Package 'SensoryDataSets'

September 14, 2026

Type Package

Title A Collection of Sensory Evaluation and Consumer Science Datasets

Version 0.1.0

Description Provides a curated collection of datasets for sensory evaluation, consumer research, and related statistical applications. The collection includes consumer acceptance and liking scores, sensory profiles, descriptive evaluations, physical and chemical measurements, wine quality and bitterness assessments, and data from products such as bread, olive oil, orange juice, grape blends, wine, cocktails, and perfume.
The package is intended for teaching, exploratory data analysis, statistical modeling, multivariate analysis, consumer studies, and methodological research in sensory and consumer science. The original sources and applicable licensing terms are documented in the 'LICENSES_DETAILS.md' file.

License GPL (>= 2) | GPL-3

URL https://github.com/dianarebaza/sensorydatasets, https://dianarebaza.github.io/sensorydatasets/

BugReports https://github.com/dianarebaza/sensorydatasets/issues

Depends R (>= 4.1.0)

Imports utils

Suggests dplyr, ggplot2, knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Encoding UTF-8

Language en

LazyData true

Config/roxygen2/version 8.1.0

Config/testthat/edition 3

NeedsCompilation no

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Repository CRAN

Date/Publication 2026-09-14 15:40:17 UTC

Contents

`brown_bread_matrix` *Brown Bread Sensory Evaluation*

Description

This dataset, brown_bread_matrix, is a matrix containing sensory evaluation data from 570 panelists and 16 brown bread products, labelled A through P to protect the identity of the manufacturer. Each panelist rated a subset of 6 products using the 9-point Hedonic Scale.

Usage

```
data(brown_bread_matrix)
```

Format

An integer matrix with 570 observations and 16 variables:

A-P Integer values representing panelists' ratings of 16 brown bread products using the 9-point Hedonic Scale

Details

The dataset name has been changed to 'brown_bread_matrix' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'matrix' indicates that the dataset is a matrix. The original content has not been modified in any way.

Source

Data taken from the sensory package version 1.1.

`grapeblend_tbl` *Sensory Evaluation of Grape Blends*

Description

This dataset, grapeblend_tbl, is a tibble containing data from a sensory analysis conducted with 6 participants evaluating different blends of the grape cultivars Bordo and Niagara. Five sensory attributes were evaluated: color (CR), aroma (AR), flavor (SB), body (CP), and global evaluation (GB). The response values correspond to the average scores given by the evaluators.

Usage

```
data(grapeblend_tbl)
```

Format

A tibble with 25 observations and 3 variables:

Blend Character vector identifying the grape blend

variable Character vector indicating the sensory attribute evaluated: color (CR), aroma (AR), flavor (SB), body (CP), or global evaluation (GB)

resp Numeric vector representing the average sensory scores given by the evaluators

Details

The dataset name has been changed from 'sensorial' to 'grapeblend_tbl' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'tbl' indicates that the dataset is a tibble. The original content has not been modified in any way.

Source

Data taken from the AgroR package version 1.3.7.

olive_oil_df *Sensory and Physico-Chemical Data of Olive Oils*

Description

This dataset, olive_oil_df, is a data frame containing sensory and physico-chemical measurements for 16 olive oil samples. It includes scores on 6 attributes evaluated by a sensory panel and measurements of 5 physico-chemical quality parameters. The first five oils are Greek, the next five are Italian, and the last six are Spanish.

Usage

```
data(olive_oil_df)
```

Format

A data frame with 16 observations and 2 variables:

chemical Numeric matrix containing measurements of 5 physico-chemical quality parameters for the 16 olive oil samples

sensory Numeric matrix containing scores on 6 sensory attributes for the 16 olive oil samples

Details

The dataset name has been changed to 'olive_oil_df' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'df' indicates that the dataset is a data frame. The original content has not been modified in any way.

Source

Data taken from the pls package version 2.9-0.

orange_juice_df *Sensory Description of Orange Juices*

Description

This dataset, orange_juice_df, is a data frame containing the sensory description of 12 orange juice samples evaluated on 8 attributes.

