



## 1.15 Exercise: Import data into iNZight Lite

This exercise will enable you to import data into iNZight Lite from a variety of sources. You will learn how to:

- Load data stored within iNZight Lite.
- Import a data file stored outside iNZight Lite. (Optional)
- Create and import your own data file. (Optional)

Follow these instructions to import data into iNZight Lite. If you have any difficulty completing this exercise, you may find the common questions on page 5 to be useful.

[The [getting started](#) video linked to the previous exercise supplemented and a new (40 sec) video about [finding the "Data to Insight" data sets](#) built into iNZight Lite covers this material.]

## Load data stored within iNZight Lite

Open iNZight Lite on your computer and go to **File > DataSet Examples**. Click on the drop down menu: **Select Data set category** and choose **Future-Learn**.

Select a data file, try **NHANES-1000**. Click on **Select Set** to start using the data. The file will automatically load in to the window on the right showing the first rows of the dataset.

The screenshot shows the iNZight Lite interface. The 'File' menu is open, and 'Dataset Examples' is selected. The 'Select Data set category' dropdown is set to 'Future-Learn', and 'NHANES-1000' is selected from the list. The 'SELECT SET' button is highlighted. The right-hand side shows the selected data set details and a table of the first 5 rows.

**Selected data set: NHANES-1000**

Selected data number of rows is: 1000  
Selected data number of columns is: 41

Column names: SurveyYr, ID, Gender, Age, AgeDecade, Race3, Education, MaritalStatus, HHIncome, HHIncomeMid, Poverty, HomeRooms, HomeOwn, Work, Weight, Height, BMI, BMI\_WHO, Pulse, BPSysAve, BPDiaAve, Testosterone, DirectChol, TotChol, UrineVol1, UrineFlow1, HealthGen, DaysPhysHlthBad, DaysMentHlthBad, SleepHrsNight, Alcohol12PlusYr, SmokeNow, Smoke100, SmokeAge, Marijuana, AgeFirstMarij, RegularMarij, AgeRegMarij, HardDrugs, SexEver, SexAge

**Data: NHANES-1000**

Show 5 entries Search:

SurveyYr	ID	Gender	Age	AgeDecade	Race3	Education	Mar
2011_12	63549	female	5	0-9	Black		
2011_12	64871	female	49	40-49	White	CollegeGrad	Marri
2011_12	70551	male	37	30-39	White	SomeCollege	Marri
2011_12	66033	female	37	30-39	White	9_11thGrade	Marri

The data appear in the right hand side of your window. The top row shows the names of each variable and the data on that variable is in the column below. Scroll right to see all the variables. Click on the variable name to sort the data by that variable. Using the drop down at the top of the data you can view more data in each snapshot: 5, 30 or 50 at a time. At the bottom of the screen you will see the variable name repeated.

Now you have data, try to do something with it. Click on the **Visualize** tab at the top middle of the page. You should see this ...

The screenshot shows the iNZight Lite interface. At the top, there is a navigation bar with the logo 'inzight lite' and several menu items: 'About', 'File', 'Visualize', 'Dataset', 'Manipulate variables', and 'Advanced'. Below the navigation bar, there are three tabs: 'Plot', 'Summary', and 'Inference'. The 'Plot' tab is selected. On the left side, there is a 'Variable selection' panel with a small checkbox. Below this panel, there are four dropdown menus: 'Select first variable:' (set to 'SurveyYr'), 'Select second variable:' (set to 'none'), 'Subset by:' (set to 'none'), and another 'Subset by:' (set to 'none'). Below these are 'Advanced Options' with radio buttons for 'Hide' (selected) and 'Show'. On the right side, there is a plot titled 'Distribution of SurveyYr'. The plot shows a single bar for the category '2011\_12' with a proportion of 100%. The y-axis is labeled 'Proportion (%)' and ranges from 0 to 100. The x-axis is labeled 'SurveyYr' and has the category '2011\_12'.

Use **Select first variable** to select the variable **AgeDecade** and see what happens. Similarly select other variables as **first variable**.

Click the little box marked by the arrow above. The behaviour changes.

Click inside the **Select first variable** box and use the up and down arrow keys and see what happens. Now uncheck the little box to get the original behaviour back.

Select **Weight** as first variable. Now use **Select second variable** and choose some variables of interest to you. Then play with some other things. iNZight Lite is a program that really rewards just trying things out and seeing what happens.

To load a new data set for this course, just click on one of the other FutureLearn datasets on the left-hand side and click on **SELECT SET** again.

## PRACTICE

Load the **Gapminder-2008** data set into iNZight Lite. Scroll so that you can see more of the data. Try clicking on variable names to sort the data.

## Import a data file from outside iNZight Lite. (optional)

Download the file [olympics100m.csv](#) and place it on your Desktop.

Now go:

- **File > Import Dataset**
- Press the **Browse** button and using the file browser that appears to navigate to **olympics100m** on your desktop and open the file. The data will get imported.
  - It is this easy because **olympics100m.csv** is in a file type format that iNZight Lite recognises (csv or "comma separated values")
- When you see it, click on the **Visualize** tab and play.

## Create and import data (optional)

iNZight Lite expects **rectangular data** in which the first row of cells contains the **names of variables** and everything in the column beneath contains **data recorded on that variable**.

Below is some data for 10 people from the New Zealand **CensusAtSchool** database.

- **Open up a spreadsheet program** such as Excel and type in some of the data illustrated below (maybe the first 5 rows of the gender, age and height columns).

	A	B	C	D	E	F	G
1	gender	age	height	armspan	memory	reaction	region
2	female	12	165	173	44	0.328	Auckland Region
3	male	13	156	147	41	0.344	Otago Region
4	female	15	162	158	34	0.345	Bay of Plenty Region
5	female	13	176	176	31	0.387	Auckland Region
6	female	13	162	156	62	0.54	Wellington Region
7	male	12	144	144	59	3.597	Auckland Region
8	female	12	146	144	33	0.459	Auckland Region
9	male	11	153	151	75	0.948	Other North Island
10	female	15	163	160	47	0.544	Auckland Region
11	female	7	123	123	56	0.54	Other North Island
12							

- **Save your file on your Desktop:** Use **Save As**, type in some suitable name for your file and for **File Type** choose **Text (tab-delimited)** (it will then give your file .txt extension on its name).
- Now go **File > Import data...** and continue as above to import your new little data set into iNZight.

Both **csv** (comma-separated values) and **tab-delimited text** are common data formats that iNZight Lite automatically recognises from the filename extensions.

**Tab-delimited text** is preferable if you are in continental Europe or any other country that uses "," as the decimal separator rather than "." (e.g. 0,57 instead of 0.57).

## Common questions

### *My data won't import at all*

Try opening your data file in Excel (or similar) and save it in **Text (tab-delimited)** format. When you go to import the data you should see a .txt extension on the end of its name..

### *My data still won't load*

Check your data set for spaces. If you are using csv files, ensure that your column names do not have commas in them.

Check that your numeric variables do not have "O" s instead of "0"s.

Try loading just the necessary rows and columns of your data by cutting and pasting them into another spreadsheet and saving as a new file.

*iNZight Lite cannot currently read Excel files.*

### Still have problems?

iNZight's [FAQ page on importing data](#) may be useful.

Read the article called [Using your own data](#).