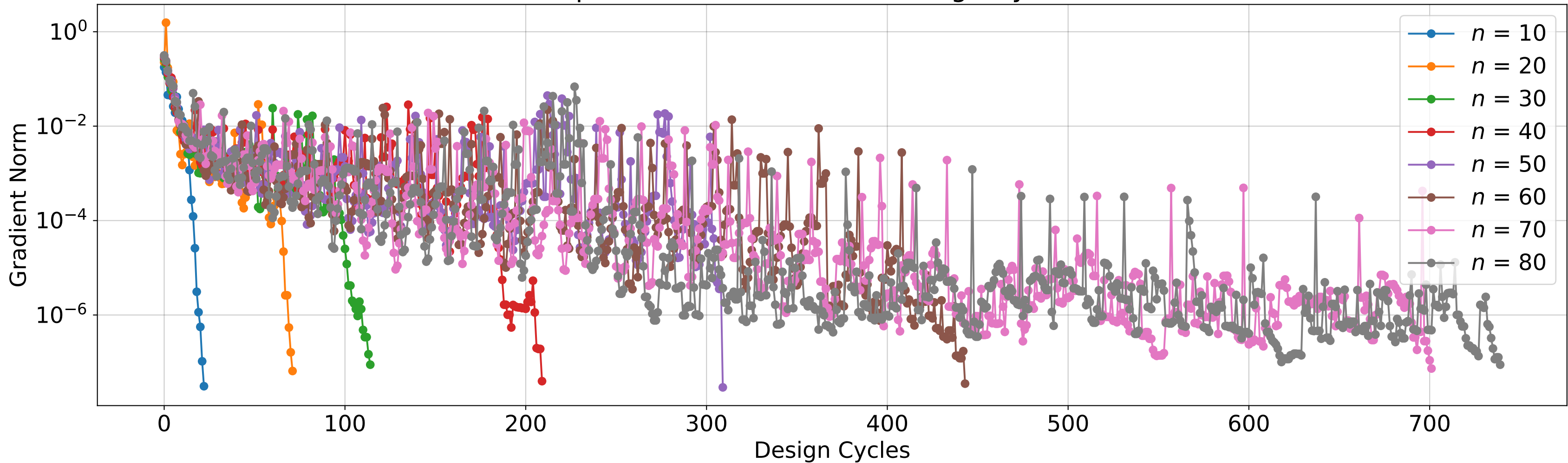
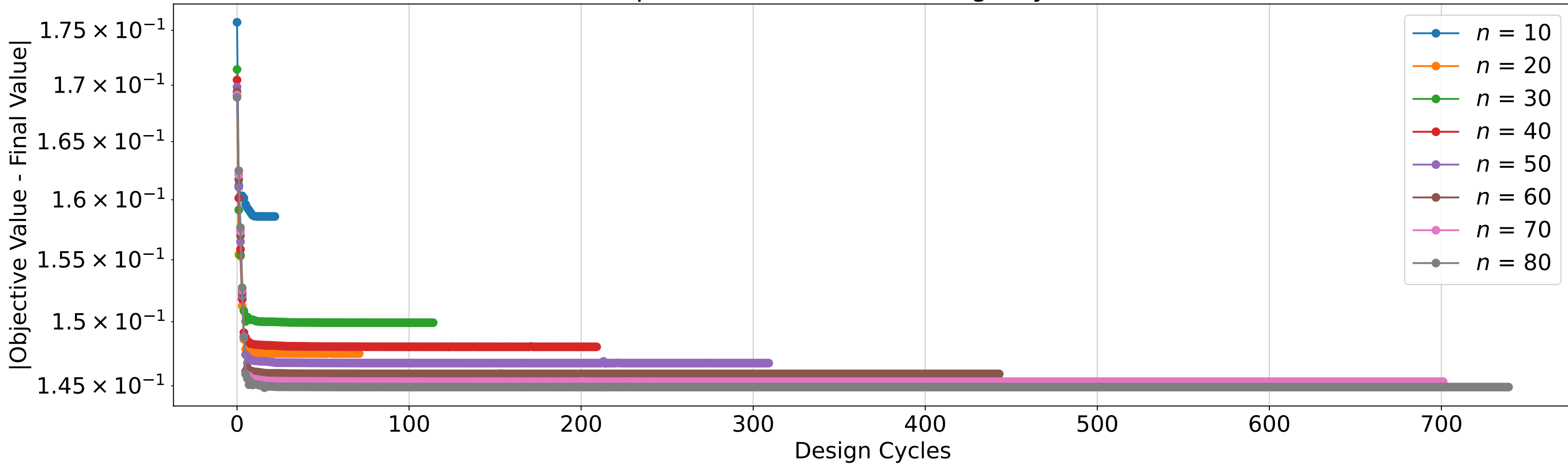


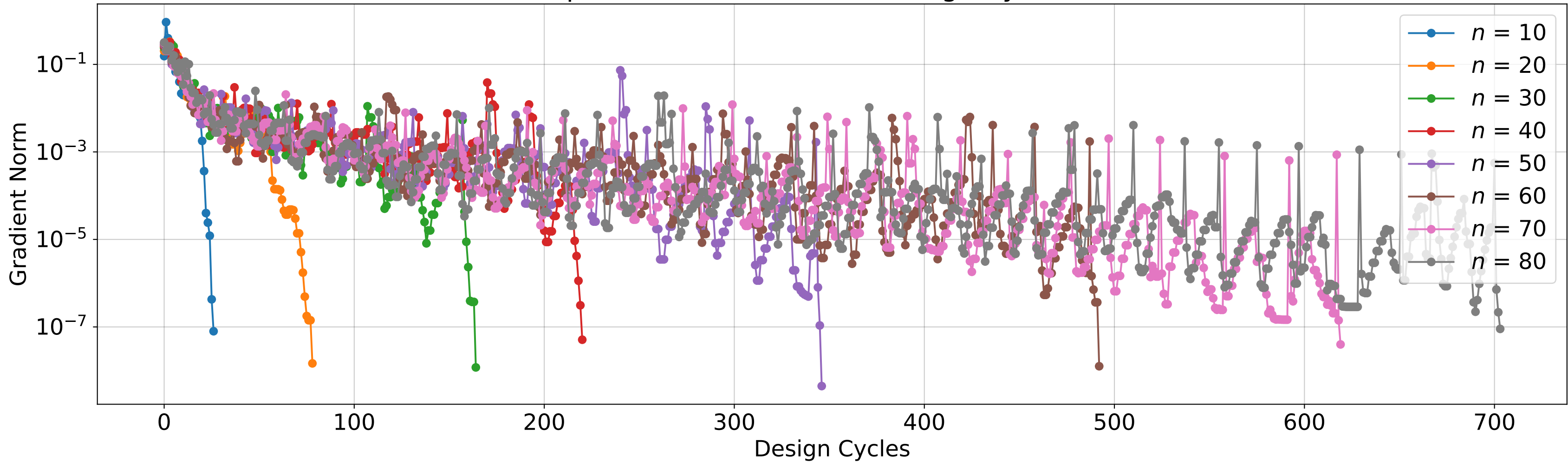
Reduced-space BFGS Gradient vs Design Cycles, $m = 2592$



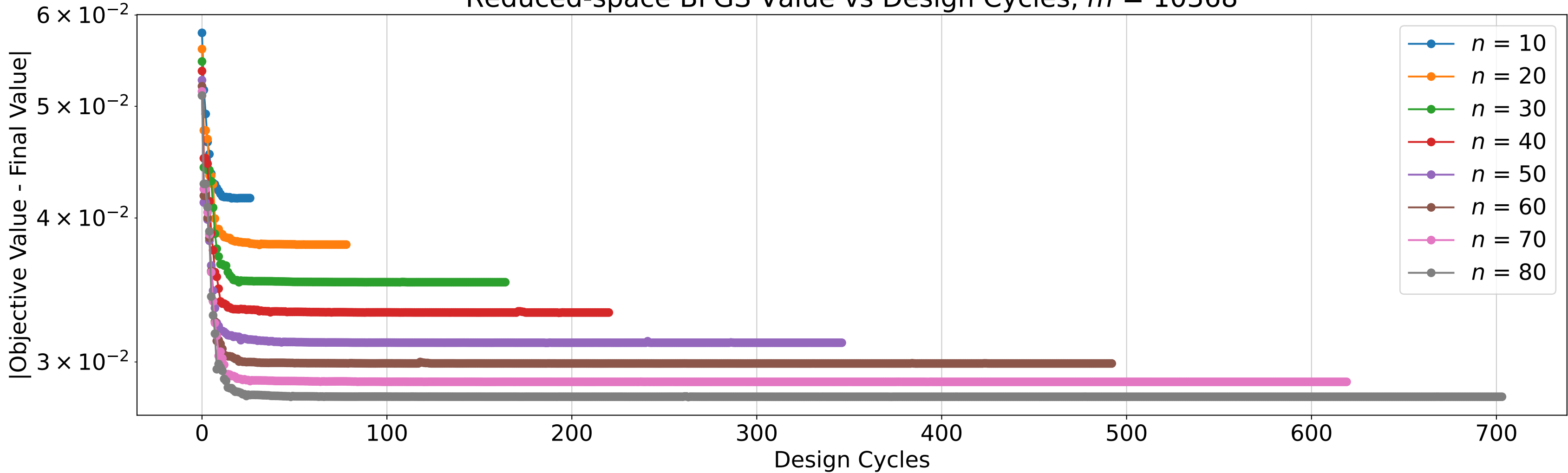
Reduced-space BFGS Value vs Design Cycles, $m = 2592$



