1014-Z1-675          **Richard N Barshinger\*** (`rxb10@psu.edu`), Penn State Scranton, 120 Ridge View Drive, dunmore, PA 18512. *The weather report: daily and seasonal termperature extremes.* Preliminary report.

"The Peak Approaches" read a recent late July weather column in a local newspaper. Observing similar time delays in daily and seasonal temperature extremes, a local high schooler sought collegiate help (the author) for a senior science/mathematics project. Using a simplistic "Newton's Law of Cooling" differential equation with non-homogeneous sinusoidal input term, the author and student showed that, indeed, there is a one-eighth cycle delay in the maximum response relative to the inpiut. Thus, on average, the hottest time of day is 3 p.m., and the hottest time of year is at the beginning of August (1-1/2 months after the summer solstice). Details of the analysis are presented in this talk. (Received September 22, 2005)