

# V&V Reference Report

## L2 ASCDS Version : 10.3.3

Observation 17408 - L2 Version 1  
Chandra X-Ray Center

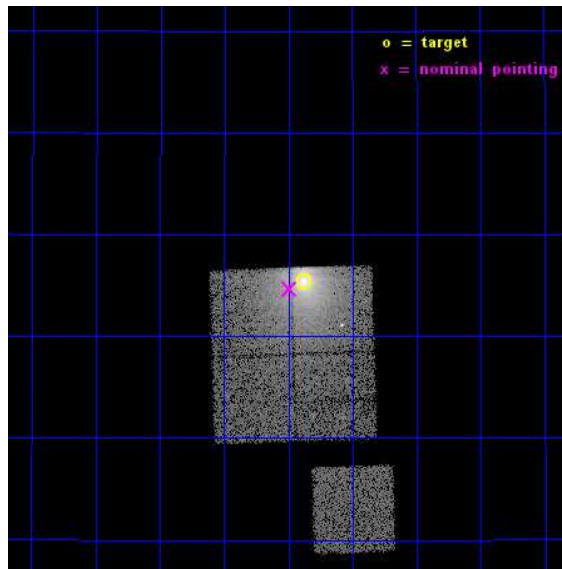
L2 Processing Date : Apr 19 2015

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# 1 Front

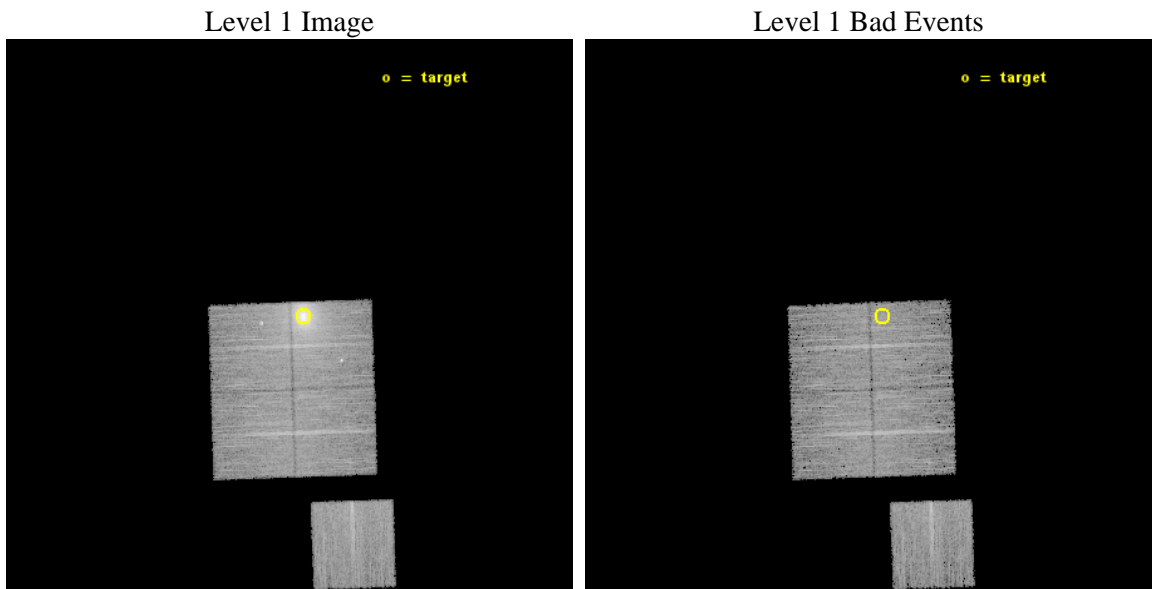
seq_num	890108	Sequence number
obs_id	17408	Observation id
title	AO-16 Calibration Observations of A1795	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	A1795	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219583	Observer's specified target RA [deg]
dec_targ	26.590833	Observer's specified target Dec [deg]
ra_nom	207.24765077834	Nominal RA [deg]
dec_nom	26.57824681147	Nominal Dec [deg]
roll_nom	178.10397287991	Nominal Roll [deg]
revision	1	Processing version of data
ontime	14773.365851283	Sum of GTIs [s]
livetime	14580.340950442	Livetime [s]
ontime0	14773.365851283	Sum of GTIs [s]
ontime1	14773.406891227	Sum of GTIs [s]
ontime2	14773.447911024	Sum of GTIs [s]
ontime3	14773.488971233	Sum of GTIs [s]
ontime6	14767.042630434	Sum of GTIs [s]
l2events	98323	Number of level 2 events



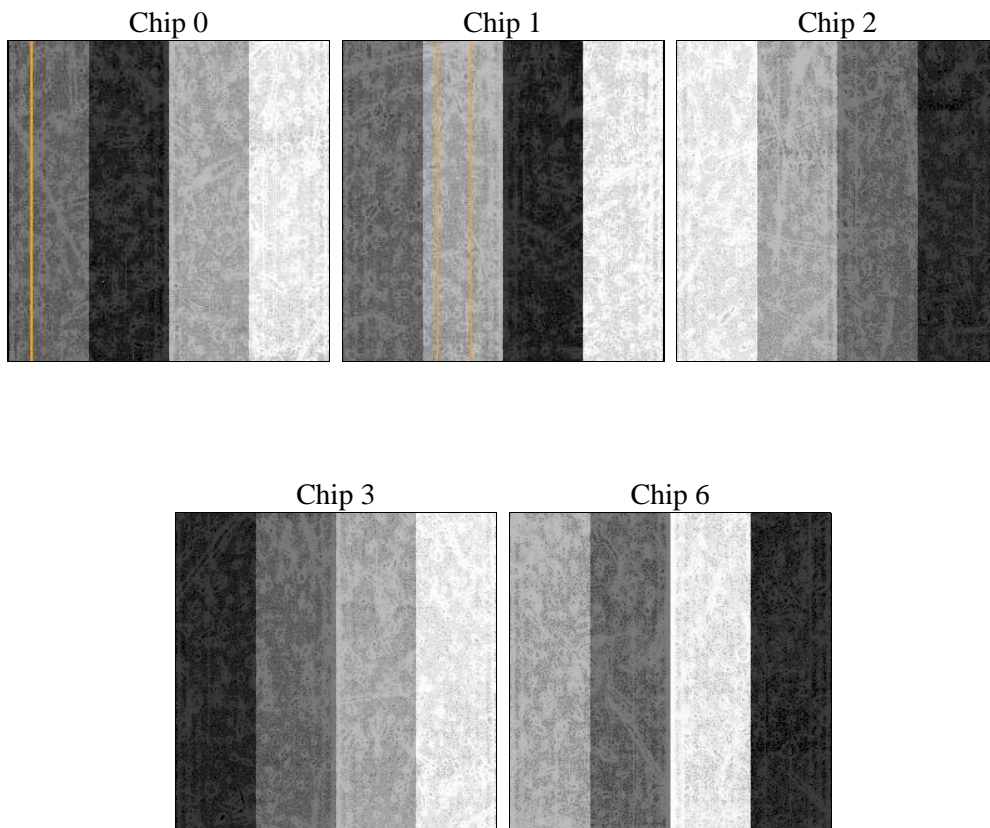
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	14773.365851283	Sum of GTIs [s]
caldbver	4.6.7	&#160	ontime0	14773.365851283	Sum of GTIs [s]
date	2015-04-19T04:48:27	Date and time of file creation	ontime1	14773.406891227	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	14773.447911024	Sum of GTIs [s]
			ontime3	14773.488971233	Sum of GTIs [s]
			ontime6	14767.042630434	Sum of GTIs [s]
			l1events	414107	Number of level 1 events

