Online Mapping Tools and Geographic Information System (GIS) Software

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Kansas State University

GIS – Geographic Information System

- What is a GIS? - a computer system for collecting, storing, displaying and <u>analyzing</u> geographical information

- Examples of GIS software
  - GIS software with complex analysis abilities
  - GIS software with basic analysis abilities

- Examples of Online Mapping Tools (great for displaying geospatial data)

Arc Pro Analysis Tools

QGIS Analysis Tools

Google Earth - Basic Analysis Tools

Online Mapping Tools – KS Water Wells
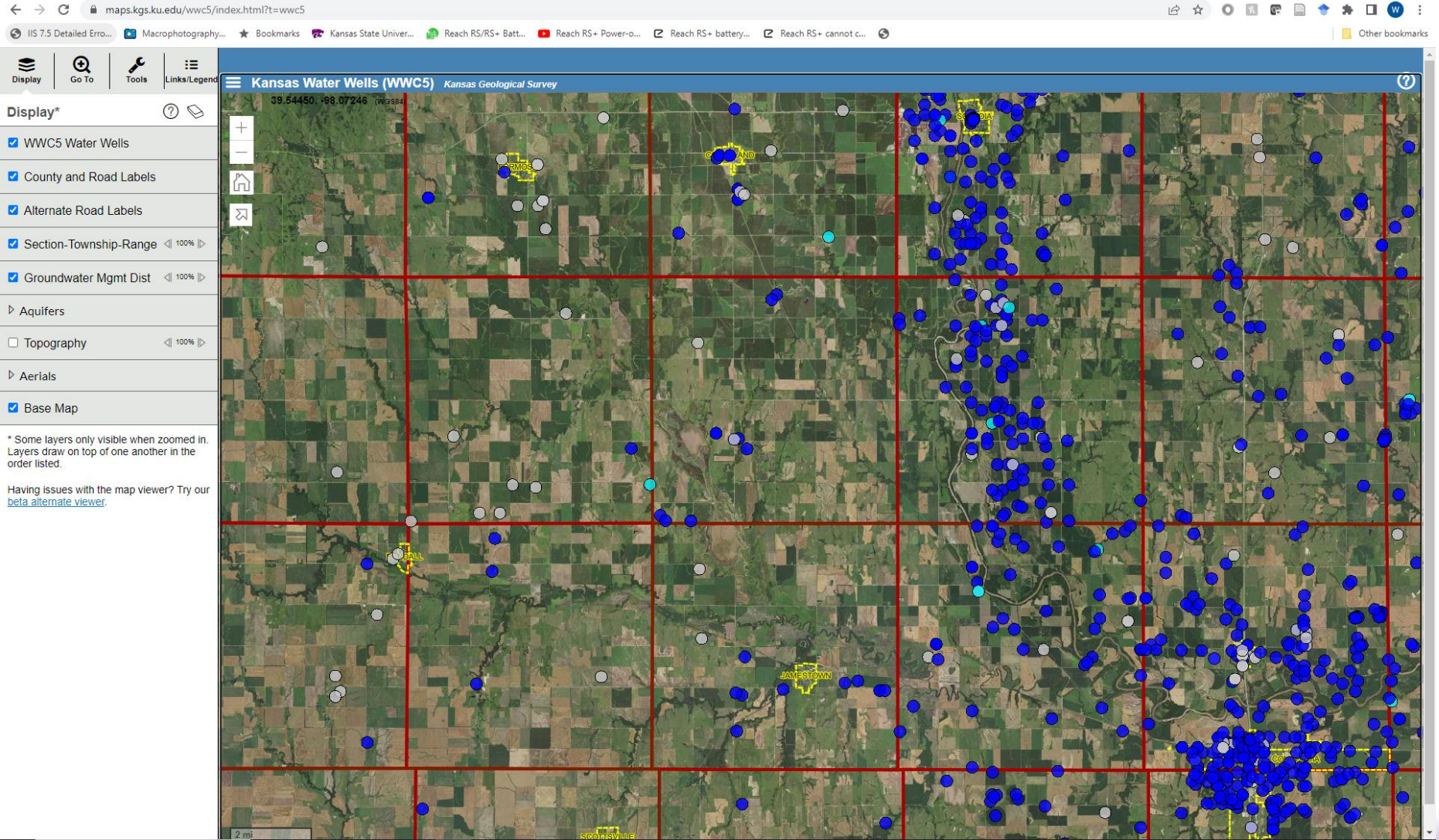
Online Mapping Tools – KS Floodplains

