

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8507 - L2 Version 3  
Chandra X-Ray Center

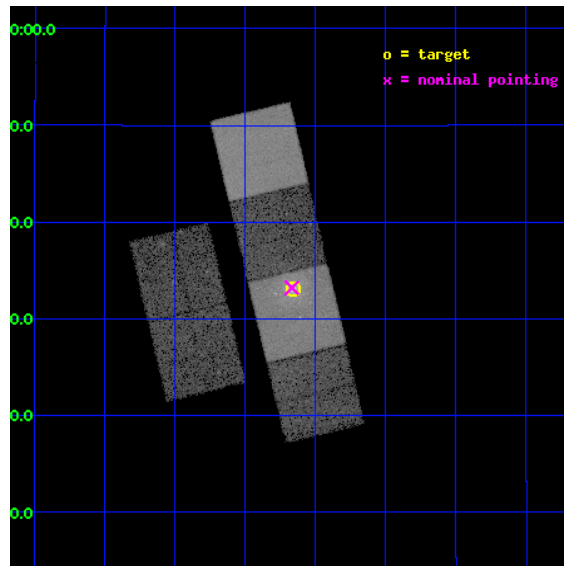
L2 Processing Date : Apr 19 2012

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# 1 Front

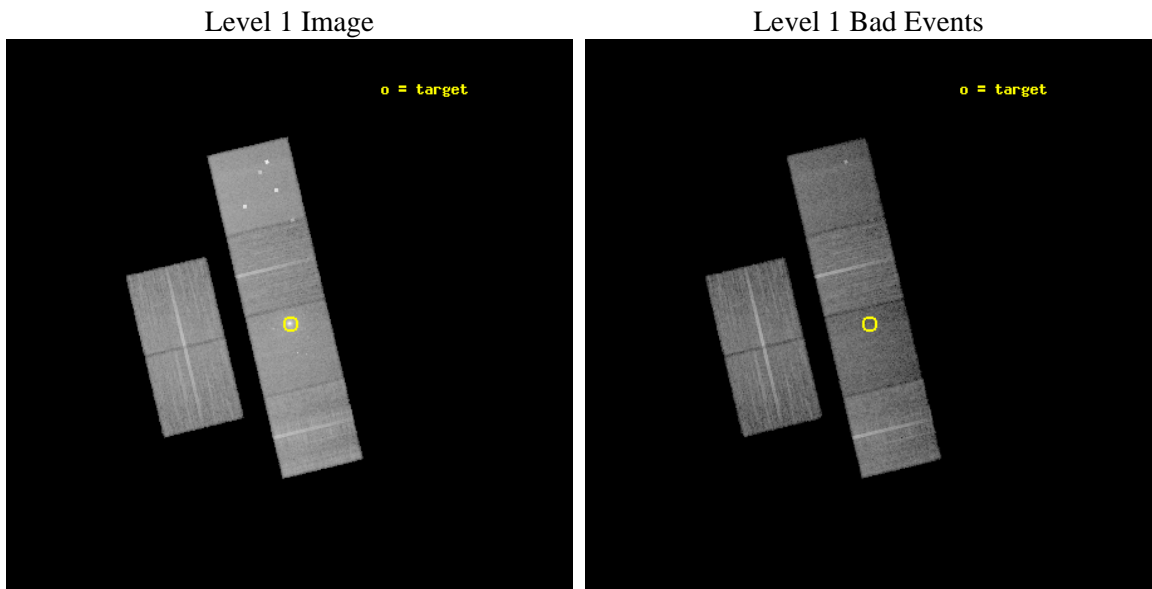
seq_num	600619	Sequence number
obs_id	8507	Observation id
title	Resolving the Problem of Stellar Orbital Anisotropy	Proposal title
observer	Dr Philip Humphrey	Principal investigator
object	NGC 4649	Source name
dtycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	190.915	Observer's specified target RA [deg]
dec_targ	11.552611	Observer's specified target Dec [deg]
ra_nom	190.91694041264	Nominal RA [deg]
dec_nom	11.553544059409	Nominal Dec [deg]
roll_nom	76.656246809718	Nominal Roll [deg]
revision	3	Processing version of data
ontime	17747.199933946	Sum of GTIs [s]
livetime	17522.474202302	Livetime [s]
ontime2	17743.958933711	Sum of GTIs [s]
ontime3	17747.199933946	Sum of GTIs [s]
ontime5	17747.199933946	Sum of GTIs [s]
ontime6	17747.199933946	Sum of GTIs [s]
ontime7	17747.199933946	Sum of GTIs [s]
ontime8	17737.477042496	Sum of GTIs [s]
l2events	214268	Number of level 2 events



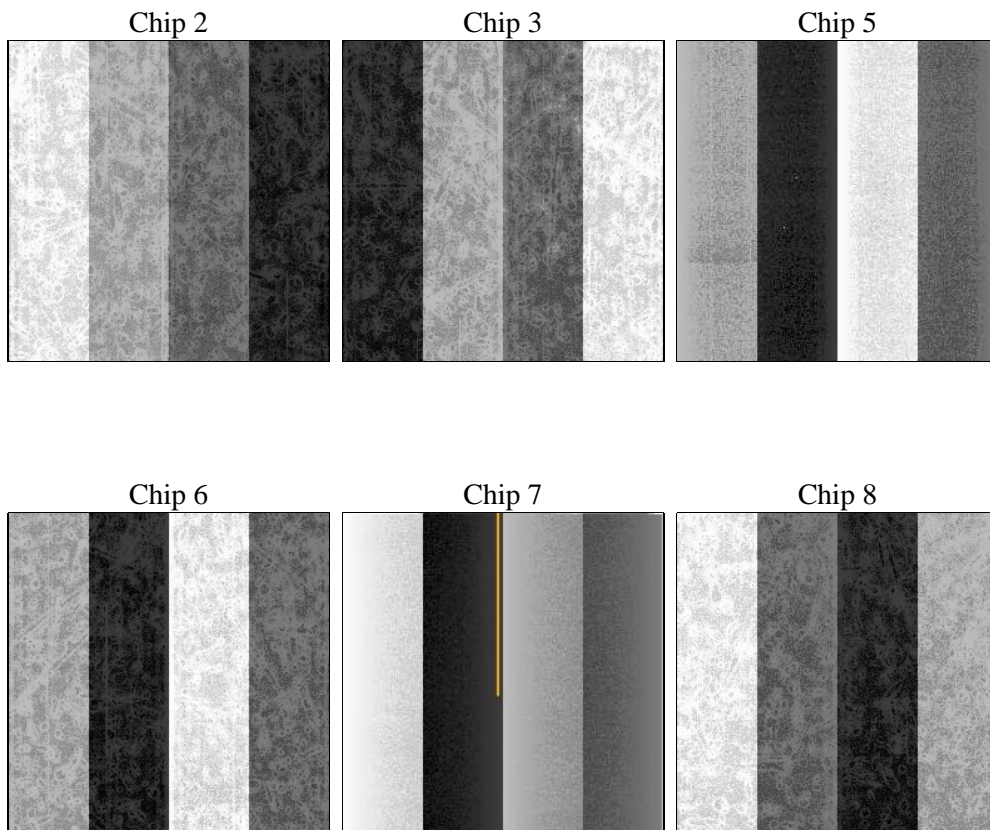
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	17700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	17747.199933946	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	17743.958933711	Sum of GTIs [s]
date	2012-04-19T13:58:20	Date and time of file creation	ontime3	17747.199933946	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	17747.199933946	Sum of GTIs [s]
			ontime6	17747.199933946	Sum of GTIs [s]
			ontime7	17747.199933946	Sum of GTIs [s]
			ontime8	17737.477042496	Sum of GTIs [s]
			l1events	910965	Number of level 1 events

