

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10863 - L2 Version 2  
Chandra X-Ray Center

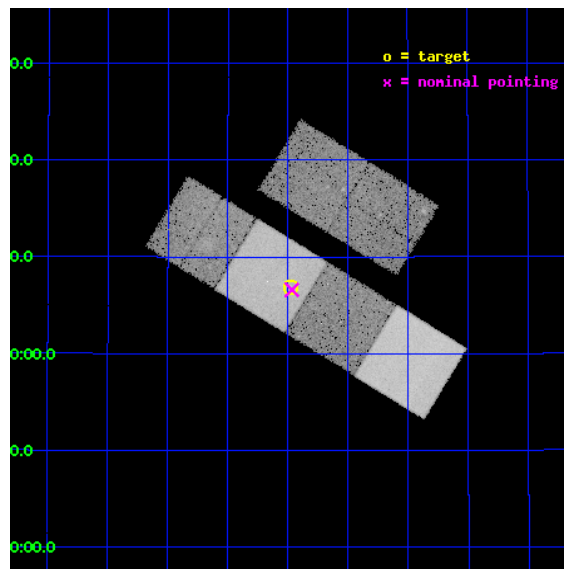
L2 Processing Date : Jun 1 2012

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# 1 Front

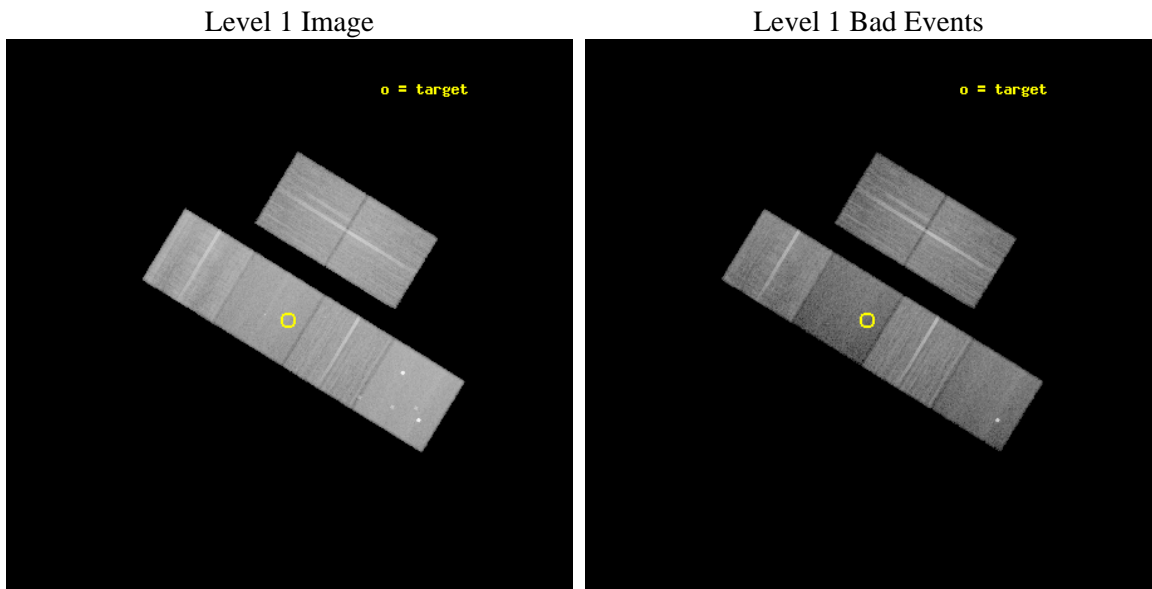
seq_num	501163	Sequence number
obs_id	10863	Observation id
title	Long GRB Jet Breaks	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	GRB 090102	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	128.244167	Observer's specified target RA [deg]
dec_targ	33.114472	Observer's specified target Dec [deg]
ra_nom	128.24155855162	Nominal RA [deg]
dec_nom	33.110134420961	Nominal Dec [deg]
roll_nom	211.43806591947	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22950.399914563	Sum of GTIs [s]
livetime	22659.788131773	Livetime [s]
ontime2	22943.917914033	Sum of GTIs [s]
ontime3	22950.399914563	Sum of GTIs [s]
ontime5	22950.399914563	Sum of GTIs [s]
ontime6	22950.399914563	Sum of GTIs [s]
ontime7	22950.399914563	Sum of GTIs [s]
ontime8	22947.158944249	Sum of GTIs [s]
l2events	262025	Number of level 2 events



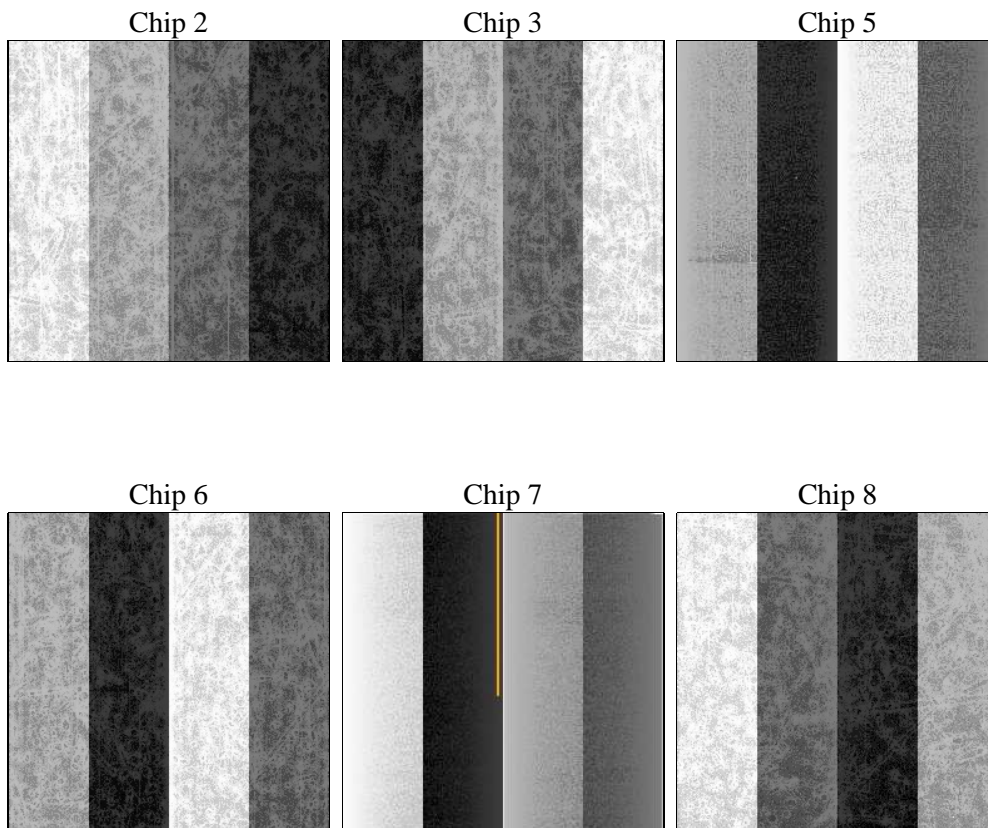
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	22950.399914563	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	22943.917914033	Sum of GTIs [s]
date	2012-06-01T08:54:38	Date and time of file creation	ontime3	22950.399914563	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	22950.399914563	Sum of GTIs [s]
			ontime6	22950.399914563	Sum of GTIs [s]
			ontime7	22950.399914563	Sum of GTIs [s]
			ontime8	22947.158944249	Sum of GTIs [s]
			l1events	1205238	Number of level 1 events

