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**COVER** Basalt lava erupted from Kilauea Volcano, Hawaii, pours 3 meters from a shallow tube into the Pacific Ocean. The current eruption began in January 1983; the lava produced now covers 70 square kilometers, including 150 acres of new land formed along the seacoast. Analysis of more than 20 years of ground deformation data suggests that Kilauea's magma system is deeper and more extensive than previously thought. See page 1311. [Photographed on 27 November 1989 by J. D. Griggs, U.S. Geological Survey]

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