

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12801 - L2 Version 2  
Chandra X-Ray Center

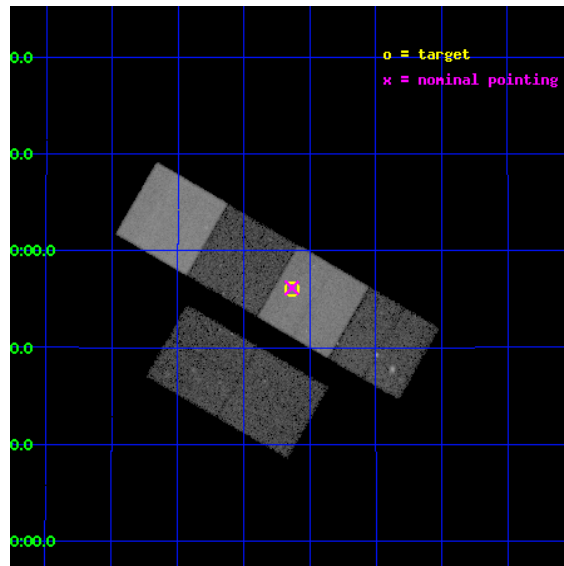
L2 Processing Date : Feb 27 2012

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# 1 Front

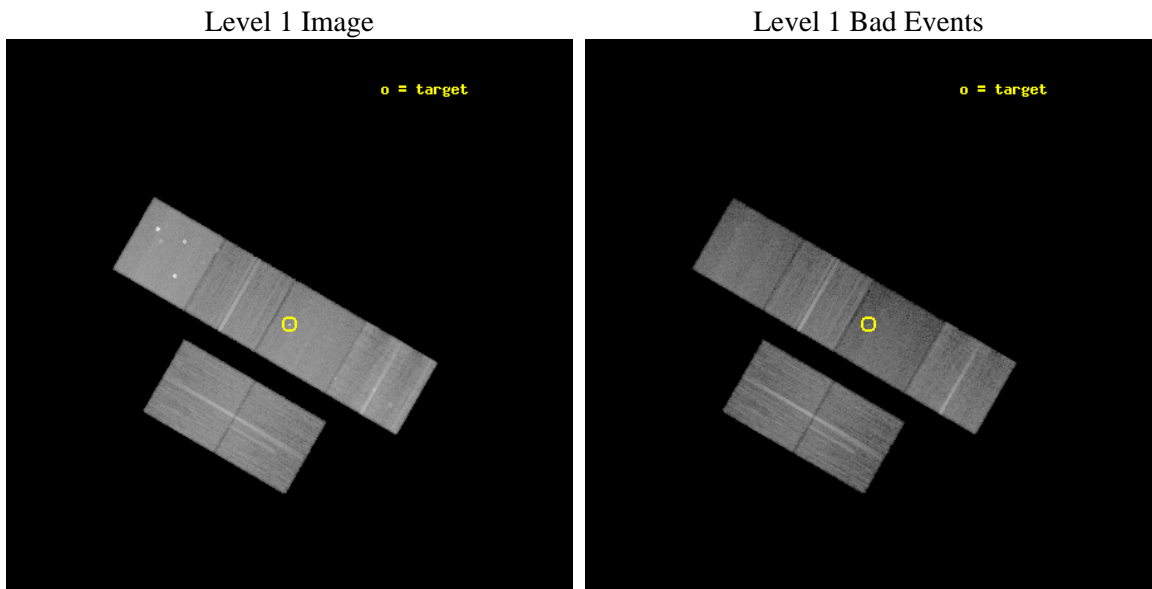
seq_num	702437	Sequence number
obs_id	12801	Observation id
title	Direct Determination of Dark Matter Fractions and M/L in Elliptical Galaxies	Proposal title
observer	David Pooley	Principal investigator
object	B1422+231	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	216.15875	Observer's specified target RA [deg]
dec_targ	22.9335	Observer's specified target Dec [deg]
ra_nom	216.15889425299	Nominal RA [deg]
dec_nom	22.936517566244	Nominal Dec [deg]
roll_nom	30.045777194914	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29963.834621072	Sum of GTIs [s]
livetime	29584.414505045	Livetime [s]
ontime2	29963.875661075	Sum of GTIs [s]
ontime3	29963.711501062	Sum of GTIs [s]
ontime5	29963.793581069	Sum of GTIs [s]
ontime6	29963.752541065	Sum of GTIs [s]
ontime7	29963.834621072	Sum of GTIs [s]
ontime8	29963.670461059	Sum of GTIs [s]
l2events	280416	Number of level 2 events



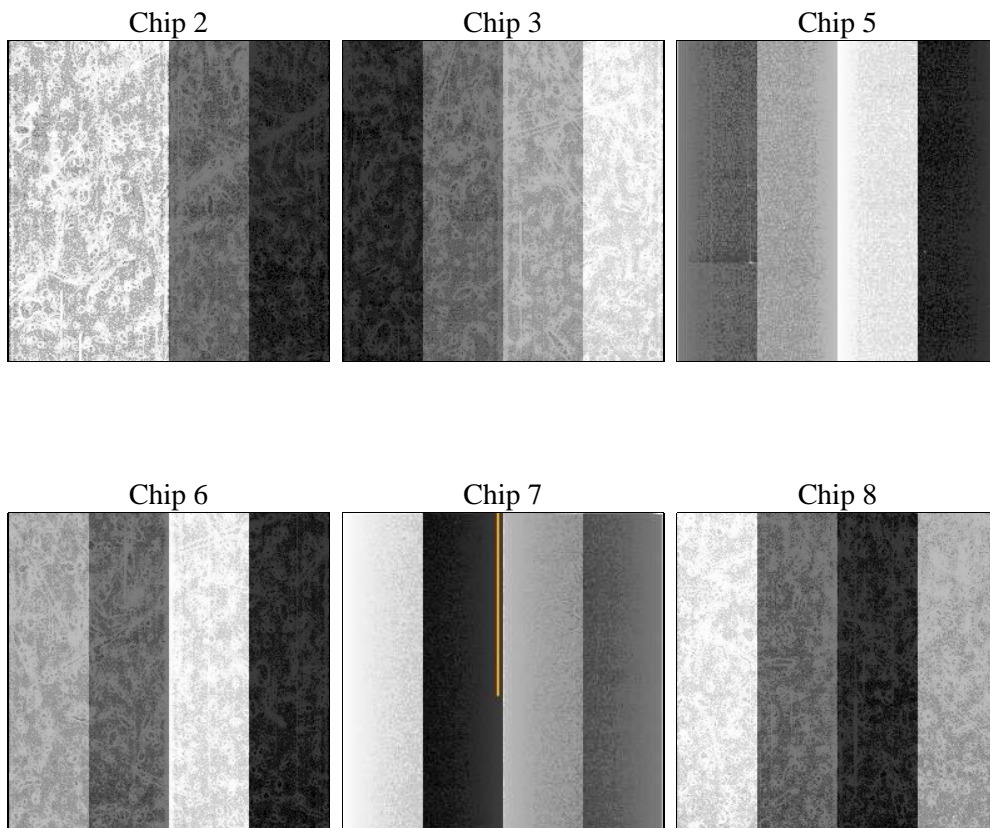
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	29963.834621072	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime2	29963.875661075	Sum of GTIs [s]
date	2012-02-27T12:53:28	Date and time of file creation	ontime3	29963.711501062	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	29963.793581069	Sum of GTIs [s]
			ontime6	29963.752541065	Sum of GTIs [s]
			ontime7	29963.834621072	Sum of GTIs [s]
			ontime8	29963.670461059	Sum of GTIs [s]
			l1events	1181654	Number of level 1 events

