



CUAHSI
HIS

Sharing hydrologic data

<http://his.cuahsi.org/>

The CUAHSI Community Hydrologic Information System

Jeffery S. Horsburgh
Utah Water Research Laboratory
Utah State University

Support
EAR 0622374



Hydrologic Data Challenges

- From dispersed federal agencies
- From investigators collected for different purposes
- Different formats
 - Points
 - Lines
 - Polygons
 - Fields
 - Time Series

Data Heterogeneity

The way that data is organized can enhance or inhibit the analysis that can be done

Water quality



Water quantity



Rainfall and Meteorology



Soil water



GIS

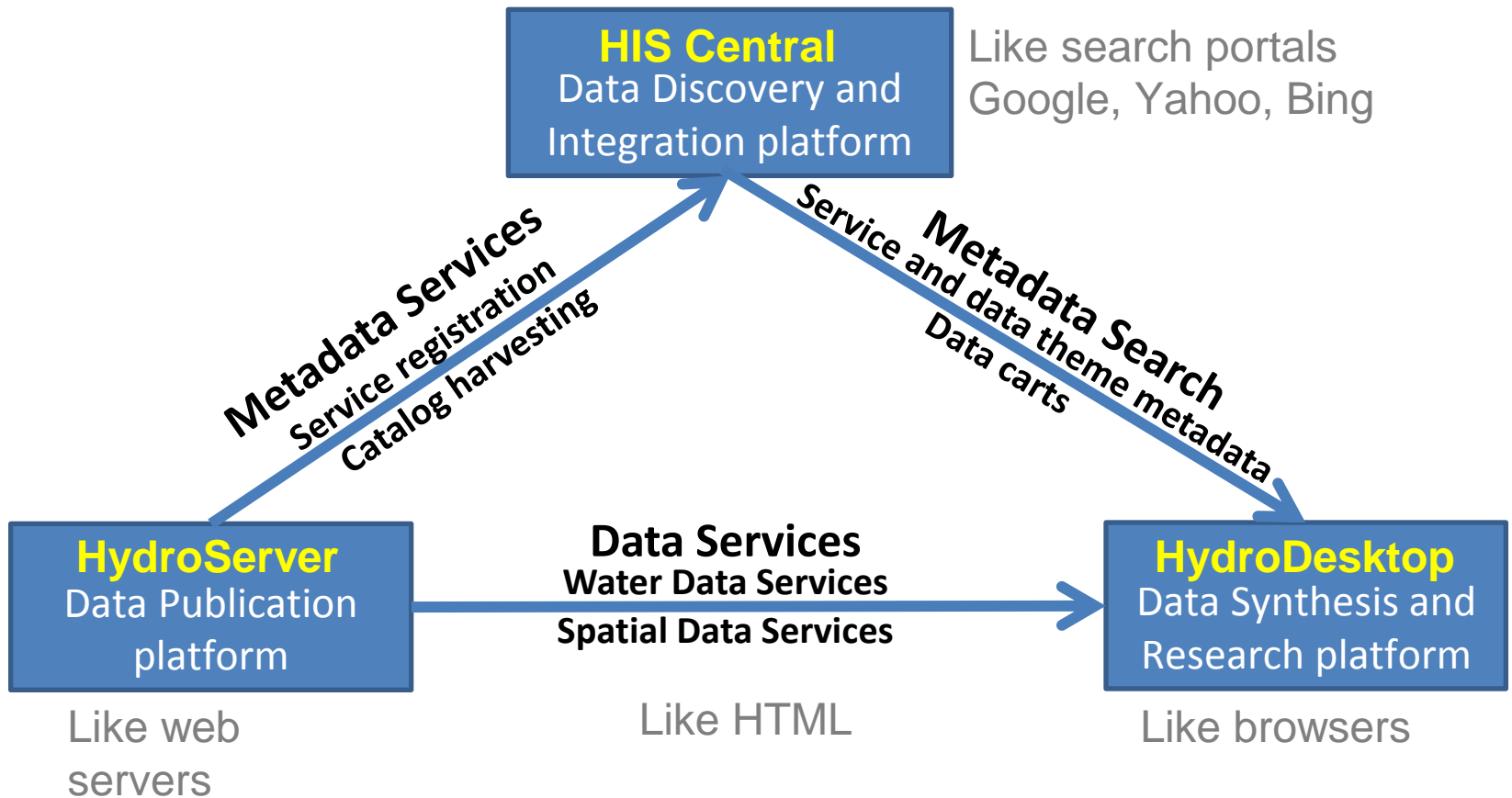


Groundwater



CUAHSI HIS

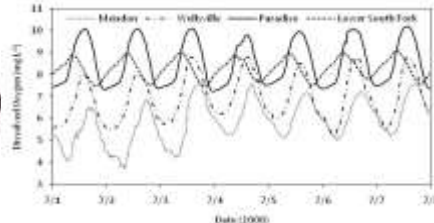
The CUAHSI Hydrologic Information System (HIS) is an internet based system to support the sharing of hydrologic data. It is comprised of hydrologic databases and servers connected through web services as well as software for data publication, discovery and access.



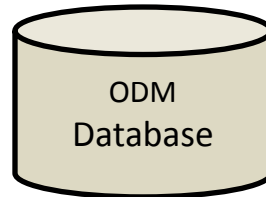
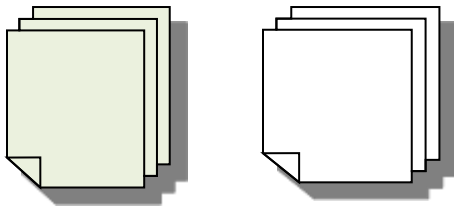
HydroServer – Data Publication

