Package 'MMAC'

August 19, 2025

Title Data for Mathematical Modeling and Applied Calculus

Version 1.0

Depends R (>= 4.1)

Suggests mosaic, mosaicCalc, plotly

Description Contains the data sets for the first and second editions of the textbook ``Mathematical Modeling and Applied Calculus" by Joel Kilty and Alex M. McAllister. The first edition of the book was published by Oxford University Press in 2018 with ISBN-13: 978-019882472. The second edition is expected to be published in January 2027.

License GPL (>= 2)

Encoding UTF-8

LazyData TRUE

RoxygenNote 7.3.2

NeedsCompilation no

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Repository CRAN

Date/Publication 2025-08-19 17:50:02 UTC

Contents

`AAPLStockMonthly` *Closing Stock Price of Apple Inc.*

Description

A data set containing the closing price of Apple Inc. Stock, from January 1981 to December 2014

Usage

```
data(AAPLStockMonthly)
```

Details

A data frame with 408 observations on the following variables.

- `Month` (months since January 1981)
- `AdjClose` (adjusted closing price of Apple Inc. stock)

Source

Yahoo Finance

References

http://finance.yahoo.com/q/hp?s=AAPL&a=11&b=12&c=1980&d=06&e=2&f=2014&g=m

Examples

```
data(APPLStockMontly)
```

Abalone *Abalone Rings*

Description

A data set containing the number of rings for 4177 abalone along with their length, and live weight. The age of an abalone is the number of rings + 1.5, but it is difficult to count the number of rings to determine the age of an abalone.

Usage

```
data(Abalone)
```

Details

A data frame with 1307 observations on the following variables.

- `Length` (in millimeters)
- `Weight` (live weight in grams)
- `Rings` (number of rings)

Source

Abalone: Donated on 11/30/1995 to UC Irvine Machine Learning Repository. Accessed on July 19, 2025.

References

https://archive.ics.uci.edu/dataset/1/abalone

Examples

```
data(Abalone)
```

AddidasProfit *Profit of Addidas*

Description

A data set containing the gross profit of Addidas in millions of euros from 2006 to 2024.

Usage

```
data(AddidasProfit)
```

Details

A data frame with 19 observations on the following variables.

- `Year`
- `Profit` (in millions of euros)

Source

Gross profit of Adidas from 2000 to 2024 (in million euros). Accessed on May 31, 2025.

References

https://www.statista.com/statistics/268417/gross-profit-of-the-adidas-group-worldwide-since-2000/

Examples

```
data(AddidasProfit)
```

Advertising *Sales Revenue based on Advertising Budget Breakdown*

Description

A data set containing the sales revenue of various products in millions of US dollars based on the TV, radio, and newspaper advertising budget of the product in 1000's of US dollars.

Usage

```
data(Advertising)
```

Details

A data frame with 200 observations on the following variables.

- `Sales` (in millions of US dollars)
- `TV` (TV advertising budget in 1000's of US dollars)
- `Radio` (radio advertising budget in 1000's of US dollars)
- `Newspaper` (newspaper advertising budget in 1000's of US dollars)

Source

Advertising Sales Data Set: Advertising Budget & Sales Prediction using Regression. Accessed on July 18, 2025.

References

https://www.kaggle.com/datasets/yasserh/advertising-sales-dataset

Examples

```
data(Advertising)
```

`APCalculus` *Number of Students taking the AP Calculus Exam*

Description

A data set containing the number of students who have taken the AP Calculus exam from 1955 to 2015.

Usage

```
data(APCalculus)
```

Details

A data frame with 61 observations on the following variables.

- `Year`
- `Exams` (number of AP exams taken in associated year)

Source

Personal correspondence with Stephen M. Kokoska.

Examples

```
data(APCalculus)
```

APCalculus2 *Number of Students taking the AP Calculus Exam*

Description

A subset of the data set APCalculus containing the number of students who have taken the AP Calculus exam from 1955 to 2015.

Usage

```
data(APCalculus2)
```

Details

A data frame with 38 observations on the following variables.

- Year
- Exams (number of AP exams taken in associated year)

Source

Personal correspondence with Stephen M. Kokoska.

Examples

```
data(APCalculus2)
```

AutoMPG *Fuel Efficiency of Automobiles*

Description

A data set containing data on predicting the MPG of 392 automobiles based on the number of cylinders, engine displacement, engine horsepower, vehicle weight, acceleration, and year.

Usage

```
data(AutoMPG)
```

Details

A data frame with 392 observations on the following variables.

- `MPG`
- `Cylinders` (number of cylinders in engine)
- `Displacement` (in cubic inches)
- `Horsepower`
- `Weight` (in pounds)
- `Acceleration` (in meters per second squared)
- `Year` (year of production; e.g. 70 is the year 1970)

Source

Data on predicting the MPG of 392 automobiles based on the number of cylinders, engine displacement, engine horsepower, vehicle weight, acceleration, and year. Accessed on August 3, 2025.

References

https://archive.ics.uci.edu/dataset/9/auto+mpg

Examples

```
data(AutoMPG)
```

`AverageCO2Levels` *Average Worldwide CO2 Levels*

Description

A data set containing the average worldwide carbon dioxide concentration level in parts per million from 1993 to 2023.

Usage

```
data(AverageCO2Levels)
```

Details

A data frame with 32 observations on the following variables.

- `Year`
- `Emissions` (parts per million)

Source

Average carbon dioxide levels in the atmosphere worldwide from 1959 to 2023 (in parts per million). Accessed on October 1, 2024.

References

https://www.statista.com/statistics/1091926/atmospheric-concentration-of-co2-historic/

Examples

```
data(AverageCO2Levels)
```

AvianFemur *Length of Avian Femurs*

Description

A data set containing the length of avian femurs in millimeters as a function of the body mass of the avian species in kilograms.

Usage

```
data(AvianFemur)
```

Details

A data frame with 22 observations on the following variables.

- `Mass` (in kilograms)
- `Length` (in millimeters)

Source

Prange, H.D., Anderson, J.F., and Rahn, H. Scaling of Skeletal Mass to Body Mass in Birds and Mammals. *The American Naturalist*, Vol. 113, No. 1 (Jan. 1979), pp. 103-122. Accessed on Augut 1, 2025.

References

https://www.jstor.org/stable/2459945

Examples

```
data(AvianFemur)
```

BlastData *Blast Radius of Trinity Test*

Description

A data set containing the blast radius (in meters) as a function of time (in seconds) for the Trinity test conducted by the United States in White Sands, New Mexico in 1945.

Usage

```
data(BlastData)
```

Details

A data frame with 23 observations on the following variables.

- `time` (in seconds)
- `radius` (in meters)

Source

Taylor, G. "The Formation of a Blast Wave by a Very Intense Explosion. II. The Atomic Explosion of 1945." *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 1950, 201: 175–86.

Examples

```
data(BlastData)
```

BodyMassMetabolicRate *Closing Stock Price of Apple Inc.*

Description

A data set containing the field metablic rate of individual birds and mammals (measured in kilojoules per day) as a function of its body mass (in kilograms)

Usage

```
data(BodyMassMetabolicRate)
```

Details

A data frame with 1498 observations on the following variables.

- `Mass` (in kilograms)
- `Rate` (field metabolic rate in kilojoules per day)

Source

Hudson, L. N., Isaac, N. J. B., Reuman, D. C. (2013), The relationship between body mass and field metabolic rate among individual birds and mammals. *Journal of Ecology*, 82: 1009-1020. doi: 10.1111/1365-2656.12086.

References

http://onlinelibrary.wiley.com/doi/10.1111/1365-2656.12086/suppinfo

Examples

```
data(BodyMassMetabolicRate)
```

CaliforniaHousing *California Housing Data from 1990 US Census*

Description

A data set containing data on housing prices in California from the 1990 Census. Each data point is from one census block and contains data on the median age, total number of rooms, total number of bedrooms, population, number of households, median income, and median value of the houses within that census block.

Usage

```
data(CaliforniaHousing)
```

Details

A data frame with 20433 observations on the following variables.

- `Age` (median age of house within block)
- `Rooms` (total number of rooms within block)
- `Bedrooms` (total number of bedrooms within block)
- `Population` (total number of people residing within block)
- `Households` (total number of households residing within block)
- `MedianIncome` (median income within block)
- `MedianValue` (median home value within block)

Source

Data on California housing from the 1990 census. Accessed on August 3, 2025.

References

https://www.dcc.fc.up.pt/~ltorgo/Regression/cal_housing.html

Examples

```
data(CaliforniaHousing)
```

`CarSales` *Car Sales*

Description

A data set containing the price, year, and mileage of 23000 cars for sale.

Usage

```
data(CarSales)
```

Details

A data frame with 23000 observations on the following variables.

- `Year` (year car was manufactured)
- `Mileage` (number of miles on car)
- `Price` (price of car in US dollars)

Source

Cars for Sale: Comprehensive Dataset of Cars for Sale with Detailed Features, Pricing, accident. Accessed on July 18, 2025.

References

https://www.kaggle.com/datasets/benjnb/cars-for-sale

Examples

```
data(CarSales)
```

CellularSubscriptions *Cellular Subscriptions Worldwide*

Description

A data set containing the worldwide number of mobile cellular subscriptions per 100 people from 1980 to 2008.

Usage

```
data(CellularSubscriptions)
```

Details

A data frame with 29 observations on the following variables.

- `Year`
- `Subscriptions` (per 100 people)

Source

Mobile cellular subscriptions (per 100 people). Accessed on October 2, 2024.

References

https://data.worldbank.org/indicator/IT.CEL.SETS.P2?end=2023&start=1960&view=chart

Examples

```
data(CellularSubscriptions)
```

CellularSubscriptions2 *Worldwide Mobile Cellular Subscriptions*

Description

A data set containing the worldwide number of mobile cellular subscriptions per 100 people from 1980 to 2023.

Usage

```
data(CellularSubscriptions2)
```

Details

A data frame with 44 observations on the following variables.

- `Year`
- `Subscriptions` (per 100 people)

Source

Mobile cellular subscriptions (per 100 people). Accessed on October 2, 2024.

