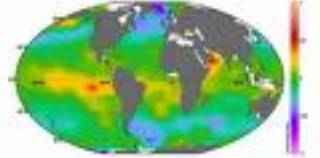
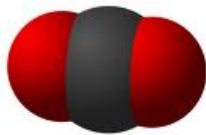


# Data Assimilation Ecological Problems

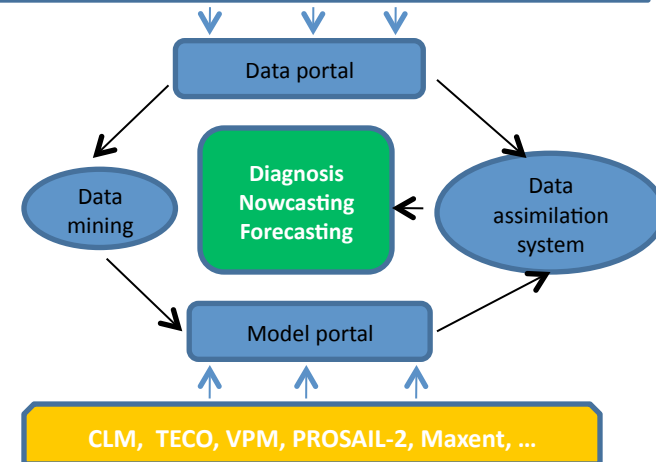
Faculty: S. Lakshmivarahan

## Objectives

- Understanding the process of carbon cycle.
- To improve prediction of terrestrial carbon sequestration at ecosystem and regional/continental scales with data assimilation techniques to estimate and constrain the three sets of parameters from AmeriFlux, soil carbon, and isotope data.
- Specifically interested in assimilating carbon flux data collected from various forests



CO2 flux, climate, biomass, images, species, diseases..



## Background and Work

- Developing a common platform for data assimilation in terrestrial carbon research.
- Conducting inverse analysis at AmeriFlux sites to quantify temporal variations of photosynthesis and respiration parameters.
- Analyzing regional and continental carbon sequestration using data from FACE, AmeriFlux, soil carbon, and isotope measurements.



## Relevant References

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