Some lava flow units have more than one vent. For example, the unit from June 12, 2004 to June 15, 2004 is composed of two vents located on the W flank of the Blackeney cone. The Lava from the summit crater of the Mackenney cone. Lava from a vent located near the S rim of the volcano. Lava flows from vents located on the S flank of the Mackenney cone. Lava flows from vents located on the SW flank of the Mackenney cone. Lava flows from vents located on the NW flank of the Mackenney cone. Lava flows from the summit crater of the Mackenney cone. Lava flows from vents located on the NE flank of the Mackenney cone. Lava flows from vents located on the SE flank of the Mackenney cone. Lava flows from the summit crater of the Mackenney cone. Lava flows from vents located on the S flank of the Mackenney cone. Lava flows from vents located on the SE flank of the Mackenney cone. Lava flows from vents located on the SW flank of the Mackenney cone.
VOLCANOLOGICAL MAP OF THE 1961-1969 ERUPTION OF PACAYA VOLCANO, GUATEMALA


Geologic units

The symbols used to represent the units on this map are the same as those used by Rüdiger Escobar-Wolf (1971): Pre-Hb61 corresponds to flows emplaced in 1961, Hb61a to flows emplaced in 1961 and those that are younger but earlier than the Pre-Hb61 flows, and so on. The suffix letter indicates the order of emplacement, progressing in alphabetical order from the oldest to the youngest unit. After the unit, a suffix letter is added at the end of the unit name, progressing in alphabetical order from the oldest to the youngest, i.e. the letter "a" corresponds to the youngest unit. If two or more units were mapped during the same year, the suffix letter is repeated. If two or more subunits from the same unit were mapped during the same year, the suffix letter is repeated and added the first suffix (i.e. the letter "a") to the second unit in the sequence, and so on.

Sources of information:

The sources of information for this map are the same as those used by Escobar-Wolf (1971). Sources of information include: (1) 1961 aerial orthophotos; (2) visible and infrared images; (3) satellite images; and (4) unpublished field notes and reports by the author.

Pahoehoe and Aa lava flows


Feb. 11, 1968 to Feb 22, 1968. Lava flow from the summit crater of the Mackenney cone.


Feb. 11, 1968 to Feb 22, 1968. Lava flow from the summit crater of the Mackenney cone.


Chupadero" stream.

Pahoehoe and Aa lavas flows

- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Nov. 10, 1974 to Jun. 28, 1975.** Lava flows from the N base of the Mackenney cone.
- **Mar. 6, 1972.** Lava flow within the summit crater of Mackenney cone. Covered by younger units.
- **Feb. 9, 1974 to Jul. 14, 1974.** Lava flows from the summit crater and the NW base of the Mackenney cone.
- **Feb. 24, 1974 to Jul. 7, 1974.** Lava flow from lateral vents of Pacaya.
- **Nov. 10, 1974 to Nov. 17, 1974.** Lava flows from the base of the Mackenney cone. Partially covered by younger flows.
- **Dec. 12, 1970 to May 9, 1971.** Lava flow from a vent on the E flank below the summit crater of the Mackenney cone.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the summit crater of the Mackenney cone. Covered by younger flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
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- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flows from lateral vents named "La Peña del Coyote".

Alluvium

- **Pred. 1565? -1846?.** The Cerro Chino Cinder Cone and the Pacaya composite cone with undivided lava flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the summit crater of the Mackenney cone.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flows from lateral vents named "La Peña del Coyote".
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Dec. 12, 1970 to May 9, 1971.** Lava flow from a vent on the E flank below the summit crater of the Mackenney cone.
- **Nov. 10, 1974 to Jun. 28, 1975.** Lava flows from the N base of the Mackenney cone.
- **Feb. 9, 1974 to Jul. 14, 1974.** Lava flows from the summit crater and the NW base of the Mackenney cone.
- **Feb. 24, 1974 to Jul. 7, 1974.** Lava flow from lateral vents of Pacaya.
- **Nov. 10, 1974 to Nov. 17, 1974.** Lava flows from the base of the Mackenney cone. Partially covered by younger flows.
- **Dec. 12, 1970 to May 9, 1971.** Lava flow from a vent on the E flank below the summit crater of the Mackenney cone.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
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- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.
- **Sept. 6, 1970 to Sept. 15, 1970.** Lava flow from the base of the Mackenney cone. Mostly covered by younger flows.

