Untitled

me

2022-07-16

This is an R Markdown Notebook. When you execute code within the notebook, the results appear beneath the code.

Try executing this chunk by clicking the *Run* button within the chunk or by placing your cursor inside it and pressing *Cmd+Shift+Enter*.

```
# lendo os dados
dados <- read_csv('data/df_join.csv')

# Formando dummys
dados <- dados %>% mutate(percent_temp = ntile(temp, 10) %>% as.factor(),
                  percent_precip = ntile(precip,5) %>% as.factor())

# criando variavel de tendencia linear
df_trend <- tibble(
  data = dados$data %>% unique(),
  trend = 1:(dados$data %>% unique() %>% length())
)
dados <- dados %>% left_join(df_trend)

# fazendo code do municipio virar factor
dados$code_muni <- as.factor(dados$code_muni)
```

```
#dados %>% group_by(percent_temp) %>% summarise(lim_inf = min(temp),lim_sup = max(temp))
#dados %>% group_by(percent_precip) %>% summarise(lim_inf = min(precip),lim_sup = max(precip))
nomes_variaveis <- c(
  percent_temp2 = "Temperatura Celcius 13° - 15°",
  percent_temp3 = "Temperatura Celcius 15° - 16°",
  percent_temp4 = "Temperatura Celcius 16° - 18°",
  percent_temp5 = "Temperatura Celcius 18° - 19°",
  percent_temp6 = "Temperatura Celcius 19° - 21°",
  percent_temp7 = "Temperatura Celcius 21° - 22°",
  percent_temp8 = "Temperatura Celcius 22° - 24°",
  percent_temp9 = "Temperatura Celcius 24° - 25°",
  percent_temp10 = "Temperatura Celcius 25° - 31°",
  percent_precip2 = "Precipitação 6.7 - 23.1 mm",
  percent_precip3 = "Precipitação 23.1 - 56.6 mm",
  percent_precip4 = "Precipitação 56.6 - 115.7 mm",
  percent_precip5 = "Precipitação 115.7 - 694.8 mm")
```

Regressao 1

```
#### OLS
model_ols_fixed <- feols(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)

#### Poisson
model_poisson_fixed <- fepois(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/2,126 fixed-effects (459,216 observations) removed because of only 0 outcomes.
```

```
#### Binomial Negativo
model_bn_fixed <- fenegbin(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/2,126 fixed-effects (459,216 observations) removed because of only 0 outcomes.
```

```
etable(list(model_ols_fixed,model_poisson_fixed,model_bn_fixed),tex = T,dict = nomes_variaveis,notes =
```

Dependent Variable:	feminicidio		
Model:	(1)	(2)	(3)
	OLS	Poisson	Neg. Bin.
Variables			
Temperatura Celcius 13° - 15°	0.0009	0.0501	0.0536
	(0.0006)	(0.0392)	(0.0402)
Temperatura Celcius 15° - 16°	0.0010	0.0526	0.0570
	(0.0008)	(0.0470)	(0.0484)
Temperatura Celcius 16° - 18°	0.0003	0.0085	0.0150
	(0.0010)	(0.0561)	(0.0581)
Temperatura Celcius 18° - 19°	0.0002	-0.0013	1.21×10^{-5}
	(0.0011)	(0.0659)	(0.0682)
Temperatura Celcius 19° - 21°	-0.0001	0.0006	0.0020
	(0.0013)	(0.0754)	(0.0778)
Temperatura Celcius 21° - 22°	0.0002	0.0098	0.0049
	(0.0015)	(0.0877)	(0.0889)
Temperatura Celcius 22° - 24°	0.0013	0.0818	0.0765
	(0.0019)	(0.1061)	(0.1063)
Temperatura Celcius 24° - 25°	0.0006	0.0435	0.0411
	(0.0020)	(0.1154)	(0.1164)
Temperatura Celcius 25° - 31°	0.0005	0.0178	0.0047
	(0.0022)	(0.1259)	(0.1271)
Precipitação 6.7 - 23.1 mm	7.98×10^{-5}	0.0019	0.0049
	(0.0004)	(0.0296)	(0.0299)
Precipitação 23.1 - 56.6 mm	2.58×10^{-5}	-0.0057	-0.0104
	(0.0005)	(0.0316)	(0.0309)
Precipitação 56.6 - 115.7 mm	-9.38×10^{-5}	-0.0089	-0.0142
	(0.0006)	(0.0361)	(0.0357)
Precipitação 115.7 - 694.8 mm	-0.0007	-0.0498	-0.0556
	(0.0007)	(0.0415)	(0.0415)
Fixed-effects			
data	Yes	Yes	Yes
code_muni	Yes	Yes	Yes
Fit statistics			
Observations	1,202,256	743,040	743,040
Squared Correlation	0.21813	0.21155	0.20880
Pseudo R^2	-0.28275	0.24076	0.19997
BIC	-1,261,002.6	197,420.5	197,056.3
Over-dispersion			2.2622

