

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3856 - L2 Version 3  
Chandra X-Ray Center

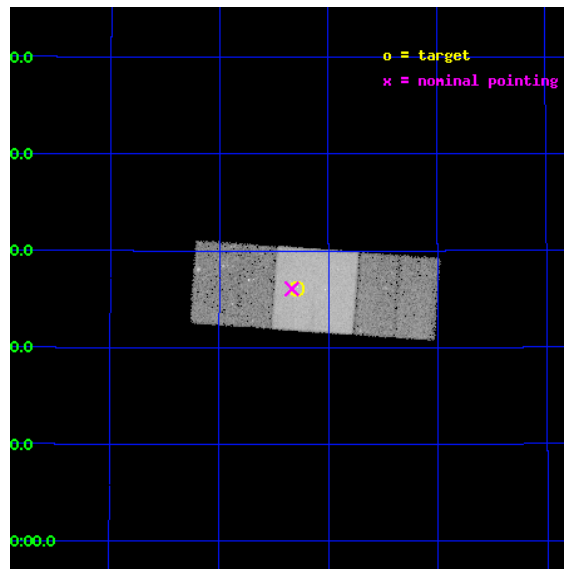
L2 Processing Date : Oct 21 2012

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# 1 Front

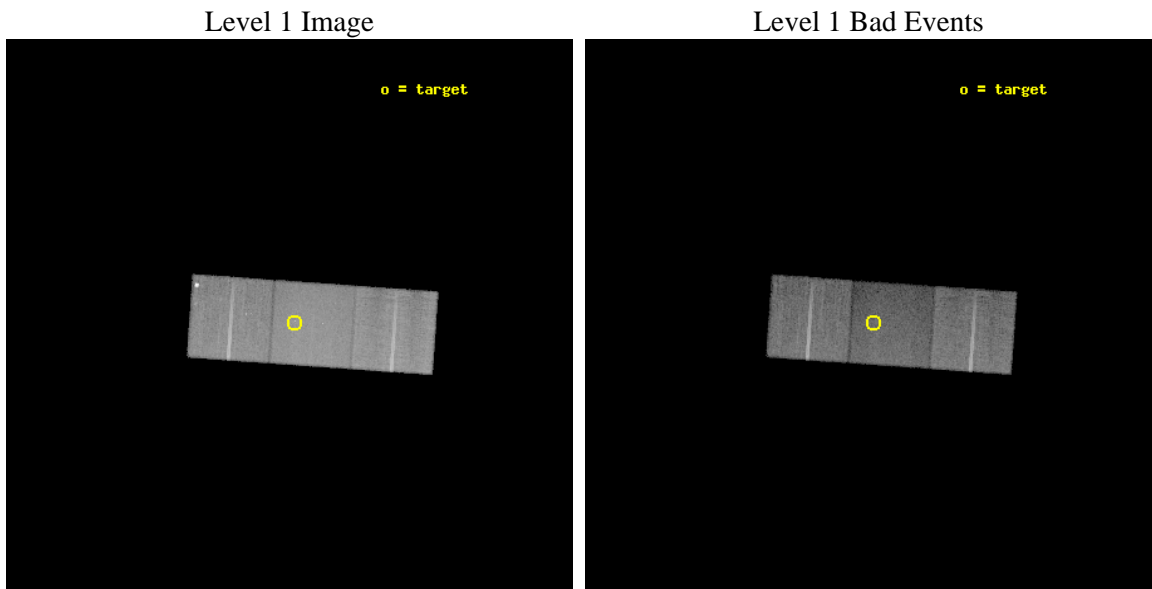
seq_num	500335	Sequence number
obs_id	3856	Observation id
title	CHANDRA OBSERVATIONS OF THE UNIDENTIFIED GAMMA-RAY SOURCE IN GAMMA-CYGNI	Proposal title
observer	Prof. Dr. Werner Becker	Principal investigator
object	RX J2020.3+4026	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	305.070833	Observer's specified target RA [deg]
dec_targ	40.435833	Observer's specified target Dec [deg]
ra_nom	305.08343701456	Nominal RA [deg]
dec_nom	40.434793192762	Nominal Dec [deg]
roll_nom	3.9940405964686	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30358.110842913	Sum of GTIs [s]
livetime	29961.459775435	Livetime [s]
ontime6	30358.06980291	Sum of GTIs [s]
ontime7	30358.110842913	Sum of GTIs [s]
ontime8	30358.028762907	Sum of GTIs [s]
l2events	127364	Number of level 2 events



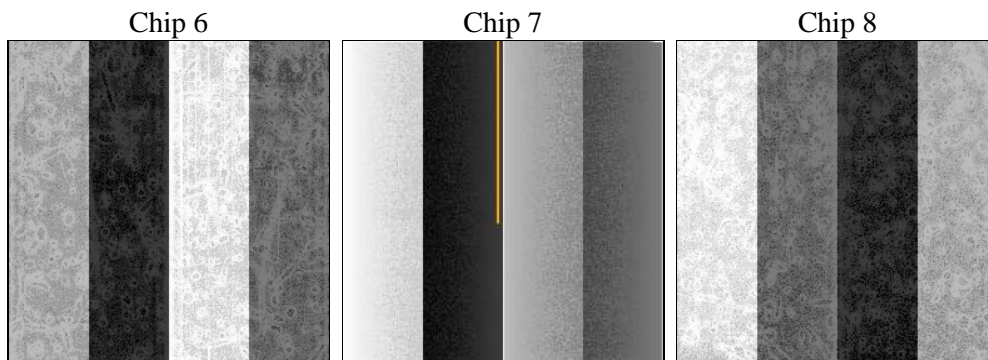
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	30358.110842913	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime6	30358.06980291	Sum of GTIs [s]
date	2012-10-21T05:58:22	Date and time of file creation	ontime7	30358.110842913	Sum of GTIs [s]
revision	3	Processing version of data	ontime8	30358.028762907	Sum of GTIs [s]
			l1events	548194	Number of level 1 events

### 2.1.4 Events

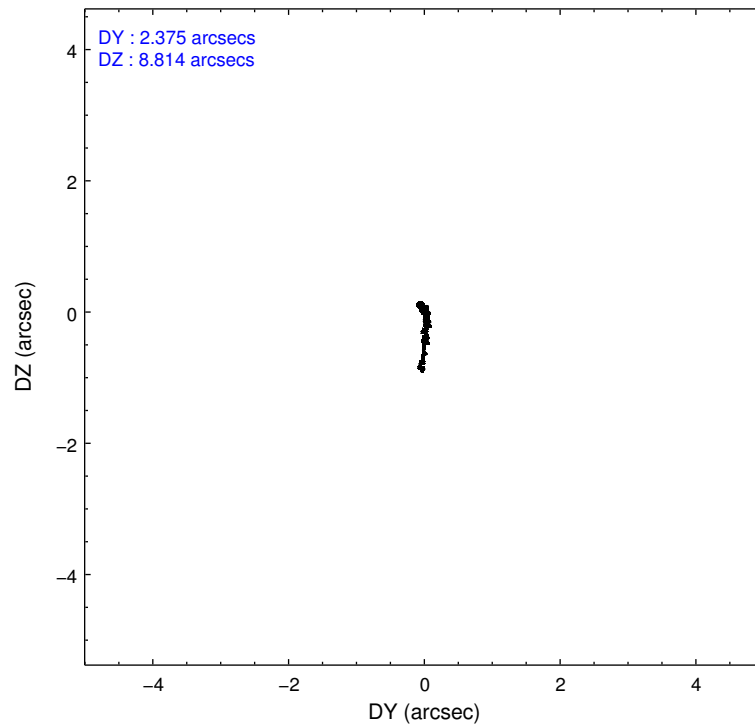
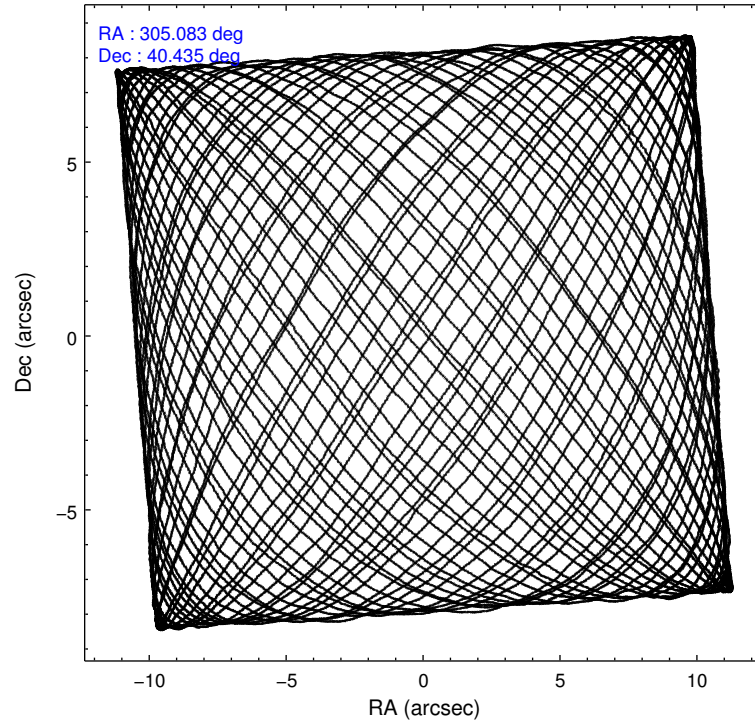
	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	169331	182550	196313
rejected events	138866	91071	150155
rejected %	<b>82%</b>	<b>49%</b>	<b>76%</b>

