

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4590 - L2 Version 3  
Chandra X-Ray Center

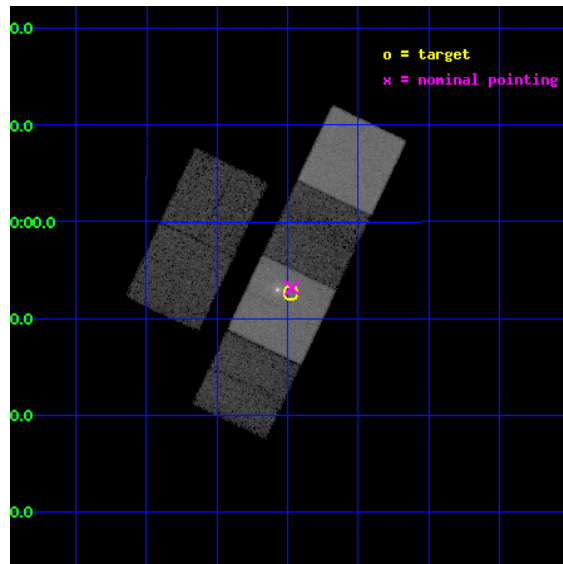
L2 Processing Date : Dec 1 2012

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# 1 Front

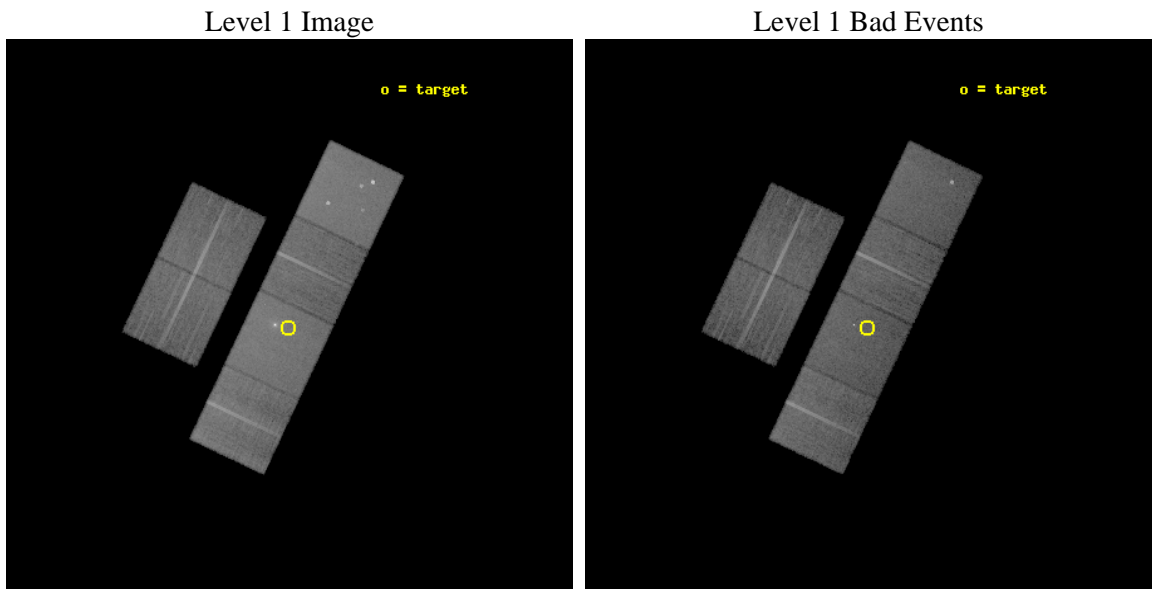
seq_num	400372	Sequence number
obs_id	4590	Observation id
title	The Low-luminosity X-ray binary EXO 1912+097	Proposal title
observer	Prof Mariano Mendez	Principal investigator
object	EXO 1912+097	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	288.495	Observer's specified target RA [deg]
dec_targ	9.876944	Observer's specified target Dec [deg]
ra_nom	288.49239893205	Nominal RA [deg]
dec_nom	9.8863094997903	Nominal Dec [deg]
roll_nom	115.43576819858	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20358.399924159	Sum of GTIs [s]
livetime	20100.609605963	Livetime [s]
ontime2	20355.158943892	Sum of GTIs [s]
ontime3	20358.399924159	Sum of GTIs [s]
ontime5	20358.399924159	Sum of GTIs [s]
ontime6	20358.399924159	Sum of GTIs [s]
ontime7	20358.399924159	Sum of GTIs [s]
ontime8	20358.399924159	Sum of GTIs [s]
l2events	243268	Number of level 2 events



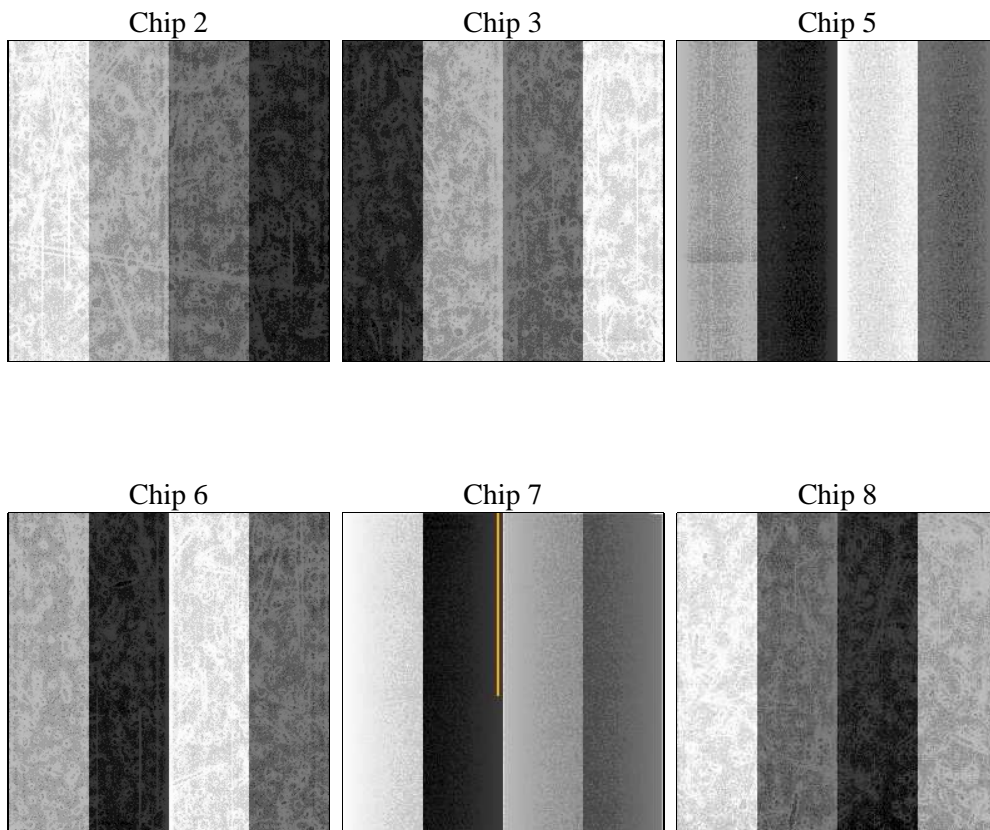
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20358.399924159	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	20355.158943892	Sum of GTIs [s]
date	2012-12-01T07:31:52	Date and time of file creation	ontime3	20358.399924159	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	20358.399924159	Sum of GTIs [s]
			ontime6	20358.399924159	Sum of GTIs [s]
			ontime7	20358.399924159	Sum of GTIs [s]
			ontime8	20358.399924159	Sum of GTIs [s]
			l1events	1047372	Number of level 1 events

