

Possible research topics employing the facilities of NCREE Tainan Laboratory:  
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- Floor acceleration of high-tech facilities under near-field movement  
High-tech facilities are sensitive to PFA which may have special characteristics from near-field movement.
- Torsional behavior of buildings  
Near-field movement may induce asymmetric damage to the structure followed by severe torsional behavior.
- Effects of vertical ground motions  
The ratio between the peak vertical and the horizontal ground acceleration can exceed 1.0. The large vertical excitation may cause different failure modes which are not observed from far-field earthquakes.
- Near-field effects of ground motions with less magnitude  
In design codes (Eurocode 8, for example), near-field effects are considered for earthquakes with certain magnitude and distance to the fault. However, near-field effects also exist for earthquakes with less magnitude.