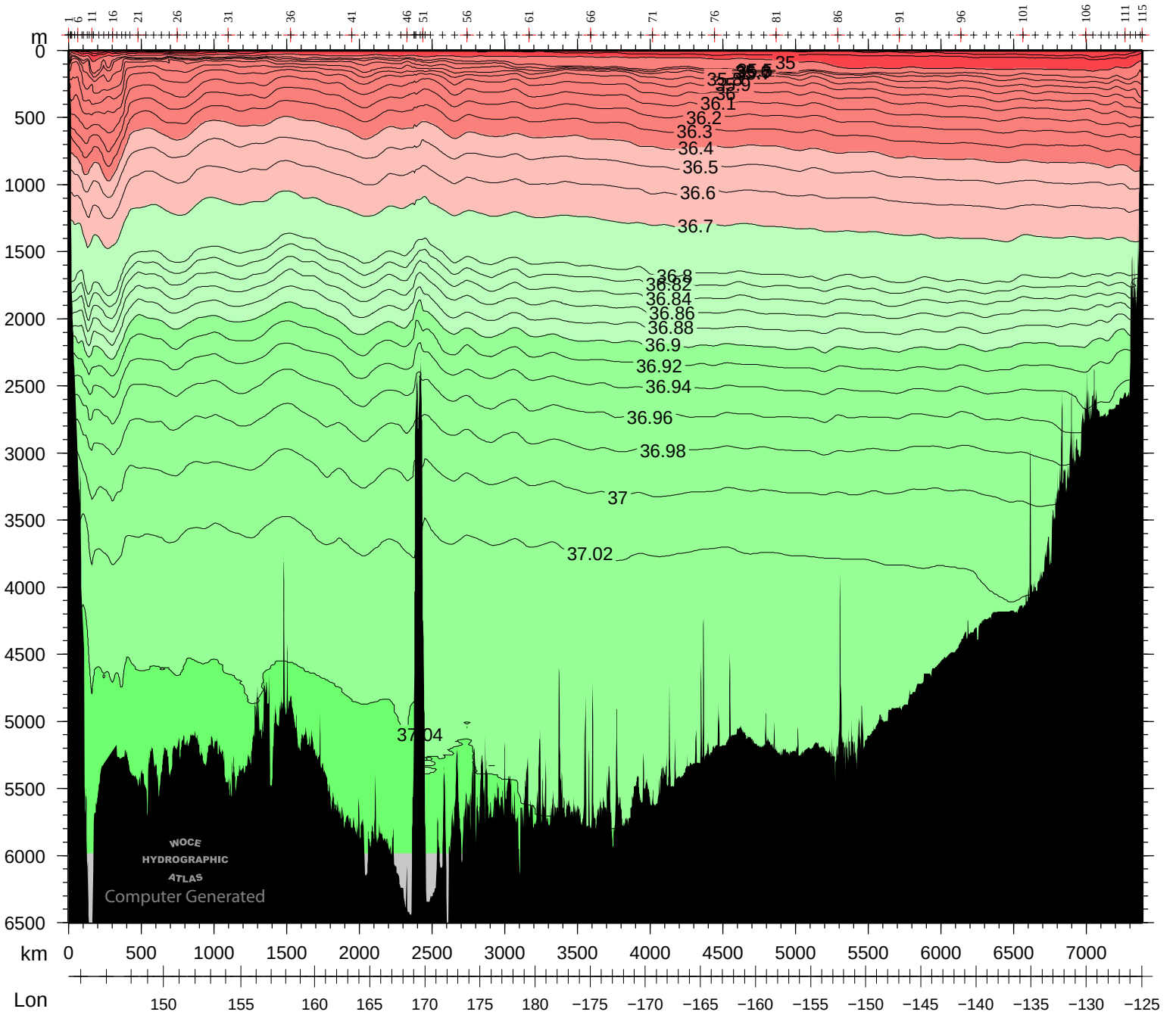σ_2 (kg/m^3) for P01 47°N (1000:1)