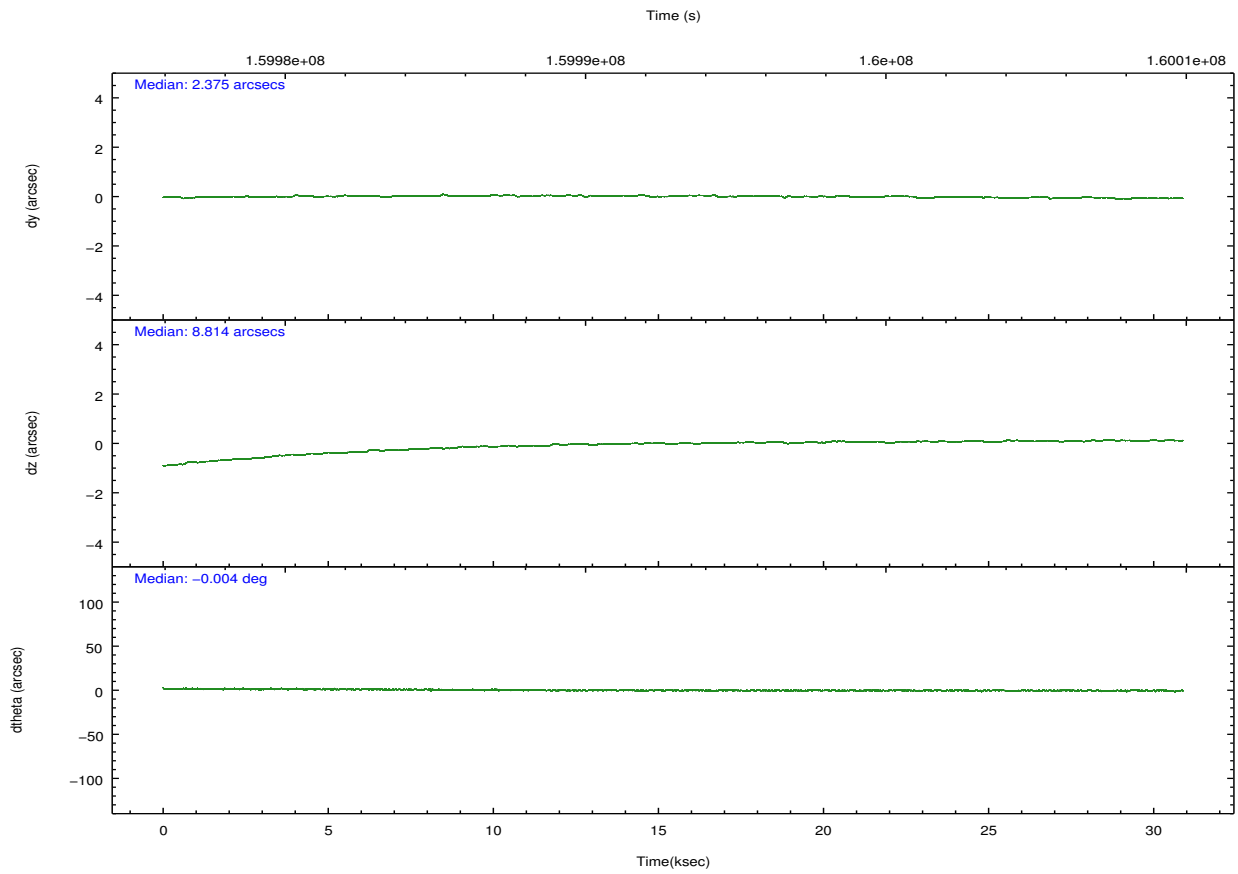
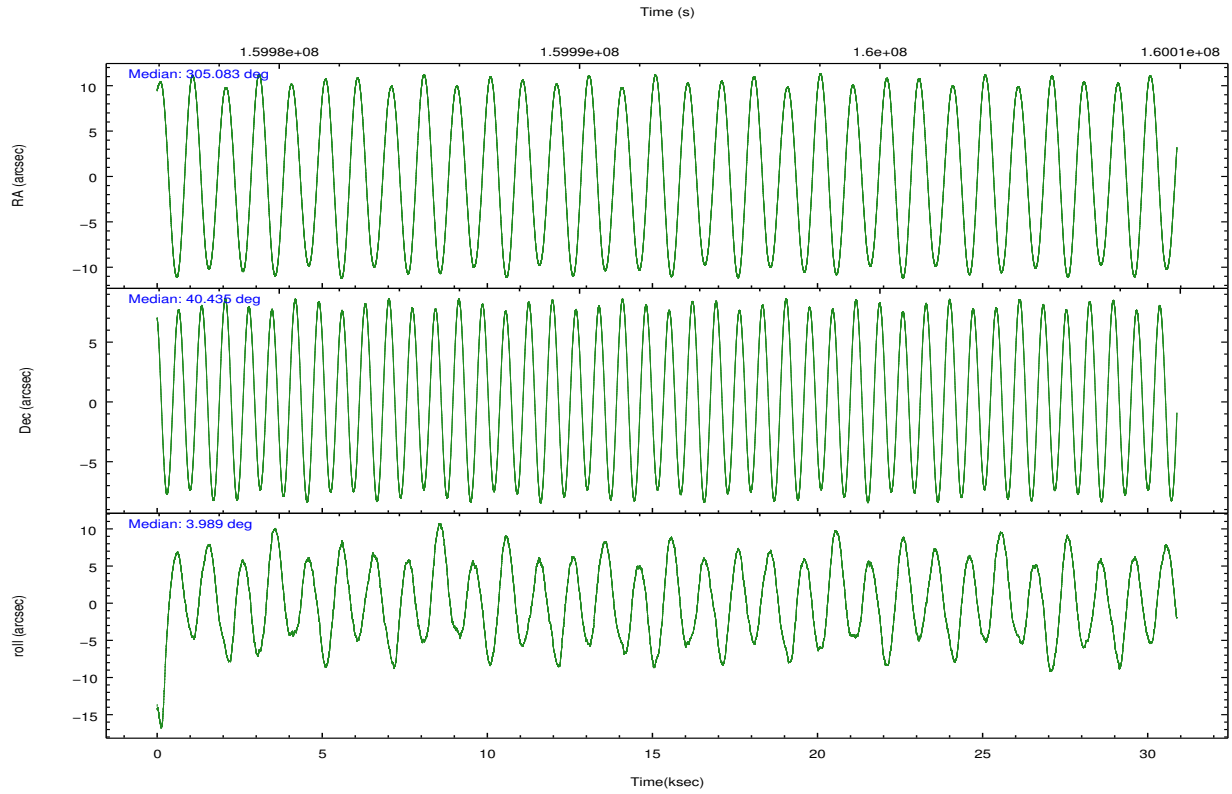
	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	19298	9097	15537
	11%	4%	7%
grade 1 events	95	145	137
	0%	0%	0%
grade 2 events	3821	18311	9589
	2%	10%	4%
grade 3 events	1996	8808	4769
	1%	4%	2%
grade 4 events	1885	8541	4378
	1%	4%	2%
grade 5 events	6022	17827	8637
	3%	9%	4%
grade 6 events	3470	46739	11925
	2%	25%	6%
grade 7 events	132744	73082	141341
	78%	40%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	305.054078	305.0834370145596	Subarray requested	NONE	NONE
[deg] Pointing Dec	40.419271	40.43479319276155	Alternating exposures requested	N	N
[deg] Pointing Roll	3.856454	3.994040596468587	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	159978357.184000	159977044.38478			
Observation start date	2003-01-26T14:24:53	2003-01-26T14:04:04			
[s] Observation end time (MET)	160008357.184000	160008655.3861			
Observation end date	2003-01-26T22:44:53	2003-01-26T22:50:55			
Read mode	TIMED	TIMED			

