

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 6175 - L2 Version 3  
Chandra X-Ray Center

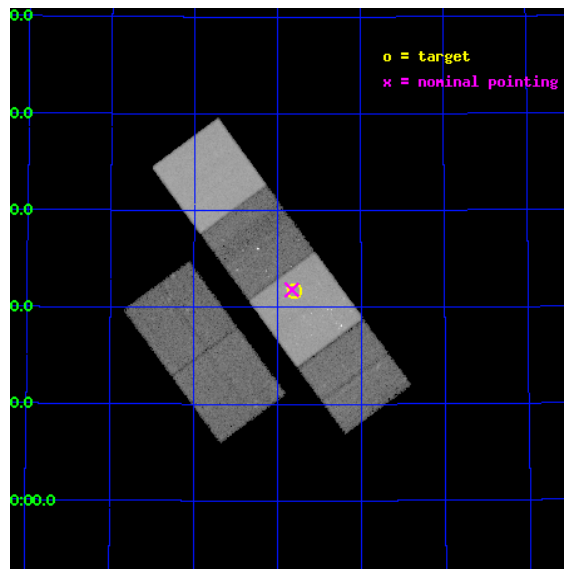
L2 Processing Date : Dec 15 2012

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# 1 Front

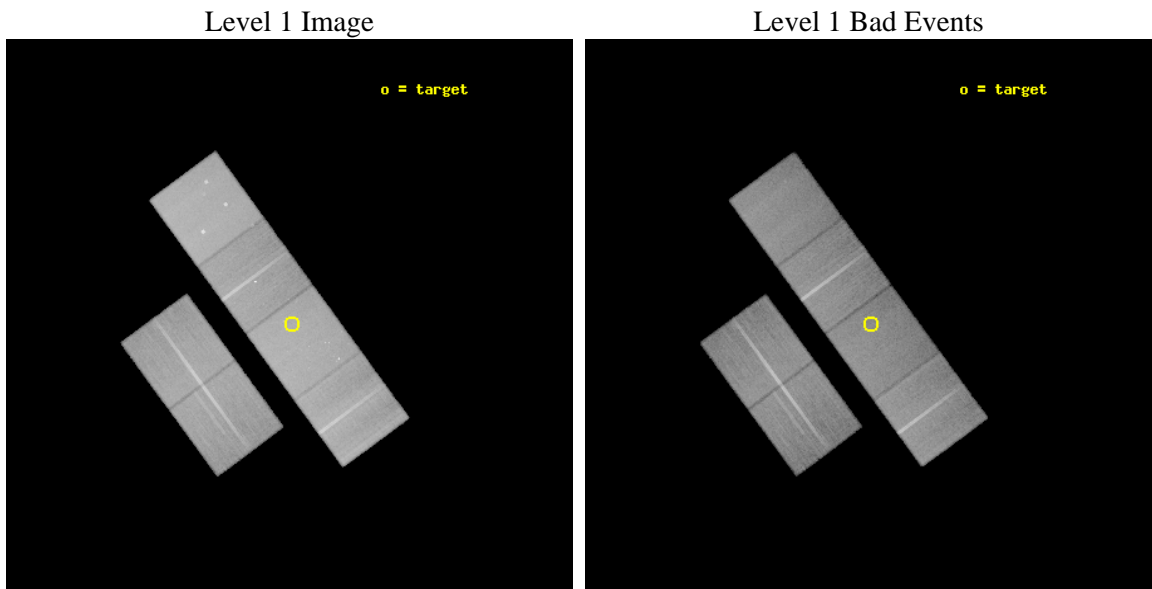
seq_num	600392	Sequence number
obs_id	6175	Observation id
title	An Ultra-Deep Study of M101	Proposal title
observer	Dr. K.D. Kuntz	Principal investigator
object	M101	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.950833	Observer's specified target RA [deg]
dec_targ	54.361389	Observer's specified target Dec [deg]
ra_nom	210.95724094472	Nominal RA [deg]
dec_nom	54.363647300395	Nominal Dec [deg]
roll_nom	53.70242456567	Nominal Roll [deg]
revision	3	Processing version of data
ontime	41177.599846601	Sum of GTIs [s]
liveltime	40656.18428317	Livetime [s]
ontime2	41177.599846601	Sum of GTIs [s]
ontime3	41171.117906034	Sum of GTIs [s]
ontime5	41177.599846601	Sum of GTIs [s]
ontime6	41177.599846601	Sum of GTIs [s]
ontime7	41177.599846601	Sum of GTIs [s]
ontime8	41177.599846601	Sum of GTIs [s]
l2events	540439	Number of level 2 events



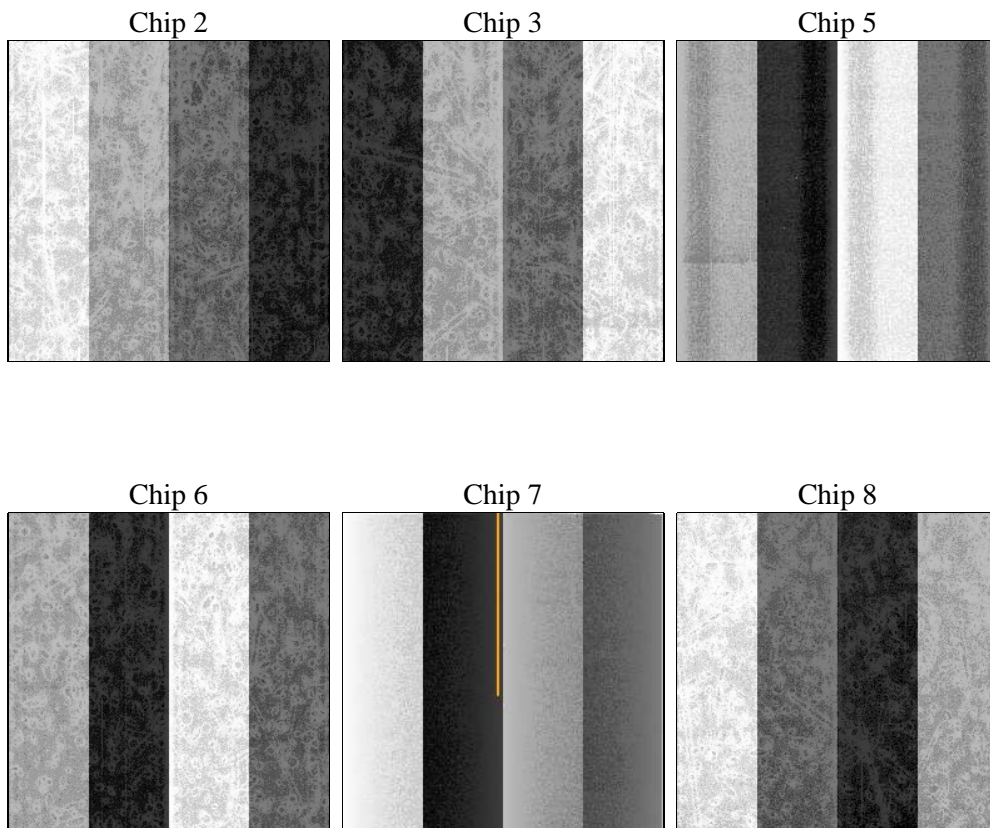
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	41000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	41177.599846601	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime2	41177.599846601	Sum of GTIs [s]
date	2012-12-15T06:38:17	Date and time of file creation	ontime3	41171.117906034	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	41177.599846601	Sum of GTIs [s]
			ontime6	41177.599846601	Sum of GTIs [s]
			ontime7	41177.599846601	Sum of GTIs [s]
			ontime8	41177.599846601	Sum of GTIs [s]
			l1events	2330768	Number of level 1 events

