

Proyecto de fin de Diplomado

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Planteamiento del problema a resolver (4 puntos). La inteligencia artificial (IA) cada vez esta abarcando más áreas que ayudan al bienestar de las personas. En este contexto, las industrias acuícolas están comenzando a utilizar esta tecnología pero aún su uso es muy incipiente y no se sabe con certeza si la IA puede de manera efectiva mejorar los parámetros productivos de peces en cultivo y ser una tecnología viable en el futuro en un contexto de costos y beneficios. Debido a esta problemática se ha decidido realizar un experimento utilizando IA en el fotoperiodo de la especie Salmón del Atlántico *Salmo salar* mantenidos en agua dulce y agua de mar con el objetivo de evaluar si la IA mejora o modifica algunos parámetros productivos de la acuicultura de *Salmo salar* y si existen diferencias con respecto a su fisiología en comparación al sistema tradicional de cultivo (peces sin inteligencia artificial).

Descripción detallada de los datos originales (4 puntos). Se tomaron datos productivos de peso, largo, factor de condición (K) y parámetros fisiológicos de actividad enzimática de ATPasas branquial (NKA), niveles de glucosa, calcio, cloro, albúmina y cortisol en la especie *Salmo salar*. Todas las variables mencionadas corresponden a variables respuestas, mientras que las variables predictoras o factores fueron condición (con IA y sin IA) y el factor tiempo que tiene alrededor de 18 niveles (18 fechas de muestreo) para las variables respuesta peso, largo y factor de condición, mientras que las demás variables respuestas (NKA, glucosa, calcio, cloro, albúmina, cortisol) tienen 15 niveles (15 fechas de muestreo). Todas las variables respuestas son variables cuantitativas continuas. De la fecha inicial (05-10-2020) hasta la fecha 10-02-2021 los peces fueron mantenidos en agua dulce, mientras que desde las fechas 26-02-2021 hasta el 25-05-2021 los peces fueron mantenidos en agua de mar. Una flecha en las gráficas indica cuando los peces fueron trasladados al agua de mar.

Análisis exploratorio de los datos

Importación de datos productivos y ATPasa

```
a <- read_excel("datos_productivos_luxmeter.xlsx")
a$Fechas <- as.factor(a$Fechas)
a$Condición <- as.factor(a$Condición)
str(a)
```

```
## tibble [1,560 x 5] (S3: tbl_df/tbl/data.frame)
## $ Fechas : Factor w/ 17 levels "2020-10-05","2020-10-14",...: 1 1 1 1 1 1 1 1 1 1 ...
## $ Condición: Factor w/ 2 levels "C","IA": 1 1 1 1 1 1 1 1 1 1 ...
## $ Peso : num [1:1560] 38 38 36 46 40 52 50 36 58 40 ...
## $ Largo : num [1:1560] 15.4 15 15.3 16.4 15.6 16.6 16.7 14.8 17.4 15.7 ...
## $ K : num [1:1560] 1.04 1.13 1.01 1.04 1.05 ...
```

```
a2 <- read_excel("nka_luxmeter.xlsx")
a2$Fechas <- as.factor(a2$Fechas)
a2$Condición <- as.factor(a2$Condición)
str(a2)
```

```
## tibble [600 x 3] (S3: tbl_df/tbl/data.frame)
## $ Fechas : Factor w/ 15 levels "2020-10-05","2020-10-14",...: 1 1 1 1 1 1 1 1 1 1 ...
```

```
## $ Condición: Factor w/ 2 levels "C","IA": 1 1 1 1 1 1 1 1 1 1 ...
## $ NKA      : num [1:600] 13.5 13.6 13.4 13.8 13 ...
```

Importación de parámetros plasmáticos

```
b <- read_excel("parametros_plasmaticos_luxmeter.xlsx")
b$Fechas <- as.factor(b$Fechas)
b$Condicion <- as.factor(b$Condicion)
b$Cortisol <- as.numeric(b$Cortisol)
```

```
## Warning: NAs introduced by coercion
```

```
str(b)
```

```
## tibble [453 x 7] (S3: tbl_df/tbl/data.frame)
## $ Fechas : Factor w/ 15 levels "2020-10-05","2020-10-14",...: 1 1 1 1 1 1 1 1 1 1 ...
## $ Condicion: Factor w/ 2 levels "C","IA": 1 1 1 1 1 2 2 2 2 ...
## $ Glucosa : num [1:453] 13.49 8.28 9.58 8.84 8.17 ...
## $ Calcio : num [1:453] 3.35 4.06 3.51 3.42 4 ...
## $ Cloro : num [1:453] 241 252 237 231 231 ...
## $ Albumina : num [1:453] 0.335 0.585 0.412 0.332 0.538 ...
## $ Cortisol : num [1:453] 244 416 324 201 449 ...
```

Importación de datos para correlaciones

```
c <- read_excel("Datos_correlaciones_luxmeter.xlsx")
c$Fechas <- as.factor(c$Fechas)
c$Condición <- as.factor(c$Condición)
c$Glucosa <- as.numeric(c$Glucosa)
```

```
## Warning: NAs introduced by coercion
```

```
c$Calcio <- as.numeric(c$Calcio)
```

```
## Warning: NAs introduced by coercion
```

```
c$Cloro <- as.numeric(c$Cloro)
```

```
## Warning: NAs introduced by coercion
```

```
c$Albumina <- as.numeric(c$Albumina)
```

```
## Warning: NAs introduced by coercion
```

```
c$Cortisol <- as.numeric(c$Cortisol)
```

```
## Warning: NAs introduced by coercion
```

```
str(c)
```

```
## tibble [600 x 11] (S3: tbl_df/tbl/data.frame)
## $ Fechas : Factor w/ 15 levels "2020-10-05","2020-10-14",...: 1 1 1 1 1 1 1 1 1 1 ...
## $ Condición: Factor w/ 2 levels "C","IA": 1 1 1 1 1 1 1 1 1 1 ...
## $ Peso : num [1:600] 38 38 36 46 40 52 50 36 58 40 ...
## $ Largo : num [1:600] 15.4 15 15.3 16.4 15.6 16.6 16.7 14.8 17.4 15.7 ...
## $ K : num [1:600] 1.04 1.13 1.01 1.04 1.05 ...
## $ NKA : num [1:600] 13.5 13.6 13.4 13.8 13 ...
## $ Glucosa : num [1:600] 13.49 8.28 9.58 8.84 8.17 ...
## $ Calcio : num [1:600] 3.35 4.06 3.51 3.42 4 ...
## $ Cloro : num [1:600] 241 252 237 231 231 ...
## $ Albumina : num [1:600] 0.335 0.585 0.412 0.332 0.538 ...
## $ Cortisol : num [1:600] 244 416 324 201 449 ...
```

Resumen de los datos productivos

```
resumen_datosa <- summary(a)
pander::pander(resumen_datosa, caption = "Resumen parámetros productivos")
```

Table 1: Resumen parámetros productivos

Fechas	Condición	Peso	Largo	K
2021-05-25:800	C :780	Min. : 26.0	Min. :13.60	Min. :0.6588
2021-04-30:160	IA:780	1st Qu.:130.0	1st Qu.:22.20	1st Qu.:1.1358
2020-10-05: 40	NA	Median :279.6	Median :28.30	Median :1.2300
2020-10-14: 40	NA	Mean :258.1	Mean :26.39	Mean :1.2307
2020-10-26: 40	NA	3rd Qu.:355.4	3rd Qu.:30.50	3rd Qu.:1.3335
2020-11-05: 40	NA	Max. :680.0	Max. :37.30	Max. :1.6988
(Other) :440	NA	NA	NA	NA

Resumen de la actividad enzimática NKA

```
resumen_datosa2 <- summary(a2)
pander::pander(resumen_datosa2, caption = "Resumen actividad enzimática NKA branquial")
```

Table 2: Resumen actividad enzimática NKA branquial

Fechas	Condición	NKA
2020-10-05: 40	C :300	Min. :11.22
2020-10-14: 40	IA:300	1st Qu.:12.99
2020-10-26: 40	NA	Median :13.60
2020-11-05: 40	NA	Mean :14.10
2020-11-14: 40	NA	3rd Qu.:14.81
2020-11-25: 40	NA	Max. :19.85
(Other) :360	NA	NA

Resumen de la actividad enzimática NKA

```
resumen_datosb <- summary(b)
pander::pander(resumen_datosb, caption = "Resumen parámetros plasmáticos")
```

Table 3: Resumen parámetros plasmáticos (continued below)

Fechas	Condicion	Glucosa	Calcio	Cloro
2021-02-12: 40	C :234	Min. : 4.058	Min. :2.869	Min. :192.6
2021-03-15: 40	IA:219	1st Qu.: 7.631	1st Qu.:4.458	1st Qu.:221.6
2021-03-30: 40	NA	Median : 8.702	Median :4.789	Median :231.5
2021-04-15: 40	NA	Mean : 8.702	Mean :4.747	Mean :233.7
2021-02-26: 39	NA	3rd Qu.: 9.668	3rd Qu.:5.096	3rd Qu.:242.8
2020-12-05: 38	NA	Max. :20.259	Max. :6.023	Max. :334.0
(Other) :216	NA	NA	NA	NA

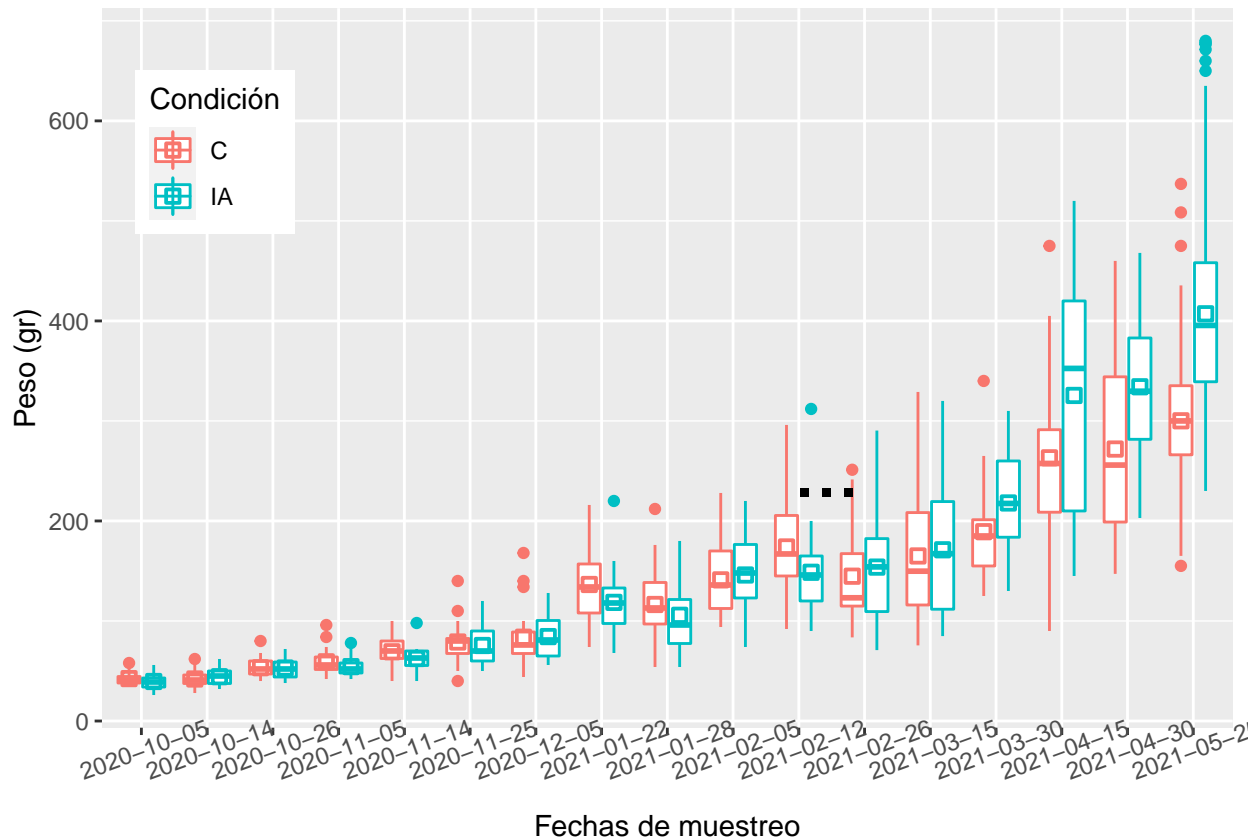
Albumina	Cortisol
Min. :0.1684	Min. : 0.0052
1st Qu.:0.7290	1st Qu.: 83.0548
Median :0.8992	Median :209.2448
Mean :0.8585	Mean :227.2589
3rd Qu.:1.0265	3rd Qu.:340.2016
Max. :1.6572	Max. :866.5350
NA	NA's :15

Análisis exploratorio de datos

Peso

```
boxplot_peso <- ggplot(a, aes(x = Fechas, y = Peso, color = Condición)) + geom_boxplot() + labs(x = "Fechas de muestreo", y = "Peso (gr)")
boxplot_peso
```

```
## Warning: Removed 34 rows containing missing values (geom_segment).
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```

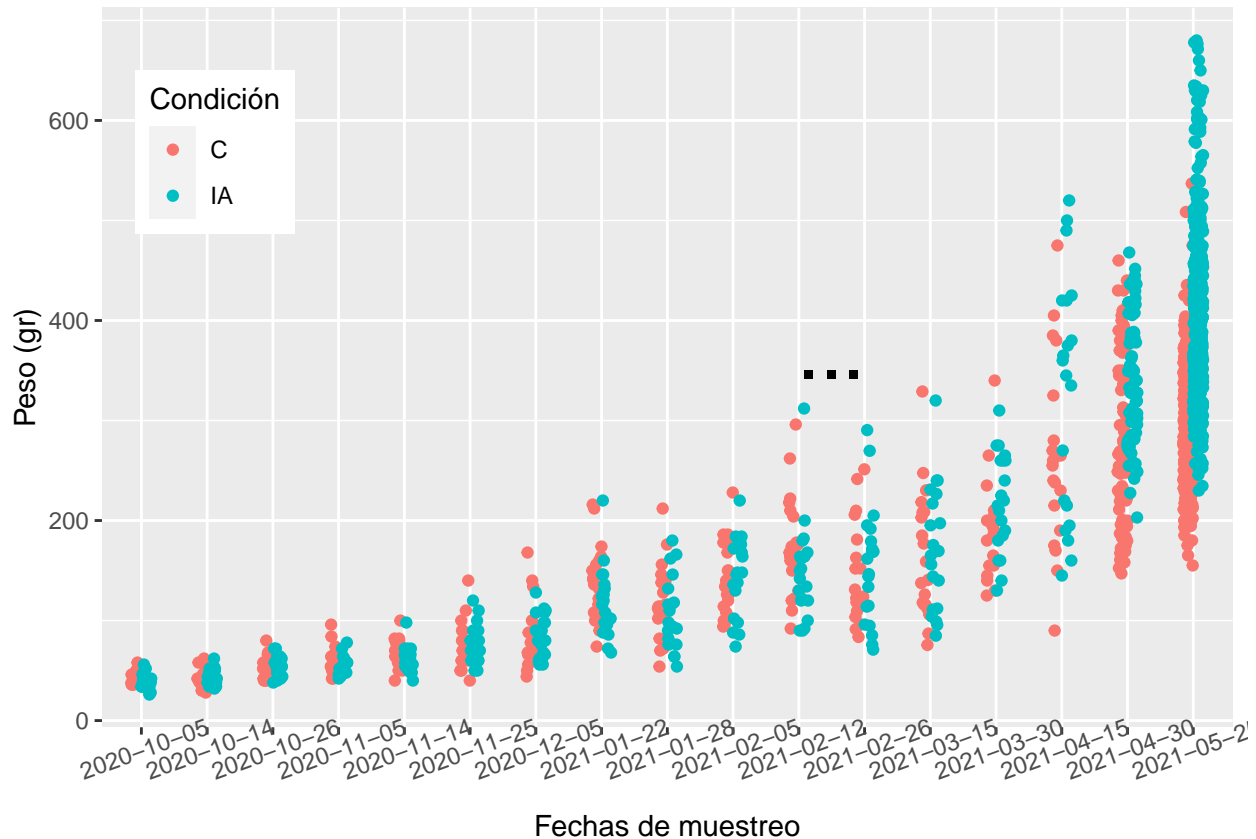


```
geompoint_peso <- ggplot(a, aes(x = Fechas, y = Peso, color = Condición)) + geom_point(position = position_dodge())
geompoint_peso
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbsToSbcs': dot substituted for <e2>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbsToSbcs': dot substituted for <86>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbsToSbcs': dot substituted for <93>
```



Largo

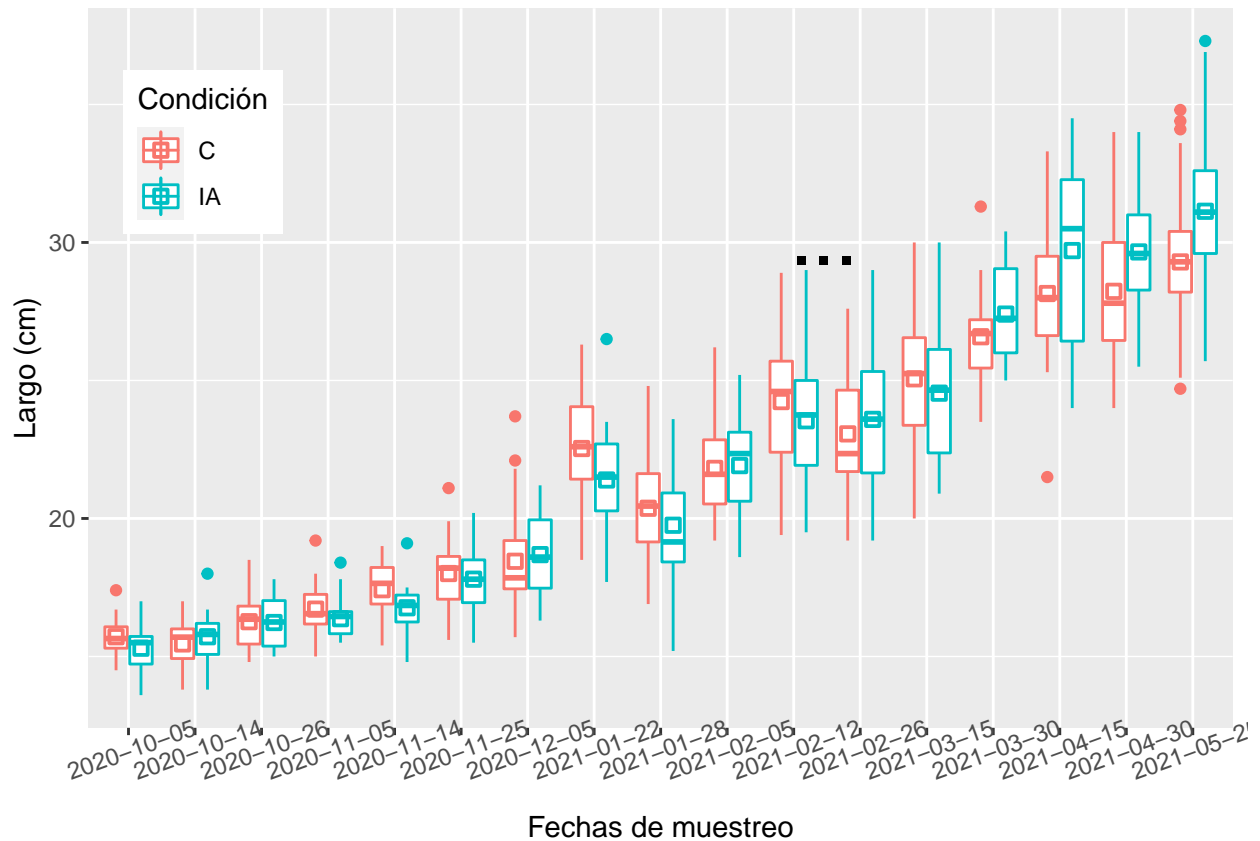
```
boxplot_largo <- ggplot(a, aes(x = Fechas, y = Largo, color = Condición)) + geom_boxplot() + labs(x = Fechas, y = Largo)
boxplot_largo
```

```
## Warning: Removed 34 rows containing missing values (geom_segment).

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbsToSbcs': dot substituted for <e2>

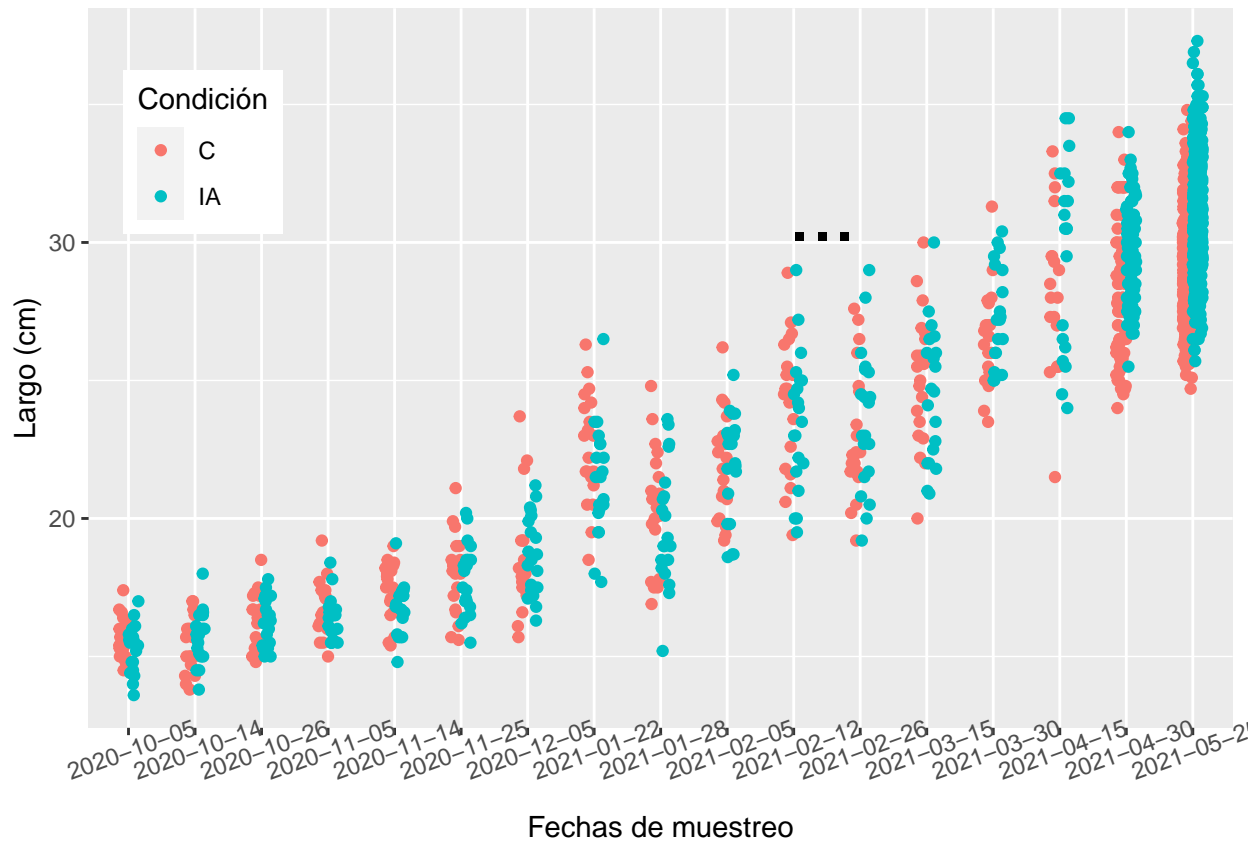
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbsToSbcs': dot substituted for <86>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbsToSbcs': dot substituted for <93>
```



```
geompoint_largo <- ggplot(a, aes(x = Fechas, y = Largo, color = Condición)) + geom_point(position = pos.  
geompoint_largo
```

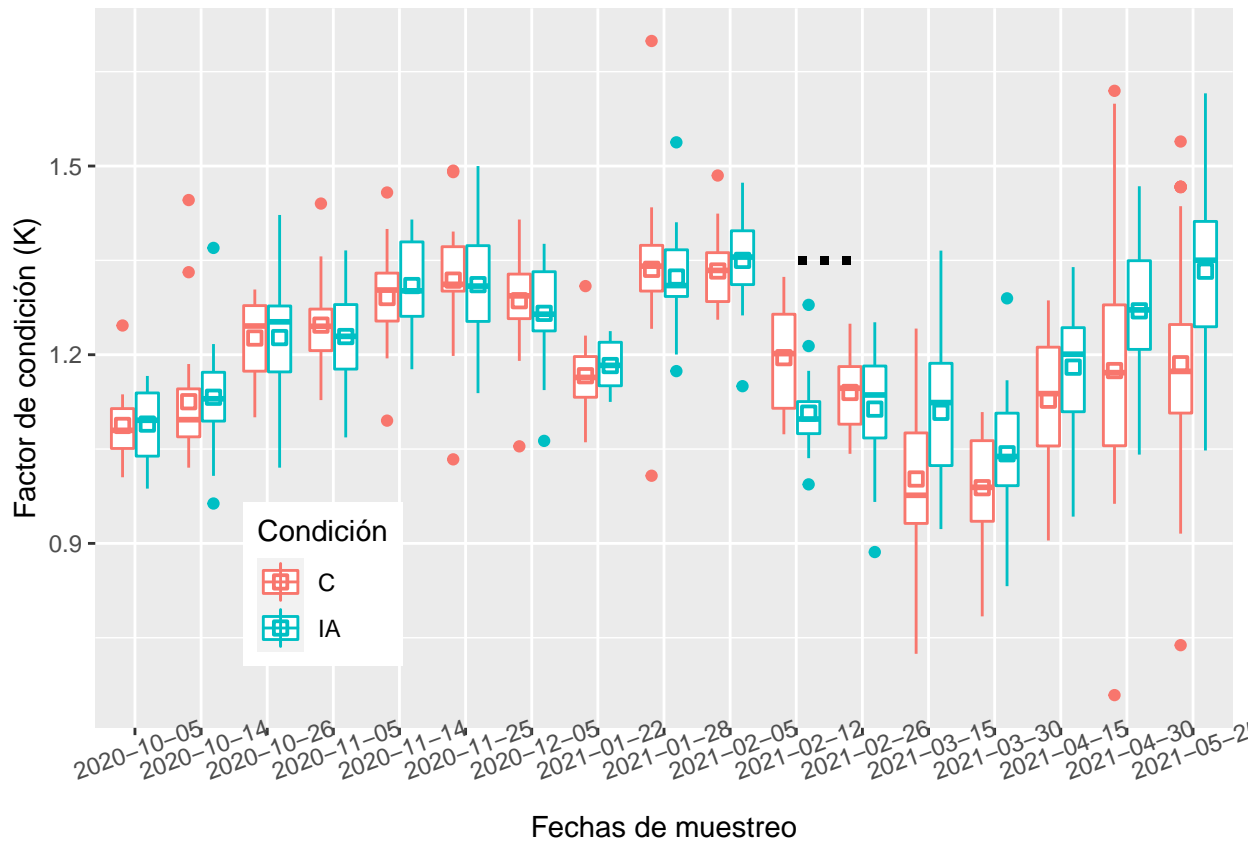
```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :  
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>  
  
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :  
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>  
  
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :  
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```



Factor de condición (K)

```
boxplot_K <- ggplot(a, aes(x = Fechas, y = K, color = Condición)) + geom_boxplot() + labs(x = "Fechas", y = "Factor de condición (K)")
boxplot_K
```

```
## Warning: Removed 34 rows containing missing values (geom_segment).
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```

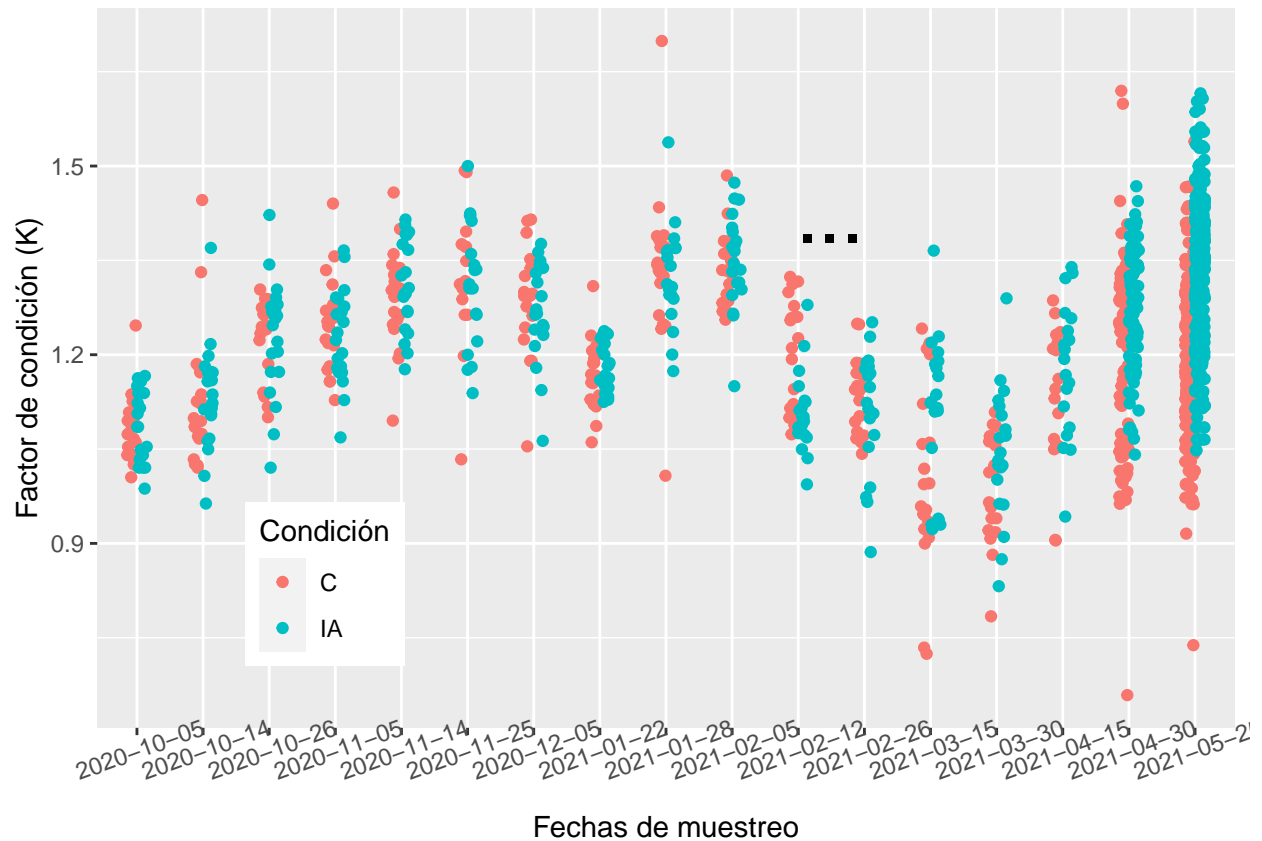


```
geompoint_K <- ggplot(a, aes(x = Fechas, y = K, color = Condición)) + geom_point(position = position_jitter)
geompoint_K
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>
```

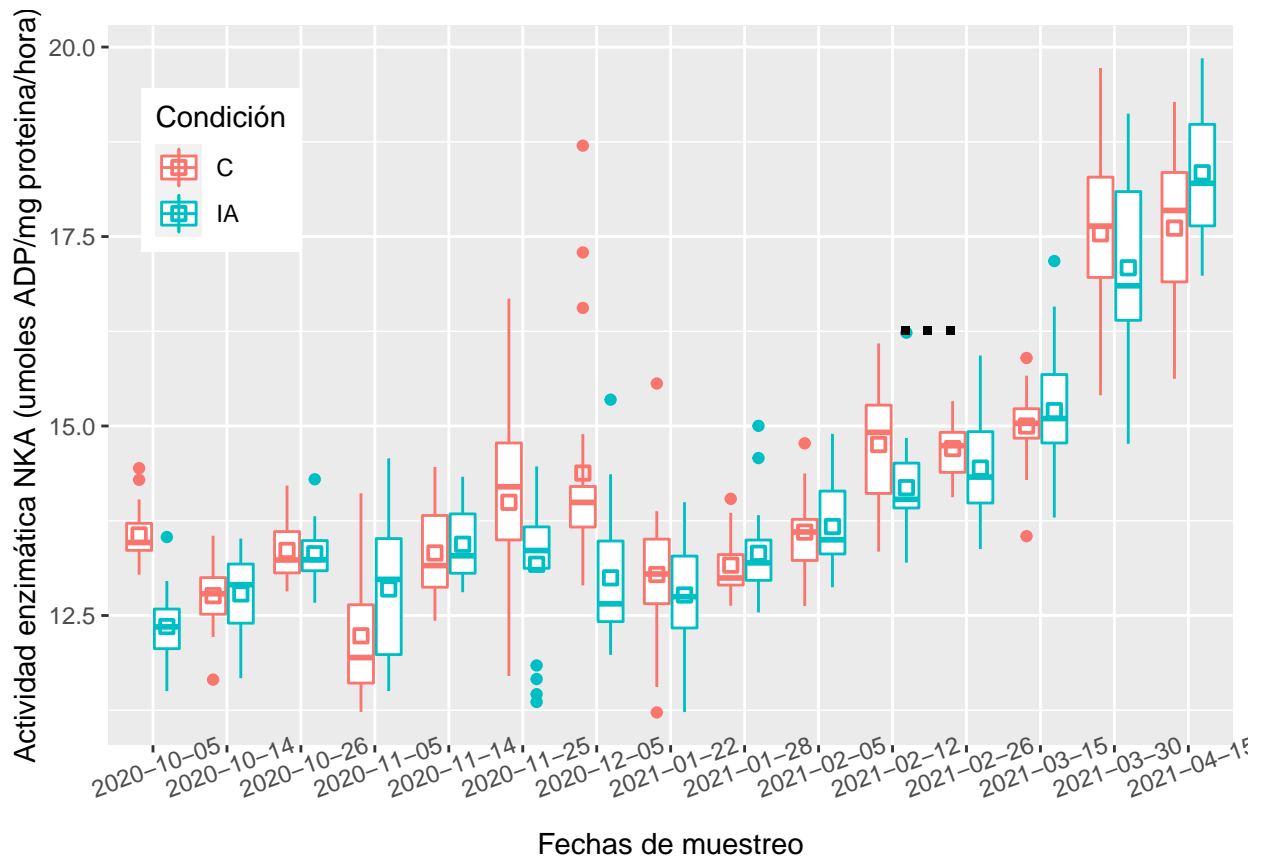
```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```

NKA

```
boxplot_NKA <- ggplot(a2, aes(x = Fechas, y = NKA, color = Condición)) + geom_boxplot() + labs(x = "Fechas", y = "NKA")
boxplot_NKA
```

```
## Warning: Removed 30 rows containing missing values (geom_segment).
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```

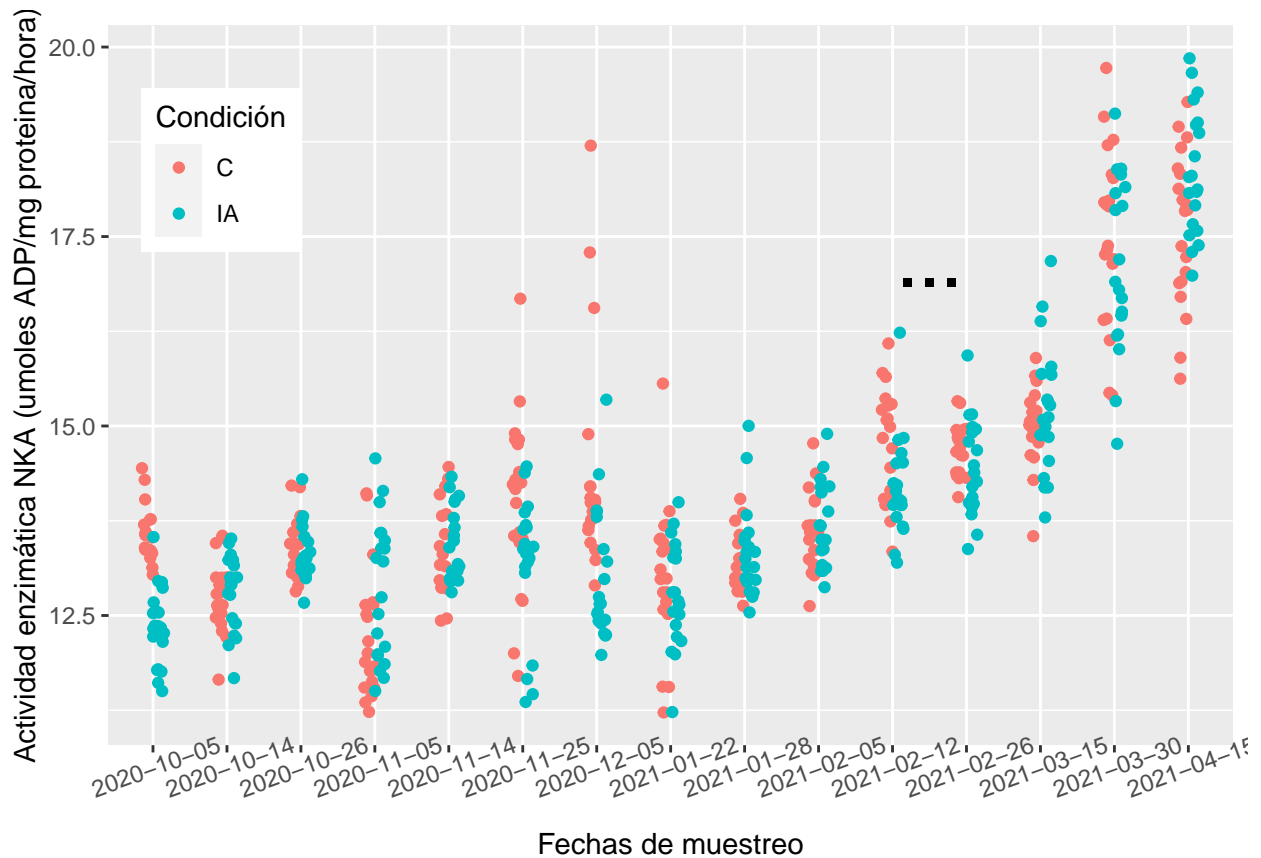


```
geompoint_NKA <- ggplot(a2, aes(x = Fechas, y = NKA, color = Condición)) + geom_point(position = position_jitter)
geompoint_NKA
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```



Glucosa

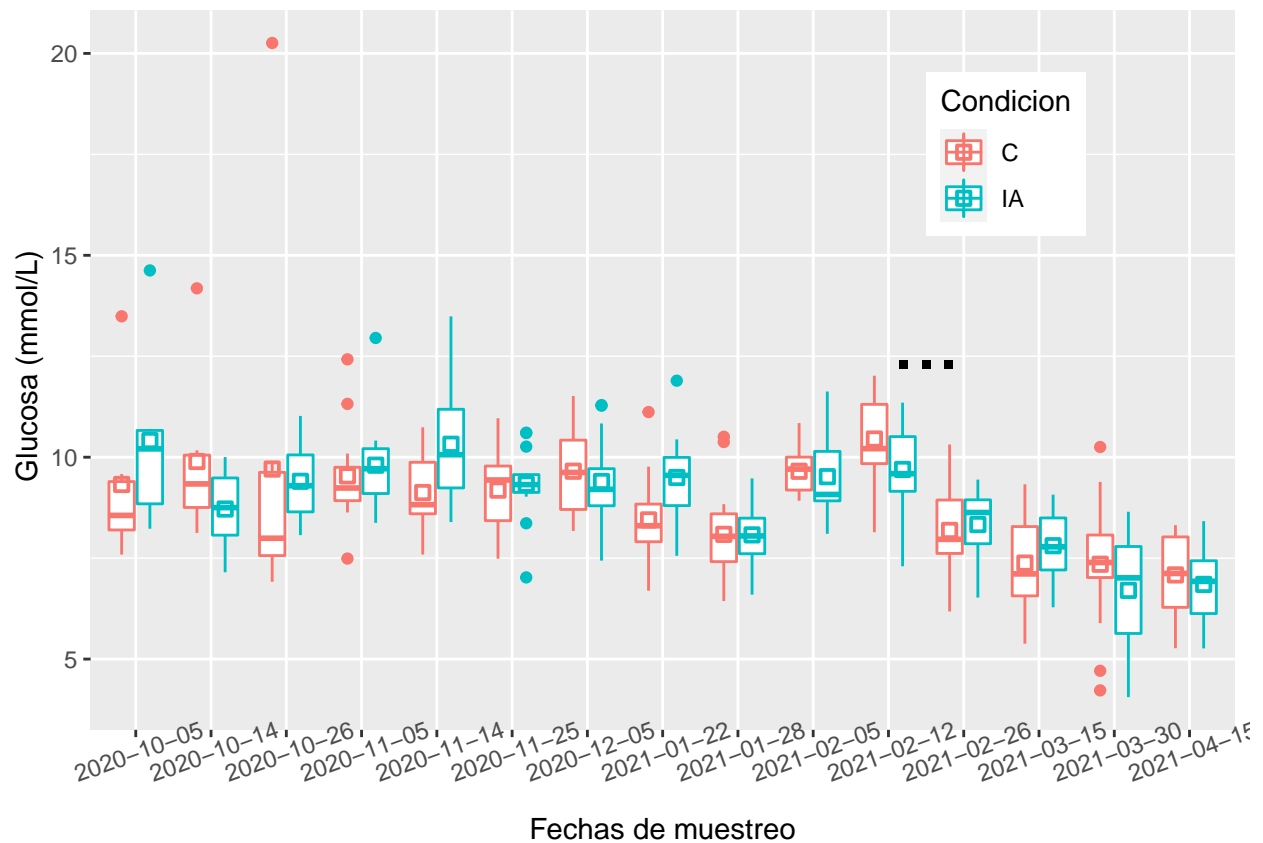
```
boxplot_glucosa <- ggplot(b, aes(x = Fechas, y = Glucosa, color = Condicion)) + geom_boxplot() + labs(
boxplot_glucosa
```

```
## Warning: Removed 30 rows containing missing values (geom_segment).
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbsToSbcs': dot substituted for <e2>
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbsToSbcs': dot substituted for <86>
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbsToSbcs': dot substituted for <93>
```

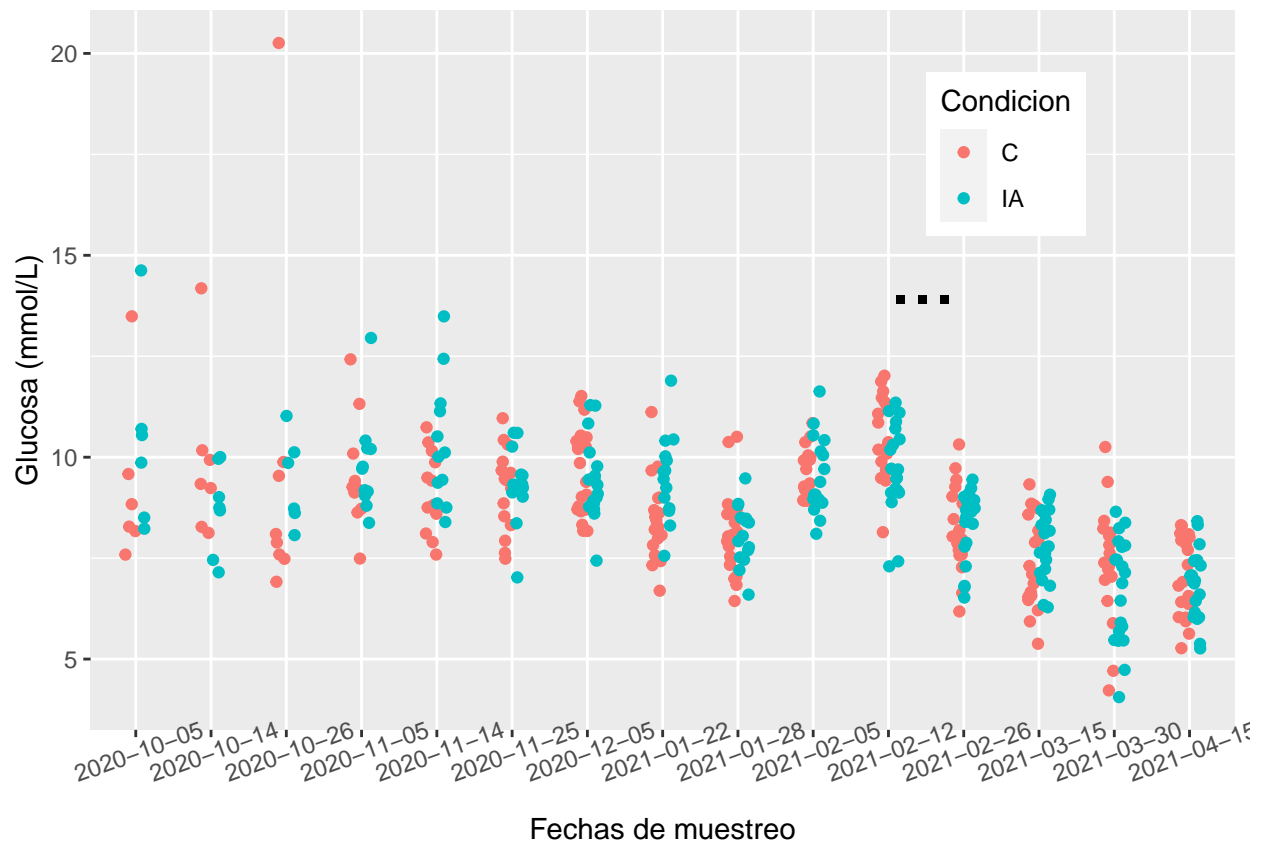


```
geompoint_glucosa <- ggplot(b, aes(x = Fechas, y = Glucosa, color = Condicion)) + geom_point(position =
geompoint_glucosa
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```



Calcio

```
boxplot_calcio <- ggplot(b, aes(x = Fechas, y = Calcio, color = Condicion)) + geom_boxplot() + labs(x = Fechas, y = Calcio)
```

```
## Warning: `fun.y` is deprecated. Use `fun` instead.
```

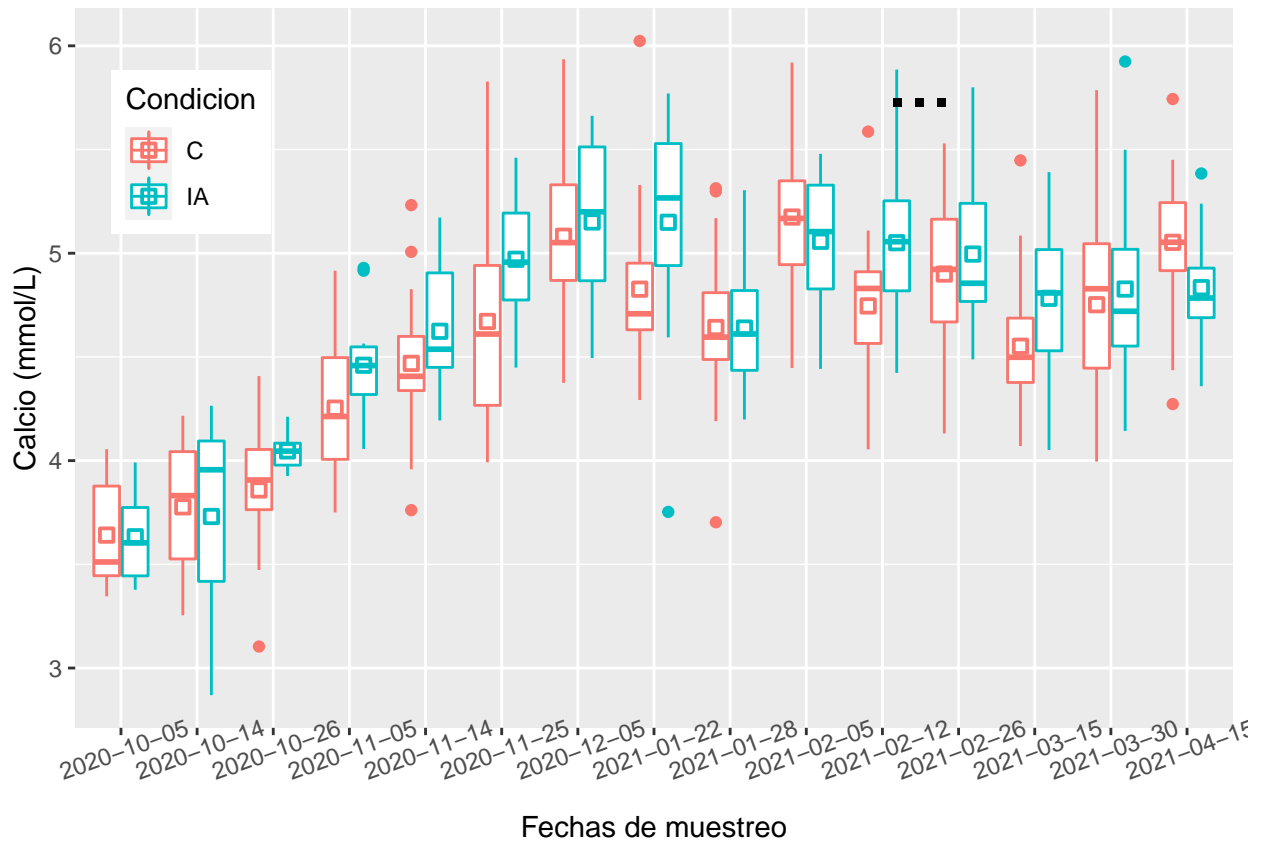
```
boxplot_calcio
```

```
## Warning: Removed 30 rows containing missing values (geom_segment).
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :  
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :  
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :  
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```

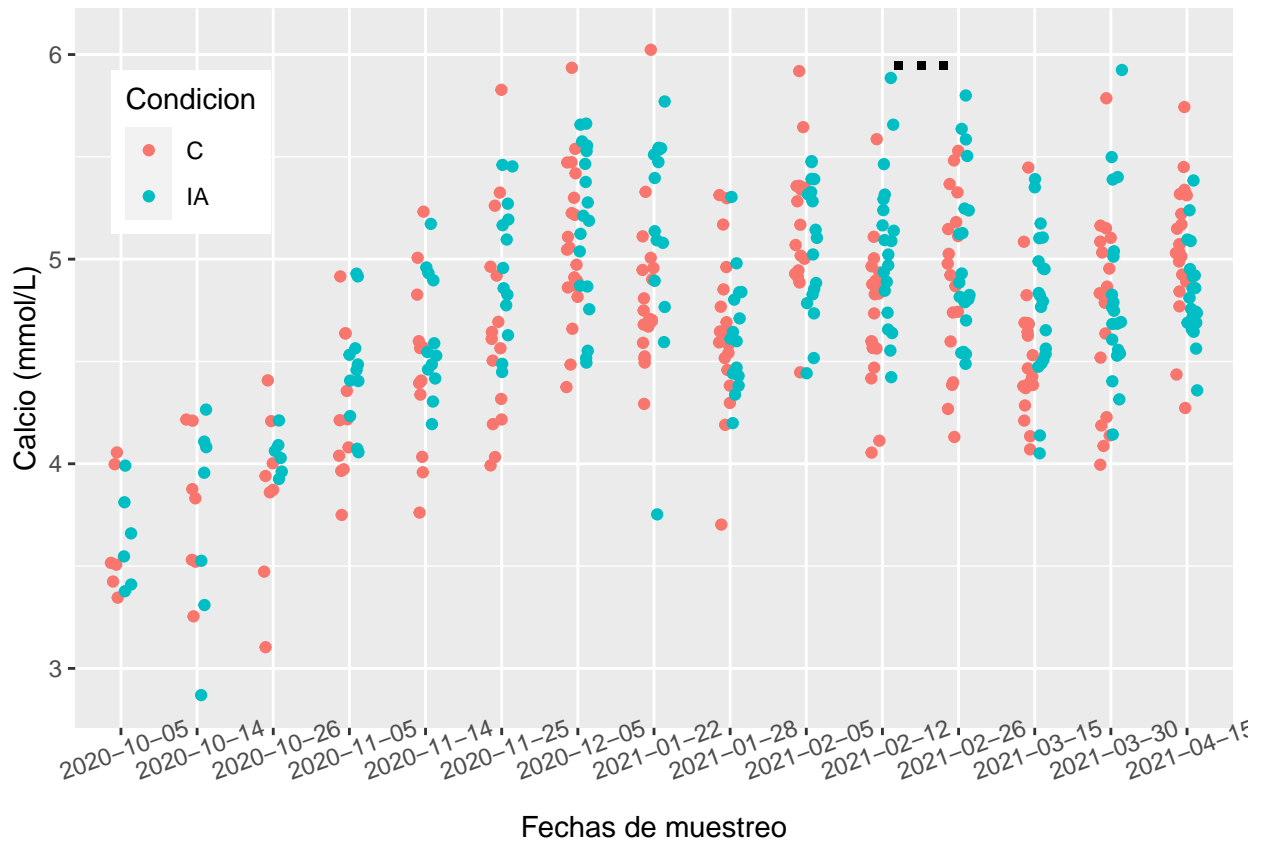


```
geompoint_calcio <- ggplot(b, aes(x = Fechas, y = Calcio, color = Condicion)) + geom_point(position = position_jitter)
geompoint_calcio
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>

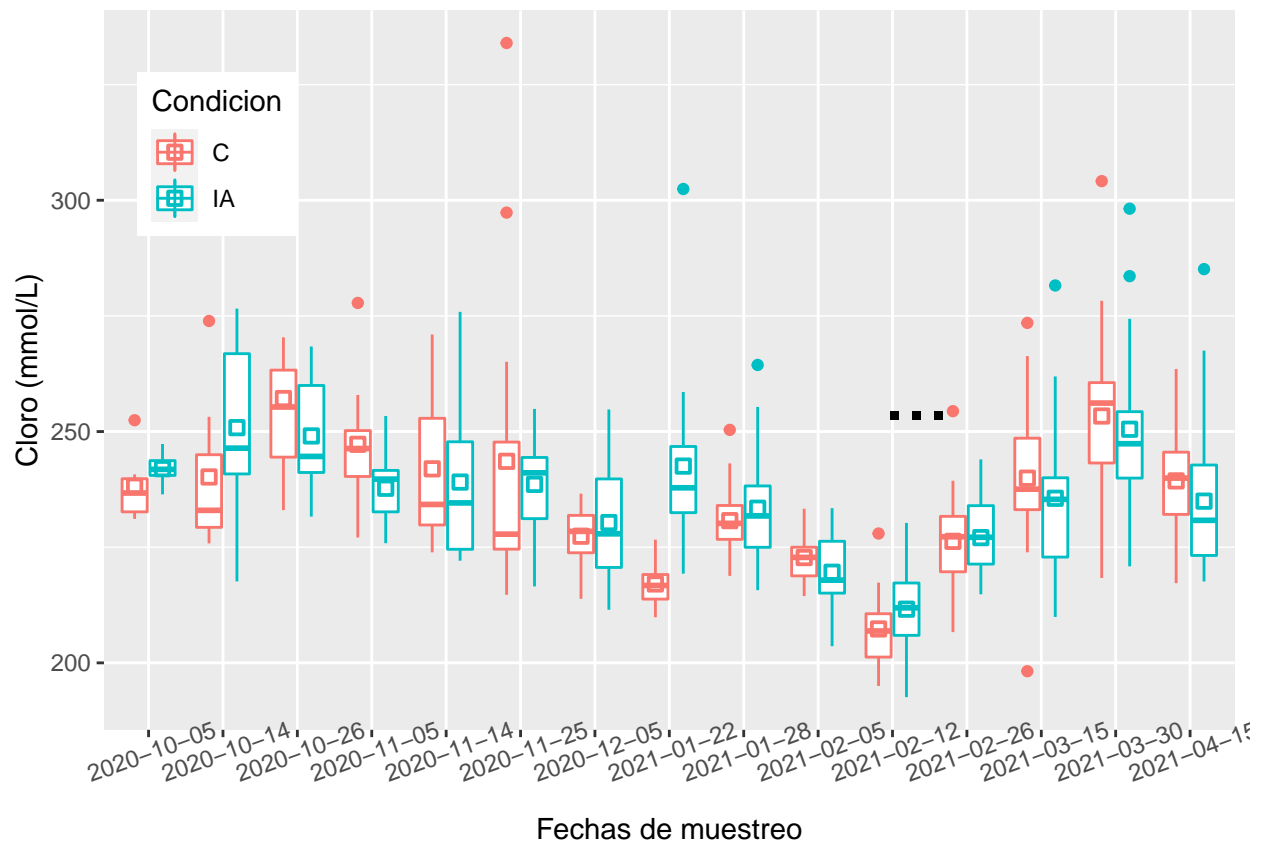
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```



Cloro

```
boxplot_cloro <- ggplot(b, aes(x = Fechas, y = Cloro, color = Condicion)) + geom_boxplot() + labs(x = Fechas, y = Cloro)
boxplot_cloro
```

```
## Warning: Removed 30 rows containing missing values (geom_segment).
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```

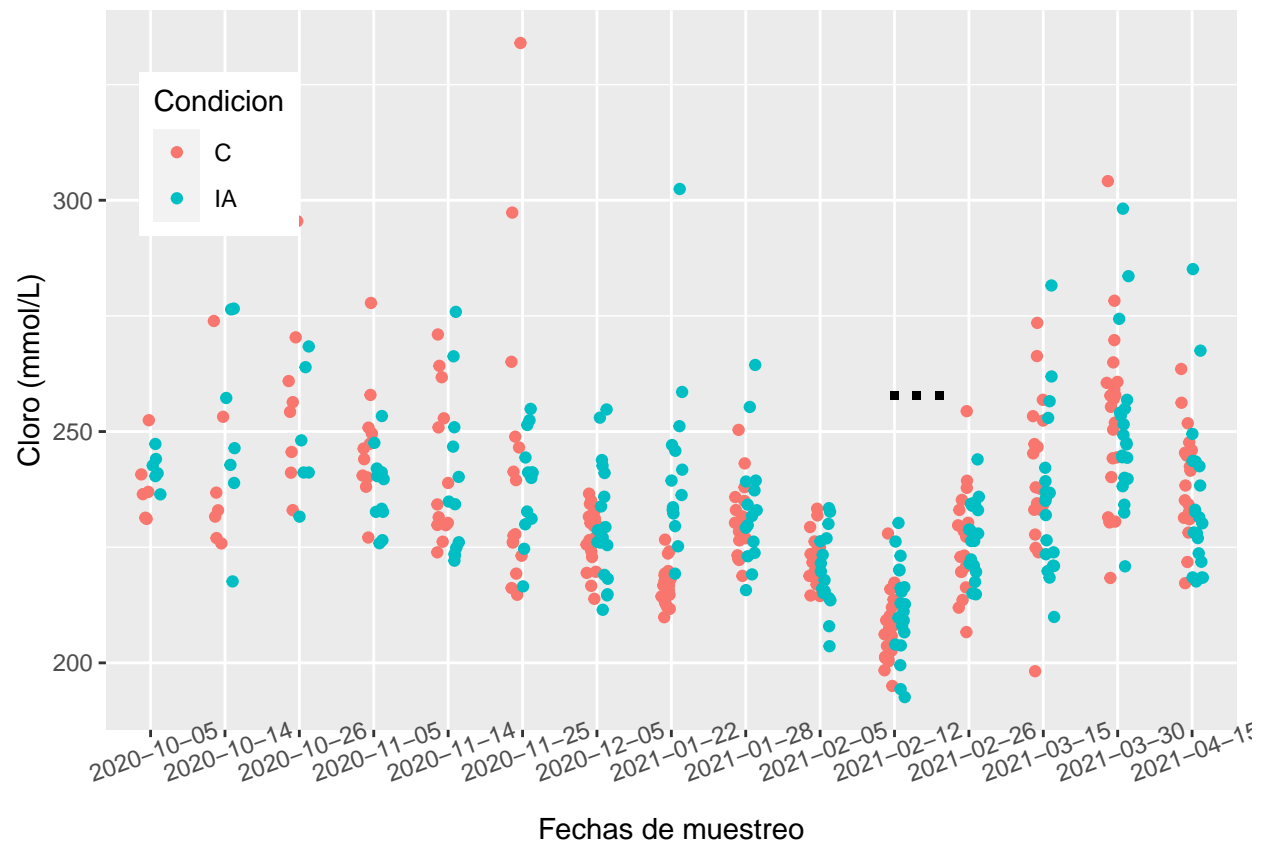


```
geompoint_cloro <- ggplot(b, aes(x = Fechas, y = Cloro, color = Condicion)) + geom_point(position = position_dodge(0.5),
  label = "↓"), mapping = aes(x = x, y = y, label = label),
  size = 10.58, inherit.aes = FALSE)
geompoint_cloro
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```

Albúmina

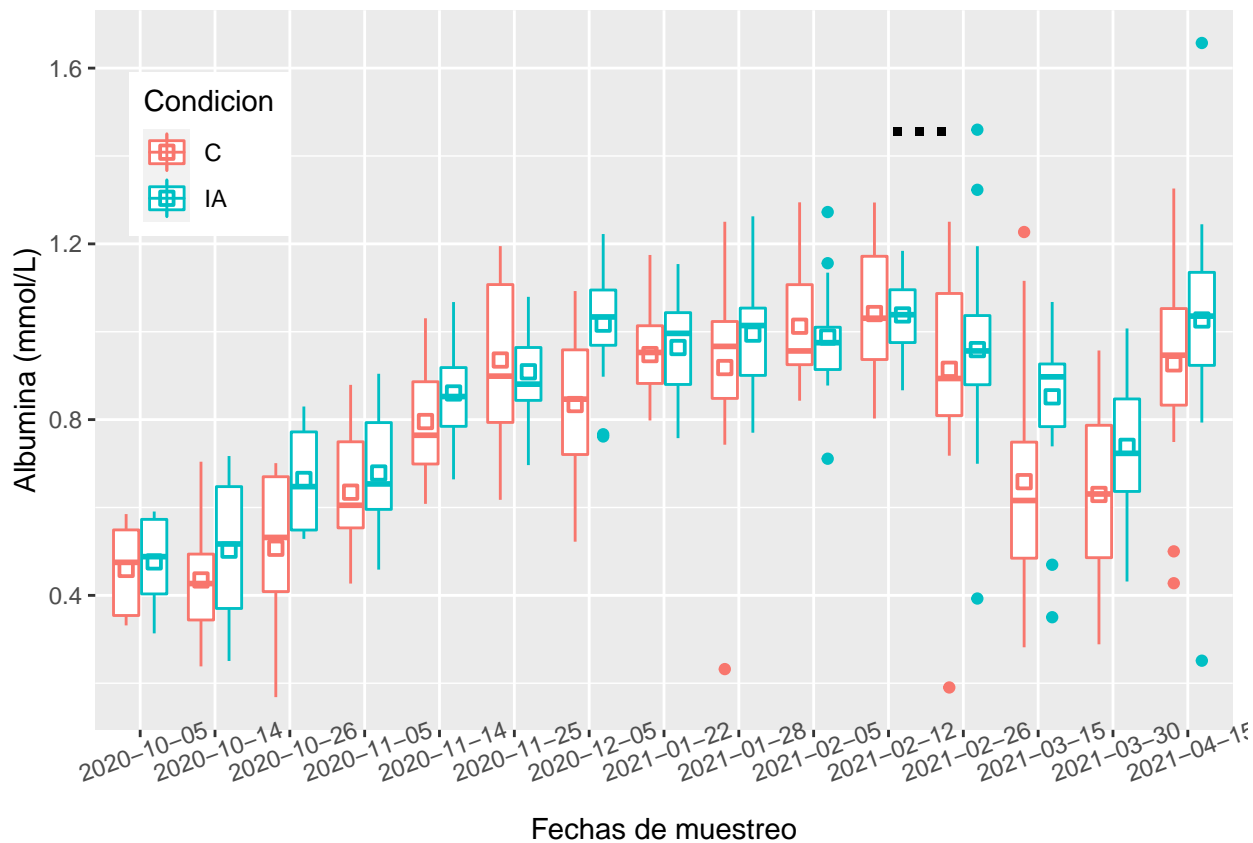
```
boxplot_albumina <- ggplot(b, aes(x = Fechas, y = Albumina, color = Condicion)) + geom_boxplot() + labs(
  boxplot_albumina
```

```
## Warning: Removed 30 rows containing missing values (geom_segment).

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```

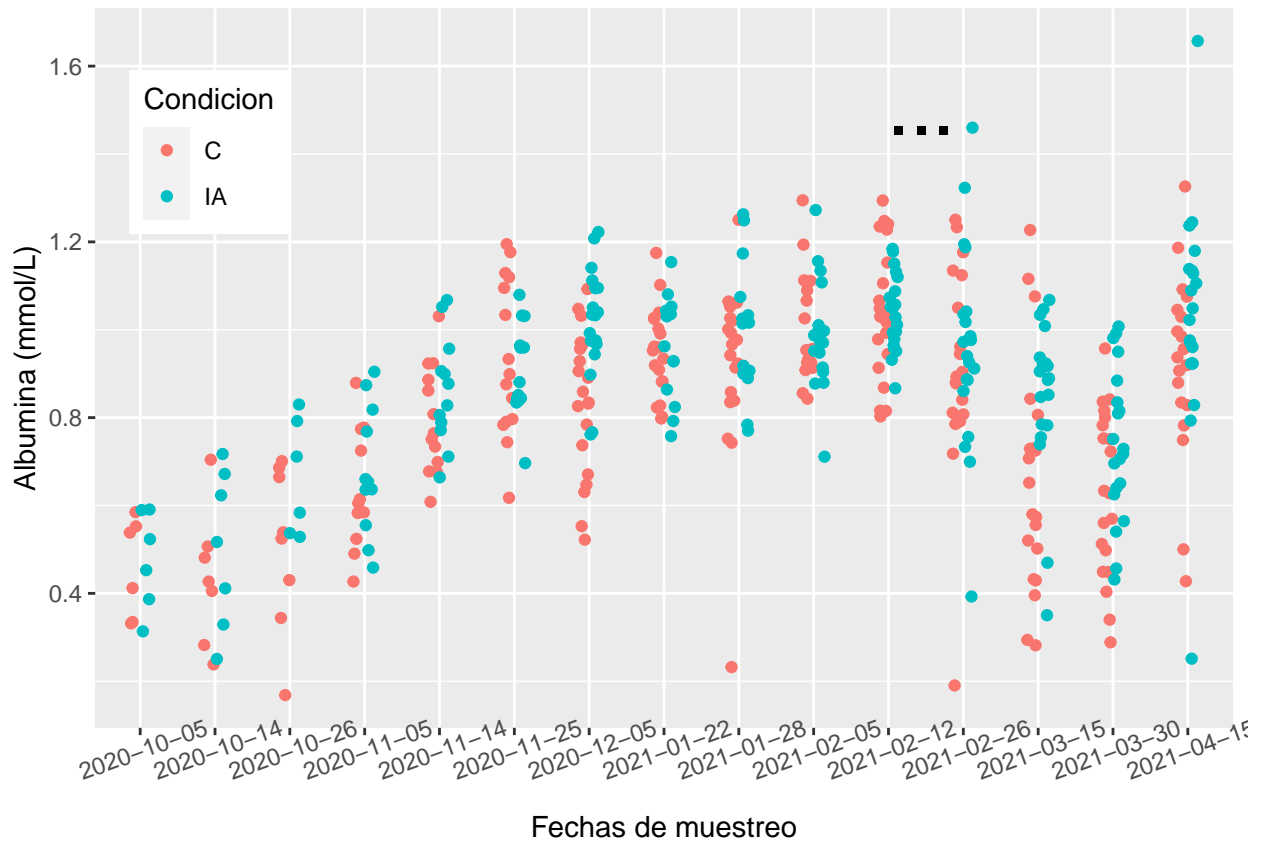


```
geompoint_albumina <- ggplot(b, aes(x = Fechas, y = Albumina, color = Condicion)) + geom_point(position = "jitter")
geompoint_albumina
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>

## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>

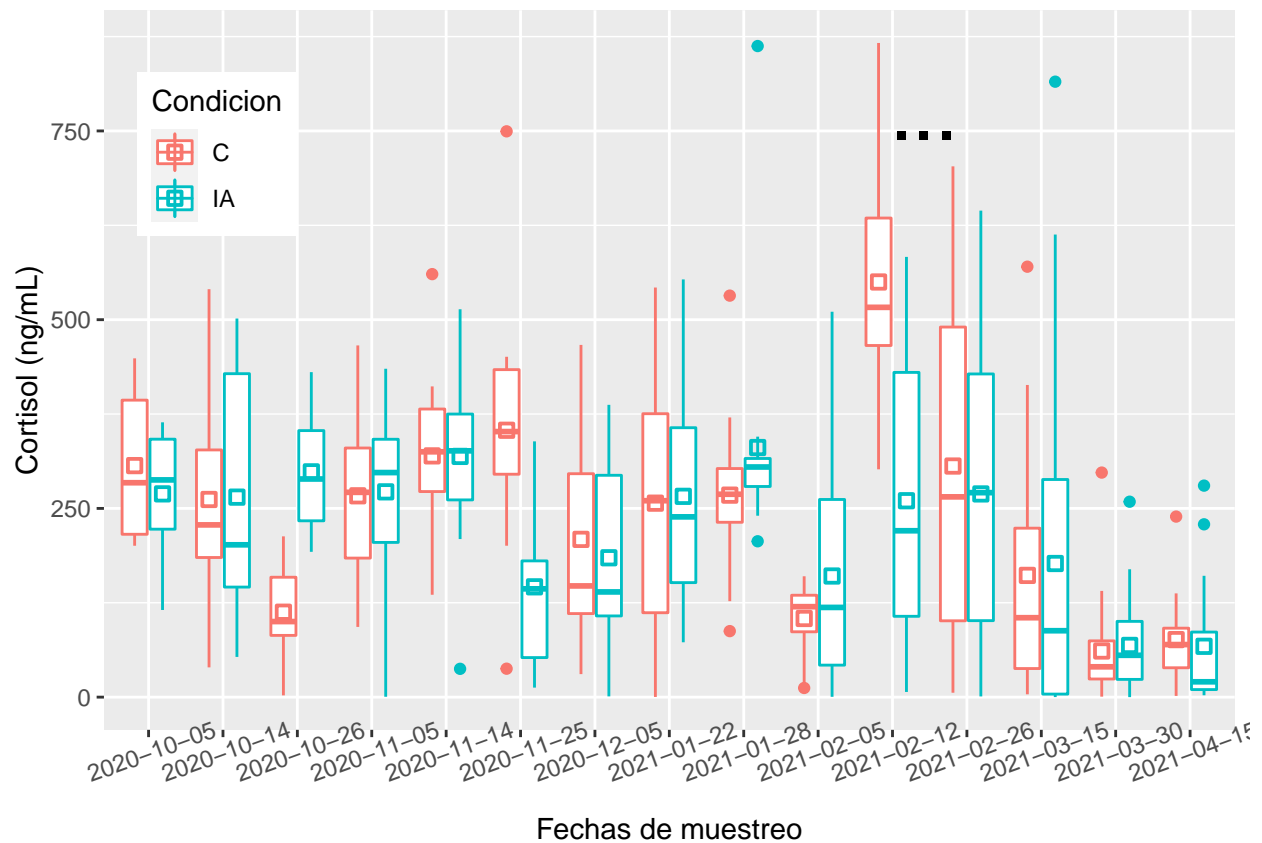
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```



Cortisol

```
boxplot_cortisol <- ggplot(b, aes(x = Fechas, y = Cortisol, color = Condicion)) + geom_boxplot() + labs(
  boxplot_cortisol
```

```
## Warning: Removed 15 rows containing non-finite values (stat_boxplot).
## Warning: Removed 15 rows containing non-finite values (stat_summary).
## Warning: Removed 30 rows containing missing values (geom_segment).
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```



```
geompoint_cortisol <- ggplot(b, aes(x = Fechas, y = Cortisol, color = Condicion)) + geom_point(position = "down", mapping = aes(x = x, y = y, label = label), size = 10.58, inherit.aes = FALSE)
geompoint_cortisol
```

```
## Warning: Removed 15 rows containing missing values (geom_point).
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <e2>
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <86>
```

```
## Warning in grid.Call.graphics(C_text, as.graphicsAnnot(x$label), x$x, x$y, :
## conversion failure on '↓' in 'mbcsToSbcs': dot substituted for <93>
```

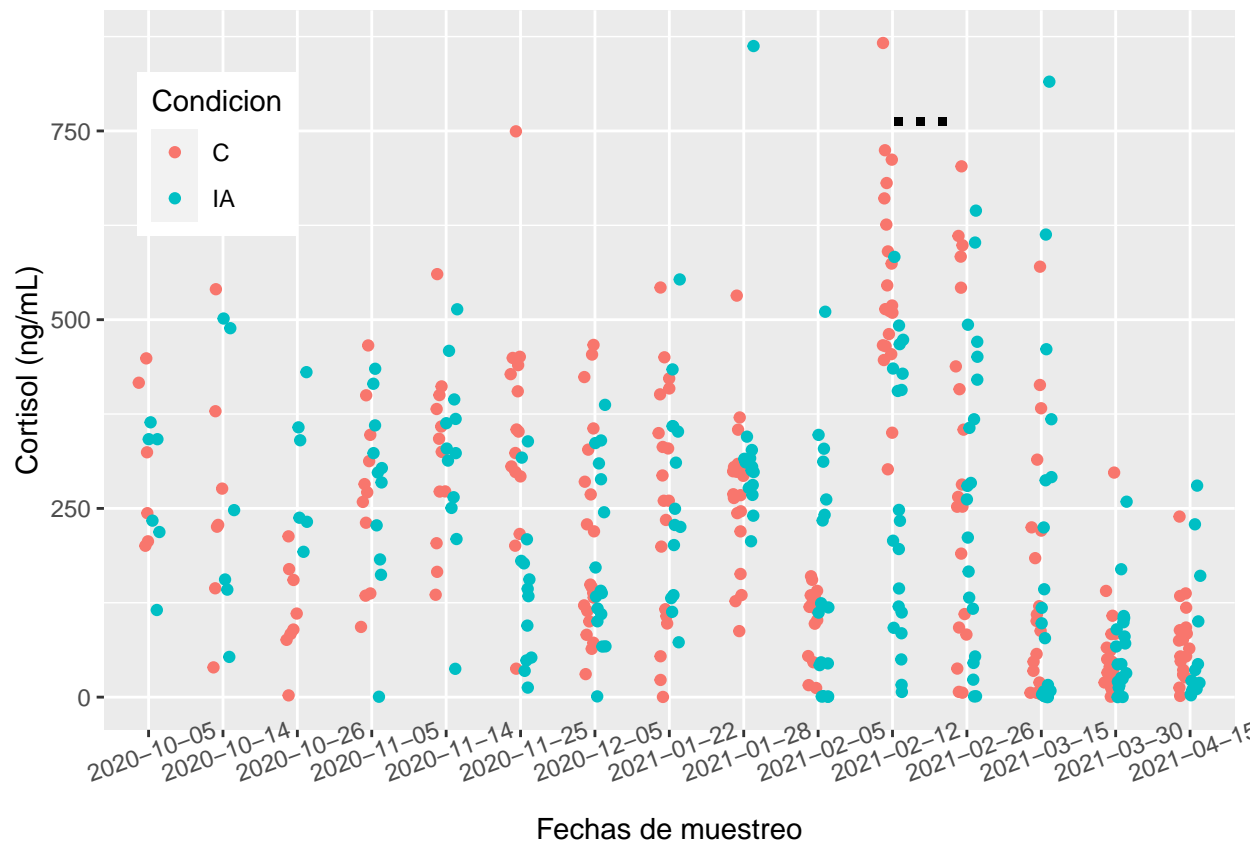
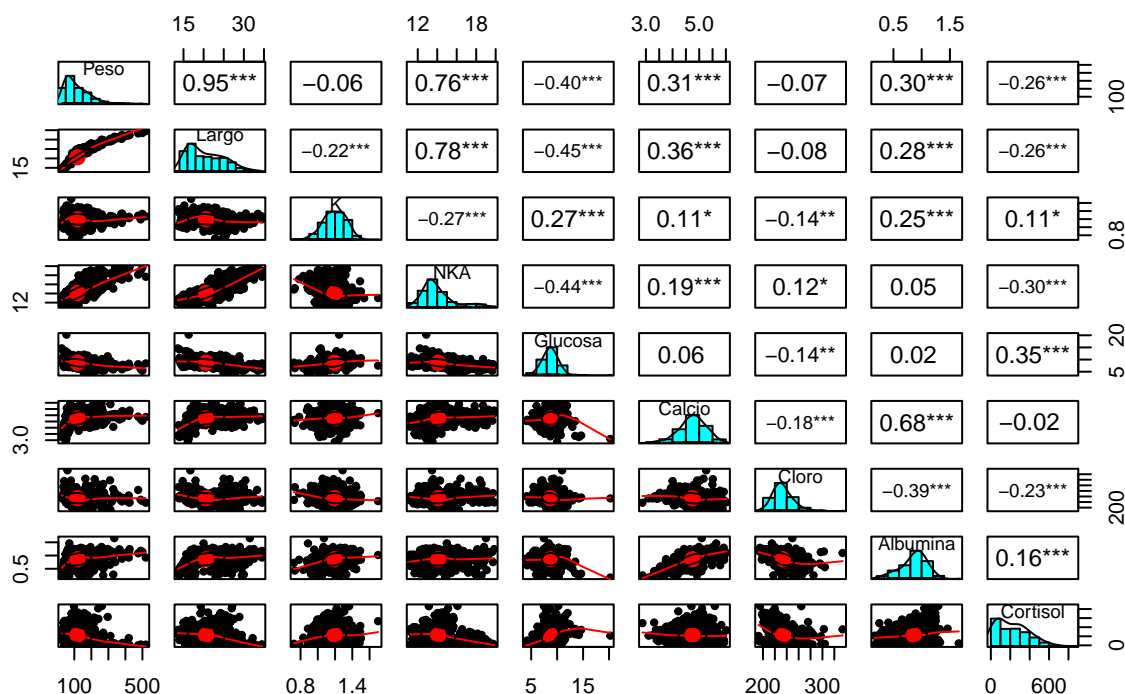


Grafico de correlaciones

```
pairs.panels(c[3:11], stars = TRUE, main = "Grafica de correlaciones parámetros fisiológicos")
```

