

# CO<sub>2</sub>-Urban Synthesis and Analysis (CO<sub>2</sub>-USA) Project

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# Motivation



NASA Earth Observatory/NOAA NGDC

- **Urban areas are responsible for significant quantities of carbon emissions**
- **Increased population residing in cities**
- **Understanding *how much, where, and why* a particular city emits carbon remain scientific goals**
- **Cities have emerged as leading players in reducing greenhouse gas emissions**

# Thanks To:

NOAA Climate Program Office's Atmospheric Chemistry, Carbon Cycle, and Climate program for funding this project



NIST for hosting this workshop and for providing travel and logistical support

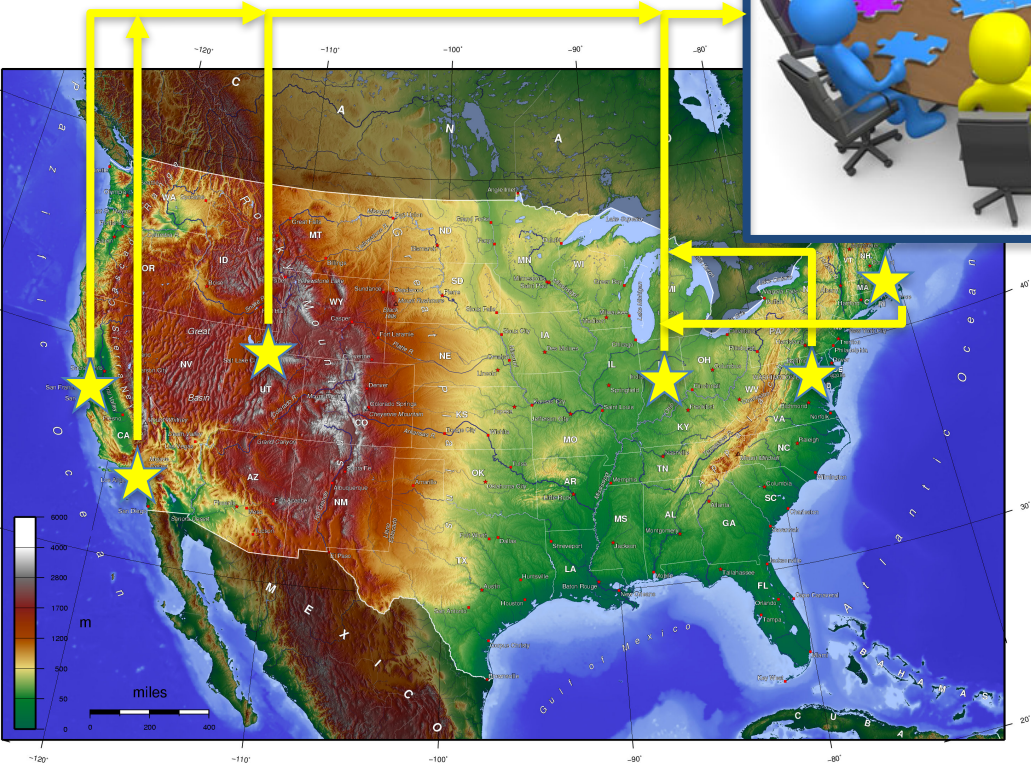


# Main Objectives of CO<sub>2</sub>-USA

- Leverage existing scientific infrastructure and investments in GHG work over the past few years
- Quantify & understand similarities/differences in CO<sub>2</sub> and CH<sub>4</sub> fluxes across cities
- Foster a community of urban carbon cycle researchers and generate collaborative studies
- Engage stakeholders to link them with data, syntheses, and insights into urban emissions



