

SUPPLEMENTAL DATA

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Deep Excavation of the Gate of the Orient in Suzhou Stiff Clay: Composite Earth Retaining Systems

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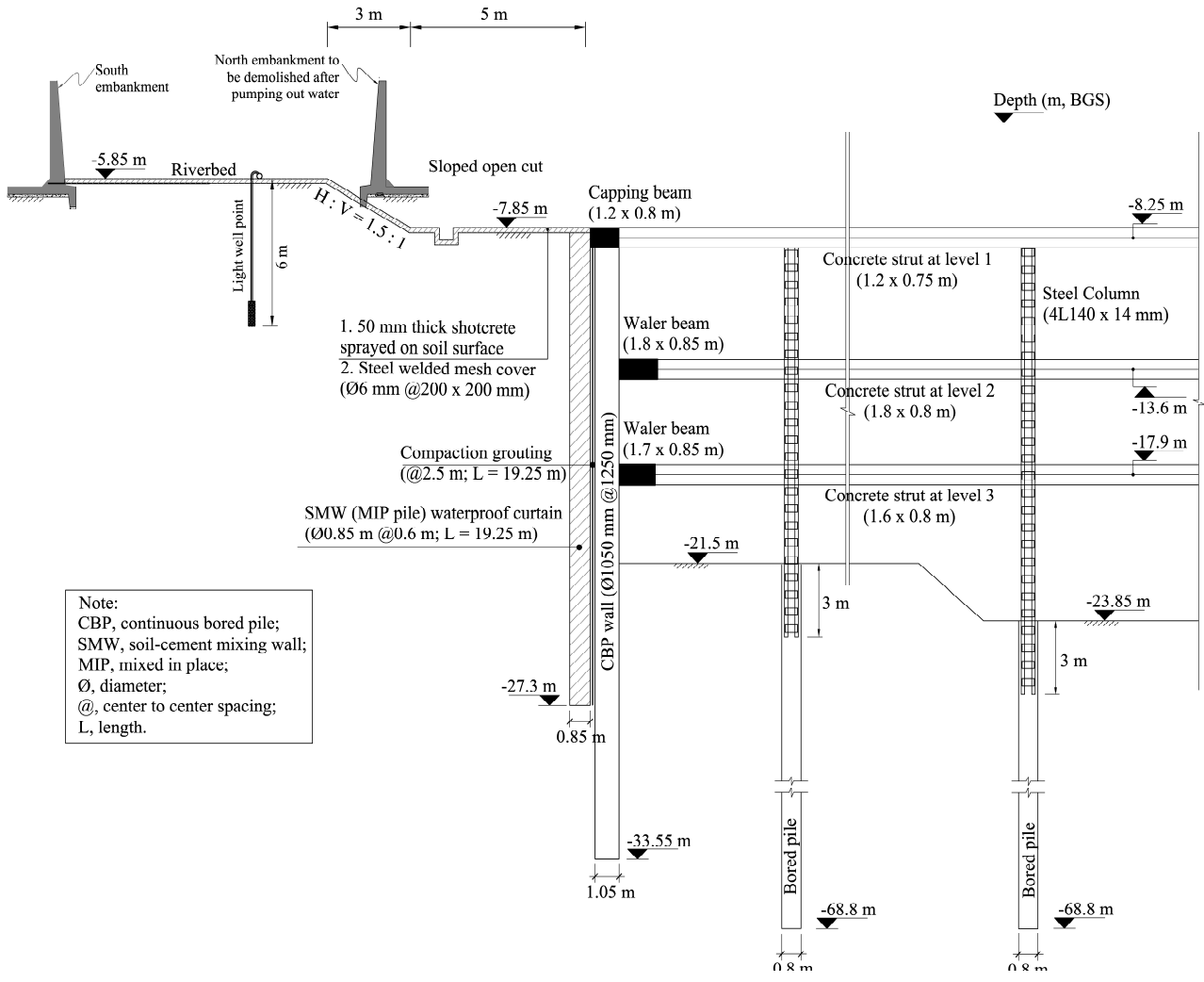


Fig. S1. Cross-section of the pit along the south side.