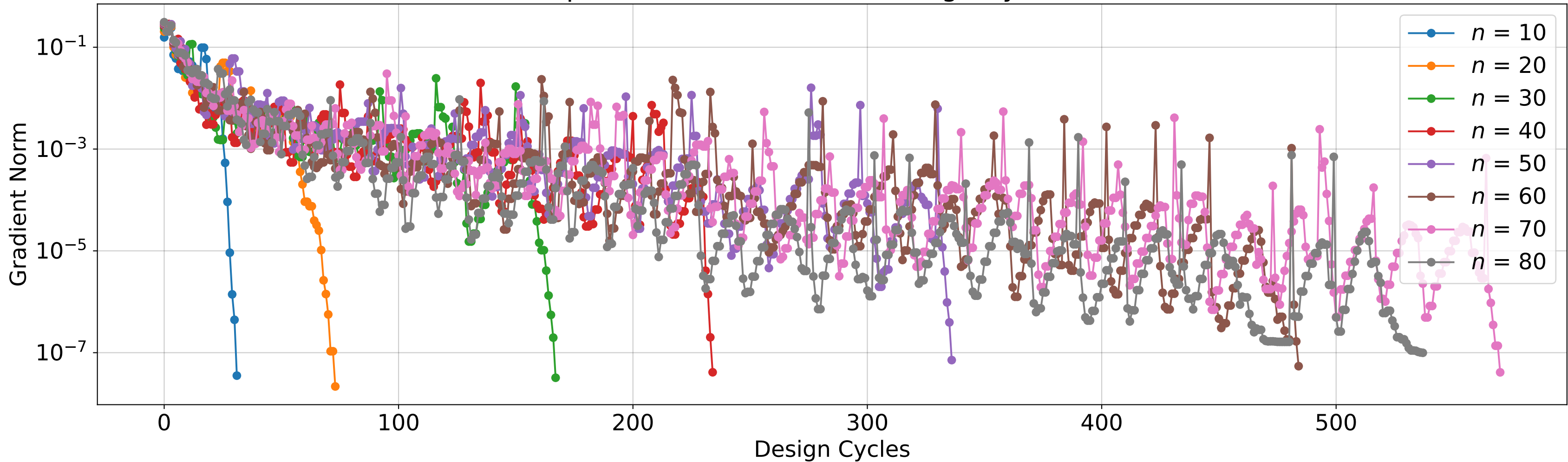
Reduced-space BFGS Gradient vs Design Cycles, $m = 10368$



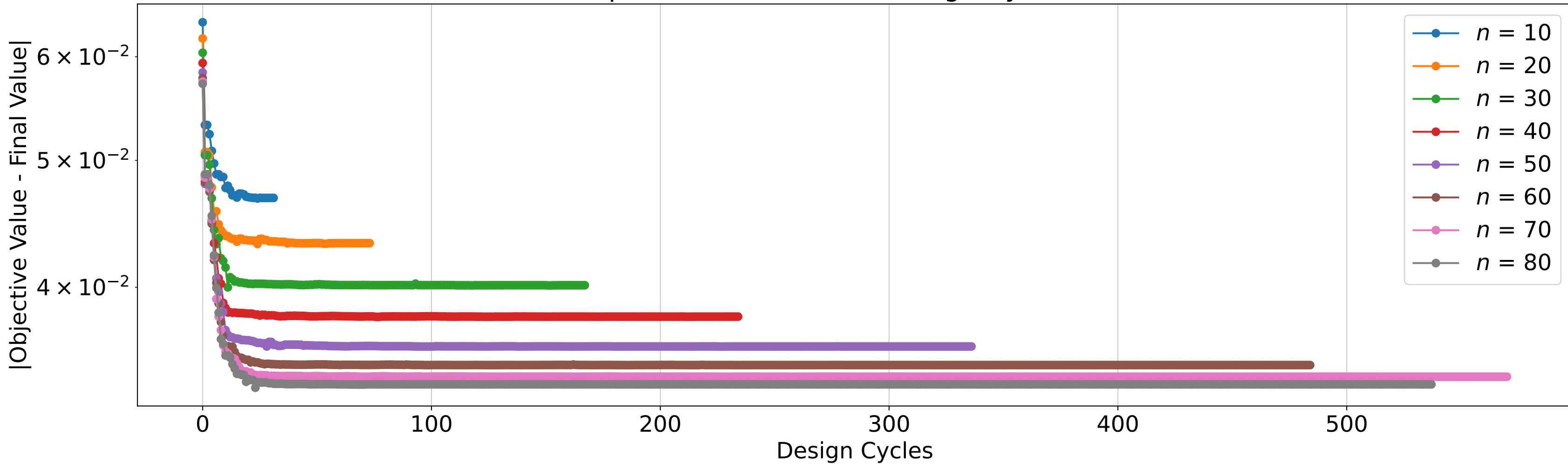
Reduced-space BFGS Value vs Design Cycles, $m = 10368$



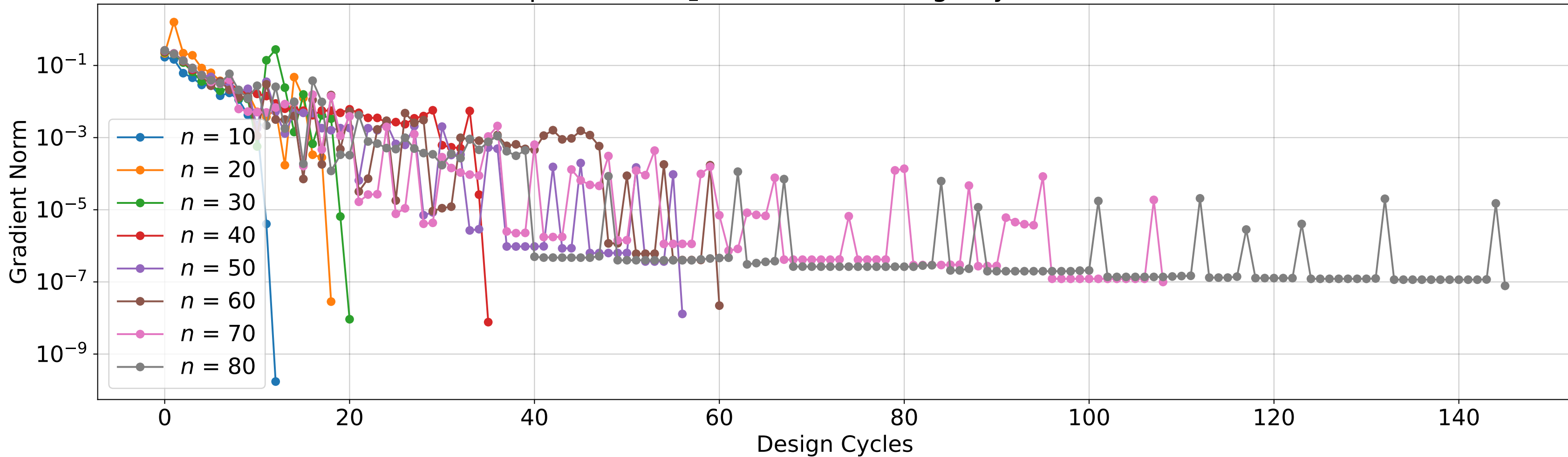
Reduced-space BFGS Gradient vs Design Cycles, $m = 23328$



