Google Earth Files for the Great Lakes and Beyond
GLOS Mapping Workshop
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GREAT LAKES

Great Lakes Information Network – GIS
(Queryable by topic, geography, organization, and upload date – 73 layers as of October, 2009)
http://gis.glin.net/

Regional GIS Data by Upload Date
Welcome, guest [login] [register]

About
These data are sorted by their date of upload and are available in many formats including OGC WMS and WFS web services, in addition to PDF, KML (Google Earth), SHP, and GML formats. Layers are accompanied by FGDC-compliant metadata and are ingested into Geospatial OneStop. For more, please see the GLIN GIS FAQ

Daily_Great_Lakes (UW - ERSC) (UW - SSEC)
Daily-updated MODIS image for the Great Lakes
Link | Image Preview | GeoTIFF | JPEG | KML | PDF | PNG

gl_air_toxics_inventory_1999 (GLC)
Great Lakes Regional Toxic Air Emissions Inventory - 1999
Link | Map Preview | Link | Metadata (html) | Metadata (txt) | Metadata (xml)
GeoRSS | PNG | PDF | GML | SVG | JSON | Shapefile (.shp) | Google Earth (.kml)
Great Lakes Environmental Research Lab
Great Lakes Coastal Forecasting System
http://www.glerl.noaa.gov/res/glcfs/

- Nowcast Winds
- Nowcast Waves
- Nowcast Surface Temperatures
- Nowcast Currents
- GLSEA Surface Temps & Ice
Huron to Erie Connecting Waterways Forecasting System (HECWFS)
http://www.glerl.noaa.gov/res/hecwfs/
- Currents (Surface and Vertically-Averaged)
- Water Levels

St. Clair River and Detroit River
http://www.glerl.noaa.gov/res/hecwfs/hecwfs2.html
- Water Currents
Indiana Dunes Nowcast
http://www.glerl.noaa.gov/res/glcfs/bd/
- Surface Water Temps
- Imaginary Tracer Concentration
- Bathymetry
- Beach Locations

Grand Haven Nowcast
http://www.glerl.noaa.gov/res/glcfs/gh/
- Surface Water Temps
- Tracer Concentrations
- Bathymetry
- Beach Locations

Saginaw Bay Nowcast
http://www.glerl.noaa.gov/res/glcfs/sb/
- Surface Water Temps
- Tracer Concentrations
- Bathymetry
National Atmospheric and Oceanic Administration (NOAA)
Google Earth Applications, Demos & Discussions
http://www.epic.noaa.gov/talks/nns/forums/google.html

National Weather Service - GIS Data Links
http://www.srh.noaa.gov/gis/kml/
National Weather Service – KML Generator
http://radar.weather.gov/ridge/kmzgenerator.php

- Real Time Weather Warnings
- Radar (a variety of products for individual stations, statewide, regional, and national)
National Severe Storms Lab
http://wdssii.nssl.noaa.gov/?r=products

- Radar
- Satellite
- NWS Warnings / Watches / Convective Outlooks / Local Storm Reports
- Storm Reports
- Surface observations (Both Hourly and 10 Minute Update)
National Operational Hydrologic Remote Sensing Center
http://www.nohrsc.noaa.gov/earth/
- National Snow Analyses
- Snow Reports and Stations
National Geophysical Data Center
http://www.ngdc.noaa.gov/dmsp/maps.html

- Defense Meteorological Satellite Program (DMSP) OLS Global Composites Version 2
- Defense Meteorological Satellite Program (DMSP) OLS Gas Flare Monitoring
- Las Vegas High Resolution Lights
- Nighttime Lights of the World: 2003
- Wells National Estuarine Research Reserve
National Aeronautics and Space Administration (NASA)

Jet Propulsion Lab – One Earth
http://oneearth.jpl.nasa.gov/KML.html

- Landsat Imagery (global 15m Landsat 7 derived A: pseudocolor style, pansharpened, using both infrared and visual bands and B: visual style, which uses color derived from the red green and blue spectral and brightness from the panchromatic band)
- MODIS Imagery (daily updated 250m per pixel visual images collected by A: TERRA MODIS, which crosses the equatorial line around 10AM local time and B: AQUA MODIS, which crosses the equatorial line around 2PM local time. Also, a specific day or range of days can be specified by using layer and time parameters.)

Goddard Space Flight Center
http://www.sirvin.com/goes/goeseast_web.kml

- GOES 12 weather satellite animation. Animation at approximately one hour intervals for 12 hours. Images from NASA Goddard Space Flight Center. Data from NOAA GOES 12 East satellite.

