

Emission: NEI & SMOKE model system

Emission data for core model

Missing HAPS emission imputation by HAPI

CTM model : Transport, Emission,
Chemistry, and Deposition

Full
emission

Core model

CTM model
with reduced
chemical
mechanism
(CB6r4)

CTM model
output for
model
species and
radicals

Hourly **OH**
radical, NO₃,
Ozone
concentration

TCEQ SIP model data

AQS observational
ozone data

SBTEX
emission

Probing tool: Reactive Tracer

Reactive Tracer:
consider chemical decay,
physical transport, and
deposition processes.

SBTEX concentration

AMTIC observational
data