

Resultados

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```
library("tidyr")
library("ggplot2")

# library("fda.usc")
# trayectorias= mortos_raw[,-1]
# datosfda= fdata(trayectorias)
# plot(datosfda)

#setwd("~/Modelo_Covid_descargado/Results/Galicia/")

#####
##### CAMBIAR DENDE AQUÍ #####
#####

i=12 #índice da autonomia
i1_raw= read.table("../src/Results/Galicia/SimulaGalicia_I1.txt")
i2_raw= read.table("../src/Results/Galicia/SimulaGalicia_I2.txt")
i3_raw= read.table("../src/Results/Galicia/SimulaGalicia_I3.txt")
r1_raw= read.table("../src/Results/Galicia/SimulaGalicia_R1.txt")
r2_raw= read.table("../src/Results/Galicia/SimulaGalicia_R2.txt")
mortos_raw=read.table("../src/Results/Galicia/SimulaGalicia_XM.txt")
erro= read.table("../src/Results/Galicia/SimulaGalicia_Error.txt")

autonomias=read.csv("../Data/Autonomias.csv",header=TRUE,sep='\t')

reais=read.csv("../Data/ccaa_covid19_fallecidos.csv",header=TRUE,sep=',')

#####
##### ATA AQUÍ #####
#####

reaisi=as.numeric(reais[(reais$cod_ine)==i,])

nceros=0
j=0
while(reaisi[j+3]==0) {
  nceros=nceros+1
  j=j+1
}

d=ncol(mortos_raw)
r= 18-nceros#numero de dias con antelacion cos que empieza o simulador
```

```

datas=seq( as.Date("2020-03-03")-r, by=1, len=d-1)
names(i1_raw)[-1]=format(datas,"%Y-%m-%d")
names(i2_raw)[-1]=format(datas,"%Y-%m-%d")
names(i3_raw)[-1]=format(datas,"%Y-%m-%d")
names(r1_raw)[-1]=format(datas,"%Y-%m-%d")
names(r2_raw)[-1]=format(datas,"%Y-%m-%d")
names(mortos_raw)[-1]=format(datas,"%Y-%m-%d")

#marxe=as.double(erro[2])
morultimodia=as.double(erro[1])
distancias=(abs(mortos_raw[,ncol(mortos_raw)]-morultimodia))
mortos_raw$dis=distancias
ordenados=mortos_raw[order(mortos_raw$dis),]
aceptados=ordenados[ordenados$dis<morultimodia*0.2,]
mortos=aceptados

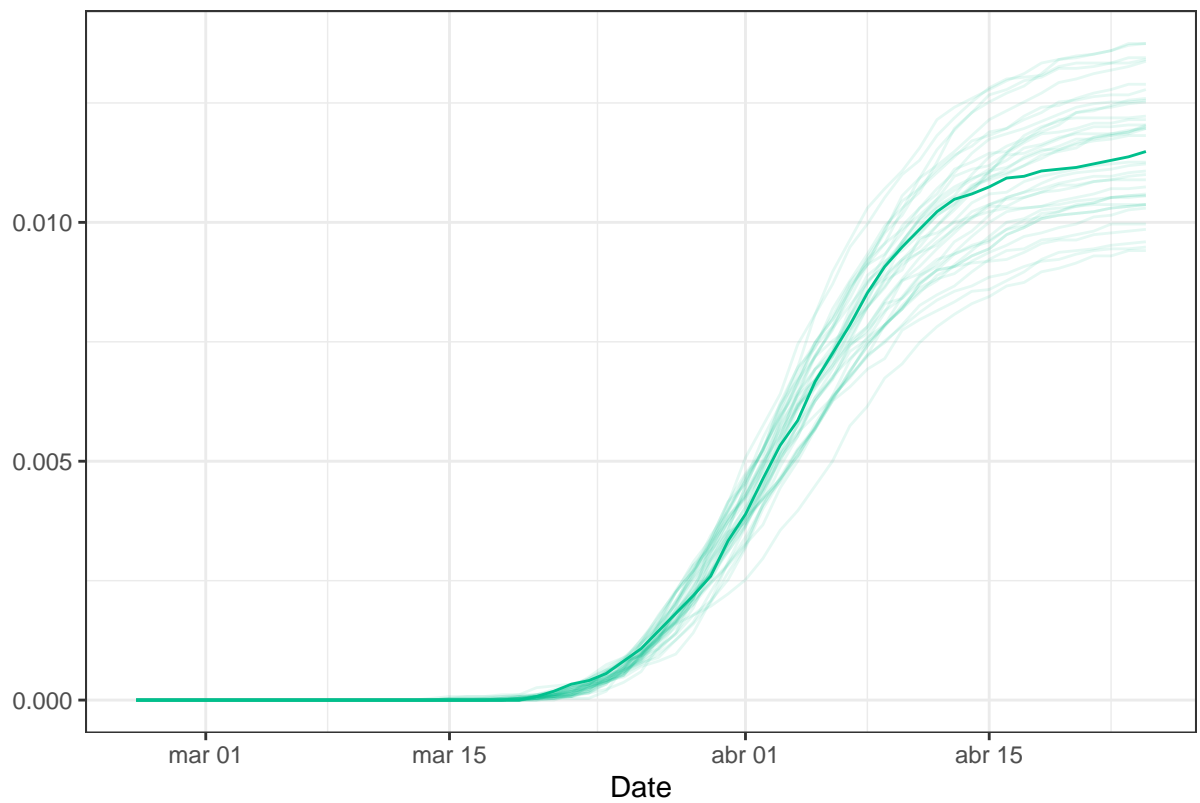
mord=gather(mortos,key="dia",value="cantos",-V1,-dis)