## 2.3 Aspect



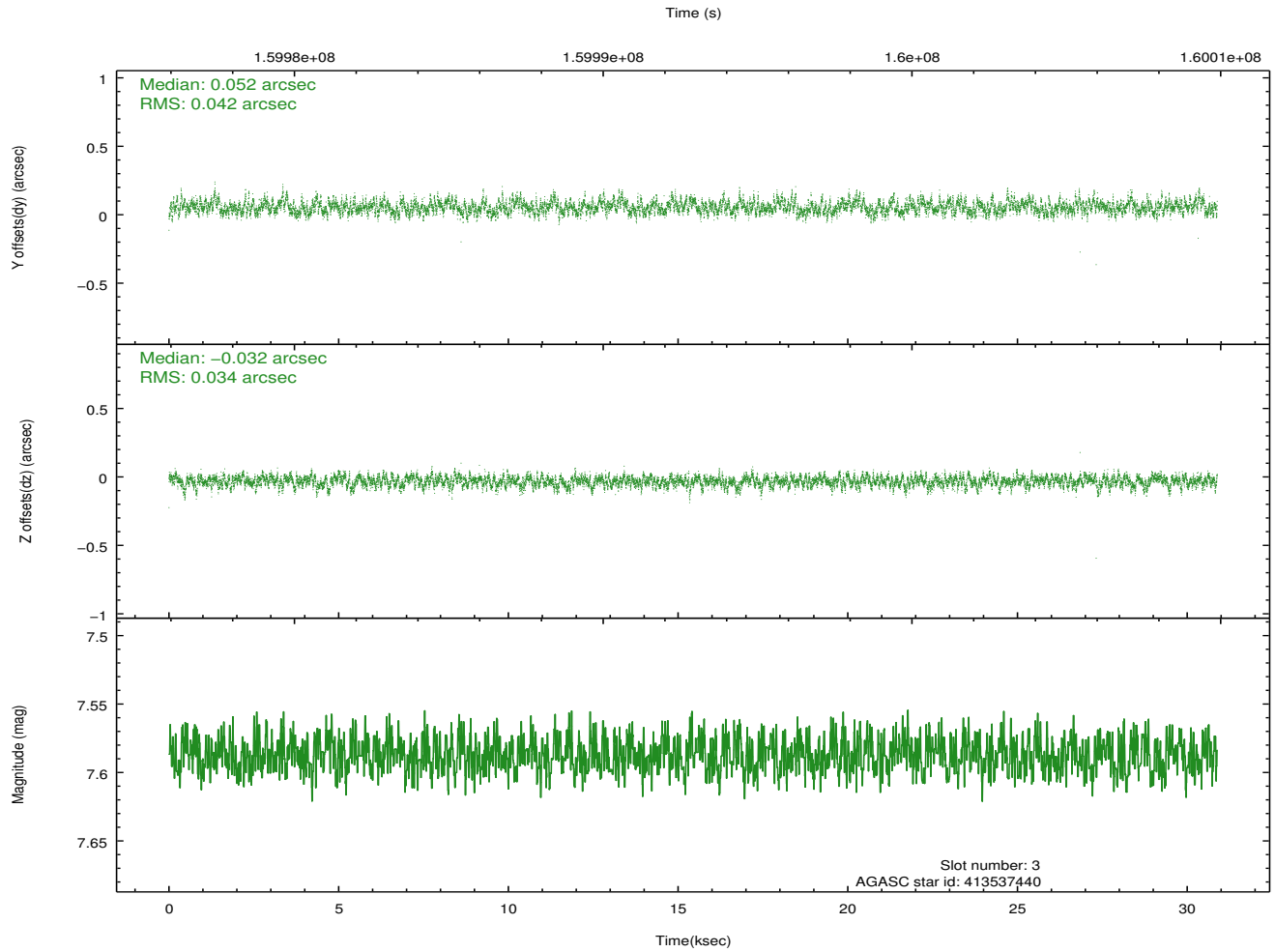
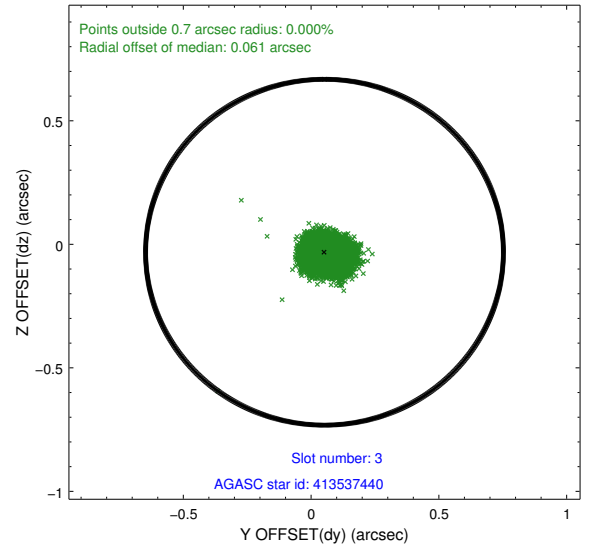
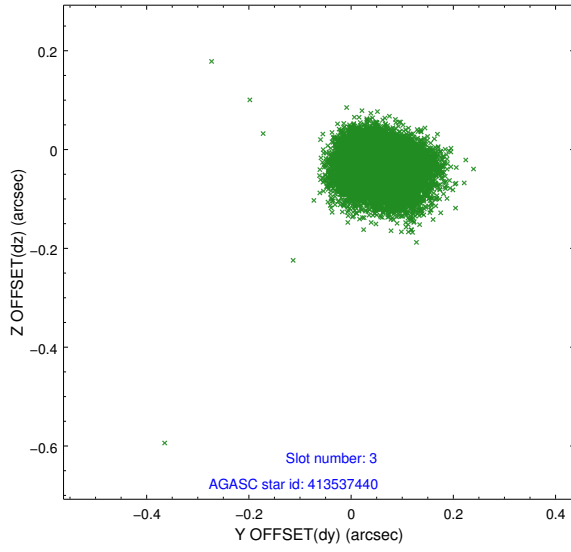


