

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8524 - L2 Version 3  
Chandra X-Ray Center

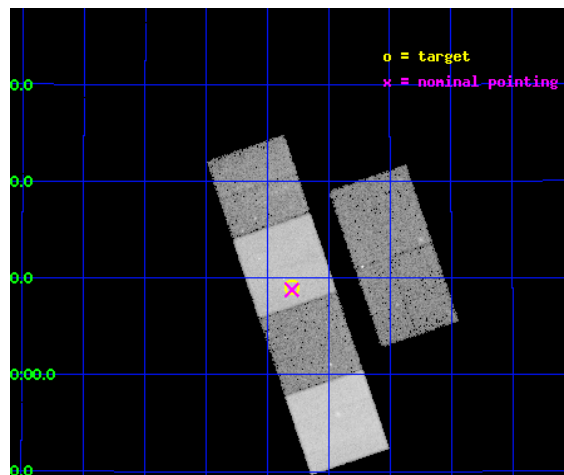
L2 Processing Date : Apr 21 2012

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# 1 Front

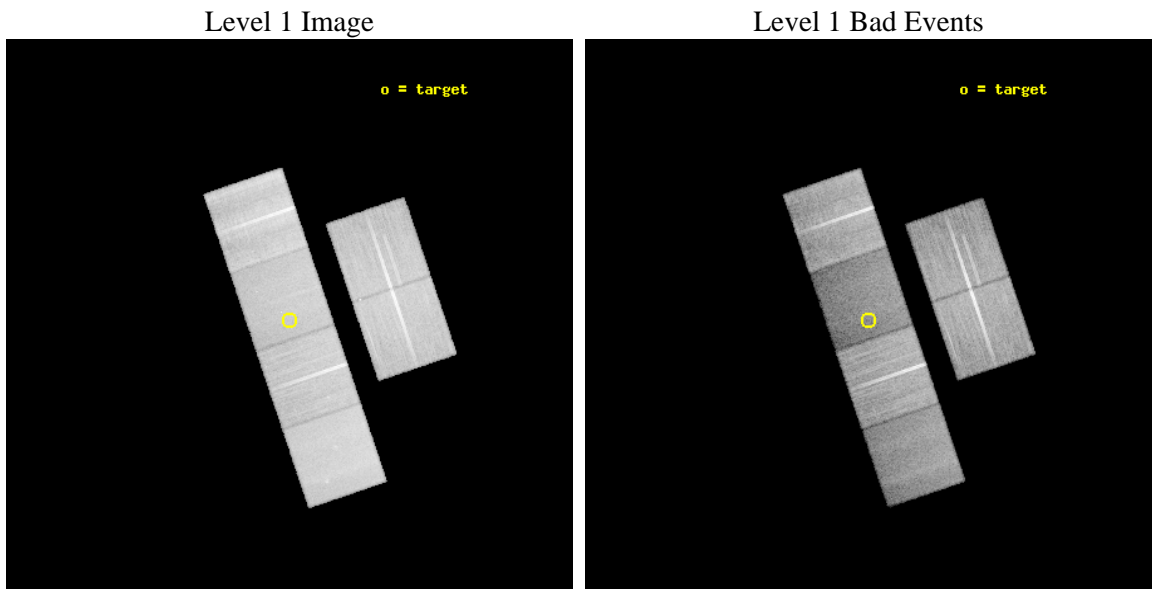
seq_num	600649	Sequence number
obs_id	8524	Observation id
title	Constraining the Geometry and Energetics of the Exceptionally Energetic GRB070125	Proposal title
observer	Dr. Dale Frail	Principal investigator
object	GRB070125	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	117.82375	Observer's specified target RA [deg]
dec_targ	31.151139	Observer's specified target Dec [deg]
ra_nom	117.8250077488	Nominal RA [deg]
dec_nom	31.14642782136	Nominal Dec [deg]
roll_nom	251.24889966314	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30041.599888146	Sum of GTIs [s]
livetime	29661.195061482	Livetime [s]
ontime2	30038.358907759	Sum of GTIs [s]
ontime3	30038.358877957	Sum of GTIs [s]
ontime5	30041.599888146	Sum of GTIs [s]
ontime6	30041.599888146	Sum of GTIs [s]
ontime7	30041.599888146	Sum of GTIs [s]
ontime8	30038.358967304	Sum of GTIs [s]
l2events	304449	Number of level 2 events



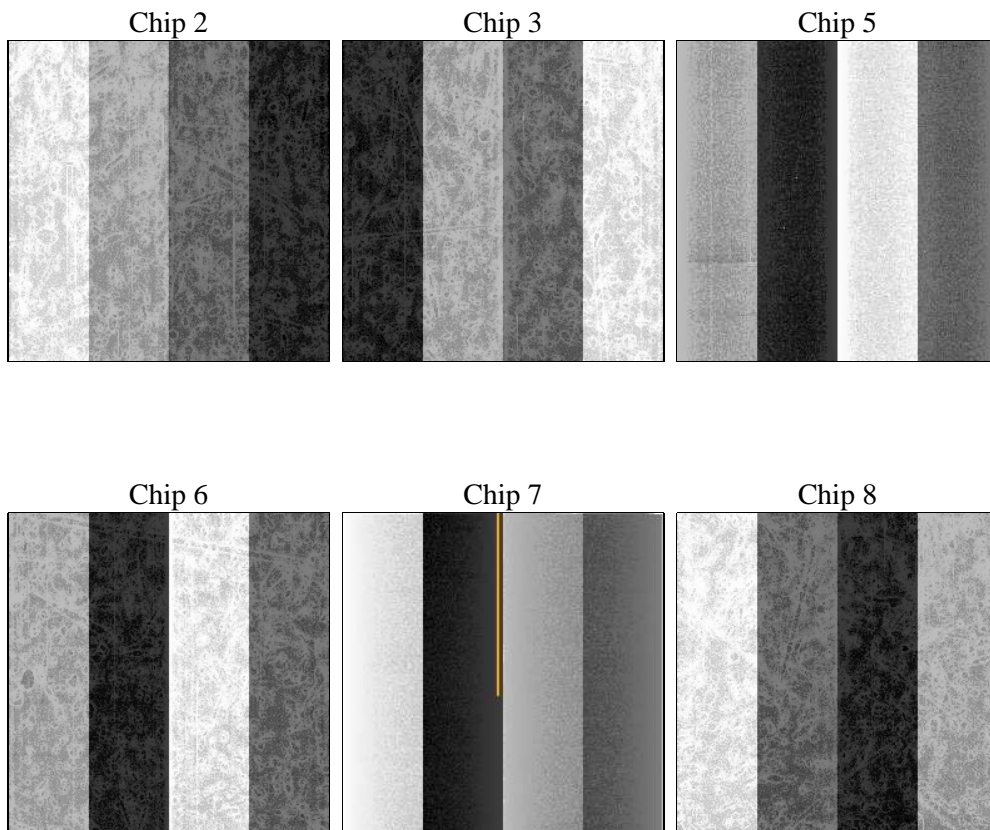
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	30041.599888146	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	30038.358907759	Sum of GTIs [s]
date	2012-04-21T01:56:39	Date and time of file creation	ontime3	30038.358877957	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	30041.599888146	Sum of GTIs [s]
			ontime6	30041.599888146	Sum of GTIs [s]
			ontime7	30041.599888146	Sum of GTIs [s]
			ontime8	30038.358967304	Sum of GTIs [s]
			l1events	1408561	Number of level 1 events