mord$dia=as.Date(mord$dia)

ggplot(mord) +
  geom_line(aes(dia, 100*cantos/autonomias$Población[i],group= V1,alpha=1/((1+dis)^100)),colour='#00C08B')
  scale_x_date() +
  theme_bw() +
  labs(x = "Date", y = "",
       subtitle = paste("Fatality rate in ", autonomias$Comunidad[i]))

```

Fatality rate in Galicia

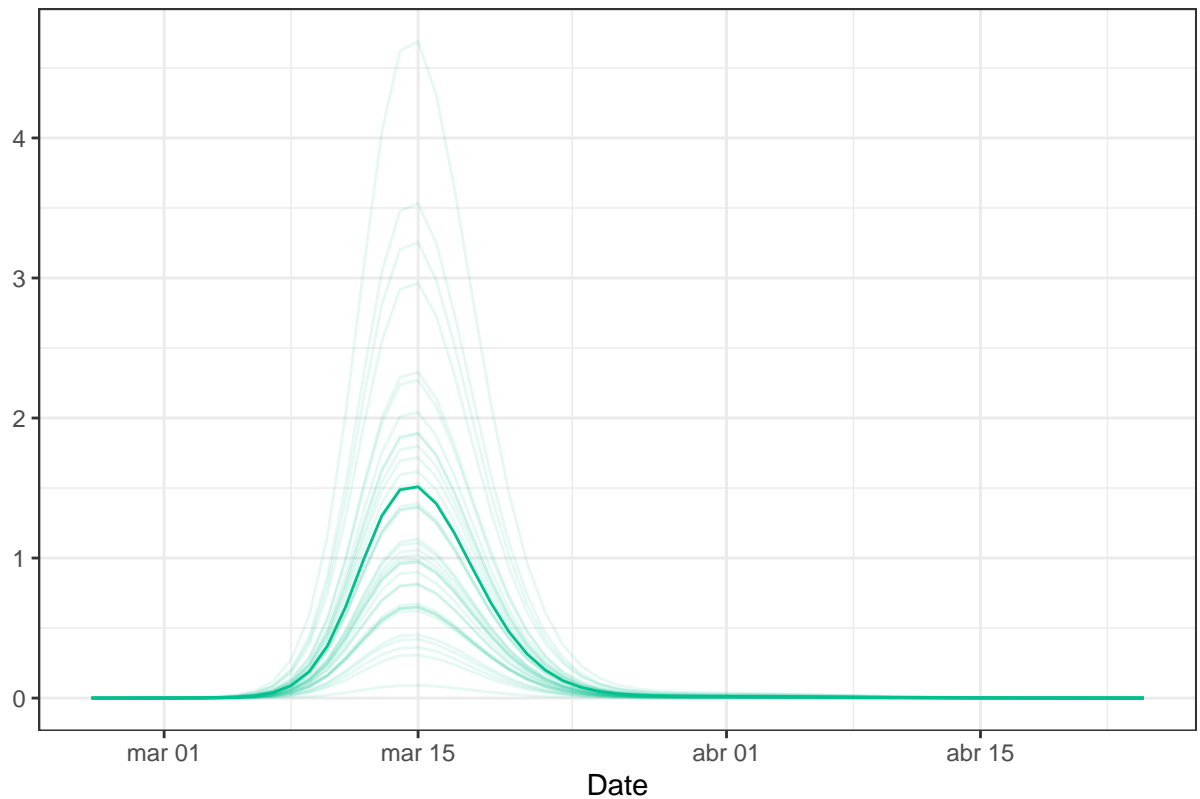


