SVISUAL COMMANDS

#setdep @node|sdevice@

set n @node|sdevice@

# determine sdevice node status

set status @[gproject::GetNodeStatus @node|sdevice@]@

# Create plot if it does not exist and set properties

if {[llength [list\_plots Plot\_1D]]==0} {

create\_plot -1d -name Plot\_1D

select\_plots Plot\_1D

set\_plot\_prop -hide\_title -show\_legend

set\_axis\_prop -title\_font\_size 16 -label\_font\_size 14

set\_axis\_prop -axis x -title "Gate Voltage (V)" -type linear

set\_axis\_prop -axis y -title "Drain Current (A/<greek>m</greek>m)" -type log

set\_legend\_prop -label\_font\_size 14 -location bottom\_right

}

# Load and create IV curve

load\_file @[relpath IdVg\_n@node|sdevice@\_des.plt]@ -name PLT($n)

create\_curve -name IdVg($n) -dataset PLT($n) -axisX "gate InnerVoltage" -axisY "drain TotalCurrent"

# Extract curve parameters only when sdevice node has status done

if { $status == "done" } {

 load\_library extract

 set Vgs [get\_variable\_data "gate OuterVoltage" -dataset PLT($n)]

 set Ids [get\_variable\_data "drain TotalCurrent" -dataset PLT($n)]

 ext::ExtractVtgm out=Vtgm name=Vtgm v= $Vgs i= $Ids

 ext::ExtractExtremum out=Id name=Id x= $Vgs y= $Ids type=max

 ext::ExtractSS out=SS name=SS v= $Vgs i= $Ids vo= [expr $Vtgm/3.0]

 ext::ExtractGm out=gm name=gm v= $Vgs i= $Ids

}

# set curve properties only if script is called through run visualizer button

       if {[info exists runVisualizerNodesTogether]} {

       # the variables color and legend are provided by swb,

       # and are individual for each curve

       set\_curve\_prop IdVg\_($n) -label "IdVg $legend" \

        -color $color -line\_style $line -line\_width 3

} else {

puts "To see the curves, select both Sentaurus Visual nodes and at the toolbar"

puts "press the \"Run selected Visualizer Nodes Together\" button."

}