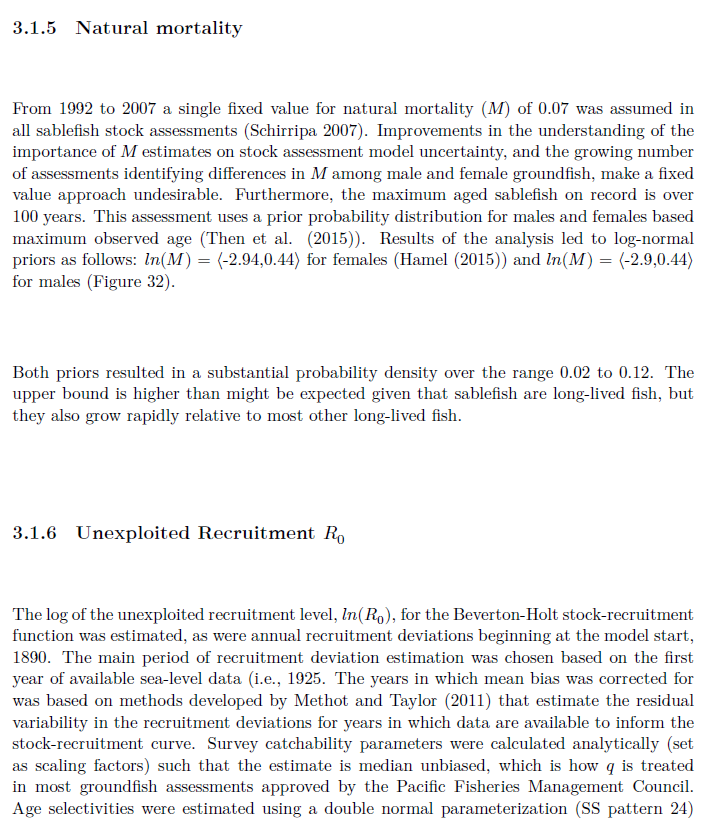
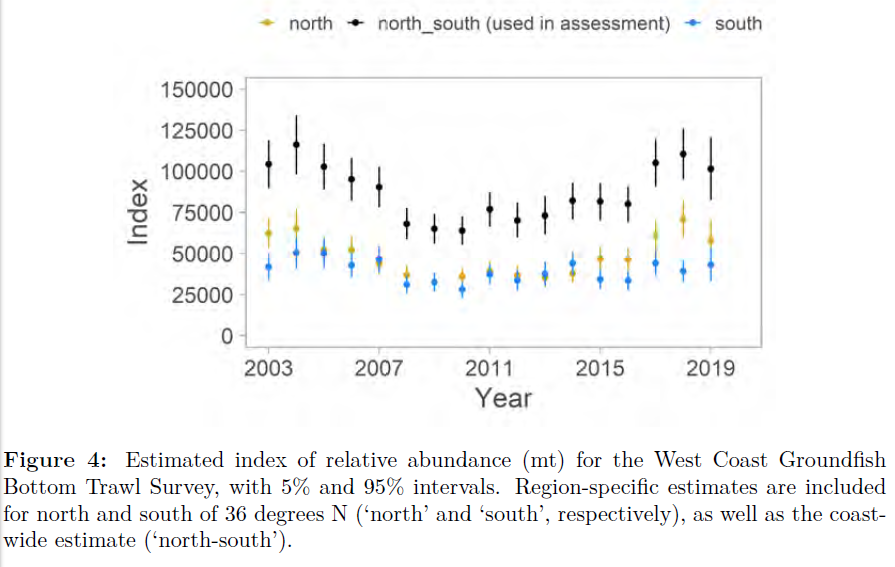
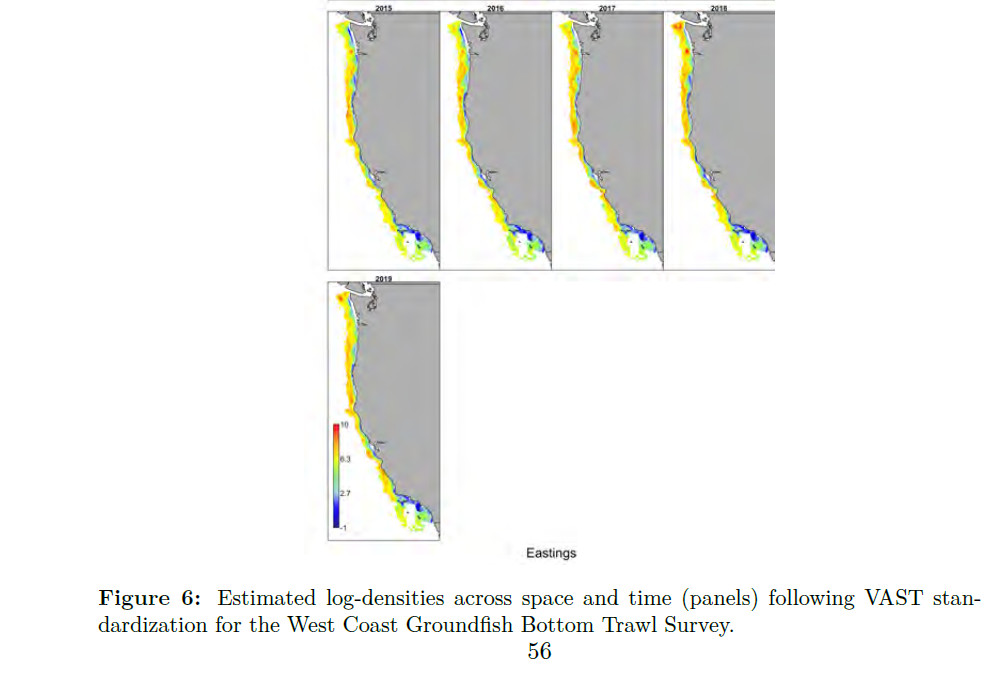
There is a huge amount of space between paragraphs and sections: This is also a latex thing I can’t change.



