# Tables

Table 1: Average annual age samples from the AFSC bottom trawl surveys by region (rounded to the nearest 10), and total reader-tester age pairs (rounded to the nearest 100) for the stocks evaluated in the bootstrap-simulation.

| Stock (species type) | Scientific name | AI | EBS | GOA | R-T |
| --- | --- | --- | --- | --- | --- |
| arrowtooth flounder (flatfish) | *Atheresthes stomias* | 450 | 480 | 850 | 6,100 |
| flathead sole (flatfish) | *Hippoglossoides elassodon* | – | 560 | 520 | 9,400 |
| northern rock sole (flatfish) | *Lepidopsetta polyxystra* | – | 460 | 450 | 8,900 |
| northern rockfish (rockfish) | *Sebastes polyspinis* | 570 | – | 450 | 6,400 |
| Pacific cod (gadid) | *Gadus macrocephalus* | 800 | 1070 | 650 | 21,200 |
| Pacific ocean perch (rockfish) | *Sebastes alutus* | 940 | – | 1030 | 13,500 |
| walleye pollock (gadid) | *Gadus chalcogrammus* | 790 | 1500 | 1300 | 84,400 |
| yellowfin sole (flatfish) | *Limanda aspera* | – | 750 | – | 10,300 |

# Figures



Figure 1: Bootstrap-simulation flow chart, the steps refer to the order of operations.

