

## SUMMARY CURRICULUM VITAE

(July, 2004)

### Personal

Name: David John KAROLY

Business Address: School of Meteorology, University of Oklahoma  
100 E. Boyd, Norman, OK 73019-1013  
USA

Telephone: +1 (405) 325 6446 FAX: +1 (405) 325 7689

Email : dkaroly@ou.edu

Date of Birth: 12 July 1955 Nationality: Australian

### Education and Awards

1976 B.Sc.(Hons), First Class, in Applied Mathematics, Monash University, Australia

1976 Awarded a Shell Australia Science and Engineering Graduate Scholarship for study in England

1980 Ph.D. in Meteorology, University of Reading, thesis "Stationary planetary waves in the atmosphere"

1981 Awarded the Meteorology Prize from the University of Reading for session 1980-81

1993 Received the Meisinger Award from the American Meteorological Society, with citation "for contributions to the understanding of the role of Rossby wave propagation in atmospheric teleconnections and to greenhouse climate change research".

1998 Received the Norbert Gerbier - MUMM Prize from the World Meteorological Organization for the paper "A search for human influences on the thermal structure of the atmosphere", *Nature*, **382**, 39-46 (1996) with B.D. Santer, and 11 others.

1999 Elected a Fellow of the American Meteorological Society in recognition of outstanding contributions to the atmospheric and related sciences during a substantial period of years.

2000 Presented the R.H. Clarke Lecture to the Australian Meteorological and Oceanographic Society.

2004 Selected as a Gary Comer Science and Education Foundation Mentor and awarded \$330,000 over three years for climate changed research.

### Appointments

Jan.,1981-Feb.,1983 Postdoctoral Research Fellow, CSIRO ANMRC, Melbourne, Australia.

March, 1983-2001 Lecturer, Senior Lecturer, Reader, Dept. of Mathematics, Monash University, Australia

July,1993-Sept.,1994 Acting Professor and Interim Director, Cooperative Research Centre (CRC) for Southern Hemisphere Meteorology, Monash University, Australia.

Sep, 1995-Sep, 2000 Director, CRC for S.H. Meteorology and Professorial Fellow, Monash University

2001-2002 Professor of Meteorology and Head, School of Math. Sciences, Monash University

Jan., 2003-present Williams Chair and Professor of Meteorology, School of Meteorology, University of Oklahoma, USA

## Recent Professional Activities

- 1998-2001 Coordinating lead author, Climate change detection and attribution, Working Group I, IPCC Third Assessment Report *Climate Change 2001: The Scientific Basis*
- 1997-2002 Member, Scientific Steering Group, WCRP Project "Stratospheric Processes and their Role in Climate" (SPARC)
- 1998-present Member, WMO/CLIVAR Expert Team on Climate Change Detection
- 2002-present Member, Council, American Meteorological Society
- 2003-present Member, US National Research Council Climate Research Committee
- 2003-present Member, UCAR University Relations Committee
- 2004 Chair, National Research Council Committee on Review of the US CLIVAR Project Office

## Recent Publications (2002-2004)

- Karoly, D.J., and K. Braganza (2004) Attribution of recent temperature changes in the Australian region. *J. Climate*, in press.
- Braganza, K., D.J. Karoly and J.M. Arblaster (2004) Diurnal temperature range as an index of global climate change during the 20<sup>th</sup> century. *Geophys. Res. Lett.*, in press.
- Braganza, K., D.J. Karoly, A.C. Hirst, P. Stott, R.J. Stouffer, and S.F.B. Tett (2003) Simple indices of global climate variability and change: Part II – Attribution of climate change during the 20<sup>th</sup> century. *Climate Dynamics*, in press.
- Randel, W., P. Udelhofen, E. Fleming, M. Gelman, M. Geller, K. Hamilton, D. Karoly, and 11 coauthors (2004) The SPARC intercomparison of middle-atmosphere climatologies. *J. Climate*, **17**, 986-1003.
- Karoly, D.J., K. Braganza, P.A. Stott, J.M. Arblaster, G.A. Meehl, A.J. Broccoli and K.W. Dixon (2003) Detection of a human influence on North American climate. *Science*, **302**, 1200-1203.
- Karoly, D.J. (2003) Ozone and climate change. *Science*, **302**, 236-237.
- Cai, W., P.H. Whetton, and D.J. Karoly (2003) The response of the Antarctic Oscillation to increasing and stabilized atmospheric CO<sub>2</sub>. *J. Climate*, **16**, 1525-1538.
- Grainger, S., and D.J. Karoly (2003) A transport model study of the breakup of the Antarctic ozone hole in November 2000. *Geophys. Res. Lett.*, **30**, 1368, doi: 10.1029/2002GL016494.
- Li, S., E.C. Cordero and D.J. Karoly (2003) Three-dimensional simulations of the springtime breakup of the Antarctic ozone hole, *Aust. Met. Mag.*, **52**, 1-9.
- Chane-Ming, F., F.M. Guest and D.J. Karoly (2003) Gravity waves observed in temperature, wind and ozone data over Macquarie Island, *Aust. Met. Mag.*, **52**, 11-21.
- Karoly, D.J., J.F.B. Mitchell, M.R. Allen, G. Hegerl, F. Zwiers, and J. Marengo (2003) Comment on Soon et al. (2001) Modeling climatic effects of anthropogenic carbon dioxide emissions: unknowns and uncertainties. *Clim. Res.*, **24**, 91-92.
- Karoly, D., J. Risbey, A. Reynolds, and K. Braganza (2003) Global warming contributes to Australia's worst drought. *Australasian Science*, April 2003 issue, 14-17.
- Braganza, K., D.J. Karoly, A.C. Hirst, M.E. Mann, P. Stott, R.J. Stouffer, and S.F.B. Tett (2003) Simple indices of global climate variability and change: Part I - Variability and correlation structure. *Climate Dynamics*, **20**, 491-502. DOI: 10.1007/s00382-002-0286-0.
- Karoly, D.J., and G. Teggart (2002) *Climate change science: An update of current understanding and uncertainties*, J. Ellis and J. Zillman Eds., Aust. Academy of Tech. Sciences and Eng., Parkville, Vic., 7pp.
- Li, S., E.C. Cordero and D.J. Karoly (2002) Transport out of the Antarctic polar vortex from a three-dimensional transport model. *J. Geophys. Res.*, **107** (D11), 4132, DOI: 10.1029/2001JD000508.