

## EDITORIAL

The following three papers are dedicated to the memory of Graeme K. Mather, who died on 15 August 1997 [see the necrology in the *Bulletin of the American Meteorological Society*, Vol. 79, No. 1, 111–112 (1998)]. Mather devoted most of his professional life to solving the problems of weather modification. He began his career in meteorology in the Flight Research Section of the Canadian National Research Council in June 1964. In 1971, in South Africa, he set in motion one of the world's largest sustained efforts in weather modification. Always conscious of the fact that attempts to modify the weather could be used as a controlled experiment in the atmosphere, Graeme strove to assemble credible quantitative observations, to involve a host of other researchers, and to produce peer-reviewed research of his own. Mather's first and last papers were submitted to and accepted by the *Journal of Applied Meteorology*. Most are coauthored with researchers from around the globe.

The papers that follow in this issue represent the scope of Graeme's work in weather modification. He pioneered many of the technical and observational methods employed in weather modification, ranging from the enormous difficulties in making credible aircraft measurements in vigorous convective clouds (Morgan et al.) to the development of seeding materials (Terblanche et al.). He was equally conscious of the challenges presented by the need to demonstrate unequivocally the results of modification experiments in a highly variable environment (Gabriel). These and future papers, which follow the body of Graeme's work and his legacy in weather modification in South Africa, will ensure that his contribution to meteorology endures.

Thanks are due to Dr. Harold Orville who acted as Guest Coordinator in soliciting and reviewing the papers that make up this special section of the *Journal of Applied Meteorology*.

*Michael Garstang*  
Chief Editor