



Introduction

Welcome to *Mission Geography*!

The purpose of these curriculum support materials is to excite and educate learners about the world in which they live, about geography, and about the research and missions of the National Aeronautics and Space Administration (NASA).

Mission Geography focuses on ways NASA scientists use spatial analysis and other geographic skills to solve real-world problems. These materials teach geography by modeling geographic thinking and decision making and by involving learners in real-world contexts. The foundation for *Mission Geography* is the *National Geography Standards: Geography for Life*. However, *Mission Geography* is connected to and supports the national standards in mathematics, science, and technology as well.

Mission Geography is a partnership between the Geography Education National Implementation Project (GENIP) and NASA.

Format

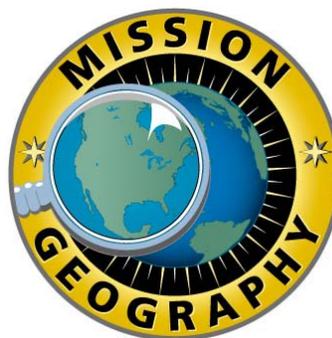
This CD-ROM contains three separate sets of materials ready to be printed:

- *Mission Geography* K-4,
- *Mission Geography* 5-8, and
- *Mission Geography* 9-12.

The files are in PDF format. Adobe Acrobat Reader is included on this CD-ROM for you to install on your computer if you do not already have it. The PDF files include “within the document” links indicated by blue script including connections from module overviews to the investigations and to essays from *Geography for Life*.

The materials are organized into *modules* comprised of three or four separate *investigations* (or lessons). A module begins with an overview of the module’s investigations and lists correlations to the national standards in geography, mathematics, science, and technology.

Each investigation begins with an *Educator’s Guide*. The guide includes step-by-step classroom procedures and all the background, images, and briefings educators and learners need to complete the investigation. Logs provide learners with opportunities to write, graph, calculate, solve problems, and make decisions.



Teaching with *Mission Geography*

The modules are developed so that each individual investigation can be taught separately or together to form a longer unit of instruction. The Educator’s Guide, identifiable by its heading, is for you, the teacher, and contains the answers to questions posed to learners on the Logs. The Briefings and Logs are for student use. The materials list provided at the beginning of each investigation indicates the materials needed to complete the activity. Detailed correlations to the National Geography Standards and its skills are included at the beginning of each investigation.

The Educator’s Guide features a preview of the content of the investigation as well as complete background of pertinent information. Even though you may not have extensive understanding of the investigation topic, sufficient information is included to allow you and your students to fully engage the topic and associated skills.

Most of these investigations do not require an Internet connection in the classroom. The color images required in most investigations can be printed for learners, or they can be projected for the class through a computer projection device in the one-computer classroom. Educators field testing these investigations used a variety of color printers with good results. They recommend making class sets of the color images and preserving them through lamination or in clear sheet protectors. They also printed color images on transparencies and projected them using an overhead projector.

Also included in this CD-ROM are three items to support *Mission Geography*:

- Essays on the subject matter of geography from *Geography for Life*. These provide good background for educators and learners on key concepts and generalizations of geography.
- Glossary of the sensors featured in the *Mission Geography* investigations. Technical specifications and additional details on the instruments used by NASA and other federal agencies to collect data appear here.
- Blank outline maps of world regions, courtesy of the Arizona Geographic Alliance, ready to be printed and used with the investigations.

Additional support to teach *Mission Geography* is available at <http://missiongeography.org>. Hints on assessment strategies, ways to extend the learning, additional updated resources, and links to the information featured in each investigation are provided. All measurements in *Mission Geography* are metric. U.S. equivalent measures are available on missiongeography.org.

Feedback

Please take time to provide comments and suggestions regarding *Mission Geography*. Fill out and mail the evaluation form available as a printable PDF file on this CD-ROM or complete a form on-line at http://ehb2.gsfc.nasa.gov/edcats/educational_cd.

Acknowledgments

Mission Geography is a collaborative effort between and among many interested groups:

- NASA and the geography education community represented by GENIP;
- the science, technology, geography education, and mathematics communities through the *Mission Geography* Advisory Board; and
- experienced geography educators, master geography classroom educators, university-based Earth scientists, and members of NASA's Aerospace Education Services program (AESP) on the development team.