References

https://data.worldbank.org/indicator/IT.CEL.SETS.P2

Examples

```
data(CellularSubscriptions2)
```

ChildLabor *Child Labor Law Violations*

Description

A data set containing the number of minors employed in the United States in violation of child labor laws from 1971 to 2024.

Usage

```
data(ChildLabor)
```

Details

A data frame with 28 observations on the following variables.

- `Year`
- `Violations`

Source

Child Labor. Accessed on June 24, 2025.

References

https://www.dol.gov/agencies/whd/data/charts/child-labor

Examples

```
data(ChildLabor)
```

CHIPExpenditures *CHIP Consumption Expenditures*

Description

A data set containing the Children's Health Insurance Program (CHIP) consumption expenditures from 2005 to 2022 in millions of US dollars.

Usage

```
data(CHIPExpenditures)
```

Details

A data frame with 18 observations on the following variables.

- `Year`
- `Expenditure` (in millions of US dollars)

Source

Children's health insurance program (CHIP) health consumption expenditure from 2000-2022 (in million U.S. dollars). Accessed on March 11, 2025.

References

https://www.statista.com/statistics/245384/chip-personal-health-care-expenditure/

Examples

```
data(CHIPExpenditures)
```

CigaretteSales *United States Cigarette Sales*

Description

A data set containing the number of individual cigarettes sold in the United States in billions each year from 1981 to 2022.

Usage

```
data(CigaretteSales)
```

Details

A data frame with 42 observations on the following variables.

- `Year`
- `Sales` (in billions of individual cigarettes)

Source

Federal Trade Commission Cigarette Report for 2022. Accessed on June 5, 2025.

References

https://www.ftc.gov/system/files/ftc_gov/pdf/2022-Cigarette-Report.pdf

Examples

```
data(CigaretteSales)
```

`DaylengthFairbanks` *Daylength in Fairbanks, Alaska*

Description

A data set containing the daylength in Fairbanks, Alaska in hours from August 2020 to August 2025.

Usage

```
data(DaylengthFairbanks)
```

Details

A data frame with 61 observations on the following variables.

- `Month` (since August 2020)
- `Daylength` (in hours)

Source

Fairbanks, Alaska, USA — Sunrise, Sunset, and Daylength, August 2025. Accessed on August 4, 2025.

References

https://www.timeanddate.com/sun/usa/fairbanks

Examples

```
data(DaylengthFairbanks)
```

DJIA *Dow Jones Industrial Average Closing Value*

Description

A data set containing the closing stock market value of the Dow Jones Industrial Average on the last day of each quarter from June 30, 1896 (quarter 1) through September 30, 2024 (quarter 515).

Usage

```
data(DJIA)
```

Details

A data frame with 515 observations on the following variables.

- `Quarter`
- `Close`

Source

Closing stock market value of the Dow Jones Industrial Average at the end of each quarter from June 30, 1896 through September 30, 2024 from "^DJI — Nasdaq Composite — U.S. — Stooq." Accessed on October 1, 2024.

References

http://stooq.com/q/d/?s=^dji&i=q.

Examples

```
data(DJIA)
```

DJIACloseQuarterly *Quarterly Closing Value of Dow Jones Industrial Average*

Description

A data set containing the quarterly closing value of the Dow Jones Industrial Average (DJIA) from March 31, 1935 to December 31, 2014.

Usage

```
data(DJIACloseQuarterly)
```

Details

A data frame with 320 observations on the following variables.

- `Quarter` (since March 31, 1935)
- `Close` (Closing value of DJIA)

Source

Closing stock market value of the Dow Jones Industrial Average at the end of each quarter from March 31, 1930 through December 31, 2014 from "^DJI — Nasdaq Composite — U.S. — Stooq." Accessed on July 7, 2015.

References

http://stooq.com/q/d/?s=^dji

Examples

```
data(DJIACloseQuarterly)
```

DuluthDayLength *Day Length in Duluth, MN*

Description

A data set containing the day length in Duluth, MN measures in hours on the first day of each month from October 2022 to October 2024.

Usage

```
data(DuluthDayLength)
```

Details

A data frame with 25 observations on the following variables.

- `Month` (since October 2022)
- `Length` (in hours)

Source

Duluth, Minnesota, USA – Sunrise, Sunset, and Daylength, October 2024. Accessed on October 24, 2024.

References

https://www.timeanddate.com/sun/usa/duluth

Examples

```
data(DuluthDayLength)
```

DunkinDonuts *Dunkin' Donuts Stores Worldwide*

Description

A data set containing the number of Dunkin' Donuts stores worldwide from 2007 to 2019.

Usage

```
data(DunkinDonuts)
```

Details

A data frame with 13 observations on the following variables.

- `Year`
- `Stores`

Source

Number of Dunkin' Donuts stores worldwide from 2007 to 2019, by region. Accessed on September 19, 2024.

References

https://www.statista.com/statistics/291462/distribution-points-dunkin-donuts/

Examples

```
data(DunkinDonuts)
```

EbolaSierraLeone *Ebola Cases in Sierra Leone, Africa*

Description

A data set containing the cummulative number of ebola cases in Sierra Leone, Africa from May 1, 2014 to December 16, 2015

Usage

```
data(EbolaSierraLeone)
```

Details

A data frame with 110 observations on the following variables.

- `Day` (since May 1, 2014)
- `Cases` (cummulative number of ebola cases)

Source

Ebola Outbreak in West Africa from Centers for Disease Control and Preven- tion. Accessed on June 2, 2016.

References

http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/cumulative-cases-graphs.html

Examples

```
data(EbolaSierraLeone)
```

ElectricBill *Electric Bill*

Description

A data set containing the electric bill (in US dollars) of a single-family home in Minnesota from 2000-2003

Usage

```
data(ElectricBill)
```

Details

A data frame with 37 observations on the following variables.

- `Month` (since January 2000)
- `ElecBill` (in US dollars)

Source

Subset of Utilities in the `mosaic` package.

Examples

```
data(ElectricBill)
```

ElectricityDemand *United States Electricity Demand*

Description

A data set containing the United States electricity demand in megawatt hours from October 1, 2024 to October 5, 2024 as a function of time in hours.

Usage

```
data(ElectricityDemand)
```

Details

A data frame with 120 observations on the following variables.

- `Time` (hours since October 1, 2024)
- `Length` (in megawatt hours)

Source

U.S. electricity overview (demand, forecast demand, net generation, and total interchange) 10/1/2024 - 10/5/24, Eastern Time. Accessed on October 24, 2024.

References

https://www.eia.gov/electricity/gridmonitor/dashboard/custom/pending

Examples

```
data(ElectricityDemand)
```

`ElectronicMailOrderSales`

US Electronic and Mail Order Sales

Description

A data set containing the he total U.S. electronic and mail-order shopping sales in billions of dollars each year from 1999 to 2012.

Usage

```
data(ElectronicMailOrderSales)
```

Details

A data frame with 14 observations on the following variables.

- `Year`
- `Sales` (in billions of US dollars)

Source

Total U.S. electronic and mail-order shopping sales in millions of dollars each year from 1999 to 2012 from "Monthly & Annual Retail Trade, Main Page — US Census Bureau." Accessed on July 16, 2014.

Examples

```
data(ElectronicMailOrderSales)
```

EngineBore *Engine Bore Diameter*

Description

A data set containing the bore diameter (i.e. the diameter of the cylinder) in millimeters as a function of the mass of various engines in kilograms

Usage

```
data(EngineBore)
```

Details

A data frame with 39 observations on the following variables.

- `Mass` (in kilograms)
- `BoreLength` (in millimeters

Source

Bore diameter as a function of engine mass from pages 60–61. McMahon, Thomas A., and John Tyler Bonner. *On Size and Life*. New York: Scientific American Library, 1983.

Examples

```
data(EngineBore)
```

EngineRPM *RPM of Different Engines*

Description

A data set containing the revolutions per minute (RPM) and mass of different engines.

Usage

```
data(EngineRPM)
```

Details

A data frame with 39 observations on the following variables.

- `Mass` (in kilograms)
- `RPM`

Source

Revolutions per minute of engines as a function of engine mass from pages 60-61. McMahon, Thomas A., and John Tyler Bonner. *On Size and Life*. New York: Scientific American Library, 1983.

Examples

```
data(EngineRPM)
```

EVMarketShare *Worldwide Electric Vehicle Market Share*

Description

A data set containing the worldwide market share of electric vehicles as a percentage of passenger vehicle sales from 2015 to 2023.

Usage

```
data(EVMarketShare)
```

Details

A data frame with 9 observations on the following variables.

- `Year`
- `Share`

Source

Global market share of electric vehicles within passenger vehicle sales between 2015 and 2023, with a forecast through 2030. Accessed on June 18, 2025.

References

https://www.statista.com/statistics/1371599/global-ev-market-share/

Examples

```
data(EVMarketShare)
```

FacebookUsers *Facebook Users*

Description

A data set containing the number of Facebook users in millions of people from 2009 through 2012.

Usage

```
data(FacebookUsers)
```

Details

A data frame with 38 observations on the following variables.

- `Months` (since January 2009)
- `Users` (in millions)

Source

Number of Facebook users in millions from 2009 through 2012 from "Number of active users at Facebook over the years — Yahoo News" and "Facebook: number of active users 2015 | Statistics." Accessed on June 22, 2015.

References

http://news.yahoo.com/number-active-users-facebook-over-230449748.html http://www.statista.com/statistics/264810/numb of-monthly-active-facebook-users-worldwide/

Examples

```
data(FacebookUsers)
```

FiddlerCrabs *Palm Length of Fiddler Crabs*

Description

A data set containing the palm length (chela size) of growing male fiddler crabs as a function of the body size (carapace breadth), both measured in millimeters.

Usage

```
data(FiddlerCrabs)
```

Details

A data frame with 19 observations on the following variables.

- `BodySize` (in millimeters)
- `PalmLength` (in millimeters)

Source

Miller, D.C. Growth in Uca, 1. Ontogeny of Asymmetry in Uca pugilator (Bosc) (Decapoda, Ocypodidae). *Crustaceana*, Vol. 24, No. 1 (Jan., 1973), pp. 119-131. Accessed on August 1, 2025.

References

https://www.jstor.org/stable/20101959

Examples

```
data(FiddlerCrabs)
```

`FishWeights` *Weight of Bream*

Description

Weight of 56 bream fish in grams as a function of their vertical length (in cm), diagonal length (in cm), cross length (in cm), height (in cm), and diagonal width (in cm).

