

# **Dataset Information**

This is a list of what all of the variables are and where the dataset is from.

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## **Babies**

The data on 189 births were collected at Baystate Medical Center, Springfield, Mass. during 1986. The goal of this study was to identify risk factors associated with giving birth to a low birth weight baby (weighing less than 2500 grams). Data was collected on 189 women, 59 of which had low birth weight babies and 130 of which had normal birth weight babies.

Variable	Description
LowBirthWeight	No = Birth Weight >= 2500g
	Yes = Birth Weight < 2500g
MothersAge	Age of the Mother in Years
Race	Race of the mother
MotherSmoke	Smoking Status During Pregnancy
FTV	Number of Physician Visits During the First Trimester
BirthWeight	Birth Weight in Grams



## **Ball Wear**

Data was recorded of students going to the school ball in 2012 as to how much they spent on their clothing and accessories.

Variable	Description
Gender	Boy = new student is male
	Girl = new student is female
Amount.spent	The amount spent on clothing and accessories in New Zealand Dollars.

## Cars

With rising costs of owning and running a car, and environmental awareness, buyers are becoming more conscious of the features when purchasing new cars. The data supplied is for new vehicles sold in America in 1993.

Variable	Description
Vehicle Name	
Origin	Country of manufacture
	· America
	· Foreign
Price	US \$1000
Туре	Small, midsize, large, compact, sporty, van
City	City MPG (miles per gallon by EPA rating)
OpenRoad	Highway MPG
Drive Train	Front Wheel Drive
	Rear Wheel Drive
Engine Size	Size in litres
Manual Transmission	Yes
	No
Weight	Weight of car in Kg

## **Diamonds**

Every diamond is unique, and there are a variety of factors which affect the price of a diamond. Insurance companies in particular are concerned that stones are valued correctly. Data on 236 round diamond stones was collected from a Singapore based retailer of diamond jewellery, who had the stones valued.

Variable	Description
Carat	Weight of diamond stones in carat units 1 carat = 0.2 grams
Colour	Numerical value given for quality of colour ranging from 1=colourless to 6=near
	colourless
Clarity	Average = score 1, 2 or 3
	Above average = score 4, 5 or 6
Lab	Laboratory that tested & valued the diamond
	1 = laboratory 1
	2 = laboratory 2
Price	Price in US dollars



# **Empty Dataset for Editing**

This is a blank dataset designed for entering experimental data.

#### Kiwi

A sample of kiwi birds around New Zealand was collected in order to help with conservation efforts. The original data is from: <a href="http://www.kiwisforkiwi.org/">http://www.kiwisforkiwi.org/</a> and was sourced from the secondary school guides (<a href="http://seniorsecondary.tki.org.nz/Mathematics-and-statistics/Achievement-objectives/AOs-by-level/AO-S7-1">http://seniorsecondary.tki.org.nz/Mathematics-and-statistics/Achievement-objectives/AOs-by-level/AO-S7-1</a>)

Variable	Description	
Species	GS-Great Spotted	
	NIBr-NorthIsland Brown	
	Tok-Southern Tokoeka	
Gender	M-Male	
	F-Female	
Weight(kg)	The weight of the kiwi bir	d in kg
Height(cm)	The height of the kiwi bird	d in cm
Location	NWN-North West Nelson	SF-South Fiordland
	CW-Central Westland	N-Northland
	EC-Eastern Canterbury	E-East North Island
	StI-Stewart Island	W-West North Island
	NF-North Fiordland	

Teachers note: this is a synthesised dataset based on real data. At the time of creating the data set there were around 25,000 brown, 17,000 great spotted and 34,500 southern tokoeka. These numbers formed the basis of the data set, but instead of being out of around 76,000 the data set contains around 700 birds.

The data was generated using the population parameters, including gender, location, height, weight and species in Fathom. The size of the population was so that it was too big to use all the data (when doing by hand) but not too big that it couldn't be created for students to use as a "population" to sample from.

#### Marathon

The data is a sample taken from marathons in NZ. It is a simple random sample of 200 athletes.

Variable	Description
Minutes	How many minutes they completed the marathon in
Gender	Male (M) or Female (F)
AgeGroup	Younger (under 40) or older (over 40)
StridelengthCM	The persons average stride length over the marathon in cm.



