

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7429 - L2 Version 3  
Chandra X-Ray Center

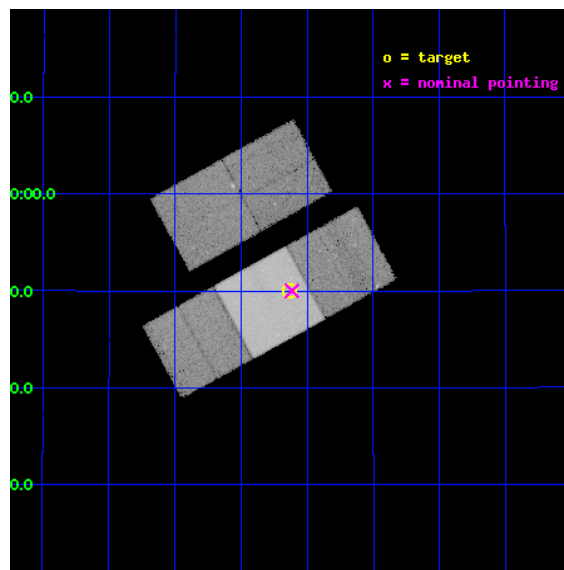
L2 Processing Date : Apr 23 2012

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# 1 Front

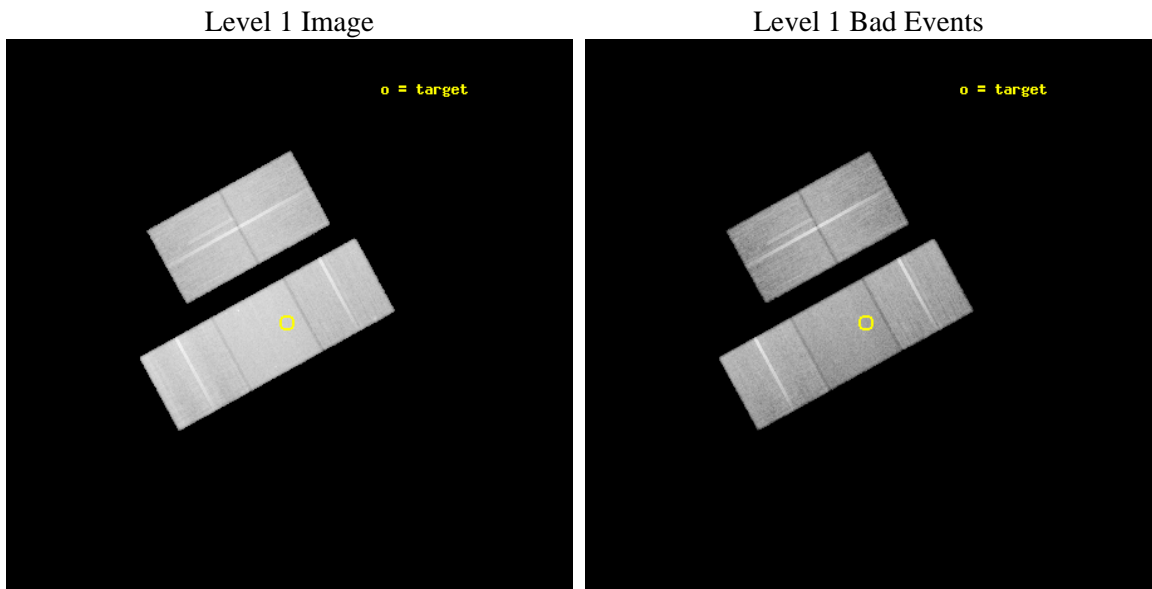
seq_num	200442	Sequence number
obs_id	7429	Observation id
title	The Full Picture of Magnetic Activity in Ultracool Dwarfs: Simultaneous Observations of Coronae and Chromospheres	Proposal title
observer	Prof. Edo Berger	Principal investigator
object	TVLM513-46546	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	225.284167	Observer's specified target RA [deg]
dec_targ	22.833889	Observer's specified target Dec [deg]
ra_nom	225.27890570284	Nominal RA [deg]
dec_nom	22.833640627683	Nominal Dec [deg]
roll_nom	151.24827076682	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30150.600231886	Sum of GTIs [s]
livetime	29756.660443307	Livetime [s]
ontime2	30147.459251523	Sum of GTIs [s]
ontime3	30150.600231886	Sum of GTIs [s]
ontime6	30150.600231886	Sum of GTIs [s]
ontime7	30150.600231886	Sum of GTIs [s]
ontime8	30144.318251252	Sum of GTIs [s]
l2events	291076	Number of level 2 events



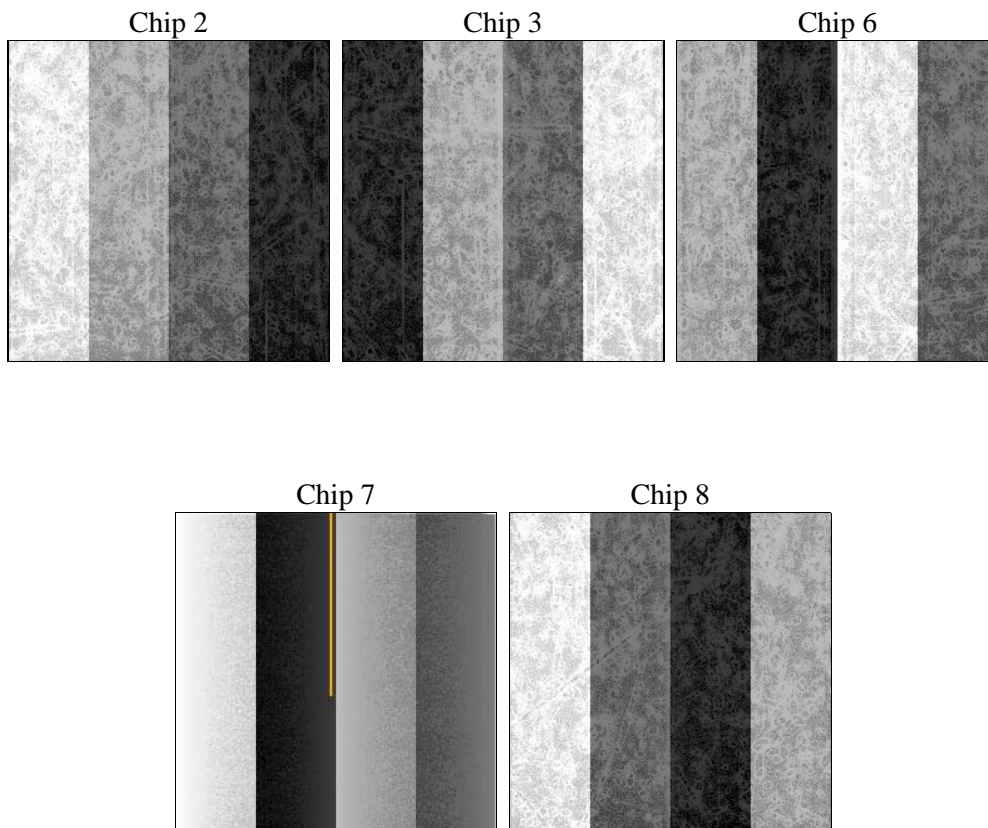
## 2 OBI

### 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	30150.600231886	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	30147.459251523	Sum of GTIs [s]
date	2012-04-23T10:44:24	Date and time of file creation	ontime3	30150.600231886	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	30150.600231886	Sum of GTIs [s]
			ontime7	30150.600231886	Sum of GTIs [s]
			ontime8	30144.318251252	Sum of GTIs [s]
			l1events	1698487	Number of level 1 events

