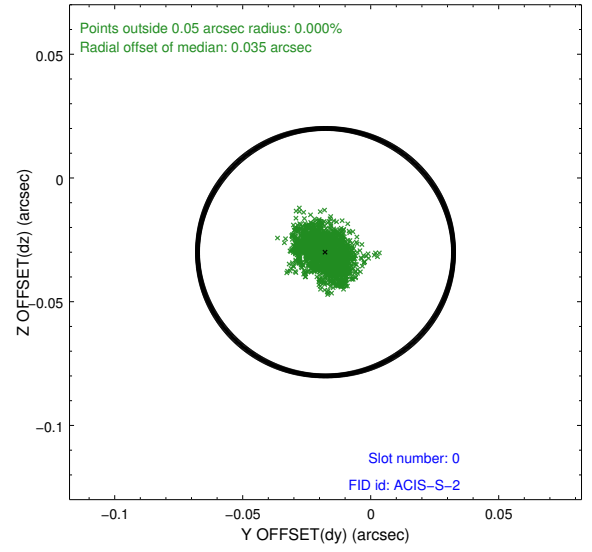
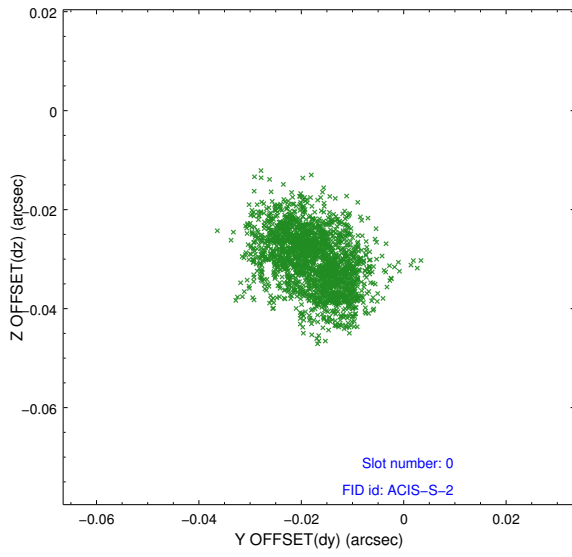


