

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12178 - L2 Version 2  
Chandra X-Ray Center

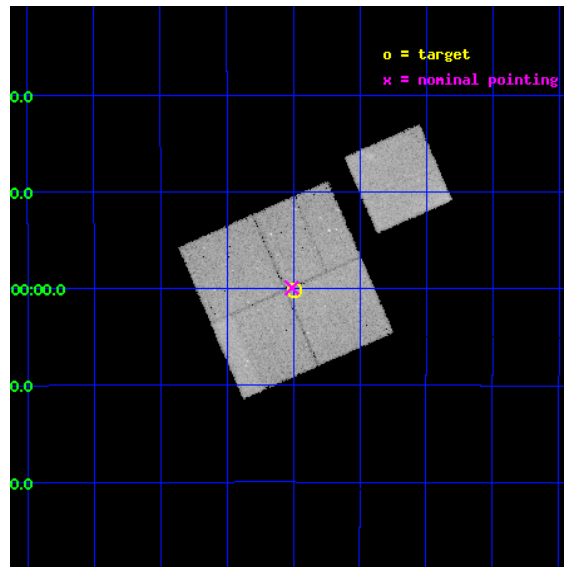
L2 Processing Date : Jul 2 2012

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# 1 Front

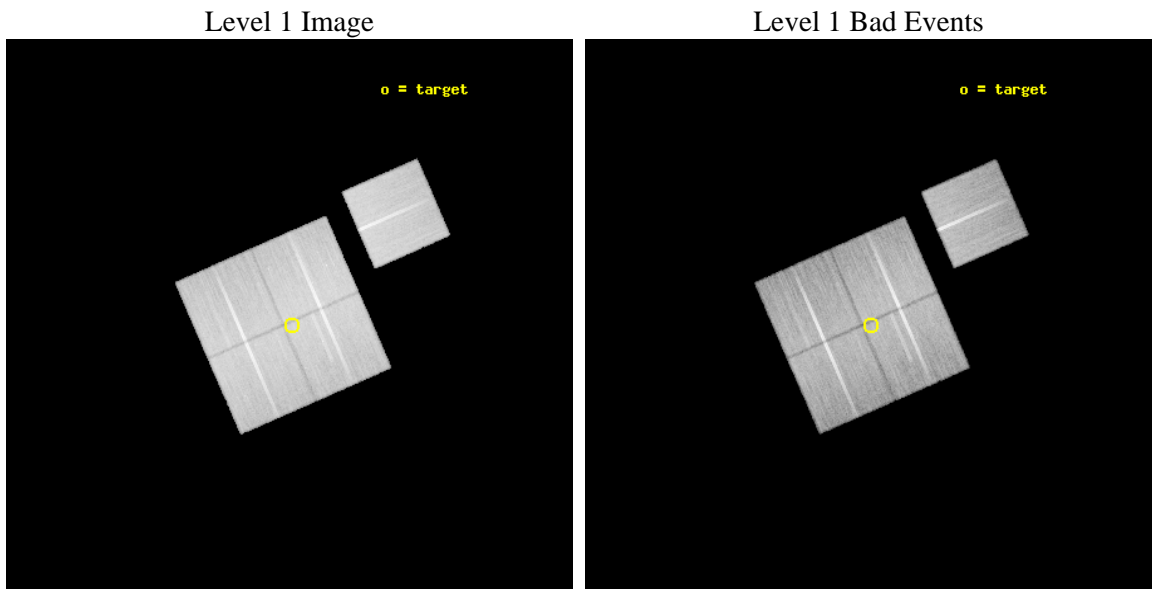
seq_num	800944	Sequence number
obs_id	12178	Observation id
title	The outskirts of Abell 133	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	Abell 133 (B)	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	15.99914	Observer's specified target RA [deg]
dec_targ	-22.00216	Observer's specified target Dec [deg]
ra_nom	16.002765138908	Nominal RA [deg]
dec_nom	-21.998857077191	Nominal Dec [deg]
roll_nom	66.38156545131	Nominal Roll [deg]
revision	2	Processing version of data
ontime	47445.5003649	Sum of GTIs [s]
livetime	46825.589973763	Livetime [s]
ontime0	47439.21831429	Sum of GTIs [s]
ontime1	47445.5003649	Sum of GTIs [s]
ontime2	47432.936273575	Sum of GTIs [s]
ontime3	47445.5003649	Sum of GTIs [s]
ontime6	47439.218304217	Sum of GTIs [s]
l2events	168527	Number of level 2 events



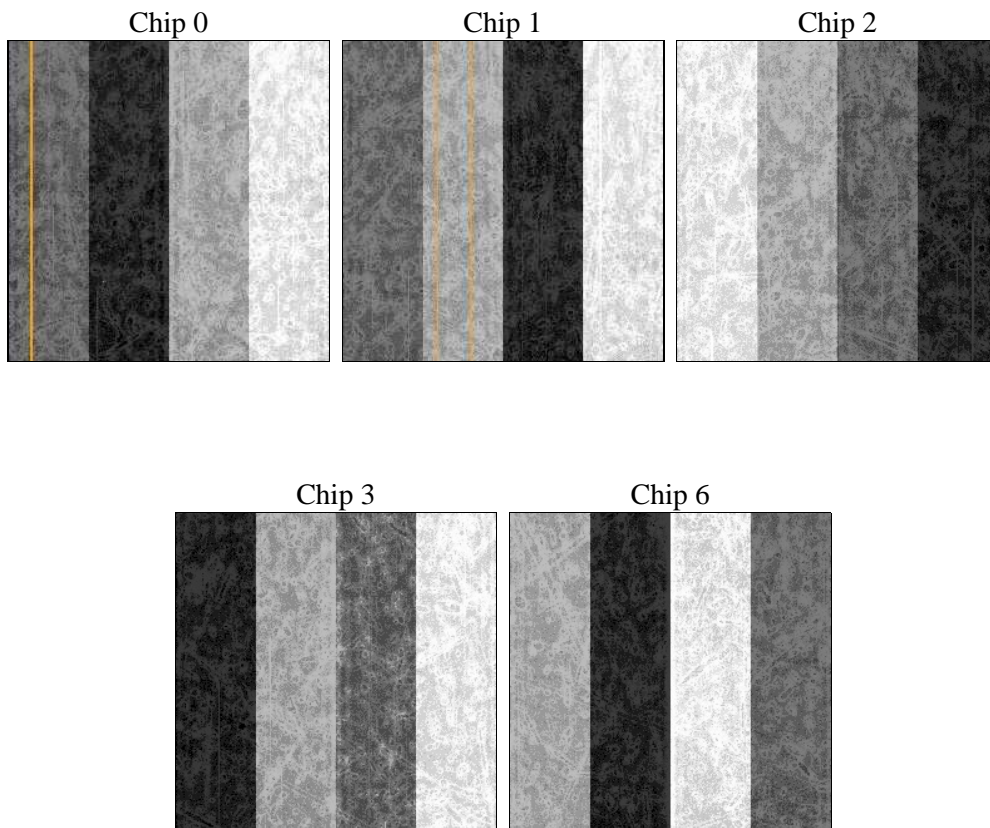
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	47675.283000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	47445.5003649	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime0	47439.21831429	Sum of GTIs [s]
date	2012-07-02T19:29:08	Date and time of file creation	ontime1	47445.5003649	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	47432.936273575	Sum of GTIs [s]
			ontime3	47445.5003649	Sum of GTIs [s]
			ontime6	47439.218304217	Sum of GTIs [s]
			l1events	1738532	Number of level 1 events

