Summary chilean Hake model in SS (1992-2020)

Members

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General characteristics

CH sustains an important fishery composed of two fleets, that is, the bottom-trawl industrial fleet (large vessels) and the artisanal fleet (smaller vessels and boats). The hake present intermediate growth and mean longevity wit a maximun age 17 years in females and 11 years in males.

Model files

https://github.com/claugatic/SSChile

Information available

There are oficial catch data and estimates of illegal catches. Furthermore, abundance and biomass from survey in august (spawning period).
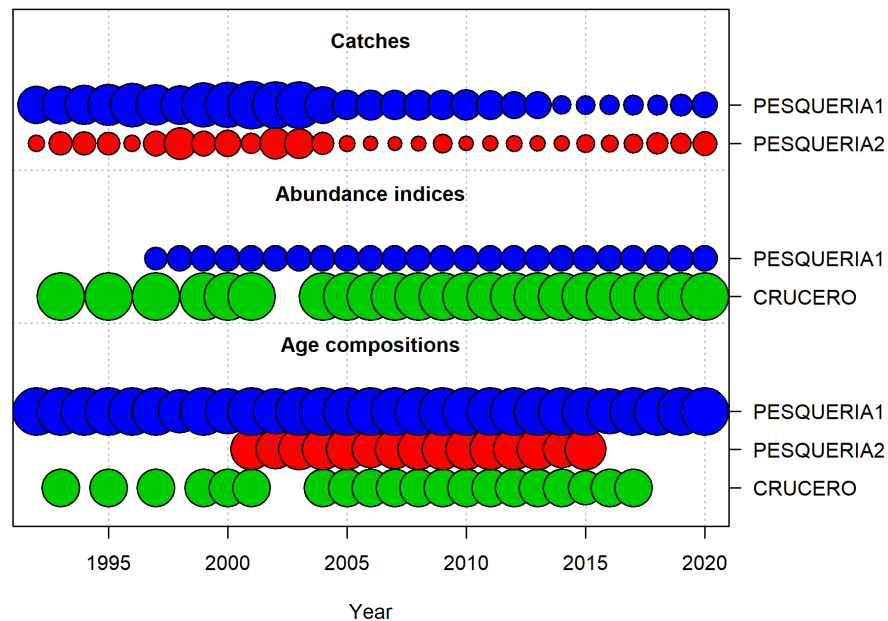