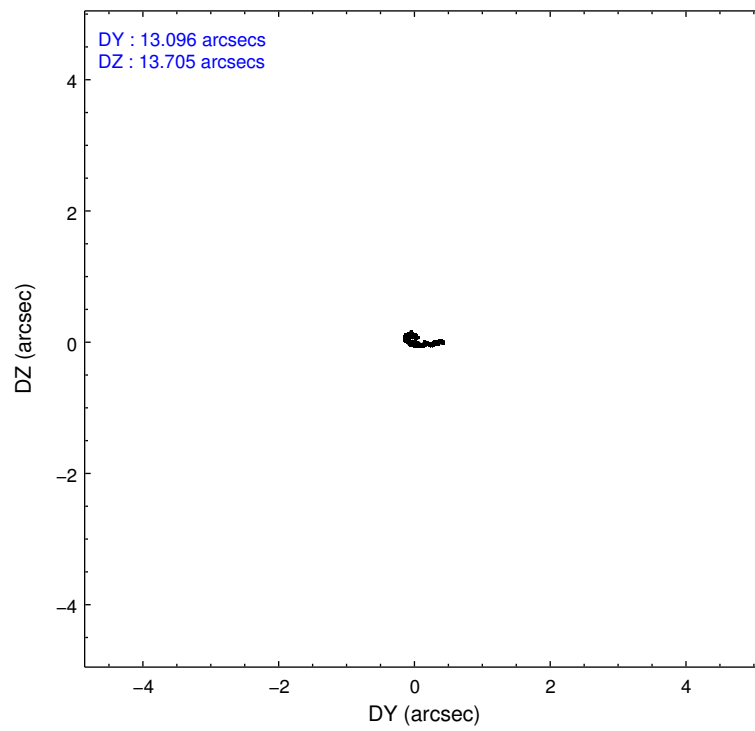
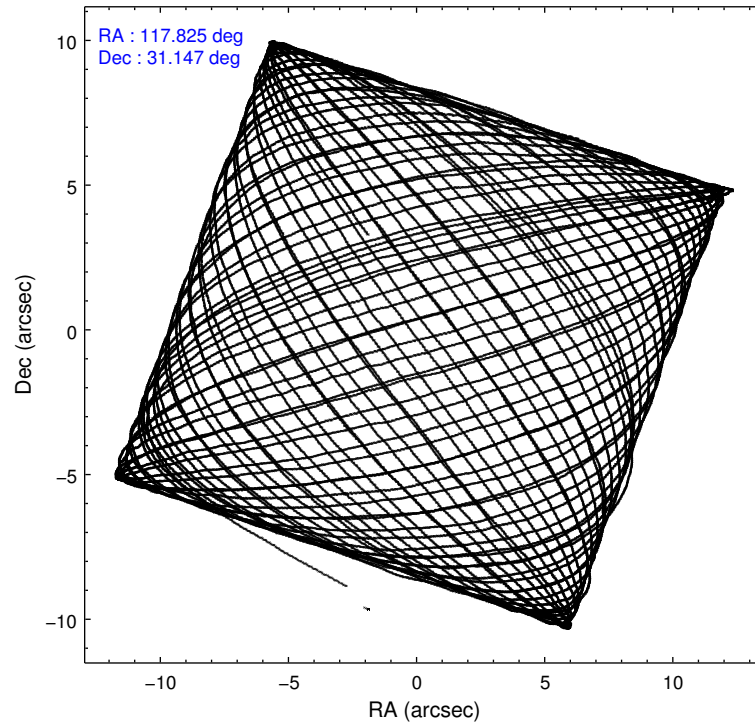
### 2.1.4 Events

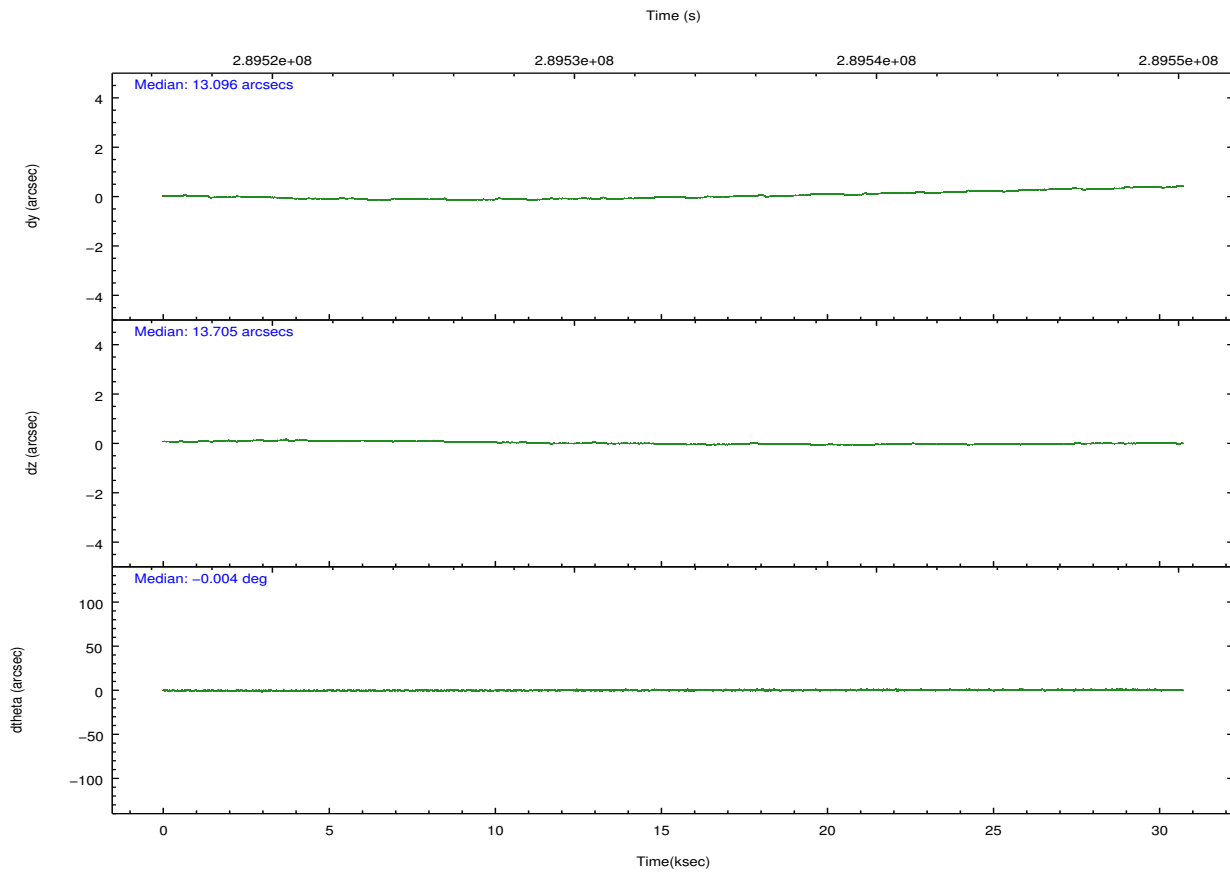
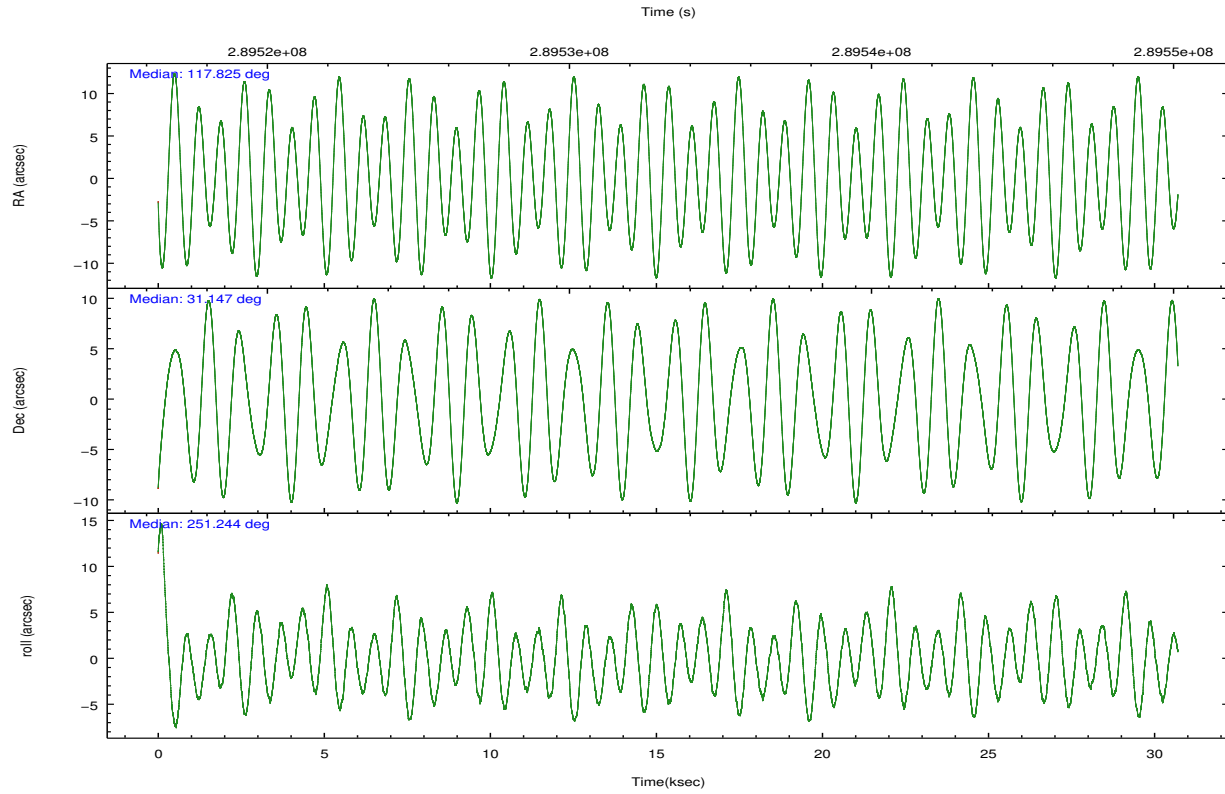
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	234952	212258	262110	223338	205369	270534	grade 0 events	7525	7246	10265	7907	10303	18005
rejected events	214355	192721	125902	201276	104513	206405		3%	3%	3%	3%	5%	6%
rejected %	91%	90%	48%	90%	50%	76%	grade 1 events	127	126	503	111	295	205
								0%	0%	0%	0%	0%	0%
							grade 2 events	4912	4193	42036	4851	21260	15144
								2%	1%	16%	2%	10%	5%
							grade 3 events	2160	2289	6244	2382	9594	6992
								0%	1%	2%	1%	4%	2%
							grade 4 events	2227	2206	6050	2387	9277	6419
								0%	1%	2%	1%	4%	2%
							grade 5 events	6219	7239	21632	7381	22403	11318
								2%	3%	8%	3%	10%	4%
							grade 6 events	3777	3605	71642	4538	50444	17579
								1%	1%	27%	2%	24%	6%
							grade 7 events	208005	185354	103738	193781	81793	194872
								88%	87%	39%	86%	39%	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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	117.818352	117.8250077488048	CCD I2 on	O1	Y
[deg] Pointing Dec	31.173156	31.14642782136014	CCD I3 on	O2	Y
[deg] Pointing Roll	251.095715	251.2488996631426	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	289518622.184000	289517357.40454	CCD S5 on	N	N
Observation start date	2007-03-05T21:49:17	2007-03-05T21:29:17	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	289548622.184000	289549808.90608	On-chip summing requested	N	N
Observation end date	2007-03-06T06:09:17	2007-03-06T06:30:08	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



