# Paper Plots V1

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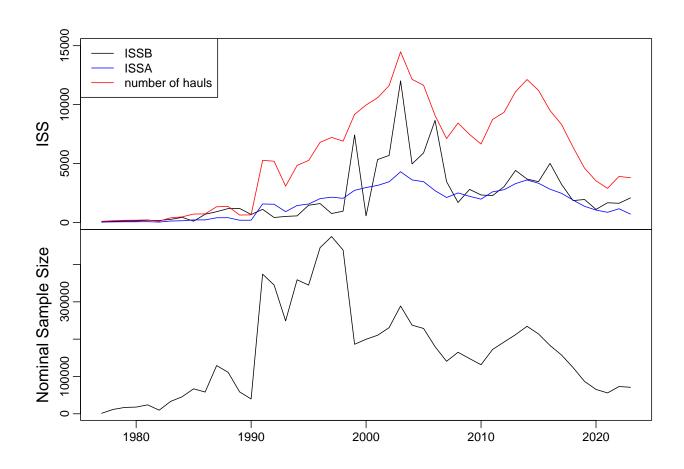
## Introduction

Plots for paper:

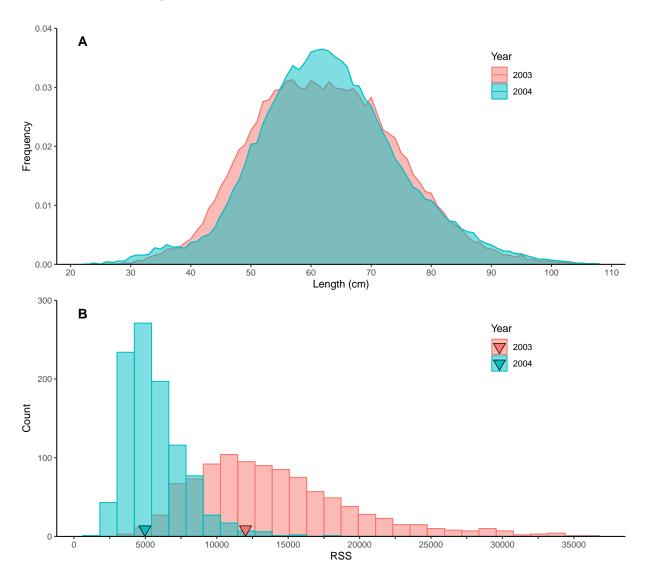
#### Data

#### **ISSB** Results

\* Time series 2 panel

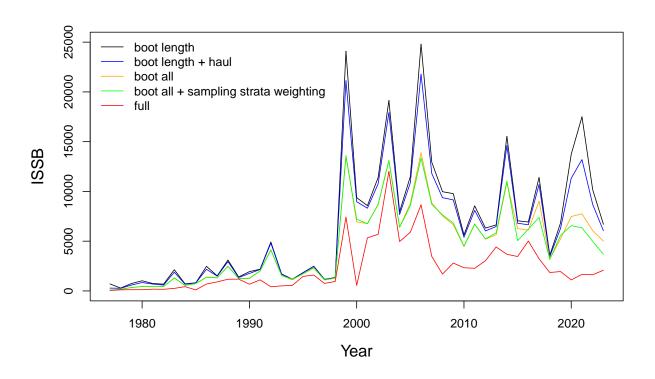


#### \* 2003 and 2004 histograms



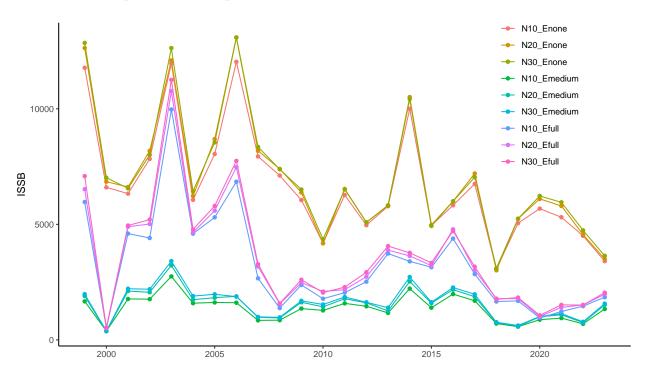
The comparison shows that fish in 2003 were less similar in length compared to 2004. 2003 corresponds to a higher ISS even though the sample rate was the same and the number of hauls and nominal sample size were comparable. More of the fish sampled in 2003 were required for characterizing the underlying multinomial sampling distribution compared to 2004 because more lengths were represented at a higher rate in 2003 (shorter, wider distribution). This is reflected in the RSS (ref figure).