Clustered (code_muni) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Notes: Ola

Lead

```
## Testando com lead

dados_lead <- dados %>% mutate(lead_temp = as.factor(dplyr::lead(as.character(percent_temp))),
                  lead_precip = as.factor(dplyr::lead(as.character(percent_precip))))
```

```
### Com efeitos fixos

#### OLS
model_ols_fixed <- feols(feminicidio  ~ lead_temp + lead_precip| data + code_muni, dados_lead)
```

```
## NOTE: 1 observation removed because of NA values (RHS: 1).
```

```
#### Poisson
model_poisson_fixed <- fepois(feminicidio  ~ lead_temp + lead_precip| data + code_muni, dados_lead)
```

```
## NOTES: 1 observation removed because of NA values (RHS: 1).
##        0/2,126 fixed-effects (459,216 observations) removed because of only 0 outcomes.
```

```
#### Binomial Negativo
model_bn_fixed <- fenegbin(feminicidio  ~ lead_temp + lead_precip| data + code_muni, dados_lead)
```

```
## NOTES: 1 observation removed because of NA values (RHS: 1).
##        0/2,126 fixed-effects (459,216 observations) removed because of only 0 outcomes.
```

```
etable(list(model_ols_fixed,model_poisson_fixed,model_bn_fixed),tex = T,notes = 'Ola',se = 'cluster',cl
```

```
## \begin{tabular}{lccc}
## \tabularnewline\midrule\midrule
## Dependent Variable:&\multicolumn{3}{c}{feminicidio}\\
## Model:&(1) & (2) & (3)\\
##  &  OLS & Poisson & Neg. Bin.\\
## \midrule \emph{Variables}&   &   &  \\
## lead\_temp10 & -0.0011 & -0.0661 & -0.0658\\
##   &(0.0023) & (0.1294) & (0.1257)\\
## lead\_temp2 & 0.0017$^{***}$ & 0.1033$^{**}$ & 0.1123$^{***}$\\
##   &(0.0006) & (0.0410) & (0.0409)\\
## lead\_temp3 & 0.0014 & 0.0907 & 0.0901\\
##   &(0.0010) & (0.0566) & (0.0572)\\
## lead\_temp4 & 0.0011 & 0.0547 & 0.0625\\
##   &(0.0011) & (0.0631) & (0.0646)\\
## lead\_temp5 & 0.0008 & 0.0414 & 0.0465\\
##   &(0.0013) & (0.0765) & (0.0753)\\
## lead\_temp6 & 0.0006 & 0.0477 & 0.0549\\
##   &(0.0015) & (0.0869) & (0.0853)\\
## lead\_temp7 & $9.24\times 10^{-5}$ & 0.0098 & 0.0160\\
##   &(0.0017) & (0.0948) & (0.0928)\\
## lead\_temp8 & 0.0002 & 0.0300 & 0.0286\\
##   &(0.0019) & (0.1090) & (0.1057)\\
## lead\_temp9 & -0.0002 & 0.0035 & 0.0092\\
##   &(0.0021) & (0.1212) & (0.1172)\\
## lead\_precip2 & 0.0006 & 0.0358 & 0.0264\\
##   &(0.0004) & (0.0284) & (0.0283)\\
## lead\_precip3 & -0.0006 & -0.0364 & -0.0414\\
##   &(0.0005) & (0.0324) & (0.0325)\\
## lead\_precip4 & 0.0002 & 0.0008 & -0.0102\\
##   &(0.0006) & (0.0366) & (0.0362)\\
## lead\_precip5 & 0.0003 & 0.0080 & -0.0032\\
##   &(0.0007) & (0.0419) & (0.0418)\\
## \midrule \emph{Fixed-effects}&   &   &  \\
## data & Yes & Yes & Yes\\
## code\_muni & Yes & Yes & Yes\\
```

```
## \midrule \emph{Fit statistics}&  & & \\
## Observations & 1,202,255&743,039&743,039\\
## Squared Correlation & 0.21818&0.21193&0.20914\\
## Pseudo R$^2$ & -0.28282&0.24083&0.20003\\
## BIC & -1,261,072.9&197,407.0&197,045.5\\
## Over-dispersion & &&2.2714\\
## \midrule\midrule\multicolumn{4}{l}{\emph{Clustered (code\_muni) standard-errors in parentheses}}\\
## \multicolumn{4}{l}{\emph{Signif. Codes: ***: 0.01, **: 0.05, *: 0.1}}\\
## \end{tabular}
##
## \medskip \emph{Notes:} Ola
```

