



Acumulación de carbono orgánico total y carbonato de calcio en la zona de oxígeno mínimo del Pacífico nororiental mexicano [

Universidad Nacional Autónoma de México: Centro de Geociencias,
2013

text (article)

Analítica

The distribution and preservation of the total organic carbon (TOC) and CaCO_3 in marine sediments is important because its connection to the carbon cycle and the regulation of atmospheric CO_2 . Studies of the sinking, accumulation and carbon burial are limited and therefore it is necessary to know, identify and quantify the content of this element in marginal sediments. In the present work was determined the distribution and accumulation of TOC and CaCO_3 in surface sediments with different conditions of oxygenation of the water column in the southwestern margin of the Peninsula of Baja California. The highest accumulation of TOC occurred over a wide oxygen minimum zone (OMZ), TOC gradually decreases towards the coastline. The deposition and accumulation of CaCO_3 was preferentially higher in the region where the OMZ is narrow and deep. The 2 to 8% of TOC generated in the photic zone is preserved and buried in the sediment, being consistent with values calculated by models of the ocean biological pump. The TOC and CaCO_3 accumulation suggest that this region is important and key in the global carbon cycle of the ocean, and contributed significantly in regulating the climate changes in the past

The distribution and preservation of the total organic carbon (TOC) and CaCO_3 in marine sediments is important because its connection to the carbon cycle and the regulation of atmospheric CO_2 . Studies of the sinking, accumulation and carbon burial are limited and therefore it is necessary to know, identify and quantify the content of this element in marginal sediments. In the present work was determined the distribution and accumulation of TOC and CaCO_3 in surface sediments with different conditions of oxygenation of the water column in the southwestern margin of the Peninsula of Baja California. The highest accumulation of TOC occurred over a wide oxygen minimum zone (OMZ), TOC gradually decreases towards the coastline. The deposition and accumulation of CaCO_3 was preferentially higher in the region where the OMZ is narrow and deep. The 2 to 8% of TOC generated in the photic zone is preserved and buried in the sediment, being consistent with values calculated by models of the ocean biological pump. The TOC and CaCO_3 accumulation suggest that this region is important and key in the global carbon cycle of the ocean, and contributed significantly in regulating the climate changes in the past

Título: Acumulación de carbono orgánico total y carbonato de calcio en la zona de oxígeno mínimo del Pacífico nororiental mexicano electronic resource]

Editorial: Universidad Nacional Autónoma de México: Centro de Geociencias 2013

Tipo Audiovisual: bomba biológica carbono orgánico total carbonato de calcio zona de oxígeno mínimo Pacífico nororiental mexicano biological pump total organic carbon calcium carbonate oxygen minimum zone northeast Mexican Pacific

Documento fuente: Revista mexicana de ciencias geológicas, ISSN 2007-2902, Vol. 30, Nº. 1, 2013, pags. 222-232

Nota general: application/pdf

Restricciones de acceso: Open access content. Open access content star

Condiciones de uso y reproducción: LICENCIA DE USO: Los documentos a texto completo incluidos en Dialnet son de acceso libre y propiedad de sus autores y/o editores. Por tanto, cualquier acto de reproducción, distribución, comunicación pública y/o transformación total o parcial requiere el consentimiento expreso y escrito de aquéllos. Cualquier enlace al texto completo de estos documentos deberá hacerse a través de la URL oficial de éstos en Dialnet. Más información: <http://dialnet.unirioja.es/info/derechosOAI> | INTELLECTUAL PROPERTY RIGHTS STATEMENT: Full text documents hosted by Dialnet are protected by copyright and/or related rights. This digital object is accessible without charge, but its use is subject to the licensing conditions set by its authors or editors. Unless expressly stated otherwise in the licensing conditions, you are free to linking, browsing, printing and making a copy for your own personal purposes. All other acts of reproduction and communication to the public are subject to the licensing conditions expressed by editors and authors and require consent from them. Any link to this document should be made using its official URL in Dialnet. More info: <http://dialnet.unirioja.es/info/derechosOAI>

Lengua: Spanish

Enlace a fuente de información: Revista mexicana de ciencias geológicas, ISSN 2007-2902, Vol. 30, Nº. 1, 2013, pags. 222-232

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es