### 2.1.4 Events

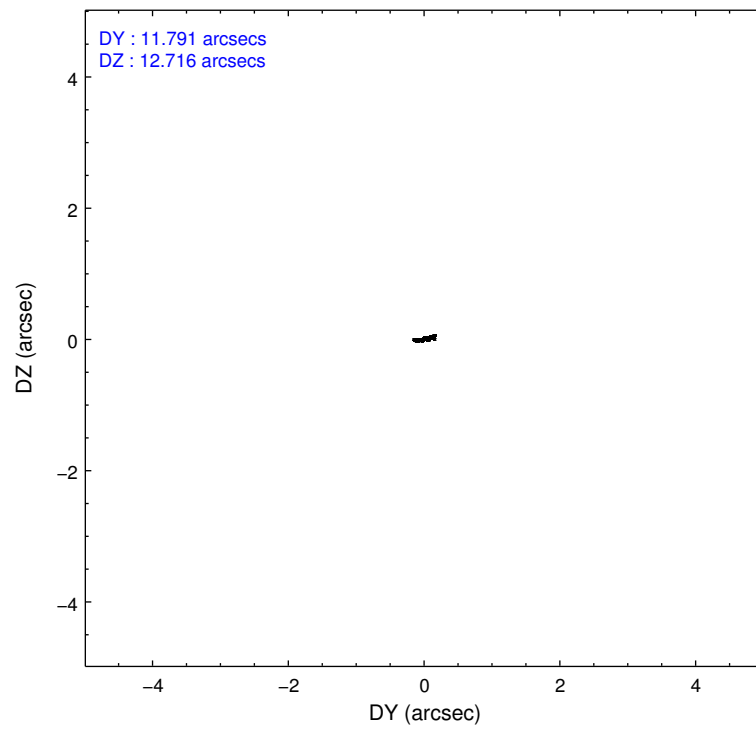
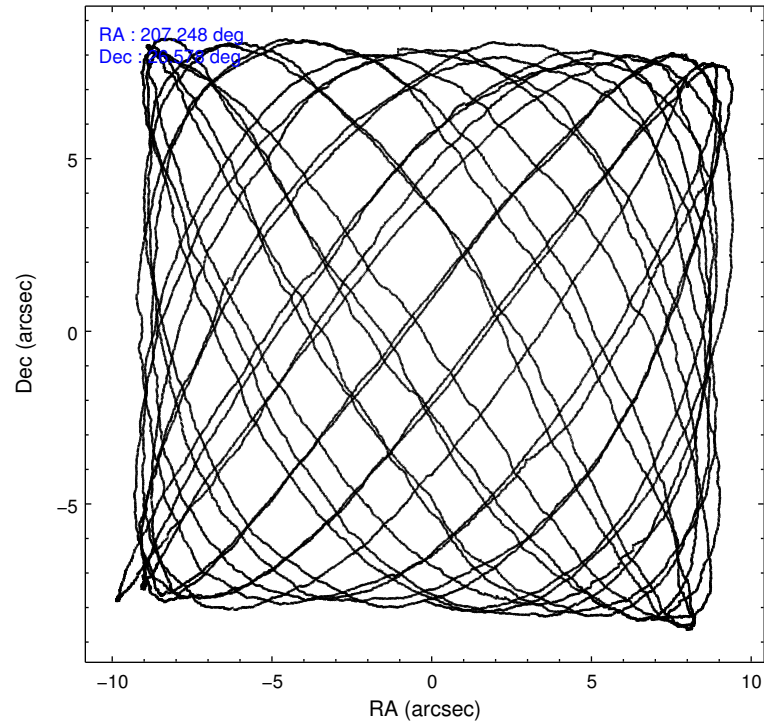
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	124029	76822	71738	70173	71345
rejected events	58259	57630	63214	62158	63282
rejected %	46%	75%	88%	88%	88%

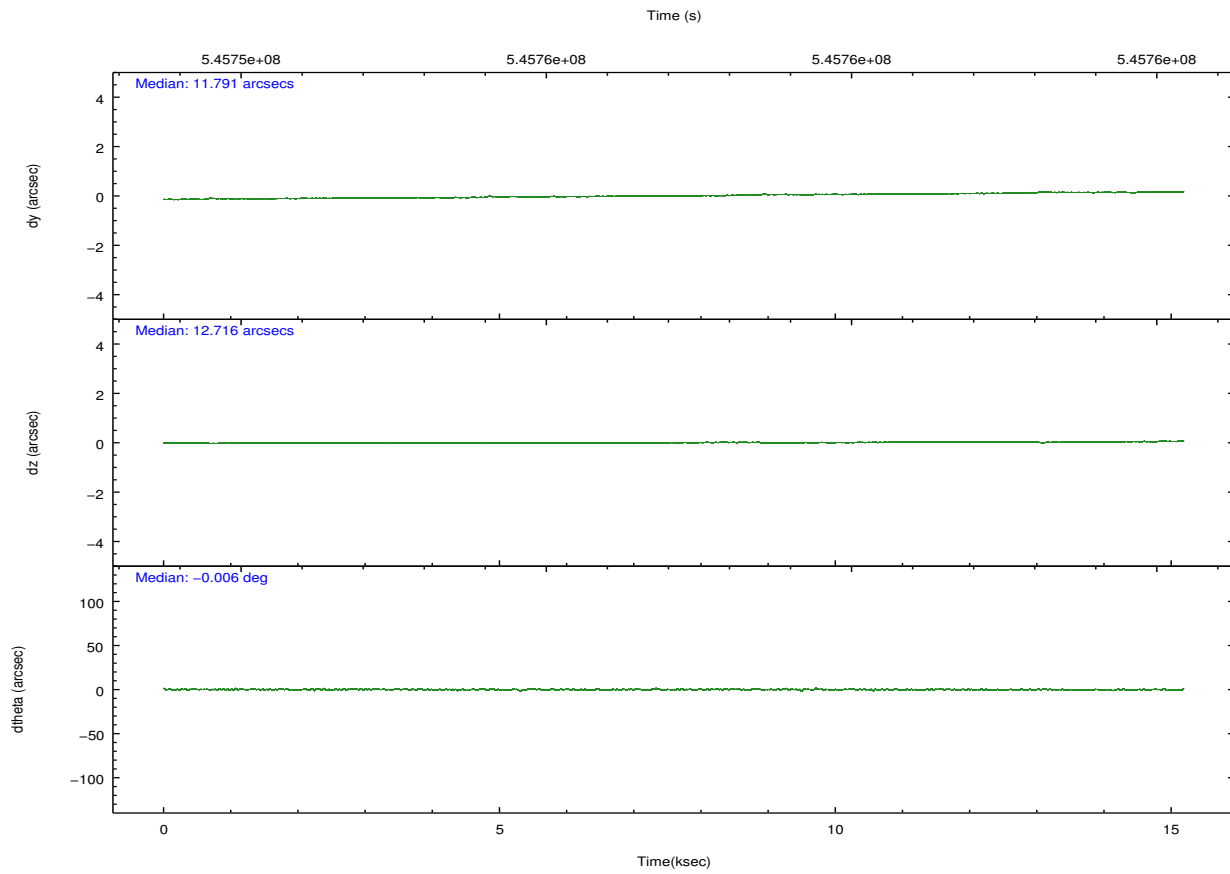
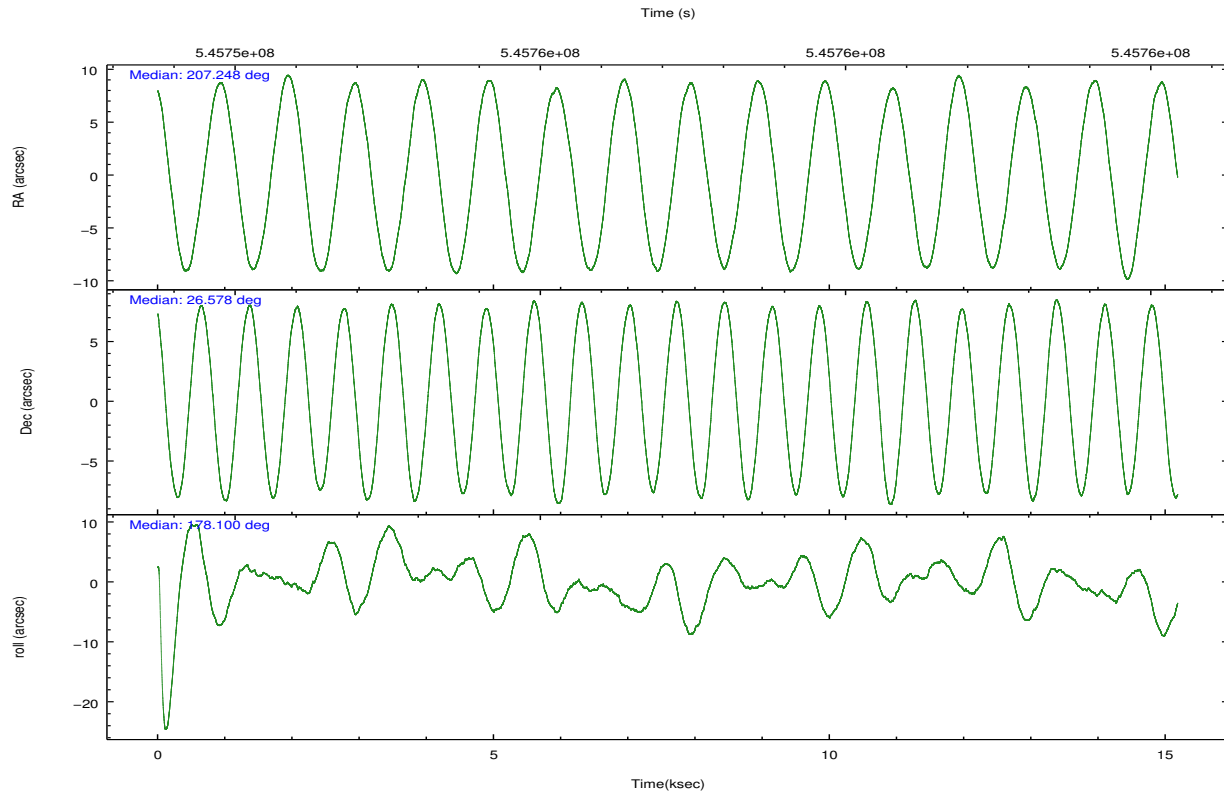
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	48655	10993	3554	3049	2415
	39%	14%	4%	4%	3%
grade 1 events	178	49	51	46	29
	0%	0%	0%	0%	0%
grade 2 events	8506	3600	1787	1685	2028
	6%	4%	2%	2%	2%
grade 3 events	2549	1045	815	859	770
	2%	1%	1%	1%	1%
grade 4 events	2493	1077	789	795	711
	2%	1%	1%	1%	0%
grade 5 events	3147	3104	2781	3560	3196
	2%	4%	3%	5%	4%
grade 6 events	3596	2482	1583	1628	2143
	2%	3%	2%	2%	3%
grade 7 events	54905	54472	60378	58551	60053
	44%	70%	84%	83%	84%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	207.274816	207.2476507783434	Subarray requested	NONE	NONE
[deg] Pointing Dec	26.591356	26.57824681146996	Alternating exposures requested	N	N
[deg] Pointing Roll	177.883128	178.1039728799098	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	544233667.184000	544233667.184000			
[s] Window stop time (MET)	546739267.184000	546739267.184000			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-254.359963	-254.3657361129205			
[mm] SIM translation stage offset	20.7675	20.77328310999084			
[s] Observation start time (MET)	545749691.184000	545749315.0214			
Observation start date	2015-04-18T13:07:04	2015-04-18T13:01:55			
[s] Observation end time (MET)	545764691.184000	545764824.80977			
Observation end date	2015-04-18T17:17:04	2015-04-18T17:20:24			
Read mode	TIMED	TIMED			

