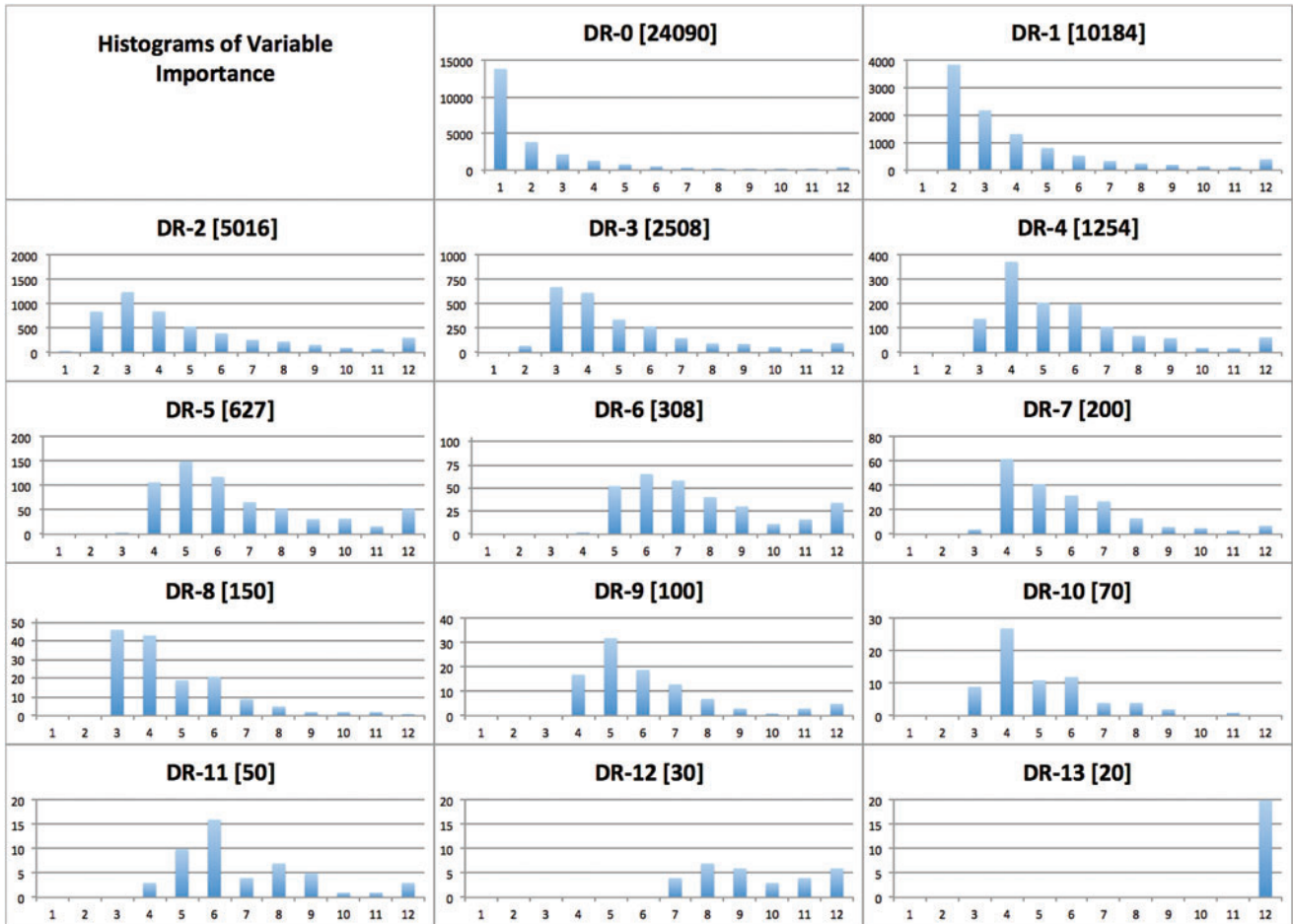


Supplementary Data



SUPPLEMENTARY FIG. S1. Histograms showing the distribution of conditional permutation importance from run 3. Each panel shows one DR step, with the total number of remaining features in brackets. The number of features is shown in the y-axis, and the x -axis shows conditional permutation importance (sorted into 12 discrete bins, as specified below). Although MDAs are computed in different bootstrapped samples for each forest and cannot be directly compared, variable importance generally increased as the number of features was reduced.

x -axis bin ranges are as follows:

Bin 1: $[-1, 0)$ Bin 7: $[0.0005, 0.0006)$
 Bin 2: $[0, 0.0001)$ Bin 8: $[0.0006, 0.0007)$
 Bin 3: $[0.0001, 0.0002)$ Bin 9: $[0.0007, 0.0008)$
 Bin 4: $[0.0002, 0.0003)$ Bin 10: $[0.0008, 0.0009)$
 Bin 5: $[0.0003, 0.0004)$ Bin 11: $[0.0009, 0.001)$
 Bin 6: $[0.0004, 0.0005)$ Bin 12: $[0.001, 1]$

DR, dimensional reduction.