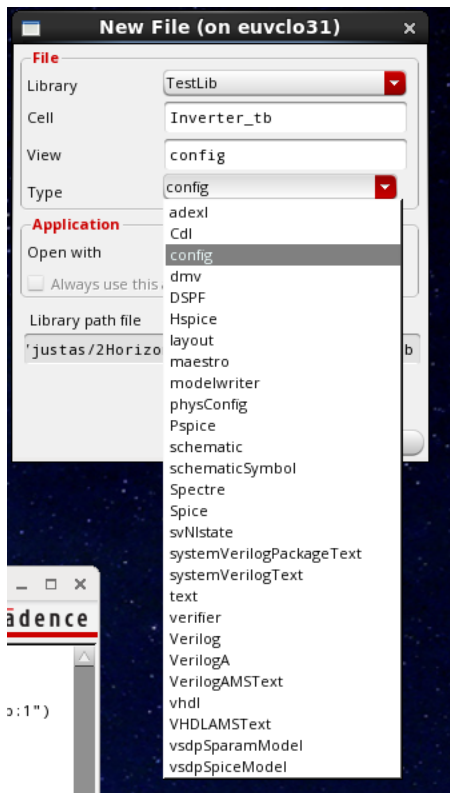


## How to create a config view and use it for config sweep within ADE Assembler

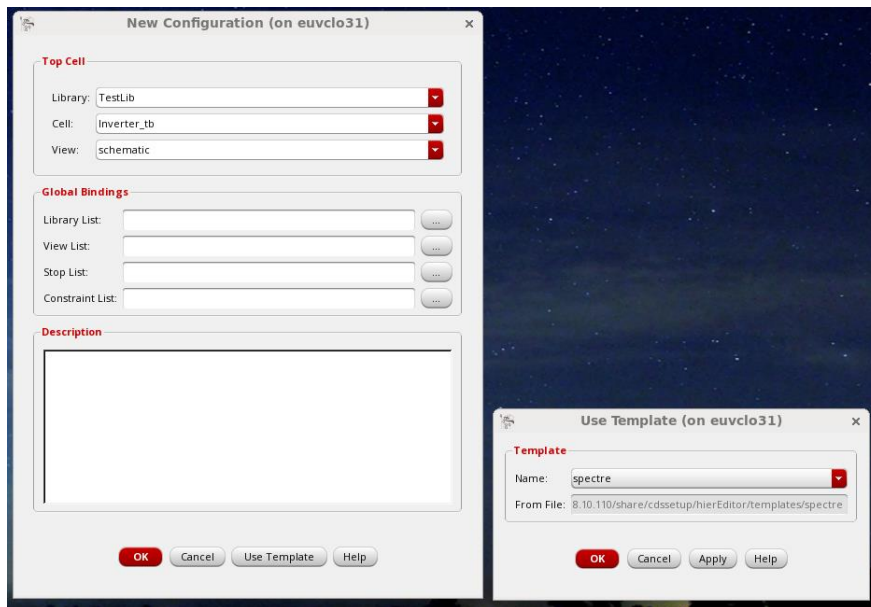
In order to run post-layout simulations on extracted view alongside the pre-layout simulations for quick comparison, it is convenient to set up a “config sweep” within the ADE Assembler environment.

To set this up, please follow the steps outlined below.

