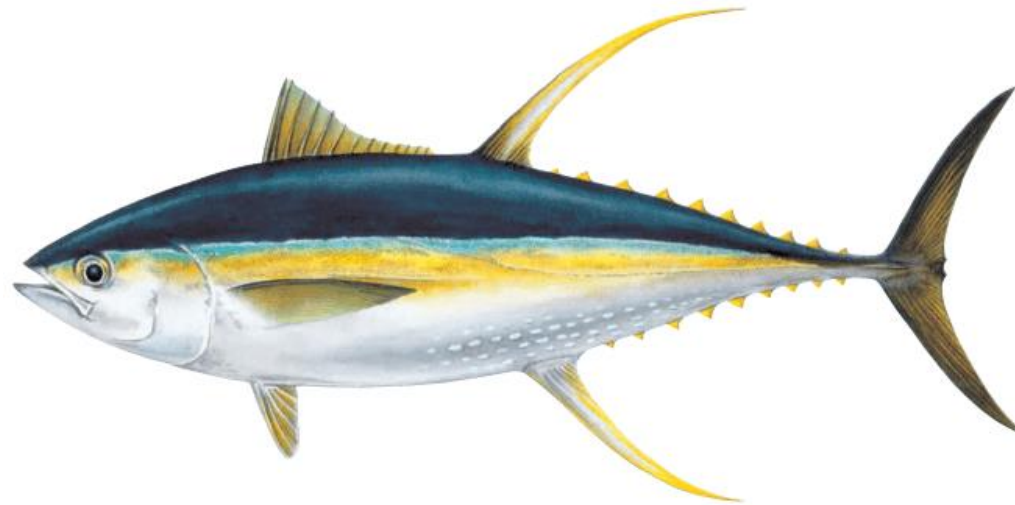


Conditional Age-at-Length Data Summary for Yellowfin Tuna

P10 – Arni Magnusson



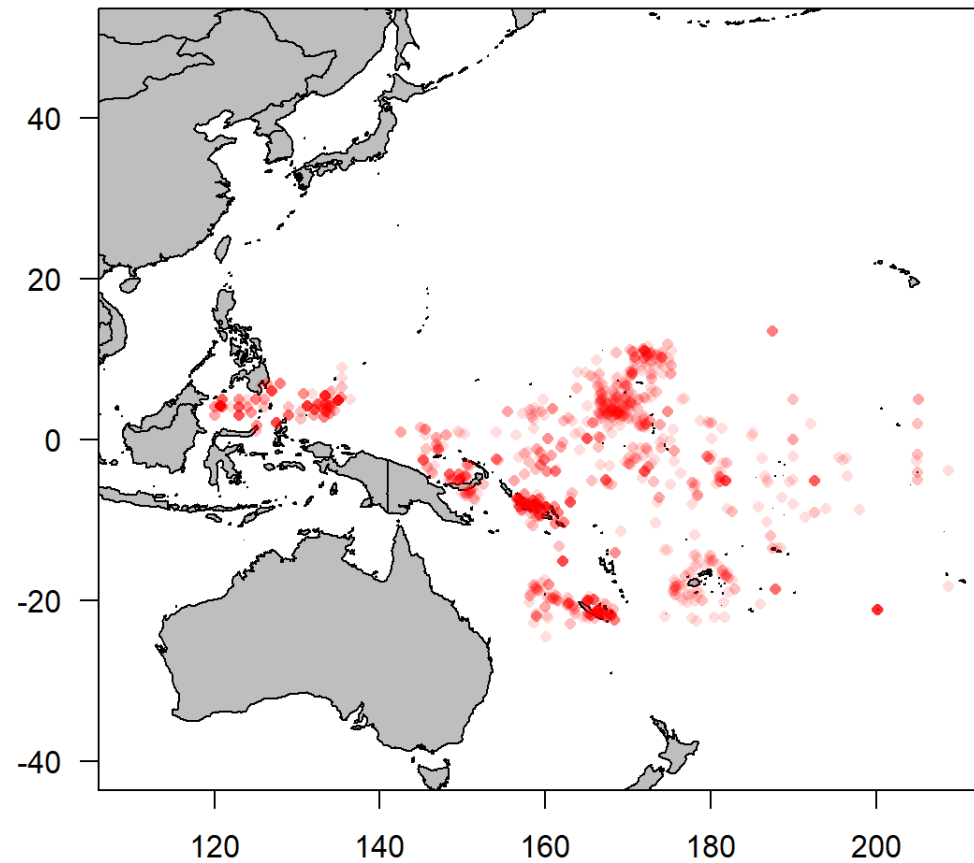
Background

Conditional age-at-length otolith data were used in the YFT 2020 assessment

Otoliths provide information useful for estimating a growth curve, internal or external of the stock assessment model

