

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7845 - L2 Version 3  
Chandra X-Ray Center

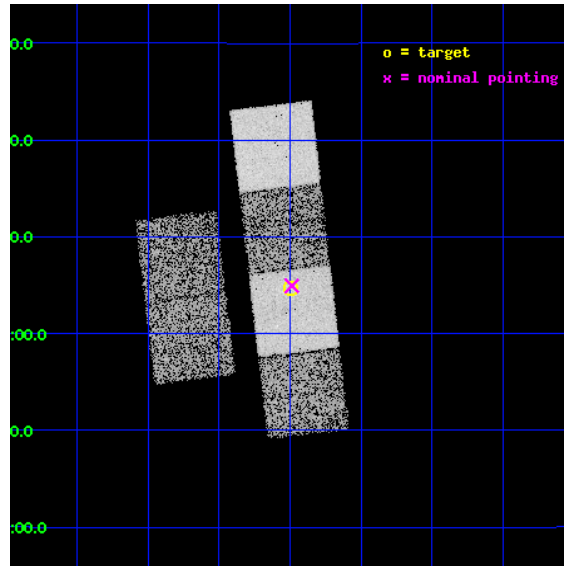
L2 Processing Date : Apr 20 2012

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# 1 Front

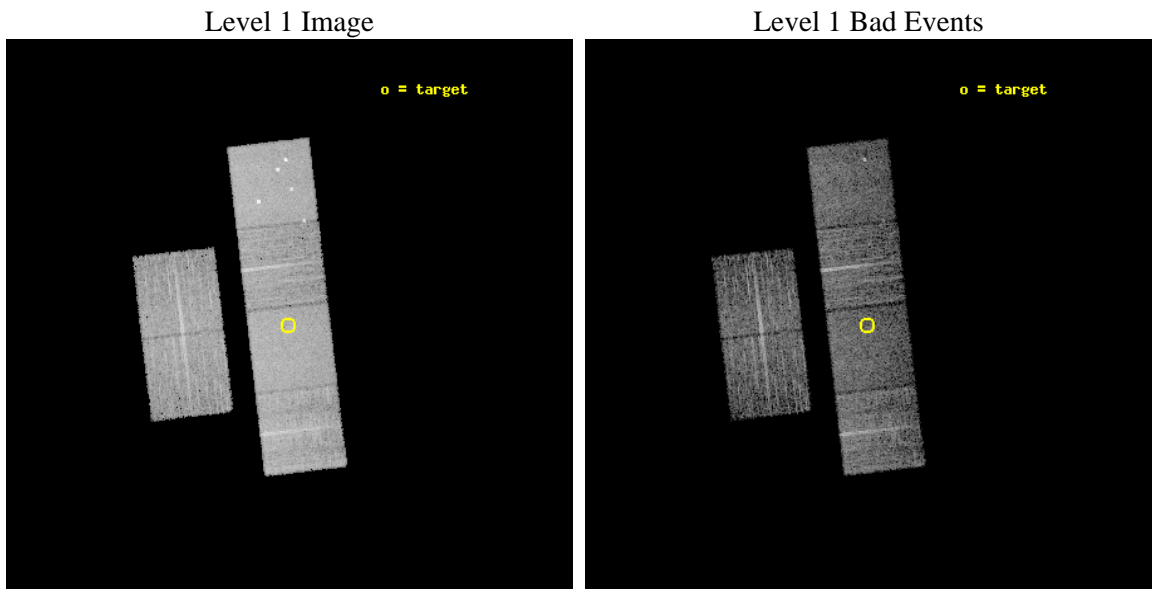
seq_num	701509	Sequence number
obs_id	7845	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	NGC 4492	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.74875	Observer's specified target RA [deg]
dec_targ	8.077944	Observer's specified target Dec [deg]
ra_nom	187.74673103443	Nominal RA [deg]
dec_nom	8.0823211481881	Nominal Dec [deg]
roll_nom	83.323581688537	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4953.599981606	Sum of GTIs [s]
livetime	4890.8745159391	Livetime [s]
ontime2	4953.599981606	Sum of GTIs [s]
ontime3	4950.3590212464	Sum of GTIs [s]
ontime5	4953.599981606	Sum of GTIs [s]
ontime6	4953.599981606	Sum of GTIs [s]
ontime7	4953.599981606	Sum of GTIs [s]
ontime8	4953.599981606	Sum of GTIs [s]
l2events	75145	Number of level 2 events



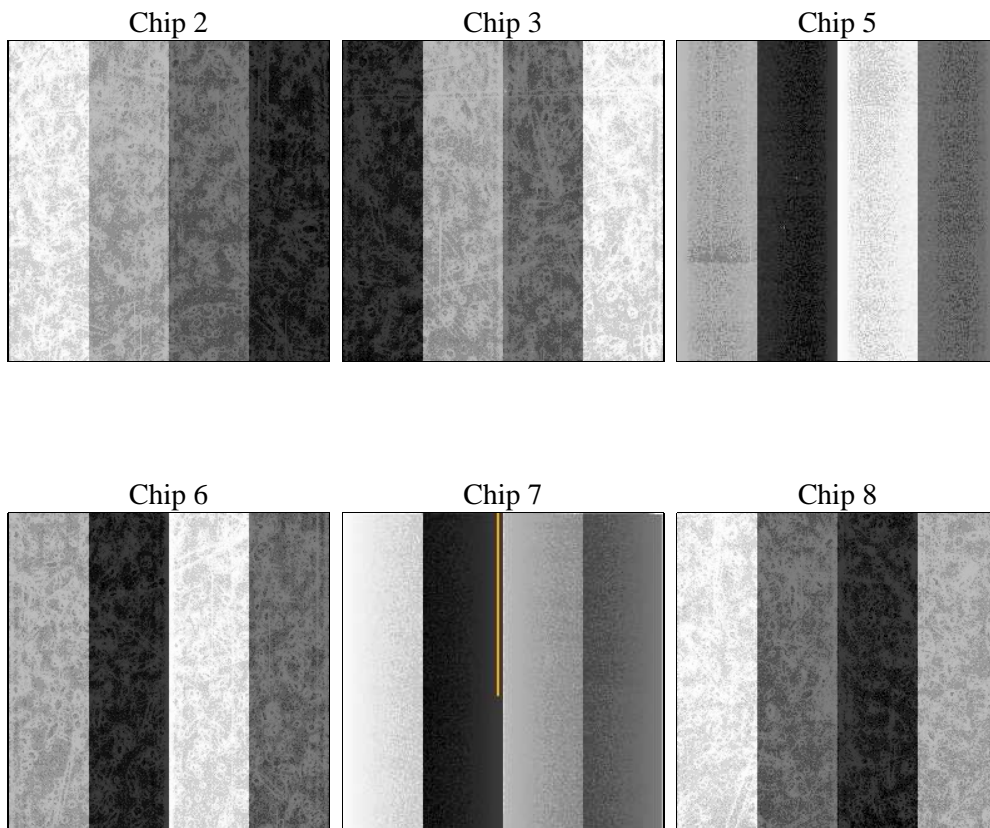
## 2 OBI

### 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	4953.599981606	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	4953.599981606	Sum of GTIs [s]
date	2012-04-20T14:34:52	Date and time of file creation	ontime3	4950.3590212464	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	4953.599981606	Sum of GTIs [s]
			ontime6	4953.599981606	Sum of GTIs [s]
			ontime7	4953.599981606	Sum of GTIs [s]
			ontime8	4953.599981606	Sum of GTIs [s]
			l1events	338297	Number of level 1 events