### 2.1.4 Events

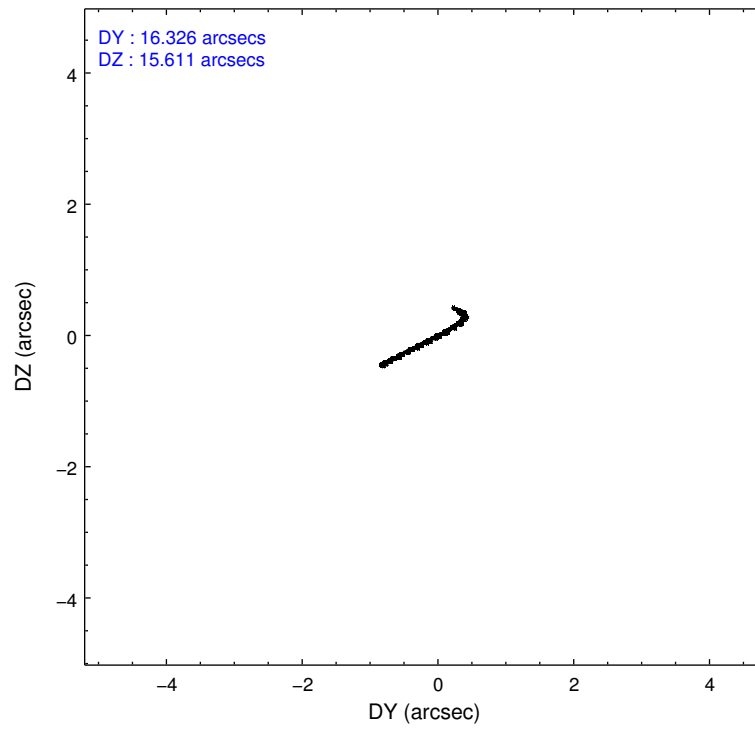
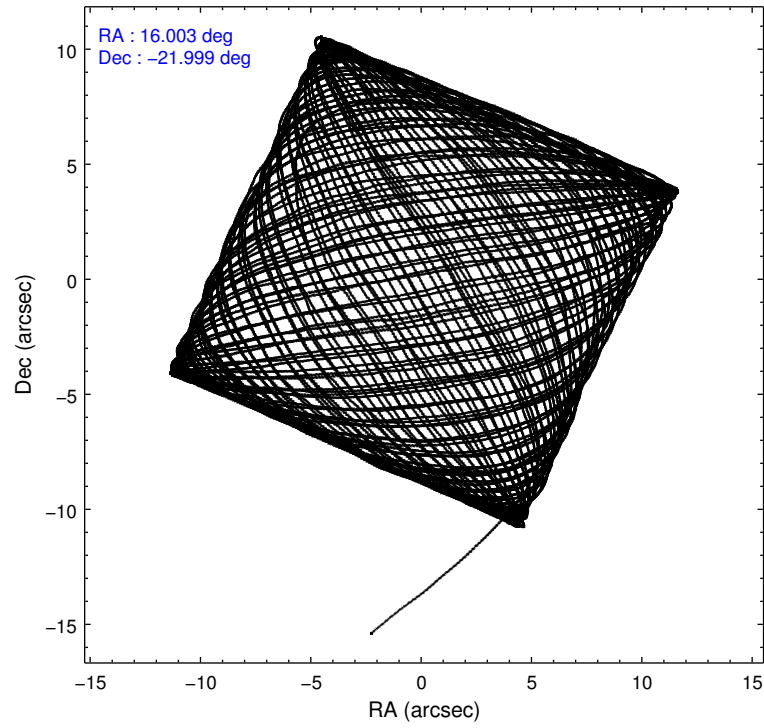
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	329482	328681	372431	346545	361393
rejected events	291237	286063	333840	310212	316458
rejected %	88%	87%	89%	89%	87%

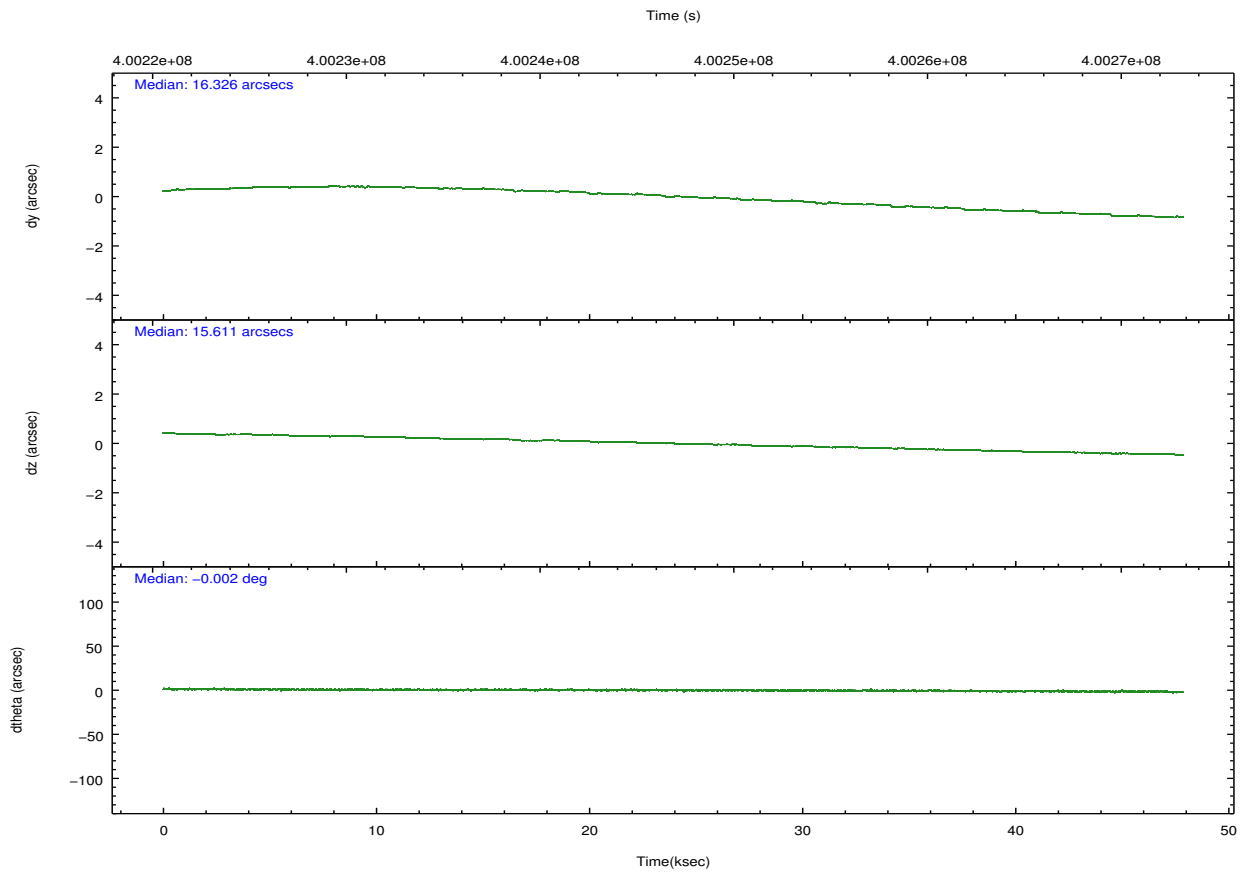
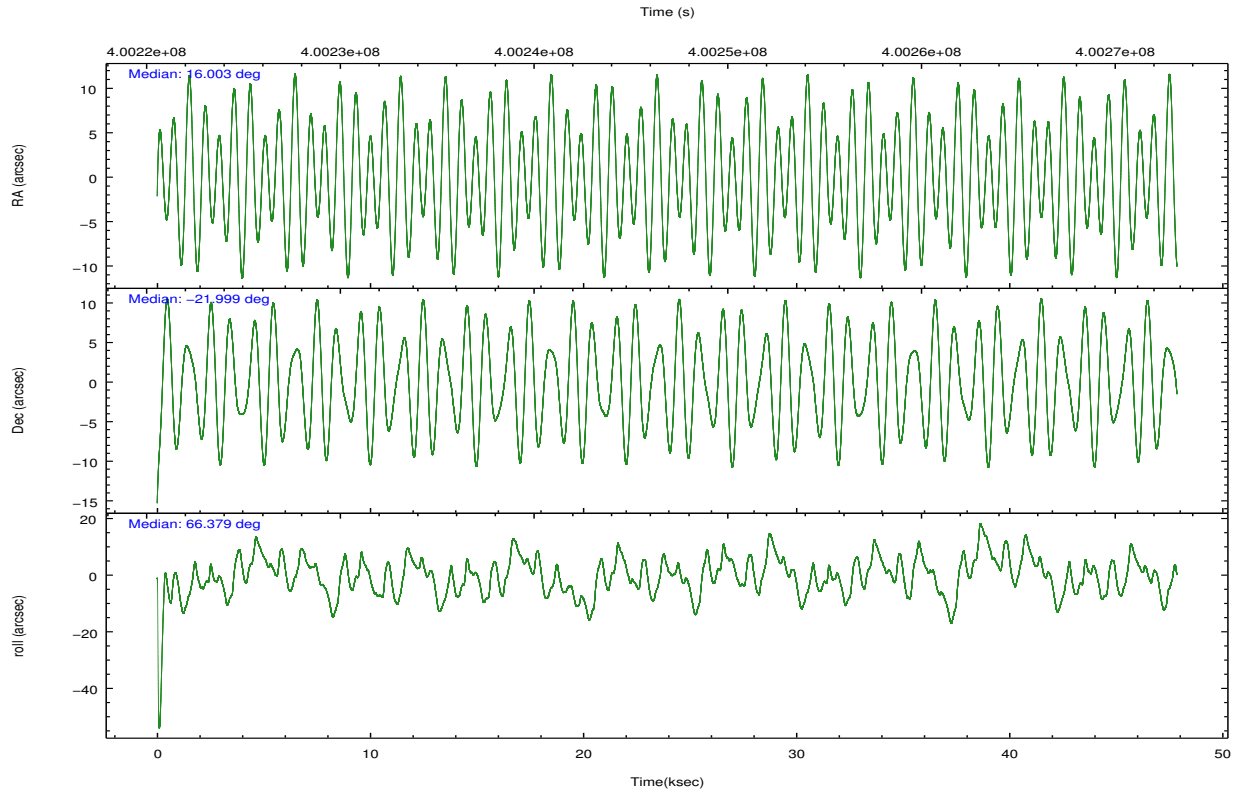
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	13167	15037	14353	13080	18451
	3%	4%	3%	3%	5%
grade 1 events	208	204	208	223	196
	0%	0%	0%	0%	0%
grade 2 events	9369	9980	9396	8092	9298
	2%	3%	2%	2%	2%
grade 3 events	4218	4429	3900	3906	4376
	1%	1%	1%	1%	1%
grade 4 events	3811	4344	3874	3934	4227
	1%	1%	1%	1%	1%
grade 5 events	14073	15302	13370	16108	15591
	4%	4%	3%	4%	4%
grade 6 events	7687	8830	7070	7326	8585
	2%	2%	1%	2%	2%
grade 7 events	276949	270555	320260	293876	300669
	84%	82%	85%	84%	83%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	16.006172	16.00276513890848	CCD I2 on	Y	Y
[deg] Pointing Dec	-22.026168	-21.99885707719073	CCD I3 on	Y	Y
[deg] Pointing Roll	66.174142	66.38156545130963	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	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5899487761303	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.002504226799430853	CCD S4 on	N	N
[s] Observation start time (MET)	400223114.184000	40022350.2951	CCD S5 on	N	N
Observation start date	2010-09-07T05:04:08	2010-09-07T04:52:30	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	400270789.184000	400271026.5226	On-chip summing requested	N	N
Observation end date	2010-09-07T18:18:43	2010-09-07T18:23:46	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



