

Laboratory Experiment for Sustainable Pressure Observation at the Seafloor



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P3.1-311

- Three pressure gauges were characterized in terms of sensor drift by applying 20 MPa equivalent to 2,000 m water depth, using a pressure balance under the ambient temperature of the deep-sea, allowing us to rank the pressure gauges pertinent to the long-term stability.
- The *in-situ* pressure dataset for the entire period was examined, for which the tidal analysis was performed to discriminate between the tide- and the trend- (i.e., non-tidal) components. Two pressure gauges measuring pore-fluid pressure showed relatively significant variation, suggesting the permeability of the pore fluid pressure section in the borehole may change over time.





