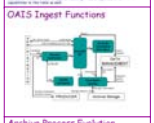
AND Archives:Freeing Ourselves From the "Tyranny of the OR"

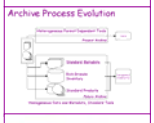
Ted Habermann, NOAA National Data Centers

Satellite Data in Legacy Format

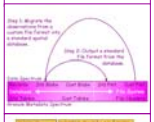
Built-in Spatial Index



OAIS ?: Does SIP = AIP = DIP



Evolving Archive Processes



Two AIPs

Foundation = DB + File System

Quality Control View (SQL)

Dataset Comparisons (SQL)

Web Reports (SQL)

Desktop GIS

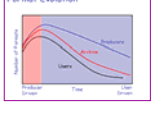
Desktop Office (ODBC)

Internet Mapping (ArcIMS)

Internet Mapping (WMS)

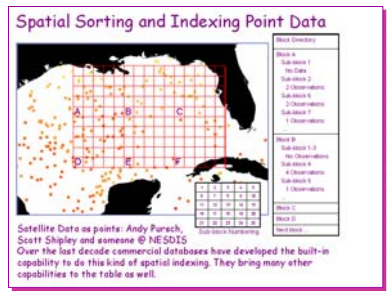
Internet Mapping (Google Earth)

One Foundation Many Paths

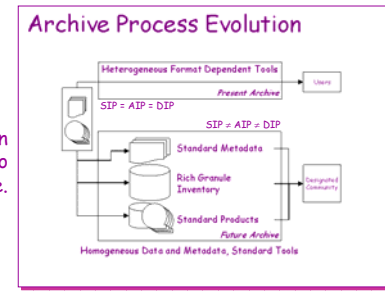


How Many Formats?

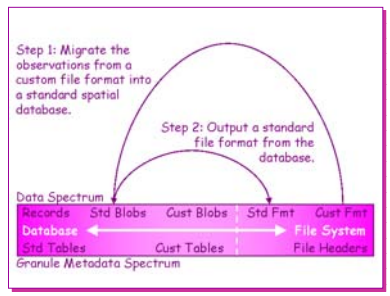
The GIS and Scientific communities have developed in different worlds. Motivations for integration between these communities are increasing. Many archives think of their users as "science" OR "GIS" people. We are exploring approaches for serving GIS AND Science. **This is the AND Archive.**



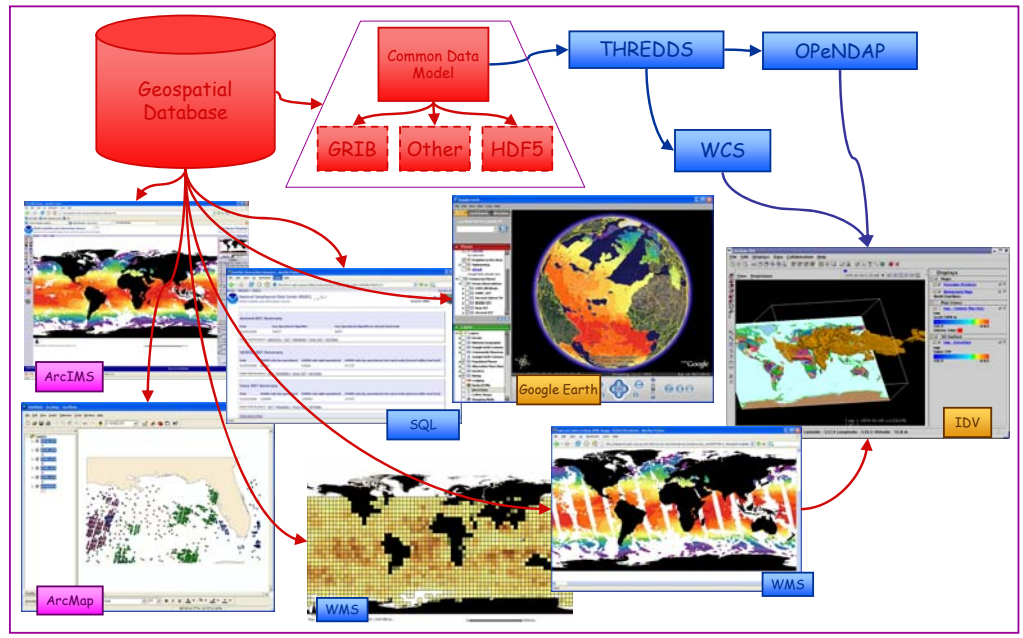
Level 2 Satellite Sea Surface Observations are written into an arcane legacy format developed during the 1970's. The files include a spatial index to increase the performance of spatial queries. They are "satellite" data, but they are really just simple geospatial features with attributes (points).



These data, and many others, are presently "archived" in their native format (SIP = AIP = DIP). This quickly leads to a heterogeneous and unsustainable archive.

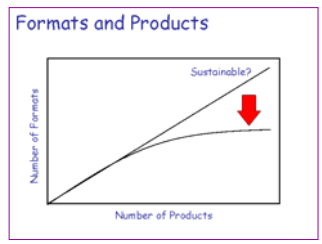


The approach we are exploring ingests data into a spatial database AND writes it to a file system in a standard format (netCDF / HDF5). Each source is then used to serve appropriate user requests.

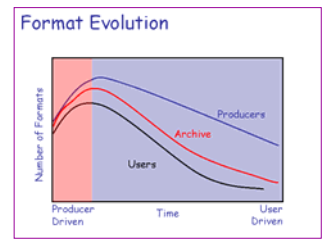


Questions

What is the number of formats(t)



Who drives format selection?



Where on the integration spectrum?