### 2.1.4 Events

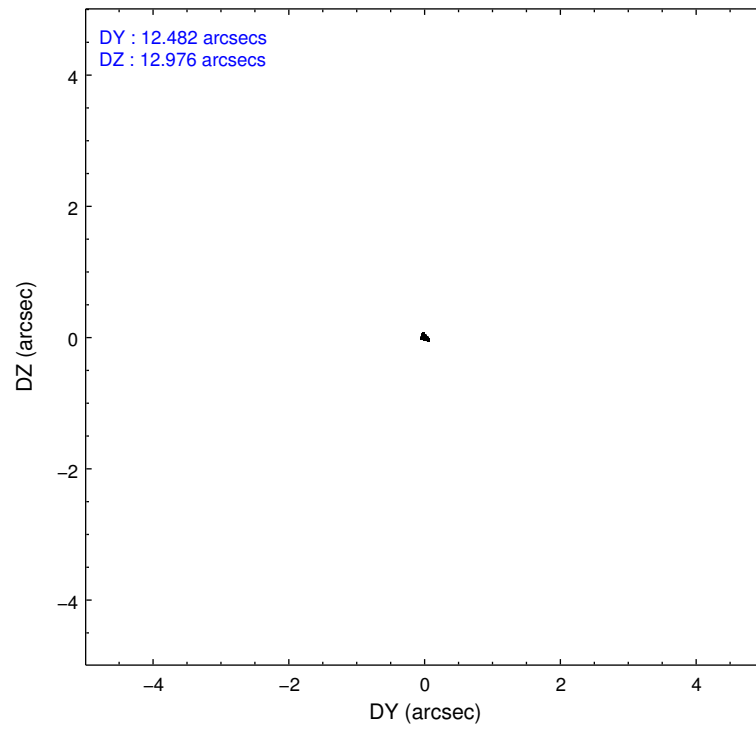
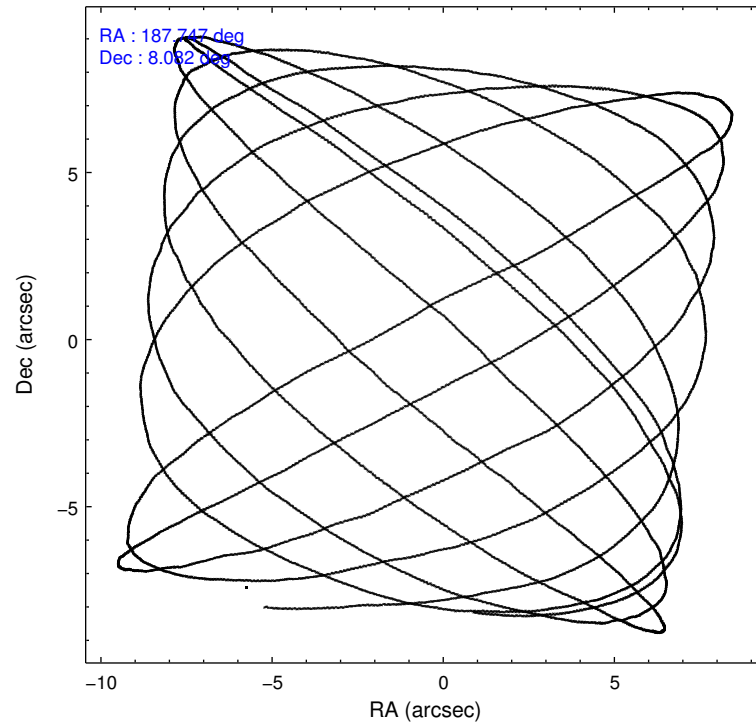
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	47578	45220	72791	48160	62886	61662	grade 0 events	2270	2446	4757	2160	2351	4398
rejected events	42260	39704	38482	42602	36909	47723		4%	5%	6%	4%	3%	7%
rejected %	88%	87%	52%	88%	58%	77%	grade 1 events	27	30	217	19	59	56
								0%	0%	0%	0%	0%	0%
							grade 2 events	1107	1084	10215	1266	5211	3135
								2%	2%	14%	2%	8%	5%
							grade 3 events	512	507	1112	502	2204	1341
								1%	1%	1%	1%	3%	2%
							grade 4 events	512	535	1107	528	2150	1295
								1%	1%	1%	1%	3%	2%
							grade 5 events	1836	2110	4737	2101	5900	2826
								3%	4%	6%	4%	9%	4%
							grade 6 events	921	952	17158	1109	14074	3780
								1%	2%	23%	2%	22%	6%
							grade 7 events	40393	37556	33488	40475	30937	44831
								84%	83%	46%	84%	49%	72%

