

Report

Created with SpatialEpiApp

- Date range: 1985 to 1988
- Type of analysis: Spatio-Temporal
- Temporal unit: Year

```
datosP<-params$datosP

fechasformatocorrecto<-params$fechasformatocorrecto
vecTimes<-unique(datosP$time)
n<-length(vecTimes)
#vecVbles<-c("Population", "Observed", "Expected", "SIR")
#vecVbles<-c("Population", "Observed", "Expected", "SIR", "Risk", "LowerLimitCI", "UpperLimitCI")
vecVblesPintar<-params$vecVblesPintar
vecVblesTabla<-params$vecVblesTabla
tablaClusters<-params$tablaClusters

vecVblesPintarprimeralinea<-params$vecVblesPintar
vecVblesTablaprimeralinea<-params$vecVblesTabla

indl<-which(vecVblesPintarprimeralinea=="LowerLimitCI")
if(length(indl)>0){vecVblesPintarprimeralinea[indl]<-"2.5 percentile"}
indl<-which(vecVblesPintarprimeralinea=="UpperLimitCI")
if(length(indl)>0){vecVblesPintarprimeralinea[indl]<-"97.5 percentile"}
indl<-which(vecVblesTablaprimeralinea=="LowerLimitCI")
if(length(indl)>0){vecVblesTablaprimeralinea[indl]<-"2.5 percentile"}
indl<-which(vecVblesTablaprimeralinea=="UpperLimitCI")
if(length(indl)>0){vecVblesTablaprimeralinea[indl]<-"97.5 percentile"}

plPintar<-paste("c",paste(rep("c",length(vecVblesPintar)),collapse=""))
plTabla<-paste("l",paste(rep("r",length(vecVblesTabla)),collapse=""))
primeralineaPintar<-paste("&",paste(vecVblesPintarprimeralinea,collapse="&"),"\\\\\\")
primeralineaTabla<-paste("&",paste(vecVblesTablaprimeralinea,collapse="&"),"\\\\\\")

fnPaste<-function(s){
p<-paste(paste(s , collapse="&"),"\\\\\\")
```

```

return(p)
}

sizemaps<-52
if(length(vecVblesPintar)==5){
  sizemaps<-40
}
if(length(vecVblesPintar)==6){
  sizemaps<-31
}
if(length(vecVblesPintar)==7){
  sizemaps<-26
}
if(length(vecVblesPintar)==8){
  sizemaps<-22
}
#sizemaps<-60-7*length(vecVblesPintar)

