Exercises

2.1 Let $\alpha = 0.45$. Keep $A$ and $B$ as given in the text.

1. Determine $\beta$ such that $\bar{T}$ 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?