Grafica de correlaciones parámetros fisiológicos



Análisis estadístico de los datos

Efecto de la IA sobre el Peso

```
t2way(Peso ~ Condición + Fechas + Condición:Fechas, data = a,)
```

```
## Call:
## t2way(formula = Peso ~ Condición + Fechas + Condición:Fechas,
##       data = a)
##
##               value p.value
## Condición      15.1590  0.001
## Fechas        13759.4376  0.001
## Condición:Fechas 359.9254  0.001

anovapeso <- aov(Peso ~ Condición + Fechas + Condición:Fechas, data = a)
anova(anovapeso)
```

```
## Analysis of Variance Table
##
## Response: Peso
##           Df    Sum Sq Mean Sq F value    Pr(>F)
## Condición     1  1514898  1514898  363.814 < 2.2e-16 ***
## Fechas        16 22072961  1379560  331.312 < 2.2e-16 ***
## Condición:Fechas 16   989713    61857   14.855 < 2.2e-16 ***
## Residuals    1526  6354160    4164
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
TukeyHSD(anovapeso)
```

```
## Tukey multiple comparisons of means
## 95% family-wise confidence level
##
## Fit: aov(formula = Peso ~ Condición + Fechas + Condición:Fechas, data = a)
##
## $Condición
##           diff          lwr          upr p adj
## IA-C 62.32459 55.91527 68.73391 0
##
## $Fechas
##           diff          lwr          upr          p adj
## 2020-10-14-2020-10-05 2.20000 -47.7873079 52.18731 1.0000000
## 2020-10-26-2020-10-05 12.20000 -37.7873079 62.18731 0.9999893
## 2020-11-05-2020-10-05 15.82500 -34.1623079 65.81231 0.9996534
## 2020-11-14-2020-10-05 24.90000 -25.0873079 74.88731 0.9520193
## 2020-11-25-2020-10-05 36.30000 -13.6873079 86.28731 0.4899937
## 2020-12-05-2020-10-05 43.15000 -6.8373079 93.13731 0.1899063
## 2021-01-22-2020-10-05 86.60000 36.6126921 136.58731 0.0000003
## 2021-01-28-2020-10-05 70.15000 20.1626921 120.13731 0.0001656
## 2021-02-05-2020-10-05 102.60000 52.6126921 152.58731 0.0000000
## 2021-02-12-2020-10-05 120.40000 70.4126921 170.38731 0.0000000
## 2021-02-26-2020-10-05 108.38975 58.4024421 158.37706 0.0000000
## 2021-03-15-2020-10-05 127.16250 77.1751921 177.14981 0.0000000
## 2021-03-30-2020-10-05 162.67500 112.6876921 212.66231 0.0000000
## 2021-04-15-2020-10-05 253.37500 203.3876921 303.36231 0.0000000
## 2021-04-30-2020-10-05 262.08750 222.5690632 301.60594 0.0000000
```

```

## 2021-05-25-2020-10-05 312.69291 276.4736669 348.91216 0.0000000
## 2020-10-26-2020-10-14 10.00000 -39.9873079 59.98731 0.9999994
## 2020-11-05-2020-10-14 13.62500 -36.3623079 63.61231 0.9999511
## 2020-11-14-2020-10-14 22.70000 -27.2873079 72.68731 0.9795065
## 2020-11-25-2020-10-14 34.10000 -15.8873079 84.08731 0.6069405
## 2020-12-05-2020-10-14 40.95000 -9.0373079 90.93731 0.2693738
## 2021-01-22-2020-10-14 84.40000 34.4126921 134.38731 0.0000008
## 2021-01-28-2020-10-14 67.95000 17.9626921 117.93731 0.0003448
## 2021-02-05-2020-10-14 100.40000 50.4126921 150.38731 0.0000000
## 2021-02-12-2020-10-14 118.20000 68.2126921 168.18731 0.0000000
## 2021-02-26-2020-10-14 106.18975 56.2024421 156.17706 0.0000000
## 2021-03-15-2020-10-14 124.96250 74.9751921 174.94981 0.0000000
## 2021-03-30-2020-10-14 160.47500 110.4876921 210.46231 0.0000000
## 2021-04-15-2020-10-14 251.17500 201.1876921 301.16231 0.0000000
## 2021-04-30-2020-10-14 259.88750 220.3690632 299.40594 0.0000000
## 2021-05-25-2020-10-14 310.49291 274.2736669 346.71216 0.0000000
## 2020-11-05-2020-10-26 3.62500 -46.3623079 53.61231 1.0000000
## 2020-11-14-2020-10-26 12.70000 -37.2873079 62.68731 0.9999812
## 2020-11-25-2020-10-26 24.10000 -25.8873079 74.08731 0.9640791
## 2020-12-05-2020-10-26 30.95000 -19.0373079 80.93731 0.7637009
## 2021-01-22-2020-10-26 74.40000 24.4126921 124.38731 0.0000375
## 2021-01-28-2020-10-26 57.95000 7.9626921 107.93731 0.0069780
## 2021-02-05-2020-10-26 90.40000 40.4126921 140.38731 0.0000001
## 2021-02-12-2020-10-26 108.20000 58.2126921 158.18731 0.0000000
## 2021-02-26-2020-10-26 96.18975 46.2024421 146.17706 0.0000000
## 2021-03-15-2020-10-26 114.96250 64.9751921 164.94981 0.0000000
## 2021-03-30-2020-10-26 150.47500 100.4876921 200.46231 0.0000000
## 2021-04-15-2020-10-26 241.17500 191.1876921 291.16231 0.0000000
## 2021-04-30-2020-10-26 249.88750 210.3690632 289.40594 0.0000000
## 2021-05-25-2020-10-26 300.49291 264.2736669 336.71216 0.0000000
## 2020-11-14-2020-11-05 9.07500 -40.9123079 59.06231 0.9999998
## 2020-11-25-2020-11-05 20.47500 -29.5123079 70.46231 0.9928547
## 2020-12-05-2020-11-05 27.32500 -22.6623079 77.31231 0.8979418
## 2021-01-22-2020-11-05 70.77500 20.7876921 120.76231 0.0001339
## 2021-01-28-2020-11-05 54.32500 4.3376921 104.31231 0.0179953
## 2021-02-05-2020-11-05 86.77500 36.7876921 136.76231 0.0000003
## 2021-02-12-2020-11-05 104.57500 54.5876921 154.56231 0.0000000
## 2021-02-26-2020-11-05 92.56475 42.5774421 142.55206 0.0000000
## 2021-03-15-2020-11-05 111.33750 61.3501921 161.32481 0.0000000
## 2021-03-30-2020-11-05 146.85000 96.8626921 196.83731 0.0000000
## 2021-04-15-2020-11-05 237.55000 187.5626921 287.53731 0.0000000
## 2021-04-30-2020-11-05 246.26250 206.7440632 285.78094 0.0000000
## 2021-05-25-2020-11-05 296.86791 260.6486669 333.08716 0.0000000
## 2020-11-25-2020-11-14 11.40000 -38.5873079 61.38731 0.9999959
## 2020-12-05-2020-11-14 18.25000 -31.7373079 68.23731 0.9980310
## 2021-01-22-2020-11-14 61.70000 11.7126921 111.68731 0.0024109
## 2021-01-28-2020-11-14 45.25000 -4.7373079 95.23731 0.1310088
## 2021-02-05-2020-11-14 77.70000 27.7126921 127.68731 0.0000112
## 2021-02-12-2020-11-14 95.50000 45.5126921 145.48731 0.0000000
## 2021-02-26-2020-11-14 83.48975 33.5024421 133.47706 0.0000012
## 2021-03-15-2020-11-14 102.26250 52.2751921 152.24981 0.0000000
## 2021-03-30-2020-11-14 137.77500 87.7876921 187.76231 0.0000000
## 2021-04-15-2020-11-14 228.47500 178.4876921 278.46231 0.0000000
## 2021-04-30-2020-11-14 237.18750 197.6690632 276.70594 0.0000000

```

##	2021-05-25-2020-11-14	287.79291	251.5736669	324.01216	0.0000000
##	2020-12-05-2020-11-25	6.85000	-43.1373079	56.83731	1.0000000
##	2021-01-22-2020-11-25	50.30000	0.3126921	100.28731	0.0466492
##	2021-01-28-2020-11-25	33.85000	-16.1373079	83.83731	0.6201301
##	2021-02-05-2020-11-25	66.30000	16.3126921	116.28731	0.0005879
##	2021-02-12-2020-11-25	84.10000	34.1126921	134.08731	0.0000009
##	2021-02-26-2020-11-25	72.08975	22.1024421	122.07706	0.0000850
##	2021-03-15-2020-11-25	90.86250	40.8751921	140.84981	0.0000001
##	2021-03-30-2020-11-25	126.37500	76.3876921	176.36231	0.0000000
##	2021-04-15-2020-11-25	217.07500	167.0876921	267.06231	0.0000000
##	2021-04-30-2020-11-25	225.78750	186.2690632	265.30594	0.0000000
##	2021-05-25-2020-11-25	276.39291	240.1736669	312.61216	0.0000000
##	2021-01-22-2020-12-05	43.45000	-6.5373079	93.43731	0.1804942
##	2021-01-28-2020-12-05	27.00000	-22.9873079	76.98731	0.9068405
##	2021-02-05-2020-12-05	59.45000	9.4626921	109.43731	0.0046064
##	2021-02-12-2020-12-05	77.25000	27.2626921	127.23731	0.0000132
##	2021-02-26-2020-12-05	65.23975	15.2524421	115.22706	0.0008222
##	2021-03-15-2020-12-05	84.01250	34.0251921	133.99981	0.0000010
##	2021-03-30-2020-12-05	119.52500	69.5376921	169.51231	0.0000000
##	2021-04-15-2020-12-05	210.22500	160.2376921	260.21231	0.0000000
##	2021-04-30-2020-12-05	218.93750	179.4190632	258.45594	0.0000000
##	2021-05-25-2020-12-05	269.54291	233.3236669	305.76216	0.0000000
##	2021-01-28-2021-01-22	-16.45000	-66.4373079	33.53731	0.9994368
##	2021-02-05-2021-01-22	16.00000	-33.9873079	65.98731	0.9996018
##	2021-02-12-2021-01-22	33.80000	-16.1873079	83.78731	0.6227594
##	2021-02-26-2021-01-22	21.78975	-28.1975579	71.77706	0.9863379
##	2021-03-15-2021-01-22	40.56250	-9.4248079	90.54981	0.2852472
##	2021-03-30-2021-01-22	76.07500	26.0876921	126.06231	0.0000204
##	2021-04-15-2021-01-22	166.77500	116.7876921	216.76231	0.0000000
##	2021-04-30-2021-01-22	175.48750	135.9690632	215.00594	0.0000000
##	2021-05-25-2021-01-22	226.09291	189.8736669	262.31216	0.0000000
##	2021-02-05-2021-01-28	32.45000	-17.5373079	82.43731	0.6921537
##	2021-02-12-2021-01-28	50.25000	0.2626921	100.23731	0.0471717
##	2021-02-26-2021-01-28	38.23975	-11.7475579	88.22706	0.3909672
##	2021-03-15-2021-01-28	57.01250	7.0251921	106.99981	0.0089848
##	2021-03-30-2021-01-28	92.52500	42.5376921	142.51231	0.0000000
##	2021-04-15-2021-01-28	183.22500	133.2376921	233.21231	0.0000000
##	2021-04-30-2021-01-28	191.93750	152.4190632	231.45594	0.0000000
##	2021-05-25-2021-01-28	242.54291	206.3236669	278.76216	0.0000000
##	2021-02-12-2021-02-05	17.80000	-32.1873079	67.78731	0.9985323
##	2021-02-26-2021-02-05	5.78975	-44.1975579	55.77706	1.0000000
##	2021-03-15-2021-02-05	24.56250	-25.4248079	74.54981	0.9574233
##	2021-03-30-2021-02-05	60.07500	10.0876921	110.06231	0.0038594
##	2021-04-15-2021-02-05	150.77500	100.7876921	200.76231	0.0000000
##	2021-04-30-2021-02-05	159.48750	119.9690632	199.00594	0.0000000
##	2021-05-25-2021-02-05	210.09291	173.8736669	246.31216	0.0000000
##	2021-02-26-2021-02-12	-12.01025	-61.9975579	37.97706	0.9999914
##	2021-03-15-2021-02-12	6.76250	-43.2248079	56.74981	1.0000000
##	2021-03-30-2021-02-12	42.27500	-7.7123079	92.26231	0.2193122
##	2021-04-15-2021-02-12	132.97500	82.9876921	182.96231	0.0000000
##	2021-04-30-2021-02-12	141.68750	102.1690632	181.20594	0.0000000
##	2021-05-25-2021-02-12	192.29291	156.0736669	228.51216	0.0000000
##	2021-03-15-2021-02-26	18.77275	-31.2145579	68.76006	0.9972705
##	2021-03-30-2021-02-26	54.28525	4.2979421	104.27256	0.0181749


```
## 2021-04-15-2021-02-26 144.98525 94.9979421 194.97256 0.0000000
## 2021-04-30-2021-02-26 153.69775 114.1793132 193.21619 0.0000000
## 2021-05-25-2021-02-26 204.30316 168.0839169 240.52241 0.0000000
## 2021-03-30-2021-03-15 35.51250 -14.4748079 85.49981 0.5317375
## 2021-04-15-2021-03-15 126.21250 76.2251921 176.19981 0.0000000
## 2021-04-30-2021-03-15 134.92500 95.4065632 174.44344 0.0000000
## 2021-05-25-2021-03-15 185.53041 149.3111669 221.74966 0.0000000
## 2021-04-15-2021-03-30 90.70000 40.7126921 140.68731 0.0000001
## 2021-04-30-2021-03-30 99.41250 59.8940632 138.93094 0.0000000
## 2021-05-25-2021-03-30 150.01791 113.7986669 186.23716 0.0000000
## 2021-04-30-2021-04-15 8.71250 -30.8059368 48.23094 0.9999974
## 2021-05-25-2021-04-15 59.31791 23.0986669 95.53716 0.0000022
## 2021-05-25-2021-04-30 50.60541 31.2454114 69.96541 0.0000000
```

```
##
```

```
## $`Condición:Fechas`
```

```
## diff lwr upr p adj
## IA:2020-10-05-C:2020-10-05 -2.90000 -80.7954823 74.995482 1.0000000
## C:2020-10-14-C:2020-10-05 -0.40000 -78.2954823 77.495482 1.0000000
## IA:2020-10-14-C:2020-10-05 1.90000 -75.9954823 79.795482 1.0000000
## C:2020-10-26-C:2020-10-05 10.90000 -66.9954823 88.795482 1.0000000
## IA:2020-10-26-C:2020-10-05 10.60000 -67.2954823 88.495482 1.0000000
## C:2020-11-05-C:2020-10-05 16.80000 -61.0954823 94.695482 1.0000000
## IA:2020-11-05-C:2020-10-05 11.95000 -65.9454823 89.845482 1.0000000
## C:2020-11-14-C:2020-10-05 26.80000 -51.0954823 104.695482 0.9999972
## IA:2020-11-14-C:2020-10-05 20.10000 -57.7954823 97.995482 1.0000000
## C:2020-11-25-C:2020-10-05 36.60000 -41.2954823 114.495482 0.9980658
## IA:2020-11-25-C:2020-10-05 33.10000 -44.7954823 110.995482 0.9997097
## C:2020-12-05-C:2020-10-05 41.40000 -36.4954823 119.295482 0.9857513
## IA:2020-12-05-C:2020-10-05 42.00000 -35.8954823 119.895482 0.9824583
## C:2021-01-22-C:2020-10-05 94.10000 16.2045177 171.995482 0.0020957
## IA:2021-01-22-C:2020-10-05 76.20000 -1.6954823 154.095482 0.0660303
## C:2021-01-28-C:2020-10-05 74.10000 -3.7954823 151.995482 0.0916922
## IA:2021-01-28-C:2020-10-05 63.30000 -14.5954823 141.195482 0.3624755
## C:2021-02-05-C:2020-10-05 98.70000 20.8045177 176.595482 0.0007337
## IA:2021-02-05-C:2020-10-05 103.60000 25.7045177 181.495482 0.0002249
## C:2021-02-12-C:2020-10-05 131.60000 53.7045177 209.495482 0.0000001
## IA:2021-02-12-C:2020-10-05 106.30000 28.4045177 184.195482 0.0001141
## C:2021-02-26-C:2020-10-05 102.39450 24.4990177 180.289982 0.0003027
## IA:2021-02-26-C:2020-10-05 111.48500 33.5895177 189.380482 0.0000294
## C:2021-03-15-C:2020-10-05 122.63500 44.7395177 200.530482 0.0000013
## IA:2021-03-15-C:2020-10-05 128.79000 50.8945177 206.685482 0.0000002
## C:2021-03-30-C:2020-10-05 146.85000 68.9545177 224.745482 0.0000000
## IA:2021-03-30-C:2020-10-05 175.60000 97.7045177 253.495482 0.0000000
## C:2021-04-15-C:2020-10-05 220.75000 142.8545177 298.645482 0.0000000
## IA:2021-04-15-C:2020-10-05 283.10000 205.2045177 360.995482 0.0000000
## C:2021-04-30-C:2020-10-05 229.51375 167.9319641 291.095536 0.0000000
## IA:2021-04-30-C:2020-10-05 291.76125 230.1794641 353.343036 0.0000000
## C:2021-05-25-C:2020-10-05 257.74858 201.3079360 314.189214 0.0000000
## IA:2021-05-25-C:2020-10-05 364.73725 308.2966110 421.177889 0.0000000
## C:2020-10-14-IA:2020-10-05 2.50000 -75.3954823 80.395482 1.0000000
## IA:2020-10-14-IA:2020-10-05 4.80000 -73.0954823 82.695482 1.0000000
## C:2020-10-26-IA:2020-10-05 13.80000 -64.0954823 91.695482 1.0000000
## IA:2020-10-26-IA:2020-10-05 13.50000 -64.3954823 91.395482 1.0000000
## C:2020-11-05-IA:2020-10-05 19.70000 -58.1954823 97.595482 1.0000000
```

##	IA:2020-11-05-IA:2020-10-05	14.85000	-63.0454823	92.745482	1.0000000
##	C:2020-11-14-IA:2020-10-05	29.70000	-48.1954823	107.595482	0.9999705
##	IA:2020-11-14-IA:2020-10-05	23.00000	-54.8954823	100.895482	0.9999999
##	C:2020-11-25-IA:2020-10-05	39.50000	-38.3954823	117.395482	0.9930389
##	IA:2020-11-25-IA:2020-10-05	36.00000	-41.8954823	113.895482	0.9985615
##	C:2020-12-05-IA:2020-10-05	44.30000	-33.5954823	122.195482	0.9638736
##	IA:2020-12-05-IA:2020-10-05	44.90000	-32.9954823	122.795482	0.9571707
##	C:2021-01-22-IA:2020-10-05	97.00000	19.1045177	174.895482	0.0010889
##	IA:2021-01-22-IA:2020-10-05	79.10000	1.2045177	156.995482	0.0407579
##	C:2021-01-28-IA:2020-10-05	77.00000	-0.8954823	154.895482	0.0579927
##	IA:2021-01-28-IA:2020-10-05	66.20000	-11.6954823	144.095482	0.2648808
##	C:2021-02-05-IA:2020-10-05	101.60000	23.7045177	179.495482	0.0003673
##	IA:2021-02-05-IA:2020-10-05	106.50000	28.6045177	184.395482	0.0001085
##	C:2021-02-12-IA:2020-10-05	134.50000	56.6045177	212.395482	0.0000000
##	IA:2021-02-12-IA:2020-10-05	109.20000	31.3045177	187.095482	0.0000539
##	C:2021-02-26-IA:2020-10-05	105.29450	27.3990177	183.189982	0.0001473
##	IA:2021-02-26-IA:2020-10-05	114.38500	36.4895177	192.280482	0.0000134
##	C:2021-03-15-IA:2020-10-05	125.53500	47.6395177	203.430482	0.0000005
##	IA:2021-03-15-IA:2020-10-05	131.69000	53.7945177	209.585482	0.0000001
##	C:2021-03-30-IA:2020-10-05	149.75000	71.8545177	227.645482	0.0000000
##	IA:2021-03-30-IA:2020-10-05	178.50000	100.6045177	256.395482	0.0000000
##	C:2021-04-15-IA:2020-10-05	223.65000	145.7545177	301.545482	0.0000000
##	IA:2021-04-15-IA:2020-10-05	286.00000	208.1045177	363.895482	0.0000000
##	C:2021-04-30-IA:2020-10-05	232.41375	170.8319641	293.995536	0.0000000
##	IA:2021-04-30-IA:2020-10-05	294.66125	233.0794641	356.243036	0.0000000
##	C:2021-05-25-IA:2020-10-05	260.64857	204.2079360	317.089214	0.0000000
##	IA:2021-05-25-IA:2020-10-05	367.63725	311.1966110	424.077889	0.0000000
##	IA:2020-10-14-C:2020-10-14	2.30000	-75.5954823	80.195482	1.0000000
##	C:2020-10-26-C:2020-10-14	11.30000	-66.5954823	89.195482	1.0000000
##	IA:2020-10-26-C:2020-10-14	11.00000	-66.8954823	88.895482	1.0000000
##	C:2020-11-05-C:2020-10-14	17.20000	-60.6954823	95.095482	1.0000000
##	IA:2020-11-05-C:2020-10-14	12.35000	-65.5454823	90.245482	1.0000000
##	C:2020-11-14-C:2020-10-14	27.20000	-50.6954823	105.095482	0.9999961
##	IA:2020-11-14-C:2020-10-14	20.50000	-57.3954823	98.395482	1.0000000
##	C:2020-11-25-C:2020-10-14	37.00000	-40.8954823	114.895482	0.9976583
##	IA:2020-11-25-C:2020-10-14	33.50000	-44.3954823	111.395482	0.9996316
##	C:2020-12-05-C:2020-10-14	41.80000	-36.0954823	119.695482	0.9836175
##	IA:2020-12-05-C:2020-10-14	42.40000	-35.4954823	120.295482	0.9799432
##	C:2021-01-22-C:2020-10-14	94.50000	16.6045177	172.395482	0.0019175
##	IA:2021-01-22-C:2020-10-14	76.60000	-1.2954823	154.495482	0.0619009
##	C:2021-01-28-C:2020-10-14	74.50000	-3.3954823	152.395482	0.0862551
##	IA:2021-01-28-C:2020-10-14	63.70000	-14.1954823	141.595482	0.3480251
##	C:2021-02-05-C:2020-10-14	99.10000	21.2045177	176.995482	0.0006678
##	IA:2021-02-05-C:2020-10-14	104.00000	26.1045177	181.895482	0.0002037
##	C:2021-02-12-C:2020-10-14	132.00000	54.1045177	209.895482	0.0000001
##	IA:2021-02-12-C:2020-10-14	106.70000	28.8045177	184.595482	0.0001031
##	C:2021-02-26-C:2020-10-14	102.79450	24.8990177	180.689982	0.0002744
##	IA:2021-02-26-C:2020-10-14	111.88500	33.9895177	189.780482	0.0000265
##	C:2021-03-15-C:2020-10-14	123.03500	45.1395177	200.930482	0.0000011
##	IA:2021-03-15-C:2020-10-14	129.19000	51.2945177	207.085482	0.0000002
##	C:2021-03-30-C:2020-10-14	147.25000	69.3545177	225.145482	0.0000000
##	IA:2021-03-30-C:2020-10-14	176.00000	98.1045177	253.895482	0.0000000
##	C:2021-04-15-C:2020-10-14	221.15000	143.2545177	299.045482	0.0000000
##	IA:2021-04-15-C:2020-10-14	283.50000	205.6045177	361.395482	0.0000000

## C:2021-04-30-C:2020-10-14	229.91375	168.3319641	291.495536	0.0000000
## IA:2021-04-30-C:2020-10-14	292.16125	230.5794641	353.743036	0.0000000
## C:2021-05-25-C:2020-10-14	258.14858	201.7079360	314.589214	0.0000000
## IA:2021-05-25-C:2020-10-14	365.13725	308.6966110	421.577889	0.0000000
## C:2020-10-26-IA:2020-10-14	9.00000	-68.8954823	86.895482	1.0000000
## IA:2020-10-26-IA:2020-10-14	8.70000	-69.1954823	86.595482	1.0000000
## C:2020-11-05-IA:2020-10-14	14.90000	-62.9954823	92.795482	1.0000000
## IA:2020-11-05-IA:2020-10-14	10.05000	-67.8454823	87.945482	1.0000000
## C:2020-11-14-IA:2020-10-14	24.90000	-52.9954823	102.795482	0.9999995
## IA:2020-11-14-IA:2020-10-14	18.20000	-59.6954823	96.095482	1.0000000
## C:2020-11-25-IA:2020-10-14	34.70000	-43.1954823	112.595482	0.9992724
## IA:2020-11-25-IA:2020-10-14	31.20000	-46.6954823	109.095482	0.9999141
## C:2020-12-05-IA:2020-10-14	39.50000	-38.3954823	117.395482	0.9930389
## IA:2020-12-05-IA:2020-10-14	40.10000	-37.7954823	117.995482	0.9911856
## C:2021-01-22-IA:2020-10-14	92.20000	14.3045177	170.095482	0.0031759
## IA:2021-01-22-IA:2020-10-14	74.30000	-3.5954823	152.195482	0.0889396
## C:2021-01-28-IA:2020-10-14	72.20000	-5.6954823	150.095482	0.1214460
## IA:2021-01-28-IA:2020-10-14	61.40000	-16.4954823	139.295482	0.4346876
## C:2021-02-05-IA:2020-10-14	96.80000	18.9045177	174.695482	0.0011401
## IA:2021-02-05-IA:2020-10-14	101.70000	23.8045177	179.595482	0.0003585
## C:2021-02-12-IA:2020-10-14	129.70000	51.8045177	207.595482	0.0000002
## IA:2021-02-12-IA:2020-10-14	104.40000	26.5045177	182.295482	0.0001843
## C:2021-02-26-IA:2020-10-14	100.49450	22.5990177	178.389982	0.0004794
## IA:2021-02-26-IA:2020-10-14	109.58500	31.6895177	187.480482	0.0000488
## C:2021-03-15-IA:2020-10-14	120.73500	42.8395177	198.630482	0.0000022
## IA:2021-03-15-IA:2020-10-14	126.89000	48.9945177	204.785482	0.0000004
## C:2021-03-30-IA:2020-10-14	144.95000	67.0545177	222.845482	0.0000000
## IA:2021-03-30-IA:2020-10-14	173.70000	95.8045177	251.595482	0.0000000
## C:2021-04-15-IA:2020-10-14	218.85000	140.9545177	296.745482	0.0000000
## IA:2021-04-15-IA:2020-10-14	281.20000	203.3045177	359.095482	0.0000000
## C:2021-04-30-IA:2020-10-14	227.61375	166.0319641	289.195536	0.0000000
## IA:2021-04-30-IA:2020-10-14	289.86125	228.2794641	351.443036	0.0000000
## C:2021-05-25-IA:2020-10-14	255.84858	199.4079360	312.289214	0.0000000
## IA:2021-05-25-IA:2020-10-14	362.83725	306.3966110	419.277889	0.0000000
## IA:2020-10-26-C:2020-10-26	-0.30000	-78.1954823	77.595482	1.0000000
## C:2020-11-05-C:2020-10-26	5.90000	-71.9954823	83.795482	1.0000000
## IA:2020-11-05-C:2020-10-26	1.05000	-76.8454823	78.945482	1.0000000
## C:2020-11-14-C:2020-10-26	15.90000	-61.9954823	93.795482	1.0000000
## IA:2020-11-14-C:2020-10-26	9.20000	-68.6954823	87.095482	1.0000000
## C:2020-11-25-C:2020-10-26	25.70000	-52.1954823	103.595482	0.9999990
## IA:2020-11-25-C:2020-10-26	22.20000	-55.6954823	100.095482	1.0000000
## C:2020-12-05-C:2020-10-26	30.50000	-47.3954823	108.395482	0.9999471
## IA:2020-12-05-C:2020-10-26	31.10000	-46.7954823	108.995482	0.9999197
## C:2021-01-22-C:2020-10-26	83.20000	5.3045177	161.095482	0.0195229
## IA:2021-01-22-C:2020-10-26	65.30000	-12.5954823	143.195482	0.2933119
## C:2021-01-28-C:2020-10-26	63.20000	-14.6954823	141.095482	0.3661328
## IA:2021-01-28-C:2020-10-26	52.40000	-25.4954823	130.295482	0.7881419
## C:2021-02-05-C:2020-10-26	87.80000	9.9045177	165.695482	0.0079728
## IA:2021-02-05-C:2020-10-26	92.70000	14.8045177	170.595482	0.0028497
## C:2021-02-12-C:2020-10-26	120.70000	42.8045177	198.595482	0.0000023
## IA:2021-02-12-C:2020-10-26	95.40000	17.5045177	173.295482	0.0015673
## C:2021-02-26-C:2020-10-26	91.49450	13.5990177	169.389982	0.0036957
## IA:2021-02-26-C:2020-10-26	100.58500	22.6895177	178.480482	0.0004691
## C:2021-03-15-C:2020-10-26	111.73500	33.8395177	189.630482	0.0000275

##	IA:2021-03-15-C:2020-10-26	117.89000	39.9945177	195.785482	0.0000050
##	C:2021-03-30-C:2020-10-26	135.95000	58.0545177	213.845482	0.0000000
##	IA:2021-03-30-C:2020-10-26	164.70000	86.8045177	242.595482	0.0000000
##	C:2021-04-15-C:2020-10-26	209.85000	131.9545177	287.745482	0.0000000
##	IA:2021-04-15-C:2020-10-26	272.20000	194.3045177	350.095482	0.0000000
##	C:2021-04-30-C:2020-10-26	218.61375	157.0319641	280.195536	0.0000000
##	IA:2021-04-30-C:2020-10-26	280.86125	219.2794641	342.443036	0.0000000
##	C:2021-05-25-C:2020-10-26	246.84857	190.4079360	303.289214	0.0000000
##	IA:2021-05-25-C:2020-10-26	353.83725	297.3966110	410.277889	0.0000000
##	C:2020-11-05-IA:2020-10-26	6.20000	-71.6954823	84.095482	1.0000000
##	IA:2020-11-05-IA:2020-10-26	1.35000	-76.5454823	79.245482	1.0000000
##	C:2020-11-14-IA:2020-10-26	16.20000	-61.6954823	94.095482	1.0000000
##	IA:2020-11-14-IA:2020-10-26	9.50000	-68.3954823	87.395482	1.0000000
##	C:2020-11-25-IA:2020-10-26	26.00000	-51.8954823	103.895482	0.9999987
##	IA:2020-11-25-IA:2020-10-26	22.50000	-55.3954823	100.395482	1.0000000
##	C:2020-12-05-IA:2020-10-26	30.80000	-47.0954823	108.695482	0.9999347
##	IA:2020-12-05-IA:2020-10-26	31.40000	-46.4954823	109.295482	0.9999017
##	C:2021-01-22-IA:2020-10-26	83.50000	5.6045177	161.395482	0.0184556
##	IA:2021-01-22-IA:2020-10-26	65.60000	-12.2954823	143.495482	0.2836399
##	C:2021-01-28-IA:2020-10-26	63.50000	-14.3954823	141.395482	0.3552141
##	IA:2021-01-28-IA:2020-10-26	52.70000	-25.1954823	130.595482	0.7780393
##	C:2021-02-05-IA:2020-10-26	88.10000	10.2045177	165.995482	0.0075022
##	IA:2021-02-05-IA:2020-10-26	93.00000	15.1045177	170.895482	0.0026694
##	C:2021-02-12-IA:2020-10-26	121.00000	43.1045177	198.895482	0.0000021
##	IA:2021-02-12-IA:2020-10-26	95.70000	17.8045177	173.595482	0.0014647
##	C:2021-02-26-IA:2020-10-26	91.79450	13.8990177	169.689982	0.0034656
##	IA:2021-02-26-IA:2020-10-26	100.88500	22.9895177	178.780482	0.0004365
##	C:2021-03-15-IA:2020-10-26	112.03500	34.1395177	189.930482	0.0000254
##	IA:2021-03-15-IA:2020-10-26	118.19000	40.2945177	196.085482	0.0000046
##	C:2021-03-30-IA:2020-10-26	136.25000	58.3545177	214.145482	0.0000000
##	IA:2021-03-30-IA:2020-10-26	165.00000	87.1045177	242.895482	0.0000000
##	C:2021-04-15-IA:2020-10-26	210.15000	132.2545177	288.045482	0.0000000
##	IA:2021-04-15-IA:2020-10-26	272.50000	194.6045177	350.395482	0.0000000
##	C:2021-04-30-IA:2020-10-26	218.91375	157.3319641	280.495536	0.0000000
##	IA:2021-04-30-IA:2020-10-26	281.16125	219.5794641	342.743036	0.0000000
##	C:2021-05-25-IA:2020-10-26	247.14857	190.7079360	303.589214	0.0000000
##	IA:2021-05-25-IA:2020-10-26	354.13725	297.6966110	410.577889	0.0000000
##	IA:2020-11-05-C:2020-11-05	-4.85000	-82.7454823	73.045482	1.0000000
##	C:2020-11-14-C:2020-11-05	10.00000	-67.8954823	87.895482	1.0000000
##	IA:2020-11-14-C:2020-11-05	3.30000	-74.5954823	81.195482	1.0000000
##	C:2020-11-25-C:2020-11-05	19.80000	-58.0954823	97.695482	1.0000000
##	IA:2020-11-25-C:2020-11-05	16.30000	-61.5954823	94.195482	1.0000000
##	C:2020-12-05-C:2020-11-05	24.60000	-53.2954823	102.495482	0.9999997
##	IA:2020-12-05-C:2020-11-05	25.20000	-52.6954823	103.095482	0.9999994
##	C:2021-01-22-C:2020-11-05	77.30000	-0.5954823	155.195482	0.0552013
##	IA:2021-01-22-C:2020-11-05	59.40000	-18.4954823	137.295482	0.5153581
##	C:2021-01-28-C:2020-11-05	57.30000	-20.5954823	135.195482	0.6019041
##	IA:2021-01-28-C:2020-11-05	46.50000	-31.3954823	124.395482	0.9348269
##	C:2021-02-05-C:2020-11-05	81.90000	4.0045177	159.795482	0.0248176
##	IA:2021-02-05-C:2020-11-05	86.80000	8.9045177	164.695482	0.0097444
##	C:2021-02-12-C:2020-11-05	114.80000	36.9045177	192.695482	0.0000120
##	IA:2021-02-12-C:2020-11-05	89.50000	11.6045177	167.395482	0.0056268
##	C:2021-02-26-C:2020-11-05	85.59450	7.6990177	163.489982	0.0123573
##	IA:2021-02-26-C:2020-11-05	94.68500	16.7895177	172.580482	0.0018400

## C:2021-03-15-C:2020-11-05	105.83500	27.9395177	183.730482	0.0001285
## IA:2021-03-15-C:2020-11-05	111.99000	34.0945177	189.885482	0.0000257
## C:2021-03-30-C:2020-11-05	130.05000	52.1545177	207.945482	0.0000001
## IA:2021-03-30-C:2020-11-05	158.80000	80.9045177	236.695482	0.0000000
## C:2021-04-15-C:2020-11-05	203.95000	126.0545177	281.845482	0.0000000
## IA:2021-04-15-C:2020-11-05	266.30000	188.4045177	344.195482	0.0000000
## C:2021-04-30-C:2020-11-05	212.71375	151.1319641	274.295536	0.0000000
## IA:2021-04-30-C:2020-11-05	274.96125	213.3794641	336.543036	0.0000000
## C:2021-05-25-C:2020-11-05	240.94858	184.5079360	297.389214	0.0000000
## IA:2021-05-25-C:2020-11-05	347.93725	291.4966110	404.377889	0.0000000
## C:2020-11-14-IA:2020-11-05	14.85000	-63.0454823	92.745482	1.0000000
## IA:2020-11-14-IA:2020-11-05	8.15000	-69.7454823	86.045482	1.0000000
## C:2020-11-25-IA:2020-11-05	24.65000	-53.2454823	102.545482	0.9999996
## IA:2020-11-25-IA:2020-11-05	21.15000	-56.7454823	99.045482	1.0000000
## C:2020-12-05-IA:2020-11-05	29.45000	-48.4454823	107.345482	0.9999755
## IA:2020-12-05-IA:2020-11-05	30.05000	-47.8454823	107.945482	0.9999618
## C:2021-01-22-IA:2020-11-05	82.15000	4.2545177	160.045482	0.0237094
## IA:2021-01-22-IA:2020-11-05	64.25000	-13.6454823	142.145482	0.3286431
## C:2021-01-28-IA:2020-11-05	62.15000	-15.7454823	140.045482	0.4055380
## IA:2021-01-28-IA:2020-11-05	51.35000	-26.5454823	129.245482	0.8216681
## C:2021-02-05-IA:2020-11-05	86.75000	8.8545177	164.645482	0.0098419
## IA:2021-02-05-IA:2020-11-05	91.65000	13.7545177	169.545482	0.0035747
## C:2021-02-12-IA:2020-11-05	119.65000	41.7545177	197.545482	0.0000031
## IA:2021-02-12-IA:2020-11-05	94.35000	16.4545177	172.245482	0.0019826
## C:2021-02-26-IA:2020-11-05	90.44450	12.5490177	168.339982	0.0046182
## IA:2021-02-26-IA:2020-11-05	99.53500	21.6395177	177.430482	0.0006026
## C:2021-03-15-IA:2020-11-05	110.68500	32.7895177	188.580482	0.0000365
## IA:2021-03-15-IA:2020-11-05	116.84000	38.9445177	194.735482	0.0000068
## C:2021-03-30-IA:2020-11-05	134.90000	57.0045177	212.795482	0.0000000
## IA:2021-03-30-IA:2020-11-05	163.65000	85.7545177	241.545482	0.0000000
## C:2021-04-15-IA:2020-11-05	208.80000	130.9045177	286.695482	0.0000000
## IA:2021-04-15-IA:2020-11-05	271.15000	193.2545177	349.045482	0.0000000
## C:2021-04-30-IA:2020-11-05	217.56375	155.9819641	279.145536	0.0000000
## IA:2021-04-30-IA:2020-11-05	279.81125	218.2294641	341.393036	0.0000000
## C:2021-05-25-IA:2020-11-05	245.79858	189.3579360	302.239214	0.0000000
## IA:2021-05-25-IA:2020-11-05	352.78725	296.3466110	409.227889	0.0000000
## IA:2020-11-14-C:2020-11-14	-6.70000	-84.5954823	71.195482	1.0000000
## C:2020-11-25-C:2020-11-14	9.80000	-68.0954823	87.695482	1.0000000
## IA:2020-11-25-C:2020-11-14	6.30000	-71.5954823	84.195482	1.0000000
## C:2020-12-05-C:2020-11-14	14.60000	-63.2954823	92.495482	1.0000000
## IA:2020-12-05-C:2020-11-14	15.20000	-62.6954823	93.095482	1.0000000
## C:2021-01-22-C:2020-11-14	67.30000	-10.5954823	145.195482	0.2325648
## IA:2021-01-22-C:2020-11-14	49.40000	-28.4954823	127.295482	0.8756570
## C:2021-01-28-C:2020-11-14	47.30000	-30.5954823	125.195482	0.9210045
## IA:2021-01-28-C:2020-11-14	36.50000	-41.3954823	114.395482	0.9981575
## C:2021-02-05-C:2020-11-14	71.90000	-5.9954823	149.795482	0.1267740
## IA:2021-02-05-C:2020-11-14	76.80000	-1.0954823	154.695482	0.0599197
## C:2021-02-12-C:2020-11-14	104.80000	26.9045177	182.695482	0.0001668
## IA:2021-02-12-C:2020-11-14	79.50000	1.6045177	157.395482	0.0380369
## C:2021-02-26-C:2020-11-14	75.59450	-2.3009823	153.489982	0.0727218
## IA:2021-02-26-C:2020-11-14	84.68500	6.7895177	162.580482	0.0147355
## C:2021-03-15-C:2020-11-14	95.83500	17.9395177	173.730482	0.0014206
## IA:2021-03-15-C:2020-11-14	101.99000	24.0945177	179.885482	0.0003341
## C:2021-03-30-C:2020-11-14	120.05000	42.1545177	197.945482	0.0000027

##	IA:2021-03-30-C:2020-11-14	148.80000	70.9045177	226.695482	0.0000000
##	C:2021-04-15-C:2020-11-14	193.95000	116.0545177	271.845482	0.0000000
##	IA:2021-04-15-C:2020-11-14	256.30000	178.4045177	334.195482	0.0000000
##	C:2021-04-30-C:2020-11-14	202.71375	141.1319641	264.295536	0.0000000
##	IA:2021-04-30-C:2020-11-14	264.96125	203.3794641	326.543036	0.0000000
##	C:2021-05-25-C:2020-11-14	230.94857	174.5079360	287.389214	0.0000000
##	IA:2021-05-25-C:2020-11-14	337.93725	281.4966110	394.377889	0.0000000
##	C:2020-11-25-IA:2020-11-14	16.50000	-61.3954823	94.395482	1.0000000
##	IA:2020-11-25-IA:2020-11-14	13.00000	-64.8954823	90.895482	1.0000000
##	C:2020-12-05-IA:2020-11-14	21.30000	-56.5954823	99.195482	1.0000000
##	IA:2020-12-05-IA:2020-11-14	21.90000	-55.9954823	99.795482	1.0000000
##	C:2021-01-22-IA:2020-11-14	74.00000	-3.8954823	151.895482	0.0930945
##	IA:2021-01-22-IA:2020-11-14	56.10000	-21.7954823	133.995482	0.6506537
##	C:2021-01-28-IA:2020-11-14	54.00000	-23.8954823	131.895482	0.7318539
##	IA:2021-01-28-IA:2020-11-14	43.20000	-34.6954823	121.095482	0.9740598
##	C:2021-02-05-IA:2020-11-14	78.60000	0.7045177	156.495482	0.0443965
##	IA:2021-02-05-IA:2020-11-14	83.50000	5.6045177	161.395482	0.0184556
##	C:2021-02-12-IA:2020-11-14	111.50000	33.6045177	189.395482	0.0000293
##	IA:2021-02-12-IA:2020-11-14	86.20000	8.3045177	164.095482	0.0109740
##	C:2021-02-26-IA:2020-11-14	82.29450	4.3990177	160.189982	0.0230892
##	IA:2021-02-26-IA:2020-11-14	91.38500	13.4895177	169.280482	0.0037832
##	C:2021-03-15-IA:2020-11-14	102.53500	24.6395177	180.430482	0.0002924
##	IA:2021-03-15-IA:2020-11-14	108.69000	30.7945177	186.585482	0.0000616
##	C:2021-03-30-IA:2020-11-14	126.75000	48.8545177	204.645482	0.0000004
##	IA:2021-03-30-IA:2020-11-14	155.50000	77.6045177	233.395482	0.0000000
##	C:2021-04-15-IA:2020-11-14	200.65000	122.7545177	278.545482	0.0000000
##	IA:2021-04-15-IA:2020-11-14	263.00000	185.1045177	340.895482	0.0000000
##	C:2021-04-30-IA:2020-11-14	209.41375	147.8319641	270.995536	0.0000000
##	IA:2021-04-30-IA:2020-11-14	271.66125	210.0794641	333.243036	0.0000000
##	C:2021-05-25-IA:2020-11-14	237.64857	181.2079360	294.089214	0.0000000
##	IA:2021-05-25-IA:2020-11-14	344.63725	288.1966110	401.077889	0.0000000
##	IA:2020-11-25-C:2020-11-25	-3.50000	-81.3954823	74.395482	1.0000000
##	C:2020-12-05-C:2020-11-25	4.80000	-73.0954823	82.695482	1.0000000
##	IA:2020-12-05-C:2020-11-25	5.40000	-72.4954823	83.295482	1.0000000
##	C:2021-01-22-C:2020-11-25	57.50000	-20.3954823	135.395482	0.5936882
##	IA:2021-01-22-C:2020-11-25	39.60000	-38.2954823	117.495482	0.9927549
##	C:2021-01-28-C:2020-11-25	37.50000	-40.3954823	115.395482	0.9970462
##	IA:2021-01-28-C:2020-11-25	26.70000	-51.1954823	104.595482	0.9999975
##	C:2021-02-05-C:2020-11-25	62.10000	-15.7954823	139.995482	0.4074572
##	IA:2021-02-05-C:2020-11-25	67.00000	-10.8954823	144.895482	0.2411085
##	C:2021-02-12-C:2020-11-25	95.00000	17.1045177	172.895482	0.0017148
##	IA:2021-02-12-C:2020-11-25	69.70000	-8.1954823	147.595482	0.1715554
##	C:2021-02-26-C:2020-11-25	65.79450	-12.1009823	143.689982	0.2774728
##	IA:2021-02-26-C:2020-11-25	74.88500	-3.0104823	152.780482	0.0812752
##	C:2021-03-15-C:2020-11-25	86.03500	8.1395177	163.930482	0.0113362
##	IA:2021-03-15-C:2020-11-25	92.19000	14.2945177	170.085482	0.0031827
##	C:2021-03-30-C:2020-11-25	110.25000	32.3545177	188.145482	0.0000409
##	IA:2021-03-30-C:2020-11-25	139.00000	61.1045177	216.895482	0.0000000
##	C:2021-04-15-C:2020-11-25	184.15000	106.2545177	262.045482	0.0000000
##	IA:2021-04-15-C:2020-11-25	246.50000	168.6045177	324.395482	0.0000000
##	C:2021-04-30-C:2020-11-25	192.91375	131.3319641	254.495536	0.0000000
##	IA:2021-04-30-C:2020-11-25	255.16125	193.5794641	316.743036	0.0000000
##	C:2021-05-25-C:2020-11-25	221.14858	164.7079360	277.589214	0.0000000
##	IA:2021-05-25-C:2020-11-25	328.13725	271.6966110	384.577889	0.0000000

## C:2020-12-05-IA:2020-11-25	8.30000	-69.5954823	86.195482	1.0000000
## IA:2020-12-05-IA:2020-11-25	8.90000	-68.9954823	86.795482	1.0000000
## C:2021-01-22-IA:2020-11-25	61.00000	-16.8954823	138.895482	0.4505237
## IA:2021-01-22-IA:2020-11-25	43.10000	-34.7954823	120.995482	0.9748612
## C:2021-01-28-IA:2020-11-25	41.00000	-36.8954823	118.895482	0.9876544
## IA:2021-01-28-IA:2020-11-25	30.20000	-47.6954823	108.095482	0.9999574
## C:2021-02-05-IA:2020-11-25	65.60000	-12.2954823	143.495482	0.2836399
## IA:2021-02-05-IA:2020-11-25	70.50000	-7.3954823	148.395482	0.1540777
## C:2021-02-12-IA:2020-11-25	98.50000	20.6045177	176.395482	0.0007689
## IA:2021-02-12-IA:2020-11-25	73.20000	-4.6954823	151.095482	0.1049515
## C:2021-02-26-IA:2020-11-25	69.29450	-8.6009823	147.189982	0.1809525
## IA:2021-02-26-IA:2020-11-25	78.38500	0.4895177	156.280482	0.0460458
## C:2021-03-15-IA:2020-11-25	89.53500	11.6395177	167.430482	0.0055861
## IA:2021-03-15-IA:2020-11-25	95.69000	17.7945177	173.585482	0.0014680
## C:2021-03-30-IA:2020-11-25	113.75000	35.8545177	191.645482	0.0000160
## IA:2021-03-30-IA:2020-11-25	142.50000	64.6045177	220.395482	0.0000000
## C:2021-04-15-IA:2020-11-25	187.65000	109.7545177	265.545482	0.0000000
## IA:2021-04-15-IA:2020-11-25	250.00000	172.1045177	327.895482	0.0000000
## C:2021-04-30-IA:2020-11-25	196.41375	134.8319641	257.995536	0.0000000
## IA:2021-04-30-IA:2020-11-25	258.66125	197.0794641	320.243036	0.0000000
## C:2021-05-25-IA:2020-11-25	224.64858	168.2079360	281.089214	0.0000000
## IA:2021-05-25-IA:2020-11-25	331.63725	275.1966110	388.077889	0.0000000
## IA:2020-12-05-C:2020-12-05	0.60000	-77.2954823	78.495482	1.0000000
## C:2021-01-22-C:2020-12-05	52.70000	-25.1954823	130.595482	0.7780393
## IA:2021-01-22-C:2020-12-05	34.80000	-43.0954823	112.695482	0.9992317
## C:2021-01-28-C:2020-12-05	32.70000	-45.1954823	110.595482	0.9997727
## IA:2021-01-28-C:2020-12-05	21.90000	-55.9954823	99.795482	1.0000000
## C:2021-02-05-C:2020-12-05	57.30000	-20.5954823	135.195482	0.6019041
## IA:2021-02-05-C:2020-12-05	62.20000	-15.6954823	140.095482	0.4036225
## C:2021-02-12-C:2020-12-05	90.20000	12.3045177	168.095482	0.0048618
## IA:2021-02-12-C:2020-12-05	64.90000	-12.9954823	142.795482	0.3065042
## C:2021-02-26-C:2020-12-05	60.99450	-16.9009823	138.889982	0.4507427
## IA:2021-02-26-C:2020-12-05	70.08500	-7.8104823	147.980482	0.1629698
## C:2021-03-15-C:2020-12-05	81.23500	3.3395177	159.130482	0.0279936
## IA:2021-03-15-C:2020-12-05	87.39000	9.4945177	165.285482	0.0086598
## C:2021-03-30-C:2020-12-05	105.45000	27.5545177	183.345482	0.0001416
## IA:2021-03-30-C:2020-12-05	134.20000	56.3045177	212.095482	0.0000000
## C:2021-04-15-C:2020-12-05	179.35000	101.4545177	257.245482	0.0000000
## IA:2021-04-15-C:2020-12-05	241.70000	163.8045177	319.595482	0.0000000
## C:2021-04-30-C:2020-12-05	188.11375	126.5319641	249.695536	0.0000000
## IA:2021-04-30-C:2020-12-05	250.36125	188.7794641	311.943036	0.0000000
## C:2021-05-25-C:2020-12-05	216.34858	159.9079360	272.789214	0.0000000
## IA:2021-05-25-C:2020-12-05	323.33725	266.8966110	379.777889	0.0000000
## C:2021-01-22-IA:2020-12-05	52.10000	-25.7954823	129.995482	0.7980180
## IA:2021-01-22-IA:2020-12-05	34.20000	-43.6954823	112.095482	0.9994486
## C:2021-01-28-IA:2020-12-05	32.10000	-45.7954823	109.995482	0.9998443
## IA:2021-01-28-IA:2020-12-05	21.30000	-56.5954823	99.195482	1.0000000
## C:2021-02-05-IA:2020-12-05	56.70000	-21.1954823	134.595482	0.6264183
## IA:2021-02-05-IA:2020-12-05	61.60000	-16.2954823	139.495482	0.4268415
## C:2021-02-12-IA:2020-12-05	89.60000	11.7045177	167.495482	0.0055111
## IA:2021-02-12-IA:2020-12-05	64.30000	-13.5954823	142.195482	0.3269100
## C:2021-02-26-IA:2020-12-05	60.39450	-17.5009823	138.289982	0.4748172
## IA:2021-02-26-IA:2020-12-05	69.48500	-8.4104823	147.380482	0.1764923
## C:2021-03-15-IA:2020-12-05	80.63500	2.7395177	158.530482	0.0311637

##	IA:2021-03-15-IA:2020-12-05	86.79000	8.8945177	164.685482	0.0097639
##	C:2021-03-30-IA:2020-12-05	104.85000	26.9545177	182.745482	0.0001647
##	IA:2021-03-30-IA:2020-12-05	133.60000	55.7045177	211.495482	0.0000000
##	C:2021-04-15-IA:2020-12-05	178.75000	100.8545177	256.645482	0.0000000
##	IA:2021-04-15-IA:2020-12-05	241.10000	163.2045177	318.995482	0.0000000
##	C:2021-04-30-IA:2020-12-05	187.51375	125.9319641	249.095536	0.0000000
##	IA:2021-04-30-IA:2020-12-05	249.76125	188.1794641	311.343036	0.0000000
##	C:2021-05-25-IA:2020-12-05	215.74858	159.3079360	272.189214	0.0000000
##	IA:2021-05-25-IA:2020-12-05	322.73725	266.2966110	379.177889	0.0000000
##	IA:2021-01-22-C:2021-01-22	-17.90000	-95.7954823	59.995482	1.0000000
##	C:2021-01-28-C:2021-01-22	-20.00000	-97.8954823	57.895482	1.0000000
##	IA:2021-01-28-C:2021-01-22	-30.80000	-108.6954823	47.095482	0.9999347
##	C:2021-02-05-C:2021-01-22	4.60000	-73.2954823	82.495482	1.0000000
##	IA:2021-02-05-C:2021-01-22	9.50000	-68.3954823	87.395482	1.0000000
##	C:2021-02-12-C:2021-01-22	37.50000	-40.3954823	115.395482	0.9970462
##	IA:2021-02-12-C:2021-01-22	12.20000	-65.6954823	90.095482	1.0000000
##	C:2021-02-26-C:2021-01-22	8.29450	-69.6009823	86.189982	1.0000000
##	IA:2021-02-26-C:2021-01-22	17.38500	-60.5104823	95.280482	1.0000000
##	C:2021-03-15-C:2021-01-22	28.53500	-49.3604823	106.430482	0.9999880
##	IA:2021-03-15-C:2021-01-22	34.69000	-43.2054823	112.585482	0.9992763
##	C:2021-03-30-C:2021-01-22	52.75000	-25.1454823	130.645482	0.7763340
##	IA:2021-03-30-C:2021-01-22	81.50000	3.6045177	159.395482	0.0266871
##	C:2021-04-15-C:2021-01-22	126.65000	48.7545177	204.545482	0.0000004
##	IA:2021-04-15-C:2021-01-22	189.00000	111.1045177	266.895482	0.0000000
##	C:2021-04-30-C:2021-01-22	135.41375	73.8319641	196.995536	0.0000000
##	IA:2021-04-30-C:2021-01-22	197.66125	136.0794641	259.243036	0.0000000
##	C:2021-05-25-C:2021-01-22	163.64858	107.2079360	220.089214	0.0000000
##	IA:2021-05-25-C:2021-01-22	270.63725	214.1966110	327.077889	0.0000000
##	C:2021-01-28-IA:2021-01-22	-2.10000	-79.9954823	75.795482	1.0000000
##	IA:2021-01-28-IA:2021-01-22	-12.90000	-90.7954823	64.995482	1.0000000
##	C:2021-02-05-IA:2021-01-22	22.50000	-55.3954823	100.395482	1.0000000
##	IA:2021-02-05-IA:2021-01-22	27.40000	-50.4954823	105.295482	0.9999953
##	C:2021-02-12-IA:2021-01-22	55.40000	-22.4954823	133.295482	0.6784421
##	IA:2021-02-12-IA:2021-01-22	30.10000	-47.7954823	107.995482	0.9999603
##	C:2021-02-26-IA:2021-01-22	26.19450	-51.7009823	104.089982	0.9999984
##	IA:2021-02-26-IA:2021-01-22	35.28500	-42.6104823	113.180482	0.9990043
##	C:2021-03-15-IA:2021-01-22	46.43500	-31.4604823	124.330482	0.9358696
##	IA:2021-03-15-IA:2021-01-22	52.59000	-25.3054823	130.485482	0.7817694
##	C:2021-03-30-IA:2021-01-22	70.65000	-7.2454823	148.545482	0.1509551
##	IA:2021-03-30-IA:2021-01-22	99.40000	21.5045177	177.295482	0.0006221
##	C:2021-04-15-IA:2021-01-22	144.55000	66.6545177	222.445482	0.0000000
##	IA:2021-04-15-IA:2021-01-22	206.90000	129.0045177	284.795482	0.0000000
##	C:2021-04-30-IA:2021-01-22	153.31375	91.7319641	214.895536	0.0000000
##	IA:2021-04-30-IA:2021-01-22	215.56125	153.9794641	277.143036	0.0000000
##	C:2021-05-25-IA:2021-01-22	181.54858	125.1079360	237.989214	0.0000000
##	IA:2021-05-25-IA:2021-01-22	288.53725	232.0966110	344.977889	0.0000000
##	IA:2021-01-28-C:2021-01-28	-10.80000	-88.6954823	67.095482	1.0000000
##	C:2021-02-05-C:2021-01-28	24.60000	-53.2954823	102.495482	0.9999997
##	IA:2021-02-05-C:2021-01-28	29.50000	-48.3954823	107.395482	0.9999746
##	C:2021-02-12-C:2021-01-28	57.50000	-20.3954823	135.395482	0.5936882
##	IA:2021-02-12-C:2021-01-28	32.20000	-45.6954823	110.095482	0.9998340
##	C:2021-02-26-C:2021-01-28	28.29450	-49.6009823	106.189982	0.9999901
##	IA:2021-02-26-C:2021-01-28	37.38500	-40.5104823	115.280482	0.9971979
##	C:2021-03-15-C:2021-01-28	48.53500	-29.3604823	126.430482	0.8959541

##	IA:2021-03-15-C:2021-01-28	54.69000	-23.2054823	132.585482	0.7059405
##	C:2021-03-30-C:2021-01-28	72.75000	-5.1454823	150.645482	0.1121373
##	IA:2021-03-30-C:2021-01-28	101.50000	23.6045177	179.395482	0.0003763
##	C:2021-04-15-C:2021-01-28	146.65000	68.7545177	224.545482	0.0000000
##	IA:2021-04-15-C:2021-01-28	209.00000	131.1045177	286.895482	0.0000000
##	C:2021-04-30-C:2021-01-28	155.41375	93.8319641	216.995536	0.0000000
##	IA:2021-04-30-C:2021-01-28	217.66125	156.0794641	279.243036	0.0000000
##	C:2021-05-25-C:2021-01-28	183.64857	127.2079360	240.089214	0.0000000
##	IA:2021-05-25-C:2021-01-28	290.63725	234.1966110	347.077889	0.0000000
##	C:2021-02-05-IA:2021-01-28	35.40000	-42.4954823	113.295482	0.9989424
##	IA:2021-02-05-IA:2021-01-28	40.30000	-37.5954823	118.195482	0.9904837
##	C:2021-02-12-IA:2021-01-28	68.30000	-9.5954823	146.195482	0.2055607
##	IA:2021-02-12-IA:2021-01-28	43.00000	-34.8954823	120.895482	0.9756433
##	C:2021-02-26-IA:2021-01-28	39.09450	-38.8009823	116.989982	0.9940971
##	IA:2021-02-26-IA:2021-01-28	48.18500	-29.7104823	126.080482	0.9035198
##	C:2021-03-15-IA:2021-01-28	59.33500	-18.5604823	137.230482	0.5180279
##	IA:2021-03-15-IA:2021-01-28	65.49000	-12.4054823	143.385482	0.2871639
##	C:2021-03-30-IA:2021-01-28	83.55000	5.6545177	161.445482	0.0182829
##	IA:2021-03-30-IA:2021-01-28	112.30000	34.4045177	190.195482	0.0000237
##	C:2021-04-15-IA:2021-01-28	157.45000	79.5545177	235.345482	0.0000000
##	IA:2021-04-15-IA:2021-01-28	219.80000	141.9045177	297.695482	0.0000000
##	C:2021-04-30-IA:2021-01-28	166.21375	104.6319641	227.795536	0.0000000
##	IA:2021-04-30-IA:2021-01-28	228.46125	166.8794641	290.043036	0.0000000
##	C:2021-05-25-IA:2021-01-28	194.44857	138.0079360	250.889214	0.0000000
##	IA:2021-05-25-IA:2021-01-28	301.43725	244.9966110	357.877889	0.0000000
##	IA:2021-02-05-C:2021-02-05	4.90000	-72.9954823	82.795482	1.0000000
##	C:2021-02-12-C:2021-02-05	32.90000	-44.9954823	110.795482	0.9997429
##	IA:2021-02-12-C:2021-02-05	7.60000	-70.2954823	85.495482	1.0000000
##	C:2021-02-26-C:2021-02-05	3.69450	-74.2009823	81.589982	1.0000000
##	IA:2021-02-26-C:2021-02-05	12.78500	-65.1104823	90.680482	1.0000000
##	C:2021-03-15-C:2021-02-05	23.93500	-53.9604823	101.830482	0.9999998
##	IA:2021-03-15-C:2021-02-05	30.09000	-47.8054823	107.985482	0.9999606
##	C:2021-03-30-C:2021-02-05	48.15000	-29.7454823	126.045482	0.9042559
##	IA:2021-03-30-C:2021-02-05	76.90000	-0.9954823	154.795482	0.0589495
##	C:2021-04-15-C:2021-02-05	122.05000	44.1545177	199.945482	0.0000015
##	IA:2021-04-15-C:2021-02-05	184.40000	106.5045177	262.295482	0.0000000
##	C:2021-04-30-C:2021-02-05	130.81375	69.2319641	192.395536	0.0000000
##	IA:2021-04-30-C:2021-02-05	193.06125	131.4794641	254.643036	0.0000000
##	C:2021-05-25-C:2021-02-05	159.04857	102.6079360	215.489214	0.0000000
##	IA:2021-05-25-C:2021-02-05	266.03725	209.5966110	322.477889	0.0000000
##	C:2021-02-12-IA:2021-02-05	28.00000	-49.8954823	105.895482	0.9999922
##	IA:2021-02-12-IA:2021-02-05	2.70000	-75.1954823	80.595482	1.0000000
##	C:2021-02-26-IA:2021-02-05	-1.20550	-79.1009823	76.689982	1.0000000
##	IA:2021-02-26-IA:2021-02-05	7.88500	-70.0104823	85.780482	1.0000000
##	C:2021-03-15-IA:2021-02-05	19.03500	-58.8604823	96.930482	1.0000000
##	IA:2021-03-15-IA:2021-02-05	25.19000	-52.7054823	103.085482	0.9999994
##	C:2021-03-30-IA:2021-02-05	43.25000	-34.6454823	121.145482	0.9736516
##	IA:2021-03-30-IA:2021-02-05	72.00000	-5.8954823	149.895482	0.1249781
##	C:2021-04-15-IA:2021-02-05	117.15000	39.2545177	195.045482	0.0000062
##	IA:2021-04-15-IA:2021-02-05	179.50000	101.6045177	257.395482	0.0000000
##	C:2021-04-30-IA:2021-02-05	125.91375	64.3319641	187.495536	0.0000000
##	IA:2021-04-30-IA:2021-02-05	188.16125	126.5794641	249.743036	0.0000000
##	C:2021-05-25-IA:2021-02-05	154.14857	97.7079360	210.589214	0.0000000
##	IA:2021-05-25-IA:2021-02-05	261.13725	204.6966110	317.577889	0.0000000

```

## IA:2021-02-12-C:2021-02-12 -25.30000 -103.1954823 52.595482 0.9999993
## C:2021-02-26-C:2021-02-12 -29.20550 -107.1009823 48.689982 0.9999797
## IA:2021-02-26-C:2021-02-12 -20.11500 -98.0104823 57.780482 1.0000000
## C:2021-03-15-C:2021-02-12 -8.96500 -86.8604823 68.930482 1.0000000
## IA:2021-03-15-C:2021-02-12 -2.81000 -80.7054823 75.085482 1.0000000
## C:2021-03-30-C:2021-02-12 15.25000 -62.6454823 93.145482 1.0000000
## IA:2021-03-30-C:2021-02-12 44.00000 -33.8954823 121.895482 0.9669112
## C:2021-04-15-C:2021-02-12 89.15000 11.2545177 167.045482 0.0060499
## IA:2021-04-15-C:2021-02-12 151.50000 73.6045177 229.395482 0.0000000
## C:2021-04-30-C:2021-02-12 97.91375 36.3319641 159.495536 0.0000009
## IA:2021-04-30-C:2021-02-12 160.16125 98.5794641 221.743036 0.0000000
## C:2021-05-25-C:2021-02-12 126.14857 69.7079360 182.589214 0.0000000
## IA:2021-05-25-C:2021-02-12 233.13725 176.6966110 289.577889 0.0000000
## C:2021-02-26-IA:2021-02-12 -3.90550 -81.8009823 73.989982 1.0000000
## IA:2021-02-26-IA:2021-02-12 5.18500 -72.7104823 83.080482 1.0000000
## C:2021-03-15-IA:2021-02-12 16.33500 -61.5604823 94.230482 1.0000000
## IA:2021-03-15-IA:2021-02-12 22.49000 -55.4054823 100.385482 1.0000000
## C:2021-03-30-IA:2021-02-12 40.55000 -37.3454823 118.445482 0.9895420
## IA:2021-03-30-IA:2021-02-12 69.30000 -8.5954823 147.195482 0.1808226
## C:2021-04-15-IA:2021-02-12 114.45000 36.5545177 192.345482 0.0000132
## IA:2021-04-15-IA:2021-02-12 176.80000 98.9045177 254.695482 0.0000000
## C:2021-04-30-IA:2021-02-12 123.21375 61.6319641 184.795536 0.0000000
## IA:2021-04-30-IA:2021-02-12 185.46125 123.8794641 247.043036 0.0000000
## C:2021-05-25-IA:2021-02-12 151.44857 95.0079360 207.889214 0.0000000
## IA:2021-05-25-IA:2021-02-12 258.43725 201.9966110 314.877889 0.0000000
## IA:2021-02-26-C:2021-02-26 9.09050 -68.8049823 86.985982 1.0000000
## C:2021-03-15-C:2021-02-26 20.24050 -57.6549823 98.135982 1.0000000
## IA:2021-03-15-C:2021-02-26 26.39550 -51.4999823 104.290982 0.9999981
## C:2021-03-30-C:2021-02-26 44.45550 -33.4399823 122.350982 0.9622182
## IA:2021-03-30-C:2021-02-26 73.20550 -4.6899823 151.100982 0.1048660
## C:2021-04-15-C:2021-02-26 118.35550 40.4600177 196.250982 0.0000044
## IA:2021-04-15-C:2021-02-26 180.70550 102.8100177 258.600982 0.0000000
## C:2021-04-30-C:2021-02-26 127.11925 65.5374641 188.701036 0.0000000
## IA:2021-04-30-C:2021-02-26 189.36675 127.7849641 250.948536 0.0000000
## C:2021-05-25-C:2021-02-26 155.35408 98.9134360 211.794714 0.0000000
## IA:2021-05-25-C:2021-02-26 262.34275 205.9021110 318.783389 0.0000000
## C:2021-03-15-IA:2021-02-26 11.15000 -66.7454823 89.045482 1.0000000
## IA:2021-03-15-IA:2021-02-26 17.30500 -60.5904823 95.200482 1.0000000
## C:2021-03-30-IA:2021-02-26 35.36500 -42.5304823 113.260482 0.9989616
## IA:2021-03-30-IA:2021-02-26 64.11500 -13.7804823 142.010482 0.3333467
## C:2021-04-15-IA:2021-02-26 109.26500 31.3695177 187.160482 0.0000530
## IA:2021-04-15-IA:2021-02-26 171.61500 93.7195177 249.510482 0.0000000
## C:2021-04-30-IA:2021-02-26 118.02875 56.4469641 179.610536 0.0000000
## IA:2021-04-30-IA:2021-02-26 180.27625 118.6944641 241.858036 0.0000000
## C:2021-05-25-IA:2021-02-26 146.26358 89.8229360 202.704214 0.0000000
## IA:2021-05-25-IA:2021-02-26 253.25225 196.8116110 309.692889 0.0000000
## IA:2021-03-15-C:2021-03-15 6.15500 -71.7404823 84.050482 1.0000000
## C:2021-03-30-C:2021-03-15 24.21500 -53.6804823 102.110482 0.9999998
## IA:2021-03-30-C:2021-03-15 52.96500 -24.9304823 130.860482 0.7689333
## C:2021-04-15-C:2021-03-15 98.11500 20.2195177 176.010482 0.0008412
## IA:2021-04-15-C:2021-03-15 160.46500 82.5695177 238.360482 0.0000000
## C:2021-04-30-C:2021-03-15 106.87875 45.2969641 168.460536 0.0000000
## IA:2021-04-30-C:2021-03-15 169.12625 107.5444641 230.708036 0.0000000
## C:2021-05-25-C:2021-03-15 135.11358 78.6729360 191.554214 0.0000000

```

```
## IA:2021-05-25-C:2021-03-15 242.10225 185.6616110 298.542889 0.0000000
## C:2021-03-30-IA:2021-03-15 18.06000 -59.8354823 95.955482 1.0000000
## IA:2021-03-30-IA:2021-03-15 46.81000 -31.0854823 124.705482 0.9296895
## C:2021-04-15-IA:2021-03-15 91.96000 14.0645177 169.855482 0.0033445
## IA:2021-04-15-IA:2021-03-15 154.31000 76.4145177 232.205482 0.0000000
## C:2021-04-30-IA:2021-03-15 100.72375 39.1419641 162.305536 0.0000003
## IA:2021-04-30-IA:2021-03-15 162.97125 101.3894641 224.553036 0.0000000
## C:2021-05-25-IA:2021-03-15 128.95858 72.5179360 185.399214 0.0000000
## IA:2021-05-25-IA:2021-03-15 235.94725 179.5066110 292.387889 0.0000000
## IA:2021-03-30-C:2021-03-30 28.75000 -49.1454823 106.645482 0.9999857
## C:2021-04-15-C:2021-03-30 73.90000 -3.9954823 151.795482 0.0945141
## IA:2021-04-15-C:2021-03-30 136.25000 58.3545177 214.145482 0.0000000
## C:2021-04-30-C:2021-03-30 82.66375 21.0819641 144.245536 0.0001770
## IA:2021-04-30-C:2021-03-30 144.91125 83.3294641 206.493036 0.0000000
## C:2021-05-25-C:2021-03-30 110.89858 54.4579360 167.339214 0.0000000
## IA:2021-05-25-C:2021-03-30 217.88725 161.4466110 274.327889 0.0000000
## C:2021-04-15-IA:2021-03-30 45.15000 -32.7454823 123.045482 0.9541199
## IA:2021-04-15-IA:2021-03-30 107.50000 29.6045177 185.395482 0.0000839
## C:2021-04-30-IA:2021-03-30 53.91375 -7.6680359 115.495536 0.2082607
## IA:2021-04-30-IA:2021-03-30 116.16125 54.5794641 177.743036 0.0000000
## C:2021-05-25-IA:2021-03-30 82.14858 25.7079360 138.589214 0.0000177
## IA:2021-05-25-IA:2021-03-30 189.13725 132.6966110 245.577889 0.0000000
## IA:2021-04-15-C:2021-04-15 62.35000 -15.5454823 140.245482 0.3978982
## C:2021-04-30-C:2021-04-15 8.76375 -52.8180359 70.345536 1.0000000
## IA:2021-04-30-C:2021-04-15 71.01125 9.4294641 132.593036 0.0052610
## C:2021-05-25-C:2021-04-15 36.99857 -19.4420640 93.439214 0.8303125
## IA:2021-05-25-C:2021-04-15 143.98725 87.5466110 200.427889 0.0000000
## C:2021-04-30-IA:2021-04-15 -53.58625 -115.1680359 7.995536 0.2192696
## IA:2021-04-30-IA:2021-04-15 8.66125 -52.9205359 70.243036 1.0000000
## C:2021-05-25-IA:2021-04-15 -25.35143 -81.7920640 31.089214 0.9991495
## IA:2021-05-25-IA:2021-04-15 81.63725 25.1966110 138.077889 0.0000214
## IA:2021-04-30-C:2021-04-30 62.24750 23.2997588 101.195241 0.0000007
## C:2021-05-25-C:2021-04-30 28.23482 -1.9339656 58.403616 0.1096674
## IA:2021-05-25-C:2021-04-30 135.22350 105.0547094 165.392291 0.0000000
## C:2021-05-25-IA:2021-04-30 -34.01268 -64.1814656 -3.843884 0.0079400
## IA:2021-05-25-IA:2021-04-30 72.97600 42.8072094 103.144791 0.0000000
## IA:2021-05-25-C:2021-05-25 106.98868 89.5707156 124.406634 0.0000000
```

Efecto de la IA sobre el largo

```
t2way(Largo ~ Condición + Fechas + Condición:Fechas, data = a,)
```

```
## Call:
## t2way(formula = Largo ~ Condición + Fechas + Condición:Fechas,
##       data = a)
##
##               value p.value
## Condición      1.5741   0.212
## Fechas      21776.8624   0.001
## Condición:Fechas 139.6078   0.001
```

```
anovalargo <- aov(Largo ~ Condición + Fechas + Condición:Fechas, data = a)
anova(anovalargo)
```

```
## Analysis of Variance Table
##
```

```
## Response: Largo
##           Df Sum Sq Mean Sq  F value    Pr(>F)
## Condición      1    437   437.46 118.4679 < 2.2e-16 ***
## Fechas        16  43124 2695.27 729.8983 < 2.2e-16 ***
## Condición:Fechas 16    385    24.06   6.5163 1.964e-14 ***
## Residuals     1526    5635     3.69
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

TukeyHSD(anovalargo)

##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = Largo ~ Condición + Fechas + Condición:Fechas, data = a)
##
## $Condición
##           diff           lwr           upr p adj
## IA-C 1.059103 0.8682358 1.249969      0
##
## $Fechas
##           diff           lwr           upr           p adj
## 2020-10-14-2020-10-05 0.077500 -1.411099805 1.5660998 1.0000000
## 2020-10-26-2020-10-05 0.737500 -0.751099805 2.2260998 0.9542329
## 2020-11-05-2020-10-05 1.035000 -0.453599805 2.5235998 0.5721170
## 2020-11-14-2020-10-05 1.585000 0.096400195 3.0735998 0.0236012
## 2020-11-25-2020-10-05 2.395000 0.906400195 3.8835998 0.0000039
## 2020-12-05-2020-10-05 3.062500 1.573900195 4.5510998 0.0000000
## 2021-01-22-2020-10-05 6.457500 4.968900195 7.9460998 0.0000000
## 2021-01-28-2020-10-05 4.555000 3.066400195 6.0435998 0.0000000
## 2021-02-05-2020-10-05 6.357500 4.868900195 7.8460998 0.0000000
## 2021-02-12-2020-10-05 8.380000 6.891400195 9.8685998 0.0000000
## 2021-02-26-2020-10-05 7.820000 6.331400195 9.3085998 0.0000000
## 2021-03-15-2020-10-05 9.292500 7.803900195 10.7810998 0.0000000
## 2021-03-30-2020-10-05 11.487500 9.998900195 12.9760998 0.0000000
## 2021-04-15-2020-10-05 13.420000 11.931400195 14.9085998 0.0000000
## 2021-04-30-2020-10-05 13.436250 12.259408523 14.6130915 0.0000000
## 2021-05-25-2020-10-05 14.705125 13.626531970 15.7837180 0.0000000
## 2020-10-26-2020-10-14 0.660000 -0.828599805 2.1485998 0.9838017
## 2020-11-05-2020-10-14 0.957500 -0.531099805 2.4460998 0.7068768
## 2020-11-14-2020-10-14 1.507500 0.018900195 2.9960998 0.0434022
## 2020-11-25-2020-10-14 2.317500 0.828900195 3.8060998 0.0000107
## 2020-12-05-2020-10-14 2.985000 1.496400195 4.4735998 0.0000000
## 2021-01-22-2020-10-14 6.380000 4.891400195 7.8685998 0.0000000
## 2021-01-28-2020-10-14 4.477500 2.988900195 5.9660998 0.0000000
## 2021-02-05-2020-10-14 6.280000 4.791400195 7.7685998 0.0000000
## 2021-02-12-2020-10-14 8.302500 6.813900195 9.7910998 0.0000000
## 2021-02-26-2020-10-14 7.742500 6.253900195 9.2310998 0.0000000
## 2021-03-15-2020-10-14 9.215000 7.726400195 10.7035998 0.0000000
## 2021-03-30-2020-10-14 11.410000 9.921400195 12.8985998 0.0000000
## 2021-04-15-2020-10-14 13.342500 11.853900195 14.8310998 0.0000000
## 2021-04-30-2020-10-14 13.358750 12.181908523 14.5355915 0.0000000
## 2021-05-25-2020-10-14 14.627625 13.549031970 15.7062180 0.0000000
## 2020-11-05-2020-10-26 0.297500 -1.191099805 1.7860998 0.9999994
## 2020-11-14-2020-10-26 0.847500 -0.641099805 2.3360998 0.8627243
```