```

Maps

```

if(length(vecVblesPintar)>0){

cat(
  sprintf("\\begin{longtable}{%s}",plPintar),
  sprintf(primeralineaPintar),
  sprintf("\\hline"),
  sprintf("&\\\\"),
  sprintf("\\endhead"))

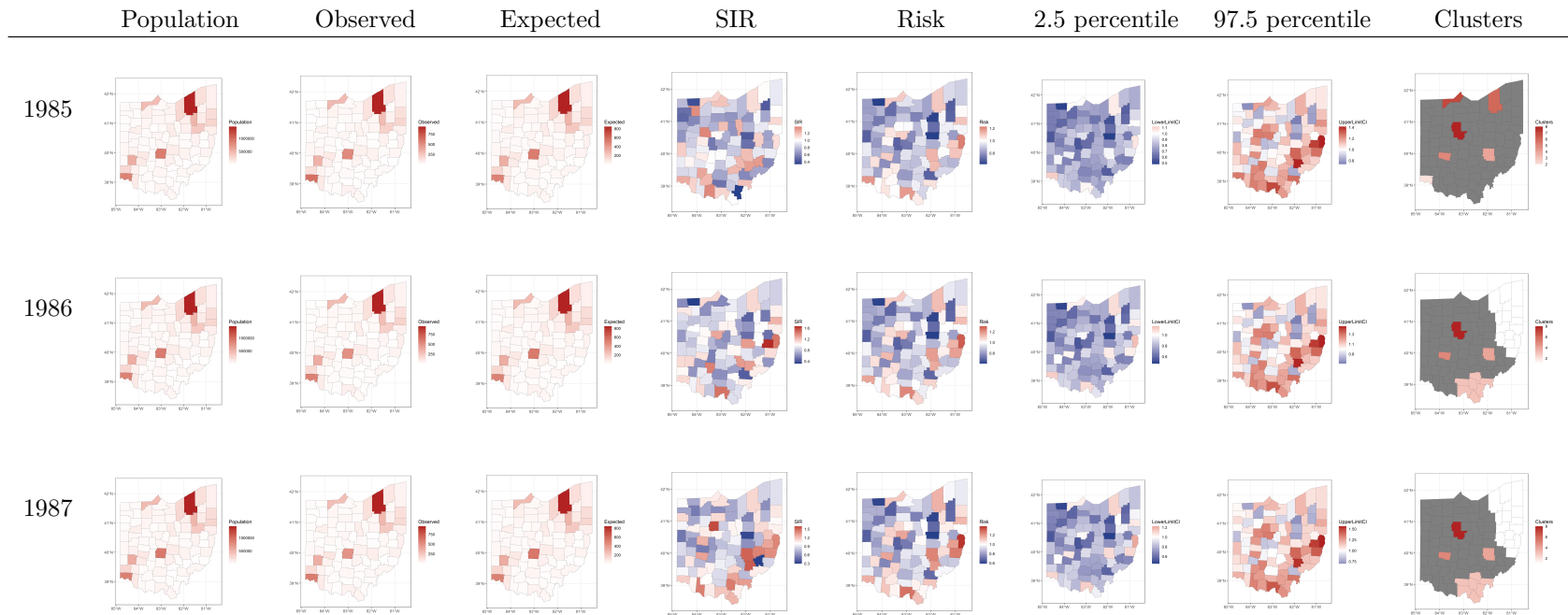
for(i in 1:n){
f<-paste(vecTimes[i])
fcorrecto<-fechasformatocorrecto[i]
vecf<-paste(getwd(), "/plots/Map",vecTimes[i],vecVblesPintar,".png",sep="")
#cat(sprintf("\\raisebox{2cm}{%s}", paste(fcorrecto,f)))
cat(sprintf("\\raisebox{1.5cm}{%s}", paste(fcorrecto)))
for(j in 1:length(vecVblesPintar)){

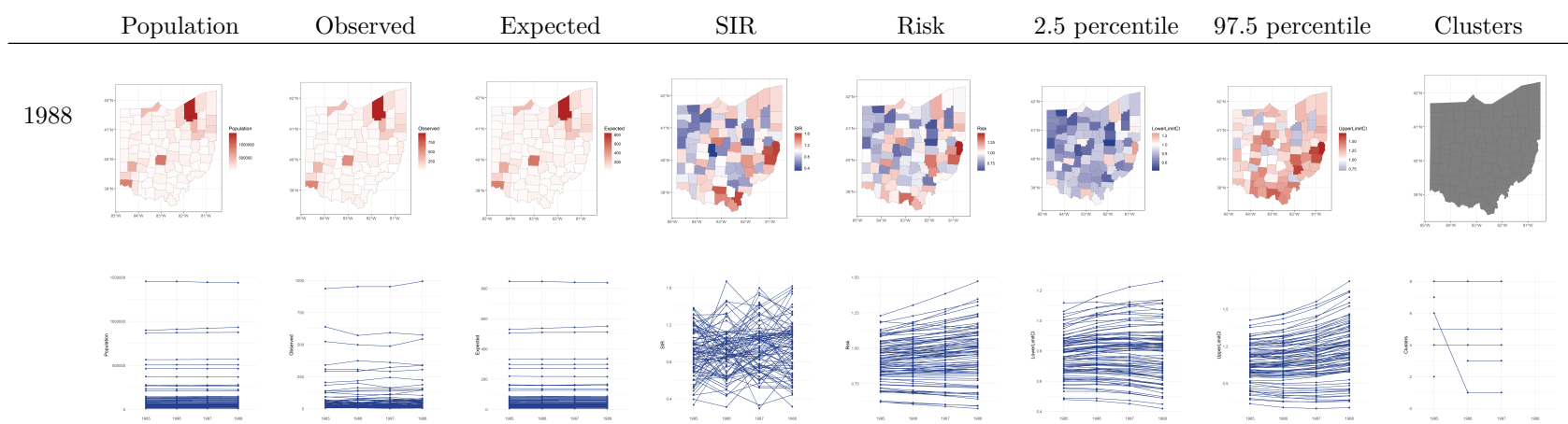
```

```

cat(sprintf("&\\includegraphics[width=%dmm]{%s}", sizemaps, vecf[j]))
}
cat(sprintf("\\\\[.5cm]"))
}
veclastf<-paste(getwd(), "/plots/TemporalTrend",vecVblesPintar, ".png",sep="")
for(j in 1:length(vecVblesPintar)){
cat(sprintf("&\\includegraphics[width=%dmm]{%s}", sizemaps, veclastf[j]))
}
cat(sprintf("\\\\"))
cat(sprintf("\\end{longtable}"))
}

