

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4056 - L2 Version 3  
Chandra X-Ray Center

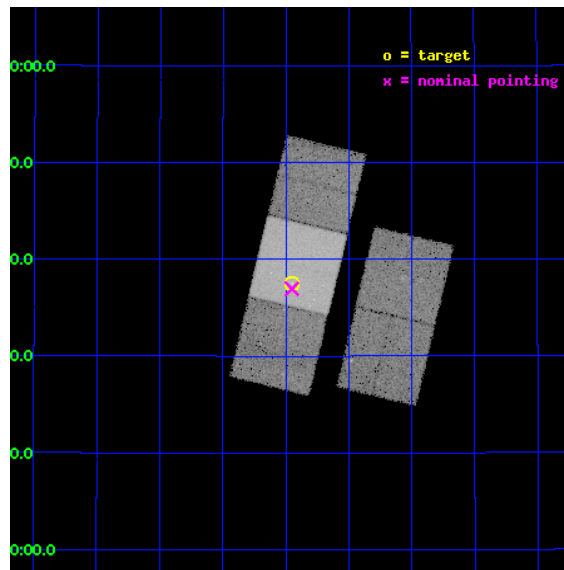
L2 Processing Date : Nov 3 2012

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# 1 Front

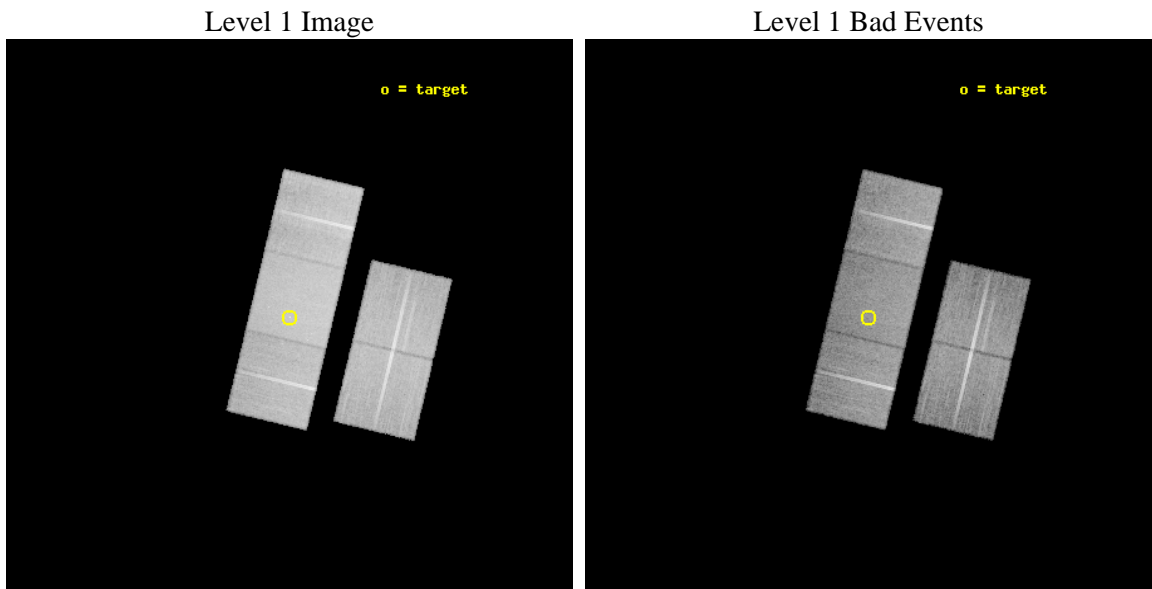
seq_num	700735	Sequence number
obs_id	4056	Observation id
title	CHANDRA OBSERVATIONS OF A UNIFORM SAMPLE OF FRI GALAXIES	Proposal
observer	Dr. Rita Sambruna	Principal investigator
object	1521+28	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	230.862083	Observer's specified target RA [deg]
dec_targ	28.625556	Observer's specified target Dec [deg]
ra_nom	230.8627309828	Nominal RA [deg]
dec_nom	28.615889409335	Nominal Dec [deg]
roll_nom	283.51377393891	Nominal Roll [deg]
revision	3	Processing version of data
ontime	29970.71802184	Sum of GTIs [s]
livetime	29579.128526763	Livetime [s]
ontime2	29970.718011856	Sum of GTIs [s]
ontime3	29973.858982086	Sum of GTIs [s]
ontime6	29976.999942333	Sum of GTIs [s]
ontime7	29970.71802184	Sum of GTIs [s]
ontime8	29976.999942333	Sum of GTIs [s]
l2events	187291	Number of level 2 events



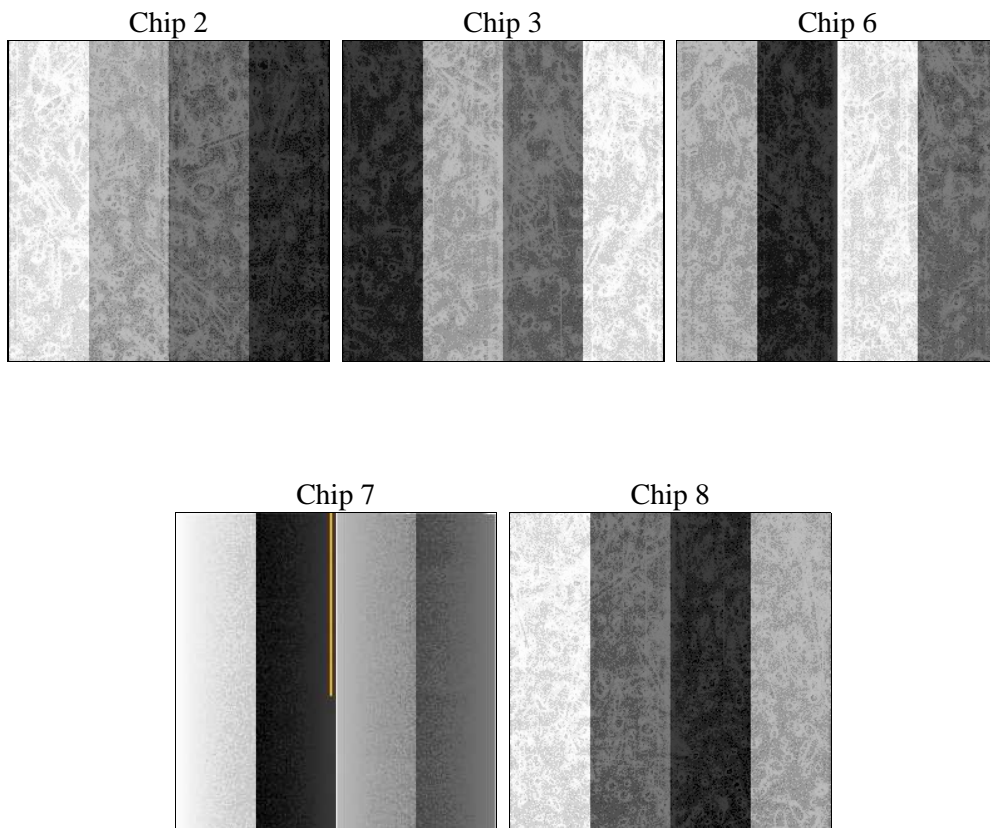
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29856.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	29970.71802184	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	29970.718011856	Sum of GTIs [s]
date	2012-11-03T19:50:44	Date and time of file creation	ontime3	29973.858982086	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	29976.999942333	Sum of GTIs [s]
			ontime7	29970.71802184	Sum of GTIs [s]
			ontime8	29976.999942333	Sum of GTIs [s]
			l1events	1087837	Number of level 1 events

