



G S P
G E O S P R I N G



About

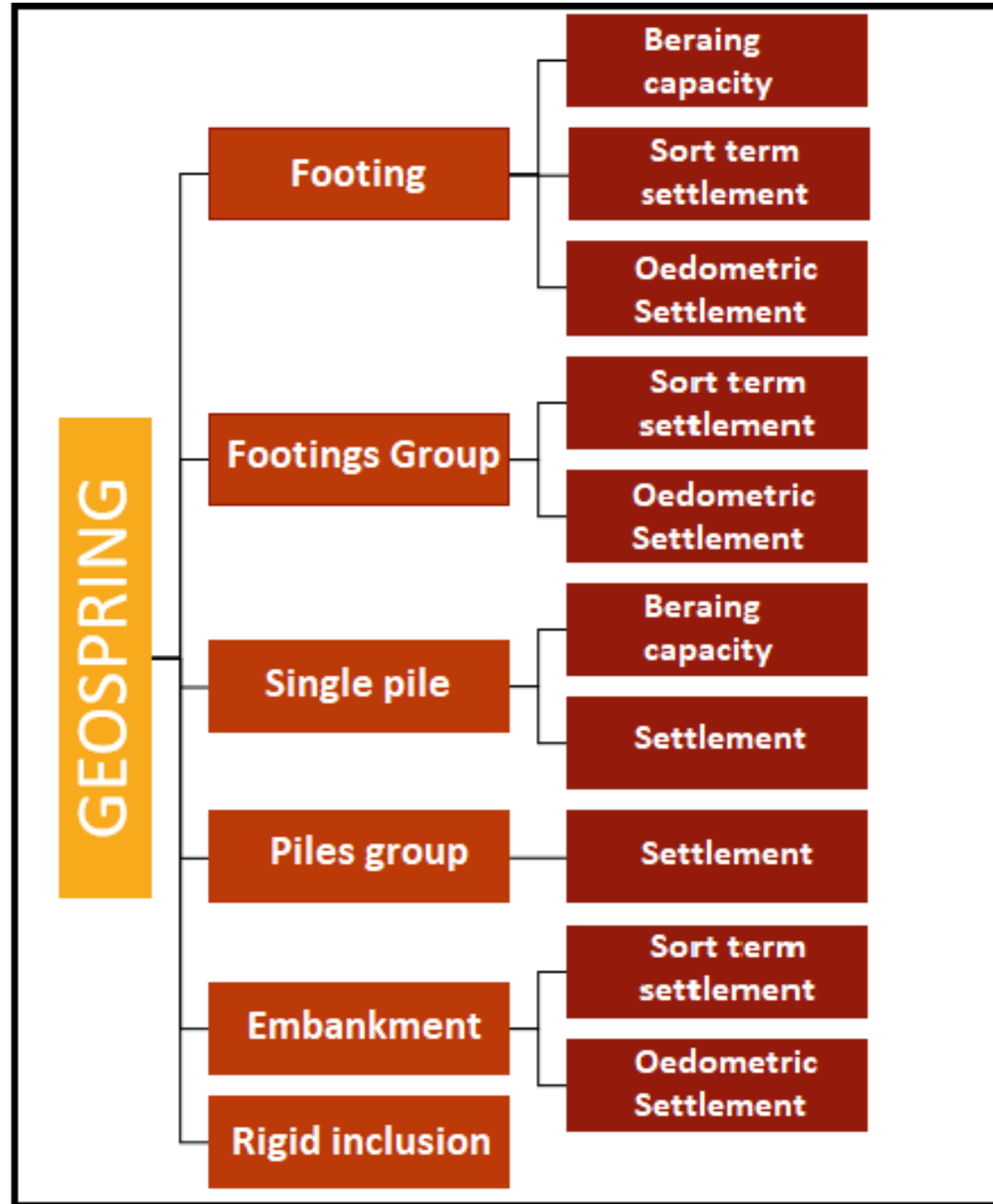
GeoSpring 1.0 is a shallow and deep foundation software that allows engineers and academics to design infrastructure for structures such as buildings, bridges and road.

The development of this software has been started by Wafy BOUASSIDA (Phd, M.Sc, P.Eng) since 2015.