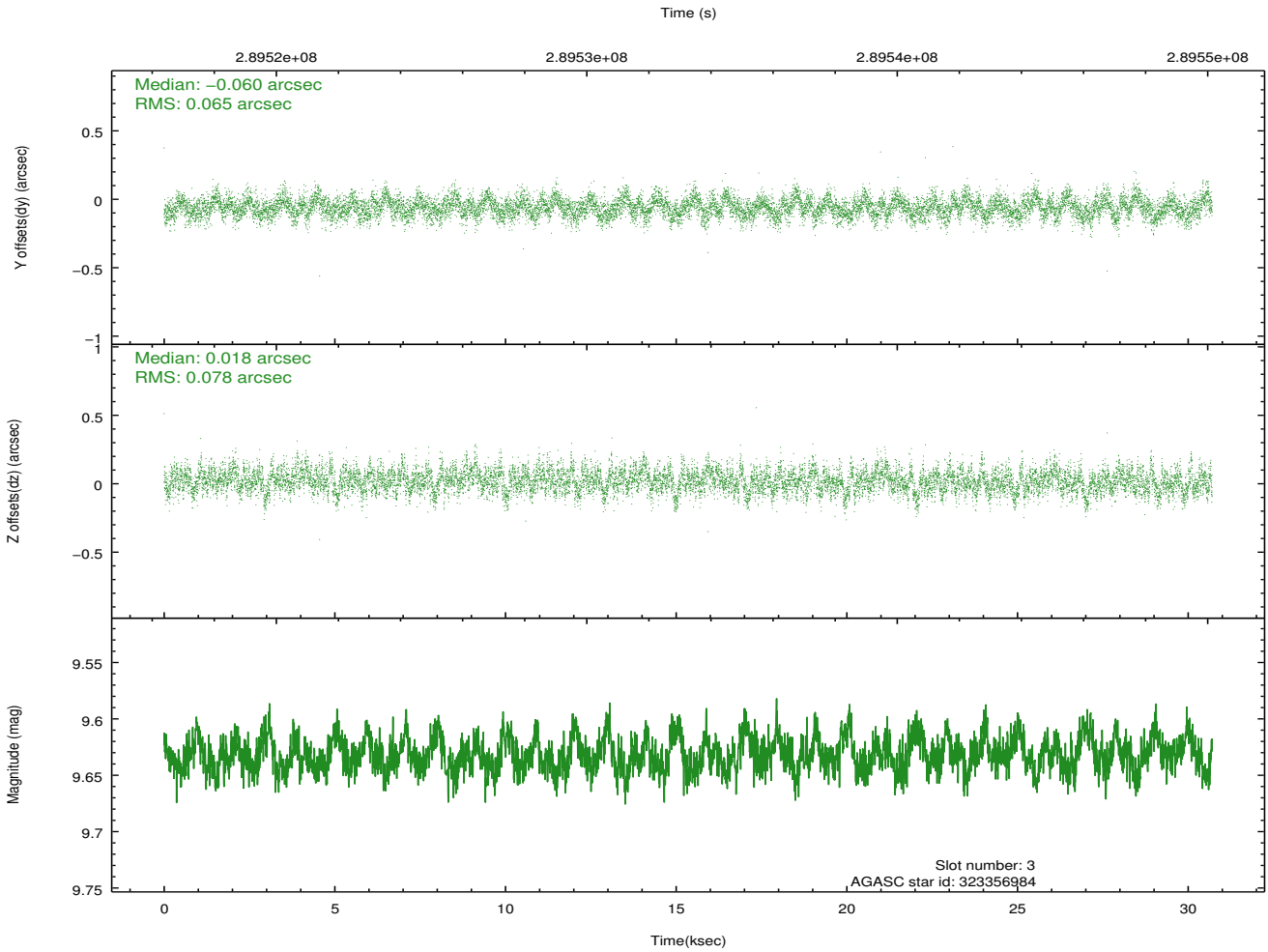
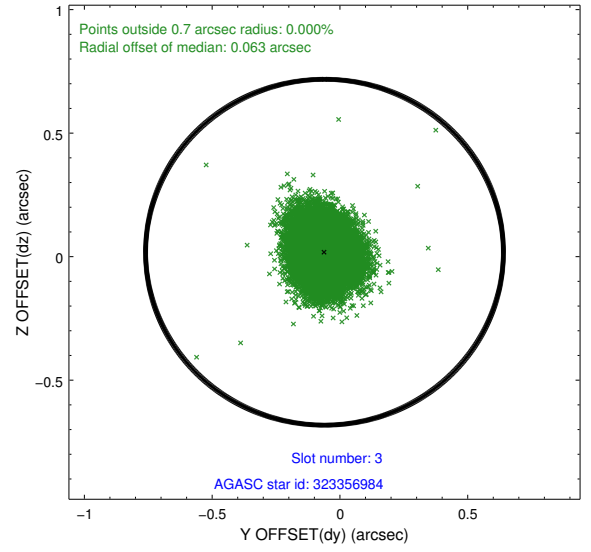
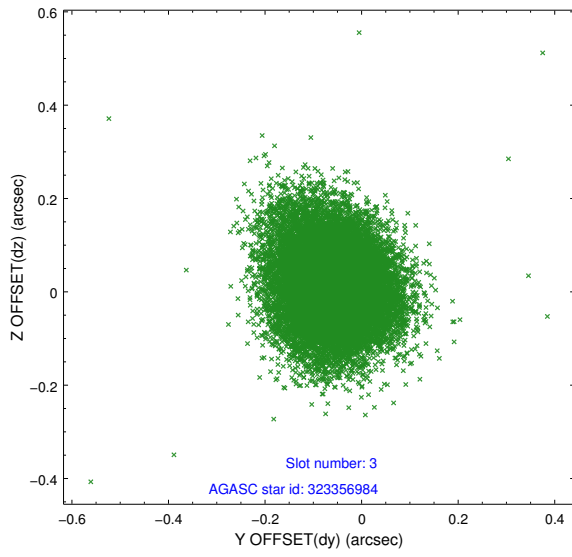