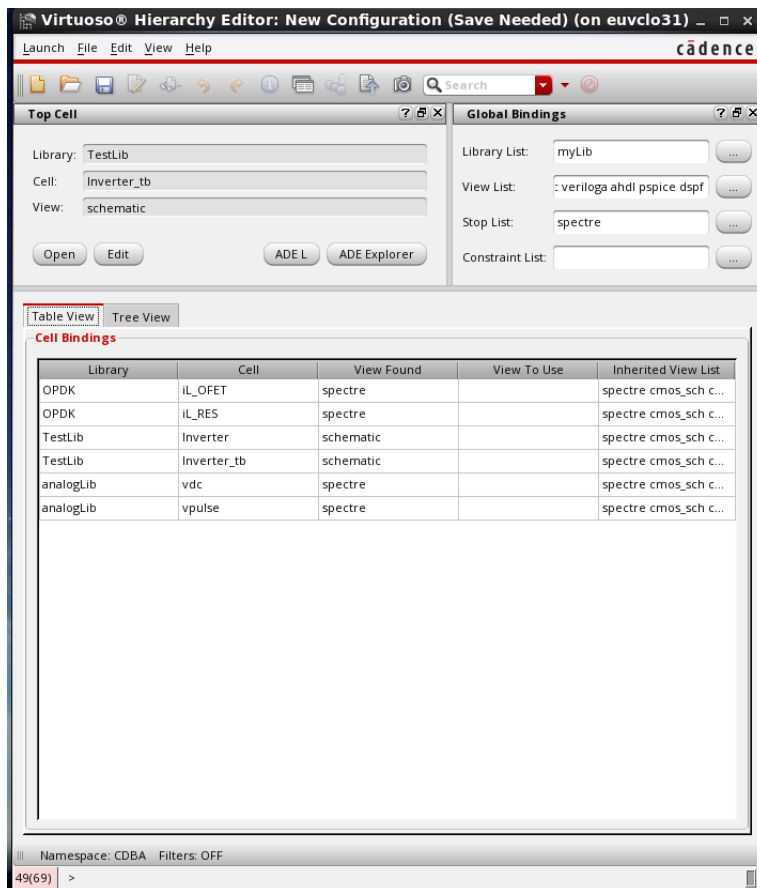
**Step 1.** Create a config view for your test bench cell – the schematic of this cell should already contain your design under test and appropriate supplementary components (e.g. voltage sources) needed for your test. In the Library Manager, go to File -> New -> Cell View. Select the View type as config and leave default view name as “config”.



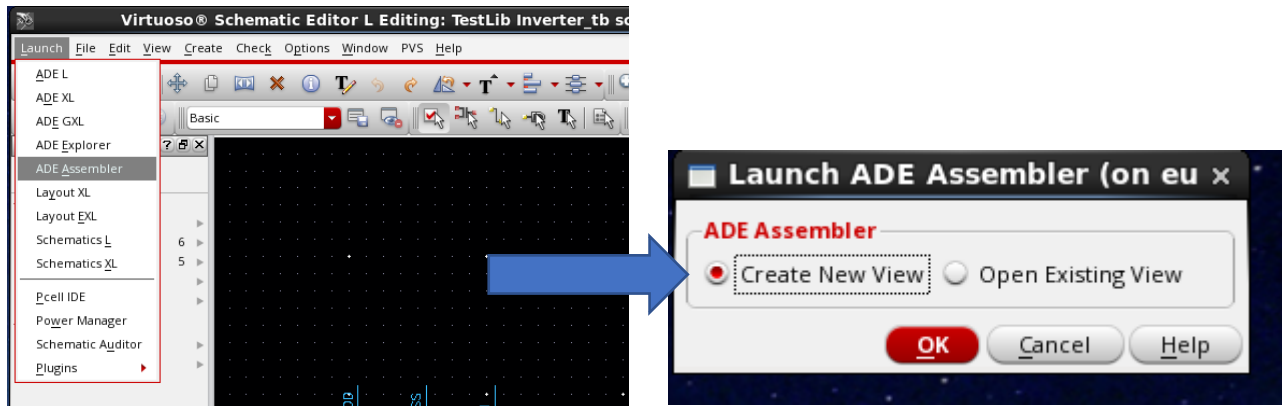
**Step 2.** In the “New Configuration” form that appears, ensure that the Top Cell is pointing to the schematic view of your testbench cell. To populate the rest of this form quickly, click on Use Template on the bottom button bar and select “spectre” from the Name options. Click OK in the Use Template form as well as on the New Configuration form.