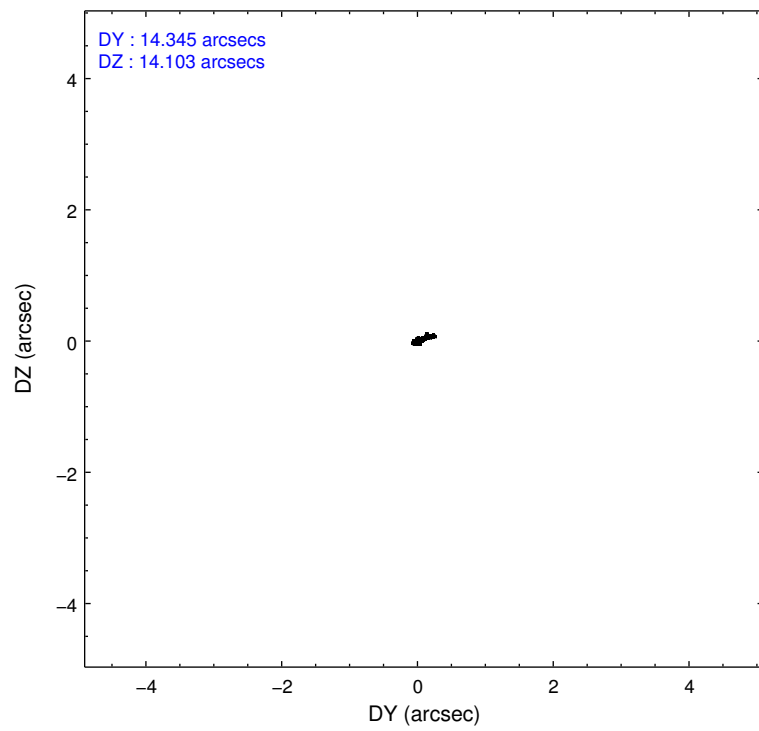
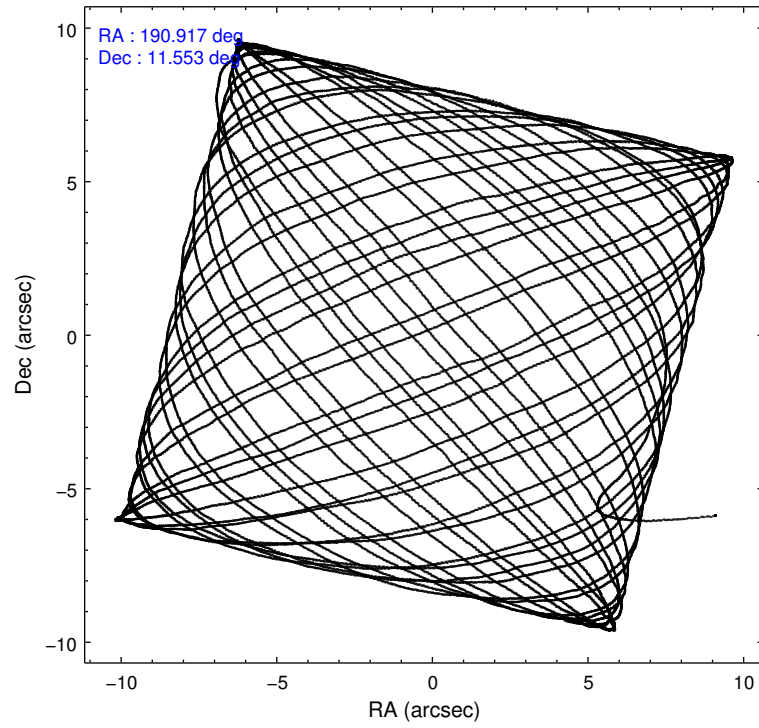
### 2.1.4 Events

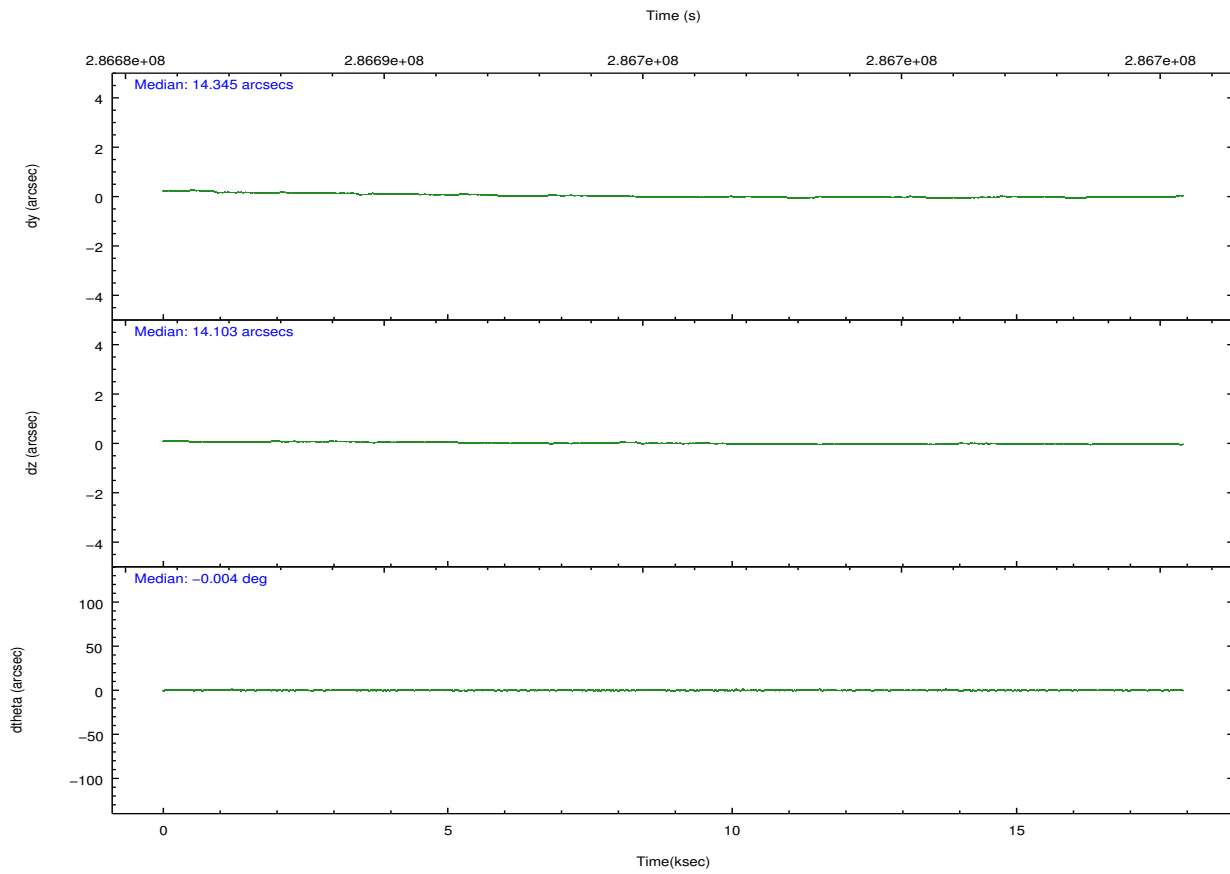
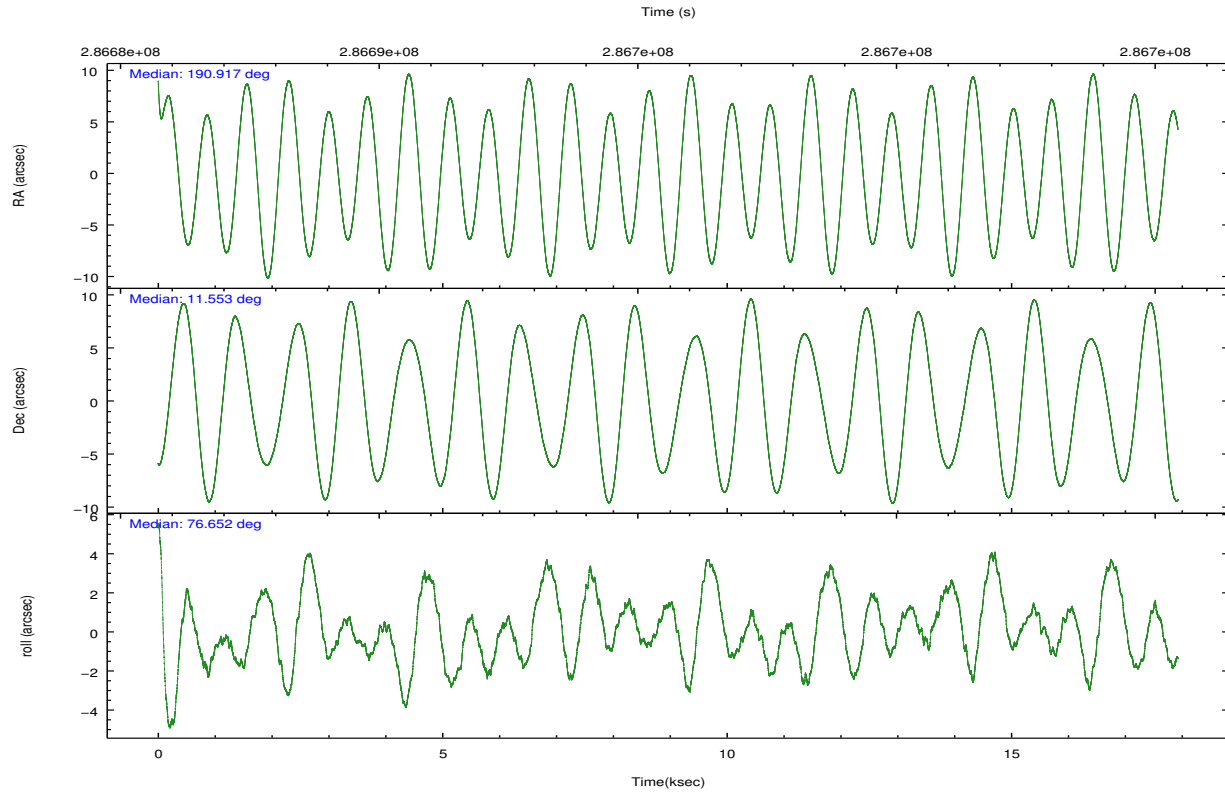
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	135808	125777	189855	131106	165317	163102	grade 0 events	4888	4458	16900	5627	12855	12094
rejected events	122930	113646	89884	116559	78682	123791		3%	3%	8%	4%	7%	7%
rejected %	90%	90%	47%	88%	47%	75%	grade 1 events	73	67	871	67	191	143
								0%	0%	0%	0%	0%	0%
							grade 2 events	2919	2594	29835	3012	18770	8676
								2%	2%	15%	2%	11%	5%
							grade 3 events	1367	1374	3439	1500	8451	4230
								1%	1%	1%	1%	5%	2%
							grade 4 events	1321	1371	3295	1500	8445	3917
								0%	1%	1%	1%	5%	2%
							grade 5 events	4288	5074	13559	5226	15215	7502
								3%	4%	7%	3%	9%	4%
							grade 6 events	2387	2335	46518	2909	38129	10406
								1%	1%	24%	2%	23%	6%
							grade 7 events	118565	108504	75438	111265	63261	116134
								87%	86%	39%	84%	38%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	190.925281	190.9169404126396	CCD I2 on	O2	Y
[deg] Pointing Dec	11.527453	11.5535440594086	CCD I3 on	Y	Y
[deg] Pointing Roll	76.497944	76.65624680971841	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O1	Y
[s] Observation start time (MET)	286686848.184000	286685816.80753	CCD S5 on	N	N
Observation start date	2007-02-01T03:13:03	2007-02-01T02:56:56	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	286704548.184000	286704854.13343	On-chip summing requested	N	N
Observation end date	2007-02-01T08:08:03	2007-02-01T08:14:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