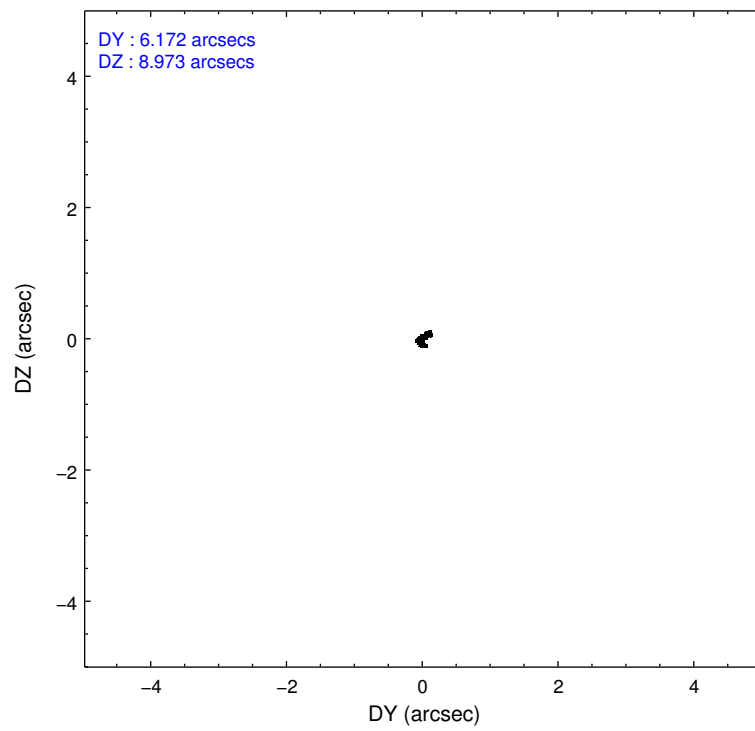
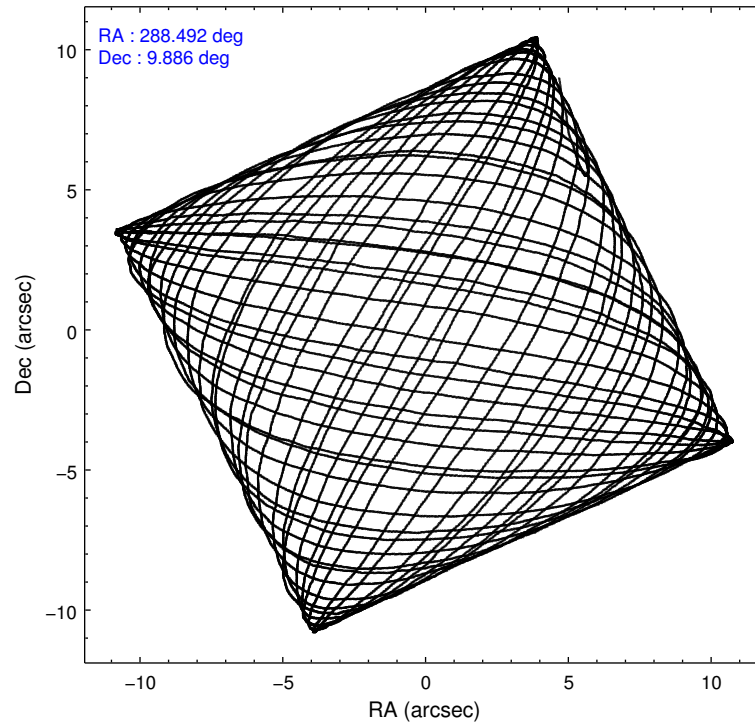
### 2.1.4 Events

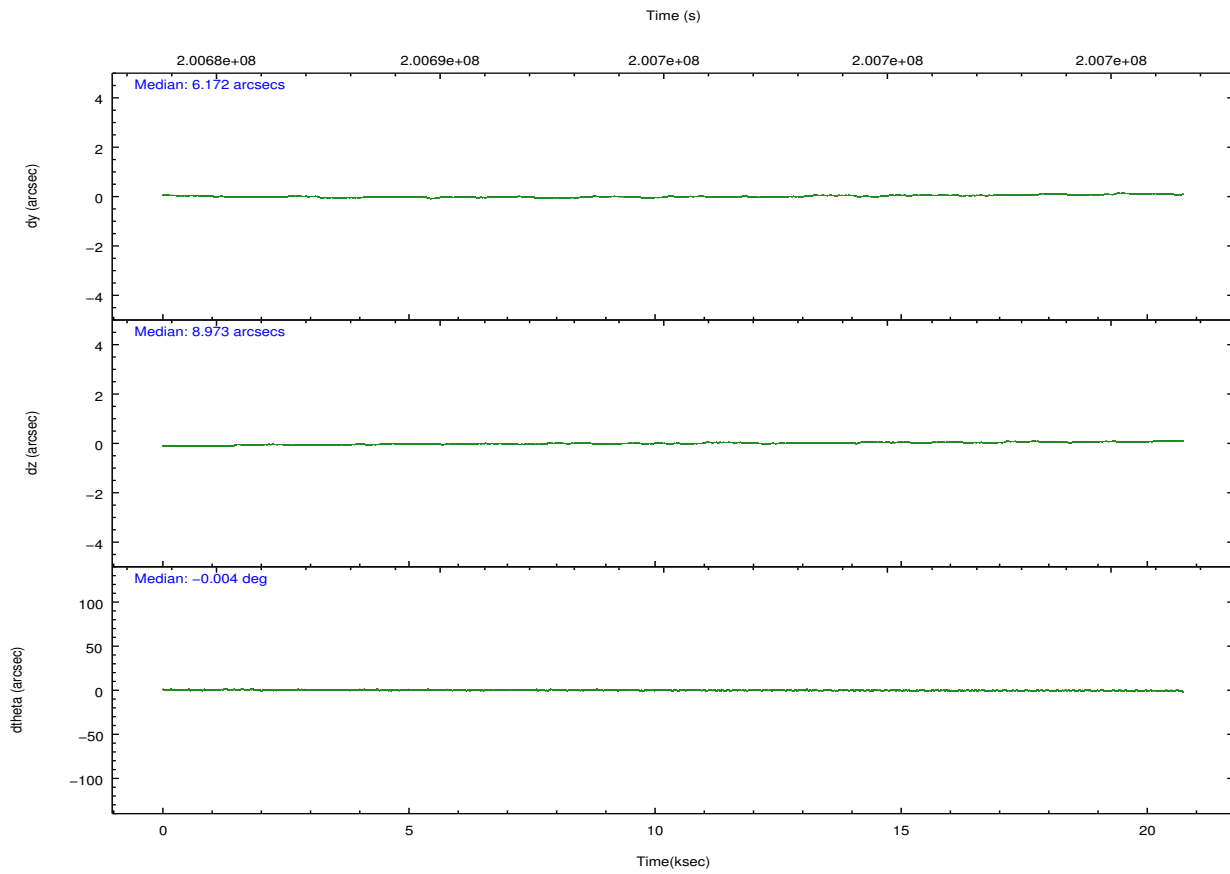
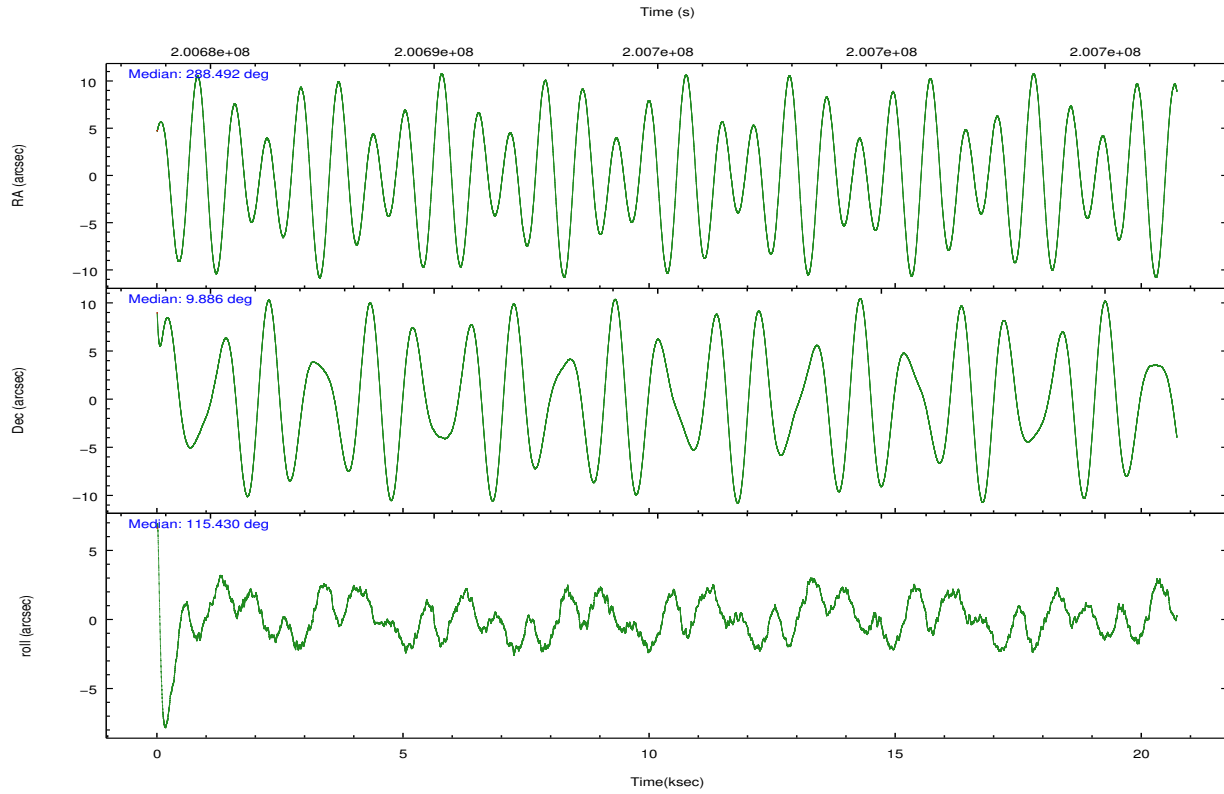
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	144238	139648	222333	146816	209304	185033	grade 0 events	7699	7160	12221	7319	9248	12230
rejected events	126989	123121	119103	128924	117469	146522		5%	5%	5%	4%	4%	6%
rejected %	88%	88%	53%	87%	56%	79%	grade 1 events	110	92	2142	66	338	118
								0%	0%	0%	0%	0%	0%
							grade 2 events	3446	3174	31514	3569	18406	8363
								2%	2%	14%	2%	8%	4%
							grade 3 events	1643	1655	3965	1734	8399	4085
								1%	1%	1%	1%	4%	2%
							grade 4 events	1654	1606	3712	1717	8225	3894
								1%	1%	1%	1%	3%	2%
							grade 5 events	5847	6307	16039	6782	19629	8699
								4%	4%	7%	4%	9%	4%
							grade 6 events	2811	2933	51840	3554	47572	9942
								1%	2%	23%	2%	22%	5%
							grade 7 events	121028	116721	100900	122075	97487	137702
								83%	83%	45%	83%	46%	74%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	288.515374	288.4923989320457	Subarray requested	NONE	NONE
[deg] Pointing Dec	9.871124	9.886309499790345	Alternating exposures requested	N	N
[deg] Pointing Roll	115.275192	115.435768198578	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	200685173.184000	200684145.7219			
Observation start date	2004-05-11T17:51:49	2004-05-11T17:35:45			
[s] Observation end time (MET)	200705573.184000	200706228.32287			
Observation end date	2004-05-11T23:31:49	2004-05-11T23:43:48			
Read mode	TIMED	TIMED			