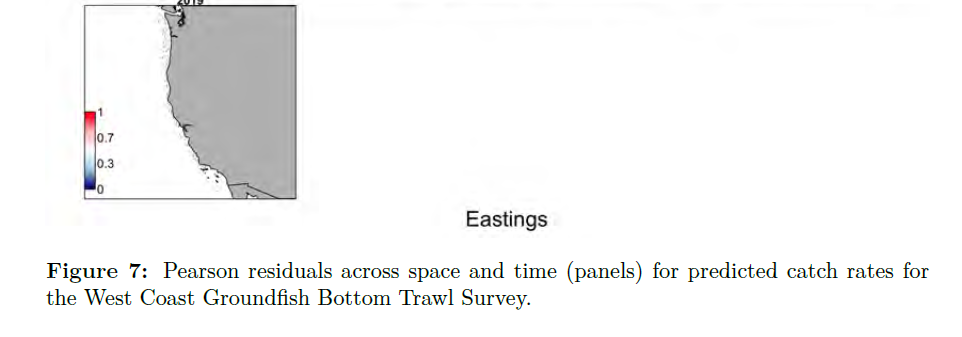
So, this is saying that around 2013-14, there was as much survey biomass south of 36as the entire coast north of there? This was a coding error and doesn’t affect our used index. Updated the plot and ratios more in keeping with 3:1.