### Slot Statistics

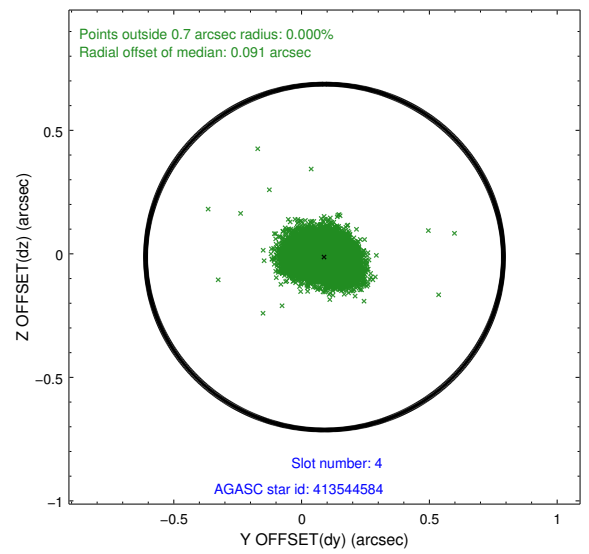
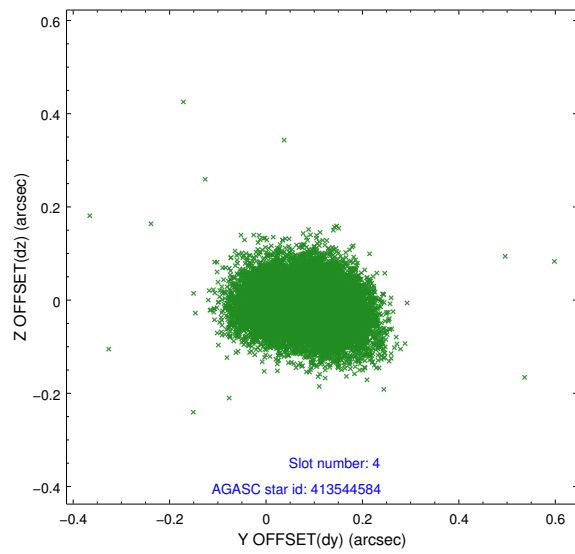
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	7533	-0.026	-0.008	0.008	0.014	0.000000	0.000000	-755.02	-1729.92
1	FID	ACIS-S-4	7.20	7533	-0.018	0.015	0.006	0.011	0.000000	0.000000	2158.23	178.52
2	FID	ACIS-S-5	7.24	7532	0.012	0.002	0.009	0.014	0.000000	0.000000	-1807.74	172.25
3	GUIDE	413537440	7.59	15065	0.052	-0.032	0.057	0.094	304.302199	40.591389	-2008.36	765.22
4	GUIDE	413544584	8.70	15061	0.090	-0.013	0.086	0.139	304.249535	40.843713	-2082.76	1682.00
5	GUIDE	413676032	8.22	15067	-0.096	-0.074	0.062	0.099	305.794948	40.874960	2122.88	1510.10
6	GUIDE	413677128	8.75	15060	-0.032	0.075	0.074	0.123	305.508885	39.832873	1113.24	-2187.12
7	GUIDE	413673064	9.28	15060	-0.008	0.044	0.088	0.145	305.845171	40.156255	2109.01	-1081.12

## 2.4 Star Slots

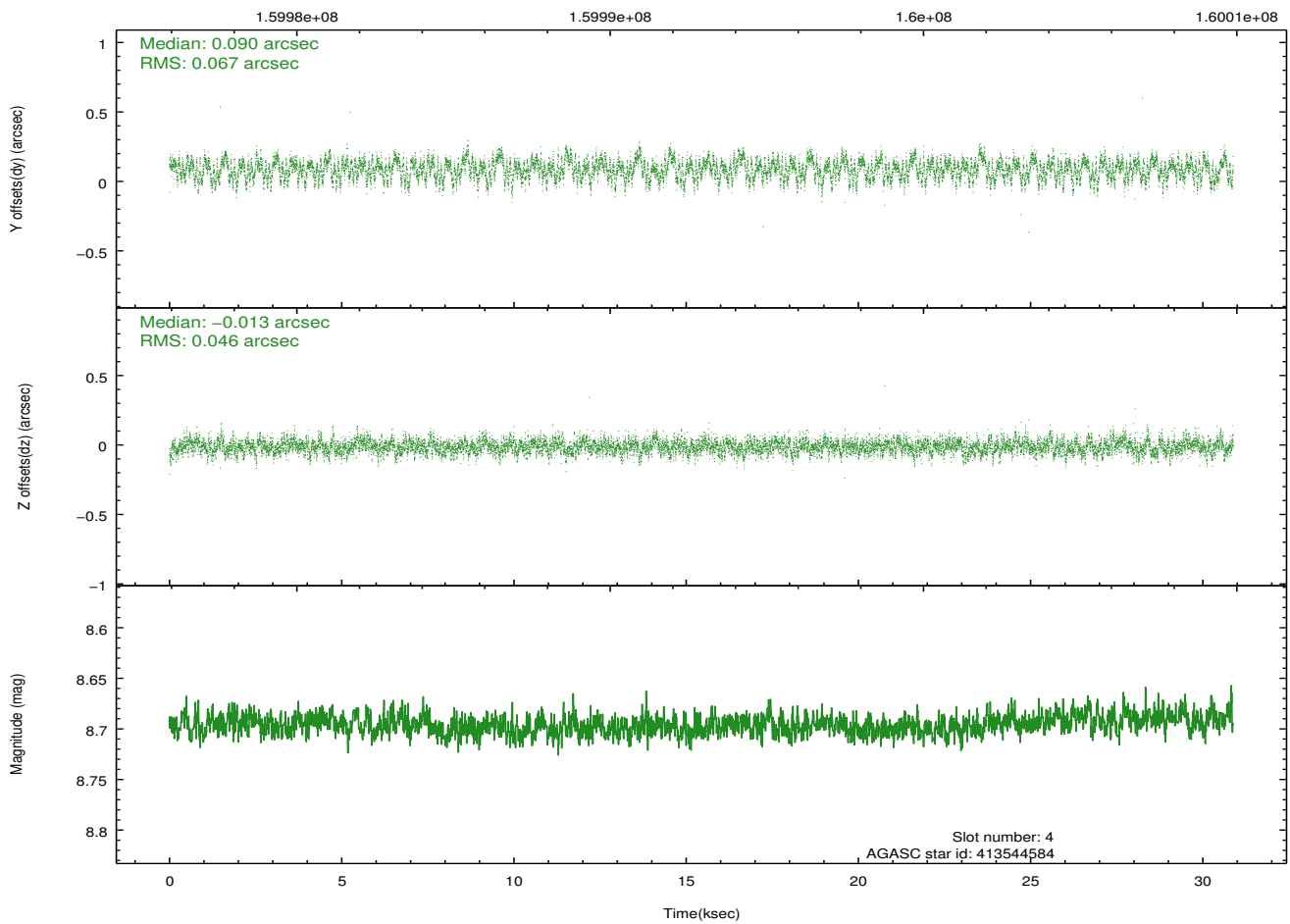
### 2.4.1 Slot 3



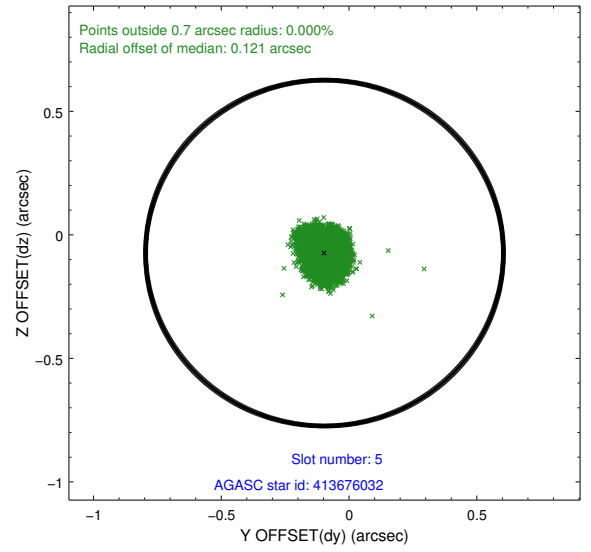
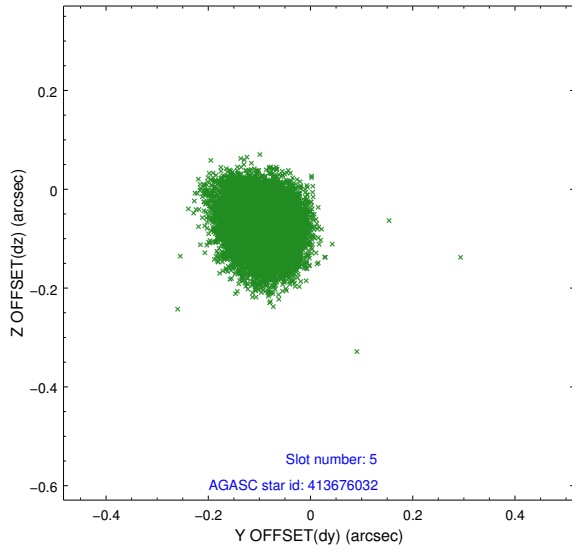
## 2.4.2 Slot 4