Such a tool contains the following features :

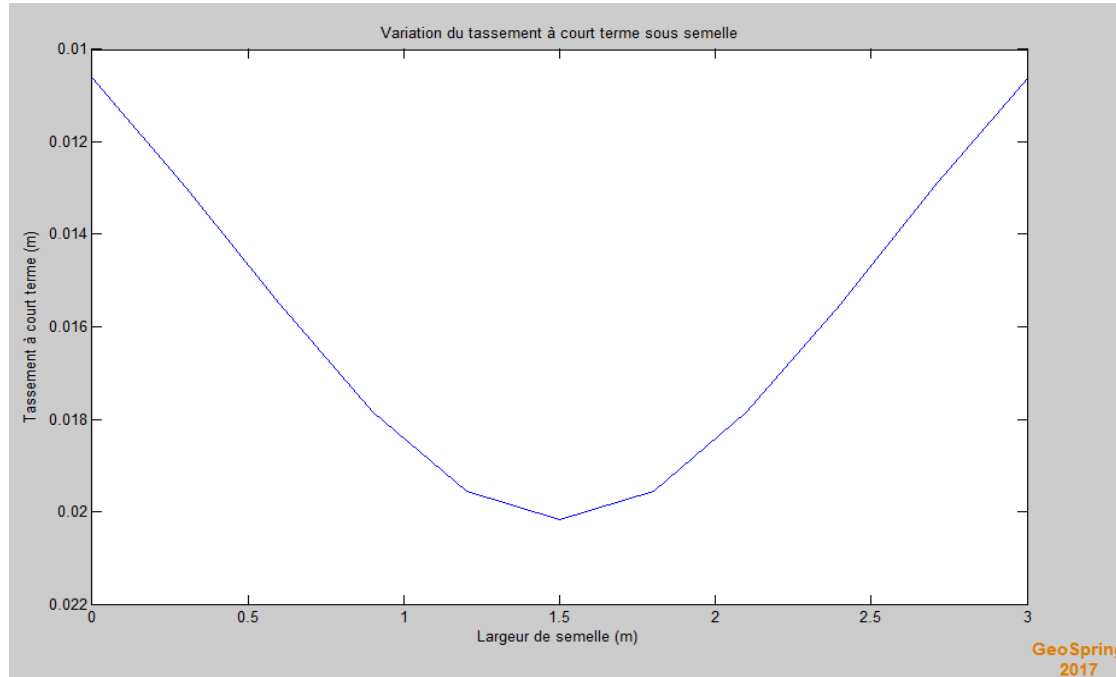
- **Bearing capacities of surface foundations using parameters at rupture (Cohesions and angles of friction) and the pressuremeter method**
- **Short-term settlement of surface foundations using the elastic method**
- **Settlement of shallow foundations using shear wave velocities**
- **Settlement of shallow foundations using the oedometric method**
- **Bearing capacities of single piles (Bored-Driven-CFA or RIT) using the pressuremeter method and the C- Φ method**
- **Individual pile settlements and pile group settlements (Bored -Beatings-CFA or RIT) using the cubic transfer curve method (Bohn and others (2016))**