Point Observations Data

Ongoing Data Collection



Historical Data Files

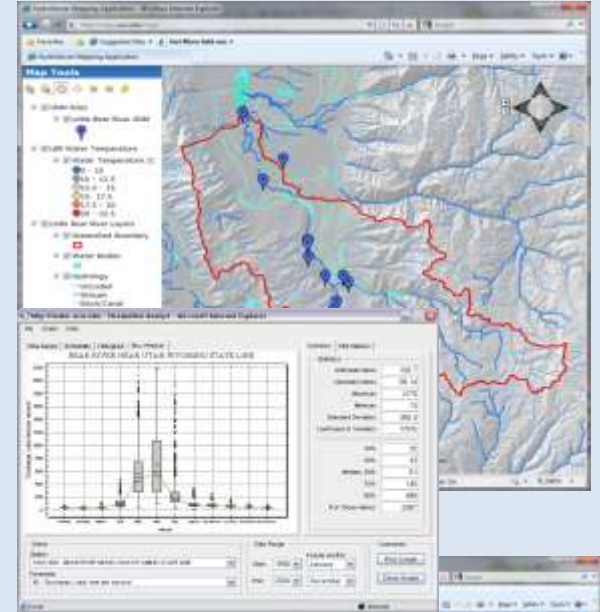


ODM
Database

GIS Data



Internet Applications



- GetSites
- GetSiteInfo
- GetVariableInfo
- GetValues

WaterML

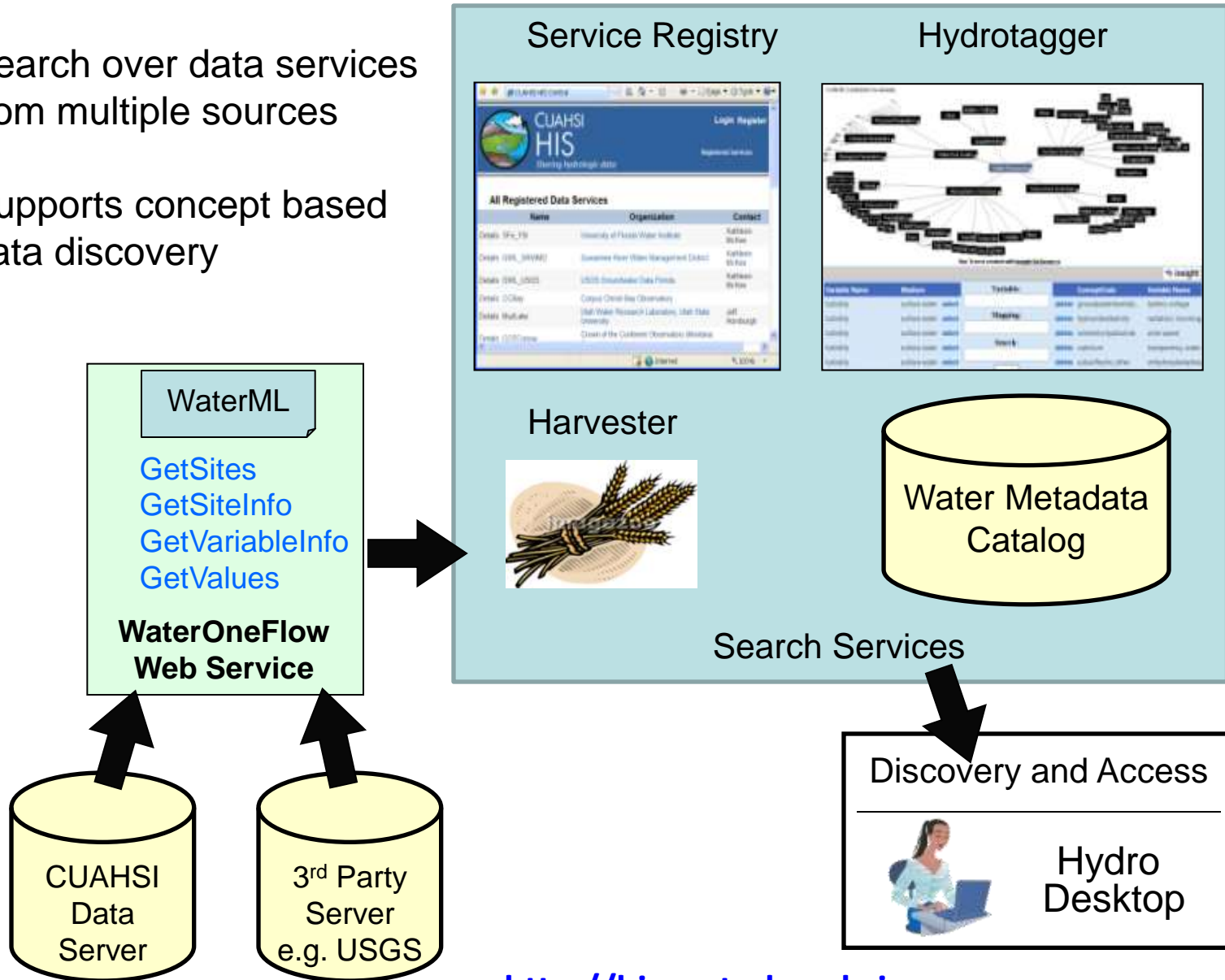
WaterOneFlow
Web Service

OGC Spatial
Data Service
from ArcGIS
Server

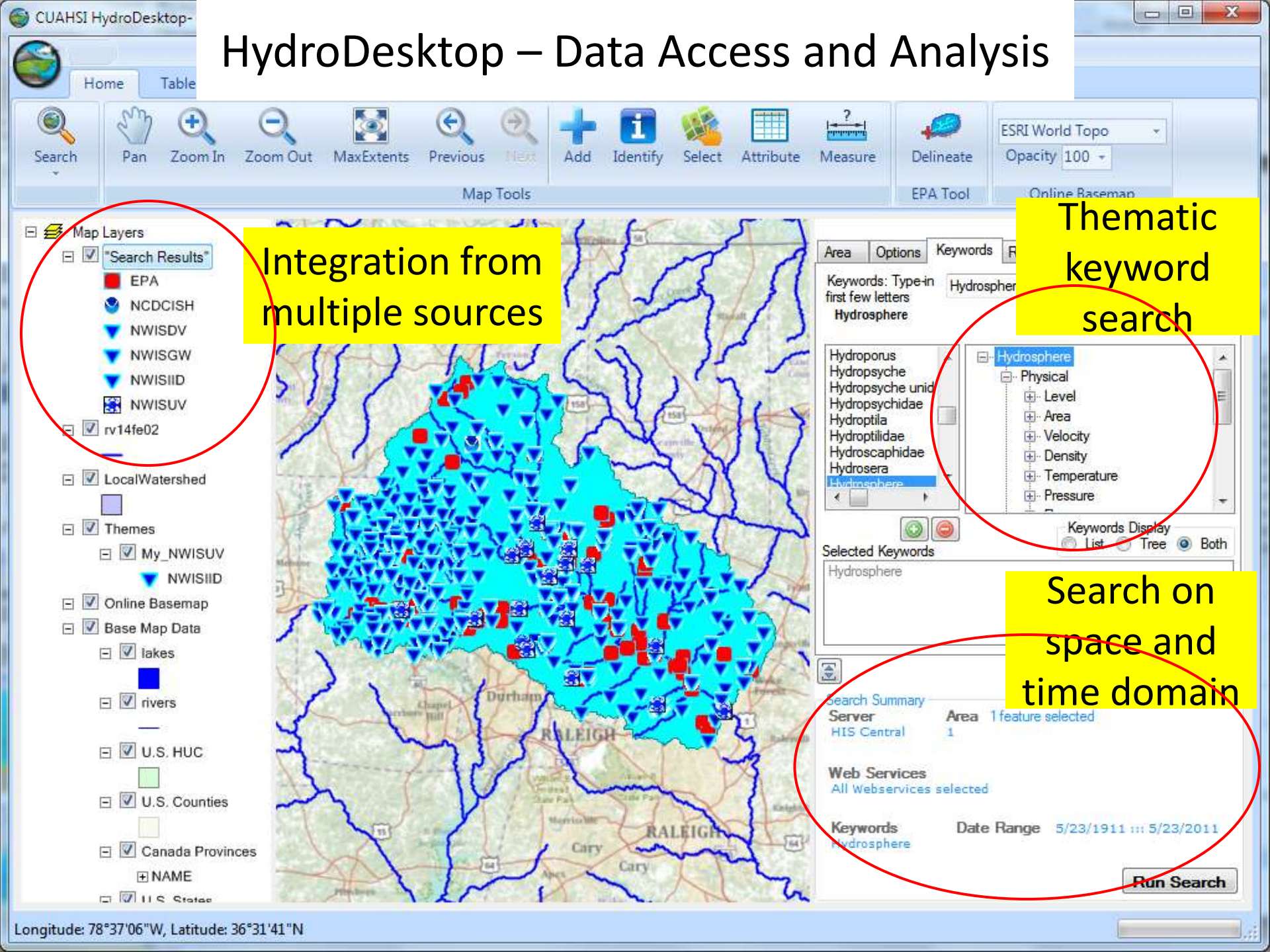
Data presentation, visualization,
and analysis through Internet
enabled applications

HydroCatalog

- Search over data services from multiple sources
- Supports concept based data discovery



HydroDesktop – Data Access and Analysis



Integration from multiple sources

Thematic keyword search

Search on space and time domain

Open Development



<http://hydrodesktop.codeplex.com/>

- http://hydrodesktop.codeplex.com
- http://hydroserver.codeplex.com
- http://hydrocatalog.codeplex.com

HIS Project Team and Sponsors

- [University of Texas at Austin](#) – David Maidment, Tim Whiteaker, James Seppi, Fernando Salas, Jingqi Dong, Harish Sangireddy
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- [ESRI](#) – Dean Djokic, Zichuan Ye



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