FISH 6004 Lab 2

This lab provides two problems that are related to lectures 1 and 2. The goal is to compute catch-at-age from an age-length key (ALK) and create a spay plot using both base R and ggplot. The plots that you are aiming to produce are on pages 2, 3 and 4. Note that these are very standard base R plots and improvements (e.g. colors, font) are encouraged. Open the Lab2.R file to get started.

Part I: Compute catch-at-age from the ALK and catch-at-length provided. The ALK data is in ALKsample.csv and the catch-at-length is in catchnum.csv. Provide barplots of catch-at-length and catch-at-age. Plot the distribution of age at length.

Part II: Use catch-at -age data from 3Ps cod to generate a spay plot (hint: see lecture 2, slide 71). The data are in 3pscodC@A.csv.
i) generate a spay plot from the base R code provided
ii) use ggplot to generate the same plot

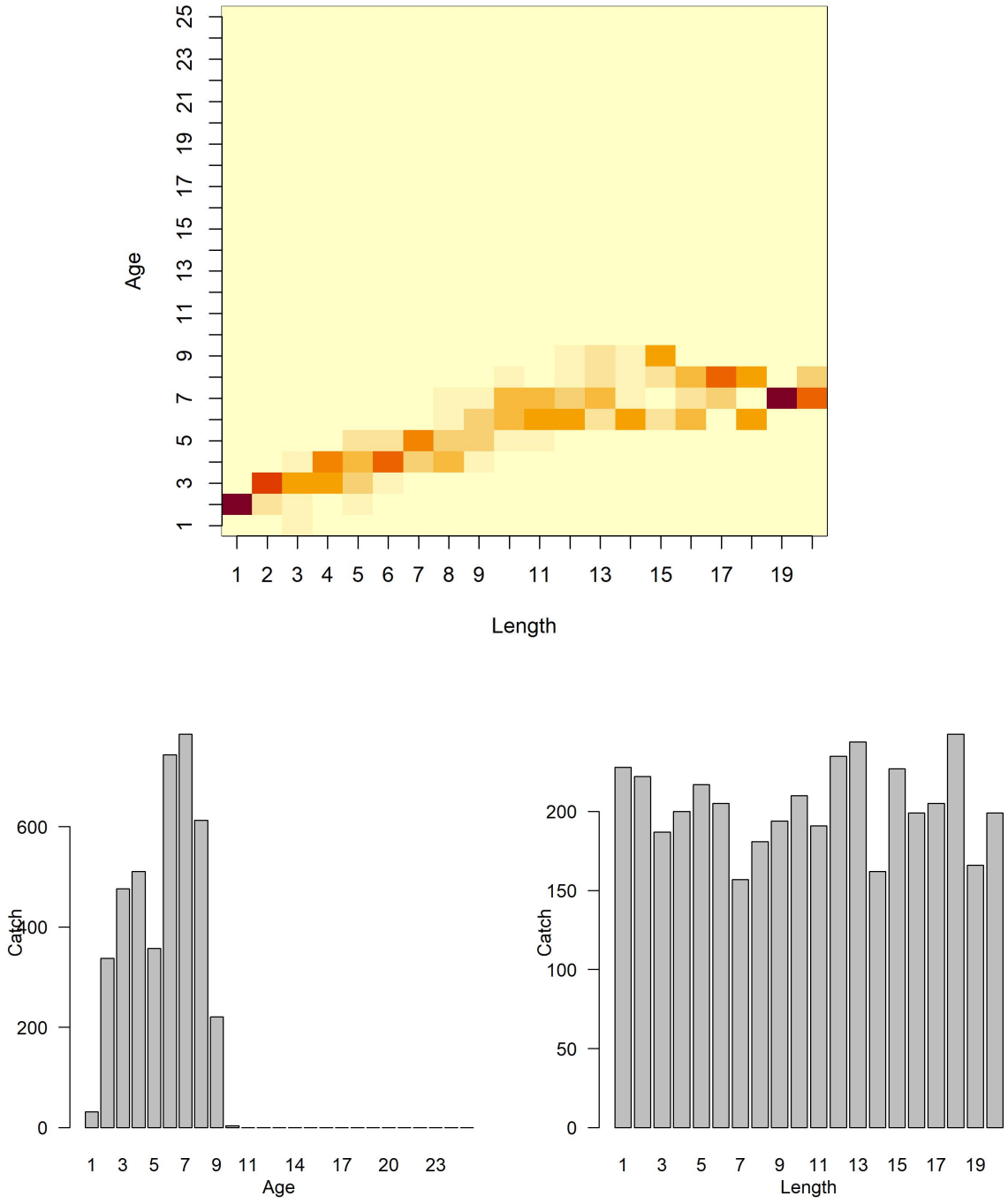

Figure 1: Age at length (top) and catch-at-length (bottom, right) and catch-at-age (bottom, left) plots for Part I.