Usage

```
data(orange_juice_df)
```

Format

A data frame with 12 observations and 8 variables:

Color.intensity Numeric vector representing color intensity scores

Odor.intensity Numeric vector representing odor intensity scores

Attack.intensity Numeric vector representing attack intensity scores

Sweet Numeric vector representing sweetness scores

Acid Numeric vector representing acidity scores

Bitter Numeric vector representing bitterness scores

Pulp Numeric vector representing pulp scores

Typicity Numeric vector representing typicity scores

Details

The dataset name has been changed from 'orange' to 'orange_juice_df' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'df' indicates that the dataset is a data frame. The original content has not been modified in any way.

Source

Data taken from the missMDA package version 1.22.

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perfume_ideal_df *Perfume Ideal Profile Data*

Description

This dataset, perfume_ideal_df, is a data frame containing sensory and hedonic evaluations of perfumes using the Ideal Profile Method. Twelve perfumes, including two duplicated products, were evaluated once by 103 Dutch consumers, resulting in 14 product levels and 1,442 observations. Each perfume was described using 21 sensory attributes, for which both perceived and ideal intensities were recorded. Overall liking scores were also collected.

Usage

```
data(perfume_ideal_df)
```

Format

A data frame with 1,442 observations and 45 variables:

user Factor with 103 levels identifying consumers

product Factor with 14 levels identifying perfume products

intensity Numeric vector representing perceived overall intensity

id_int Numeric vector representing ideal overall intensity
freshness Numeric vector representing perceived freshness
id_fresh Numeric vector representing ideal freshness
jasmin Numeric vector representing perceived jasmine intensity
id_jasm Numeric vector representing ideal jasmine intensity
rose Numeric vector representing perceived rose intensity
id_rose Numeric vector representing ideal rose intensity
camomille Numeric vector representing perceived chamomile intensity
id_camo Numeric vector representing ideal chamomile intensity
fresh_lemon Numeric vector representing perceived fresh lemon intensity
id_fresh_lem Numeric vector representing ideal fresh lemon intensity
vanilla Numeric vector representing perceived vanilla intensity
id_vanilla Numeric vector representing ideal vanilla intensity
citrus Numeric vector representing perceived citrus intensity
id_citrus Numeric vector representing ideal citrus intensity
anis Numeric vector representing perceived anise intensity
id_anis Numeric vector representing ideal anise intensity
sweet_fruit Numeric vector representing perceived sweet fruit intensity
id_sweet_fruit Numeric vector representing ideal sweet fruit intensity
honey Numeric vector representing perceived honey intensity
id_honey Numeric vector representing ideal honey intensity
caramel Numeric vector representing perceived caramel intensity
id_caram Numeric vector representing ideal caramel intensity
spicy Numeric vector representing perceived spicy intensity
id_spicy Numeric vector representing ideal spicy intensity
woody Numeric vector representing perceived woody intensity
id_woody Numeric vector representing ideal woody intensity
leather Numeric vector representing perceived leather intensity
id_leather Numeric vector representing ideal leather intensity
nutty Numeric vector representing perceived nutty intensity
id_nutty Numeric vector representing ideal nutty intensity
musk Numeric vector representing perceived musk intensity
id_musk Numeric vector representing ideal musk intensity
animal Numeric vector representing perceived animal note intensity
id_animal Numeric vector representing ideal animal note intensity
earthy Numeric vector representing perceived earthy intensity
id_earthy Numeric vector representing ideal earthy intensity
incense Numeric vector representing perceived incense intensity
id_incense Numeric vector representing ideal incense intensity
green Numeric vector representing perceived green note intensity
id_green Numeric vector representing ideal green note intensity
liking Integer vector representing overall liking scores

Details

The dataset name has been changed to 'perfume_ideal_df' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'df' indicates that the dataset is a data frame. The original content has not been modified in any way.

Source

Data taken from the SensoMineR package version 1.28.

