



Climate - Theme Summary

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ARL Laboratory Review

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Summary of ARL's Climate Theme

- **Climate Observing Networks**

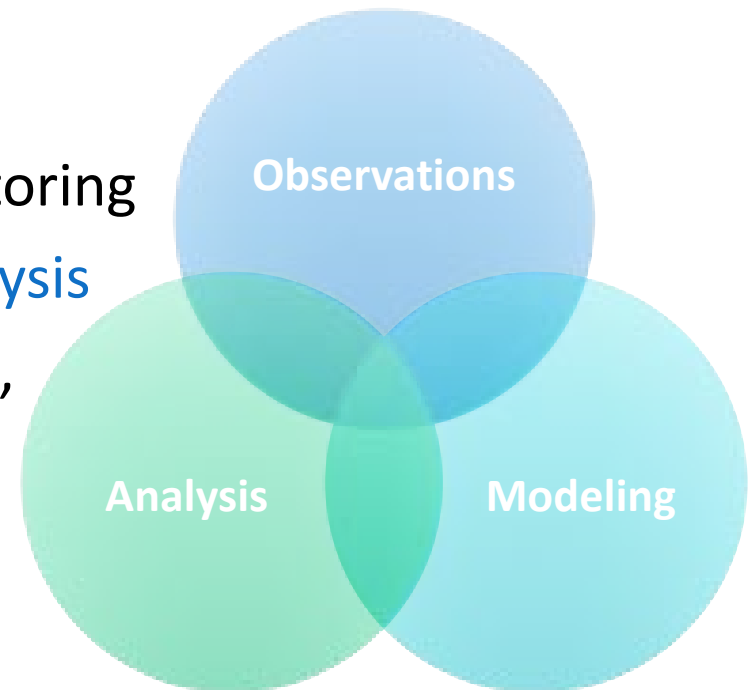
Providing high-quality observations to support climate research and monitoring

- **Climate Variability and Change Analysis**

Understanding past climate variations, their interconnections and causes

- **Regional Climate Modeling**

Developing a NOAA modeling capability for addressing regional climate change issues





Indicators of Preeminence

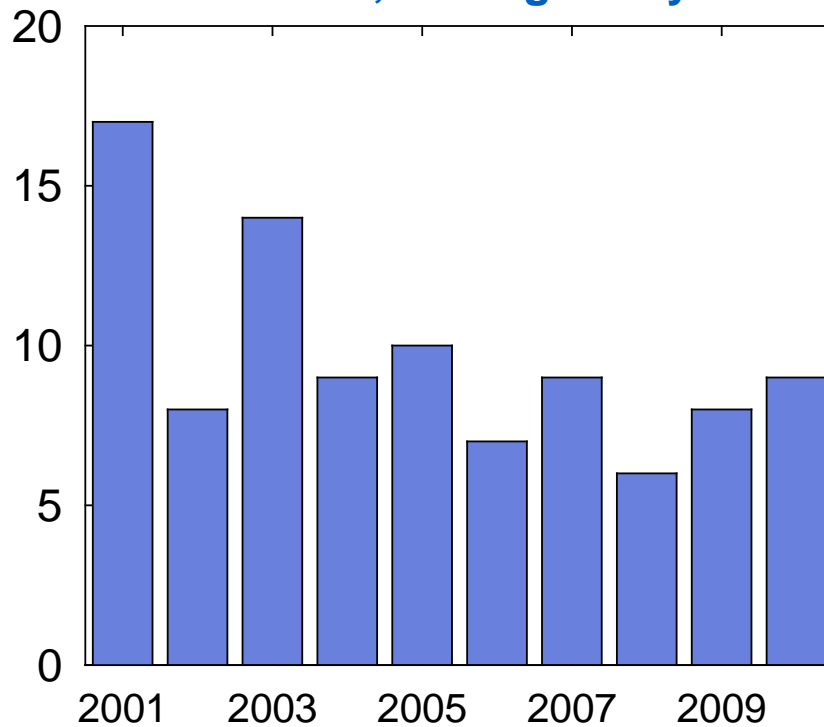
- Awards
 - Commerce Dept. and NOAA Gold, Silver and Bronze Medals
 - Three major World Meteorological Organization awards
 - Several NOAA Research Outstanding Paper Awards
- Scientific leadership and service
 - Journal editorial boards
 - American Meteorological Society
 - National Research Council committees
 - World Meteorological Organization
 - Global Climate Observing System



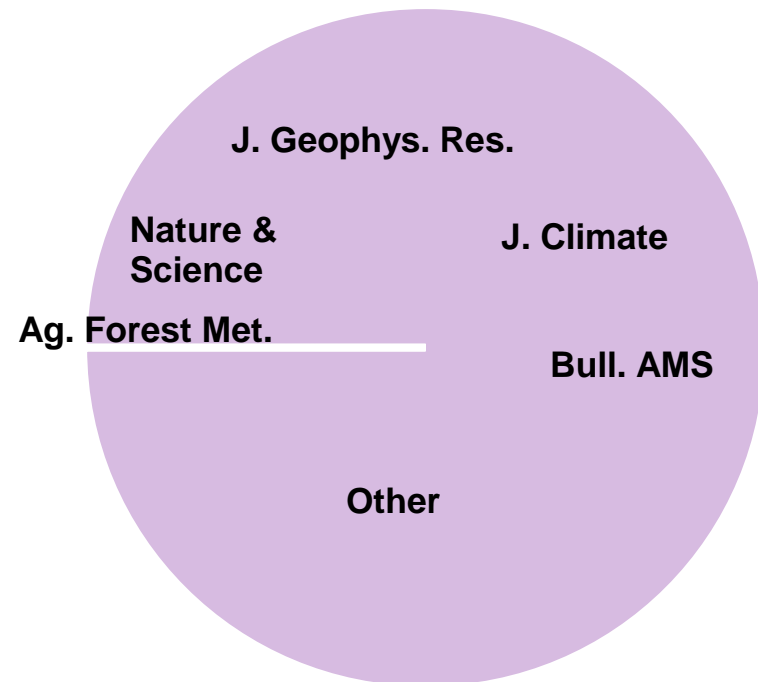
Publications

ARL Climate Publications 2001-2010

Total = 90; Average = 9/year



Journals





Future Plans

- **Climate Observing Networks**
 - Continued support for US surface climate reference networks
 - Integration of Surface Energy Balance Network with surface radiation networks
 - Continued research in support of GCOS Reference Upper Air Network
- **Climate Variability and Change Analysis**
 - Continued analysis of temperature trends and their uncertainties
 - Expansion of planetary boundary layer and cloudiness research
 - Focus on tropical tropopause and linkages to stratospheric water vapor
 - Maintaining flexibility to address emerging scientific problems
- **Regional Climate Modeling**
 - Work toward a regional Earth system modeling capability
 - Incorporate a data assimilation capability
 - Develop a model-based satellite data calibration and validation tool



Questions ?