```





Summary data

| | Population | Observed | Expected | SIR | Risk | 2.5 percentile | 97.5 percentile |
|--------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| 1985 to 1988 | | | | | | | |
| Min. | 11272 | 2 | 6.73322625405604 | 0.296140506227404 | 0.575155977537473 | 0.419774216693343 | 0.698253730537896 |
| 1st Qu. | 33102 | 16 | 19.7318270737803 | 0.743258907225568 | 0.83302138153091 | 0.67278189251076 | 0.994116032520795 |
| Median | 54348.5 | 28 | 32.1771818693045 | 0.930808786806923 | 0.946268179253783 | 0.797552007008453 | 1.10680855082763 |
| Mean | 122287.443181818 | 72.1420454545455 | 72.1420454545455 | 0.931397948434054 | 0.935801606761005 | 0.787685659220597 | 1.1057108010498 |
| 3rd Qu. | 107592.5 | 56.5 | 64.0760972850941 | 1.10300922812533 | 1.04604768077969 | 0.880063872120818 | 1.21911502078034 |
| Max. | 1454155 | 993 | 846.199673679593 | 1.66862336986462 | 1.47132058564459 | 1.25966439165931 | 1.72366853495168 |

Table summary data for each date

```

if(length(vecVblesTabla)>0){

cat(
  sprintf("\\begin{longtable}{%s}",plTabla),
  sprintf(primeralineatTabla),
  sprintf("\\hline"),
  sprintf("\\endhead"))

for(i in 1:n){
f<-paste(vecTimes[i])
fcorrecto<-fechasformatocorrecto[i]
datostime<-datosP[which(datosP$time==f),vecVblesTabla]

if(length(vecVblesTabla)>1){
s<-sapply(datostime, summary)
s<-cbind(rownames(s),matrix(s,nrow=nrow(s)))
}else{
s<-summary(datostime)
s<-cbind(names(s),s)
}
}

```

```

a<-apply(s,1,fnPaste)

cat(
  sprintf(as.character(fcorrecto)),
  sprintf("\\\\[.1cm]"),
  sprintf(a),
  sprintf("[.2cm]")
)
}

cat(sprintf("\\end{longtable}"))
}

```

| | Population | Observed | Expected | SIR | Risk | 2.5 percentile | 97.5 percentile |
|---------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| 1985 | | | | | | | |
| Min. | 11435 | 6 | 6.83579649289265 | 0.334507914142587 | 0.621355588992226 | 0.479250996899003 | 0.736450101280046 |
| 1st Qu. | 32936.75 | 17 | 19.6745500016105 | 0.711975146332762 | 0.826866748847361 | 0.675723566143241 | 0.985346224822609 |
| Median | 54348.5 | 26 | 32.1771818693045 | 0.919644088436455 | 0.917305450831221 | 0.776181634097437 | 1.06028038494496 |
| Mean | 122061.136363636 | 70.9772727272727 | 71.995054095849 | 0.903324825337779 | 0.914481408456384 | 0.773170417177217 | 1.07472555454454 |
| 3rd Qu. | 104448.5 | 56 | 62.5137912969326 | 1.10351080626705 | 0.999843418443972 | 0.855281576964656 | 1.17843816518245 |
| Max. | 1454155 | 937 | 846.199673679593 | 1.3825315165666 | 1.22887679500816 | 1.11803949254302 | 1.41191533337268 |
| 1986 | | | | | | | |
| Min. | 11272 | 6 | 6.73322625405604 | 0.311830465236511 | 0.604773908625981 | 0.471355867021427 | 0.706357398803096 |
| 1st Qu. | 32891 | 15.75 | 19.6708904612285 | 0.768114669990689 | 0.831481585121348 | 0.681045926011725 | 0.978350844816441 |
| Median | 54390.5 | 27 | 32.2206447174887 | 0.895464130428486 | 0.934727236106049 | 0.798364469294605 | 1.07251434085673 |
| Mean | 122023.090909091 | 70.875 | 71.9806575783078 | 0.909933296439992 | 0.927723749345188 | 0.794096121023442 | 1.07911277872812 |
| 3rd Qu. | 105677.5 | 50 | 63.2128197924086 | 1.04251112785378 | 1.02971689364419 | 0.879909828420321 | 1.19914029129726 |
| Max. | 1453242 | 953 | 845.761343007908 | 1.66862336986462 | 1.30347684019554 | 1.15883761962483 | 1.46237751264861 |
| 1987 | | | | | | | |
| Min. | 11301 | 2 | 6.75355095957126 | 0.296140506227404 | 0.58933669190259 | 0.451013429261049 | 0.698253730537896 |
| 1st Qu. | 33152.75 | 17 | 19.8157149799075 | 0.759382049037192 | 0.839941378834507 | 0.670952351812088 | 0.993830566978551 |
| Median | 54687 | 28 | 32.3996360942348 | 0.959373841876793 | 0.955655782941776 | 0.815142572995436 | 1.09928144204368 |
| Mean | 122443.693181818 | 72.5568181818182 | 72.2415330879147 | 0.95489149632338 | 0.942407406505853 | 0.797569722035068 | 1.10828151679245 |