### 2.1.4 Events

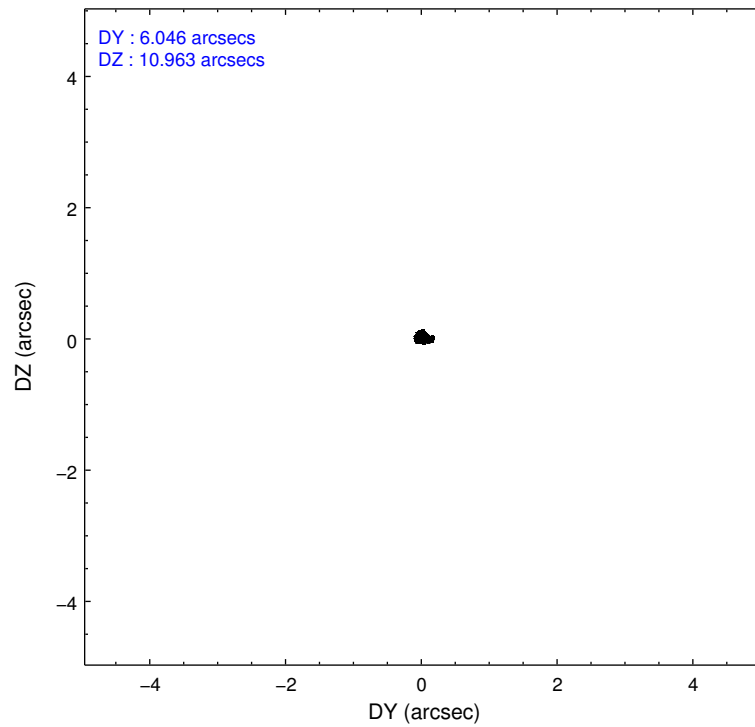
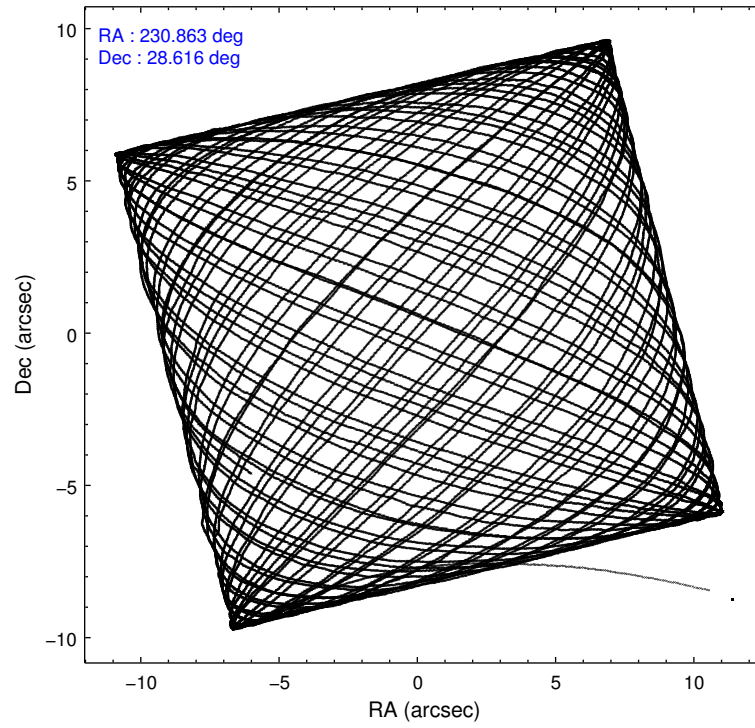
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	189714	189937	196318	264558	247310
rejected events	167442	167716	173124	156084	197431
rejected %	88%	88%	88%	58%	79%

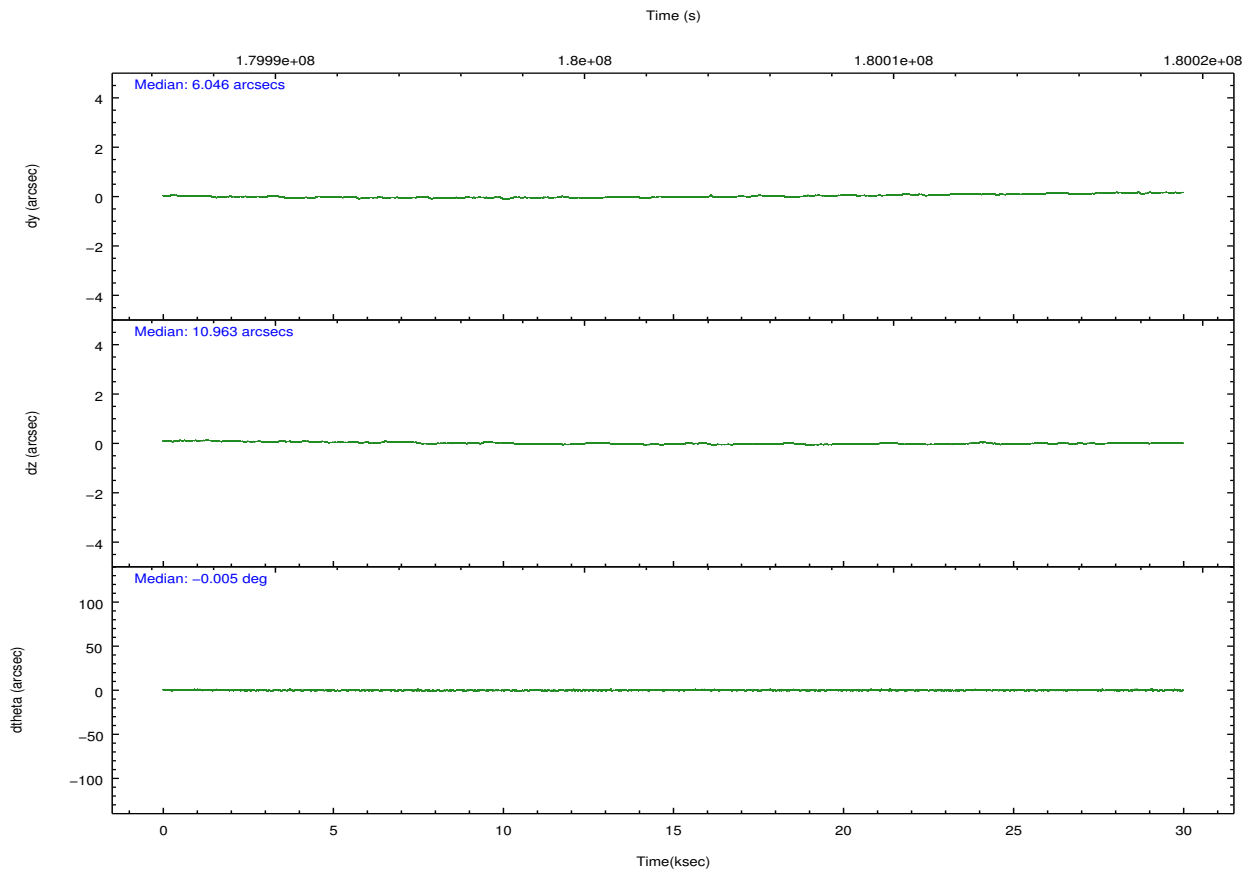
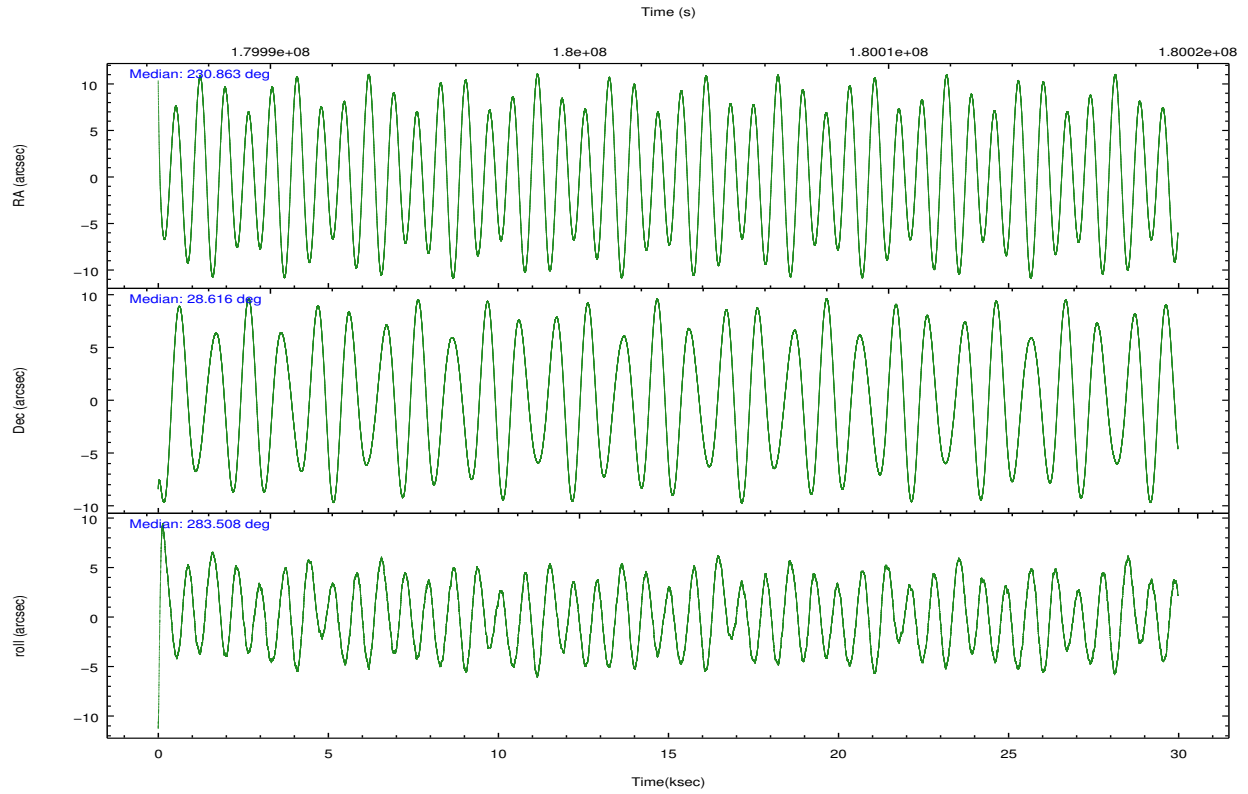
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	10206	10082	9621	11230	15703
	5%	5%	4%	4%	6%
grade 1 events	126	113	87	223	147
	0%	0%	0%	0%	0%
grade 2 events	4507	4194	4805	21790	11390
	2%	2%	2%	8%	4%
grade 3 events	2203	2210	2255	9884	5210
	1%	1%	1%	3%	2%
grade 4 events	2189	2219	2252	9829	4743
	1%	1%	1%	3%	1%
grade 5 events	7132	8475	8965	24711	11772
	3%	4%	4%	9%	4%
grade 6 events	3554	3882	4630	57673	13492
	1%	2%	2%	21%	5%
grade 7 events	159797	158762	163703	129218	184853
	84%	83%	83%	48%	74%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	230.841077	230.8627309827965	Subarray requested	NONE	NONE
[deg] Pointing Dec	28.635392	28.61588940933467	Alternating exposures requested	N	N
[deg] Pointing Roll	283.367526	283.5137739389114	[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)	179987995.184000	179986775.43299			
Observation start date	2003-09-15T04:38:51	2003-09-15T04:19:35			
[s] Observation end time (MET)	180017851.184000	180018458.18435			
Observation end date	2003-09-15T12:56:27	2003-09-15T13:07:38			
Read mode	TIMED	TIMED			