Testando com cidades + 100.000

```
# lendo os dados
dados <- read_csv('data/df_join.csv') %>% filter(populacao > 100000)
```

```
##
## -- Column specification --------------------------------------------------------
## cols(
##   unique_key = col_character(),
##   code_muni = col_double(),
##   ano = col_double(),
##   data = col_date(format = ""),
##   mes = col_double(),
##   temp = col_double(),
##   precip = col_double(),
##   feminicidio = col_double(),
##   populacao = col_double()
## )
```

```
# Formando dummys
dados <- dados %>% mutate(percent_temp = ntile(temp, 10) %>% as.factor(),
                 percent_precip = ntile(precip,5) %>% as.factor())

# criando variavel de tendencia linear
df_trend <- tibble(
  data = dados$data %>% unique(),
  trend = 1:(dados$data %>% unique() %>% length())
)
dados <- dados %>% left_join(df_trend)
```

```
## Joining, by = "data"
```

```
# fazendo code do municipio virar factor
dados$code_muni <- as.factor(dados$code_muni)
```

```
#### OLS
model_ols_fixed <- feols(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)

#### Poisson
model_poisson_fixed <- fepois(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/267 fixed-effects (4,224 observations) removed because of only 0 outcomes.
```

```
#### Binomial Negativo
model_bn_fixed <- fenegbin(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/267 fixed-effects (4,224 observations) removed because of only 0 outcomes.
```

```
etable(list(model_ols_fixed,model_poisson_fixed,model_bn_fixed),tex = T,notes = 'Ola',se = 'cluster',cl
```

```
## \begin{tabular}{lccc}
## \tabularnewline\midrule\midrule
## Dependent Variable:&\multicolumn{3}{c}{feminicidio}\\
## Model:&(1) & (2) & (3)\\
##  &  OLS & Poisson & Neg. Bin.\\
## \midrule \emph{Variables}&  &  &  \\
## percent\_temp2 & 0.0156$^{**}$ & 0.1057$^{**}$ & 0.1077$^{**}$\\
##   &(0.0067) & (0.0491) & (0.0513)\\
## percent\_temp3 & 0.0129$^{*}$ & 0.0806 & 0.0702\\
##   &(0.0073) & (0.0519) & (0.0527)\\
## percent\_temp4 & 0.0114 & 0.0632 & 0.0558\\
##   &(0.0100) & (0.0725) & (0.0747)\\
## percent\_temp5 & 0.0140 & 0.0671 & 0.0640\\
##   &(0.0118) & (0.0808) & (0.0850)\\
## percent\_temp6 & 0.0110 & 0.0529 & 0.0432\\
##   &(0.0145) & (0.0978) & (0.1016)\\
## percent\_temp7 & 0.0299$^{*}$ & 0.1679 & 0.1638\\
##   &(0.0181) & (0.1099) & (0.1150)\\
## percent\_temp8 & 0.0303 & 0.1698 & 0.1683\\
##   &(0.0229) & (0.1324) & (0.1376)\\
## percent\_temp9 & 0.0501$^{*}$ & 0.2744$^{*}$ & 0.2734$^{*}$\\
##   &(0.0279) & (0.1530) & (0.1583)\\
## percent\_temp10 & 0.0529$^{*}$ & 0.2945$^{*}$ & 0.2881\\
##   &(0.0316) & (0.1711) & (0.1755)\\
## percent\_precip2 & 0.0082 & 0.0576 & 0.0504\\
##   &(0.0058) & (0.0403) & (0.0408)\\
## percent\_precip3 & 0.0057 & 0.0411 & 0.0397\\
##   &(0.0064) & (0.0449) & (0.0457)\\
## percent\_precip4 & 0.0091 & 0.0623 & 0.0544\\
##   &(0.0077) & (0.0529) & (0.0528)\\
## percent\_precip5 & 0.0018 & 0.0122 & 0.0086\\
##   &(0.0087) & (0.0580) & (0.0591)\\
## \midrule \emph{Fixed-effects}&  &  &  \\
## data & Yes & Yes & Yes\\
## code\_muni & Yes & Yes & Yes\\
## \midrule \emph{Fit statistics}&  & & \\
## Observations & 59,448&55,224&55,224\\
## Squared Correlation & 0.28213&0.28502&0.28084\\
## Pseudo R$^2$ & 0.22116&0.20460&0.16118\\
## BIC & 78,418.0&51,895.5&51,781.8\\
## Over-dispersion & &&4.2741\\
## \midrule\midrule\multicolumn{4}{l}{\emph{Clustered (code\_muni) standard-errors in parentheses}}\\
## \multicolumn{4}{l}{\emph{Signif. Codes: ***: 0.01, **: 0.05, *: 0.1}}\\
## \end{tabular}
##
## \medskip \emph{Notes:} Ola
```

