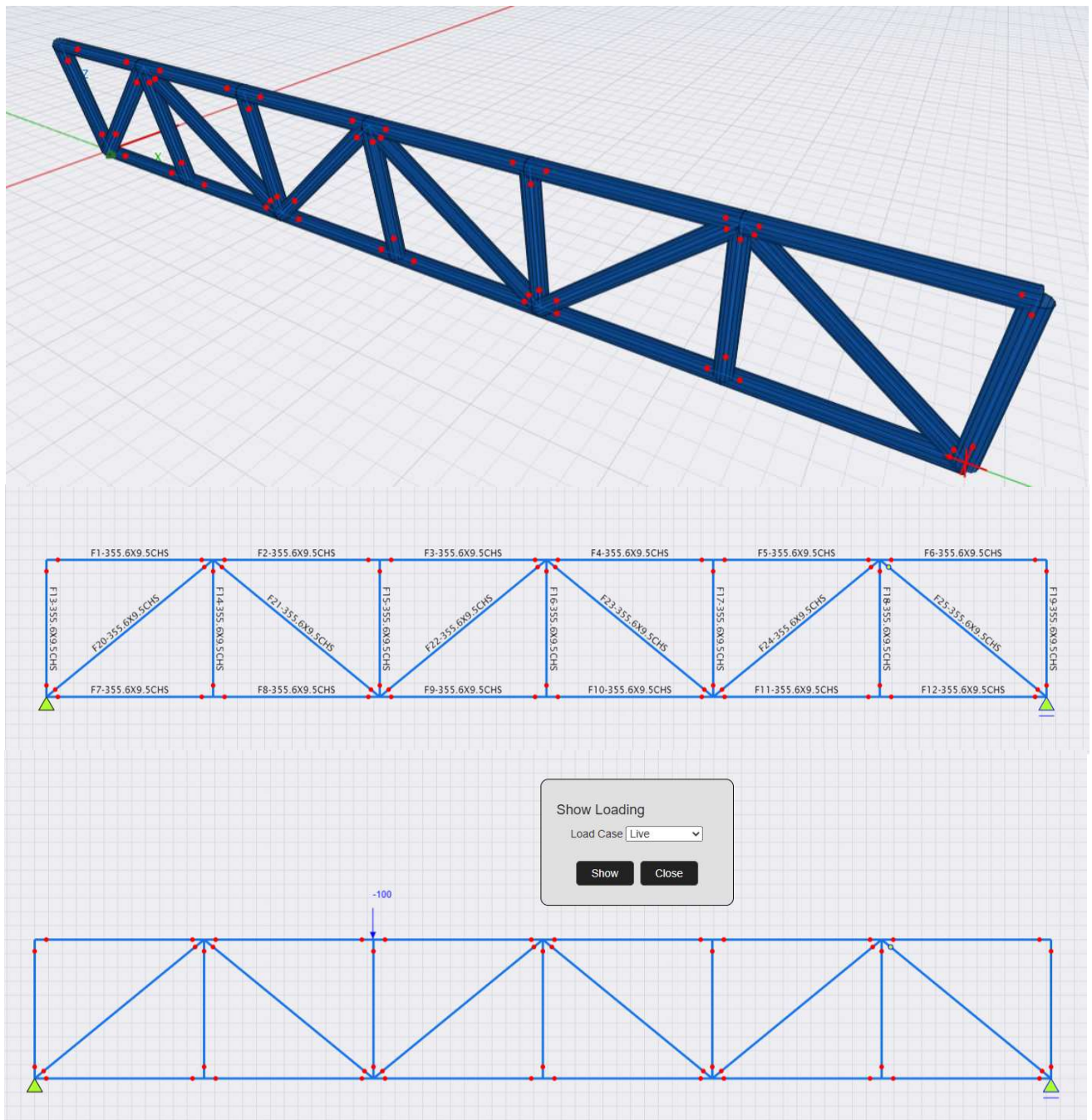




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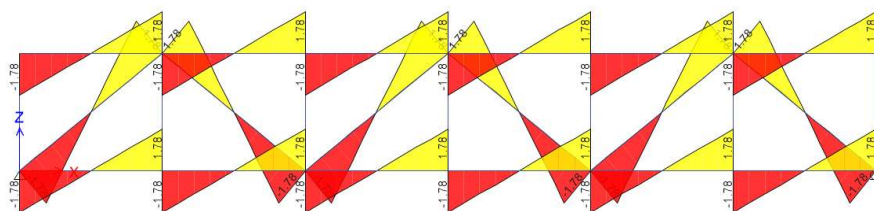
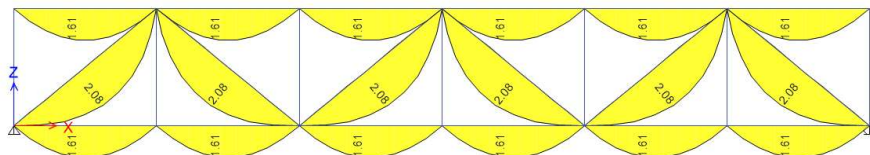
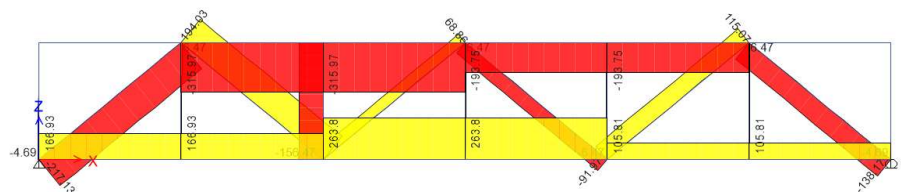
Two-Dimensional Truss Verification

FEAKalc was verified against ETABS using a two-dimensional steel truss comprising pin-connected (moment-released) members. Two independent load cases were applied, consisting of self-weight (dead load) and concentrated live loading. Results were compared using the ultimate load combination $1.2DL + 1.5LL$, simultaneously verifying correct load case superposition together with the finite element solution. The comparison includes deformed shape, member axial forces and support reactions, demonstrating excellent agreement with ETABS and confirming the accuracy of the truss element formulation, load combination procedures and release implementation.



