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Nonlocal electron transport: comparison with the SNB model and results for implosion runs[1] DENIS COLOMBANT, Berkeley Research Associates, Beltsville, MD, WALLACE MANHEIMER, RSI, Lanham MD, ANDREW J. SCHMITT, Plasma Physics Division, Naval Research Laboratory — Two main models have been proposed for nonlocal transport: the SNB model[2] and ours, the velocity dependent Krook (VDK) model.[3] Although these models are based on similar basic equations, they differ in some aspects. A comparison between the two models was published last year,[4] followed this year by implosion calculations using the SNB model only.[5] Our model has since then been updated numerically and runs much faster than our previous one and is now comparable to SNB in running time. We have run some of the same test problems as Marocchino et al. and we have also made some implosion runs for shock ignition targets. We have also updated our code to make it easier to change the electron collision frequencies when needed. Most of the results we have obtained are quite different from Marocchino's, in particular from his version of our model. We present these results and discuss them in some detail.

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[2]Schurz *et al.*, Phys. Plasmas **7**, 4238 (2000)
[3]Manheimer *et al.*, Phys. Plasmas **19**, 056317 (2012)
[4]Marocchino *et al*, Phys. Plasmas **20**, 022702 (2013)
[5]Marocchino *et al.*, Phys. Plasmas **21**, 012701 (2014)

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