## 2.3 Aspect



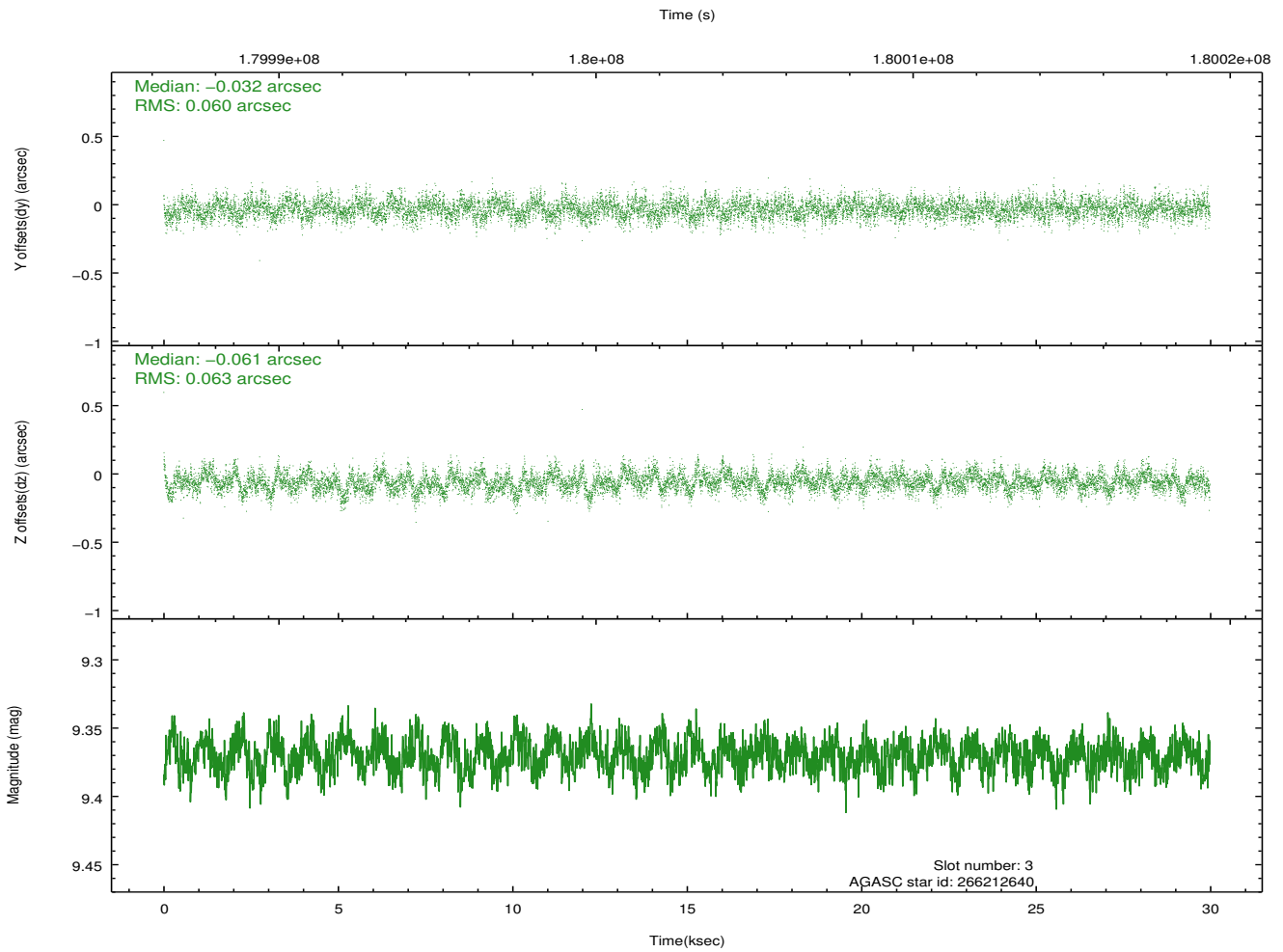
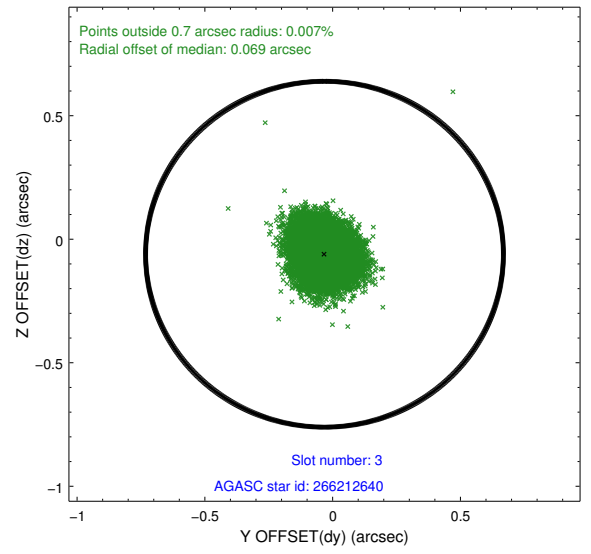
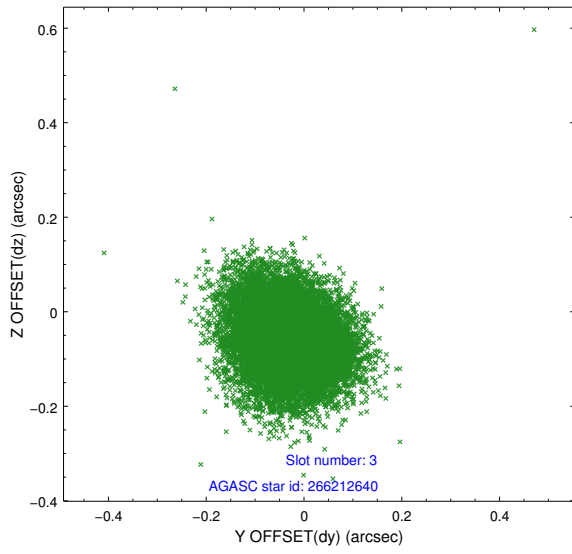


