Providing Data in a Virtual World

P. C. Schroeder and the VHO Team
University of California, Berkeley, Space Sciences Laboratory, Berkeley, United States (peters@ssl.berkeley.edu)

As virtual observatories become more robust, soliciting involvement from an ever-growing group of data providers, a new and evolving set of challenges are posed to the scientific teams producing and distributing data. Metadata requirements are being imposed, and data products are being scrutinized for quality and consistency in new ways. Most, perhaps all, such data providers agree that these developments are a good thing, but many often do not know how to perform the steps necessary to be responsible participants in this new "virtual" world. We share some lessons learned from our experiences with the Virtual Heliospheric Observatory (VHO). We suggest ways to ease the burdens on data providers and examine issues unique to the role data providers play. Finally, we explore some of the implications for the developers of virtual observatories and similar distributed data systems in an effort to ensure that their systems continue to find willing participants in the scientific community.