Testando com distribuicao a priori cidade + 100000

```
# lendo os dados
dados <- read_csv('data/df_join.csv') #%>% filter(populacao > 100000)
```

```
##
## -- Column specification --------------------------------------------------------
## cols(
##   unique_key = col_character(),
##   code_muni = col_double(),
##   ano = col_double(),
##   data = col_date(format = ""),
##   mes = col_double(),
##   temp = col_double(),
##   precip = col_double(),
##   feminicidio = col_double(),
##   populacao = col_double()
## )
```

```
dados <- dados %>% mutate(x_temp = case_when(
  temp <= 15 ~ 'Inverno',
  (temp > 15) & (temp <= 24) ~ 'Outono',
  (temp > 24) & (temp <= 30) ~ 'Primavera',
  temp > 30 ~ 'Verão'),
  x_precip = case_when(
  precip <= 5 ~ 'Fraca',
  (precip > 5) & (precip <= 25) ~ 'Moderada',
  (precip > 25) & (precip <= 50) ~ 'Forte',
  precip > 50 ~ 'Torrencial'))

# criando variavel de tendencia linear
df_trend <- tibble(
  data = dados$data %>% unique(),
  trend = 1:(dados$data %>% unique() %>% length())
)
dados <- dados %>% left_join(df_trend)
```

```
## Joining, by = "data"
```

```
# fazendo code do municipio virar factor
dados$code_muni <- as.factor(dados$code_muni)

# Fazendo com que
dados$x_temp <- factor(dados$x_temp,ordered = F)
dados <- dados %>% mutate(x_temp = relevel(x_temp,ref = 'Primavera'))
```

```
#### OLS
model_ols_fixed <- feols(feminicidio  ~ x_temp + x_precip | data + code_muni, dados)

#### Poisson
model_poisson_fixed <- fepois(feminicidio  ~ x_temp + x_precip | data + code_muni, dados)
```

```
## NOTE: 0/2,126 fixed-effects (459,216 observations) removed because of only 0 outcomes.
```

```
#### Binomial Negativo
model_bn_fixed <- fenegbin(feminicidio  ~ x_temp + x_precip | data + code_muni, dados)
```

```
## NOTE: 0/2,126 fixed-effects (459,216 observations) removed because of only 0 outcomes.
```

```
etable(list(model_ols_fixed,model_poisson_fixed,model_bn_fixed),tex = F,notes = 'Ola',se = 'cluster',cl
```