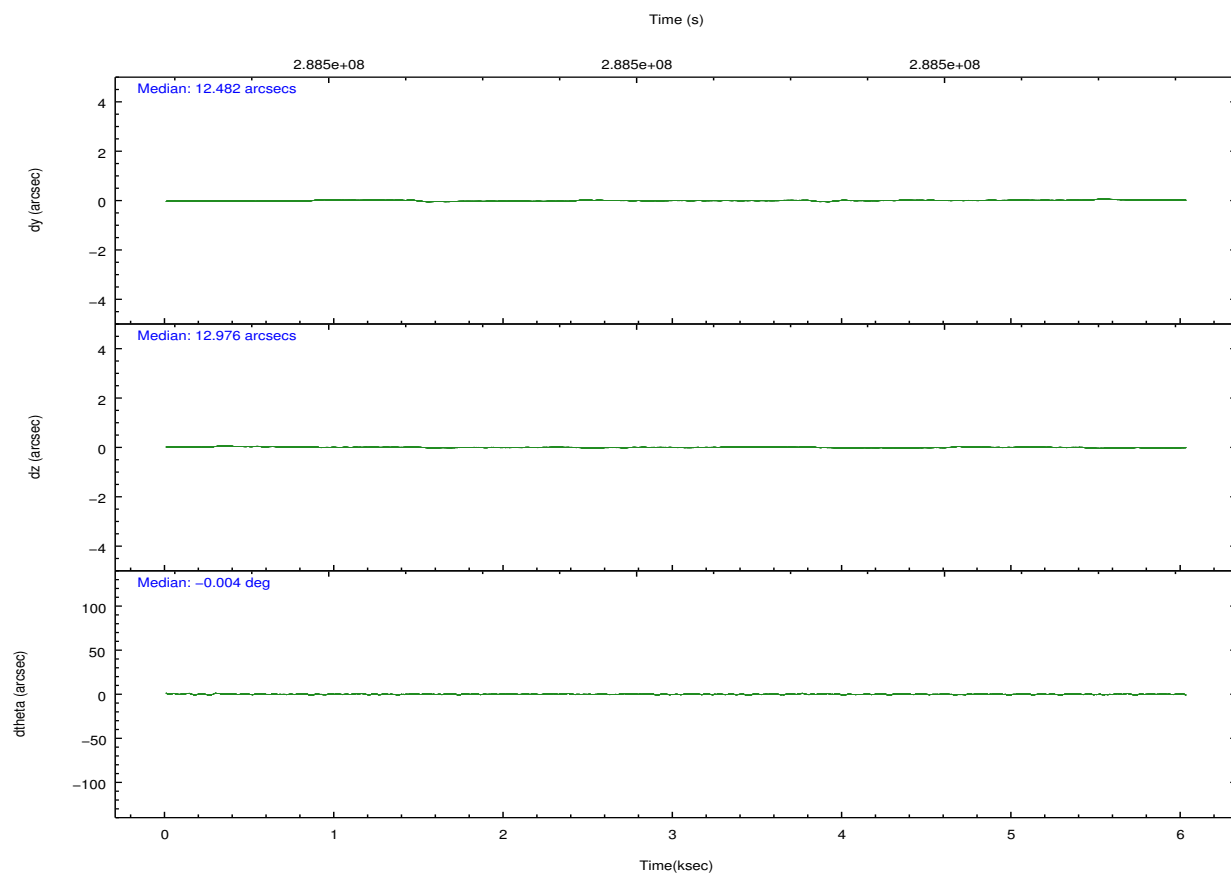
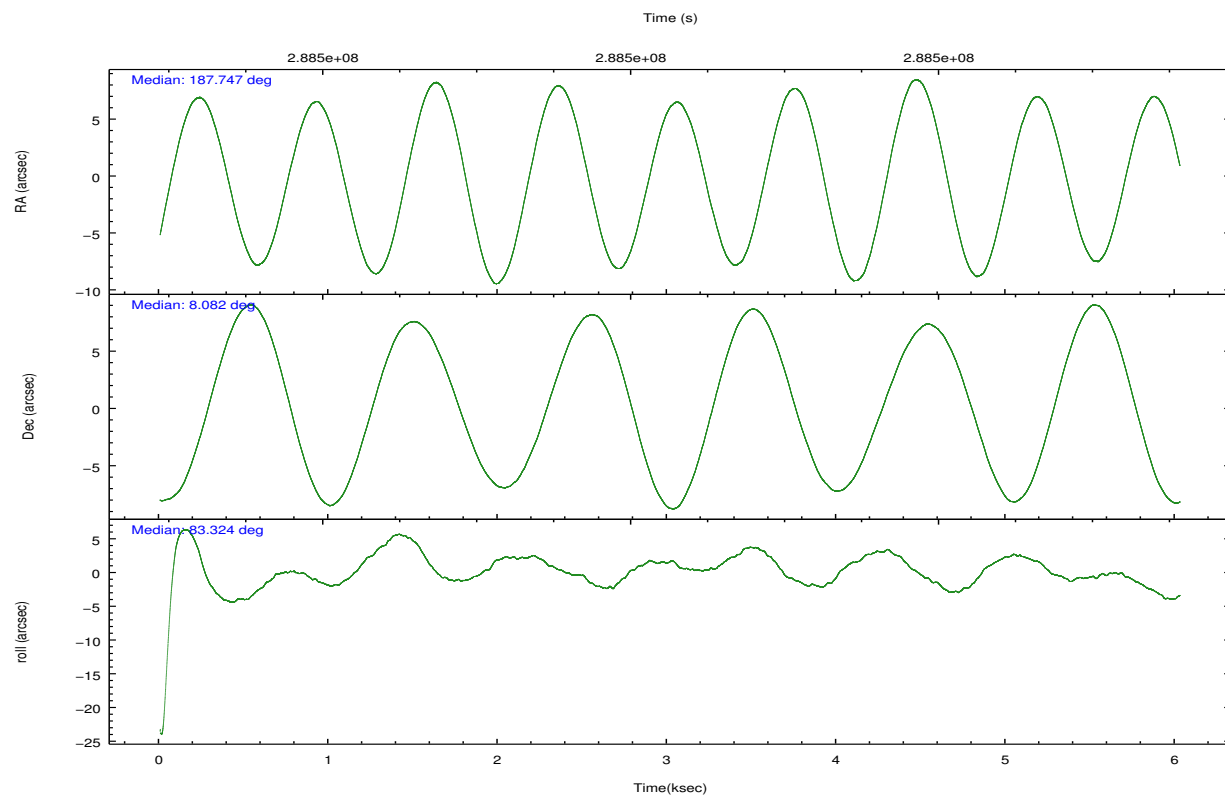


## 2.2 Compared Parameters

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	187.757959	187.7467310344287	Subarray requested	NONE	NONE
[deg] Pointing Dec	8.057378	8.082321148188129	Alternating exposures requested	N	N
[deg] Pointing Roll	83.165370	83.32358168853743	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	288496267.184000	288494886.03095			
Observation start date	2007-02-22T01:50:02	2007-02-22T01:28:06			
[s] Observation end time (MET)	288501267.184000	288502173.78129			
Observation end date	2007-02-22T03:13:22	2007-02-22T03:29:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