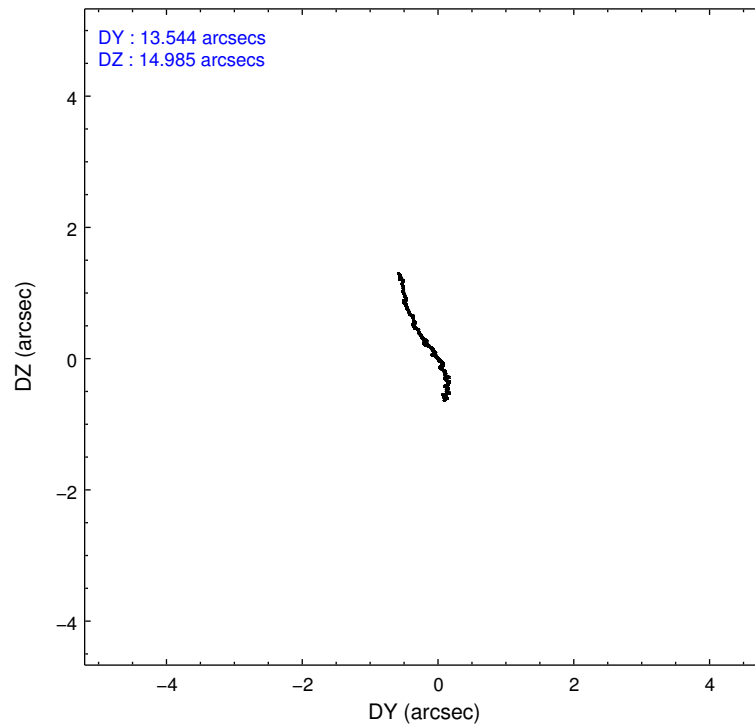
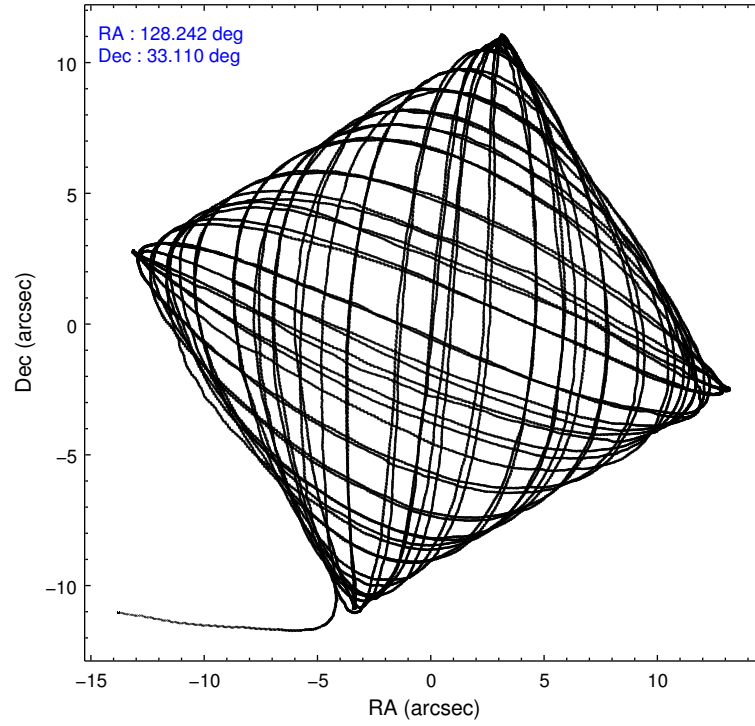
### 2.1.4 Events

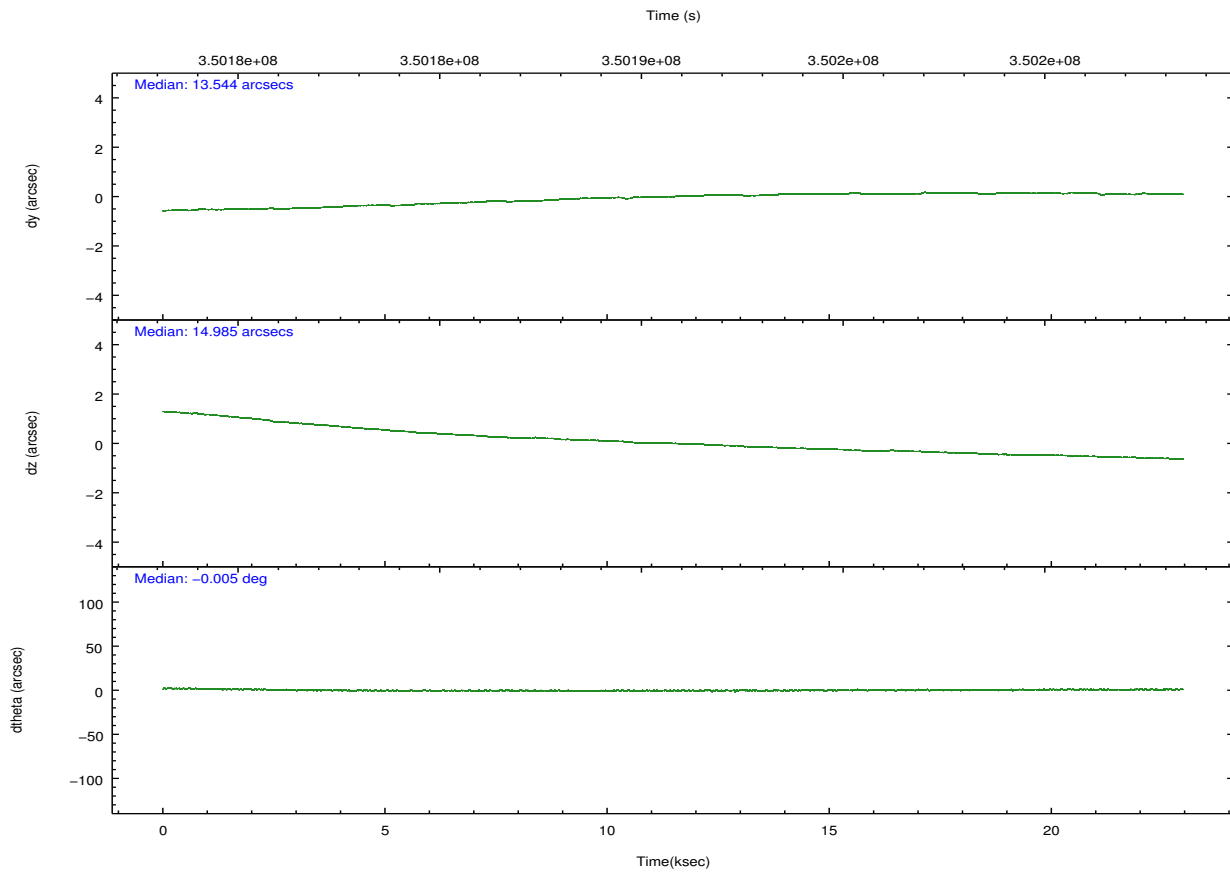
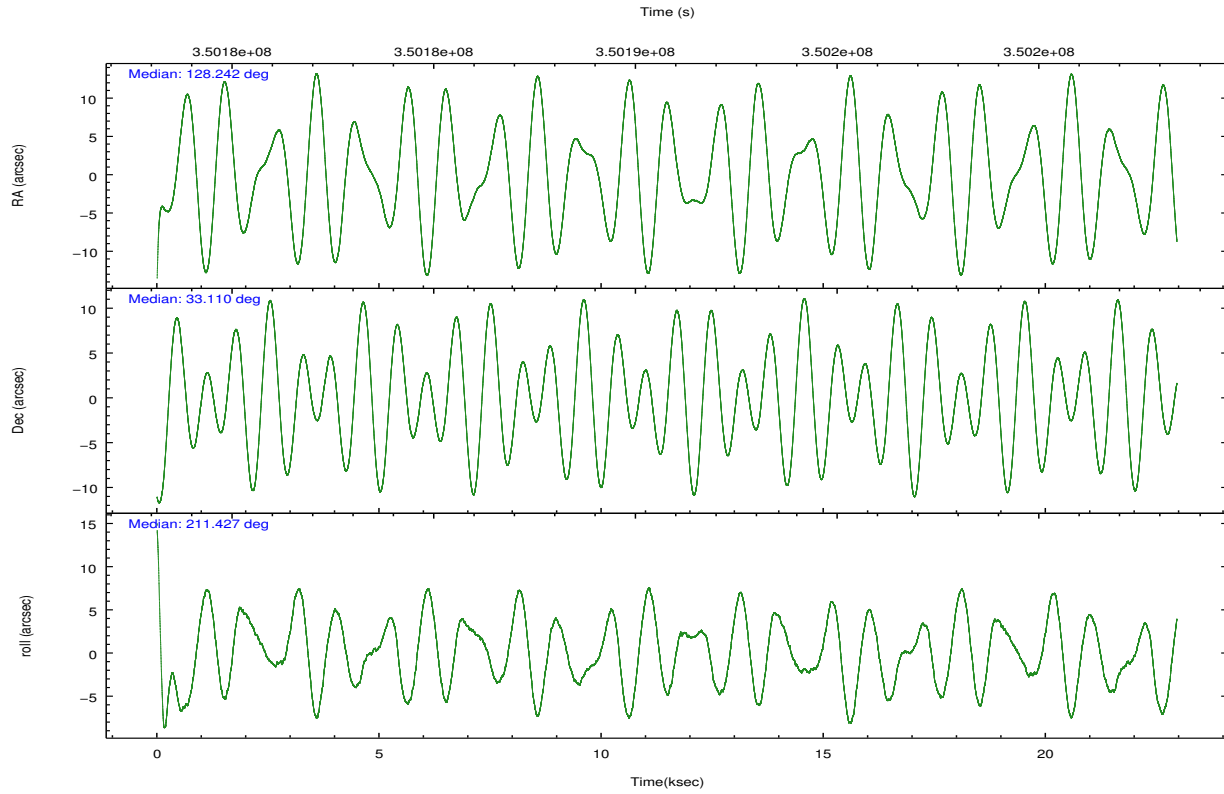
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	200352	172018	242886	185439	178269	226274	grade 0 events	6855	6177	17141	6886	8886	16496
rejected events	182206	155285	113946	166689	91840	168529		3%	3%	7%	3%	4%	7%
rejected %	90%	90%	46%	89%	51%	74%	grade 1 events	131	115	525	108	278	194
								0%	0%	0%	0%	0%	0%
							grade 2 events	4398	3714	39817	4293	18530	13797
								2%	2%	16%	2%	10%	6%
							grade 3 events	1936	1827	5441	2061	8184	6395
								0%	1%	2%	1%	4%	2%
							grade 4 events	1880	1951	5249	1927	8105	6015
								0%	1%	2%	1%	4%	2%
							grade 5 events	5302	6213	19677	6475	19218	9683
								2%	3%	8%	3%	10%	4%
							grade 6 events	3205	3185	62387	3733	43419	15501
								1%	1%	25%	2%	24%	6%
							grade 7 events	176645	148836	92649	159956	71649	158193
								88%	86%	38%	86%	40%	69%