### Slot Statistics

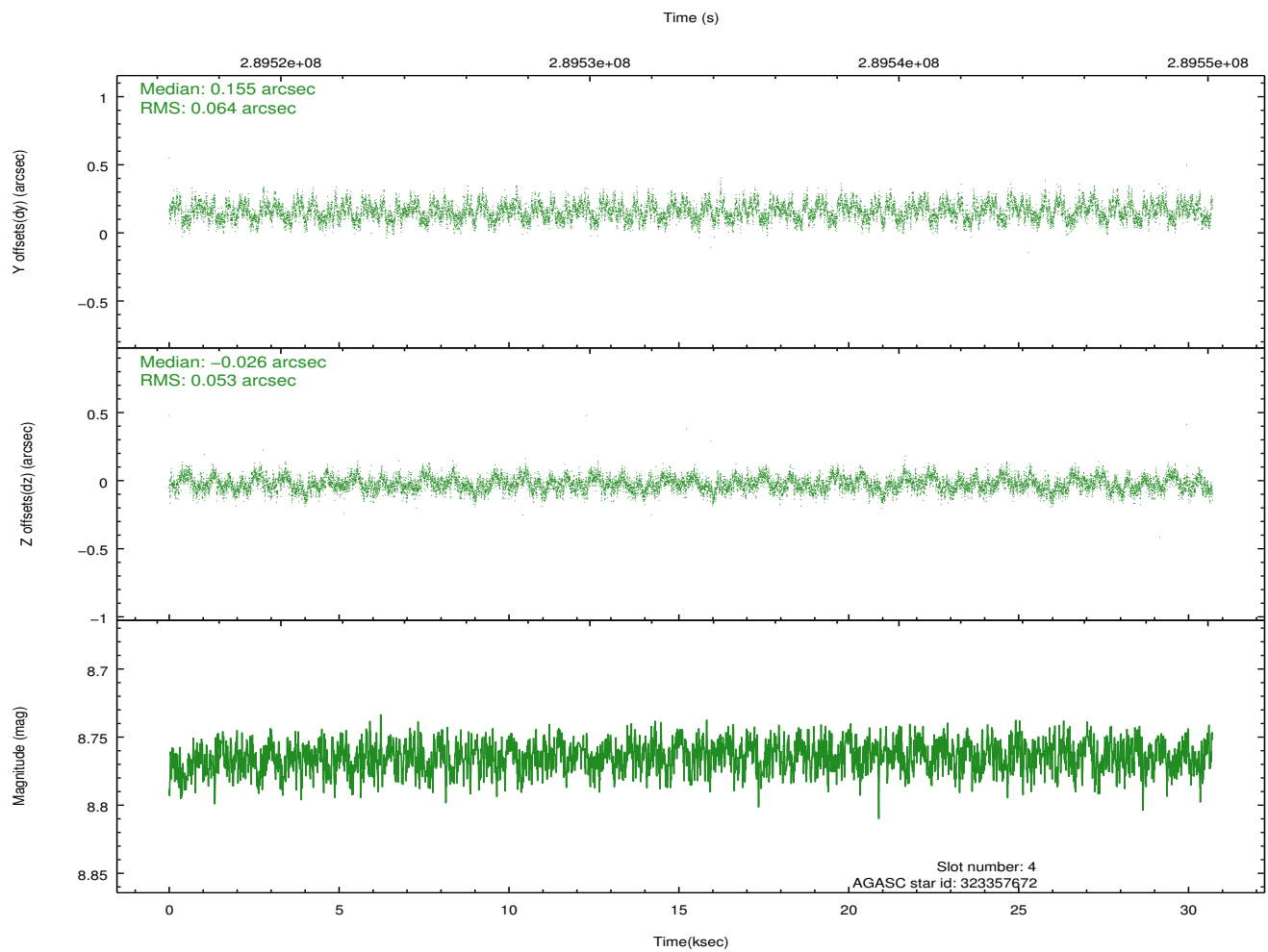
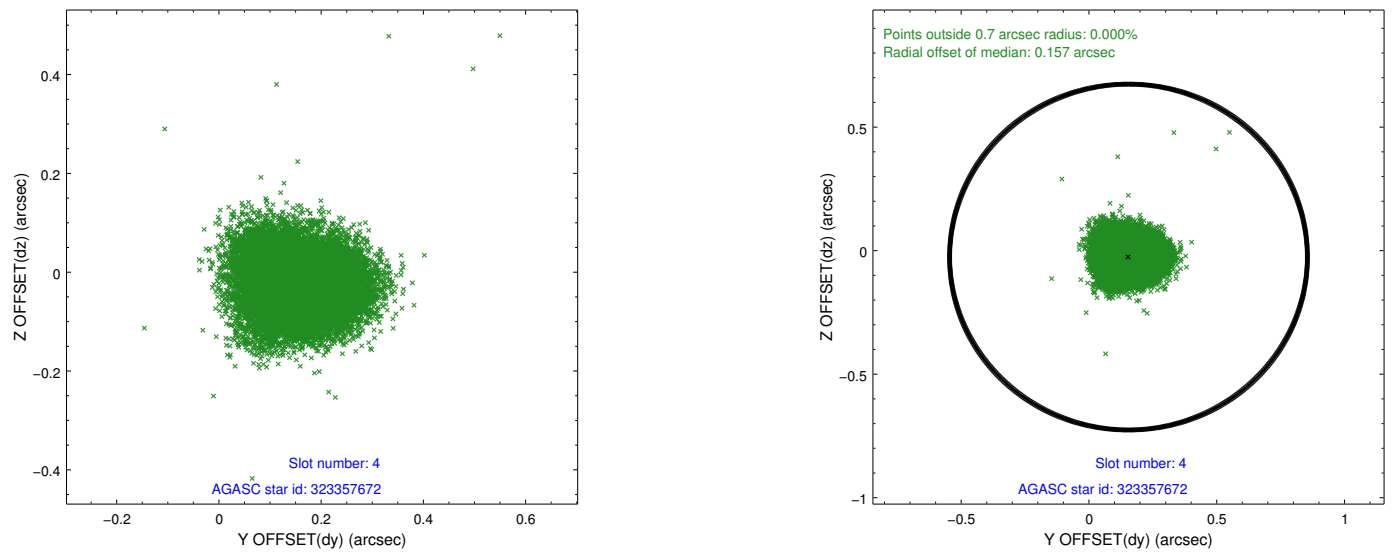
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	7489	-0.035	-0.064	0.008	0.013	0.000000	0.000000	-766.10	-1735.13
1	FID	ACIS-S-4	7.20	7489	0.171	0.034	0.009	0.018	0.000000	0.000000	2147.35	173.38
2	FID	ACIS-S-5	7.23	7490	-0.167	0.038	0.008	0.014	0.000000	0.000000	-1818.99	167.13
3	GUIDE	323356984	9.63	14969	-0.060	0.018	0.108	0.175	117.124559	31.154889	748.98	-2002.54
4	GUIDE	323357672	8.76	14972	0.155	-0.026	0.090	0.140	117.184895	30.909950	1526.10	-1545.54
5	GUIDE	323369776	8.66	14972	0.208	0.084	0.078	0.124	117.875992	30.530329	2132.13	919.41
6	GUIDE	323370192	7.21	14978	-0.182	-0.083	0.073	0.112	117.750818	31.613536	-1432.03	-709.30
7	GUIDE	323370184	8.10	14977	-0.123	0.004	0.070	0.110	117.775711	31.615961	-1465.19	-639.95