# [1] Workshop



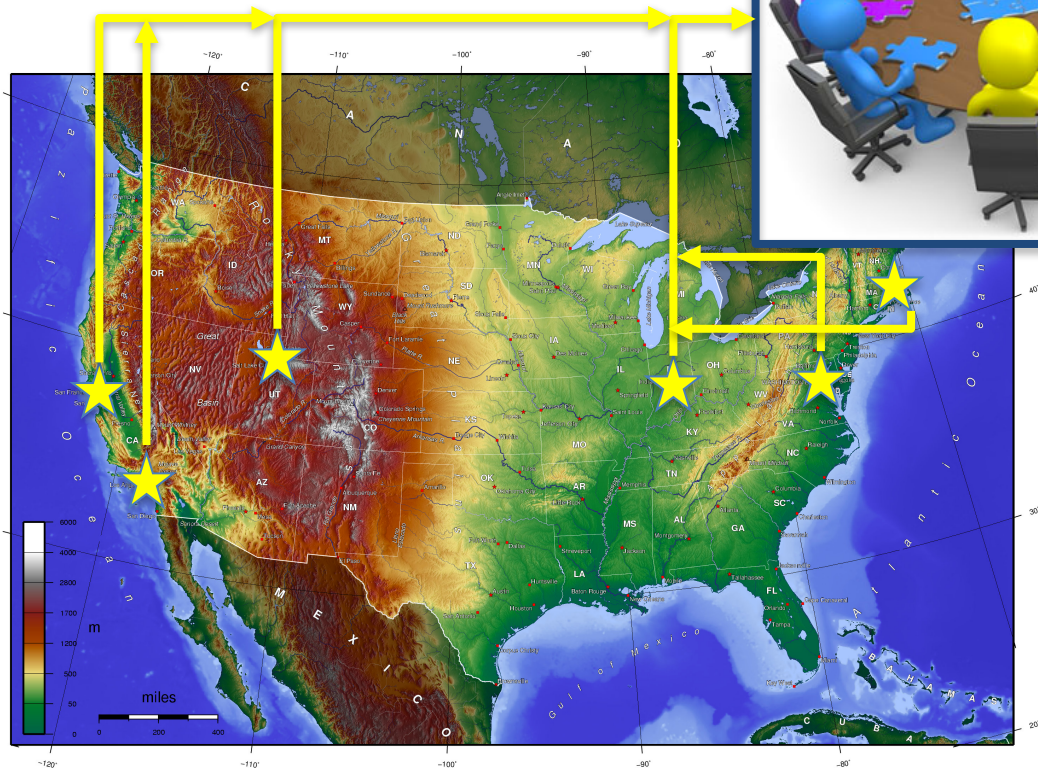
[2] Harmonized  
Multi-city  
Atmospheric CO<sub>2</sub> &  
CH<sub>4</sub> dataset



