

Monitoring the oceans for signs of climate change

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[ 摘要 ] 14 December 2006. The oceans absorb half of the carbon dioxide emitted into the atmosphere and therefore have an important influence on the Earth's climate. It is feared that this ability to absorb carbon dioxide may be adversely affected due to climate change. To investigate this, the European Space Agency is supporting two projects, Medspiration and GlobCOLOUR, which combine data from several satellites.

[ 关键词 ] ocean,climate change,carbon dioxide

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Medspiration aims to chart sea surface temperatures while GlobCOLOUR aims to produce data sets of global ocean colour. Ocean colour is affected by phytoplankton that drift on or near the surface. These tiny marine plants absorb carbon dioxide from the atmosphere but are sensitive to environmental changes. GlobCOLOUR should be able to detect changes in ocean colour due to phytoplankton. Professor Ian Robinson of the National Oceanography Centre, Southampton (NOC) and Medspiration Project Manager said: "Clues to climatic changes may already be written on the oceans' surface. Because we now have detailed data that allow us to look for correlations, we are learning how to read those messages."

