

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4646 - L2 Version 4  
Chandra X-Ray Center

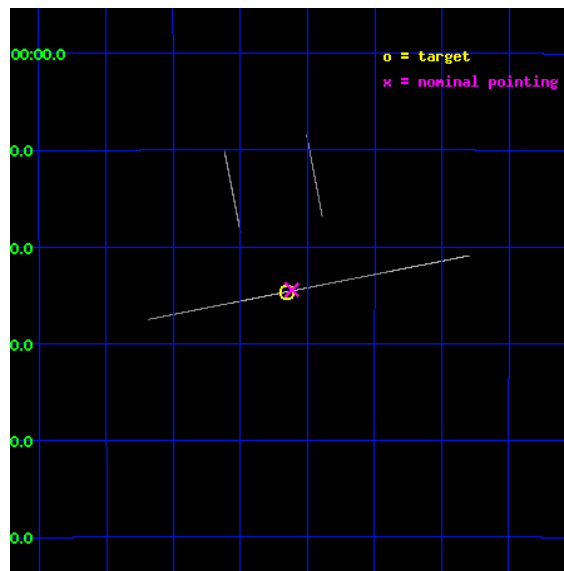
L2 Processing Date : Dec 3 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

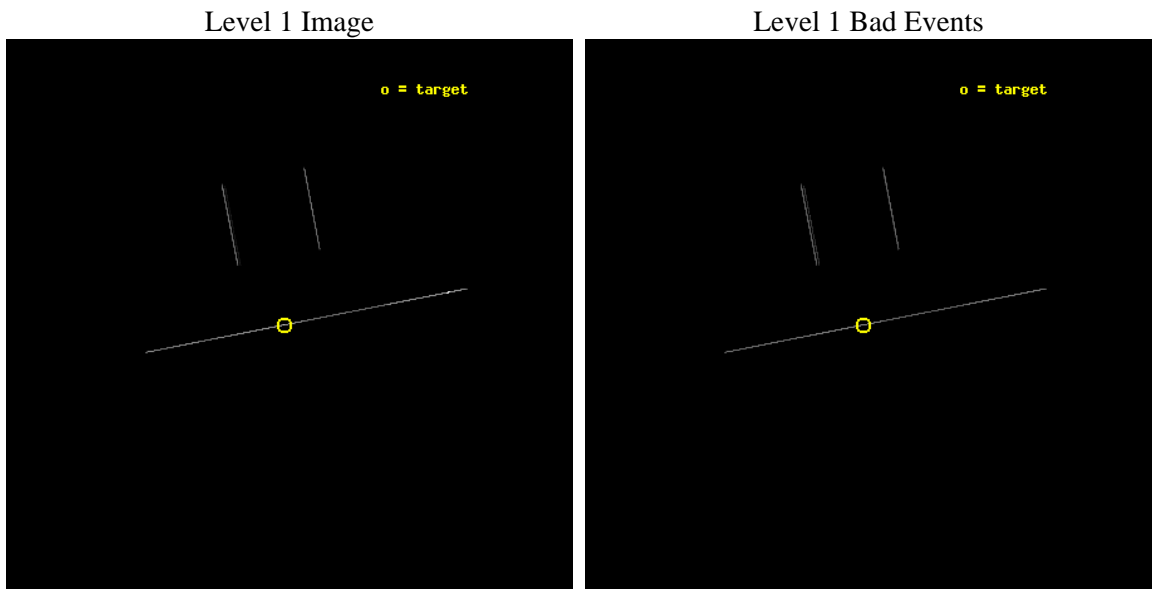
seq_num	500465	Sequence number
obs_id	4646	Observation id
title	ToO Observations of Soft Gamma Repeaters	Proposal title
observer	Dr. Peter Woods	Principal investigator
object	SGR 1806-20	Source name
ra_targ	272.16375	Observer's specified target RA [deg]
dec_targ	-20.410972	Observer's specified target Dec [deg]
ra_nom	272.15411433329	Nominal RA [deg]
dec_nom	-20.407496658162	Nominal Dec [deg]
roll_nom	168.8631418708	Nominal Roll [deg]
revision	4	Processing version of data
ontime	20181.75	Sum of GTIs [s]
livetime	20102.915039062	Livetime [s]
ontime2	20181.75	Sum of GTIs [s]
ontime3	20181.75	Sum of GTIs [s]
ontime5	20181.75	Sum of GTIs [s]
ontime6	20181.75	Sum of GTIs [s]
ontime7	20181.75	Sum of GTIs [s]
ontime8	20181.75	Sum of GTIs [s]
l2events	282145	Number of level 2 events



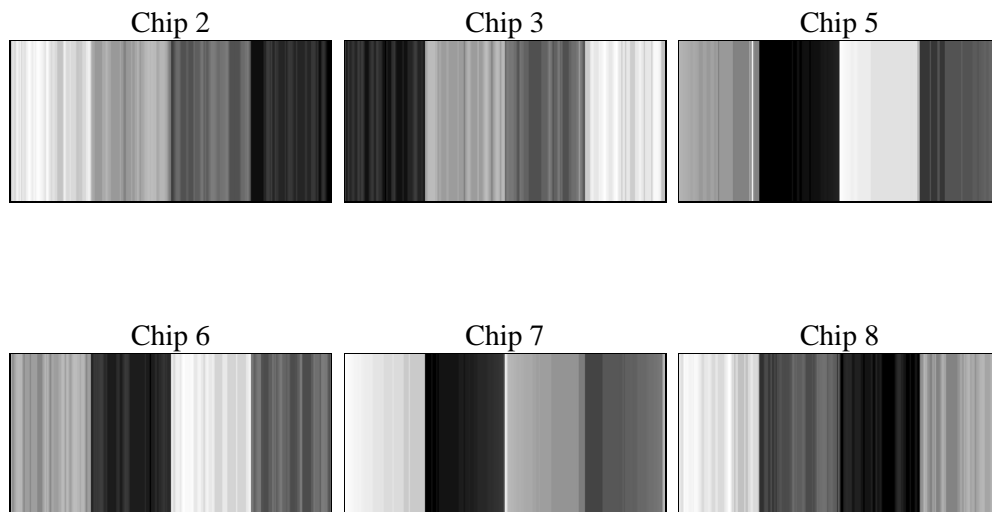
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20181.75	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	20181.75	Sum of GTIs [s]
date	2012-12-03T05:20:14	Date and time of file creation	ontime3	20181.75	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	20181.75	Sum of GTIs [s]
			ontime6	20181.75	Sum of GTIs [s]
			ontime7	20181.75	Sum of GTIs [s]
			ontime8	20181.75	Sum of GTIs [s]
			l1events	609778	Number of level 1 events