## 2.4 Star Slots

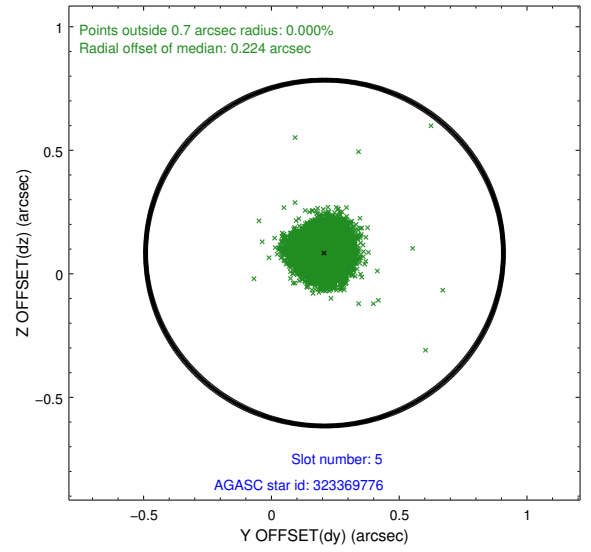
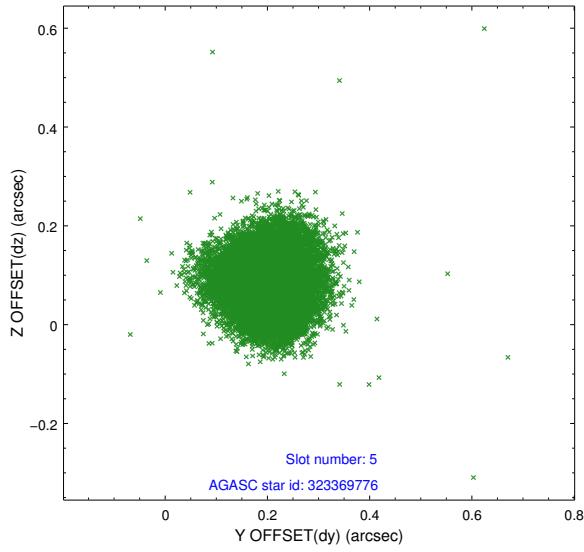
### 2.4.1 Slot 3



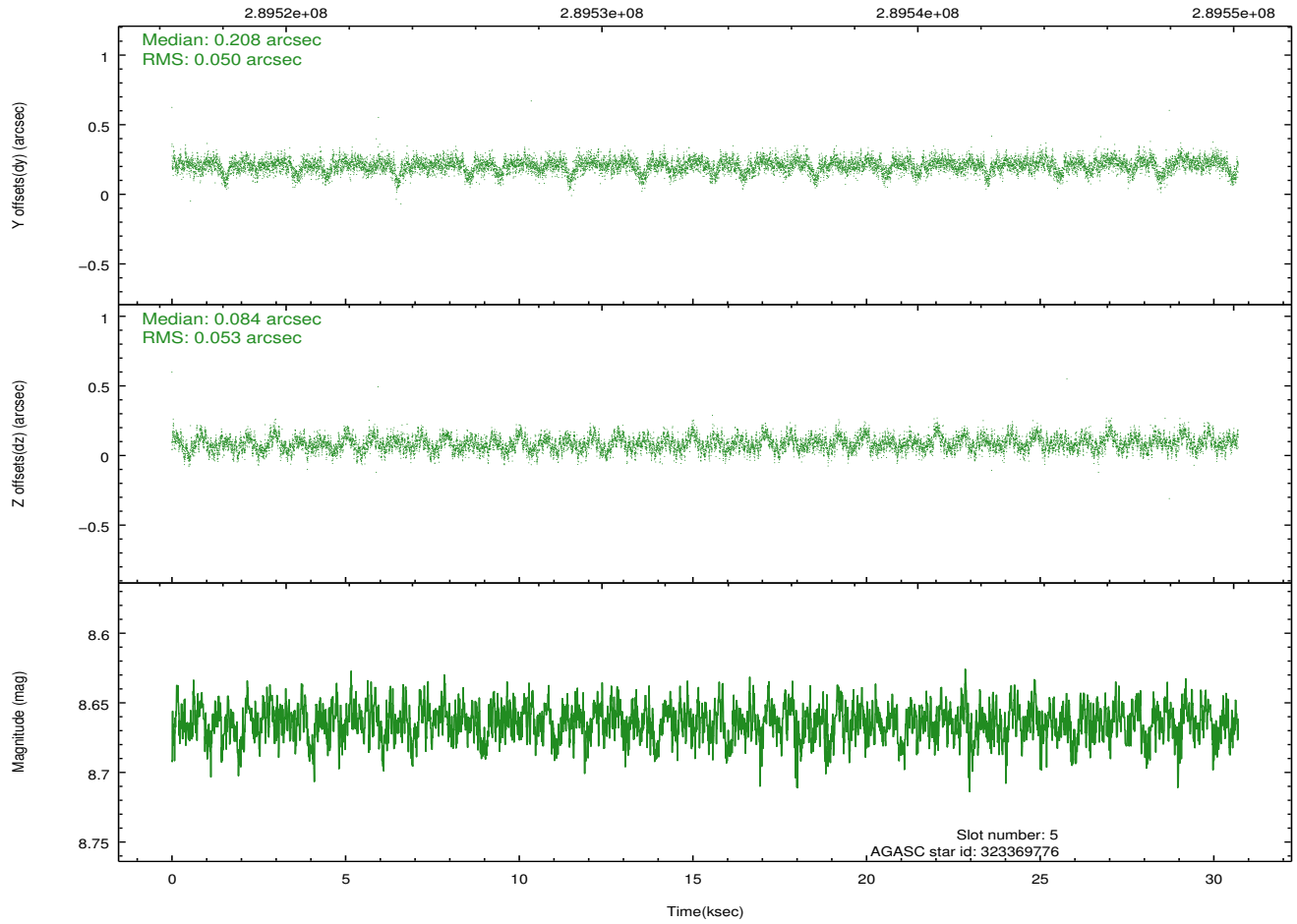
## 2.4.2 Slot 4



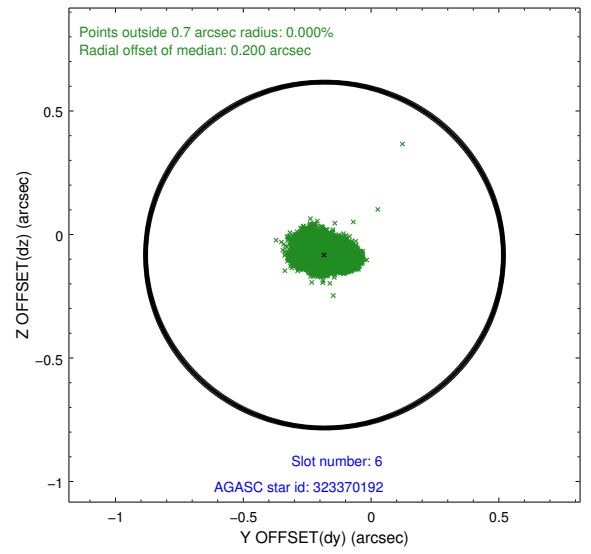
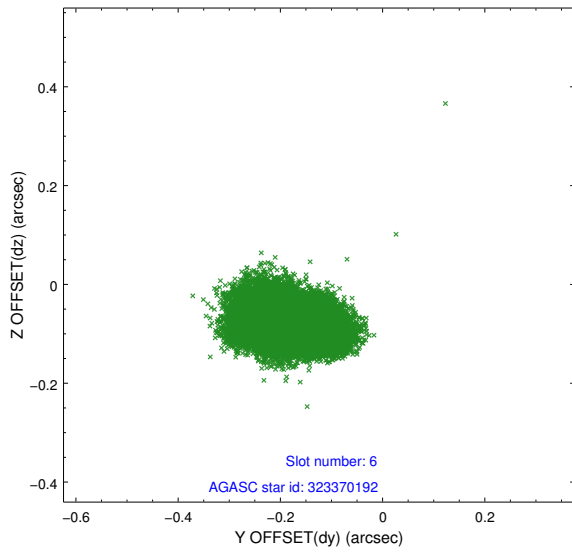
### 2.4.3 Slot 5