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Mission Geography

- Pamela L. Mountjoy, Office of Human Resources and Education, National Aeronautics and Space Administration
- Sarah Witham Bednarz, Geography Education National Implementation Project

Mission Geography Development Team

- Osa Brand, Association of American Geographers, Grades K-4 Team Leader
- Patterson Biggs, NASA Aerospace Education Services Program
- Judith K. Bock, Lake Villa Community Consolidated District No. 41, Lake Villa, Illinois
- David Butler, Southwest Texas State University
- Steve Culivan, NASA Aerospace Education Services Program
- Ronald I. Dorn, Arizona State University
- Jane George, NASA Teaching From Space Program
- A. David Hill, University of Colorado, Grades 9-12 Team Leader
- Billie M. Kapp, Connecticut Geographic Alliance
- James McMurtray, NASA Aerospace Education Services Program
- Gary E. Miller, Virginia Beach City Public Schools, Virginia Beach, Virginia
- Robert Morrill, Virginia Tech University, Grades 5-8 Team Leader
- Patricia Robeson, Maryland Geographic Alliance
- Jonathan Phillips, Texas A&M University

National Aeronautics and Space Administration (NASA)

- Frank Owens, Office of Human Resources and Education
- Malcolm Phelps, Office of Human Resources and Education
- Blanche M. Meeson, Office of Earth Science
- Nora A. T. Normandy, Office of Earth Science

Mission Geography Editor

- Robert S. Bednarz, Texas A&M University

Mission Geography Design and Production

- Susan Whisenant, Texas A&M University
- Michelle Benoit, Texas Transportation Institute, Texas A&M University System
- John Henry, Texas Transportation Institute, Texas A&M University System
- Chris Pourteau, Texas Transportation Institute, Texas A&M University System

Mission Geography Evaluator

- Lynn S. Burlbaw, Texas A&M University

Mission Geography Advisory Team

- Roger M. Downs, The Pennsylvania State University
- Phillip J. Gersmehl, University of Minnesota
- Michael Hynes, National Council for Teachers of Mathematics
- Lydia Lewis, National Geographic Society
- Brigitte Valesey, International Technology Education Association
- Steven Weinberg, National Science Teachers Association

Mission Geography Review and Critique Workshop

Jack Adams, Fair Haven, Vermont; Jim Alvaro, Clinton Township, Michigan; Richard Audet, Swansea, Massachusetts; Dora Bradley, North Little Rock, Arkansas; Roni Jones, Auburn, California; Cathy Lee, Delray Beach, Florida; Joan Linsley, Houston, Texas; Craig Pepper, Indiana, Pennsylvania; Dyrene Saulsberry, Detroit, Michigan; Marci Smith, Hurst, Texas; Arden Thompson, Wiscasset, Maine; Fred Walk, Normal, Illinois; Steve Wanner, Boulder, Colorado; Carol Warren, Mesa, Arizona; Marilyn Weiser, Minot, North Dakota

Mission Geography Development Team Research Assistants

Laura Culp, Association of American Geographers; Jeff Bury, University of Colorado; Brian King, University of Colorado; Patricia Rennecker, Virginia Tech University; Lisa Sanders, Virginia Tech University; Susan Whisenant, Texas A&M University; Jodi Winship, Virginia Tech University

NASA Ames Research Center, Moffett Field, California

Susan Benjamin, Jim Brass, Hector D'Antoni, Garth A. Hull, Anthony Strawa, Bryon L. Wood

NASA Goddard Space Flight Center, Greenbelt, Maryland

Barbara A. Bradnmueller, Michael Carlowicz, Fritz Hasler, Cindy Howell, Blanche Meeson, Carolyn Ng, Stephanie Stockman, M. Sara Tweedie, Peter J. Wasilewski

NASA Jet Propulsion Laboratory, Pasadena, California

Ron Blom, Nevin Bryant, Susan A. Digby, Andrea Donnellan, Tom Farr, Richard Fretz, Robert Parker, David M. Seidel, Marguerite Syvertson

