Paper Plots V1

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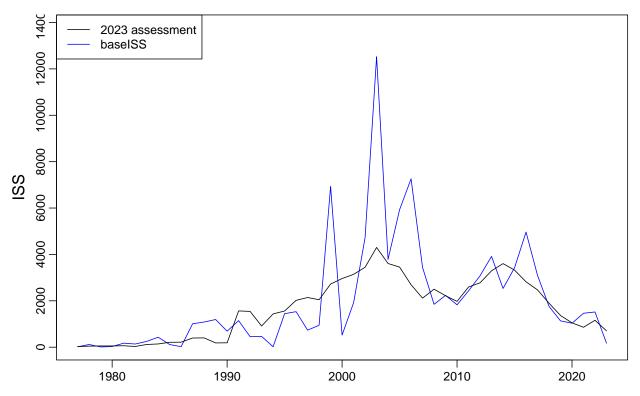
Introduction

Plots for paper:

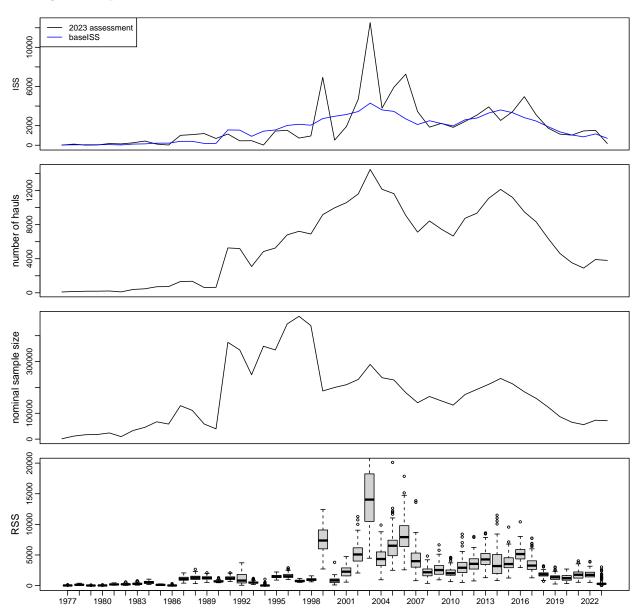
- 1. Time series of new ISS vs old. Accompanied by number of hauls, nominal sample size, and possibly RSS boxplots. RSS boxplots may help justify focusing in on 20 sample size meidan for later plots to get an apples to apples, granular test of impact of sample size and expansion complexity.
- 2. ISS full, ISS without expansion, ISS without sampling strata, ISS without either.
- 3. 3x3 grid: sample size 10, 20, 30 fixed X expansion none, haul only, haul+month. With sampling strata.

3.supp.1: same as above but without sampling strata. 3.supp.2: same as above but without bootstrapping trip. 3.supp.3: same as above but without either.

