

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 13642 - L2 Version 1  
Chandra X-Ray Center

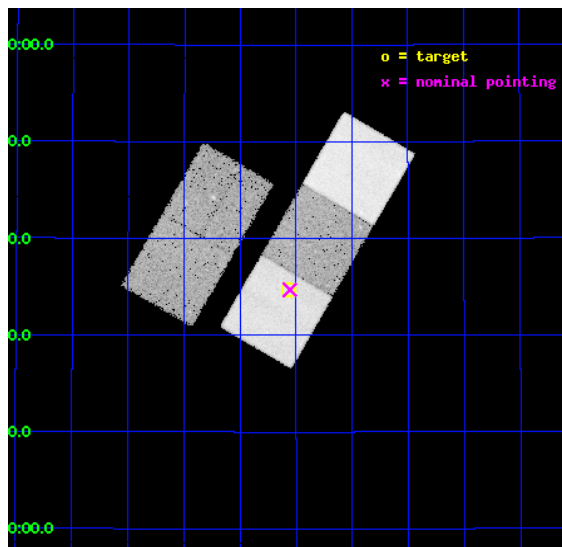
L2 Processing Date : Jan 2 2012

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# 1 Front

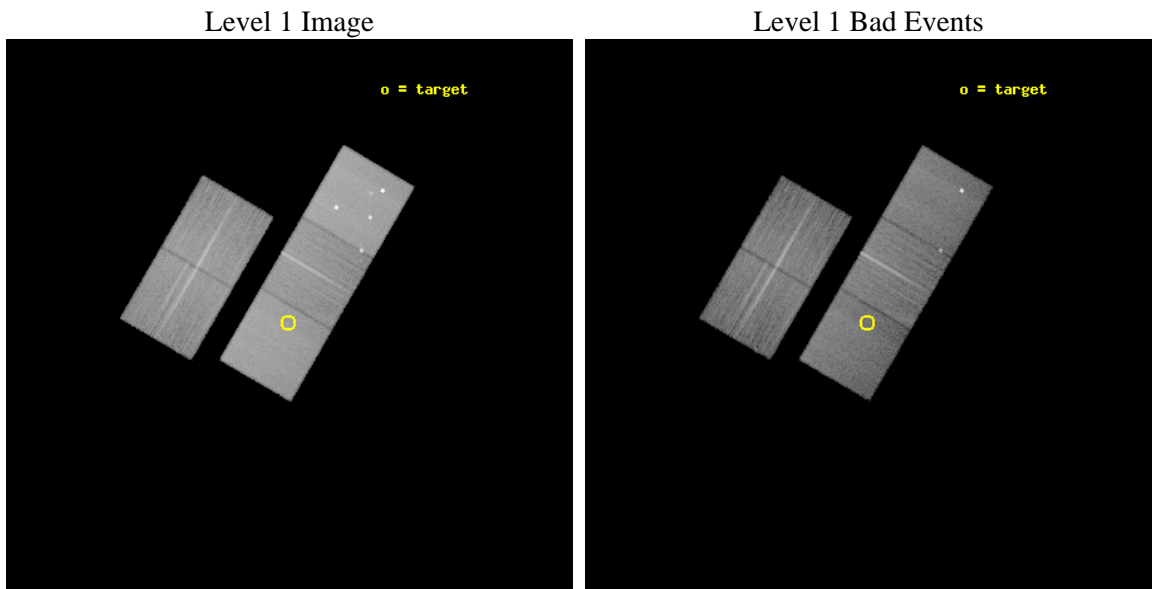
seq_num	200796	Sequence number
obs_id	13642	Observation id
title	LIVING WITH A RED DWARF: MAGNETIC ACTIVITY, XUV IRRADIANCES OF dM STARS - EXOPLANET ATMOSPHERES AND ENVIRONMENT IMPACTS	Proposal titl
observer	Dr. Edward Guinan	Principal investigator
object	G 111-72	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	125.017917	Observer's specified target RA [deg]
dec_targ	38.578194	Observer's specified target Dec [deg]
ra_nom	125.01402618258	Nominal RA [deg]
dec_nom	38.578319051269	Nominal Dec [deg]
roll_nom	120.23253931692	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30045.200231075	Sum of GTIs [s]
livetime	29652.637571102	Livetime [s]
ontime2	30041.985797703	Sum of GTIs [s]
ontime3	30045.167868197	Sum of GTIs [s]
ontime5	30045.200231075	Sum of GTIs [s]
ontime6	30045.200231075	Sum of GTIs [s]
ontime7	30045.200231075	Sum of GTIs [s]
l2events	292005	Number of level 2 events



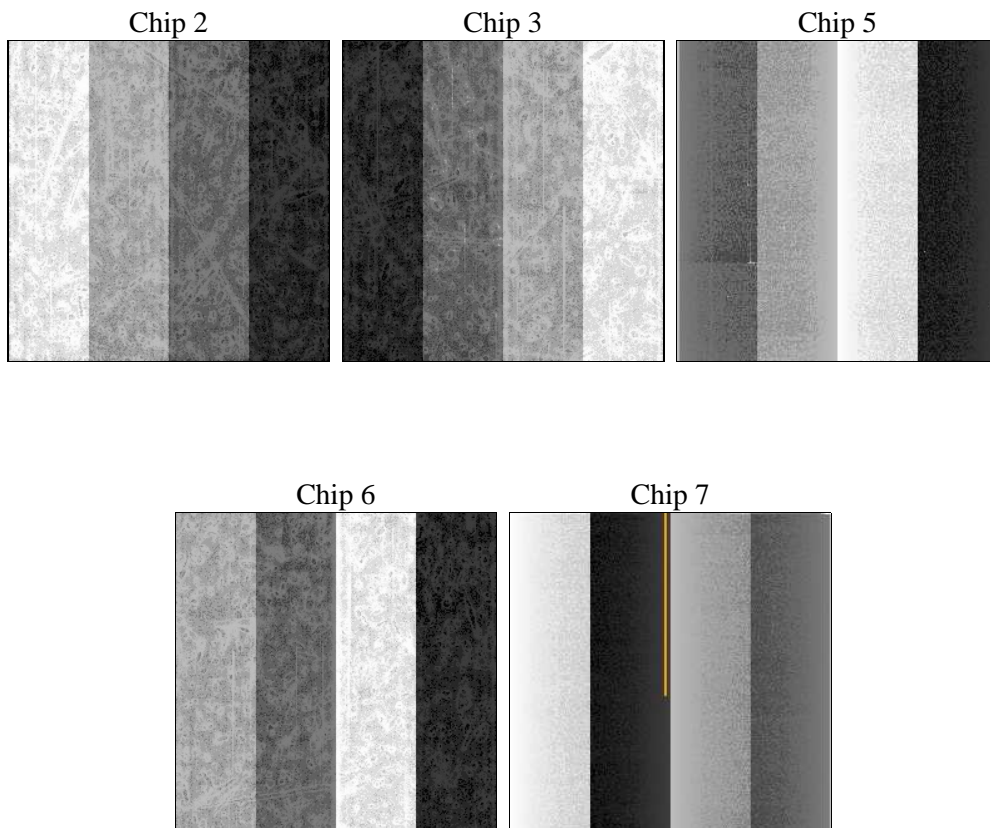
## 2 OBI

### 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	8.4.3	Processing system revision	ontime	30045.200231075	Sum of GTIs [s]
caldbver	4.4.7	&#160	ontime2	30041.985797703	Sum of GTIs [s]
date	2012-01-02T06:53:58	Date and time of file creation	ontime3	30045.167868197	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	30045.200231075	Sum of GTIs [s]
			ontime6	30045.200231075	Sum of GTIs [s]
			ontime7	30045.200231075	Sum of GTIs [s]
			l1events	1113021	Number of level 1 events

