

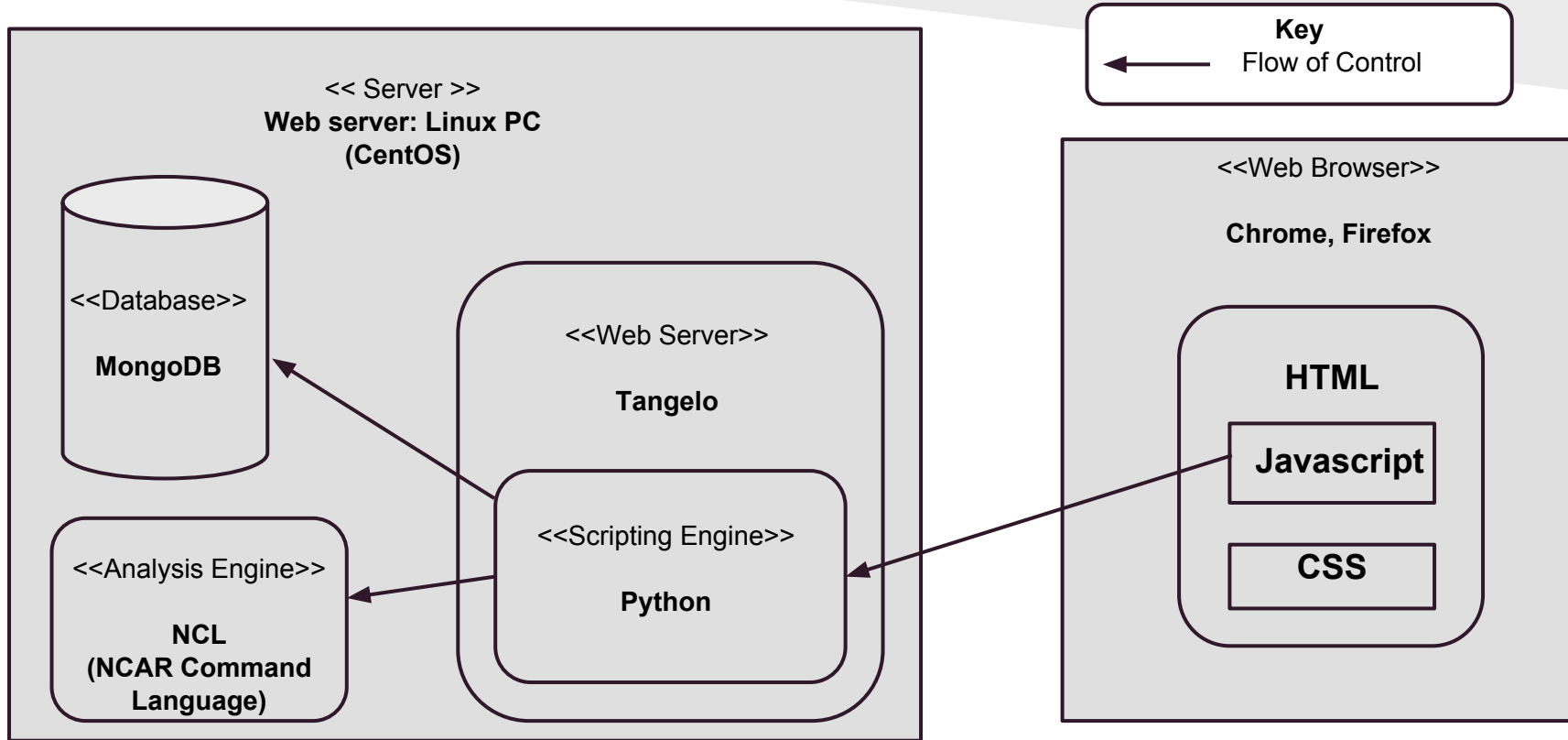
# NCAR Scientific Data

*Data Analysis Web Application*

# Work Assignment View

- Hannah Thomas - HTML/Javascript
- Hannah Keller - NCL/Python interaction
- Connor Guerrieri - MongoDB storage
- Bobby Crimi - OPeNDAP File I/O
- Bo Han - Caching System
- Seongmin Choi - CSS Structure

# System-level Deployment Diagram



# Completed Tasks

- Set up working environment
- Created basic two page working demo

Model:

Data:

Region:

Top Left Corner:

Latitude:  Longitude:

Bottom Right Corner:

