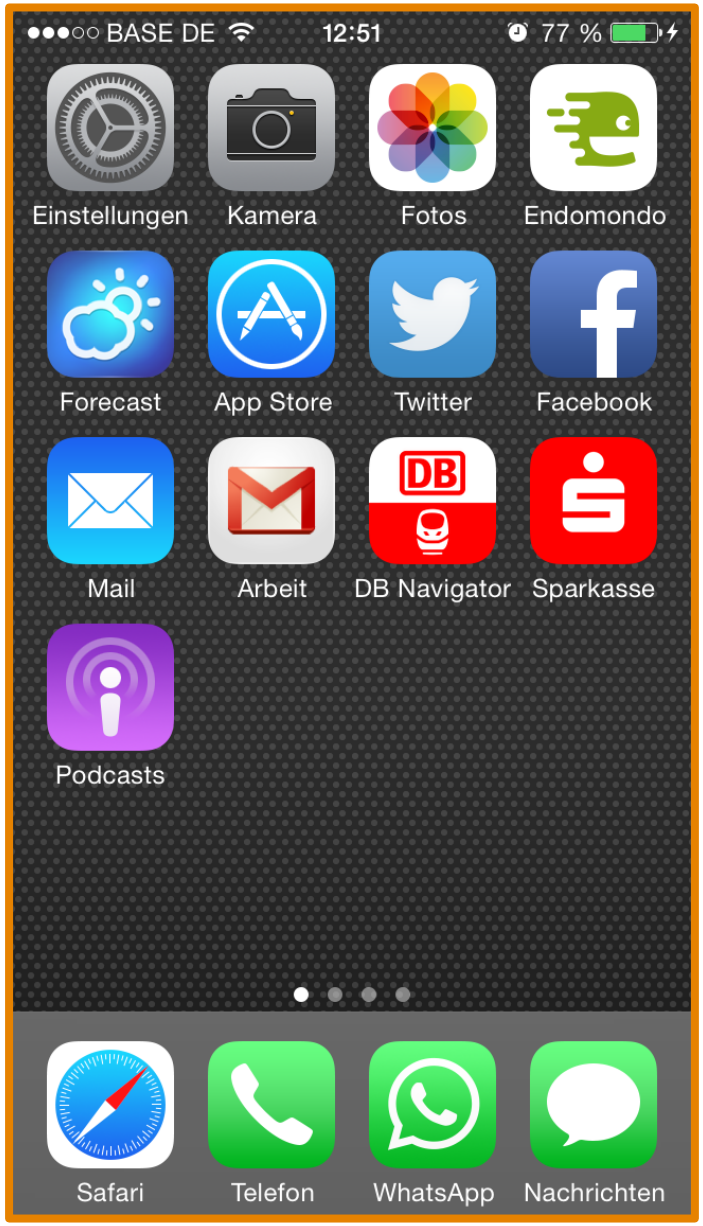
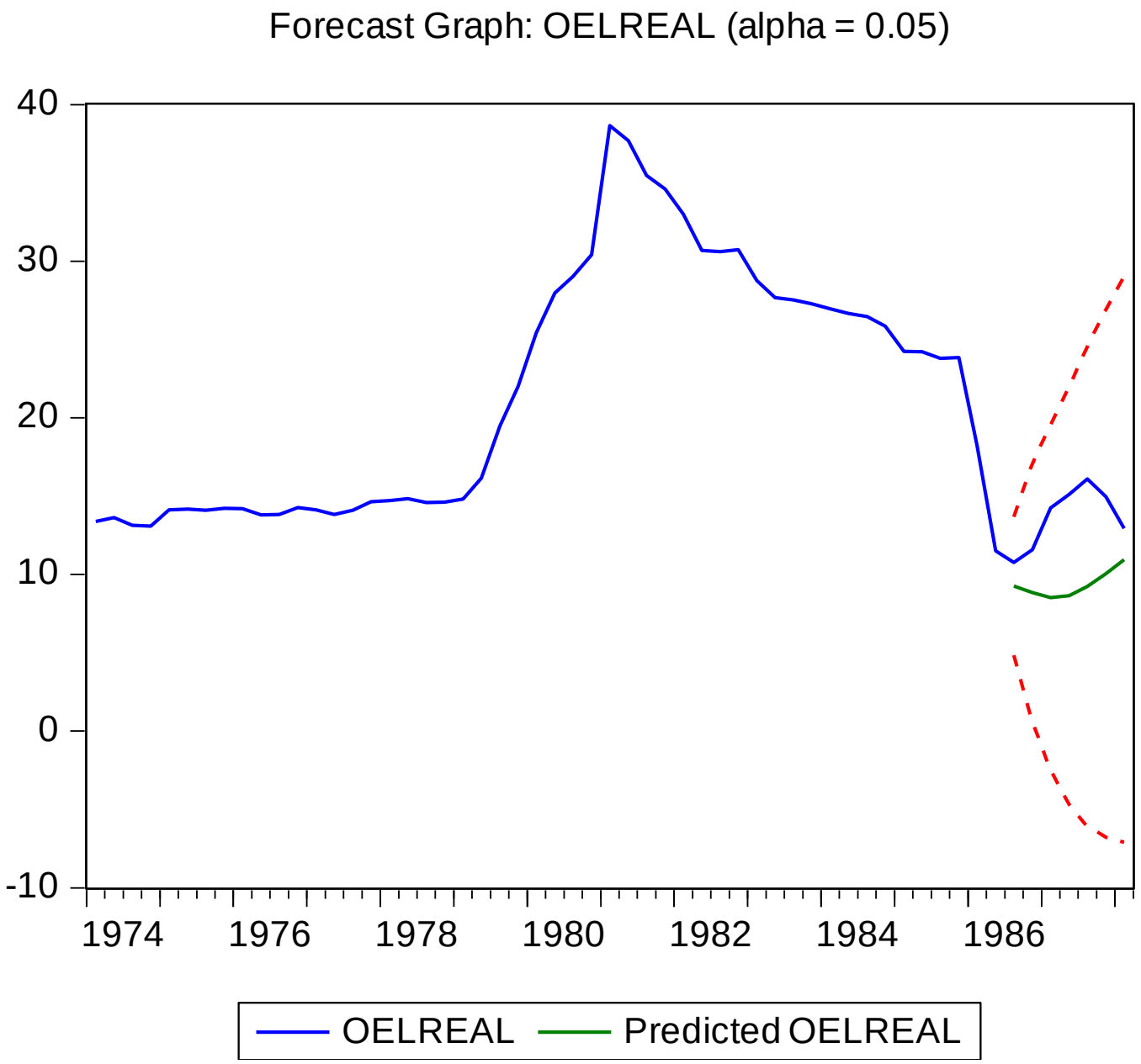
SEBASTIAN HOFFMEISTER