##	2020-11-25-2020-10-26	1.657500	0.168900195	3.1460998	0.0128198
##	2020-12-05-2020-10-26	2.325000	0.836400195	3.8135998	0.0000097
##	2021-01-22-2020-10-26	5.720000	4.231400195	7.2085998	0.0000000
##	2021-01-28-2020-10-26	3.817500	2.328900195	5.3060998	0.0000000
##	2021-02-05-2020-10-26	5.620000	4.131400195	7.1085998	0.0000000
##	2021-02-12-2020-10-26	7.642500	6.153900195	9.1310998	0.0000000
##	2021-02-26-2020-10-26	7.082500	5.593900195	8.5710998	0.0000000
##	2021-03-15-2020-10-26	8.555000	7.066400195	10.0435998	0.0000000
##	2021-03-30-2020-10-26	10.750000	9.261400195	12.2385998	0.0000000
##	2021-04-15-2020-10-26	12.682500	11.193900195	14.1710998	0.0000000
##	2021-04-30-2020-10-26	12.698750	11.521908523	13.8755915	0.0000000
##	2021-05-25-2020-10-26	13.967625	12.889031970	15.0462180	0.0000000
##	2020-11-14-2020-11-05	0.550000	-0.938599805	2.0385998	0.9977379
##	2020-11-25-2020-11-05	1.360000	-0.128599805	2.8485998	0.1211424
##	2020-12-05-2020-11-05	2.027500	0.538900195	3.5160998	0.0003300
##	2021-01-22-2020-11-05	5.422500	3.933900195	6.9110998	0.0000000
##	2021-01-28-2020-11-05	3.520000	2.031400195	5.0085998	0.0000000
##	2021-02-05-2020-11-05	5.322500	3.833900195	6.8110998	0.0000000
##	2021-02-12-2020-11-05	7.345000	5.856400195	8.8335998	0.0000000
##	2021-02-26-2020-11-05	6.785000	5.296400195	8.2735998	0.0000000
##	2021-03-15-2020-11-05	8.257500	6.768900195	9.7460998	0.0000000
##	2021-03-30-2020-11-05	10.452500	8.963900195	11.9410998	0.0000000
##	2021-04-15-2020-11-05	12.385000	10.896400195	13.8735998	0.0000000
##	2021-04-30-2020-11-05	12.401250	11.224408523	13.5780915	0.0000000
##	2021-05-25-2020-11-05	13.670125	12.591531970	14.7487180	0.0000000
##	2020-11-25-2020-11-14	0.810000	-0.678599805	2.2985998	0.9014307
##	2020-12-05-2020-11-14	1.477500	-0.011099805	2.9660998	0.0542610
##	2021-01-22-2020-11-14	4.872500	3.383900195	6.3610998	0.0000000
##	2021-01-28-2020-11-14	2.970000	1.481400195	4.4585998	0.0000000
##	2021-02-05-2020-11-14	4.772500	3.283900195	6.2610998	0.0000000
##	2021-02-12-2020-11-14	6.795000	5.306400195	8.2835998	0.0000000
##	2021-02-26-2020-11-14	6.235000	4.746400195	7.7235998	0.0000000
##	2021-03-15-2020-11-14	7.707500	6.218900195	9.1960998	0.0000000
##	2021-03-30-2020-11-14	9.902500	8.413900195	11.3910998	0.0000000
##	2021-04-15-2020-11-14	11.835000	10.346400195	13.3235998	0.0000000
##	2021-04-30-2020-11-14	11.851250	10.674408523	13.0280915	0.0000000
##	2021-05-25-2020-11-14	13.120125	12.041531970	14.1987180	0.0000000
##	2020-12-05-2020-11-25	0.667500	-0.821099805	2.1560998	0.9818872
##	2021-01-22-2020-11-25	4.062500	2.573900195	5.5510998	0.0000000
##	2021-01-28-2020-11-25	2.160000	0.671400195	3.6485998	0.0000728
##	2021-02-05-2020-11-25	3.962500	2.473900195	5.4510998	0.0000000
##	2021-02-12-2020-11-25	5.985000	4.496400195	7.4735998	0.0000000
##	2021-02-26-2020-11-25	5.425000	3.936400195	6.9135998	0.0000000
##	2021-03-15-2020-11-25	6.897500	5.408900195	8.3860998	0.0000000
##	2021-03-30-2020-11-25	9.092500	7.603900195	10.5810998	0.0000000
##	2021-04-15-2020-11-25	11.025000	9.536400195	12.5135998	0.0000000
##	2021-04-30-2020-11-25	11.041250	9.864408523	12.2180915	0.0000000
##	2021-05-25-2020-11-25	12.310125	11.231531970	13.3887180	0.0000000
##	2021-01-22-2020-12-05	3.395000	1.906400195	4.8835998	0.0000000
##	2021-01-28-2020-12-05	1.492500	0.003900195	2.9810998	0.0485723
##	2021-02-05-2020-12-05	3.295000	1.806400195	4.7835998	0.0000000
##	2021-02-12-2020-12-05	5.317500	3.828900195	6.8060998	0.0000000
##	2021-02-26-2020-12-05	4.757500	3.268900195	6.2460998	0.0000000
##	2021-03-15-2020-12-05	6.230000	4.741400195	7.7185998	0.0000000

```

## 2021-03-30-2020-12-05 8.425000 6.936400195 9.9135998 0.0000000
## 2021-04-15-2020-12-05 10.357500 8.868900195 11.8460998 0.0000000
## 2021-04-30-2020-12-05 10.373750 9.196908523 11.5505915 0.0000000
## 2021-05-25-2020-12-05 11.642625 10.564031970 12.7212180 0.0000000
## 2021-01-28-2021-01-22 -1.902500 -3.391099805 -0.4139002 0.0012507
## 2021-02-05-2021-01-22 -0.100000 -1.588599805 1.3885998 1.0000000
## 2021-02-12-2021-01-22 1.922500 0.433900195 3.4110998 0.0010169
## 2021-02-26-2021-01-22 1.362500 -0.126099805 2.8510998 0.1192366
## 2021-03-15-2021-01-22 2.835000 1.346400195 4.3235998 0.0000000
## 2021-03-30-2021-01-22 5.030000 3.541400195 6.5185998 0.0000000
## 2021-04-15-2021-01-22 6.962500 5.473900195 8.4510998 0.0000000
## 2021-04-30-2021-01-22 6.978750 5.801908523 8.1555915 0.0000000
## 2021-05-25-2021-01-22 8.247625 7.169031970 9.3262180 0.0000000
## 2021-02-05-2021-01-28 1.802500 0.313900195 3.2910998 0.0033900
## 2021-02-12-2021-01-28 3.825000 2.336400195 5.3135998 0.0000000
## 2021-02-26-2021-01-28 3.265000 1.776400195 4.7535998 0.0000000
## 2021-03-15-2021-01-28 4.737500 3.248900195 6.2260998 0.0000000
## 2021-03-30-2021-01-28 6.932500 5.443900195 8.4210998 0.0000000
## 2021-04-15-2021-01-28 8.865000 7.376400195 10.3535998 0.0000000
## 2021-04-30-2021-01-28 8.881250 7.704408523 10.0580915 0.0000000
## 2021-05-25-2021-01-28 10.150125 9.071531970 11.2287180 0.0000000
## 2021-02-12-2021-02-05 2.022500 0.533900195 3.5110998 0.0003487
## 2021-02-26-2021-02-05 1.462500 -0.026099805 2.9510998 0.0605064
## 2021-03-15-2021-02-05 2.935000 1.446400195 4.4235998 0.0000000
## 2021-03-30-2021-02-05 5.130000 3.641400195 6.6185998 0.0000000
## 2021-04-15-2021-02-05 7.062500 5.573900195 8.5510998 0.0000000
## 2021-04-30-2021-02-05 7.078750 5.901908523 8.2555915 0.0000000
## 2021-05-25-2021-02-05 8.347625 7.269031970 9.4262180 0.0000000
## 2021-02-26-2021-02-12 -0.560000 -2.048599805 0.9285998 0.9972166
## 2021-03-15-2021-02-12 0.912500 -0.576099805 2.4010998 0.7774232
## 2021-03-30-2021-02-12 3.107500 1.618900195 4.5960998 0.0000000
## 2021-04-15-2021-02-12 5.040000 3.551400195 6.5285998 0.0000000
## 2021-04-30-2021-02-12 5.056250 3.879408523 6.2330915 0.0000000
## 2021-05-25-2021-02-12 6.325125 5.246531970 7.4037180 0.0000000
## 2021-03-15-2021-02-26 1.472500 -0.016099805 2.9610998 0.0562791
## 2021-03-30-2021-02-26 3.667500 2.178900195 5.1560998 0.0000000
## 2021-04-15-2021-02-26 5.600000 4.111400195 7.0885998 0.0000000
## 2021-04-30-2021-02-26 5.616250 4.439408523 6.7930915 0.0000000
## 2021-05-25-2021-02-26 6.885125 5.806531970 7.9637180 0.0000000
## 2021-03-30-2021-03-15 2.195000 0.706400195 3.6835998 0.0000481
## 2021-04-15-2021-03-15 4.127500 2.638900195 5.6160998 0.0000000
## 2021-04-30-2021-03-15 4.143750 2.966908523 5.3205915 0.0000000
## 2021-05-25-2021-03-15 5.412625 4.334031970 6.4912180 0.0000000
## 2021-04-15-2021-03-30 1.932500 0.443900195 3.4210998 0.0009162
## 2021-04-30-2021-03-30 1.948750 0.771908523 3.1255915 0.0000016
## 2021-05-25-2021-03-30 3.217625 2.139031970 4.2962180 0.0000000
## 2021-04-30-2021-04-15 0.016250 -1.160591477 1.1930915 1.0000000
## 2021-05-25-2021-04-15 1.285125 0.206531970 2.3637180 0.0044671
## 2021-05-25-2021-04-30 1.268875 0.692342774 1.8454072 0.0000000
##
## $`Condición:Fechas`
##
## diff lwr upr p adj
## IA:2020-10-05-C:2020-10-05 -4.150000e-01 -2.7346928323 1.9046928 1.0000000
## C:2020-10-14-C:2020-10-05 -2.600000e-01 -2.5796928323 2.0596928 1.0000000

```

## IA:2020-10-14-C:2020-10-05	2.629008e-13	-2.3196928323	2.3196928	1.0000000
## C:2020-10-26-C:2020-10-05	5.450000e-01	-1.7746928323	2.8646928	1.0000000
## IA:2020-10-26-C:2020-10-05	5.150000e-01	-1.8046928323	2.8346928	1.0000000
## C:2020-11-05-C:2020-10-05	1.000000e+00	-1.3196928323	3.3196928	0.9996138
## IA:2020-11-05-C:2020-10-05	6.550000e-01	-1.6646928323	2.9746928	1.0000000
## C:2020-11-14-C:2020-10-05	1.705000e+00	-0.6146928323	4.0246928	0.6037892
## IA:2020-11-14-C:2020-10-05	1.050000e+00	-1.2696928323	3.3696928	0.9990178
## C:2020-11-25-C:2020-10-05	2.290000e+00	-0.0296928323	4.6096928	0.0589649
## IA:2020-11-25-C:2020-10-05	2.085000e+00	-0.2346928323	4.4046928	0.1645181
## C:2020-12-05-C:2020-10-05	2.735000e+00	0.4153071677	5.0546928	0.0034308
## IA:2020-12-05-C:2020-10-05	2.975000e+00	0.6553071677	5.2946928	0.0005524
## C:2021-01-22-C:2020-10-05	6.820000e+00	4.5003071677	9.1396928	0.0000000
## IA:2021-01-22-C:2020-10-05	5.680000e+00	3.3603071677	7.9996928	0.0000000
## C:2021-01-28-C:2020-10-05	4.655000e+00	2.3353071677	6.9746928	0.0000000
## IA:2021-01-28-C:2020-10-05	4.040000e+00	1.7203071677	6.3596928	0.0000000
## C:2021-02-05-C:2020-10-05	6.100000e+00	3.7803071677	8.4196928	0.0000000
## IA:2021-02-05-C:2020-10-05	6.200000e+00	3.8803071677	8.5196928	0.0000000
## C:2021-02-12-C:2020-10-05	8.520000e+00	6.2003071677	10.8396928	0.0000000
## IA:2021-02-12-C:2020-10-05	7.825000e+00	5.5053071677	10.1446928	0.0000000
## C:2021-02-26-C:2020-10-05	7.350000e+00	5.0303071677	9.6696928	0.0000000
## IA:2021-02-26-C:2020-10-05	7.875000e+00	5.5553071677	10.1946928	0.0000000
## C:2021-03-15-C:2020-10-05	9.345000e+00	7.0253071677	11.6646928	0.0000000
## IA:2021-03-15-C:2020-10-05	8.825000e+00	6.5053071677	11.1446928	0.0000000
## C:2021-03-30-C:2020-10-05	1.087000e+01	8.5503071677	13.1896928	0.0000000
## IA:2021-03-30-C:2020-10-05	1.169000e+01	9.3703071677	14.0096928	0.0000000
## C:2021-04-15-C:2020-10-05	1.243500e+01	10.1153071677	14.7546928	0.0000000
## IA:2021-04-15-C:2020-10-05	1.399000e+01	11.6703071677	16.3096928	0.0000000
## C:2021-04-30-C:2020-10-05	1.251500e+01	10.6811217945	14.3488782	0.0000000
## IA:2021-04-30-C:2020-10-05	1.394250e+01	12.1086217945	15.7763782	0.0000000
## C:2021-05-25-C:2020-10-05	1.357975e+01	11.8989728616	15.2605271	0.0000000
## IA:2021-05-25-C:2020-10-05	1.541550e+01	13.7347228616	17.0962771	0.0000000
## C:2020-10-14-IA:2020-10-05	1.550000e-01	-2.1646928323	2.4746928	1.0000000
## IA:2020-10-14-IA:2020-10-05	4.150000e-01	-1.9046928323	2.7346928	1.0000000
## C:2020-10-26-IA:2020-10-05	9.600000e-01	-1.3596928323	3.2796928	0.9998300
## IA:2020-10-26-IA:2020-10-05	9.300000e-01	-1.3896928323	3.2496928	0.9999123
## C:2020-11-05-IA:2020-10-05	1.415000e+00	-0.9046928323	3.7346928	0.9169560
## IA:2020-11-05-IA:2020-10-05	1.070000e+00	-1.2496928323	3.3896928	0.9986109
## C:2020-11-14-IA:2020-10-05	2.120000e+00	-0.1996928323	4.4396928	0.1401144
## IA:2020-11-14-IA:2020-10-05	1.465000e+00	-0.8546928323	3.7846928	0.8806775
## C:2020-11-25-IA:2020-10-05	2.705000e+00	0.3853071677	5.0246928	0.0042534
## IA:2020-11-25-IA:2020-10-05	2.500000e+00	0.1803071677	4.8196928	0.0169524
## C:2020-12-05-IA:2020-10-05	3.150000e+00	0.8303071677	5.4696928	0.0001303
## IA:2020-12-05-IA:2020-10-05	3.390000e+00	1.0703071677	5.7096928	0.0000156
## C:2021-01-22-IA:2020-10-05	7.235000e+00	4.9153071677	9.5546928	0.0000000
## IA:2021-01-22-IA:2020-10-05	6.095000e+00	3.7753071677	8.4146928	0.0000000
## C:2021-01-28-IA:2020-10-05	5.070000e+00	2.7503071677	7.3896928	0.0000000
## IA:2021-01-28-IA:2020-10-05	4.455000e+00	2.1353071677	6.7746928	0.0000000
## C:2021-02-05-IA:2020-10-05	6.515000e+00	4.1953071677	8.8346928	0.0000000
## IA:2021-02-05-IA:2020-10-05	6.615000e+00	4.2953071677	8.9346928	0.0000000
## C:2021-02-12-IA:2020-10-05	8.935000e+00	6.6153071677	11.2546928	0.0000000
## IA:2021-02-12-IA:2020-10-05	8.240000e+00	5.9203071677	10.5596928	0.0000000
## C:2021-02-26-IA:2020-10-05	7.765000e+00	5.4453071677	10.0846928	0.0000000
## IA:2021-02-26-IA:2020-10-05	8.290000e+00	5.9703071677	10.6096928	0.0000000
## C:2021-03-15-IA:2020-10-05	9.760000e+00	7.4403071677	12.0796928	0.0000000

##	IA:2021-03-15-IA:2020-10-05	9.240000e+00	6.9203071677	11.5596928	0.0000000
##	C:2021-03-30-IA:2020-10-05	1.128500e+01	8.9653071677	13.6046928	0.0000000
##	IA:2021-03-30-IA:2020-10-05	1.210500e+01	9.7853071677	14.4246928	0.0000000
##	C:2021-04-15-IA:2020-10-05	1.285000e+01	10.5303071677	15.1696928	0.0000000
##	IA:2021-04-15-IA:2020-10-05	1.440500e+01	12.0853071677	16.7246928	0.0000000
##	C:2021-04-30-IA:2020-10-05	1.293000e+01	11.0961217945	14.7638782	0.0000000
##	IA:2021-04-30-IA:2020-10-05	1.435750e+01	12.5236217945	16.1913782	0.0000000
##	C:2021-05-25-IA:2020-10-05	1.399475e+01	12.3139728616	15.6755271	0.0000000
##	IA:2021-05-25-IA:2020-10-05	1.583050e+01	14.1497228616	17.5112771	0.0000000
##	IA:2020-10-14-C:2020-10-14	2.600000e-01	-2.0596928323	2.5796928	1.0000000
##	C:2020-10-26-C:2020-10-14	8.050000e-01	-1.5146928323	3.1246928	0.9999966
##	IA:2020-10-26-C:2020-10-14	7.750000e-01	-1.5446928323	3.0946928	0.9999986
##	C:2020-11-05-C:2020-10-14	1.260000e+00	-1.0596928323	3.5796928	0.9805267
##	IA:2020-11-05-C:2020-10-14	9.150000e-01	-1.4046928323	3.2346928	0.9999380
##	C:2020-11-14-C:2020-10-14	1.965000e+00	-0.3546928323	4.2846928	0.2715164
##	IA:2020-11-14-C:2020-10-14	1.310000e+00	-1.0096928323	3.6296928	0.9670098
##	C:2020-11-25-C:2020-10-14	2.550000e+00	0.2303071677	4.8696928	0.0122739
##	IA:2020-11-25-C:2020-10-14	2.345000e+00	0.0253071677	4.6646928	0.0433111
##	C:2020-12-05-C:2020-10-14	2.995000e+00	0.6753071677	5.3146928	0.0004706
##	IA:2020-12-05-C:2020-10-14	3.235000e+00	0.9153071677	5.5546928	0.0000626
##	C:2021-01-22-C:2020-10-14	7.080000e+00	4.7603071677	9.3996928	0.0000000
##	IA:2021-01-22-C:2020-10-14	5.940000e+00	3.6203071677	8.2596928	0.0000000
##	C:2021-01-28-C:2020-10-14	4.915000e+00	2.5953071677	7.2346928	0.0000000
##	IA:2021-01-28-C:2020-10-14	4.300000e+00	1.9803071677	6.6196928	0.0000000
##	C:2021-02-05-C:2020-10-14	6.360000e+00	4.0403071677	8.6796928	0.0000000
##	IA:2021-02-05-C:2020-10-14	6.460000e+00	4.1403071677	8.7796928	0.0000000
##	C:2021-02-12-C:2020-10-14	8.780000e+00	6.4603071677	11.0996928	0.0000000
##	IA:2021-02-12-C:2020-10-14	8.085000e+00	5.7653071677	10.4046928	0.0000000
##	C:2021-02-26-C:2020-10-14	7.610000e+00	5.2903071677	9.9296928	0.0000000
##	IA:2021-02-26-C:2020-10-14	8.135000e+00	5.8153071677	10.4546928	0.0000000
##	C:2021-03-15-C:2020-10-14	9.605000e+00	7.2853071677	11.9246928	0.0000000
##	IA:2021-03-15-C:2020-10-14	9.085000e+00	6.7653071677	11.4046928	0.0000000
##	C:2021-03-30-C:2020-10-14	1.113000e+01	8.8103071677	13.4496928	0.0000000
##	IA:2021-03-30-C:2020-10-14	1.195000e+01	9.6303071677	14.2696928	0.0000000
##	C:2021-04-15-C:2020-10-14	1.269500e+01	10.3753071677	15.0146928	0.0000000
##	IA:2021-04-15-C:2020-10-14	1.425000e+01	11.9303071677	16.5696928	0.0000000
##	C:2021-04-30-C:2020-10-14	1.277500e+01	10.9411217945	14.6088782	0.0000000
##	IA:2021-04-30-C:2020-10-14	1.420250e+01	12.3686217945	16.0363782	0.0000000
##	C:2021-05-25-C:2020-10-14	1.383975e+01	12.1589728616	15.5205271	0.0000000
##	IA:2021-05-25-C:2020-10-14	1.567550e+01	13.9947228616	17.3562771	0.0000000
##	C:2020-10-26-IA:2020-10-14	5.450000e-01	-1.7746928323	2.8646928	1.0000000
##	IA:2020-10-26-IA:2020-10-14	5.150000e-01	-1.8046928323	2.8346928	1.0000000
##	C:2020-11-05-IA:2020-10-14	1.000000e+00	-1.3196928323	3.3196928	0.9996138
##	IA:2020-11-05-IA:2020-10-14	6.550000e-01	-1.6646928323	2.9746928	1.0000000
##	C:2020-11-14-IA:2020-10-14	1.705000e+00	-0.6146928323	4.0246928	0.6037892
##	IA:2020-11-14-IA:2020-10-14	1.050000e+00	-1.2696928323	3.3696928	0.9990178
##	C:2020-11-25-IA:2020-10-14	2.290000e+00	-0.0296928323	4.6096928	0.0589649
##	IA:2020-11-25-IA:2020-10-14	2.085000e+00	-0.2346928323	4.4046928	0.1645181
##	C:2020-12-05-IA:2020-10-14	2.735000e+00	0.4153071677	5.0546928	0.0034308
##	IA:2020-12-05-IA:2020-10-14	2.975000e+00	0.6553071677	5.2946928	0.0005524
##	C:2021-01-22-IA:2020-10-14	6.820000e+00	4.5003071677	9.1396928	0.0000000
##	IA:2021-01-22-IA:2020-10-14	5.680000e+00	3.3603071677	7.9996928	0.0000000
##	C:2021-01-28-IA:2020-10-14	4.655000e+00	2.3353071677	6.9746928	0.0000000
##	IA:2021-01-28-IA:2020-10-14	4.040000e+00	1.7203071677	6.3596928	0.0000000

## C:2021-02-05-IA:2020-10-14	6.100000e+00	3.7803071677	8.4196928	0.0000000
## IA:2021-02-05-IA:2020-10-14	6.200000e+00	3.8803071677	8.5196928	0.0000000
## C:2021-02-12-IA:2020-10-14	8.520000e+00	6.2003071677	10.8396928	0.0000000
## IA:2021-02-12-IA:2020-10-14	7.825000e+00	5.5053071677	10.1446928	0.0000000
## C:2021-02-26-IA:2020-10-14	7.350000e+00	5.0303071677	9.6696928	0.0000000
## IA:2021-02-26-IA:2020-10-14	7.875000e+00	5.5553071677	10.1946928	0.0000000
## C:2021-03-15-IA:2020-10-14	9.345000e+00	7.0253071677	11.6646928	0.0000000
## IA:2021-03-15-IA:2020-10-14	8.825000e+00	6.5053071677	11.1446928	0.0000000
## C:2021-03-30-IA:2020-10-14	1.087000e+01	8.5503071677	13.1896928	0.0000000
## IA:2021-03-30-IA:2020-10-14	1.169000e+01	9.3703071677	14.0096928	0.0000000
## C:2021-04-15-IA:2020-10-14	1.243500e+01	10.1153071677	14.7546928	0.0000000
## IA:2021-04-15-IA:2020-10-14	1.399000e+01	11.6703071677	16.3096928	0.0000000
## C:2021-04-30-IA:2020-10-14	1.251500e+01	10.6811217945	14.3488782	0.0000000
## IA:2021-04-30-IA:2020-10-14	1.394250e+01	12.1086217945	15.7763782	0.0000000
## C:2021-05-25-IA:2020-10-14	1.357975e+01	11.8989728616	15.2605271	0.0000000
## IA:2021-05-25-IA:2020-10-14	1.541550e+01	13.7347228616	17.0962771	0.0000000
## IA:2020-10-26-C:2020-10-26	-3.000000e-02	-2.3496928323	2.2896928	1.0000000
## C:2020-11-05-C:2020-10-26	4.550000e-01	-1.8646928323	2.7746928	1.0000000
## IA:2020-11-05-C:2020-10-26	1.100000e-01	-2.2096928323	2.4296928	1.0000000
## C:2020-11-14-C:2020-10-26	1.160000e+00	-1.1596928323	3.4796928	0.9944332
## IA:2020-11-14-C:2020-10-26	5.050000e-01	-1.8146928323	2.8246928	1.0000000
## C:2020-11-25-C:2020-10-26	1.745000e+00	-0.5746928323	4.0646928	0.5484275
## IA:2020-11-25-C:2020-10-26	1.540000e+00	-0.7796928323	3.8596928	0.8104007
## C:2020-12-05-C:2020-10-26	2.190000e+00	-0.1296928323	4.5096928	0.0997657
## IA:2020-12-05-C:2020-10-26	2.430000e+00	0.1103071677	4.7496928	0.0262102
## C:2021-01-22-C:2020-10-26	6.275000e+00	3.9553071677	8.5946928	0.0000000
## IA:2021-01-22-C:2020-10-26	5.135000e+00	2.8153071677	7.4546928	0.0000000
## C:2021-01-28-C:2020-10-26	4.110000e+00	1.7903071677	6.4296928	0.0000000
## IA:2021-01-28-C:2020-10-26	3.495000e+00	1.1753071677	5.8146928	0.0000059
## C:2021-02-05-C:2020-10-26	5.555000e+00	3.2353071677	7.8746928	0.0000000
## IA:2021-02-05-C:2020-10-26	5.655000e+00	3.3353071677	7.9746928	0.0000000
## C:2021-02-12-C:2020-10-26	7.975000e+00	5.6553071677	10.2946928	0.0000000
## IA:2021-02-12-C:2020-10-26	7.280000e+00	4.9603071677	9.5996928	0.0000000
## C:2021-02-26-C:2020-10-26	6.805000e+00	4.4853071677	9.1246928	0.0000000
## IA:2021-02-26-C:2020-10-26	7.330000e+00	5.0103071677	9.6496928	0.0000000
## C:2021-03-15-C:2020-10-26	8.800000e+00	6.4803071677	11.1196928	0.0000000
## IA:2021-03-15-C:2020-10-26	8.280000e+00	5.9603071677	10.5996928	0.0000000
## C:2021-03-30-C:2020-10-26	1.032500e+01	8.0053071677	12.6446928	0.0000000
## IA:2021-03-30-C:2020-10-26	1.114500e+01	8.8253071677	13.4646928	0.0000000
## C:2021-04-15-C:2020-10-26	1.189000e+01	9.5703071677	14.2096928	0.0000000
## IA:2021-04-15-C:2020-10-26	1.344500e+01	11.1253071677	15.7646928	0.0000000
## C:2021-04-30-C:2020-10-26	1.197000e+01	10.1361217945	13.8038782	0.0000000
## IA:2021-04-30-C:2020-10-26	1.339750e+01	11.5636217945	15.2313782	0.0000000
## C:2021-05-25-C:2020-10-26	1.303475e+01	11.3539728616	14.7155271	0.0000000
## IA:2021-05-25-C:2020-10-26	1.487050e+01	13.1897228616	16.5512771	0.0000000
## C:2020-11-05-IA:2020-10-26	4.850000e-01	-1.8346928323	2.8046928	1.0000000
## IA:2020-11-05-IA:2020-10-26	1.400000e-01	-2.1796928323	2.4596928	1.0000000
## C:2020-11-14-IA:2020-10-26	1.190000e+00	-1.1296928323	3.5096928	0.9916501
## IA:2020-11-14-IA:2020-10-26	5.350000e-01	-1.7846928323	2.8546928	1.0000000
## C:2020-11-25-IA:2020-10-26	1.775000e+00	-0.5446928323	4.0946928	0.5069654
## IA:2020-11-25-IA:2020-10-26	1.570000e+00	-0.7496928323	3.8896928	0.7773329
## C:2020-12-05-IA:2020-10-26	2.220000e+00	-0.0996928323	4.5396928	0.0856236
## IA:2020-12-05-IA:2020-10-26	2.460000e+00	0.1403071677	4.7796928	0.0217973
## C:2021-01-22-IA:2020-10-26	6.305000e+00	3.9853071677	8.6246928	0.0000000

##	IA: 2021-01-22-IA: 2020-10-26	5.165000e+00	2.8453071677	7.4846928	0.0000000
##	C: 2021-01-28-IA: 2020-10-26	4.140000e+00	1.8203071677	6.4596928	0.0000000
##	IA: 2021-01-28-IA: 2020-10-26	3.525000e+00	1.2053071677	5.8446928	0.0000044
##	C: 2021-02-05-IA: 2020-10-26	5.585000e+00	3.2653071677	7.9046928	0.0000000
##	IA: 2021-02-05-IA: 2020-10-26	5.685000e+00	3.3653071677	8.0046928	0.0000000
##	C: 2021-02-12-IA: 2020-10-26	8.005000e+00	5.6853071677	10.3246928	0.0000000
##	IA: 2021-02-12-IA: 2020-10-26	7.310000e+00	4.9903071677	9.6296928	0.0000000
##	C: 2021-02-26-IA: 2020-10-26	6.835000e+00	4.5153071677	9.1546928	0.0000000
##	IA: 2021-02-26-IA: 2020-10-26	7.360000e+00	5.0403071677	9.6796928	0.0000000
##	C: 2021-03-15-IA: 2020-10-26	8.830000e+00	6.5103071677	11.1496928	0.0000000
##	IA: 2021-03-15-IA: 2020-10-26	8.310000e+00	5.9903071677	10.6296928	0.0000000
##	C: 2021-03-30-IA: 2020-10-26	1.035500e+01	8.0353071677	12.6746928	0.0000000
##	IA: 2021-03-30-IA: 2020-10-26	1.117500e+01	8.8553071677	13.4946928	0.0000000
##	C: 2021-04-15-IA: 2020-10-26	1.192000e+01	9.6003071677	14.2396928	0.0000000
##	IA: 2021-04-15-IA: 2020-10-26	1.347500e+01	11.1553071677	15.7946928	0.0000000
##	C: 2021-04-30-IA: 2020-10-26	1.200000e+01	10.1661217945	13.8338782	0.0000000
##	IA: 2021-04-30-IA: 2020-10-26	1.342750e+01	11.5936217945	15.2613782	0.0000000
##	C: 2021-05-25-IA: 2020-10-26	1.306475e+01	11.3839728616	14.7455271	0.0000000
##	IA: 2021-05-25-IA: 2020-10-26	1.490050e+01	13.2197228616	16.5812771	0.0000000
##	IA: 2020-11-05-C: 2020-11-05	-3.450000e-01	-2.6646928323	1.9746928	1.0000000
##	C: 2020-11-14-C: 2020-11-05	7.050000e-01	-1.6146928323	3.0246928	0.9999999
##	IA: 2020-11-14-C: 2020-11-05	5.000000e-02	-2.2696928323	2.3696928	1.0000000
##	C: 2020-11-25-C: 2020-11-05	1.290000e+00	-1.0296928323	3.6096928	0.9730860
##	IA: 2020-11-25-C: 2020-11-05	1.085000e+00	-1.2346928323	3.4046928	0.9982156
##	C: 2020-12-05-C: 2020-11-05	1.735000e+00	-0.5846928323	4.0546928	0.5622936
##	IA: 2020-12-05-C: 2020-11-05	1.975000e+00	-0.3446928323	4.2946928	0.2612037
##	C: 2021-01-22-C: 2020-11-05	5.820000e+00	3.5003071677	8.1396928	0.0000000
##	IA: 2021-01-22-C: 2020-11-05	4.680000e+00	2.3603071677	6.9996928	0.0000000
##	C: 2021-01-28-C: 2020-11-05	3.655000e+00	1.3353071677	5.9746928	0.0000012
##	IA: 2021-01-28-C: 2020-11-05	3.040000e+00	0.7203071677	5.3596928	0.0003266
##	C: 2021-02-05-C: 2020-11-05	5.100000e+00	2.7803071677	7.4196928	0.0000000
##	IA: 2021-02-05-C: 2020-11-05	5.200000e+00	2.8803071677	7.5196928	0.0000000
##	C: 2021-02-12-C: 2020-11-05	7.520000e+00	5.2003071677	9.8396928	0.0000000
##	IA: 2021-02-12-C: 2020-11-05	6.825000e+00	4.5053071677	9.1446928	0.0000000
##	C: 2021-02-26-C: 2020-11-05	6.350000e+00	4.0303071677	8.6696928	0.0000000
##	IA: 2021-02-26-C: 2020-11-05	6.875000e+00	4.5553071677	9.1946928	0.0000000
##	C: 2021-03-15-C: 2020-11-05	8.345000e+00	6.0253071677	10.6646928	0.0000000
##	IA: 2021-03-15-C: 2020-11-05	7.825000e+00	5.5053071677	10.1446928	0.0000000
##	C: 2021-03-30-C: 2020-11-05	9.870000e+00	7.5503071677	12.1896928	0.0000000
##	IA: 2021-03-30-C: 2020-11-05	1.069000e+01	8.3703071677	13.0096928	0.0000000
##	C: 2021-04-15-C: 2020-11-05	1.143500e+01	9.1153071677	13.7546928	0.0000000
##	IA: 2021-04-15-C: 2020-11-05	1.299000e+01	10.6703071677	15.3096928	0.0000000
##	C: 2021-04-30-C: 2020-11-05	1.151500e+01	9.6811217945	13.3488782	0.0000000
##	IA: 2021-04-30-C: 2020-11-05	1.294250e+01	11.1086217945	14.7763782	0.0000000
##	C: 2021-05-25-C: 2020-11-05	1.257975e+01	10.8989728616	14.2605271	0.0000000
##	IA: 2021-05-25-C: 2020-11-05	1.441550e+01	12.7347228616	16.0962771	0.0000000
##	C: 2020-11-14-IA: 2020-11-05	1.050000e+00	-1.2696928323	3.3696928	0.9990178
##	IA: 2020-11-14-IA: 2020-11-05	3.950000e-01	-1.9246928323	2.7146928	1.0000000
##	C: 2020-11-25-IA: 2020-11-05	1.635000e+00	-0.6846928323	3.9546928	0.6977561
##	IA: 2020-11-25-IA: 2020-11-05	1.430000e+00	-0.8896928323	3.7496928	0.9069676
##	C: 2020-12-05-IA: 2020-11-05	2.080000e+00	-0.2396928323	4.3996928	0.1682483
##	IA: 2020-12-05-IA: 2020-11-05	2.320000e+00	0.0003071677	4.6396928	0.0499138
##	C: 2021-01-22-IA: 2020-11-05	6.165000e+00	3.8453071677	8.4846928	0.0000000
##	IA: 2021-01-22-IA: 2020-11-05	5.025000e+00	2.7053071677	7.3446928	0.0000000

## C:2021-01-28-IA:2020-11-05	4.000000e+00	1.6803071677	6.3196928	0.0000000
## IA:2021-01-28-IA:2020-11-05	3.385000e+00	1.0653071677	5.7046928	0.0000163
## C:2021-02-05-IA:2020-11-05	5.445000e+00	3.1253071677	7.7646928	0.0000000
## IA:2021-02-05-IA:2020-11-05	5.545000e+00	3.2253071677	7.8646928	0.0000000
## C:2021-02-12-IA:2020-11-05	7.865000e+00	5.5453071677	10.1846928	0.0000000
## IA:2021-02-12-IA:2020-11-05	7.170000e+00	4.8503071677	9.4896928	0.0000000
## C:2021-02-26-IA:2020-11-05	6.695000e+00	4.3753071677	9.0146928	0.0000000
## IA:2021-02-26-IA:2020-11-05	7.220000e+00	4.9003071677	9.5396928	0.0000000
## C:2021-03-15-IA:2020-11-05	8.690000e+00	6.3703071677	11.0096928	0.0000000
## IA:2021-03-15-IA:2020-11-05	8.170000e+00	5.8503071677	10.4896928	0.0000000
## C:2021-03-30-IA:2020-11-05	1.021500e+01	7.8953071677	12.5346928	0.0000000
## IA:2021-03-30-IA:2020-11-05	1.103500e+01	8.7153071677	13.3546928	0.0000000
## C:2021-04-15-IA:2020-11-05	1.178000e+01	9.4603071677	14.0996928	0.0000000
## IA:2021-04-15-IA:2020-11-05	1.333500e+01	11.0153071677	15.6546928	0.0000000
## C:2021-04-30-IA:2020-11-05	1.186000e+01	10.0261217945	13.6938782	0.0000000
## IA:2021-04-30-IA:2020-11-05	1.328750e+01	11.4536217945	15.1213782	0.0000000
## C:2021-05-25-IA:2020-11-05	1.292475e+01	11.2439728616	14.6055271	0.0000000
## IA:2021-05-25-IA:2020-11-05	1.476050e+01	13.0797228616	16.4412771	0.0000000
## IA:2020-11-14-C:2020-11-14	-6.550000e-01	-2.9746928323	1.6646928	1.0000000
## C:2020-11-25-C:2020-11-14	5.850000e-01	-1.7346928323	2.9046928	1.0000000
## IA:2020-11-25-C:2020-11-14	3.800000e-01	-1.9396928323	2.6996928	1.0000000
## C:2020-12-05-C:2020-11-14	1.030000e+00	-1.2896928323	3.3496928	0.9993159
## IA:2020-12-05-C:2020-11-14	1.270000e+00	-1.0496928323	3.5896928	0.9782545
## C:2021-01-22-C:2020-11-14	5.115000e+00	2.7953071677	7.4346928	0.0000000
## IA:2021-01-22-C:2020-11-14	3.975000e+00	1.6553071677	6.2946928	0.0000000
## C:2021-01-28-C:2020-11-14	2.950000e+00	0.6303071677	5.2696928	0.0006739
## IA:2021-01-28-C:2020-11-14	2.335000e+00	0.0153071677	4.6546928	0.0458552
## C:2021-02-05-C:2020-11-14	4.395000e+00	2.0753071677	6.7146928	0.0000000
## IA:2021-02-05-C:2020-11-14	4.495000e+00	2.1753071677	6.8146928	0.0000000
## C:2021-02-12-C:2020-11-14	6.815000e+00	4.4953071677	9.1346928	0.0000000
## IA:2021-02-12-C:2020-11-14	6.120000e+00	3.8003071677	8.4396928	0.0000000
## C:2021-02-26-C:2020-11-14	5.645000e+00	3.3253071677	7.9646928	0.0000000
## IA:2021-02-26-C:2020-11-14	6.170000e+00	3.8503071677	8.4896928	0.0000000
## C:2021-03-15-C:2020-11-14	7.640000e+00	5.3203071677	9.9596928	0.0000000
## IA:2021-03-15-C:2020-11-14	7.120000e+00	4.8003071677	9.4396928	0.0000000
## C:2021-03-30-C:2020-11-14	9.165000e+00	6.8453071677	11.4846928	0.0000000
## IA:2021-03-30-C:2020-11-14	9.985000e+00	7.6653071677	12.3046928	0.0000000
## C:2021-04-15-C:2020-11-14	1.073000e+01	8.4103071677	13.0496928	0.0000000
## IA:2021-04-15-C:2020-11-14	1.228500e+01	9.9653071677	14.6046928	0.0000000
## C:2021-04-30-C:2020-11-14	1.081000e+01	8.9761217945	12.6438782	0.0000000
## IA:2021-04-30-C:2020-11-14	1.223750e+01	10.4036217945	14.0713782	0.0000000
## C:2021-05-25-C:2020-11-14	1.187475e+01	10.1939728616	13.5555271	0.0000000
## IA:2021-05-25-C:2020-11-14	1.371050e+01	12.0297228616	15.3912771	0.0000000
## C:2020-11-25-IA:2020-11-14	1.240000e+00	-1.0796928323	3.5596928	0.9845037
## IA:2020-11-25-IA:2020-11-14	1.035000e+00	-1.2846928323	3.3546928	0.9992501
## C:2020-12-05-IA:2020-11-14	1.685000e+00	-0.6346928323	4.0046928	0.6311918
## IA:2020-12-05-IA:2020-11-14	1.925000e+00	-0.3946928323	4.2446928	0.3152008
## C:2021-01-22-IA:2020-11-14	5.770000e+00	3.4503071677	8.0896928	0.0000000
## IA:2021-01-22-IA:2020-11-14	4.630000e+00	2.3103071677	6.9496928	0.0000000
## C:2021-01-28-IA:2020-11-14	3.605000e+00	1.2853071677	5.9246928	0.0000020
## IA:2021-01-28-IA:2020-11-14	2.990000e+00	0.6703071677	5.3096928	0.0004899
## C:2021-02-05-IA:2020-11-14	5.050000e+00	2.7303071677	7.3696928	0.0000000
## IA:2021-02-05-IA:2020-11-14	5.150000e+00	2.8303071677	7.4696928	0.0000000
## C:2021-02-12-IA:2020-11-14	7.470000e+00	5.1503071677	9.7896928	0.0000000

##	IA:2021-02-12-IA:2020-11-14	6.775000e+00	4.4553071677	9.0946928	0.0000000
##	C:2021-02-26-IA:2020-11-14	6.300000e+00	3.9803071677	8.6196928	0.0000000
##	IA:2021-02-26-IA:2020-11-14	6.825000e+00	4.5053071677	9.1446928	0.0000000
##	C:2021-03-15-IA:2020-11-14	8.295000e+00	5.9753071677	10.6146928	0.0000000
##	IA:2021-03-15-IA:2020-11-14	7.775000e+00	5.4553071677	10.0946928	0.0000000
##	C:2021-03-30-IA:2020-11-14	9.820000e+00	7.5003071677	12.1396928	0.0000000
##	IA:2021-03-30-IA:2020-11-14	1.064000e+01	8.3203071677	12.9596928	0.0000000
##	C:2021-04-15-IA:2020-11-14	1.138500e+01	9.0653071677	13.7046928	0.0000000
##	IA:2021-04-15-IA:2020-11-14	1.294000e+01	10.6203071677	15.2596928	0.0000000
##	C:2021-04-30-IA:2020-11-14	1.146500e+01	9.6311217945	13.2988782	0.0000000
##	IA:2021-04-30-IA:2020-11-14	1.289250e+01	11.0586217945	14.7263782	0.0000000
##	C:2021-05-25-IA:2020-11-14	1.252975e+01	10.8489728616	14.2105271	0.0000000
##	IA:2021-05-25-IA:2020-11-14	1.436550e+01	12.6847228616	16.0462771	0.0000000
##	IA:2020-11-25-C:2020-11-25	-2.050000e-01	-2.5246928323	2.1146928	1.0000000
##	C:2020-12-05-C:2020-11-25	4.450000e-01	-1.8746928323	2.7646928	1.0000000
##	IA:2020-12-05-C:2020-11-25	6.850000e-01	-1.6346928323	3.0046928	0.9999999
##	C:2021-01-22-C:2020-11-25	4.530000e+00	2.2103071677	6.8496928	0.0000000
##	IA:2021-01-22-C:2020-11-25	3.390000e+00	1.0703071677	5.7096928	0.0000156
##	C:2021-01-28-C:2020-11-25	2.365000e+00	0.0453071677	4.6846928	0.0385887
##	IA:2021-01-28-C:2020-11-25	1.750000e+00	-0.5696928323	4.0696928	0.5414977
##	C:2021-02-05-C:2020-11-25	3.810000e+00	1.4903071677	6.1296928	0.0000003
##	IA:2021-02-05-C:2020-11-25	3.910000e+00	1.5903071677	6.2296928	0.0000001
##	C:2021-02-12-C:2020-11-25	6.230000e+00	3.9103071677	8.5496928	0.0000000
##	IA:2021-02-12-C:2020-11-25	5.535000e+00	3.2153071677	7.8546928	0.0000000
##	C:2021-02-26-C:2020-11-25	5.060000e+00	2.7403071677	7.3796928	0.0000000
##	IA:2021-02-26-C:2020-11-25	5.585000e+00	3.2653071677	7.9046928	0.0000000
##	C:2021-03-15-C:2020-11-25	7.055000e+00	4.7353071677	9.3746928	0.0000000
##	IA:2021-03-15-C:2020-11-25	6.535000e+00	4.2153071677	8.8546928	0.0000000
##	C:2021-03-30-C:2020-11-25	8.580000e+00	6.2603071677	10.8996928	0.0000000
##	IA:2021-03-30-C:2020-11-25	9.400000e+00	7.0803071677	11.7196928	0.0000000
##	C:2021-04-15-C:2020-11-25	1.014500e+01	7.8253071677	12.4646928	0.0000000
##	IA:2021-04-15-C:2020-11-25	1.170000e+01	9.3803071677	14.0196928	0.0000000
##	C:2021-04-30-C:2020-11-25	1.022500e+01	8.3911217945	12.0588782	0.0000000
##	IA:2021-04-30-C:2020-11-25	1.165250e+01	9.8186217945	13.4863782	0.0000000
##	C:2021-05-25-C:2020-11-25	1.128975e+01	9.6089728616	12.9705271	0.0000000
##	IA:2021-05-25-C:2020-11-25	1.312550e+01	11.4447228616	14.8062771	0.0000000
##	C:2020-12-05-IA:2020-11-25	6.500000e-01	-1.6696928323	2.9696928	1.0000000
##	IA:2020-12-05-IA:2020-11-25	8.900000e-01	-1.4296928323	3.2096928	0.9999661
##	C:2021-01-22-IA:2020-11-25	4.735000e+00	2.4153071677	7.0546928	0.0000000
##	IA:2021-01-22-IA:2020-11-25	3.595000e+00	1.2753071677	5.9146928	0.0000022
##	C:2021-01-28-IA:2020-11-25	2.570000e+00	0.2503071677	4.8896928	0.0107580
##	IA:2021-01-28-IA:2020-11-25	1.955000e+00	-0.3646928323	4.2746928	0.2820764
##	C:2021-02-05-IA:2020-11-25	4.015000e+00	1.6953071677	6.3346928	0.0000000
##	IA:2021-02-05-IA:2020-11-25	4.115000e+00	1.7953071677	6.4346928	0.0000000
##	C:2021-02-12-IA:2020-11-25	6.435000e+00	4.1153071677	8.7546928	0.0000000
##	IA:2021-02-12-IA:2020-11-25	5.740000e+00	3.4203071677	8.0596928	0.0000000
##	C:2021-02-26-IA:2020-11-25	5.265000e+00	2.9453071677	7.5846928	0.0000000
##	IA:2021-02-26-IA:2020-11-25	5.790000e+00	3.4703071677	8.1096928	0.0000000
##	C:2021-03-15-IA:2020-11-25	7.260000e+00	4.9403071677	9.5796928	0.0000000
##	IA:2021-03-15-IA:2020-11-25	6.740000e+00	4.4203071677	9.0596928	0.0000000
##	C:2021-03-30-IA:2020-11-25	8.785000e+00	6.4653071677	11.1046928	0.0000000
##	IA:2021-03-30-IA:2020-11-25	9.605000e+00	7.2853071677	11.9246928	0.0000000
##	C:2021-04-15-IA:2020-11-25	1.035000e+01	8.0303071677	12.6696928	0.0000000
##	IA:2021-04-15-IA:2020-11-25	1.190500e+01	9.5853071677	14.2246928	0.0000000

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## C:2021-04-30-IA:2020-11-25 1.043000e+01 8.5961217945 12.2638782 0.0000000
## IA:2021-04-30-IA:2020-11-25 1.185750e+01 10.0236217945 13.6913782 0.0000000
## C:2021-05-25-IA:2020-11-25 1.149475e+01 9.8139728616 13.1755271 0.0000000
## IA:2021-05-25-IA:2020-11-25 1.333050e+01 11.6497228616 15.0112771 0.0000000
## IA:2020-12-05-C:2020-12-05 2.400000e-01 -2.0796928323 2.5596928 1.0000000
## C:2021-01-22-C:2020-12-05 4.085000e+00 1.7653071677 6.4046928 0.0000000
## IA:2021-01-22-C:2020-12-05 2.945000e+00 0.6253071677 5.2646928 0.0007011
## C:2021-01-28-C:2020-12-05 1.920000e+00 -0.3996928323 4.2396928 0.3209258
## IA:2021-01-28-C:2020-12-05 1.305000e+00 -1.0146928323 3.6246928 0.9686189
## C:2021-02-05-C:2020-12-05 3.365000e+00 1.0453071677 5.6846928 0.0000196
## IA:2021-02-05-C:2020-12-05 3.465000e+00 1.1453071677 5.7846928 0.0000078
## C:2021-02-12-C:2020-12-05 5.785000e+00 3.4653071677 8.1046928 0.0000000
## IA:2021-02-12-C:2020-12-05 5.090000e+00 2.7703071677 7.4096928 0.0000000
## C:2021-02-26-C:2020-12-05 4.615000e+00 2.2953071677 6.9346928 0.0000000
## IA:2021-02-26-C:2020-12-05 5.140000e+00 2.8203071677 7.4596928 0.0000000
## C:2021-03-15-C:2020-12-05 6.610000e+00 4.2903071677 8.9296928 0.0000000
## IA:2021-03-15-C:2020-12-05 6.090000e+00 3.7703071677 8.4096928 0.0000000
## C:2021-03-30-C:2020-12-05 8.135000e+00 5.8153071677 10.4546928 0.0000000
## IA:2021-03-30-C:2020-12-05 8.955000e+00 6.6353071677 11.2746928 0.0000000
## C:2021-04-15-C:2020-12-05 9.700000e+00 7.3803071677 12.0196928 0.0000000
## IA:2021-04-15-C:2020-12-05 1.125500e+01 8.9353071677 13.5746928 0.0000000
## C:2021-04-30-C:2020-12-05 9.780000e+00 7.9461217945 11.6138782 0.0000000
## IA:2021-04-30-C:2020-12-05 1.120750e+01 9.3736217945 13.0413782 0.0000000
## C:2021-05-25-C:2020-12-05 1.084475e+01 9.1639728616 12.5255271 0.0000000
## IA:2021-05-25-C:2020-12-05 1.268050e+01 10.9997228616 14.3612771 0.0000000
## C:2021-01-22-IA:2020-12-05 3.845000e+00 1.5253071677 6.1646928 0.0000002
## IA:2021-01-22-IA:2020-12-05 2.705000e+00 0.3853071677 5.0246928 0.0042534
## C:2021-01-28-IA:2020-12-05 1.680000e+00 -0.6396928323 3.9996928 0.6379895
## IA:2021-01-28-IA:2020-12-05 1.065000e+00 -1.2546928323 3.3846928 0.9987244
## C:2021-02-05-IA:2020-12-05 3.125000e+00 0.8053071677 5.4446928 0.0001611
## IA:2021-02-05-IA:2020-12-05 3.225000e+00 0.9053071677 5.5446928 0.0000683
## C:2021-02-12-IA:2020-12-05 5.545000e+00 3.2253071677 7.8646928 0.0000000
## IA:2021-02-12-IA:2020-12-05 4.850000e+00 2.5303071677 7.1696928 0.0000000
## C:2021-02-26-IA:2020-12-05 4.375000e+00 2.0553071677 6.6946928 0.0000000
## IA:2021-02-26-IA:2020-12-05 4.900000e+00 2.5803071677 7.2196928 0.0000000
## C:2021-03-15-IA:2020-12-05 6.370000e+00 4.0503071677 8.6896928 0.0000000
## IA:2021-03-15-IA:2020-12-05 5.850000e+00 3.5303071677 8.1696928 0.0000000
## C:2021-03-30-IA:2020-12-05 7.895000e+00 5.5753071677 10.2146928 0.0000000
## IA:2021-03-30-IA:2020-12-05 8.715000e+00 6.3953071677 11.0346928 0.0000000
## C:2021-04-15-IA:2020-12-05 9.460000e+00 7.1403071677 11.7796928 0.0000000
## IA:2021-04-15-IA:2020-12-05 1.101500e+01 8.6953071677 13.3346928 0.0000000
## C:2021-04-30-IA:2020-12-05 9.540000e+00 7.7061217945 11.3738782 0.0000000
## IA:2021-04-30-IA:2020-12-05 1.096750e+01 9.1336217945 12.8013782 0.0000000
## C:2021-05-25-IA:2020-12-05 1.060475e+01 8.9239728616 12.2855271 0.0000000
## IA:2021-05-25-IA:2020-12-05 1.244050e+01 10.7597228616 14.1212771 0.0000000
## IA:2021-01-22-C:2021-01-22 -1.140000e+00 -3.4596928323 1.1796928 0.9958159
## C:2021-01-28-C:2021-01-22 -2.165000e+00 -4.4846928323 0.1546928 0.1129448
## IA:2021-01-28-C:2021-01-22 -2.780000e+00 -5.0996928323 -0.4603072 0.0024711
## C:2021-02-05-C:2021-01-22 -7.200000e-01 -3.0396928323 1.5996928 0.9999998
## IA:2021-02-05-C:2021-01-22 -6.200000e-01 -2.9396928323 1.6996928 1.0000000
## C:2021-02-12-C:2021-01-22 1.700000e+00 -0.6196928323 4.0196928 0.6106672
## IA:2021-02-12-C:2021-01-22 1.005000e+00 -1.3146928323 3.3246928 0.9995741
## C:2021-02-26-C:2021-01-22 5.300000e-01 -1.7896928323 2.8496928 1.0000000
## IA:2021-02-26-C:2021-01-22 1.055000e+00 -1.2646928323 3.3746928 0.9989274

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## C:2021-03-15-C:2021-01-22	2.525000e+00	0.2053071677	4.8446928	0.0144419
## IA:2021-03-15-C:2021-01-22	2.005000e+00	-0.3146928323	4.3246928	0.2317759
## C:2021-03-30-C:2021-01-22	4.050000e+00	1.7303071677	6.3696928	0.0000000
## IA:2021-03-30-C:2021-01-22	4.870000e+00	2.5503071677	7.1896928	0.0000000
## C:2021-04-15-C:2021-01-22	5.615000e+00	3.2953071677	7.9346928	0.0000000
## IA:2021-04-15-C:2021-01-22	7.170000e+00	4.8503071677	9.4896928	0.0000000
## C:2021-04-30-C:2021-01-22	5.695000e+00	3.8611217945	7.5288782	0.0000000
## IA:2021-04-30-C:2021-01-22	7.122500e+00	5.2886217945	8.9563782	0.0000000
## C:2021-05-25-C:2021-01-22	6.759750e+00	5.0789728616	8.4405271	0.0000000
## IA:2021-05-25-C:2021-01-22	8.595500e+00	6.9147228616	10.2762771	0.0000000
## C:2021-01-28-IA:2021-01-22	-1.025000e+00	-3.3446928323	1.2946928	0.9993765
## IA:2021-01-28-IA:2021-01-22	-1.640000e+00	-3.9596928323	0.6796928	0.6912668
## C:2021-02-05-IA:2021-01-22	4.200000e-01	-1.8996928323	2.7396928	1.0000000
## IA:2021-02-05-IA:2021-01-22	5.200000e-01	-1.7996928323	2.8396928	1.0000000
## C:2021-02-12-IA:2021-01-22	2.840000e+00	0.5203071677	5.1596928	0.0015789
## IA:2021-02-12-IA:2021-01-22	2.145000e+00	-0.1746928323	4.4646928	0.1244559
## C:2021-02-26-IA:2021-01-22	1.670000e+00	-0.6496928323	3.9896928	0.6515060
## IA:2021-02-26-IA:2021-01-22	2.195000e+00	-0.1246928323	4.5146928	0.0972851
## C:2021-03-15-IA:2021-01-22	3.665000e+00	1.3453071677	5.9846928	0.0000011
## IA:2021-03-15-IA:2021-01-22	3.145000e+00	0.8253071677	5.4646928	0.0001360
## C:2021-03-30-IA:2021-01-22	5.190000e+00	2.8703071677	7.5096928	0.0000000
## IA:2021-03-30-IA:2021-01-22	6.010000e+00	3.6903071677	8.3296928	0.0000000
## C:2021-04-15-IA:2021-01-22	6.755000e+00	4.4353071677	9.0746928	0.0000000
## IA:2021-04-15-IA:2021-01-22	8.310000e+00	5.9903071677	10.6296928	0.0000000
## C:2021-04-30-IA:2021-01-22	6.835000e+00	5.0011217945	8.6688782	0.0000000
## IA:2021-04-30-IA:2021-01-22	8.262500e+00	6.4286217945	10.0963782	0.0000000
## C:2021-05-25-IA:2021-01-22	7.899750e+00	6.2189728616	9.5805271	0.0000000
## IA:2021-05-25-IA:2021-01-22	9.735500e+00	8.0547228616	11.4162771	0.0000000
## IA:2021-01-28-C:2021-01-28	-6.150000e-01	-2.9346928323	1.7046928	1.0000000
## C:2021-02-05-C:2021-01-28	1.445000e+00	-0.8746928323	3.7646928	0.8962147
## IA:2021-02-05-C:2021-01-28	1.545000e+00	-0.7746928323	3.8646928	0.8050726
## C:2021-02-12-C:2021-01-28	3.865000e+00	1.5453071677	6.1846928	0.0000001
## IA:2021-02-12-C:2021-01-28	3.170000e+00	0.8503071677	5.4896928	0.0001099
## C:2021-02-26-C:2021-01-28	2.695000e+00	0.3753071677	5.0146928	0.0045661
## IA:2021-02-26-C:2021-01-28	3.220000e+00	0.9003071677	5.5396928	0.0000713
## C:2021-03-15-C:2021-01-28	4.690000e+00	2.3703071677	7.0096928	0.0000000
## IA:2021-03-15-C:2021-01-28	4.170000e+00	1.8503071677	6.4896928	0.0000000
## C:2021-03-30-C:2021-01-28	6.215000e+00	3.8953071677	8.5346928	0.0000000
## IA:2021-03-30-C:2021-01-28	7.035000e+00	4.7153071677	9.3546928	0.0000000
## C:2021-04-15-C:2021-01-28	7.780000e+00	5.4603071677	10.0996928	0.0000000
## IA:2021-04-15-C:2021-01-28	9.335000e+00	7.0153071677	11.6546928	0.0000000
## C:2021-04-30-C:2021-01-28	7.860000e+00	6.0261217945	9.6938782	0.0000000
## IA:2021-04-30-C:2021-01-28	9.287500e+00	7.4536217945	11.1213782	0.0000000
## C:2021-05-25-C:2021-01-28	8.924750e+00	7.2439728616	10.6055271	0.0000000
## IA:2021-05-25-C:2021-01-28	1.076050e+01	9.0797228616	12.4412771	0.0000000
## C:2021-02-05-IA:2021-01-28	2.060000e+00	-0.2596928323	4.3796928	0.1837924
## IA:2021-02-05-IA:2021-01-28	2.160000e+00	-0.1596928323	4.4796928	0.1157402
## C:2021-02-12-IA:2021-01-28	4.480000e+00	2.1603071677	6.7996928	0.0000000
## IA:2021-02-12-IA:2021-01-28	3.785000e+00	1.4653071677	6.1046928	0.0000003
## C:2021-02-26-IA:2021-01-28	3.310000e+00	0.9903071677	5.6296928	0.0000322
## IA:2021-02-26-IA:2021-01-28	3.835000e+00	1.5153071677	6.1546928	0.0000002
## C:2021-03-15-IA:2021-01-28	5.305000e+00	2.9853071677	7.6246928	0.0000000
## IA:2021-03-15-IA:2021-01-28	4.785000e+00	2.4653071677	7.1046928	0.0000000
## C:2021-03-30-IA:2021-01-28	6.830000e+00	4.5103071677	9.1496928	0.0000000

##	IA: 2021-03-30-IA: 2021-01-28	7.650000e+00	5.3303071677	9.9696928	0.0000000
##	C: 2021-04-15-IA: 2021-01-28	8.395000e+00	6.0753071677	10.7146928	0.0000000
##	IA: 2021-04-15-IA: 2021-01-28	9.950000e+00	7.6303071677	12.2696928	0.0000000
##	C: 2021-04-30-IA: 2021-01-28	8.475000e+00	6.6411217945	10.3088782	0.0000000
##	IA: 2021-04-30-IA: 2021-01-28	9.902500e+00	8.0686217945	11.7363782	0.0000000
##	C: 2021-05-25-IA: 2021-01-28	9.539750e+00	7.8589728616	11.2205271	0.0000000
##	IA: 2021-05-25-IA: 2021-01-28	1.137550e+01	9.6947228616	13.0562771	0.0000000
##	IA: 2021-02-05-C: 2021-02-05	1.000000e-01	-2.2196928323	2.4196928	1.0000000
##	C: 2021-02-12-C: 2021-02-05	2.420000e+00	0.1003071677	4.7396928	0.0278489
##	IA: 2021-02-12-C: 2021-02-05	1.725000e+00	-0.5946928323	4.0446928	0.5761542
##	C: 2021-02-26-C: 2021-02-05	1.250000e+00	-1.0696928323	3.5696928	0.9826060
##	IA: 2021-02-26-C: 2021-02-05	1.775000e+00	-0.5446928323	4.0946928	0.5069654
##	C: 2021-03-15-C: 2021-02-05	3.245000e+00	0.9253071677	5.5646928	0.0000573
##	IA: 2021-03-15-C: 2021-02-05	2.725000e+00	0.4053071677	5.0446928	0.0036869
##	C: 2021-03-30-C: 2021-02-05	4.770000e+00	2.4503071677	7.0896928	0.0000000
##	IA: 2021-03-30-C: 2021-02-05	5.590000e+00	3.2703071677	7.9096928	0.0000000
##	C: 2021-04-15-C: 2021-02-05	6.335000e+00	4.0153071677	8.6546928	0.0000000
##	IA: 2021-04-15-C: 2021-02-05	7.890000e+00	5.5703071677	10.2096928	0.0000000
##	C: 2021-04-30-C: 2021-02-05	6.415000e+00	4.5811217945	8.2488782	0.0000000
##	IA: 2021-04-30-C: 2021-02-05	7.842500e+00	6.0086217945	9.6763782	0.0000000
##	C: 2021-05-25-C: 2021-02-05	7.479750e+00	5.7989728616	9.1605271	0.0000000
##	IA: 2021-05-25-C: 2021-02-05	9.315500e+00	7.6347228616	10.9962771	0.0000000
##	C: 2021-02-12-IA: 2021-02-05	2.320000e+00	0.0003071677	4.6396928	0.0499138
##	IA: 2021-02-12-IA: 2021-02-05	1.625000e+00	-0.6946928323	3.9446928	0.7105982
##	C: 2021-02-26-IA: 2021-02-05	1.150000e+00	-1.1696928323	3.4696928	0.9951663
##	IA: 2021-02-26-IA: 2021-02-05	1.675000e+00	-0.6446928323	3.9946928	0.6447616
##	C: 2021-03-15-IA: 2021-02-05	3.145000e+00	0.8253071677	5.4646928	0.0001360
##	IA: 2021-03-15-IA: 2021-02-05	2.625000e+00	0.3053071677	4.9446928	0.0074298
##	C: 2021-03-30-IA: 2021-02-05	4.670000e+00	2.3503071677	6.9896928	0.0000000
##	IA: 2021-03-30-IA: 2021-02-05	5.490000e+00	3.1703071677	7.8096928	0.0000000
##	C: 2021-04-15-IA: 2021-02-05	6.235000e+00	3.9153071677	8.5546928	0.0000000
##	IA: 2021-04-15-IA: 2021-02-05	7.790000e+00	5.4703071677	10.1096928	0.0000000
##	C: 2021-04-30-IA: 2021-02-05	6.315000e+00	4.4811217945	8.1488782	0.0000000
##	IA: 2021-04-30-IA: 2021-02-05	7.742500e+00	5.9086217945	9.5763782	0.0000000
##	C: 2021-05-25-IA: 2021-02-05	7.379750e+00	5.6989728616	9.0605271	0.0000000
##	IA: 2021-05-25-IA: 2021-02-05	9.215500e+00	7.5347228616	10.8962771	0.0000000
##	IA: 2021-02-12-C: 2021-02-12	-6.950000e-01	-3.0146928323	1.6246928	0.9999999
##	C: 2021-02-26-C: 2021-02-12	-1.170000e+00	-3.4896928323	1.1496928	0.9936086
##	IA: 2021-02-26-C: 2021-02-12	-6.450000e-01	-2.9646928323	1.6746928	1.0000000
##	C: 2021-03-15-C: 2021-02-12	8.250000e-01	-1.4946928323	3.1446928	0.9999939
##	IA: 2021-03-15-C: 2021-02-12	3.050000e-01	-2.0146928323	2.6246928	1.0000000
##	C: 2021-03-30-C: 2021-02-12	2.350000e+00	0.0303071677	4.6696928	0.0420857
##	IA: 2021-03-30-C: 2021-02-12	3.170000e+00	0.8503071677	5.4896928	0.0001099
##	C: 2021-04-15-C: 2021-02-12	3.915000e+00	1.5953071677	6.2346928	0.0000001
##	IA: 2021-04-15-C: 2021-02-12	5.470000e+00	3.1503071677	7.7896928	0.0000000
##	C: 2021-04-30-C: 2021-02-12	3.995000e+00	2.1611217945	5.8288782	0.0000000
##	IA: 2021-04-30-C: 2021-02-12	5.422500e+00	3.5886217945	7.2563782	0.0000000
##	C: 2021-05-25-C: 2021-02-12	5.059750e+00	3.3789728616	6.7405271	0.0000000
##	IA: 2021-05-25-C: 2021-02-12	6.895500e+00	5.2147228616	8.5762771	0.0000000
##	C: 2021-02-26-IA: 2021-02-12	-4.750000e-01	-2.7946928323	1.8446928	1.0000000
##	IA: 2021-02-26-IA: 2021-02-12	5.000000e-02	-2.2696928323	2.3696928	1.0000000
##	C: 2021-03-15-IA: 2021-02-12	1.520000e+00	-0.7996928323	3.8396928	0.8309403
##	IA: 2021-03-15-IA: 2021-02-12	1.000000e+00	-1.3196928323	3.3196928	0.9996138
##	C: 2021-03-30-IA: 2021-02-12	3.045000e+00	0.7253071677	5.3646928	0.0003134

##	IA: 2021-03-30-IA: 2021-02-12	3.865000e+00	1.5453071677	6.1846928	0.0000001
##	C: 2021-04-15-IA: 2021-02-12	4.610000e+00	2.2903071677	6.9296928	0.0000000
##	IA: 2021-04-15-IA: 2021-02-12	6.165000e+00	3.8453071677	8.4846928	0.0000000
##	C: 2021-04-30-IA: 2021-02-12	4.690000e+00	2.8561217945	6.5238782	0.0000000
##	IA: 2021-04-30-IA: 2021-02-12	6.117500e+00	4.2836217945	7.9513782	0.0000000
##	C: 2021-05-25-IA: 2021-02-12	5.754750e+00	4.0739728616	7.4355271	0.0000000
##	IA: 2021-05-25-IA: 2021-02-12	7.590500e+00	5.9097228616	9.2712771	0.0000000
##	IA: 2021-02-26-C: 2021-02-26	5.250000e-01	-1.7946928323	2.8446928	1.0000000
##	C: 2021-03-15-C: 2021-02-26	1.995000e+00	-0.3246928323	4.3146928	0.2413313
##	IA: 2021-03-15-C: 2021-02-26	1.475000e+00	-0.8446928323	3.7946928	0.8723941
##	C: 2021-03-30-C: 2021-02-26	3.520000e+00	1.2003071677	5.8396928	0.0000046
##	IA: 2021-03-30-C: 2021-02-26	4.340000e+00	2.0203071677	6.6596928	0.0000000
##	C: 2021-04-15-C: 2021-02-26	5.085000e+00	2.7653071677	7.4046928	0.0000000
##	IA: 2021-04-15-C: 2021-02-26	6.640000e+00	4.3203071677	8.9596928	0.0000000
##	C: 2021-04-30-C: 2021-02-26	5.165000e+00	3.3311217945	6.9988782	0.0000000
##	IA: 2021-04-30-C: 2021-02-26	6.592500e+00	4.7586217945	8.4263782	0.0000000
##	C: 2021-05-25-C: 2021-02-26	6.229750e+00	4.5489728616	7.9105271	0.0000000
##	IA: 2021-05-25-C: 2021-02-26	8.065500e+00	6.3847228616	9.7462771	0.0000000
##	C: 2021-03-15-IA: 2021-02-26	1.470000e+00	-0.8496928323	3.7896928	0.8765786
##	IA: 2021-03-15-IA: 2021-02-26	9.500000e-01	-1.3696928323	3.2696928	0.9998631
##	C: 2021-03-30-IA: 2021-02-26	2.995000e+00	0.6753071677	5.3146928	0.0004706
##	IA: 2021-03-30-IA: 2021-02-26	3.815000e+00	1.4953071677	6.1346928	0.0000002
##	C: 2021-04-15-IA: 2021-02-26	4.560000e+00	2.2403071677	6.8796928	0.0000000
##	IA: 2021-04-15-IA: 2021-02-26	6.115000e+00	3.7953071677	8.4346928	0.0000000
##	C: 2021-04-30-IA: 2021-02-26	4.640000e+00	2.8061217945	6.4738782	0.0000000
##	IA: 2021-04-30-IA: 2021-02-26	6.067500e+00	4.2336217945	7.9013782	0.0000000
##	C: 2021-05-25-IA: 2021-02-26	5.704750e+00	4.0239728616	7.3855271	0.0000000
##	IA: 2021-05-25-IA: 2021-02-26	7.540500e+00	5.8597228616	9.2212771	0.0000000
##	IA: 2021-03-15-C: 2021-03-15	-5.200000e-01	-2.8396928323	1.7996928	1.0000000
##	C: 2021-03-30-C: 2021-03-15	1.525000e+00	-0.7946928323	3.8446928	0.8259233
##	IA: 2021-03-30-C: 2021-03-15	2.345000e+00	0.0253071677	4.6646928	0.0433111
##	C: 2021-04-15-C: 2021-03-15	3.090000e+00	0.7703071677	5.4096928	0.0002161
##	IA: 2021-04-15-C: 2021-03-15	4.645000e+00	2.3253071677	6.9646928	0.0000000
##	C: 2021-04-30-C: 2021-03-15	3.170000e+00	1.3361217945	5.0038782	0.0000000
##	IA: 2021-04-30-C: 2021-03-15	4.597500e+00	2.7636217945	6.4313782	0.0000000
##	C: 2021-05-25-C: 2021-03-15	4.234750e+00	2.5539728616	5.9155271	0.0000000
##	IA: 2021-05-25-C: 2021-03-15	6.070500e+00	4.3897228616	7.7512771	0.0000000
##	C: 2021-03-30-IA: 2021-03-15	2.045000e+00	-0.2746928323	4.3646928	0.1961127
##	IA: 2021-03-30-IA: 2021-03-15	2.865000e+00	0.5453071677	5.1846928	0.0013055
##	C: 2021-04-15-IA: 2021-03-15	3.610000e+00	1.2903071677	5.9296928	0.0000019
##	IA: 2021-04-15-IA: 2021-03-15	5.165000e+00	2.8453071677	7.4846928	0.0000000
##	C: 2021-04-30-IA: 2021-03-15	3.690000e+00	1.8561217945	5.5238782	0.0000000
##	IA: 2021-04-30-IA: 2021-03-15	5.117500e+00	3.2836217945	6.9513782	0.0000000
##	C: 2021-05-25-IA: 2021-03-15	4.754750e+00	3.0739728616	6.4355271	0.0000000
##	IA: 2021-05-25-IA: 2021-03-15	6.590500e+00	4.9097228616	8.2712771	0.0000000
##	IA: 2021-03-30-C: 2021-03-30	8.200000e-01	-1.4996928323	3.1396928	0.9999947
##	C: 2021-04-15-C: 2021-03-30	1.565000e+00	-0.7546928323	3.8846928	0.7830230
##	IA: 2021-04-15-C: 2021-03-30	3.120000e+00	0.8003071677	5.4396928	0.0001680
##	C: 2021-04-30-C: 2021-03-30	1.645000e+00	-0.1888782055	3.4788782	0.1676633
##	IA: 2021-04-30-C: 2021-03-30	3.072500e+00	1.2386217945	4.9063782	0.0000001
##	C: 2021-05-25-C: 2021-03-30	2.709750e+00	1.0289728616	4.3905271	0.0000005
##	IA: 2021-05-25-C: 2021-03-30	4.545500e+00	2.8647228616	6.2262771	0.0000000
##	C: 2021-04-15-IA: 2021-03-30	7.450000e-01	-1.5746928323	3.0646928	0.9999995
##	IA: 2021-04-15-IA: 2021-03-30	2.300000e+00	-0.0196928323	4.6196928	0.0558036


```
## C:2021-04-30-IA:2021-03-30 8.250000e-01 -1.0088782055 2.6588782 0.9991244
## IA:2021-04-30-IA:2021-03-30 2.252500e+00 0.4186217945 4.0863782 0.0014724
## C:2021-05-25-IA:2021-03-30 1.889750e+00 0.2089728616 3.5705271 0.0083344
## IA:2021-05-25-IA:2021-03-30 3.725500e+00 2.0447228616 5.4062771 0.0000000
## IA:2021-04-15-C:2021-04-15 1.555000e+00 -0.7646928323 3.8746928 0.7941927
## C:2021-04-30-C:2021-04-15 8.000000e-02 -1.7538782055 1.9138782 1.0000000
## IA:2021-04-30-C:2021-04-15 1.507500e+00 -0.3263782055 3.3413782 0.3362456
## C:2021-05-25-C:2021-04-15 1.144750e+00 -0.5360271384 2.8255271 0.7658606
## IA:2021-05-25-C:2021-04-15 2.980500e+00 1.2997228616 4.6612771 0.0000000
## C:2021-04-30-IA:2021-04-15 -1.475000e+00 -3.3088782055 0.3588782 0.3864839
## IA:2021-04-30-IA:2021-04-15 -4.750000e-02 -1.8813782055 1.7863782 1.0000000
## C:2021-05-25-IA:2021-04-15 -4.102500e-01 -2.0910271384 1.2705271 1.0000000
## IA:2021-05-25-IA:2021-04-15 1.425500e+00 -0.2552771384 3.1062771 0.2690426
## IA:2021-04-30-C:2021-04-30 1.427500e+00 0.2676535838 2.5873464 0.0014090
## C:2021-05-25-C:2021-04-30 1.064750e+00 0.1663368292 1.9631632 0.0030962
## IA:2021-05-25-C:2021-04-30 2.900500e+00 2.0020868292 3.7989132 0.0000000
## C:2021-05-25-IA:2021-04-30 -3.627500e-01 -1.2611631708 0.5356632 0.9998982
## IA:2021-05-25-IA:2021-04-30 1.473000e+00 0.5745868292 2.3714132 0.0000003
## IA:2021-05-25-C:2021-05-25 1.835750e+00 1.3170509140 2.3544491 0.0000000
```

Efecto de la IA sobre el factor de condición

```
t2way(K ~ Condición + Fechas + Condición:Fechas, data = a,)
```

```
## Call:
## t2way(formula = K ~ Condición + Fechas + Condición:Fechas,
##       data = a)
##
##               value p.value
## Condición      15.4532  0.001
## Fechas         954.4315  0.001
## Condición:Fechas 242.1393  0.001
```

```
anovak <- aov(K ~ Condición + Fechas + Condición:Fechas, data = a)
anova(anovak)
```

```
## Analysis of Variance Table
##
## Response: K
##           Df Sum Sq Mean Sq F value    Pr(>F)
## Condición    1  3.0086  3.00856  266.582 < 2.2e-16 ***
## Fechas       16  7.4582  0.46614   41.303 < 2.2e-16 ***
## Condición:Fechas 16  1.9569  0.12230   10.837 < 2.2e-16 ***
## Residuals   1526 17.2220  0.01129
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
TukeyHSD(anovak)
```

```
## Tukey multiple comparisons of means
## 95% family-wise confidence level
##
## Fit: aov(formula = K ~ Condición + Fechas + Condición:Fechas, data = a)
##
## $Condición
##           diff          lwr          upr p adj
## IA-C 0.08783091 0.07727916 0.09838266      0
```

```

##
## $Fechas
##               diff               lwr               upr               p adj
## 2020-10-14-2020-10-05 0.040223385 -0.042071352 0.122518121 0.9593812
## 2020-10-26-2020-10-05 0.138250543 0.055955806 0.220545279 0.0000010
## 2020-11-05-2020-10-05 0.149346753 0.067052016 0.231641489 0.0000001
## 2020-11-14-2020-10-05 0.211813898 0.129519161 0.294108634 0.0000000
## 2020-11-25-2020-10-05 0.226358654 0.144063917 0.308653390 0.0000000
## 2020-12-05-2020-10-05 0.187194934 0.104900197 0.269489670 0.0000000
## 2021-01-22-2020-10-05 0.086059892 0.003765155 0.168354628 0.0296365
## 2021-01-28-2020-10-05 0.241009367 0.158714631 0.323304104 0.0000000
## 2021-02-05-2020-10-05 0.252935486 0.170640750 0.335230223 0.0000000
## 2021-02-12-2020-10-05 0.062572992 -0.019721745 0.144867728 0.4023876
## 2021-02-26-2020-10-05 0.038142328 -0.044152408 0.120437065 0.9750730
## 2021-03-15-2020-10-05 -0.033227227 -0.115521964 0.049067509 0.9938796
## 2021-03-30-2020-10-05 -0.073080705 -0.155375441 0.009214032 0.1531680
## 2021-04-15-2020-10-05 0.065317558 -0.016977179 0.147612294 0.3235977
## 2021-04-30-2020-10-05 0.133669192 0.068609491 0.198728894 0.0000000
## 2021-05-25-2020-10-05 0.170614541 0.110986339 0.230242742 0.0000000
## 2020-10-26-2020-10-14 0.098027158 0.015732421 0.180321894 0.0044868
## 2020-11-05-2020-10-14 0.109123368 0.026828632 0.191418105 0.0005910
## 2020-11-14-2020-10-14 0.171590513 0.089295777 0.253885250 0.0000000
## 2020-11-25-2020-10-14 0.186135269 0.103840533 0.268430006 0.0000000
## 2020-12-05-2020-10-14 0.146971549 0.064676813 0.229266286 0.0000001
## 2021-01-22-2020-10-14 0.045836507 -0.036458229 0.128131244 0.8826931
## 2021-01-28-2020-10-14 0.200785983 0.118491246 0.283080719 0.0000000
## 2021-02-05-2020-10-14 0.212712102 0.130417365 0.295006838 0.0000000
## 2021-02-12-2020-10-14 0.022349607 -0.059945129 0.104644344 0.9999534
## 2021-02-26-2020-10-14 -0.002081056 -0.084375793 0.080213680 1.0000000
## 2021-03-15-2020-10-14 -0.073450612 -0.155745349 0.008844124 0.1471207
## 2021-03-30-2020-10-14 -0.113304089 -0.195598826 -0.031009353 0.0002585
## 2021-04-15-2020-10-14 0.025094173 -0.057200563 0.107388910 0.9997853
## 2021-04-30-2020-10-14 0.093445808 0.028386106 0.158505509 0.0000941
## 2021-05-25-2020-10-14 0.130391156 0.070762955 0.190019358 0.0000000
## 2020-11-05-2020-10-26 0.011096210 -0.071198526 0.093390947 1.0000000
## 2020-11-14-2020-10-26 0.073563355 -0.008731381 0.155858092 0.1453138
## 2020-11-25-2020-10-26 0.088108111 0.005813375 0.170402848 0.0219687
## 2020-12-05-2020-10-26 0.048944391 -0.033350345 0.131239128 0.8157266
## 2021-01-22-2020-10-26 -0.052190651 -0.134485387 0.030104086 0.7287609
## 2021-01-28-2020-10-26 0.102758825 0.020464088 0.185053561 0.0019493
## 2021-02-05-2020-10-26 0.114684944 0.032390207 0.196979680 0.0001953
## 2021-02-12-2020-10-26 -0.075677551 -0.157972287 0.006617186 0.1144616
## 2021-02-26-2020-10-26 -0.100108214 -0.182402951 -0.017813478 0.0031276
## 2021-03-15-2020-10-26 -0.171477770 -0.253772507 -0.089183034 0.0000000
## 2021-03-30-2020-10-26 -0.211331247 -0.293625984 -0.129036511 0.0000000
## 2021-04-15-2020-10-26 -0.072932985 -0.155227721 0.009361752 0.1556341
## 2021-04-30-2020-10-26 -0.004581350 -0.069641052 0.060478351 1.0000000
## 2021-05-25-2020-10-26 0.032363998 -0.027264203 0.091992200 0.9033099
## 2020-11-14-2020-11-05 0.062467145 -0.019827591 0.144761882 0.4055789
## 2020-11-25-2020-11-05 0.077011901 -0.005282836 0.159306638 0.0978051
## 2020-12-05-2020-11-05 0.037848181 -0.044446555 0.120142918 0.9768446
## 2021-01-22-2020-11-05 -0.063286861 -0.145581597 0.019007876 0.3811352
## 2021-01-28-2020-11-05 0.091662615 0.009367878 0.173957351 0.0127585
## 2021-02-05-2020-11-05 0.103588734 0.021293997 0.185883470 0.0016761

