**Additional Tables**

Table S1. Summary of available LWD data in NanTroSEIZE. Exp.= Expedition number, Hole = Hole name, Res = Resistivity log, GR = Natural Gamma Ray log, Vp = Compressional sonic velocity log, Vs = Shear sonic velocity log, PEF = Photoelectric factor log, Den = Density log, Por = Neutron Porosity log.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Exp. | Hole | Res | GR | Vp | Vs | PEF | Den | Por |
| 314 | C0001D | O | O | O |  | O | O | O |
| 314 | C0002A | O | O | O |  | O | O | O |
| 314 | C0003A | O | O | O |  |  | O | O |
| 314 | C0004B | O | O | O |  |  |  |  |
| 314 | C0006B | O | O | O |  |  |  |  |
| 319 | C0009A | O | O | O | O | O | O | O |
| 319 | C0010A | O | O |  |  |  |  |  |
| 322 | C0011A | O | O |  |  |  |  |  |
| 338 | C0002F | O | O | O |  |  |  |  |
| 338 | C0012H | O | O | O | O |  |  |  |
| 338 | C0018B | O | O |  |  |  |  |  |
| 338 | C0021A | O | O |  |  |  |  |  |
| 338 | C0022A | O | O |  |  |  |  |  |
| 348 | C0002N | O | O |  |  |  |  |  |
| 348 | C0002P | O | O | O | O |  |  |  |

Table S2. Summary of available physical property data for sampled cores and cuttings in NanTroSEIZE. Alphabets in the table represent the hole names at each site where data are available. XCT=X-ray Computed Tomography. MAD=Moisture and Density. Vp=P-wave velocity. ER=Electric resistivity. TC=Thermal conductivity. MS=Magnetic susceptibility. PS=Penetration strength. MSCL=Multisensor core logger. Den=Gamma ray attenuation density. GR=Natural gamma ray. \* = Only for Den and MS.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Site | XCT | MAD | Vp | ER | TC | MS | PS | MSCL(Den/Vp/ER/MS/GR) |
| C0001 | BEFH | BEFH | H | H | EFH |  | BEF | B\*EFH |
| C0002 | BCDHJKLMP | BDHJKLMP | BHJMP | BHJKLMP | BCDHJKLMP | P | BDHJKL | BCDHJKLMP |
| C0004 | CD | D | D | D | CD |  | CD | CD |
| C0006 | CDEF | CDEF | EF | EF | CDEF |  | CDE | CDEF |
| C0007 | ABCD | ABCD | D | D | ABCD |  | ABC | ABCD |
| C0008 | ABC | ABC | A | A | ABC |  | ABC | ABC |
| C0009 | A | A | A |  | A | A |  | A |
| C0010 | CDE | CDE | CDE | CDE | CDE |  |  | CDE |
| C0011 | BCD | BCD | BD | BCD | BCD | BCD | CD | BCD |
| C0012 | ACDEFG | ACDEFG | AEFG | ACDEFG | ACDEFG | ACDEFG | ACD | ACDEFG |
| C0018 | A | A |  |  | A | A | A | A |
| C0021 | B | B |  | B | B |  | B | B |
| C0022 | B | B | B | B | B |  | B | B |