To complete the tasks, you are allowed to search online, use the scripts and ask the lecturer.

Tasks:

1. What is the impact of increasing radiation by 10% on GPP under default settings? **(1 point)**
2. What is the impact of reducing rainfall by 50% on transpiration under default settings? Is the effect stronger at the beginning or the end of the growing season? **(2 points)**
3. Adding new species:
   * 1. How do you find parameter values for species *Larix decidua*? **(1 point)**
     2. Set the initial conditions for the species **(3 points)**

Assume the following parameters (and use defaults for all others):

stems\_n = 200

biom\_stem = 15

biom\_root = 5

biom\_foliage = 1

* + 1. How does adding this species affect the transpiration of the others? Describe both the magnitude of the flux and its trend over time.

**(3 points)**

Please submit your answers to [J.Knauer@westernsydney.edu.au](mailto:J.Knauer@westernsydney.edu.au) by **14/08/2023 8pm.**