Different modules



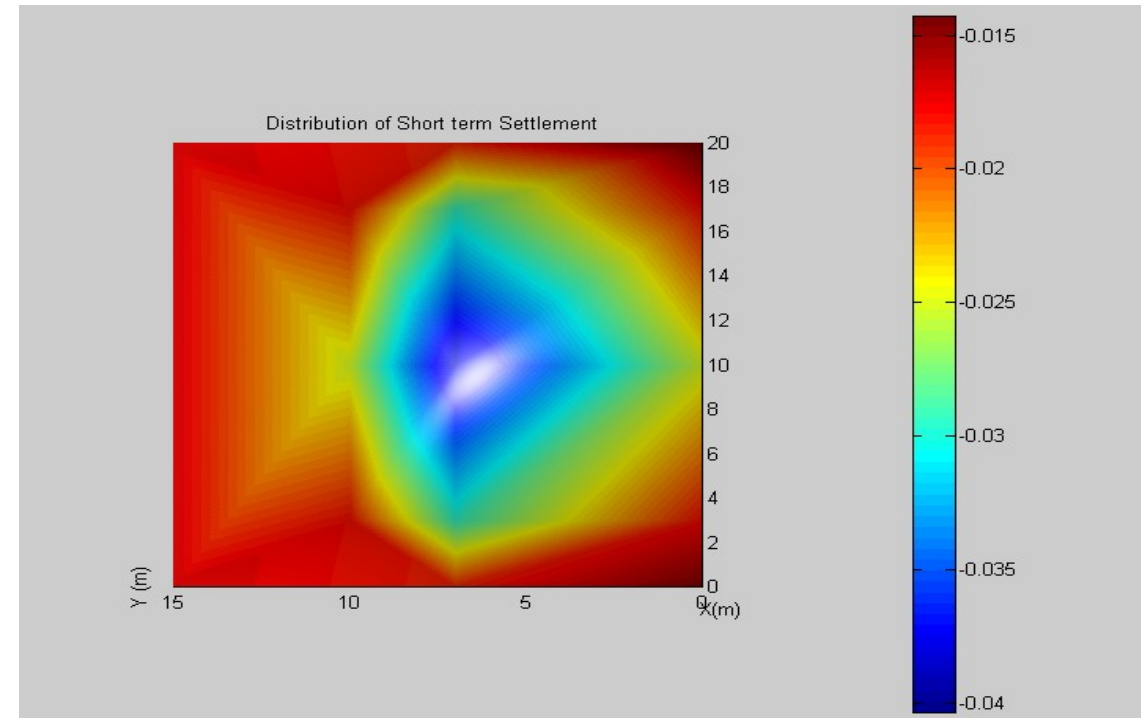


Some outputs



Short-term settlement curve of an isolated footing

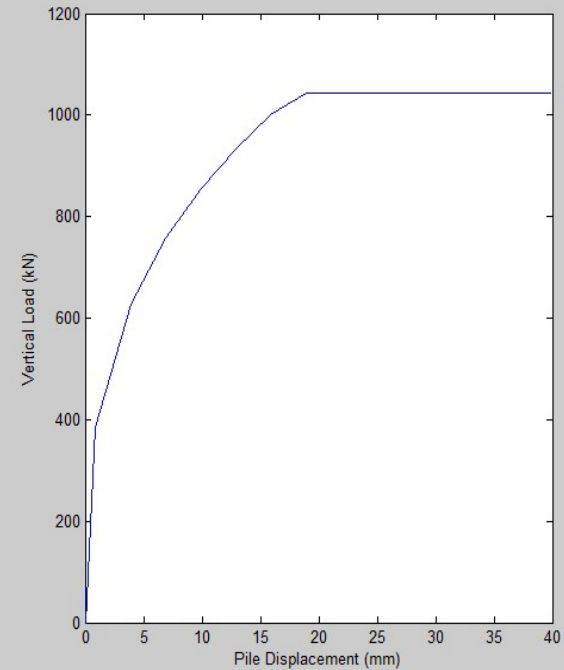
Short-term settlement contours of a footings group





Some outputs

Load (kN)	Pile Settlement (mm)
0	0
384.2185	0.9000
626.3571	3.9000
757.5527	6.9000
854.4238	9.9000
933.2343	12.9000
1.0006e+03	15.9000
1.0427e+03	18.9000
1.0427e+03	21.9000
1.0427e+03	24.9000
1.0427e+03	27.9000
1.0427e+03	30.9000
1.0427e+03	33.9000
1.0427e+03	36.9000
1.0427e+03	39.9000