Usage

```
data(FishWeights)
```

Details

A data frame with 56 observations on the following variables.

- `Weight` (in grams)
- `Vertial` (vertical length in centimeters)
- `Diagonal` (diagonal length in centimeters)
- `Cross` (cross length in centimeters)
- `Height` (in centimeters)
- `Width` (diagonal width in centimeters)

Source

FishMarket: Estimate the weight of fish based on its species and the physical measurements. Accessed on August 3, 2025

References

https://www.kaggle.com/datasets/vipullrathod/fish-market

Examples

```
data(FishWeights)
```

`FlightsWorldwide` *Worldwide Flights Performed*

Description

A data set containing the worldwide number of flights performed by the global airline industry in millions from 2004 to 2019.

Usage

```
data(FlightsWorldwide)
```

Details

A data frame with 16 observations on the following variables.

- `Year`
- `Flights` (in millions)

Source

Number of flights performed by the global airline industry from 2004 to 2024, with a forecast for 2025 (in millions). Accessed on August 2, 2025.

References

https://www.statista.com/statistics/564769/airline-industry-number-of-flights/

Examples

```
data(FlightsWorldwide)
```

FordMarketVolume1 *Ford Motors Market Volume*

Description

A subset of the data set containing the volume of Ford Motor Company stock shares traded per quarter since January 1, 2007.

Usage

```
data(FordMarketVolume1)
```

Details

A data frame with 7 observations on the following variables.

- `Date` (quarter since January 1, 2007)
- `Volume` (number of shares of Ford Motor Company stock shares)

Source

Ford Motor Company (F) stock market value quarterly in U.S. dollars. Accessed on July 7, 2014

References

http://stooq.com/q/d/?s=f.us

Examples

```
data(FordMarketVolume1)
```

FordMarketVolume2 *Ford Motors Market Volume*

Description

A data set containing the volume of Ford Motor Company stock shares traded per quarter since January 1, 2007.

Usage

```
data(FordMarketVolume2)
```

Details

A data frame with 20 observations on the following variables.

- `Date` (quarter since January 1, 2007)
- `Volume` (number of shares of Ford Motor Company stock shares)

Source

Ford Motor Company (F) stock market value quarterly in U.S. dollars. Accessed on July 7, 2014

References

http://stooq.com/q/d/?s=f.us

Examples

```
data(FordMarketVolume1)
```

GaltonMale *Height of Children*

Description

A data set containing data on the height of 465 male children and the height of both their mother and father.

Usage

```
data(GaltonMale)
```

Details

A data frame with 465 observations on the following variables.

- `father` (height of father in inches)
- `mother` (height of mother in inches)
- `height` (height of child in inches)

Source

Hanley, J.A. (2004). “Transmuting" women into men: Galton’s family data on human stature. The American Statistician, vol. 58, no. 3, pp. 237-243. Accessed on May 21, 2025.

References

https://www.medicine.mcgill.ca/epidemiology/hanley/galton/

Examples

```
data(GaltonMale)
```

GenderRatio1 *Gender Ratio in World Population*

Description

A subset of the data set containing the number of males per 100 females in the word population.

Usage

```
data(GenderRatio1)
```

Details

A data frame with 9 observations on the following variables.

- `Year`
- `Ratio` (number of males per 100 females)

Source

The global gender ratio based on the number of males per 100 females by year from "World Population Prospects, the 2012 Revision" by the United Nations Department of Economic and Social Affairs. Accessed on June 25, 2014.

References

http://esa.un.org/unpd/wpp/Excel-Data/population.htm

Examples

```
data(GenderRatio1)
```

GenderRatio2 *Gender Ratio in World Population*

Description

A data set containing the number of males per 100 females in the word population.

Usage

```
data(GenderRatio2)
```

Details

A data frame with 14 observations on the following variables.

- `Year`
- `Ratio` (number of males per 100 females)

Source

The global gender ratio based on the number of males per 100 females by year from "World Population Prospects, the 2012 Revision" by the United Nations Department of Economic and Social Affairs. Accessed on June 25, 2014.

References

http://esa.un.org/unpd/wpp/Excel-Data/population.htm

Examples

```
data(GenderRatio2)
```

GlobalCO2Emissions *Global CO2 Emissions*

Description

A data set containing the annual worldwide carbon dioxide emissions in billion metric tons from 1940 to 2023.

Usage

```
data(GlobalCO2Emissions)
```

Details

A data frame with 84 observations on the following variables.

- `Year`
- `Emissions` (in billion metric tons)

Source

Annual carbon dioxide emissions worldwide from 1940 to 2023 (in billion metric tons). Accessed on September 26, 2024.

References

https://www.statista.com/statistics/276629/global-co2-emissions/

Examples

```
data(GlobalCO2Emissions)
```

`Happiness` *Happiness in Southeastern Asian and Middle Eastern Countries*

Description

A data set containing a happiness score (between 0 and 10) from the 2023 World Happiness Report from 12 Southeastern Asian and Middle Eastern countries along with the median income in United States dollars and the poverty rate of the county.

Usage

```
data(Happiness)
```

Details

A data frame with 12 observations on the following variables.

- `Happiness` (score between 0 and 10)
- `Income` (median income in US dollars)
- `Poverty` (poverty rate)

Source

SA-ME Happiness Index: Education, Income & Life Satisfaction Metrics. Accessed on July 18, 2025.

References

https://www.kaggle.com/datasets/towhid121/sa-me-happiness-index

Examples

```
data(Happiness)
```

`Hawaii` *Tidal Depths in Pearl Harbor, Hawaii*

Description

A data set containing the depth of the tide in feet relative to the MLLW (mean lower low water mark) in Pearl Harbor, Hawaii as a function of time measured in hours Hr.

Usage

```
data(Hawaii)
```

Details

A data frame with 31 observations on the following variables.

- `time` (in hours)
- `water` (tide depth in feet relative to the MLLW)

Source

Tidal measurements in Pearl Harbor, Hawaii based on data sets from Project Mosaic. Accessed on August 19, 2015.

References

http://www.mosaic-web.org

Examples

```
data(Hawaii)
```

HealthExpenditure *Health Expenditures as a Percentage of U.S. GDP*

Description

A data set containing the World Bank's data for total U.S. health expenditures as a percentage of the U.S gross domestic product (GDP) from 1995 to 2012.

Usage

```
data(HealthExpenditure)
```

Details

A data frame with 18 observations on the following variables.

- `Year`
- `PercentGDP`

Source

Total U.S. health expenditures as a percentage of GDP from the World Bank. Accessed on July 10, 2014.

References

http://data.worldbank.org/country/united-states

Examples

```
data(HealthExpenditure)
```

HenWeight *Mean Hen Weight*

Description

A data set containing the mean hen weight of hens (female chickens) in grams as a function of the age in days.

Usage

```
data(HenWeight)
```

Details

A data frame with 28 observations on the following variables.

- `Day`
- `Weight` (in grams)

Source

Aggrey, S.E. Comparison of Three Nonlinear and Spline Regression Models for Describing Chicken Growth Curves. *Poultry Science*, Volume 81, Issue 12, December 1, 2022, 1782-1788.

Examples

```
data(HenWeight)
```

HispanicPopulation *Latino's Living in the United States*

Description

A data set containing the number of Latino's living in the United States as a function of the year.

Usage

```
data(HispanicPopulation)
```

Details

A data frame with 5 observations on the following variables.

- `Year`
- `People` (in millions)

Source

The U.S. Hispanic population has increased sixfold since 1970. Accessed on June 16, 2014.

References

http://www.pewresearch.org/fact-tank/2014/02/26/the-u-s-hispanic-population-has-increased-sixfold-since-1970/

Examples

```
data(HispanicPopulation)
```

HSDropoutRate *High School Dropout Rate*

Description

A data set containing the high school dropout rate in the United States from 1970 through 2012.

Usage

```
data(HSDropoutRate)
```

Details

A data frame with 43 observations on the following variables.

- `Year`
- `Rate` (high school dropout rate)

Source

The high school dropout rate in the United States from 1970 through 2012 from "Percentage of high school dropouts among persons 16 to 24 years old." Accessed on June 22, 2015.

References

http://nces.ed.gov/programs/digest/d13/tables/dt13 219.70.asp

Examples

```
data(HSDropoutRate)
```

HSGradsInCollege *High School Graduates in College*

Description

A data set containing the percent of each year's high school graduates to enroll in either a two-year or four-year college from 1972 to 2012.

Usage

```
data(HSGradsInCollege)
```

Details

A data frame with 41 observations on the following variables.

- `Year`
- `Percent` (of high schol graduates)

Source

Percent of high school graduates to enroll in a two-year or four-year college from National Center for Education Statistics. Accessed on July 2, 2014.

References

http://nces.ed.gov/programs/digest/d13/tables/dt13302.10.asp

Examples

```
data(HSGradsInCollege)
```

JuniperTrees *Biomass of OneSeed Juniper trees*

Description

A data set containing the above ground biomass of Oneseed juniper trees in kilograms as a function of the maximum height of the tree is meters.

Usage

```
data(JuniperTrees)
```

Details

A data frame with 18 observations on the following variables.

- `Height` (in meters)
- `BioMass` (in kilograms)

Source

Boschetti Fabio , Sauer Katherine J. , Litvak Marcy , Anderson Karen , Brazier Richard E., Allometric Relationships for Predicting Aboveground Biomass and Sapwood Area of Oneseed Juniper (Juniperus monosperma) Trees, Frontiers in Plant Science, Volume 11, 2020, doi:10.3389/fpls.2020.00094. Accessed on October 9, 2024.

References

https://www.frontiersin.org/journals/plant-science/articles/10.3389/fpls.2020.00094

Examples

```
data(JuniperTrees)
```

`KeyWestTides` *KeyWestTides*

Description

A data set containing the tidal depth relative to the mean lower low water (MLLW) level in feet as a function of time in minutes in Key West, Florida.

Usage

```
data(KeyWestTides)
```

Details

A data frame with 960 observations on the following variables.