### Slot Statistics

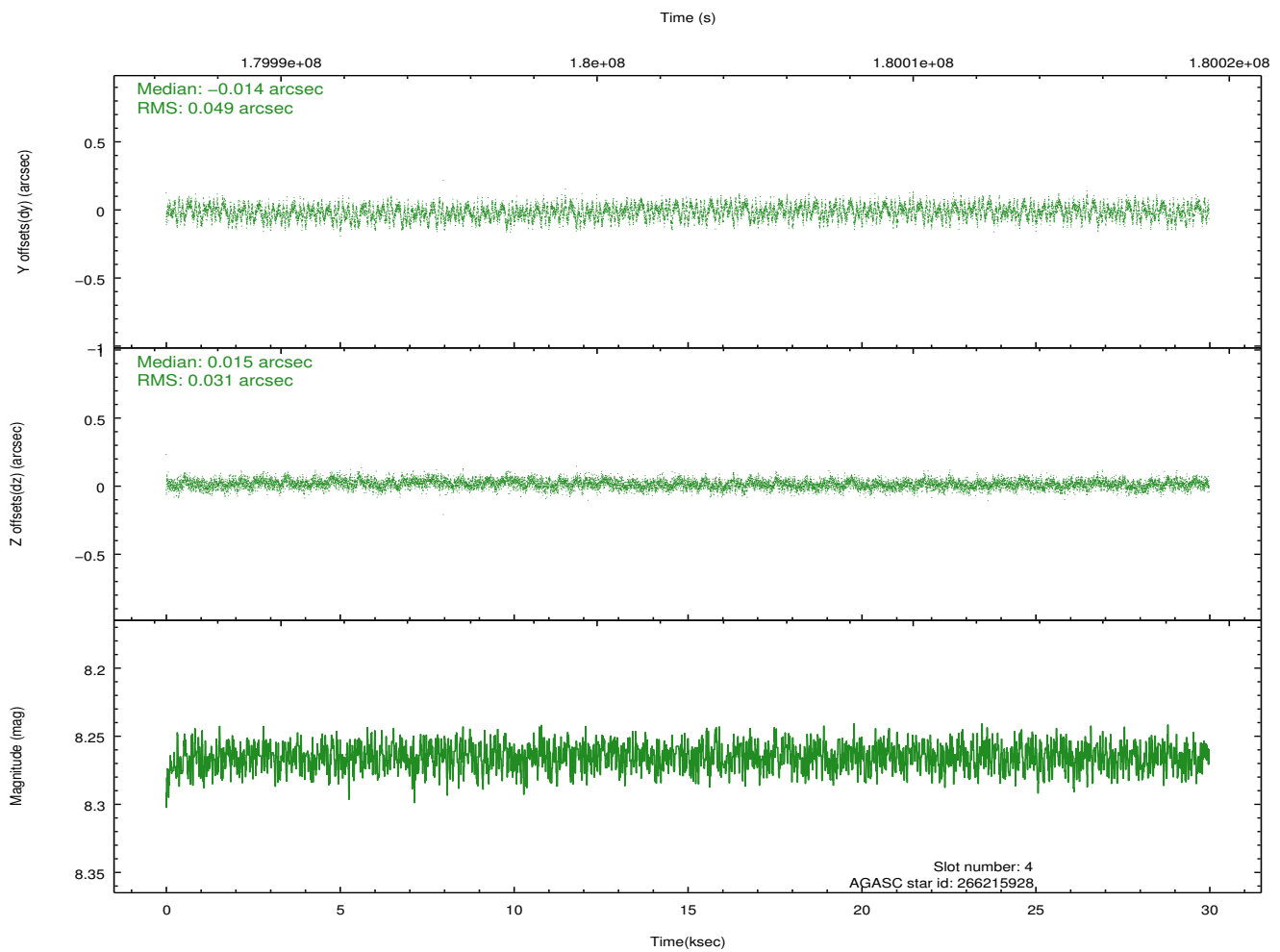
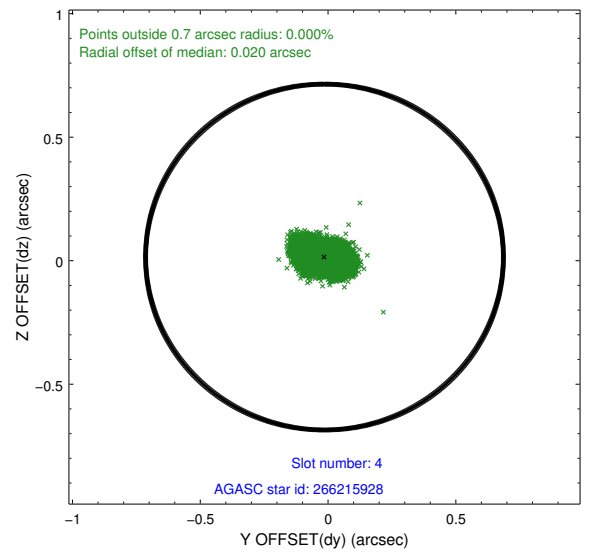
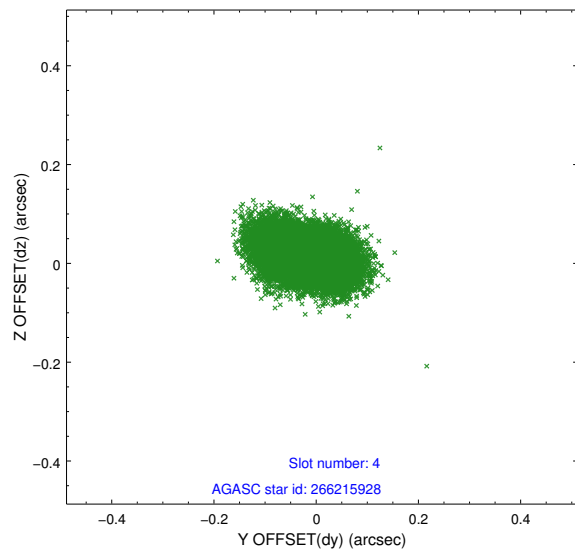
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	7311	-0.058	-0.011	0.010	0.018	0.000000	0.000000	-758.83	-1732.26
1	FID	ACIS-S-4	7.20	7311	0.061	0.030	0.015	0.030	0.000000	0.000000	2154.51	176.22
2	FID	ACIS-S-5	7.23	7311	-0.036	-0.011	0.012	0.022	0.000000	0.000000	-1811.58	169.89
3	GUIDE	266212640	9.37	14610	-0.032	-0.061	0.093	0.151	230.478020	28.040711	1815.00	-1616.58
4	GUIDE	266215928	8.26	14622	-0.014	0.015	0.062	0.103	231.261301	29.146197	-1485.68	1711.16
5	GUIDE	266216280	9.11	14617	-0.041	-0.057	0.073	0.120	230.814626	29.031614	-1406.83	248.53
6	GUIDE	266216960	7.30	14620	0.009	0.039	0.057	0.089	230.691743	28.057036	1916.01	-942.44
7	GUIDE	266213664	7.12	14621	0.079	0.065	0.050	0.081	231.625635	28.127527	2347.20	2003.10

