



Web site: <http://ezmt.anl.gov>

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Energy Zones Mapping Tool Newsletter

Next Webinar: Model Updates and Other Recent Activities

Thursday, September 20, at 4pm ET / 3 pm CT / 2 pm MT / 1 pm PT

Use the following link to attend the webinar: <https://bluejeans.com/355741337>

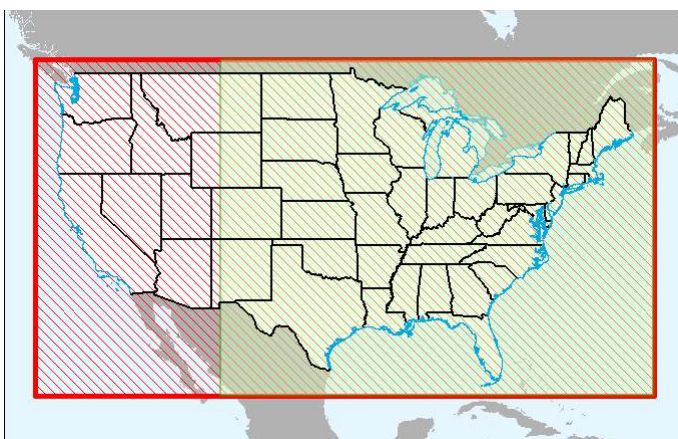
Audio: 866.226.4650, Meeting Id: 355 741 337#

After a brief introduction about the project and user interface, a live demonstration will highlight:

- Modeling updates to solar, wind, and corridor models extending them to the 48 contiguous states
- Examples of locating and analyzing higher suitability solar, wind, and energy corridor locations in the western U.S.
- Most notable new mapping layers - added, updated, or extended to the full U.S.
- Audience questions and comments

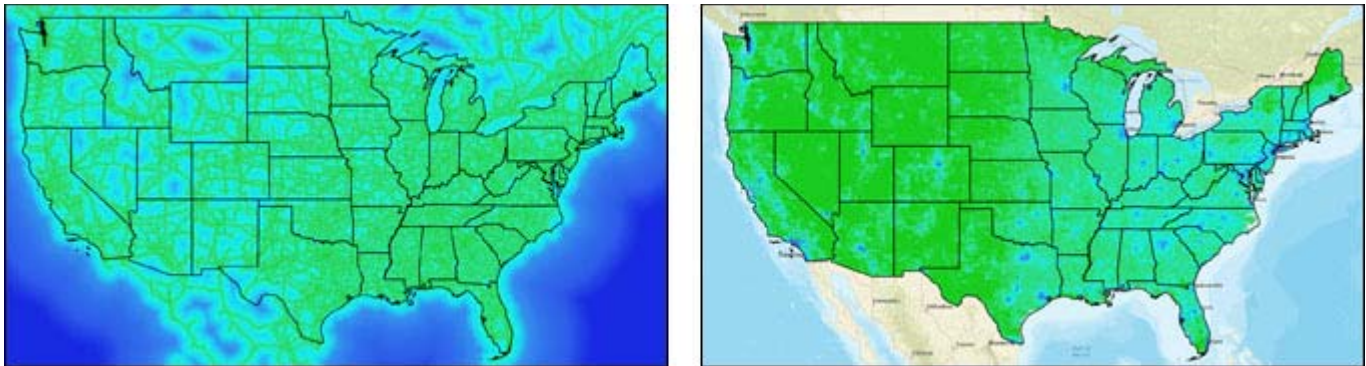
Solar, Wind, and Corridor Suitability Models Being Extended to Lower 48 States

The suitability models for solar (photovoltaic and concentrating), wind (land-based and offshore), and corridors are being extended to the lower 48 states and offshore areas.