- `Time` (in minutes)
- `Depth` (in feet)

Source

NOAA/NOS/CO-OPS Observed Water Levels at 8724580, Key West, FL from 2024/09/09 00:00 GMT to 2024/09/12 23:59 GMT. Accessed on October 23, 2024

References

https://tidesandcurrents.noaa.gov/waterlevels.html?id=8724580

Examples

```
data(KeyWestTides)
```

LifeExpectancyPhysicians *Life Expectancy in Different Countries*

Description

A data set containing the number of physicians per 1000 people as a function of average life expectancy in different countries in 2010.

Usage

```
data(LifeExpectancyPhysicians)
```

Details

A data frame with 175 observations on the following variables.

- `LifeExpectancy` (life expectancy in years)
- `Physicians` (number of physicians per 1000 people)

Source

Number of physicians per 1000 people as a function of average life expectancy in different countries in 2010 from "Physicians (per 1,000 people) | Data | Table."

References

http://data.worldbank.org/indicator/SH.MED.PHYS.ZS

Examples

```
data(LifeExpectancyPhysicians)
```

MammalEnergy *Metablic Energy of Mammals*

Description

A data set containing the total lifetime metabolic energy in kilojoules for various mammals as a function of their body mass in kilograms

Usage

```
data(MammalEnergy)
```

Details

A data frame with 93 observations on the following variables.

- `Mass` (in kilograms)
- `Energy` (kilojoules)

Source

Atanasov AT. The linear allometric relationship between total metabolic energy per life span and body mass of mammals. Biosystems. 2007 Jul-Aug; 90(1):224-33. doi: 10.1016/j.biosystems.2006.08.006. Epub 2006 Aug 23. PMID: 17030408. Accessed on October 10, 2024.

References

https://www.sciencedirect.com/science/article/abs/pii/S0303264706001481?via%3Dihub

Examples

```
data(MammalEnergy)
```

MaunaLoaCO2 *Atmospheric Carbon Dioxide from Mauna Loa*

Description

A data set containing the atmospheric carbon dioxide from Mauna Loa in ppmv (or parts per million by volume) as a function of years from 1958 to 2008.

Usage

```
data(MaunaLoaCO2)
```

Details

A data frame with 49 observations on the following variables.

- `Year`
- `Average` (in ppmv)

Source

Atmospheric carbon dioxide from Mauna Loa in ppmv (parts per million by volume) as a function of years from 1958 to 2008 from "Atmospheric Carbon Dioxide Record from Mauna Loa." Accessed on August 19, 2015.

References

http://cdiac.ornl.gov/trends/co2/sio-mlo.html

Examples

```
data(MaunaLoaCO2)
```

McDBurgers1 *Burgers Sold by McDonalds*

Description

A subset of the data set containing the number of burgers (in billions) sold by McDonald's since 1955.

Usage

```
data(McDBurgers1)
```

Details

A data frame with 5 observations on the following variables.

- `Year`
- `Burgers` (in billions)

Source

The total number of burgers sold by McDonald's in billions as of each year from "Over How Many Billion Served." Accessed on July 3, 2014.

References

http://overhowmanybillionserved.blogspot.com/

Examples

```
data(McDBurgers1)
```

McDBurgers2 *Burgers Sold by McDonalds*

Description

A data set containing the number of burgers (in billions) sold by McDonald's since 1955.

Usage

```
data(McDBurgers2)
```

Details

A data frame with 11 observations on the following variables.

- `Year`
- `Burgers` (in billions)

Source

The total number of burgers sold by McDonald's in billions as of each year from "Over How Many Billion Served." Accessed on July 3, 2014.

References

http://overhowmanybillionserved.blogspot.com/

Examples

```
data(McDBurgers2)
```

MediterraneanSeaTemp *Temperature of Mediterranean Sea*

Description

A data set containing the sea surface temperature of the Mediterranean Sea in degrees Celsius from 1996 to 2023 relative to the 1991-2020 average.

Usage

```
data(MediterraneanSeaTemp)
```

Details

A data frame with 28 observations on the following variables.

- `Year`
- `Temperature` (in degrees Celsius relative to the 1991-2020 average)

Source

Sea surface temperature anomalies in the Mediterranean Sea from 1994 to 2023. Accessed on June 13, 2025.

References

https://www.statista.com/statistics/1463322/sea-surface-temperature-anomalies-mediterranean-sea/

Examples

```
data(MediterraneanSeaTemp)
```

`MonthlyUnemployment` *US Unemployment Rate*

Description

A data set containing the United States monthly unemployment rate from January 2010 to December 2014.

Usage

```
data(MonthlyUnemployment)
```

Details

A data frame with 60 observations on the following variables.

- `Months` (since January 2010)
- `Rate` (monthly unemployment rate)

Source

U.S. monthly unemployment rate from January 2010 to December 2014 from "Bureau of Labor Statistics Data." Accessed on June 22, 2015.

References

http://data.bls.gov/timeseries/LNS14000000

Examples

```
data(MonthlyUnemployment)
```

`Mortgage15YrAnnual` *15 Year Annual Mortgage Rates*

Description

A data set containing interest rates on 15-year, fixed-rate conventional home mortgages annually from 1992 to 2014.

Usage

```
data(Mortgage15YrAnnual)
```

Details

A data frame with 23 observations on the following variables.

- `Year`
- `Rate` (interest rate on 15-year, fixed-rate conventional home mortgage)

Source

Interest rates on 15-year, fixed-rate conventional home mortgages annually from 1992 to 2014 from "Mortgage Interest Rates History." Accessed on June 22, 2015.

References

http://www.fedprimerate.com/mortgagerates.htm

Examples

```
data(Mortgage15YrAnnual)
```

Mortgage30YrAnnual *30 Year Annual Mortgage Rates*

Description

A data set containing the average interest rate for conventional 30-year mortgages each year from 1981 to 2012.

Usage

```
data(Mortgage30YrAnnual)
```

Details

A data frame with 32 observations on the following variables.

- `Year`
- `Rate` (average interest rate on conventional 30-year mortgage)

Source

Average interest rate for conventional 30-year mortgages each year from 1981 to 2012 from "Primary Mortgage Market Survey Archives — 30 Year Fixed Rate Mortgages — Freddie Mac." Accessed on July 7, 2015.

References

http://www.freddiemac.com/pmms/pmms30.htm

Examples

```
data(Mortgage30YrAnnual)
```

Mortgage30YrMonthly1 *30 Year Annual Mortgage Rates*

Description

A subset of the data set containing the interest rate on a 30-year fixed-rate conventional home mortgage.

Usage

```
data(Mortgage30YrMonthly1)
```

Details

A data frame with 265 observations on the following variables.

- `Month`
- `Rate` (average interest rate on conventional 30-year mortgage)

Source

Average interest rate for conventional 30-year mortgages each year from 1981 to 2012 from "Primary Mortgage Market Survey Archives — 30 Year Fixed Rate Mortgages — Freddie Mac." Accessed on July 7, 2015.

References

http://www.freddiemac.com/pmms/pmms30.htm

Examples

```
data(Mortgage30YrMonthly1)
```

`Mortgage30YrMonthly2` *30 Year Annual Mortgage Rates*

Description

A data set containing the interest rate on a 30-year fixed-rate conventional home mortgage.

Usage

```
data(Mortgage30YrMonthly2)
```

Details

A data frame with 519 observations on the following variables.

- `Month`
- `Rate` (average interest rate on conventional 30-year mortgage)

Source

Average interest rate for conventional 30-year mortgages each year from 1981 to 2012 from "Primary Mortgage Market Survey Archives — 30 Year Fixed Rate Mortgages — Freddie Mac." Accessed on July 7, 2015.

References

http://www.freddiemac.com/pmms/pmms30.htm

Examples

```
data(Mortgage30YrMonthly2)
```

`MusselsMetabolic` *Metabolic Rate of Mussels*

Description

A data set containing the standard metabolic rate in mL/hr of mussels as a function of their live weight in grams

Usage

```
data(MusselsMetabolic)
```

Details

A data frame with 47 observations on the following variables.

- `LW` (in grams)
- `SMR` (in mL/hr)

Source

Ibarrola I, Arranz K, Markaide P, Navarro E (2022) Metabolic size scaling reflects growth performance effects on age-size relationships in mussels (Mytilus galloprovincialis). PLoS ONE 17(9): e0268053. Accessed on October 8, 2024.

References

https://doi.org/10.1371/journal.pone.0268053.

Examples

```
data(MusselsMetabolic)
```

NASDAQ *Closing NASDAQ Market Value*

Description

A data set containing the closing NASDAQ stock market value in U.S. dollars at the end of each quarter from March 1938 (Quarter=1) through September 2024 (Quarter=347).

Usage

```
data(NASDAQ)
```

Details

A data frame with 347 observations on the following variables.

- `Quarter`
- `Close`

Source

Closing NASDAQ stock market value in U.S. dollars at the end of each quarter from March 1938 through September 2024 from "Stooq:Historical data: Nasdaq Composite - U.S. " Accessed on September 27, 2024.

References

https://stooq.com/q/d/?s=%5Endq&c=0&i=q

Examples

```
data(NASDAQ)
```

NASDAQQuarterly *Closing NASDAQ Value*

Description

A data set containing the closing NASDAQ stock market value in U.S. dollars at the end of each quarter from March 1938 (quarter 1) through December 2014 (quarter 308)

Usage

```
data(NASDAQQuarterly)
```

Details

A data frame with 308 observations on the following variables.

- `Quarter` (since March 1938)
- `Close`

Source

Closing stock market value of the Dow Jones Industrial Average at the end of each quarter from March 31, 1930 through December 31, 2014 from "^DJI — Nasdaq Composite — U.S. — Stooq." Accessed on July 7, 2015.

References

http://stooq.com/q/d/?s=^dji

Examples

```
data(NASDAQQuarterly)
```

`NaturalGasConsumption` *US Natural Gas Consumption*

Description

A subset of the data set containing the total number of millions of cubic feet of natural gas consumed in the United States from 1950 to 1970.

Usage

```
data(NaturalGasConsumption)
```

Details

A data frame with 21 observations on the following variables.

- `Year`
- `CubicFeet` (in millions of cubic feet)

Source

Natural Gas from U.S. Energy Information Administration. Accessed on June 9, 2016.

