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How to	URBS - Modify URBS model parameters	
Description	Modify URBS parameters to match model outcome with observed data	
Comments	italic phrases taken from the book "Flood Forecasting: a Global Perspective".	
	Please be aware that the screenshots may deviate slightly from the application	
version	2016-01	

When a change is made to a parameter the value will turn blue. Changes can be made to each tab before a Modifier is applied. Once you hit the Apply button, the Modifier is listed in the top panel of the Modelling display. You can remove the Modifier by clicking on the Delete button in the second last column. You can re-access any Modifier at a later stage by clicking on it in the list and the Modifier panel will open. Modifiers that have been used in a server run, and have therefore been saved, will have a green background, while unsaved modifiers will have a red background.

Overview of steps:

While on the node "Run URBS Forecast" open the Modifiers display and here:

- 1. Select the URBS parameters modifier
- 2. Modify the URBS parameters
- 3. Apply
- 4. Re-run
- 5. Review the results in the Plots display or via Plot Overview



Ad 2. For an explanation of the specific URBS model parameters, the user is referred to the training material provided by Don Caroll, which is available in ROWS-Flood as HowTo_URBS_course_2016-02-1X.

Uniform Initial Loss / Continuous Ioss Estimate the initial Ioss and continuous Ioss (ILCL) No runoff is produced until the initial Ioss is satisfied, otherwise a continuing Iosses further removed and the remainder is effective (net) rainfall.

URBS Catchment and Channel Routing The effective rainfall becomes runoff and can then be conveyed across the landscape using 1. Parameter nonlinear reservoir catchment routing, and/or 2. Parameter Muskingum channel routing. URBS also has the ability to model reservoirs (the volume before spill or by an equation relating storage to discharge), baseflow, losses, and variable infiltration/recovering loss.

URBS Matching Stations At the hydrologist's discretion (depending mostly on quality of data), URBS' simulated streamflow can be replaced with observed streamflow and routed down the river network in a process called "matching", aka "flow insertion". This is particularly useful when rainfall has ceased and an observed floodwave is traveling downstream. Use option with care. URBS Initial Reservoir Volume Before Full Overwrite the observed water level in a reservoir by replacing -99 with a value.