

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7606 - L2 Version 3  
Chandra X-Ray Center

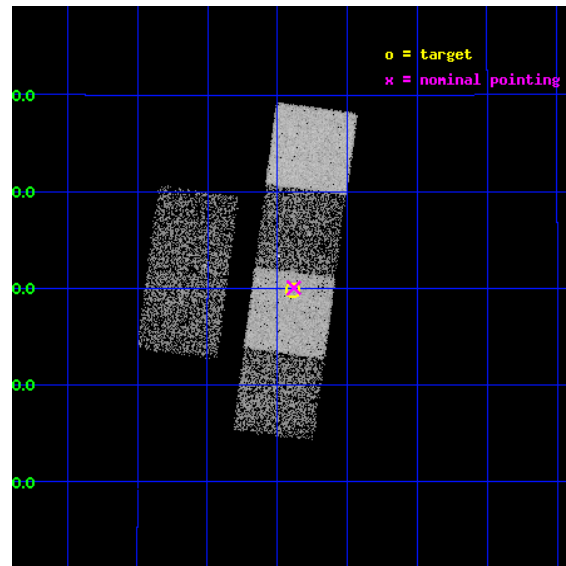
L2 Processing Date : Apr 23 2012

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# 1 Front

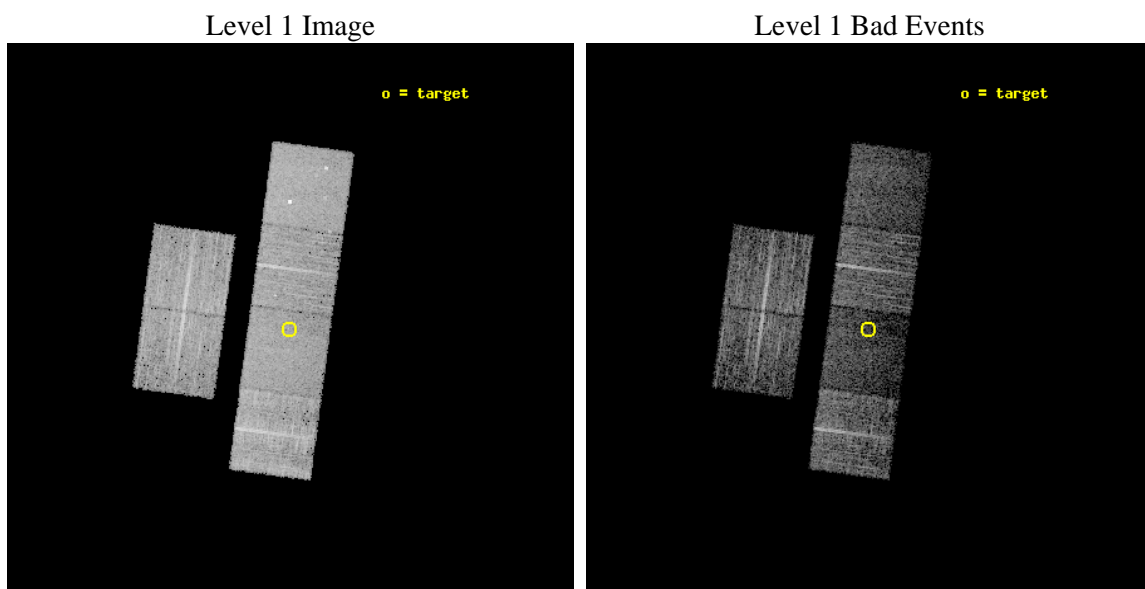
seq_num	500736	Sequence number
obs_id	7606	Observation id
title	CHANDRA OBSERVATIONS OF YOUNG ENERGETIC SUPERNOVAE	Proposal title
observer	Prof. David Pooley	Principal investigator
object	SN 2001em	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	325.59875	Observer's specified target RA [deg]
dec_targ	12.497472	Observer's specified target Dec [deg]
ra_nom	325.5955759198	Nominal RA [deg]
dec_nom	12.501111997793	Nominal Dec [deg]
roll_nom	97.689333174841	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5039.8864278197	Sum of GTIs [s]
livetime	4976.0683512154	Livetime [s]
ontime2	5036.6864975691	Sum of GTIs [s]
ontime3	5039.7633078098	Sum of GTIs [s]
ontime5	5039.8453878164	Sum of GTIs [s]
ontime6	5039.8043478131	Sum of GTIs [s]
ontime7	5039.8864278197	Sum of GTIs [s]
ontime8	5039.7222678065	Sum of GTIs [s]
l2events	52724	Number of level 2 events



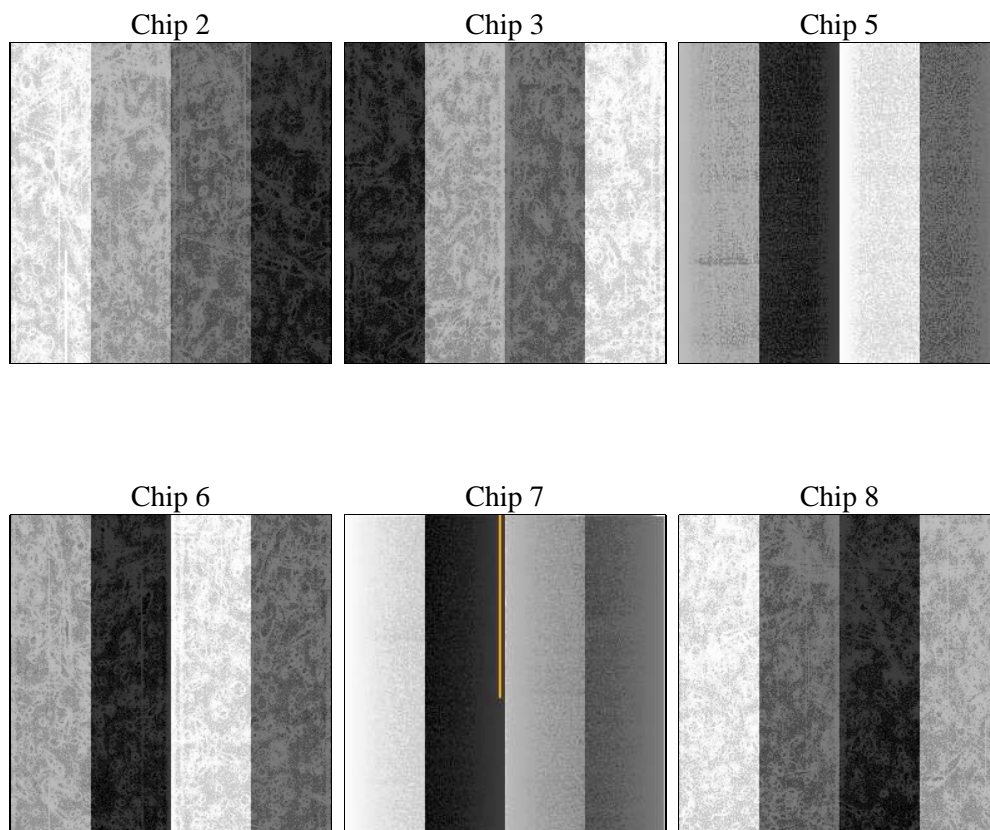
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	5039.8864278197	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	5036.6864975691	Sum of GTIs [s]
date	2012-04-23T20:00:37	Date and time of file creation	ontime3	5039.7633078098	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5039.8453878164	Sum of GTIs [s]
			ontime6	5039.8043478131	Sum of GTIs [s]
			ontime7	5039.8864278197	Sum of GTIs [s]
			ontime8	5039.7222678065	Sum of GTIs [s]
			l1events	245776	Number of level 1 events