```

```

## 2021-02-12-2020-11-05 -0.086773761 -0.169068498 -0.004479025 0.0267311
## 2021-02-26-2020-11-05 -0.111204424 -0.193499161 -0.028909688 0.0003933
## 2021-03-15-2020-11-05 -0.182573980 -0.264868717 -0.100279244 0.0000000
## 2021-03-30-2020-11-05 -0.222427457 -0.304722194 -0.140132721 0.0000000
## 2021-04-15-2020-11-05 -0.084029195 -0.166323932 -0.001734458 0.0394712
## 2021-04-30-2020-11-05 -0.015677560 -0.080737262 0.049382141 0.9999910
## 2021-05-25-2020-11-05 0.021267788 -0.038360413 0.080895990 0.9985035
## 2020-11-25-2020-11-14 0.014544756 -0.067749981 0.096839492 0.9999999
## 2020-12-05-2020-11-14 -0.024618964 -0.106913701 0.057675772 0.9998323
## 2021-01-22-2020-11-14 -0.125754006 -0.208048742 -0.043459269 0.0000182
## 2021-01-28-2020-11-14 0.029195469 -0.053099267 0.111490206 0.9985957
## 2021-02-05-2020-11-14 0.041121589 -0.041173148 0.123416325 0.9507022
## 2021-02-12-2020-11-14 -0.149240906 -0.231535643 -0.066946170 0.0000001
## 2021-02-26-2020-11-14 -0.173671570 -0.255966306 -0.091376833 0.0000000
## 2021-03-15-2020-11-14 -0.245041125 -0.327335862 -0.162746389 0.0000000
## 2021-03-30-2020-11-14 -0.284894603 -0.367189339 -0.202599866 0.0000000
## 2021-04-15-2020-11-14 -0.146496340 -0.228791077 -0.064201604 0.0000001
## 2021-04-30-2020-11-14 -0.078144706 -0.143204407 -0.013085004 0.0038970
## 2021-05-25-2020-11-14 -0.041199357 -0.100827559 0.018428844 0.5836909
## 2020-12-05-2020-11-25 -0.039163720 -0.121458456 0.043131017 0.9680958
## 2021-01-22-2020-11-25 -0.140298762 -0.222593498 -0.058004025 0.0000006
## 2021-01-28-2020-11-25 0.014650714 -0.067644023 0.096945450 0.9999999
## 2021-02-05-2020-11-25 0.026576833 -0.055717904 0.108871569 0.9995546
## 2021-02-12-2020-11-25 -0.163785662 -0.246080399 -0.081490926 0.0000000
## 2021-02-26-2020-11-25 -0.188216325 -0.270511062 -0.105921589 0.0000000
## 2021-03-15-2020-11-25 -0.259585881 -0.341880618 -0.177291145 0.0000000
## 2021-03-30-2020-11-25 -0.299439358 -0.381734095 -0.217144622 0.0000000
## 2021-04-15-2020-11-25 -0.161041096 -0.243335833 -0.078746359 0.0000000
## 2021-04-30-2020-11-25 -0.092689461 -0.157749163 -0.027629760 0.0001151
## 2021-05-25-2020-11-25 -0.055744113 -0.115372314 0.003884089 0.0987187
## 2021-01-22-2020-12-05 -0.101135042 -0.183429778 -0.018840305 0.0026087
## 2021-01-28-2020-12-05 0.053814433 -0.028480303 0.136109170 0.6802006
## 2021-02-05-2020-12-05 0.065740553 -0.016554184 0.148035289 0.3122164
## 2021-02-12-2020-12-05 -0.124621942 -0.206916679 -0.042327206 0.0000234
## 2021-02-26-2020-12-05 -0.149052606 -0.231347342 -0.066757869 0.0000001
## 2021-03-15-2020-12-05 -0.220422161 -0.302716898 -0.138127425 0.0000000
## 2021-03-30-2020-12-05 -0.260275639 -0.342570375 -0.177980902 0.0000000
## 2021-04-15-2020-12-05 -0.121877376 -0.204172113 -0.039582640 0.0000428
## 2021-04-30-2020-12-05 -0.053525742 -0.118585443 0.011533960 0.2623683
## 2021-05-25-2020-12-05 -0.016580393 -0.076208595 0.043047808 0.9999361
## 2021-01-28-2021-01-22 0.154949475 0.072654739 0.237244212 0.0000000
## 2021-02-05-2021-01-22 0.166875594 0.084580858 0.249170331 0.0000000
## 2021-02-12-2021-01-22 -0.023486900 -0.105781637 0.058807836 0.9999096
## 2021-02-26-2021-01-22 -0.047917564 -0.130212300 0.034377173 0.8397657
## 2021-03-15-2021-01-22 -0.119287119 -0.201581856 -0.036992383 0.0000748
## 2021-03-30-2021-01-22 -0.159140597 -0.241435333 -0.076845860 0.0000000
## 2021-04-15-2021-01-22 -0.020742334 -0.103037071 0.061552402 0.9999832
## 2021-04-30-2021-01-22 0.047609300 -0.017450401 0.112669002 0.4753163
## 2021-05-25-2021-01-22 0.084554649 0.024926447 0.144182850 0.0001290
## 2021-02-05-2021-01-28 0.011926119 -0.070368617 0.094220856 1.0000000
## 2021-02-12-2021-01-28 -0.178436376 -0.260731112 -0.096141639 0.0000000
## 2021-02-26-2021-01-28 -0.202867039 -0.285161775 -0.120572302 0.0000000
## 2021-03-15-2021-01-28 -0.274236595 -0.356531331 -0.191941858 0.0000000
## 2021-03-30-2021-01-28 -0.314090072 -0.396384809 -0.231795336 0.0000000

```

```

## 2021-04-15-2021-01-28 -0.175691810 -0.257986546 -0.093397073 0.0000000
## 2021-04-30-2021-01-28 -0.107340175 -0.172399877 -0.042280473 0.0000018
## 2021-05-25-2021-01-28 -0.070394826 -0.130023028 -0.010766625 0.0052058
## 2021-02-12-2021-02-05 -0.190362495 -0.272657231 -0.108067758 0.0000000
## 2021-02-26-2021-02-05 -0.214793158 -0.297087895 -0.132498422 0.0000000
## 2021-03-15-2021-02-05 -0.286162714 -0.368457450 -0.203867977 0.0000000
## 2021-03-30-2021-02-05 -0.326016191 -0.408310928 -0.243721455 0.0000000
## 2021-04-15-2021-02-05 -0.187617929 -0.269912665 -0.105323192 0.0000000
## 2021-04-30-2021-02-05 -0.119266294 -0.184325996 -0.054206593 0.0000000
## 2021-05-25-2021-02-05 -0.082320946 -0.141949147 -0.022692744 0.0002428
## 2021-02-26-2021-02-12 -0.024430663 -0.106725400 0.057864073 0.9998483
## 2021-03-15-2021-02-12 -0.095800219 -0.178094956 -0.013505483 0.0065339
## 2021-03-30-2021-02-12 -0.135653696 -0.217948433 -0.053358960 0.0000018
## 2021-04-15-2021-02-12 0.002744566 -0.079550170 0.085039303 1.0000000
## 2021-04-30-2021-02-12 0.071096201 0.006036499 0.136155902 0.0166890
## 2021-05-25-2021-02-12 0.108041549 0.048413348 0.167669751 0.0000001
## 2021-03-15-2021-02-26 -0.071369556 -0.153664292 0.010925181 0.1835578
## 2021-03-30-2021-02-26 -0.111223033 -0.193517770 -0.028928297 0.0003918
## 2021-04-15-2021-02-26 0.027175229 -0.055119507 0.109469966 0.9994122
## 2021-04-30-2021-02-26 0.095526864 0.030467162 0.160586566 0.0000537
## 2021-05-25-2021-02-26 0.132472213 0.072844011 0.192100414 0.0000000
## 2021-03-30-2021-03-15 -0.039853477 -0.122148214 0.042441259 0.9626039
## 2021-04-15-2021-03-15 0.098544785 0.016250049 0.180839522 0.0041051
## 2021-04-30-2021-03-15 0.166896420 0.101836718 0.231956121 0.0000000
## 2021-05-25-2021-03-15 0.203841768 0.144213567 0.263469970 0.0000000
## 2021-04-15-2021-03-30 0.138398262 0.056103526 0.220692999 0.0000009
## 2021-04-30-2021-03-30 0.206749897 0.141690195 0.271809599 0.0000000
## 2021-05-25-2021-03-30 0.243695246 0.184067044 0.303323447 0.0000000
## 2021-04-30-2021-04-15 0.068351635 0.003291933 0.133411336 0.0279807
## 2021-05-25-2021-04-15 0.105296983 0.045668782 0.164925185 0.0000002
## 2021-05-25-2021-04-30 0.036945349 0.005072734 0.068817963 0.0069911
##
## $`Condición:Fechas`
##
## diff lwr upr p adj
## IA:2020-10-05-C:2020-10-05 0.0021717214 -0.126068595 0.1304120380 1.0000000
## C:2020-10-14-C:2020-10-05 0.0377489271 -0.090491390 0.1659892437 0.9999999
## IA:2020-10-14-C:2020-10-05 0.0448695634 -0.083370753 0.1731098800 0.9999959
## C:2020-10-26-C:2020-10-05 0.1389649966 0.010724680 0.2672053132 0.0155328
## IA:2020-10-26-C:2020-10-05 0.1397078099 0.011467493 0.2679481265 0.0142450
## C:2020-11-05-C:2020-10-05 0.1594965773 0.031256261 0.2877368940 0.0011191
## IA:2020-11-05-C:2020-10-05 0.1413686493 0.013128333 0.2696089659 0.0117096
## C:2020-11-14-C:2020-10-05 0.2033891106 0.075148794 0.3316294273 0.0000010
## IA:2020-11-14-C:2020-10-05 0.2224104067 0.094170090 0.3506507233 0.0000000
## C:2020-11-25-C:2020-10-05 0.2310183689 0.102778052 0.3592586855 0.0000000
## IA:2020-11-25-C:2020-10-05 0.2238706597 0.095630343 0.3521109764 0.0000000
## C:2020-12-05-C:2020-10-05 0.1983240977 0.070083781 0.3265644143 0.0000024
## IA:2020-12-05-C:2020-10-05 0.1782374916 0.049997175 0.3064778082 0.0000689
## C:2021-01-22-C:2020-10-05 0.0790573913 -0.049182925 0.2072977079 0.9069395
## IA:2021-01-22-C:2020-10-05 0.0952341141 -0.033006203 0.2234744307 0.5794011
## C:2021-01-28-C:2020-10-05 0.2482395132 0.119999197 0.3764798298 0.0000000
## IA:2021-01-28-C:2020-10-05 0.2359509426 0.107710626 0.3641912592 0.0000000
## C:2021-02-05-C:2020-10-05 0.2455911384 0.117350822 0.3738314550 0.0000000
## IA:2021-02-05-C:2020-10-05 0.2624515559 0.134211239 0.3906918726 0.0000000
## C:2021-02-12-C:2020-10-05 0.1077942461 -0.020446071 0.2360345628 0.2876088

```

##	IA: 2021-02-12-C: 2020-10-05	0.0195234584	-0.108716858	0.1477637751	1.0000000
##	C: 2021-02-26-C: 2020-10-05	0.0524657441	-0.075774573	0.1807060608	0.9998659
##	IA: 2021-02-26-C: 2020-10-05	0.0259906337	-0.102249683	0.1542309503	1.0000000
##	C: 2021-03-15-C: 2020-10-05	-0.0851415580	-0.213381875	0.0430987586	0.8103002
##	IA: 2021-03-15-C: 2020-10-05	0.0208588244	-0.107381492	0.1490991411	1.0000000
##	C: 2021-03-30-C: 2020-10-05	-0.0989486567	-0.227188973	0.0292916599	0.4866217
##	IA: 2021-03-30-C: 2020-10-05	-0.0450410316	-0.173281348	0.0831992851	0.9999955
##	C: 2021-04-15-C: 2020-10-05	0.0401306455	-0.088109671	0.1683709621	0.9999997
##	IA: 2021-04-15-C: 2020-10-05	0.0926761911	-0.035564126	0.2209165078	0.6428868
##	C: 2021-04-30-C: 2020-10-05	0.0872694433	-0.014113429	0.1886523154	0.2396212
##	IA: 2021-04-30-C: 2020-10-05	0.1822406625	0.080857790	0.2836235346	0.0000000
##	C: 2021-05-25-C: 2020-10-05	0.0981161473	0.005197210	0.1910350844	0.0232684
##	IA: 2021-05-25-C: 2020-10-05	0.2452846557	0.152365719	0.3382035928	0.0000000
##	C: 2020-10-14-IA: 2020-10-05	0.0355772057	-0.092663111	0.1638175223	1.0000000
##	IA: 2020-10-14-IA: 2020-10-05	0.0426978420	-0.085542475	0.1709381587	0.9999987
##	C: 2020-10-26-IA: 2020-10-05	0.1367932752	0.008552959	0.2650335918	0.0199253
##	IA: 2020-10-26-IA: 2020-10-05	0.1375360885	0.009295772	0.2657764052	0.0183107
##	C: 2020-11-05-IA: 2020-10-05	0.1573248560	0.029084539	0.2855651726	0.0015111
##	IA: 2020-11-05-IA: 2020-10-05	0.1391969279	0.010956611	0.2674372445	0.0151198
##	C: 2020-11-14-IA: 2020-10-05	0.2012173892	0.072977073	0.3294577059	0.0000014
##	IA: 2020-11-14-IA: 2020-10-05	0.2202386853	0.091998369	0.3484790019	0.0000000
##	C: 2020-11-25-IA: 2020-10-05	0.2288466475	0.100606331	0.3570869642	0.0000000
##	IA: 2020-11-25-IA: 2020-10-05	0.2216989383	0.093458622	0.3499392550	0.0000000
##	C: 2020-12-05-IA: 2020-10-05	0.1961523763	0.067912060	0.3243926929	0.0000035
##	IA: 2020-12-05-IA: 2020-10-05	0.1760657702	0.047825454	0.3043060868	0.0000968
##	C: 2021-01-22-IA: 2020-10-05	0.0768856699	-0.051354647	0.2051259865	0.9315146
##	IA: 2021-01-22-IA: 2020-10-05	0.0930623927	-0.035177924	0.2213027093	0.6334077
##	C: 2021-01-28-IA: 2020-10-05	0.2460677918	0.117827475	0.3743081084	0.0000000
##	IA: 2021-01-28-IA: 2020-10-05	0.2337792212	0.105538905	0.3620195378	0.0000000
##	C: 2021-02-05-IA: 2020-10-05	0.2434194170	0.115179100	0.3716597337	0.0000000
##	IA: 2021-02-05-IA: 2020-10-05	0.2602798345	0.132039518	0.3885201512	0.0000000
##	C: 2021-02-12-IA: 2020-10-05	0.1056225247	-0.022617792	0.2338628414	0.3318786
##	IA: 2021-02-12-IA: 2020-10-05	0.0173517370	-0.110888580	0.1455920537	1.0000000
##	C: 2021-02-26-IA: 2020-10-05	0.0502940228	-0.077946294	0.1785343394	0.9999453
##	IA: 2021-02-26-IA: 2020-10-05	0.0238189123	-0.104421404	0.1520592289	1.0000000
##	C: 2021-03-15-IA: 2020-10-05	-0.0873132794	-0.215553596	0.0409270372	0.7664772
##	IA: 2021-03-15-IA: 2020-10-05	0.0186871030	-0.109553214	0.1469274197	1.0000000
##	C: 2021-03-30-IA: 2020-10-05	-0.1011203781	-0.229360695	0.0271199386	0.4338087
##	IA: 2021-03-30-IA: 2020-10-05	-0.0472127530	-0.175453070	0.0810275637	0.9999865
##	C: 2021-04-15-IA: 2020-10-05	0.0379589241	-0.090281393	0.1661992407	0.9999999
##	IA: 2021-04-15-IA: 2020-10-05	0.0905044698	-0.037735847	0.2187447864	0.6950324
##	C: 2021-04-30-IA: 2020-10-05	0.0850977219	-0.016285150	0.1864805941	0.2906130
##	IA: 2021-04-30-IA: 2020-10-05	0.1800689411	0.078686069	0.2814518133	0.0000000
##	C: 2021-05-25-IA: 2020-10-05	0.0959444259	0.003025489	0.1888633630	0.0323070
##	IA: 2021-05-25-IA: 2020-10-05	0.2431129343	0.150193997	0.3360318714	0.0000000
##	IA: 2020-10-14-C: 2020-10-14	0.0071206363	-0.121119680	0.1353609530	1.0000000
##	C: 2020-10-26-C: 2020-10-14	0.1012160695	-0.027024247	0.2294563861	0.4315248
##	IA: 2020-10-26-C: 2020-10-14	0.1019588828	-0.026281434	0.2301991995	0.4139449
##	C: 2020-11-05-C: 2020-10-14	0.1217476503	-0.006492666	0.2499879669	0.0937777
##	IA: 2020-11-05-C: 2020-10-14	0.1036197222	-0.024620594	0.2318600388	0.3757046
##	C: 2020-11-14-C: 2020-10-14	0.1656401835	0.037399867	0.2938805002	0.0004660
##	IA: 2020-11-14-C: 2020-10-14	0.1846614796	0.056421163	0.3129017962	0.0000245
##	C: 2020-11-25-C: 2020-10-14	0.1932694418	0.065029125	0.3215097585	0.0000058
##	IA: 2020-11-25-C: 2020-10-14	0.1861217326	0.057881416	0.3143620493	0.0000193

## C:2020-12-05-C:2020-10-14	0.1605751706	0.032334854	0.2888154872	0.0009622
## IA:2020-12-05-C:2020-10-14	0.1404885645	0.012248248	0.2687288811	0.0129967
## C:2021-01-22-C:2020-10-14	0.0413084642	-0.086931852	0.1695487808	0.9999994
## IA:2021-01-22-C:2020-10-14	0.0574851870	-0.070755130	0.1857255036	0.9991812
## C:2021-01-28-C:2020-10-14	0.2104905861	0.082250269	0.3387309027	0.0000003
## IA:2021-01-28-C:2020-10-14	0.1982020155	0.069961699	0.3264423321	0.0000025
## C:2021-02-05-C:2020-10-14	0.2078422113	0.079601895	0.3360825280	0.0000004
## IA:2021-02-05-C:2020-10-14	0.2247026288	0.096462312	0.3529429455	0.0000000
## C:2021-02-12-C:2020-10-14	0.0700453190	-0.058194998	0.1982856357	0.9789515
## IA:2021-02-12-C:2020-10-14	-0.0182254687	-0.146465785	0.1100148480	1.0000000
## C:2021-02-26-C:2020-10-14	0.0147168171	-0.113523500	0.1429571337	1.0000000
## IA:2021-02-26-C:2020-10-14	-0.0117582934	-0.139998610	0.1164820232	1.0000000
## C:2021-03-15-C:2020-10-14	-0.1228904851	-0.251130802	0.0053498315	0.0843391
## IA:2021-03-15-C:2020-10-14	-0.0168901027	-0.145130419	0.1113502140	1.0000000
## C:2021-03-30-C:2020-10-14	-0.1366975838	-0.264937900	-0.0084572671	0.0201423
## IA:2021-03-30-C:2020-10-14	-0.0827899587	-0.211030275	0.0454503580	0.8524585
## C:2021-04-15-C:2020-10-14	0.0023817184	-0.125858598	0.1306220350	1.0000000
## IA:2021-04-15-C:2020-10-14	0.0549272641	-0.073313053	0.1831675807	0.9996601
## C:2021-04-30-C:2020-10-14	0.0495205162	-0.051862356	0.1509033884	0.9962220
## IA:2021-04-30-C:2020-10-14	0.1444917354	0.043108863	0.2458746076	0.0000334
## C:2021-05-25-C:2020-10-14	0.0603672202	-0.032551717	0.1532861573	0.8435597
## IA:2021-05-25-C:2020-10-14	0.2075357286	0.114616791	0.3004546657	0.0000000
## C:2020-10-26-IA:2020-10-14	0.0940954332	-0.034144883	0.2223357498	0.6078376
## IA:2020-10-26-IA:2020-10-14	0.0948382465	-0.033402070	0.2230785631	0.5893080
## C:2020-11-05-IA:2020-10-14	0.1146270140	-0.013613303	0.2428673306	0.1732312
## IA:2020-11-05-IA:2020-10-14	0.0964990859	-0.031741231	0.2247394025	0.5476829
## C:2020-11-14-IA:2020-10-14	0.1585195472	0.030279231	0.2867598639	0.0012818
## IA:2020-11-14-IA:2020-10-14	0.1775408433	0.049300527	0.3057811599	0.0000768
## C:2020-11-25-IA:2020-10-14	0.1861488055	0.057908489	0.3143891221	0.0000192
## IA:2020-11-25-IA:2020-10-14	0.1790010963	0.050760780	0.3072414130	0.0000610
## C:2020-12-05-IA:2020-10-14	0.1534545343	0.025214218	0.2816948509	0.0025490
## IA:2020-12-05-IA:2020-10-14	0.1333679282	0.005127612	0.2616082448	0.0291467
## C:2021-01-22-IA:2020-10-14	0.0341878279	-0.094052489	0.1624281445	1.0000000
## IA:2021-01-22-IA:2020-10-14	0.0503645507	-0.077875766	0.1786048673	0.9999436
## C:2021-01-28-IA:2020-10-14	0.2033699498	0.075129633	0.3316102664	0.0000010
## IA:2021-01-28-IA:2020-10-14	0.1910813792	0.062841063	0.3193216958	0.0000084
## C:2021-02-05-IA:2020-10-14	0.2007215750	0.072481258	0.3289618916	0.0000016
## IA:2021-02-05-IA:2020-10-14	0.2175819925	0.089341676	0.3458223092	0.0000001
## C:2021-02-12-IA:2020-10-14	0.0629246827	-0.065315634	0.1911649994	0.9959232
## IA:2021-02-12-IA:2020-10-14	-0.0253461050	-0.153586422	0.1028942117	1.0000000
## C:2021-02-26-IA:2020-10-14	0.0075961808	-0.120644136	0.1358364974	1.0000000
## IA:2021-02-26-IA:2020-10-14	-0.0188789297	-0.147119246	0.1093613869	1.0000000
## C:2021-03-15-IA:2020-10-14	-0.1300111214	-0.258251438	-0.0017708048	0.0416701
## IA:2021-03-15-IA:2020-10-14	-0.0240107390	-0.152251056	0.1042295777	1.0000000
## C:2021-03-30-IA:2020-10-14	-0.1438182201	-0.272058537	-0.0155779035	0.0087161
## IA:2021-03-30-IA:2020-10-14	-0.0899105950	-0.218150912	0.0383297217	0.7088624
## C:2021-04-15-IA:2020-10-14	-0.0047389179	-0.132979235	0.1235013987	1.0000000
## IA:2021-04-15-IA:2020-10-14	0.0478066278	-0.080433689	0.1760469444	0.9999821
## C:2021-04-30-IA:2020-10-14	0.0423998799	-0.058982992	0.1437827521	0.9997894
## IA:2021-04-30-IA:2020-10-14	0.1373710991	0.035988227	0.2387539713	0.0001382
## C:2021-05-25-IA:2020-10-14	0.0532465839	-0.039672353	0.1461655210	0.9602088
## IA:2021-05-25-IA:2020-10-14	0.2004150923	0.107496155	0.2933340294	0.0000000
## IA:2020-10-26-C:2020-10-26	0.0007428133	-0.127497503	0.1289831300	1.0000000
## C:2020-11-05-C:2020-10-26	0.0205315808	-0.107708736	0.1487718974	1.0000000

##	IA:2020-11-05-C:2020-10-26	0.0024036527	-0.125836664	0.1306439693	1.0000000
##	C:2020-11-14-C:2020-10-26	0.0644241140	-0.063816203	0.1926644307	0.9940044
##	IA:2020-11-14-C:2020-10-26	0.0834454101	-0.044794907	0.2116857267	0.8412963
##	C:2020-11-25-C:2020-10-26	0.0920533723	-0.036186944	0.2202936890	0.6580592
##	IA:2020-11-25-C:2020-10-26	0.0849056632	-0.043334653	0.2131459798	0.8147882
##	C:2020-12-05-C:2020-10-26	0.0593591011	-0.068881216	0.1875994177	0.9985206
##	IA:2020-12-05-C:2020-10-26	0.0392724950	-0.088967822	0.1675128116	0.9999998
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##	IA:2021-01-22-C:2020-10-26	-0.0437308825	-0.171971199	0.0845094341	0.9999978
##	C:2021-01-28-C:2020-10-26	0.1092745166	-0.018965800	0.2375148333	0.2595491
##	IA:2021-01-28-C:2020-10-26	0.0969859460	-0.031254371	0.2252262626	0.5354814
##	C:2021-02-05-C:2020-10-26	0.1066261418	-0.021614175	0.2348664585	0.3109765
##	IA:2021-02-05-C:2020-10-26	0.1234865593	-0.004753757	0.2517268760	0.0797357
##	C:2021-02-12-C:2020-10-26	-0.0311707505	-0.159411067	0.0970695662	1.0000000
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##	C:2021-02-26-C:2020-10-26	-0.0864992524	-0.214739569	0.0417410642	0.7834145
##	IA:2021-02-26-C:2020-10-26	-0.1129743629	-0.241214680	0.0152659537	0.1973319
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##	IA:2021-03-15-C:2020-10-26	-0.1181061721	-0.246346489	0.0101341445	0.1296928
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##	IA:2021-03-30-C:2020-10-26	-0.1840060282	-0.312246345	-0.0557657115	0.0000273
##	C:2021-04-15-C:2020-10-26	-0.0988343511	-0.227074668	0.0294059655	0.4894450
##	IA:2021-04-15-C:2020-10-26	-0.0462888054	-0.174529122	0.0819515112	0.9999914
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##	IA:2021-04-30-C:2020-10-26	0.0432756660	-0.058107206	0.1446585381	0.9996824
##	C:2021-05-25-C:2020-10-26	-0.0408488493	-0.133767786	0.0520700878	0.9994347
##	IA:2021-05-25-C:2020-10-26	0.1063196591	0.013400722	0.1992385962	0.0060755
##	C:2020-11-05-IA:2020-10-26	0.0197887675	-0.108451549	0.1480290841	1.0000000
##	IA:2020-11-05-IA:2020-10-26	0.0016608394	-0.126579477	0.1299011560	1.0000000
##	C:2020-11-14-IA:2020-10-26	0.0636813007	-0.064559016	0.1919216174	0.9950331
##	IA:2020-11-14-IA:2020-10-26	0.0827025968	-0.045537720	0.2109429134	0.8539110
##	C:2020-11-25-IA:2020-10-26	0.0913105590	-0.036929758	0.2195508756	0.6759396
##	IA:2020-11-25-IA:2020-10-26	0.0841628498	-0.044077467	0.2124031665	0.8285507
##	C:2020-12-05-IA:2020-10-26	0.0586162878	-0.069624029	0.1868566044	0.9988239
##	IA:2020-12-05-IA:2020-10-26	0.0385296817	-0.089710635	0.1667699983	0.9999999
##	C:2021-01-22-IA:2020-10-26	-0.0606504186	-0.188890735	0.0675898980	0.9978292
##	IA:2021-01-22-IA:2020-10-26	-0.0444736958	-0.172714012	0.0837666208	0.9999967
##	C:2021-01-28-IA:2020-10-26	0.1085317033	-0.019708613	0.2367720199	0.2734087
##	IA:2021-01-28-IA:2020-10-26	0.0962431327	-0.031997184	0.2244834493	0.5541021
##	C:2021-02-05-IA:2020-10-26	0.1058833285	-0.022356988	0.2341236451	0.3263757
##	IA:2021-02-05-IA:2020-10-26	0.1227437460	-0.005496571	0.2509840627	0.0855054
##	C:2021-02-12-IA:2020-10-26	-0.0319135638	-0.160153880	0.0963267529	1.0000000
##	IA:2021-02-12-IA:2020-10-26	-0.1201843515	-0.248424668	0.0080559652	0.1080641
##	C:2021-02-26-IA:2020-10-26	-0.0872420657	-0.215482382	0.0409982509	0.7679821
##	IA:2021-02-26-IA:2020-10-26	-0.1137171762	-0.241957493	0.0145231404	0.1862197
##	C:2021-03-15-IA:2020-10-26	-0.2248493679	-0.353089685	-0.0966090513	0.0000000
##	IA:2021-03-15-IA:2020-10-26	-0.1188489855	-0.247089302	0.0093913312	0.1216029
##	C:2021-03-30-IA:2020-10-26	-0.2386564666	-0.366896783	-0.1104161500	0.0000000
##	IA:2021-03-30-IA:2020-10-26	-0.1847488415	-0.312989158	-0.0565085248	0.0000242
##	C:2021-04-15-IA:2020-10-26	-0.0995771644	-0.227817481	0.0286631522	0.4711655
##	IA:2021-04-15-IA:2020-10-26	-0.0470316187	-0.175271935	0.0812086979	0.9999877
##	C:2021-04-30-IA:2020-10-26	-0.0524383666	-0.153821239	0.0489445056	0.9905200
##	IA:2021-04-30-IA:2020-10-26	0.0425328526	-0.058850019	0.1439157248	0.9997756
##	C:2021-05-25-IA:2020-10-26	-0.0415916626	-0.134510600	0.0513272745	0.9992033

##	IA: 2021-05-25-IA: 2020-10-26	0.1055768458	0.012657909	0.1984957829	0.0069051
##	IA: 2020-11-05-C: 2020-11-05	-0.0181279281	-0.146368245	0.1101123886	1.0000000
##	C: 2020-11-14-C: 2020-11-05	0.0438925333	-0.084347783	0.1721328499	0.9999976
##	IA: 2020-11-14-C: 2020-11-05	0.0629138293	-0.065326487	0.1911541460	0.9959349
##	C: 2020-11-25-C: 2020-11-05	0.0715217915	-0.056718525	0.1997621082	0.9720238
##	IA: 2020-11-25-C: 2020-11-05	0.0643740824	-0.063866234	0.1926143990	0.9940789
##	C: 2020-12-05-C: 2020-11-05	0.0388275203	-0.089412796	0.1670678370	0.9999999
##	IA: 2020-12-05-C: 2020-11-05	0.0187409142	-0.109499402	0.1469812309	1.0000000
##	C: 2021-01-22-C: 2020-11-05	-0.0804391861	-0.208679503	0.0478011306	0.8885904
##	IA: 2021-01-22-C: 2020-11-05	-0.0642624633	-0.192502780	0.0639778534	0.9942423
##	C: 2021-01-28-C: 2020-11-05	0.0887429358	-0.039497381	0.2169832525	0.7353859
##	IA: 2021-01-28-C: 2020-11-05	0.0764543652	-0.051785951	0.2046946819	0.9357936
##	C: 2021-02-05-C: 2020-11-05	0.0860945610	-0.042145756	0.2143348777	0.7916119
##	IA: 2021-02-05-C: 2020-11-05	0.1029549786	-0.025285338	0.2311952952	0.3908206
##	C: 2021-02-12-C: 2020-11-05	-0.0517023312	-0.179942648	0.0765379854	0.9999013
##	IA: 2021-02-12-C: 2020-11-05	-0.1399731189	-0.268213436	-0.0117328023	0.0138091
##	C: 2021-02-26-C: 2020-11-05	-0.1070308332	-0.235271150	0.0212094835	0.3027614
##	IA: 2021-02-26-C: 2020-11-05	-0.1335059437	-0.261746260	-0.0052656270	0.0287121
##	C: 2021-03-15-C: 2020-11-05	-0.2446381354	-0.372878452	-0.1163978187	0.0000000
##	IA: 2021-03-15-C: 2020-11-05	-0.1386377529	-0.266878070	-0.0103974363	0.0161330
##	C: 2021-03-30-C: 2020-11-05	-0.2584452341	-0.386685551	-0.1302049174	0.0000000
##	IA: 2021-03-30-C: 2020-11-05	-0.2045376089	-0.332777926	-0.0762972923	0.0000008
##	C: 2021-04-15-C: 2020-11-05	-0.1193659319	-0.247606249	0.0088743848	0.1162110
##	IA: 2021-04-15-C: 2020-11-05	-0.0668203862	-0.195060703	0.0614199305	0.9893927
##	C: 2021-04-30-C: 2020-11-05	-0.0722271340	-0.173610006	0.0291557381	0.6747360
##	IA: 2021-04-30-C: 2020-11-05	0.0227440852	-0.078638787	0.1241269573	1.0000000
##	C: 2021-05-25-C: 2020-11-05	-0.0613804301	-0.154299367	0.0315385071	0.8184113
##	IA: 2021-05-25-C: 2020-11-05	0.0857880783	-0.007130859	0.1787070155	0.1264571
##	C: 2020-11-14-IA: 2020-11-05	0.0620204613	-0.066219855	0.1902607780	0.9968055
##	IA: 2020-11-14-IA: 2020-11-05	0.0810417574	-0.047198559	0.2092820741	0.8799175
##	C: 2020-11-25-IA: 2020-11-05	0.0896497196	-0.038590597	0.2178900363	0.7148682
##	IA: 2020-11-25-IA: 2020-11-05	0.0825020105	-0.045738306	0.2107423271	0.8572143
##	C: 2020-12-05-IA: 2020-11-05	0.0569554484	-0.071284868	0.1851957651	0.9993127
##	IA: 2020-12-05-IA: 2020-11-05	0.0368688423	-0.091371474	0.1651091589	1.0000000
##	C: 2021-01-22-IA: 2020-11-05	-0.0623112580	-0.190551575	0.0659290586	0.9965416
##	IA: 2021-01-22-IA: 2020-11-05	-0.0461345352	-0.174374852	0.0821057814	0.9999921
##	C: 2021-01-28-IA: 2020-11-05	0.1068708639	-0.021369453	0.2351111806	0.3059938
##	IA: 2021-01-28-IA: 2020-11-05	0.0945822933	-0.033658023	0.2228226100	0.5957031
##	C: 2021-02-05-IA: 2020-11-05	0.1042224891	-0.024017828	0.2324628058	0.3622340
##	IA: 2021-02-05-IA: 2020-11-05	0.1210829067	-0.007157410	0.2493232233	0.0996529
##	C: 2021-02-12-IA: 2020-11-05	-0.0335744032	-0.161814720	0.0946659135	1.0000000
##	IA: 2021-02-12-IA: 2020-11-05	-0.1218451909	-0.250085508	0.0063951258	0.0929398
##	C: 2021-02-26-IA: 2020-11-05	-0.0889029051	-0.217143222	0.0393374115	0.7318085
##	IA: 2021-02-26-IA: 2020-11-05	-0.1153780156	-0.243618332	0.0128623010	0.1630204
##	C: 2021-03-15-IA: 2020-11-05	-0.2265102073	-0.354750524	-0.0982698907	0.0000000
##	IA: 2021-03-15-IA: 2020-11-05	-0.1205098248	-0.248750141	0.0077304918	0.1049539
##	C: 2021-03-30-IA: 2020-11-05	-0.2403173060	-0.368557623	-0.1120769893	0.0000000
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##	C: 2021-04-15-IA: 2020-11-05	-0.1012380038	-0.229478320	0.0270023128	0.4310019
##	IA: 2021-04-15-IA: 2020-11-05	-0.0486924581	-0.176932775	0.0795478585	0.9999731
##	C: 2021-04-30-IA: 2020-11-05	-0.0540992059	-0.155482078	0.0472836662	0.9848947
##	IA: 2021-04-30-IA: 2020-11-05	0.0408720133	-0.060510859	0.1422548854	0.9999014
##	C: 2021-05-25-IA: 2020-11-05	-0.0432525020	-0.136171439	0.0496664351	0.9983629
##	IA: 2021-05-25-IA: 2020-11-05	0.1039160064	0.010997069	0.1968349435	0.0091517

##	IA:2020-11-14-C:2020-11-14	0.0190212961	-0.109219021	0.1472616127	1.0000000
##	C:2020-11-25-C:2020-11-14	0.0276292583	-0.100611058	0.1558695749	1.0000000
##	IA:2020-11-25-C:2020-11-14	0.0204815491	-0.107758768	0.1487218658	1.0000000
##	C:2020-12-05-C:2020-11-14	-0.0050650129	-0.133305330	0.1231753037	1.0000000
##	IA:2020-12-05-C:2020-11-14	-0.0251516191	-0.153391936	0.1030886976	1.0000000
##	C:2021-01-22-C:2020-11-14	-0.1243317193	-0.252572036	0.0039085973	0.0735676
##	IA:2021-01-22-C:2020-11-14	-0.1081549965	-0.236395313	0.0200853201	0.2806081
##	C:2021-01-28-C:2020-11-14	0.0448504026	-0.083389914	0.1730907192	0.9999959
##	IA:2021-01-28-C:2020-11-14	0.0325618320	-0.095678485	0.1608021486	1.0000000
##	C:2021-02-05-C:2020-11-14	0.0422020278	-0.086038289	0.1704423444	0.9999991
##	IA:2021-02-05-C:2020-11-14	0.0590624453	-0.069177871	0.1873027620	0.9986491
##	C:2021-02-12-C:2020-11-14	-0.0955948645	-0.223835181	0.0326454522	0.5703609
##	IA:2021-02-12-C:2020-11-14	-0.1838656522	-0.312105969	-0.0556253356	0.0000279
##	C:2021-02-26-C:2020-11-14	-0.1509233665	-0.279163683	-0.0226830498	0.0035567
##	IA:2021-02-26-C:2020-11-14	-0.1773984770	-0.305638794	-0.0491581603	0.0000786
##	C:2021-03-15-C:2020-11-14	-0.2885306686	-0.416770985	-0.1602903520	0.0000000
##	IA:2021-03-15-C:2020-11-14	-0.1825302862	-0.310770603	-0.0542899695	0.0000347
##	C:2021-03-30-C:2020-11-14	-0.3023377673	-0.430578084	-0.1740974507	0.0000000
##	IA:2021-03-30-C:2020-11-14	-0.2484301422	-0.376670459	-0.1201898255	0.0000000
##	C:2021-04-15-C:2020-11-14	-0.1632584652	-0.291498782	-0.0350181485	0.0006575
##	IA:2021-04-15-C:2020-11-14	-0.1107129195	-0.238953236	0.0175273972	0.2340022
##	C:2021-04-30-C:2020-11-14	-0.1161196673	-0.217502539	-0.0147367952	0.0059652
##	IA:2021-04-30-C:2020-11-14	-0.0211484481	-0.122531320	0.0802344240	1.0000000
##	C:2021-05-25-C:2020-11-14	-0.1052729634	-0.198191900	-0.0123540262	0.0072737
##	IA:2021-05-25-C:2020-11-14	0.0418955450	-0.051023392	0.1348144822	0.9990867
##	C:2020-11-25-IA:2020-11-14	0.0086079622	-0.119632354	0.1368482789	1.0000000
##	IA:2020-11-25-IA:2020-11-14	0.0014602531	-0.126780064	0.1297005697	1.0000000
##	C:2020-12-05-IA:2020-11-14	-0.0240863090	-0.152326626	0.1041540076	1.0000000
##	IA:2020-12-05-IA:2020-11-14	-0.0441729151	-0.172413232	0.0840674015	0.9999972
##	C:2021-01-22-IA:2020-11-14	-0.1433530154	-0.271593332	-0.0151126988	0.0092239
##	IA:2021-01-22-IA:2020-11-14	-0.1271762926	-0.255416609	0.0010640240	0.0556660
##	C:2021-01-28-IA:2020-11-14	0.0258291065	-0.102411210	0.1540694232	1.0000000
##	IA:2021-01-28-IA:2020-11-14	0.0135405359	-0.114699781	0.1417808526	1.0000000
##	C:2021-02-05-IA:2020-11-14	0.0231807317	-0.105059585	0.1514210484	1.0000000
##	IA:2021-02-05-IA:2020-11-14	0.0400411493	-0.088199167	0.1682814659	0.9999997
##	C:2021-02-12-IA:2020-11-14	-0.1146161606	-0.242856477	0.0136241561	0.1733821
##	IA:2021-02-12-IA:2020-11-14	-0.2028869483	-0.331127265	-0.0746466316	0.0000011
##	C:2021-02-26-IA:2020-11-14	-0.1699446625	-0.298184979	-0.0417043459	0.0002466
##	IA:2021-02-26-IA:2020-11-14	-0.1964197730	-0.324660090	-0.0681794564	0.0000034
##	C:2021-03-15-IA:2020-11-14	-0.3075519647	-0.435792281	-0.1793116481	0.0000000
##	IA:2021-03-15-IA:2020-11-14	-0.2015515822	-0.329791899	-0.0733112656	0.0000014
##	C:2021-03-30-IA:2020-11-14	-0.3213590634	-0.449599380	-0.1931187467	0.0000000
##	IA:2021-03-30-IA:2020-11-14	-0.2674514383	-0.395691755	-0.1392111216	0.0000000
##	C:2021-04-15-IA:2020-11-14	-0.1822797612	-0.310520078	-0.0540394446	0.0000361
##	IA:2021-04-15-IA:2020-11-14	-0.1297342155	-0.257974532	-0.0014938989	0.0428872
##	C:2021-04-30-IA:2020-11-14	-0.1351409633	-0.236523835	-0.0337580912	0.0002123
##	IA:2021-04-30-IA:2020-11-14	-0.0401697441	-0.141552616	0.0612131280	0.9999318
##	C:2021-05-25-IA:2020-11-14	-0.1242942594	-0.217213197	-0.0313753223	0.0001939
##	IA:2021-05-25-IA:2020-11-14	0.0228742490	-0.070044688	0.1157931861	1.0000000
##	IA:2020-11-25-C:2020-11-25	-0.0071477092	-0.135388026	0.1210926075	1.0000000
##	C:2020-12-05-C:2020-11-25	-0.0326942712	-0.160934588	0.0955460454	1.0000000
##	IA:2020-12-05-C:2020-11-25	-0.0527808773	-0.181021194	0.0754594393	0.9998482
##	C:2021-01-22-C:2020-11-25	-0.1519609776	-0.280201294	-0.0237206610	0.0031054
##	IA:2021-01-22-C:2020-11-25	-0.1357842548	-0.264024571	-0.0075439382	0.0223233

## C:2021-01-28-C:2020-11-25	0.0172211443	-0.111019172	0.1454614609	1.0000000
## IA:2021-01-28-C:2020-11-25	0.0049325737	-0.123307743	0.1331728903	1.0000000
## C:2021-02-05-C:2020-11-25	0.0145727695	-0.113667547	0.1428130861	1.0000000
## IA:2021-02-05-C:2020-11-25	0.0314331870	-0.096807130	0.1596735037	1.0000000
## C:2021-02-12-C:2020-11-25	-0.1232241228	-0.251464439	0.0050161939	0.0817361
## IA:2021-02-12-C:2020-11-25	-0.2114949105	-0.339735227	-0.0832545938	0.0000002
## C:2021-02-26-C:2020-11-25	-0.1785526247	-0.306792941	-0.0503123081	0.0000655
## IA:2021-02-26-C:2020-11-25	-0.2050277352	-0.333268052	-0.0767874186	0.0000007
## C:2021-03-15-C:2020-11-25	-0.3161599269	-0.444400244	-0.1879196103	0.0000000
## IA:2021-03-15-C:2020-11-25	-0.2101595445	-0.338399861	-0.0819192278	0.0000003
## C:2021-03-30-C:2020-11-25	-0.3299670256	-0.458207342	-0.2017267090	0.0000000
## IA:2021-03-30-C:2020-11-25	-0.2760594005	-0.404299717	-0.1478190838	0.0000000
## C:2021-04-15-C:2020-11-25	-0.1908877234	-0.319128040	-0.0626474068	0.0000087
## IA:2021-04-15-C:2020-11-25	-0.1383421777	-0.266582494	-0.0101018611	0.0166930
## C:2021-04-30-C:2020-11-25	-0.1437489256	-0.245131798	-0.0423660534	0.0000388
## IA:2021-04-30-C:2020-11-25	-0.0487777064	-0.150160578	0.0526051658	0.9970766
## C:2021-05-25-C:2020-11-25	-0.1329022216	-0.225821159	-0.0399832845	0.0000300
## IA:2021-05-25-C:2020-11-25	0.0142662868	-0.078652650	0.1071852239	1.0000000
## C:2020-12-05-IA:2020-11-25	-0.0255465621	-0.153786879	0.1026937546	1.0000000
## IA:2020-12-05-IA:2020-11-25	-0.0456331682	-0.173873485	0.0826071485	0.9999939
## C:2021-01-22-IA:2020-11-25	-0.1448132685	-0.273053585	-0.0165729518	0.0077151
## IA:2021-01-22-IA:2020-11-25	-0.1286365457	-0.256876862	-0.0003962290	0.0480207
## C:2021-01-28-IA:2020-11-25	0.0243688535	-0.103871463	0.1526091701	1.0000000
## IA:2021-01-28-IA:2020-11-25	0.0120802828	-0.116160034	0.1403205995	1.0000000
## C:2021-02-05-IA:2020-11-25	0.0217204787	-0.106519838	0.1499607953	1.0000000
## IA:2021-02-05-IA:2020-11-25	0.0385808962	-0.089659420	0.1668212128	0.9999999
## C:2021-02-12-IA:2020-11-25	-0.1160764136	-0.244316730	0.0121639030	0.1539328
## IA:2021-02-12-IA:2020-11-25	-0.2043472013	-0.332587518	-0.0761068847	0.0000008
## C:2021-02-26-IA:2020-11-25	-0.1714049156	-0.299645232	-0.0431645989	0.0001980
## IA:2021-02-26-IA:2020-11-25	-0.1978800261	-0.326120343	-0.0696397094	0.0000026
## C:2021-03-15-IA:2020-11-25	-0.3090122178	-0.437252534	-0.1807719011	0.0000000
## IA:2021-03-15-IA:2020-11-25	-0.2030118353	-0.331252152	-0.0747715187	0.0000011
## C:2021-03-30-IA:2020-11-25	-0.3228193164	-0.451059633	-0.1945789998	0.0000000
## IA:2021-03-30-IA:2020-11-25	-0.2689116913	-0.397152008	-0.1406713747	0.0000000
## C:2021-04-15-IA:2020-11-25	-0.1837400143	-0.311980331	-0.0554996976	0.0000285
## IA:2021-04-15-IA:2020-11-25	-0.1311944686	-0.259434785	-0.0029541519	0.0368018
## C:2021-04-30-IA:2020-11-25	-0.1366012164	-0.237984089	-0.0352183443	0.0001604
## IA:2021-04-30-IA:2020-11-25	-0.0416299972	-0.143012869	0.0597528749	0.9998554
## C:2021-05-25-IA:2020-11-25	-0.1257545125	-0.218673450	-0.0328355753	0.0001426
## IA:2021-05-25-IA:2020-11-25	0.0214139959	-0.071504941	0.1143329331	1.0000000
## IA:2020-12-05-C:2020-12-05	-0.0200866061	-0.148326923	0.1081537105	1.0000000
## C:2021-01-22-C:2020-12-05	-0.1192667064	-0.247507023	0.0089736102	0.1172310
## IA:2021-01-22-C:2020-12-05	-0.1030899836	-0.231330300	0.0251503330	0.3877294
## C:2021-01-28-C:2020-12-05	0.0499154155	-0.078324901	0.1781557322	0.9999535
## IA:2021-01-28-C:2020-12-05	0.0376268449	-0.090613472	0.1658671616	0.9999999
## C:2021-02-05-C:2020-12-05	0.0472670407	-0.080973276	0.1755073574	0.9999862
## IA:2021-02-05-C:2020-12-05	0.0641274583	-0.064112858	0.1923677749	0.9944349
## C:2021-02-12-C:2020-12-05	-0.0905298516	-0.218770168	0.0377104651	0.6944366
## IA:2021-02-12-C:2020-12-05	-0.1788006393	-0.307040956	-0.0505603226	0.0000630
## C:2021-02-26-C:2020-12-05	-0.1458583535	-0.274098670	-0.0176180369	0.0067788
## IA:2021-02-26-C:2020-12-05	-0.1723334640	-0.300573781	-0.0440931474	0.0001719
## C:2021-03-15-C:2020-12-05	-0.2834656557	-0.411705972	-0.1552253391	0.0000000
## IA:2021-03-15-C:2020-12-05	-0.1774652732	-0.305705590	-0.0492249566	0.0000778
## C:2021-03-30-C:2020-12-05	-0.2972727544	-0.425513071	-0.1690324377	0.0000000

##	IA: 2021-03-30-C: 2020-12-05	-0.2433651293	-0.371605446	-0.1151248126	0.0000000
##	C: 2021-04-15-C: 2020-12-05	-0.1581934522	-0.286433769	-0.0299531356	0.0013409
##	IA: 2021-04-15-C: 2020-12-05	-0.1056479065	-0.233888223	0.0225924101	0.3313409
##	C: 2021-04-30-C: 2020-12-05	-0.1110546543	-0.212437526	-0.0096717822	0.0130186
##	IA: 2021-04-30-C: 2020-12-05	-0.0160834351	-0.117466307	0.0852994370	1.0000000
##	C: 2021-05-25-C: 2020-12-05	-0.1002079504	-0.193126888	-0.0072890133	0.0167741
##	IA: 2021-05-25-C: 2020-12-05	0.0469605580	-0.045958379	0.1398794951	0.9934001
##	C: 2021-01-22-IA: 2020-12-05	-0.0991801003	-0.227420417	0.0290602164	0.4809163
##	IA: 2021-01-22-IA: 2020-12-05	-0.0830033775	-0.211243694	0.0452369392	0.8488752
##	C: 2021-01-28-IA: 2020-12-05	0.0700020216	-0.058238295	0.1982423383	0.9791319
##	IA: 2021-01-28-IA: 2020-12-05	0.0577134510	-0.070526866	0.1859537677	0.9991180
##	C: 2021-02-05-IA: 2020-12-05	0.0673536468	-0.060886670	0.1955939635	0.9880446
##	IA: 2021-02-05-IA: 2020-12-05	0.0842140644	-0.044026252	0.2124543810	0.8276201
##	C: 2021-02-12-IA: 2020-12-05	-0.0704432454	-0.198683562	0.0577970712	0.9772344
##	IA: 2021-02-12-IA: 2020-12-05	-0.1587140332	-0.286954350	-0.0304737165	0.0012477
##	C: 2021-02-26-IA: 2020-12-05	-0.1257717474	-0.254012064	0.0024685692	0.0639784
##	IA: 2021-02-26-IA: 2020-12-05	-0.1522468579	-0.280487175	-0.0240065413	0.0029908
##	C: 2021-03-15-IA: 2020-12-05	-0.2633790496	-0.391619366	-0.1351387329	0.0000000
##	IA: 2021-03-15-IA: 2020-12-05	-0.1573786671	-0.285618984	-0.0291383505	0.0015000
##	C: 2021-03-30-IA: 2020-12-05	-0.2771861483	-0.405426465	-0.1489458316	0.0000000
##	IA: 2021-03-30-IA: 2020-12-05	-0.2232785231	-0.351518840	-0.0950382065	0.0000000
##	C: 2021-04-15-IA: 2020-12-05	-0.1381068461	-0.266347163	-0.0098665295	0.0171514
##	IA: 2021-04-15-IA: 2020-12-05	-0.0855613004	-0.213801617	0.0426790162	0.8021777
##	C: 2021-04-30-IA: 2020-12-05	-0.0909680482	-0.192350920	0.0104148239	0.1672004
##	IA: 2021-04-30-IA: 2020-12-05	0.0040031710	-0.097379701	0.1053860431	1.0000000
##	C: 2021-05-25-IA: 2020-12-05	-0.0801213443	-0.173040281	0.0127975928	0.2363260
##	IA: 2021-05-25-IA: 2020-12-05	0.0670471641	-0.025871773	0.1599661012	0.6463668
##	IA: 2021-01-22-C: 2021-01-22	0.0161767228	-0.112063594	0.1444170394	1.0000000
##	C: 2021-01-28-C: 2021-01-22	0.1691821219	0.040941805	0.2974224386	0.0002764
##	IA: 2021-01-28-C: 2021-01-22	0.1568935513	0.028653235	0.2851338680	0.0016031
##	C: 2021-02-05-C: 2021-01-22	0.1665337471	0.038293430	0.2947740638	0.0004090
##	IA: 2021-02-05-C: 2021-01-22	0.1833941647	0.055153848	0.3116344813	0.0000302
##	C: 2021-02-12-C: 2021-01-22	0.0287368549	-0.099503462	0.1569771715	1.0000000
##	IA: 2021-02-12-C: 2021-01-22	-0.0595339329	-0.187774250	0.0687063838	0.9984401
##	C: 2021-02-26-C: 2021-01-22	-0.0265916471	-0.154831964	0.1016486695	1.0000000
##	IA: 2021-02-26-C: 2021-01-22	-0.0530667576	-0.181307074	0.0751735590	0.9998304
##	C: 2021-03-15-C: 2021-01-22	-0.1641989493	-0.292439266	-0.0359586327	0.0005743
##	IA: 2021-03-15-C: 2021-01-22	-0.0581985668	-0.186438883	0.0700417498	0.9989693
##	C: 2021-03-30-C: 2021-01-22	-0.1780060480	-0.306246365	-0.0497657313	0.0000714
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##	C: 2021-04-30-C: 2021-01-22	0.0082120521	-0.093170820	0.1095949242	1.0000000
##	IA: 2021-04-30-C: 2021-01-22	0.1031832713	0.001800399	0.2045661434	0.0395214
##	C: 2021-05-25-C: 2021-01-22	0.0190587560	-0.073860181	0.1119776931	1.0000000
##	IA: 2021-05-25-C: 2021-01-22	0.1662272644	0.073308327	0.2591462015	0.0000000
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##	IA: 2021-01-28-IA: 2021-01-22	0.1407168285	0.012476512	0.2689571452	0.0126510
##	C: 2021-02-05-IA: 2021-01-22	0.1503570243	0.022116708	0.2785973410	0.0038282
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## C:2021-03-15-IA:2021-01-22 -0.1803756721 -0.308615989 -0.0521353554 0.0000490
## IA:2021-03-15-IA:2021-01-22 -0.0743752896 -0.202615606 0.0538650270 0.9537823
## C:2021-03-30-IA:2021-01-22 -0.1941827708 -0.322423087 -0.0659424541 0.0000050
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## C:2021-03-15-C:2021-01-28 -0.3333810712 -0.461621388 -0.2051407546 0.0000000
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## C:2021-03-30-C:2021-01-28 -0.3471881699 -0.475428487 -0.2189478532 0.0000000
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## C:2021-05-25-IA:2021-01-28 -0.1378347953 -0.230753732 -0.0449158582 0.0000097
## IA:2021-05-25-IA:2021-01-28 0.0093337131 -0.083585224 0.1022526502 1.0000000
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## C:2021-04-30-C:2021-02-05 -0.1583216951 -0.259704567 -0.0569388229 0.0000017
## IA:2021-04-30-C:2021-02-05 -0.0633504759 -0.164733348 0.0380323963 0.8928448
## C:2021-05-25-C:2021-02-05 -0.1474749911 -0.240393928 -0.0545560540 0.0000010
## IA:2021-05-25-C:2021-02-05 -0.0003064827 -0.093225420 0.0926124544 1.0000000
## C:2021-02-12-IA:2021-02-05 -0.1546573098 -0.282897626 -0.0264169932 0.0021705
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## IA:2021-02-12-C:2021-02-12 -0.0882707877 -0.216511104 0.0399695289 0.7458329
## C:2021-02-26-C:2021-02-12 -0.0553285020 -0.183568819 0.0729118147 0.9996076
## IA:2021-02-26-C:2021-02-12 -0.0818036125 -0.210043929 0.0464367042 0.8683689
## C:2021-03-15-C:2021-02-12 -0.1929358042 -0.321176121 -0.0646954875 0.0000061
## IA:2021-03-15-C:2021-02-12 -0.0869354217 -0.215175738 0.0413048950 0.7744121
## C:2021-03-30-C:2021-02-12 -0.2067429028 -0.334983219 -0.0785025862 0.0000005
## IA:2021-03-30-C:2021-02-12 -0.1528352777 -0.281075594 -0.0245949611 0.0027673
## C:2021-04-15-C:2021-02-12 -0.0676636007 -0.195903917 0.0605767160 0.9871988
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## IA:2021-05-25-C:2021-02-26 0.1928189115 0.099899974 0.2857378487 0.0000000

```

##	C:2021-03-15-IA:2021-02-26	-0.1111321917	-0.239372508	0.0171081250	0.2268799
##	IA:2021-03-15-IA:2021-02-26	-0.0051318092	-0.133372126	0.1231085074	1.0000000
##	C:2021-03-30-IA:2021-02-26	-0.1249392904	-0.253179607	0.0033010263	0.0693841
##	IA:2021-03-30-IA:2021-02-26	-0.0710316652	-0.199271982	0.0572086514	0.9744957
##	C:2021-04-15-IA:2021-02-26	0.0141400118	-0.114100305	0.1423803284	1.0000000
##	IA:2021-04-15-IA:2021-02-26	0.0666855575	-0.061554759	0.1949258741	0.9897130
##	C:2021-04-30-IA:2021-02-26	0.0612788097	-0.040104062	0.1626616818	0.9249487
##	IA:2021-04-30-IA:2021-02-26	0.1562500289	0.054867157	0.2576329010	0.0000027
##	C:2021-05-25-IA:2021-02-26	0.0721255136	-0.020793424	0.1650444507	0.4720107
##	IA:2021-05-25-IA:2021-02-26	0.2192940220	0.126375085	0.3122129591	0.0000000
##	IA:2021-03-15-C:2021-03-15	0.1060003825	-0.022239934	0.2342406991	0.3239220
##	C:2021-03-30-C:2021-03-15	-0.0138070987	-0.142047415	0.1144332180	1.0000000
##	IA:2021-03-30-C:2021-03-15	0.0401005264	-0.088139790	0.1683408431	0.9999997
##	C:2021-04-15-C:2021-03-15	0.1252722035	-0.002968113	0.2535125201	0.0671779
##	IA:2021-04-15-C:2021-03-15	0.1778177492	0.049577433	0.3060580658	0.0000736
##	C:2021-04-30-C:2021-03-15	0.1724110014	0.071028129	0.2737938735	0.0000001
##	IA:2021-04-30-C:2021-03-15	0.2673822206	0.165999348	0.3687650927	0.0000000
##	C:2021-05-25-C:2021-03-15	0.1832577053	0.090338768	0.2761766424	0.0000000
##	IA:2021-05-25-C:2021-03-15	0.3304262137	0.237507277	0.4233451508	0.0000000
##	C:2021-03-30-IA:2021-03-15	-0.1198074811	-0.248047798	0.0084328355	0.1117571
##	IA:2021-03-30-IA:2021-03-15	-0.0658998560	-0.194140173	0.0623404606	0.9914251
##	C:2021-04-15-IA:2021-03-15	0.0192718210	-0.108968496	0.1475121377	1.0000000
##	IA:2021-04-15-IA:2021-03-15	0.0718173667	-0.056422950	0.2000576834	0.9704458
##	C:2021-04-30-IA:2021-03-15	0.0664106189	-0.034972253	0.1677934910	0.8314281
##	IA:2021-04-30-IA:2021-03-15	0.1613818381	0.059998966	0.2627647102	0.0000009
##	C:2021-05-25-IA:2021-03-15	0.0772573228	-0.015661614	0.1701762600	0.3109950
##	IA:2021-05-25-IA:2021-03-15	0.2244258312	0.131506894	0.3173447684	0.0000000
##	IA:2021-03-30-C:2021-03-30	0.0539076251	-0.074332692	0.1821479418	0.9997664
##	C:2021-04-15-C:2021-03-30	0.1390793022	0.010838986	0.2673196188	0.0153280
##	IA:2021-04-15-C:2021-03-30	0.1916248479	0.063384531	0.3198651645	0.0000077
##	C:2021-04-30-C:2021-03-30	0.1862181000	0.084835228	0.2876009722	0.0000000
##	IA:2021-04-30-C:2021-03-30	0.2811893192	0.179806447	0.3825721914	0.0000000
##	C:2021-05-25-C:2021-03-30	0.1970648040	0.104145867	0.2899837411	0.0000000
##	IA:2021-05-25-C:2021-03-30	0.3442333124	0.251314375	0.4371522495	0.0000000
##	C:2021-04-15-IA:2021-03-30	0.0851716770	-0.043068640	0.2134119937	0.8097232
##	IA:2021-04-15-IA:2021-03-30	0.1377172227	0.009476906	0.2659575394	0.0179354
##	C:2021-04-30-IA:2021-03-30	0.1323104749	0.030927603	0.2336933470	0.0003621
##	IA:2021-04-30-IA:2021-03-30	0.2272816941	0.125898822	0.3286645662	0.0000000
##	C:2021-05-25-IA:2021-03-30	0.1431571788	0.050238242	0.2360761160	0.0000028
##	IA:2021-05-25-IA:2021-03-30	0.2903256872	0.197406750	0.3832446244	0.0000000
##	IA:2021-04-15-C:2021-04-15	0.0525455457	-0.075694771	0.1807858623	0.9998616
##	C:2021-04-30-C:2021-04-15	0.0471387979	-0.054244074	0.1485216700	0.9983959
##	IA:2021-04-30-C:2021-04-15	0.1421100171	0.040727145	0.2434928892	0.0000541
##	C:2021-05-25-C:2021-04-15	0.0579855018	-0.034933435	0.1509044389	0.8942799
##	IA:2021-05-25-C:2021-04-15	0.2051540102	0.112235073	0.2980729473	0.0000000
##	C:2021-04-30-IA:2021-04-15	-0.0054067478	-0.106789620	0.0959761243	1.0000000
##	IA:2021-04-30-IA:2021-04-15	0.0895644714	-0.011818401	0.1909473435	0.1925376
##	C:2021-05-25-IA:2021-04-15	0.0054399561	-0.087478981	0.0983588932	1.0000000
##	IA:2021-05-25-IA:2021-04-15	0.1526084645	0.059689527	0.2455274016	0.0000003
##	IA:2021-04-30-C:2021-04-30	0.0949712192	0.030851061	0.1590913775	0.0000102
##	C:2021-05-25-C:2021-04-30	0.0108467039	-0.038820557	0.0605139650	1.0000000
##	IA:2021-05-25-C:2021-04-30	0.1580152123	0.108347951	0.2076824734	0.0000000
##	C:2021-05-25-IA:2021-04-30	-0.0841245153	-0.133791776	-0.0344572542	0.0000001
##	IA:2021-05-25-IA:2021-04-30	0.0630439931	0.013376732	0.1127112542	0.0007042

```
## IA:2021-05-25-C:2021-05-25 0.1471685084 0.118493102 0.1758439149 0.0000000
```

Efecto de la IA sobre la actividad enzimática de NKA

```
t2way(NKA ~ Condición + Fechas + Condición:Fechas, data = a2,)
```

```
## Call:
```

```
## t2way(formula = NKA ~ Condición + Fechas + Condición:Fechas,
```

```
## data = a2)
```

```
##
```

```
## value p.value
```

```
## Condición 9.9093 0.002
```

```
## Fechas 1782.4525 0.001
```

```
## Condición:Fechas 99.2833 0.001
```

```
anovanka <- aov(NKA ~ Condición + Fechas + Condición:Fechas, data = a2)
```

```
anova(anovanka)
```

```
## Analysis of Variance Table
```

```
##
```

```
## Response: NKA
```

```
## Df Sum Sq Mean Sq F value Pr(>F)
```

```
## Condición 1 6.32 6.321 10.7712 0.001094 **
```

```
## Fechas 14 1444.39 103.170 175.8188 < 2.2e-16 ***
```

```
## Condición:Fechas 14 50.74 3.625 6.1769 1.59e-11 ***
```

```
## Residuals 570 334.48 0.587
```

```
## ---
```

```
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
TukeyHSD(anovanka)
```

```
## Tukey multiple comparisons of means
```

```
## 95% family-wise confidence level
```

```
##
```

```
## Fit: aov(formula = NKA ~ Condición + Fechas + Condición:Fechas, data = a2)
```

```
##
```

```
## $Condición
```

```
## diff lwr upr p adj
```

```
## IA-C -0.2052724 -0.3281211 -0.08242368 0.001094
```

```
##
```

```
## $Fechas
```

```
## diff lwr upr p adj
```

```
## 2020-10-14-2020-10-05 -0.18510434 -0.76857309 0.39836440 0.9991051
```

```
## 2020-10-26-2020-10-05 0.37840028 -0.20506847 0.96186902 0.6581874
```

```
## 2020-11-05-2020-10-05 -0.41726752 -1.00073627 0.16620123 0.4889506
```

```
## 2020-11-14-2020-10-05 0.42446506 -0.15900368 1.00793381 0.4580026
```

```
## 2020-11-25-2020-10-05 0.62649390 0.04302515 1.20996265 0.0219470
```

```
## 2020-12-05-2020-10-05 0.73004048 0.14657174 1.31350923 0.0021919
```

```
## 2021-01-22-2020-10-05 -0.05252919 -0.63599794 0.53093956 1.0000000
```

```
## 2021-01-28-2020-10-05 0.28475765 -0.29871110 0.86822640 0.9433391
```

```
## 2021-02-05-2020-10-05 0.67936813 0.09589938 1.26283688 0.0071421
```

```
## 2021-02-12-2020-10-05 1.51308618 0.92961744 2.09655493 0.0000000
```

```
## 2021-02-26-2020-10-05 1.61552798 1.03205923 2.19899673 0.0000000
```

```
## 2021-03-15-2020-10-05 2.14329433 1.55982558 2.72676307 0.0000000
```

```
## 2021-03-30-2020-10-05 4.35367878 3.77021004 4.93714753 0.0000000
```

```
## 2021-04-15-2020-10-05 5.01813205 4.43466330 5.60160080 0.0000000
```

```
## 2020-10-26-2020-10-14 0.56350462 -0.01996413 1.14697337 0.0711338
```

##	2020-11-05-2020-10-14	-0.23216318	-0.81563192	0.35130557	0.9905615
##	2020-11-14-2020-10-14	0.60956941	0.02610066	1.19303815	0.0306486
##	2020-11-25-2020-10-14	0.81159824	0.22812950	1.39506699	0.0002687
##	2020-12-05-2020-10-14	0.91514483	0.33167608	1.49861357	0.0000136
##	2021-01-22-2020-10-14	0.13257515	-0.45089359	0.71604390	0.9999827
##	2021-01-28-2020-10-14	0.46986199	-0.11360675	1.05333074	0.2817347
##	2021-02-05-2020-10-14	0.86447247	0.28100373	1.44794122	0.0000611
##	2021-02-12-2020-10-14	1.69819053	1.11472178	2.28165927	0.0000000
##	2021-02-26-2020-10-14	1.80063233	1.21716358	2.38410107	0.0000000
##	2021-03-15-2020-10-14	2.32839867	1.74492992	2.91186742	0.0000000
##	2021-03-30-2020-10-14	4.53878313	3.95531438	5.12225187	0.0000000
##	2021-04-15-2020-10-14	5.20323639	4.61976765	5.78670514	0.0000000
##	2020-11-05-2020-10-26	-0.79566780	-1.37913654	-0.21219905	0.0004123
##	2020-11-14-2020-10-26	0.04606479	-0.53740396	0.62953353	1.0000000
##	2020-11-25-2020-10-26	0.24809362	-0.33537512	0.83156237	0.9824229
##	2020-12-05-2020-10-26	0.35164021	-0.23182854	0.93510895	0.7653364
##	2021-01-22-2020-10-26	-0.43092947	-1.01439821	0.15253928	0.4306948
##	2021-01-28-2020-10-26	-0.09364263	-0.67711138	0.48982612	0.9999998
##	2021-02-05-2020-10-26	0.30096785	-0.28250089	0.88443660	0.9138409
##	2021-02-12-2020-10-26	1.13468590	0.55121716	1.71815465	0.0000000
##	2021-02-26-2020-10-26	1.23712770	0.65365896	1.82059645	0.0000000
##	2021-03-15-2020-10-26	1.76489405	1.18142530	2.34836280	0.0000000
##	2021-03-30-2020-10-26	3.97527850	3.39180976	4.55874725	0.0000000
##	2021-04-15-2020-10-26	4.63973177	4.05626303	5.22320052	0.0000000
##	2020-11-14-2020-11-05	0.84173258	0.25826384	1.42520133	0.0001168
##	2020-11-25-2020-11-05	1.04376142	0.46029267	1.62723017	0.0000002
##	2020-12-05-2020-11-05	1.14730800	0.56383926	1.73077675	0.0000000
##	2021-01-22-2020-11-05	0.36473833	-0.21873042	0.94820708	0.7146744
##	2021-01-28-2020-11-05	0.70202517	0.11855642	1.28549392	0.0042634
##	2021-02-05-2020-11-05	1.09663565	0.51316690	1.68010440	0.0000000
##	2021-02-12-2020-11-05	1.93035370	1.34688496	2.51382245	0.0000000
##	2021-02-26-2020-11-05	2.03279550	1.44932675	2.61626425	0.0000000
##	2021-03-15-2020-11-05	2.56056185	1.97709310	3.14403059	0.0000000
##	2021-03-30-2020-11-05	4.77094630	4.18747756	5.35441505	0.0000000
##	2021-04-15-2020-11-05	5.43539957	4.85193082	6.01886832	0.0000000
##	2020-11-25-2020-11-14	0.20202884	-0.38143991	0.78549758	0.9976896
##	2020-12-05-2020-11-14	0.30557542	-0.27789333	0.88904417	0.9038707
##	2021-01-22-2020-11-14	-0.47699425	-1.06046300	0.10647449	0.2580999
##	2021-01-28-2020-11-14	-0.13970741	-0.72317616	0.44376133	0.9999670
##	2021-02-05-2020-11-14	0.25490307	-0.32856568	0.83837181	0.9775803
##	2021-02-12-2020-11-14	1.08862112	0.50515237	1.67208987	0.0000000
##	2021-02-26-2020-11-14	1.19106292	0.60759417	1.77453167	0.0000000
##	2021-03-15-2020-11-14	1.71882926	1.13536052	2.30229801	0.0000000
##	2021-03-30-2020-11-14	3.92921372	3.34574497	4.51268247	0.0000000
##	2021-04-15-2020-11-14	4.59366699	4.01019824	5.17713573	0.0000000
##	2020-12-05-2020-11-25	0.10354658	-0.47992216	0.68701533	0.9999993
##	2021-01-22-2020-11-25	-0.67902309	-1.26249184	-0.09555434	0.0071973
##	2021-01-28-2020-11-25	-0.34173625	-0.92520500	0.24173250	0.8007434
##	2021-02-05-2020-11-25	0.05287423	-0.53059452	0.63634298	1.0000000
##	2021-02-12-2020-11-25	0.88659228	0.30312354	1.47006103	0.0000320
##	2021-02-26-2020-11-25	0.98903408	0.40556534	1.57250283	0.0000013
##	2021-03-15-2020-11-25	1.51680043	0.93333168	2.10026917	0.0000000
##	2021-03-30-2020-11-25	3.72718488	3.14371614	4.31065363	0.0000000
##	2021-04-15-2020-11-25	4.39163815	3.80816940	4.97510690	0.0000000