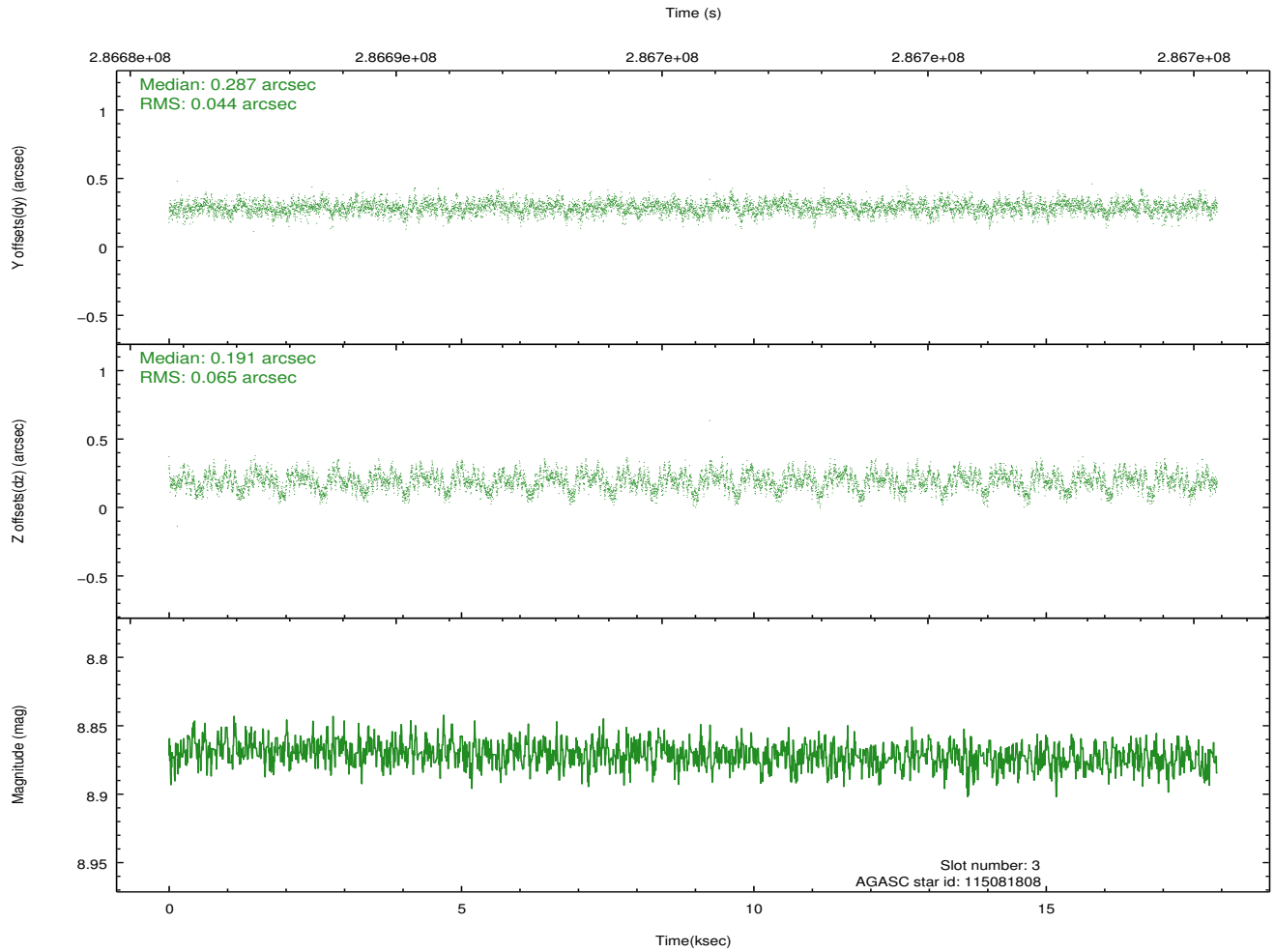
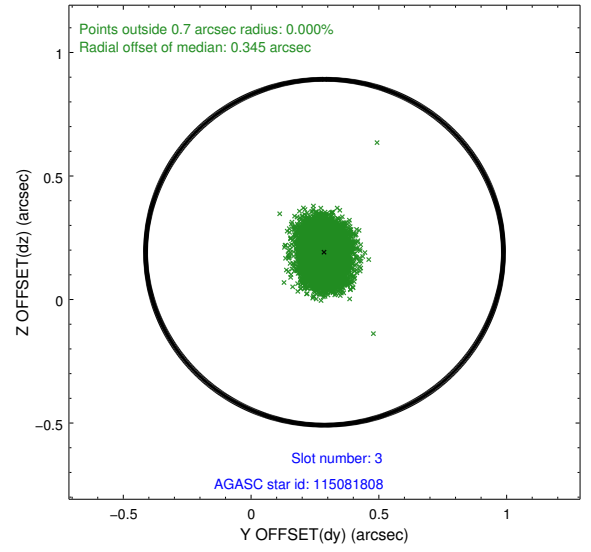
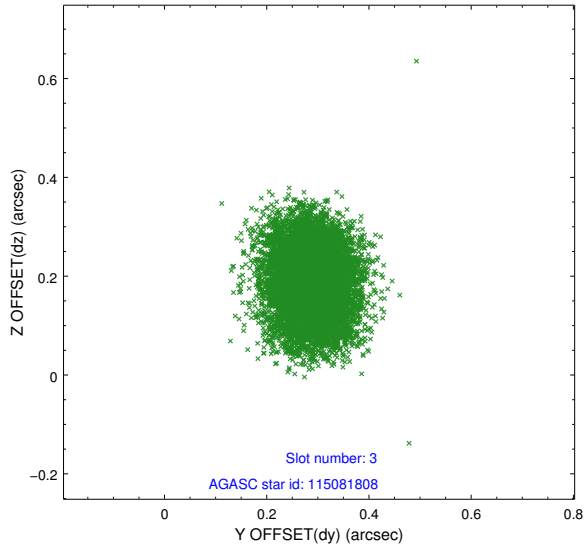


