Minutes arising from the 1st Meeting of Group 19 Project

Time: 1000-1100 Date: 07/02/23 Location: R413a

Present: RI, JFM, XZ, GB, RW

Apologies:

Minutes

Project presentation should have reference to diagram used on the first slide.

Project plan description could have been split into paragraphs for easier reading like the background. The GPS aspect of the tracking systems could have been made clearer – GPS does not track the sun, it locates the solar array location on earth.

Should look into phototransistors and photodiodes as well as LDRs.

To keep measurements consistent the light source could be moved by a motor (depending on time constraints).

Need to conduct tests on PV cells with LED light sources.

Should also look into the load required for PV cells. A non-constant load may be used normally for solar panels, however this may be beyond this project.

The light source could be tracked uni or bi-directionally.

The sensor could be mounted separately to the solar panel as it would likely be with large arrays.

Logbooks need to be more comprehensive and hardbacks (if using written logbook).

The demonstration could be expanded with the students noting down power value and at the end plotting graphs – showing $\cos\theta$ dependency.

The next mentor meeting was scheduled for 21/02/23 at 1300 (in 2 weeks).

A progress report could be submitted to the mentor on a weekly basis.