

Layer Name: Solar Radiation (solrad)
Layer Type: Line, Poly
Status: Complete
Geog. Extent: Islands of Kauai, Oahu, Maui, Molokai and Hawaii only
Projection: Universal Trans Mercator, Zone 4, meters
Datum: NAD 83 HARN

Please note - if you are using data in the [State's web services](#) or downloading from the [State's geoportal](#), the data is served and exported in WGS84 coordinates, although it is stored internally in UTM coordinates.

Description: Estimated Daily Solar Insulation Contours, in calories/sq.cm/day

Source: State Department of Planning and Economic Development, Energy Division "Sunshine Maps," 1985. Source maps were of varying scales, with each island depicted on an 11x17 paper map sheet.

Per DBEDT Energy Division, July, 2006: "The solar maps were put together several years ago by a consultant hired to review old Hawaii Sugar Planters Association anemometer solar data collected from a [limited] number of different sites."

History: Digitized by OP staff in Arc/Info using ArcEdit, 1992. Converted from coverage to shapefile, extraneous attributes removed, 2008. OP staff added polygon layer, Aug. 2012. Coastline removed from line layer by OP staff, August 2013.

Attributes: SOLAR_CAL Estimated solar calories per sq. centimeter per day

Note: These maps are based on extrapolation of a limited number of data points and should be used as a general first-cut illustration of irradiance. They were originally intended to simply distinguish between "sunny" areas and "cloudy" areas. The sunshine maps should not be used for sizing PV arrays; map users are advised to seek additional data on sun-hours per day. The boundaries depicted in these maps are approximate only.

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