www.statcon.de


●●●○○ BASE DE
12:51
77 %
Einstellungen
Kamera
Fotos
Endomondo
Forecast
App Store
Twitter
Facebook
Mail
Arbeit
DB Navigator
Sparkasse
Podcasts
Safari
Telefon
WhatsApp
Nachrichten

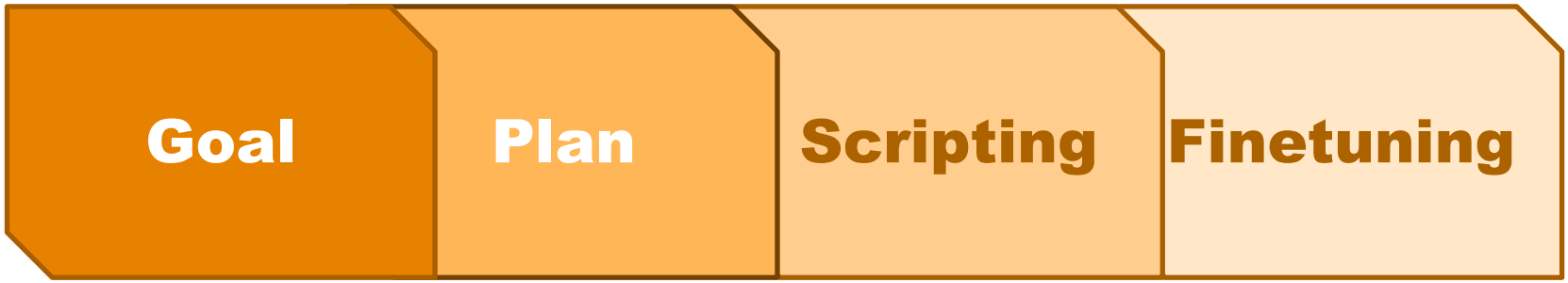
INNOVATION

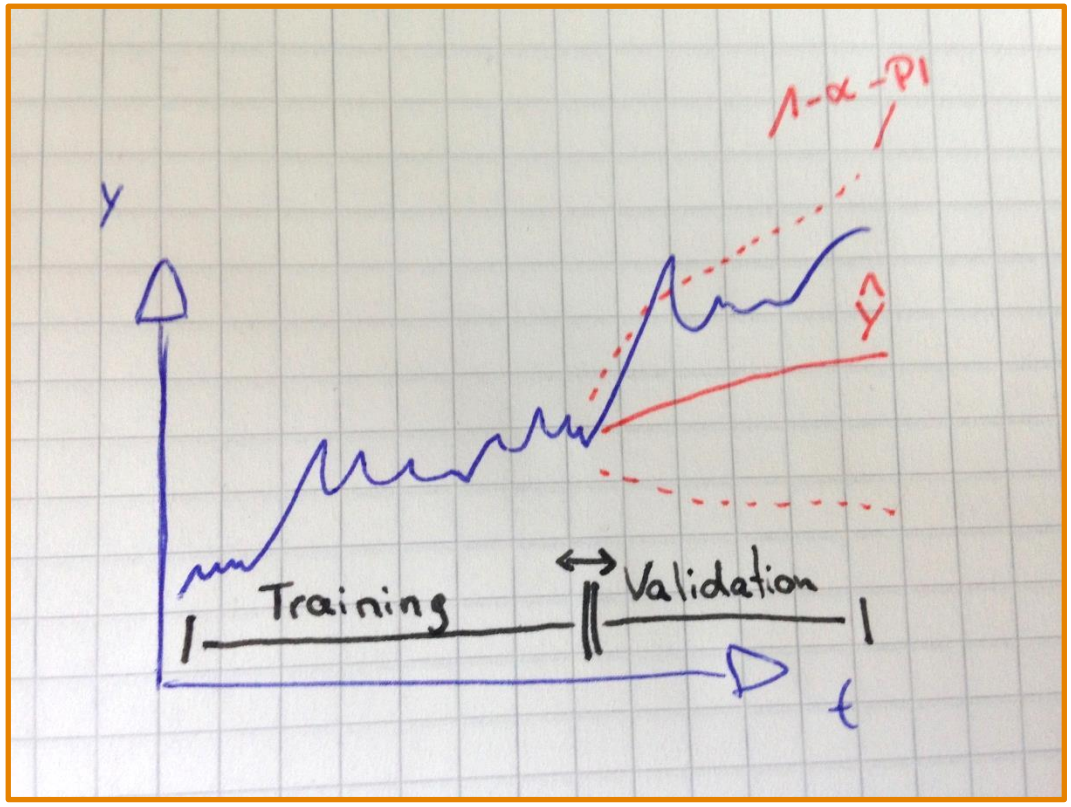
Time needed to create a forecast graph in EViews.


