Massachusetts Roads Dataset

Tags   There are no tags for this item.

Summary

Aerial images and accompanying road segmentations of the Massachusetts road network.

Description

The Massachusetts Roads Dataset consists of 1171 aerial images of the state of Massachusetts. Each image is 1500×1500 pixels in size, covering an area of 2.25 square kilometers. The images have been transformed from TIFF into PNG formant. The dataset covers a wide variety of urban, suburban, and rural regions and covers an area of over 2600 square kilometers. The target maps were generated by rasterizing road centerlines obtained from the OpenStreetMap project. A line thickness of 7 pixels and no smoothing was used in generating the labels. All images are at 1m spatial resolution.

Credits

This dataset is derived from Volodymyr Mnih's original Massachusetts Roads Dataset. Massachusetts Roads Dataset & Massachusetts Buildings dataset were introduced in Chapter 6 of his PhD thesis.

@phdthesis{MnihThesis,
author = {Volodymyr Mnih},
title = {Machine Learning for Aerial Image Labeling},
school = {University of Toronto},
year = {2013}
}

Use limitations

There are no access and use limitations for this item.

Extent

West   73.5180468   East   69.8771656
North   42.9174648   South   41.2060525

Scale Range

Maximum (zoomed in)   1:5,000
Minimum (zoomed out)   1:20,000,000

Topics and Keywords   ▶

Citation   ▶

     Title   Massachusetts Roads Dataset

     Other citation details
     @phdthesis{MnihThesis,
     author = {Volodymyr Mnih},
     title = {Machine Learning for Aerial Image Labeling},
     school = {University of Toronto},
     year = {2013}
     }

Resource Details   ▶

     Dataset languages   English
     Dataset character set   utf8 - 8 bit UCS Transfer Format

     Spatial representation type   grid

     Credits
     This dataset is derived from Volodymyr Mnih's original Massachusetts Roads Dataset. Massachusetts Roads Dataset & Massachusetts Buildings dataset were introduced in Chapter 6 of his PhD thesis.

     @phdthesis{MnihThesis,
     author = {Volodymyr Mnih},
     title = {Machine Learning for Aerial Image Labeling},

```
school = {University of Toronto},
year = {2013}
}
```

ArcGIS item properties

Extents ►

Extent
    Geographic extent
       Bounding rectangle
         Extent type
      Extent used for searching
         West longitude   73.5180468
         East longitude   69.8771656
         North latitude   42.9174648
         South latitude   41.2060525
         Extent contains the resource   Yes

Metadata Details ►

Metadata language   English
Metadata character set   utf8 - 8 bit UCS Transfer Format

Scope of the data described by the metadata   dataset

Last update   ⇔ 2023-05-14

ArcGIS metadata properties
    Metadata format   ArcGIS 1.0
    Standard or profile used to edit metadata   ISO19139

    Created in ArcGIS for the item   2023-05-14   09:21:03

    Automatic updates
       Have been performed   No

Metadata Maintenance ►

Maintenance
    Update frequency   unknown