

DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

Catalog of heat-flow values and other pertinent data from the eastern United States and selected adjacent areas, in ASCII on IBM-compatible 5 1/4-inch diskette; supplement to U.S. Geological Survey map MF-2057

by

Lucy McCartan and Rebecca J. Architzel

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The data on this diskette are printed on sheet two of the "Heat-flow map of the eastern United States" (McCartan and Architzel, 1988)¹. The format is as follows: STATE (columns 1-7); COUNTY (8-25); QUADRANGLE (26-46); E (47-49); LAT (50-58); LONG (59-68); HF (60-72); RF (73-75); DEPTH (76-80).

Of the 483 values given here, 468 values are published elsewhere, and were calculated from various measurements or estimates of geothermal gradients and conductivity of rock or sediment samples from bore holes; the 15 new values from the Charleston, S.C., area (shown by an asterisk in column E) were calculated from estimated conductivities and measured gradients at each of the 15 localities and a single conductivity measurement from one nearby borehole (Sass and Ziagos, 1977; M.E. Gettings, U.S. Geological Survey, written commun., 1986).

The state column includes Gulf of Mexico (GM) and Lake Superior (LS). The county column includes counties and parishes. All named quadrangles are 7.5-minute (may be published in topographic, orthophotoquad, or orthophotomap format) unless otherwise noted. Lake Superior quadrangle numbers represent squares defined by whole degrees. Latitude and longitude are best available estimates. The heat-flow values for Troup County, Ga., and Frederick County, Md., cannot be accurately located. The position of the Troup County value was estimated from the approximate latitude and longitude and its location on the small-scale map in Sass and others (1976). Heat-flow values are given in column HF. Numbered references in the RF column appear after the table. Depth of temperature measurement (in meters) is best available estimate. Depth datum for the 159 heat flow values in Lake Superior (Steinhart and others, 1969) and the 3 values from Minnesota lakes (Roy and others, 1972; R.F. Roy, 1987, oral communication) is the water-sediment interface.

¹McCartan, Lucy, and Architzel, R.J., 1988, Heat-Flow map of the eastern United States: U.S. Geological Survey map MF-2057, 1:2,500,000 scale.

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