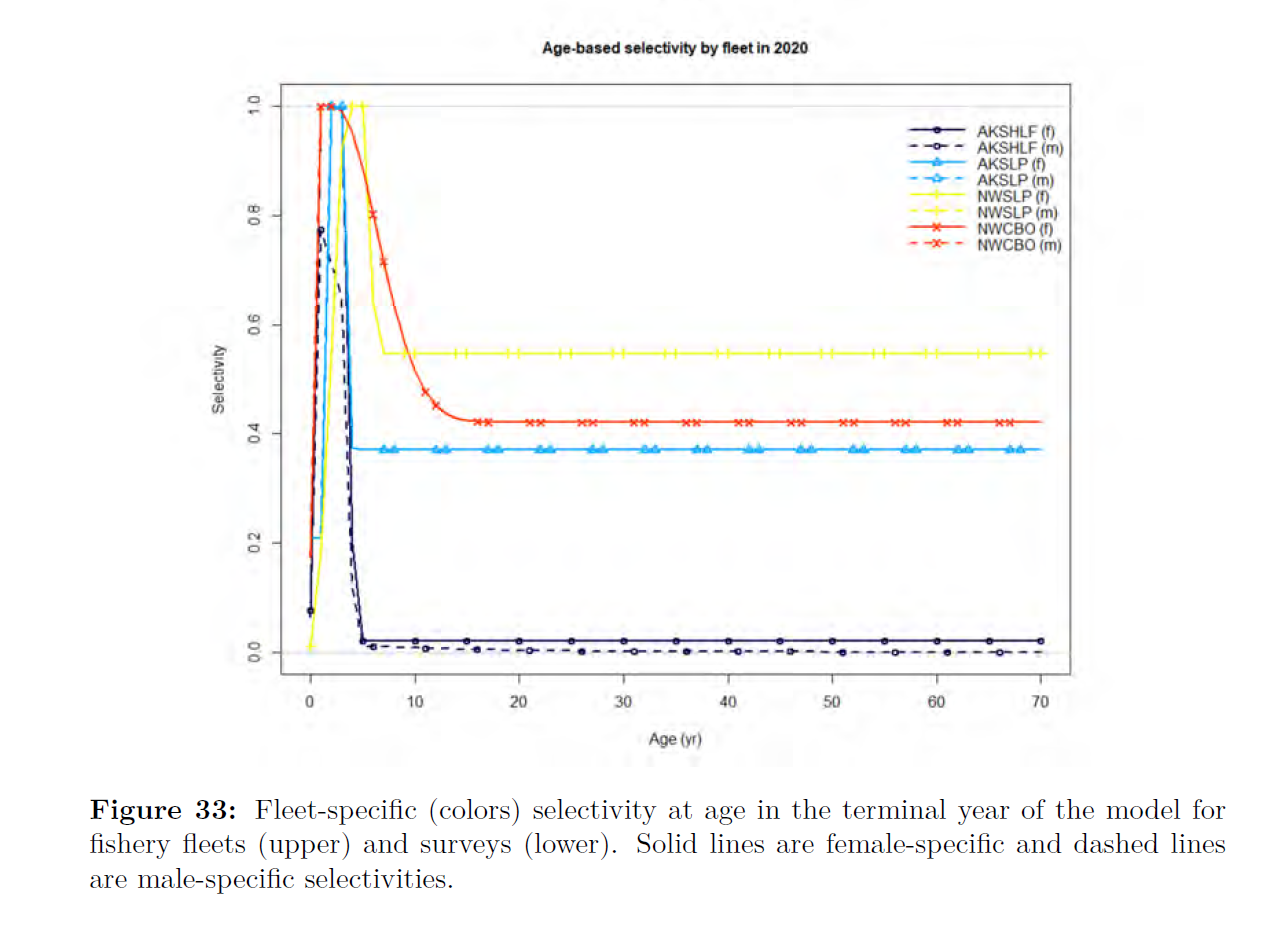
Putting 17 of these on a single page pretty much removes any opportunity to discern anything. LEE QI ON THIS



Likewise, putting 17 of these on a single page pretty much removes any opportunity to discern anything. LEE QI ON THIS



The label above this lower panel should probably be ‘by survey’ not ‘by fleet’, to reduce confusion. This is an r4ss default which can’t be overwritten. I simply removed the title and folks will depend on caption.



