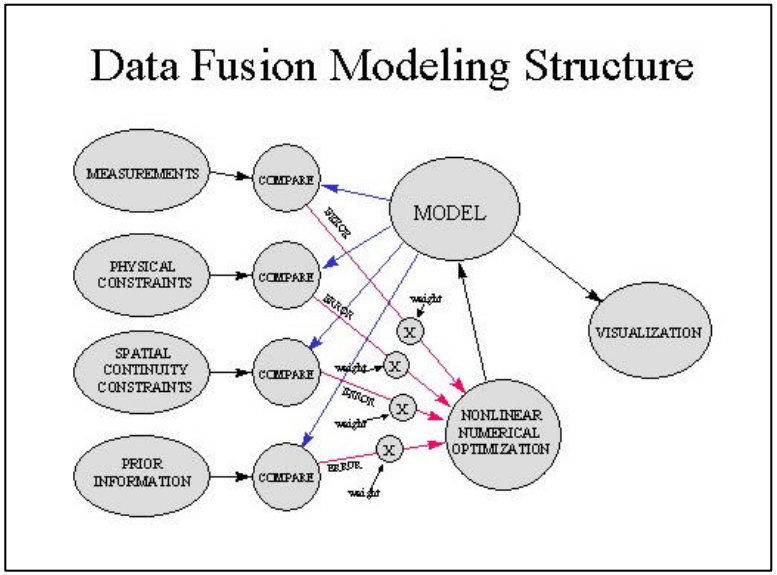
Hydrogeologic Data Fusion (TechID 2944)

Hydrogeologic Data Fusion is a mathematical tool used to combine various types of geophysical, geological, and hydrological data from various sensors to estimate geological and hydrological properties. It is used in conjunction with standard groundwater flow models such as MODFLOW to provide superior estimates of model parameters as well as uncertainty in parameter estimation, parameter correlation, and uncertainty in contaminant transport.



Developers:

- FACT, Inc., Anapolis, MD
- HydroGeologic, Inc., Herndon, VA

Applications:

- Demonstrated at Hanford/200 Area, Zone 12 Pantex Weapons Facility, Savannah River Site/OldBurial Ground and A/M Area, and Fernald.

Benefits:

- Hydrogeological Data Fusion allows the investigator to reliably incorporate data from various types of sources into a common analysis, taking into account correlations among data sources and providing overall uncertainty estimates. This provides a technical validation and defensibility for overall conclusions made based on data from multiple sources.

Status:

- Commercially Available from HydroGeologic, Inc. (psh@hgl.com)
- Innovative Technology Summary Report Available (www.cmst.org)