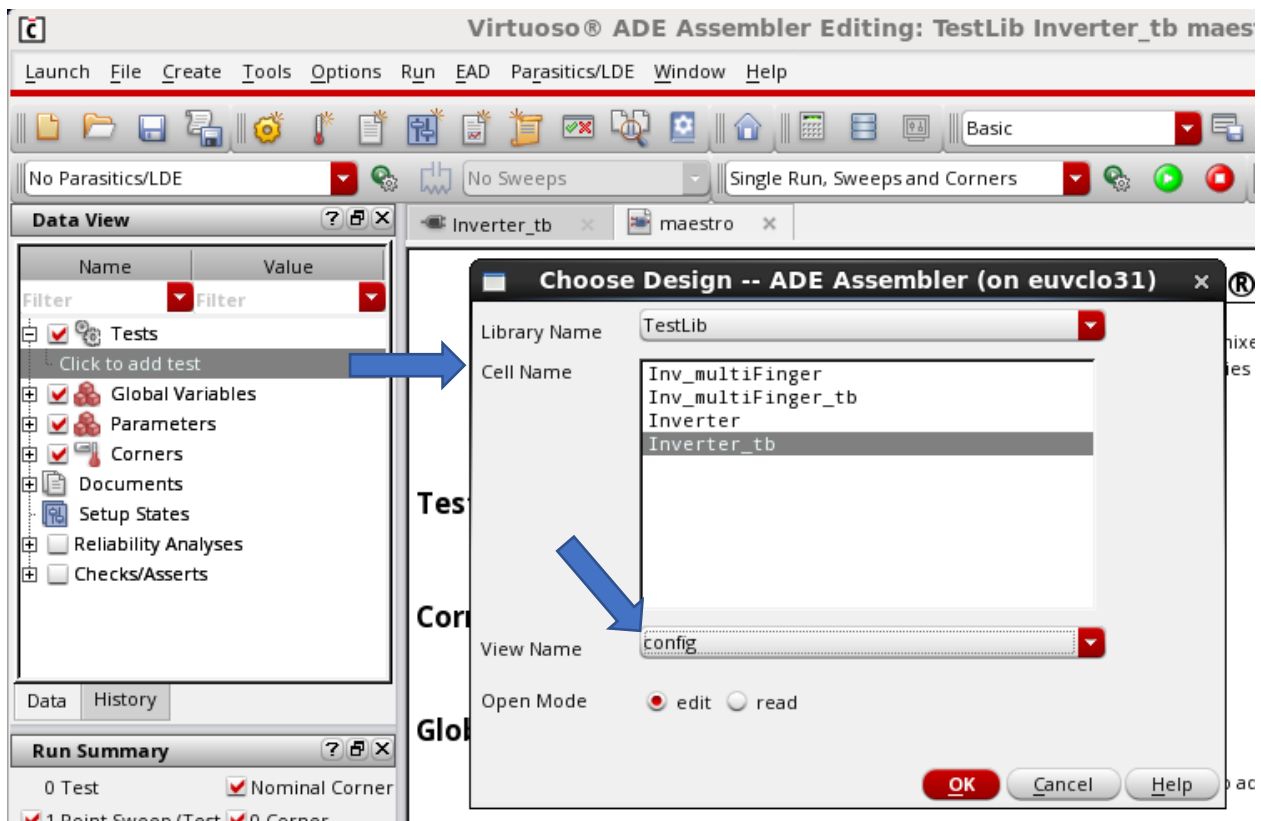
**Step 3.** This then populates the Virtuoso Hierarchy Editor (HE) window. The HE can be used to point to different views (schematic/av\_extracted/..) of the cells found within the testbench cell.



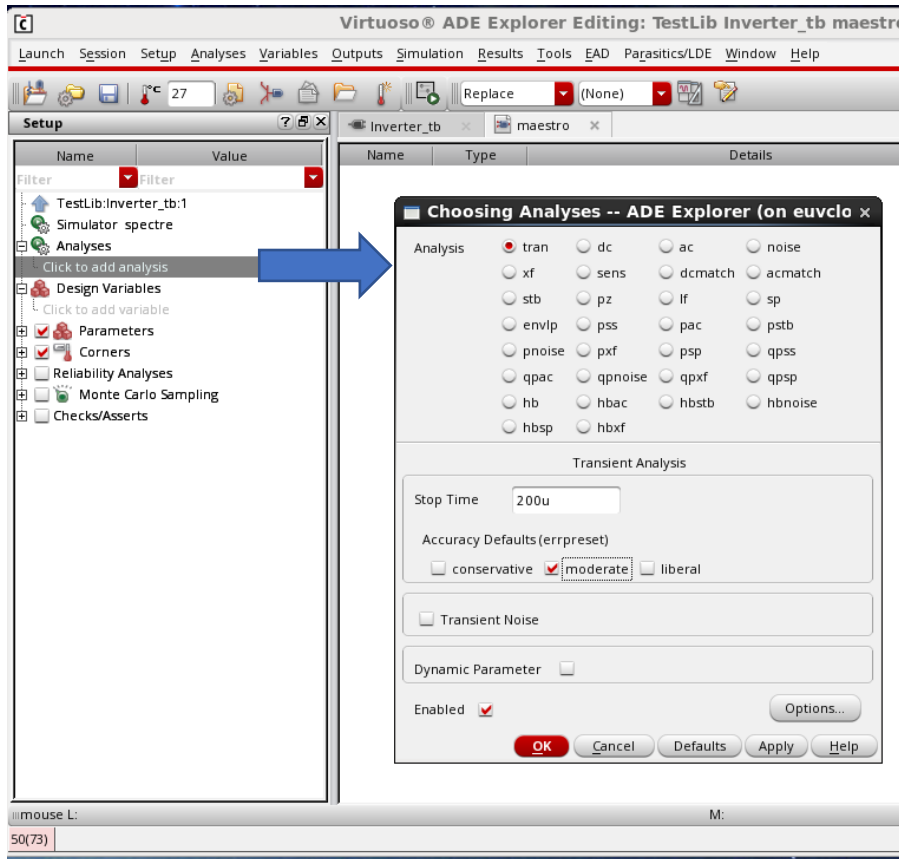
**Step 4.** With the config view present, one can then create a maestro view to be opened with ADE Assembler. From your testbench schematic, go to Launch -> ADE Assembler. Select 'Create New View' option in the pop up and click OK. You can select a name for your maestro view in the next window, if you wish.



