gustav / January 06, 2009 11:13AM

[地球科學]中研院發現世界首見完整海底柱狀玄武岩群 澎湖地質史可能改寫

中研院發現世界首見完整海底柱狀玄武岩群 澎湖地質史可能改寫

中央研究院生物多樣性研究中心,為調查澎湖寒害赫見海底玄武岩奇景。研究人員在澎湖大磽燈塔北方海底發現長近 200公尺、高約10公尺的柱狀玄武岩地形景觀,雄偉樣貌狀似懸崖峭壁,為世界首見的完整海底柱狀玄武岩。

柱狀玄武岩頂部岩礁多呈5角或6角形柱狀節理剖面,在頂部以及筆直柱狀節理上、縫隙內富涵多種生物,底部散落 許多玄武岩塊,由於此區水流十分強勁,珊瑚群體不易附生,因此岩塊節理仍十分清晰。由於此區水流強勁,位處邊 陲,少有人湮,所以地景保存完整,而事實上,冰島、夏威夷與澎湖目斗嶼都有海底玄武岩,但皆被珊瑚礁覆蓋,不 易看出節理分明的樣貌。

這次發現的海底柱狀玄武岩群透漏許多地質資訊,倘若進一步會同地質與生態學家探勘,澎湖地質史可能改寫。

Academia Sinica Finds the First Complete Submarine Basalt Columns in the World

Biodiversity Research Center, Academia Sinica Taiwan, investigating on the chilling injury situation near Penghu, unexpectedly finds the spectacular submarine basalt columns. The submarine basalt columns stretch over two hundred meters, ten meters high, on the northern seabed of Daqiao Lighthouse. This is the first well-remained submarine basalt columns in the world.

On tops of the basalt columns is described that the joints of the columns appear pentagonal or hexagonal, and rich biodiversity on tops, in the joints and in the seams is noticed. Plenty of basalt rocks avalanche at the bottom. Due to the strong current, coral reefs cannot easily get attached to the columns, and therefore the columns are remained with clear joints and appearances. Besides, due to the strong current and its remote location, not many human activities take place around, so the geomorphic state remains well. In fact, it is reported that submarine basalt columns are found too in Iceland, Hawaii and Mudou Isle (Penghu). However, the basalt columns there are covered with thick coral reefs and incomplete.

The submarine basalt columns in Daqiao Reef disclose a lot of geological data. With some further geological and ecological investigation, the geological history of Penghu may have to be rewritten.

深入資訊:

中研院生物多樣性研究中心 http://biodiv.sinica.edu.tw/ 文建會台灣大百科 http://taipedia.cca.gov.tw/index.php?title=玄武岩(文建會) 公視 http://news.sina.com.tw/article/20090103/1246922.html

Edited 5 time(s). Last edit at 01/18/2009 09:40PM by gustav.