

Statistics & Data Analyses Through R



8th October 2020 – online webinar

Morning Session

- 10:00 – 11:00 Introduction and background to R, bringing over 15 years experience with R to provide examples of its use in processing, analysing and visualising groundwater quality data sets. **Dan Lapworth BGS** -
- 11:00 - 11:30 Q&A session

Afternoon Session

20 minute case studies followed by Q&A

- 1:30 – 2:00 A BEGINNERS PERSPECTIVE; starting out with R, data input requirements, data clustering and regression analyses. **Sonja Masterson**
- 2:00 – 2:30 TELLING YOUR “DATA” STORY WITH R MARKDOWN; creating output with summary statistics, images, interactive hydrographs and maps. **Shane Carey GSI**
- 2:30 – 3:00 INCENTIVES AND FEASIBILITY TO GET STARTED WITH R FOR ‘NON-CODERS’; A demonstration of how R can quickly improve efficiency and capability in data collation, visualization and computing, including an overview of useful hydrogeological R-packages. **Bentje Brauns BGS**
- 3:00 – 3:30 MODELLING OF GROUNDWATER LEVEL HYDROGRAPHS IN R; development of automated, reproducible workflows for pre-processing, modelling, post-processing and analysis of groundwater level hydrographs. **Matt Ascott BGS**
- 3:30 – 4:00 MANIPULATING AND VISUALISING LARGE DATASETS USING TIDYVERSE; A demonstration of the power of Tidyverse, to clean and manipulate data, and produce striking, clear, reproducible and high impact visualisations using the dplyr and ggplot2 packages. **Donald John MacAllister BGS**