

S1 Appendix: Effect of Number of Random Points on Step-Selection Function Coefficients

SSFs were run with 25, 50, 100, 200, and 400 pseudo-absence points for each step. A linear shape tests whether individual gazelles select for low or high NDVI within a given year. A quadratic model tests whether individual gazelles select for intermediate NDVI within a given year. Graphs show the model coefficients for each parameter \pm their standard error and the p-values. Here we add the standard errors calculated by ``clogit()`` to the beta coefficients but it should be noted that they must be interpreted with caution because their calculation assumes that the steps are independent, which they are not.

Growing Season Results

Linear model: presence as a function of NDVI

Quadratic model: presence as a function of NDVI + NDVI²

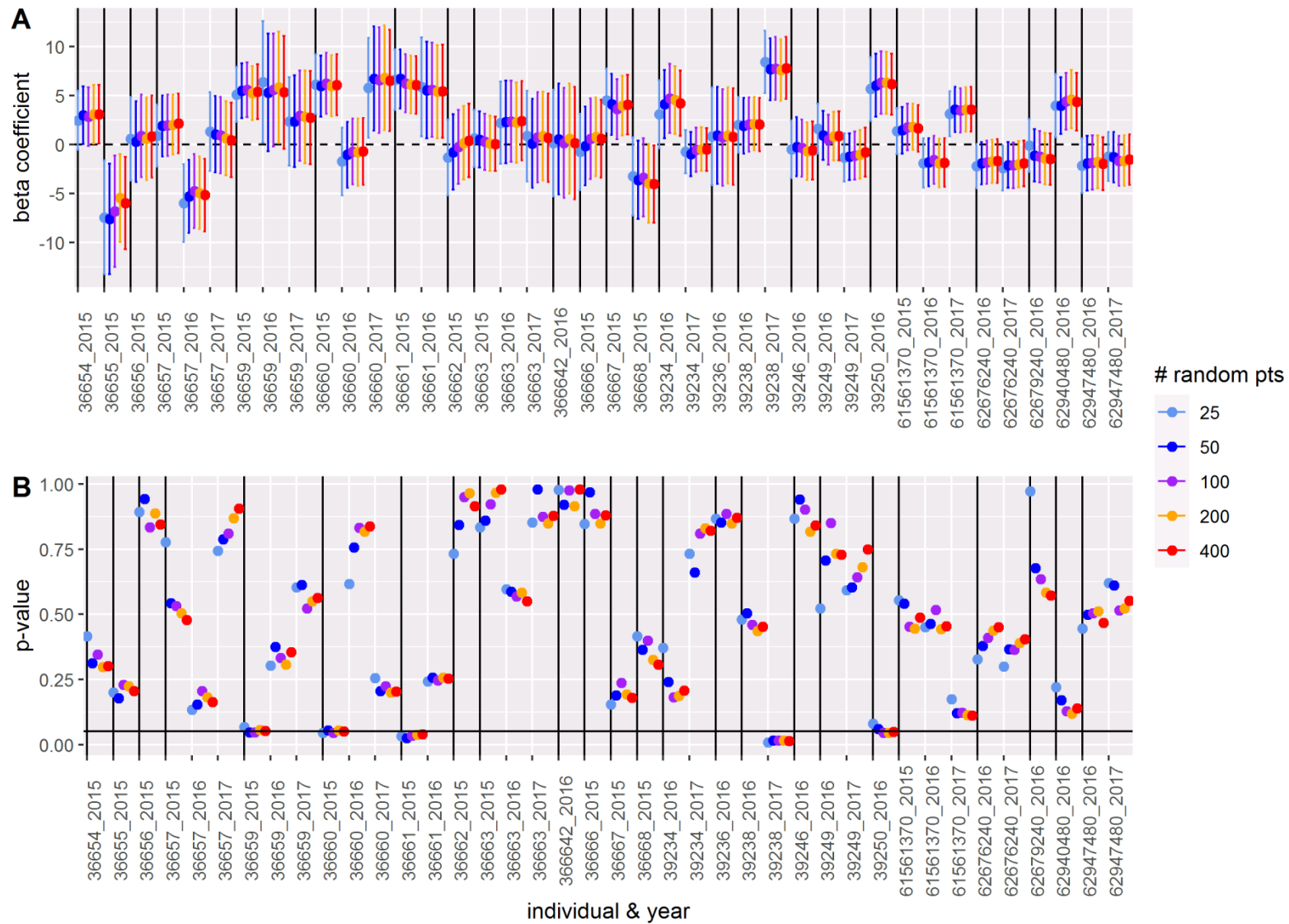


Figure 1. Results (A - beta coefficients, B - p-values) of SSF run by individual/year at the 1 day scale, testing if selection takes a linear shape in the growing season.