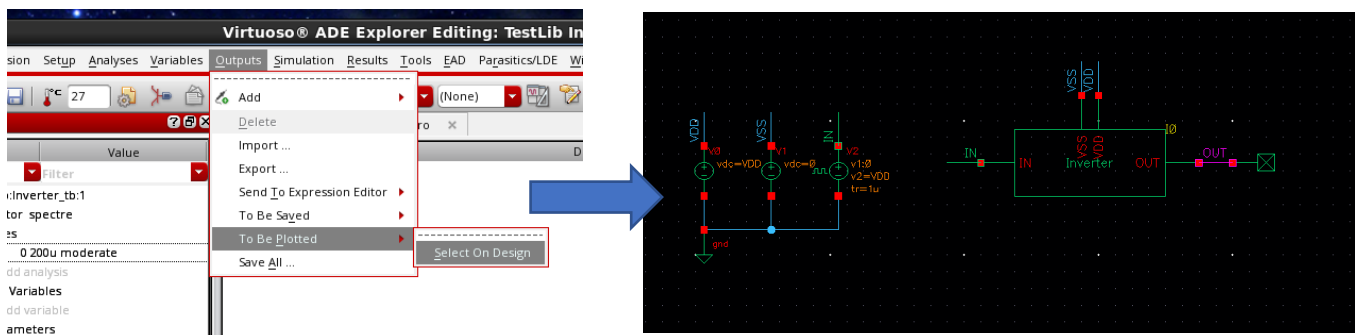
**Step 5.** The ADE Assembler window opens. Now, create a new test by clicking on 'Click to add test' in the Data View panel. This opens a pop-up form 'Choose design'. Here it is important to point to the config view that was created in the earlier steps.



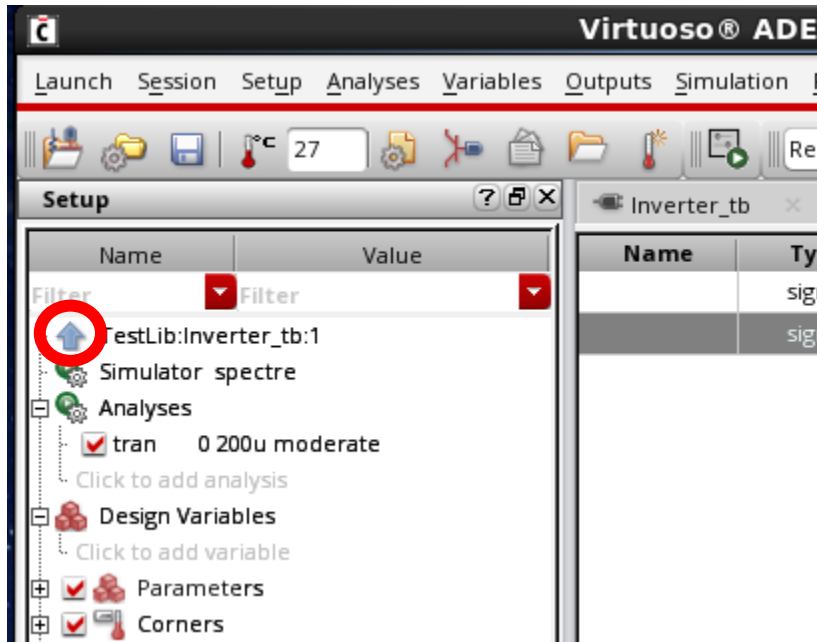
**Step 6.** A single test environment called ADE Explorer is then opened. Here, you can enable various analyses within this test. Hit 'Click to add analysis' In the example case, we will setup a transient analysis, with moderate accuracy and 200u Stop Time.



