**Supporting materials for "Sensitivity of different BVOC emission schemes in WRF-Chem to vegetation distributions and its impacts over East China"**
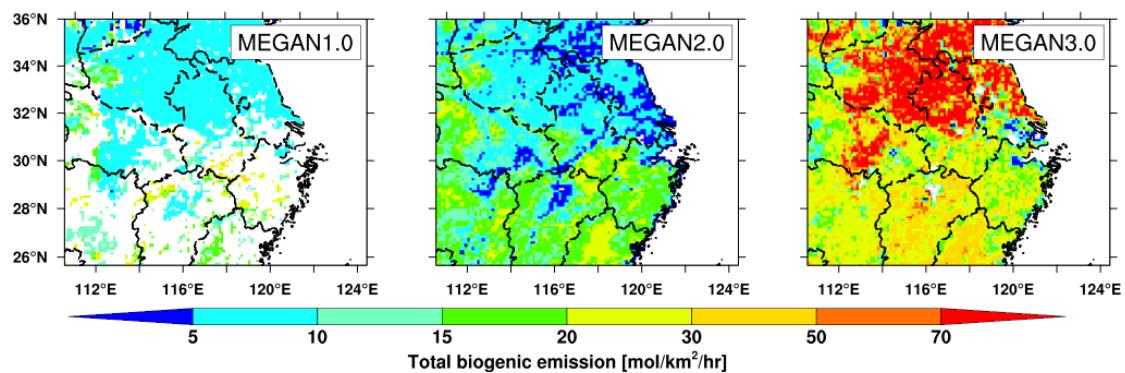
**Figure S1.** Spatial distribution of total biogenic emissions in July using the VEG-2015 vegetation date set.
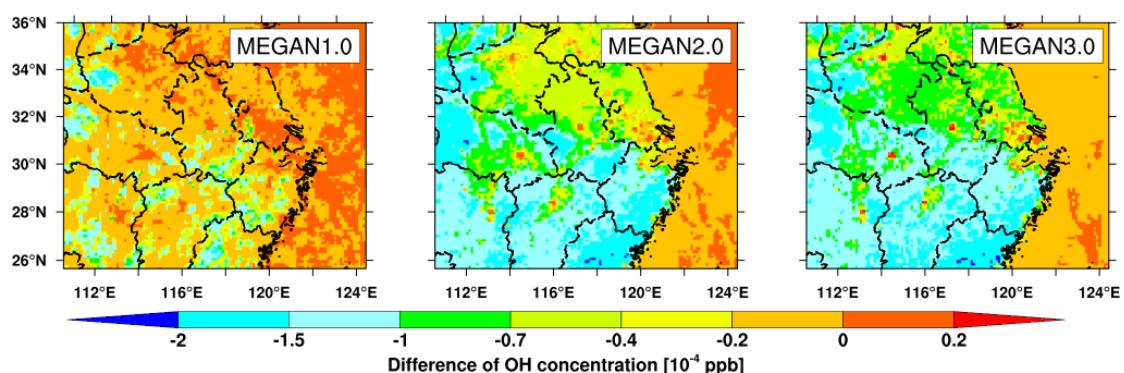
**Figure S2.** Spatial distribution of OH concentration due to the biogenic emissions near the surface in July using the VEG-2015 vegetation dataset.
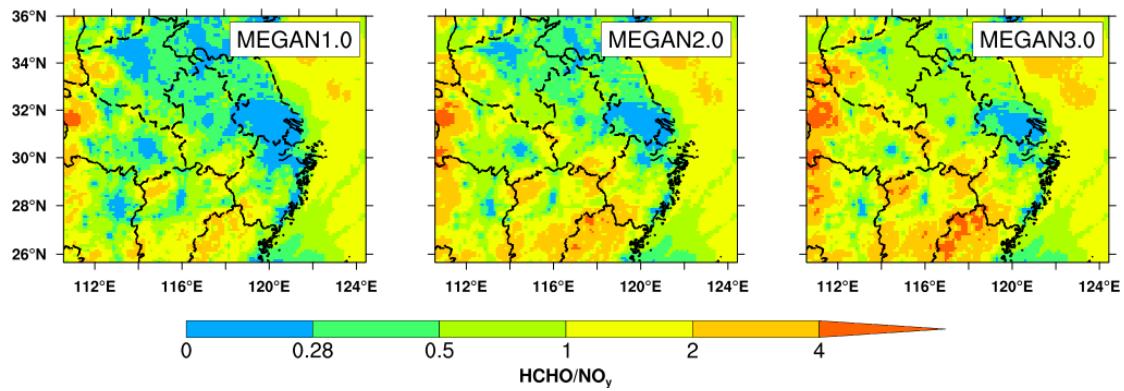
**Figure S3.** The ratio of monthly mean $CH_2O$ and $NOy$ concentration for July 2015 over the simulation domain. The ozone production sensitivity can be roughly determined by the ratio of $CH_2O$ and $NO_y$, where $NO_y$ represent for total reactive nitrogen. Ozone production is sensitive to $NO_x$ concentrations in $NO_x$ sensitive region if the ratio is large, otherwise, ozone production is more sensitive to VOCs concentrations.