

# V&V Reference Report

## L2 ASCDS Version : 10.3

Observation 16652 - L2 Version 1  
Chandra X-Ray Center

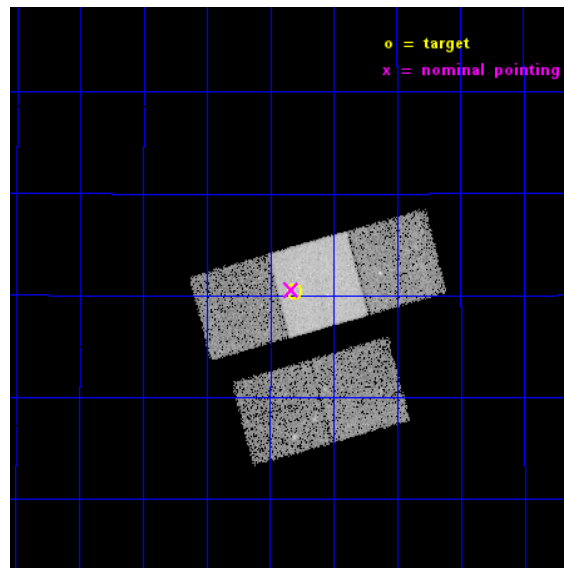
L2 Processing Date : Nov 22 2014

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# 1 Front

seq_num	200974	Sequence number
obs_id	16652	Observation id
title	Rejuvenation of the Innocent Bystander: Testing Spin-Up in a Dwarf Carbon Star Sample	Proposal title
observer	Dr. Paul Green	Principal investigator
object	SDSS J163718.64+274026.5	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	249.3275	Observer's specified target RA [deg]
dec_targ	27.674028	Observer's specified target Dec [deg]
ra_nom	249.33310219372	Nominal RA [deg]
dec_nom	27.676205979159	Nominal Dec [deg]
roll_nom	344.785385833	Nominal Roll [deg]
revision	1	Processing version of data
ontime	17465.400134325	Sum of GTIs [s]
livetime	17237.20182373	Livetime [s]
ontime2	17462.259173989	Sum of GTIs [s]
ontime3	17462.25917393	Sum of GTIs [s]
ontime6	17465.400134325	Sum of GTIs [s]
ontime7	17465.400134325	Sum of GTIs [s]
ontime8	17465.400134325	Sum of GTIs [s]
l2events	94522	Number of level 2 events

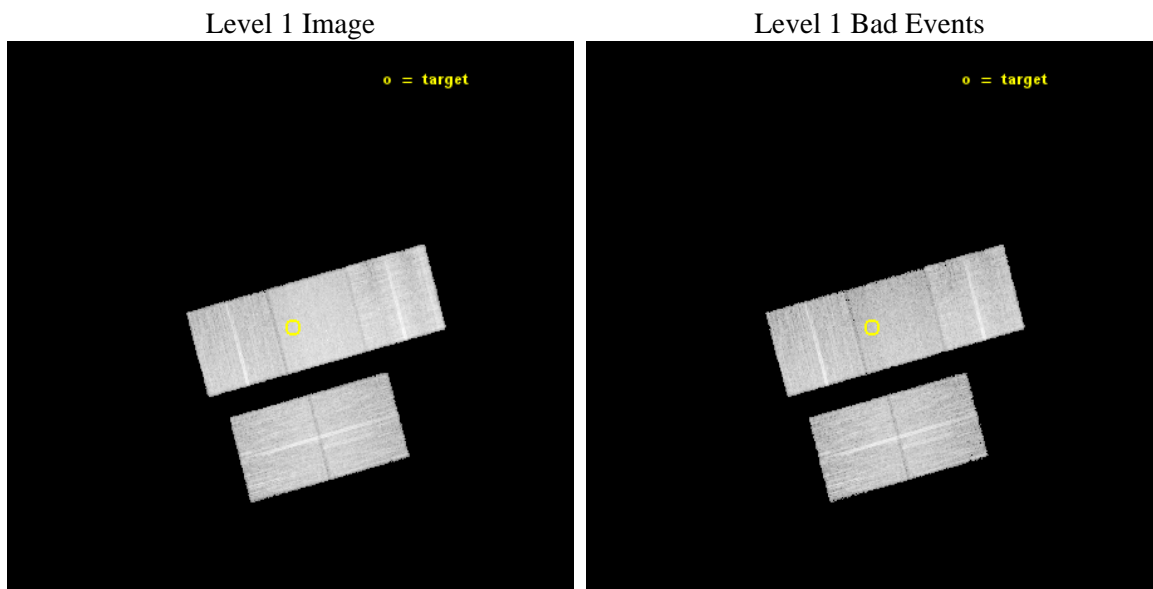




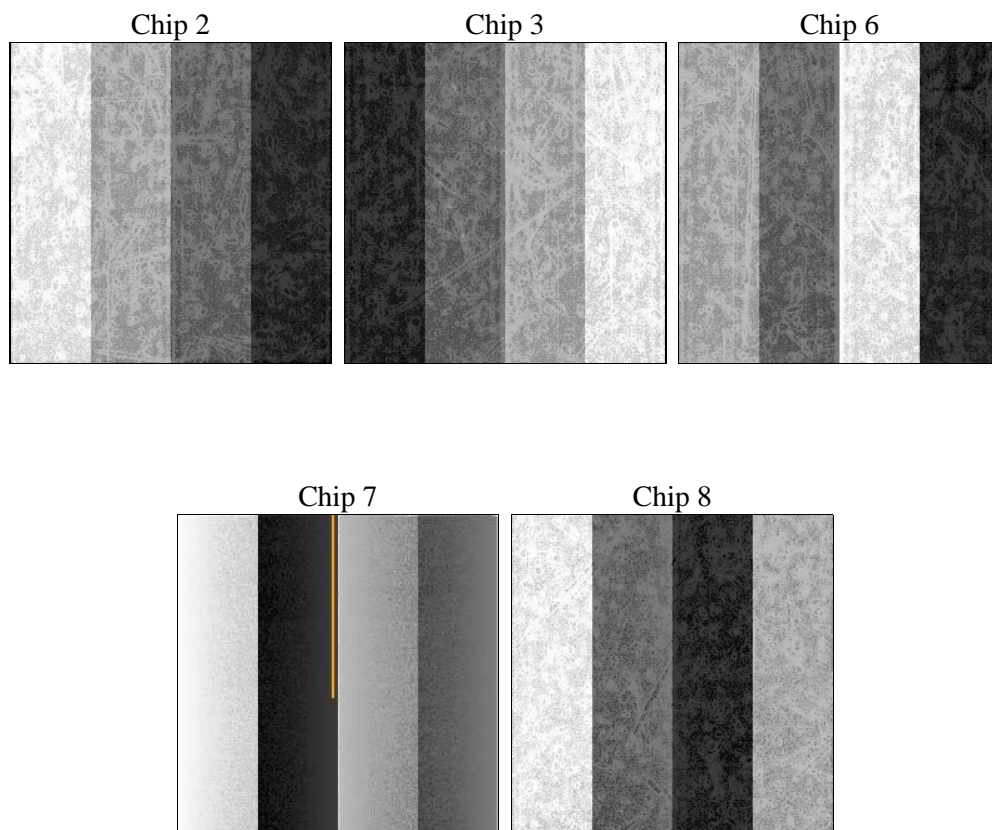
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	17400.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	17465.400134325	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime2	17462.259173989	Sum of GTIs [s]
date	2014-11-22T11:50:22	Date and time of file creation	ontime3	17462.25917393	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	17465.400134325	Sum of GTIs [s]
			ontime7	17465.400134325	Sum of GTIs [s]
			ontime8	17465.400134325	Sum of GTIs [s]
			l1events	542981	Number of level 1 events