### 2.1.4 Events

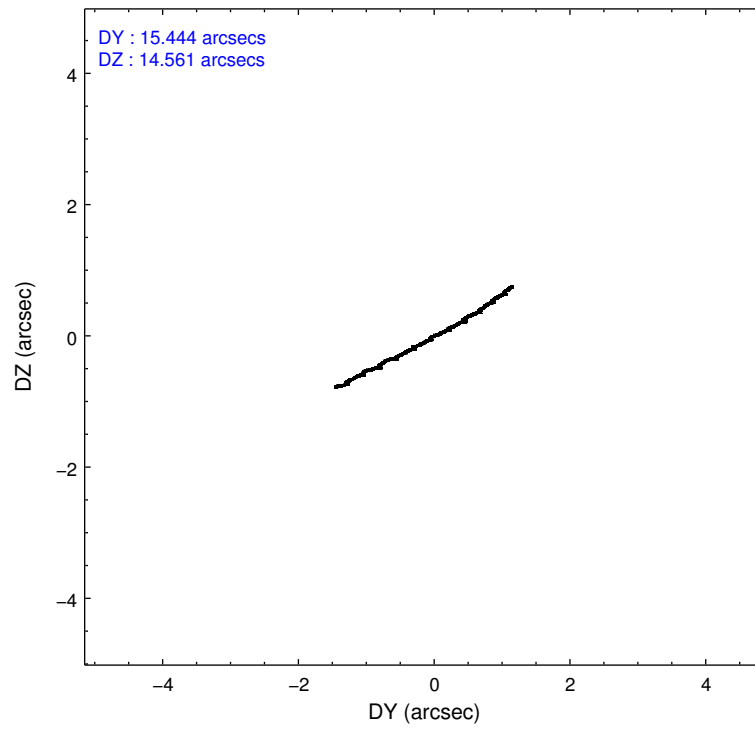
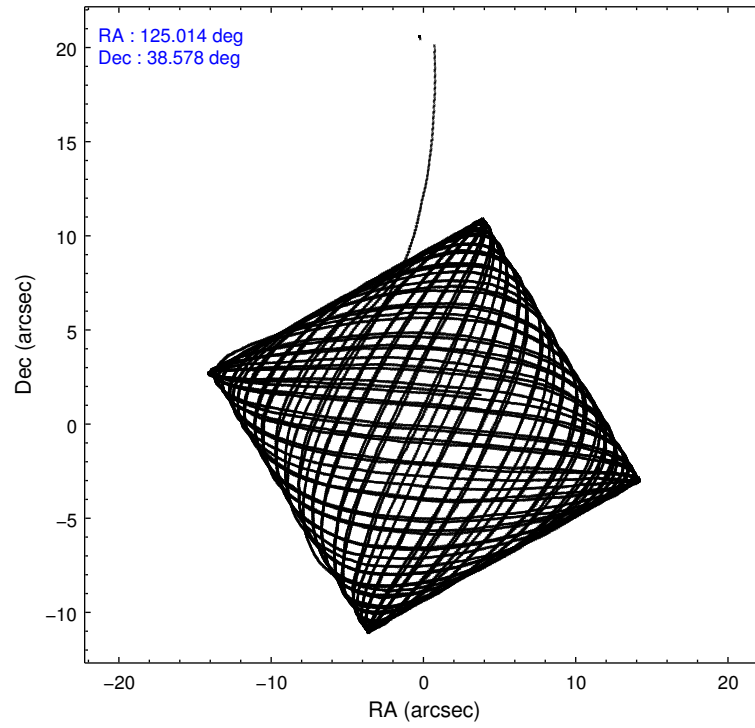
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	183966	180218	318475	188984	241378
rejected events	163294	160650	158254	167045	135550
rejected %	88%	89%	49%	88%	56%

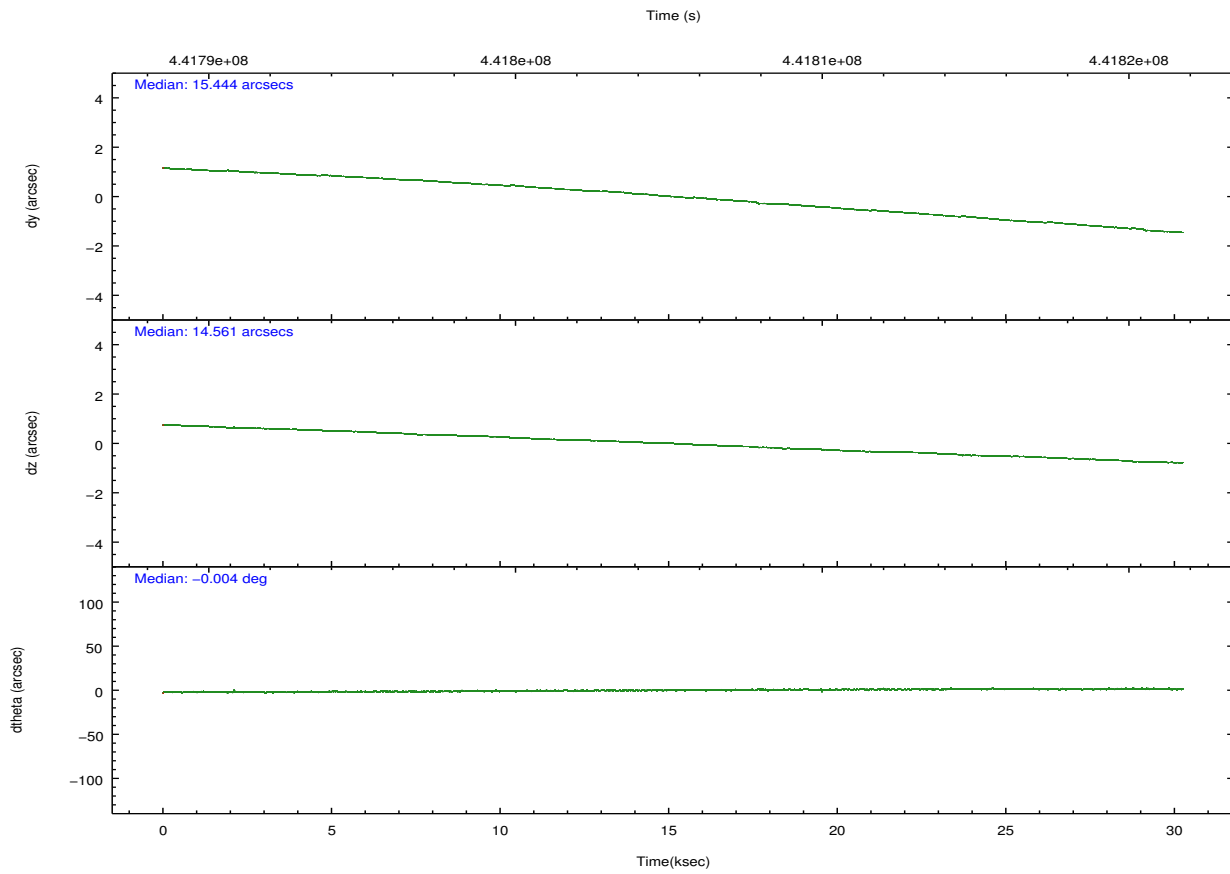
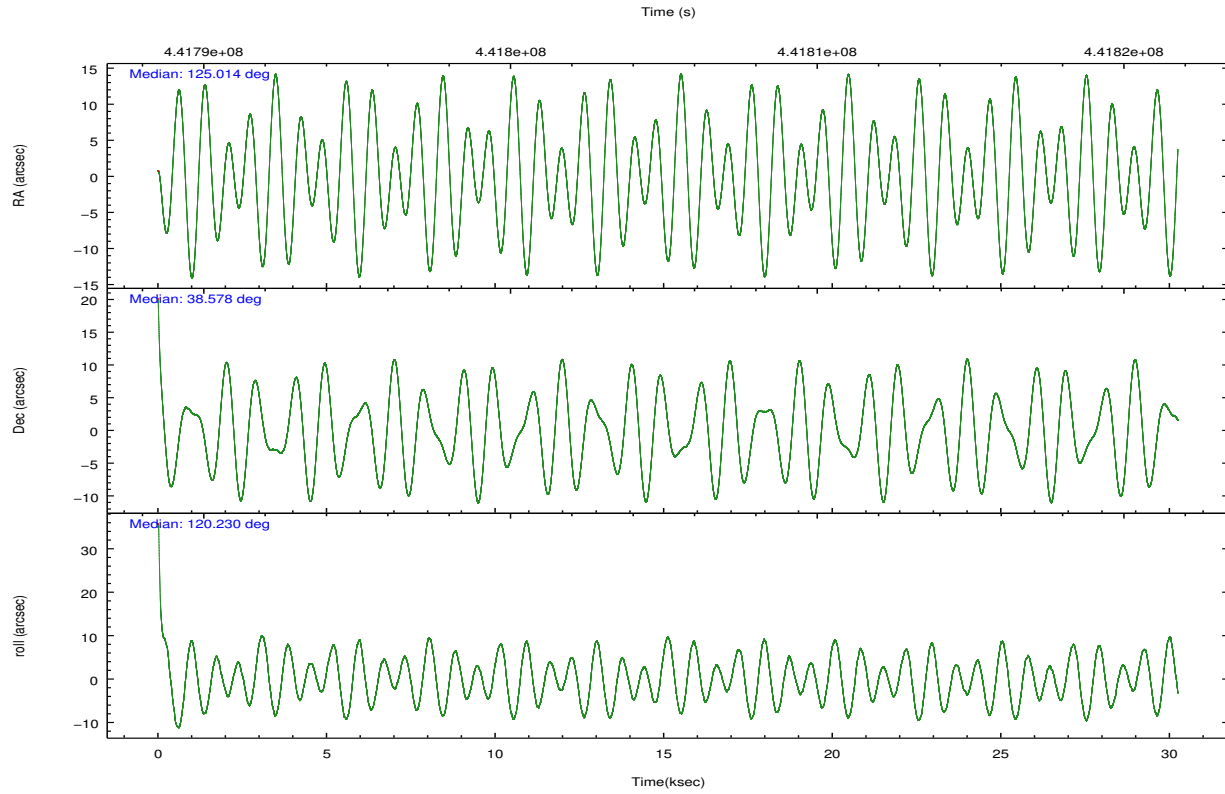
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	7447	6874	25230	7537	9181
	4%	3%	7%	3%	3%
grade 1 events	116	112	1221	96	326
	0%	0%	0%	0%	0%
grade 2 events	5063	4207	47074	4880	21776
	2%	2%	14%	2%	9%
grade 3 events	2062	2173	5499	2324	9111
	1%	1%	1%	1%	3%
grade 4 events	2212	2154	5095	2264	8998
	1%	1%	1%	1%	3%
grade 5 events	7409	8965	24025	8801	24993
	4%	4%	7%	4%	10%
grade 6 events	3893	4163	77359	4944	56789
	2%	2%	24%	2%	23%
grade 7 events	155764	151570	132972	158138	110204
	84%	84%	41%	83%	45%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	125.044637	125.0140261825847	Subarray requested	NONE	NONE
[deg] Pointing Dec	38.565056	38.57831905126861	Alternating exposures requested	N	N
[deg] Pointing Roll	120.056811	120.2325393169153	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	441790269.184000	441789312.1722			
Observation start date	2012-01-01T07:30:03	2012-01-01T07:15:12			
[s] Observation end time (MET)	441820269.184000	441820763.27386			
Observation end date	2012-01-01T15:50:03	2012-01-01T15:59:23			
Read mode	TIMED	TIMED			