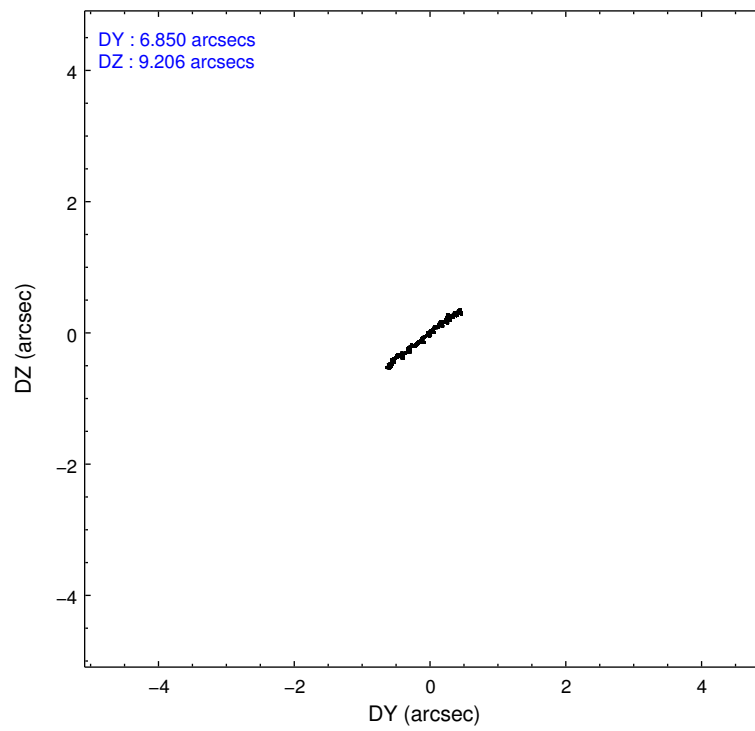
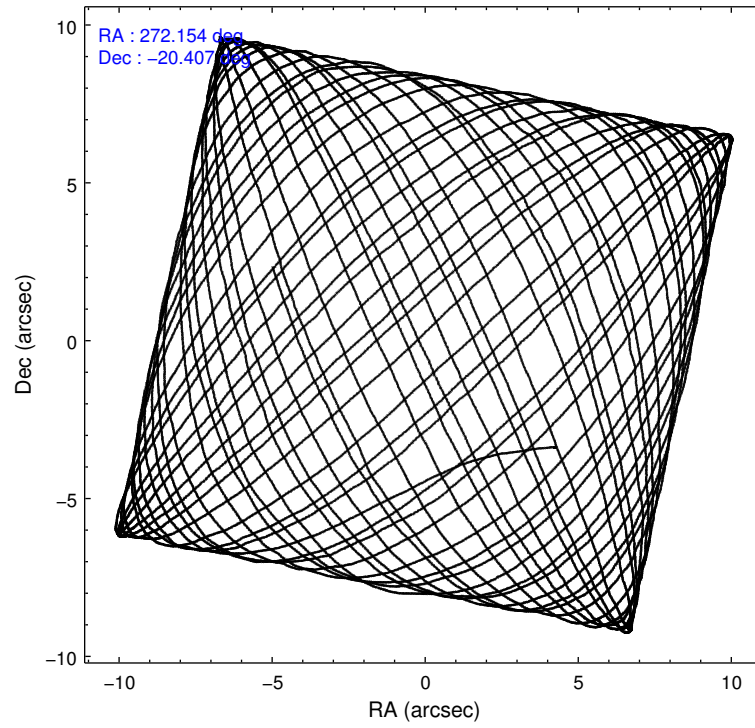
### 2.1.4 Events

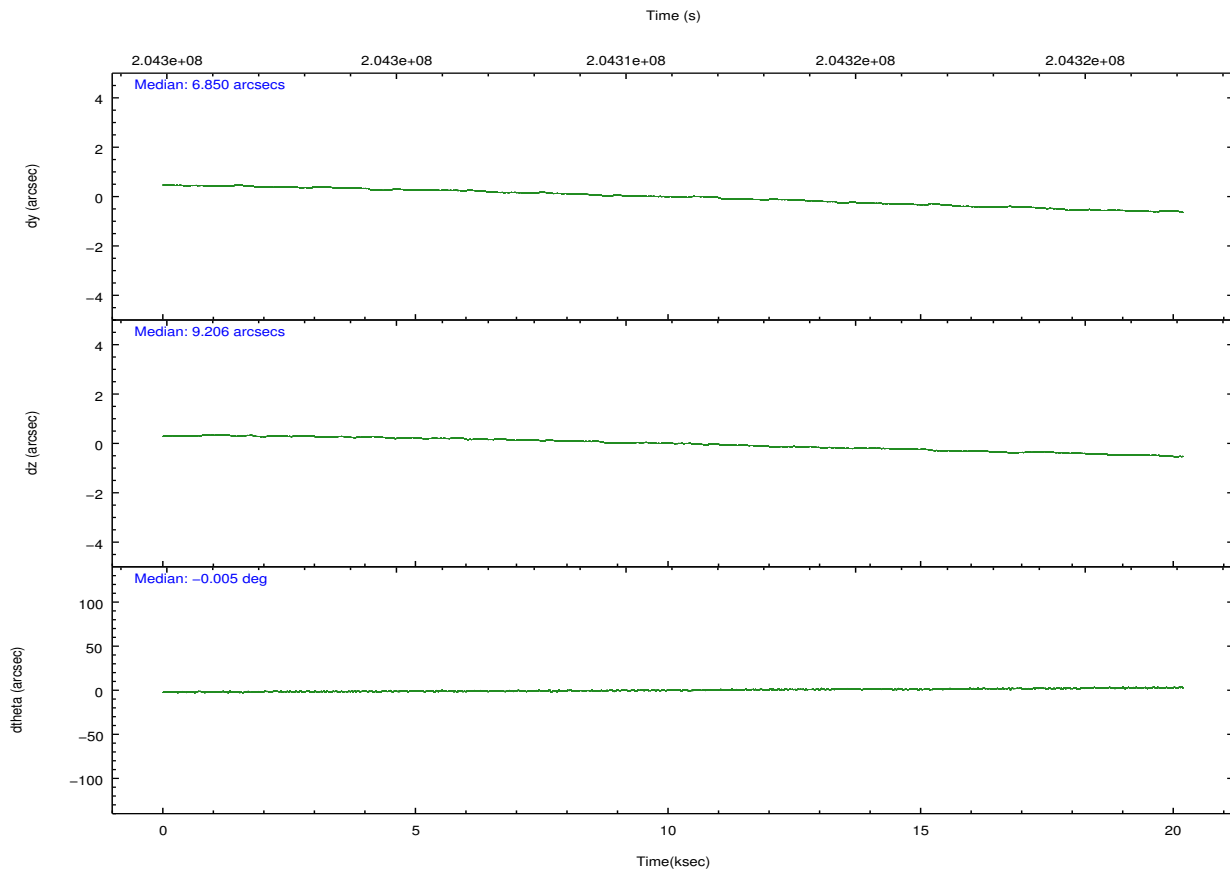
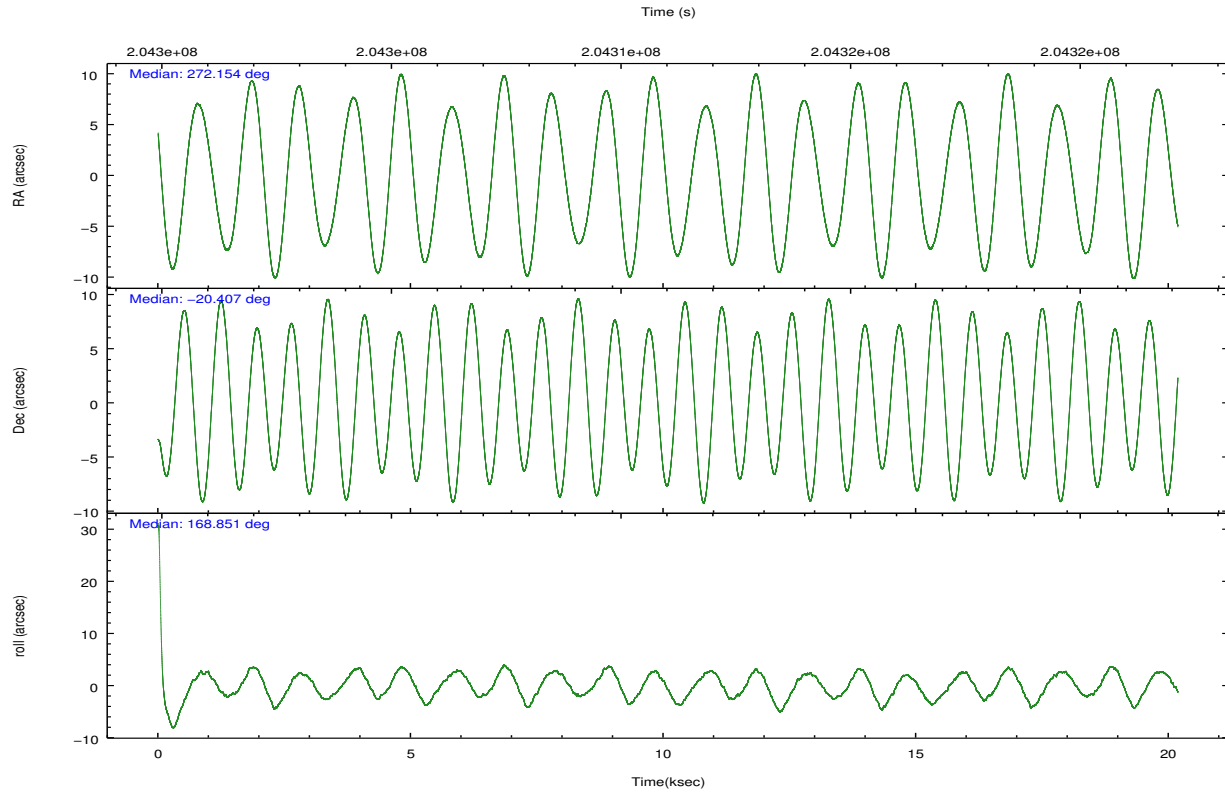
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	30215	32158	331753	33436	119313	62903	grade 0 events	3619	3525	137412	3298	11487	10036
rejected events	6188	6561	17588	7018	19812	10137		11%	10%	41%	9%	9%	15%
rejected %	20%	20%	5%	20%	16%	16%	grade 1 events	137	130	229	142	290	218
								0%	0%	0%	0%	0%	0%
							grade 2 events	9391	10013	115133	10834	25709	16953
								31%	31%	34%	32%	21%	26%
							grade 3 events	3120	3779	2999	3337	8057	6062
								10%	11%	0%	9%	6%	9%
							grade 4 events	3206	3282	2913	3192	8085	6051
								10%	10%	0%	9%	6%	9%
							grade 5 events	5488	5799	14097	6261	17446	8657
								18%	18%	4%	18%	14%	13%
							grade 6 events	5254	5630	58970	6372	48239	14926
								17%	17%	17%	19%	40%	23%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

