

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 4657 - L2 Version 5  
Chandra X-Ray Center

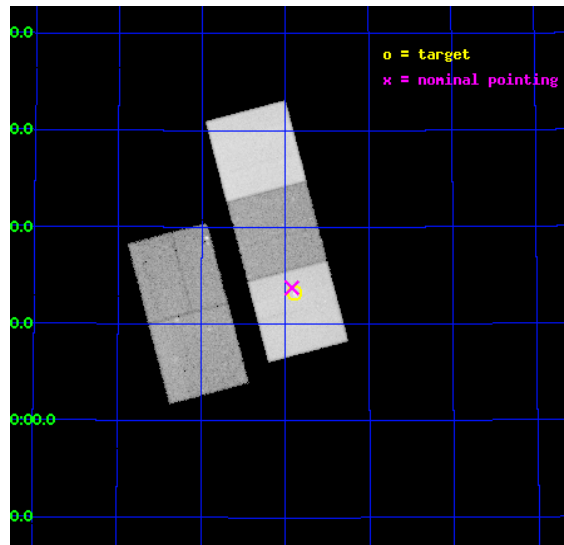
L2 Processing Date : Feb 4 2013

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# 1 Front

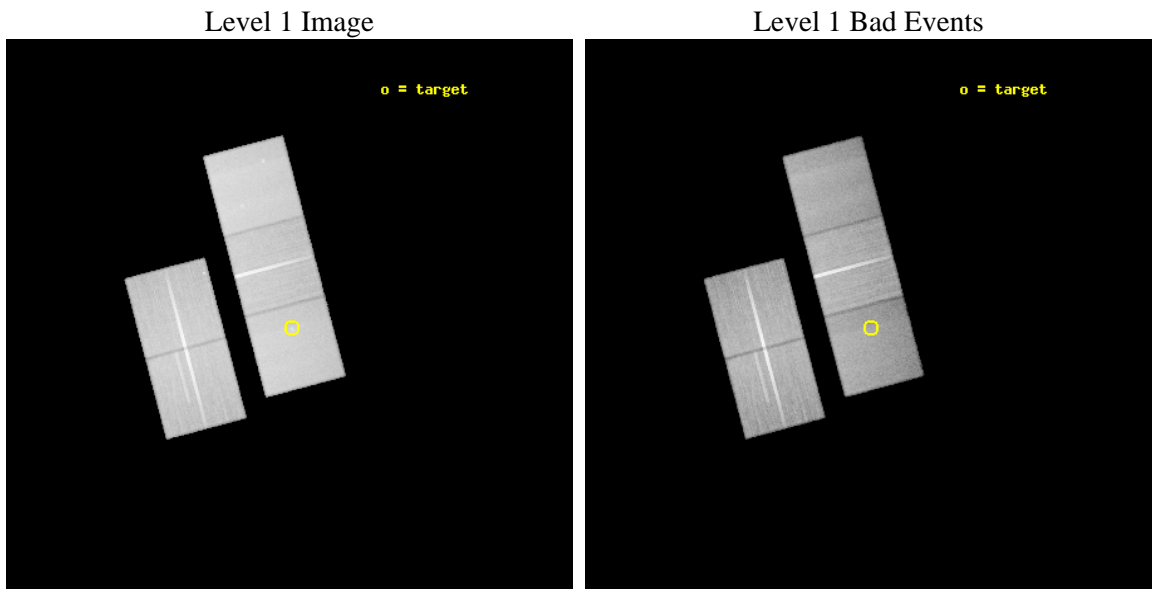
seq_num	500476	Sequence number
obs_id	4657	Observation id
title	PROBING THE PULSAR WIND NEBULA OF PSR 0355+54	Proposal title
observer	Dr Katherine McGowan	Principal investigator
object	PSR 0355+54	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	59.72375	Observer's specified target RA [deg]
dec_targ	54.220444	Observer's specified target Dec [deg]
ra_nom	59.730727666192	Nominal RA [deg]
dec_nom	54.22922707894	Nominal Dec [deg]
roll_nom	75.163660841509	Nominal Roll [deg]
revision	5	Processing version of data
ontime	67127.399870902	Sum of GTIs [s]
livetime	66250.330973116	Livetime [s]
ontime2	67114.836039841	Sum of GTIs [s]
ontime3	67121.117930382	Sum of GTIs [s]
ontime5	67127.399870902	Sum of GTIs [s]
ontime6	67114.835980028	Sum of GTIs [s]
ontime7	67127.399870902	Sum of GTIs [s]
l2events	562819	Number of level 2 events



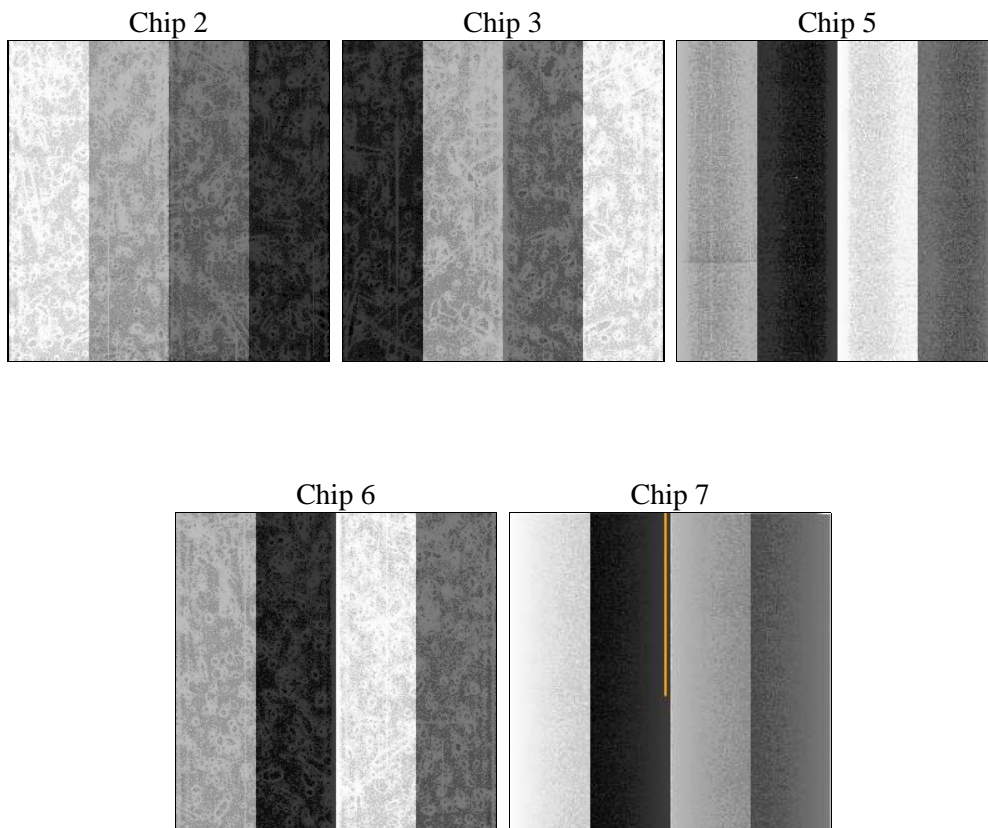
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	67000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	67127.399870902	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime2	67114.836039841	Sum of GTIs [s]
date	2013-02-02T09:33:56	Date and time of file creation	ontime3	67121.117930382	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	67127.399870902	Sum of GTIs [s]
			ontime6	67114.835980028	Sum of GTIs [s]
			ontime7	67127.399870902	Sum of GTIs [s]
			l1events	2248460	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	419285	414863	535039	423662	455611
rejected events	375326	369094	284735	376071	253899
rejected %	89%	88%	53%	88%	55%