Online - Soil data viewer and download

NASS – Cropland Data Layer

1997-2022, 30m resolution
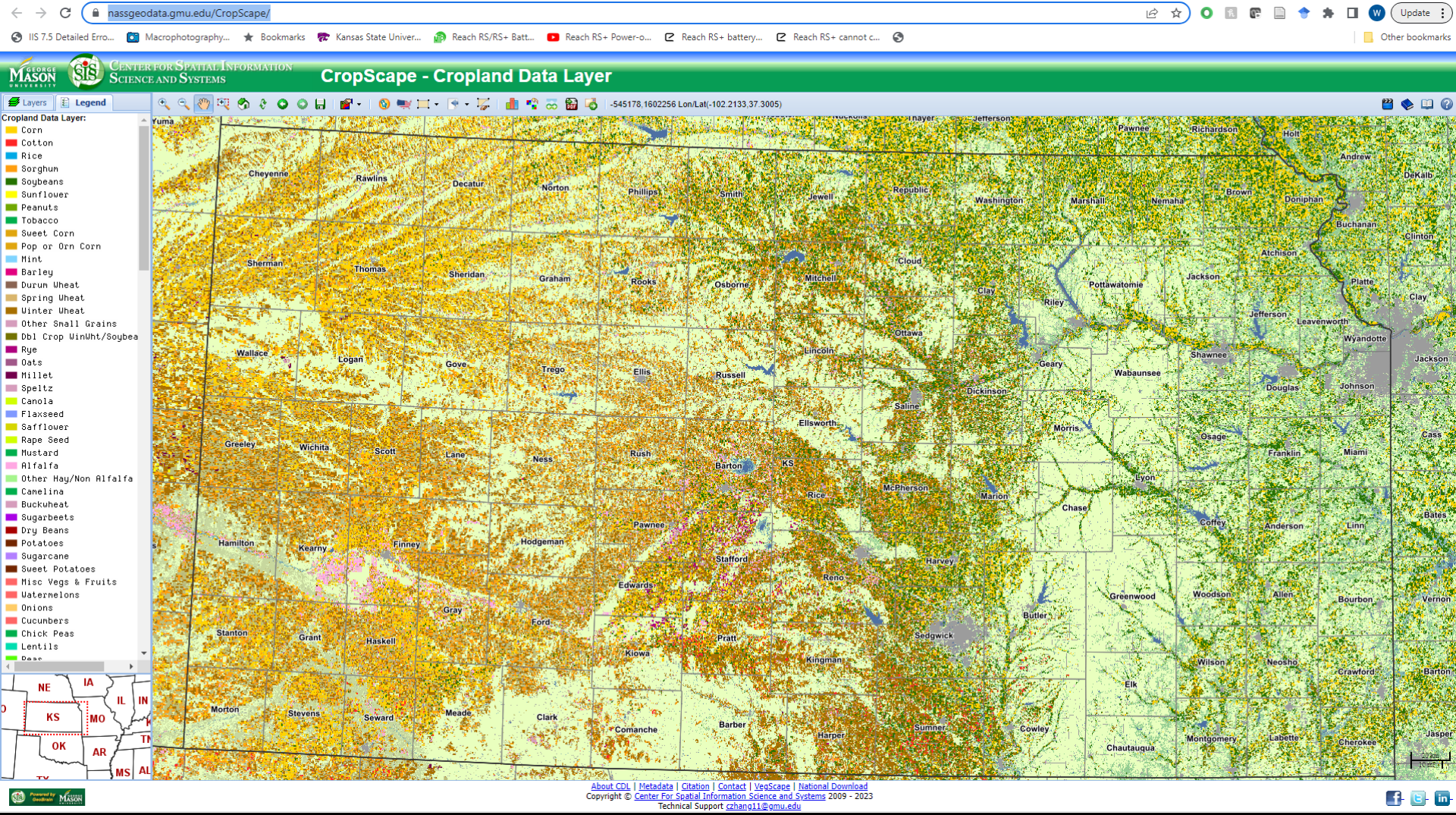
Download Data or Access Servers?