## 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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	128.256772	128.2415585516165	CCD I2 on	O2	Y
[deg] Pointing Dec	33.134338	33.1101344209606	CCD I3 on	O3	Y
[deg] Pointing Roll	211.273116	211.438065919467	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O5	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O4	Y
[s] Observation start time (MET)	350179458.184000	350178303.83483	CCD S5 on	N	N
Observation start date	2009-02-05T00:03:12	2009-02-04T23:45:03	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	350202258.184000	350203170.84856	On-chip summing requested	N	N
Observation end date	2009-02-05T06:23:12	2009-02-05T06:39:30	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



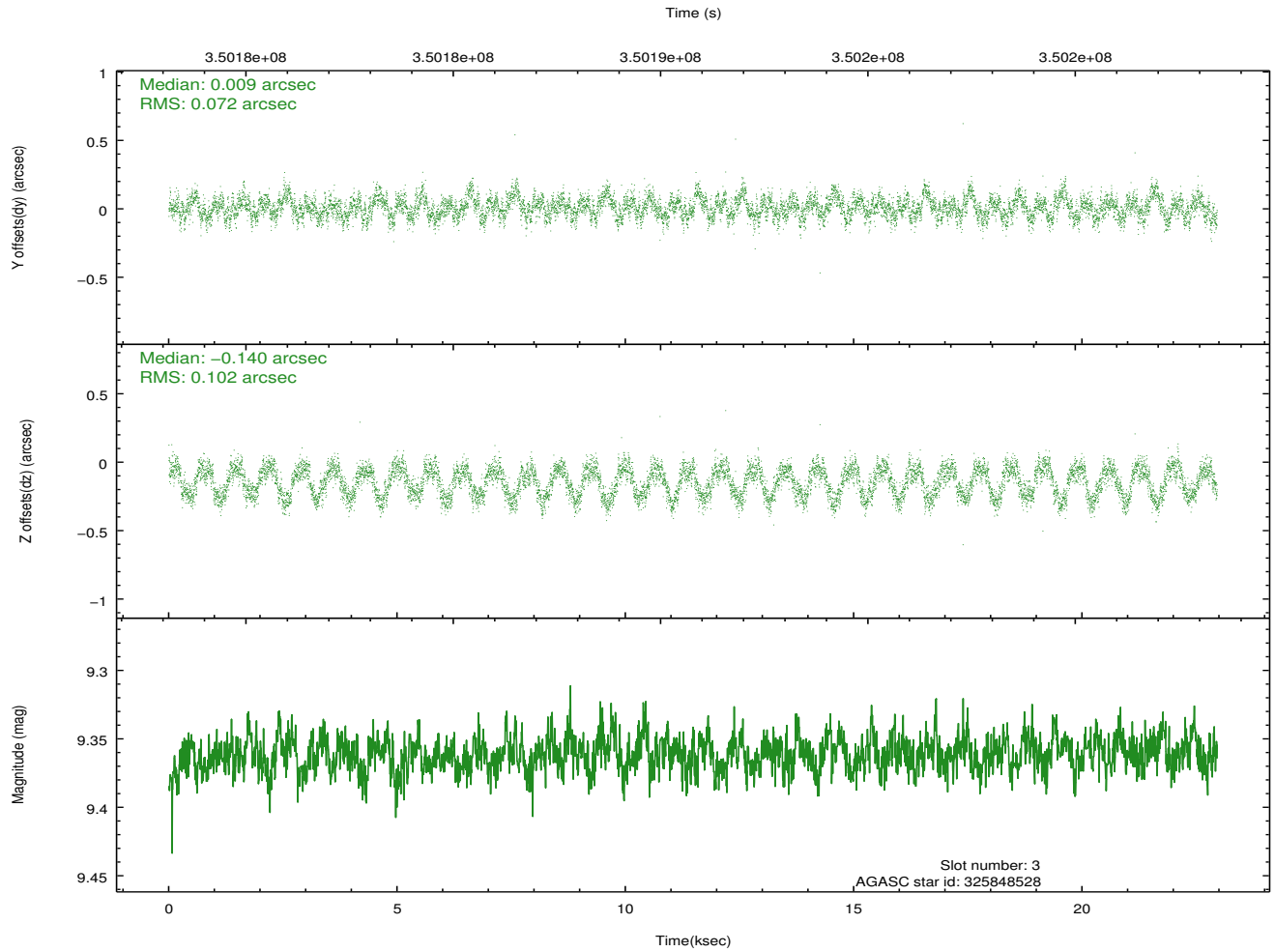
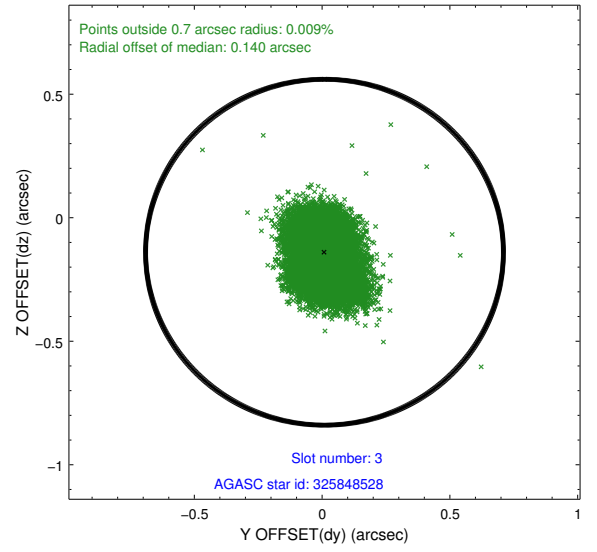
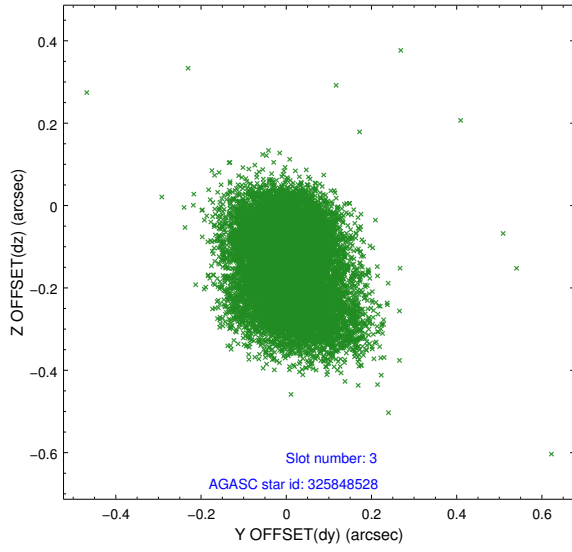


