Estimated Temperature at 2000 m Depth

File Geodatabase Feature Class



Tags

There are no tags for this item.

Summary

Estimated temperature at 2000 m Depth

Description

For detailed methodology see Mullane, M., M. Gleason, K. McCabe, M. Mooney, T. Reber, and K.R. Young. 2016. "An Estimate of Shallow, Low-Temperature Geothermal Resources of the United States." Presented at the 40th GRC Annual Meeting. Sacramento, California, October 23–26. NREL/CP-6A20-66461. https://www.nrel.gov/docs/fy17osti/66461.pdf.

The temperature-at-depth maps for each depth interval are presented in **Figure 6**. As noted at the outset of this section, these maps were intended to provide preliminary, approximate estimates of the shallow, accessible resource base for HDR EGS, rather than accurate temperature values. The confidence interval map shown in **Figure 7**reinforces this point. For most of the United States, the confidence intervals indicate that we would expect that the true temperature at depth at each location in the grid is within ±20 degrees of the estimated temperature at depth shown on the maps; however, because uncertainty increases as a function of distance from BHT observations, large confidence intervals in the range of 20 to 26 degrees are found in regions with sparse BHT data.

Credits

NREL 2016. Downloaded from Geothermal Prospector (https://maps.nrel.gov/geothermal-prospector/?aL=PX68eI%255Bv%255D%3Dt&bL=clight&cE=0&lR=0&mC=40.17887331434696%2C-91.58203125&zL=4) on 7/14/21

Use limitations

There are no access and use limitations for this item.

Extent

West	-124.689015	**East**	-67.016999
North	49.372008	**South**	25.141005

Scale Range

Maximum (zoomed in)	1:5,000
Minimum (zoomed out)	1:150,000,000

ArcGIS Metadata

Topics and Keywords

* CONTENT TYPE Downloadable Data

Citation

TITLE Estimated Temperature at 2000 m Depth

PRESENTATION FORMATS * digital map

Resource Details

DATASET LANGUAGES * English (UNITED STATES)

SPATIAL REPRESENTATION TYPE * vector

* PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.6.1.9270

CREDITS
NREL 2016. Downloaded from Geothermal Prospector (https://maps.nrel.gov/geothermal-prospector/?aL=PX68eI%255Bv%255D%3Dt&bL=clight&cE=0&lR=0&mC=40.17887331434696%2C-91.58203125&zL=4) on 7/14/21

ARCGIS ITEM PROPERTIES
* NAME
* SIZE 61.477
* LOCATION ACCESS PROTOCOL Local Area Network

Extents

EXTENT
GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
EXTENT TYPE Extent used for searching
* WEST LONGITUDE -124.689015
* EAST LONGITUDE -67.016999
* NORTH LATITUDE 49.372008
* SOUTH LATITUDE 25.141005
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM
* WEST LONGITUDE -13880317.702546
* EAST LONGITUDE -7460298.244664
* SOUTH LATITUDE 2893073.813542
* NORTH LATITUDE 6338220.805864
* 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 102100
    X ORIGIN -21940362.558068998
    Y ORIGIN -30241100
    XY SCALE 144381166.92742443
    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
    LATEST WELL-KNOWN IDENTIFIER 3857
    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 3857
* CODESPACE EPSG
* VERSION 8.8(9.3.1.2)

Spatial Data Properties

VECTOR
* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS
FEATURE CLASS NAME geothermal_egs_depth_2000
* OBJECT TYPE composite
* OBJECT COUNT 473992

ARCGIS FEATURE CLASS PROPERTIES
FEATURE CLASS NAME geothermal_egs_depth_2000
* FEATURE TYPE Simple
* GEOMETRY TYPE Polygon
* HAS TOPOLOGY FALSE
* FEATURE COUNT 473992
* SPATIAL INDEX TRUE
* LINEAR REFERENCING FALSE

Distribution

DISTRIBUTION FORMAT
* NAME File Geodatabase Feature Class

TRANSFER OPTIONS
* TRANSFER SIZE 61.477

Fields

DETAILS FOR OBJECT geothermal_egs_depth_2000
* TYPE Feature Class
* ROW COUNT 473992

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 gid
* ALIAS ID
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0

FIELD est
* ALIAS Estimated Temperature (degrees C)
* DATA TYPE Integer
* WIDTH 4
* 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 2021-08-05

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

CREATED IN ARCGIS FOR THE ITEM 2021-07-15 09:34:04
LAST MODIFIED IN ARCGIS FOR THE ITEM 2021-08-05 12:08:28

AUTOMATIC UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2021-08-05 12:08:28