### Slot Statistics

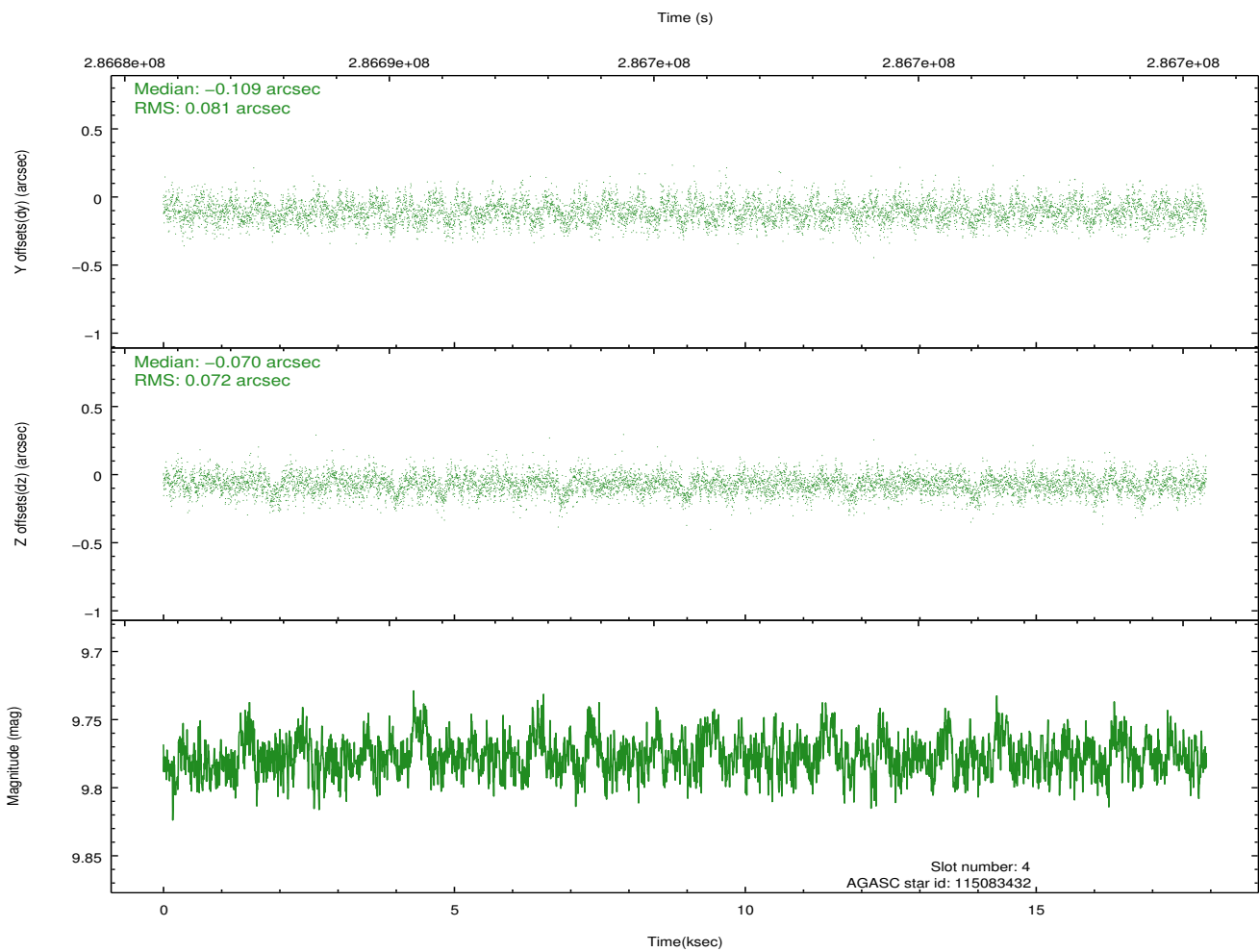
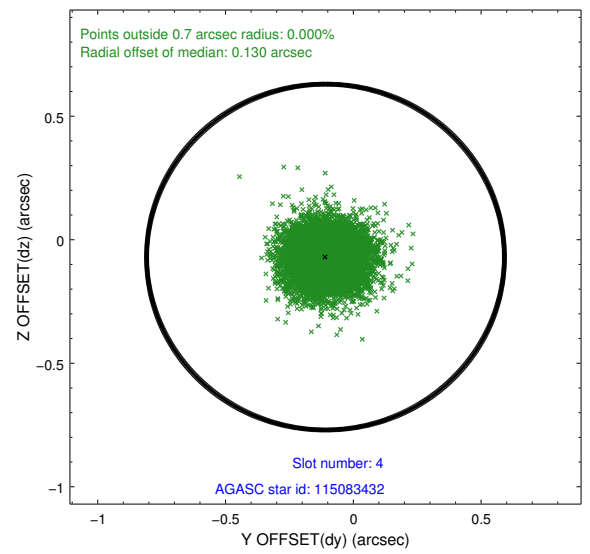
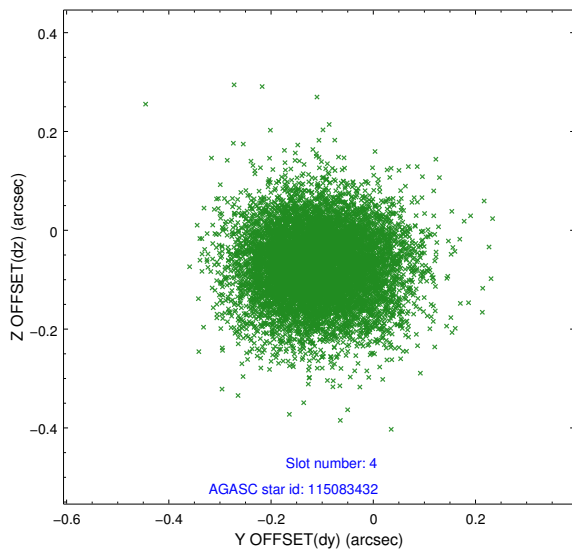
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4372	-0.081	-0.065	0.008	0.013	0.000000	0.000000	-767.42	-1735.53
1	FID	ACIS-S-4	7.20	4372	0.221	0.056	0.007	0.013	0.000000	0.000000	2146.06	172.83
2	FID	ACIS-S-5	7.23	4371	-0.171	0.017	0.007	0.011	0.000000	0.000000	-1820.06	166.73
3	GUIDE	115081808	8.87	8741	0.287	0.191	0.084	0.136	191.005561	10.921316	-2054.93	-784.92
4	GUIDE	115083432	9.78	8738	-0.109	-0.070	0.114	0.189	190.888504	12.192141	2296.48	684.78
5	GUIDE	115084248	8.89	8744	-0.082	0.169	0.090	0.146	191.376307	11.903207	1688.05	-1228.33
6	GUIDE	115084352	9.25	8740	0.034	-0.097	0.100	0.158	190.760225	11.783180	759.10	780.71
7	GUIDE	115089400	9.86	8730	-0.130	-0.187	0.122	0.191	190.425194	11.760272	404.91	1909.21

