R Demo Handout | National Tribal Air Forum

Dorian Kvale and Kristie Ellickson May 16, 2018

$\text{``}\{\text{r setup, include} = \text{FALSE}\}$
$library(rmarkdown)\ library(knitr)\ knitr::opts_chunk\$set(echo=FALSE)$ ""
Today's presentation is online:
$https://mpca-air.github.io/NTF_learn_R/NTF_Demo.html\\$
Upcoming Training!
 2-Day hands-on course Using real air monitoring data Includes criteria pollutants and air toxics
R Camp
Find tutorials and workshops at https://MPCA-air.github.io/RCamp.
R resources
 library(swirl) Intro to R with Pirates! library(YaRrr) @ http://nathanieldphillips.com/thepiratesguidetor Coursera online courses @ https://www.coursera.org/specializations/jhu-data-science R for Data Science by Hadley Wickham (paper book or online) R Bloggers (Great articles online) '#rstats Twitter' (follow this!) R cookbooks @ cookbook-r.com (a variety of simple recipes for data and charts)
Instructions to Install R
$https://mpca-air.github.io/NTF_learn_R/00_Install.html$

Shiny tools in presentation

- Pollution roses
- Site comparisons

R packages in presentation

1. For data reading

library(readxl) library(readr)

1. For air specific analysis, processing and charts

*library(openair)

1. For data processing and cleaning up

library(tidyverse) library(dplyr) *library(lubridate)

1. To make dynamic documents and presentations

library(Rmarkdown) library(knitr)

1. To make dynamic tools

*library(RShiny)

1. To make charts

library(ggplot2) library(ggbeeswarm) library(waffle) library(ggpomological)

1. To make maps

*library(leaflet)

1. To provide other information or just fun.

library(weatherAlerts) library(cowsay)

Contacts

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Notes