Forecast Graph: OELREAL (alpha = 0.05)
40
30
20
10
0
-10
1974
1976
1978
1980
1982
1984
1986
OELREAL
Predicted OELREAL


EViews® 8
Estimation · Forecasting · Statistical Analysis
Graphics · Data Management · Simulation

SCRIPTING GUIDE


Goal
Plan
Scripting
Finetuning


1-α -PI
y
ŷ
Training
Validation
t

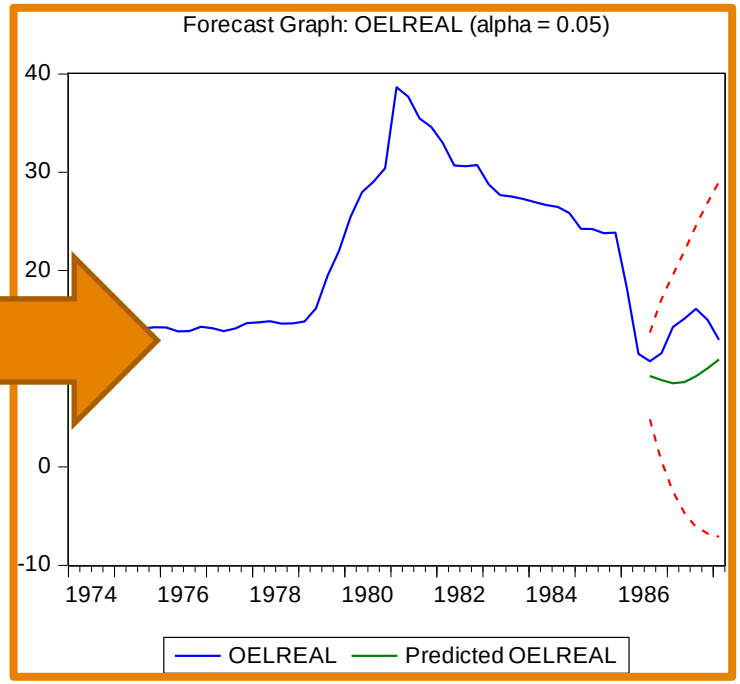
Workfile: OEL - (y:\google drive\scripting\eviews\addin forecast graph\oel.wf1)

View | Proc | Object | Save | Freeze | Details+/- | Show | Fetch | Store | Delete | Genr | Sample

Range: 1974Q1 1988Q1 -- 57 obs

Sample: 1974Q1 1988Q1 -- 57 obs

Name	Type	Last Update
c	coef	08/20/14
eq1	equation	08/20/14 14:32
oelreal	series	06/20/09 20:11
resid	series	08/20/14 14:08
txnonag	series	06/20/09 20:12
usnonag	series	06/20/09 20:12