### Slot Statistics

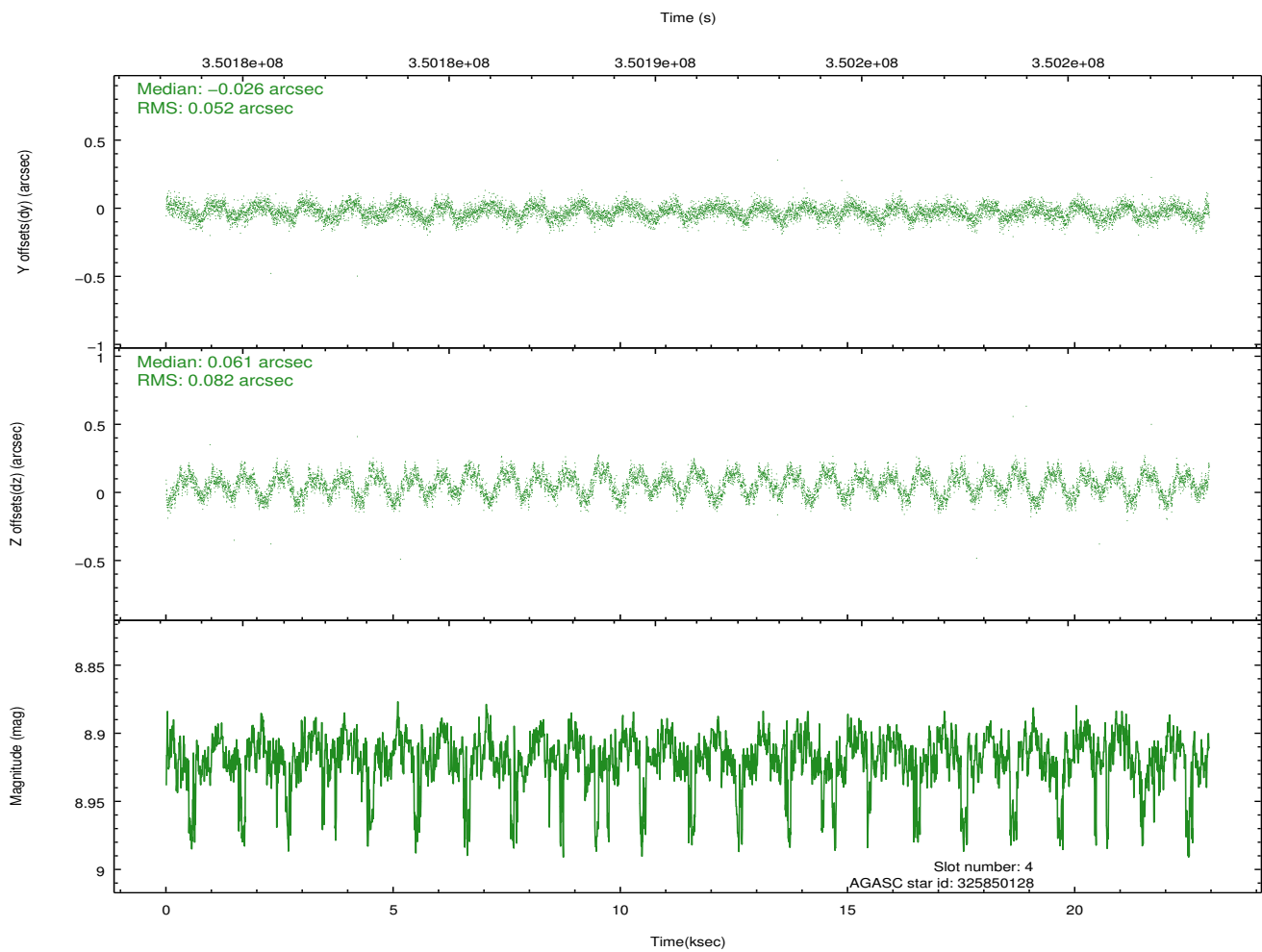
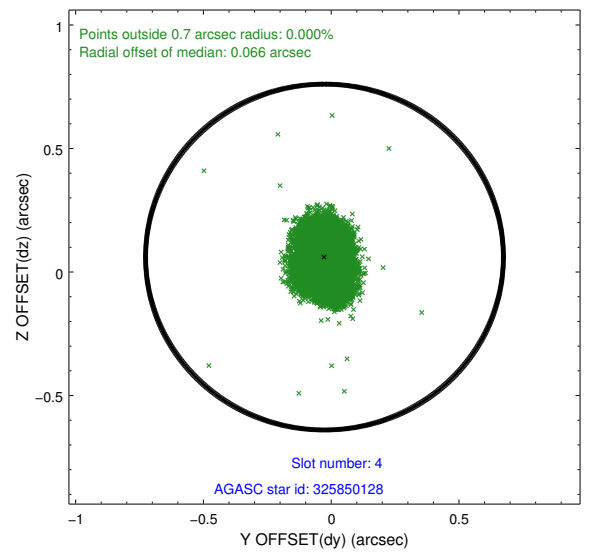
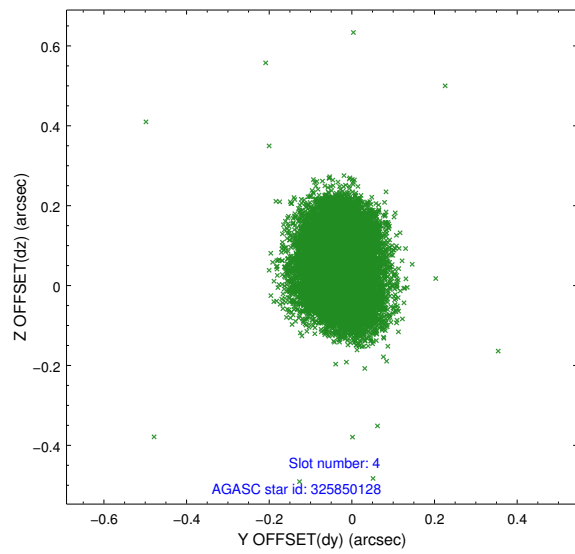
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	5599	-0.051	-0.017	0.010	0.016	0.000000	0.000000	-766.40	-1736.44
1	FID	ACIS-S-4	6.98	5599	0.164	0.029	0.008	0.014	0.000000	0.000000	2147.00	171.98
2	FID	ACIS-S-5	7.01	5598	-0.145	-0.003	0.009	0.015	0.000000	0.000000	-1819.18	165.73
3	GUIDE	325848528	9.36	11188	0.009	-0.140	0.134	0.204	128.890961	32.792079	-1003.91	2044.47
4	GUIDE	325850128	8.92	11192	-0.026	0.061	0.103	0.161	128.006537	33.170352	576.78	-502.57
5	GUIDE	325854112	9.19	11188	0.080	0.119	0.083	0.135	128.739587	32.919099	-846.42	1416.92
6	GUIDE	325453560	9.65	11181	-0.053	-0.022	0.139	0.210	128.370140	32.438942	1004.84	2318.81
7	GUIDE	325862568	9.44	11184	-0.008	-0.000	0.116	0.190	127.808098	33.641064	201.65	-2259.30