Otolith Samples

YFT otolith locations (n=1471)

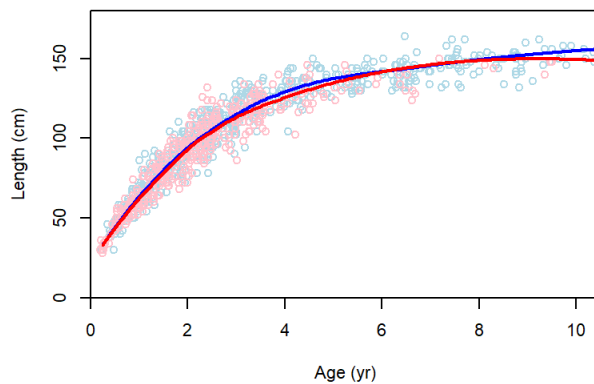


Year	Count
2009	29
2010	155
2011	59
2012	1
2013	117
2014	364
2015	298
2016	168
2017	133
2018	147

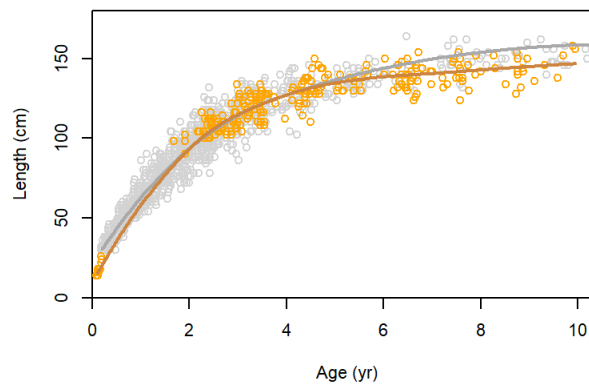
Exploratory Data Analysis

Simple loess
smooth lines

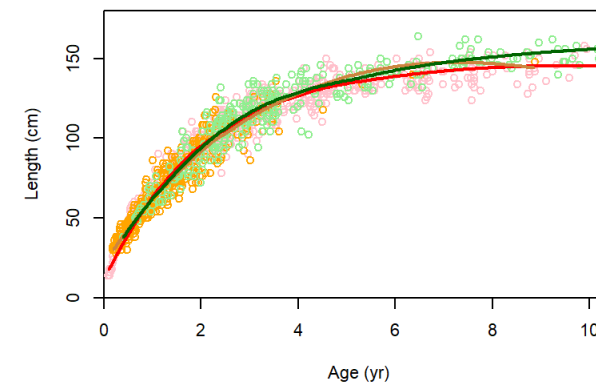
Female and Male



West (ID.PH) and East

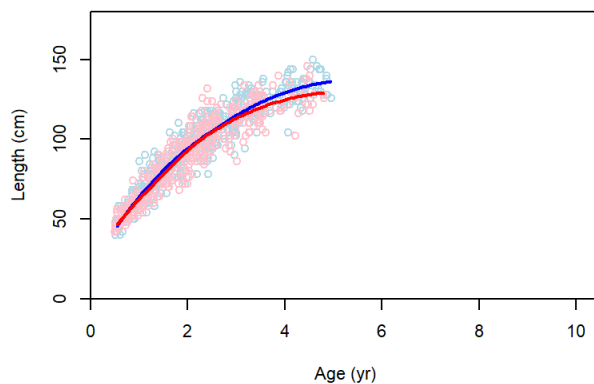


North, Center, South

