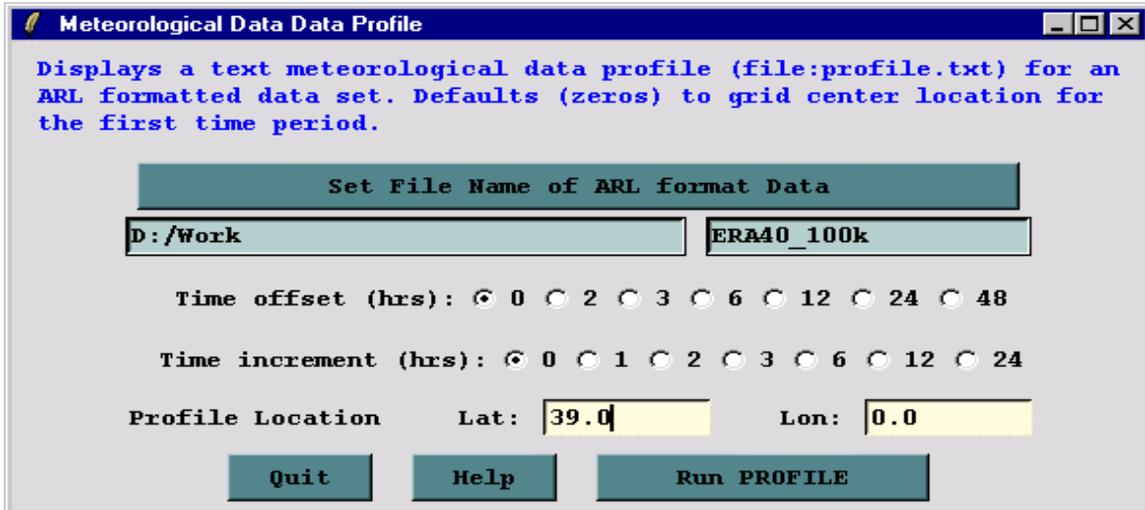


Vertical Meteorological Profile

The profile utility program creates a simple text based listing of the meteorological data profile at a selected latitude-longitude point. In the example below, the ECMWF ERA-40 data set was selected with default values for offset and increment. Zeros indicated that only the first time period is displayed. The profile location was chosen at 39N on the Greenwich meridian.



The data are shown for the nearest grid location, with no temporal or spatial interpolation. The location grid index is indicated in parenthesis next to the position. The first row shows the surface variables. Subsequent rows show the upper-level data, in this case by pressure level. The leftmost columns show the data directly from the file, while on the right side ambient temperatures has been converted to potential temperature and wind components have been rotated from the native grid to true compass direction. In this case they are almost identical because the location chosen was near the center of the grid. The leftmost coordinate is pressure as taken from the

index record. In other coordinate systems the program computes a height.