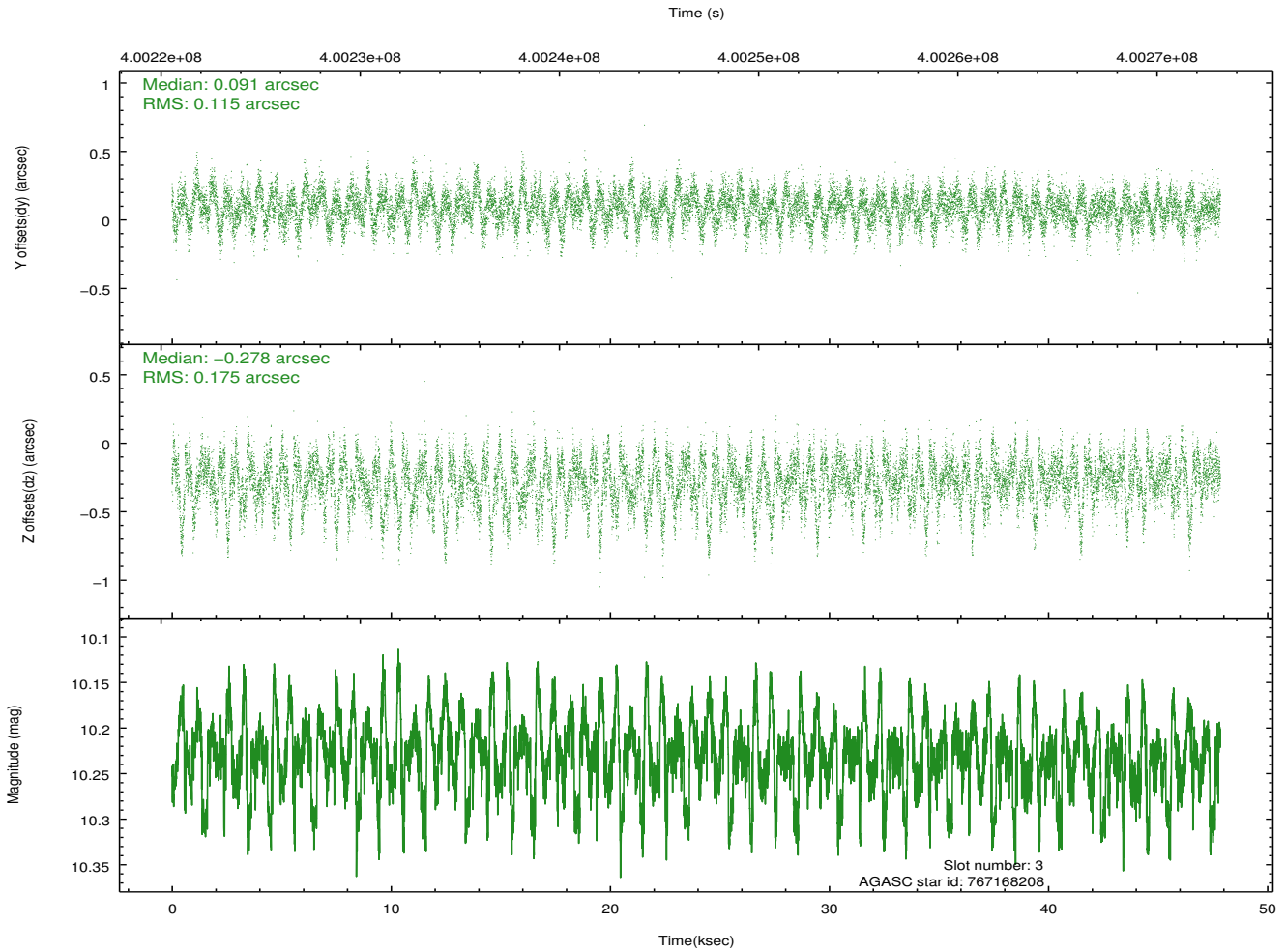
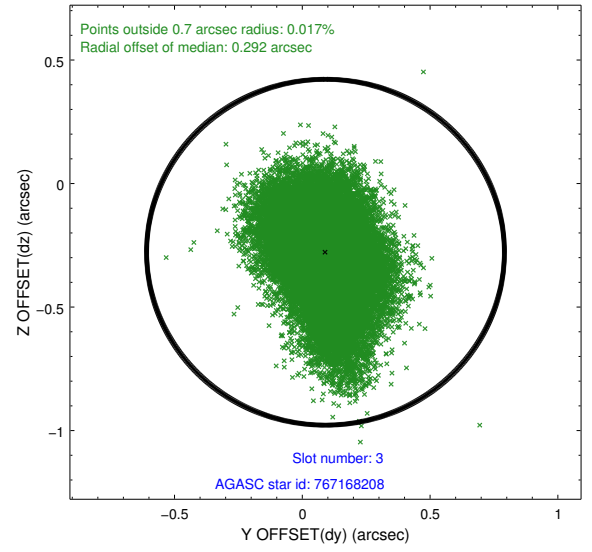
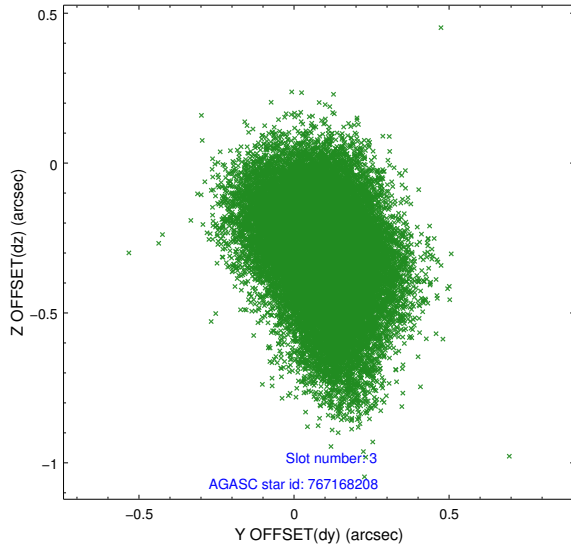