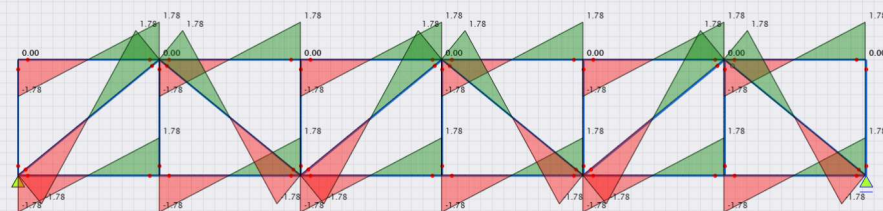
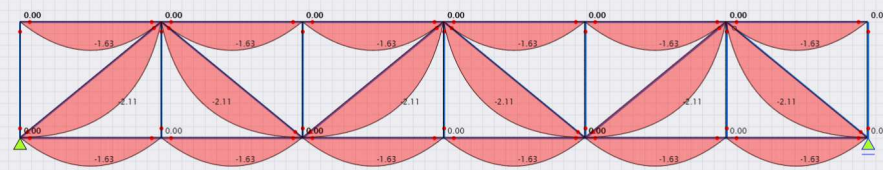
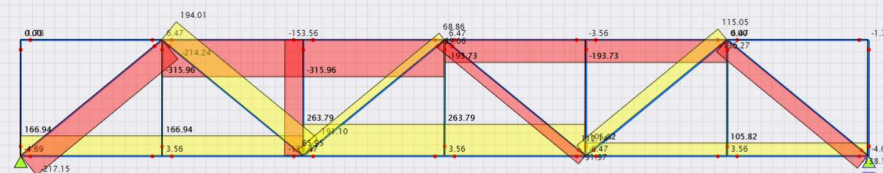


ETABS



Load Combo : 1.2DL + 1.5LL

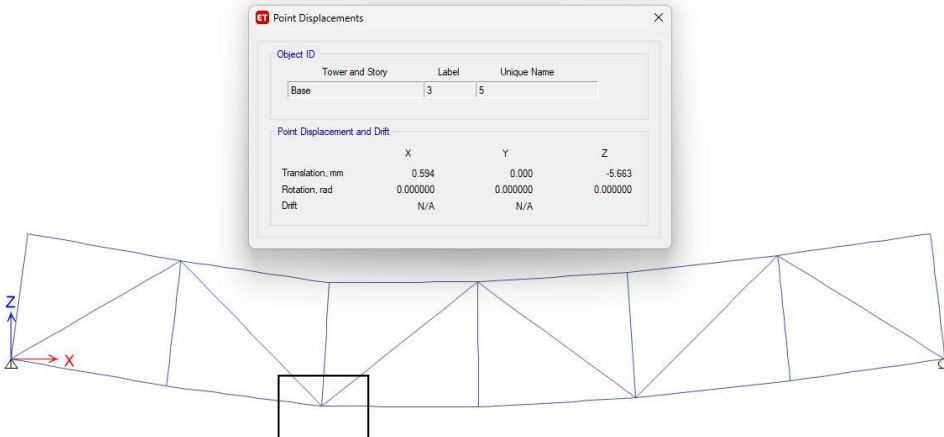
FEAKalc 3D



Load Combo : 1.2DL + 1.5LL

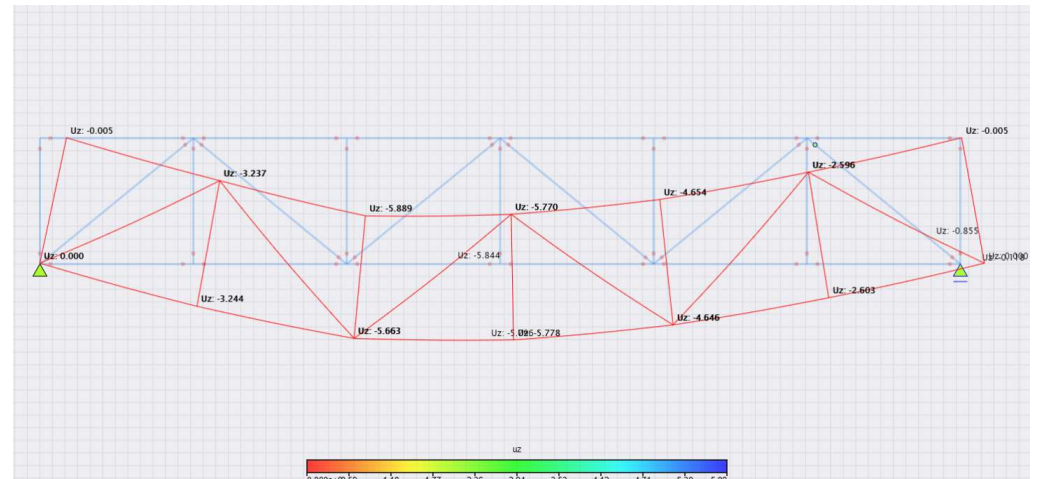


ETABS



Load Combo : 1.2DL + 1.5LL

FEAKalc 3D



Load Combo : 1.2DL + 1.5LL