```

## 2021-01-22-2020-12-05 -0.78256967 -1.36603842 -0.19910092 0.0005825
## 2021-01-28-2020-12-05 -0.44528283 -1.02875158 0.13818591 0.3722860
## 2021-02-05-2020-12-05 -0.05067235 -0.63414110 0.53279640 1.0000000
## 2021-02-12-2020-12-05 0.78304570 0.19957695 1.36651445 0.0005753
## 2021-02-26-2020-12-05 0.88548750 0.30201875 1.46895625 0.0000331
## 2021-03-15-2020-12-05 1.41325384 0.82978510 1.99672259 0.0000000
## 2021-03-30-2020-12-05 3.62363830 3.04016955 4.20710705 0.0000000
## 2021-04-15-2020-12-05 4.28809157 3.70462282 4.87156031 0.0000000
## 2021-01-28-2021-01-22 0.33728684 -0.24618191 0.92075559 0.8157271
## 2021-02-05-2021-01-22 0.73189732 0.14842857 1.31536607 0.0020951
## 2021-02-12-2021-01-22 1.56561537 0.98214662 2.14908412 0.0000000
## 2021-02-26-2021-01-22 1.66805717 1.08458842 2.25152592 0.0000000
## 2021-03-15-2021-01-22 2.19582352 1.61235477 2.77929226 0.0000000
## 2021-03-30-2021-01-22 4.40620797 3.82273922 4.98967672 0.0000000
## 2021-04-15-2021-01-22 5.07066124 4.48719249 5.65412999 0.0000000
## 2021-02-05-2021-01-28 0.39461048 -0.18885827 0.97807923 0.5881376
## 2021-02-12-2021-01-28 1.22832853 0.64485979 1.81179728 0.0000000
## 2021-02-26-2021-01-28 1.33077033 0.74730159 1.91423908 0.0000000
## 2021-03-15-2021-01-28 1.85853668 1.27506793 2.44200542 0.0000000
## 2021-03-30-2021-01-28 4.06892113 3.48545239 4.65238988 0.0000000
## 2021-04-15-2021-01-28 4.73337440 4.14990565 5.31684315 0.0000000
## 2021-02-12-2021-02-05 0.83371805 0.25024930 1.41718680 0.0001462
## 2021-02-26-2021-02-05 0.93615985 0.35269110 1.51962860 0.0000071
## 2021-03-15-2021-02-05 1.46392620 0.88045745 2.04739494 0.0000000
## 2021-03-30-2021-02-05 3.67431065 3.09084190 4.25777940 0.0000000
## 2021-04-15-2021-02-05 4.33876392 3.75529517 4.92223267 0.0000000
## 2021-02-26-2021-02-12 0.10244180 -0.48102695 0.68591055 0.9999994
## 2021-03-15-2021-02-12 0.63020814 0.04673940 1.21367689 0.0203615
## 2021-03-30-2021-02-12 2.84059260 2.25712385 3.42406135 0.0000000
## 2021-04-15-2021-02-12 3.50504587 2.92157712 4.08851461 0.0000000
## 2021-03-15-2021-02-26 0.52776634 -0.05570240 1.11123509 0.1272014
## 2021-03-30-2021-02-26 2.73815080 2.15468205 3.32161955 0.0000000
## 2021-04-15-2021-02-26 3.40260407 2.81913532 3.98607281 0.0000000
## 2021-03-30-2021-03-15 2.21038446 1.62691571 2.79385320 0.0000000
## 2021-04-15-2021-03-15 2.87483772 2.29136898 3.45830647 0.0000000
## 2021-04-15-2021-03-30 0.66445327 0.08098452 1.24792201 0.0099190
##
## $`Condición:Fechas`
##
## diff lwr upr p adj
## IA:2020-10-05-C:2020-10-05 -1.208684157 -2.121504e+00 -0.29586472 0.0003220
## C:2020-10-14-C:2020-10-05 -0.800843718 -1.713663e+00 0.11197572 0.1953101
## IA:2020-10-14-C:2020-10-05 -0.778049126 -1.690869e+00 0.13477031 0.2459855
## C:2020-10-26-C:2020-10-05 -0.203905687 -1.116725e+00 0.70891375 1.0000000
## IA:2020-10-26-C:2020-10-05 -0.247977916 -1.160797e+00 0.66484152 0.9999999
## C:2020-11-05-C:2020-10-05 -1.330861410 -2.243681e+00 -0.41804197 0.0000248
## IA:2020-11-05-C:2020-10-05 -0.712357787 -1.625177e+00 0.20046165 0.4331982
## C:2020-11-14-C:2020-10-05 -0.237444749 -1.150264e+00 0.67537469 1.0000000
## IA:2020-11-14-C:2020-10-05 -0.122309280 -1.035129e+00 0.79051016 1.0000000
## C:2020-11-25-C:2020-10-05 0.431004785 -4.818147e-01 1.34382422 0.9958112
## IA:2020-11-25-C:2020-10-05 -0.386701143 -1.299521e+00 0.52611829 0.9993055
## C:2020-12-05-C:2020-10-05 0.816704088 -9.611535e-02 1.72952353 0.1647152
## IA:2020-12-05-C:2020-10-05 -0.565307279 -1.478127e+00 0.34751216 0.8767685
## C:2021-01-22-C:2020-10-05 -0.521690615 -1.434510e+00 0.39112882 0.9459295
## IA:2021-01-22-C:2020-10-05 -0.792051920 -1.704871e+00 0.12076752 0.2139134

```

## C:2021-01-28-C:2020-10-05	-0.397806488	-1.310626e+00	0.51501295	0.9988651
## IA:2021-01-28-C:2020-10-05	-0.241362371	-1.154182e+00	0.67145707	1.0000000
## C:2021-02-05-C:2020-10-05	0.038031781	-8.747877e-01	0.95085122	1.0000000
## IA:2021-02-05-C:2020-10-05	0.112020323	-8.007991e-01	1.02483976	1.0000000
## C:2021-02-12-C:2020-10-05	1.193313349	2.804939e-01	2.10613279	0.0004366
## IA:2021-02-12-C:2020-10-05	0.624174859	-2.886446e-01	1.53699430	0.7246396
## C:2021-02-26-C:2020-10-05	1.140069840	2.272504e-01	2.05288928	0.0012136
## IA:2021-02-26-C:2020-10-05	0.882301967	-3.051747e-02	1.79512140	0.0750987
## C:2021-03-15-C:2020-10-05	1.437696165	5.248767e-01	2.35051560	0.0000022
## IA:2021-03-15-C:2020-10-05	1.640208332	7.273889e-01	2.55302777	0.0000000
## C:2021-03-30-C:2020-10-05	3.973703648	3.060884e+00	4.88652309	0.0000000
## IA:2021-03-30-C:2020-10-05	3.524969760	2.612150e+00	4.43778920	0.0000000
## C:2021-04-15-C:2020-10-05	4.048784547	3.135965e+00	4.96160398	0.0000000
## IA:2021-04-15-C:2020-10-05	4.778795394	3.865976e+00	5.69161483	0.0000000
## C:2020-10-14-IA:2020-10-05	0.407840440	-5.049790e-01	1.32065988	0.9982736
## IA:2020-10-14-IA:2020-10-05	0.430635031	-4.821844e-01	1.34345447	0.9958665
## C:2020-10-26-IA:2020-10-05	1.004778471	9.195903e-02	1.91759791	0.0127337
## IA:2020-10-26-IA:2020-10-05	0.960706242	4.788680e-02	1.87352568	0.0251584
## C:2020-11-05-IA:2020-10-05	-0.122177253	-1.034997e+00	0.79064218	1.0000000
## IA:2020-11-05-IA:2020-10-05	0.496326370	-4.164931e-01	1.40914581	0.9699702
## C:2020-11-14-IA:2020-10-05	0.971239408	5.841997e-02	1.88405885	0.0214681
## IA:2020-11-14-IA:2020-10-05	1.086374877	1.735554e-01	1.99919431	0.0032246
## C:2020-11-25-IA:2020-10-05	1.639688943	7.268695e-01	2.55250838	0.0000000
## IA:2020-11-25-IA:2020-10-05	0.821983014	-9.083642e-02	1.73480245	0.1553628
## C:2020-12-05-IA:2020-10-05	2.025388245	1.112569e+00	2.93820768	0.0000000
## IA:2020-12-05-IA:2020-10-05	0.643376878	-2.694426e-01	1.55619632	0.6637417
## C:2021-01-22-IA:2020-10-05	0.686993543	-2.258259e-01	1.59981298	0.5172116
## IA:2021-01-22-IA:2020-10-05	0.416632237	-4.961872e-01	1.32945167	0.9975514
## C:2021-01-28-IA:2020-10-05	0.810877669	-1.019418e-01	1.72369711	0.1755155
## IA:2021-01-28-IA:2020-10-05	0.967321787	5.450235e-02	1.88014122	0.0227798
## C:2021-02-05-IA:2020-10-05	1.246715939	3.338965e-01	2.15953538	0.0001490
## IA:2021-02-05-IA:2020-10-05	1.320704481	4.078850e-01	2.23352392	0.0000310
## C:2021-02-12-IA:2020-10-05	2.401997506	1.489178e+00	3.31481694	0.0000000
## IA:2021-02-12-IA:2020-10-05	1.832859016	9.200396e-01	2.74567845	0.0000000
## C:2021-02-26-IA:2020-10-05	2.348753997	1.435935e+00	3.26157343	0.0000000
## IA:2021-02-26-IA:2020-10-05	2.090986124	1.178167e+00	3.00380556	0.0000000
## C:2021-03-15-IA:2020-10-05	2.646380322	1.733561e+00	3.55919976	0.0000000
## IA:2021-03-15-IA:2020-10-05	2.848892489	1.936073e+00	3.76171193	0.0000000
## C:2021-03-30-IA:2020-10-05	5.182387805	4.269568e+00	6.09520724	0.0000000
## IA:2021-03-30-IA:2020-10-05	4.733653917	3.820834e+00	5.64647335	0.0000000
## C:2021-04-15-IA:2020-10-05	5.257468705	4.344649e+00	6.17028814	0.0000000
## IA:2021-04-15-IA:2020-10-05	5.987479552	5.074660e+00	6.90029899	0.0000000
## IA:2020-10-14-C:2020-10-14	0.022794591	-8.900248e-01	0.93561403	1.0000000
## C:2020-10-26-C:2020-10-14	0.596938031	-3.158814e-01	1.50975747	0.8026777
## IA:2020-10-26-C:2020-10-14	0.552865802	-3.599536e-01	1.46568524	0.9003977
## C:2020-11-05-C:2020-10-14	-0.530017693	-1.442837e+00	0.38280174	0.9356127
## IA:2020-11-05-C:2020-10-14	0.088485931	-8.243335e-01	1.00130537	1.0000000
## C:2020-11-14-C:2020-10-14	0.563398968	-3.494205e-01	1.47621841	0.8805995
## IA:2020-11-14-C:2020-10-14	0.678534437	-2.342850e-01	1.59135387	0.5458322
## C:2020-11-25-C:2020-10-14	1.231848503	3.190291e-01	2.14466794	0.0002019
## IA:2020-11-25-C:2020-10-14	0.414142574	-4.986769e-01	1.32696201	0.9977784
## C:2020-12-05-C:2020-10-14	1.617547806	7.047284e-01	2.53036724	0.0000000
## IA:2020-12-05-C:2020-10-14	0.235536438	-6.772830e-01	1.14835588	1.0000000
## C:2021-01-22-C:2020-10-14	0.279153103	-6.336663e-01	1.19197254	0.9999991

##	IA: 2021-01-22-C: 2020-10-14	0.008791797	-9.040276e-01	0.92161123	1.0000000
##	C: 2021-01-28-C: 2020-10-14	0.403037230	-5.097822e-01	1.31585667	0.9985837
##	IA: 2021-01-28-C: 2020-10-14	0.559481347	-3.533381e-01	1.47230078	0.8882296
##	C: 2021-02-05-C: 2020-10-14	0.838875499	-7.394394e-02	1.75169494	0.1281205
##	IA: 2021-02-05-C: 2020-10-14	0.912864041	4.460375e-05	1.82568348	0.0499694
##	C: 2021-02-12-C: 2020-10-14	1.994157066	1.081338e+00	2.90697650	0.0000000
##	IA: 2021-02-12-C: 2020-10-14	1.425018576	5.121991e-01	2.33783801	0.0000029
##	C: 2021-02-26-C: 2020-10-14	1.940913558	1.028094e+00	2.85373300	0.0000000
##	IA: 2021-02-26-C: 2020-10-14	1.683145684	7.703262e-01	2.59596512	0.0000000
##	C: 2021-03-15-C: 2020-10-14	2.238539883	1.325720e+00	3.15135932	0.0000000
##	IA: 2021-03-15-C: 2020-10-14	2.441052049	1.528233e+00	3.35387149	0.0000000
##	C: 2021-03-30-C: 2020-10-14	4.774547366	3.861728e+00	5.68736680	0.0000000
##	IA: 2021-03-30-C: 2020-10-14	4.325813478	3.412994e+00	5.23863292	0.0000000
##	C: 2021-04-15-C: 2020-10-14	4.849628265	3.936809e+00	5.76244770	0.0000000
##	IA: 2021-04-15-C: 2020-10-14	5.579639112	4.666820e+00	6.49245855	0.0000000
##	C: 2020-10-26-IA: 2020-10-14	0.574143440	-3.386760e-01	1.48696288	0.8580598
##	IA: 2020-10-26-IA: 2020-10-14	0.530071211	-3.827482e-01	1.44289065	0.9355422
##	C: 2020-11-05-IA: 2020-10-14	-0.552812284	-1.465632e+00	0.36000715	0.9004925
##	IA: 2020-11-05-IA: 2020-10-14	0.065691339	-8.471281e-01	0.97851078	1.0000000
##	C: 2020-11-14-IA: 2020-10-14	0.540604377	-3.722151e-01	1.45342381	0.9205882
##	IA: 2020-11-14-IA: 2020-10-14	0.655739846	-2.570796e-01	1.56855928	0.6228463
##	C: 2020-11-25-IA: 2020-10-14	1.209053912	2.962345e-01	2.12187335	0.0003196
##	IA: 2020-11-25-IA: 2020-10-14	0.391347983	-5.214715e-01	1.30416742	0.9991440
##	C: 2020-12-05-IA: 2020-10-14	1.594753214	6.819338e-01	2.50757265	0.0000000
##	IA: 2020-12-05-IA: 2020-10-14	0.212741847	-7.000776e-01	1.12556128	1.0000000
##	C: 2021-01-22-IA: 2020-10-14	0.256358512	-6.564609e-01	1.16917795	0.9999999
##	IA: 2021-01-22-IA: 2020-10-14	-0.014002794	-9.268222e-01	0.89881664	1.0000000
##	C: 2021-01-28-IA: 2020-10-14	0.380242638	-5.325768e-01	1.29306208	0.9994851
##	IA: 2021-01-28-IA: 2020-10-14	0.536686756	-3.761327e-01	1.44950619	0.9264032
##	C: 2021-02-05-IA: 2020-10-14	0.816080908	-9.673853e-02	1.72890035	0.1658463
##	IA: 2021-02-05-IA: 2020-10-14	0.890069450	-2.274999e-02	1.80288889	0.0678737
##	C: 2021-02-12-IA: 2020-10-14	1.971362475	1.058543e+00	2.88418191	0.0000000
##	IA: 2021-02-12-IA: 2020-10-14	1.402223985	4.894045e-01	2.31504342	0.0000050
##	C: 2021-02-26-IA: 2020-10-14	1.918118966	1.005300e+00	2.83093840	0.0000000
##	IA: 2021-02-26-IA: 2020-10-14	1.660351093	7.475317e-01	2.57317053	0.0000000
##	C: 2021-03-15-IA: 2020-10-14	2.215745291	1.302926e+00	3.12856473	0.0000000
##	IA: 2021-03-15-IA: 2020-10-14	2.418257458	1.505438e+00	3.33107690	0.0000000
##	C: 2021-03-30-IA: 2020-10-14	4.751752774	3.838933e+00	5.66457221	0.0000000
##	IA: 2021-03-30-IA: 2020-10-14	4.303018886	3.390199e+00	5.21583832	0.0000000
##	C: 2021-04-15-IA: 2020-10-14	4.826833674	3.914014e+00	5.73965311	0.0000000
##	IA: 2021-04-15-IA: 2020-10-14	5.556844521	4.644025e+00	6.46966396	0.0000000
##	IA: 2020-10-26-C: 2020-10-26	-0.044072229	-9.568917e-01	0.86874721	1.0000000
##	C: 2020-11-05-C: 2020-10-26	-1.126955724	-2.039775e+00	-0.21413629	0.0015486
##	IA: 2020-11-05-C: 2020-10-26	-0.508452100	-1.421272e+00	0.40436734	0.9597847
##	C: 2020-11-14-C: 2020-10-26	-0.033539063	-9.463585e-01	0.87928037	1.0000000
##	IA: 2020-11-14-C: 2020-10-26	0.081596406	-8.312230e-01	0.99441584	1.0000000
##	C: 2020-11-25-C: 2020-10-26	0.634910472	-2.779090e-01	1.54772991	0.6910635
##	IA: 2020-11-25-C: 2020-10-26	-0.182795457	-1.095615e+00	0.73002398	1.0000000
##	C: 2020-12-05-C: 2020-10-26	1.020609774	1.077903e-01	1.93342921	0.0098639
##	IA: 2020-12-05-C: 2020-10-26	-0.361401593	-1.274221e+00	0.55141784	0.9997975
##	C: 2021-01-22-C: 2020-10-26	-0.317784928	-1.230604e+00	0.59503451	0.9999842
##	IA: 2021-01-22-C: 2020-10-26	-0.588146234	-1.500966e+00	0.32467320	0.8252137
##	C: 2021-01-28-C: 2020-10-26	-0.193900801	-1.106720e+00	0.71891864	1.0000000
##	IA: 2021-01-28-C: 2020-10-26	-0.037456684	-9.502761e-01	0.87536275	1.0000000

## C:2021-02-05-C:2020-10-26	0.241937468	-6.708820e-01	1.15475691	1.0000000
## IA:2021-02-05-C:2020-10-26	0.315926010	-5.968934e-01	1.22874545	0.9999860
## C:2021-02-12-C:2020-10-26	1.397219035	4.843996e-01	2.31003847	0.0000056
## IA:2021-02-12-C:2020-10-26	0.828080545	-8.473889e-02	1.74089998	0.1450638
## C:2021-02-26-C:2020-10-26	1.343975526	4.311561e-01	2.25679496	0.0000186
## IA:2021-02-26-C:2020-10-26	1.086207653	1.733882e-01	1.99902709	0.0032341
## C:2021-03-15-C:2020-10-26	1.641601851	7.287824e-01	2.55442129	0.0000000
## IA:2021-03-15-C:2020-10-26	1.844114018	9.312946e-01	2.75693346	0.0000000
## C:2021-03-30-C:2020-10-26	4.177609334	3.264790e+00	5.09042877	0.0000000
## IA:2021-03-30-C:2020-10-26	3.728875446	2.816056e+00	4.64169488	0.0000000
## C:2021-04-15-C:2020-10-26	4.252690234	3.339871e+00	5.16550967	0.0000000
## IA:2021-04-15-C:2020-10-26	4.982701081	4.069882e+00	5.89552052	0.0000000
## C:2020-11-05-IA:2020-10-26	-1.082883494	-1.995703e+00	-0.17006406	0.0034294
## IA:2020-11-05-IA:2020-10-26	-0.464379871	-1.377199e+00	0.44843957	0.9874695
## C:2020-11-14-IA:2020-10-26	0.010533166	-9.022863e-01	0.92335260	1.0000000
## IA:2020-11-14-IA:2020-10-26	0.125668635	-7.871508e-01	1.03848807	1.0000000
## C:2020-11-25-IA:2020-10-26	0.678982701	-2.338367e-01	1.59180214	0.5443127
## IA:2020-11-25-IA:2020-10-26	-0.138723228	-1.051543e+00	0.77409621	1.0000000
## C:2020-12-05-IA:2020-10-26	1.064682004	1.518626e-01	1.97750144	0.0047092
## IA:2020-12-05-IA:2020-10-26	-0.317329364	-1.230149e+00	0.59549007	0.9999847
## C:2021-01-22-IA:2020-10-26	-0.273712699	-1.186532e+00	0.63910674	0.9999994
## IA:2021-01-22-IA:2020-10-26	-0.544074004	-1.456893e+00	0.36874543	0.9151832
## C:2021-01-28-IA:2020-10-26	-0.149828572	-1.062648e+00	0.76299087	1.0000000
## IA:2021-01-28-IA:2020-10-26	0.006615545	-9.062039e-01	0.91943498	1.0000000
## C:2021-02-05-IA:2020-10-26	0.286009697	-6.268097e-01	1.19882913	0.9999984
## IA:2021-02-05-IA:2020-10-26	0.359998239	-5.528212e-01	1.27281768	0.9998119
## C:2021-02-12-IA:2020-10-26	1.441291264	5.284718e-01	2.35411070	0.0000020
## IA:2021-02-12-IA:2020-10-26	0.872152774	-4.066666e-02	1.78497221	0.0854952
## C:2021-02-26-IA:2020-10-26	1.388047756	4.752283e-01	2.30086719	0.0000069
## IA:2021-02-26-IA:2020-10-26	1.130279882	2.174604e-01	2.04309932	0.0014562
## C:2021-03-15-IA:2020-10-26	1.685674081	7.728546e-01	2.59849352	0.0000000
## IA:2021-03-15-IA:2020-10-26	1.888186247	9.753668e-01	2.80100568	0.0000000
## C:2021-03-30-IA:2020-10-26	4.221681564	3.308862e+00	5.13450100	0.0000000
## IA:2021-03-30-IA:2020-10-26	3.772947676	2.860128e+00	4.68576711	0.0000000
## C:2021-04-15-IA:2020-10-26	4.296762463	3.383943e+00	5.20958190	0.0000000
## IA:2021-04-15-IA:2020-10-26	5.026773310	4.113954e+00	5.93959275	0.0000000
## IA:2020-11-05-C:2020-11-05	0.618503623	-2.943158e-01	1.53132306	0.7418037
## C:2020-11-14-C:2020-11-05	1.093416661	1.805972e-01	2.00623610	0.0028458
## IA:2020-11-14-C:2020-11-05	1.208552130	2.957327e-01	2.12137157	0.0003229
## C:2020-11-25-C:2020-11-05	1.761866196	8.490468e-01	2.67468563	0.0000000
## IA:2020-11-25-C:2020-11-05	0.944160267	3.134083e-02	1.85697970	0.0321036
## C:2020-12-05-C:2020-11-05	2.147565498	1.234746e+00	3.06038494	0.0000000
## IA:2020-12-05-C:2020-11-05	0.765554131	-1.472653e-01	1.67837357	0.2771123
## C:2021-01-22-C:2020-11-05	0.809170795	-1.036486e-01	1.72199023	0.1787755
## IA:2021-01-22-C:2020-11-05	0.538809490	-3.740099e-01	1.45162893	0.9232901
## C:2021-01-28-C:2020-11-05	0.933054922	2.023548e-02	1.84587436	0.0376678
## IA:2021-01-28-C:2020-11-05	1.089499040	1.766796e-01	2.00231848	0.0030510
## C:2021-02-05-C:2020-11-05	1.368893192	4.560738e-01	2.28171263	0.0000107
## IA:2021-02-05-C:2020-11-05	1.442881734	5.300623e-01	2.35570117	0.0000019
## C:2021-02-12-C:2020-11-05	2.524174759	1.611355e+00	3.43699420	0.0000000
## IA:2021-02-12-C:2020-11-05	1.955036269	1.042217e+00	2.86785571	0.0000000
## C:2021-02-26-C:2020-11-05	2.470931250	1.558112e+00	3.38375069	0.0000000
## IA:2021-02-26-C:2020-11-05	2.213163377	1.300344e+00	3.12598281	0.0000000
## C:2021-03-15-C:2020-11-05	2.768557575	1.855738e+00	3.68137701	0.0000000

##	IA: 2021-03-15-C: 2020-11-05	2.971069742	2.058250e+00	3.88388918	0.0000000
##	C: 2021-03-30-C: 2020-11-05	5.304565058	4.391746e+00	6.21738450	0.0000000
##	IA: 2021-03-30-C: 2020-11-05	4.855831170	3.943012e+00	5.76865061	0.0000000
##	C: 2021-04-15-C: 2020-11-05	5.379645958	4.466827e+00	6.29246540	0.0000000
##	IA: 2021-04-15-C: 2020-11-05	6.109656805	5.196837e+00	7.02247624	0.0000000
##	C: 2020-11-14-IA: 2020-11-05	0.474913038	-4.379064e-01	1.38773247	0.9829871
##	IA: 2020-11-14-IA: 2020-11-05	0.590048507	-3.227709e-01	1.50286794	0.8204590
##	C: 2020-11-25-IA: 2020-11-05	1.143362572	2.305431e-01	2.05618201	0.0011409
##	IA: 2020-11-25-IA: 2020-11-05	0.325656644	-5.871628e-01	1.23847608	0.9999739
##	C: 2020-12-05-IA: 2020-11-05	1.529061875	6.162424e-01	2.44188131	0.0000002
##	IA: 2020-12-05-IA: 2020-11-05	0.147050508	-7.657689e-01	1.05986994	1.0000000
##	C: 2021-01-22-IA: 2020-11-05	0.190667172	-7.221523e-01	1.10348661	1.0000000
##	IA: 2021-01-22-IA: 2020-11-05	-0.079694133	-9.925136e-01	0.83312530	1.0000000
##	C: 2021-01-28-IA: 2020-11-05	0.314551299	-5.982681e-01	1.22737074	0.9999873
##	IA: 2021-01-28-IA: 2020-11-05	0.470995416	-4.418240e-01	1.38381485	0.9847841
##	C: 2021-02-05-IA: 2020-11-05	0.750389568	-1.624299e-01	1.66320901	0.3179506
##	IA: 2021-02-05-IA: 2020-11-05	0.824378110	-8.844133e-02	1.73719755	0.1512535
##	C: 2021-02-12-IA: 2020-11-05	1.905671136	9.928517e-01	2.81849057	0.0000000
##	IA: 2021-02-12-IA: 2020-11-05	1.336532646	4.237132e-01	2.24935208	0.0000219
##	C: 2021-02-26-IA: 2020-11-05	1.852427627	9.396082e-01	2.76524706	0.0000000
##	IA: 2021-02-26-IA: 2020-11-05	1.594659754	6.818403e-01	2.50747919	0.0000000
##	C: 2021-03-15-IA: 2020-11-05	2.150053952	1.237235e+00	3.06287339	0.0000000
##	IA: 2021-03-15-IA: 2020-11-05	2.352566119	1.439747e+00	3.26538556	0.0000000
##	C: 2021-03-30-IA: 2020-11-05	4.686061435	3.773242e+00	5.59888087	0.0000000
##	IA: 2021-03-30-IA: 2020-11-05	4.237327547	3.324508e+00	5.15014698	0.0000000
##	C: 2021-04-15-IA: 2020-11-05	4.761142334	3.848323e+00	5.67396177	0.0000000
##	IA: 2021-04-15-IA: 2020-11-05	5.491153181	4.578334e+00	6.40397262	0.0000000
##	IA: 2020-11-14-C: 2020-11-14	0.115135469	-7.976840e-01	1.02795491	1.0000000
##	C: 2020-11-25-C: 2020-11-14	0.668449535	-2.443699e-01	1.58126897	0.5800249
##	IA: 2020-11-25-C: 2020-11-14	-0.149256394	-1.062076e+00	0.76356304	1.0000000
##	C: 2020-12-05-C: 2020-11-14	1.054148837	1.413294e-01	1.96696827	0.0056403
##	IA: 2020-12-05-C: 2020-11-14	-0.327862530	-1.240682e+00	0.58495691	0.9999700
##	C: 2021-01-22-C: 2020-11-14	-0.284245865	-1.197065e+00	0.62857357	0.9999986
##	IA: 2021-01-22-C: 2020-11-14	-0.554607171	-1.467427e+00	0.35821227	0.8972820
##	C: 2021-01-28-C: 2020-11-14	-0.160361739	-1.073181e+00	0.75245770	1.0000000
##	IA: 2021-01-28-C: 2020-11-14	-0.003917621	-9.167371e-01	0.90890182	1.0000000
##	C: 2021-02-05-C: 2020-11-14	0.275476531	-6.373429e-01	1.18829597	0.9999993
##	IA: 2021-02-05-C: 2020-11-14	0.349465073	-5.633544e-01	1.26228451	0.9998934
##	C: 2021-02-12-C: 2020-11-14	1.430758098	5.179387e-01	2.34357754	0.0000026
##	IA: 2021-02-12-C: 2020-11-14	0.861619608	-5.119983e-02	1.77443905	0.0975105
##	C: 2021-02-26-C: 2020-11-14	1.377514589	4.646952e-01	2.29033403	0.0000088
##	IA: 2021-02-26-C: 2020-11-14	1.119746716	2.069273e-01	2.03256615	0.0017682
##	C: 2021-03-15-C: 2020-11-14	1.675140914	7.623215e-01	2.58796035	0.0000000
##	IA: 2021-03-15-C: 2020-11-14	1.877653081	9.648336e-01	2.79047252	0.0000000
##	C: 2021-03-30-C: 2020-11-14	4.211148397	3.298329e+00	5.12396783	0.0000000
##	IA: 2021-03-30-C: 2020-11-14	3.762414509	2.849595e+00	4.67523395	0.0000000
##	C: 2021-04-15-C: 2020-11-14	4.286229297	3.373410e+00	5.19904873	0.0000000
##	IA: 2021-04-15-C: 2020-11-14	5.016240144	4.103421e+00	5.92905958	0.0000000
##	C: 2020-11-25-IA: 2020-11-14	0.553314066	-3.595054e-01	1.46613350	0.8996016
##	IA: 2020-11-25-IA: 2020-11-14	-0.264391863	-1.177211e+00	0.64842757	0.9999997
##	C: 2020-12-05-IA: 2020-11-14	0.939013368	2.619393e-02	1.85183281	0.0345853
##	IA: 2020-12-05-IA: 2020-11-14	-0.442997999	-1.355817e+00	0.46982144	0.9936436
##	C: 2021-01-22-IA: 2020-11-14	-0.399381335	-1.312201e+00	0.51343810	0.9987860
##	IA: 2021-01-22-IA: 2020-11-14	-0.669742640	-1.582562e+00	0.24307680	0.5756444

```

## C:2021-01-28-IA:2020-11-14 -0.275497208 -1.188317e+00 0.63732223 0.9999993
## IA:2021-01-28-IA:2020-11-14 -0.119053090 -1.031873e+00 0.79376635 1.0000000
## C:2021-02-05-IA:2020-11-14 0.160341062 -7.524784e-01 1.07316050 1.0000000
## IA:2021-02-05-IA:2020-11-14 0.234329604 -6.784898e-01 1.14714904 1.0000000
## C:2021-02-12-IA:2020-11-14 1.315622629 4.028032e-01 2.22844207 0.0000347
## IA:2021-02-12-IA:2020-11-14 0.746484139 -1.663353e-01 1.65930358 0.3289855
## C:2021-02-26-IA:2020-11-14 1.262379120 3.495597e-01 2.17519856 0.0001077
## IA:2021-02-26-IA:2020-11-14 1.004611247 9.179181e-02 1.91743068 0.0127678
## C:2021-03-15-IA:2020-11-14 1.560005445 6.471860e-01 2.47282488 0.0000001
## IA:2021-03-15-IA:2020-11-14 1.762517612 8.496982e-01 2.67533705 0.0000000
## C:2021-03-30-IA:2020-11-14 4.096012928 3.183193e+00 5.00883237 0.0000000
## IA:2021-03-30-IA:2020-11-14 3.647279040 2.734460e+00 4.56009848 0.0000000
## C:2021-04-15-IA:2020-11-14 4.171093828 3.258274e+00 5.08391327 0.0000000
## IA:2021-04-15-IA:2020-11-14 4.901104675 3.988285e+00 5.81392411 0.0000000
## IA:2020-11-25-C:2020-11-25 -0.817705929 -1.730525e+00 0.09511351 0.1629088
## C:2020-12-05-C:2020-11-25 0.385699303 -5.271201e-01 1.29851874 0.9993365
## IA:2020-12-05-C:2020-11-25 -0.996312065 -1.909132e+00 -0.08349263 0.0145637
## C:2021-01-22-C:2020-11-25 -0.952695400 -1.865515e+00 -0.03987596 0.0283337
## IA:2021-01-22-C:2020-11-25 -1.223056706 -2.135876e+00 -0.31023727 0.0002413
## C:2021-01-28-C:2020-11-25 -0.828811273 -1.741631e+00 0.08400816 0.1438653
## IA:2021-01-28-C:2020-11-25 -0.672367156 -1.585187e+00 0.24045228 0.5667477
## C:2021-02-05-C:2020-11-25 -0.392973004 -1.305792e+00 0.51984643 0.9990802
## IA:2021-02-05-C:2020-11-25 -0.318984462 -1.231804e+00 0.59383498 0.9999829
## C:2021-02-12-C:2020-11-25 0.762308563 -1.505109e-01 1.67512800 0.2855760
## IA:2021-02-12-C:2020-11-25 0.193170073 -7.196494e-01 1.10598951 1.0000000
## C:2021-02-26-C:2020-11-25 0.709065055 -2.037544e-01 1.62188449 0.4438711
## IA:2021-02-26-C:2020-11-25 0.451297181 -4.615223e-01 1.36411662 0.9916484
## C:2021-03-15-C:2020-11-25 1.006691380 9.387194e-02 1.91951082 0.0123505
## IA:2021-03-15-C:2020-11-25 1.209203546 2.963841e-01 2.12202298 0.0003187
## C:2021-03-30-C:2020-11-25 3.542698862 2.629879e+00 4.45551830 0.0000000
## IA:2021-03-30-C:2020-11-25 3.093964975 2.181146e+00 4.00678441 0.0000000
## C:2021-04-15-C:2020-11-25 3.617779762 2.704960e+00 4.53059920 0.0000000
## IA:2021-04-15-C:2020-11-25 4.347790609 3.434971e+00 5.26061005 0.0000000
## C:2020-12-05-IA:2020-11-25 1.203405231 2.905858e-01 2.11622467 0.0003577
## IA:2020-12-05-IA:2020-11-25 -0.178606136 -1.091426e+00 0.73421330 1.0000000
## C:2021-01-22-IA:2020-11-25 -0.134989471 -1.047809e+00 0.77782997 1.0000000
## IA:2021-01-22-IA:2020-11-25 -0.405350777 -1.318170e+00 0.50746866 0.9984410
## C:2021-01-28-IA:2020-11-25 -0.011105345 -9.239248e-01 0.90171409 1.0000000
## IA:2021-01-28-IA:2020-11-25 0.145338773 -7.674807e-01 1.05815821 1.0000000
## C:2021-02-05-IA:2020-11-25 0.424732925 -4.880865e-01 1.33755236 0.9966691
## IA:2021-02-05-IA:2020-11-25 0.498721467 -4.140980e-01 1.41154090 0.9681347
## C:2021-02-12-IA:2020-11-25 1.580014492 6.671951e-01 2.49283393 0.0000001
## IA:2021-02-12-IA:2020-11-25 1.010876002 9.805656e-02 1.92369544 0.0115485
## C:2021-02-26-IA:2020-11-25 1.526770983 6.139515e-01 2.43959042 0.0000003
## IA:2021-02-26-IA:2020-11-25 1.269003110 3.561837e-01 2.18182255 0.0000937
## C:2021-03-15-IA:2020-11-25 1.824397308 9.115779e-01 2.73721675 0.0000000
## IA:2021-03-15-IA:2020-11-25 2.026909475 1.114090e+00 2.93972891 0.0000000
## C:2021-03-30-IA:2020-11-25 4.360404791 3.447585e+00 5.27322423 0.0000000
## IA:2021-03-30-IA:2020-11-25 3.911670903 2.998851e+00 4.82449034 0.0000000
## C:2021-04-15-IA:2020-11-25 4.435485691 3.522666e+00 5.34830513 0.0000000
## IA:2021-04-15-IA:2020-11-25 5.165496538 4.252677e+00 6.07831598 0.0000000
## IA:2020-12-05-C:2020-12-05 -1.382011367 -2.294831e+00 -0.46919193 0.0000079
## C:2021-01-22-C:2020-12-05 -1.338394703 -2.251214e+00 -0.42557527 0.0000211
## IA:2021-01-22-C:2020-12-05 -1.608756008 -2.521575e+00 -0.69593657 0.0000000

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## C:2021-01-28-C:2020-12-05 -1.214510576 -2.127330e+00 -0.30169114 0.0002866
## IA:2021-01-28-C:2020-12-05 -1.058066459 -1.970886e+00 -0.14524702 0.0052757
## C:2021-02-05-C:2020-12-05 -0.778672306 -1.691492e+00 0.13414713 0.2444946
## IA:2021-02-05-C:2020-12-05 -0.704683764 -1.617503e+00 0.20813567 0.4582008
## C:2021-02-12-C:2020-12-05 0.376609261 -5.362102e-01 1.28942870 0.9995668
## IA:2021-02-12-C:2020-12-05 -0.192529229 -1.105349e+00 0.72029021 1.0000000
## C:2021-02-26-C:2020-12-05 0.323365752 -5.894537e-01 1.23618519 0.9999774
## IA:2021-02-26-C:2020-12-05 0.065597879 -8.472216e-01 0.97841732 1.0000000
## C:2021-03-15-C:2020-12-05 0.620992077 -2.918274e-01 1.53381151 0.7343252
## IA:2021-03-15-C:2020-12-05 0.823504244 -8.931519e-02 1.73632368 0.1527432
## C:2021-03-30-C:2020-12-05 3.156999560 2.244180e+00 4.06981900 0.0000000
## IA:2021-03-30-C:2020-12-05 2.708265672 1.795446e+00 3.62108511 0.0000000
## C:2021-04-15-C:2020-12-05 3.232080460 2.319261e+00 4.14489990 0.0000000
## IA:2021-04-15-C:2020-12-05 3.962091307 3.049272e+00 4.87491074 0.0000000
## C:2021-01-22-IA:2020-12-05 0.043616665 -8.692028e-01 0.95643610 1.0000000
## IA:2021-01-22-IA:2020-12-05 -0.226744641 -1.139564e+00 0.68607480 1.0000000
## C:2021-01-28-IA:2020-12-05 0.167500791 -7.453186e-01 1.08032023 1.0000000
## IA:2021-01-28-IA:2020-12-05 0.323944909 -5.888745e-01 1.23676435 0.9999765
## C:2021-02-05-IA:2020-12-05 0.603339061 -3.094804e-01 1.51615850 0.7853993
## IA:2021-02-05-IA:2020-12-05 0.677327603 -2.354918e-01 1.59014704 0.5499242
## C:2021-02-12-IA:2020-12-05 1.758620628 8.458012e-01 2.67144007 0.0000000
## IA:2021-02-12-IA:2020-12-05 1.189482138 2.766627e-01 2.10230158 0.0004708
## C:2021-02-26-IA:2020-12-05 1.705377119 7.925577e-01 2.61819656 0.0000000
## IA:2021-02-26-IA:2020-12-05 1.447609246 5.347898e-01 2.36042868 0.0000017
## C:2021-03-15-IA:2020-12-05 2.003003444 1.090184e+00 2.91582288 0.0000000
## IA:2021-03-15-IA:2020-12-05 2.205515611 1.292696e+00 3.11833505 0.0000000
## C:2021-03-30-IA:2020-12-05 4.539010927 3.626191e+00 5.45183036 0.0000000
## IA:2021-03-30-IA:2020-12-05 4.090277039 3.177458e+00 5.00309648 0.0000000
## C:2021-04-15-IA:2020-12-05 4.614091827 3.701272e+00 5.52691126 0.0000000
## IA:2021-04-15-IA:2020-12-05 5.344102674 4.431283e+00 6.25692211 0.0000000
## IA:2021-01-22-C:2021-01-22 -0.270361305 -1.183181e+00 0.64245813 0.9999995
## C:2021-01-28-C:2021-01-22 0.123884127 -7.889353e-01 1.03670356 1.0000000
## IA:2021-01-28-C:2021-01-22 0.280328244 -6.324912e-01 1.19314768 0.9999990
## C:2021-02-05-C:2021-01-22 0.559722396 -3.530970e-01 1.47254183 0.8877693
## IA:2021-02-05-C:2021-01-22 0.633710938 -2.791085e-01 1.54653038 0.6948788
## C:2021-02-12-C:2021-01-22 1.715003963 8.021845e-01 2.62782340 0.0000000
## IA:2021-02-12-C:2021-01-22 1.145865474 2.330460e-01 2.05868491 0.0010885
## C:2021-02-26-C:2021-01-22 1.661760455 7.489410e-01 2.57457989 0.0000000
## IA:2021-02-26-C:2021-01-22 1.403992581 4.911731e-01 2.31681202 0.0000048
## C:2021-03-15-C:2021-01-22 1.959386780 1.046567e+00 2.87220622 0.0000000
## IA:2021-03-15-C:2021-01-22 2.161898947 1.249080e+00 3.07471838 0.0000000
## C:2021-03-30-C:2021-01-22 4.495394263 3.582575e+00 5.40821370 0.0000000
## IA:2021-03-30-C:2021-01-22 4.046660375 3.133841e+00 4.95947981 0.0000000
## C:2021-04-15-C:2021-01-22 4.570475162 3.657656e+00 5.48329460 0.0000000
## IA:2021-04-15-C:2021-01-22 5.300486009 4.387667e+00 6.21330545 0.0000000
## C:2021-01-28-IA:2021-01-22 0.394245432 -5.185740e-01 1.30706487 0.9990274
## IA:2021-01-28-IA:2021-01-22 0.550689550 -3.621299e-01 1.46350899 0.9042042
## C:2021-02-05-IA:2021-01-22 0.830083702 -8.273574e-02 1.74290314 0.1417965
## IA:2021-02-05-IA:2021-01-22 0.904072244 -8.747194e-03 1.81689168 0.0563264
## C:2021-02-12-IA:2021-01-22 1.985365269 1.072546e+00 2.89818471 0.0000000
## IA:2021-02-12-IA:2021-01-22 1.416226779 5.034073e-01 2.32904622 0.0000036
## C:2021-02-26-IA:2021-01-22 1.932121760 1.019302e+00 2.84494120 0.0000000
## IA:2021-02-26-IA:2021-01-22 1.674353887 7.615344e-01 2.58717332 0.0000000
## C:2021-03-15-IA:2021-01-22 2.229748085 1.316929e+00 3.14256752 0.0000000

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##	IA: 2021-03-15-IA: 2021-01-22	2.432260252	1.519441e+00	3.34507969	0.0000000
##	C: 2021-03-30-IA: 2021-01-22	4.765755568	3.852936e+00	5.67857501	0.0000000
##	IA: 2021-03-30-IA: 2021-01-22	4.317021680	3.404202e+00	5.22984112	0.0000000
##	C: 2021-04-15-IA: 2021-01-22	4.840836468	3.928017e+00	5.75365591	0.0000000
##	IA: 2021-04-15-IA: 2021-01-22	5.570847315	4.658028e+00	6.48366675	0.0000000
##	IA: 2021-01-28-C: 2021-01-28	0.156444117	-7.563753e-01	1.06926355	1.0000000
##	C: 2021-02-05-C: 2021-01-28	0.435838269	-4.769812e-01	1.34865771	0.9950282
##	IA: 2021-02-05-C: 2021-01-28	0.509826811	-4.029926e-01	1.42264625	0.9584842
##	C: 2021-02-12-C: 2021-01-28	1.591119837	6.783004e-01	2.50393927	0.0000001
##	IA: 2021-02-12-C: 2021-01-28	1.021981347	1.091619e-01	1.93480078	0.0096456
##	C: 2021-02-26-C: 2021-01-28	1.537876328	6.250569e-01	2.45069577	0.0000002
##	IA: 2021-02-26-C: 2021-01-28	1.280108455	3.672890e-01	2.19292789	0.0000742
##	C: 2021-03-15-C: 2021-01-28	1.835502653	9.226832e-01	2.74832209	0.0000000
##	IA: 2021-03-15-C: 2021-01-28	2.038014820	1.125195e+00	2.95083426	0.0000000
##	C: 2021-03-30-C: 2021-01-28	4.371510136	3.458691e+00	5.28432957	0.0000000
##	IA: 2021-03-30-C: 2021-01-28	3.922776248	3.009957e+00	4.83559569	0.0000000
##	C: 2021-04-15-C: 2021-01-28	4.446591035	3.533772e+00	5.35941047	0.0000000
##	IA: 2021-04-15-C: 2021-01-28	5.176601882	4.263782e+00	6.08942132	0.0000000
##	C: 2021-02-05-IA: 2021-01-28	0.279394152	-6.334253e-01	1.19221359	0.9999990
##	IA: 2021-02-05-IA: 2021-01-28	0.353382694	-5.594367e-01	1.26620213	0.9998678
##	C: 2021-02-12-IA: 2021-01-28	1.434675719	5.218563e-01	2.34749516	0.0000023
##	IA: 2021-02-12-IA: 2021-01-28	0.865537229	-4.728221e-02	1.77835667	0.0928903
##	C: 2021-02-26-IA: 2021-01-28	1.381432211	4.686128e-01	2.29425165	0.0000080
##	IA: 2021-02-26-IA: 2021-01-28	1.123664337	2.108449e-01	2.03648377	0.0016455
##	C: 2021-03-15-IA: 2021-01-28	1.679058536	7.662391e-01	2.59187797	0.0000000
##	IA: 2021-03-15-IA: 2021-01-28	1.881570702	9.687513e-01	2.79439014	0.0000000
##	C: 2021-03-30-IA: 2021-01-28	4.215066019	3.302247e+00	5.12788546	0.0000000
##	IA: 2021-03-30-IA: 2021-01-28	3.766332131	2.853513e+00	4.67915157	0.0000000
##	C: 2021-04-15-IA: 2021-01-28	4.290146918	3.377327e+00	5.20296636	0.0000000
##	IA: 2021-04-15-IA: 2021-01-28	5.020157765	4.107338e+00	5.93297720	0.0000000
##	IA: 2021-02-05-C: 2021-02-05	0.073988542	-8.388309e-01	0.98680798	1.0000000
##	C: 2021-02-12-C: 2021-02-05	1.155281567	2.424621e-01	2.06810100	0.0009110
##	IA: 2021-02-12-C: 2021-02-05	0.586143077	-3.266764e-01	1.49896251	0.8301466
##	C: 2021-02-26-C: 2021-02-05	1.102038058	1.892186e-01	2.01485750	0.0024388
##	IA: 2021-02-26-C: 2021-02-05	0.844270185	-6.854925e-02	1.75708962	0.1202522
##	C: 2021-03-15-C: 2021-02-05	1.399664383	4.868449e-01	2.31248382	0.0000053
##	IA: 2021-03-15-C: 2021-02-05	1.602176550	6.893571e-01	2.51499599	0.0000000
##	C: 2021-03-30-C: 2021-02-05	3.935671866	3.022852e+00	4.84849130	0.0000000
##	IA: 2021-03-30-C: 2021-02-05	3.486937978	2.574119e+00	4.39975742	0.0000000
##	C: 2021-04-15-C: 2021-02-05	4.010752766	3.097933e+00	4.92357220	0.0000000
##	IA: 2021-04-15-C: 2021-02-05	4.740763613	3.827944e+00	5.65358305	0.0000000
##	C: 2021-02-12-IA: 2021-02-05	1.081293025	1.684736e-01	1.99411246	0.0035267
##	IA: 2021-02-12-IA: 2021-02-05	0.512154535	-4.006649e-01	1.42497397	0.9562110
##	C: 2021-02-26-IA: 2021-02-05	1.028049517	1.152301e-01	1.94086895	0.0087318
##	IA: 2021-02-26-IA: 2021-02-05	0.770281643	-1.425378e-01	1.68310108	0.2650610
##	C: 2021-03-15-IA: 2021-02-05	1.325675841	4.128564e-01	2.23849528	0.0000278
##	IA: 2021-03-15-IA: 2021-02-05	1.528188008	6.153686e-01	2.44100745	0.0000002
##	C: 2021-03-30-IA: 2021-02-05	3.861683324	2.948864e+00	4.77450276	0.0000000
##	IA: 2021-03-30-IA: 2021-02-05	3.412949436	2.500130e+00	4.32576887	0.0000000
##	C: 2021-04-15-IA: 2021-02-05	3.936764224	3.023945e+00	4.84958366	0.0000000
##	IA: 2021-04-15-IA: 2021-02-05	4.666775071	3.753956e+00	5.57959451	0.0000000
##	IA: 2021-02-12-C: 2021-02-12	-0.569138490	-1.481958e+00	0.34368095	0.8688521
##	C: 2021-02-26-C: 2021-02-12	-0.053243509	-9.660629e-01	0.85957593	1.0000000
##	IA: 2021-02-26-C: 2021-02-12	-0.311011382	-1.223831e+00	0.60180806	0.9999900


```
## C:2021-03-15-C:2021-02-12 0.244382816 -6.684366e-01 1.15720225 1.0000000
## IA:2021-03-15-C:2021-02-12 0.446894983 -4.659245e-01 1.35971442 0.9927631
## C:2021-03-30-C:2021-02-12 2.780390299 1.867571e+00 3.69320974 0.0000000
## IA:2021-03-30-C:2021-02-12 2.331656411 1.418837e+00 3.24447585 0.0000000
## C:2021-04-15-C:2021-02-12 2.855471199 1.942652e+00 3.76829064 0.0000000
## IA:2021-04-15-C:2021-02-12 3.585482046 2.672663e+00 4.49830148 0.0000000
## C:2021-02-26-IA:2021-02-12 0.515894981 -3.969245e-01 1.42871442 0.9523668
## IA:2021-02-26-IA:2021-02-12 0.258127108 -6.546923e-01 1.17094655 0.9999998
## C:2021-03-15-IA:2021-02-12 0.813521306 -9.929813e-02 1.72634074 0.1705524
## IA:2021-03-15-IA:2021-02-12 1.016033473 1.032140e-01 1.92885291 0.0106257
## C:2021-03-30-IA:2021-02-12 3.349528789 2.436709e+00 4.26234823 0.0000000
## IA:2021-03-30-IA:2021-02-12 2.900794901 1.987975e+00 3.81361434 0.0000000
## C:2021-04-15-IA:2021-02-12 3.424609689 2.511790e+00 4.33742913 0.0000000
## IA:2021-04-15-IA:2021-02-12 4.154620536 3.241801e+00 5.06743997 0.0000000
## IA:2021-02-26-C:2021-02-26 -0.257767873 -1.170587e+00 0.65505156 0.9999998
## C:2021-03-15-C:2021-02-26 0.297626325 -6.151931e-01 1.21044576 0.9999961
## IA:2021-03-15-C:2021-02-26 0.500138492 -4.126809e-01 1.41295793 0.9670090
## C:2021-03-30-C:2021-02-26 2.833633808 1.920814e+00 3.74645325 0.0000000
## IA:2021-03-30-C:2021-02-26 2.384899920 1.472080e+00 3.29771936 0.0000000
## C:2021-04-15-C:2021-02-26 2.908714707 1.995895e+00 3.82153414 0.0000000
## IA:2021-04-15-C:2021-02-26 3.638725555 2.725906e+00 4.55154499 0.0000000
## C:2021-03-15-IA:2021-02-26 0.555394198 -3.574252e-01 1.46821364 0.8958534
## IA:2021-03-15-IA:2021-02-26 0.757906365 -1.549131e-01 1.67072580 0.2972996
## C:2021-03-30-IA:2021-02-26 3.091401681 2.178582e+00 4.00422112 0.0000000
## IA:2021-03-30-IA:2021-02-26 2.642667793 1.729848e+00 3.55548723 0.0000000
## C:2021-04-15-IA:2021-02-26 3.166482581 2.253663e+00 4.07930202 0.0000000
## IA:2021-04-15-IA:2021-02-26 3.896493428 2.983674e+00 4.80931287 0.0000000
## IA:2021-03-15-C:2021-03-15 0.202512167 -7.103073e-01 1.11533160 1.0000000
## C:2021-03-30-C:2021-03-15 2.536007483 1.623188e+00 3.44882692 0.0000000
## IA:2021-03-30-C:2021-03-15 2.087273595 1.174454e+00 3.00009303 0.0000000
## C:2021-04-15-C:2021-03-15 2.611088383 1.698269e+00 3.52390782 0.0000000
## IA:2021-04-15-C:2021-03-15 3.341099230 2.428280e+00 4.25391867 0.0000000
## C:2021-03-30-IA:2021-03-15 2.333495316 1.420676e+00 3.24631475 0.0000000
## IA:2021-03-30-IA:2021-03-15 1.884761428 9.719420e-01 2.79758087 0.0000000
## C:2021-04-15-IA:2021-03-15 2.408576216 1.495757e+00 3.32139565 0.0000000
## IA:2021-04-15-IA:2021-03-15 3.138587063 2.225768e+00 4.05140650 0.0000000
## IA:2021-03-30-C:2021-03-30 -0.448733888 -1.361553e+00 0.46408555 0.9923135
## C:2021-04-15-C:2021-03-30 0.075080900 -8.377385e-01 0.98790034 1.0000000
## IA:2021-04-15-C:2021-03-30 0.805091747 -1.077277e-01 1.71791118 0.1867438
## C:2021-04-15-IA:2021-03-30 0.523814788 -3.890046e-01 1.43663422 0.9434194
## IA:2021-04-15-IA:2021-03-30 1.253825635 3.410062e-01 2.16664507 0.0001286
## IA:2021-04-15-C:2021-04-15 0.730010847 -1.828086e-01 1.64283028 0.3776740
```

Efecto de la IA sobre los niveles de glucosa plasmática

```
t2way(Glucosa ~ Condicion + Fechas + Condicion:Fechas, data = b,)
```

```
## Call:
## t2way(formula = Glucosa ~ Condicion + Fechas + Condicion:Fechas,
##       data = b)
##
##               value p.value
## Condicion      2.4961   0.119
## Fechas        335.2355   0.001
## Condicion:Fechas 31.5386   0.027
```

```
anovaglucosa <- aov(Glucosa ~ Condicion + Fechas + Condicion:Fechas, data = b)
anova(anovaglucosa)
```

```
## Analysis of Variance Table
```

```
##
```

```
## Response: Glucosa
```

```
##           Df Sum Sq Mean Sq F value    Pr(>F)
## Condicion      1    0.00    0.000  0.0000 0.99940
## Fechas        14  517.82   36.987  23.9430 < 2e-16 ***
## Condicion:Fechas 14   40.28    2.877   1.8623 0.02861 *
## Residuals     423  653.45    1.545
```

```
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
TukeyHSD(anovaglucosa)
```

```
## Tukey multiple comparisons of means
```

```
## 95% family-wise confidence level
```

```
##
```

```
## Fit: aov(formula = Glucosa ~ Condicion + Fechas + Condicion:Fechas, data = b)
```

```
##
```

```
## $Condicion
```

```
##           diff          lwr          upr          p adj
## IA-C -8.834111e-05 -0.229781 0.2296043 0.9993972
```

```
##
```

```
## $Fechas
```

```
##           diff          lwr          upr          p adj
## 2020-10-14-2020-10-05 -0.563007228 -2.2311188 1.105104387 0.9981879
## 2020-10-26-2020-10-05 -0.291743130 -1.9598547 1.376368485 0.9999994
## 2020-11-05-2020-10-05 -0.198704816 -1.7204102 1.323000537 1.0000000
## 2020-11-14-2020-10-05 -0.169572910 -1.6587053 1.319559472 1.0000000
## 2020-11-25-2020-10-05 -0.614987305 -2.0780180 0.848043364 0.9838089
## 2020-12-05-2020-10-05 -0.336178794 -1.7402711 1.067913494 0.9999658
## 2021-01-22-2020-10-05 -0.975857713 -2.4052510 0.453535571 0.5693115
## 2021-01-28-2020-10-05 -1.785145077 -3.2089219 -0.361368292 0.0021578
## 2021-02-05-2020-10-05 -0.283608368 -1.7073852 1.140168417 0.9999966
## 2021-02-12-2020-10-05 0.204809916 -1.1908324 1.600452224 0.9999999
## 2021-02-26-2020-10-05 -1.607177897 -3.0069432 -0.207412560 0.0088914
## 2021-03-15-2020-10-05 -2.275558744 -3.6712011 -0.879916436 0.0000049
## 2021-03-30-2020-10-05 -2.842778658 -4.2384210 -1.447136350 0.0000000
## 2021-04-15-2020-10-05 -2.901167746 -4.2968101 -1.505525438 0.0000000
## 2020-10-26-2020-10-14 0.271264098 -1.3314057 1.873933898 0.9999996
## 2020-11-05-2020-10-14 0.364302412 -1.0853670 1.813971790 0.9999383
## 2020-11-14-2020-10-14 0.393434318 -1.0220053 1.808873959 0.9997952
## 2020-11-25-2020-10-14 -0.051980077 -1.4399328 1.335972683 1.0000000
## 2020-12-05-2020-10-14 0.226828434 -1.0988523 1.552509119 0.9999995
## 2021-01-22-2020-10-14 -0.412850485 -1.7652999 0.939598880 0.9993992
## 2021-01-28-2020-10-14 -1.222137850 -2.5686498 0.124374111 0.1232893
## 2021-02-05-2020-10-14 0.279398860 -1.0671131 1.625910820 0.9999943
## 2021-02-12-2020-10-14 0.767817144 -0.5489105 2.084544746 0.8037279
## 2021-02-26-2020-10-14 -1.044170669 -2.3652676 0.276926271 0.3106690
## 2021-03-15-2020-10-14 -1.712551516 -3.0292791 -0.395823914 0.0011020
## 2021-03-30-2020-10-14 -2.279771430 -3.5964990 -0.963043828 0.0000007
## 2021-04-15-2020-10-14 -2.338160519 -3.6548881 -1.021432916 0.0000003
```

```

## 2020-11-05-2020-10-26 0.093038314 -1.3566311 1.542707692 1.0000000
## 2020-11-14-2020-10-26 0.122170220 -1.2932694 1.537609861 1.0000000
## 2020-11-25-2020-10-26 -0.323244175 -1.7111969 1.064708585 0.9999757
## 2020-12-05-2020-10-26 -0.044435664 -1.3701164 1.281245021 1.0000000
## 2021-01-22-2020-10-26 -0.684114583 -2.0365639 0.668334782 0.9242173
## 2021-01-28-2020-10-26 -1.493401948 -2.8399139 -0.146889987 0.0144620
## 2021-02-05-2020-10-26 0.008134761 -1.3383772 1.354646722 1.0000000
## 2021-02-12-2020-10-26 0.496553046 -0.8201746 1.813280648 0.9942806
## 2021-02-26-2020-10-26 -1.315434767 -2.6365317 0.005662173 0.0523020
## 2021-03-15-2020-10-26 -1.983815614 -3.3005432 -0.667088012 0.0000426
## 2021-03-30-2020-10-26 -2.551035528 -3.8677631 -1.234307926 0.0000000
## 2021-04-15-2020-10-26 -2.609424617 -3.9261522 -1.292697014 0.0000000
## 2020-11-14-2020-11-05 0.029131906 -1.2104084 1.268672224 1.0000000
## 2020-11-25-2020-11-05 -0.416282489 -1.6243403 0.791775326 0.9977398
## 2020-12-05-2020-11-05 -0.137473978 -1.2734406 0.998492615 1.0000000
## 2021-01-22-2020-11-05 -0.777152897 -1.9442476 0.389941832 0.6121722
## 2021-01-28-2020-11-05 -1.586440261 -2.7466494 -0.426231107 0.0004042
## 2021-02-05-2020-11-05 -0.084903552 -1.2451127 1.075305602 1.0000000
## 2021-02-12-2020-11-05 0.403514732 -0.7219907 1.529020129 0.9965788
## 2021-02-26-2020-11-05 -1.408473081 -2.5390870 -0.277859112 0.0024157
## 2021-03-15-2020-11-05 -2.076853928 -3.2023593 -0.951348531 0.0000001
## 2021-03-30-2020-11-05 -2.644073842 -3.7695792 -1.518568445 0.0000000
## 2021-04-15-2020-11-05 -2.702462930 -3.8279683 -1.576957533 0.0000000
## 2020-11-25-2020-11-14 -0.445414395 -1.6121756 0.721346831 0.9935406
## 2020-12-05-2020-11-14 -0.166605884 -1.2585528 0.925341080 0.9999999
## 2021-01-22-2020-11-14 -0.806284803 -1.9305793 0.318009722 0.4816169
## 2021-01-28-2020-11-14 -1.615572167 -2.7327173 -0.498426987 0.0001161
## 2021-02-05-2020-11-14 -0.114035458 -1.2311806 1.003109722 1.0000000
## 2021-02-12-2020-11-14 0.374382826 -0.7066771 1.455442710 0.9976175
## 2021-02-26-2020-11-14 -1.437604986 -2.5239825 -0.351227511 0.0007882
## 2021-03-15-2020-11-14 -2.105985834 -3.1870457 -1.024925950 0.0000000
## 2021-03-30-2020-11-14 -2.673205748 -3.7542656 -1.592145864 0.0000000
## 2021-04-15-2020-11-14 -2.731594836 -3.8126547 -1.650534953 0.0000000
## 2020-12-05-2020-11-25 0.278808511 -0.7772652 1.334882210 0.9998885
## 2021-01-22-2020-11-25 -0.360870408 -1.4503573 0.728616473 0.9985197
## 2021-01-28-2020-11-25 -1.170157772 -2.2522654 -0.088050181 0.0201556
## 2021-02-05-2020-11-25 0.331378937 -0.7507287 1.413486528 0.9993773
## 2021-02-12-2020-11-25 0.819797221 -0.2250157 1.864610102 0.3228301
## 2021-02-26-2020-11-25 -0.992190592 -2.0425046 0.058123411 0.0873647
## 2021-03-15-2020-11-25 -1.660571439 -2.7053843 -0.615758557 0.0000102
## 2021-03-30-2020-11-25 -2.227791353 -3.2726042 -1.182978472 0.0000000
## 2021-04-15-2020-11-25 -2.286180441 -3.3309933 -1.241367560 0.0000000
## 2021-01-22-2020-12-05 -0.639678919 -1.6486378 0.369279990 0.6911461
## 2021-01-28-2020-12-05 -1.448966283 -2.4499524 -0.447980142 0.0001135
## 2021-02-05-2020-12-05 0.052570426 -0.9484157 1.053556567 1.0000000
## 2021-02-12-2020-12-05 0.540988710 -0.4195582 1.501535623 0.8412319
## 2021-02-26-2020-12-05 -1.270999102 -2.2375269 -0.304471338 0.0008914
## 2021-03-15-2020-12-05 -1.939379949 -2.8999269 -0.978833036 0.0000000
## 2021-03-30-2020-12-05 -2.506599864 -3.4671468 -1.546052951 0.0000000
## 2021-04-15-2020-12-05 -2.564988952 -3.5255359 -1.604442039 0.0000000
## 2021-01-28-2021-01-22 -0.809287364 -1.8454646 0.226889870 0.3305855
## 2021-02-05-2021-01-22 0.692249345 -0.3439279 1.728426579 0.6066105
## 2021-02-12-2021-01-22 1.180667629 0.1835015 2.177833803 0.0055887
## 2021-02-26-2021-01-22 -0.631320184 -1.6342489 0.371608490 0.7019467

```

```

## 2021-03-15-2021-01-22 -1.299701031 -2.2968672 -0.302534857 0.0010579
## 2021-03-30-2021-01-22 -1.866920945 -2.8640871 -0.869754771 0.0000000
## 2021-04-15-2021-01-22 -1.925310033 -2.9224762 -0.928143860 0.0000000
## 2021-02-05-2021-01-28 1.501536709 0.4731212 2.529952207 0.0000925
## 2021-02-12-2021-01-28 1.989954994 1.0008566 2.979053347 0.0000000
## 2021-02-26-2021-01-28 0.177967181 -0.8169404 1.172874764 0.9999991
## 2021-03-15-2021-01-28 -0.490413666 -1.4795120 0.498684687 0.9348409
## 2021-03-30-2021-01-28 -1.057633580 -2.0467319 -0.068535227 0.0232116
## 2021-04-15-2021-01-28 -1.116022669 -2.1051210 -0.126924315 0.0114135
## 2021-02-12-2021-02-05 0.488418284 -0.5006801 1.477516638 0.9368481
## 2021-02-26-2021-02-05 -1.323569528 -2.3184771 -0.328661945 0.0007095
## 2021-03-15-2021-02-05 -1.991950375 -2.9810487 -1.002852022 0.0000000
## 2021-03-30-2021-02-05 -2.559170290 -3.5482686 -1.570071936 0.0000000
## 2021-04-15-2021-02-05 -2.617559378 -3.6066577 -1.628461025 0.0000000
## 2021-02-26-2021-02-12 -1.811987813 -2.7661986 -0.857777030 0.0000000
## 2021-03-15-2021-02-12 -2.480368660 -3.4285209 -1.532216420 0.0000000
## 2021-03-30-2021-02-12 -3.047588574 -3.9957408 -2.099436334 0.0000000
## 2021-04-15-2021-02-12 -3.105977663 -4.0541299 -2.157825423 0.0000000
## 2021-03-15-2021-02-26 -0.668380847 -1.6225916 0.285829935 0.5239339
## 2021-03-30-2021-02-26 -1.235600761 -2.1898115 -0.281389979 0.0011980
## 2021-04-15-2021-02-26 -1.293989850 -2.2482006 -0.339779067 0.0004806
## 2021-03-30-2021-03-15 -0.567219914 -1.5153722 0.380932326 0.7725759
## 2021-04-15-2021-03-15 -0.625609003 -1.5737612 0.322543237 0.6274945
## 2021-04-15-2021-03-30 -0.058389088 -1.0065413 0.889763152 1.0000000
##
## $`Condicion:Fechas`
##
## diff lwr upr p adj
## IA:2020-10-05-C:2020-10-05 1.087755952 -1.621202598 3.796714503 0.9997155
## C:2020-10-14-C:2020-10-05 0.569850340 -2.040567437 3.180268117 1.0000000
## IA:2020-10-14-C:2020-10-05 -0.608108844 -3.218526621 2.002308933 1.0000000
## C:2020-10-26-C:2020-10-05 0.382113095 -2.151885598 2.916111788 1.0000000
## IA:2020-10-26-C:2020-10-05 0.078845238 -2.630113313 2.787803789 1.0000000
## C:2020-11-05-C:2020-10-05 0.212790043 -2.168517460 2.594097546 1.0000000
## IA:2020-11-05-C:2020-10-05 0.477556277 -1.903751226 2.858863780 1.0000000
## C:2020-11-14-C:2020-10-05 -0.199569597 -2.515323936 2.116184742 1.0000000
## IA:2020-11-14-C:2020-10-05 0.996006298 -1.350020624 3.342033221 0.9992266
## C:2020-11-25-C:2020-10-05 -0.140007918 -2.406485251 2.126469415 1.0000000
## IA:2020-11-25-C:2020-10-05 0.008395839 -2.307358501 2.324150178 1.0000000
## C:2020-12-05-C:2020-10-05 0.328622896 -1.855409311 2.512655102 1.0000000
## IA:2020-12-05-C:2020-10-05 0.073344408 -2.138510987 2.285199802 1.0000000
## C:2021-01-22-C:2020-10-05 -0.877775238 -3.075030767 1.319480292 0.9997413
## IA:2021-01-22-C:2020-10-05 0.173044218 -2.116443627 2.462532063 1.0000000
## C:2021-01-28-C:2020-10-05 -1.235385025 -3.432640554 0.961870504 0.9535822
## IA:2021-01-28-C:2020-10-05 -1.248705952 -3.515183285 1.017771381 0.9634060
## C:2021-02-05-C:2020-10-05 0.327312675 -1.900747005 2.555372355 1.0000000
## IA:2021-02-05-C:2020-10-05 0.193226541 -2.034833139 2.421286221 1.0000000
## C:2021-02-12-C:2020-10-05 1.125524784 -1.058507423 3.309556990 0.9843528
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## C:2021-03-15-C:2020-10-05 -1.946554430 -4.130586636 0.237477777 0.1694714
## IA:2021-03-15-C:2020-10-05 -1.516807105 -3.700839312 0.667225101 0.6901276
## C:2021-03-30-C:2020-10-05 -1.975308562 -4.159340768 0.208723645 0.1484129
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## C:2021-04-15-C:2020-10-05 -2.240129762 -4.424161968 -0.056097555 0.0360522
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## C:2020-10-14-IA:2020-10-05 -0.517905612 -3.128323389 2.092512165 1.0000000
## IA:2020-10-14-IA:2020-10-05 -1.695864796 -4.306282573 0.914552981 0.8093836
## C:2020-10-26-IA:2020-10-05 -0.705642857 -3.239641550 1.828355836 0.9999999
## IA:2020-10-26-IA:2020-10-05 -1.008910714 -3.717869265 1.700047836 0.9999323
## C:2020-11-05-IA:2020-10-05 -0.874965909 -3.256273412 1.506341594 0.9999482
## IA:2020-11-05-IA:2020-10-05 -0.610199675 -2.991507178 1.771107827 1.0000000
## C:2020-11-14-IA:2020-10-05 -1.287325549 -3.603079889 1.028428790 0.9593113
## IA:2020-11-14-IA:2020-10-05 -0.091749654 -2.437776577 2.254277269 1.0000000
## C:2020-11-25-IA:2020-10-05 -1.227763870 -3.494241203 1.038713463 0.9702031
## IA:2020-11-25-IA:2020-10-05 -1.079360114 -3.395114453 1.236394226 0.9963752
## C:2020-12-05-IA:2020-10-05 -0.759133056 -2.943165263 1.424899150 0.9999832
## IA:2020-12-05-IA:2020-10-05 -1.014411545 -3.226266939 1.197443850 0.9971912
## C:2021-01-22-IA:2020-10-05 -1.965531190 -4.162786719 0.231724340 0.1640404
## IA:2021-01-22-IA:2020-10-05 -0.914711735 -3.204199580 1.374776110 0.9997408
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## IA:2021-01-28-IA:2020-10-05 -2.336461905 -4.602939238 -0.069984572 0.0336895
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## IA:2021-04-15-IA:2020-10-05 -3.562205731 -5.746237937 -1.378173524 0.0000007
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## IA:2021-02-26-C:2020-10-14 -1.562794794 -3.623333854 0.497744267 0.4957443
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## C:2021-02-05-IA:2020-10-14 0.935421519 -1.171726905 3.042569942 0.9983467
## IA:2021-02-05-IA:2020-10-14 0.801335384 -1.305813039 2.908483808 0.9998982
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## C:2020-11-05-IA:2020-10-26 0.133944805 -2.247362698 2.515252308 1.0000000
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## C:2021-02-26-IA:2020-10-26 -1.216205870 -3.413461399 0.981049660 0.9613258
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## C:2021-03-15-IA:2020-10-26 -2.025399668 -4.209431874 0.158632539 0.1165700
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## C:2021-03-30-IA:2020-10-26 -2.054153800 -4.238186006 0.129878407 0.1008947
## IA:2021-03-30-IA:2020-10-26 -2.701338040 -4.885370246 -0.517305833 0.0015347
## C:2021-04-15-IA:2020-10-26 -2.318975000 -4.503007207 -0.134942793 0.0222553
## IA:2021-04-15-IA:2020-10-26 -2.553295017 -4.737327223 -0.369262810 0.0045965
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## IA:2021-01-22-IA:2020-11-05 -0.304512059 -2.194994428 1.585970309 1.0000000
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## IA:2021-01-28-C:2020-11-14 -1.049136355 -2.827107455 0.728834744 0.9213419
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## IA:2021-02-26-C:2020-11-14 -0.793374856 -2.464978401 0.878228688 0.9952053
## C:2021-03-15-C:2020-11-14 -1.746984833 -3.418588377 -0.075381288 0.0279056
## IA:2021-03-15-C:2020-11-14 -1.317237508 -2.988841053 0.354366036 0.4079472
## C:2021-03-30-C:2020-11-14 -1.775738965 -3.447342509 -0.104135420 0.0220999
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## IA:2021-04-15-C:2020-11-14 -2.274880181 -3.946483726 -0.603276637 0.0001725
## C:2020-11-25-IA:2020-11-14 -1.136014217 -2.953238857 0.681210424 0.8626316
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## IA:2021-01-28-IA:2020-11-14 -2.244712251 -4.061936891 -0.427487611 0.0015767
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## C:2021-03-15-IA:2020-11-14 -2.942560728 -4.655856550 -1.229264907 0.0000001
## IA:2021-03-15-IA:2020-11-14 -2.512813404 -4.226109225 -0.799517582 0.0000227
## C:2021-03-30-IA:2020-11-14 -2.971314860 -4.684610682 -1.258019039 0.0000001
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## C:2021-04-15-IA:2020-11-14 -3.236136060 -4.949431882 -1.522840239 0.0000000
## IA:2021-04-15-IA:2020-11-14 -3.470456077 -5.183751898 -1.757160256 0.0000000
## IA:2020-11-25-C:2020-11-25 0.148403757 -1.629567343 1.926374856 1.0000000
## C:2020-12-05-C:2020-11-25 0.468630814 -1.134010678 2.071272305 0.9999996
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## C:2021-02-12-C:2020-11-25 1.265532702 -0.337108790 2.868174193 0.4032344
## IA:2021-02-12-C:2020-11-25 0.511858919 -1.090782572 2.114500411 0.9999972
## C:2021-02-26-C:2020-11-25 -0.997352714 -2.617968317 0.623262889 0.8810008
## IA:2021-02-26-C:2020-11-25 -0.852936535 -2.455578027 0.749704956 0.9761340
## C:2021-03-15-C:2020-11-25 -1.806546512 -3.409188003 -0.203905020 0.0087126
## IA:2021-03-15-C:2020-11-25 -1.376799187 -2.979440679 0.225842304 0.2299996
## C:2021-03-30-C:2020-11-25 -1.835300644 -3.437942135 -0.232659152 0.0066475
## IA:2021-03-30-C:2020-11-25 -2.482484884 -4.085126375 -0.879843392 0.0000042
## C:2021-04-15-C:2020-11-25 -2.100121844 -3.702763335 -0.497480352 0.0004311
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## C:2021-01-22-IA:2020-11-25 -0.886171076 -2.575014939 0.802672786 0.9801222
## IA:2021-01-22-IA:2020-11-25 0.164648379 -1.642563928 1.971860686 1.0000000
## C:2021-01-28-IA:2020-11-25 -1.243780864 -2.932624726 0.445062999 0.5632697
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## C:2021-02-05-IA:2020-11-25 0.318916836 -1.409814394 2.047648067 1.0000000
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## C:2021-02-12-IA:2020-11-25 1.117128945 -0.554474600 2.788732489 0.7627965
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## C:2021-03-15-IA:2020-11-25 -1.954950268 -3.626553813 -0.283346724 0.0045655
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## C:2021-03-30-IA:2020-11-25 -1.983704400 -3.655307945 -0.312100856 0.0034799
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## C:2021-03-30-C:2020-12-05 -2.303931458 -3.787689163 -0.820173752 0.0000039
## IA:2021-03-30-C:2020-12-05 -2.951115698 -4.434873403 -1.467357992 0.0000000

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## C:2021-04-15-C:2020-12-05 -2.568752658 -4.052510363 -1.084994952 0.0000001
## IA:2021-04-15-C:2020-12-05 -2.803072674 -4.286830380 -1.319314969 0.0000000
## C:2021-01-22-IA:2020-12-05 -0.951119645 -2.494421209 0.592181919 0.8794168
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## C:2021-03-30-IA:2020-12-05 -2.048652969 -3.573069099 -0.524236840 0.0002357
## IA:2021-03-30-IA:2020-12-05 -2.695837209 -4.220253339 -1.171421080 0.0000000
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## IA:2021-04-15-IA:2020-12-05 -2.547794186 -4.072210316 -1.023378056 0.0000003
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## C:2021-01-28-C:2021-01-22 -0.357609788 -1.879913073 1.164693498 1.0000000
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## C:2021-02-12-C:2021-01-22 2.003300021 0.500145967 3.506454075 0.0002888
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## IA:2021-02-12-IA:2021-01-22 0.198806783 -1.436214575 1.833828142 1.0000000
## C:2021-02-26-IA:2021-01-22 -1.310404849 -2.963048194 0.342238495 0.3939664
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## IA:2021-03-15-IA:2021-01-22 -1.689851323 -3.324872681 -0.054829965 0.0325344
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## IA:2021-04-15-IA:2021-01-22 -2.647493996 -4.282515355 -1.012472638 0.0000010
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## C:2021-02-12-C:2021-01-28 2.360909809 0.857755754 3.864063863 0.0000027
## IA:2021-02-12-C:2021-01-28 1.607236026 0.104081972 3.110390081 0.0200808
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## IA:2021-02-26-C:2021-01-28 0.242440572 -1.260713483 1.745594626 1.0000000

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## C:2021-03-15-C:2021-01-28 -0.711169405 -2.214323459 0.791984650 0.9954318
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## C:2021-04-15-C:2021-01-28 -1.004744737 -2.507898791 0.498409318 0.7624642
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## IA:2021-02-05-C:2021-02-05 -0.134086134 -1.743447326 1.475275057 1.0000000
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## C:2021-03-30-C:2021-02-12 -3.100833345 -4.584591051 -1.617075640 0.0000000
## IA:2021-03-30-C:2021-02-12 -3.748017585 -5.231775291 -2.264259880 0.0000000
## C:2021-04-15-C:2021-02-12 -3.365654545 -4.849412251 -1.881896840 0.0000000
## IA:2021-04-15-C:2021-02-12 -3.599974562 -5.083732268 -2.116216856 0.0000000
## C:2021-02-26-IA:2021-02-12 -1.509211633 -3.012365687 -0.006057578 0.0475426
## IA:2021-02-26-IA:2021-02-12 -1.364795455 -2.848553160 0.118962251 0.1263877
## C:2021-03-15-IA:2021-02-12 -2.318405431 -3.802163136 -0.834647725 0.0000032
## IA:2021-03-15-IA:2021-02-12 -1.888658107 -3.372415812 -0.404900401 0.0008322
## C:2021-03-30-IA:2021-02-12 -2.347159563 -3.830917268 -0.863401857 0.0000021
## IA:2021-03-30-IA:2021-02-12 -2.994343803 -4.478101508 -1.510586097 0.0000000

```

```
## C:2021-04-15-IA:2021-02-12 -2.611980763 -4.095738469 -1.128223057 0.0000000
## IA:2021-04-15-IA:2021-02-12 -2.846300780 -4.330058485 -1.362543074 0.0000000
## IA:2021-02-26-C:2021-02-26 0.144416178 -1.358737876 1.647570233 1.0000000
## C:2021-03-15-C:2021-02-26 -0.809193798 -2.312347852 0.693960256 0.9724278
## IA:2021-03-15-C:2021-02-26 -0.379446474 -1.882600528 1.123707581 1.0000000
## C:2021-03-30-C:2021-02-26 -0.837947930 -2.341101984 0.665206124 0.9579529
## IA:2021-03-30-C:2021-02-26 -1.485132170 -2.988286224 0.018021884 0.0579684
## C:2021-04-15-C:2021-02-26 -1.102769130 -2.605923185 0.400384924 0.5720054
## IA:2021-04-15-C:2021-02-26 -1.337089147 -2.840243201 0.166064908 0.1724191
## C:2021-03-15-IA:2021-02-26 -0.953609976 -2.437367682 0.530147729 0.8254598
## IA:2021-03-15-IA:2021-02-26 -0.523862652 -2.007620358 0.959895054 0.9999769
## C:2021-03-30-IA:2021-02-26 -0.982364108 -2.466121814 0.501393597 0.7788701
## IA:2021-03-30-IA:2021-02-26 -1.629548348 -3.113306054 -0.145790643 0.0133252
## C:2021-04-15-IA:2021-02-26 -1.247185308 -2.730943014 0.236572397 0.2707499
## IA:2021-04-15-IA:2021-02-26 -1.481505325 -2.965263031 0.002252381 0.0509537
## IA:2021-03-15-C:2021-03-15 0.429747324 -1.054010381 1.913505030 0.9999997
## C:2021-03-30-C:2021-03-15 -0.028754132 -1.512511838 1.455003574 1.0000000
## IA:2021-03-30-C:2021-03-15 -0.675938372 -2.159696078 0.807819333 0.9974773
## C:2021-04-15-C:2021-03-15 -0.293575332 -1.777333038 1.190182373 1.0000000
## IA:2021-04-15-C:2021-03-15 -0.527895349 -2.011653054 0.955862357 0.9999729
## C:2021-03-30-IA:2021-03-15 -0.458501456 -1.942259162 1.025256249 0.9999987
## IA:2021-03-30-IA:2021-03-15 -1.105685696 -2.589443402 0.378072009 0.5363640
## C:2021-04-15-IA:2021-03-15 -0.723322656 -2.207080362 0.760435049 0.9928434
## IA:2021-04-15-IA:2021-03-15 -0.957642673 -2.441400379 0.526115032 0.8192647
## IA:2021-03-30-C:2021-03-30 -0.647184240 -2.130941946 0.836573466 0.9987693
## C:2021-04-15-C:2021-03-30 -0.264821200 -1.748578906 1.218936505 1.0000000
## IA:2021-04-15-C:2021-03-30 -0.499141217 -1.982898922 0.984616489 0.9999916
## C:2021-04-15-IA:2021-03-30 0.382363040 -1.101394666 1.866120745 1.0000000
## IA:2021-04-15-IA:2021-03-30 0.148043023 -1.335714682 1.631800729 1.0000000
## IA:2021-04-15-C:2021-04-15 -0.234320017 -1.718077722 1.249437689 1.0000000
```

Efecto de la IA sobre los niveles de calcio plasmáticos

```
t2way(Calcio ~ Condicion + Fechas + Condicion:Fechas, data = b,)
```

```
## Call:
## t2way(formula = Calcio ~ Condicion + Fechas + Condicion:Fechas,
##       data = b)
##
##               value p.value
## Condicion      7.5778   0.008
## Fechas        452.1435   0.001
## Condicion:Fechas 43.4384   0.003
```

```
anovacalcio <- aov(Calcio ~ Condicion + Fechas + Condicion:Fechas, data = b)
anova(anovacalcio)
```

```
## Analysis of Variance Table
##
## Response: Calcio
##              Df Sum Sq Mean Sq F value    Pr(>F)
## Condicion      1  1.273   1.2732   9.0749 0.002747 **
## Fechas        14 58.252   4.1609 29.6566 < 2.2e-16 ***
## Condicion:Fechas 14  3.004   0.2146  1.5293 0.097093 .
## Residuals     423 59.348   0.1403
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
TukeyHSD(anovacalcio)
```

```
## Tukey multiple comparisons of means
```

```
## 95% family-wise confidence level
```

```
##
```

```
## Fit: aov(formula = Calcio ~ Condicion + Fechas + Condicion:Fechas, data = b)
```

```
##
```

```
## $Condicion
```

```
## diff lwr upr p adj
```

```
## IA-C 0.1060895 0.03686764 0.1753113 0.0027469
```

```
##
```

```
## $Fechas
```

```
## diff lwr upr p adj
```

```
## 2020-10-14-2020-10-05 0.117023273 -0.3856909221 0.619737469 0.9999758
```

```
## 2020-10-26-2020-10-05 0.309929279 -0.1927849161 0.812643475 0.7321675
```

```
## 2020-11-05-2020-10-05 0.719551938 0.2609597942 1.178144082 0.0000145
```

```
## 2020-11-14-2020-10-05 0.908351987 0.4595762695 1.357127705 0.0000000
```

```
## 2020-11-25-2020-10-05 1.177099061 0.7361895441 1.618008577 0.0000000
```

```
## 2020-12-05-2020-10-05 1.480374889 1.0572274701 1.903522309 0.0000000
```

```
## 2021-01-22-2020-10-05 1.334632054 0.9038597434 1.765404364 0.0000000
```

```
## 2021-01-28-2020-10-05 1.009984382 0.5809047005 1.439064064 0.0000000
```

```
## 2021-02-05-2020-10-05 1.479067080 1.0499873985 1.908146762 0.0000000
```

```
## 2021-02-12-2020-10-05 1.261366499 0.8407656269 1.681967371 0.0000000
```

```
## 2021-02-26-2020-10-05 1.310732365 0.8888889467 1.732575783 0.0000000
```

```
## 2021-03-15-2020-10-05 1.030115541 0.6095146685 1.450716413 0.0000000
```

```
## 2021-03-30-2020-10-05 1.152552660 0.7319517875 1.573153532 0.0000000
```

```
## 2021-04-15-2020-10-05 1.306265328 0.8856644562 1.726866200 0.0000000
```

```
## 2020-10-26-2020-10-14 0.192906006 -0.2900861700 0.675898182 0.9899708
```

```
## 2020-11-05-2020-10-14 0.602528665 0.1656458038 1.039411526 0.0003368
```

```
## 2020-11-14-2020-10-14 0.791328714 0.3647615742 1.217895854 0.0000001
```

```
## 2020-11-25-2020-10-14 1.060075787 0.6417922930 1.478359282 0.0000000
```

```
## 2020-12-05-2020-10-14 1.363351616 0.9638348853 1.762868347 0.0000000
```

```
## 2021-01-22-2020-10-14 1.217608781 0.8100248465 1.625192715 0.0000000
```

```
## 2021-01-28-2020-10-14 0.892961109 0.4871665142 1.298755704 0.0000000
```

```
## 2021-02-05-2020-10-14 1.362043807 0.9562492123 1.767838402 0.0000000
```

```
## 2021-02-12-2020-10-14 1.144343226 0.7475246609 1.541161791 0.0000000
```

```
## 2021-02-26-2020-10-14 1.193709091 0.7955737512 1.591844432 0.0000000
```

```
## 2021-03-15-2020-10-14 0.913092267 0.5162737025 1.309910832 0.0000000
```

```
## 2021-03-30-2020-10-14 1.035529386 0.6387108214 1.432347951 0.0000000
```

```
## 2021-04-15-2020-10-14 1.189242055 0.7924234901 1.586060620 0.0000000
```

```
## 2020-11-05-2020-10-26 0.409622659 -0.0272602022 0.846505520 0.0934646
```

```
## 2020-11-14-2020-10-26 0.598422708 0.1718555682 1.024989848 0.0002323
```

```
## 2020-11-25-2020-10-26 0.867169781 0.4488862870 1.285453276 0.0000000
```

```
## 2020-12-05-2020-10-26 1.170445610 0.7709288792 1.569962341 0.0000000
```

```
## 2021-01-22-2020-10-26 1.024702775 0.6171188405 1.432286709 0.0000000
```

```
## 2021-01-28-2020-10-26 0.700055103 0.2942605082 1.105849698 0.0000008
```

```
## 2021-02-05-2020-10-26 1.169137801 0.7633432062 1.574932396 0.0000000
```

```
## 2021-02-12-2020-10-26 0.951437220 0.5546186548 1.348255785 0.0000000
```

```
## 2021-02-26-2020-10-26 1.000803085 0.6026677452 1.398938426 0.0000000
```

```
## 2021-03-15-2020-10-26 0.720186261 0.3233676965 1.117004826 0.0000001
```

```
## 2021-03-30-2020-10-26 0.842623380 0.4458048154 1.239441945 0.0000000
```

```
## 2021-04-15-2020-10-26 0.996336049 0.5995174841 1.393154614 0.0000000
```

```
## 2020-11-14-2020-11-05 0.188800049 -0.1847567969 0.562356895 0.9246873
```