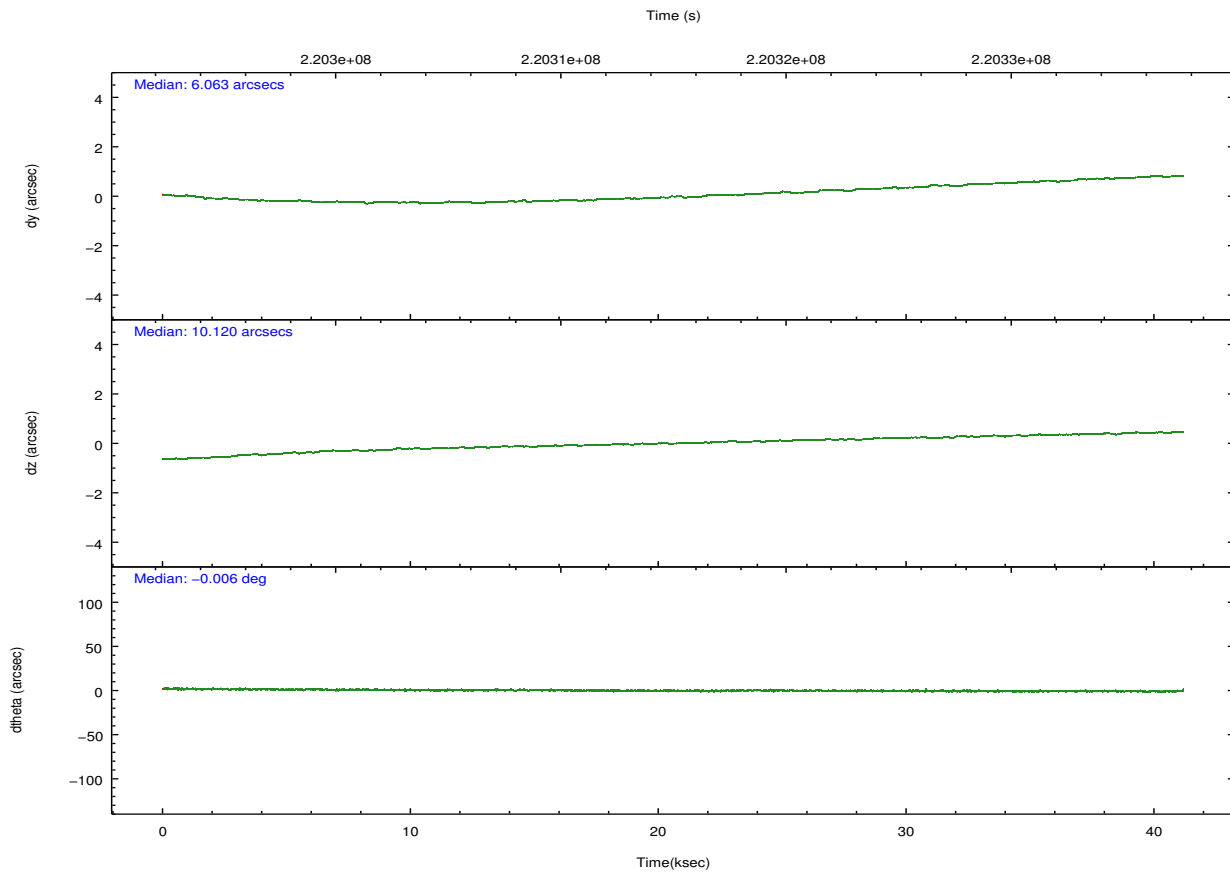
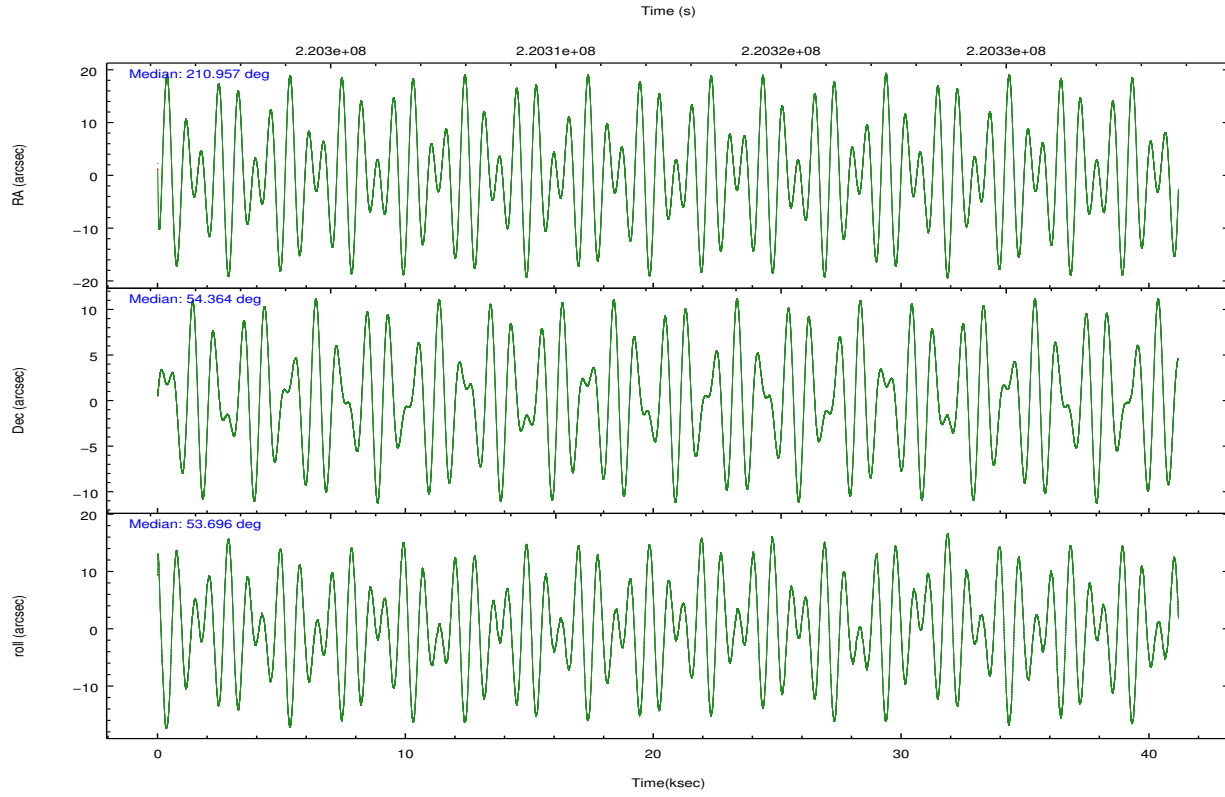
### 2.1.4 Events

	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	335638	317770	483048	335340	443429	415543	grade 0 events	17924	17051	22613	18336	18984	30666
rejected events	295105	278451	262325	292081	254381	321429		5%	5%	4%	5%	4%	7%
rejected %	87%	87%	54%	87%	57%	77%	grade 1 events	236	190	797	175	454	274
								0%	0%	0%	0%	0%	0%
							grade 2 events	8658	7978	64388	9194	37987	20360
								2%	2%	13%	2%	8%	4%
							grade 3 events	3623	3729	8616	3871	16943	10334
								1%	1%	1%	1%	3%	2%
							grade 4 events	3560	3578	8413	3795	17120	9503
								1%	1%	1%	1%	3%	2%
							grade 5 events	12788	14216	35182	15003	42059	19560
								3%	4%	7%	4%	9%	4%
							grade 6 events	6789	7005	116818	8078	98076	23363
								2%	2%	24%	2%	22%	5%
							grade 7 events	282060	264023	226221	276888	211806	301483
								84%	83%	46%	82%	47%	72%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	210.952749	210.9572409447207	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.336526	54.36364730039454	Alternating exposures requested	N	N
[deg] Pointing Roll	53.549439	53.7024245656698	[s] Primary exposure time	0.000000	3.2
[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)	220294576.184000	220293498.47106			
Observation start date	2004-12-24T16:55:12	2004-12-24T16:38:18			
[s] Observation end time (MET)	220335576.184000	220336176.39798			
Observation end date	2004-12-25T04:18:32	2004-12-25T04:29:36			
Read mode	TIMED	TIMED			