### 2.1.4 Events

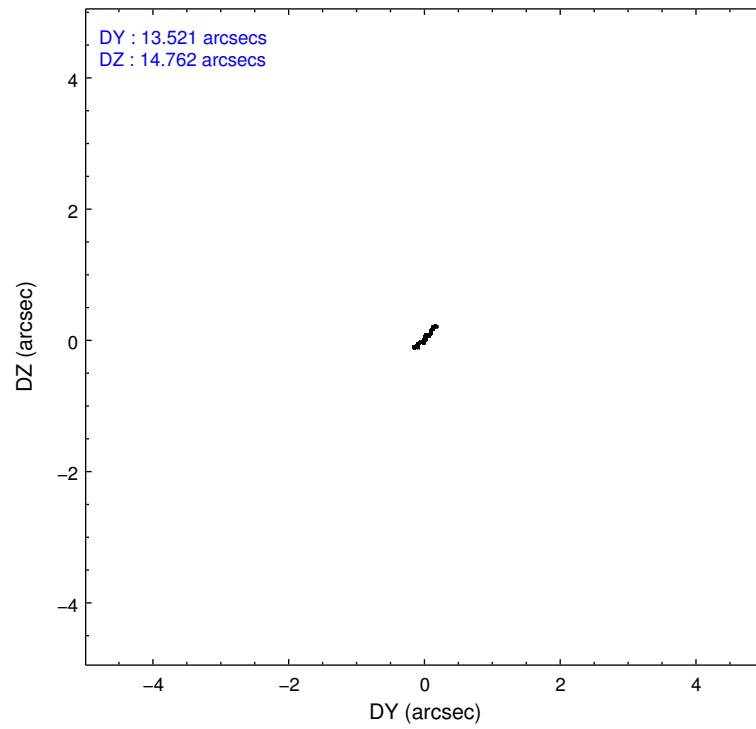
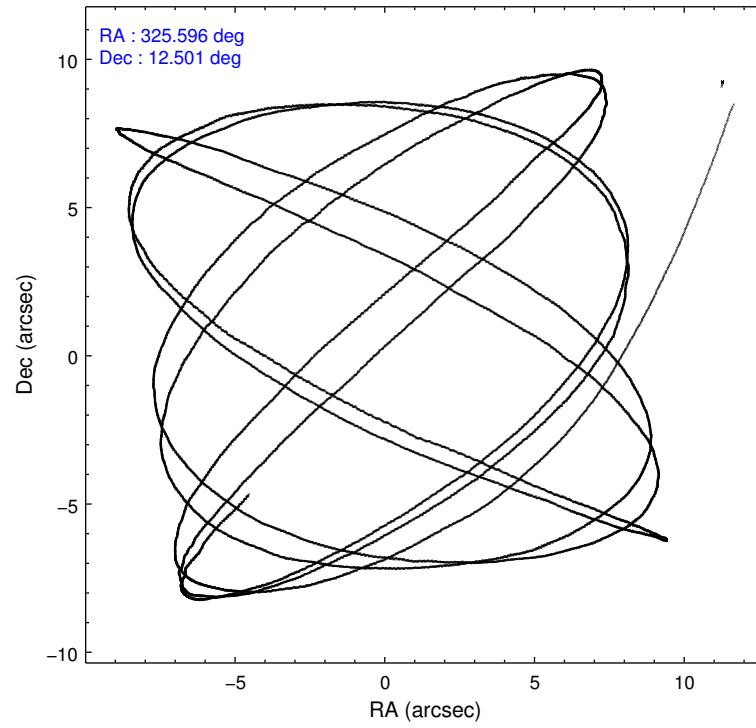
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	41740	35819	47453	37459	35989	47316	grade 0 events	1307	1288	3467	1468	1861	3041
rejected events	38151	32356	21787	33614	18433	35779		3%	3%	7%	3%	5%	6%
rejected %	91%	90%	45%	89%	51%	75%	grade 1 events	22	26	121	19	61	47
								0%	0%	0%	0%	0%	0%
							grade 2 events	846	764	7778	818	3798	2840
								2%	2%	16%	2%	10%	6%
							grade 3 events	401	402	1156	425	1625	1280
								0%	1%	2%	1%	4%	2%
							grade 4 events	416	383	1050	432	1662	1146
								0%	1%	2%	1%	4%	2%
							grade 5 events	1001	1218	3820	1219	3802	2023
								2%	3%	8%	3%	10%	4%
							grade 6 events	624	635	12242	708	8626	3239
								1%	1%	25%	1%	23%	6%
							grade 7 events	37123	31103	17819	32370	14554	33700
								88%	86%	37%	86%	40%	71%