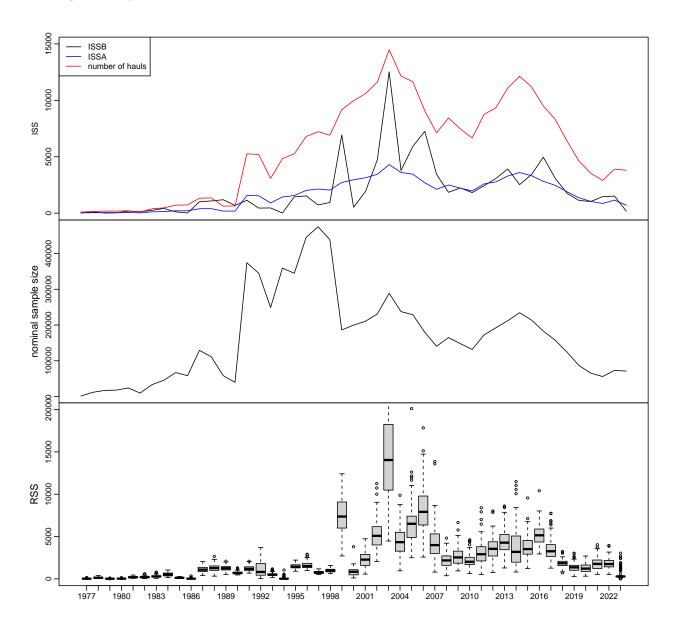
Plot 1.1 baseISS with assessment ISS



All together 4 panel



All together 3 panel



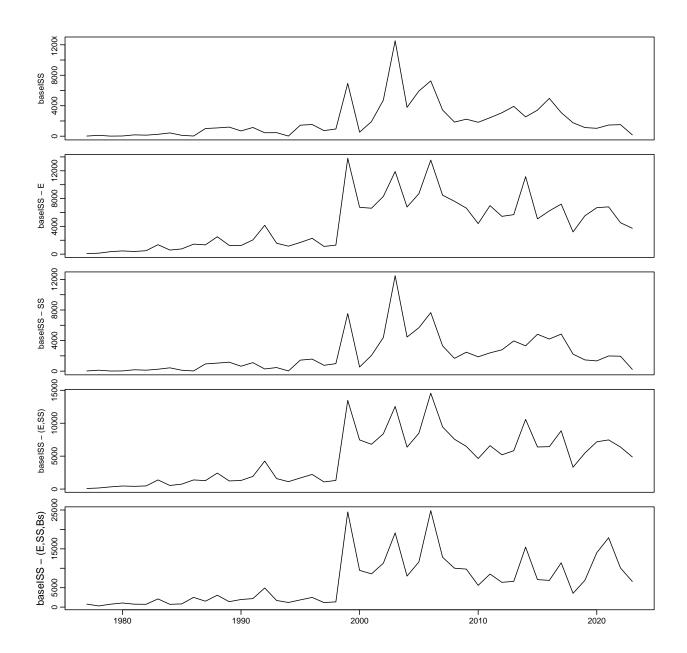
Inspect R-squared Fit models to number of hauls.