## 2.3 Aspect

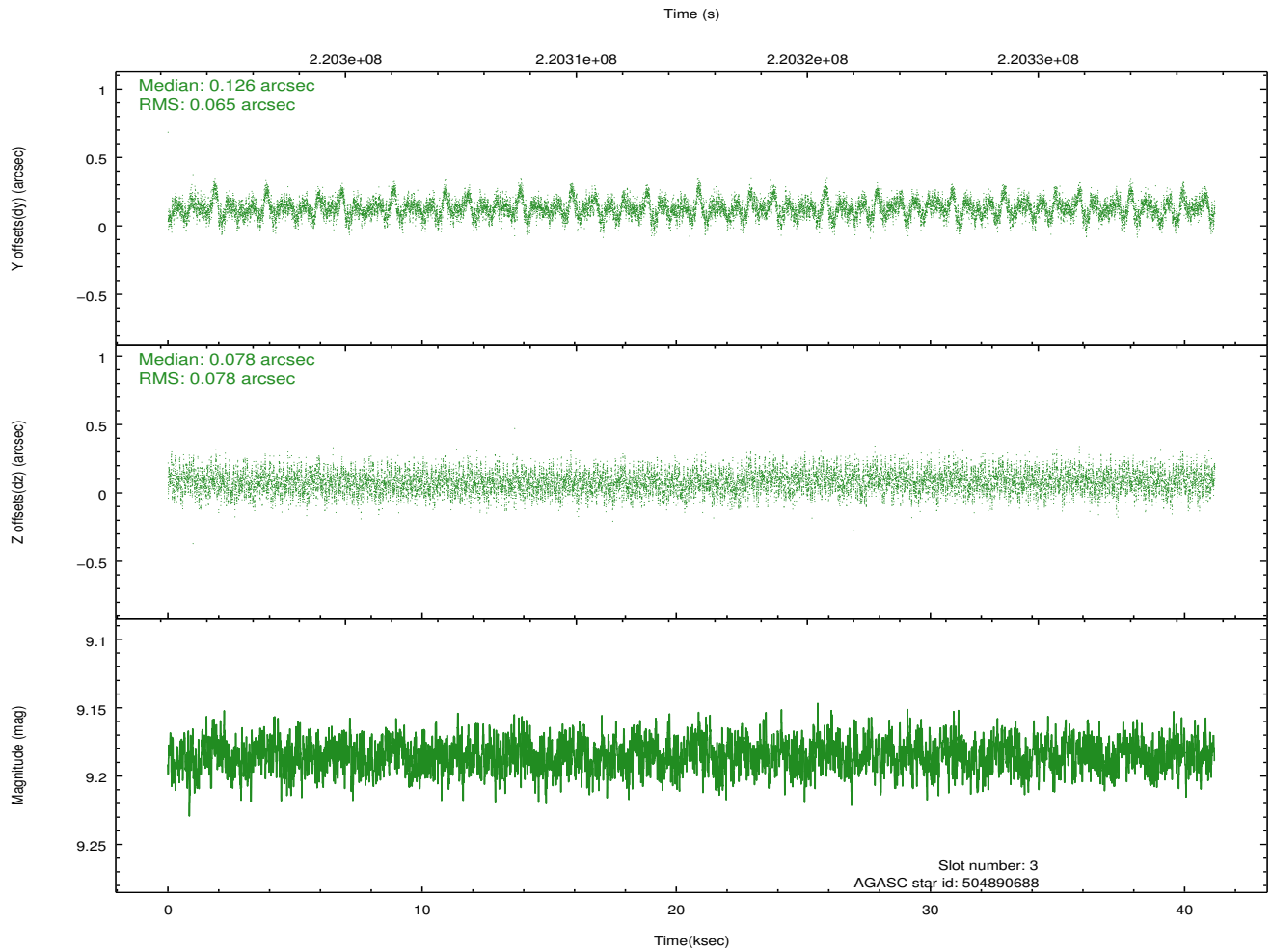
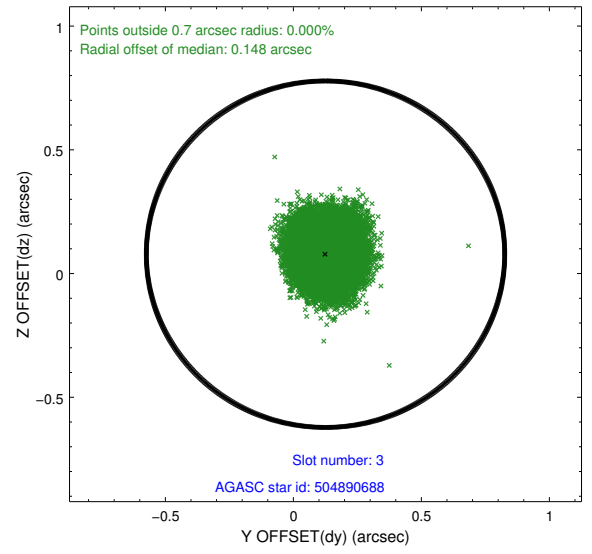
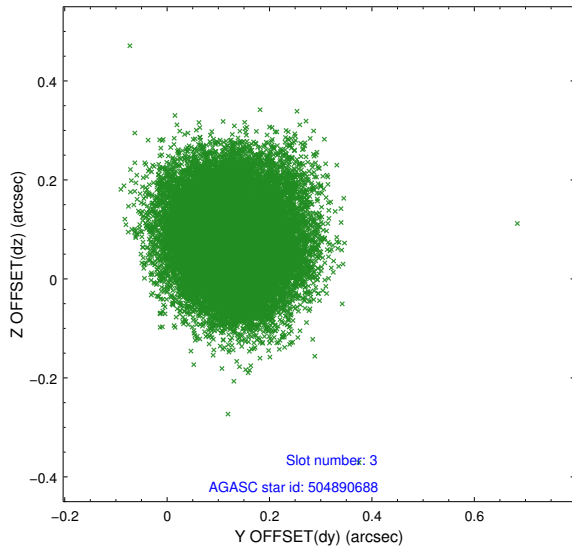


