

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12530 - L2 Version 4  
Chandra X-Ray Center

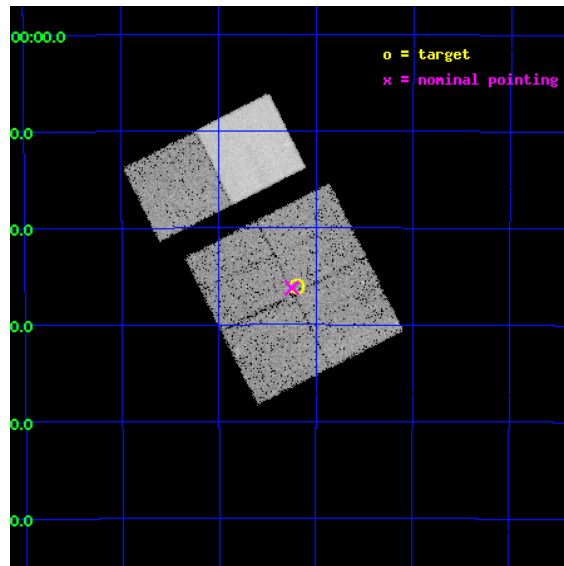
L2 Processing Date : Feb 12 2012

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# 1 Front

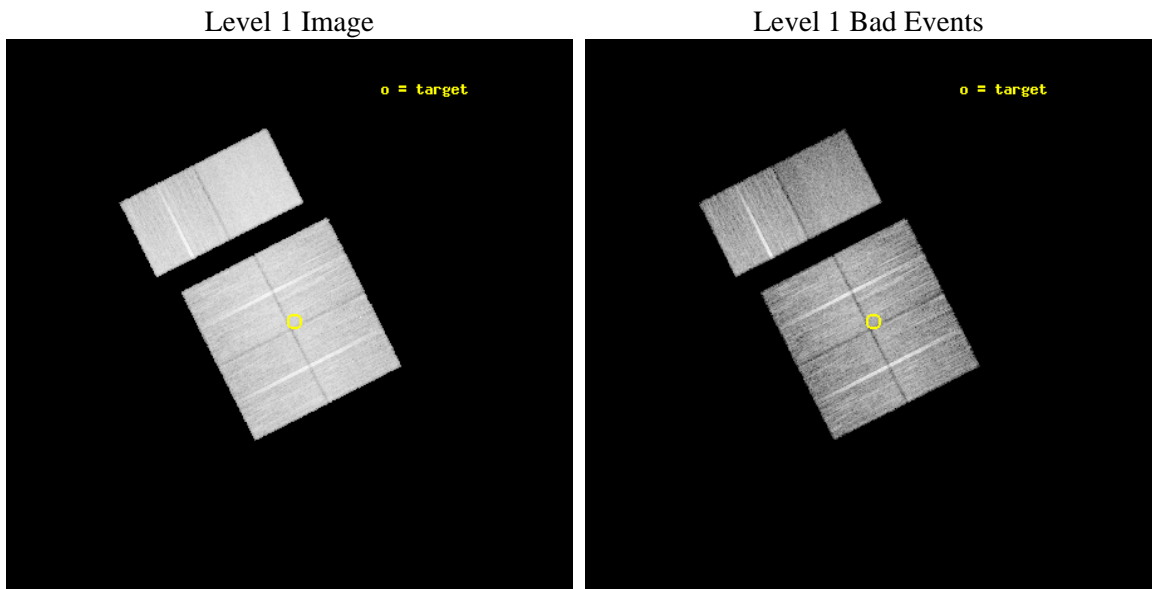
seq_num	401271	Sequence number
obs_id	12530	Observation id
title	Census of the Normal Spiral Arm Region	Proposal title
observer	Dr. John Tomsick	Principal investigator
object	Norma Region	Source name
dtycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	248.549971	Observer's specified target RA [deg]
dec_targ	-47.435345	Observer's specified target Dec [deg]
ra_nom	248.56177580617	Nominal RA [deg]
dec_nom	-47.436667148195	Nominal Dec [deg]
roll_nom	333.21738210576	Nominal Roll [deg]
revision	4	Processing version of data
ontime	19507.19992739	Sum of GTIs [s]
livetime	19260.188016083	Livetime [s]
ontime0	19507.19992739	Sum of GTIs [s]
ontime1	19503.958877146	Sum of GTIs [s]
ontime2	19507.19992739	Sum of GTIs [s]
ontime3	19507.19992739	Sum of GTIs [s]
ontime6	19507.19992739	Sum of GTIs [s]
ontime7	19507.19992739	Sum of GTIs [s]
l2events	135254	Number of level 2 events



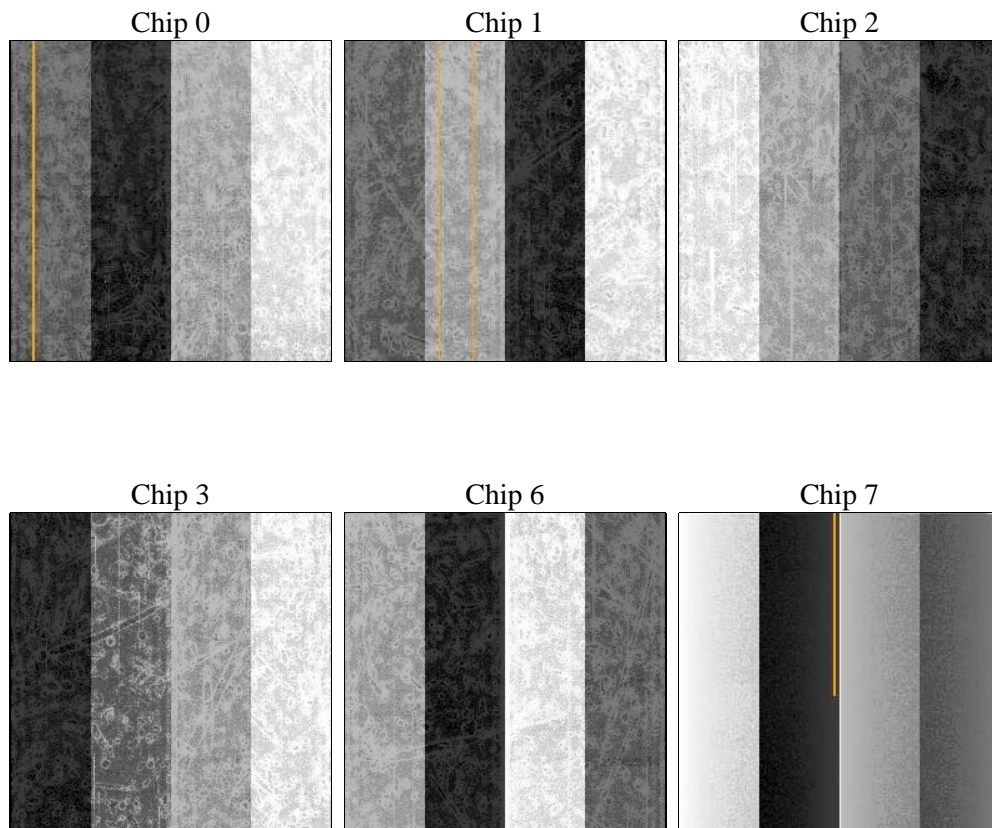
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19750.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	19507.19992739	Sum of GTIs [s]
caldsver	4.4.7	&#160	ontime0	19507.19992739	Sum of GTIs [s]
date	2012-02-12T11:48:26	Date and time of file creation	ontime1	19503.958877146	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	19507.19992739	Sum of GTIs [s]
			ontime3	19507.19992739	Sum of GTIs [s]
			ontime6	19507.19992739	Sum of GTIs [s]
			ontime7	19507.19992739	Sum of GTIs [s]
			l1events	791232	Number of level 1 events