### 2.1.4 Events

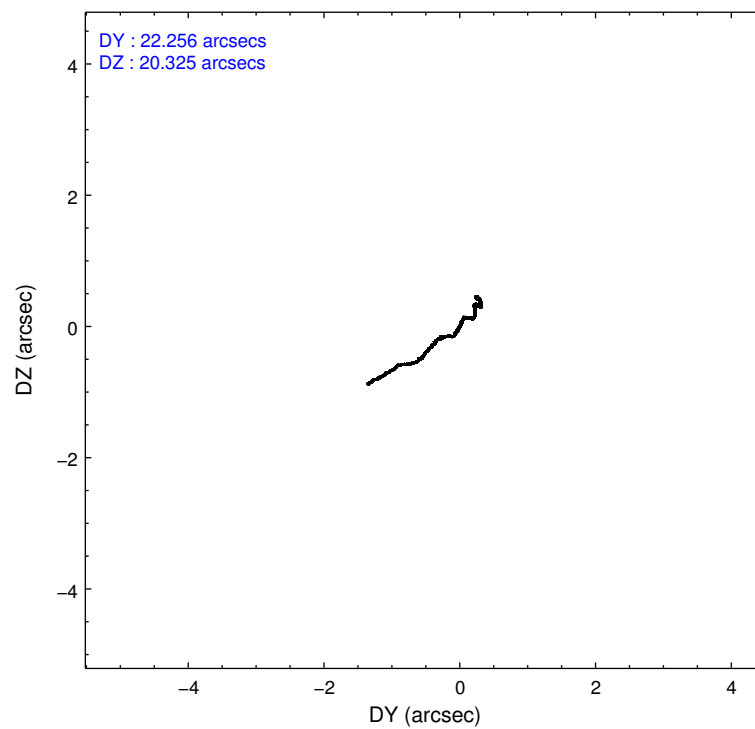
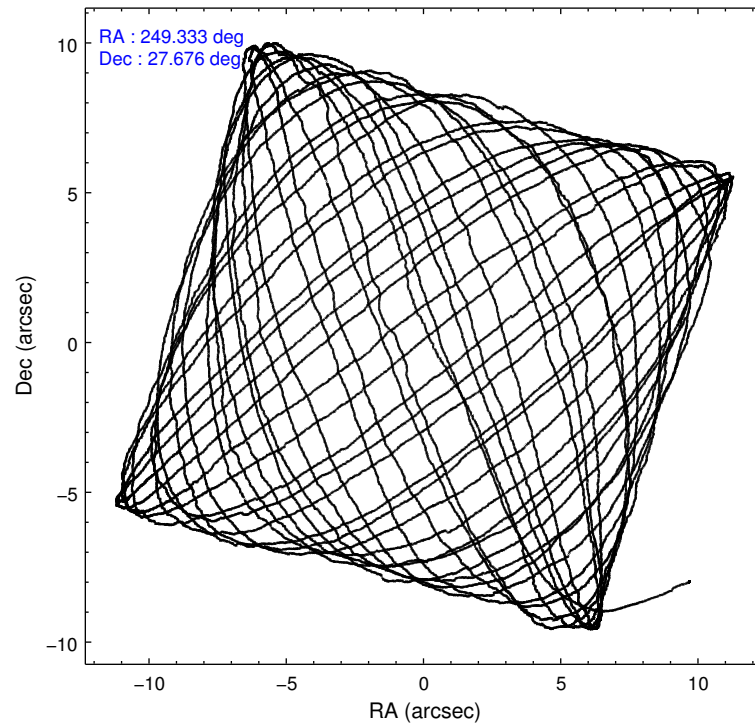
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	95196	89068	98166	128376	132175
rejected events	84400	78398	86751	72897	97070
rejected %	88%	88%	88%	56%	73%

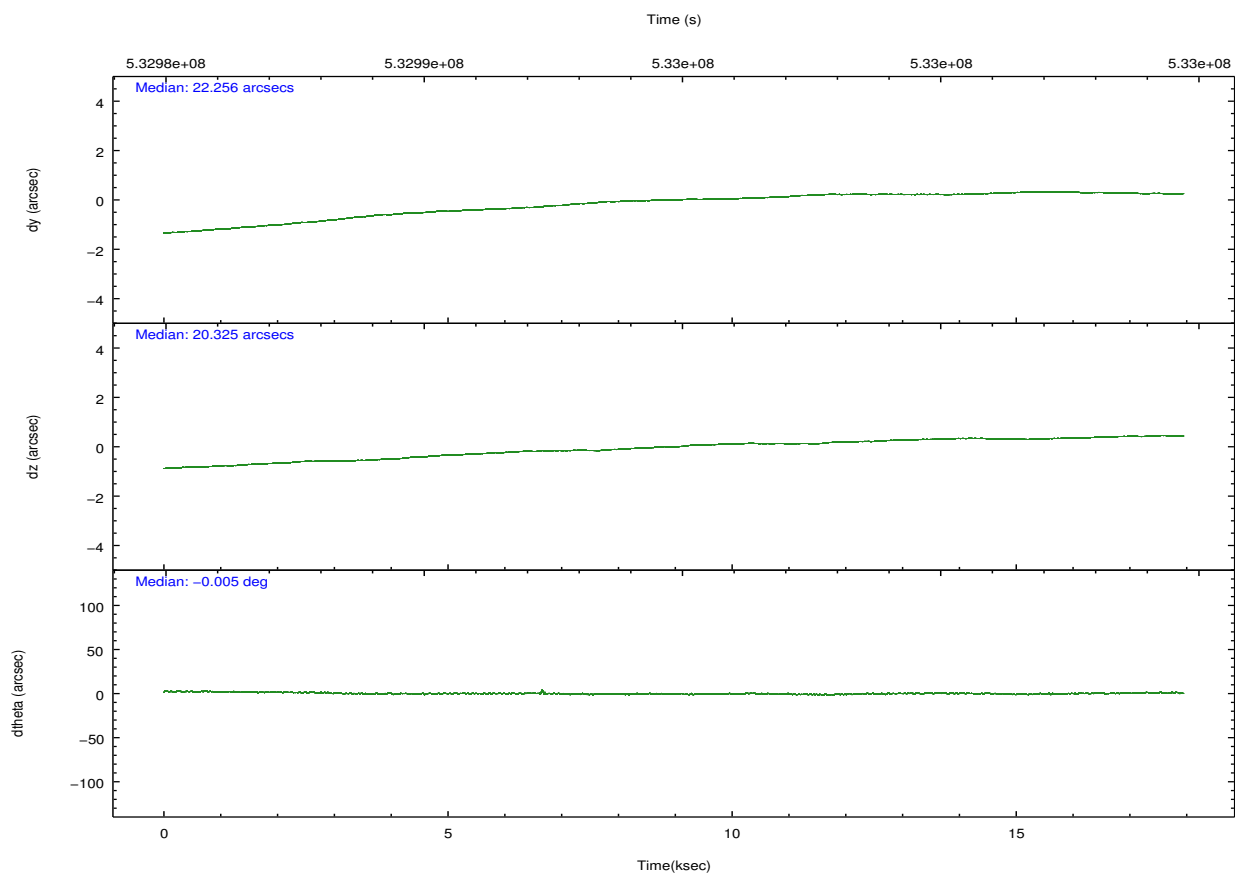
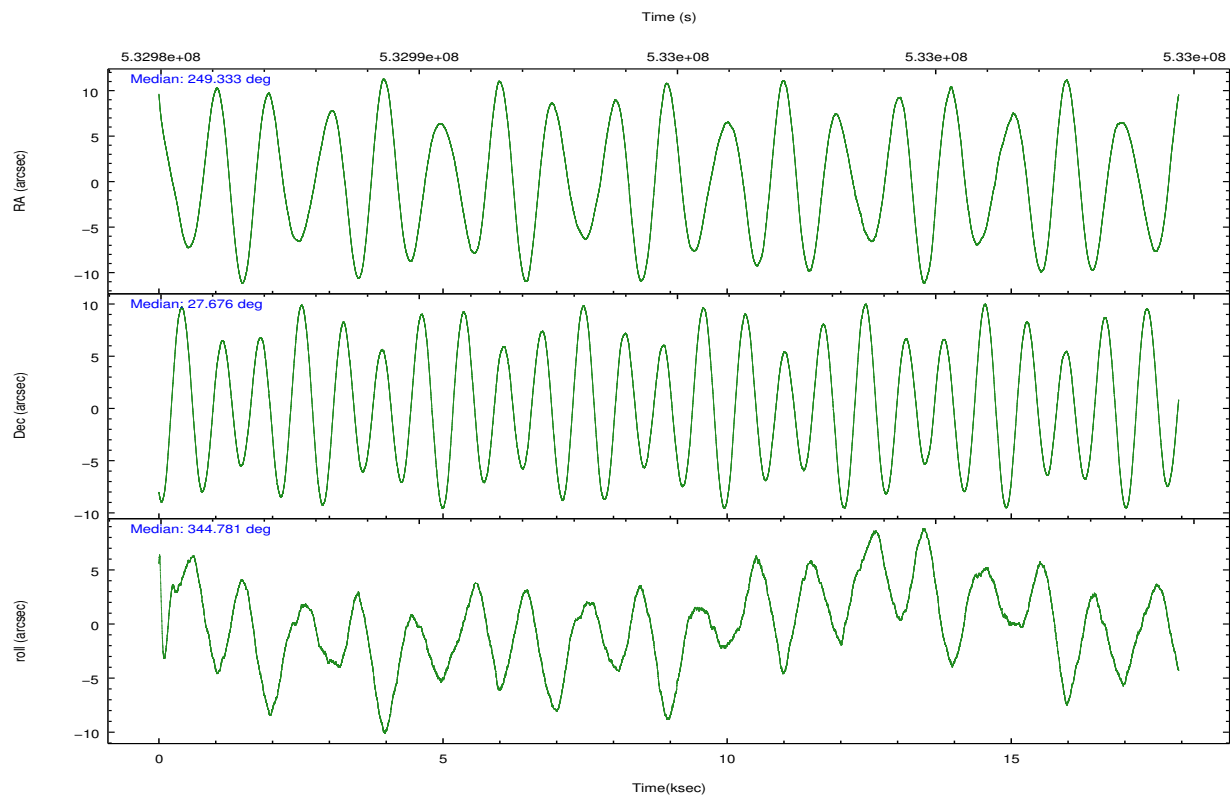
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3888	3983	3757	4723	10283
	4%	4%	3%	3%	7%
grade 1 events	49	62	40	194	90
	0%	0%	0%	0%	0%
grade 2 events	2605	2282	2703	11468	8670
	2%	2%	2%	8%	6%
grade 3 events	1092	1110	1206	4610	3460
	1%	1%	1%	3%	2%
grade 4 events	1088	1100	1134	4641	3251
	1%	1%	1%	3%	2%
grade 5 events	3984	4849	4991	13242	7249
	4%	5%	5%	10%	5%
grade 6 events	2123	2196	2615	30046	9459
	2%	2%	2%	23%	7%
grade 7 events	80367	73486	81720	59452	89713
	84%	82%	83%	46%	67%