Figure 1: x

Developed activities

a. Model costruction incorporating two fleets with catches and age-composition and biomass acoustic survey
b. Structure data file
c. Structure control file
d. Solve problems by follow examples, manual_SS, lectures and specially echoinput
e. Review different options to recruitment, include block to selectivity.
f. Generate output and summary to get a first base model.
g. Review data weithing options.
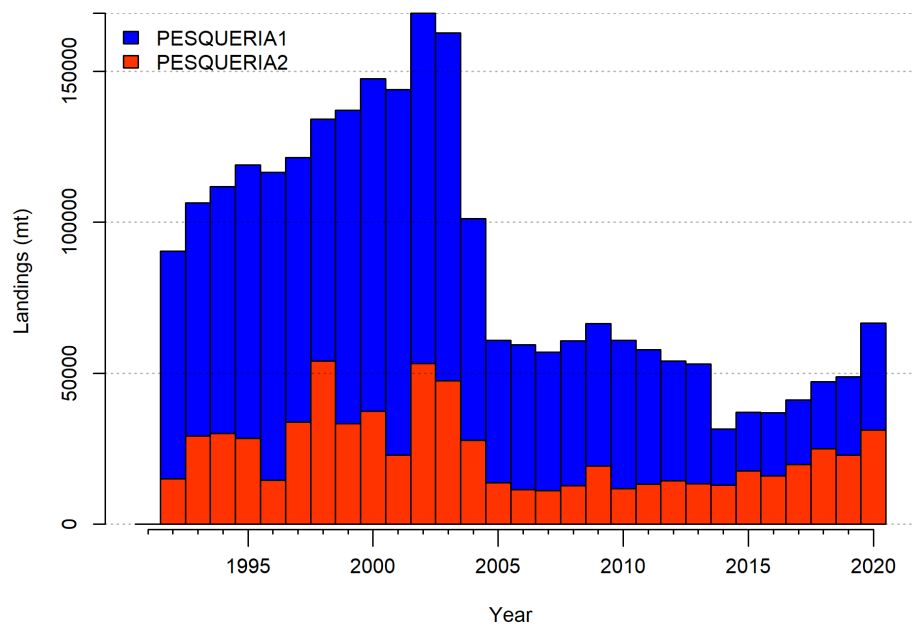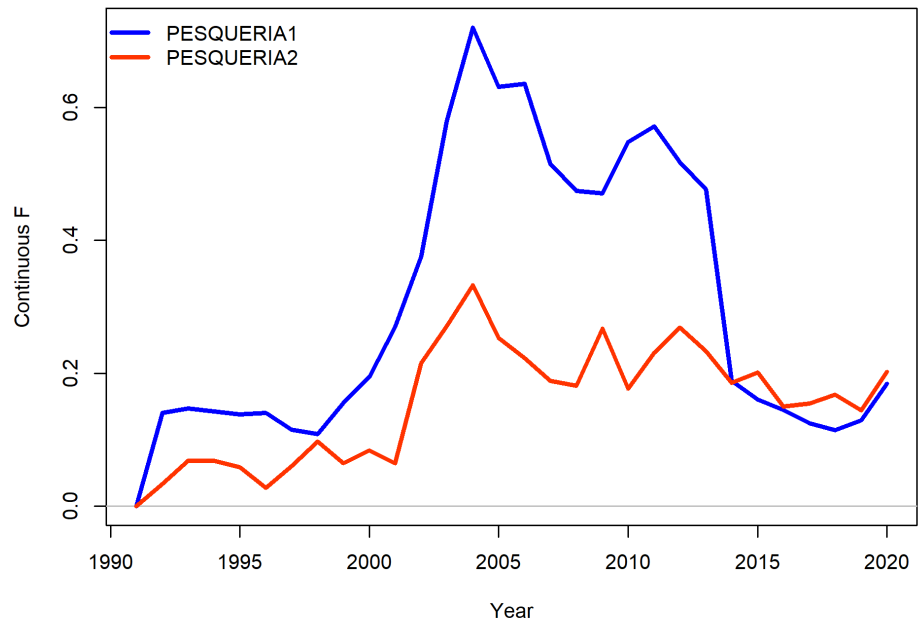h. Include bias correction SR

Results

Catches and F

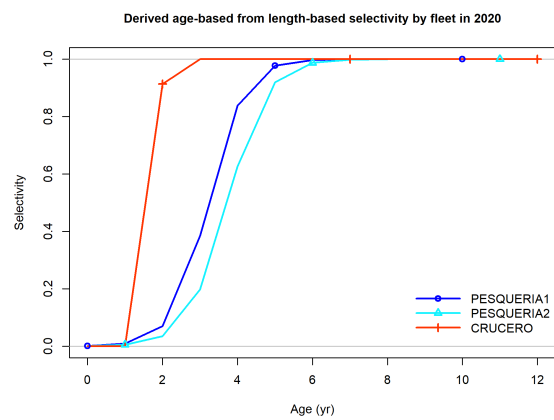Figure 2: x

Figure 3: x

Selectivity by fleets and block

Derived age-based from length-based selectivity by fleet in 2020

Selectivity

Age (yr)

PESQUERIA1
PESQUERIA2
CRUCERO

Figure 4: x

Time-varying selectivity for PESQUERIA1

Year

Selectivity

Age (yr)