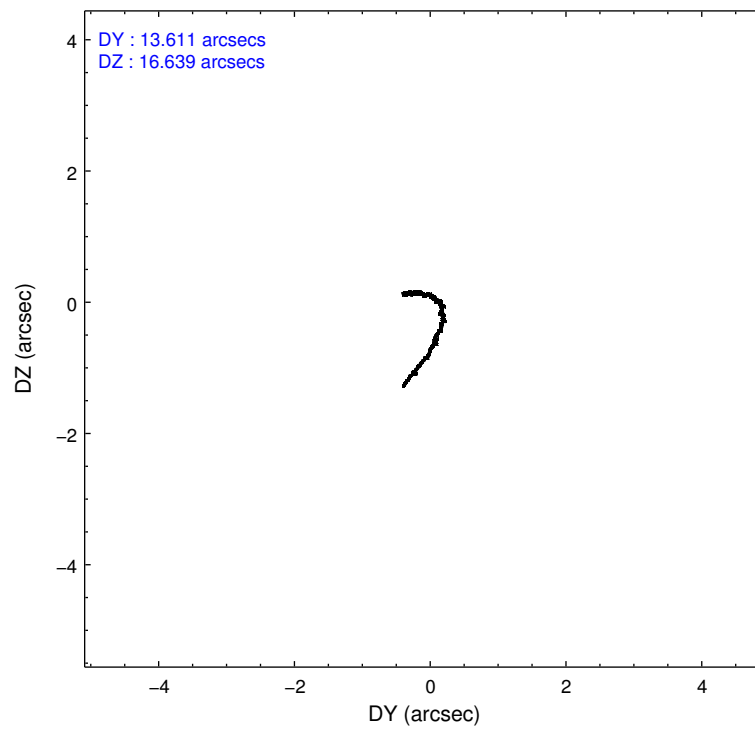
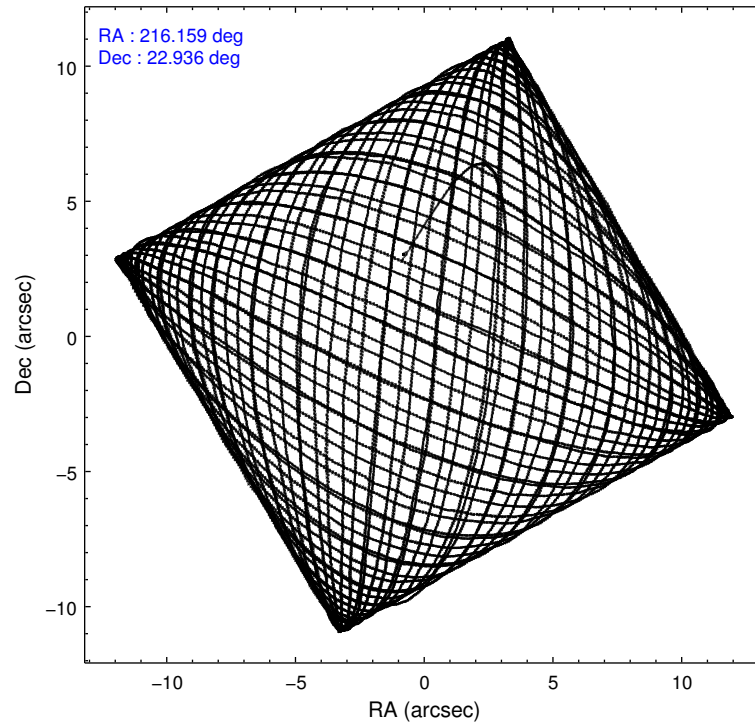
### 2.1.4 Events

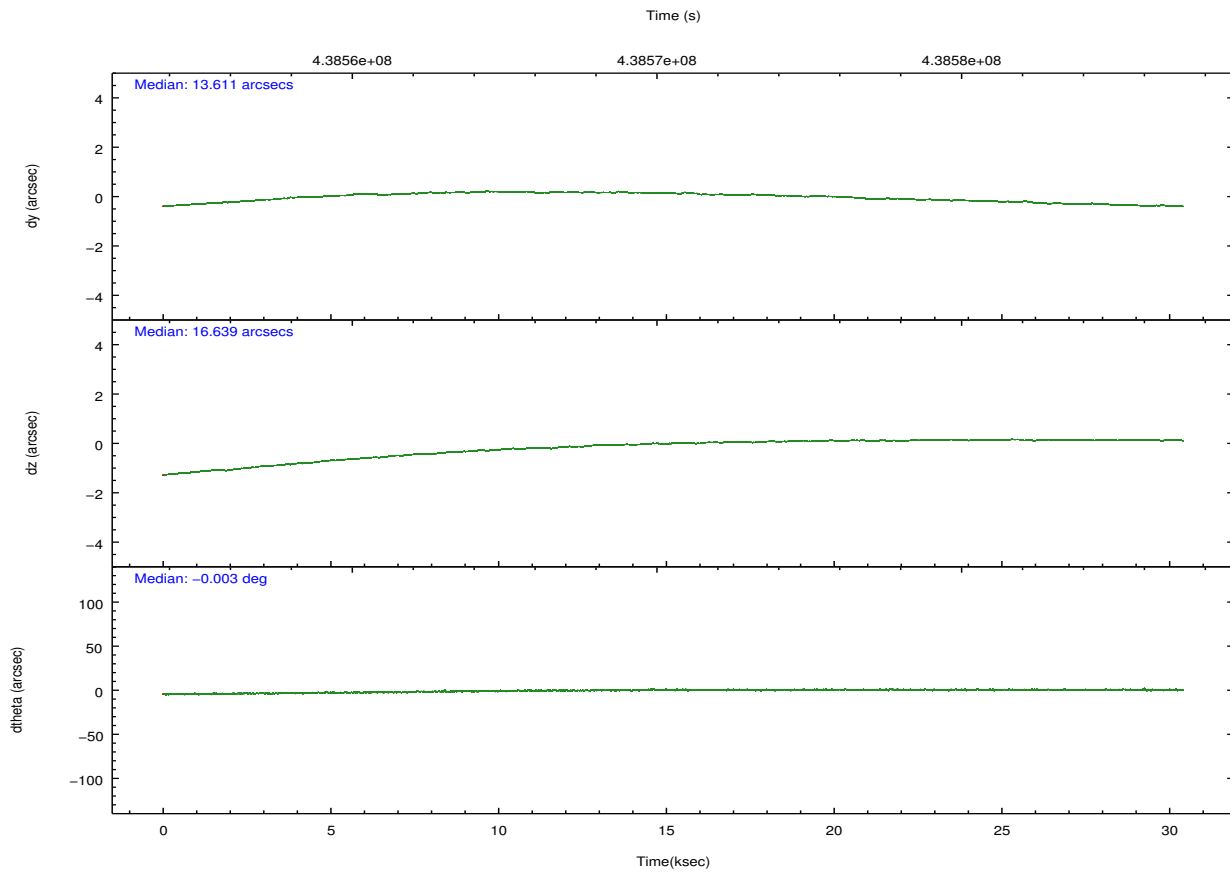
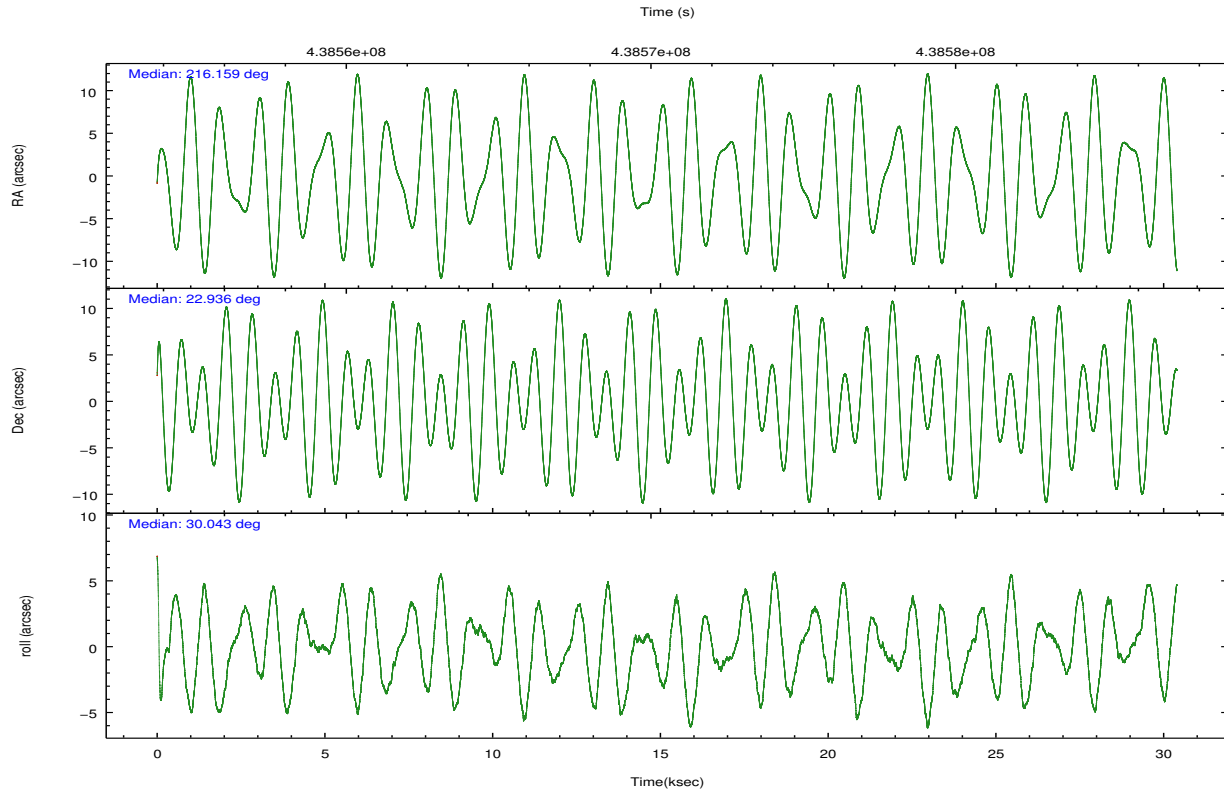
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	177514	159851	259607	169183	193073	222426	grade 0 events	7388	6476	21421	7081	10185	18748
rejected events	158037	142300	117972	149795	98645	159663		4%	4%	8%	4%	5%	8%
rejected %	89%	89%	45%	88%	51%	71%	grade 1 events	107	82	665	83	327	191
								0%	0%	0%	0%	0%	0%
							grade 2 events	4778	3863	44479	4292	20495	14774
								2%	2%	17%	2%	10%	6%
							grade 3 events	1896	1891	5119	2017	8569	6511
								1%	1%	1%	1%	4%	2%
							grade 4 events	1930	1855	4935	1944	8430	6186
								1%	1%	1%	1%	4%	2%
							grade 5 events	6146	6916	19237	7002	20279	10503
								3%	4%	7%	4%	10%	4%
							grade 6 events	3486	3470	65712	4060	46786	16547
								1%	2%	25%	2%	24%	7%
							grade 7 events	151783	135298	98039	142704	78002	148966
								85%	84%	37%	84%	40%	66%