## 2.4 Star Slots

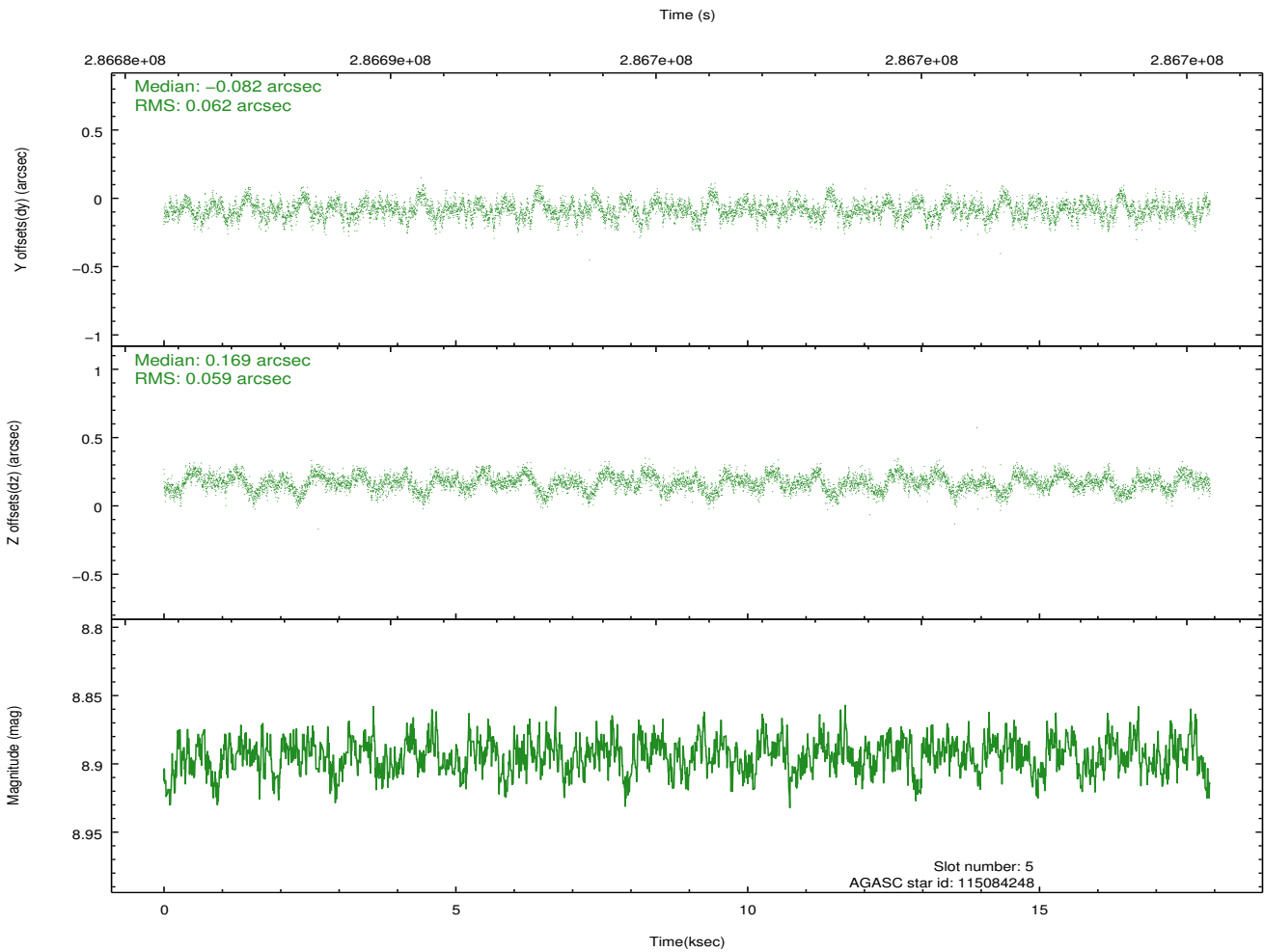
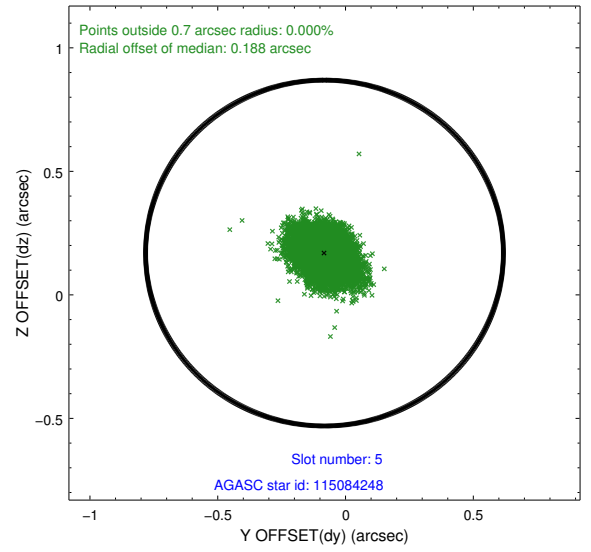
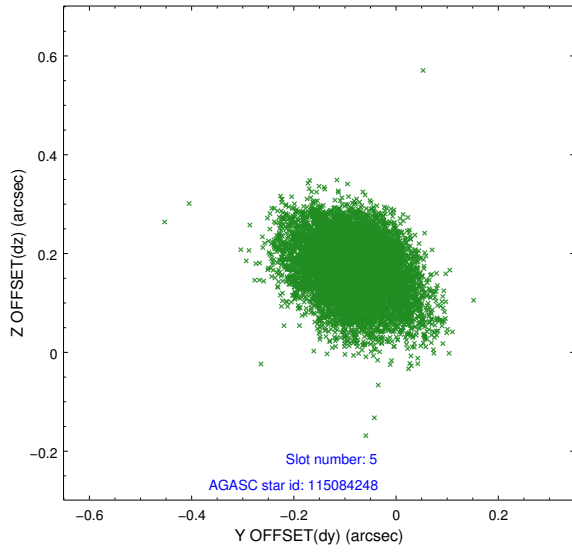
### 2.4.1 Slot 3



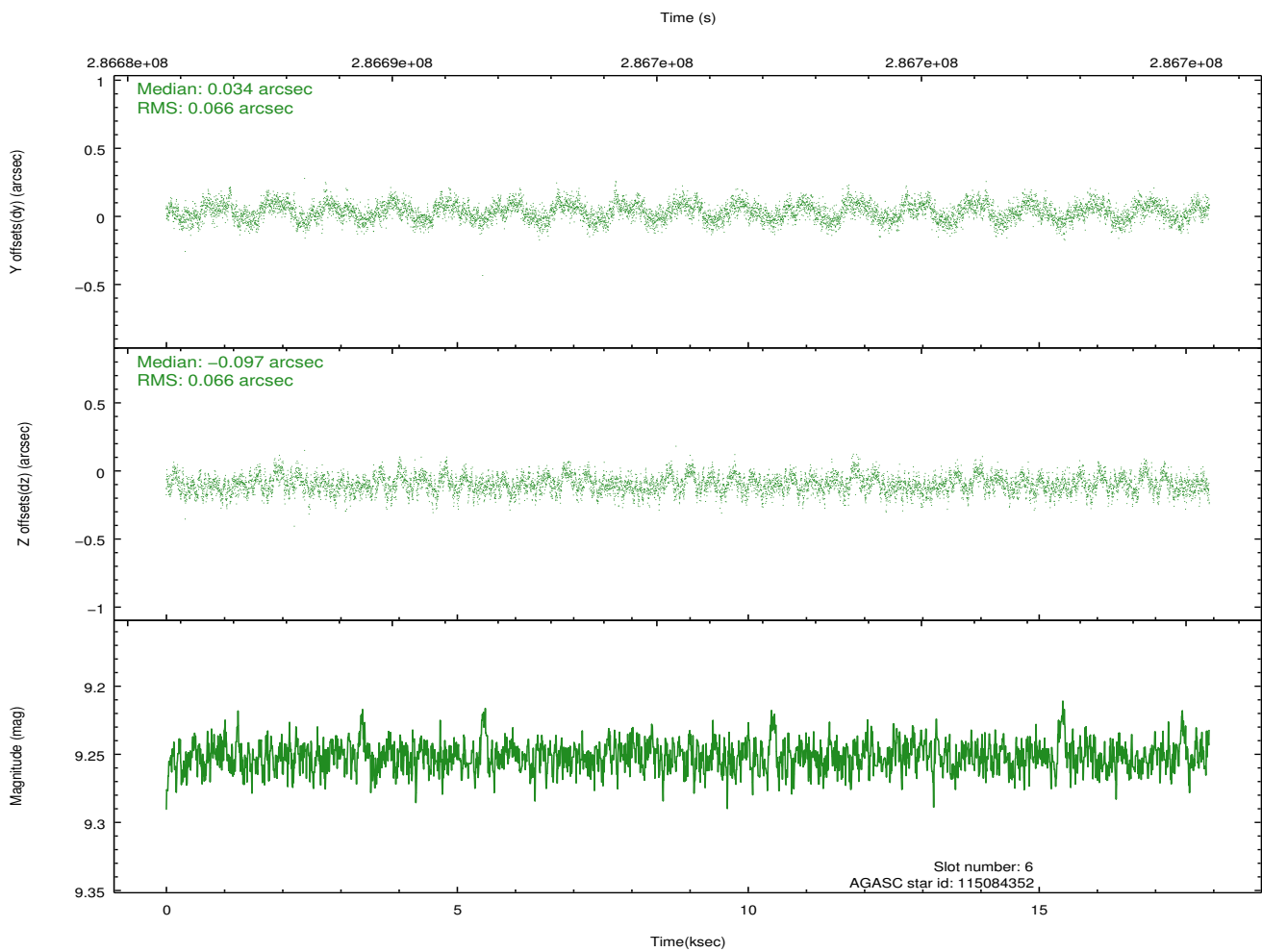
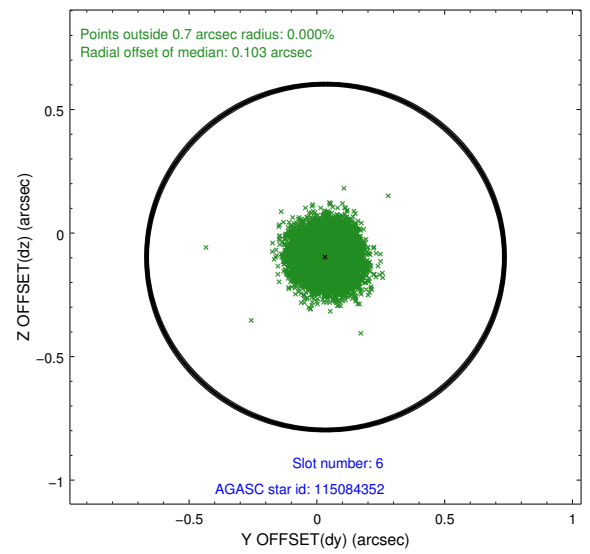
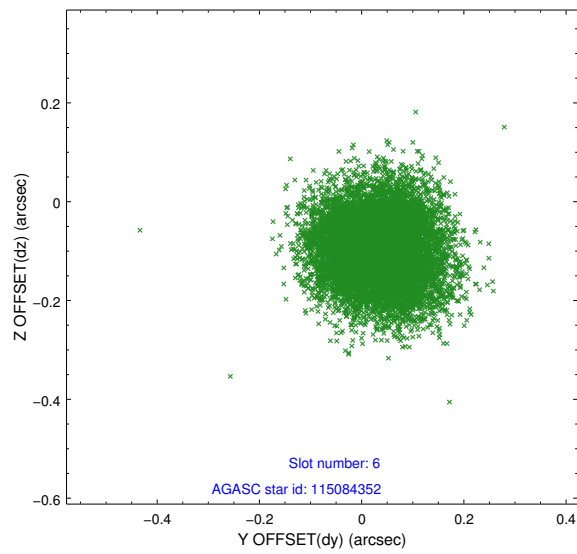
## 2.4.2 Slot 4