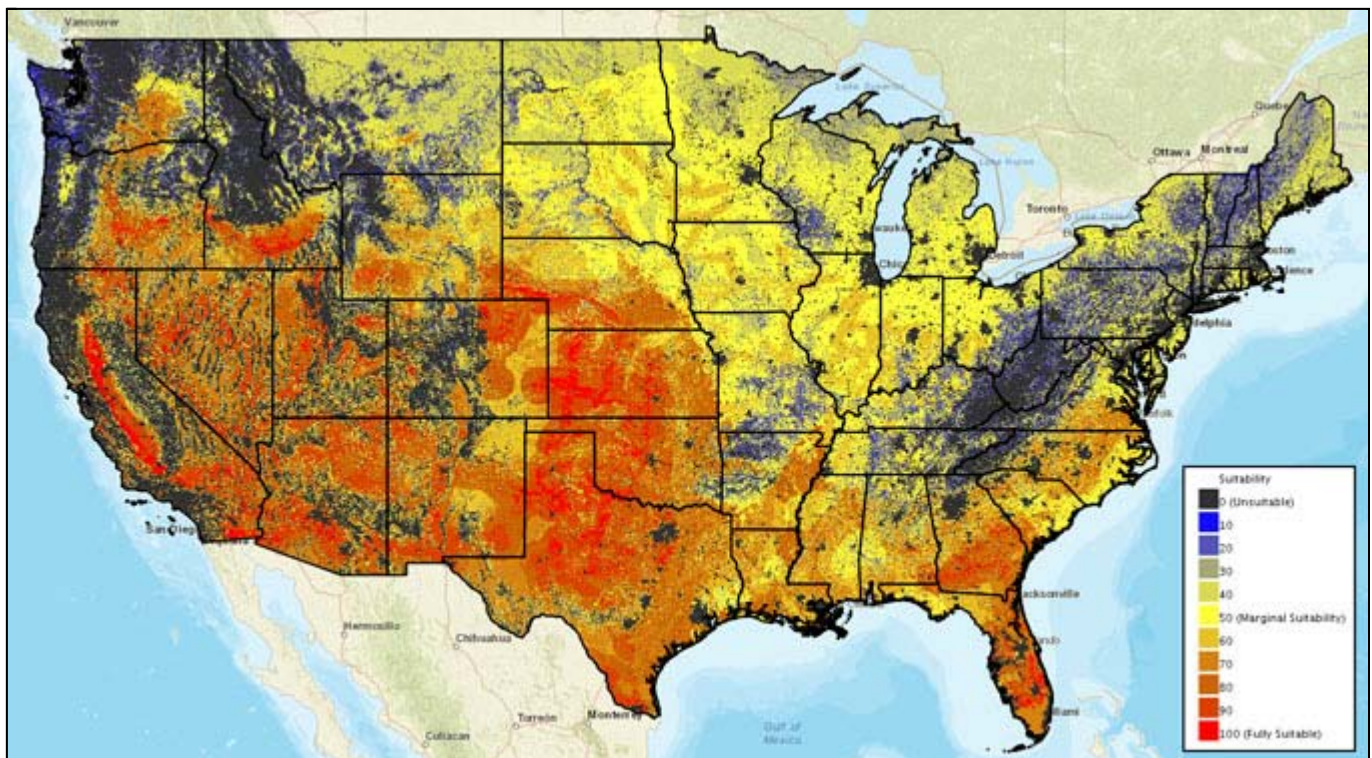


New Extent for EZMT Solar, Wind, and Corridor Models (Green: Original Extent, Red: New Extent)

Many of the model input layers have already been added (see list below), and are ready for use. We will be adding the rest of the layers used by these models and adjusting the default settings. Below are some examples of initial results.



Extended Model Input Layers: Distance to Transmission (left), and Population Density (right). Green (low) to Blue (high).



Preliminary Example Results for Utility-scale Photovoltaic Solar Power Plants for the Lower 48 States



Existing Solar Plants (Solar One, and Copper Mountain Projects in Nevada) Within Area Rated as High Suitability by the Preliminary Example Model

