

**2005 NASA Science Mission Directorate:
Earth Science Education Products Review
Product Submission Form**

Products Due: Nov 27, 2006

Please consult the instructions online at

http://www.strategies.org/SMD_EarthScienceReview/SubmissionForms.html

1. Product Title: _____

2. Date Submitted (month-day-year): _____

3. Is this a Re-Submission from a Previous Review?

Yes No Previous Review Date: _____

*If this is a re-submission, before completing this form, please email john_ensworth@strategies.org a description of the specific, point-by-point, revisions that have been made based on the earlier review, and any other changes that were incorporated into the product.

4. Description: Provide an abstract no longer than 200 words. This description may be used in NASA publications and other references to describe this product. If there is more than one piece to the product it should be described here (i.e., video and teacher's guidebook).

5. Contact Person for the Review:

Provide the name of the person who can answer any questions and should receive the review results.

Name:

Role (choose those that apply):

Author

Contact

Contributor

Editor

Principal Investigator

Publisher

Title:

Organization:

Street Address:

City:

State:

Zip Code:

Country:

E-mail:

Phone:

FAX:

6. Product Creator:

Provide contact information for the person or organization responsible for developing the product.

Name:

Role (choose those that apply):

- Author
- Contact
- Contributor
- Editor
- Principal Investigator
- Publisher

Title:

Organization:

Street Address:

City:

State:

Zip Code:

Country:

E-mail:

Phone:

FAX:

7. URL: Provide the URL that links directly to the resource, as well as additional URL(s) to information about ordering, receiving, or purchasing the resource.

URL 1: http://

URL 2: http://

8. Copyright Status

- 8a. Is there any copyright restriction? Yes No
- 8b. Is the product free and clear for general use? Yes No
- 8c. Is the product free and clear for general distribution by NASA? Yes No
- 8d. If any restrictions exist, please provide comments on conditions (e.g., "may be used in an educational setting as long as credit to NASA is given").
- 8e. Additional Comments:

9. Cost and Inventory (answer all that apply):

- 9a. Is there a cost to purchase this product? Yes/No
- 9b. Amount: \$
- 9c. Describe how to order the product:

10. Supporting/Funding Partners: Identify and briefly describe any non-NASA support (e.g., funding, resources) for developing this product.

11. Additional Information: Provide any additional information or background that you believe would be useful in the evaluation of this product. For example, how would this resource be used in the classroom (e.g., to introduce a topic, at the end of a unit), is it intended to be distributed with other education resources? Is this material part of a series or set of education resources?

12. Publication Date: Indicate month-day-year:

13. NASA Publication Number

13a. Does this product have a NASA Publication Number? ___Yes ___No

13b. If yes, what is the NASA Publication Number: _____

13c. If it does not have a NASA Publication Number, do you want one assigned?
Yes/No

14. Availability/Dissemination Plans

14a. How will this product be made available to target audiences/distributed if it passes review?

14b. As a result of this review, some products will be recommended for distribution through NASA earth science teacher workshops and considered for use with the NASA Explorer Schools. Please identify the quantity (number) of copies of this product that you would be able to commit to NASA space science Teacher workshops/NASA Explorer Schools during 2005-2006, if this product is selected for workshop distribution.

15. Physical Format (select from list):

Select the format that best describes the resource. Wherever possible, limit your selection to the format that best describes the resource. If your resource has two or more distinct formats, select all that apply.

Audio Format:

- CD-ROM
- DVD

- Cassette

Computer Format :

- CD-ROM -- Operating System (i.e.; Mac, PC, Unix, etc.): _____
- Website-- URL: _____.

Printed Images:

- Lithograph
- Poster/wallsheet

Printed Material:

- Book, or Booklet
- Bookmark
- Magnet
- Ruler
- Brochure or Pamphlet
- Fact Sheet

Slide/slide set

- 35 mm Slides

Video Format:

- Video, BetaCam
- Video, VHS
- DVD

Other:

- Multimedia Exhibit
- Permanent Exhibit
- Traveling Exhibit
- Traveling Trunk

- Other _____

(e.g. PDF, picture, chart, java applet or software DVD -- Operating System (i.e.; Mac, PC, Unix, etc.): _____)

16. Learning Resource Type:

Select all the Learning Resource Types that apply to your product. Check all that apply. This information is independent of the format of the product. These are the pieces that are a part of the product.