[3] Biospheric & Anthropogenic  
Inventories



[1] Workshop



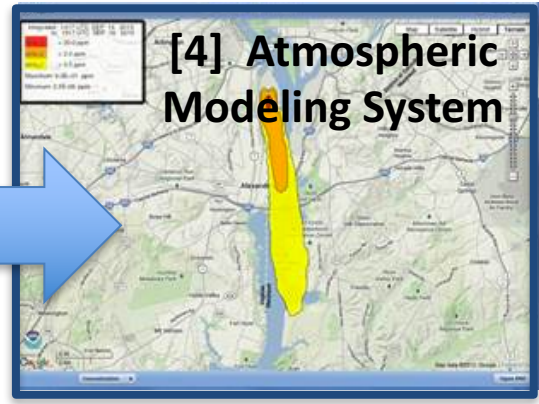
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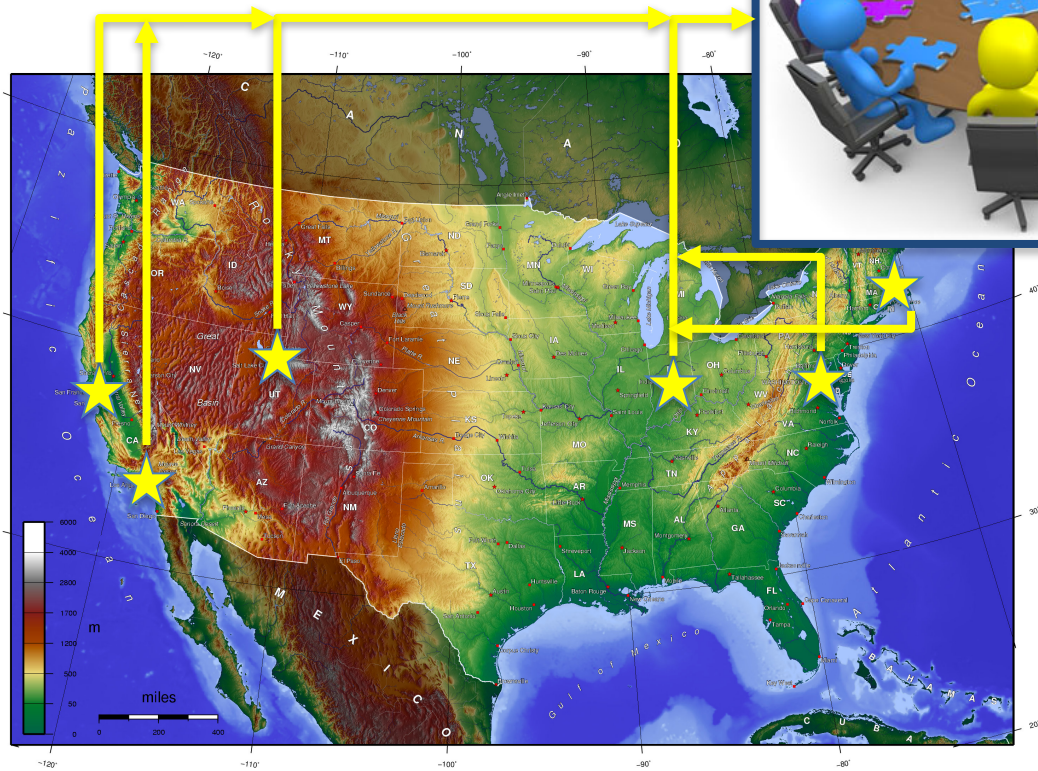
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[4] Atmospheric  
Modeling System



[1] Workshop



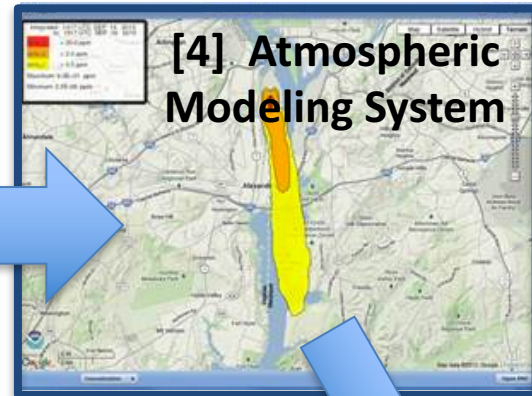
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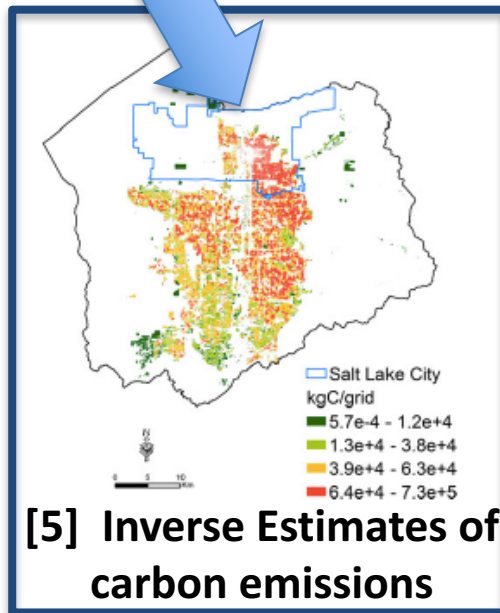
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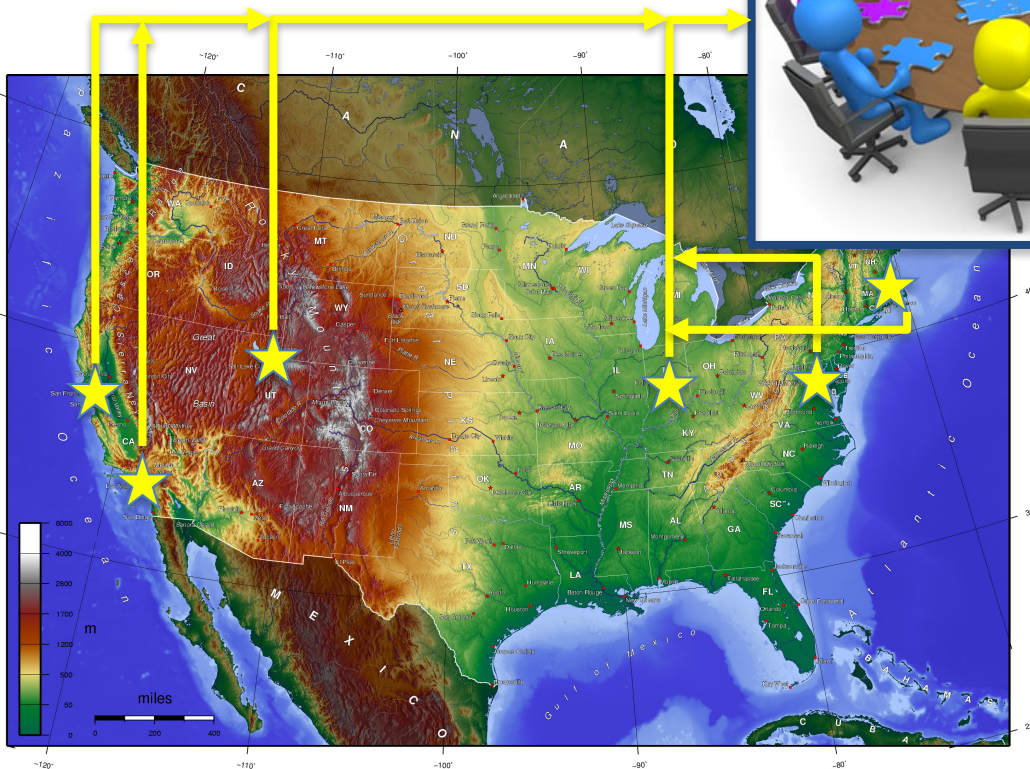
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[1] Workshop