### Slot Statistics

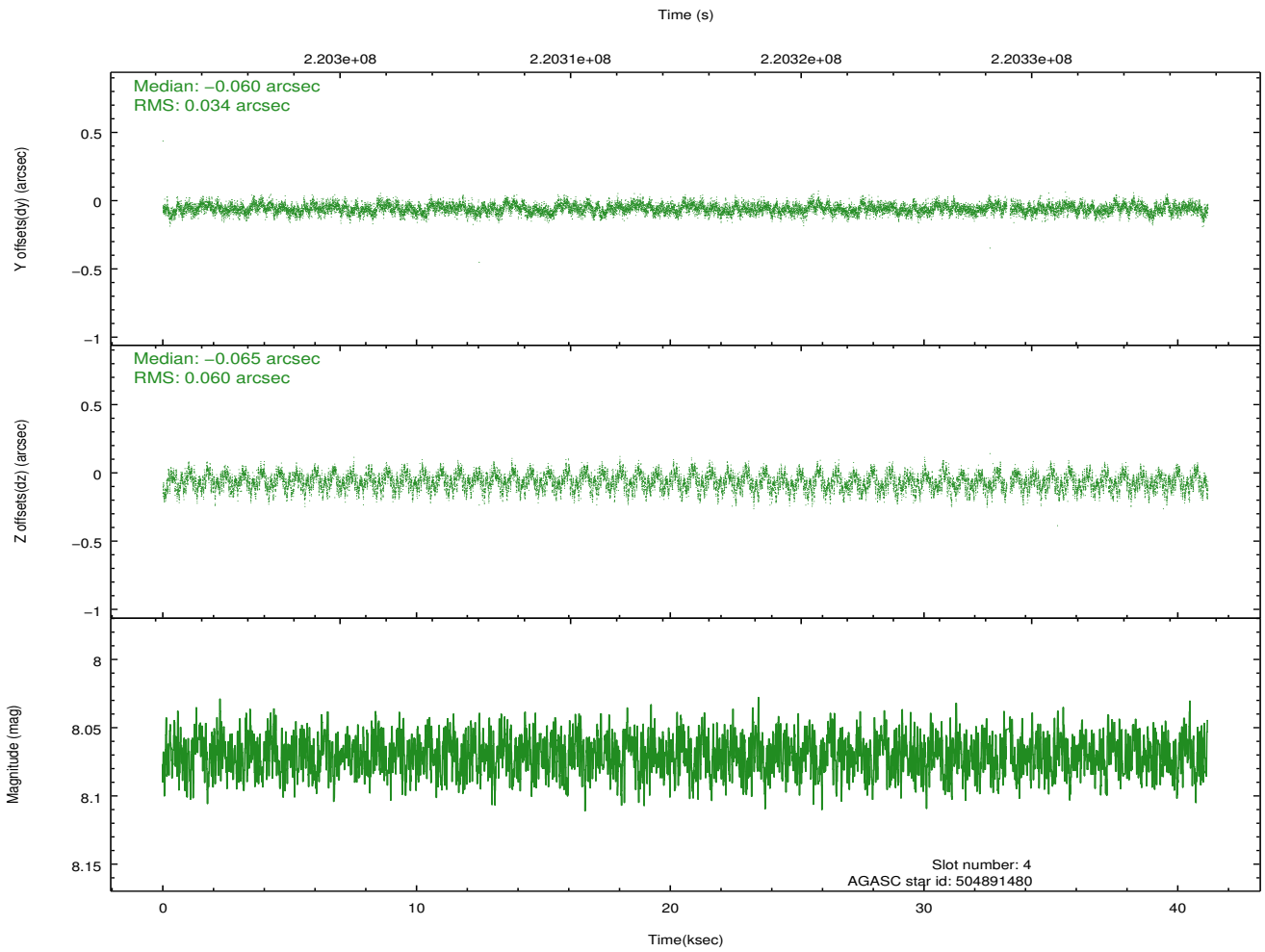
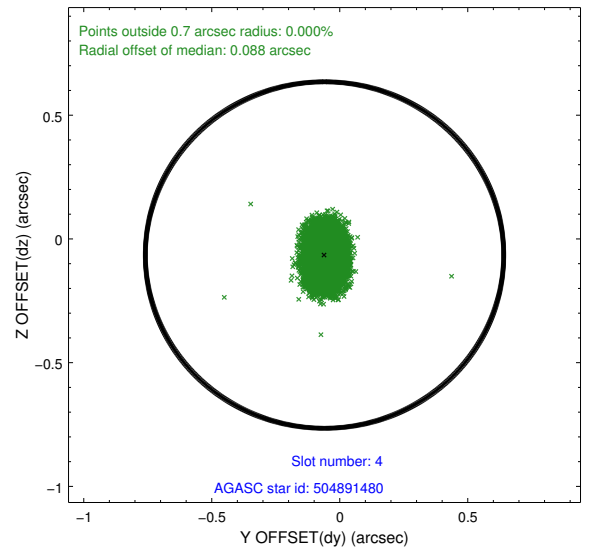
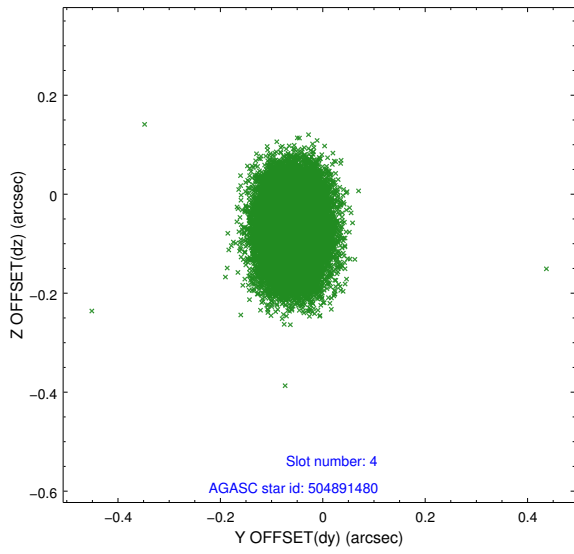
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-4	7.20	10046	0.074	0.000	0.014	0.020	0.000000	0.000000	2154.51	177.35
1	FID	ACIS-S-5	7.23	10042	-0.114	-0.003	0.024	0.032	0.000000	0.000000	-1811.84	170.74
2	FID	ACIS-S-6	7.35	10044	0.008	0.017	0.015	0.023	0.000000	0.000000	402.68	814.55
3	GUIDE	504890688	9.19	20080	0.126	0.078	0.110	0.173	211.697686	53.837149	-498.64	-2336.25
4	GUIDE	504891480	8.07	20026	-0.060	-0.065	0.074	0.120	210.708012	54.666096	652.41	1115.37
5	GUIDE	504894408	9.26	20078	-0.106	0.122	0.101	0.159	211.942794	54.047749	419.22	-2291.63
6	GUIDE	504894856	8.97	20081	0.131	-0.058	0.082	0.135	209.819510	54.132689	-1994.70	1497.86
7	GUIDE	505292416	9.30	20078	-0.096	-0.072	0.104	0.165	210.920759	55.040479	1999.28	1559.63