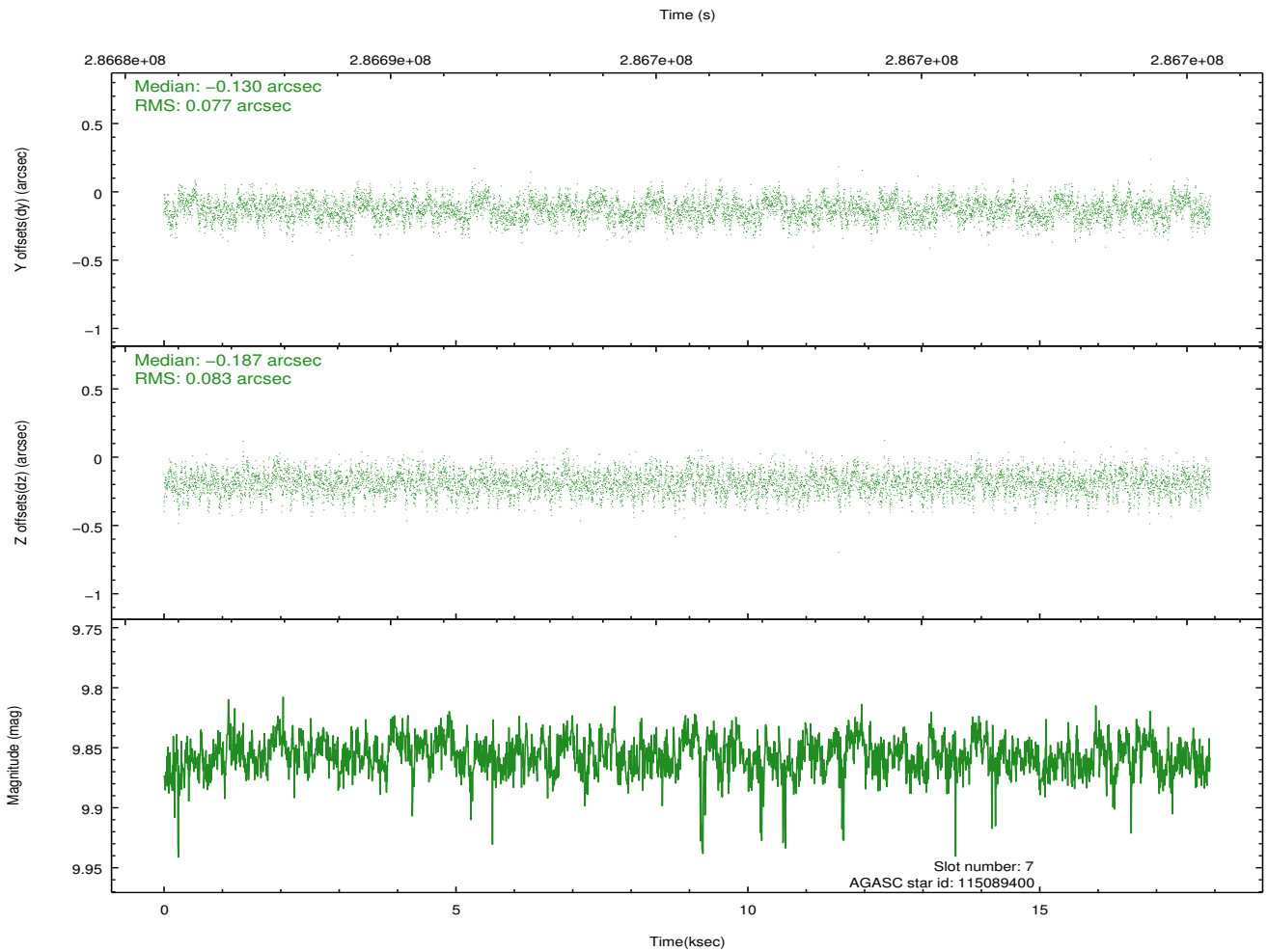
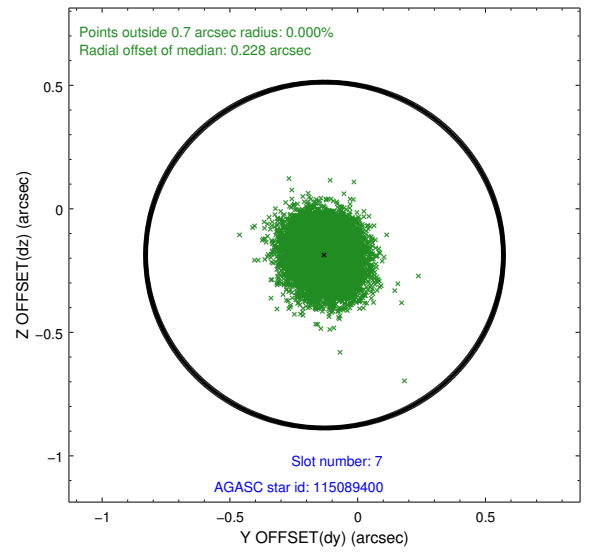
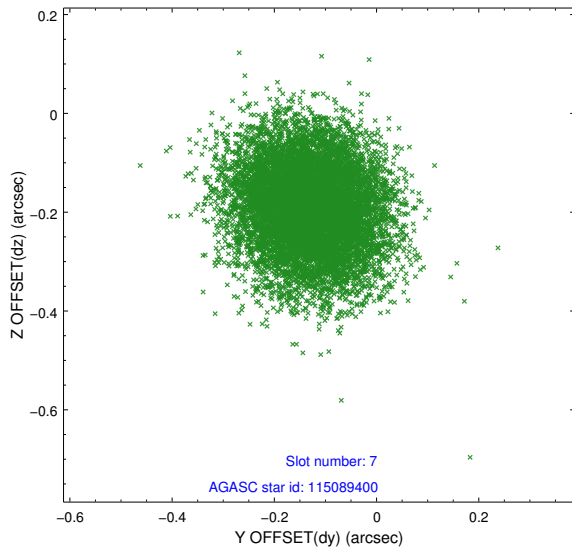
### 2.4.3 Slot 5



