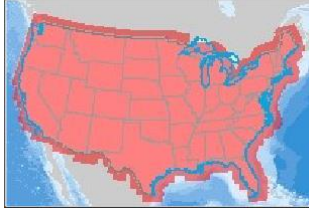


# Solar Potential: 1-Axis Tracking Flat-Plate Collector



## 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/m<sup>2</sup>/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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## Extent

**West** -125.000000 **East** -66.100000  
**North** 50.100000 **South** 24.000000

## 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 Solar Potential: 1-Axis Tracking Flat-Plate Collector  
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  
ARCGIS ITEM PROPERTIES  
\* NAME energy\_potential\_solar\_tilt\_1\_axis\_flat\_plate\_v2  
\* SIZE 13.335  
\* ACCESS PROTOCOL Local Area Network

## Extents

### EXTENT

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

- \* WEST LONGITUDE -125.000000
- \* EAST LONGITUDE -66.100000
- \* NORTH LATITUDE 50.100000
- \* SOUTH LATITUDE 24.000000
- \* EXTENT CONTAINS THE RESOURCE Yes

#### EXTENT IN THE ITEM'S COORDINATE SYSTEM

- \* WEST LONGITUDE -13914936.349159
- \* EAST LONGITUDE -7358218.341435
- \* SOUTH LATITUDE 2753408.109365
- \* NORTH LATITUDE 6463612.124258
- \* EXTENT CONTAINS THE RESOURCE Yes

## Resource Constraints

### CONSTRAINTS

#### LIMITATIONS OF USE

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## 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 -21940362.558060005  
Y ORIGIN -30241100  
XY SCALE 144381166.92744523  
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 energy\_potential\_solar\_tilt\_1\_axis\_flat\_plate\_v2

- \* OBJECT TYPE composite
- \* OBJECT COUNT 102812

## ARCGIS FEATURE CLASS PROPERTIES

FEATURE CLASS NAME **energy\_potential\_solar\_tilt\_1\_axis\_flat\_plate\_v2**

- \* FEATURE TYPE **Simple**
- \* GEOMETRY TYPE **Polygon**
- \* HAS TOPOLOGY **FALSE**
- \* FEATURE COUNT **102812**
- \* SPATIAL INDEX **TRUE**
- \* LINEAR REFERENCING **FALSE**

## Distribution

### DISTRIBUTOR

AVAILABLE FORMAT

- \* NAME **Shapefile**

### TRANSFER OPTIONS

- \* TRANSFER SIZE **13.335**

### ONLINE SOURCE

- \* LOCATION **I48\_tilt1axflat\_10km.shp**
  - \* ACCESS PROTOCOL **Local Area Network**
  - \* DESCRIPTION **Downloadable Data**

### DISTRIBUTION FORMAT

- \* NAME **File Geodatabase Feature Class**

### TRANSFER OPTIONS

- \* TRANSFER SIZE **13.335**

## Fields

DETAILS FOR OBJECT **energy\_potential\_solar\_tilt\_1\_axis\_flat\_plate\_v2**

- \* TYPE **Feature Class**
- \* ROW COUNT **102812**

### 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 ID

- \* ALIAS **ID**
- \* DATA TYPE **Integer**
- \* WIDTH **4**
- \* PRECISION **0**
- \* SCALE **0**

### FIELD GRIDCODE

- \* ALIAS **GRIDCODE**
- \* DATA TYPE **Integer**
- \* WIDTH **4**
- \* PRECISION **0**
- \* SCALE **0**

### FIELD RPid

- \* ALIAS **RPid**
- \* DATA TYPE **Integer**
- \* WIDTH **4**
- \* 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 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 2019-01-17

#### 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 2019-01-17 12:33:21

LAST MODIFIED IN ARCGIS FOR THE ITEM 2019-01-17 12:52:14

#### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2019-01-17 12:51:21