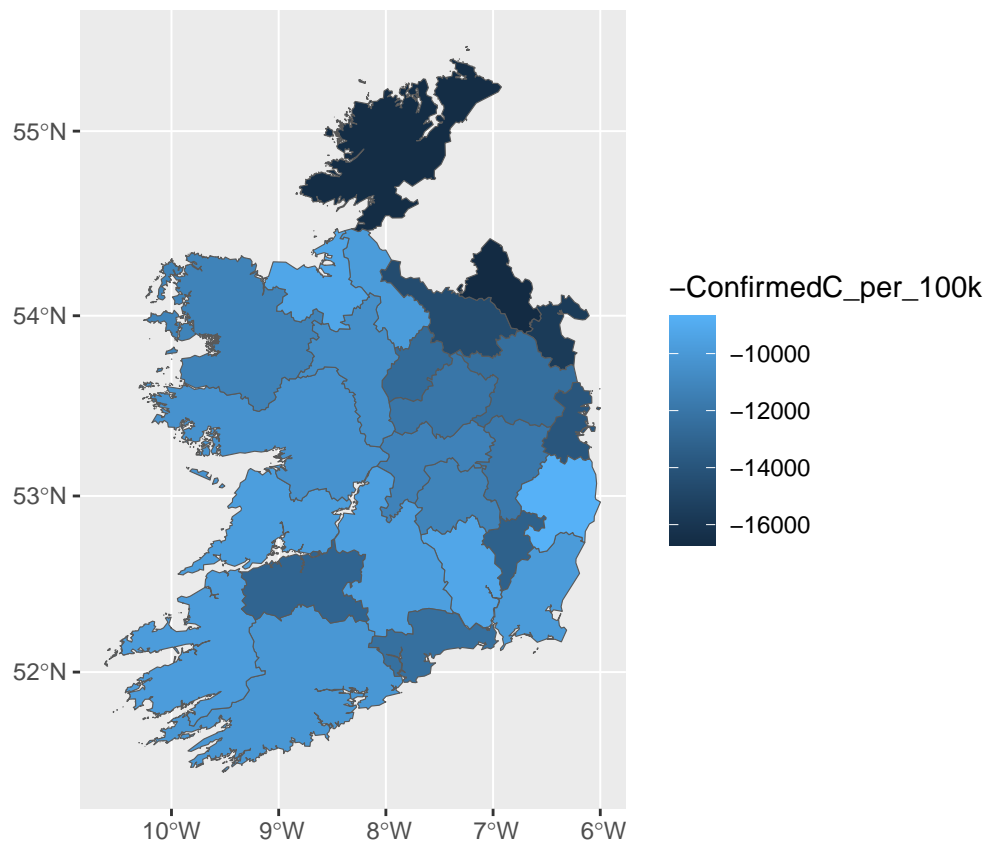


```
library(ggplot2)
library(colorspace)
```

```
## Warning: package 'colorspace' was built under R version 4.1.3
```

```
library(colorblindr)
```

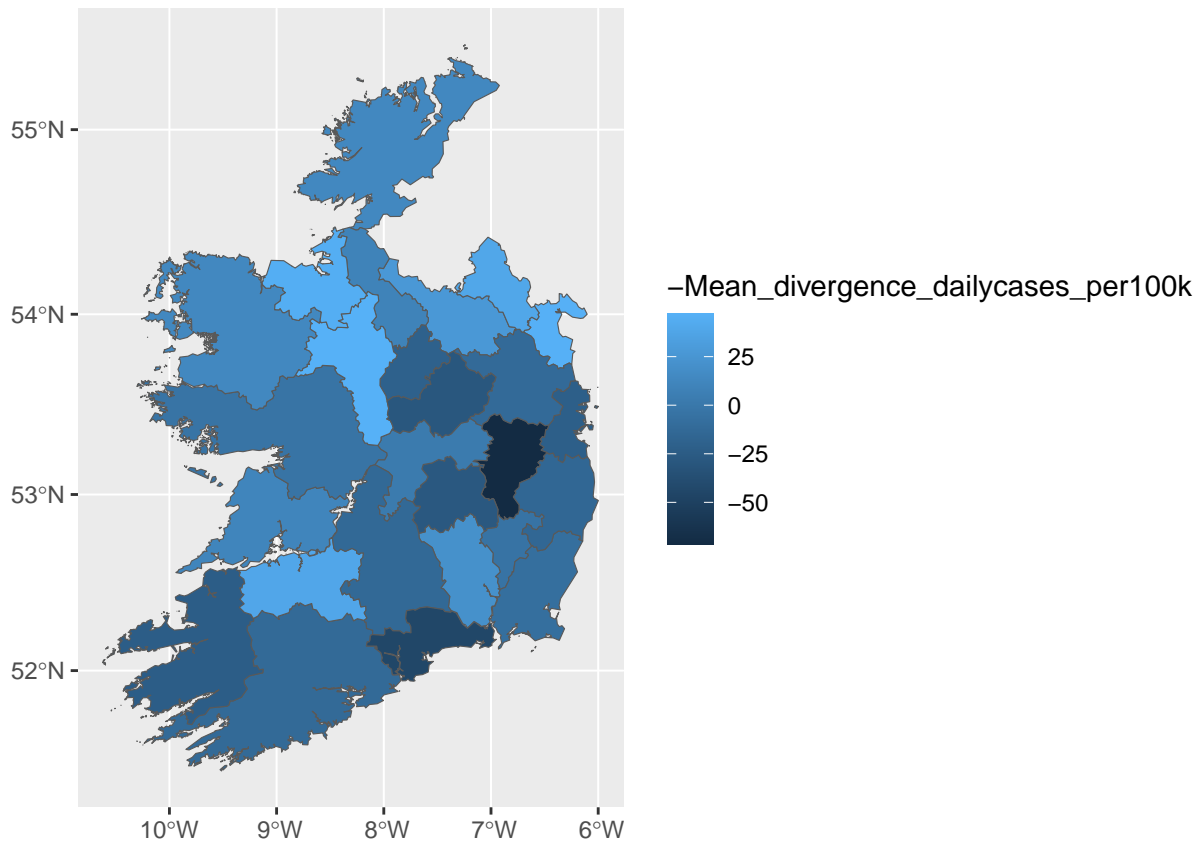
```
ggplot(IRE_Covid19_2021_09_01) +
  geom_sf(aes(fill = -ConfirmedC_per_100k))
```



```
mean_daily_cases <- IRL_Covid19_2021_09_01 %>%
  select(DailyCCase_per_100k) %>%
  st_drop_geometry() %>%
  unlist() %>%
  mean()

IRE_Covid19_2021_09_01 <- IRL_Covid19_2021_09_01 %>%
  mutate(Mean_divergence_dailycases_per100k = DailyCCase_per_100k - mean_daily_cases)

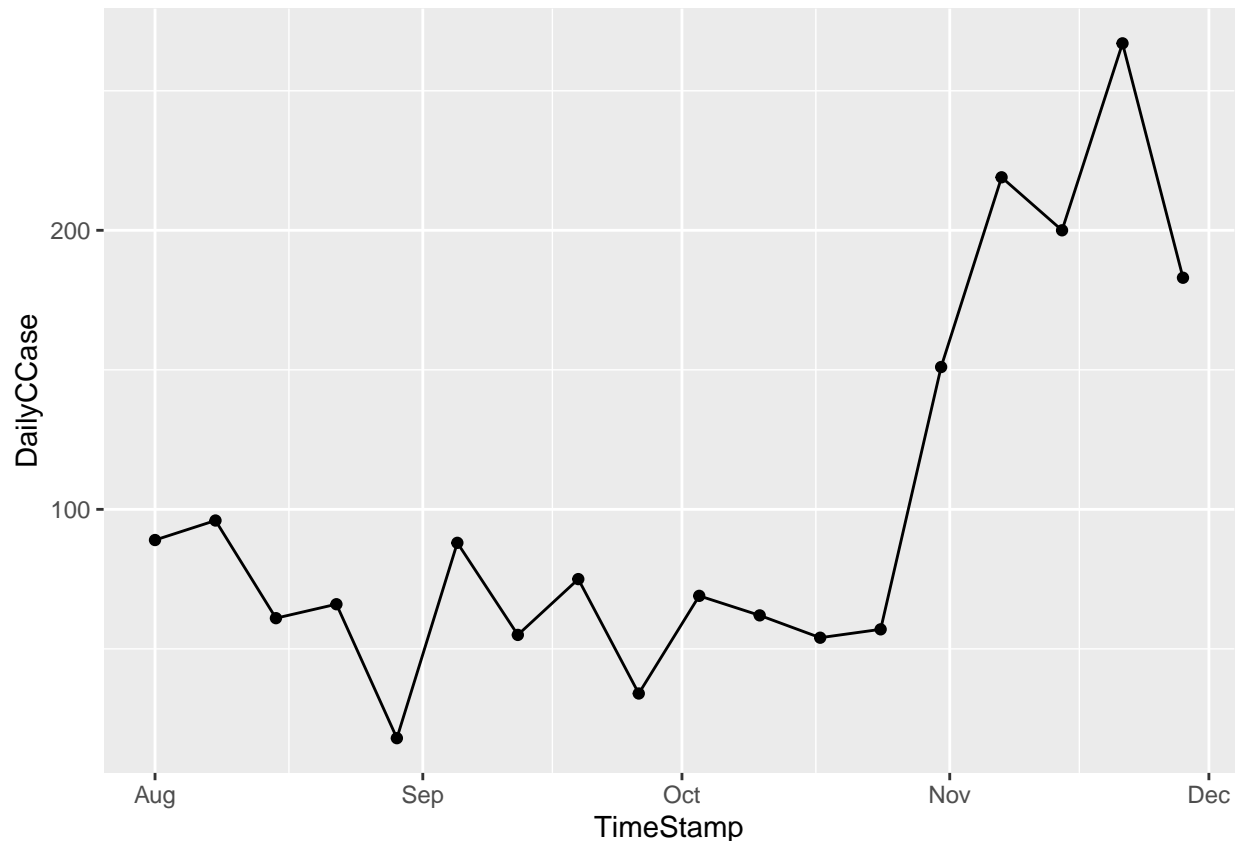
ggplot(IRE_Covid19_2021_09_01) +
  geom_sf(aes(fill = -Mean_divergence_dailycases_per100k))
```



```
library(colorspace)

IRL_Covid19_plot3<- IRL_counties_Covid19%>%
  filter(CountyName == "Galway") %>%