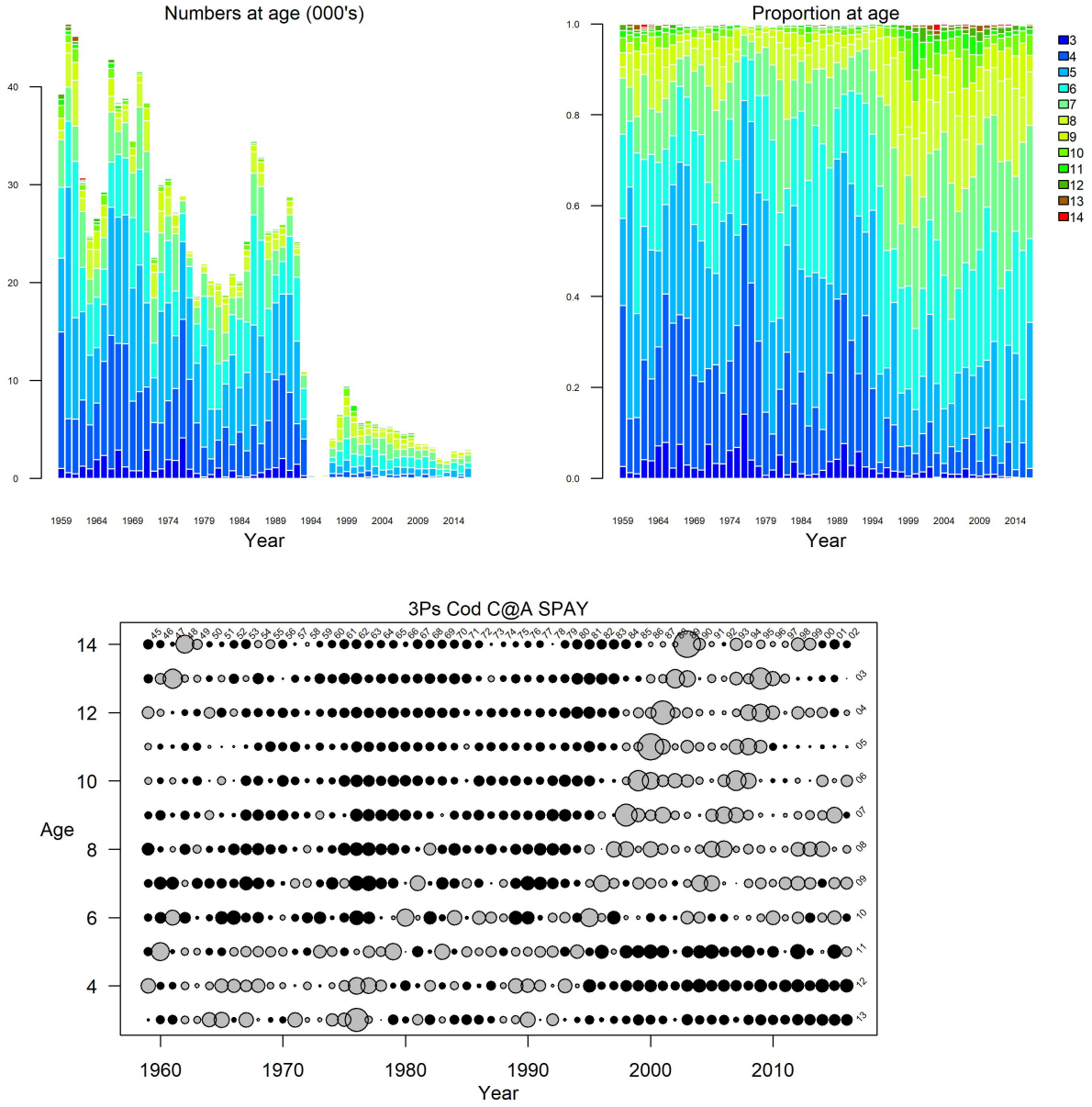

Figure 2: Numbers at age (top, left), proportion at age (top, right) and spay (bottom) plots for Part II.