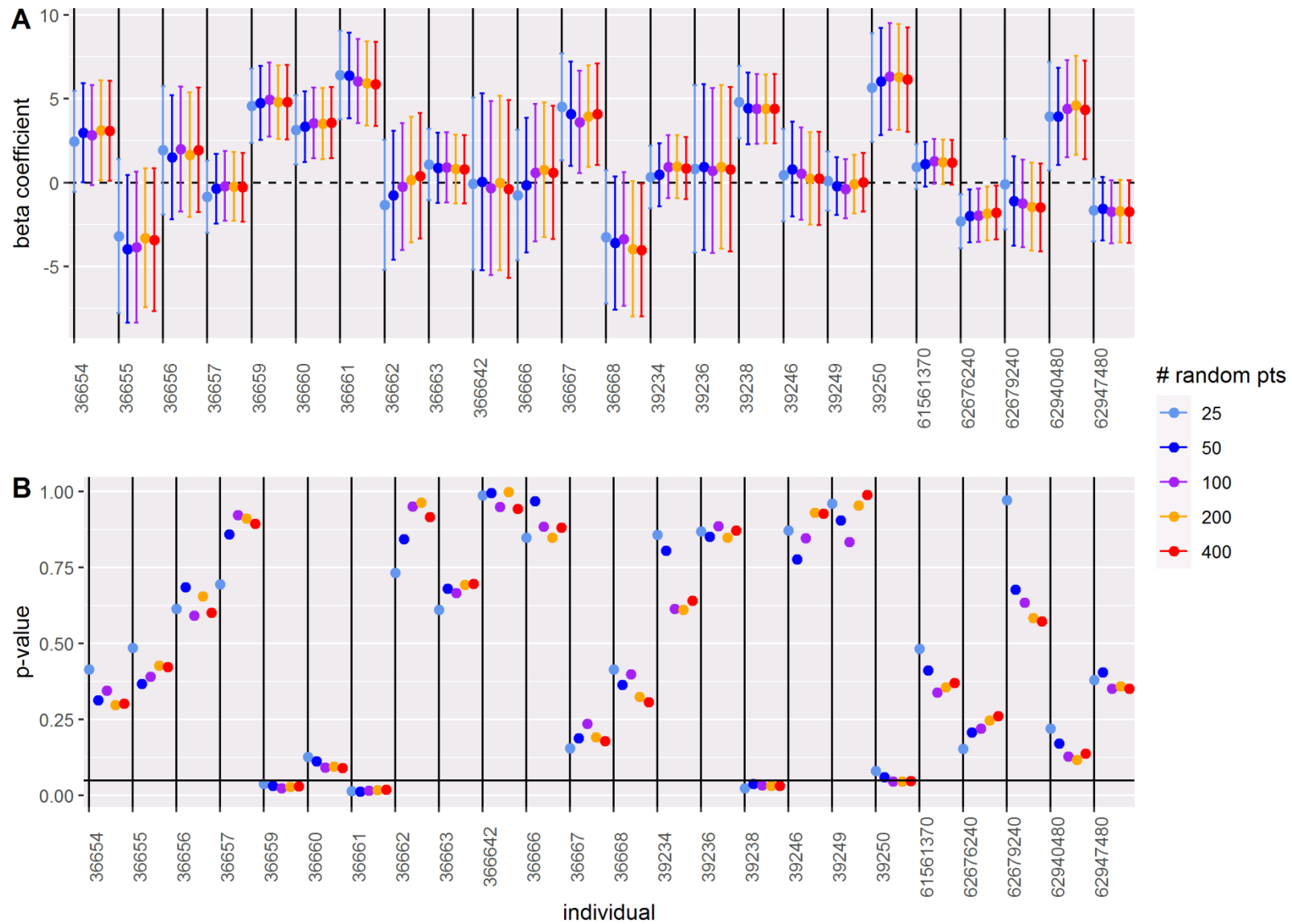


Figure 2. Results (A - beta coefficients, B - p-values) of SSF run by individual at the 1 day scale, testing if selection takes a linear shape in the growing season.

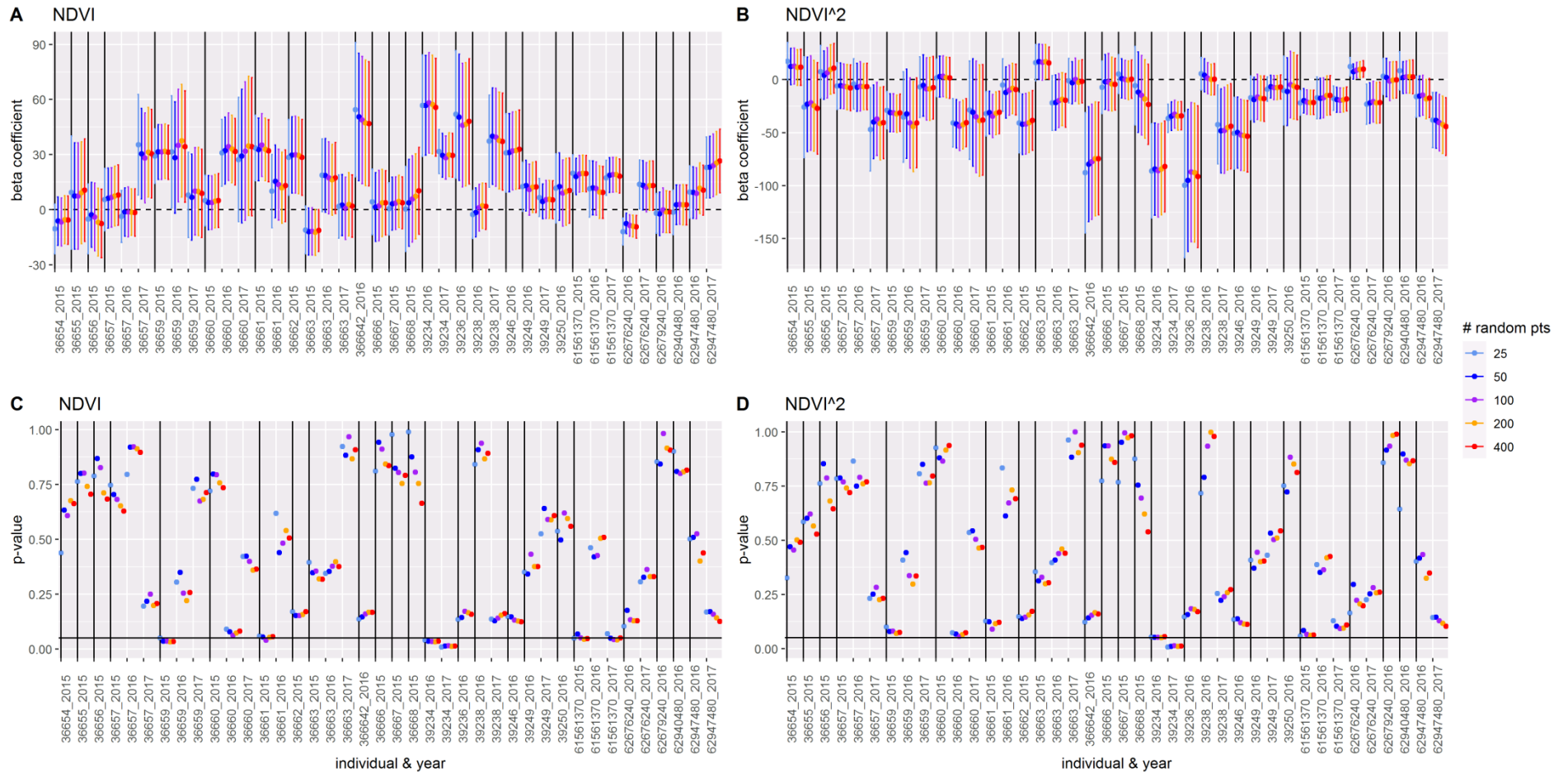


Figure 3. Results (A,B - beta coefficients, C,D - p-values) of SSF run by individual/year at the 1 day scale, testing if selection takes a quadratic shape in the growing season.