## 2.3 Aspect



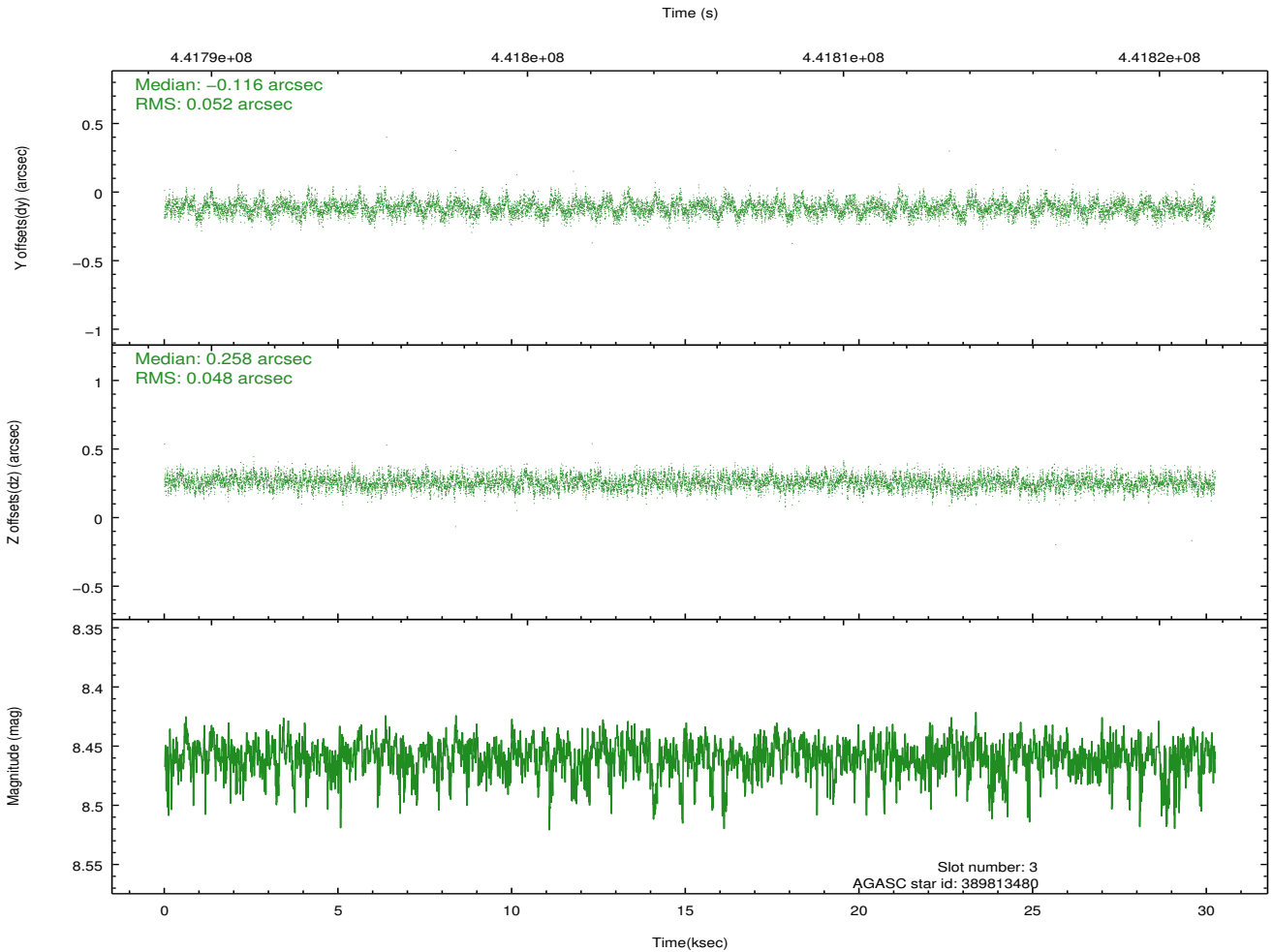
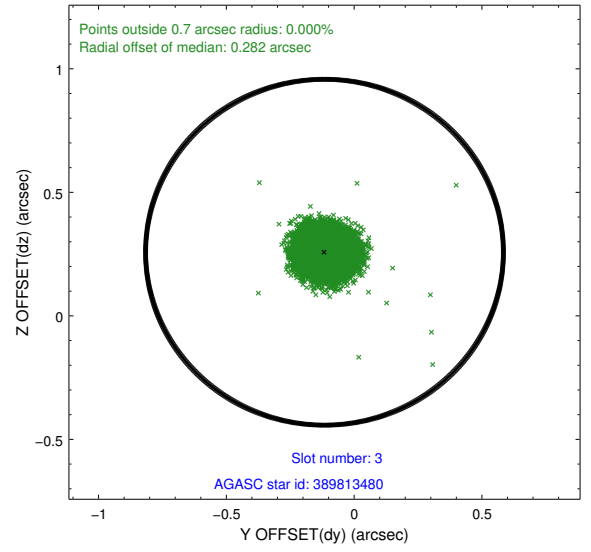
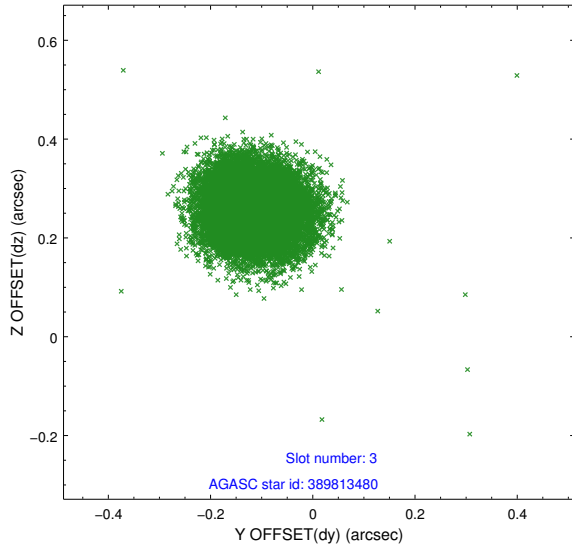