## 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	216.144426	216.1588942529857	CCD I2 on	O1	Y
[deg] Pointing Dec	22.912649	22.93651756624399	CCD I3 on	O2	Y
[deg] Pointing Roll	29.894787	30.04577719491391	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	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	Y	Y
[s] Observation start time (MET)	438555723.184000	438554659.02653	CCD S5 on	N	N
Observation start date	2011-11-24T21:00:57	2011-11-24T20:44:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	438585723.184000	438586808.15322	On-chip summing requested	N	N
Observation end date	2011-11-25T05:20:57	2011-11-25T05:40:08	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



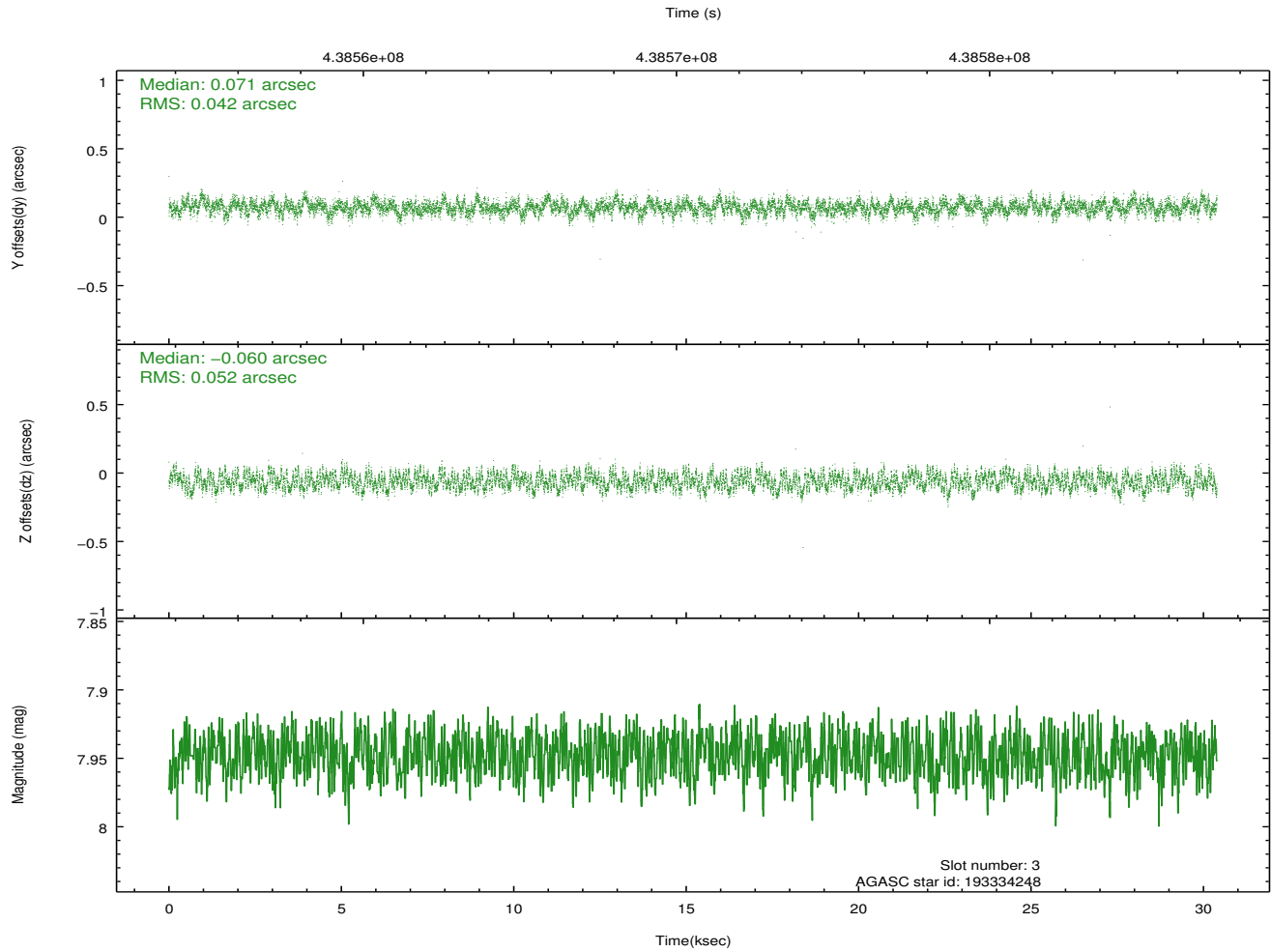
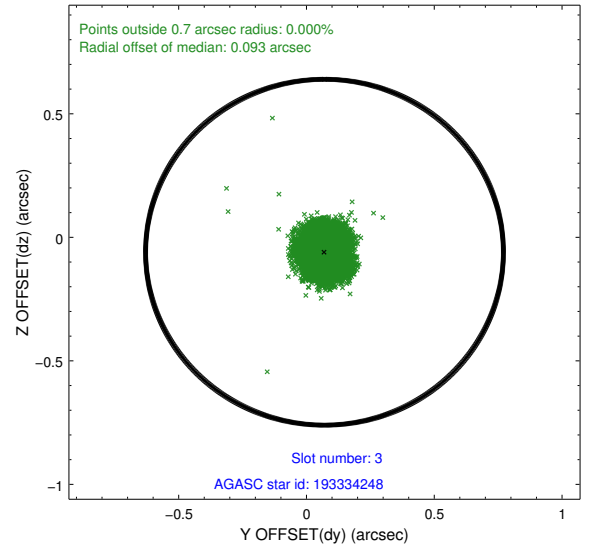
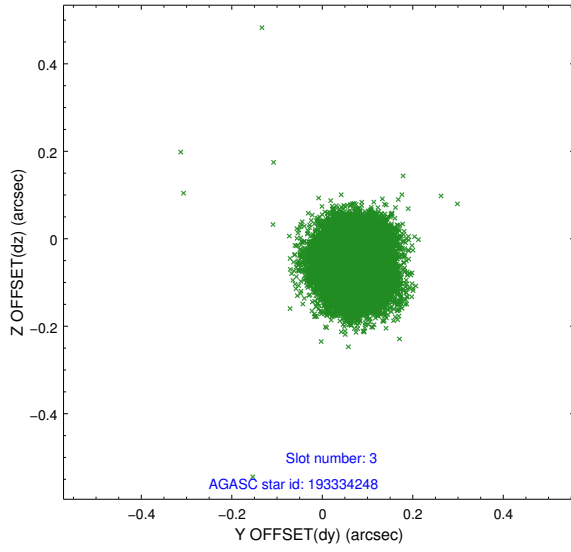


