

The submarine eruptions at Santorin, in 1707, were fully reported by Vallisnieri and Lazzaro Moro, but Mount Vesuvius was the volcano which proved the chief source of interest throughout the sixteenth, seventeenth, and eighteenth centuries, when it was visited by cultured men of all countries during their travels in Italy.

The Royal Librarian in Naples, Father della Torre, in 1755 compiled a complete record of all the active eruptions and other phenomena observed at Vesuvius from 79 A.D. to the middle of the eighteenth century. Valuable information about Vesuvius, Etna, and the surroundings of Naples is contained in the letters addressed by the English ambassador at Naples, Sir William Hamilton, to the President of the Royal Society in London. And the handsome volume, with fifty-nine coloured plates, by the same author still holds its reputation as one of the most trustworthy historical and scientific accounts of Mount Vesuvius.

The progress of travel in the sixteenth, seventeenth, and eighteenth centuries gradually added a knowledge of the wide distribution of volcanic mountains. Besides the S. European volcanoes and Mt. Hecla in Iceland, geographers recognised the active volcanoes of Kamtschatka, of Japan, the Sunda Isles, the Philippines, the Canary Isles, the Azores, the West Indies, Mexico, and Peru.

Meantime Guettard's discovery of the extinct volcanoes of Auvergne gave a new impulse to the mineralogical study of the volcanic rocks in that vicinity.

Nicolas Desmarest, a French Professor, opposed Guettard's erroneous conception that the Auvergne basalt pillars had crystallised from a watery fluid, and demonstrated the resemblance of the Auvergne basalt to certain recent lavas. He showed that in the Auvergne district true basalt is frequently covered by volcanic ashes or rests upon ashy material, that the transition in the field from basalt to true lava is quite gradual, and that the basalt everywhere presents the character of a volcanic mass that has been originally molten and has afterwards consolidated. He thought, further, that basaltic rock frequently showed transitions to porphyry (trachyte and phonolite), and this again into granite, and concluded that all these rocks probably originated from a molten state, the granite representing rock solidified from a less fluid state of the volcanic magma, and basalt