

Scientific ocean drilling and sampling at the BGS

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BGS Marine Operations

The BGS in Edinburgh provides expertise and equipment for exploring the seabed and sub-seabed for scientific research and industry.

We provide a series of remotely operated systems for vibrocoring, rotary coring and drilling that can be deployed from suitable vessels of opportunity. We also provide a small survey catamaran, the *White Ribbon*, to undertake multibeam bathymetric surveys in coastal zones and inland waters.

<http://www.bgs.ac.uk/sciencefacilities>

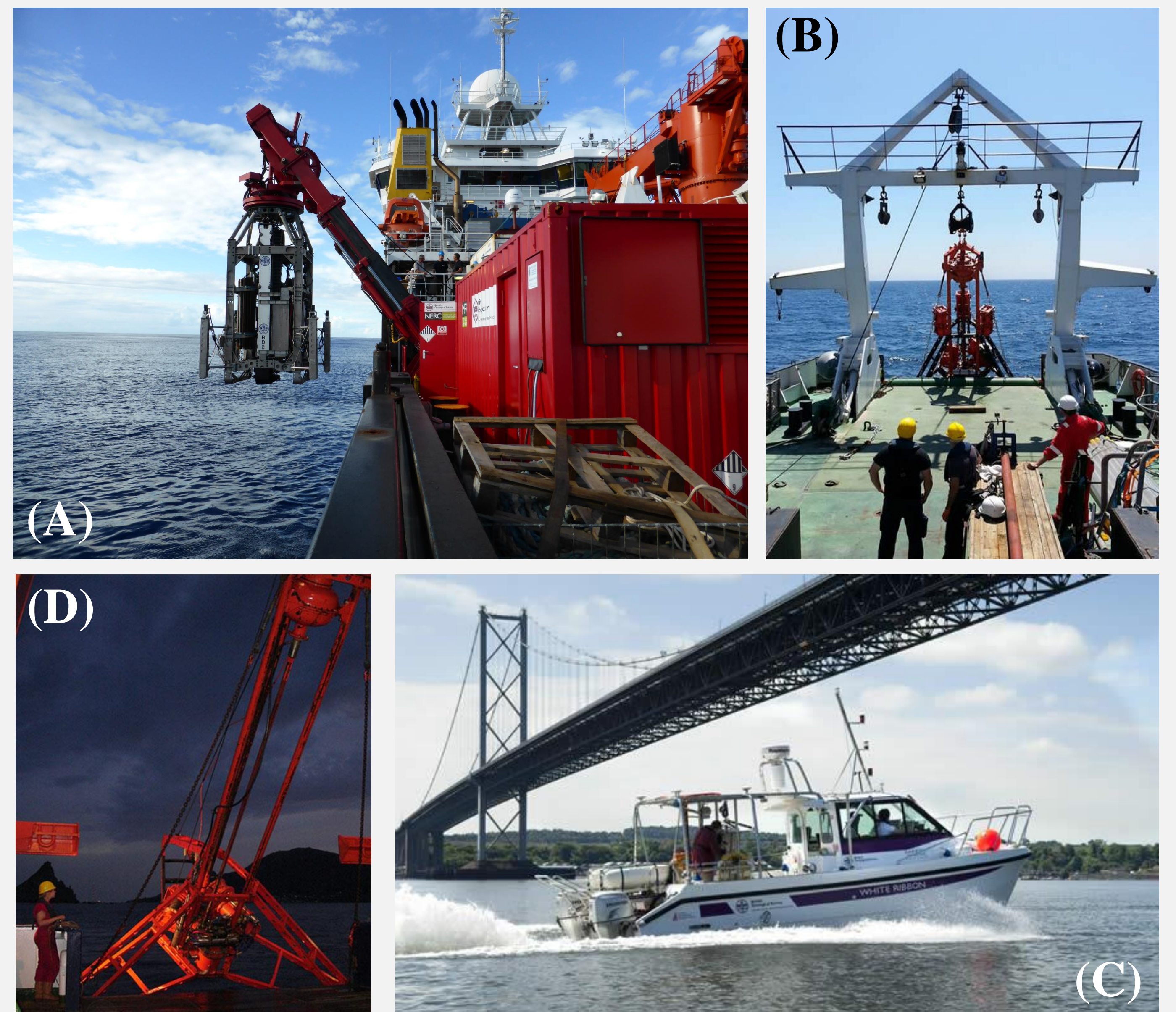


Figure 1 – Examples of BGS Marine Operations equipment
(A) BGS Rockdrill 2 (55 meters maximum penetration).
(B) BGS 3m Rockdrill.
(C) The *White Ribbon* survey catamaran.
(D) BGS 5m rockdrill/vibrocorer.



Figure 2 – IODP Expeditions implemented by the BGS
(A) Central Arctic Paleoceanography, 2004.
(B) Tahiti Sea Level, 2005.
(C) New Jersey Shallow Shelf, 2009. A similar platform was used for Chicxulub Impact Crater, 2016.
(D) Great Barrier Reef Environmental Changes, 2010.
(E) Baltic Sea Paleoenvironment, 2013.
(Fig. 1, A) Atlantis Massif Serpentinisation & Life, 2015.

International Ocean Discovery Program (IODP)

The BGS implements scientific drilling projects worldwide for the European Consortium for Ocean Research Drilling (ECORD), under the auspices of the International Ocean Discovery Program (IODP). Projects have been undertaken in diverse environments from the central Arctic Ocean to the Great Barrier Reef, and have helped improve our understanding of global climate and sea level change, buried microbiology and earth processes.