

- References in the abstract have been excluded.
- The typo in Equation (2) has been corrected.
- A dot has been removed from Equation (3)
- The axis denotations in Fig. 2 have been changed accordingly.
- The typo in line 191 has been be corrected, “und” has been replaced by “and”.
- “exemplary” has been replaced by “as an example” in line 200.
- The paragraph to describe the numerical simulation in section 4.2 has been extended as follows:

*“The simulations were conducted with the finite element code Abaqus (Abaqus 2016) using 8-noded volume elements (C3D8). Only one half of the three-dimensional cylindrical system was modelled, hereby utilizing symmetry conditions. The sufficient size of the model domain and sufficient fineness of the finite element mesh was proven by preceding sensitivity analyses. For instance, the model for the pile with 5 m diameter and a length of 25 m had a width of 100 m (dimension in direction of the horizontal load), a breadth of 50 m and a depth of 50 m. At the edges of the domain, horizontal supports were considered for the nodes in the vertical planes and vertical supports for the nodes in the bottom plane.”*

- The presentations of ranges in the formulations have been changed accordingly:  $L/D = 5 - 8$ ,  $e/L = 0 - 1$  etc.)