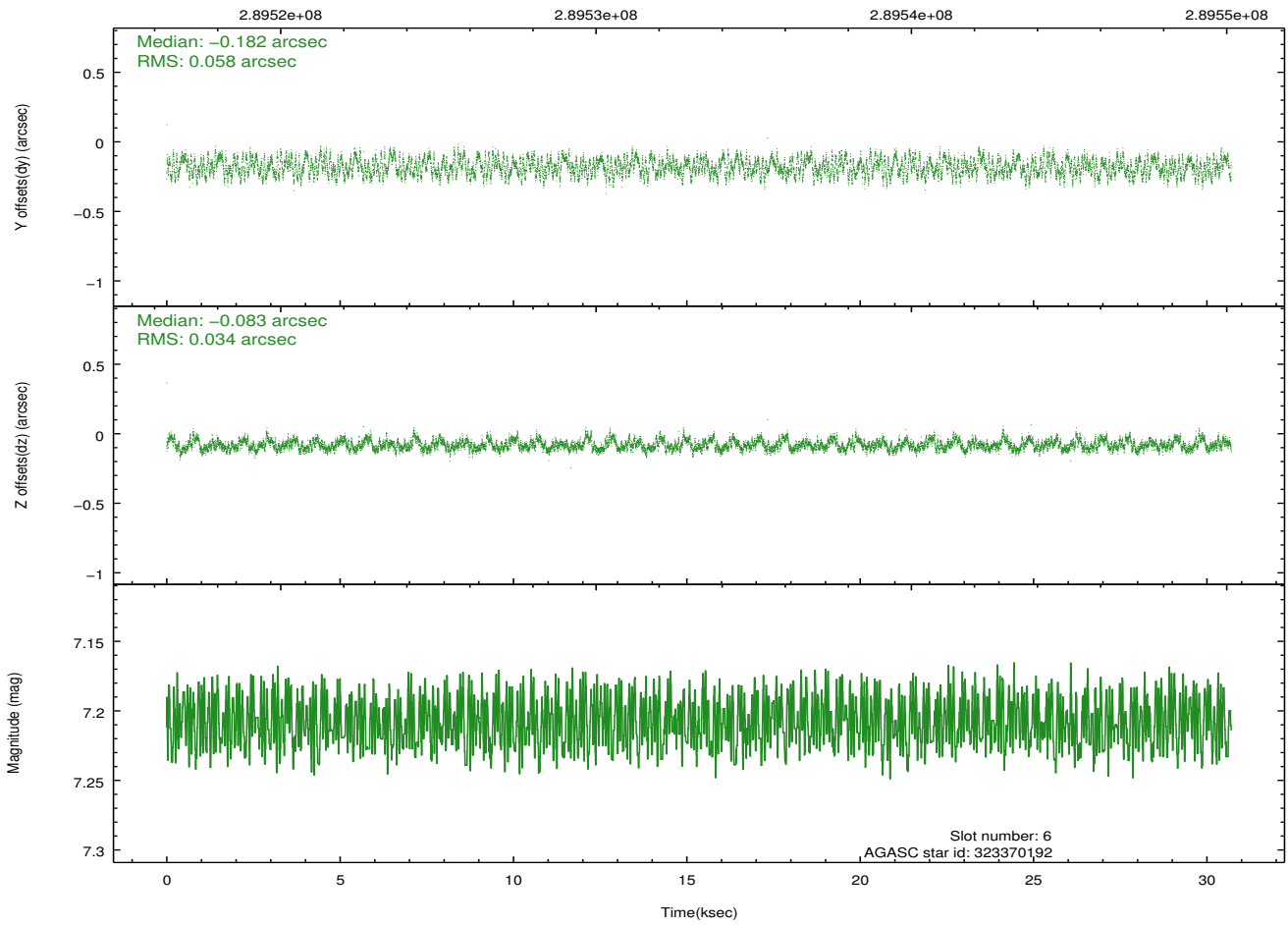
Time (s)



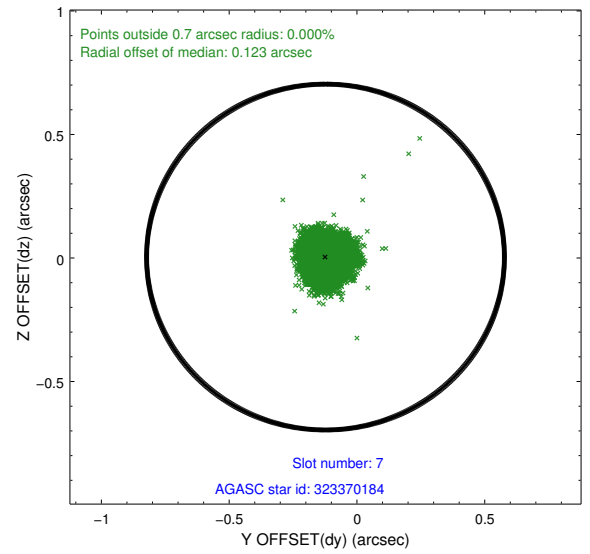
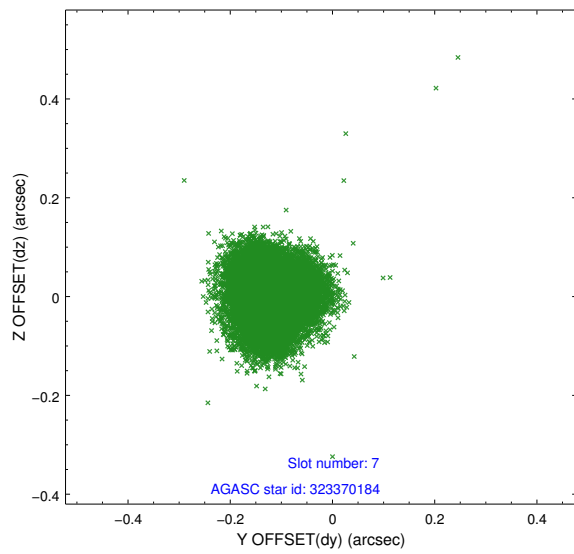
## 2.4.4 Slot 6



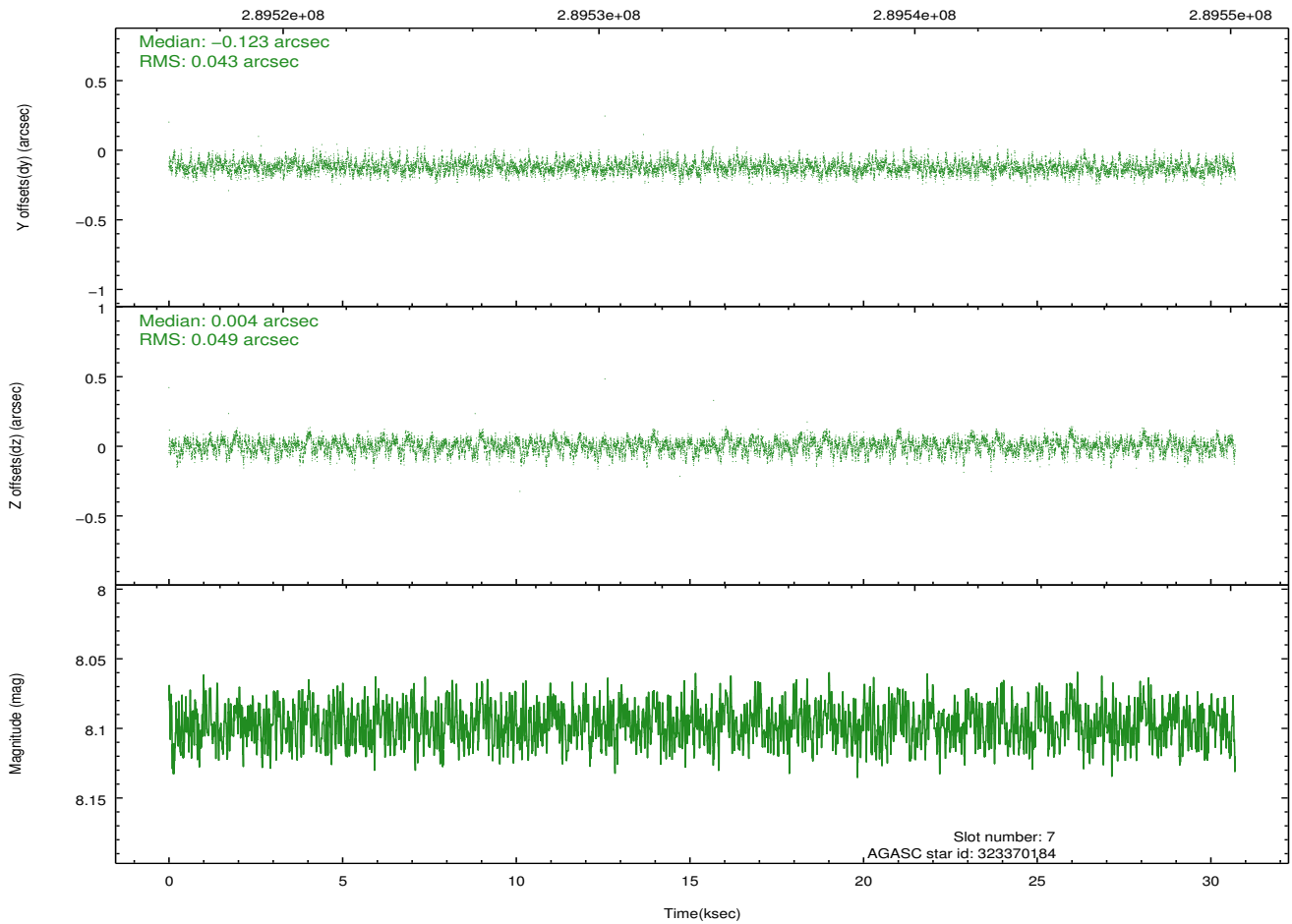
Time (s)



