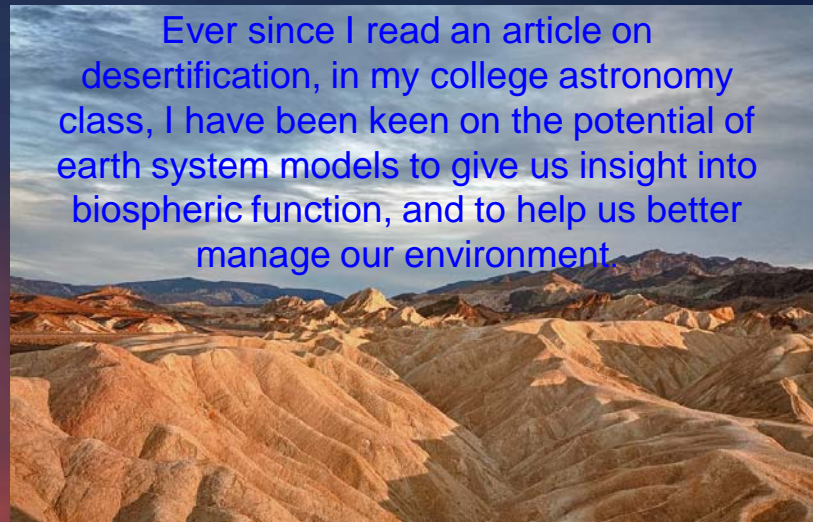**Joe Vaughan**
**Research Assistant Professor**

**Laboratory for Atmospheric Research**

Ever since I read an article on desertification, in my college astronomy class, I have been keen on the potential of earth system models to give us insight into biospheric function, and to help us better manage our environment.

- B.A. in Astronomy at Vassar College ('75)
- M.S. Environmental Studies at Duke Forestry & Environ. Studies ('79)
- Worked in air pollution modeling and in climate modeling projects at:
  - Computer Sciences Corp. ( '84 - '91); and University of Arizona ('91-'93)
- Ph.D. in Civil Engineering at WSU (2000).
  - Doctoral research-- Columbia Plateau $PM_{10}$ Program:
    - Shadowband Radiometric measurement for AOD
    - Satellite imagery analysis for AOD
- Postdoc at LAR/CEE -- development of AIRPACT and ClearSky AQ EDSS
- Research Assistant Professor at LAR/CEE 2004 -- present.

**Ongoing, Recent and Current Projects:**
- **NW-AIRQUEST -- ongoing development and support of AIRPACT daily AQ and ClearSky agriculture burning plume forecasting systems for the Pacific and Inland Northwest.**
- **Forest Service -- Extraction of AIRPACT nitrogen deposition results, both matching high-elevation forest site resin tube samples and domain-wide, monthly totals.**
- **Park Service -- Vulnerability of Minidoka (Japanese-American WWII Internment Camp) National Monument to CAFO emissions.**
- **NASA ROSES -- Application of satellite data for air quality modeling (AIRPACT)**