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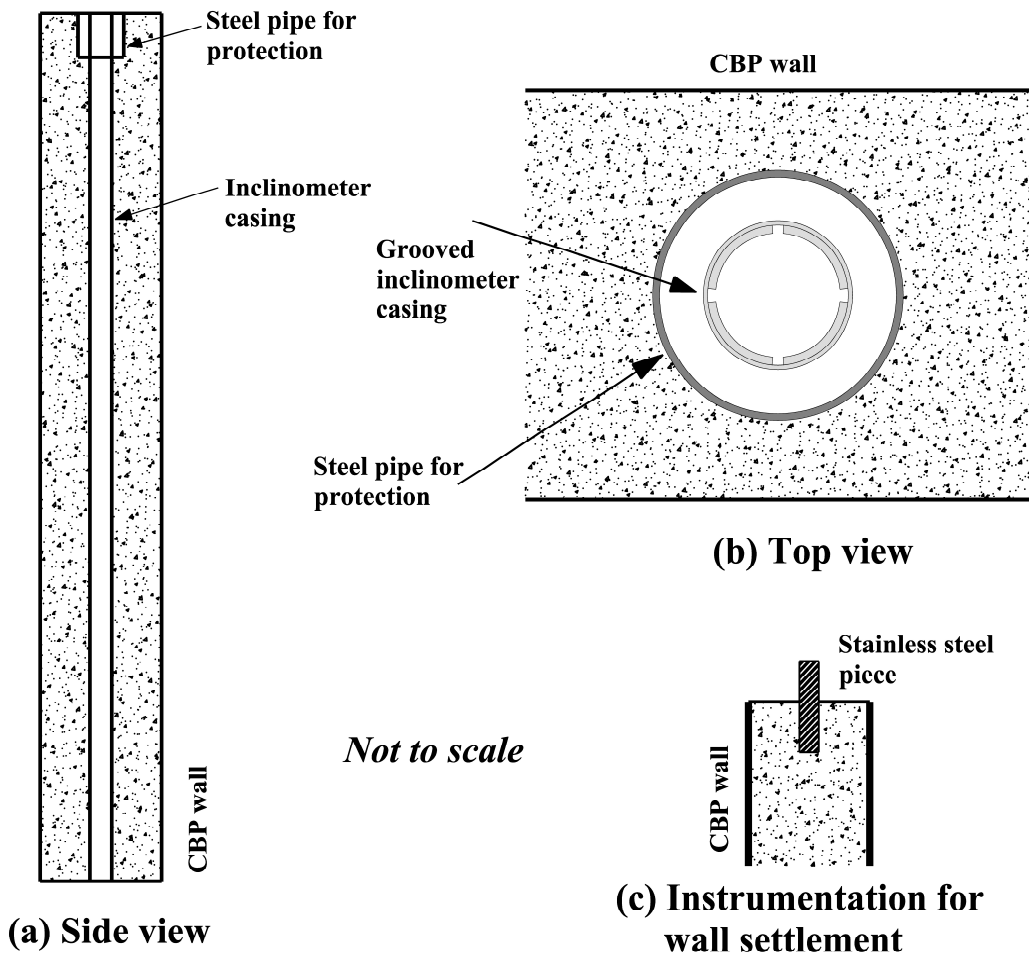
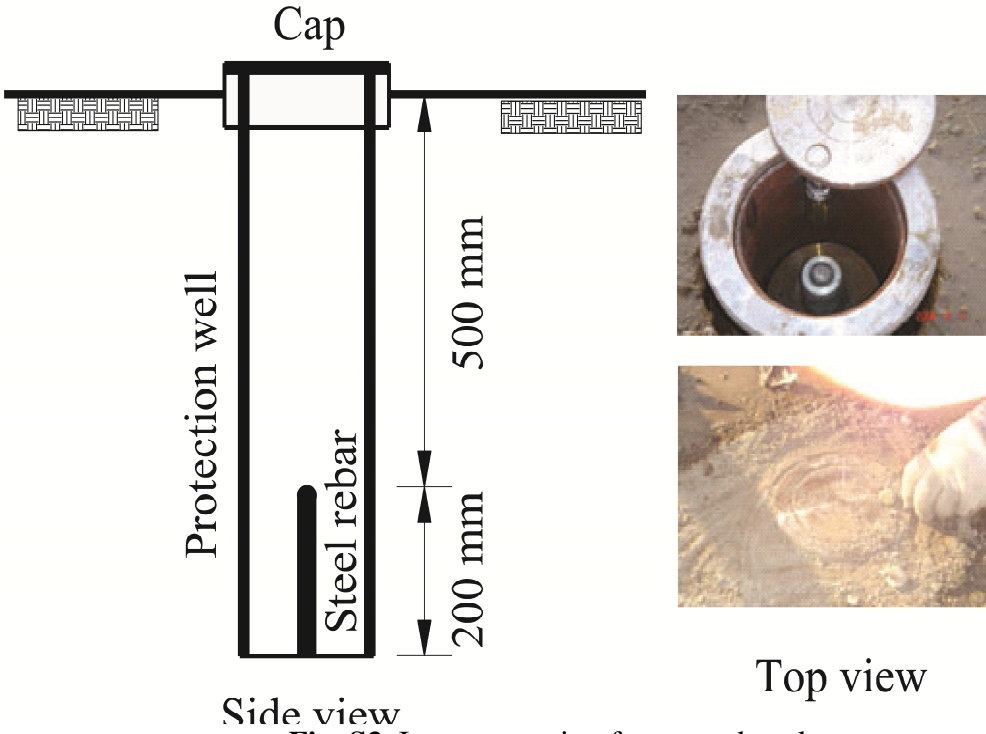