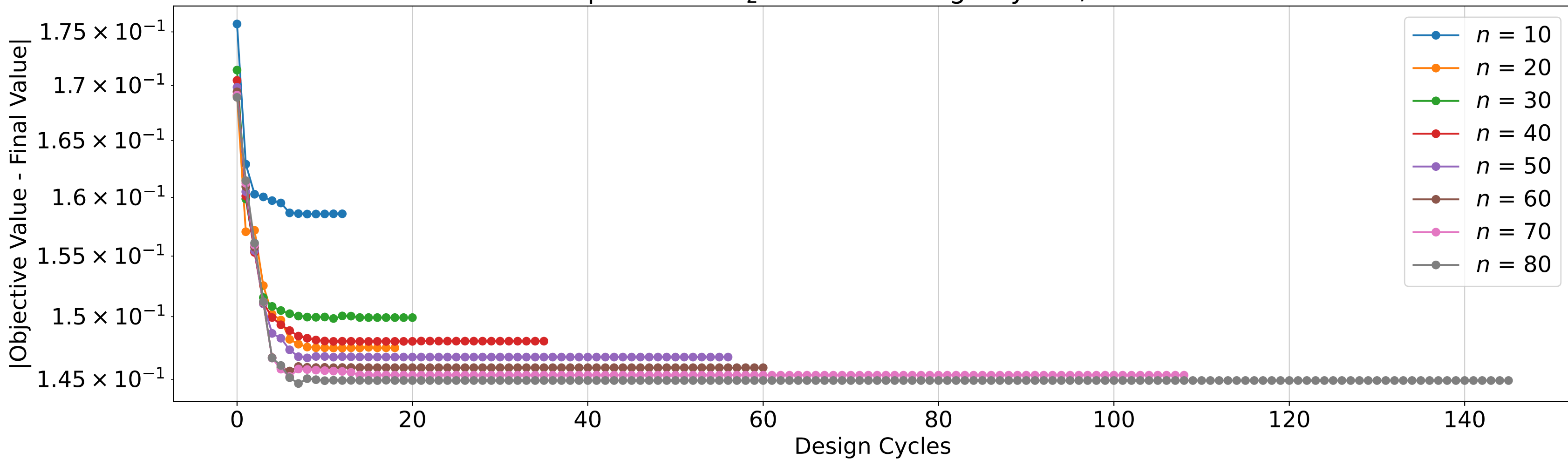
Reduced-space BFGS Value vs Design Cycles, $m = 23328$



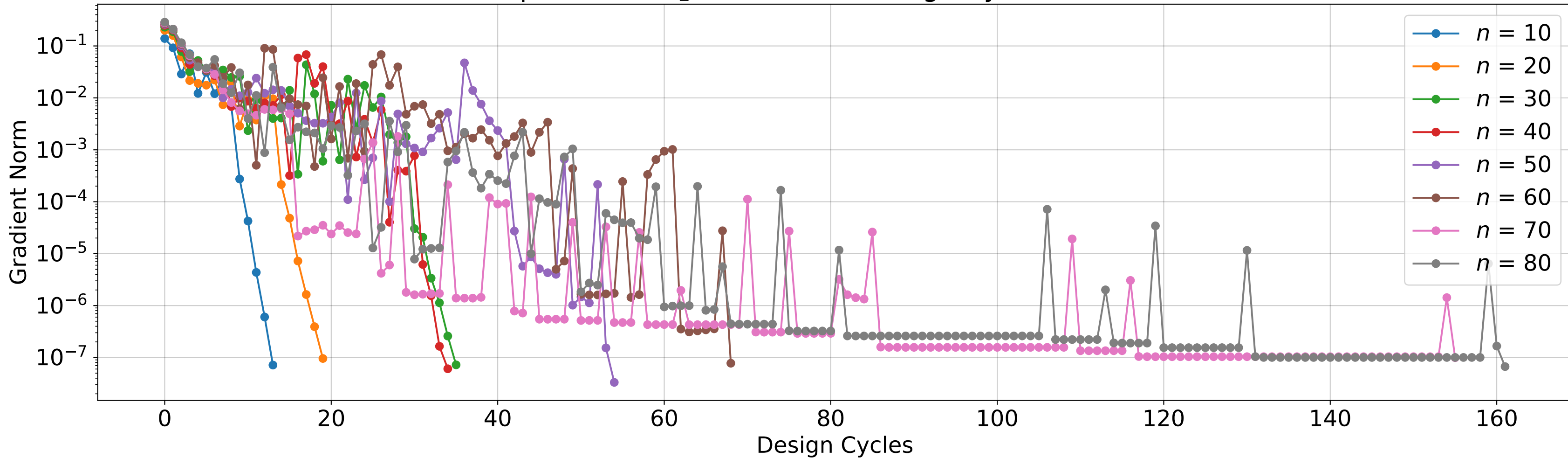
Full-space with $\tilde{\mathbf{P}}_2$ Gradient vs Design Cycles, $m = 2592$



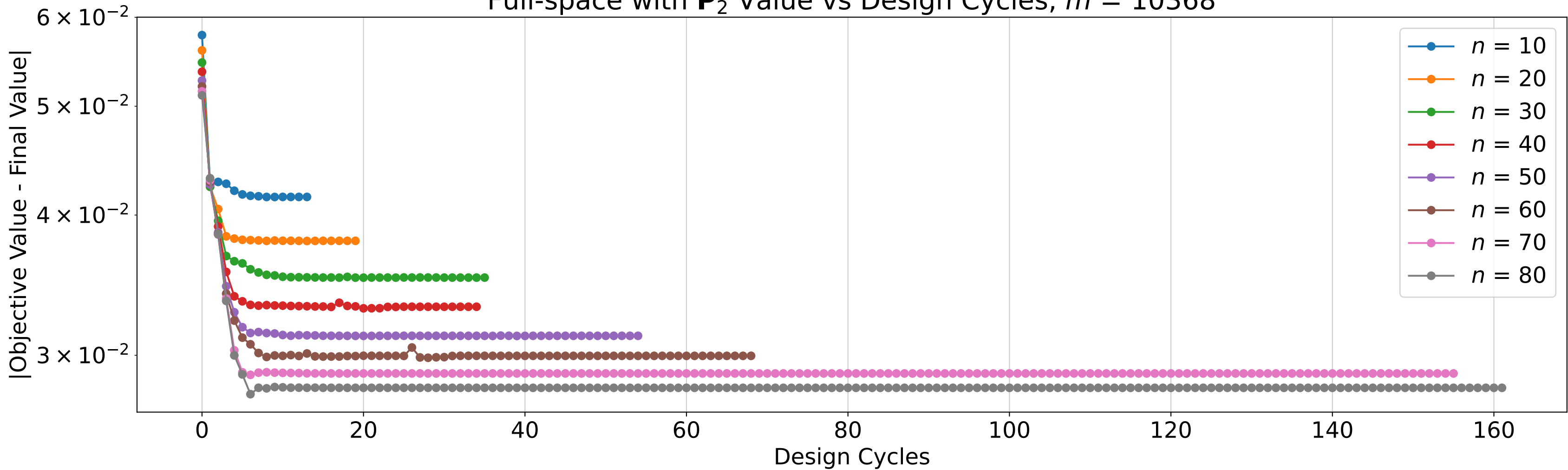
Full-space with $\tilde{\mathbf{P}}_2$ Value vs Design Cycles, $m = 2592$



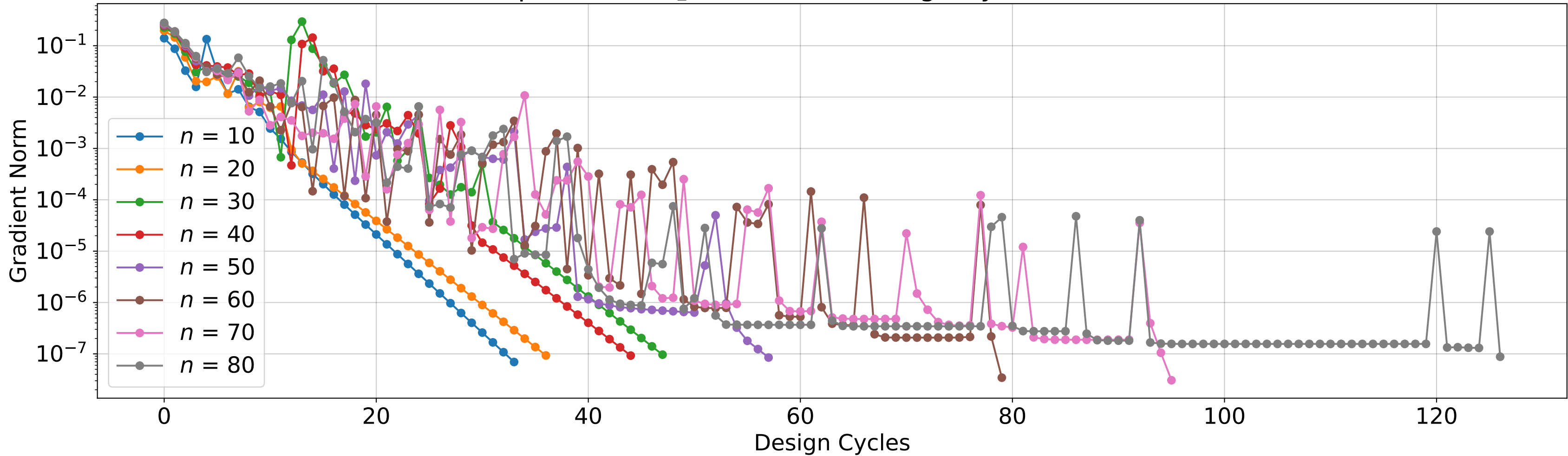
Full-space with $\tilde{\mathbf{P}}_2$ Gradient vs Design Cycles, $m = 10368$