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	15722	18019	15890	16250	19408
	3%	4%	2%	3%	4%
grade 1 events	192	220	363	197	380
	0%	0%	0%	0%	0%
grade 2 events	9790	9022	73005	10070	38506
	2%	2%	13%	2%	8%
grade 3 events	4831	4904	10482	5188	18296
	1%	1%	1%	1%	4%
grade 4 events	4905	4896	10014	5080	18053
	1%	1%	1%	1%	3%
grade 5 events	13440	16024	45525	16818	48635
	3%	3%	8%	3%	10%
grade 6 events	9016	9225	143059	11348	109033
	2%	2%	26%	2%	23%
grade 7 events	361389	352553	236701	358711	203300
	86%	84%	44%	84%	44%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	59.743514	59.73072766619248	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.203030	54.22922707893995	Alternating exposures requested	N	N
[deg] Pointing Roll	74.996659	75.16366084150856	[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)	206359027.184000	206357782.34797			
Observation start date	2004-07-16T09:56:03	2004-07-16T09:36:22			
[s] Observation end time (MET)	206426027.184000	206427260.95106			
Observation end date	2004-07-17T04:32:43	2004-07-17T04:54:20			
Read mode	TIMED	TIMED			

## 2.3 Aspect

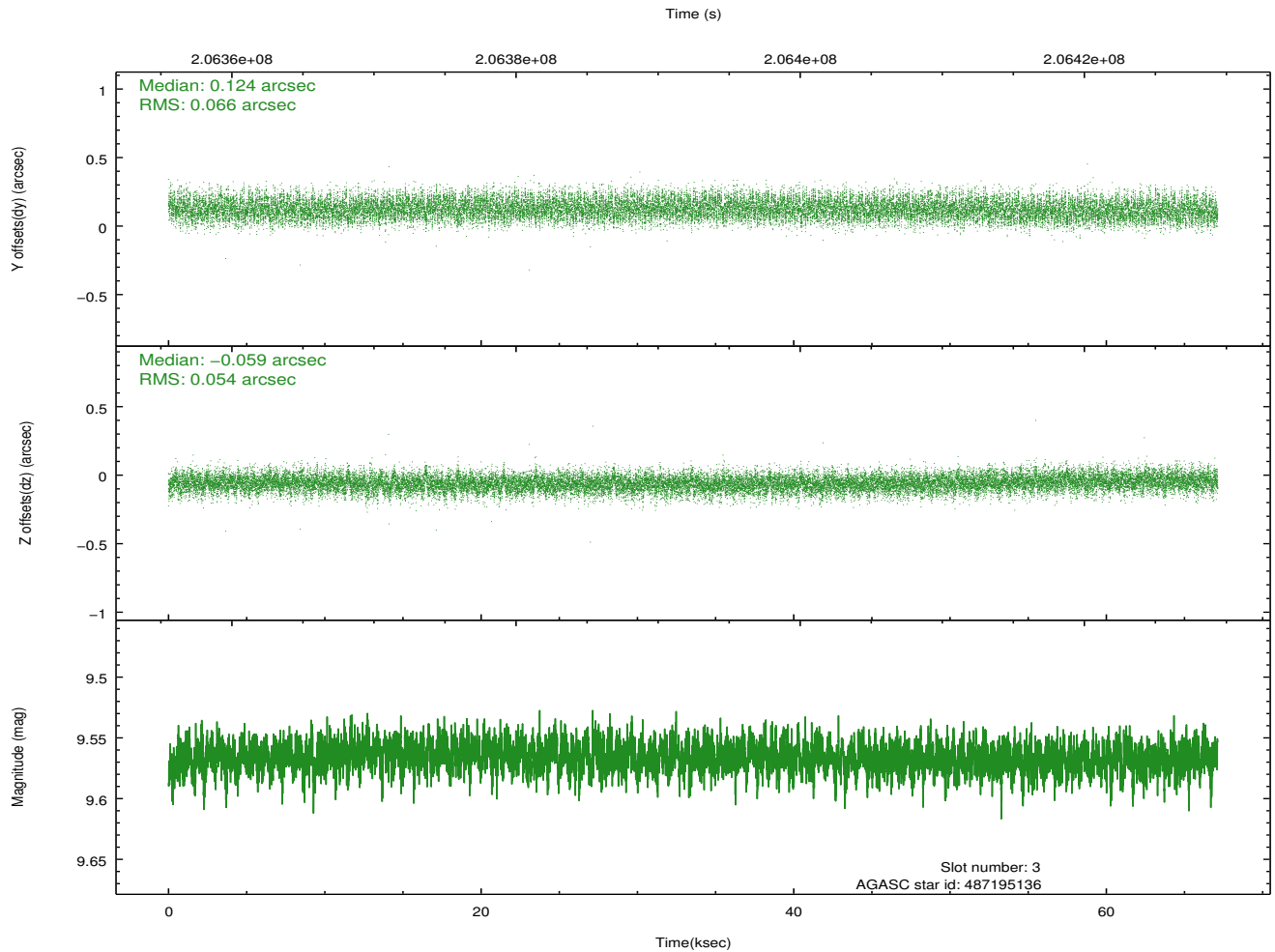
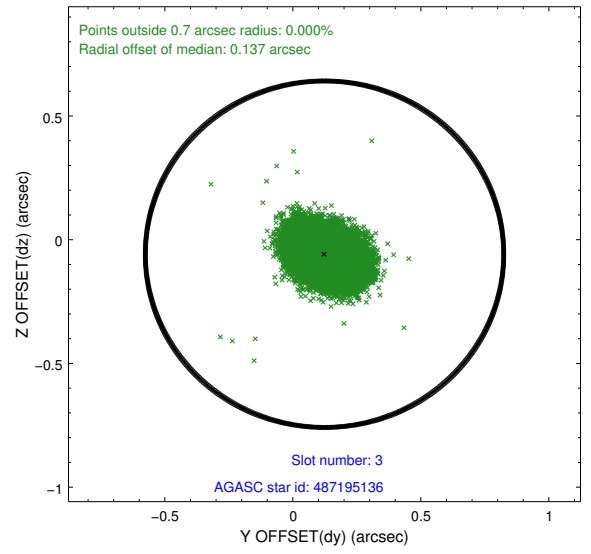
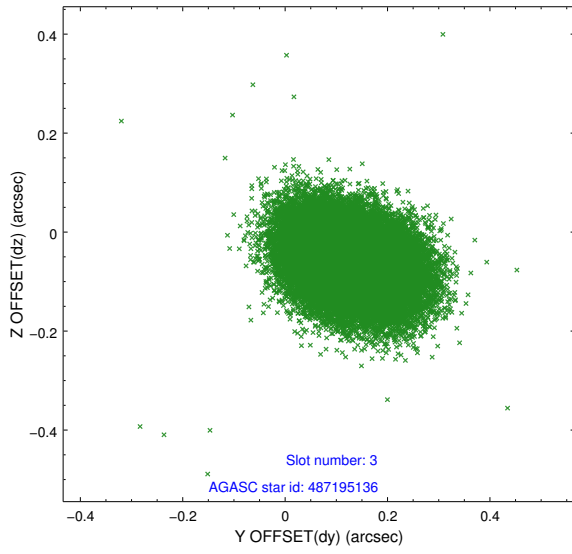