model 1 model 2 model 3

Dependent Var.: feminicidio feminicidio feminicidio

x_tempInverno 0.0004 (0.0010) 0.0219 (0.0568) 0.0183 (0.0591) x_tempOutono 0.0004 (0.0008) 0.0205 (0.0445) 0.0192 (0.0456) x_tempVerão -0.0146. (0.0083) -9.267*** (0.0253) -13.40*** (0.7641) x_precipFraca 0.0003 (0.0005) 0.0236 (0.0350) 0.0291 (0.0342) x_precipModerada 0.0002 (0.0004) 0.0169 (0.0264) 0.0267 (0.0260) x_precipTorrencial 0.0001 (0.0005) 0.0060 (0.0256) 0.0081 (0.0259) Fixed-Effects: ———— ———— ———— data Yes Yes Yes code_muni Yes Yes Yes _____ _____ _____ _____ _____ _____ Family OLS Poisson Neg. Bin. S.E.: Clustered by: code_muni by: code_muni by: code_muni Observations 1,202,256 743,040 743,040 Squared Cor. 0.21812 0.21146 0.20871 Pseudo R2 -0.28274 0.24072 0.19993 BIC -1,261,093.6 197,333.2 196,968.3 Over-dispersion – – 2.2596

Testando por raca preta

```
# lendo os dados
dados <- read_csv('data/df_join_negro.csv') #%>% filter(populacao > 100000)
```

```
##
## -- Column specification --------------------------------------------------------
## cols(
##   unique_key = col_character(),
##   code_muni = col_double(),
##   ano = col_double(),
##   data = col_date(format = ""),
##   mes = col_double(),
##   temp = col_double(),
##   precip = col_double(),
##   feminicidio = col_double(),
##   populacao = col_double()
## )
```

```
# Formando dummys
dados <- dados %>% mutate(percent_temp = ntile(temp, 10) %>% as.factor(),
                  percent_precip = ntile(precip,5) %>% as.factor())

# criando variavel de tendencia linear
df_trend <- tibble(
  data = dados$data %>% unique(),
  trend = 1:(dados$data %>% unique() %>% length())
)
dados <- dados %>% left_join(df_trend)
```

```
## Joining, by = "data"
```

```
# fazendo code do municipio virar factor
dados$code_muni <- as.factor(dados$code_muni)
```

```
#### OLS
model_ols_fixed <- feols(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
#### Poisson
model_poisson_fixed <- fepois(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/4,881 fixed-effects (1,054,296 observations) removed because of only 0 outcomes.
```

```
#### Binomial Negativo
model_bn_fixed <- fenegbin(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/4,881 fixed-effects (1,054,296 observations) removed because of only 0 outcomes.
```

```
etable(list(model_ols_fixed,model_poisson_fixed,model_bn_fixed),tex = T,dict = nomes_variaveis,notes =
```

Dependent Variable:	feminicidio		
Model:	(1)	(2)	(3)
	OLS	Poisson	Neg. Bin.
Variables			
Temperatura Celcius 13° - 15°	4.3×10^{-5}	0.0474	0.0661
	(0.0001)	(0.1959)	(0.1953)
Temperatura Celcius 15° - 16°	9.54×10^{-5}	0.0914	0.1087
	(0.0002)	(0.2116)	(0.2129)
Temperatura Celcius 16° - 18°	-4.7×10^{-5}	-0.0265	-0.0232
	(0.0002)	(0.2605)	(0.2567)
Temperatura Celcius 18° - 19°	-5.93×10^{-5}	-0.0575	-0.0537
	(0.0003)	(0.2863)	(0.2850)
Temperatura Celcius 19° - 21°	-0.0002	-0.1169	-0.1187
	(0.0003)	(0.3230)	(0.3225)
Temperatura Celcius 21° - 22°	-0.0005	-0.2835	-0.2962
	(0.0004)	(0.3719)	(0.3706)
Temperatura Celcius 22° - 24°	-0.0005	-0.3476	-0.3533
	(0.0004)	(0.4095)	(0.4090)
Temperatura Celcius 24° - 25°	-0.0006	-0.4329	-0.4287
	(0.0005)	(0.5125)	(0.5079)
Temperatura Celcius 25° - 31°	-0.0003	-0.0178	-0.0147
	(0.0005)	(0.5564)	(0.5514)
Precipitação 6.7 - 23.1 mm	-2.98×10^{-5}	-0.0295	-0.0299
	(0.0001)	(0.1068)	(0.1071)
Precipitação 23.1 - 56.6 mm	1.34×10^{-5}	0.0228	0.0231
	(0.0001)	(0.1065)	(0.1074)
Precipitação 56.6 - 115.7 mm	0.0001	0.1295	0.1324
	(0.0001)	(0.1295)	(0.1304)
Precipitação 115.7 - 694.8 mm	0.0002	0.1634	0.1623
	(0.0002)	(0.1605)	(0.1599)
Fixed-effects			
data	Yes	Yes	Yes
code_muni	Yes	Yes	Yes
Fit statistics			
Observations	1,202,256	147,960	147,960
Squared Correlation	0.02661	0.02066	0.01982
Pseudo R^2	-0.00683	0.09382	0.08968
BIC	-4,699,096.4	24,223.7	24,205.7
Over-dispersion			0.85449

