**Dynamic photosynthesis model of soybean canopy**

This dynamic photosynthesis model of soybean canopy is developed by Yu Wang ([yuwangcn@illinois.edu](mailto:yuwangcn@illinois.edu)), IGB, University of Illinois.

If you want to know more details, please check the following publication

**Publication:** Yu Wang, Steven J. Burgess, Elsa de Becker, Stephen P. Long. Photosynthesis in the fleeting shadows: An overlooked opportunity for increasing crop productivity? (Under revision)

**Quick start**

**Input variables**

Input variables and related references were listed in ‘InputParameters. xlsx’

**Output:**

The cumulative net CO2 assimilation of the soybean canopy of the whole day and every 10min were saved in the two output .txt file, separately.

The output data was summarized in ‘OutputSummary.xlsx’

**Simulation**

simulations were conducted in MATLAB (2017b)

1. Start Matlab
2. Run simRca.m for Rca related simulations
3. And run simNPQ.m for NPQ related simulations