1-Axis Tracking Flat-Plate Collector



Tags
Resource Potential, 10km, one axis flat plate collector

Summary

Provide information on the solar resource potential for the lower 48 states. The insolation values represent the average solar energy available to a concentrating collector on a 1-axis tracker, such as a dish or a power tower in Wh/m2/day..

Description

Monthly and annual average solar resource potential for a one axis flat plate, horizontal axis aligned north-south for the lower 48 states of the U.S.

Credits

There are no credits for this item.

Use limitations

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ArcGIS Metadata

Topics and Keywords

* CONTENT TYPE Downloadable Data

Citation ▶

* TITLE energy_potential_solar_tilt_1_axis_flat_plate

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

Extents

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

- * WEST LONGITUDE -116.050004
- * EAST LONGITUDE -66.950005
- * NORTH LATITUDE 49.384359
- * SOUTH LATITUDE 24.521051
- * EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

- * WEST LONGITUDE -12918627.354060
 - * EAST LONGITUDE -
 - 7452840.456234
- * SOUTH LATITUDE 2817030.198912
- * NORTH LATITUDE 6340332.527519
- * EXTENT CONTAINS THE RESOURCE Yes

Resource Constraints

CONSTRAINTS

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Hide Resource Constraints

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 -22041545.367140558

Y ORIGIN -33272760.666301586

```
XY SCALE 135368852.55354118
      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
       1.PARAMETER
       ["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],A
       UTHORITY ["EPSG",3857]]
 REFERENCE SYSTEM IDENTIFIER
    * CODESPACE
        EPSG
   * VERSION 7.4.1
Spatial Data Properties
 VECTOR
   * LEVEL OF TOPOLOGY FOR THIS DATASET
                                            geometry only
   GEOMETRIC OBJECTS
     FEATURE CLASS NAME energy_potential_solar_tilt_1_axis_flat_plate
     * OBJECT TYPE
                        composite
     * OBJECT COUNT 63947
   ARCGIS FEATURE CLASS
  PROPERTIES
     * FEATURE TYPE Simple
     * GEOMETRY TYPE Polygon
     * HAS TOPOLOGY FALSE
     * FEATURE COUNT 63947
     * SPATIAL INDEX TRUE
     * LINEAR REFERENCING FALSE
  DISTRIBUTION
    FORMAT
   * NAME File Geodatabase Feature Class
 TRANSFER OPTIONS
   * TRANSFER SIZE 13.335
 Hide Distribution
Fields
 DETAILS FOR OBJECT energy_potential_solar_tilt_1_axis_flat_plate
   * TYPE Feature Class
   * ROW COUNT 63947
```

* ALIAS 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 ID

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

FIELD GRIDCODE

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

FIELD RPid

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

FIELD JAN

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

FIELD DESCRIPTION

JAN - Averaged daily in Wh/m2/day.

FIELD FEB

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

FIELD DESCRIPTION

FEB- Averaged daily in Wh/m2/day.

FIELD MAR

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

FIELD DESCRIPTION

MAR- Averaged daily in Wh/m2/day.

FIELD APR

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

FIELD DESCRIPTION

APR- Averaged daily in Wh/m2/day.

FIELD MAY

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

FIELD DESCRIPTION

MAY- Averaged daily in Wh/m2/day.

FIELD JUN

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

FIELD DESCRIPTION

JUN- Averaged daily in Wh/m2/day.

FIELD JUL

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

FIELD DESCRIPTION

JUL- Averaged daily in Wh/m2/day.

FIELD AUG

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

FIELD DESCRIPTION

AUG- Averaged daily in Wh/m2/day.

FIELD SEP

- * ALIAS Sep
- * DATA TYPE Double

- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

SEP- Averaged daily in Wh/m2/day.

FIELD OCT

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

FIELD DESCRIPTION

OCT- Averaged daily in Wh/m2/day.

FIELD NOV

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

FIELD DESCRIPTION

NOV- Averaged daily in Wh/m2/day.

FIELD DEC

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

FIELD DESCRIPTION

DEC- Averaged daily in Wh/m2/day.

FIELD ANNUAL

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

FIELD DESCRIPTION

ANNUAL- Averaged daily in Wh/m2/day.

FIELD NYR

- * ALIAS Nyr
- * 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

* 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 2012-05-17

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0
METADATA STYLE ISO 19139 Metadata Implementation Specification
STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS 2012-01-24 12:44:38
LAST MODIFIED IN ARCGIS 2012-05-17 10:30:17
AUTOMATIC
UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2012-05-17 10:30:17

Thumbnail and Enclosures

THUMBNAIL TYPE JPG