

Interactive Map

2024-11-15

#PACKAGE LOADING

```
library(leaflet)
library(htmlwidgets)
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr      1.1.4      v readr      2.1.5
## v forcats    1.0.0      v stringr   1.5.1
## v ggplot2    3.5.1      v tibble    3.2.1
## v lubridate  1.9.3      v tidyr     1.3.1
## v purrr      1.0.2
```

```
## -- Conflicts ----- tidyverse_conflicts() --
```

```
## x dplyr::filter() masks stats::filter()
```

```
## x dplyr::lag()     masks stats::lag()
```

```
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

#DATAFRAME

```
df <- read.csv("~/Desktop/Menstrual taboos/R CODE DATA FILES (USE)/Master's data set.csv", header=TRUE)
```

#CLEANING VARIABLES

```
#Set presence/absence factor levels
```

```
df$Presence <- as.factor(df$Expression)
```

```
levels(df$Presence) <- list("Absence of Menstrual Taboos"=c("0"), "Presence of Menstrual Taboos"=c("1"))
```

```
#Set level of restriction factor levels
```

```
df$Restriction <- ordered(df$Restrictiveness)
```

```
levels(df$Restriction) <- list("Absence of Menstrual Taboos"=c("0"),
```

```
"Minimally Restrictive Menstrual Taboos"=c("1"),
```

```
"Moderately Restrictive Menstrual Taboos"=c("2"),
```

```
"Severly Restrictive Menstrual Taboos"=c("3"))
```

```
#Set subsistence strategy as a factor
```

```
df$Subsistence <- as.factor(df$Subsistence)
```

```
levels(df$Subsistence) <- list("Agriculture"=c("1"),
```

```
"Horticulture"=c("2"),
```

```
"Hunter-Gatherers"=c("3"),
```

```
"Pastoralism"=c("4"))
```

```
df$Subsistence <- factor(df$Subsistence, levels = c("Hunter-Gatherers", "Agriculture", "Horticulture",
```

```
#Set biome as a factor
```

```
df$Biome <- as.factor(df$Landscape)
```

```
levels(df$Biome)
```

```
## [1] "Deserts"      "Forests"      "Grasslands"  "Tundra"
```

```

levels(df$Biome) <- list("Deserts"=c("1"),
"Forests"=c("2"),
"Grasslands"=c("3"),
"Tundra"=c("4"))
df$Biome <- factor(df$Biome, levels = c("Tundra", "Deserts", "Forests", "Grasslands"))

# Prepare the text for the tooltip:
mytext <- paste(
  "Culture: ", df$HRAF.culture, "<br/>",
  "Presence: ", df$Expression, "<br/>",
  "Restriction Level of Taboos: ", df$Restrictiveness, "<br/>",
  "Percent Men Married to More Than One Wife: ", df$Men_Poly,"<br/>",
  "Primary Subsistence Strategy: ", df$Subsistence,"<br/>",
  "Biome: ", df$Biome, "<br/>",
  "Landscape: ", df$Landscape,"<br/>",
  "Average Monthly Temperature (celsius): ", df$MeanMonthlyTemperature, "<br/>",
  "Temperature Predictability: ", df$Temperature_Predictability, "<br/>",
  "Temperature Variability: ", df$Temperature_Variance, "<br/>",
  "Average Monthly Precipitation (mL/m2/month): ", df$MeanMonthlyPrecipitation, "<br/>",
  "Precipitaion Predictability: ", df$Precipitation_Predictability, "<br/>",
  "Precipitaion Variability: ", df$Precipitation_Variance, sep="") %>%
lapply(htmltools::HTML)

# Final Map
m <- leaflet(data = df) %>%
  addTiles() %>%
  addProviderTiles("OpenTopoMap") %>%
  addCircleMarkers(~long, ~lat,
    fillOpacity = 0.8, color="black", radius=3.5, stroke=FALSE,
    label = mytext,
    labelOptions = labelOptions( style = list("font-weight" = "normal", padding = "3px 8px"), textsize :
  )

m

saveWidget(m, file=paste0( getwd(), "/InteractiveMap.html"))

```