## 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	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	272.181489	272.1541143332859	Subarray requested	NONE	NONE
[deg] Pointing Dec	-20.398315	-20.40749665816179	Alternating exposures requested	N	N
[deg] Pointing Roll	168.716037	168.8631418708	[s] Primary exposure time	0.000000	0
[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)	204301121.184000	204300353.05674			
Observation start date	2004-06-22T14:17:37	2004-06-22T14:05:53			
[s] Observation end time (MET)	204321121.184000	204321681.77019			
Observation end date	2004-06-22T19:50:57	2004-06-22T20:01:21			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



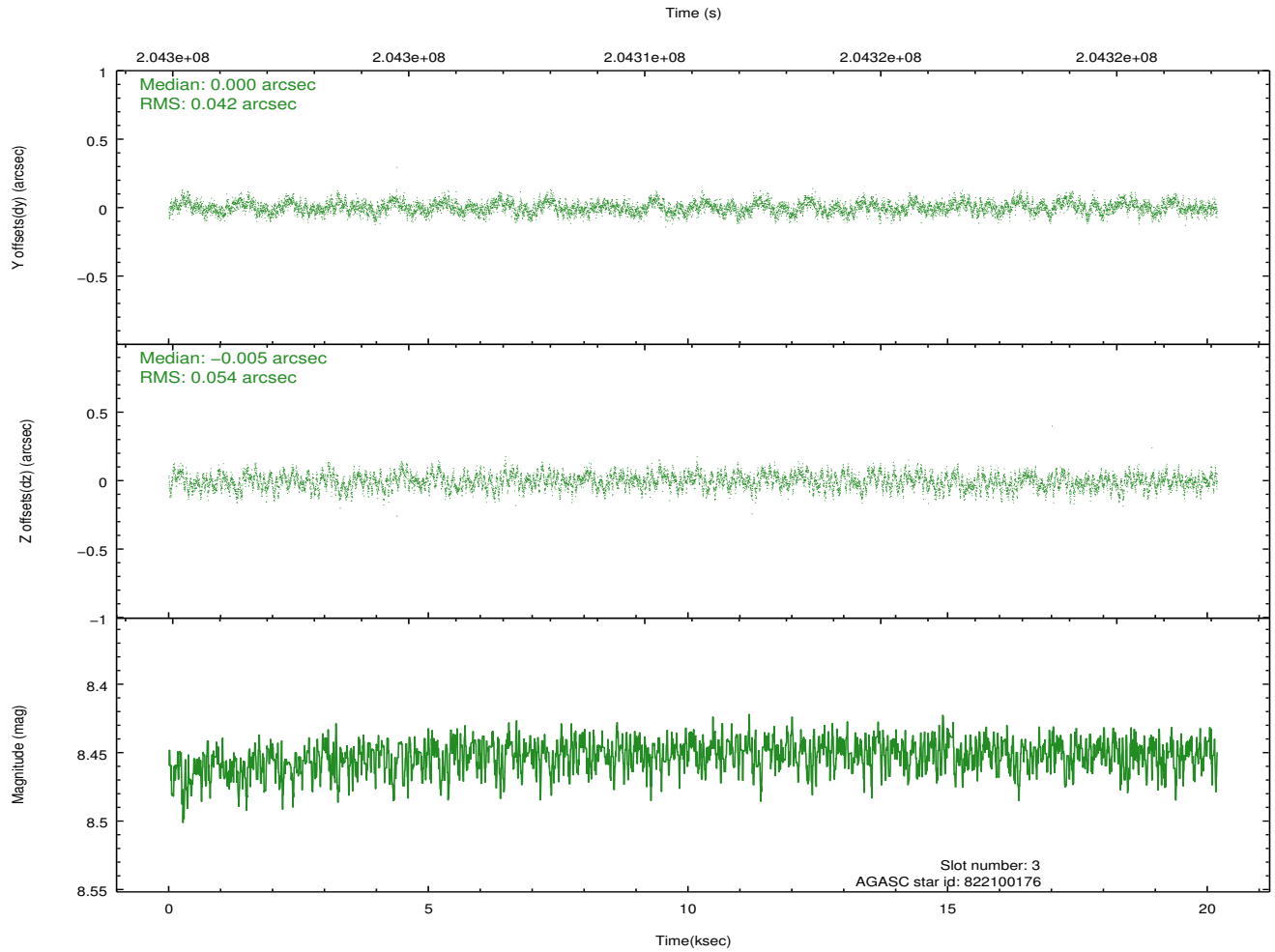
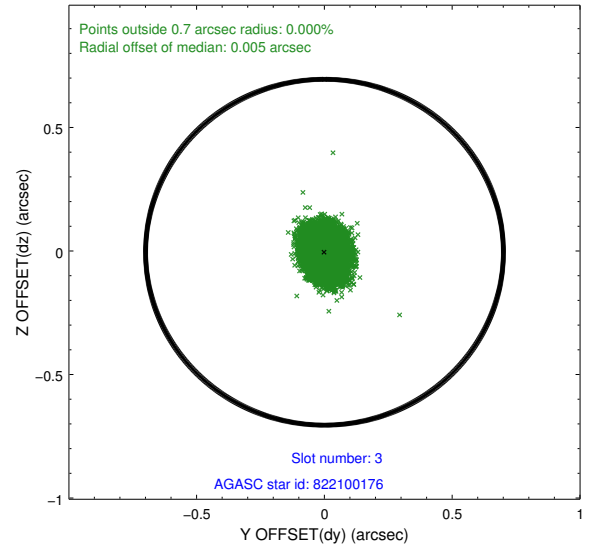
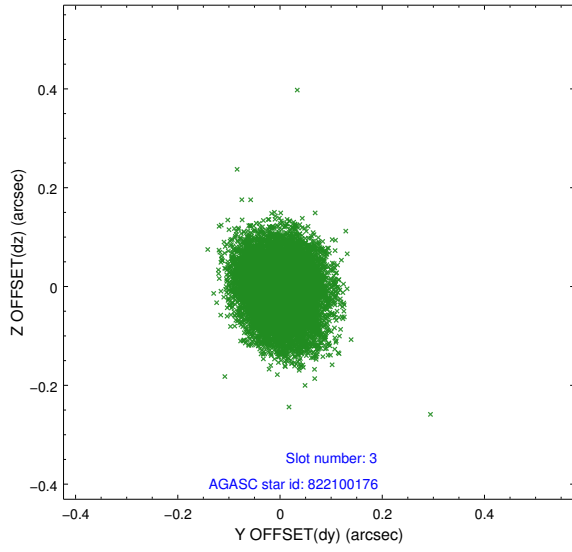


