Climate And Health Challenge 2:
Develop a platform for accessing and augmenting climate datasets with other data sources

Climate Care Alliance

wellcome trust

Core Team:

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Partners:

- **Mexico Academia: (UTeM, INECC), Healthcare (Clinician)**
- **Mexico Stake holders: Flood relief NGO, Local Government**

- **UK stake holders:**
- **Mid and South Essex NHS Foundation Trust, Colchester and Hertfordshire county council**
- **Mental Health Experts and Other collaborators in UK**

Context

- Various climate datasets exist, yet they are often challenging to utilize in health research due to different spatiotemporal scales and incompatibilities with other data types such as health or financial data.

- The complexity of climate data often creates a barrier to entry, making data cleaning, harmonisation, standardization and pre-processing a challenging starting point for any analysis.

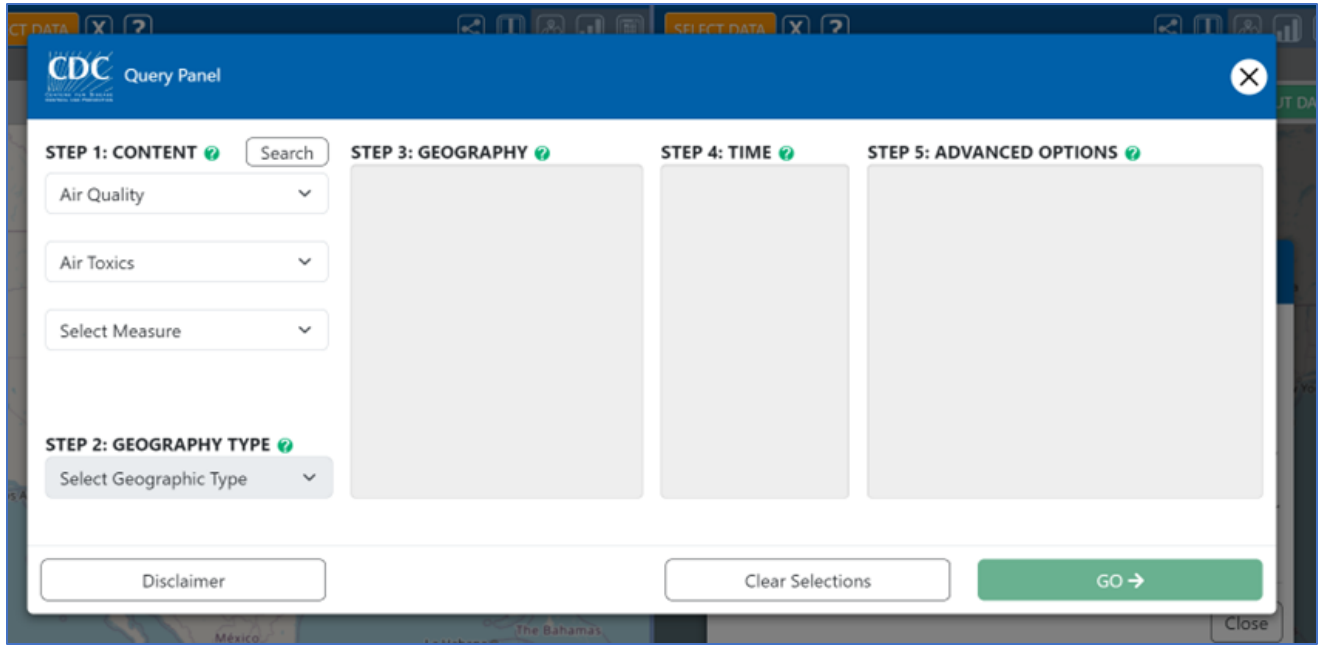
- Augmenting health data with climate data enables researchers to analyze the impact of environmental changes on health conditions, disease outbreaks, and overall public health.

Challenge Questions

- 1. How can your platform handle multiple types of data and how can users choose how data can be collapsed and interpolated? How will you trade-off user-choice against design decisions that favour optimal methods?
- 2. How would you visualise complex data across multiple spatiotemporal scales?
- 3. How can users search and access data and be informed about benefits and limitations (including possible biases) of data and data types across different scales?