## 2.4.4 Slot 6

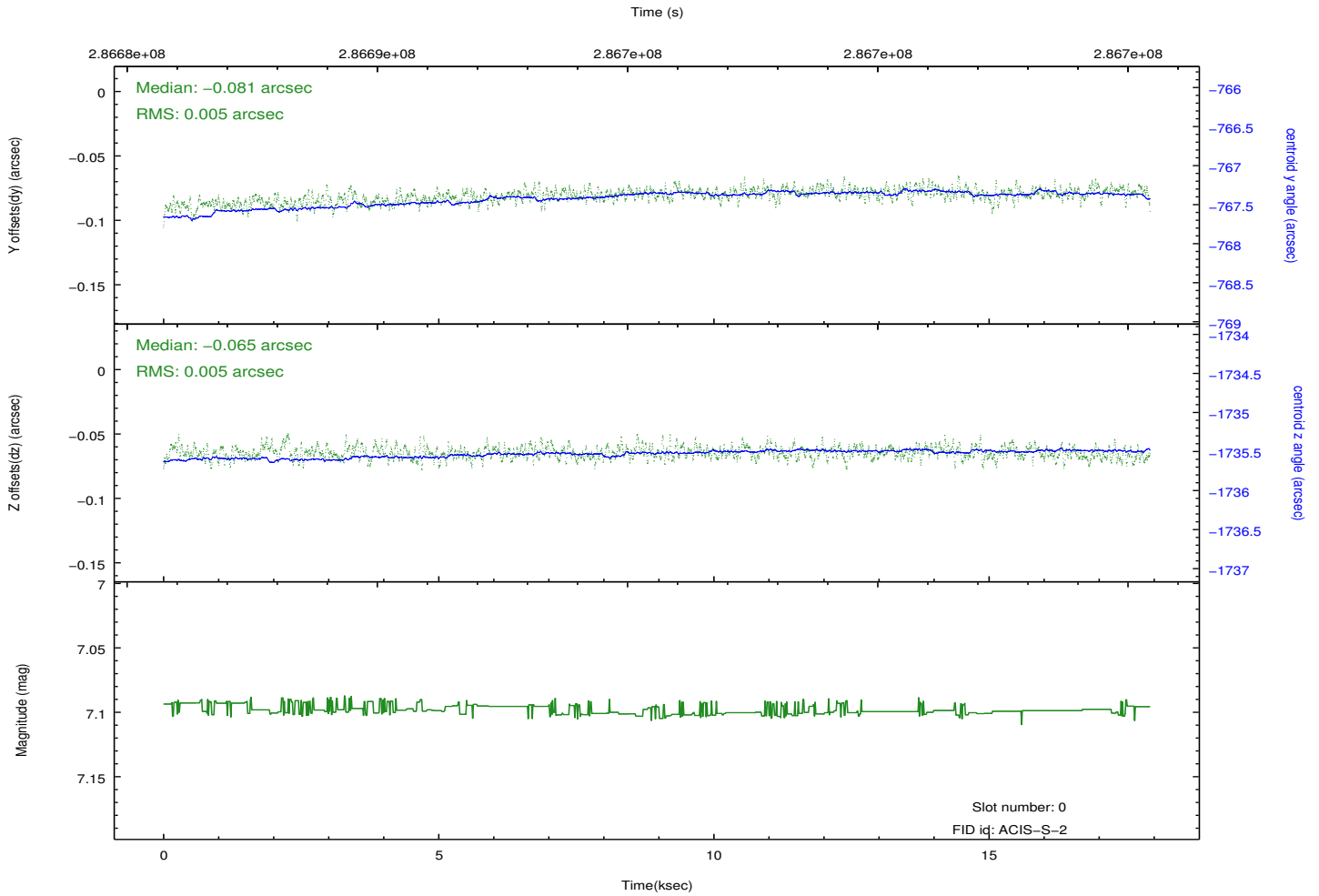
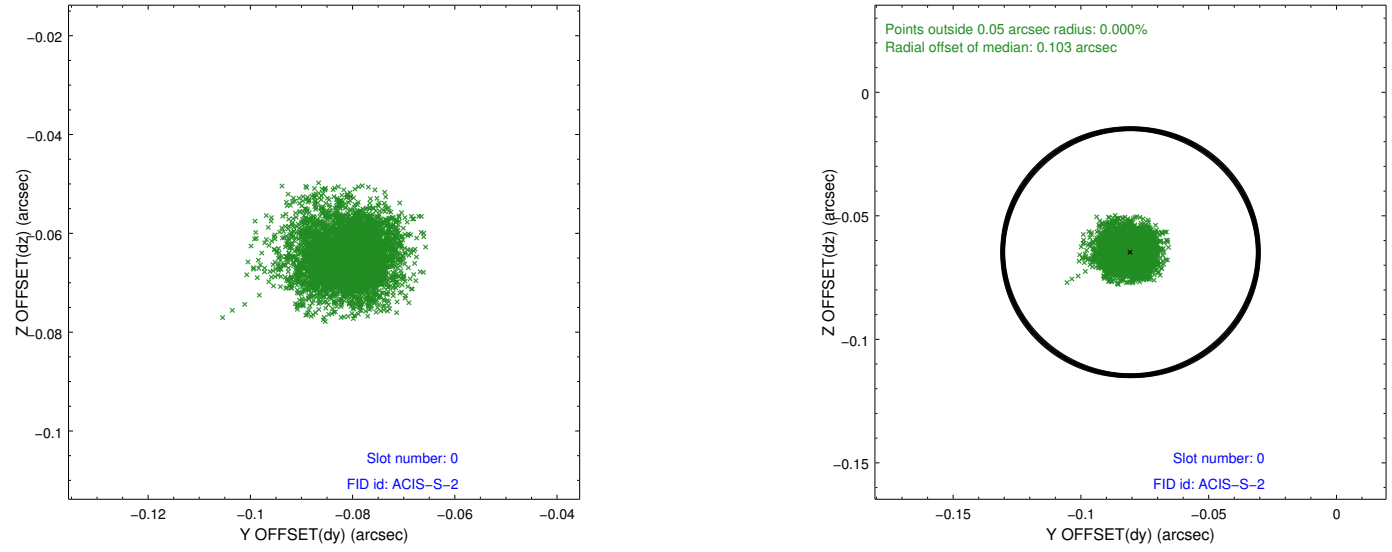


### 2.4.5 Slot 7

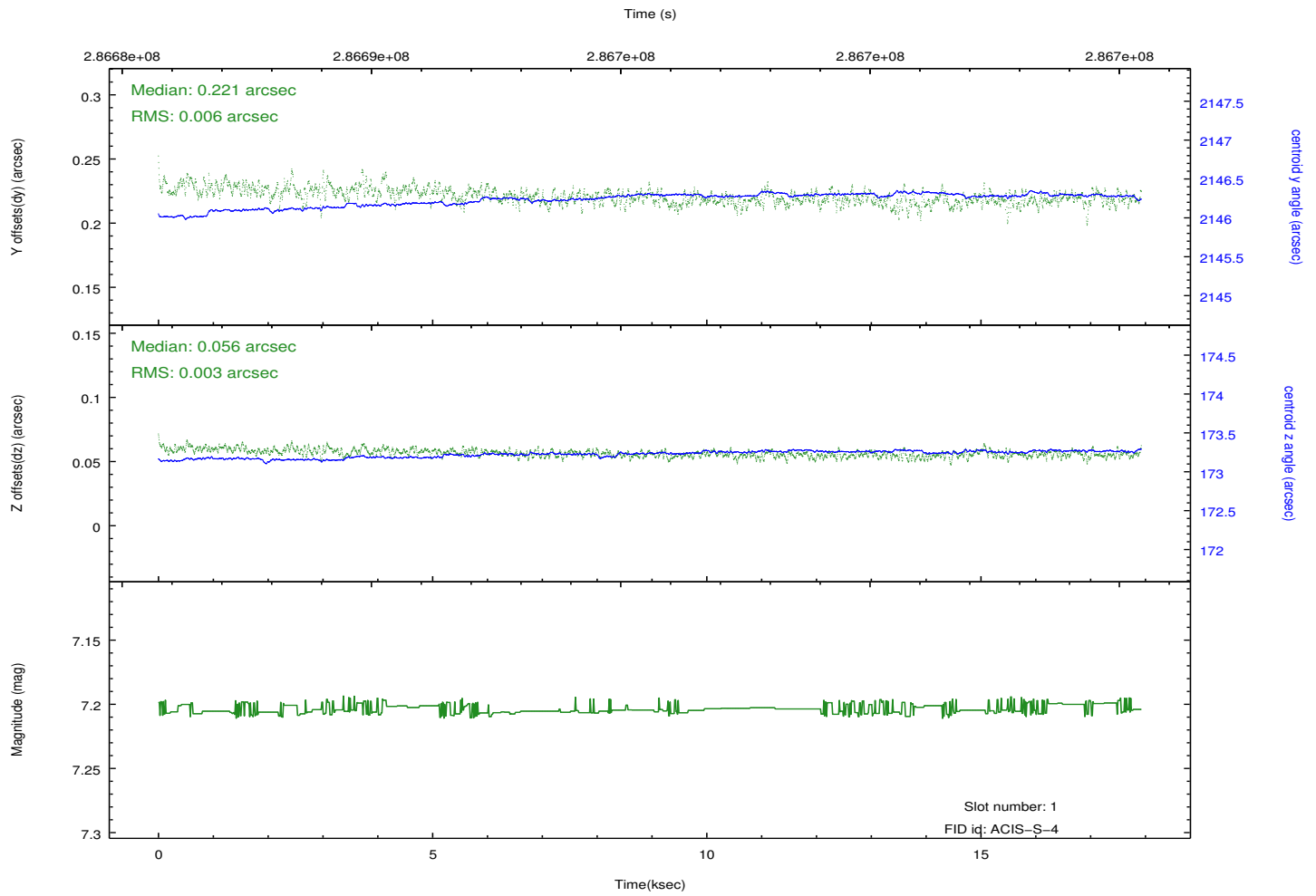
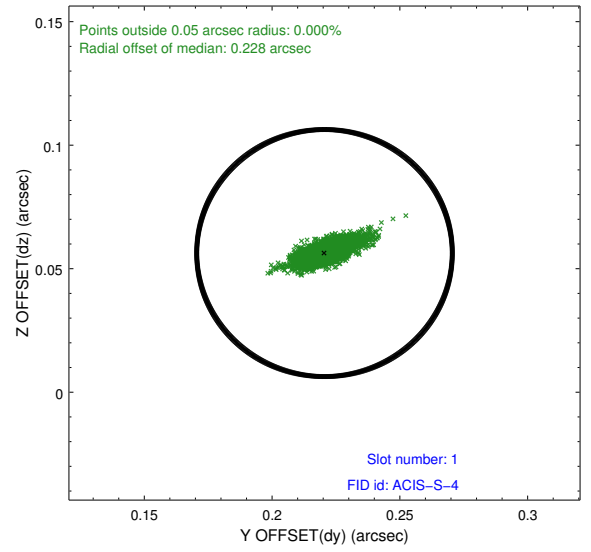
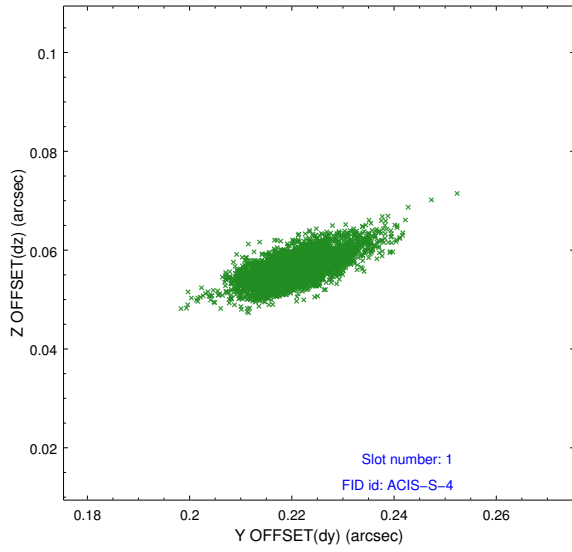


