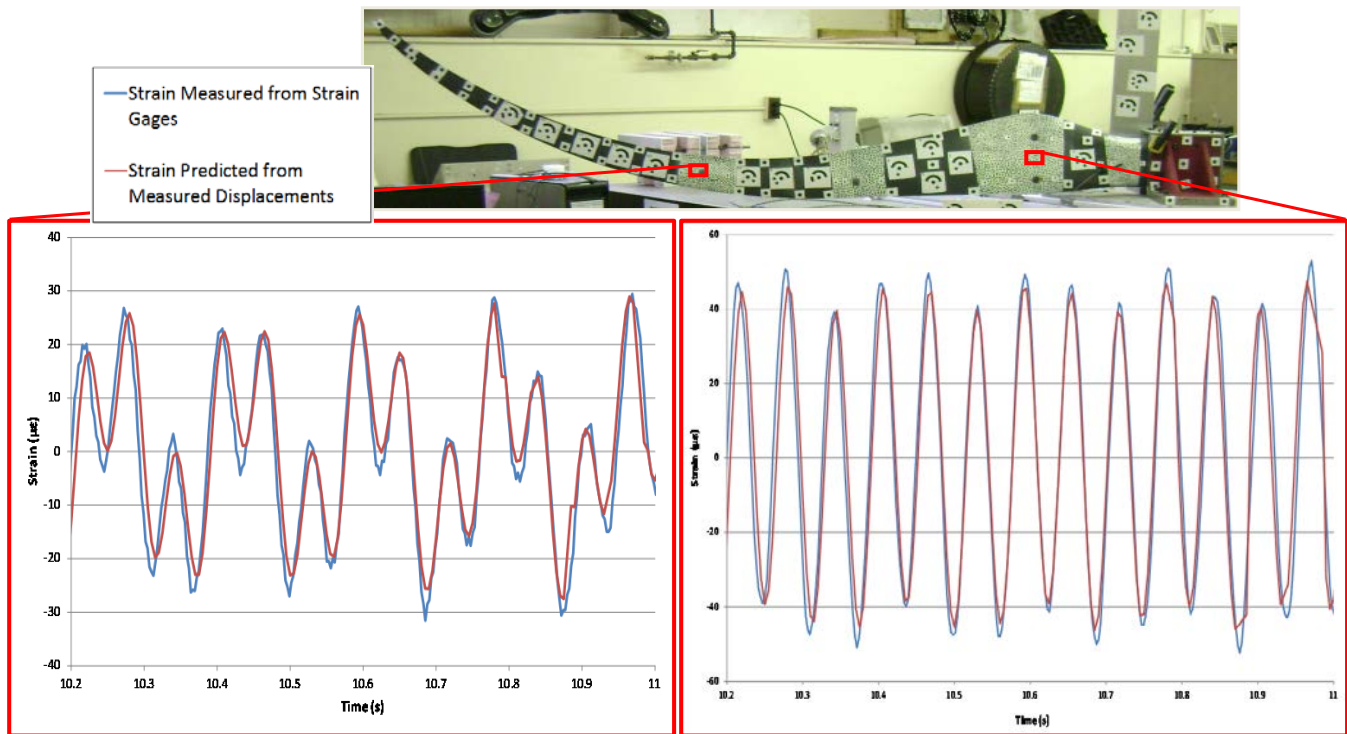


Wind Turbine Blade Full Field Strain from Limited Sets of Dynamic Measurements



Limited number of photogrammatic measurements of dynamic response were used in conjunction with an expansion process to obtain full field displacements. These were then used in conjunction with the finite element model to obtain full field strain and compared to actual strain measurements made; very good agreement overall was observed. The approach overcomes the difficulty in defining the finite element loads and boundary conditions which are often unknown or difficult to identify.