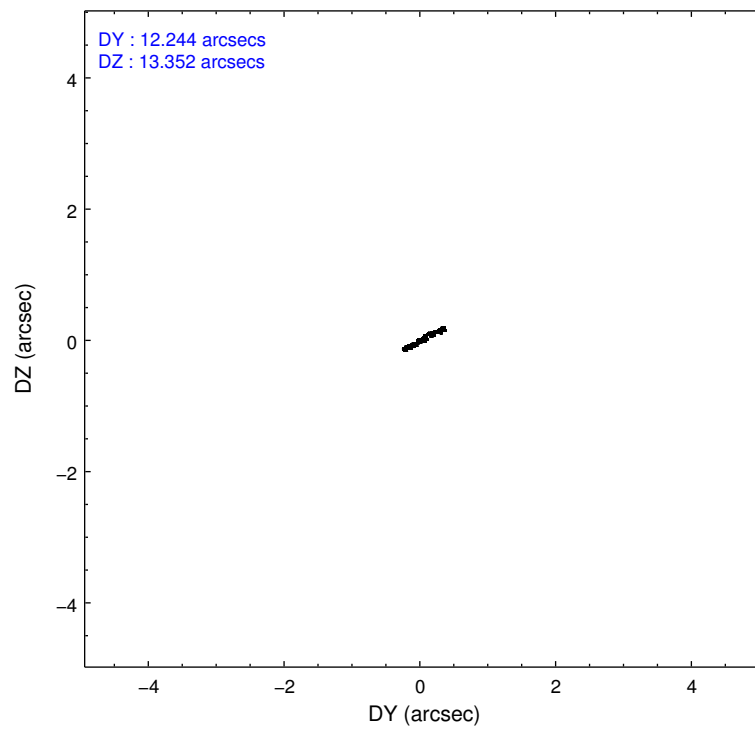
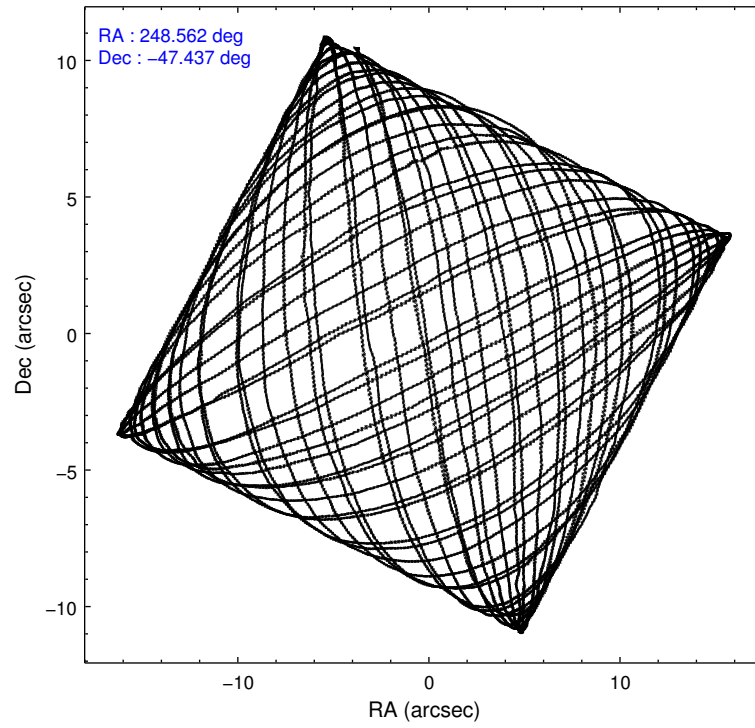
### 2.1.4 Events

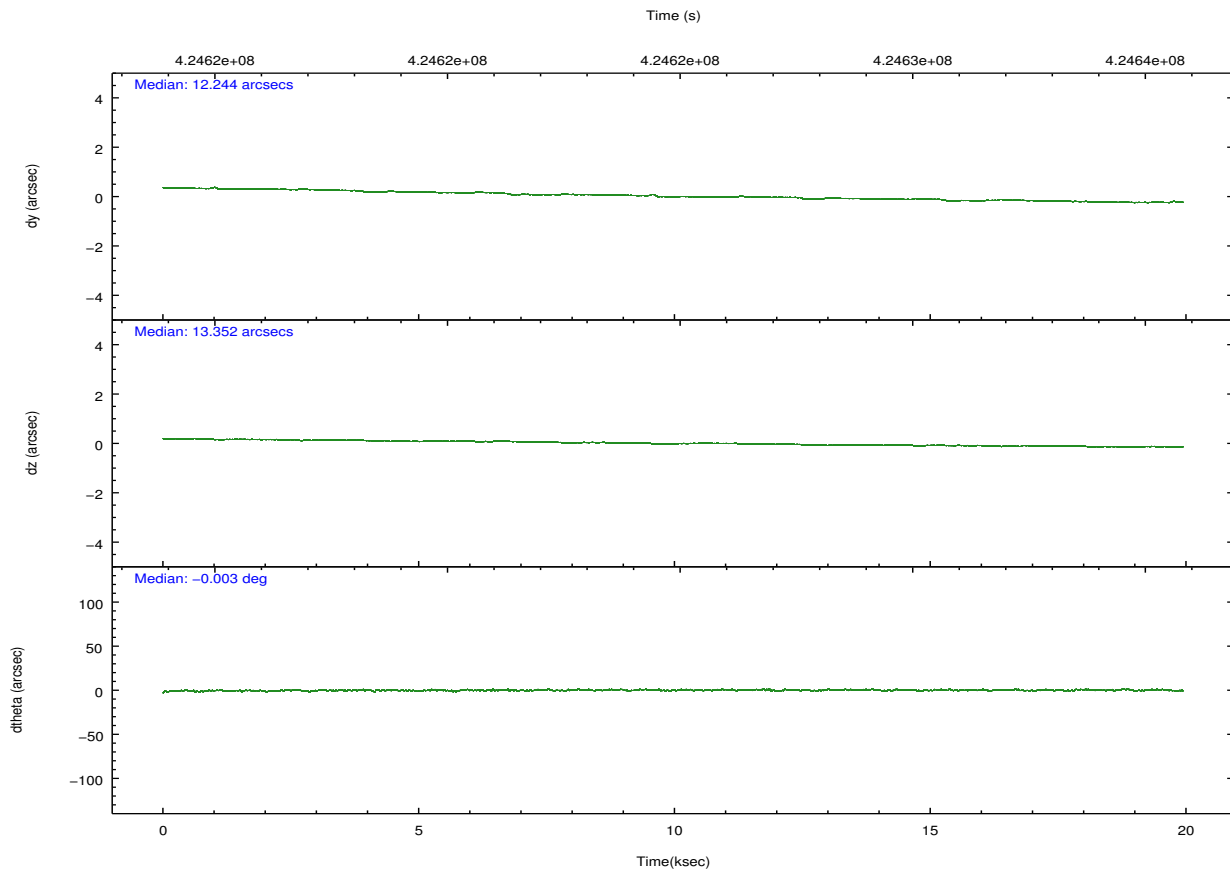
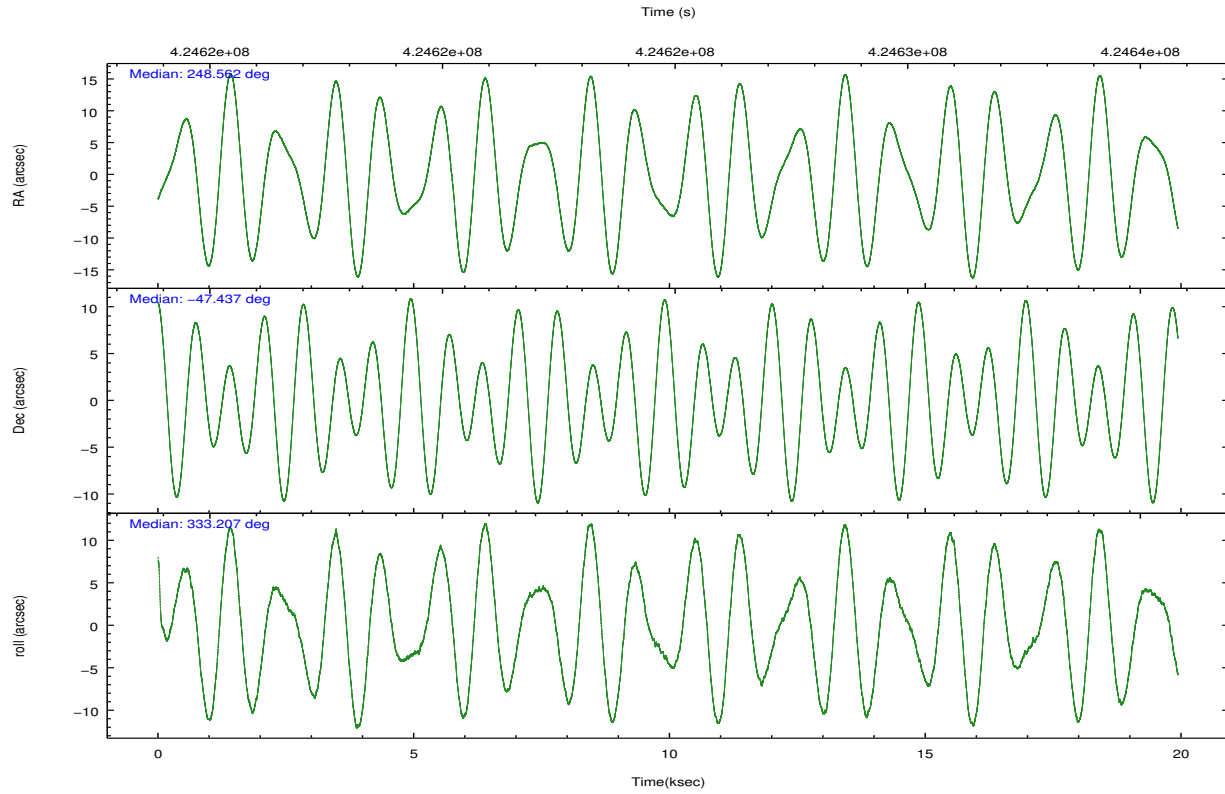
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	115134	120233	131424	127361	138021	159059	grade 0 events	6381	6714	6403	5635	6473	6583
rejected events	99075	103138	115525	113063	121402	87540		5%	5%	4%	4%	4%	4%
rejected %	86%	85%	87%	88%	87%	55%	grade 1 events	67	63	84	87	76	222
								0%	0%	0%	0%	0%	0%
							grade 2 events	3869	3912	3867	3111	3837	15071
								3%	3%	2%	2%	2%	9%
							grade 3 events	1577	1609	1384	1477	1516	6423
								1%	1%	1%	1%	1%	4%
							grade 4 events	1361	1582	1528	1378	1494	6254
								1%	1%	1%	1%	1%	3%
							grade 5 events	5059	5381	4873	5810	5932	16293
								4%	4%	3%	4%	4%	10%
							grade 6 events	2873	3285	2719	2701	3304	37218
								2%	2%	2%	2%	2%	23%
							grade 7 events	93947	97687	110566	107162	115389	70995
								81%	81%	84%	84%	83%	44%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	248.521181	248.5617758061659	CCD I2 on	Y	Y
[deg] Pointing Dec	-47.438331	-47.43666714819536	CCD I3 on	Y	Y
[deg] Pointing Roll	332.978794	333.217382105764	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	424615071.184000	424614695.26834	CCD S5 on	N	N
Observation start date	2011-06-16T12:36:45	2011-06-16T12:31:35	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	424634821.184000	424634954.9069	On-chip summing requested	N	N
Observation end date	2011-06-16T18:05:55	2011-06-16T18:09:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