## 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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	249.303252	249.3331021937179	CCD I2 on	O1	Y
[deg] Pointing Dec	27.668858	27.67620597915868	CCD I3 on	Y	Y
[deg] Pointing Roll	344.642614	344.7853858330017	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	O2	Y
[s] Observation start time (MET)	532986402.184000	532985279.38345	CCD S5 on	N	N
Observation start date	2014-11-21T19:45:35	2014-11-21T19:27:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	533003802.184000	533004500.18452	On-chip summing requested	N	N
Observation end date	2014-11-22T00:35:35	2014-11-22T00:48:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



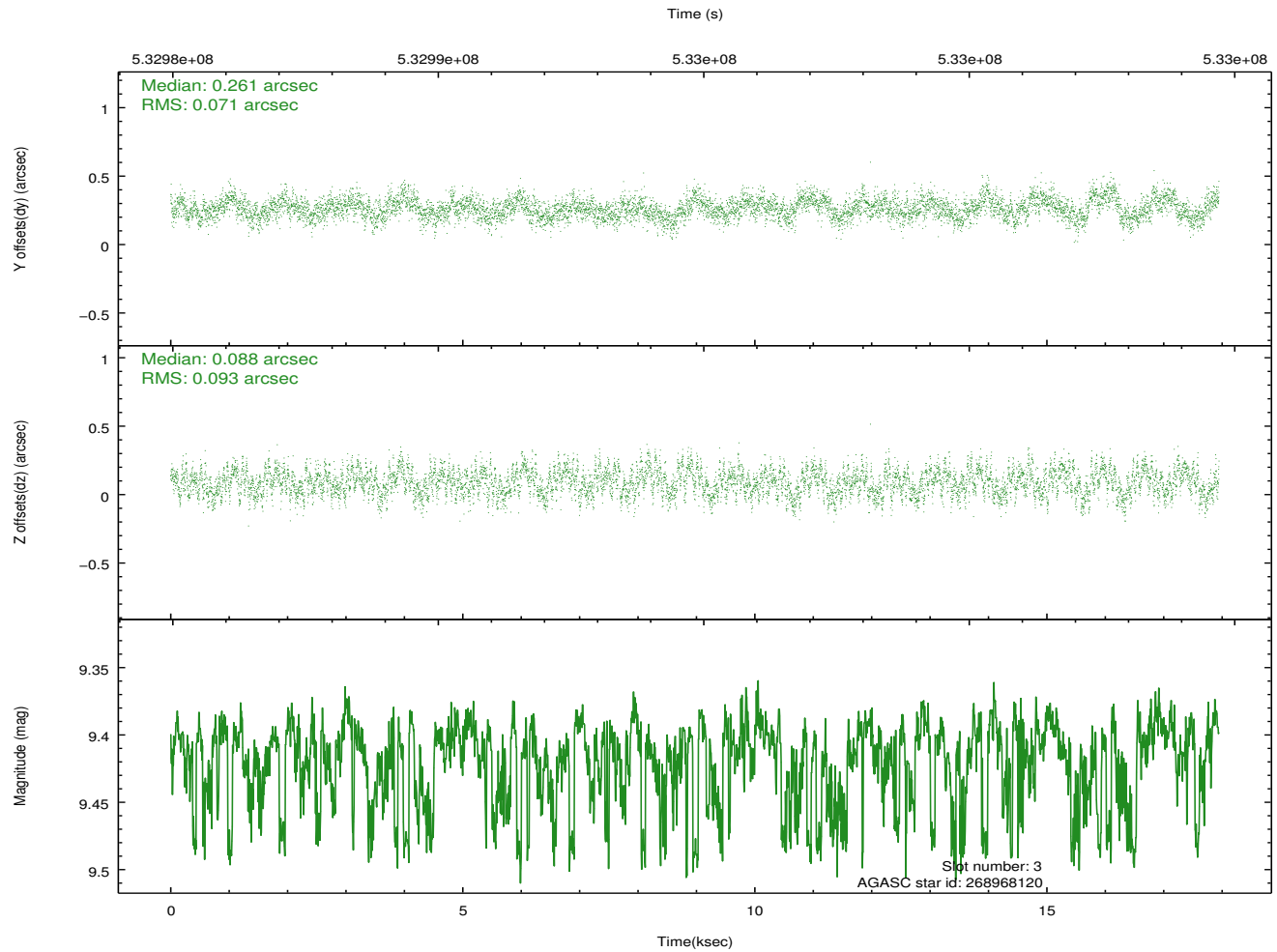
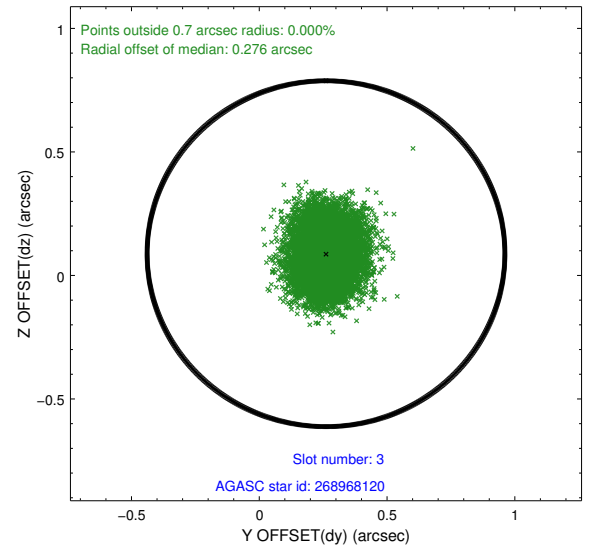
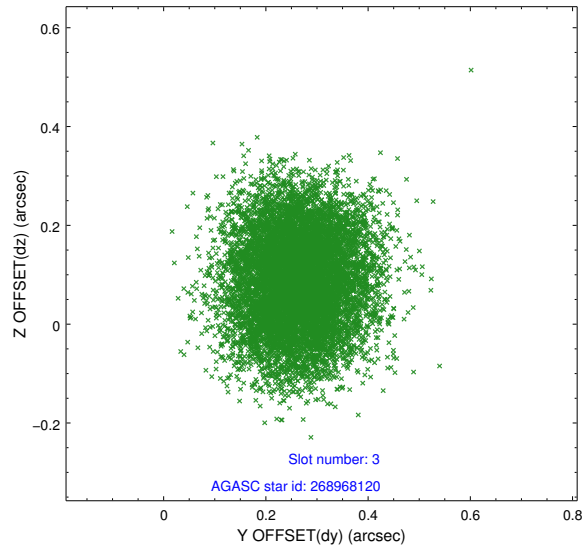


