

The Making of Europe – A geological history

The continent of Europe, as a recognisable geographic entity, attained roughly its present shape around 20 million years ago. Even since then, the European coastline has undergone significant changes, due mainly to sea-level movements, to form the outline of the continent that we are familiar with from maps and the photographs of Europe from space that we view today.

Graham Park relates how Europe has been assembled through geological time by the accretion of various distinct geological components, some of which have travelled a considerable distance across the globe to reach their present positions.

The Making of Europe is a book for all those curious about the origins, variety and geological history of the continent of Europe. Why are there such distinct regions and landscapes, ranging from the wide plains of Northern Europe to the mountains of the South?

Although some previous knowledge of geology will be useful, important geological concepts are explained in the Introduction, technical terms are kept to a minimum and a comprehensive glossary is provided in addition to an index. Copiously illustrated in colour, this book will educate and inform all those who are interested in European geology.

Graham Park is Emeritus Professor of Tectonic Geology at the University of Keele and the author of the popular books *Introducing Geology* and *Introducing Tectonics*, *Rock Structures and Mountain Belts* also published by Dunedin Academic Press.

Cover images:

Background, NASA, courtesy Visibleearth

Loch Torridon, the author

Mt Etna, Shutterstock, ©RZdesign

Gibraltar, Shutterstock © Algefoto

ISBN: 978-1-78046-023-9



9 781780 460239

DUNEDIN

EDINBURGH ♦ LONDON

List of illustrations	vi
Sourced illustrations	ix
Preface	xii
1 Introduction	1
2 The construction of Baltica – ‘Proto-Europe’	13
3 Lower Paleozoic growth of Proto-Europe	26
4 The Caledonian Orogeny	41
5 The Expansion of Europe in the Upper Paleozoic	57
6 The Hercynian Orogenic Cycle	70
7 Europe in Mesozoic to Mid-Cenozoic time	90
8 The Alpine Orogeny	107
9 Neogene to Quaternary Europe	136
Glossary	145
Appendix	156
Selected further Reading	157
Index	159