e-JUST — Environmental Justice using Urban Scalable Toolkit

Ashish Sharma

Illinois Research Climatologist, Illinois State Water Survey
University of Illinois at Urbana-Champaign

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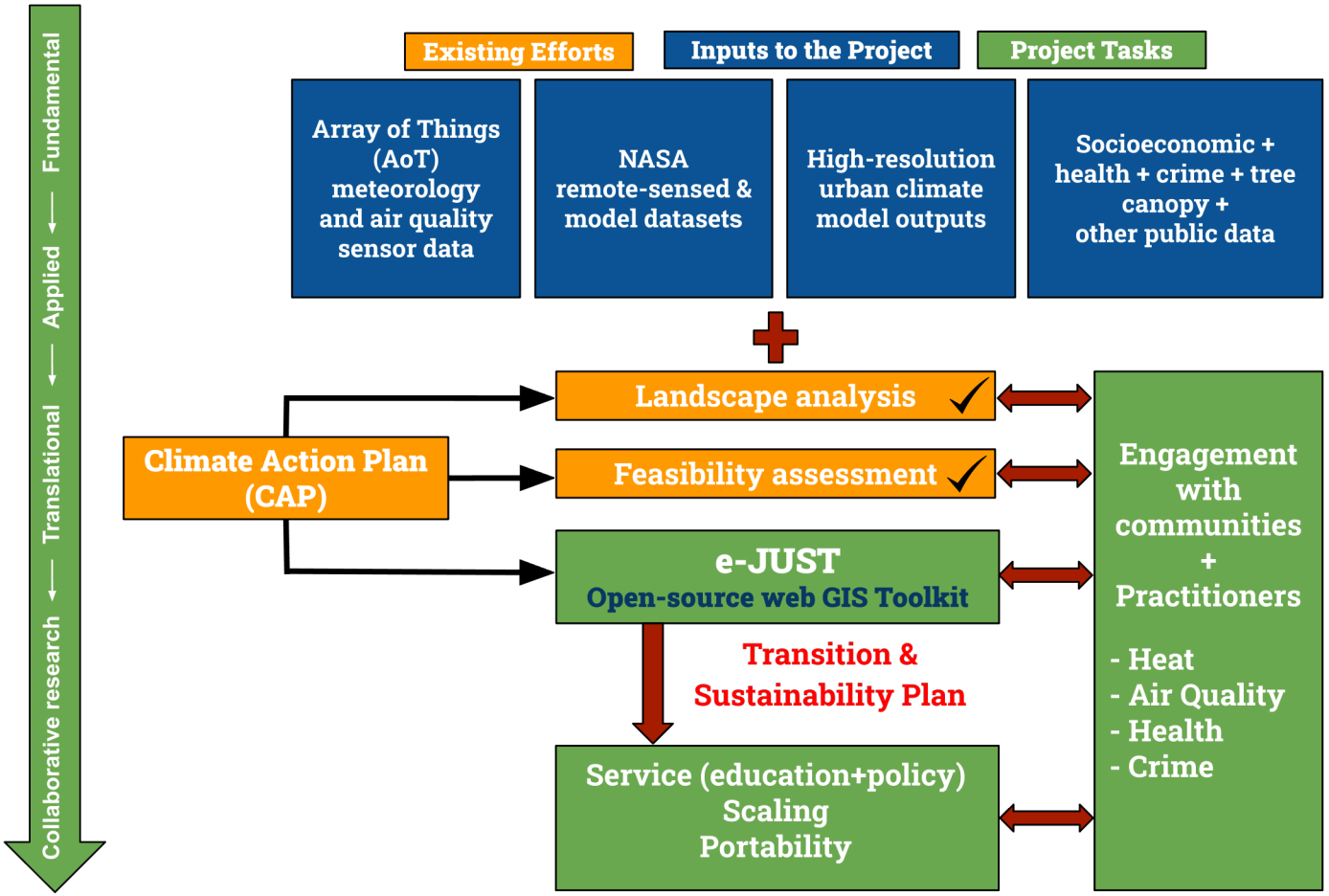
Email: sharmaa@illinois.edu
Twitter: @A_Sharma007

