

Regression of correlation between the TGM concentration and modeled atmospheric  $\text{Hg}^0$  concentration at CHC as a function of the emissions from the respective regions. The red horizontal line in each plot indicates the value of the correlation between the TGM concentration and Base (ASGM = OFF) modeled  $\text{Hg}^0$  concentration at CHC. The dashed blue line indicates the linear regression line on the correlation between the TGM concentration at CHC and the modeled  $\text{Hg}^0$  produces by different emission amounts from the respective regions.