### Slot Statistics

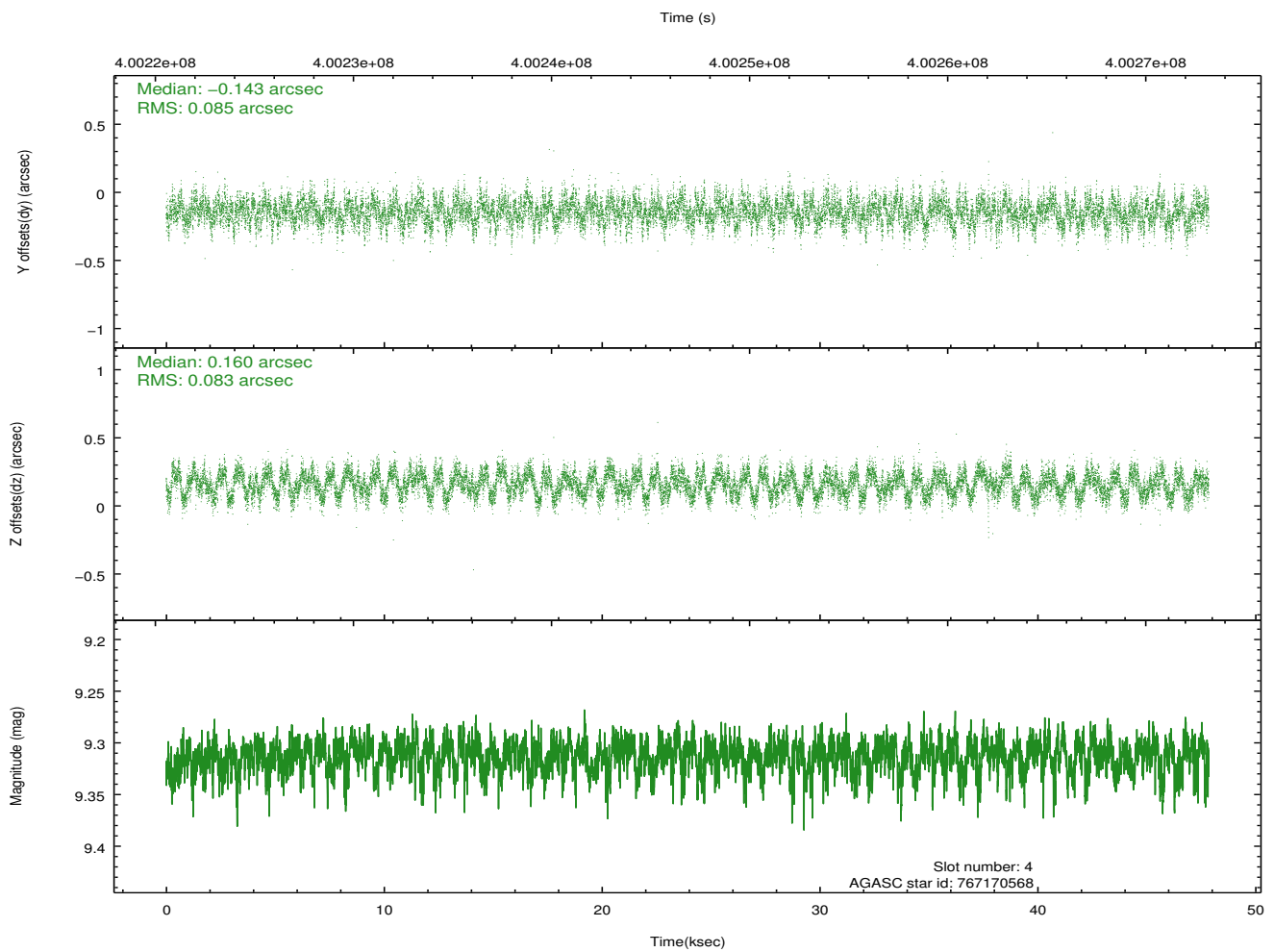
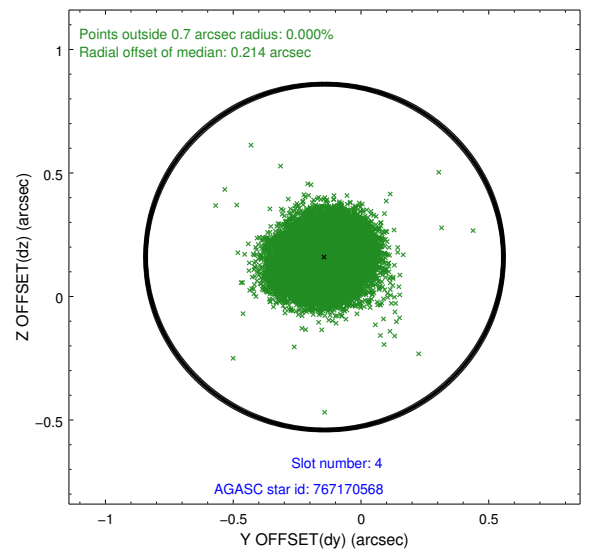
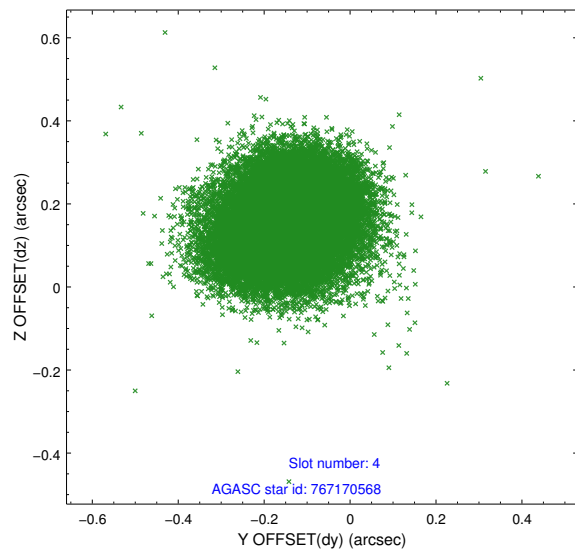
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.07	11670	0.041	-0.027	0.018	0.030	0.000000	0.000000	923.21	-839.19
1	FID	ACIS-I-5	7.06	11671	-0.218	0.039	0.011	0.017	0.000000	0.000000	-1825.16	1058.36
2	FID	ACIS-I-6	7.08	11672	0.086	0.058	0.010	0.019	0.000000	0.000000	388.81	1702.88
3	GUIDE	767168208	10.23	23292	0.091	-0.278	0.218	0.368	16.688182	-22.019098	938.86	-2074.13
4	GUIDE	767170568	9.31	23178	-0.143	0.160	0.128	0.199	16.585715	-21.675711	1933.78	-1265.95
5	GUIDE	767171568	10.01	23310	-0.087	0.060	0.201	0.346	16.035890	-22.108834	-231.66	-210.84
6	GUIDE	841745408	8.65	23334	-0.018	-0.055	0.090	0.147	16.162435	-22.504118	-1363.73	-1170.69
7	GUIDE	767171896	10.33	23293	0.150	0.139	0.210	0.326	16.079513	-22.498908	-1457.50	-910.74

