

Package ‘ADGofTest’

February 19, 2015

Type Package

Title Anderson-Darling GoF test

Version 0.3

Date 2011-12-28

Author Carlos J. Gil Bellosta

Maintainer Carlos J. Gil Bellosta <cgb@datanalytics.com>

Description Anderson-Darling GoF test with p-value calculation based on Marsaglia's 2004 paper "Evaluating the Anderson-Darling Distribution"

License GPL

LazyLoad yes

Repository CRAN

Date/Publication 2011-12-28 13:50:19

NeedsCompilation no

R topics documented:

ADGofTest-package	1
ad.test	2

Index	4
--------------	----------

ADGofTest-package *Implementation of the Anderson-Darling goodness of fit test.*

Description

Implementation of the Anderson-Darling goodness of fit test.

Details

Package: ADGofTest
Type: Package
Version: 0.1
Date: 2009-06-26
License: GPL
LazyLoad: yes

Author(s)

Carlos J. Gil Bellosta

Maintainer: Carlos J. Gil Bellosta <cjgb@datanalytics.com>

References

G. and J. Marsaglia, "Evaluating the Anderson-Darling Distribution", Journal of Statistical Software, 2004

ad.test

Anderson-Darling GoF test

Description

Implementation of the Anderson-Darling goodness of fit test.

Usage

```
ad.test(x, distr.fun, ...)
```

Arguments

x	a random sample from a possibly unknown continuous distribution
distr.fun	a named CDF, such as pnorm, punif, etc.
...	extra parameters for the distribution function above, such as location and scale parameters, etc.

Details

If the `distr.fun` is provided, the function checks whether `x` is a iid sample from the distribution described by such CDF. Otherwise, whether they follow a uniform law.

Value

The output is an object of the class `htest` exactly like for the Kolmogorov-Smirnov test, `ks.test`. The `statistic` and `p.value` fields are the most relevant ones.

Author(s)

Carlos J. Gil Bellosta

References

G. and J. Marsaglia, "Evaluating the Anderson-Darling Distribution", *Journal of Statistical Software*, 2004

Examples

```
set.seed( 123 )  
x <- runif( 100 )  
  
ad.test( x )$p.value  
  
ad.test( x, pnorm, 0, 1 )$p.value  
  
replicate( ad.test( rnorm( 100 ), pnorm )$p.value, 100 )
```

Index

*Topic **htest**

ad.test, [2](#)

*Topic **package**

ADGofTest-package, [1](#)

ad.test, [2](#)

ADGofTest (ADGofTest-package), [1](#)

ADGofTest-package, [1](#)

ks.test, [2](#)