Family size dynamics in wintering geese

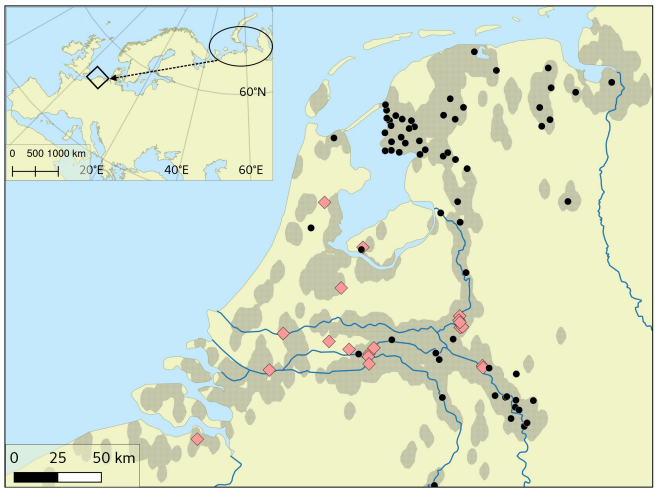

Figure 1: Wintering grounds of greater white-fronted geese *Anser a. albifrons* in the Netherlands and north-west Germany with sites (dots, n = 64) where successful families (n = 51,037) within flocks (n = 1,884) were recorded. Diamonds mark fission (n = 19) in GPS tracked families (n = 13). Shaded area bounds observations (n = 10,635) of marked geese. Inset shows breeding grounds (ellipse) and wintering grounds (rectangle). Data were collected from 2000 - 2016.