References

http://www.eia.gov/dnav/ng/hist/n9140us2a.htm

Examples

```
data(NaturalGasConsumption)
```

NaturalGasConsumption2

US Natural Gas Consumption

Description

A data set containing the total number of millions of cubic feet of natural gas consumed in the United States from 1950 to 1970.

Usage

```
data(NaturalGasConsumption2)
```

Details

A data frame with 67 observations on the following variables.

- `Year`
- `CubicFeet` (in millions of cubic feet)

Source

Natural Gas from U.S. Energy Information Administration. Accessed on June 9, 2016.

References

http://www.eia.gov/dnav/ng/hist/n9140us2a.htm

Examples

```
data(NaturalGasConsumption2)
```

NetherlandsPopulation *Population of the Netherlands*

Description

A data set containing the population of the Netherlands measured in millions of people at the beginning of each decade since 1700.

Usage

```
data(NetherlandsPopulation)
```

Details

A data frame with 21 observations on the following variables.

- `Year`
- `Population` (in millions of people)

Source

Population of the Netherlands from "The NETHERLANDS : country populations." Accessed on July 11, 2014.

References

http://www.populstat.info/Europe/netherlc.htm

Examples

```
data(NetherlandsPopulation)
```

NikeRevenue *Revenue of Nike*

Description

A data set containing the revenue of Nike in millions of US dollars from 2010 to 2023.

Usage

```
data(NikeRevenue)
```

Details

A data frame with 14 observations on the following variables.

- `Year`
- `Revenue` (in millions of US dollars)

Source

Revenue of Nike from 2005 to 2024 (in million U.S. dollars). Accessed on June 18, 2025.

References

https://www.statista.com/statistics/241683/nikes-sales-worldwide-since-2004/

Examples

```
data(NikeRevenue)
```

NintendoSwitch *Nintendo Switch Sales*

Description

A data set containing the cumulative sales of the Nintendo Switch worldwide from 2017 to 2024.

Usage

```
data(NintendoSwitch)
```

Details

A data frame with 8 observations on the following variables.

- `Year`
- `Sales` (in millions of units)

Source

Annual unit sales of the Nintendo Switch worldwide from 2017 to 2024. Accessed on August 3, 2025.

References

https://www.statista.com/statistics/1085606/annual-unit-sales-nintendo-switch-worldwide/

Examples

```
data(NintendoSwitch)
```

NYCHousingPrices *New York City Housing Prices*

Description

A data set containing the contains the median sales price of housing in New York City from October 2022 (Month=0) to October 2024 (Month=24).

Usage

```
data(NYCHousingPrices)
```

Details

A data frame with 25 observations on the following variables.

- `Month` (since October 2022)
- `Price` (in US dollars)

Source

Median sales price of housing in New York City from January 2019 to October 2024 (in U.S. dollars). Accessed on May 31, 2025.

References

https://www.statista.com/statistics/1235655/median-sale-price-of-housing-new-york/

Examples

```
data(NYCHousingPrices)
```

OilProductionAnnual1 *Annual US Oil Production*

Description

A subset of the data set containing the number of barrels (in thousands) of crude oil produced per year in the United States.

Usage

```
data(OilProductionAnnual1)
```

Details

A data frame with 38 observations on the following variables.

- `Year`
- `Barrels` (in thousands)

Source

U.S. field production of crude oil in billions of barrels from the U.S. Energy Information Administration from "U.S. Field Production of Crude Oil." Accessed on July 3, 2014.

References

http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPUS1&f=M

Examples

```
data(OilProductionAnnual1)
```

`OilProductionAnnual2` *Annual US Oil Production*

Description

A subset of the data set containing the number of barrels (in thousands) of crude oil produced per year in the United States.

Usage

```
data(OilProductionAnnual2)
```

Details

A data frame with 114 observations on the following variables.

- `Year`
- `Barrels` (in thousands)

Source

U.S. field production of crude oil in billions of barrels from the U.S. Energy Information Administration from "U.S. Field Production of Crude Oil." Accessed on July 3, 2014.

References

http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPUS1&f=M

Examples

```
data(OilProductionAnnual2)
```

`OnlineAdvertising` *Online Advertising Revenue*

Description

A data set containing the online advertising revenue in the United States from 2000 to 2024 in billion of U.S. dollars.

Usage

```
data(OnlineAdvertising)
```

Details

A data frame with 25 observations on the following variables.

- `Year`
- `Revenue` (in billions of US dollars)

Source

Online advertising revenue in the United States from 2000 to 2024 (in billion U.S. dollars). Accessed on August 3, 2025.

References

https://www.statista.com/statistics/183816/us-online-advertising-revenue-since-2000/

Examples

```
data(OnlineAdvertising)
```

OrganicFood *Organic Food Sales*

Description

A data set containing the organic food sales in the United States in billions of U.S. dollars from 2005 to 2023.

Usage

```
data(OrganicFood)
```

Details

A data frame with 19 observations on the following variables.

- `Year`
- `Sales` (billions of US dollars)

Source

Organic food sales in the United States from 2005 to 2023 (in billion U.S. dollars). Accessed on September 26, 2024.

References

https://www.statista.com/statistics/196952/organic-food-sales-in-the-us-since-2000/

Examples

```
data(OrganicFood)
```

PaypalAccounts *Active Paypal Accounts*

Description

A data set containing the global number of active Paypal accounts in millions each quarter from the first quarter in 2010 (Quarter=1).

Usage

```
data(PaypalAccounts)
```

Details

A data frame with 48 observations on the following variables.

- `Quarter`
- `Accounts` (in millions)

Source

Global user number of PayPal from 1st quarter 2010 to 2nd quarter 2024. Accessed on October 2, 2024.

References

https://www.statista.com/statistics/218493/paypals-total-active-registered-accounts-from-2010/

Examples

```
data(PaypalAccounts)
```

PaypalUsers *Worldwide Number of Paypal Accounts*

Description

A data set containing the worldwide number of Paypal accounts in millions from the first quarter of 2010 (Quarter=1) to the first quarter of 2025.

Usage

```
data(PaypalUsers)
```

Details

A data frame with 61 observations on the following variables.

- `Quarter` (since first Quarter of 2010)
- `Accounts` (in millions)

Source

Global user number of Paypal from 1st quarter 2010 to 1st quarter 2025. Accessed on June 18, 2025.

References

https://www.statista.com/statistics/218493/paypals-total-active-registered-accounts-from-2010/

Examples

```
data(PaypalUsers)
```

`PesticideConsumption` *Pesticide Consumption*

Description

A data set containing the worldwide agricultural consumption of pesticides in million metric tons from 1990 to 2022.

Usage

```
data(PesticideConsumption)
```

Details

A data frame with 33 observations on the following variables.

- `Year`
- `Pesticide` (in million metric tons)

Source

Agricultural consumption of pesticides worldwide from 1990 to 2022 (in million metric tons). Accessed on September 26, 2024.

References

https://www.statista.com/statistics/1263077/global-pesticide-agricultural-use/

Examples

```
data(PesticideConsumption)
```

PollenCountLA *Pollen Count in Los Angeles, CA*

Description

A data set containing the pollen count each day in Los Angeles from April to July of 2014.

Usage

```
data(PollenCountLA)
```

Details

A data frame with 30 observations on the following variables.

- `Date` (since April 1, 2014)
- `Count` (Pollen count in Los Angeles, CA)

Source

Three-year average monthly pollen count in Los Angeles, California from "Historic Allergy Index for 90001 | Pollen.com." Accessed on June 25, 2014.

References

http://www.pollen.com/allergy-trends.asp?PostalCode=90001

Examples

```
data(PollenCountLA)
```

PopulationBelgium *Population of Belgium*

Description

A data set containing the population of Belgium in millions of people.

Usage

```
data(PopulationBelgium)
```

Details

A data frame with 18 observations on the following variables.

- `Year`
- `People` (in millions of people)

Source

Population of Belgium in millions of people by year from "Population of the Netherlands, Belgium, and Luxembourg." Accessed on June 26, 2014.

References

http://www.tacitus.nu/historical-atlas/population/benelux.htm

Examples

```
data(PopulationBelgium)
```

RoosterWeight *Mean Rooster Weight*

Description

A data set containing the mean weight of roosters in grams as a function of the age in days.

Usage

```
data(RoosterWeight)
```

Details

A data frame with 28 observations on the following variables.

- `Day`
- `Weight` (in grams)

Source

Aggrey, S.E. Comparison of Three Nonlinear and Spline Regression Models for Describing Chicken Growth Curves. *Poultry Science*, Volume 81, Issue 12, December 1, 2022, 1782-1788.

Examples

```
data(RoosterWeight)
```

RunningSpeed *Running Speed of Animals*

Description

A data set containing the running speed in centimeters per second as a function of the length in centimeters of various animals.

Usage

```
data(RunningSpeed)
```

Details

A data frame with 12 observations on the following variables.

- `Length` (in centimeters)
- `Speed` (in centimeters per second)

Source

Running speed and length of animals from page 152. McMahon, Thomas A., and John Tyler Bonner. *On Size and Life*. New York: Scientific American Library, 1983.

Examples

```
data(RunningSpeed)
```

SATMathKentucky *SAT Math Scores in Kentucky*

Description

A data set containing the average SAT math score in Kentucky each year from 1980 to 2013.

Usage

```
data(SATMathKentucky)
```

Details

A data frame with 34 observations on the following variables.

- `Year`
- `Score` (Average SAT math score in Kentucky)

Source

Average SAT math score in Kentucky each year from 1980 to 2013 from College Board's 2013 SAT State Profile Report for Kentucky. Accessed on July 16, 2014.

References

http://media.collegeboard.com/digitalServices/pdf/research/2013/KY_13_03_03_01.pdf

Examples

```
data(SATMathKentucky)
```

SeaTemperature *Average Global Sea Surface Temperature*

Description

A data set containing the average sea surface temperature from 1910 to 2020, measured in degrees Fahrenheit from a 1971-2000 baseline average.

Usage

```
data(SeaTemperature)
```

Details

A data frame with 111 observations on the following variables.

- `Year`
- `Temperature` (in degrees Fahrenheit)

Source

Average global sea surface temperature from "Climate Change Indicators: Sea Surface Temperature." Accessed on April 25, 2024.