### Slot Statistics

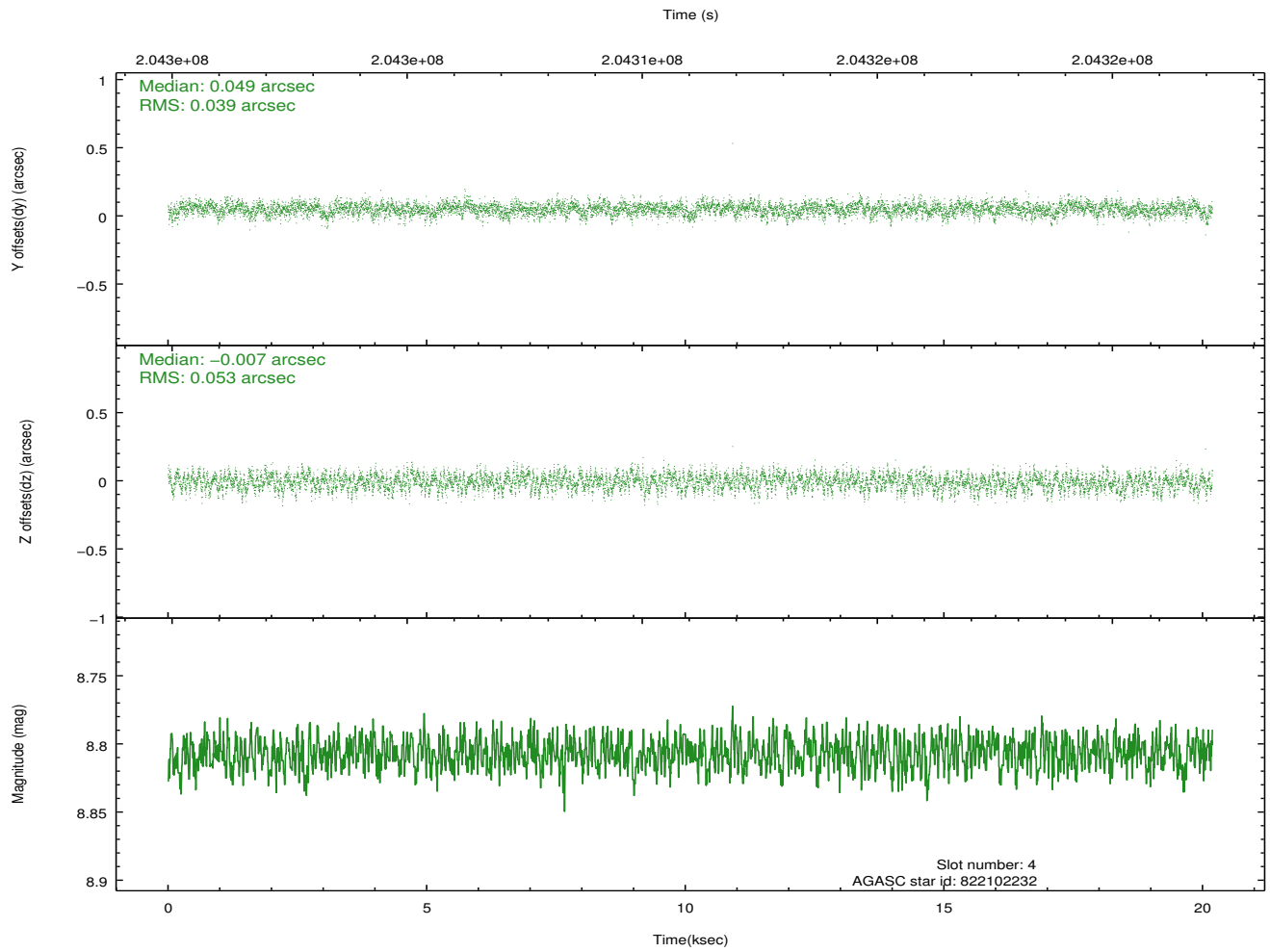
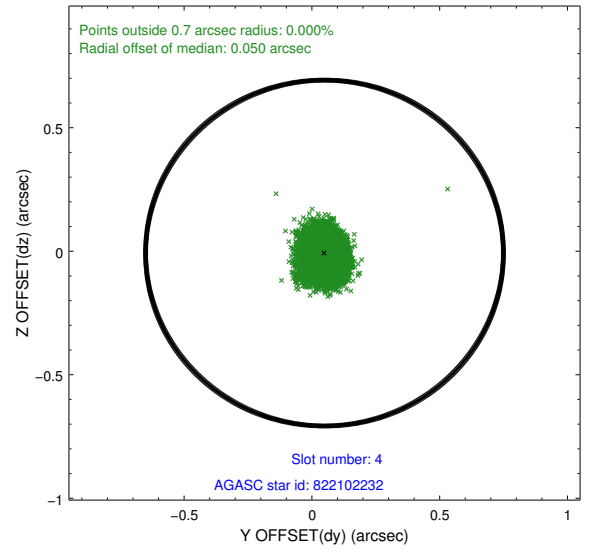
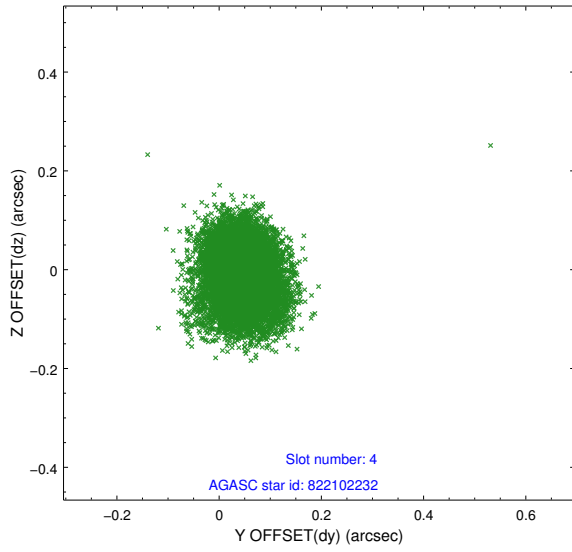
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	4924	0.018	-0.013	0.011	0.022	0.000000	0.000000	936.48	-1726.05
1	FID	ACIS-S-4	7.20	4924	0.051	0.006	0.011	0.017	0.000000	0.000000	2154.03	177.94
2	FID	ACIS-S-5	7.23	4924	-0.095	0.021	0.012	0.022	0.000000	0.000000	-1812.26	171.77
3	GUIDE	822100176	8.45	9840	0.000	-0.005	0.073	0.116	272.112888	-19.868886	601.44	-1823.22
4	GUIDE	822102232	8.81	9843	0.049	-0.007	0.070	0.115	272.350923	-20.034935	-305.34	-1394.72
5	GUIDE	822102416	7.49	9848	-0.038	0.011	0.048	0.076	272.173216	-20.087156	247.10	-1092.85
6	GUIDE	822616024	8.42	9843	-0.005	-0.063	0.072	0.117	272.218514	-20.919122	-489.25	1814.39
7	GUIDE	822617304	8.98	9841	-0.008	0.061	0.095	0.160	272.421826	-20.831304	-1098.22	1371.27