Figure 5: x

Time series

Fraction of unfished with ~95% asymptotic intervals

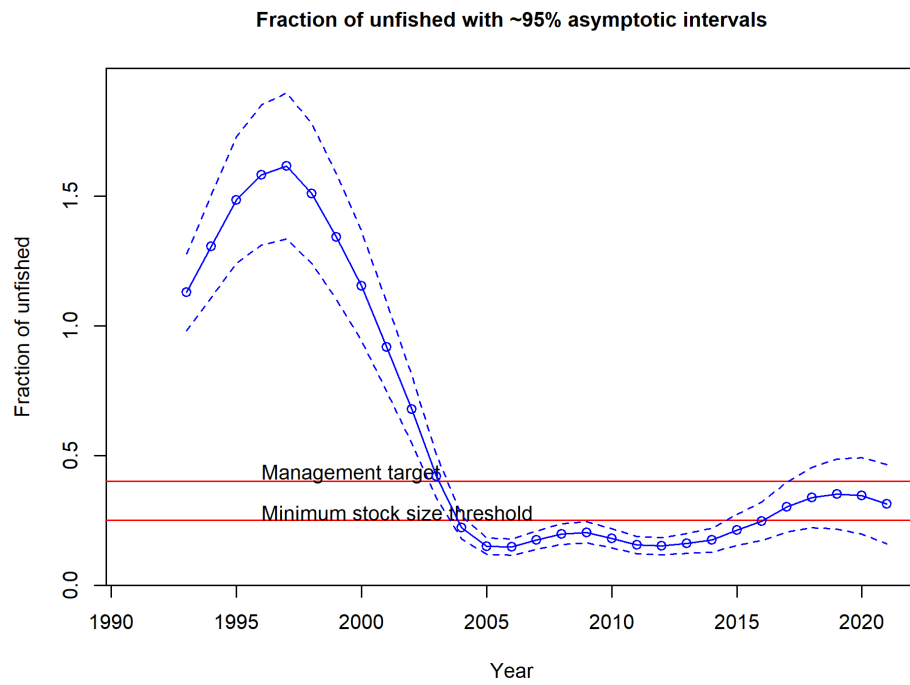Figure 6: x

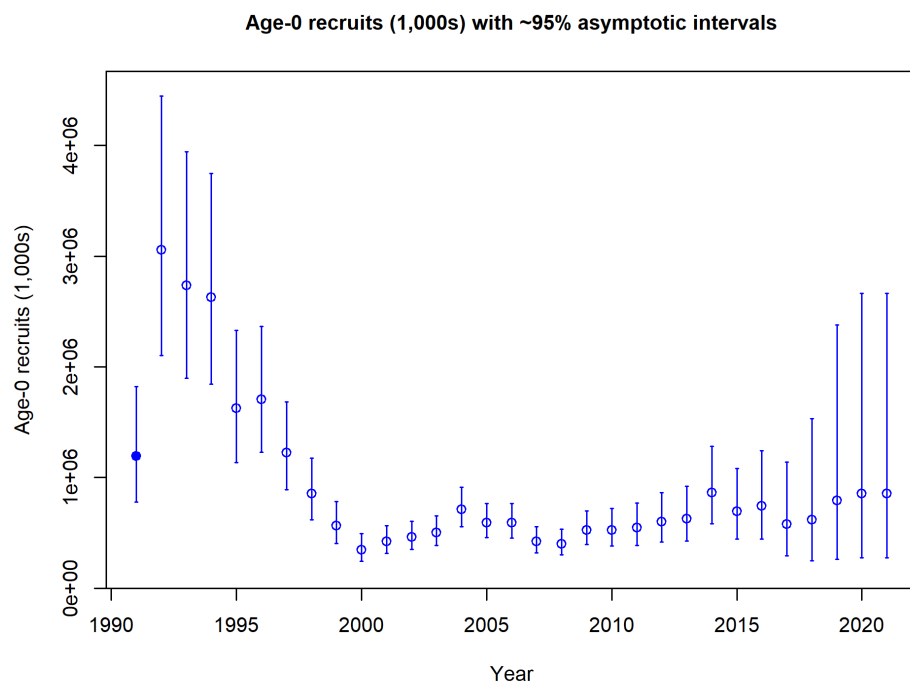**Age-0 recruits (1,000s) with ~95% asymptotic intervals**
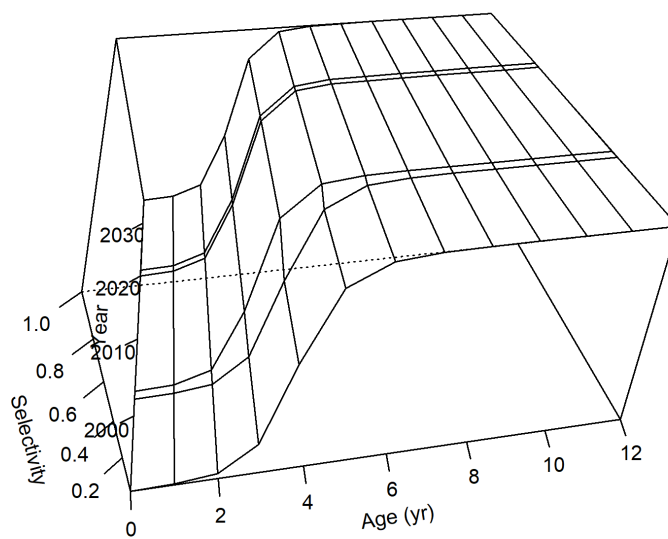
Figure 7: x

