Simple Constants for LST Retrieval from LS5 and LS7 work for clear air of Idaho

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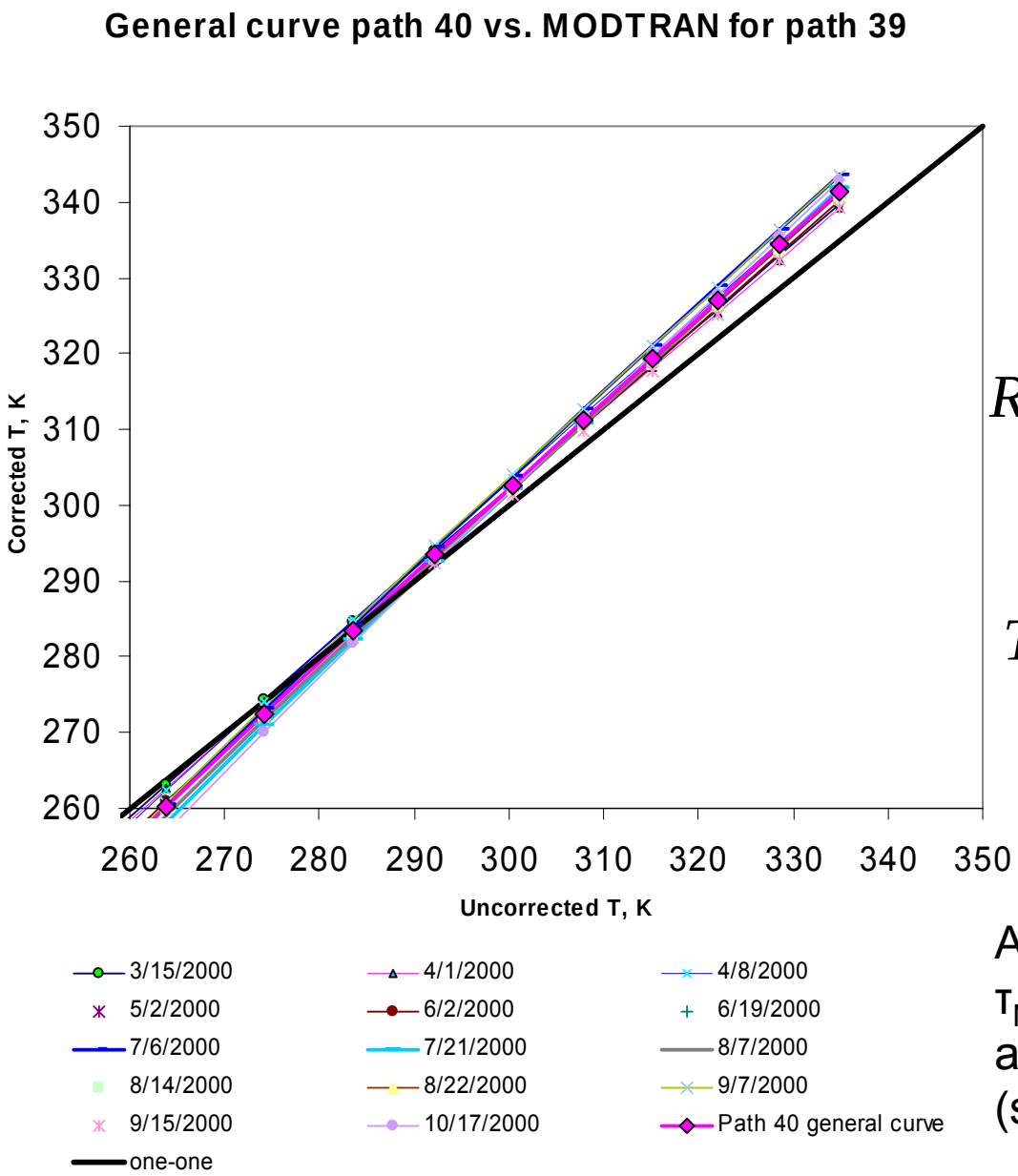
Conversion of band6 (L_6) to Radiance and to LST



Wukelic et al. (1989):

$$R_c = \frac{L_6 - R_p}{\tau_{NB}} - \left(1 - \varepsilon_{NB}\right) R_{sky}$$

Planck (~1900):

$$T_s = \frac{K_2}{\ln\left(\frac{\varepsilon_{NB} \; K_1}{R_c} + 1\right)}$$

Allen et al. (2007a): R_p = 0.91, τ_{NB} = 0.866, R_{sky} = 1.32 ---low aerosol, relatively dry conditions (southern Idaho).

Corrected LST compared well against MODTRAN spanning many months