### 2.1.4 Events

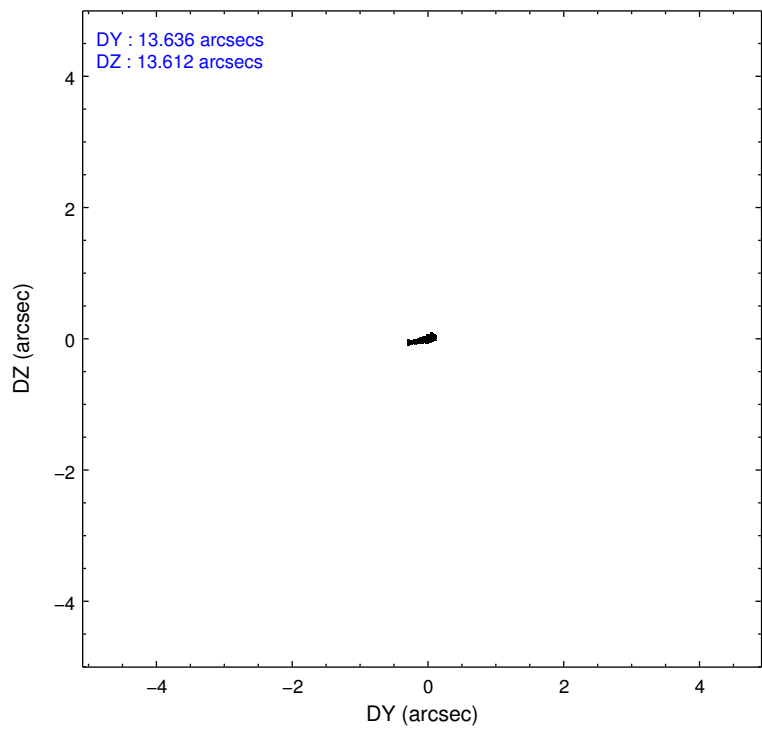
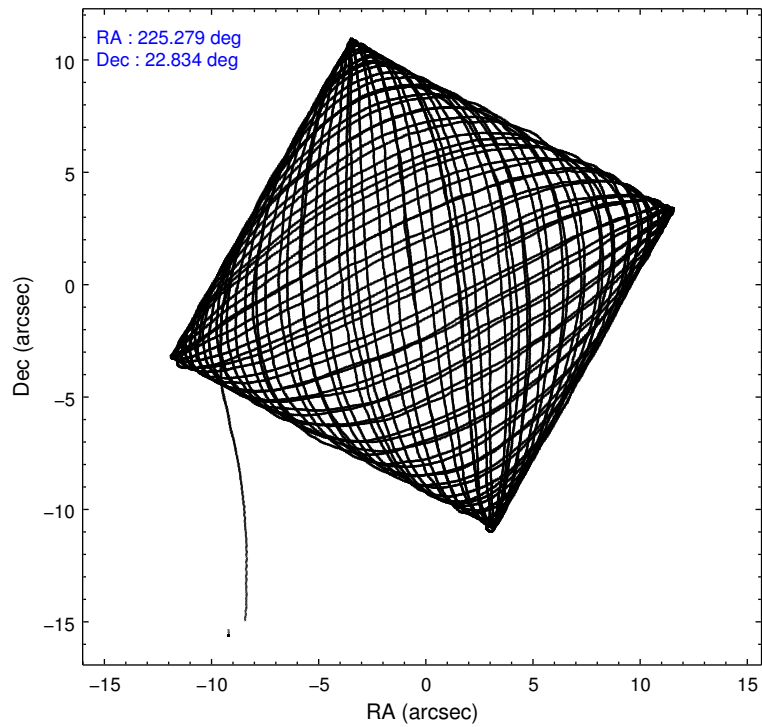
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	298603	291568	311096	412803	384417
rejected events	264807	256879	275383	244384	301360
rejected %	88%	88%	88%	59%	78%

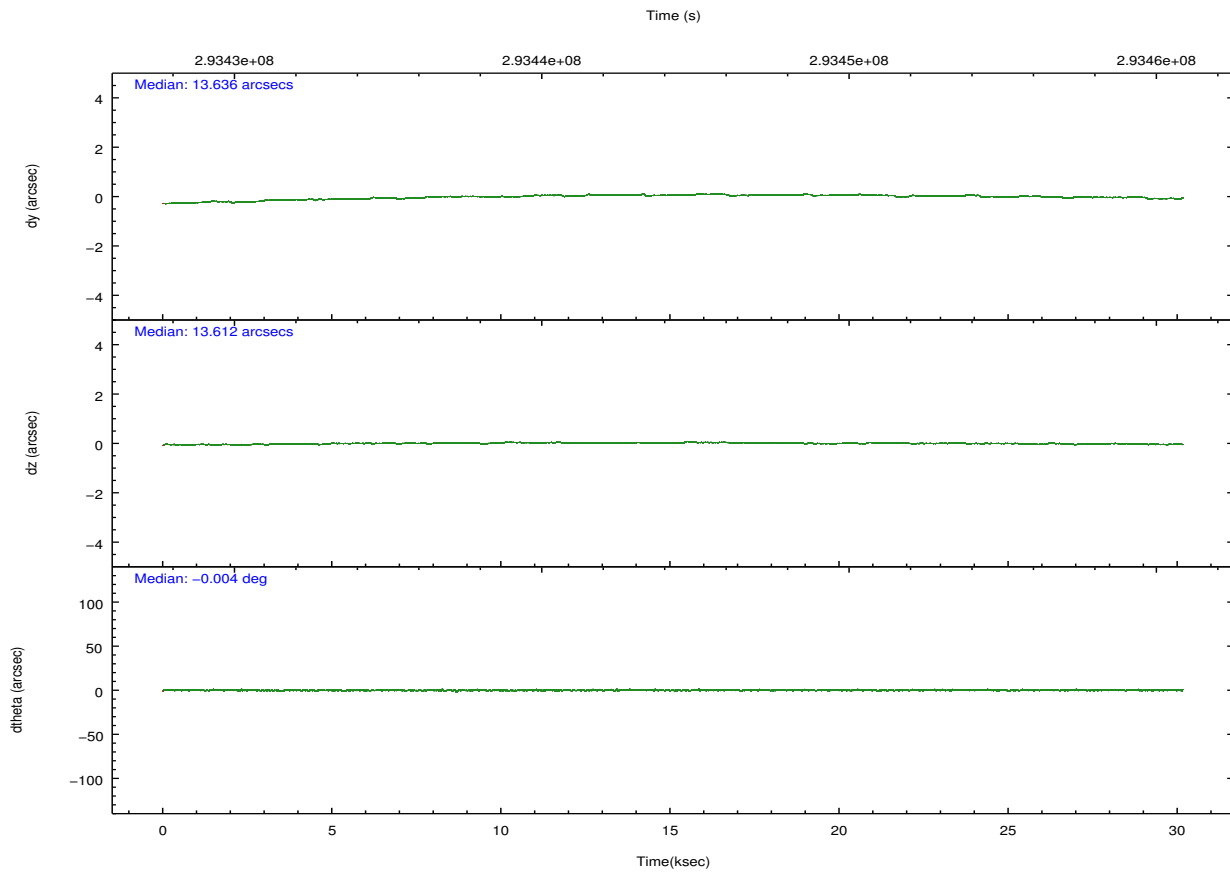
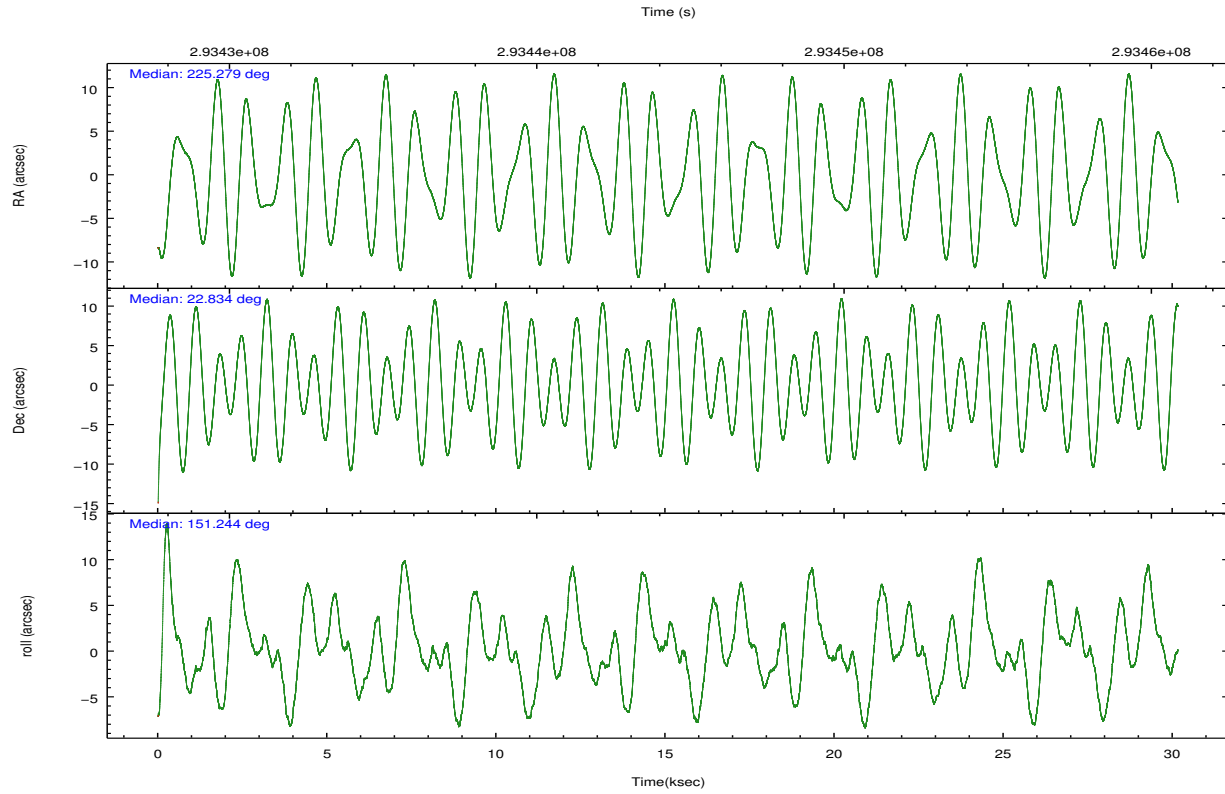
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	15163	15410	14420	15173	26749
	5%	5%	4%	3%	6%
grade 1 events	213	184	153	420	293
	0%	0%	0%	0%	0%
grade 2 events	7190	6937	7920	34538	18703
	2%	2%	2%	8%	4%
grade 3 events	3188	3379	3408	14815	8874
	1%	1%	1%	3%	2%
grade 4 events	3241	3379	3332	14662	8400
	1%	1%	1%	3%	2%
grade 5 events	11250	13546	14234	38741	18457
	3%	4%	4%	9%	4%
grade 6 events	5731	6343	7422	92837	21817
	1%	2%	2%	22%	5%
grade 7 events	252627	242390	260207	201617	281124
	84%	83%	83%	48%	73%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	225.308564	225.2789057028414	Subarray requested	NONE	NONE
[deg] Pointing Dec	22.834609	22.83364062768312	Alternating exposures requested	N	N
[deg] Pointing Roll	151.080127	151.2482707668193	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	290304065.184000	290304065.184000			
[s] Window stop time (MET)	299635265.184000	299635265.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	293429354.184000	293428043.67826			
Observation start date	2007-04-20T04:08:09	2007-04-20T03:47:23			
[s] Observation end time (MET)	293459354.184000	293460067.24228			
Observation end date	2007-04-20T12:28:09	2007-04-20T12:41:07			
Read mode	TIMED	TIMED			

