

Title: Photovoltaic panel defect detection dataset

Generated on: 2026-04-15 18:41:57

Copyright (C) 2026 ELALMACEN SOLAR. All rights reserved.

---

This study utilizes a publicly available photovoltaic panel defect dataset as the experimental foundation. 25 The dataset contains a total of 1108 infrared images, covering five ...

607 open source Defects images and annotations in multiple formats for training computer vision models. solar-panel-defects (v4, 2025-07-02 5:41pm), created by Defect detection in solar ...

This dataset offers valuable insights into the performance of photovoltaic panels in real-world fault conditions, including discoloration, cracks, and shading. It also considers scenarios such ...

? Dataset Overview This dataset contains labeled images of photovoltaic (PV) panels across 6 defect classes. The dataset was created as part of an educational and research project to ...

The PVMD dataset has 3-category of 1000 images, which includes both permanent and temporal anomalies in solar cells of PV module such as hotspots, cracks, and shadings.

By using these datasets with specialized models, the study aims to improve defect detection accuracy and reliability.

This study compares deep learning models for classifying solar panel images (broken, clean, and dirty) using a novel, proprietary dataset of 6079 images augmented to enhance performance.

In this current work, the labelled dataset is made public and the results from twelve deep learning models are compared and summarized to identify models that might be better suited for ...

Website: <https://elalmacendelaireacondicado.es>