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sensopanels_df *Sensory Profiles Given by Seven Panels*

Description

This dataset, sensopanels_df, is a data frame containing sensory profiles provided by 7 panels. Six products were evaluated using 14 sensory attributes for each panel, resulting in 98 sensory variables.

Usage

```
data(sensopanels_df)
```

Format

A data frame with 6 observations and 98 variables:

CocoaA1 Numeric vector representing CocoaA sensory scores from panel 1

MilkA1 Numeric vector representing MilkA sensory scores from panel 1

Sweetness1 Numeric vector representing sweetness scores from panel 1

Acidity1 Numeric vector representing acidity scores from panel 1

Bitterness1 Numeric vector representing bitterness scores from panel 1

CocoaF1 Numeric vector representing CocoaF sensory scores from panel 1

MilkF1 Numeric vector representing MilkF sensory scores from panel 1

Caramel1 Numeric vector representing caramel scores from panel 1

Vanilla1 Numeric vector representing vanilla scores from panel 1

Astringency1 Numeric vector representing astringency scores from panel 1

Crunchy1 Numeric vector representing crunchiness scores from panel 1

Melting1 Numeric vector representing melting scores from panel 1

Sticky1 Numeric vector representing stickiness scores from panel 1

Granular1 Numeric vector representing granularity scores from panel 1

CocoaA2 Numeric vector representing CocoaA sensory scores from panel 2

MilkA2 Numeric vector representing MilkA sensory scores from panel 2

Sweetness2 Numeric vector representing sweetness scores from panel 2

Acidity2 Numeric vector representing acidity scores from panel 2

Bitterness2 Numeric vector representing bitterness scores from panel 2

CocoaF2 Numeric vector representing CocoaF sensory scores from panel 2

MilkF2 Numeric vector representing MilkF sensory scores from panel 2

Caramel2 Numeric vector representing caramel scores from panel 2

Vanilla2 Numeric vector representing vanilla scores from panel 2

Astringency2 Numeric vector representing astringency scores from panel 2

Crunchy2 Numeric vector representing crunchiness scores from panel 2

Melting2 Numeric vector representing melting scores from panel 2

Sticky2 Numeric vector representing stickiness scores from panel 2

Granular2 Numeric vector representing granularity scores from panel 2

CocoaA3 Numeric vector representing CocoaA sensory scores from panel 3

MilkA3 Numeric vector representing MilkA sensory scores from panel 3

Sweetness3 Numeric vector representing sweetness scores from panel 3

Acidity3 Numeric vector representing acidity scores from panel 3

Bitterness3 Numeric vector representing bitterness scores from panel 3

CocoaF3 Numeric vector representing CocoaF sensory scores from panel 3

MilkF3 Numeric vector representing MilkF sensory scores from panel 3

Caramel3 Numeric vector representing caramel scores from panel 3

Vanilla3 Numeric vector representing vanilla scores from panel 3

Astringency3 Numeric vector representing astringency scores from panel 3

Crunchy3 Numeric vector representing crunchiness scores from panel 3

Melting3 Numeric vector representing melting scores from panel 3

Sticky3 Numeric vector representing stickiness scores from panel 3

Granular3 Numeric vector representing granularity scores from panel 3

CocoaA4 Numeric vector representing CocoaA sensory scores from panel 4

MilkA4 Numeric vector representing MilkA sensory scores from panel 4

Sweetness4 Numeric vector representing sweetness scores from panel 4

Acidity4 Numeric vector representing acidity scores from panel 4

Bitterness4 Numeric vector representing bitterness scores from panel 4

CocoaF4 Numeric vector representing CocoaF sensory scores from panel 4

MilkF4 Numeric vector representing MilkF sensory scores from panel 4

Caramel4 Numeric vector representing caramel scores from panel 4

Vanilla4 Numeric vector representing vanilla scores from panel 4

Astringency4 Numeric vector representing astringency scores from panel 4

Crunchy4 Numeric vector representing crunchiness scores from panel 4

Melting4 Numeric vector representing melting scores from panel 4

