20–23 June

Geodynamics

Mexico City, with its 9 million inhabitants and its burgeoning scientific facilities, will be host to the first symposium on geodynamics to be held in this continent, 20–23 June. The 3½-day event will include invited papers by about 25 scientists from the United States, Latin America, and other countries, followed by round-table discussions.

Some of the problems to be discussed are: tectonics of the Gulf of Mexico, Yucatan, and Guatemala; origin and age relations across the Mexican Volcanic Belt; mechanism of subduction in the Middle America Trench from studies of the aftershock sequence of the Colima earthquake of 30 January 1973; comparative studies of the evolution of the west coast of North America; and reports on recent geophysical cruises in the areas of the Nasca and Cocos plates. A session on "mechanisms of sea-floor spreading" and a joint session with the earthquake engineering symposium on earthquake hazard in relation to the Managua earthquake, are also planned.

This symposium is cosponsored by AAAS, the Consejo Nacional de Ciencia y Tecnologia of Mexico, and the Inter-Union Commission on Geodynamics. The arrangers are C. L. Drake (Dartmouth University) and C. Lomnitz (University of Mexico). A field trip to the volcanoes near Mexico City will close the symposium.

C. LOMNITZ
Instituto de Geofisica, Universidad Nacional Autonoma de Mexico

21–23 June

Volcanism in Mexico and Central America

Active volcanoes are major geologic features in Mexico and Central America; they create both hazards and blessings for the region. Forecasting eruptions has long been a goal of volcanology and, although useful predictions are still only a visionary hope, some progress is being made.

Many of the volcanic eruptions in Mexico and Central America are highly explosive. The emitted gases and ash are one of the atmosphere's major natural pollutants, and they can be used as a meter stick against which man's atmospheric pollutants can be compared. Geothermal steam reservoirs are proving to be an important source of energy. In most cases these natural steam occurrences are closely related to volcanic activity.

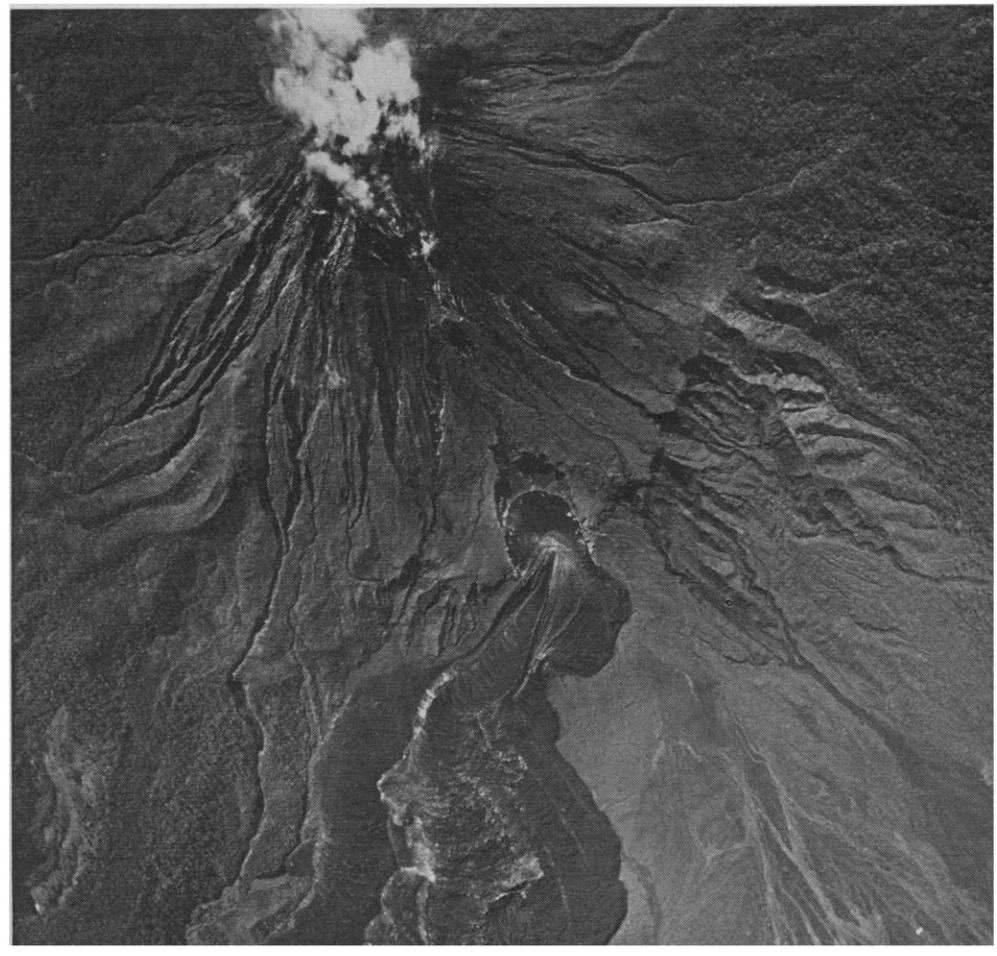
The symposium (21–23 June) focuses on these topics of volcanism which are most relevant to mankind: forecasting volcanic eruptions, explosive volcanism, and geothermal power.

Five speakers will discuss the current status of predicting volcanic eruptions. Several approaches (including historic activity patterns, seismic monitoring, small ground surface movements, and changes in temperature and gas emissions) show considerable promise, but no single technique at present is a reliable indicator of forthcoming eruptions.

The volcanoes of Mexico and Central America are much more explosive than those in Hawaii. Because of the long intervals between, and the danger during eruptions, the mechanics of explosive volcanic eruptions are not as thoroughly studied and, therefore, less well understood than the eruptions in Hawaii. Five speakers will discuss the products and mechanisms of explosive volcanism, and motion picture films of the recent eruption of Pacaya Volcano in Guatemala will be shown.

Geothermal power resources are currently of great interest in Mexico and Central America. Five speakers will discuss the recent developments and future prospects of geothermal power in this region.

R. W. DECKER
Dartmouth College, Hanover, New Hampshire



Arenal Volcano, central Costa Rica, erupted violently in the summer of 1968 after about 500 years of repose. The above photo shows lava flow still being emitted, 4 November 1971, from the lower explosion crater on the west flank of the volcano. [Courtesy Instituto Geográfico, Costa Rica]