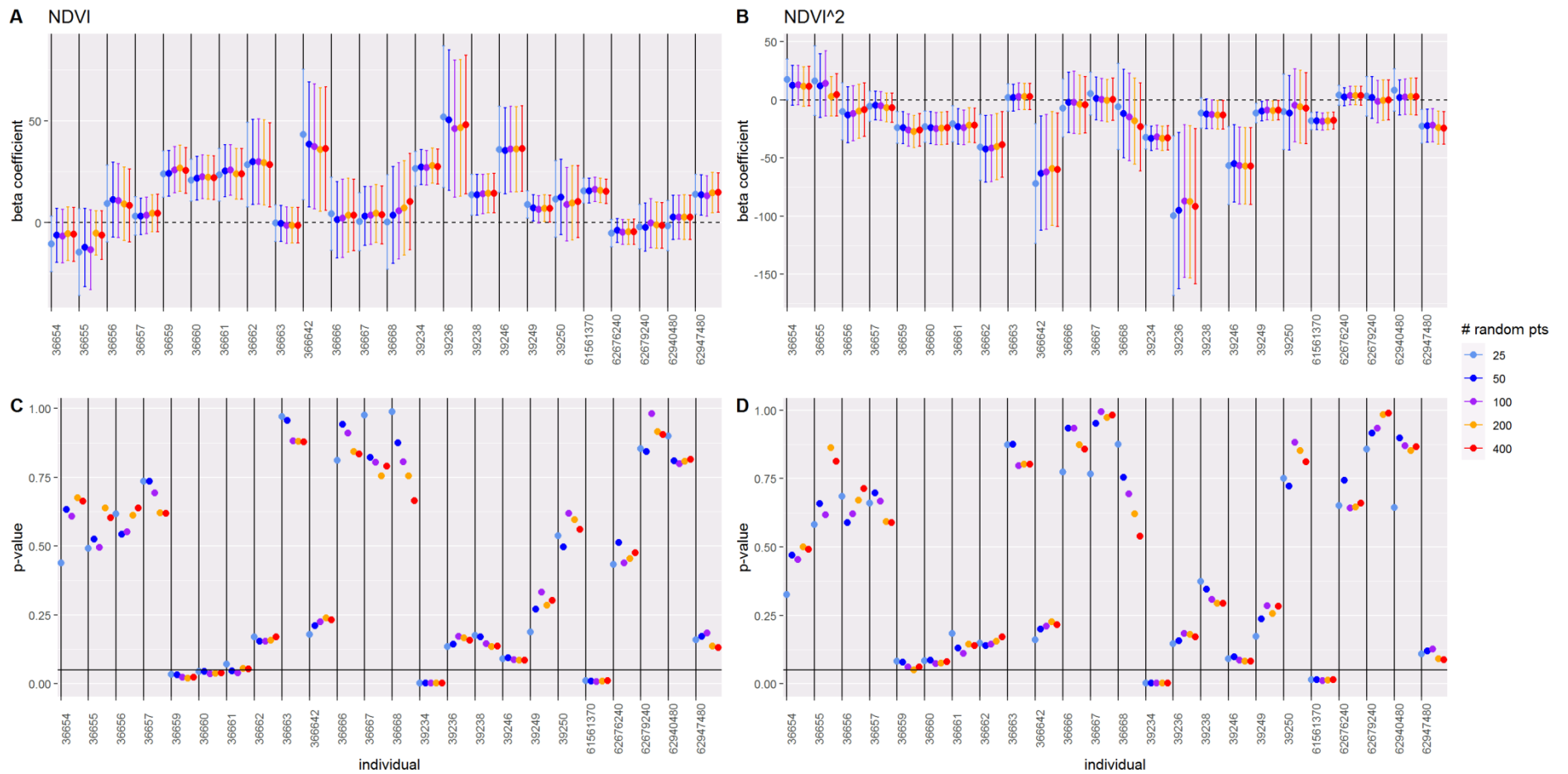


Figure 4. Results (A,B - beta coefficients, C,D - p-values) of SSF run by individual at the 1 day scale, testing if selection takes a quadratic shape in the growing season.

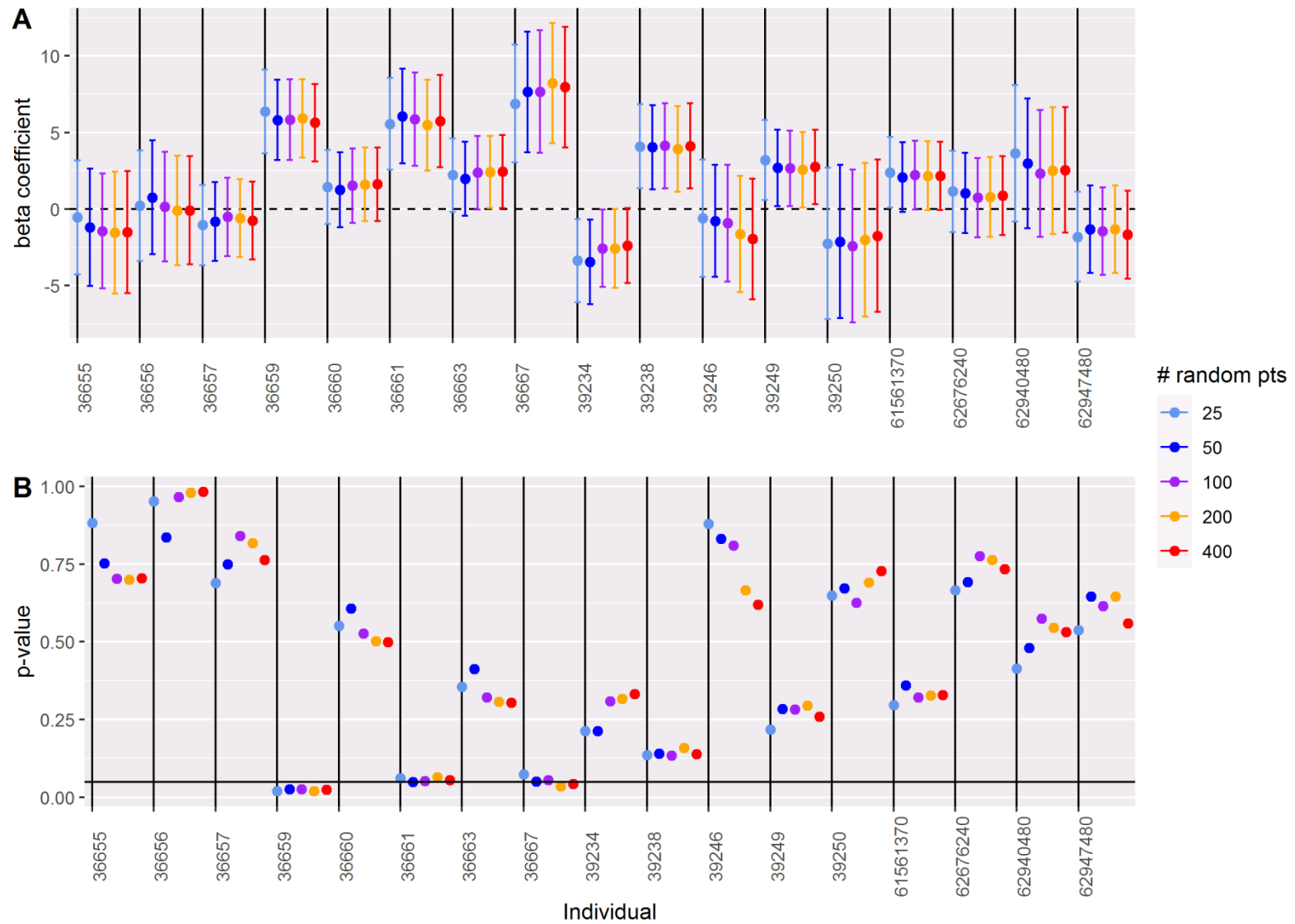


Figure 5. Results (A - beta coefficients, B - p-values) of SSF run by individual at the 5 day scale, testing if selection takes a linear shape in the growing season.

