

Earth Science Workshop Three Understanding Space

The chapters in this Yearbook are examples of ways to study the power of teacher education. They describe practices of teacher education based on theory, research, and experience and then assess influences of these practices. These research findings become part of the knowledge base on good teacher education.

This volume draws on the ecojustice, citizen science and youth activism literature base in science education and applies the ideas to situated tensions as they are either analyzed theoretically or praxiologically within science education pedagogy. It uses ecojustice to evaluate the holistic connections between cultural and natural systems, environmentalism, sustainability and Earth-friendly marketing trends, and introduces citizen science and youth activism as two of the pedagogical ecojustice philosophy can be enacted. It also comprises evidence-based practice with international service, community embedded curriculum, teacher preparation, citizen monitoring and community activism, student-scientist partnerships, socioscientific issues, and new avenues for educational research.

Earthquakes and Multi-hazards Around the Pacific Rim, Vol. II

Spatial Information for Land Use Management

Research Priorities for Earth Science and Public Health

The Earth Observer

Effective Curriculum, Instruction, and Assessment

Ready for the 21st Century? : Hearing Before the Committee on Commerce, Science, and Transportation, United States Senate, One Hundred Tenth Congress, First Session, July 11, 2007

Scientific and Technical Aerospace Reports

We live on a dynamic Earth shaped by both natural processes and the impacts of humans on their environment. It is in our collective interest to observe and understand our planet, and to predict future behavior to the extent possible, in order to effectively manage resources, successfully respond to threats from natural and human-induced environmental change, and capitalize on the opportunities a€ social-economic security, and more a€ that such knowledge can bring. By continuously monitoring and exploring Earth, developing a deep understanding of its evolving behavior, and characterizing the processes that shape and reshape the environment in which we live, we not only advance knowledge and basic discovery about our planet, but we further develop the foundation upon which benefits to society are built. Thriving on Our Changing Planet presents prioritized science, applications, and observations, along with related strategic and programmatic guidance, to support the U.S. civil space Earth observation program over the coming decade.

Monthly Catalog of United States Government Publications

Situated Tensions for Science Education

Recent Highlights and Achievements

The Guidebook of Federal Resources for K-12 Mathematics and Science

Climate Variation and Its Effects on Our Land and Water: Earth science in climate research

International Geosphere/Biosphere Program, 1984

The Workshop on Decadal Science Strategy Surveys was held on November 14-16, 2006, to promote discussions of the use of National Research Council (NRC) decadal surveys for developing and implementing scientific priorities, to review lessons learned from the most recent surveys, and to identify potential approaches for future surveys that can enhance their realism, utility, and endurance. The workshop involved approximately 60 participants from academia, industry, government, and the NRC. This report summarizes the workshop presentations, panel discussions, and general discussions on the use of decadal surveys for developing and implementing scientific priorities in astronomy and astrophysics, planetary science, solar and space physics, and Earth science. Decadal Science Strategy Surveys: Report of a Workshop summarizes the evnts of the three day workshop.

Where is U.S. secondary-level science education heading today? That's the question that The Essentials of Science, Grades 7-12 sets out to answer. Over the last century, U.S. science classes have consistently relied on lectures, textbooks, rote memorization, and lab demonstrations. But with the onset of NCLB-mandated science testing and increased concern over the United States' diminishing global stature in science and technology, public pressure is mounting to educate students for a deeper conceptual understanding of science. Through lively examples of classroom practice, interviews with award-winning science teachers and science education experts, and a wide-ranging look at research, readers will learn
* How to make use of research within the cognitive sciences to foster critical thinking and deeper understanding.
* How to use backward design to bring greater coherence to the curriculum.
* Innovative, engaging ideas for implementing scientific inquiry in the classroom.
* Holistic strategies to address the complex problems of the achievement gap, equity, and resources in the science classroom.
* Strategies for dealing with both day-to-day and NCLB assessments.
* How professional learning communities and mentoring can help teachers reexamine and improve their practice.
Today's secondary science teachers are faced with an often-overwhelming array of challenges. The Essentials of Science, Grades 7-12 can help educators negotiate these challenges while making their careers more productive and rewarding.