### Slot Statistics

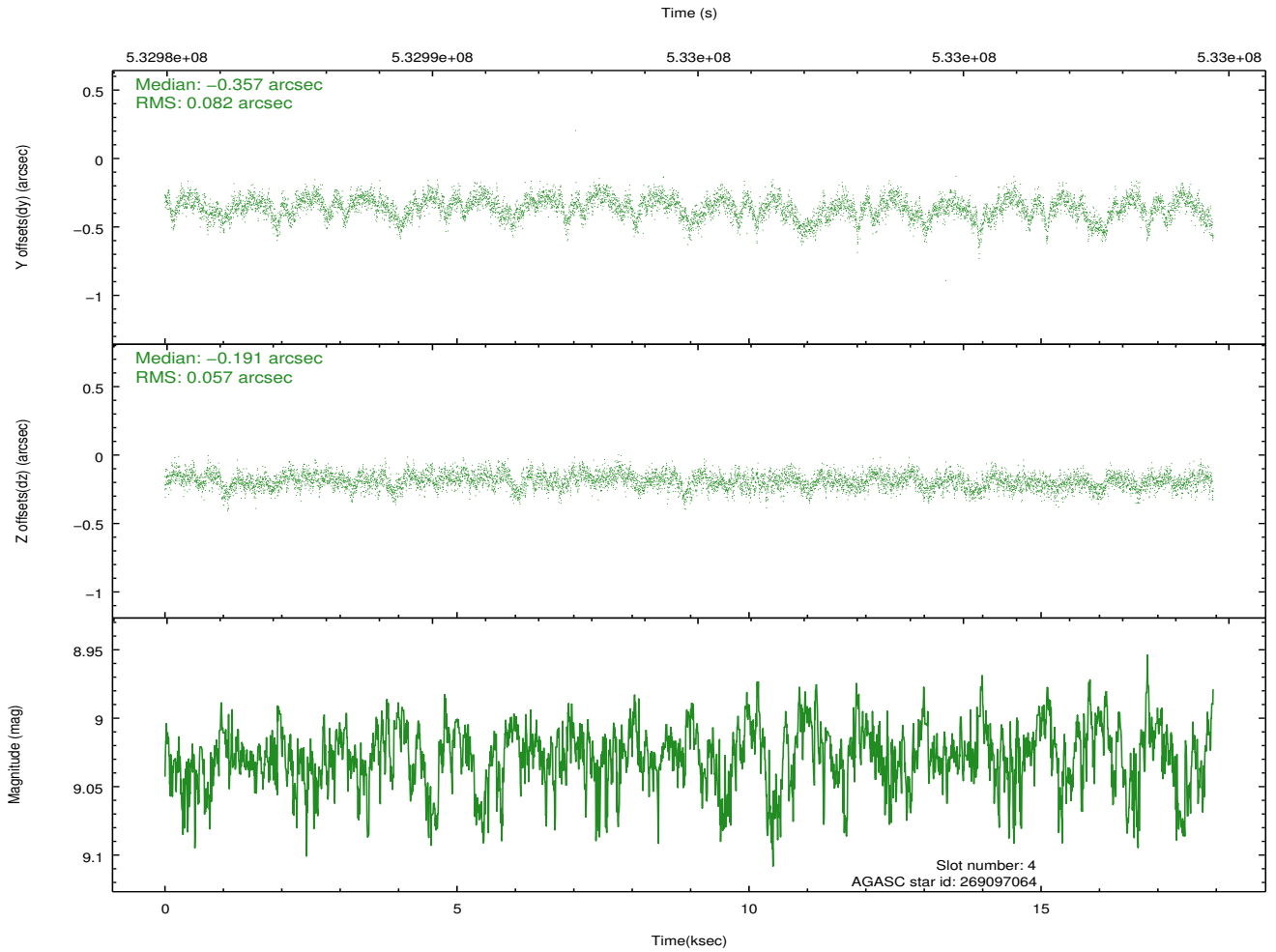
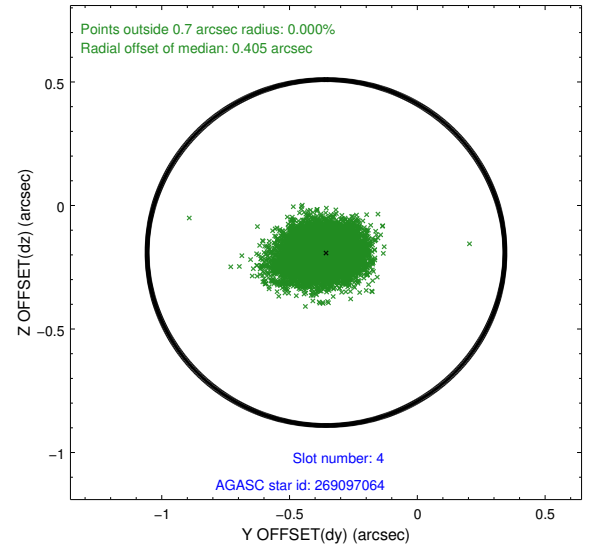
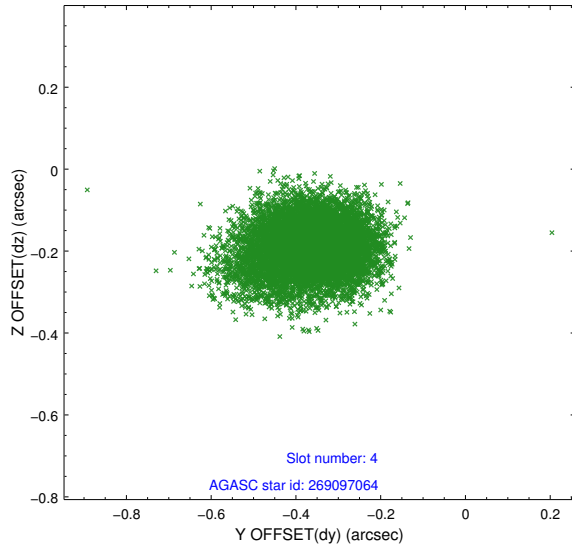
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	4378	-0.112	0.024	0.010	0.016	0.000000	0.000000	-775.32	-1741.69
1	FID		ACIS-S-4	7.02	4377	0.222	0.047	0.016	0.025	0.000000	0.000000	2138.17	166.60
2	FID		ACIS-S-5	7.04	4378	-0.143	-0.063	0.018	0.030	0.000000	0.000000	-1827.92	160.39
3	GUIDE	used	268968120	9.42	8746	0.261	0.088	0.127	0.199	248.865605	27.871413	-1536.11	336.92
4	GUIDE	used	269097064	9.03	8750	-0.357	-0.191	0.104	0.176	250.060753	27.728168	2269.00	852.66
5	GUIDE	used	269099048	8.02	8756	-0.075	0.149	0.086	0.134	249.423156	27.364423	660.59	-954.99
6	GUIDE	used	269101512	9.08	8750	0.160	-0.029	0.135	0.222	249.799184	26.887447	2280.33	-2287.27
7	GUIDE	used	268965624	8.62	8753	0.009	-0.018	0.092	0.148	248.936629	27.873232	-1319.96	402.34