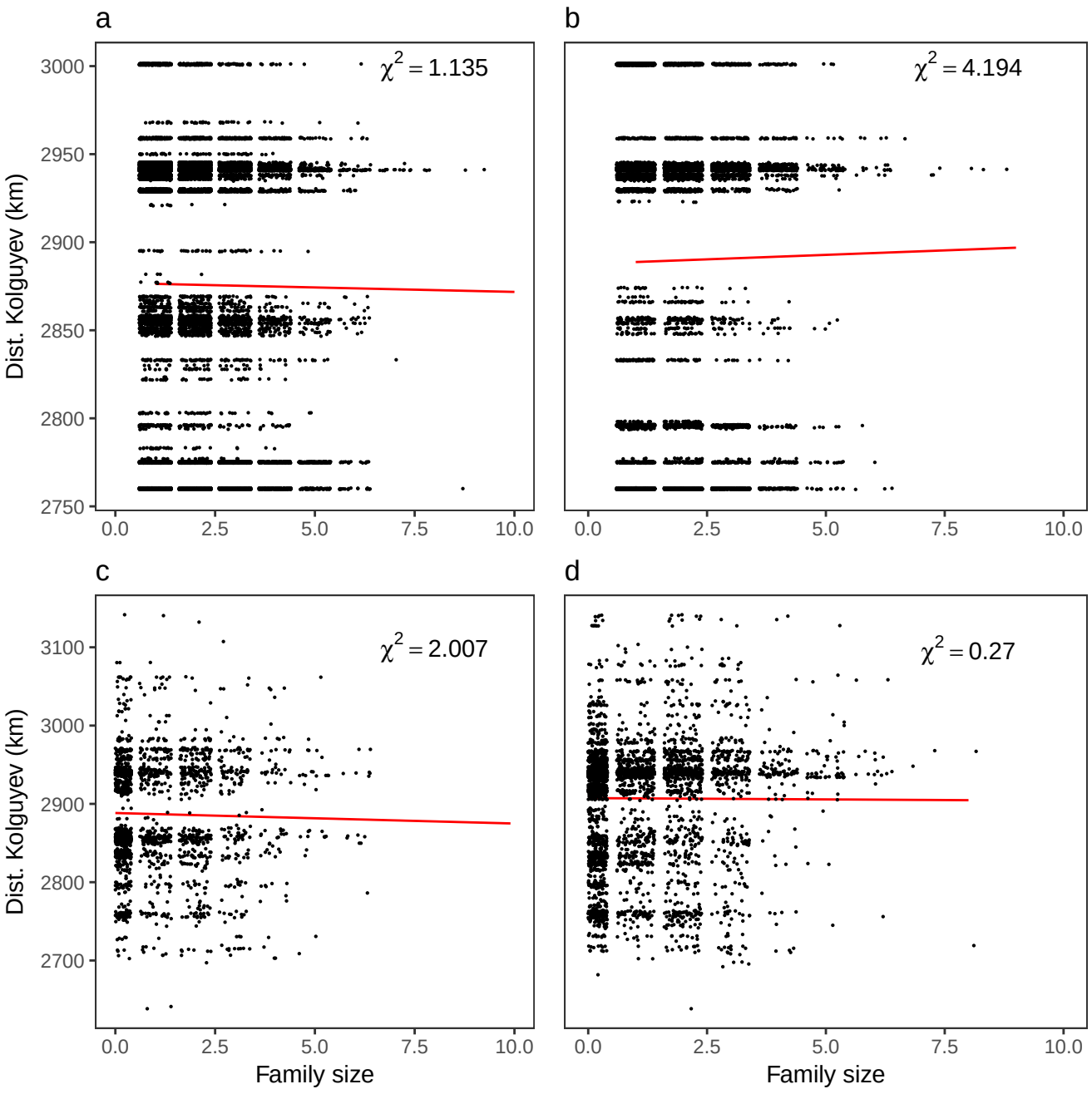

Figure 2: Predicted distance of wintering site from breeding grounds on Kolguyev for *(a,b)* successful families in flocks, and *(c,d)* marked geese, within *(a,c)* the first 60 days, and *(b,d)* the remainder of winter. Winter days were calculated from flight activity data (see *Methods*).

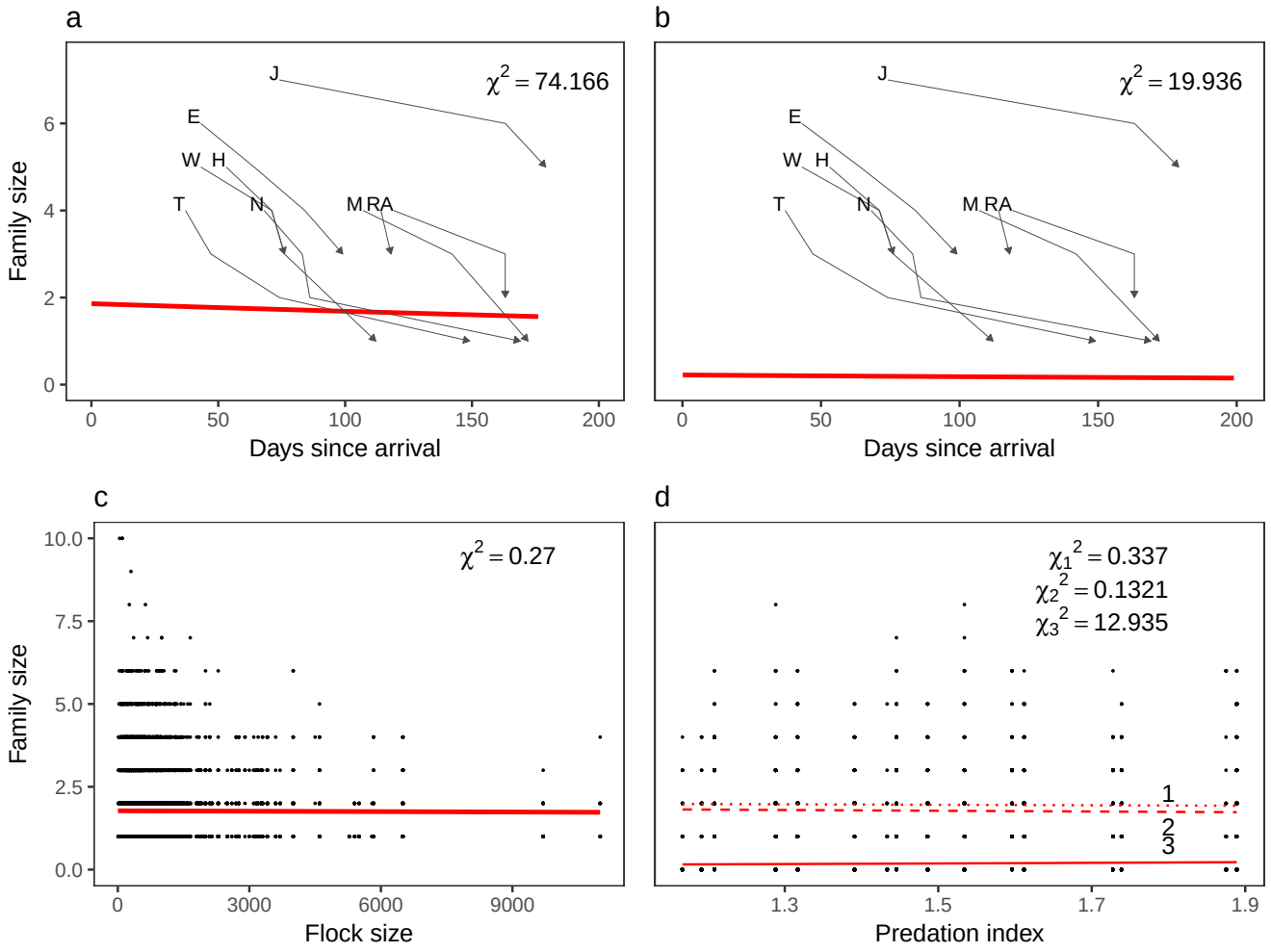

Figure 3: Predicted size of *(a)* successful families in flocks and *(b)* families of marked geese after arrival on the wintering grounds. Predicted size of (*c*) successful families in flocks over flock size, and of *(d) 1* successful families in flocks, *2* successful families of marked geese, and *3* all marked geese over summer predation levels. Arrival dates were calculated from flight activity data, and predation index from Arctic rodent abundance (see *Methods*).

