

**RESUMÉ**  
Charles F. Keller  
5/07

**Education**

AB, St. Vincent College, Latrobe Penna.,	1961, philosophy, Magna cum Laude
BS, Penn State University, Penna.,	1964, physics and mathematics
PhD, Indiana University, Ind.,	1969, astronomy and astrophysics

**Career History**

Doctoral Research Associate, Los Alamos Nat. Lab.....	1967-1969
Research Scientist, Los Alamos National Laboratory.....	1969-1974
Group Leader (Computer Modeling--Los Alamos, Radiation/Hydrodynamics Group).....	1974-1980
Group Leader (Computer Modeling--Los Alamos, Earth & Space Sciences Division).....	1980-1987
Director, Los Alamos National Laboratory Branch of University of California's Institute of Geophysics and Planetary Physics (IGPP).....	1987-2000
Sabbatical at Scripps Institution of Oceanography.....	2001
Member of Los Alamos Laboratory Environmental Ethics working group--"Our Common Ground".....	1990-2000
Faculty Member--Univ. of New Mexico at Los Alamos 1992-1997 --Course: "Global Climate Change: Science and Policy"	
Member External Advisory Committee, Department of Physics, New Mexico State University.....	1995—2000
Los Alamos Lab. Representative on University of California's "University Committee on Research Planning.....	1998
Board Member and Chair, Univ. of New Mexico at Los Alamos,	1992-2000
Retired	June 2001
Visiting Scientist at LANL	July 2001-present
President, Native Plant Society of New Mexico	2006-2008

## Accomplishments

**1970--1974**---Several publications in Astrophysical Journal and Solar Physics. Observer several airborne solar eclipse expeditions.

**1979--1980**----Scientific Leader of two airborne solar eclipse expeditions.

**1980--1987**----Established and led large group (36 staff--25 PhD's) that introduced large scale computing to geophysics and atmospheric physics at Los Alamos.

**1982--2000**---Fostered research in global climate studies that led to Los Alamos National Laboratory program in Global Climate Change. Formed several inter-laboratory working groups in various aspects of both ocean and atmosphere studies.

**1987--2000**---Director of Los Alamos National Laboratory branch of University of California's Institute of Geophysics and Planetary Physics:

administering a large program (with the University of California) of collaborative research between Laboratory research staff and Campus faculty and students in the areas of Atmospheric Dynamics, Planetary Interiors, Space Plasma Physics, Mineral Physics, and Astrophysics. In addition sponsored large visitor/speaker program, topical workshops, and variety of activities in collaborative research in geophysics.

Member of the United States delegation to the "Japan--U.S. Seminar on the Global Environment", January 13-14, 1992, Tokyo.

Participated in CEPEX, Central Equatorial Pacific Experiment on Ocean-Atmospheric Heat Transfer. March 4-28, 1993

**1988 -- 1995** ---Co-Principle Investigator on INCOR grant from University of California, Lawrence Livermore and Los Alamos National Laboratories for collaborative research in ocean/atmosphere climate studies.

**1991** Co-Convenor of international Conference on Global Climate Change and Energy Policy, October 21-24, 1991 at Los Alamos National Laboratory.

**1996--1998** -- CoPI. University of California Multi-campus/laboratory Project on Water Resources in the Southwest.

**1996-1999** — Chair of Los Alamos Committee on Earth and Environmental Systems

**1996 and 1998** Lecturer and Participant, Political Science Fall Retreat, Patterson School of Diplomacy, University of Kentucky.

**2001** Cecil Green Scholar, IGPP at Scripps Institute of Oceanography, UCSD

## Awards

- Outstanding Alumnus of 1990, Saint Vincent College, Latrobe, Penna.
- Associated Western Universities' DOE Laboratory Distinguished Lecturer--1991/1992.
- 1993 Los Alamos National Laboratory "Distinguished Performance Award" for participation in Central Equatorial Pacific Ocean/Atmospheric Experiment.
- Cecil Green Scholar, Scripps Institution of Oceanography, Jan-Jun, 2001
- LANL Outstanding Retired Volunteer, 2006

## Publications

(Referred Journal Articles)

Atmospheres of Classical Cepheid Variables, C. Keller, and J. Mutschelcner, ApJ. 161, 217-228, July 1970  
Hydrodynamic Envelopes of Classical Cepheid Variables, C. Keller, and J. Mutschelcner, ApJ, 176, 127-136, July 1, 1971  
Solar eclipse of 1970 pub—solar physics find this  
Semi-Empirical Solar Line Blanketing, J. Mutschelcner, and C. Keller, Solar Physics 14, 294-309, 1970  
Enhancement of Solar Corona and Comet Details, W. Matuska, D. Janney, F. Farrell, and C. Keller, Optical engineering, 17, 661-665, 1978  
Airborne Eclipse Expedition: A Description of five experiments to determine temperature, density and structure oin the corona, C. Keller, Proc. Indian National Sci.Acad., 48,A, Supplement No. 3, 33-52, 1982.