## 2.4 Star Slots

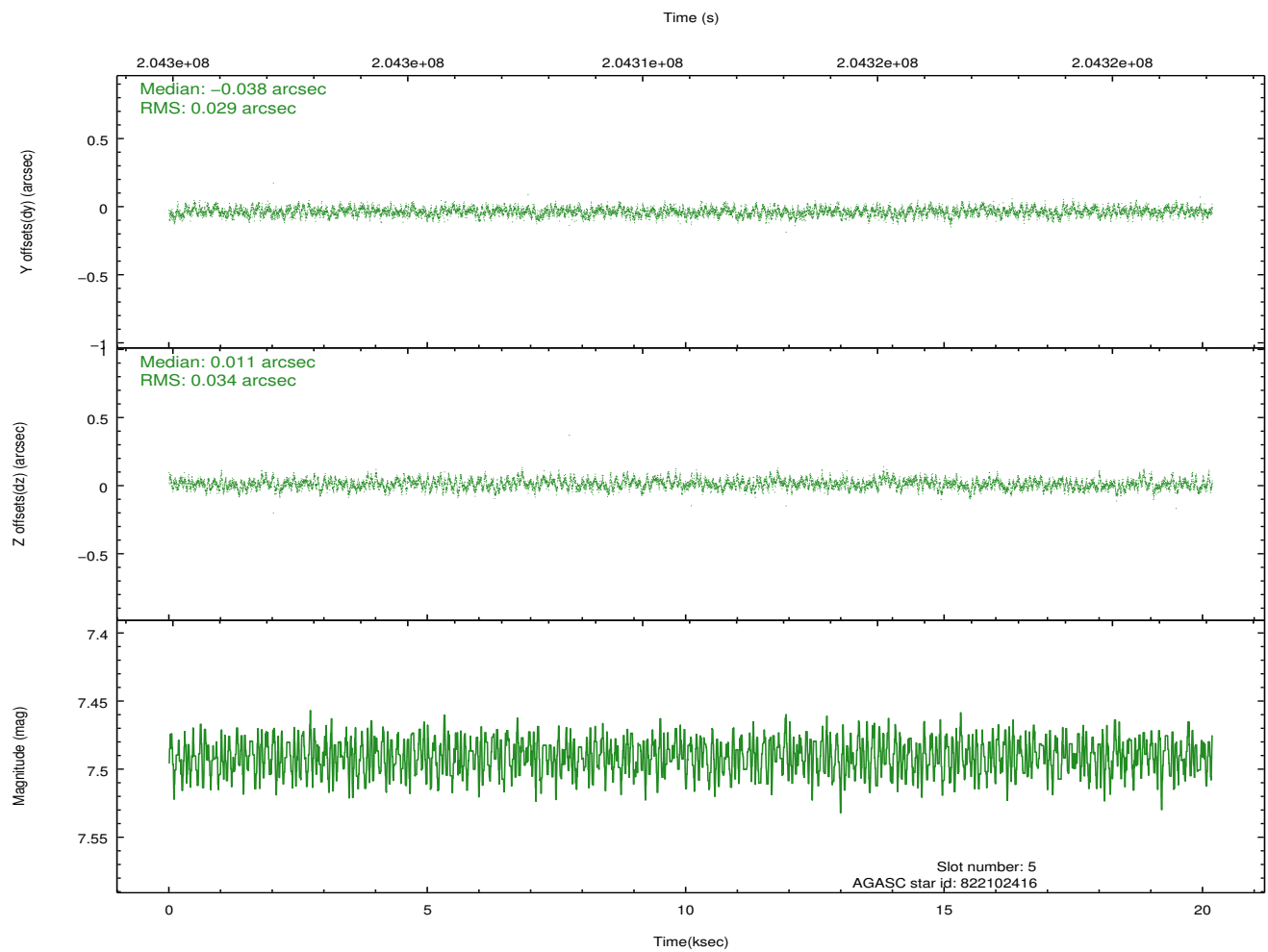
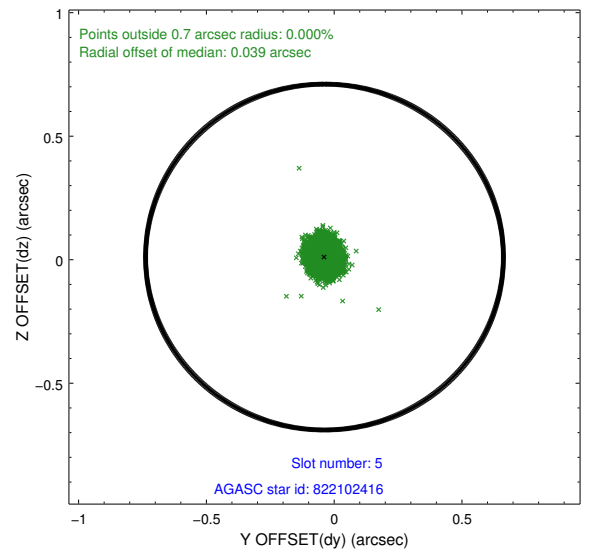
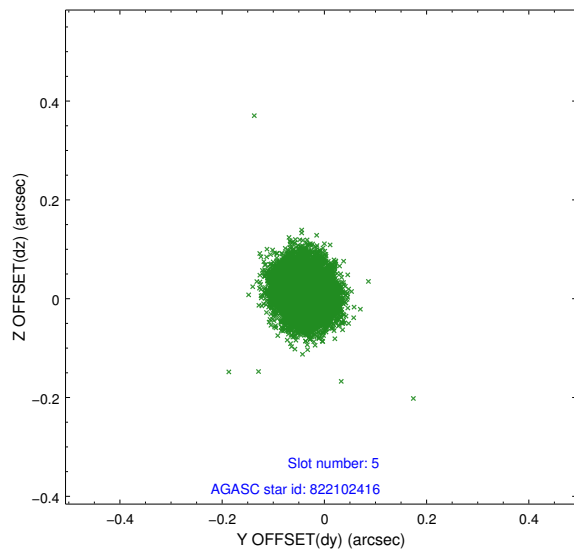
### 2.4.1 Slot 3



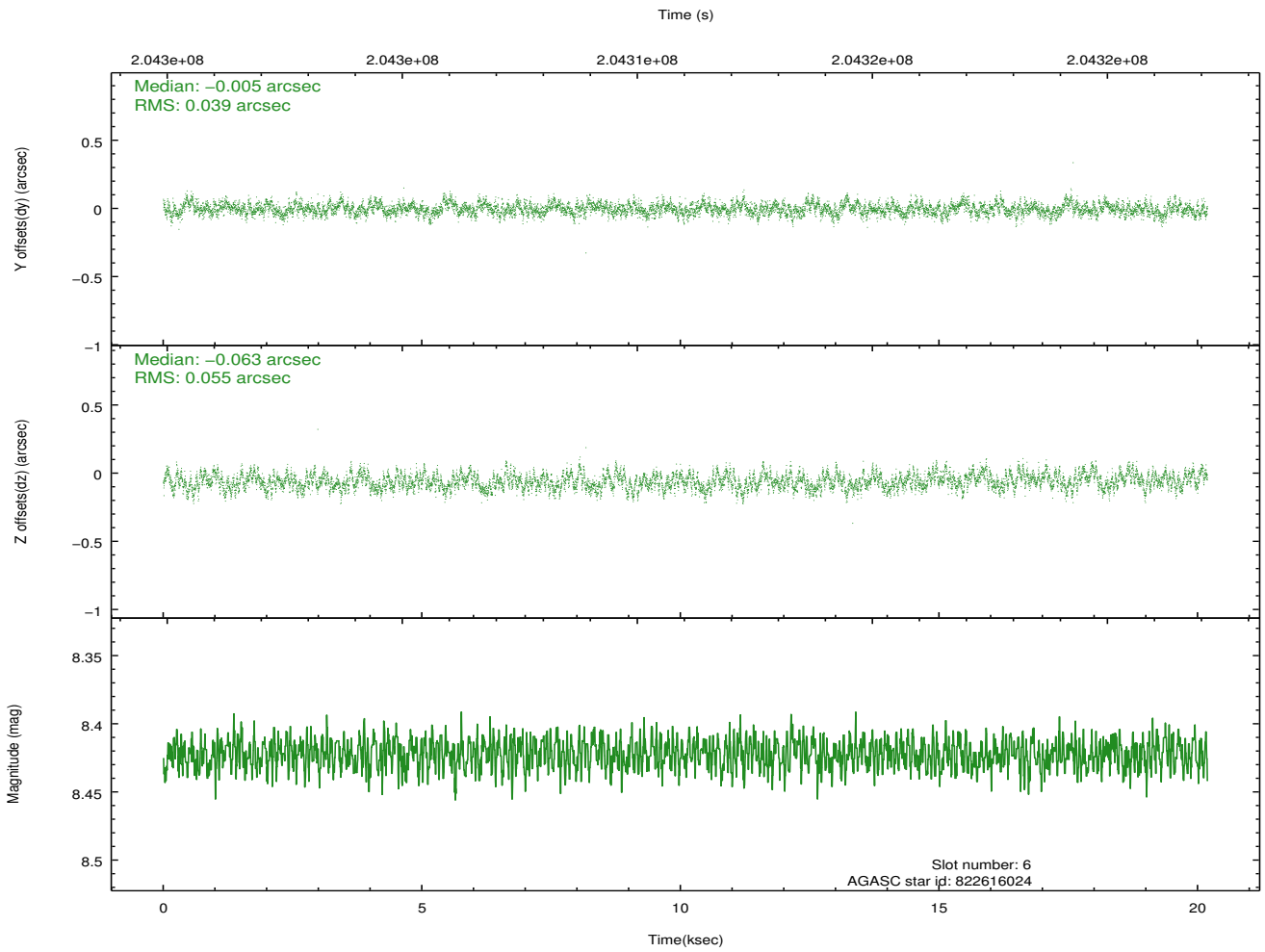
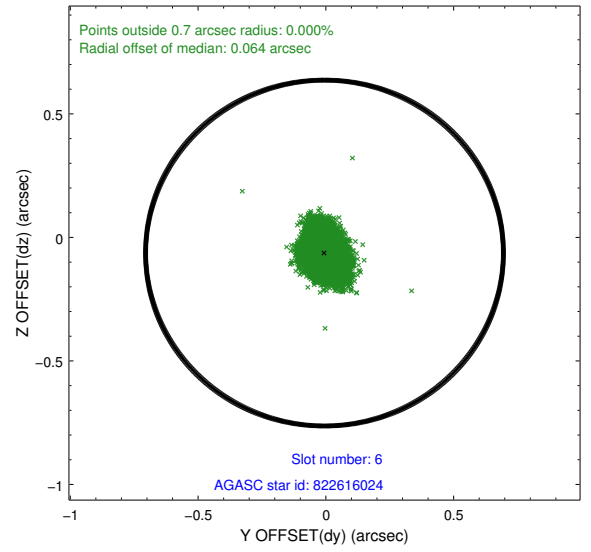
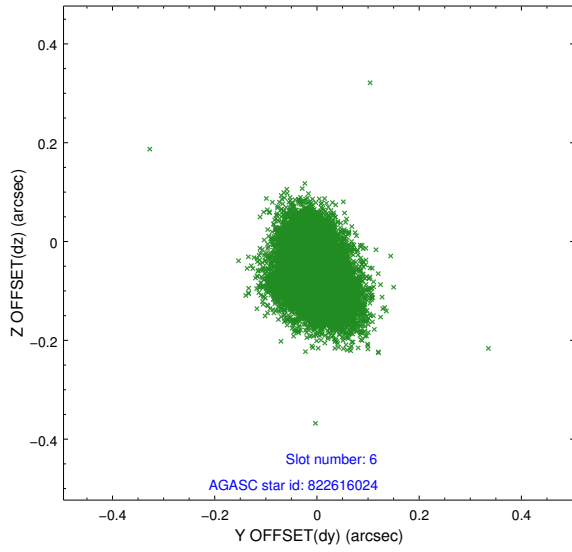
### 2.4.2 Slot 4