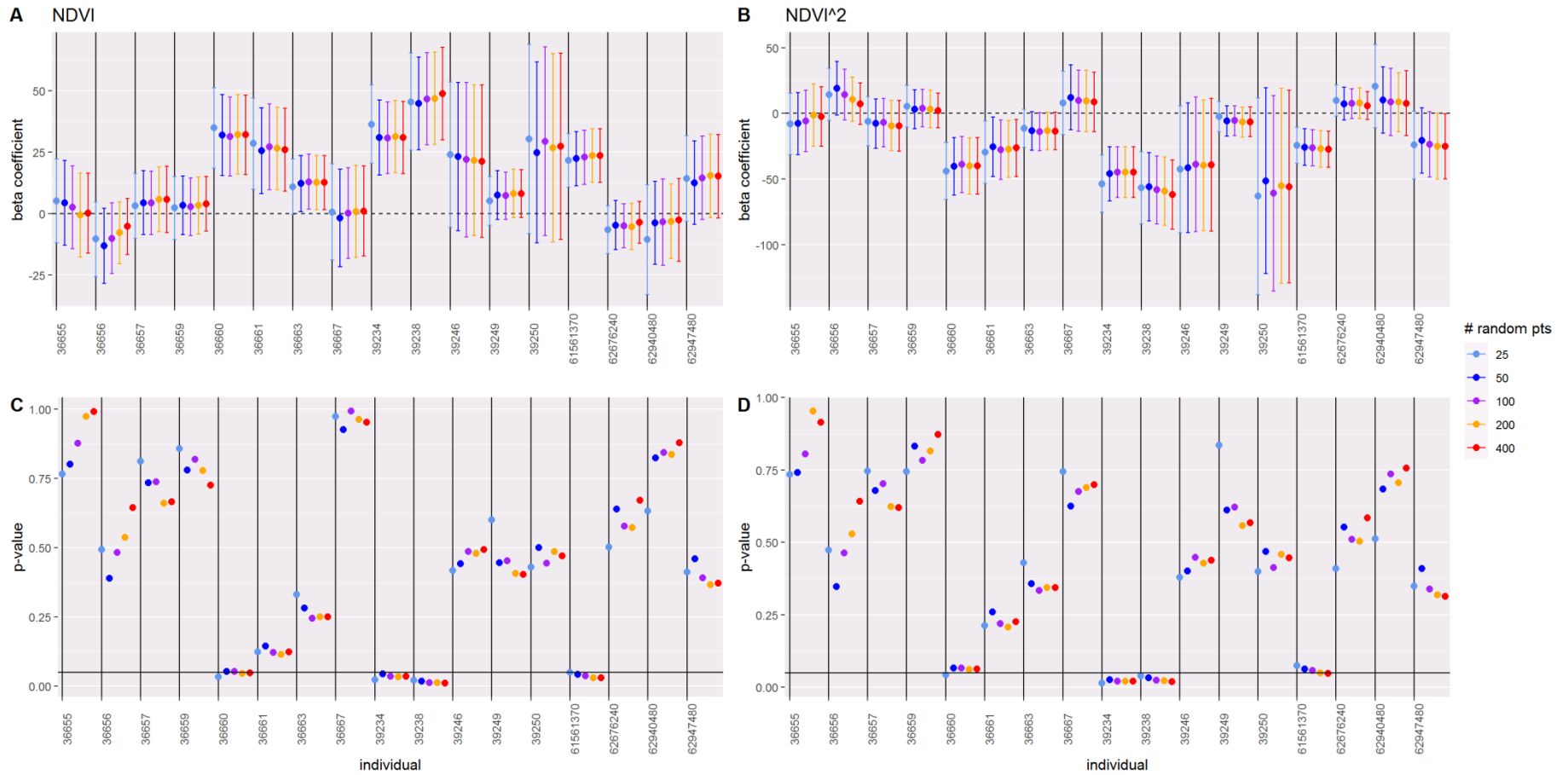


Figure 6. Results (A,B - beta coefficients, C,D - p-values) of SSF run by individual at the 5 day scale, testing if selection takes a quadratic shape in the growing season.

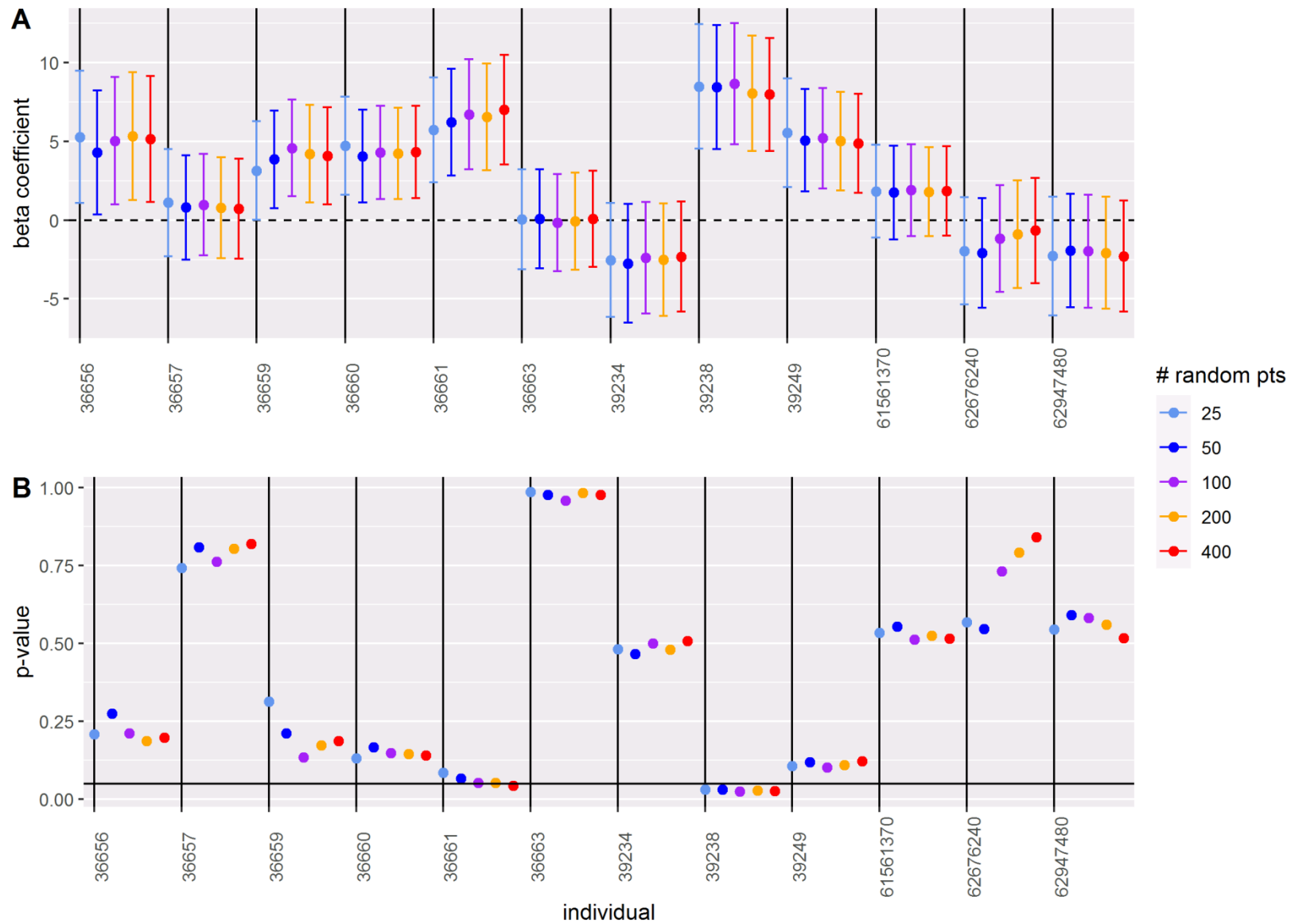


Figure 7. Results (A - beta coefficients, B - p-values) of SSF run by individual at the 10 day scale, testing if selection takes a linear shape in the growing season.