## 2.3 Aspect



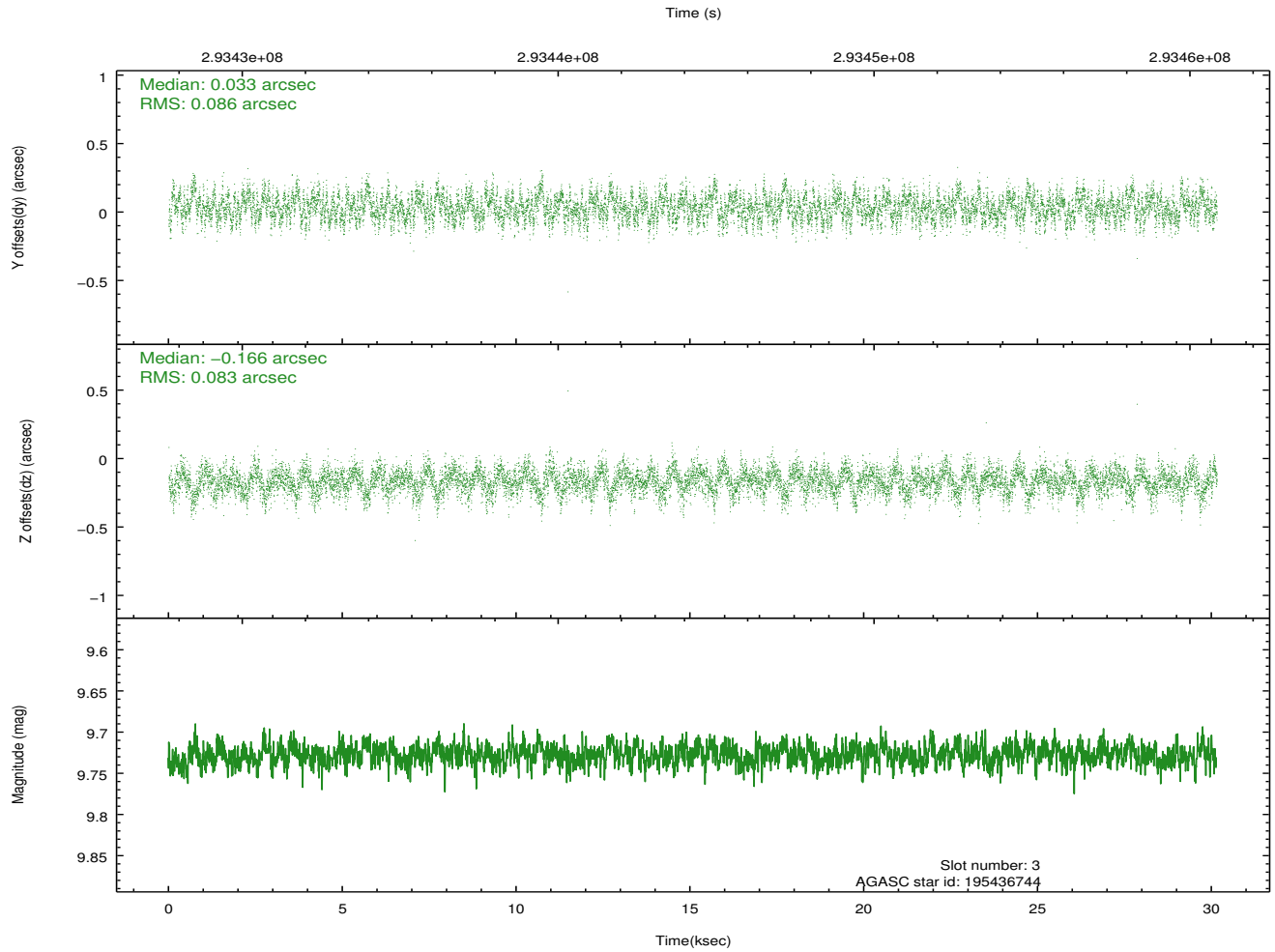
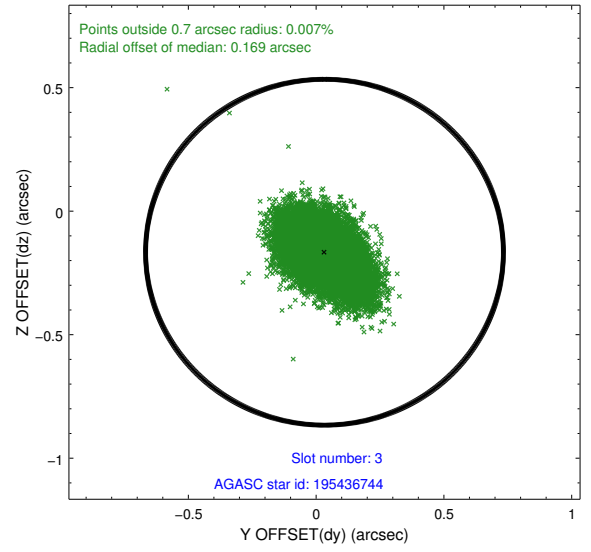
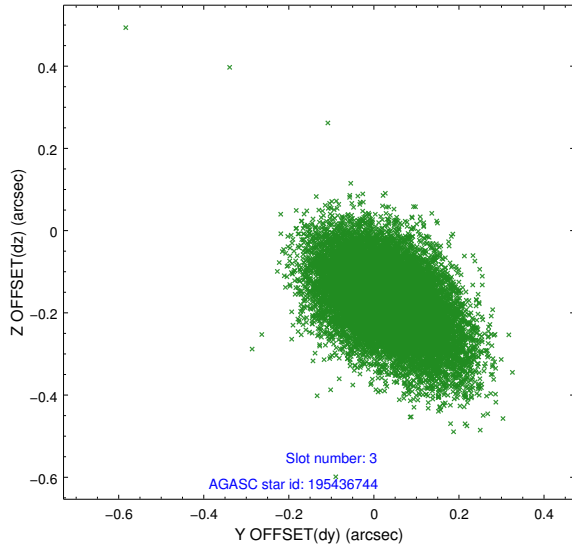