## 2.4 Star Slots

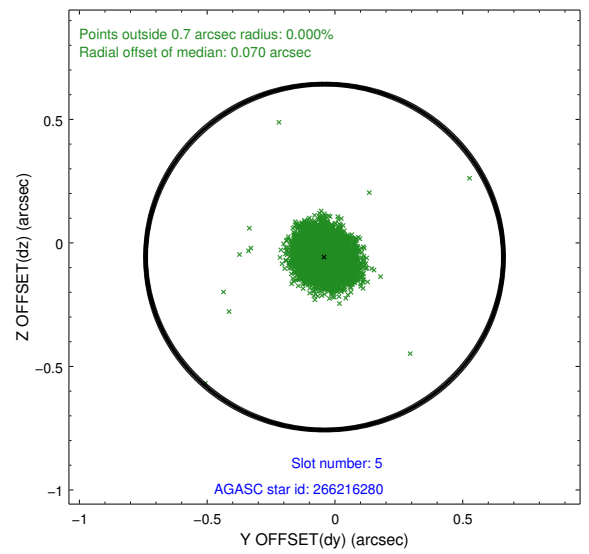
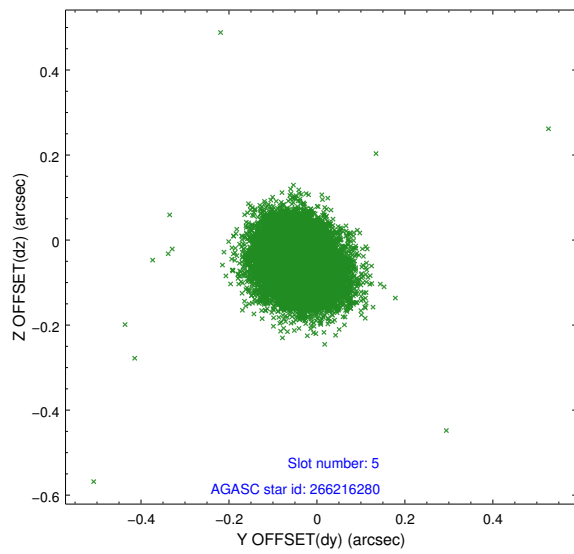
### 2.4.1 Slot 3



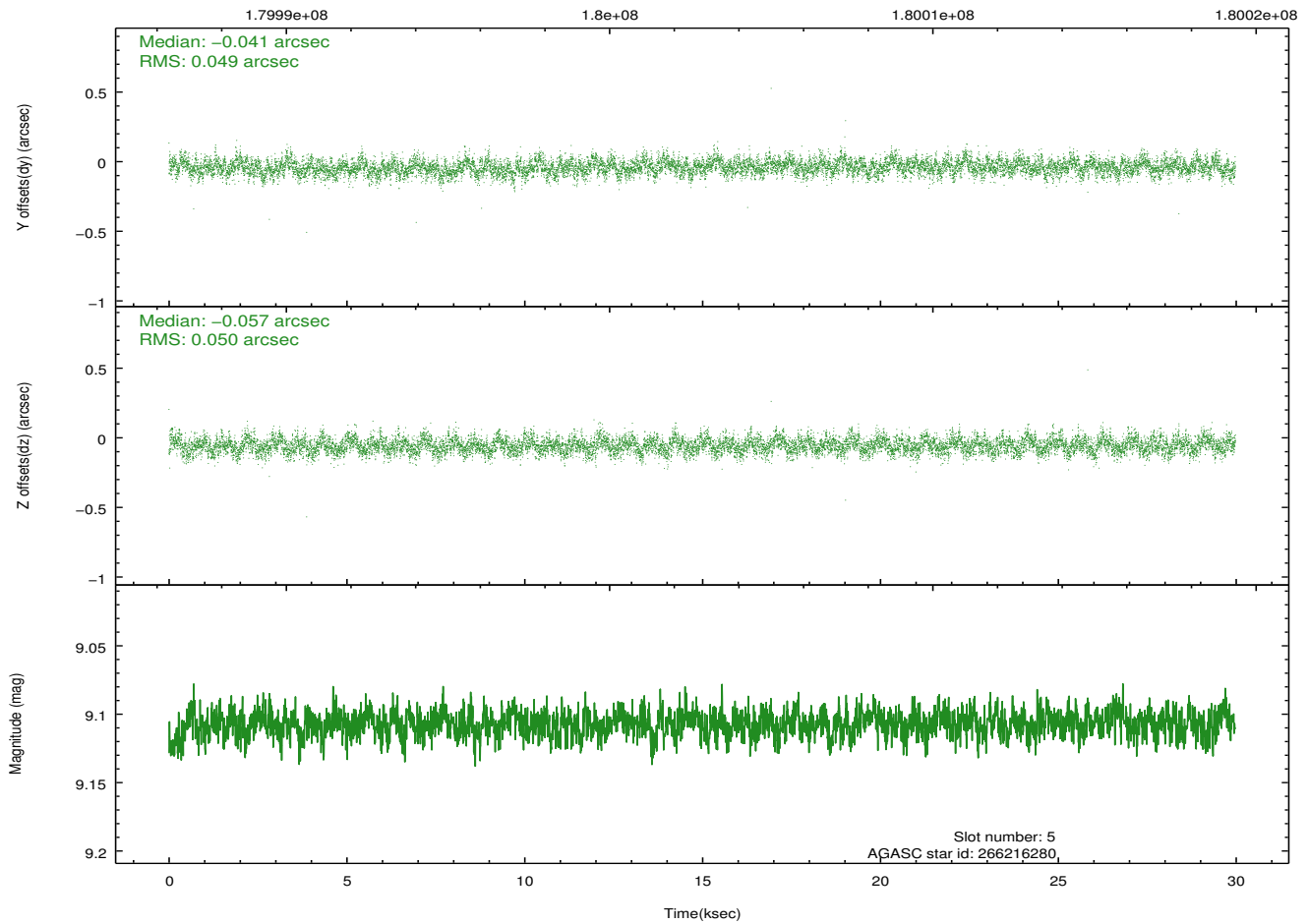
## 2.4.2 Slot 4



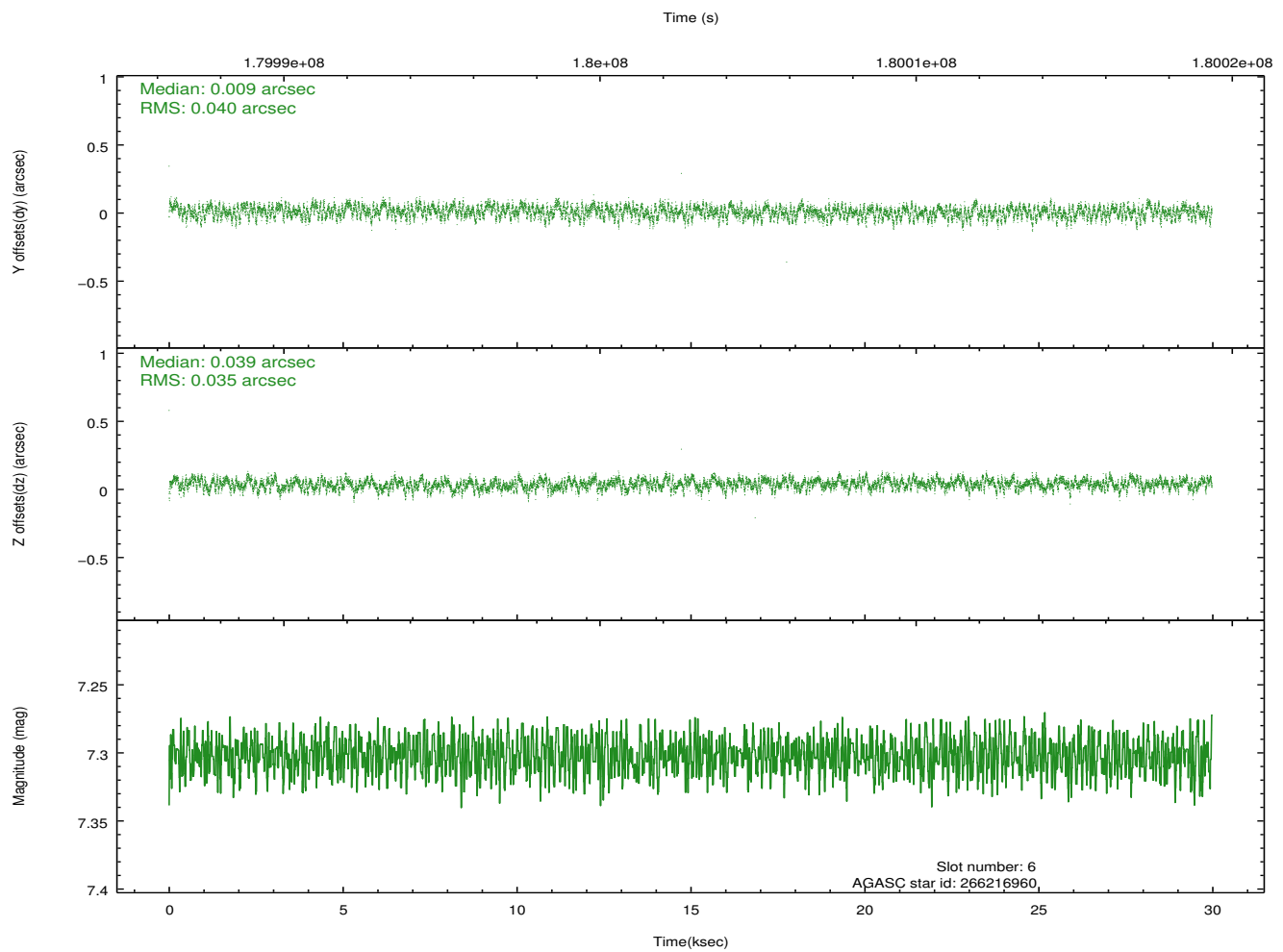
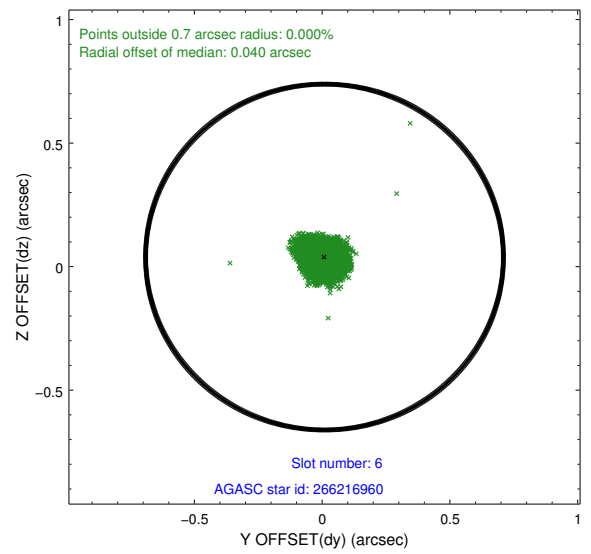
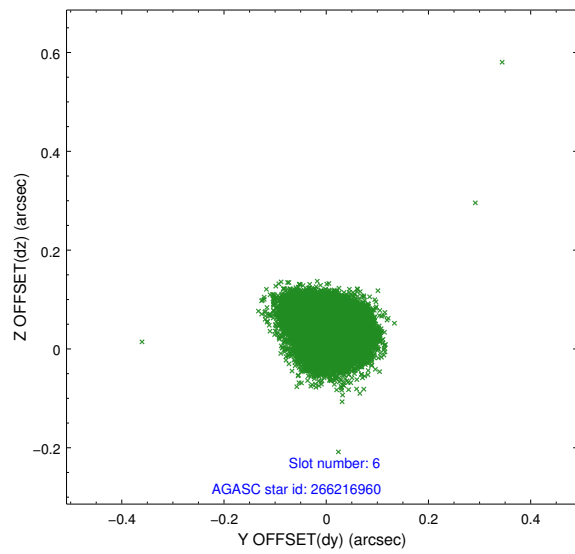
### 2.4.3 Slot 5