```
i1=i1_raw[aceptados$V1,]
i1$dis=aceptados$dis

i1ord=gather(i1,key="dia",value="cantos",-V1,-dis)
i1ord$dia=as.Date(i1ord$dia)

ggplot(i1ord) +
  geom_line(aes(dia, 100*cantos/autonomias$Población[i],group= V1,alpha=1/((1+dis)^100)),colour='#00C08B') +
  scale_x_date() +
  theme_bw() +
  labs(x = "Date", y = "",
       subtitle = paste("% of I1 in ", autonomias$Comunidad[i]))
```

% of I1 in Galicia

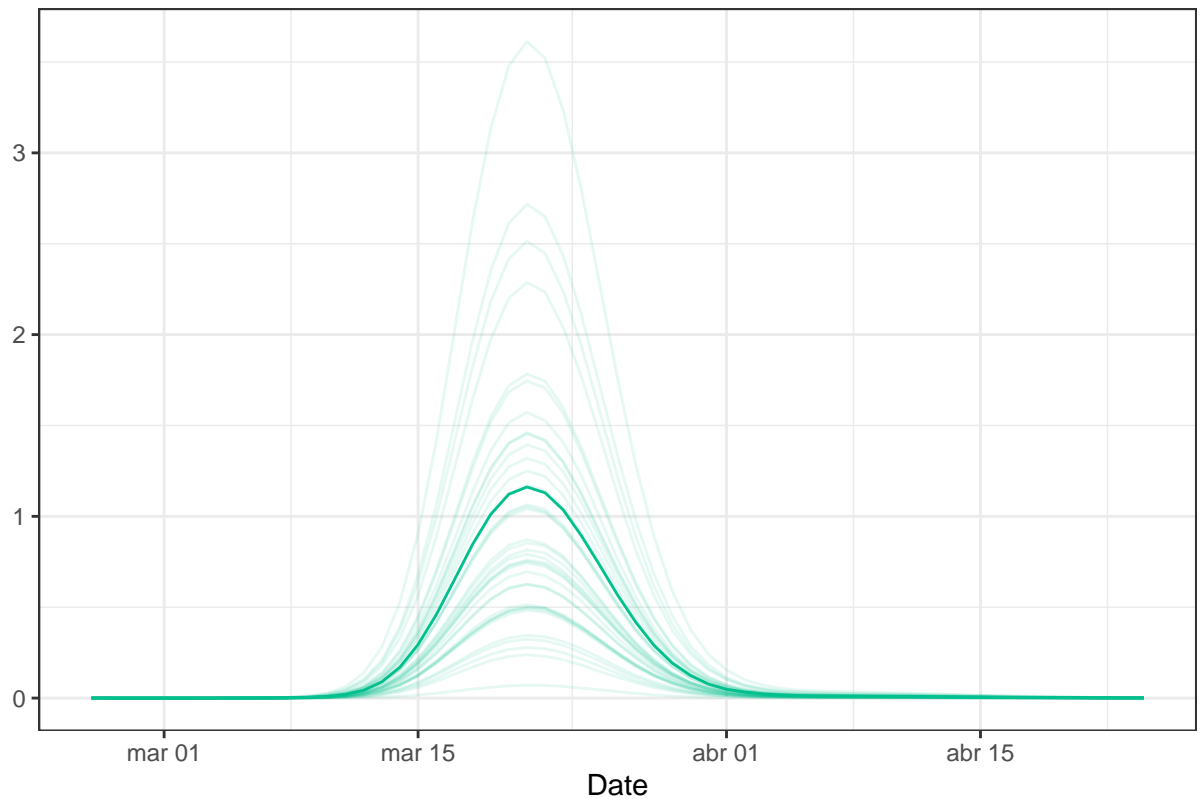


