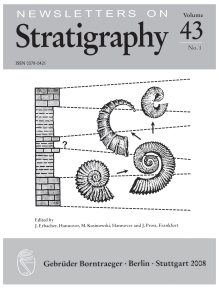
BOOK REVIEW



Newsletters on Stratigraphy

Edited by ERBACHER J., KOSINOWSKI M., PROSS J.

2008. Vol. 43, No. 1, Gebrüder Borntraeger, Berlin-Stuttgart, 90 pp.
ISSN 0078-0421

The Editors of the **Newsletters on Stratigraphy** expressed their belief, that stratigraphy in the broadest sense will remain a key discipline in the Earth Sciences. They intend to establish their journal as an international forum for all studies focused on temporal aspects of systems evolution on Earth. The format of the Newsletters has been increased and, starting in 2009, the manuscript handling will be fully electronic.

The author of the Foreword of this issue is FELIX M. GRADSTEIN, the chair of the International Commission on Stratigraphy. He stressed that the ICS is a body of expert stratigraphers linked to the IGCP, IODP or to the World Geological Maps. It has two main purposes: — promoting and coordinating long-term international cooperation, and — maintaining standards in stratigraphy.

The objectives of the ICS are: — Compilation of the Global Stratigraphical Scale — Global Correlation Charts — Formation of a database centre — Unification of regional nomenclature and methods — Introduction of new stratigraphical methods — Principles, guides to stratigraphical classification, terminology, and procedure.

During 2000–2008, more than thirty five chronostratigraphical units of the Geological Time Scale were formalized. However, about one third of 100 geological stages are still awaiting an international definition with the GSSP. The author proposed to build a new forum for specialists dealing with stratigraphic geology, which could be called the ***International Association of Stratigraphic Geologists***.

The modern approach to stratigraphic geology has been illustrated by several example studies. PETER M. SADLER and ROGER A. COOPER, building an Ordovician and Silurian time scale compiled stratigraphic range-ends of over 1500 graptolite species from over 214 measured sections worldwide. Even greater time-extension of this scale could be produced by integrating composites based on conodont bioevents.

SILKE VOIGT et al. dealt with the Cenomanian-Turonian Boundary. It is reflected by extreme carbon cycle perturbation indicating O deficiency in oceanic waters (OAE-2). Numerous small-scaled positive C curve excursions in the Wunstorf sequence have been interpreted as short eccentricity-modulated precession cycles (100 kyr, 21 kyr). Thus, the duration of the OAE-2 should be 430–445 kyr.

Dinoflagellates found by CLAUS HEILMANN-CLAUSEN et al. in intra-basaltic sediments below terminal flood basalts in Eastern Greenland indicate an Early Lutetian age.

FREDERIK J. HILGEN stated progress since 2004 in standardization and calibration of the older part of Paleogene chronostratigraphical units connected with direct astronomical tuning. He considered the establishment of a standard marine isotope stratigraphy and astrochronology of the Neogene, proposition of formal definition of orbital-induced cycles as formal chronostratigraphic units of minor rank (chronozones) as extraordinarily important decisions.

As shown by ERIC D. ANTHONISSEN, presenting results of the Ocean Drilling Program in the Northern Atlantic, the base of the Pleistocene is correlated in 15 bathyal sites with the FO of *Neogloboquadrina pachyderma*, in lower neritic ones with the LO of *Cibicides grossus*. Morever, the nature of many bioevents is diachronous. As a result, truncation of the Neogene at 2.6 Ma would introduce an artificial division, especially, when looking from the marine perspective. In accordance with the opinion of F.J. HILGEN, the term Neogene should remain attached to the extended concept of 23-0 Ma (thus, including the Quaternary).

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