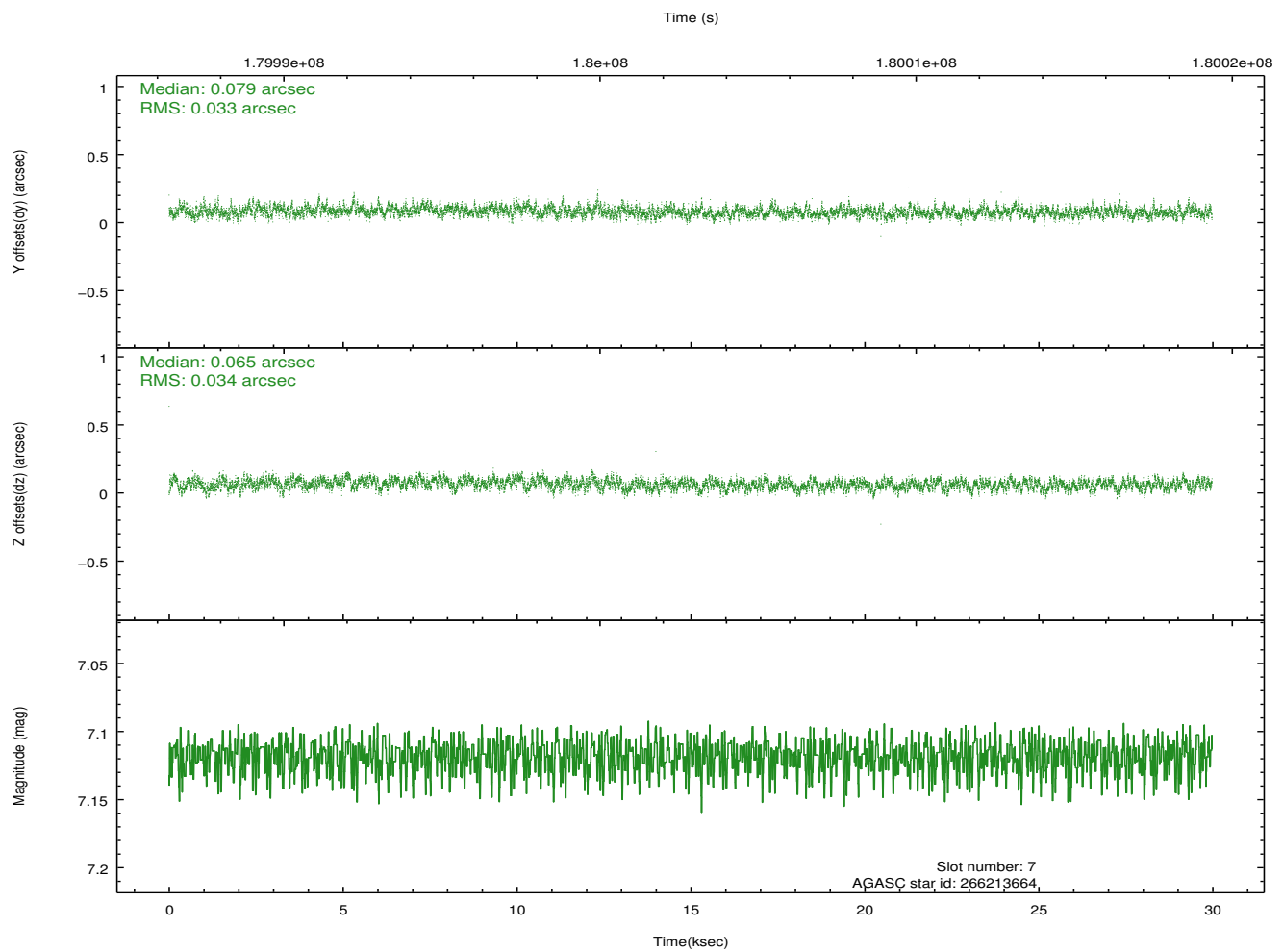
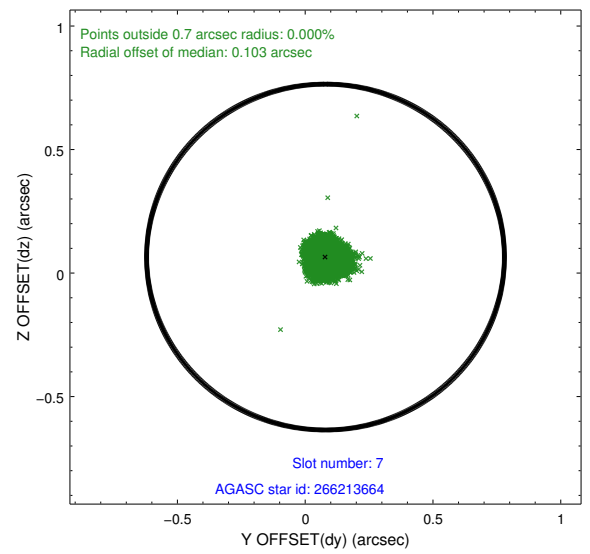
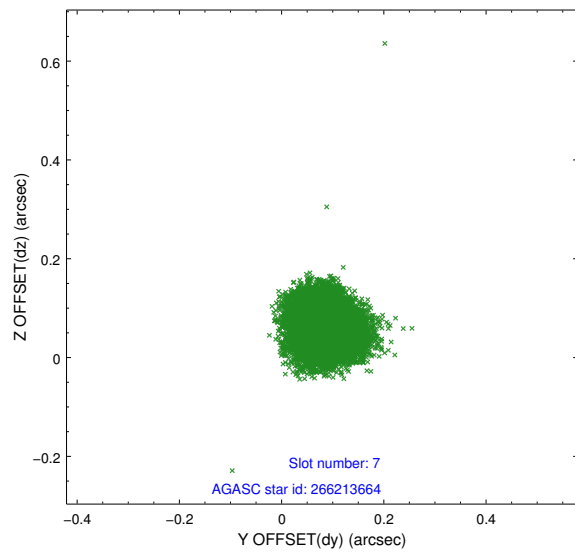
Time (s)