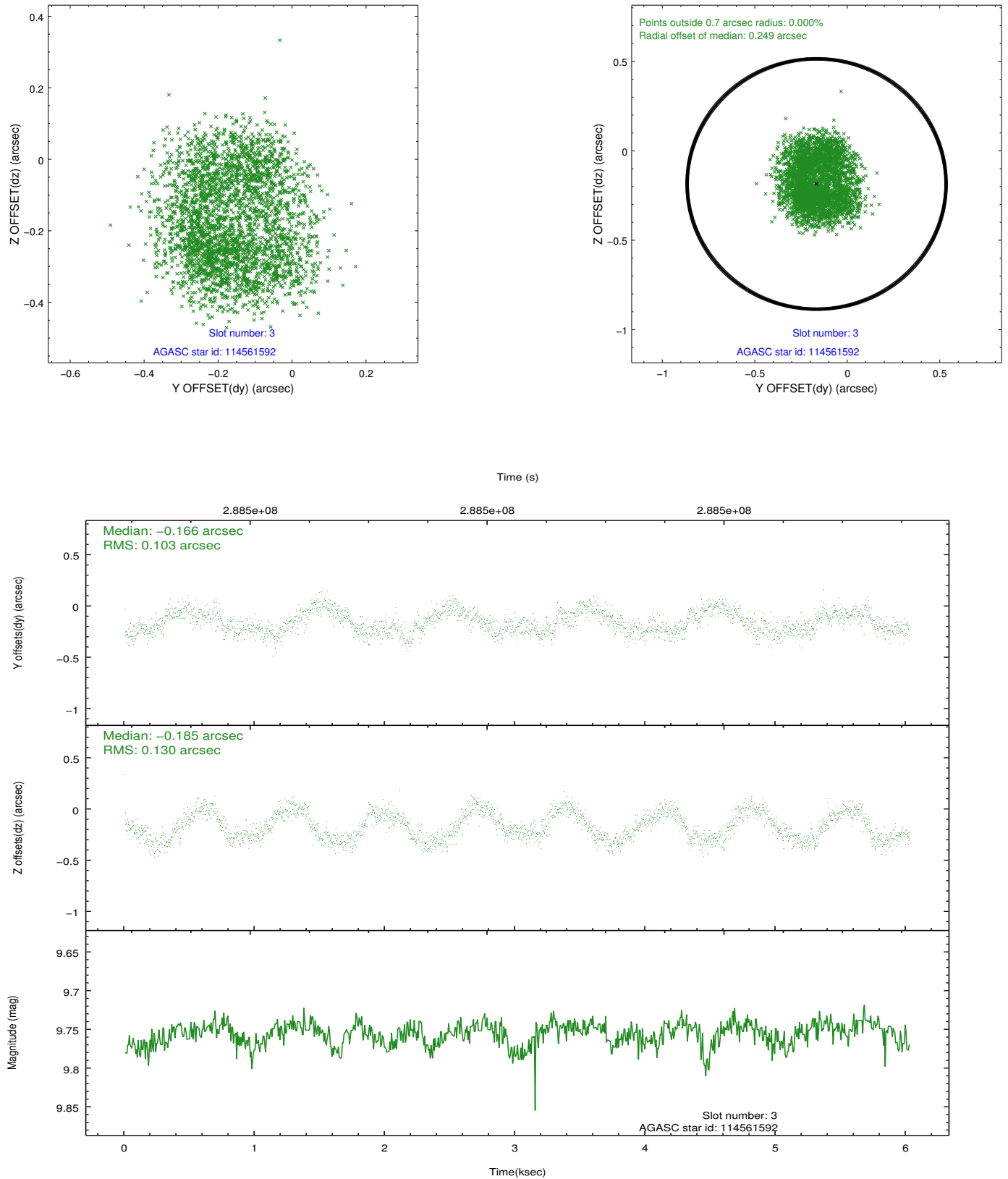


### Slot Statistics

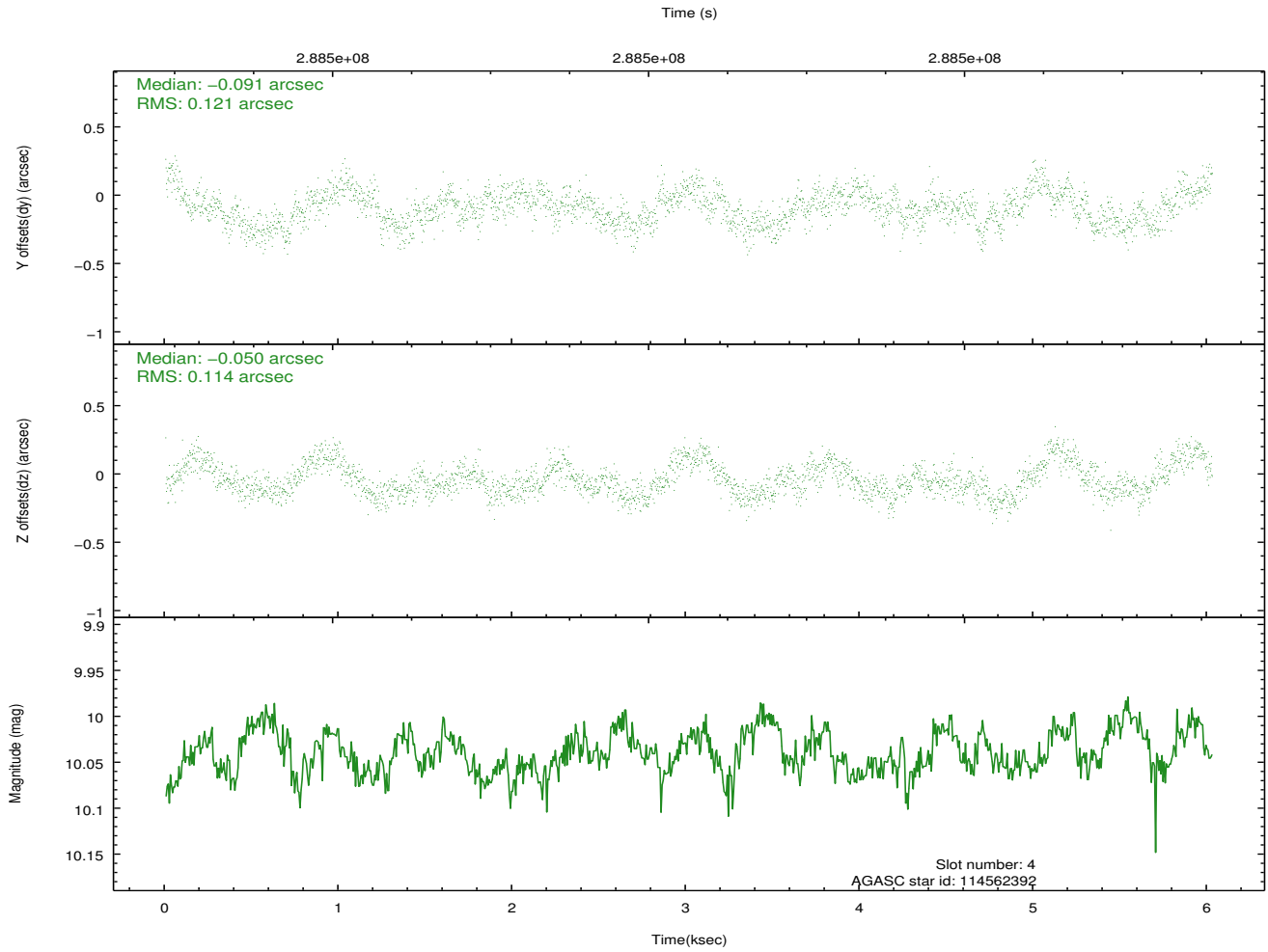
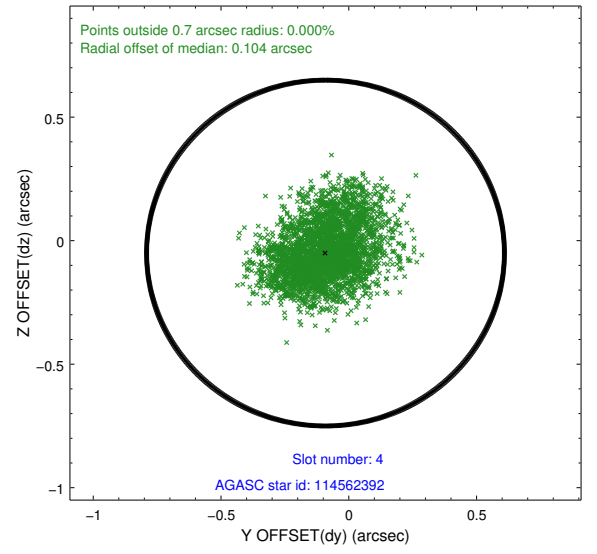
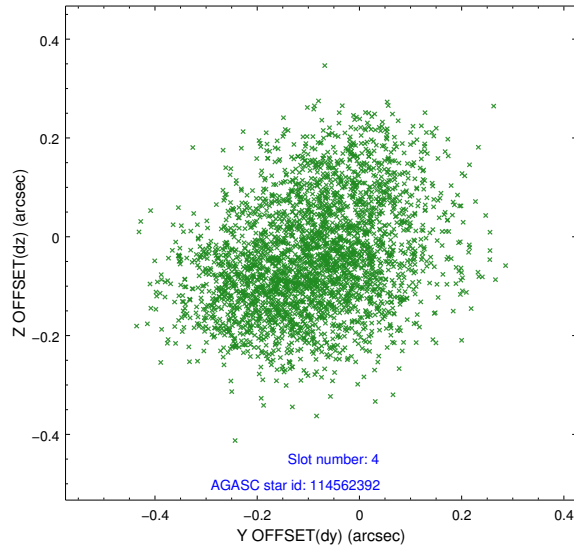
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1469	-0.023	-0.067	0.007	0.012	0.000000	0.000000	-765.41	-1734.36
1	FID	ACIS-S-4	7.20	1470	0.150	0.029	0.006	0.012	0.000000	0.000000	2147.60	173.18
2	FID	ACIS-S-5	7.23	1470	-0.159	0.047	0.007	0.012	0.000000	0.000000	-1817.12	168.01
3	GUIDE	114561592	9.75	2938	-0.166	-0.185	0.183	0.260	187.709505	8.445382	1366.78	337.80
4	GUIDE	114562392	10.04	2939	-0.091	-0.050	0.181	0.285	187.662769	8.522526	1623.30	536.28
5	GUIDE	114563056	9.90	2935	0.205	0.020	0.130	0.209	188.043188	7.639178	-1372.35	-1188.81
6	GUIDE	114563104	6.83	2940	0.024	0.103	0.058	0.097	188.385813	7.679181	-1083.26	-2385.11
7	GUIDE	114564248	7.43	2939	0.027	0.087	0.062	0.100	188.352467	7.946007	-144.57	-2152.18