## 2.4 Star Slots

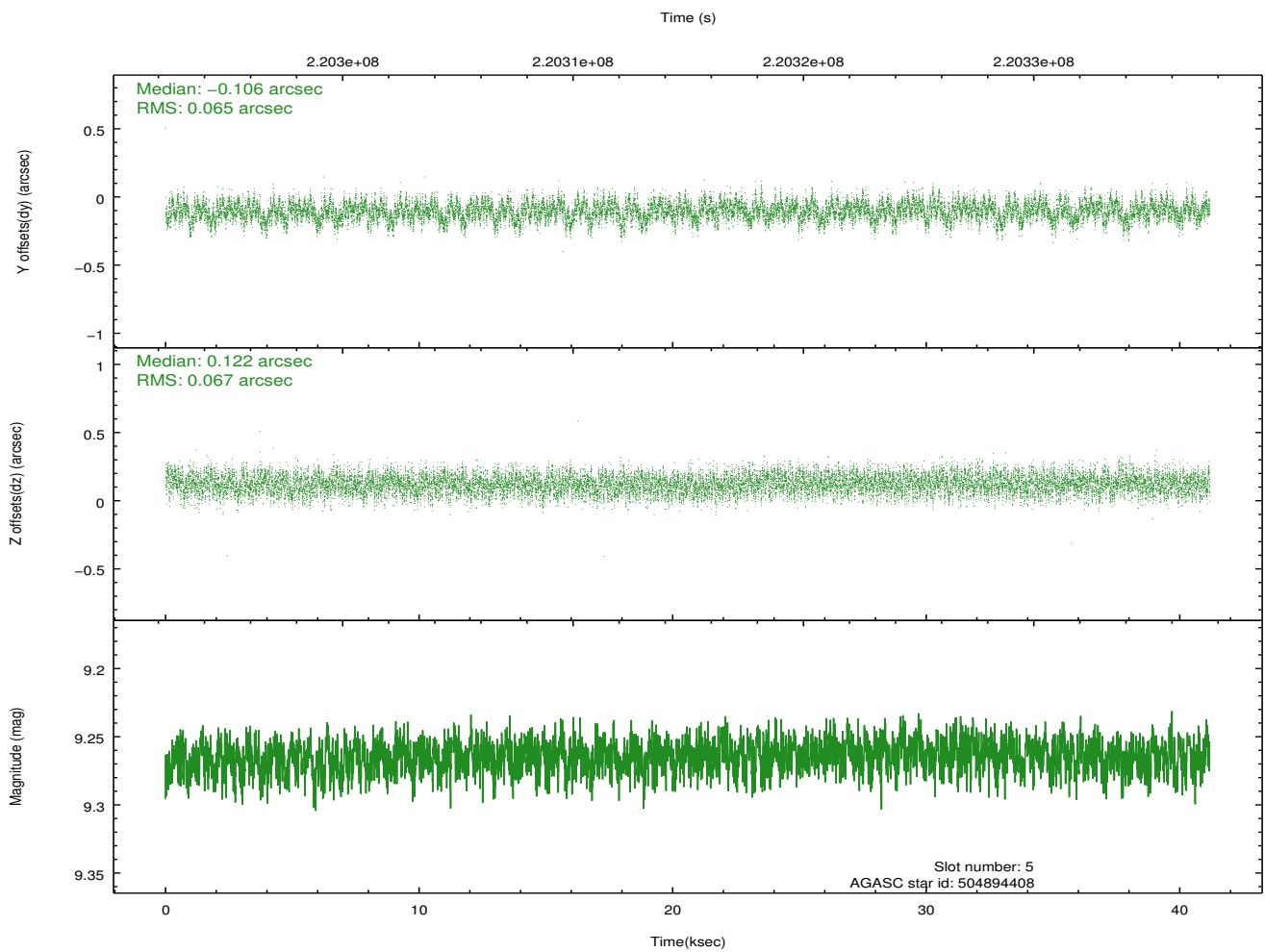
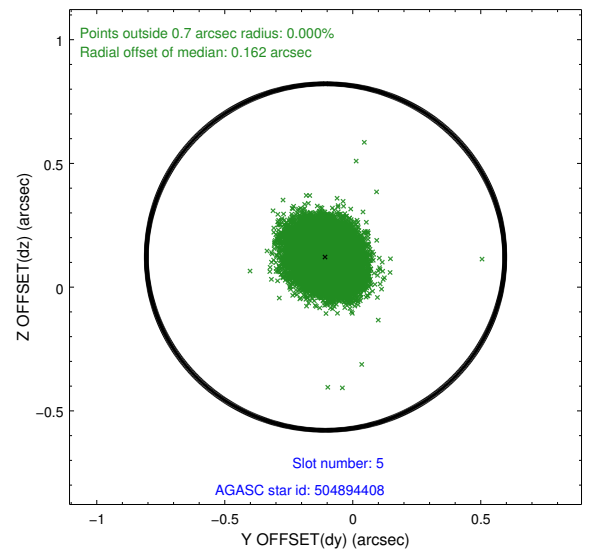
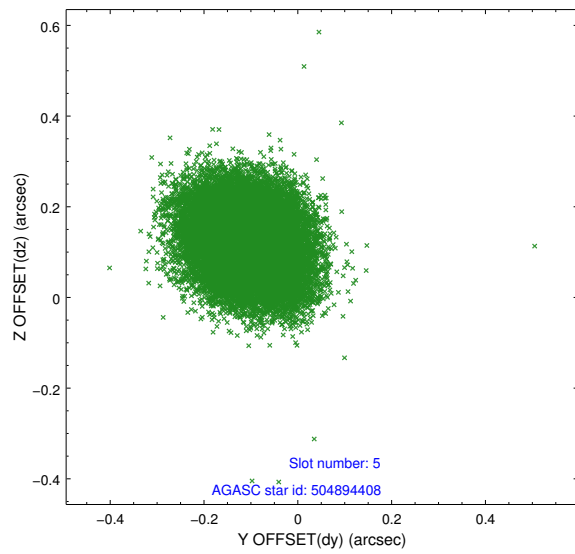
### 2.4.1 Slot 3



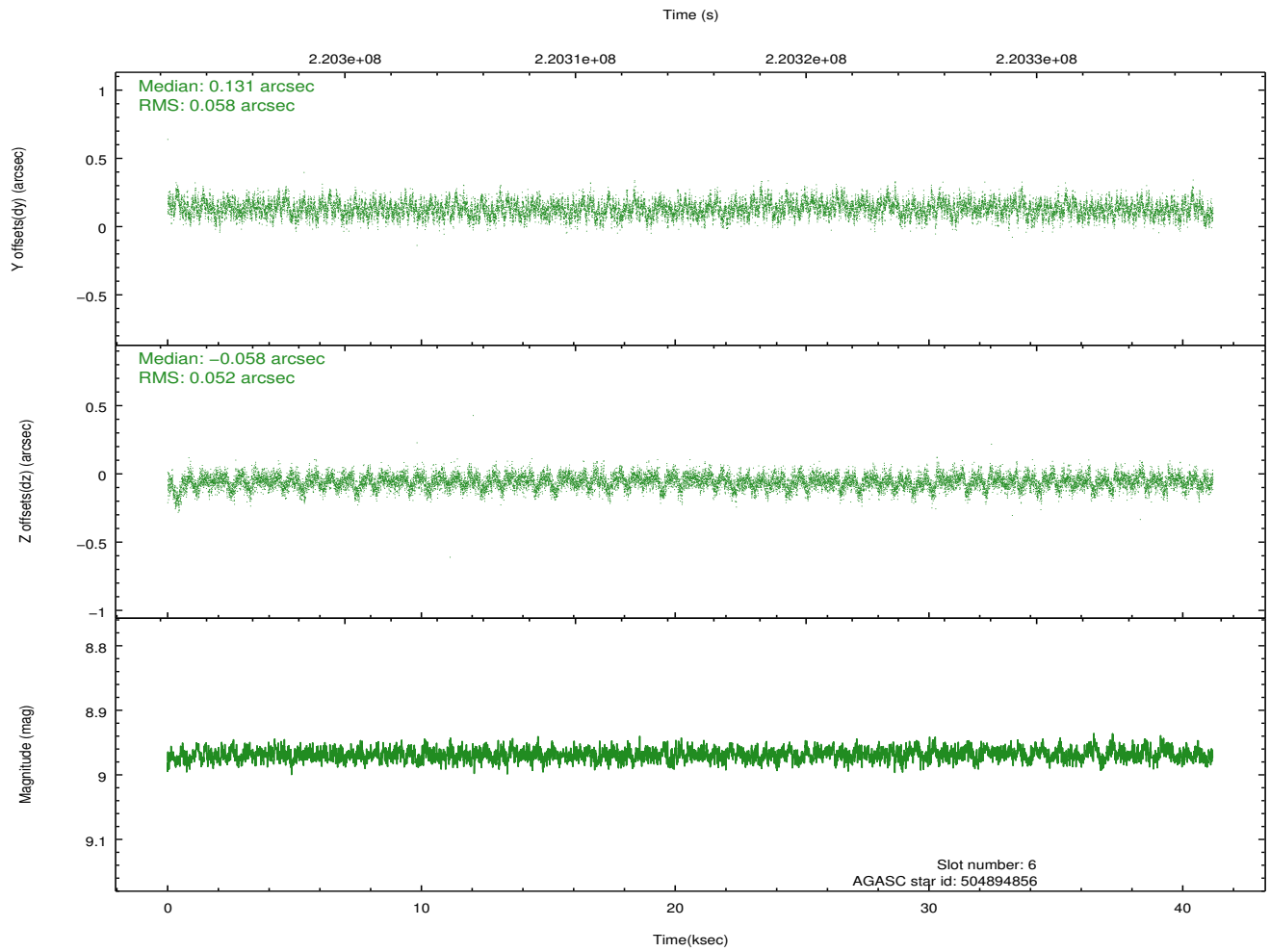
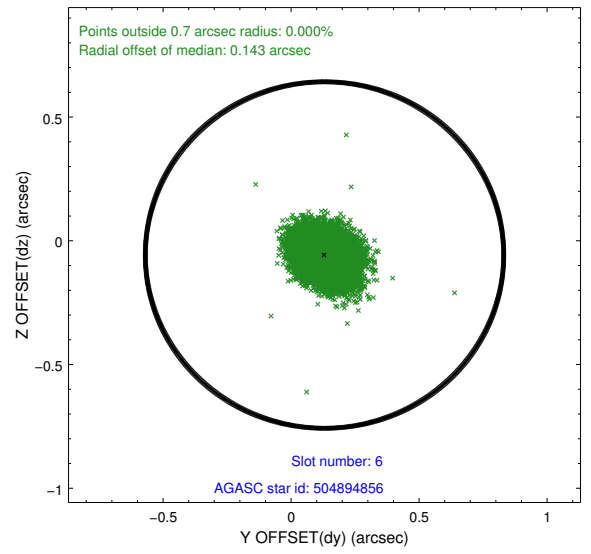
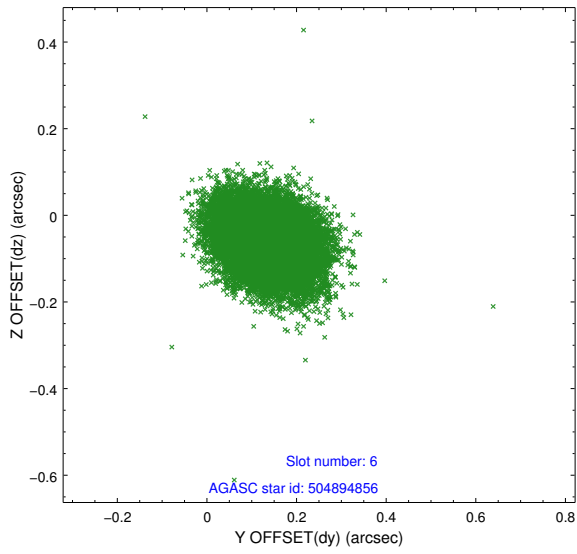
### 2.4.2 Slot 4