## 2.4 Star Slots

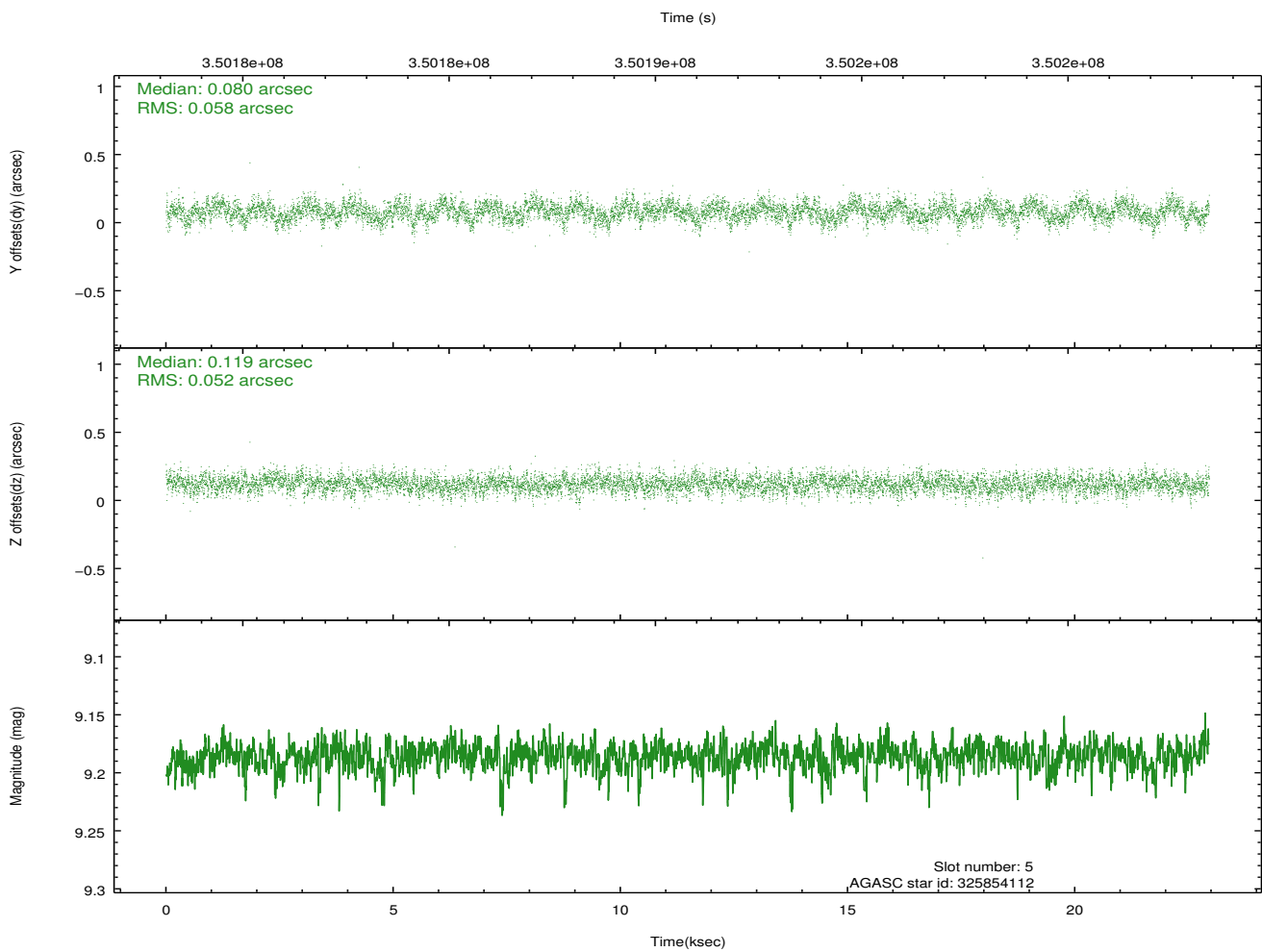
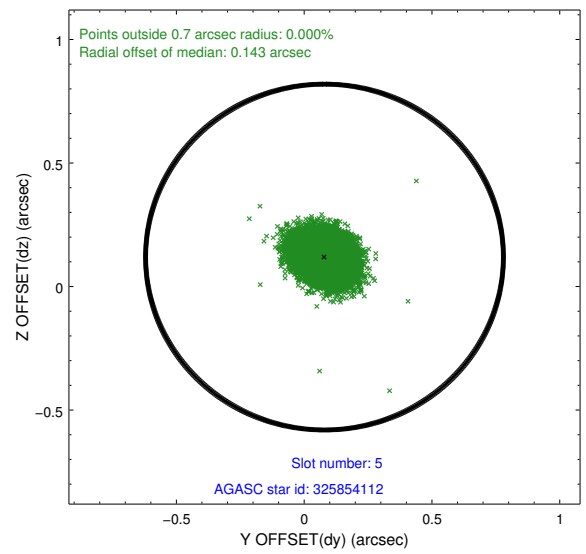
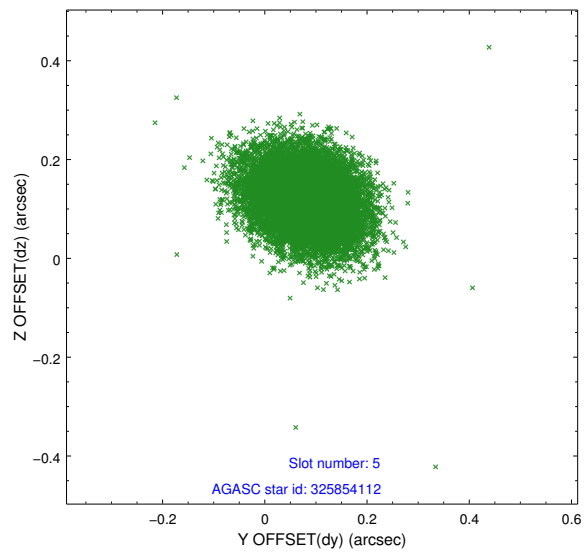
### 2.4.1 Slot 3



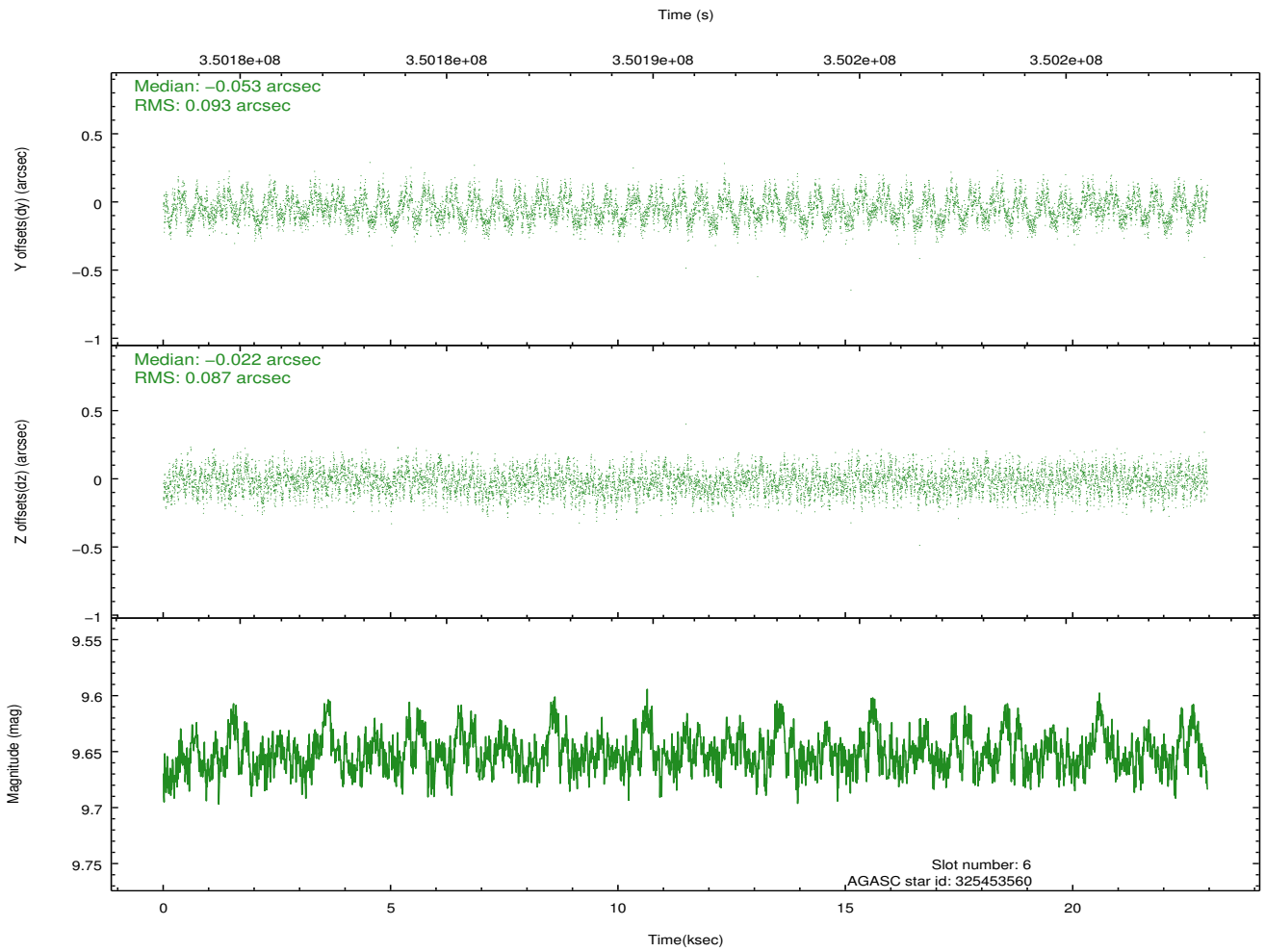
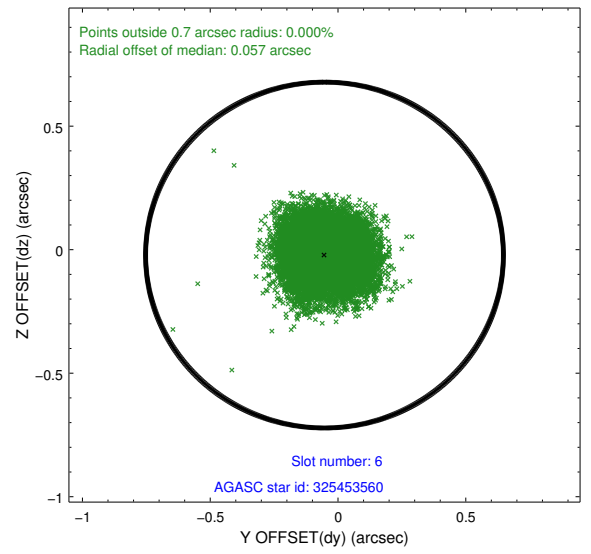
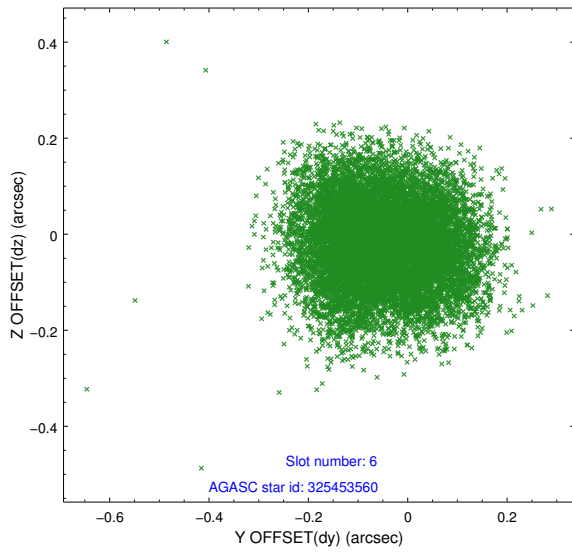
## 2.4.2 Slot 4