### Slot Statistics

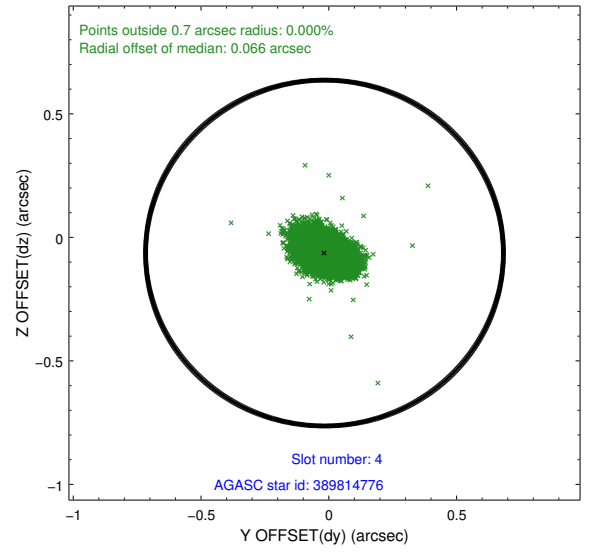
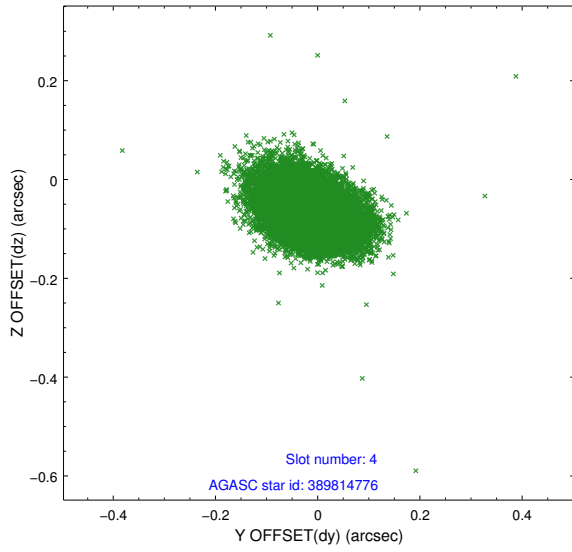
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.96	7378	-0.129	-0.044	0.026	0.047	0.000000	0.000000	-768.51	-1735.90
1	FID	ACIS-S-4	7.05	7377	0.270	0.073	0.014	0.024	0.000000	0.000000	2145.14	172.61
2	FID	ACIS-S-5	7.08	7378	-0.172	-0.023	0.031	0.054	0.000000	0.000000	-1821.31	166.29
3	GUIDE	389813480	8.46	14744	-0.116	0.258	0.075	0.120	125.705443	39.011983	472.98	-2408.52
4	GUIDE	389814776	7.97	14753	-0.017	-0.064	0.070	0.116	125.306723	38.878420	609.98	-1200.88
5	GUIDE	389815064	9.20	14741	0.125	0.104	0.124	0.192	125.981644	38.462461	-1630.30	-2107.64
6	GUIDE	389818224	8.82	14742	0.223	-0.019	0.096	0.158	125.770570	38.472670	-1305.31	-1608.39
7	GUIDE	389819992	7.81	14747	-0.213	-0.289	0.070	0.111	124.480844	38.800815	1531.04	941.66

