

Are solar photovoltaic map services free?

Map services and data downloaded from the U.S. Large-Scale Solar Photovoltaic Database are free and in the public domain.

How much solar energy does the United States use?

Total solar energy use in the United States increased from about 0.02 trillion British thermal units (Btu) in 1984 to about 878 trillion Btu (or about 0.9 quadrillion Btu) in 2023. Solar electricity generation accounted for about 93% of total solar energy use in 2023 and solar energy use for space and water heating accounted for about 7%.

What is the Global Solar Atlas?

The Global Solar Atlas provides a summary of solar power potential and solar resources globally.

What is the annual solar GHI map?

U.S. Annual Solar GHI (Print Format: 11"x17") This map provides annual average daily total solar resource using 1998-2016 data (PSM v3) covering 0.038-degree latitude by 0.038-degree longitude (nominally 4 km x 4 km). For more information, please visit NSRDB or email NSRDB.

Which state produces the most solar power?

In 2023, California accounted for the largest percentage share of total utility-scale solar electricity generation (25%), followed by Texas (17%). California accounted for nearly 40% of total generation from small-scale PV systems. Most small-scale PV systems are installed on or near buildings.

What is global horizontal solar irradiance?

Global Horizontal Solar Irradiance--Americas (Print Format: 8.5"x11") This map provides annual average total daily solar resource from PSM v3 at a resolution of 0.038-degree latitude by 0.038 longitude (nominally 4 km x 4 km). The insolation values represent the resource available for solar energy systems.



GOES Solar Ultraviolet Imager (SUVI) GOES X-ray Flux; LASCO Coronagraph; Planetary K-index; Real Time Solar Wind; Satellite Environment; Solar Synoptic Map; Space Weather Overview; Station K and A Indices; Summaries. Solar & Geophysical Activity Summary; Solar Region Summary; Summary of Space Weather Observations; Alerts, Watches and Warnings



A serially complete collection of hourly and half-hourly values of meteorological data and the three most common measurements of solar radiation: global horizontal, direct normal and diffuse horizontal irradiance. It covers the United States and a growing subset of international locations.



The Saturday, Oct. 14, 2023, annular solar eclipse will cross North, Central, and South America. annular solar eclipse will cross North, Central, and South America. It will be visible in parts of the United States, Mexico, and many countries in South and Central America. NASA's Eclipse Explorer is an interactive map designed to enhance



This interactive solar reference map is intended to provide quick and intuitive access to weather data needed to install code-compliant PV systems. NOTE: This page uses outdated ASHRAE weather data. We are working to get the data updated and permissions from ASHRAE. How do I use this map?



A serially complete collection of hourly and half-hourly values of meteorological data and the three most common measurements of solar radiation: global horizontal, direct normal and diffuse horizontal irradiance. It covers the United ???



The Monday, April 8, 2024, total solar eclipse crossed North America, passing over Mexico, the United States, and Canada. The total solar eclipse began over the South Pacific Ocean. Weather permitting, the first location in continental North America that experienced totality is Mexico's Pacific coast at around 11:07 a.m. PDT.



Interactive Google map of the US allowing learners to observe the stages of the 2024 total solar eclipse at different locations on the path of totality. Learners can select any location on the path to view data, including a simulation of what you would see at that location, a shadow map, the time, and the magnitude and obscuration of the Sun. Learners can adjust the speed and time of this

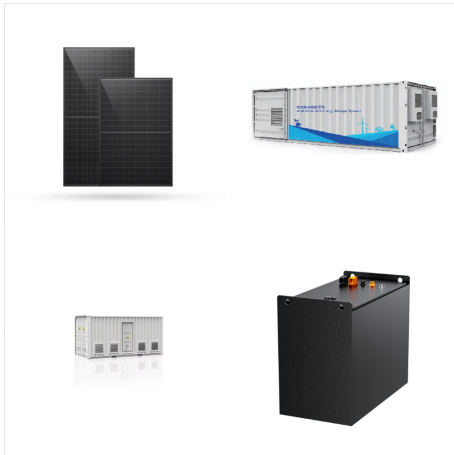


Solar maps; Concentrating solar resources of the U. S. Photovoltaic resources of the U. S. World map of solar resources; Map of U.S. wind resources; Geothermal maps "Ring of Fire" map shows that volcanic activity occurs around the Pacific Rim; State rankings for geothermal power; U.S. geothermal resource map; State biodiesel production capacity



Federal Energy Management Program Screening Map Examines the viability of three solar technologies in the United States at the state and federal levels. and the public to compile a comprehensive database of photovoltaic installation data for the United States. National Solar Radiation Database Contains high-resolution meteorological and