## 2.3 Aspect





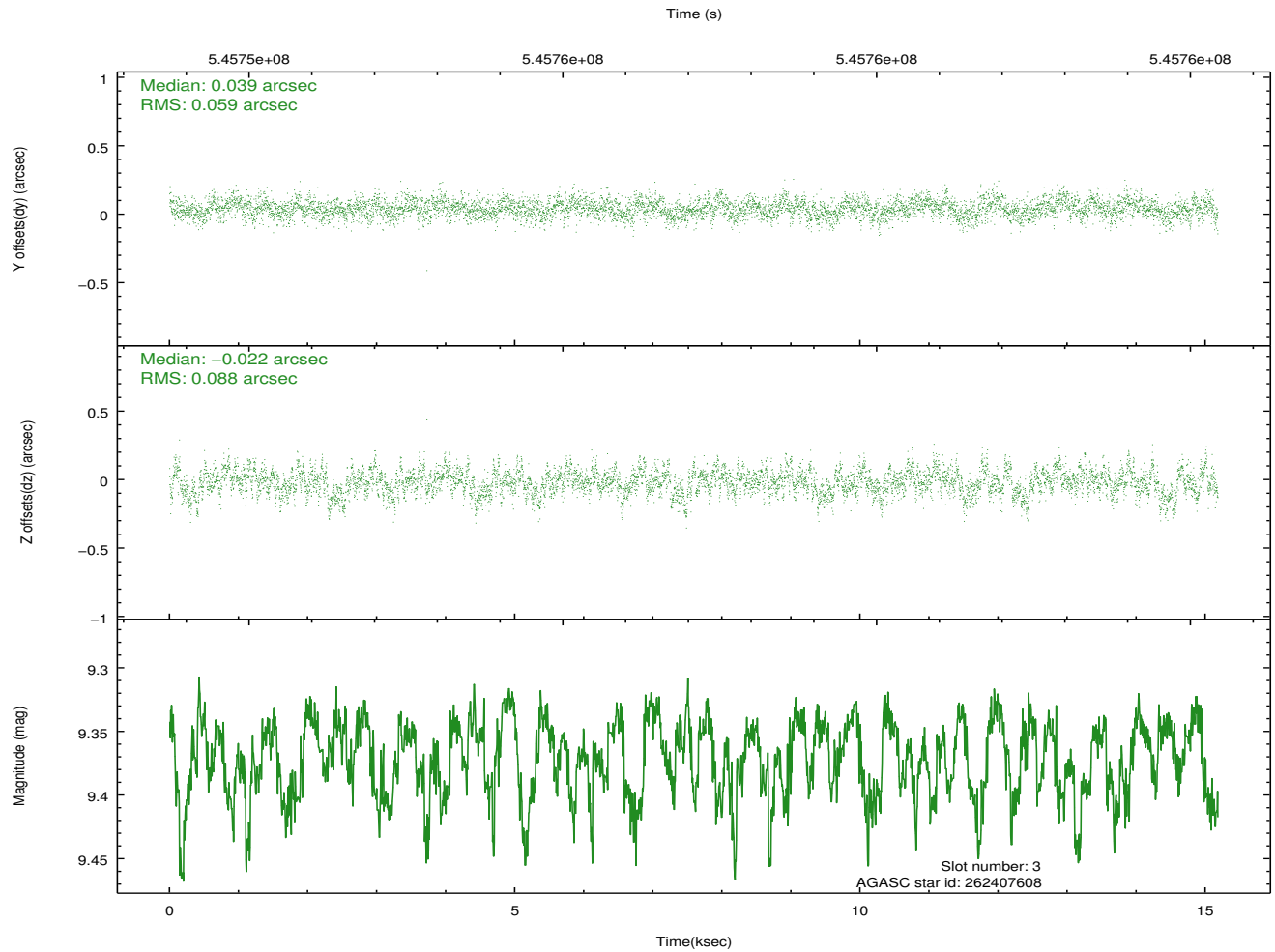
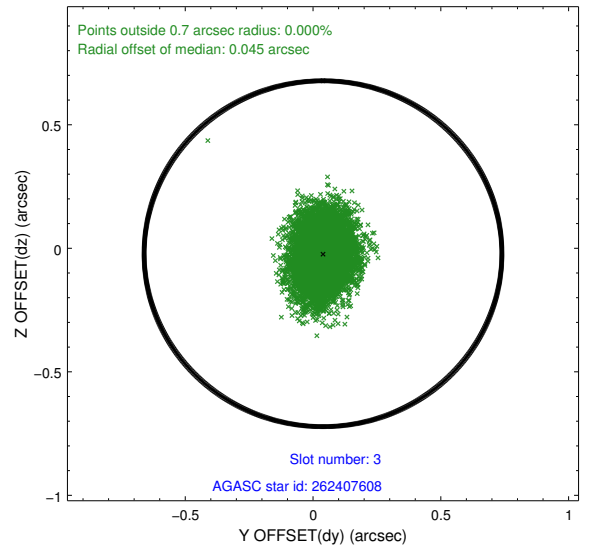
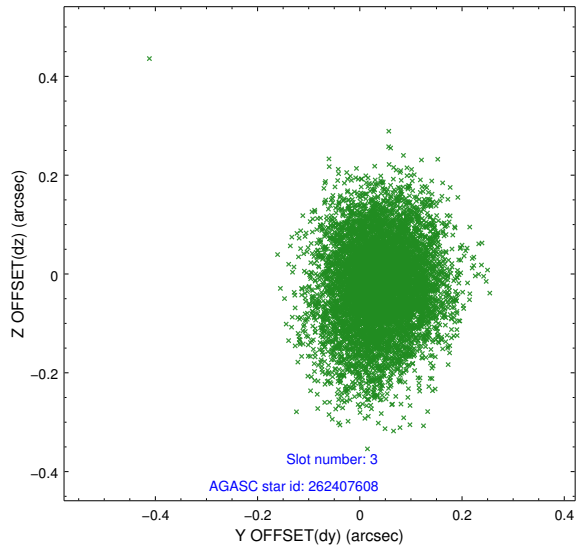
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.39	3702	-0.055	0.168	0.008	0.013	0.000000	0.000000	928.11	-409.20
1	FID		ACIS-I-5	7.28	3703	-0.115	0.006	0.007	0.013	0.000000	0.000000	-1820.02	1487.90
2	FID		ACIS-I-6	7.28	3702	0.079	-0.106	0.009	0.014	0.000000	0.000000	393.30	2132.75
3	GUIDE	used	262407608	9.37	7400	0.039	-0.022	0.113	0.188	207.378401	26.435507	-354.23	548.38
4	GUIDE	used	262407760	9.90	7398	-0.062	-0.022	0.168	0.271	206.566773	26.577263	2277.13	128.88
5	GUIDE	used	262408096	9.30	7402	-0.023	-0.128	0.118	0.185	207.011678	26.515421	838.18	303.51
6	GUIDE	used	262408512	7.98	7406	0.080	0.026	0.073	0.119	207.800210	27.128796	-1609.94	-1999.07
7	GUIDE	used	262408936	9.68	7397	-0.036	0.148	0.160	0.249	207.154731	26.726554	403.72	-472.07