## 2.4 Star Slots

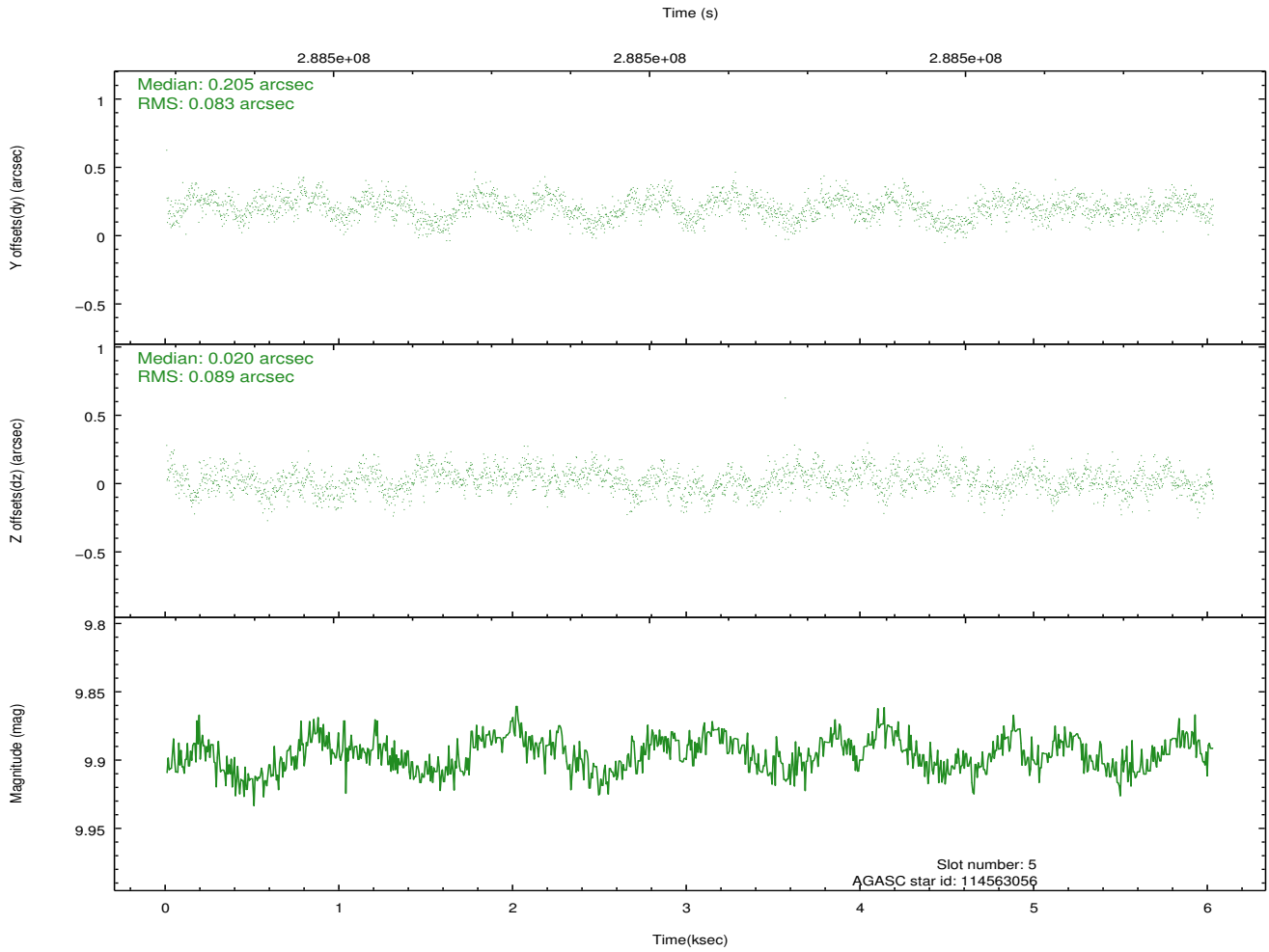
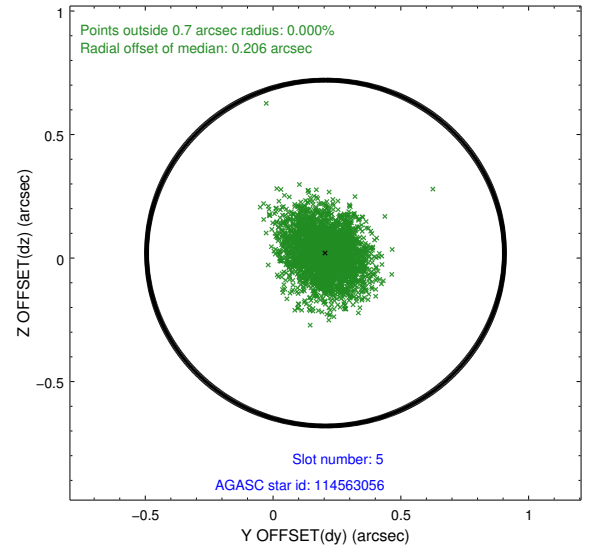
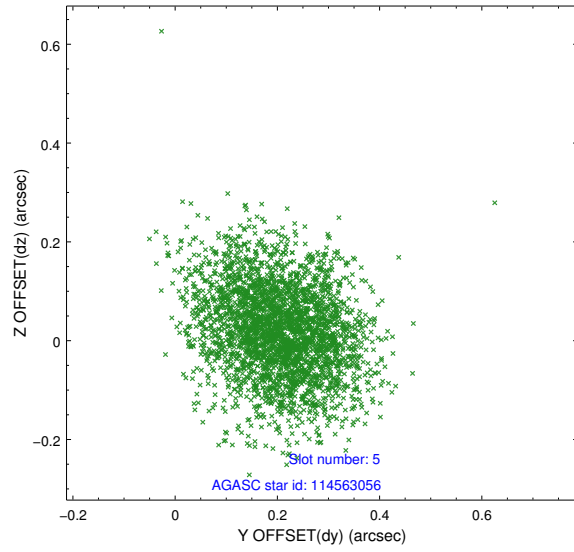
### 2.4.1 Slot 3