Is this really better than just saying Figure 44 (cont.), or Figure 44a, 44b…

Figure 45: The continuation of Figure 44 but for more recent years.

Figure 46: The continuation of Figure 44 but for more recent years.

Figure 47: The continuation of Figure 44 but for more recent years.

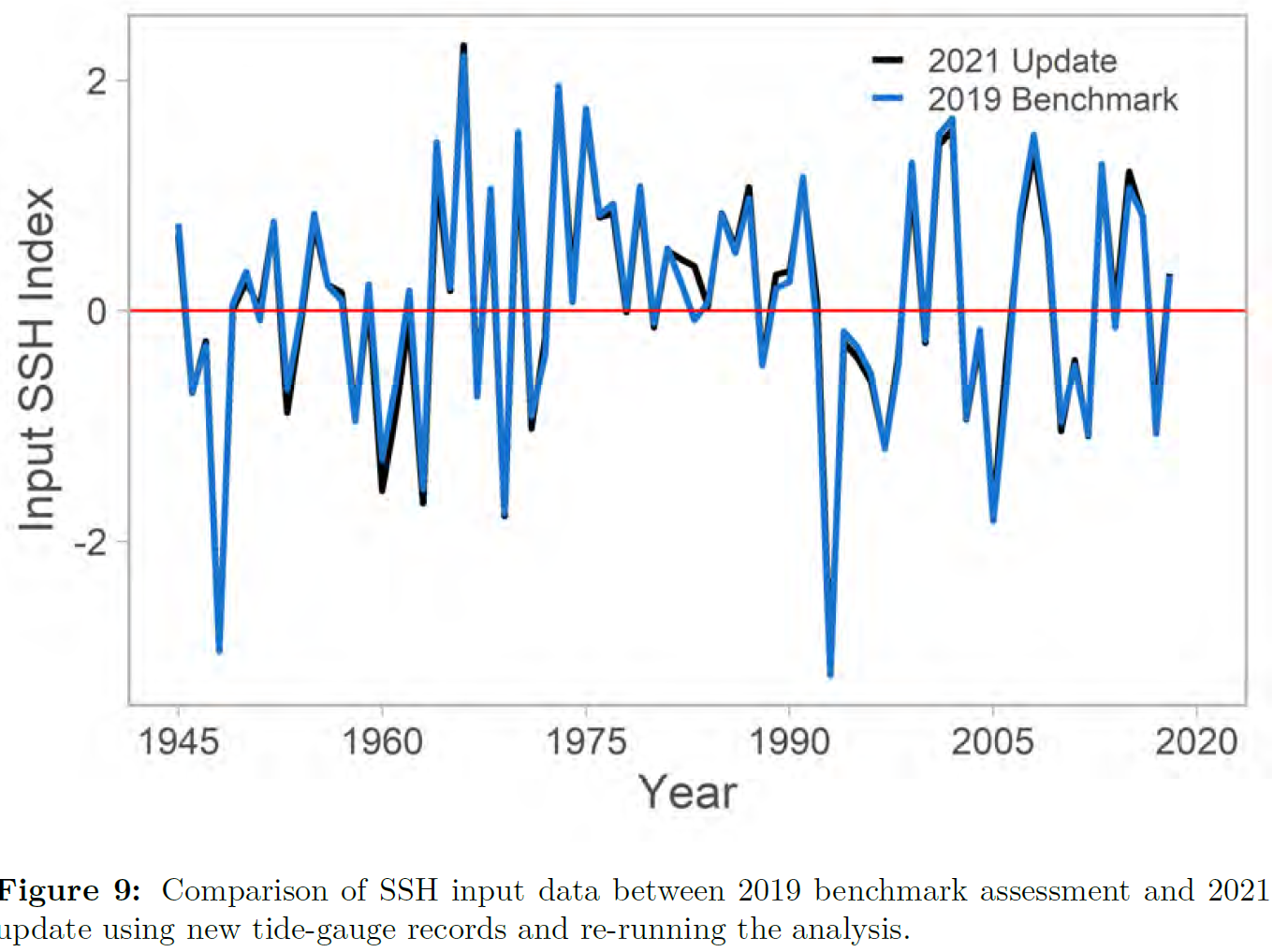
Technically, if numbered this way, wouldn’t 46 be a continuation of 45?