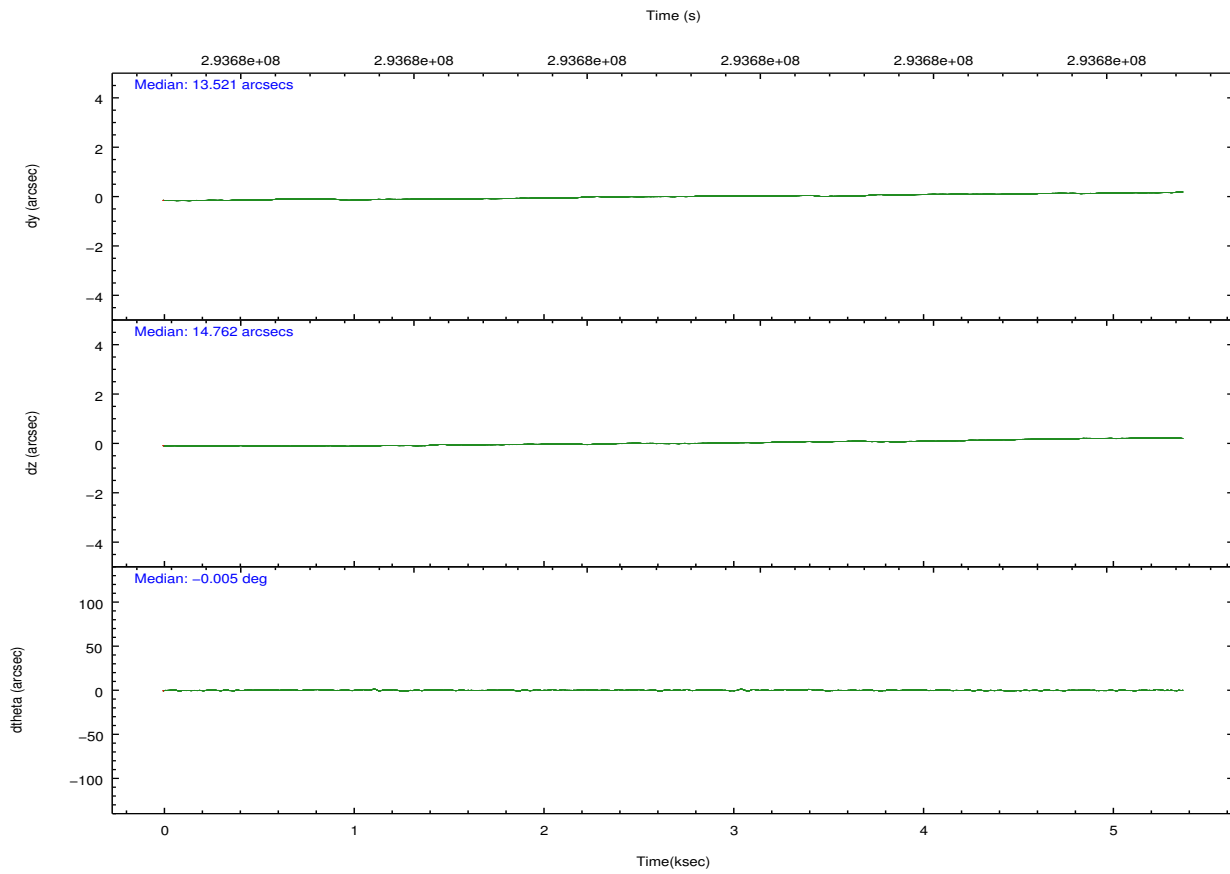
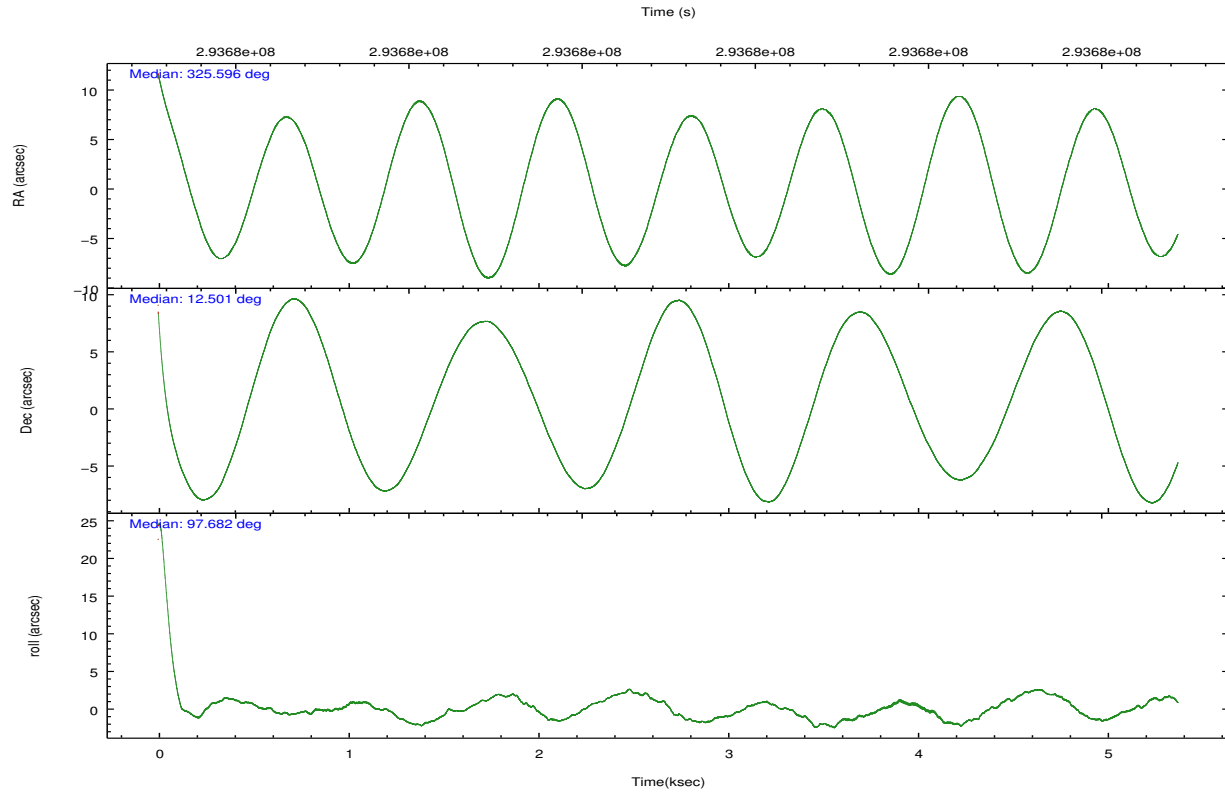


## 2.2 Compared Parameters

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	325.613021	325.5955759197961	CCD I2 on	O2	Y
[deg] Pointing Dec	12.479815	12.50111199779343	CCD I3 on	Y	Y
[deg] Pointing Roll	97.528880	97.68933317484077	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	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)	293676174.184000	293675059.46504	CCD S5 on	N	N
Observation start date	2007-04-23T00:41:49	2007-04-23T00:24:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	293681174.184000	293681985.39037	On-chip summing requested	N	N
Observation end date	2007-04-23T02:05:09	2007-04-23T02:19:45	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



