



Interactive
Comment

Interactive comment on “Shallow water carbonate platforms (Late Aptian, Southern Apennines) in the context of supraregional to global changes” by A. Raspini

M. Di Lucia

dilucia@geo.uni-potsdam.de

Received and published: 3 November 2011

The paper by Raspini presents some interesting ideas which are largely based on previously published data. However, while the Author cites exhaustively the source of his data (Raspini, 1998; Raspini, 2001; D’Argenio et al., 2004) he fails to cite previous Authors that published earlier some of the ideas that he presents as new.

On p903, lines 19-21, with reference to the "Orbitolina level" of the southern Apennines, Raspini writes: "no documentation exists on a number of fundamental questions such as the striking concentration of orbitolinids in just a few beds and the relative paleoenvironmental significance".

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



Interactive
Comment

This is manifestly false! The questions of the shelliness of the Orbitolina level and of its "paleoenvironmental significance" are addressed in Di Lucia et al. (2007). In Di Lucia (2009) there is a paragraph entirely devoted to the "paleoenvironmental significance" of the Orbitolina level.

On p.916 lines 2–5 Raspini writes "...Orbitolina level shows an exceptional concentration of flat conical foraminifera. Their high alteration level suggests that the high shelliness of the biostratigraphic marker was possibly related to a reduced rate of sedimentation, rather than to a high population density of shell producers". With reference to the shelliness of the Orbitolina level, Di Lucia et al. (2007) should be cited, or even quoted, since they expressed the same concept with remarkably similar words: " The high alteration level of the orbitolinids suggests that the extremely high shelliness of the Orbitolina level is related to reduced rate of sedimentation more than to increased rate of shell production".

Also the idea that seawater chemistry played an important role in in the bloom of *S. dinarica* is not new as it can be found in Parente and Di Lucia (2007). Di Lucia (2009, p. 99) suggests that the " acme of this species can be explained with changes in the chemistry of seawater and in particular of the ocean Mg/Ca ratio and aragonite saturation" (our translation from the italian text).

In conclusion, we believe that the hypotheses proposed by Raspini on the paleoenvironmental significance of the Orbitolina level and of the *Salpingoporella dinarica* acme are very interesting. However, since these ideas were published before in documents that are fully available to the scientific community (Di Lucia et al. (2007) is the second or third item retrieved by googling "Orbitolina level"), we claim that it is not appropriate to present these ideas as new. Previous works should be adequately cited.

Di Lucia Matteo*, Frijia Gianluca*, Mariano Parente^o

*Institut für Erd- und Umweltwissenschaften, Universität Potsdam, Germany

^oDipartimento di Scienze della Terra, Università degli Studi di Napoli "Federico II", Italy

[Full Screen / Esc](#)[Printer-friendly Version](#)[Interactive Discussion](#)[Discussion Paper](#)

References cited

Di Lucia (2009) - Il record dei cambiamenti globali nelle piattaforme carbonatiche del Cretacico medio dell'Appennino meridionale. PhD Thesis, University of Naples. http://www.fedoa.unina.it/3342/1/Matteo_Di_Lucia_-_PhD_thesis.pdf

Di Lucia, M., Parente, M., Frijia, G. (2007) - The Orbitolina level of southern Apennines: a tale of nutrient fluctuations and stratigraphic condensation. Geophysical Research Abstracts, Vol. 9, 06495, EGU2007 (EGU2007 IAS Young Scientists' Best Paper Award to M. Di Lucia). <http://meetings.copernicus.org/www.cosis.net/abstracts/EGU2007/06495/EGU2007-J-06495.pdf>

Parente, M., Di Lucia, M. (2007) - Out-of-balance facies in the late Barremian-Aptian shallow-water carbonates of central-southern Apennines (Italy): the signature of nutrients and seawater chemistry? Geophysical Research Abstracts, Vol. 9, 06430, EGU2007. <http://meetings.copernicus.org/www.cosis.net/abstracts/EGU2007/06430/EGU2007-J-06430.pdf>

Parente M., Di Lucia M. (2009) - The Salpingoporella dinarica acme and the chemistry of the early Aptian ocean. IFAA 6th Regional Symposium, Abstract book. Museologia Scientifica e Naturalistica, Volume speciale 2009, p.44. <http://annali.unife.it/museologia/sp09abstract.pdf>

Interactive comment on Solid Earth Discuss., 3, 901, 2011.

SED

3, C454–C456, 2011

Interactive
Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

