FORM TO SPECIFY INPUT DATA FOR
ATMOSPHERIC TEMPERATURE MODEL TTABLE

This model represents the temperature profile by a sequence of cubic segments such that the temperature gradient is continuous through each profile point. This is not a cubic spline; the coefficients of the cubic fit in each segment depend on only the four nearest profile points.

The coefficients of the cubic are calculated as follows: each set of three successive points in the profile is first fit with a quadratic. The slope of that quadratic at the middle profile point is then assigned to that profile point. This procedure assigns a slope to every profile point except the first and last. A slope of zero is assigned to the first and last point. Between each pair of profile points the coefficients of the cubic are chosen so that the curve goes through the two points and matches the assigned slope at the two points. Those four conditions determine the four coefficients. Both the temperature and its gradient are continuous throughout the profile, even at the profile points.

Specify--

the model check number for TTABLE = 6.0 (W200)

the input data-format code = 2.0 (W201)

an input data-set identification number = _____ (W202)

an 80-character description of the profile:

_____

and the profile values:

the number of points in the profile, n = _____

the profile:	height (km)	Temperature (K)

OTHER MODELS REQUIRED: Subroutine GAUSEL and any temperature-perturbation model. Use NPTEMP if no perturbations are desired.