## 2.3 Aspect



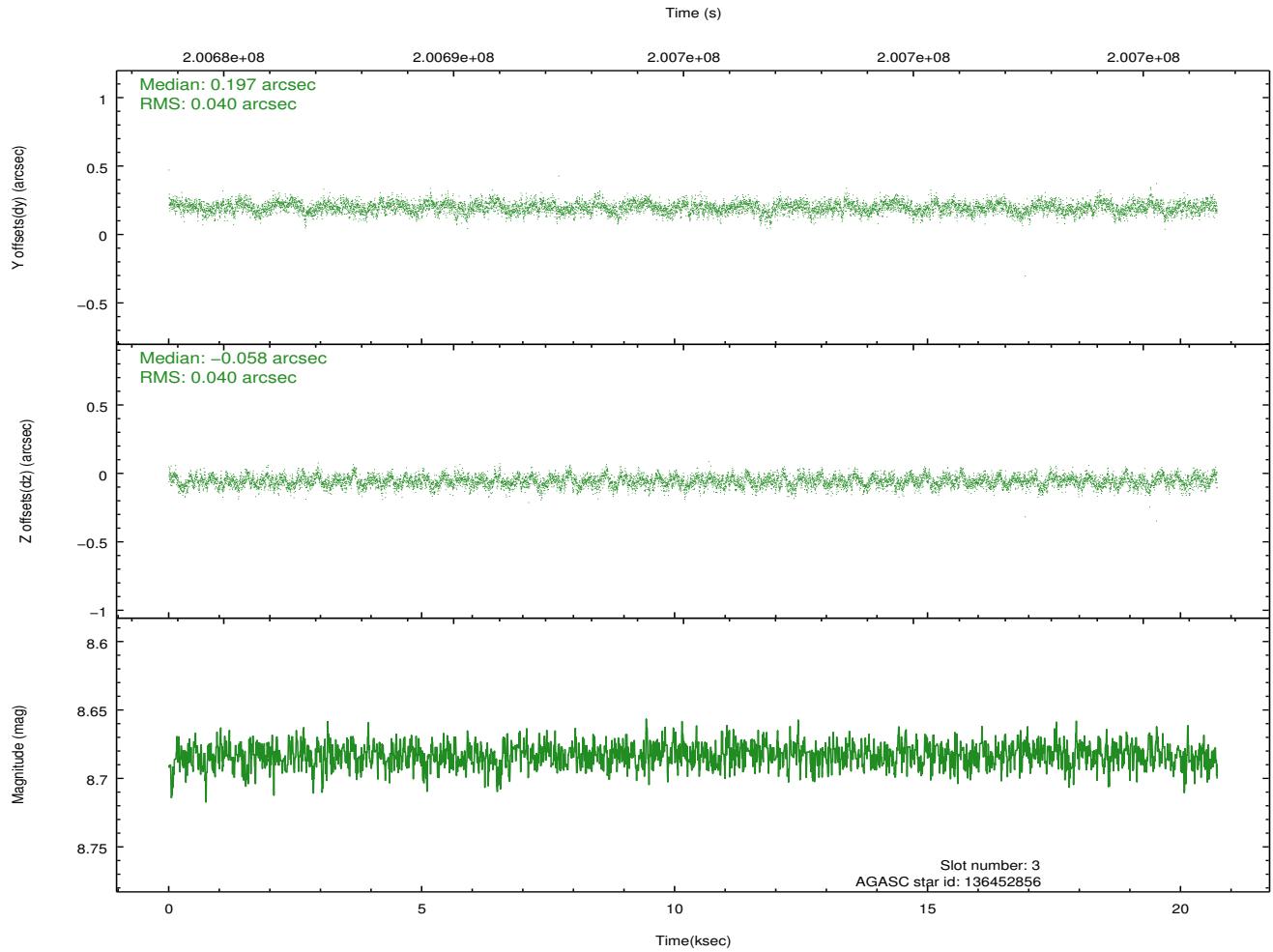
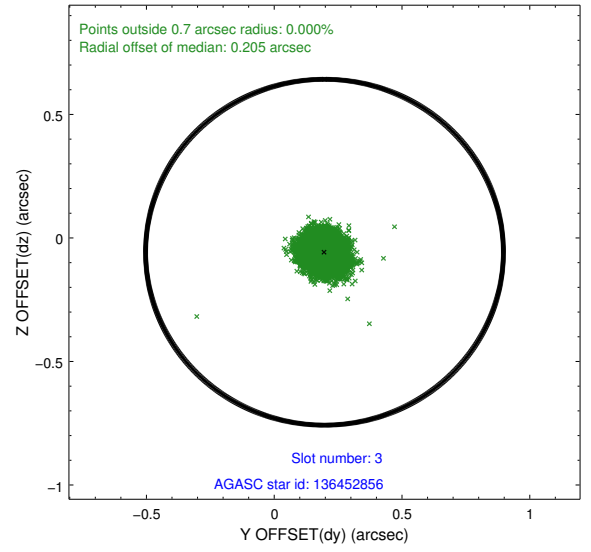
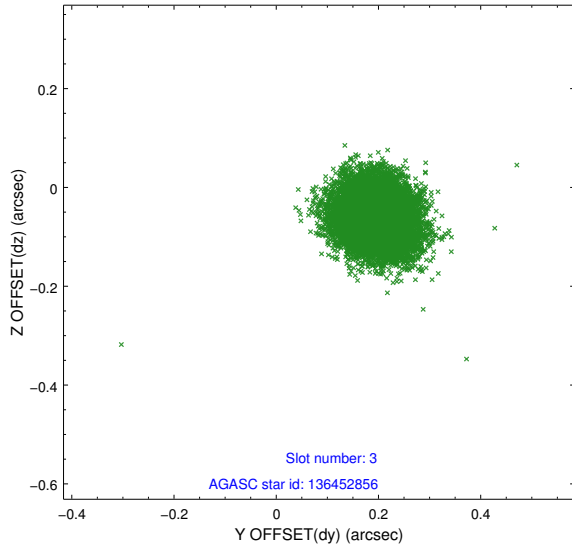