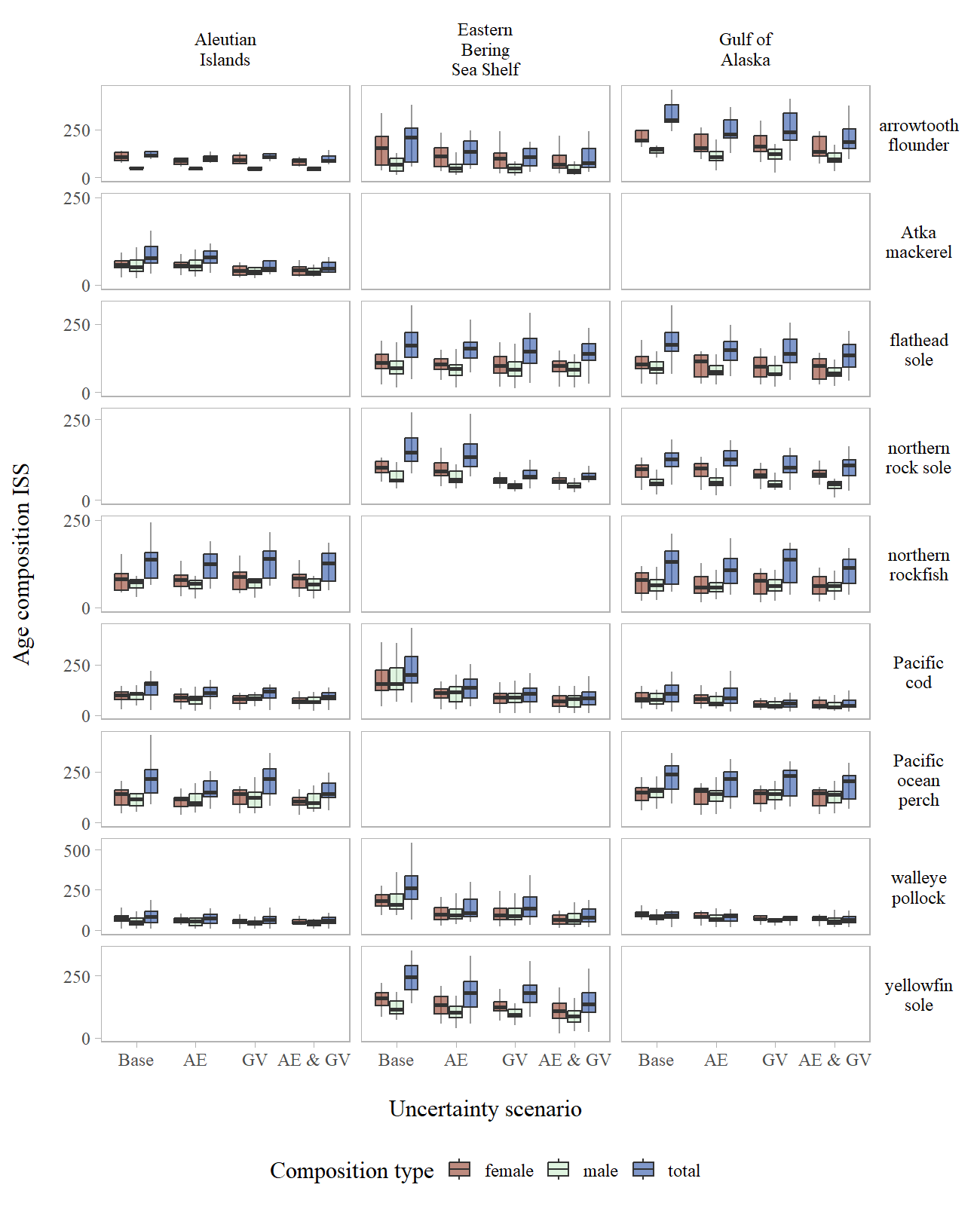


Figure 2: Boxplot of annual age composition input sample size for the stocks and regions evaluated across uncertainty scenarios. ‘Base’ refers to the case that includes no additional sources of uncertainty, ‘AE’ is the case when ageing error is included, ‘GV’ is the case when growth variability is included, and ‘AE & GV’ is the case when both ageing error and growth variability is included. The boxplots shows the median, 1st and 3rd quartiles, and 1.5 times the inter-quartile range.