Spectroscopy of Rare Earth Metals in the Sun;  
Physics of Solar Corona: Observations of a Total Solar Eclipse from a High Altitude Aircraft;

(Other Publications)

Los Alamos Science Large Review Article on Observations of Solar Eclipses from High Altitude Aircraft;  
Sky and Telescope Review article on photographs of outer corona over solar cycle.

LA Report and Referred Journal:

Two Dimensional Computations of Explosive Experiments in Oil Shale ;

### **Publications Related to Atmospheric Science**

"Global Impacts of Climate Warming: an Assessment" Proceedings of Japan--U.S. Seminar on the Global Environment, January 13-14, 1992, Tokyo.

"Integrating Climate -Change and Energy Policy", C.F. Keller, and R. Glasser., Proceedings of "Climate Change and Energy Policy" , Rosen and Glasser, editors, AIP, 1991.

Editor, Annual Reports 1990, 1991, 1992, 1993, 1994/95; University of California's Institutional Collaborative Research Program: "Coupled Atmospheric/Ocean General Circulation Model for Global Climate Change "

S. Barr, C. Keller, and R. Waller, "The Los Alamos Air Emissions Monitoring Program: a Quick-Look Technical Review", 9/9/91.

D. I. Cooper, W.E. Eichinger, M.V. Hynes, C. F. Keller, C. F. Lebeda, and D.A. Poling, High Resolution Properties of the Equatorial Pacific Marine Atmospheric 'Boundary Layer From Lidar and Radiosonde Observations, J. Atm. Sci., 1995, Vol. 53, No. 14, 15 July 1996

C. F. Keller, Comments on New Compact with Society for Federal Support of Science by Roger Pielke Jr. and Radford Byerly Jr. (Physics Today Feb. 1998), **Physics Today**, August 1998, p. 80.

C. F. Keller, "Predictability and Variability in the Earth's Climate" **Physica D**, 1999

C.F. Keller "Climate Change a Certainty", **EOS**, pp 368-372, August 17,1999

C.F. Keller "Global Warming, Science and Policy; A Review" **TheScientificWorld**, 2003

C.F. Keller "1000 Years of Climate Change" **Advances in Space Research**, 34, 315-322, 2004.

C.F. Keller "Update to Global Warming, Science and Policy" **TheScientificWorld**, 2006

C.F. Keller "Global Warming: a review o this mostly settled issue", Stoch Environ Res Risk Assess, 2009.

## **Climate Change communication Activities**

Has been active in study and communication of climate change.

- Faculty Member--Univ. of New Mexico at Los Alamos  
1992-present --Course: "Global Climate Change: Science and Policy"
- Participant Aspen Climate Institute, summer 1998
- Lectures on Global Warming at Los Alamos Lab, several universities, community service organizations, etc. see climate writings at web site  
<http://www.igpp.lanl.gov/>
- Formal Debate with S. Fred Singer on global warming 10/28/98.
- American Museum of Natural History Special Invited Lecture: "What is Climate and How does it change" at the AMNH including follow-on discussion in its Hall of Planet Earth
- Talk at IGPP Annual Systemwide Meeting at Scripps Institute of Oceanography on Satellite and Surface temperature measurements
- Presentation at Dec. 1999 AGU Mtg. Satellite and Surface Temperature Comparisons Abstract published in EOS.
- Invited Speaker and Participant at DOE Conference in Albuquerque on Pollution Reduction
- After Dinner Speaker at LANL/CNLS Annual International Meeting on New Directions in Non-Linear Science, "New Ideas in Forest Fire Suppression"
- Invited Speaker, "Climate Change" kickoff of Phillips Petroleum New Ideas Lecture Series, July 2001
- Invited Speaker, Los Alamos Fellows Lecture Series, "Global Warming" Fall 2001
- Panelist at special session on Solar Influences on Climate, Amer. Ast. Soc. Meeting, January 2002.
- Invited paper, "1,000 Years of Climate Change", COSPAR Meeting, October 11, 2002, Houston, (submitted for publication).
- Second debate with Fred Singer, Duquesne Univ. Oct. 2007.