### Slot Statistics

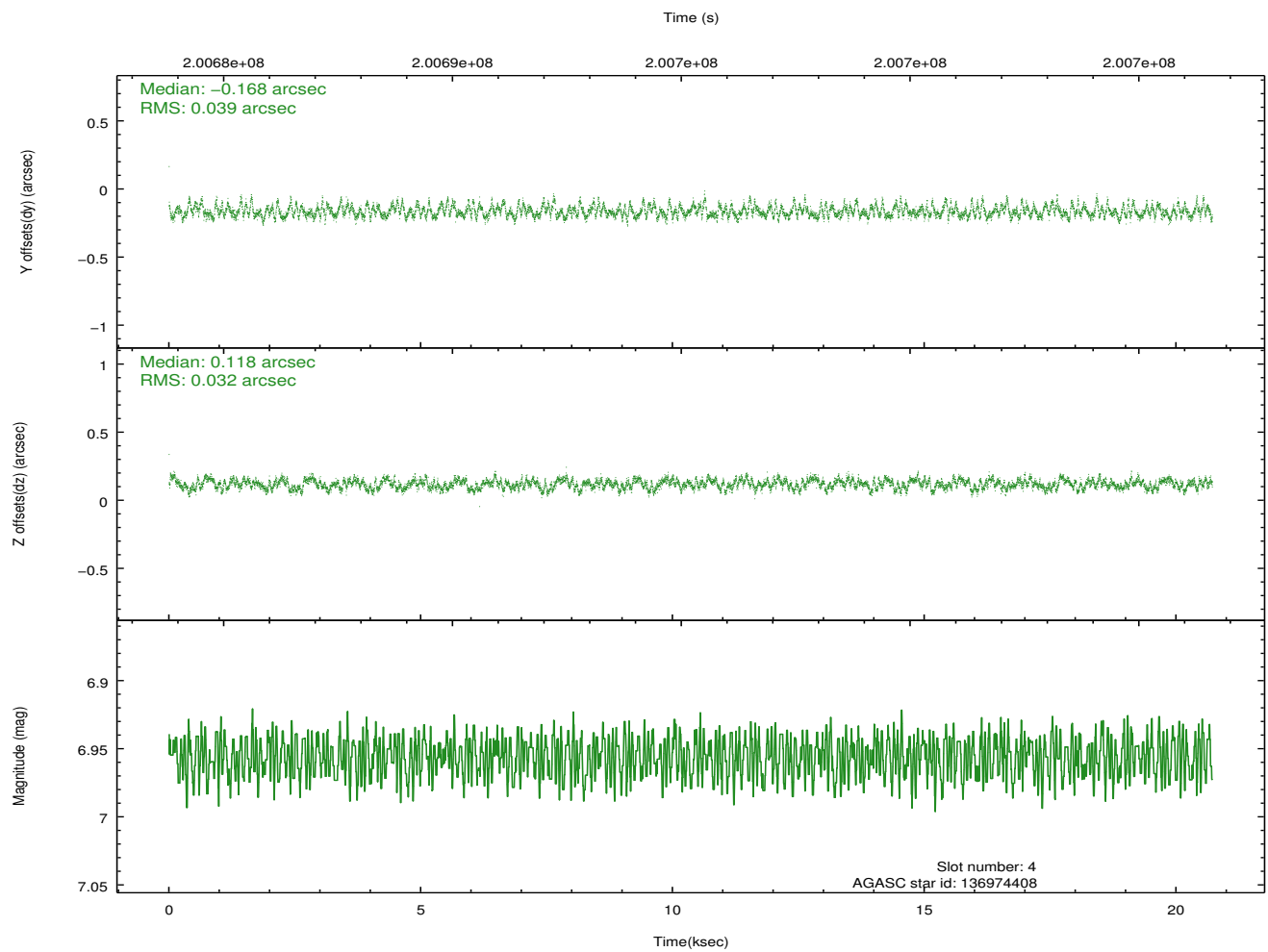
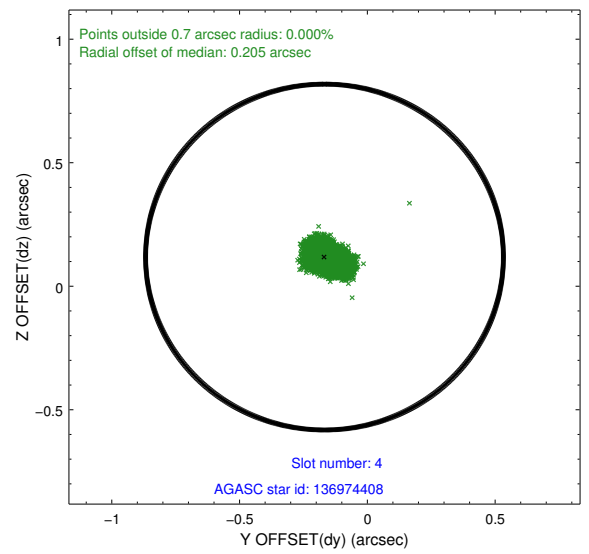
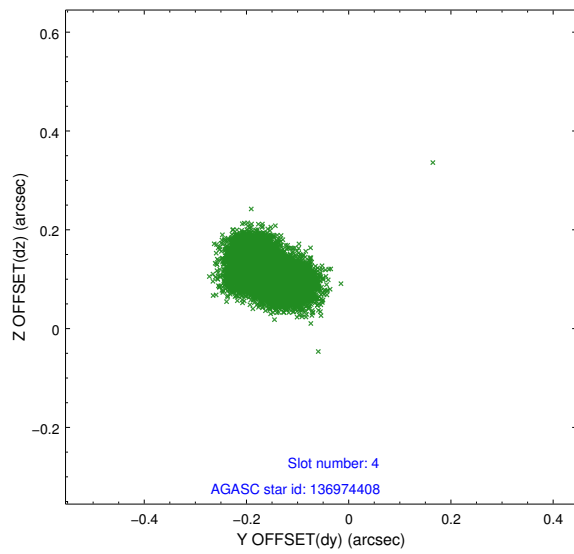
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5054	-0.049	-0.048	0.007	0.011	0.000000	0.000000	-758.96	-1730.24
1	FID	ACIS-S-4	7.20	5054	0.090	0.036	0.006	0.010	0.000000	0.000000	2154.37	178.15
2	FID	ACIS-S-5	7.23	5054	-0.072	0.021	0.007	0.011	0.000000	0.000000	-1811.60	172.00
3	GUIDE	136452856	8.68	10102	0.197	-0.058	0.060	0.098	288.703253	9.318908	-2082.13	245.18
4	GUIDE	136974408	6.96	10103	-0.168	0.118	0.054	0.089	288.806802	10.212409	670.52	-1458.00
5	GUIDE	136977584	8.43	10098	-0.099	0.105	0.080	0.129	288.635599	10.555283	2045.90	-1436.03
6	GUIDE	136973480	8.44	10103	-0.156	-0.139	0.066	0.108	287.924725	9.951688	1158.23	1769.34
7	GUIDE	136975784	9.22	10101	0.227	-0.025	0.077	0.124	288.508619	9.520005	-1132.33	561.69