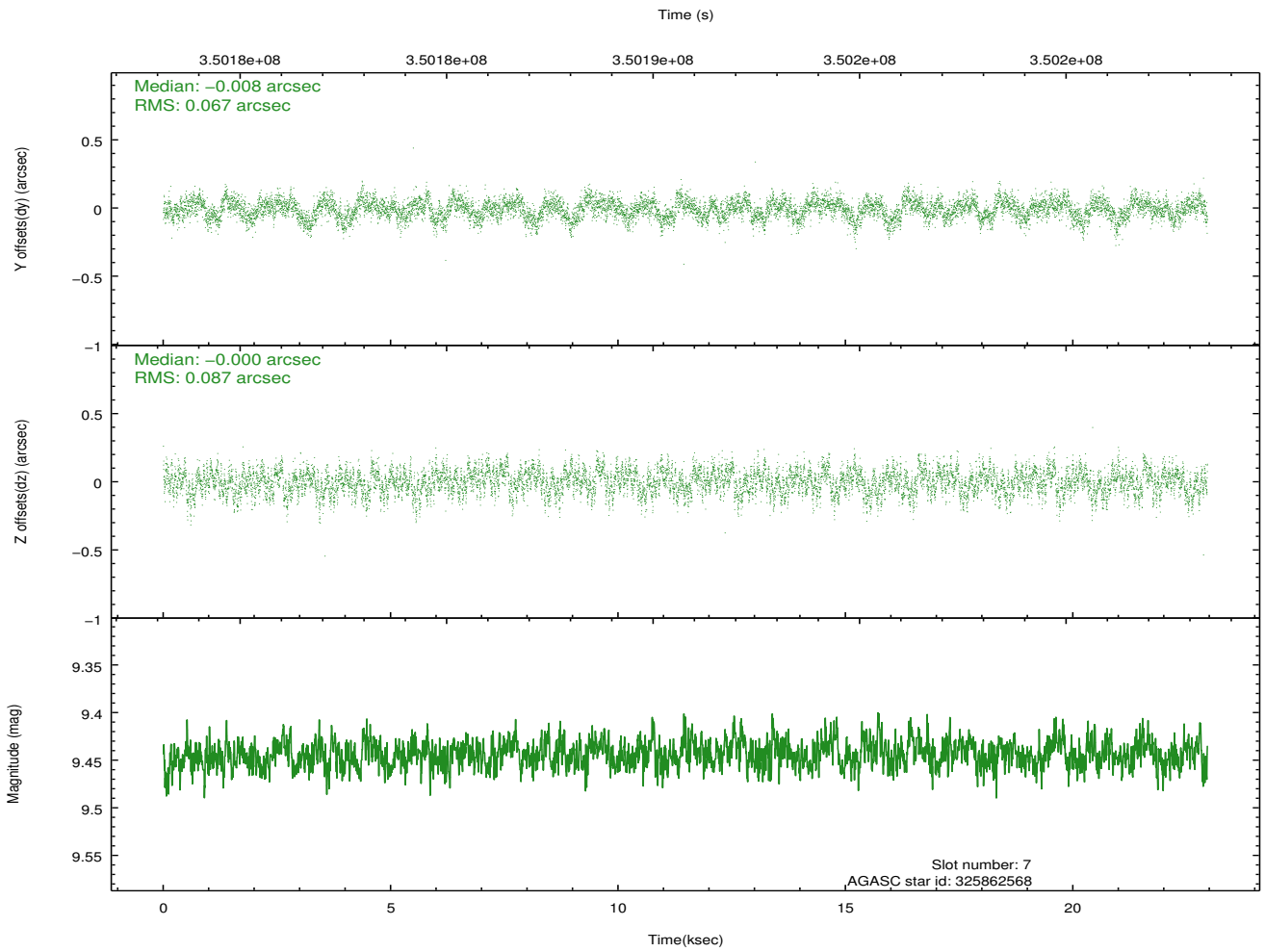
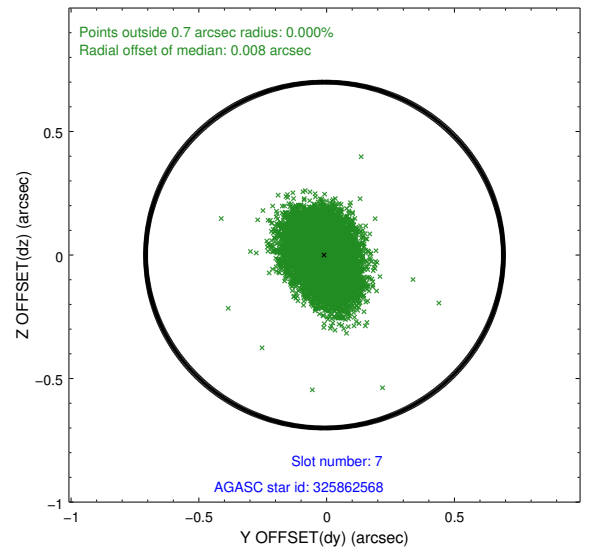
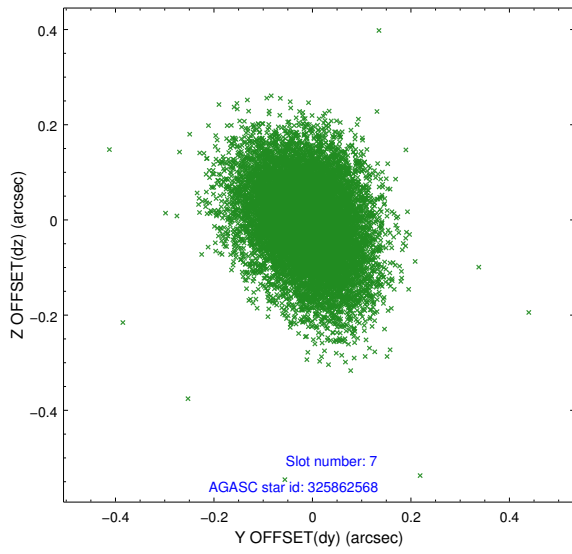
### 2.4.3 Slot 5



