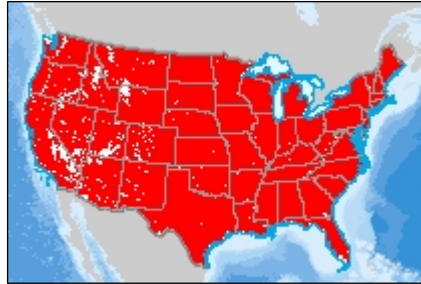


Enhanced Geothermal System (EGS) Technology Potential



Tags

Geothermal, LCOE, Power density

Summary

This dataset reflects power density estimate at optimum LCOE between 3.5 and 9.5 km.

Description

Levelized Cost of Electricity (LCOE) was calculated for Temperature at Depth (TAD) data, which was produced by the Southern Methodist University (SMU) geothermal program. TAD data were rasters for the lower 48 United States which estimated temperature at depth, from 3.5 km to 9.5 km in 1 km intervals. Across all depths, the optimal (smallest) LCOE was chosen for each grid cell, and the temperature at that depth was chosen to create this shapefile.

Credits

There are no credits for this item.

Use limitations

There are no access and use limitations for this item.

ArcGIS Metadata

Topics and Keywords

* CONTENT TYPE Downloadable Data

Citation

TITLE Power Density at Optimum LCOE

PRESENTATION FORMATS digital map

Resource Details

DATASET LANGUAGES English (UNITED STATES)

SPATIAL REPRESENTATION TYPE vector

* PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; ESRI ArcGIS 10.0.4.4000

ARCGIS ITEM PROPERTIES

* NAME geothermal_egs_tech_potential

* SIZE 19.041

* ACCESS PROTOCOL Local Area Network

Extents

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -116.050004

* EAST LONGITUDE -67.074925

* NORTH LATITUDE 49.370006

* SOUTH LATITUDE 25.250019

* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE -12918627.354001

* EAST LONGITUDE -7466746.487171

* SOUTH LATITUDE 2906485.164502

* NORTH LATITUDE 6337878.464161

* EXTENT CONTAINS THE RESOURCE Yes

Spatial Reference

ARCGIS COORDINATE SYSTEM

* TYPE Projected

* GEOGRAPHIC COORDINATE REFERENCE GCS_WGS_1984

* PROJECTION WGS_1984_Web_Mercator_Auxiliary_Sphere

* COORDINATE REFERENCE DETAILS

PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 3857

X ORIGIN -22041545.196626503

Y ORIGIN -33272760.666301586

XY SCALE 135368852.55354038

Z ORIGIN -100000

Z SCALE 10000

M ORIGIN -100000

M SCALE 10000

XY TOLERANCE 0.001

Z TOLERANCE 0.001

M TOLERANCE 0.001

HIGH PRECISION true

WELL-KNOWN TEXT

PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY ["EPSG",3857]]

REFERENCE SYSTEM IDENTIFIER

VALUE 0

* CODESPACE EPSG

* VERSION 7.4.1

Spatial Data Properties

VECTOR

* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

FEATURE CLASS NAME geothermal_egs_tech_potential

* OBJECT TYPE composite

* OBJECT COUNT 3

ARCGIS FEATURE CLASS PROPERTIES

- * FEATURE TYPE Simple
- * GEOMETRY TYPE Polygon
- * HAS TOPOLOGY FALSE
- * FEATURE COUNT 3
- * SPATIAL INDEX TRUE
- * LINEAR REFERENCING FALSE

Distribution

DISTRIBUTION FORMAT

- * NAME File Geodatabase Feature Class

TRANSFER OPTIONS

- * TRANSFER SIZE 19.041

Fields

DETAILS FOR OBJECT geothermal_egs_tech_potential

- * TYPE Feature Class
- * ROW COUNT 3

FIELD OBJECTID

- * ALIAS OBJECTID
- * DATA TYPE OID
- * WIDTH 4
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION
Internal feature number.
- * DESCRIPTION SOURCE
ESRI

- * DESCRIPTION OF VALUES Sequential unique whole numbers that are automatically generated.

FIELD Shape

- * ALIAS Shape
- * DATA TYPE Geometry
- * WIDTH 0
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION
Feature geometry.
- * DESCRIPTION SOURCE
ESRI
- * DESCRIPTION OF VALUES Coordinates defining the features.

FIELD TEMP

- * ALIAS TEMP
- * DATA TYPE Integer
- * WIDTH 4
- * PRECISION 0
- * SCALE 0

FIELD SQKM

- * ALIAS SQKM
- * DATA TYPE Double
- * WIDTH 8

- * PRECISION 0
- * SCALE 0

FIELD MW_SQKM

- * ALIAS MW_SQKM
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD Shape_Length

- * ALIAS Shape_Length
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION
Length of feature in internal units.

- * DESCRIPTION SOURCE
ESRI

- * DESCRIPTION OF VALUES Positive real numbers that are automatically generated.

FIELD Shape_Area

- * ALIAS Shape_Area
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION
Area of feature in internal units squared.

- * DESCRIPTION SOURCE
ESRI

- * DESCRIPTION OF VALUES Positive real numbers that are automatically generated.

Metadata Details

METADATA LANGUAGE English (UNITED STATES)
METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset
SCOPE NAME * dataset

* LAST UPDATE 2012-05-22

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0
STANDARD OR PROFILE USED TO EDIT METADATA FGDC
METADATA STYLE FGDC CSDGM Metadata

CREATED IN ARCGIS 2012-03-22 12:40:07
LAST MODIFIED IN ARCGIS 2012-05-22 12:06:23

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes
LAST UPDATE 2012-05-22 12:06:03

Thumbnail and Enclosures

THUMBNAIL	
THUMBNAIL TYPE	JPG