

1.007 Model Ready Emissions Inventory Conversion System: Central Mexico Base Case.

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Abstract:

This work presents the Central México Emissions Inventory 2013; Spatial Temporal and Speciation Distribution model (STSP2013). The methodology and information used to perform the temporal, geographical and chemical distribution of the emissions is described. The results and the validation procedure are shown using the 2013 Emissions Inventory.

The EI 2013 considers seven pollutants: ammonia (NH_3), carbon monoxide (CO), nitrogen oxide (NO_x), particles (PM_{10} and $\text{PM}_{2.5}$), sulfur dioxide (SO_2) and volatile organic compounds (VOC). Emissions are from fixed, area and mobile sources. They are further subdivided into different categories. A source classification code (SCC), from EPA, is used to identify each one. Temporal and chemical profiles are based on the SCC. The STSP2013 system can generate files for RADM2, RACM, CBM5 and SAPRC99, these can be used by WRF-chem.

With this work air quality studies, policy evaluation and decision making can be done with an updated emissions inventory.