Fig. S2. View of the instrumentation layout of retaining wall for monitoring lateral wall displacements: (a) side view; (b) top view; (c) instrumentation for wall settlement.

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Side view

Top view

Fig. S3. Instrumentation for ground settlement.

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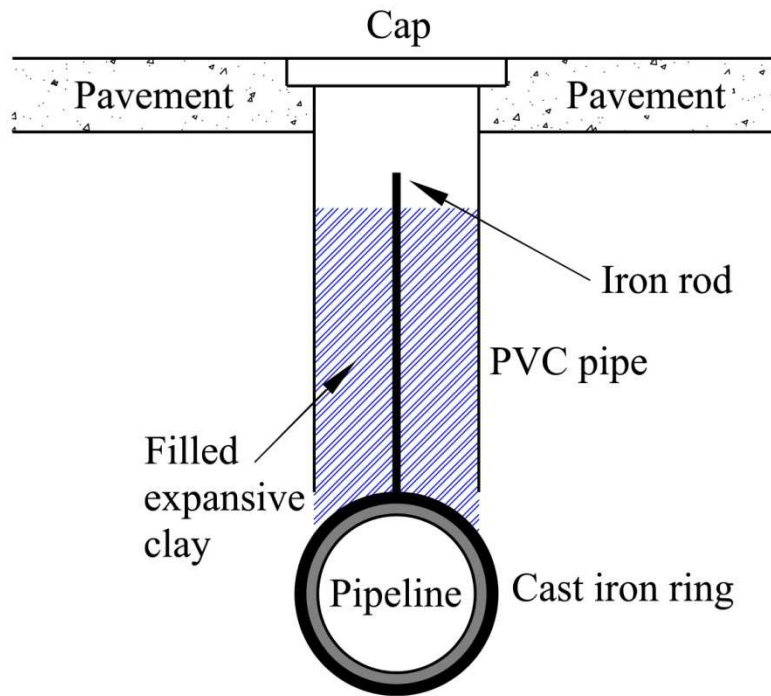


Fig. S4. Instrumentation for settlement of buried pipeline.

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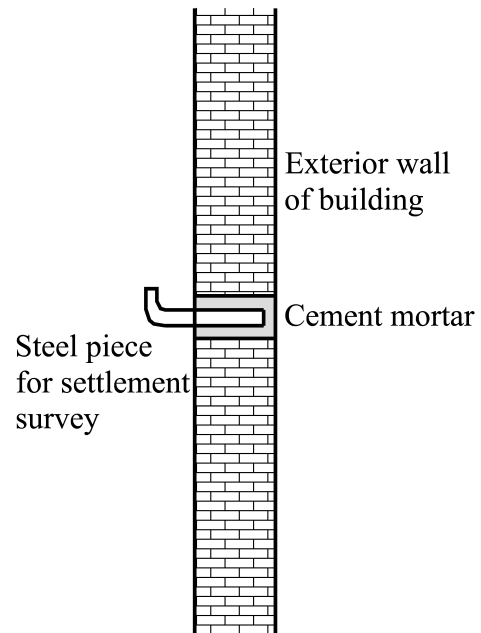


Fig. S5. Instrumentation for building settlement.