Age composition

Fleet 1

Fleet 2

Figure 8: x

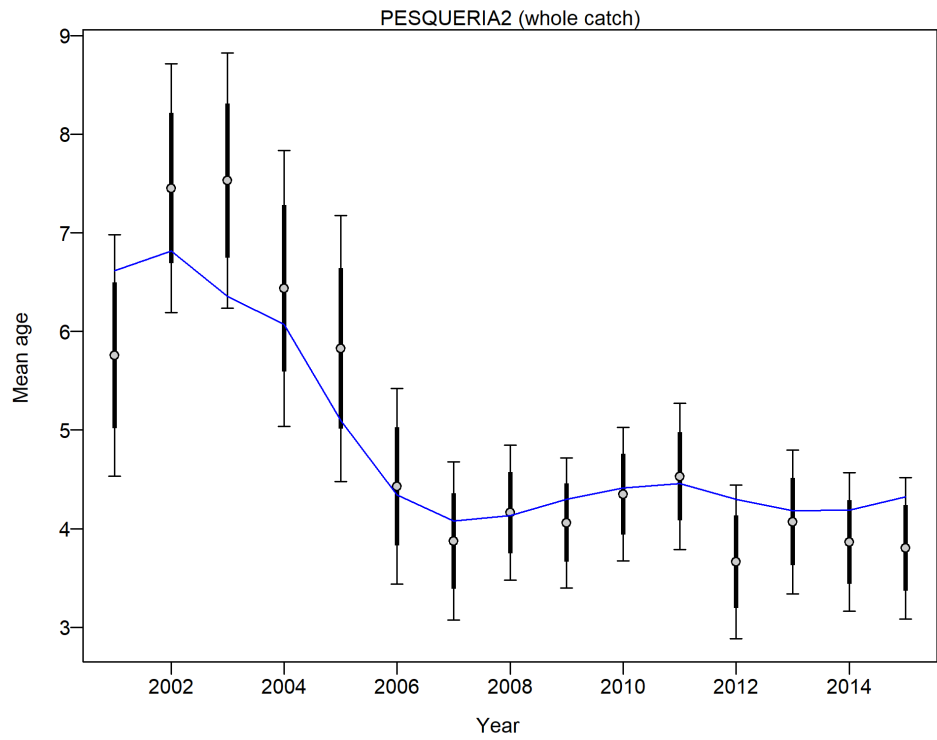Figure 9: x