## 2.4.5 Slot 7

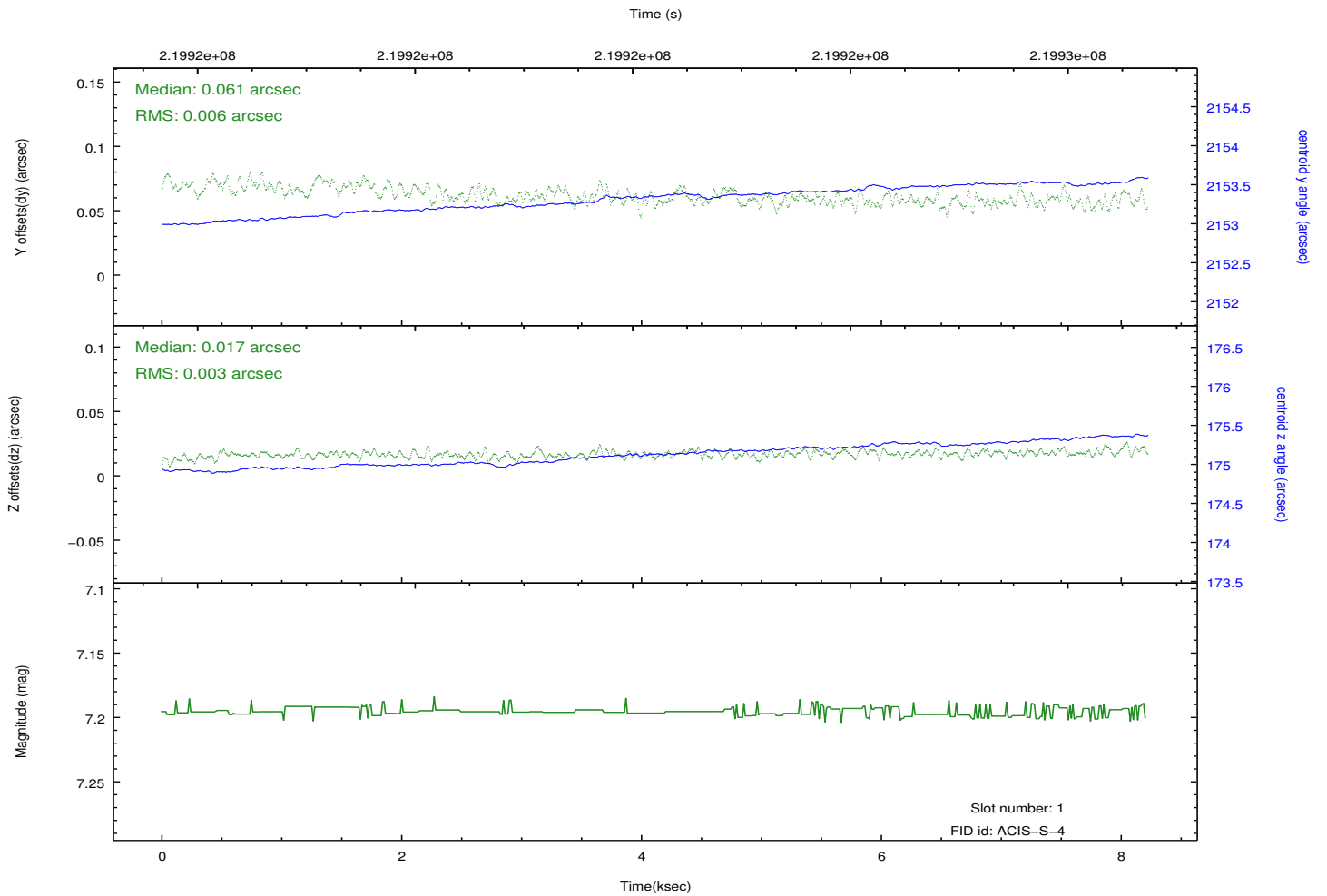
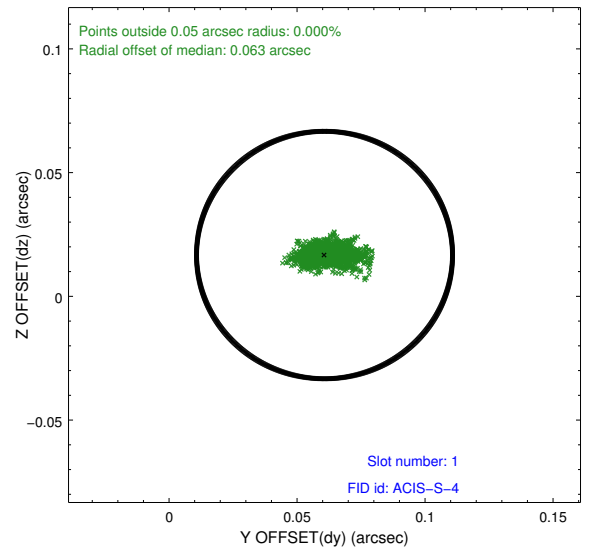
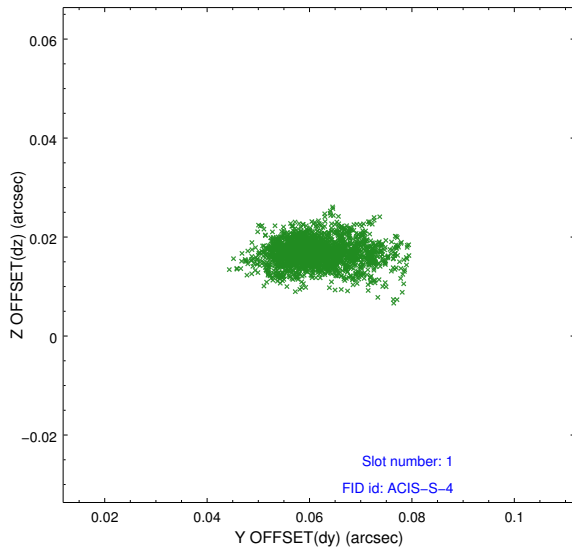