### Slot Statistics

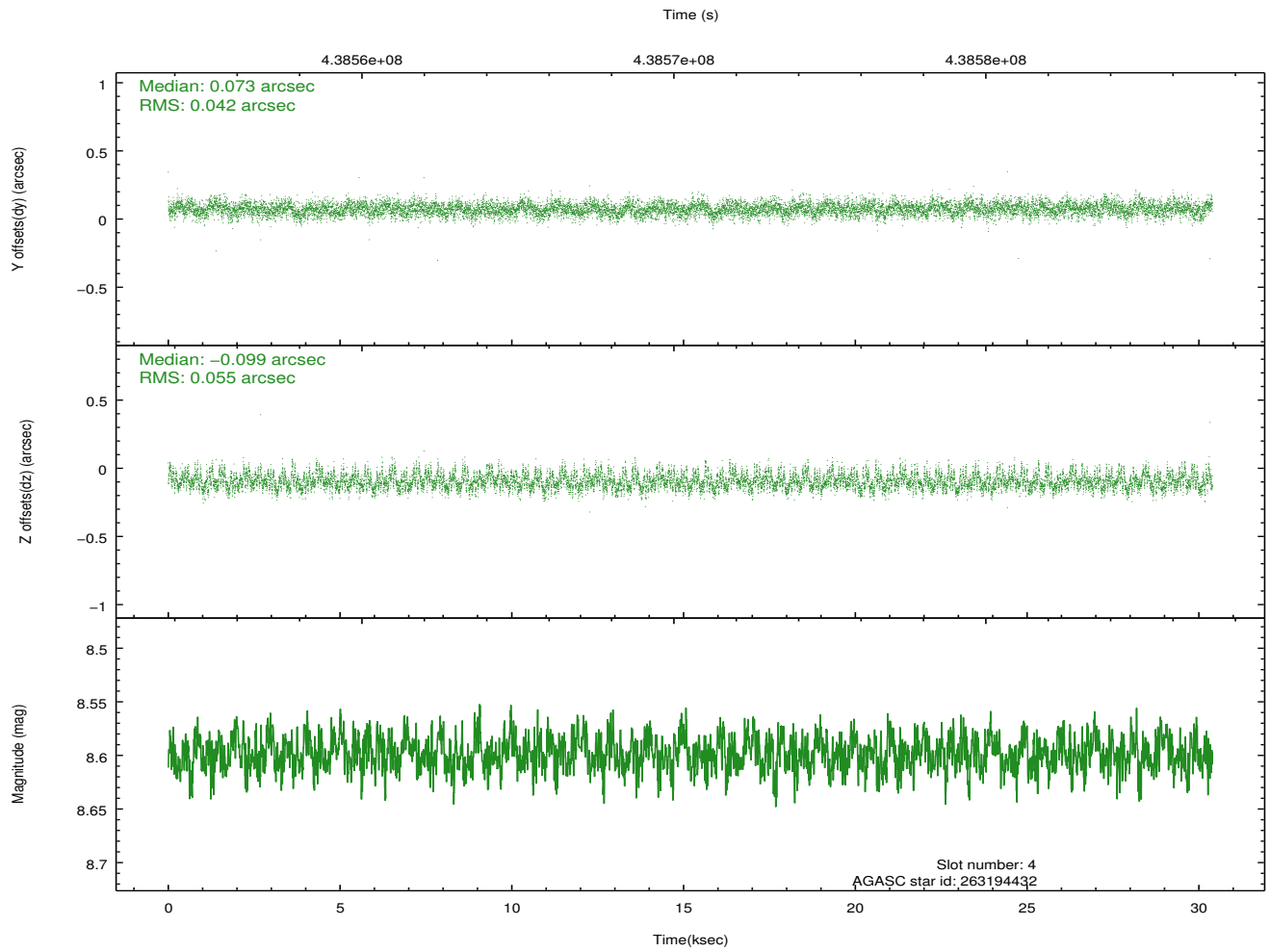
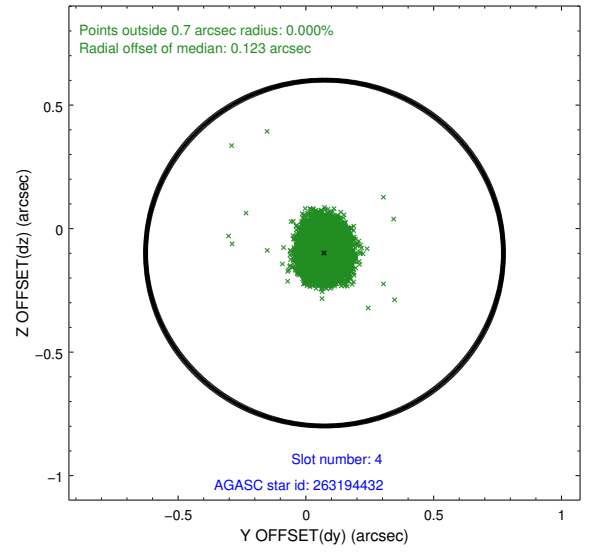
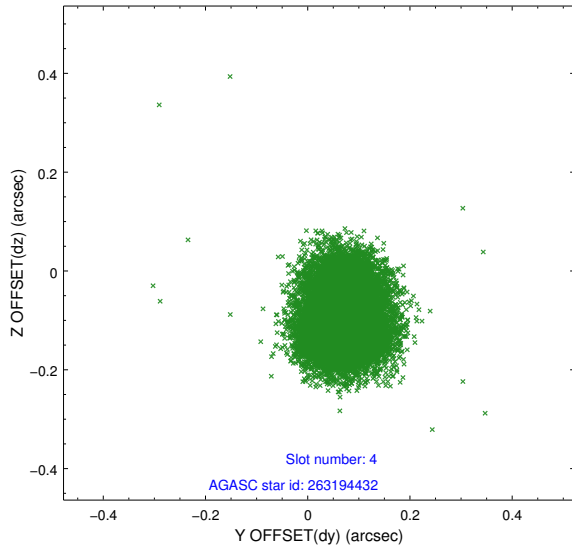
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	7414	-0.053	-0.011	0.014	0.019	0.000000	0.000000	-766.57	-1737.75
1	FID	ACIS-S-4	6.98	7414	0.212	0.029	0.010	0.019	0.000000	0.000000	2146.96	170.66
2	FID	ACIS-S-5	7.02	7414	-0.192	-0.007	0.012	0.021	0.000000	0.000000	-1819.44	164.42
3	GUIDE	193334248	7.95	14824	0.071	-0.060	0.073	0.111	215.839819	22.271930	-2028.30	-1492.95
4	GUIDE	263194432	8.60	14825	0.073	-0.099	0.073	0.120	216.192636	22.671847	-292.87	-831.20
5	GUIDE	263196048	8.69	14819	-0.082	-0.121	0.075	0.122	216.468737	22.828170	782.36	-798.84
6	GUIDE	263198168	8.83	14760	-0.061	0.014	0.084	0.139	216.844674	22.716629	1667.10	-1764.46
7	GUIDE	194250128	9.07	14769	-0.001	0.265	0.096	0.158	216.438086	22.290634	-267.21	-2426.58