### Slot Statistics

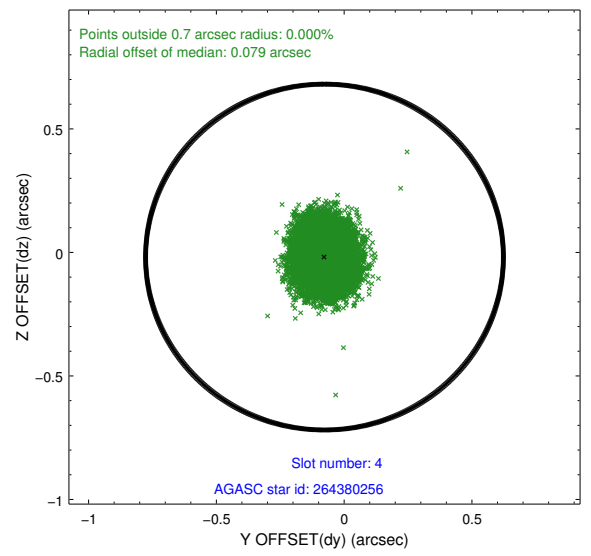
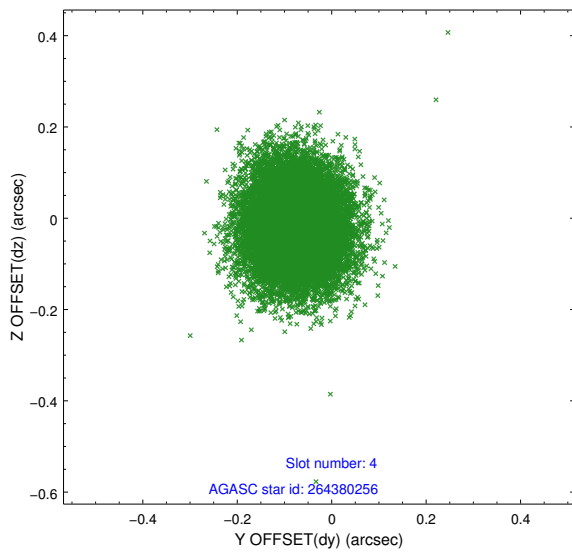
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	7356	-0.042	-0.073	0.009	0.014	0.000000	0.000000	-766.59	-1734.92
1	FID	ACIS-S-4	7.19	7356	0.195	0.040	0.008	0.019	0.000000	0.000000	2146.89	173.59
2	FID	ACIS-S-5	7.23	7356	-0.183	0.042	0.007	0.012	0.000000	0.000000	-1819.48	167.36
3	GUIDE	195436744	9.73	14684	0.033	-0.166	0.125	0.211	225.481752	22.018957	-1925.83	2290.38
4	GUIDE	264380256	9.37	14697	-0.077	-0.019	0.094	0.154	225.047020	22.669639	473.51	939.74
5	GUIDE	264380752	10.25	14684	-0.063	-0.078	0.174	0.275	224.720923	22.632014	1358.30	1579.61
6	GUIDE	265299840	9.32	14693	-0.015	0.143	0.129	0.213	226.076954	23.167483	-1642.41	-2284.39
7	GUIDE	265298488	10.18	14691	0.126	0.126	0.146	0.241	226.210528	23.017007	-2293.64	-2027.91