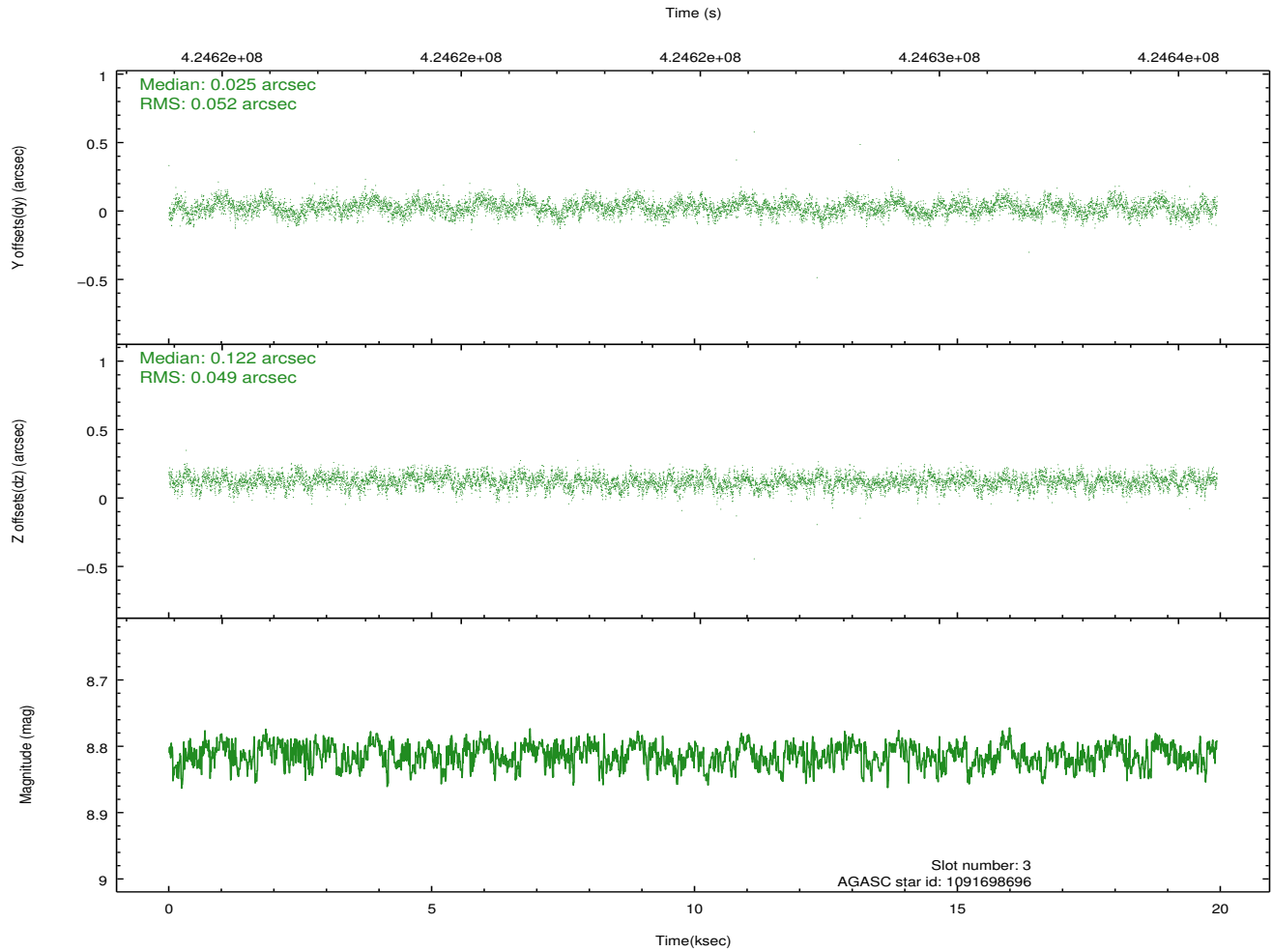
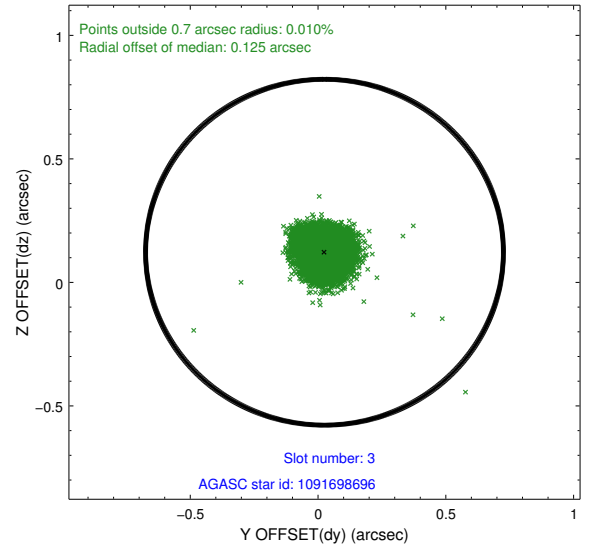
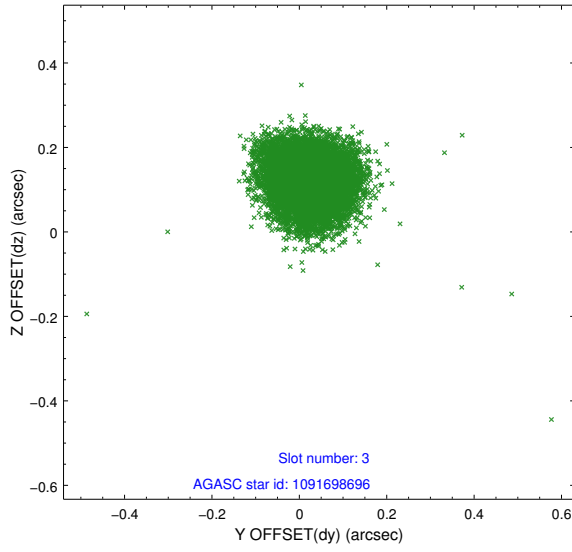