A NASA federal funded project between UI system and MMC

e-JUST —
Environmental Justice using Urban Scalable Toolkit



Themes

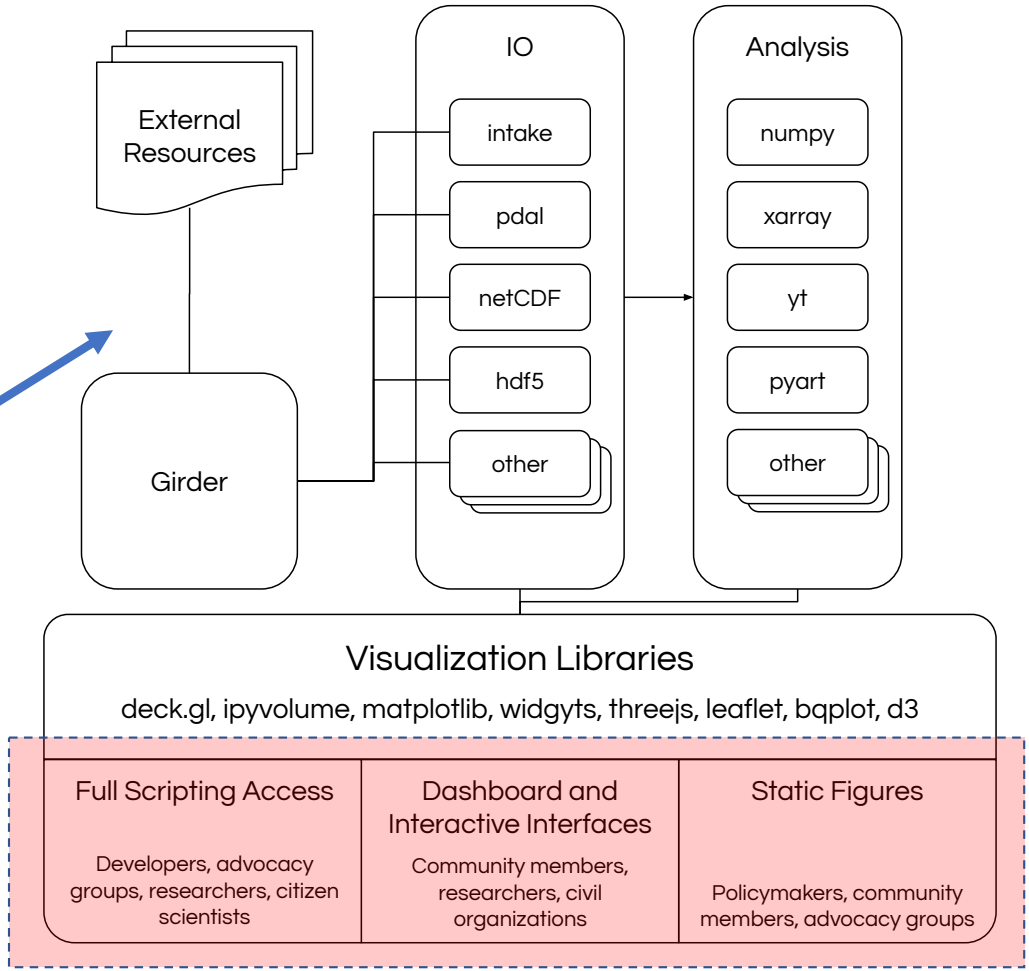
- Climate Hazards
  Extreme Heat
- Public Health
  Air Quality
- Greenspace
  Tree Canopy
- Urban Development
- Energy
  Utilities
- Crime

Objective 1

Develop e-JUST architecture with capacity for scale and portability.

Data analysis behind the scenes

Web-based GIS visualization



Objective 2

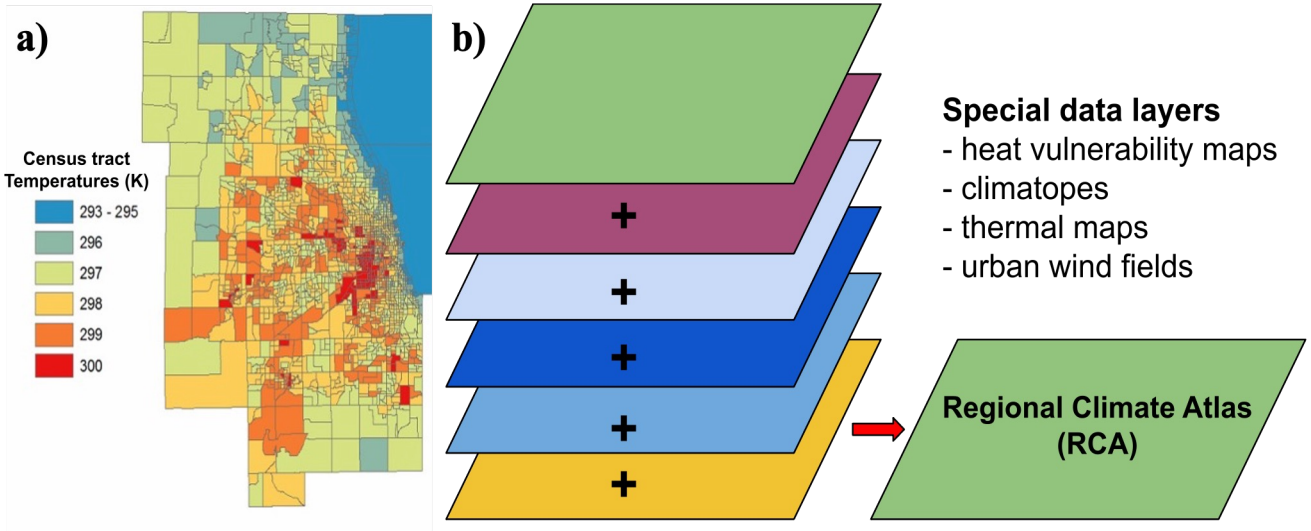
Co-identify extreme heat and air quality threats to health, equity, and crime.

