Stock Assessment Models

Marvin Mace

2021-08-26

Contents

L	Introduction	1
2	Models Overview	1
	Statistical catch at age models 3.1 Simple catch at age model	1

1 Introduction

One goal is to implement some of the common stock assessment models in different computer languages/software. Another goal is to explore the effects of different types of data and data of varying quality on estimates from these models. Also explore how much and what types of data are necessary to get decent estimates from these models. The plan is to determine this partly by conducting simulations where the values of different parameters are known and compare to model estimates.

2 Models Overview

Eventually I would like to implement a wide range of models, but for now the models implemented are:

Statistical Catch at Age Models

3 Statistical catch at age models

3.1 Simple catch at age model

This model uses catch at age data and total catch data for one fleet and one fishery independent index of abundance.