The Geology of North America
Decade Map Volume 1
1991

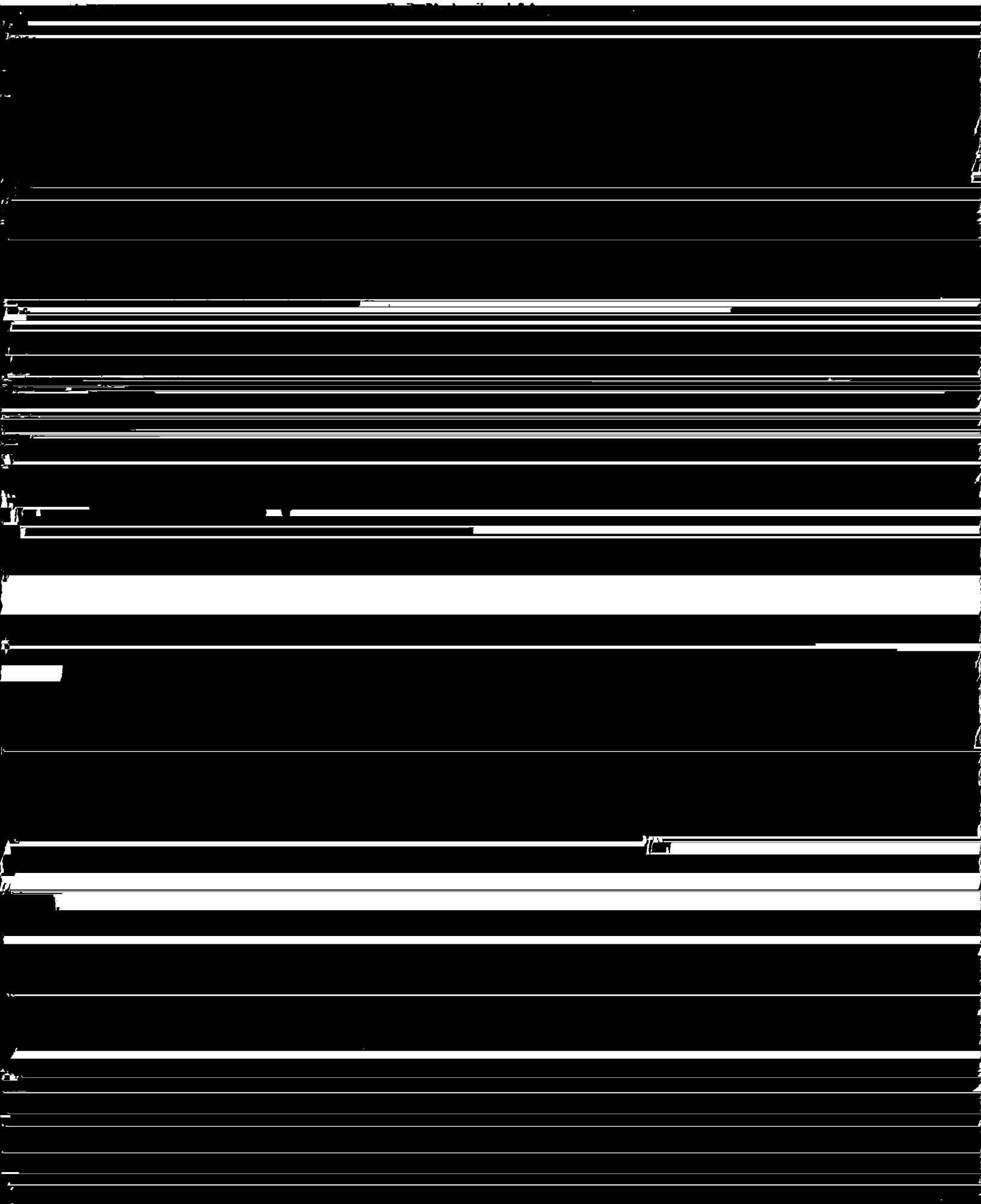
Chapter 23

Heat-flow patterns of the North American continent; A discussion of the Geothermal Map of North America

[redacted]

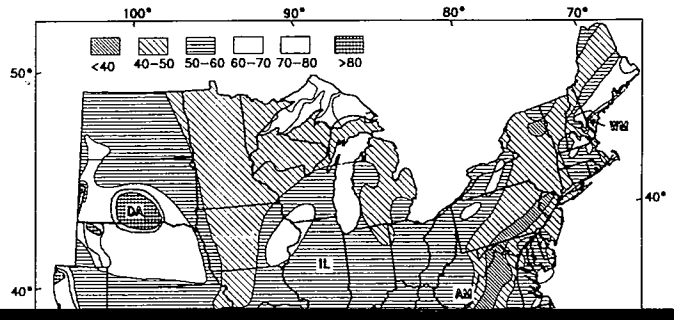
[redacted]

[redacted]



flow distribution in the Barbados accretionary sediment prism in activity. The heat flow is generally high. The heat-flow values for

affect the heat flow from the crust and mantle. The most common effect is rapid ground-water flow.



Fluid Flow

In an attempt to delineate areas where large-scale hydrologic disturbances of, or influences on, heat-flow data are common, some areas of the map have an overprint. Where there is docu-

nary volcanoes were also taken from the same publication (Smith and Shaw, 1979). The major hot springs and their reservoir temperatures in Canada were taken from data supplied by Jessop

HEAT-FLOW DISCUSSION: UNITED STATES

Introduction


120°
110°
50°

triple-point migration along the coast (see Atwater, 1970). The heat flow in the Sierra Nevada and Peninsular Ranges (PB) in southern California and in northern Baja California is consistent with heating from the bottom and sides of the cold block after the

province (RG) of the Basin and Range Province and in the Southern Rocky Mountains (SR). This north-south–trending zone is bounded on the east by the Great Plains (GP) Province with generally normal continental heat flow except in areas disturbed

Figures 2 and 3, and equivalent areas in Canada, Alaska, and [redacted] process that has dominated the tectonics of the region for the last 100 m.y. or more. Much of the interior region of the Cordillera [redacted]

thermal Resources Council, v. 5, p. 693–696.

Smith, D. L., Gregory, R. G., and Embof, J. W., 1981, Geothermal measurements