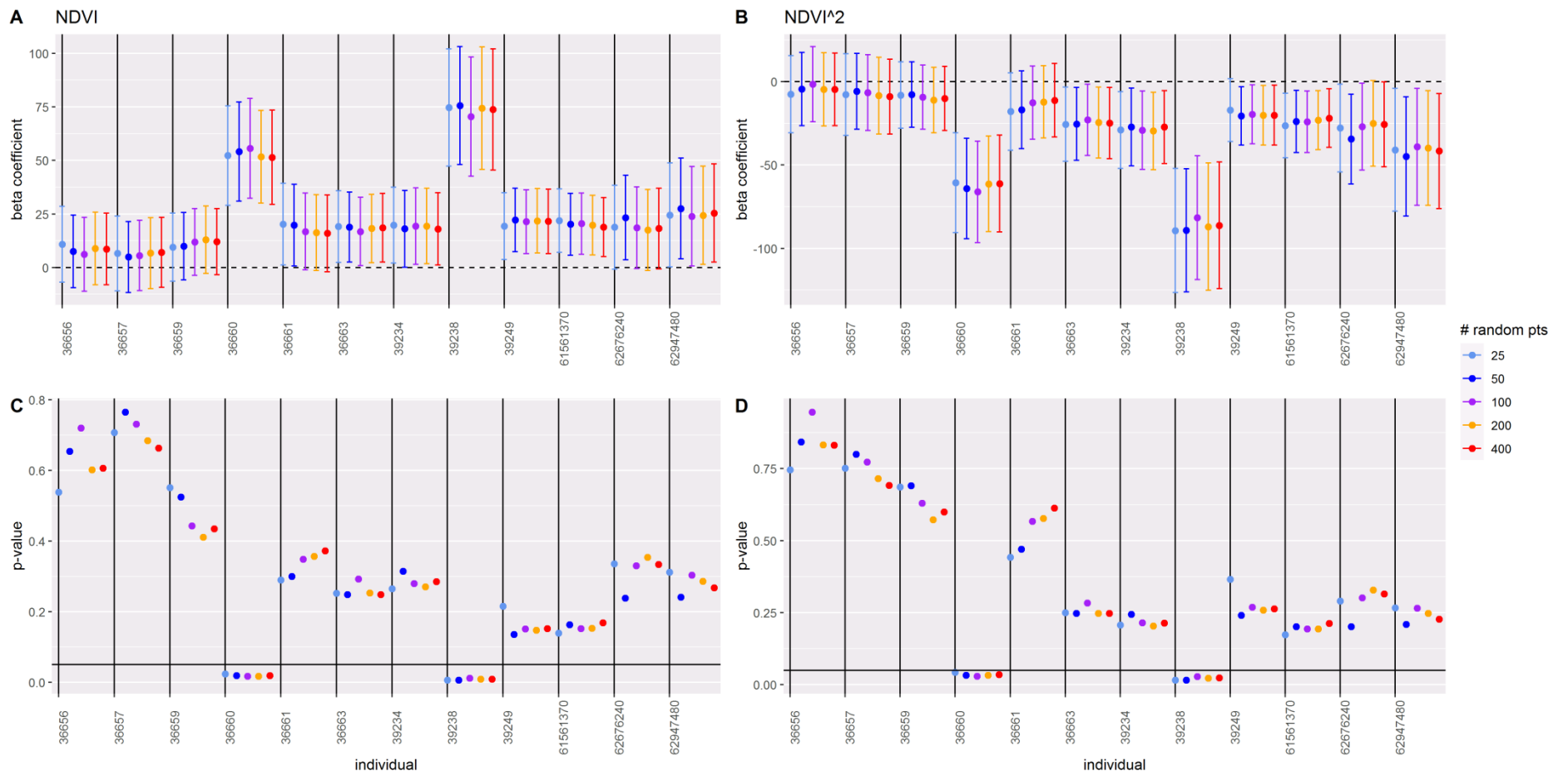


Figure 8. Results (A,B - beta coefficients, C,D - p-values) of SSF run by individual at the 10 day scale, testing if selection takes a quadratic shape in the growing season.

Winter Results

Linear model: presence as a function of fraction snow cover in a 2 x 2 km area.