| | Population | Observed | Expected | SIR | Risk | 2.5 percentile | 97.5 percentile |
|---------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| 3rd Qu. | 107592.5 | 60.25 | 64.1733841375541 | 1.10774301060939 | 1.06164215029983 | 0.887114348436737 | 1.22974374998368 |
| Max. | 1444257 | 952 | 840.575910342608 | 1.59891511152189 | 1.3840787290378 | 1.22304147294933 | 1.56146017047301 |
| 1988 | | | | | | | |
| Min. | 11276 | 4 | 6.73680339180383 | 0.316014381124612 | 0.575155977537473 | 0.419774216693343 | 0.704731535965003 |
| 1st Qu. | 33353.25 | 16.75 | 19.896366632091 | 0.740179828333259 | 0.848535511797738 | 0.655668208221573 | 1.01817670206625 |
| Median | 54787 | 29.5 | 32.4633987616188 | 0.992667022866814 | 0.968292252910145 | 0.811464099084057 | 1.15056195404576 |
| Mean | 122621.852272727 | 74.1590909090909 | 72.3509370561102 | 0.957442175635065 | 0.958593862736593 | 0.785906376646661 | 1.1607233541341 |
| 3rd Qu. | 107720.75 | 59.25 | 63.8998692449171 | 1.12693896875363 | 1.09013545300066 | 0.881209228607768 | 1.29427222286045 |
| Max. | 1438103 | 993 | 836.898769794294 | 1.61785818629552 | 1.47132058564459 | 1.25966439165931 | 1.72366853495168 |

Clusters

```
#Table clusters

if(!is.null(tablaClusters)){

#All years
s<-tablaClusters
a<-apply(s,1,fnPaste)

plTablaClusters<-paste(paste(rep("r",ncol(tablaClusters)),collapse=""))
plTablaClusters<-paste("p{1cm}",paste(rep("p{2cm}",ncol(tablaClusters)-2),collapse=""),"p{6cm}")
primeralineTablaClusters<-paste(paste(names(tablaClusters),collapse="&"),"\\\\\\\\")

cat(
  sprintf("\\begin{longtable}{%s}",plTablaClusters),
  sprintf(primeralineTablaClusters),
  sprintf("\\hline"),
  sprintf("\\endhead"))
cat(
  #sprintf("{%s}",fcorrecto),
  sprintf("\\\\\\[.1cm]"),
  sprintf(a),
  sprintf("[.2cm]")
)

cat(sprintf("\\end{longtable}"))
}
```

| Cluster | Central area | No. areas | Start date | End date | Risk in / Risk out | LLR | p-value | Areas |
|---------|--------------|-----------|------------|----------|-----------------------|-----|---------|-------|
|---------|--------------|-----------|------------|----------|-----------------------|-----|---------|-------|

| Cluster | Central area | No. areas | Start date | End date | Risk in / Risk out | LLR | p-value | Areas |
|---------|--------------|-----------|------------|----------|-----------------------|-----|-----------|--|
| 1 | Mahoning | 4 | 1987 | 1988 | 1.10 | 15 | 25.101532 | Portage, Harrison, Lake, Cuyahoga, Carroll, Ashtabula, Belmont, Mahoning, Trumbull, Tuscarawas, Summit, Columbiana, Geauga, Jefferson, Stark |
| 2 | Hamilton | 2 | 1985 | 1986 | 1.19 | 1 | 18.413505 | Hamilton |
| 3 | Lawrence | 4 | 1986 | 1988 | 1.26 | 7 | 9.734536 | Gallia, Vinton, Jackson, Pike, Meigs, Lawrence, Scioto |
| 4 | Muskingum | 4 | 1985 | 1988 | 1.43 | 1 | 8.178653 | Muskingum |
| 5 | Clark | 4 | 1985 | 1988 | 1.26 | 1 | 5.413516 | Clark |
| 6 | Cuyahoga | 1 | 1985 | 1986 | 1.11 | 1 | 5.027418 | Cuyahoga |
| 7 | Lucas | 2 | 1985 | 1986 | 1.13 | 1 | 4.401300 | Lucas |
| 8 | Wyandot | 4 | 1985 | 1988 | 1.27 | 2 | 3.568187 | Wyandot, Marion |