## 2.4 Star Slots

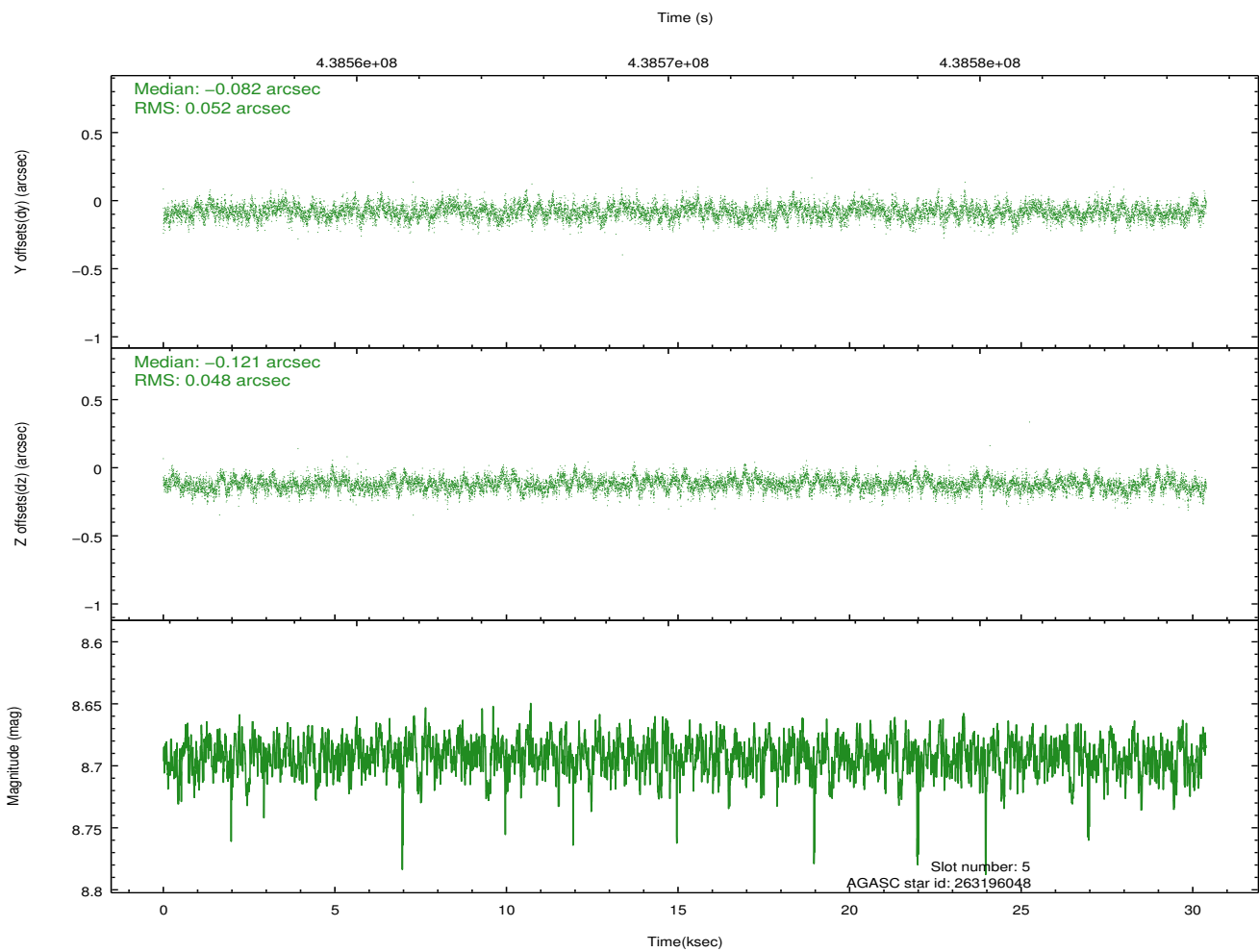
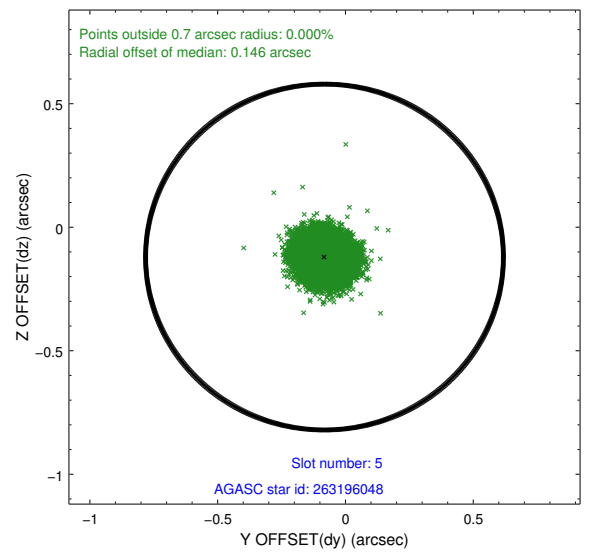
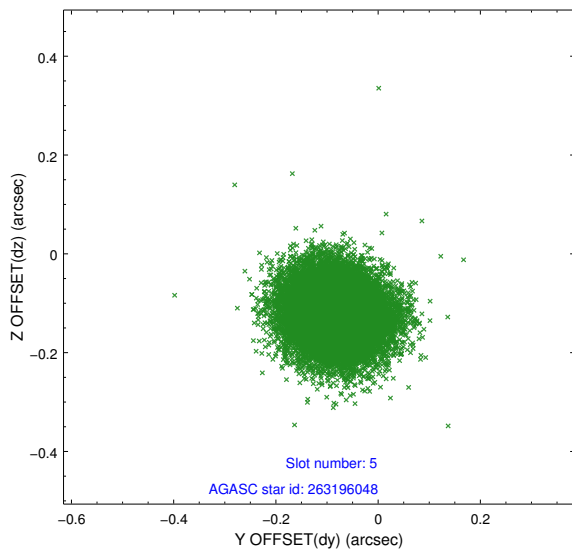
### 2.4.1 Slot 3



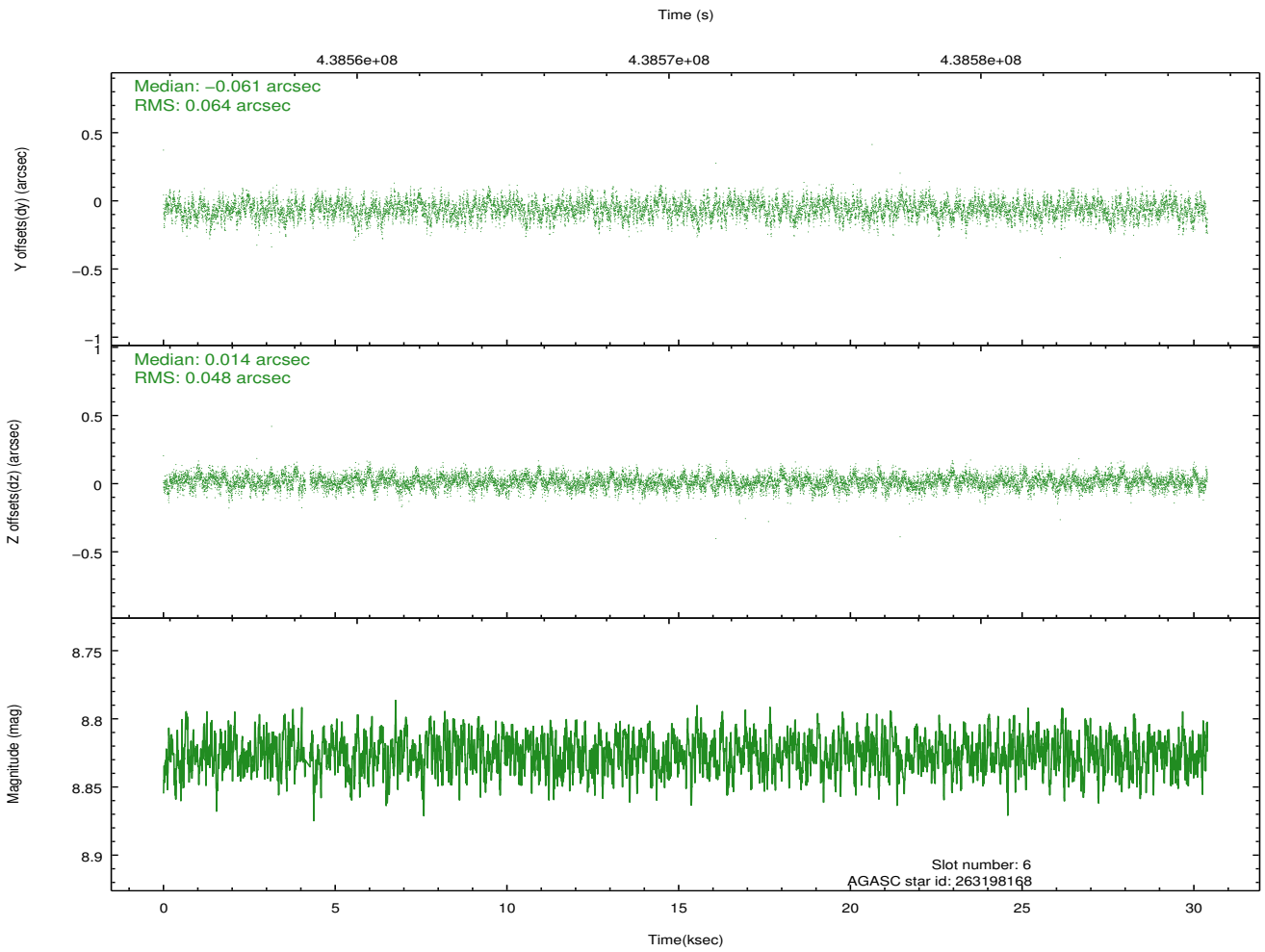
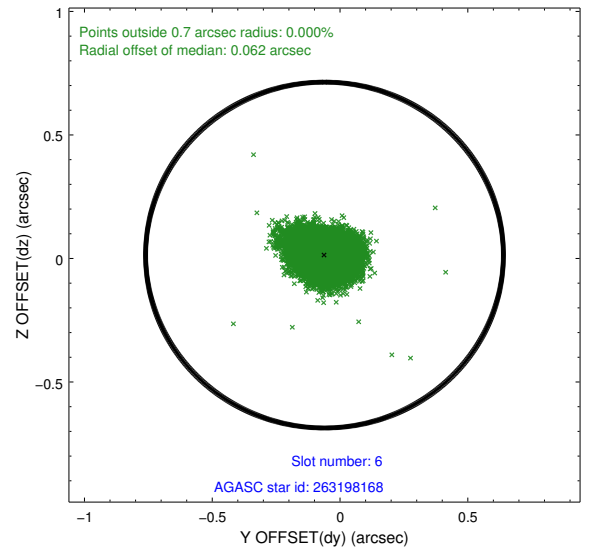
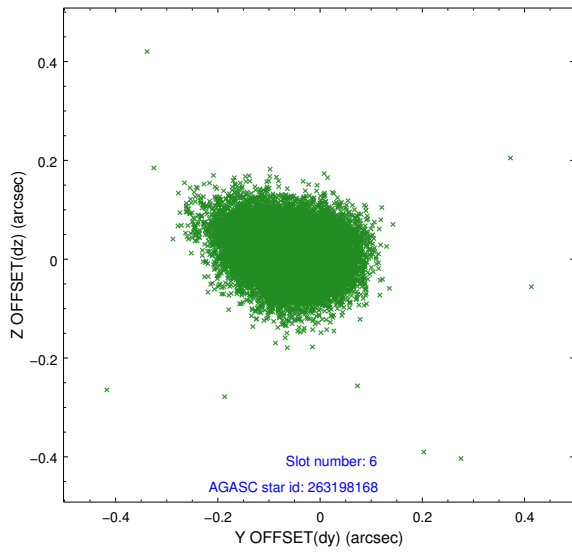
### 2.4.2 Slot 4