Quadratic model: presence as a function of snow cover + snow cover²

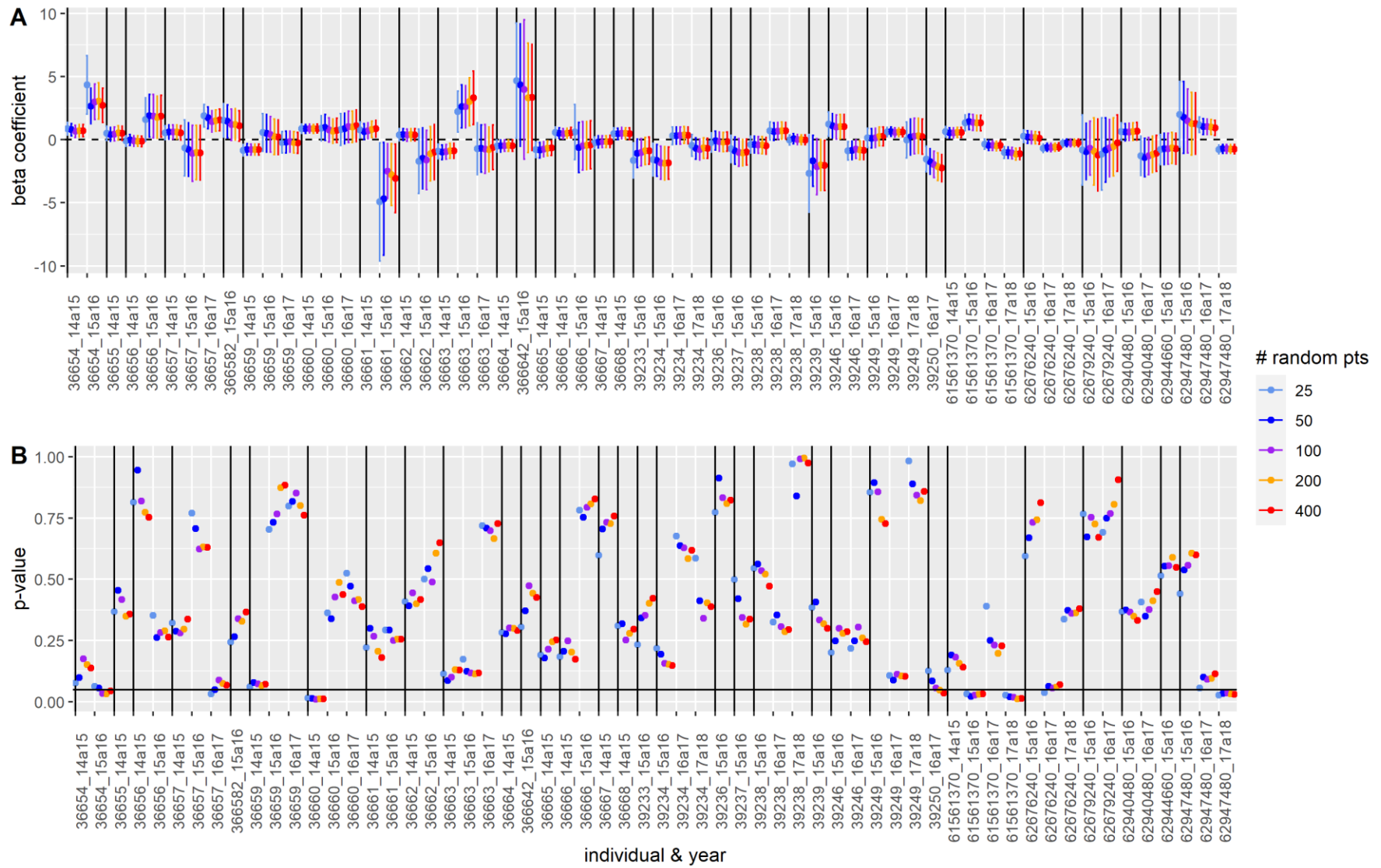


Figure 9. Results (A - beta coefficients, B - p-values) of SSF run by individual/year at the 1 day scale, testing if selection takes a linear shape in winter.

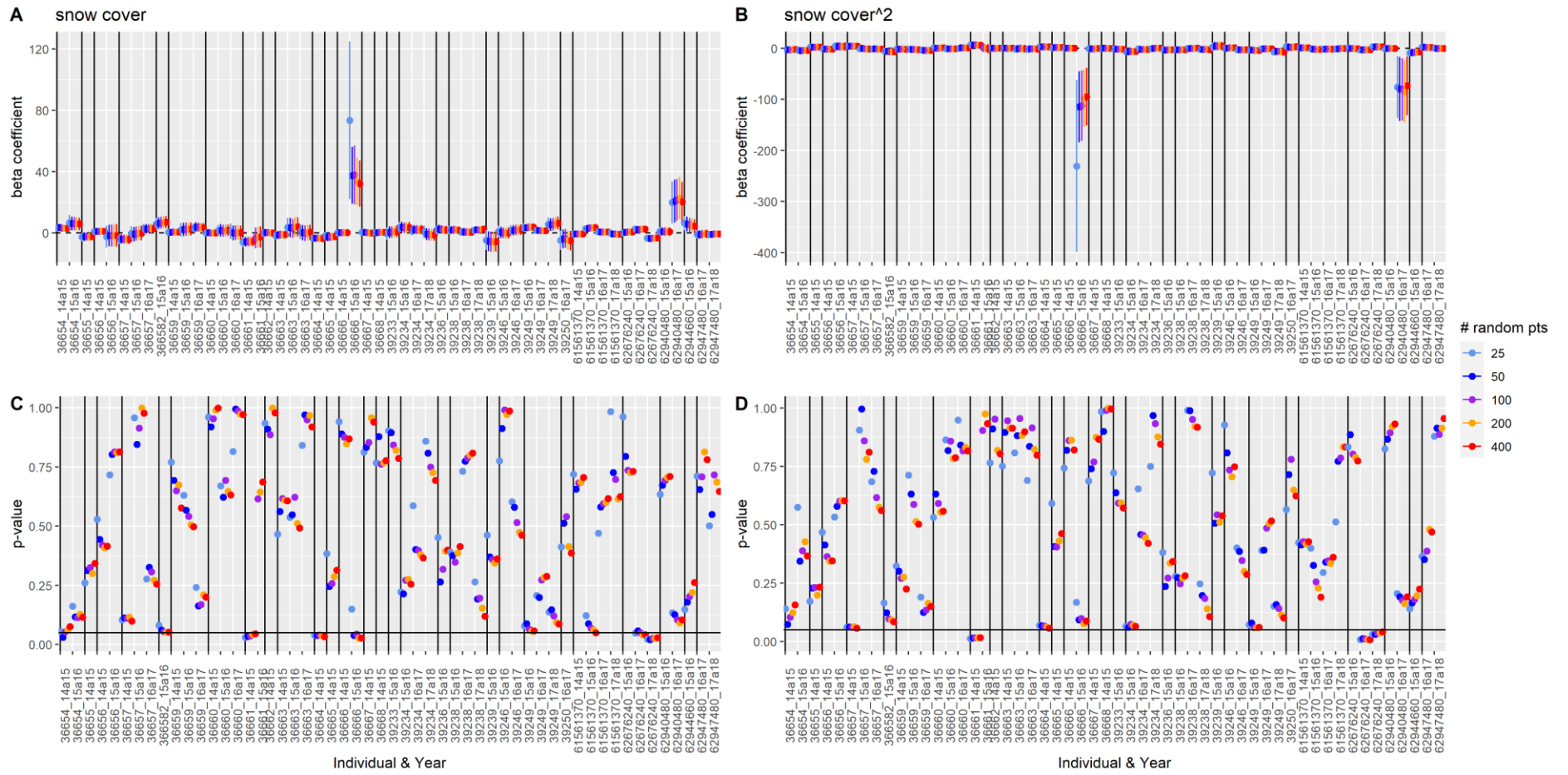


Figure 10. Results (A,B - beta coefficients, C,D - p-values) of SSF run by individual/year at the 1 day scale, testing if selection takes a quadratic shape in winter.