- Audio: Audio-Book
- Audio: Lecture
- Audio: Music
- Audio: Oral History
- Audio: Radio Broadcast

- Audio: Sound
- Audio: Audio-Webcast
- Data: Dataset-In-Situ
- Data: Dataset-Remotely Sensed
- Data: Dataset-Model
- Learning Materials: Activity-Classroom
- Learning Materials: Activity-Computer
- Learning Materials: Activity-Field
- Learning Materials: Activity-Lab
- Learning Materials: Assessment
- Learning Materials: Case Study
- Learning Materials: Course
- Learning Materials: Curriculum
- Learning Materials: Field trip guide
- Learning Materials: Instructor's guide
- Learning Materials: Lesson plan
- Learning Materials: Module/unit
- Learning Materials: Presentation/Demo
- Learning Materials: Project
- Learning Materials: Problem set
- Learning Materials: Syllabus
- Learning Materials: Tutorial
- Learning Materials: Virtual field trip
- Portal: Educational
- Portal: For-Profit
- Portal: Government
- Portal: Non-Profit
- Service: Ask An Expert
- Service: Clearinghouse
- Service: Forum/Discussion
- Service: Listserv
- Service: Message Board
- Service: Search Engine
- Text: Abstract/summary
- Text: Annotation
- Text: Book/monograph
- Text: Glossary
- Text: Journal article
- Text: Index/bibliography
- Text: Periodical
- Text: Policy/procedure
- Text: Proceedings
- Text: Proposal
- Text: Reference
- Text: Report
- Text: Thesis
- Tool: Calculation/Conversion
- Tool: Software

- Tool: Code
- Visual: Artistic illustration
- Visual: Imagery-remotely sensed
- Visual: Map
- Visual: Photograph
- Visual: Scientific illustration
- Visual: Scientific visualization
- Visual: Video
- Visual: Webcast
- Other -- Any product not covered in the above. Specify:

17. Product Evaluation/Review:

Provide a description of how this product has been tested and evaluated during the product development phase with the intended audience. Address how data, if any, was collected and analyzed.

Include how it was reviewed and who has reviewed this product for scientific accuracy and educational use. Describe any changes that have occurred in product development as a result of this testing.

18a. Primary Topic: Please select up to 8 Primary Topics that this product addresses.

Atmosphere

- Air quality
- Ozone
- Aerosols
- Atmosphere—Physical Properties
- Structure
- Composition and Chemistry
- Atmospheric Dynamics
- Energy Transport
- Atmospheric circulation
- Latent Heat
- Coriolis Effect
- Clouds and Cloud Cover
- Albedo
- Energy Budget
- Global Warming
- Global Climate Systems
- Greenhouse Effect
- Weather
- Hurricanes
- Tornadoes
- Monsoons
- Pressure Gradient Forces
- Thunderstorms

- Precipitation
- Lightning

Biosphere

- Anthropogenic Activity
- Biodiversity
- Biomes
- Ecosystems and Environmental Change
- Effect of Changes in Atmospheric Ozone on Biosphere
- Effect of Global Warming
- Effect of Changes in Hydrologic Cycle
- Decomposition
- Carbon Fixation
- Solar Radiation
- Photosynthesis
- Effect of ENSO
- Food Webs
- Organisms - Adaptations to their Environments
- Seasonal Variations
- Productivity

Cryosphere

- Arctic/Antarctic Ice Sheets
- Climate Variability
- Global Warming
- Ice Ages
- Sea level change
- Sea Ice
- Energy Budget (Albedo, Heat Exchange)
- Glaciers
- Ice density
- Land Ice
- Permafrost

