

Fig. 1 Station distribution in China and average ground monitoring concentration of  $PM_{2.5}$  during 2013-2017

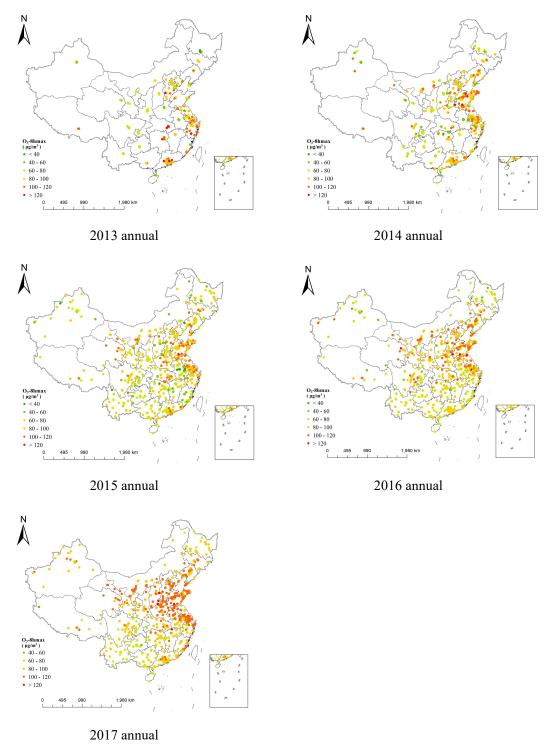


Fig. 2 Station distribution in China and average ground monitoring concentration of  $O_3$ -8hmax during 2013-2017

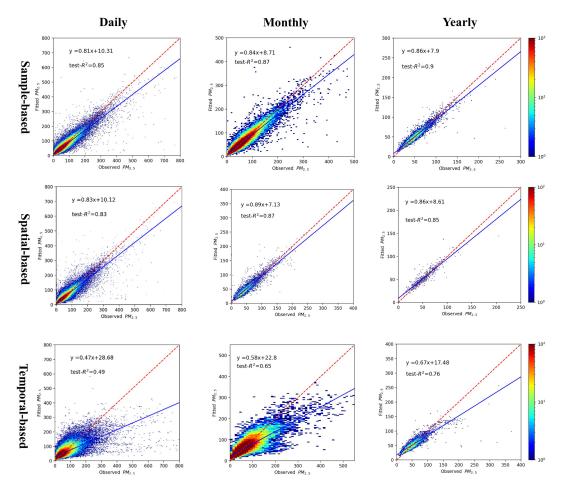


Fig. 3 The density plot of PM<sub>2.5</sub> model

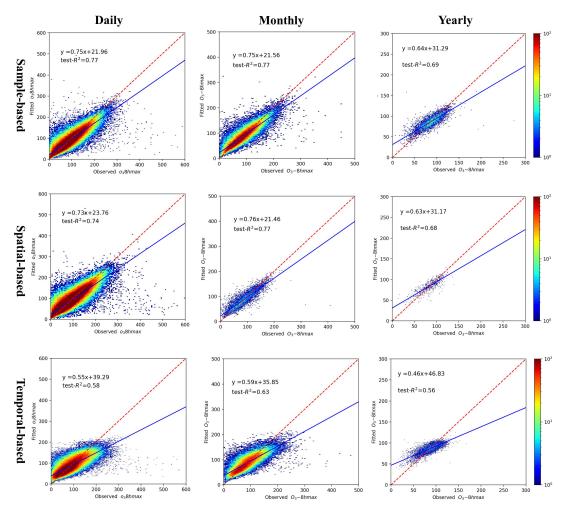


Fig. 4 The density plot of O<sub>3</sub>-8hmax model

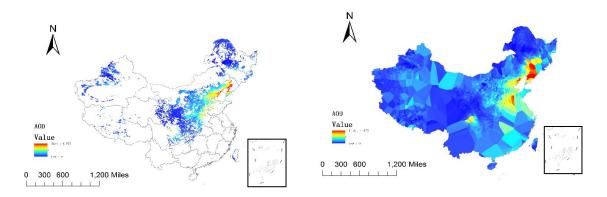


Fig. 5 MYD04\_3K coverage in China and results after interpolation on January 1, 2017

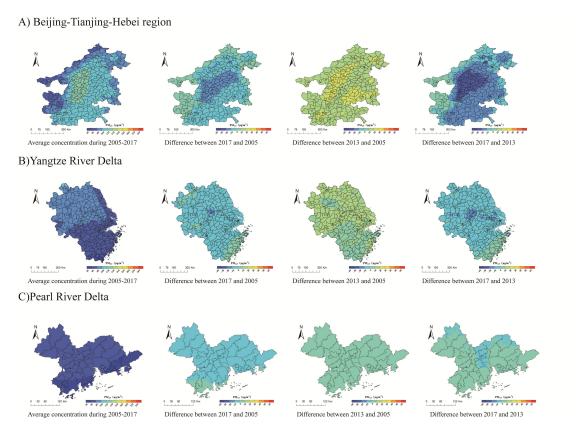


Fig. 6 The Simulated annual mean and difference of  $PM_{2.5}$  concentration in A) Beijing-Tianjin-Hebei region, B) Yangtze River Delta, and C) Pearl River Delta during 2005 to 2017

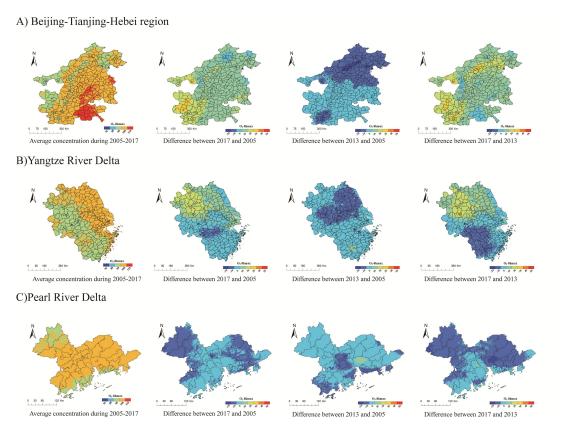
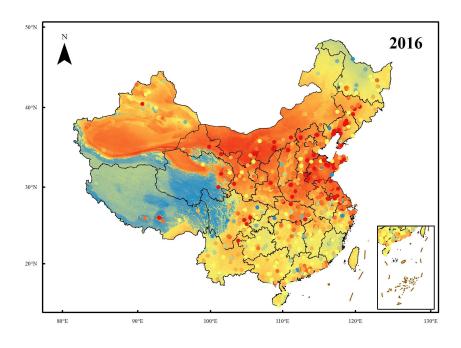


Fig. 7 The Simulated annual mean and difference of  $O_3$ -8hmax concentration in A) Beijing-Tianjin-Hebei region, B) Yangtze River Delta, and C) Pearl River Delta during 2005 to 2017



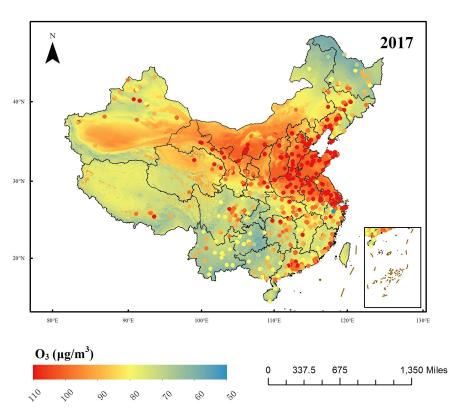


Fig. 8 The modeling and monitoring  $O_3$ -8hmax concentrations in China in 2016 and 2017