##	2020-11-25-2020-11-05	0.457547122	0.0934780712	0.821616173	0.0020699
##	2020-12-05-2020-11-05	0.760822951	0.4184798329	1.103166069	0.0000000
##	2021-01-22-2020-11-05	0.615080116	0.2633559969	0.966804234	0.0000005
##	2021-01-28-2020-11-05	0.290432444	-0.0592165879	0.640081476	0.2330298
##	2021-02-05-2020-11-05	0.759515142	0.4098661101	1.109164174	0.0000000
##	2021-02-12-2020-11-05	0.541814561	0.2026241042	0.881005017	0.0000088
##	2021-02-26-2020-11-05	0.591180426	0.2504504138	0.931910439	0.0000007
##	2021-03-15-2020-11-05	0.310563602	-0.0286268542	0.649754059	0.1147121
##	2021-03-30-2020-11-05	0.433000721	0.0938102648	0.772191178	0.0015614
##	2021-04-15-2020-11-05	0.586713390	0.2475229334	0.925903846	0.0000008
##	2020-11-25-2020-11-14	0.268747073	-0.0828765385	0.620370685	0.3678173
##	2020-12-05-2020-11-14	0.572022902	0.2429458579	0.901099946	0.0000007
##	2021-01-22-2020-11-14	0.426280066	0.0874545273	0.765105606	0.0020308
##	2021-01-28-2020-11-14	0.101632395	-0.2350385660	0.438303356	0.9994703
##	2021-02-05-2020-11-14	0.570715093	0.2340441320	0.907386054	0.0000015
##	2021-02-12-2020-11-14	0.353014512	0.0272184770	0.678810546	0.0196452
##	2021-02-26-2020-11-14	0.402380377	0.0749817947	0.729778960	0.0030469
##	2021-03-15-2020-11-14	0.121763553	-0.2040324814	0.447559588	0.9947726
##	2021-03-30-2020-11-14	0.244200672	-0.0815953624	0.569996707	0.4021845
##	2021-04-15-2020-11-14	0.397913341	0.0721173063	0.723709375	0.0033848
##	2020-12-05-2020-11-25	0.303275829	-0.0149901884	0.621541846	0.0806588
##	2021-01-22-2020-11-25	0.157532993	-0.1708026623	0.485868649	0.9495994
##	2021-01-28-2020-11-25	-0.167114678	-0.4932264576	0.158997101	0.9165893
##	2021-02-05-2020-11-25	0.301968020	-0.0241437596	0.628079799	0.1042712
##	2021-02-12-2020-11-25	0.084267438	-0.2306049371	0.399139814	0.9998689
##	2021-02-26-2020-11-25	0.133633304	-0.1828969292	0.450163537	0.9831528
##	2021-03-15-2020-11-25	-0.146983520	-0.4618558955	0.167888856	0.9596556
##	2021-03-30-2020-11-25	-0.024546401	-0.3394187765	0.290325975	1.0000000
##	2021-04-15-2020-11-25	0.129166268	-0.1857061079	0.444038643	0.9870839
##	2021-01-22-2020-12-05	-0.145742836	-0.4498099983	0.158324327	0.9500015
##	2021-01-28-2020-12-05	-0.470390507	-0.7720549388	-0.168726075	0.0000172
##	2021-02-05-2020-12-05	-0.001307809	-0.3029722408	0.300356623	1.0000000
##	2021-02-12-2020-12-05	-0.219008390	-0.5084857636	0.070468983	0.3856787
##	2021-02-26-2020-12-05	-0.169642525	-0.4609223306	0.121637281	0.8051588
##	2021-03-15-2020-12-05	-0.450259349	-0.7397367220	-0.160781976	0.0000185
##	2021-03-30-2020-12-05	-0.327822230	-0.6172996030	-0.038344857	0.0108393
##	2021-04-15-2020-12-05	-0.174109561	-0.4635869344	0.115367812	0.7656520
##	2021-01-28-2021-01-22	-0.324647671	-0.6369175459	-0.012377797	0.0325259
##	2021-02-05-2021-01-22	0.144435027	-0.1678348479	0.456704901	0.9626127
##	2021-02-12-2021-01-22	-0.073265555	-0.3737787736	0.227247664	0.9999573
##	2021-02-26-2021-01-22	-0.023899689	-0.3261495367	0.278350158	1.0000000
##	2021-03-15-2021-01-22	-0.304516513	-0.6050297320	-0.004003295	0.0433911
##	2021-03-30-2021-01-22	-0.182079394	-0.4825926130	0.118433824	0.7559839
##	2021-04-15-2021-01-22	-0.028366726	-0.3288799444	0.272146493	1.0000000
##	2021-02-05-2021-01-28	0.469082698	0.1591519567	0.779013439	0.0000379
##	2021-02-12-2021-01-28	0.251382117	-0.0466997255	0.549463959	0.2114319
##	2021-02-26-2021-01-28	0.300747982	0.0009154286	0.600580536	0.0484136
##	2021-03-15-2021-01-28	0.020131158	-0.2779506838	0.318213000	1.0000000
##	2021-03-30-2021-01-28	0.142568277	-0.1555135649	0.440650119	0.9508507
##	2021-04-15-2021-01-28	0.296280946	-0.0018008962	0.594362788	0.0532707
##	2021-02-12-2021-02-05	-0.217700581	-0.5157824235	0.080381261	0.4487378
##	2021-02-26-2021-02-05	-0.168334716	-0.4681672695	0.131497838	0.8443745
##	2021-03-15-2021-02-05	-0.448951540	-0.7470333819	-0.150869698	0.0000429
##	2021-03-30-2021-02-05	-0.326514421	-0.6245962629	-0.028432579	0.0170647

```

## 2021-04-15-2021-02-05 -0.172801752 -0.4708835943 0.125280090 0.8104515
## 2021-02-26-2021-02-12 0.049365866 -0.2382020053 0.336933737 0.9999995
## 2021-03-15-2021-02-12 -0.231250958 -0.5169929832 0.054491066 0.2724914
## 2021-03-30-2021-02-12 -0.108813839 -0.3945558642 0.176928185 0.9936968
## 2021-04-15-2021-02-12 0.044898829 -0.2408431956 0.330640854 0.9999998
## 2021-03-15-2021-02-26 -0.280616824 -0.5681846951 0.006951047 0.0641994
## 2021-03-30-2021-02-26 -0.158179705 -0.4457475761 0.129388166 0.8636045
## 2021-04-15-2021-02-26 -0.004467036 -0.2920349074 0.283100835 1.0000000
## 2021-03-30-2021-03-15 0.122437119 -0.1633049058 0.408179144 0.9807294
## 2021-04-15-2021-03-15 0.276149788 -0.0095922372 0.561891812 0.0705697
## 2021-04-15-2021-03-30 0.153712669 -0.1320293561 0.439454693 0.8824697
##
## $`Condicion:Fechas`
##
## diff lwr upr p adj
## IA:2020-10-05-C:2020-10-05 -0.0080705706 -0.8244619355 0.808320794 1.0000000
## C:2020-10-14-C:2020-10-05 0.1362344487 -0.6504599550 0.922928852 1.0000000
## IA:2020-10-14-C:2020-10-05 0.0897415272 -0.6969528765 0.876435931 1.0000000
## C:2020-10-26-C:2020-10-05 0.2175769520 -0.5460872433 0.981241147 0.9999998
## IA:2020-10-26-C:2020-10-05 0.4059684685 -0.4104228964 1.222359833 0.9904610
## C:2020-11-05-C:2020-10-05 0.6121177996 -0.1055302729 1.329765872 0.2430132
## IA:2020-11-05-C:2020-10-05 0.8189155064 0.1012674339 1.536563579 0.0070708
## C:2020-11-14-C:2020-10-05 0.8279481404 0.1300556440 1.525840637 0.0034995
## IA:2020-11-14-C:2020-10-05 0.9826289151 0.2756132537 1.689644577 0.0001005
## C:2020-11-25-C:2020-10-05 1.0300610393 0.3470190183 1.713103060 0.0000099
## IA:2020-11-25-C:2020-10-05 1.3299062022 0.6320137057 2.027798699 0.0000000
## C:2020-12-05-C:2020-10-05 1.4409708622 0.7827751014 2.099166623 0.0000000
## IA:2020-12-05-C:2020-10-05 1.5097443458 0.8431635877 2.176325104 0.0000000
## C:2021-01-22-C:2020-10-05 1.1857267737 0.5235459366 1.847907611 0.0000000
## IA:2021-01-22-C:2020-10-05 1.5082614957 0.8182848601 2.198238131 0.0000000
## C:2021-01-28-C:2020-10-05 1.0008910960 0.3387102589 1.663071933 0.0000092
## IA:2021-01-28-C:2020-10-05 0.9982106332 0.3151686122 1.681252654 0.0000252
## C:2021-02-05-C:2020-10-05 1.5334910922 0.8620268932 2.204955291 0.0000000
## IA:2021-02-05-C:2020-10-05 1.4165724981 0.7451082992 2.088036697 0.0000000
## C:2021-02-12-C:2020-10-05 1.1049119235 0.4467161627 1.763107684 0.0000003
## IA:2021-02-12-C:2020-10-05 1.4097505039 0.7515547432 2.067946265 0.0000000
## C:2021-02-26-C:2020-10-05 1.2586299800 0.5964491430 1.920810817 0.0000000
## IA:2021-02-26-C:2020-10-05 1.3550130610 0.6968173003 2.013208822 0.0000000
## C:2021-03-15-C:2020-10-05 0.9105171348 0.2523213741 1.568712896 0.0001135
## IA:2021-03-15-C:2020-10-05 1.1416433758 0.4834476151 1.799839137 0.0000001
## C:2021-03-30-C:2020-10-05 1.1107823197 0.4525865589 1.768978080 0.0000002
## IA:2021-03-30-C:2020-10-05 1.1862524289 0.5280566682 1.844448190 0.0000000
## C:2021-04-15-C:2020-10-05 1.4115303915 0.7533346307 2.069726152 0.0000000
## IA:2021-04-15-C:2020-10-05 1.1929296944 0.5347339337 1.851125455 0.0000000
## C:2020-10-14-IA:2020-10-05 0.1443050193 -0.6423893845 0.930999423 1.0000000
## IA:2020-10-14-IA:2020-10-05 0.0978120978 -0.6888823060 0.884506502 1.0000000
## C:2020-10-26-IA:2020-10-05 0.2256475225 -0.5380166727 0.989311718 0.9999995
## IA:2020-10-26-IA:2020-10-05 0.4140390390 -0.4023523259 1.230430404 0.9874242
## C:2020-11-05-IA:2020-10-05 0.6201883702 -0.0974597023 1.337836443 0.2195078
## IA:2020-11-05-IA:2020-10-05 0.8269860770 0.1093380045 1.544634149 0.0059558
## C:2020-11-14-IA:2020-10-05 0.8360187110 0.1381262145 1.533911208 0.0029079
## IA:2020-11-14-IA:2020-10-05 0.9906994857 0.2836838243 1.697715147 0.0000809
## C:2020-11-25-IA:2020-10-05 1.0381316099 0.3550895889 1.721173631 0.0000078
## IA:2020-11-25-IA:2020-10-05 1.3379767728 0.6400842763 2.035869269 0.0000000
## C:2020-12-05-IA:2020-10-05 1.4490414327 0.7908456720 2.107237193 0.0000000

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##	IA:2020-12-05-IA:2020-10-05	1.5178149164	0.8512341582	2.184395675	0.0000000
##	C:2021-01-22-IA:2020-10-05	1.1937973443	0.5316165072	1.855978181	0.0000000
##	IA:2021-01-22-IA:2020-10-05	1.5163320663	0.8263554307	2.206308702	0.0000000
##	C:2021-01-28-IA:2020-10-05	1.0089616666	0.3467808295	1.671142504	0.0000072
##	IA:2021-01-28-IA:2020-10-05	1.0062812038	0.3232391828	1.689323225	0.0000199
##	C:2021-02-05-IA:2020-10-05	1.5415616627	0.8700974638	2.213025862	0.0000000
##	IA:2021-02-05-IA:2020-10-05	1.4246430687	0.7531788697	2.096107268	0.0000000
##	C:2021-02-12-IA:2020-10-05	1.1129824940	0.4547867333	1.771178255	0.0000002
##	IA:2021-02-12-IA:2020-10-05	1.4178210745	0.7596253138	2.076016835	0.0000000
##	C:2021-02-26-IA:2020-10-05	1.2667005506	0.6045197135	1.928881388	0.0000000
##	IA:2021-02-26-IA:2020-10-05	1.3630836316	0.7048878708	2.021279392	0.0000000
##	C:2021-03-15-IA:2020-10-05	0.9185877054	0.2603919446	1.576783466	0.0000900
##	IA:2021-03-15-IA:2020-10-05	1.1497139464	0.4915181857	1.807909707	0.0000001
##	C:2021-03-30-IA:2020-10-05	1.1188528902	0.4606571295	1.777048651	0.0000002
##	IA:2021-03-30-IA:2020-10-05	1.1943229995	0.5361272387	1.852518760	0.0000000
##	C:2021-04-15-IA:2020-10-05	1.4196009620	0.7614052013	2.077796723	0.0000000
##	IA:2021-04-15-IA:2020-10-05	1.2010002650	0.5428045042	1.859196026	0.0000000
##	IA:2020-10-14-C:2020-10-14	-0.0464929215	-0.8023244564	0.709338613	1.0000000
##	C:2020-10-26-C:2020-10-14	0.0813425032	-0.6504882336	0.813173240	1.0000000
##	IA:2020-10-26-C:2020-10-14	0.2697340197	-0.5169603840	1.056428423	0.9999874
##	C:2020-11-05-C:2020-10-14	0.4758833509	-0.2077919962	1.159558698	0.6855661
##	IA:2020-11-05-C:2020-10-14	0.6826810577	-0.0009942894	1.366356405	0.0509134
##	C:2020-11-14-C:2020-10-14	0.6917136917	0.0288055828	1.354621801	0.0285251
##	IA:2020-11-14-C:2020-10-14	0.8463944664	0.1738884295	1.518900503	0.0010638
##	C:2020-11-25-C:2020-10-14	0.8938265906	0.2465711335	1.541082048	0.0001187
##	IA:2020-11-25-C:2020-10-14	1.1936717535	0.5307636445	1.856579862	0.0000000
##	C:2020-12-05-C:2020-10-14	1.3047364134	0.6837574414	1.925715385	0.0000000
##	IA:2020-12-05-C:2020-10-14	1.3735098971	0.7436502846	2.003369509	0.0000000
##	C:2021-01-22-C:2020-10-14	1.0494923249	0.4242910092	1.674693641	0.0000003
##	IA:2021-01-22-C:2020-10-14	1.3720270469	0.7174577367	2.026596357	0.0000000
##	C:2021-01-28-C:2020-10-14	0.8646566473	0.2394553315	1.489857963	0.0001142
##	IA:2021-01-28-C:2020-10-14	0.8619761845	0.2147207274	1.509231642	0.0002940
##	C:2021-02-05-C:2020-10-14	1.3972566434	0.7622311363	2.032282151	0.0000000
##	IA:2021-02-05-C:2020-10-14	1.2803380494	0.6453125422	1.915363556	0.0000000
##	C:2021-02-12-C:2020-10-14	0.9686774747	0.3476985027	1.589656447	0.0000034
##	IA:2021-02-12-C:2020-10-14	1.2735160552	0.6525370832	1.894495027	0.0000000
##	C:2021-02-26-C:2020-10-14	1.1223955313	0.4971942155	1.747596847	0.0000000
##	IA:2021-02-26-C:2020-10-14	1.2187786123	0.5977996403	1.839757584	0.0000000
##	C:2021-03-15-C:2020-10-14	0.7742826860	0.1533037140	1.395261658	0.0012971
##	IA:2021-03-15-C:2020-10-14	1.0054089271	0.3844299551	1.626387899	0.0000010
##	C:2021-03-30-C:2020-10-14	0.9745478709	0.3535688989	1.595526843	0.0000028
##	IA:2021-03-30-C:2020-10-14	1.0500179802	0.4290390082	1.670996952	0.0000002
##	C:2021-04-15-C:2020-10-14	1.2752959427	0.6543169707	1.896274915	0.0000000
##	IA:2021-04-15-C:2020-10-14	1.0566952457	0.4357162737	1.677674218	0.0000002
##	C:2020-10-26-IA:2020-10-14	0.1278354247	-0.6039953121	0.859666162	1.0000000
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##	C:2020-11-05-IA:2020-10-14	0.5223762724	-0.1612990747	1.206051619	0.4786505
##	IA:2020-11-05-IA:2020-10-14	0.7291739792	0.0454986321	1.412849326	0.0208428
##	C:2020-11-14-IA:2020-10-14	0.7382066132	0.0752985043	1.401114722	0.0106622
##	IA:2020-11-14-IA:2020-10-14	0.8928873879	0.2203813509	1.565393425	0.0003163
##	C:2020-11-25-IA:2020-10-14	0.9403195121	0.2930640550	1.587574969	0.0000298
##	IA:2020-11-25-IA:2020-10-14	1.2401646749	0.5772565660	1.903072784	0.0000000
##	C:2020-12-05-IA:2020-10-14	1.3512293349	0.7302503629	1.972208307	0.0000000
##	IA:2020-12-05-IA:2020-10-14	1.4200028186	0.7901432061	2.049862431	0.0000000

## C:2021-01-22-IA:2020-10-14	1.0959852464	0.4707839307	1.721186562	0.0000000
## IA:2021-01-22-IA:2020-10-14	1.4185199684	0.7639506582	2.073089279	0.0000000
## C:2021-01-28-IA:2020-10-14	0.9111495688	0.2859482530	1.536350885	0.0000273
## IA:2021-01-28-IA:2020-10-14	0.9084691060	0.2612136489	1.555724563	0.0000774
## C:2021-02-05-IA:2020-10-14	1.4437495649	0.8087240578	2.078775072	0.0000000
## IA:2021-02-05-IA:2020-10-14	1.3268309709	0.6918054637	1.961856478	0.0000000
## C:2021-02-12-IA:2020-10-14	1.0151703962	0.3941914242	1.636149368	0.0000007
## IA:2021-02-12-IA:2020-10-14	1.3200089767	0.6990300047	1.940987949	0.0000000
## C:2021-02-26-IA:2020-10-14	1.1688884528	0.5436871370	1.794089769	0.0000000
## IA:2021-02-26-IA:2020-10-14	1.2652715338	0.6442925618	1.886250506	0.0000000
## C:2021-03-15-IA:2020-10-14	0.8207756075	0.1997966355	1.441754580	0.0003521
## IA:2021-03-15-IA:2020-10-14	1.0519018486	0.4309228766	1.672880821	0.0000002
## C:2021-03-30-IA:2020-10-14	1.0210407924	0.4000618204	1.642019764	0.0000006
## IA:2021-03-30-IA:2020-10-14	1.0965109017	0.4755319296	1.717489874	0.0000000
## C:2021-04-15-IA:2020-10-14	1.3217888642	0.7008098922	1.942767836	0.0000000
## IA:2021-04-15-IA:2020-10-14	1.1031881672	0.4822091952	1.724167139	0.0000000
## IA:2020-10-26-C:2020-10-26	0.1883915165	-0.5752726787	0.952055712	1.0000000
## C:2020-11-05-C:2020-10-26	0.3945408477	-0.2625032136	1.051584909	0.9060944
## IA:2020-11-05-C:2020-10-26	0.6013385545	-0.0557055068	1.258382616	0.1326932
## C:2020-11-14-C:2020-10-26	0.6103711885	-0.0250358299	1.245778207	0.0803278
## IA:2020-11-14-C:2020-10-26	0.7650519632	0.1196379194	1.410466007	0.0035550
## C:2020-11-25-C:2020-10-26	0.8124840873	0.1934246840	1.431543491	0.0004158
## IA:2020-11-25-C:2020-10-26	1.1123292502	0.4769222318	1.747736269	0.0000001
## C:2020-12-05-C:2020-10-26	1.2233939102	0.6318621682	1.814925652	0.0000000
## IA:2020-12-05-C:2020-10-26	1.2921673938	0.6913196182	1.893015170	0.0000000
## C:2021-01-22-C:2020-10-26	0.9681498217	0.3721870684	1.564112575	0.0000009
## IA:2021-01-22-C:2020-10-26	1.2906845437	0.6639821422	1.917386945	0.0000000
## C:2021-01-28-C:2020-10-26	0.7833141440	0.1873513907	1.379276897	0.0004018
## IA:2021-01-28-C:2020-10-26	0.7806336813	0.1615742779	1.399693085	0.0010206
## C:2021-02-05-C:2020-10-26	1.3159141402	0.7096532122	1.922175068	0.0000000
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## C:2021-02-12-C:2020-10-26	0.8873349715	0.2958032295	1.478866714	0.0000116
## IA:2021-02-12-C:2020-10-26	1.1921735520	0.6006418099	1.783705294	0.0000000
## C:2021-02-26-C:2020-10-26	1.0410530281	0.4450902747	1.637015781	0.0000001
## IA:2021-02-26-C:2020-10-26	1.1374361091	0.5459043670	1.728967851	0.0000000
## C:2021-03-15-C:2020-10-26	0.6929401828	0.1014084408	1.284471925	0.0044298
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## IA:2021-04-15-C:2020-10-26	0.9753527424	0.3838210004	1.566884485	0.0000005
## C:2020-11-05-IA:2020-10-26	0.2061493311	-0.5114987414	0.923797404	0.9999997
## IA:2020-11-05-IA:2020-10-26	0.4129470379	-0.3047010346	1.130595110	0.9398160
## C:2020-11-14-IA:2020-10-26	0.4219796720	-0.2759128245	1.119872168	0.8994712
## IA:2020-11-14-IA:2020-10-26	0.5766604467	-0.1303552148	1.283676108	0.3321616
## C:2020-11-25-IA:2020-10-26	0.6240925708	-0.0589494502	1.307134592	0.1348302
## IA:2020-11-25-IA:2020-10-26	0.9239377337	0.2260452372	1.621830230	0.0003387
## C:2020-12-05-IA:2020-10-26	1.0350023937	0.3768066330	1.693198154	0.0000026
## IA:2020-12-05-IA:2020-10-26	1.1037758773	0.4371951192	1.770356635	0.0000004
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##	IA: 2021-02-05-IA: 2020-10-26	1.0106040296	0.3391398307	1.682068229	0.0000105
##	C: 2021-02-12-IA: 2020-10-26	0.6989434550	0.0407476943	1.357139216	0.0222181
##	IA: 2021-02-12-IA: 2020-10-26	1.0037820355	0.3455862747	1.661977796	0.0000070
##	C: 2021-02-26-IA: 2020-10-26	0.8526615115	0.1904806745	1.514842349	0.0006440
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##	C: 2021-03-15-IA: 2020-10-26	0.5045486663	-0.1536470944	1.162744427	0.4711288
##	IA: 2021-03-15-IA: 2020-10-26	0.7356749074	0.0774791467	1.393870668	0.0100340
##	C: 2021-03-30-IA: 2020-10-26	0.7048138512	0.0466180905	1.363009612	0.0196440
##	IA: 2021-03-30-IA: 2020-10-26	0.7802839604	0.1220881997	1.438479721	0.0035480
##	C: 2021-04-15-IA: 2020-10-26	1.0055619230	0.3473661623	1.663757684	0.0000066
##	IA: 2021-04-15-IA: 2020-10-26	0.7869612259	0.1287654652	1.445156987	0.0030168
##	IA: 2020-11-05-C: 2020-11-05	0.2067977068	-0.3961472752	0.809742689	0.9999873
##	C: 2020-11-14-C: 2020-11-05	0.2158303408	-0.3634604600	0.795121142	0.9999318
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##	C: 2020-11-25-C: 2020-11-05	0.4179432397	-0.1433679911	0.979254470	0.5382407
##	IA: 2020-11-25-C: 2020-11-05	0.7177884026	0.1384976017	1.297079203	0.0014786
##	C: 2020-12-05-C: 2020-11-05	0.8288530625	0.2980559688	1.359650156	0.0000033
##	IA: 2020-12-05-C: 2020-11-05	0.8976265462	0.3564668633	1.438786229	0.0000004
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##	IA: 2021-01-22-C: 2020-11-05	0.8961436961	0.3264142402	1.465873152	0.0000026
##	C: 2021-01-28-C: 2020-11-05	0.3887732964	-0.1469573787	0.924503972	0.5964750
##	IA: 2021-01-28-C: 2020-11-05	0.3860928336	-0.1752183971	0.947404064	0.7092611
##	C: 2021-02-05-C: 2020-11-05	0.9213732925	0.3742096372	1.468536948	0.0000002
##	IA: 2021-02-05-C: 2020-11-05	0.8044546985	0.2572910431	1.351618354	0.0000211
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##	C: 2021-02-26-C: 2020-11-05	0.6465121804	0.1107815053	1.182242856	0.0025193
##	IA: 2021-02-26-C: 2020-11-05	0.7428952614	0.2120981676	1.273692355	0.0000835
##	C: 2021-03-15-C: 2020-11-05	0.2983993352	-0.2323977586	0.829196429	0.9536465
##	IA: 2021-03-15-C: 2020-11-05	0.5295255762	-0.0012715175	1.060322670	0.0515121
##	C: 2021-03-30-C: 2020-11-05	0.4986645200	-0.0321325737	1.029461614	0.1021007
##	IA: 2021-03-30-C: 2020-11-05	0.5741346293	0.0433375355	1.104931723	0.0168841
##	C: 2021-04-15-C: 2020-11-05	0.7994125918	0.2686154981	1.330209686	0.0000103
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##	C: 2020-11-25-IA: 2020-11-05	0.2111455329	-0.3501656979	0.772456764	0.9999177
##	IA: 2020-11-25-IA: 2020-11-05	0.5109906958	-0.0683001051	1.090281497	0.1853908
##	C: 2020-12-05-IA: 2020-11-05	0.6220553558	0.0912582620	1.152852450	0.0043956
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##	C: 2021-01-22-IA: 2020-11-05	0.3668112673	-0.1689194079	0.902541942	0.7181627
##	IA: 2021-01-22-IA: 2020-11-05	0.6893459893	0.1196165334	1.259075445	0.0023928
##	C: 2021-01-28-IA: 2020-11-05	0.1819755896	-0.3537550855	0.717706265	0.9999896
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##	C: 2021-02-05-IA: 2020-11-05	0.7145755858	0.1674119304	1.261739241	0.0004666
##	IA: 2021-02-05-IA: 2020-11-05	0.5976569917	0.0504933363	1.144820647	0.0145181
##	C: 2021-02-12-IA: 2020-11-05	0.2859964170	-0.2448006767	0.816793511	0.9721228
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##	C: 2021-02-26-IA: 2020-11-05	0.4397144736	-0.0960162015	0.975445149	0.3188918
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## C:2021-04-15-IA:2020-11-05	0.5926148850	0.0618177913	1.123411979	0.0102210
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## C:2020-11-25-C:2020-11-14	0.2021128989	-0.3337093463	0.737935144	0.9999131
## IA:2020-11-25-C:2020-11-14	0.5019580617	-0.0526706543	1.056586778	0.1474991
## C:2020-12-05-C:2020-11-14	0.6130227217	0.1092561732	1.116789270	0.0021366
## IA:2020-12-05-C:2020-11-14	0.6817962053	0.1671225387	1.196469872	0.0003338
## C:2021-01-22-C:2020-11-14	0.3577786332	-0.1511835824	0.866740849	0.6652913
## IA:2021-01-22-C:2020-11-14	0.6803133552	0.1356787680	1.224947942	0.0012489
## C:2021-01-28-C:2020-11-14	0.1729429556	-0.3360192601	0.681905171	0.9999896
## IA:2021-01-28-C:2020-11-14	0.1702624928	-0.3655597524	0.706084738	0.9999975
## C:2021-02-05-C:2020-11-14	0.7055429517	0.1845599900	1.226525913	0.0001950
## IA:2021-02-05-C:2020-11-14	0.5886243577	0.0676413959	1.109607319	0.0083801
## C:2021-02-12-C:2020-11-14	0.2769637830	-0.2268027655	0.780730332	0.9643181
## IA:2021-02-12-C:2020-11-14	0.5818023635	0.0780358150	1.085568912	0.0057269
## C:2021-02-26-C:2020-11-14	0.4306818396	-0.0782803761	0.939644055	0.2578942
## IA:2021-02-26-C:2020-11-14	0.5270649206	0.0232983720	1.030831469	0.0274776
## C:2021-03-15-C:2020-11-14	0.0825689943	-0.4211975542	0.586335543	1.0000000
## IA:2021-03-15-C:2020-11-14	0.3136952354	-0.1900713131	0.817461784	0.8673874
## C:2021-03-30-C:2020-11-14	0.2828341792	-0.2209323693	0.786600728	0.9543370
## IA:2021-03-30-C:2020-11-14	0.3583042885	-0.1454622601	0.862070837	0.6404689
## C:2021-04-15-C:2020-11-14	0.5835822510	0.0798157025	1.087348800	0.0054230
## IA:2021-04-15-C:2020-11-14	0.3649815540	-0.1387849946	0.868748102	0.6001051
## C:2020-11-25-IA:2020-11-14	0.0474321242	-0.5002198523	0.595084101	1.0000000
## IA:2020-11-25-IA:2020-11-14	0.3472772870	-0.2187882758	0.913342850	0.8844443
## C:2020-12-05-IA:2020-11-14	0.4583419470	-0.0579892880	0.974673182	0.1755570
## IA:2020-12-05-IA:2020-11-14	0.5271154306	0.0001370706	1.054093791	0.0498381
## C:2021-01-22-IA:2020-11-14	0.2030978585	-0.3183038540	0.724499571	0.9998389
## IA:2021-01-22-IA:2020-11-14	0.5256325805	-0.0306443671	1.081909528	0.0960752
## C:2021-01-28-IA:2020-11-14	0.0182621809	-0.5031395317	0.539663893	1.0000000
## IA:2021-01-28-IA:2020-11-14	0.0155817181	-0.5320702584	0.563233695	1.0000000
## C:2021-02-05-IA:2020-11-14	0.5508621770	0.0177201178	1.084004236	0.0326621
## IA:2021-02-05-IA:2020-11-14	0.4339435830	-0.0991984762	0.967085642	0.3365802
## C:2021-02-12-IA:2020-11-14	0.1222830083	-0.3940482267	0.638614243	1.0000000
## IA:2021-02-12-IA:2020-11-14	0.4271215888	-0.0892096463	0.943452824	0.3026939
## C:2021-02-26-IA:2020-11-14	0.2760010649	-0.2454006476	0.797402777	0.9777268
## IA:2021-02-26-IA:2020-11-14	0.3723841459	-0.1439470892	0.888715381	0.6101951
## C:2021-03-15-IA:2020-11-14	-0.0721117804	-0.5884430154	0.444219455	1.0000000
## IA:2021-03-15-IA:2020-11-14	0.1590144607	-0.3573167743	0.675345696	0.9999988
## C:2021-03-30-IA:2020-11-14	0.1281534045	-0.3881778305	0.644484640	1.0000000
## IA:2021-03-30-IA:2020-11-14	0.2036235138	-0.3127077213	0.719954749	0.9997966
## C:2021-04-15-IA:2020-11-14	0.4289014763	-0.0874297587	0.945232711	0.2942327
## IA:2021-04-15-IA:2020-11-14	0.2103007793	-0.3060304558	0.726632014	0.9996308
## IA:2020-11-25-C:2020-11-25	0.2998451629	-0.2359770823	0.835667408	0.9560372
## C:2020-12-05-C:2020-11-25	0.4109098229	-0.0720738220	0.893893468	0.2477455
## IA:2020-12-05-C:2020-11-25	0.4796833065	-0.0146662145	0.974032827	0.0716795
## C:2021-01-22-C:2020-11-25	0.1556657344	-0.3327347189	0.644066188	0.9999974
## IA:2021-01-22-C:2020-11-25	0.4782004564	-0.0472700941	1.003671007	0.1400675
## C:2021-01-28-C:2020-11-25	-0.0291699433	-0.5175703966	0.459230510	1.0000000
## IA:2021-01-28-C:2020-11-25	-0.0318504061	-0.5481816411	0.484480829	1.0000000
## C:2021-02-05-C:2020-11-25	0.5034300529	0.0025151776	1.004344928	0.0469544
## IA:2021-02-05-C:2020-11-25	0.3865114588	-0.1144034165	0.887426334	0.4559942
## C:2021-02-12-C:2020-11-25	0.0748508842	-0.4081327607	0.557834529	1.0000000
## IA:2021-02-12-C:2020-11-25	0.3796894646	-0.1032941803	0.862673110	0.4133428

## C:2021-02-26-C:2020-11-25	0.2285689407	-0.2598315126	0.716969394	0.9961380
## IA:2021-02-26-C:2020-11-25	0.3249520217	-0.1580316232	0.807935667	0.7508484
## C:2021-03-15-C:2020-11-25	-0.1195439045	-0.6025275494	0.363439740	1.0000000
## IA:2021-03-15-C:2020-11-25	0.1115823365	-0.3714013083	0.594565981	1.0000000
## C:2021-03-30-C:2020-11-25	0.0807212804	-0.4022623645	0.563704925	1.0000000
## IA:2021-03-30-C:2020-11-25	0.1561913896	-0.3267922553	0.639175034	0.9999964
## C:2021-04-15-C:2020-11-25	0.3814693522	-0.1015142927	0.864452997	0.4027658
## IA:2021-04-15-C:2020-11-25	0.1628686551	-0.3201149898	0.645852300	0.9999911
## C:2020-12-05-IA:2020-11-25	0.1110646600	-0.3927018885	0.614831209	1.0000000
## IA:2020-12-05-IA:2020-11-25	0.1798381436	-0.3348355230	0.694511810	0.9999813
## C:2021-01-22-IA:2020-11-25	-0.1441794285	-0.6531416441	0.364782787	0.9999998
## IA:2021-01-22-IA:2020-11-25	0.1783552935	-0.3662792937	0.722989881	0.9999952
## C:2021-01-28-IA:2020-11-25	-0.3290151062	-0.8379773218	0.179947109	0.8168964
## IA:2021-01-28-IA:2020-11-25	-0.3316955690	-0.8675178141	0.204126676	0.8743393
## C:2021-02-05-IA:2020-11-25	0.2035848900	-0.3173980718	0.724567852	0.9998288
## IA:2021-02-05-IA:2020-11-25	0.0866662959	-0.4343166658	0.607649258	1.0000000
## C:2021-02-12-IA:2020-11-25	-0.2249942787	-0.7287608273	0.278772270	0.9981726
## IA:2021-02-12-IA:2020-11-25	0.0798443017	-0.4239222468	0.583610850	1.0000000
## C:2021-02-26-IA:2020-11-25	-0.0712762222	-0.5802384378	0.437685993	1.0000000
## IA:2021-02-26-IA:2020-11-25	0.0251068588	-0.4786596897	0.528873407	1.0000000
## C:2021-03-15-IA:2020-11-25	-0.4193890674	-0.9231556159	0.084377481	0.2897844
## IA:2021-03-15-IA:2020-11-25	-0.1882628263	-0.6920293749	0.315503722	0.9999276
## C:2021-03-30-IA:2020-11-25	-0.2191238825	-0.7228904310	0.284642666	0.9988259
## IA:2021-03-30-IA:2020-11-25	-0.1436537733	-0.6474203218	0.360112775	0.9999998
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## IA:2021-04-15-IA:2020-11-25	-0.1369765078	-0.6407430563	0.366790041	0.9999999
## IA:2020-12-05-C:2020-12-05	0.0687734836	-0.3906355997	0.528182567	1.0000000
## C:2021-01-22-C:2020-12-05	-0.2552440885	-0.7082454789	0.197757302	0.9524237
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## C:2021-02-26-C:2020-12-05	-0.1823408822	-0.6353422726	0.270660508	0.9997025
## IA:2021-02-26-C:2020-12-05	-0.0859578012	-0.5331137675	0.361198165	1.0000000
## C:2021-03-15-C:2020-12-05	-0.5304537274	-0.9776096937	-0.083297761	0.0035035
## IA:2021-03-15-C:2020-12-05	-0.2993274863	-0.7464834526	0.147828480	0.7598880
## C:2021-03-30-C:2020-12-05	-0.3301885425	-0.7773445088	0.116967424	0.5572521
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## IA:2021-04-15-C:2020-12-05	-0.2480411678	-0.6951971341	0.199114799	0.9603254
## C:2021-01-22-IA:2020-12-05	-0.3240175721	-0.7891181068	0.141082963	0.6838294
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## C:2021-01-28-IA:2020-12-05	-0.5088532498	-0.9739537845	-0.043752715	0.0141510
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## IA:2021-02-26-IA:2020-12-05	-0.1547312848	-0.6141403682	0.304677799	0.9999913
## C:2021-03-15-IA:2020-12-05	-0.5992272110	-1.0586362944	-0.139818128	0.0004802

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## IA:2021-03-15-IA:2020-12-05 -0.3681009699 -0.8275100533 0.091308113 0.3707018
## C:2021-03-30-IA:2020-12-05 -0.3989620261 -0.8583711095 0.060447057 0.2110834
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## C:2021-04-15-IA:2020-12-05 -0.0982139543 -0.5576230377 0.361195129 1.0000000
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## IA:2021-01-22-C:2021-01-22 0.3225347220 -0.1755178434 0.820587287 0.8142257
## C:2021-01-28-C:2021-01-22 -0.1848356777 -0.6436080191 0.273936664 0.9996974
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## IA:2021-02-05-C:2021-01-22 0.2308457244 -0.2412271203 0.702918569 0.9925115
## C:2021-02-12-C:2021-01-22 -0.0808148502 -0.5338162407 0.372186540 1.0000000
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## C:2021-02-26-C:2021-01-22 0.0729032063 -0.3858691351 0.531675548 1.0000000
## IA:2021-02-26-C:2021-01-22 0.1692862873 -0.2837151031 0.622287678 0.9999276
## C:2021-03-15-C:2021-01-22 -0.2752096389 -0.7282110293 0.177791752 0.8947305
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## C:2021-03-30-C:2021-01-22 -0.0749444540 -0.5279458445 0.378056936 1.0000000
## IA:2021-03-30-C:2021-01-22 0.0005256552 -0.4524757352 0.453527046 1.0000000
## C:2021-04-15-C:2021-01-22 0.2258036178 -0.2271977727 0.678805008 0.9901312
## IA:2021-04-15-C:2021-01-22 0.0072029207 -0.4457984697 0.460204311 1.0000000
## C:2021-01-28-IA:2021-01-22 -0.5073703997 -1.0054229651 -0.009317834 0.0394551
## IA:2021-01-28-IA:2021-01-22 -0.5100508625 -1.0355214129 0.015419688 0.0714063
## C:2021-02-05-IA:2021-01-22 0.0252295965 -0.4851007548 0.535559948 1.0000000
## IA:2021-02-05-IA:2021-01-22 -0.0916889976 -0.6020193488 0.418641354 1.0000000
## C:2021-02-12-IA:2021-01-22 -0.4033495722 -0.8960914483 0.089392304 0.3245085
## IA:2021-02-12-IA:2021-01-22 -0.0985109918 -0.5912528678 0.394230884 1.0000000
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## IA:2021-03-15-IA:2021-01-22 -0.3666181198 -0.8593599959 0.126123756 0.5399261
## C:2021-03-30-IA:2021-01-22 -0.3974791760 -0.8902210520 0.095262700 0.3559268
## IA:2021-03-30-IA:2021-01-22 -0.3220090668 -0.8147509428 0.170732809 0.8001630
## C:2021-04-15-IA:2021-01-22 -0.0967311042 -0.5894729803 0.396010772 1.0000000
## IA:2021-04-15-IA:2021-01-22 -0.3153318013 -0.8080736773 0.177410075 0.8316012
## IA:2021-01-28-C:2021-01-28 -0.0026804628 -0.4910809161 0.485719991 1.0000000
## C:2021-02-05-C:2021-01-28 0.5325999962 0.0605271514 1.004672841 0.0085854
## IA:2021-02-05-C:2021-01-28 0.4156814021 -0.0563914426 0.887754247 0.1881888
## C:2021-02-12-C:2021-01-28 0.1040208275 -0.3489805630 0.557022218 1.0000000
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## C:2021-02-26-C:2021-01-28 0.2577388840 -0.2010334574 0.716511225 0.9539967
## IA:2021-02-26-C:2021-01-28 0.3541219650 -0.0988794254 0.807123355 0.4261374
## C:2021-03-15-C:2021-01-28 -0.0903739612 -0.5433753517 0.362627429 1.0000000
## IA:2021-03-15-C:2021-01-28 0.1407522798 -0.3122491106 0.593753670 0.9999985
## C:2021-03-30-C:2021-01-28 0.1098912237 -0.3431101668 0.562892614 1.0000000
## IA:2021-03-30-C:2021-01-28 0.1853613329 -0.2676400575 0.638362723 0.9995984
## C:2021-04-15-C:2021-01-28 0.4106392955 -0.0423620950 0.863640686 0.1453151
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## C:2021-03-15-IA:2021-01-28 -0.0876934985 -0.5706771433 0.395290146 1.0000000

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## IA:2021-03-15-IA:2021-01-28 0.1434327426 -0.3395509023 0.626416388 0.9999995
## C:2021-03-30-IA:2021-01-28 0.1125716864 -0.3704119585 0.595555331 1.0000000
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## C:2021-04-15-IA:2021-01-28 0.4133197582 -0.0696638867 0.896303403 0.2369825
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## IA:2021-02-05-C:2021-02-05 -0.1169185941 -0.6019273365 0.368090148 1.0000000
## C:2021-02-12-C:2021-02-05 -0.4285791687 -0.8950456404 0.037887303 0.1277982
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## IA:2021-03-30-C:2021-02-05 -0.3472386633 -0.8137051350 0.119227808 0.5388002
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## IA:2021-04-15-C:2021-02-05 -0.3405613978 -0.8070278695 0.125905074 0.5829433
## C:2021-02-12-IA:2021-02-05 -0.3116605746 -0.7781270463 0.154805897 0.7632348
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## C:2021-02-26-IA:2021-02-05 -0.1579425181 -0.6300153628 0.314130327 0.9999925
## IA:2021-02-26-IA:2021-02-05 -0.0615594371 -0.5280259088 0.404907035 1.0000000
## C:2021-03-15-IA:2021-02-05 -0.5060553633 -0.9725218350 -0.039588892 0.0161325
## IA:2021-03-15-IA:2021-02-05 -0.2749291223 -0.7413955940 0.191537349 0.9222873
## C:2021-03-30-IA:2021-02-05 -0.3057901784 -0.7722566501 0.160676293 0.7951882
## IA:2021-03-30-IA:2021-02-05 -0.2303200692 -0.6967865409 0.236146402 0.9913836
## C:2021-04-15-IA:2021-02-05 -0.0050421066 -0.4715085783 0.461424365 1.0000000
## IA:2021-04-15-IA:2021-02-05 -0.2236428037 -0.6901092754 0.242823668 0.9944125
## IA:2021-02-12-C:2021-02-12 0.3048385805 -0.1423173858 0.751994547 0.7264589
## C:2021-02-26-C:2021-02-12 0.1537180566 -0.2992833339 0.606719447 0.9999899
## IA:2021-02-26-C:2021-02-12 0.2501011375 -0.1970548288 0.697257104 0.9562943
## C:2021-03-15-C:2021-02-12 -0.1943947887 -0.6415507550 0.252761178 0.9988366
## IA:2021-03-15-C:2021-02-12 0.0367314524 -0.4104245139 0.483887419 1.0000000
## C:2021-03-30-C:2021-02-12 0.0058703962 -0.4412855701 0.453026363 1.0000000
## IA:2021-03-30-C:2021-02-12 0.0813405054 -0.3658154609 0.528496472 1.0000000
## C:2021-04-15-C:2021-02-12 0.3066184680 -0.1405374983 0.753774434 0.7153037
## IA:2021-04-15-C:2021-02-12 0.0880177709 -0.3591381954 0.535173737 1.0000000
## C:2021-02-26-IA:2021-02-12 -0.1511205239 -0.6041219143 0.301880867 0.9999929
## IA:2021-02-26-IA:2021-02-12 -0.0547374429 -0.5018934092 0.392418523 1.0000000
## C:2021-03-15-IA:2021-02-12 -0.4992333691 -0.9463893355 -0.052077403 0.0102208
## IA:2021-03-15-IA:2021-02-12 -0.2681071281 -0.7152630944 0.179048838 0.9074782
## C:2021-03-30-IA:2021-02-12 -0.2989681843 -0.7461241506 0.148187782 0.7620043
## IA:2021-03-30-IA:2021-02-12 -0.2234980750 -0.6706540413 0.223657891 0.9897426
## C:2021-04-15-IA:2021-02-12 0.0017798875 -0.4453760788 0.448935854 1.0000000
## IA:2021-04-15-IA:2021-02-12 -0.2168208095 -0.6639767758 0.230335157 0.9933868
## IA:2021-02-26-C:2021-02-26 0.0963830810 -0.3566183094 0.549384471 1.0000000
## C:2021-03-15-C:2021-02-26 -0.3481128452 -0.8011142357 0.104888545 0.4654297
## IA:2021-03-15-C:2021-02-26 -0.1169866042 -0.5699879946 0.336014786 1.0000000
## C:2021-03-30-C:2021-02-26 -0.1478476603 -0.6008490508 0.305153730 0.9999956
## IA:2021-03-30-C:2021-02-26 -0.0723775511 -0.5253789415 0.380623839 1.0000000
## C:2021-04-15-C:2021-02-26 0.1529004114 -0.3001009790 0.605901802 0.9999909
## IA:2021-04-15-C:2021-02-26 -0.0657002856 -0.5187016760 0.387301105 1.0000000
## C:2021-03-15-IA:2021-02-26 -0.4444959262 -0.8916518925 0.002660040 0.0538274
## IA:2021-03-15-IA:2021-02-26 -0.2133696852 -0.6605256515 0.233786281 0.9947985
## C:2021-03-30-IA:2021-02-26 -0.2442307413 -0.6913867076 0.202925225 0.9670393
## IA:2021-03-30-IA:2021-02-26 -0.1687606321 -0.6159165984 0.278395334 0.9999122

```

```
## C:2021-04-15-IA:2021-02-26 0.0565173305 -0.3906386359 0.503673297 1.0000000
## IA:2021-04-15-IA:2021-02-26 -0.1620833666 -0.6092393329 0.285072600 0.9999605
## IA:2021-03-15-C:2021-03-15 0.2311262411 -0.2160297252 0.678282207 0.9837135
## C:2021-03-30-C:2021-03-15 0.2002651849 -0.2468907814 0.647421151 0.9980873
## IA:2021-03-30-C:2021-03-15 0.2757352941 -0.1714206722 0.722891260 0.8787718
## C:2021-04-15-C:2021-03-15 0.5010132567 0.0538572904 0.948169223 0.0096373
## IA:2021-04-15-C:2021-03-15 0.2824125596 -0.1647434067 0.729568526 0.8495912
## C:2021-03-30-IA:2021-03-15 -0.0308610562 -0.4780170225 0.416294910 1.0000000
## IA:2021-03-30-IA:2021-03-15 0.0446090530 -0.4025469133 0.491765019 1.0000000
## C:2021-04-15-IA:2021-03-15 0.2698870156 -0.1772689507 0.717042982 0.9012230
## IA:2021-04-15-IA:2021-03-15 0.0512863186 -0.3958696478 0.498442285 1.0000000
## IA:2021-03-30-C:2021-03-30 0.0754701092 -0.3716858571 0.522626076 1.0000000
## C:2021-04-15-C:2021-03-30 0.3007480718 -0.1464078945 0.747904038 0.7514419
## IA:2021-04-15-C:2021-03-30 0.0821473747 -0.3650085916 0.529303341 1.0000000
## C:2021-04-15-IA:2021-03-30 0.2252779626 -0.2218780037 0.672433929 0.9885326
## IA:2021-04-15-IA:2021-03-30 0.0066772655 -0.4404787008 0.453833232 1.0000000
## IA:2021-04-15-C:2021-04-15 -0.2186006971 -0.6657566634 0.228555269 0.9925418
```

Efecto de la IA sobre los niveles de cloro plasmático

```
t2way(Cloro ~ Condicion + Fechas + Condicion:Fechas, data = b,)
```

```
## Call:
## t2way(formula = Cloro ~ Condicion + Fechas + Condicion:Fechas,
##       data = b)
##
##               value p.value
## Condicion      0.6261  0.433
## Fechas        511.0321  0.001
## Condicion:Fechas 69.5673  0.001
```

```
anovacloro <- aov(Cloro ~ Condicion + Fechas + Condicion:Fechas, data = b)
anova(anovacloro)
```

```
## Analysis of Variance Table
##
## Response: Cloro
##              Df Sum Sq Mean Sq F value    Pr(>F)
## Condicion      1     42    41.7  0.2033  0.652321
## Fechas       14   59843   4274.5 20.8621 < 2.2e-16 ***
## Condicion:Fechas 14    7442    531.6  2.5943  0.001312 **
## Residuals    423   86670    204.9
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
TukeyHSD(anovacloro)
```

```
## Tukey multiple comparisons of means
## 95% family-wise confidence level
##
## Fit: aov(formula = Cloro ~ Condicion + Fechas + Condicion:Fechas, data = b)
##
## $Condicion
##      diff      lwr      upr      p adj
## IA-C 0.6067736 -2.038535 3.252082 0.6523206
##
## $Fechas
```

##		diff	lwr	upr	p adj
##	2020-10-14-2020-10-05	5.4368885	-13.77430273	24.6480796	0.9997474
##	2020-10-26-2020-10-05	13.6377637	-5.57342750	32.8489549	0.4999481
##	2020-11-05-2020-10-05	2.4112702	-15.11379954	19.9363400	1.0000000
##	2020-11-14-2020-10-05	0.5006070	-16.64932868	17.6505427	1.0000000
##	2020-11-25-2020-10-05	1.1952530	-15.65407630	18.0445823	1.0000000
##	2020-12-05-2020-10-05	-11.2892537	-27.45980555	4.8812982	0.5298485
##	2021-01-22-2020-10-05	-12.1677596	-28.62969615	4.2941770	0.4271742
##	2021-01-28-2020-10-05	-8.1183687	-24.51562158	8.2788842	0.9355558
##	2021-02-05-2020-10-05	-18.9034730	-35.30072591	-2.5062201	0.0083779
##	2021-02-12-2020-10-05	-30.6135566	-46.68679232	-14.5403209	0.0000000
##	2021-02-26-2020-10-05	-13.4063843	-29.52710386	2.7143352	0.2313042
##	2021-03-15-2020-10-05	-2.3283424	-18.40157813	13.7448933	0.9999999
##	2021-03-30-2020-10-05	11.8514669	-4.22176883	27.9247026	0.4315609
##	2021-04-15-2020-10-05	-2.9347881	-19.00802383	13.1384476	0.9999989
##	2020-10-26-2020-10-14	8.2008752	-10.25664023	26.6583907	0.9734411
##	2020-11-05-2020-10-14	-3.0256182	-19.72106913	13.6698327	0.9999990
##	2020-11-14-2020-10-14	-4.9362815	-21.23751773	11.3649548	0.9994513
##	2020-11-25-2020-10-14	-4.2416355	-20.22631274	11.7430418	0.9998815
##	2020-12-05-2020-10-14	-16.7261421	-31.99364874	-1.4586355	0.0170334
##	2021-01-22-2020-10-14	-17.6046480	-33.18044226	-2.0288537	0.0111419
##	2021-01-28-2020-10-14	-13.5552571	-29.06267190	1.9521576	0.1648861
##	2021-02-05-2020-10-14	-24.3403615	-39.84777624	-8.8329467	0.0000144
##	2021-02-12-2020-10-14	-36.0504451	-51.21484141	-20.8860487	0.0000000
##	2021-02-26-2020-10-14	-18.8432728	-34.05798963	-3.6285559	0.0026731
##	2021-03-15-2020-10-14	-7.7652309	-22.92962722	7.3991655	0.9170365
##	2021-03-30-2020-10-14	6.4145784	-8.74981792	21.5789748	0.9828518
##	2021-04-15-2020-10-14	-8.3716766	-23.53607292	6.7927198	0.8603266
##	2020-11-05-2020-10-26	-11.2264934	-27.92194435	5.4689575	0.5955553
##	2020-11-14-2020-10-26	-13.1371567	-29.43839295	3.1640796	0.2791371
##	2020-11-25-2020-10-26	-12.4425107	-28.42718796	3.5421666	0.3363054
##	2020-12-05-2020-10-26	-24.9270174	-40.19452397	-9.6595108	0.0000047
##	2021-01-22-2020-10-26	-25.8055232	-41.38131749	-10.2297290	0.0000030
##	2021-01-28-2020-10-26	-21.7561323	-37.26354712	-6.2487176	0.0002320
##	2021-02-05-2020-10-26	-32.5412367	-48.04865146	-17.0338219	0.0000000
##	2021-02-12-2020-10-26	-44.2513203	-59.41571663	-29.0869239	0.0000000
##	2021-02-26-2020-10-26	-27.0441480	-42.25886485	-11.8294312	0.0000003
##	2021-03-15-2020-10-26	-15.9661061	-31.13050244	-0.8017097	0.0280262
##	2021-03-30-2020-10-26	-1.7862968	-16.95069314	13.3780996	1.0000000
##	2021-04-15-2020-10-26	-16.5725518	-31.73694814	-1.4081554	0.0175881
##	2020-11-14-2020-11-05	-1.9106632	-16.18611448	12.3647880	1.0000000
##	2020-11-25-2020-11-05	-1.2160172	-15.12889300	12.6968585	1.0000000
##	2020-12-05-2020-11-05	-13.7005239	-26.78314454	-0.6179033	0.0298715
##	2021-01-22-2020-11-05	-14.5790298	-28.02014473	-1.1379148	0.0193881
##	2021-01-28-2020-11-05	-10.5296389	-23.89145455	2.8321767	0.3155949
##	2021-02-05-2020-11-05	-21.3147432	-34.67655888	-7.9529276	0.0000092
##	2021-02-12-2020-11-05	-33.0248268	-45.98696867	-20.0626850	0.0000000
##	2021-02-26-2020-11-05	-15.8176546	-28.83863044	-2.7966787	0.0037021
##	2021-03-15-2020-11-05	-4.7396126	-17.70175448	8.2225292	0.9958120
##	2021-03-30-2020-11-05	9.4401967	-3.52194519	22.4023385	0.4538014
##	2021-04-15-2020-11-05	-5.3460583	-18.30820018	7.6160835	0.9864168
##	2020-11-25-2020-11-14	0.6946460	-12.74262809	14.1319201	1.0000000
##	2020-12-05-2020-11-14	-11.7898607	-24.36551911	0.7857977	0.0935433
##	2021-01-22-2020-11-14	-12.6683665	-25.61656310	0.2798300	0.0625500


```

## 2021-01-28-2020-11-14 -8.6189757 -21.48483515 4.2468838 0.6019609
## 2021-02-05-2020-11-14 -19.4040800 -32.26993948 -6.5382205 0.0000415
## 2021-02-12-2020-11-14 -31.1141636 -43.56443845 -18.6638887 0.0000000
## 2021-02-26-2020-11-14 -13.9069913 -26.41850745 -1.3954752 0.0140372
## 2021-03-15-2020-11-14 -2.8289494 -15.27922425 9.6213255 0.9999821
## 2021-03-30-2020-11-14 11.3508599 -1.09941496 23.8011347 0.1188561
## 2021-04-15-2020-11-14 -3.4353951 -15.88566996 9.0148798 0.9998120
## 2020-12-05-2020-11-25 -12.4845067 -24.64702240 -0.3219910 0.0376205
## 2021-01-22-2020-11-25 -13.3630125 -25.91033885 -0.8156862 0.0243902
## 2021-01-28-2020-11-25 -9.3136217 -21.77596269 3.1487194 0.4074425
## 2021-02-05-2020-11-25 -20.0987260 -32.56106702 -7.6363850 0.0000067
## 2021-02-12-2020-11-25 -31.8088096 -43.84163750 -19.7759817 0.0000000
## 2021-02-26-2020-11-25 -14.6016373 -26.69782016 -2.5054545 0.0041063
## 2021-03-15-2020-11-25 -3.5235954 -15.55642331 8.5092325 0.9996254
## 2021-03-30-2020-11-25 10.6562139 -1.37661402 22.6890418 0.1496028
## 2021-04-15-2020-11-25 -4.1300411 -16.16286901 7.9027868 0.9978324
## 2021-01-22-2020-12-05 -0.8785059 -12.49841325 10.7414015 1.0000000
## 2021-01-28-2020-12-05 3.1708850 -8.35720216 14.6989722 0.9998189
## 2021-02-05-2020-12-05 -7.6142193 -19.14230650 3.9138679 0.6257982
## 2021-02-12-2020-12-05 -19.3243029 -30.38666241 -8.2619434 0.0000006
## 2021-02-26-2020-12-05 -2.1171306 -13.24837000 9.0141087 0.9999981
## 2021-03-15-2020-12-05 8.9609113 -2.10144822 20.0232708 0.2710650
## 2021-03-30-2020-12-05 23.1407206 12.07836107 34.2030801 0.0000000
## 2021-04-15-2020-12-05 8.3544656 -2.70789393 19.4168251 0.3888313
## 2021-01-28-2021-01-22 4.0493909 -7.88398262 15.9827644 0.9980805
## 2021-02-05-2021-01-22 -6.7357135 -18.66908695 5.1976600 0.8390320
## 2021-02-12-2021-01-22 -18.4457970 -29.92989069 -6.9617034 0.0000075
## 2021-02-26-2021-01-22 -1.2386248 -12.78908358 10.3118340 1.0000000
## 2021-03-15-2021-01-22 9.8394171 -1.64467650 21.3235108 0.1900768
## 2021-03-30-2021-01-22 24.0192264 12.53513279 35.5033201 0.0000000
## 2021-04-15-2021-01-22 9.2329714 -2.25112220 20.7170651 0.2829326
## 2021-02-05-2021-01-28 -10.7851043 -22.62908801 1.0588793 0.1200414
## 2021-02-12-2021-01-28 -22.4951879 -33.88636666 -11.1040092 0.0000000
## 2021-02-26-2021-01-28 -5.2880157 -16.74609773 6.1700664 0.9632963
## 2021-03-15-2021-01-28 5.7900263 -5.60115247 17.1812050 0.9214410
## 2021-03-30-2021-01-28 19.9698356 8.57865682 31.3610143 0.0000005
## 2021-04-15-2021-01-28 5.1835806 -6.20759818 16.5747593 0.9673981
## 2021-02-12-2021-02-05 -11.7100836 -23.10126233 -0.3189049 0.0369981
## 2021-02-26-2021-02-05 5.4970887 -5.96099340 16.9551708 0.9496296
## 2021-03-15-2021-02-05 16.5751306 5.18395186 27.9663093 0.0001003
## 2021-03-30-2021-02-05 30.7549399 19.36376115 42.1461186 0.0000000
## 2021-04-15-2021-02-05 15.9686849 4.57750616 27.3598636 0.0002361
## 2021-02-26-2021-02-12 17.2071723 6.21778427 28.1965603 0.0000154
## 2021-03-15-2021-02-12 28.2852142 17.36560079 39.2048276 0.0000000
## 2021-03-30-2021-02-12 42.4650235 31.54541008 53.3846369 0.0000000
## 2021-04-15-2021-02-12 27.6787685 16.75915508 38.5983819 0.0000000
## 2021-03-15-2021-02-26 11.0780419 0.08865392 22.0674299 0.0459019
## 2021-03-30-2021-02-26 25.2578512 14.26846322 36.2472392 0.0000000
## 2021-04-15-2021-02-26 10.4715962 -0.51779178 21.4609842 0.0806729
## 2021-03-30-2021-03-15 14.1798093 3.26019589 25.0994227 0.0011355
## 2021-04-15-2021-03-15 -0.6064457 -11.52605911 10.3131677 1.0000000
## 2021-04-15-2021-03-30 -14.7862550 -25.70586840 -3.8666416 0.0004954
##
## $`Condicion:Fechas`

```

##		diff	lwr	upr	p adj
##	IA: 2020-10-05-C: 2020-10-05	3.78767123	-27.4106731	34.98601560	1.0000000
##	C: 2020-10-14-C: 2020-10-05	1.99706458	-28.0664123	32.06054146	1.0000000
##	IA: 2020-10-14-C: 2020-10-05	12.66438356	-17.3990933	42.72786044	0.9993253
##	C: 2020-10-26-C: 2020-10-05	18.95205479	-10.2313241	48.13543371	0.8099508
##	IA: 2020-10-26-C: 2020-10-05	10.86986301	-20.3284814	42.06820738	0.9999824
##	C: 2020-11-05-C: 2020-10-05	9.05168120	-18.3731945	36.47655689	0.9999944
##	IA: 2020-11-05-C: 2020-10-05	-0.44146949	-27.8663452	26.98340621	1.0000000
##	C: 2020-11-14-C: 2020-10-05	3.75605901	-22.9138586	30.42597662	1.0000000
##	IA: 2020-11-14-C: 2020-10-05	0.89407594	-26.1244828	27.91263472	1.0000000
##	C: 2020-11-25-C: 2020-10-05	5.38085797	-20.7215497	31.48326560	1.0000000
##	IA: 2020-11-25-C: 2020-10-05	0.39806444	-26.2718532	27.06798205	1.0000000
##	C: 2020-12-05-C: 2020-10-05	-10.80532624	-35.9582356	14.34758312	0.9990512
##	IA: 2020-12-05-C: 2020-10-05	-7.86256309	-33.3359046	17.61077842	0.9999987
##	C: 2021-01-22-C: 2020-10-05	-21.13091489	-46.4361137	4.17428392	0.2837056
##	IA: 2021-01-22-C: 2020-10-05	4.35221135	-22.0152021	30.71962484	1.0000000
##	C: 2021-01-28-C: 2020-10-05	-7.44387888	-32.7490777	17.86131993	0.9999996
##	IA: 2021-01-28-C: 2020-10-05	-4.76093151	-30.8633391	21.34147612	1.0000000
##	C: 2021-02-05-C: 2020-10-05	-15.42257857	-41.0825405	10.23738332	0.9052249
##	IA: 2021-02-05-C: 2020-10-05	-18.59669621	-44.2566581	7.06326568	0.5993976
##	C: 2021-02-12-C: 2020-10-05	-30.85319466	-56.0061040	-5.70028530	0.0018195
##	IA: 2021-02-12-C: 2020-10-05	-26.58624730	-51.7391567	-1.43333793	0.0237651
##	C: 2021-02-26-C: 2020-10-05	-11.91969605	-37.2248949	13.38550275	0.9957308
##	IA: 2021-02-26-C: 2020-10-05	-11.11058940	-36.2634988	14.04231996	0.9984782
##	C: 2021-03-15-C: 2020-10-05	1.73911913	-23.4137902	26.89202849	1.0000000
##	IA: 2021-03-15-C: 2020-10-05	-2.60813271	-27.7610421	22.54477666	1.0000000
##	C: 2021-03-30-C: 2020-10-05	15.17363778	-9.9792716	40.32654714	0.9017161
##	IA: 2021-03-30-C: 2020-10-05	12.31696723	-12.8359421	37.46987659	0.9923582
##	C: 2021-04-15-C: 2020-10-05	1.14796323	-24.0049461	26.30087259	1.0000000
##	IA: 2021-04-15-C: 2020-10-05	-3.22986822	-28.3827776	21.92304115	1.0000000
##	C: 2020-10-14-IA: 2020-10-05	-1.79060665	-31.8540835	28.27287023	1.0000000
##	IA: 2020-10-14-IA: 2020-10-05	8.87671233	-21.1867646	38.94018921	0.9999995
##	C: 2020-10-26-IA: 2020-10-05	15.16438356	-14.0189954	44.34776248	0.9825212
##	IA: 2020-10-26-IA: 2020-10-05	7.08219178	-24.1161526	38.28053615	1.0000000
##	C: 2020-11-05-IA: 2020-10-05	5.26400996	-22.1608657	32.68888566	1.0000000
##	IA: 2020-11-05-IA: 2020-10-05	-4.22914072	-31.6540164	23.19573498	1.0000000
##	C: 2020-11-14-IA: 2020-10-05	-0.03161222	-26.7015298	26.63830539	1.0000000
##	IA: 2020-11-14-IA: 2020-10-05	-2.89359529	-29.9121541	24.12496349	1.0000000
##	C: 2020-11-25-IA: 2020-10-05	1.59318673	-24.5092209	27.69559436	1.0000000
##	IA: 2020-11-25-IA: 2020-10-05	-3.38960679	-30.0595244	23.28031082	1.0000000
##	C: 2020-12-05-IA: 2020-10-05	-14.59299748	-39.7459068	10.55991189	0.9342001
##	IA: 2020-12-05-IA: 2020-10-05	-11.65023432	-37.1235758	13.82310719	0.9973133
##	C: 2021-01-22-IA: 2020-10-05	-24.91858612	-50.2237849	0.38661268	0.0603351
##	IA: 2021-01-22-IA: 2020-10-05	0.56454012	-25.8028734	26.93195360	1.0000000
##	C: 2021-01-28-IA: 2020-10-05	-11.23155011	-36.5367489	14.07364870	0.9983519
##	IA: 2021-01-28-IA: 2020-10-05	-8.54860274	-34.6510104	17.55380489	0.9999952
##	C: 2021-02-05-IA: 2020-10-05	-19.21024980	-44.8702117	6.44971209	0.5257332
##	IA: 2021-02-05-IA: 2020-10-05	-22.38436745	-48.0443293	3.27559444	0.2034728
##	C: 2021-02-12-IA: 2020-10-05	-34.64086590	-59.7937753	-9.48795653	0.0001273
##	IA: 2021-02-12-IA: 2020-10-05	-30.37391853	-55.5268279	-5.22100917	0.0024874
##	C: 2021-02-26-IA: 2020-10-05	-15.70736728	-41.0125661	9.59783152	0.8711820
##	IA: 2021-02-26-IA: 2020-10-05	-14.89826063	-40.0511700	10.25464873	0.9182219
##	C: 2021-03-15-IA: 2020-10-05	-2.04855211	-27.2014615	23.10435726	1.0000000
##	IA: 2021-03-15-IA: 2020-10-05	-6.39580394	-31.5487133	18.75710542	1.0000000

## C:2021-03-30-IA:2020-10-05	11.38596655	-13.7669428	36.53887591	0.9977235
## IA:2021-03-30-IA:2020-10-05	8.52929599	-16.6236134	33.68220536	0.9999900
## C:2021-04-15-IA:2020-10-05	-2.63970800	-27.7926174	22.51320136	1.0000000
## IA:2021-04-15-IA:2020-10-05	-7.01753945	-32.1704488	18.13536991	0.9999999
## IA:2020-10-14-C:2020-10-14	10.66731898	-18.2167353	39.55137328	0.9999427
## C:2020-10-26-C:2020-10-14	16.95499022	-11.0118751	44.92185553	0.8968445
## IA:2020-10-26-C:2020-10-14	8.87279843	-21.1906784	38.93627531	0.9999995
## C:2020-11-05-C:2020-10-14	7.05461662	-19.0719935	33.18122676	0.9999999
## IA:2020-11-05-C:2020-10-14	-2.43853407	-28.5651442	23.68807608	1.0000000
## C:2020-11-14-C:2020-10-14	1.75899443	-23.5739970	27.09198588	1.0000000
## IA:2020-11-14-C:2020-10-14	-1.10298864	-26.8027643	24.59678703	1.0000000
## C:2020-11-25-C:2020-10-14	3.38379339	-21.3510330	28.11861974	1.0000000
## IA:2020-11-25-C:2020-10-14	-1.59900013	-26.9319916	23.73399132	1.0000000
## C:2020-12-05-C:2020-10-14	-12.80239082	-36.5330630	10.92828131	0.9716805
## IA:2020-12-05-C:2020-10-14	-9.85962767	-33.9296729	14.21041758	0.9995906
## C:2021-01-22-C:2020-10-14	-23.12797947	-47.0200082	0.76404927	0.0736593
## IA:2021-01-22-C:2020-10-14	2.35514677	-22.6591780	27.36947156	1.0000000
## C:2021-01-28-C:2020-10-14	-9.44094345	-33.3329722	14.45108528	0.9997889
## IA:2021-01-28-C:2020-10-14	-6.75799609	-31.4928224	17.97683027	0.9999999
## C:2021-02-05-C:2020-10-14	-17.41964314	-41.6871027	6.84781644	0.6205521
## IA:2021-02-05-C:2020-10-14	-20.59376079	-44.8612204	3.67369880	0.2524962
## C:2021-02-12-C:2020-10-14	-32.85025924	-56.5809314	-9.11958711	0.0001115
## IA:2021-02-12-C:2020-10-14	-28.58331188	-52.3139840	-4.85263974	0.0026151
## C:2021-02-26-C:2020-10-14	-13.91676063	-37.8087894	9.97526811	0.9313373
## IA:2021-02-26-C:2020-10-14	-13.10765398	-36.8383261	10.62301816	0.9622776
## C:2021-03-15-C:2020-10-14	-0.25794545	-23.9886176	23.47272668	1.0000000
## IA:2021-03-15-C:2020-10-14	-4.60519729	-28.3358694	19.12547485	1.0000000
## C:2021-03-30-C:2020-10-14	13.17657320	-10.5540989	36.90724534	0.9598623
## IA:2021-03-30-C:2020-10-14	10.31990265	-13.4107695	34.05057478	0.9988302
## C:2021-04-15-C:2020-10-14	-0.84910135	-24.5797735	22.88157079	1.0000000
## IA:2021-04-15-C:2020-10-14	-5.22693279	-28.9576049	18.50373934	1.0000000
## C:2020-10-26-IA:2020-10-14	6.28767123	-21.6791941	34.25453655	1.0000000
## IA:2020-10-26-IA:2020-10-14	-1.79452055	-31.8579974	28.26895633	1.0000000
## C:2020-11-05-IA:2020-10-14	-3.61270237	-29.7393125	22.51390778	1.0000000
## IA:2020-11-05-IA:2020-10-14	-13.10585305	-39.2324632	13.02075709	0.9892069
## C:2020-11-14-IA:2020-10-14	-8.90832455	-34.2413160	16.42466690	0.9999787
## IA:2020-11-14-IA:2020-10-14	-11.77030762	-37.4700833	13.92946805	0.9972523
## C:2020-11-25-IA:2020-10-14	-7.28352559	-32.0183519	17.45130076	0.9999996
## IA:2020-11-25-IA:2020-10-14	-12.26631912	-37.5993106	13.06667234	0.9935239
## C:2020-12-05-IA:2020-10-14	-23.46970981	-47.2003819	0.26096233	0.0572698
## IA:2020-12-05-IA:2020-10-14	-20.52694665	-44.5969919	3.54309860	0.2433360
## C:2021-01-22-IA:2020-10-14	-33.79529845	-57.6873272	-9.90326971	0.0000628
## IA:2021-01-22-IA:2020-10-14	-8.31217221	-33.3264970	16.70215257	0.9999935
## C:2021-01-28-IA:2020-10-14	-20.10826244	-44.0002912	3.78376630	0.2682752
## IA:2021-01-28-IA:2020-10-14	-17.42531507	-42.1601414	7.30951128	0.6607501
## C:2021-02-05-IA:2020-10-14	-28.08696213	-52.3544217	-3.81950254	0.0055114
## IA:2021-02-05-IA:2020-10-14	-31.26107977	-55.5285394	-6.99362019	0.0006380
## C:2021-02-12-IA:2020-10-14	-43.51757823	-67.2482504	-19.78690609	0.0000000
## IA:2021-02-12-IA:2020-10-14	-39.25063086	-62.9813030	-15.51995872	0.0000004
## C:2021-02-26-IA:2020-10-14	-24.58407961	-48.4761083	-0.69205088	0.0345433
## IA:2021-02-26-IA:2020-10-14	-23.77497296	-47.5056451	-0.04430083	0.0488483
## C:2021-03-15-IA:2020-10-14	-10.92526444	-34.6559366	12.80540770	0.9970146
## IA:2021-03-15-IA:2020-10-14	-15.27251627	-39.0031884	8.45815587	0.8234716
## C:2021-03-30-IA:2020-10-14	2.50925422	-21.2214179	26.23992636	1.0000000

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##	C:2021-04-15-IA:2020-10-14	-11.51642033	-35.2470925	12.21425181	0.9933040
##	IA:2021-04-15-IA:2020-10-14	-15.89425178	-39.6249239	7.83642036	0.7589005
##	IA:2020-10-26-C:2020-10-26	-8.08219178	-37.2655707	21.10118714	0.9999999
##	C:2020-11-05-C:2020-10-26	-9.90037360	-35.0092708	15.20852364	0.9997972
##	IA:2020-11-05-C:2020-10-26	-19.39352428	-44.5024215	5.71537296	0.4537114
##	C:2020-11-14-C:2020-10-26	-15.19599579	-39.4780348	9.08604323	0.8612963
##	IA:2020-11-14-C:2020-10-26	-18.05797885	-42.7224357	6.60647801	0.5766021
##	C:2020-11-25-C:2020-10-26	-13.57119683	-37.2285128	10.08611911	0.9418055
##	IA:2020-11-25-C:2020-10-26	-18.55399035	-42.8360294	5.72804867	0.4785513
##	C:2020-12-05-C:2020-10-26	-29.75738104	-52.3627291	-7.15203293	0.0003875
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##	C:2021-01-22-C:2020-10-26	-40.08296968	-62.8576486	-17.30829076	0.0000000
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##	IA:2021-01-28-C:2020-10-26	-23.71298630	-47.3703022	-0.05567036	0.0485521
##	C:2021-02-05-C:2020-10-26	-34.37463336	-57.5428564	-11.20641034	0.0000161
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##	C:2021-02-26-C:2020-10-26	-30.87175084	-53.6464298	-8.09707192	0.0001904
##	IA:2021-02-26-C:2020-10-26	-30.06264420	-52.6679923	-7.45729609	0.0003040
##	C:2021-03-15-C:2020-10-26	-17.21293567	-39.8182838	5.39241244	0.4865771
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##	C:2020-11-05-IA:2020-10-26	-1.81818182	-29.2430575	25.60669388	1.0000000
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##	C:2021-02-12-IA:2020-10-26	-41.72305768	-66.8759670	-16.57014831	0.0000004
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##	C:2021-02-26-IA:2020-10-26	-22.78955906	-48.0947579	2.51563974	0.1543455
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##	C:2021-03-15-IA:2020-10-26	-9.13074389	-34.2836533	16.02216548	0.9999593
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##	C:2021-03-30-IA:2020-10-26	4.30377477	-20.8491346	29.45668413	1.0000000
##	IA:2021-03-30-IA:2020-10-26	1.44710421	-23.7058051	26.60001358	1.0000000
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##	IA:2020-11-05-C:2020-11-05	-9.49315068	-32.5346550	13.54835366	0.9995455
##	C:2020-11-14-C:2020-11-05	-5.29562219	-27.4331835	16.84193913	1.0000000

##	IA:2020-11-14-C:2020-11-05	-8.15760525	-30.7139710	14.39876046	0.9999623
##	C:2020-11-25-C:2020-11-05	-3.67082323	-25.1212964	17.77964995	1.0000000
##	IA:2020-11-25-C:2020-11-05	-8.65361675	-30.7911781	13.48394456	0.9998277
##	C:2020-12-05-C:2020-11-05	-19.85700744	-40.1413848	0.42736992	0.0647027
##	IA:2020-12-05-C:2020-11-05	-16.91424428	-37.5946273	3.76613877	0.3262956
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##	IA:2021-01-22-C:2020-11-05	-4.69946985	-26.4716450	17.07270528	1.0000000
##	C:2021-01-28-C:2020-11-05	-16.49556007	-36.9684739	3.97735379	0.3584744
##	IA:2021-01-28-C:2020-11-05	-13.81261270	-35.2630859	7.63786048	0.8226677
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##	IA:2021-02-05-C:2020-11-05	-27.64837741	-48.5582019	-6.73855293	0.0003488
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##	IA:2021-02-12-C:2020-11-05	-35.63792849	-55.9223059	-15.35355113	0.0000000
##	C:2021-02-26-C:2020-11-05	-20.97137725	-41.4442911	-0.49846338	0.0366840
##	IA:2021-02-26-C:2020-11-05	-20.16227060	-40.4466480	0.12210677	0.0538745
##	C:2021-03-15-C:2020-11-05	-7.31256207	-27.5969394	12.97181529	0.9999646
##	IA:2021-03-15-C:2020-11-05	-11.65981390	-31.9441913	8.62456346	0.9404994
##	C:2021-03-30-C:2020-11-05	6.12195658	-14.1624208	26.40633395	0.9999992
##	IA:2021-03-30-C:2020-11-05	3.26528603	-17.0190913	23.54966340	1.0000000
##	C:2021-04-15-C:2020-11-05	-7.90371797	-28.1880953	12.38065940	0.9998379
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##	C:2020-11-14-IA:2020-11-05	4.19752850	-17.9400328	26.33508981	1.0000000
##	IA:2020-11-14-IA:2020-11-05	1.33554543	-21.2208203	23.89191115	1.0000000
##	C:2020-11-25-IA:2020-11-05	5.82232746	-15.6281457	27.27280064	0.9999999
##	IA:2020-11-25-IA:2020-11-05	0.83953393	-21.2980274	22.97709525	1.0000000
##	C:2020-12-05-IA:2020-11-05	-10.36385675	-30.6482341	9.92052061	0.9860765
##	IA:2020-12-05-IA:2020-11-05	-7.42109360	-28.1014766	13.25928946	0.9999678
##	C:2021-01-22-IA:2020-11-05	-20.68944540	-41.1623593	-0.21653153	0.0437733
##	IA:2021-01-22-IA:2020-11-05	4.79368084	-16.9784943	26.56585596	1.0000000
##	C:2021-01-28-IA:2020-11-05	-7.00240939	-27.4753232	13.47050448	0.9999880
##	IA:2021-01-28-IA:2020-11-05	-4.31946202	-25.7699352	17.13101116	1.0000000
##	C:2021-02-05-IA:2020-11-05	-14.98110908	-35.8909336	5.92871540	0.6246803
##	IA:2021-02-05-IA:2020-11-05	-18.15522672	-39.0650512	2.75459776	0.2114007
##	C:2021-02-12-IA:2020-11-05	-30.41172518	-50.6961025	-10.12734781	0.0000118
##	IA:2021-02-12-IA:2020-11-05	-26.14477781	-46.4291552	-5.86040044	0.0006300
##	C:2021-02-26-IA:2020-11-05	-11.47822656	-31.9511404	8.99468730	0.9550676
##	IA:2021-02-26-IA:2020-11-05	-10.66911991	-30.9534973	9.61525745	0.9794924
##	C:2021-03-15-IA:2020-11-05	2.18058862	-18.1037887	22.46496598	1.0000000
##	IA:2021-03-15-IA:2020-11-05	-2.16666322	-22.4510406	18.11771415	1.0000000
##	C:2021-03-30-IA:2020-11-05	15.61510727	-4.6692701	35.89948463	0.4613796
##	IA:2021-03-30-IA:2020-11-05	12.75843672	-7.5259406	33.04281408	0.8549335
##	C:2021-04-15-IA:2020-11-05	1.58943272	-18.6949446	21.87381008	1.0000000
##	IA:2021-04-15-IA:2020-11-05	-2.78839873	-23.0727761	17.49597864	1.0000000
##	IA:2020-11-14-C:2020-11-14	-2.86198307	-24.4941427	18.77017661	1.0000000
##	C:2020-11-25-C:2020-11-14	1.62479896	-18.8516143	22.10121217	1.0000000
##	IA:2020-11-25-C:2020-11-14	-3.35799456	-24.5530959	17.83710674	1.0000000
##	C:2020-12-05-C:2020-11-14	-14.56138525	-33.8127920	4.69002153	0.5020271
##	IA:2020-12-05-C:2020-11-14	-11.61862210	-31.2868437	8.04959952	0.9204342
##	C:2021-01-22-C:2020-11-14	-24.88697390	-44.3369328	-5.43701502	0.0007417
##	IA:2021-01-22-C:2020-11-14	0.59615234	-20.2170240	21.40932864	1.0000000
##	C:2021-01-28-C:2020-11-14	-11.19993788	-30.6498968	8.25002099	0.9393384
##	IA:2021-01-28-C:2020-11-14	-8.51699052	-28.9934037	11.95942269	0.9994611
##	C:2021-02-05-C:2020-11-14	-19.17863758	-39.0879685	0.73069335	0.0778459
##	IA:2021-02-05-C:2020-11-14	-22.35275522	-42.2620862	-2.44342429	0.0093165