Working Packages

EViews Addin

GUI

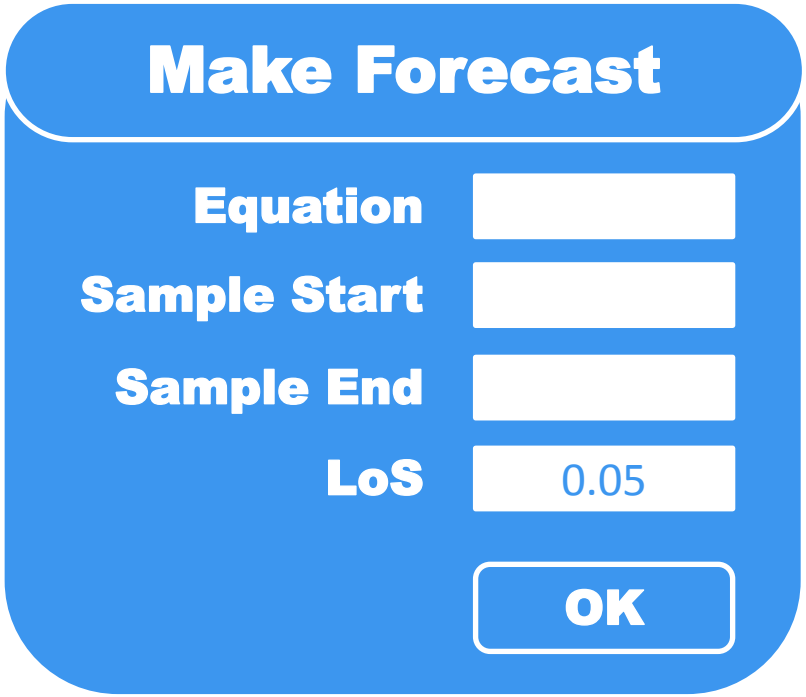
Logic

Data Management

Calculations

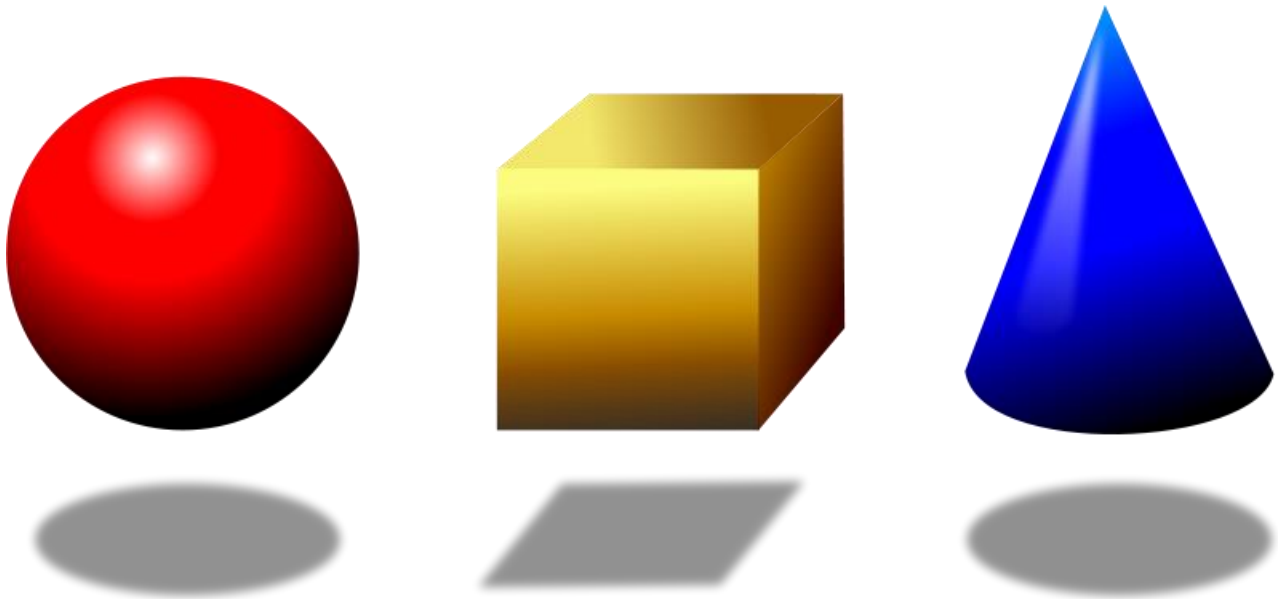
Graph Customization


Make Forecast
Equation
OK


Make Forecast
Equation
Sample Start
Sample End
LoS
0.05
OK

1. Forecast based on Equation
2. Prediction Intervals for Forecast
3. Customized Forecast Graph

```
PRINT(„HELLO WORLD!“)
```



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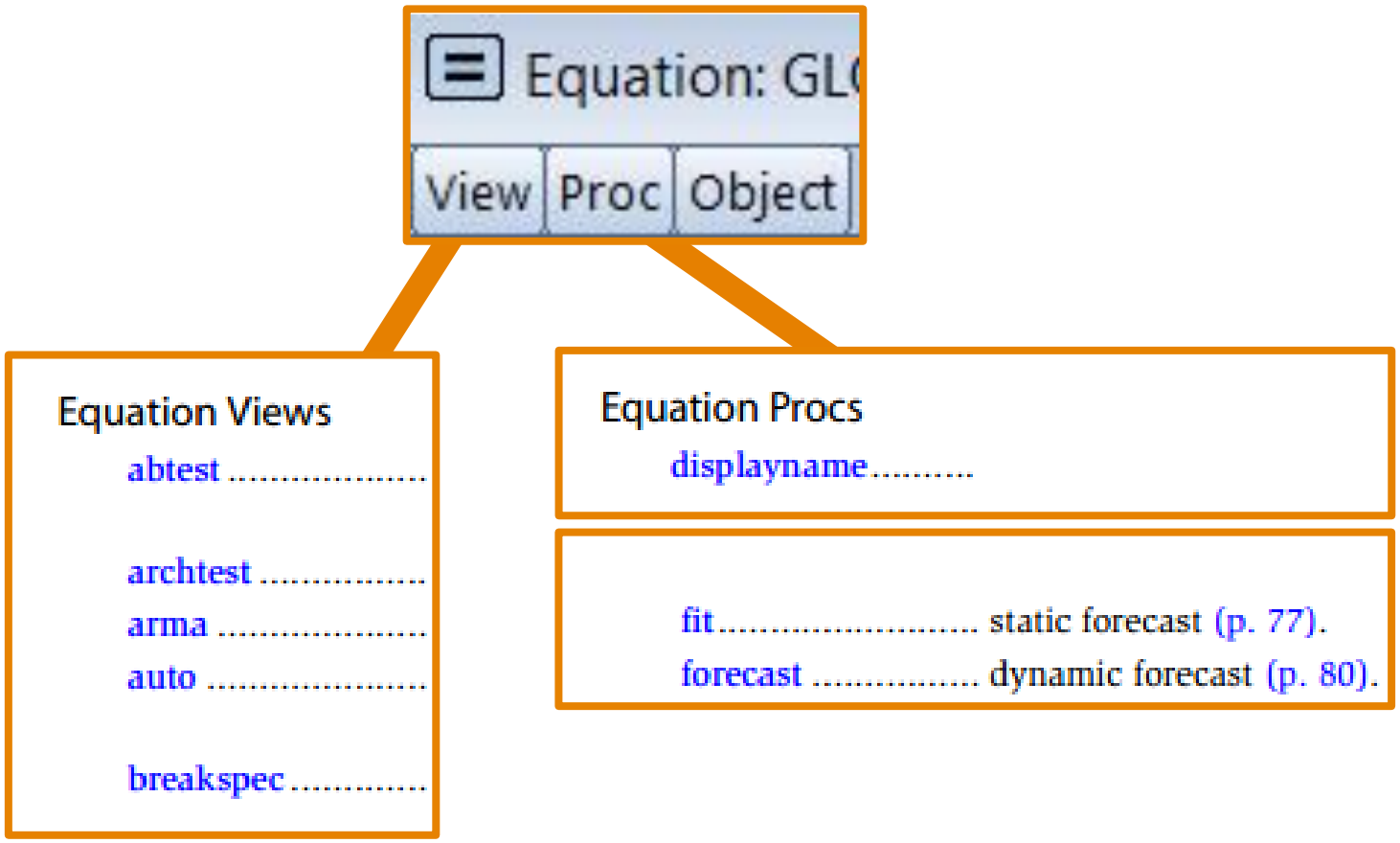
Object Reference