**References:**
VOLCANOLOGICAL MAP OF THE 1985-1989 ERUPTION OF PACAYA VOLCANO, GUATEMALA

To Finca Santa Fe 3.9 Km
To Finca Sierra Morena 4.5 km
To Finca El Amate 2.7 Km
To El Cedro 1.3 Km

Geologic units

Symbology

Populated centers

Roads

Geographical references:

Photograph was taken by the USGS on March 26, 1996, using an 80-mm focal length camera and a 180-mm focal length camera. The image was taken from an altitude of 3,000 feet above sea level.

Sources:


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Hal61

Alluvium

Pahohoe and Aa lava flows

Sources of information:

- Mackenney was used to delineate, identify and date units emplaced between 1961 and 1985. Maps published by Eggers (1971), and Underman (1982) were used to identify and date units. Information from the Monthly Bulletin of Global Volcanism

Vulcanología, Meteorología e Hidrología (INSIVUMEH) in Guatemala, were used to delineate, identify and date some units emplaced between 1987 and 2009. Unpublished field notes and reports by the author were used as well. Elevation level contours

and so on. E.g. the units Hb06, Hb06a, and Hb06b are lava flow units emplaced during the same year, with the oldest one being Hb06 and the youngest one being Hb06b. Missing letters in the sequence occur when older units are covered by younger units.

were mapped, a suffix letter is added at the end of the unit name, progressing in alphabetical order from the oldest to the first unit without a suffix and adding the first suffix (i.e. the letter "a") to the second unit in the sequence,
NOTE: The electronic image file for this map is formatted for printing at a 1:10,000 scale for a paper printing size A0 (841 mm X 1189 mm).

Geologic units

The map units are based on geologic maps by Eggers (1971). All aspects of the geology are portrayed graphically, and are supported with photos & the "Symbology." The main unit group are "Pyr." The pyroclastic rocks are subdivided into "Pyroclastic flows" and "Pahoehoe and Aa lava flows." Places where pyroclastic flows are not individually mapped are indicated as "Pyroclastic flows." For permission to copy, contact editing@geosociety.org.

The vent locations are shown as circles on the "Symbology." The colors of the vent symbols correspond to the colors of the lava flows that were erupted from those vents.

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Symbology

Populated centers

Roads

Pahoehoe and Aa lava flows

Pyroclastic flows

Active crater

Alluvium

Locales of Volcano Eruptions

Bella Cerro

Pre-Hb61 Undivided lava flow units from 1961 to 1989.

Hb92c

Hb93a

Hb91h

Hb90e

Hb92e

Hb91i

Hb90

Hb94

Hb2

Historic 1565?-1846? Cerro Chino Cinder cone and Pacaya composite cone with undivided lava flows.


The electronic image file for this map is formatted for printing at a 1:10,000 scale for a paper printing size A0 (841 mm X 1189 mm).

To Finca Sierra Morena 4.7 km
To El Cedro 1.3 km
To San Francisco de Sales 2.3 km

Time (a.d.)
00 51 11 22 30 41 52 63

VOLCANOLOGICAL MAP OF THE 1995-1999 ERUPTION OF PACAYA VOLCANO, GUATEMALA

Geologic units

The map follows conventions used by Eggers (1971). All deposits of Pacaya are porphyritic basalt, and are mapped with the prefix “Hb” for basaltic lava flows. “Hpf” corresponds to pyroclastic flows. The main unit group codes are: “Hb” corresponds to basaltic lava flow; “Hpf” corresponds to pyroclastic flows; “Hg” is used for lahars. Lava deposits are mapped with the main unit group code, followed by a suffix letter corresponding to the age of the deposit.


The main unit group codes are: “Hb” corresponds to basaltic lava flow; “Hpf” corresponds to pyroclastic flows; “Hg” is used for lahars. Lava deposits are mapped with the main unit group code, followed by a suffix letter corresponding to the age of the deposit.


References:
