



Answers to the Practical Stats webinar topic R Statistics, from 2014 and 2015.

Comment: Hugh Hamilton: It's "free" but still expensive if there is a learning curve. Commercial packages often come with free phone support etc. that offsets the up-front price.

DRH ANSWER: I agree. For users who only need the routines found in a commercial package, those software packages make a lot of sense.

Xueyuan Yu: can you recommend a text book of how to use r?

[answer from] Jeremy Mears: A good book I have used is "R in Action" by Kabacoff

[answer from] David Doyle: R in Action is great and his web page is great.

<http://www.statmethods.net/>

DRH ANSWER: There are many free R books online, many of which are on the CRAN site. One is by John Verzani, at <http://cran.r-project.org/doc/contrib/Verzani-SimpleR.pdf>

David Doyle: Can you tell us an example or 2 of a GUI for R?

[answer from] John Tate: One GUI for R is Rcmdr

DRH ANSWER: I regularly use R Commander (Rcmdr). Two that are more oriented to programming with R, are TinnR and RStudio. All are free.

Andrew Wan: First time user of R here: Where do you find the dropdown menus for R?

DRH ANSWER: Well, the default R console has menus for installing and loading packages, and running scripts. Rcmdr adds the pull down menus for running statistical tests, making R look like commercial software.

Marlena Brewer: Any other programs that can do permutation tests besides R?

DRH ANSWER: Yes. SAS does them. Others are beginning to. Here's the third name for these methods: Resampling methods. You should look at Good's *Introduction to Statistics Through Resampling Methods and Microsoft Office Excel*. With a little help, even Excel can perform them.

Kerry-Anne Pumphrey: is the on-demand report available for everyone using R or only for those associated with WQSAR?

DRH ANSWER: The programming that created the site was either done by the agency staff or by a contractor. It doesn't come with R, though all the capabilities to do it come with R. As I said in the video, the agency only made the site public during the testing process. Once that ended my understanding is that the site is only available to financially cooperating agencies. However I believe that the US Geological Survey has several sites where you see pull-down menus that then use R to go get data and produce graphs or statistical results, presenting them online to you.