

Tellus

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20480065&lokasi=lokal>

Abstrak

ABSTRAK

The relation between spatial variability and residence time for gases in the atmosphere is studied using a two-dimensional numerical model. Results indicate that although the residence time shows a strong dependence on the variability, other factors mainly the distribution of sources, also play an important role. If nothing is known about the location of the sources and sinks, the uncertainty in the estimate of the residence time from variability measures will be at least a factor of 10. The situation is greatly improved when one has indications of where the sources is located. Verification of the model, using gases in the atmosphere for which variability estimates and independent estimates of the residence time were available, proved difficult because of the uncertainties associated with these estimates. The general features of decreasing variability with increasing residence time and a strong dependence on the source configuration were, however, confirmed.