## 2.4.4 Slot 6

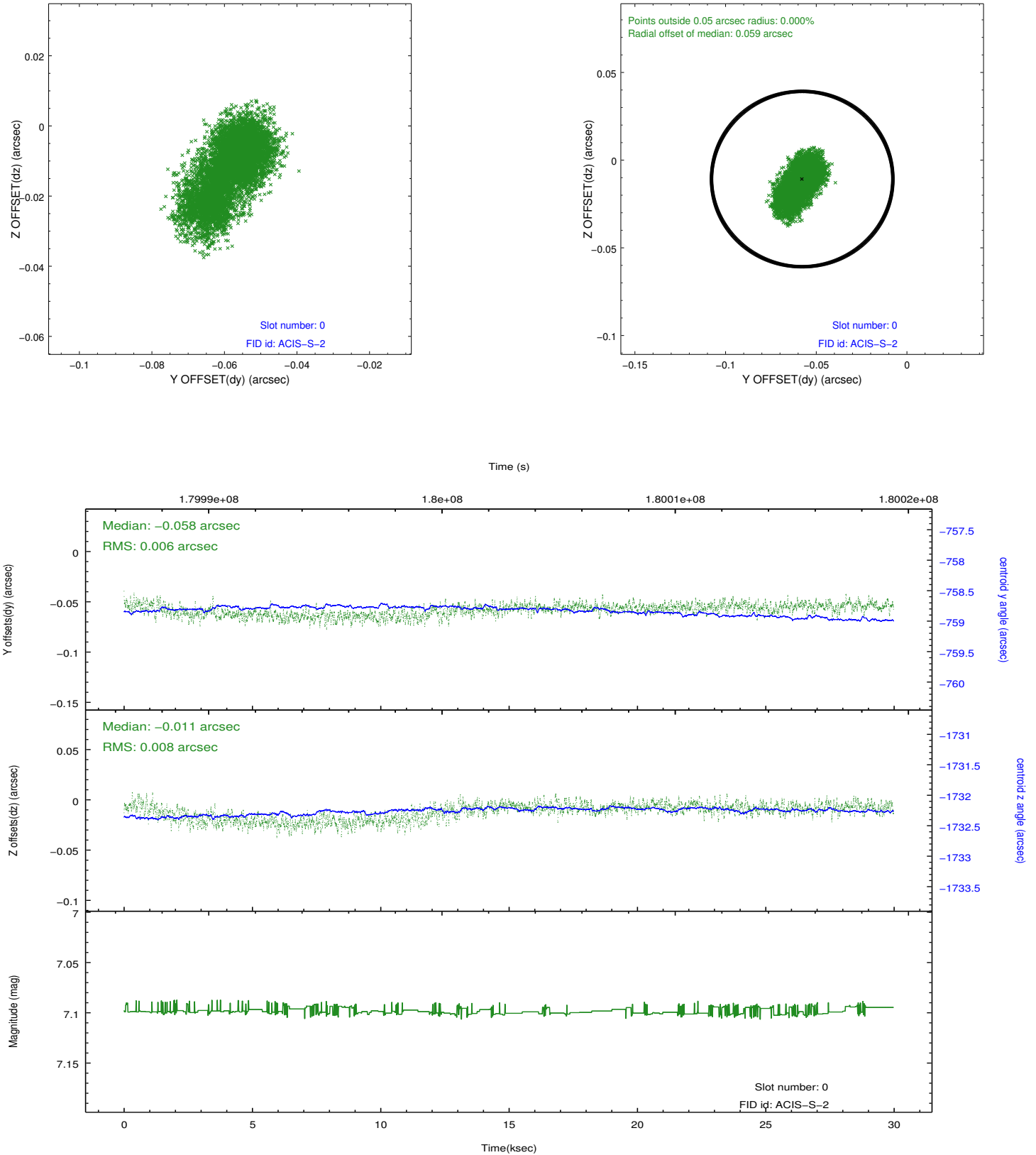


## 2.4.5 Slot 7

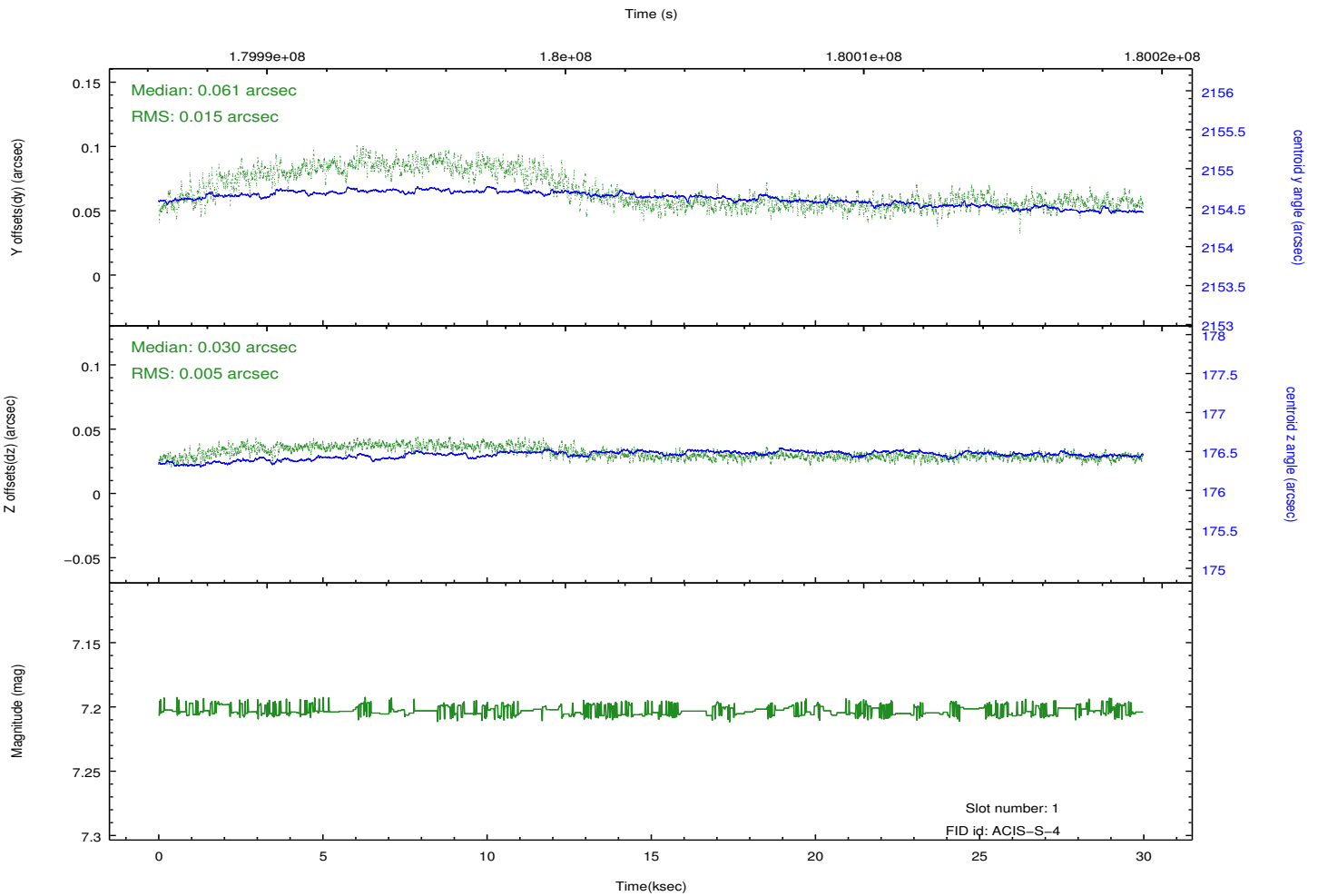
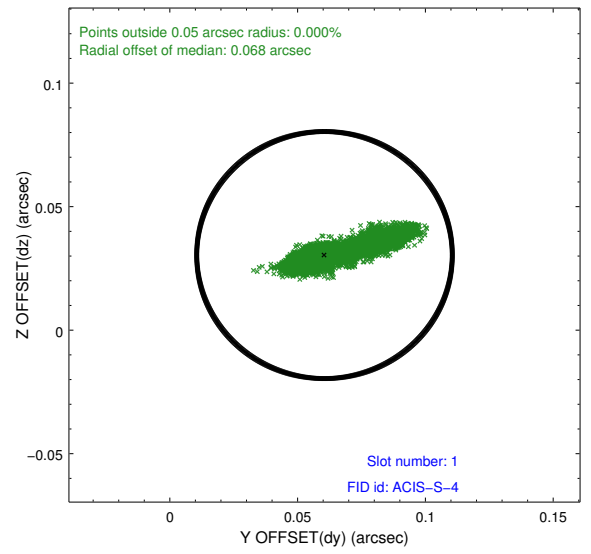
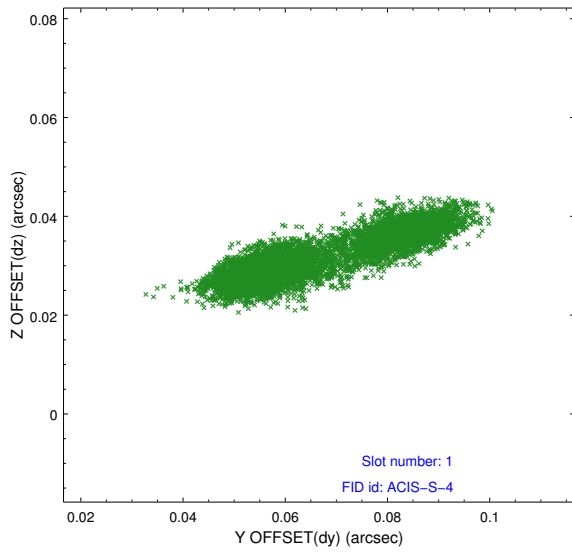