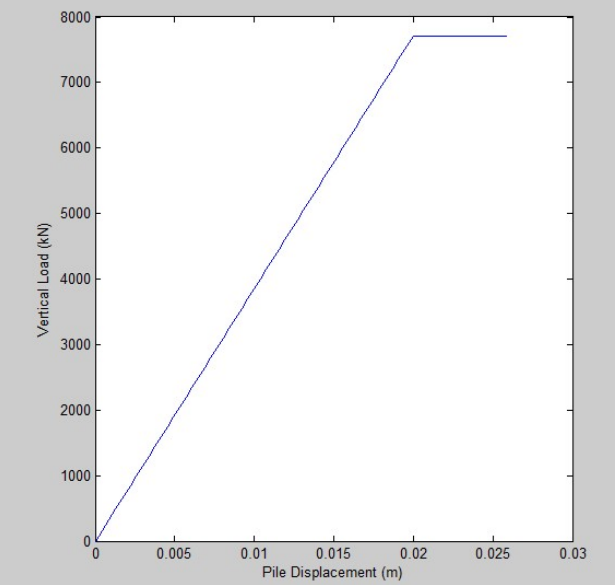


Single pile settlement

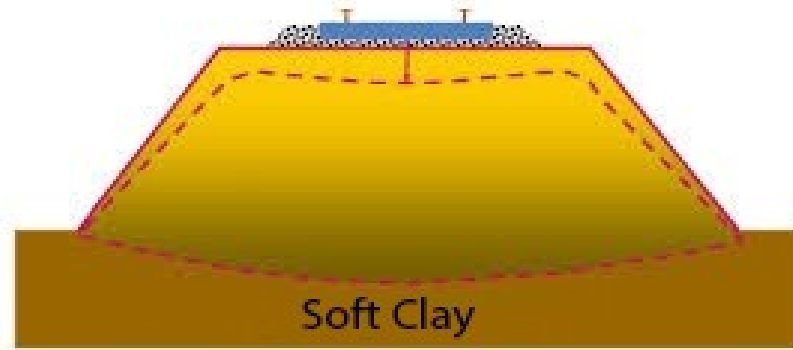
GeoSpring 2017

Pile group settlement

Load (kN)	Pile Group Settlement (m)
8000	0.0286



GeoSpring

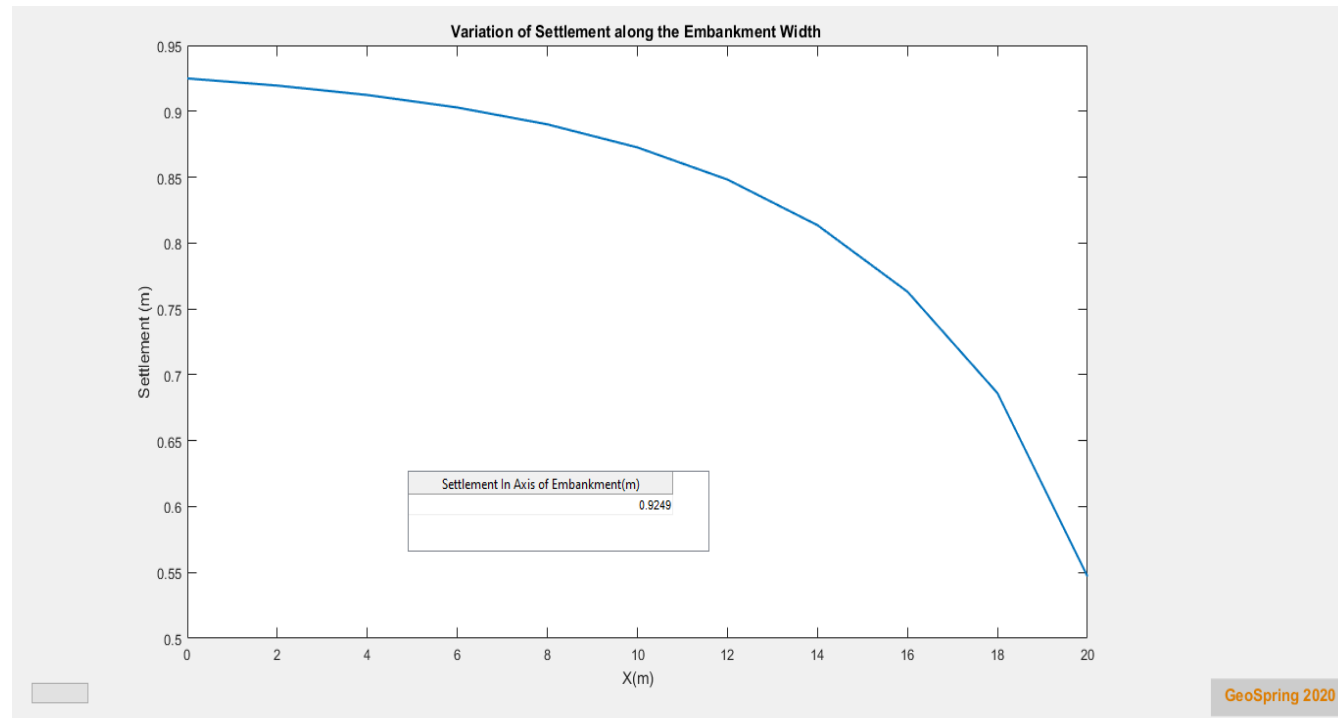