### Slot Statistics

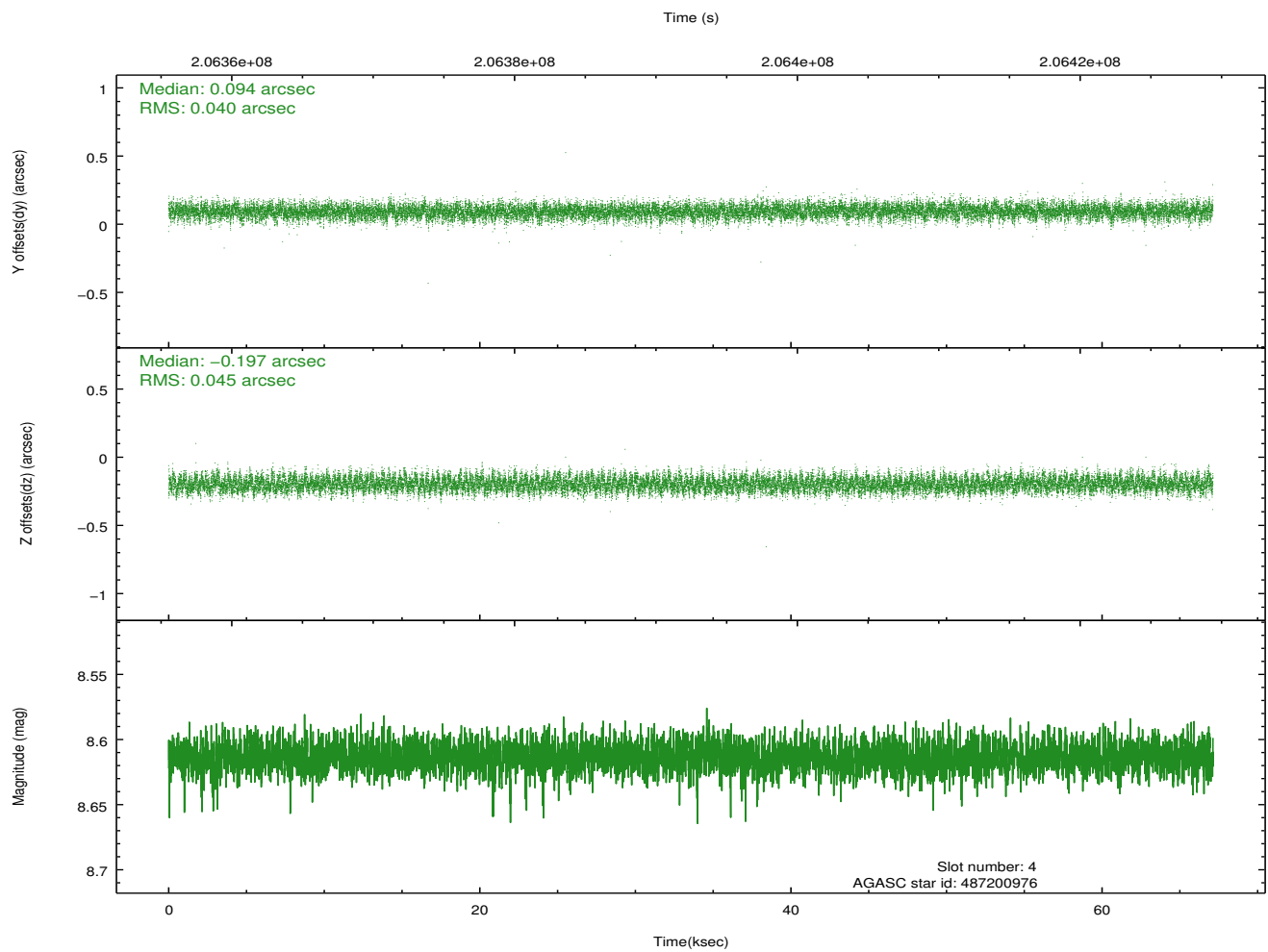
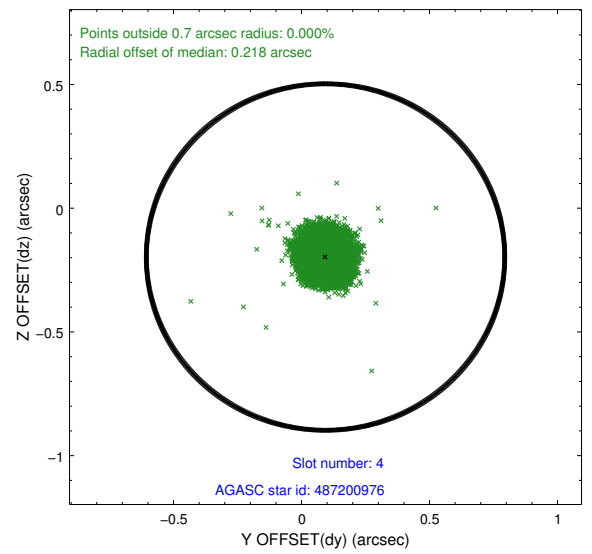
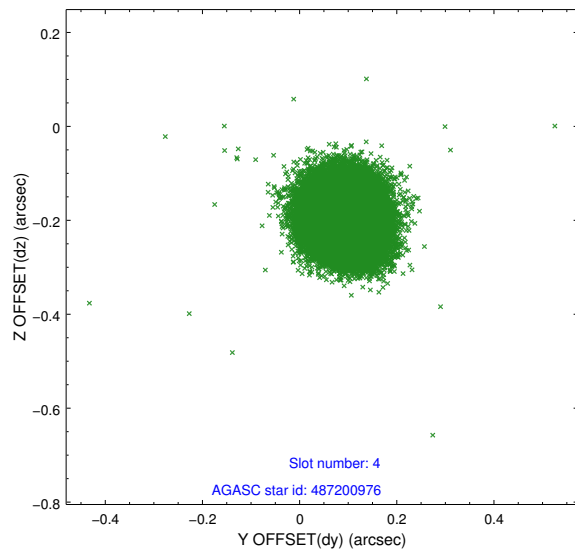
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	16374	-0.007	-0.068	0.012	0.057	0.000000	0.000000	937.51	-1727.95
1	FID	ACIS-S-4	7.20	16375	0.065	0.055	0.014	0.041	0.000000	0.000000	2154.97	176.37
2	FID	ACIS-S-5	7.23	16370	-0.083	0.026	0.014	0.024	0.000000	0.000000	-1811.50	169.90
3	GUIDE	487195136	9.57	32722	0.124	-0.059	0.090	0.147	58.914846	53.877945	-1575.37	1398.26
4	GUIDE	487200976	8.61	32735	0.094	-0.197	0.065	0.103	59.647091	54.074996	-497.39	77.39
5	GUIDE	487330000	6.71	32749	-0.007	0.076	0.040	0.065	60.405525	53.865933	-801.57	-1669.69
6	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	487851880	8.13	32746	-0.209	0.179	0.061	0.102	60.850967	54.723956	2425.09	-1733.54

