```r
source('RECURSOS-INVESTIGACION/R/get-dat-basic-normalizada.R')
source('RECURSOS-INVESTIGACION/R/pef-r2-ids-eeff-forecast.R')
source('RECURSOS-INVESTIGACION/R/pef-list-summary-resumen.R')
source('RECURSOS-INVESTIGACION/R/pef-get-dats-for-forescat.R')
source('RECURSOS-INVESTIGACION/R/pef-get-ids-for-models.R')

if (!('listResultPEF' %in% ls())) {
    datTotalSistema <- getDatEEFFNormalizada(by = 'TOTAL_SISTEMA')

    ids <- getVariablesForModelsForecast()

    listResultPEF <- getListFittedAndSimulateModels(datTotalSistema,ids)
    listResumeModels <- getListResumeSummaryModels(listResultPEF)
    listDatsForTestCamels <- getDatsForTestCamels(listResultPEF,12,TRUE)
}
```

```
## Loading required package: openxlsx

## Loading required package: dplyr

##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##     filter, lag

## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union

## Registered S3 method overwritten by 'quantmod':
##   method            from
##   as.zoo.data.frame zoo

## -- Attaching packages --------------------------------------------- fpp2 2.5 --

## v ggplot2   3.4.2     v fma       2.5
## v forecast  8.21      v expsmooth 2.3

##

##
## Attaching package: 'lubridate'

## The following objects are masked from 'package:base':
##
##     date, intersect, setdiff, union
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```
source("RECURSOS-INVESTIGACION/R/pef-get-camel-test.R")
require(dplyr)
require(kableExtra)
```

```
## Loading required package: kableExtra

##
## Attaching package: 'kableExtra'

## The following object is masked from 'package:dplyr':
##
##     group_rows
```

```
originalCamelTest <- getCamelTestForecast(listDatsForTestCamels$datCuentas)
```

```
## Scale for x is already present.
## Adding another scale for x, which will replace the existing scale.
```

```
nnCamelTest <- getCamelTestForecast(listDatsForTestCamels$nnDataForecastCuentas)
```

```
## Scale for x is already present.
## Adding another scale for x, which will replace the existing scale.
```

```
mcoCamelTest <- getCamelTestForecast(listDatsForTestCamels$mcoDataForecastCuentas)
```

```
## Scale for x is already present.
## Adding another scale for x, which will replace the existing scale.
```

```
arimaCamelTest <- getCamelTestForecast(listDatsForTestCamels$arimaDataForecastCuentas)
```

```
## Scale for x is already present.
## Adding another scale for x, which will replace the existing scale.
```

```
camelTestModels <- bind_rows(originalCamelTest,
                             nnCamelTest,
                             mcoCamelTest,
                             arimaCamelTest)
```

Aplicaciones

```
kable(camelTestModels) %>%
    pack_rows(index = c('DATOS ORIGINALES',
                        'REDES NEURONALES',
                        'MCO',
                        'ARIMA'))
```

TIPO_DE_ENTIDAD	TENDENCIA	PROMEDIO	DESVIACION	MINIMO	MAXIMO
DATOS ORIGINALES					
TOTAL SISTEMA	0.0450175	3	0.2784052	3	4
REDES NEURONALES					
TOTAL SISTEMA	-0.0411713	3	0.2399396	3	4
MCO					
TOTAL SISTEMA	-0.0979895	4	0.4729421	2	4
ARIMA					
TOTAL SISTEMA	-0.0231206	4	0.1164246	3	4