Time series topic 3: Seasonal Kendall Tests

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Objectives for the session (4:15 - 5:00)

- What is and why would we use a Kendall test

- What is a why would we use a *Seasonal* Kendall test

- Application with NERRS data

  - Data prep

  - Execution

  - Interpretation

Interactive portion

Follow along as we go:

- flash drive

- online: swmprats.net 2016 workshop tab

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You will run examples whenever you see this guy:

Is everything installed?

We will use functions in the EnvStats package

Option 1, from the R Console prompt:

```r
install.packages('EnvStats')
library(EnvStats)
```

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```

Option 2, install the source file from the flash drive:

```r
# change as needed
path_to_file <- 'C:/Users/mbeck/Desktop/EnvStats_2.1.1.tar.gz'

# install, load
install.packages(path_to_file, repos = NULL, type="source")
library(SWMPr)
```

Theory and background

Load some water quality data

Summary

Things to ask before Seasonal Kendall

- test

What does Seasonal Kendall not tell us

NERRS / SWMP

Training Workshop: *R, SWMPr, SWMPrats*

Williamsburg, VA, Nov 13, 2016

Up next... nothing!

Questions??

References