## 2.5 FID Slots

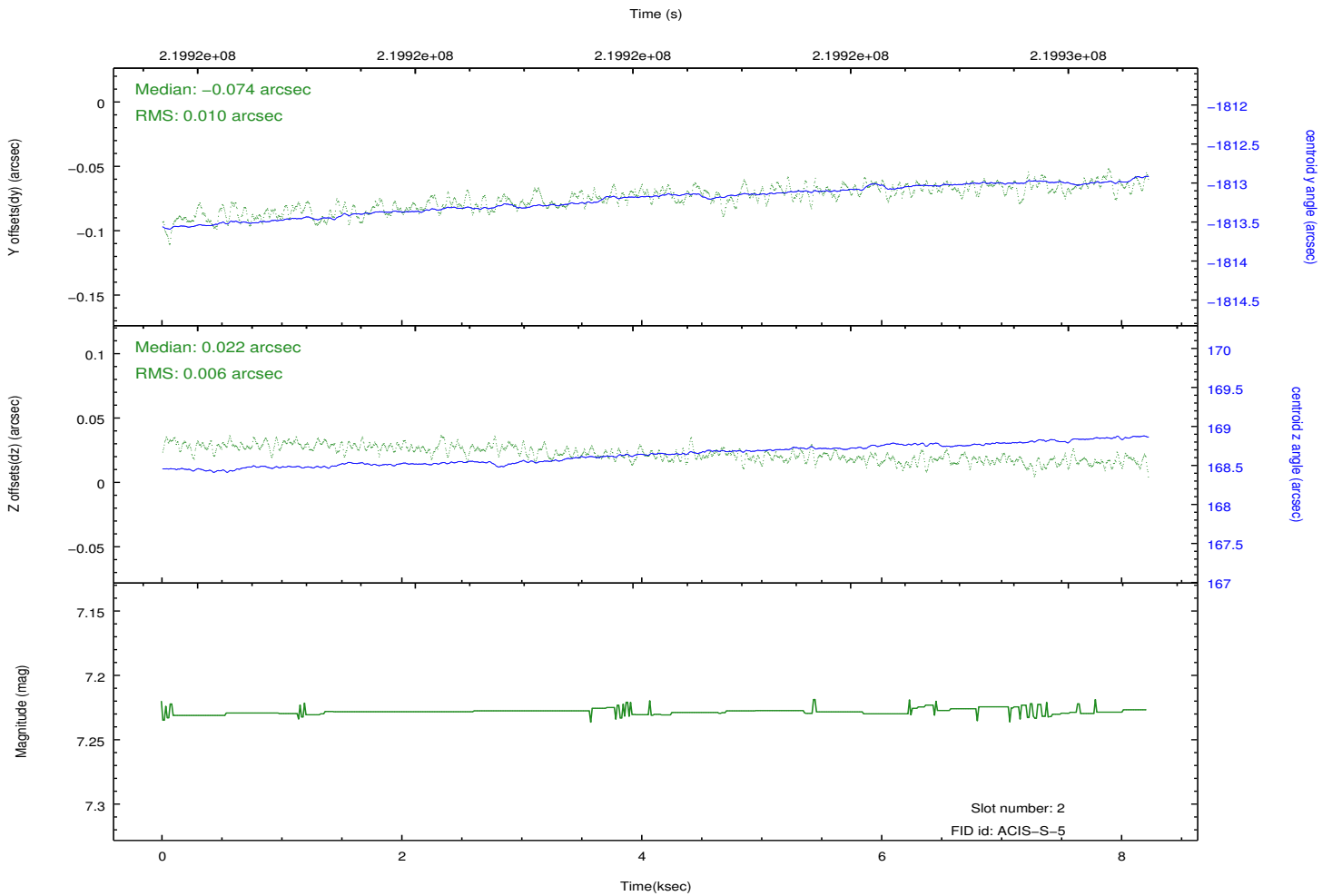
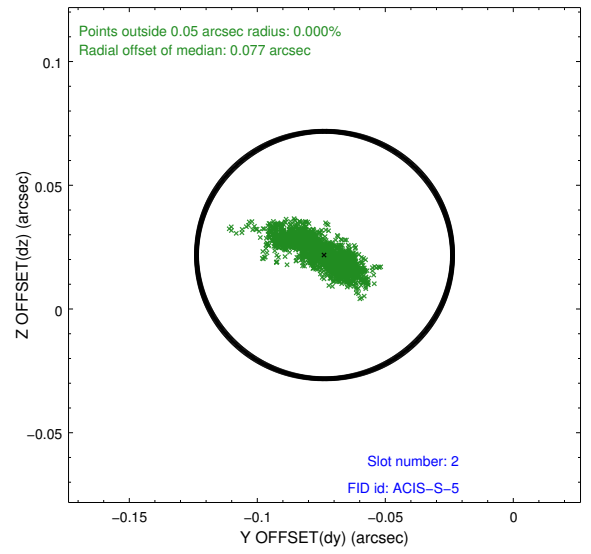
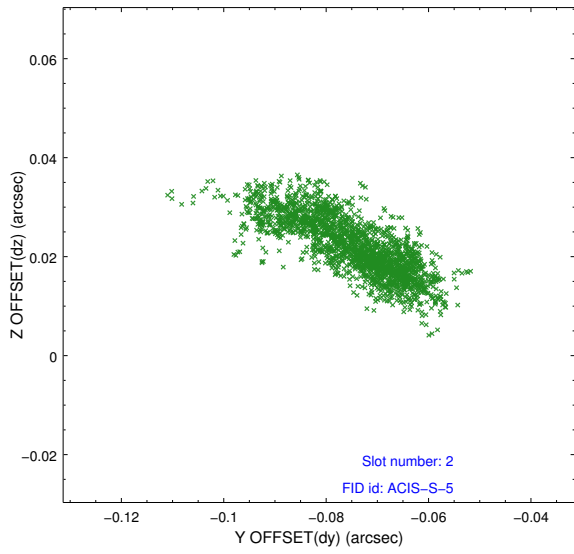
### 2.5.1 Slot 0



## 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)	2013.01.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.955199

## A.2 Comments

Window constraint satisfied.