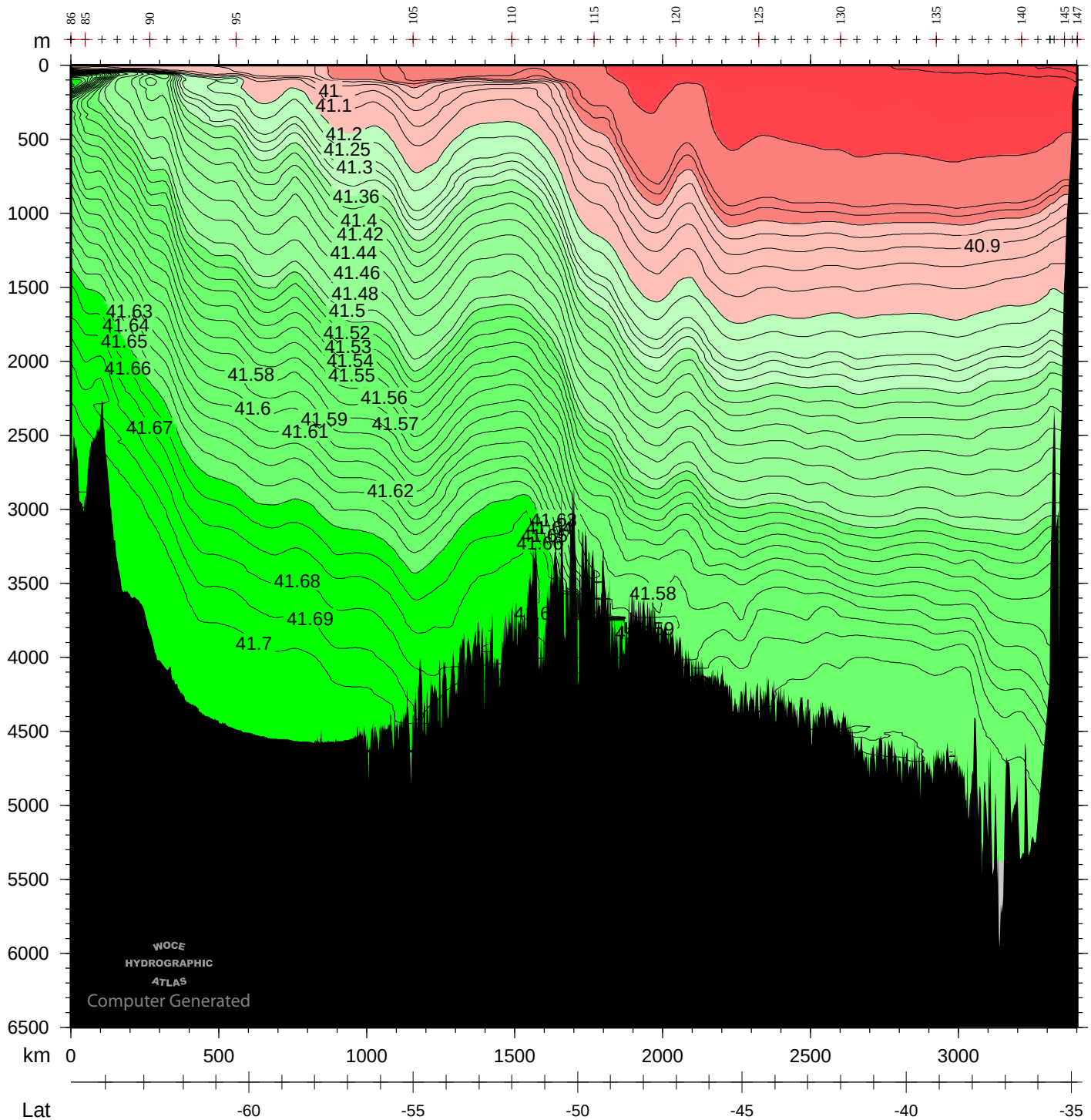σ_3 (kg/m^3) for I09S 115˚E (500:1)