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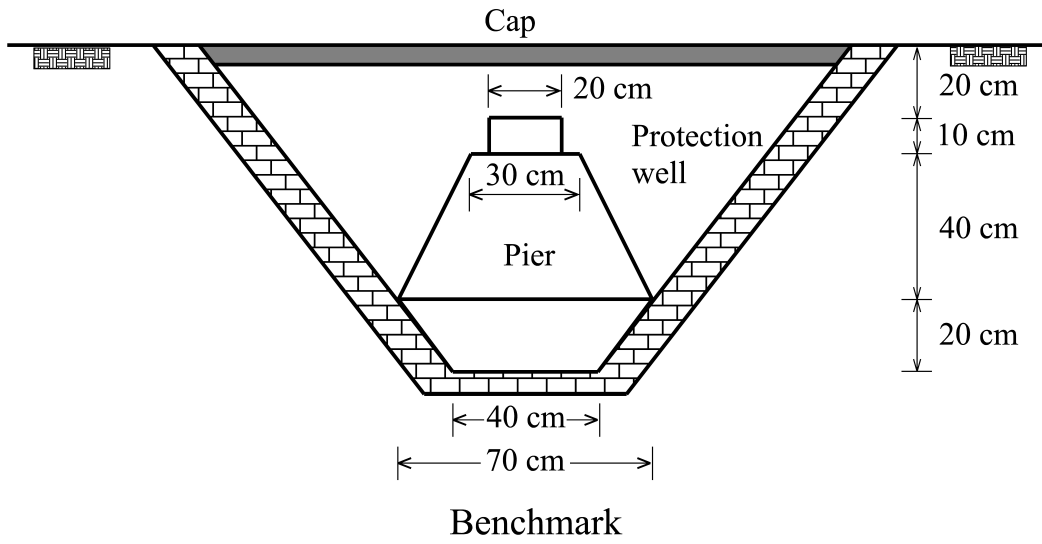
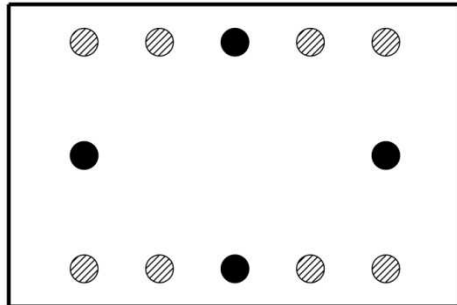


Fig. S6. Configuration of reference point (benchmark).

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Cross-section of concrete strut



Notes:

- Reinforcing bar with instrumented stress meter
- ⊘ Reinforcing bar



Stress meter adopted



Reinforcing bars instrumented with stress meters

Fig. S7. Instrumentation of reinforced concrete strut for axial strut force.

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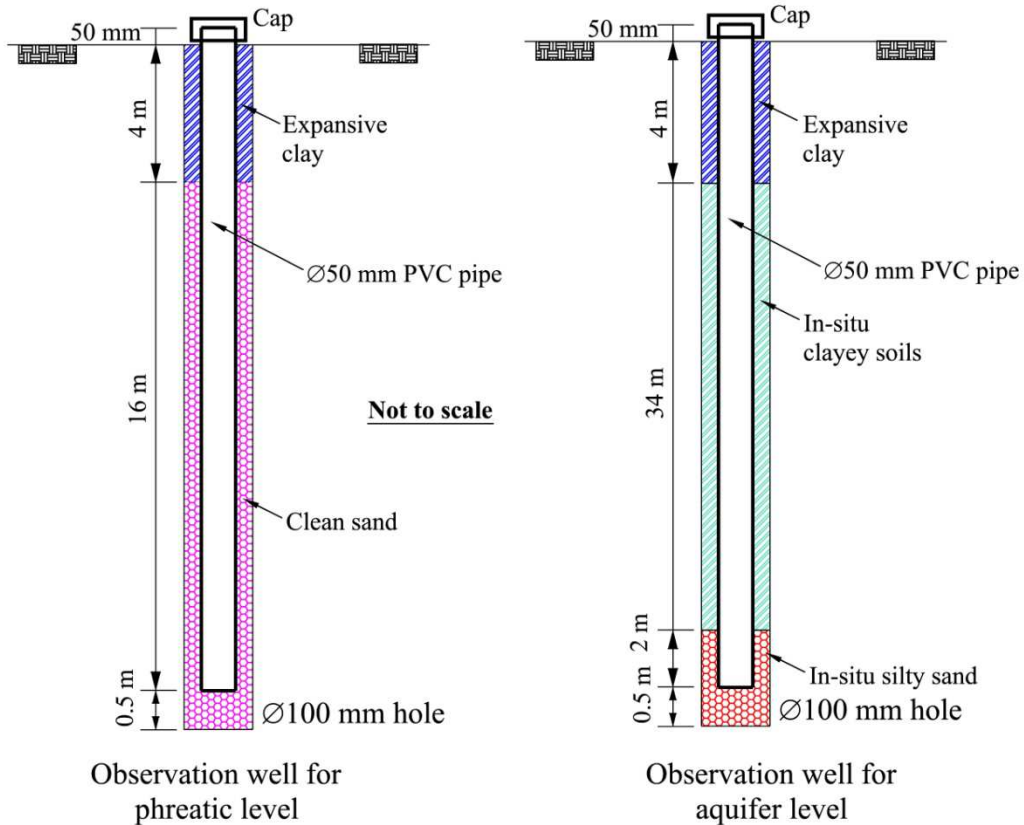