## 2.4 Star Slots

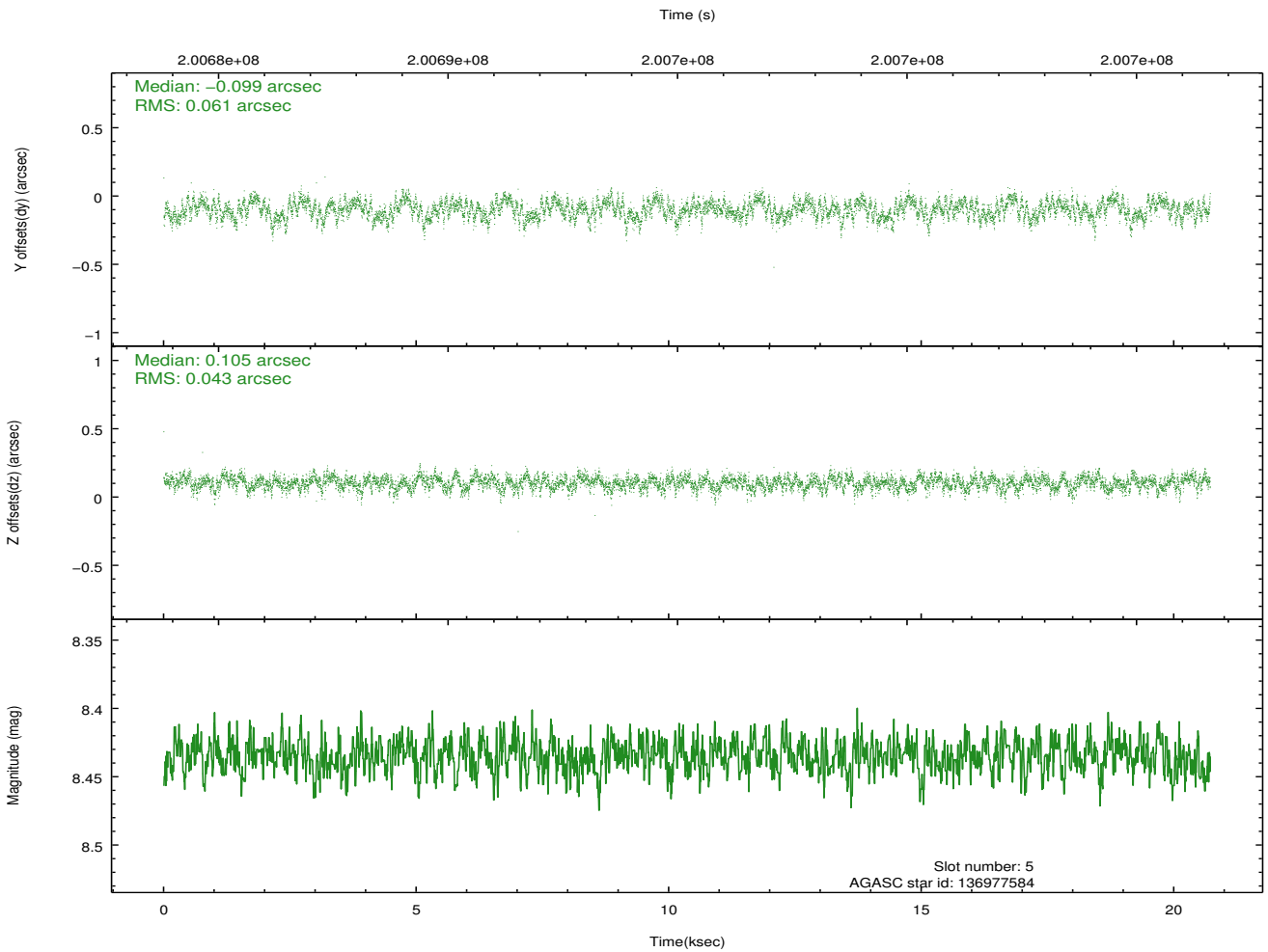
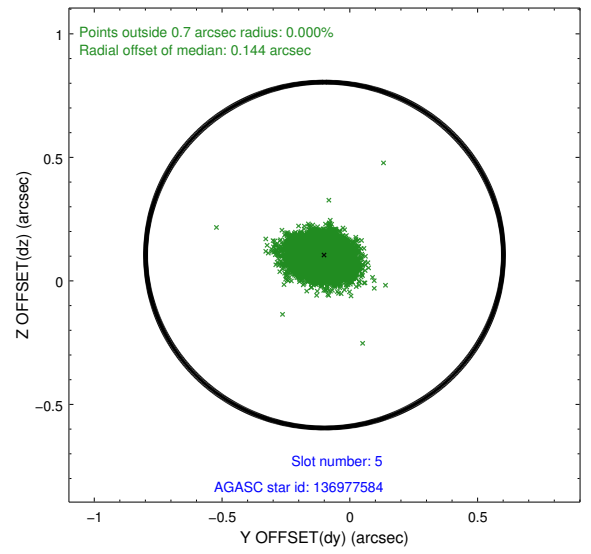
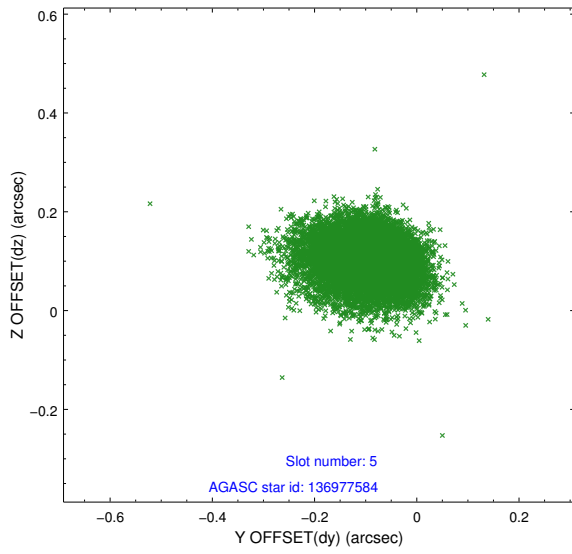
### 2.4.1 Slot 3



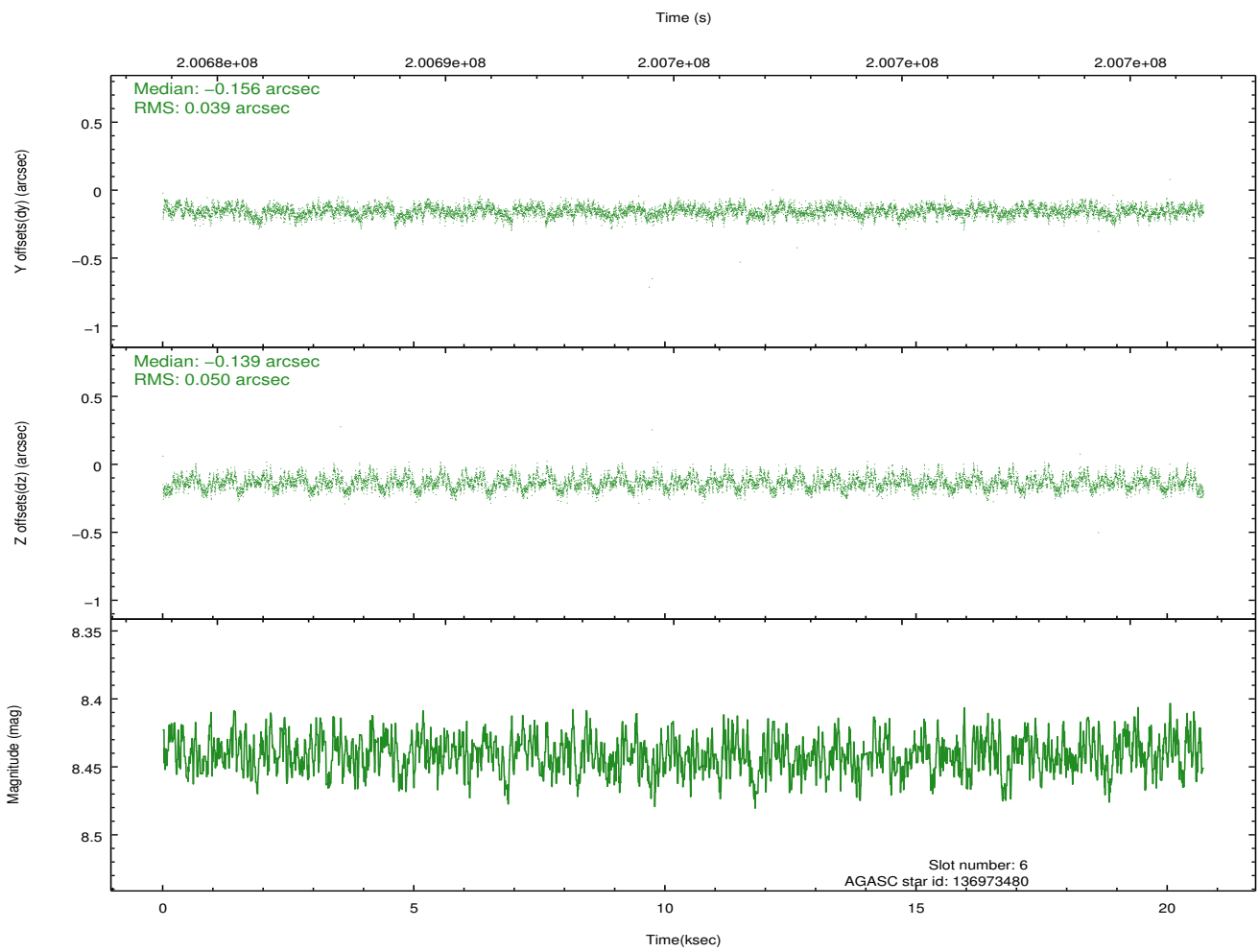
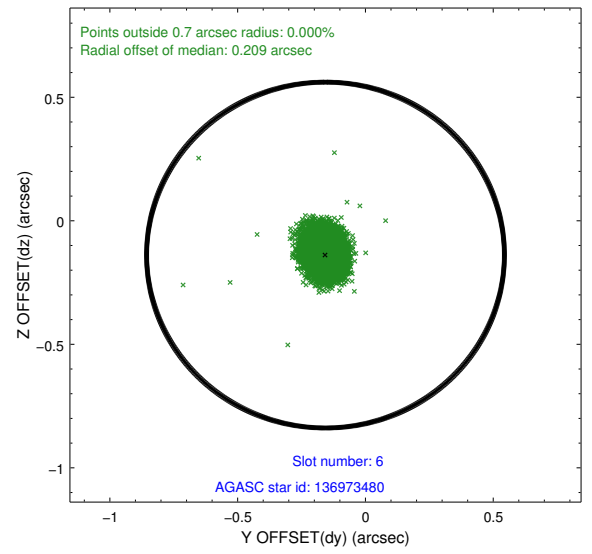
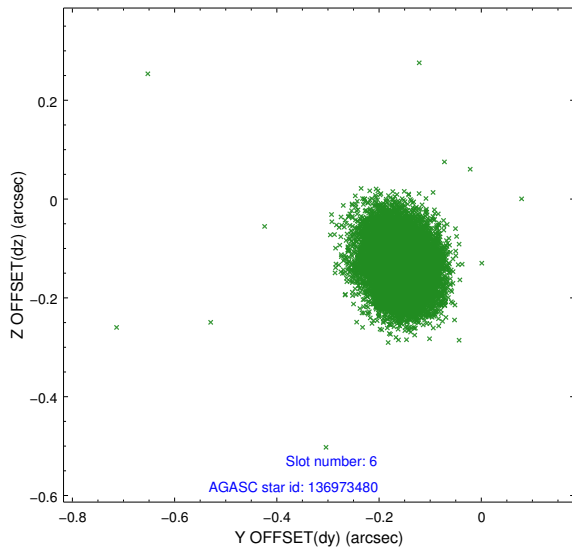
## 2.4.2 Slot 4