## 2.4 Star Slots

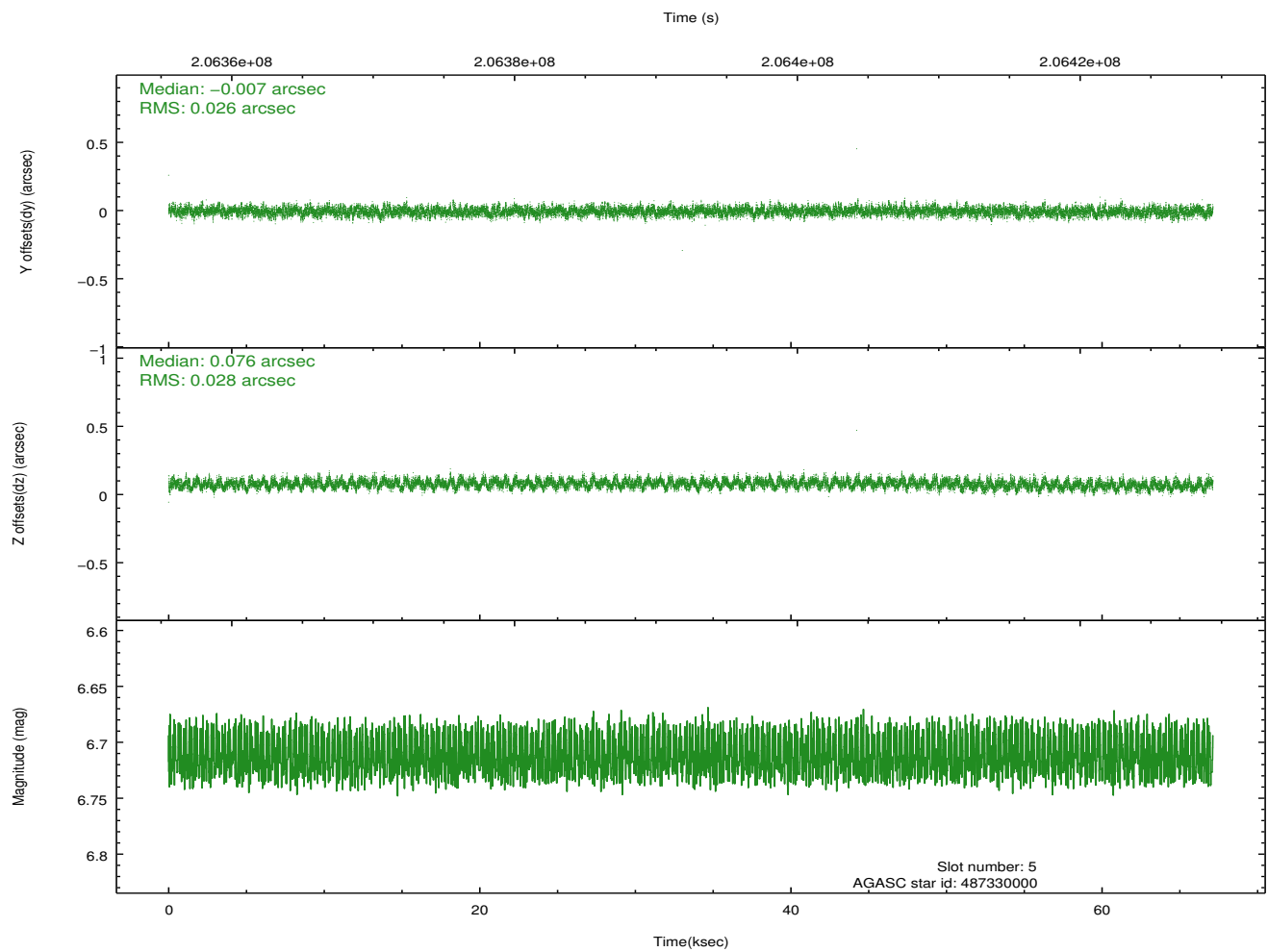
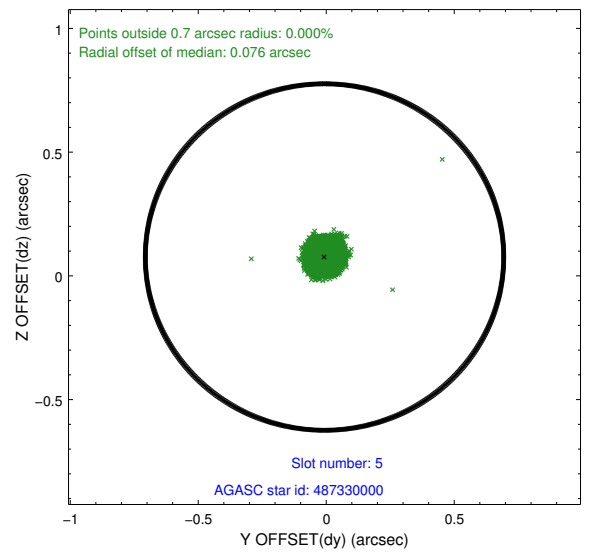
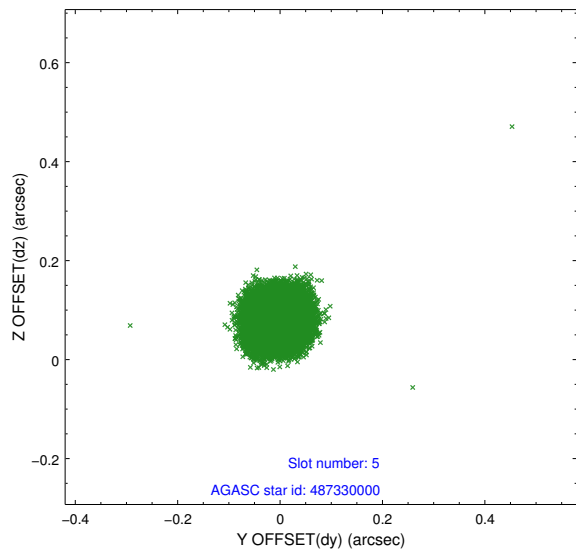
### 2.4.1 Slot 3



