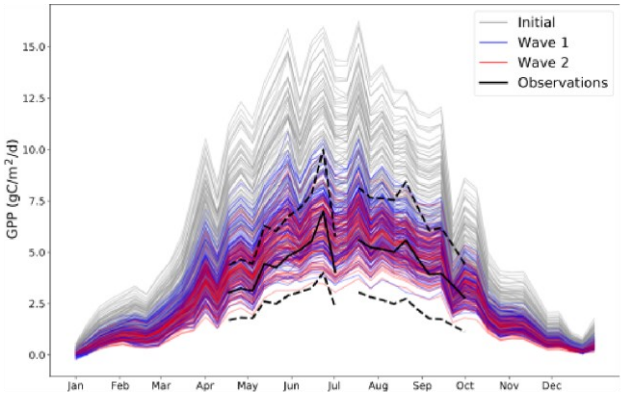


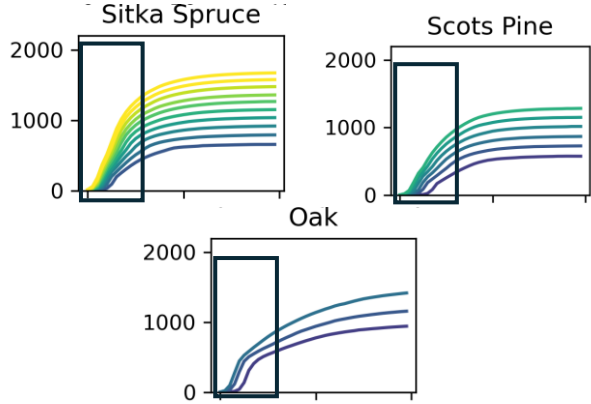
How it started:



Evan Baker et al. 2022: *Emulation of high-resolution land surface models using sparse Gaussian processes with application to JULES*, Geosci. Mod. Dev.

- Proof of concept producing GP emulator of JULES
- Calibrated model parameters compared to MODIS GPP

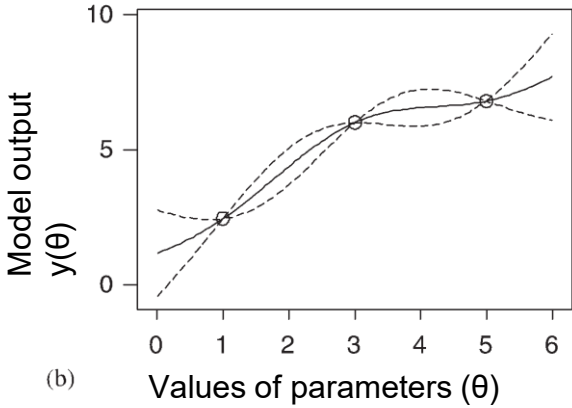
Application 2: Tuning species



Focus on growth over first few decades to help with net zero by 2050.

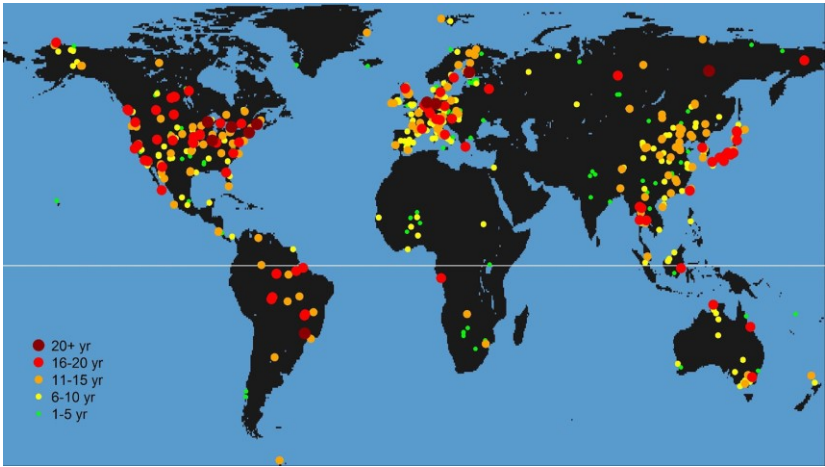
- Sitka Spruce and Douglas Fir
- Norway Spruce and Scots Pine
- Oak

GP emulation: Example with one parameter

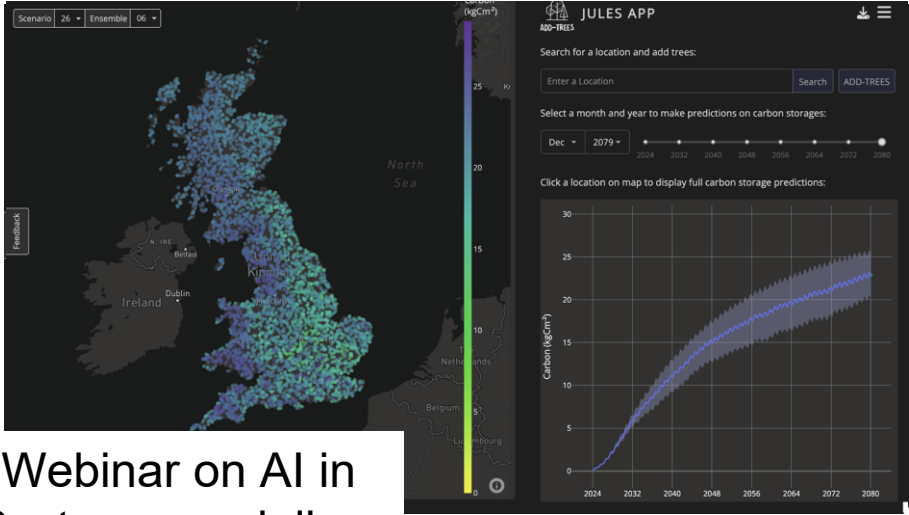


National Academies Webinar on AI in Weather and Earth Systems modeling

Application 3: Calibration across biomes



How it's going:
Application 1: JULES App



Using u-al752 and calibration techniques.

Open to collaborations on this!



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