## 2.4 Star Slots

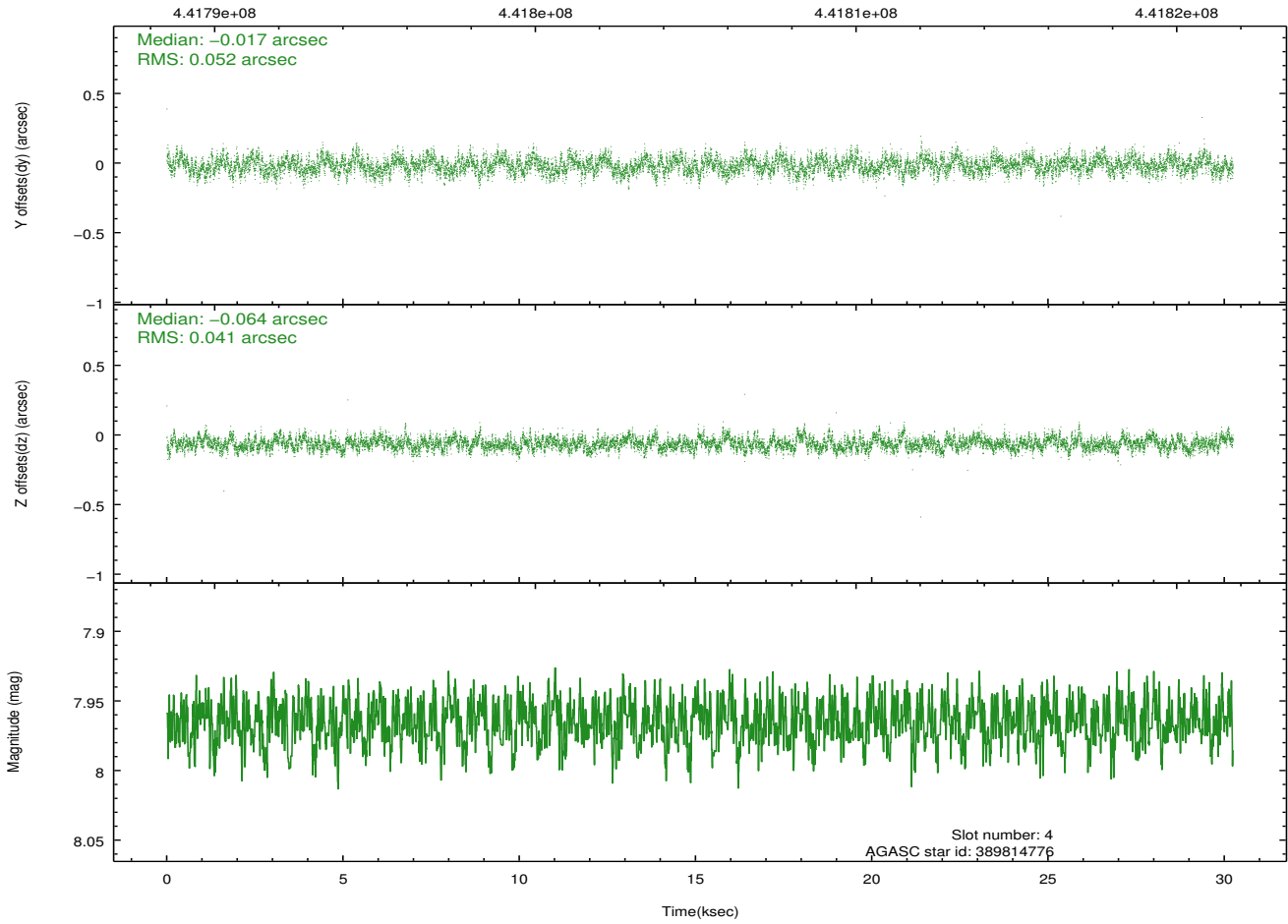
### 2.4.1 Slot 3



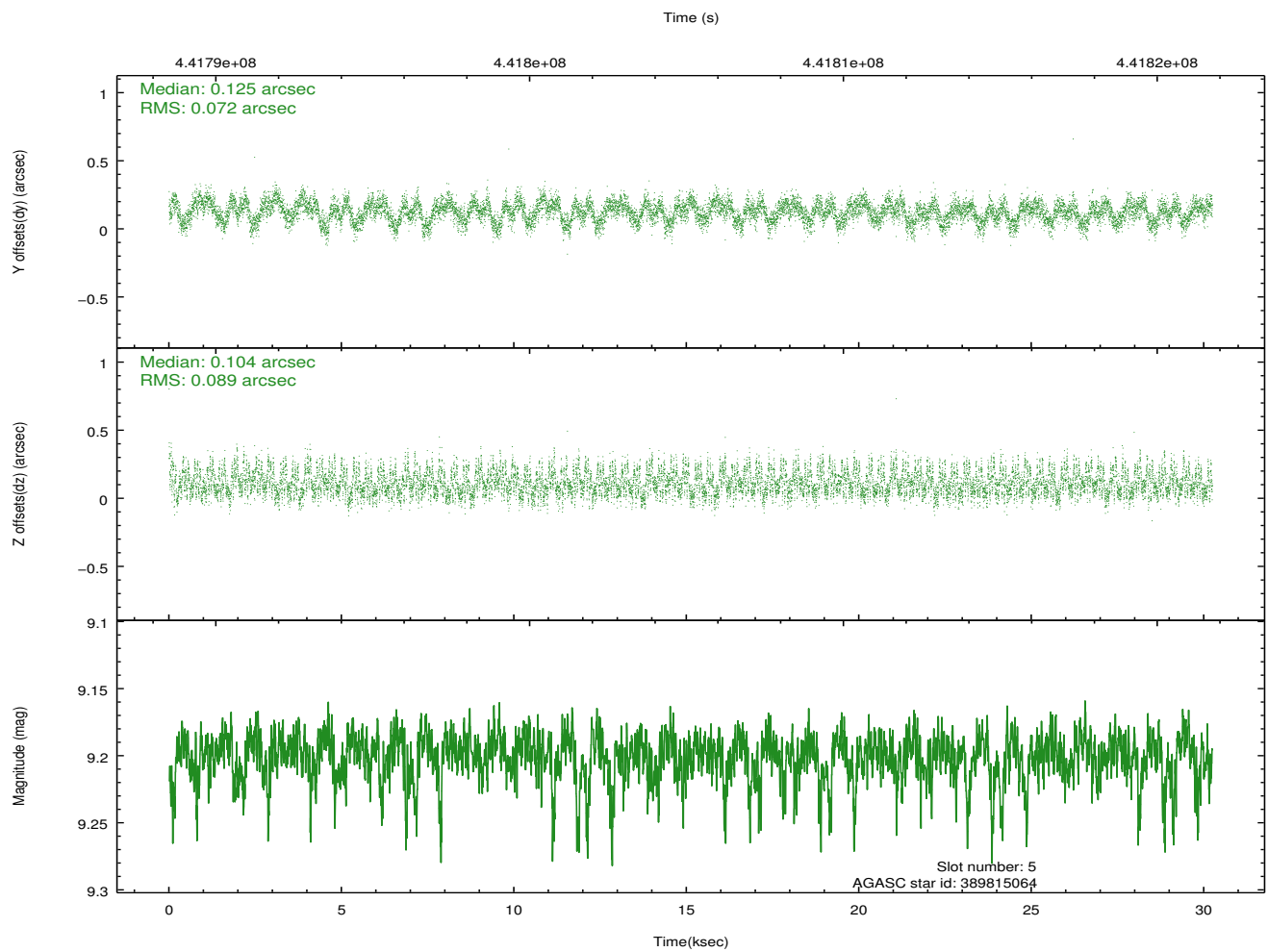
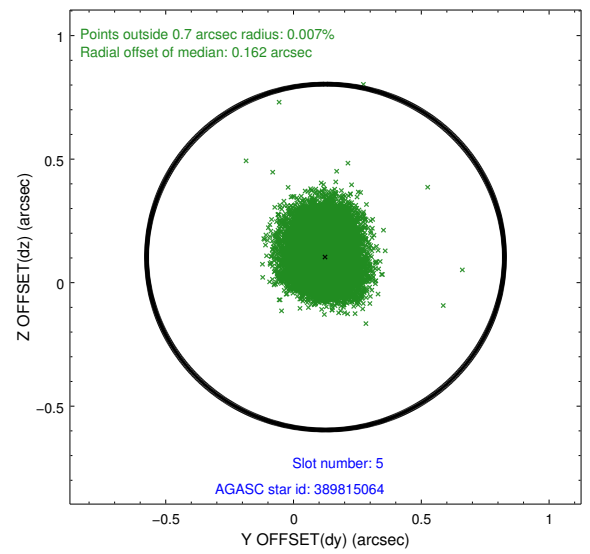
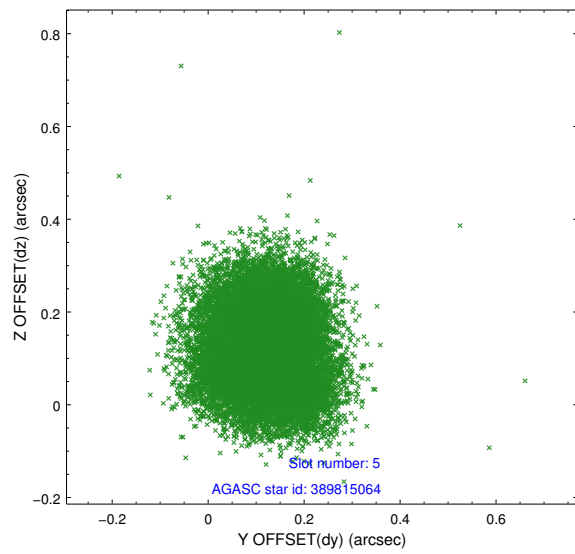
## 2.4.2 Slot 4



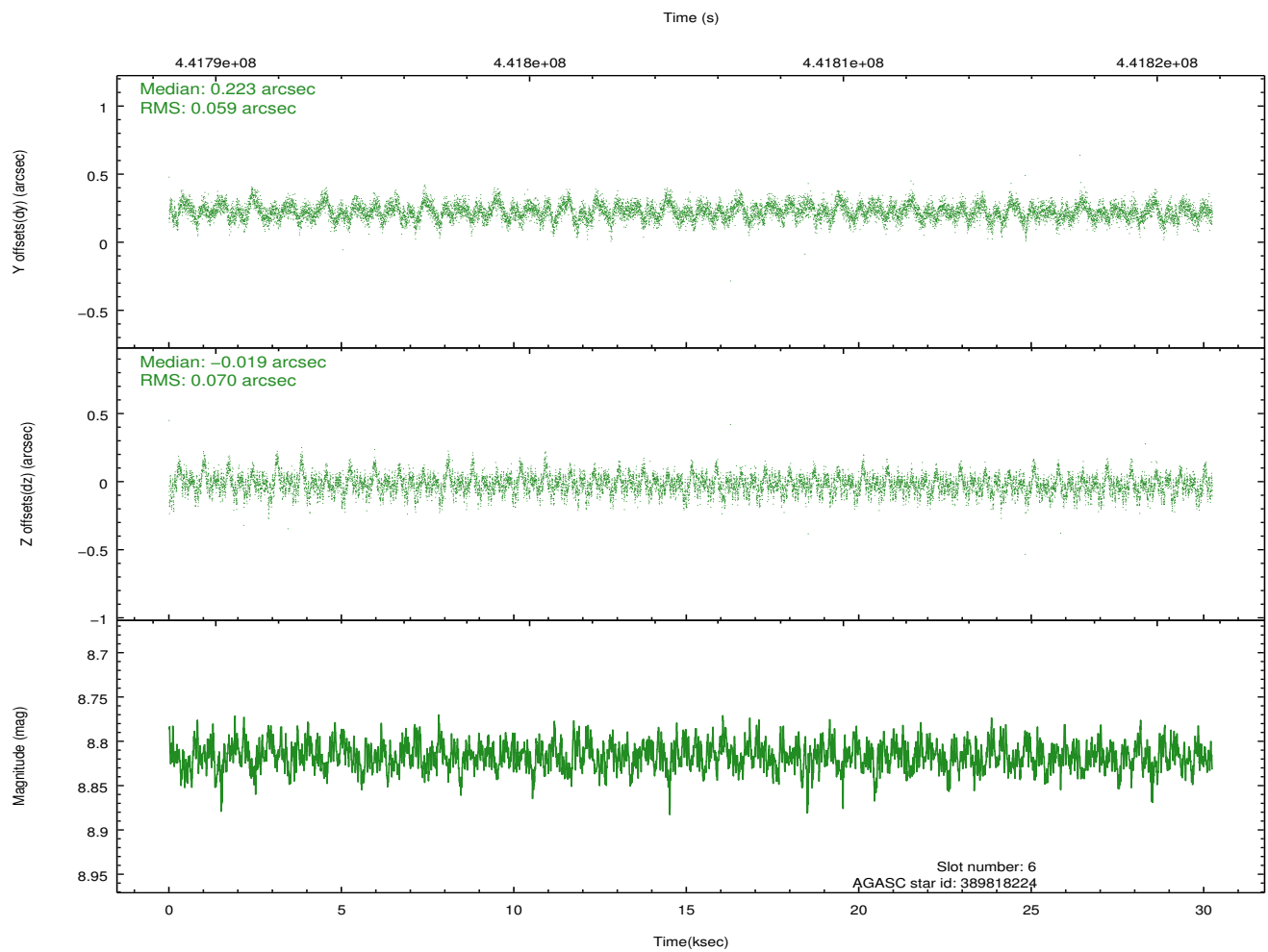
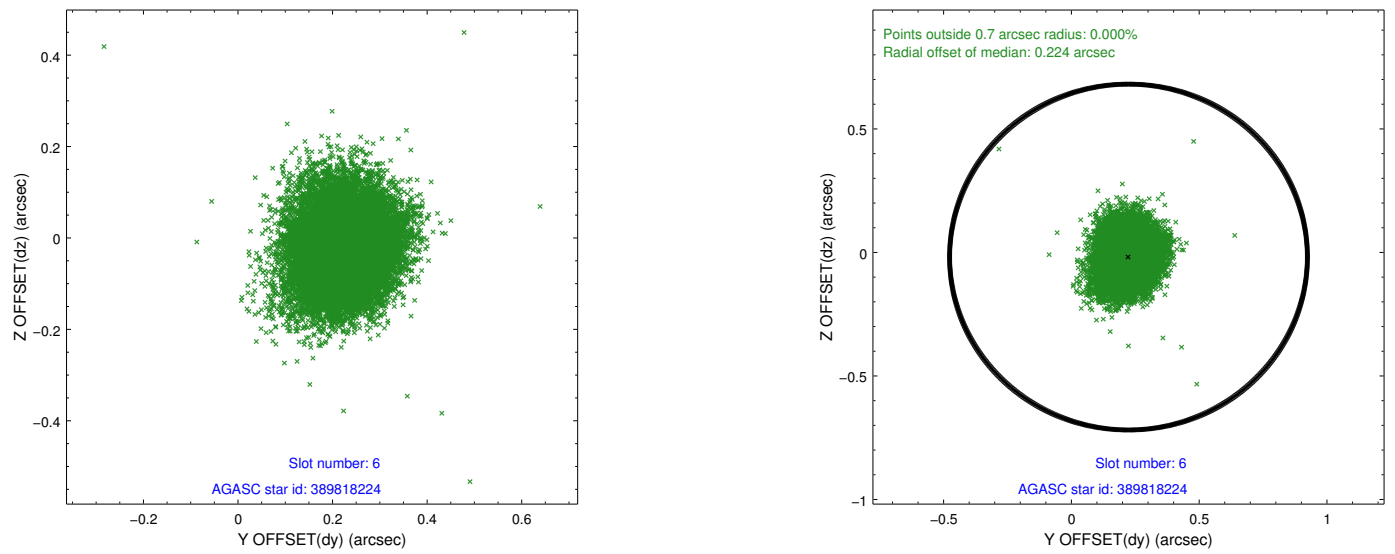
Time (s)