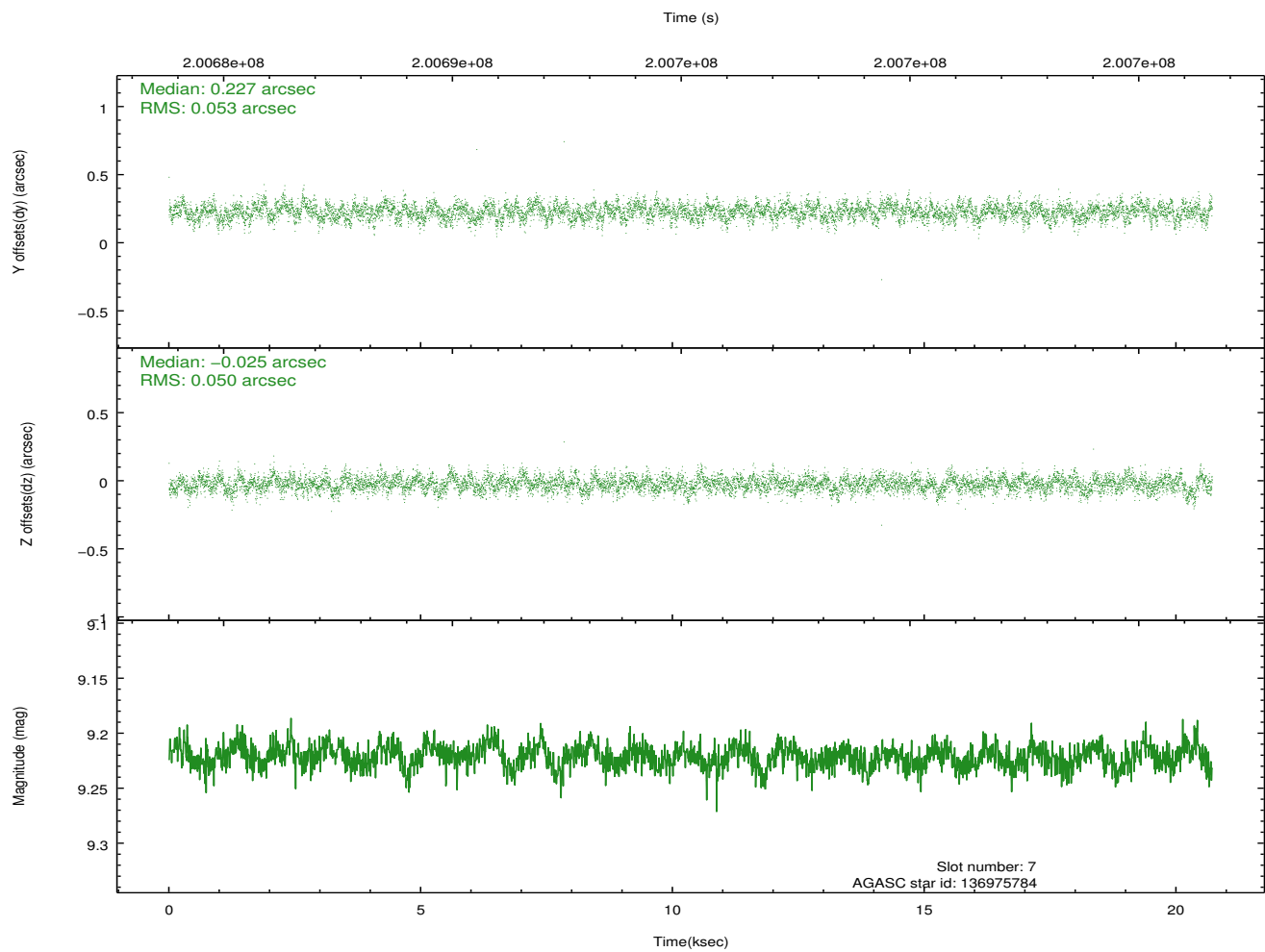
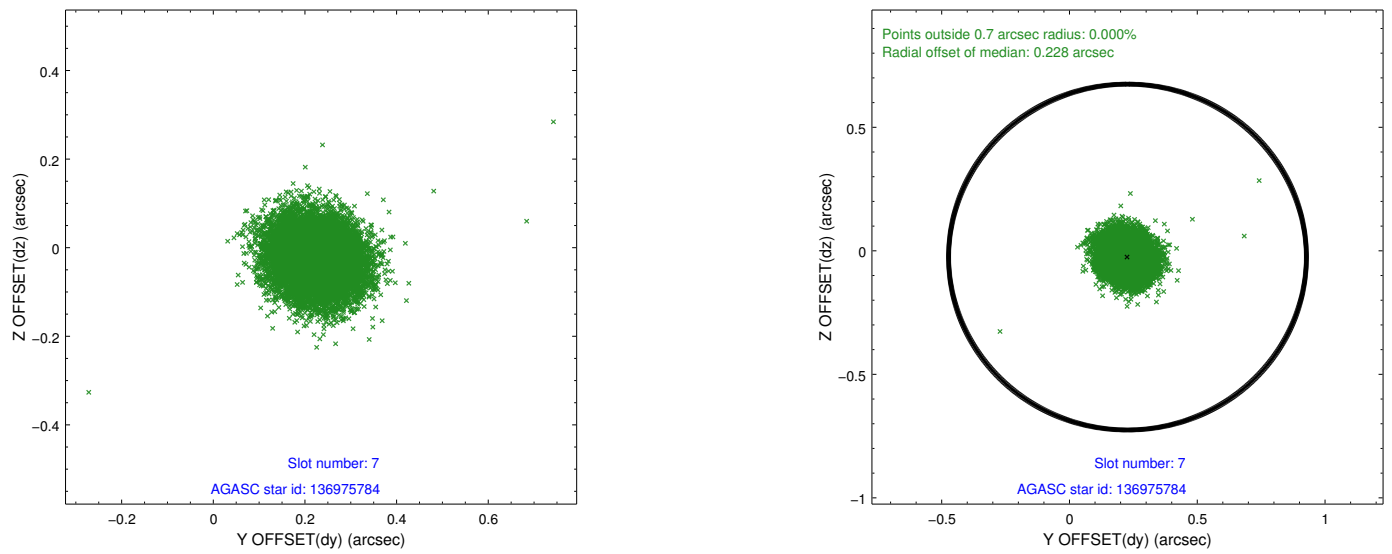
### 2.4.3 Slot 5