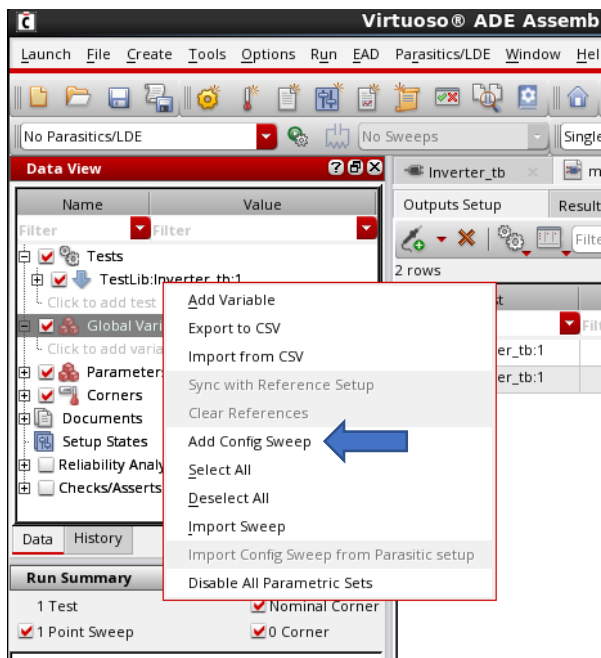
**Step 7.** Set up outputs to be observed. Select Outputs -> To Be Plotted -> Select on Design. This will open your testbench schematic. Click on nets you wish to observe during simulation. Once clicked, the net changes colour to indicate that it has been selected (IN and OUT in the below example)



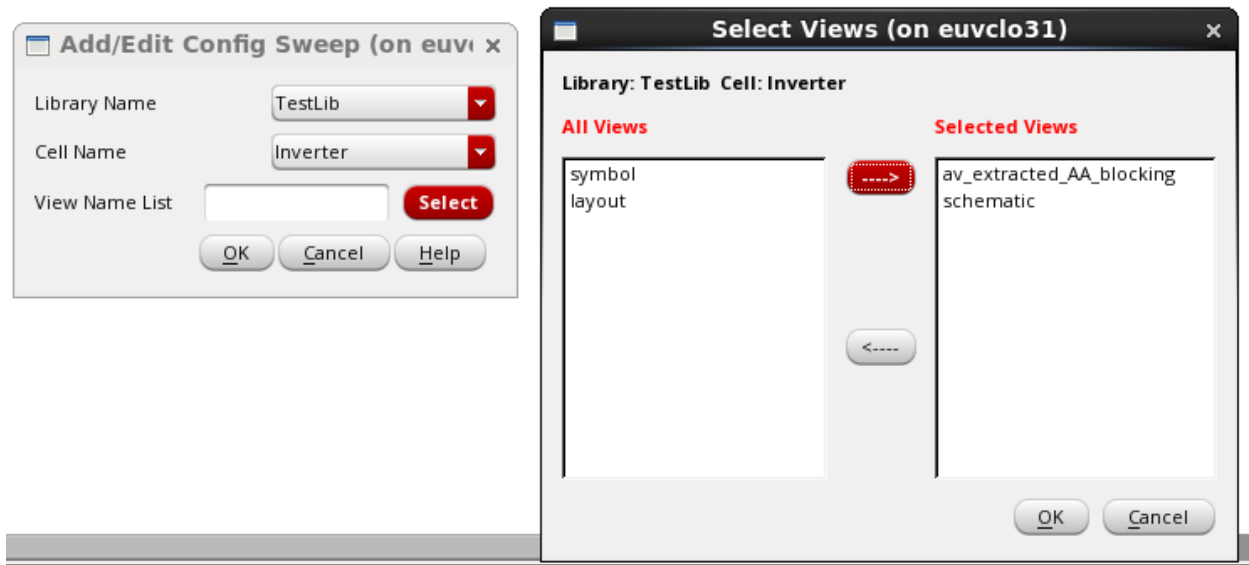
**Step 8.** This completes the basic test setup. To get back to ADE Assembler (multi-test environment), hit the blue arrow pointing up. From ADE Assembler to get back to Explorer, the same arrow will point down and can also be clicked to make the transition.