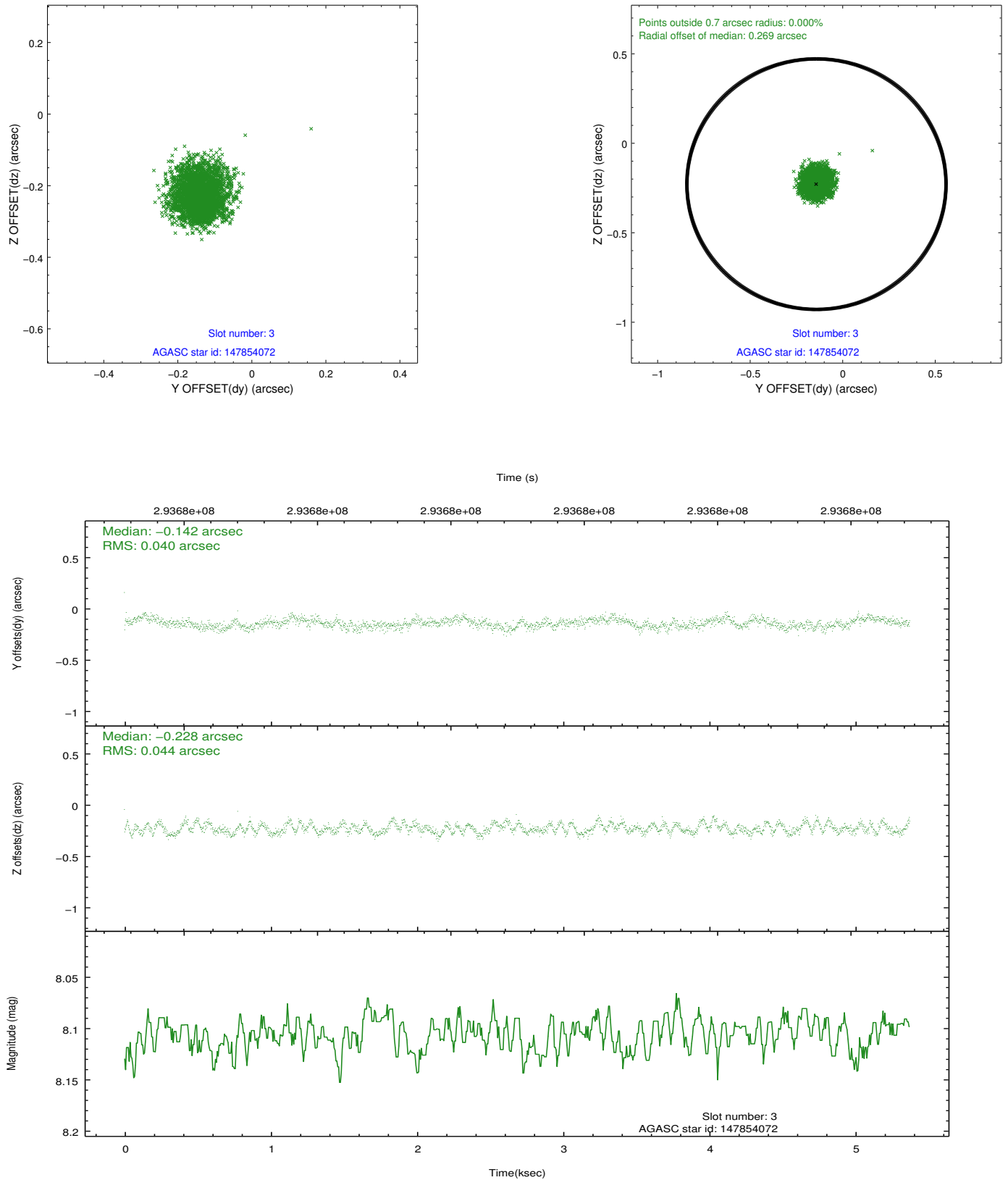


### Slot Statistics

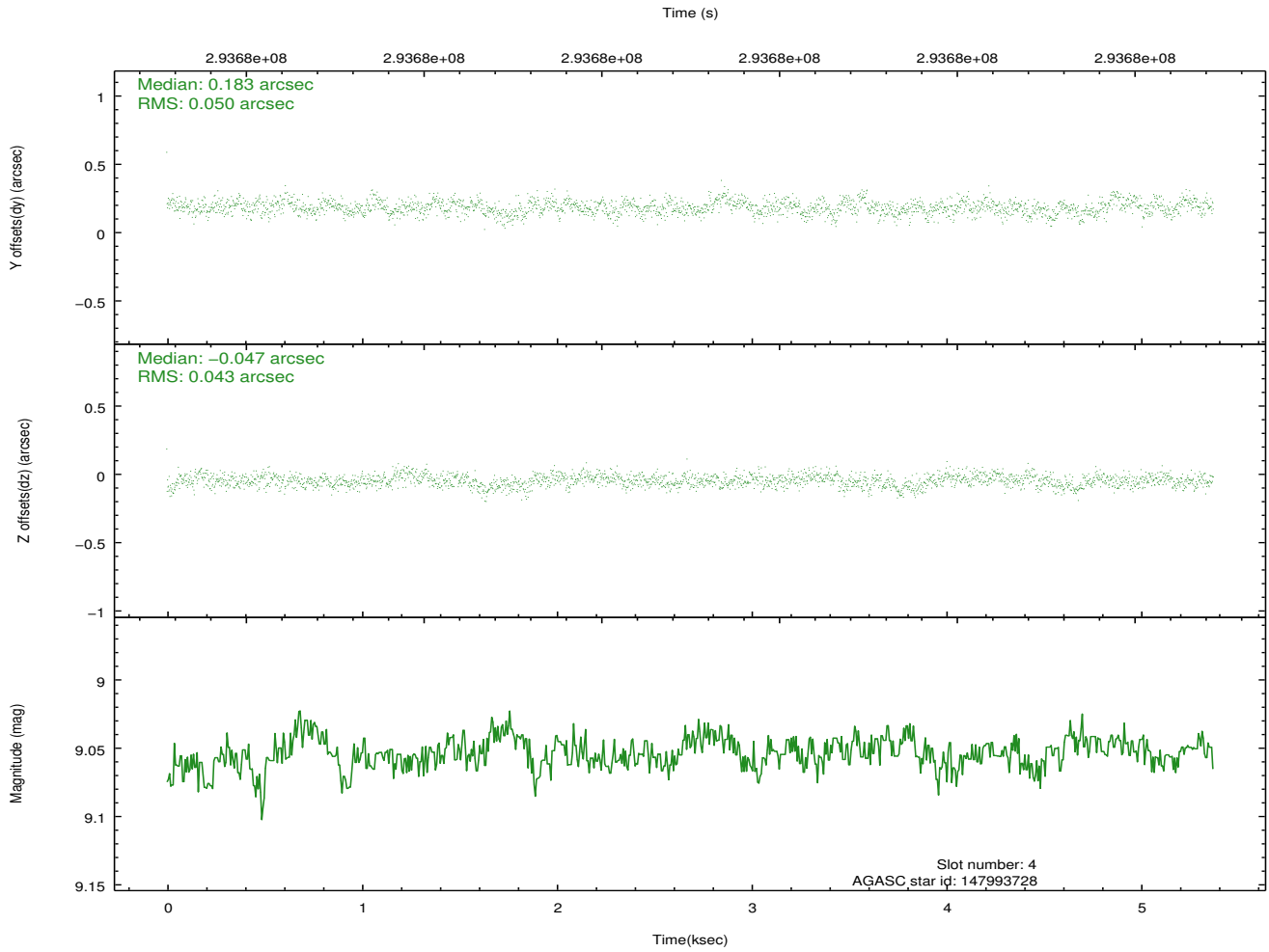
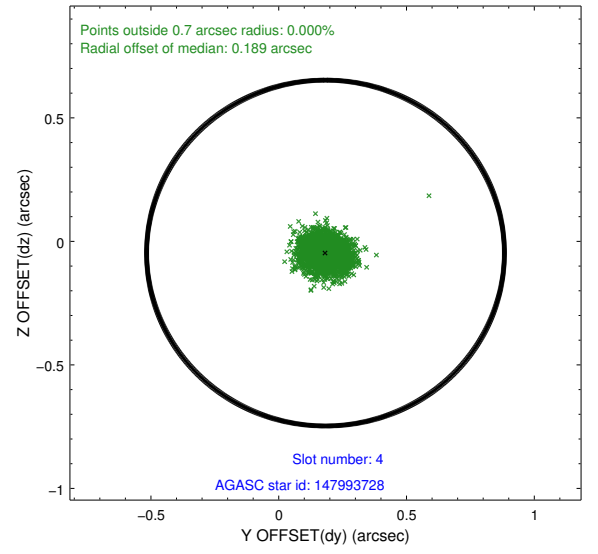
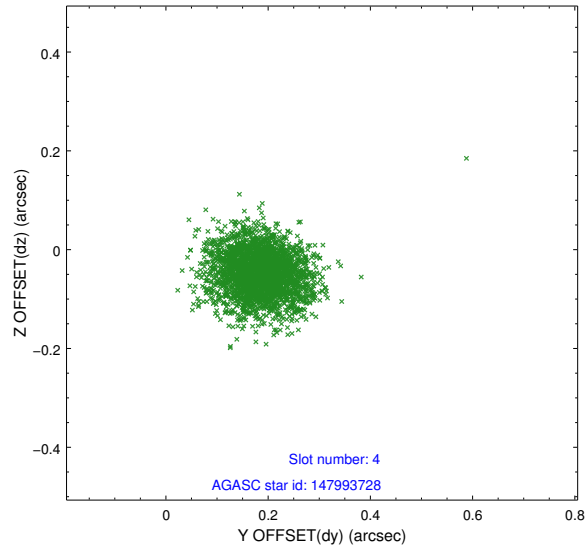
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1311	-0.057	-0.041	0.007	0.012	0.000000	0.000000	-766.48	-1736.21
1	FID	ACIS-S-4	7.19	1311	0.198	0.039	0.008	0.014	0.000000	0.000000	2146.52	171.23
2	FID	ACIS-S-5	7.22	1311	-0.171	0.011	0.007	0.011	0.000000	0.000000	-1818.02	166.10
3	GUIDE	147854072	8.11	2620	-0.142	-0.228	0.064	0.099	325.349490	12.755754	1106.81	787.34
4	GUIDE	147993728	9.05	2616	0.183	-0.047	0.068	0.112	325.561791	11.853388	-2210.83	474.59
5	GUIDE	147995656	8.69	2620	0.239	-0.089	0.059	0.096	325.586526	11.818453	-2348.26	404.57
6	GUIDE	147995336	8.76	2621	-0.241	0.243	0.070	0.110	326.176555	13.042686	1751.70	-2224.35
7	GUIDE	147984864	9.24	2620	-0.035	0.118	0.107	0.166	326.223612	13.062402	1802.78	-2398.25