### 2.4.4 Slot 6

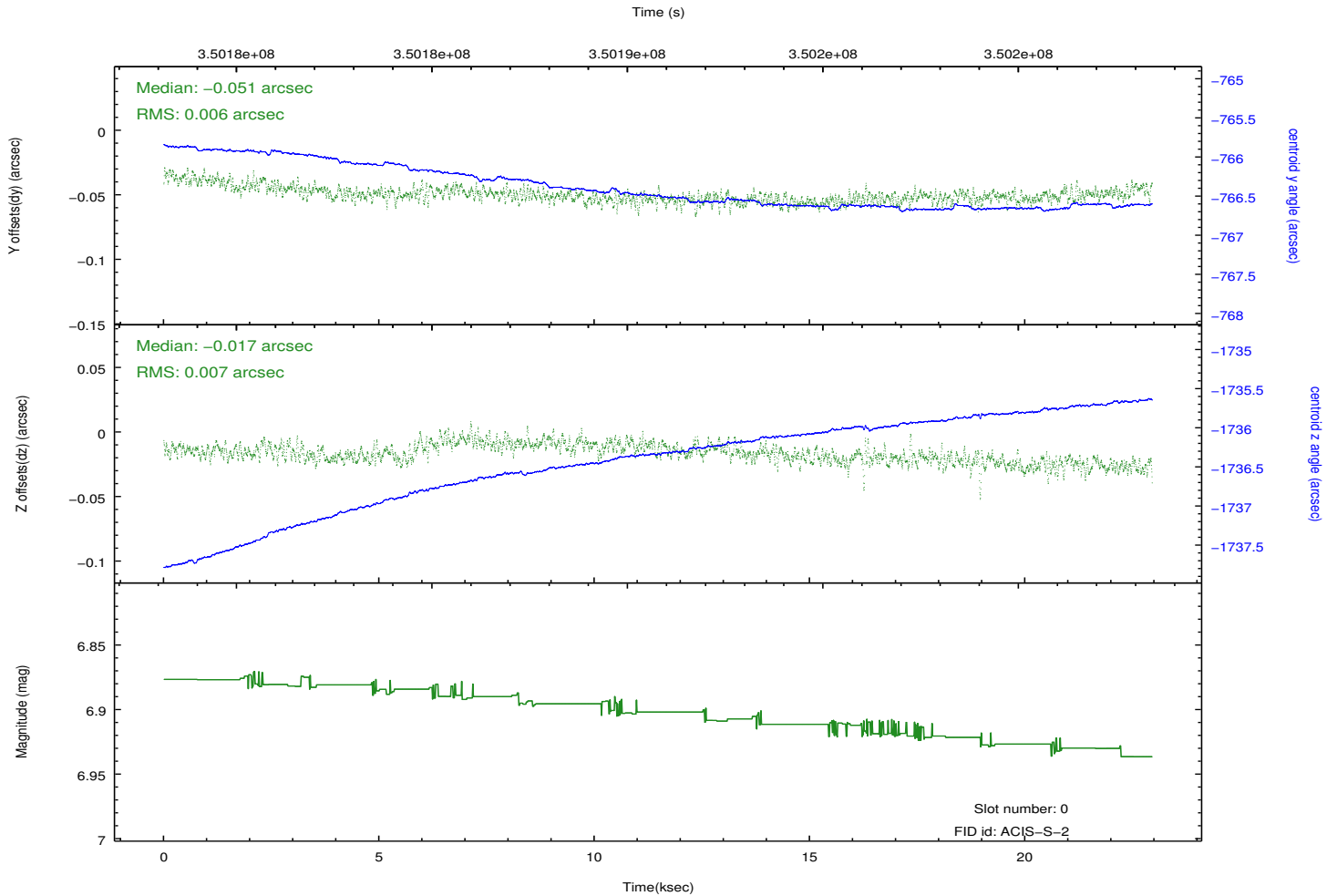
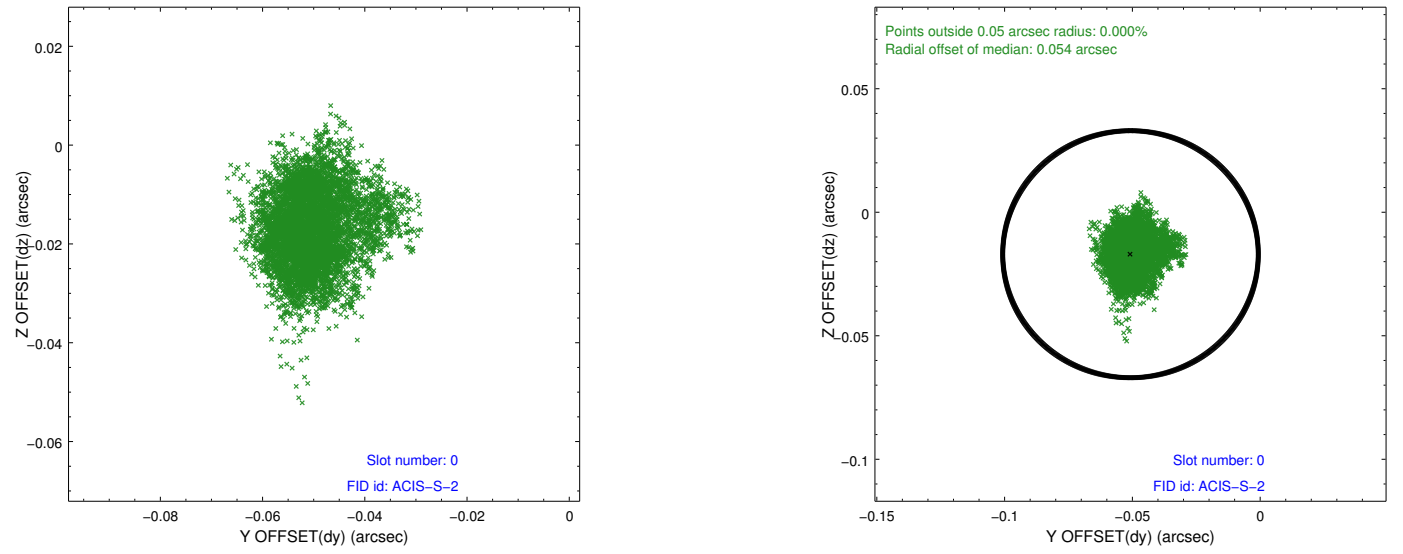


### 2.4.5 Slot 7

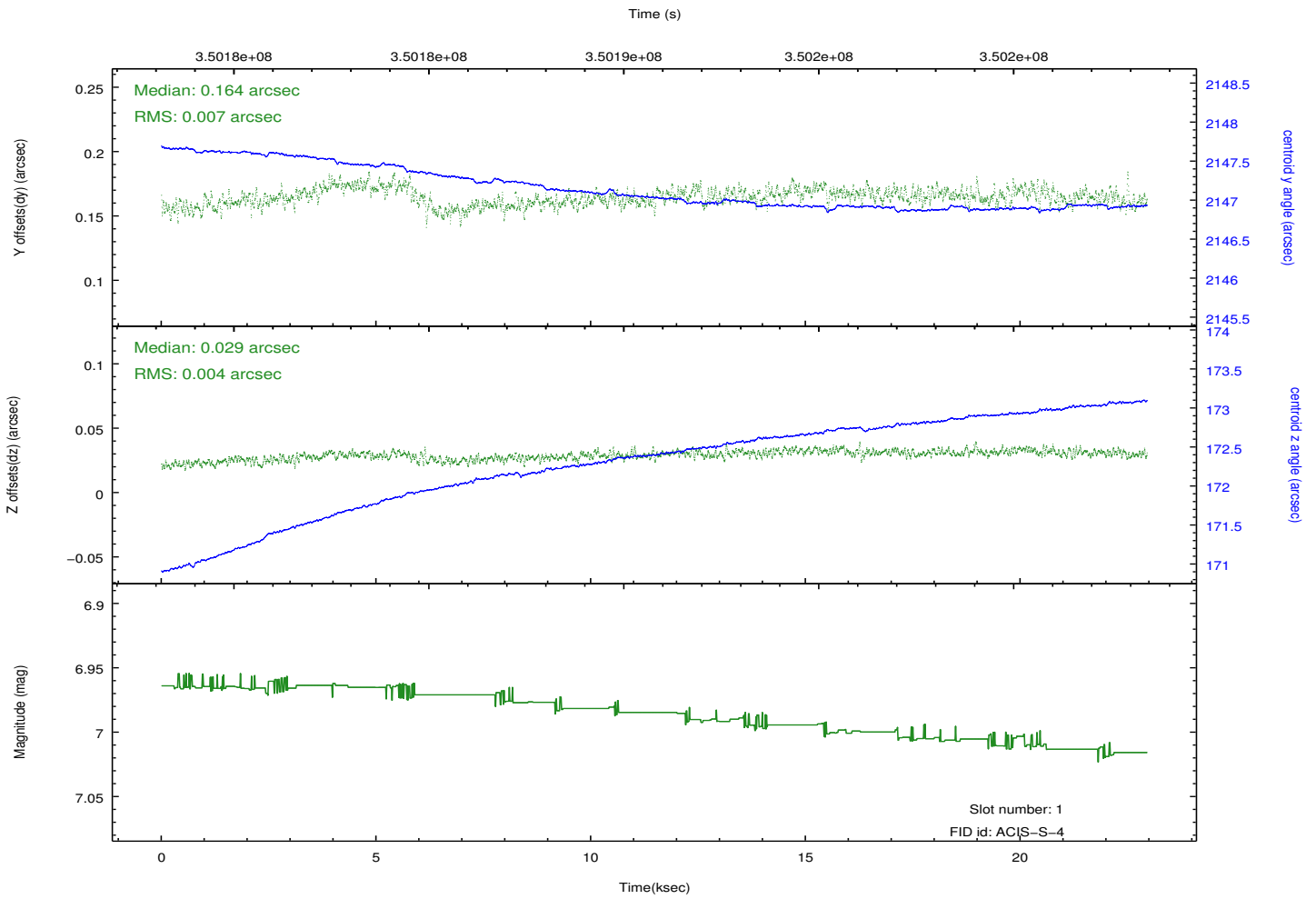
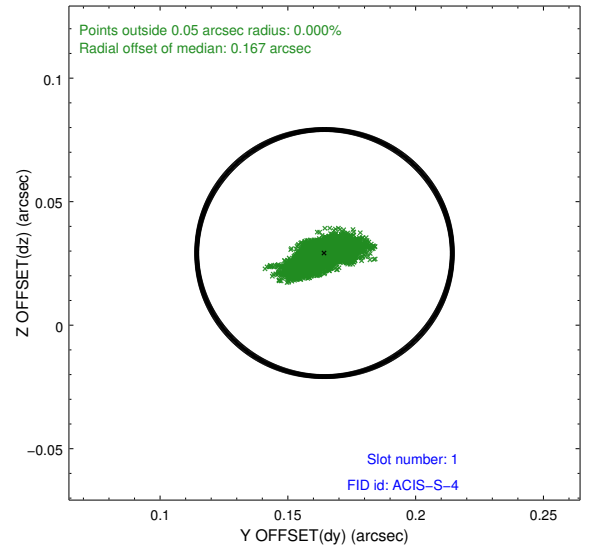
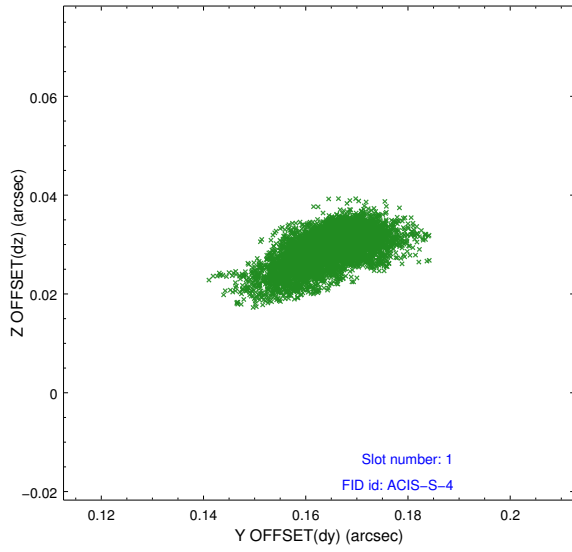


