

Site Response Analysis/Modeling Research

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Analysis Type:

- Equivalent linear: Meite
- Total stress: de la Torre, Dismuke, Foster,
- Effective stress: Balachandra, de la Torre, Ntritsos

Validation:

- Downhole: Dismuke, Foster
- Surface instruments: de la Torre, Ntritsos
- Element testing: McGann, Bradley

SFSI:

- Parametric analysis: Hayden (and future students)
- Verification and validation: Balachandra

Locations:

- Christchurch: de la Torre, Ntritsos
- Wellington: de la Torre
- Other NZ: Meite, Dawson
- Japan/KIK-Net: Dismuke, Foster

Areas for Software Development Team input:

- Streamlined inputs for creation of 1D and 3D column OpenSees models
- Automated generation of site response models from 'raw' site characterisation data
- Optimisation for large models (OpenSeesSP) and parametric uncertainties