## 2.4.4 Slot 6

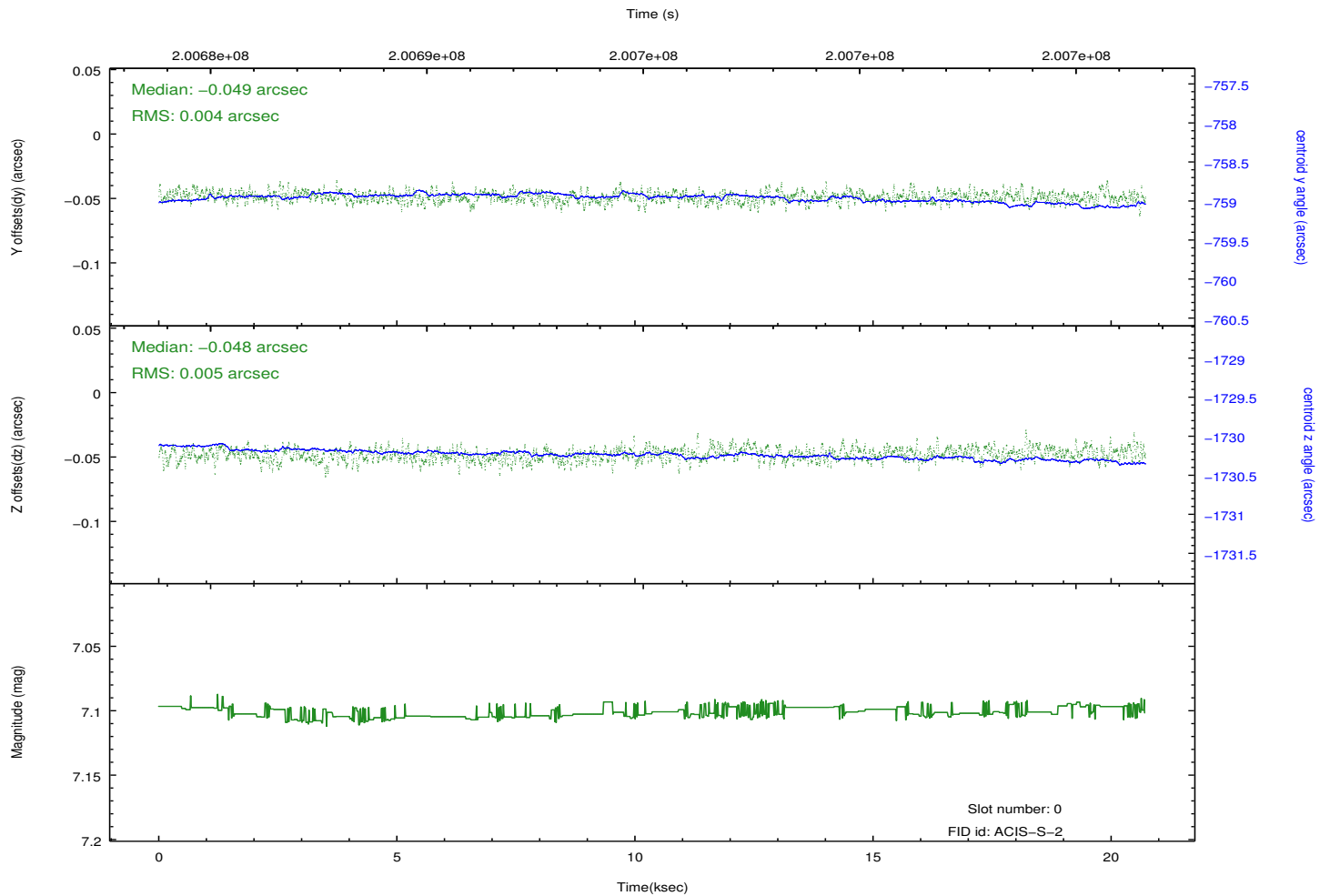
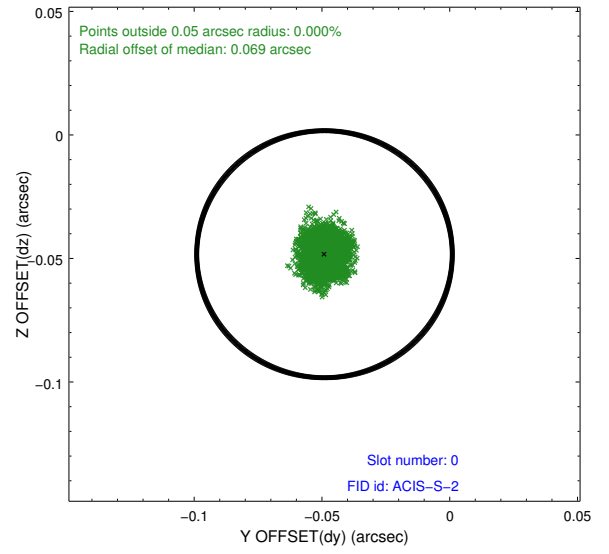
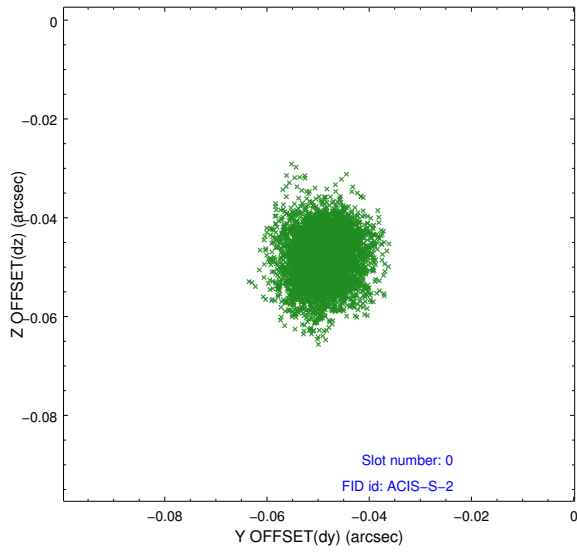


## 2.4.5 Slot 7

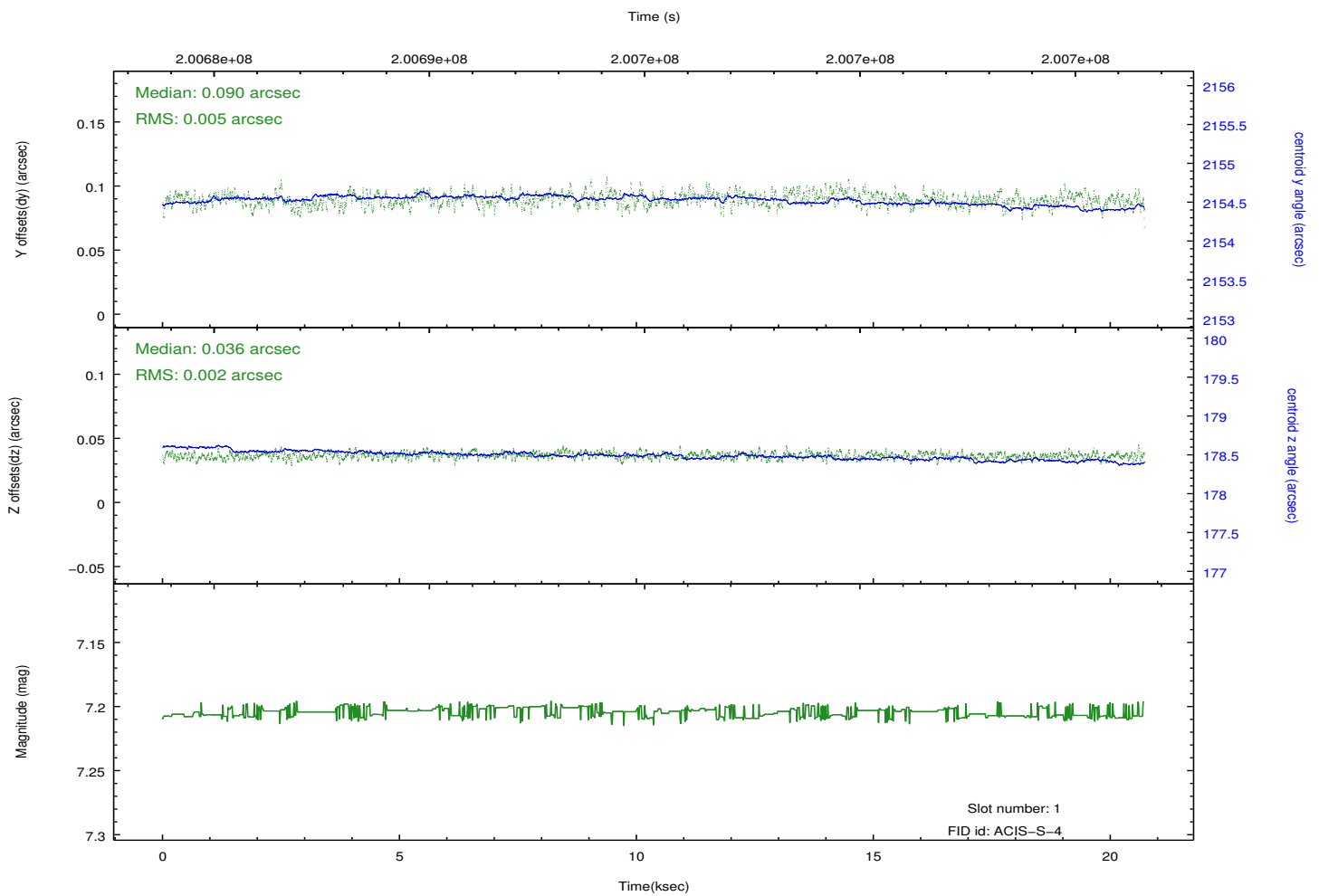
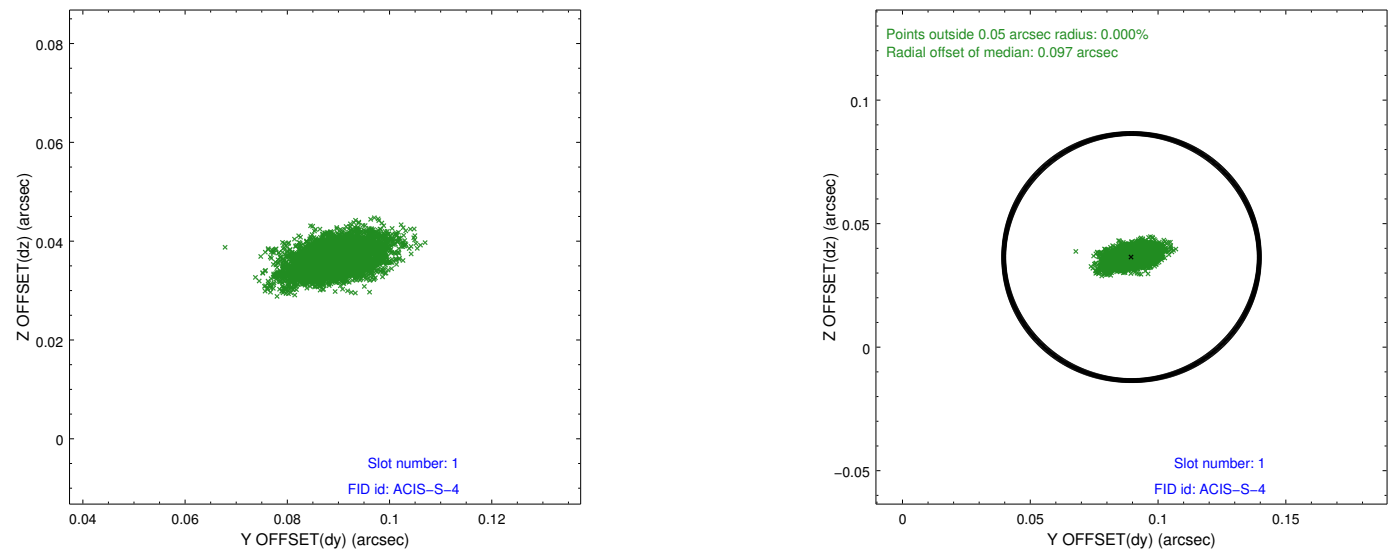