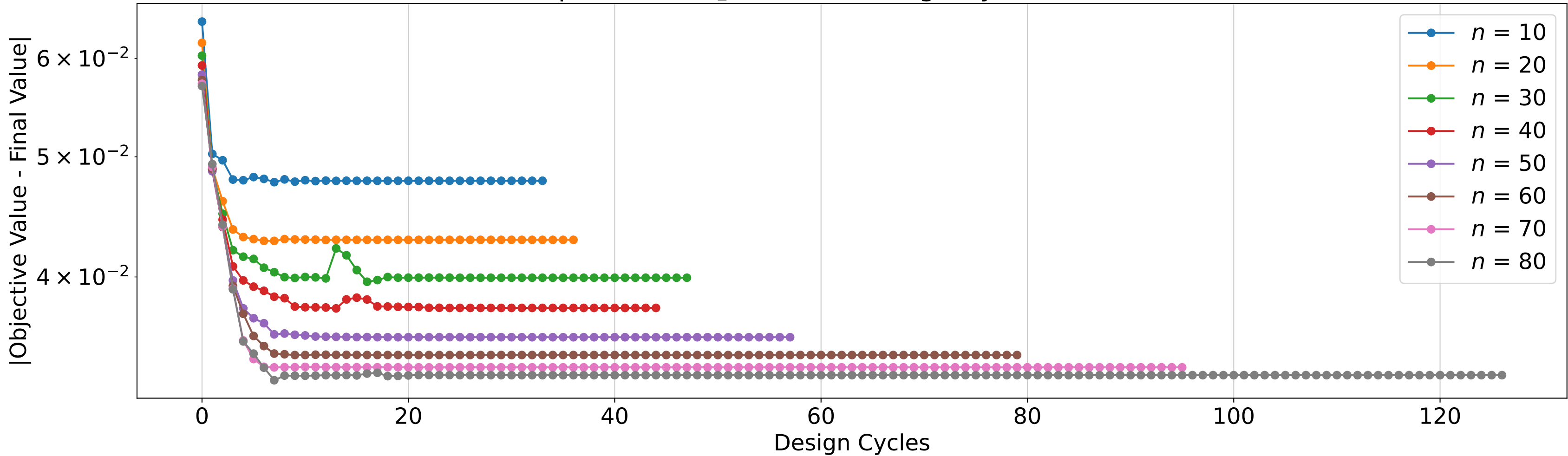
Full-space with $\tilde{\mathbf{P}}_2$ Value vs Design Cycles, $m = 10368$



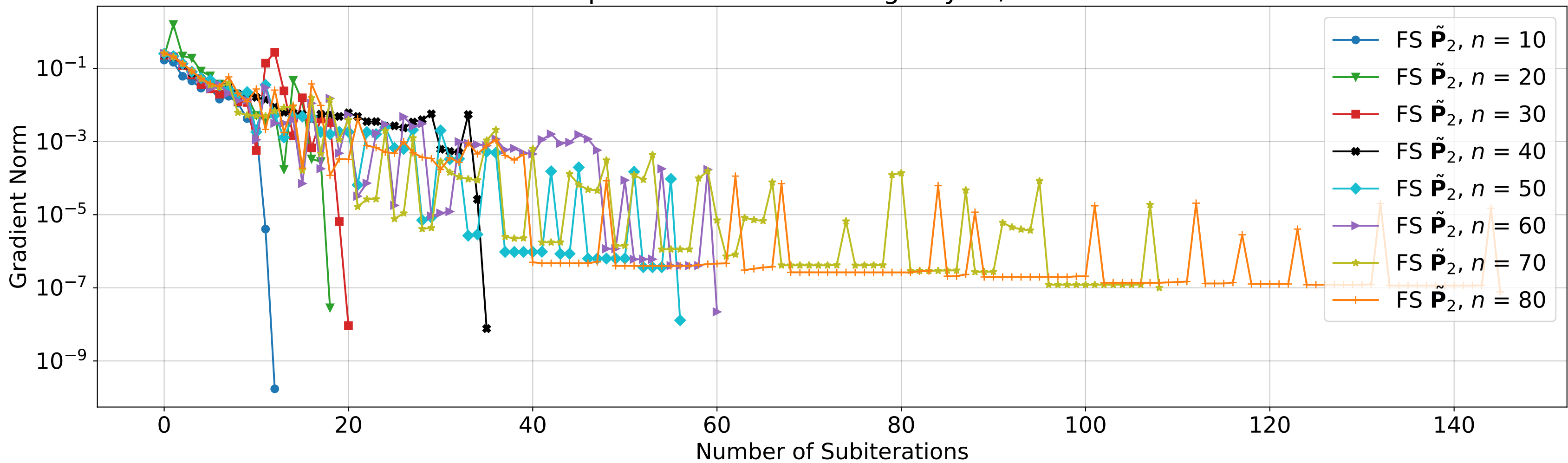
Full-space with $\tilde{\mathbf{P}}_2$ Gradient vs Design Cycles, $m = 23328$

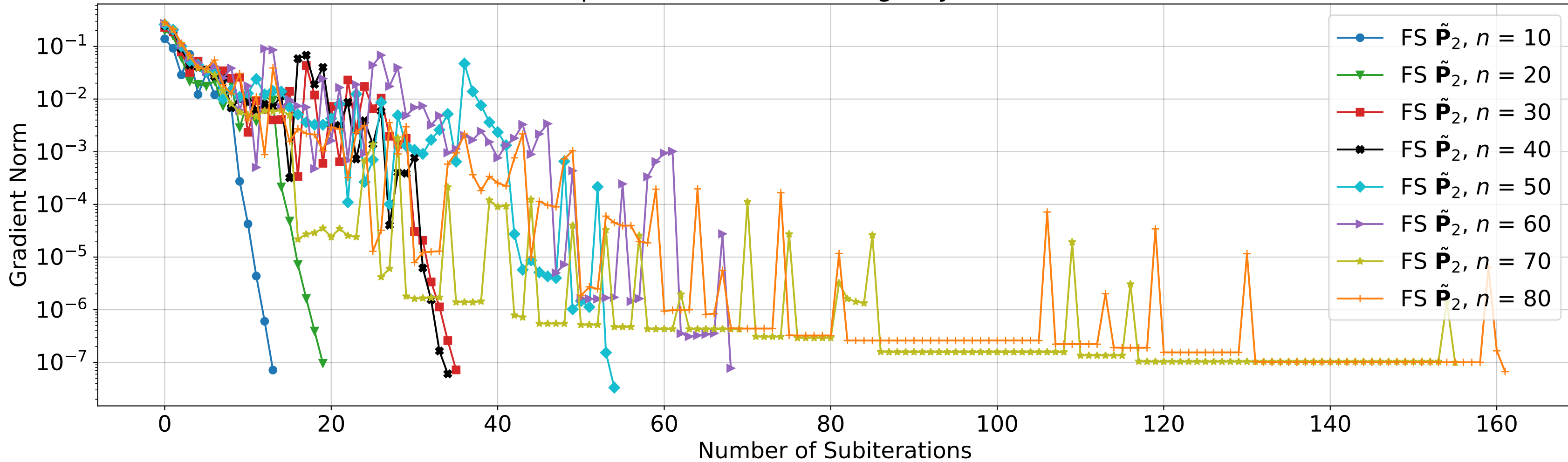


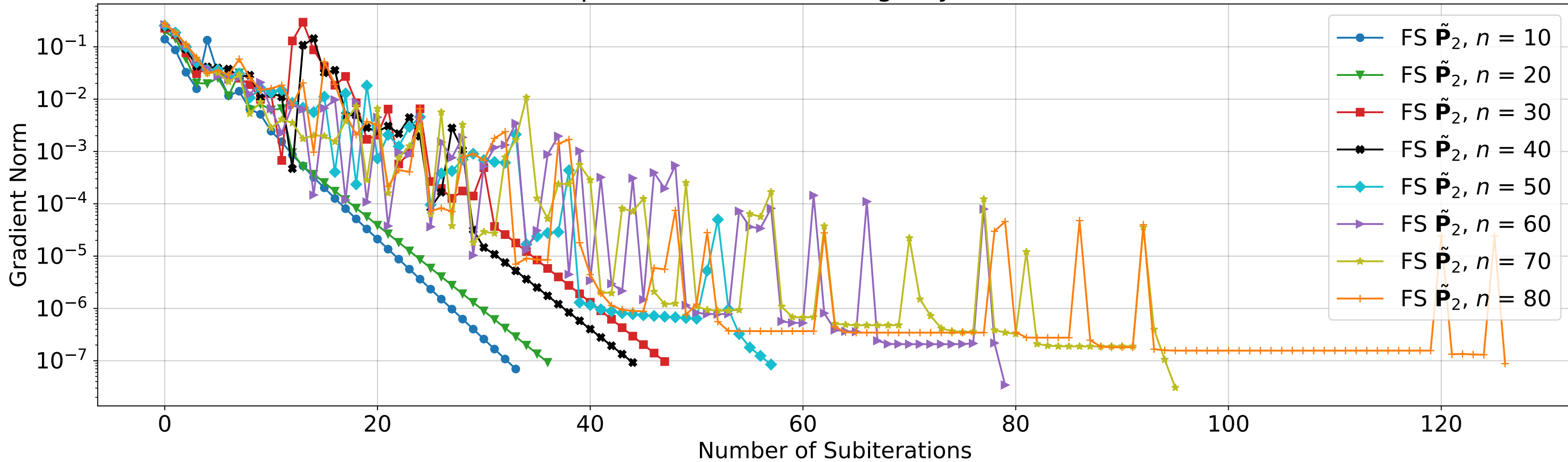
Full-space with $\tilde{\mathbf{P}}_2$ Value vs Design Cycles, $m = 23328$