Clustered (code_muni) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Notes: Ola

Testando por raca branco

```
# lendo os dados
dados <- read_csv('data/df_join_branco.csv') #%>% filter(populacao > 100000)
```

```
##
```

```
## -- Column specification --------------------------------------------------------
## cols(
##   unique_key = col_character(),
##   code_muni = col_double(),
##   ano = col_double(),
##   data = col_date(format = ""),
##   mes = col_double(),
##   temp = col_double(),
##   precip = col_double(),
##   feminicidio = col_double(),
##   populacao = col_double()
## )
```

```
# Formando dummys
dados <- dados %>% mutate(percent_temp = ntile(temp, 10) %>% as.factor(),
                  percent_precip = ntile(precip,5) %>% as.factor())

# criando variavel de tendencia linear
df_trend <- tibble(
  data = dados$data %>% unique(),
  trend = 1:(dados$data %>% unique() %>% length())
)
dados <- dados %>% left_join(df_trend)
```

```
## Joining, by = "data"
```

```
# fazendo code do municipio virar factor
dados$code_muni <- as.factor(dados$code_muni)
```

```
#### OLS
model_ols_fixed <- feols(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)

#### Poisson
model_poisson_fixed <- fepois(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/3,405 fixed-effects (735,480 observations) removed because of only 0 outcomes.
```

```
#### Binomial Negativo
model_bn_fixed <- fenegbin(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/3,405 fixed-effects (735,480 observations) removed because of only 0 outcomes.
```

```
etable(list(model_ols_fixed,model_poisson_fixed,model_bn_fixed),tex = T,dict = nomes_variaveis,notes =
```

Dependent Variable:	feminicidio		
Model:	(1)	(2)	(3)
	OLS	Poisson	Neg. Bin.
Variables			
Temperatura Celcius 13° - 15°	0.0005	0.0411	0.0430
	(0.0005)	(0.0458)	(0.0469)
Temperatura Celcius 15° - 16°	0.0002	0.0325	0.0386
	(0.0007)	(0.0623)	(0.0622)
Temperatura Celcius 16° - 18°	-0.0005	-0.0255	-0.0070
	(0.0009)	(0.0847)	(0.0819)
Temperatura Celcius 18° - 19°	-0.0010	-0.0869	-0.0697
	(0.0009)	(0.0995)	(0.0973)
Temperatura Celcius 19° - 21°	-0.0006	-0.0364	-0.0191
	(0.0010)	(0.1164)	(0.1137)
Temperatura Celcius 21° - 22°	-2.93×10^{-5}	0.0589	0.0658
	(0.0011)	(0.1370)	(0.1326)
Temperatura Celcius 22° - 24°	-9.7×10^{-5}	0.0440	0.0553
	(0.0012)	(0.1675)	(0.1648)
Temperatura Celcius 24° - 25°	-0.0006	-0.1235	-0.1094
	(0.0013)	(0.1892)	(0.1863)
Temperatura Celcius 25° - 31°	-0.0009	-0.2433	-0.2293
	(0.0014)	(0.2224)	(0.2204)
Precipitação 6.7 - 23.1 mm	-5.74×10^{-5}	-0.0093	-0.0141
	(0.0003)	(0.0446)	(0.0457)
Precipitação 23.1 - 56.6 mm	-4.01×10^{-5}	-0.0152	-0.0235
	(0.0003)	(0.0469)	(0.0477)
Precipitação 56.6 - 115.7 mm	-0.0003	-0.0336	-0.0441
	(0.0004)	(0.0545)	(0.0554)
Precipitação 115.7 - 694.8 mm	-0.0007	-0.0704	-0.0838
	(0.0005)	(0.0649)	(0.0654)
Fixed-effects			
data	Yes	Yes	Yes
code_muni	Yes	Yes	Yes
Fit statistics			
Observations	1,202,256	466,776	466,776
Squared Correlation	0.15202	0.15052	0.14746
Pseudo R^2	-0.09055	0.19391	0.16603
BIC	-2,306,487.9	103,442.4	103,307.5
Over-dispersion			1.8576