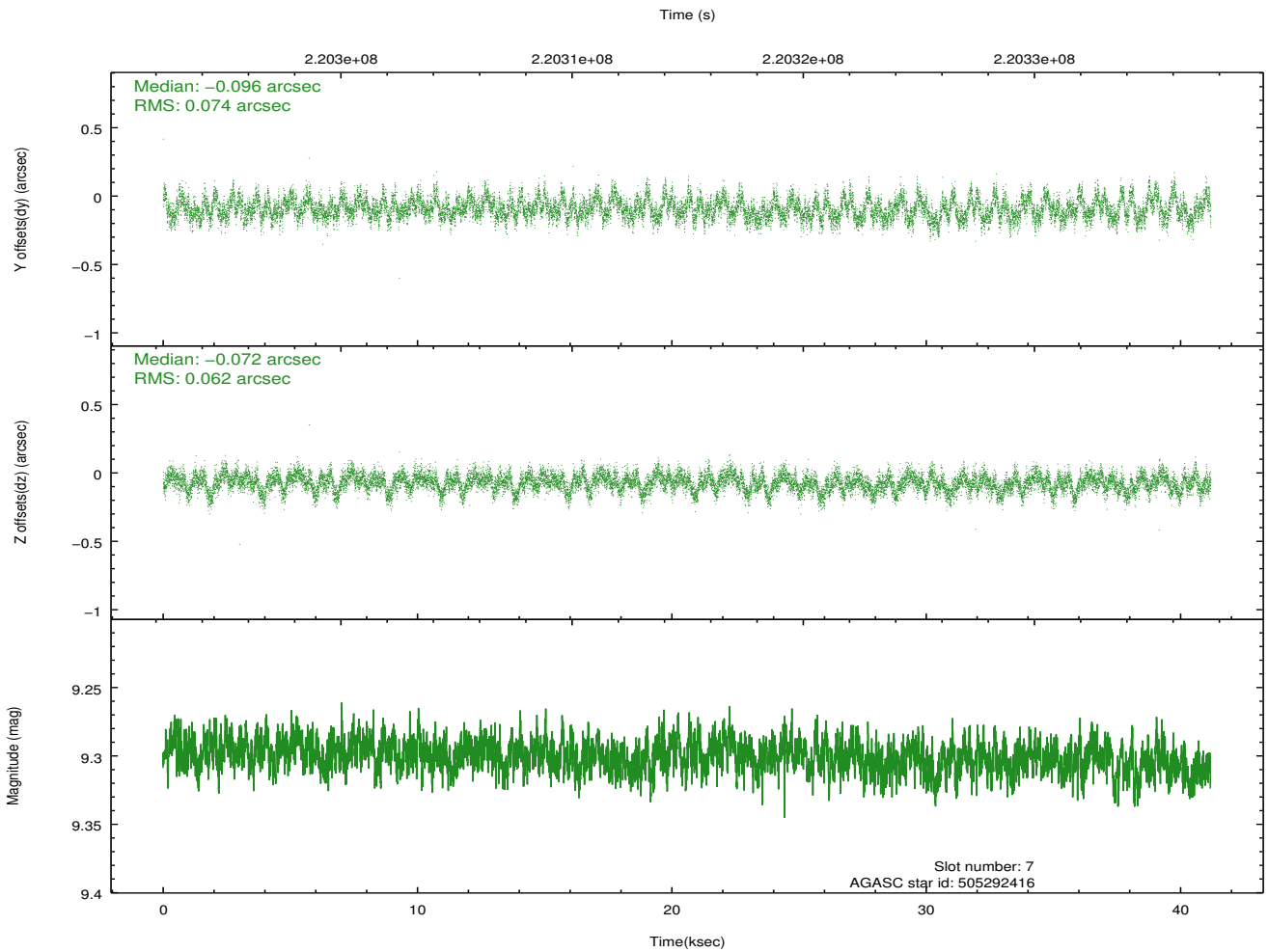
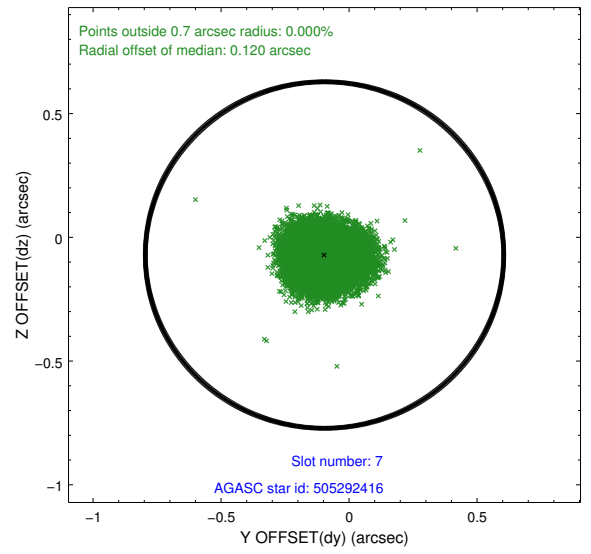
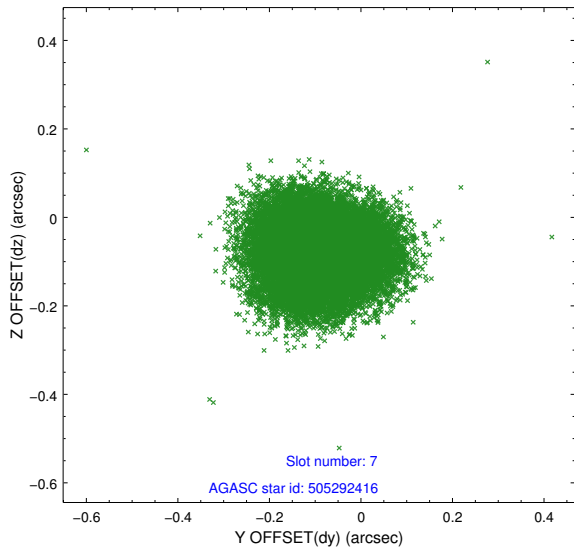
### 2.4.3 Slot 5



