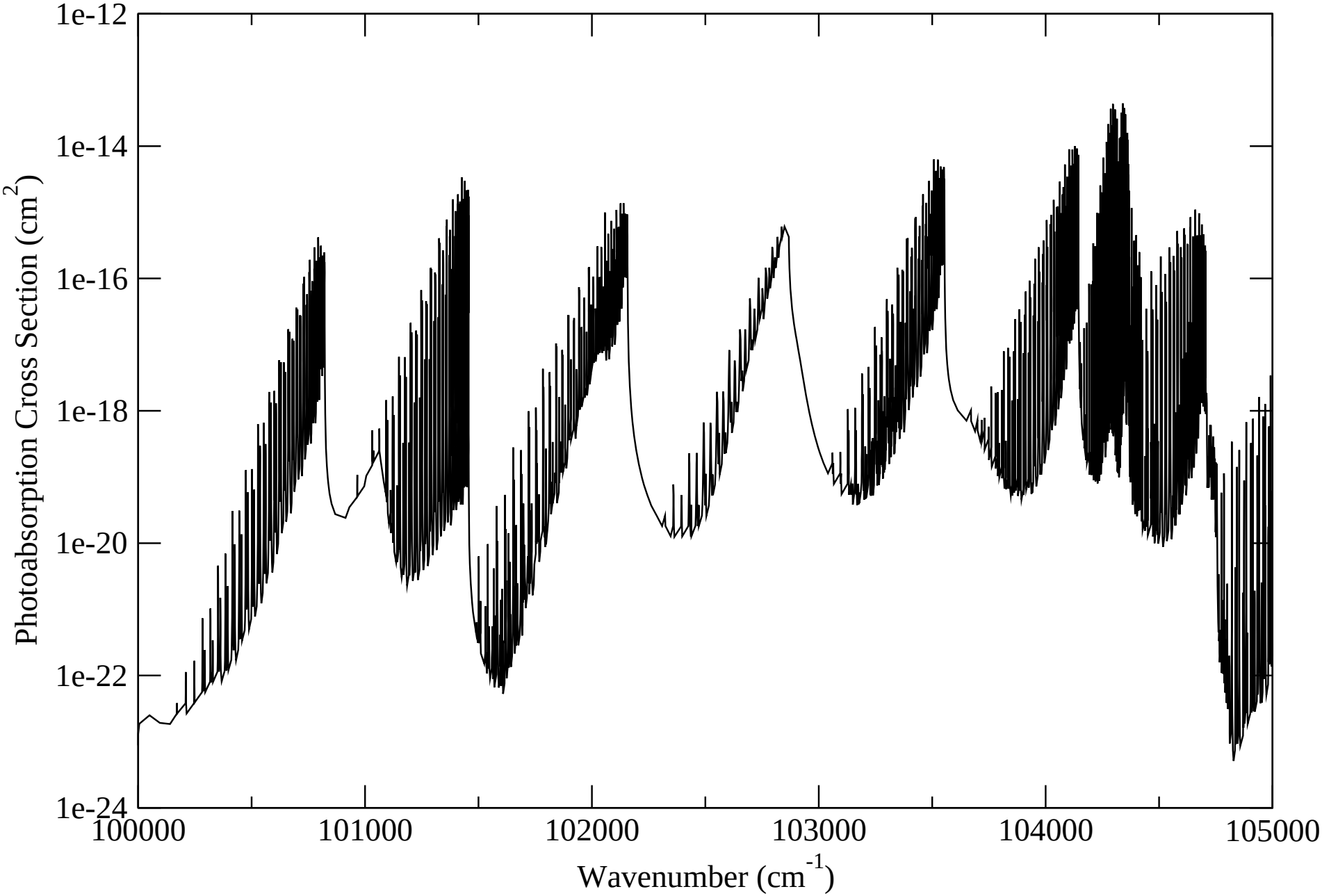Modeled $^{14}N_2$ Cross Section: 180 K