

Package ‘MSMB’

April 17, 2025

Title Data sets for the book 'Modern Statistics for Biology'

Version 1.27.0

Author Wolfgang Huber, Andrzej Oles, Mike Smith

Description Data sets for the book 'Modern Statistics for Modern Biology',
S.P. Holmes and W. Huber.

Maintainer Wolfgang Huber <wolfgang.huber@embl.org>

License LGPL

Depends R (>= 3.5), tibble

Suggests knitr, BiocStyle

VignetteBuilder knitr

biocViews ExperimentData

git_url <https://git.bioconductor.org/packages/MSMB>

git_branch devel

git_last_commit 0b08090

git_last_commit_date 2025-04-15

Repository Bioconductor 3.22

Date/Publication 2025-04-17

Contents

brcalymphnode	1
ukraine_dists	2
Index	3

brcalymphnode	<i>Coordinates and cell types in a histopathology slide of a breast cancer patient's lymph node</i>
---------------	---

Description

Coordinates and cell types in a histopathology slide of a breast cancer patient's lymph node.

Usage

```
data("brcalymphnode")
```

Format

A data.frame.

Details

This dataset is used as an example in the 'Image data' chapter. See there for more details about it.

Examples

```
data("brcalymphnode")
plot(x = brcalymphnode$x, y = brcalymphnode$y, pch=".", col = brcalymphnode$class)
```

ukraine_dists	<i>Coordinates of and pairwise distances between hero cities and oblast capitals in Ukraine</i>
---------------	---

Description

This dataset is used as an example in the 'Multivariate methods for heterogeneous data' chapter.

Usage

```
data("ukraine_dists")
data("ukraine_coords")
```

Format

ukraine_dists is an object of S3 class dist. ukraine_coords is a tibble.

Details

The two datasets were constructed using the R code in the file 'ukraine-dists.R' in the 'scripts' directory of this package. Briefly, the city and place names are hardcoded in the script, coordinates were queried from OpenStreetMap using the geo function in the **tidygeocoder**, and pairwise geodesic distances computed using the geodist function from the eponymous package.

Examples

```
data("ukraine_coords")
plot(x = ukraine_coords$lon, y = ukraine_coords$lat, pch = 16, cex = 0.7, col = "#0057b7", asp = 1 / cos(pi / 180))
text(x = ukraine_coords$lon, y = ukraine_coords$lat, labels = ukraine_coords$city, adj = c(0.5, -0.2))
```

Index

* **datasets**

 brcalymphnode, [1](#)

 ukraine_dists, [2](#)

brcalymphnode, [1](#)

ukraine_coords(ukraine_dists), [2](#)

ukraine_dists, [2](#)