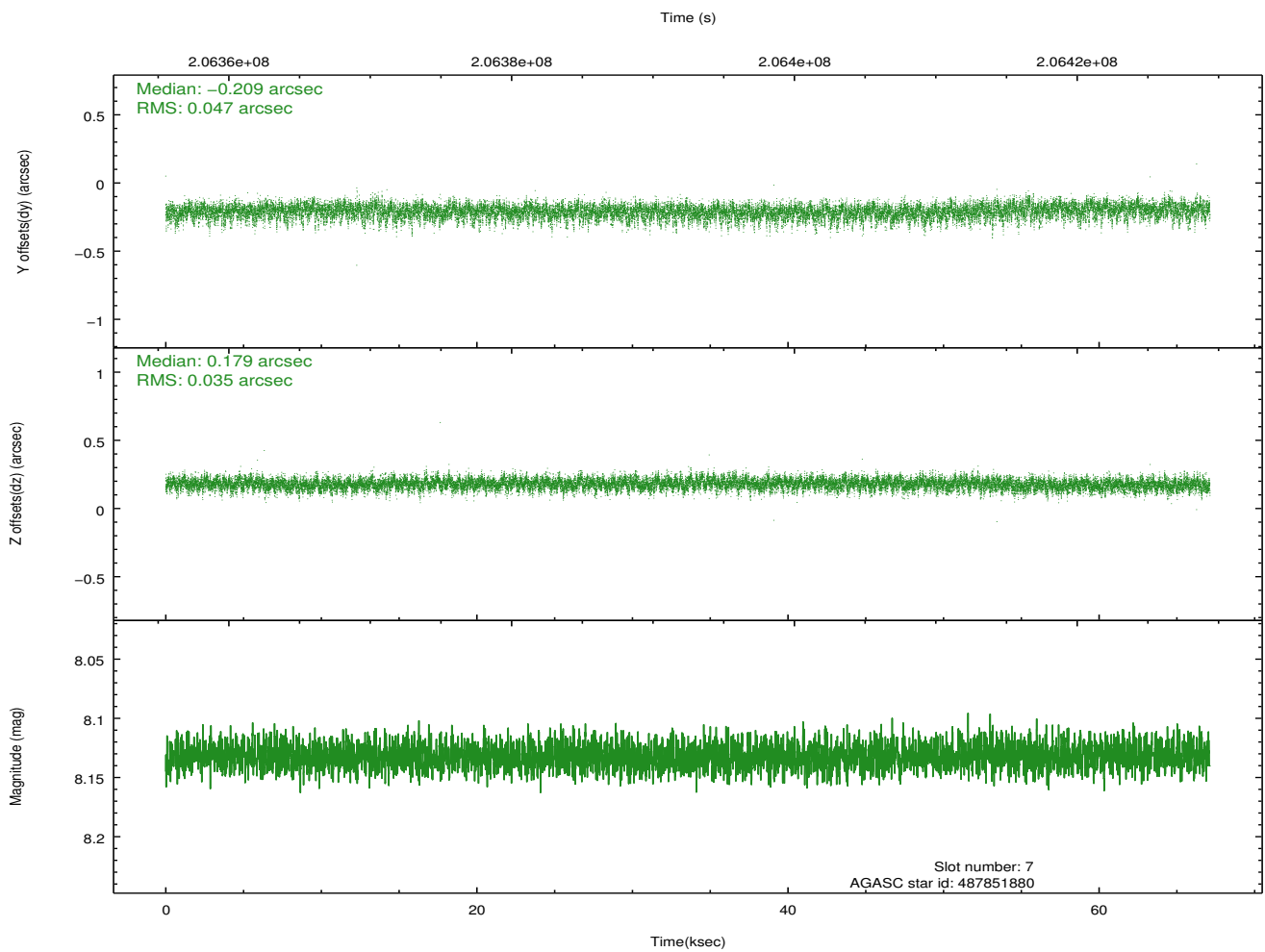
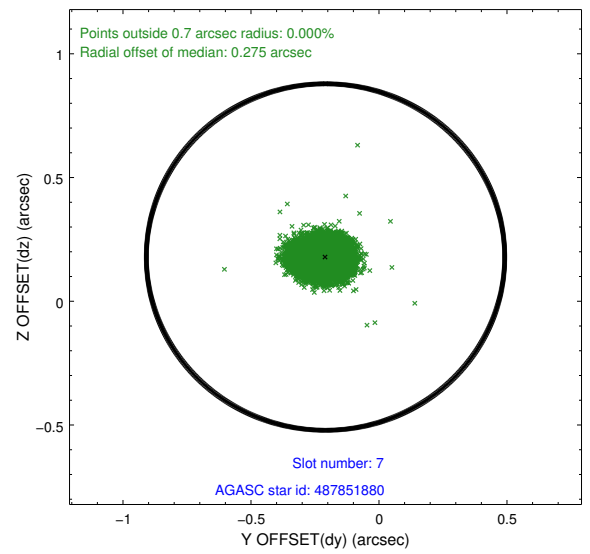
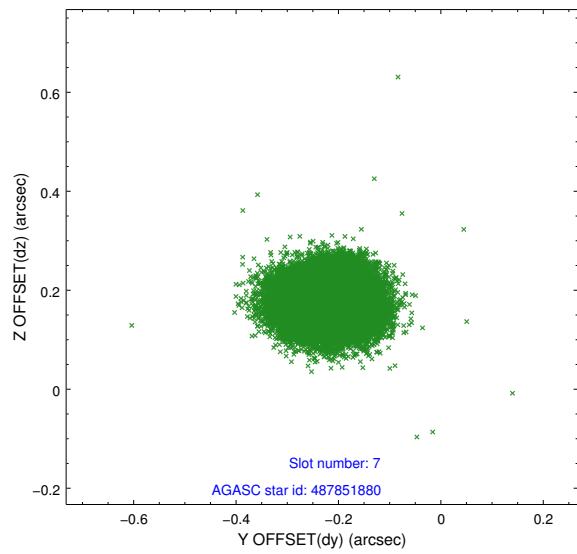
## 2.4.2 Slot 4



