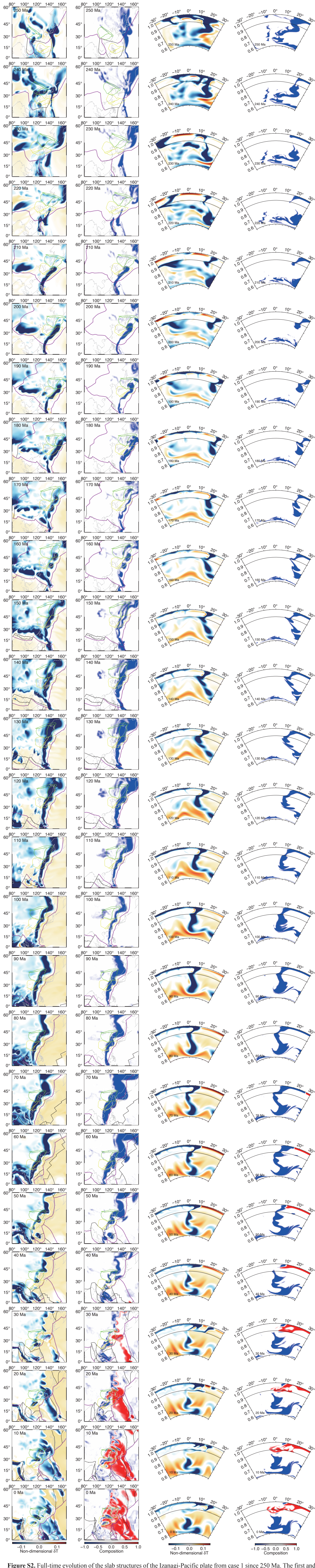




**Figure S2.** Full-time evolution of the slab structures of the Izanagi-Pacific plate from case 1 since 250 Ma. The first and second columns show the residual temperature and composition fields at 670 km depth, respectively. The third and fourth columns show the cross-section of residual temperature and composition fields at section P3 as shown in Figure 1. In figures of compositional fields, the blue and red colors denote the Izanagi plate and the Pacific plate, respectively.