Package 'ADGofTest'

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Type Package

Title Anderson-Darling GoF test

Version 0.3

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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

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NeedsCompilation no

R topics documented:

`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)

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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 )
```

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