

**Cover illustration**

Pinnacles eroded from sedimentary rock, with melting snow, in Bryce Canyon National Park, Utah. (Courtesy of T. Dempsey/Photoseek.com)

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YEAR OF PLANET EARTH

As we progress into the twenty-first century, modern society faces one of its greatest challenges — climate change. Earth scientists are uniquely placed to help tackle this issue, as well as to help society reduce the risks from natural hazards and use Earth's resources sustainably.

To achieve these goals, it is essential that Earth scientists and society interact in mutually beneficial ways, as Ted Nield and Frank Press reflect in the essays that open and close this collection. But it is also crucial that Earth scientists are excited and inspired by science in its own right, and it is this aim that we hope to fulfil through the other articles in this supplement. These informal, sometimes opinionated, pieces look back at recent developments in the Earth sciences and consider where future advances might lie.

These ideas have much in common with the philosophy behind the International Year of Planet Earth, a joint initiative by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Union of Geological Sciences. This project aims to capture people's imagination with the knowledge accumulated by Earth scientists and to ensure that this information is used to benefit society, and we hope that this supplement will contribute to these goals.

With *Nature Geoscience*, Nature Publishing Group has just launched a new journal that also supports the goals of the International Year of Planet Earth. Alongside *Nature*, *Nature Geoscience* will publish research, commentary and analysis across the entire spectrum of the Earth sciences.

We are pleased to acknowledge the financial support of the International Year of Planet Earth (IYPE) and the International Union of Geological Sciences in producing this supplement. As always, *Nature* carries sole responsibility for all editorial content.

Joanna Thorpe, Associate Editor,
Juliane Mössinger and John VanDecar, Senior Editors

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