CASA0005wk4

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##packages “here”,“sf”,“tidyverse”,“dplyr”,“janitor”,“tmap”

##Codes

```
gender_diff <- read_csv(here::here("data", "Gender Inequality Index (GII).csv"),
    skip = 5, na = c("NA", "..", " ")) %>%
    clean_names() %>%
    # calculate the differences
mutate(diff = (x2019 - x2010)) %>%
    select(., c("country", "diff"))
# load world data
worldshp <- st_read(here("data", "World_Countries__Generalized_.shp")) %>%
    # join the data
left_join(., gender_diff, by = c(COUNTRY = "country"))
```

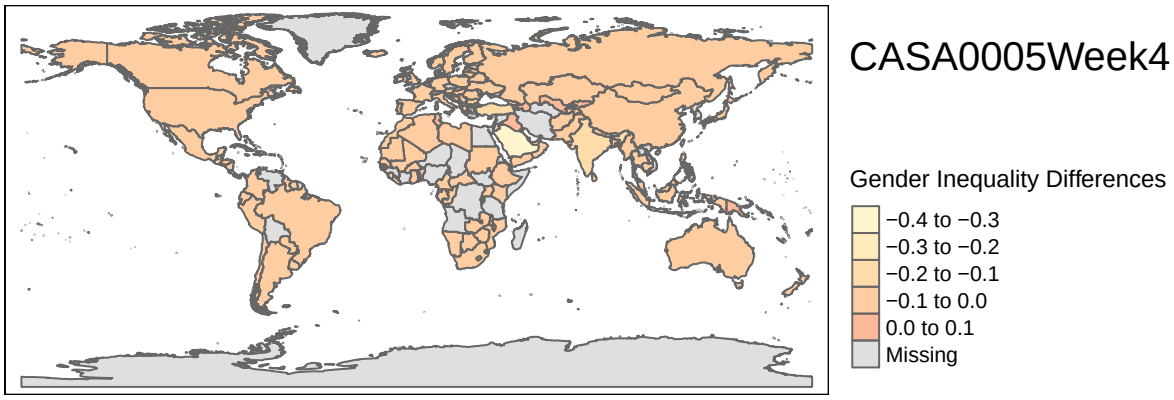
```
## Reading layer ‘World_Countries__Generalized_’ from data source
##   ‘C:\Users\yulin\OneDrive\Desktop\CASA0005\wk4\data\World_Countries__Generalized_.shp’
##   using driver ‘ESRI Shapefile’
## Simple feature collection with 249 features and 7 fields
## Geometry type: MULTIPOLYGON
## Dimension:     XY
## Bounding box:  xmin: -180 ymin: -89 xmax: 180 ymax: 83.6236
## Geodetic CRS:  WGS 84
```

#Plot

```
tmap_mode("plot")
```

```
## tmap mode set to plotting
```

```
tm_shape(worldshp) +
  tm_polygons("diff",
              style="pretty",
              palette="YlOrRd", n = 5,
              midpoint=0,
              title="Gender Inequality Differences",
              alpha = 0.5) +
  tm_layout(title="CASA0005Week4", legend.outside = TRUE, legend.position = c("right", "bottom"))
```



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.