The volume is well illustrated with some colour plates and is competently edited. The varied nature of the articles, and the availability of much of the material from the broad review articles elsewhere, mean that this is a volume for a library rather than a personal bookshelf. However the papers on the global evolution of mineral deposits and on the broad-scale geodynamic control of gold and placer diamond deposits, as well as the relation of mineral deposits to impact structures, will be of interest to a wide audience.

Charlie Moon

SCHLÜTER, T. 2006. *Geological Atlas of Africa, with Notes on Stratigraphy, Economic Geology, Geohazards and Geosites of Each Country*. xii + 272 pp. + CD-ROM. Berlin, Heidelberg, New York: Springer-Verlag. Price Euros 129.95 (+ VAT at local rate), SFr 220.00, £100.00, US $169.00 (hard covers). ISBN 3 540 29144 X.
doi:10.1017/S0016756807233321

Africa is a huge continent with many large countries. Any attempt to compile a geological overview of approximately 20 % of the Earth's land surface is therefore extraordinarily ambitious and should be applauded. The *Geological Atlas of Africa* emerges from such ambition as the result of an eight-year project by Professor Schlüter and associates. The aim was simple: to assimilate basic geological facts for each African country, in order to give the regional geologist a digestible starting point for future research.

The book, which is printed in full colour on high quality, glossy paper, is in A4 format and organized into four chapters. From an initial section on the aims of the book, we proceed to a second, historical and contextual chapter on early geological maps of Africa, then to a third that delivers a tectono-stratigraphical synopsis of the continent. However, it is the fourth chapter – a geological review of the countries and territories of Africa – that is the bulk of the book (some 218 of its 249 pages). In this chapter, the geology is, very wisely, organized encyclopaedically for each country under subheadings that address country size, a geological summary, stratigraphy and tectonics, economic geology, key geological sites and a reference list.

On the one hand, the rigid encyclopaedic approach leaves voids on certain topics for certain countries where facts are in short supply. For example, the author is forcedto comment on geohazards and important geological sites for Eritrea, even though inventories have not yet been made for them. Yet on the other hand, the book benefits enormously from this encyclopaedic approach by including excellent geological sketch maps for each country, in full colour and at a level of detail that reflects the current state of knowledge in each case. These maps are very helpfully reproduced digitally, in PDF format, on the accompanying CD.

A shortcoming, but one that is easily resolved with a basic geographical atlas, is that a simple map of Africa actually showing where the countries are in relation to one another isn't included. This will be a nuisance for anyone not scoring A-grades in geography because it makes direct geological comparisons between the neighbouring countries that much more difficult, yet can easily be addressed in a subsequent edition. Another criticism is that whilst the geological sketch maps are excellent, the resolution/reproduction of some photographs and figures is poor and grainy, and still others are too small. This is because the photos are squashed to fit into text columns only 7.5 cm wide, regardless of whether they are in portrait or landscape format. Given the amount of unused space and half-finished pages in general throughout the book, we are left a little surprised that more space has not been given to them.

Overall, Schlüter wants his book to 'initiate new research opportunities by providing a database of basic geological information of this continent'. In this regard, he succeeds, and there isn't a comparable work on the market. Yet the book is very attractive to a wider audience and shouldn't miss the coffee table community. The *Geological Atlas of Africa* is a worthwhile addition to the regional literature on African geology.

Daniel Paul Le Heron

GROSHONG, R. H., JR. 2006. *3-D Structural Geology. A Practical Guide to Quantitative Surface and Subsurface Map Interpretation*, 2nd ed. xvi + 400 pp. + CD-ROM. Berlin, Heidelberg, New York: Springer-Verlag. Price Euros 69.95 (net price), US $89.95, £54.00 (hard covers). ISBN 3 540 31054 1.
doi:10.1017/S0016756807243328

The first edition of this respected textbook appeared in 1999, aimed at a target readership of professional geologists, particularly those involved in exploring for hydrocarbons and mineral deposits. A more accurate primary title might be '3-D Structural Geometry': the book has no aspirations to be a full text in the kinematics and mechanics of deformation structures. Rather it concentrates on the display and analysis of data from outcrop, wells and 2-D profiles, mainly on maps, cross-sections and 3-D visualizations. One of the main strengths of the book is that geometric methods are described from first principles, so that they could be used with pen, paper and pocket calculator, or implemented on spreadsheets, mapping software and computer-graphics programs.

In the second edition, material has been reorganized to follow more closely the typical workflowof the exploration geologist. After dealing with the elements of map-scale structures and of location and structural attitude, successive chapters cover structure contouring, thickness maps, fold geometry, cross-sections and faults. The book is concluded with new chapters on dip-sequence analysis, quality control and direction cosines and vector geometry, and a rewritten chapter on structural validation and restoration. A CD-ROM is bound into the book, containing pdf versions of the text, coloured figures, exercises and answers, worked Excel spreadsheets of some exercises, and xyz input files for mapping software.

This book has its place on the shelves of exploration geologists and some structural geology researchers. However, some of its methods have their limitations for structural geology in general. Tangent plots, used throughout the book as an alternative to stereoplots, are not practical for areas of steep dips, such as most deformed metamorphic terranes. Similarly, the emphasis on folds comprising homoclinal dip-domains is a good way of automating section drawing, but necessarily produces rather angular folds that do not match those from higher grade rocks. With these provisos though, this is a useful and well produced book.

Nigel Woodcock