Sticky4 Numeric vector representing stickiness scores from panel 4

Granular4 Numeric vector representing granularity scores from panel 4

CocoaA5 Numeric vector representing CocoaA sensory scores from panel 5

MilkA5 Numeric vector representing MilkA sensory scores from panel 5

Sweetness5 Numeric vector representing sweetness scores from panel 5

Acidity5 Numeric vector representing acidity scores from panel 5

Bitterness5 Numeric vector representing bitterness scores from panel 5

CocoaF5 Numeric vector representing CocoaF sensory scores from panel 5

MilkF5 Numeric vector representing MilkF sensory scores from panel 5

Caramel5 Numeric vector representing caramel scores from panel 5

Vanilla5 Numeric vector representing vanilla scores from panel 5

Astringency5 Numeric vector representing astringency scores from panel 5

Crunchy5 Numeric vector representing crunchiness scores from panel 5

Melting5 Numeric vector representing melting scores from panel 5

Sticky5 Numeric vector representing stickiness scores from panel 5

Granular5 Numeric vector representing granularity scores from panel 5

CocoaA6 Numeric vector representing CocoaA sensory scores from panel 6

MilkA6 Numeric vector representing MilkA sensory scores from panel 6

Sweetness6 Numeric vector representing sweetness scores from panel 6

Acidity6 Numeric vector representing acidity scores from panel 6

Bitterness6 Numeric vector representing bitterness scores from panel 6

CocoaF6 Numeric vector representing CocoaF sensory scores from panel 6

MilkF6 Numeric vector representing MilkF sensory scores from panel 6

Caramel6 Numeric vector representing caramel scores from panel 6

Vanilla6 Numeric vector representing vanilla scores from panel 6

Astringency6 Numeric vector representing astringency scores from panel 6

Crunchy6 Numeric vector representing crunchiness scores from panel 6

Melting6 Numeric vector representing melting scores from panel 6

Sticky6 Numeric vector representing stickiness scores from panel 6

Granular6 Numeric vector representing granularity scores from panel 6

CocoaA7 Numeric vector representing CocoaA sensory scores from panel 7

MilkA7 Numeric vector representing MilkA sensory scores from panel 7

Sweetness7 Numeric vector representing sweetness scores from panel 7

Acidity7 Numeric vector representing acidity scores from panel 7

Bitterness7 Numeric vector representing bitterness scores from panel 7

CocoaF7 Numeric vector representing CocoaF sensory scores from panel 7

MilkF7 Numeric vector representing MilkF sensory scores from panel 7

Caramel7 Numeric vector representing caramel scores from panel 7

Vanilla7 Numeric vector representing vanilla scores from panel 7

Astringency7 Numeric vector representing astringency scores from panel 7

Crunchy7 Numeric vector representing crunchiness scores from panel 7

Melting7 Numeric vector representing melting scores from panel 7

Sticky7 Numeric vector representing stickiness scores from panel 7

Granular7 Numeric vector representing granularity scores from panel 7

Details

The dataset name has been changed to 'sensopanels_df' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'df' indicates that the dataset is a data frame. The original content has not been modified in any way.

Source

Data taken from the SensoMineR package version 1.28.

`SensoryDataSets` *SensoryDataSets: A Collection of Sensory Evaluation and Consumer Science Datasets*

Description

This package provides a curated collection of datasets for sensory evaluation, consumer research, and related statistical applications. The collection includes hedonic and liking scores, sensory profiles, descriptive evaluations, physicochemical measurements, wine quality and bitterness assessments, and data from products such as bread, olive oil, Orange juice, grape blends, wine, cocktails, chocolate, perfume, and smoothies. Additional datasets support examples involving missing values, response times, and electrophysiological measurements.

Details

SensoryDataSets: A Collection of Sensory Evaluation and Consumer Science Datasets

A Comprehensive Collection of Sensory Evaluation and Consumer Science Datasets.