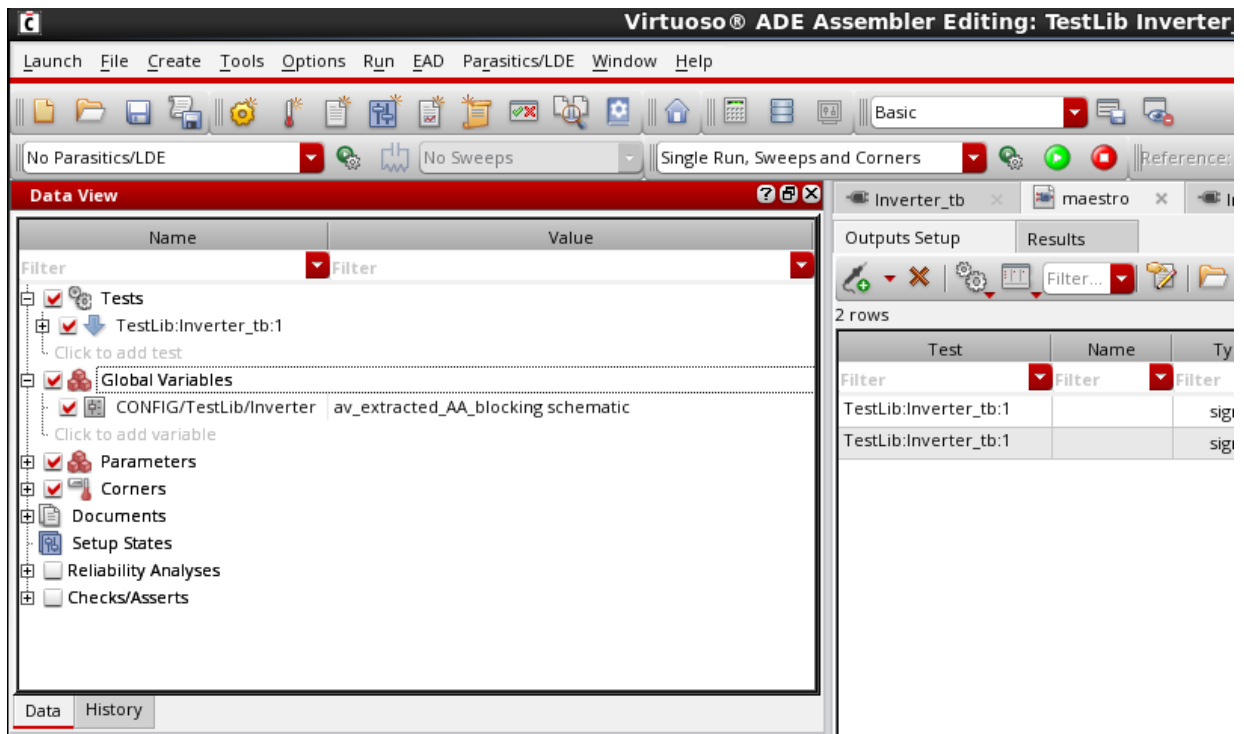
**Step 9.** In ADE Assembler, right click on Global Variables section and select Add Config Sweep



**Step 10.** In the Add/Edit Config Sweep form, make sure to select the Cell Name for the design for which you have multiple views, you'd like to run your simulations across. In this example case, we select Inverter as the Cell Name, since it's the Inverter cell within our Inverter\_tb testbench for which we have schematic and extracted views. Then click red Select button and populate the Selected Views pane with the views you want to run your test across. Click OK on both forms.



**Step 11.** The Global Variables pane, will now appear as follows. You are now ready to run your simulations.



**Step 12.** Click the 'Netlist and Run' icon (green circle with white triangle inside). Once the simulation finishes, you can observe in the Results tab, that there will two sets of results – one where the Inverter cell was simulated with a schematic view and the other, where it was set as av\_extracted\_AA\_blocking. Click on 'Plot All' icon to observe all waveforms in a single window:

