

Piezometer SPF-PZ3L metadata

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Parameters:

- Sediment pore pressure
- Sediment temperature

Location:

Regional node: EMSO LIGURE NICE

Site: Nice continental shelf

Coordinates: N43°38.613 /E7° 13.119

Depth: 21 m below sea-level

Deployment:

Cruise: ESS_PENF50_2015

Date: 15/10/2015

Connection to EMSO-LIGURE NICE:

Date: 14/09/2016

Station: West

Port: 3 on junction box 1 until March 2021 then port 3 on junction box 2

Data management:

Daily data transmission

Full data storage in the communication and storage centre

Full data storage in the instrument

Instrument characteristics:

Model: V3 piezometer

Provider: IFREMER

Description: The piezometer has a 30 m long piercing lance along which 20 modules containing relative pressure and temperature sensors are mounted as follows:

Module N°	Depth below seafloor [m]	Parameters
1200	0	Sediment pore pressure (P1, ± 200 kPa range) & Temperature (T1, 0-50°C range)
1201	1.75	Sediment pore pressure (P2, ± 200 kPa range) & Temperature (T2, 0-50°C range)
1202	2.75	Sediment pore pressure (P3, ± 200 kPa range) & Temperature (T3, 0-50°C range)
1203	4.75	Sediment pore pressure (P4, ± 200 kPa range) & Temperature (T4, 0-50°C range)
1204	5.75	Sediment pore pressure (P5, ± 200 kPa range) & Temperature (T5, 0-50°C range)
1205	6.75	Sediment pore pressure (P6, ± 200 kPa range) & Temperature (T6, 0-50°C range)
1208	9.75	Sediment pore pressure (P7, ± 500 kPa range) & Temperature (T7, 0-50°C range)
1210	11.75	Sediment pore pressure (P8, ± 500 kPa range) & Temperature (T8, 0-50°C range)
1211	14.75	Sediment pore pressure (P9, ± 500 kPa range) & Temperature (T9, 0-50°C range)
1212	15.75	Sediment pore pressure (P10, ± 500 kPa range) & Temperature (T10, 0-50°C range)
1213	16.75	Sediment pore pressure (P11, ± 500 kPa range) & Temperature (T11, 0-50°C range)
1214	17.75	Sediment pore pressure (P12, ± 1 MPa range) & Temperature (T12, 0-50°C range)
1215	18.75	Sediment pore pressure (P13, ± 1 MPa range) & Temperature (T13, 0-50°C range)
1216	20.75	Sediment pore pressure (P14, ± 1 MPa range) & Temperature (T14, 0-50°C range)
1217	21.75	Sediment pore pressure (P15, ± 1 MPa range) & Temperature (T15, 0-50°C range)
1219	22.75	Sediment pore pressure (P16, ± 1 MPa range) & Temperature (T16, 0-50°C range)
1220	23.75	Sediment pore pressure (P17, ± 2 MPa range) & Temperature (T17, 0-50°C range)
1221	25.75	Sediment pore pressure (P18, ± 2 MPa range) & Temperature (T18, 0-50°C range)
1222	26.75	Sediment pore pressure (P19, ± 2 MPa range) & Temperature (T19, 0-50°C range)
1225	28.33	Sediment pore pressure (P20, ± 2 MPa range) & Temperature (T20, 0-50°C range)

Note that sediment pore pressure is measured relative to the water column pressure by P1 to P20 relative pressure sensors (PR-9LH from Keller) with ranges extending from ± 200 kilopascal to ± 2 megapascal.

Relative pressure sensor range: ± 200 kPa, ± 500 kPa, ± 1 MPa, ± 2 MPa

Relative pressure accuracy: $\pm 1\%$ Full Scale

Temperature sensor range: 0°C to +50°C

Temperature sensor accuracy: ± 0.05 °C

Calibration: before deployment, 4-points calibration and zero checking

Sampling rate: 2 minutes