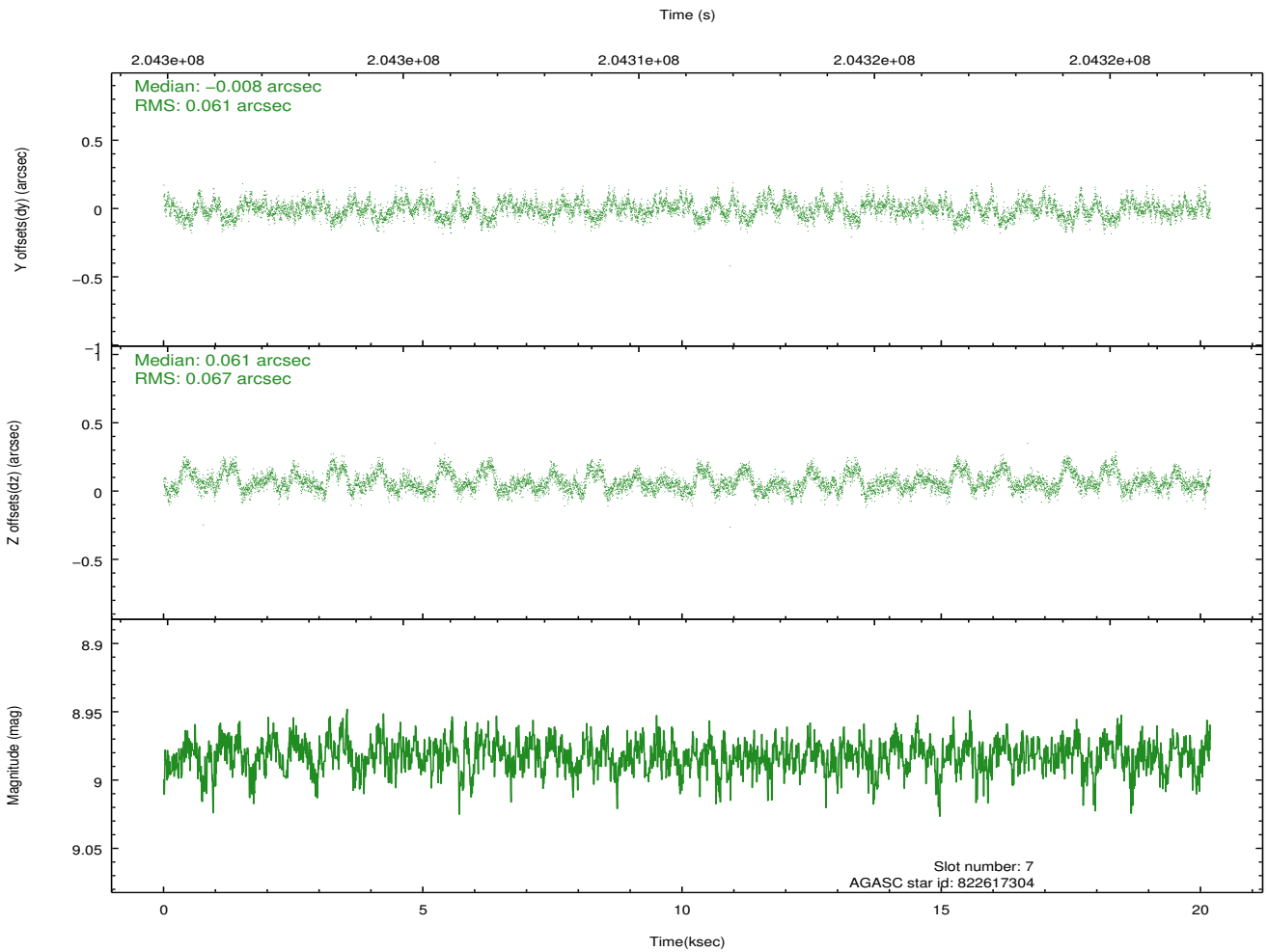
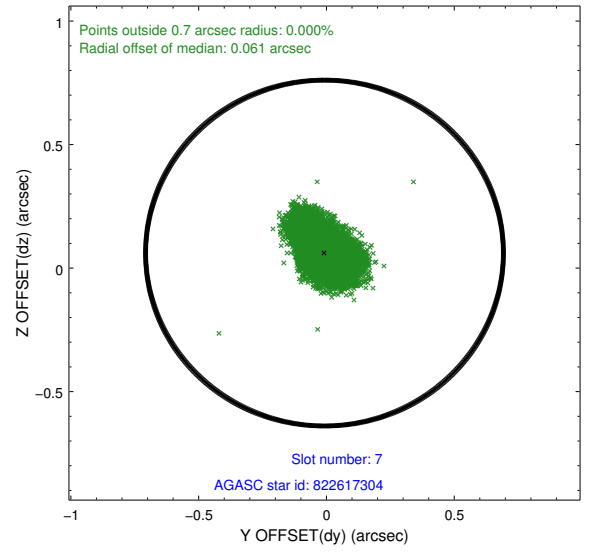
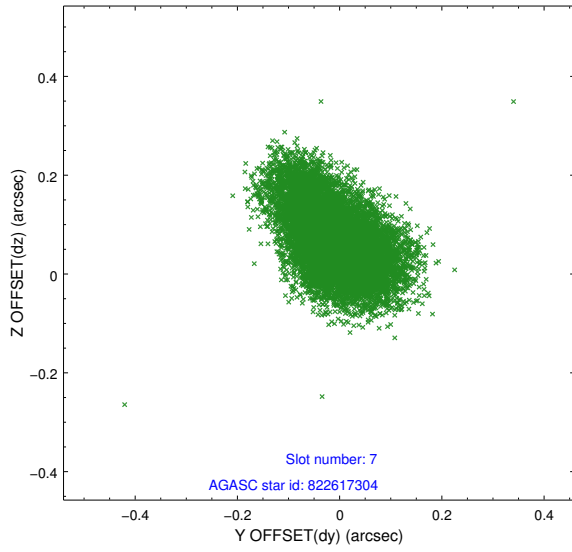
### 2.4.3 Slot 5



