

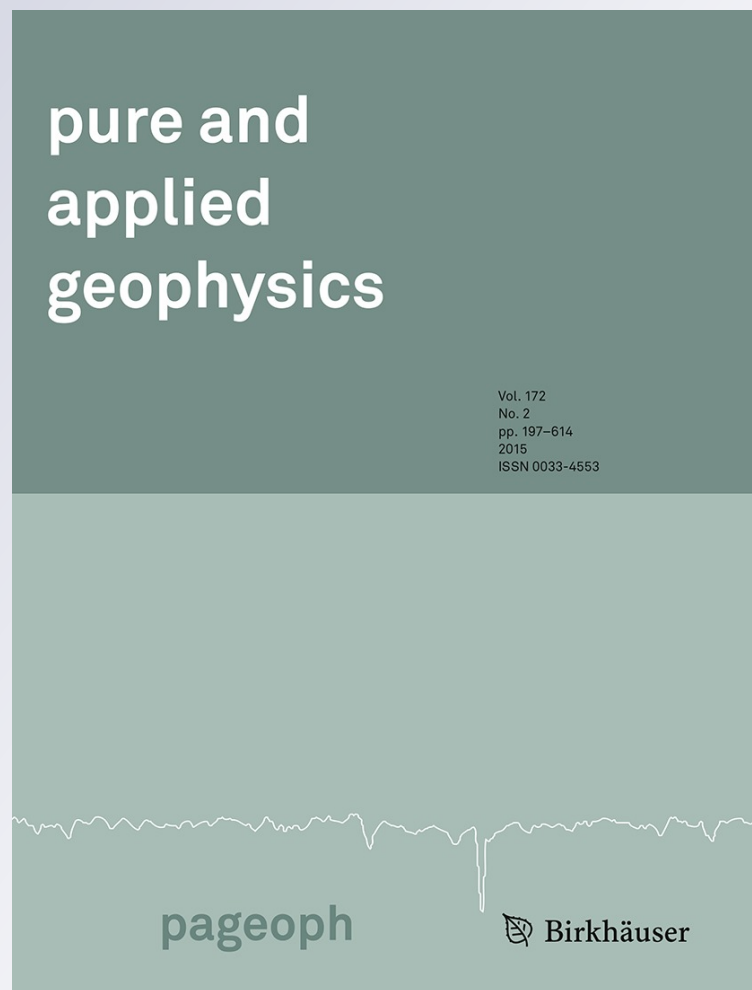
Book Review

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Book Review

Tectonic Geomorphology by Douglas W. Burbank and Robert S. Anderson, Second edition, Wiley-Blackwell, 2012; ISBN: 978-1-4443-3886-7 (cloth), ISBN: 978-1-4443-3887-4 (paperback)

YANN KLINGER¹

In one decade, concepts and techniques involved in our understanding of the deformation of the lithosphere have made major progress. This is also about the time between the first, in 2001, and the second edition of “*Tectonic Geomorphology*” by D. W. Burbank and R. S. Anderson. Hence, this new edition is much more than a mere update, as it tries to incorporate all the new knowledge gained in 10 years, making this second edition a brand-new book.

The book is organized into 11 chapters. The first four chapters address mostly observations and methods, such as landform markers and dating techniques, to provide all readers with a common language and some basic understanding of the different tools available. Next, the following six chapters take the reader on a journey across spatial and temporal scales, zooming out from instantaneous deformation to deformation cumulated over the entire Cenozoic, from a single earthquake observed in a paleoseismological trench to the building of an entire mountain range. In this series of chapters, great emphasis is placed on the need to integrate various fields of investigation, such as geomorphology and climate studies, as the only way to eventually obtain a full understanding of the processes in action. The last chapter is devoted to numerical modeling of landscape evolution, a topic that is often less well known by field-oriented geoscientists.

In each chapter, the authors propose a state-of-the-art overview and point to the main issues currently at stake in the scientific community. Each chapter also offers a large choice of references that are possible starting points for further reading into a specific topic.

Many of the examples are taken from the experiences of the two authors, and they embrace a large choice of tectonic contexts.

“*Tectonic Geomorphology*” is a textbook designed for graduate students and researchers who are looking for a starting point on topics related to the deformation of the lithosphere. Although the book is organized in order to progressively integrate time and space into larger scales, the reader who is interested in a specific aspect of the deformation of the lithosphere could jump to the relevant chapter with no difficulties. However, the intrinsic limitation of such a broad understandable overview is that, at any given scale, the authors can only give the main clues and cannot be as exhaustive as in a more specialized manual.

Finally, it is worth mentioning that, unusually, this book comes with an electronic supplement readily available on the web that includes all figures, plates, and tables to be used in lectures by anyone, making this book a must-have for anyone teaching tectonic geomorphology or interested in this topic.

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