### Slot Statistics

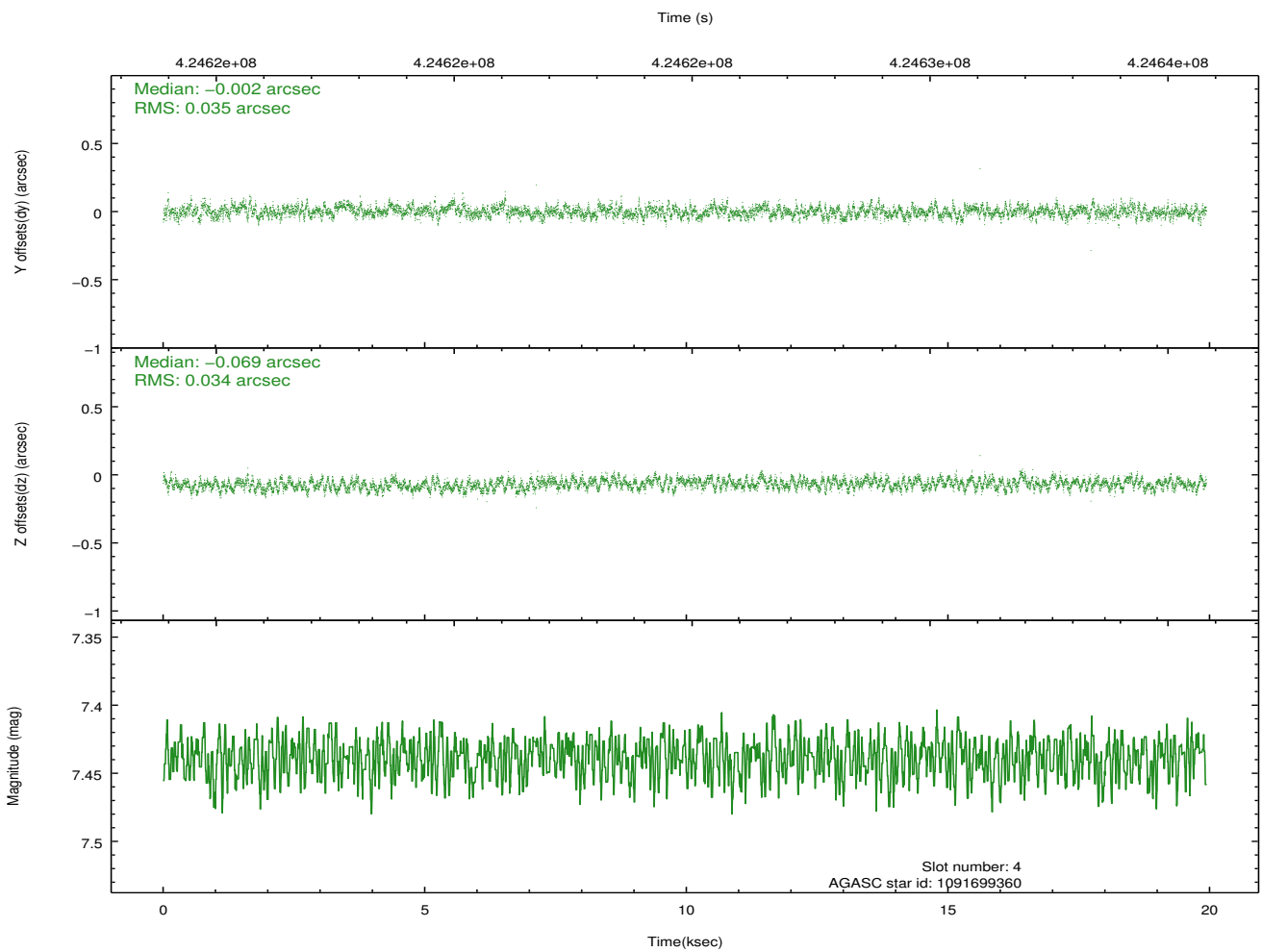
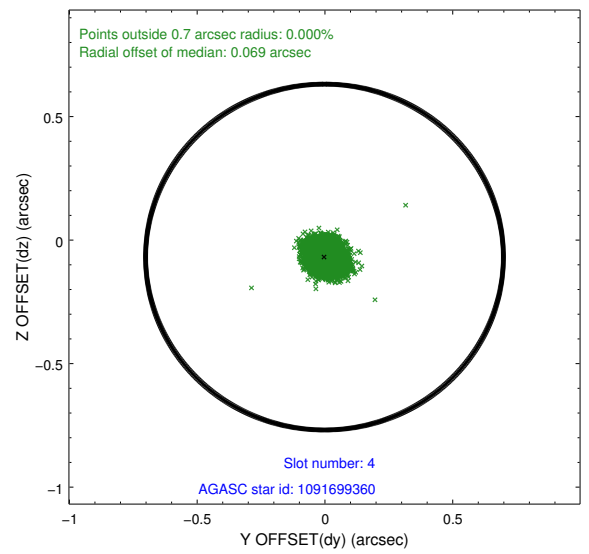
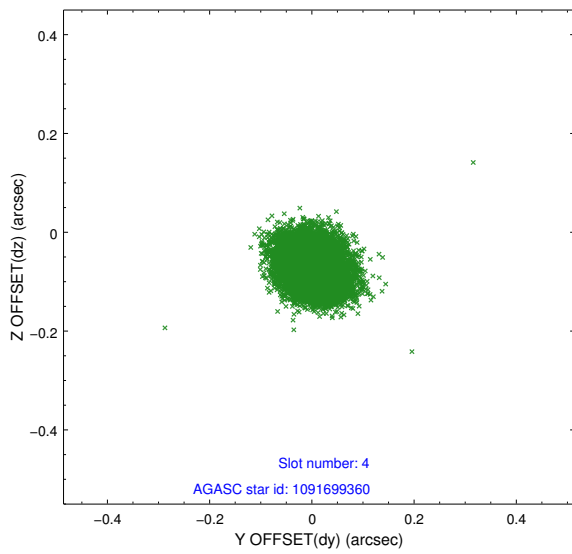
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.13	4862	0.039	0.012	0.013	0.021	0.000000	0.000000	927.31	-836.89
1	FID	ACIS-I-5	7.13	4863	-0.183	0.056	0.009	0.015	0.000000	0.000000	-1820.94	1060.50
2	FID	ACIS-I-6	7.13	4863	0.053	0.000	0.011	0.019	0.000000	0.000000	392.62	1705.20
3	GUIDE	1091698696	8.81	9724	0.025	0.122	0.076	0.121	248.529134	-48.079711	1066.84	-2048.27
4	GUIDE	1091699360	7.44	9726	-0.002	-0.069	0.052	0.083	248.660725	-47.004364	-404.30	1546.73
5	GUIDE	1091705224	9.21	9718	0.057	0.054	0.104	0.163	248.613211	-47.940846	1020.26	-1510.71
6	GUIDE	1091706216	9.03	9717	0.025	0.060	0.099	0.154	248.520013	-47.617493	291.07	-575.94
7	GUIDE	1091709768	7.73	9725	-0.111	-0.172	0.099	0.137	249.435228	-47.706899	2418.14	133.03