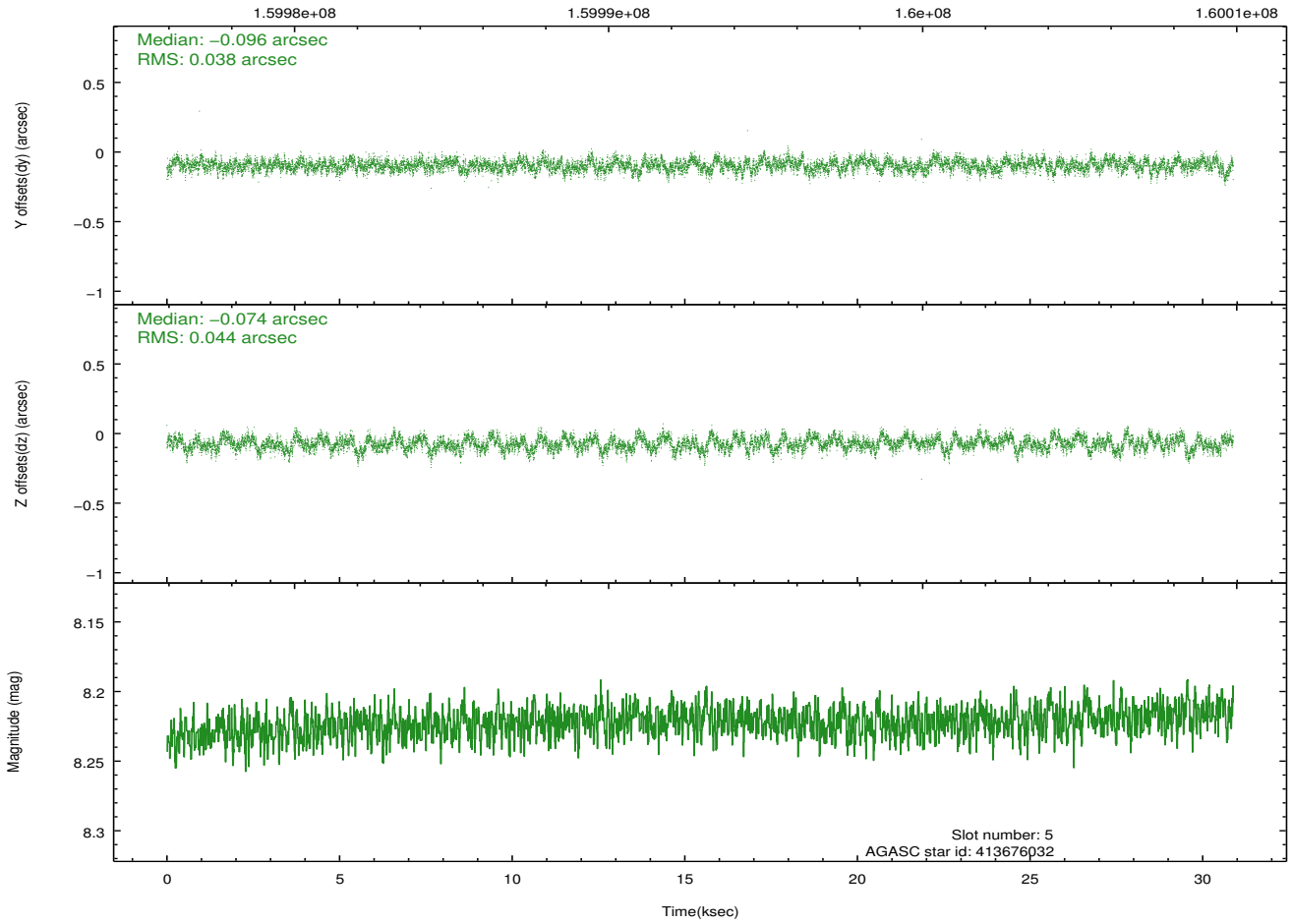
Time (s)



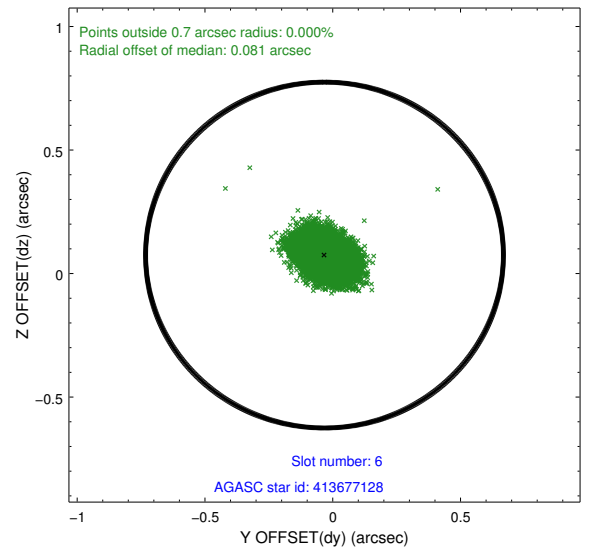
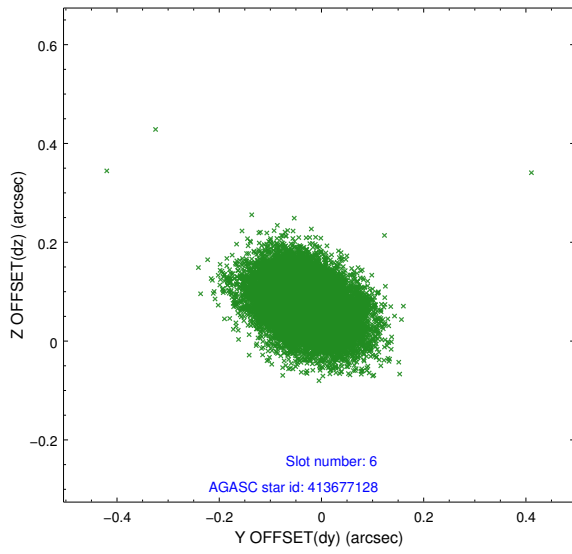
### 2.4.3 Slot 5



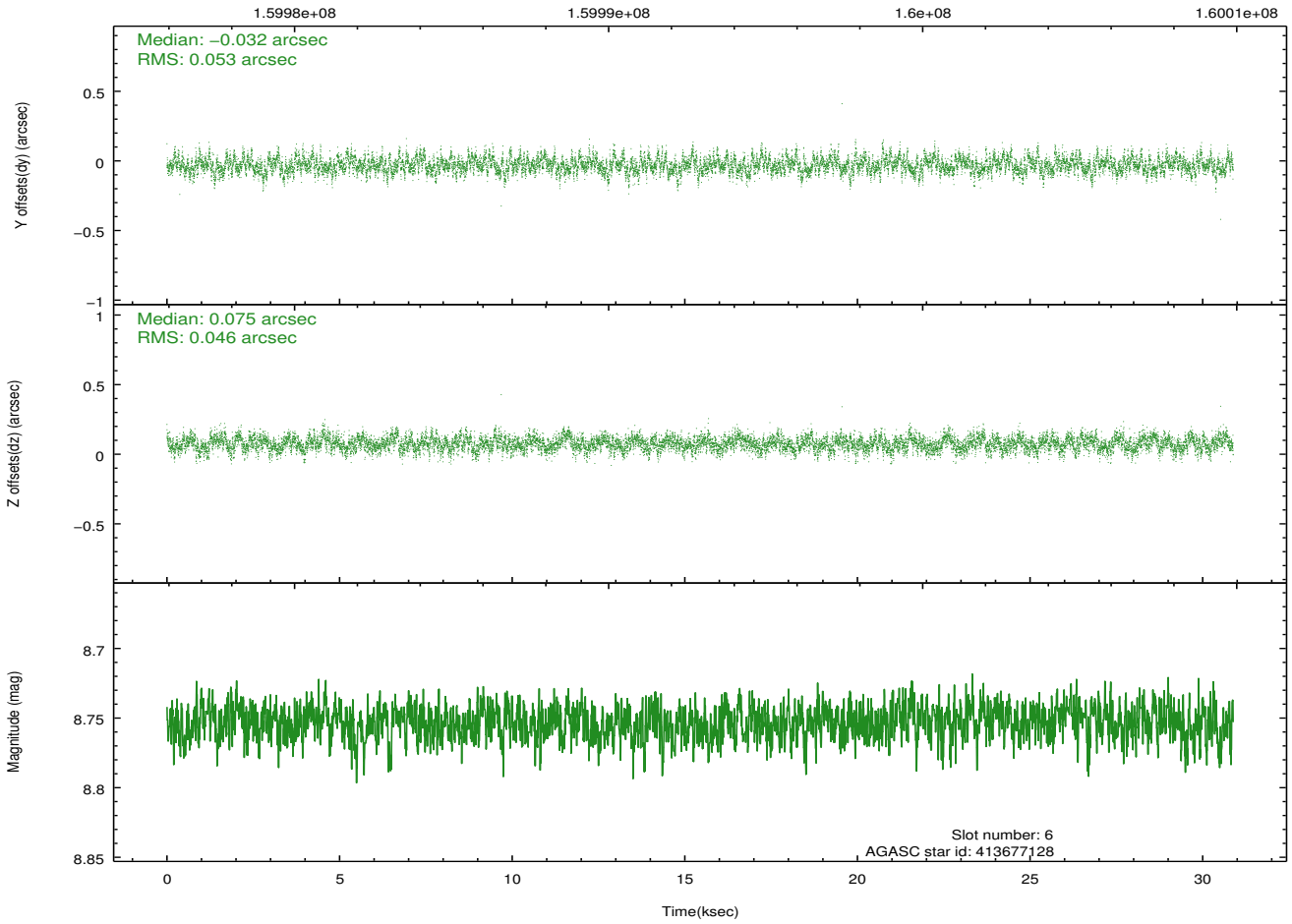
Time (s)