## 2.4 Star Slots

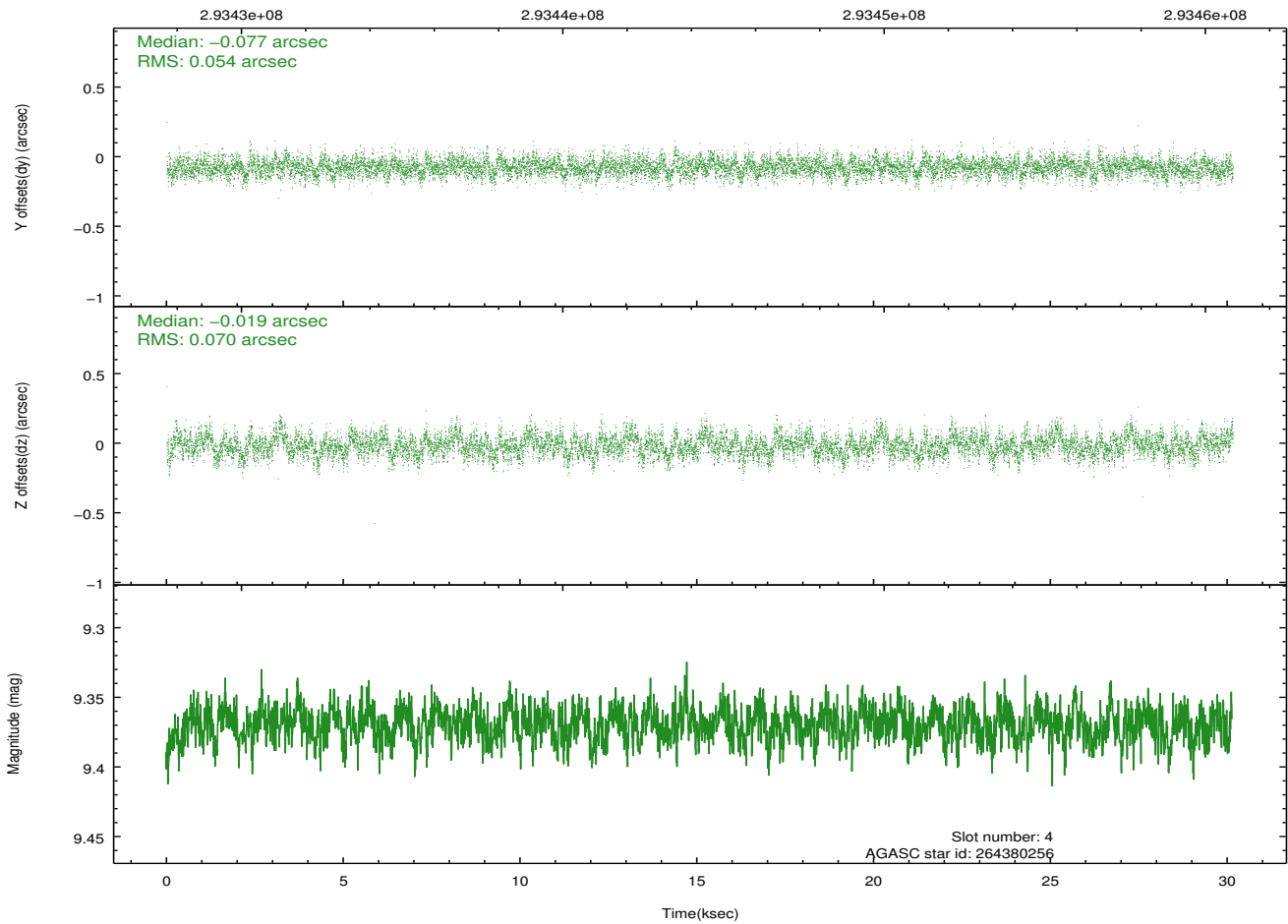
### 2.4.1 Slot 3



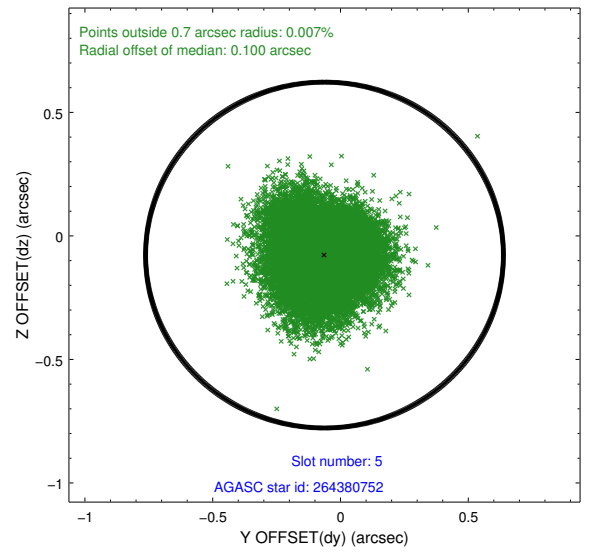
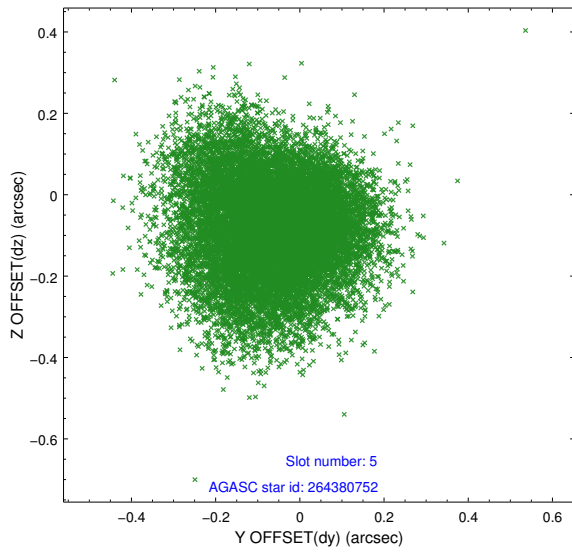
## 2.4.2 Slot 4



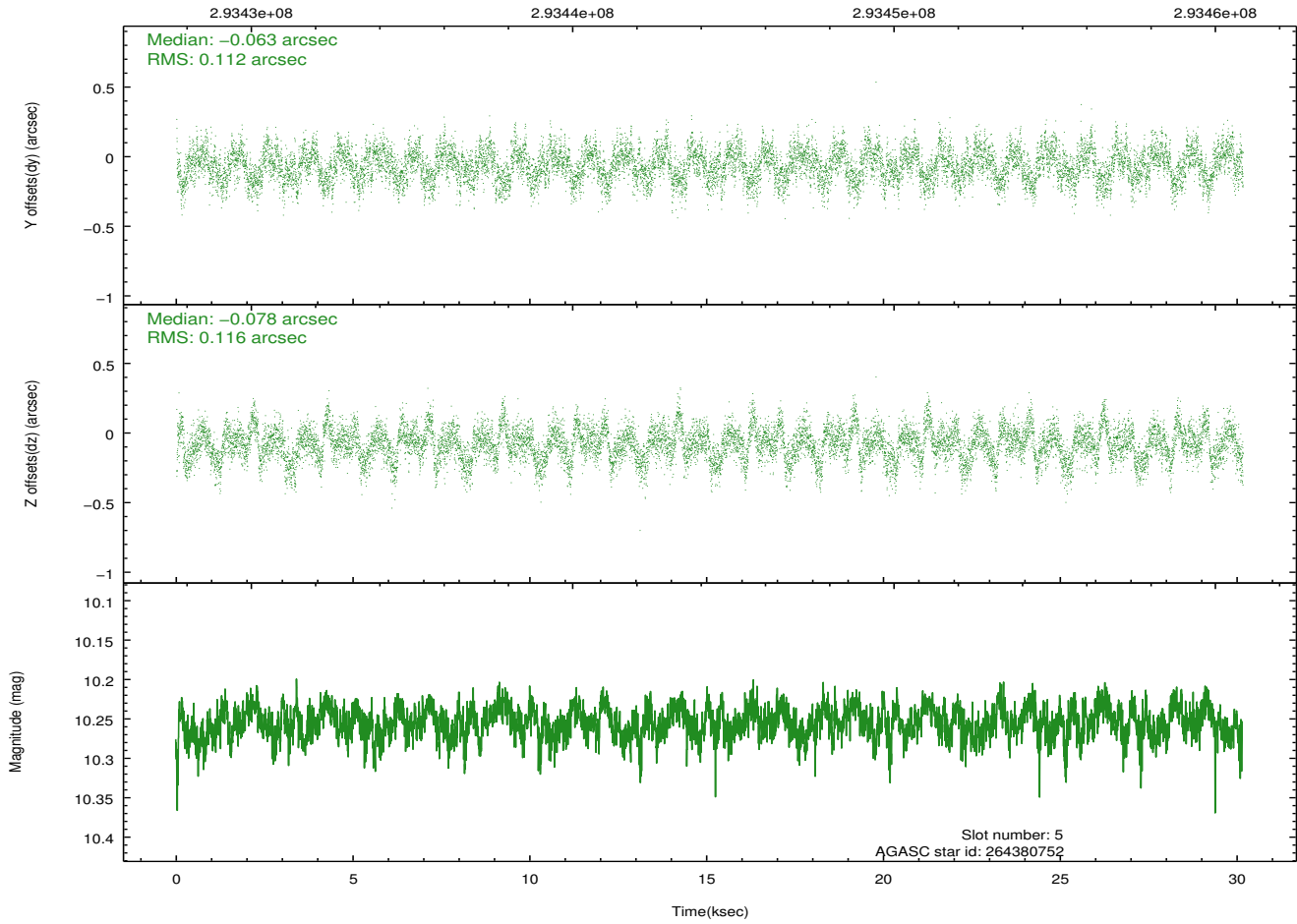
Time (s)



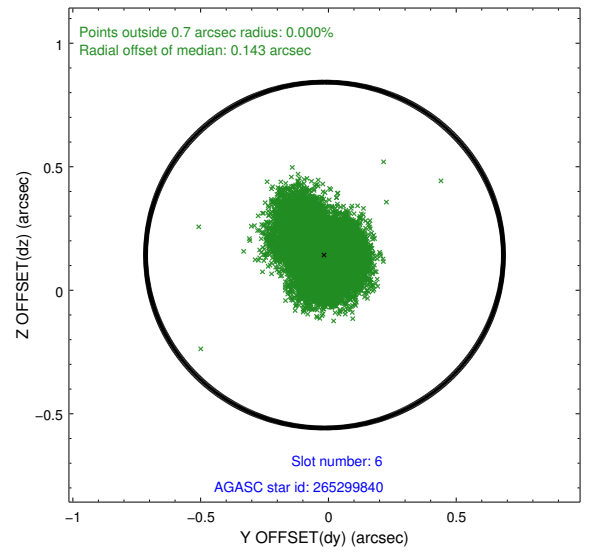
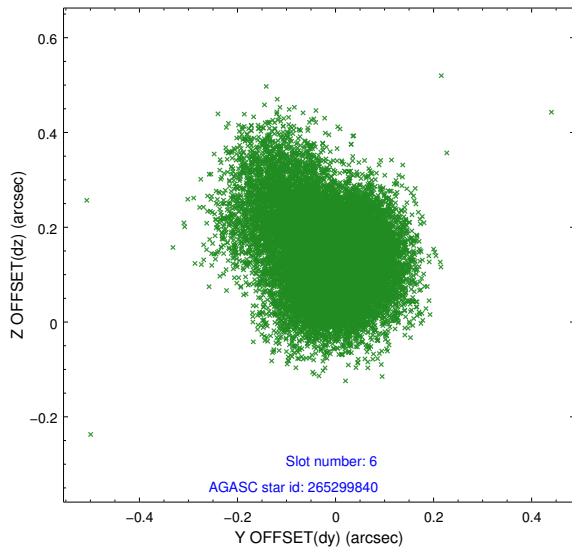
### 2.4.3 Slot 5