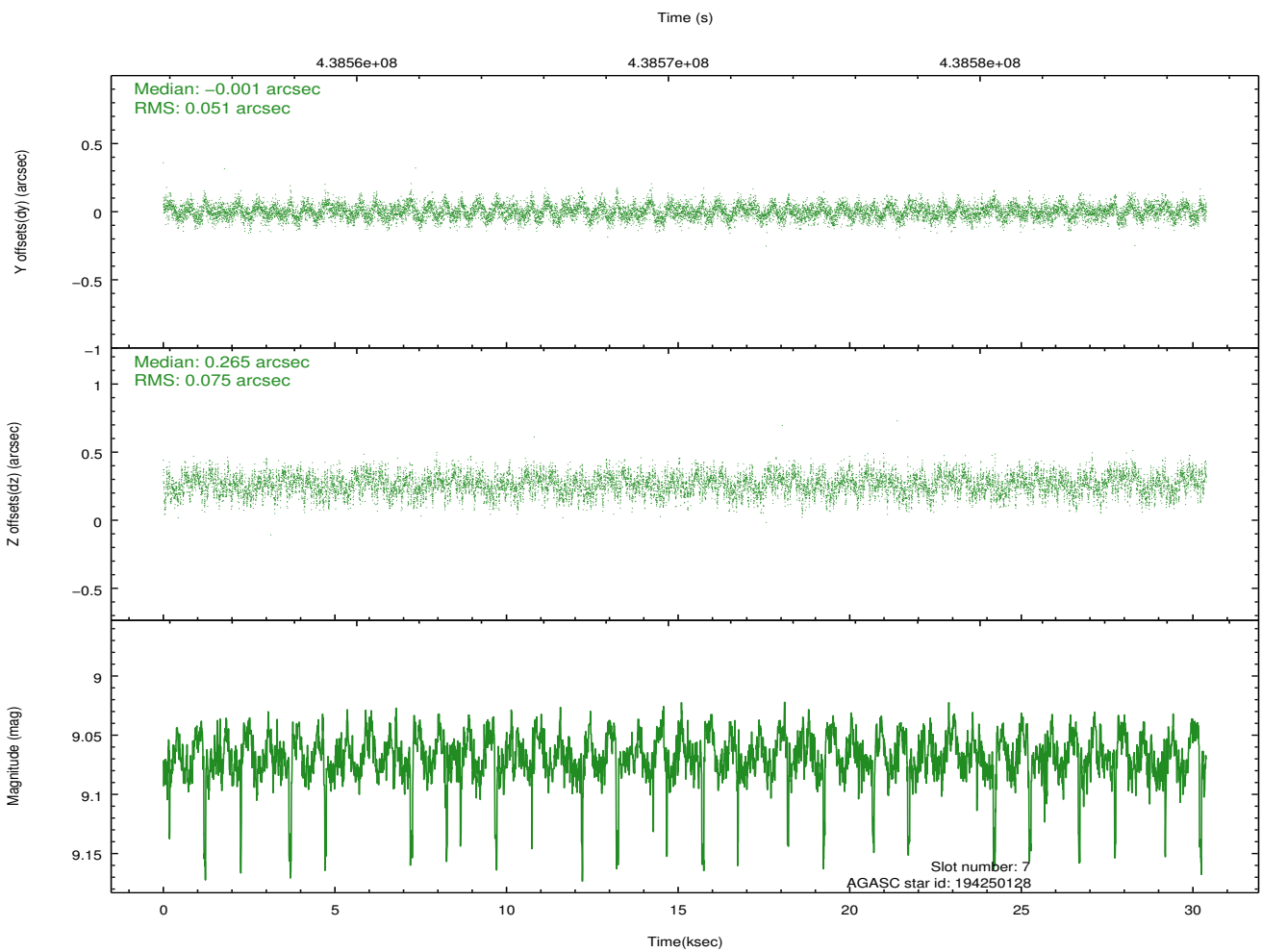
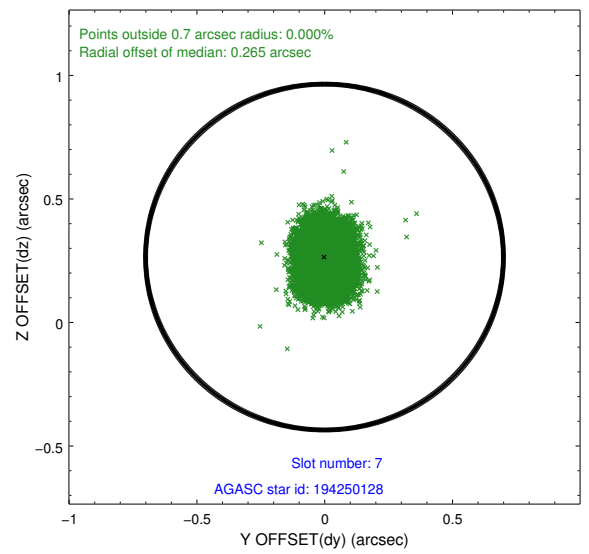
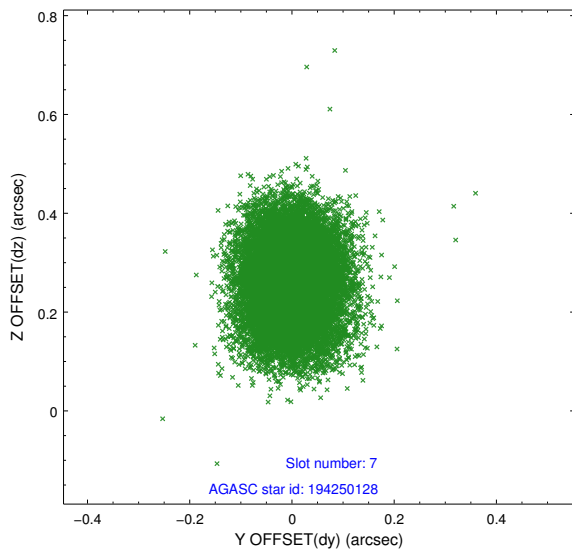
### 2.4.3 Slot 5