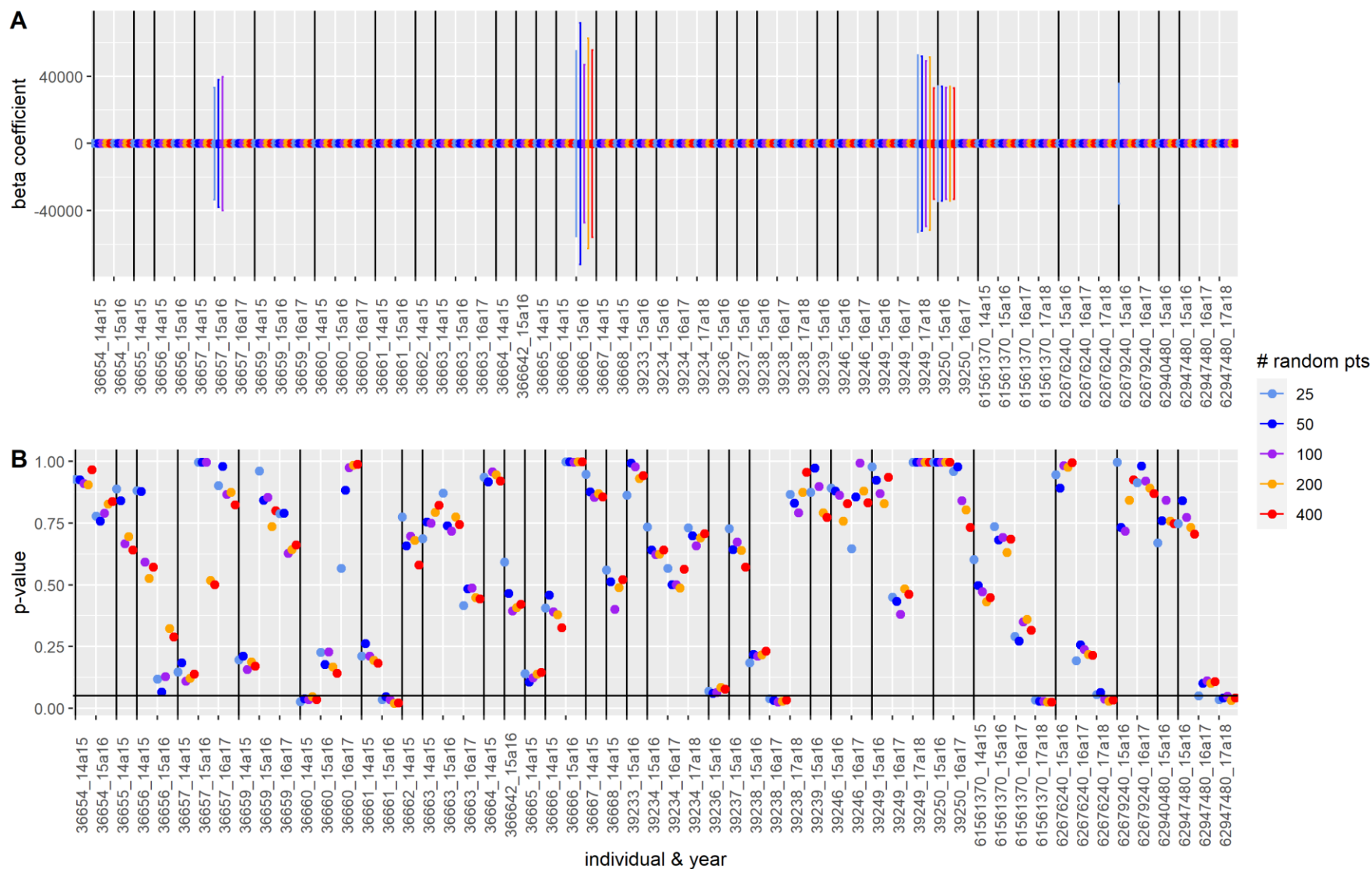


Figure 11. Results (A - beta coefficients, B - p-values) of SSF run by individual/year at the 5 day scale, testing if selection takes a linear shape in winter. Missing results for a random point value are due to high coefficient estimates that obscure the other results and were left out.

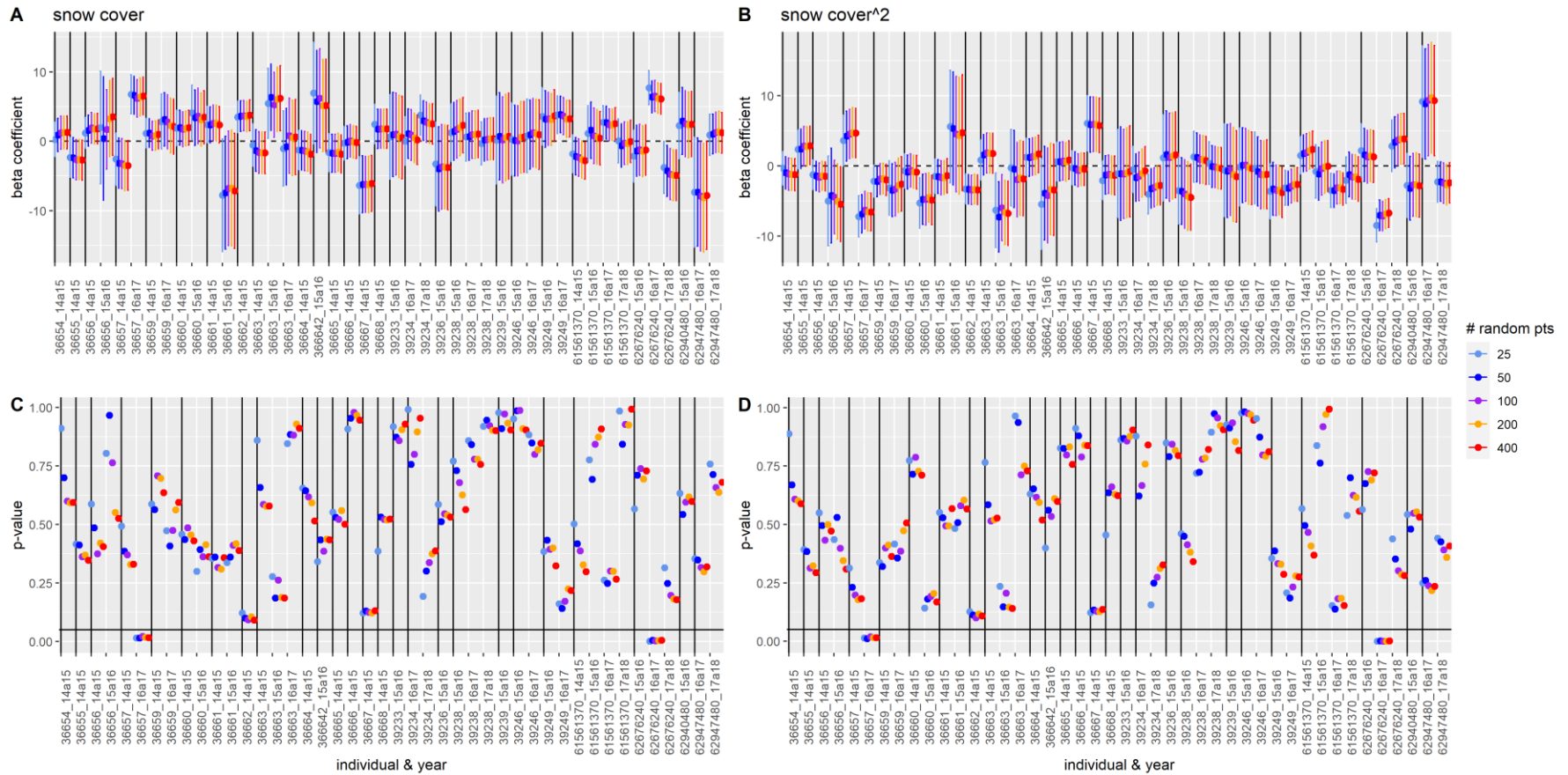


Figure 12. Results (A,B - beta coefficients, C,D - p-values) of SSF run by individual/year at the 5 day scale, testing if selection takes a quadratic shape in winter. Missing results for a random point value are due to high coefficient estimates that obscure the other results and were left out.