IHS


Equation: GL
View
Proc
Object
Equation Views
abtest .....
archtest .....
arma .....
auto .....
breakspec .....
Equation Procs
displayname.....
fit..... static forecast (p. 77).
forecast ..... dynamic forecast (p. 80).

COMMAND LINE INTERFACE

- This generates a **forecast** based on a equation called **`Eq01`.**
- The **forecast** is stored in a new series named **`yhat`.**
- An additional series **`y_sd`** saves the **prediction standard deviation**.

```
Eq01.forecast yhat y_sd
```

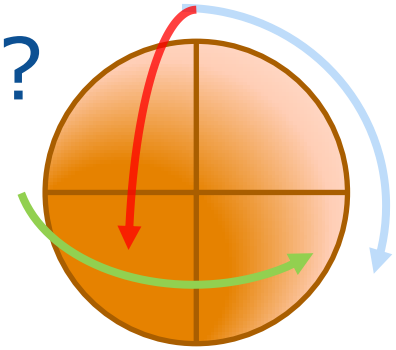
$$PI_{1-\alpha}(y_{t+1}) =$$

$$\hat{y}_{t+1} \pm t_{(1-\frac{\alpha}{2},df)} \cdot s\sqrt{1 + x'_{t+1}(X'X)^{-1}x_{t+1}}$$

Calculating the prediction intervals is easy!

```
Series upper
```

Degrees of Freedom?



```
Eq01.@df
```

EVIEWS PROGRAMS

Subroutines allow to perform the same task for different **objects** without writing the same code twice.

```
Subroutine create_fc_graph
...
endsub
```

Remember this?

