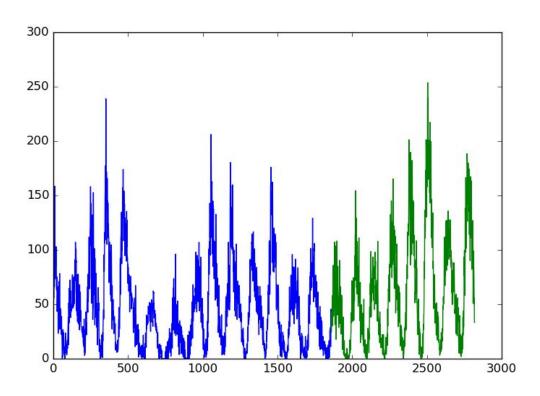
# Predicción Series Temporales 2

Iván G. Torre

## **Split Train-Test en Series Temporales**

No puede randomizarse.



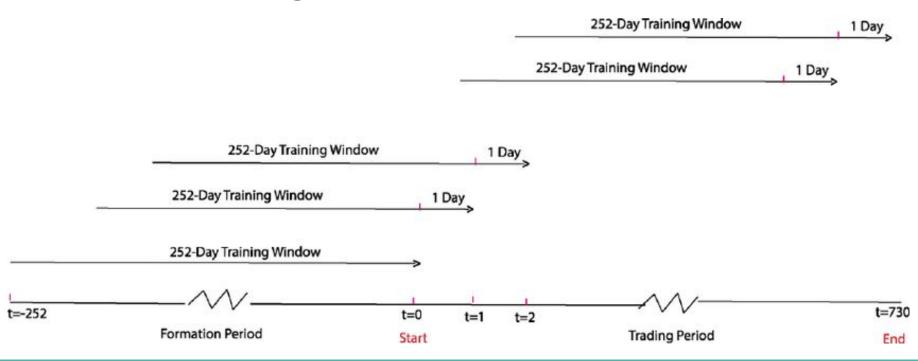
## **Split Train-Test en Series Temporales**

• ¿O si?

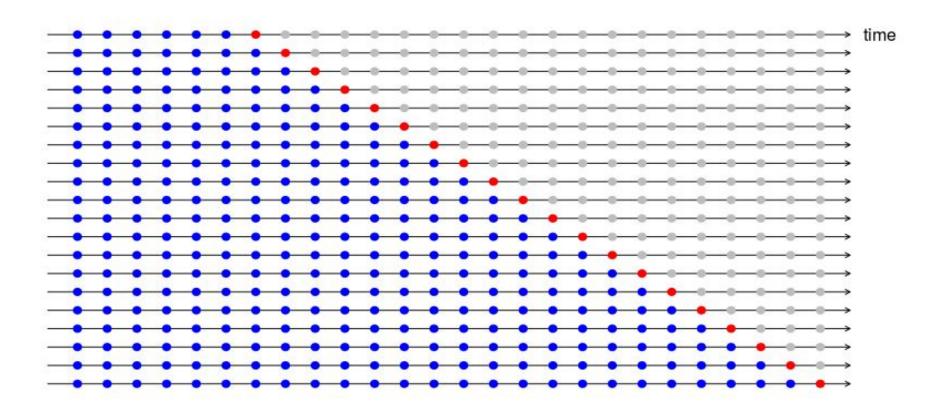
Trip Start Timestamp	Trip End Timestamp	Trip Seconds	Trip Miles	Trip Total	Date	Year	Month	Day	Hour	Week
2017-03-12 11:00:00	2017-03-12 11:30:00	1500.0	17.80	\$56.12	2017-03-12	2017	3	Sunday	11	10
2017-03-23 18:00:00	2017-03-23 18:15:00	366.0	0.87	\$6.00	2017-03-23	2017	3	Thursday	18	12
2017-04-21 16:30:00	2017-04-21 16:30:00	840.0	0.00	\$11.75	2017-04-21	2017	4	Friday	16	16
2017-02-28 10:30:00	2017-02-28 10:30:00	720.0	0.00	\$11.00	2017-02-28	2017	2	Tuesday	10	9
2017-05-18 20:00:00	2017-05-18 20:15:00	540.0	0.00	\$9.00	2017-05-18	2017	5	Thursday	20	20

## Test sobre serie temporal: Rolling Window

Predicción con rolling window



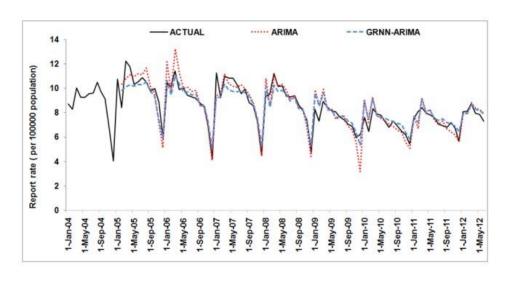
#### **Cross Validation time series**



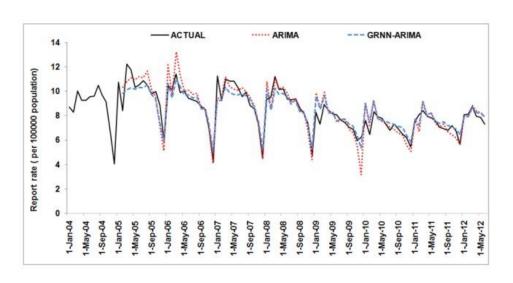
#### **Cross Validation time series**

Test	Train	Train	Train	Train
Train	Test	Train	Train	Train
Train	Train	Test	Train	Train
Train	Train	Train	Test	Train
Train	Train	Train	Train	Test

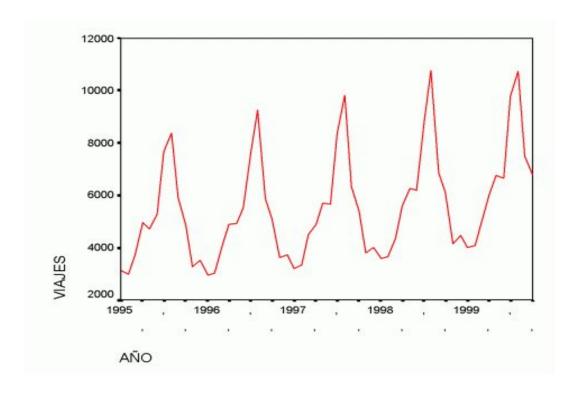
 Modelo autorregresivo de media móvil



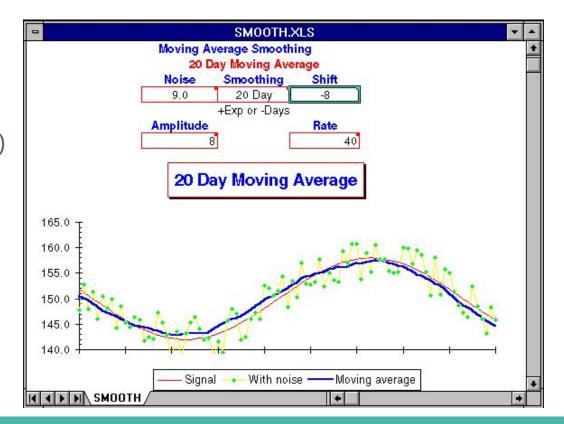
 Seasionalidad (frecuencia)



 Seasionalidad (frecuencia)



- Seasionalidad (frecuencia)
- Autorregresivo (n lags)
- Media móvil (n términos)



# Predicción con ARIMA: Ejercicio



