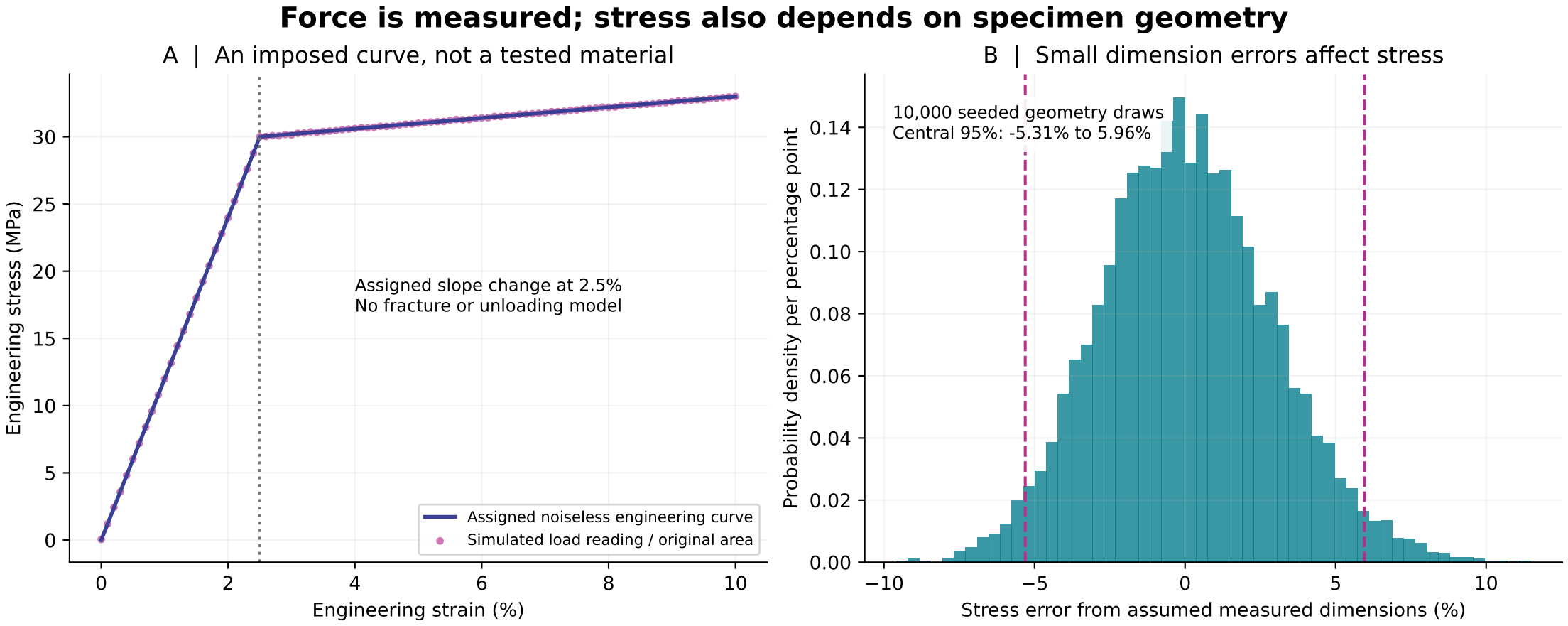

Force is measured; stress also depends on specimen geometry
A | An imposed curve, not a tested material
Engineering stress (MPa)
Engineering strain (%)
Assigned slope change at 2.5%
No fracture or unloading model
Assigned noiseless engineering curve
Simulated load reading / original area
B | Small dimension errors affect stress
10,000 seeded geometry draws
Central 95%: -5.31% to 5.96%
Probability density per percentage point
Stress error from assumed measured dimensions (%)
All curves and error distributions are synthetic. Width 5 mm, thickness 0.50 mm, gauge 25 mm; dimension errors are independent 2% SD.