Goddard Space Flight Center - Scientific Visualization Studio
U.S. Geological Survey

WaterWatch
http://water.usgs.gov/waterwatch/kml.html
- Real-Time Stream Flow color coded by flow condition (updated hourly)

EDNA Derived Watersheds for Major Named Rivers
http://edna.usgs.gov/watersheds/kml_index.htm
- this KML depicts 1992 land cover in the U.S. side of the Great Lakes watershed
  (http://edna.usgs.gov/watersheds/sheds/greatlakes/greatlakes.kmz)

Historical Orthoimagery
http://gisdata.usgs.gov/webappcontent/kml/HistoricOrtho/HistoricOrthoCoverageAreas.kml
- 2002 Orthophotos for Chicago

Latest Earthquakes
http://earthquake.usgs.gov/eqcenter/catalogs/
USDA Forest Service, Remote Sensing Applications Center

MODIS Active Fire Mapping Program
http://activefiremaps.fs.fed.us/wms.php
- Fire Detections
- Fire Radiative Power
- Large Incidents
- Fire Weather

World Wide Lightning Location Network
http://wwlln.net/
link to KML file (http://flash3.ess.washington.edu/WWLLN.kml)
Environmental Protection Agency
EPA Geospatial Data Access Project
http://www.epa.gov/enviro/html/frs_demo/geospatial_data/region_05.kmz

ACADEMIC

Space Science and Engineering Center, University of Wisconsin-Madison
Google Earth Imagery
http://ge.ssec.wisc.edu/
- AVHRR
- Latest Wisconsin GOES Imagery
- MODIS Today

University of Wisconsin Sea Grant Institute
Great Lakes WebCams
http://aqua.wisc.edu/glct/maps/kml/gl_webcams_15Nov07.kmz
- 130 webcams across the Great Lakes

University of Illinois
Intersection of Severe Weather, Climate, and Society
http://www.atmos.uiuc.edu/iswecs/latest.html
MICHIGAN

Michigan Tech Research Institute
Using Google Earth for Exploring Atmospheric Observations of Carbon Dioxide for Understanding the North American Carbon Budget
http://earth.google.com/gallery/kmz/tyler_erickson.kmz

U.S. Geological Survey, Mineral Resources Program
Geologic units and structural features in Michigan, with lithology, age, data structure, and format
http://tin.er.usgs.gov/geology/state/kml/migeol.kmz

Mineral Resources

WISCONSIN

University of Wisconsin Sea Grant Institute
Wisconsin Coastal Guide
http://www.wisconsincoastalguide.org/
- Shipwrecks
- Lighthouses
- Parks (State, County, Local)
- 360° Panorama Photos
- Beaches
- Webcams
- Circle Tour Route
- Oblique Photos
- All-in-One
- Note: you need to scroll down on the page to find the links to the KML files

Wisconsin State Cartographer’s Office
Wisconsin Land Economic Inventory/Bordner Maps (for six counties)
http://www.sco.wisc.edu/maps/bordner_main.php
Great Lakes WATER Institute
Wisconsin Coastal Imagery Database
http://www.glwi.uwm.edu/research/aquaticecology/cladophora/aerial_imagery/
• Nearshore aerial photos from Kenosha to Door Counties showing bottom characteristics.

MINNESOTA

Minnesota Department of Natural Resources
State Wildlife Management Areas
http://maps.dnr.state.mn.us/compass/wma/kml/mndnr_wmas.kmz

U.S. Geological Survey, Mineral Resources Program
Geologic Units of Minnesota
http://tin.er.usgs.gov/geology/state/kml/mngeol.kmz

Mineral Resources

MISCELLANEOUS

Google Earth Library
Topographic Maps
http://www.gelib.com/maps/_NL/usgs-topographic-maps.kml

Historic Topos
http://www.gelib.com/maps/Topos/Topos.kmz

Aeronautical Charts
http://www.gelib.com/maps/_NL/aeronautical-charts-united-states.kml

GeoGarage – Google Map Application for Raster Nautical Charts
http://demo.geogarage.com/noaa/

EarthNC - Nautical Data for a Digital World
http://earthnc.com/
Registration is required for a free online service of raster and vector nautical charts.
http://earthnc.com/kml/earthnc-online.kmz

Additional Near-Real Time Layers in Google Earth 5.0
• Ocean (State of the Ocean >> Ocean Observations includes Great Lakes buoys)
• Weather (clouds, radar, conditions and forecasts)
• Traffic (on most interstate highways and some major arterials in large cities)

How to add a Web Map Service (WMS) to Google Earth
1. Choose the Add pull-down menu and select Image Overlay
2. Click on the Refresh tab
3. Select the WMS Parameters button
4. Select an existing WMS or select the Add button to type in a new WMS server URL