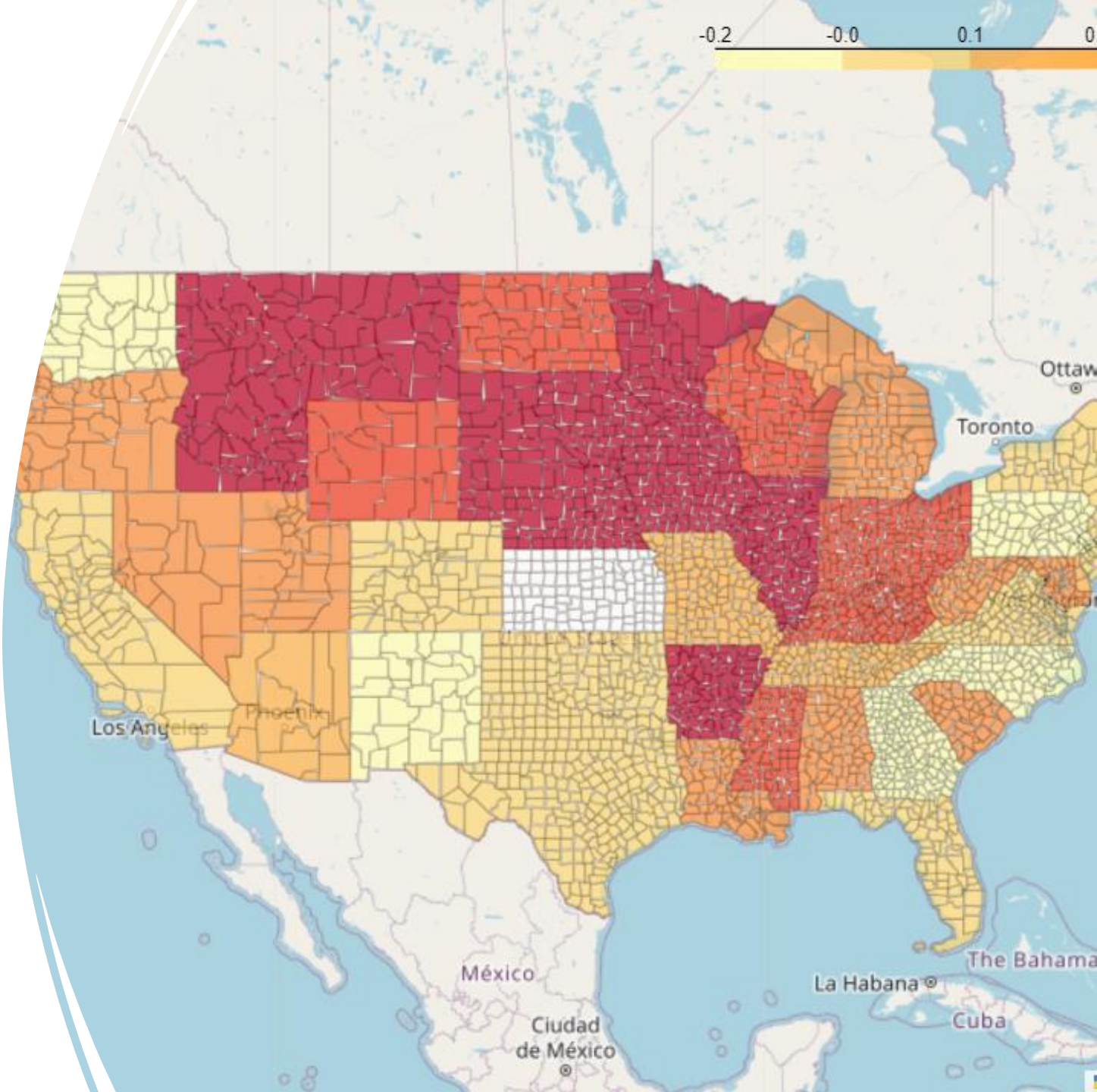
Making Climate Data Accessible

- CDC Dashboard as reference



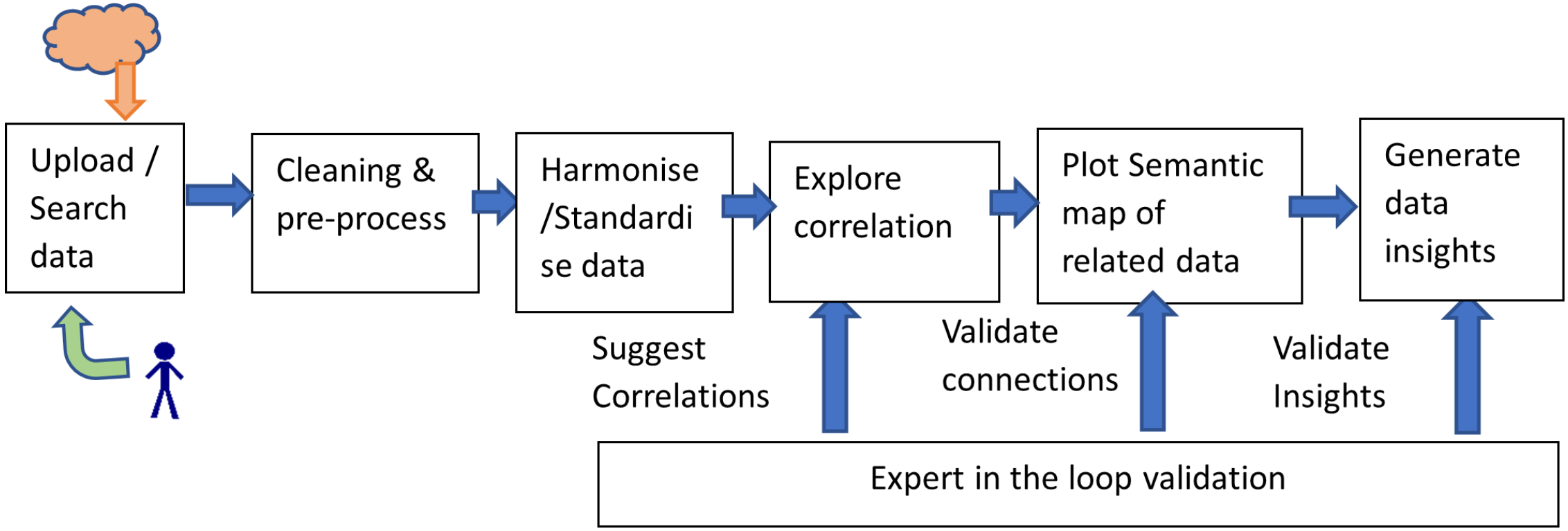
Aim

Build a comprehensive data dependency visualisation tool to aid researchers and policymakers to leverage the climate and health data for informed decision making and policy generation.