### \* Time seris components

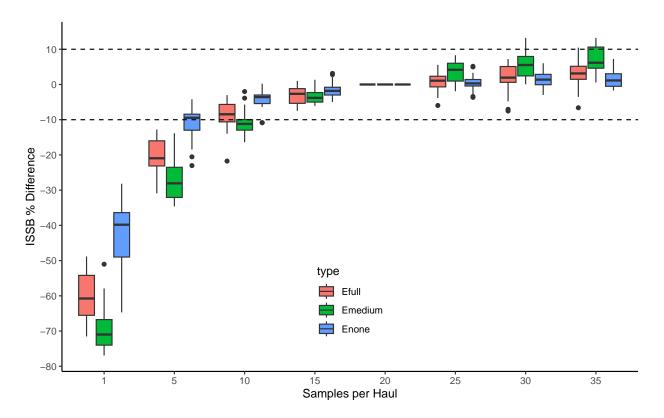


## **Optimize Sampling**

\* Time series Expansion X Samples 10, 20, 30



\* Samples VS Expantion. Boxplots Together 1999-2023

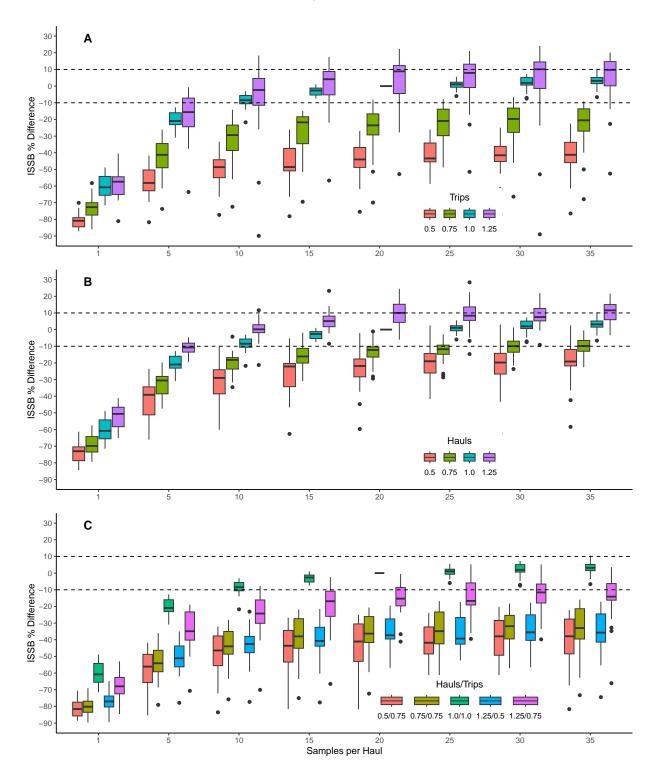


DATA: Samples VS Haul

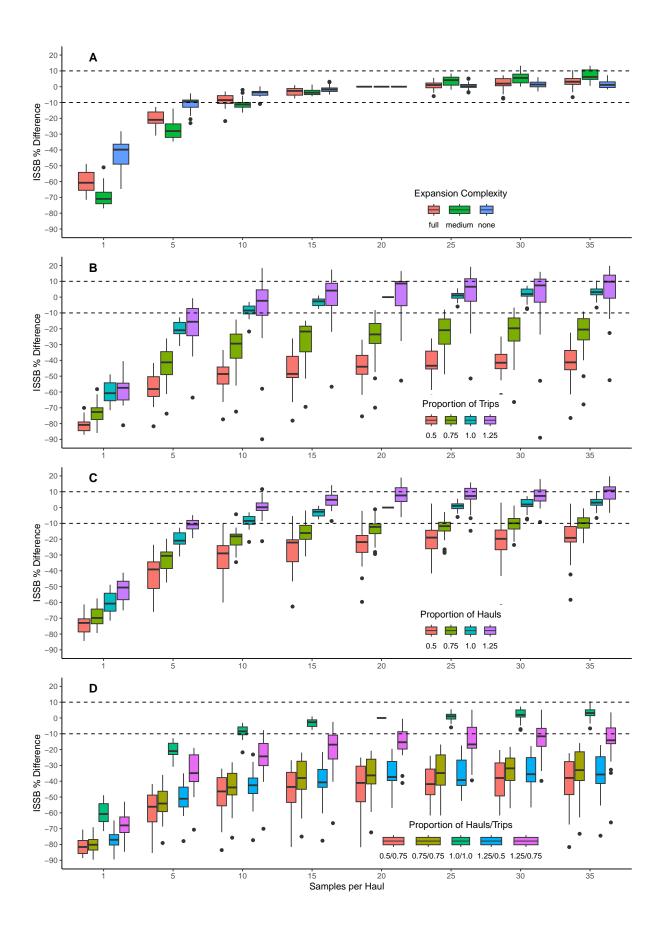
DATA: Samples VS Trip

DATA: Samples VS Trip/Haul

\* 3 Panel: Sample Size VS Haul, Trip, Haul/Trip



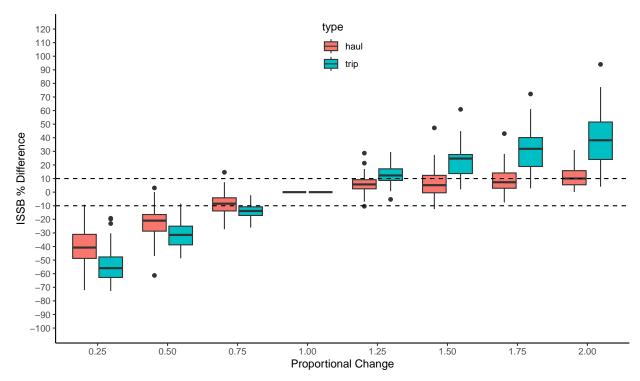
\* 4 Panel: Sample Size VS Expansion, Haul, Trip, Haul/Trip



#### SUPPLEMENTARY MATERIAL

#### Plot 7x2 Grid Haul and Trip numbers

CONSIDER MOVING THESE TO SUPPLEMENTARY MATERIAL AND TOTALLY FOCUSING ON 1999-2023 PERIOD.



## Boxplots Together 1999-2023

