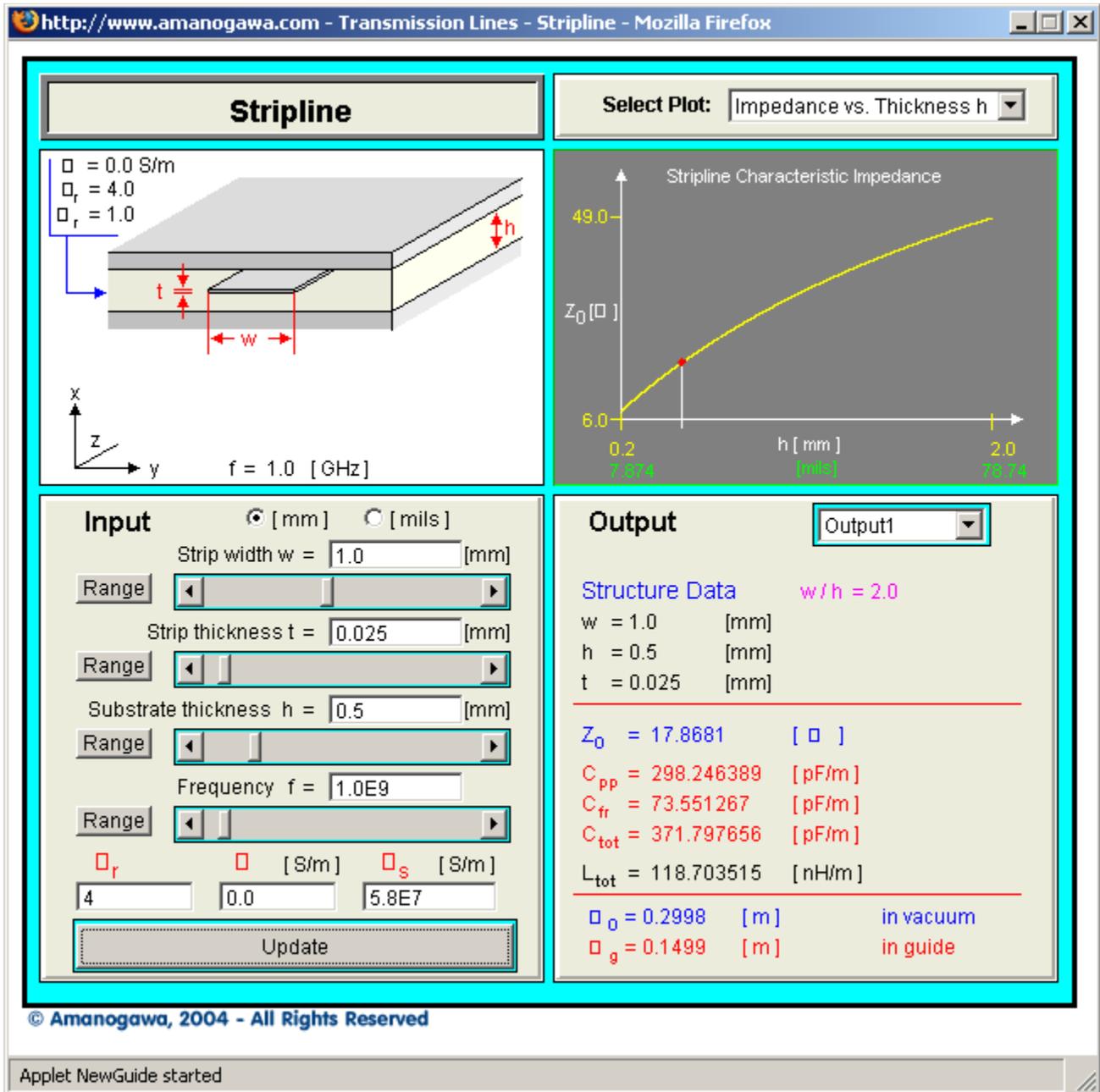


Stripline

Calculation using Java applet at
<http://www.amanogawa.com/archive/transmissionA.html>



For the line going from summation point to preamp we would like to have the impedance = 8 ohm, or as near as possible to that. The 8 ohm is impedance of six 50ohm line ganged together. In the example above, which I think is realistic, the relative permeability = 4, the strip width = 1mm, substrate thickness = 0.5mm and 0.025 mm copper the $Z_0 = 17.8$ ohm. The resistance of the 30 cm line (2ns delay) will be 0.2 ohm.