## 2.4 Star Slots

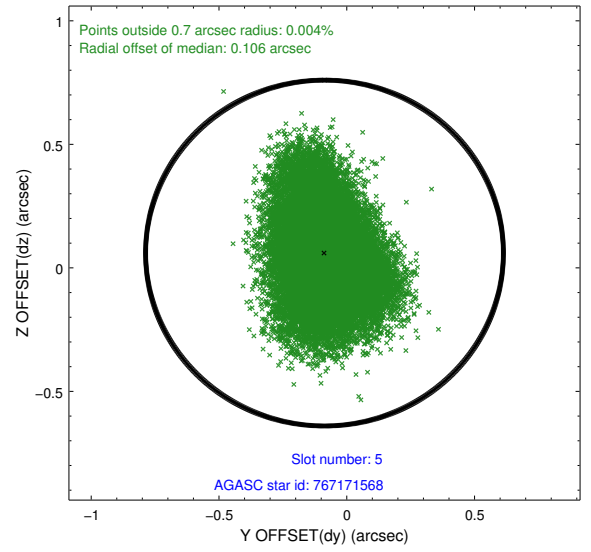
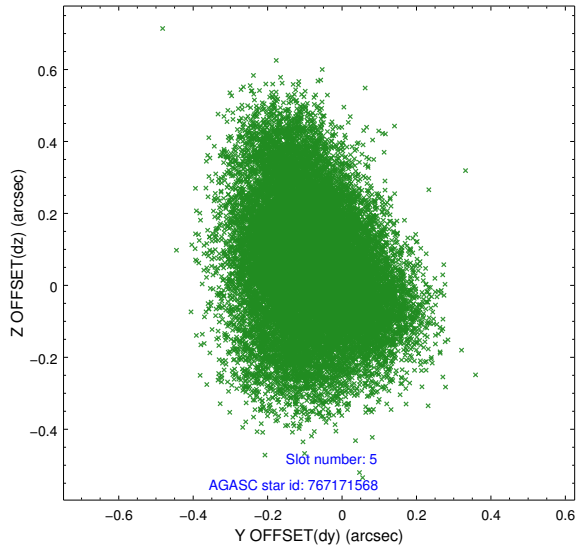
### 2.4.1 Slot 3