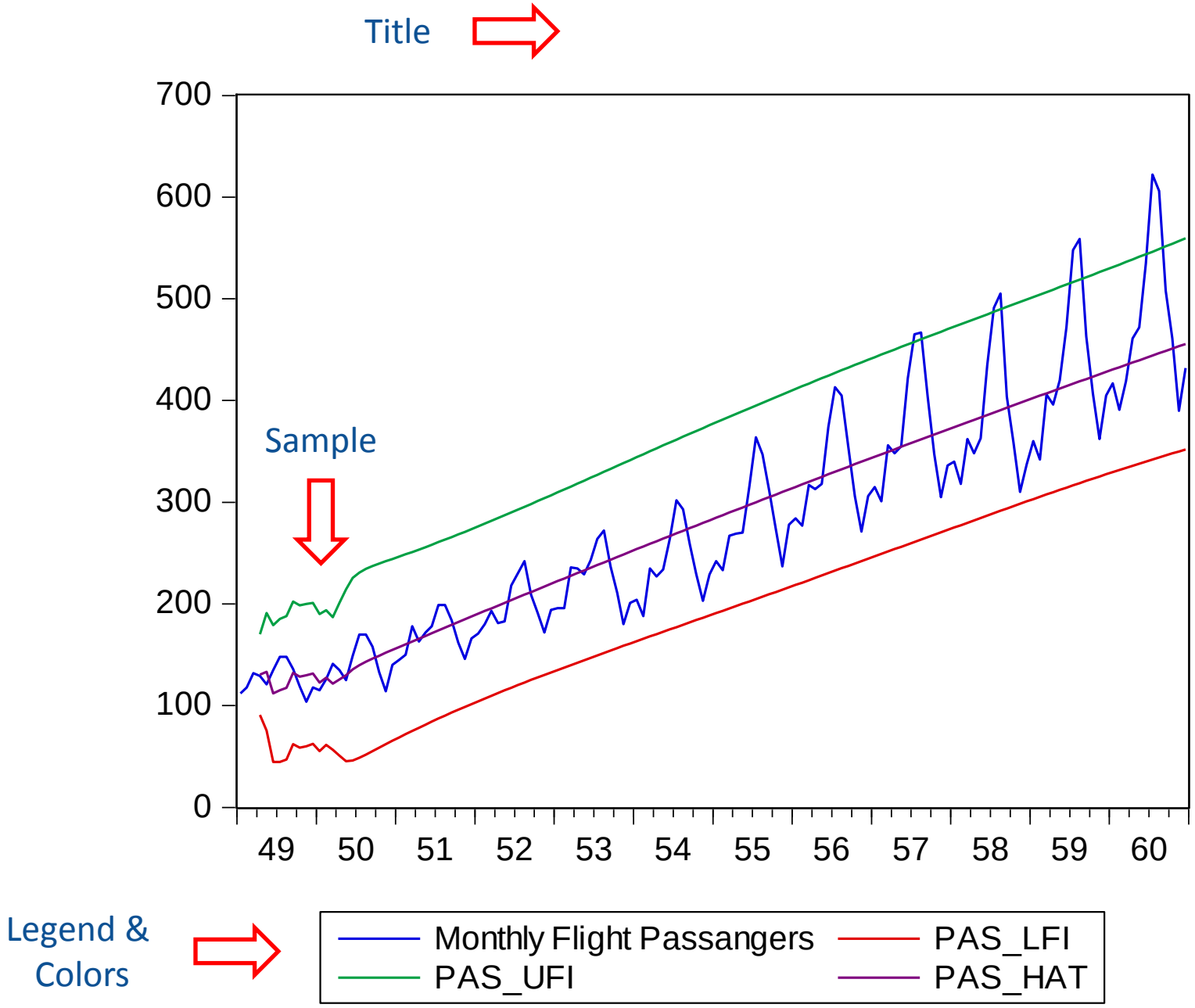

```
@uidialog(
  „caption“, „Make Forecast“,
  „edit“, %eqname, „Equation“
)
```

Creating a group G object

```
Group g01 y yhat upper lower
```

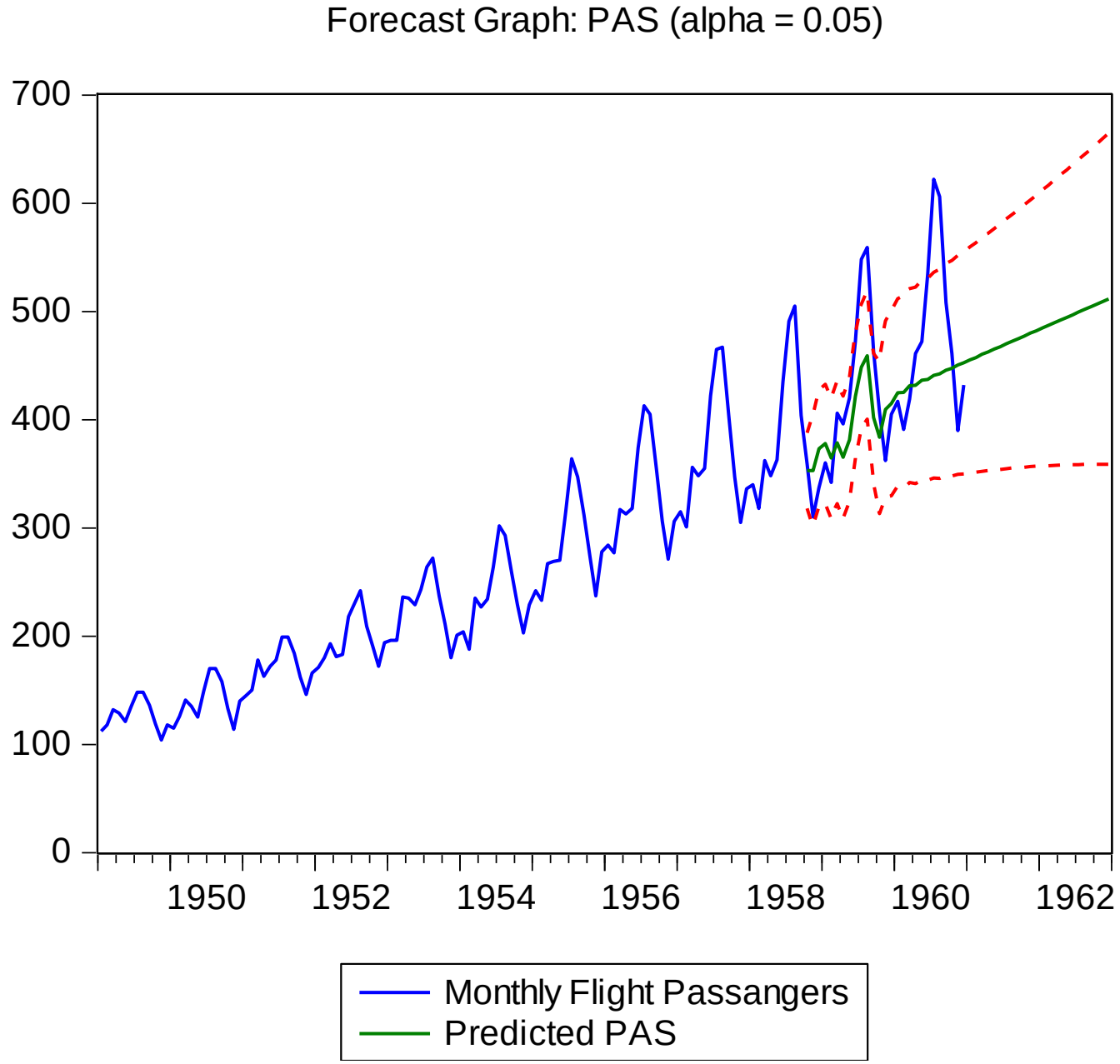
Creating a graph  object from a group

```
Graph graph01.line g01
```