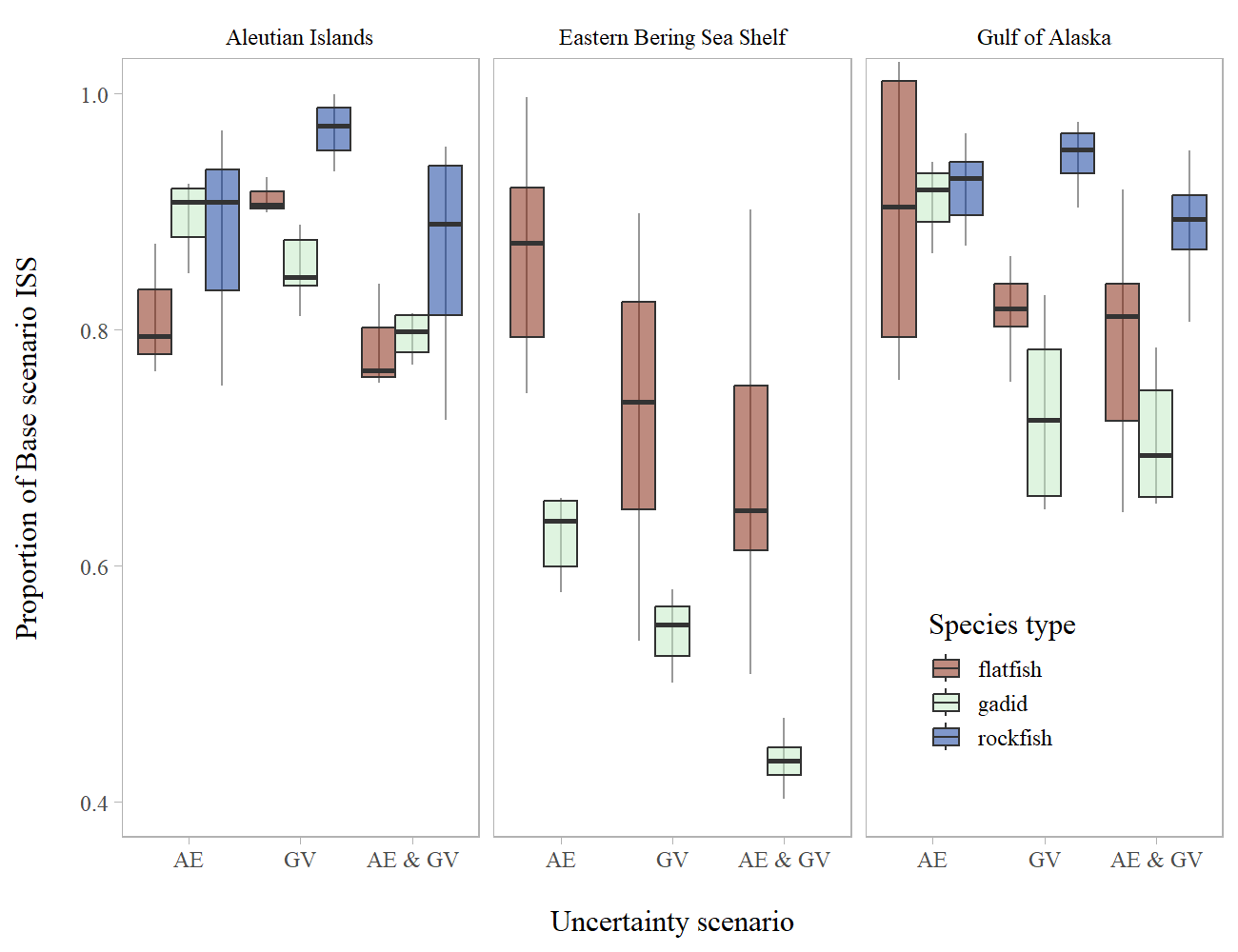


Figure 3: Boxplot of annual age composition relative input sample size by species type across sex categories and uncertainty scenarios. ‘Base’ refers to the case that includes no additional sources of uncertainty, ‘AE’ is the case when ageing error is included, ‘GV’ is the case when growth variability is included, and ‘AE & GV’ is the case when both ageing error and growth variability is included. Note that there are no rockfish found on the Eastern Bering Sea Shelf. The boxplots shows the median, 1st and 3rd quartiles, and 1.5 times the inter-quartile range.

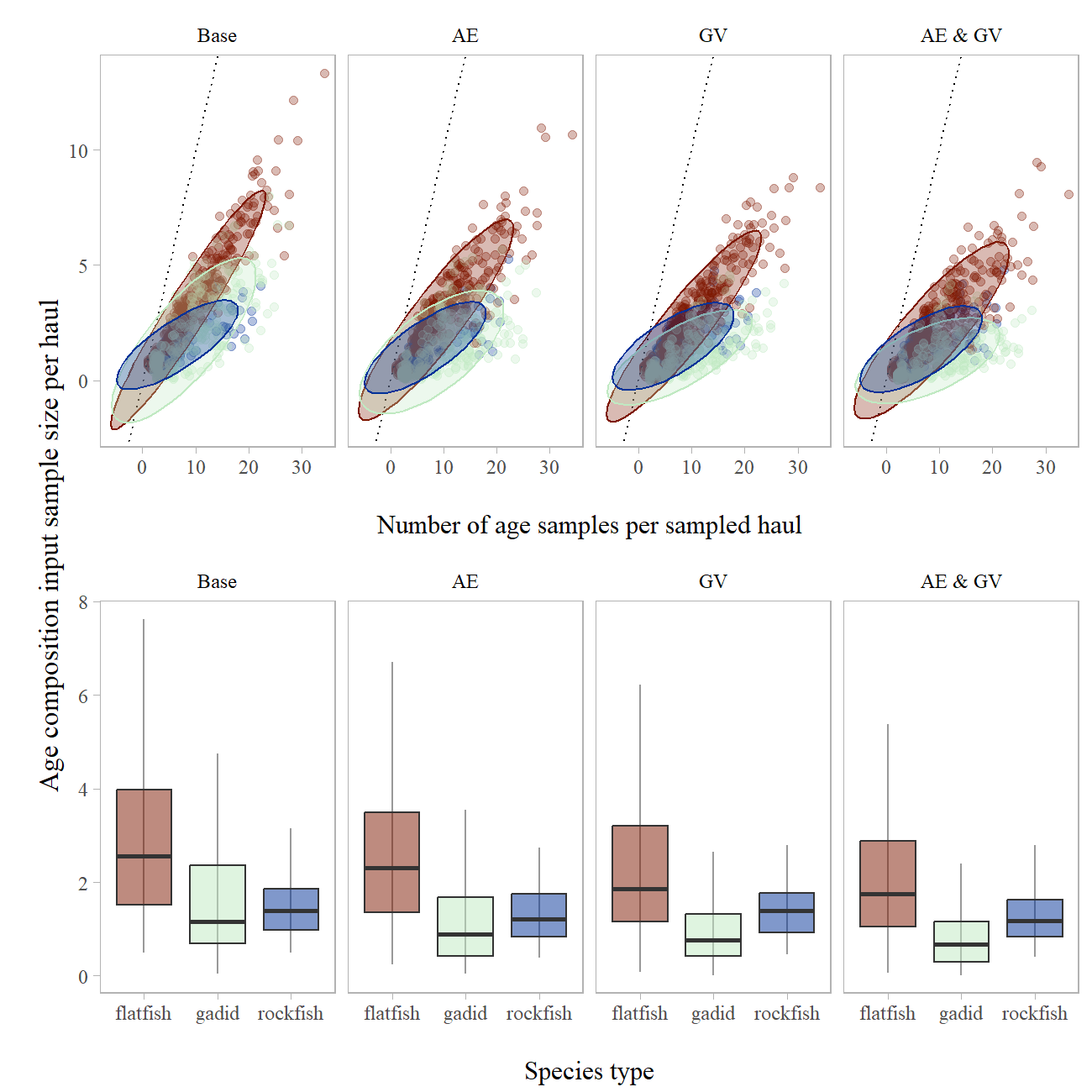


Figure 4: Age composition input sample size per sampled haul compared to number of ages sampled within a haul (top panel) across uncertainty scenarios and species types (bottom panel). ‘Base’ refers to the case that includes no additional sources of uncertainty, ‘AE’ is the case when ageing error is included, ‘GV’ is the case when growth variability is included, and ‘AE & GV’ is the case when both ageing error and growth variability is included. The dashed line in the top panel plots shows a 1:1 relationship and ellipses are plotted for reference. The boxplots shows the median, 1st and 3rd quartiles, and 1.5 times the inter-quartile range.