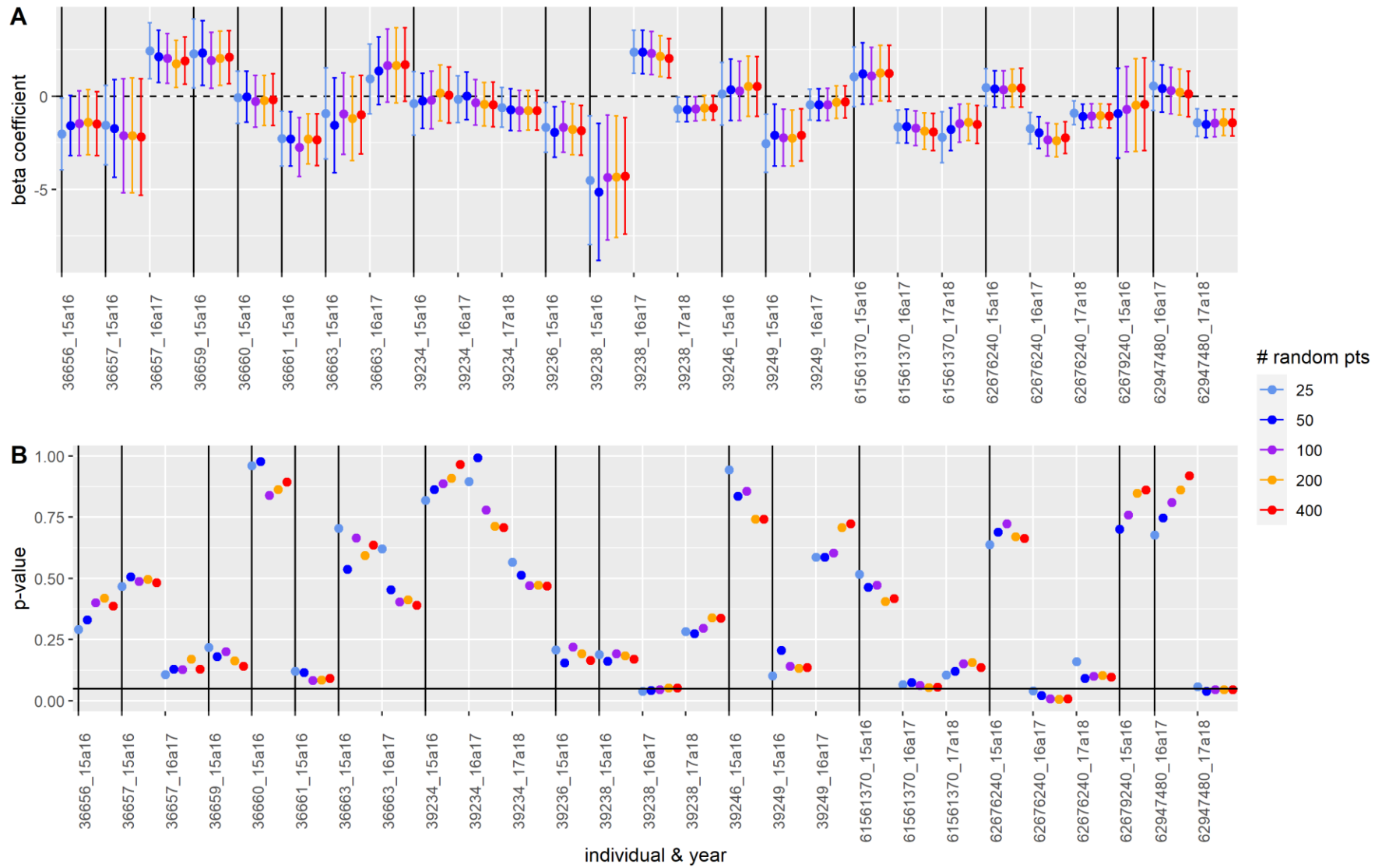


Figure 13. Results (A - beta coefficients, B - p-values) of SSF run by individual/year at the 10 day scale, testing if selection takes a linear shape in winter.

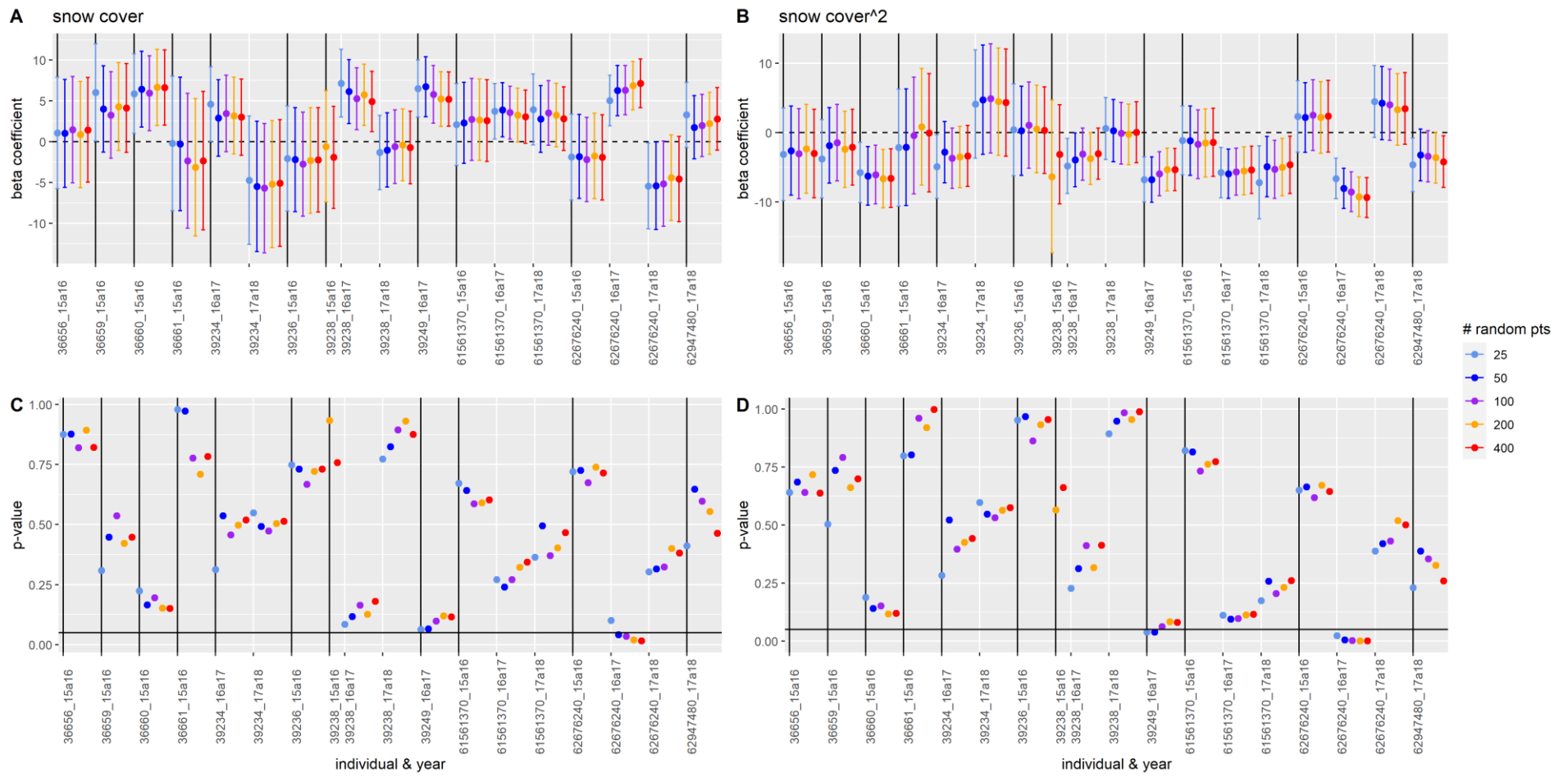


Figure 14. Results (A,B - beta coefficients, C,D - p-values) of SSF run by individual/year at the 10 day scale, testing if selection takes a quadratic shape in winter. Missing results for a random point value are due to high coefficient estimates that obscure the other results and were left out.