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SPOTLIGHT 2. Scientific Ocean Drilling, A Truly International Program

During the first part of the Deep Sea Drilling Project (DSDP), from 1968 to 1975, scientific ocean drilling was led and fully funded by the United States. However, guest scientists from around the world were invited to join *Glomar Challenger*'s 12-person scientific crew, some in co-chief scientist roles. The great success of DSDP led some countries to approach the United States about the possibility of a more formal relationship, and so began the International Phase of Ocean Drilling (IPOD) within DSDP in 1975. The Soviet Union, Germany, Japan, France, and the United Kingdom became partners, and scientists from those and other countries continued to sail on *Glomar Challenger*.

In 1983, DSDP ended and the next phase of ocean drilling, the Ocean Drilling Program (ODP), replaced it in 1985 and continued until 2003. It used the larger and more capable *JOIDES Resolution*, which could carry nearly 30 scientists and an equal number of technicians who oversaw and assisted with initial core analyses in the many sophisticated onboard laboratories. The United States was the dominant funder of the program, but additional funding also came from international members. The United States, Japan, Germany, the United Kingdom, France, and Canada were original regular members. The European Science Foundation Consortium for Ocean Drilling (ECOD) was formed in 1986 and represented Belgium, Denmark, Finland, Iceland, Ireland, Italy, The Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland. In 1988, Canada formed a consortium with Australia, and Korea and Chinese Taipei (Taiwan) joined them in the AusCan consortium in 1997. When it concluded in 2003, ODP had 22 member countries.

In 2003, the Integrated Ocean Drilling Program (IODP) began its 10-year run, with access to more drilling platforms and with more capabilities. An integrated management system for all platforms was provided, and two new core repositories were established in Europe and Japan to complement those long established in the United States. Now the United States, Japan, and Europe were the major players; some 15 European countries plus Canada participated in the self-funded European Consortium for Ocean Research Drilling (ECORD). Associate Members, who joined at different stages, were China, Korea, Australia, India, and Brazil. New Zealand was a member country within the Australia and New Zealand IODP Consortium (ANZIC).

In 2013, a renewed version of IODP, the International Ocean Discovery Program, was established for another 10 years, with the same access to three drilling facilities and core repositories, but no longer with an integrated management system. Each platform provider—the United States, Europe, and Japan—now manages its own program, but the proposal review system remains integrated, assuring a coordinated approach. The same membership generally continued on, and it is widely hoped that when IODP ends in 2023, scientific ocean drilling will evolve into a new equally exciting program, continuing to address global scientific problems for which ocean drilling is an essential tool.

The ongoing internationalization of ocean drilling has added scientific expertise and funding to this hugely successful and globally cutting-edge research program. The international science plans for each phase of activity have changed over time, with new technology and new scientific ideas and capabilities leading to general modification and broadening of the program.

— Neville Exon

Group photo from International Ocean Discovery Program Expedition 371. Tasman Frontier Subduction and Climate. The ship-board scientific party included 11 from the United States and 19 from other countries. Photo credit: Tim Fulton, IODP JRSO