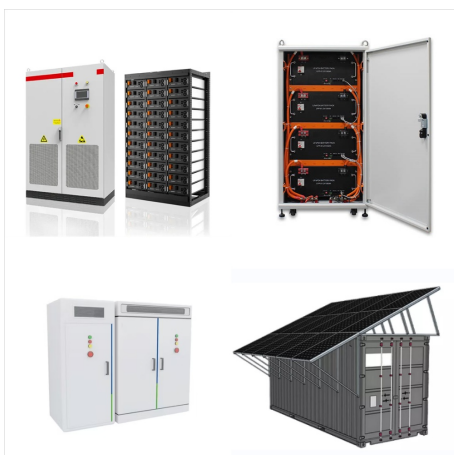




Using the map tool, users can view a selection of different map layers displaying the location and information about: all power plants (biomass; coal; geothermal; hydroelectric; natural gas; nuclear; petroleum; solar; wind; wood power) oil and gas refining facilities; pipelines; oil and gas wells; fossil fuel resources (coal, oil, and gas)



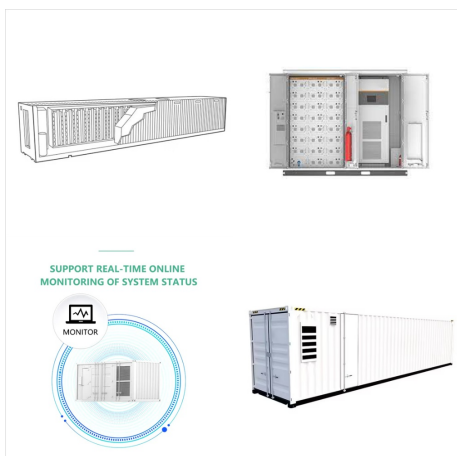
Monitor America's solar activities and patterns from New York to Arizona using Solcast's irradiance maps. Our real-time and forecast irradiance data and PV power data help businesses make informed solar decisions. Powered by live satellite data, our maps update every 5-15 minutes and are designed for solar applications.



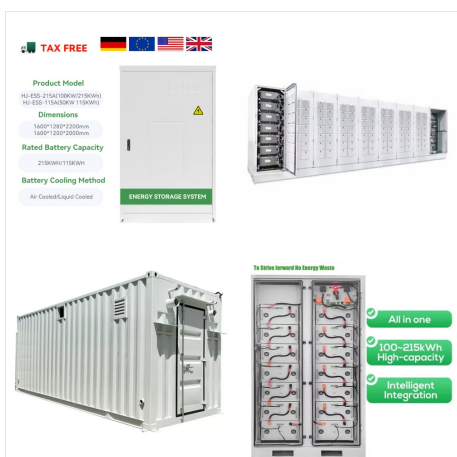
National Rooftop Potential. According to National Renewable Energy Laboratory (NREL) analysis in 2016, there are over 8 billion square meters of rooftops on which solar panels could be installed in the United States, representing over 1 terawatt of potential solar capacity. With improvements in solar conversion efficiency, the rooftop potential in the country could be even greater.



There are more than 7,290 major solar projects currently in the database, representing over 257 GWdc of capacity. There are over 1,040 major energy storage projects currently in the database, representing more than 43,650 MWh of capacity. The list shows that there are more than 140 GWdc of major solar projects currently operating. There remains an enormous amount of ???



The Global Solar Atlas provides a summary of solar power potential and solar resources globally. It is provided by the World Bank Group as a free service to governments, developers and the general public, and allows users to quickly obtain data and carry out a simple electricity output calculation for any location covered by the solar resource database.



This dashboard will consolidate the previous Biomass, Geothermal, Hydroelectric, Wind, and Solar maps into one new product that includes a map as well as charts and tables. This dashboard can be found in the "Apps" section. This new tool provides stakeholders the ability to make selections and filter by state or renewable source.



Explore solar resource data via our online geospatial tools and downloadable maps and data sets. Access our tools to explore solar geospatial data for the contiguous United States and several international regions and countries.



This map shows the general trends in the amount of solar radiation received in the United States and its territories. It is a spatial interpolation of solar radiation values derived from the 1961-1990 National Solar Radiation Data Base (NSRDB). The dots ???



Below is a solar map for the United States showing the estimated potential daily and yearly power generation per 1kW of peak grid-connected solar panels. Maps obtained from the Global Solar Atlas 2.0, a free, web-based application is developed and operated by the company Solargis s.r.o. on behalf of the World Bank Group, utilizing Solargis data



Access our tools to explore solar geospatial data for the contiguous United States and several international regions and countries. Solar Resource Maps and Data. Find and download resource map images and data for North America, the contiguous United States, Canada, Mexico, and Central America. Solar Supply Curves



US Solar is a developer, owner, operator, and financier of solar generation and storage projects with a focus on emerging markets and community solar programs. As a long-term owner and operator, we take special care in every step of the process to make sure the projects and relationships are developed to the highest standards. With over 200



All large-scale solar energy facilities can now be found on a single map thanks to a collaboration between the U.S. Geological Survey and the U.S. Department of Energy's Lawrence Berkeley National Laboratory. The interactive map is based on the United States Large-Scale Solar Photovoltaic Database (USPVDB) and is called the USPVDB Viewer.