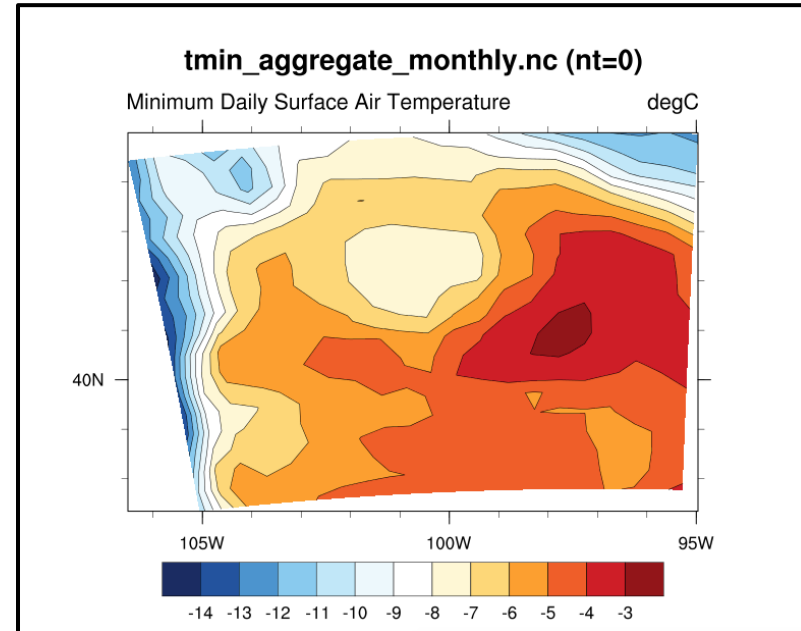
Latitude:  Longitude:

Time Period:

Frequency:

Range: Start:  End:

Calculation:

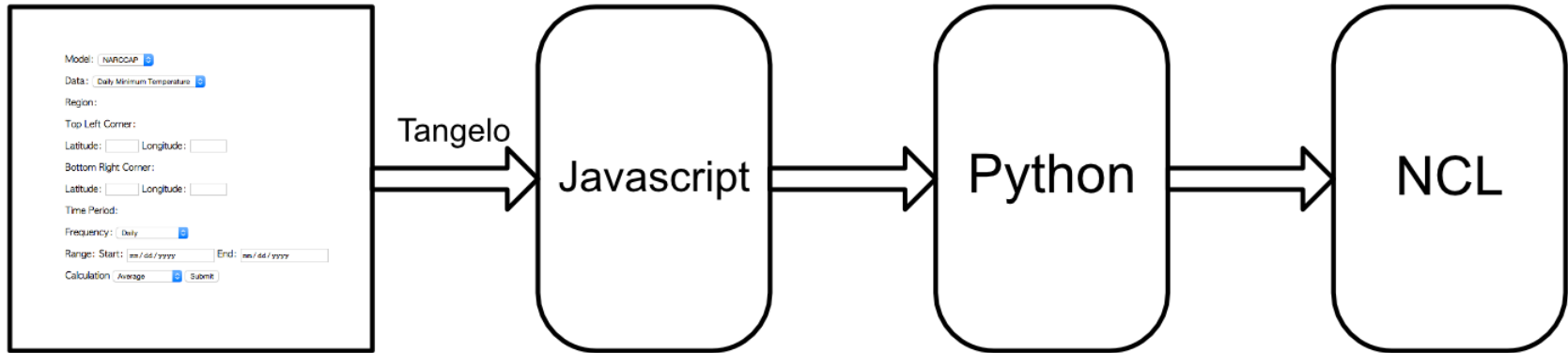
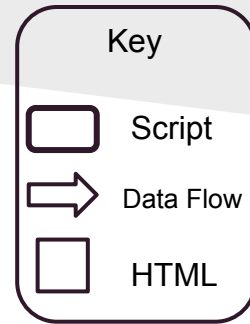


# Active Tasks

- Research interactive workflow frameworks
  - Tangelo Hub, Kepler, Taverna, Arbor
- Split workflow into Data Selection, Calculations, and Result pages
- Set up database for both temporary workflow files and saved workflows
- Create help boxes for workflow process
- Connect user parameters dynamically to NCL scripts

# Next Steps

- Model drop down
- Dynamic HTML to NCL Python Module



# Risks and Concerns

- Mitigating sponsor's expectations
  - Want catch-all application
- Creating an interactive drag and drop workflow process
- Saving and handling intermediate datasets
  - NARCCAP NetCDF files ~1GB

Questions?