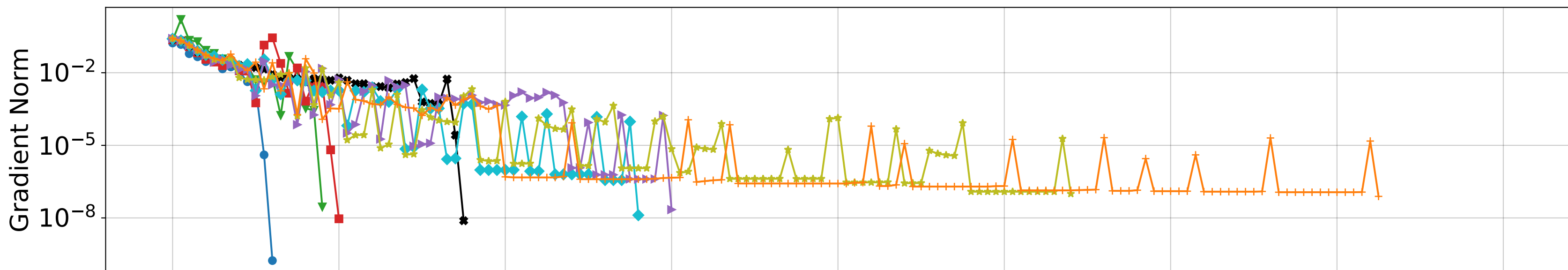
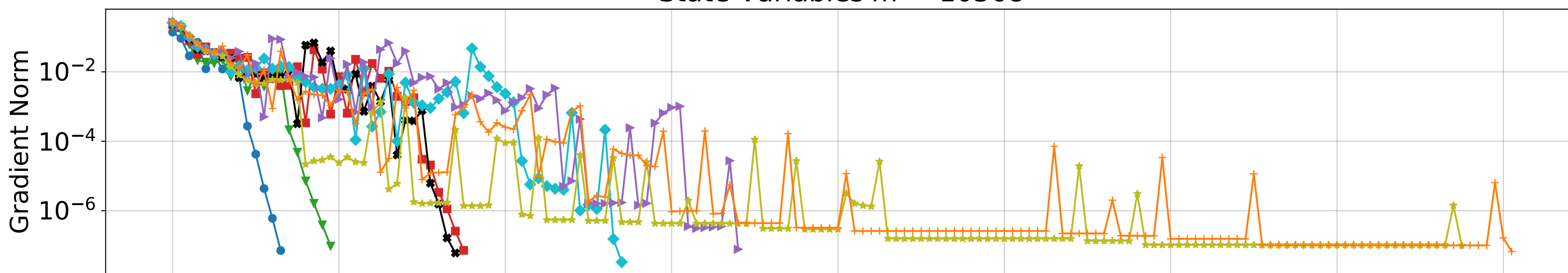
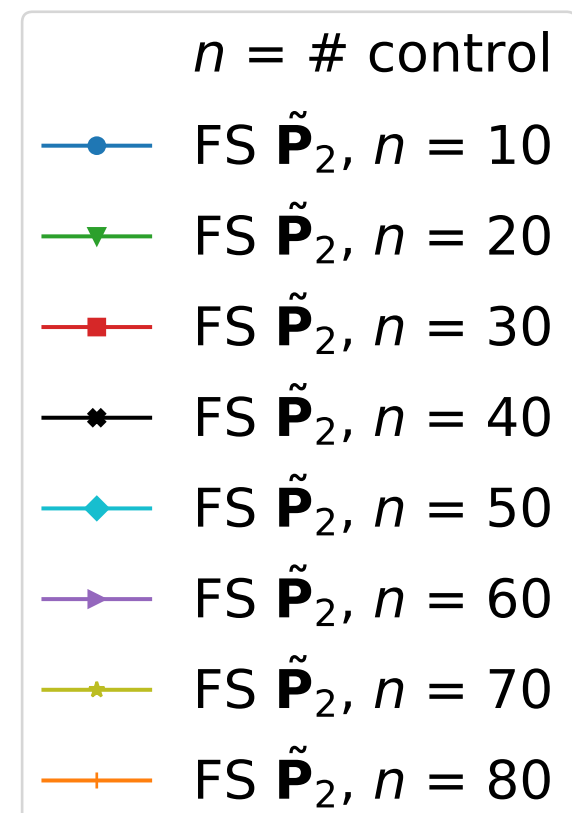
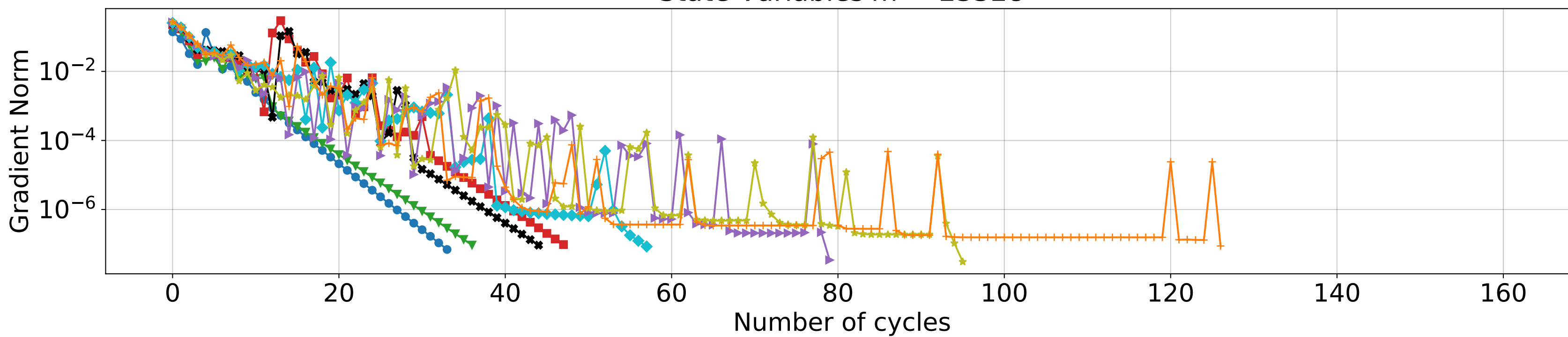