- Gather community-based inputs (citizen engagement via participatory sessions, citizen commissions, etc.)

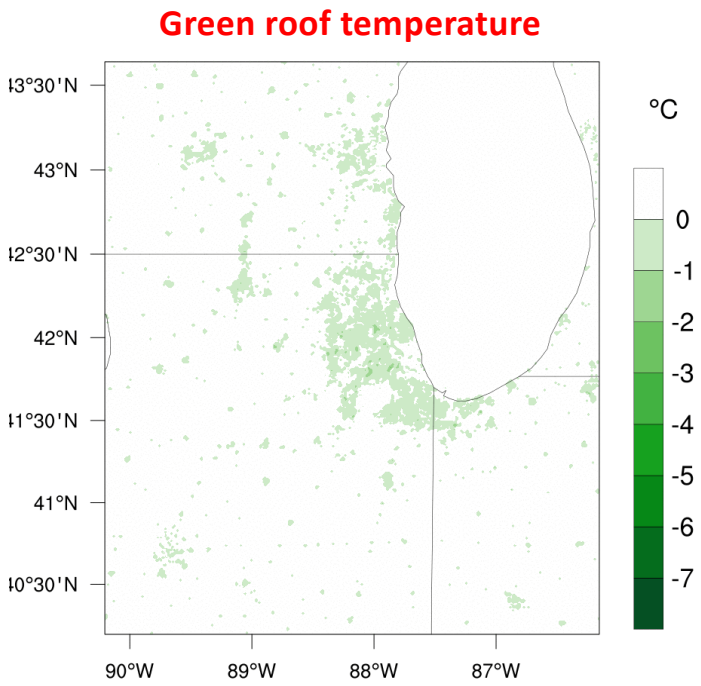
Objective 3

Develop integrated products for equity-informed planning and decision-making

Array of Things (AoT) meteorology and air quality sensor data	NASA remote-sensed & model datasets	High-resolution urban climate model outputs	Socioeconomic + health + crime + tree canopy + other public data



- Impact of green roofs on roof temperatures

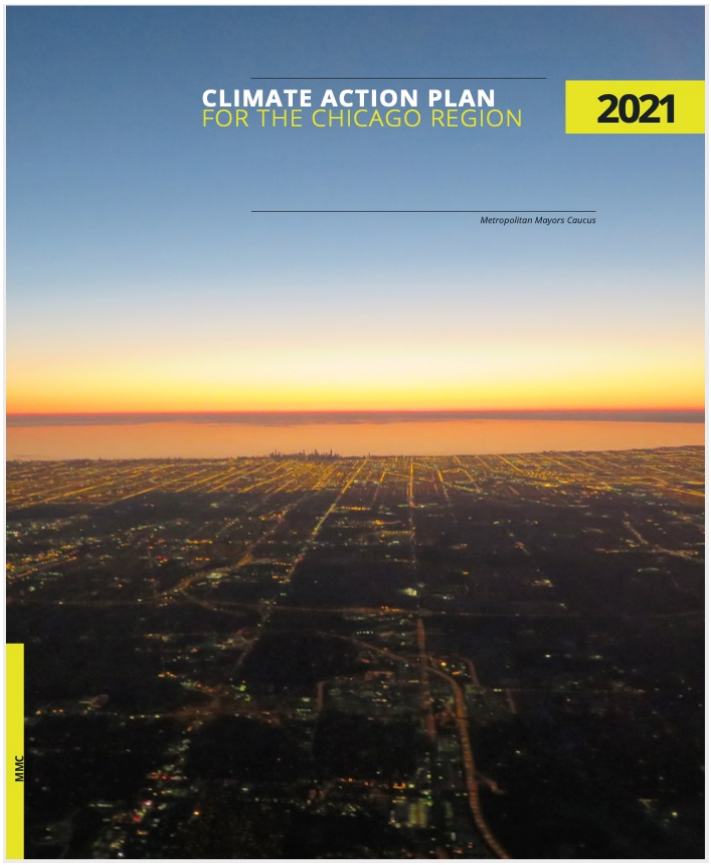


Objective 4

Empowering communities with evidence-based measures to improve health equity and reduce crime.

- Co-produce knowledge to empower underserved and EJ communities
- Integrate health and equity focus into municipal planning and operations (MMC CAP)

Planned Outcomes



- Contribute to adopting short-term health and equity strategies
- Learning and preparing for long-term solutions to advance EJ actions

This project will serve

- interdisciplinary scientists and researchers;
- policymakers and their staff;
- community members;
- developers seeking to augment, utilize or build on the technology and data available through e-JUST.

Thank you

Email: sharmaa@illinois.edu
Twitter: @A_Sharma007