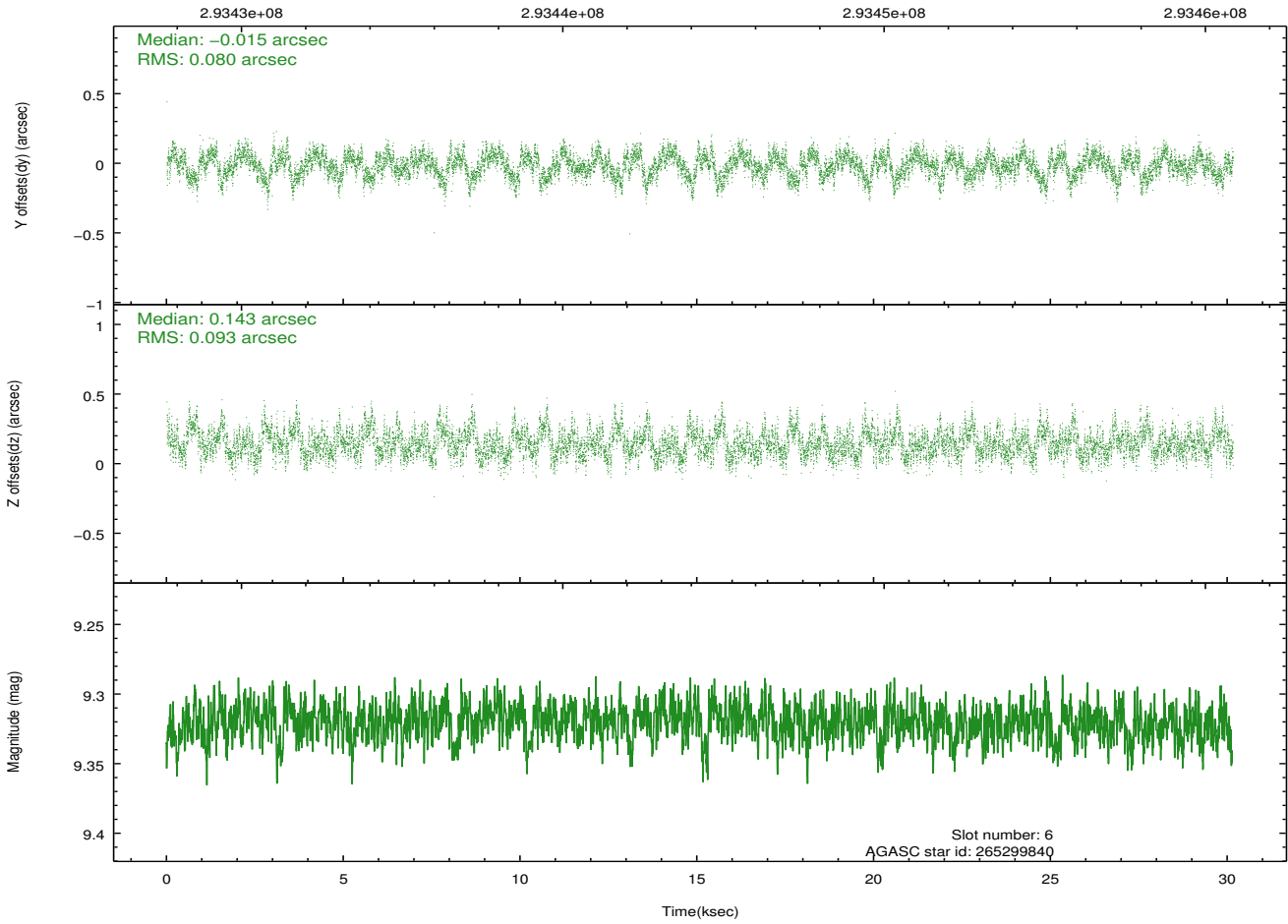
Time (s)



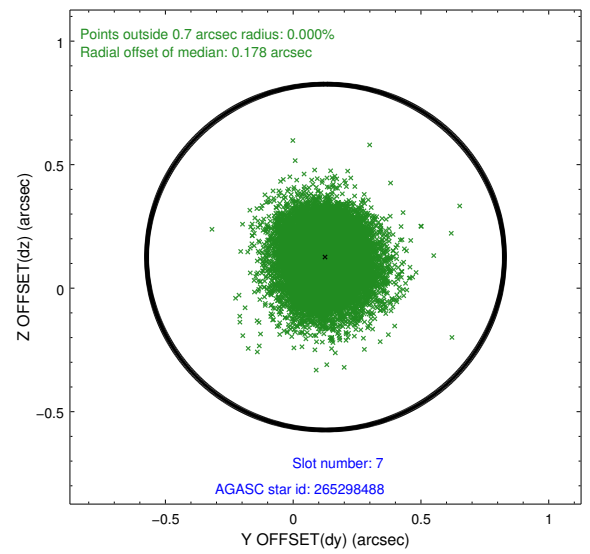
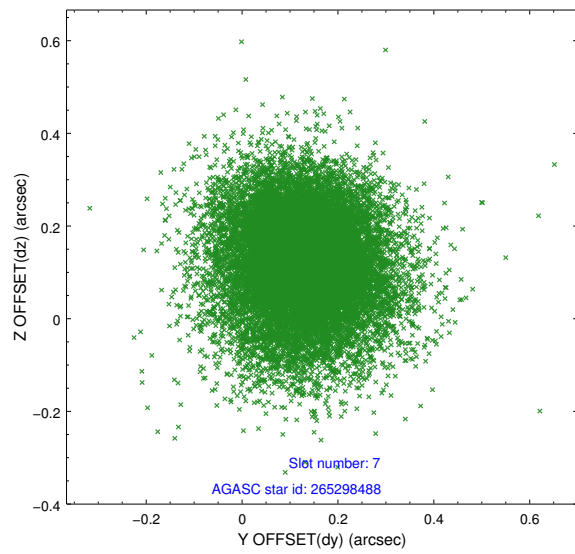
### 2.4.4 Slot 6



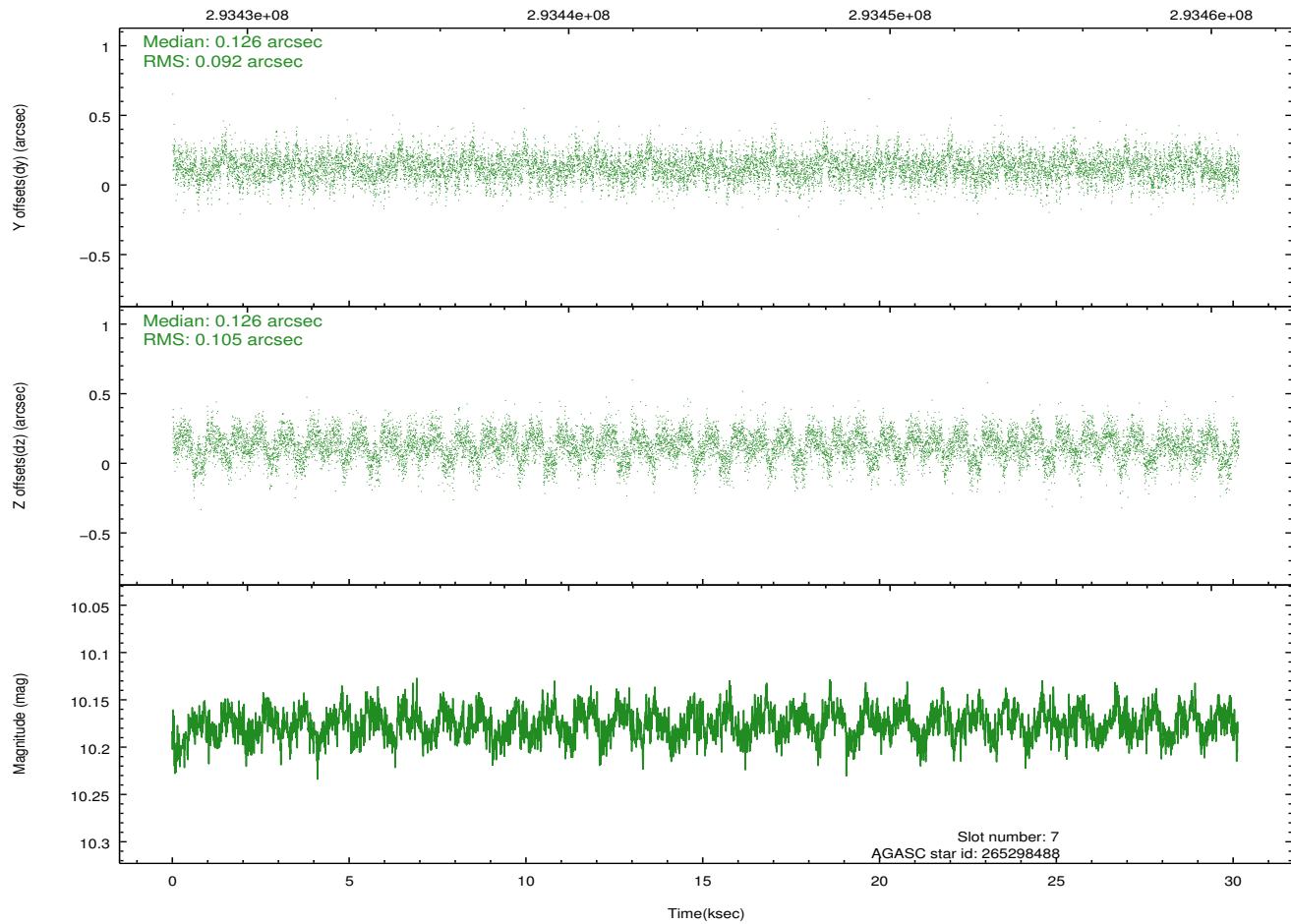
Time (s)