## 2.4.5 Slot 7

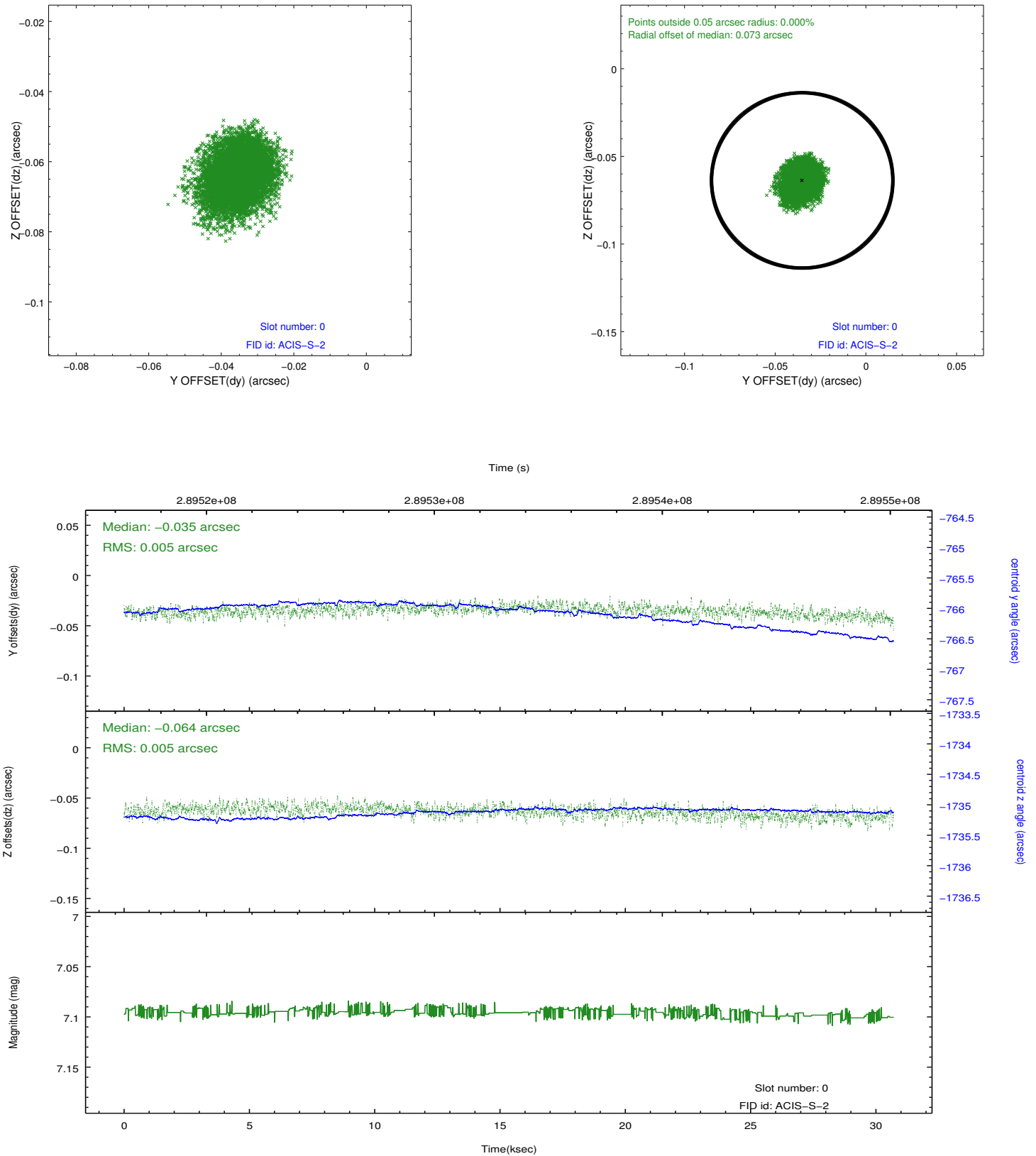


Time (s)

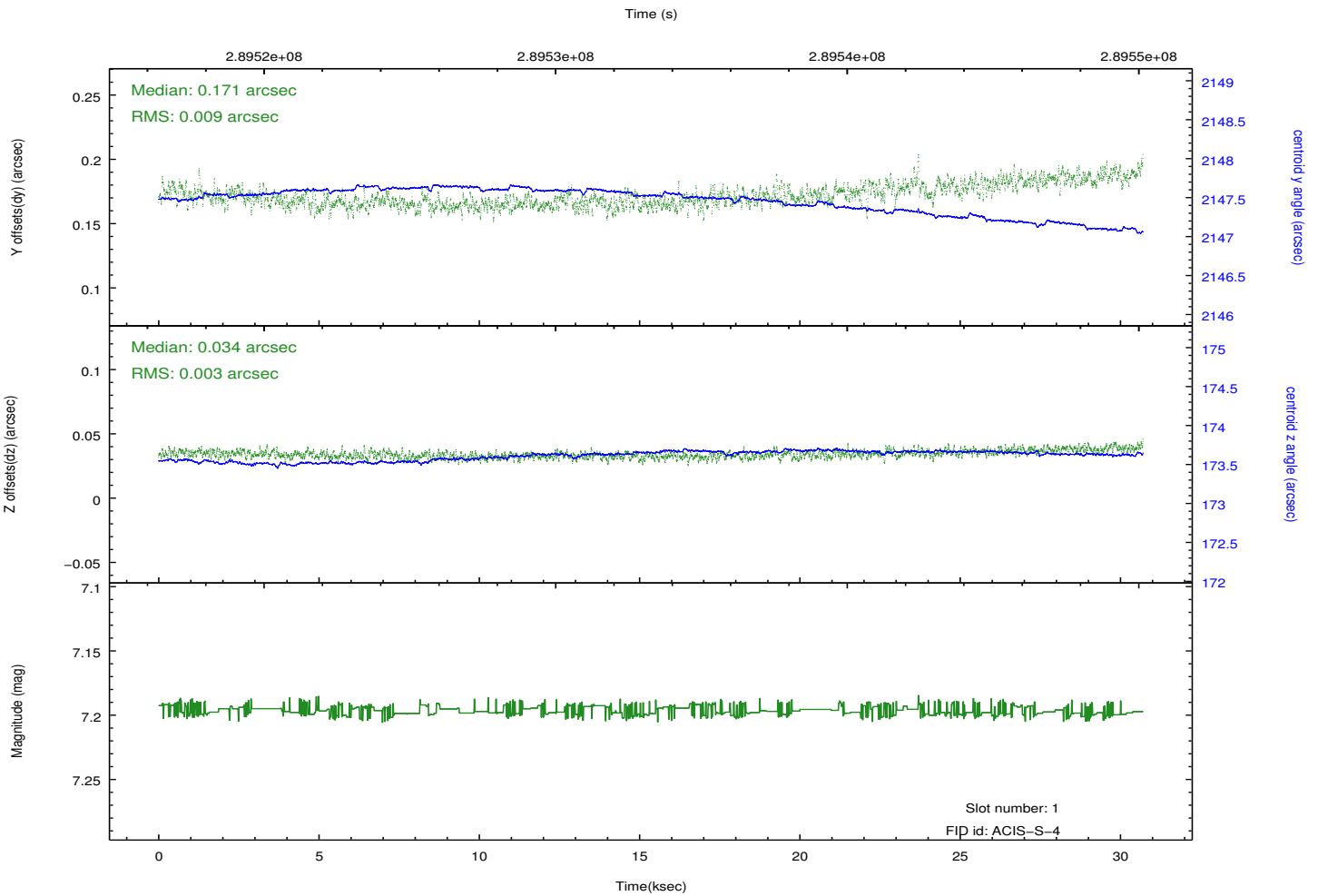
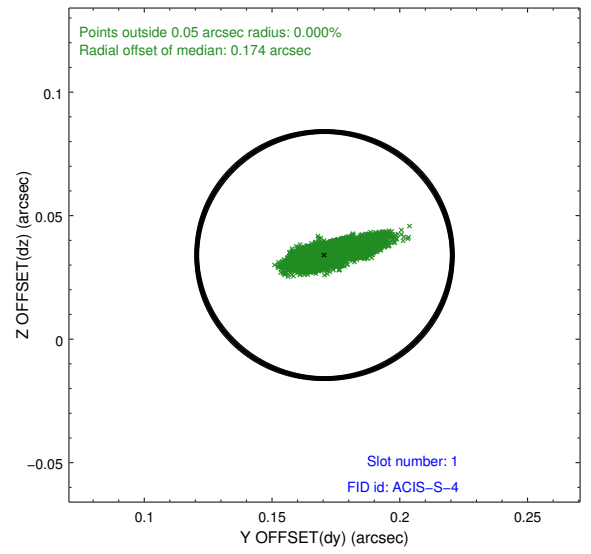
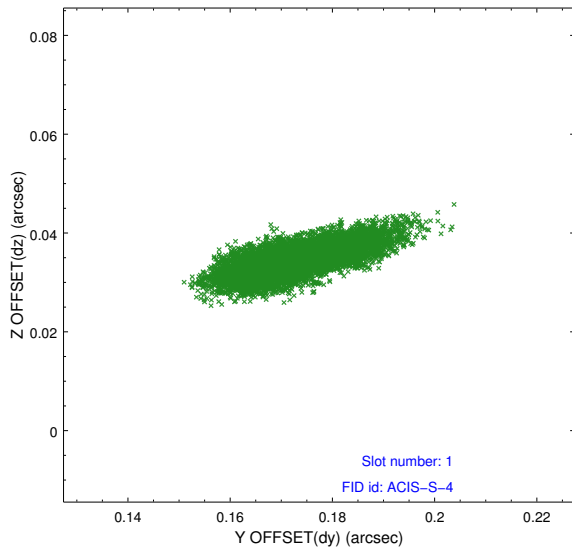