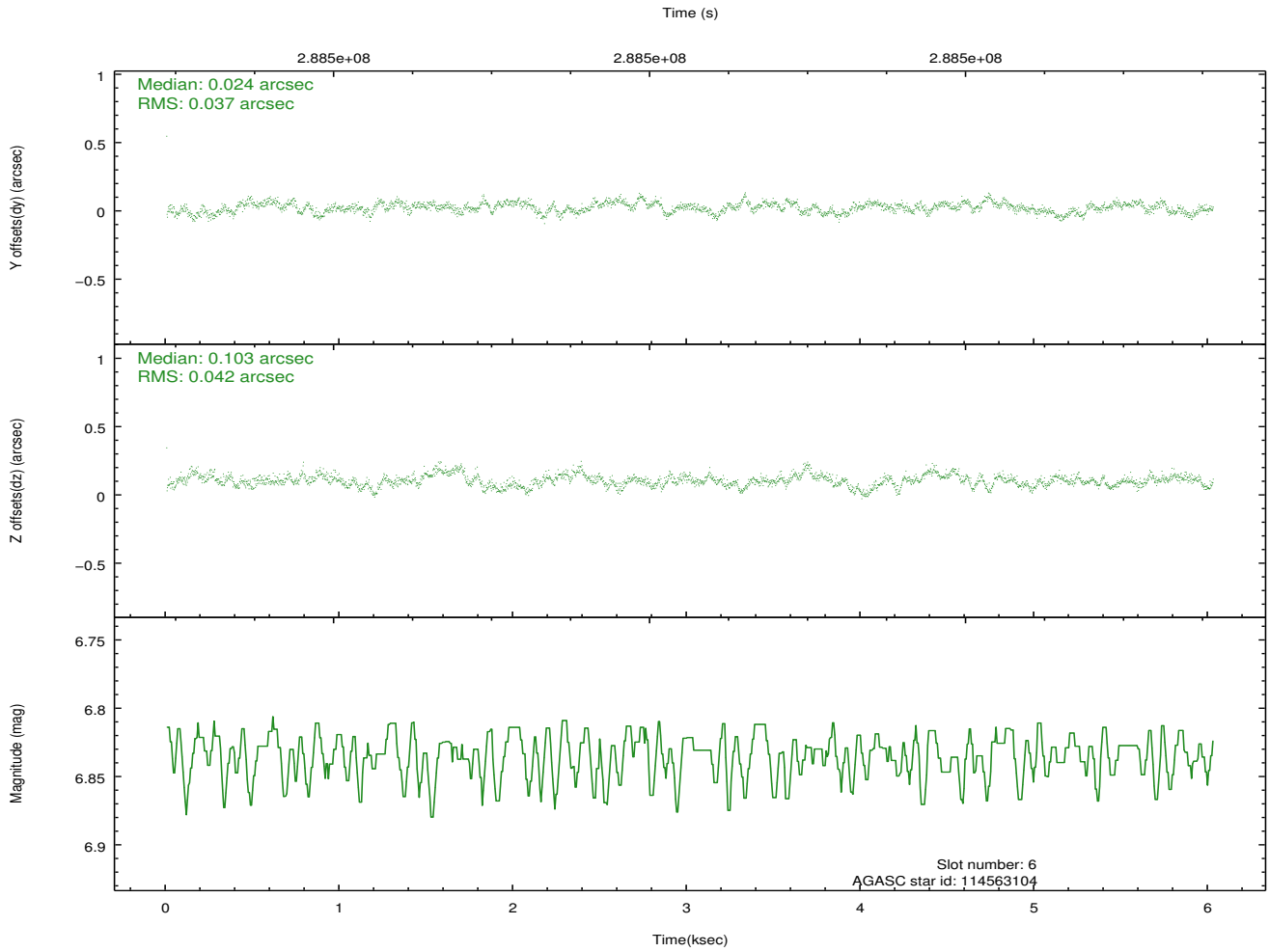
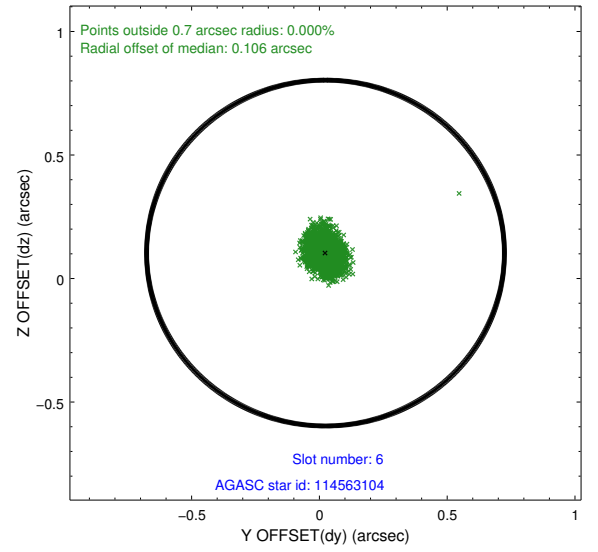
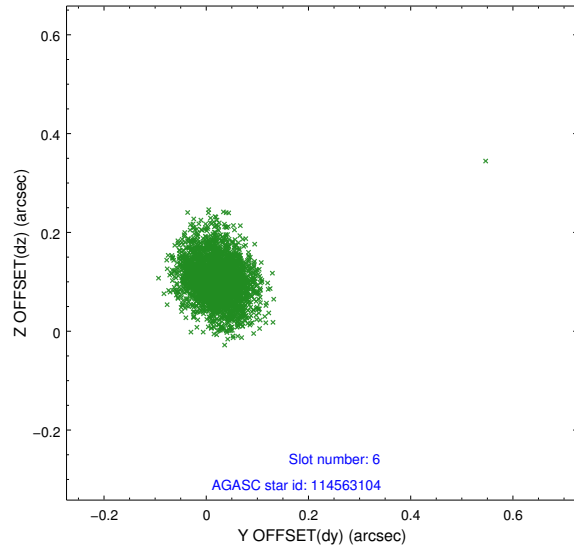
## 2.4.2 Slot 4



