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| **Objective** | To create an interactive that allows students to explore how tilt angles affect output power (to emplace in Tab 2 Activity 1 of SLS lesson) |
| **SLS Lesson** | [Solar Panels in Singapore [Enrichment] (moe.edu.sg)](https://vle.learning.moe.edu.sg/moe-library/lesson/view/cd41a333-46a5-4a81-9be5-634a9fedb8af/cover) |
| **Independent Variable** | Tilt angle |
| **Dependent Variable** | Output power |
| **Display** | 1. Sun and sun’s rays 2. Solar panels at various tilt angles 3. Toggle for tilt angle 4. If possible, graph of output power against tilt angle |
| **Reference Images** | **Solar panels** |
|  | **Solar panel and Sun** |
| **Reference data** | [Solar Radiation on a Tilted Surface | PVEducation](https://www.pveducation.org/pvcdrom/properties-of-sunlight/solar-radiation-on-a-tilted-surface) Singapore data: Latitude 1.290270  Longitude 103.851959 |
|  | [Solar Array Tilt Angle and Energy Output | Greentech Renewables](https://www.greentechrenewables.com/article/solar-array-tilt-angle-and-energy-output) |
|  | Fig. 6(c) and 6(d) of current/voltage against tilt angle (outdoor results) |