# OTN Workshop Install Instructions

# Preparation

Attendees should:

Bring a laptop with the following software installed (see installation instructions below). This is an interactive workshop.

WARNING: Software installation may require administrative rights to your machine and may take considerable time, depending on internet connection. Install in the order shown so that RStudio will automatically find and link with R. If you have different versions of the software already installed on your computer, we recommend removing previously installed software and re-installing the recommended version to minimize the possibility of installation errors.

Detailed installation instructions are below.

1. R version: 3.6.x or newer (recommend 4.0.x)
2. RStudio
3. Dataset and workshop code
   1. You can download the datasets and code for this workshop from <https://github.com/ocean-tracking-network/2024-biologging-class> .
      1. Select the GREEN "code" button at the top and choose "Download ZIP".
      2. Unzip the folder and move to secure location on your computer (Documents, Desktop etc.)
      3. Copy the folder's path and use it to set your working directly in R using `setwd('<path-to-folder>')`. This will be covered during the workshop.
   2. If you are familiar with Git and Github, feel free to clone this repository as you normally would, by running `git clone https://github.com/ocean-tracking-network/2024-biologging-class.git` in a terminal program and following from step 3 above.
4. Various R packages, provided on the Setup page of the workshop website and also in the `Setup.R` file provided on the workshop GitHub, which you have just downloaded in step 3.

# Instructions for installing R:

1. Point your browser to <https://cran.r-project.org/mirrors.html> and select one of the mirrors for the USA/Canada.
2. Click on the "Download" link of precompiled binary for the distribution that matches your operating system.
   1. If you are installing to a Windows computer, click on "Download R for Windows" link. Under subdirectories, click on “base” and then “Download R 4.0.3 for Windows.”
   2. If you are installing to a Mac, click "Download R for (Mac) OS X" and on the resulting webpage click the "R-4.0.3.pkg" link to download the installer to your computer.
3. Once R finishes downloading, click on the installer and follow the prompts. Make sure to "install as administrator" if you are on Windows. Otherwise, the default options are fine.
4. After install finishes, you should be able to open a R command line terminal by selecting the icon in Windows, or through Launchpad in MacOS.

# Instructions for installing RStudio:

1. Point your browser to <https://www.rstudio.com/products/rstudio/download/> , click the Download button under the RStudio Desktop Free version and you will be directed to download the appropriate RStudio installer for your operating system.
2. Click on downloaded installer and follow the prompts for installing RStudio. Unless you have specific installation requirements, the default options are fine.
3. Once RStudio has finished installing, click on the program icon. RStudio should open with an active R console.