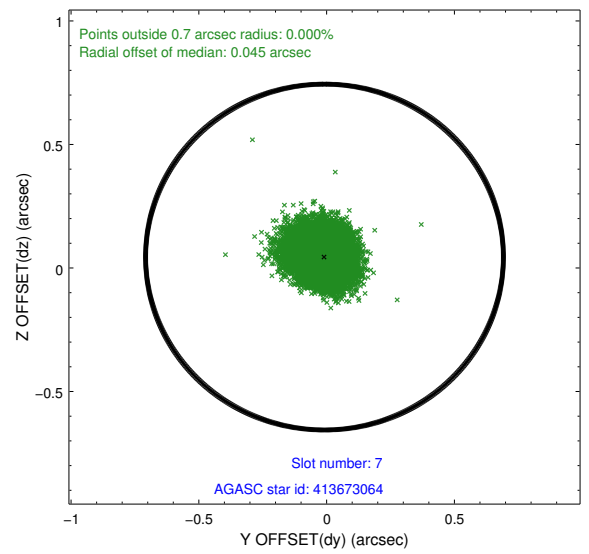
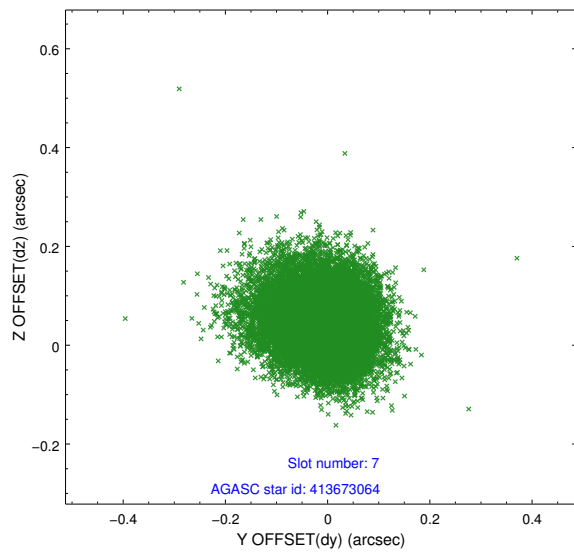
### 2.4.4 Slot 6



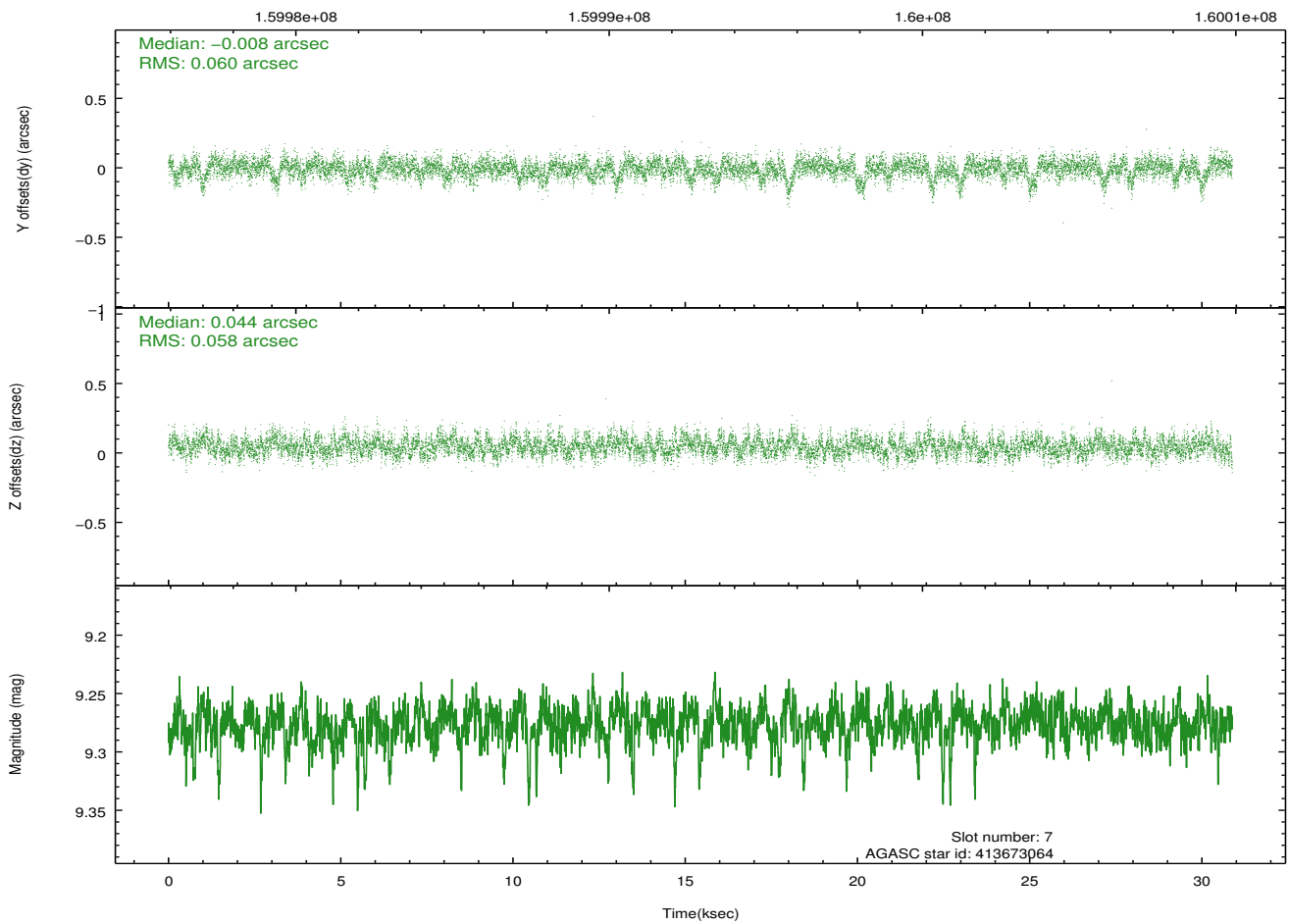
Time (s)