## 2.5 FID Slots

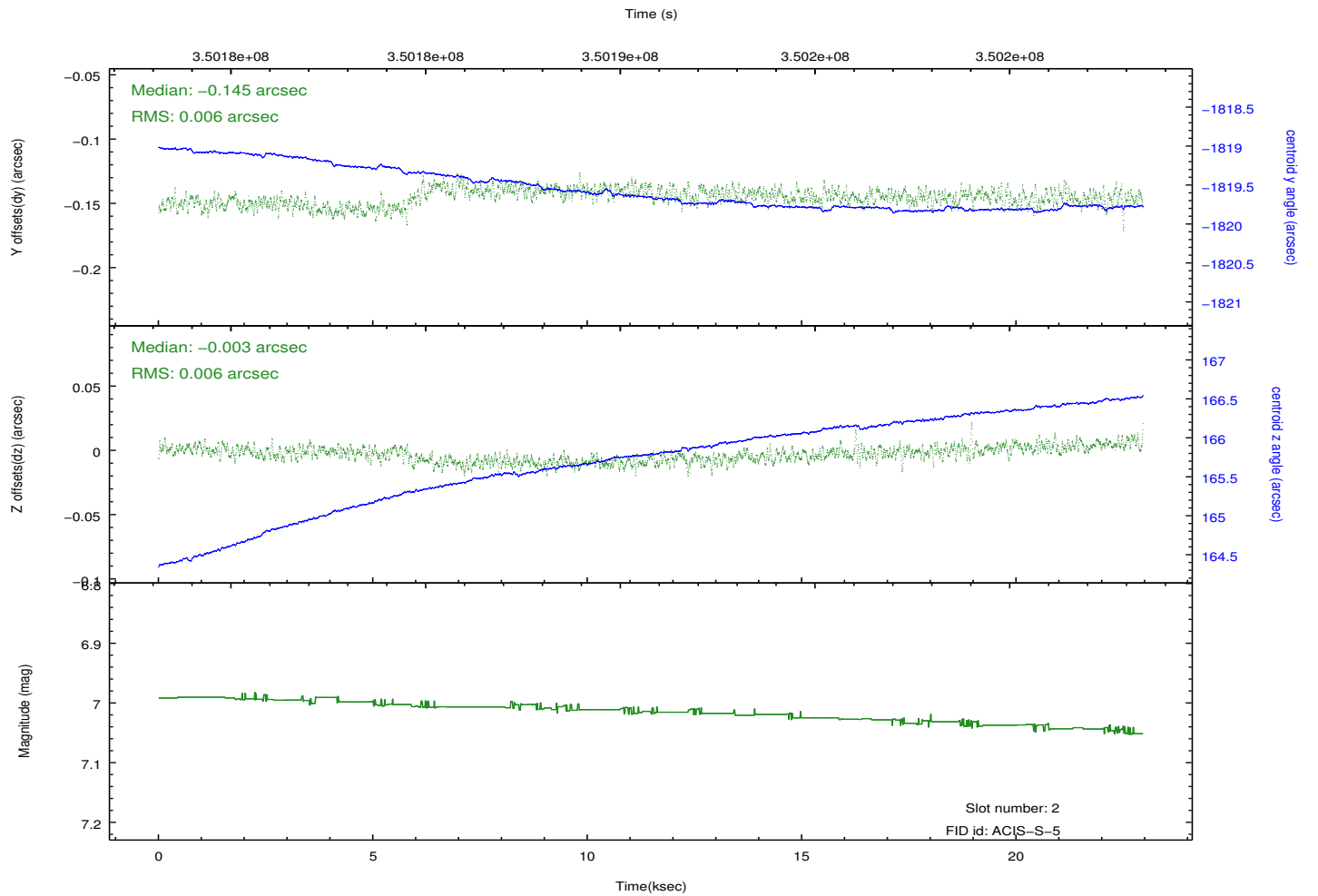
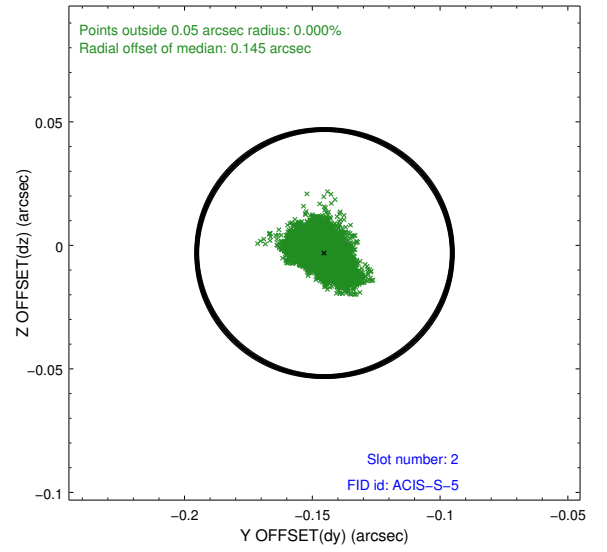
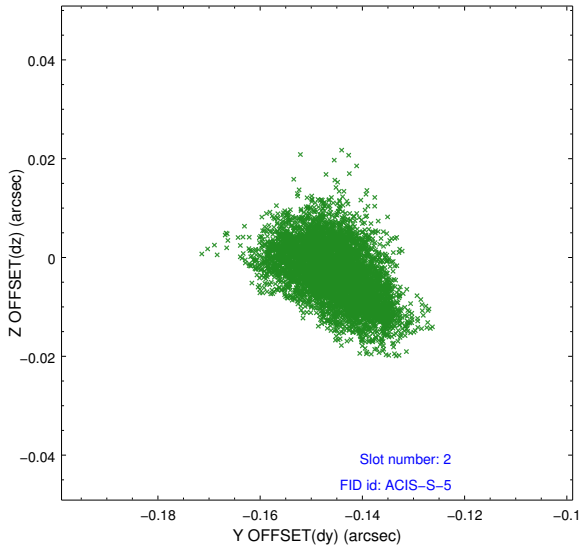
### 2.5.1 Slot 0



## 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)	2012.06.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.9503999

## A.2 Comments