Fig. S8. Instrumentation for ground water levels.

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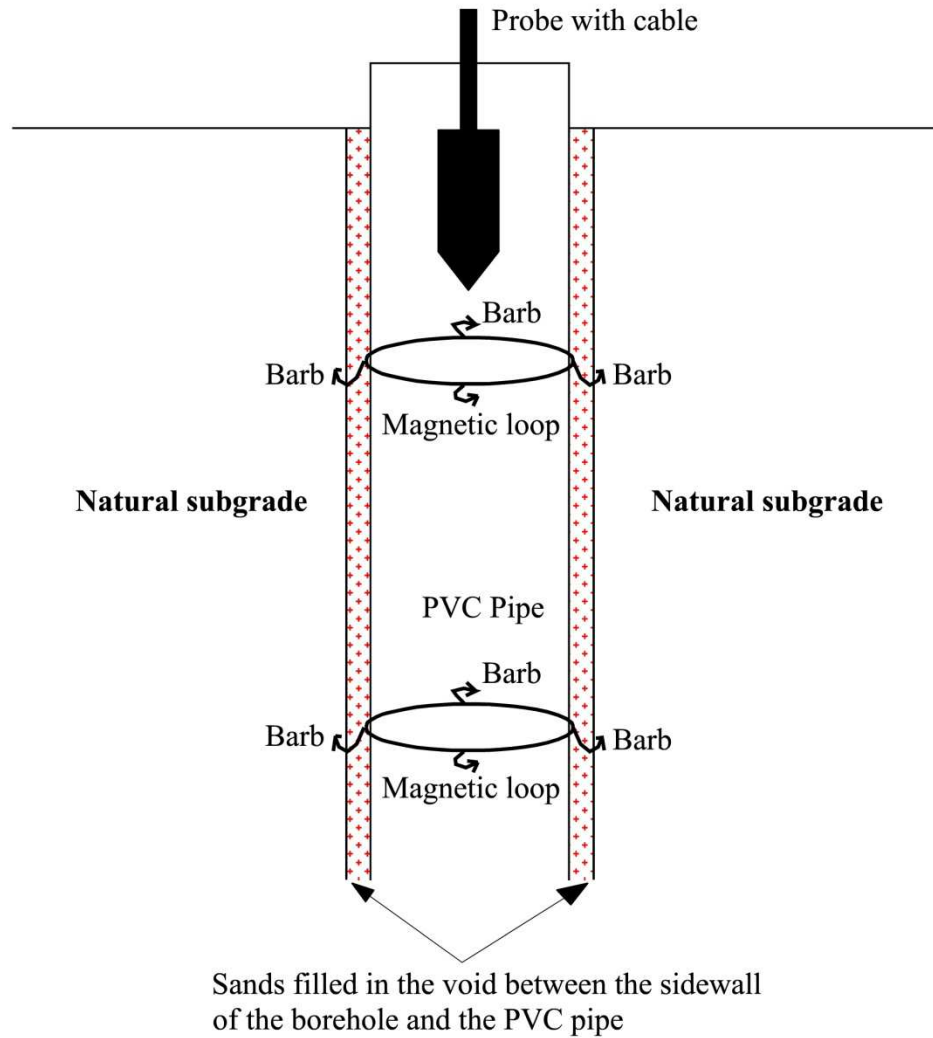


Fig. S9. Instrumentation for measuring basal rebound.