### 2.4.3 Slot 5

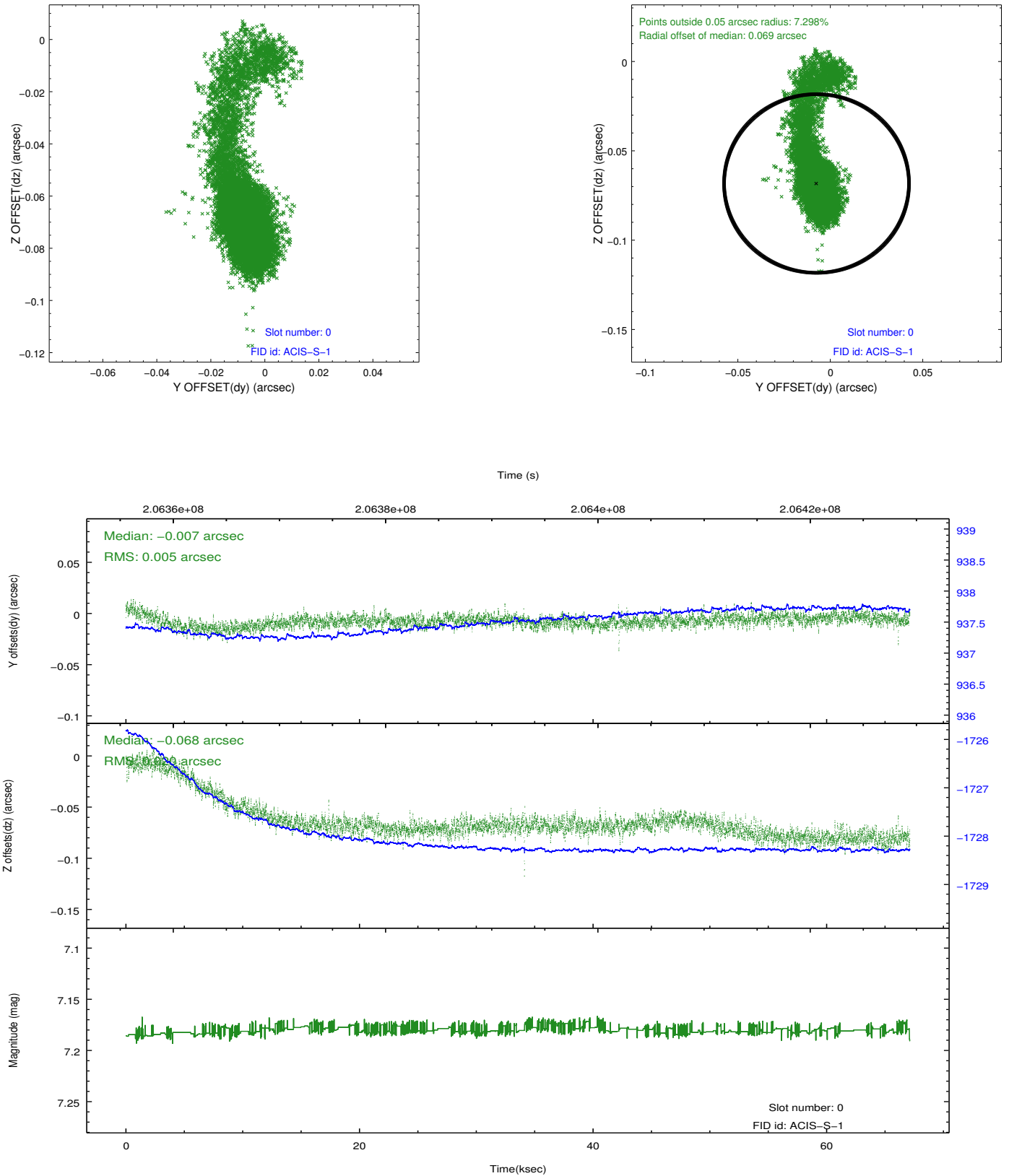


## 2.4.4 Slot 7

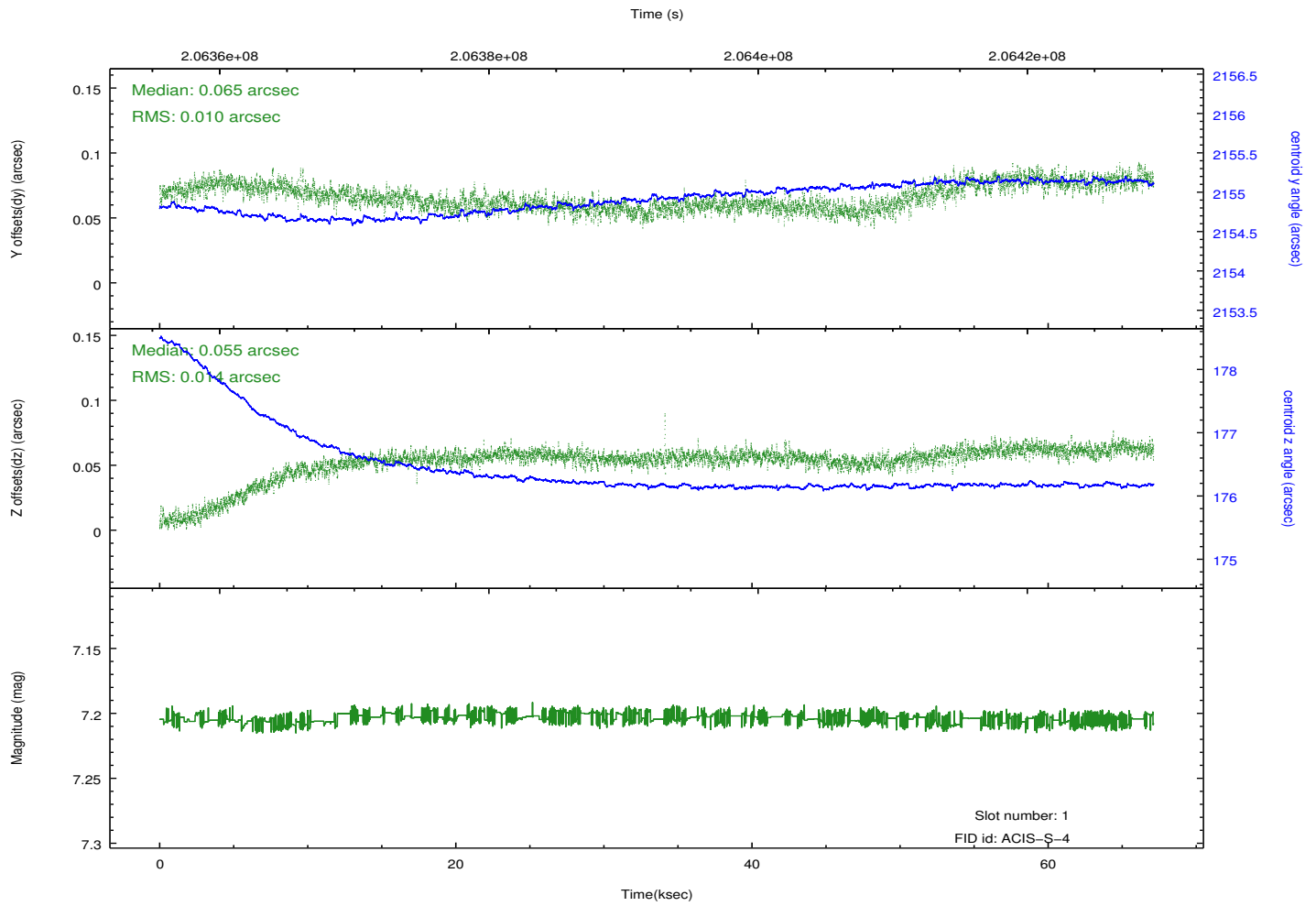
