

PREFACE

In its millennial session, the GFD program focused on "The General Circulation of the Atmosphere." Isaac Held led the charge with an inspiring two-week introductory course, strongly supported by the lectures of Alan Plumb, Wayne Schubert, Michael Cullen, and Oliver Bühler. As the dust settled, the important concept of pseudomomentum shone brightly in the sky above Walsh Cottage. This is a concept which has virtually transformed meteorology within the past 20 years, yet it remains mostly unfamiliar to oceanographers and others. Thus our "pseudomomentum summer" perfectly fit the GFD mission of diffusing ideas across disciplinary boundaries. As the summer wore on, the range of topics broadened in its customary way to include: the general circulation of Jupiter and Mars; lattice-Boltzmann and gas-kinetic methods for solving the equations of fluid mechanics; the scattering of sound waves by vortices; the heating of the universe; and many more topics too numerous to list. For an accurate impression of the program's activities, the reader should be sure to scan the 2000 lecture schedule.

Our 9 GFD fellows--all attending American or Canadian universities, but representing America, Italy, Barbados, Greece, Ghana and China--seemed to thrive in this atmosphere, holding up well under the pressure of the full lecture schedule and the deadline for research projects. Once again I must apologize to the many excellent applicants who were not selected to be fellows.

This year WHOI made significant improvements to Walsh Cottage, including the installation of very quiet air conditioners in the lecture room, which greatly increased our comfort there. It is a pleasure to thank John Farrington and the Education Office staff for their indispensable help in running GFD. Very special thanks go to our administrative assistant Janet Fields for her ability to transform chaos into order, for her cheerfulness in the face of unusual requests, and for her willingness to undertake almost any mission. Eric Chassignet and Jean Luc Thiffeault generously contributed time and expertise to the maintenance of our computer network and to the preparation of this volume. Once again we acknowledge the National Science Foundation and the Office of Naval Research for their support of GFD.