



Developing Interoperable Air Quality Community Portals

S. R. Falke (2), R. B. Husar (1), C. P. Yang (3), E. M. Robinson (1), and W. E. Fialkowski (1)

(1) Washington University, St. Louis, MO, 63130, USA., stefan@wustl.edu, (2) Norththorp Grumman, St. Louis, MO 63101, USA, stefan@wustl.edu, (3) George Mason University, Fairfax, VA 22030, USA

Web portals are intended to provide consolidated discovery, filtering and aggregation of content from multiple, distributed web sources targeted at particular user communities. This paper presents a standards-based information architectural approach to developing portals aimed at air quality community collaboration in data access and analysis. An important characteristic of the approach is to advance beyond the present stand-alone design of most portals to achieve interoperability with other portals and information sources. We show how using metadata standards, web services, RSS feeds and other Web 2.0 technologies, such as Yahoo! Pipes and del.icio.us, helps increase interoperability among portals. The approach is illustrated within the context of the GEOSS Architecture Implementation Pilot where an air quality community portal is being developed to provide a user interface between the portals and clearinghouse of the GEOSS Common Infrastructure and the air quality community catalog of metadata and data services.