Fiscal Year 1981

Proceedings of the Third UN/ESA/NASA Workshop on the International Heliophysical Year 2007 and Basic Space Science

Decadal Science Strategy Surveys

Monthly Catalogue, United States Public Documents

U.S. Geological Survey Activities

Google Earth and Virtual Visualizations in Geoscience Education and Research

Geographic Information Systems (GIS), Remote Sensing, and environmental modelling are increasingly being used to address land use and land use management issues although much of the development in these applications is based in specific case studies that are not readily accessible to a wide audience. Spatial Information for Land Use Management is d

This book represents Volume II of the Proceedings of the UN/ESA/NASA Workshop on the International Heliophysical Year 2007 and Basic Space Science, hosted by the National Astronomical Observatory of Japan, Tokyo, 18 – 22 June, 2007. It covers two programme topics explored in this and past workshops of this nature: (i) non-extensive statistical mechanics as applicable to astrophysics, addressing q-distribution, fractional reaction and diffusion, and the reaction coefficient, as well as the Mittag-Leffler function and (ii) the TRIPOD concept, developed for astronomical telescope facilities. The companion publication, Volume I of the proceedings of this workshop, is a special issue in the journal Earth, Moon, and Planets, Volume 104, Numbers 1-4, April 2009.

The Essentials of Science, Grades 7-12

Proceedings of the 9th International Conference on Computer Supported Collaborative Learning

Oklahoma Geology Notes

June 8-13, 2009, Rhodes, Greece

A Guide to NASA's Earth Science Enterprise and the Earth Observing System

Thriving on Our Changing Planet

Lists citations with abstracts for aerospace related reports obtained from world wide sources and announces documents that have recently been entered into the NASA Scientific and Technical Information Database.

The Earth system functions and connects in unexpected ways - from the microscopic interactions of bacteria and rocks to the macro-scale processes that build and erode mountains and regulate Earth's climate. Efforts to study Earth's intertwined processes are made even more pertinent and urgent by the need to understand how the Earth can continue to sustain both civilization and the planet's biodiversity. A Vision for NSF Earth Sciences 2020-2030: Earth in Time provides recommendations to help the National Science Foundation plan and support the next decade of Earth science research, focusing on research priorities, infrastructure and facilities, and partnerships. This report presents a compelling and vibrant vision of the future of Earth science research.

Fiscal Year 2008 Budget Request and Issues : Hearing Before the Subcommittee on Space and Aeronautics, Committee on Science and Technology, House of Representatives, One Hundred Tenth Congress, First Session, June 28, 2007

Web Information Systems Engineering - WISE 2007 Workshops

A Vision for NSF Earth Sciences 2020-2030

National Science Foundation Directory of NSF-supported Teacher Enhancement Projects

EcoJustice, Citizen Science and Youth Activism

U.S. Geological Survey Coastal and Marine Geology Research

Previous conference titles: Dynamics of fluids in fractured rock and Dynamics of fluids and transport in fractured rock.

A range of natural earth materials, like arsenic or fluoride, have long been linked to significant human health effects. Improved understanding of the pervasive and complex interactions between earth materials and human health will require creative collaborations between earth scientists and public health professionals. At the request of the National Science Foundation, U.S. Geological Survey, and National Aeronautics and Space Administration, this National Research Council book assesses the current state of knowledge at the interface between the earth sciences and public health disciplines. The book identifies high-priority areas for collaborative research, including understanding the transport and bioavailability of potentially hazardous earth materials, using risk-based scenarios to mitigate the public health effects of natural hazards under current and future climate regimes, and understanding the health risks that result from disturbance of earth systems. Geospatial Information - geological maps for earth scientists and epidemiological data for public health professionals - is identified as one of the essential integrative tools that is fundamental to the activities of both communities. The book also calls for increased data sharing between agencies to promote interdisciplinary research without compromising privacy.