## 2.4 Star Slots

### 2.4.1 Slot 3

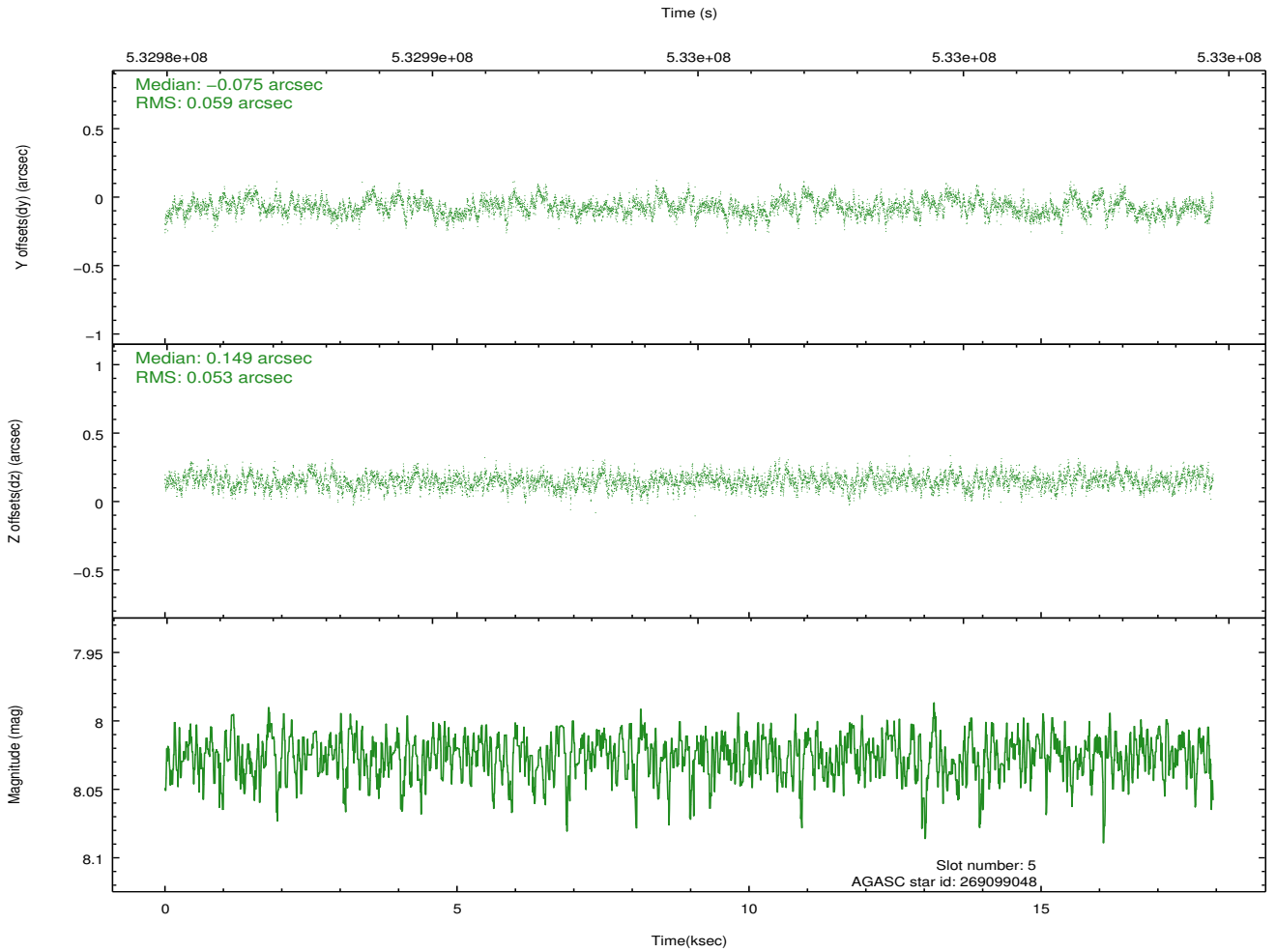
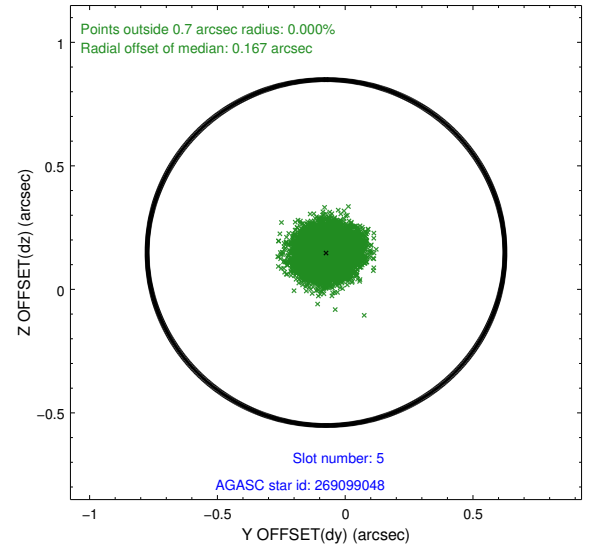
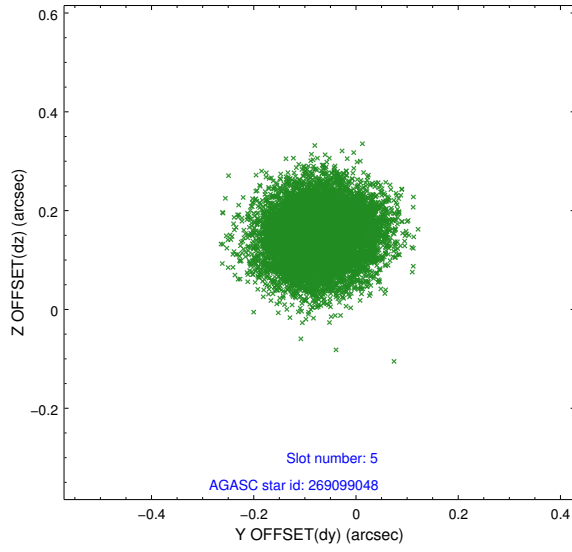