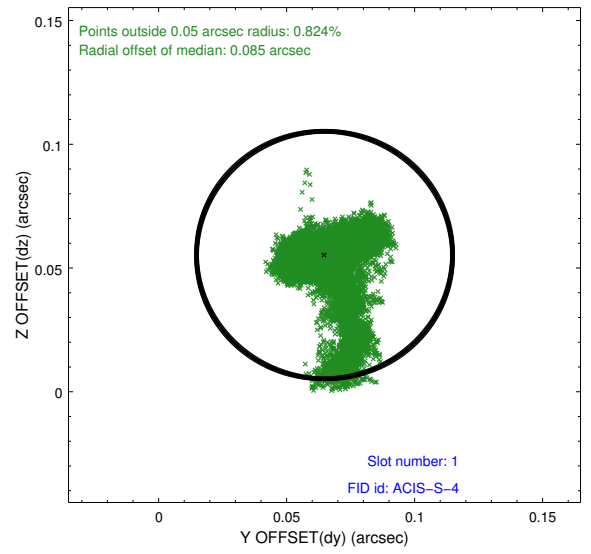
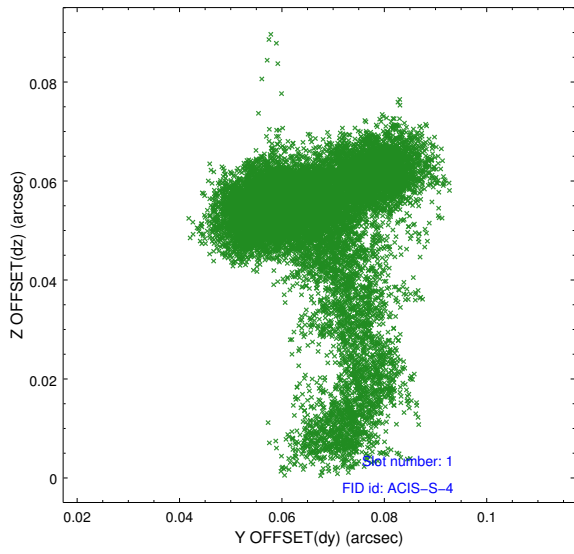