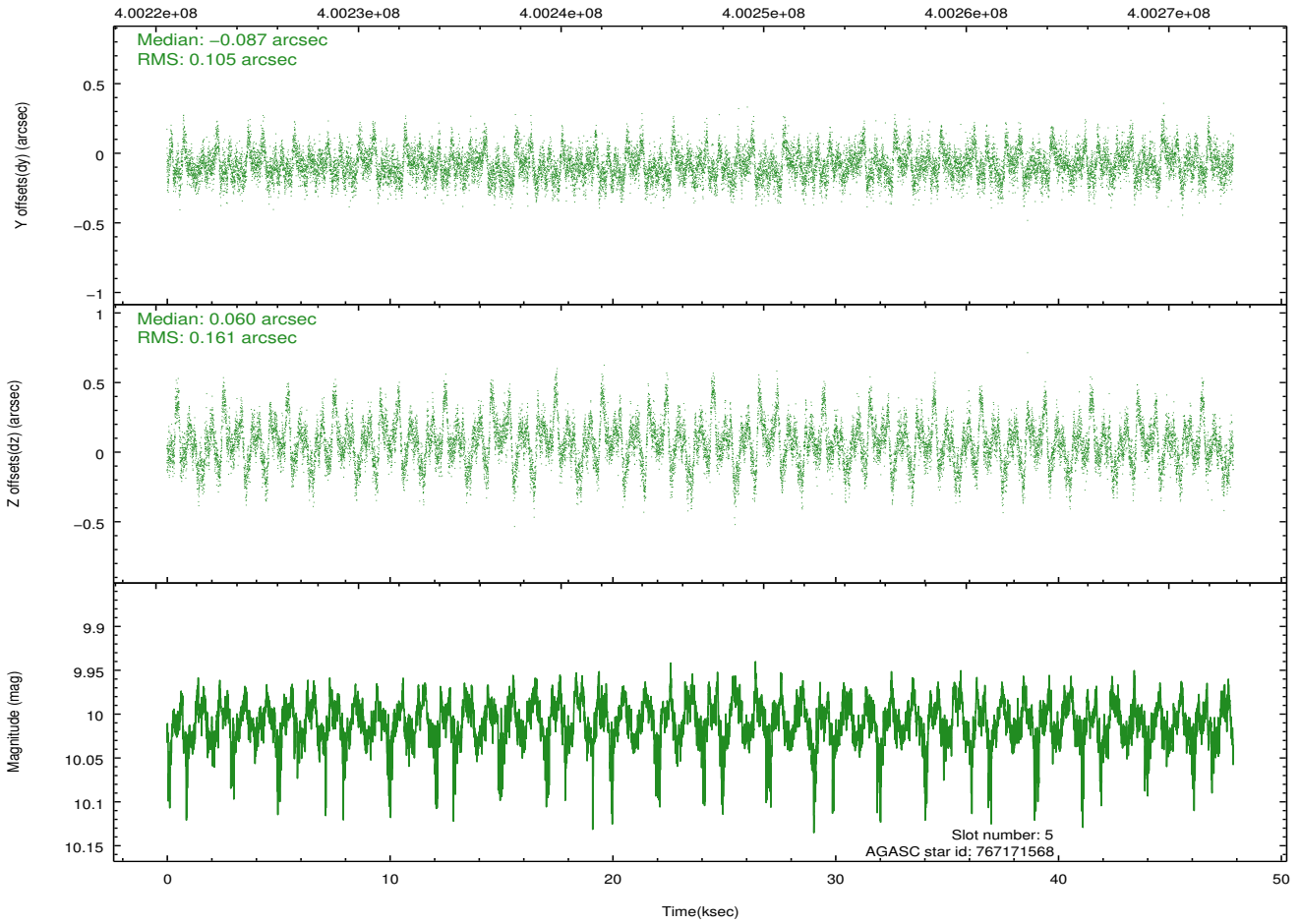
## 2.4.2 Slot 4



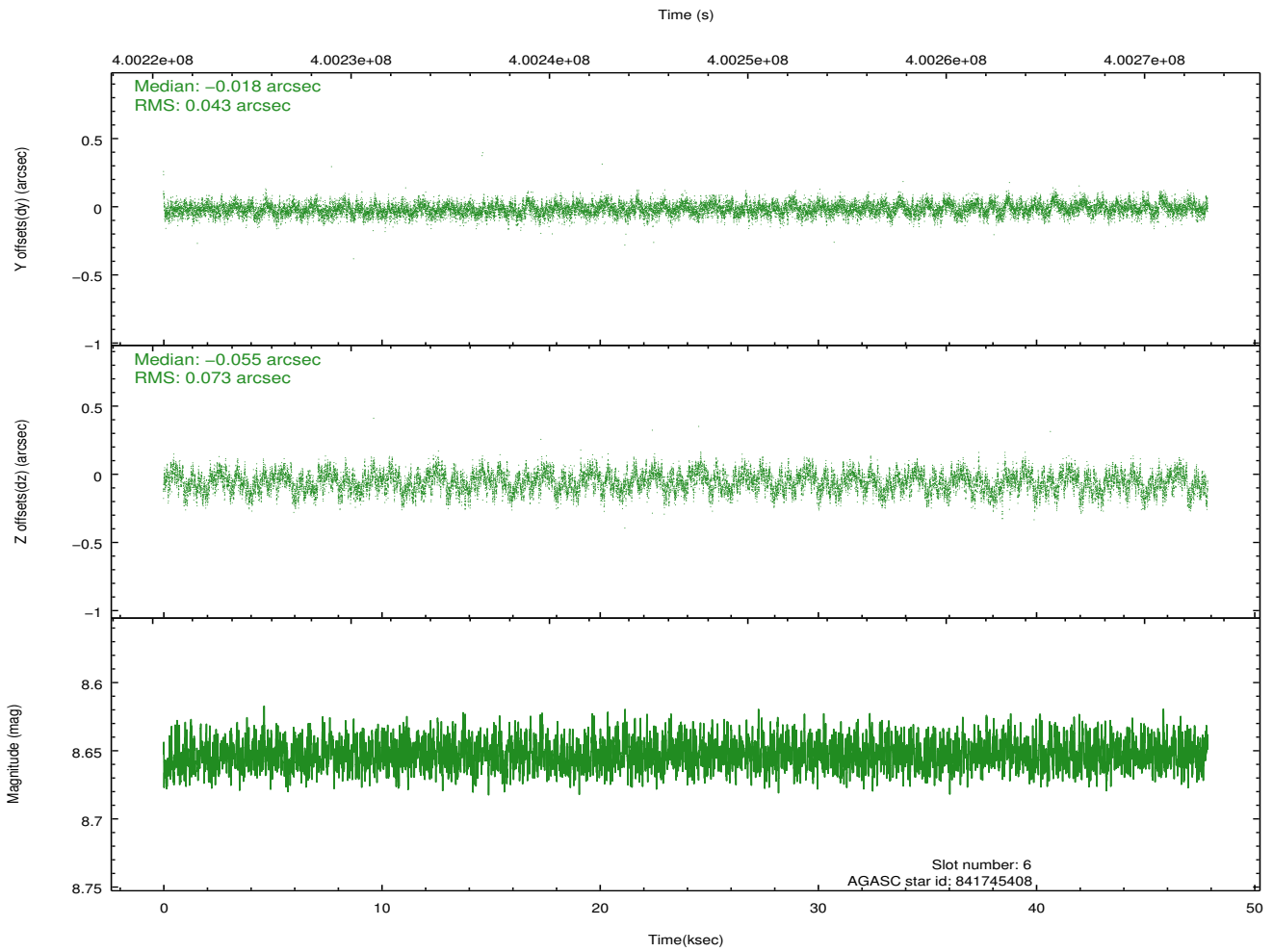
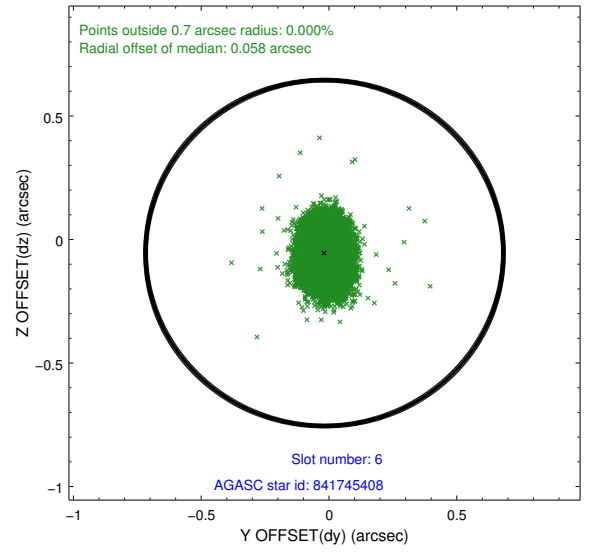
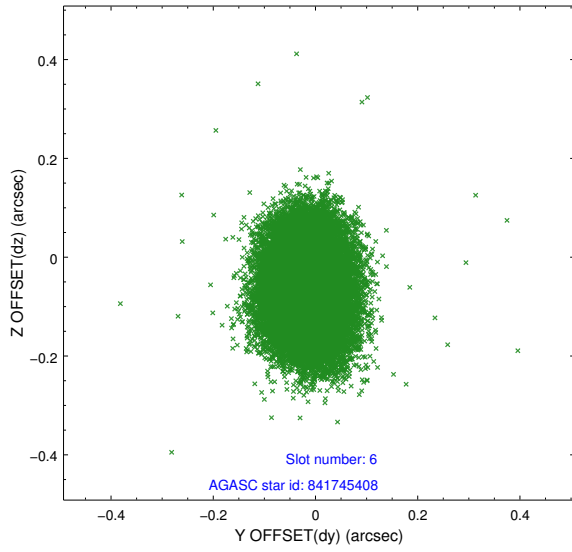
### 2.4.3 Slot 5



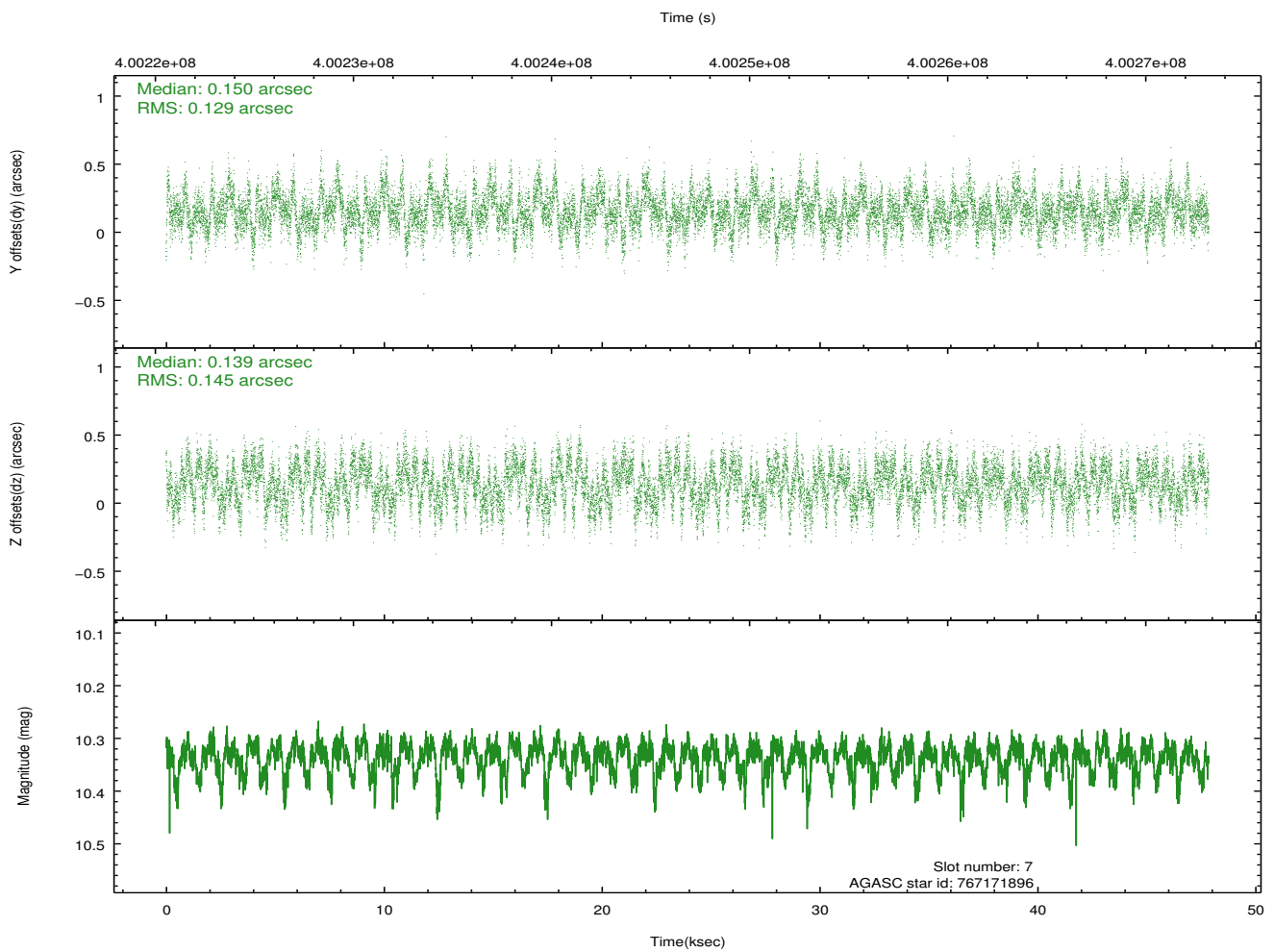
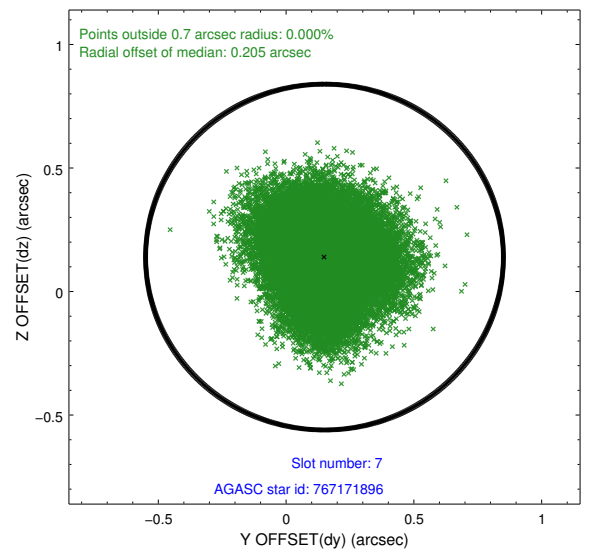
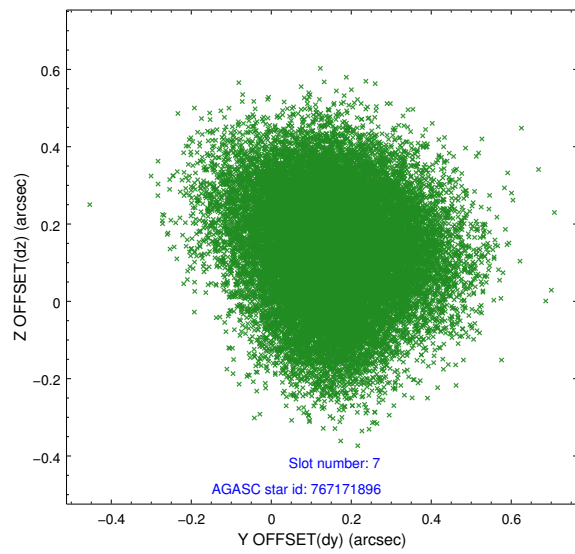
Time (s)