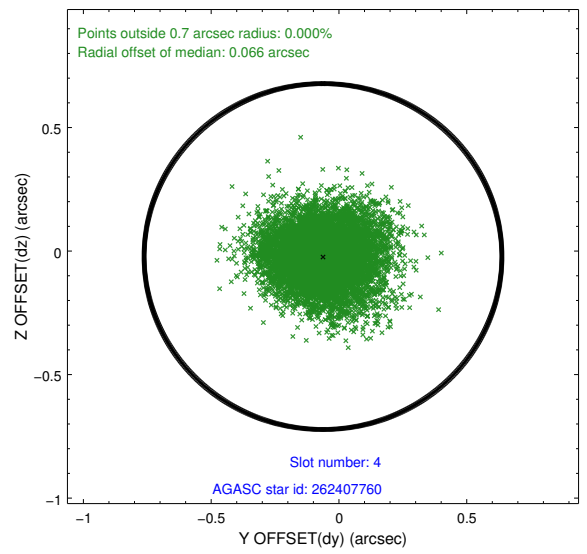
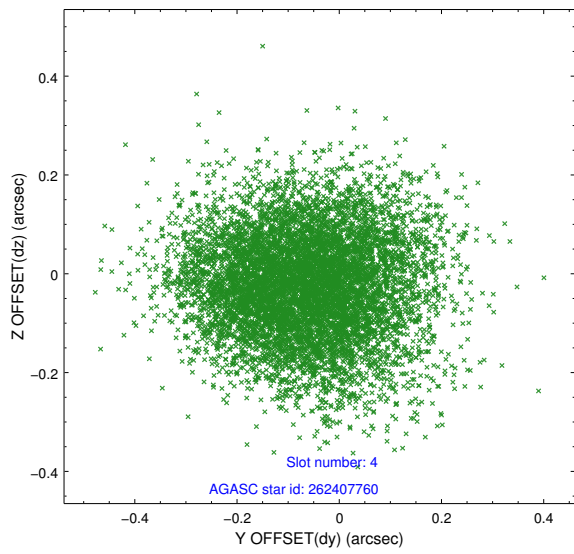
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## 2.4 Star Slots