Plot 2.1

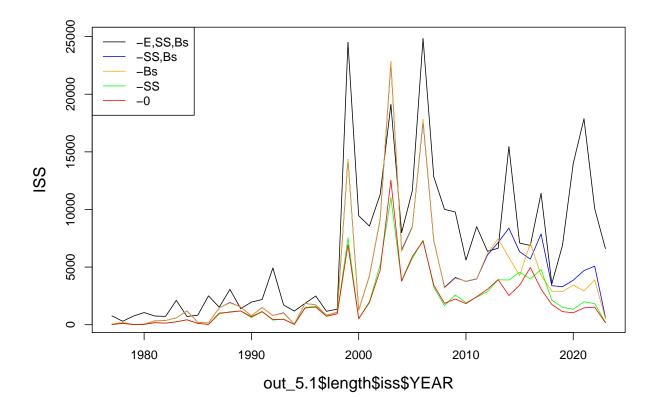
Deconstruct the contributors to baseISS

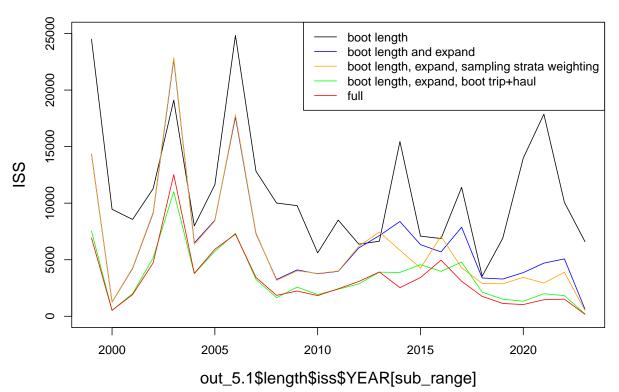
All together 1

Subtracting things from baseISS

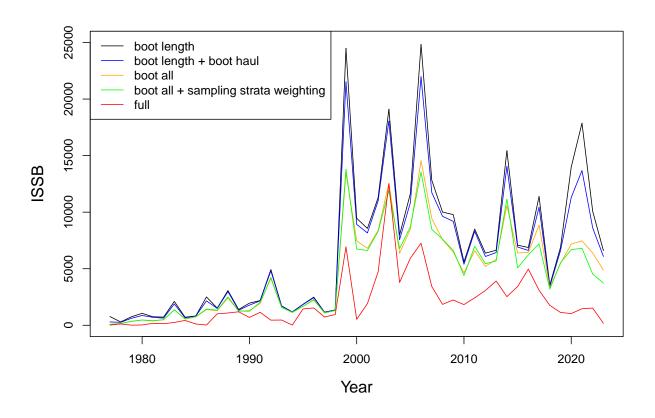


All together ${f 2}$ Adding things to baseISS

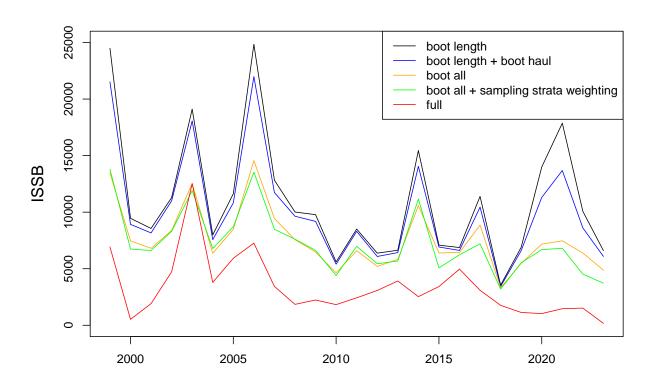


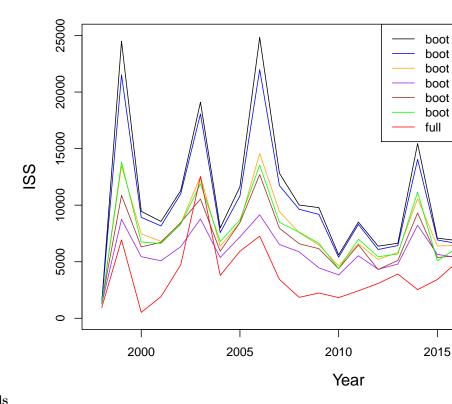


 $\begin{array}{c} \text{sub range 1} \\ \\ \text{reorder long} \end{array}$

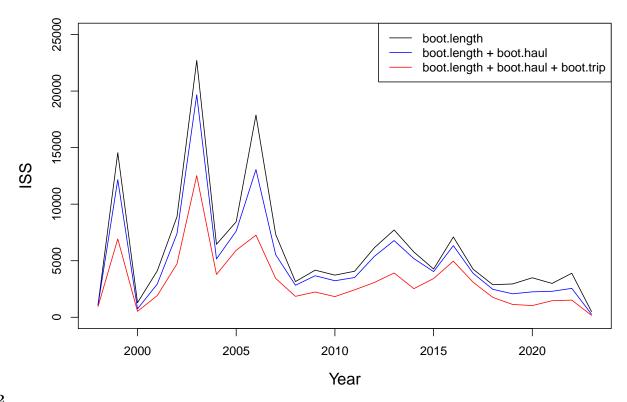


reorder short

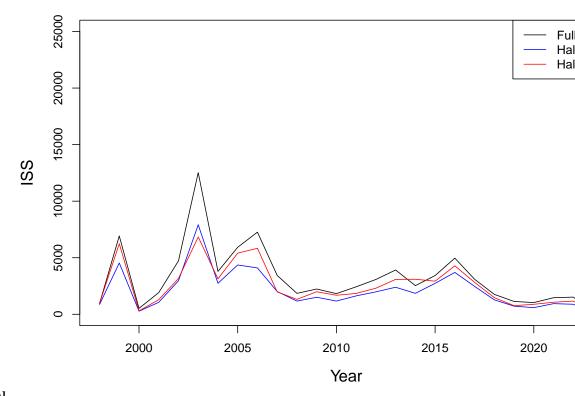




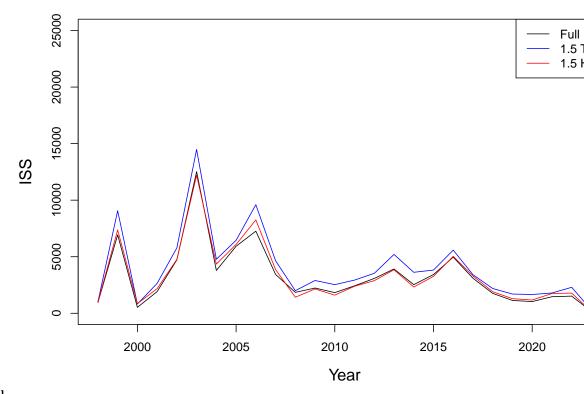
reorder short with half trips and half hauls