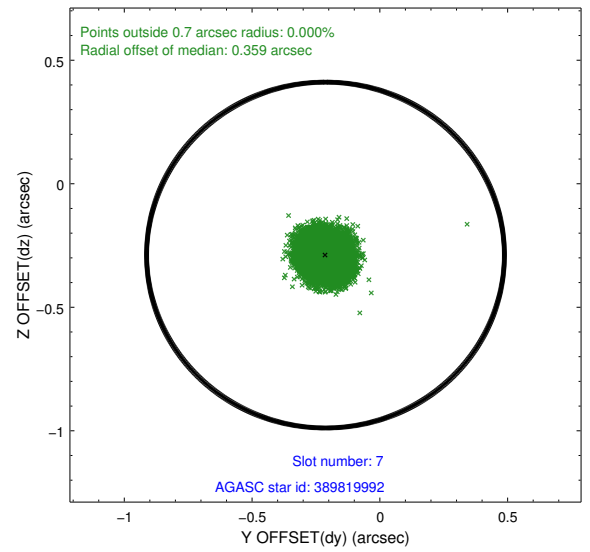
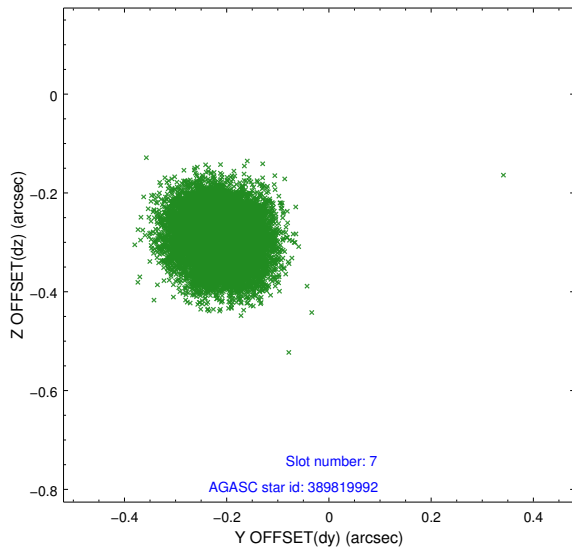
### 2.4.3 Slot 5