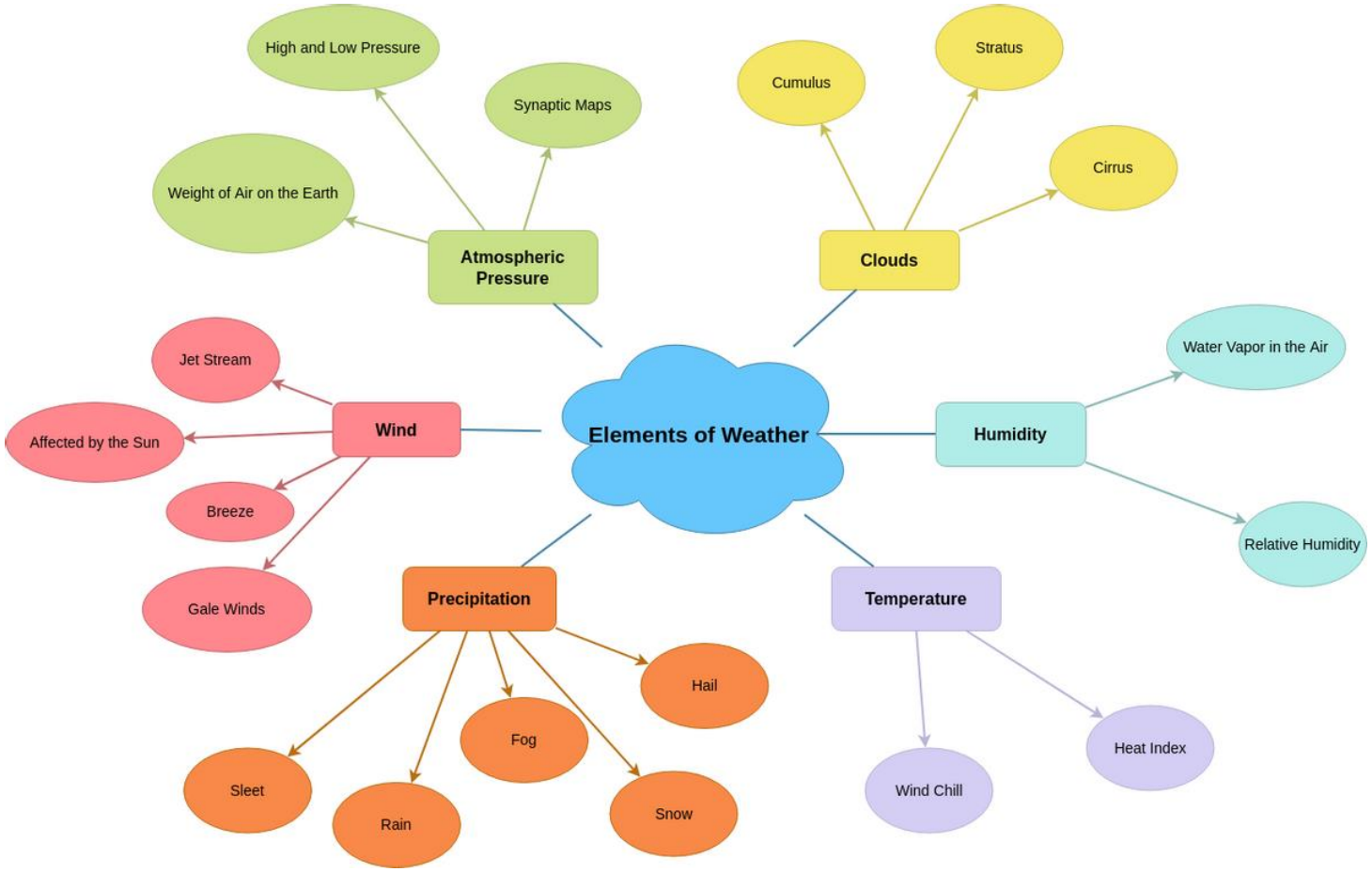
MVP Key Contributions

- Improved correlation metrics
- Expert in the loop
- Modularised Pipeline



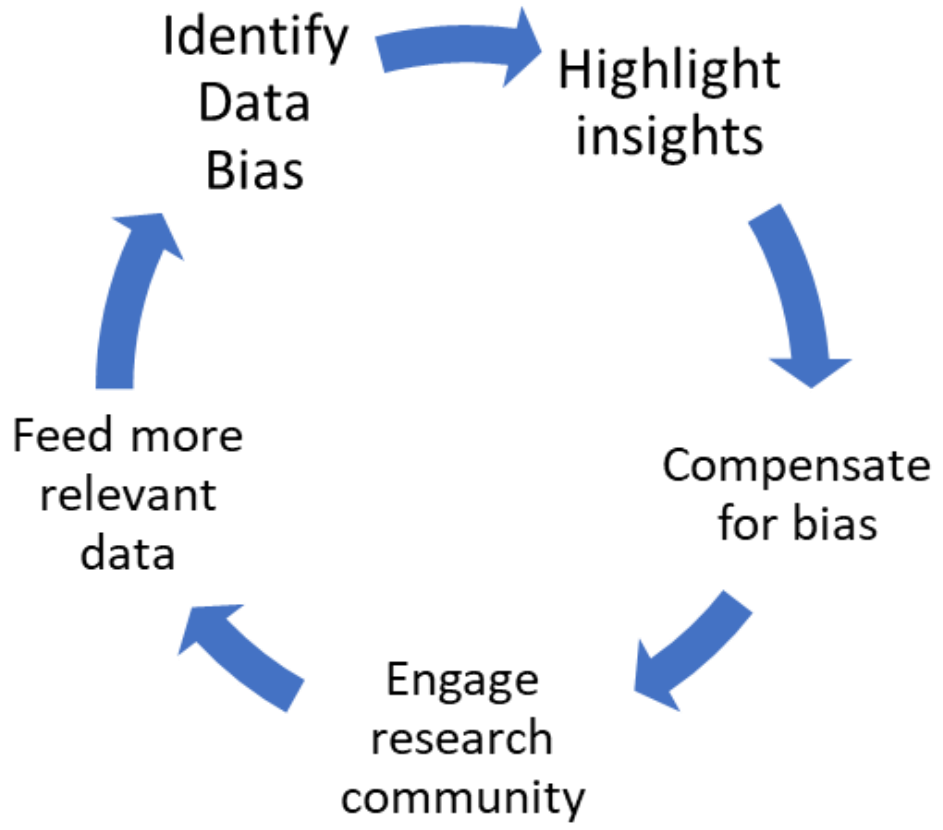
Planned Contributions

- Semantic maps for related datasets
- Designing refined correlation scores
- Identify and compensate for Bias in data