Feedback Requested on Model Siting Factors

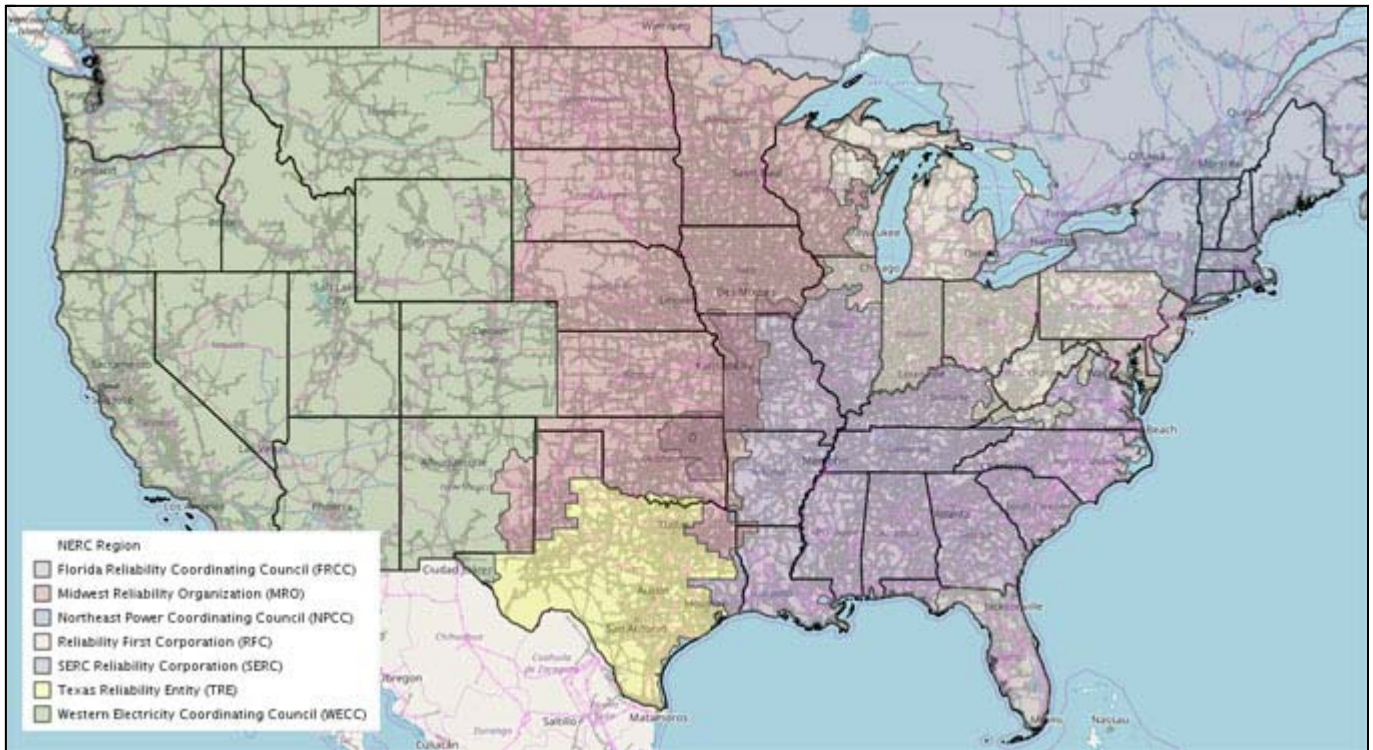
The webinar will highlight the initial updates to the solar, wind, and corridor models including data updates and extending them from only the Eastern Interconnection and its adjacent coasts, to include the 48 contiguous states and Pacific coast. As we update the models we welcome feedback about refinements to the siting factors, especially for the western states and the Pacific coast. Send feedback to ezmt@anl.gov. If there is sufficient interest, we will follow up about forming an advisory group and/or schedule web-based meetings for more interactive collaboration.

Recent Mapping Catalog Data Updates

The following layers have recently been updated in the EZMT mapping catalog:

- Airports
- Airport Runways
- Alternative Fuel Stations
- County Boundaries
- Major Roads
- Marine Ports
- National Conservation Easement Database
- Navigable Waterway Network
- NERC Region Boundaries
- Railroads
- State Boundaries
- Transmission Lines - Existing
- Transmission Lines - Planned
- Wind Turbines - Existing Locations

Also, the data sources for 39 other layers were checked and found to be still up to date.



Existing Transmission Lines with 2018 North American Electric Reliability Corporation (NERC) Boundaries

Recent Modeling Catalog Data Updates

The following layers have recently been updated in the EZMT model layer catalog:

- Distance in Meters to Transmission Line (≥ 115 kV) (Lower 48)
- Distance in Meters to Transmission Line (≥ 220 kV) (Lower 48)
- Distance in Meters to Transmission Line (≥ 345 kV) (Lower 48)
- Distance in Meters to Transmission Line (≥ 500 kV) (Lower 48)
- Distance in Meters to Transmission Line (≥ 735 kV) (Lower 48)
- Distance in Meters to DC Transmission Line (Lower 48)
- Federal Land (BLM Surface Management Agency) (Lower 48)
- Land Cover Area (Lower 48)
- Population Density (Lower 48)
- Slope (Lower 48)
- Solar CSP: Direct Normal Potential (Lower 48)
- Solar PV: 1-Axis Tracking Flat-Plate Collector (Lower 48)