References

https://www.epa.gov/climate-indicators/climate-change-indicators-sea-surface-temperature

Examples

```
data(SeaTemperature)
```

SmartphoneUsers *Smartphone Users Worldwide*

Description

A data set containing the worldwide number of smartphone users from 2014-2024 in millions.

Usage

```
data(SmartphoneUsers)
```

Details

A data frame with 11 observations on the following variables.

- `Year`
- `Users` (in millions)

Source

Number of smartphone users worldwide from 2014 to 2029 (in millions). Accessed on October 2, 2024.

References

https://www.statista.com/forecasts/1143723/smartphone-users-in-the-world

Examples

```
data(SmartphoneUsers)
```

SolarCapacity *Solar photovoltaic capacity in United States*

Description

A data set containing the cumulative solar photovoltaic capacity in the United States from 2000 to 2023 measured in megawatts.

Usage

```
data(SolarCapacity)
```

Details

A data frame with 24 observations on the following variables.

- `Year`
- `Capacity` (in megawatts)

Source

Cumulative solar PV capacity in the United States from 2000 to 2023 (in megawatts). Accessed on October 2, 2024.

References

https://www.statista.com/statistics/232863/cumulative-solar-pv-capacity/

Examples

```
data(SolarCapcity)
```

StJohnsTides *Tides in St. Johns, Newfoundland*

Description

A data set containing the water levels in meters at St. Johns, Newfoundland on the Bay of Fundy each hour from midnight July 13, 2025 to midnight July 15, 2025.

Usage

```
data(StJohnsTides)
```

Details

A data frame with 672 observations on the following variables.

- `Hour` (since midnight July 23, 2025)
- `Level` (in meters)

Source

Water levels at St. Johns relative to chart datum. St. Johns - 00905. Accessed on August 2, 2025.

References

https://tides.gc.ca/en/stations/00905/2025-07-13

Examples

```
data(StJohnsTides)
```

`StudentDebt1` *Average Student Debt*

Description

A subset of the data set containing the average cumulative debt of bachelor's degree students enrolled in public colleges and universities.

Usage

```
data(StudentDebt1)
```

Details

A data frame with 7 observations on the following variables.

- `Year`
- `Debt` (Average cummulative debt)

Source

Average debt load in 2013 dollars of bachelor's degree recipients attending U.S. public colleges and universities who borrowed money to finance their education from "Average Cumulative Debt Load of Bachelor's Degree Recipients at Public Four-Year Institutions over Time — Trends in Higher Education." Accessed on July 5, 2015.

References

https://trends.collegeboard.org/student-aid/figures-tables/average-debt-levels-public-sector-bachelors-degree-recipients-over-time

Examples

```
data(StudentDebt1)
```

StudentDebt2 *Average Student Debt*

Description

A data set containing the average cumulative debt of bachelor's degree students enrolled in public colleges and universities.

Usage

```
data(StudentDebt2)
```

Details

A data frame with 15 observations on the following variables.

- `Year`
- `Debt` (Average cumulative debt)

Source

Average debt load in 2013 dollars of bachelor's degree recipients attending U.S. public colleges and universities who borrowed money to finance their education from "Average Cumulative Debt Load of Bachelor's Degree Recipients at Public Four-Year Institutions over Time — Trends in Higher Education." Accessed on July 5, 2015.

References

https://trends.collegeboard.org/student-aid/figures-tables/average-debt-levels-public-sector-bachelors-degree-recipients-over-time

Examples

```
data(StudentDebt2)
```

StudentLoans *Student Loan Debt in United States*

Description

A data set containing the value of outstanding student loans in the United States in billions of US dollars each quarter from the first quarter of 2006 (Quarter=1) to the fourth quarter of 2024.

Usage

```
data(StudentLoans)
```

Details

A data frame with 76 observations on the following variables.

- `Quarter` (quarter since first quarter of 2006)
- `Loans` (in billions of US dollars)

Source

Value of outstanding student loans in the United States from Q1 2006 to Q4 2024 (in billion U.S. dollars). Accessed on August 3, 2025.

References

https://www.statista.com/statistics/1077038/value-outstanding-student-loans-us/

Examples

```
data(StudentLoans)
```

SunflowerHeight *Height of a Sunflower*

Description

A data set containing the height of a sunflower in centimeters as a function of the day.

Usage

```
data(SunflowerHeight)
```

Details

A data frame with 13 observations on the following variables.

- `Day`
- `Height` (in centimeters)

Source

Reed, H.S. and Holland, R. H., The Growth of an Annual Plant Helianthus, *Proceedings of the National Academy of Sciences* (USA), 5, 135-144 (1919).

Examples

```
data(SunflowerHeight)
```

SunPositionAlaska *Sun Position in Anchorage, Alaska*

Description

A data set containing the altitude angle of the sun in Anchorage, Alaska, each hour from midnight on June 29, 2014 (hour 0) until midnight on June 30, 2014 (hour 24).

Usage

```
data(SunPositionAlaska)
```

Details

A data frame with 25 observations on the following variables.

- `Time` (hours since midnight on June 29, 2014)
- `Position` (Altitude angle of the sun)

Source

Altitude angle of the sun in Anchorage, Alaska, each hour from midnight on June 29, 2014 (hour 0) until midnight on June 30, 2014 (hour 24) from "Sun & moon times, Anchorage, Alaska, U.S.A." Accessed on July 1, 2014.

References

http://www.timeanddate.com/astronomy/usa/anchorage

Examples

```
data(SunPositionAlaska)
```

SunriseCancun *Sunrise in Cancun, Mexico*

Description

A data set containing the time of sunrise in Cancun, Mexico in minutes after 6 AM on the first day of each month from July 2023 to August 2025.

Usage

```
data(SunriseCancun)
```

Details

A data frame with 26 observations on the following variables.

- `Month` (since July 2023)
- `Sunrise` (minutes after 6 AM)

Source

Cancun, Quintana Roo, Mexico — Sunrise, Sunset, and Daylength, August 2025. Accessed on August 4, 2025.

References

https://www.timeanddate.com/sun/mexico/cancun

Examples

```
data(SunriseCancun)
```

SunriseLA *Sunrise in Los Angeles, CA*

Description

A data set containing the number of minutes after 4 a.m. until sunrise in Los Angeles, California, adjusted for Daylight Savings Time, from January 2010 (month 1) through December 2011 (month 24).

Usage

```
data(SunriseLA)
```

Details

A data frame with 24 observations on the following variables.

- `Month` (from January 2010)
- `Time` (minutes after 4 a.m.)

Source

Number of minutes after 4 a.m. until sunrise in Los Angeles, adjusted for Daylight Savings Time, from January 2010 (month 1) through December 2011 (month 24) from "Sunrise and sunset times in Los Angeles, December 2011." Accessed on July 14, 2014.

References

http://www.timeanddate.com/sun/usa/los-angeles?month=12&year=2011

Examples

```
data(SunriseLA)
```

SunsetGreenwich *Sunset in Greenwich, England*

Description

A data set containing the number of minutes after 3 p.m. until sunset at Greenwich, England since January 2010.

Usage

```
data(SunsetGreenwich)
```

Details

A data frame with 25 observations on the following variables.

- `Month` (from January 2010)
- `Minutes` (minutes after 3 p.m.)

Source

Number of minutes after 3 p.m. until sunset in Greenwich, England since January 2010 from "Sunrise and sunset times in Greenwich Borough." Accessed on July 14, 2014.

References

http://www.timeanddate.com/sun/uk/greenwich-city

Examples

```
data(SunsetGreenwich)
```

SunsetLA *Sunset in Los Angeles, CA*

Description

A data set containing the number of minutes after 4 p.m. until sunset in Los Angeles, California, adjusted for Daylight Savings time, from January 2010 (month 1) through December 2013 (month 48).

Usage

```
data(SunsetLA)
```

Details

A data frame with 48 observations on the following variables.

- `Month` (from January 2010)
- `Minutes` (minutes after 4 p.m.)

Source

Number of minutes after 4 p.m. until sunset in Los Angeles, California, adjusted for Daylight Savings Time, from January 2010 (month 1) through December 2013 (month 48) from "Sunrise and sunset times in Los Angeles, December 2011." Accessed on July 14, 2014.

References

http://www.timeanddate.com/sun/usa/los-angeles?month=12&year=2011

Examples

```
data(SunsetLA)
```

SwimmingSpeed *Swimming Speed of Various Animals*

Description

A data set containing the swimming speed in centimeters per second as a function of the length in centimeters of various animals

Usage

```
data(SwimmingSpeed)
```

Details

A data frame with 17 observations on the following variables.

- `Length` (in centimeters)
- `Speed` (swimming speed of animal in centimeters per second)

Source

Swimming speed and length of animals from page 152. McMahon, Thomas A., and John Tyler Bonner. *On Size and Life*. New York: Scientific American Library, 1983.

Examples

```
data(SwimmingSpeed)
```

TemperaturesDanville *Temperatures in Danville, KY*

Description

A data set containing the average maximum temperature in Danville, Kentucky at the beginning of each month since January 2006

Usage

```
data(TemperaturesDanville)
```

Details

A data frame with 60 observations on the following variables.

- `Month` (from January 2006)
- `Temperature` (in degrees Fahrenheit)

Source

Average maximum temperature in Danville, Kentucky at the beginning of each month since January 2006 from "noaa.gov." Accessed on June 25, 2014

References

http://www1.ncdc.noaa.gov/pub/orders/cdo/352625.pdf

Examples

```
data(TemperaturesDanville)
```

TemperaturesLexington *Average Temperature in Lexington, KY*

Description

A data set containing the average maximum temperature in Lexington, Kentucky at the beginning of each month since October 2019.

Usage

```
data(TemperaturesLexington)
```

Details

A data frame with 61 observations on the following variables.

- `Month` (since October 2019)
- `Temperature` (in degrees Fahrenheit)

Source

Average maximum temperature in Lexington Kentucky at the beginning of each month since October 2019 from "Lexington, KY Weather History. Accessed on January 7, 2025.

References

https://www.wunderground.com/history/monthly/us/ky/lexington/KLEX/date/2024-10.

Examples

```
data(TemperaturesLexington)
```

TeslaRevenue *Revenue of Tesla*

Description

A data set containing the revenue of Tesla from 2008 to 2024 in millions of US dollars.

