

# Package ‘clustertend’

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**Type** Package

**Title** Check the Clustering Tendency

**Version** 1.7

**Description** Calculate some statistics aiming to help analyzing the clustering tendency of given data. In the first version, Hopkins statistic is implemented. See Hopkins and Skellam (1954) <[doi:10.1093/oxfordjournals.aob.a083391](https://doi.org/10.1093/oxfordjournals.aob.a083391)>.

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**NeedsCompilation** no

**Encoding** UTF-8

**RoxygenNote** 7.2.3

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**Repository** CRAN

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## Contents

hopkins . . . . .	1
<b>Index</b>	<b>3</b>

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hopkins	<i>Calculate Hopkins statistic.</i>
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## Description

Calculate Hopkins statistic of given data.

**Usage**

```
hopkins(X, n = ceiling(nrow(X)/10))
```

**Arguments**

X	Data (matrix or data.frame) to check clusterability.
n	The number of rows to sample from X. The default is 1/10th the number of rows of X.

**Details**

Note: Package `clustertend` is deprecated. Use package `hopkins` instead.

Sample data must be preprocessed into dataframe or matrix form before given as the value of parameter "data".

**Value**

The value returned is actually 1-Hopkins statistic.

**Author(s)**

Kevin Wright, Luo YiLan, Zeng RuTong.

**References**

Lawson, R.G. and Jurs, P.C.(1990). New index for clustering tendency and its application to chemical problems. *Journal of Chemical Information and Computer Sciences*. 30(1):36-41.

**Examples**

```
set.seed(1)
hopkins(iris[,-5], n=15)
```

# Index

hopkins, 1