## C:2021-02-12-C:2020-11-14	-34.60925367	-53.8606605	-15.35784689	0.0000000
## IA:2021-02-12-C:2020-11-14	-30.34230631	-49.5937131	-11.09089952	0.0000024
## C:2021-02-26-C:2020-11-14	-15.67575506	-35.1257139	3.77420382	0.3578596
## IA:2021-02-26-C:2020-11-14	-14.86664841	-34.1180552	4.38475838	0.4541274
## C:2021-03-15-C:2020-11-14	-2.01693988	-21.2683467	17.23446690	1.0000000
## IA:2021-03-15-C:2020-11-14	-6.36419172	-25.6155985	12.88721507	0.9999942
## C:2021-03-30-C:2020-11-14	11.41757877	-7.8338280	30.66898556	0.9171267
## IA:2021-03-30-C:2020-11-14	8.56090822	-10.6904986	27.81231501	0.9982990
## C:2021-04-15-C:2020-11-14	-2.60809578	-21.8595026	16.64331101	1.0000000
## IA:2021-04-15-C:2020-11-14	-6.98592723	-26.2373340	12.26547956	0.9999596
## C:2020-11-25-IA:2020-11-14	4.48678202	-16.4417036	25.41526766	1.0000000
## IA:2020-11-25-IA:2020-11-14	-0.49601150	-22.1281712	21.13614818	1.0000000
## C:2020-12-05-IA:2020-11-14	-11.69940219	-31.4309677	8.03216330	0.9173400
## IA:2020-12-05-IA:2020-11-14	-8.75663903	-28.8950837	11.38180567	0.9988327
## C:2021-01-22-IA:2020-11-14	-22.02499083	-41.9503243	-2.09965737	0.0120211
## IA:2021-01-22-IA:2020-11-14	3.45813541	-17.7999530	24.71622377	1.0000000
## C:2021-01-28-IA:2020-11-14	-8.33795482	-28.2632883	11.58737864	0.9994001
## IA:2021-01-28-IA:2020-11-14	-5.65500745	-26.5834931	15.27347819	0.9999999
## C:2021-02-05-IA:2020-11-14	-16.31665451	-36.6906446	4.05733556	0.3717807
## IA:2021-02-05-IA:2020-11-14	-19.49077216	-39.8647622	0.88321791	0.0840756
## C:2021-02-12-IA:2020-11-14	-31.74727061	-51.4788361	-12.01570512	0.0000012
## IA:2021-02-12-IA:2020-11-14	-27.48032324	-47.2118887	-7.74875775	0.0000951
## C:2021-02-26-IA:2020-11-14	-12.81377199	-32.7391055	7.11156147	0.8245775
## IA:2021-02-26-IA:2020-11-14	-12.00466534	-31.7362308	7.72690014	0.8932619
## C:2021-03-15-IA:2020-11-14	0.84504318	-18.8865223	20.57660867	1.0000000
## IA:2021-03-15-IA:2020-11-14	-3.50220865	-23.2337741	16.22935684	1.0000000
## C:2021-03-30-IA:2020-11-14	14.27956184	-5.4520037	34.01112732	0.6026019
## IA:2021-03-30-IA:2020-11-14	11.42289128	-8.3086742	31.15445677	0.9357192
## C:2021-04-15-IA:2020-11-14	0.25388729	-19.4776782	19.98545277	1.0000000
## IA:2021-04-15-IA:2020-11-14	-4.12394416	-23.8555096	15.60762133	1.0000000
## IA:2020-11-25-C:2020-11-25	-4.98279352	-25.4592067	15.49361969	1.0000000
## C:2020-12-05-C:2020-11-25	-16.18618421	-34.6433737	2.27100523	0.1947710
## IA:2020-12-05-C:2020-11-25	-13.24342105	-32.1349567	5.64811462	0.6710141
## C:2021-01-22-C:2020-11-25	-26.51177285	-45.1759653	-7.84758042	0.0000560
## IA:2021-01-22-C:2020-11-25	-1.02864662	-21.1094705	19.05217723	1.0000000
## C:2021-01-28-C:2020-11-25	-12.82473684	-31.4889293	5.83945559	0.7112786
## IA:2021-01-28-C:2020-11-25	-10.14178947	-29.8733550	9.58977601	0.9848990
## C:2021-02-05-C:2020-11-25	-20.80343653	-39.9458668	-1.66100626	0.0157036
## IA:2021-02-05-C:2020-11-25	-23.97755418	-43.1199845	-4.83512391	0.0011777
## C:2021-02-12-C:2020-11-25	-36.23405263	-54.6912421	-17.77686319	0.0000000
## IA:2021-02-12-C:2020-11-25	-31.96710526	-50.4242947	-13.50991582	0.0000001
## C:2021-02-26-C:2020-11-25	-17.30055402	-35.9647464	1.36363841	0.1171115
## IA:2021-02-26-C:2020-11-25	-16.49144737	-34.9486368	1.96574207	0.1657552
## C:2021-03-15-C:2020-11-25	-3.64173884	-22.0989283	14.81545060	1.0000000
## IA:2021-03-15-C:2020-11-25	-7.98899067	-26.4461801	10.46819877	0.9989201
## C:2021-03-30-C:2020-11-25	9.79277981	-8.6644096	28.24996925	0.9770569
## IA:2021-03-30-C:2020-11-25	6.93610926	-11.5210802	25.39329870	0.9999193
## C:2021-04-15-C:2020-11-25	-4.23289474	-22.6900842	14.22429470	1.0000000
## IA:2021-04-15-C:2020-11-25	-8.61072618	-27.0679156	9.84646326	0.9963227
## C:2020-12-05-IA:2020-11-25	-11.20339069	-30.4547975	8.04801610	0.9320051
## IA:2020-12-05-IA:2020-11-25	-8.26062753	-27.9288491	11.40759408	0.9993598
## C:2021-01-22-IA:2020-11-25	-21.52897933	-40.9789382	-2.07902045	0.0117591
## IA:2021-01-22-IA:2020-11-25	3.95414691	-16.8590294	24.76732321	1.0000000
## C:2021-01-28-IA:2020-11-25	-7.84194332	-27.2919022	11.60801556	0.9996933

##	IA:2021-01-28-IA:2020-11-25	-5.15899595	-25.6354092	15.31741726	1.0000000
##	C:2021-02-05-IA:2020-11-25	-15.82064301	-35.7299739	4.08868792	0.3891134
##	IA:2021-02-05-IA:2020-11-25	-18.99476066	-38.9040916	0.91457027	0.0866077
##	C:2021-02-12-IA:2020-11-25	-31.25125911	-50.5026659	-11.99985232	0.0000009
##	IA:2021-02-12-IA:2020-11-25	-26.98431174	-46.2357185	-7.73290495	0.0000802
##	C:2021-02-26-IA:2020-11-25	-12.31776049	-31.7677194	7.13219838	0.8459698
##	IA:2021-02-26-IA:2020-11-25	-11.50865385	-30.7600606	7.74275294	0.9101807
##	C:2021-03-15-IA:2020-11-25	1.34105468	-17.9103521	20.59246147	1.0000000
##	IA:2021-03-15-IA:2020-11-25	-3.00619715	-22.2576039	16.24520964	1.0000000
##	C:2021-03-30-IA:2020-11-25	14.77557334	-4.4758335	34.02698012	0.4682913
##	IA:2021-03-30-IA:2020-11-25	11.91890278	-7.3325040	31.17030957	0.8741930
##	C:2021-04-15-IA:2020-11-25	0.74989879	-18.5015080	20.00130557	1.0000000
##	IA:2021-04-15-IA:2020-11-25	-3.62793266	-22.8793394	15.62347413	1.0000000
##	IA:2020-12-05-C:2020-12-05	2.94276316	-14.6135259	20.49905222	1.0000000
##	C:2021-01-22-C:2020-12-05	-10.32558864	-27.6370081	6.98583084	0.9121971
##	IA:2021-01-22-C:2020-12-05	15.15753759	-3.6725620	33.98763722	0.3605437
##	C:2021-01-28-C:2020-12-05	3.36144737	-13.9499721	20.67286685	1.0000000
##	IA:2021-01-28-C:2020-12-05	6.04439474	-12.4127947	24.50158418	0.9999952
##	C:2021-02-05-C:2020-12-05	-4.61725232	-22.4432390	13.20873439	1.0000000
##	IA:2021-02-05-C:2020-12-05	-7.79136997	-25.6173567	10.03461674	0.9987257
##	C:2021-02-12-C:2020-12-05	-20.04786842	-37.1359054	-2.95983145	0.0043080
##	IA:2021-02-12-C:2020-12-05	-15.78092105	-32.8689580	1.30711592	0.1215158
##	C:2021-02-26-C:2020-12-05	-1.11436981	-18.4257893	16.19704968	1.0000000
##	IA:2021-02-26-C:2020-12-05	-0.30526316	-17.3933001	16.78277381	1.0000000
##	C:2021-03-15-C:2020-12-05	12.54444537	-4.5435916	29.63248234	0.5705558
##	IA:2021-03-15-C:2020-12-05	8.19719354	-8.8908434	25.28523051	0.9943662
##	C:2021-03-30-C:2020-12-05	25.97896402	8.8909271	43.06700099	0.0000077
##	IA:2021-03-30-C:2020-12-05	23.12229347	6.0342565	40.21033044	0.0001990
##	C:2021-04-15-C:2020-12-05	11.95328947	-5.1347475	29.04132644	0.6754715
##	IA:2021-04-15-C:2020-12-05	7.57545803	-9.5125789	24.66349500	0.9983839
##	C:2021-01-22-IA:2020-12-05	-13.26835180	-31.0421393	4.50543572	0.5323006
##	IA:2021-01-22-IA:2020-12-05	12.21477444	-7.0412618	31.47081063	0.8437914
##	C:2021-01-28-IA:2020-12-05	0.41868421	-17.3551033	18.19247173	1.0000000
##	IA:2021-01-28-IA:2020-12-05	3.10163158	-15.7899041	21.99316726	1.0000000
##	C:2021-02-05-IA:2020-12-05	-7.56001548	-25.8353563	10.71532529	0.9995112
##	IA:2021-02-05-IA:2020-12-05	-10.73413313	-29.0094739	7.54120765	0.9250306
##	C:2021-02-12-IA:2020-12-05	-22.99063158	-40.5469206	-5.43434252	0.0004379
##	IA:2021-02-12-IA:2020-12-05	-18.72368421	-36.2799733	-1.16739515	0.0208589
##	C:2021-02-26-IA:2020-12-05	-4.05713296	-21.8309205	13.71665455	1.0000000
##	IA:2021-02-26-IA:2020-12-05	-3.24802632	-20.8043154	14.30826275	1.0000000
##	C:2021-03-15-IA:2020-12-05	9.60168221	-7.9546069	27.15797127	0.9665069
##	IA:2021-03-15-IA:2020-12-05	5.25443038	-12.3018587	22.81071944	0.9999994
##	C:2021-03-30-IA:2020-12-05	23.03620087	5.4799118	40.59248993	0.0004181
##	IA:2021-03-30-IA:2020-12-05	20.17953031	2.6232413	37.73581938	0.0062301
##	C:2021-04-15-IA:2020-12-05	9.01052632	-8.5457627	26.56681538	0.9851954
##	IA:2021-04-15-IA:2020-12-05	4.63269487	-12.9235942	22.18898393	1.0000000
##	IA:2021-01-22-C:2021-01-22	25.48312624	6.4500790	44.51617352	0.0002583
##	C:2021-01-28-C:2021-01-22	13.68703601	-3.8449200	31.21899202	0.4291557
##	IA:2021-01-28-C:2021-01-22	16.36998338	-2.2942091	35.03417581	0.1945455
##	C:2021-02-05-C:2021-01-22	5.70833632	-12.3318976	23.74857022	0.9999977
##	IA:2021-02-05-C:2021-01-22	2.53421867	-15.5060152	20.57445258	1.0000000
##	C:2021-02-12-C:2021-01-22	-9.72227978	-27.0336993	7.58913970	0.9541759
##	IA:2021-02-12-C:2021-01-22	-5.45533241	-22.7667519	11.85608707	0.9999979
##	C:2021-02-26-C:2021-01-22	9.21121884	-8.3207372	26.74317485	0.9797856

##	IA: 2021-02-26-C: 2021-01-22	10.02032548	-7.2910940	27.33174497	0.9358236
##	C: 2021-03-15-C: 2021-01-22	22.87003401	5.5586145	40.18145349	0.0003562
##	IA: 2021-03-15-C: 2021-01-22	18.52278218	1.2113627	35.83420166	0.0198778
##	C: 2021-03-30-C: 2021-01-22	36.30455267	18.9931332	53.61597215	0.0000000
##	IA: 2021-03-30-C: 2021-01-22	33.44788211	16.1364626	50.75930160	0.0000000
##	C: 2021-04-15-C: 2021-01-22	22.27887812	4.9674586	39.59029760	0.0006520
##	IA: 2021-04-15-C: 2021-01-22	17.90104667	0.5896272	35.21246615	0.0323102
##	C: 2021-01-28-IA: 2021-01-22	-11.79609023	-30.8291375	7.23695706	0.8729732
##	IA: 2021-01-28-IA: 2021-01-22	-9.11314286	-29.1939667	10.96768099	0.9976278
##	C: 2021-02-05-IA: 2021-01-22	-19.77478992	-39.2770320	-0.27254782	0.0419209
##	IA: 2021-02-05-IA: 2021-01-22	-22.94890756	-42.4511497	-3.44666547	0.0040758
##	C: 2021-02-12-IA: 2021-01-22	-35.20540602	-54.0355056	-16.37530639	0.0000000
##	IA: 2021-02-12-IA: 2021-01-22	-30.93845865	-49.7685583	-12.10835902	0.0000006
##	C: 2021-02-26-IA: 2021-01-22	-16.27190740	-35.3049547	2.76113988	0.2387603
##	IA: 2021-02-26-IA: 2021-01-22	-15.46280075	-34.2929004	3.36729887	0.3178748
##	C: 2021-03-15-IA: 2021-01-22	-2.61309222	-21.4431918	16.21700740	1.0000000
##	IA: 2021-03-15-IA: 2021-01-22	-6.96034406	-25.7904437	11.86975557	0.9999417
##	C: 2021-03-30-IA: 2021-01-22	10.82142643	-8.0086732	29.65152606	0.9406466
##	IA: 2021-03-30-IA: 2021-01-22	7.96475588	-10.8653437	26.79485550	0.9992751
##	C: 2021-04-15-IA: 2021-01-22	-3.20424812	-22.0343477	15.62585150	1.0000000
##	IA: 2021-04-15-IA: 2021-01-22	-7.58207957	-26.4121792	11.24802006	0.9997006
##	IA: 2021-01-28-C: 2021-01-28	2.68294737	-15.9812451	21.34713980	1.0000000
##	C: 2021-02-05-C: 2021-01-28	-7.97869969	-26.0189336	10.06153421	0.9984463
##	IA: 2021-02-05-C: 2021-01-28	-11.15281734	-29.1930512	6.88741656	0.8758682
##	C: 2021-02-12-C: 2021-01-28	-23.40931579	-40.7207353	-6.09789631	0.0002023
##	IA: 2021-02-12-C: 2021-01-28	-19.14236842	-36.4537879	-1.83094894	0.0119533
##	C: 2021-02-26-C: 2021-01-28	-4.47581717	-22.0077732	13.05613883	1.0000000
##	IA: 2021-02-26-C: 2021-01-28	-3.66671053	-20.9781300	13.64470896	1.0000000
##	C: 2021-03-15-C: 2021-01-28	9.18299800	-8.1284215	26.49441748	0.9771168
##	IA: 2021-03-15-C: 2021-01-28	4.83574617	-12.4756733	22.14716565	0.9999999
##	C: 2021-03-30-C: 2021-01-28	22.61751666	5.3060972	39.92893614	0.0004621
##	IA: 2021-03-30-C: 2021-01-28	19.76084610	2.4494266	37.07226558	0.0070300
##	C: 2021-04-15-C: 2021-01-28	8.59184211	-8.7195774	25.90326159	0.9907209
##	IA: 2021-04-15-C: 2021-01-28	4.21401066	-13.0974088	21.52543014	1.0000000
##	C: 2021-02-05-IA: 2021-01-28	-10.66164706	-29.8040773	8.48078321	0.9583879
##	IA: 2021-02-05-IA: 2021-01-28	-13.83576471	-32.9781950	5.30666557	0.6053948
##	C: 2021-02-12-IA: 2021-01-28	-26.09226316	-44.5494526	-7.63507372	0.0000638
##	IA: 2021-02-12-IA: 2021-01-28	-21.82531579	-40.2825052	-3.36812635	0.0037215
##	C: 2021-02-26-IA: 2021-01-28	-7.15876454	-25.8229570	11.50542789	0.9998800
##	IA: 2021-02-26-IA: 2021-01-28	-6.34965789	-24.8068473	12.10753154	0.9999865
##	C: 2021-03-15-IA: 2021-01-28	6.50005063	-11.9571388	24.95724007	0.9999780
##	IA: 2021-03-15-IA: 2021-01-28	2.15279880	-16.3043906	20.60998824	1.0000000
##	C: 2021-03-30-IA: 2021-01-28	19.93456929	1.4773798	38.39175873	0.0172694
##	IA: 2021-03-30-IA: 2021-01-28	17.07789873	-1.3792907	35.53508817	0.1192357
##	C: 2021-04-15-IA: 2021-01-28	5.90889474	-12.5482947	24.36608418	0.9999971
##	IA: 2021-04-15-IA: 2021-01-28	1.53106329	-16.9261261	19.98825273	1.0000000
##	IA: 2021-02-05-C: 2021-02-05	-3.17411765	-21.7086961	15.36046077	1.0000000
##	C: 2021-02-12-C: 2021-02-05	-15.43061610	-33.2566028	2.39537061	0.2166354
##	IA: 2021-02-12-C: 2021-02-05	-11.16366873	-28.9896554	6.66231798	0.8604103
##	C: 2021-02-26-C: 2021-02-05	3.50288252	-14.5373514	21.54311642	1.0000000
##	IA: 2021-02-26-C: 2021-02-05	4.31198916	-13.5139975	22.13797587	1.0000000
##	C: 2021-03-15-C: 2021-02-05	17.16169769	-0.6642890	34.98768440	0.0783591
##	IA: 2021-03-15-C: 2021-02-05	12.81444586	-5.0115409	30.64043257	0.6173689
##	C: 2021-03-30-C: 2021-02-05	30.59621635	12.7702296	48.42220306	0.0000001

##	IA: 2021-03-30-C: 2021-02-05	27.73954579	9.9135591	45.56553250	0.0000037
##	C: 2021-04-15-C: 2021-02-05	16.57054180	-1.2554449	34.39652851	0.1138173
##	IA: 2021-04-15-C: 2021-02-05	12.19271035	-5.6332764	30.01869706	0.7201521
##	C: 2021-02-12-IA: 2021-02-05	-12.25649845	-30.0824852	5.56948826	0.7100495
##	IA: 2021-02-12-IA: 2021-02-05	-7.98955108	-25.8155378	9.83643563	0.9980639
##	C: 2021-02-26-IA: 2021-02-05	6.67700016	-11.3632337	24.71723407	0.9999401
##	IA: 2021-02-26-IA: 2021-02-05	7.48610681	-10.3398799	25.31209352	0.9993610
##	C: 2021-03-15-IA: 2021-02-05	20.33581534	2.5098286	38.16180205	0.0071046
##	IA: 2021-03-15-IA: 2021-02-05	15.98856351	-1.8374232	33.81455022	0.1601645
##	C: 2021-03-30-IA: 2021-02-05	33.77033399	15.9443473	51.59632070	0.0000000
##	IA: 2021-03-30-IA: 2021-02-05	30.91366344	13.0876767	48.73965015	0.0000001
##	C: 2021-04-15-IA: 2021-02-05	19.74465944	1.9186727	37.57064615	0.0116326
##	IA: 2021-04-15-IA: 2021-02-05	15.36682800	-2.4591587	33.19281471	0.2238765
##	IA: 2021-02-12-C: 2021-02-12	4.26694737	-12.8210896	21.35498434	1.0000000
##	C: 2021-02-26-C: 2021-02-12	18.93349861	1.6220791	36.24491810	0.0142266
##	IA: 2021-02-26-C: 2021-02-12	19.74260526	2.6545683	36.83064223	0.0056880
##	C: 2021-03-15-C: 2021-02-12	32.59231379	15.5042768	49.68035076	0.0000000
##	IA: 2021-03-15-C: 2021-02-12	28.24506196	11.1570250	45.33309893	0.0000005
##	C: 2021-03-30-C: 2021-02-12	46.02683245	28.9387955	63.11486941	0.0000000
##	IA: 2021-03-30-C: 2021-02-12	43.17016189	26.0821249	60.25819886	0.0000000
##	C: 2021-04-15-C: 2021-02-12	32.00115789	14.9131209	49.08919486	0.0000000
##	IA: 2021-04-15-C: 2021-02-12	27.62332645	10.5352895	44.71136342	0.0000010
##	C: 2021-02-26-IA: 2021-02-12	14.66655125	-2.6448682	31.97797073	0.2556054
##	IA: 2021-02-26-IA: 2021-02-12	15.47565789	-1.6123791	32.56369486	0.1465805
##	C: 2021-03-15-IA: 2021-02-12	28.32536642	11.2373295	45.41340339	0.0000004
##	IA: 2021-03-15-IA: 2021-02-12	23.97811459	6.8900776	41.06615156	0.0000779
##	C: 2021-03-30-IA: 2021-02-12	41.75988508	24.6718481	58.84792205	0.0000000
##	IA: 2021-03-30-IA: 2021-02-12	38.90321452	21.8151776	55.99125149	0.0000000
##	C: 2021-04-15-IA: 2021-02-12	27.73421053	10.6461736	44.82224749	0.0000009
##	IA: 2021-04-15-IA: 2021-02-12	23.35637908	6.2683421	40.44441605	0.0001545
##	IA: 2021-02-26-C: 2021-02-26	0.80910665	-16.5023128	18.12052613	1.0000000
##	C: 2021-03-15-C: 2021-02-26	13.65881518	-3.6526043	30.97023466	0.4050877
##	IA: 2021-03-15-C: 2021-02-26	9.31156334	-7.9998561	26.62298283	0.9727113
##	C: 2021-03-30-C: 2021-02-26	27.09333383	9.7819143	44.40475331	0.0000030
##	IA: 2021-03-30-C: 2021-02-26	24.23666328	6.9252438	41.54808276	0.0000828
##	C: 2021-04-15-C: 2021-02-26	13.06765928	-4.2437602	30.37907876	0.5066811
##	IA: 2021-04-15-C: 2021-02-26	8.68982783	-8.6215916	26.00124732	0.9891029
##	C: 2021-03-15-IA: 2021-02-26	12.84970853	-4.2383284	29.93774550	0.5155241
##	IA: 2021-03-15-IA: 2021-02-26	8.50245670	-8.5855803	25.59049366	0.9903798
##	C: 2021-03-30-IA: 2021-02-26	26.28422718	9.1961902	43.37226415	0.0000053
##	IA: 2021-03-30-IA: 2021-02-26	23.42755663	6.3395197	40.51559360	0.0001430
##	C: 2021-04-15-IA: 2021-02-26	12.25855263	-4.8294843	29.34658960	0.6219003
##	IA: 2021-04-15-IA: 2021-02-26	7.88072119	-9.2073158	24.96875815	0.9969315
##	IA: 2021-03-15-C: 2021-03-15	-4.34725183	-21.4352888	12.74078514	1.0000000
##	C: 2021-03-30-C: 2021-03-15	13.43451865	-3.6535183	30.52255562	0.4131662
##	IA: 2021-03-30-C: 2021-03-15	10.57784810	-6.5101889	27.66588507	0.8743760
##	C: 2021-04-15-C: 2021-03-15	-0.59115590	-17.6791929	16.49688107	1.0000000
##	IA: 2021-04-15-C: 2021-03-15	-4.96898734	-22.0570243	12.11904963	0.9999997
##	C: 2021-03-30-IA: 2021-03-15	17.78177049	0.6937335	34.86980745	0.0296319
##	IA: 2021-03-30-IA: 2021-03-15	14.92509993	-2.1629370	32.01313690	0.2014152
##	C: 2021-04-15-IA: 2021-03-15	3.75609594	-13.3319410	20.84413290	1.0000000
##	IA: 2021-04-15-IA: 2021-03-15	-0.62173551	-17.7097725	16.46630146	1.0000000
##	IA: 2021-03-30-C: 2021-03-30	-2.85667055	-19.9447075	14.23136642	1.0000000
##	C: 2021-04-15-C: 2021-03-30	-14.02567455	-31.1137115	3.06236242	0.3188565

```
## IA:2021-04-15-C:2021-03-30 -18.40350600 -35.4915430 -1.31546903 0.0180278
## C:2021-04-15-IA:2021-03-30 -11.16900400 -28.2570410 5.91903297 0.7998944
## IA:2021-04-15-IA:2021-03-30 -15.54683544 -32.6348724 1.54120153 0.1404085
## IA:2021-04-15-C:2021-04-15 -4.37783145 -21.4658684 12.71020552 1.0000000
```

Efecto de la IA sobre los niveles de albumina plasmática

```
t2way(Albumina ~ Condicion + Fechas + Condicion:Fechas, data = b,)
```

```
## Call:
## t2way(formula = Albumina ~ Condicion + Fechas + Condicion:Fechas,
##       data = b)
##
##               value p.value
## Condicion      14.6664  0.001
## Fechas        385.2984  0.001
## Condicion:Fechas 24.2829  0.116
```

```
anovaalbumina <- aov(Albumina ~ Condicion + Fechas + Condicion:Fechas, data = b)
anova(anovaalbumina)
```

```
## Analysis of Variance Table
##
## Response: Albumina
##              Df Sum Sq Mean Sq F value    Pr(>F)
## Condicion      1  0.5364  0.53637 17.7663 3.056e-05 ***
## Fechas        14 11.3501  0.81072 26.8537 < 2.2e-16 ***
## Condicion:Fechas 14  0.5598  0.03998  1.3244  0.1891
## Residuals     423 12.7705  0.03019
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
TukeyHSD(anovaalbumina)
```

```
## Tukey multiple comparisons of means
## 95% family-wise confidence level
##
## Fit: aov(formula = Albumina ~ Condicion + Fechas + Condicion:Fechas, data = b)
##
## $Condicion
##           diff           lwr           upr      p adj
## IA-C 0.06885764 0.03674726 0.100968 3.06e-05
##
## $Fechas
##              diff           lwr           upr      p adj
## 2020-10-14-2020-10-05 0.001357312 -0.231839984 0.234554608 1.0000000
## 2020-10-26-2020-10-05 0.111637048 -0.121560248 0.344834344 0.9504894
## 2020-11-05-2020-10-05 0.189061764 -0.023668350 0.401791877 0.1456076
## 2020-11-14-2020-10-05 0.360628635 0.152452131 0.568805139 0.0000007
## 2020-11-25-2020-10-05 0.458048312 0.253520754 0.662575870 0.0000000
## 2020-12-05-2020-10-05 0.455188260 0.258900121 0.651476399 0.0000000
## 2021-01-22-2020-10-05 0.492422043 0.292596897 0.692247190 0.0000000
## 2021-01-28-2020-10-05 0.488483123 0.289443147 0.687523100 0.0000000
## 2021-02-05-2020-10-05 0.532590591 0.333550615 0.731630567 0.0000000
## 2021-02-12-2020-10-05 0.572184865 0.377078009 0.767291720 0.0000000
## 2021-02-26-2020-10-05 0.469026137 0.273342893 0.664709380 0.0000000
## 2021-03-15-2020-10-05 0.287739709 0.092632853 0.482846564 0.0000726
```

##	2021-03-30-2020-10-05	0.216770948	0.021664092	0.411877803	0.0141228
##	2021-04-15-2020-10-05	0.509242919	0.314136063	0.704349774	0.0000000
##	2020-10-26-2020-10-14	0.110279736	-0.113768978	0.334328451	0.9383975
##	2020-11-05-2020-10-14	0.187704452	-0.014955236	0.390364139	0.1040383
##	2020-11-14-2020-10-14	0.359271323	0.161396856	0.557145790	0.0000001
##	2020-11-25-2020-10-14	0.456691000	0.262659122	0.650722879	0.0000000
##	2020-12-05-2020-10-14	0.453830948	0.268504530	0.639157367	0.0000000
##	2021-01-22-2020-10-14	0.491064731	0.301996127	0.680133336	0.0000000
##	2021-01-28-2020-10-14	0.487125812	0.298887240	0.675364383	0.0000000
##	2021-02-05-2020-10-14	0.531233279	0.342994707	0.719471851	0.0000000
##	2021-02-12-2020-10-14	0.570827553	0.386752750	0.754902355	0.0000000
##	2021-02-26-2020-10-14	0.467668825	0.282983201	0.652354448	0.0000000
##	2021-03-15-2020-10-14	0.286382397	0.102307594	0.470457199	0.0000183
##	2021-03-30-2020-10-14	0.215413636	0.031338833	0.399488438	0.0066937
##	2021-04-15-2020-10-14	0.507885607	0.323810805	0.691960409	0.0000000
##	2020-11-05-2020-10-26	0.077424716	-0.125234972	0.280084403	0.9934919
##	2020-11-14-2020-10-26	0.248991587	0.051117120	0.446866054	0.0020245
##	2020-11-25-2020-10-26	0.346411264	0.152379386	0.540443143	0.0000003
##	2020-12-05-2020-10-26	0.343551212	0.158224794	0.528877630	0.0000001
##	2021-01-22-2020-10-26	0.380784995	0.191716391	0.569853599	0.0000000
##	2021-01-28-2020-10-26	0.376846075	0.188607504	0.565084647	0.0000000
##	2021-02-05-2020-10-26	0.420953543	0.232714971	0.609192114	0.0000000
##	2021-02-12-2020-10-26	0.460547817	0.276473014	0.644622619	0.0000000
##	2021-02-26-2020-10-26	0.357389089	0.172703465	0.542074712	0.0000000
##	2021-03-15-2020-10-26	0.176102661	-0.007972142	0.360177463	0.0777193
##	2021-03-30-2020-10-26	0.105133900	-0.078940903	0.289208702	0.8267909
##	2021-04-15-2020-10-26	0.397605871	0.213531068	0.581680673	0.0000000
##	2020-11-14-2020-11-05	0.171566871	-0.001717367	0.344851109	0.0554597
##	2020-11-25-2020-11-05	0.268986548	0.100103475	0.437869621	0.0000096
##	2020-12-05-2020-11-05	0.266126497	0.107321573	0.424931420	0.0000021
##	2021-01-22-2020-11-05	0.303360280	0.140203730	0.466516829	0.0000001
##	2021-01-28-2020-11-05	0.299421360	0.137227394	0.461615325	0.0000001
##	2021-02-05-2020-11-05	0.343528827	0.181334862	0.505722792	0.0000000
##	2021-02-12-2020-11-05	0.383123101	0.225780623	0.540465579	0.0000000
##	2021-02-26-2020-11-05	0.279964373	0.121907731	0.438021015	0.0000003
##	2021-03-15-2020-11-05	0.098677945	-0.058664533	0.256020423	0.7074448
##	2021-03-30-2020-11-05	0.027709184	-0.129633294	0.185051662	0.9999993
##	2021-04-15-2020-11-05	0.320181155	0.162838677	0.477523633	0.0000000
##	2020-11-25-2020-11-14	0.097419677	-0.065690249	0.260529603	0.7746472
##	2020-12-05-2020-11-14	0.094559625	-0.058091478	0.247210729	0.7254238
##	2021-01-22-2020-11-14	0.131793408	-0.025379793	0.288966610	0.2194494
##	2021-01-28-2020-11-14	0.127854488	-0.028319255	0.284028232	0.2546862
##	2021-02-05-2020-11-14	0.171961956	0.015788213	0.328135699	0.0159331
##	2021-02-12-2020-11-14	0.211556230	0.060427109	0.362685350	0.0002437
##	2021-02-26-2020-11-14	0.108397502	-0.043475003	0.260270006	0.4902016
##	2021-03-15-2020-11-14	-0.072888926	-0.224018047	0.078240194	0.9474700
##	2021-03-30-2020-11-14	-0.143857687	-0.294986808	0.007271433	0.0814609
##	2021-04-15-2020-11-14	0.148614284	-0.002514837	0.299743404	0.0594493
##	2020-12-05-2020-11-25	-0.002860052	-0.150496174	0.144776071	1.0000000
##	2021-01-22-2020-11-25	0.034373731	-0.117933460	0.186680922	0.9999835
##	2021-01-28-2020-11-25	0.030434811	-0.120840776	0.181710398	0.9999961
##	2021-02-05-2020-11-25	0.074542279	-0.076733308	0.225817866	0.9378690
##	2021-02-12-2020-11-25	0.114136553	-0.031925339	0.260198444	0.3297325
##	2021-02-26-2020-11-25	0.010977824	-0.135853109	0.157808758	1.0000000

```

## 2021-03-15-2020-11-25 -0.170308604 -0.316370495 -0.024246712 0.0070732
## 2021-03-30-2020-11-25 -0.241277364 -0.387339256 -0.095215473 0.0000033
## 2021-04-15-2020-11-25 0.051194607 -0.094867285 0.197256498 0.9972965
## 2021-01-22-2020-12-05 0.037233783 -0.103815825 0.178283391 0.9998886
## 2021-01-28-2020-12-05 0.033294863 -0.106640174 0.173229900 0.9999683
## 2021-02-05-2020-12-05 0.077402331 -0.062532707 0.217337368 0.8585563
## 2021-02-12-2020-12-05 0.116996604 -0.017285143 0.251278352 0.1688348
## 2021-02-26-2020-12-05 0.013837876 -0.121279977 0.148955730 1.0000000
## 2021-03-15-2020-12-05 -0.167448552 -0.301730299 -0.033166804 0.0023743
## 2021-03-30-2020-12-05 -0.238417313 -0.372699060 -0.104135565 0.0000003
## 2021-04-15-2020-12-05 0.054054658 -0.080227089 0.188336406 0.9891908
## 2021-01-28-2021-01-22 -0.003938920 -0.148793573 0.140915733 1.0000000
## 2021-02-05-2021-01-22 0.040168548 -0.104686105 0.185023200 0.9998008
## 2021-02-12-2021-01-22 0.079762821 -0.059638195 0.219163838 0.8248581
## 2021-02-26-2021-01-22 -0.023395907 -0.163602505 0.116810691 0.9999997
## 2021-03-15-2021-01-22 -0.204682335 -0.344083351 -0.065281318 0.0000808
## 2021-03-30-2021-01-22 -0.275651096 -0.415052112 -0.136250079 0.0000000
## 2021-04-15-2021-01-22 0.016820875 -0.122580141 0.156221892 1.0000000
## 2021-02-05-2021-01-28 0.044107467 -0.099662116 0.187877051 0.9993644
## 2021-02-12-2021-01-28 0.083701741 -0.054571417 0.221974899 0.7572116
## 2021-02-26-2021-01-28 -0.019456987 -0.158542259 0.119628285 1.0000000
## 2021-03-15-2021-01-28 -0.200743415 -0.339016573 -0.062470257 0.0001059
## 2021-03-30-2021-01-28 -0.271712176 -0.409985334 -0.133439017 0.0000000
## 2021-04-15-2021-01-28 0.020759795 -0.117513363 0.159032954 0.9999999
## 2021-02-12-2021-02-05 0.039594274 -0.098678884 0.177867432 0.9997105
## 2021-02-26-2021-02-05 -0.063564454 -0.202649726 0.075520818 0.9661880
## 2021-03-15-2021-02-05 -0.244850882 -0.383124040 -0.106577724 0.0000003
## 2021-03-30-2021-02-05 -0.315819643 -0.454092801 -0.177546485 0.0000000
## 2021-04-15-2021-02-05 -0.023347672 -0.161620830 0.114925486 0.9999996
## 2021-02-26-2021-02-12 -0.103158728 -0.236554702 0.030237246 0.3474882
## 2021-03-15-2021-02-12 -0.284445156 -0.416994163 -0.151896149 0.0000000
## 2021-03-30-2021-02-12 -0.355413917 -0.487962924 -0.222864910 0.0000000
## 2021-04-15-2021-02-12 -0.062941946 -0.195490953 0.069607061 0.9536132
## 2021-03-15-2021-02-26 -0.181286428 -0.314682402 -0.047890454 0.0004596
## 2021-03-30-2021-02-26 -0.252255189 -0.385651163 -0.118859215 0.0000000
## 2021-04-15-2021-02-26 0.040216782 -0.093179192 0.173612756 0.9994780
## 2021-03-30-2021-03-15 -0.070968761 -0.203517768 0.061580246 0.8861885
## 2021-04-15-2021-03-15 0.221503210 0.088954203 0.354052217 0.0000023
## 2021-04-15-2021-03-30 0.292471971 0.159922964 0.425020978 0.0000000
##
## $`Condicion:Fechas`
##
## diff lwr upr p adj
## IA:2020-10-05-C:2020-10-05 0.017058942 -0.3616458173 0.395763702 1.0000000
## C:2020-10-14-C:2020-10-05 -0.024030590 -0.3889596270 0.340898448 1.0000000
## IA:2020-10-14-C:2020-10-05 0.043804155 -0.3211248820 0.408733193 1.0000000
## C:2020-10-26-C:2020-10-05 0.048153723 -0.3060921422 0.402399588 1.0000000
## IA:2020-10-26-C:2020-10-05 0.204707307 -0.1739974527 0.583412066 0.9709827
## C:2020-11-05-C:2020-10-05 0.175771886 -0.1571281820 0.508671954 0.9784445
## IA:2020-11-05-C:2020-10-05 0.219410584 -0.1134894839 0.552310652 0.7864132
## C:2020-11-14-C:2020-10-05 0.336577747 0.0128418269 0.660313668 0.0300005
## IA:2020-11-14-C:2020-10-05 0.401584426 0.0736164839 0.729552369 0.0018858
## C:2020-11-25-C:2020-10-05 0.476500731 0.1596535967 0.793347865 0.0000107
## IA:2020-11-25-C:2020-10-05 0.449831487 0.1260955660 0.773567407 0.0001011
## C:2020-12-05-C:2020-10-05 0.375250990 0.0699294519 0.680572528 0.0017483

```

##	IA:2020-12-05-C:2020-10-05	0.558188686	0.2489775446	0.867399827	0.0000000
##	C:2021-01-22-C:2020-10-05	0.488910531	0.1817404099	0.796080653	0.0000017
##	IA:2021-01-22-C:2020-10-05	0.504996841	0.1849329021	0.825060780	0.0000023
##	C:2021-01-28-C:2020-10-05	0.459391677	0.1522215556	0.766561798	0.0000127
##	IA:2021-01-28-C:2020-10-05	0.535484737	0.2186376033	0.852331872	0.0000002
##	C:2021-02-05-C:2020-10-05	0.553480020	0.2420035654	0.864956475	0.0000000
##	IA:2021-02-05-C:2020-10-05	0.528760104	0.2172836492	0.840236559	0.0000002
##	C:2021-02-12-C:2020-10-05	0.582308231	0.2769866926	0.887629769	0.0000000
##	IA:2021-02-12-C:2020-10-05	0.579120441	0.2737989027	0.884441979	0.0000000
##	C:2021-02-26-C:2020-10-05	0.455451415	0.1482812938	0.762621537	0.0000165
##	IA:2021-02-26-C:2020-10-05	0.500276032	0.1949544936	0.805597570	0.0000006
##	C:2021-03-15-C:2020-10-05	0.199697852	-0.1056236867	0.505019390	0.7988213
##	IA:2021-03-15-C:2020-10-05	0.392840508	0.0875189698	0.698162046	0.0006554
##	C:2021-03-30-C:2020-10-05	0.170550192	-0.1347713467	0.475871730	0.9569464
##	IA:2021-03-30-C:2020-10-05	0.280050646	-0.0252708919	0.585372184	0.1299066
##	C:2021-04-15-C:2020-10-05	0.467856874	0.1625353355	0.773178412	0.0000060
##	IA:2021-04-15-C:2020-10-05	0.567687906	0.2623663679	0.873009444	0.0000000
##	C:2020-10-14-IA:2020-10-05	-0.041089532	-0.4060185693	0.323839506	1.0000000
##	IA:2020-10-14-IA:2020-10-05	0.026745213	-0.3381838243	0.391674251	1.0000000
##	C:2020-10-26-IA:2020-10-05	0.031094781	-0.3231510845	0.385340646	1.0000000
##	IA:2020-10-26-IA:2020-10-05	0.187648365	-0.1910563949	0.566353124	0.9909354
##	C:2020-11-05-IA:2020-10-05	0.158712944	-0.1741871242	0.491613011	0.9948661
##	IA:2020-11-05-IA:2020-10-05	0.202351642	-0.1305484261	0.535251710	0.8941942
##	C:2020-11-14-IA:2020-10-05	0.319518805	-0.0042171154	0.643254726	0.0587060
##	IA:2020-11-14-IA:2020-10-05	0.384525484	0.0565575417	0.712493426	0.0043598
##	C:2020-11-25-IA:2020-10-05	0.459441789	0.1425946545	0.776288923	0.0000315
##	IA:2020-11-25-IA:2020-10-05	0.432772544	0.1090366238	0.756508465	0.0002682
##	C:2020-12-05-IA:2020-10-05	0.358192048	0.0528705097	0.663513586	0.0043112
##	IA:2020-12-05-IA:2020-10-05	0.541129744	0.2319186024	0.850340885	0.0000001
##	C:2021-01-22-IA:2020-10-05	0.471851589	0.1646814677	0.779021711	0.0000055
##	IA:2021-01-22-IA:2020-10-05	0.487937899	0.1678739598	0.808001837	0.0000070
##	C:2021-01-28-IA:2020-10-05	0.442332735	0.1351626134	0.749502856	0.0000383
##	IA:2021-01-28-IA:2020-10-05	0.518425795	0.2015786611	0.835272929	0.0000007
##	C:2021-02-05-IA:2020-10-05	0.536421078	0.2249446231	0.847897533	0.0000001
##	IA:2021-02-05-IA:2020-10-05	0.511701162	0.2002247070	0.823177616	0.0000006
##	C:2021-02-12-IA:2020-10-05	0.565249289	0.2599277503	0.870570827	0.0000000
##	IA:2021-02-12-IA:2020-10-05	0.562061499	0.2567399604	0.867383037	0.0000000
##	C:2021-02-26-IA:2020-10-05	0.438392473	0.1312223515	0.745562594	0.0000492
##	IA:2021-02-26-IA:2020-10-05	0.483217090	0.1778955514	0.788538628	0.0000021
##	C:2021-03-15-IA:2020-10-05	0.182638909	-0.1226826289	0.487960447	0.9096110
##	IA:2021-03-15-IA:2020-10-05	0.375781566	0.0704600276	0.681103104	0.0016985
##	C:2021-03-30-IA:2020-10-05	0.153491249	-0.1518302889	0.458812787	0.9888724
##	IA:2021-03-30-IA:2020-10-05	0.262991704	-0.0423298342	0.568313242	0.2252844
##	C:2021-04-15-IA:2020-10-05	0.450797931	0.1454763933	0.756119470	0.0000187
##	IA:2021-04-15-IA:2020-10-05	0.550628964	0.2453074257	0.855950502	0.0000000
##	IA:2020-10-14-C:2020-10-14	0.067834745	-0.2827777333	0.418447223	1.0000000
##	C:2020-10-26-C:2020-10-14	0.072184313	-0.2672947598	0.411663385	1.0000000
##	IA:2020-10-26-C:2020-10-14	0.228737896	-0.1361911411	0.593666934	0.8593272
##	C:2020-11-05-C:2020-10-14	0.199802475	-0.1173384439	0.516943395	0.8528212
##	IA:2020-11-05-C:2020-10-14	0.243441173	-0.0736997458	0.560582093	0.4679731
##	C:2020-11-14-C:2020-10-14	0.360608337	0.0531008512	0.668115823	0.0043439
##	IA:2020-11-14-C:2020-10-14	0.425615016	0.1136552769	0.737574755	0.0001619
##	C:2020-11-25-C:2020-10-14	0.500531320	0.2002847318	0.800777909	0.0000003
##	IA:2020-11-25-C:2020-10-14	0.473862076	0.1663545904	0.781369562	0.0000050

## C:2020-12-05-C:2020-10-14	0.399281580	0.1112240347	0.687339125	0.0001077
## IA:2020-12-05-C:2020-10-14	0.582219276	0.2900422103	0.874396341	0.0000000
## C:2021-01-22-C:2020-10-14	0.512941121	0.2229249299	0.802957312	0.0000000
## IA:2021-01-22-C:2020-10-14	0.529027430	0.2253881174	0.832666743	0.0000001
## C:2021-01-28-C:2020-10-14	0.483422267	0.1934060756	0.773438457	0.0000003
## IA:2021-01-28-C:2020-10-14	0.559515327	0.2592687384	0.859761916	0.0000000
## C:2021-02-05-C:2020-10-14	0.577510610	0.2829372073	0.872084012	0.0000000
## IA:2021-02-05-C:2020-10-14	0.552790693	0.2582172911	0.847364096	0.0000000
## C:2021-02-12-C:2020-10-14	0.606338820	0.3182812754	0.894396365	0.0000000
## IA:2021-02-12-C:2020-10-14	0.603151030	0.3150934855	0.891208575	0.0000000
## C:2021-02-26-C:2020-10-14	0.479482005	0.1894658138	0.769498196	0.0000005
## IA:2021-02-26-C:2020-10-14	0.524306621	0.2362490764	0.812364166	0.0000000
## C:2021-03-15-C:2020-10-14	0.223728441	-0.0643291039	0.511785986	0.4409459
## IA:2021-03-15-C:2020-10-14	0.416871098	0.1288135526	0.704928642	0.0000333
## C:2021-03-30-C:2020-10-14	0.194580781	-0.0934767639	0.482638326	0.7435904
## IA:2021-03-30-C:2020-10-14	0.304081236	0.0160236909	0.592138781	0.0242086
## C:2021-04-15-C:2020-10-14	0.491887463	0.2038299183	0.779945008	0.0000001
## IA:2021-04-15-C:2020-10-14	0.591718496	0.3036609507	0.879776041	0.0000000
## C:2020-10-26-IA:2020-10-14	0.004349568	-0.3351295048	0.343828640	1.0000000
## IA:2020-10-26-IA:2020-10-14	0.160903151	-0.2040258861	0.525832189	0.9985240
## C:2020-11-05-IA:2020-10-14	0.131967730	-0.1851731889	0.449108650	0.9994570
## IA:2020-11-05-IA:2020-10-14	0.175606428	-0.1415344908	0.492747348	0.9611550
## C:2020-11-14-IA:2020-10-14	0.292773592	-0.0147338938	0.600281078	0.0885854
## IA:2020-11-14-IA:2020-10-14	0.357780271	0.0458205319	0.669740010	0.0064766
## C:2020-11-25-IA:2020-10-14	0.432696575	0.1324499868	0.732943164	0.0000375
## IA:2020-11-25-IA:2020-10-14	0.406027331	0.0985198454	0.713534817	0.0003608
## C:2020-12-05-IA:2020-10-14	0.331446835	0.0433892897	0.619504380	0.0061159
## IA:2020-12-05-IA:2020-10-14	0.514384530	0.2222074653	0.806561596	0.0000000
## C:2021-01-22-IA:2020-10-14	0.445106376	0.1550901849	0.735122567	0.0000057
## IA:2021-01-22-IA:2020-10-14	0.461192685	0.1575533723	0.764831998	0.0000079
## C:2021-01-28-IA:2020-10-14	0.415587522	0.1255713306	0.705603712	0.0000439
## IA:2021-01-28-IA:2020-10-14	0.491680582	0.1914339934	0.791927171	0.0000006
## C:2021-02-05-IA:2020-10-14	0.509675865	0.2151024623	0.804249267	0.0000001
## IA:2021-02-05-IA:2020-10-14	0.484955948	0.1903825461	0.779529351	0.0000005
## C:2021-02-12-IA:2020-10-14	0.538504075	0.2504465304	0.826561620	0.0000000
## IA:2021-02-12-IA:2020-10-14	0.535316285	0.2472587405	0.823373830	0.0000000
## C:2021-02-26-IA:2020-10-14	0.411647260	0.1216310688	0.701663451	0.0000572
## IA:2021-02-26-IA:2020-10-14	0.456471876	0.1684143314	0.744529421	0.0000020
## C:2021-03-15-IA:2020-10-14	0.155893696	-0.1321638489	0.443951241	0.9705521
## IA:2021-03-15-IA:2020-10-14	0.349036353	0.0609788076	0.637093897	0.0023260
## C:2021-03-30-IA:2020-10-14	0.126746036	-0.1613115089	0.414803581	0.9985744
## IA:2021-03-30-IA:2020-10-14	0.236246491	-0.0518110541	0.524304036	0.3205221
## C:2021-04-15-IA:2020-10-14	0.424052718	0.1359951733	0.712110263	0.0000203
## IA:2021-04-15-IA:2020-10-14	0.523883751	0.2358262057	0.811941296	0.0000000
## IA:2020-10-26-C:2020-10-26	0.156553584	-0.1976922814	0.510799449	0.9984660
## C:2020-11-05-C:2020-10-26	0.127618163	-0.1771691290	0.432405455	0.9993936
## IA:2020-11-05-C:2020-10-26	0.171256861	-0.1335304310	0.476044153	0.9539133
## C:2020-11-14-C:2020-10-26	0.288424024	-0.0063263520	0.583174401	0.0650097
## IA:2020-11-14-C:2020-10-26	0.353430703	0.0540383030	0.652823103	0.0038407
## C:2020-11-25-C:2020-10-26	0.428347008	0.1411799057	0.715514110	0.0000138
## IA:2020-11-25-C:2020-10-26	0.401677764	0.1069273872	0.696428140	0.0001666
## C:2020-12-05-C:2020-10-26	0.327097267	0.0526995998	0.601494934	0.0031950
## IA:2020-12-05-C:2020-10-26	0.510034963	0.2313158067	0.788754119	0.0000000
## C:2021-01-22-C:2020-10-26	0.440756808	0.1643036990	0.717209918	0.0000016

##	IA:2021-01-22-C:2020-10-26	0.456843118	0.1661306086	0.747555627	0.0000026
##	C:2021-01-28-C:2020-10-26	0.411237954	0.1347848447	0.687691063	0.0000149
##	IA:2021-01-28-C:2020-10-26	0.487331014	0.2001639123	0.774498117	0.0000002
##	C:2021-02-05-C:2020-10-26	0.505326297	0.2240961067	0.786556487	0.0000000
##	IA:2021-02-05-C:2020-10-26	0.480606381	0.1993761905	0.761836571	0.0000001
##	C:2021-02-12-C:2020-10-26	0.534154508	0.2597568404	0.808552175	0.0000000
##	IA:2021-02-12-C:2020-10-26	0.530966718	0.2565690505	0.805364385	0.0000000
##	C:2021-02-26-C:2020-10-26	0.407297692	0.1308445829	0.683750801	0.0000199
##	IA:2021-02-26-C:2020-10-26	0.452122309	0.1777246414	0.726519976	0.0000005
##	C:2021-03-15-C:2020-10-26	0.151544128	-0.1228535388	0.425941796	0.9623356
##	IA:2021-03-15-C:2020-10-26	0.344686785	0.0702891177	0.619084452	0.0011084
##	C:2021-03-30-C:2020-10-26	0.122396468	-0.1520011988	0.396794136	0.9982106
##	IA:2021-03-30-C:2020-10-26	0.231896923	-0.0425007441	0.506294591	0.2603345
##	C:2021-04-15-C:2020-10-26	0.419703151	0.1453054834	0.694100818	0.0000064
##	IA:2021-04-15-C:2020-10-26	0.519534183	0.2451365158	0.793931850	0.0000000
##	C:2020-11-05-IA:2020-10-26	-0.028935421	-0.3618354888	0.303964647	1.0000000
##	IA:2020-11-05-IA:2020-10-26	0.014703277	-0.3181967908	0.347603345	1.0000000
##	C:2020-11-14-IA:2020-10-26	0.131870441	-0.1918654800	0.455606361	0.9996301
##	IA:2020-11-14-IA:2020-10-26	0.196877119	-0.1310908230	0.524845062	0.9063809
##	C:2020-11-25-IA:2020-10-26	0.271793424	-0.0450537102	0.588640558	0.2326668
##	IA:2020-11-25-IA:2020-10-26	0.245124180	-0.0786117408	0.568860100	0.4996063
##	C:2020-12-05-IA:2020-10-26	0.170543683	-0.1347778550	0.475865221	0.9569655
##	IA:2020-12-05-IA:2020-10-26	0.353481379	0.0442702377	0.662692520	0.0068530
##	C:2021-01-22-IA:2020-10-26	0.284203224	-0.0229668970	0.591373346	0.1192872
##	IA:2021-01-22-IA:2020-10-26	0.300289534	-0.0197744048	0.620353473	0.1035210
##	C:2021-01-28-IA:2020-10-26	0.254684370	-0.0524857513	0.561854492	0.2979950
##	IA:2021-01-28-IA:2020-10-26	0.330777431	0.0139302964	0.647624565	0.0283306
##	C:2021-02-05-IA:2020-10-26	0.348772713	0.0372962585	0.660249168	0.0097382
##	IA:2021-02-05-IA:2020-10-26	0.324052797	0.0125763423	0.635529252	0.0297192
##	C:2021-02-12-IA:2020-10-26	0.377600924	0.0722793857	0.682922462	0.0015379
##	IA:2021-02-12-IA:2020-10-26	0.374413134	0.0690915958	0.679734672	0.0018296
##	C:2021-02-26-IA:2020-10-26	0.250744108	-0.0564260131	0.557914230	0.3303987
##	IA:2021-02-26-IA:2020-10-26	0.295568725	-0.0097528133	0.600890263	0.0736277
##	C:2021-03-15-IA:2020-10-26	-0.005009455	-0.3103309936	0.300312083	1.0000000
##	IA:2021-03-15-IA:2020-10-26	0.188133201	-0.1171883371	0.493454739	0.8796141
##	C:2021-03-30-IA:2020-10-26	-0.034157115	-0.3394786536	0.271164423	1.0000000
##	IA:2021-03-30-IA:2020-10-26	0.075343339	-0.2299781988	0.380664878	1.0000000
##	C:2021-04-15-IA:2020-10-26	0.263149567	-0.0421719714	0.568471105	0.2242236
##	IA:2021-04-15-IA:2020-10-26	0.362980599	0.0576590610	0.668302137	0.0033632
##	IA:2020-11-05-C:2020-11-05	0.043638698	-0.2360533029	0.323330699	1.0000000
##	C:2020-11-14-C:2020-11-05	0.160805862	-0.1079135209	0.429525244	0.9092621
##	IA:2020-11-14-C:2020-11-05	0.225812540	-0.0479905484	0.499615629	0.3089116
##	C:2020-11-25-C:2020-11-05	0.300728845	0.0403497623	0.561107928	0.0057215
##	IA:2020-11-25-C:2020-11-05	0.274059601	0.0053402183	0.542778983	0.0388684
##	C:2020-12-05-C:2020-11-05	0.199479104	-0.0467451877	0.445703396	0.3465844
##	IA:2020-12-05-C:2020-11-05	0.382416800	0.1313855467	0.633448054	0.0000072
##	C:2021-01-22-C:2020-11-05	0.313138645	0.0646257811	0.561651510	0.0010373
##	IA:2021-01-22-C:2020-11-05	0.329224955	0.0649408557	0.593509054	0.0013225
##	C:2021-01-28-C:2020-11-05	0.283619791	0.0351069268	0.532132656	0.0070539
##	IA:2021-01-28-C:2020-11-05	0.359712852	0.0993337689	0.620091934	0.0001175
##	C:2021-02-05-C:2020-11-05	0.377708134	0.1238917791	0.631524489	0.0000148
##	IA:2021-02-05-C:2020-11-05	0.352988218	0.0991718630	0.606804573	0.0000988
##	C:2021-02-12-C:2020-11-05	0.406536345	0.1603120530	0.652760637	0.0000005
##	IA:2021-02-12-C:2020-11-05	0.403348555	0.1571242631	0.649572847	0.0000006

## C:2021-02-26-C:2020-11-05	0.279679529	0.0311666650	0.528192394	0.0089520
## IA:2021-02-26-C:2020-11-05	0.324504146	0.0782798540	0.570728438	0.0003770
## C:2021-03-15-C:2020-11-05	0.023925966	-0.2222983263	0.270150258	1.0000000
## IA:2021-03-15-C:2020-11-05	0.217068622	-0.0291556698	0.463292914	0.1863034
## C:2021-03-30-C:2020-11-05	-0.005221694	-0.2514459863	0.241002598	1.0000000
## IA:2021-03-30-C:2020-11-05	0.104278760	-0.1419455315	0.350503052	0.9992590
## C:2021-04-15-C:2020-11-05	0.292084988	0.0458606959	0.538309280	0.0035050
## IA:2021-04-15-C:2020-11-05	0.391916020	0.1456917283	0.638140312	0.0000017
## C:2020-11-14-IA:2020-11-05	0.117167164	-0.1515522190	0.385886546	0.9987769
## IA:2020-11-14-IA:2020-11-05	0.182173842	-0.0916292465	0.455976931	0.7704882
## C:2020-11-25-IA:2020-11-05	0.257090147	-0.0032889357	0.517469230	0.0584241
## IA:2020-11-25-IA:2020-11-05	0.230420903	-0.0382984798	0.499140285	0.2333570
## C:2020-12-05-IA:2020-11-05	0.155840406	-0.0903838857	0.402064698	0.8467792
## IA:2020-12-05-IA:2020-11-05	0.338778102	0.0877468487	0.589809355	0.0002126
## C:2021-01-22-IA:2020-11-05	0.269499947	0.0209870831	0.518012812	0.0162285
## IA:2021-01-22-IA:2020-11-05	0.285586257	0.0213021576	0.549870356	0.0171340
## C:2021-01-28-IA:2020-11-05	0.239981093	-0.0085317712	0.488493957	0.0757206
## IA:2021-01-28-IA:2020-11-05	0.316074154	0.0556950709	0.576453236	0.0022434
## C:2021-02-05-IA:2020-11-05	0.334069436	0.0802530811	0.587885791	0.0003889
## IA:2021-02-05-IA:2020-11-05	0.309349520	0.0555331650	0.563165875	0.0020705
## C:2021-02-12-IA:2020-11-05	0.362897647	0.1166733549	0.609121939	0.0000197
## IA:2021-02-12-IA:2020-11-05	0.359709857	0.1134855650	0.605934149	0.0000254
## C:2021-02-26-IA:2020-11-05	0.236040831	-0.0124720331	0.484553696	0.0909044
## IA:2021-02-26-IA:2020-11-05	0.280865448	0.0346411559	0.527089740	0.0071161
## C:2021-03-15-IA:2020-11-05	-0.019712732	-0.2659370243	0.226511560	1.0000000
## IA:2021-03-15-IA:2020-11-05	0.173429924	-0.0727943678	0.419654216	0.6611298
## C:2021-03-30-IA:2020-11-05	-0.048860392	-0.2950846844	0.197363900	1.0000000
## IA:2021-03-30-IA:2020-11-05	0.060640062	-0.1855842296	0.306864354	1.0000000
## C:2021-04-15-IA:2020-11-05	0.248446290	0.0022219979	0.494670582	0.0446427
## IA:2021-04-15-IA:2020-11-05	0.348277322	0.1020530302	0.594501614	0.0000628
## IA:2020-11-14-C:2020-11-14	0.065006679	-0.1975778268	0.327591184	1.0000000
## C:2020-11-25-C:2020-11-14	0.139922983	-0.1086323581	0.388478325	0.9529103
## IA:2020-11-25-C:2020-11-14	0.113253739	-0.1440254820	0.370532960	0.9985637
## C:2020-12-05-C:2020-11-14	0.038673243	-0.1950122148	0.272358700	1.0000000
## IA:2020-12-05-C:2020-11-14	0.221610939	-0.0171340746	0.460355952	0.1154832
## C:2021-01-22-C:2020-11-14	0.152332784	-0.0837628215	0.388428389	0.8197260
## IA:2021-01-22-C:2020-11-14	0.168419093	-0.0842240864	0.421062273	0.7671609
## C:2021-01-28-C:2020-11-14	0.122813930	-0.1132816757	0.358909535	0.9822680
## IA:2021-01-28-C:2020-11-14	0.198906990	-0.0496483515	0.447462332	0.3734495
## C:2021-02-05-C:2020-11-14	0.216902273	-0.0247694742	0.458574019	0.1592271
## IA:2021-02-05-C:2020-11-14	0.192182356	-0.0494893903	0.433854103	0.3874660
## C:2021-02-12-C:2020-11-14	0.245730483	0.0120450258	0.479415941	0.0255865
## IA:2021-02-12-C:2020-11-14	0.242542693	0.0088572359	0.476228151	0.0307113
## C:2021-02-26-C:2020-11-14	0.118873668	-0.1172219376	0.354969273	0.9886289
## IA:2021-02-26-C:2020-11-14	0.163698284	-0.0699871732	0.397383742	0.6725405
## C:2021-03-15-C:2020-11-14	-0.136879896	-0.3705653535	0.096805562	0.9271604
## IA:2021-03-15-C:2020-11-14	0.056262761	-0.1774226969	0.289948218	1.0000000
## C:2021-03-30-C:2020-11-14	-0.166027556	-0.3997130135	0.067657902	0.6428088
## IA:2021-03-30-C:2020-11-14	-0.056527101	-0.2902125587	0.177158356	1.0000000
## C:2021-04-15-C:2020-11-14	0.131279126	-0.1024063313	0.364964584	0.9540195
## IA:2021-04-15-C:2020-11-14	0.231110159	-0.0025752989	0.464795616	0.0572863
## C:2020-11-25-IA:2020-11-14	0.074916305	-0.1791265711	0.328959180	0.9999995
## IA:2020-11-25-IA:2020-11-14	0.048247060	-0.2143374452	0.310831566	1.0000000
## C:2020-12-05-IA:2020-11-14	-0.026333436	-0.2658473563	0.213180484	1.0000000

##	IA:2020-12-05-IA:2020-11-14	0.156604260	-0.0878486114	0.401057131	0.8300951
##	C:2021-01-22-IA:2020-11-14	0.087326105	-0.1545398904	0.329192101	0.9999635
##	IA:2021-01-22-IA:2020-11-14	0.103412415	-0.1546313824	0.361456212	0.9997256
##	C:2021-01-28-IA:2020-11-14	0.057807251	-0.1840587447	0.299673246	1.0000000
##	IA:2021-01-28-IA:2020-11-14	0.133900311	-0.1201425645	0.387943187	0.9789280
##	C:2021-02-05-IA:2020-11-14	0.151895594	-0.0954164724	0.399207660	0.8832108
##	IA:2021-02-05-IA:2020-11-14	0.127175678	-0.1201363886	0.374487744	0.9848019
##	C:2021-02-12-IA:2020-11-14	0.180723805	-0.0587901156	0.420237725	0.5076409
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##	C:2021-02-26-IA:2020-11-14	0.053866989	-0.1879990065	0.295732984	1.0000000
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##	C:2021-03-15-IA:2020-11-14	-0.201886575	-0.4414004949	0.037627345	0.2653602
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##	C:2021-03-30-IA:2020-11-14	-0.231034235	-0.4705481549	0.008479685	0.0766763
##	IA:2021-03-30-IA:2020-11-14	-0.121533780	-0.3610477001	0.117980140	0.9873345
##	C:2021-04-15-IA:2020-11-14	0.066272447	-0.1732414727	0.305786368	0.9999999
##	IA:2021-04-15-IA:2020-11-14	0.166103480	-0.0734104403	0.405617400	0.6930152
##	IA:2020-11-25-C:2020-11-25	-0.026669244	-0.2752245858	0.221886097	1.0000000
##	C:2020-12-05-C:2020-11-25	-0.101249741	-0.3252944979	0.122795016	0.9977841
##	IA:2020-12-05-C:2020-11-25	0.081687955	-0.1476291648	0.311005075	0.9999722
##	C:2021-01-22-C:2020-11-25	0.012409800	-0.2141476868	0.238967288	1.0000000
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##	C:2021-01-28-C:2020-11-25	-0.017109054	-0.2436665411	0.209448433	1.0000000
##	IA:2021-01-28-C:2020-11-25	0.058984007	-0.1805299136	0.298497927	1.0000000
##	C:2021-02-05-C:2020-11-25	0.076979289	-0.1553833441	0.309341923	0.9999939
##	IA:2021-02-05-C:2020-11-25	0.052259373	-0.1801032603	0.284622006	1.0000000
##	C:2021-02-12-C:2020-11-25	0.105807500	-0.1182372573	0.329852257	0.9955571
##	IA:2021-02-12-C:2020-11-25	0.102619710	-0.1214250472	0.326664467	0.9972485
##	C:2021-02-26-C:2020-11-25	-0.021049316	-0.2476068029	0.205508172	1.0000000
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##	C:2021-03-30-C:2020-11-25	-0.305950539	-0.5299952965	-0.081905782	0.0001582
##	IA:2021-03-30-C:2020-11-25	-0.196450085	-0.4204948418	0.027594673	0.1950017
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##	C:2020-12-05-IA:2020-11-25	-0.074580497	-0.3082659540	0.159104961	0.9999973
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##	C:2021-01-28-IA:2020-12-05	-0.098797009	-0.3145462118	0.116952194	0.9972588
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##	C:2021-03-15-IA:2020-12-05	-0.358490834	-0.5715999068	-0.145381762	0.0000002
##	IA:2021-03-15-IA:2020-12-05	-0.165348178	-0.3784572503	0.047760894	0.4432940
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##	C:2021-04-15-IA:2020-12-05	-0.090331812	-0.3034408846	0.122777260	0.9992478
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##	C:2021-01-28-C:2021-01-22	-0.029518854	-0.2423325570	0.183294848	1.0000000
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##	IA:2021-02-05-C:2021-01-22	0.039849573	-0.1791339209	0.258833066	1.0000000
##	C:2021-02-12-C:2021-01-22	0.093397699	-0.1167389948	0.303534394	0.9983134
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##	C:2021-03-15-C:2021-01-22	-0.289212680	-0.4993493741	-0.079075986	0.0001295
##	IA:2021-03-15-C:2021-01-22	-0.096070023	-0.3062067176	0.114066671	0.9973294
##	C:2021-03-30-C:2021-01-22	-0.318360340	-0.5284970341	-0.108223646	0.0000086
##	IA:2021-03-30-C:2021-01-22	-0.208859885	-0.4189965793	0.001276809	0.0539119
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## C:2021-02-26-IA:2021-01-22 -0.049545426 -0.2805803008 0.181489449 1.0000000
## IA:2021-02-26-IA:2021-01-22 -0.004720809 -0.2332921803 0.223850562 1.0000000
## C:2021-03-15-IA:2021-01-22 -0.305298989 -0.5338703606 -0.076727618 0.0002737
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## C:2021-03-30-IA:2021-01-22 -0.334446649 -0.5630180206 -0.105875278 0.0000243
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## C:2021-02-26-IA:2021-01-28 -0.080033322 -0.3065908095 0.146524165 0.9999766
## IA:2021-02-26-IA:2021-01-28 -0.035208706 -0.2592534629 0.188836051 1.0000000
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## IA:2021-02-26-C:2021-02-05 -0.053203988 -0.2695868172 0.163178841 1.0000000
## C:2021-03-15-C:2021-02-05 -0.353782169 -0.5701649974 -0.137399340 0.0000007
## IA:2021-03-15-C:2021-02-05 -0.160639512 -0.3770223409 0.055743317 0.5450165
## C:2021-03-30-C:2021-02-05 -0.382929829 -0.5993126575 -0.166547000 0.0000000
## IA:2021-03-30-C:2021-02-05 -0.273429374 -0.4898122027 -0.057046545 0.0009756
## C:2021-04-15-C:2021-02-05 -0.085623146 -0.3020059752 0.130759683 0.9997833
## IA:2021-04-15-C:2021-02-05 0.014207886 -0.2021749429 0.230590715 1.0000000
## C:2021-02-12-IA:2021-02-05 0.053548127 -0.1628347020 0.269930956 1.0000000
## IA:2021-02-12-IA:2021-02-05 0.050360337 -0.1660224919 0.266743166 1.0000000
## C:2021-02-26-IA:2021-02-05 -0.073308689 -0.2922921823 0.145674805 0.9999924
## IA:2021-02-26-IA:2021-02-05 -0.028484072 -0.2448669010 0.187898757 1.0000000
## C:2021-03-15-IA:2021-02-05 -0.329062252 -0.5454450813 -0.112679424 0.0000076
## IA:2021-03-15-IA:2021-02-05 -0.135919596 -0.3523024248 0.080463233 0.8566265
## C:2021-03-30-IA:2021-02-05 -0.358209912 -0.5745927413 -0.141827084 0.0000004
## IA:2021-03-30-IA:2021-02-05 -0.248709458 -0.4650922865 -0.032326629 0.0062323
## C:2021-04-15-IA:2021-02-05 -0.060903230 -0.2772860591 0.155479599 0.9999998
## IA:2021-04-15-IA:2021-02-05 0.038927802 -0.1774550267 0.255310631 1.0000000

```

```
## IA:2021-02-12-C:2021-02-12 -0.003187790 -0.2106129293 0.204237350 1.0000000
## C:2021-02-26-C:2021-02-12 -0.126856816 -0.3369935099 0.083279879 0.9010244
## IA:2021-02-26-C:2021-02-12 -0.082032199 -0.2894573384 0.125392940 0.9997856
## C:2021-03-15-C:2021-02-12 -0.382610379 -0.5900355187 -0.175185240 0.0000000
## IA:2021-03-15-C:2021-02-12 -0.189467723 -0.3968928622 0.017957417 0.1352102
## C:2021-03-30-C:2021-02-12 -0.411758039 -0.6191831787 -0.204332900 0.0000000
## IA:2021-03-30-C:2021-02-12 -0.302257585 -0.5096827240 -0.094832445 0.0000274
## C:2021-04-15-C:2021-02-12 -0.114451357 -0.3218764965 0.092973782 0.9627456
## IA:2021-04-15-C:2021-02-12 -0.014620325 -0.2220454641 0.192804815 1.0000000
## C:2021-02-26-IA:2021-02-12 -0.123669026 -0.3338057200 0.086467669 0.9234705
## IA:2021-02-26-IA:2021-02-12 -0.078844409 -0.2862695485 0.128580730 0.9998992
## C:2021-03-15-IA:2021-02-12 -0.379422589 -0.5868477288 -0.171997450 0.0000000
## IA:2021-03-15-IA:2021-02-12 -0.186279933 -0.3937050723 0.021145207 0.1583458
## C:2021-03-30-IA:2021-02-12 -0.408570249 -0.6159953888 -0.201145110 0.0000000
## IA:2021-03-30-IA:2021-02-12 -0.299069795 -0.5064949341 -0.091644655 0.0000370
## C:2021-04-15-IA:2021-02-12 -0.111263567 -0.3186887066 0.096161572 0.9736392
## IA:2021-04-15-IA:2021-02-12 -0.011432535 -0.2188576742 0.195992605 1.0000000
## IA:2021-02-26-C:2021-02-26 0.044824617 -0.1653120776 0.254961311 1.0000000
## C:2021-03-15-C:2021-02-26 -0.255753564 -0.4658902579 -0.045616869 0.0021295
## IA:2021-03-15-C:2021-02-26 -0.062610907 -0.2727476014 0.147525787 0.9999994
## C:2021-03-30-C:2021-02-26 -0.284901224 -0.4950379179 -0.074764529 0.0001895
## IA:2021-03-30-C:2021-02-26 -0.175400769 -0.3855374632 0.034735925 0.2845258
## C:2021-04-15-C:2021-02-26 0.012405459 -0.1977312357 0.222542153 1.0000000
## IA:2021-04-15-C:2021-02-26 0.112236491 -0.0979002033 0.322373185 0.9750254
## C:2021-03-15-IA:2021-02-26 -0.300578180 -0.5080033197 -0.093153041 0.0000321
## IA:2021-03-15-IA:2021-02-26 -0.107435524 -0.3148606632 0.099989616 0.9832574
## C:2021-03-30-IA:2021-02-26 -0.329725840 -0.5371509797 -0.122300701 0.0000018
## IA:2021-03-30-IA:2021-02-26 -0.220225386 -0.4276505250 -0.012800246 0.0222785
## C:2021-04-15-IA:2021-02-26 -0.032419158 -0.2398442975 0.175005981 1.0000000
## IA:2021-04-15-IA:2021-02-26 0.067411874 -0.1400132651 0.274837014 0.9999960
## IA:2021-03-15-C:2021-03-15 0.193142657 -0.0142824829 0.400567796 0.1118870
## C:2021-03-30-C:2021-03-15 -0.029147660 -0.2365727995 0.178277479 1.0000000
## IA:2021-03-30-C:2021-03-15 0.080352795 -0.1270723447 0.287777934 0.9998549
## C:2021-04-15-C:2021-03-15 0.268159022 0.0607338828 0.475584162 0.0005885
## IA:2021-04-15-C:2021-03-15 0.367990055 0.1605649151 0.575415194 0.0000000
## C:2021-03-30-IA:2021-03-15 -0.222290317 -0.4297154560 -0.014865177 0.0194165
## IA:2021-03-30-IA:2021-03-15 -0.112789862 -0.3202150012 0.094635278 0.9687819
## C:2021-04-15-IA:2021-03-15 0.075016366 -0.1324087738 0.282441505 0.9999623
## IA:2021-04-15-IA:2021-03-15 0.174847398 -0.0325777414 0.382272538 0.2652666
## IA:2021-03-30-C:2021-03-30 0.109500455 -0.0979246847 0.316925594 0.9784964
## C:2021-04-15-C:2021-03-30 0.297306682 0.0898815428 0.504731822 0.0000437
## IA:2021-04-15-C:2021-03-30 0.397137715 0.1897125752 0.604562854 0.0000000
## C:2021-04-15-IA:2021-03-30 0.187806227 -0.0196189120 0.395231367 0.1469210
## IA:2021-04-15-IA:2021-03-30 0.287637260 0.0802121204 0.495062399 0.0001065
## IA:2021-04-15-C:2021-04-15 0.099831032 -0.1075941071 0.307256172 0.9940810
```

Efecto de la IA sobre los niveles de cortisol plasmático

```
t2way(Cortisol ~ Condicion + Fechas + Condicion:Fechas, data = b,)
```

```
## Call:
## t2way(formula = Cortisol ~ Condicion + Fechas + Condicion:Fechas,
##       data = b)
##
##               value p.value
```

```
## Condicion      2.0917  0.155
## Fechas        579.4959  0.001
## Condicion:Fechas 71.4639  0.001

anovacortisol <- aov(Cortisol ~ Condicion + Fechas + Condicion:Fechas, data = b)
anova(anovacortisol)

## Analysis of Variance Table
##
## Response: Cortisol
##              Df Sum Sq Mean Sq F value    Pr(>F)
## Condicion      1   94260   94260  4.6872  0.03097 *
## Fechas        14 4195264 299662 14.9011 < 2.2e-16 ***
## Condicion:Fechas 14 1253690   89549  4.4530 1.861e-07 ***
## Residuals     408 8204888   20110
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

TukeyHSD(anovacortisol)

