

sugar_consumption.Rmd

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Load some R packages:

```
suppressPackageStartupMessages(library(sf))
library(sp)
library(ggplot2)
library(maps)
suppressPackageStartupMessages(library(dplyr))
```

Get some map data and create an sf dataframe:

```
world_map <- map_data("world")
class(world_map)

## [1] "data.frame"

xy_points <- SpatialPoints(cbind(world_map$long, world_map$lat))
xy_points <- st_as_sfc(xy_points)

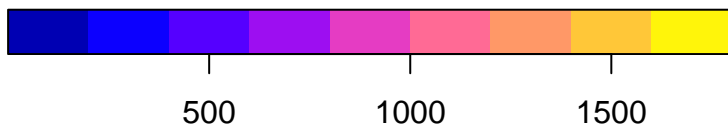
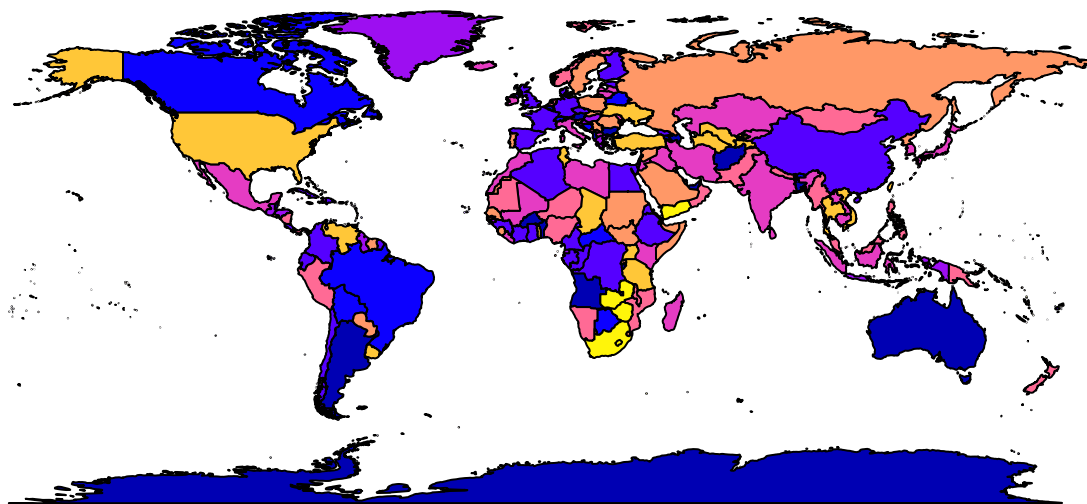
ids <- world_map$group

xy_multipoint <- st_cast(xy_points, to = "MULTIPOINT", ids = ids)
xy_polygon <- st_cast(xy_multipoint, to = "POLYGON")

polygon_sf <- st_sf(data.frame(geometry = xy_polygon, group = unique(ids)))

plot(polygon_sf)
```

group



Combine the sugar data with the map data:

```
world_map_summary <- summarize(group_by(world_map, group, region, subregion), .groups = "keep")

polygon_sf <- left_join(polygon_sf, world_map_summary, by = "group")

sugar_data <- read.csv("WHO_sugar_data.csv")

sugar_data$region <- sugar_data$Location

polygon_sf <- left_join(polygon_sf, sugar_data[,c("region", "Value")], by = "region")

names(polygon_sf)

## [1] "group"      "region"     "subregion"  "Value"      "geometry"
ggplot(polygon_sf) +
  geom_sf(aes(fill = Value))
```