## 2.4 Star Slots

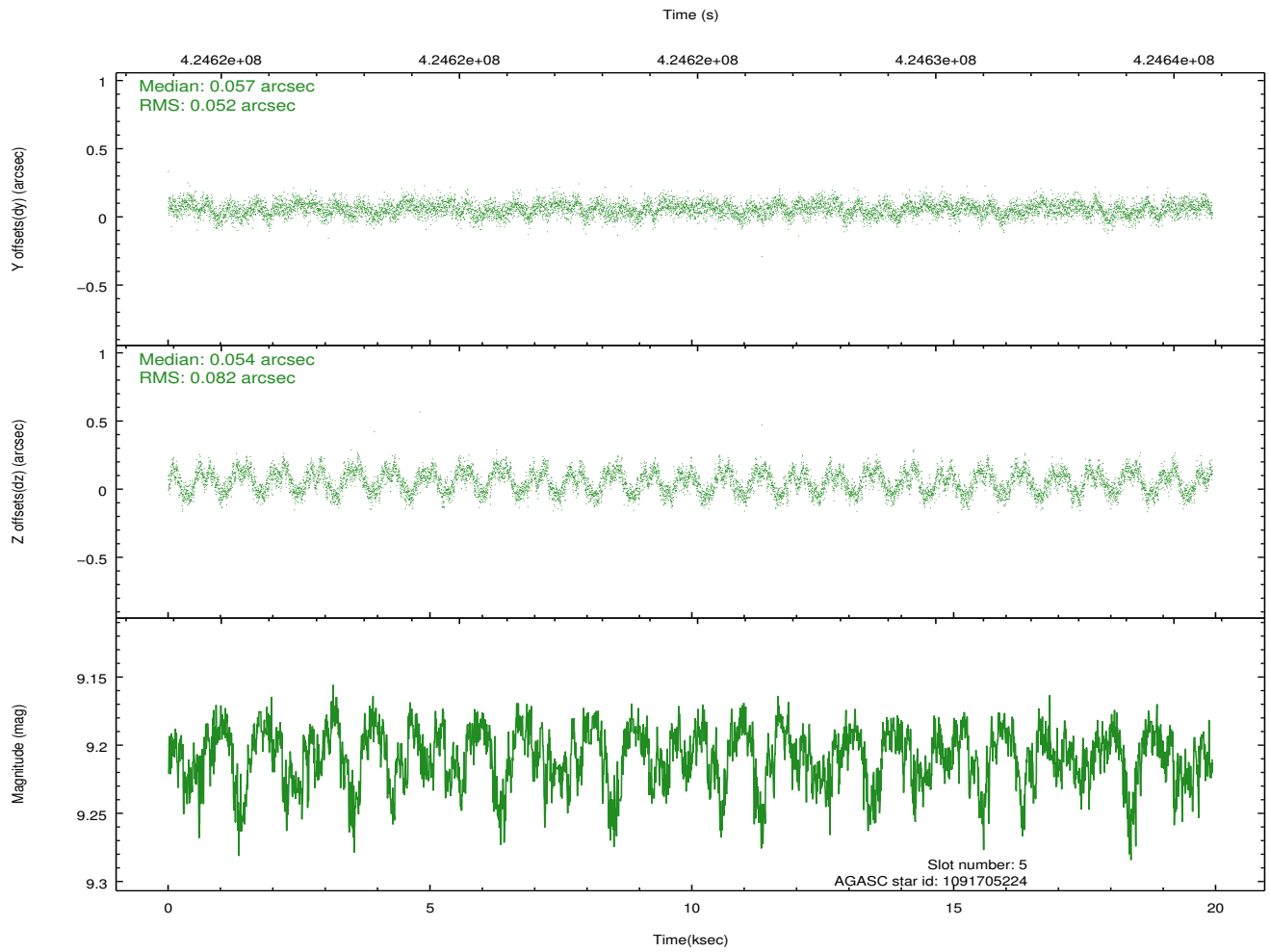
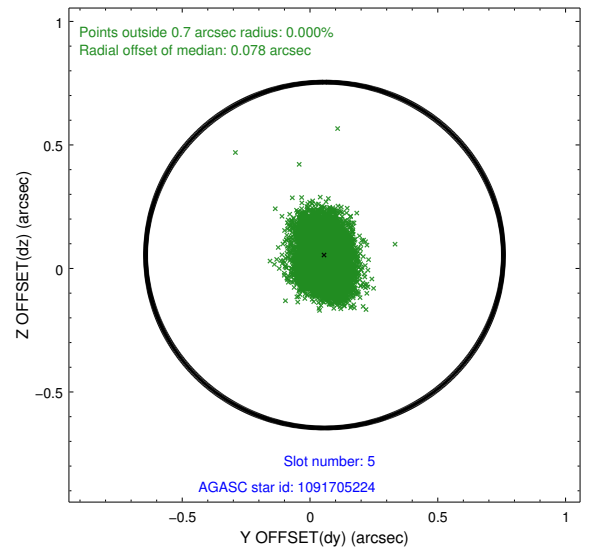
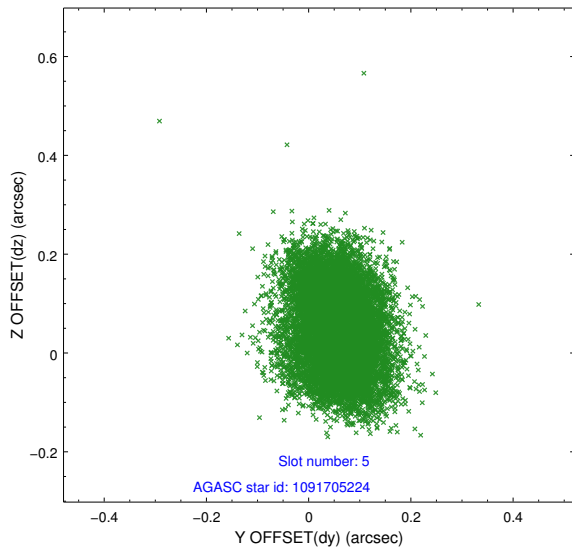
### 2.4.1 Slot 3