## 2.5 FID Slots

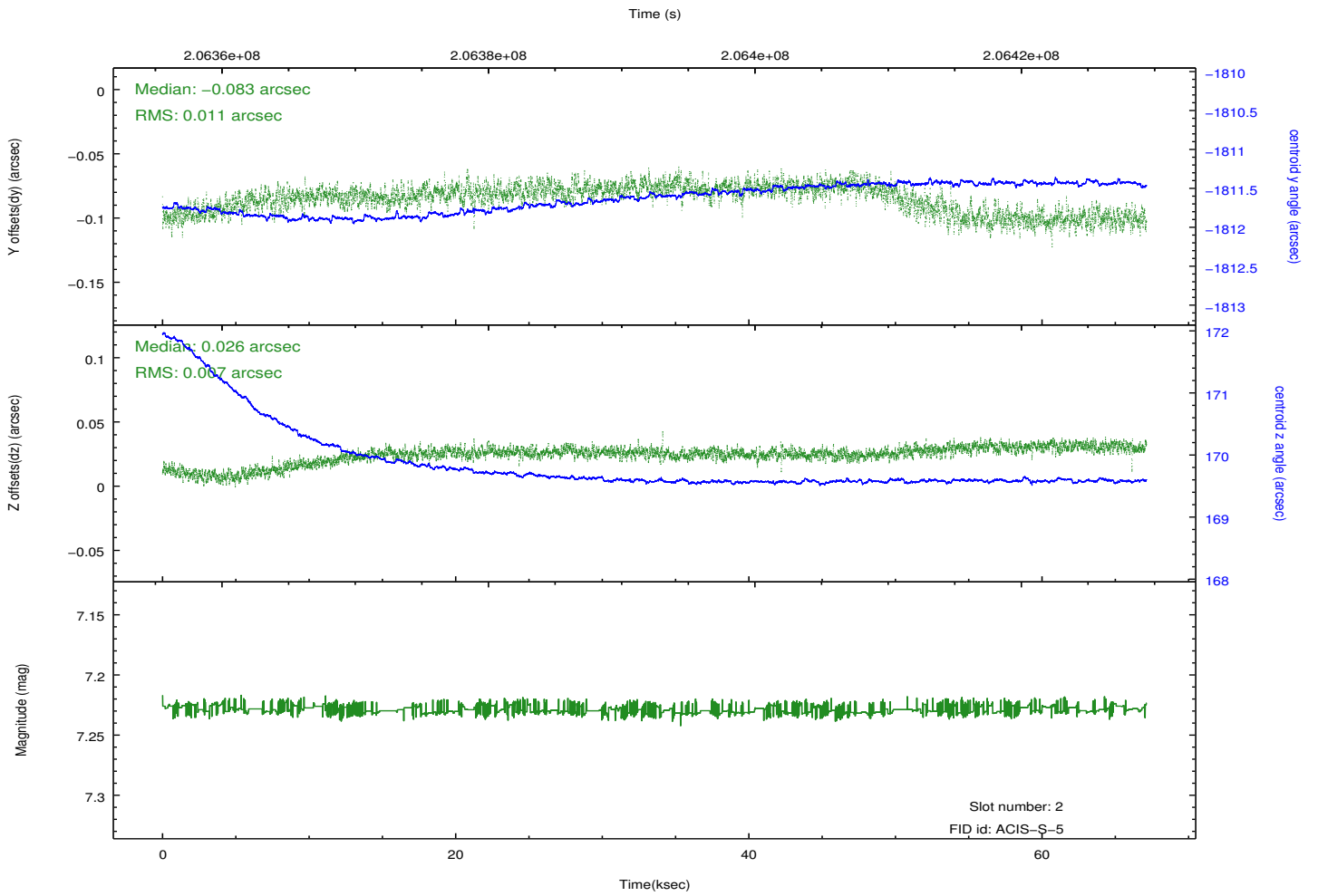
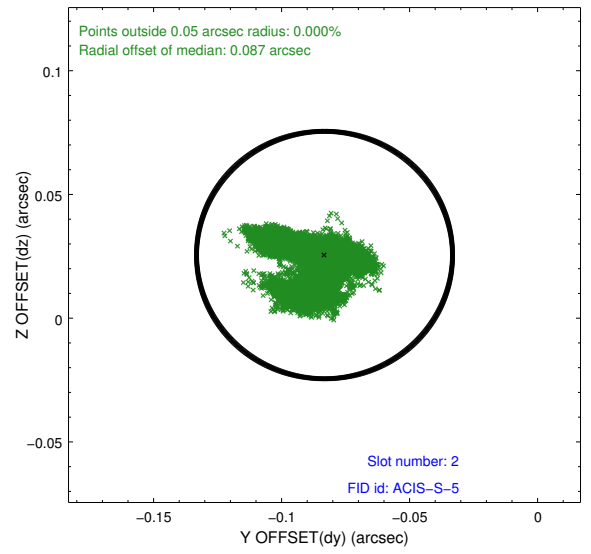
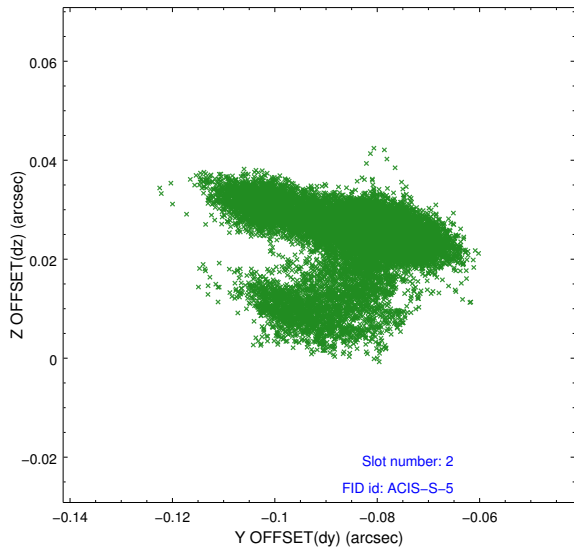
### 2.5.1 Slot 0



## 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)	2013.02.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	67.127

## A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.