## 2.5 FID Slots

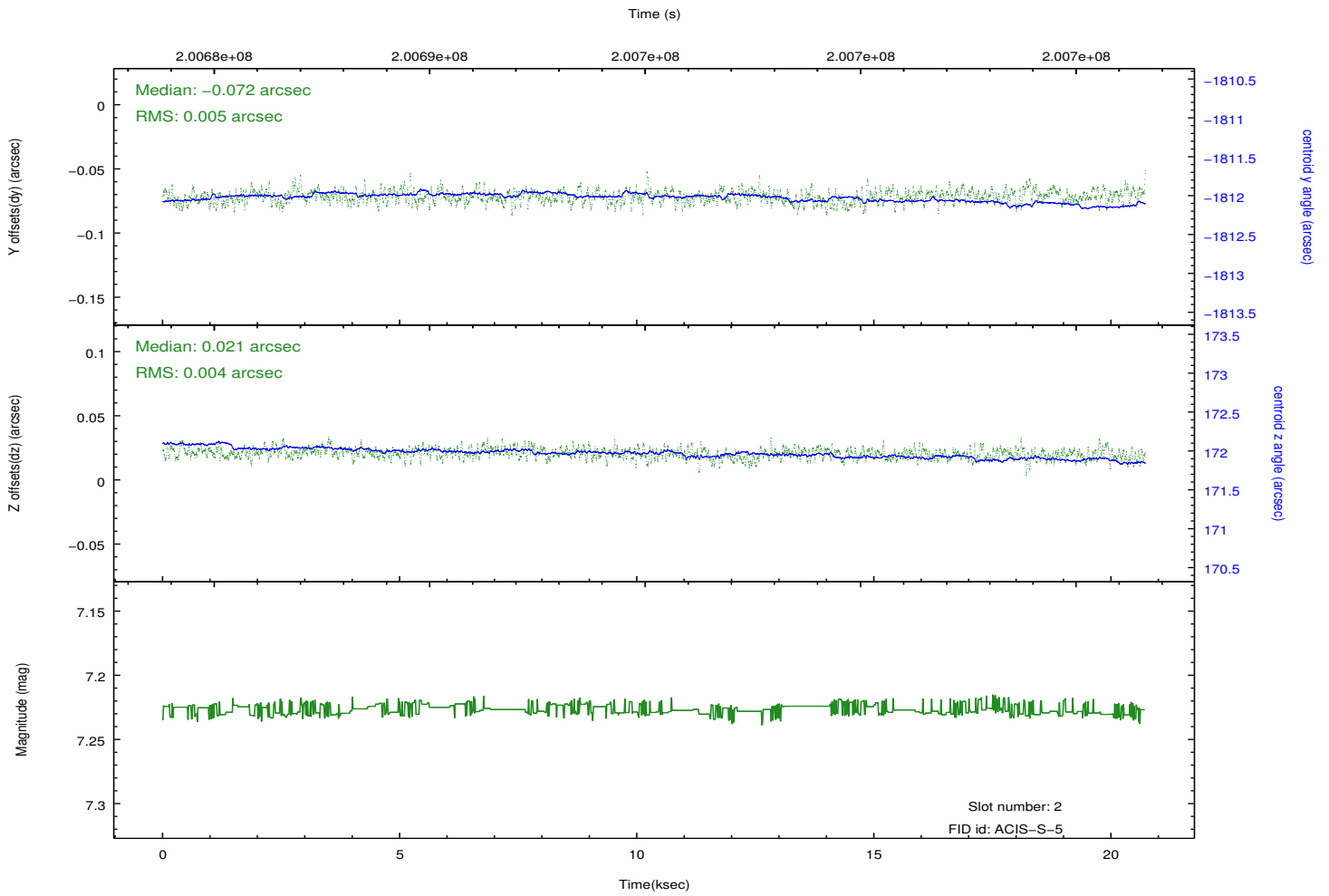
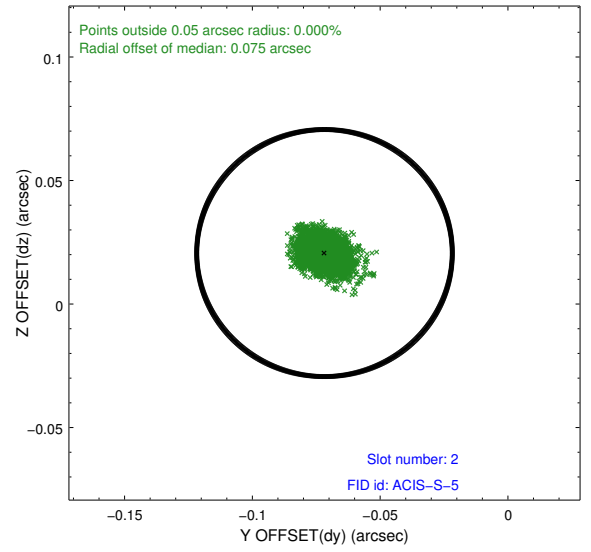
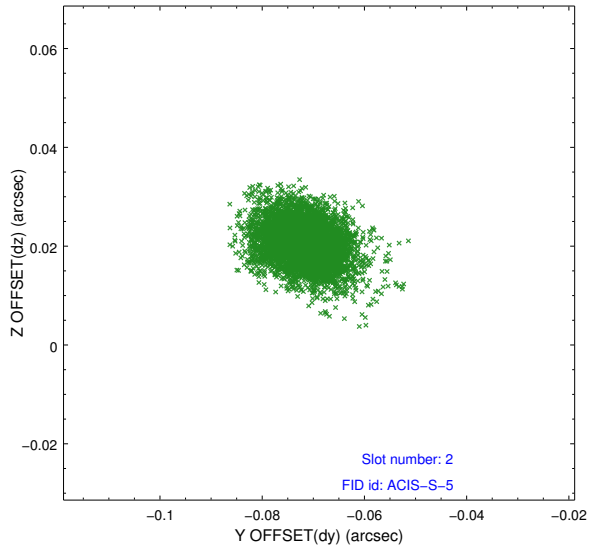
### 2.5.1 Slot 0



## 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)	2012.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.361

## A.2 Comments

Window preference not met.