Geosphere

- Soils -- Properties, Formation, Relation to Carbon Cycle
- Ecosystem
- Earth History
- Plate Tectonics
- Erosion and Weathering
- Earthquakes
- Land Use and Classification
- Volcanoes
- Physical Properties
- Magnetic Fields
- Earth Structure
- Uplifting
- Topography/Physical

- Geography

Hydrosphere

- Coastal Resources
 - Oceans--Dynamics (Circulation, Energy Transport, Waves, etc.)
 - ENSO
 - Oceans—Biology
 - Erosion and Weathering
 - Oceans—Geology
 - Groundwater
 - Rivers and Streams
 - Hydrologic Cycle
 - Runoff
 - Water's Properties
 - Lakes (temperature, density, salinity)
-
- Careers in Earth System Science**
 - Systems, Interactions, Feedback Loops**

Current Issues in ESS

- Climate Variability
- Human Health and Global Environmental Change
- Desertification
- Ozone Depletion
- Effect of Humans on the Environment
- Population Growth and Urbanization/Urban Heat Island
- El Niño/La Niña
- Pollution (Air and Water)
- Energy Resources
- Water Resources (Quality, Availability, Overdraft)
- Enhanced Greenhouse Effect

Science Techniques/Technologies

- Remote Sensing (Active and Passive)
- Ground Truthing (in situ)
- Albedo
- Geographic Information Systems (GIS)
- Electromagnetic Spectrum

Earth in Space

- Kepler's Laws
- Phases
- Moon-Earth Interactions
- Tides

18b. Secondary Topic: You may select up to 8 Secondary Topics (from the list above) that this product addresses.

19. Keywords

Use keywords to list subjects or topics that are not included above. You may enter up to 8 keywords describing the resource:

20. Technical Requirements

Please check all that apply. Most products fall into the first category. All printed physical product fall into the first category.

- ? **General: No specific technical requirements**: The resource needs any browser to work and no other requirements.
- ? **Other: More specific technical requirements**: In order for the resource to work, it needs something that is not on this list
- ? **Unknown**: Technical information not easily determined: You do not know or can not determine the technical information for the resource.
- ? **Browser: Internet Explorer**: The Microsoft Internet Explorer browser is specifically required to make the resource work properly
- ? **Browser: Netscape**: The Netscape browser is specifically required to make the resource work properly.
- ? **Operating system: Microsoft Windows**: The resource needs this operating system in order to function, generally for PC type computers.
- ? **Operating system: Macintosh**: The resource needs this operating system in order to function, generally for Mac type computers
- ? **Operating system: UNIX**: The resource needs this operating system in order to function, generally for UNIX workstations.
- ? **Operating system: PC DOS**: The DOS operating system is specifically required to make the resource function, generally on PC type computers.
- ? **Software or plug in: Adobe Acrobat reader**: Required to make the resource work properly for the following file formats: .pdf.
- ? **Software or plug in: ArcView**: The geographic program ArcView is required to make the resource work properly.
- ? **Software or plug in: Cosmoplayer**: Required to make the resource work properly.
- ? **Software or plug in: Excel**: The Microsoft spreadsheet program of Excel is required to make the resource work properly.
- ? **Software or plug in: Flash player**: Required to make the resource work properly.
- ? **Software or plug in: Java**: Java is required either in the browser or as a separate program in order to make the resource work.
- ? **Software or plug in: NIH image**: The NIH image software is required to make the resource work properly.
- ? **Software or plug in: Platform emulation software**: Software that is required to make a PC act like a Mac or a Mac act like a PC.
- ? **Software or plug in: QuickTime**: Required to make the resource work properly. File formats may include: .mov

- ? **Software or plug in: Real player:** Required to make the resource work properly. File formats may include: .rm, .rp
- ? **Software or plug in: Shockwave player:** An animated gif player required to make the resource work.
- ? **If specific version is required** please list:

21. 508 Compliance Certification Section 508 of the Rehabilitation Act requires Federal agencies to make their electronic and information technology accessible to people with disabilities. This requirement covers learning resources that are Web-based (including PDF/Adobe Acrobat files), video (closed captioning of video on videotape, CD/DVD, and WWW sites), and multimedia.