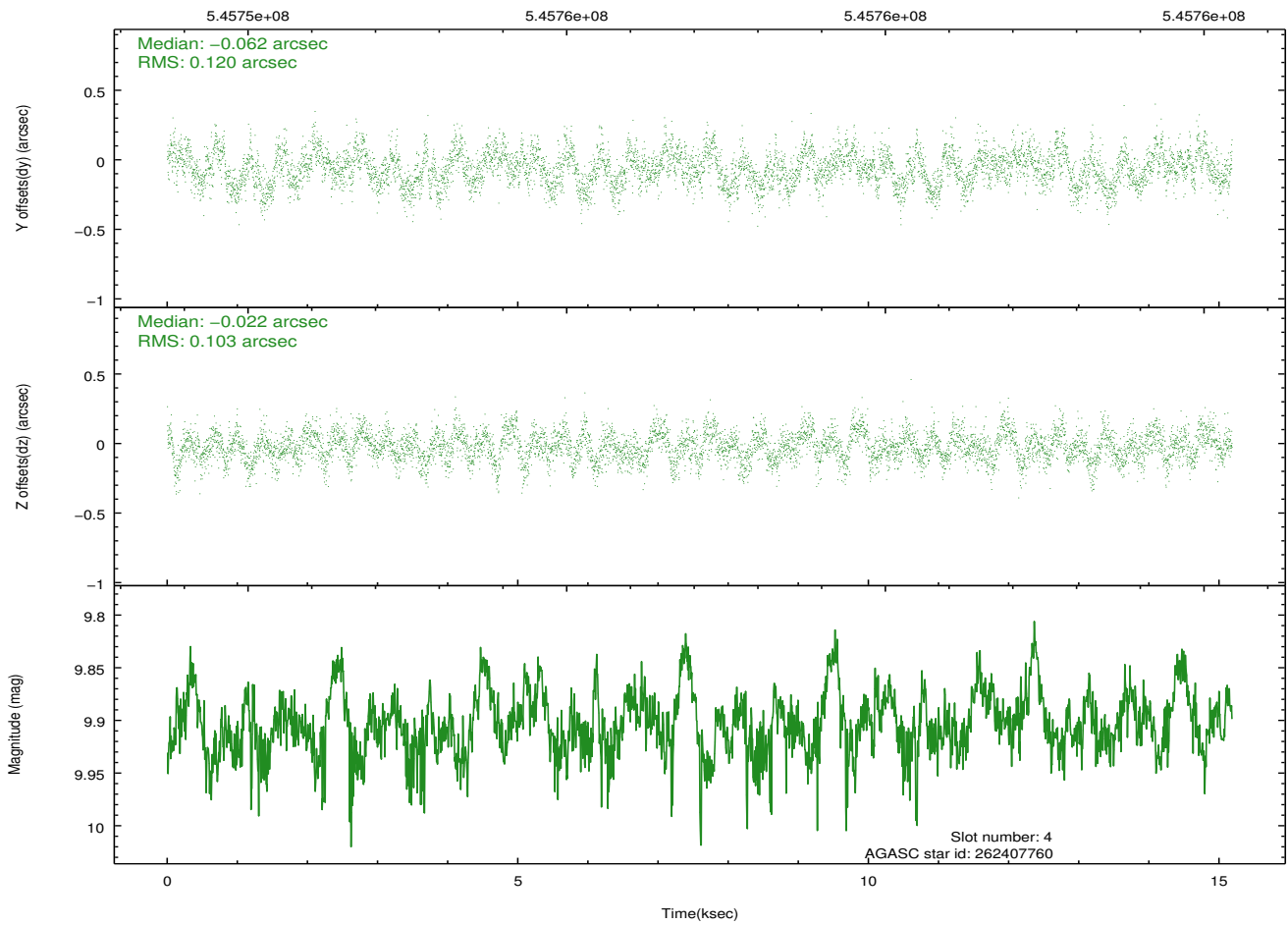
### 2.4.1 Slot 3



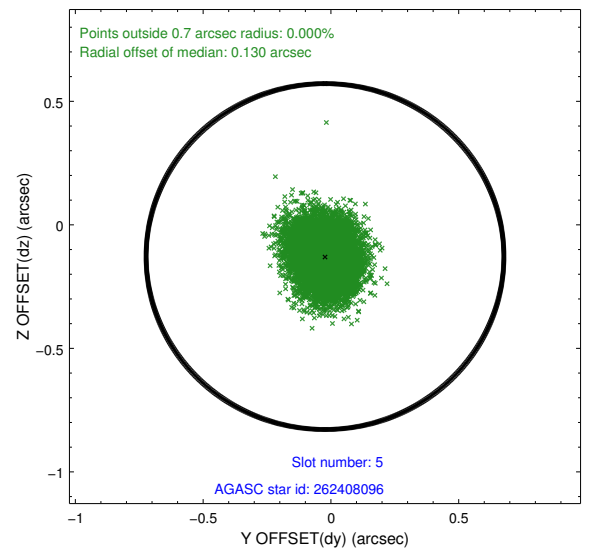
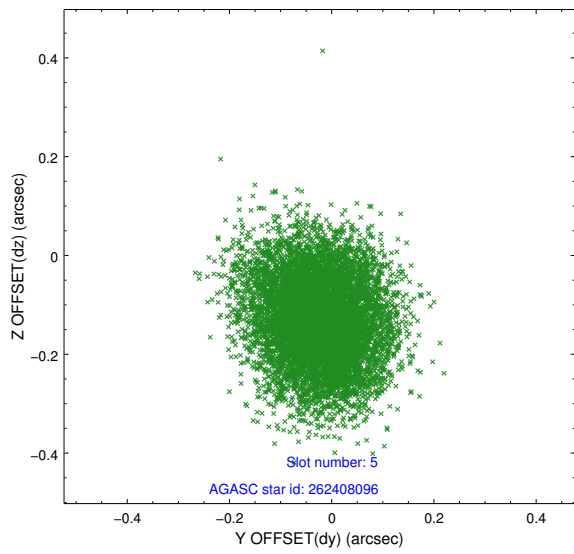
## 2.4.2 Slot 4



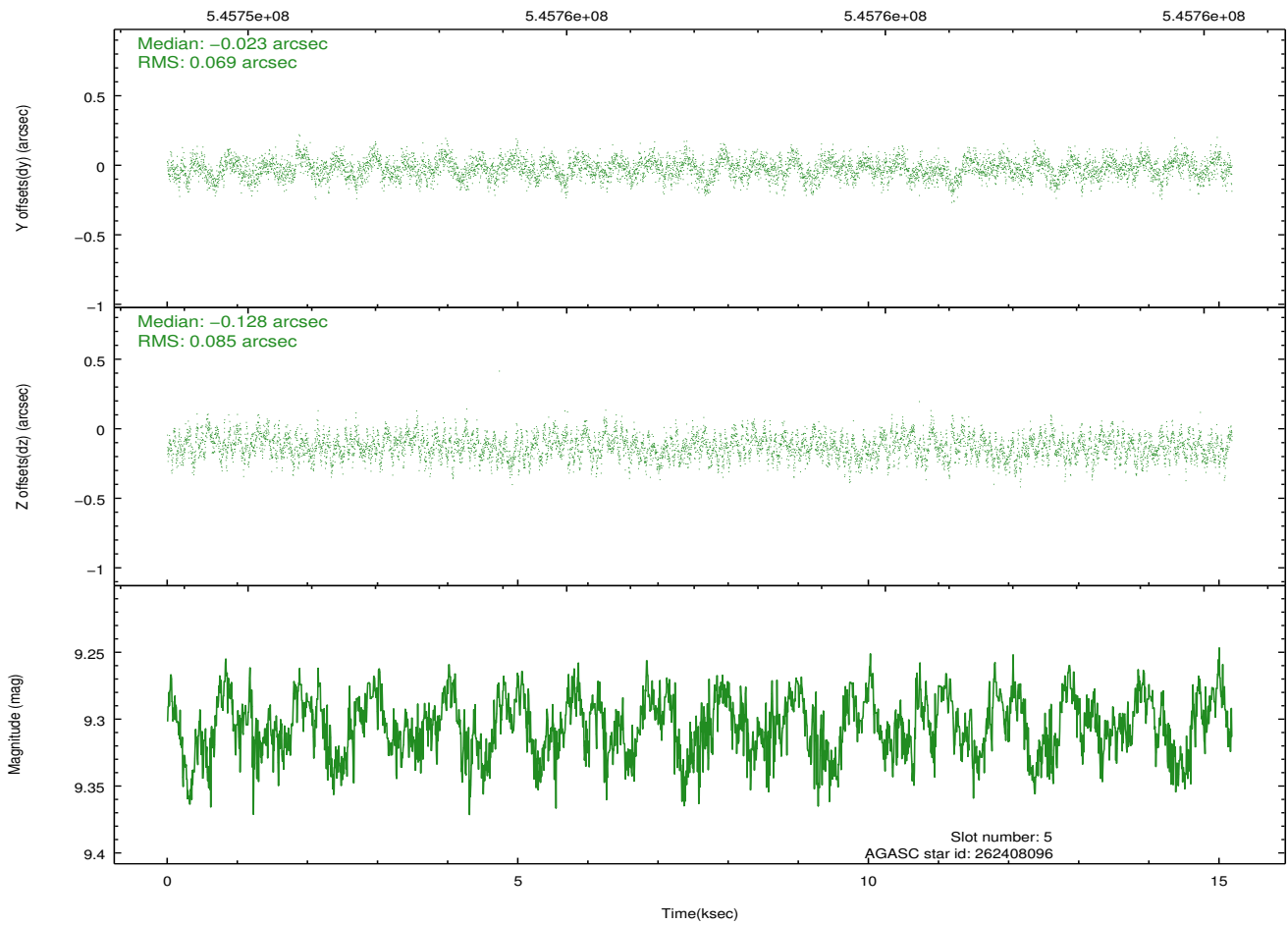
Time (s)