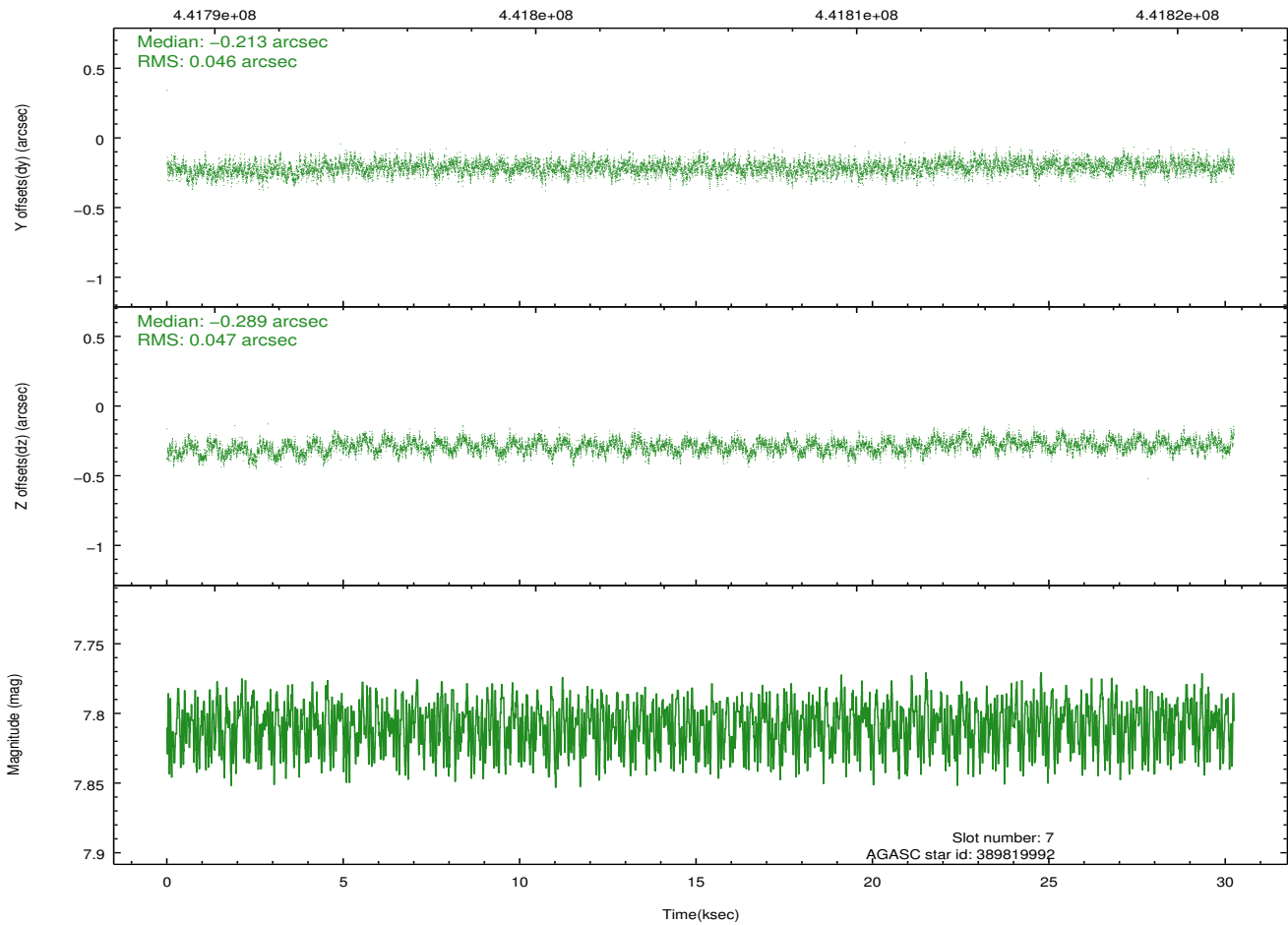
## 2.4.4 Slot 6



## 2.4.5 Slot 7

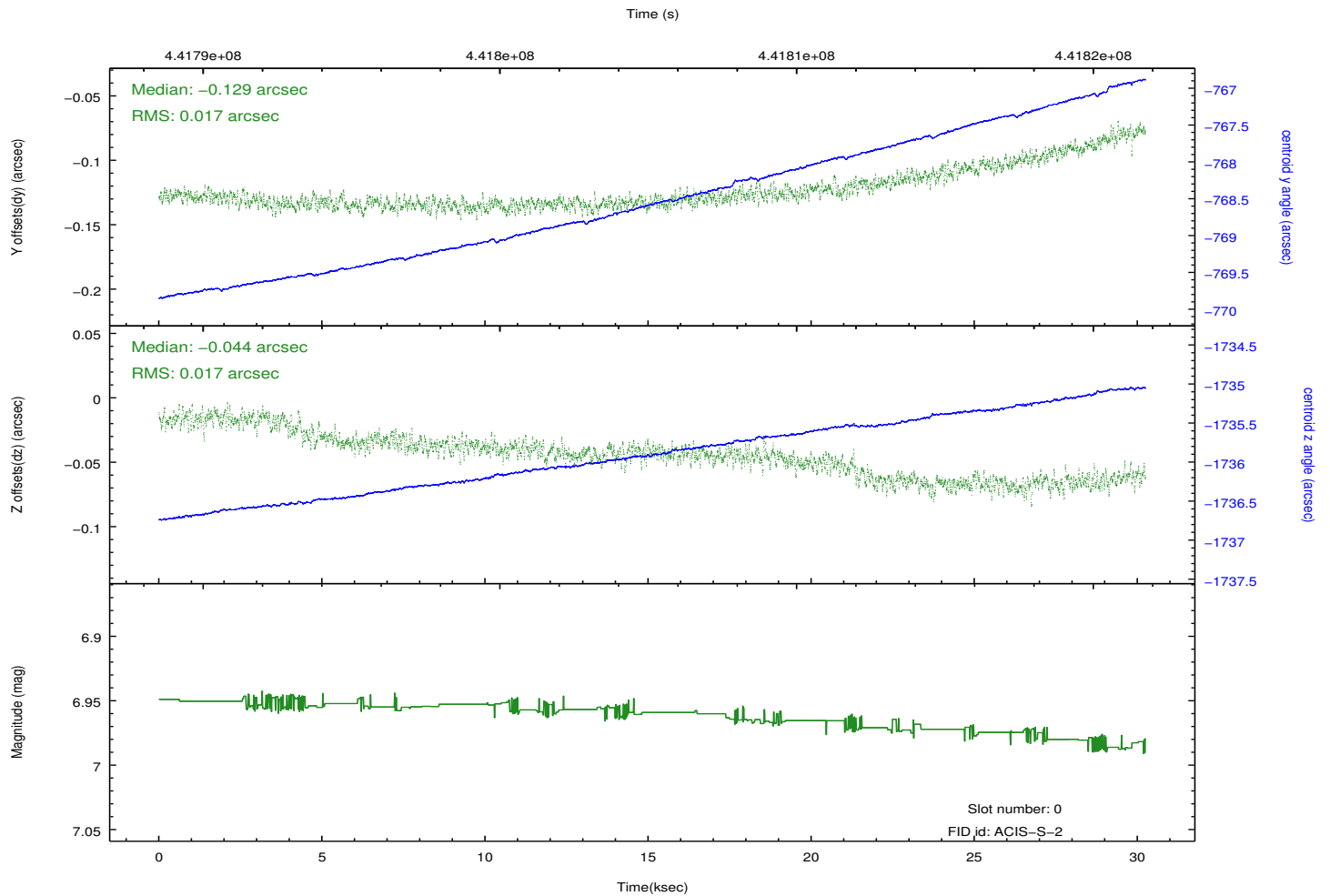
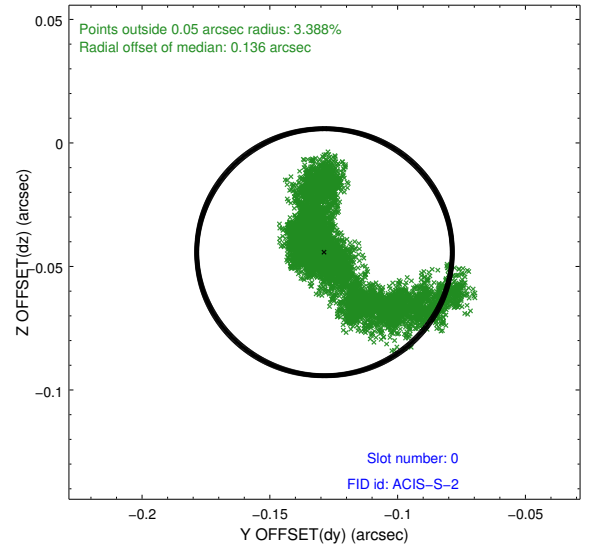
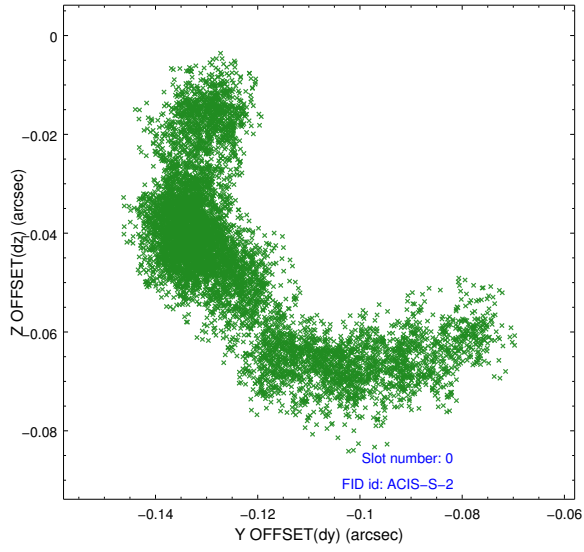


Time (s)

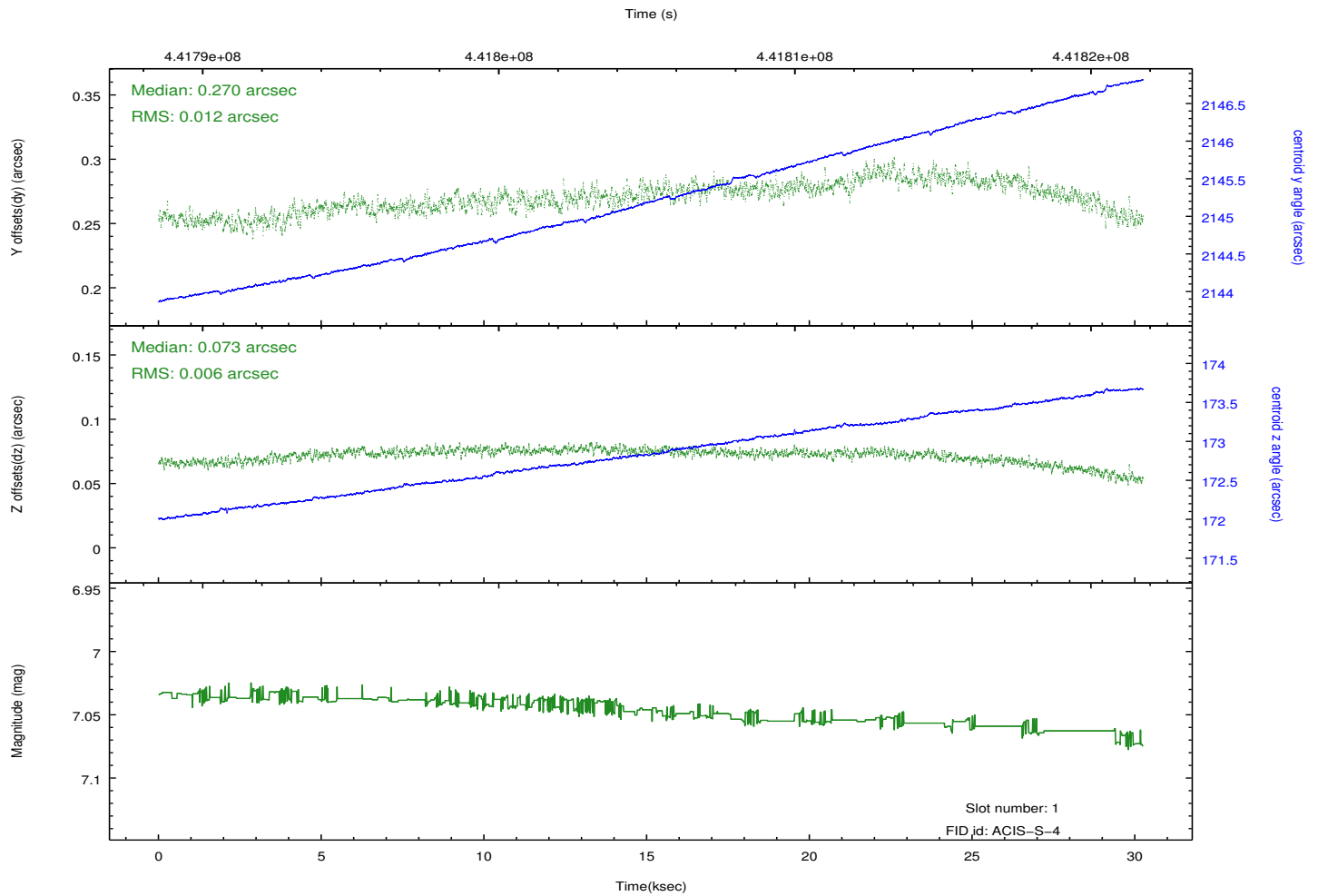
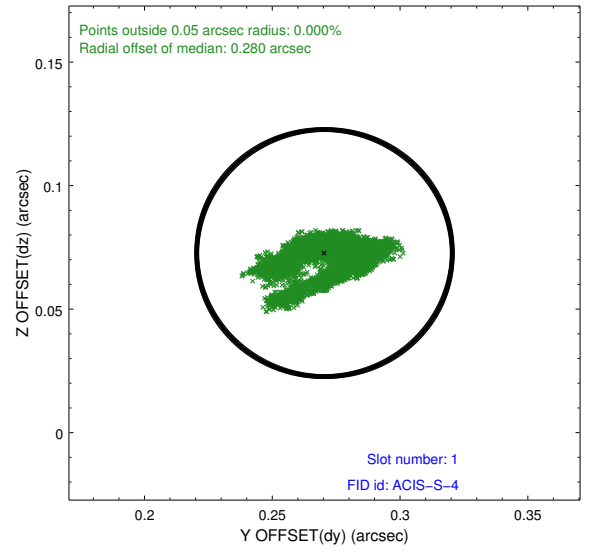
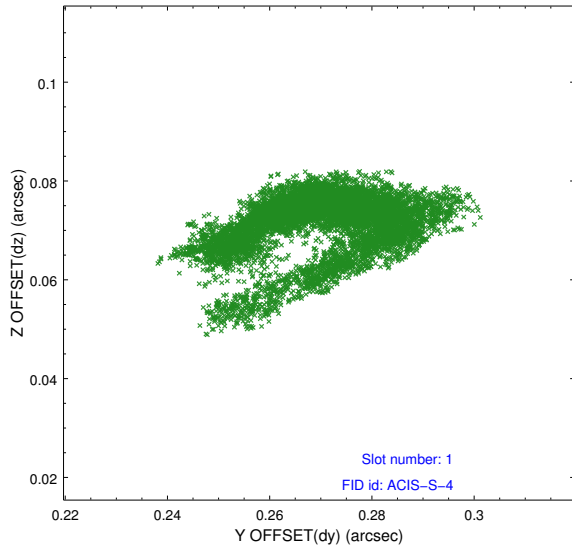


