

European Lithosphere Dynamics

Edited by **D. G. Gee and R. A. Stephenson**

Europe provides an outstanding field laboratory for studying lithospheric processes through time, for tracing the tectonic evolution of crust and mantle from the present far back into the early Precambrian. Two things are particularly striking: the importance of plate tectonics during the Phanerozoic and through the Proterozoic into the Archaean, and the significance of tectonic inheritance, older structures and rheologies guiding the younger evolution.

'European Lithosphere Dynamics' grew out of a major European Science Foundation programme, EUROPROBE, with participation of many hundreds of Earth scientists from all over Europe. The main research activities focused on specific target areas and involved integration of geological, geophysical and geochemical methods. Defining surface–depth relationships was a prerequisite for interpretation of the processes, present and past, responsible for the formation of the lithosphere.

This Memoir addresses the major features of the European lithosphere and is aimed at giving the reader an overview of their development and growth during three billion years of Earth history.

Visit our online bookshop: <http://www.geolsoc.org.uk/bookshop>

Geological Society web site: <http://www.geolsoc.org.uk>



The European Science Foundation, International Lithosphere Programme and the Netherlands Research Centre for Integrated Solid Earth Science are thanked for generous contributions towards production costs

Cover illustration:

The Blue Marble Next Generation from NASA's Earth Observatory. This image shows Europe in June 2004. For more information see: Stöckli, R., Vermote, E., Saleous, N., Simmon, R. & Herring, D. 2005. The Blue Marble Next Generation – A true color earth dataset including seasonal dynamics from MODIS.

<http://earthobservatory.nasa.gov/Newsroom/BlueMarble/bmng.pdf>