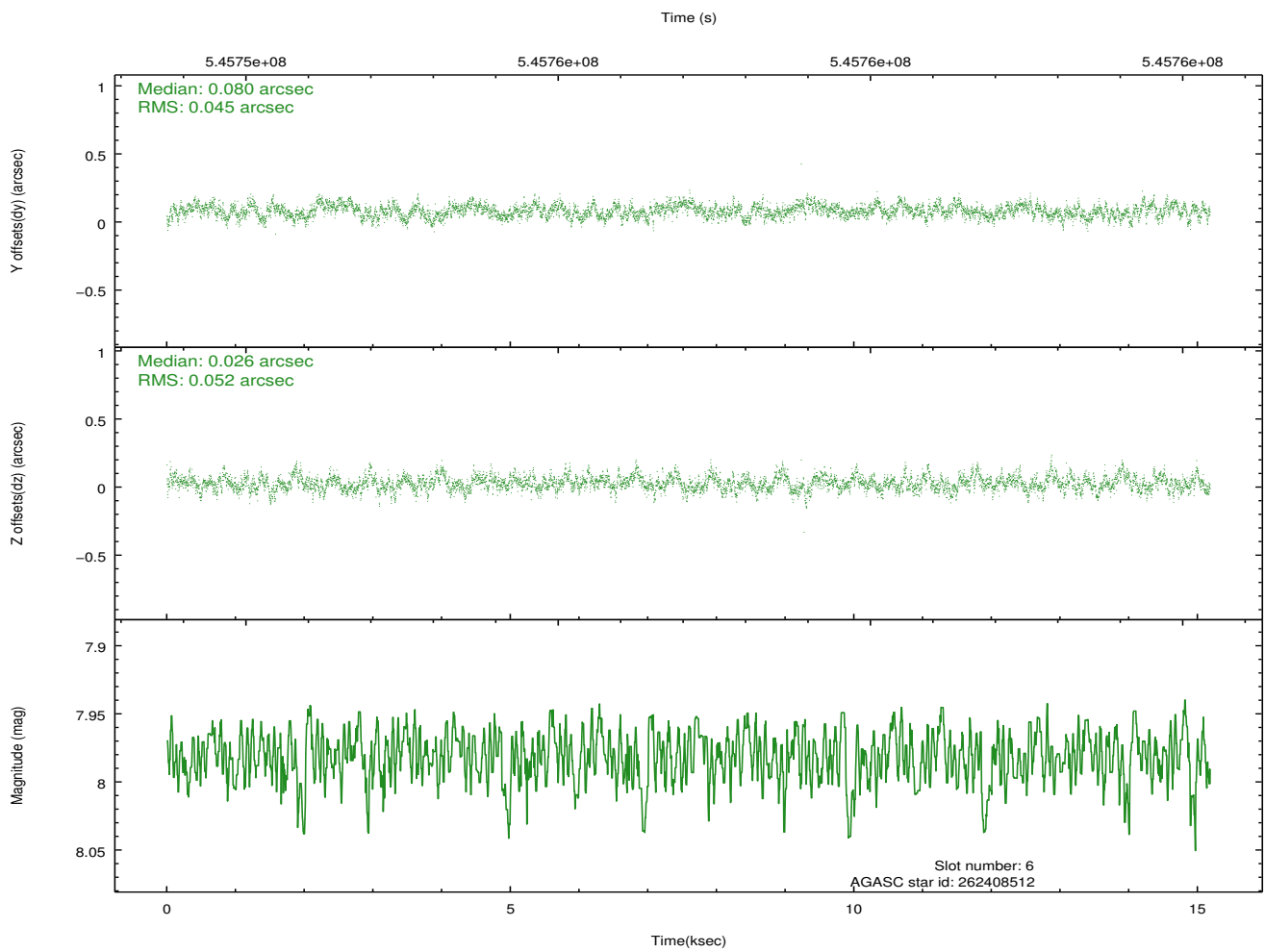
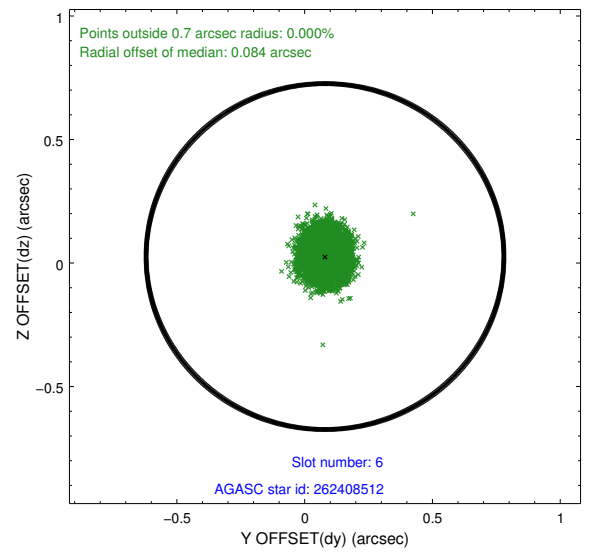
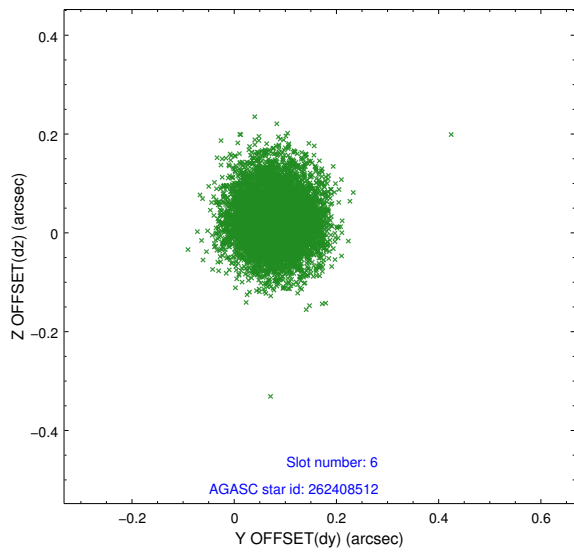
### 2.4.3 Slot 5



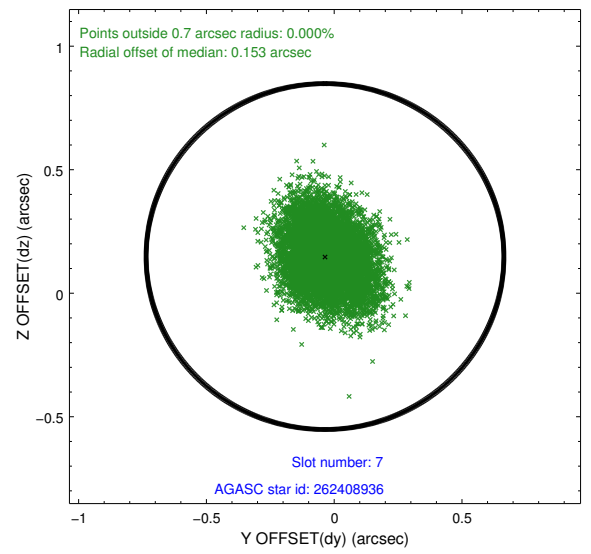
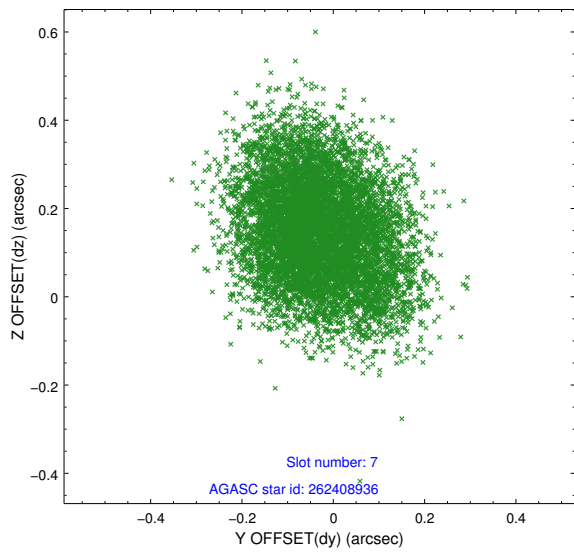
Time (s)