Clustered (code_muni) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Notes: Ola

Testando por ate 12 anos

```
# lendo os dados
dados <- read_csv('data/df_join_ate_12anos.csv') #%>% filter(populacao > 100000)
```

```
##
```

```
## -- Column specification --------------------------------------------------------
## cols(
##   unique_key = col_character(),
##   code_muni = col_double(),
##   ano = col_double(),
##   data = col_date(format = ""),
##   mes = col_double(),
##   temp = col_double(),
##   precip = col_double(),
##   feminicidio = col_double(),
##   populacao = col_double()
## )
```

```
# Formando dummys
dados <- dados %>% mutate(percent_temp = ntile(temp, 10) %>% as.factor(),
                  percent_precip = ntile(precip,5) %>% as.factor())

# criando variavel de tendencia linear
df_trend <- tibble(
  data = dados$data %>% unique(),
  trend = 1:(dados$data %>% unique() %>% length())
)
dados <- dados %>% left_join(df_trend)
```

```
## Joining, by = "data"
```

```
# fazendo code do municipio virar factor
dados$code_muni <- as.factor(dados$code_muni)
```

```
#### OLS
model_ols_fixed <- feols(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)

#### Poisson
model_poisson_fixed <- fepois(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/2,941 fixed-effects (635,256 observations) removed because of only 0 outcomes.
```

```
#### Binomial Negativo
model_bn_fixed <- fenegbin(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 0/2,941 fixed-effects (635,256 observations) removed because of only 0 outcomes.
```

```
etable(list(model_ols_fixed,model_poisson_fixed,model_bn_fixed),tex = T,dict = nomes_variaveis,notes =
```

Dependent Variable:	feminicidio		
Model:	(1)	(2)	(3)
	OLS	Poisson	Neg. Bin.
Variables			
Temperatura Celcius 13° - 15°	0.0008	0.0692	0.0786
	(0.0005)	(0.0516)	(0.0517)
Temperatura Celcius 15° - 16°	0.0005	0.0302	0.0267
	(0.0006)	(0.0622)	(0.0627)
Temperatura Celcius 16° - 18°	4.17×10^{-5}	-0.0348	-0.0447
	(0.0007)	(0.0750)	(0.0749)
Temperatura Celcius 18° - 19°	-5.83×10^{-5}	-0.0515	-0.0637
	(0.0008)	(0.0862)	(0.0866)
Temperatura Celcius 19° - 21°	-0.0008	-0.0957	-0.1077
	(0.0010)	(0.0965)	(0.0982)
Temperatura Celcius 21° - 22°	0.0004	0.0014	-0.0129
	(0.0011)	(0.1078)	(0.1095)
Temperatura Celcius 22° - 24°	-0.0006	-0.0851	-0.0986
	(0.0014)	(0.1301)	(0.1312)
Temperatura Celcius 24° - 25°	-0.0013	-0.1399	-0.1513
	(0.0015)	(0.1425)	(0.1450)
Temperatura Celcius 25° - 31°	-0.0011	-0.1491	-0.1642
	(0.0016)	(0.1576)	(0.1597)
Precipitação 6.7 - 23.1 mm	-0.0001	-0.0221	-0.0196
	(0.0003)	(0.0367)	(0.0374)
Precipitação 23.1 - 56.6 mm	-1.35×10^{-5}	-0.0189	-0.0265
	(0.0004)	(0.0381)	(0.0385)
Precipitação 56.6 - 115.7 mm	-0.0002	-0.0237	-0.0299
	(0.0004)	(0.0441)	(0.0443)
Precipitação 115.7 - 694.8 mm	-0.0003	-0.0369	-0.0431
	(0.0005)	(0.0515)	(0.0521)
Fixed-effects			
data	Yes	Yes	Yes
code_muni	Yes	Yes	Yes
Fit statistics			
Observations	1,202,256	567,000	567,000
Squared Correlation	0.21056	0.20056	0.19593
Pseudo R^2	-0.16961	0.23611	0.19752
BIC	-1,879,064.1	132,429.6	132,246.4
Over-dispersion			2.4567