### 2.4.4 Slot 6

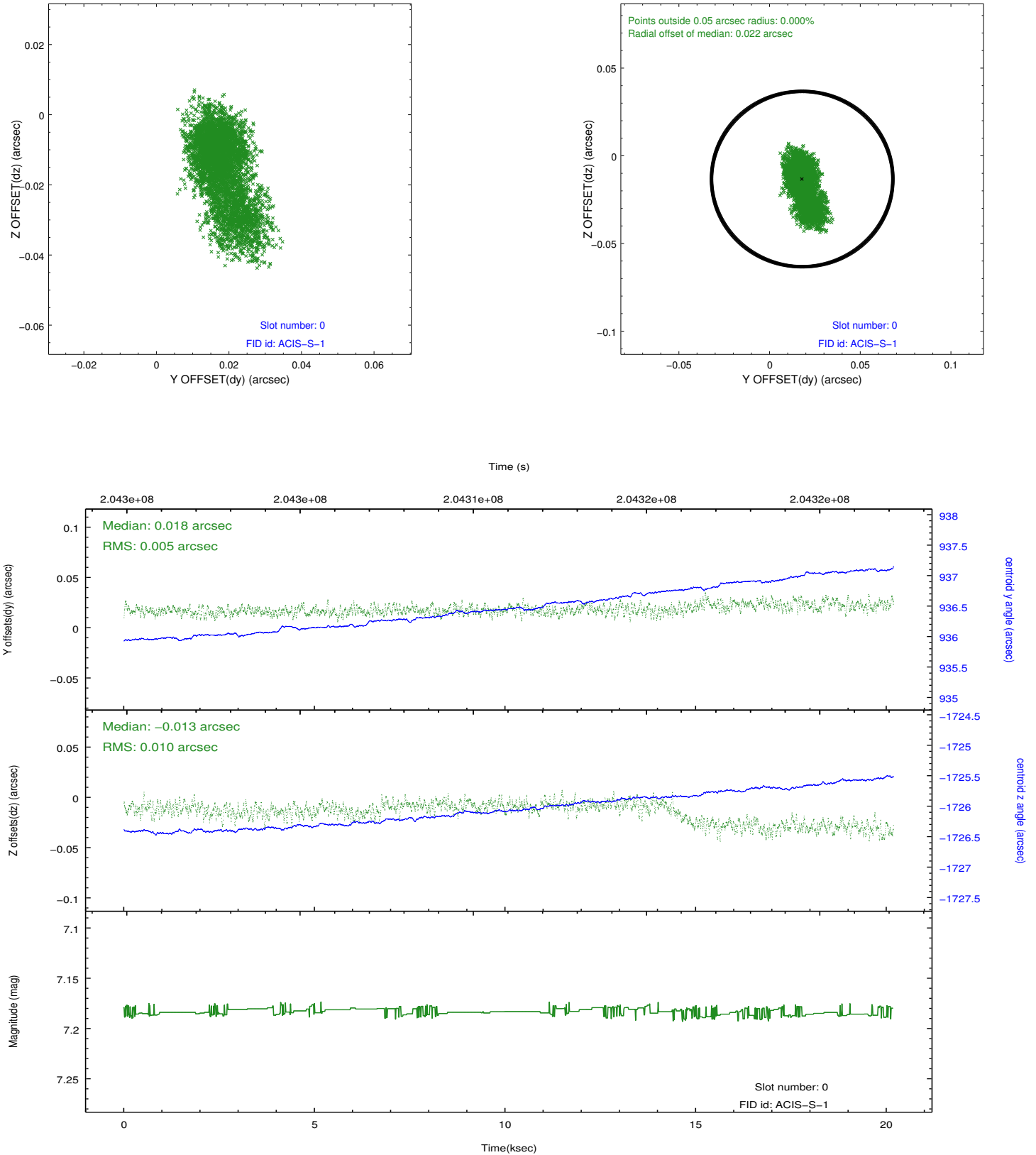


### 2.4.5 Slot 7

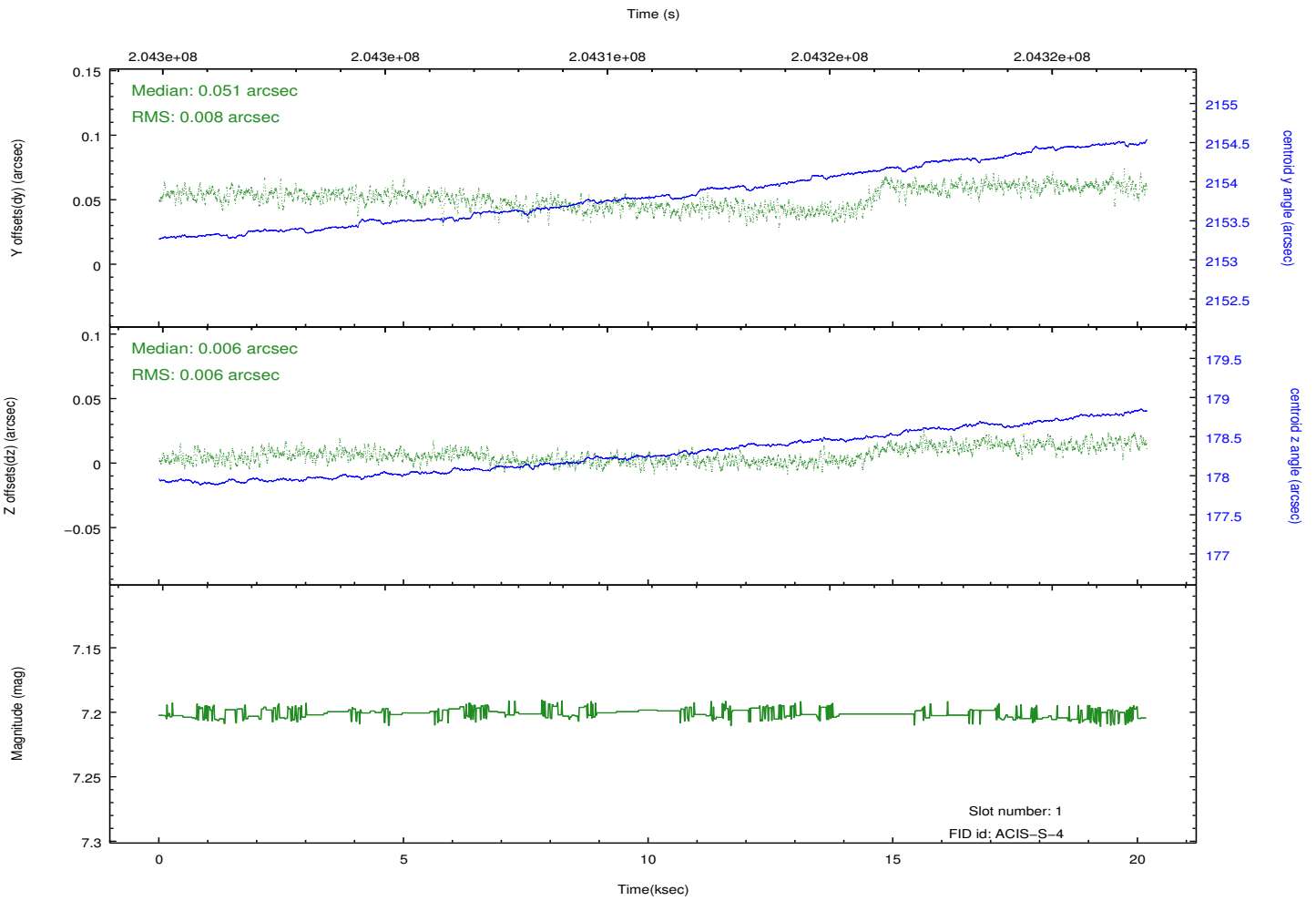
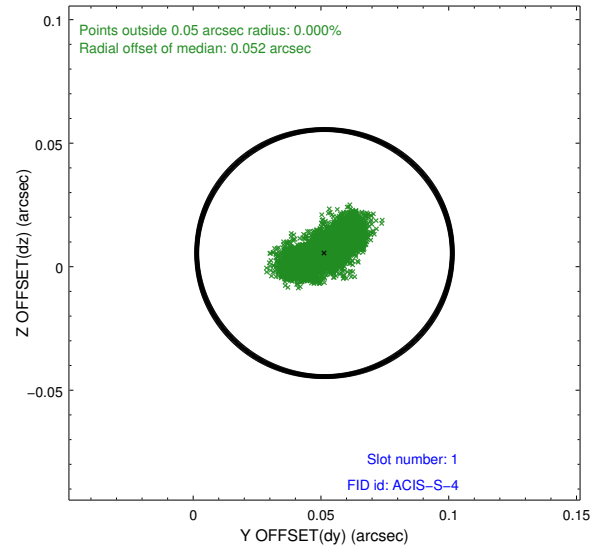
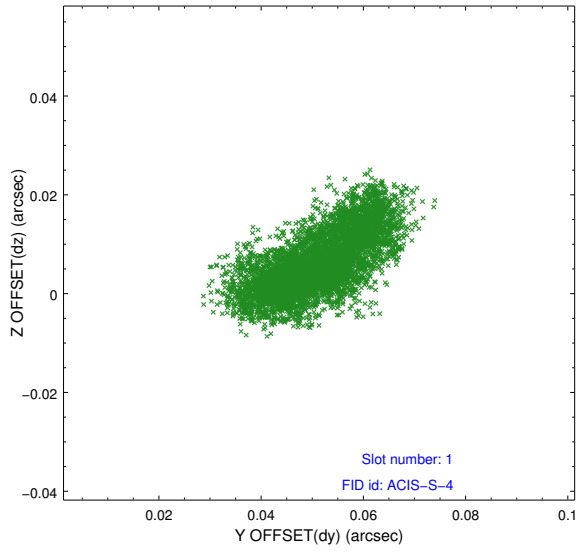