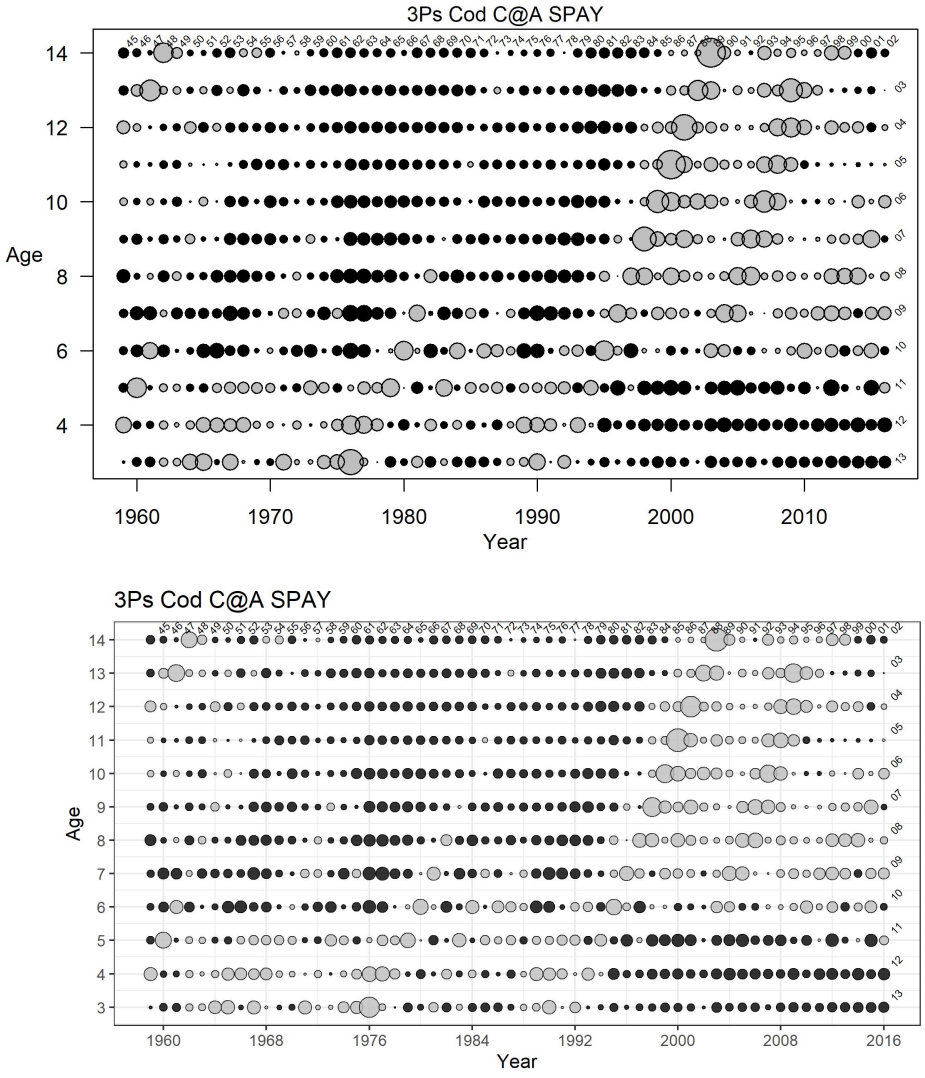

Figure 3: Spay plots using base R (top) and ggplot (bottom) for Part II.