

Exploring the potential for virtual expeditions using legacy cores

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The Kochi Core Center (KCC) stores a large number of valuable cores drilled during the DSDP, ODP, and IODP. Recent years have seen remarkable progress in analytical techniques, and new proxies are being developed every day. The reuse of legacy core samples has the potential to open up new research areas. In this presentation, we will introduce the idea of "Virtual Expedition" of new research, systematically developed by a large international and interdisciplinary research team.

Ideally, the virtual expeditions will lead to new proposals for future scientific ocean drilling. To address "Ground-truth future climate change" which is one of the Flagship Initiative of Science Framework 2050 of scientific ocean drilling, it is essential to reconstruct the paleoenvironment by not only through new drilling, but also using the past drilling cores. Virtual expedition is expected to make a significant contribution to this theme.

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