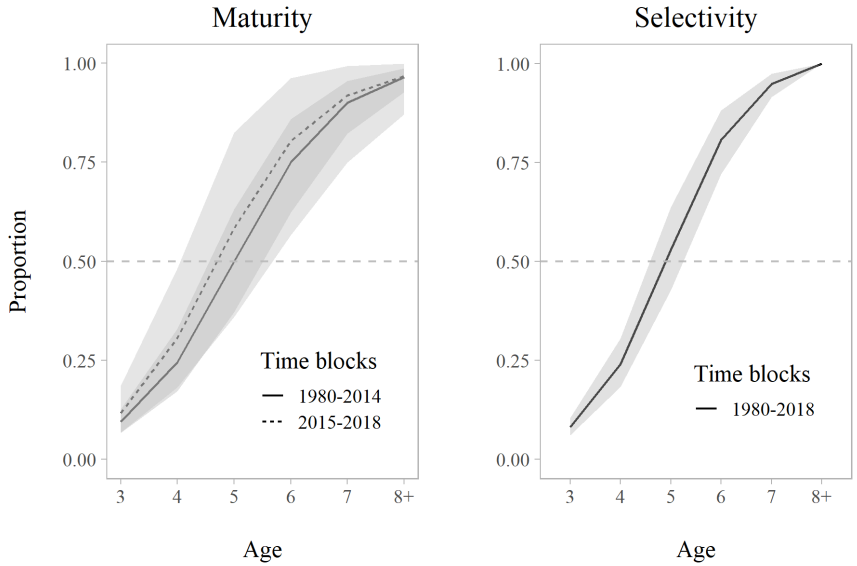
Posterior interval for selectivity with transformation (original version)


```
//  // old herring model - scaled selectivity by dividing by the max so
    // it adds to one (but this is not differentiable)
 // // this process is to get the same thing but keeping differentiable
   int jyr = h != nSlxBlks ? nslx_nyr(h):nslx_nyr(h)-retro_yrs;
   for(int i = nslx_syr(h); i <= jyr; i++){
     log_slx(i) = log(slx) - log(mean(slx));
     //log_slx(i) = log(slx);// - log(mean(slx));
   }
 }
 Sij.sub(mod_syr,mod_nyr) = mfexp(log_slx);
```

Selectivity normalized in R prior to plotting (intervals tiny even if we don't normalize it in R) (R code below)

```
# To make sure selectivity is differentiable, it was scaled to have a
# mean of 1 across all ages. This was done in log space by substracting
# the mean from the vector of age-specific selectivities. See Tech Doc
# p 11. Here we normalize it from 0 to 1.
proportion = ifelse(param == "Selectivity", (proportion - 0)/(max(proportion) - 0),
                    proportion)) %>%
```

Posterior interval for selectivity without transformation (new version):




```
   int jyr = h != nSlxBlks ? nslx_nyr(h):nslx_nyr(h)-retro_yrs;
   for(int i = nslx_syr(h); i <= jyr; i++){
     // log_slx(i) = log(slx) - log(mean(slx));
     log_slx(i) = log(slx);
   }
}
Sij.sub(mod_syr,mod_nyr) = mfexp(log_slx);
```