## 2.5 FID Slots

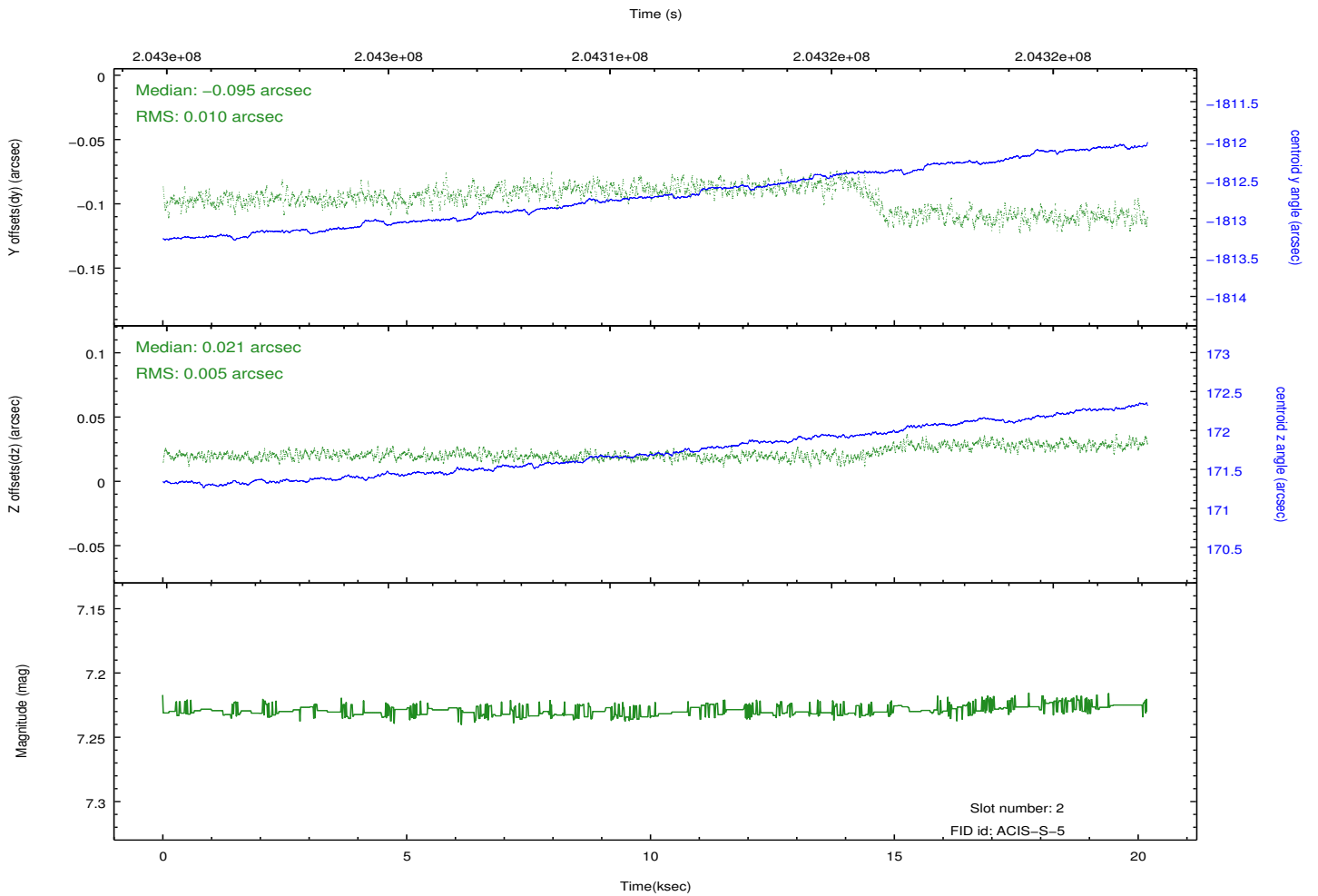
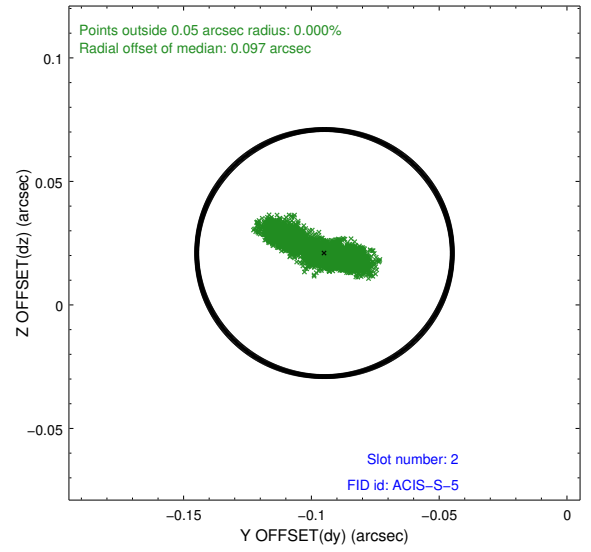
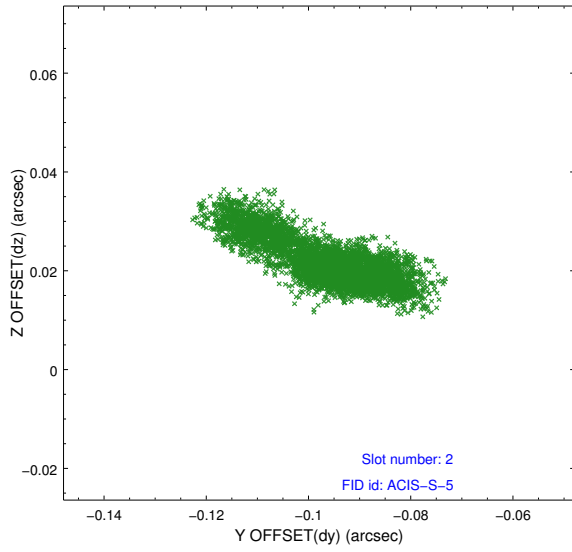
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.12.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.185

## A.2 Comments