

The Azores archipelago in the Atlantic Ocean is composed of nine volcanic islands and São Miguel is the largest and most volcanically active. During the past 5000 years several eruptions have taken place on the three active central volcanoes – Sete Cidades, Fogo and Furnas – and in the basaltic fissure systems of Picos and Congro. There is evidence that Furnas was in eruption when the first settlers arrived some time between 1439 and 1443. In the sixteenth and seventeenth centuries there were two explosive sub-Plinian eruptions, Fogo in 1563 and Furnas in 1630. The last eruption on land occurred in the Picos Fissural Volcanic System in 1652, involving the extrusion of lava domes. In 22 chapters, this volume considers the volcanic geology of the island under the headings of geological setting, volcanic history, geological hazards and risk assessment, volcano monitoring and natural resources.