reorder short 2



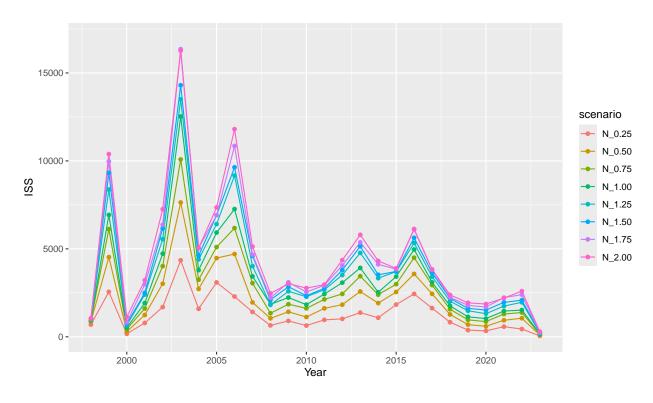
Full, half trip, half haul



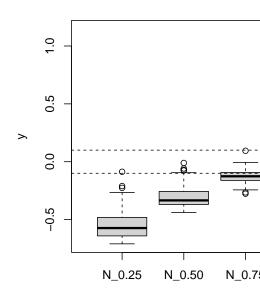
 $Full,\, 1.5 \; trip,\, 1.5 \; haul$

Plot 7x2 Grid Haul and Trip numbers

Trip Change

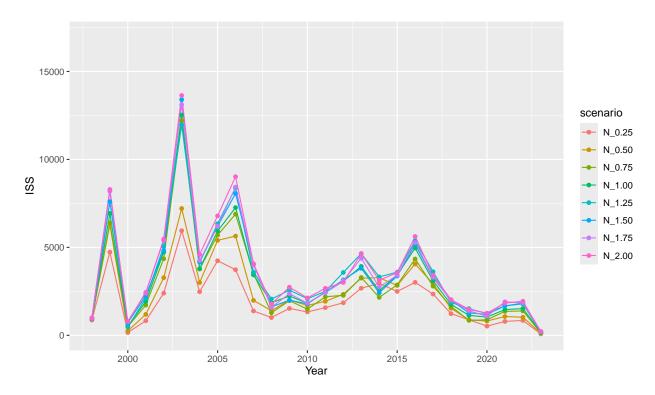


Boxplots

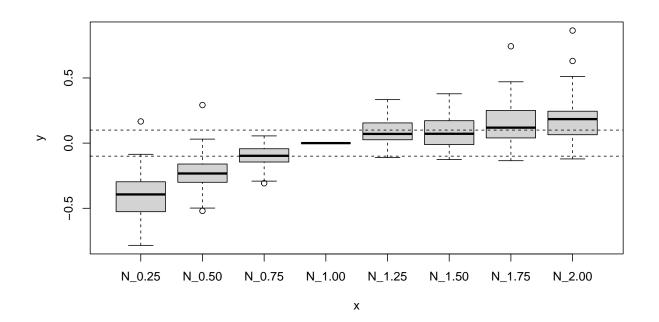


REMEMBER! these are the full year range, may want to narrow it to recent range.

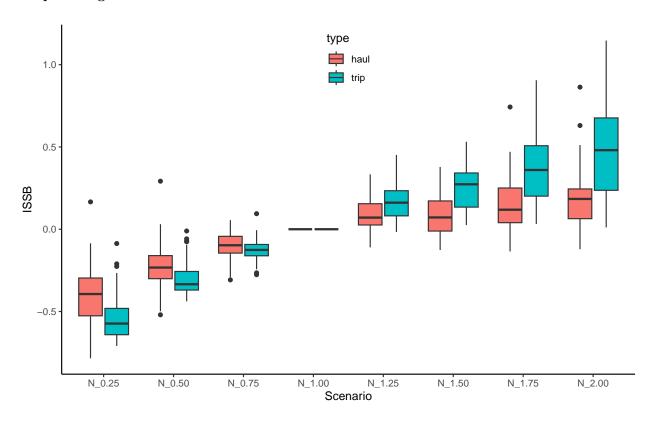
Haul Change



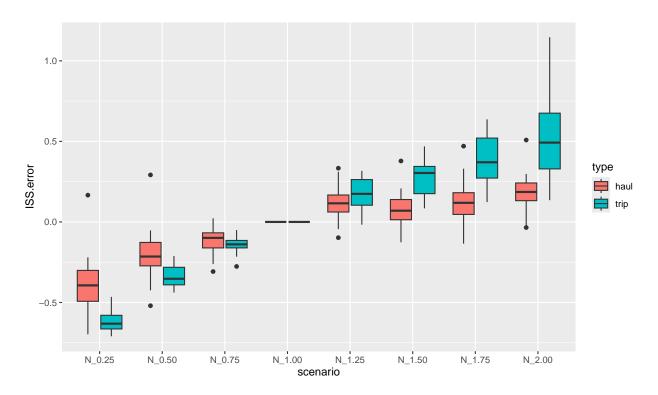
Boxplots



Boxplots Together 1977-2023



Boxplots Together 1999-2023

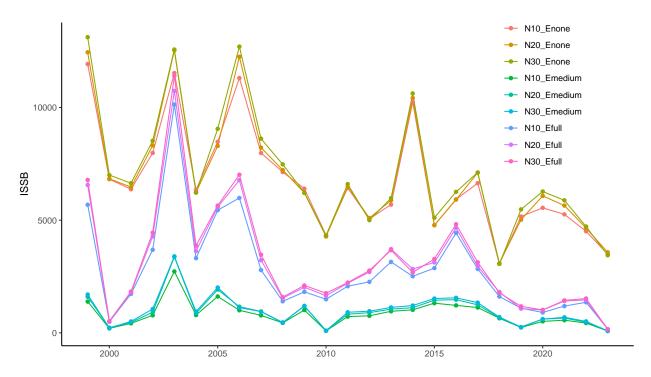


Plot 3.1

3x3 grid.

Data

With sampling strata



Without sampling strata

