

# 1 Taurus

You will need a valid Medici file that outputs simulation or device data to TIF files. If the TIF file is generated as a LOG, it will contain terminal characteristics for the subsequent simulations. If the TIF file is generated using the SAVE command, it will contain the device structure, including doping, and two-dimensional data from the most recent simulation.

It is useful to use Taurus to visualize the results. A PDF version of the Taurus manual is in the folder:

`/CMC/tools/tcad/manuals_pdf/taurusvisual_2002.2.0/`

In order to perform the simulation, visualize the device, and plot the turn-on characteristic, perform the following steps:

1. Run the Medici simulation. When the simulation is complete, you will have additional files in your directory.
2. Execute the command:  
`tv2d filename.tif &`  
to open the **Taurus-Visual** tool where *filename* is the name of the file specified when the SAVE command was invoked. A 2D plot of the device will be visible.
3. Choose **Load Table...** from the **File** menu.
4. Choose the file specified when the LOG command was invoked from the **Load TIF/TDF/1D File** window, and then click **OK**.
5. Choose **New 1D Plot** from the **File** menu. An empty plot window will appear next to the existing plot.
6. Ensure that the new plot is active by clicking on it. A red box should be around the active plot.
7. Click on the **edit** button along the bottom of the screen. This will open the **Plot Properties** window.
8. In this new window, click on the **Curve Plot** tab.
9. Click on **Create...** to open the **Curve Plot Chooser** window.
10. Ensure that the log file is specified under the **Data Table** heading, and choose an appropriate **X Variable** heading. Click **OK**.
11. In the **Y Variable** section of the **Plot Properties** window, click in the cell that is in the same row as the data you wish to view, and the **Show** column. A new plot will appear. Note that the axes of this plot may be modified by changing the parameters accessible via the **Axis** tab of the **Plot Properties** window.

This should give enough information to get started using Taurus to visualize a Medici simulation. For more details regarding Taurus, attempt the tutorial in Chapter 6 of the manual, but note that the 3D tool is not configured. If you require further explanations, please consult the manuals or e-mail the TA,