Settlement of embankments



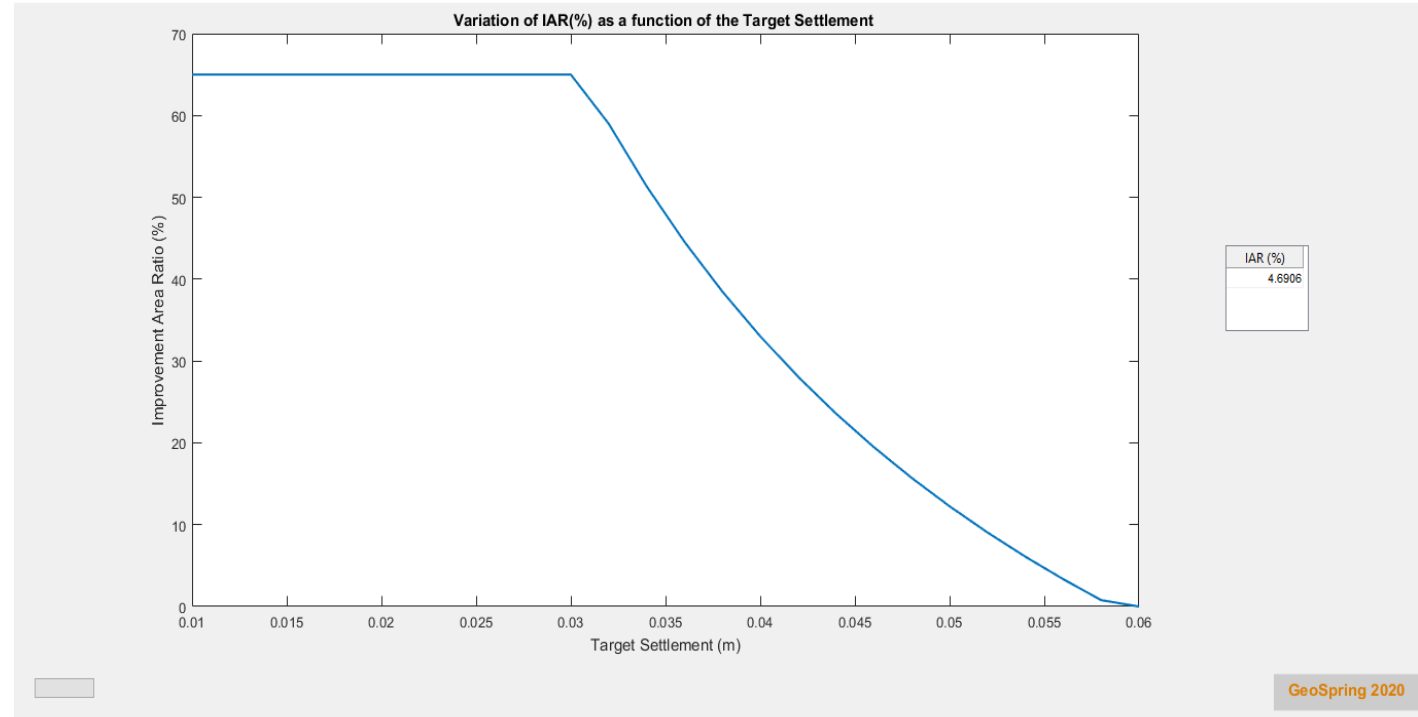
Some outputs

Variation of odometric settlement along the embankment width





Some outputs



Design of rigid inclusions

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