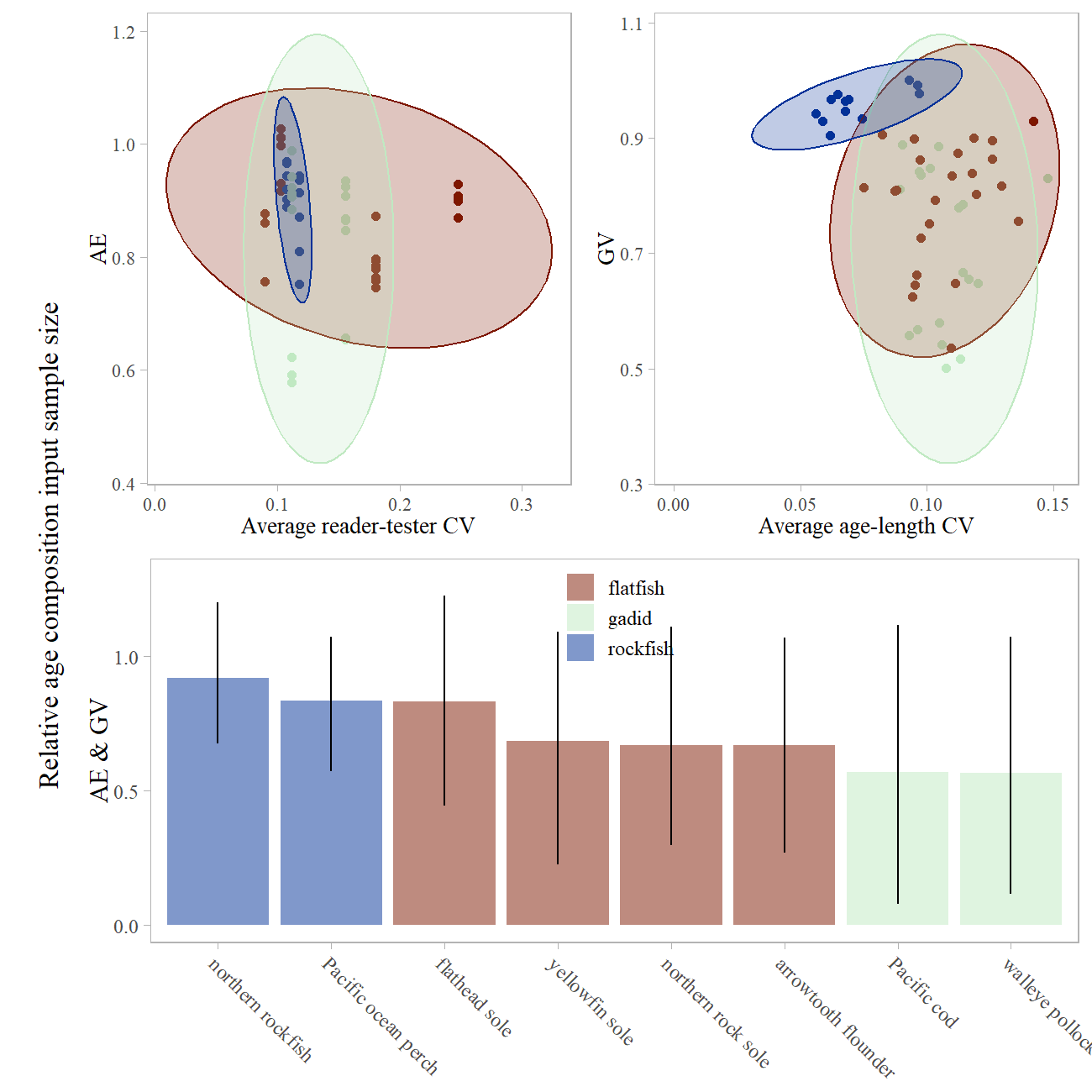


Figure 5: Relative age composition input sample size when including ageing error (‘AE’) or growth variability (‘GV’) compared to age and growth statistics (top panel) and when including both ageing error and growth variability (‘AE & GV’) across the stocks evaluated (bottom panel).