## 2.4.5 Slot 7

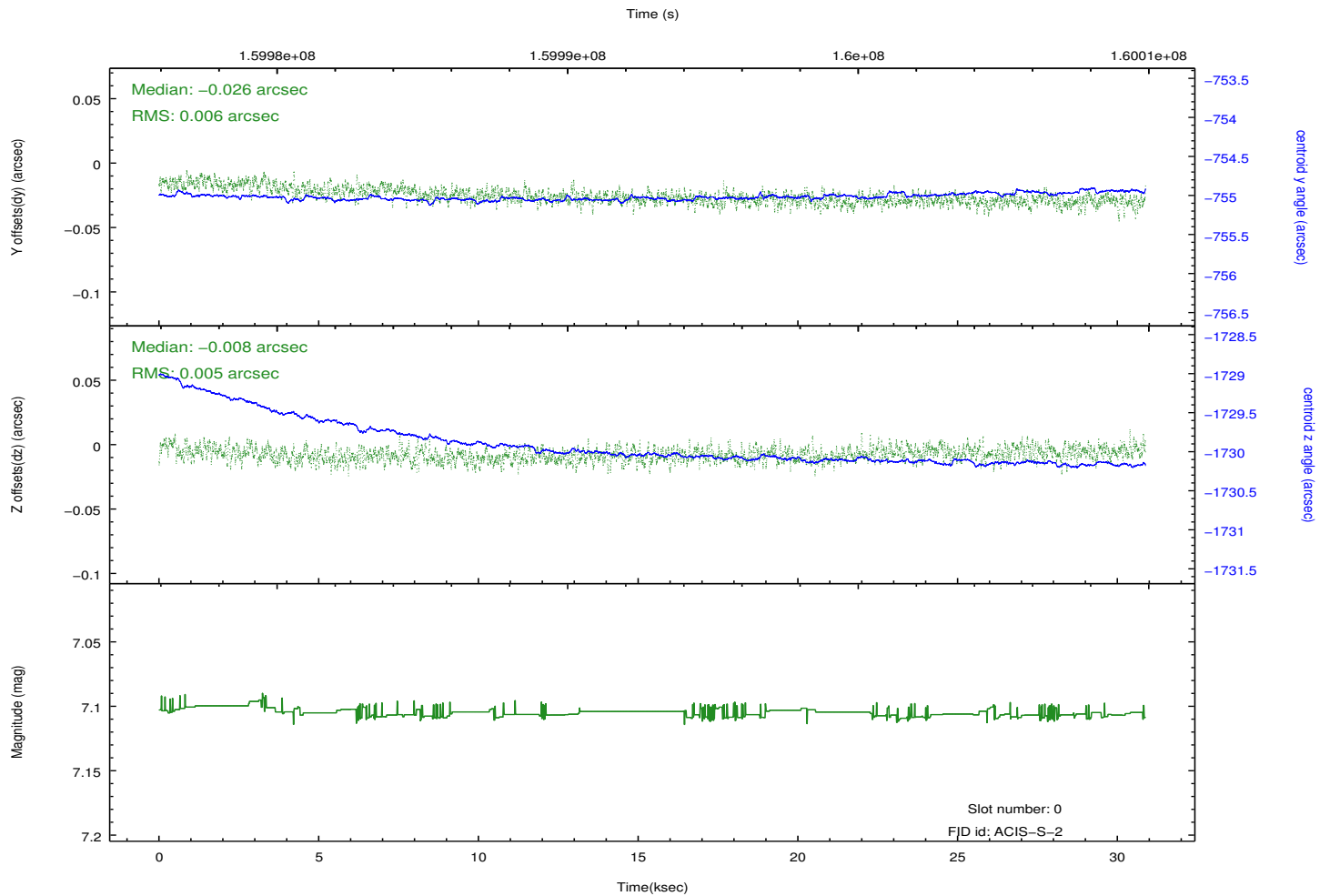
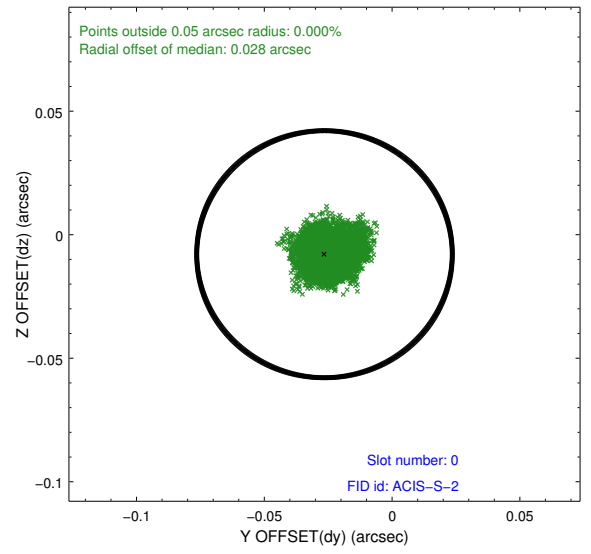
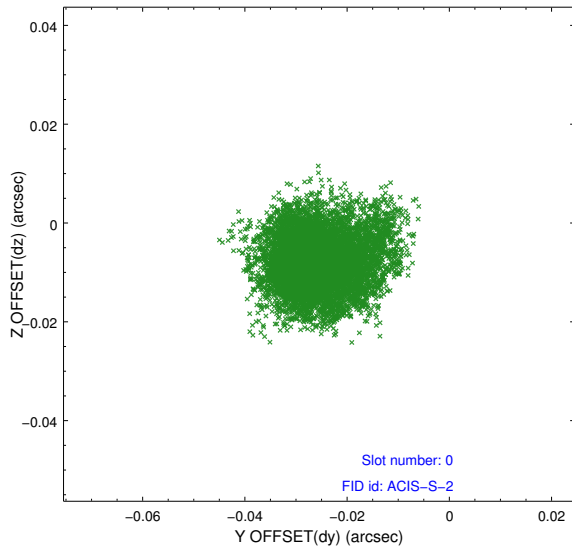


Time (s)

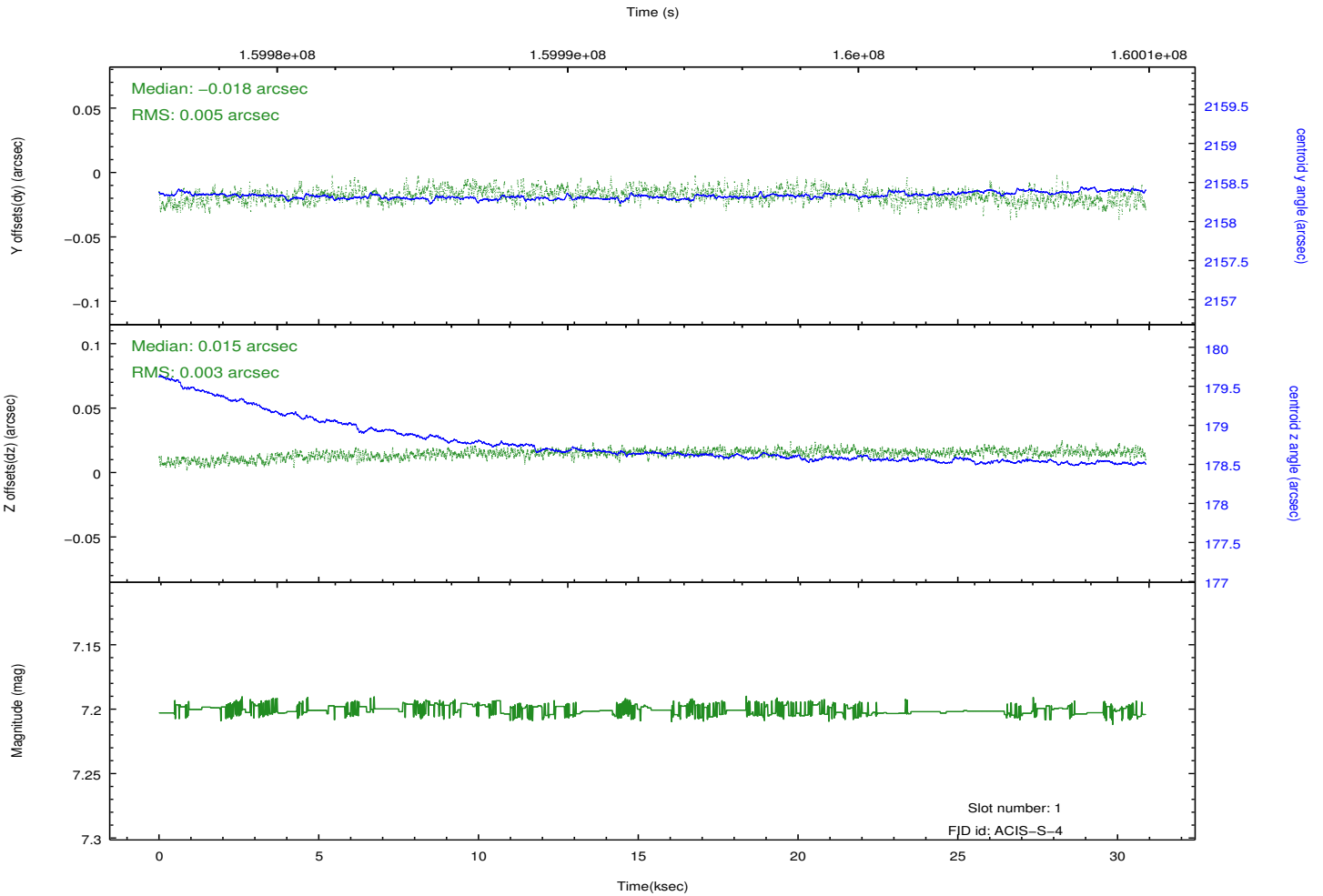
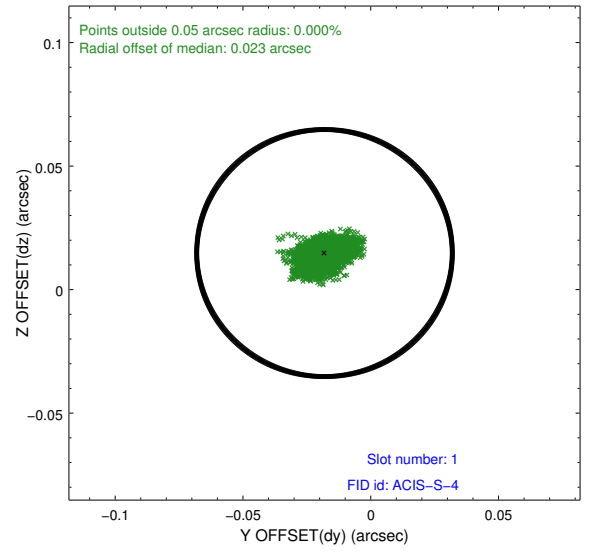
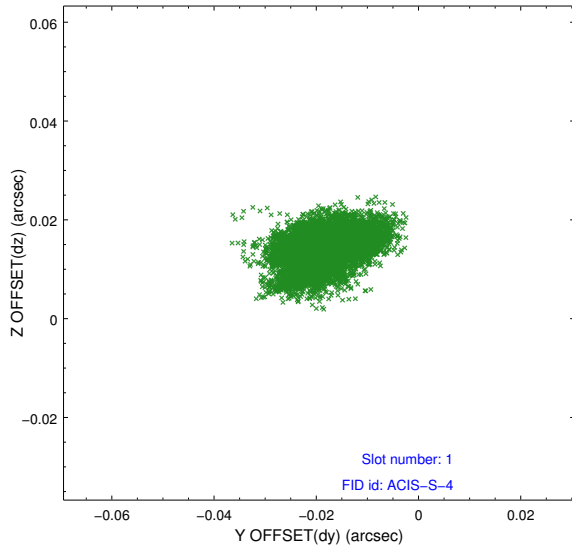