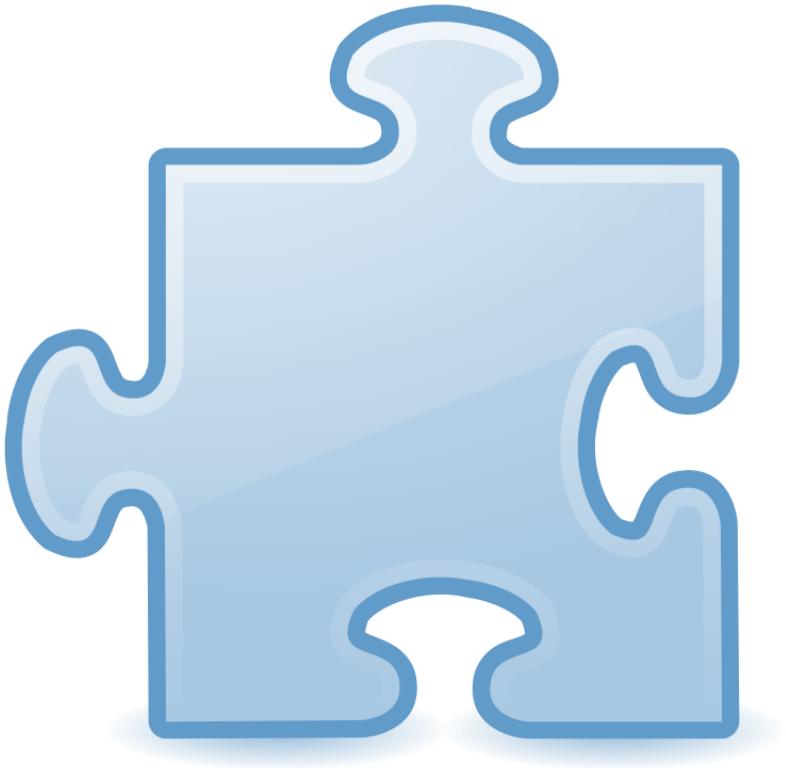

Title
700
600
500
400
300
200
100
0
Sample
49
50
51
52
53
54
55
56
57
58
59
60
Legend &
Colors
Monthly Flight Passangers
PAS_LFI
PAS_UFI
PAS_HAT