## 2.5 FID Slots

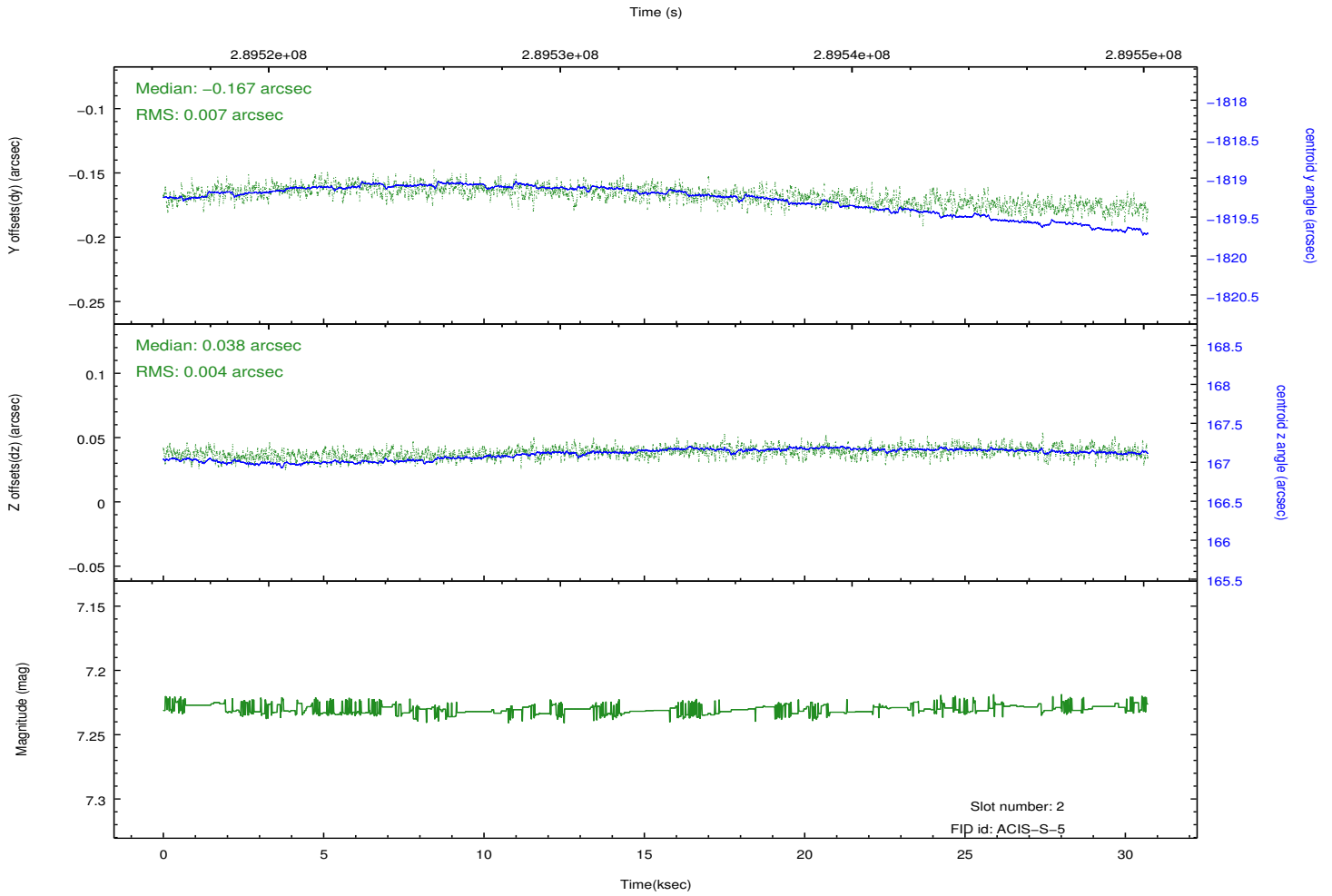
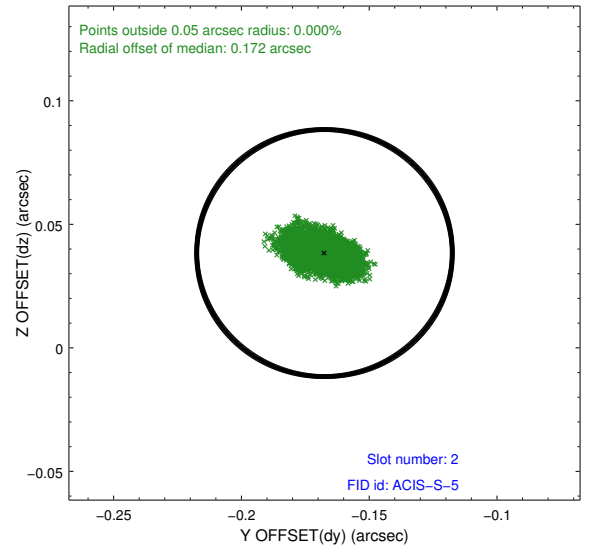
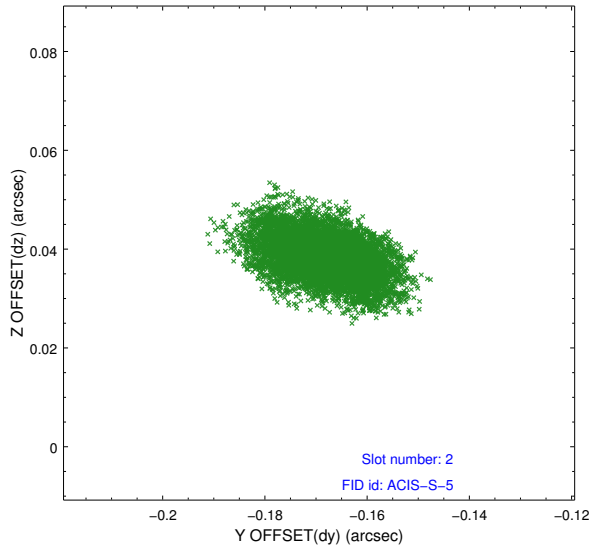
### 2.5.1 Slot 0



## 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)	2012.04.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.0415998

## A.2 Comments