```
i2=i2_raw[aceptados$V1,]
i2$dis=aceptados$dis

i2ord=gather(i2,key="dia",value="cantos",-V1,-dis)
i2ord$dia=as.Date(i1ord$dia)

ggplot(i2ord) +
  geom_line(aes(dia, 100*cantos/autonomias$Población[i],group= V1,alpha=1/((1+dis)^100)),colour='#00C08B') +
  scale_x_date() +
  theme_bw() +
  labs(x = "Date", y = "",
       subtitle = paste("% of I2 in ", autonomias$Comunidad[i]))
```

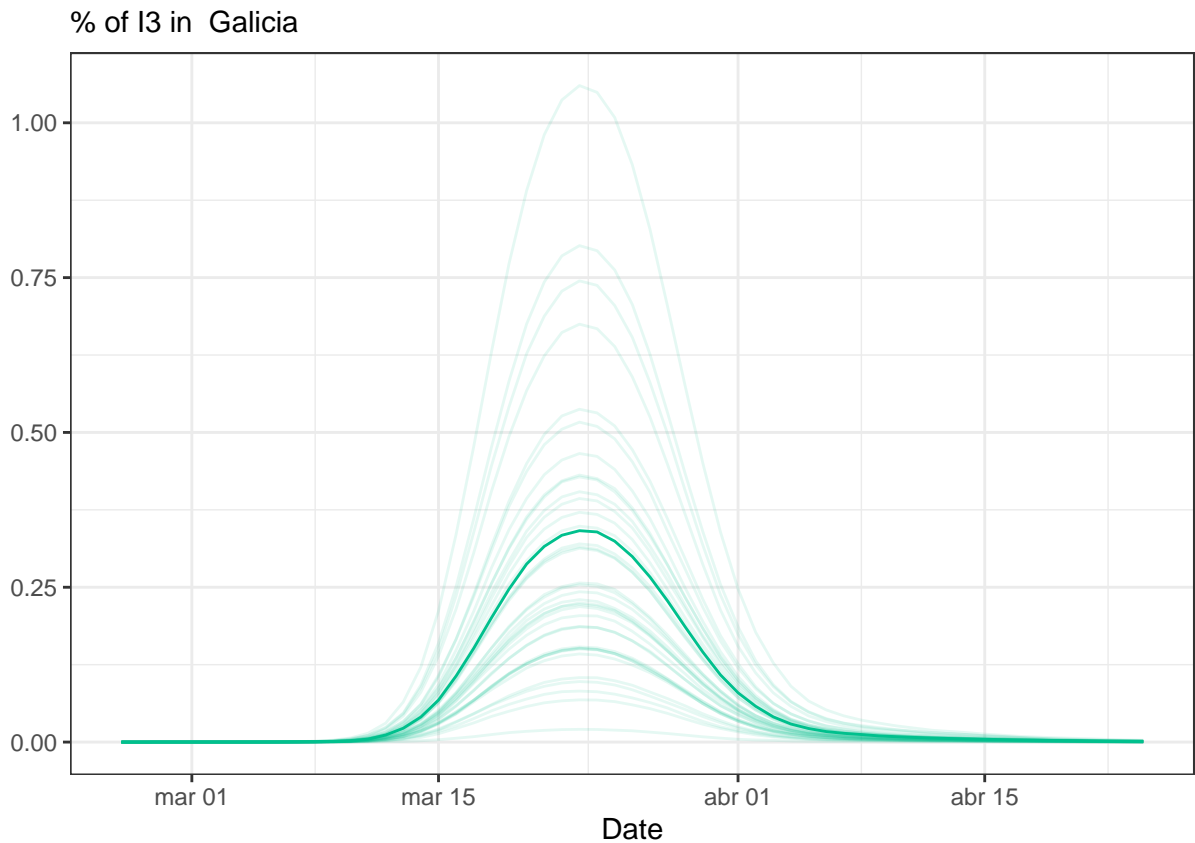
% of I2 in Galicia



```
i3=i3_raw[aceptados$V1,]
i3$dis=aceptados$dis

i3ord=gather(i3,key="dia",value="cantos",-V1,-dis)
i3ord$dia=as.Date(i1ord$dia)