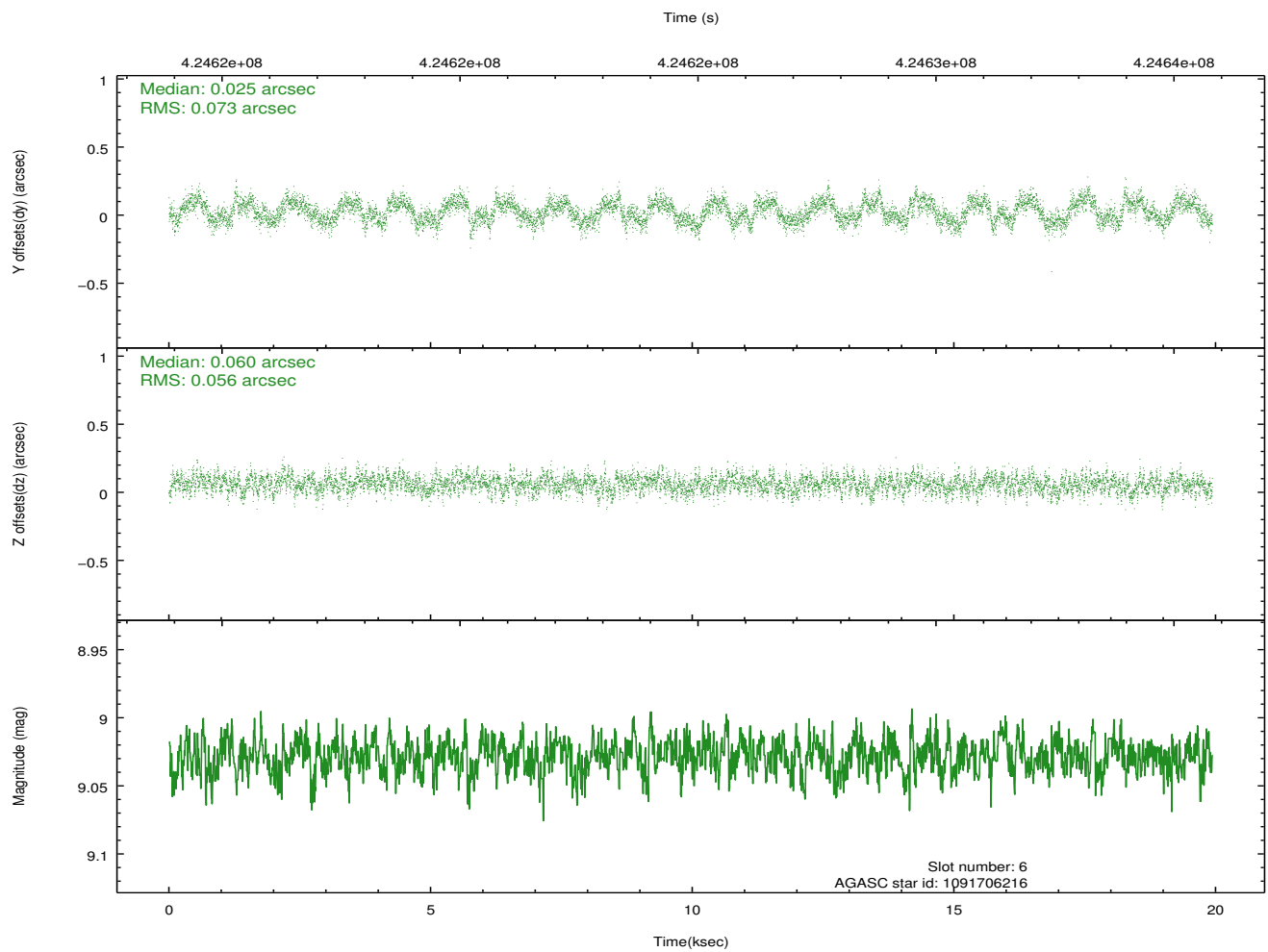
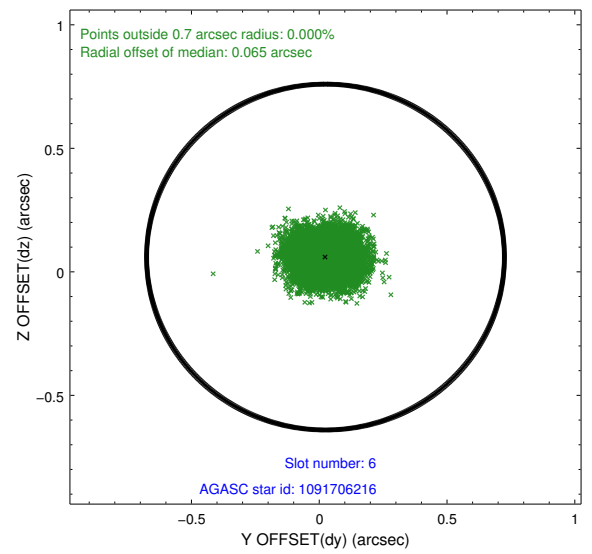
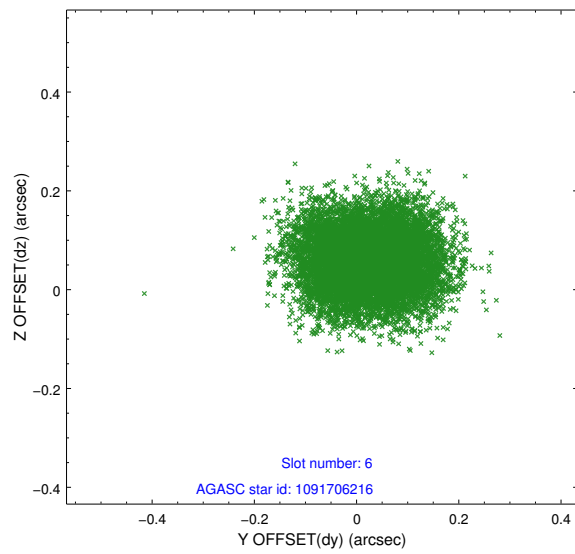
## 2.4.2 Slot 4



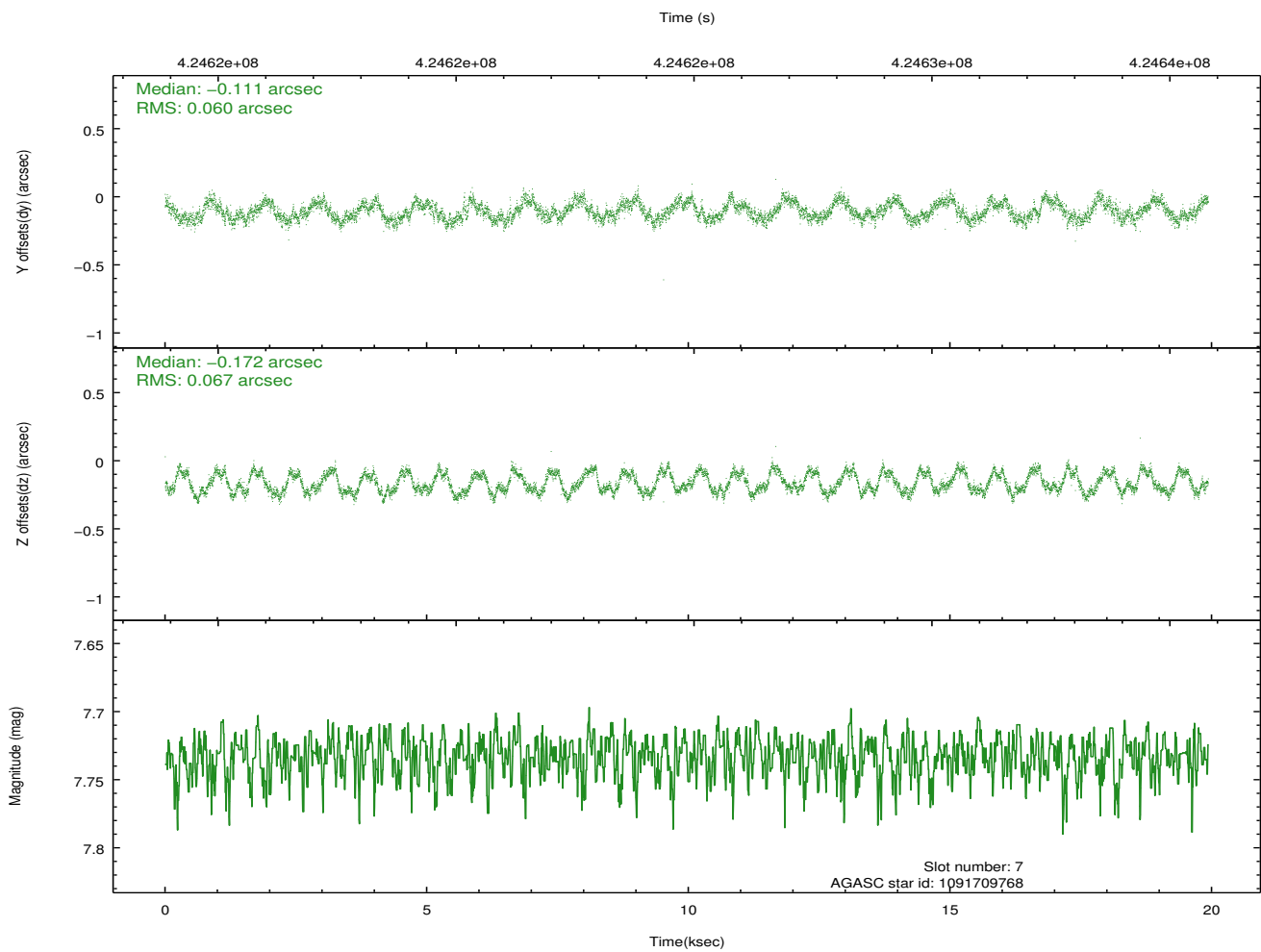
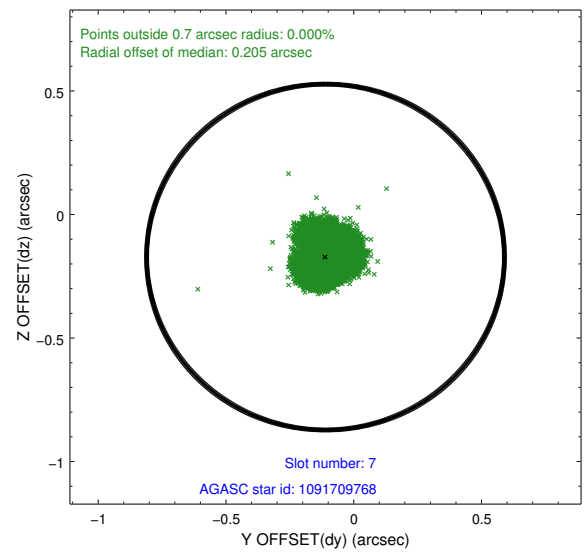
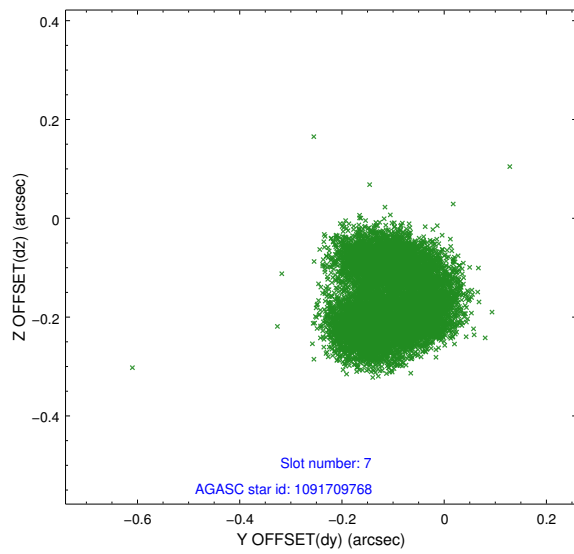
### 2.4.3 Slot 5