### 2.4.3 Slot 5

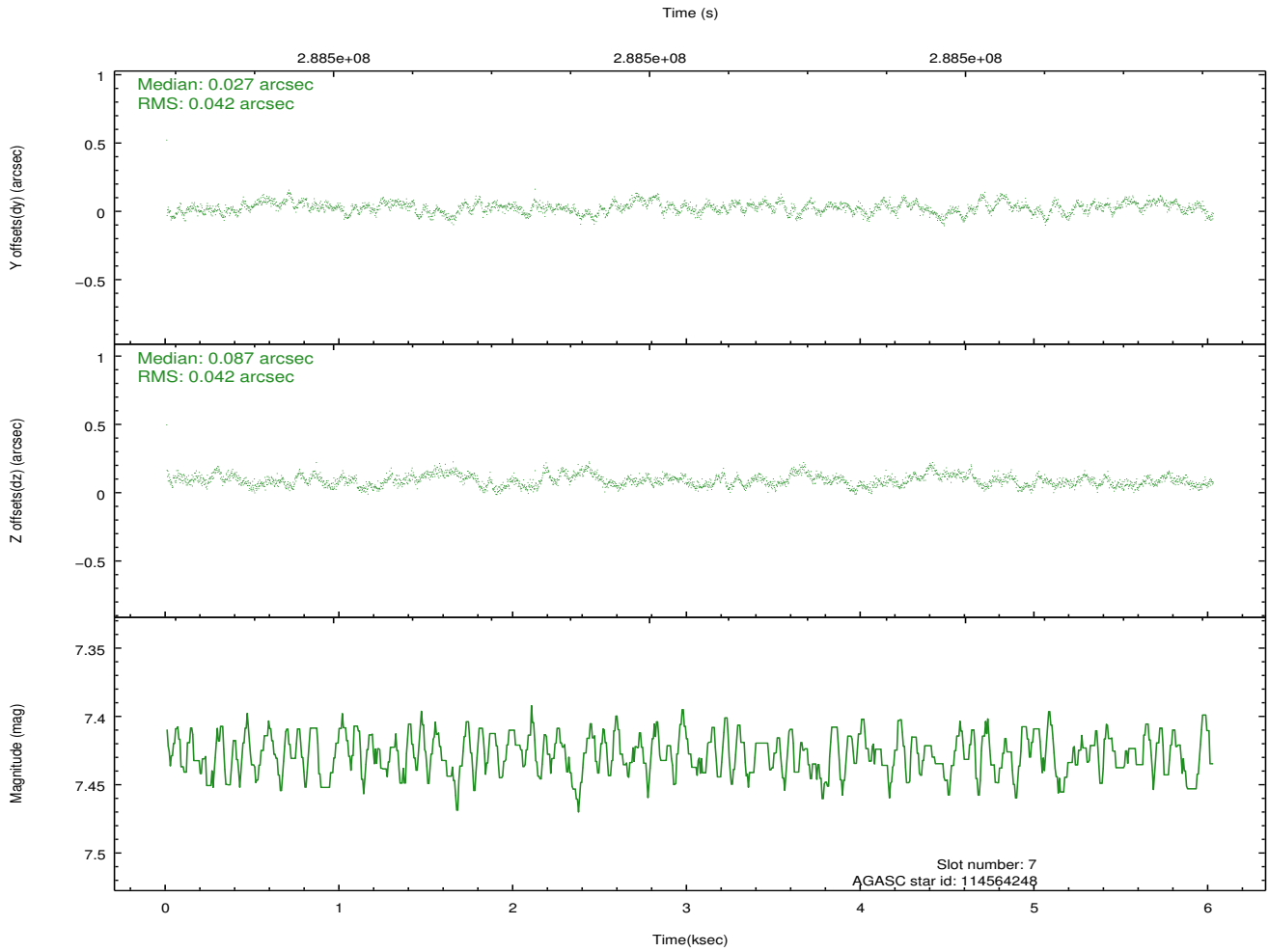
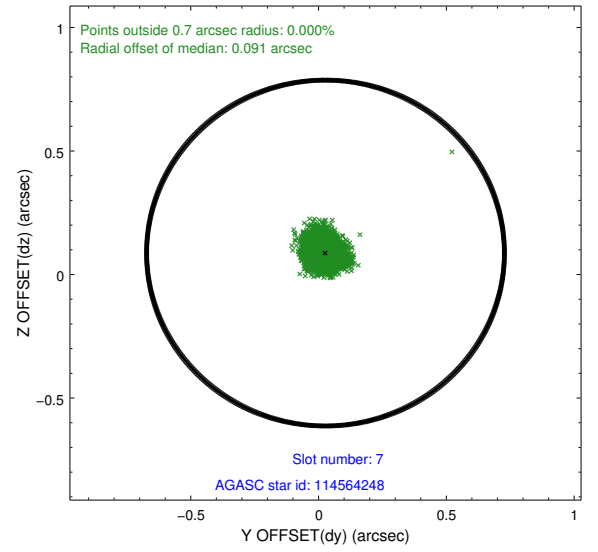
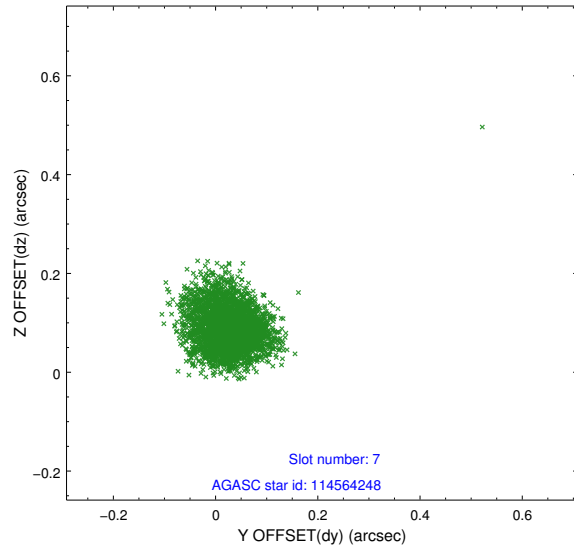