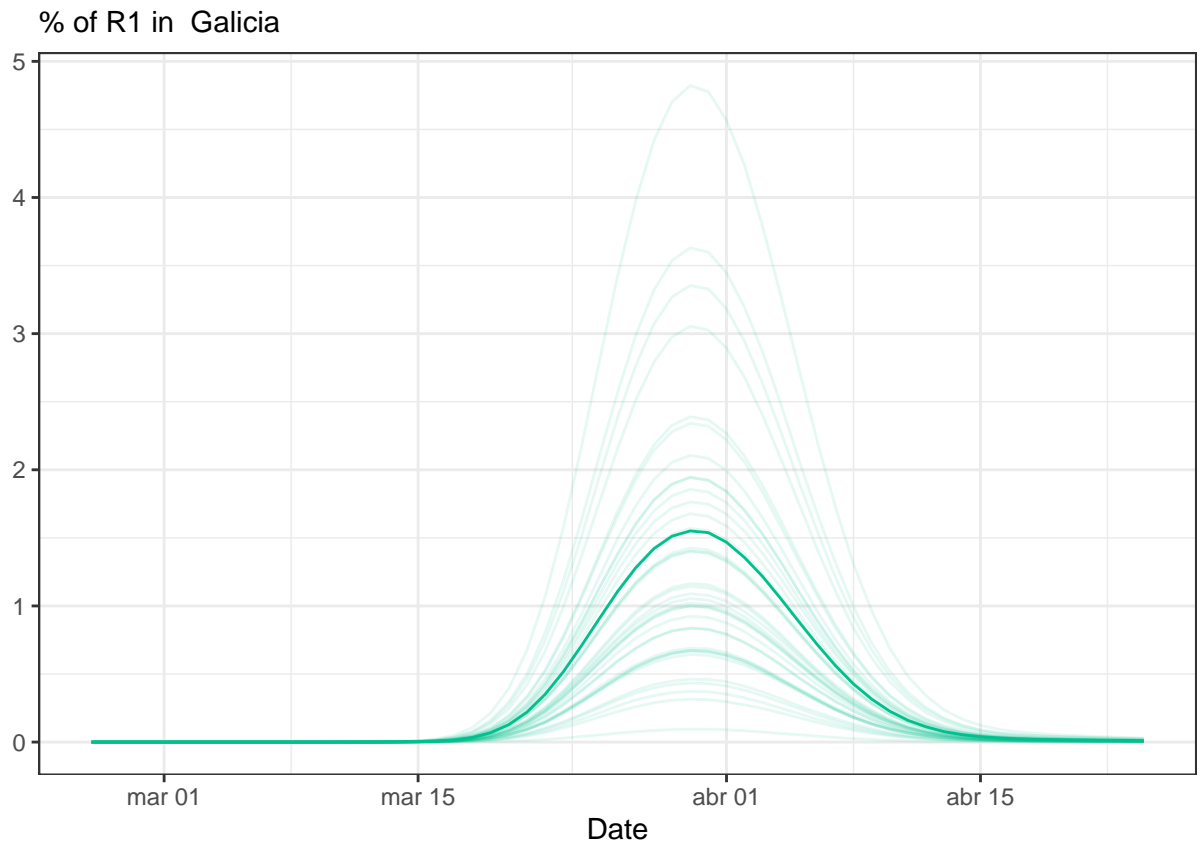
ggplot(i3ord) +
  geom_line(aes(dia, 100*cantos/autonomias$Población[i],group= V1,alpha=1/((1+dis)^100)),colour='#00C08B') +
  scale_x_date() +
  theme_bw() +
  labs(x = "Date", y = "",
       subtitle = paste("% of I3 in ", autonomias$Comunidad[i]))
```



```
r1=r1_raw[aceptados$V1,]
r1$dis=aceptados$dis

r1ord=gather(r1,key="dia",value="cantos",-V1,-dis)
r1ord$dia=as.Date(r1ord$dia)