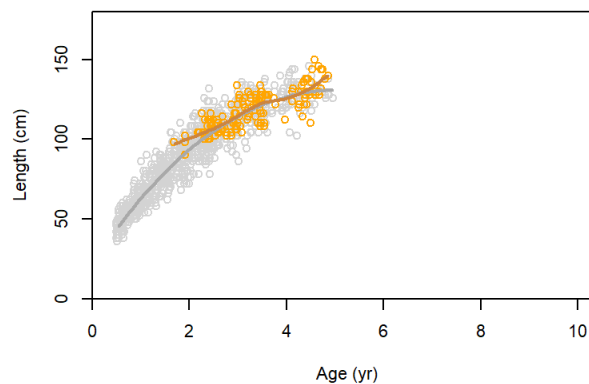


Ages 0.5 - 5 yrs
constitute >90% of
the current biomass

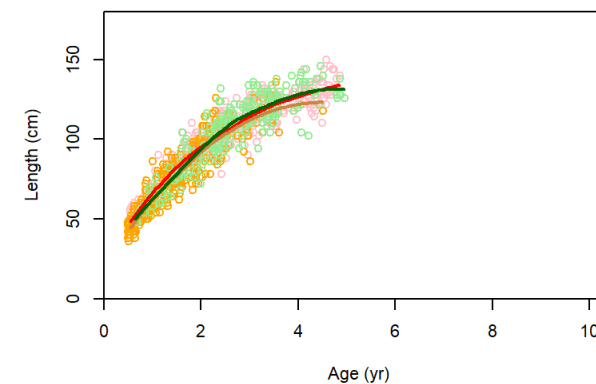
Female and Male



West (ID.PH) and East



North, Center, South

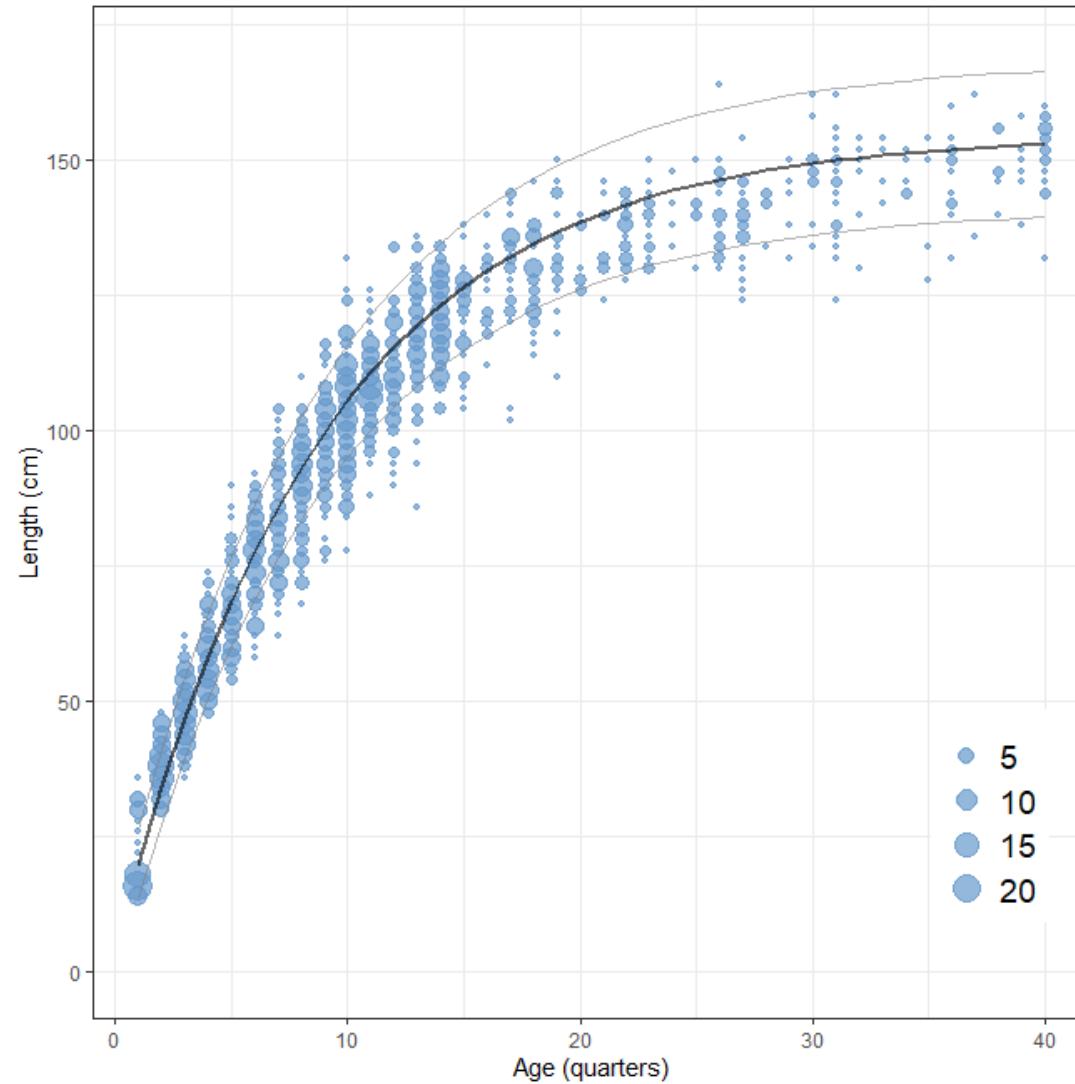


Blue: Male
Red: Female

Orange: West (ID, PH)
Gray: East of 140°E

Red: North of the equator
Yellow: In between
Green: South of 10°S

Growth Curve



Von Bertalanffy curve
internally estimated in
the YFT 2020 assessment