[5] Inverse Estimates of  
carbon emissions





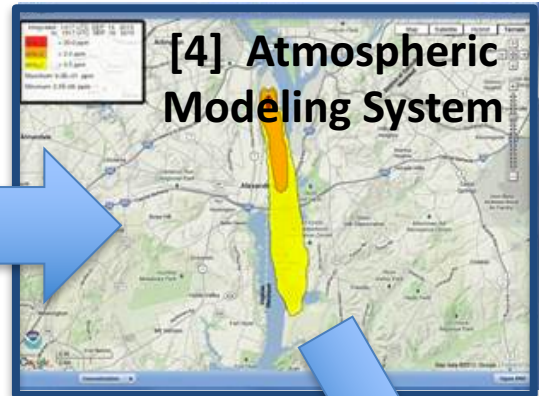
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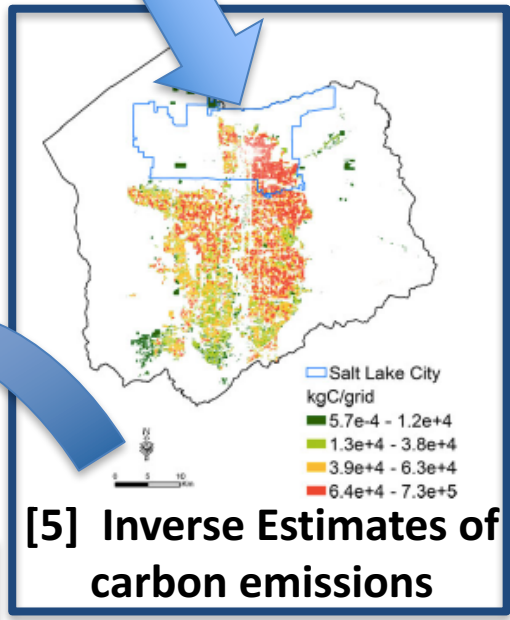
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[1] Workshop



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[6] Stakeholders, Citizens