NASA Johnson Space Center, Houston, Texas

Bill Bates, Debbie Brown, Billie Deason, Thomas Jones, Kim Lewis, Kamlesh Lulla, Cindy McArthur, Nancy Robertson, Connie Van Praet-Cremins, Justin Wilkinson, Kim Willis

NASA Stennis Space Center, Stennis Space Center, Mississippi

Richard Brown, Mark Craig, Melvin Furhmann, Brennan Grant, Mike Harris, Conrad Johnson, Dan Lee, Maura Lohrenz, Jeanette Lovely, Shaun Muston, Deborah Noel, Carolyn Owen, David Powe, Jack Puleo, Richard Sellers, James Smoot, Steven Tate

NASA Marshall Space Flight Center/Global Hydrology and Climate Center, Huntsville, Alabama

Dennis Boccipio, Michael Goodman, Tim Miller, Don Perkey, Dale Quattrochi, Doug Rickman, Ron Ritschard, Tom Sever, Roy Spencer

Oklahoma State University, Stillwater, Oklahoma

Contract management for the NASA Teaching from Space and Aerospace Education Specialists Programs

Research Foundation, Texas A&M University, College Station, Texas

Sharon Thigpin, Brad Merritt, Sarah Mesa

Mission Geography Reviewers

Andrew Klein, Texas A&M University; Greg A. Quam, Platteville (WI) Public Schools; Jay Skiles, Ames (CA) Research Center; Carol Warren, Sacaton (AZ) Community Schools

Teacher Consultant, NASA Teaching from Space Program, and NASA Aerospace Education Special- ist Disseminators

Jack Adams, Mary Alice Aguilar, Mona Aldana-Ramirez, Douglas Andersen, Todd Anderson, Amy Bartholomew, Keith Bellinger, Patterson Biggs, Darlene Black, Carol Blankenship, Clarence Bostic, Anita Brooks, Cindy Brown, Deborah Brown, Leah Bug-Townsend, Sandra Carter, Angelo Casaburri, Mary Cassarino, Barbara Chailland, Kay Clapper, Bette Cobb, Cindy Cobb, Gary Collins, Caryn Connolly, Phyllis Cook, Steve Culivan, Jim Curtis, Florence Daniel, Jim d'Entremont, Chris Dunne, Kaye Ebel, Warren Edwards, Bart Farnsworth, Alicia Feddor, Jan Franke, Caroline Franklin, Tom Gates, Janice Gibson, Sarah Gilbert, Joel Glazier, Hans Goettsch, Jeffrey Goumas, Shawn Gregg, Doris

Grigsby, Brian Hawkins, Gayle Herrington, Ann Hoehn, Cheryl Hoff, Patrick Huth, Kay Jackson, Lynn Jones, Kenneth Jordan, Susan Kaplan, Frances Koontz, Gail Kuba, Eric Langhorst, Marge Lehky, Philip Leonardi, Liz Lewis, Mimi Link, Lori London, Leanne Lorenz, Ota Lutz, Cinny MacGonagle, Steve Marks, Michael Marrapodi, John McCabe, Tim McDonnell, Jill McGinn-Koepke, Peter Michaud, Rosemary Millham, Lauren Mittermann, Catherine Moseley, Tim Moses, Libby Olson, José Ortiz Quesada, Anita Pahman, Roger Palmer, Karen Paruolo, James Pratt, Gloria Rainone, Betto Ramirez, Cynthia Ryan, Delise Sanders, Joan Sanders, Robert Sankey, James Schmidt, Kristen Schultz, Kirstin Schulz, Suzanne Steckert, John D. Thompson, Octavia Tripp, Charlotte Turpin, Tim Tyler, Carmen Vargas, Paula Verstegen, Karen Stockton Wallace, Linda Wallis, Dodie Wangerin, Marilyn Weiser, Kelly Witherspoon, Christine Yanco

National Aeronautics and Space Administration (NASA)

<http://education.nasa.gov>

Geography Education National Implementation Project (GENIP)

<http://genip.tamu.edu>