  filter(TimeStamp %in% seq(ymd("2021-08-01") , ymd("2021-12-01"), by="weeks"))

ggplot(IRL_Covid19_plot3, aes(x= TimeStamp, y= DailyCCase)) +
  geom_line()+
  geom_point()
```



```
mean <- IRL_counties_Covid19 %>%
  st_drop_geometry() %>%
  mutate(ConfirmedC_per_100k = round(100000 * ConfirmedC/Population,1))%>%
  mutate(DailyCCase_per_100k = round(100000 * DailyCCase/Population, 1))%>%
  select(CountyName, DailyCCase_per_100k) %>%
  group_by(CountyName) %>%
  summarise(mean = mean(DailyCCase_per_100k, na.rm = TRUE)) %>%
  arrange(desc(mean))

plt_data<- IRL_counties_Covid19%>%
  mutate(ConfirmedC_per_100k = round(100000 * ConfirmedC/Population,1))%>%
  mutate(DailyCCase_per_100k = round(100000 * DailyCCase/Population, 1))%>%
  filter(CountyName %in% c("Galway", head(mean$CountyName, 1), tail(mean$CountyName, 1)))

plt_data2<- IRL_counties_Covid19%>%
  mutate(ConfirmedC_per_100k = round(100000 * ConfirmedC/Population,1))%>%
  mutate(DailyCCase_per_100k = round(100000 * DailyCCase/Population, 1))%>%
  filter(!CountyName %in% c("Galway", head(mean$CountyName, 1), tail(mean$CountyName, 1)))

ggplot(plt_data, aes(y=DailyCCase_per_100k, x = TimeStamp, ))+
  geom_smooth(data = plt_data2,aes(group = CountyName, colour = "#d3d3d3" ), size = 1, alpha = 0.9, na.rm = TRUE)+
  geom_smooth(data = plt_data, aes(group = CountyName, color = CountyName), size = 0.9, alpha = 0.8, na.rm = TRUE)+
  scale_color_manual(values = c("#d3d3d3", "#663399", "#339999", "#000066"), labels = c("Others", "Galway", "Dublin", "Cork"))
```

```
## Warning: Using 'size' aesthetic for lines was deprecated in ggplot2 3.4.0.  
## i Please use 'linewidth' instead.
```

```
##
```

```
## 'geom_smooth()' using formula = 'y ~ x'
```

```
##
```

```
##
```

```
## 'geom_smooth()' using formula = 'y ~ x'
```