## 2.4 Star Slots

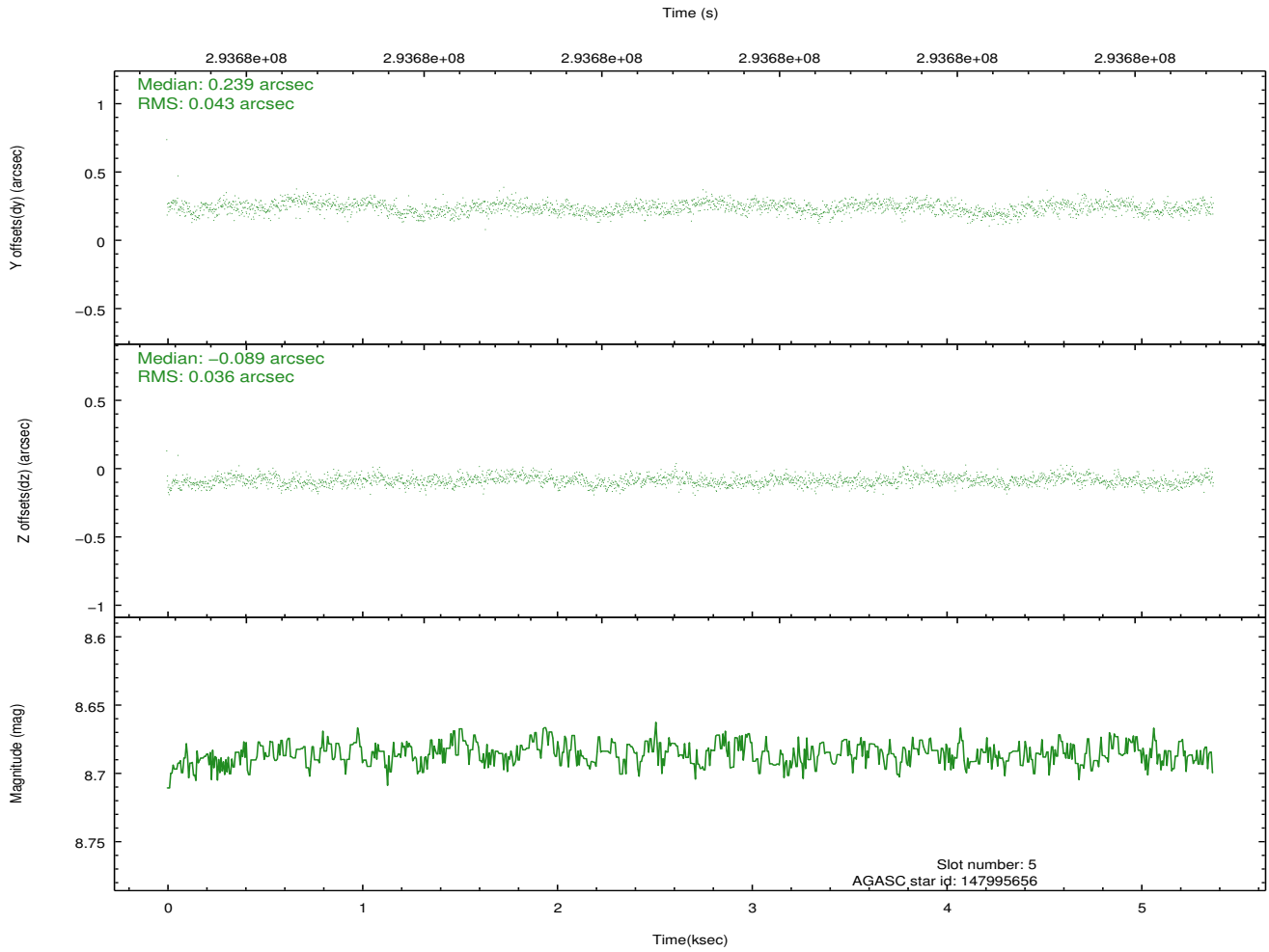
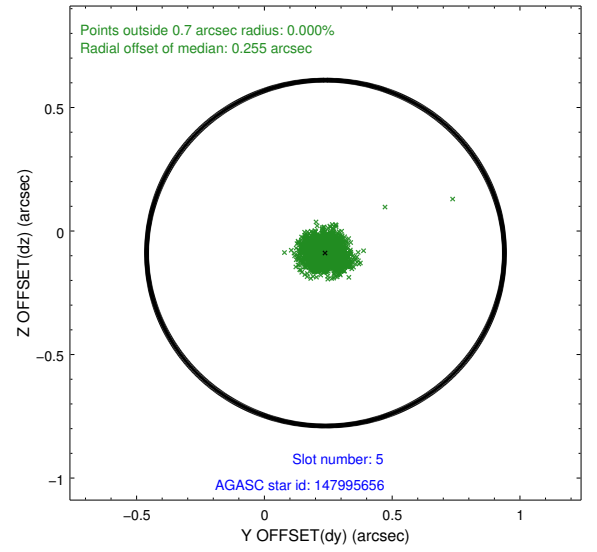
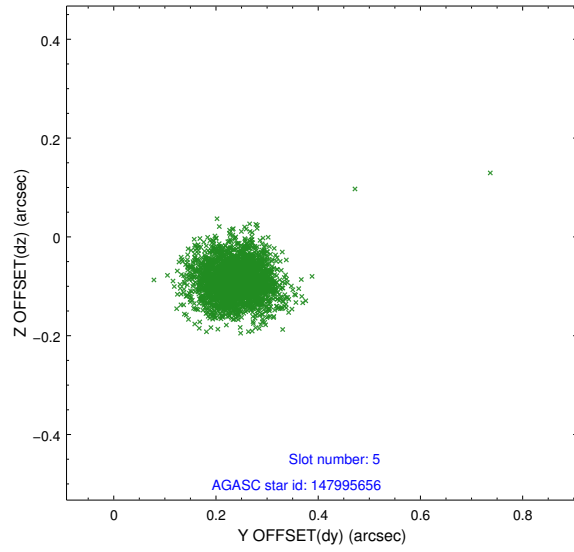
### 2.4.1 Slot 3



