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The Malpaisillo Formation: A sequence of explosive eruptions in the mid to late Pleistocene (Nicaragua, Central America)

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Abstract

The subduction-related volcanic front in Nicaragua consists of the Tertiary “Coyol” member in the eastern highlands and the Quaternary to recent volcanic arc within the Nicaraguan depression. Although the Holocene to recent explosive volcanism has been studied extensively no detailed work has been done on the products of explosive volcanism from Quaternary volcanic complexes comprising also the Malpaisillo and Monte Galán Calderas, the focus of this study.

The 11 km-wide Malpaisillo Caldera and ~3.5 km-wide Monte Galán Caldera, located ~50 km northwest of Managua, are surrounded by tens of meters of rhyolitic tephra. These pyroclastic flow and fall deposits extend proximally at least 11 km to the southeast and at least 23 km to

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