## 2.4.4 Slot 6



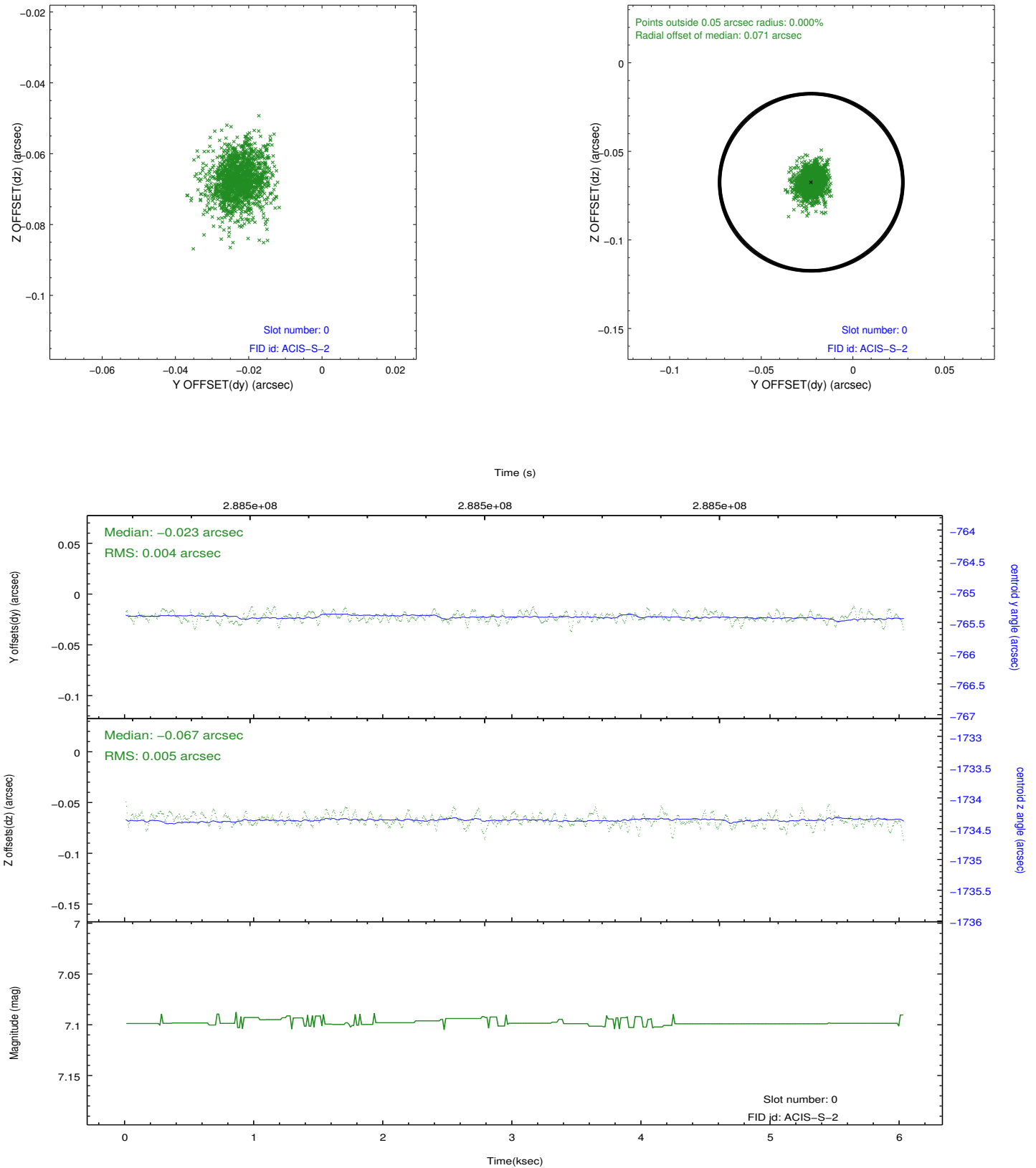


## 2.4.5 Slot 7

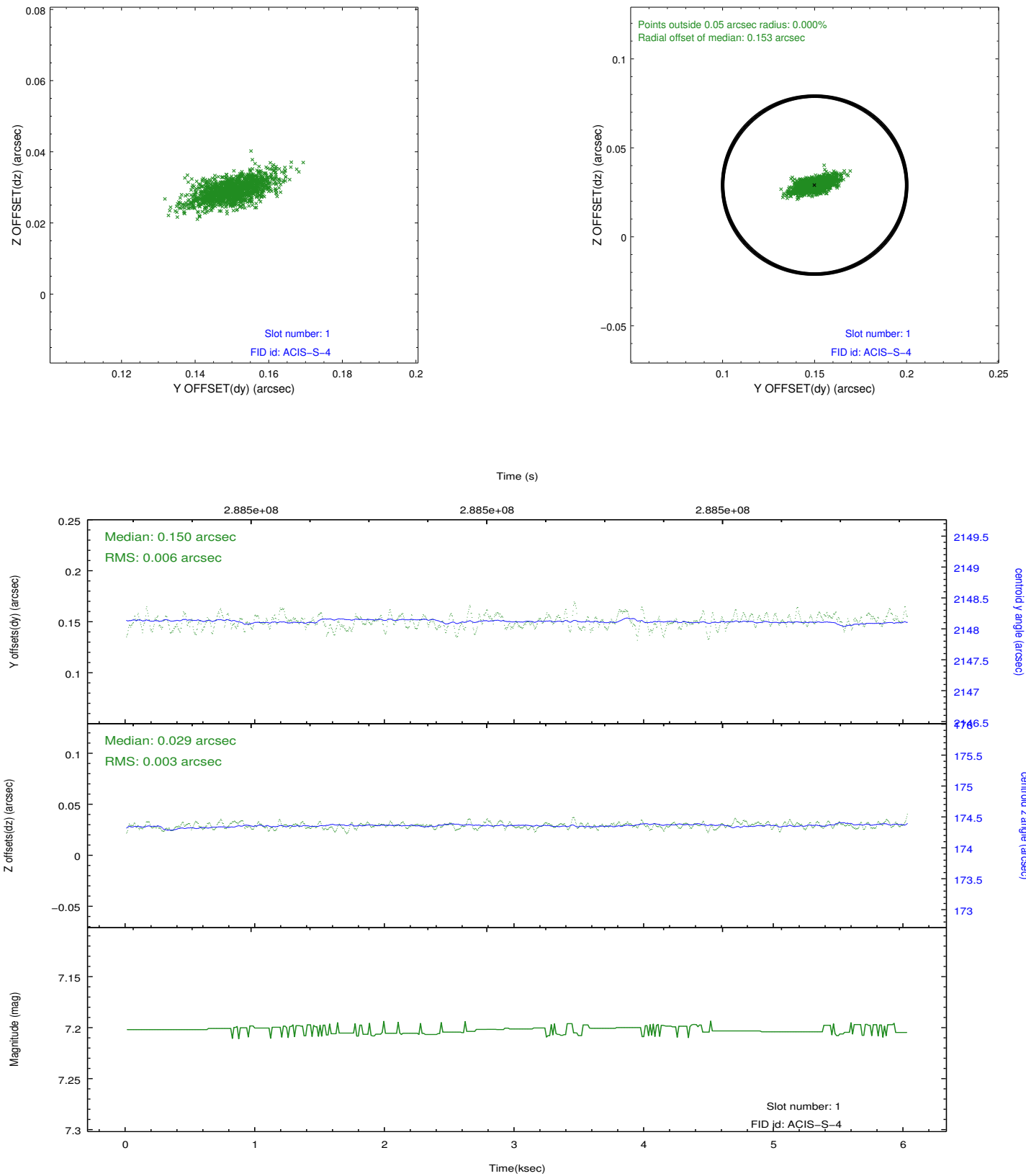


## 2.5 FID Slots

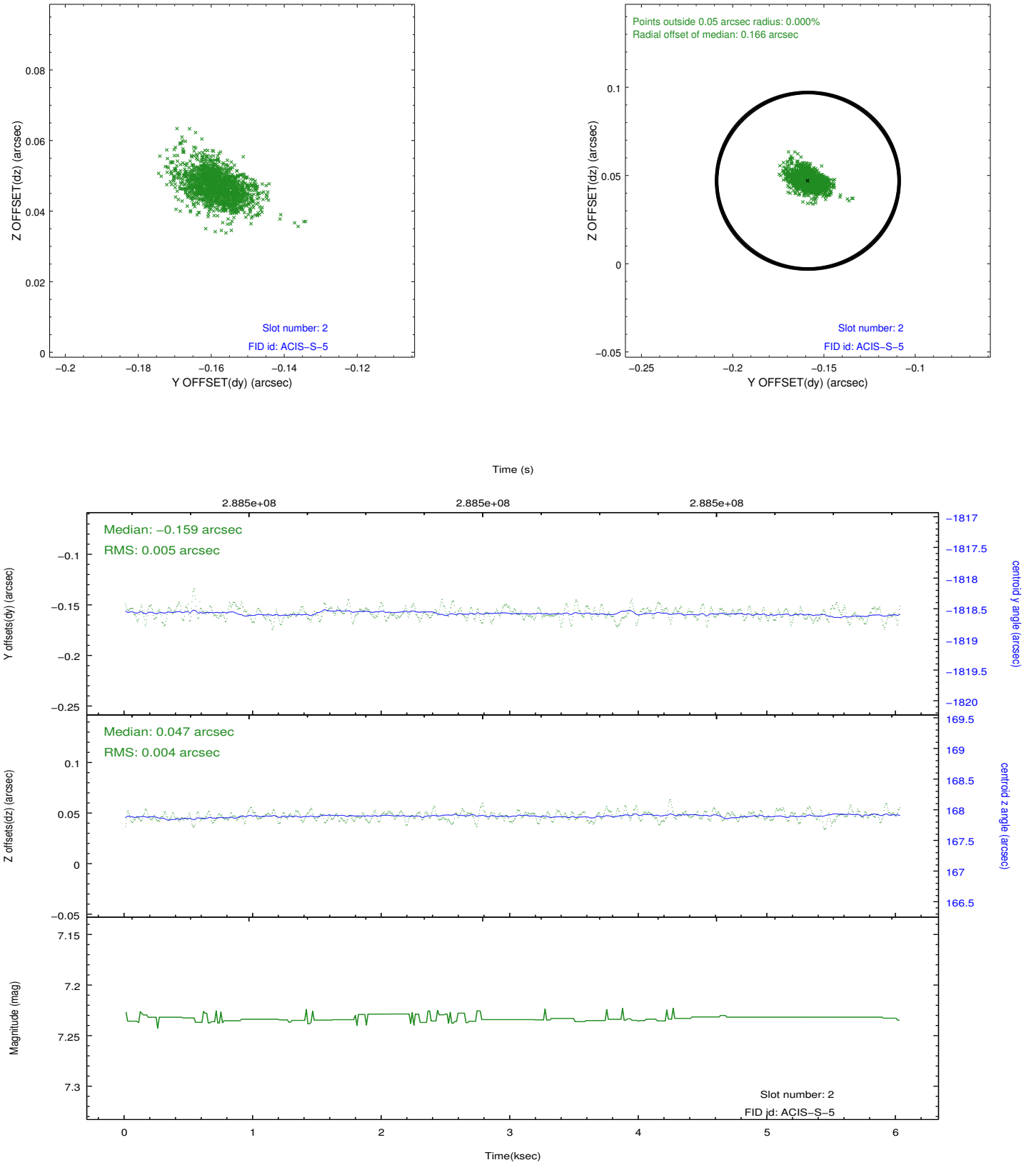
### 2.5.1 Slot 0



## 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)	2012.04.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.95359998

### A.2 Comments