Scientific Ocean Drilling and the Tyrrhenian Sea: The Past and the Present Alberto Malinverno, Lamont-Doherty Earth Observatory and Department of Earth and Environmental Sciences of Columbia University

Abstract

Since the 1960s, scientific ocean drilling has been an international "big science" project in the Earth sciences that provided a wealth of new information about the Earth's history and structure. Scientific drilling programs visited the Mediterranean multiple times making many outstanding discoveries, such as the desiccation of the deep basin and widespread evaporite deposition during the Messinian (DSDP Leg 13, 1970). The latest expedition (IODP Expedition 402) just ended in Naples and was focused on sampling the heterogeneous geological basement of the Tyrrhenian Sea. This talk will present a historical perspective of scientific ocean drilling and of the development of ideas about the Tyrrhenian Sea formation from the presenter's experience, concluding with some of the Expedition 402 results.

Biografia.

Alberto Malinverno received a Laurea in Geology at the University of Milano in 1981 and a Ph.D. in Geology at Columbia University in 1989. He then continued at the Lamont-Doherty Earth Observatory (LDEO) as a post-doctoral scientist and research scientist. In 1992 Alberto joined the Schlumberger-Doll Research center in Ridgefield, Connecticut, where he worked on the inversion of borehole measurements. He returned to LDEO in 2005, and is now a Lamont Research Professor and an adjunct professor at the Department of Earth and Environmental Sciences of Columbia



University. Alberto participated in eighteen marine geology and geophysics seagoing expeditions, including six on the IODP drilling vessel JOIDES Resolution.

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