Discussion:

With varying Y/Ycc, the Wnet increase linearly for Y/Ycc less than 1 and decrease linearly with Y/Ycc greater than 1. The thermal efficiency exhibits a linearly increasing relationship and is discontinuous at Y/Ycc = 1; the slope is steeper for Y/Ycc less than 1. Conversely, the sfc exhibits a linearly decreasing relationship and is also discontinuous at Y/Ycc = 1; the slop is also steeper for Y/Ycc less than 1.

With varying rv, the Wnet and thermal efficiency both increase linearly while the sfc decreases linearly.