21a. 508 Compliance Certification: Yes No Not Applicable

21b. How was 508 compliance determined? (e.g., passed the Bobby utility report, closed captioning is provided, passed Adobe Acrobat's Accessibility Checker, etc.) See <http://www.section508.gov/> for more information.

21c. If the product is not currently 508 compliant, what are your plans to meet 508 regulations?

22. NASA Sponsoring Office: Please identify the NASA sponsoring office for this product (e.g., NASA Center/Code):

23. How does this product meet NASA Education Program Operating Principles?

NASA has established Education Program Operating Principles to ensure alignment of all education programs and resources with the 2003 NASA Strategic Plan, to ensure adherence to NASA value transformation principles, and to promote excellence. The six principles by which every NASA-sponsored education program or activity is both developed and assessed are identified in questions 1-f below. Please describe how this product addresses/helps to meet these operating principles. If it does not address a specific item, please notes "N/A."

a. Content: Programs/products are directly tied to or make direct use of NASA content, people or facilities to involve students and/or the public in NASA science, technology, engineering, or mathematics. This principle clearly defines "as only NASA can" by focusing on the content themes that govern the work of each of the enterprises.

b. Customer Focused: Programs/products are used to respond to needs identified by the education community, a customer or customer group. Connection to national and/or state standards at the elementary and secondary level is evident. At the higher education level, opportunities exist for institutions to develop scientific and technical capability that contribute to NASA research and development.

c. Pipeline: Workforce-related programs/products make a demonstrable contribution to attracting diverse students to NASA careers in science, technology, engineering, or mathematics through program articulation. Students have an opportunity to remain engaged with NASA throughout their academic career.

d. Diversity: Programs/products reach identified targeted groups. Promotes careers in STEM with underrepresented/underserved groups, and the opportunity to participate in NASA pre-employment scientific and technical programs.

e. Evaluation Programs/products have goals expressed in an objective, quantifiable, and measurable form and provide for a periodic evaluation by internal and external sources.

f. Partnership/ Sustainability Programs/products achieve high leverage and sustainability through intrinsic design or the involvement of appropriate local, regional, or national partners in the design, development, and dissemination. Such partnerships allow for NASA's unique contribution while reflecting the importance of others' contributions to overall success and customer needs.

Audience and Level

In the following sections (Formal Education Audiences and Informal Education Audiences) you will enter the audience and grade levels for this resource. Audiences that are identified should be very specific. Don't fall into the trap of assuming that a resource could be used for audiences for which it was not designed.

This information will be used by the reviewers to determine whether the product is appropriate for the intended audience.

Formal Education Audiences:

Formal Education Products are resources and materials developed for use in a formal classroom setting or instruction, as part of a school program, activity, or assignment. This includes all levels of formal education, including elementary and secondary, home schooling, as well as post-secondary instruction. Formal education products also include resources that can be used to supplement existing education products or curriculum.

Formal education resources include curriculum and instructional materials, teachers' guides, student activity books, teacher/educator training materials, posters, fact sheets, slide sets, videos, etc.

24. Is this product targeted for a formal education audience? Yes: No

If yes, fill out questions 24 a-d below. If no, skip to question 25.

24a. Audience: Identify the typical kind of learner(s) or audience for whom the material is intended.

Students Teachers Other: Specify: _____

(Other can include: Administrators, College/University Instructors, Other Education Professionals, Curriculum Developers, Adult Education Students, Curriculum Supervisors)

24b. Education Level -- Identify the specific, primary level(s) for which this product was designed. Don't fall into the trap of assuming that a product could be used for grade levels for which it was not designed. Only in rare cases will you have a single resource that is truly broad-based, for example, material that can be used for a K-12 range.

