

SSA-package: tutorials on novel Simple Sign Accuracy forecast approach proposed in JBCY-paper entitled “Business Cycle Analysis and Zero-Crossings of Time Series: a Generalized Forecast Approach”

Description: There are four folders and a R-project file called SSA_package

- Folder “Data”: macro data used in JBCA paper. This is not relevant for the SSA-tutorial because new/fresh data will be imported by the latter, using R-packages.
- Folder “R”: collection of R-functions used in tutorials
- Folder “SSA Tutorials”: all tutorials. Proceed in ascending order (of numbering).
- Folder “Technical proofs”: technical paper with full proofs for SSA predictors proposed in JBCY paper.

Working through the tutorials:

- Load the R-project file “SSA_package” in R studio.
- In R-studio: select a tutorial from the “SSA Tutorial” folder.
- Go through the numbered tutorials starting with lowest numbers first.
 - Number 0: introduction to topic: trilemma, optimization criterion, classic mean-square error (MSE) approach
 - Number 1: application of SSA to forecasting
 - Number 2: application to real-time signal extraction and Hodrick-Prescott filter
 - Number 3: application to Hamilton regression filter
 - Number 4: application to Baxter and King filter
 - Number 5: replication of examples in JBCY paper
 - Number 6-7: robustness and smoothness
- In preparation: new tutorials on multivariate SSA and ‘look ahead’ criteria which emphasize a prospective (lead/left shift/advancement) perspective.