Author(s)

Maintainer: Dian Rebaza Fernández<drebazaf@gmail.com>

See Also

Useful links:

- https://github.com/dianarebaza/sensorydatasets

view_datasets_SensoryDataSets *View Available Datasets in SensoryDataSets*

Description

This function lists all datasets available in the 'SensoryDataSets' package. If the 'SensoryDataSets' package is not loaded, it stops and shows an error message. If no datasets are available, it returns a message and an empty vector.

Usage

```
view_datasets_SensoryDataSets()
```

Value

A character vector with the names of the available datasets. If no datasets are found, it returns an empty character vector.

Examples

```
if (requireNamespace("SensoryDataSets", quietly = TRUE)) {
  library(SensoryDataSets)
  view_datasets_SensoryDataSets()
}
```

white_bread_matrix *White Bread Liking Study*

Description

This dataset, white_bread_matrix, is a matrix containing liking evaluation data from 420 panelists and 12 white bread products, labelled A through L to protect the identity of the manufacturer. Each panelist rated 6 white breads using the 9-point Hedonic Scale.

Usage

```
data(white_bread_matrix)
```

Format

An integer matrix with 420 observations and 12 variables:

A-L Integer values representing panelists' liking ratings of 12 white bread products using the 9-point Hedonic Scale

Details

The dataset name has been changed to 'white_bread_matrix' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'matrix' indicates that the dataset is a matrix. The original content has not been modified in any way.

Source

Data taken from the sensory package version 1.1.

`winequality_df` *Quality of Portuguese White Wine*

Description

This dataset, winequality_df, is a data frame containing physicochemical measurements and quality ratings for 4,898 white wine samples from Portugal. It includes 11 physicochemical characteristics of the wines and an overall wine quality score.

Usage

```
data(winequality_df)
```

Format

A data frame with 4,898 observations and 12 variables:

fixed.acidity Numeric vector representing fixed acidity

volatile.acidity Numeric vector representing volatile acidity

citric.acid Numeric vector representing citric acid content

residual.sugar Numeric vector representing residual sugar content

chlorides Numeric vector representing chloride content

free.sulfur.dioxide Numeric vector representing free sulfur dioxide content

total.sulfur.dioxide Numeric vector representing total sulfur dioxide content

density Numeric vector representing wine density

pH Numeric vector representing pH

sulphates Numeric vector representing sulphate content

alcohol Numeric vector representing alcohol content

quality Integer vector representing wine quality ratings

Details

The dataset name has been changed to 'winequality_df' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'df' indicates that the dataset is a data frame. The original content has not been modified in any way.

Source

Data taken from the sgd package version 1.1.3.

`winetable_tb` *Sensory Wine Evaluation*

Description

This dataset, winetable_tb, is a contingency table containing data from a sensory evaluation of wine. The table consists of 8 rows and 5 columns representing the categories involved in the sensory evaluation.

Usage

```
data(winetable_tb)
```

Format

A contingency table with 8 rows and 5 columns containing integer frequencies from a sensory wine evaluation.

Details

The dataset name has been changed to 'winetable_tb' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'tb' indicates that the dataset is a table. The original content has not been modified in any way.

Source

Data taken from the raters package version 2.1.1.

`wine_bitter_df` *Bitterness of Wine*

Description

This dataset, wine_bitter_df, is a data frame containing sensory evaluation data on the bitterness of wine. It includes responses and ordered ratings together with information on temperature, contact condition, bottle, and judge for 72 observations.

Usage

```
data(wine_bitter_df)
```

Format

A data frame with 72 observations and 6 variables:

response Numeric vector representing the sensory response

rating Ordered factor with 5 levels representing wine bitterness ratings

temp Factor with 2 levels indicating temperature conditions

contact Factor with 2 levels indicating contact conditions

bottle Factor with 8 levels identifying wine bottles

judge Factor with 9 levels identifying sensory judges

Details

The dataset name has been changed to 'wine_bitter_df' to follow the descriptive naming convention adopted for the SensoryDataSets package while maintaining clarity. The suffix 'df' indicates that the dataset is a data frame. The original content has not been modified in any way.

Source

Data taken from the serp package version 0.2.5.

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