## Tukey multiple comparisons of means
## 95% family-wise confidence level
##
## Fit: aov(formula = Cortisol ~ Condicion + Fechas + Condicion:Fechas, data = b)
##
## $Condicion
##      diff      lwr      upr    p adj
## IA-C -29.36455 -56.02728 -2.701829 0.0309671
##
## $Fechas
##              diff      lwr      upr    p adj
## 2020-10-14-2020-10-05 -25.8348922 -219.551546 167.881761 1.0000000
## 2020-10-26-2020-10-05 -97.8777412 -288.244575 92.489092 0.9143501
## 2020-11-05-2020-10-05 -18.6532448 -192.312026 155.005536 1.0000000
## 2020-11-14-2020-10-05 30.6887837 -139.252732 200.630300 0.9999990
## 2020-11-25-2020-10-05 -31.8028880 -198.765646 135.159870 0.9999981
## 2020-12-05-2020-10-05 -91.4469730 -252.748322 69.854376 0.8342638
## 2021-01-22-2020-10-05 -29.4137600 -192.537781 133.710261 0.9999991
## 2021-01-28-2020-10-05 5.7180584 -156.765001 168.201118 1.0000000
## 2021-02-05-2020-10-05 -154.3434341 -317.467455 8.780587 0.0860743
## 2021-02-12-2020-10-05 117.0931525 -42.179168 276.365473 0.4365457
## 2021-02-26-2020-10-05 -0.4200047 -160.162850 159.322840 1.0000000
## 2021-03-15-2020-10-05 -117.6348323 -277.871474 42.601809 0.4391010
## 2021-03-30-2020-10-05 -222.6879852 -382.430830 -62.945140 0.0002685
## 2021-04-15-2020-10-05 -217.4823058 -381.284600 -53.680012 0.0007412
## 2020-10-26-2020-10-14 -72.0428490 -258.425481 114.339783 0.9926711
## 2020-11-05-2020-10-14 7.1816475 -162.100149 176.463444 1.0000000
## 2020-11-14-2020-10-14 56.5236759 -108.942554 221.989905 0.9979306
## 2020-11-25-2020-10-14 -5.9679958 -168.373405 156.437413 1.0000000
## 2020-12-05-2020-10-14 -65.6120808 -222.191388 90.967226 0.9842171
## 2021-01-22-2020-10-14 -3.5788677 -162.035172 154.877437 1.0000000
## 2021-01-28-2020-10-14 31.5529506 -126.243434 189.349335 0.9999964
## 2021-02-05-2020-10-14 -128.5085418 -286.964846 29.947763 0.2690098
## 2021-02-12-2020-10-14 142.9280447 -11.560227 297.416317 0.1049998
## 2021-02-26-2020-10-14 25.4148875 -129.558435 180.388210 0.9999997
```

##	2021-03-15-2020-10-14	-91.7999401	-247.282208	63.682328	0.7886491
##	2021-03-30-2020-10-14	-196.8530930	-351.826416	-41.879770	0.0017151
##	2021-04-15-2020-10-14	-191.6474136	-350.801885	-32.492942	0.0042832
##	2020-11-05-2020-10-26	79.2244964	-86.213456	244.662448	0.9502336
##	2020-11-14-2020-10-26	128.5665249	-32.965090	290.098140	0.2989752
##	2020-11-25-2020-10-26	66.0748532	-92.319927	224.469633	0.9848572
##	2020-12-05-2020-10-26	6.4307682	-145.984680	158.846216	1.0000000
##	2021-01-22-2020-10-26	68.4639813	-85.879110	222.807073	0.9737389
##	2021-01-28-2020-10-26	103.5957996	-50.069708	257.261307	0.5907762
##	2021-02-05-2020-10-26	-56.4656928	-210.808784	97.877398	0.9957727
##	2021-02-12-2020-10-26	214.9708937	64.704412	365.237376	0.0001503
##	2021-02-26-2020-10-26	97.4577365	-53.307380	248.222853	0.6605379
##	2021-03-15-2020-10-26	-19.7570911	-171.045310	131.531127	1.0000000
##	2021-03-30-2020-10-26	-124.8102440	-275.575360	25.954872	0.2378107
##	2021-04-15-2020-10-26	-119.6045646	-274.664344	35.455215	0.3516537
##	2020-11-14-2020-11-05	49.3420284	-92.115751	190.799808	0.9974195
##	2020-11-25-2020-11-05	-13.1496432	-151.014603	124.715317	1.0000000
##	2020-12-05-2020-11-05	-72.7937282	-203.745283	58.157827	0.8536761
##	2021-01-22-2020-11-05	-10.7605152	-143.950720	122.429690	1.0000000
##	2021-01-28-2020-11-05	24.3713032	-108.033112	156.775718	0.9999988
##	2021-02-05-2020-11-05	-135.6901893	-268.880394	-2.499984	0.0409193
##	2021-02-12-2020-11-05	135.7463973	7.302415	264.190380	0.0267951
##	2021-02-26-2020-11-05	18.2332401	-110.793738	147.260218	1.0000000
##	2021-03-15-2020-11-05	-98.9815875	-228.619414	30.656239	0.3693345
##	2021-03-30-2020-11-05	-204.0347405	-333.061719	-75.007762	0.0000119
##	2021-04-15-2020-11-05	-198.8290610	-332.849120	-64.809002	0.0000632
##	2020-11-25-2020-11-14	-62.4916717	-195.643817	70.660474	0.9577166
##	2020-12-05-2020-11-14	-122.1357566	-248.116137	3.844624	0.0684323
##	2021-01-22-2020-11-14	-60.1025436	-188.408340	68.203252	0.9583714
##	2021-01-28-2020-11-14	-24.9707253	-152.460630	102.519179	0.9999972
##	2021-02-05-2020-11-14	-185.0322177	-313.338014	-56.726422	0.0001248
##	2021-02-12-2020-11-14	86.4043689	-36.967440	209.776177	0.5238394
##	2021-02-26-2020-11-14	-31.1087884	-155.087447	92.869870	0.9999391
##	2021-03-15-2020-11-14	-148.3236160	-272.937871	-23.709361	0.0051562
##	2021-03-30-2020-11-14	-253.3767689	-377.355427	-129.398111	0.0000000
##	2021-04-15-2020-11-14	-248.1710894	-377.338124	-119.004055	0.0000000
##	2020-12-05-2020-11-25	-59.6440850	-181.576443	62.288273	0.9411578
##	2021-01-22-2020-11-25	2.3891280	-121.944379	126.722635	1.0000000
##	2021-01-28-2020-11-25	37.5209464	-85.970428	161.012321	0.9994275
##	2021-02-05-2020-11-25	-122.5405461	-246.874053	1.792961	0.0581018
##	2021-02-12-2020-11-25	148.8960405	29.660782	268.131299	0.0023231
##	2021-02-26-2020-11-25	31.3828833	-88.480170	151.245936	0.9998985
##	2021-03-15-2020-11-25	-85.8319443	-206.352301	34.688412	0.4938177
##	2021-03-30-2020-11-25	-190.8850972	-310.748150	-71.022044	0.0000097
##	2021-04-15-2020-11-25	-185.6794178	-310.901486	-60.457349	0.0000640
##	2021-01-22-2020-12-05	62.0332130	-54.587469	178.653895	0.8909848
##	2021-01-28-2020-12-05	97.1650314	-18.557404	212.887467	0.2174270
##	2021-02-05-2020-12-05	-62.8964611	-179.517143	53.724221	0.8801686
##	2021-02-12-2020-12-05	208.5401255	97.370843	319.709408	0.0000000
##	2021-02-26-2020-12-05	91.0269683	-20.815394	202.869330	0.2634968
##	2021-03-15-2020-12-05	-26.1878593	-138.734378	86.358659	0.9999758
##	2021-03-30-2020-12-05	-131.2410122	-243.083374	-19.398650	0.0064320
##	2021-04-15-2020-12-05	-126.0353328	-243.602883	-8.467782	0.0224990
##	2021-01-28-2021-01-22	35.1318183	-83.117930	153.381567	0.9995560

```

## 2021-02-05-2021-01-22 -124.9296741 -244.058615 -5.800733 0.0293940
## 2021-02-12-2021-01-22 146.5069125 32.709151 260.304674 0.0013399
## 2021-02-26-2021-01-22 28.9937552 -85.461629 143.449140 0.9999317
## 2021-03-15-2021-01-22 -88.2210723 -203.364634 26.922489 0.3632763
## 2021-03-30-2021-01-22 -193.2742253 -307.729610 -78.818841 0.0000017
## 2021-04-15-2021-01-22 -188.0685458 -308.124574 -68.012517 0.0000154
## 2021-02-05-2021-01-28 -160.0614924 -278.311241 -41.811744 0.0005017
## 2021-02-12-2021-01-28 111.3750941 -1.501958 224.252146 0.0574382
## 2021-02-26-2021-01-28 -6.1380631 -119.678071 107.401945 1.0000000
## 2021-03-15-2021-01-28 -123.3528907 -237.586591 -9.119190 0.0205377
## 2021-03-30-2021-01-28 -228.4060436 -341.946052 -114.866035 0.0000000
## 2021-04-15-2021-01-28 -223.2003642 -342.384039 -104.016689 0.0000000
## 2021-02-12-2021-02-05 271.4365866 157.638825 385.234348 0.0000000
## 2021-02-26-2021-02-05 153.9234293 39.468045 268.378814 0.0005731
## 2021-03-15-2021-02-05 36.7086017 -78.434960 151.852163 0.9990208
## 2021-03-30-2021-02-05 -68.3445512 -182.799935 46.110833 0.7746126
## 2021-04-15-2021-02-05 -63.1388717 -183.194900 56.917157 0.8992987
## 2021-02-26-2021-02-12 -117.5131572 -226.408799 -8.617515 0.0207056
## 2021-03-15-2021-02-12 -234.7279848 -344.346713 -125.109256 0.0000000
## 2021-03-30-2021-02-12 -339.7811377 -448.676780 -230.885496 0.0000000
## 2021-04-15-2021-02-12 -334.5754583 -449.343380 -219.807537 0.0000000
## 2021-03-15-2021-02-26 -117.2148276 -227.516098 -6.913557 0.0250662
## 2021-03-30-2021-02-26 -222.2679805 -331.850668 -112.685293 0.0000000
## 2021-04-15-2021-02-26 -217.0623011 -332.482318 -101.642284 0.0000000
## 2021-03-30-2021-03-15 -105.0531529 -215.354423 5.248117 0.0810145
## 2021-04-15-2021-03-15 -99.8474735 -215.949951 16.255004 0.1851020
## 2021-04-15-2021-03-30 5.2056794 -110.214338 120.625697 1.0000000
##
## $`Condicion:Fechas`
##
## diff lwr upr p adj
## IA:2020-10-05-C:2020-10-05 -37.46646191 -346.627846 271.6949221 1.0000000
## C:2020-10-14-C:2020-10-05 -44.86361991 -342.778984 253.0517442 1.0000000
## IA:2020-10-14-C:2020-10-05 -41.77633079 -350.937715 267.3850533 1.0000000
## C:2020-10-26-C:2020-10-05 -194.19221100 -483.386205 95.0017831 0.7537962
## IA:2020-10-26-C:2020-10-05 -8.27522794 -317.436612 300.8861561 1.0000000
## C:2020-11-05-C:2020-10-05 -39.99791578 -311.765944 231.7701123 1.0000000
## IA:2020-11-05-C:2020-10-05 -34.77503569 -306.543064 236.9929924 1.0000000
## C:2020-11-14-C:2020-10-05 12.87793004 -251.408807 277.1646673 1.0000000
## IA:2020-11-14-C:2020-10-05 12.17983371 -255.561779 279.9214462 1.0000000
## C:2020-11-25-C:2020-10-05 46.81901363 -211.843958 305.4819854 1.0000000
## IA:2020-11-25-C:2020-10-05 -160.61015233 -424.896890 103.6765849 0.8940399
## C:2020-12-05-C:2020-10-05 -97.70977410 -346.963651 151.5441023 0.9998162
## IA:2020-12-05-C:2020-10-05 -122.09767189 -378.440750 134.2454058 0.9949003
## C:2021-01-22-C:2020-10-05 -49.75939744 -300.522393 201.0035980 1.0000000
## IA:2021-01-22-C:2020-10-05 -40.71505441 -302.004114 220.5740047 1.0000000
## C:2021-01-28-C:2020-10-05 -39.09319332 -289.856189 211.6698021 1.0000000
## IA:2021-01-28-C:2020-10-05 23.93226100 -234.730711 282.5952328 1.0000000
## C:2021-02-05-C:2020-10-05 -202.51032204 -458.853400 53.8327556 0.4018330
## IA:2021-02-05-C:2020-10-05 -146.23806293 -400.516599 108.0404731 0.9399012
## C:2021-02-12-C:2020-10-05 243.25849399 -5.995382 492.5123704 0.0670401
## IA:2021-02-12-C:2020-10-05 -46.53865087 -295.792527 202.7152255 1.0000000
## C:2021-02-26-C:2020-10-05 -0.58599152 -251.348987 250.1770039 1.0000000
## IA:2021-02-26-C:2020-10-05 -37.52623148 -286.780108 211.7276449 1.0000000
## C:2021-03-15-C:2020-10-05 -145.43577167 -397.864985 106.9934414 0.9387102

```

##	IA:2021-03-15-C:2020-10-05	-129.67535343	-378.929230	119.5785230	0.9821284
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##	IA:2021-03-30-C:2020-10-05	-238.19589809	-487.449775	11.0579783	0.0850254
##	C:2021-04-15-C:2020-10-05	-230.50657160	-482.935785	21.9226414	0.1355008
##	IA:2021-04-15-C:2020-10-05	-239.36069839	-500.649758	21.9283607	0.1314080
##	C:2020-10-14-IA:2020-10-05	-7.39715800	-305.312522	290.5182061	1.0000000
##	IA:2020-10-14-IA:2020-10-05	-4.30986888	-313.471253	304.8515152	1.0000000
##	C:2020-10-26-IA:2020-10-05	-156.72574909	-445.919743	132.4682450	0.9698808
##	IA:2020-10-26-IA:2020-10-05	29.19123397	-279.970150	338.3526180	1.0000000
##	C:2020-11-05-IA:2020-10-05	-2.53145387	-274.299482	269.2365742	1.0000000
##	IA:2020-11-05-IA:2020-10-05	2.69142622	-269.076602	274.4594543	1.0000000
##	C:2020-11-14-IA:2020-10-05	50.34439195	-213.942345	314.6311292	1.0000000
##	IA:2020-11-14-IA:2020-10-05	49.64629562	-218.095317	317.3879081	1.0000000
##	C:2020-11-25-IA:2020-10-05	84.28547554	-174.377496	342.9484473	0.9999957
##	IA:2020-11-25-IA:2020-10-05	-123.14369042	-387.430428	141.1430468	0.9963636
##	C:2020-12-05-IA:2020-10-05	-60.24331220	-309.497189	189.0105642	1.0000000
##	IA:2020-12-05-IA:2020-10-05	-84.63120998	-340.974288	171.7118677	0.9999943
##	C:2021-01-22-IA:2020-10-05	-12.29293553	-263.055931	238.4700599	1.0000000
##	IA:2021-01-22-IA:2020-10-05	-3.24859250	-264.537652	258.0404666	1.0000000
##	C:2021-01-28-IA:2020-10-05	-1.62673142	-252.389727	249.1362640	1.0000000
##	IA:2021-01-28-IA:2020-10-05	61.39872291	-197.264249	320.0616947	1.0000000
##	C:2021-02-05-IA:2020-10-05	-165.04386013	-421.386938	91.2992175	0.8223863
##	IA:2021-02-05-IA:2020-10-05	-108.77160103	-363.050137	145.5069350	0.9991097
##	C:2021-02-12-IA:2020-10-05	280.72495590	31.471079	529.9788323	0.0088554
##	IA:2021-02-12-IA:2020-10-05	-9.07218896	-258.326065	240.1816874	1.0000000
##	C:2021-02-26-IA:2020-10-05	36.88047039	-213.882525	287.6434658	1.0000000
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##	C:2021-03-15-IA:2020-10-05	-107.96930976	-360.398523	144.4599033	0.9991113
##	IA:2021-03-15-IA:2020-10-05	-92.20889152	-341.462768	157.0449849	0.9999400
##	C:2021-03-30-IA:2020-10-05	-208.12257739	-458.885573	42.6404180	0.2956695
##	IA:2021-03-30-IA:2020-10-05	-200.72943618	-449.983313	48.5244402	0.3591942
##	C:2021-04-15-IA:2020-10-05	-193.04010969	-445.469323	59.3891034	0.4761704
##	IA:2021-04-15-IA:2020-10-05	-201.89423648	-463.183296	59.3948227	0.4523225
##	IA:2020-10-14-C:2020-10-14	3.08728912	-294.828075	301.0026532	1.0000000
##	C:2020-10-26-C:2020-10-14	-149.32859110	-426.467489	127.8103072	0.9719574
##	IA:2020-10-26-C:2020-10-14	36.58839197	-261.326972	334.5037560	1.0000000
##	C:2020-11-05-C:2020-10-14	4.86570413	-254.037104	263.7685118	1.0000000
##	IA:2020-11-05-C:2020-10-14	10.08858422	-248.814223	268.9913919	1.0000000
##	C:2020-11-14-C:2020-10-14	57.74154994	-193.296858	308.7799578	1.0000000
##	IA:2020-11-14-C:2020-10-14	57.04345362	-197.629619	311.7165260	1.0000000
##	C:2020-11-25-C:2020-10-14	91.68263353	-153.428231	336.7934977	0.9999254
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##	IA:2020-12-05-C:2020-10-14	-77.23405199	-319.895496	165.4273916	0.9999974
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##	IA:2021-01-22-C:2020-10-14	4.14856550	-243.732001	252.0291319	1.0000000
##	C:2021-01-28-C:2020-10-14	5.77042658	-230.988697	242.5295502	1.0000000
##	IA:2021-01-28-C:2020-10-14	68.79588091	-176.314983	313.9067451	0.9999998
##	C:2021-02-05-C:2020-10-14	-157.64670214	-400.308146	85.0147415	0.8088710
##	IA:2021-02-05-C:2020-10-14	-101.37444303	-341.853915	139.1050294	0.9993100
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##	IA:2021-02-26-C:2020-10-14	7.33738842	-227.822765	242.4975416	1.0000000

## C:2021-03-15-C:2020-10-14	-100.57215176	-339.095338	137.9510344	0.9993073
## IA:2021-03-15-C:2020-10-14	-84.81173352	-319.971887	150.3484197	0.9999639
## C:2021-03-30-C:2020-10-14	-200.72541939	-437.484543	36.0337042	0.2540469
## IA:2021-03-30-C:2020-10-14	-193.33227819	-428.492431	41.8278750	0.3151216
## C:2021-04-15-C:2020-10-14	-185.64295169	-424.166138	52.8802345	0.4357111
## IA:2021-04-15-C:2020-10-14	-194.49707848	-442.377645	53.3834879	0.4172209
## C:2020-10-26-IA:2020-10-14	-152.41588021	-441.609874	136.7781139	0.9788243
## IA:2020-10-26-IA:2020-10-14	33.50110285	-275.660281	342.6624869	1.0000000
## C:2020-11-05-IA:2020-10-14	1.77841501	-269.989613	273.5464431	1.0000000
## IA:2020-11-05-IA:2020-10-14	7.00129511	-264.766733	278.7693232	1.0000000
## C:2020-11-14-IA:2020-10-14	54.65426083	-209.632476	318.9409981	1.0000000
## IA:2020-11-14-IA:2020-10-14	53.95616450	-213.785448	321.6977770	1.0000000
## C:2020-11-25-IA:2020-10-14	88.59534442	-170.067627	347.2583162	0.9999875
## IA:2020-11-25-IA:2020-10-14	-118.83382154	-383.120559	145.4529157	0.9979412
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## IA:2021-03-15-IA:2020-10-14	-87.89902264	-337.152899	161.3548538	0.9999771
## C:2021-03-30-IA:2020-10-14	-203.81270851	-454.575704	46.9502869	0.3392908
## IA:2021-03-30-IA:2020-10-14	-196.41956730	-445.673444	52.8343091	0.4074567
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## IA:2021-04-15-IA:2020-10-14	-197.58436760	-458.873427	63.7046915	0.5020985
## IA:2020-10-26-C:2020-10-26	185.91698307	-103.277011	475.1109772	0.8245664
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## IA:2020-11-05-C:2020-10-26	159.41717532	-89.400561	408.2349116	0.8294664
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## C:2021-01-28-C:2020-10-26	155.09901768	-70.587678	380.7857135	0.7104299
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## IA:2021-02-26-C:2020-10-26	156.66597952	-67.342725	380.6746841	0.6753086
## C:2021-03-15-C:2020-10-26	48.75643933	-178.780178	276.2930571	1.0000000
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##	IA:2021-03-30-C:2020-10-26	-44.00368709	-268.012392	180.0050175	1.0000000
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##	IA:2020-11-05-IA:2020-10-26	-26.49980775	-298.267836	245.2682203	1.0000000
##	C:2020-11-14-IA:2020-10-26	21.15315798	-243.133579	285.4398952	1.0000000
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##	C:2020-11-25-IA:2020-10-26	55.09424157	-203.568730	313.7572134	1.0000000
##	IA:2020-11-25-IA:2020-10-26	-152.33492439	-416.621662	111.9518128	0.9384137
##	C:2020-12-05-IA:2020-10-26	-89.43454617	-338.688423	159.8193302	0.9999674
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##	C:2021-01-22-IA:2020-10-26	-41.48416950	-292.247165	209.2788259	1.0000000
##	IA:2021-01-22-IA:2020-10-26	-32.43982647	-293.728886	228.8492327	1.0000000
##	C:2021-01-28-IA:2020-10-26	-30.81796539	-281.580961	219.9450300	1.0000000
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##	C:2021-02-05-IA:2020-10-26	-194.23509410	-450.578172	62.1079835	0.4974481
##	IA:2021-02-05-IA:2020-10-26	-137.96283500	-392.241371	116.3157010	0.9694500
##	C:2021-02-12-IA:2020-10-26	251.53372193	2.279846	500.7875983	0.0445780
##	IA:2021-02-12-IA:2020-10-26	-38.26342293	-287.517299	210.9904535	1.0000000
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##	C:2021-03-30-IA:2020-10-26	-237.31381136	-488.076807	13.4491840	0.0944691
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##	IA:2021-04-15-IA:2020-10-26	-231.08547045	-492.374530	30.2035887	0.1811278
##	IA:2020-11-05-C:2020-11-05	5.22288009	-223.107934	233.5536944	1.0000000
##	C:2020-11-14-C:2020-11-05	52.87584582	-166.497305	272.2489963	1.0000000
##	IA:2020-11-14-C:2020-11-05	52.17774949	-171.345562	275.7010609	1.0000000
##	C:2020-11-25-C:2020-11-05	86.81692940	-125.747491	299.3813494	0.9996076
##	IA:2020-11-25-C:2020-11-05	-120.61223655	-339.985387	98.7609140	0.9641186
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##	C:2021-01-22-C:2020-11-05	-9.76148166	-212.638734	193.1157707	1.0000000
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##	C:2021-01-28-C:2020-11-05	0.90472245	-201.972530	203.7819749	1.0000000
##	IA:2021-01-28-C:2020-11-05	63.93017678	-148.634243	276.4945968	0.9999993
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##	C:2021-03-30-C:2020-11-05	-205.59112352	-408.468376	-2.7138711	0.0422481
##	IA:2021-03-30-C:2020-11-05	-198.19798232	-399.206924	2.8109592	0.0593859
##	C:2021-04-15-C:2020-11-05	-190.50865582	-395.441833	14.4245218	0.1136965
##	IA:2021-04-15-C:2020-11-05	-199.36278261	-415.115122	16.3895571	0.1207507
##	C:2020-11-14-IA:2020-11-05	47.65296572	-171.720185	267.0261162	1.0000000
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##	C:2020-11-25-IA:2020-11-05	81.59404931	-130.970371	294.1584693	0.9998768
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## C:2020-12-05-IA:2020-11-05	-62.93473842	-263.943680	138.0742031	0.9999982
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## IA:2021-02-05-IA:2020-11-05	-111.46302725	-318.669865	95.7438104	0.9725301
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## C:2021-03-30-IA:2020-11-05	-210.81400362	-413.691256	-7.9367512	0.0302329
## IA:2021-03-30-IA:2020-11-05	-203.42086241	-404.429804	-2.4119208	0.0429951
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## IA:2021-04-15-IA:2020-11-05	-204.58566270	-420.338002	11.1666770	0.0924914
## IA:2020-11-14-C:2020-11-14	-0.69809633	-215.062947	213.6667542	1.0000000
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## C:2020-12-05-C:2020-11-14	-110.58770414	-301.360378	80.1849695	0.9345119
## IA:2020-12-05-C:2020-11-14	-134.97560193	-334.921824	64.9706197	0.7442148
## C:2021-01-22-C:2020-11-14	-62.63732748	-255.377562	130.1029069	0.9999959
## IA:2021-01-22-C:2020-11-14	-53.59298445	-259.842083	152.6561138	1.0000000
## C:2021-01-28-C:2020-11-14	-51.97112336	-244.711358	140.7691110	0.9999999
## IA:2021-01-28-C:2020-11-14	11.05433096	-191.857598	213.9662603	1.0000000
## C:2021-02-05-C:2020-11-14	-215.38825208	-415.334474	-15.4420305	0.0179827
## IA:2021-02-05-C:2020-11-14	-159.11599297	-356.408395	38.1764092	0.3560112
## C:2021-02-12-C:2020-11-14	230.38056395	39.607890	421.1532375	0.0024941
## IA:2021-02-12-C:2020-11-14	-59.41658091	-250.189255	131.3560927	0.9999984
## C:2021-02-26-C:2020-11-14	-13.46392156	-206.204156	179.2763128	1.0000000
## IA:2021-02-26-C:2020-11-14	-50.40416152	-241.176835	140.3685121	1.0000000
## C:2021-03-15-C:2020-11-14	-158.31370171	-353.216820	36.5894170	0.3406128
## IA:2021-03-15-C:2020-11-14	-142.55328347	-333.325957	48.2193901	0.5295305
## C:2021-03-30-C:2020-11-14	-258.46696934	-451.207204	-65.7267350	0.0002502
## IA:2021-03-30-C:2020-11-14	-251.07382813	-441.846502	-60.3011545	0.0003921
## C:2021-04-15-C:2020-11-14	-243.38450163	-438.287620	-48.4813829	0.0012624
## IA:2021-04-15-C:2020-11-14	-252.23862843	-458.487727	-45.9895302	0.0019399
## C:2020-11-25-IA:2020-11-14	34.63917992	-172.752581	242.0309411	1.0000000
## IA:2020-11-25-IA:2020-11-14	-172.78998604	-387.154837	41.5748645	0.3572068
## C:2020-12-05-IA:2020-11-14	-109.88960782	-305.420435	85.6412198	0.9535803
## IA:2020-12-05-IA:2020-11-14	-134.27750560	-338.768540	70.2135287	0.7919729
## C:2021-01-22-IA:2020-11-14	-61.93923115	-259.390211	135.5117489	0.9999981
## IA:2021-01-22-IA:2020-11-14	-52.89488812	-263.552862	157.7630860	1.0000000
## C:2021-01-28-IA:2020-11-14	-51.27302704	-248.724007	146.1779530	1.0000000
## IA:2021-01-28-IA:2020-11-14	11.75242729	-195.639334	219.1441885	1.0000000
## C:2021-02-05-IA:2020-11-14	-214.69015575	-419.181190	-10.1991215	0.0261850
## IA:2021-02-05-IA:2020-11-14	-158.41789665	-360.314859	43.4790660	0.4172007
## C:2021-02-12-IA:2020-11-14	231.07866028	35.547833	426.6094879	0.0037728
## IA:2021-02-12-IA:2020-11-14	-58.71848458	-254.249312	136.8123431	0.9999993
## C:2021-02-26-IA:2020-11-14	-12.76582523	-210.216805	184.6851548	1.0000000
## IA:2021-02-26-IA:2020-11-14	-49.70606519	-245.236893	145.8247624	1.0000000
## C:2021-03-15-IA:2020-11-14	-157.61560538	-357.178421	41.9472099	0.4023826

##	IA:2021-03-15-IA:2020-11-14	-141.85518714	-337.386015	53.6756405	0.5965336
##	C:2021-03-30-IA:2020-11-14	-257.76887301	-455.219853	-60.3178930	0.0004734
##	IA:2021-03-30-IA:2020-11-14	-250.37573180	-445.906559	-54.8449042	0.0007334
##	C:2021-04-15-IA:2020-11-14	-242.68640531	-442.249221	-43.1235900	0.0021723
##	IA:2021-04-15-IA:2020-11-14	-251.54053210	-462.198506	-40.8825579	0.0031032
##	IA:2020-11-25-C:2020-11-25	-207.42916596	-410.341095	-4.5172366	0.0376977
##	C:2020-12-05-C:2020-11-25	-144.52878773	-327.431129	38.3735537	0.4012651
##	IA:2020-12-05-C:2020-11-25	-168.91668552	-361.368095	23.5347240	0.1932037
##	C:2021-01-22-C:2020-11-25	-96.57841107	-281.532058	88.3752357	0.9812368
##	IA:2021-01-22-C:2020-11-25	-87.53406803	-286.525887	111.4577509	0.9985675
##	C:2021-01-28-C:2020-11-25	-85.91220695	-270.865854	99.0414398	0.9965355
##	IA:2021-01-28-C:2020-11-25	-22.88675263	-218.417580	172.6440750	1.0000000
##	C:2021-02-05-C:2020-11-25	-249.32933567	-441.780745	-56.8779261	0.0005640
##	IA:2021-02-05-C:2020-11-25	-193.05707656	-382.749843	-3.3643106	0.0399592
##	C:2021-02-12-C:2020-11-25	196.43948036	13.537139	379.3418218	0.0188094
##	IA:2021-02-12-C:2020-11-25	-93.35766450	-276.260006	89.5446769	0.9861740
##	C:2021-02-26-C:2020-11-25	-47.40500515	-232.358652	137.5486416	1.0000000
##	IA:2021-02-26-C:2020-11-25	-84.34524511	-267.247587	98.5570963	0.9969095
##	C:2021-03-15-C:2020-11-25	-192.25478530	-379.461300	-5.0482705	0.0354671
##	IA:2021-03-15-C:2020-11-25	-176.49436706	-359.396708	6.4079743	0.0763207
##	C:2021-03-30-C:2020-11-25	-292.40805293	-477.361700	-107.4544062	0.0000022
##	IA:2021-03-30-C:2020-11-25	-285.01491172	-467.917253	-102.1125703	0.0000036
##	C:2021-04-15-C:2020-11-25	-277.32558522	-464.532100	-90.1190704	0.0000171
##	IA:2021-04-15-C:2020-11-25	-286.17971202	-485.171531	-87.1878931	0.0000402
##	C:2020-12-05-IA:2020-11-25	62.90037823	-127.872295	253.6730518	0.9999944
##	IA:2020-12-05-IA:2020-11-25	38.51248044	-161.433741	238.4587021	1.0000000
##	C:2021-01-22-IA:2020-11-25	110.85075489	-81.889479	303.5909893	0.9398777
##	IA:2021-01-22-IA:2020-11-25	119.89509792	-86.354000	326.1441961	0.9325127
##	C:2021-01-28-IA:2020-11-25	121.51695901	-71.223275	314.2571934	0.8514274
##	IA:2021-01-28-IA:2020-11-25	184.54241333	-18.369516	387.4543427	0.1407972
##	C:2021-02-05-IA:2020-11-25	-41.90016971	-241.846391	158.0460519	1.0000000
##	IA:2021-02-05-IA:2020-11-25	14.37208940	-182.920313	211.6644916	1.0000000
##	C:2021-02-12-IA:2020-11-25	403.86864632	213.095973	594.6413199	0.0000000
##	IA:2021-02-12-IA:2020-11-25	114.07150146	-76.701172	304.8441751	0.9096308
##	C:2021-02-26-IA:2020-11-25	160.02416081	-32.716074	352.7643952	0.2949359
##	IA:2021-02-26-IA:2020-11-25	123.08392085	-67.688753	313.8565944	0.8193039
##	C:2021-03-15-IA:2020-11-25	15.17438066	-179.728738	210.0774994	1.0000000
##	IA:2021-03-15-IA:2020-11-25	30.93479890	-159.837875	221.7074725	1.0000000
##	C:2021-03-30-IA:2020-11-25	-84.97888697	-277.719121	107.7613474	0.9985114
##	IA:2021-03-30-IA:2020-11-25	-77.58574576	-268.358419	113.1869278	0.9996368
##	C:2021-04-15-IA:2020-11-25	-69.89641927	-264.799538	125.0066994	0.9999678
##	IA:2021-04-15-IA:2020-11-25	-78.75054606	-284.999644	127.4985521	0.9998887
##	IA:2020-12-05-C:2020-12-05	-24.38789779	-203.994432	155.2186360	1.0000000
##	C:2021-01-22-C:2020-12-05	47.95037666	-123.597906	219.4986596	0.9999999
##	IA:2021-01-22-C:2020-12-05	56.99471970	-129.602992	243.5924312	0.9999990
##	C:2021-01-28-C:2020-12-05	58.61658078	-112.931702	230.1648637	0.9999881
##	IA:2021-01-28-C:2020-12-05	121.64203511	-61.260306	304.5443765	0.7706795
##	C:2021-02-05-C:2020-12-05	-104.80054794	-284.407082	74.8059858	0.9297599
##	IA:2021-02-05-C:2020-12-05	-48.52828883	-225.175699	128.1191210	0.9999999
##	C:2021-02-12-C:2020-12-05	340.96826809	171.633604	510.3029321	0.0000000
##	IA:2021-02-12-C:2020-12-05	51.17112323	-118.163541	220.5057872	0.9999992
##	C:2021-02-26-C:2020-12-05	97.12378258	-74.424500	268.6720655	0.9495195
##	IA:2021-02-26-C:2020-12-05	60.18354262	-109.151121	229.5182066	0.9999732
##	C:2021-03-15-C:2020-12-05	-47.72599756	-221.700827	126.2488314	0.9999999

##	IA:2021-03-15-C:2020-12-05	-31.96557932	-201.300243	137.3690846	1.0000000
##	C:2021-03-30-C:2020-12-05	-147.87926520	-319.427548	23.6690177	0.2237032
##	IA:2021-03-30-C:2020-12-05	-140.48612399	-309.820788	28.8485400	0.2964541
##	C:2021-04-15-C:2020-12-05	-132.79679749	-306.771626	41.1780315	0.4804587
##	IA:2021-04-15-C:2020-12-05	-141.65092428	-328.248636	44.9467872	0.4931571
##	C:2021-01-22-IA:2020-12-05	72.33827445	-109.356778	254.0333265	0.9997544
##	IA:2021-01-22-IA:2020-12-05	81.38261749	-114.584177	277.3494118	0.9994706
##	C:2021-01-28-IA:2020-12-05	83.00447857	-98.690573	264.6995306	0.9973389
##	IA:2021-01-28-IA:2020-12-05	146.02993289	-46.421477	338.4813424	0.4941797
##	C:2021-02-05-IA:2020-12-05	-80.41265015	-269.734560	108.9092596	0.9992128
##	IA:2021-02-05-IA:2020-12-05	-24.14039104	-210.657377	162.3765946	1.0000000
##	C:2021-02-12-IA:2020-12-05	365.35616588	185.749632	544.9626996	0.0000000
##	IA:2021-02-12-IA:2020-12-05	75.55902102	-104.047513	255.1655548	0.9993343
##	C:2021-02-26-IA:2020-12-05	121.51168037	-60.183372	303.2067324	0.7610226
##	IA:2021-02-26-IA:2020-12-05	84.57144041	-95.035093	264.1779742	0.9957202
##	C:2021-03-15-IA:2020-12-05	-23.33809978	-207.325925	160.6497250	1.0000000
##	IA:2021-03-15-IA:2020-12-05	-7.57768154	-187.184215	172.0288522	1.0000000
##	C:2021-03-30-IA:2020-12-05	-123.49136741	-305.186419	58.2036846	0.7316248
##	IA:2021-03-30-IA:2020-12-05	-116.09822620	-295.704760	63.5083076	0.8164945
##	C:2021-04-15-IA:2020-12-05	-108.40889970	-292.396724	75.5789251	0.9222039
##	IA:2021-04-15-IA:2020-12-05	-117.26302650	-313.229821	78.7037679	0.9089670
##	IA:2021-01-22-C:2021-01-22	9.04434303	-179.564487	197.6531734	1.0000000
##	C:2021-01-28-C:2021-01-22	10.66620412	-163.067495	184.3999036	1.0000000
##	IA:2021-01-28-C:2021-01-22	73.69165844	-111.261988	258.6453052	0.9997509
##	C:2021-02-05-C:2021-01-22	-152.75092460	-334.445977	28.9441274	0.2701516
##	IA:2021-02-05-C:2021-01-22	-96.47866549	-275.249167	82.2918364	0.9713982
##	C:2021-02-12-C:2021-01-22	293.01789143	121.469608	464.5661744	0.0000001
##	IA:2021-02-12-C:2021-01-22	3.22074657	-168.327536	174.7690295	1.0000000
##	C:2021-02-26-C:2021-01-22	49.17340592	-124.560294	222.9071054	0.9999998
##	IA:2021-02-26-C:2021-01-22	12.23316596	-159.315117	183.7814489	1.0000000
##	C:2021-03-15-C:2021-01-22	-95.67637423	-271.806514	80.4537653	0.9689989
##	IA:2021-03-15-C:2021-01-22	-79.91595599	-251.464239	91.6323269	0.9963753
##	C:2021-03-30-C:2021-01-22	-195.82964186	-369.563341	-22.0959424	0.0087346
##	IA:2021-03-30-C:2021-01-22	-188.43650065	-359.984784	-16.8882177	0.0133066
##	C:2021-04-15-C:2021-01-22	-180.74717415	-356.877314	-4.6170346	0.0358159
##	IA:2021-04-15-C:2021-01-22	-189.60130095	-378.210131	-0.9924706	0.0468151
##	C:2021-01-28-IA:2021-01-22	1.62186108	-186.986969	190.2306915	1.0000000
##	IA:2021-01-28-IA:2021-01-22	64.64731541	-134.344504	263.6391343	0.9999959
##	C:2021-02-05-IA:2021-01-22	-161.79526764	-357.762062	34.1715267	0.3063465
##	IA:2021-02-05-IA:2021-01-22	-105.52300853	-298.781346	87.7353287	0.9669868
##	C:2021-02-12-IA:2021-01-22	283.97354839	97.375837	470.5712599	0.0000075
##	IA:2021-02-12-IA:2021-01-22	-5.82359646	-192.421308	180.7741150	1.0000000
##	C:2021-02-26-IA:2021-01-22	40.12906289	-148.479767	228.7378933	1.0000000
##	IA:2021-02-26-IA:2021-01-22	3.18882292	-183.408889	189.7865344	1.0000000
##	C:2021-03-15-IA:2021-01-22	-104.72071726	-295.539266	86.0978317	0.9648995
##	IA:2021-03-15-IA:2021-01-22	-88.96029902	-275.558011	97.6374125	0.9948279
##	C:2021-03-30-IA:2021-01-22	-204.87398489	-393.482815	-16.2651545	0.0158407
##	IA:2021-03-30-IA:2021-01-22	-197.48084368	-384.078555	-10.8831322	0.0233517
##	C:2021-04-15-IA:2021-01-22	-189.79151719	-380.610066	1.0270318	0.0534493
##	IA:2021-04-15-IA:2021-01-22	-198.64564398	-401.039279	3.7479909	0.0627353
##	IA:2021-01-28-C:2021-01-28	63.02545433	-121.928192	247.9791011	0.9999888
##	C:2021-02-05-C:2021-01-28	-163.41712872	-345.112181	18.2779233	0.1560856
##	IA:2021-02-05-C:2021-01-28	-107.14486961	-285.915372	71.6256323	0.9074976
##	C:2021-02-12-C:2021-01-28	282.35168731	110.803404	453.8999702	0.0000005

##	IA:2021-02-12-C:2021-01-28	-7.44545755	-178.993740	164.1028254	1.0000000
##	C:2021-02-26-C:2021-01-28	38.50720180	-135.226498	212.2409013	1.0000000
##	IA:2021-02-26-C:2021-01-28	1.56696184	-169.981321	173.1152448	1.0000000
##	C:2021-03-15-C:2021-01-28	-106.34257835	-282.472718	69.7875612	0.9005223
##	IA:2021-03-15-C:2021-01-28	-90.58216010	-262.130443	80.9661228	0.9783040
##	C:2021-03-30-C:2021-01-28	-206.49584598	-380.229545	-32.7621465	0.0033880
##	IA:2021-03-30-C:2021-01-28	-199.10270477	-370.650988	-27.5544218	0.0052556
##	C:2021-04-15-C:2021-01-28	-191.41337827	-367.543518	-15.2832387	0.0157210
##	IA:2021-04-15-C:2021-01-28	-200.26750506	-388.876335	-11.6586747	0.0222638
##	C:2021-02-05-IA:2021-01-28	-226.44258304	-418.893993	-33.9911735	0.0040942
##	IA:2021-02-05-IA:2021-01-28	-170.17032394	-359.863090	19.5224420	0.1597791
##	C:2021-02-12-IA:2021-01-28	219.32623299	36.423892	402.2285744	0.0028604
##	IA:2021-02-12-IA:2021-01-28	-70.47091187	-253.373253	112.4314295	0.9998676
##	C:2021-02-26-IA:2021-01-28	-24.51825252	-209.471899	160.4353942	1.0000000
##	IA:2021-02-26-IA:2021-01-28	-61.45849248	-244.360834	121.4438489	0.9999916
##	C:2021-03-15-IA:2021-01-28	-169.36803267	-356.574547	17.8384821	0.1478739
##	IA:2021-03-15-IA:2021-01-28	-153.60761443	-336.509956	29.2947270	0.2721556
##	C:2021-03-30-IA:2021-01-28	-269.52130030	-454.474947	-84.5676536	0.0000276
##	IA:2021-03-30-IA:2021-01-28	-262.12815909	-445.030500	-79.2258177	0.0000443
##	C:2021-04-15-IA:2021-01-28	-254.43883260	-441.645347	-67.2323178	0.0001796
##	IA:2021-04-15-IA:2021-01-28	-263.29295939	-462.284778	-64.3011404	0.0003456
##	IA:2021-02-05-C:2021-02-05	56.27225911	-130.244727	242.7892448	0.9999992
##	C:2021-02-12-C:2021-02-05	445.76881603	266.162282	625.3753498	0.0000000
##	IA:2021-02-12-C:2021-02-05	155.97167117	-23.634863	335.5782049	0.2109203
##	C:2021-02-26-C:2021-02-05	201.92433052	20.229279	383.6193825	0.0110370
##	IA:2021-02-26-C:2021-02-05	164.98409056	-14.622443	344.5906243	0.1279707
##	C:2021-03-15-C:2021-02-05	57.07455037	-126.913274	241.0623751	0.9999985
##	IA:2021-03-15-C:2021-02-05	72.83496861	-106.771565	252.4415024	0.9996553
##	C:2021-03-30-C:2021-02-05	-43.07871726	-224.773769	138.6163348	1.0000000
##	IA:2021-03-30-C:2021-02-05	-35.68557605	-215.292110	143.9209577	1.0000000
##	C:2021-04-15-C:2021-02-05	-27.99624955	-211.984074	155.9915752	1.0000000
##	IA:2021-04-15-C:2021-02-05	-36.85037635	-232.817171	159.1164180	1.0000000
##	C:2021-02-12-IA:2021-02-05	389.49655692	212.849147	566.1439667	0.0000000
##	IA:2021-02-12-IA:2021-02-05	99.69941206	-76.947998	276.3468219	0.9512729
##	C:2021-02-26-IA:2021-02-05	145.65207141	-33.118430	324.4225733	0.3341164
##	IA:2021-02-26-IA:2021-02-05	108.71183145	-67.935578	285.3592413	0.8805953
##	C:2021-03-15-IA:2021-02-05	0.80229127	-180.298013	181.9025952	1.0000000
##	IA:2021-03-15-IA:2021-02-05	16.56270951	-160.084700	193.2101193	1.0000000
##	C:2021-03-30-IA:2021-02-05	-99.35097637	-278.121478	79.4195255	0.9592396
##	IA:2021-03-30-IA:2021-02-05	-91.95783516	-268.605245	84.6895747	0.9819829
##	C:2021-04-15-IA:2021-02-05	-84.26850866	-265.368813	96.8317953	0.9964401
##	IA:2021-04-15-IA:2021-02-05	-93.12263545	-286.380973	100.1357018	0.9939301
##	IA:2021-02-12-C:2021-02-12	-289.79714486	-459.131809	-120.4624809	0.0000001
##	C:2021-02-26-C:2021-02-12	-243.84448551	-415.392768	-72.2962026	0.0000555
##	IA:2021-02-26-C:2021-02-12	-280.78472547	-450.119389	-111.4500615	0.0000004
##	C:2021-03-15-C:2021-02-12	-388.69426566	-562.669095	-214.7194367	0.0000000
##	IA:2021-03-15-C:2021-02-12	-372.93384742	-542.268511	-203.5991835	0.0000000
##	C:2021-03-30-C:2021-02-12	-488.84753329	-660.395816	-317.2992504	0.0000000
##	IA:2021-03-30-C:2021-02-12	-481.45439208	-650.789056	-312.1197281	0.0000000
##	C:2021-04-15-C:2021-02-12	-473.76506558	-647.739895	-299.7902366	0.0000000
##	IA:2021-04-15-C:2021-02-12	-482.61919238	-669.216904	-296.0214809	0.0000000
##	C:2021-02-26-IA:2021-02-12	45.95265935	-125.595624	217.5009423	0.9999999
##	IA:2021-02-26-IA:2021-02-12	9.01241939	-160.322245	178.3470833	1.0000000
##	C:2021-03-15-IA:2021-02-12	-98.89712080	-272.871950	75.0777081	0.9471662

```
## IA:2021-03-15-IA:2021-02-12 -83.13670256 -252.471367 86.1979614 0.9920056
## C:2021-03-30-IA:2021-02-12 -199.05038843 -370.598671 -27.5021055 0.0052805
## IA:2021-03-30-IA:2021-02-12 -191.65724722 -360.991911 -22.3225833 0.0081492
## C:2021-04-15-IA:2021-02-12 -183.96792073 -357.942750 -9.9930918 0.0236348
## IA:2021-04-15-IA:2021-02-12 -192.82204752 -379.419759 -6.2243360 0.0326232
## IA:2021-02-26-C:2021-02-26 -36.94023996 -208.488523 134.6080430 1.0000000
## C:2021-03-15-C:2021-02-26 -144.84978015 -320.979920 31.2803594 0.3144344
## IA:2021-03-15-C:2021-02-26 -129.08936191 -300.637645 42.4589210 0.5133995
## C:2021-03-30-C:2021-02-26 -245.00304778 -418.736747 -71.2693483 0.0000688
## IA:2021-03-30-C:2021-02-26 -237.60990657 -409.158190 -66.0616236 0.0001108
## C:2021-04-15-C:2021-02-26 -229.92058007 -406.050720 -53.7904405 0.0004741
## IA:2021-04-15-C:2021-02-26 -238.77470687 -427.383537 -50.1658765 0.0009418
## C:2021-03-15-IA:2021-02-26 -107.90954019 -281.884369 66.0652888 0.8716291
## IA:2021-03-15-IA:2021-02-26 -92.14912195 -261.483786 77.1855420 0.9683148
## C:2021-03-30-IA:2021-02-26 -208.06280782 -379.611091 -36.5145249 0.0022903
## IA:2021-03-30-IA:2021-02-26 -200.66966661 -370.004331 -31.3350027 0.0035836
## C:2021-04-15-IA:2021-02-26 -192.98034011 -366.955169 -19.0055112 0.0113797
## IA:2021-04-15-IA:2021-02-26 -201.83446691 -388.432178 -15.2367554 0.0168996
## IA:2021-03-15-C:2021-03-15 15.76041824 -158.214411 189.7352472 1.0000000
## C:2021-03-30-C:2021-03-15 -100.15326763 -276.283407 75.9768719 0.9469829
## IA:2021-03-30-C:2021-03-15 -92.76012642 -266.734955 81.2147025 0.9754319
## C:2021-04-15-C:2021-03-15 -85.07079993 -263.565208 93.4236084 0.9948520
## IA:2021-04-15-C:2021-03-15 -93.92492672 -284.743476 96.8936222 0.9917032
## C:2021-03-30-IA:2021-03-15 -115.91368587 -287.461969 55.6345971 0.7425011
## IA:2021-03-30-IA:2021-03-15 -108.52054466 -277.855209 60.8141193 0.8290968
## C:2021-04-15-IA:2021-03-15 -100.83121817 -274.806047 73.1436108 0.9346448
## IA:2021-04-15-IA:2021-03-15 -109.68534496 -296.283056 76.9123665 0.9241043
## IA:2021-03-30-C:2021-03-30 7.39314121 -164.155142 178.9414241 1.0000000
## C:2021-04-15-C:2021-03-30 15.08246771 -161.047672 191.2126073 1.0000000
## IA:2021-04-15-C:2021-03-30 6.22834091 -182.380489 194.8371713 1.0000000
## C:2021-04-15-IA:2021-03-30 7.68932650 -166.285502 181.6641554 1.0000000
## IA:2021-04-15-IA:2021-03-30 -1.16480030 -187.762512 185.4329112 1.0000000
## IA:2021-04-15-C:2021-04-15 -8.85412679 -199.672676 181.9644222 1.0000000
```

Supuestos estadísticos

Homocedasticidad para datos productivos

```
leveneTest(Peso ~ Condición*Fechas, data = a, center = "median")
```

```
## Levene's Test for Homogeneity of Variance (center = "median")
##           Df F value    Pr(>F)
## group    33  14.406 < 2.2e-16 ***
##           1526
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
leveneTest(Largo ~ Condición*Fechas, data = a, center = "median")
```

```
## Levene's Test for Homogeneity of Variance (center = "median")
##           Df F value    Pr(>F)
## group    33  5.3081 < 2.2e-16 ***
##           1526
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```

leveneTest(K ~ Condición*Fechas, data = a, center = "median")

## Levene's Test for Homogeneity of Variance (center = "median")
##           Df F value    Pr(>F)
## group    33  3.9135 1.154e-12 ***
##           1526
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

leveneTest(NKA ~ Condición*Fechas, data = a2, center = "median")

## Levene's Test for Homogeneity of Variance (center = "median")
##           Df F value    Pr(>F)
## group    29  3.2368 5.341e-08 ***
##           570
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Normalidad para datos productivos

```

normalidad_peso <- lm(Peso ~ Condición*Fechas, data = a)
shapiro.test(normalidad_peso$residuals)

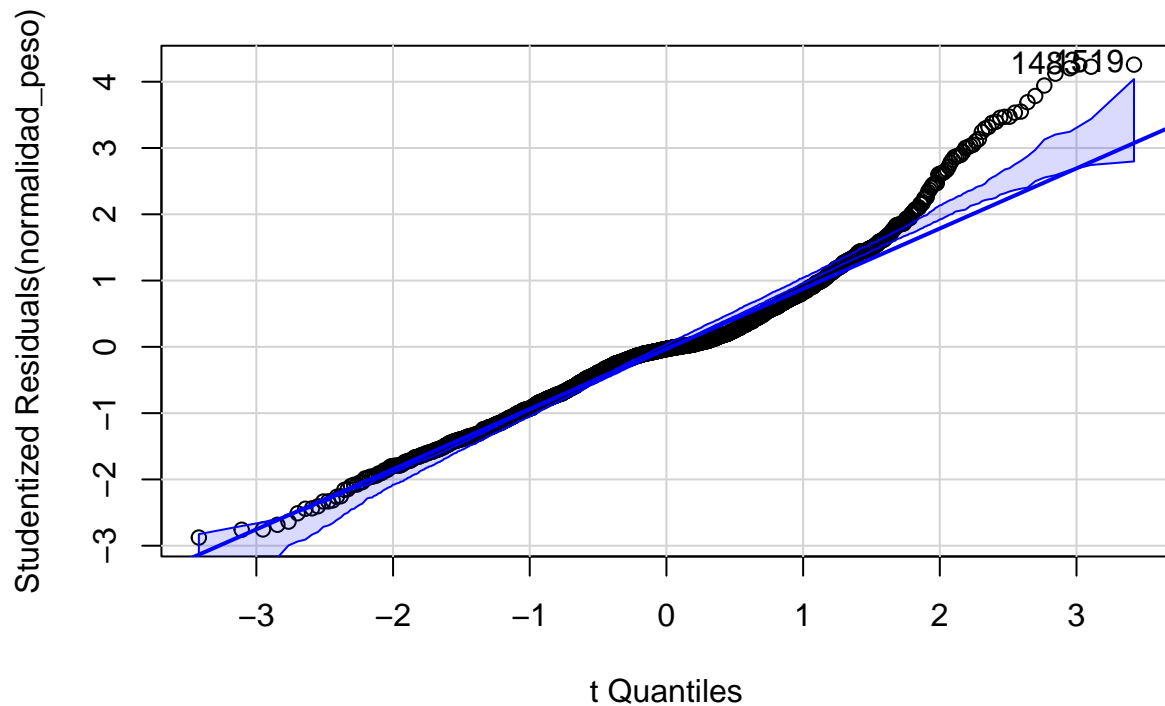
```

```

##
## Shapiro-Wilk normality test
##
## data:  normalidad_peso$residuals
## W = 0.96061, p-value < 2.2e-16

```

```
qqPlot(normalidad_peso)
```



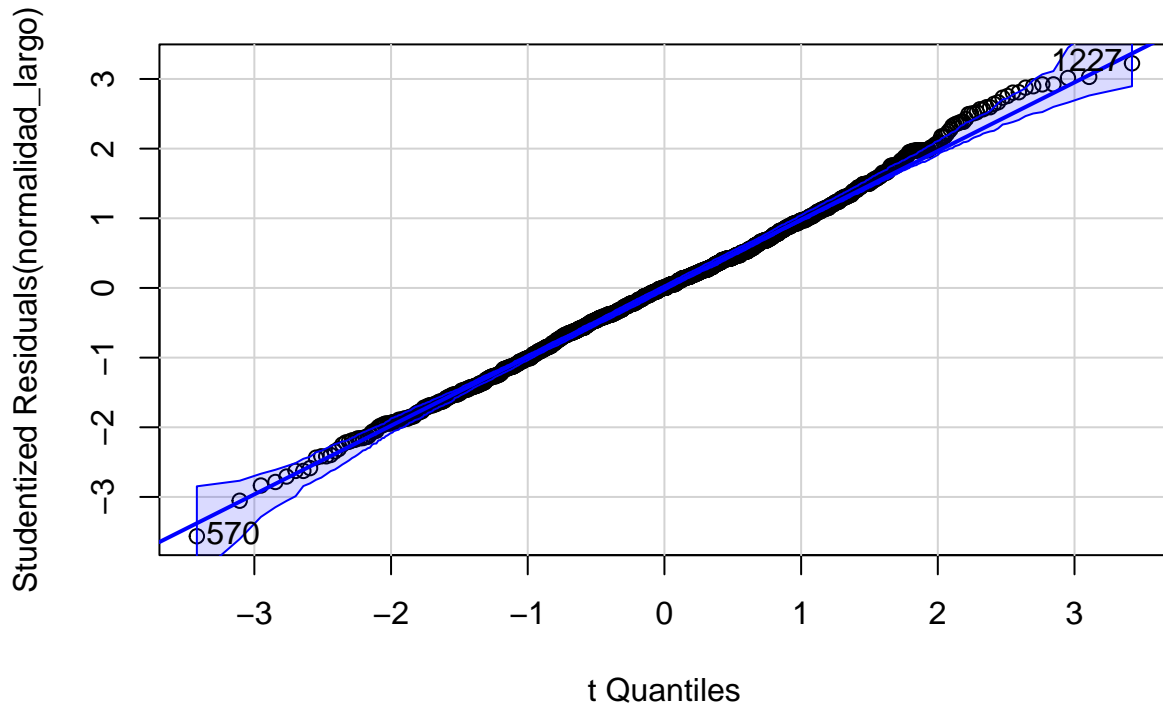
```
## [1] 1483 1519
```



```
normalidad_largo <- lm(Largo ~ Condición*Fechas, data = a)
shapiro.test(normalidad_largo$residuals)
```

```
##
## Shapiro-Wilk normality test
##
## data:  normalidad_largo$residuals
## W = 0.99768, p-value = 0.02366
```

```
qqPlot(normalidad_largo)
```

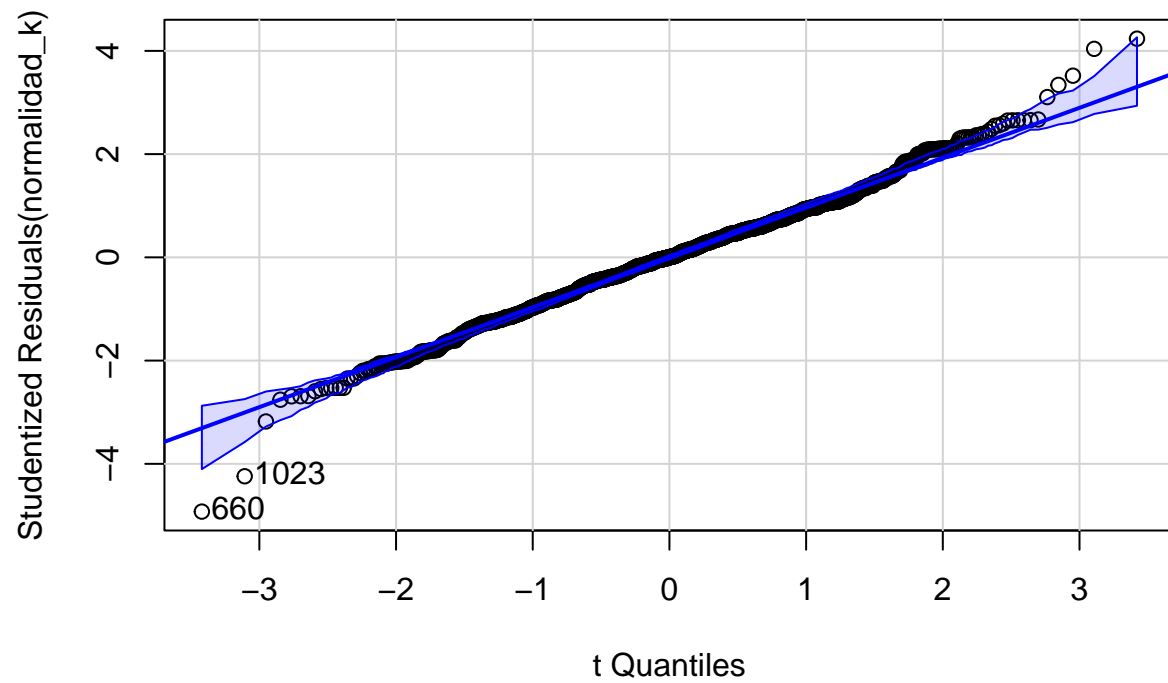


```
## [1] 570 1227
```

```
normalidad_k <- lm(K ~ Condición*Fechas, data = a)
shapiro.test(normalidad_k$residuals)
```

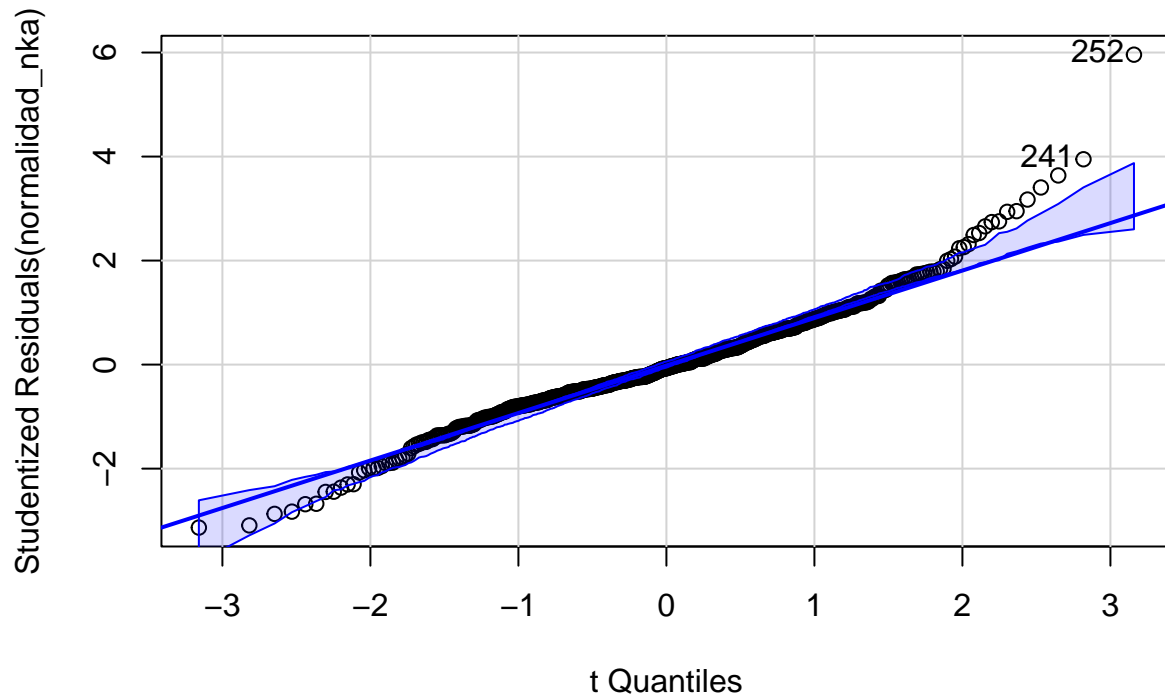
```
##
## Shapiro-Wilk normality test
##
## data:  normalidad_k$residuals
## W = 0.99326, p-value = 1.505e-06
```

```
qqPlot(normalidad_k)
```



```
## [1] 660 1023
normalidad_nka <- lm(NKA ~ Condición*Fechas, data = a2)
shapiro.test(normalidad_nka$residuals)
```

```
##
## Shapiro-Wilk normality test
##
## data:  normalidad_nka$residuals
## W = 0.96779, p-value = 3.335e-10
qqPlot(normalidad_nka)
```



```
## [1] 241 252
```

Homocedasticidad para datos plasmáticos

```
leveneTest(Glucosa ~ Condicion*Fechas, data = b, center = "median")
```

```
## Levene's Test for Homogeneity of Variance (center = "median")
##      Df F value Pr(>F)
## group 29  1.3141 0.1306
##      423
```

```
leveneTest(Calcio ~ Condicion*Fechas, data = b, center = "median")
```

```
## Levene's Test for Homogeneity of Variance (center = "median")
##      Df F value Pr(>F)
## group 29  0.8072 0.753
##      423
```

```
leveneTest(Clоро ~ Condicion*Fechas, data = b, center = "median")
```

```
## Levene's Test for Homogeneity of Variance (center = "median")
##      Df F value    Pr(>F)
## group 29  2.1747 0.0005156 ***
##      423
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
leveneTest(Albumina ~ Condicion*Fechas, data = b, center = "median")
```

```
## Levene's Test for Homogeneity of Variance (center = "median")
##      Df F value Pr(>F)
## group 29  1.2559 0.1724
##      423
```

```
leveneTest(Cortisol ~ Condicion*Fechas, data = b, center = "median")
```

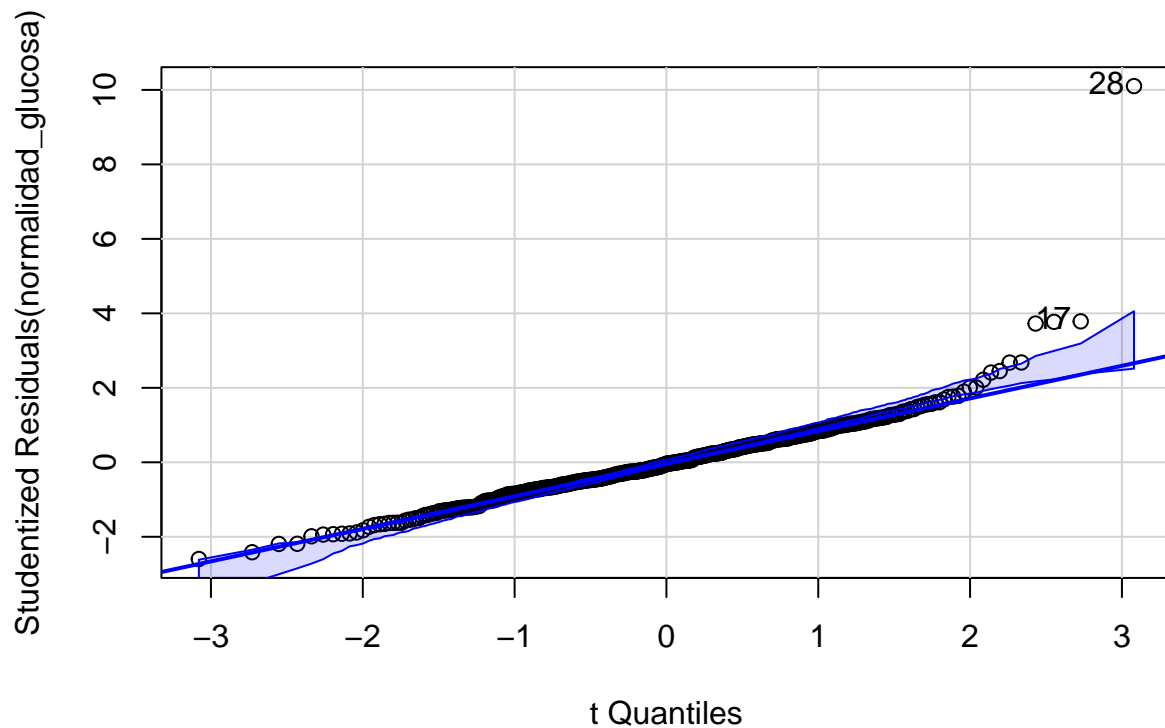
```
## Levene's Test for Homogeneity of Variance (center = "median")
##      Df F value    Pr(>F)
## group 29  3.0563 4.474e-07 ***
##      408
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Normalidad para datos plasmáticos

```
normalidad_glucosa <- lm(Glucosa ~ Condicion*Fechas, data = b)
shapiro.test(normalidad_glucosa$residuals)
```

```
##
## Shapiro-Wilk normality test
##
## data:  normalidad_glucosa$residuals
## W = 0.91091, p-value = 1.146e-15
```

```
qqPlot(normalidad_glucosa)
```

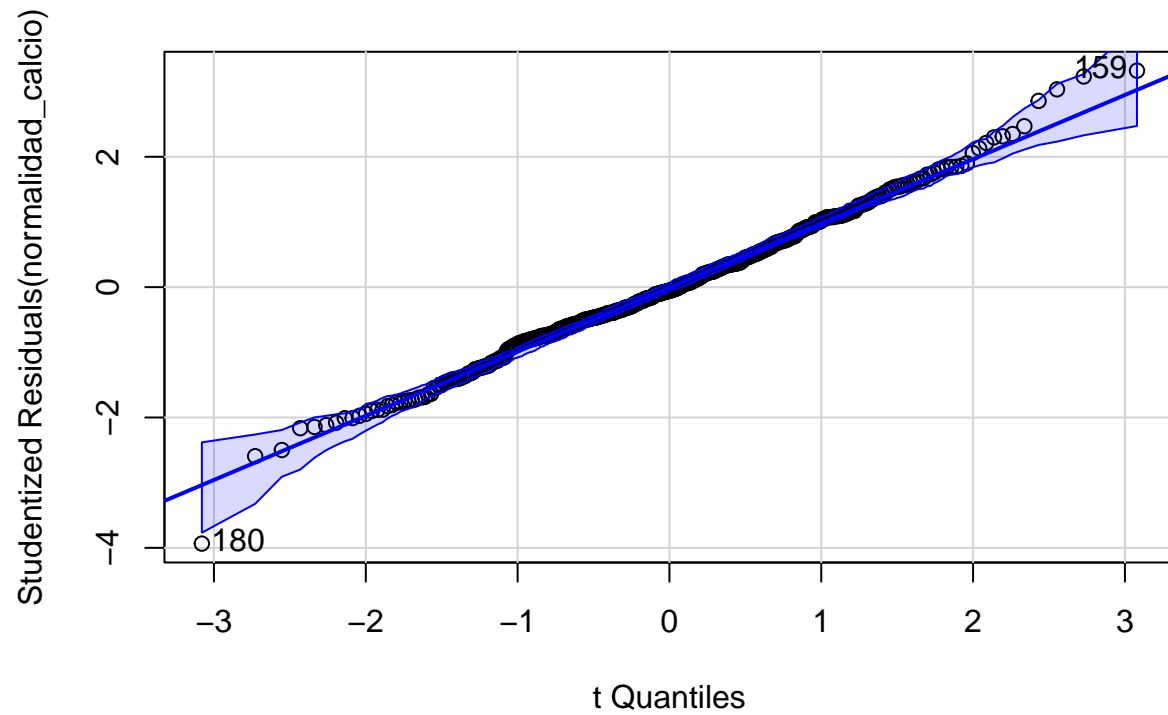


```
## [1] 17 28
```

```
normalidad_calcio <- lm(Calcio ~ Condicion*Fechas, data = b)
shapiro.test(normalidad_calcio$residuals)
```

```
##
## Shapiro-Wilk normality test
##
## data:  normalidad_calcio$residuals
## W = 0.99464, p-value = 0.1151
```

```
qqPlot(normalidad_calcio)
```

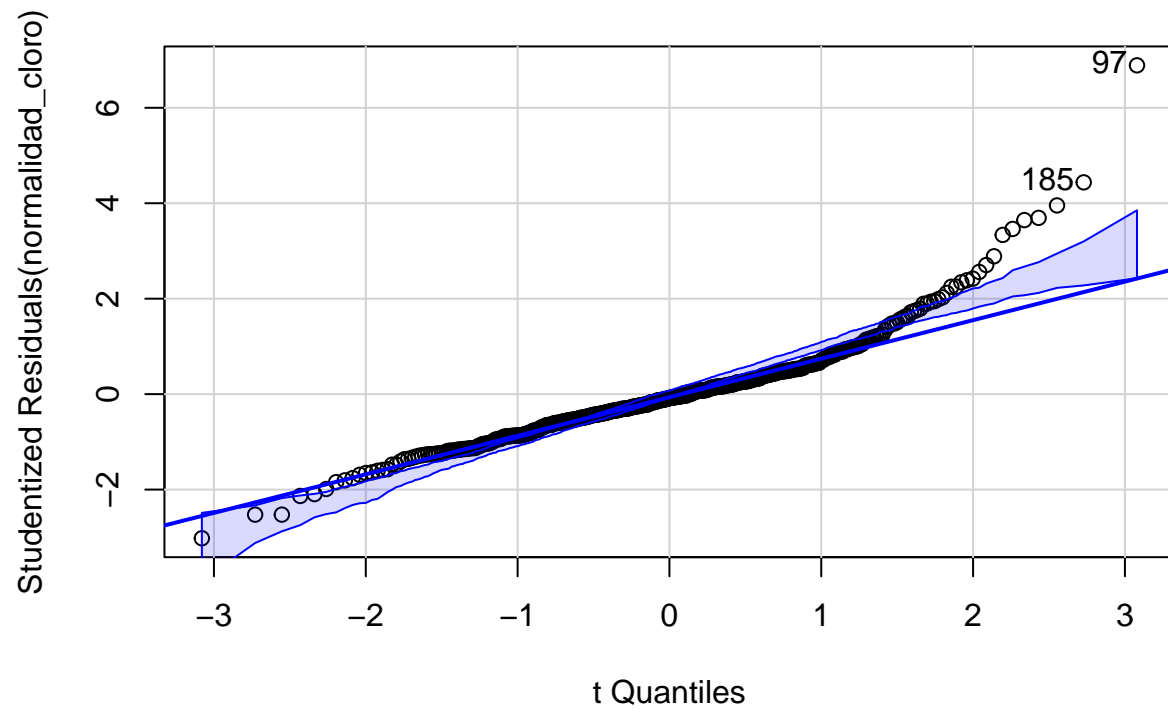


```
## [1] 159 180
```

```
normalidad_cloro <- lm(Clورو ~ Condicion*Fechas, data = b)
shapiro.test(normalidad_cloro$residuals)
```

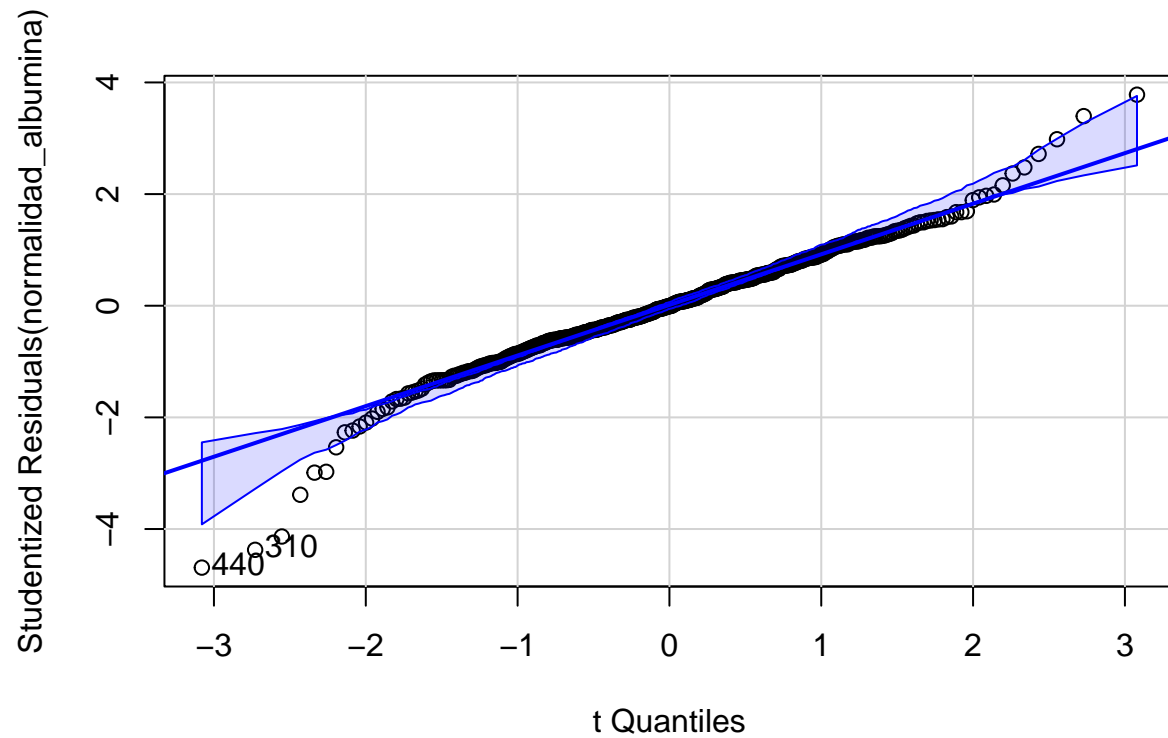
```
##
## Shapiro-Wilk normality test
##
## data:  normalidad_cloro$residuals
## W = 0.91728, p-value = 4.712e-15
```

```
qqPlot(normalidad_cloro)
```



```
## [1] 97 185
normalidad_albumina <- lm(Albumina ~ Condicion*Fechas, data = b)
shapiro.test(normalidad_albumina$residuals)

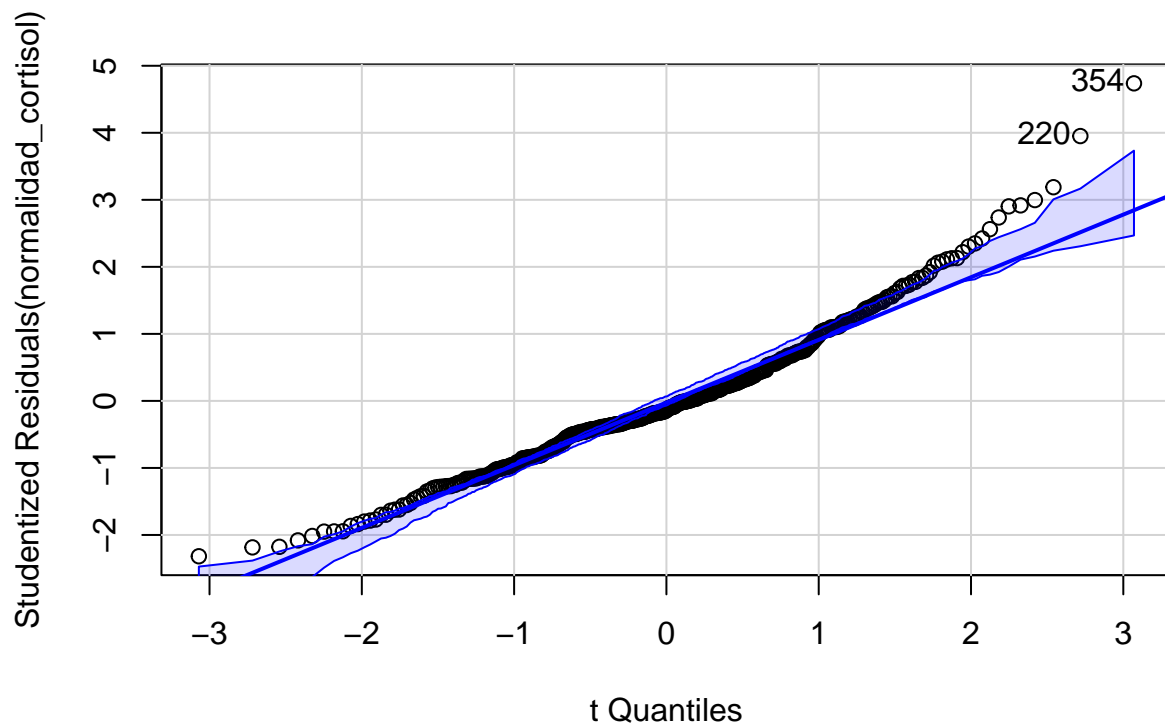
##
## Shapiro-Wilk normality test
##
## data:  normalidad_albumina$residuals
## W = 0.96955, p-value = 4.269e-08
qqPlot(normalidad_albumina)
```



```
## [1] 310 440
```

```
normalidad_cortisol <- lm(Cortisol ~ Condicion*Fechas, data = b)
shapiro.test(normalidad_cortisol$residuals)
```

```
##
## Shapiro-Wilk normality test
##
## data: normalidad_cortisol$residuals
## W = 0.96833, p-value = 3.96e-08
qqPlot(normalidad_cortisol)
```



[1] 220 354

Interpretación de resultados y conclusión

Para evaluar si la IA genera un efecto en la fisiología de los peces se realizó un ANOVA de dos vías con interacción, donde las variables condición y fecha serán las variables predictoras y para el análisis se ocupó el paquete estadístico WRS2, el cual realiza análisis estadísticos robustos cuando no se pueden cumplir los supuestos de homocedasticidad y es robusto a la presencia de outlier. Al realizar la visualización de los datos se puede apreciar el incremento en la varianza de los datos, sugiriendo heterocedasticidad, lo cual fue confirmado con los test de Levene ($p < 0.05$), por lo tanto realizamos ANOVA de dos vías utilizando el paquete WRS2 y además realizamos el ANOVA de dos vías tradicional para ir comparando ambas pruebas estadísticas. Para nuestra sorpresa el ANOVA tradicional a pesar de existir heterocedasticidad en los datos, de todas formas fue capaz de detectar efectos significativos de los factores predictivos e incluso fue mucho más sensible en identificar diferencias significativas que utilizando el paquete WRS2. En ambos modelos se puede apreciar que la IA afecta la fisiología de los peces y este efecto es más evidente en condiciones de agua de mar que en agua dulce, ya que observa un incremento del peso y el largo en los últimos muestreos y el test a posteriori logra detectar diferencias significativas de la condición control con los peces mantenidos en la IA en los últimos 4 muestreos. Los niveles de Cortisol se reducen significativamente en los últimos muestreos, sugiriendo una reducción del estrés en los peces, además los niveles de Calcio disminuyen significativamente sugiriendo que los peces están captando el ion Calcio y utilizándolo para aumentar el crecimiento del tejido óseo. Se detectaron varias correlaciones significativas, con los niveles más altos en las variables largo y peso (0.95) lo cual es plausible, mientras que los niveles de calcio y albúmina también presentaron un alto nivel de correlación (0.68) lo cual es lógico ya que se ha descrito que la proteína albúmina moviliza ion calcio, sugiriendo procesos que afectan el proceso de crecimiento en peces. En conclusión, la IA mejora el crecimiento de los peces, especialmente en agua de mar y además modifica la fisiología de *Salmo salar*, mejorando procesos fisiológicos asociados al crecimiento, tales como disminución del cortisol e incremento de proteínas tales como albúmina. Muchos más estudios son necesarios que permitan detallar si los efectos de la IA son específicos y de corto plazo de cada salinidad o si es un efecto acumulativo donde la IA es necesaria en agua dulce para generar los efectos en agua de mar.