The word ‘but’ also seems out of place.

LATEX FORCES LABELS OF 45, 46. CHANGED TO SIMPLY FIG 44 CONTD.

~~It would be nice to have a table with the SSH timeseries being used in the model data~~. ADDED AS TABLE 13.

What is shown here as 2019 Benchmark does not appear to be the same as what is reported as the SL\_Index in the 2019 document… I THINK DOCUMENT IS OUT OF DATE; THIS DEFINITELY USES SS VALUES FROM 2019.

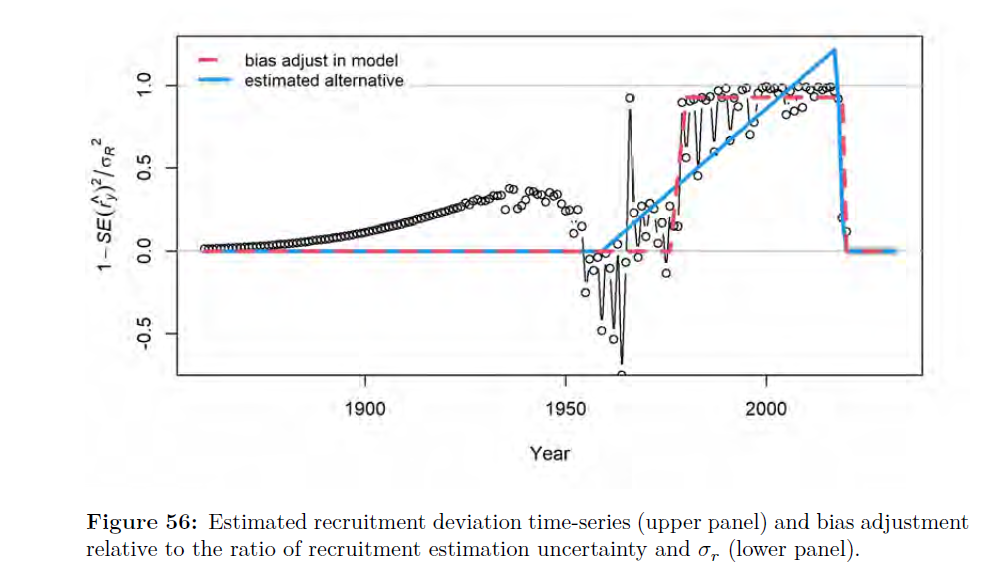


\*Also, I didn’t see any discussion about whether there was any impact of these data on the estimation of the most recent recruit classes, where there is typically less data to inform strength. (and especially this year, where recent survey data is reduced) good point; added sensitivity which drops ssh data; this doesn’t change the recruit boom just shifts it a few years out. Added discussion of this and figure to sensitivity list.

Additionally, i was a bit surprised that the confidence bounds on the 2019 survey index value didn’t seem to increase much. Do you think that is mainly a function of the fact that we encounter sablefish in such a high % of hauls?

Added text to NWCBO survey description: The WCGBT Survey encounters sablefish in a high percentage of tows, which leads to confidence intervals which are relatively small and consistent year-to-year; this is the case for other highly-encountered species such as Petrale Sole.

\*I am always worried when we start seeing weird recruitment spikes occurring around the time that the bias adjustment starts going into effect.



I can’t remember if it is still that way, but the bocaccio assessment used to have that one HUGE recruitment around that time that stood out like the one in this model.