KyTopo!

Kentucky’s New Topographic Map Series

A KAMP Quarterly Meeting Presentation

Kent Anness

COT - GIS
KyTopo Map Series Information

Commonwealth Specific Map Product
Uses Public Domain Vector Data
Leverages KyFromAbove Elevation Data
Employs Python-based Automated Routines
Derivative Datasets to be Distributed
New Quadrangle Tiles

Landscape Orientation
Arch D Sized Sheet
30” x 20” Map Area
60,000’ x 40,000’
Based on 5K grid
1:24,000 – 1” = 2,000’
Kentucky Single Zone
549 Tiles (779 USGS)
Square Corners!
NxxExx – N22E17
New Quadrangle Names

New Names
USGS Methodology
Most Prominent Feature
Place Names
Natural Features
Cities, GNIS, State Parks
Kentucky Features
Contour Intervals & Indexes

Kentucky Topographic Map Series
Quadrangle & Tile Names

10’, 20’, & 40’ Intervals
40’, 100’, & 200’ Indices
10’ Interval & 40’ Index

10’ Interval
40’ Index
20’ Interval & 100’ Index
40’ Interval & 200’ Index
New KyTopo Layers

LiDAR-derived Spot Elevation

Woodlands

Tunnels

Airport Runway Footprints
Production Environment

Enhanced Workstation
Windows 10 Enterprise
64-bit
4 Cores
16GB of RAM
1.5TB SSD Storage
ArcGIS for Desktop 10.5.1
Data Driven Pages
Production Mapping
Typography - Labeling

Maplex Enabled (Best)

ArcGIS Styles Employed

Constantia
Title & Layout Elements

Calibri
Features & Layout Elements

Arial
Road Shields & Elevation Features
Symbology

ArcGIS Styles Employed

ArcGIS Style Manager

KyTopo.style
Legend Creation

Process is partially manual

ArcGIS automated legend creation had less than desirable results

ArcMap legend is pasted into Letter-sized document

(Paste Special – Enhanced Metafile)

Output to PNG file

Opened in Adobe Photoshop to capture symbols

Pasted into Adobe Illustrator for text and symbol alignment

Exported to a TIFF from Adobe Illustrator

Placed as referenced graphic in ArcMap layout
Index & Inset Maps

Index Map
Inset Map
Separate Data Frames
Data Driven Pages
Map Output Process

KyTopoMapProduction Toolbox

Python Scripts

Background Processing (64-bit)

300dpi PNG for printing *(5-9 minutes per quad)*

600dpi GeoTIFF for use in GIS/CAD software *(15-40 minutes per quad)*

KyTopo_24K_<tilename>_<_quadname>.png

KyTopo_24K_N21E03_Wickliffe.png
KyTopo Quadrangle
KyTopo Quadrangle
Status

Contour generation completed
KyTopo (PNG) Quadrangle Maps completed
KyTopo (GeoTIFF) Quadrangle Maps completed
Downloadable Contours (10’, 20’, and 40’) completed
KyTopo 5’ Contours in process
KyTopo Products

Kentucky Topographic Map Series
*(collared & uncollared)*

KyTopo Contours for Download

KyTopo Cached Base Map Service

KyTopo Image Service
How to Download KyTopo Maps

KyTopo 300dpi PNG Files

KyTopo 600dpi GeoTIFF Files

Symbology Information
KyTopo Quad Index Web Map
KyTopo Contours – KyGeoPortal Download
KyTopo Contours – 5ft Scaled
KyTopo Contours – 5ft Scaled
KyTopo Contours – 5ft Scaled
KyTopo Contours – 5ft Scaled
KyTopo Contours – 5ft Scaled
KyTopo Image Service
Questions?

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