Full-space Gradient vs Design Cyles, $m = 2592$

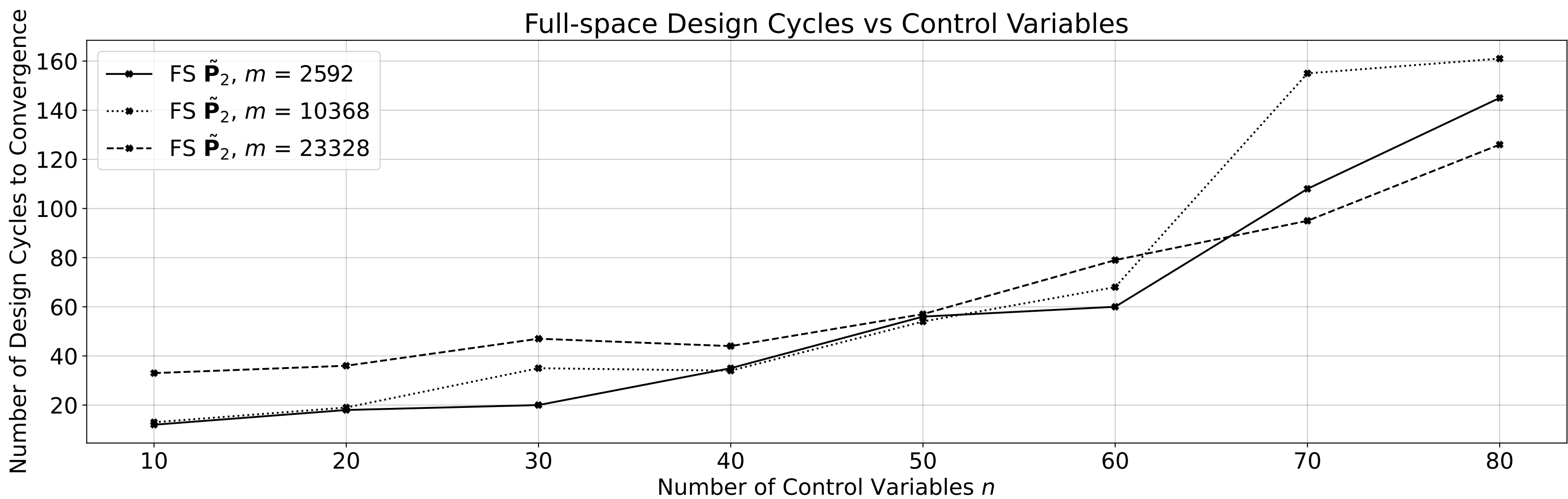


Full-space Gradient vs Design Cycles, $m = 10368$ 

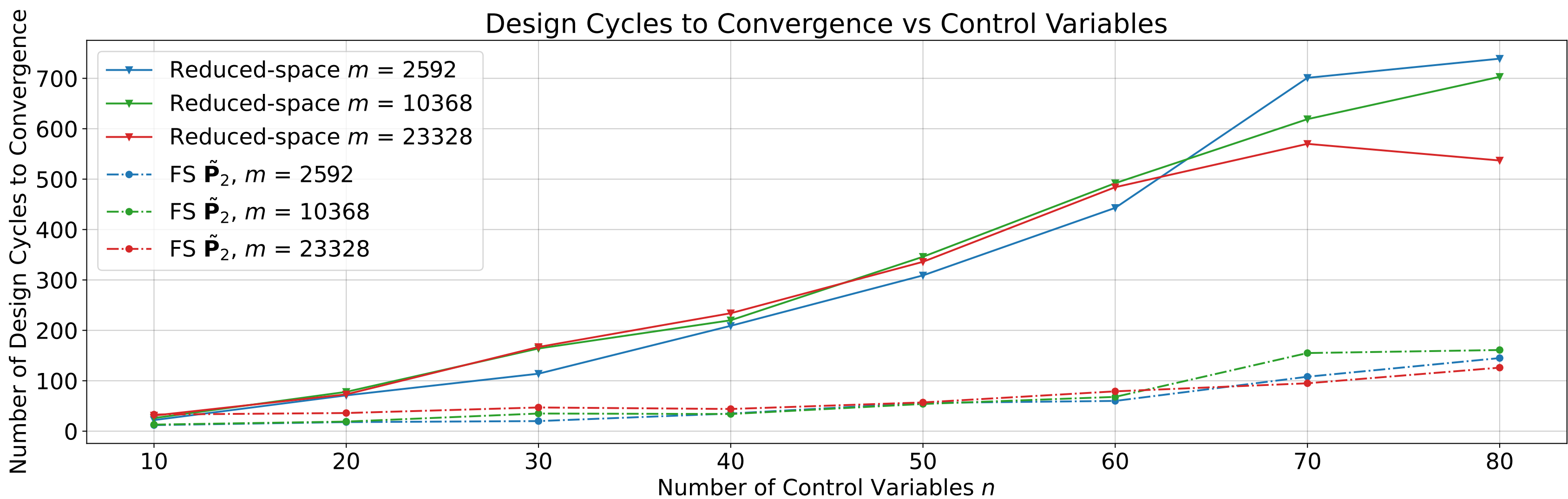
Full-space Gradient vs Design Cycles, $m = 23328$ 

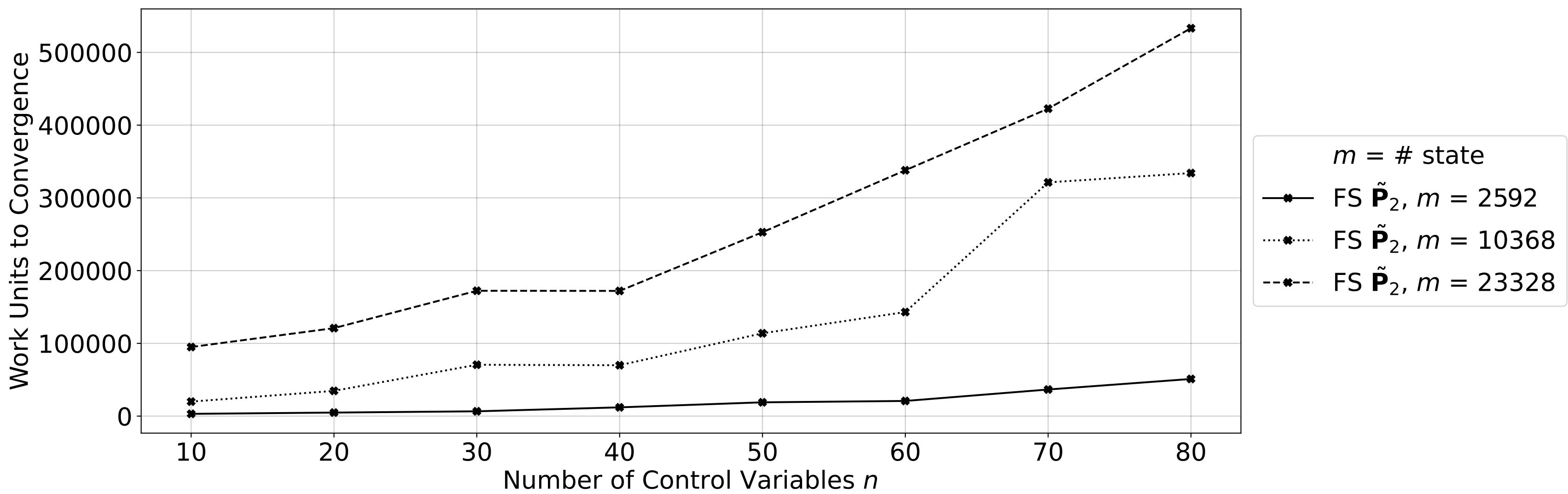
State Variables $m = 2592$ State Variables $m = 10368$ State Variables $m = 23328$ 

Full-space Design Cycles vs Control Variables

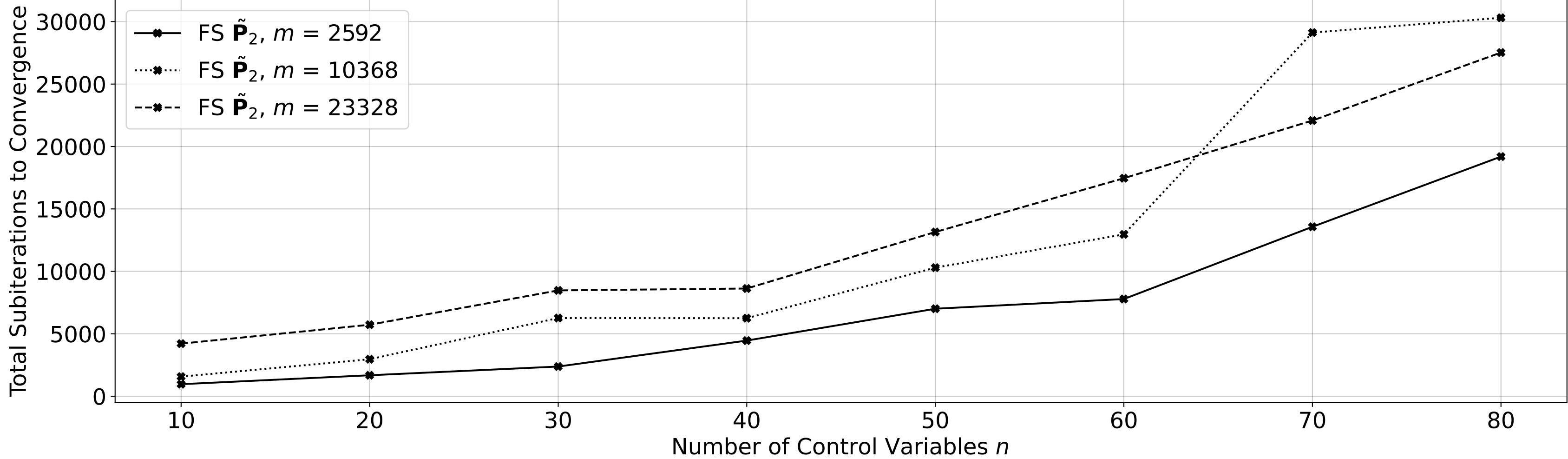


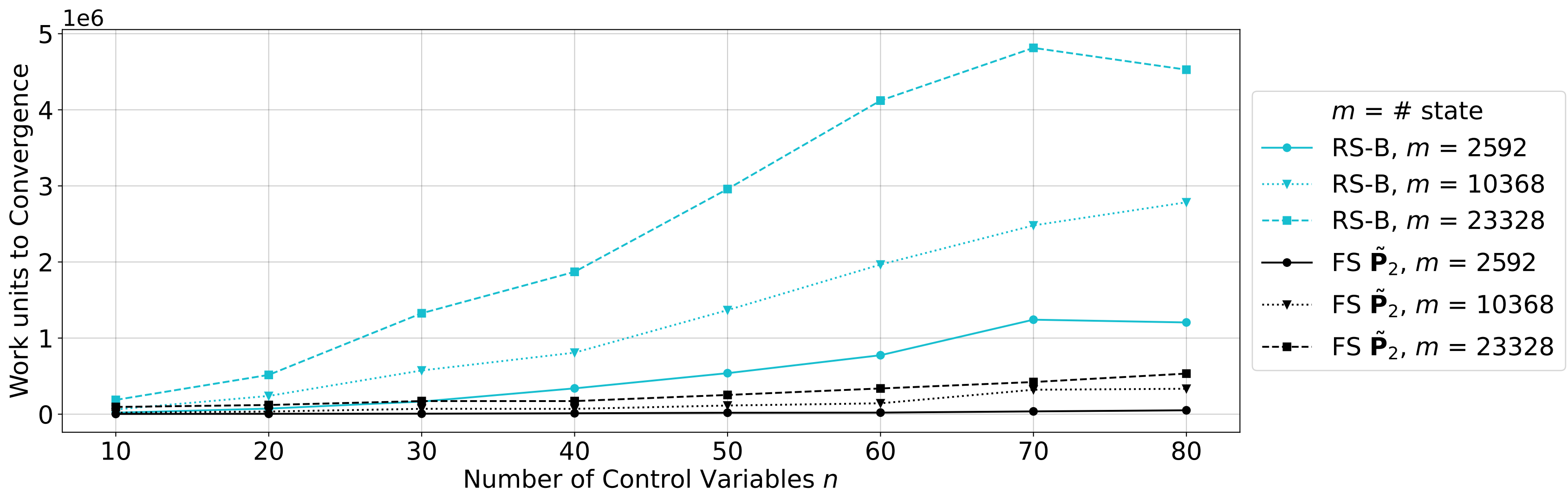
Design Cycles to Convergence vs Control Variables



