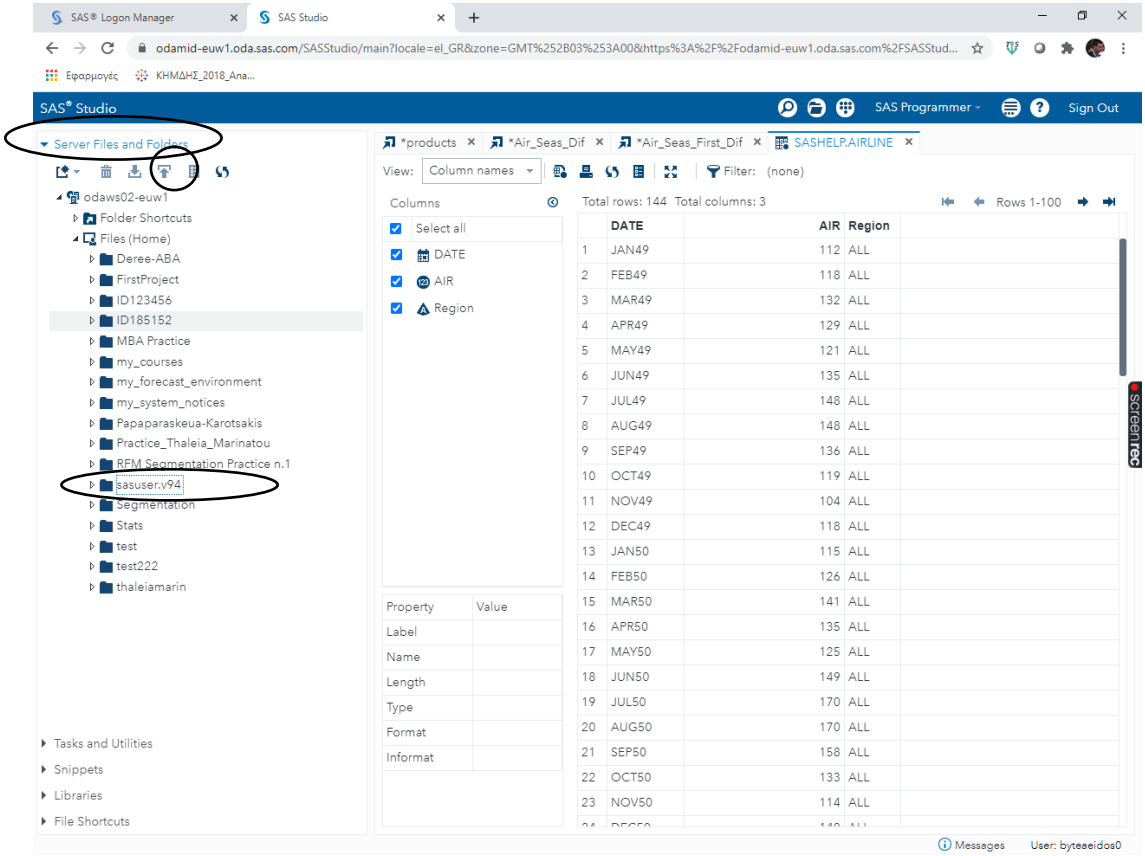
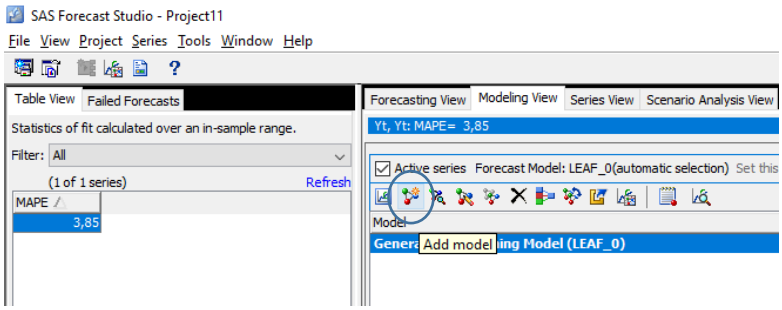
Exercise Internet Users Logged in a Server Data

1) Open google chrome
2) Go to welcome.oda.sas.com
3) Select Europe in the drop down menu and press sign in
4) Insert your credentials
5) In the dashboard select SAS Studio
6) On the left hand side select Server Files and Folders and then sasuser.v94
7) Press the upload button (the one with the arrow heading upwards).



8) Select the file “Internet_Users_for_SAS.sas7bdat”
9) Press Upload
10) Open SAS Forecast Studio
11) In the projects window press New.
12) In step 1 name the project “Internet Users” and press next.
13) In step 2 open the sasuser library, Select the “Internet_Users_for_SAS_minutes” data set and press next.

14) In step 3 press next
15) In step 4 select Minute as the time id variable.
16) In step 5 select Users as the dependent variable.
17) In step 6 press next
18) In step 7 set 20 in the Change the number of periods to forecast (horizon). Press Change Other Forecasting Settings. Select the Model Selection tab. Check the Use Holdout Sample for Model Selection option and input 25 and 25. Press OK. Press Next.
19) In step 8 press finish
20) In the Forecast Summary window double click on the Model Type box. What do you observe? Press close.
21) In the Forecasting view window, comment on the characteristics of the time series. Is your observation in line with the results of the previous step (model type)?
22) Select the Series View window. Select plot Unit Root Test. Which one of the three windows should you look (Zero Mean, Single Mean, Trend)? What do you conclude? Is this in line with the results in the two previous steps?
23) Select plot Seasonal Unit Root. What do you conclude?
24) Set the Simple Difference (dependent) (1) on the upper right corner.
25) Check the ACF and the PACF plot on the first differenced data to conclude on the p, d, q, P, D, Q.
26) Select the Modelling View window. Select Add Model.



27) Select ARIMA and press OK
28) Select the appropriate options for p, d, q, P, D, Q.