U.S. Geological Survey Circular

Research on Effective Models for Teacher Education

Catalog of Copyright Entries. Third Series

Graduate Announcement

Research in Education

EOS Reference Handbook

This is the second of two volumes devoted to earthquakes and multi-hazards around the Pacific Rim. The circum-Pacific seismic belt is home to roughly 80% of the world's largest earthquakes, making it the ideal location for investigating earthquakes and related hazards such as tsunamis and landslides. Following the Introduction, this volume includes 14 papers covering a range of topics related to multi-hazards. The book is divided into five sections: viscoelastic deformation, earthquake source models, earthquake prediction, seismic hazard assessment, and tsunami simulation. Viscoelastic relaxation can play an important role in subduction zone behavior, and this is explored in the first section, with specific examples including the Tohoku-oki earthquake in Eastern Japan. In addition to laboratory rock friction experiments, the second section examines earthquake source models for the 2016 MW 6.6 Aketao earthquake in Eastern Pamir and two earthquakes in Eastern Taiwan, along with strong ground motion studies of the 2008 MW 7.9 Wenchuan, China earthquake. The Load/Unload Response Ratio (LURR), Natural Time (NT), and "nowcasting" are earthquake prediction techniques that are analyzed in the third section, with nowcasting predictions performed for a number of large cities globally. Viscoelastic relaxation can play an important role in subduction zone behavior, assessment are the focus of the fourth section, with specific applications to the Himalayan-Tibetan region and the Xianshuihe Fault Zone in Southwest China. In the last section, a new approach in modeling tsunami height distributions is described. Rapid advances are being made in our understanding of multi-hazards, as well as the range of tools used to investigate them. This volume provides a representative cross-section of how state-of-the-art knowledge and tools are currently being applied to multi-hazards around the Pacific Rim. The material here should be of interest to scientists involved in all areas of multi-hazards, particularly seismic and tsunami hazards. In addition, it offers a valuable resource for students in the geosciences, covering a broad spectrum of topics related to hazard research.

This book constitutes the joint refereed proceedings of six workshops held in conjunction with the 8th International Conference on Web Information Systems Engineering, WISE 2007 in Nancy, France, in December 2007. The 44 revised full papers presented were carefully reviewed and selected from numerous submissions for presentation in the six workshops. The workshops discuss a broad range of subjects.

Contributions of Land Remote Sensing for Decisions About Food Security and Human Health

Resources in Education

1977: July-December: Index

Earth in Time

Hearings Before the Subcommittee on Space Science and Applications of the Committee on Science and Technology, U.S. House of Representatives, Ninety-eighth Congress, Second Session, September 12, 13, 1984

Fluid Dynamics in Complex Fractured-Porous Systems

Land remote sensing: the use of space-based satellite technologies to obtain information on environmental variables such as land-use and land-covering combination with other types of data can provide information on changes in the Earth's surface and atmosphere that are critical for forecasting and responding to human welfare issues, such as disease outbreaks, food shortages, and floods. This book summarizes a workshop on the potential contributions of remotely sensed data to land-use and land-cover change and ways to use physical, biological, temporal, and social characteristics of particular locations to support decisions about human welfare. The discussions focused on human health and food security, two aspects of human welfare in which remotely-sensed environmental conditions play a key role. Examples illustrating the possibilities for applying remote sensing for societal benefit are included throughout the report. As a result of the workshop, three themes were identified that, if fostered, could help realize the potential for the application of land remote sensing to decisions about human welfare: (1) integration of spatial data on environmental conditions derived from remote sensing with socioeconomic data; (2) communication between remote sensing scientists and decision makers to determine effective use of land remote sensing data for human welfare issues; and (3) acquisition and access to long-term environmental data and development of capacity to interpret these data.

Contains directories of federal agencies that promote mathematics and science education at elementary and secondary levels; organized in sections by agency name, national program name, and state highlights by region.

U.S. Weather and Environmental Satellites

Earth Materials and Health

Geological Survey Circular

BOREAS RSS-18 Level-1B AVIRIS Imagery: At-Sensor Radiance in BIL Format

A Decadal Strategy for Earth Observation from Space

Workshop Report