### 2.4.4 Slot 6

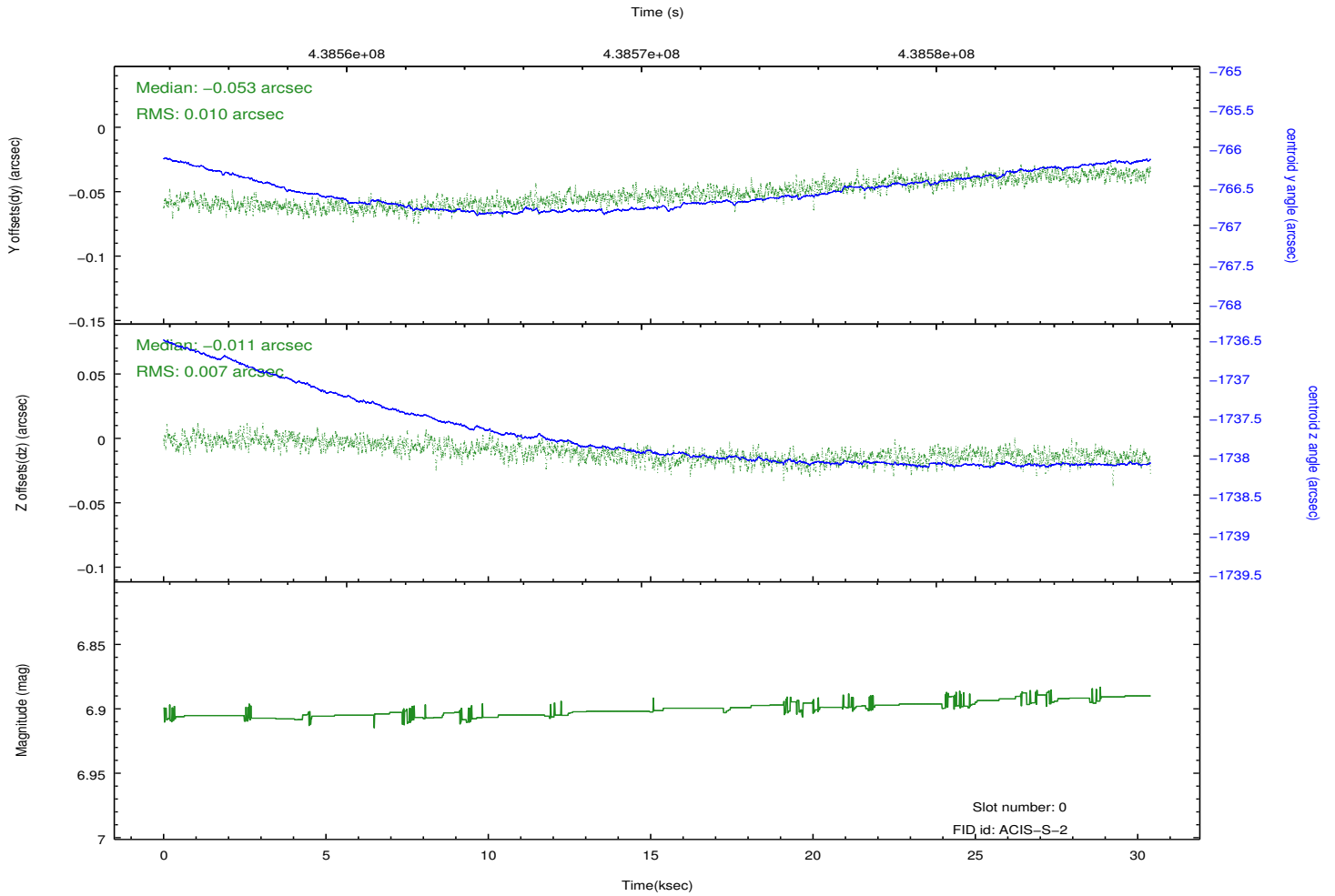
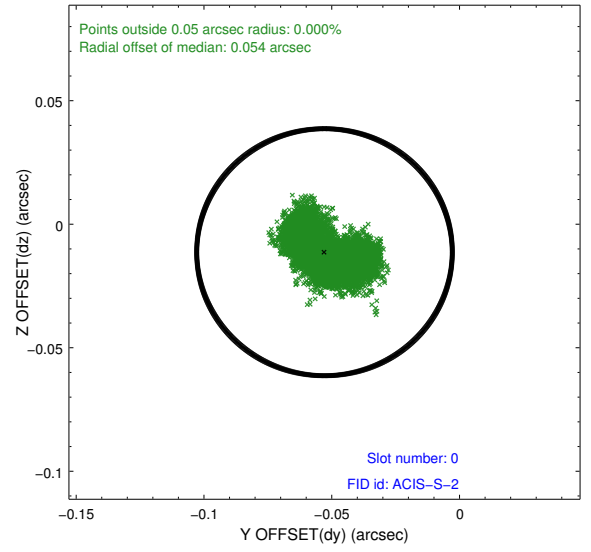
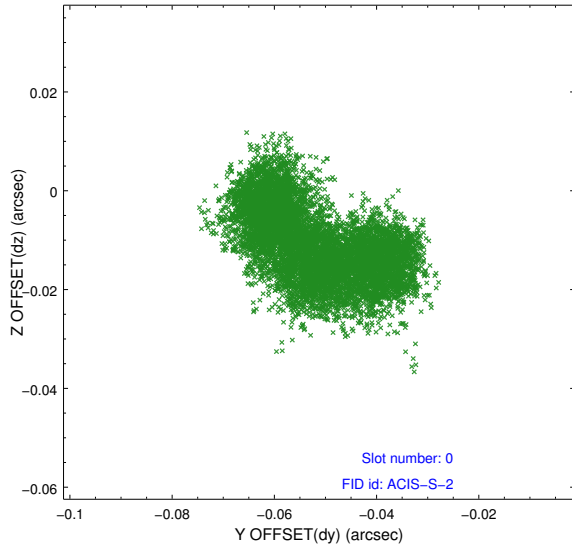


## 2.4.5 Slot 7

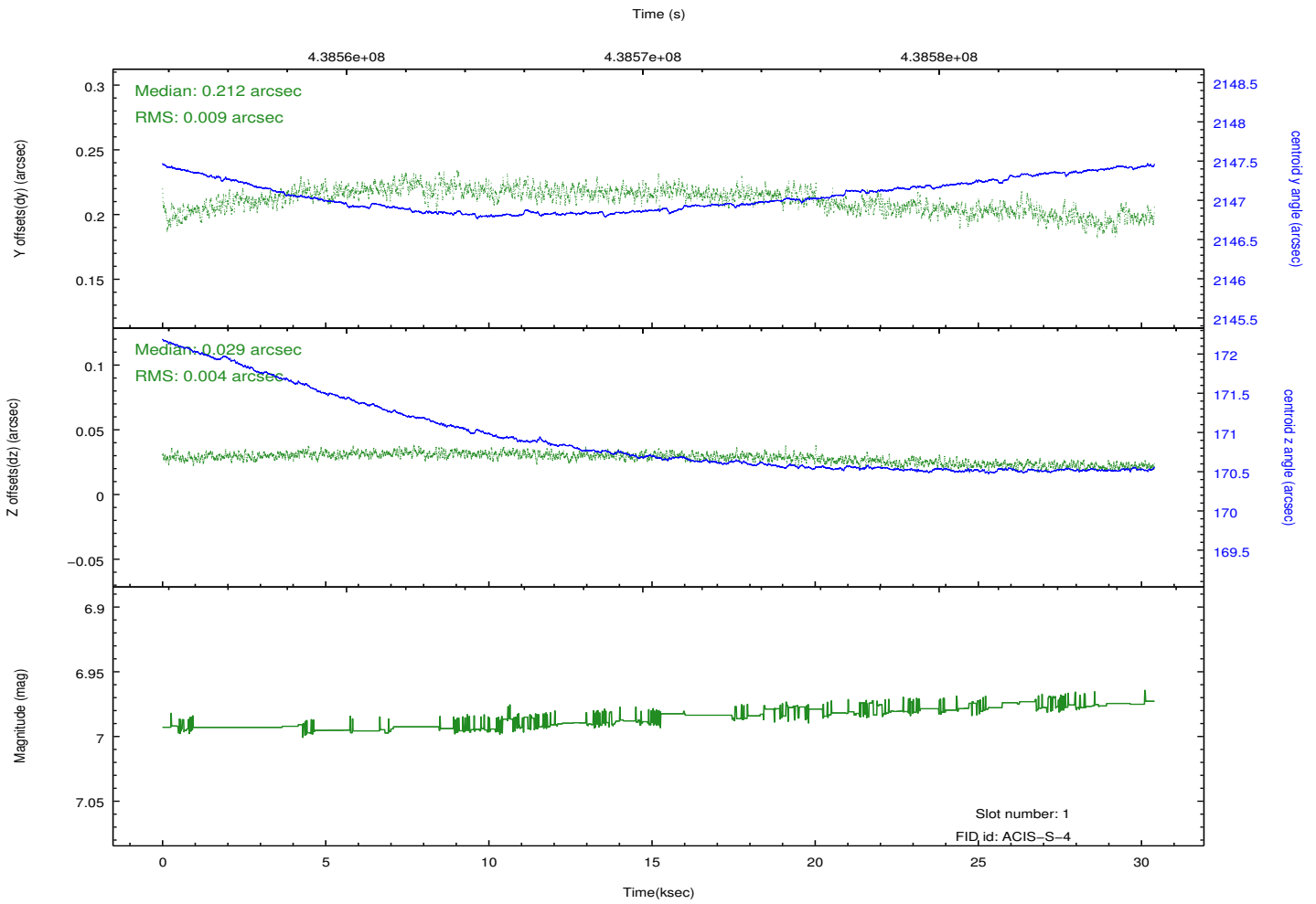
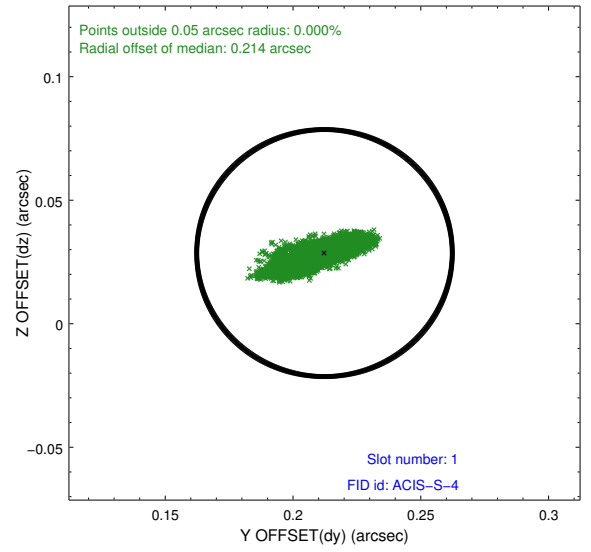
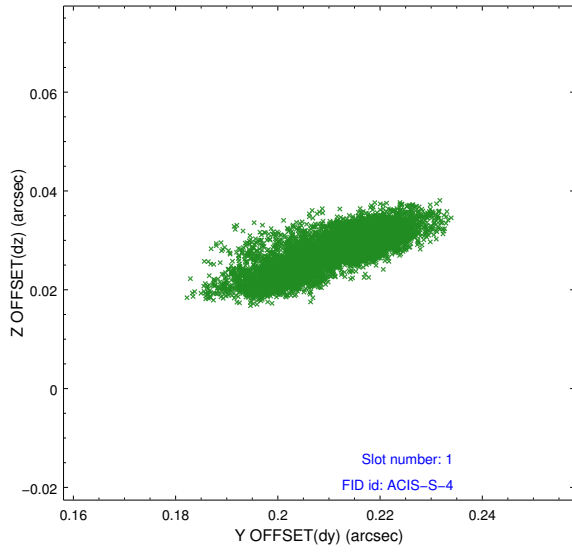