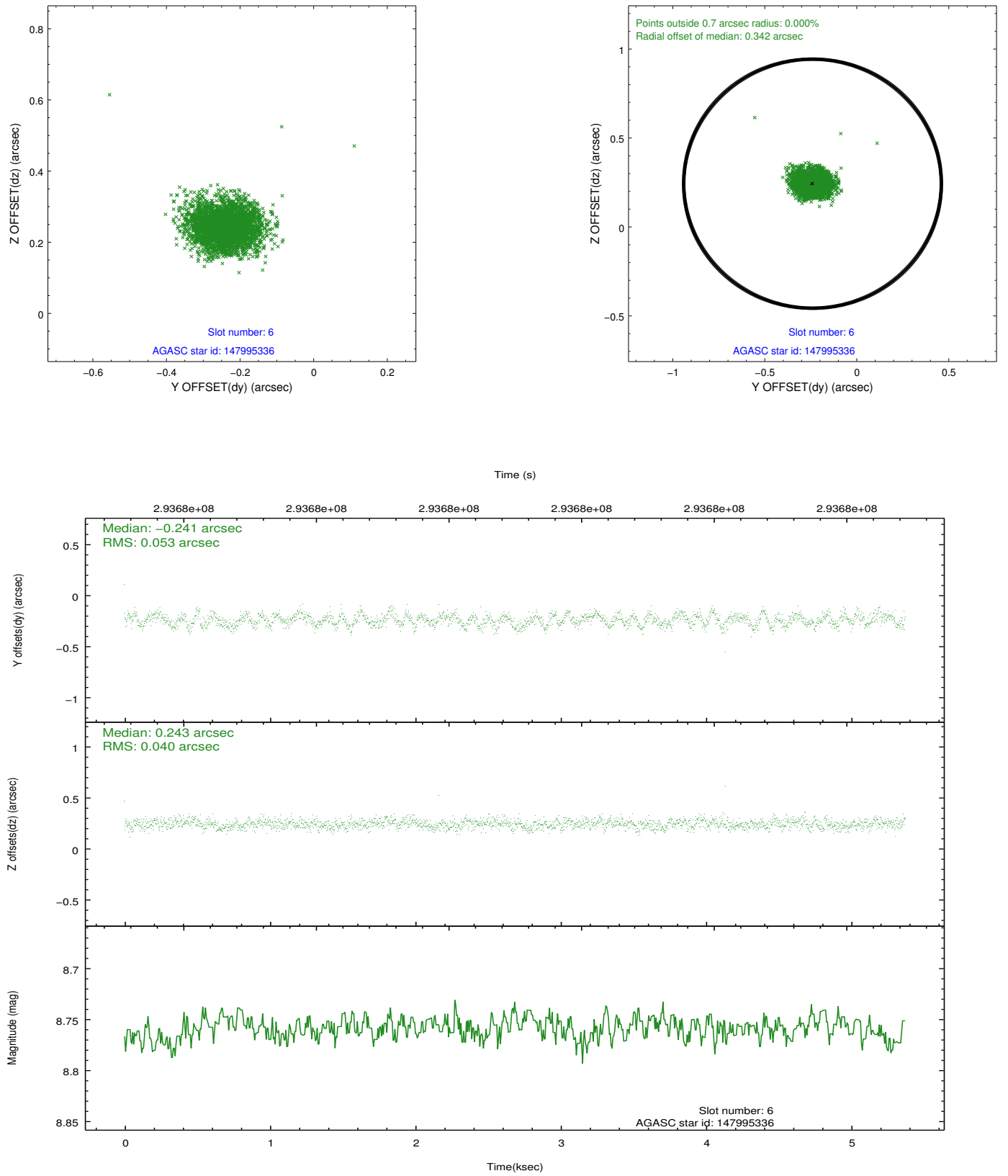
## 2.4.2 Slot 4



### 2.4.3 Slot 5

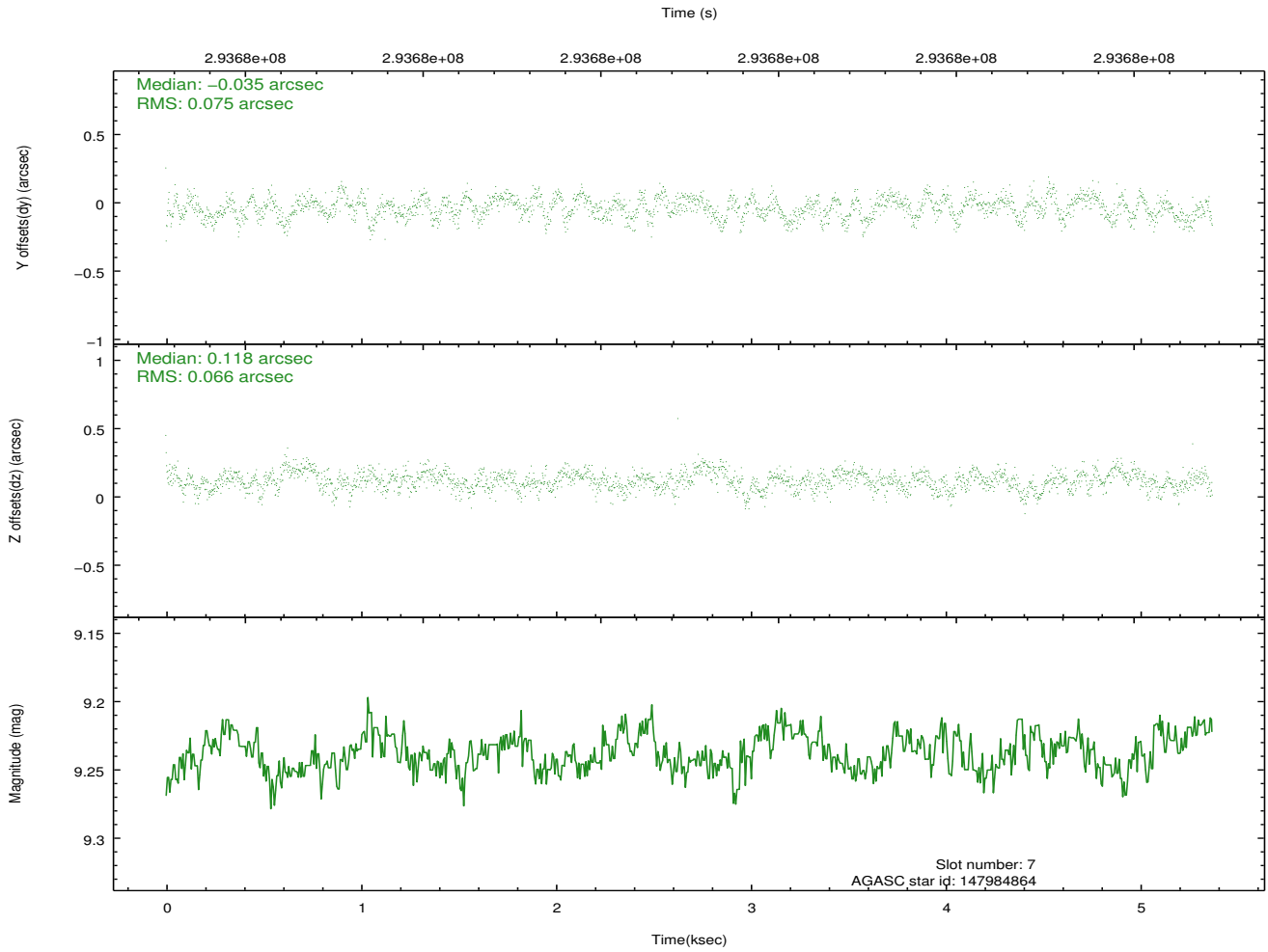
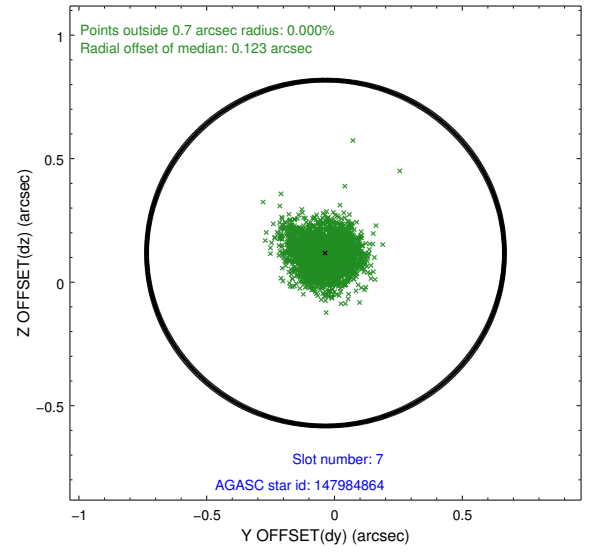
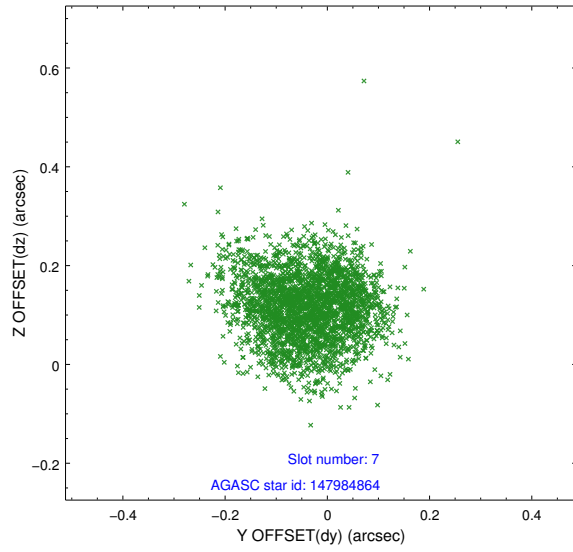


