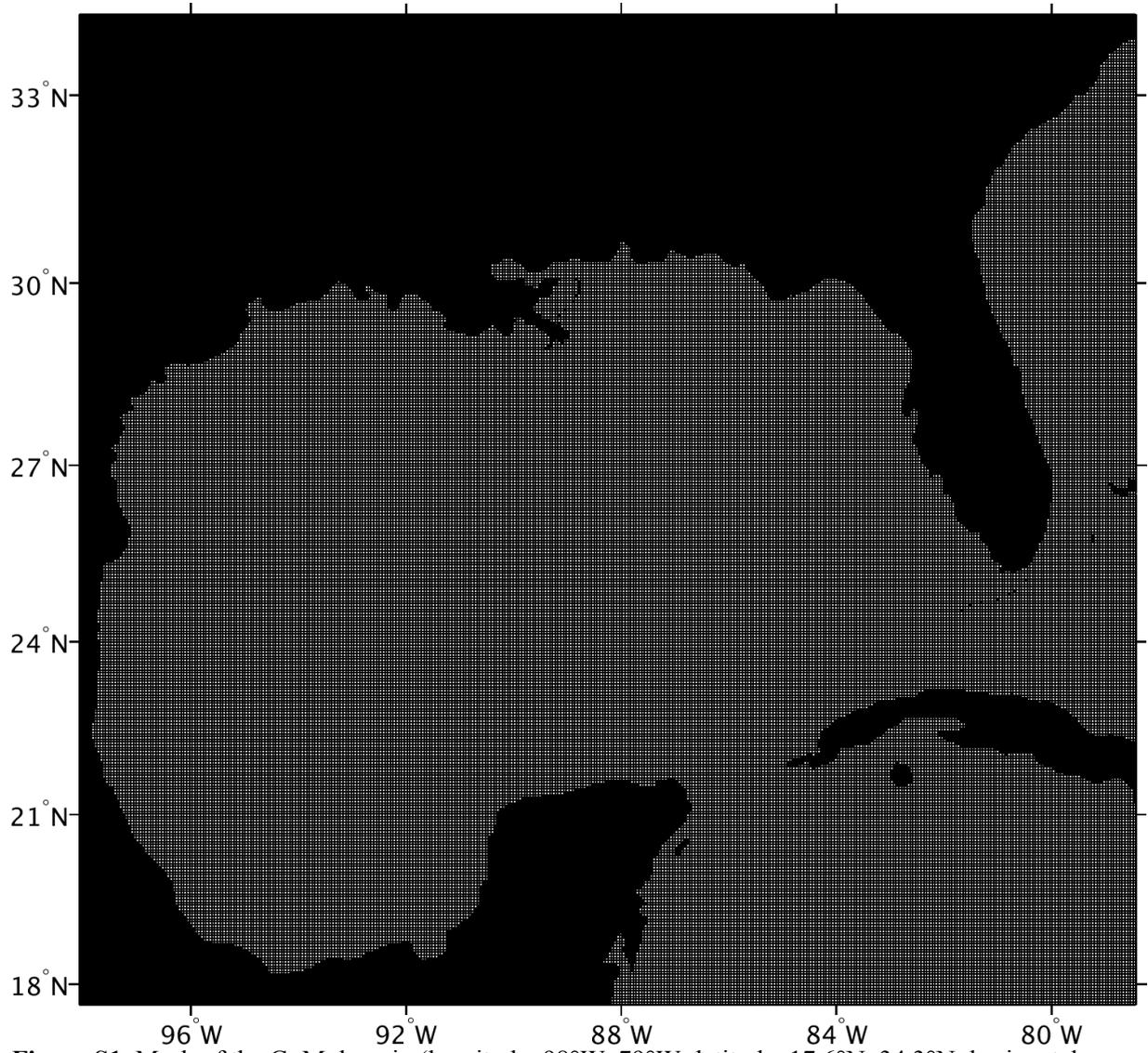
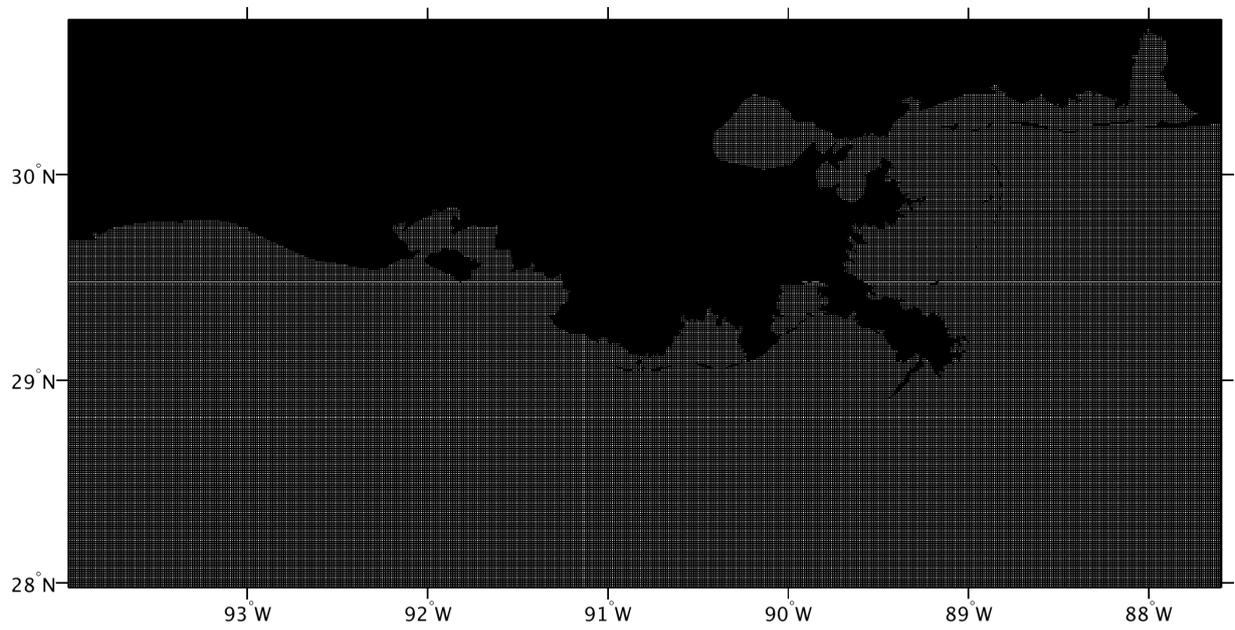


Complementary Material



**Figure S1.** Mesh of the GoM domain (longitude: 98°W–79°W; latitude: 17.6°N–34.3°N; horizontal resolution: 5 km; number of vertical layers: 36).



**Figure S2.** Mesh of the nGoM domain (longitude: 94°W–87.6°W; latitude: 27.9°N–30.7°N; horizontal resolution: 1 km; number of vertical layers: 24).