### 2.4.4 Slot 6

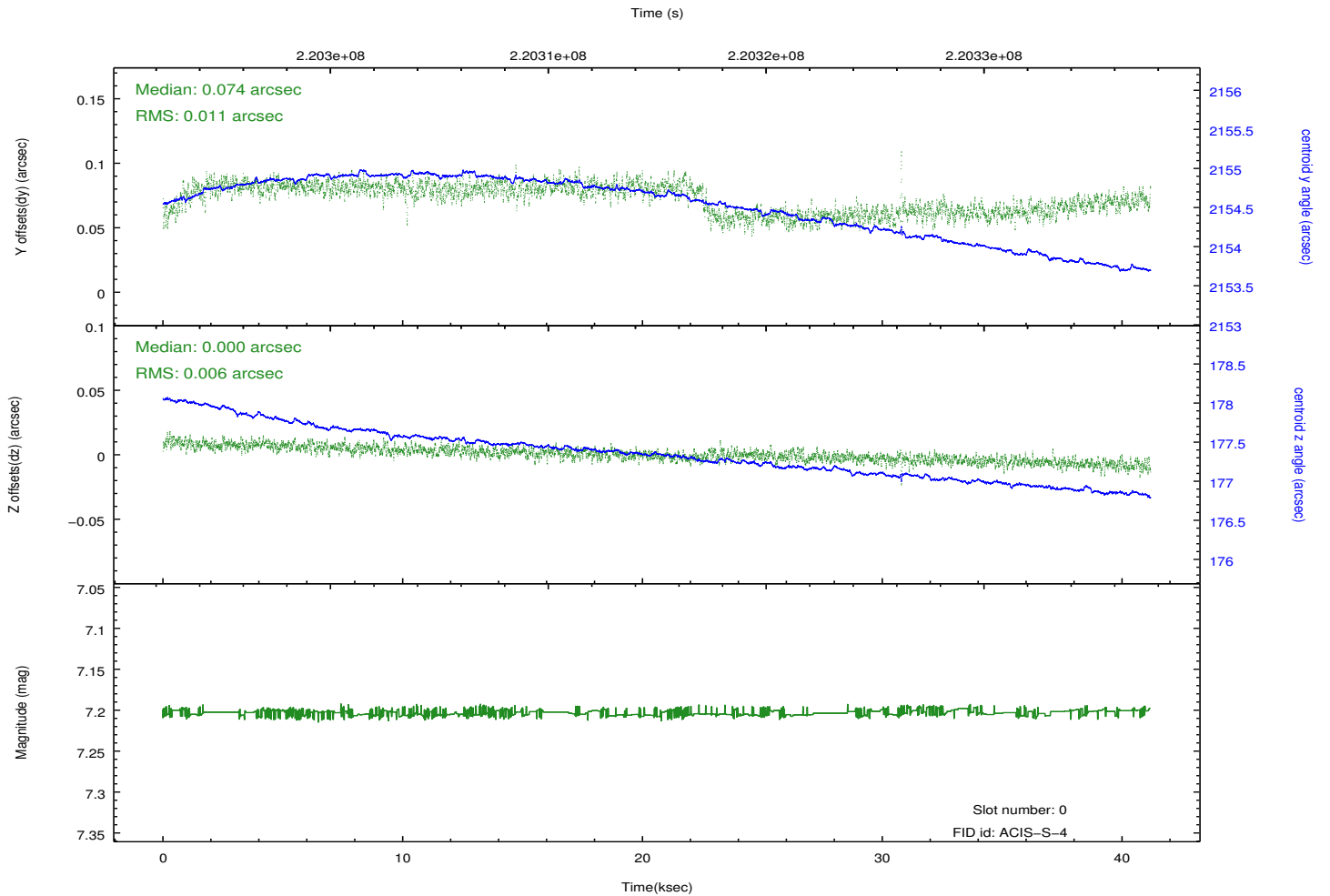
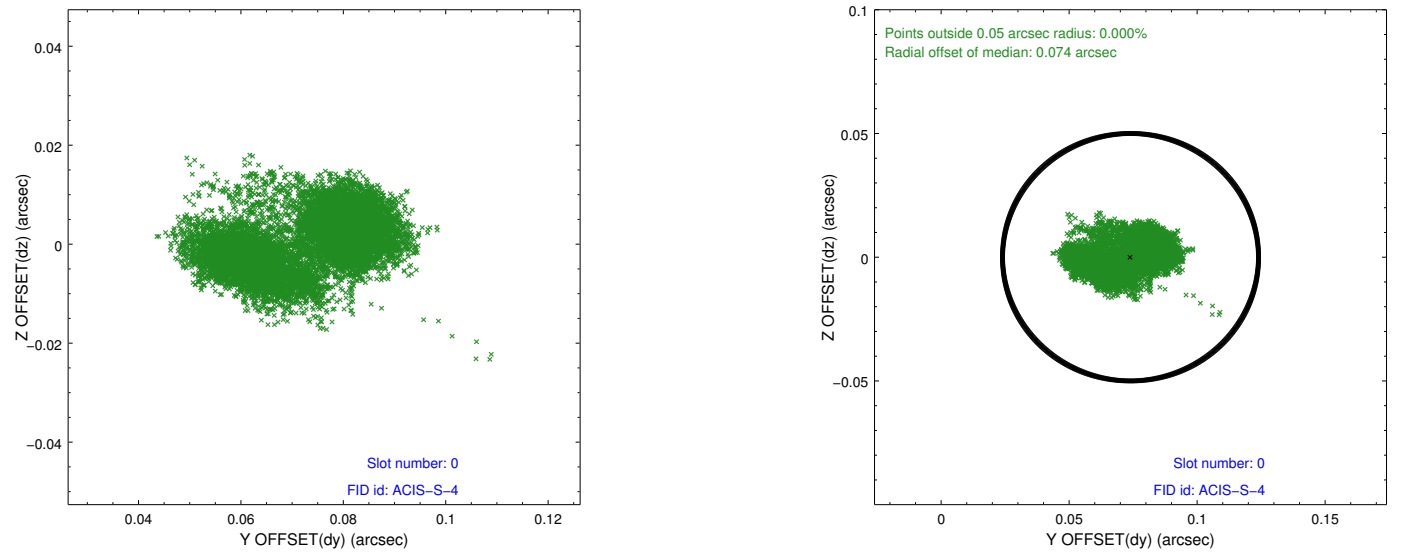