## 2.4.4 Slot 6

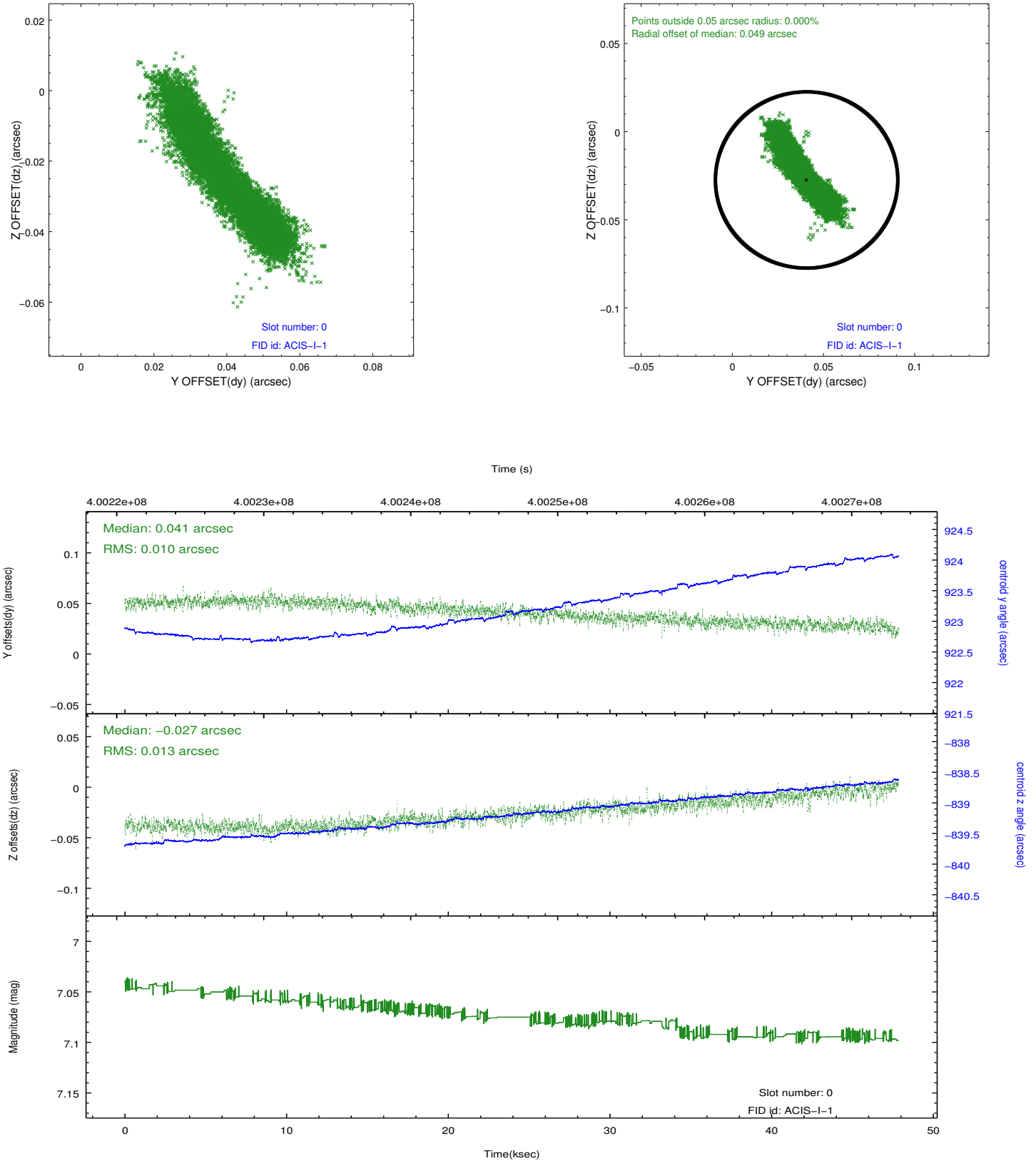


## 2.4.5 Slot 7

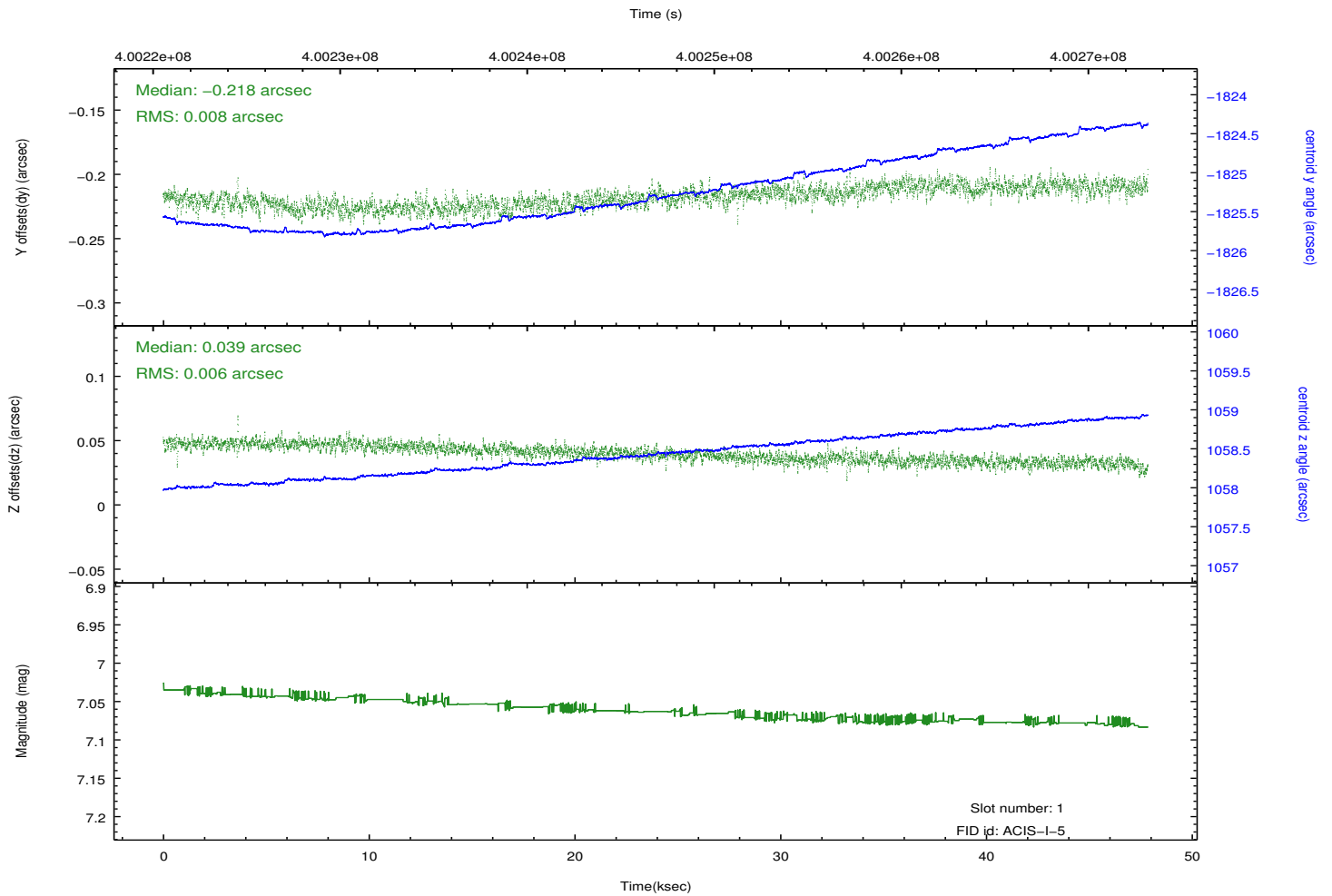
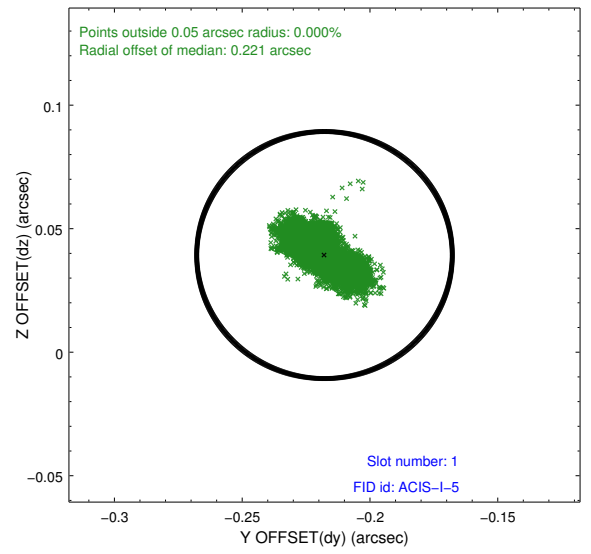
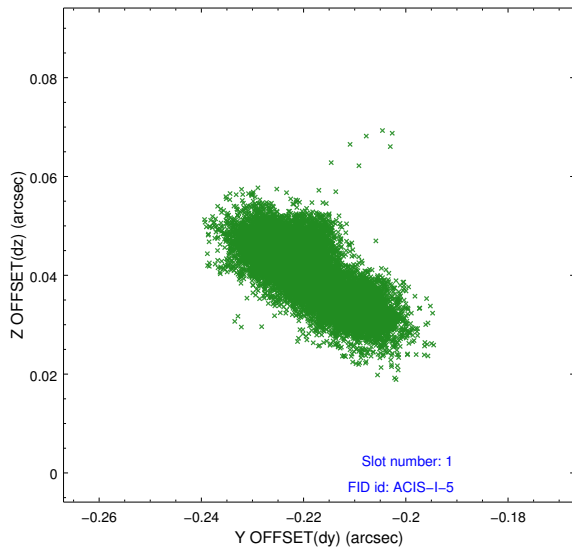