## 2.4.4 Slot 6



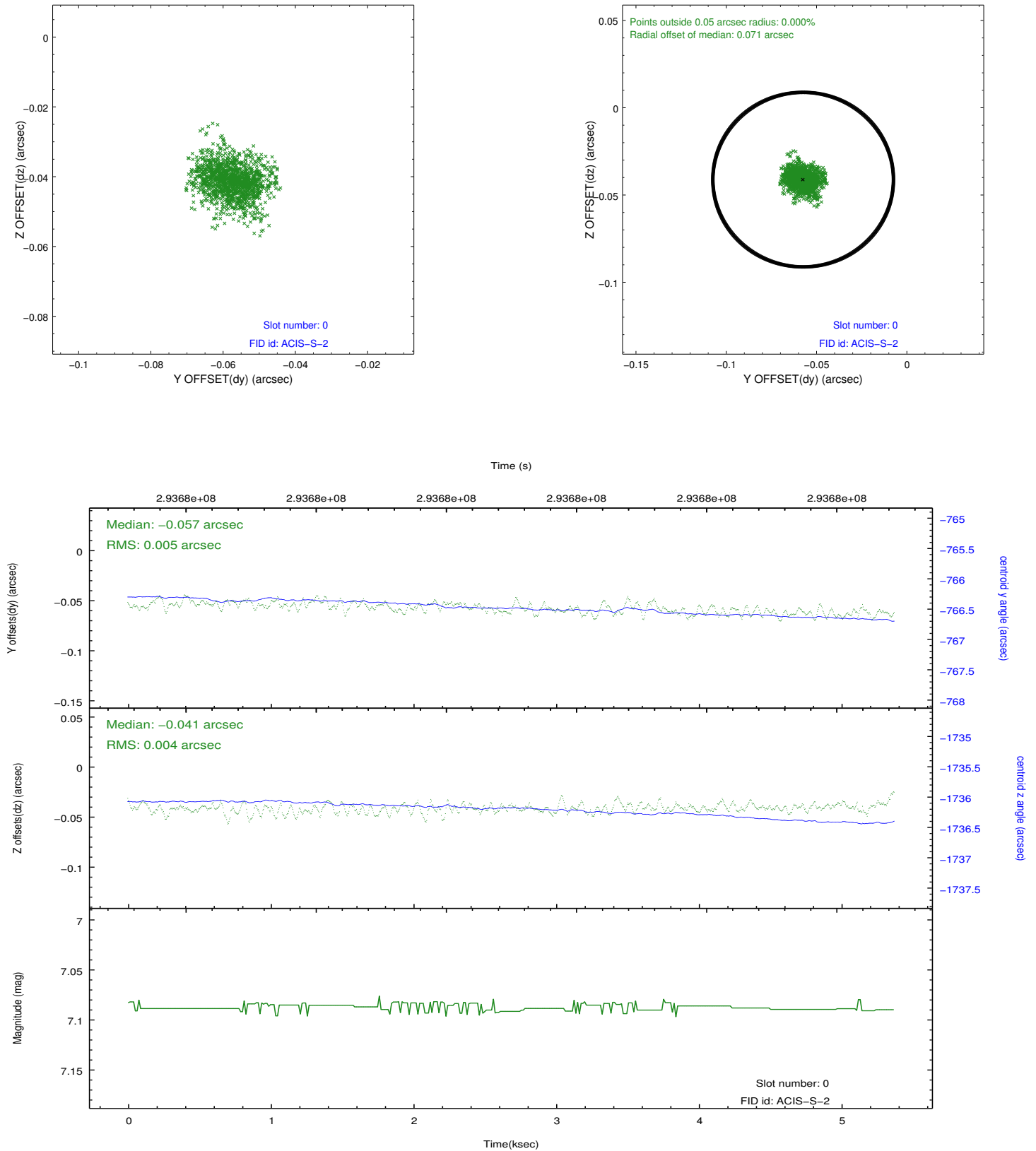


### 2.4.5 Slot 7

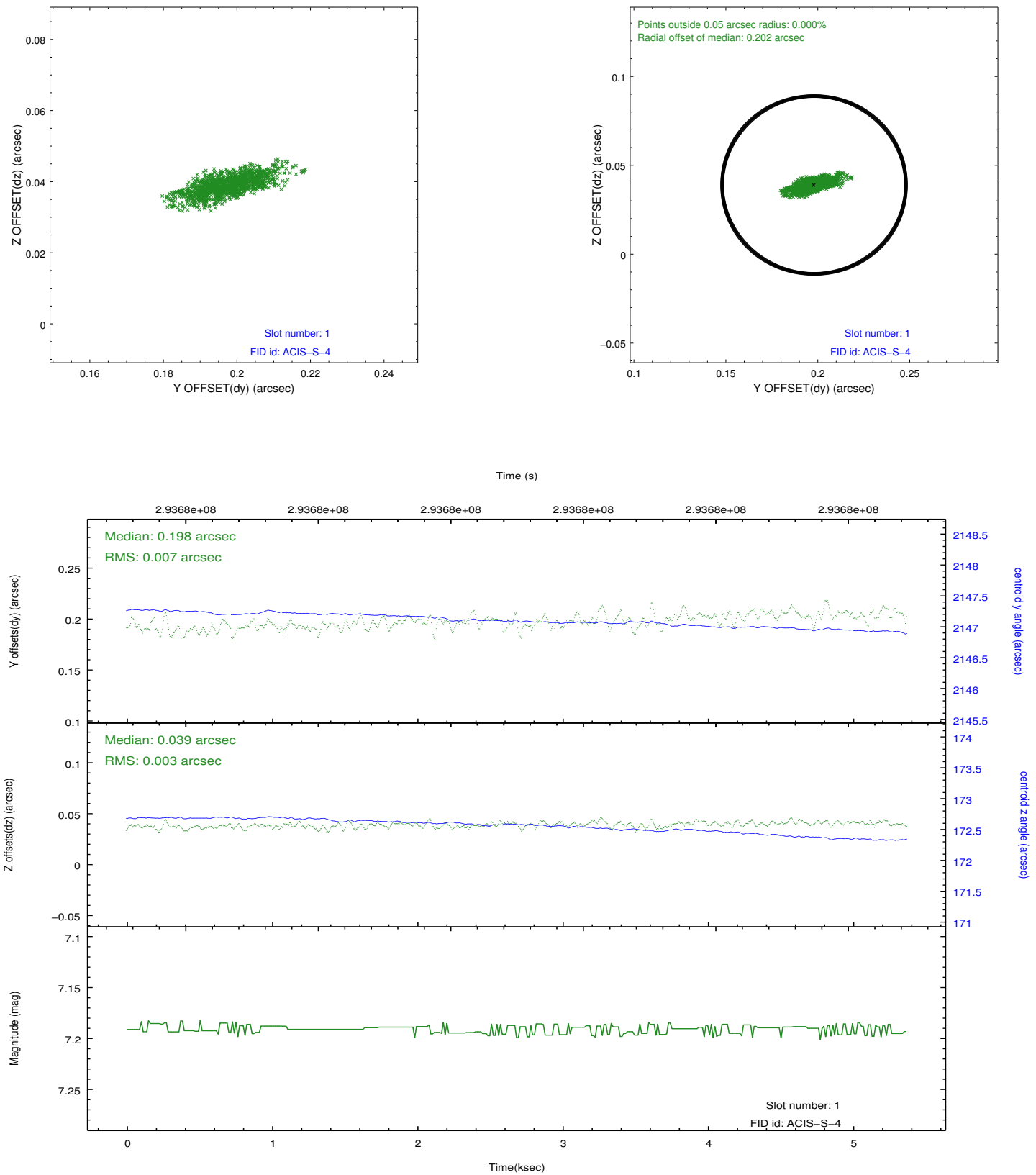


## 2.5 FID Slots

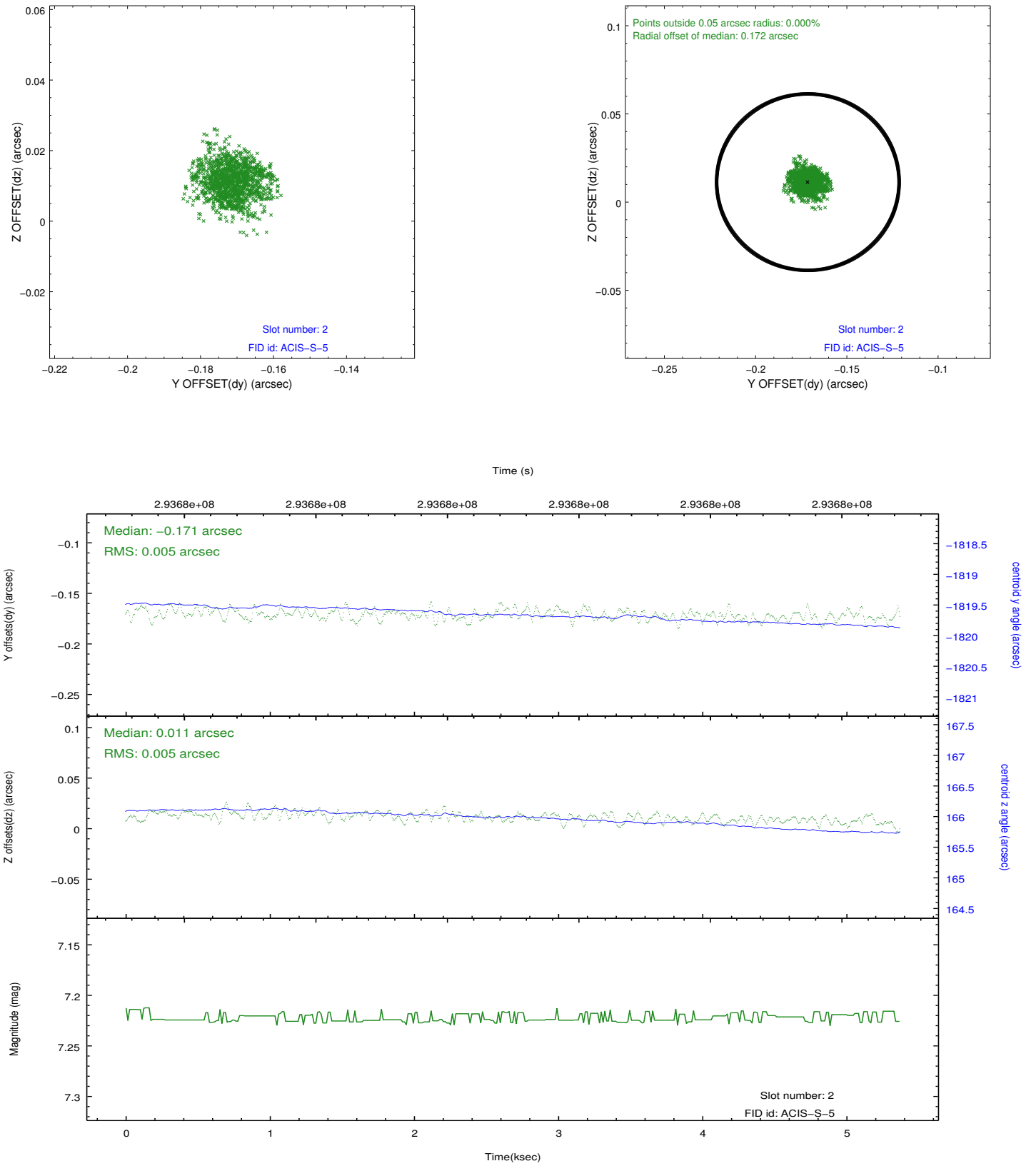
### 2.5.1 Slot 0



## 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)	2012.04.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.03999998

### A.2 Comments