Usage

```
data(TeslaRevenue)
```

Details

A data frame with 9 observations on the following variables.

- `Year`
- `Revenue` (in millions of US dollars)

Source

Revenue of Tesla from 2008 to 2024 (in millions U.S. dollars). Accessed on June 18, 2025.

References

https://www.statista.com/statistics/272120/revenue-of-tesla/

Examples

```
data(TeslaRevenue)
```

TherapodLength *Body length of therapods*

Description

A data set containing the body length in meters of different therapods as a function of the skull length in meters.

Usage

```
data(TherapodLength)
```

Details

A data frame with 19 observations on the following variables.

- `Skull` (in meters)
- `Body` (in meters)

Source

Therrien, François & Henderson, Donald. (2007). My theropod is bigger than yours...or not: Estimating body size from skull length in theropods. Journal of Vertebrate Paleontology. 108-115. doi: 10.1671/0272-4634(2007)27[108:MTIBTY] 2.0.CO;2. Accessed on October 8, 2024.

References

https://www.researchgate.net/publication/232687833_My_theropod_is_bigger_than_yoursor_not_Estimating_body_size_fr

Examples

```
data(TherapodLength)
```

ThreadfinBream *Weight of Threadfin Bream*

Description

A data set containing the weight of threadfin bream measured in grams as a function of their length in centimeters

Usage

```
data(ThreadfinBream)
```

Details

A data frame with 16 observations on the following variables.

- `Length` (in centimeters)
- `Weight` (in grams)

Source

Pauly, D., Some simple methods for the 1983 assessment of tropical fish stocks.*FAO Fish.Tech.Pap*., (234):52 p.

Examples

```
data(ThreadfinBream)
```

ToyotaMonthly *Toyota Stock Prices*

Description

A data set containing the average monthly stock price of Toyota from 1982 to 1998.

Usage

```
data(ToyotaMonthly)
```

Details

A data frame with 60 observations on the following variables.

- `Month` (from January 1982)
- `Value` (in US dollars)

Source

Toyota Motors Corporation (TM) stock market value in U.S. dollars from "Yahoo Finance | TM Historical Prices." Accessed on August 13, 2016.

References

http://finance.yahoo.com/quote/TM/history?p=TM

Examples

```
data(ToyotaMonthly)
```

`Transistors` *Transistors in an Integrated Circuit*

Description

A data set containing the number of transistors in an integrated circuit from 1971 to 2021.

Usage

```
data(Transistors)
```

Details

A data frame with 39 observations on the following variables.

- `Year`
- `Transistors`

Source

Number of transistors in an integrated circuit from "Moore's Law: The number of transistors per microprocessor." Accessed on May 8, 2024.

References

https://ourworldindata.org/grapher/transistors-per-microprocessor.

Examples

```
data(Transistors)
```

`TwitterUsers` *Twitter Users*

Description

A data set containing the number of monthly active Twitter users worldwide by quarter (e.g., 10.25 represents April to June 2010) in millions of people.

Usage

```
data(TwitterUsers)
```

Details

A data frame with 17 observations on the following variables.

- `Year` (since 2000)
- `Users` (in millions)

Source

Number of monthly active Twitter users worldwide from 1st quarter 2010 to 1st quarter 2016 (in millions) from "Twitter : number of monthly active users 2010–2016 | Statista." Accessed on June 9, 2016.

References

http://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/

Examples

```
data(TwitterUsers)
```

TwitterUsers1 *Twitter Users*

Description

A data set containing how many millions of people used Twitter from the first quarter of 2012 to the end of the third quarter of 2013.

Usage

```
data(TwitterUsers1)
```

Details

A data frame with 8 observations on the following variables.

- `Year` (since 2000)
- `Users` (in millions)

Source

Number of monthly active Twitter users worldwide from 1st quarter 2010 to 1st quarter 2016 (in millions) from "Twitter : number of monthly active users 2010–2016 | Statista." Accessed on June 9, 2016.

References

http://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/

Examples

```
data(TwitterUsers1)
```

TwitterUsers2 *Twitter Users*

Description

A data set containing how many millions of people used Twitter from the first quarter of 2010 to the end of the third quarter of 2013.

Usage

```
data(TwitterUsers2)
```

Details

A data frame with 15 observations on the following variables.

- `Year` (since 2000)
- `Users` (in millions)

Source

Number of monthly active Twitter users worldwide from 1st quarter 2010 to 1st quarter 2016 (in millions) from "Twitter : number of monthly active users 2010–2016 | Statista." Accessed on June 9, 2016.

References

http://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/

Examples

```
data(TwitterUsers2)
```

`TwitterUsers3` *Twitter Users*

Description

A data set containing how many millions of people used Twitter from the first quarter of 2010 to the beginning of 2016.

Usage

```
data(TwitterUsers3)
```

Details

A data frame with 24 observations on the following variables.

- `Year` (since 2000)
- `Users` (in millions)

Source

Number of monthly active Twitter users worldwide from 1st quarter 2010 to 1st quarter 2016 (in millions) from "Twitter : number of monthly active users 2010–2016 | Statista." Accessed on June 9, 2016.

References

http://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/

Examples

```
data(TwitterUsers3)
```

`UKOnlineSales` *Online Retail Sales in the United Kingdom*

Description

A data set containing the value of online retail sales in billions of Great British pounds (GBP) in the United Kingdom from 2012 to 2022.

Usage

```
data(UKOnlineSales)
```

Details

A data frame with 11 observations on the following variables.

- `Year`
- `Sales` (in billions of GBP)

Source

Value of online retail sales in the United Kingdom (UK) from 2012 to 2022 (in billion GBP). Accessed on June 24, 2025.

References

https://www.statista.com/statistics/315506/online-retail-sales-in-the-united-kingdom/

Examples

```
data(UKOnlineSales)
```

UnemploymentRate *United States Unemployment Rate*

Description

A data set containing the annual United States unemployment rate from 1990 to 2024.

Usage

```
data(UnemploymentRate)
```

Details

A data frame with 35 observations on the following variables.

- `Year`
- `Rate`

Source

Unemployment rate in the United States from 1990 to 2024. Accessed on May 28, 2025.

References

https://www.statista.com/statistics/193290/unemployment-rate-in-the-usa-since-1990/

Examples

```
data(UnemploymentRate)
```

UrbanPopulation *Urban Population*

Description

A data set containing the urban population of the United States (in millions) from 1960 to 2020.

Usage

```
data(UrbanPopulation)
```

Details

A data frame with 61 observations on the following variables.

- `Year`
- `Population` (in millions of people)

Source

Size of the urban and rural population of the United States from 1960 to 2020 (in millions). Accessed on September 19, 2024.

References

https://www.statista.com/statistics/985183/size-urban-rural-population-us/

Examples

```
data(UrbanPopulation)
```

USCO2Emissions *US CO2 Emissions*

Description

A data set containing U.S. carbon dioxide emissions in kT (energy) annually from 1980 to 2008 according to the World Bank.

Usage

```
data(USCO2Emissions)
```

Details

A data frame with 29 observations on the following variables.

- `Year`
- `kT`

Source

United States carbon dioxide emissions in kT annually from 1960 to 2010 according to the World Bank at "Data | United States." Accessed on July 10, 2014.

References

http://data.worldbank.org/country/united-states

Examples

```
data(USCO2Emissions)
```

USGDPDebt *United States Debt as a Percentage of GDP*

Description

A data set containing the total public debt of the United States as a percentage of the US gross domestic product from the first quarter of 1966 to the first quarter of 2025.

Usage

```
data(USGDPDebt)
```

Details

A data frame with 237 observations on the following variables.

- `Quarter` (since first Quarter of 1966)
- `Percent`

Source

U.S. Office of Management and Budget and Federal Reserve Bank of St. Louis, Federal Debt: Total Public Debt as Percent of Gross Domestic Product [GFDEGDQ188S], retrieved from FRED, Federal Reserve Bank of St. Louis. Accessed on August 10, 2025.

References

https://fred.stlouisfed.org/series/GFDEGDQ188S

Examples

```
data(USGDPDebt)
```

USGrossDomesticProduct *United States Gross Domestic Product*

Description

A data set containing the gross domestic product of the United States in billions of US dollars each quarter from the first quarter of 1966 to the second quarter of 2025.

Usage

```
data(USGrossDomesticProduct)
```

Details

A data frame with 238 observations on the following variables.

- `Quarter` (since first Quarter of 1966)
- `GDP` (in billions of US dollars)

Source

U.S. Bureau of Economic Analysis, Gross Domestic Product [GDP], retrieved from FRED, Federal Reserve Bank of St. Louis. Accessed on August 15, 2025.

References

https://fred.stlouisfed.org/series/GDP

Examples

```
data(USGrossDomesticProduct)
```

`USInflationRate` *United States Inflation Rate*

Description

A data set containing the annual inflation rate of the United States from 2010 to 2023.

Usage

```
data(USInflationRate)
```

Details

A data frame with 14 observations on the following variables.

- `Year`
- `Rate`

Source

Projected annual inflation rate in the United States from 2010 to 2029. Accessed on May 31, 2025.

References

https://www.statista.com/statistics/244983/projected-inflation-rate-in-the-united-states/

Examples

```
data(USInflationRate)
```

USMilitarySpending *United States Military Spending*

Description

A data set containing the annual United States military spending in billions of US dollars from 1960 to 2022.

Usage

```
data(USMilitarySpending)
```

Details

A data frame with 35 observations on the following variables.

- `Year`
- `Spending` (in billions of US dollars)

Source

U.S. Military Spending/Defense Budget 1960-2025. Accessed on May 28, 2025.

References

https://www.macrotrends.net/global-metrics/countries/usa/united-states/military-spending-defense-budget

Examples

```
data(USMilitarySpending)
```

USNationalDebt *United States National Debt*

Description

A data set containing the total United States pulic debt in millions of US dollars each quarter from the first quarter of 1966 to the first quarter of 2025.

Usage

```
data(USNationalDebt)
```

Details

A data frame with 237 observations on the following variables.

- `Quarter` (since first Quarter of 1966)
- `Debt` (in millions of US dollars)

Source

U.S. Department of the Treasury. Fiscal Service, Federal Debt: Total Public Debt [GFDEBTN], retrieved from FRED, Federal Reserve Bank of St. Louis. Accessed on August 15, 2025.

