混合一氧化碳排放因子和氧化反应：混合方法

混合-一氧化碳排放因子和氧化反应

Chatfield and Andreae (2016) move to solve the emissions better problem by abolishing the neat view approach (confounding one emission factor using multiple sequential observations is a problem). Instead, they use a parallel and sequential analysis approach for estimating emission factors. Using this approach, they can separate the contributions of multiple fires, which can be challenging in practice. They also use model-based methods to account for the uncertainty in the emission factor estimates.

Chatfield and Andreae (2016) data-driven approach:

1. Data-driven approach:
   - Train a machine learning model using the Emission-Factor and Ozone Analysis dataset.
   - Use the model to predict emissions and ozone concentrations for new observations.

2. Model-based approach:
   - Develop a statistical model to estimate emissions.
   - Use the model to make predictions and quantify uncertainty.

Which fire types contribute most to O₃ precursors?

Without mixed-effect analysis, apparently opposite (+) and (-) enhancements can be observed simultaneously.

Enhancement Ratios on Consecutive Portions of the Same Flight

Easier comparisons of similar fires in different campaigns.