## 2.4.5 Slot 7

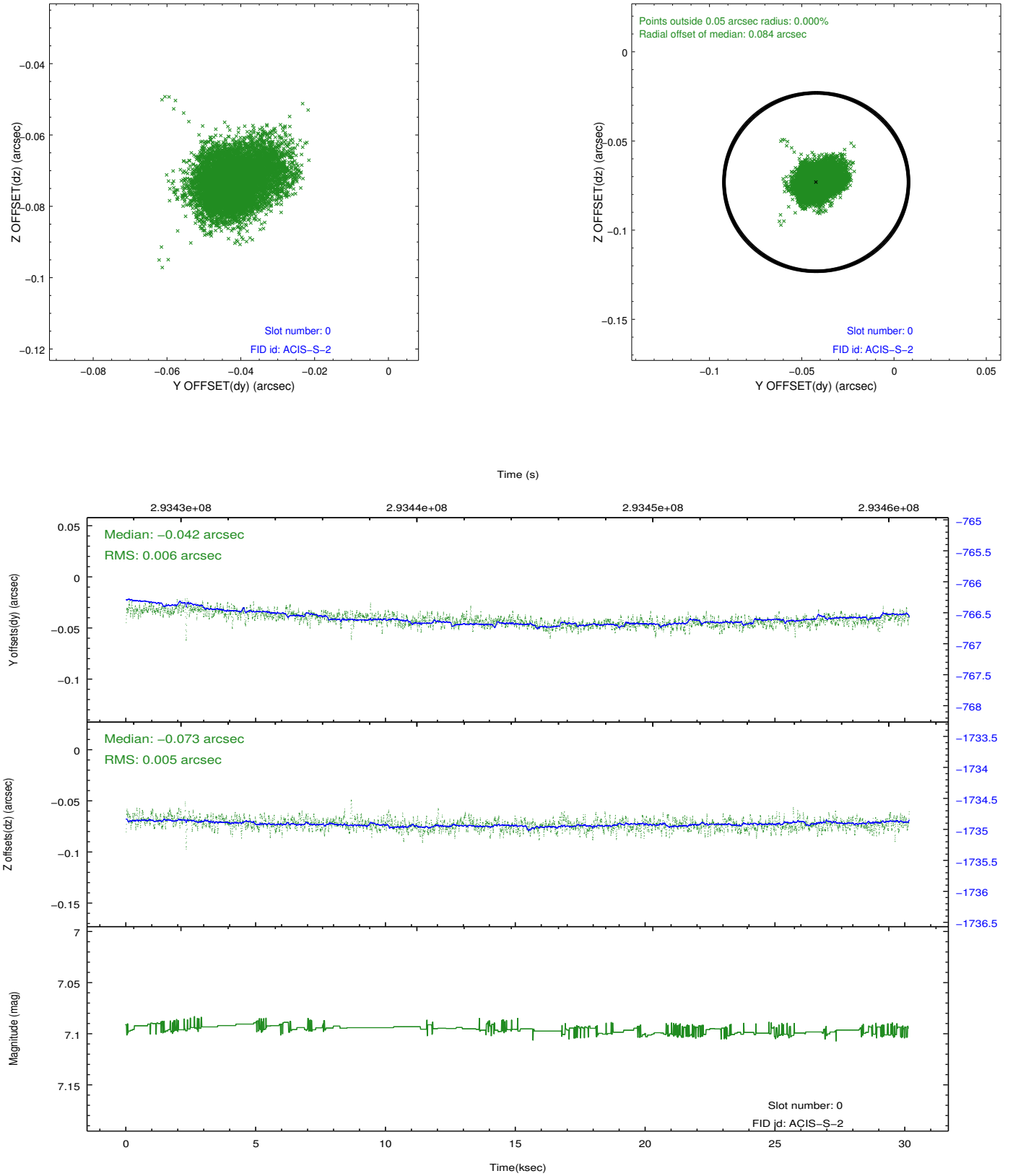


Time (s)

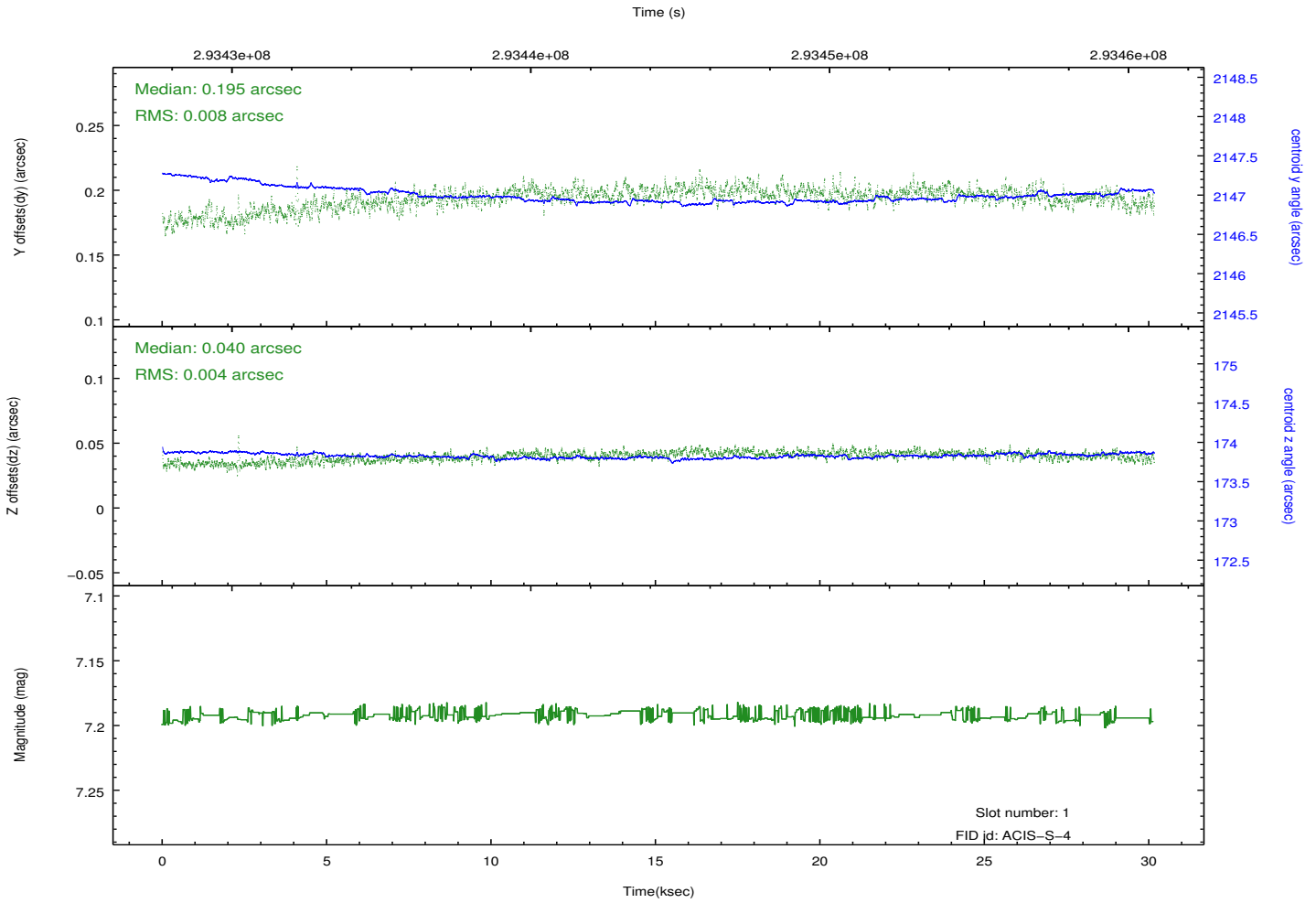
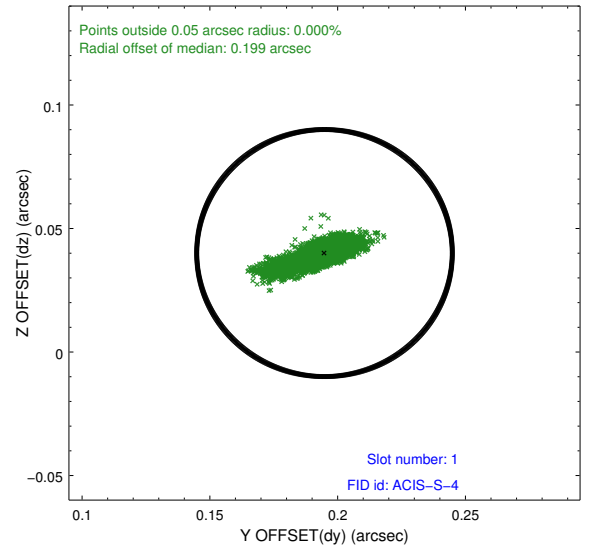
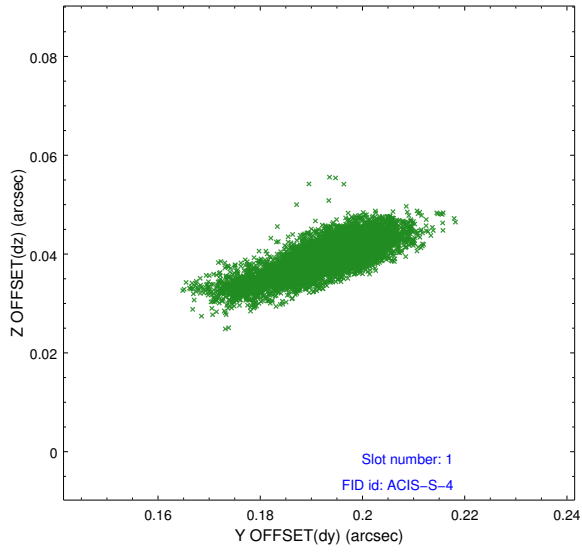


