^{2}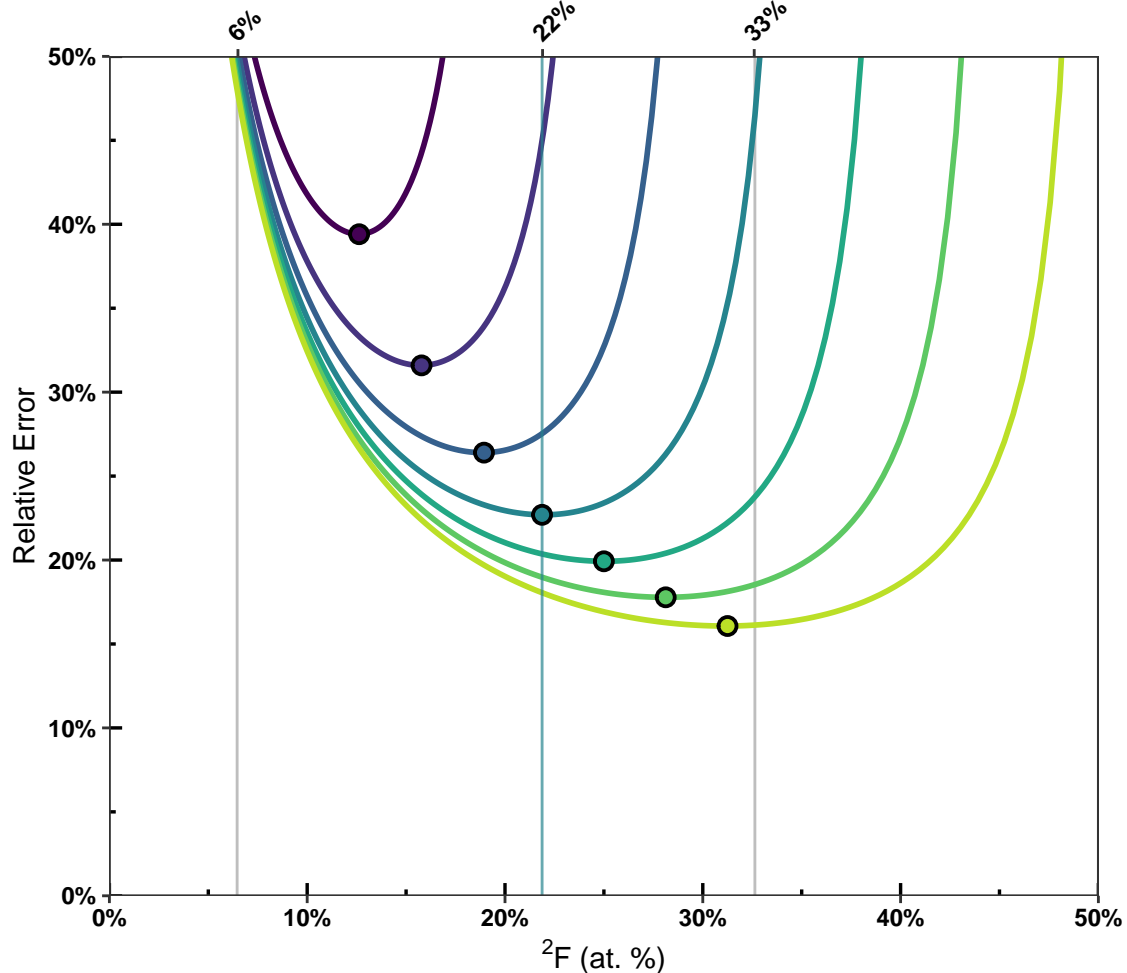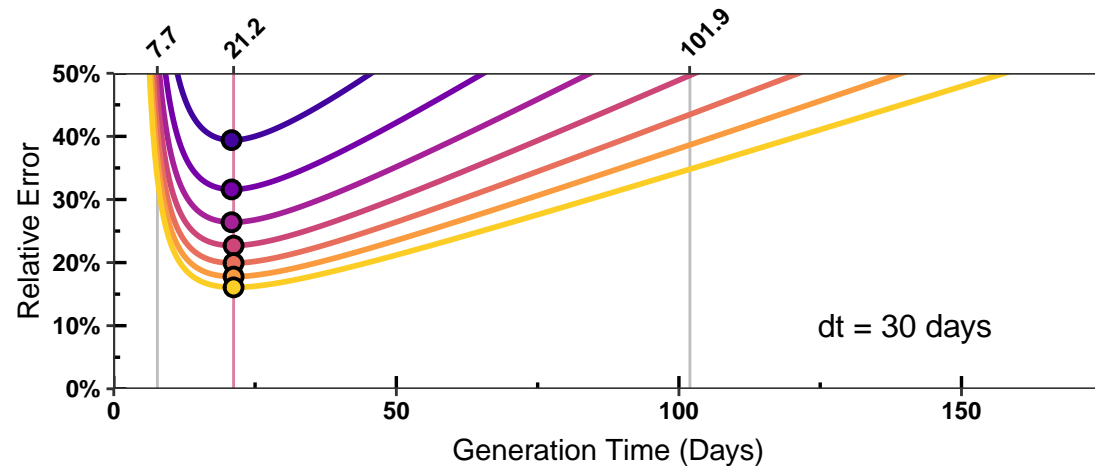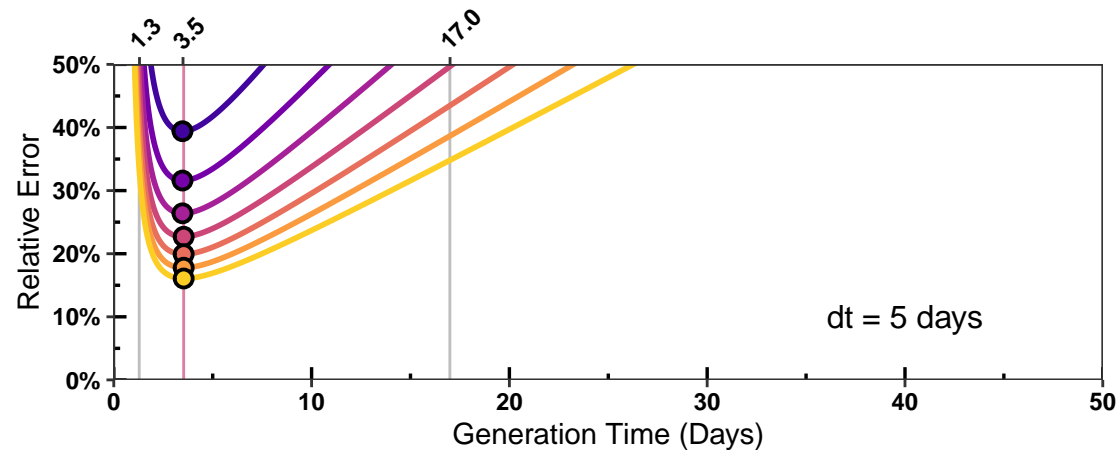F quantification range