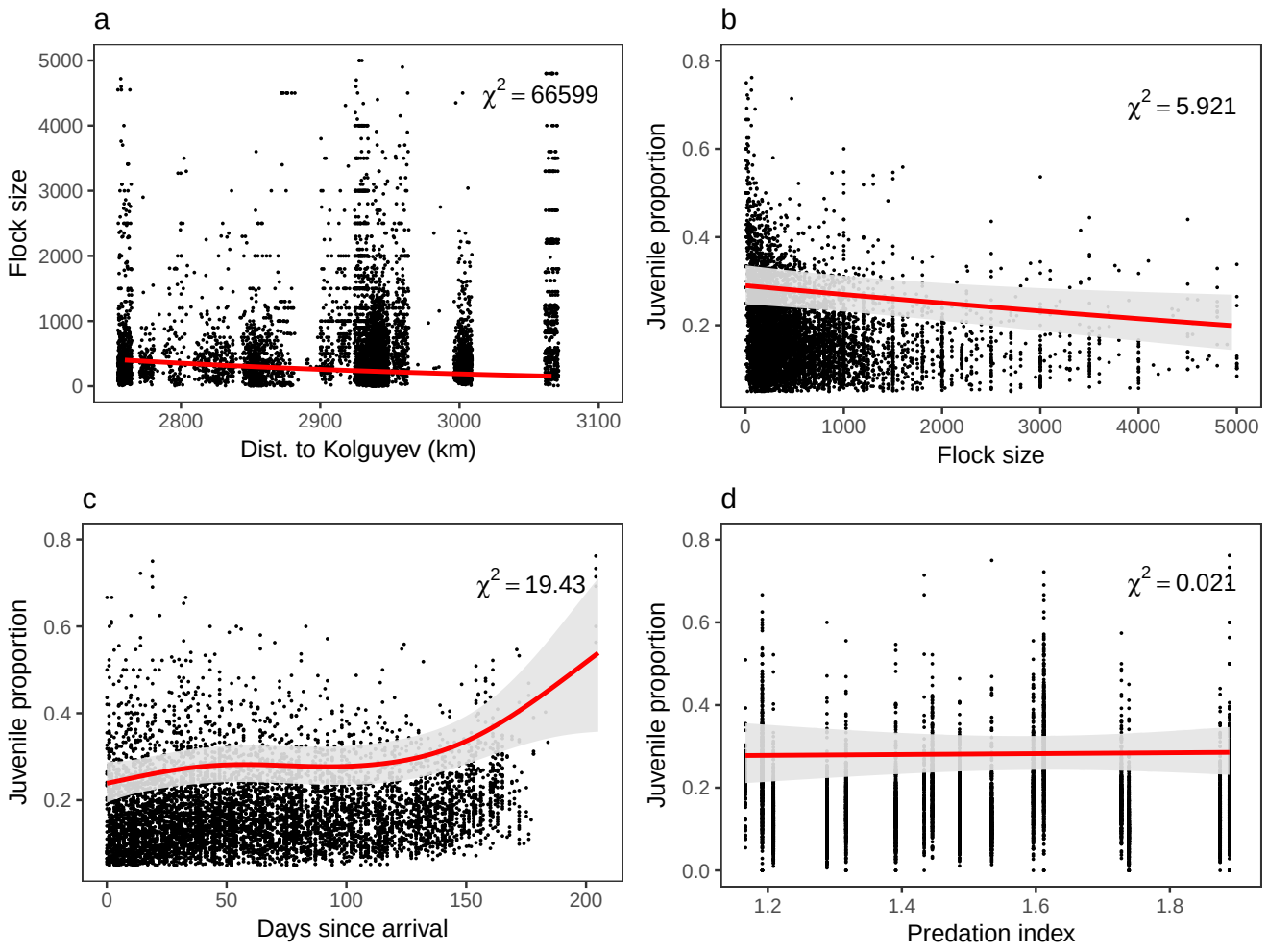

Figure 4: Predicted *(a)* flock size at distances from breeding grounds on Kolguyev. Predicted proportion of first winter juveniles in relation to *(b)* flock size, *(c)* days after arrival, and *(d)* summer predation index. Arrival dates were calculated from flight activity data, and predation index from Arctic rodent abundance (see *Methods*).