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The Sedimentary Record of Sea-Level Change, edited by Angela L. Coe, Dan W.J. Bosence, Kevin D. Church, Stephen S. Flint, John A. Howell & R. Chris L. Wilson, 2003. The Open University /Cambridge University Press etc.; 288 pp. $ 50.00 paperback, ISBN 0521-53842-4; $ 110.00 hardbound, ISBN 0521-83111-3.

In teaching basic earth-science courses, it is not easy to find a good book that contains an overview of the topic of sea-level change and its interpretation from the sedimentary rock record. *The Sedimentary Record of Sea-Level Change* might be just this book, as it is clearly written and didactically well organized. The illustrations are all in color and mostly instructive.

The book is made up of thirteen chapters, many of them being rather short and to the point. The book opens with a introductory part (chapters 1-3) including a chapter on 'sedimentary rocks as a recorder of Earth processes', followed by a chapter on 'stratigraphical record and geological time' and a third chapter summarizing some of the basics of 'sea-level change'. Chapter three begins with a reference to Noah's flood referring to the change of fresh-water to salt-water conditions in the Black Sea some 7600 years ago. After a few very general remarks concerning 'why sea-level changes', the authors use Namurian cycles in northern England to illustrate some of the principles of the way sediments record sea-level change.

Part two (chapters 4-6) refer to the interaction between sea level, accommodation space, and sediment deposition. Chapter four is a general introduction to sequence stratigraphy. A nice sideline is made by revisiting the Carboniferous of northern England as introduced in chapter 3. Chapter 5 deals with the processes causing sea-level change (in fact an extension of portions of chapter 3), and chapter 6 discusses a case study from the Quaternary of the Gulf of Mexico.

Part three (chapters 7-10) makes use of the Books Cliffs, Utah, as an example for the siliciclastic depositional system. Chapter 7 sets the stage, followed by chapter 8 focusing on the topic of parasequences. Chapter 9 deals with the Books Cliffs sequences and systems tracts, and chapter 10 links sequence stratigraphy to orbital forcing and palaeoclimate.

Finally, part four (chapters 11 through 13) deals with the sequence stratigraphy of carbonate depositional systems. Chapter 11 starts with the statement that "Carbonate sediments are different". Being a carbonate sedimentologist myself, I appreciate the consideration that has been given to this topic. Chapter 12 summarizes the basic principles in carbonate sedimentology and chapter 13 refers to Miocene and Jurassic case studies.

Overall, I find this a useful, didactically well organized and nicely illustrated book for undergraduate and graduate students. I will certainly use it for my teaching in fall. This is where I personally would draw the line. The strength of this book (viz. providing a simplified, short, and to-the-point overview of the topic) seems to be its weakness, too (i.e. a very selective literature list, a certain tendency to neglect research by non-British, non-US American colleagues, and scientific gaps in the topics covered). If a colleague enters my office and asks for a textbook in the field of sequence stratigraphy I would rather suggest using the one by Emery and Myers. I was particularly surprised to see that the authors have chosen to ignore some of the exciting controversies concerning these topics. Reading this book, I was left with the impression that these controversies do not exist. But then, on page 86, I found an inserted box dealing with controversies in the sequence-stratigraphy model. One topic chosen is the discussion on Type 1 and Type 2 sequence boundaries. No mention is made of the Type 3 sequence boundaries as

proposed by Schlager in 1999 (although his paper is now widely cited), for instance, and in the end reference is made to two other papers that in fact discuss some of these controversies. I found this less than satisfactory, I have to admit, at least for my personal use. The same, amongst other examples, refers to the topic of intraplate stress and its significance to relative sea-level change (chapter 5.2.2). In this type of book it is perhaps reasonable to keep things simple. Nevertheless, the way the authors deal with this issue here is a coarse oversimplification and obviously not useful any more. This is a pity, particularly because this book clearly has the potential to become a valuable reference for the professional geologist, too. The authors might wish to consider some of this criticism when revising the text for a second edition.

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