## 2.4.2 Slot 4

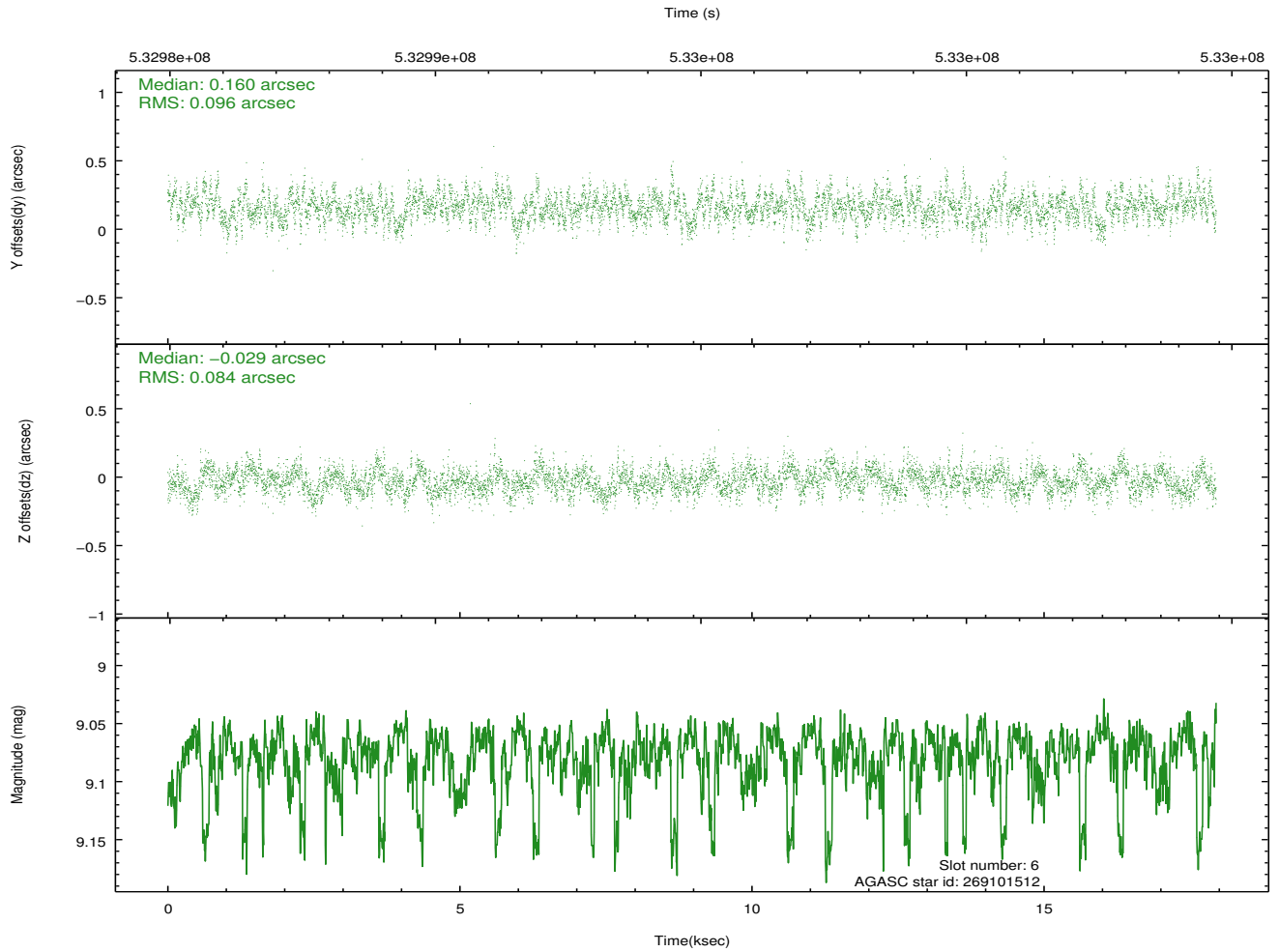
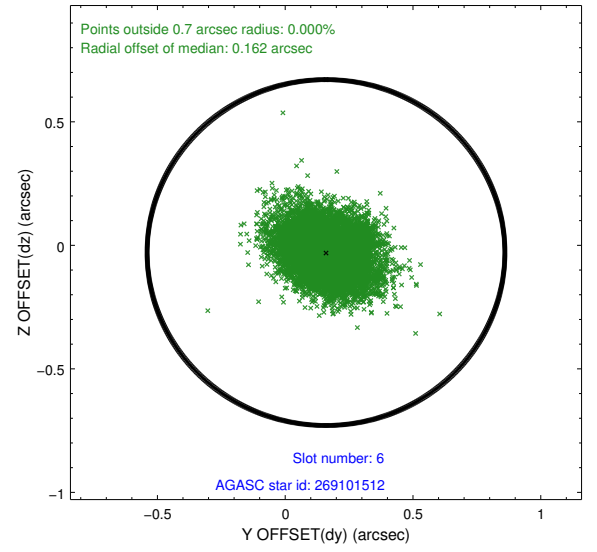
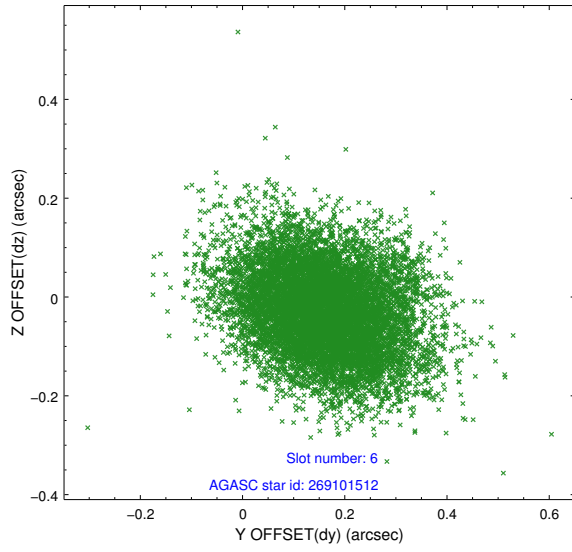




