Preface

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The International Association of Meteorology and Atmospheric Sciences (IAMAS) requests each of its member countries to submit, every four years, a progress report on relevant operational and research fields, and to exchange the report with other members during the International Union of Geodesy and Geophysics (IUGG) Assembly, which is also held every four years. During the last thirty years, the Chinese National Committee for IAMAS has regularly fulfilled this request and, accordingly, prepared the present report for the XXV General Assembly of the IUGG, held in Melbourne, Australia, 28 June–7 July 2011, in which some advances and achievements in meteorology and the atmospheric sciences in China, mainly for the period 2006–10, are presented.

Initially, the report received twelve submissions that cover, amongst others, the following fields: the middle atmosphere, weather and climate effects of the Tibetan Plateau, meteorological satellites and satellite meteorology, the East Asian monsoon system, atmospheric electricity, climate change, the mesoscale atmosphere, data assimilation, nonlinear atmospheric dynamics and predictability for weather and climate, climate and weather predictions, atmospheric chemistry, carbon and nitrogen cycles. All the papers have also been sent out for peer-review and the eight papers accepted for publication are published in the special issue of *Advances in Atmospheric Sciences*. Through this special report, readers will gain insight into recent progress made by Chinese scientists, as well as plans for future research. We hope that the report will not only strengthen exchanges in knowledge domestically, but also enhance international cooperation and collaboration in ways that will enable meteorology and the atmospheric sciences in China to develop even further, thus allowing the research conducted by Chinese scientists to contribute positively worldwide.

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