

Ian Allison

Honorary Research Professor

Antarctic Climate and Ecosystems Cooperative Research Centre.

Hobart, Tasmania, AUSTRALIA

Qualifications:

B.Sc (Hon) Physics, University of Melbourne, 1967

M.Sc Meteorology, University of Melbourne, 1970

Ph.D Meteorology, University of Melbourne, 1987

Employment History:

Glaciologist with Australian Antarctic Division (AAD) from 1968 until retirement in 2010 (>42 years).

Program Manager, AAD Glaciology Section from July 1979.

Leader: AAD Ice, Ocean, Atmosphere and Climate Program (Senior Principal Research Scientist) from December 1995.

Awards & Honours:

2010 Future Justice Prize (for leadership and initiative in the advancement of future justice) as a member of the authorship team of **The Copenhagen Diagnosis**, recognized for communicating the latest advances in climate change science.

2009 Doctor of Science (Honoris Causa) University of Tasmania for outstanding contributions to international scientific collaboration.

2007 Recognition for contributing to the award of the Nobel Peace Prize to IPCC.

2006 Ministerial Achievement Award, Australian Government Department of Environment and Heritage.

1999 National Australia Day Achievement Medallion (for leadership during and following the engine room fire on RSV *Aurora Australis* in the Antarctic, July 1998).

1988 Australian Antarctic Medal (AAM).

1980 Allison Glacier, a 9 km-long glacier on Heard Island (53S, 73E) was named in recognition of my work on the glaciers of the island. Conferred by Australian Antarctic Names Committee.

1969 Australian Antarctic Service Medallion.

Scientific interests and achievements

110 peer-reviewed research publications; nearly 50 papers in reports and other publications; and 5 edited monographs.

My major projects include:

- Studies of the energy exchange between atmosphere, landfast sea ice and the ocean.
- Characteristics, thickness and dynamics of Antarctic pack ice. Climate role of sea ice.
- The role of coastal polynyas in sea ice production and bottom water formation.
- Antarctic surface meteorology
- Dynamics and mass budget of the Lambert Glacier Basin (LGB).
- Ice – ocean interaction beneath the Amery Ice Shelf.

To investigate these I instigated and led:

- The first Australian winter time (July) voyage into the Antarctic sea ice.
- The first voyage through the winter (July) sea ice to the coastal Mertz Glacier Polynya.
- Establishment of a network of automatic weather stations in the deep interior of Antarctic (including Dome A in collaboration with Chinese).
- A series of major oversnow traverse from Mawson to Davis inland via the 2500 m contour around the LGB.
- A program of hot water drillings through the Amery Ice Shelf (> 800 m) to deploy oceanographic instruments in the cavity beneath the ice shelf.

International involvement

- Co-chair, Joint Committee for International Polar Year 2007-2008. This committee endorsed, coordinated and oversaw the 228 projects undertaken by 50,000 researchers from 60 nations that made up IPY (Arctic and Antarctic). Member ICSU Planning Group for IPY. This group planned the science and operational framework for IPY.
- Lead Author, Intergovernmental Panel on Climate Change (IPCC) Working Group 1 Chapter 4 (on Observed changes to snow and ice) for Assessment Reports 4 and 5.
- President, International Association of Cryospheric Sciences (IACS) of the International Union of Geodesy and Geophysics IUGG.
- IUGG Delegate to the Scientific Committee on Antarctic Research (SCAR).
- Previous positions include: Chair, Australian National Committee for Antarctic Research, Australian Academy of Science and Australian Delegate to SCAR; Secretary of the SCAR Working Group on Antarctic Climate Research; member of the SCAR Group of Specialists on Antarctica and Global Change; Vice-president, International Glaciological Society; Vice Chair, Scientific Steering Group of the WCRP Climate and Cryosphere project; Chair of the IUGG/IAMAS International Commission on Polar Meteorology; member of WMO-CAS Working Group on Sea Ice and Climate; etc, etc.....

Antarctic field expeditions

25 research-related trips to the Antarctic including:

- Mawson winter (1969)
- 7 extended deep-field operations (South Prince Charles Mts, Enderby Land, Heard I)
- Numerous marine science voyages
- 2 x field leader of deep-field operations
- 7 x voyage leader of resupply and research voyages.

Other: glaciologist/meteorologist – Australian Universities' Carstensz Glaciers Expedition, Irian Jaya, 1972/73.