Level:

K 1 2 3 4 5 6 7 8 9 10 11 12

13 14 15 16 Graduate - Professional

Other: Specify: _____

24c. Category:

Curriculum/Instructional -- In general, NASA curriculum/instructional materials are intended to support standards-based education (including science, mathematics, geography, and technology standards) and to supplement existing curricula. These products were developed for use in a formal classroom setting or instruction, as part of a school program, activity, or assignment. This includes all levels of formal education, including elementary and secondary, as well as post-secondary instruction (e.g., community college or undergraduate). Examples are instructional modules, teachers' guides with learning activities, student activity books, online courses, etc.

Educational Resources -- These that can be used with curriculum materials or as resources for instructors/instruction. These include fact sheets, lithographs, posters w/activities, video/audio tapes, and WWW sites. This category also includes tools that could be used by curriculum/product developers to create new education products, such as: catalogs (e.g., images or video), software (e.g., tools to look at and analyze data or create learning materials), explained imagery, maps, video clips, scientific visualizations, etc.

Other: Please identify:

24d. National Education Standards (K-12 Curriculum/Instructional materials only) If this material is Curriculum/Instructional (used in a formal classroom setting or instruction, as part of a school program, activity, or assignment), please complete an

Education Standards form indicating which standards (science, geography, mathematics, and/or technology) this product addresses. This form will be available online in mid October.

Has an Education Standards Form been completed for this product: Yes No N/A

Additional Submission Questions for Informal Education Products

Informal science education products are designed for learning outside the formal classroom experience. These include products and resources specifically designed for use through:

- **Informal Learning Centers** (museums, science centers, planetariums, zoos, aquariums, arboretums, botanical gardens, conservatories, etc.).
- **Natural and Cultural History Sites** (national parks, national wildlife refuges, national recreation areas, national forests, state parks, county parks, public and private nature centers, historical parks and monuments, archeological sites, etc.)
- **Multiple Media** (radio, T.V., documentary films and videos, , educational toys, internet, and various print media)
- **Youth Groups** (4-H, Scouts, Girls and Boys Clubs, Head Start, after-school programs, etc.)
- **Community Groups** (senior centers, civic organizations, Elderhostel, etc.)
- **Libraries**

Please use this category if this product has been specifically designed for use in the above informal science education venues. Products that are designed for public relations purposes (e.g., stickers, pins, mission patches, etc.) would not fit this category.

25. Is this product targeted for a informal education audience? Yes: No

If yes, please answer questions 25 a-b. If no, skip to question 26.

25a. Category: Please identify the appropriate category for your product.

- Stand Alone Product**—An informal education product that can be used off-the-shelf in informal education settings, interpretive programs, exhibits, special events, etc. These are complete, stand-alone products such as teachers' guides, books, brochures, or documentaries. These are intended for the final public audience (as opposed to a background resource intended for use by an informal educator – see below).
- Background Resource**-- Background Resources are intended for use by informal educators. These include products that can be used to supplement or support existing, informal education products and/or for use in creating new products for informal education and/or interpretation. Background resources may include: fact sheets, lithographs, posters, video/audio tapes, WWW sites, remote-sensing imagery, catalogs (images, video, or audio clips), software, maps, writers guides,

teachers guides, interpreters' guides, explained imagery, maps, movies, scientific visualizations, etc

Other: Please identify:

25b. Audience: Identify the typical kind of learner(s) or audience for whom the product is intended.

General Public

- Public at Informal Learning Center or Natural/Cultural History Site
- Children/Youth (if Selected use categories below)
__ages 4-6; __ages 7-9; __ages 10-12; __ages 13-15; __ages 16-18; __Other
- Families
- Library Patrons
- Adults
- Web Users
- School groups
- Public at special event
- Underserved audience (indicate targeted audience):

Informal Educators

- Interpreters/Informal Educators at Informal Learning Centers or Natural and Cultural History sites
- Media Professionals
- Youth Group Leaders
- Community Group Leaders
- Library Professionals
- Other (identify):

26. Other Information

Use this space to provide any additional information about this product that you believe reviewers should have (e.g. workshop plans, part of specific program/mission, part of a suite of products, part of an event like Earth Day, etc.).

**For more information, please contact Theresa Schwerin at
theresa_schwerin@strategies.org**