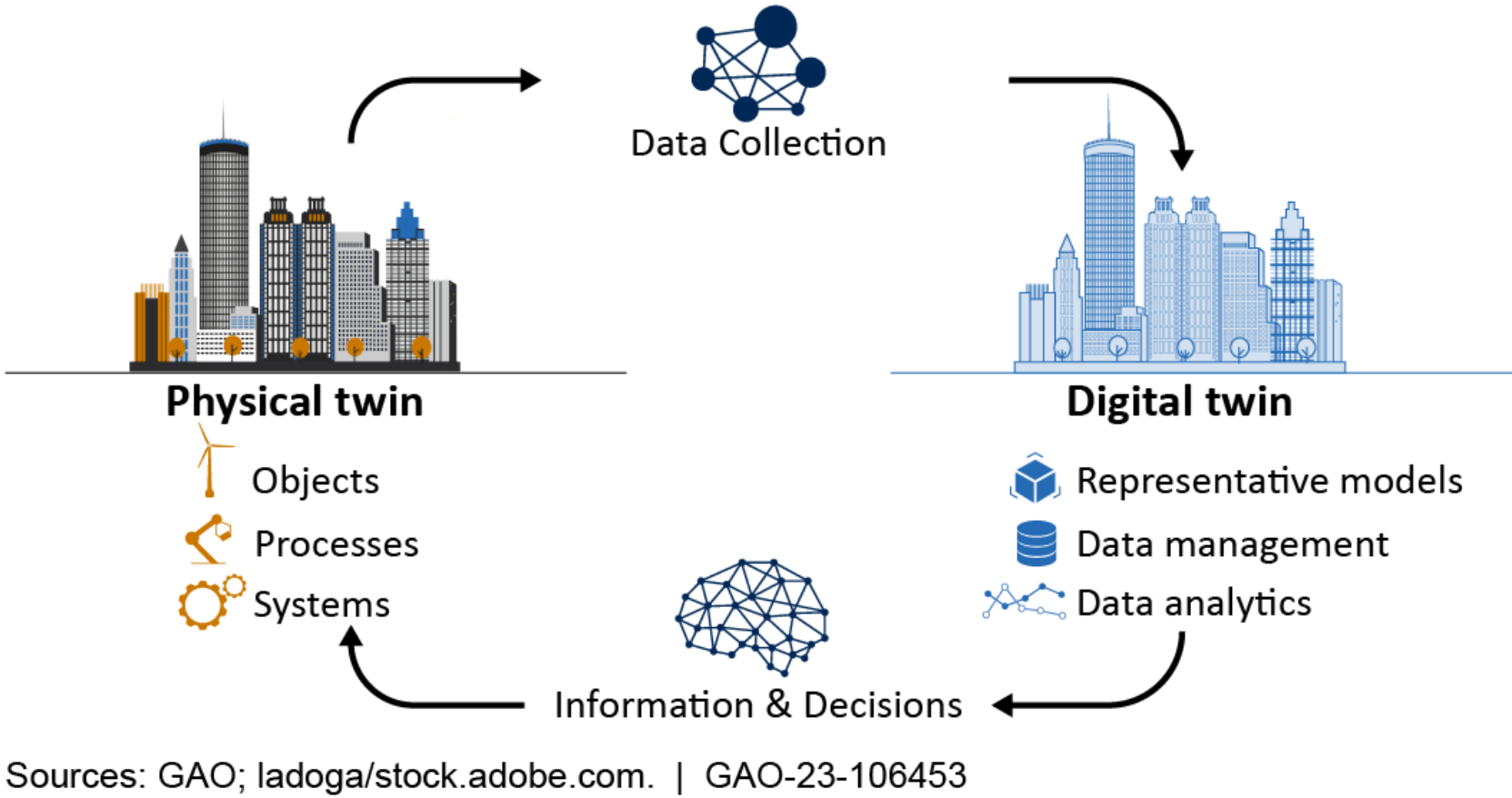
Future Work

- Automated Data Insights to support informed decisions
- Co-creation of the platform with stake holders/policy makers
- Improved Geospatial Evaluation Index (dataset Correlation) alongside Confidence scores
- Identify, compensate and highlight bias
- Risk and EDI considerations



Long term Goals

- Digital Twin for impact and mitigation/adaptation action planning
- Standardise data collection protocols and enable general upload of



Sources: GAO; ladoga/stock.adobe.com. | GAO-23-106453

Thank you