## 2.4.4 Slot 6

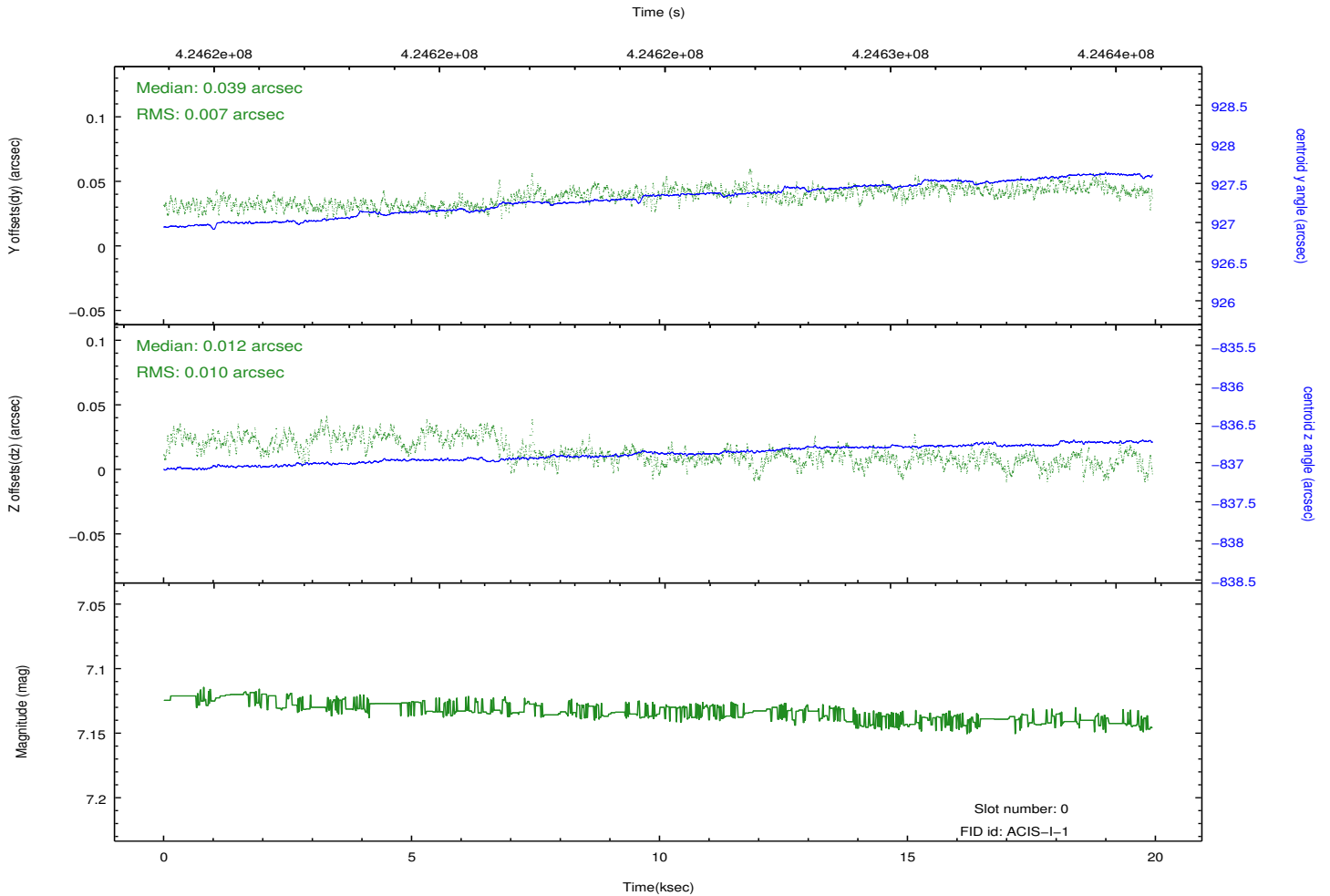
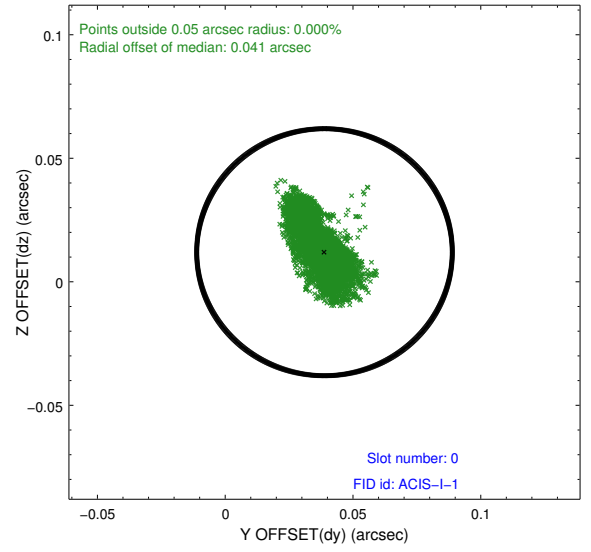
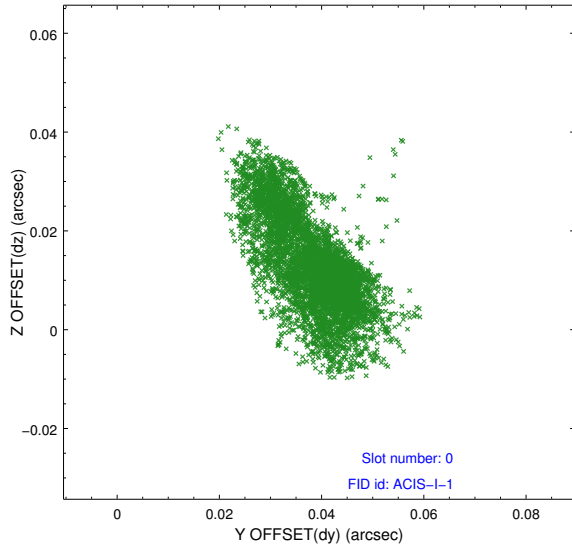