## 2.5 FID Slots

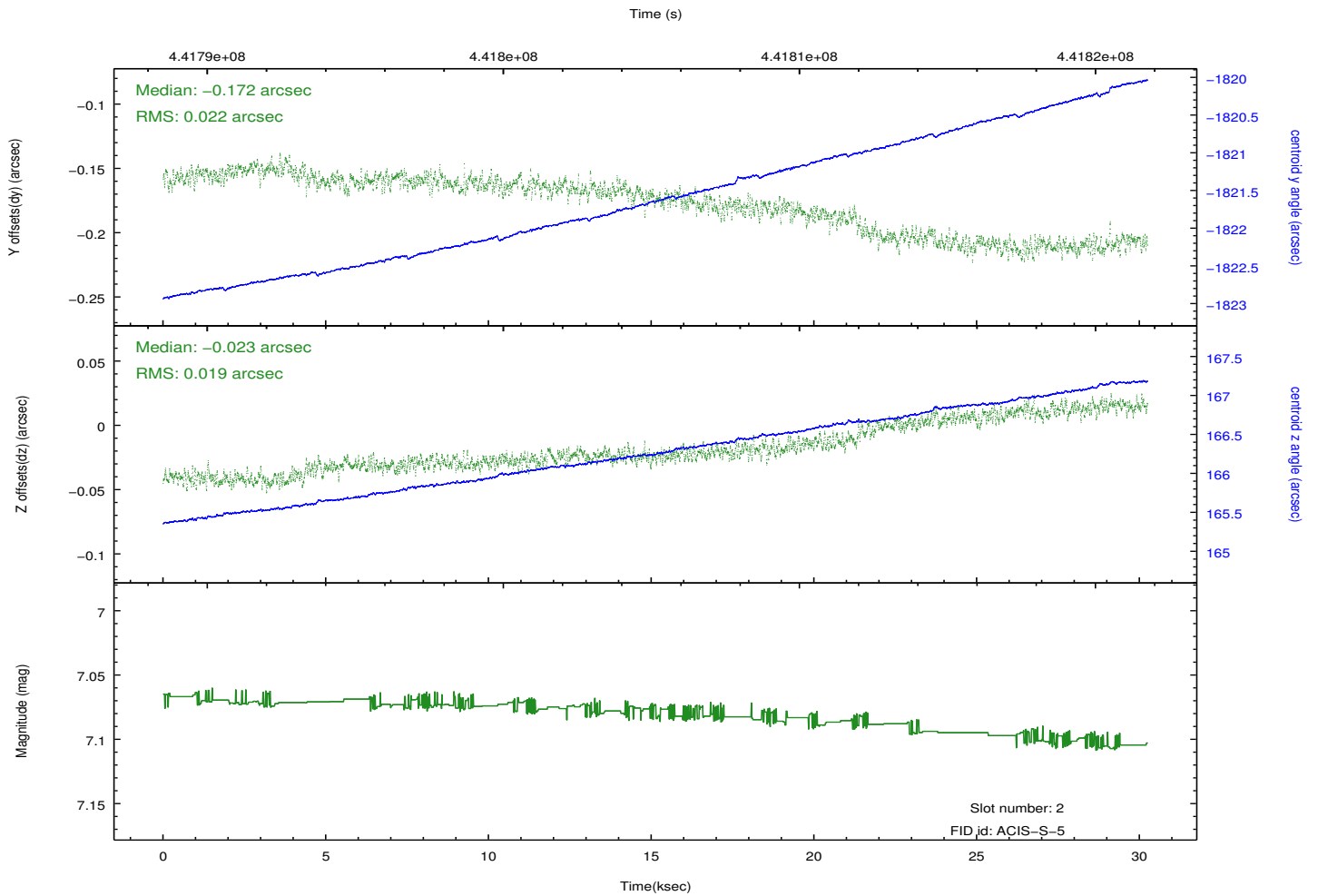
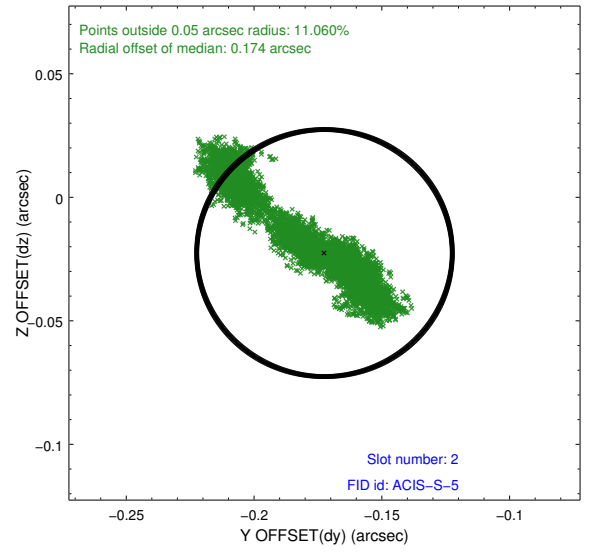
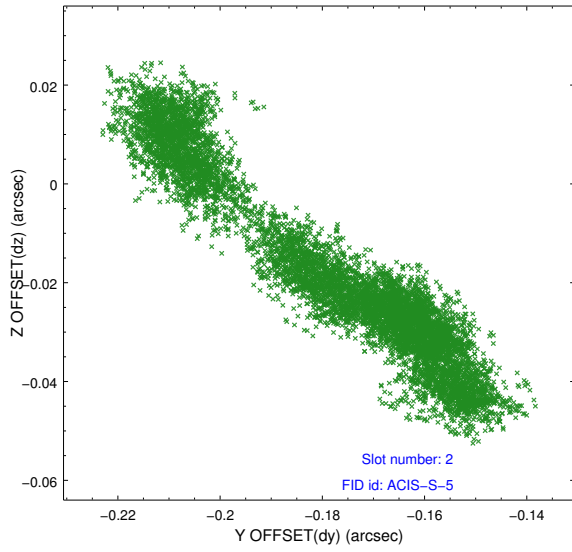
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## **A Summary**

### **A.1 Status**

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.01.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.045200231075

### **A.2 Comments**