



Book Review

Bulletin of the Geological Society of Denmark
Vol. 44, p. 114. Copenhagen, 1998–02–28.

Baldschuh, R., Frisch, U. & Kockel, F. (compilers) 1996: Tectonic Atlas of NW Germany. 16 maps, scale 1:300.000; 7 cross-section panels, scale 1:200.000; 1 tectonic index map, scale 1:500.000, folded, contained in two hard-cover cassettes. Published by Bundesanstalt für Geowissenschaften und Rohstoffe, Hannover, Germany. Price DM 315 (only cassette 1: DM 115). Orders to be placed: Internationales Landkartenhaus IHL, P.O.Box 900380, D-70508 Stuttgart, Germany. Phone: (+49) 711-7889340, Fax: (+49) 711-7889354. <https://doi.org/10.37570/bgsd-1998-44-14>

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This atlas consists of two hard-cover cassettes. Cassette 1 contains two multicoloured regional subcrop maps at a scale of 1:300.000, drawn at the level of the base-Cretaceous and base-Tertiary unconformities, seven panels of multicoloured structural cross-sections at a scale of 1:200.000 and a tectonic index map at a scale of 1:500.000. Cassette 2 contains 14 black-and-white structural contour maps at a scale of 1:300.000, drawn at regional marker levels ranging from the base-Pliocene to the base-Zechstein. All 1:300.000 maps consist of four separate sheets. Explanatory notes are kept to a minimum.

The two subcrop maps cover northwest German on- and off-shore areas between 6°40'–9°20'E and 51°40'–55°00'N whereas the structural maps are restricted to the area of the former Bundesrepublik. Only parts of the German North Sea are shown as this area is already covered by the "Structural and Palaeogeographical Development of the German North Sea Sector", published 1995 by F. Kockel (Gebr. Bornträger, Berlin, Stuttgart, Beiträge zur Regionalen Geologie der Erde, Vol. 26, ISBN 3-443-11026-6).

The regional maps presented in this atlas are based on the interpretation of over 500.000 km of reflection-seismic lines, acquired by the petroleum industry, and the results of some 70.000 wells drilled during the search for hydrocarbons, water, coral and minerals. This mapping project was carried out at the Bundesanstalt für Geowissenschaften und Rohstoffe, Hannover, by a team of 12 geoscientists under the able leadership of Dr. Franz Kockel. The objective of this effort was to document the basic results of 40 years of exploration activity in the North German Basin and to make these publicly available in readily accessible format. This project was financially supported by the Federal Ministry of Research and Technology and the Federal Ministry of Economics. Permission to publish this atlas was obtained from the "Wirtschaftsvereinigung Erdöl Erdgas", representing the petroleum industry of NW Germany.

Although well locations are not given and identified on the maps, selected control wells are shown on the 140 cross-sections given in 7 panels. These provide a cross-reference to the main structural features shown on the tectonic index map. All maps are available in analogue format only, rendering it difficult to derive from them a complementary set of isopach maps. However, this should not be regarded as a major drawback as the Bundesanstalt interpretation team is at present in the process of constructing a new set of palaeogeographic and isopach maps for northwest Germany, starting from the Cambrian, preparing a detailed morphological and genetic description of some 800 structures (salt-induced, extensional, inversion), compiling a comprehensive literature index that reaches back to 1950 and writing a supporting descriptive text. This material, which will be published at a later date will complement the Tectonic Atlas introduced here.

This atlas fills a big gap in the documentation of the configuration of the North-German Basin that hosts important hydrocarbon provinces and major salt deposits. It highlights the scope of the latest Cretaceous and Paleocene intraplate compressional deformations and the role played by the mobility of Rotliegend and Zechstein salts during the evolution of this basin. The Tectonic Atlas provides a data base that is of immense value to researchers and all concerned with the subsurface resources of this basin. Congratulations are extended to the authors and sponsors of this milestone publication that documents and preserves the scientific results of resource-exploration in NW Germany for future generations. All users of this atlas will look forward to the forthcoming follow-up publication by this able interpretation team.

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