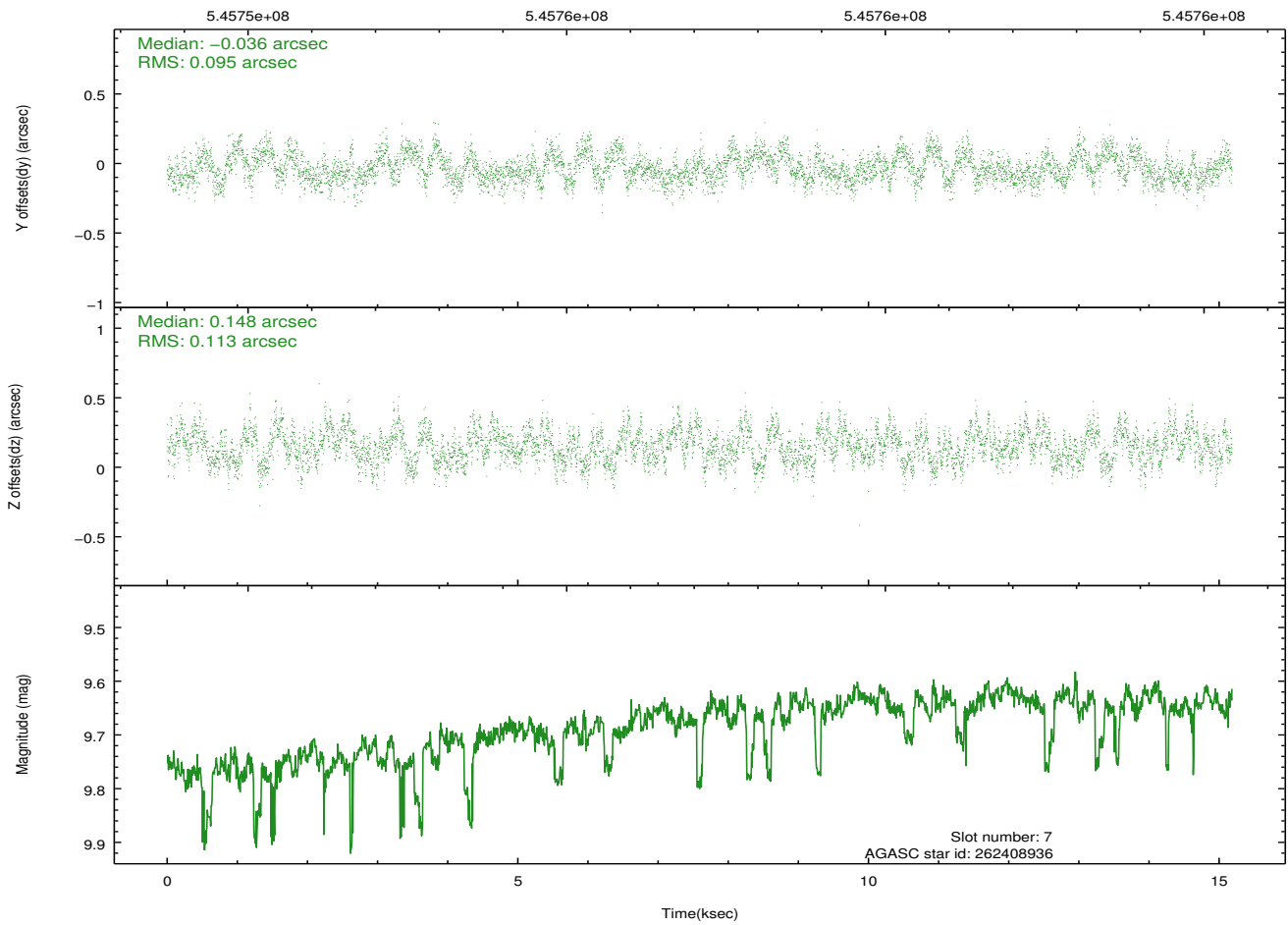
## 2.4.4 Slot 6



## 2.4.5 Slot 7

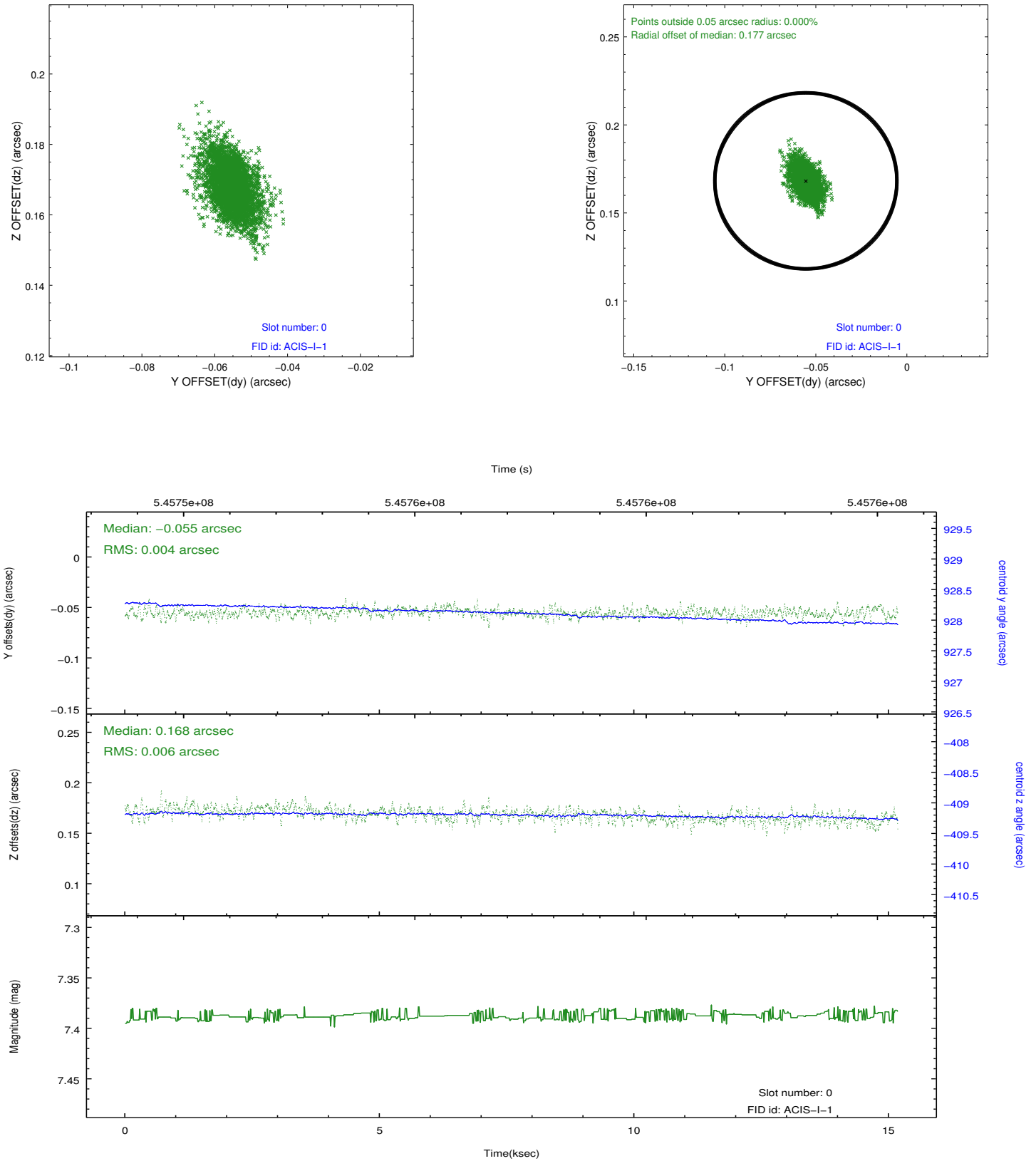


Time (s)

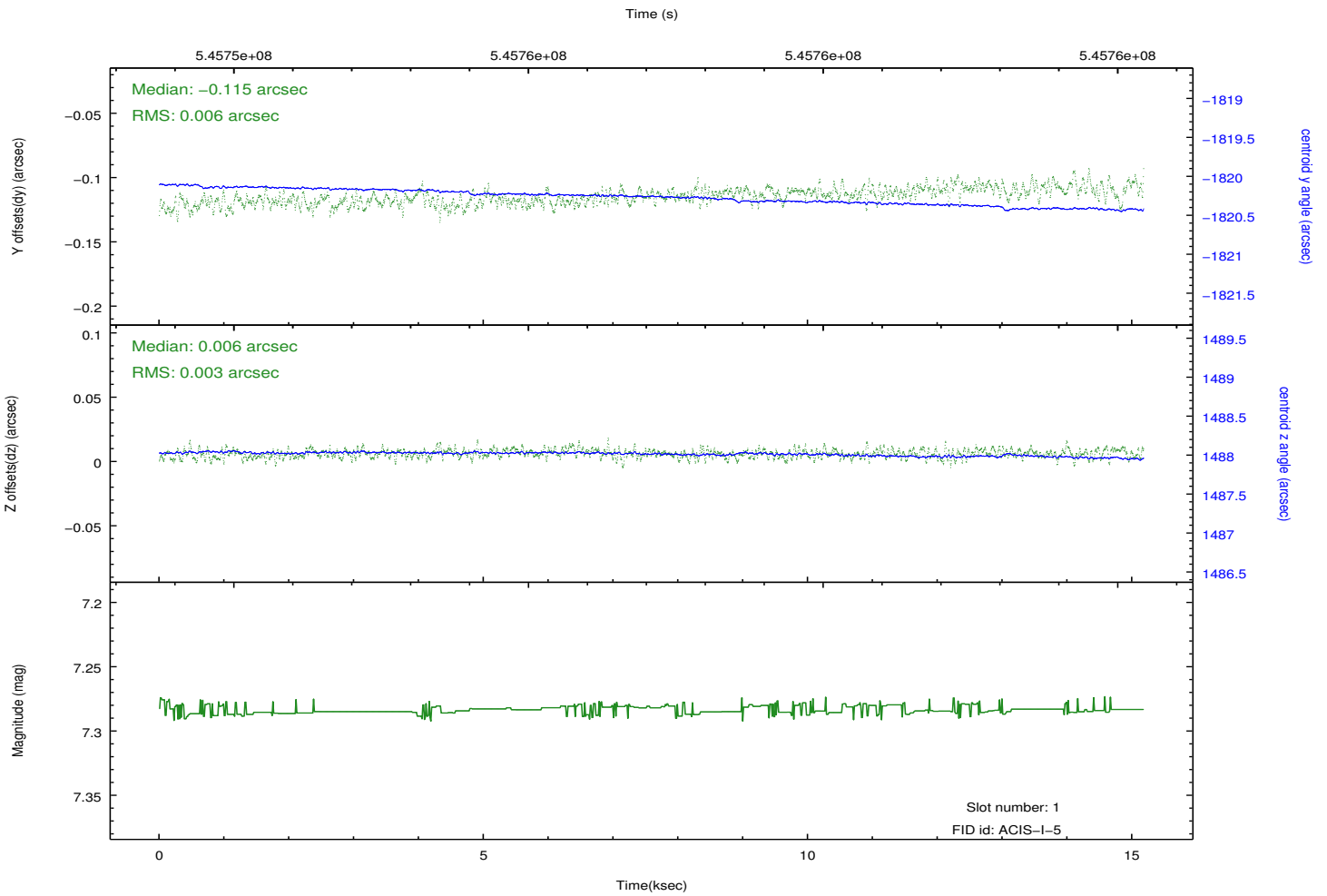
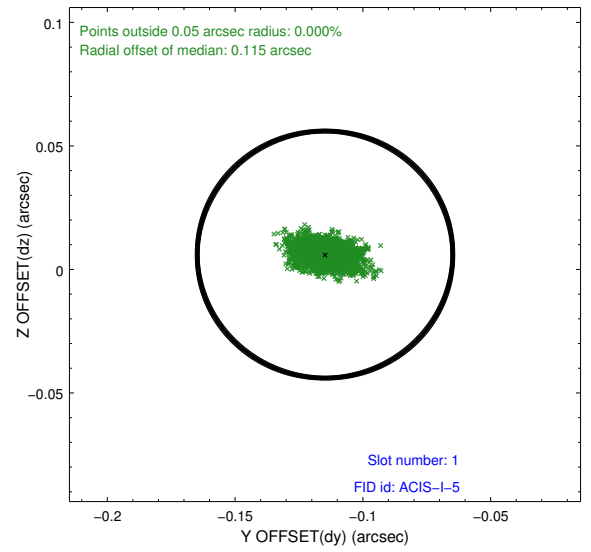
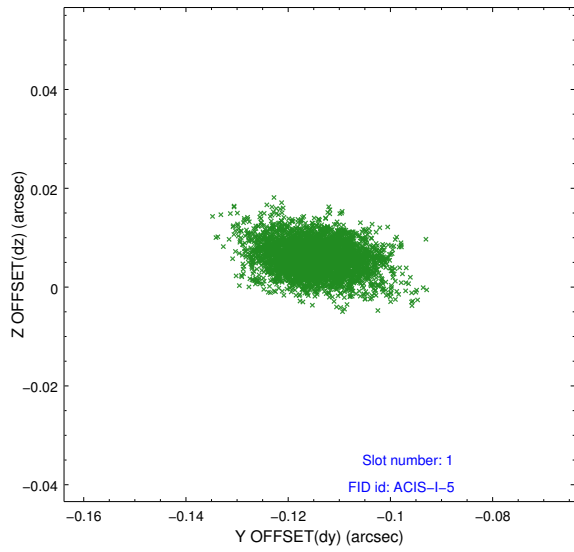