## 2.5 FID Slots

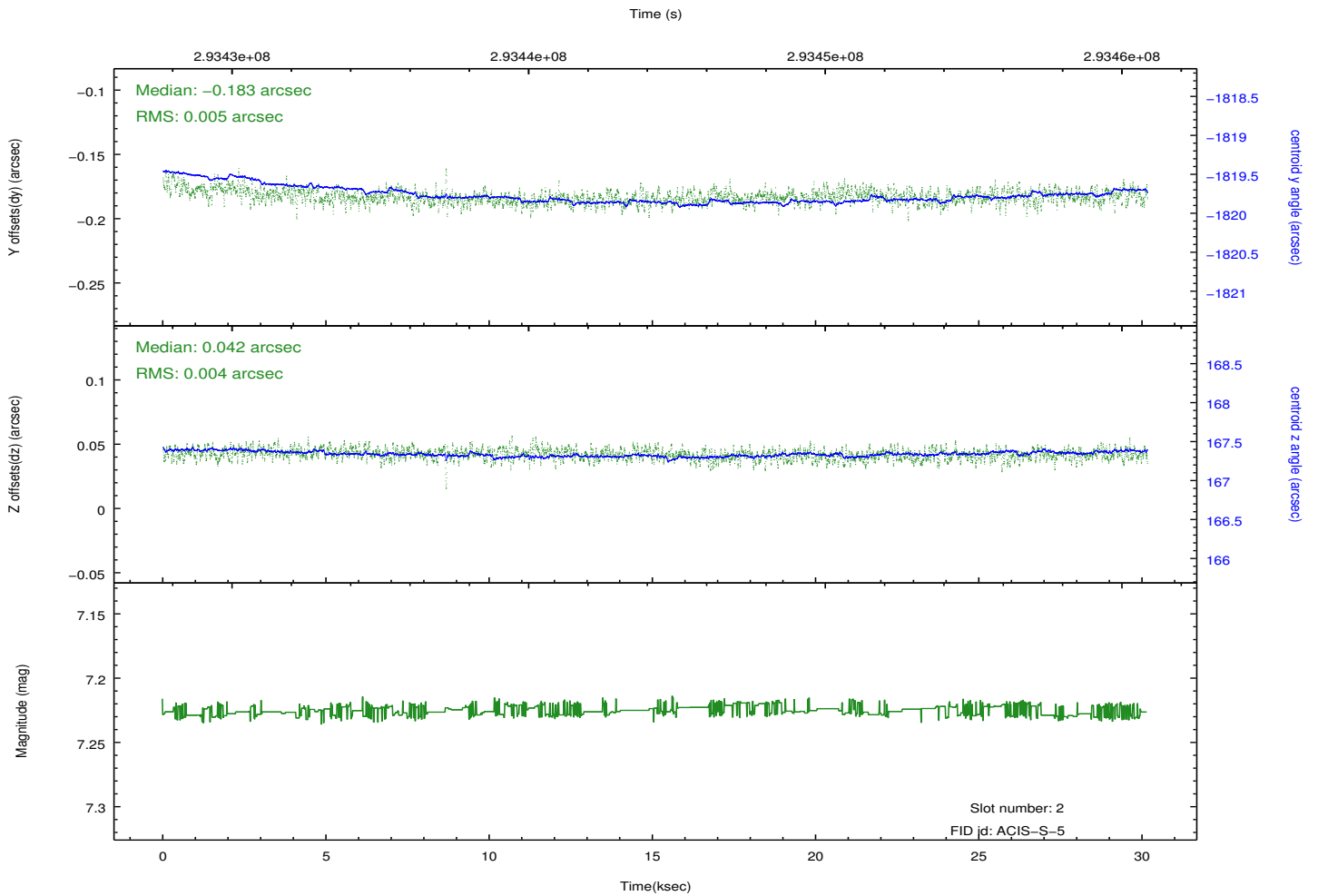
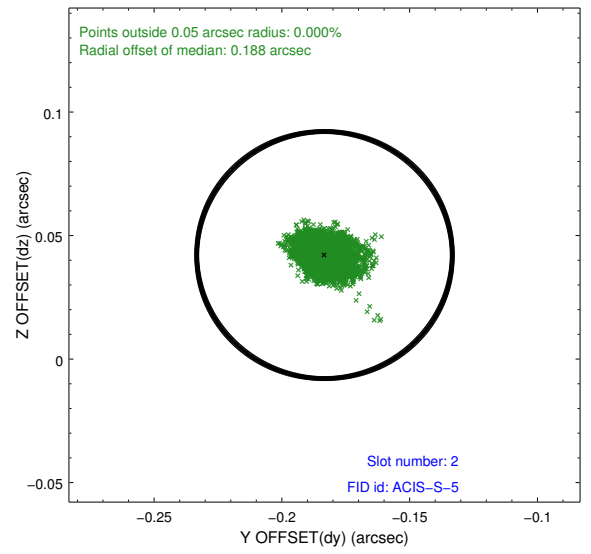
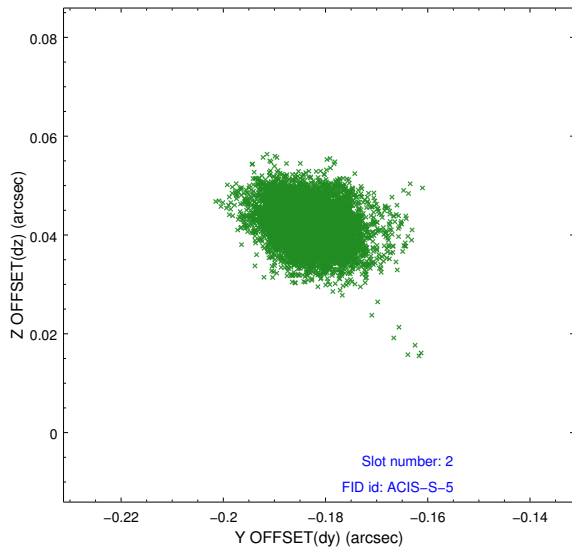
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.04.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.1506002

## A.2 Comments

Time constraint met. Joint Proposal: NRAO+NOAO