AW3D Newsletter Vol.24

February 17th, 2021

Welcome to your AW3D newsletter. We're excited to share the latest news, tips, and resource for geospatial data specialists.

In this issue, we take a look at one of the most frequently asked questions - raster and vector data in the context of AW3D products.

Thanks for reading,

GeoData of the Month

Skyscrapers in downtown San Francisco, CA. (AW3D Building 3D data)
This city model includes 10,000+ polygons to describe one of the most iconic urban areas in the US.

Our satellite-based 3D building data is hassle-free and cost-effective, and you can order any location/city in the world.

Please contact us if you are interested in our 3D building samples or/and the current off-the-shelf coverage.

FAQ-1: All about Raster and Vector Data

Most, if not all, geospatial data comes with either vector data or raster data format.

Raster data is a dot matrix data that relies on pixel values to describe a shape.
Within AW3D product portfolio, a raster data type is used for ortho-imagery,
Digital Surface Model (DSM), Digital Terrain Model (DTM), and auxiliary data in
telecom datasets such as Digital Height Model (DHM) and Digital Land Use map (DLU).

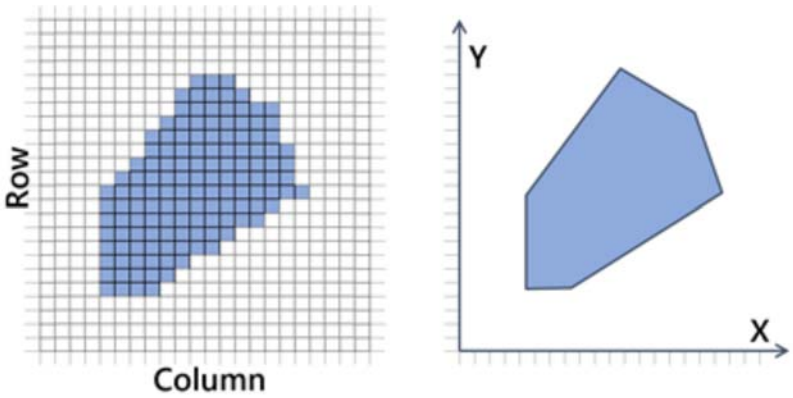
Vector data, in general, is defined as polygons that are made of points and connected by lines.
AW3D building 3D data is a typical example of vector data among our product lineups.

Raster and vector data have their advantages and disadvantages.
Raster is good at describing complex details of shapes and values, and that's why we exclusively use raster for satellite imagery or digital elevation model (DEM). It, however, tends to be not great at data manipulation, such as scaling (zooming).

Vector is mathematically defined and it can be zoomed without being blurry.
It is also easy to be used with object properties defined in an attribute table, but it's not good at describing complex shapes. It can be error-prone in a real application in some situations.

Each raster and vector data comes in various file formats. In fact, the latest GDAL
(the Geospatial Data Abstraction Library) supports 169 raster and 98 vector file formats.

AW3D supports an extensive range of customization with free/paid options, including data file types
such as OBJ, DWG, DXF, etc.
Feel free to contact our sales representative if you need your data in a specific file format.



Raster data (left) vs. Vector data (right)

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Any questions, comments, or suggestions are always welcome. We can be reached via here.

Thanks for tuning in,

The AW3D sales team

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