

## DAVID R. COOK

Climate Research Section  
Environmental Science Division  
Argonne National Laboratory

### Education:

M.S.                The Pennsylvania State Univ., Meteorology, 1977  
B.S.                The Pennsylvania State Univ., Meteorology, 1974

### Professional Experience:

2006-present    Meteorologist,  
                         Environmental Science Division  
1997-2005       Scientific Associate Senior, Atmospheric Research Section  
                         Environmental Research Division  
1989-1997       Scientific Associate, Environmental Research Division  
1977-1989       Scientific Assistant, Radiological and Environmental Research Division  
                         Argonne National Laboratory

As a technical staff member, coordinate and participate in intensive micrometeorological, air-quality, lightning, and precipitation field studies, and climatological, meteorological, and air-quality monitoring activities.

A member of the Instrument Team of the Department of Energy Atmospheric Measurement Program with responsibility for developing, procuring, installing, and directing maintenance of instrument systems used to monitor climate change; perform data quality activities on the systems and produce data quality and monthly reports.

Participant in the Ameriflux program for the measurement of the air-surface exchange of heat and carbon dioxide fluxes (manage four sites and direct support staff activities); produce data sets and write publications/posters.

Project Director of the Argonne National Laboratory emergency response system Meteorological Tower; responsible for equipment, data processing, and dissemination to the laboratory, and the direction of support personnel.

Expertise in air-surface exchange, micrometeorological, and air-quality measurement techniques, data analysis, quality assurance of data, monitoring and siting requirements, surface and boundary layer theory, meteorological and air-quality instrumentation, and computer programming.

**Summary of Previous Experience:**

1975-1976

Graduate Research Assistant,  
Institute for Research on Land and Water Resources  
The Pennsylvania State University

Investigated the soil and air-surface exchange of energy from the release of heat from power plant water cooling pipes buried in the soil under different vegetation.

Summers, 1973 &amp; 1974

Research Assistant, Environmental Research and  
Technology, Concord, Massachusetts

Developed an air-mass classification system. Wrote progress reports on air-quality standards compliance for industries. Interpreted air-quality and meteorological data. Located air-quality monitoring stations on topographic maps.

**Research Interests:**

Management of climate monitoring instrument networks and tower platforms.  
Experimental studies of the air-surface exchange of energy, carbon dioxide, and pollutants using the gradient and eddy correlation techniques.  
Comparison of the gradient and eddy correlation techniques for flux measurements.  
Measurement of nitrogen oxides production by lightning.  
Lightning protection systems for instrumentation and facilities.  
Building Manager/Field Site Manager (484, Climate Research Section field site)  
Satellite Accumulation Area Supervisor (Bldg. 203, J-068, J-176, Building 484)  
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**Professional Activities:**

Member, American Meteorological Society  
Member, Air and Waste Management Association  
Member, American Management Association  
Member, Lightning Protection Institute (Professional Division)  
Certified Designer/Inspector (Lightning Protection Institute)  
DOE Lightning Protection Taskgroup; DOE Explosives Committee 2002-2003  
Atmospheric Radiation Measurements Program Instrument Team 1992-present  
Atmospheric Radiation Measurements Program Data Quality Reporter Team 2002-2003  
International Workshop on Semi-Arid Land Surface-Atmosphere Interaction, China 2007  
Atmospheric Radiation Measurements Program Surface Measurements Focus Group, 2008

**Publications:**

Author or co-author of 33 peer-reviewed articles and book chapters, 69 conference publications and presentations, and 29 reports.