### 2.4.5 Slot 7

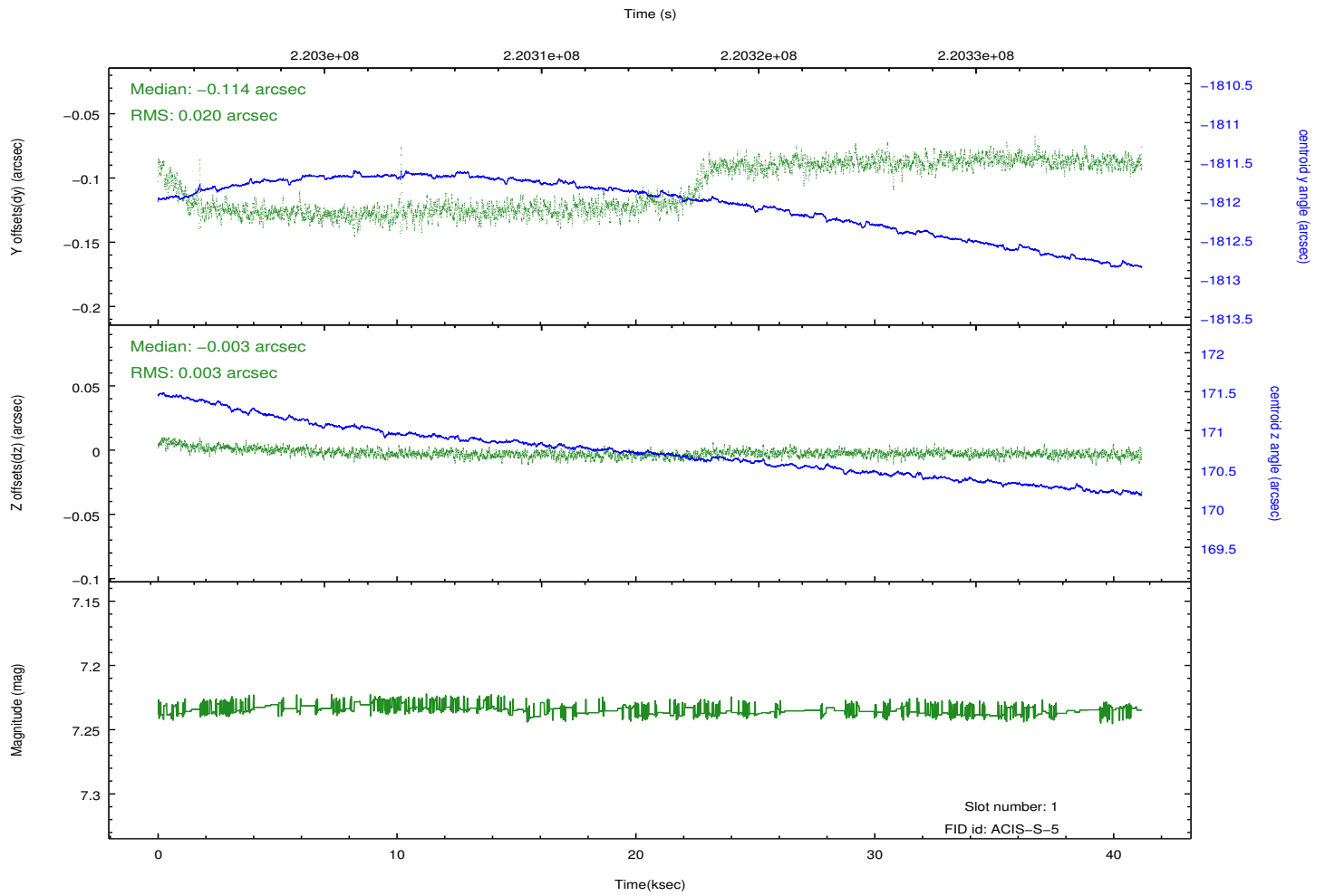
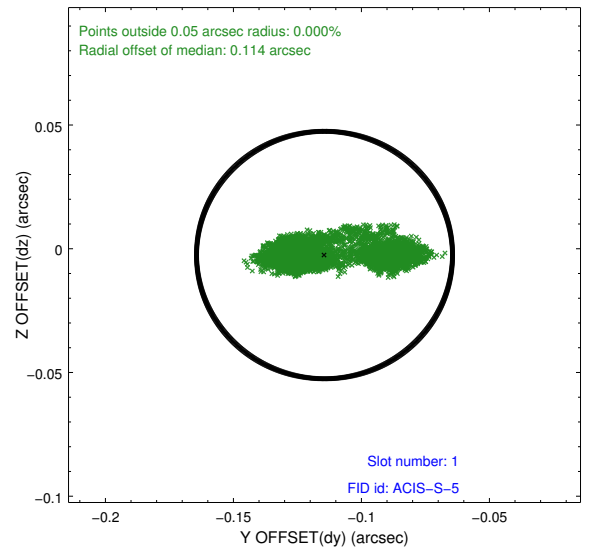
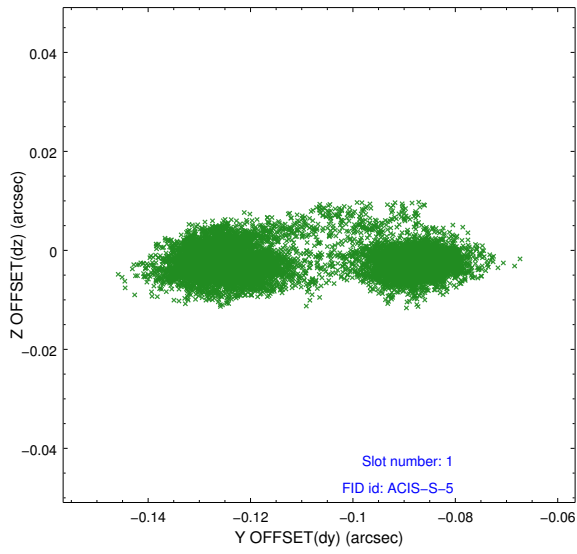


## 2.5 FID Slots

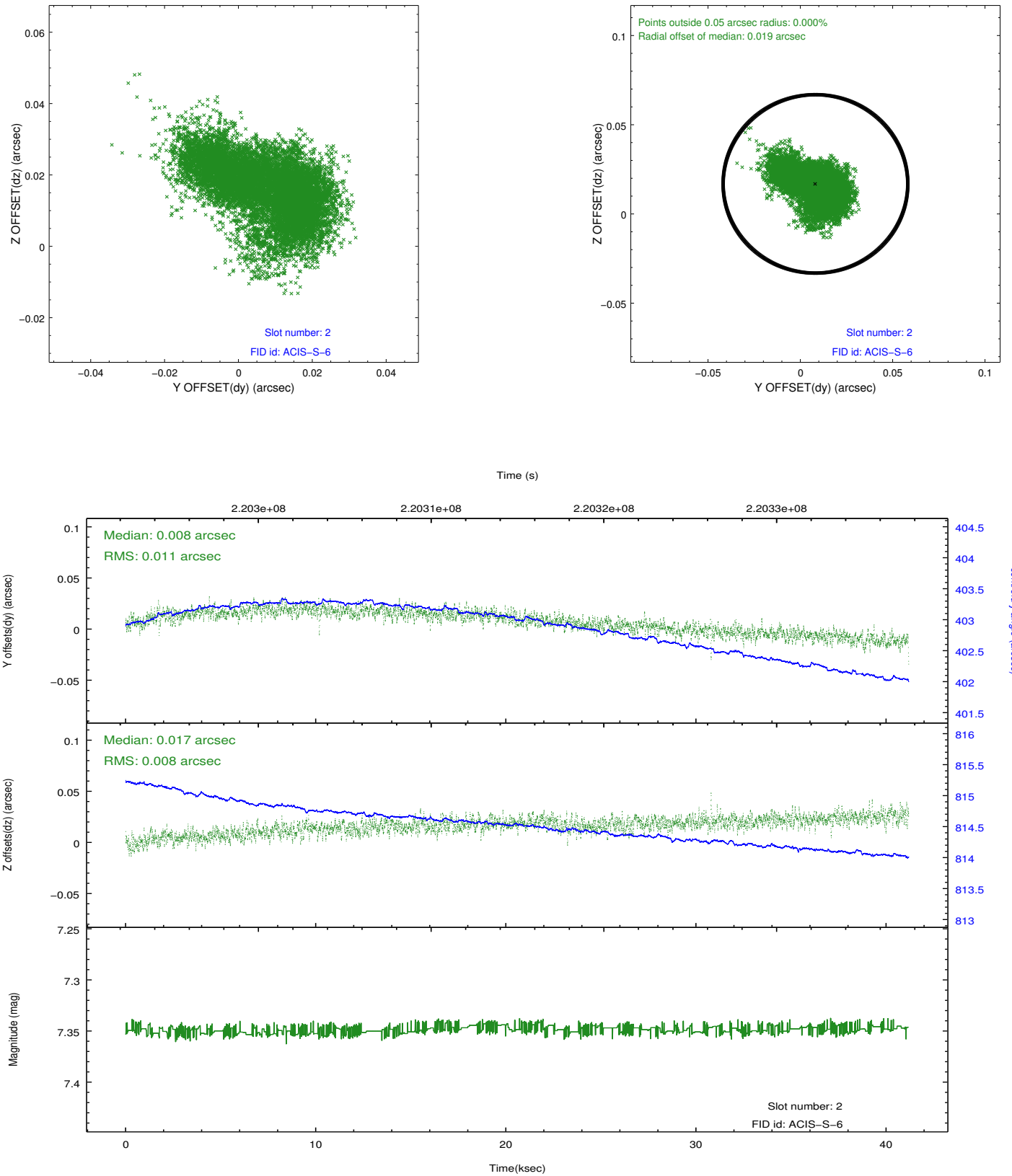
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.01.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	41.17759

## A.2 Comments