## Exercises

- **2.1** Let  $\alpha = 0.45$ . Keep A and B as given in the text.
  - 1. Determine  $\beta$  such that  $\overline{T}$  remains unchanged.
  - 2. Determine C for the above choices of  $\alpha$  and  $\beta$ .
  - 3. Compute  $Q(x_s)$ .
  - 4. Discuss any differences between these results and those obtained for  $\alpha = .4$ ,  $\beta = .7$ . In particular, how has the global stability changed and why?
- 2.2 Trace the behavior in Figure 2.4 to the various assumptions especially the use of annual averages. Was it appropriate to replace annual means with equinoctial values? How would matters have changed, had we correctly taken means?