## 2.5 FID Slots

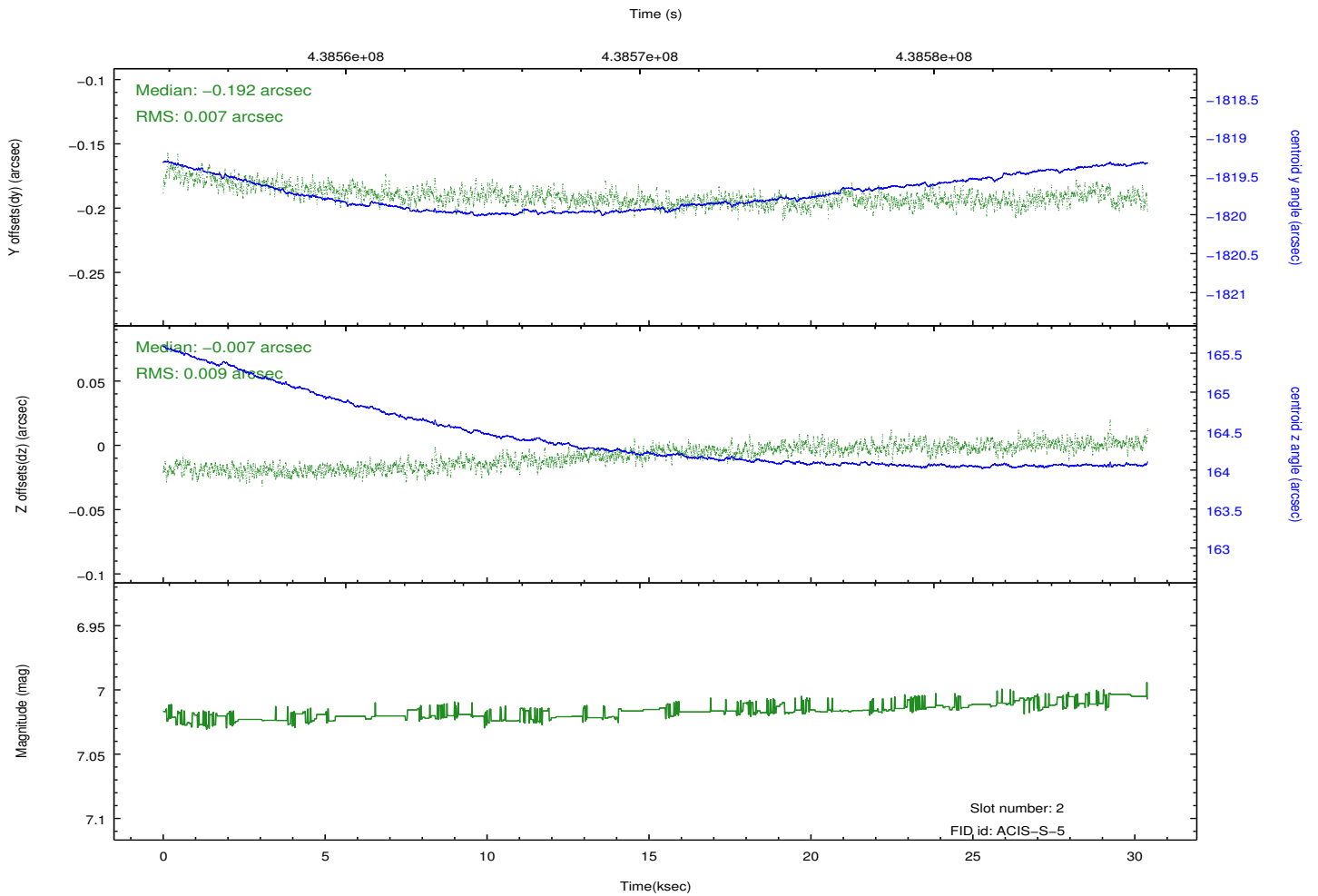
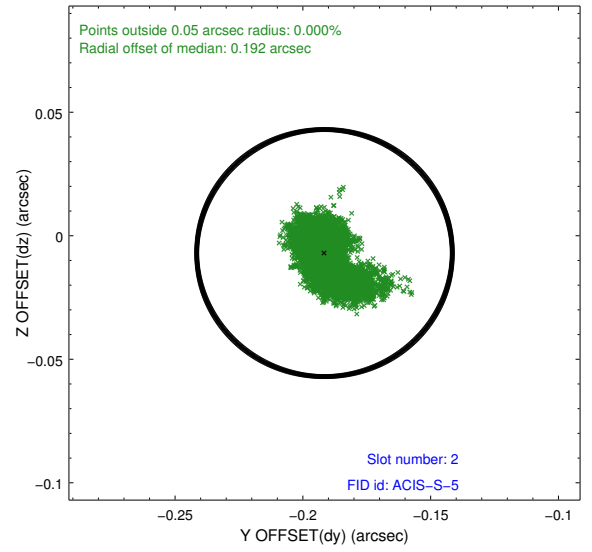
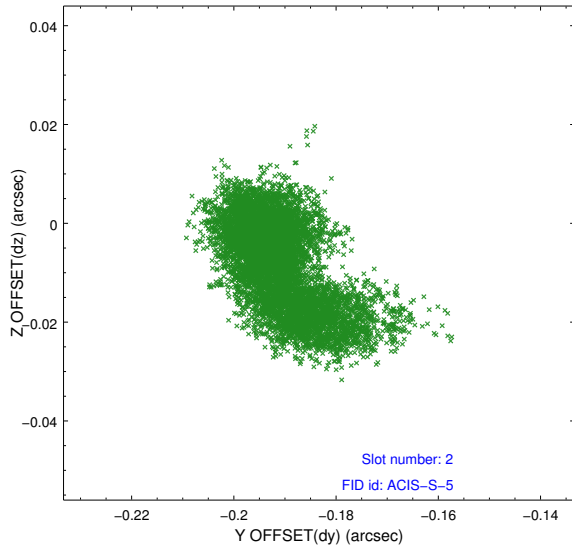
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.963834615648

## A.2 Comments