

2.15 Exercise: Time travel

This exercise will enable you to construct the types of graphs used in the previous video. You will learn how to:

1. Make separate group-comparison dot plots for different subsets of the data defined by a third variable.
2. View different plots for categories of a third variable.

[iNZight Lite version linked [here](#)]

[The first 3 minutes of the iNZight instructional video linked [here](#) provides useful background (it deals with more variable types)]

[**Note to Windows users:** The below works a lot better if you stop using iNZight in integrated-windows mode and switch to dual-window mode which works better for Windows. Go **File > Preferences** and click **Use dual window display mode** and then **Save**. *This does not take effect until you close iNZight down and start it up again.*]

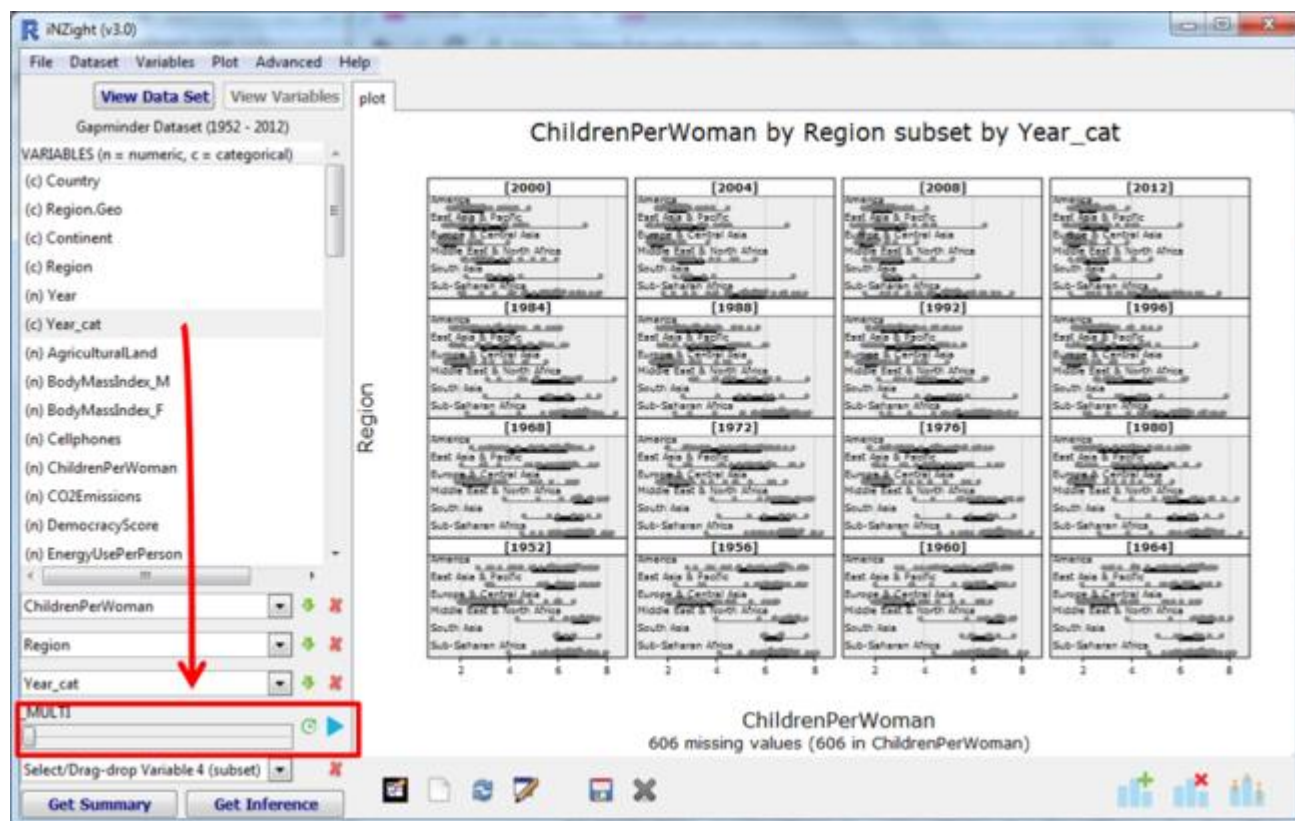
INSTRUCTIONS

Follow the instructions below to generate the plots. Or you may prefer to [print the instructions](#). If you have any problems doing this exercise, scroll down to **Common questions**.

Load the **gapminder** dataset (**NOT gapminder_2008**) into iNZight using **File > Example data** You will find the data set in *Module (package) FutureLearn*. Put iNZight into **View Variables** mode.

Make a set of group-comparison dot plots

Drag the variable name **ChildrenPerWoman** into the **Variable 1** slot and **Region** into the **Variable 2** slot and **Year_cat** into the **Variable 3 (subset)** slot.



Note: iNZight automatically produces a set of group-comparison dot plots when you drag the names of a **numeric** variable into the **Variable 1** slot, a **categorical** variable into the **Variable 2** slot and a **third** variable into the **Variable 3 (subset)** slot.

View different plots for categories of a third variable

Underneath the Variable 3 slot a slider and play button will have appeared. Click the **Play** button on the left side of the iNZight screen and watch it play through all the years on that window. The little **Timer** button lets you speed up or slow down how fast it plays.

You can also play through the graphs in a more controlled way by using the **slider** to the left of the *play* button. You can either **drag** the slider handle or (better) **click** the slider handle and then *move it* with the left and right **arrow keys**.

PRACTICE (~5 min)

Do this with a number of other choices for the numeric variable in the **Variable 1** slot. You can also experiment with interchanging the positions of **Region** and **Year_cat**. If you see something interesting, post a comment.

OPTIONAL

If you want to play with a more recent version of the data download [Gapminder_1952-2016_by_4yrs.csv](https://www.stat.auckland.ac.nz/~wild/data/gapminder_datasets/) from https://www.stat.auckland.ac.nz/~wild/data/gapminder_datasets/. [Some variable names may differ somewhat from those in the Exercise above.]

Common questions

I cannot see the Year_cat variable .

Make sure you are using the **gapminder** data set and not **gapminder_2008**.

Why are we using Year_cat and not Year ?

Since **Year_cat** is categorical, iNZight subsets by every value of **Year_cat**. If you do it using a numeric variable like **Year** then iNZight will create 4 class-interval subsets.

Why is the transition between graphs slow and "flashy"?

See the "Note to Windows users" above.

In the panel of graphs the Years are ordered from bottom-left to top-right. Why is that?

They are behaving like numbers plotted on a scatter plot – they get larger going up the page and towards the right.

Remember, for **how to** instructions for iNZight you should consult iNZight's [User Guides](#). For **technical issues** with running iNZight, you should first consult iNZight's [frequently asked questions \(FAQ\)](#) page and if the answer you need is not there ask at [iNZight support](#).