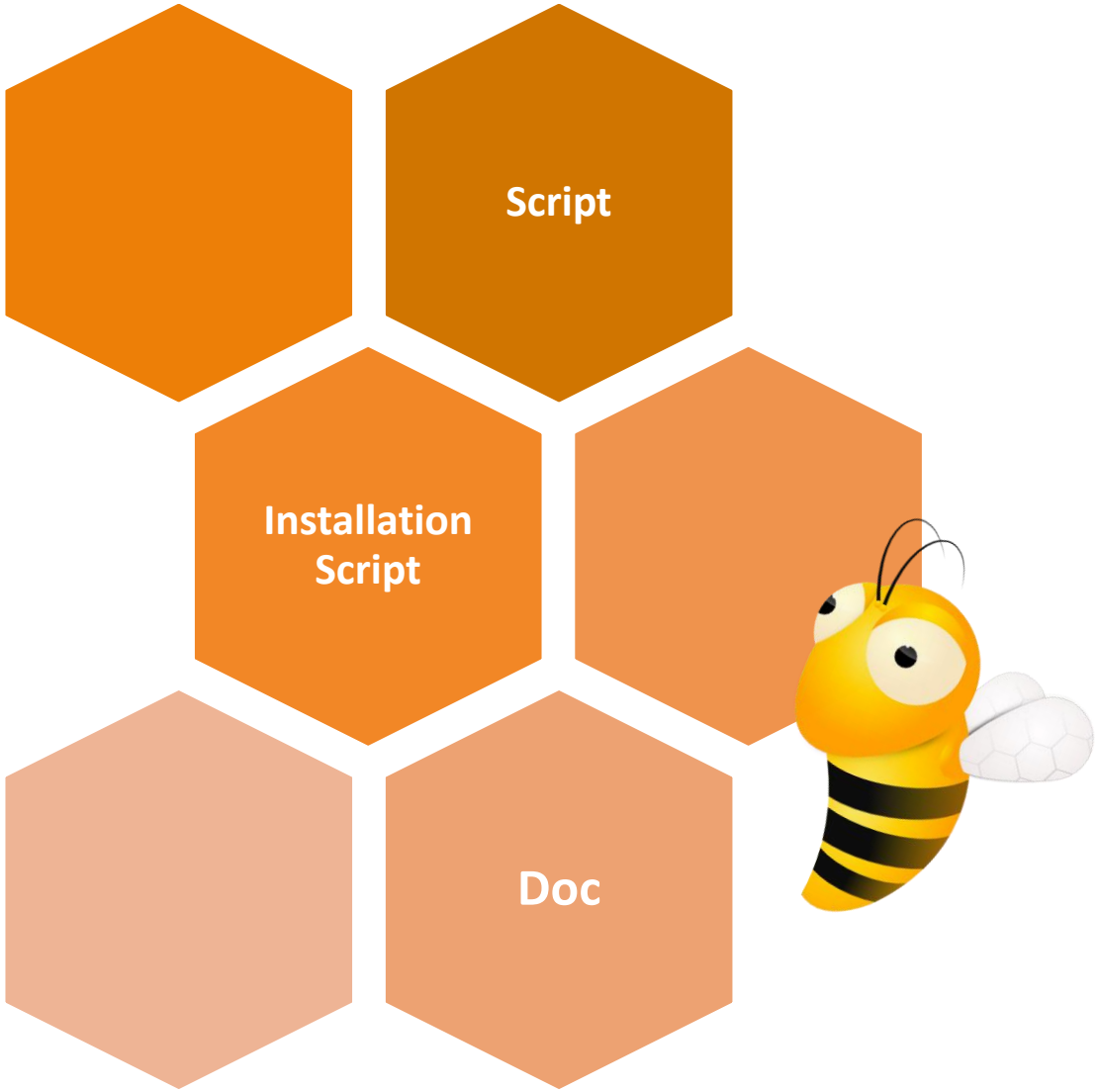
Customizing Graphs

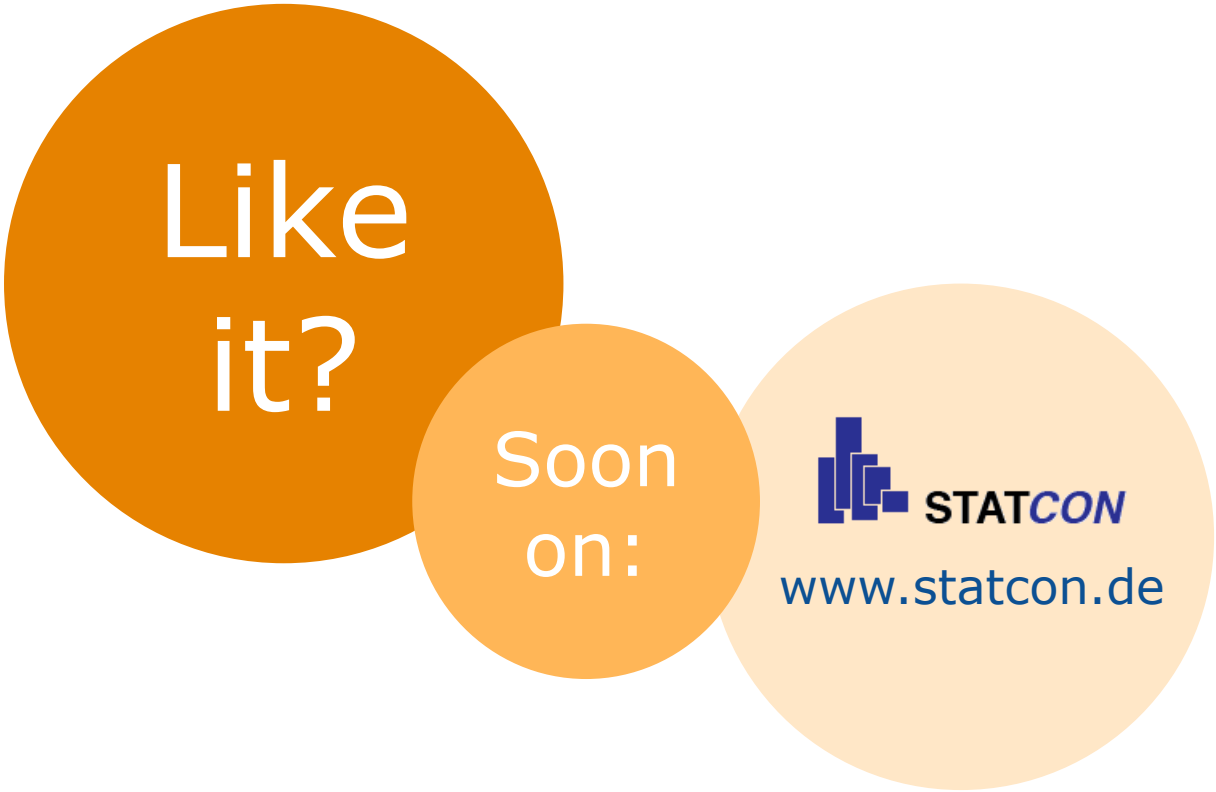
```
Graph01.setelem(2) lcolor(blue)
    lwidth(2) lpat(dash6)
```


Forecast Graph: PAS (alpha = 0.05)
700
600
500
400
300
200
100
0
1950
1952
1954
1956
1958
1960
1962
Monthly Flight Passangers
Predicted PAS

One more thing …




Script
Installation Script
Doc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References

1. **Open Clipart Library**
   https://openclipart.org
2. **EViews Forums**
   http://forums.eviews.com
3. **Statcon Blog**
   http://statistiksoftware.blogspot.de