Expanding Indiana Statewide Geospatial Data Portal

Jinha Jung, Purdue University (jinha@purdue.edu)

Content: Indiana has identified the need to have ubiquitous access to statewide topographic LiDAR covering all of Indiana, and Indiana recently finished 2nd statewide LiDAR data collection (1st statewide LiDAR data collection between 2011 – 2013 and 2nd statewide LiDAR data collection between 2016 – 2019). Thanks to the support from the IndianaView in 2020, Geospatial Data Science Lab (GDSL) was able to start hosting Indiana Statewide LiDAR data and provide seamless LiDAR data coverage within Indiana to the public. The second year of this project aims to host complete LiDAR data coverage for both 1st and 2nd statewide LiDAR data acquisition and provide additional geospatial data product services to the public. Below is a summary of additional achievements we accomplished in the second year.

- Hosting complete (wall-to-wall) Indiana statewide LiDAR data for both 2011 – 2013 and 2016 – 2019 acquisition

- Providing a web map service for statewide NDHM (Normalized Digital Height Model) at 100 ft spatial resolution (Figure 1)

- Providing web map services for county level NDHM and DTM (Digital Terrain Model) at 5 ft spatial resolution (Figure 2)

- Over 3,782 visits to the LiDAR data portal since October, 2020, and average daily visit is in constant increasing trend: 6 daily visits in Oct 2020 and 14 daily visits in Aug 2021
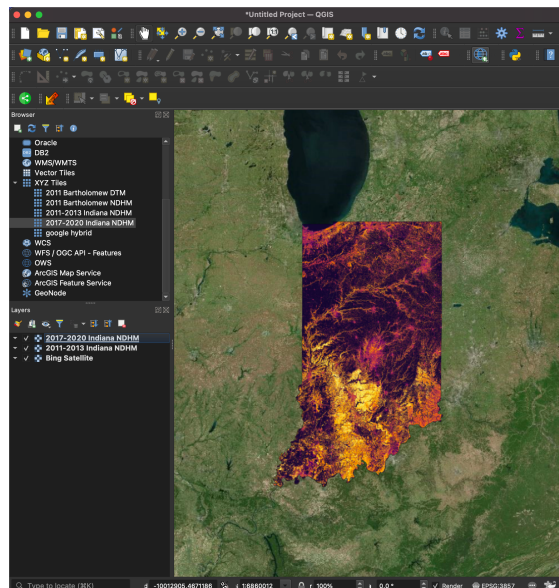
FOR FURTHER READING:

- A complete list of web map services is available at https://gdslab.org/2021/08/02/how-to-add-indiana-lidar-data-product-layers-in-gis-software/

- Indiana Statewide LiDAR data portal (https://lidar.jinha.org)

- Reference from IGIC website (https://www.igic.org/countywide-lidar-and-dem-tiles)

- Reference from Indiana Statewide LiDAR planning and Status Story Map (https://indianamap.maps.arcgis.com/apps/MapJournal/index.html?appid=a0f9003d504446da8158f5efce5be5d5)

- 2020 IGIC Virtual Conference presentation recording (https://youtu.be/ImE0QTLp3DI)

Figure 1. An example of accessing the Indiana statewide NDHM web map service in QGIS.
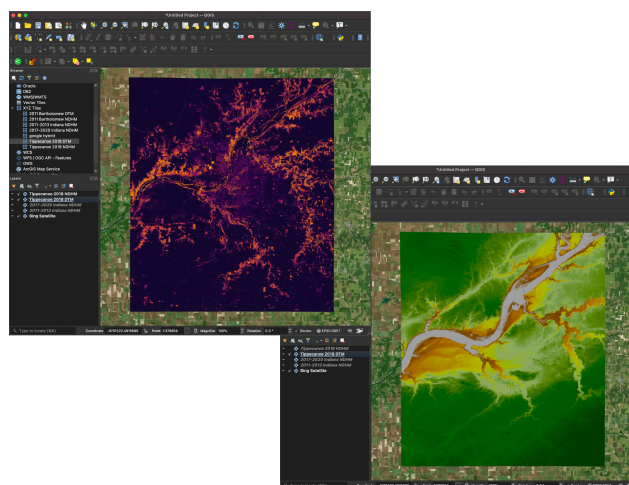

Figure 2. An example of accessing county level NDHM and DTM web map service in QGIS. (top left: NDHM of Tippecanoe county, bottom right: DTM of Tippecanoe county)