

Accepted Manuscript

Coccolithophore and benthic foraminifera distribution patterns in the Gulf of Cadiz and western Iberian margin during Integrated Ocean drilling program (IODP) expedition 339

B. Balestra, P. Grunert, B. Ausin, D. Hodell, J-A. Flores, C.A. Alvarez-Zarikian, F.J. Hernandez-Molina, D. Stow, W.E. Piller, A. Paytan

PII: S0924-7963(16)30072-0
DOI: doi: [10.1016/j.jmarsys.2017.01.005](https://doi.org/10.1016/j.jmarsys.2017.01.005)
Reference: MARSYS 2933

To appear in: *Journal of Marine Systems*

Received date: 2 May 2016
Revised date: 4 January 2017
Accepted date: 9 January 2017



Please cite this article as: Balestra, B., Grunert, P., Ausin, B., Hodell, D., Flores, J.-A., Alvarez-Zarikian, C.A., Hernandez-Molina, F.J., Stow, D., Piller, W.E., Paytan, A., Coccolithophore and benthic foraminifera distribution patterns in the Gulf of Cadiz and western Iberian margin during Integrated Ocean drilling program (IODP) expedition 339, *Journal of Marine Systems* (2017), doi: [10.1016/j.jmarsys.2017.01.005](https://doi.org/10.1016/j.jmarsys.2017.01.005)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Coccolithophore and benthic foraminifera distribution patterns in the Gulf of Cadiz and Western Iberian Margin during Integrated Ocean Drilling Program (IODP) Expedition 339.

Balestra, B.¹, Grunert, P.², Ausin, B.³, Hodell, D.⁴, Flores, J-A.⁵, Alvarez-Zarikian, C.A.⁶, Hernandez-Molina, F. J.⁷, Stow, D.⁸, Piller, W.E.², Paytan, A.¹.

¹*University of California Santa Cruz, Institute of Marine Science, USA*

²*Universitz of Graz, Institute of Earth Sciences, NAWI Graz Center, Austria*

³*Department of Earth Sciences, ETH Zurich, Sonneggstrasse 5, 8092 Zurich, Switzerland*

⁴*University of Cambridge, Department of Earth Sciences, United Kingdom*

⁵*University of Salamanca, Department of Geology, Spain*

⁶*International Ocean Discovery Program & Department of Oceanography, Texas A&M University, Texas, USA*

⁷*Department of Earth Sciences, Royal Holloway University of London, Egham, Surrey, TW20 0EX United Kingdom*

⁸*Institute of Petroleum Engineering, Heriot-Watt University, United Kingdom*

Abstract

For the first time during an Integrated Ocean Drilling Program (IODP) Expedition (Exp. 339, Mediterranean Outflow) water samples for living coccolithophore distributions and mudline samples for coccoliths, benthic foraminifera, and geochemical analyses in the underlying surface sediments were collected. In total, 14 water samples (from 5 and 20 m water depth) and 7 mudline samples were gathered at the drill sites. Coccolithophore distributions show spatial variations in species diversity. In particular, assemblages that characterize the Western Iberian Margin differ from those in the Gulf of Cadiz, indicative of oceanographic and environmental controls on the community in the upper ocean (0-20 m depth). Comparison of the living assemblages to those in surface sediments shows differences in the presence of some species, suggesting the influence of post deposition sedimentary processes. Other factors such as the season of sampling and the limited

Download English Version:

<https://daneshyari.com/en/article/8886032>

Download Persian Version:

<https://daneshyari.com/article/8886032>

[Daneshyari.com](https://daneshyari.com)