## 2.4.5 Slot 7

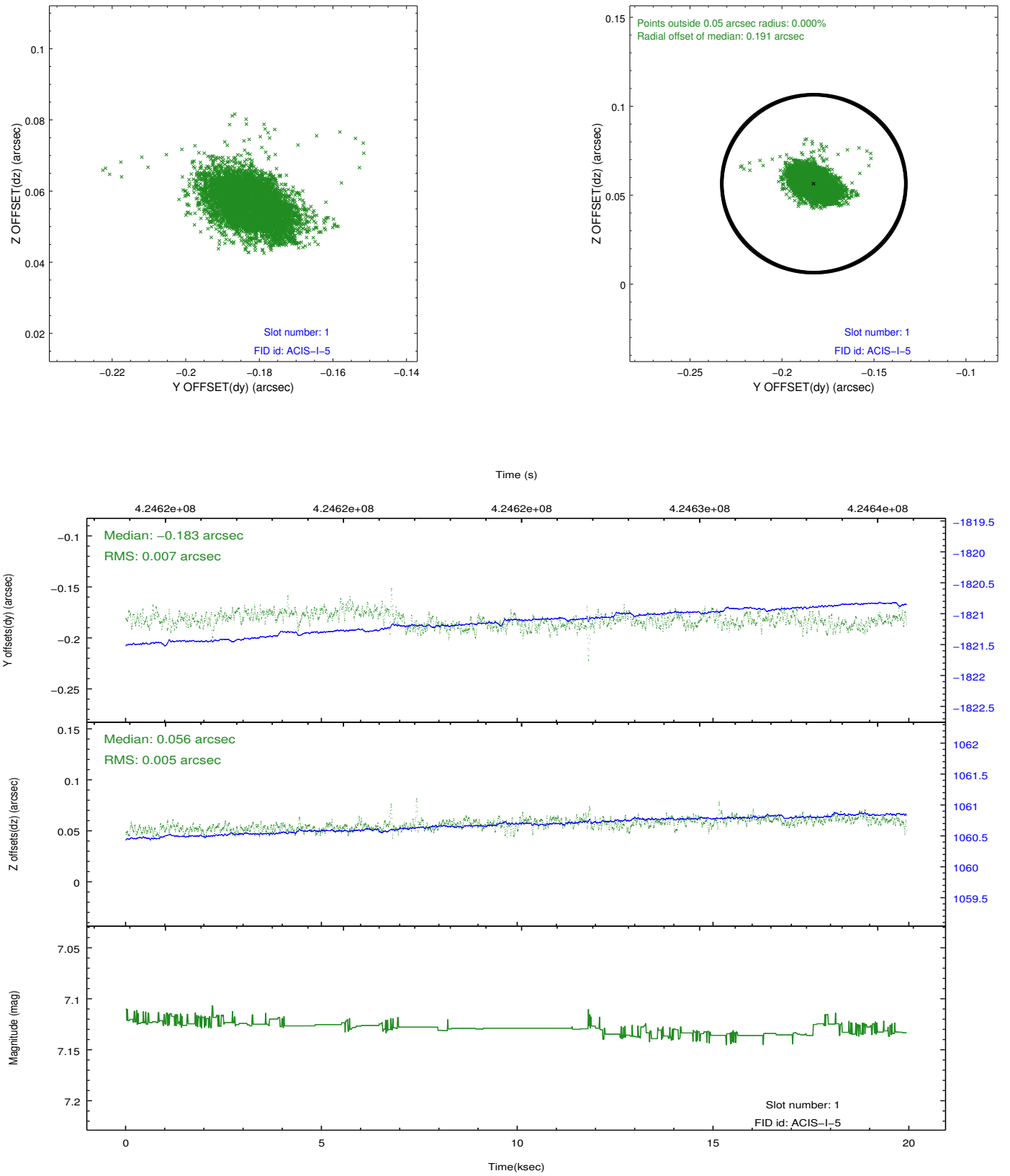


## 2.5 FID Slots

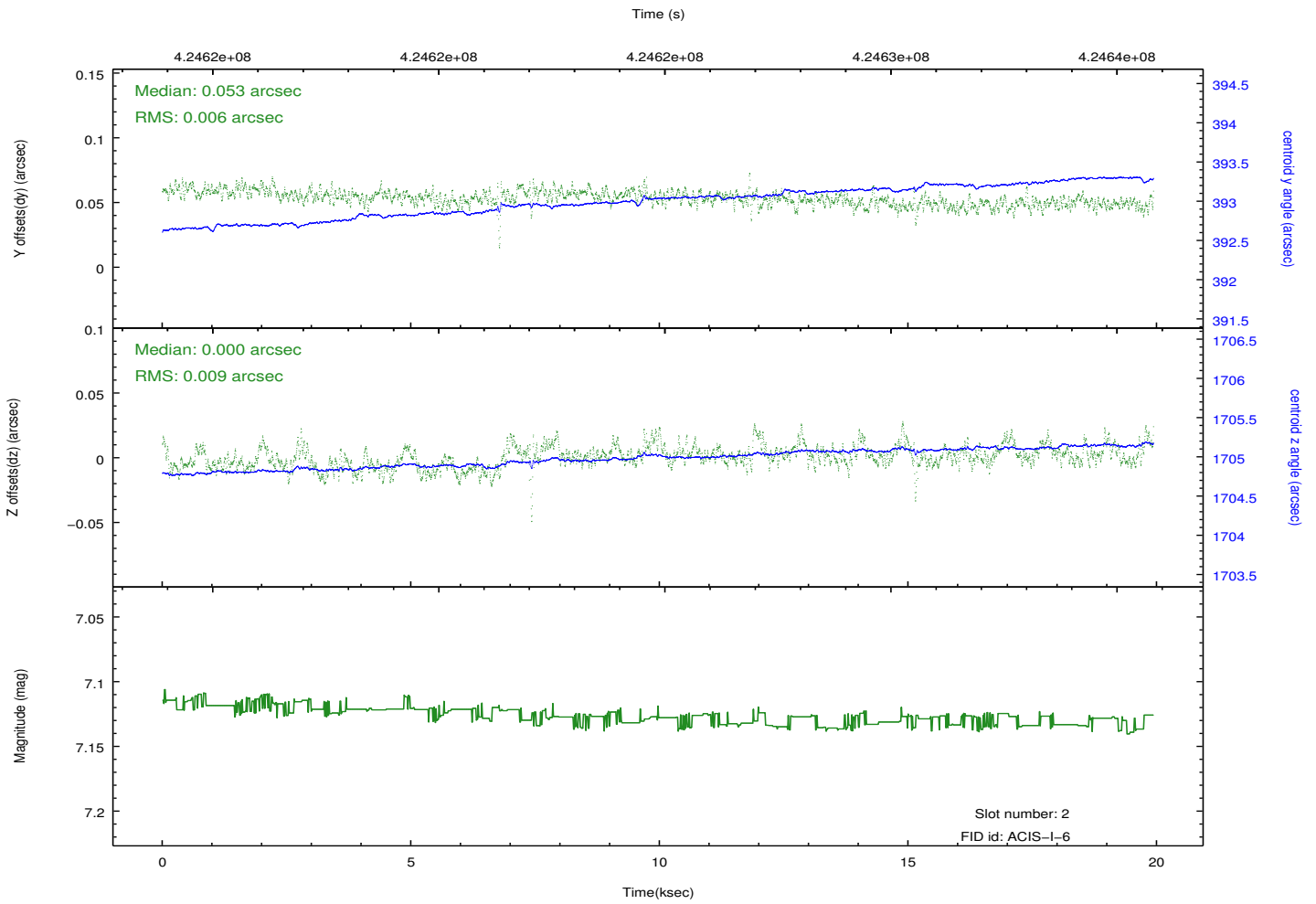
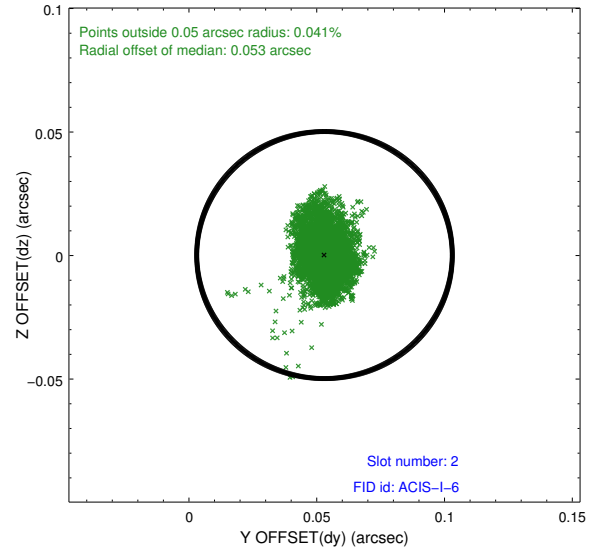
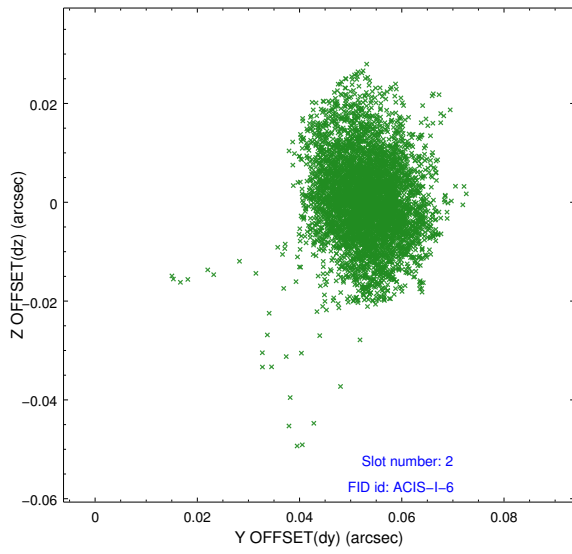
### 2.5.1 Slot 0



## 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)	2012.02.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.50719992739

## A.2 Comments

Joint proposal: NOAO