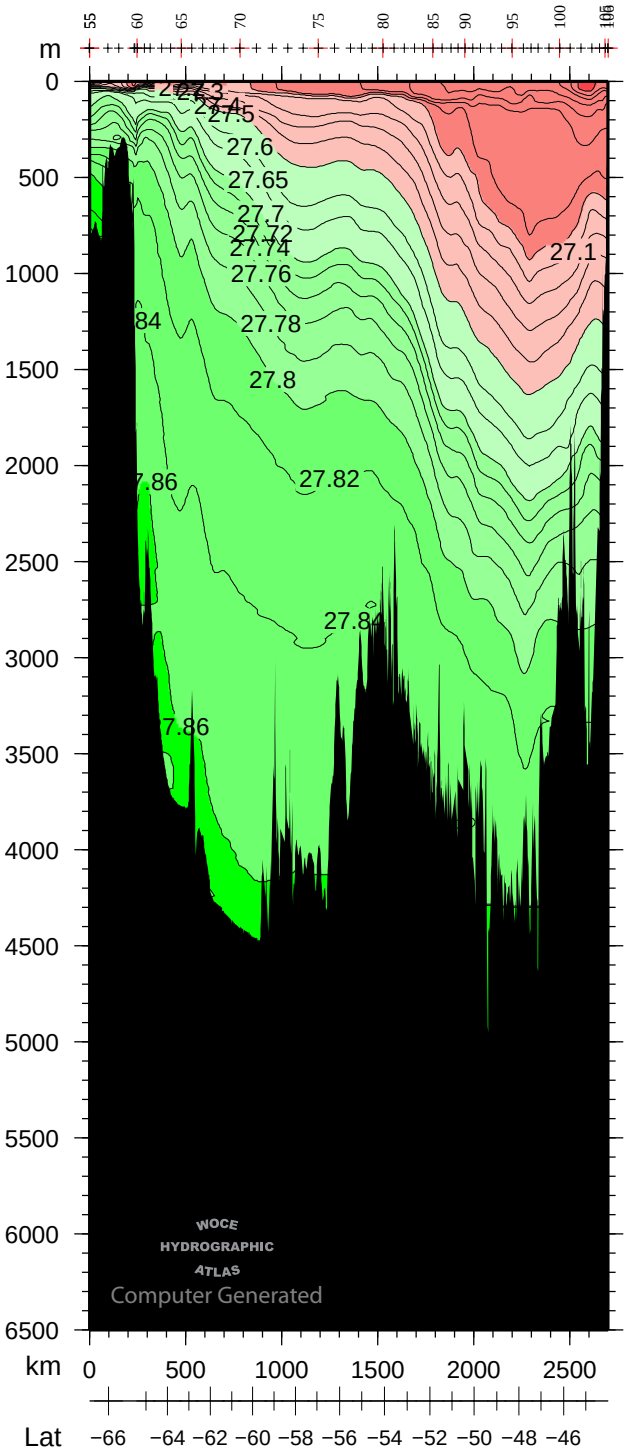σ_0 (kg/m^3) for S03 140°E (1000:1)