References

https://fred.stlouisfed.org/series/GFDEBTN

Examples

```
data(USNationalDebt)
```

`USNuclearTests` *United States Nuclear Tests*

Description

A data set containing the cumulative number of nuclear tests conducted by the United States as a function of the year.

Usage

```
data(USNuclearTests)
```

Details

A data frame with 48 observations on the following variables.

- `Year`
- `Tests`

Source

United States Nuclear Tests July 1945 through September 1992. U.S. Department of Energy Nevada Operations Office. DOE/NV—209REV15, December 2000. Accessed on June 17, 2025.

References

https://www.osti.gov/opennet/manhattan-project-history/publications/DOENuclearTests.pdf

Examples

```
data(USNuclearTests)
```

`USPopulationDecade` *United States Population*

Description

A data set containing the population of the United States in thousands of people each decade.

Usage

```
data(USPopulationDecade)
```

Details

A data frame with 23 observations on the following variables.

- `Year`
- `Population` (in thousands of people)

Source

Population of the United States from 1610 to 2020 (in thousands). Accessed on July 22, 2025.

References

https://www.statista.com/statistics/1067138/population-united-states-historical/

Examples

```
data(USPopulationDecade)
```

USPowerProduction *US Electricity Generation*

Description

A data set containing the United States net electricity generation in terawatt-hours from 1950 to 2024.

Usage

```
data(USPowerProduction)
```

Details

A data frame with 27 observations on the following variables.

- `Year`
- `Power` (in terawatt-hours)

Source

Net electricity generation in the United States from 1950 to 2024 (in terawatt-hours). Accessed on June 18, 2025.

References

https://www.statista.com/statistics/188521/total-us-electricity-net-generation/

Examples

```
data(USPowerProduction)
```

USRetailTax *US Retail Tax*

Description

A data set containing U.S. retail tax in millions of dollars each year from 2005 through 2011.

Usage

```
data(USRetailTax)
```

Details

A data frame with 7 observations on the following variables.

- `Year`
- `Tax` (in millions of dollars)

Source

Annual total retail sales taxes collected in the United States in each year from "Monthly & Annual Retail Trade, Main Page — U.S. Census Bureau." Accessed on July 14, 2014.

References

http://www.census.gov/retail/

Examples

```
data(USRetailTax)
```

USTaxReceipts *United States Tax Receipts*

Description

A data set containing the total amount of United States federal government receipts in billions of US dollars each quarter from January 1947 to January 2025.

Usage

```
data(USTaxReceipts)
```

Details

A data frame with 313 observations on the following variables.

- `Quarter` (since January 1947)
- `Receipts` (in billions of US dollars)

Source

Federal government current tax receipts, billions of US dollars, seasonally adjusted annual rate. Accessed on August 1, 2025

References

https://fred.stlouisfed.org/series/W006RC1Q027SBEA

Examples

```
data(USTaxReceipts)
```

`USTotalPopulation` *Total U.S. Population*

Description

A data set containing the U.S. population in millions of people each decade from 1900 to 2010 based on the census.

Usage

```
data(USTotalPopulation)
```

Details

A data frame with 9 observations on the following variables.

- `Year`
- `Population` (US population in millions of people)
- `RelGrowth` (Relative growth rate of the US population)

Source

U.S. census data for 1950–2000 is from "Measuring America: The Decennial Censuses from 1790 to 2000." Accessed on June 9, 2016.

References

https://www.census.gov/prod/2002pubs/pol02-ma.pdf http://www.census.gov/2010census/popmap/

Examples

```
data(USTotalPopulation)
```

VehicleRegistrations *United States Vehicle Registrations*

Description

A data set containing the number of motor vehicles registered in the United States in 1000's from 1990 to 2022.

Usage

```
data(VehicleRegistrations)
```

Details

A data frame with 33 observations on the following variables.

- `Year`
- `Vehicles` (in 1000's)

Source

Number of motor vehicles registered in the United States from 1990 to 2022 (in 1,000s). Accessed on September 26, 2024.

References

https://www.statista.com/statistics/183505/number-of-vehicles-in-the-united-states-since-1990/

Examples

```
data(VehicleRegistrations)
```

VerizonEmployees *Number of Verizon Employees*

Description

A data set containing the number of employees at Verizon in thousands from 2007 to 2024.

Usage

```
data(VerizonEmployees)
```

Details

A data frame with 18 observations on the following variables.

- `Year`
- `Employees` (in thousands)

Source

Number of employees at Verizon from 2007 to 2024. Accessed on August 1, 2025.

References

https://www.statista.com/statistics/257304/number-of-employees-at-verizon/

Examples

```
data(VerizonEmployees)
```

VO2Max *Mammalian maximal metabolic rate*

Description

A data set containing the maximal metabolic rate in mL/min of various mammalian species as a function of their mass in kilograms

Usage

```
data(VO2Max)
```

Details

A data frame with 34 observations on the following variables.

- `Mass` (in kilograms)
- `VO2Max` (in mL/min)

Source

Ewald R. Weibel, Leonardo D. Bacigalupe, Beat Schmitt, and Hans Hoppeler. Allometric scaling of maximal metabolic rate in mammals: muscle aerobic capacity as determinant factor, Respiratory Physiology & Neurobiology, Volume 140, Issue 2, 2004, Pages 115-132, ISSN 1569-9048, https://doi.org/10.1016/j.resp.2004.01.006. Accessed on October 8, 2024.

References

https://www.sciencedirect.com/science/article/pii/S1569904804000126.

Examples

```
data(VO2Max)
```

`WaterLevelsEastportMaine`

Water Levels in Eastport, Maine

Description

A data set containing the water level in Eastport, Maine from May 26, 2016 to May 27, 2016 measured in feet above the mean lower water level as a function of the time after 12:00 a.m. on May 26, 2016.

Usage

```
data(WaterLevelsEastportMaine)
```

Details

A data frame with 477 observations on the following variables.

- `Hours` (since 12 a.m. on May 26m, 2016)
- `WaterLevel` (feet above the mean lower water level)

Source

Observed water levels in Eastport, Maine from NOAA Tides and Currents. Accessed on June 2, 2016.

References

http://tidesandcurrents.noaa.gov/waterlevels.html?id=8410140&units=standard&bdate=20160526&edate=20160527&timez

Examples

```
data(WaterLevelsEastportMaine)
```

WeightChange *Weight Change during Pregnancy*

Description

A data set containing the change in one woman's weight during a pregnancy from the beginning of her second trimester until birth.

Usage

```
data(WeightChange)
```

Details

A data frame with 129 observations on the following variables.

- `Day` (since beginning of second trimester)
- `Weight` (in pounds)

Source

Personal data collection

Examples

```
data(WeightChange)
```

WineQuality *Wine Quality of Red Vinho Verde Wines from Portugal*

Description

A data set containing data on 1599 red vinho verde wines from Portugal. For each wine, the alcohol level, the volatile acidity of the wine, amount of sulphates present in the wine, and a sensory score assigned by a human expert based on the wines smell is recorded.

Usage

```
data(WineQuality)
```

Details

A data frame with 1599 observations on the following variables.

- `volatileAcidity` (in grams per liter)
- `sulphates` (parts per million)
- `alcohol` (percent)
- `quality` (number between 0 and 10)

Source

Cortez, P., Cerdeira, A., Almeida, F., Matos, T., & Reis, J. (2009). Wine Quality [Dataset]. UCI Machine Learning Repository. Accessed on May 21, 2025.

References

https://doi.org/10.24432/C56S3T.

Examples

```
data(WineQuality)
```

WineSales *Sales Volume of Wine in United States*

Description

A data set containing the sales volume of wine in the United States, measured in millions of 9-liter cases, from 1999 to 2023.

Usage

```
data(WineSales)
```

Details

A data frame with 23 observations on the following variables.

- `Year`
- `Cases` (millions of 9-liter cases)

Source

Sales volume of wine in the United States from 1999 to 2023 (in million 9-liter cases). Accessed on March 11, 2025.

References

https://www.statista.com/statistics/715474/wine-sales-in-us/

Examples

```
data(WineSales)
```

`WorldPopulation` *World Population*

Description

A data set containing the total midyear population for the world from 1950 to 2015.

Usage

```
data(WorldPopulation)
```

Details

A data frame with 14 observations on the following variables.

- `Year`
- `People` (in billions)

Source

Estimated world population data from 1950 to 2015 from "International Programs — Total Mid-Year Population for the World: 1950–2050 — U.S. Census Bureau." Accessed on June 16, 2014.

References

http://www.census.gov/population/international/data/worldpop/table_population.php

Examples

```
data(WorldPopulation)
```

WorldPopulationChange *World Population Change*

Description

A data set containing the percent growth of the world's population as a function of the year from 1970 to 2015.

Usage

```
data(WorldPopulationChange)
```

Details

A data frame with 10 observations on the following variables.

- `Year`
- `Growth` (Percent growth of worlds population)

Source

World population from the U.S. Census Bureau. Accessed on June 3, 2016.

References

http://www.census.gov/population/international/data/worldpop/table_population.php

Examples

```
data(WorldPopulationChange)
```

XUsers *Active X Users Worldwide*

Description

A data set containing the number of active X (formerly Twitter) users worldwide in millions each quarter from the first quarter of 2020 to the first quarter of 2019.

Usage

```
data(XUsers)
```

Details

A data frame with 37 observations on the following variables.

- `Year`
- `Users` (in millions)

Source

Number of monthly active X (formerly Twitter) users worldwide from 1st quarter 2010 to 1st quarter 2019. Accessed on January 15, 2025.

References

http://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/

Examples

```
data(XUsers)
```

`YellowCards` *Yellow Cards in World Cup*

Description

A data set containing the number of yellow cards given per men's World Cup tournament from 1970 to 2010.

Usage

```
data(YellowCards)
```

Details

A data frame with 11 observations on the following variables.

- `Year`
- `Cards` Number of yellow cards given

Source

Number of yellow cards given per men's World Cup tournament from "Planet World Cup." Accessed on July 16, 2014.

References

http://www.planetworldcup.com

Examples

```
data(YellowCards)
```

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