## 2.5 FID Slots

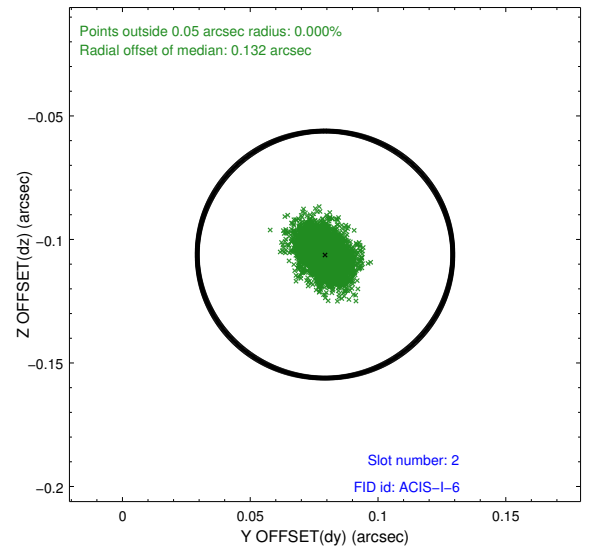
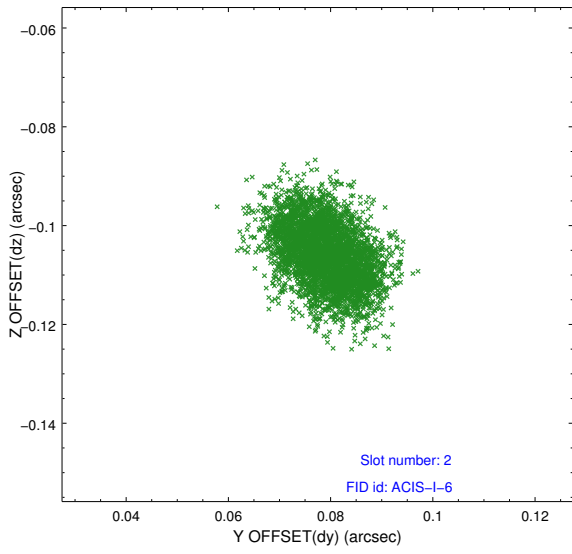
### 2.5.1 Slot 0



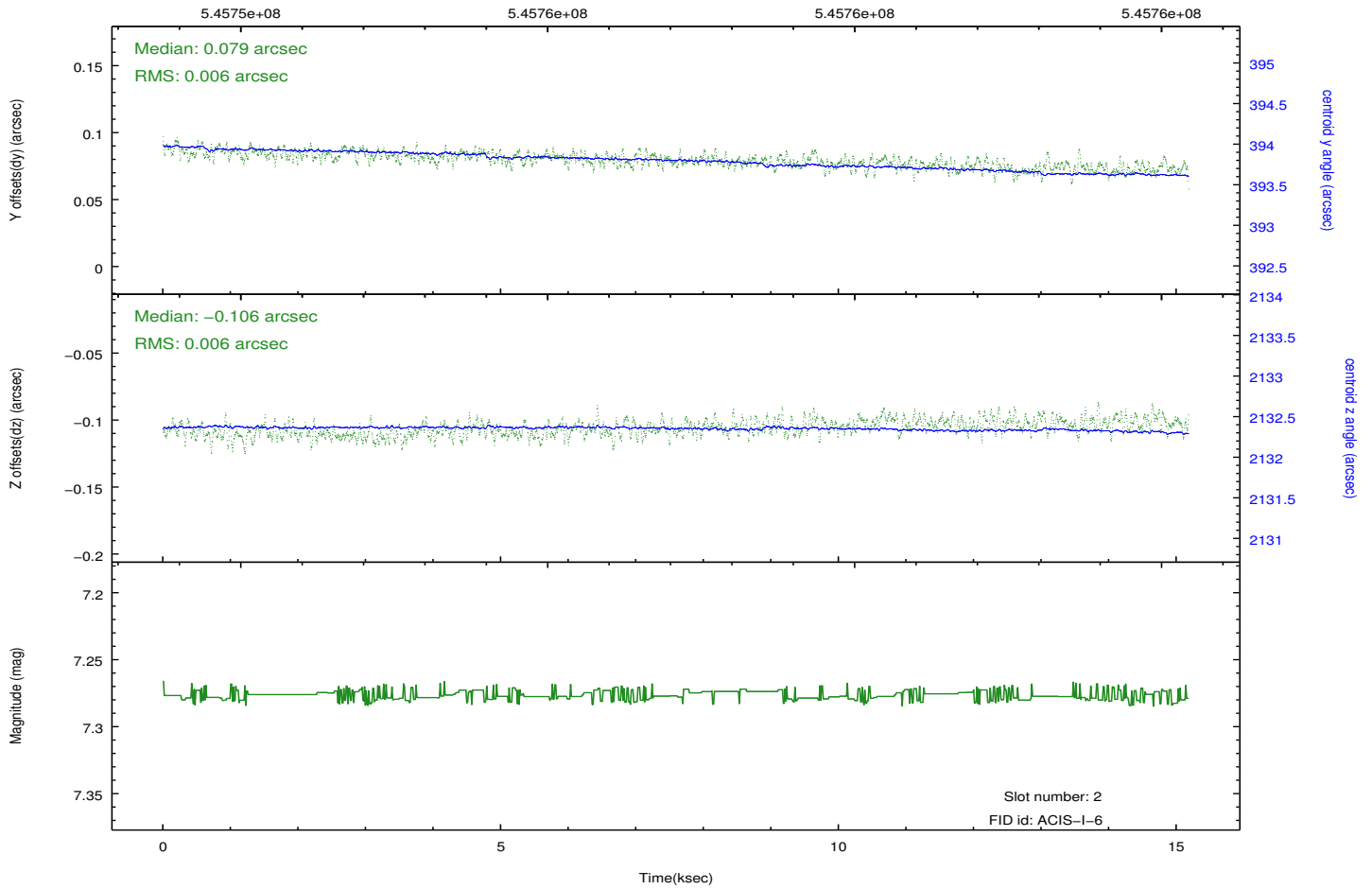
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.04.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.773365851283

## A.2 Comments

Window preference met.