

## Federation of Earth Science Information Partners Partnership Application

Please complete all sections to the fullest extent possible and forward completed application to: Carol Meyer, [carol.meyer@earthsciencefoundation.org](mailto:carol.meyer@earthsciencefoundation.org). If you have any questions, please contact her at 877.870.3747.

### I. CONTACT INFORMATION

#### A. Primary Contact/Principal Investigator

Name: Ali H. Omar, Associate Program Manager for Air Quality Applications, NASA HQ  
Address: NASA Langley Research Center, MS 475, Hampton, VA 23681  
Phone: (757)864-5128  
Fax: (757)864-2671  
Email: [ali.h.omar@nasa.gov](mailto:ali.h.omar@nasa.gov)

#### B. Designated Assembly Representative (could be same as above)

Name: Ali H. Omar  
Address: NASA Langley Research Center, MS 475, Hampton, VA 23681  
Phone: (757)864-5128  
Fax: (757)864-2671  
Email: [ali.h.omar@nasa.gov](mailto:ali.h.omar@nasa.gov)

#### C. Other Contacts

Name:

Address:

Phone:

Fax:

Email:

Name:

Address:

Phone:

Fax:

Email:

Name:

Address:

Phone:

Fax:

Email:

## II. ABOUT YOUR ORGANIZATION

### A. ORGANIZATION/DIVISION/PROJECT NAME:

NASA Applied Sciences Program - Health and Air Quality Applications, NASA HQ

### B. OVERVIEW OF YOUR PRIMARY ACTIVITIES in regards to the Earth Sciences Community (200 words or less)

The objective of this effort is to advance the societal use of the NASA's Earth Science satellite data to improve, and sometimes revolutionize our ability to make informed decisions and policies, using products of a quality and latency that benefits targeted communities. We will realize some of these goals by participation in the design of the mission and pro-actively engaging relevant concept and science teams, providing inputs in the design of the instruments, and encouraging measurements that would have societal benefits in alignment with the Applied Sciences Program. In concert with the communities of practice, and the NASA HQ Applied Sciences Program Management, we develop applications plans for Earth Science missions that identify potential NASA satellite and air borne measurements have societal benefits. At the user end we organize applications communities of practice and facilitate physical or virtual interactions to imagine, articulate, and anticipate possible applications. As early as possible in the mission planning process, we identify, encourage and facilitate potential partnerships and collaborations.

### C. Please list and briefly describe the primary product(s) or service(s) that your organization provides (will provide) to the Earth Sciences community.

We develop useful and readily usable Earth science products by identifying applications early in satellite mission lifecycle and facilitate effective ways to integrate end-user needs into satellite mission planning. We advance the use of NASA Earth science in policy making, resource management and planning, and disaster response. We actively identify priority needs, conduct applied research to generate innovative applications, and support projects that demonstrate uses of NASA Earth science. We work to establish a flexible program structure to meet diverse partner needs and applications objectives by pursuing partnerships to leverage resources and risks and extend the program's reach and impact.

### D. Please give a main website address for the proposed Partnership:

Web Address: <http://appliedsciences.nasa.gov/health-air.html>

### III. HOW YOUR ORGANIZATION WILL BENEFIT FROM/CONTRIBUTE TO THE EARTH SCIENCE INFORMATION PARTNERS (ESIP) FEDERATION

- A. Describe current or anticipated users of your products and services and how you think the Federation can help you better serve this population. (200 words or less)

We measure aerosol properties that have applications in air quality forecasting, monitoring, management, and research. These activities are in the purview of the Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration (NOAA), State Environmental /Natural Resources Departments, and the US Department of the Interior (National Parks Service). These products are also of interest to Academic and Laboratory Research Groups (e.g. Air Quality Applied Sciences Team - <http://acmg.seas.harvard.edu/aqast/>). We expect to benefit from the Earth Science Information Partners (ESIP) forums to form collaborations and partnerships with communities of application within and beyond the above agencies.

- B. Describe any Earth science technologies that you have developed and are willing to bring to the Federation's efforts to provide best-practices. (200 words or less)

Satellite measurements of parameters relevant to Air Quality and Health

- C. Describe how your proposed membership would contribute to the efforts and the mission of one or more standing committees, working groups and/or clusters. See Page 3 for descriptions of the different activities of the various standing committees, working groups, and clusters. (200 words or less)

Contribute to the Air Quality Cluster by encouraging the use of NASA's satellite measurements for air quality applications.

- D. Describe your own use of Earth science information and data and how you would see this use enhanced by your partnership in the Federation. (200 words or less)

NASA's satellite measurements of aerosol optical depth have been used to estimate particulate matter (PM) concentrations where ground measurements are not available. Such an activity would benefit from wider participation and collaboration by interested members of ESIP air quality cluster

### IV. YOUR CHOICE OF MEMBERSHIP TYPE. PLEASE PICK ONE.

ESIP-I (primarily a data center/archive)

ESIP-II (primarily a research center)

ESIP-III (primarily applications and education)

ESIP-IV (primarily a sponsoring member)

### V. Any other comments about your proposed membership and its relation to the Federation that you wish to provide.

**Thank you for your application for partnership in the ESIP Federation.**

## List of Federation Committees and Clusters

### Administrative Committees

*Executive Committee:* Comprised of all standing and administrative committee chairs, ESIP Type Representatives, the President and Vice President of the Federation. Oversight body for most day-to-day activities of the Federation, acts on behalf of the Assembly between meetings.

*Constitution and Bylaws:* Provides counsel on matters related to the constitution and bylaws and other related issues (e.g. amendments to government documents)

*Finance and Appropriations:* Oversees financial resources of the Federation, including the annual budgeting process.

*Partnership:* Reviews and processes all applications for membership before making applications available for review by members of the Federation. Deals with other membership-related issues.

### Standing Committees:

*Commercial Development:* Promotes a forum wherein commercial development of Earth science information can be fostered. (inactive)

*Community Engagement:* Provides a forum for the Federation to promote partner products and to engage new users for data products and services. (inactive)

*Education:* Provides a forum to make accessible to educators and learners at all levels in both formal and informal educational contexts the Earth science data, information, tools, and curricula available within the ESIP Federation.

*Information Technology and Interoperability:* Provides a forum for discussing information technology and interoperability issues of the Earth science community and serves as a central point for activities in this realm.

*Products and Services:* Provides a forum for defining best practices and defining requirements for earth science products and services. Currently is involved in developing an inventory of partner products and services.

### Clusters (presently active, April 2009):

- Web Services
- Semantic Web
- Data Preservation and Stewardship
- Decisions
- Air Quality
- Federated Search
- Water