## 2.5 FID Slots

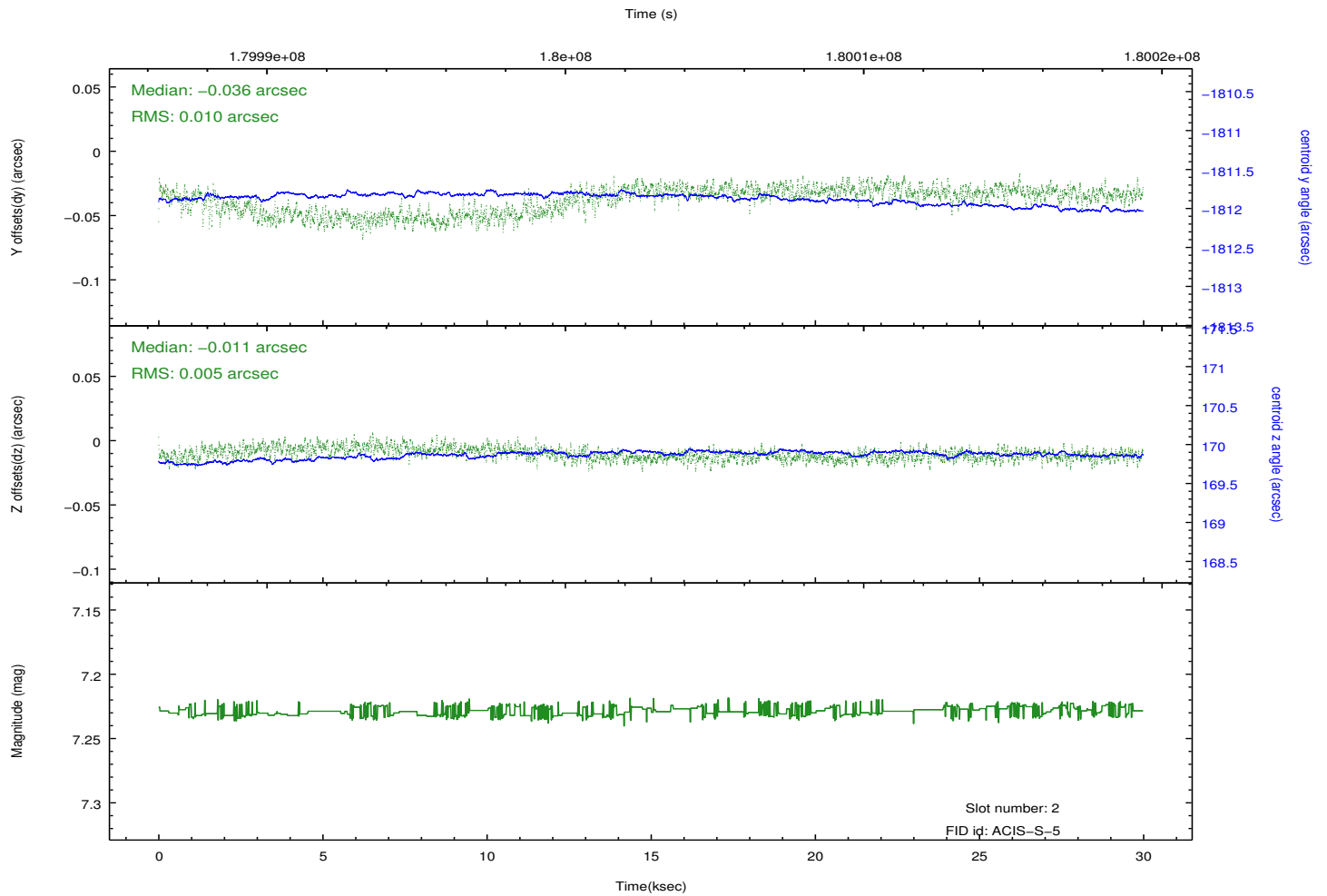
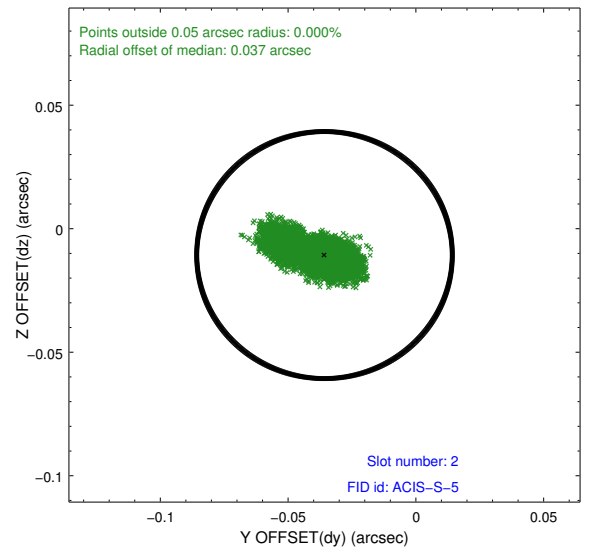
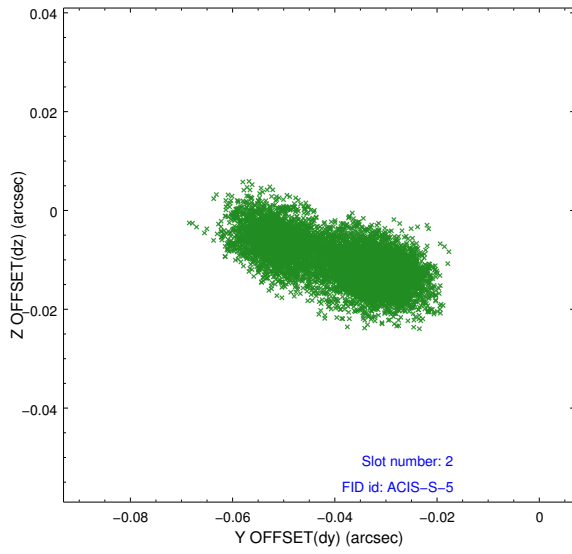
### 2.5.1 Slot 0



## 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)	2012.11.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.97

## A.2 Comments