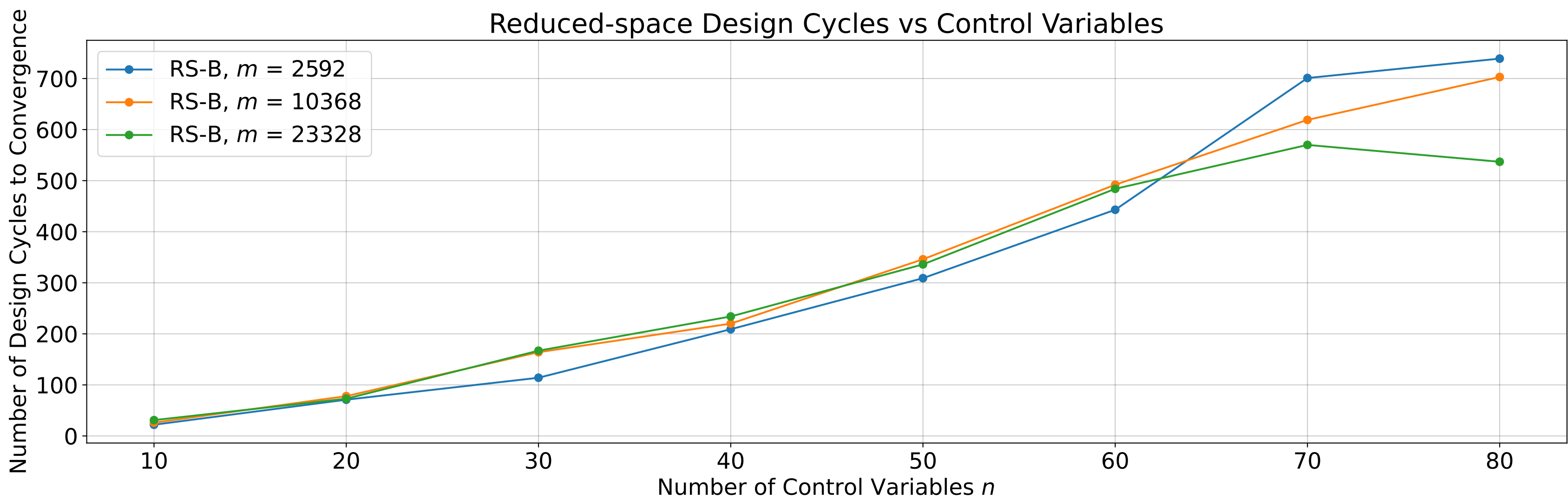


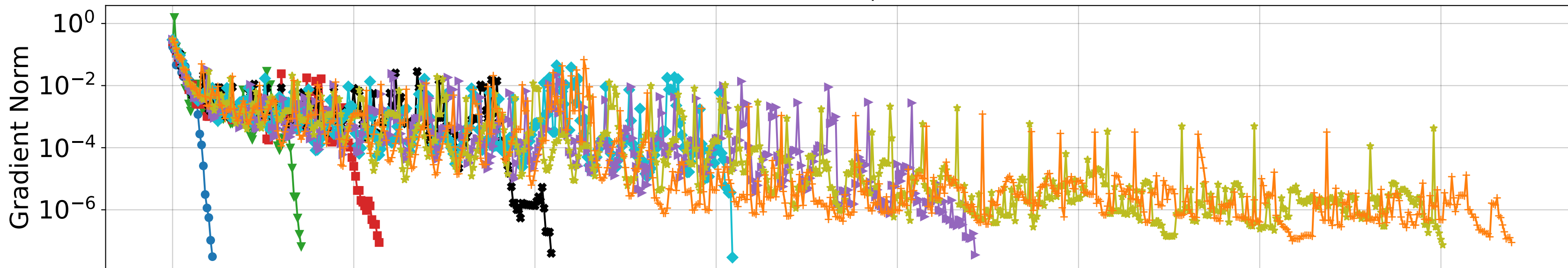
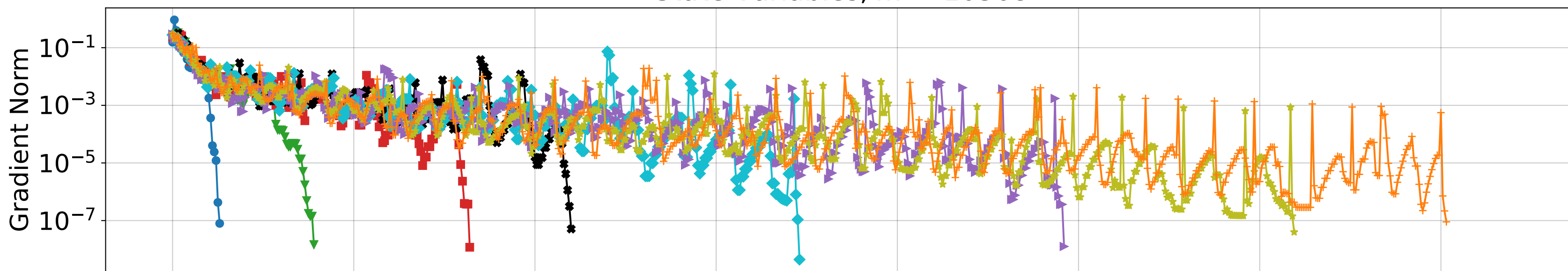
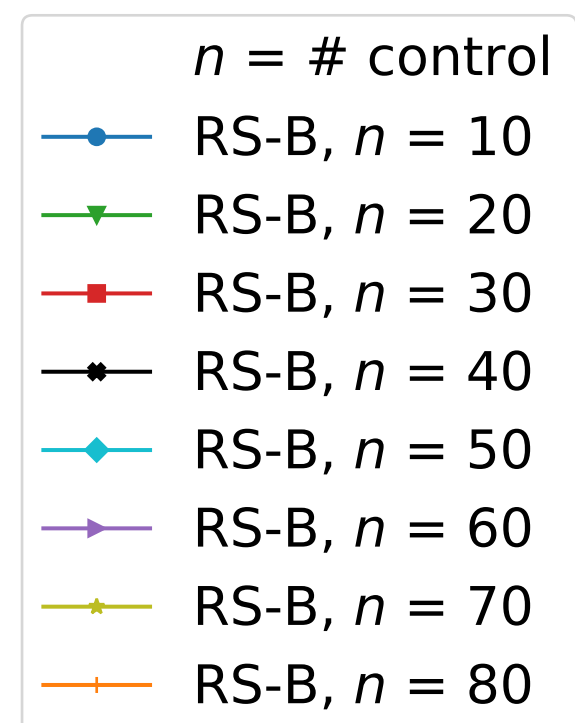
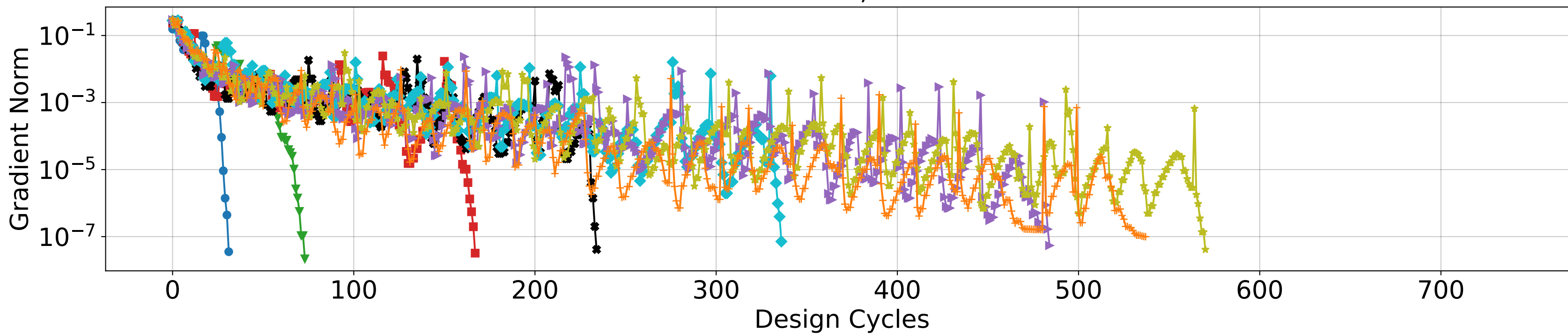
Total Subiterations vs Control Variables