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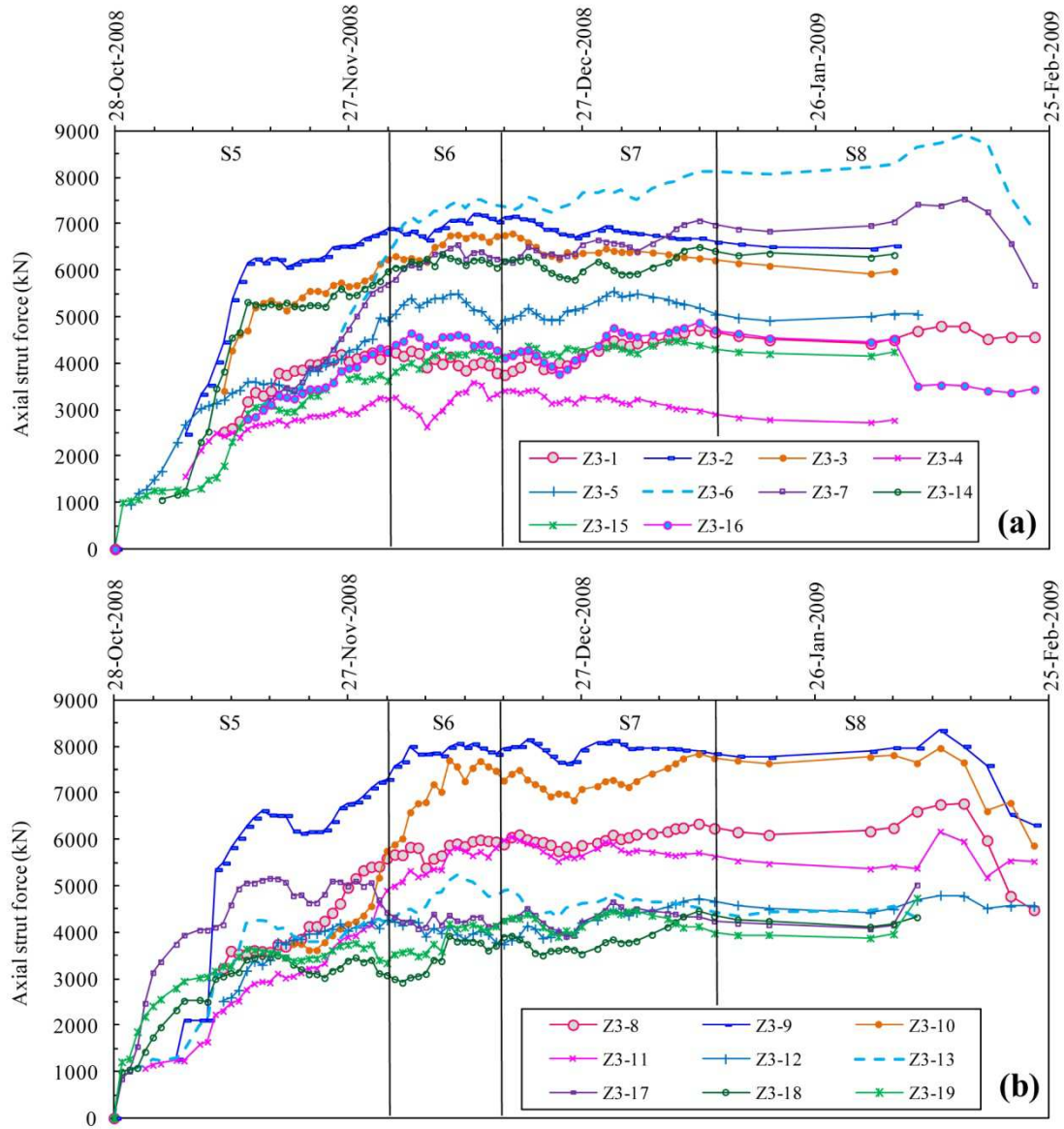


Fig. S10. Development of axial strut forces at level 3: (a) diagonal struts; (b) normal struts.