Clustered (code_muni) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Notes: Ola

Testando por + 12 anos

```
# lendo os dados
dados <- read_csv('data/df_join_12anos+.csv') #%>% filter(populacao > 100000)
```

```
##
```

```
## -- Column specification --------------------------------------------------------
## cols(
##   unique_key = col_character(),
##   code_muni = col_double(),
##   ano = col_double(),
##   data = col_date(format = ""),
##   mes = col_double(),
##   temp = col_double(),
##   precip = col_double(),
##   feminicidio = col_double(),
##   populacao = col_double()
## )
```

```
# Formando dummys
dados <- dados %>% mutate(percent_temp = ntile(temp, 10) %>% as.factor(),
                  percent_precip = ntile(precip,5) %>% as.factor())

# criando variavel de tendencia linear
df_trend <- tibble(
  data = dados$data %>% unique(),
  trend = 1:(dados$data %>% unique() %>% length())
)
dados <- dados %>% left_join(df_trend)
```

```
## Joining, by = "data"
```

```
# fazendo code do municipio virar factor
dados$code_muni <- as.factor(dados$code_muni)
```

```
#### OLS
model_ols_fixed <- feols(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)

#### Poisson
model_poisson_fixed <- fepois(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 5/5,111 fixed-effects (1,106,251 observations) removed because of only 0 outcomes.
```

```
#### Binomial Negativo
model_bn_fixed <- fenegbin(feminicidio  ~ percent_temp + percent_precip | data + code_muni, dados)
```

```
## NOTE: 5/5,111 fixed-effects (1,106,251 observations) removed because of only 0 outcomes.
```

```
etable(list(model_ols_fixed,model_poisson_fixed,model_bn_fixed),tex = T,dict = nomes_variaveis,notes =
```

Dependent Variable:	feminicidio		
Model:	(1)	(2)	(3)
	OLS	Poisson	Neg. Bin.
Variables			
Temperatura Celcius 13° - 15°	-3.59×10^{-6}	-0.0266	-0.0322
	(0.0002)	(0.2067)	(0.2044)
Temperatura Celcius 15° - 16°	-0.0003	-0.2962	-0.2879
	(0.0002)	(0.2524)	(0.2420)
Temperatura Celcius 16° - 18°	-0.0004	-0.4352	-0.4286
	(0.0003)	(0.2808)	(0.2755)
Temperatura Celcius 18° - 19°	-0.0003	-0.3525	-0.3490
	(0.0003)	(0.3339)	(0.3271)
Temperatura Celcius 19° - 21°	-0.0003	-0.3171	-0.2972
	(0.0003)	(0.3669)	(0.3607)
Temperatura Celcius 21° - 22°	-0.0005	-0.4984	-0.4953
	(0.0004)	(0.4535)	(0.4385)
Temperatura Celcius 22° - 24°	-0.0004	-0.3834	-0.3813
	(0.0004)	(0.5124)	(0.5018)
Temperatura Celcius 24° - 25°	-0.0003	-0.3193	-0.3189
	(0.0004)	(0.5564)	(0.5445)
Temperatura Celcius 25° - 31°	-0.0004	-0.5446	-0.5615
	(0.0005)	(0.6170)	(0.6015)
Precipitação 6.7 - 23.1 mm	6.11×10^{-5}	0.0878	0.0855
	(8.53×10^{-5})	(0.1305)	(0.1328)
Precipitação 23.1 - 56.6 mm	6.39×10^{-5}	0.0765	0.0642
	(0.0001)	(0.1512)	(0.1516)
Precipitação 56.6 - 115.7 mm	-3.72×10^{-5}	-0.0121	-0.0189
	(0.0001)	(0.1659)	(0.1665)
Precipitação 115.7 - 694.8 mm	-0.0001	-0.1362	-0.1498
	(0.0002)	(0.2018)	(0.2008)
Fixed-effects			
data	Yes	Yes	Yes
code_muni	Yes	Yes	Yes
Fit statistics			
Observations	1,202,256	96,005	96,005
Squared Correlation	0.05704	0.05913	0.05648
Pseudo R^2	-0.01402	0.15502	0.14475
BIC	-5,024,650.2	16,999.3	16,993.3
Over-dispersion			1.9137

Clustered (code_muni) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Notes: Ola