# Rugby

The data is real data and comes from <a href="http://www.rugby-sidestep-central.com/">http://www.rugby-sidestep-central.com/</a>

Variable	Description
Country	New Zealand or South Africa
Position	Forward or Back
Weight	The weight of the player in kilograms (kg)
Height	The height of the player in metres (m)

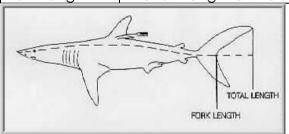
## **Sharks**

The data is real and comes from the MPI centralised observer database:

http://www.fish.govt.nz/mi-

nz/Research+Services/Research+Database+Documentation/Cod/default.htm

Variable	Description
Calendar Year	Year which the data was recorded in
Fish Sex	The gender of the shark
Total Length	The total length of the shark
Fork Length	The fork length of the shark



# **Sports Science**

The data is real data and comes from <a href="http://www.statsci.org/data/oz/ais.html">http://www.statsci.org/data/oz/ais.html</a>
The data set provides information about 102 male athletes and 100 female athletes at the Australian Institute of Sport.

Variable	Description
Sex	male or female
Sport	sport played
Ht	height in cm
Wt	weight in kg
LBM	lean body mass in kg
%Bfat	% body fat
BMI	body mass index (weight/height²)
RCC	red blood cell count
WCC	white blood cell count
Нс	haematocrit
Hg	haemoglobin
Ferr	plasma ferritin concentration
SSF	sum of skin folds

Teachers note: this is the dataset used in the TKI Exemplar A



## TS Note

All datasets prefixed with a TS that are preloaded in NZGrapher are time series datasets, and not particularly well suited to bivariate or multivariate analysis.

## TS - Births and Deaths

Data on the number of births and deaths in New Zealand. The data is sourced from Statistics New Zealand.

Variable	Description
Quarter	Quarterly
Male Live Births	Number of males born during the quarter
Female Live Births	Number of females born during the quarter
Male Deaths	Number of male deaths during the quarter
Female Deaths	Number of female deaths during the quarter

# TS - Forestry

The volume of wood removed from different types of forests in New Zealand. The data is sourced from the Ministry for Primary Industries.

Variable	Description
Quarter	Quarterly
Natural Forests	The volume of wood removed from Natural Forests in millions of m <sup>3</sup>
Plantation Forests	The volume of wood removed from Plantation Forests in millions of m <sup>3</sup>

# TS - Imports

Information on imports to and from New Zealand. The data is sourced from Statistics New Zealand.

Variable	Description
Month	Monthly
TotalAirportsCIF	Cost, insurance and freight of imported goods in NZ\$(000)
TotalParcelPostCIF	Cost, insurance and freight of imported goods in NZ\$(000)
TotalSeaportsCIF	Cost, insurance and freight of imported goods in NZ\$(000)
TotalAirportsWeight	Weight of imported goods in tonnes
TotalParcelPostWeight	Weight of imported goods in tonnes
TotalSeaportsWeight	Weight of imported goods in tonnes

# TS - Jobs

The number of people in employment in New Zealand. The data is sourced from Statistics New Zealand.

Variable	Description
Month	Monthly
Total Filled Jobs	The number of jobs that are filled in millions
NZ Population	The population of New Zealand in millions



# TS - Penguin

Data on the number of penguins at the Phillip Island Penguin Parade in Australia. This data was created by a teacher on her return from Philip Island and should not be considered \*real\* but is still useful for teaching and learning.

Variable	Description	
Month	Monthly	
Number	The number of penguins in the colony	

## TS - Sea Ice

The data is the surface area of sea ice in millions of square kilometres. The data is sourced from the National Snow and Ice Data Center.

Variable	Description
Time	Monthly
Arctic	Million Square Kilometres of Ice in the Arctic
Antarctica	Million Square Kilometres of Ice in Antarctica

You can find some more info about the different measurements used to calculate sea ice and why the numbers in the different versions are different here: <a href="https://students.mathsnz.com/nzgrapher/pdfs/NSIDC-special-report-19.pdf">https://students.mathsnz.com/nzgrapher/pdfs/NSIDC-special-report-19.pdf</a>

# TS - Sunglasses

Data on the value of sunglasses sold.

Variable	Description	
Quarter	Quarterly	
Sales	Amount of sales in thousands of dollars	

## TS - Visitors

The visitors' dataset is the number of people entering New Zealand on a Visitor Visa from Australia, China, Japan and the UK.

The data is sourced from Statistics New Zealand.

Variable	Description
Date	Quarterly
Australia	Number of visitors in the quarter from Australia
China, People's Republic of	Number of visitors in the quarter from China
Japan	Number of visitors in the quarter from Japan
United Kingdom	Number of visitors in the quarter from the UK