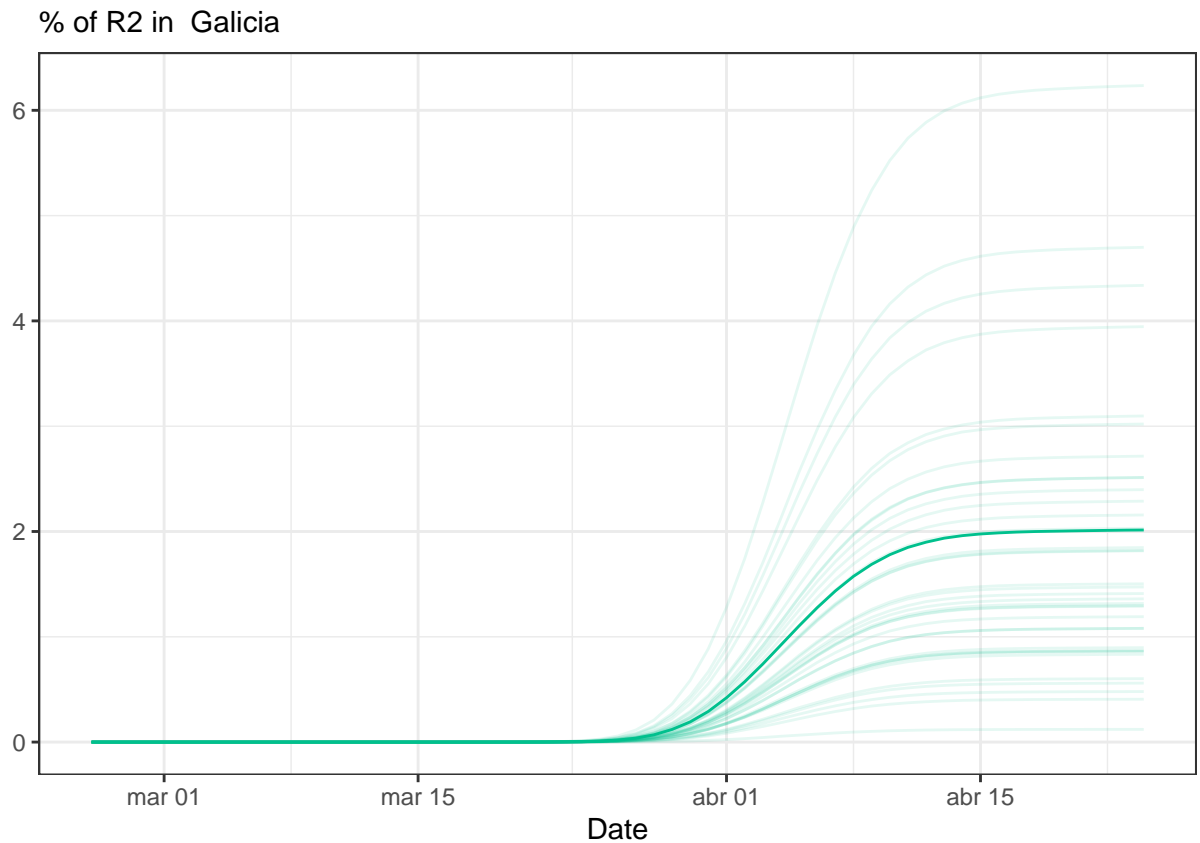
ggplot(r1ord) +
  geom_line(aes(dia, 100*cantos/autonomias$Población[i],group= V1,alpha=1/((1+dis)^100)),colour='#00C08B') +
  scale_x_date() +
  theme_bw() +
  labs(x = "Date", y = "",
       subtitle = paste("% of R1 in ", autonomias$Comunidad[i]))
```



```
r2=r2_raw[aceptados$V1,]
r2$dis=aceptados$dis

r2ord=gather(r2,key="dia",value="cantos",-V1,-dis)
r2ord$dia=as.Date(r2ord$dia)

ggplot(r2ord) +
  geom_line(aes(dia, 100*cantos/autonomias$Población[i],group= V1,alpha=1/((1+dis)^100)),colour='#00C08B') +
  scale_x_date() +
  theme_bw() +
  labs(x = "Date", y = "",
       subtitle = paste("% of R2 in ", autonomias$Comunidad[i]))
```



```
totalcovid=gather(r1+r2+i1+i1+i3,key="dia",value="cantos",-V1,-dis)
totalcovid$dia=as.Date(totalcovid$dia)

ggplot(totalcovid) +
  geom_line(aes(dia, 100*cantos/autonomias$Población[i],group= V1,alpha=1/((1+dis)^2)),colour='#00C08D')
  scale_x_date() +
  theme_bw() +
  labs(x = "Date", y = "",
        subtitle = paste("% of total people affected by COVID-19 in ", autonomias$Comunidad[i]))
```