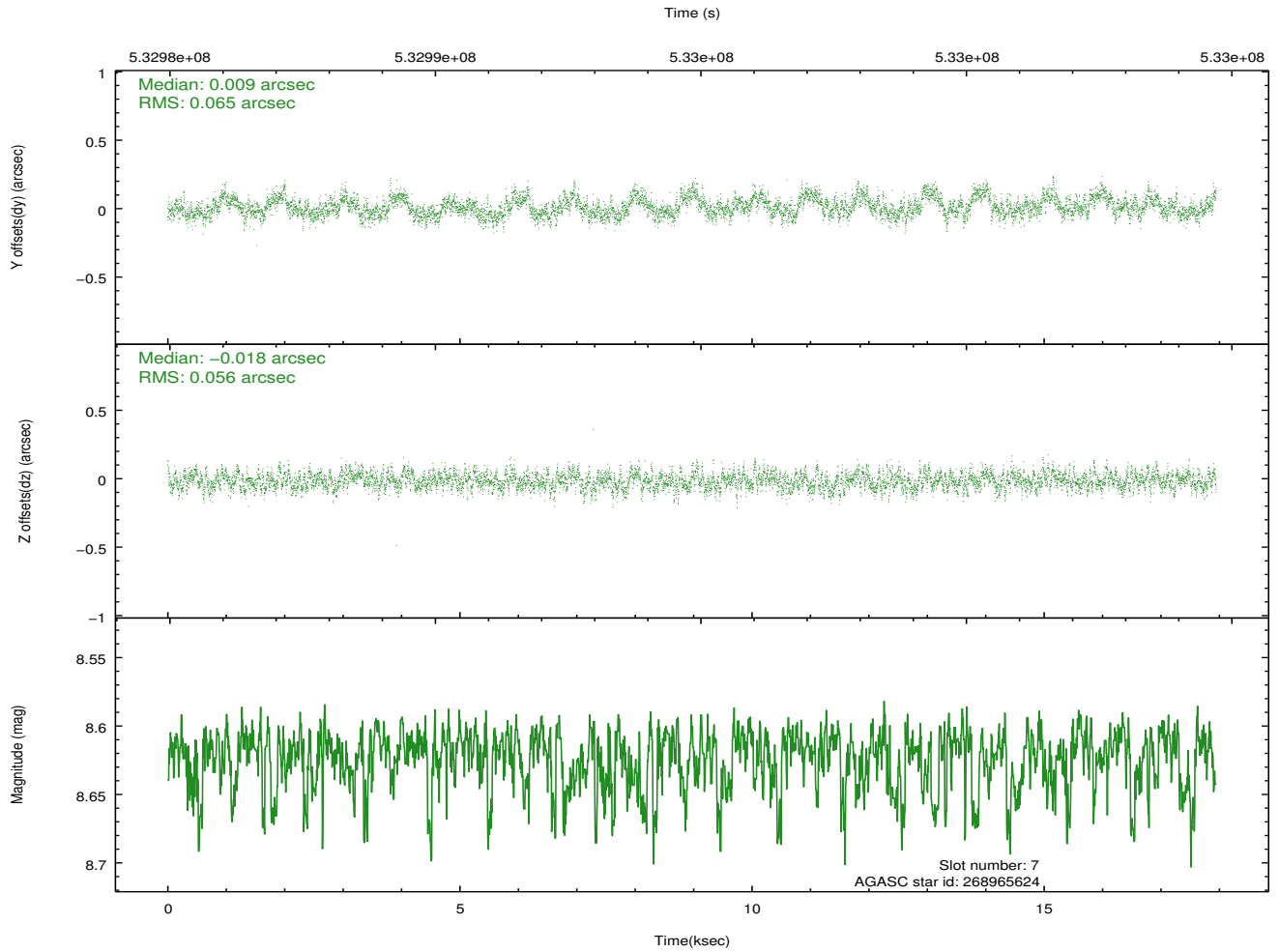
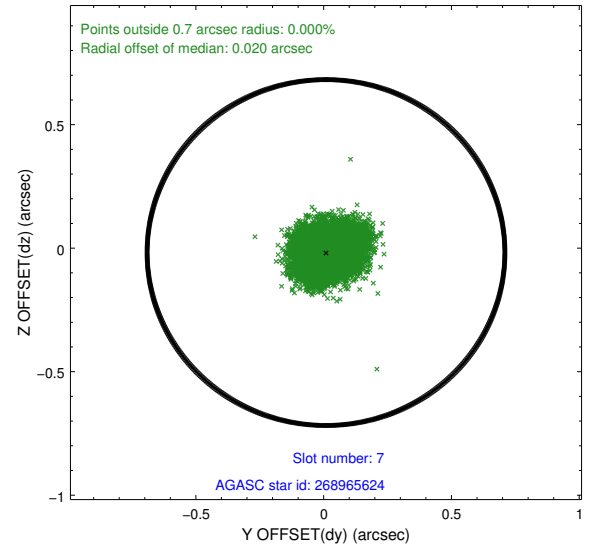
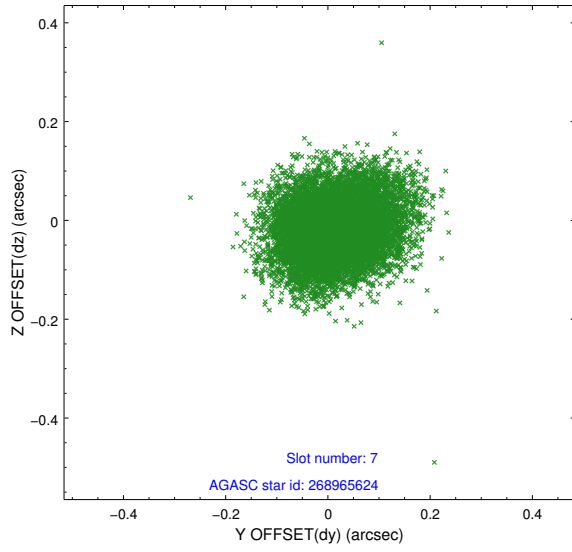
### 2.4.3 Slot 5



