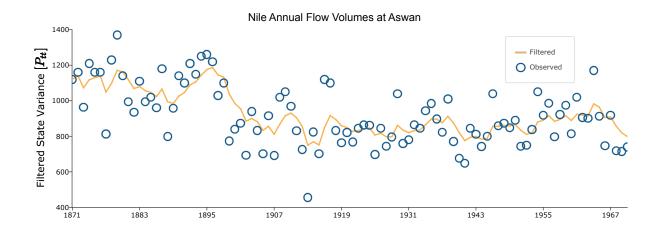
# > Time Series MT 3.0

Comprehensive treatment of time series models, including model diagnostics, MLE estimation, and forecasts.



#### New features include:

- > Improved tools for panel data analysis
- > State space estimation for ARIMA family models
- > More user-friendly syntax including optional arguments and string formulas.

### Efficient and robust estimation of cutting edge time series models:

- > ARIMA family models (ARIMAX, SARIMA, VARMAX, SVARIMA)
- > Error correction models
- > GARCH family models (GARCH, IGARCH, GJRGARCH, GARCHM)
- > Least squares dummy variables (LSDV)
- > Non-linear time series models: Switching regression, structural break models and threshold autoregressive models (TAR)
- > Kalman filter function

#### Powerful model selection and assessment tools:

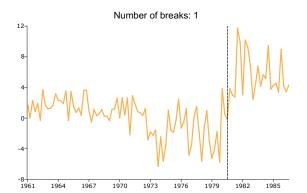
- > Parameter instability tests: Chow forecast, CUSUM test of coefficient equality, Hansen-Nyblom test, and rolling regressions
- > ACF and PACF reports and plots
- > AIC, BIC, and Adjusted-R2 for goodness-of-fit analysis
- > Pesaran, Frees and Friedman tests for crossdependence
- > Cluster and robust standard error functions

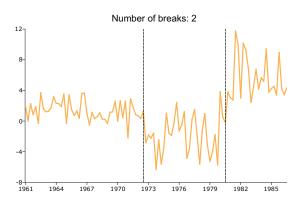
# Extensive unit root and cointegration tests:

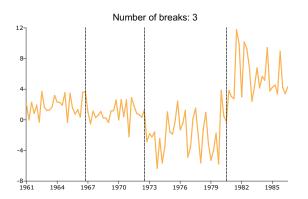
- > Augmented Dickey-Fuller (ADF), GLS-ADF, Phillips-Perron and KPSS tests
- > Zivot-Andrews
- > Johansen's trace and eigenvalues statistics and ADF cointegration test

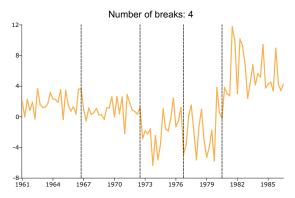












# Panel series estimation and diagnostics tools:

- > Dynamic panel data models
- > One-way fixed and random effects
- > F-tests, Lagrange multiplier tests and Hausman specification test
- > IPS, LLC and Breitung and Das unit root tests
- > Panel series data management tools including format conversion, gap elimination, sorting functions, and much more

## Resources to get you started:

- > Full suite of example programs provide templates for model implementation.
- > Completely revised manual with more function examples and clear function explanations.



#### Requires:

GAUSS 17

#### Platforms:

Windows, Mac and Linux