- If you are analyzing large datasets, it is good to work with them on your hard drive

- If you are using a dataset that gets frequent updates, then it is good to access through a server.
  - Where?

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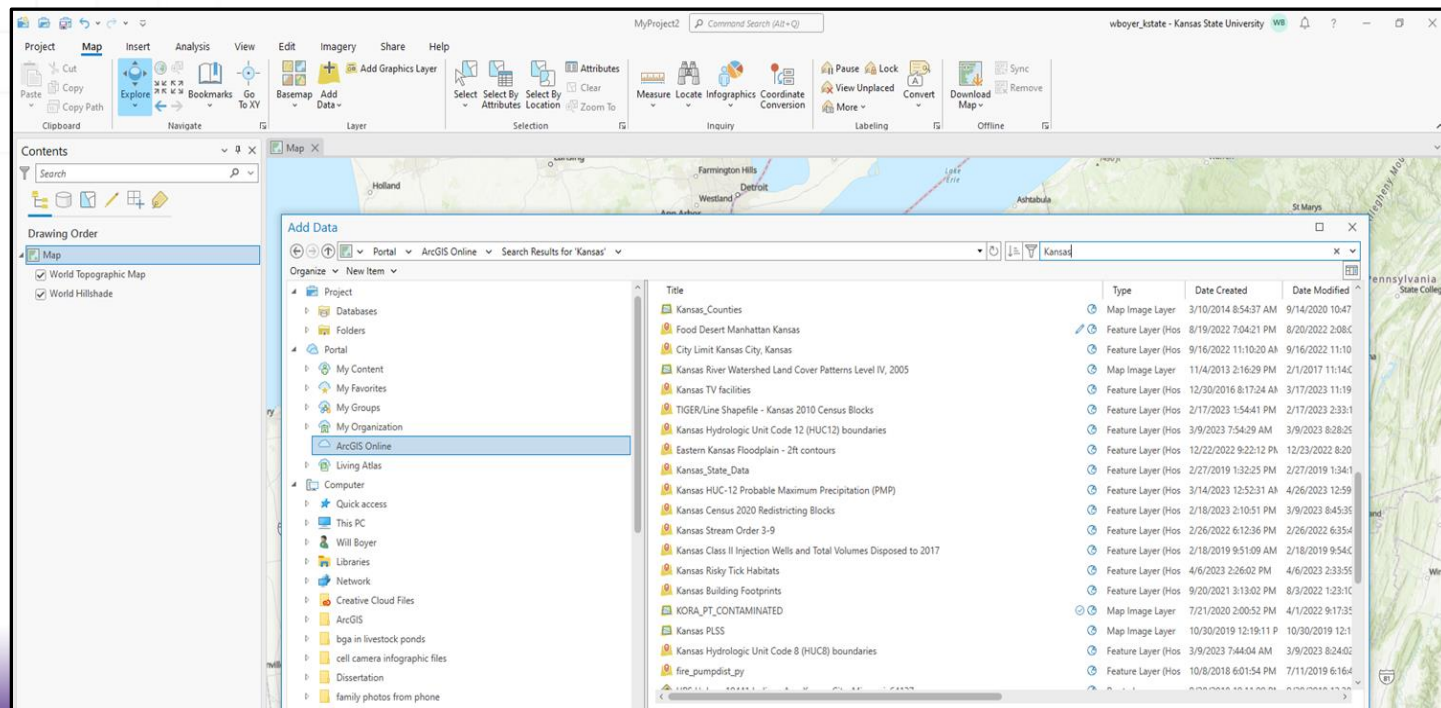
GIS Server Connection and Download

- Server Examples
  - ArcGIS Online Portal
  - Google: _____ ArcGIS REST Services Directory
  - Kansas GIS Data Center
- Download Site Examples
  - Kansas GIS Data Center https://www.kansasgis.org/
  - USDA Geospatial Data Gateway https://datagateway.nrcs.usda.gov/
  - Cropland data layer https://nassgeodata.gmu.edu/CropScape/
  - Google: _____ GIS data download

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Knowledge
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GIS – Geographic Information System

- What is a GIS? - a computer system for collecting, storing, displaying and analyzing geographical information

- Examples of GIS software
  - ArcPro and QGIS have complex analysis abilities
  - Google Earth Pro has basic analysis abilities

- ArcGIS Online gives you great potential for for displaying geospatial data in Web Maps

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