## 2.5 FID Slots

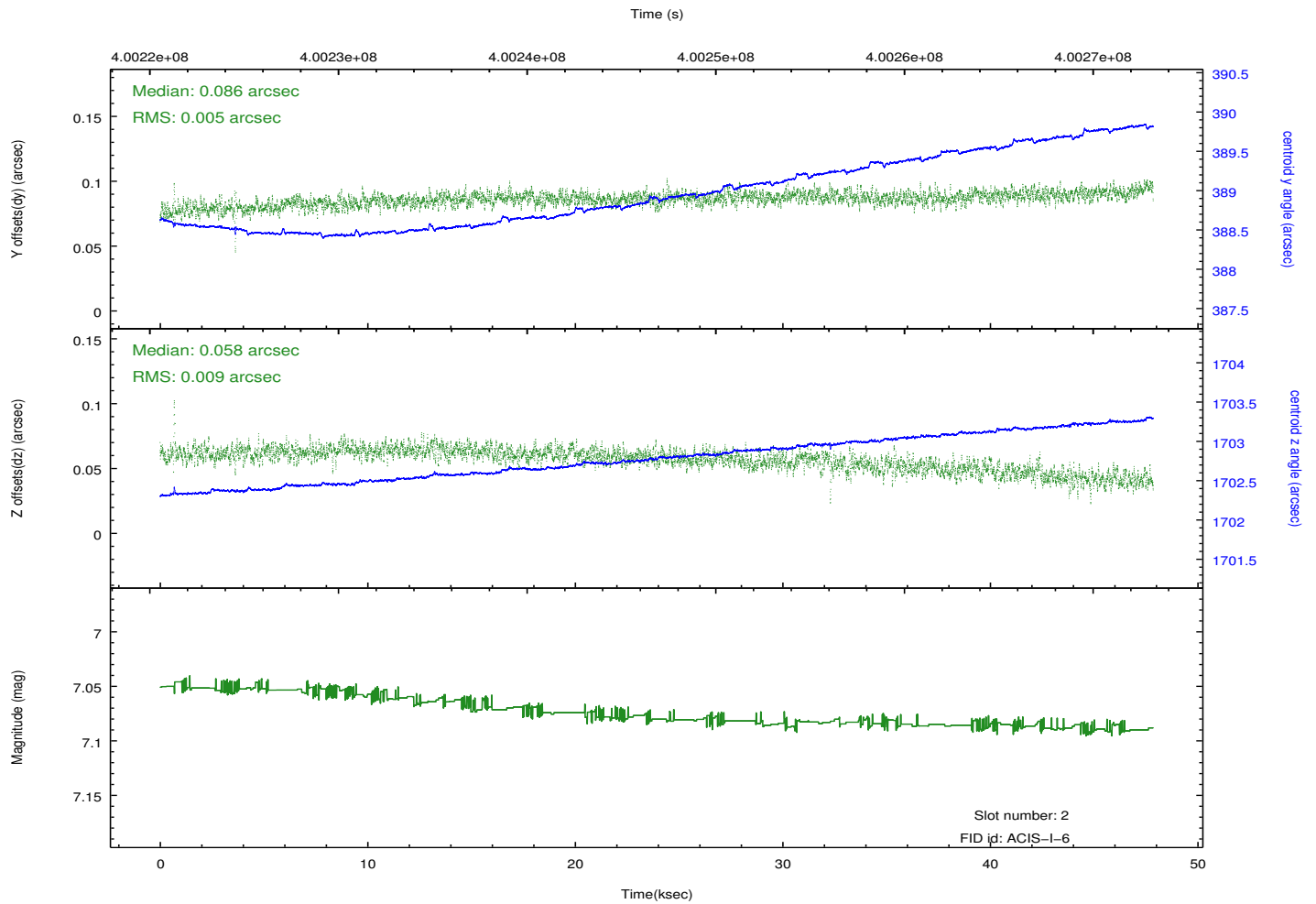
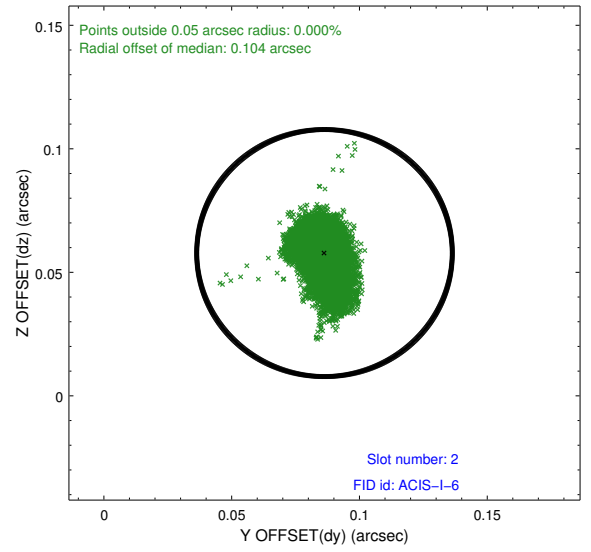
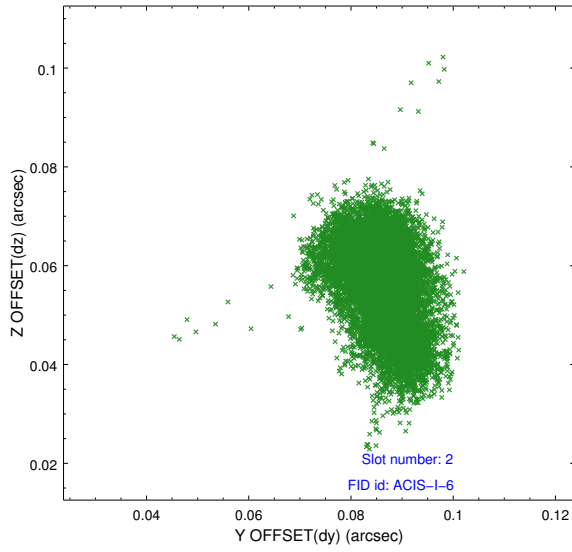
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.07.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.4455003649

## A.2 Comments