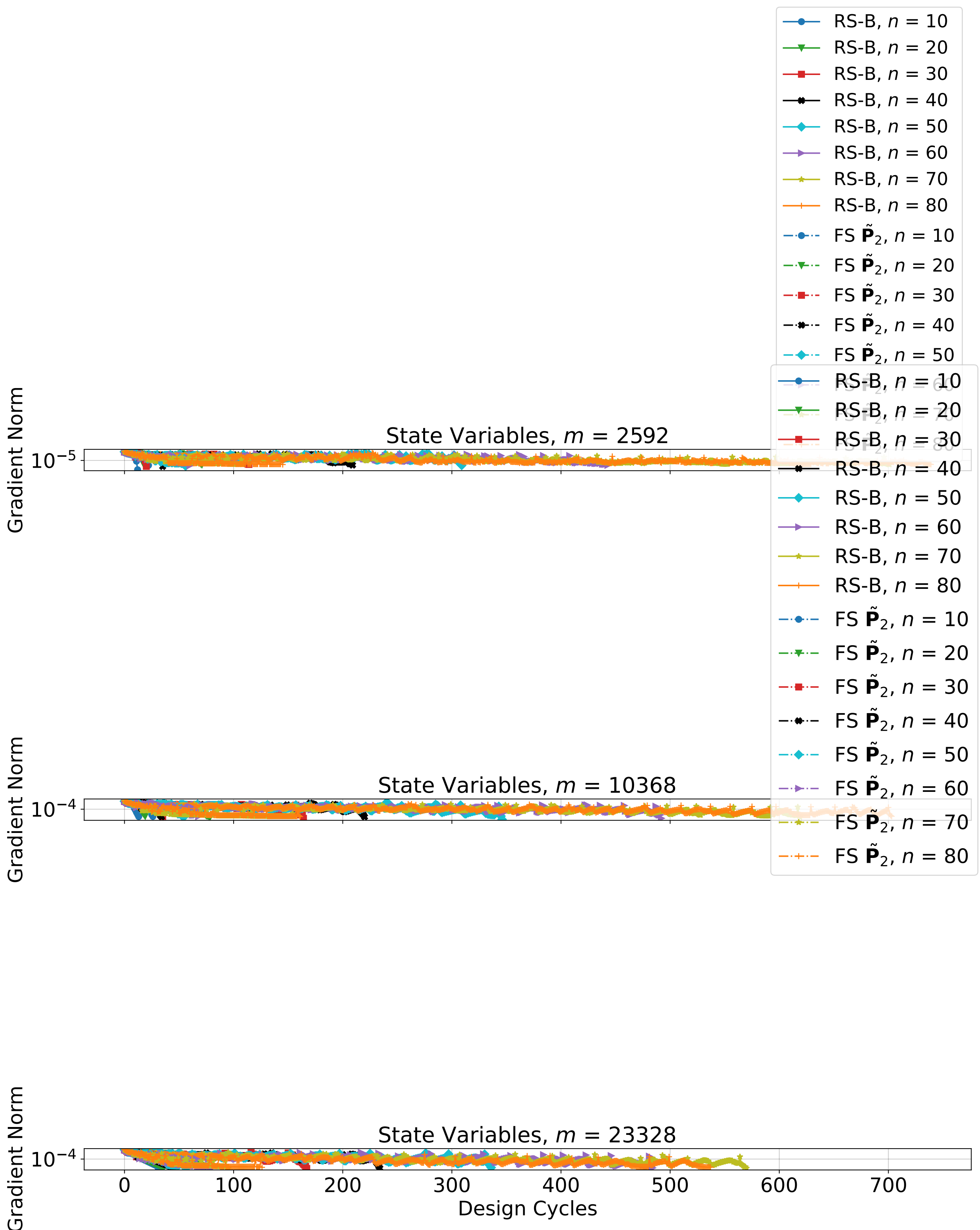


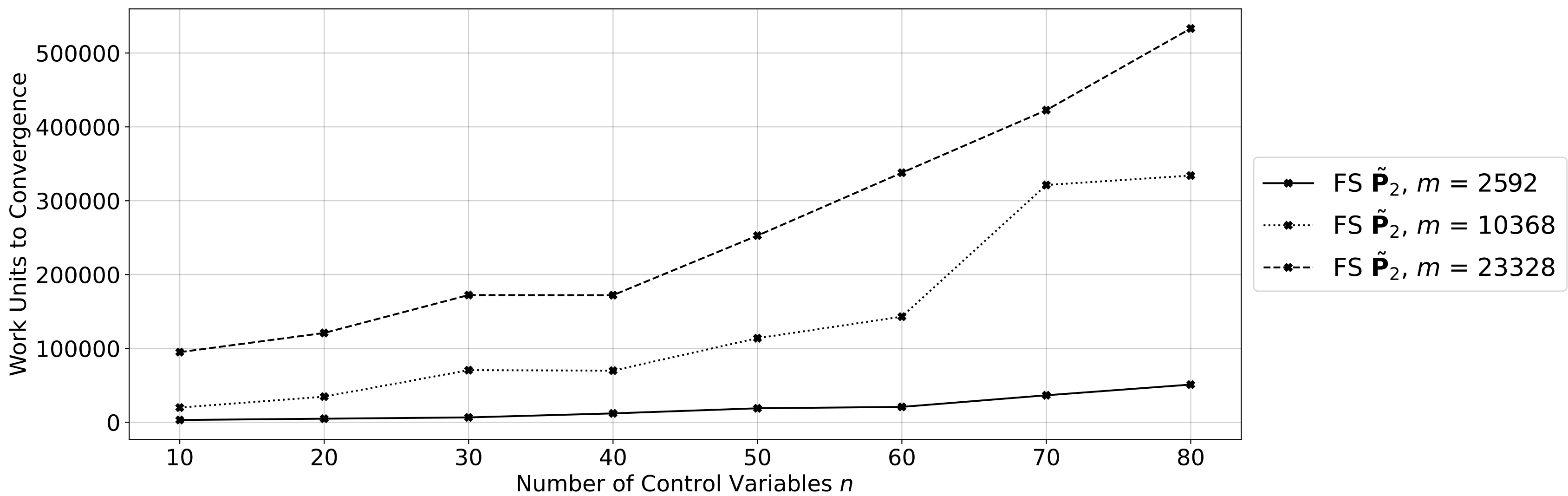


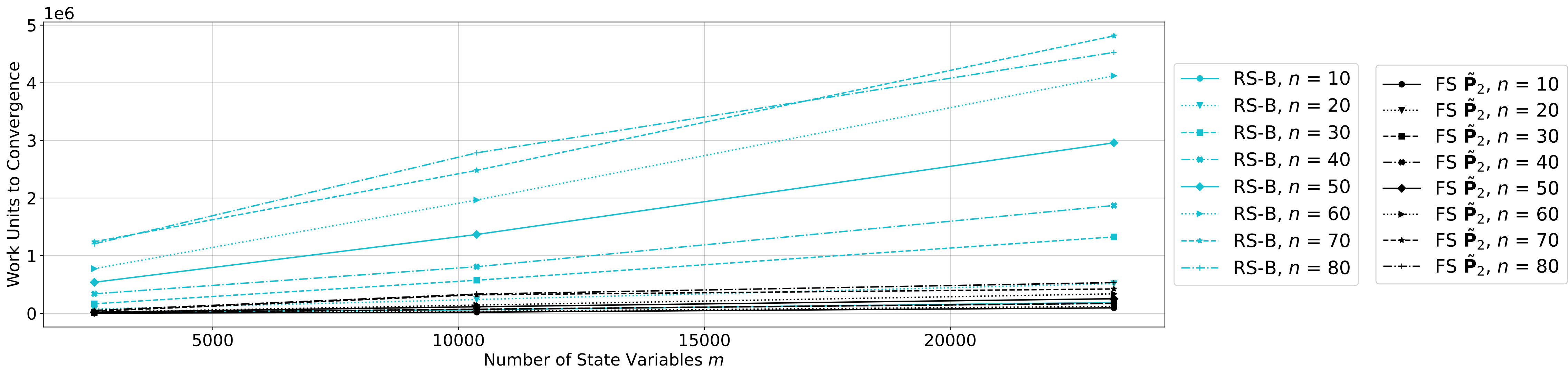
Reduced-space Design Cycles vs Control Variables



State Variables, $m = 2592$ State Variables, $m = 10368$ State Variables, $m = 23328$ 







Gradient Norm vs Design Cycles $m = 10368$