## 2.5 FID Slots

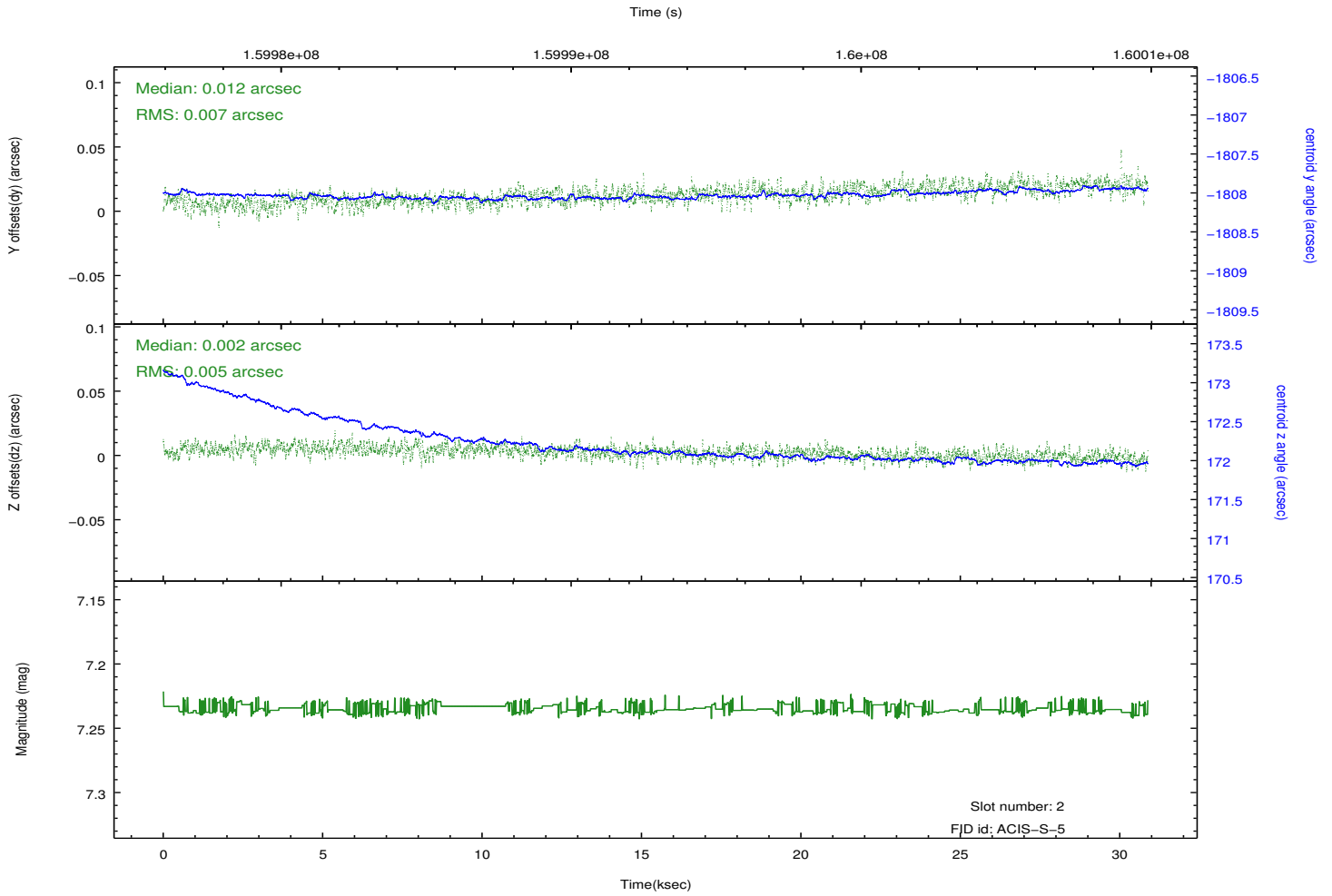
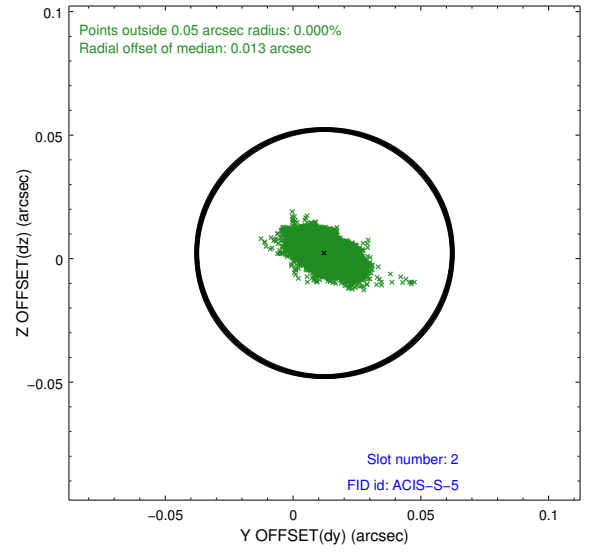
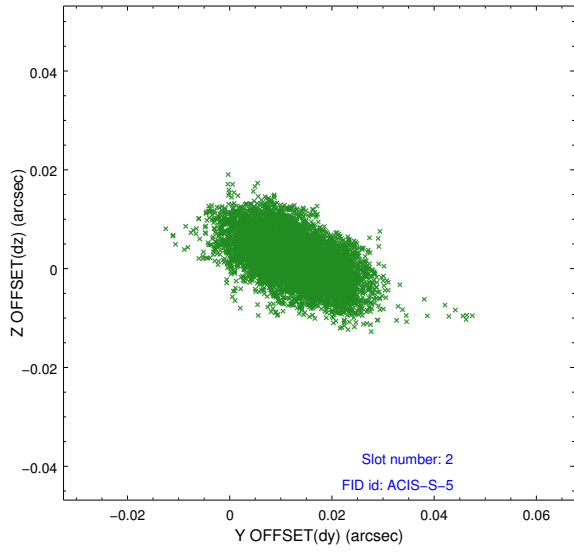
### 2.5.1 Slot 0



## 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)	2012.11.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.358

## A.2 Comments