## 2.4.4 Slot 6

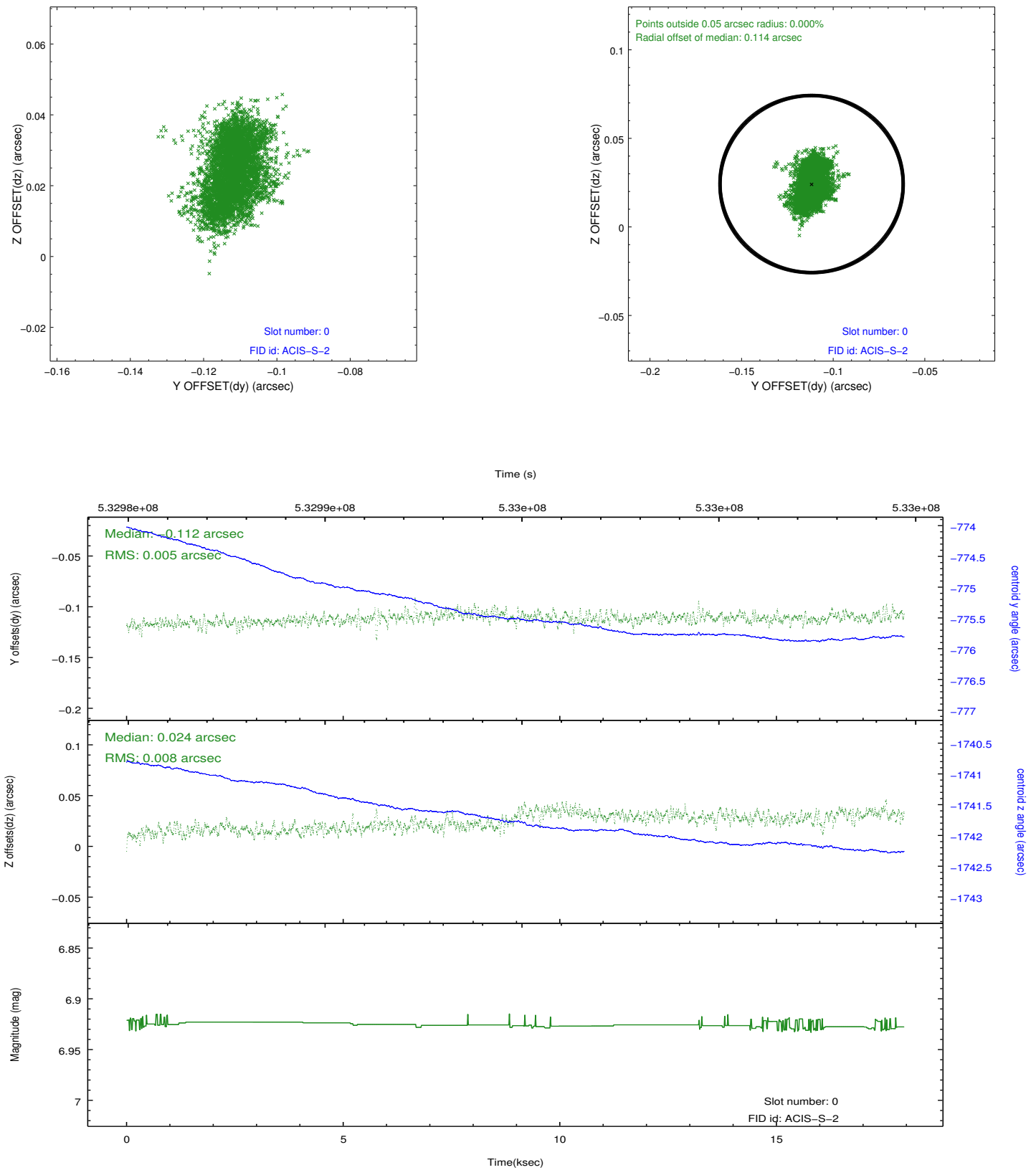


## 2.4.5 Slot 7

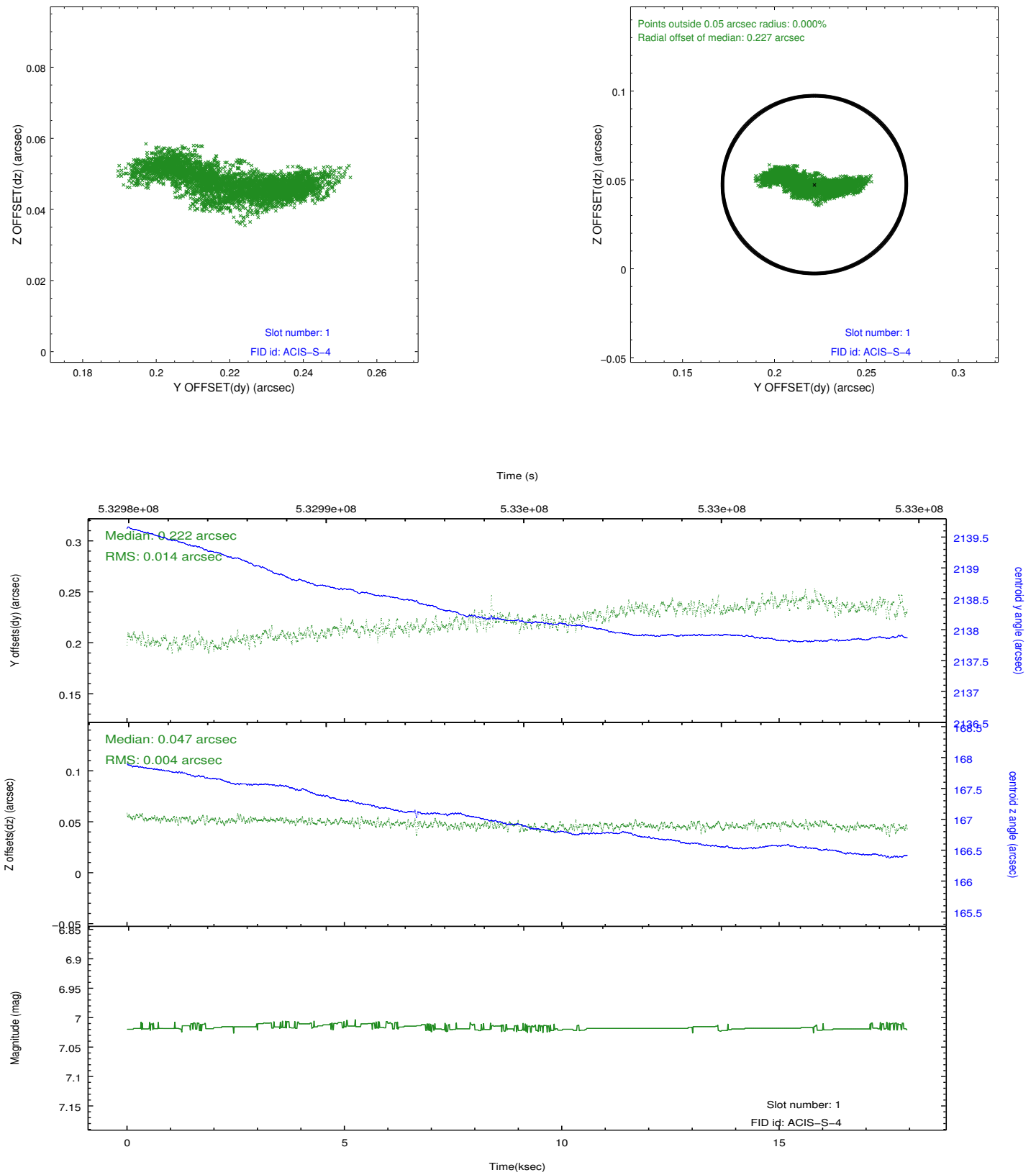


## 2.5 FID Slots

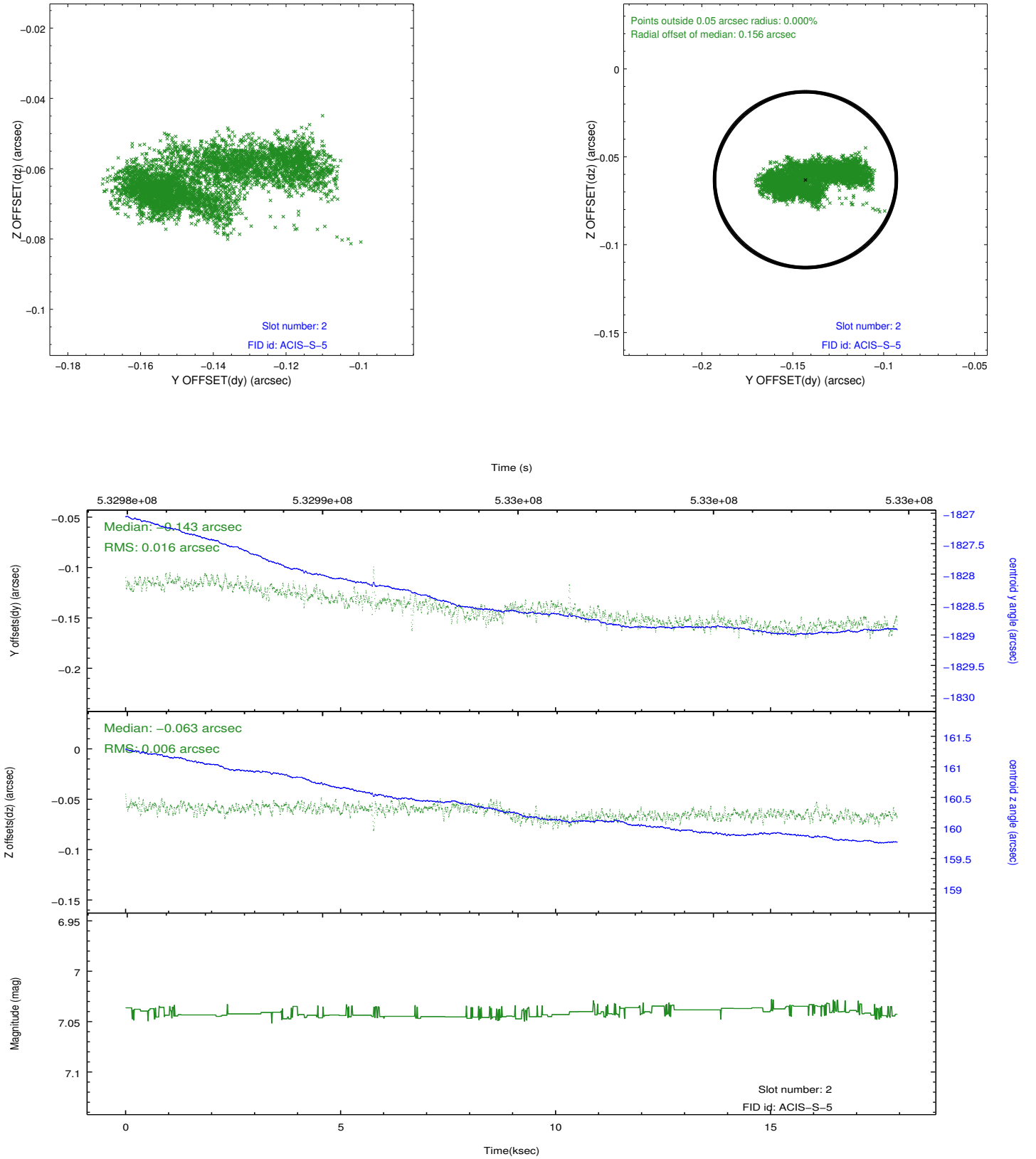
### 2.5.1 Slot 0



## 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)	2014.11.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.465400134325

### A.2 Comments