

Piezometers

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Piezometer measurements

The needle-like probe of the piezometer is six centimetres in diameter and is equipped with four pore pressure and four temperature sensors distributed along its four metre length. The piezometer can measure differential pressure between the pressure in the sediment and the water column. Scientists are interested in comparing these pressure variations with other events such as nearby earthquakes and groundwater flow. Piezometers, therefore, expand areas of pore pressure measurements, which complement borehole measurements.

Piezometer deployment at ODP 1027

The [Ifremer](#)-developed piezometer was lowered down 2560 m using the ship's cable rolled out on the A-Frame on the R/V Thompson. It was dropped at a rate of one metre per second for the final one hundred metres, where the momentum of its 999 kg "piezo-head" pressed the piezometer probe four meters into the sediments. It was a delicate operation performed from deck, involving both NEPTUNE Canada staff and ship crew.