## 2.5 FID Slots

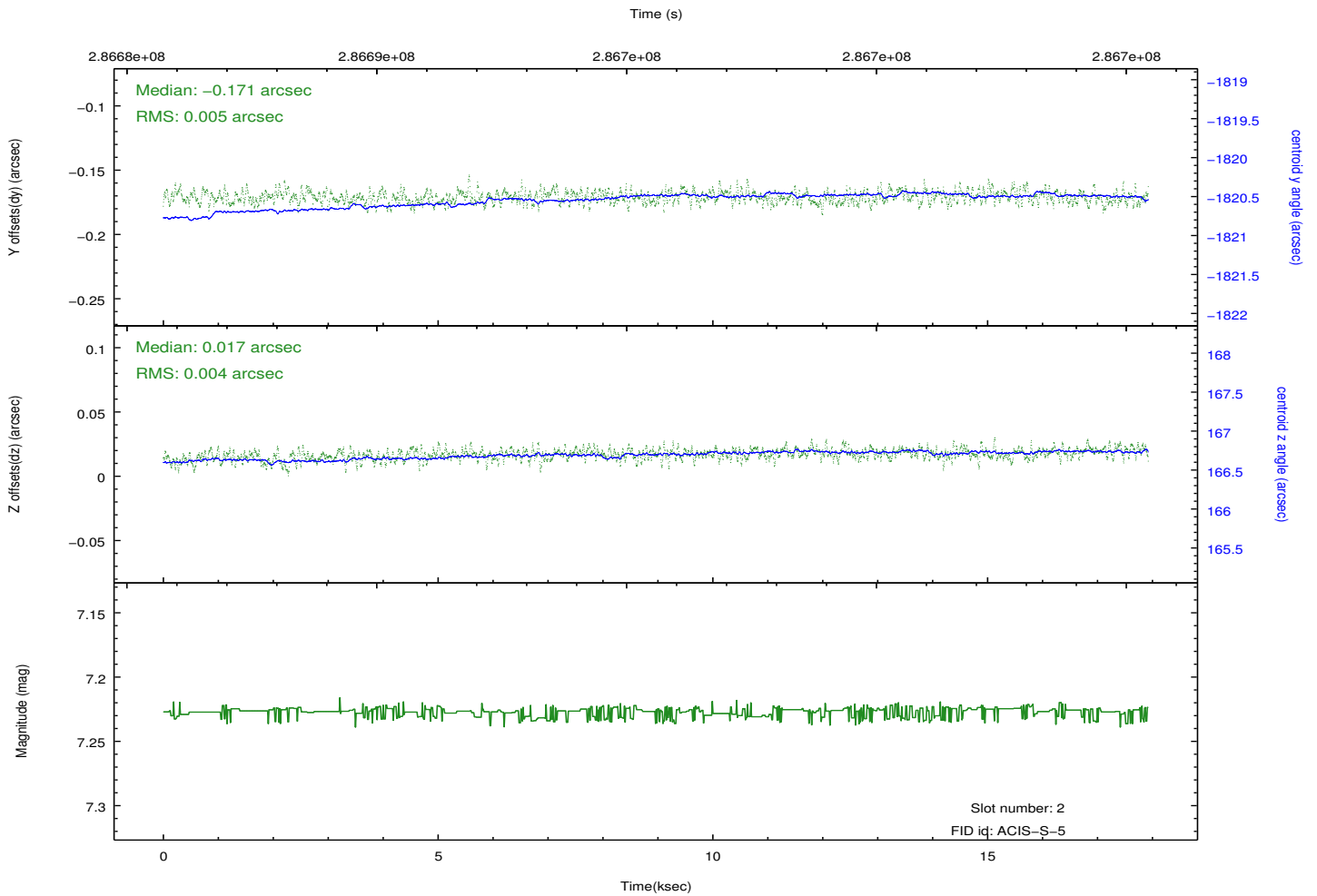
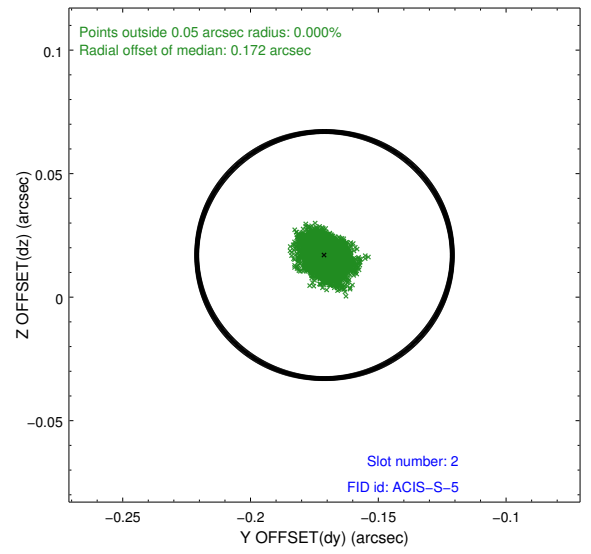
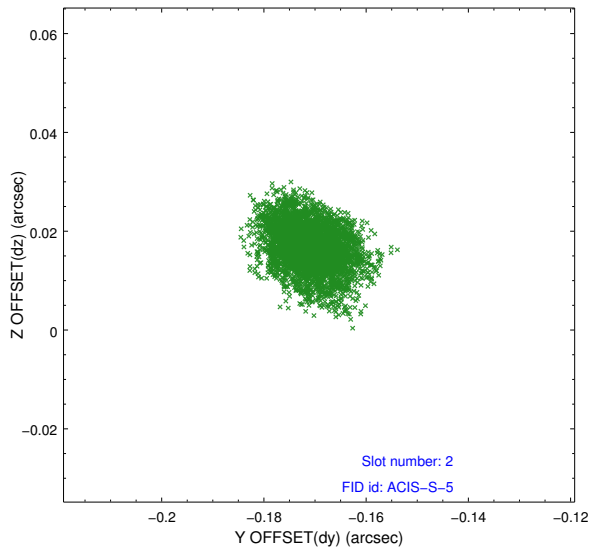
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.04.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.7471999

## A.2 Comments